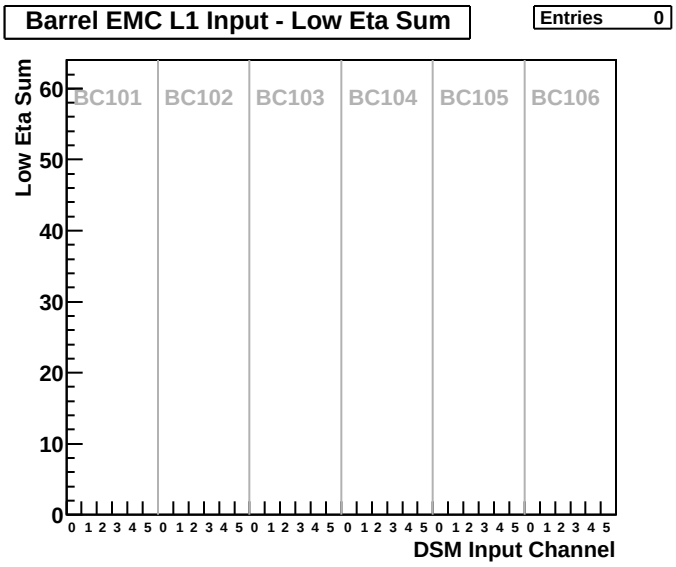
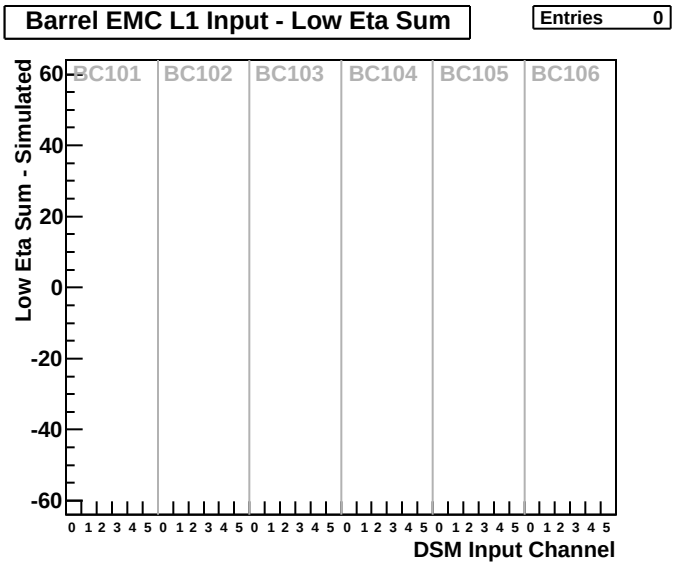
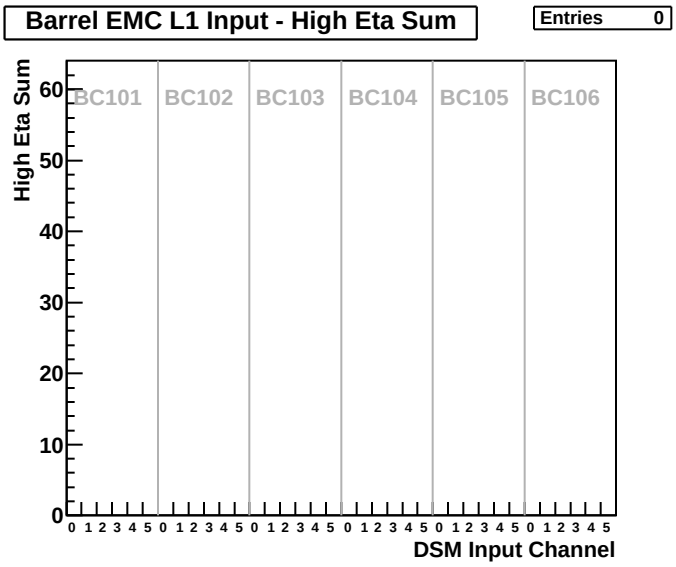
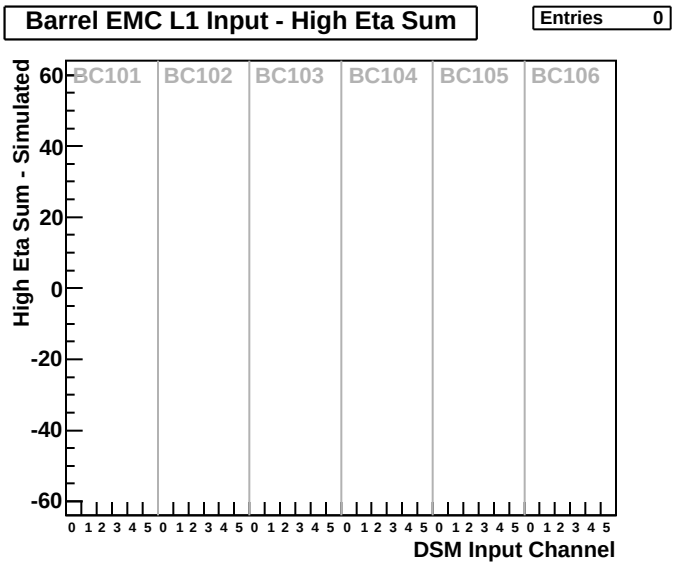
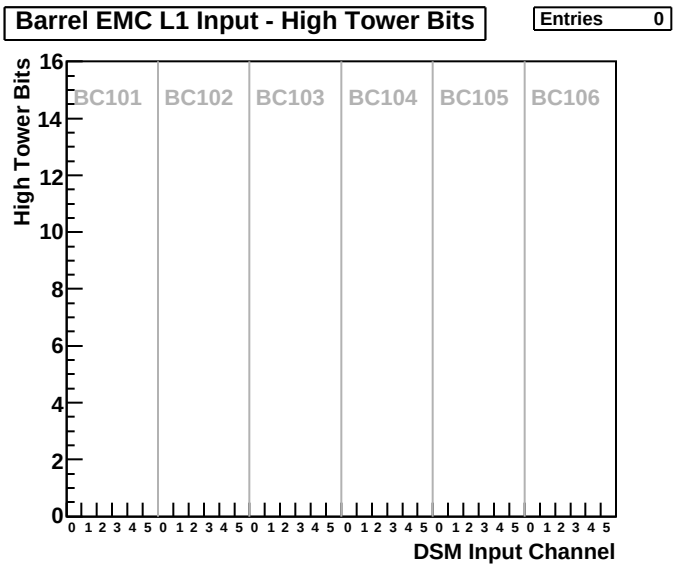
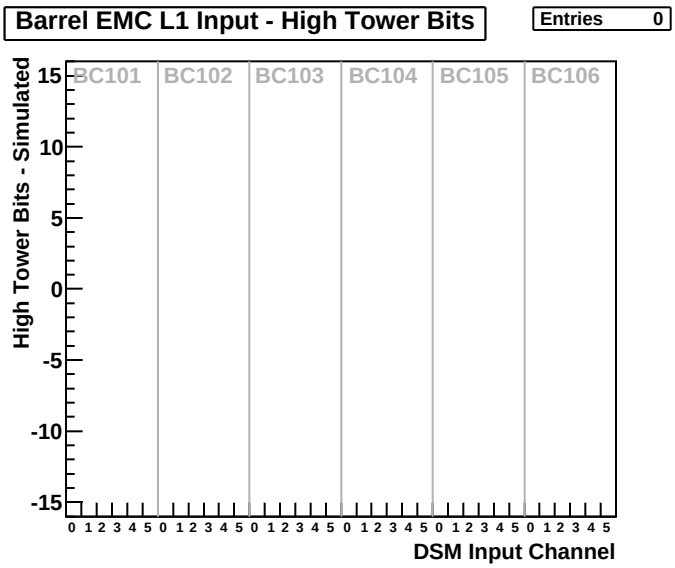

