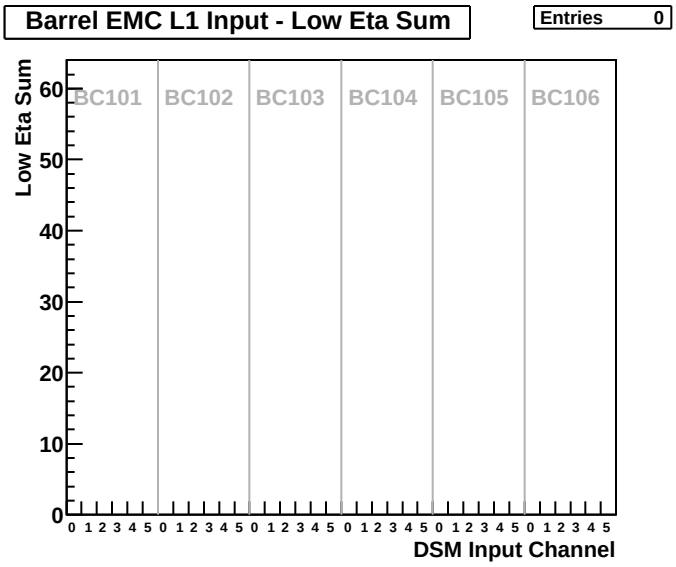
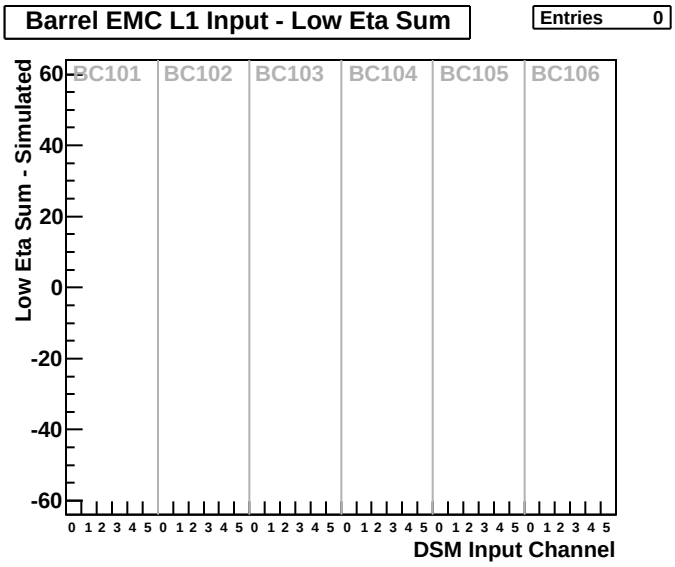
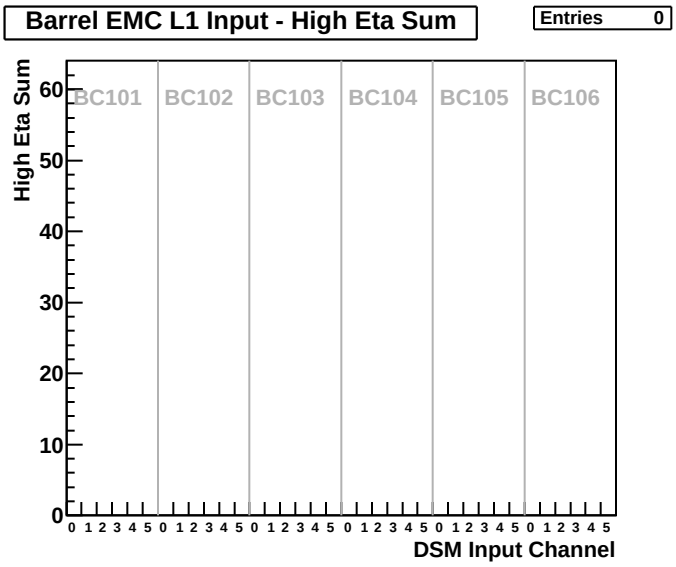
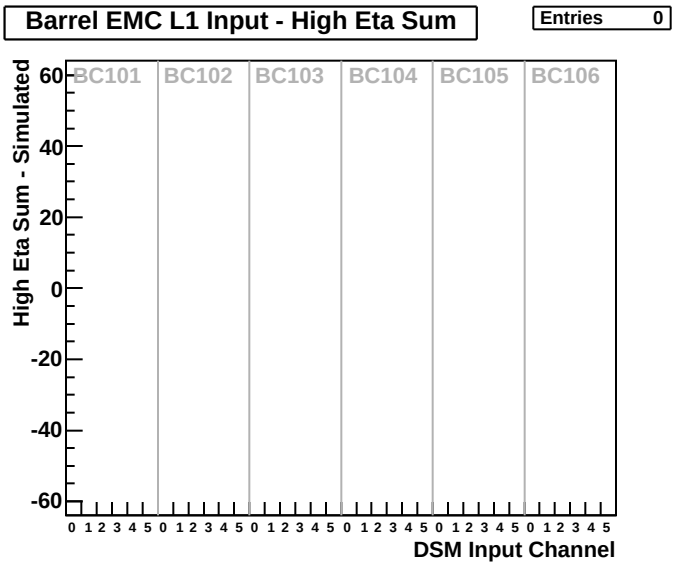
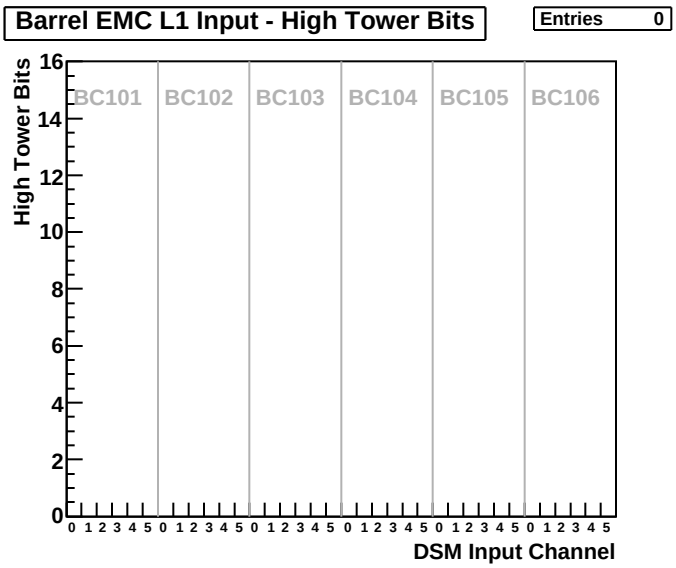
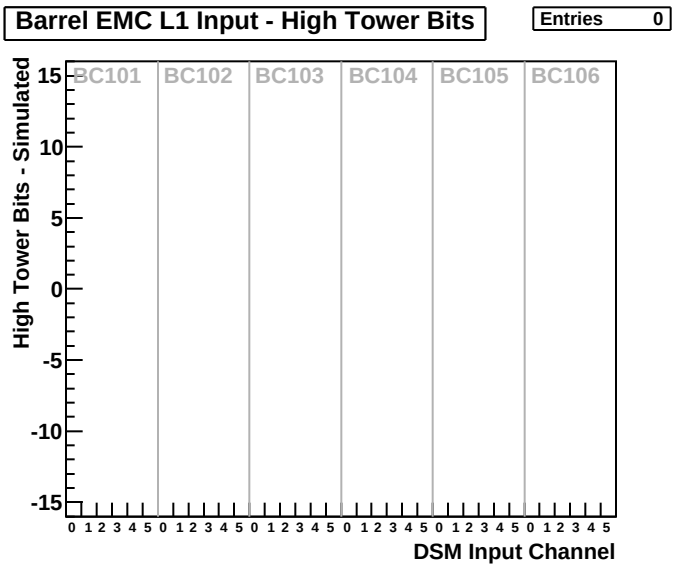

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

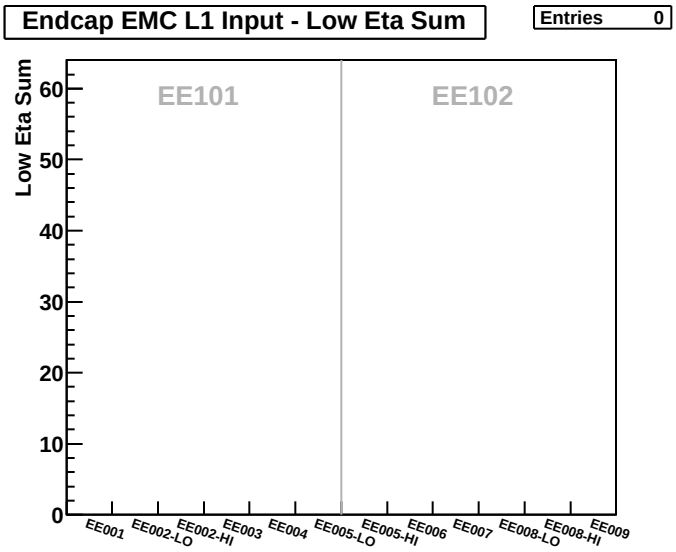

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

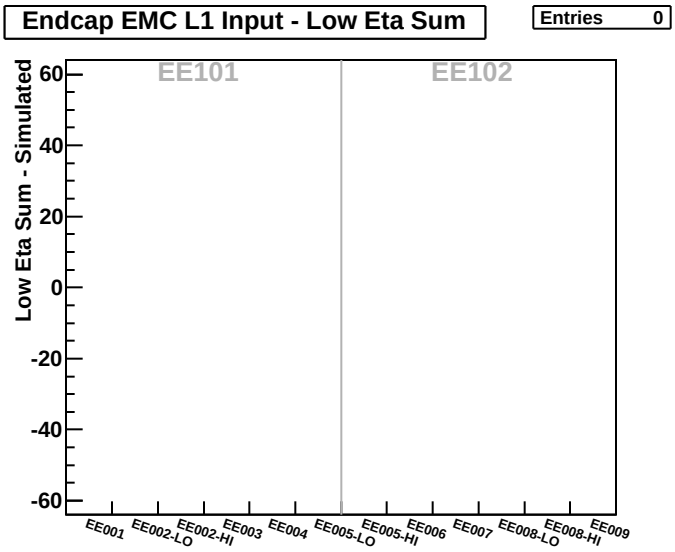

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

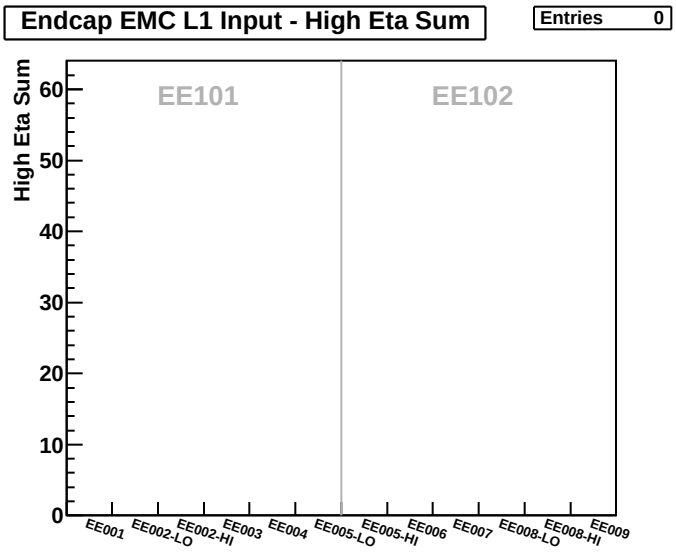

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

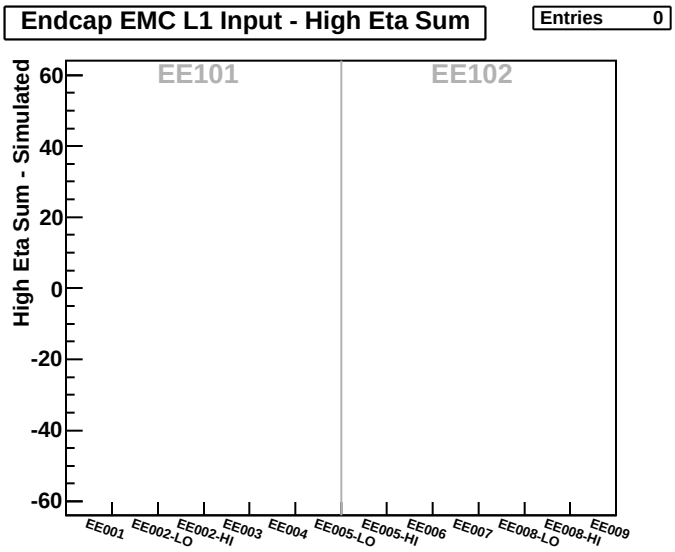

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

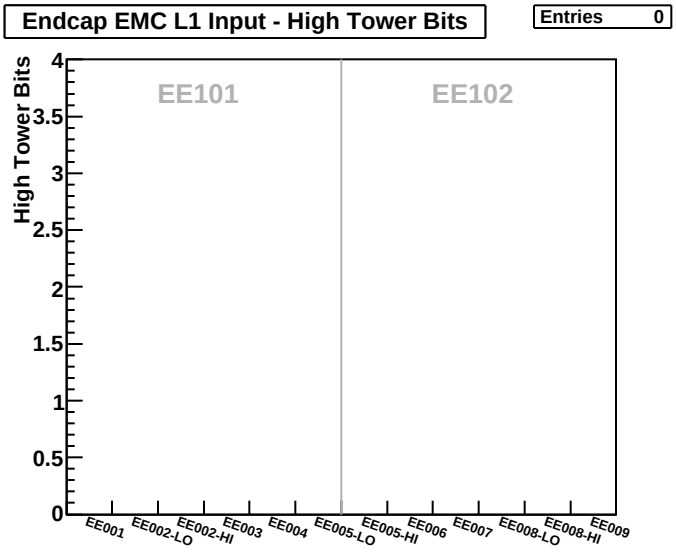

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

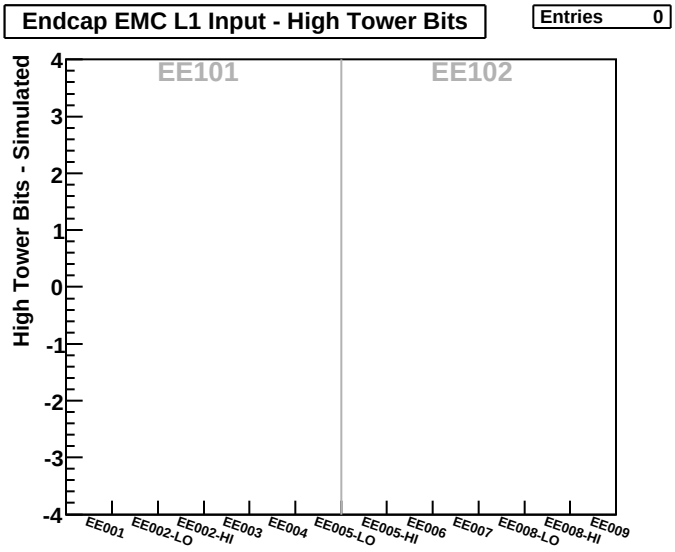

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
EE101
EE102
0
10
20
30
40
50
60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

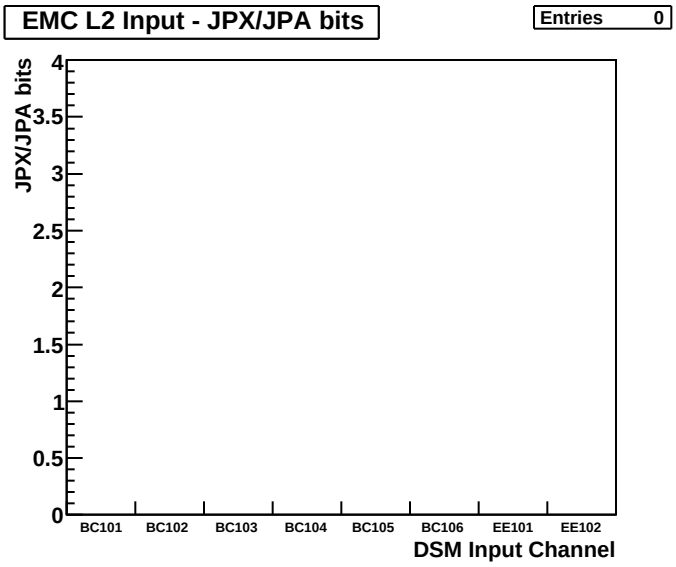

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
60
40
20
0
-20
-40
-60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

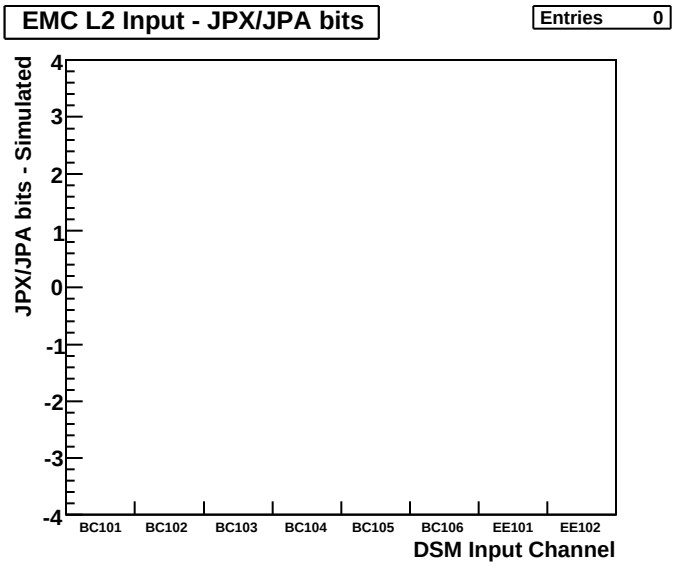

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
EE101
EE102
0
10
20
30
40
50
60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

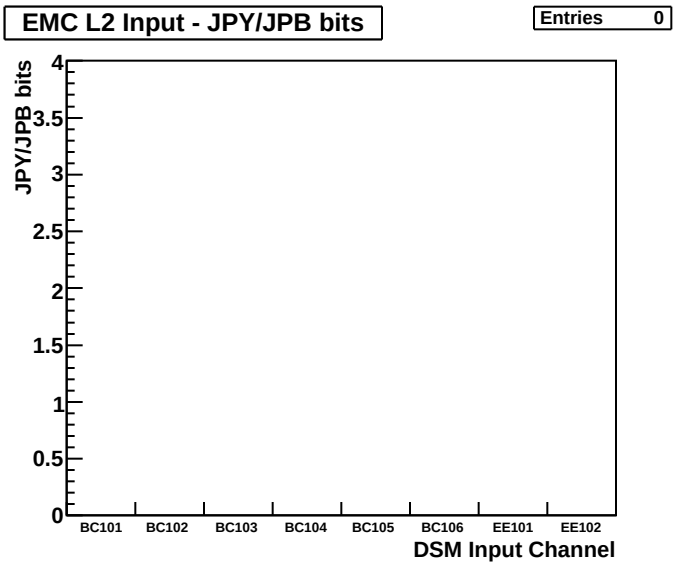

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
60
40
20
0
-20
-40
-60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

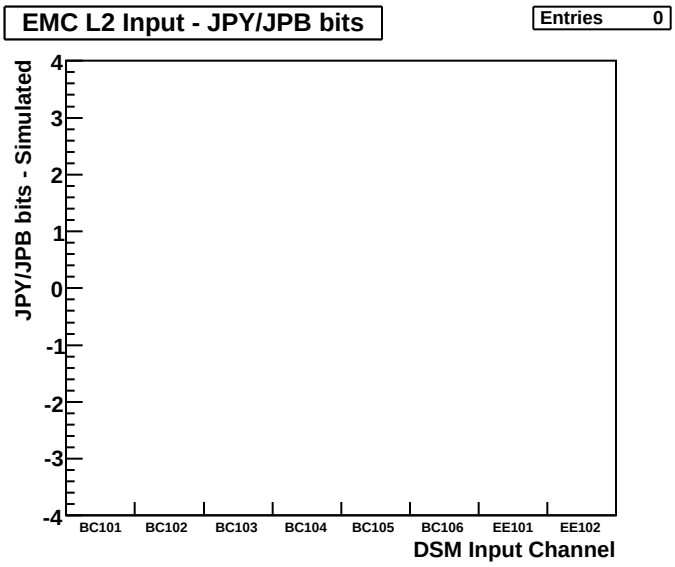

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
EE101
EE102
0
0.5
1
1.5
2
2.5
3
3.5
4
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

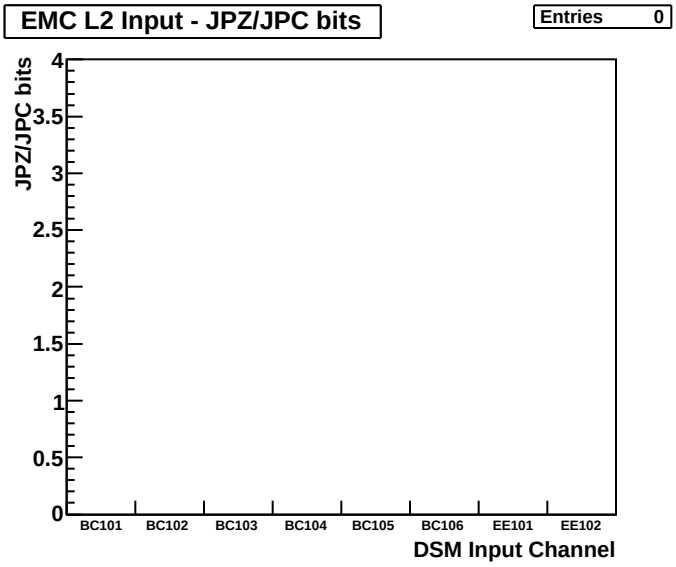

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
4
3
2
1
0
-1
-2
-3
-4
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

