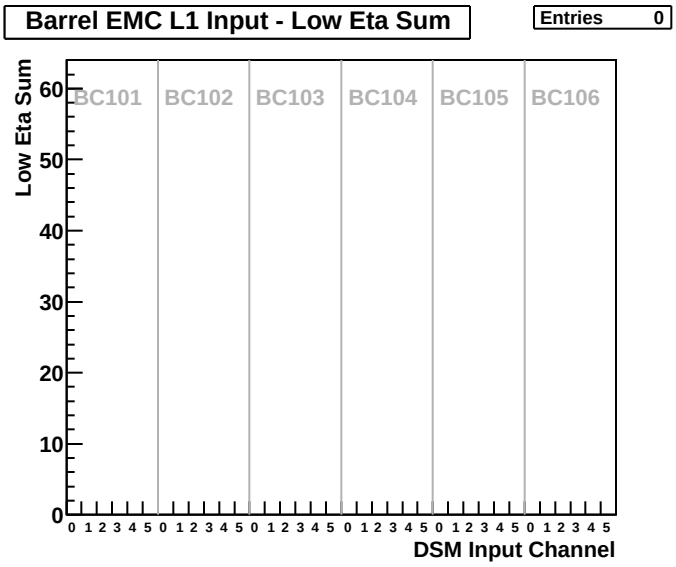
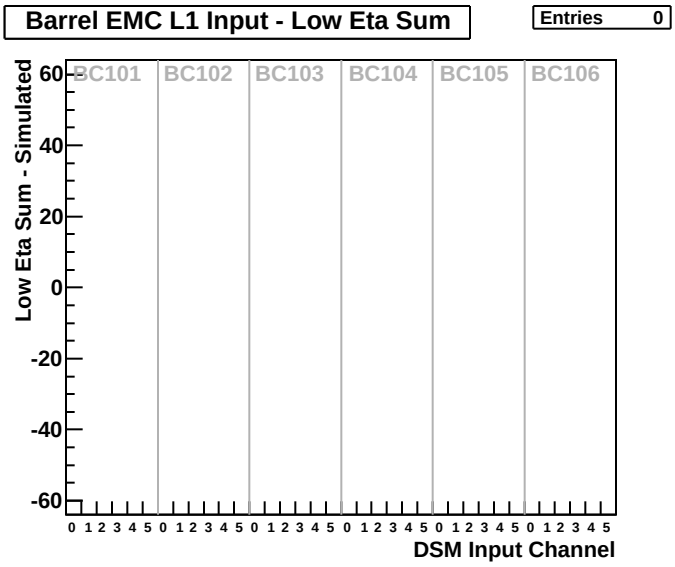
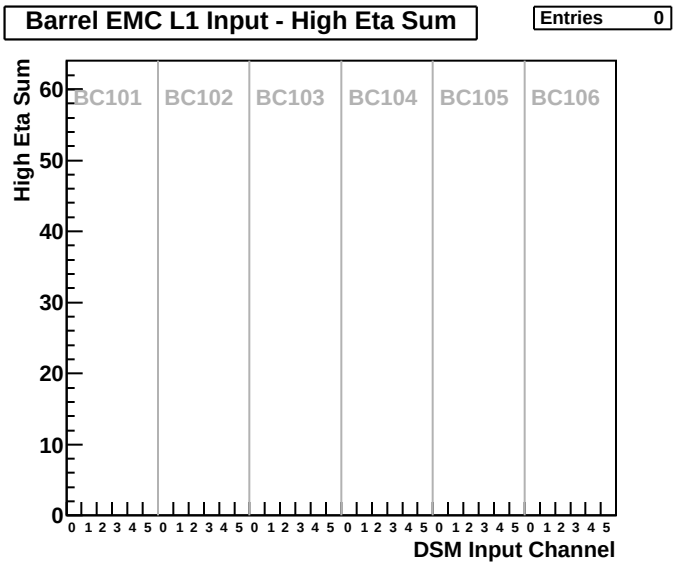
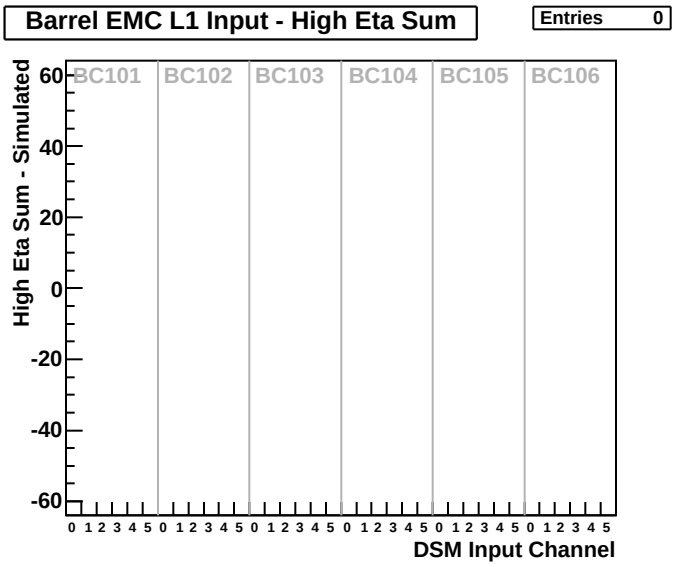
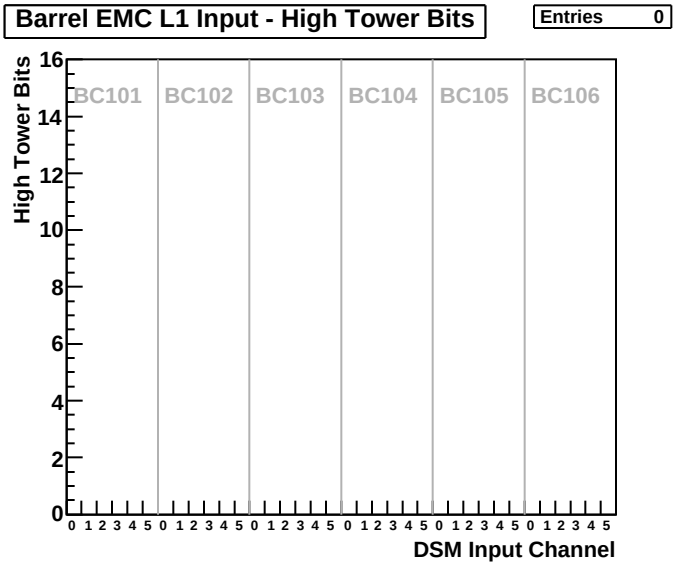
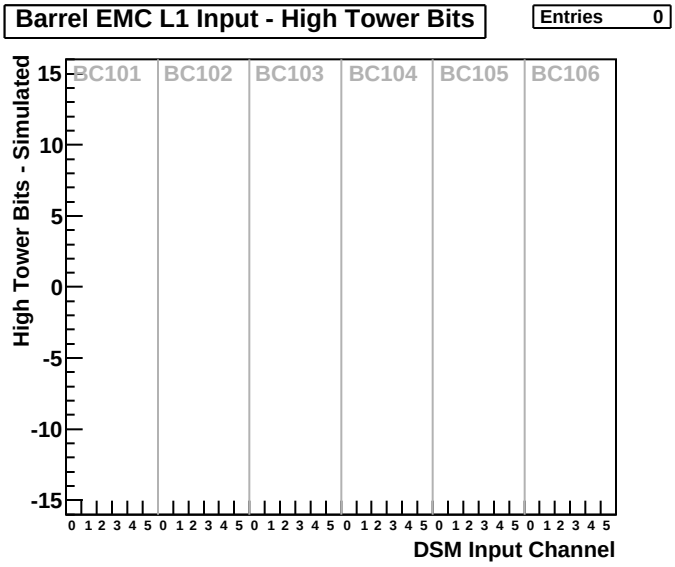

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

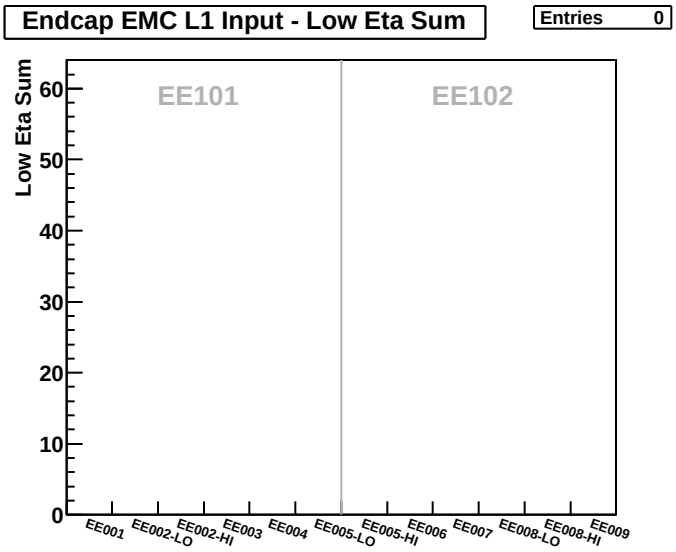

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

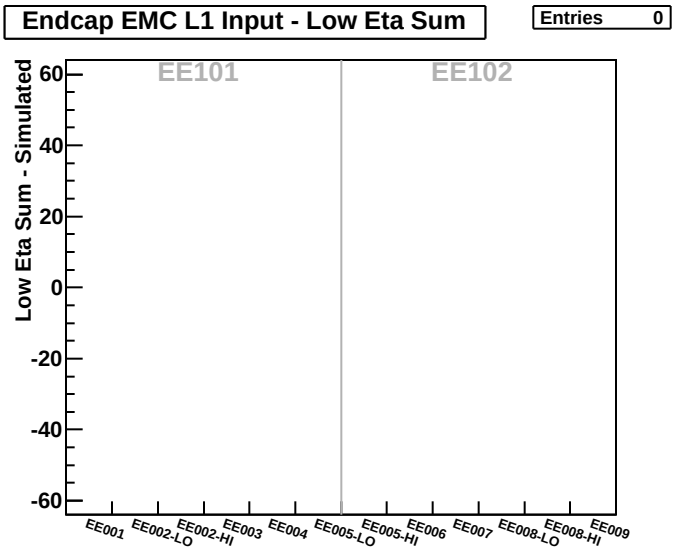

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

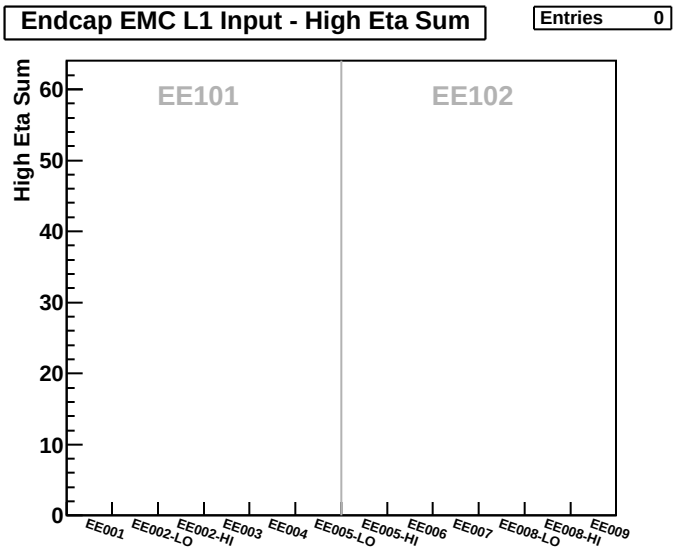

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

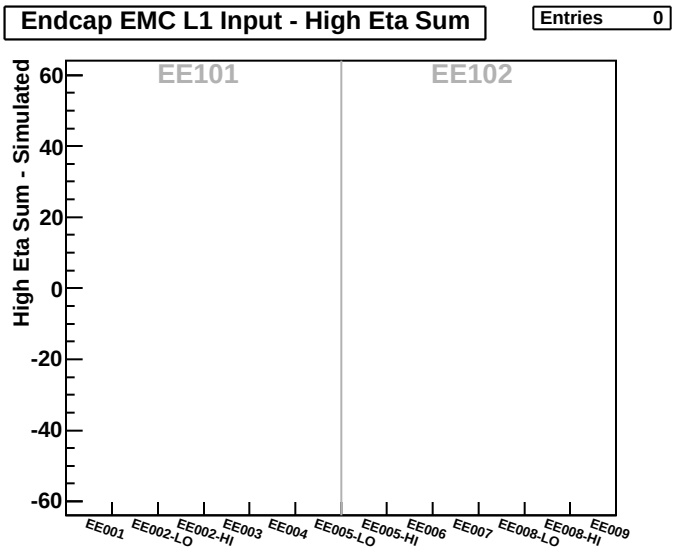

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

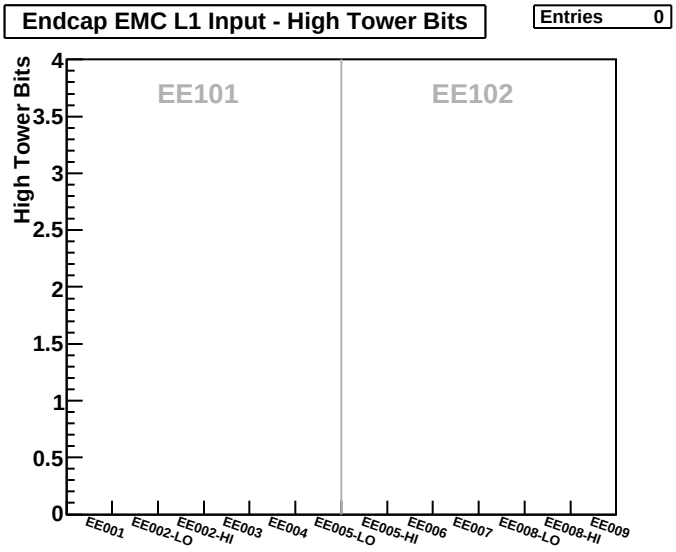

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

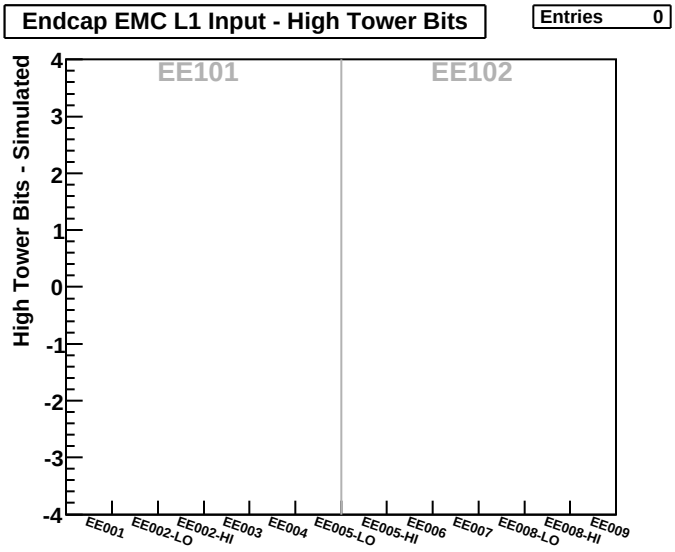

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
EE101
EE102
0
10
20
30
40
50
60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

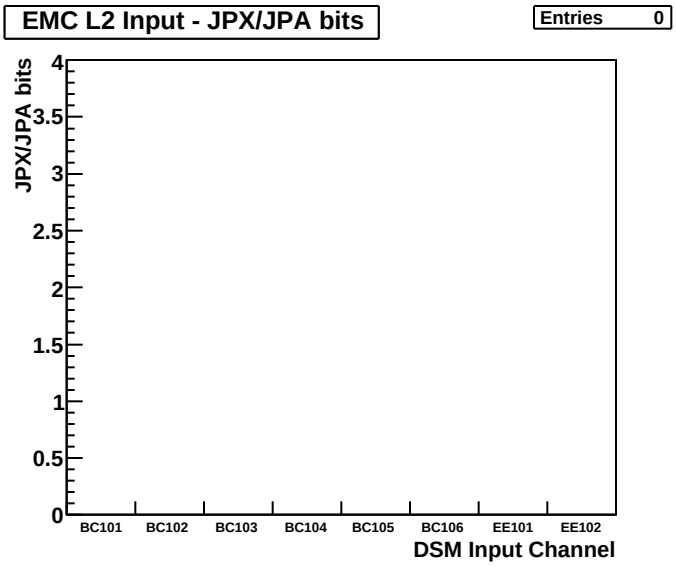

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
60
40
20
0
-20
-40
-60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

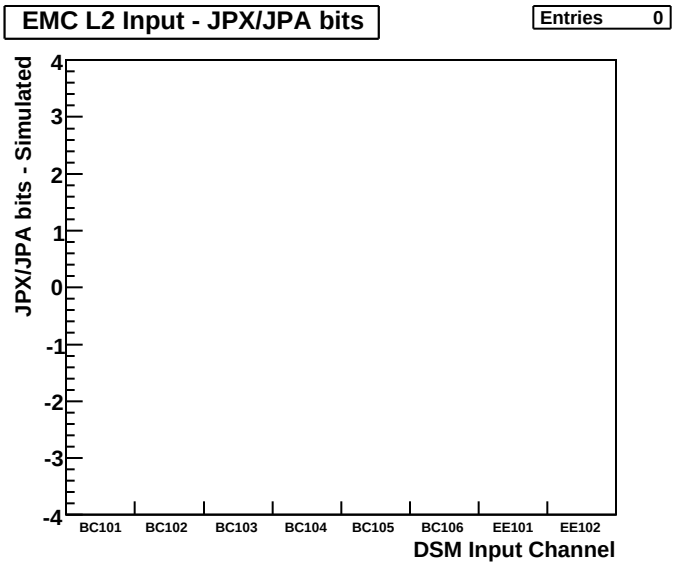

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
EE101
EE102
0
10
20
30
40
50
60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

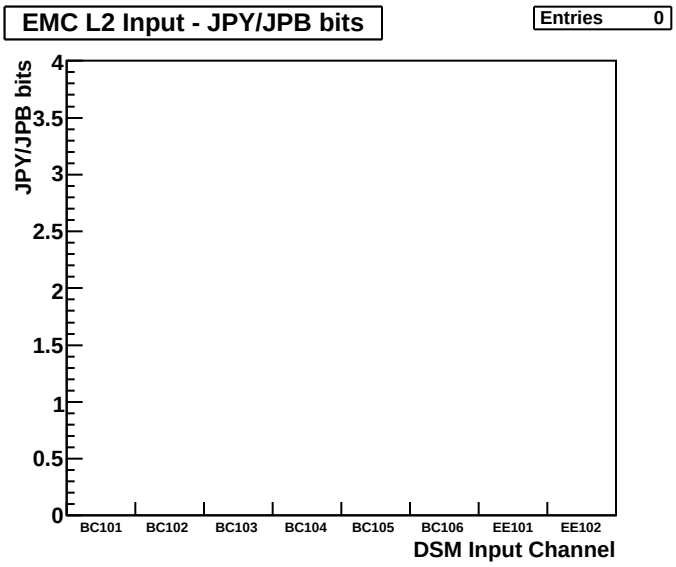

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
60
40
20
0
-20
-40
-60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

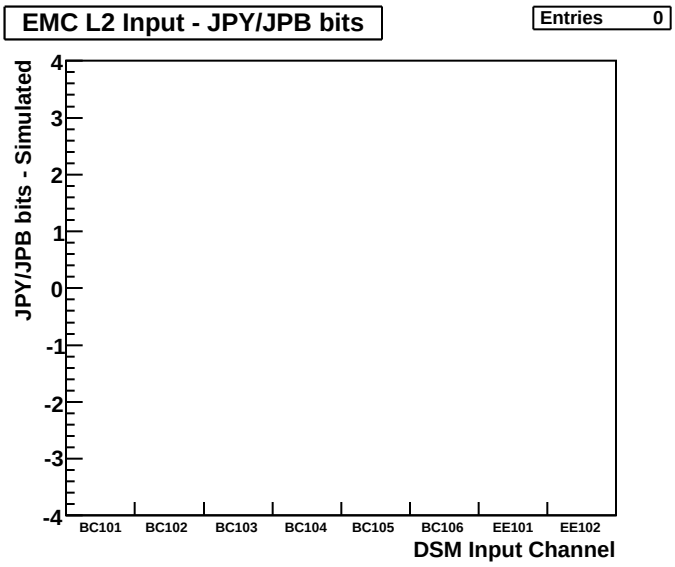

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
EE101
EE102
0
0.5
1
1.5
2
2.5
3
3.5
4
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

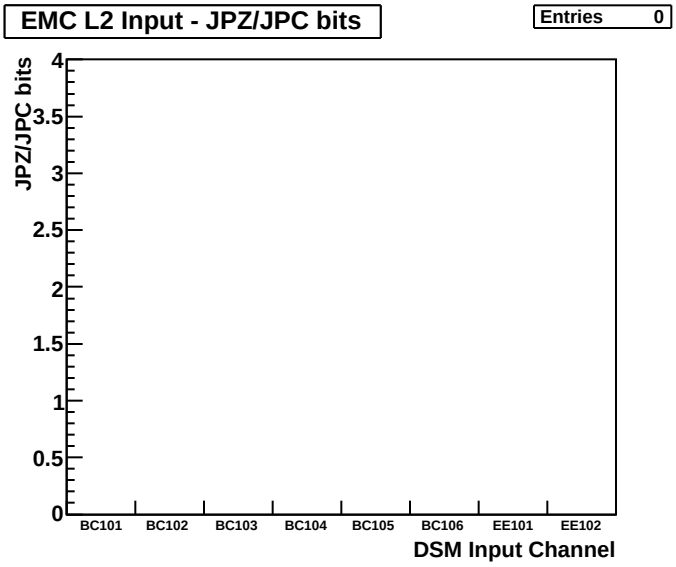

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
4
3
2
1
0
-1
-2
-3
-4
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