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

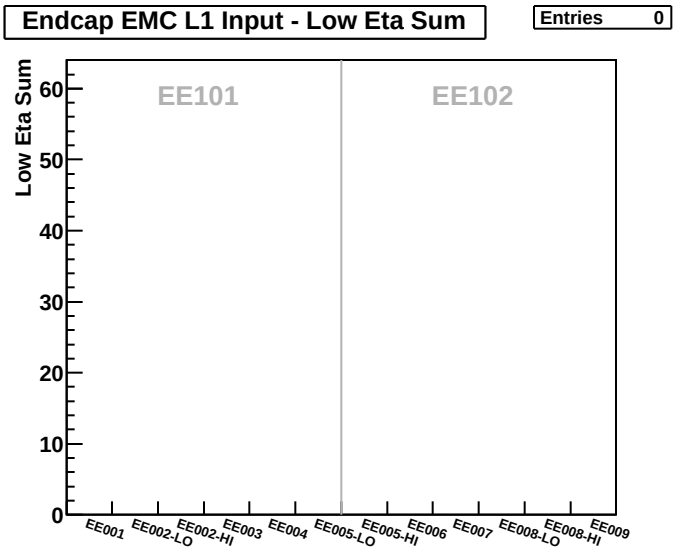

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

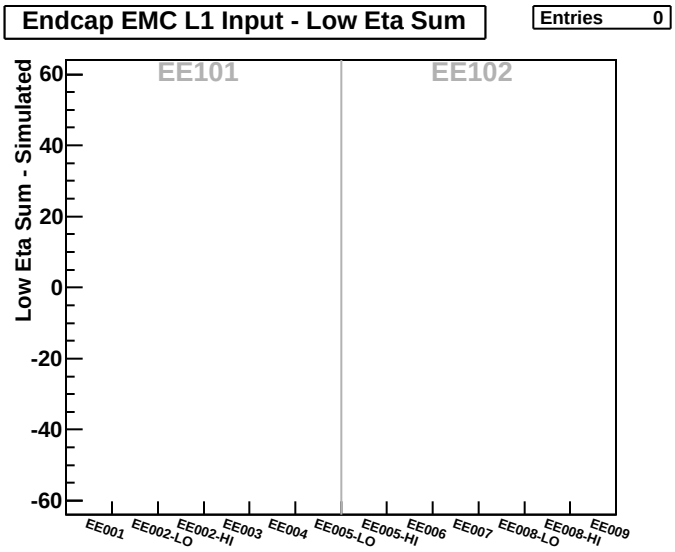

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

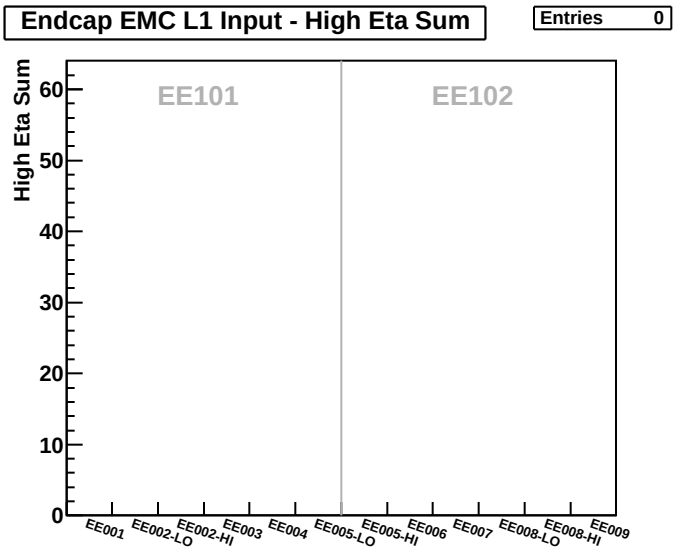

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

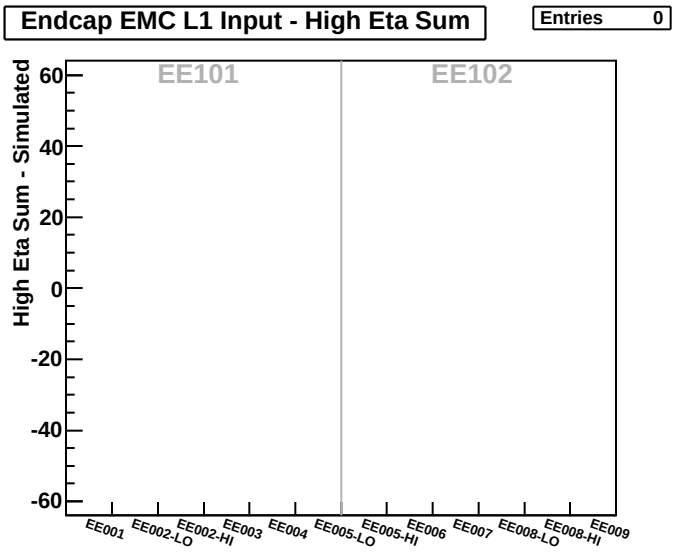

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

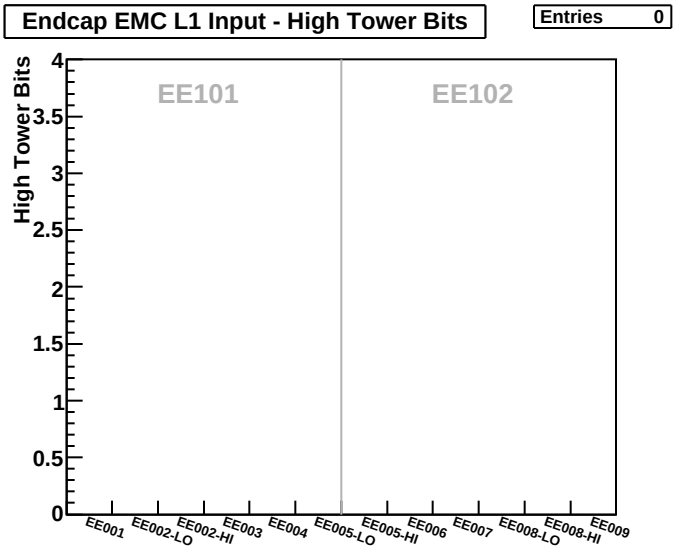

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

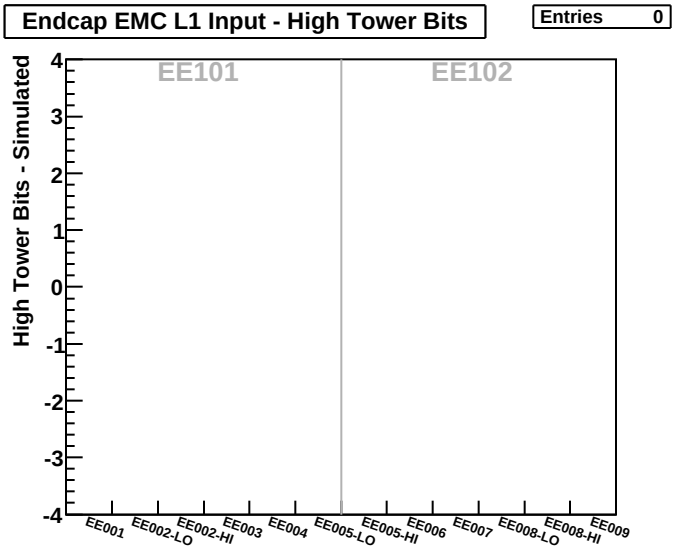

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

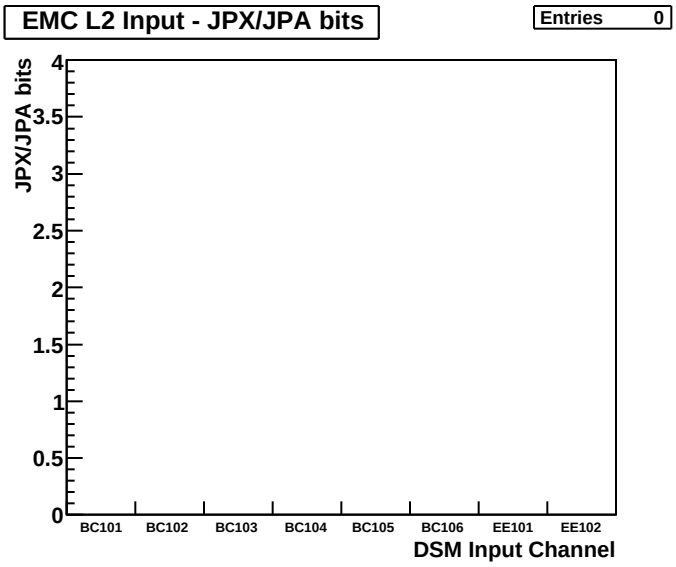

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

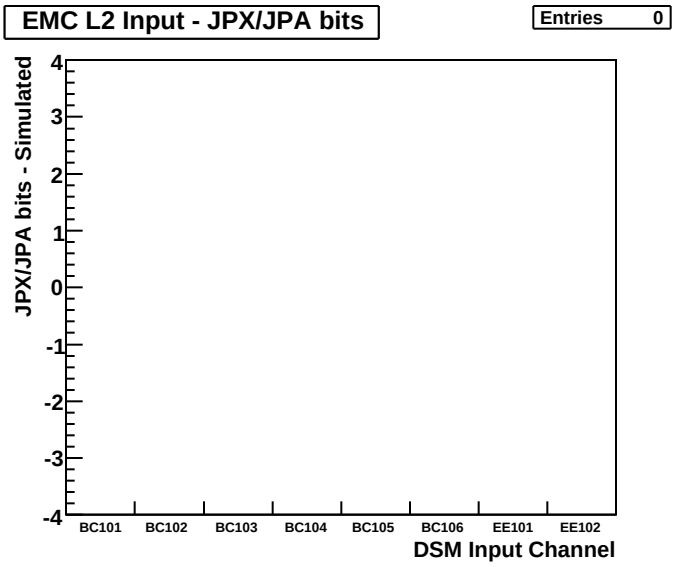

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

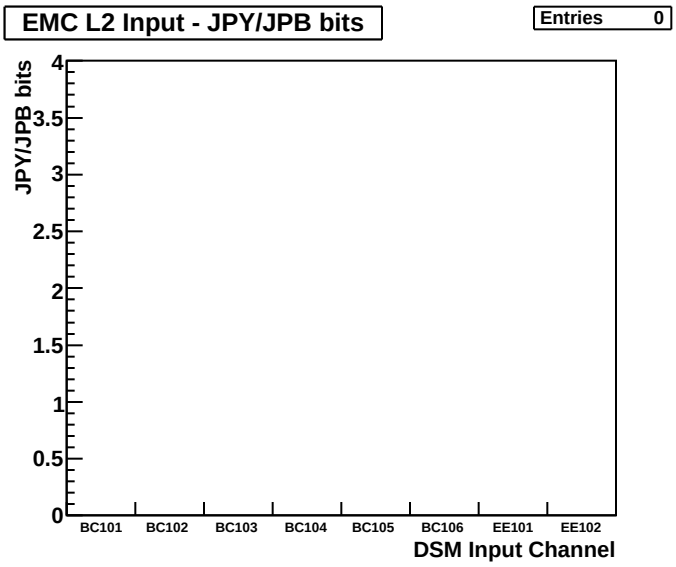

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

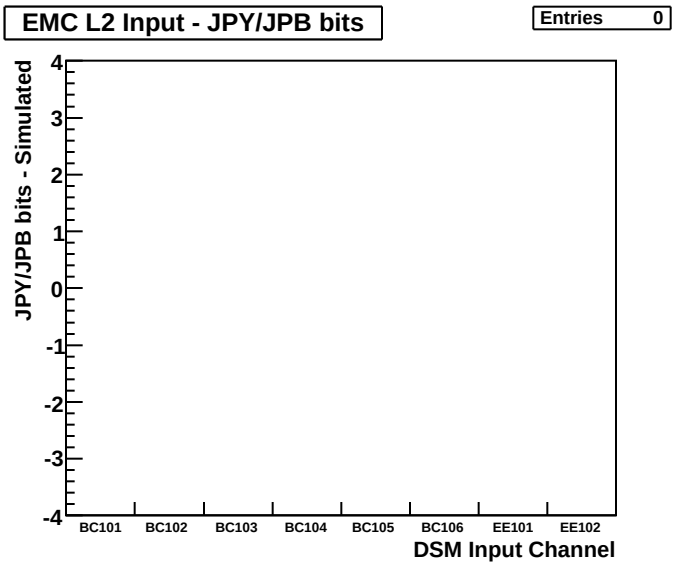

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

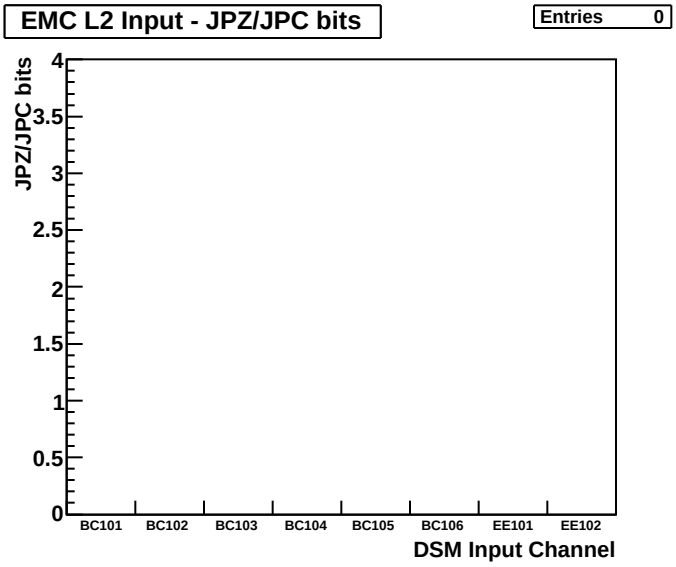

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

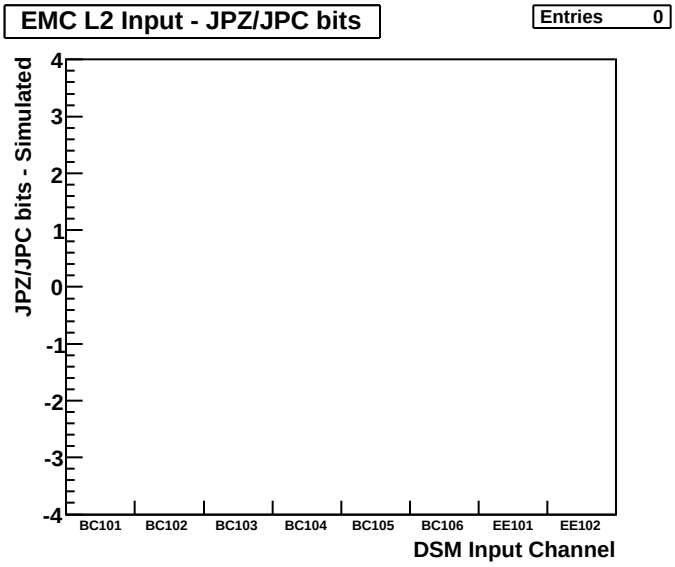

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

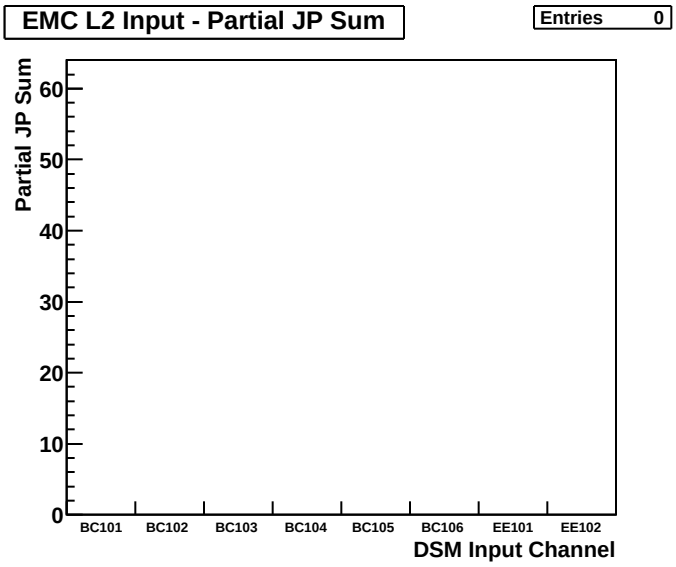

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

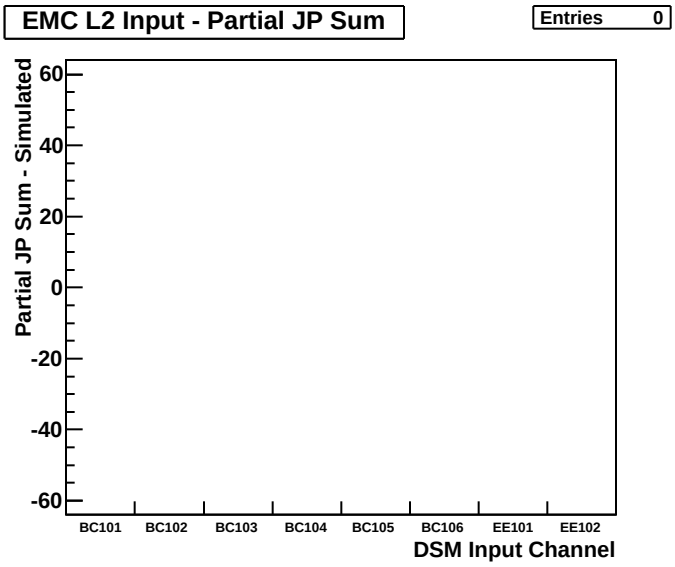

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

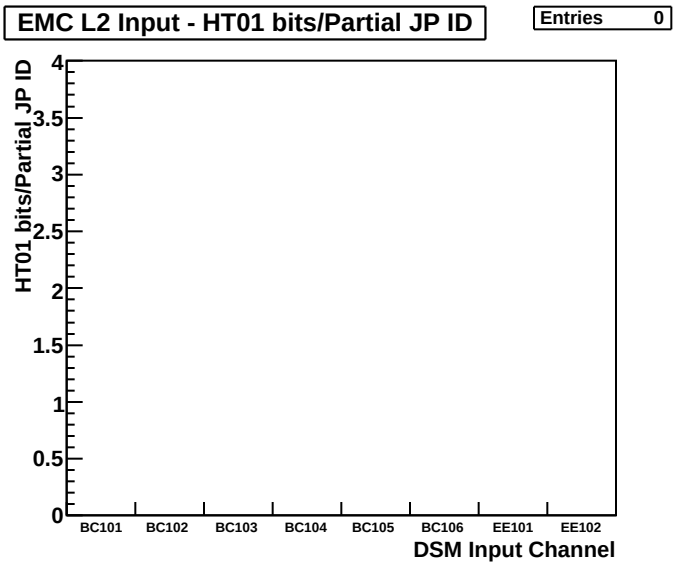

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

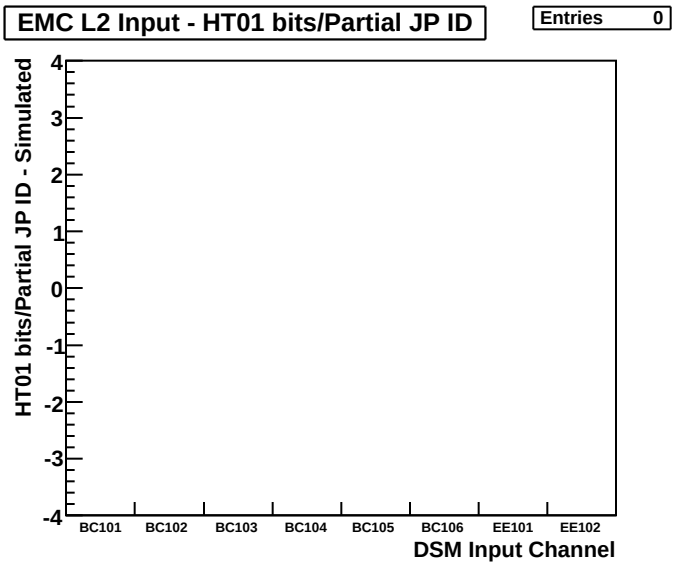

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

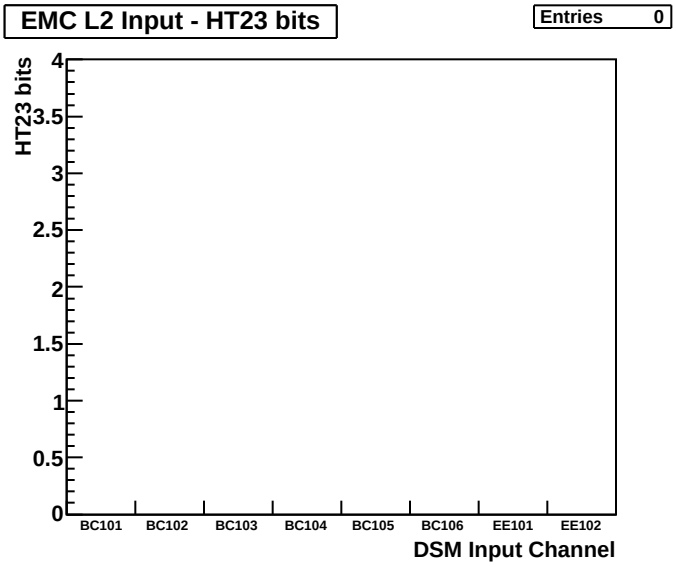

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

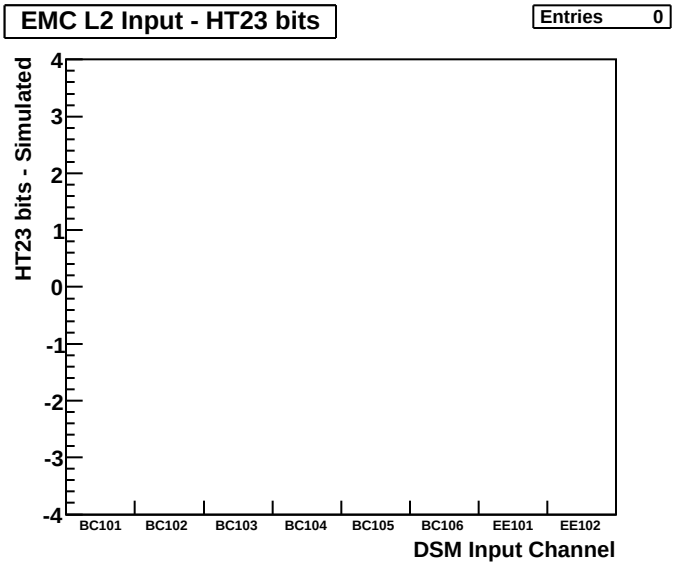

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum
60
50
40
30
20
10
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

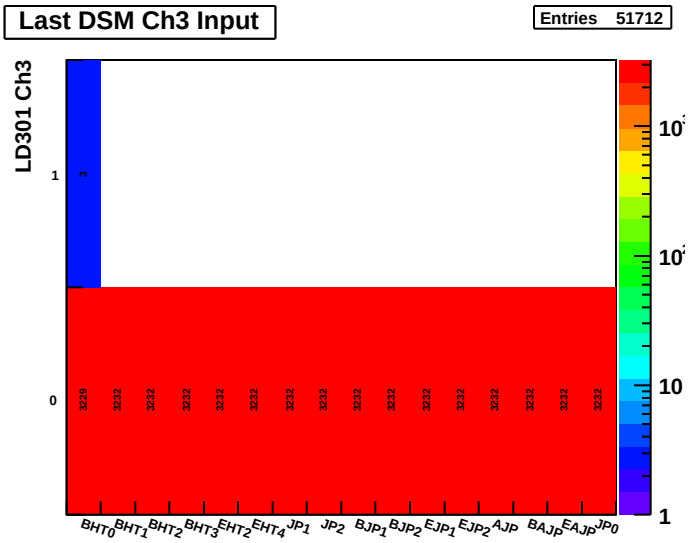

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
60
40
20
0
-20
-40
-60
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