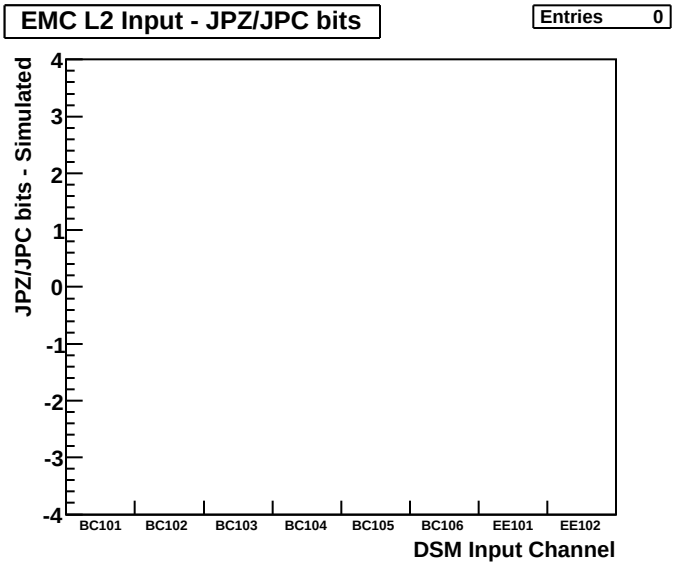

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

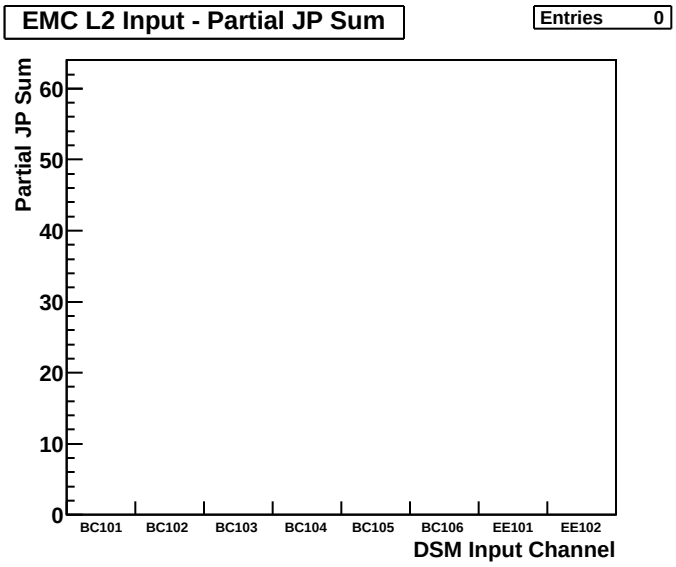

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

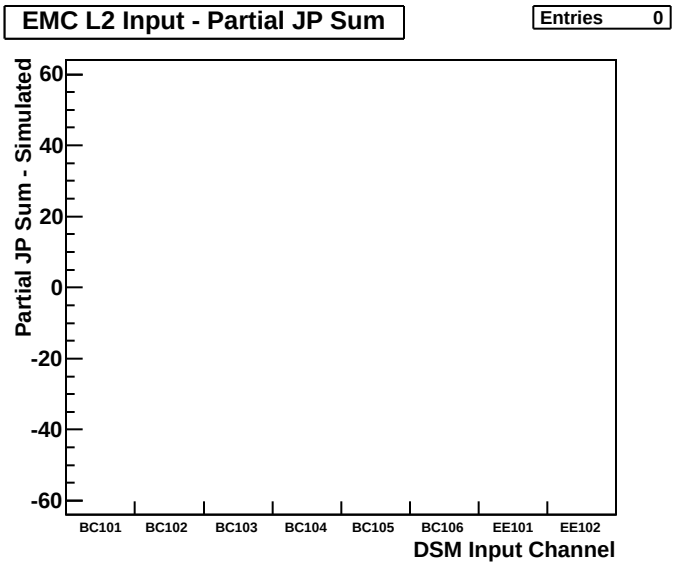

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

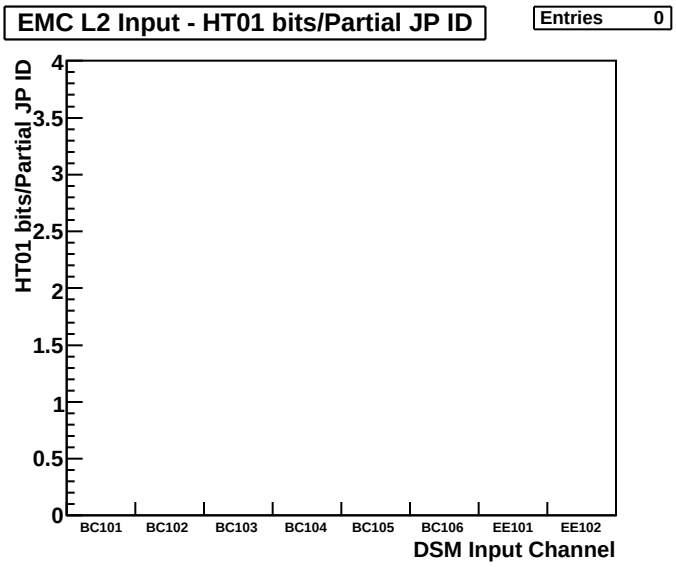

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

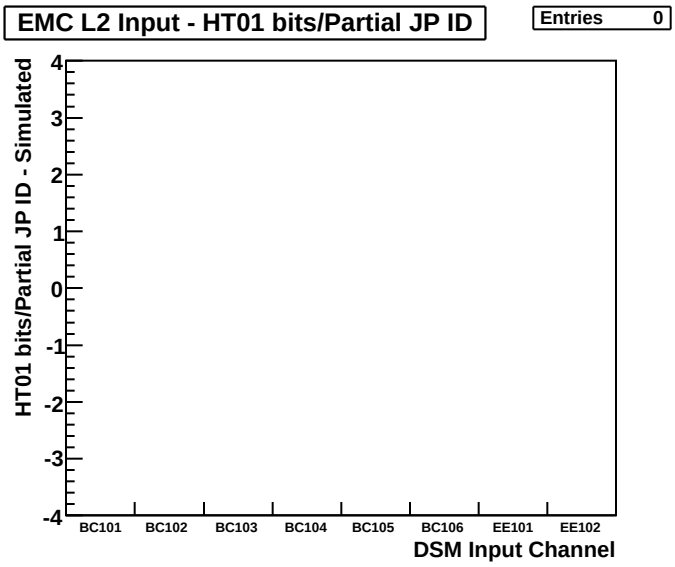

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

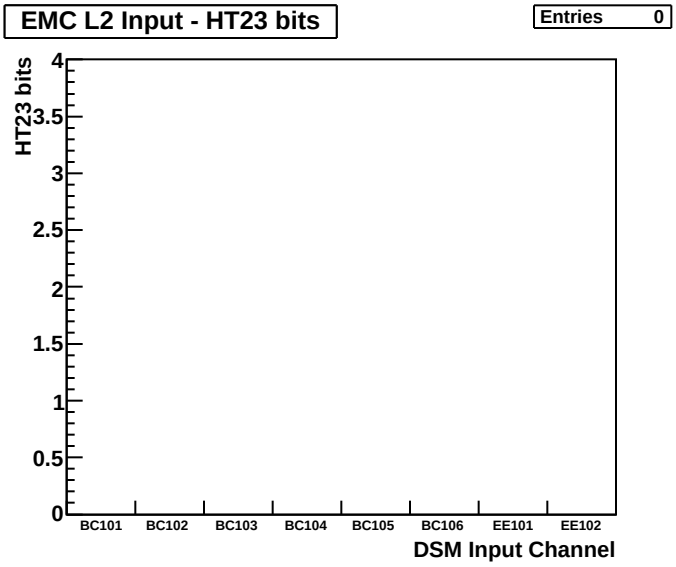

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

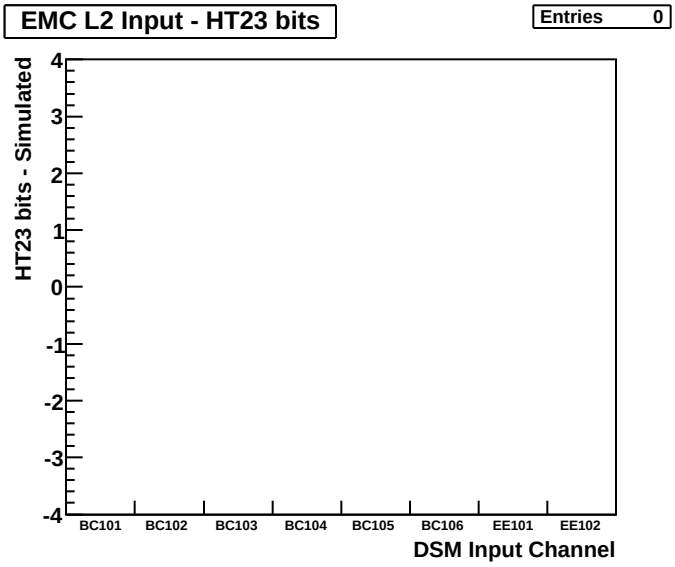

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum
60
50
40
30
20
10
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

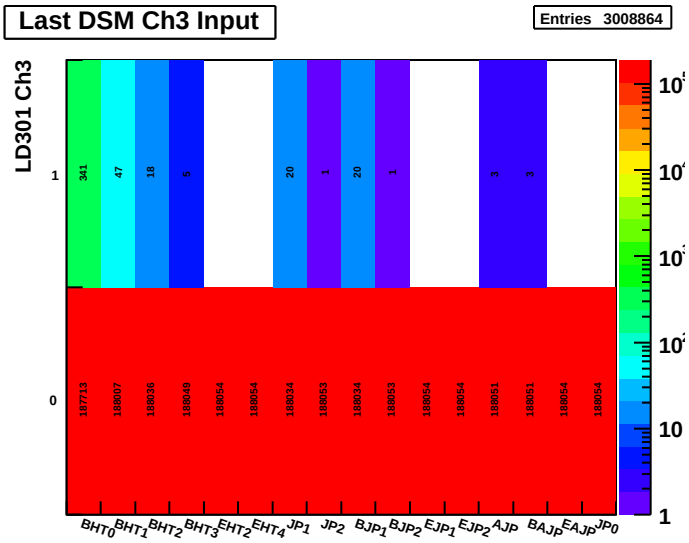

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
60
40
20
0
-20
-40
-60
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

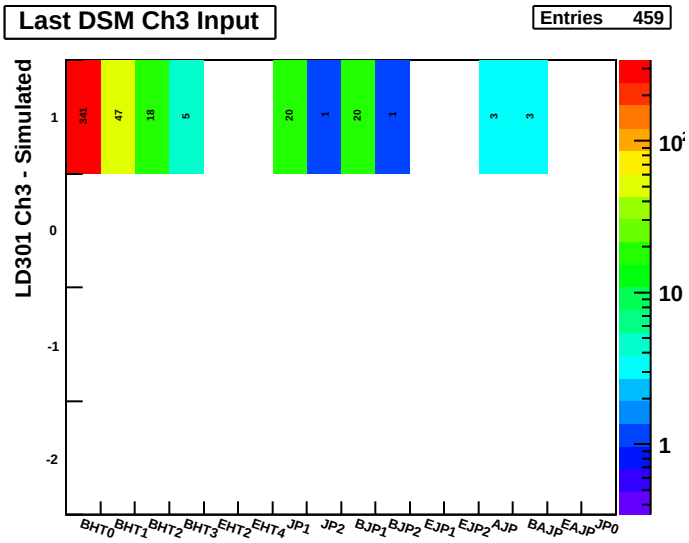

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

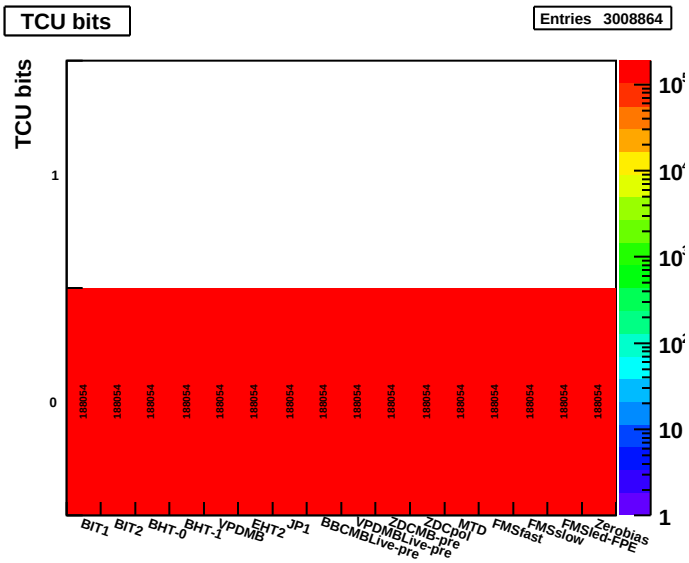

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

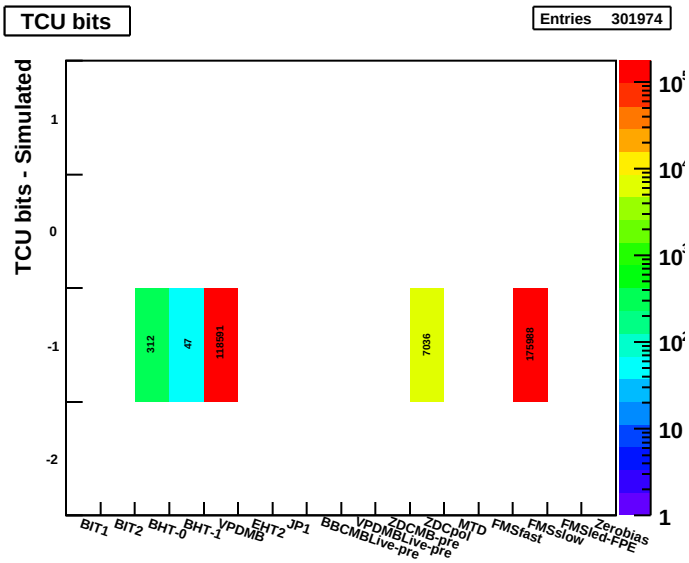

EMC L2 Input - HT23 bits
Entries 0
HT23 bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

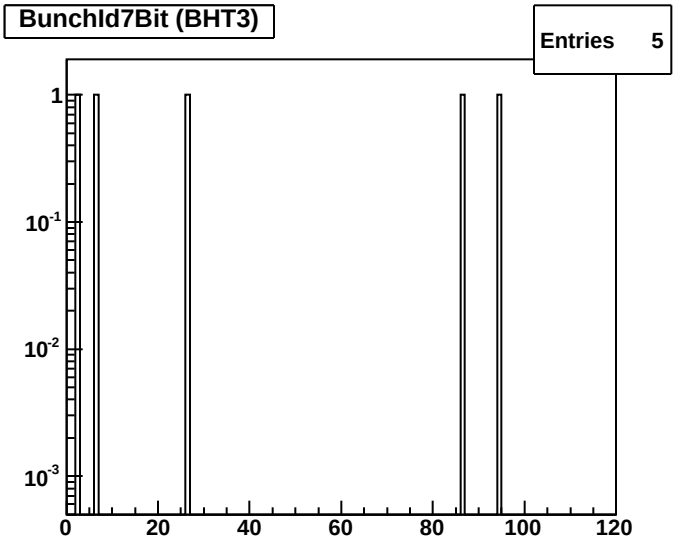

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

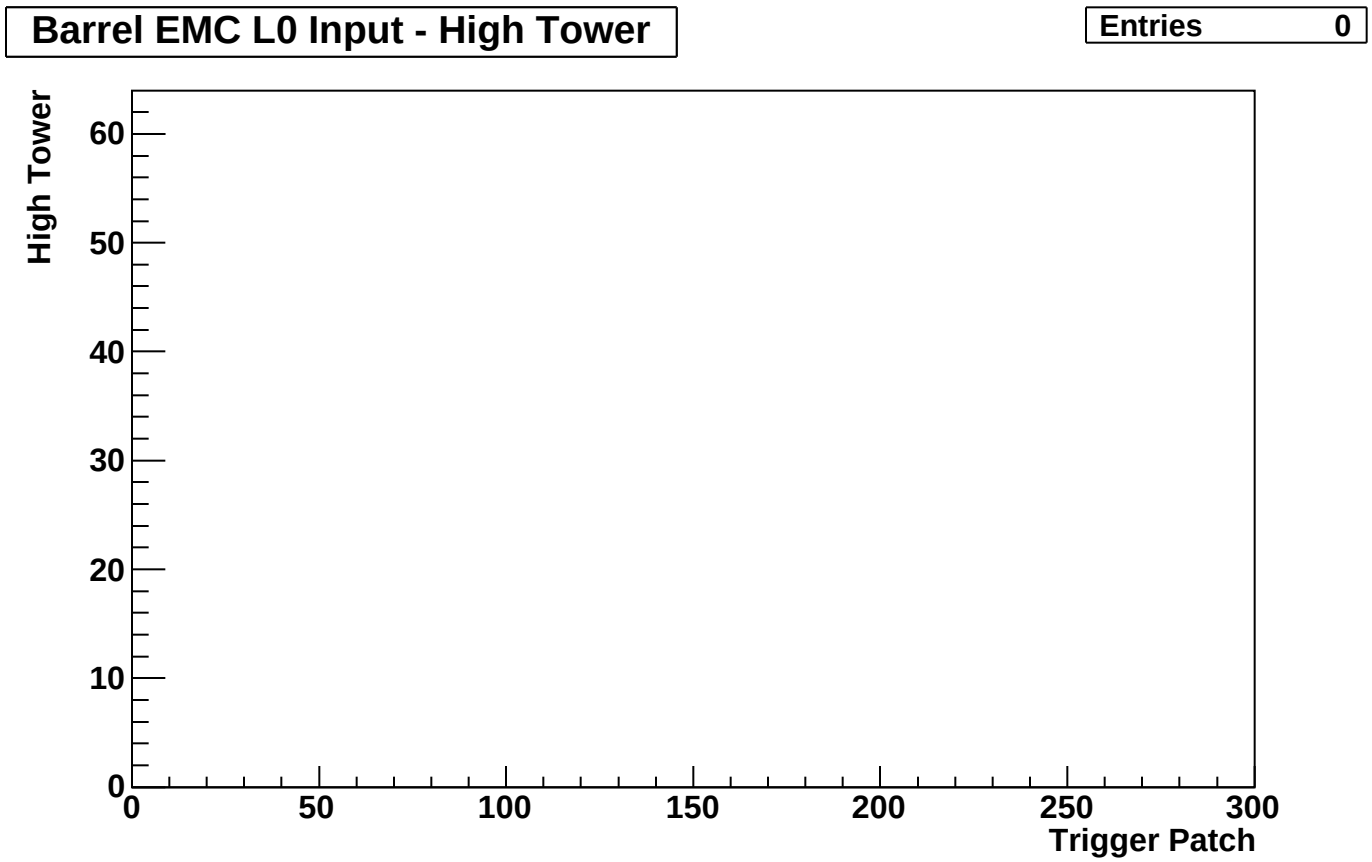

Last DSM Ch3 Input
Entries 3008864
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