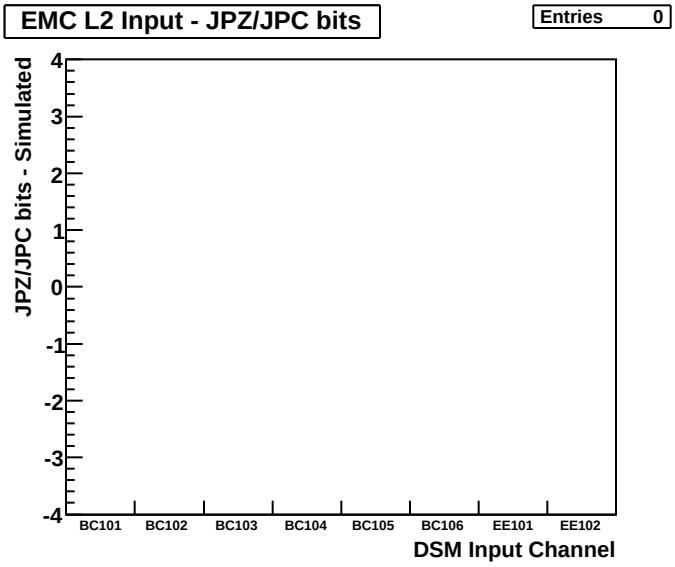

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

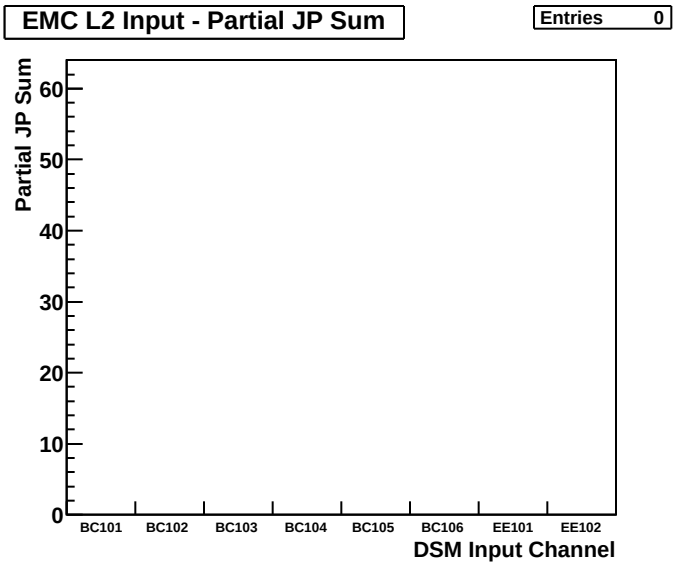

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

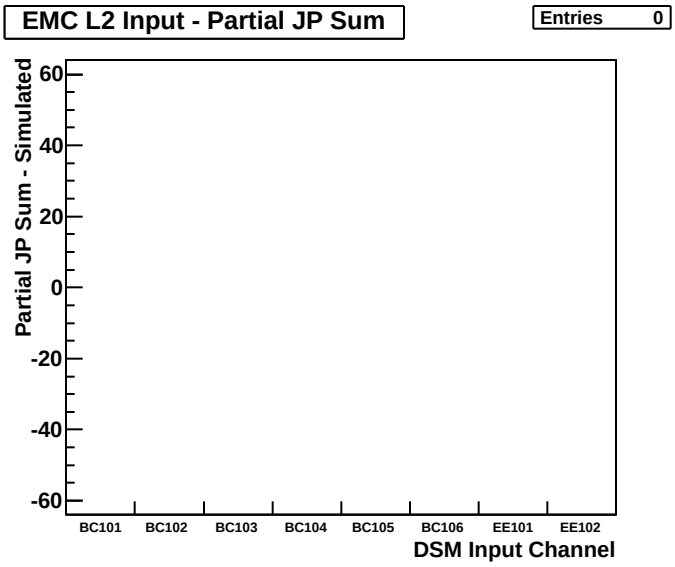

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

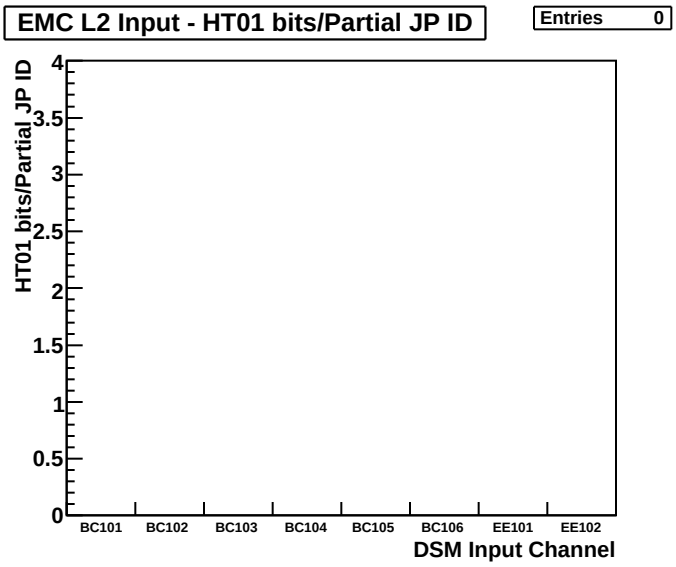

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

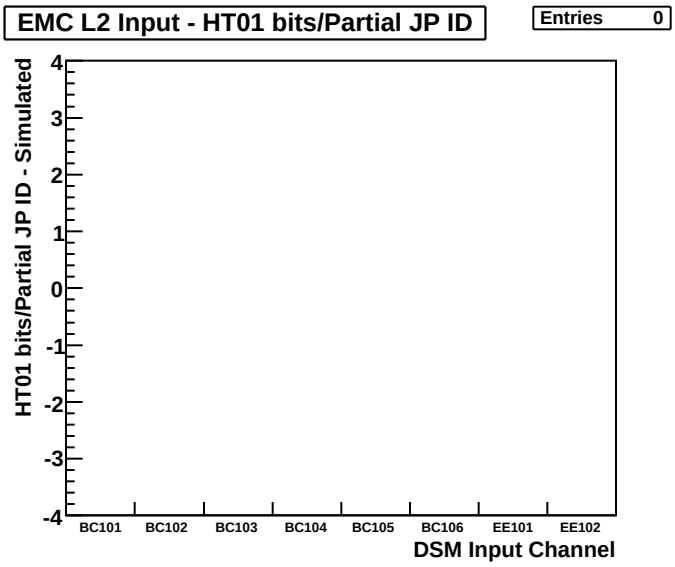

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

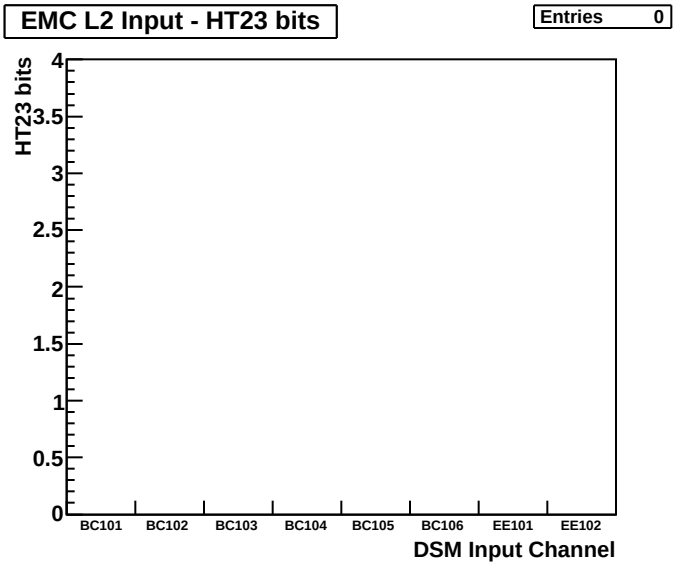

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

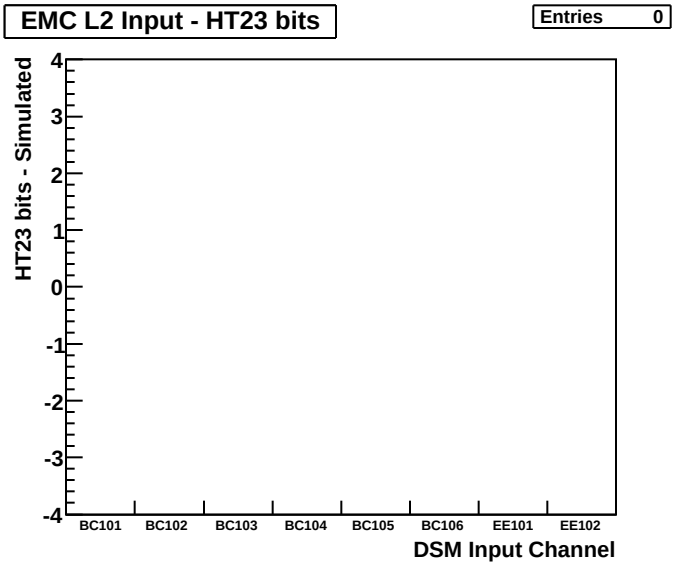

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum
60
50
40
30
20
10
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

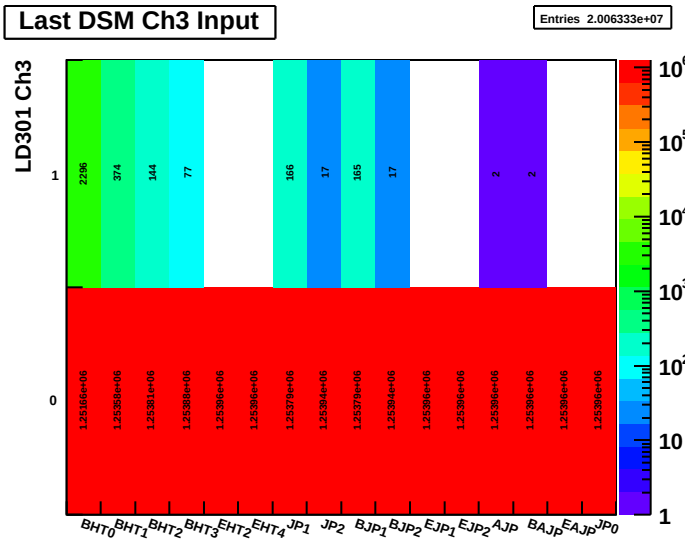

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
60
40
20
0
-20
-40
-60
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

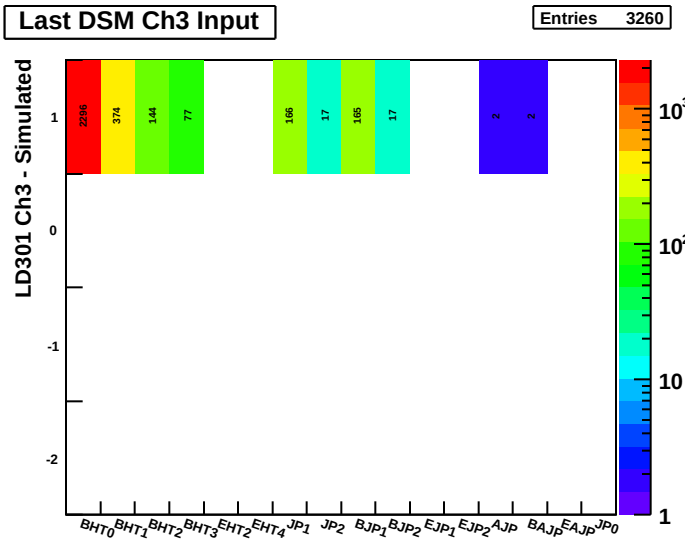

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

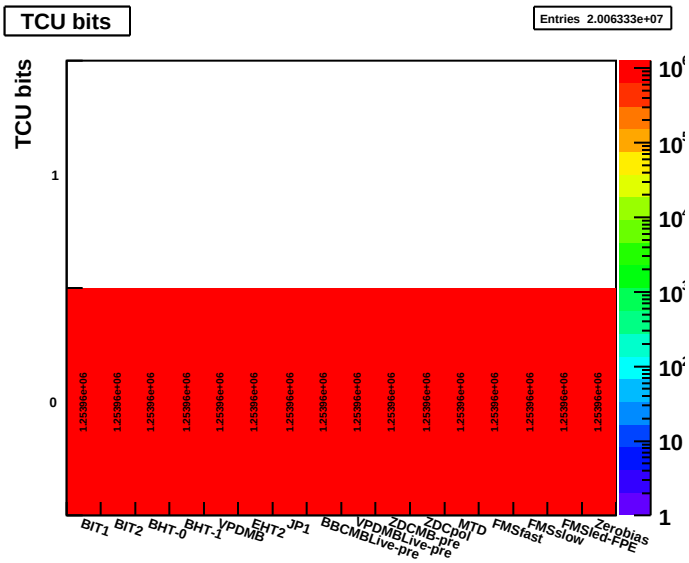

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

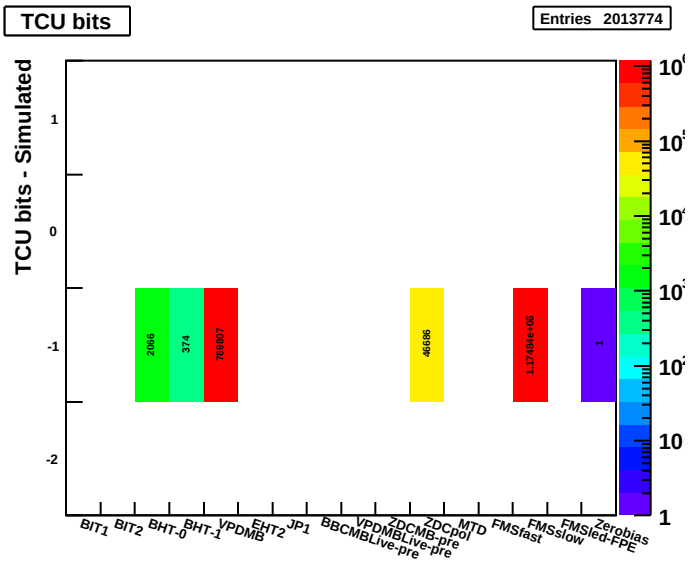

EMC L2 Input - HT23 bits
Entries 0
HT23 bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

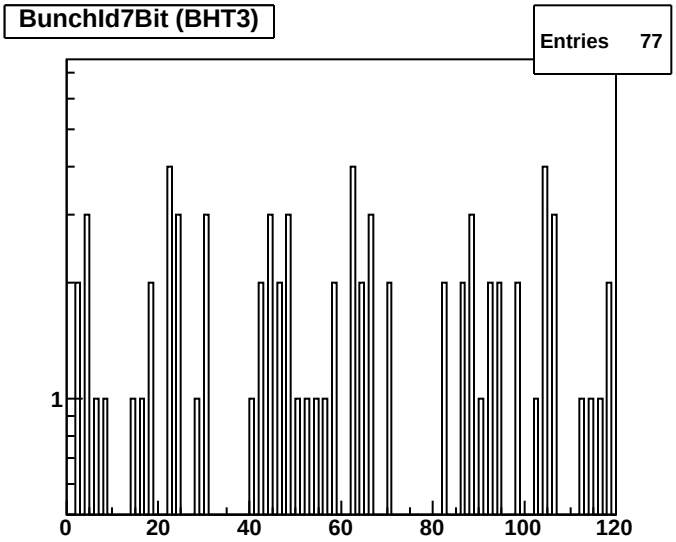

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

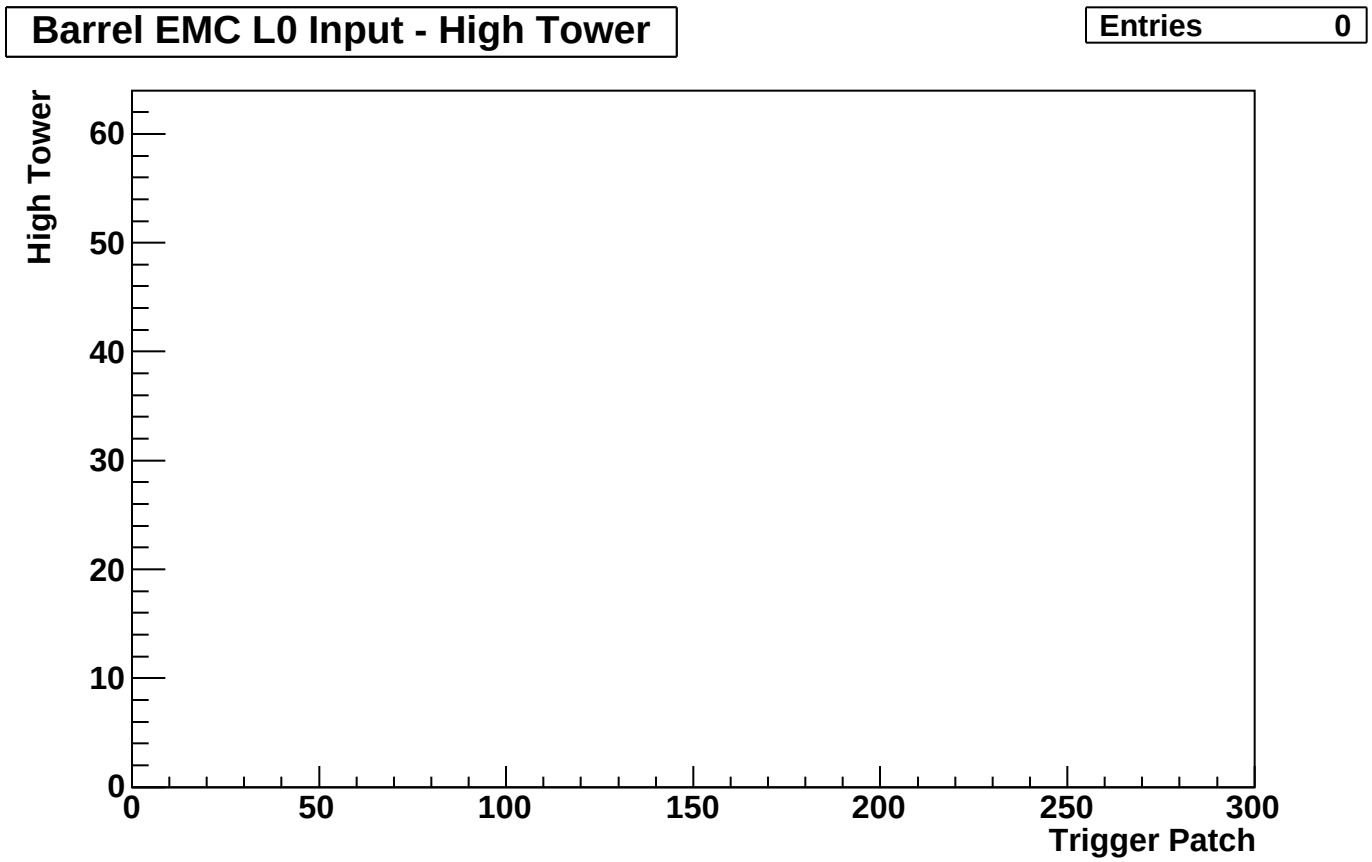

Last DSM Ch3 Input
Entries 2.006333e+07
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