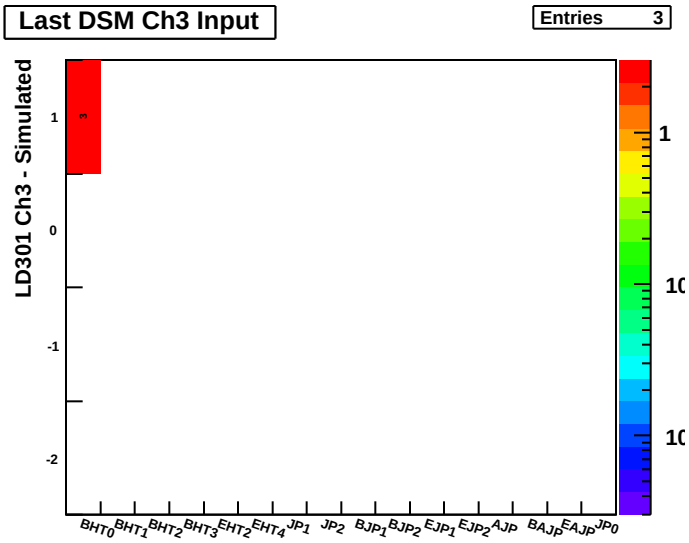

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

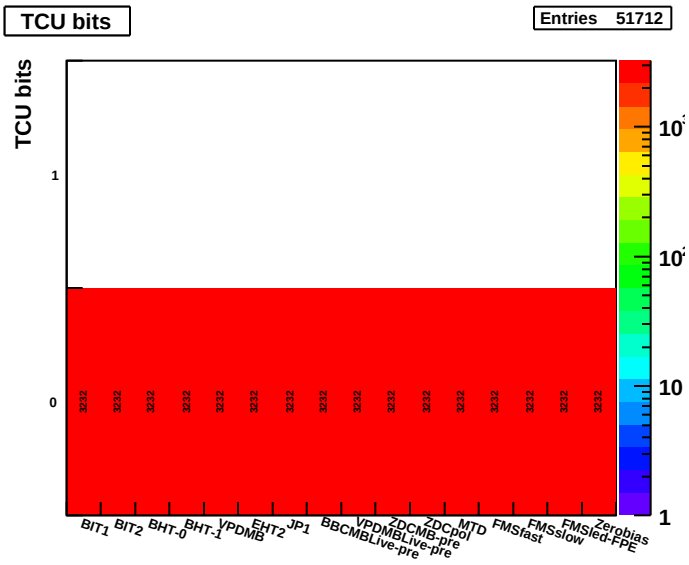

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

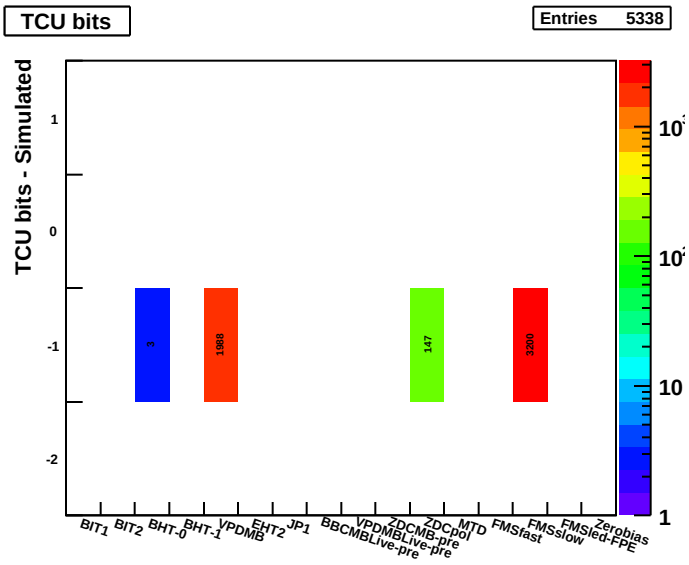

EMC L2 Input - HT23 bits
Entries 0
HT23 bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

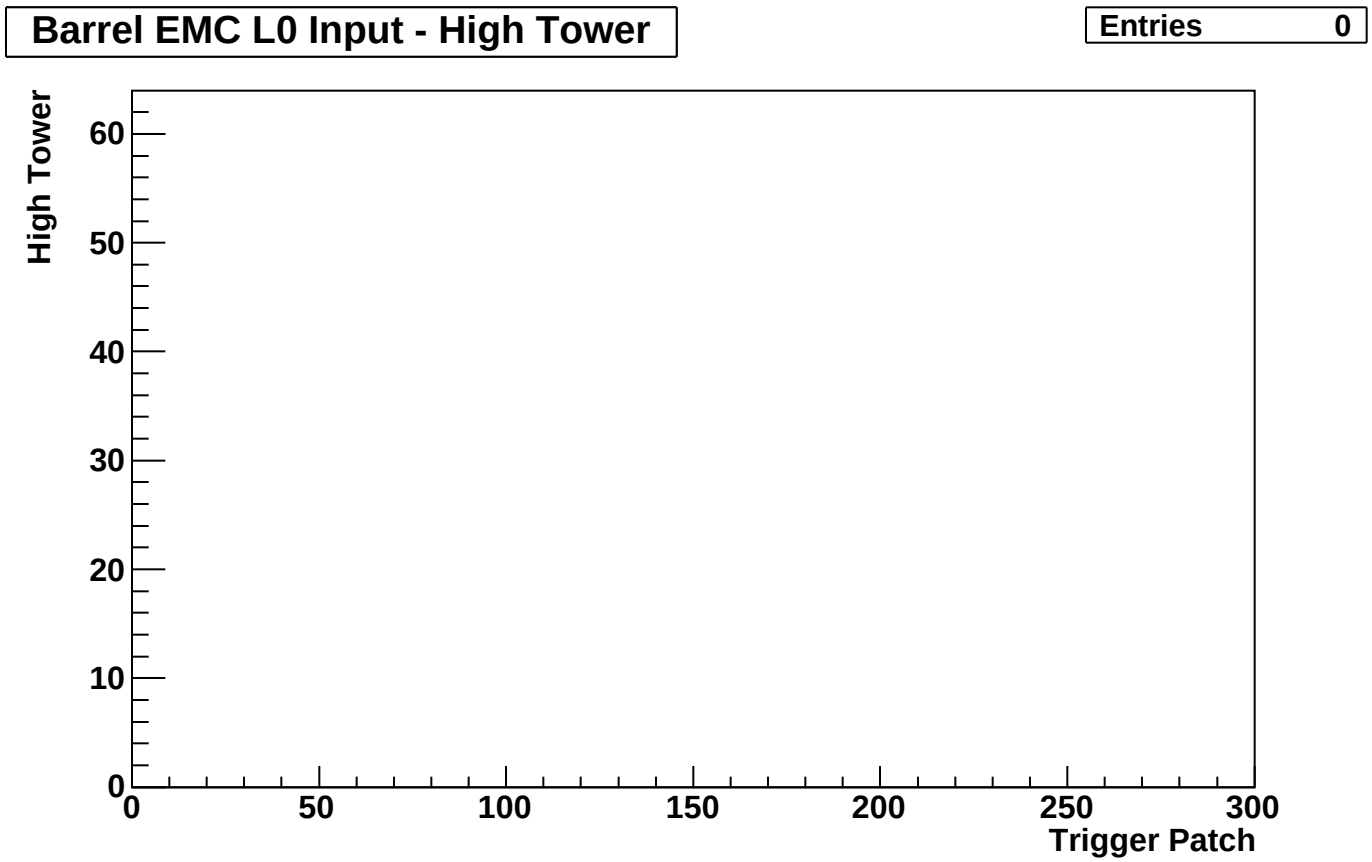

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

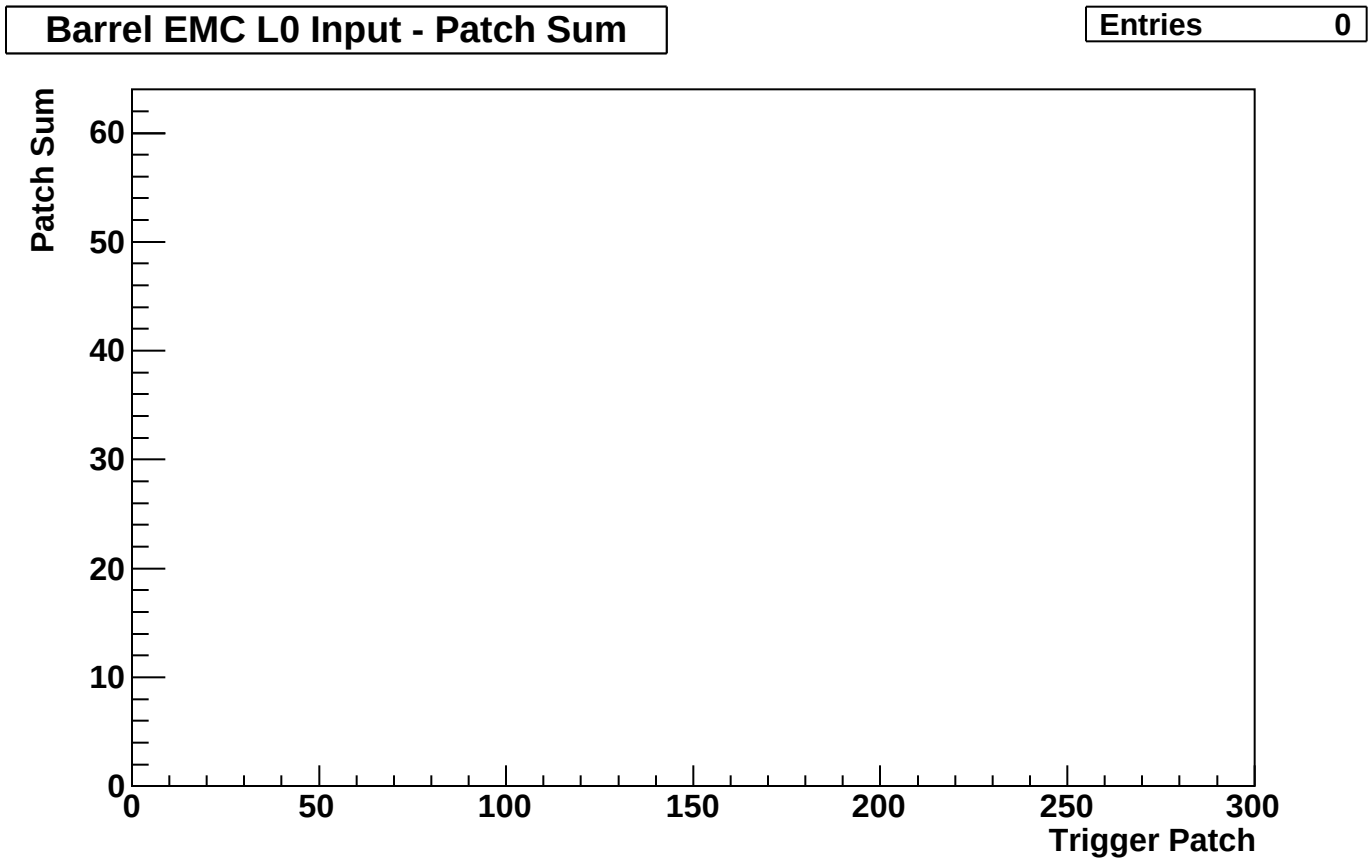

Last DSM Ch3 Input
Entries 51712
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

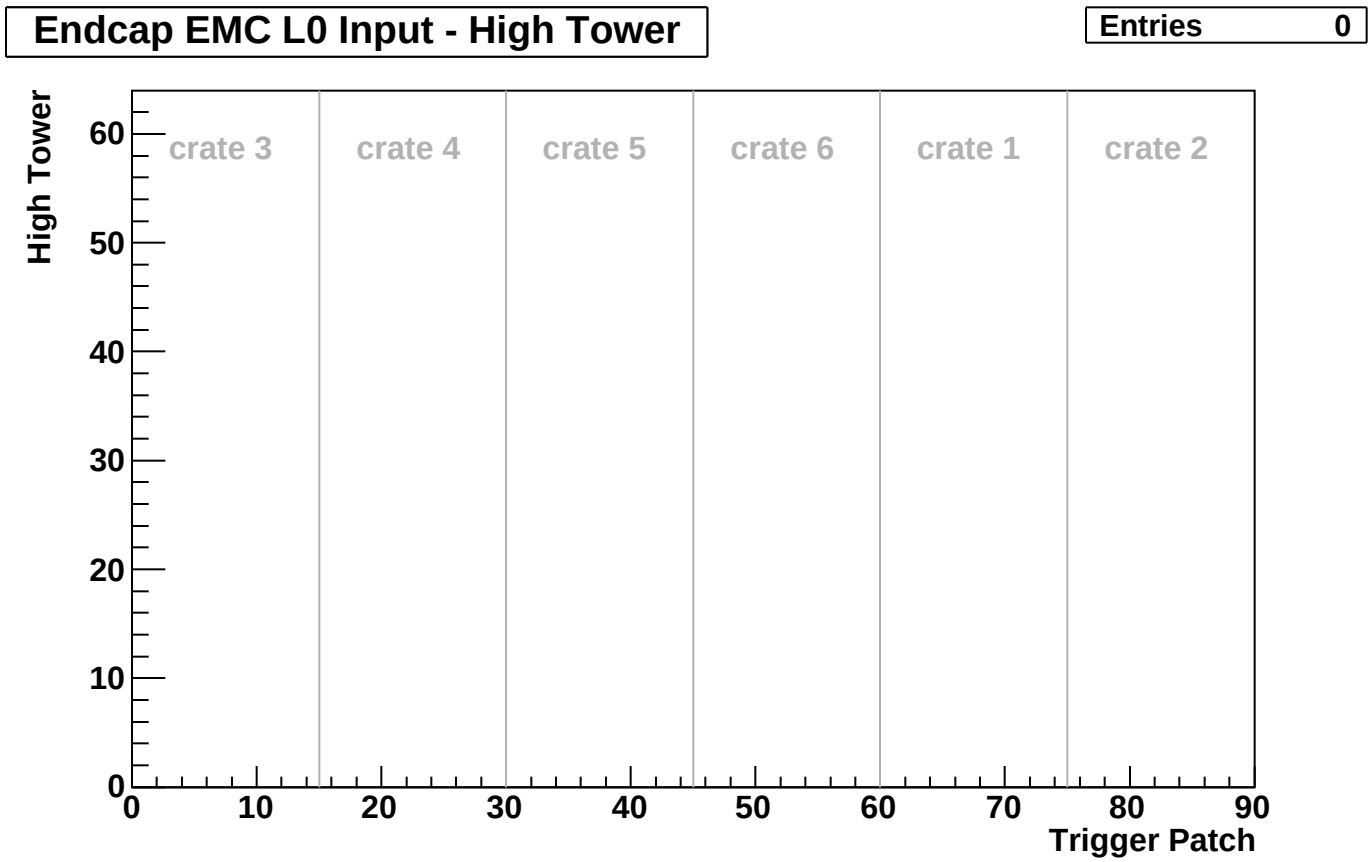

Last DSM Ch3 Input
Entries 3
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