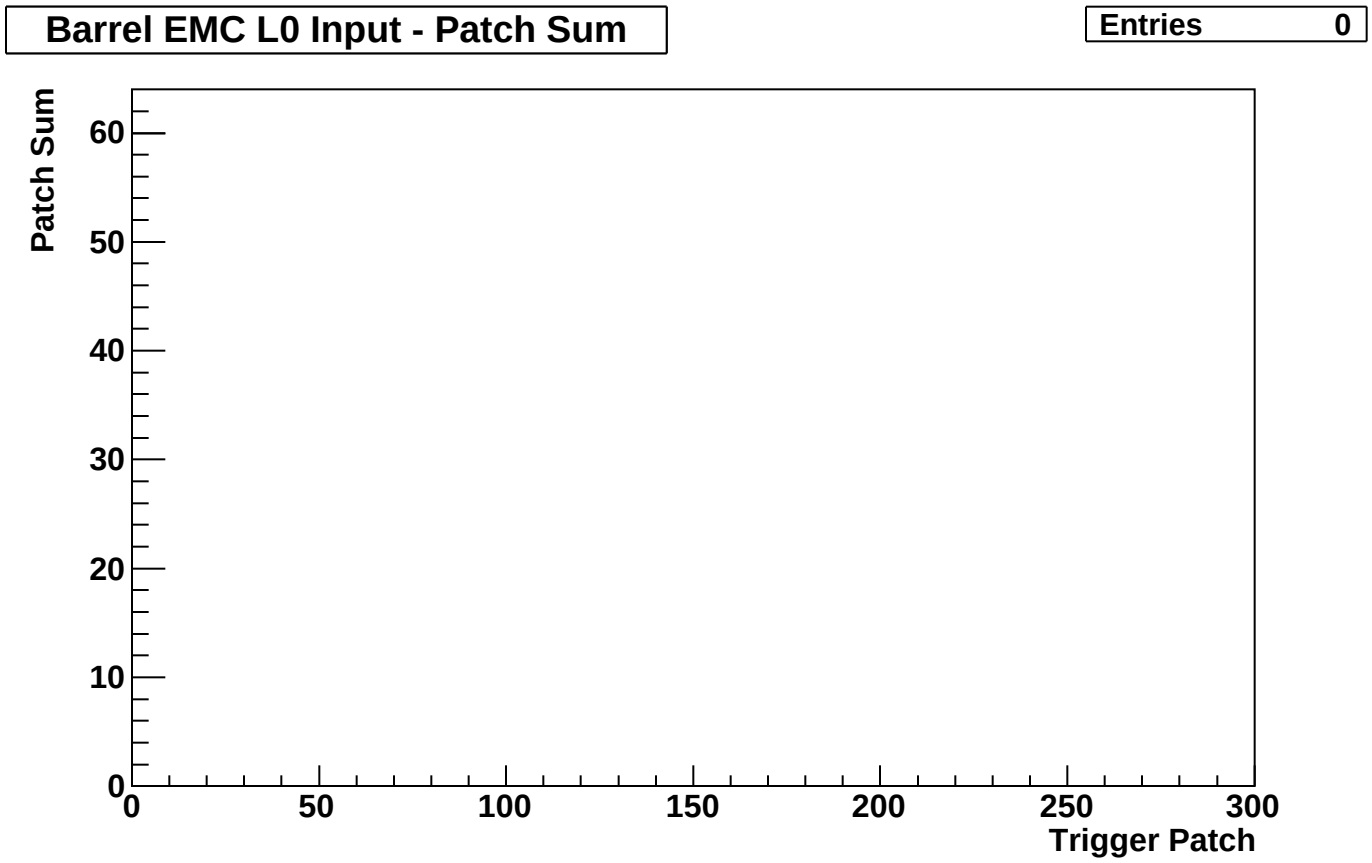

Last DSM Ch3 Input
Entries 459
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

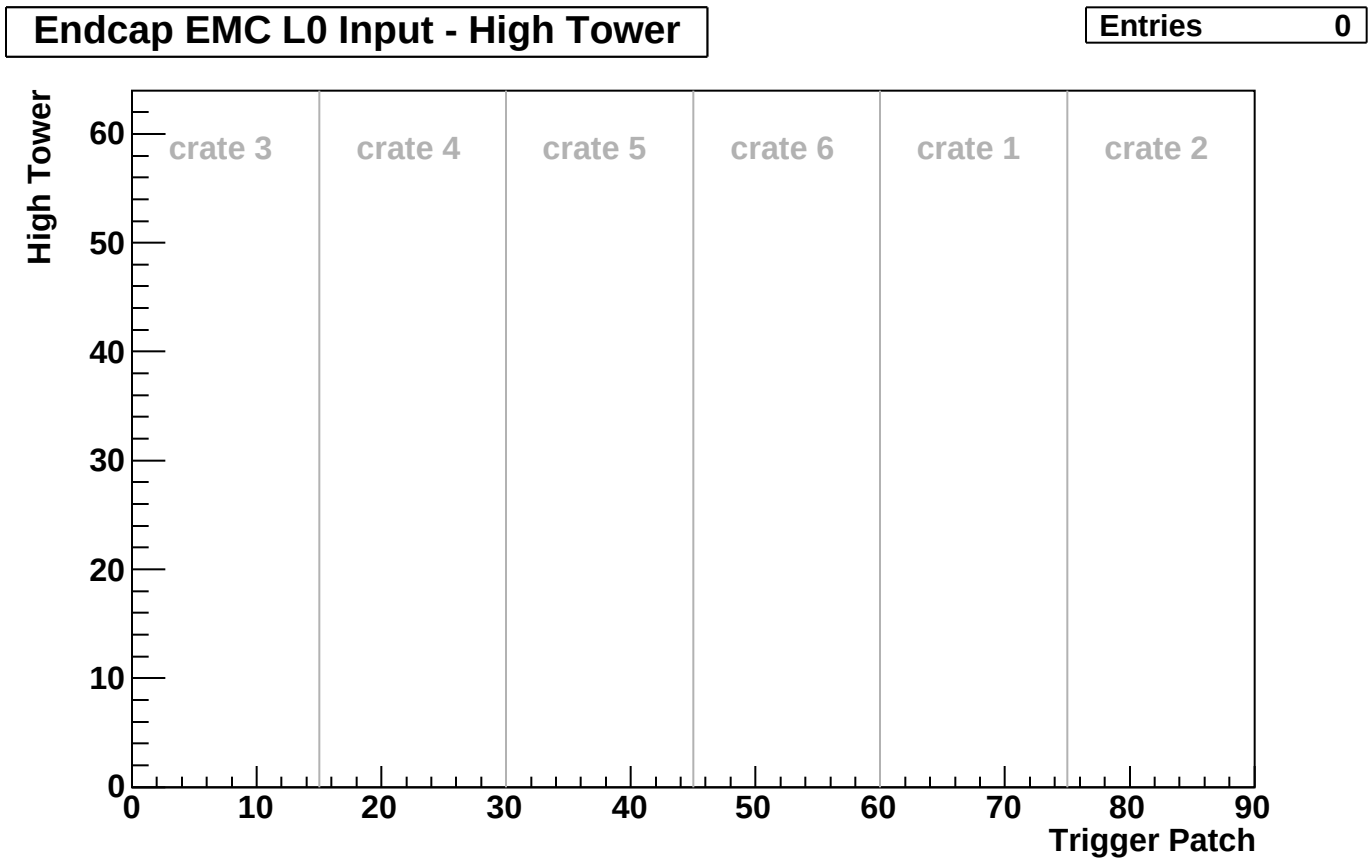

TCU bits
Entries 3008864
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

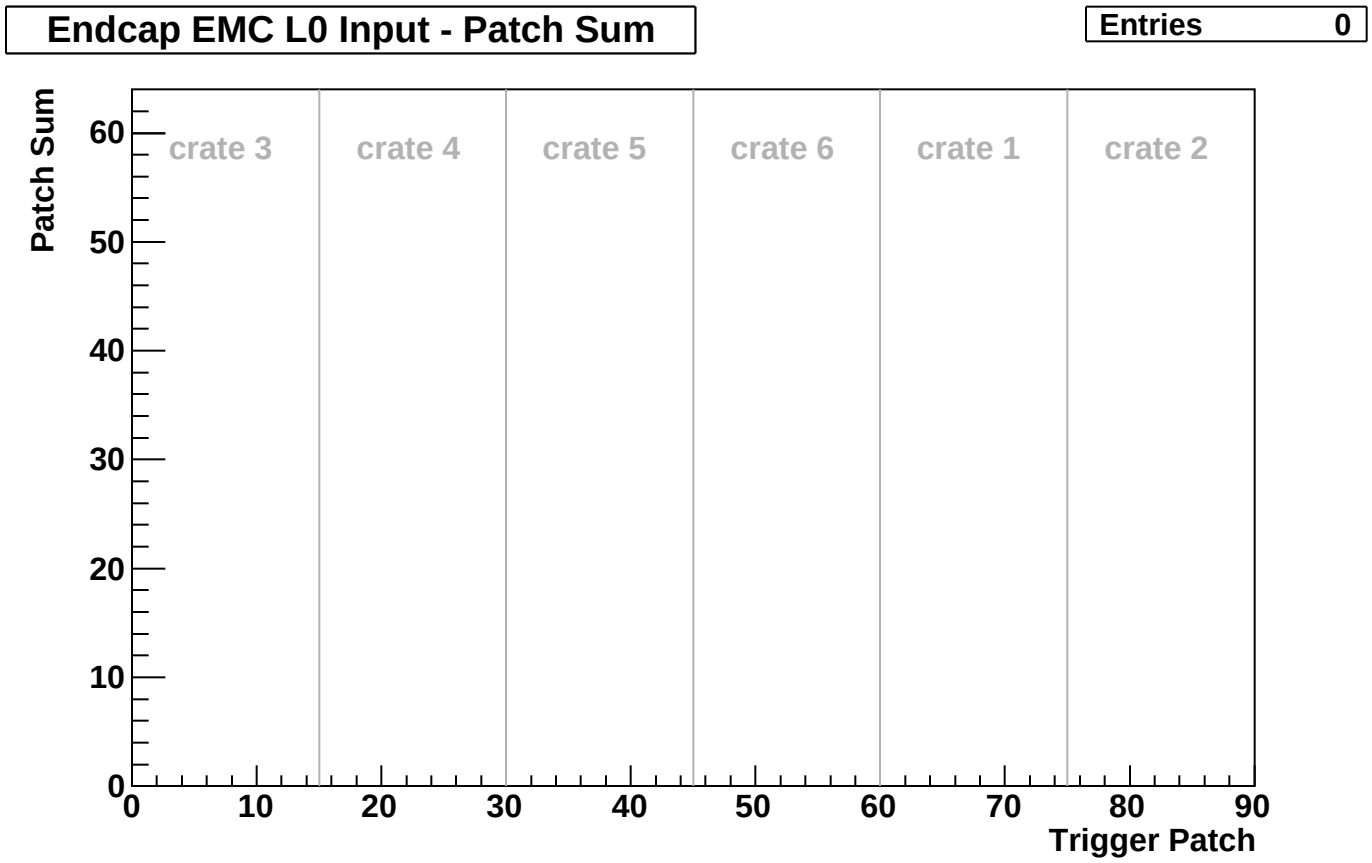

TCU bits
Entries 301974
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

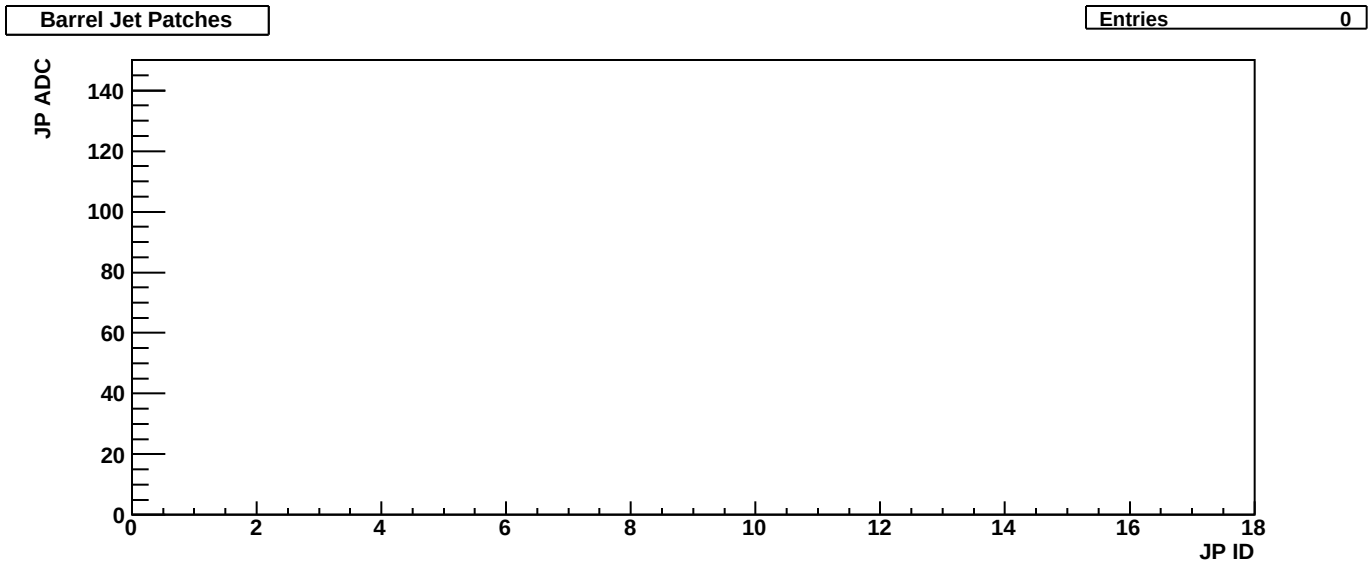

BunchId7Bit (BHT3)
Entries 5

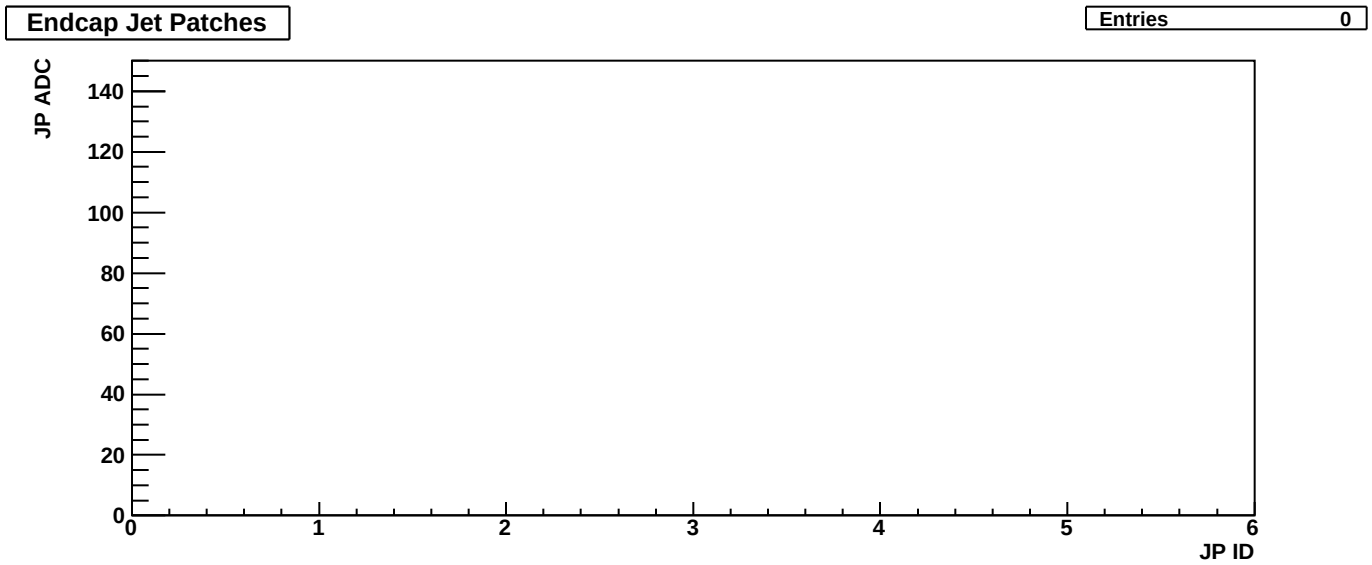

Barrel EMC L0 Input - High Tower
Entries 0
High Tower
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

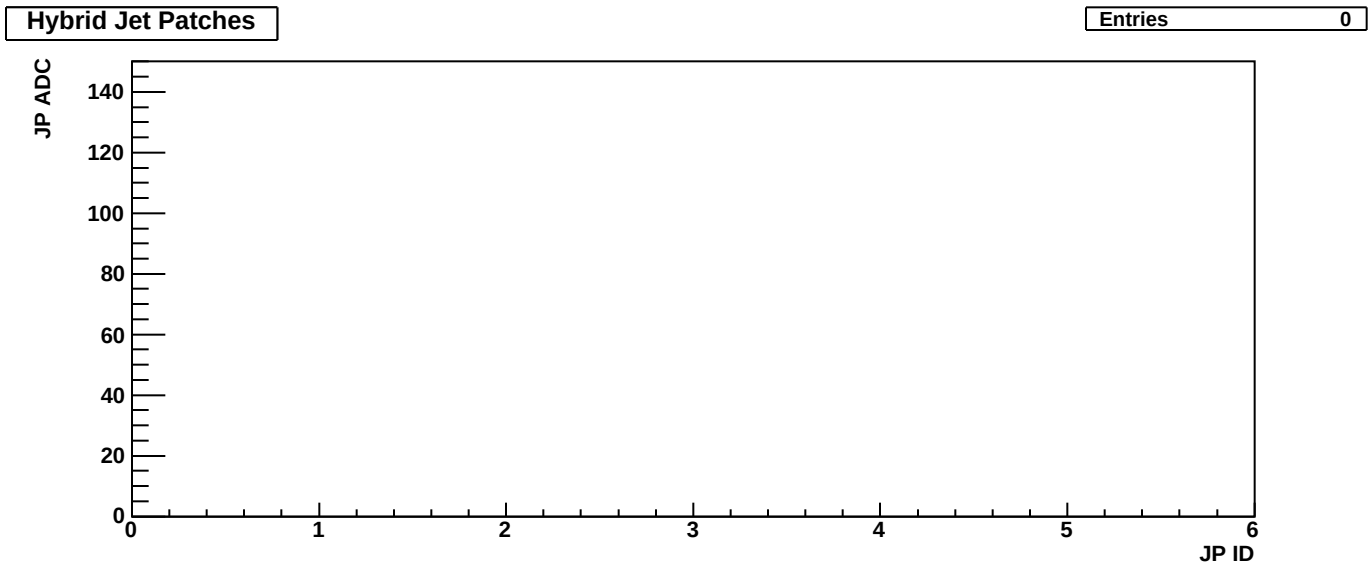

Barrel EMC L0 Input - Patch Sum
Entries 0
Patch Sum
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

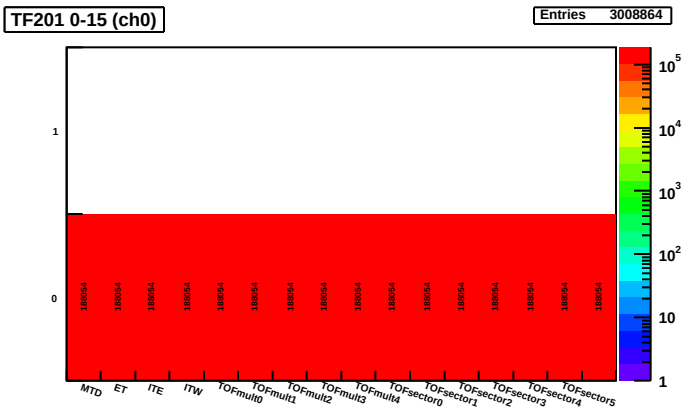

Endcap EMC L0 Input - High Tower
Entries 0
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

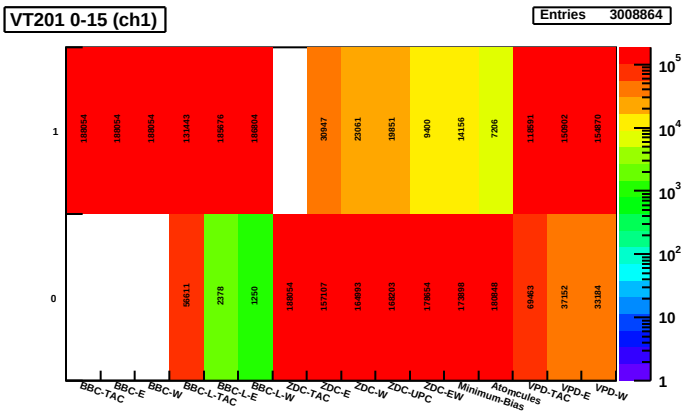

Endcap EMC L0 Input - Patch Sum
Entries 0
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

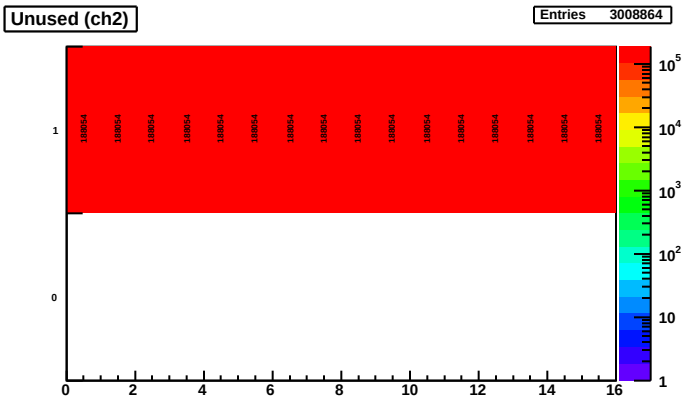

Barrel Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
2
4
6
8
10
12
14
16
18
JP ID