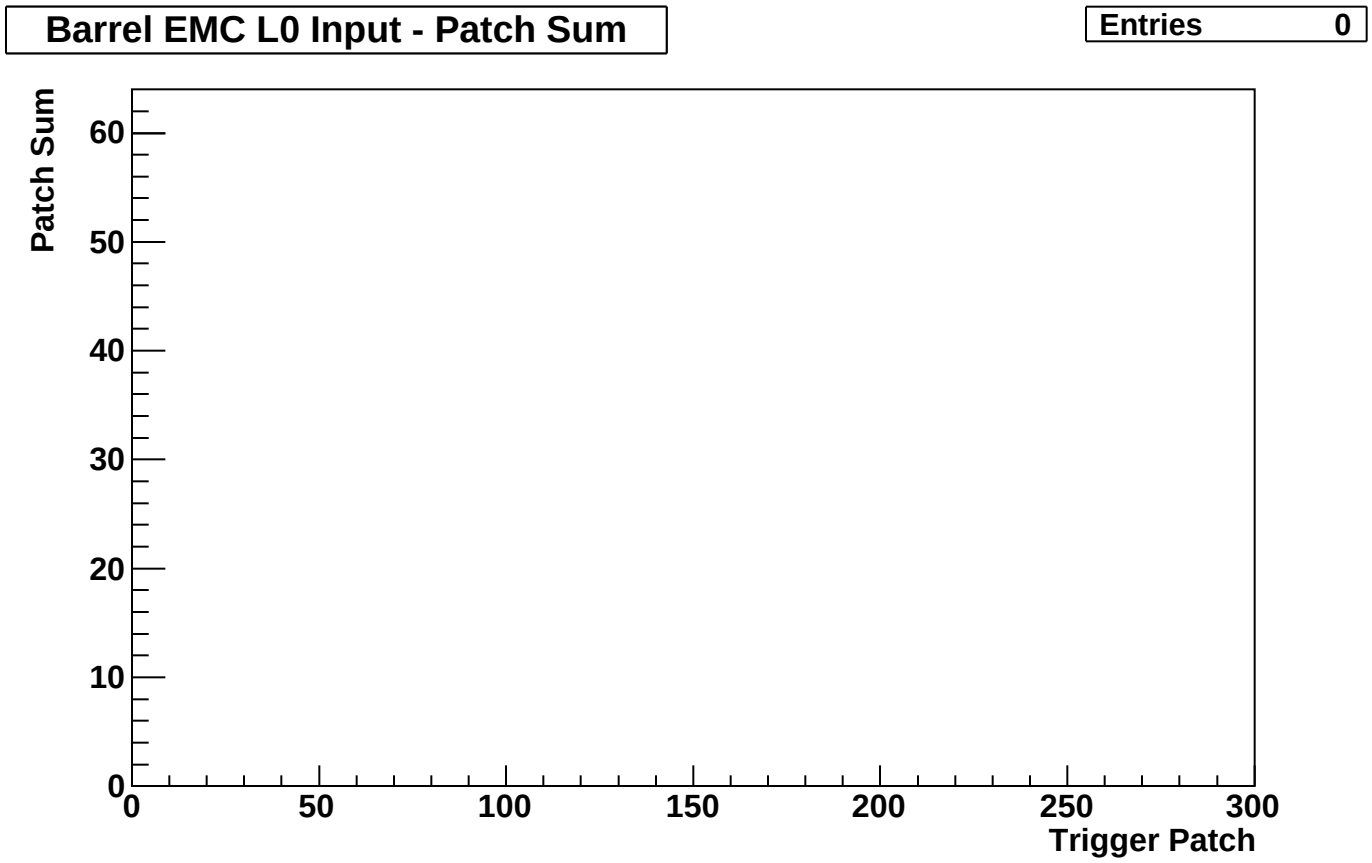

Last DSM Ch3 Input
Entries 3260
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

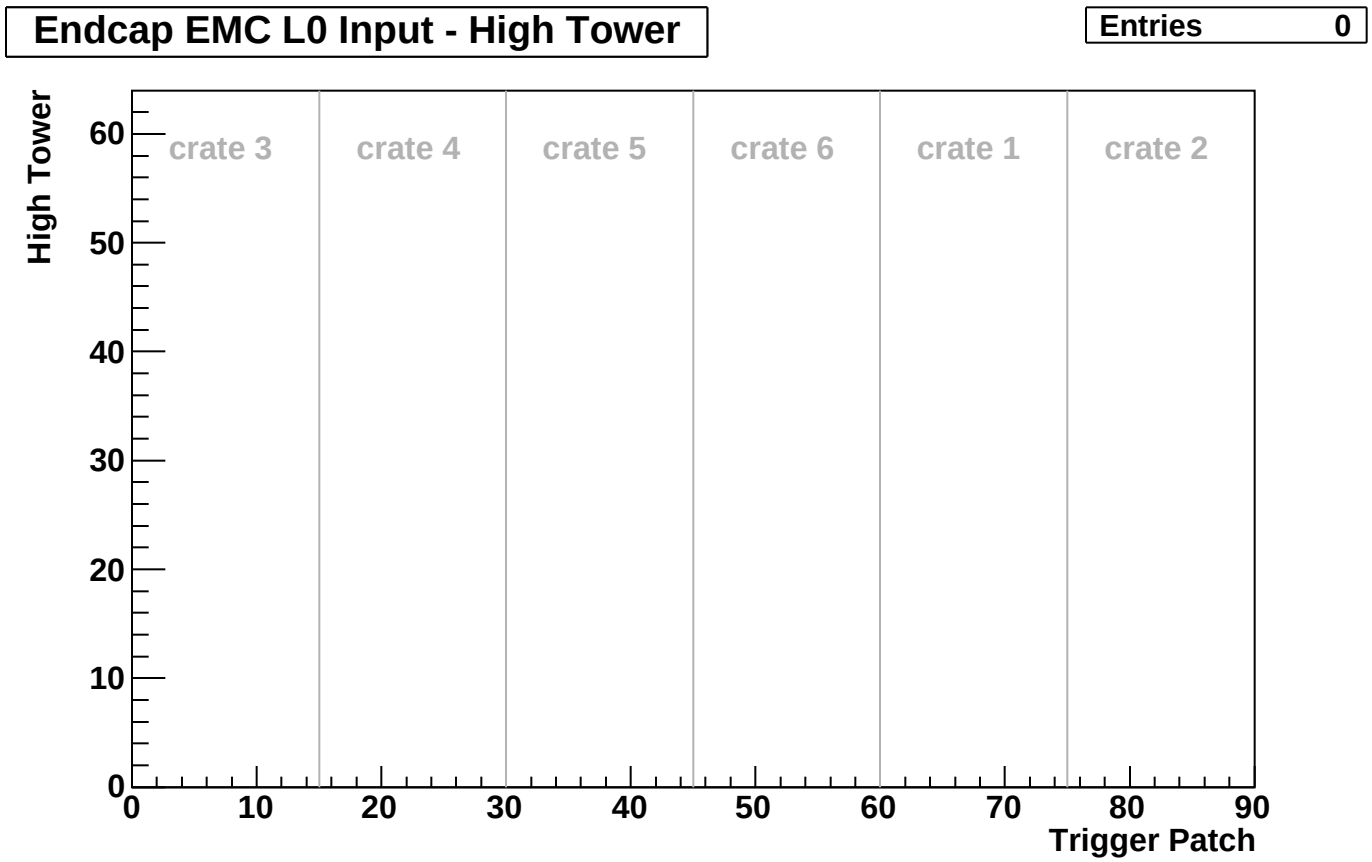

TCU bits
Entries 2.006333e+07
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

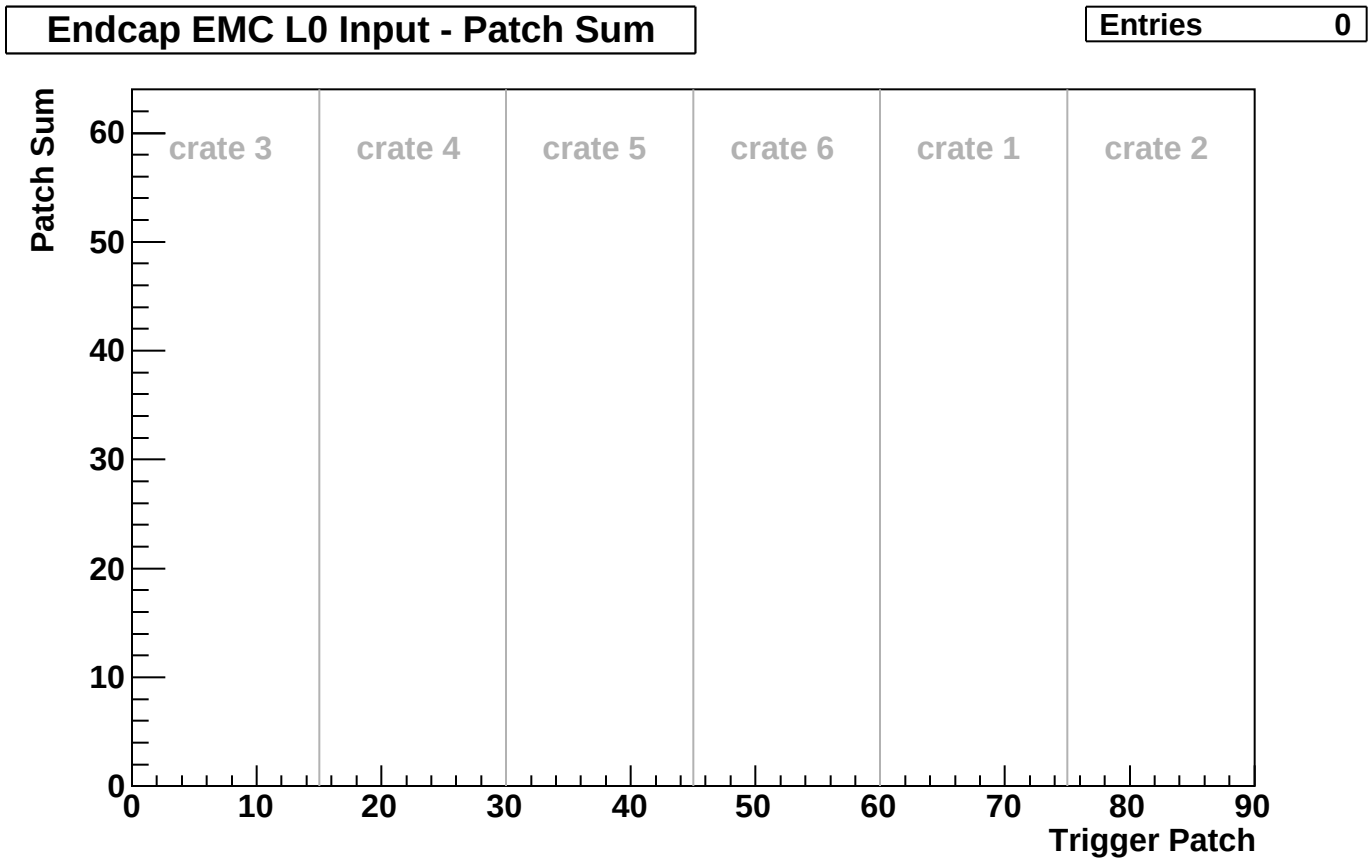

TCU bits
Entries 2013774
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

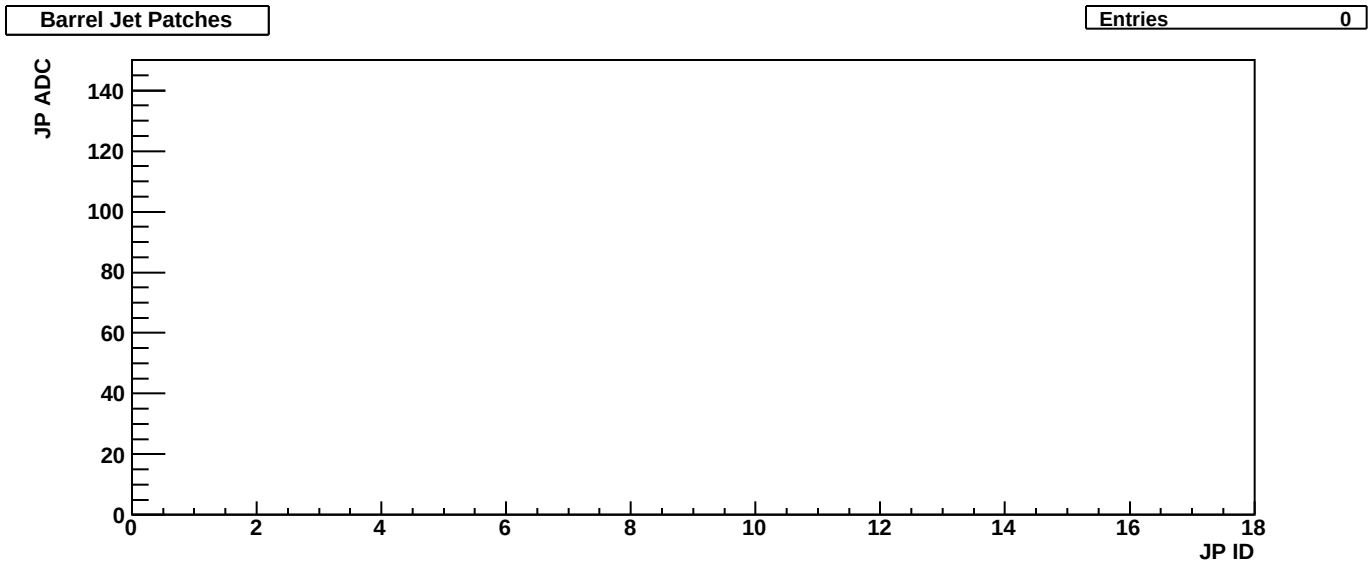

BunchId7Bit (BHT3)
Entries 77

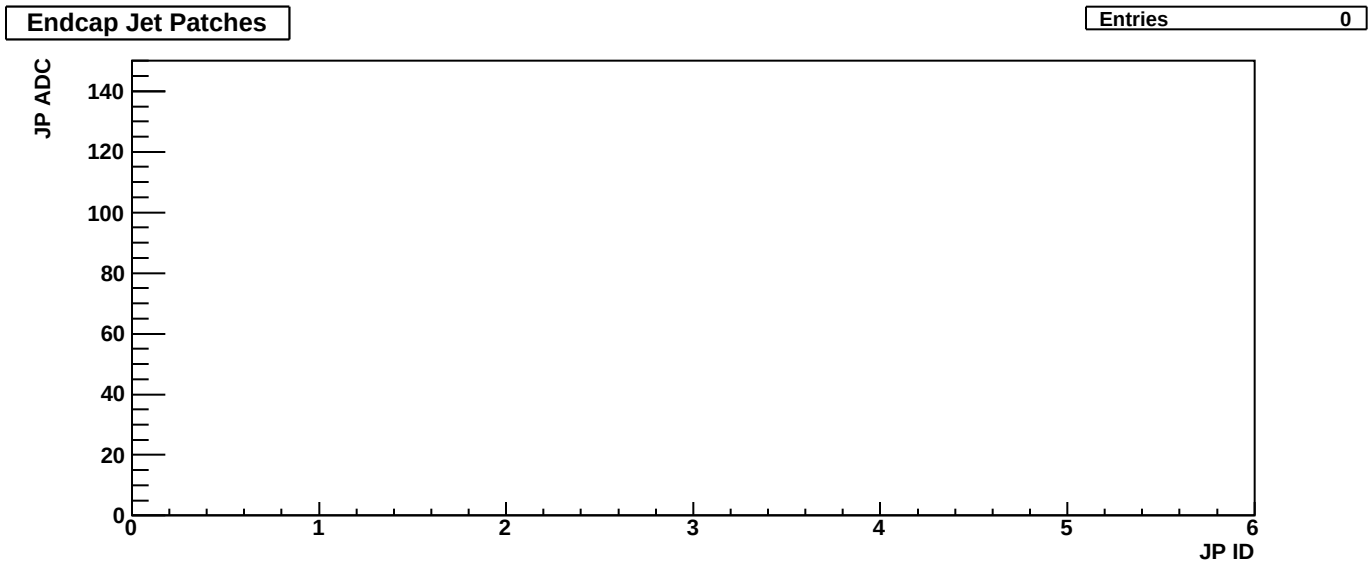

Barrel EMC L0 Input - High Tower
Entries 0
High Tower
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

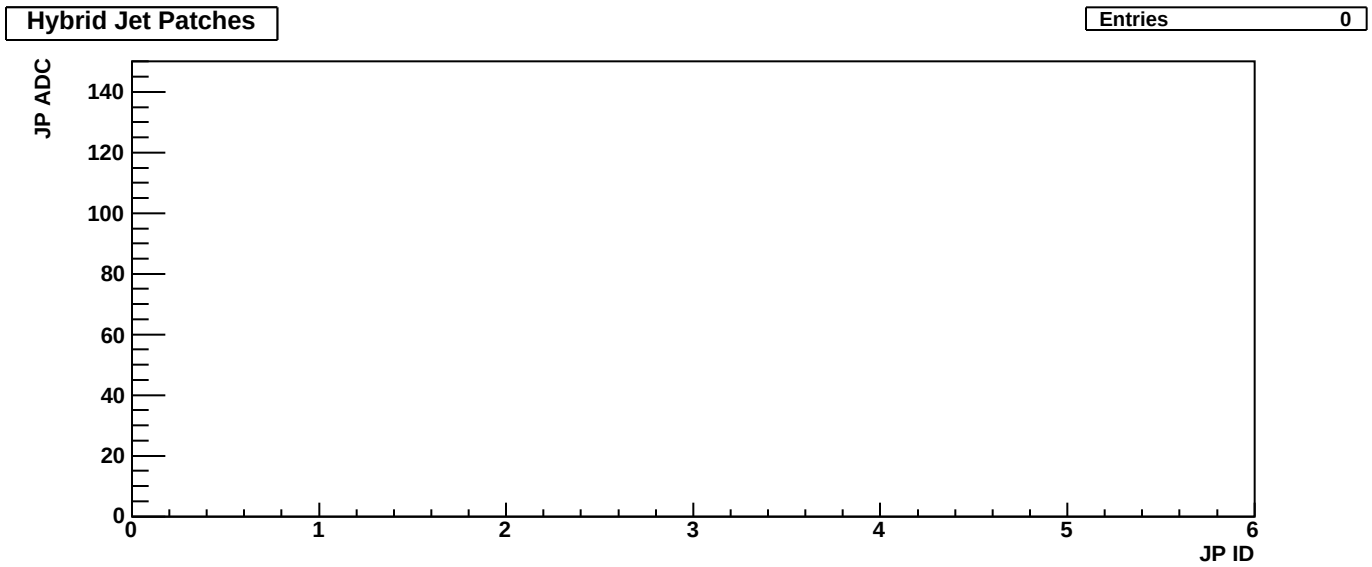

Barrel EMC L0 Input - Patch Sum
Entries 0
Patch Sum
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

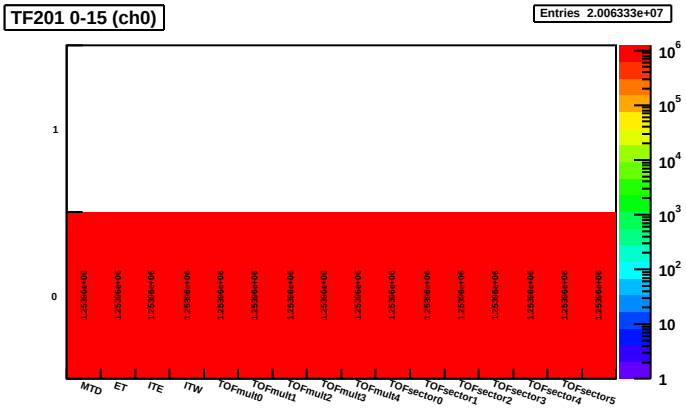

Endcap EMC L0 Input - High Tower
Entries 0
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

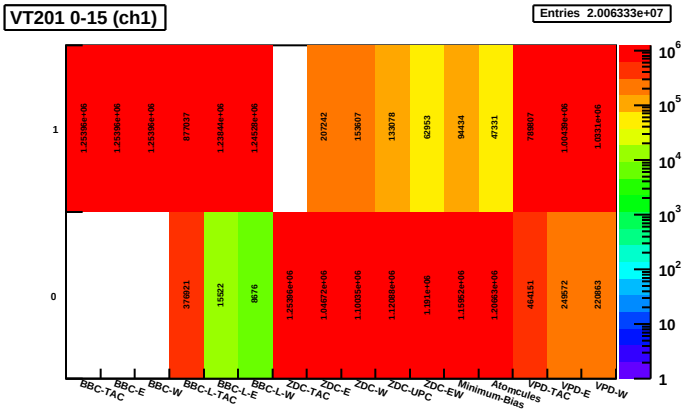

Endcap EMC L0 Input - Patch Sum
Entries 0
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

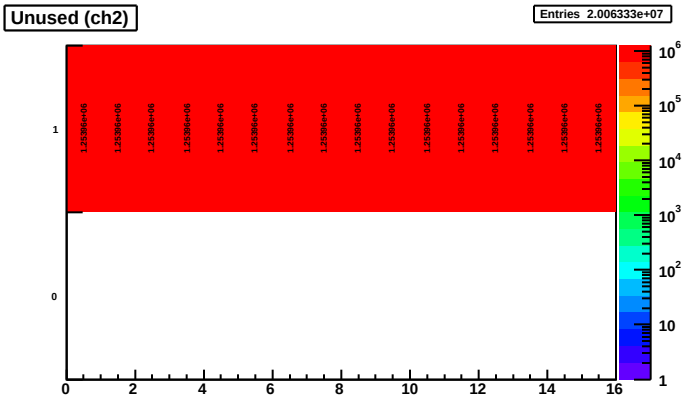

Barrel Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
2
4
6
8
10
12
14
16
18
JP ID