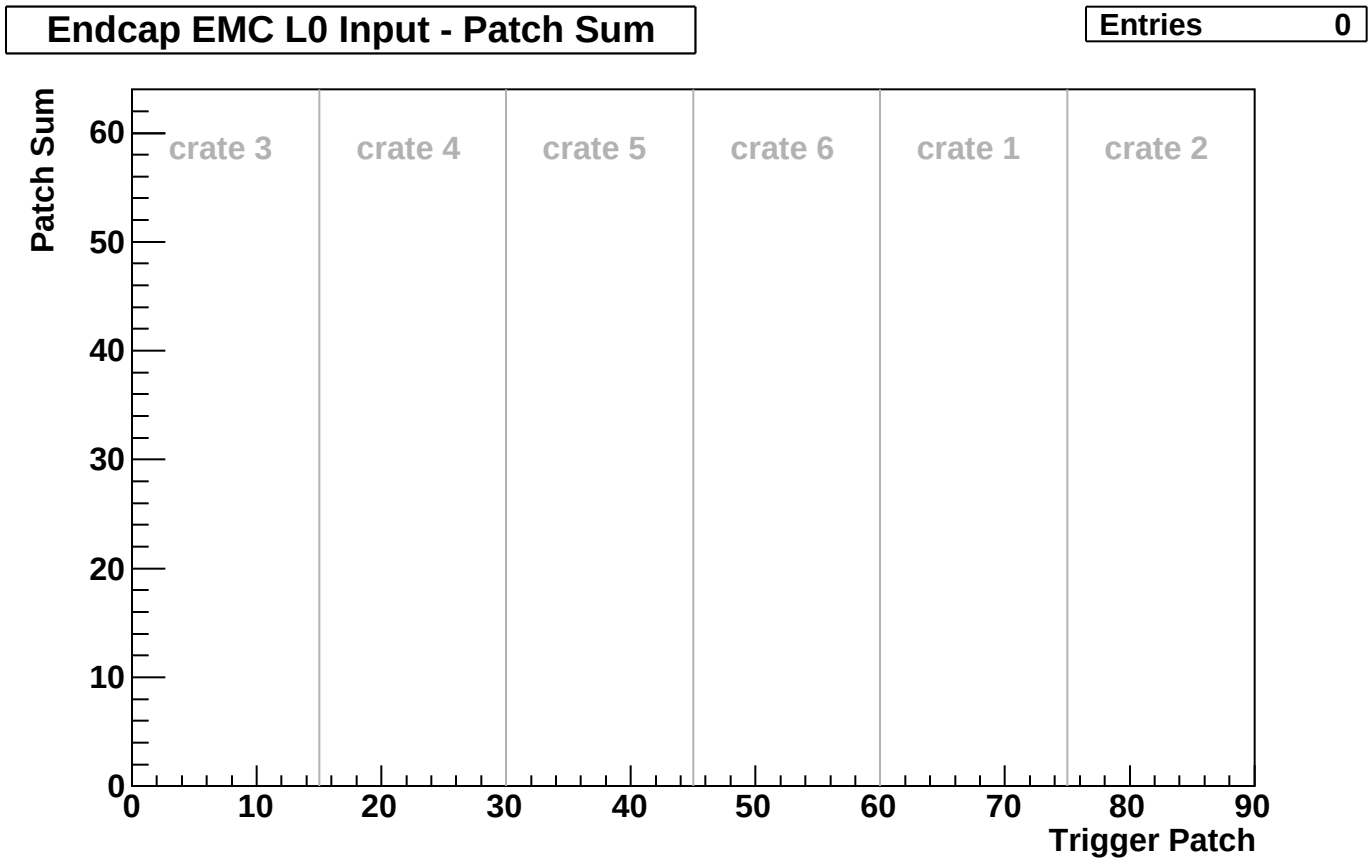

TCU bits
Entries 51712
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

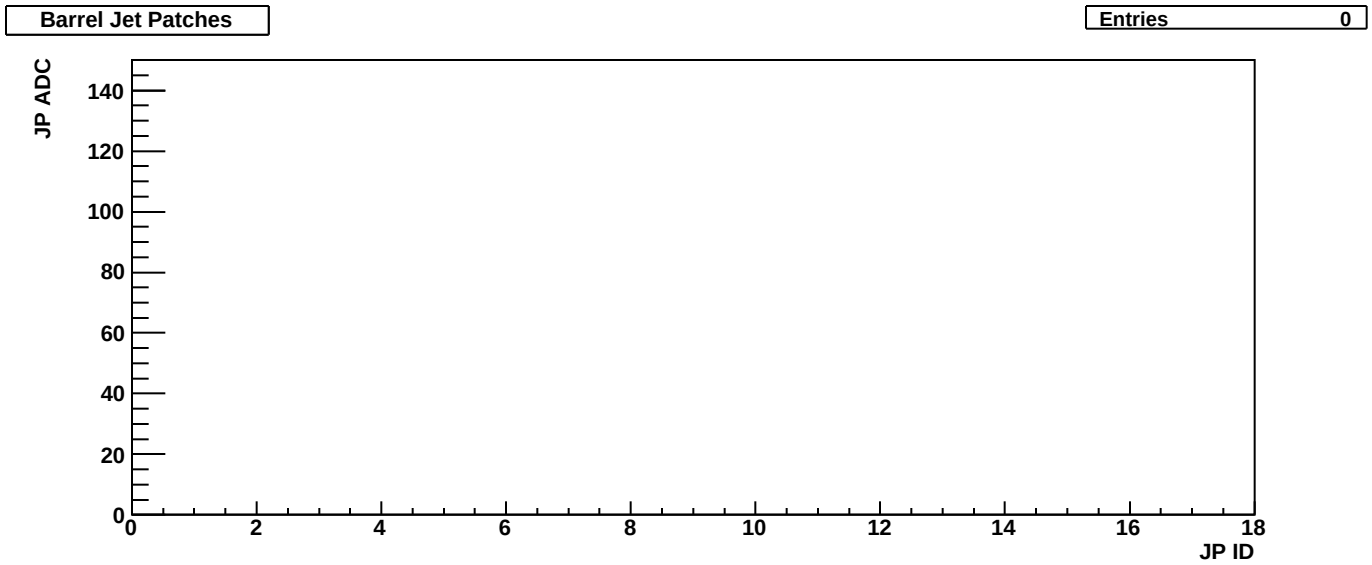

TCU bits
Entries 5338
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

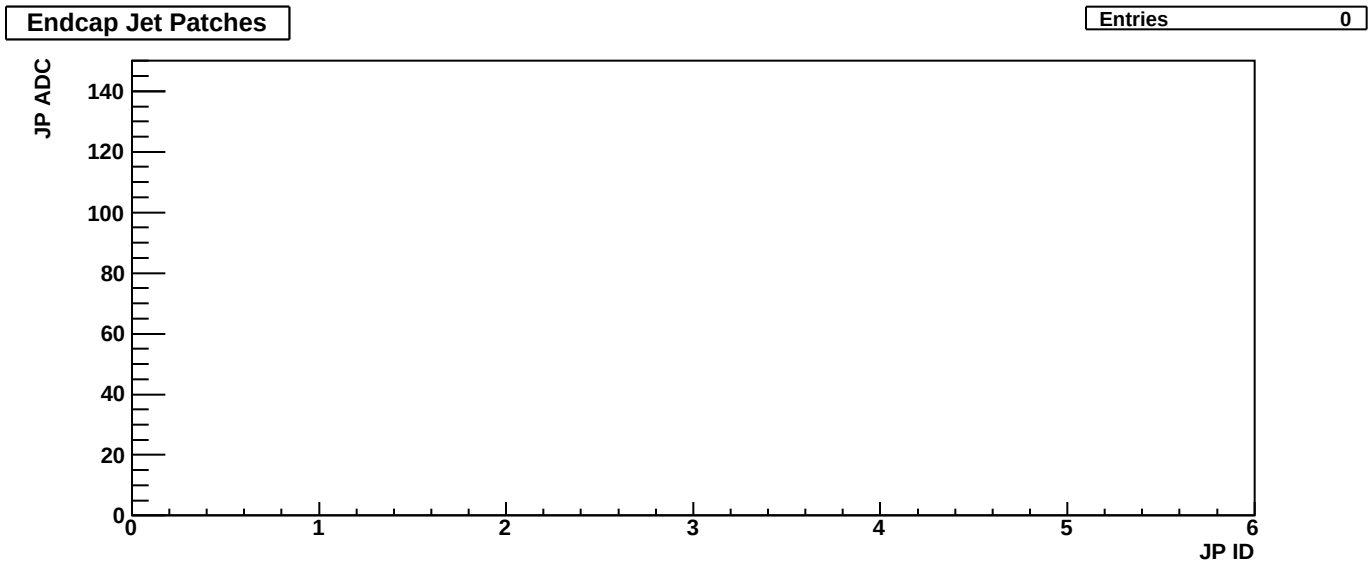

Barrel EMC L0 Input - High Tower
Entries 0
High Tower
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

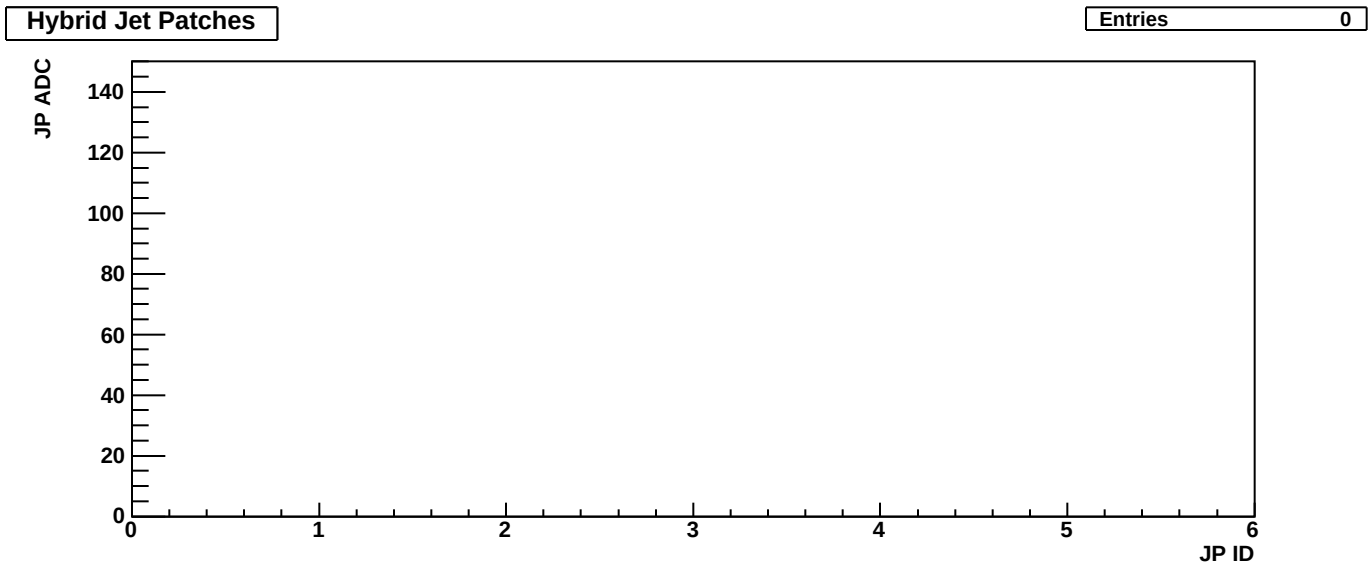

Barrel EMC L0 Input - Patch Sum
Entries 0
Patch Sum
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

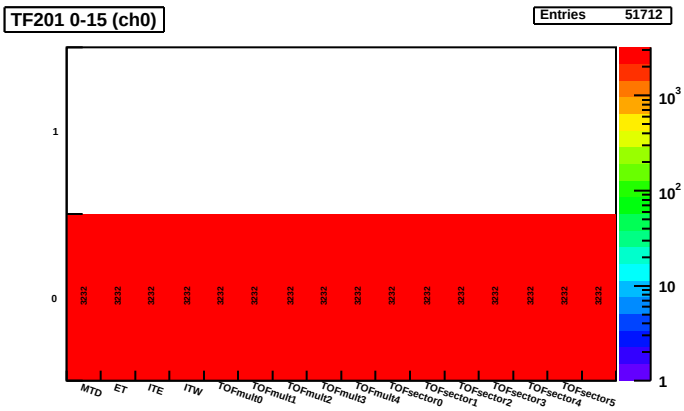

Endcap EMC L0 Input - High Tower
Entries 0
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

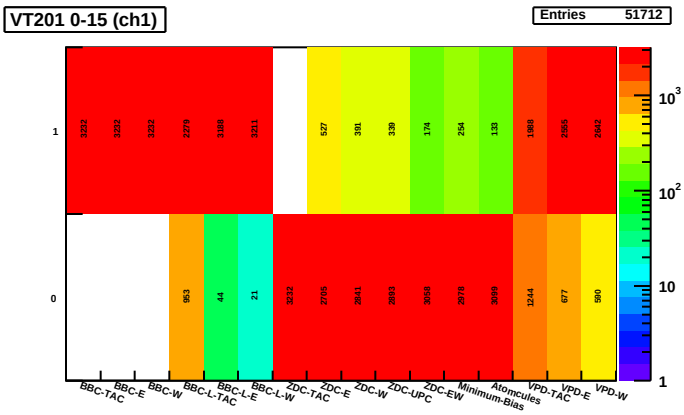

Endcap EMC L0 Input - Patch Sum
Entries 0
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

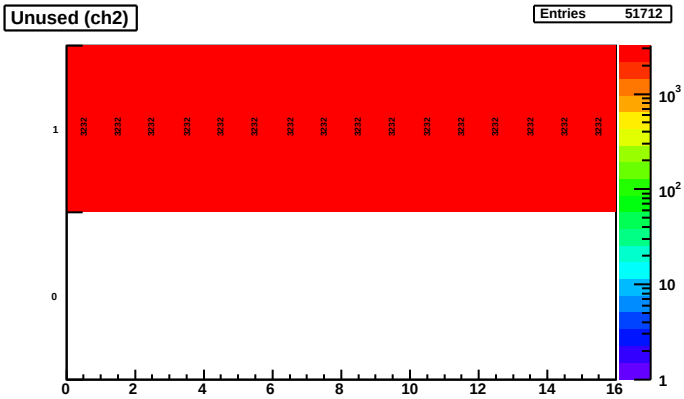

Barrel Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
2
4
6
8
10
12
14
16
18
JP ID

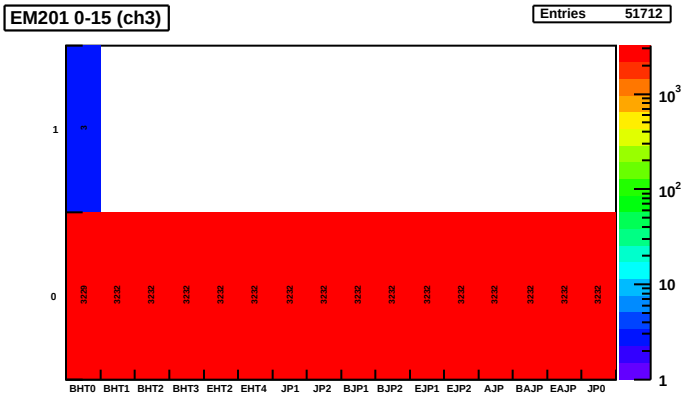

Endcap Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

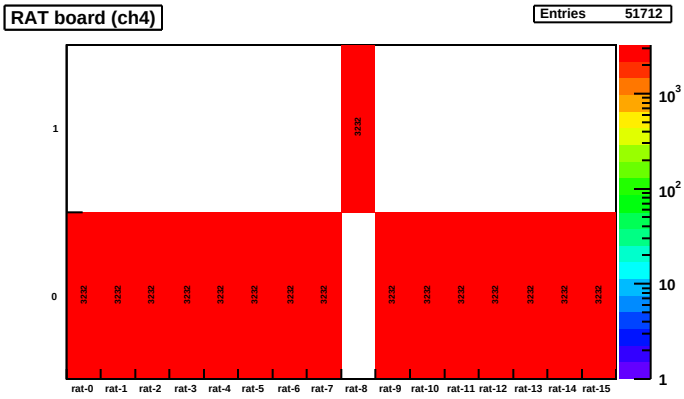

Hybrid Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

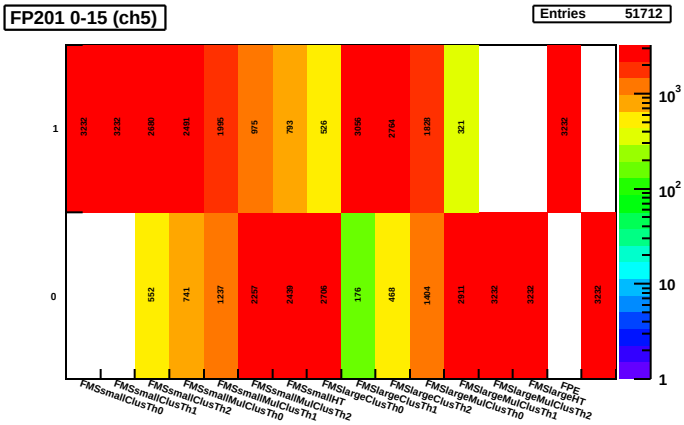

TF201 0-15 (ch0)
Entries 51712
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