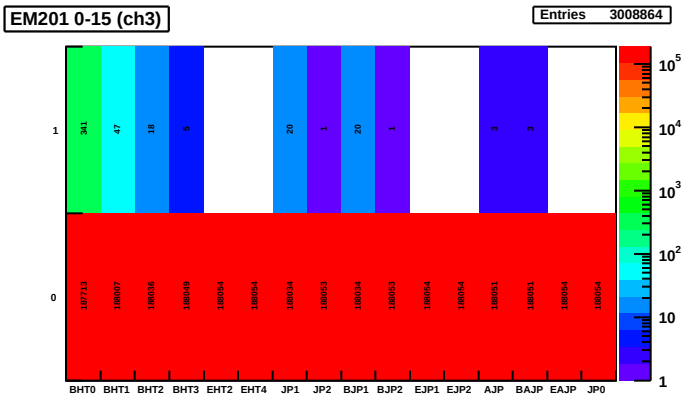

Endcap Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

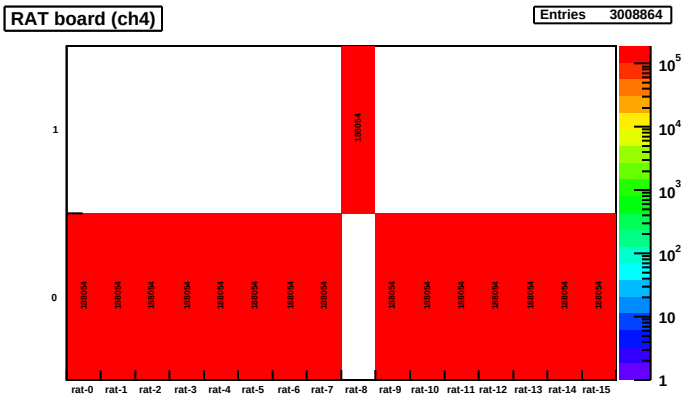

Hybrid Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

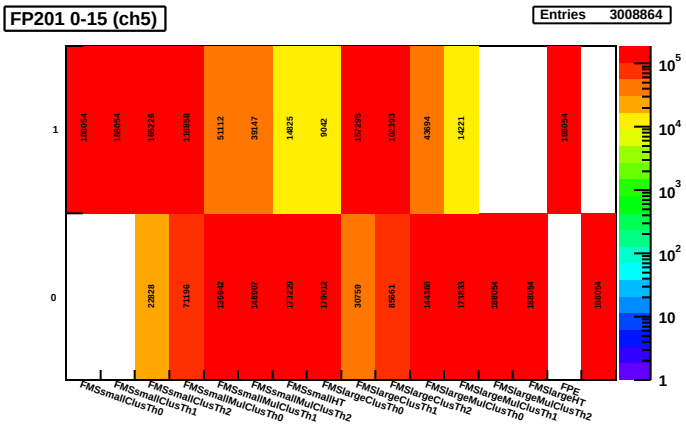

TF201 0-15 (ch0)
Entries 3008864
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

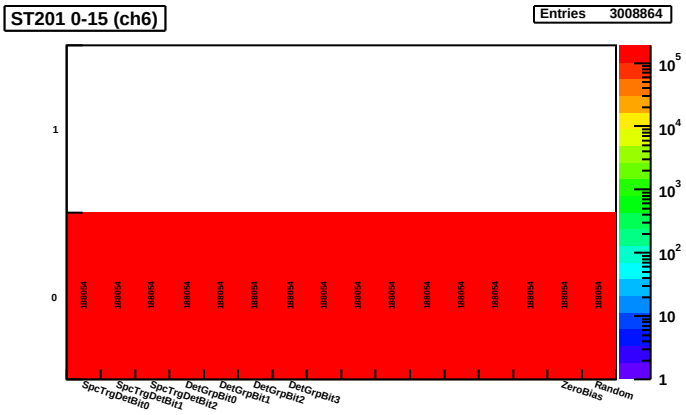

VT201 0-15 (ch1)
Entries 3008864
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

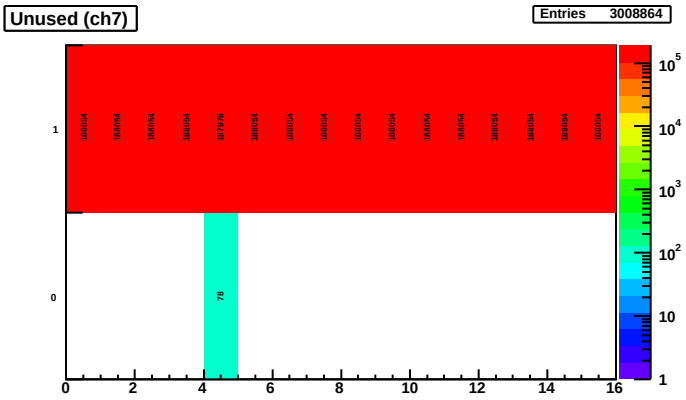

Unused (ch2)
Entries 3008864

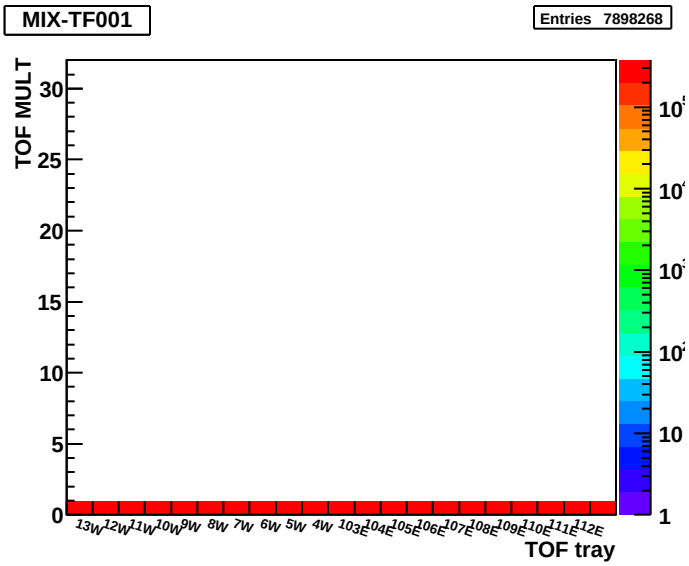

EM201 0-15 (ch3)
Entries 3008864
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

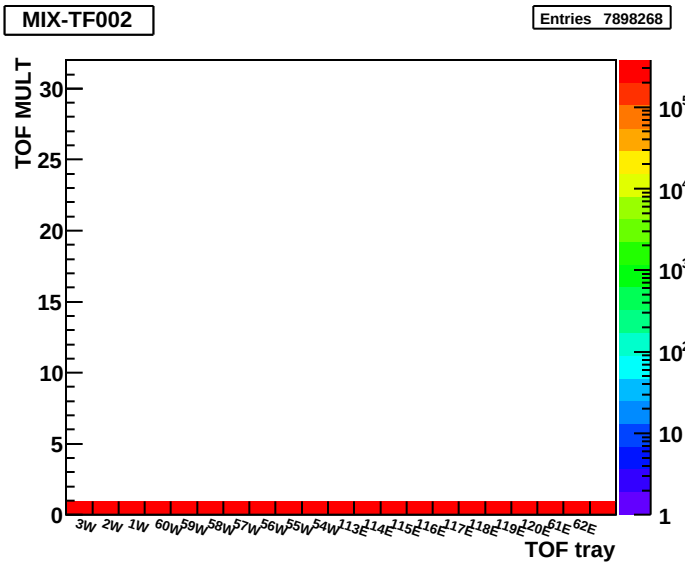

RAT board (ch4)
Entries 3008864
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

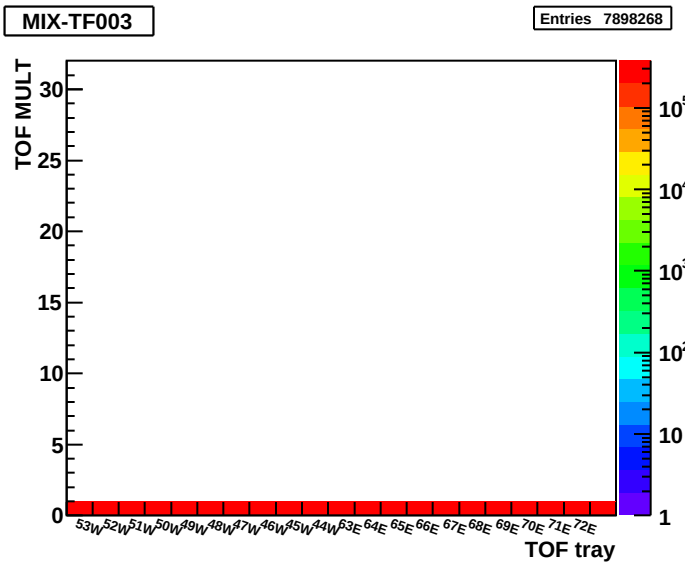

FP201 0-15 (ch5)
Entries 3008864
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

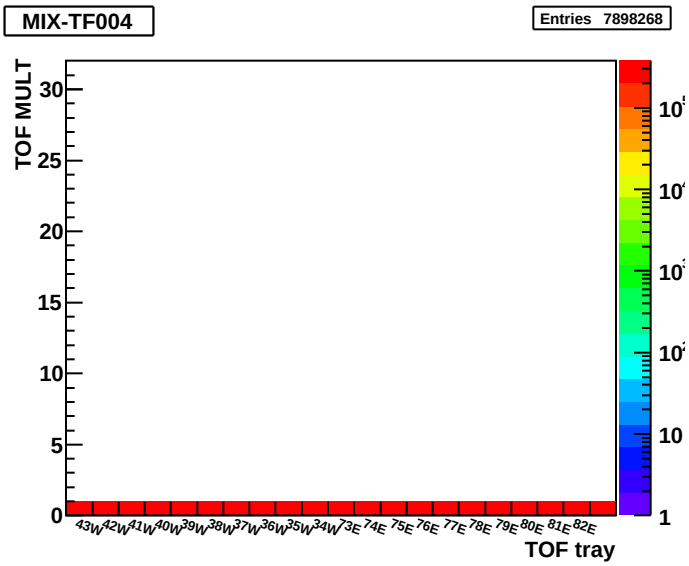

ST201 0-15 (ch6)
Entries 3008864
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

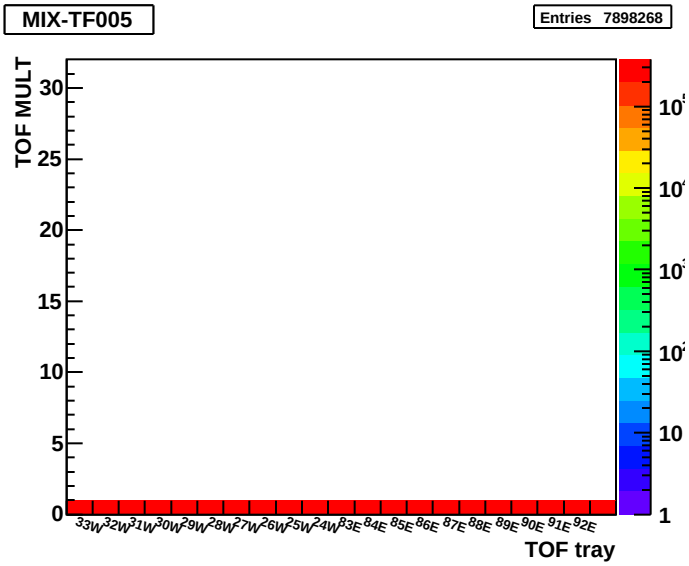

Unused (ch7)
Entries 3008864

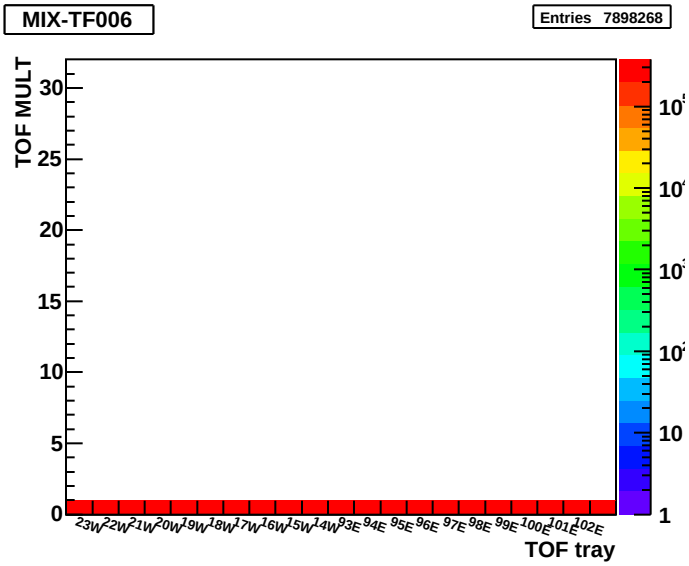

MIX-TF001
Entries 7898268
TOF MULT
TOF tray

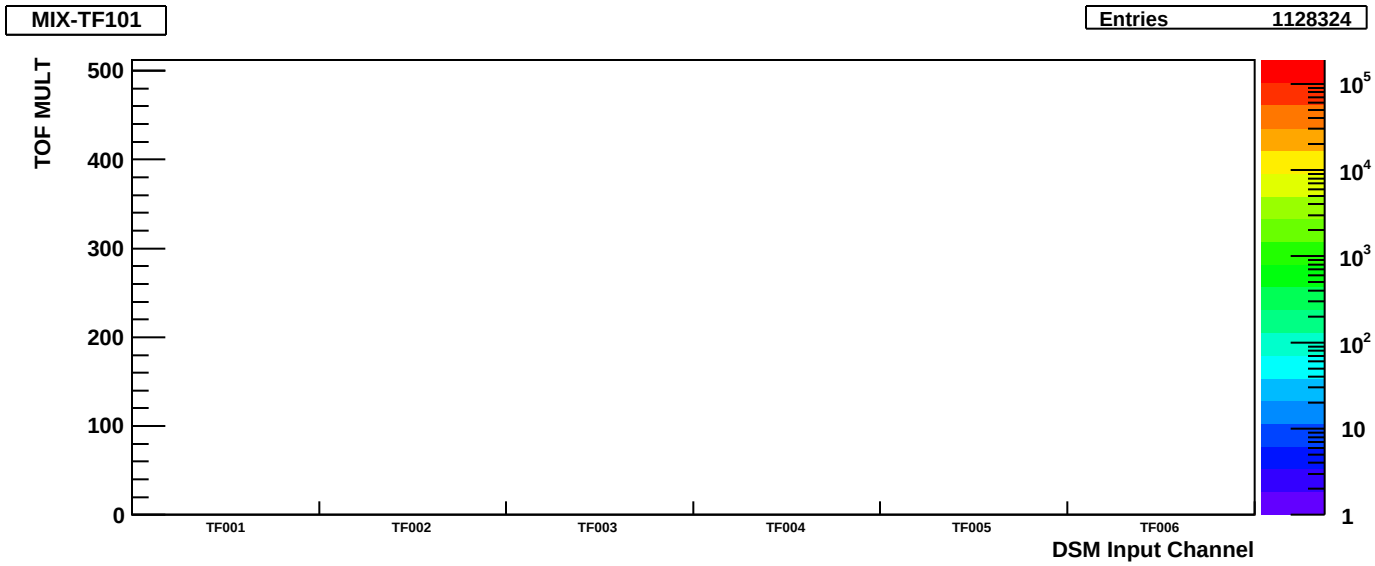

MIX-TF002
Entries 7898268
TOF MULT
TOF tray

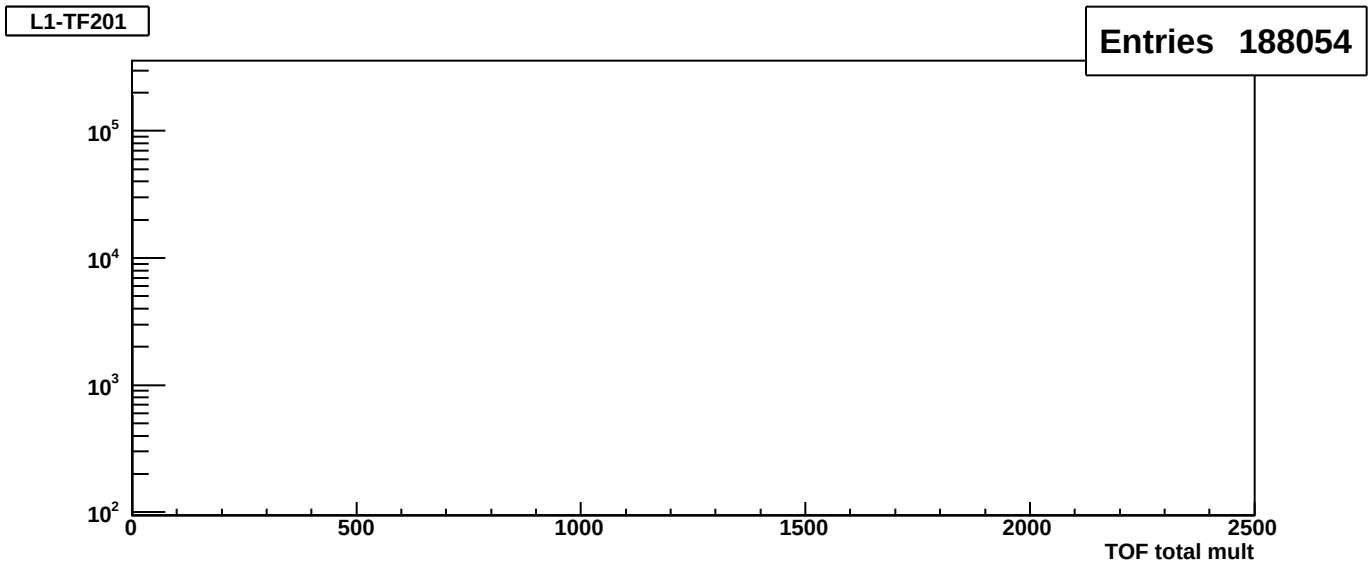

MIX-TF003
Entries 7898268
TOF MULT
TOF tray

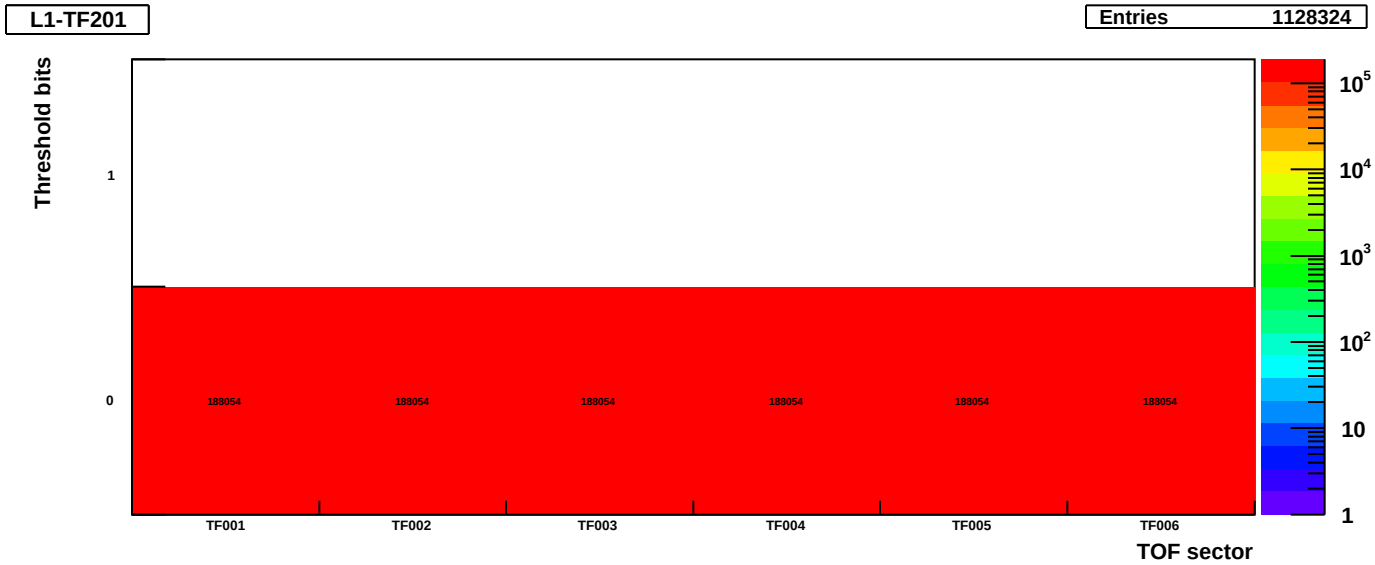

MIX-TF004
Entries 7898268
TOF MULT
TOF tray

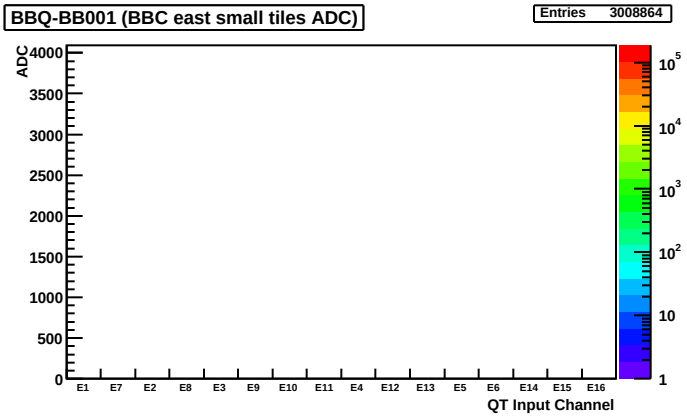

MIX-TF005
Entries 7898268
TOF MULT
TOF tray

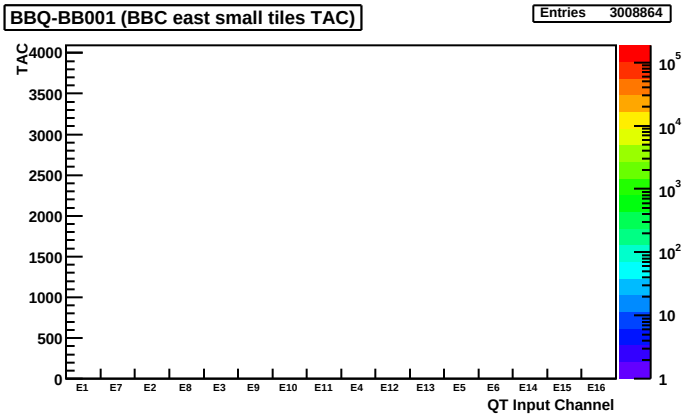

MIX-TF006
Entries 7898268
TOF MULT
TOF tray

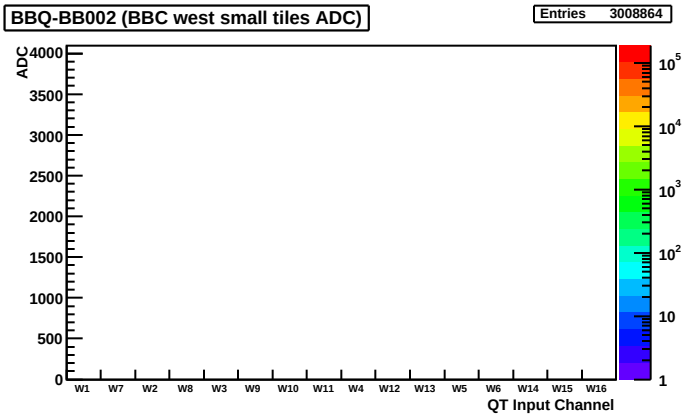

MIX-TF101
Entries 1128324
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

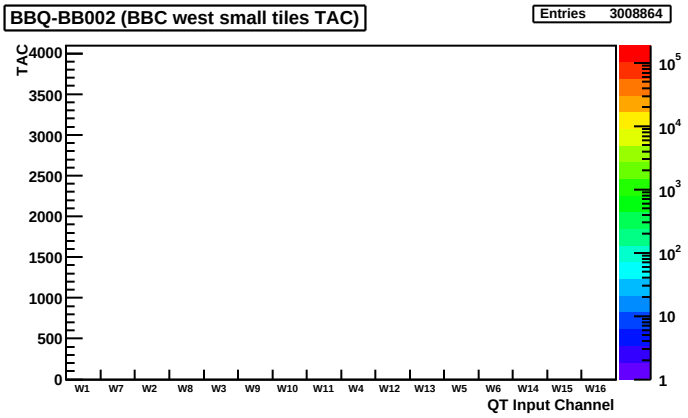

L1-TF201
Entries 188054
10^5
10^4
10^3
10^2
0
500
1000
1500
2000
2500
TOF total mult