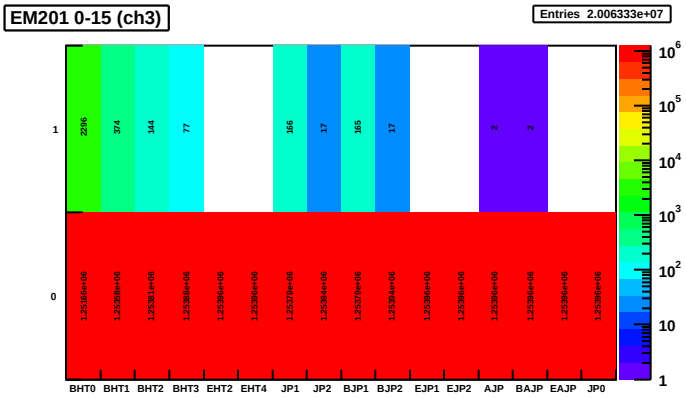

Endcap Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

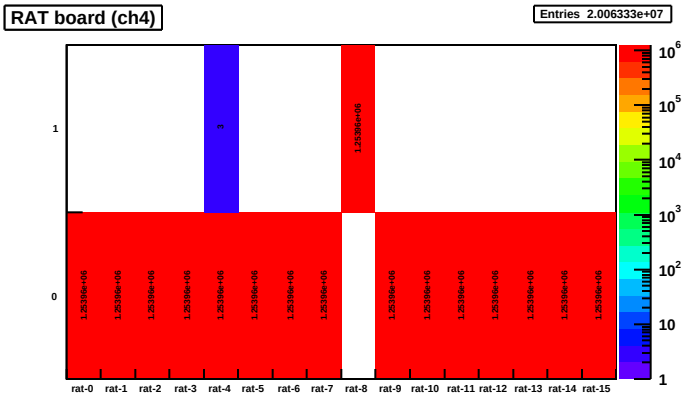

Hybrid Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

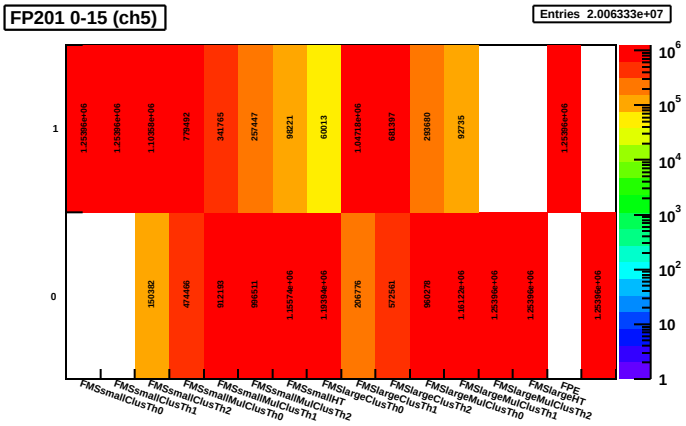

TF201 0-15 (ch0)
Entries 2.006333e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

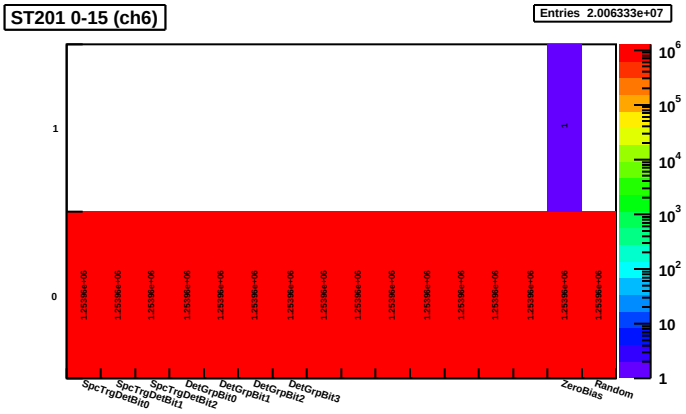

VT201 0-15 (ch1)
Entries 2.006333e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

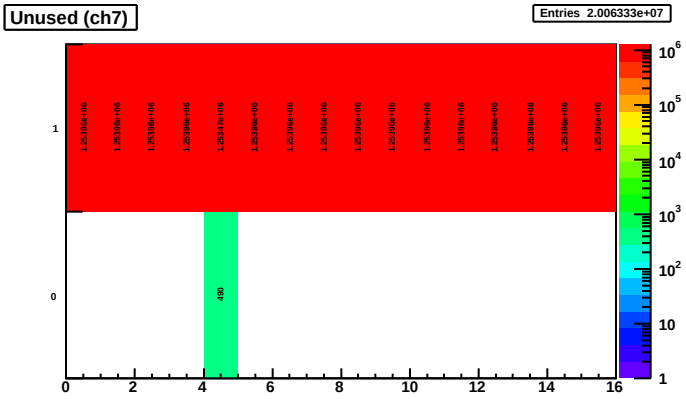

Unused (ch2)
Entries 2.006333e+07

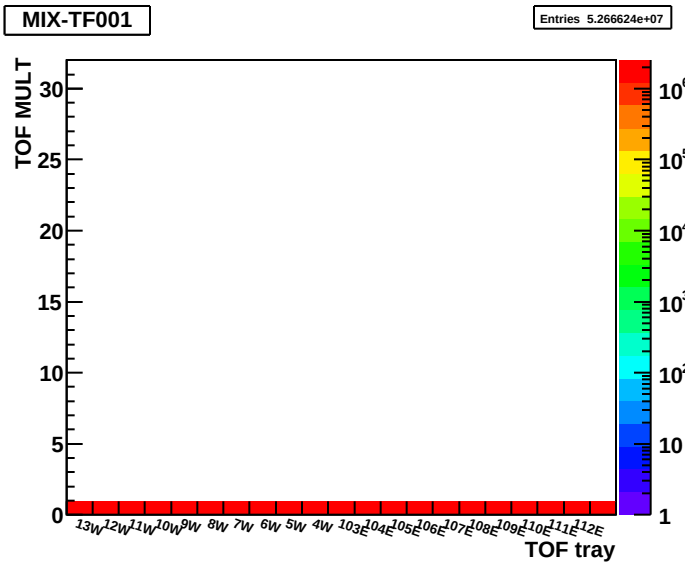

EM201 0-15 (ch3)
Entries 2.006333e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

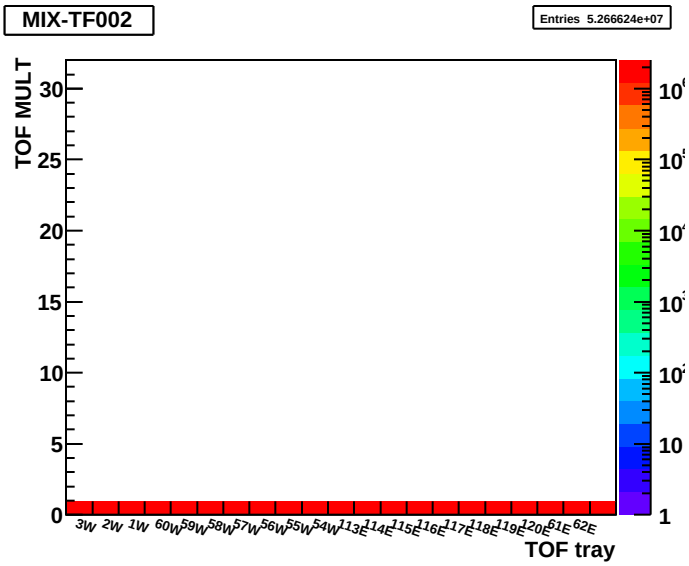

RAT board (ch4)
Entries 2.006333e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

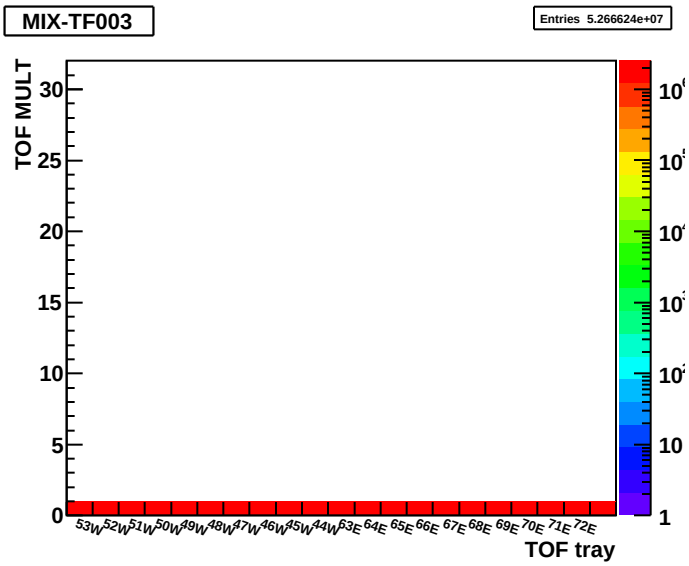

FP201 0-15 (ch5)
Entries 2.006333e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

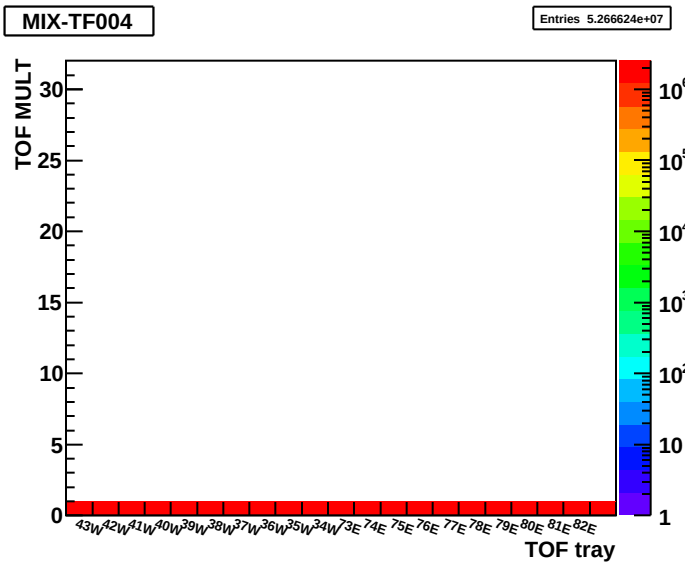

ST201 0-15 (ch6)
Entries 2.006333e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

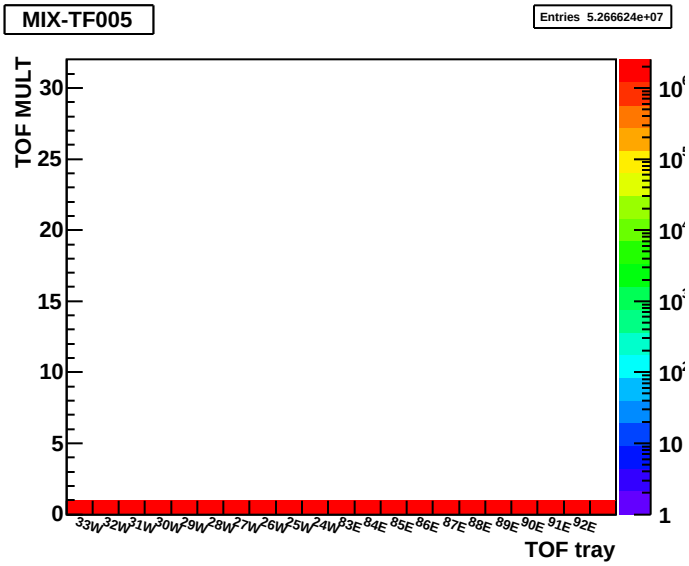

Unused (ch7)
Entries 2.006333e+07

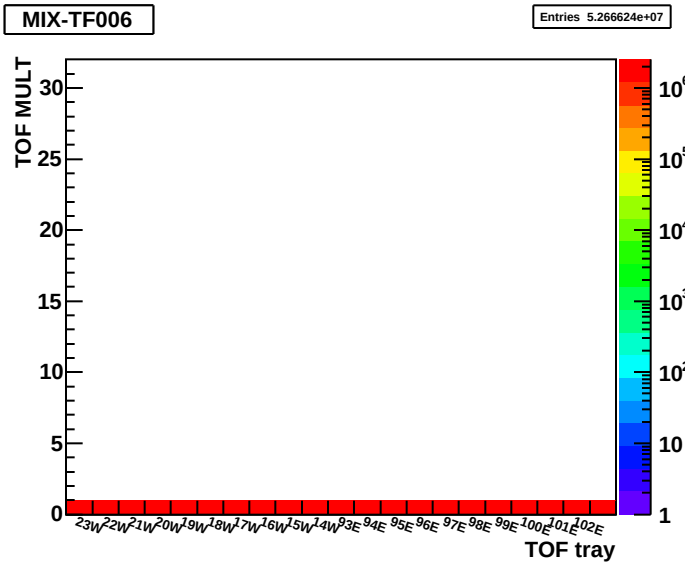

MIX-TF001
Entries 5.266624e+07
TOF MULT
TOF tray

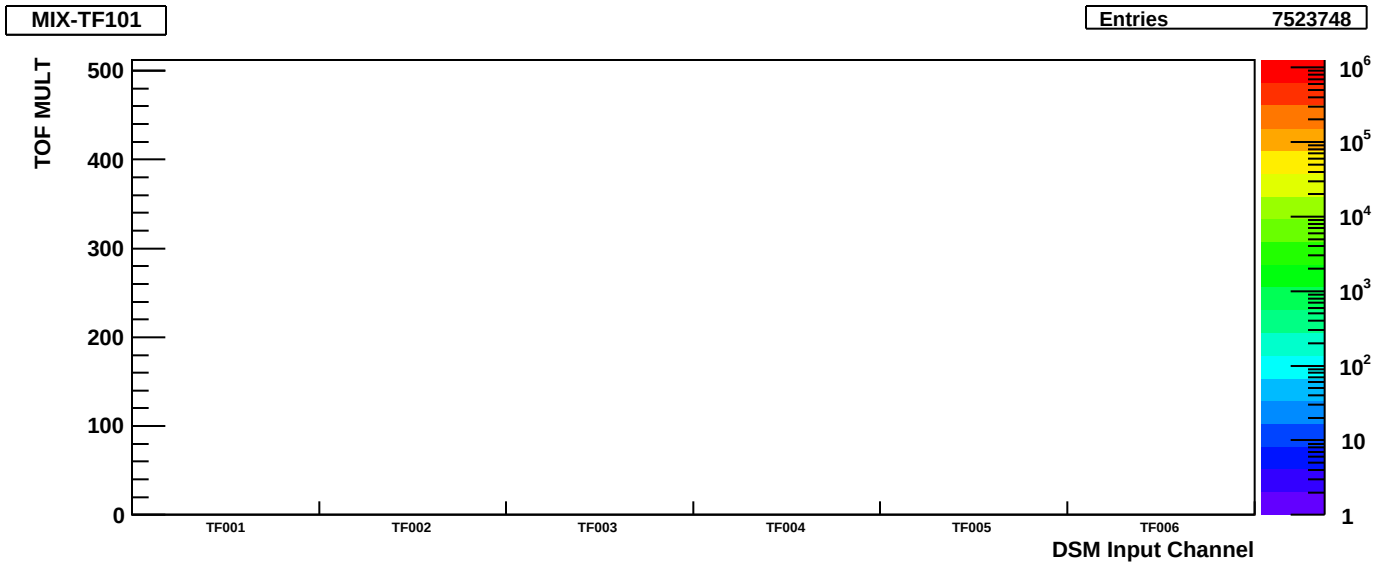

MIX-TF002
Entries 5.266624e+07
TOF MULT
TOF tray

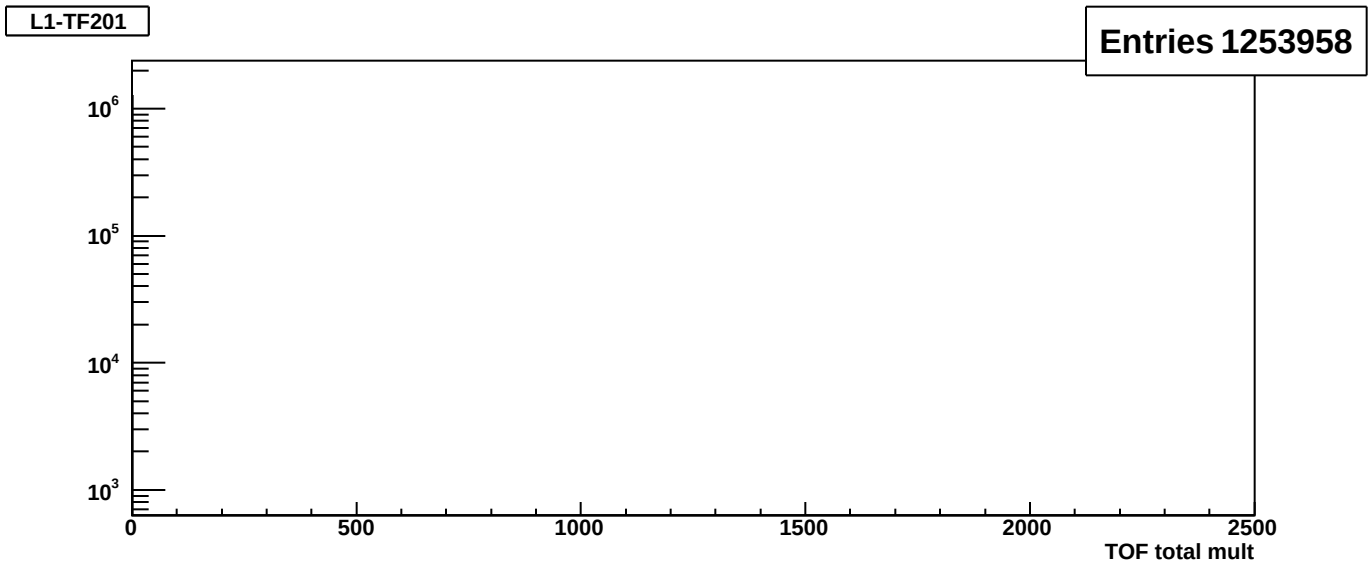

MIX-TF003
Entries 5.266624e+07
TOF MULT
TOF tray

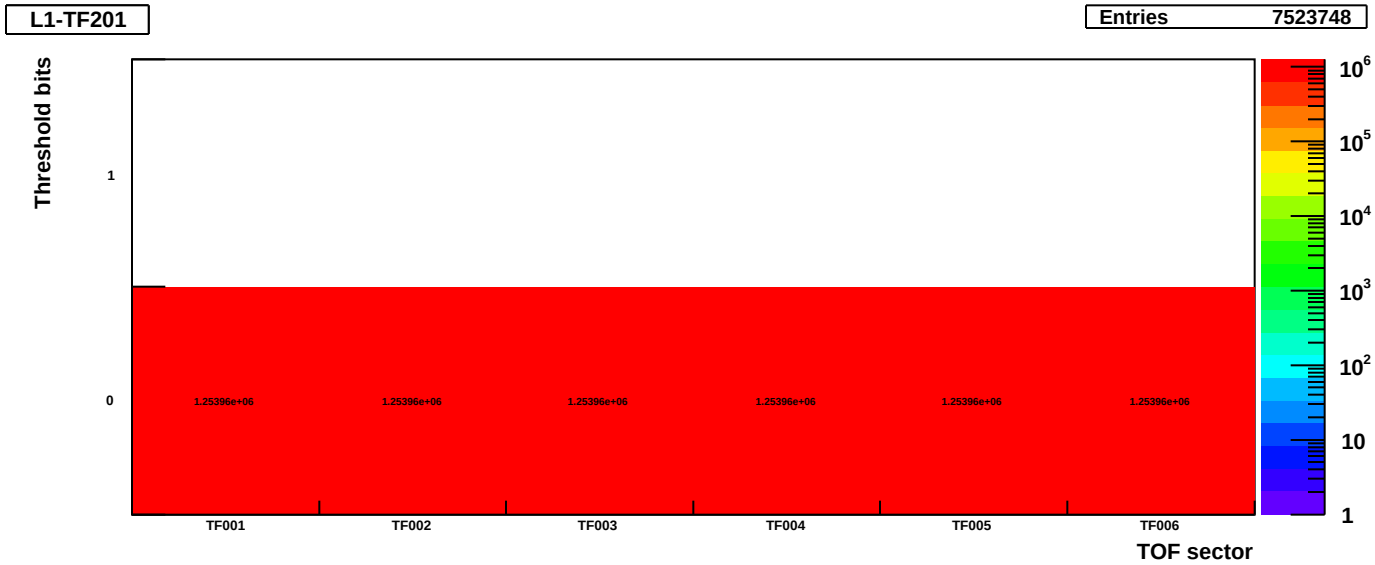

MIX-TF004
Entries 5.266624e+07
TOF MULT
TOF tray

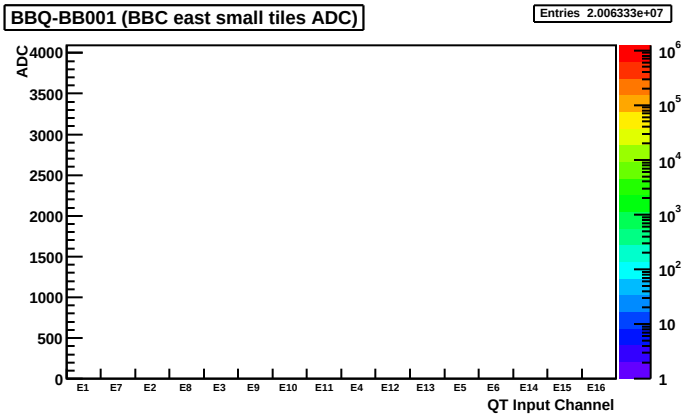

MIX-TF005
Entries 5.266624e+07
TOF MULT
TOF tray

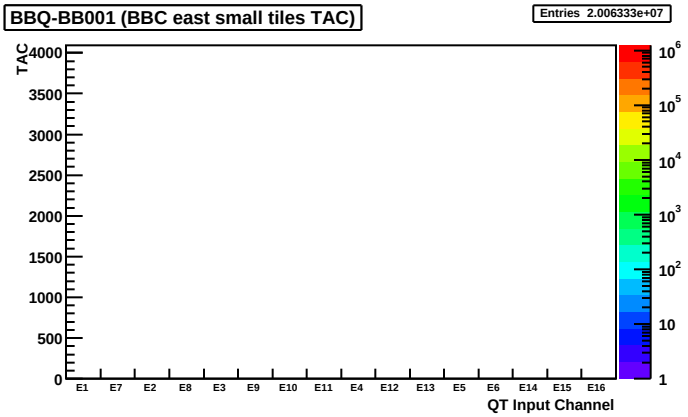

MIX-TF006
Entries 5.266624e+07
TOF MULT
TOF tray

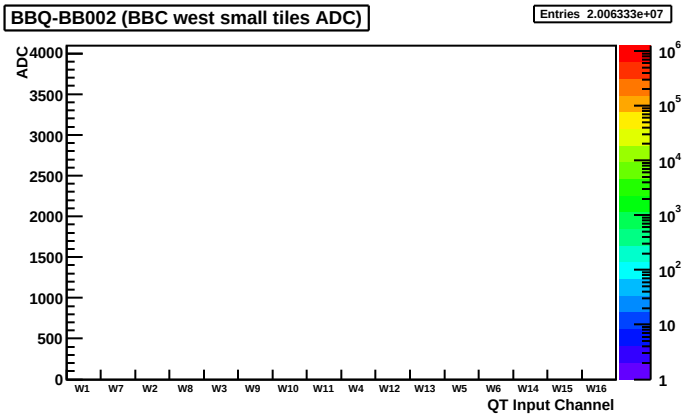

MIX-TF101
Entries 7523748
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^6
10^5
10^4
10^3
10^2
10
1