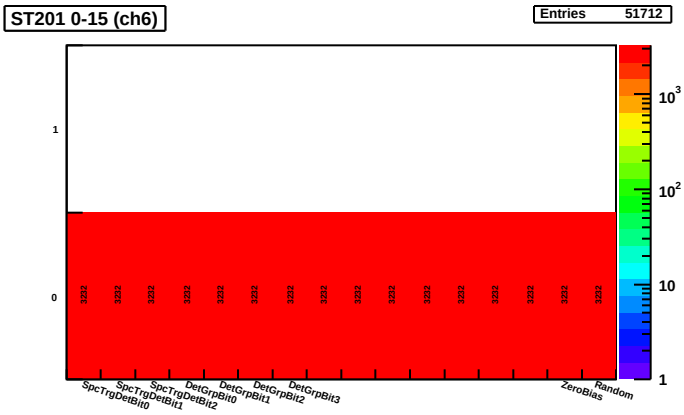

VT201 0-15 (ch1)
Entries 51712
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

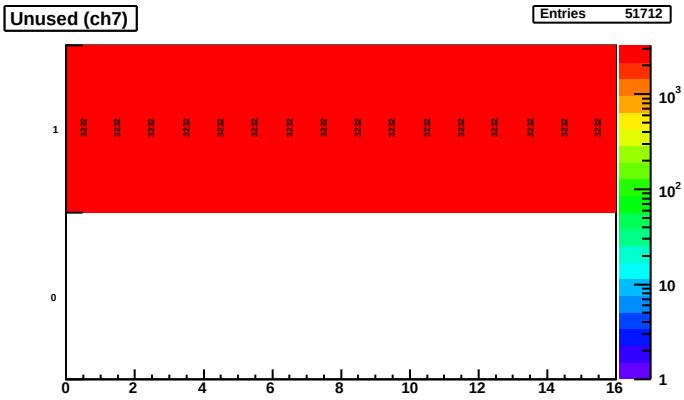

Unused (ch2)
Entries 51712

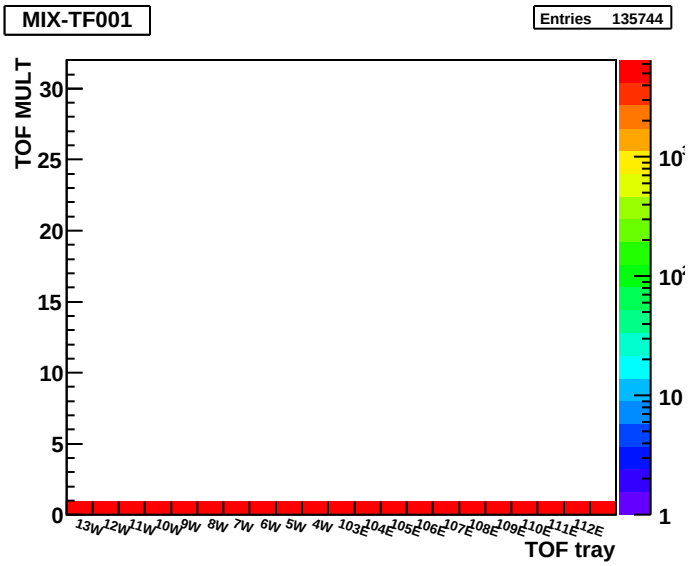

EM201 0-15 (ch3)
Entries 51712
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

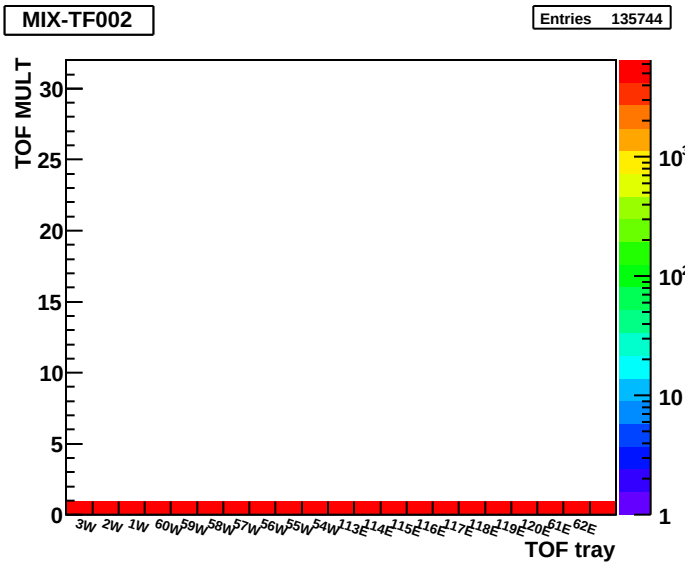

RAT board (ch4)
Entries 51712
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

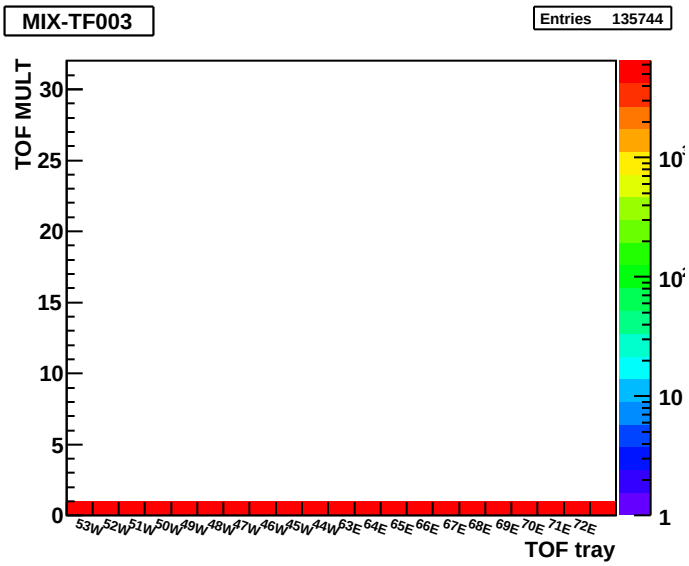

FP201 0-15 (ch5)
Entries 51712
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

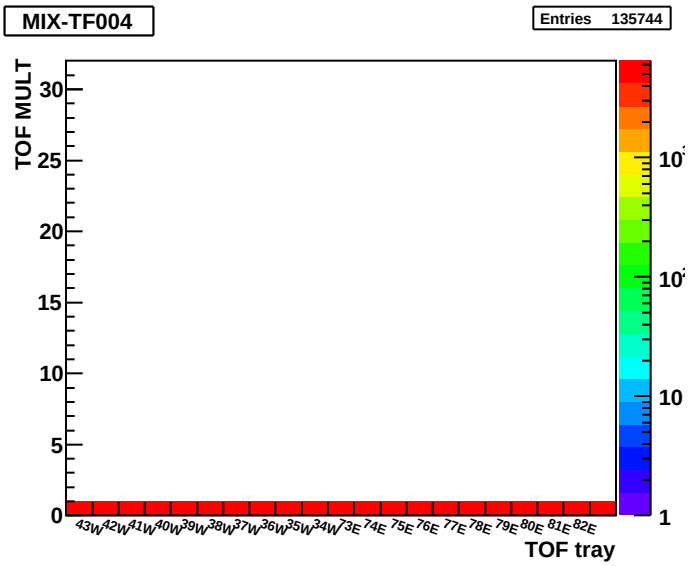

ST201 0-15 (ch6)
Entries 51712
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