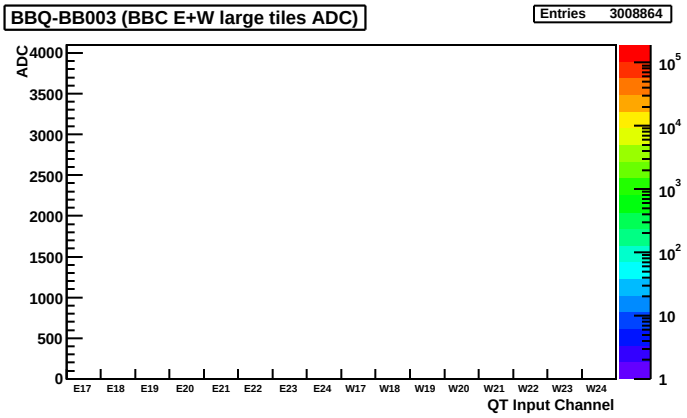

L1-TF201
Entries 1128324
Threshold bits
1
0
188054
188054
188054
188054
188054
188054
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3
10^2
10
1

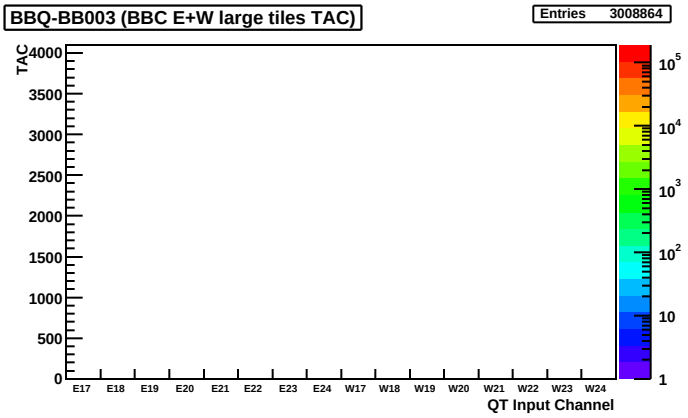

BBQ-BB001 (BBC east small tiles ADC)
Entries 3008864
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

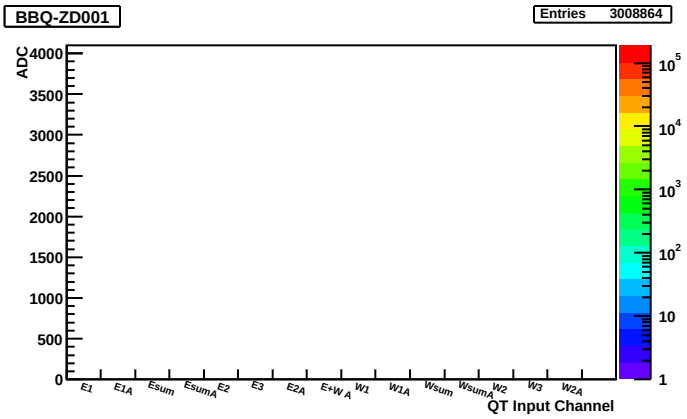

BBQ-BB001 (BBC east small tiles TAC)
Entries 3008864
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

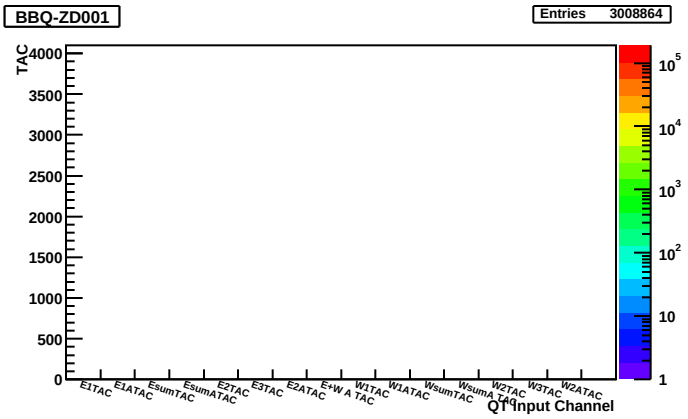

BBQ-BB002 (BBC west small tiles ADC)
Entries 3008864
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

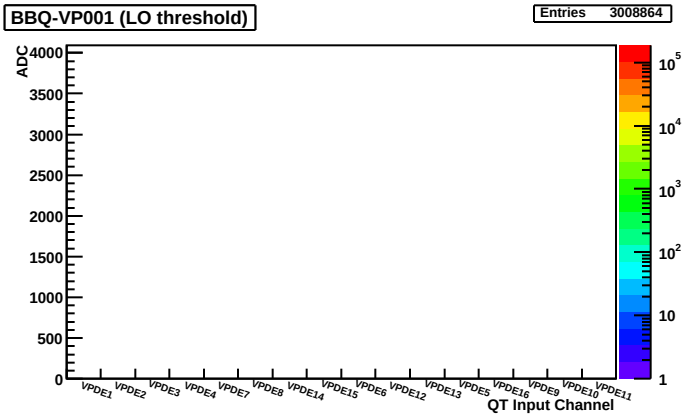

BBQ-BB002 (BBC west small tiles TAC)
Entries 3008864
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

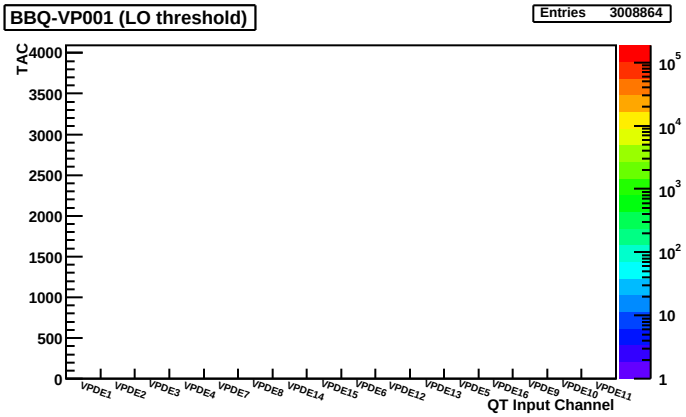

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3008864
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

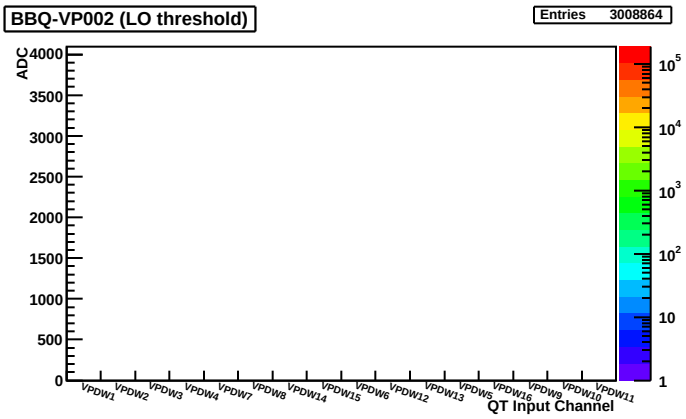

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3008864
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

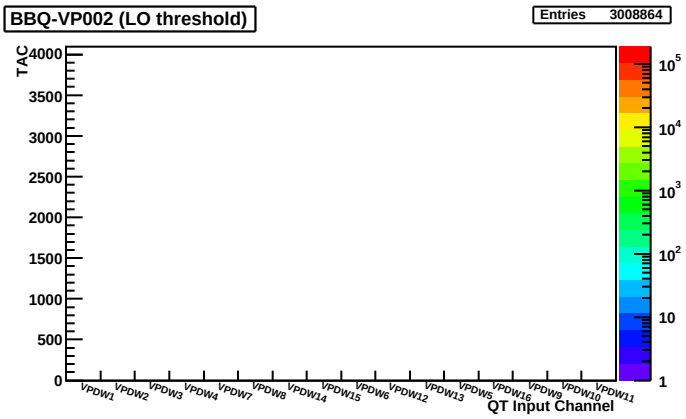

BBQ-ZD001
Entries 3008864
ADC
QT Input Channel
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

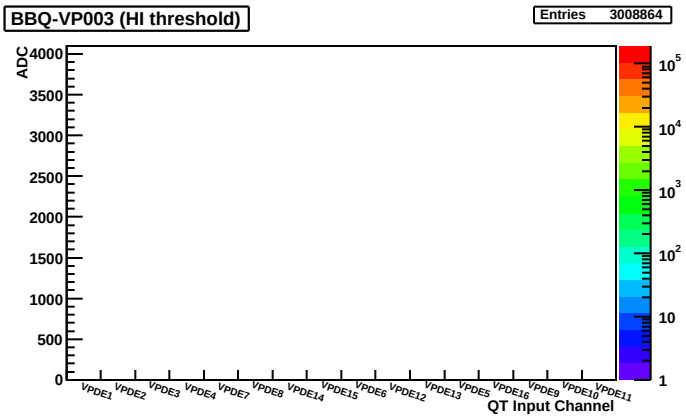

BBQ-ZD001
Entries 3008864
TAC
QT Input Channel
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