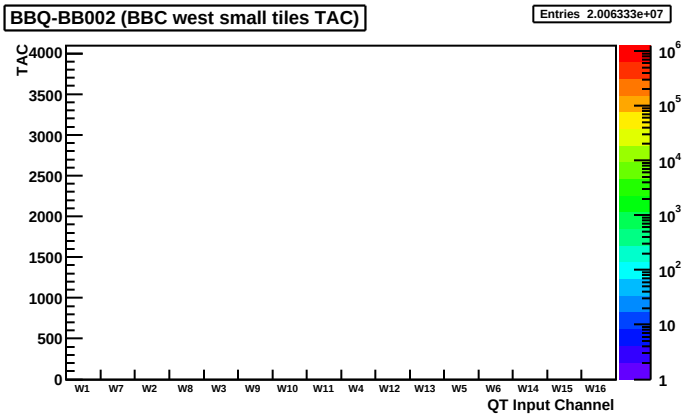

L1-TF201
Entries 1253958
10^6
10^5
10^4
10^3
0
500
1000
1500
2000
2500
TOF total mult

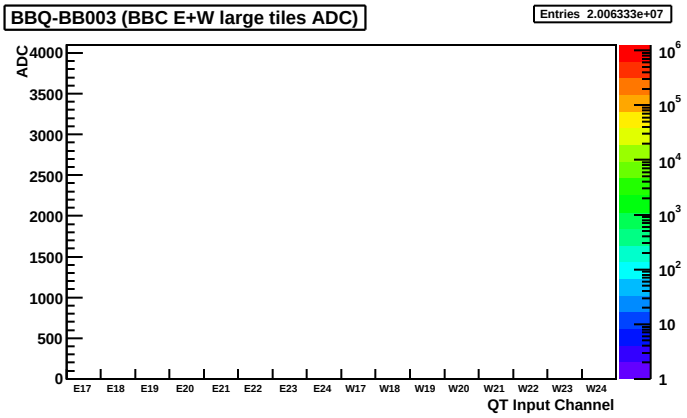

L1-TF201
Entries 7523748
Threshold bits
1
0
1.25396e+06
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6
10^5
10^4
10^3
10^2
10
1

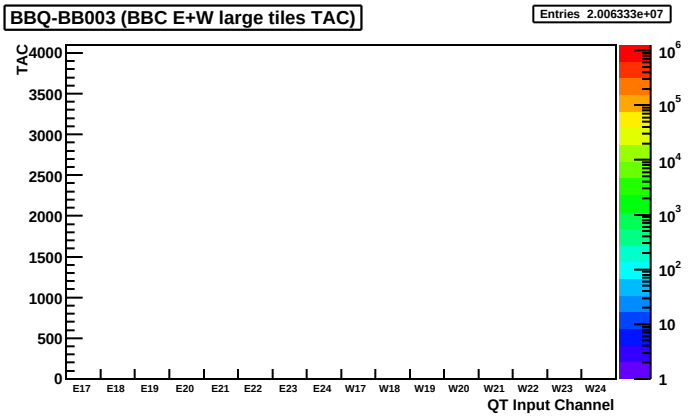

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.006333e+07
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

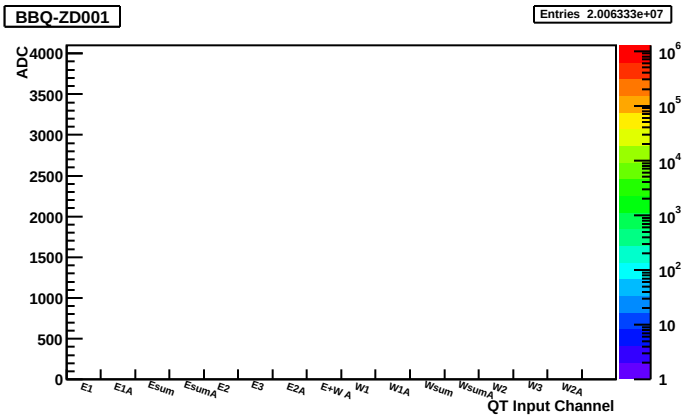

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.006333e+07
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

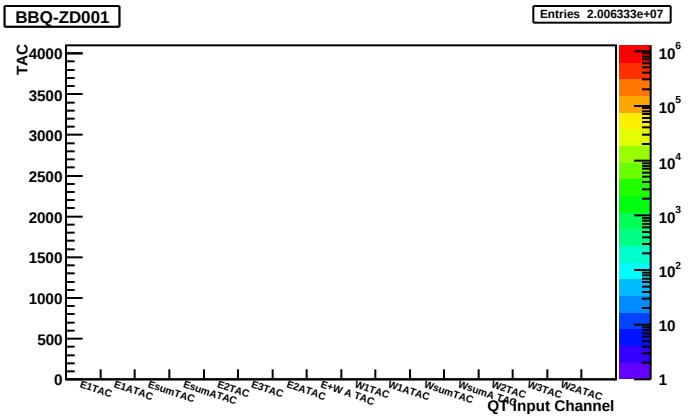

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.006333e+07
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

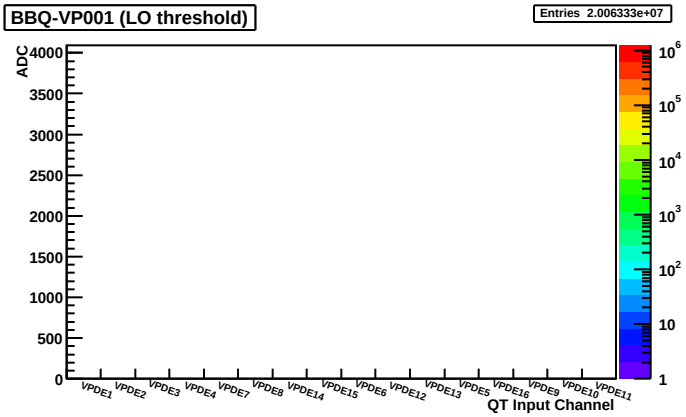

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.006333e+07
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

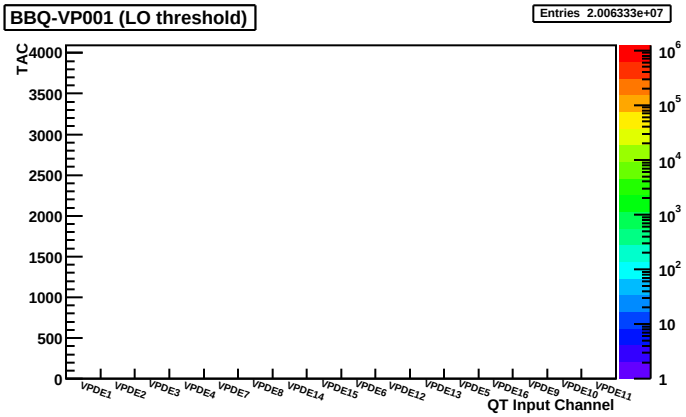

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.006333e+07
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

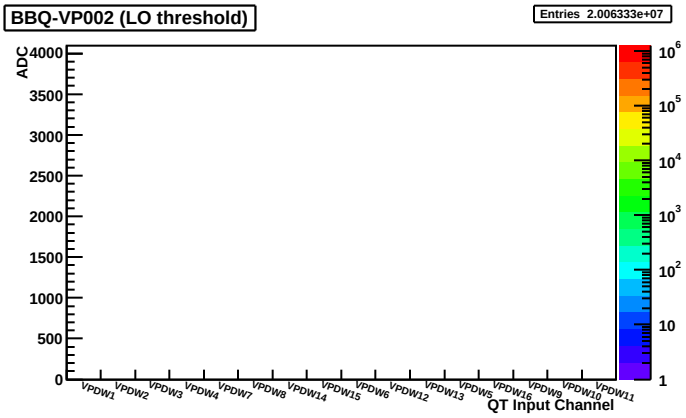

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.006333e+07
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

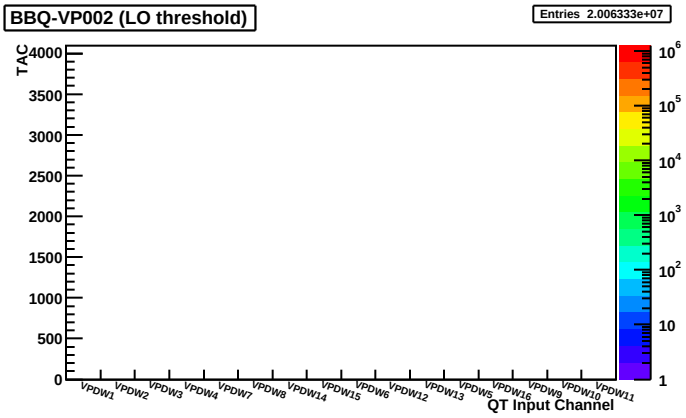

BBQ-ZD001
Entries 2.006333e+07
ADC
QT Input Channel
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

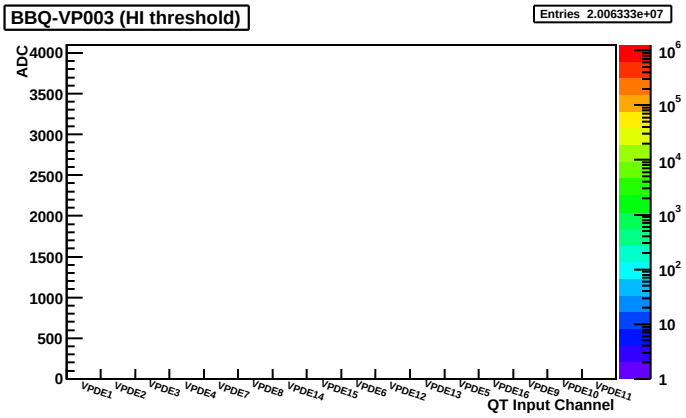

BBQ-ZD001
Entries 2.006333e+07
TAC
QT Input Channel
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