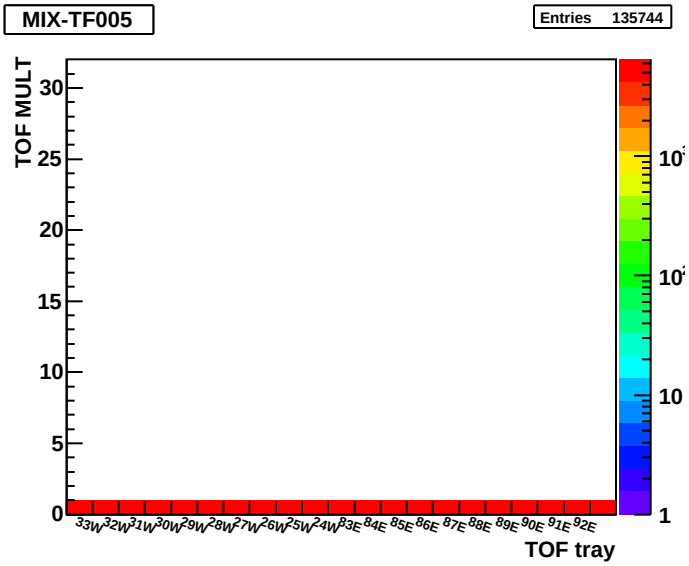

Unused (ch7)
Entries 51712

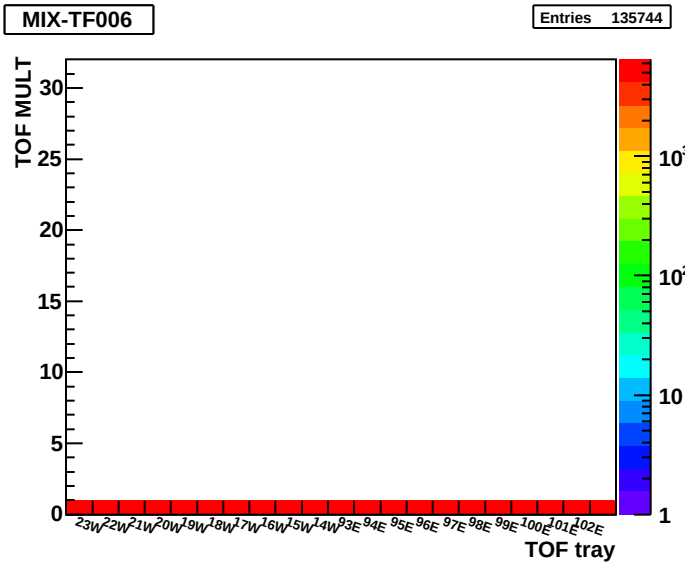

MIX-TF001
Entries 135744
TOF MULT
TOF tray

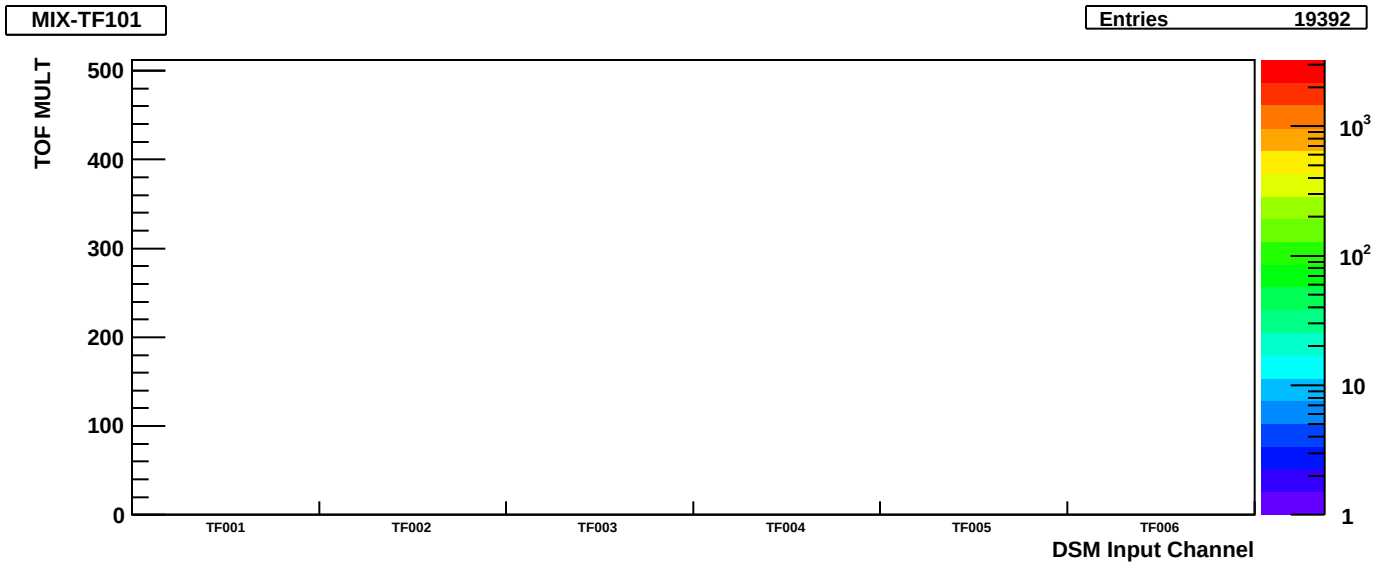

MIX-TF002
Entries 135744
TOF MULT
TOF tray

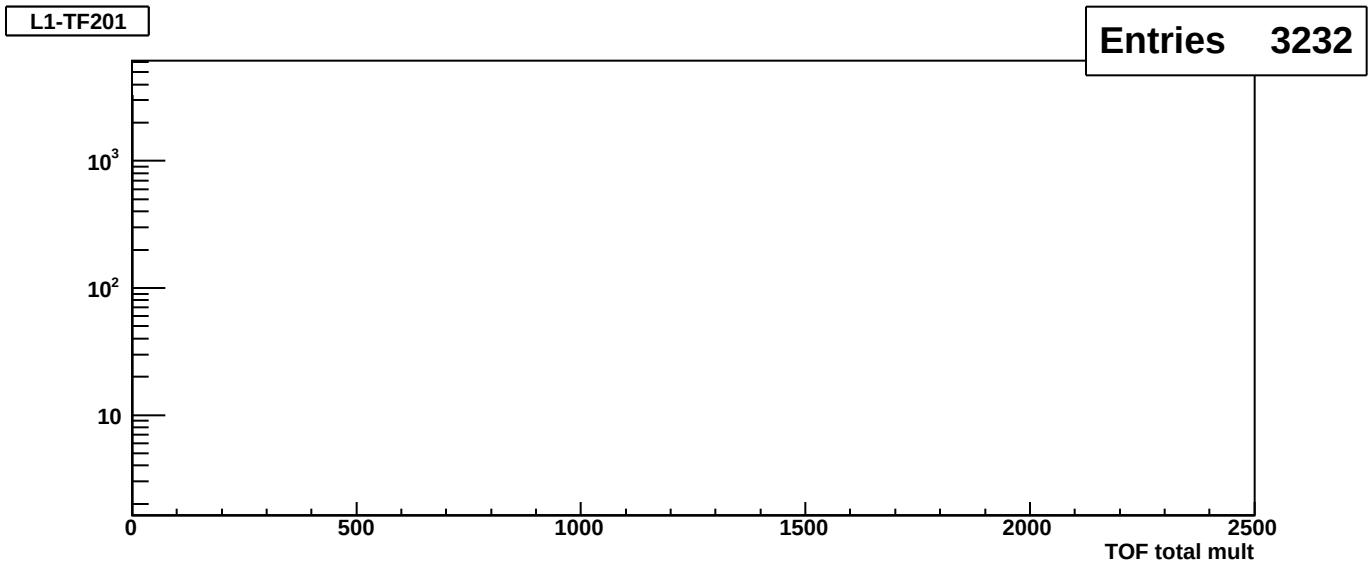

MIX-TF003
Entries 135744
TOF MULT
TOF tray

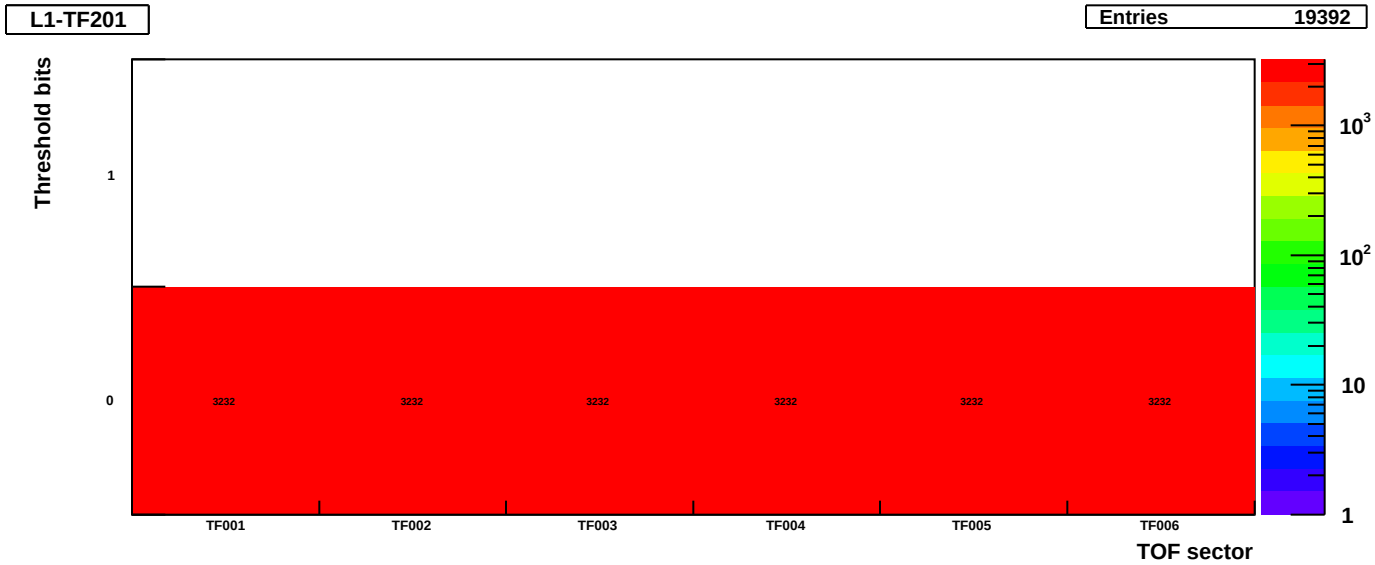

MIX-TF004
Entries 135744
TOF MULT
TOF tray

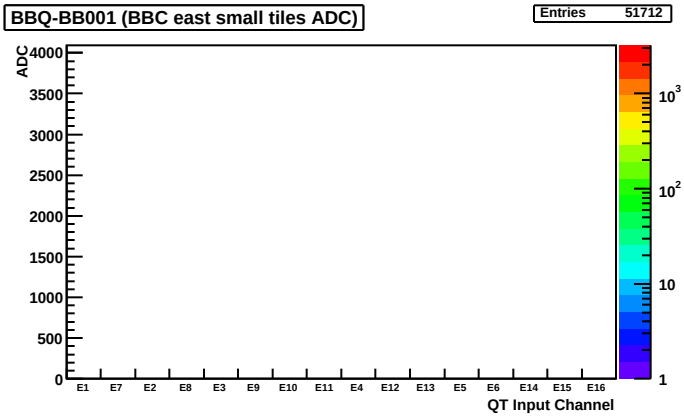

MIX-TF005
Entries 135744
TOF MULT
TOF tray

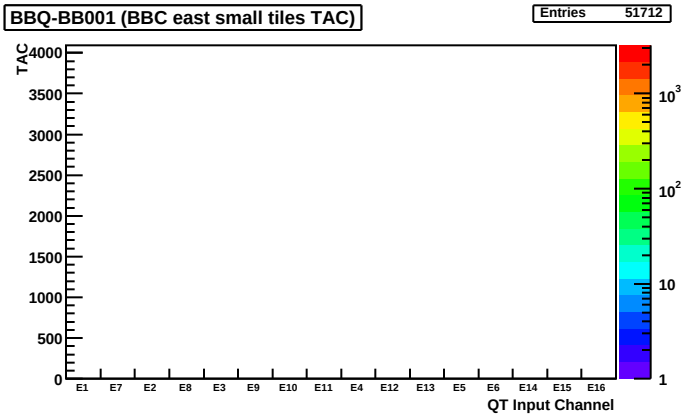

MIX-TF006
Entries 135744
TOF MULT
TOF tray

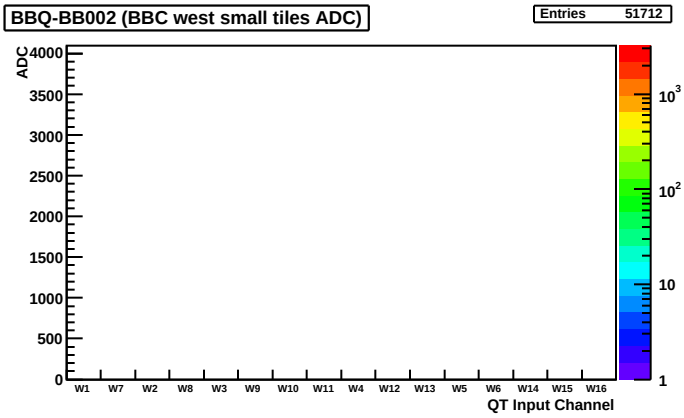

MIX-TF101
Entries 19392
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

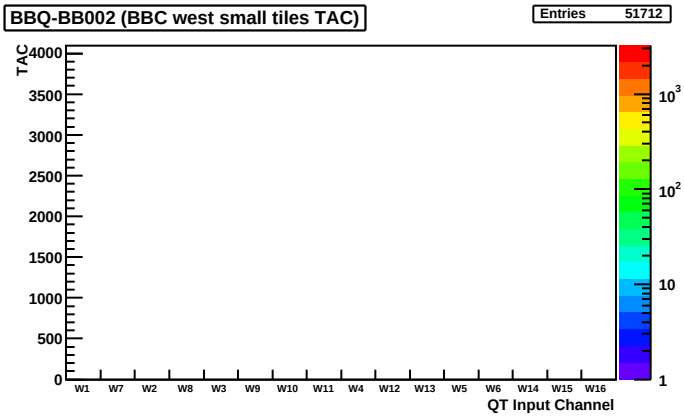

L1-TF201
Entries 3232
10^3
10^2
10
0
500
1000
1500
2000
2500
TOF total mult

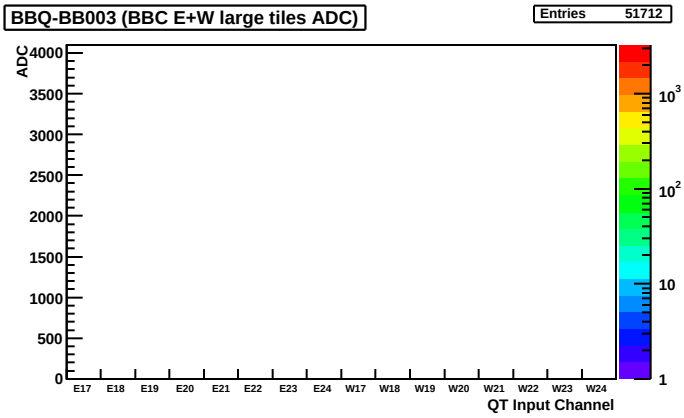

L1-TF201
Entries 19392
Threshold bits
1
0
3232
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2
10
1