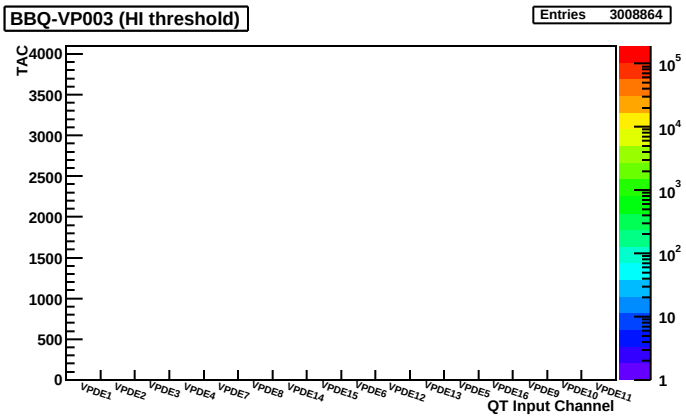

BBQ-VP001 (LO threshold)
Entries 3008864
ADC
QT Input Channel

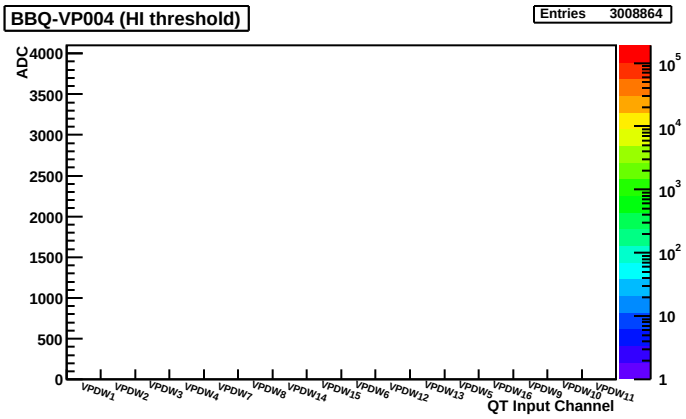

BBQ-VP001 (LO threshold)
Entries 3008864
TAC
QT Input Channel

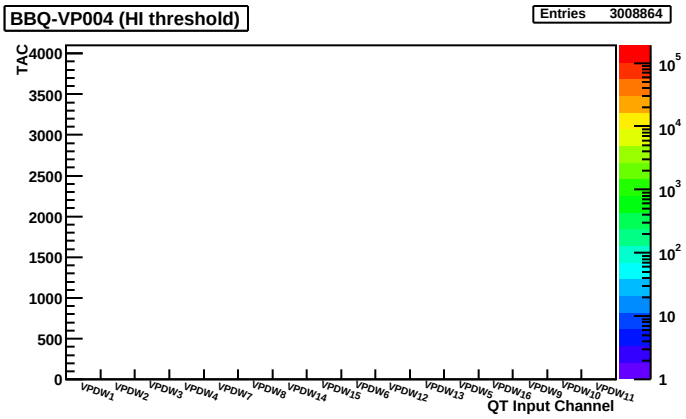

BBQ-VP002 (LO threshold)
Entries 3008864
ADC
QT Input Channel

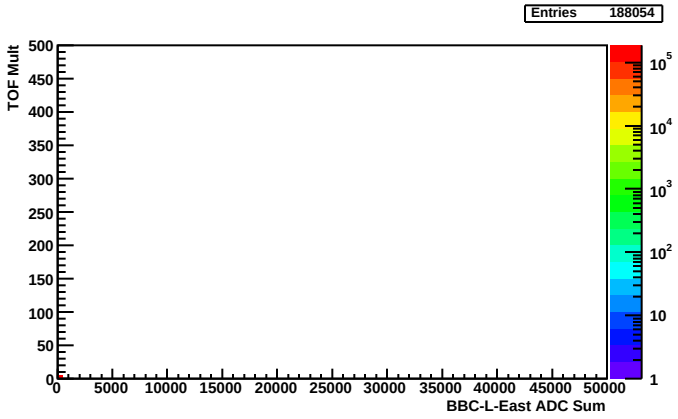

BBQ-VP002 (LO threshold)
Entries 3008864
TAC
QT Input Channel

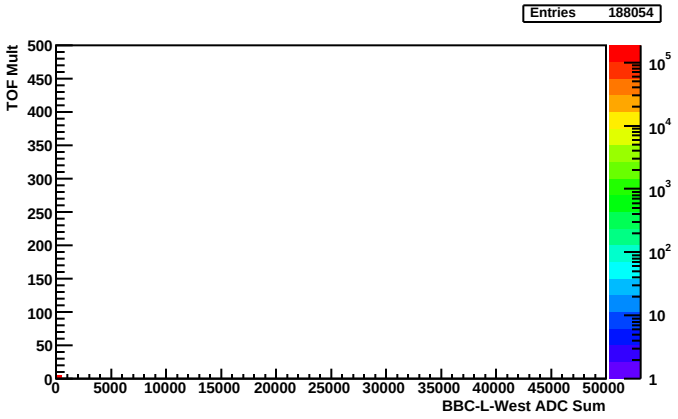

BBQ-VP003 (HI threshold)
Entries 3008864
ADC
QT Input Channel

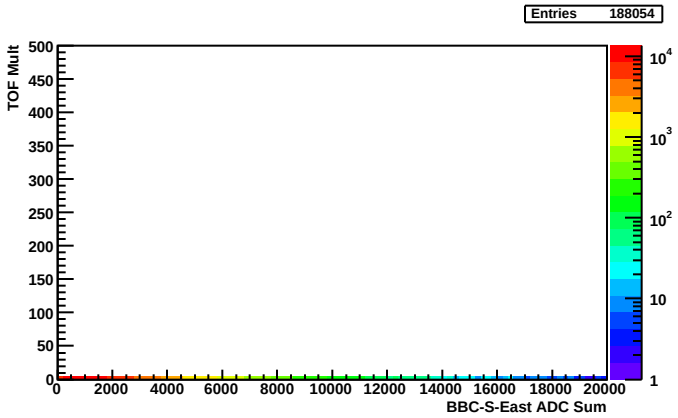

BBQ-VP003 (HI threshold)
Entries 3008864
TAC
QT Input Channel

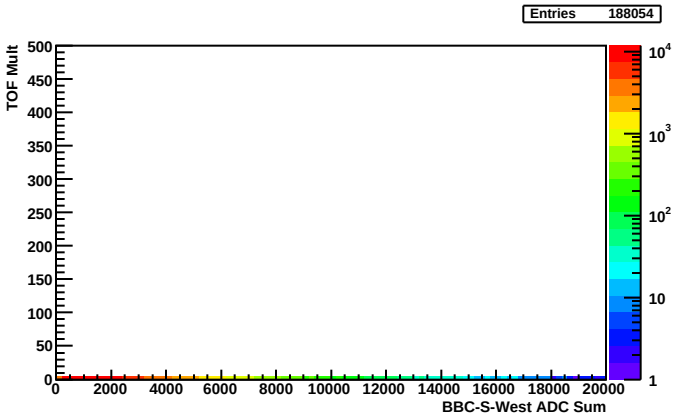

BBQ-VP004 (HI threshold)
Entries 3008864
ADC
QT Input Channel

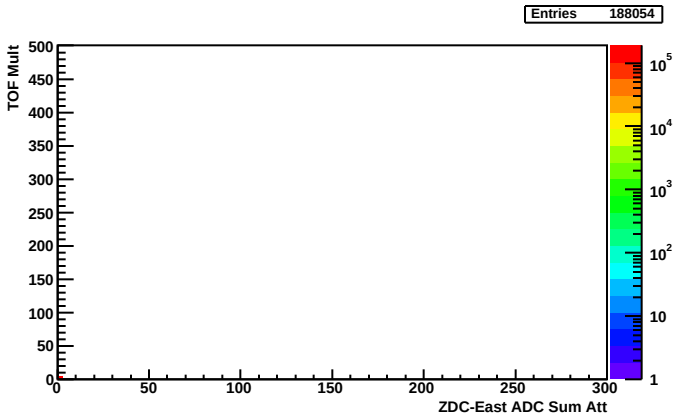

BBQ-VP004 (HI threshold)
Entries 3008864
TAC
QT Input Channel

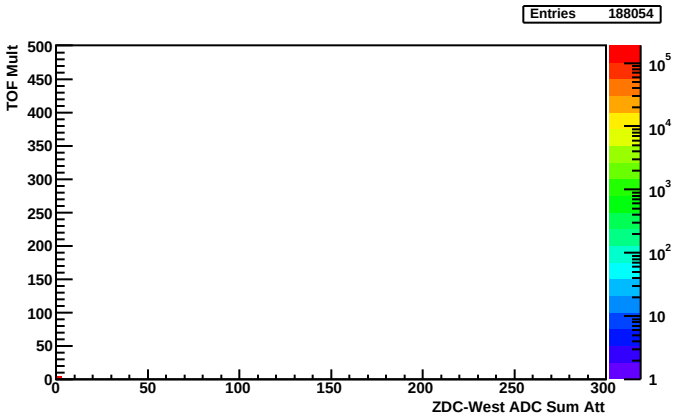

Entries 188054
TOF Mult
BBC-L-East ADC Sum

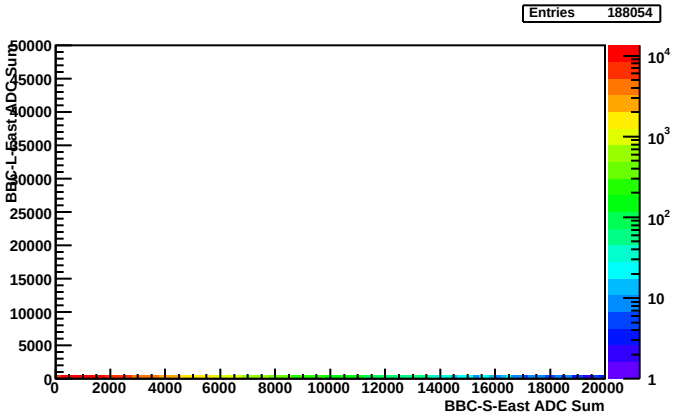

Entries 188054
TOF Mult
BBC-L-West ADC Sum

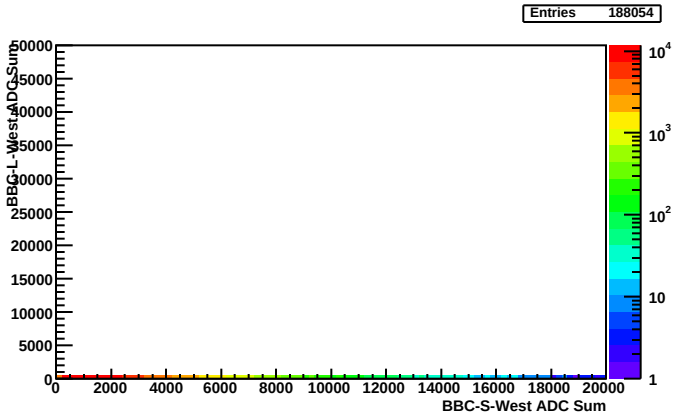

Entries 188054
TOF Mult
BBC-S-East ADC Sum

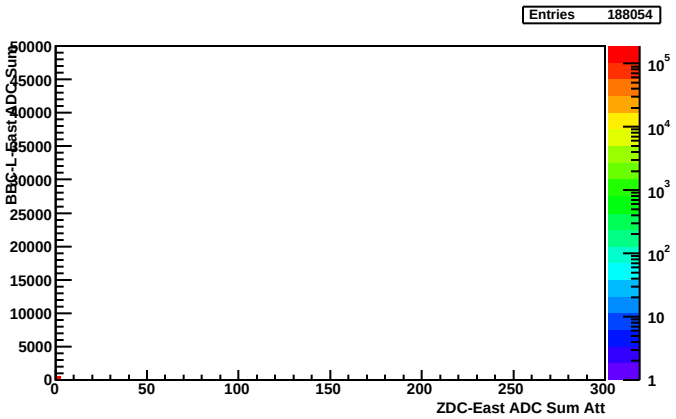

Entries 188054
TOF Mult
BBC-S-West ADC Sum

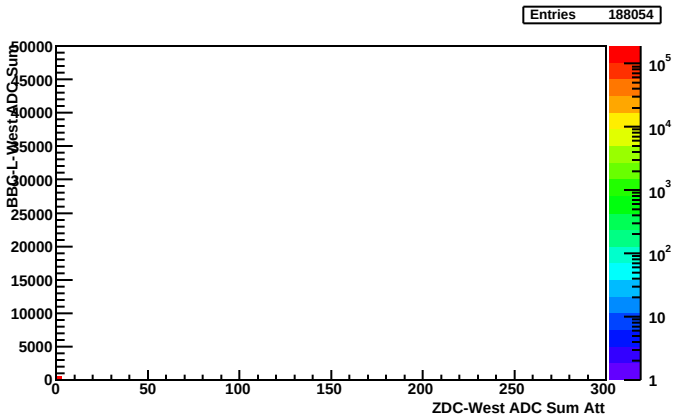

Entries 188054
TOF Mult
ZDC-East ADC Sum Att

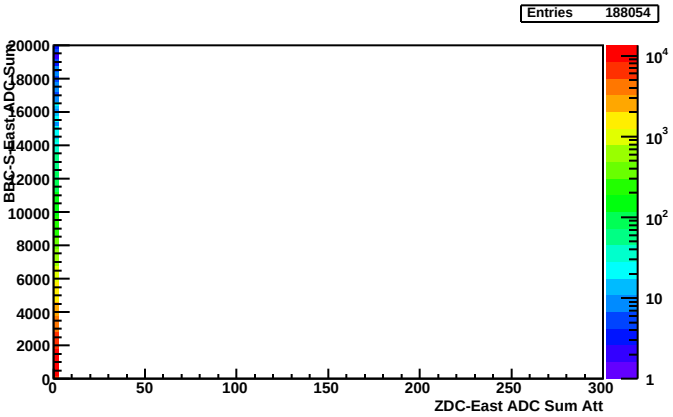

Entries 188054
TOF Mult
ZDC-West ADC Sum Att

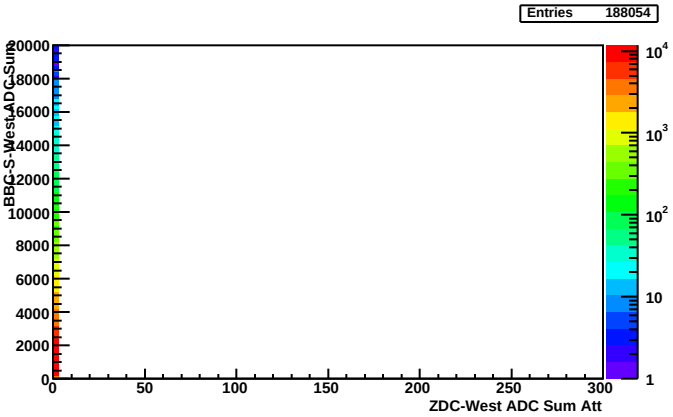

Entries 188054
BBC-L-East ADC Sum
BBC-S-East ADC Sum

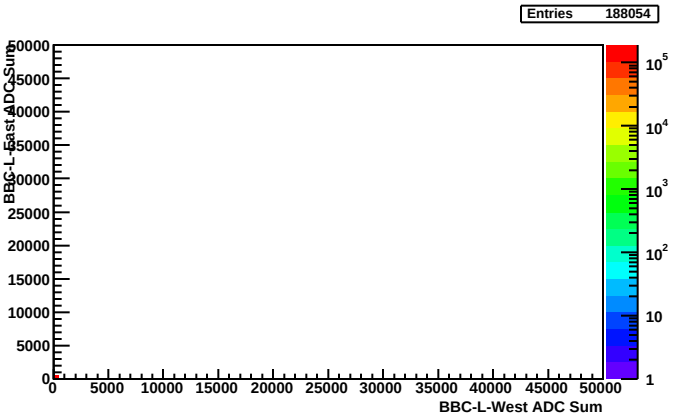

Entries 188054
BBC-L-West ADC Sum
BBC-S-West ADC Sum

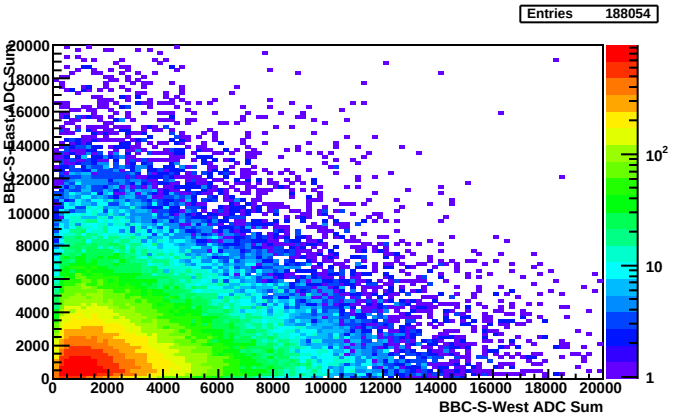

Entries 188054
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

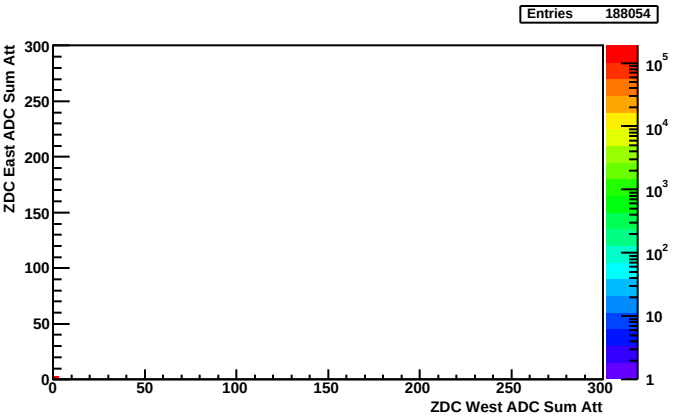

Entries 188054
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

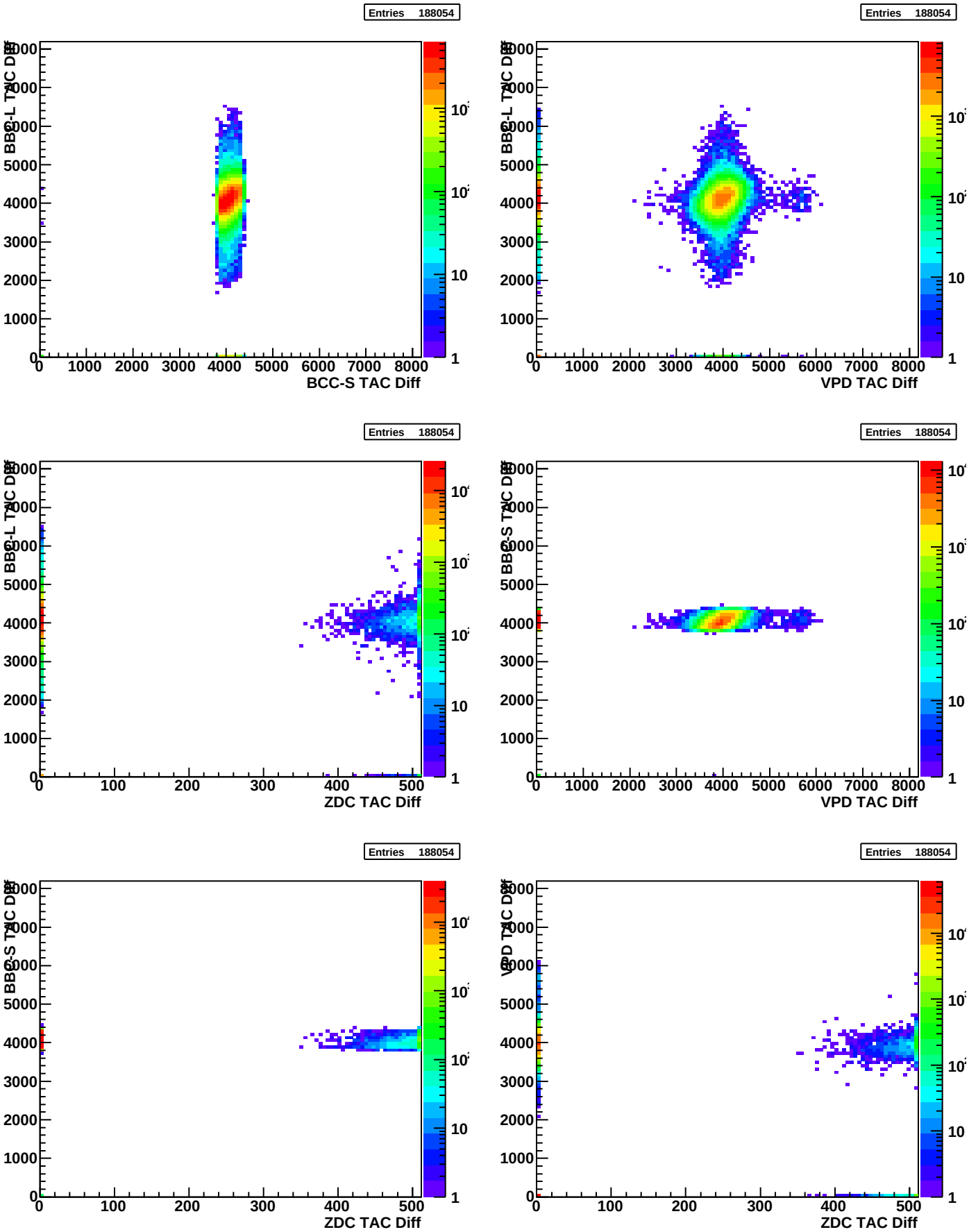

Entries 188054
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

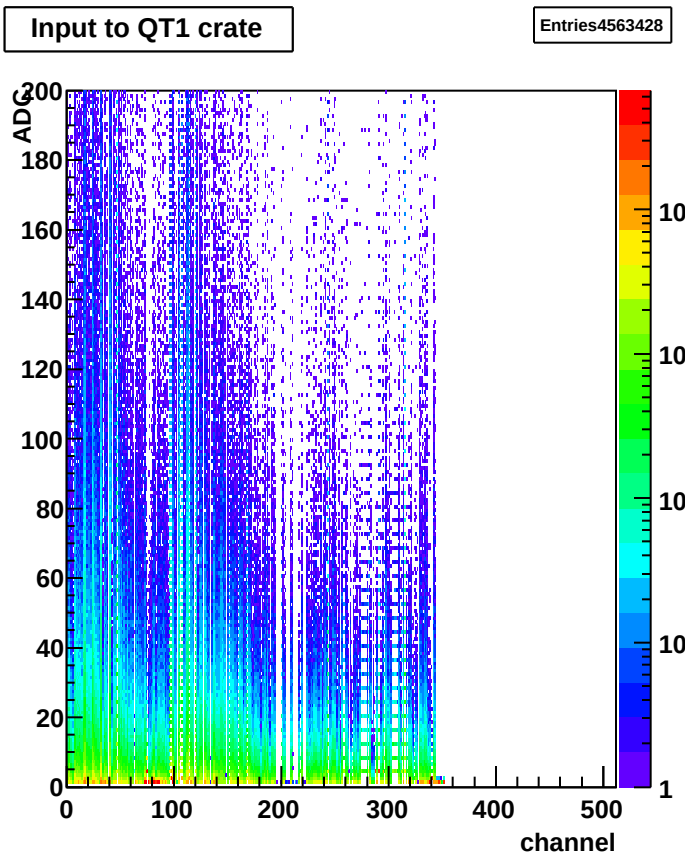

Entries 188054
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

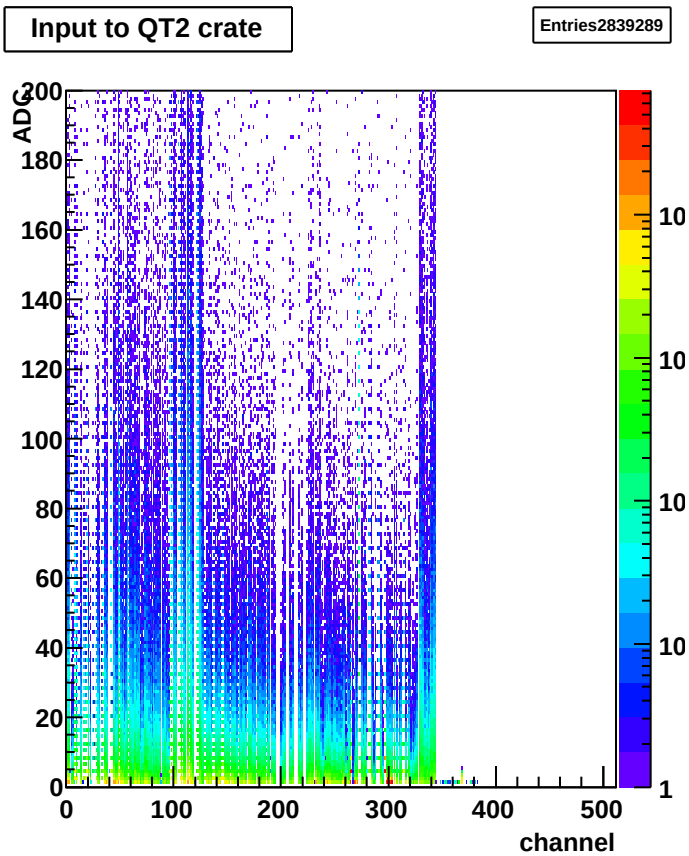

Entries 188054
BBC-L-East ADC Sum
BBC-L-West ADC Sum

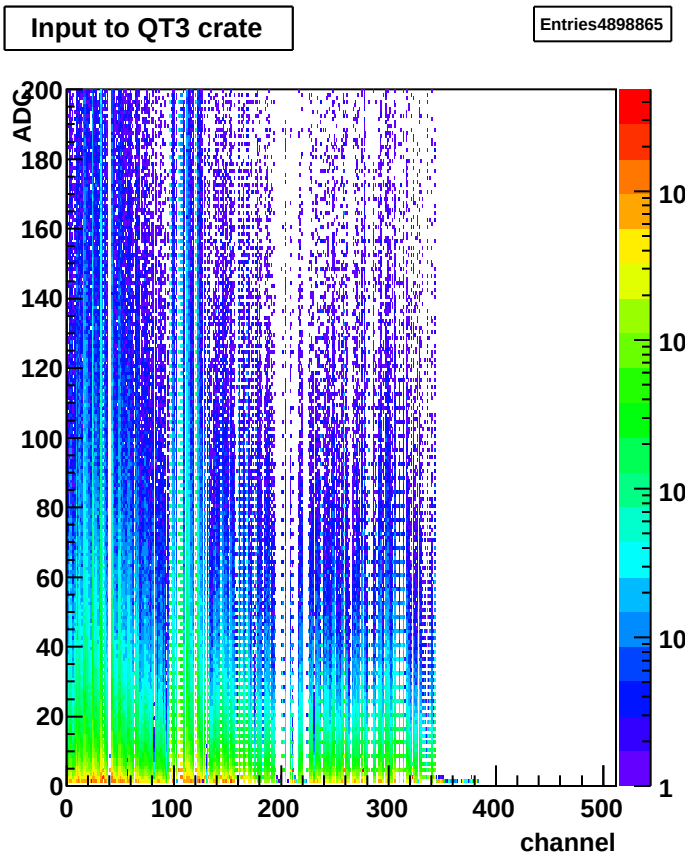

Entries 188054
BBC-S-East ADC Sum
BBC-S-West ADC Sum

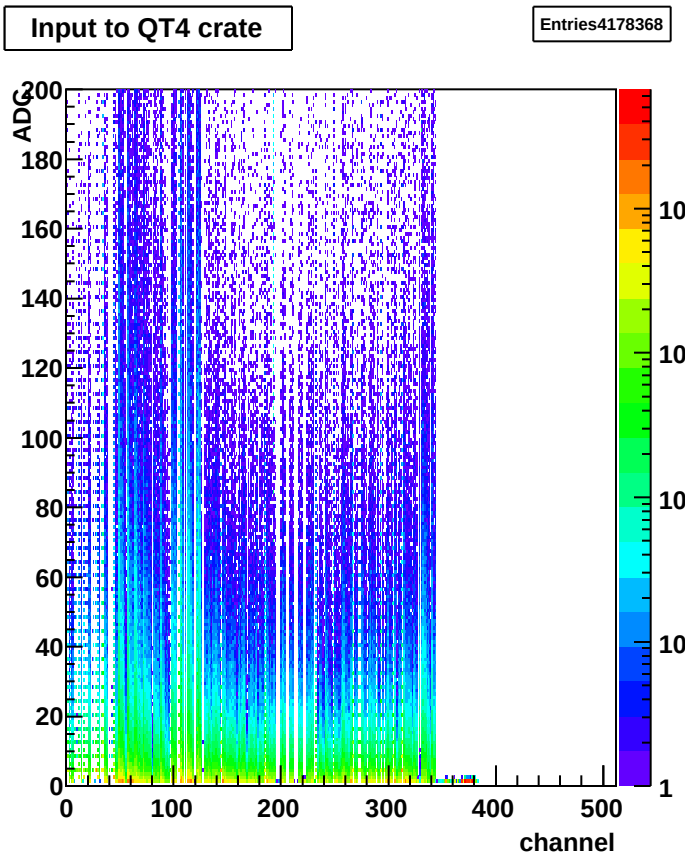

Entries 188054
ZDC East ADC Sum Att
ZDC West ADC Sum Att

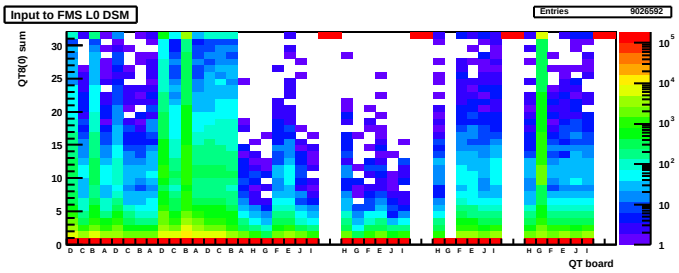

Entries 188054
BBC-L TAC Diff
BCC-S TAC Diff
Entries 188054
BBC-L TAC Diff
VPD TAC Diff
Entries 188054
BBC-L TAC Diff
ZDC TAC Diff
Entries 188054
BBC-S TAC Diff
VPD TAC Diff
Entries 188054
BBC-S TAC Diff
ZDC TAC Diff
Entries 188054
VPD TAC Diff
ZDC TAC Diff