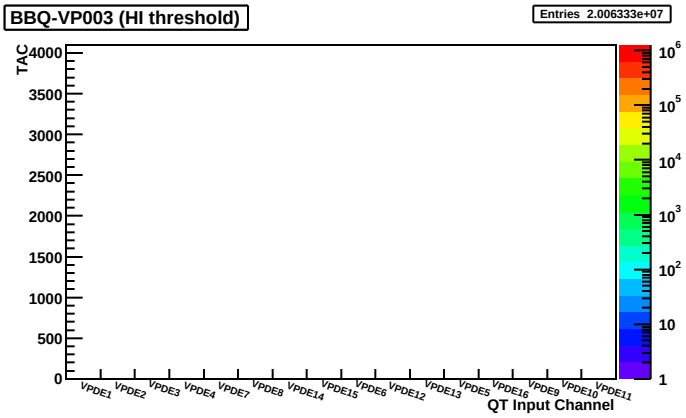

BBQ-VP001 (LO threshold)
Entries 2.006333e+07
ADC
QT Input Channel

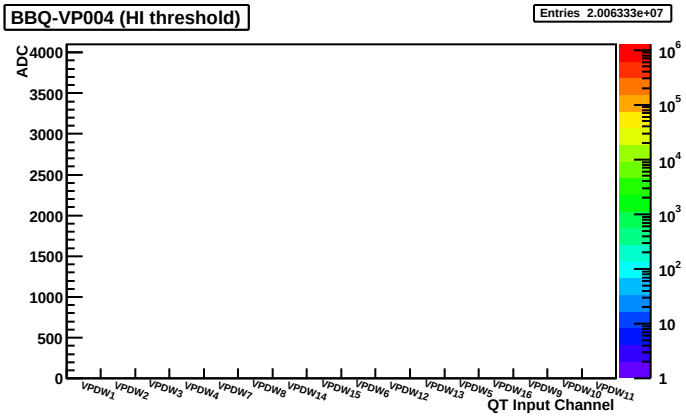

BBQ-VP001 (LO threshold)
Entries 2.006333e+07
TAC
QT Input Channel

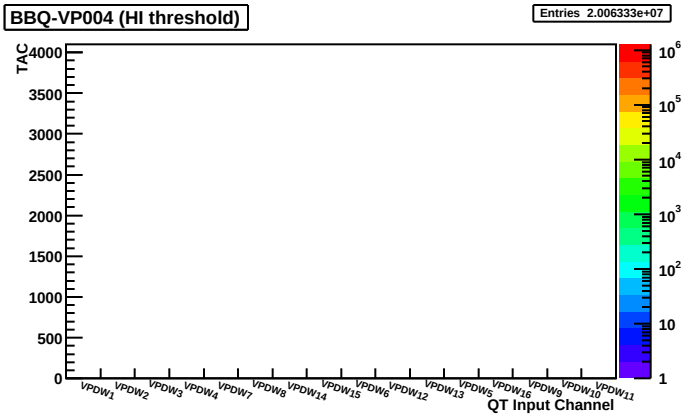

BBQ-VP002 (LO threshold)
Entries 2.006333e+07
ADC
QT Input Channel

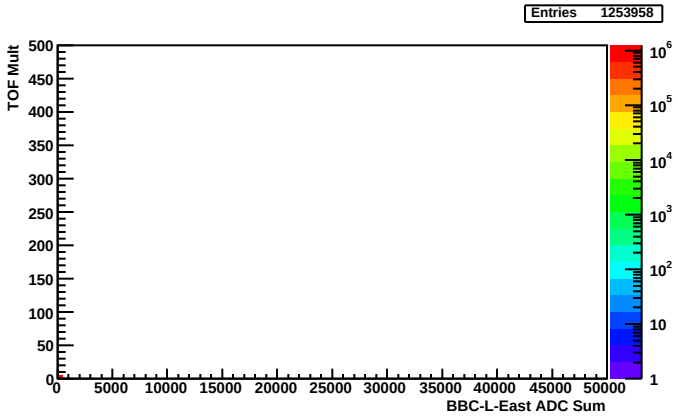

BBQ-VP002 (LO threshold)
Entries 2.006333e+07
TAC
QT Input Channel

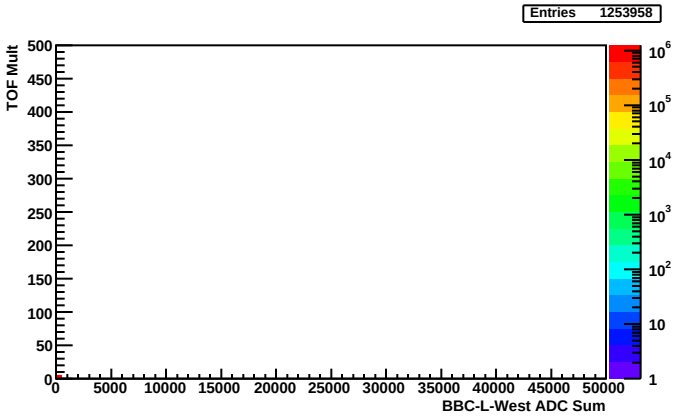

BBQ-VP003 (HI threshold)
Entries 2.006333e+07
ADC
QT Input Channel

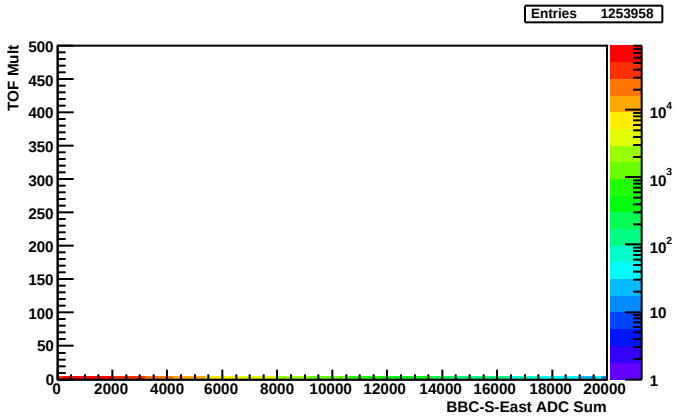

BBQ-VP003 (HI threshold)
Entries 2.006333e+07
TAC
QT Input Channel

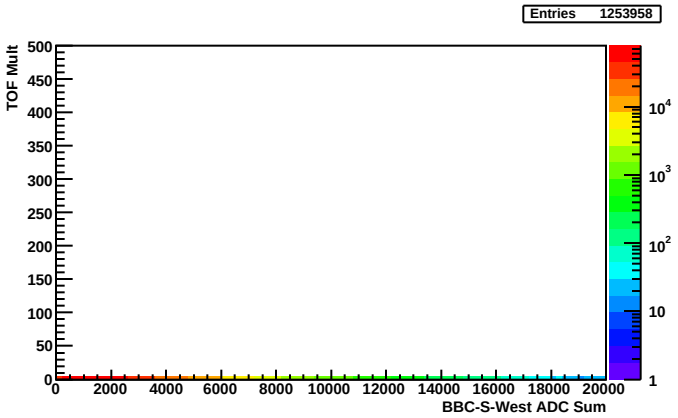

BBQ-VP004 (HI threshold)
Entries 2.006333e+07
ADC
QT Input Channel

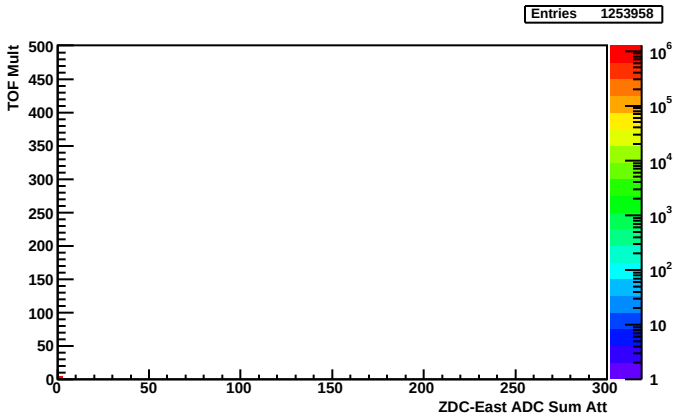

BBQ-VP004 (HI threshold)
Entries 2.006333e+07
TAC
QT Input Channel

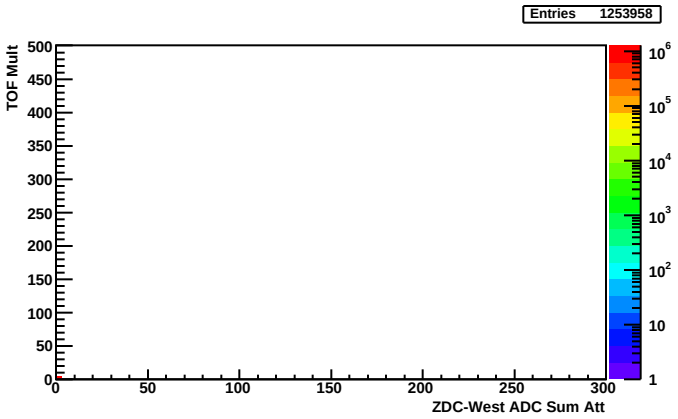

Entries 1253958
TOF Mult
BBC-L-East ADC Sum

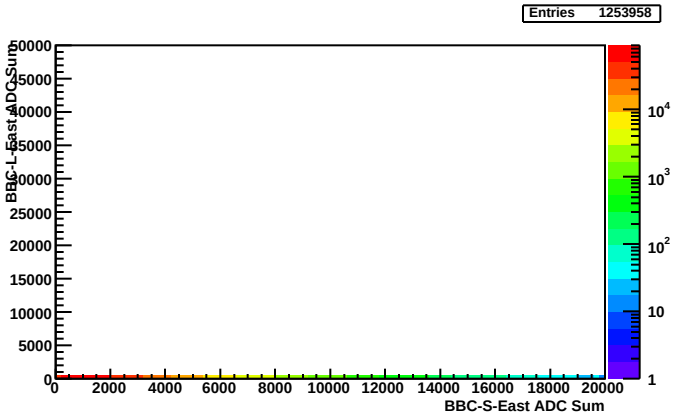

Entries 1253958
TOF Mult
BBC-L-West ADC Sum

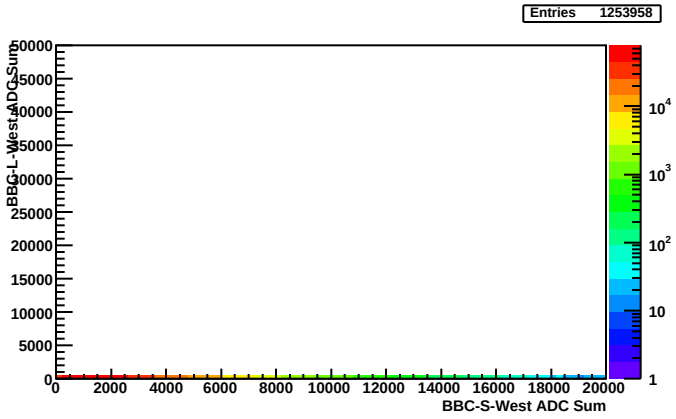

Entries 1253958
TOF Mult
BBC-S-East ADC Sum

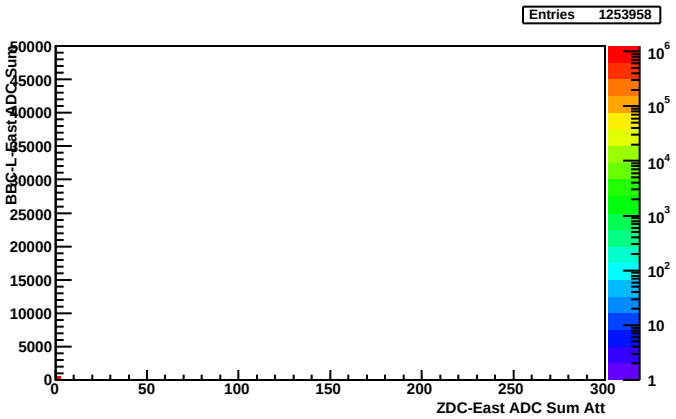

Entries 1253958
TOF Mult
BBC-S-West ADC Sum

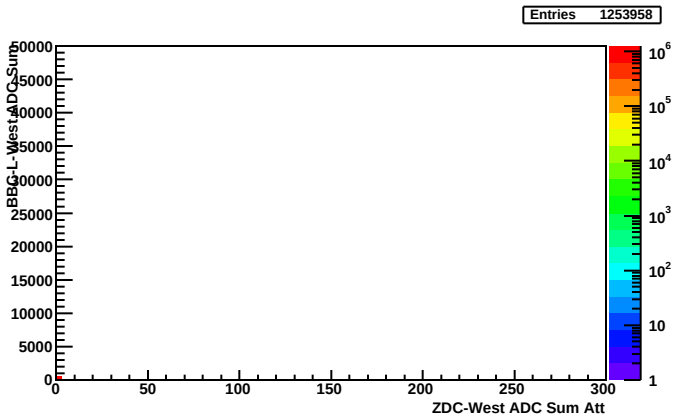

Entries 1253958
TOF Mult
ZDC-East ADC Sum Att

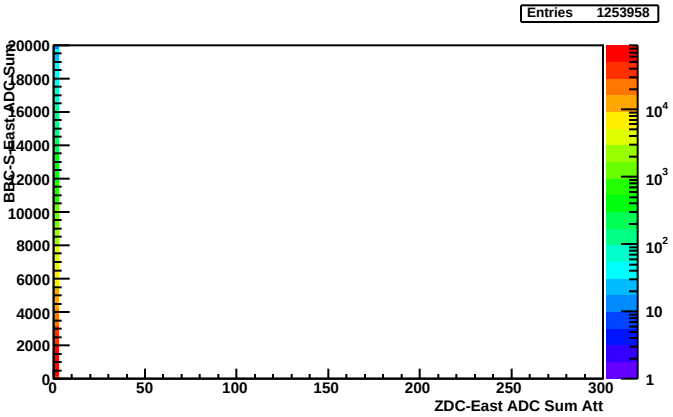

Entries 1253958
TOF Mult
ZDC-West ADC Sum Att

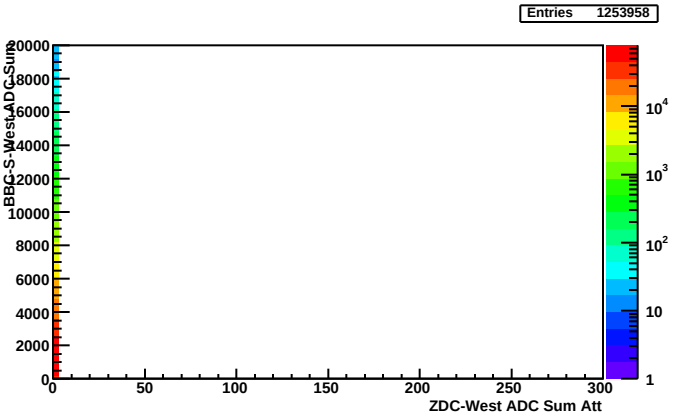

Entries 1253958
BBC-L-East ADC Sum
BBC-S-East ADC Sum

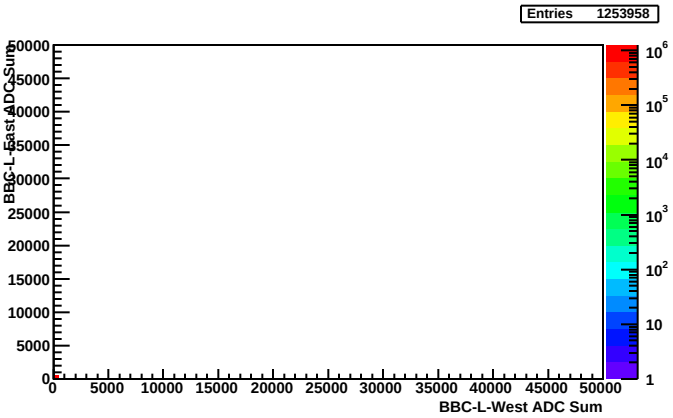

Entries 1253958
BBC-L-West ADC Sum
BBC-S-West ADC Sum

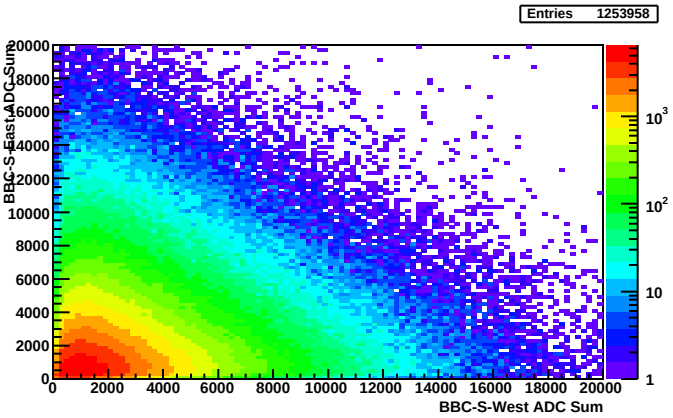

Entries 1253958
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

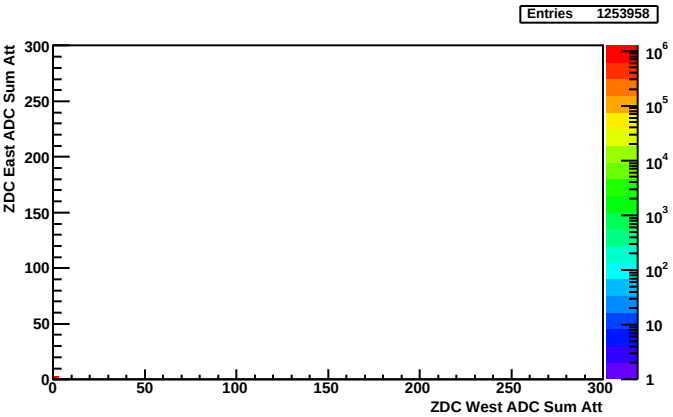

Entries 1253958
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

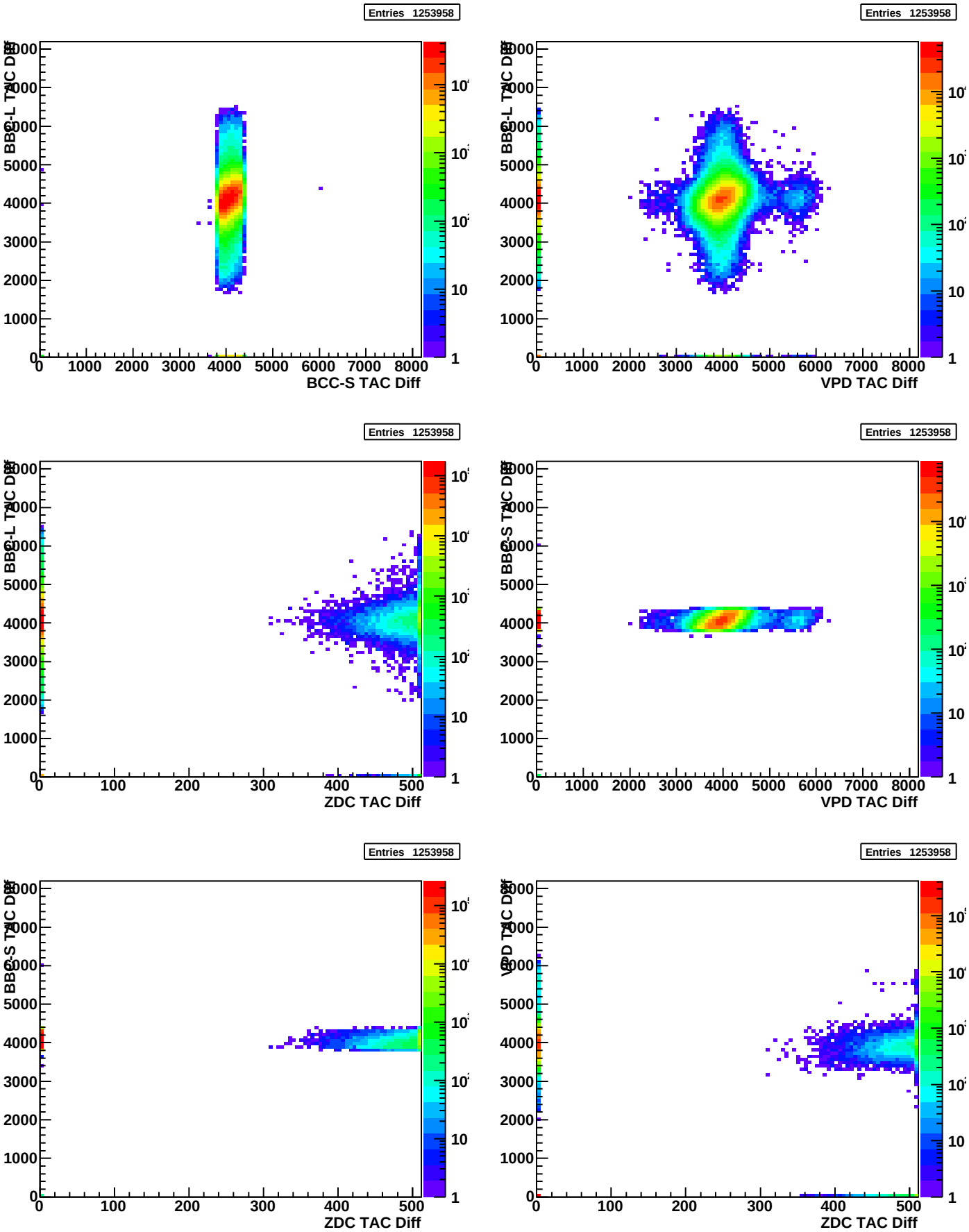

Entries 1253958
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

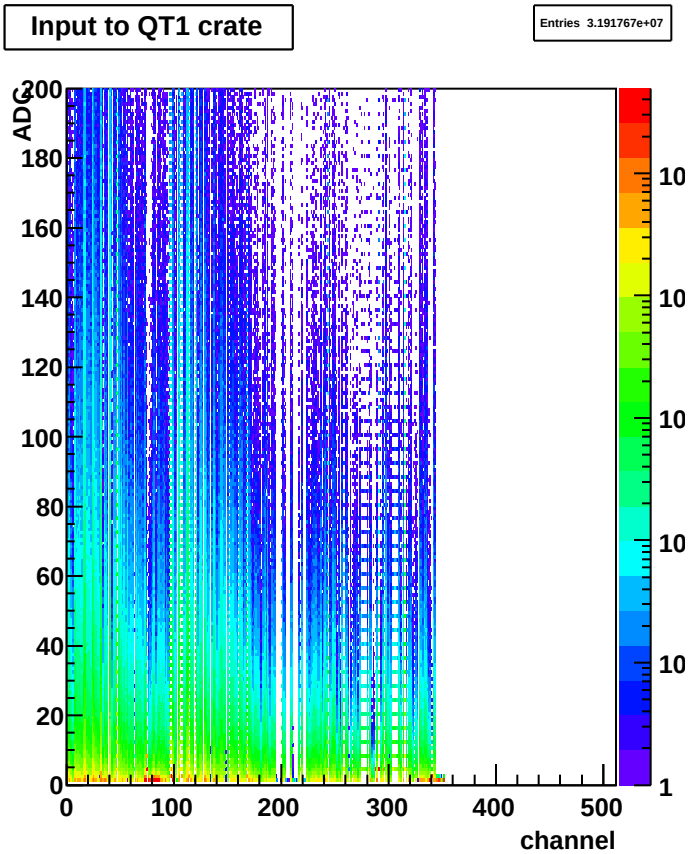

Entries 1253958
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

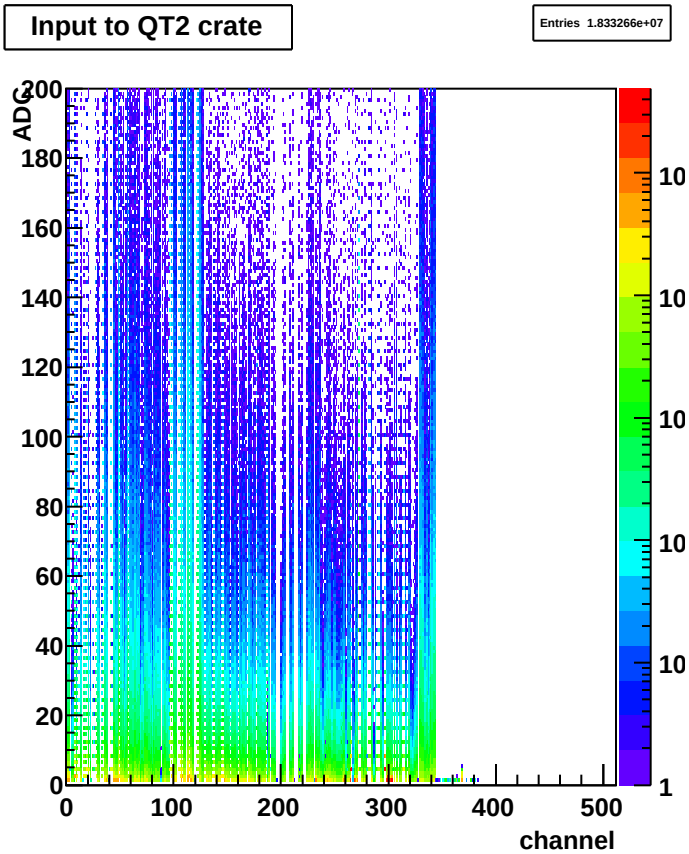

Entries 1253958
BBC-L-East ADC Sum
BBC-L-West ADC Sum

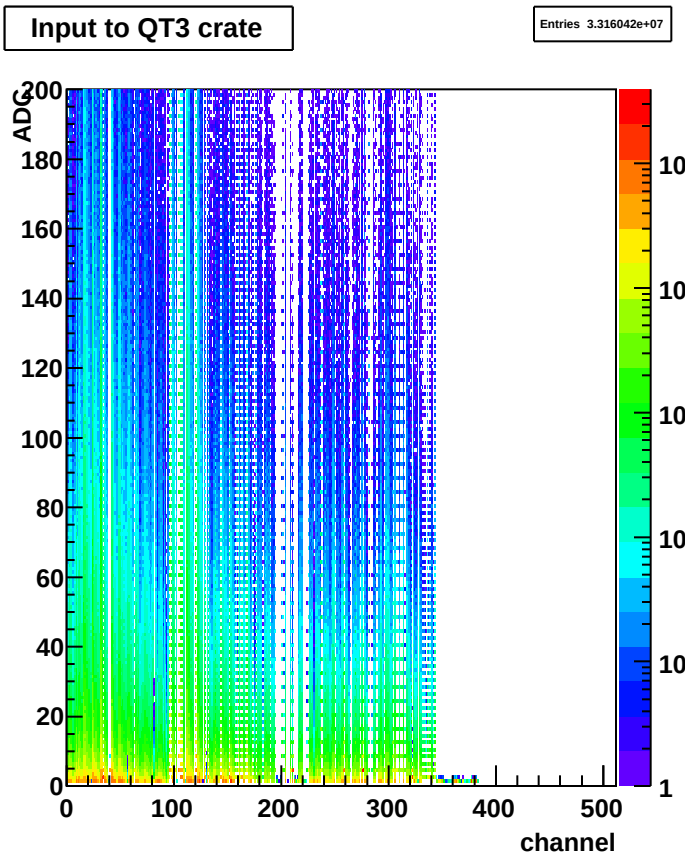

Entries 1253958
BBC-S-East ADC Sum
BBC-S-West ADC Sum

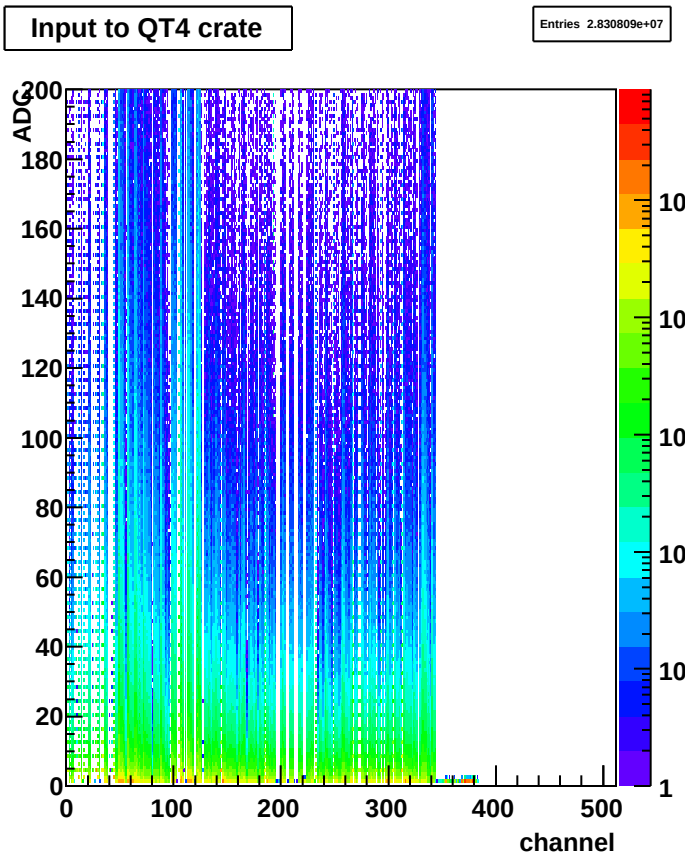

Entries 1253958
ZDC East ADC Sum Att
ZDC West ADC Sum Att

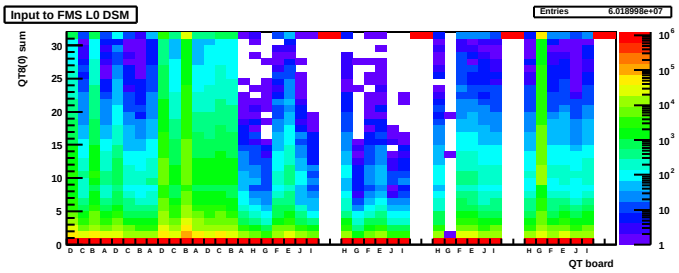

Entries 1253958
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1253958
BBC-L TAC Diff
VPD TAC Diff
Entries 1253958
BBC-L TAC Diff
ZDC TAC Diff
Entries 1253958
BBC-S TAC Diff
VPD TAC Diff
Entries 1253958
BBC-S TAC Diff
ZDC TAC Diff
Entries 1253958
VPD TAC Diff
ZDC TAC Diff