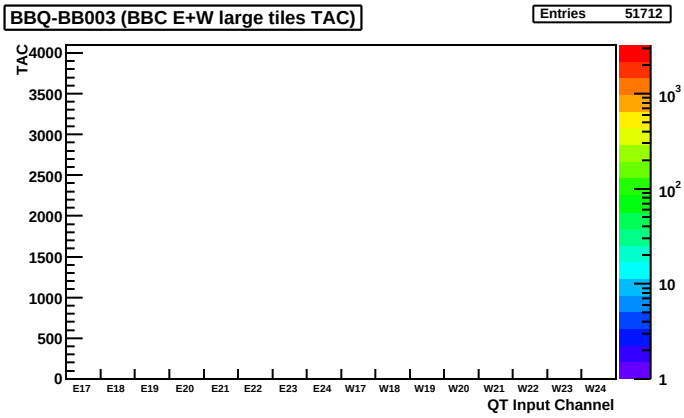

BBQ-BB001 (BBC east small tiles ADC)
Entries 51712
ADC
QT Input Channel

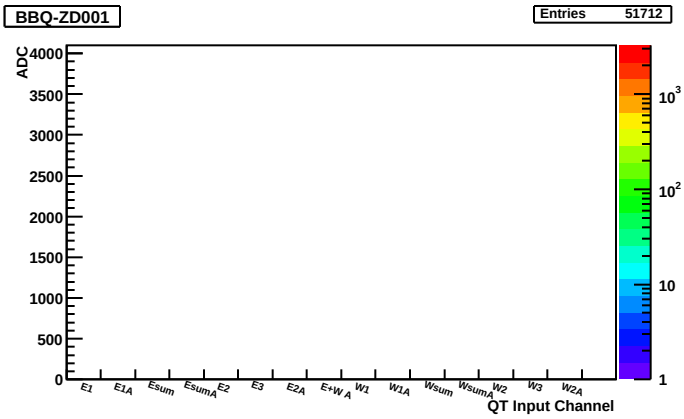

BBQ-BB001 (BBC east small tiles TAC)
Entries 51712
TAC
QT Input Channel

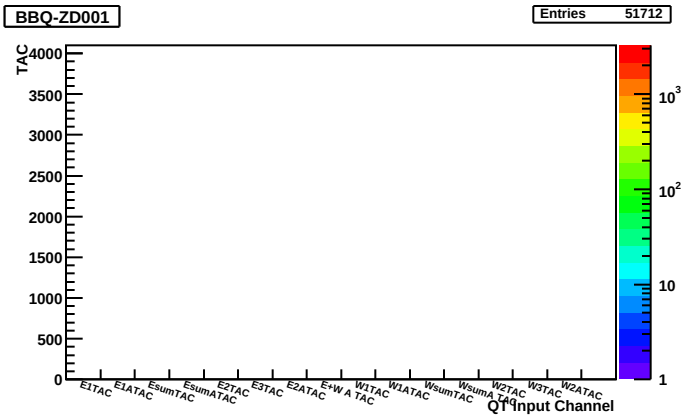

BBQ-BB002 (BBC west small tiles ADC)
Entries 51712
ADC
QT Input Channel

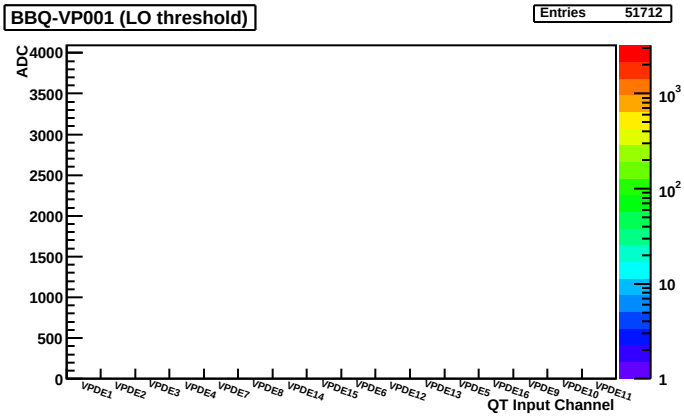

BBQ-BB002 (BBC west small tiles TAC)
Entries 51712
TAC
QT Input Channel

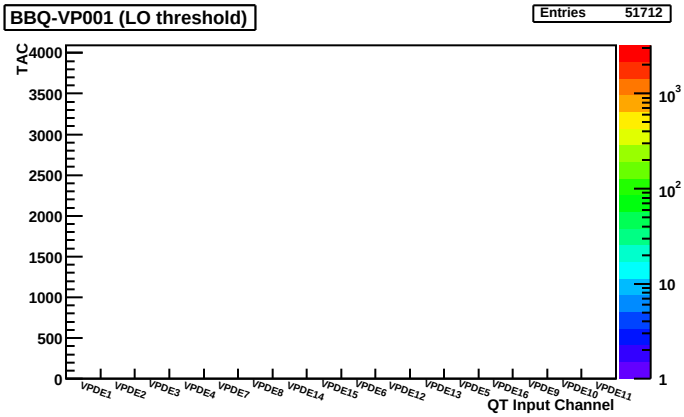

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 51712
ADC
QT Input Channel

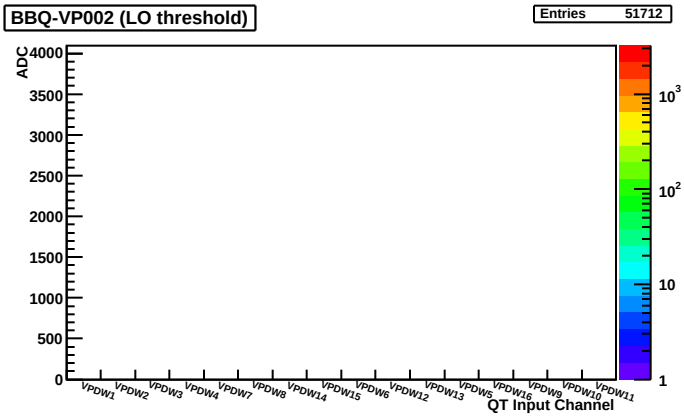

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 51712
TAC
QT Input Channel

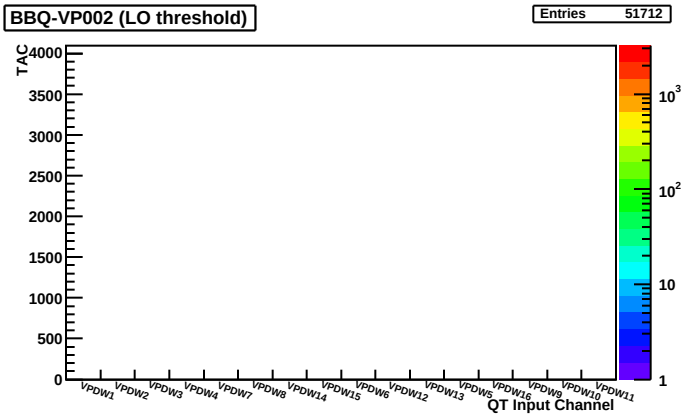

BBQ-ZD001
Entries 51712
ADC
QT Input Channel

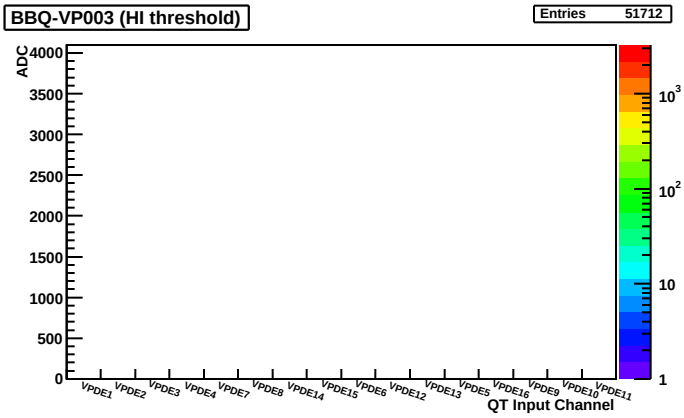

BBQ-ZD001
Entries 51712
TAC
QT Input Channel

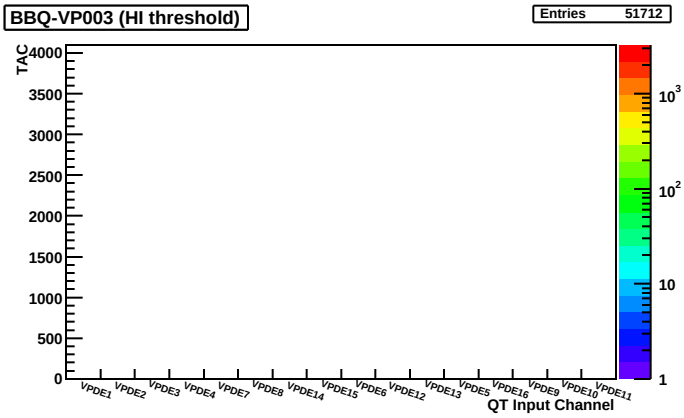

BBQ-VP001 (LO threshold)
Entries 51712
ADC
QT Input Channel

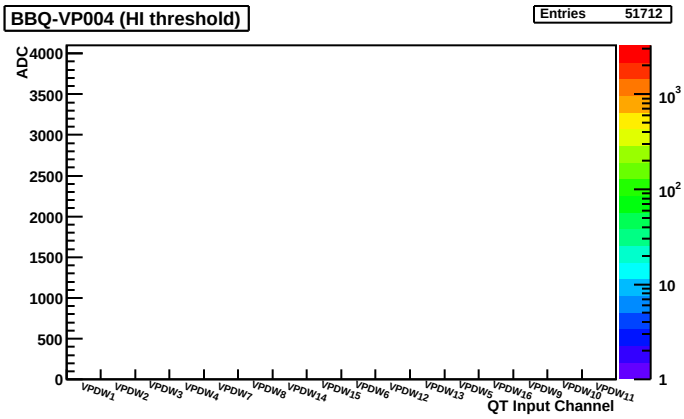

BBQ-VP001 (LO threshold)
Entries 51712
TAC
QT Input Channel

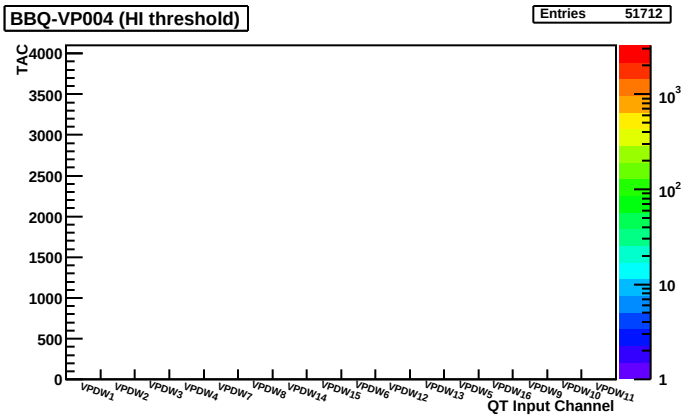

BBQ-VP002 (LO threshold)
Entries 51712
ADC
QT Input Channel

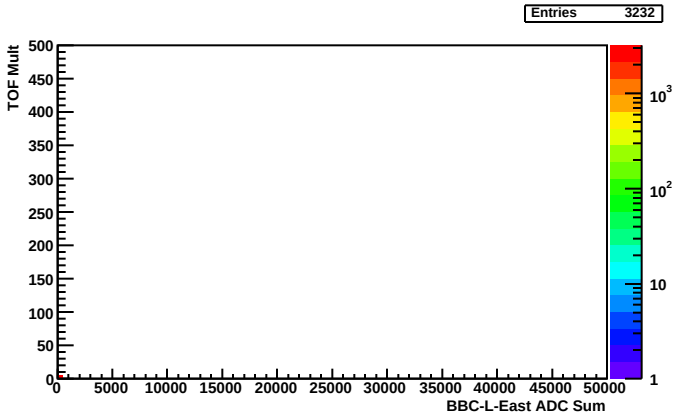

BBQ-VP002 (LO threshold)
Entries 51712
TAC
QT Input Channel

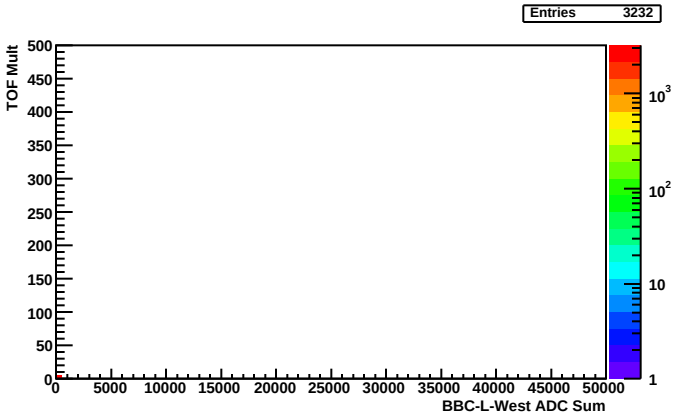

BBQ-VP003 (HI threshold)
Entries 51712
ADC
QT Input Channel

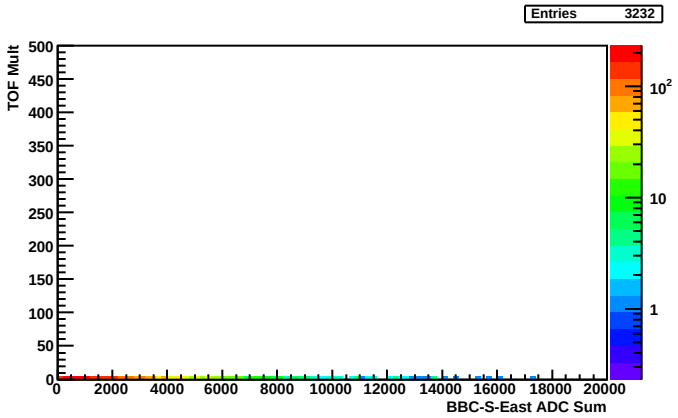

BBQ-VP003 (HI threshold)
Entries 51712
TAC
QT Input Channel

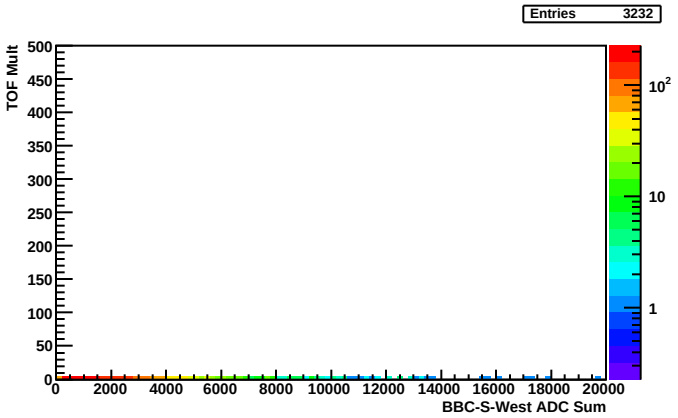

BBQ-VP004 (HI threshold)
Entries 51712
ADC
QT Input Channel

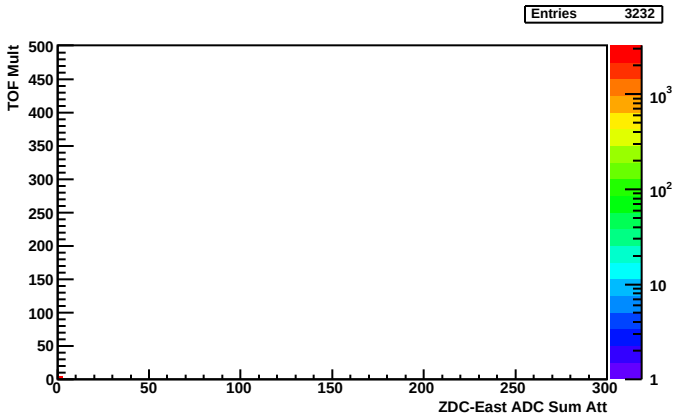

BBQ-VP004 (HI threshold)
Entries 51712
TAC
QT Input Channel

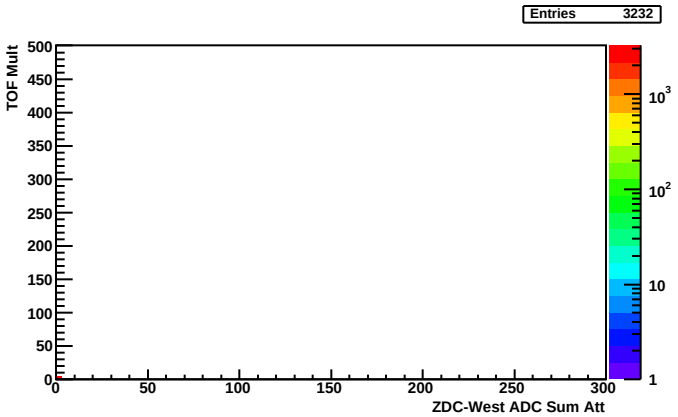

Entries 3232
TOF Mult
BBC-L-East ADC Sum

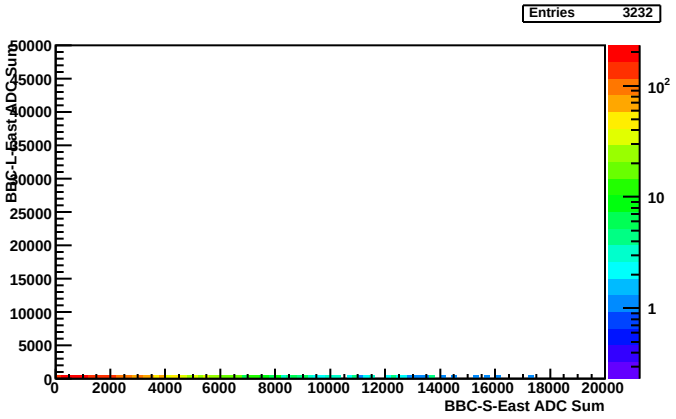

Entries 3232
TOF Mult
BBC-L-West ADC Sum