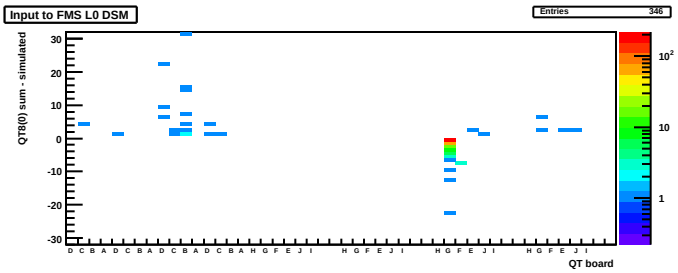

Input to QT1 crate
Entries4563428
ADC
channel

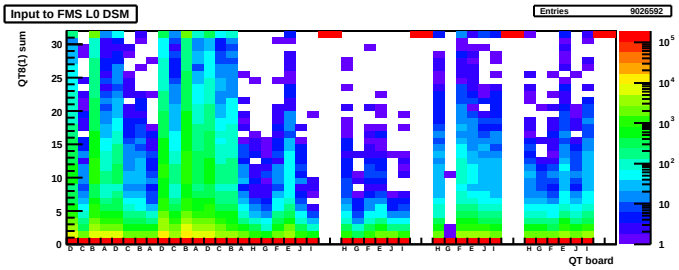

Input to QT2 crate
Entries2839289
ADC
channel

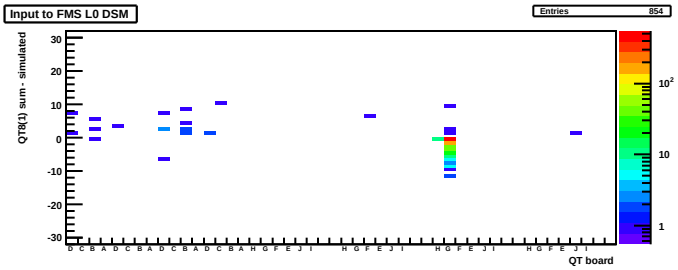

Input to QT3 crate
Entries4898865
ADC
channel

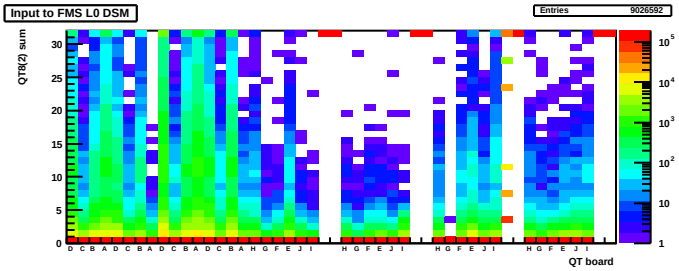

Input to QT4 crate
Entries4178368
ADC
channel

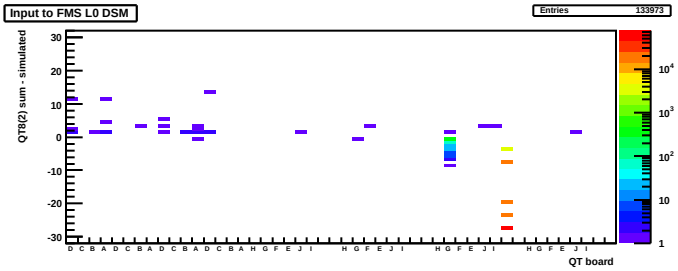

Input to FMS L0 DSM
Entries 9026592
QT8(0) sum
QT board

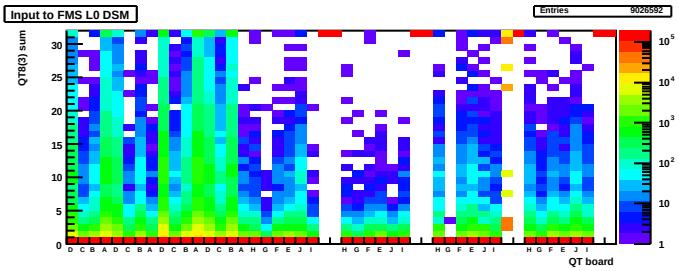

Input to FMS L0 DSM
Entries 346
QT8(0) sum - simulated
QT board

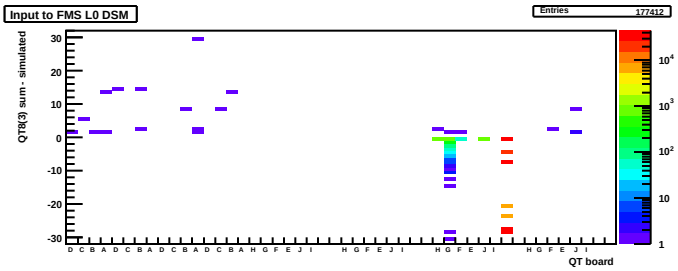

Input to FMS L0 DSM
Entries 9026592
QT8(1) sum
QT board

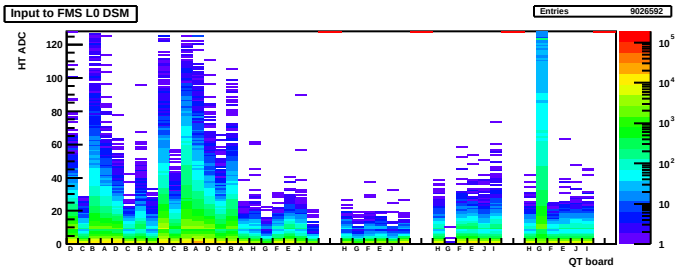

Input to FMS L0 DSM
Entries 854
QT8(1) sum - simulated
QT board

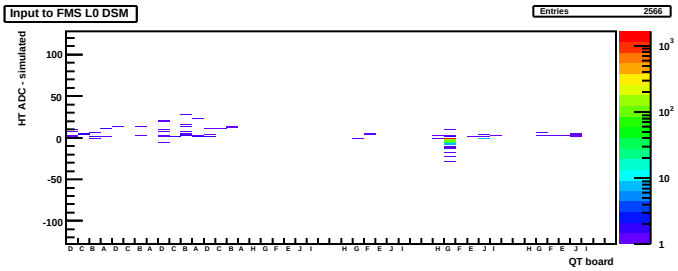

Input to FMS L0 DSM
Entries 9026592
QT8(2) sum
QT board

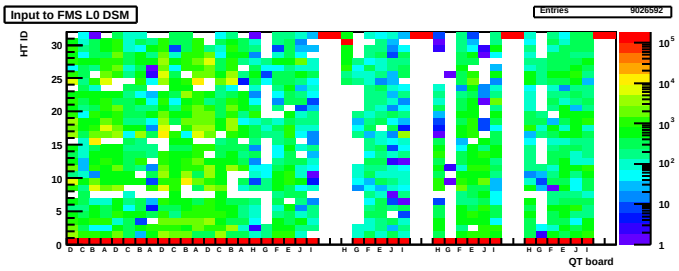

Input to FMS L0 DSM
Entries 133973
QT8(2) sum - simulated
QT board

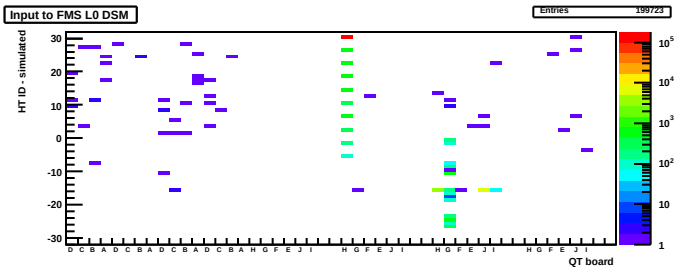

Input to FMS L0 DSM
Entries 9026592
QT8(3) sum
QT board

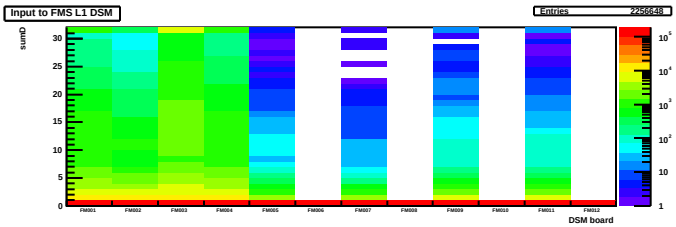

Input to FMS L0 DSM
Entries 177412
QT8(3) sum - simulated
QT board

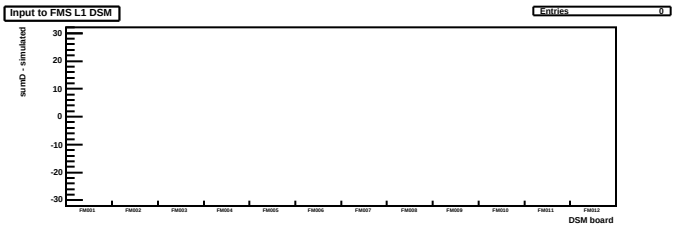

Input to FMS L0 DSM
Entries 9026592
HT ADC
QT board

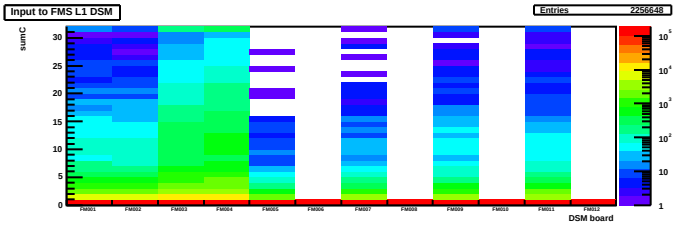

Input to FMS L0 DSM
Entries 2566
HT ADC - simulated
QT board

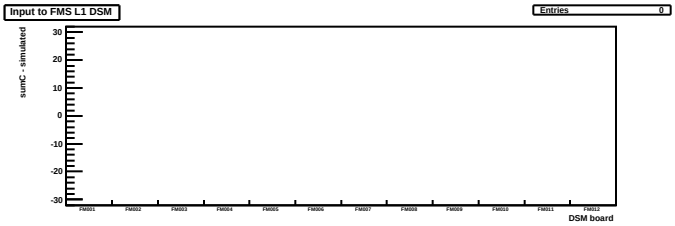

Input to FMS L0 DSM
Entries 9026592
HT ID
QT board

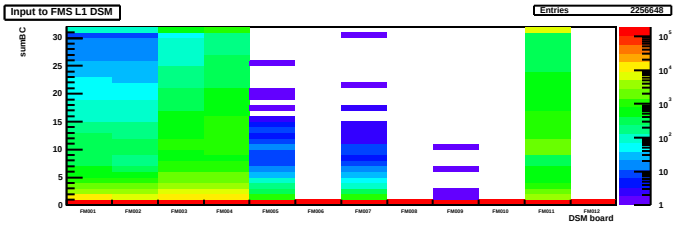

Input to FMS L0 DSM
Entries 199723
HT ID - simulated
QT board

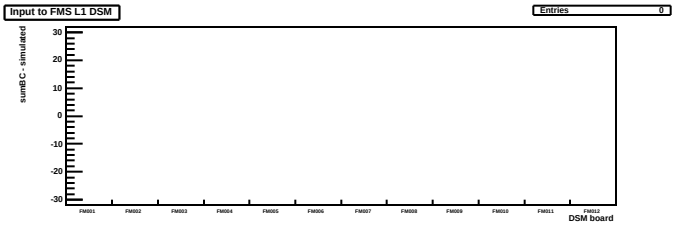

Input to FMS L1 DSM
Entries 2256648
sumD
DSM board

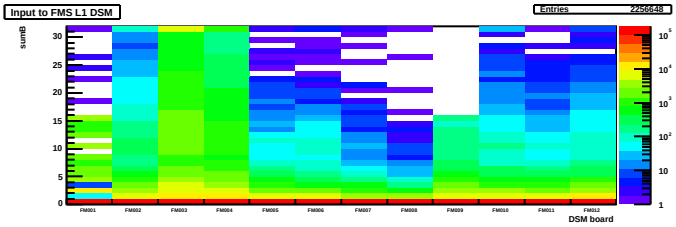

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

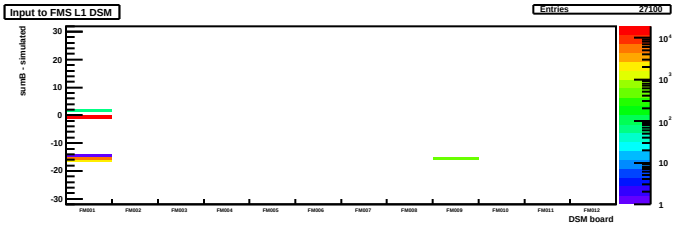

Input to FMS L1 DSM
Entries 2256648
sumC
DSM board

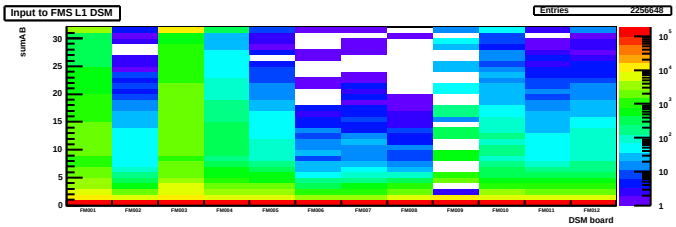

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

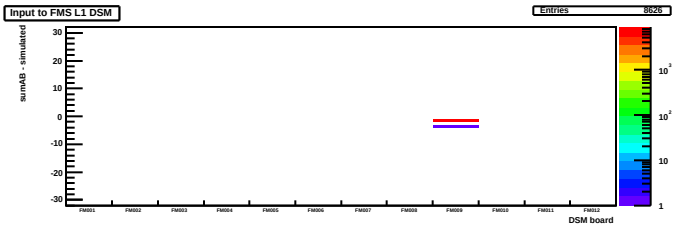

Input to FMS L1 DSM
Entries 2256648
sumBC
DSM board

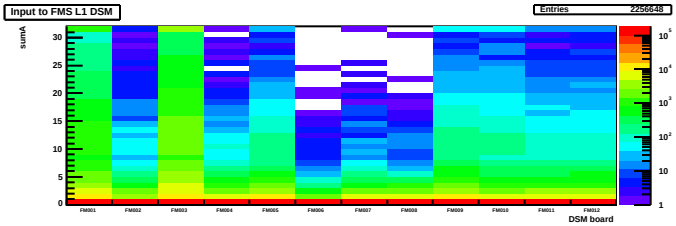

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

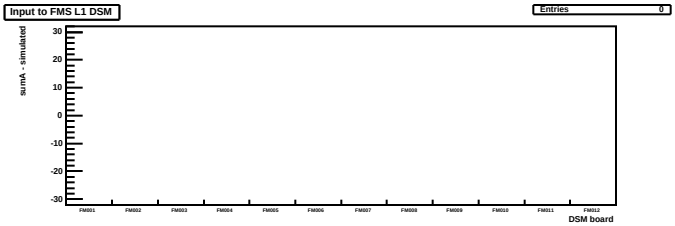

Input to FMS L1 DSM
Entries 2256648
sumB
DSM board

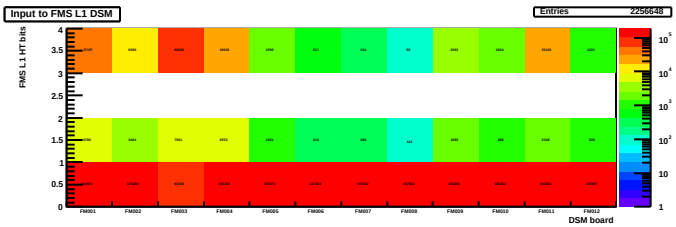

Input to FMS L1 DSM
Entries 27100
sumB - simulated
DSM board

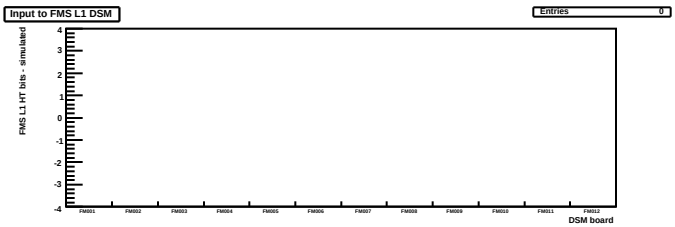

Input to FMS L1 DSM
Entries 2256648
sumAB
DSM board

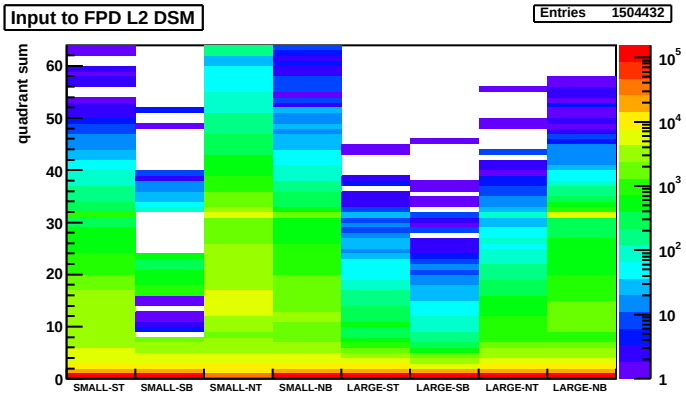

Input to FMS L1 DSM
Entries 8626
sumAB - simulated
DSM board

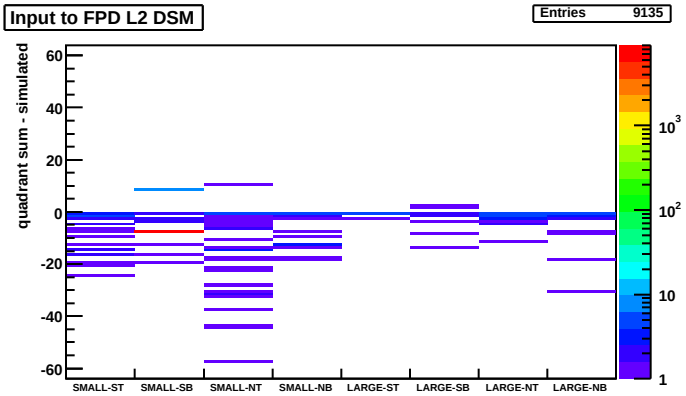

Input to FMS L1 DSM
Entries 2256648
sumA
DSM board

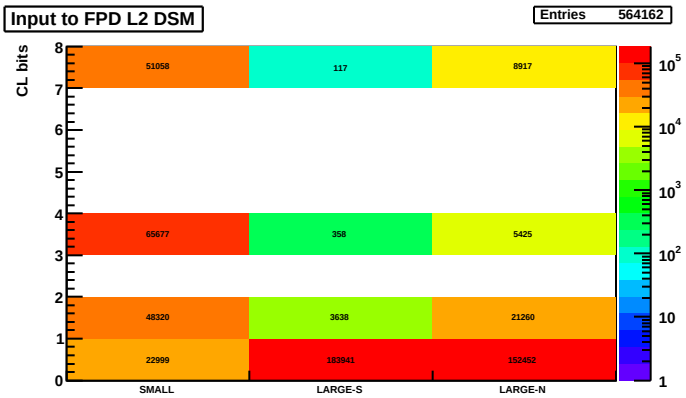

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

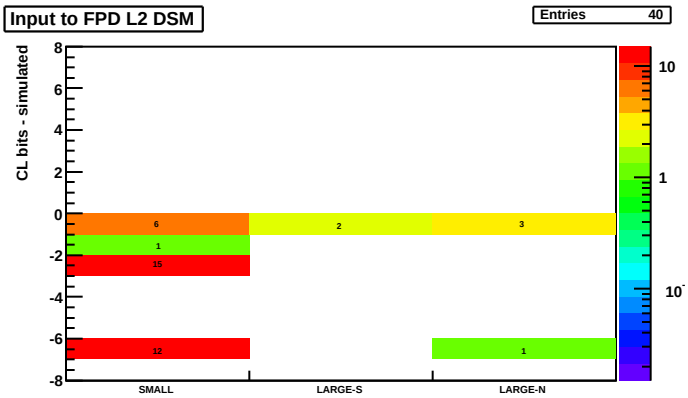

Input to FMS L1 DSM
Entries 2256648
FMS L1 HT bits
DSM board

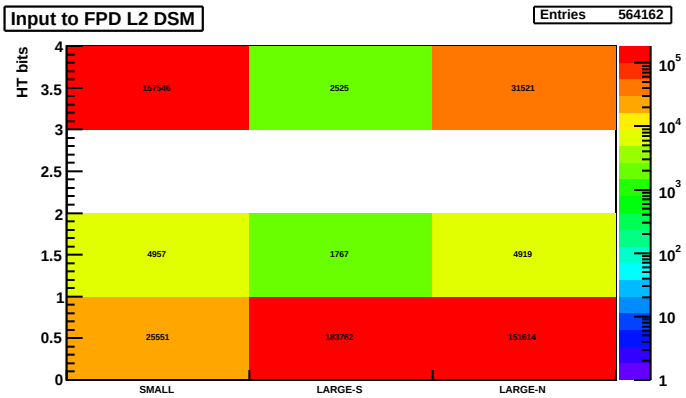

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

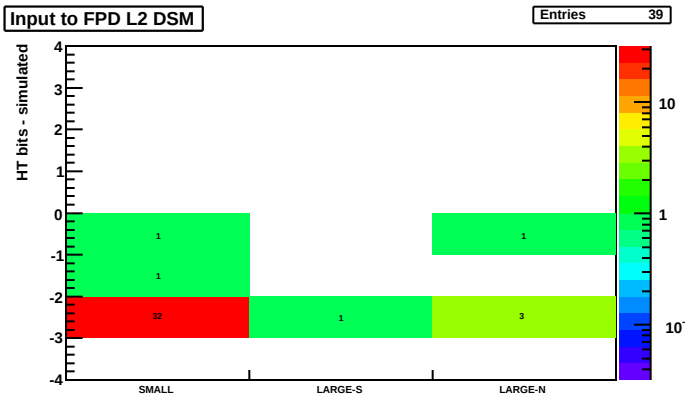

Input to FPD L2 DSM
Entries 1504432
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

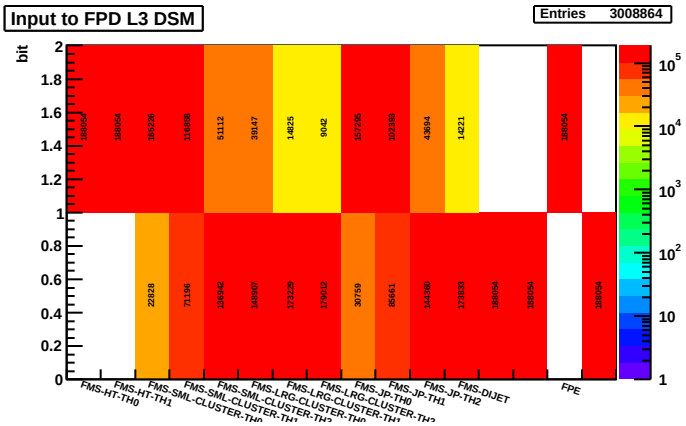

Input to FPD L2 DSM
Entries 9135
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