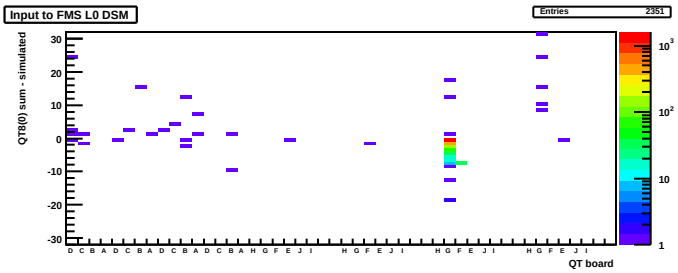

Input to QT1 crate
Entries 3.191767e+07
ADC
channel

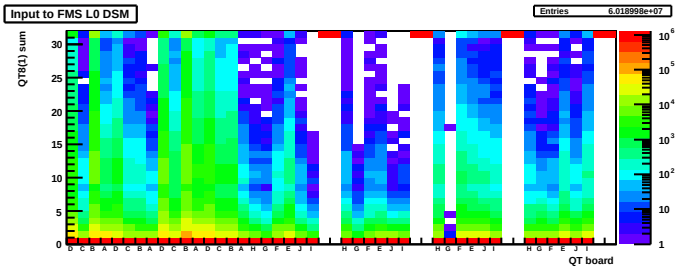

Input to QT2 crate
Entries 1.833266e+07
ADC
channel

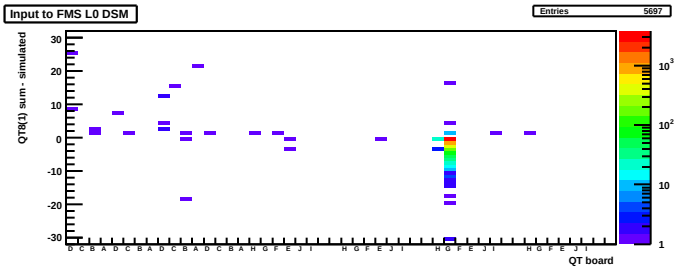

Input to QT3 crate
Entries 3.316042e+07
ADC
channel

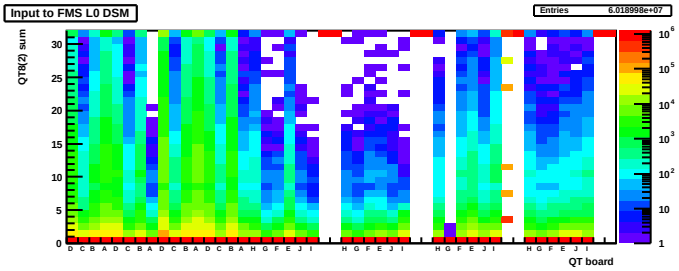

Input to QT4 crate
Entries 2.830809e+07
ADC
channel

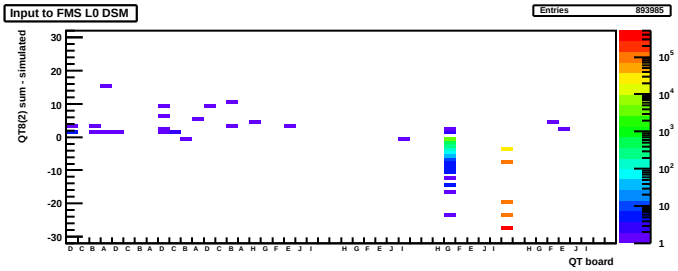

Input to FMS L0 DSM
Entries 6.018998e+07
QT8(0) sum
QT board

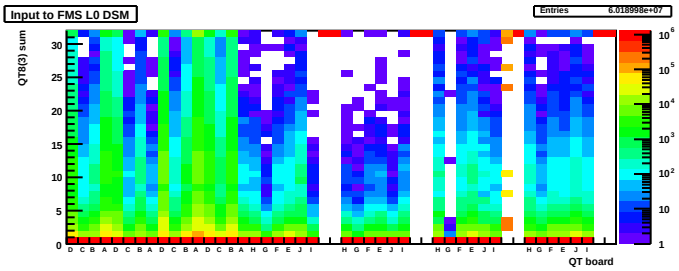

Input to FMS L0 DSM
Entries 2351
QT8(0) sum - simulated
QT board

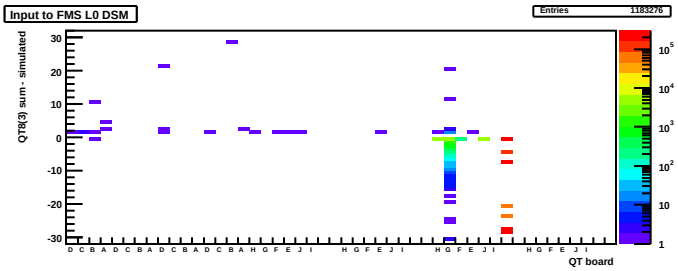

Input to FMS L0 DSM
Entries 6.018998e+07
QT8(1) sum
QT board

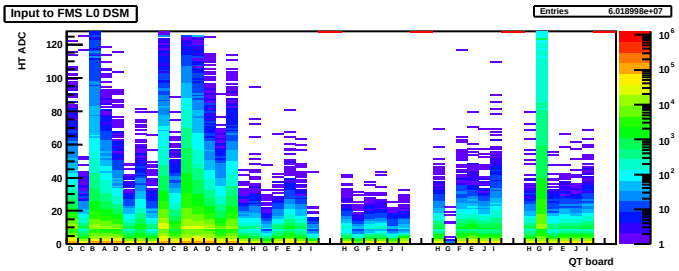

Input to FMS L0 DSM
Entries 5697
QT8(1) sum - simulated
QT board

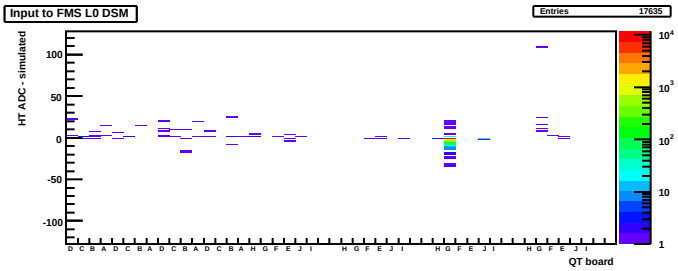

Input to FMS L0 DSM
Entries 6.018998e+07
QT8(2) sum
QT board

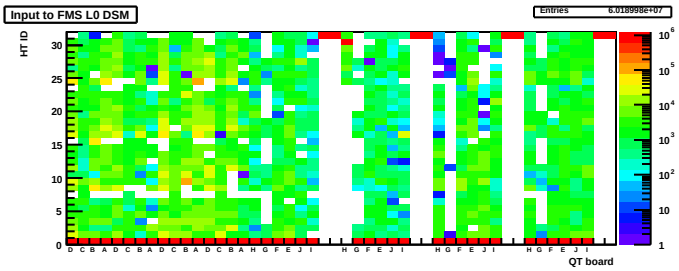

Input to FMS L0 DSM
Entries 883985
QT8(2) sum - simulated
QT board

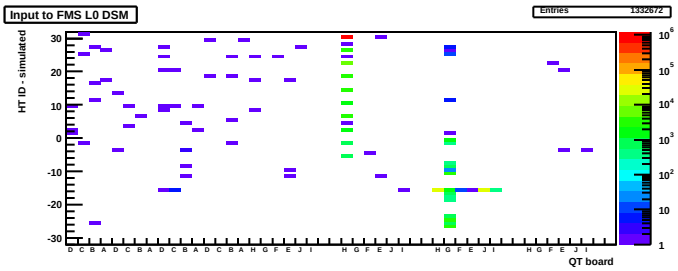

Input to FMS L0 DSM
Entries 6.018998e+07
QT8(3) sum
QT board

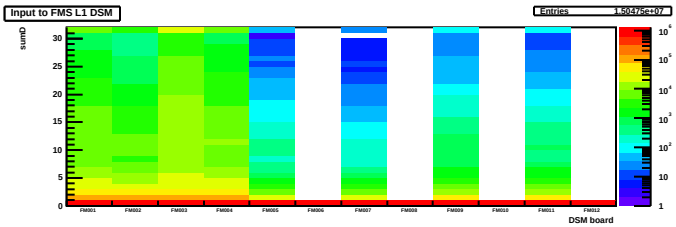

Input to FMS L0 DSM
Entries 1183276
QT8(3) sum - simulated
QT board

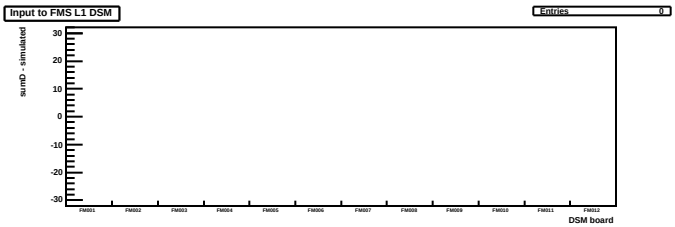

Input to FMS L0 DSM
Entries 6.018998e+07
HT ADC
QT board

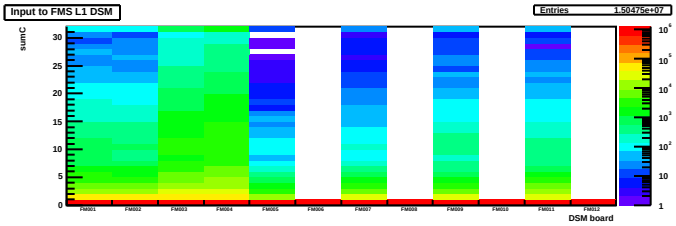

Input to FMS L0 DSM
Entries 17635
HT ADC - simulated
QT board

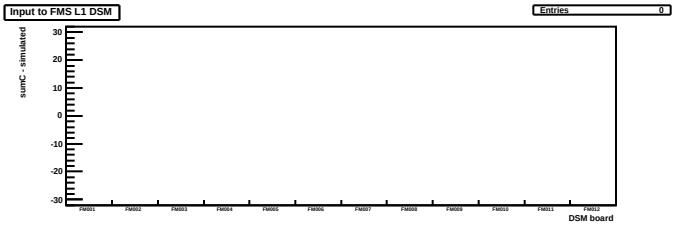

Input to FMS L0 DSM
Entries 6.018998e+07
HT ID
QT board

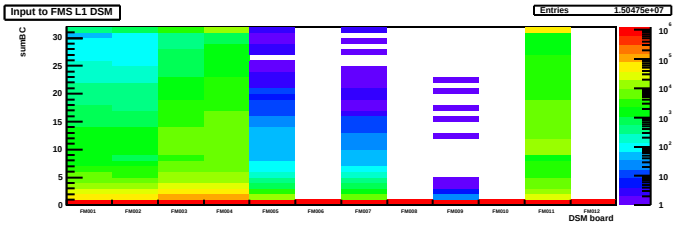

Input to FMS L0 DSM
Entries 1332672
HT ID - simulated
QT board

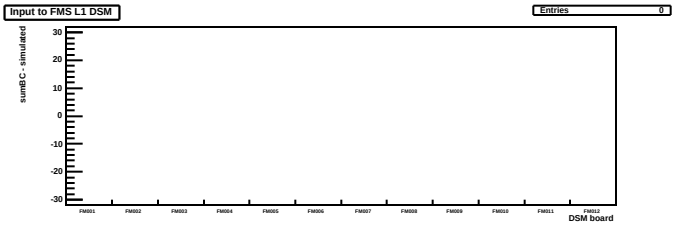

Input to FMS L1 DSM
Entries 1.50475e+07
sumD
DSM board

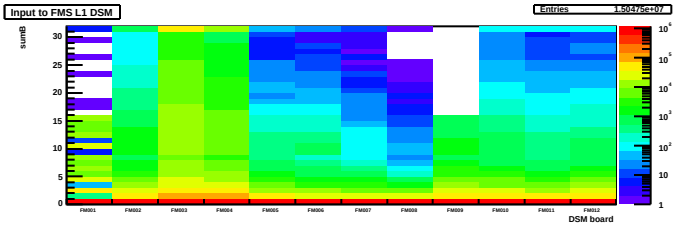

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

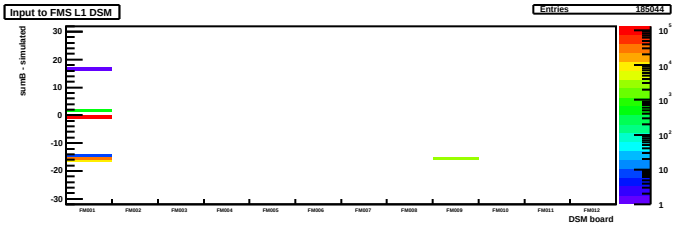

Input to FMS L1 DSM
Entries 1.50475e+07
sumC
DSM board

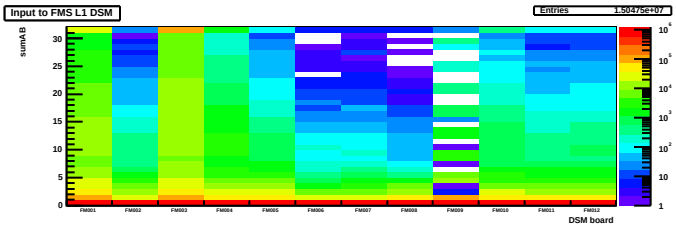

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

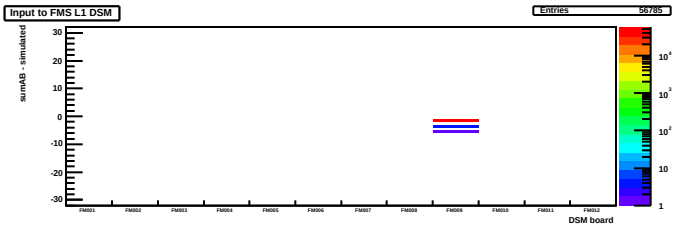

Input to FMS L1 DSM
Entries 1.50475e+07
sumBC
DSM board

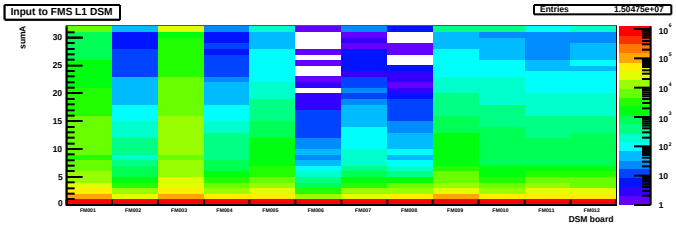

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

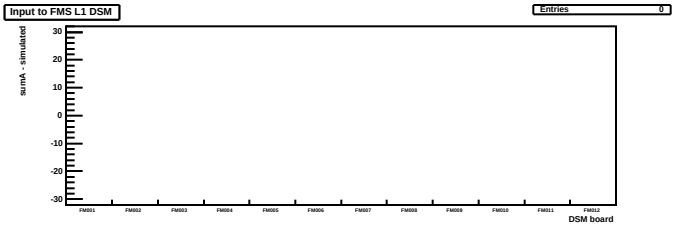

Input to FMS L1 DSM
Entries 1.50475e+07
sumB
DSM board

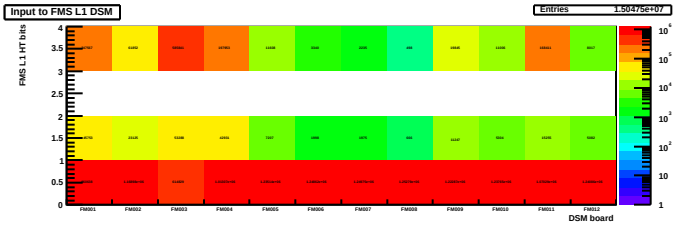

Input to FMS L1 DSM
Entries 185044
sumB - simulated
DSM board

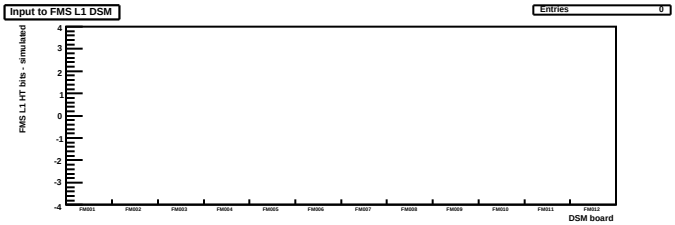

Input to FMS L1 DSM
Entries 1.50475e+07
sumAB
DSM board

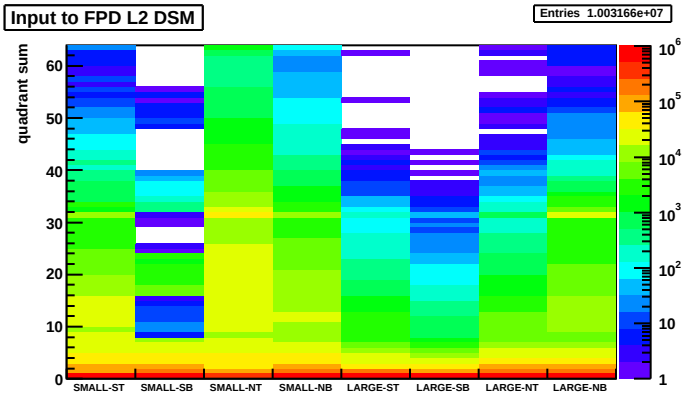

Input to FMS L1 DSM
Entries 56785
sumAB - simulated
DSM board

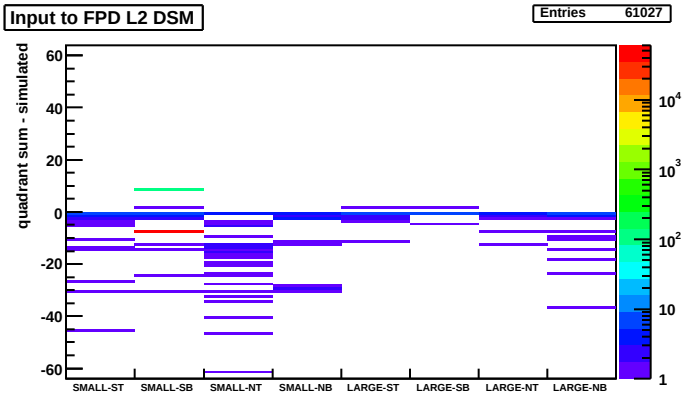

Input to FMS L1 DSM
Entries 1.50475e+07
sumA
DSM board

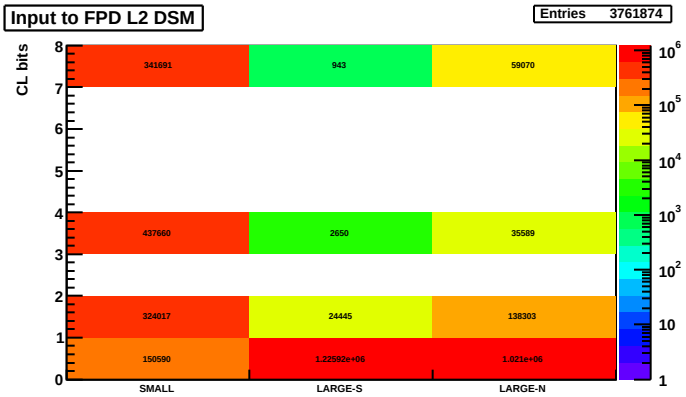

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

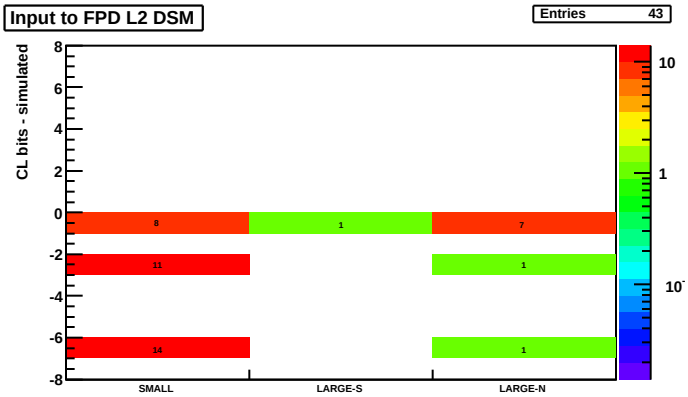

Input to FMS L1 DSM
Entries 1.50475e+07
FMS L1 HT bits
DSM board

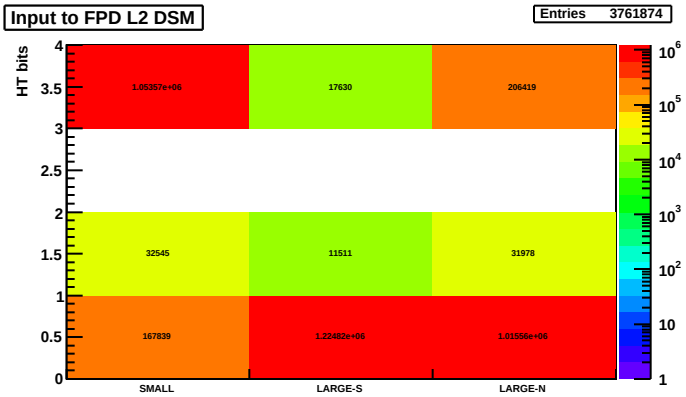

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

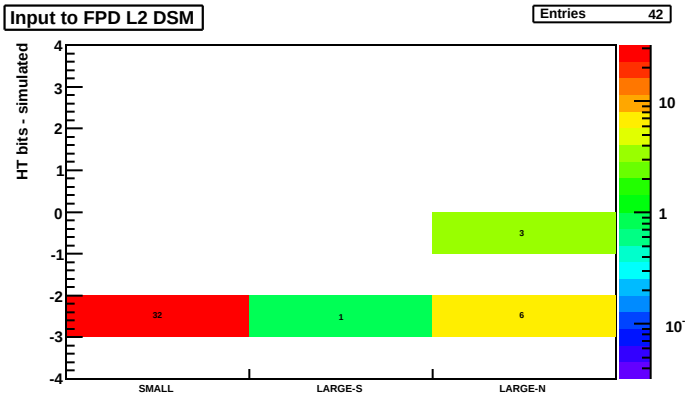

Input to FPD L2 DSM
Entries 1.003166e+07
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

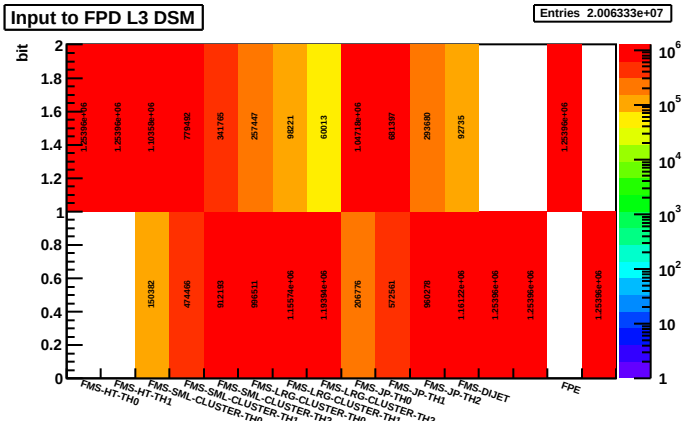

Input to FPD L2 DSM
Entries 61027
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