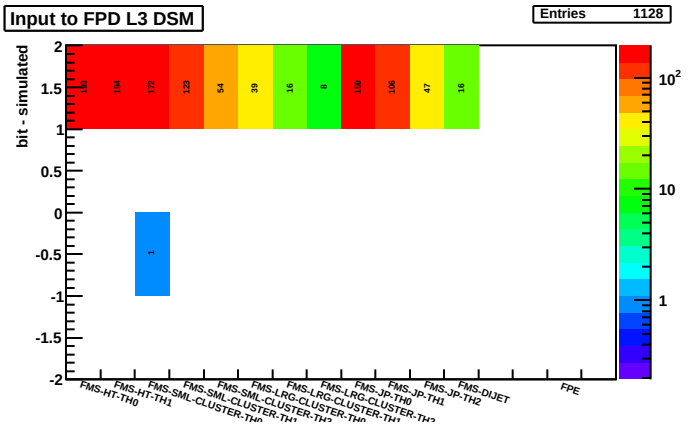

Input to FPD L2 DSM
Entries 564162
CL bits
51058
117
8917
65677
358
5425
48320
3638
21260
22999
183941
152452
SMALL
LARGE-S
LARGE-N

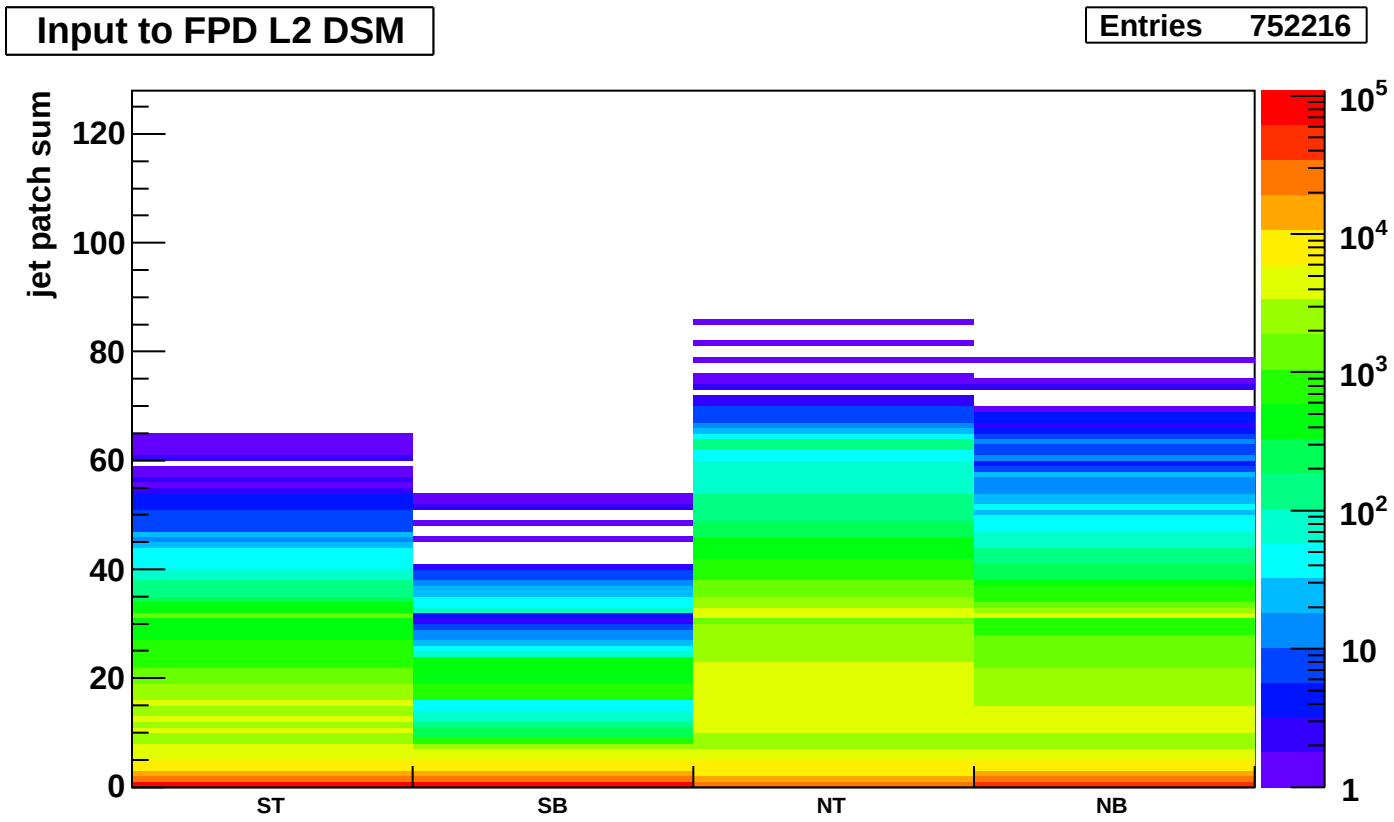

Input to FPD L2 DSM
Entries 40
CL bits - simulated
6
2
3
1
15
12
1
SMALL
LARGE-S
LARGE-N

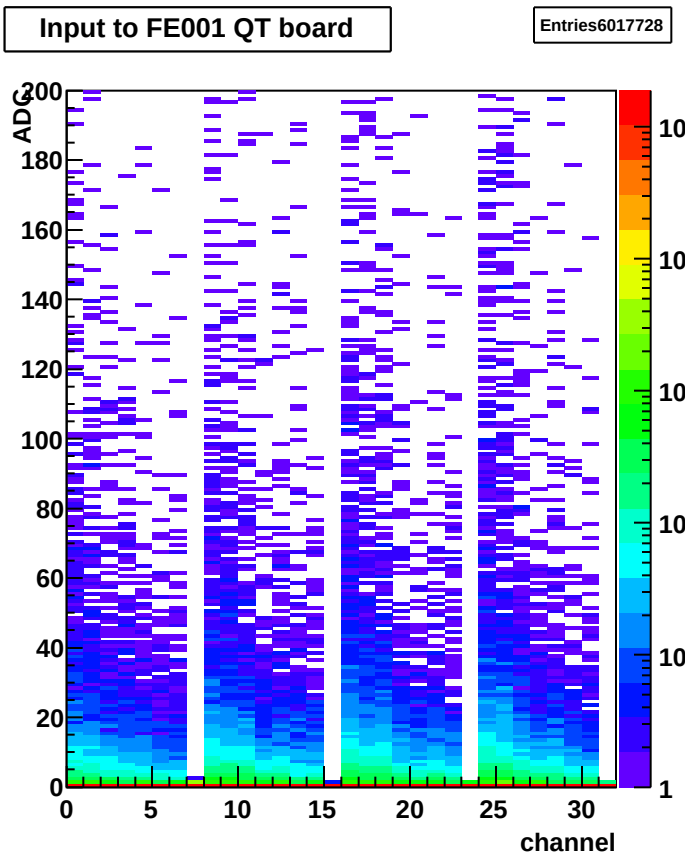

Input to FPD L2 DSM
Entries 564162
HT bits
157546
2525
31521
4957
1767
4919
25551
183762
151614
SMALL
LARGE-S
LARGE-N

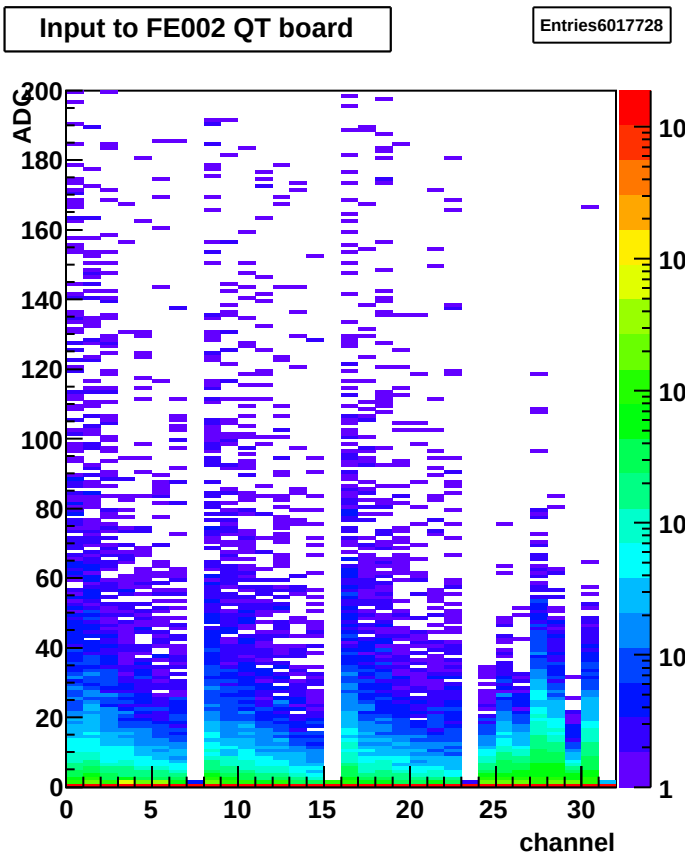

Input to FPD L2 DSM
Entries 39
HT bits - simulated
1
1
1
1
32
1
3
SMALL
LARGE-S
LARGE-N

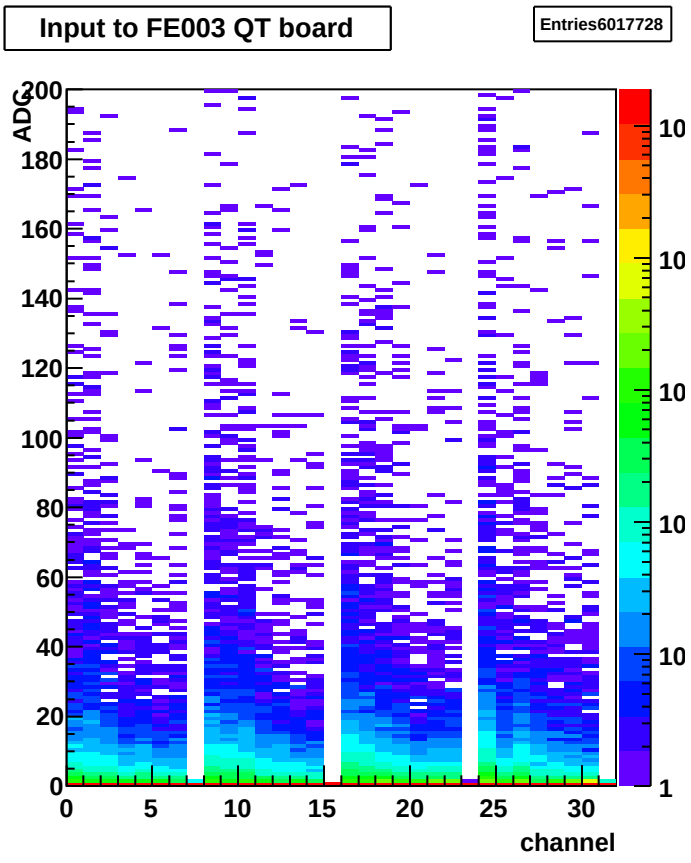

Input to FPD L3 DSM
Entries 3008864
bit
188054
188054
165526
116858
51112
39147
14825
9042
157286
102393
43694
14221
188054
22528
71196
136942
148807
173229
179012
30759
85561
144360
173833
188054
188054
188054
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

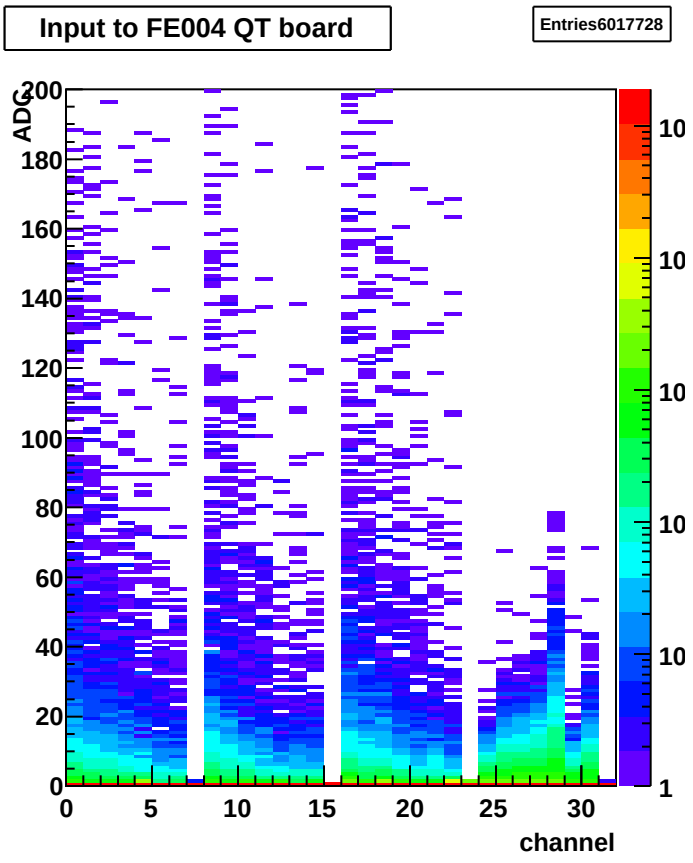

Input to FPD L3 DSM
Entries 1128
bit - simulated
193
194
172
123
54
39
16
8
159
106
47
16
1
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

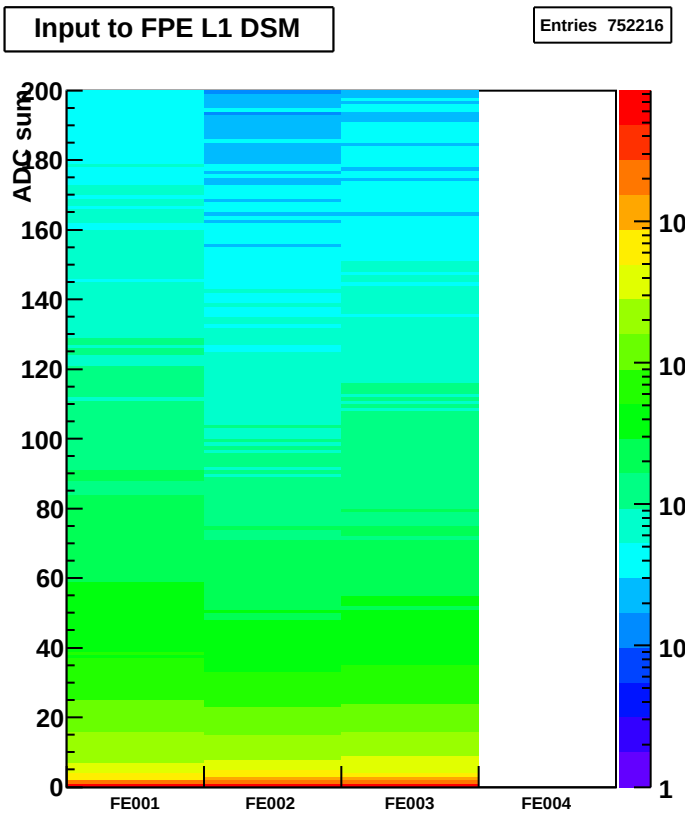

Input to FPD L2 DSM
Entries 752216
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

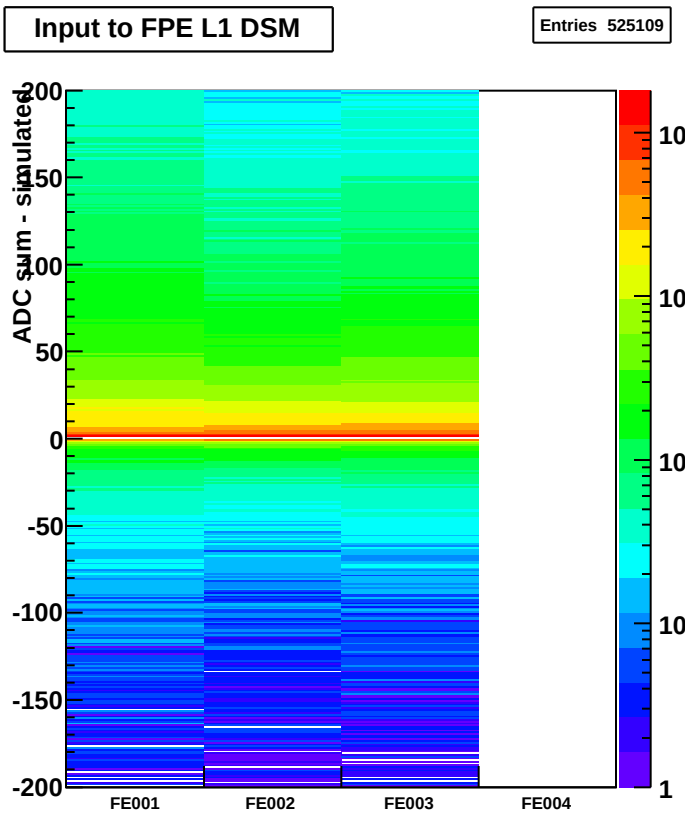

Input to FE001 QT board
Entries6017728
ADC
channel

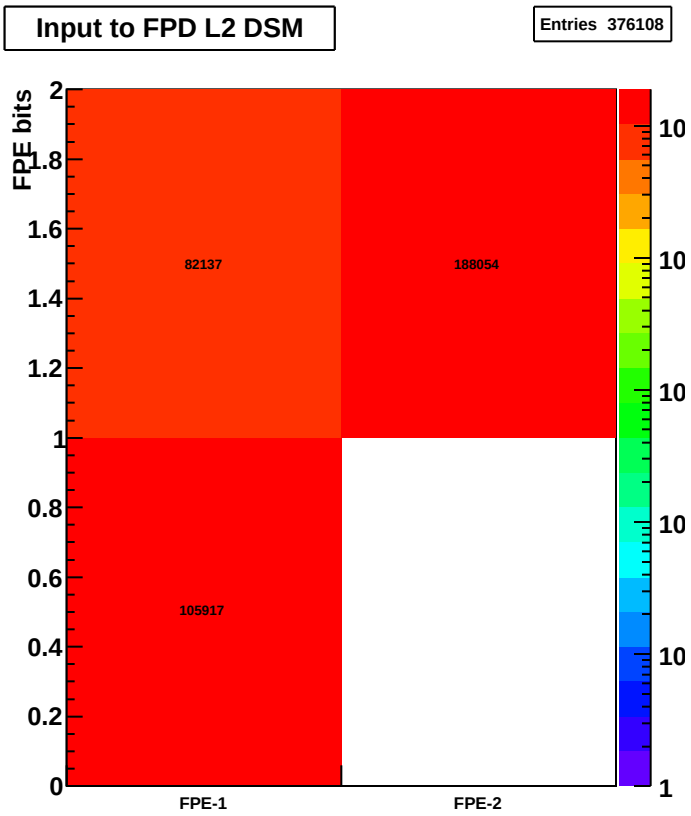

Input to FE002 QT board
Entries6017728
ADC
channel

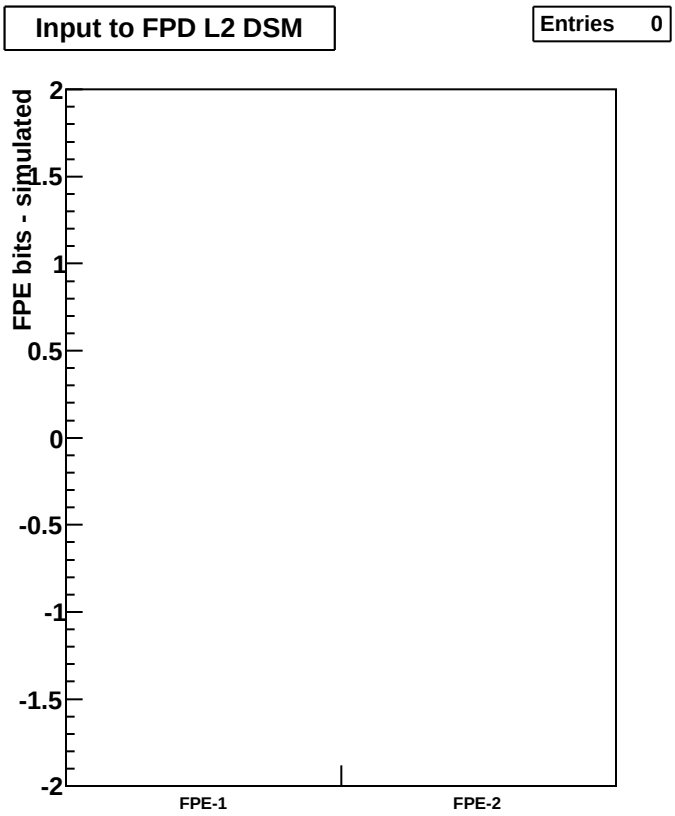

Input to FE003 QT board
Entries6017728
ADC
channel


Input to FE004 QT board
Entries6017728
ADC
channel


Input to FPE L1 DSM
Entries 752216
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 525109
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 376108
FPE bits
82137
188054
105917
FPE-1
FPE-2


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