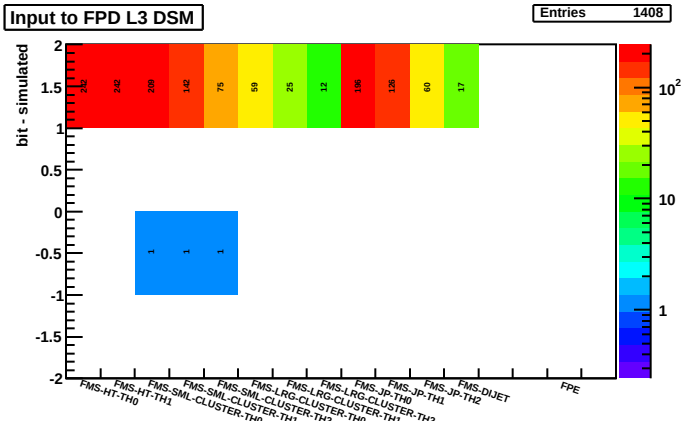

Input to FPD L2 DSM
Entries 3761874
CL bits
341691
943
59070
437660
2650
35589
324017
24445
138303
150590
1.22592e+06
1.021e+06
SMALL
LARGE-S
LARGE-N

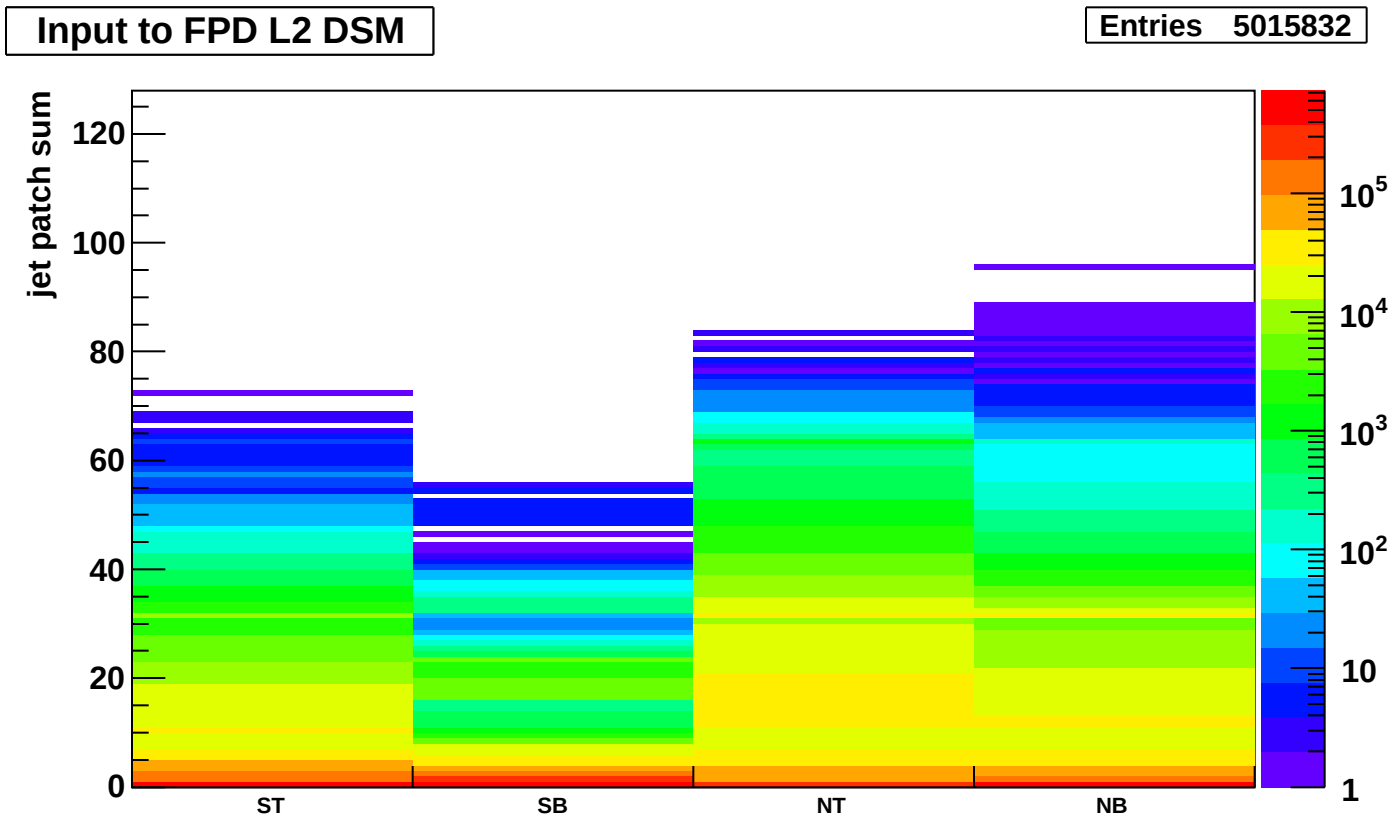

Input to FPD L2 DSM
Entries 43
CL bits - simulated
8
1
7
11
1
14
1
SMALL
LARGE-S
LARGE-N

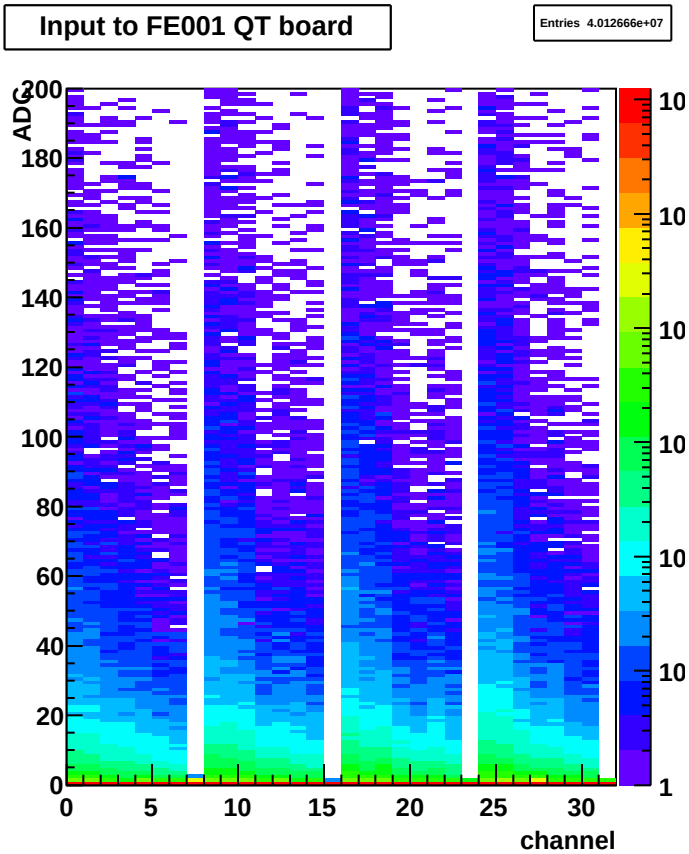

Input to FPD L2 DSM
Entries 3761874
HT bits
1.05357e+06
17630
206419
32545
11511
31978
167839
1.22482e+06
1.01556e+06
SMALL
LARGE-S
LARGE-N

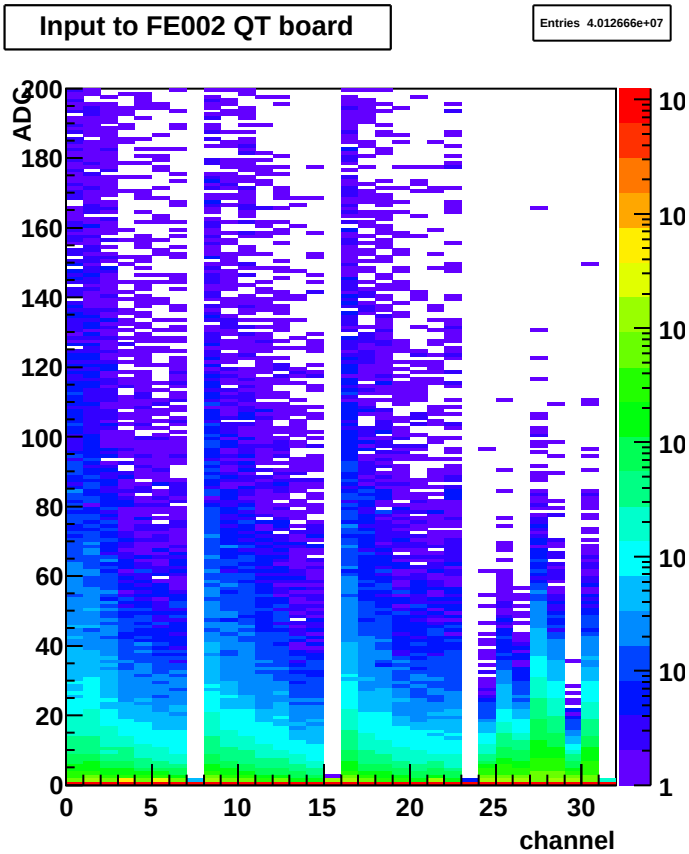

Input to FPD L2 DSM
Entries 42
HT bits - simulated
3
32
1
6
SMALL
LARGE-S
LARGE-N

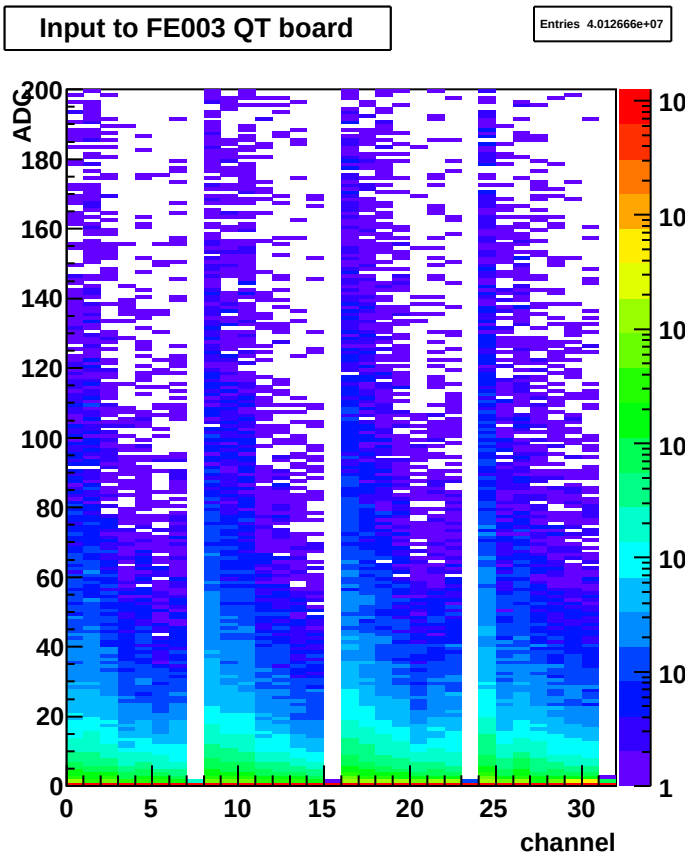

Input to FPD L3 DSM
Entries 2.006333e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

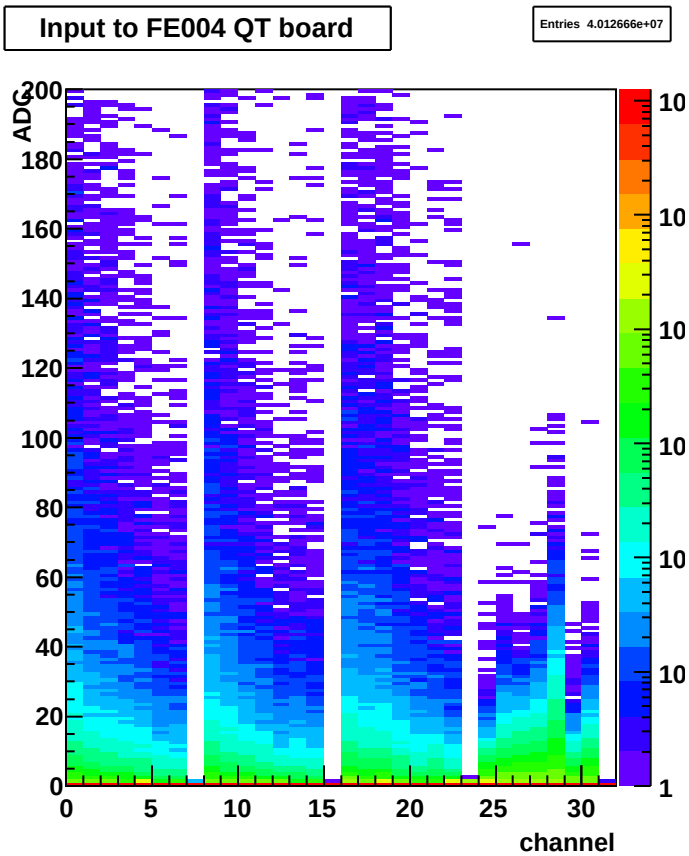

Input to FPD L3 DSM
Entries 1408
bit - simulated
262
242
209
142
75
59
25
12
138
126
60
17
1
1
1
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

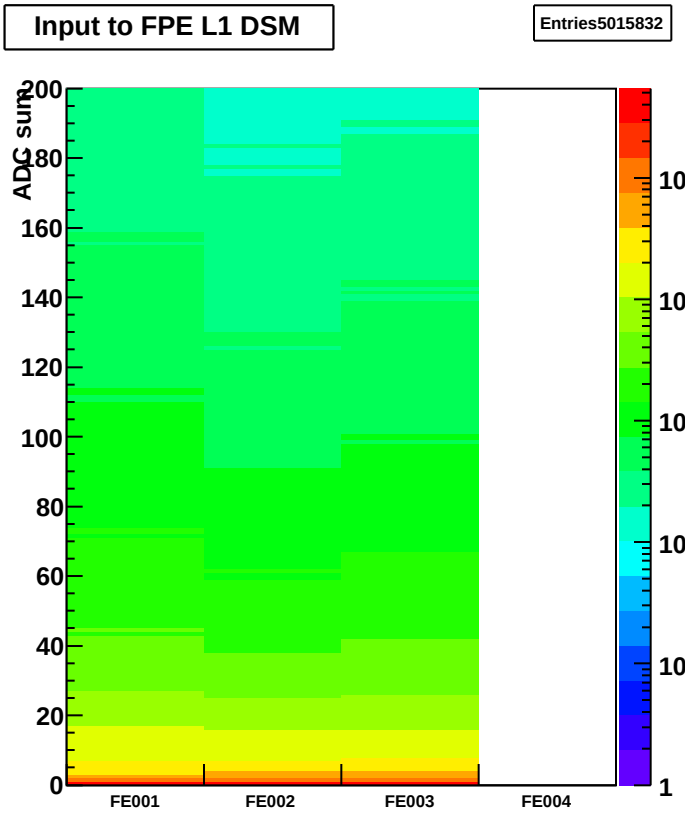

Input to FPD L2 DSM
Entries 5015832
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

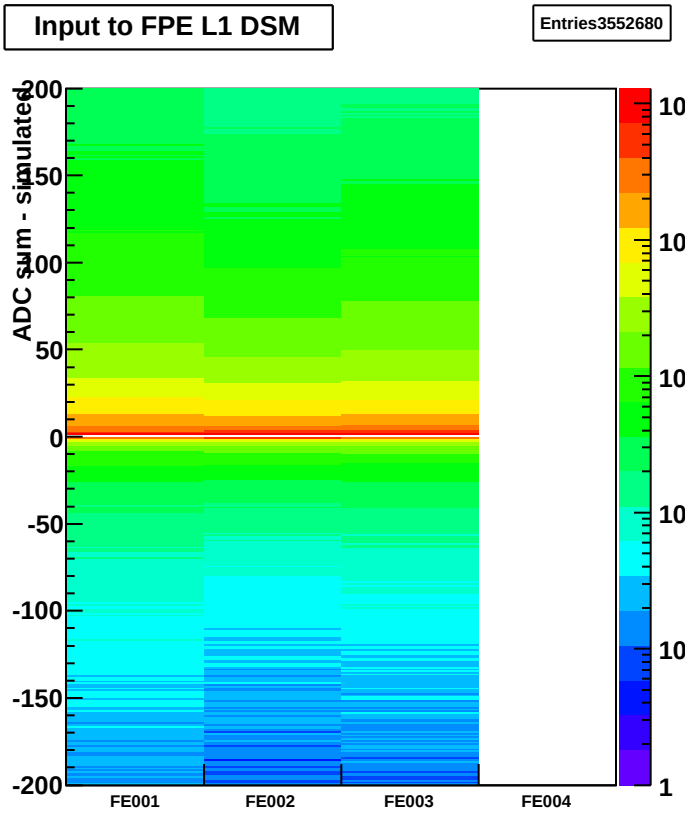

Input to FE001 QT board
Entries 4.012666e+07
ADC
channel

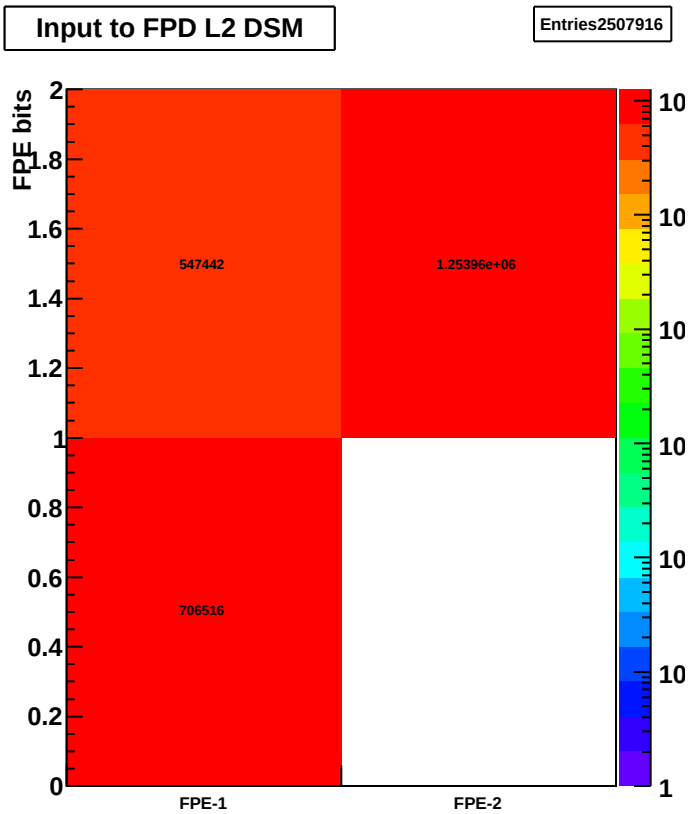

Input to FE002 QT board
Entries 4.012666e+07
ADC
channel

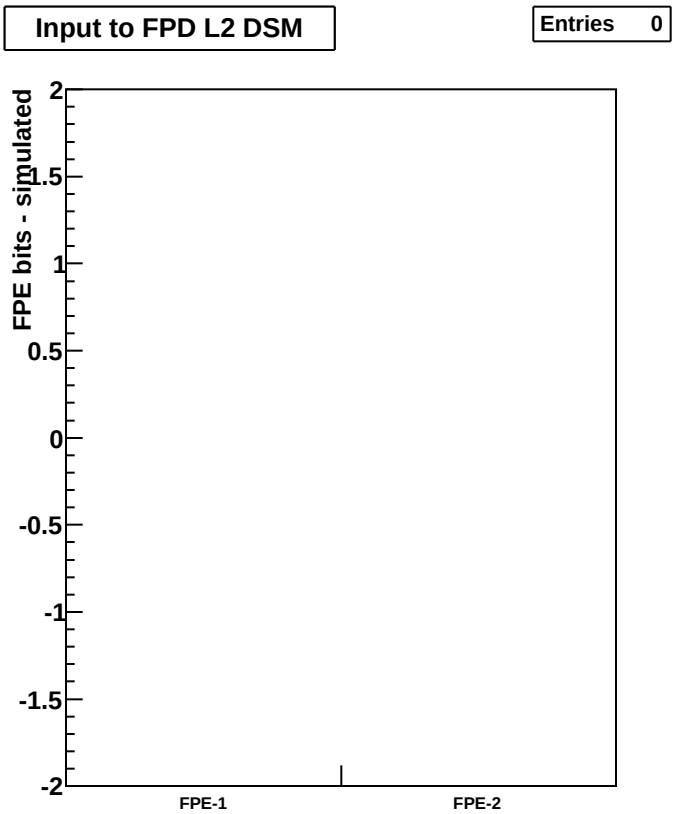

Input to FE003 QT board
Entries 4.012666e+07
ADC
channel


Input to FE004 QT board
Entries 4.012666e+07
ADC
channel


Input to FPE L1 DSM
Entries5015832
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries3552680
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries2507916
FPE bits
547442
1.25396e+06
706516
FPE-1
FPE-2


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