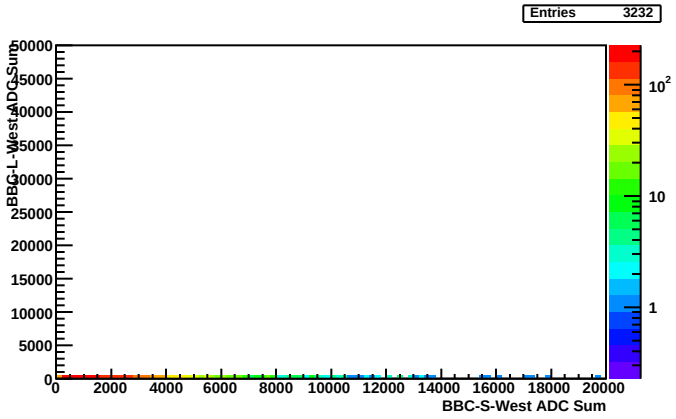

Entries 3232
TOF Mult
BBC-S-East ADC Sum

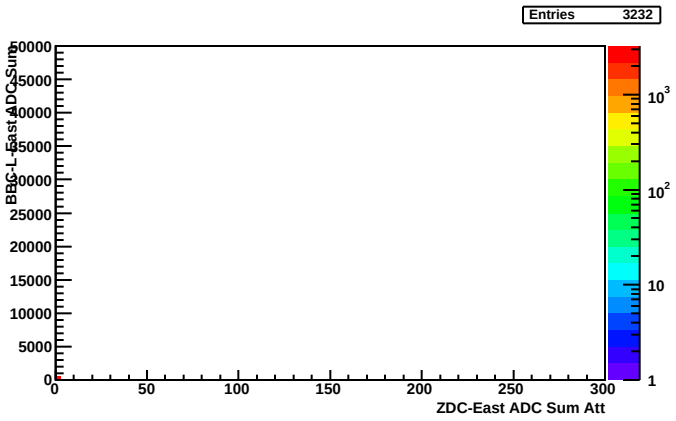

Entries 3232
TOF Mult
BBC-S-West ADC Sum

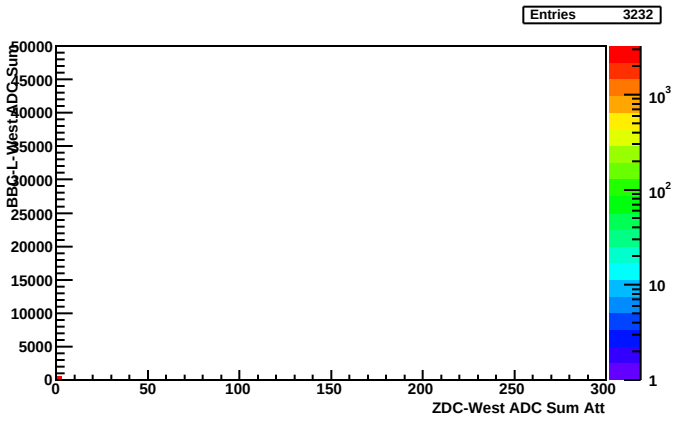

Entries 3232
TOF Mult
ZDC-East ADC Sum Att

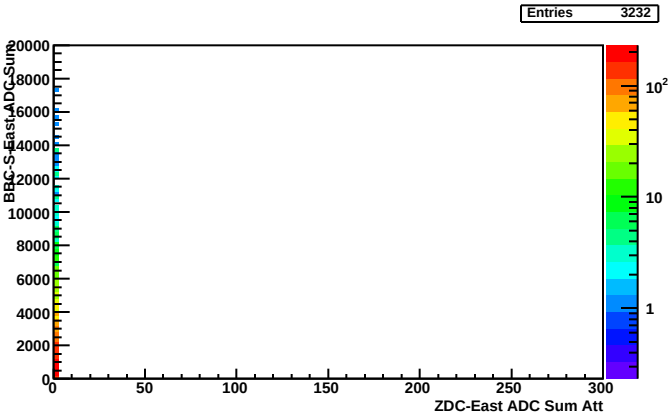

Entries 3232
TOF Mult
ZDC-West ADC Sum Att

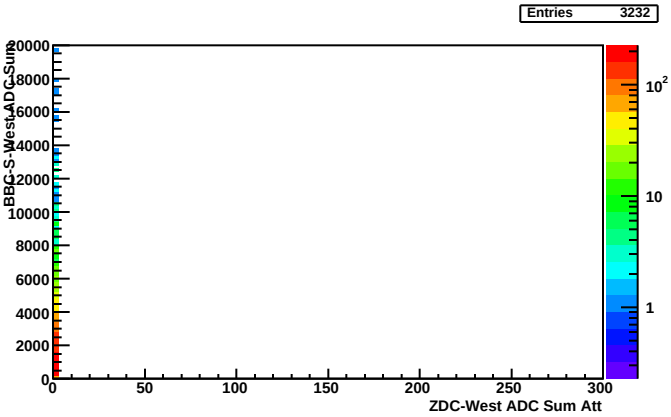

Entries 3232
BBC-L-East ADC Sum
BBC-S-East ADC Sum

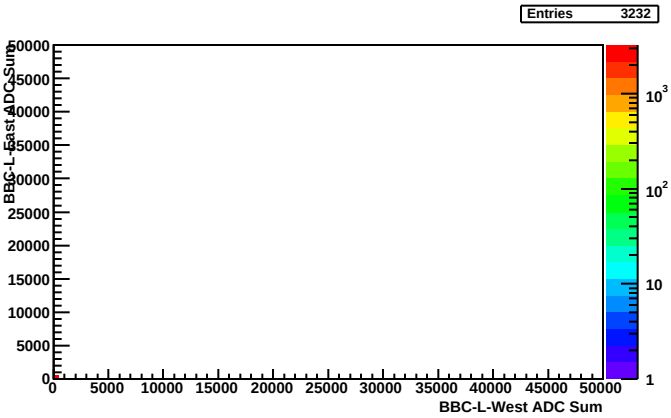

Entries 3232
BBC-L-West ADC Sum
BBC-S-West ADC Sum

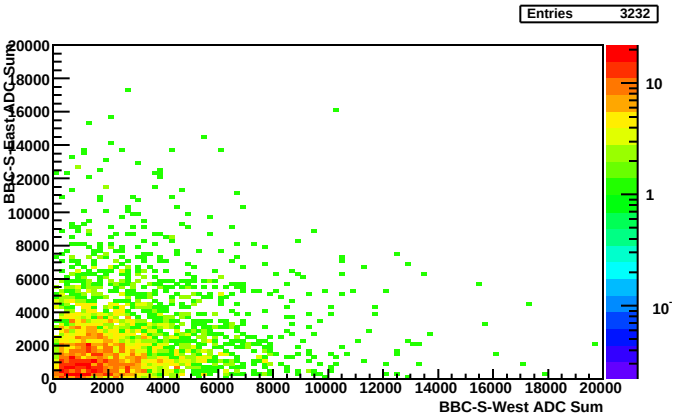

Entries 3232
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

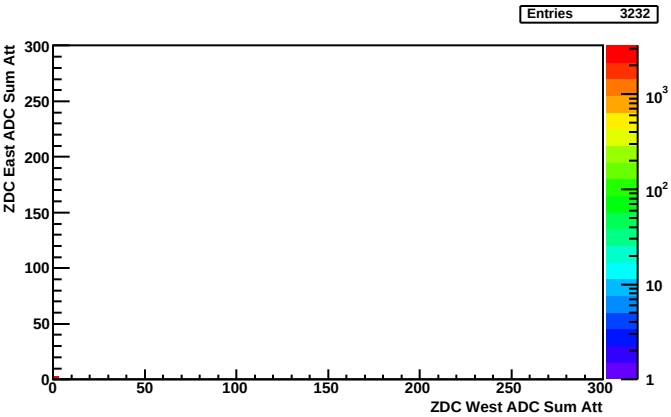

Entries 3232
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

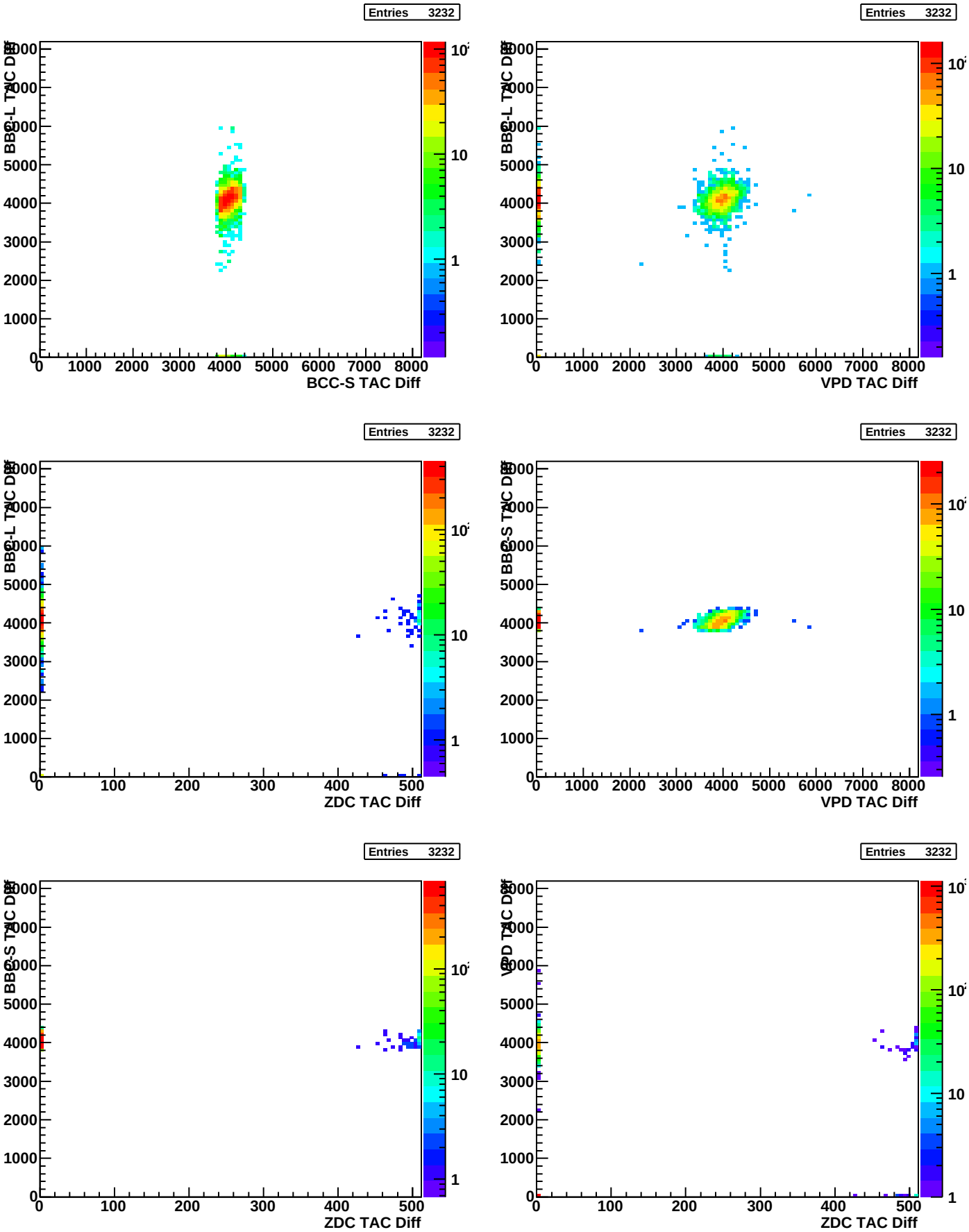

Entries 3232
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

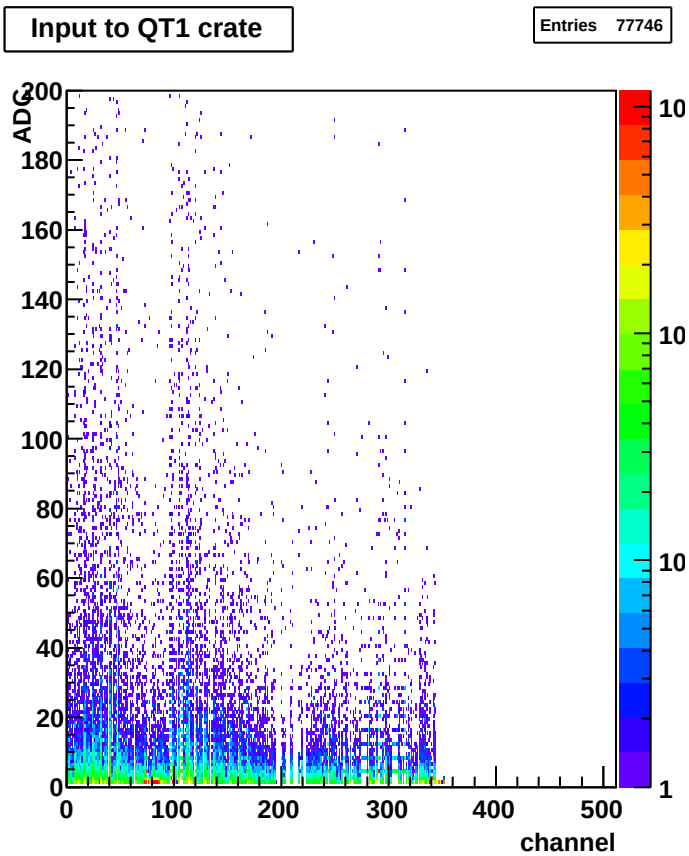

Entries 3232
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

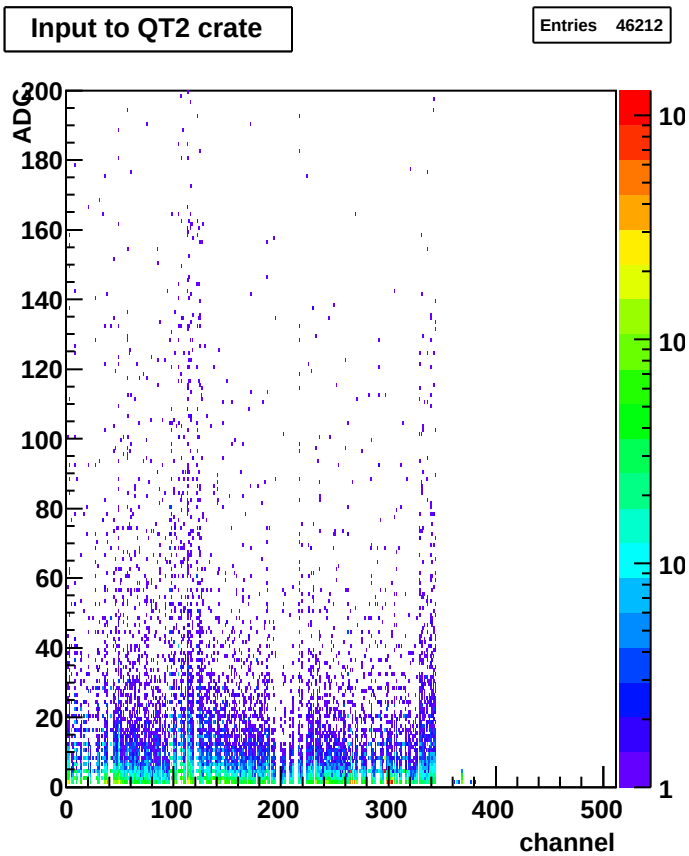

Entries 3232
BBC-L-East ADC Sum
BBC-L-West ADC Sum

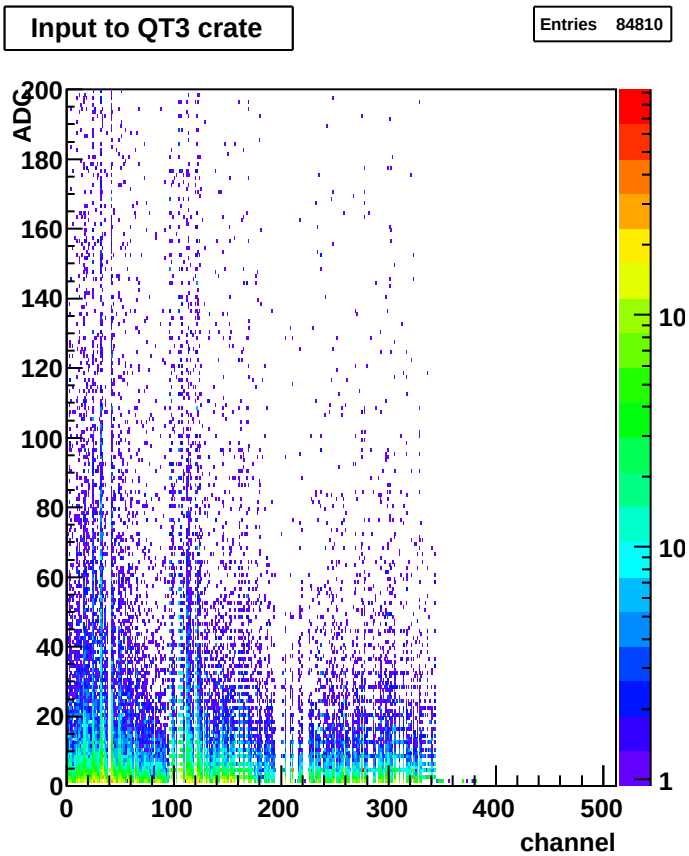

Entries 3232
BBC-S-East ADC Sum
BBC-S-West ADC Sum

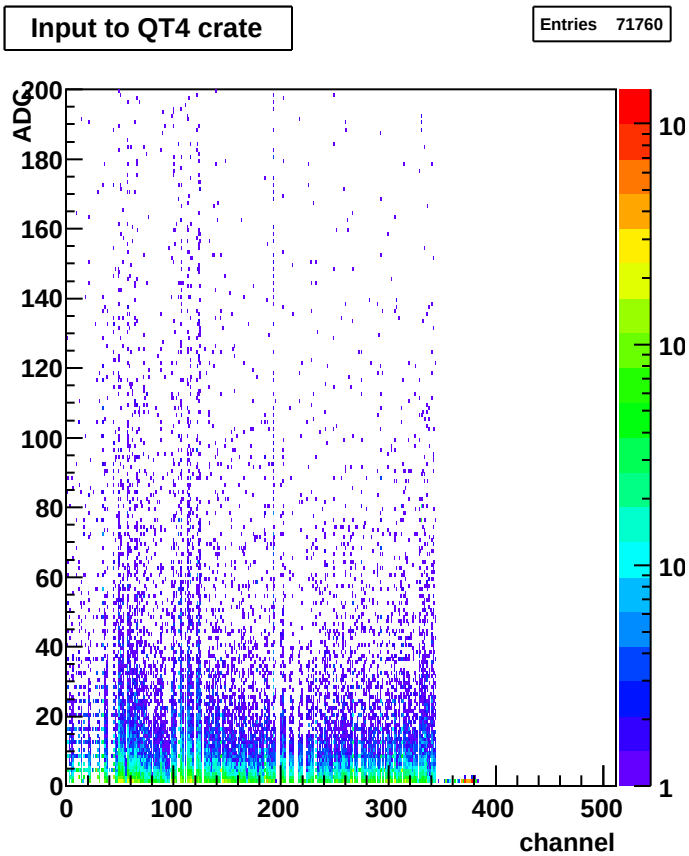

Entries 3232
ZDC East ADC Sum Att
ZDC West ADC Sum Att

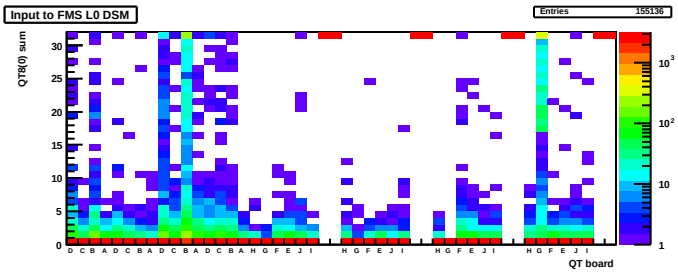

Entries 3232
BBC-L TAC Diff
BCC-S TAC Diff
Entries 3232
BBC-L TAC Diff
VPD TAC Diff
Entries 3232
BBC-L TAC Diff
ZDC TAC Diff
Entries 3232
BBC-S TAC Diff
VPD TAC Diff
Entries 3232
BBC-S TAC Diff
ZDC TAC Diff
Entries 3232
VPD TAC Diff
ZDC TAC Diff

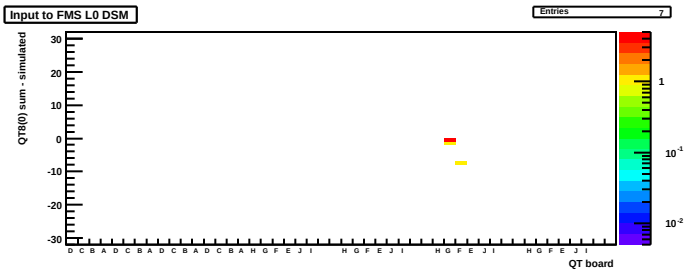

Input to QT1 crate
Entries 77746
ADC
channel

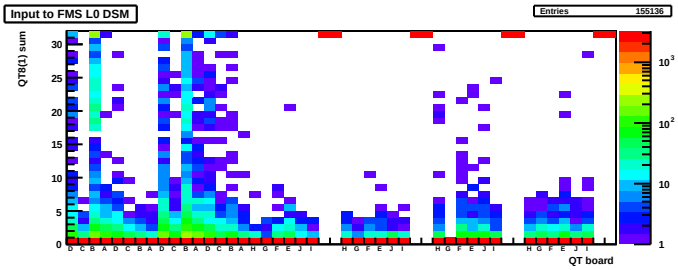

Input to QT2 crate
Entries 46212
ADC
channel

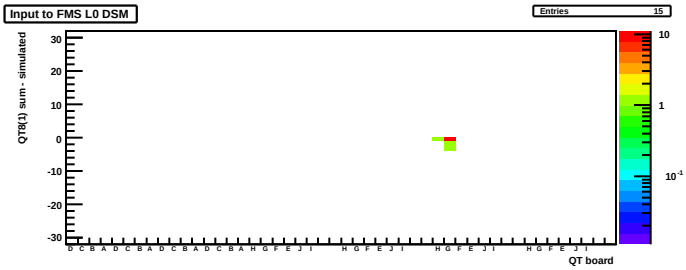

Input to QT3 crate
Entries 84810
ADC
channel

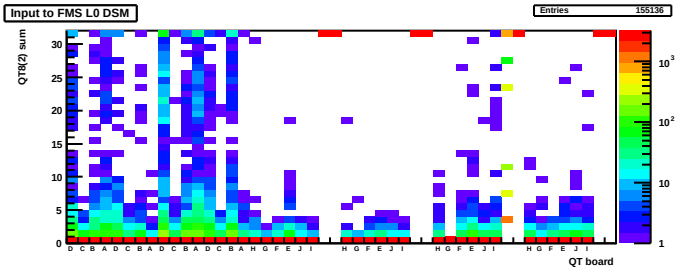

Input to QT4 crate
Entries 71760
ADC
channel

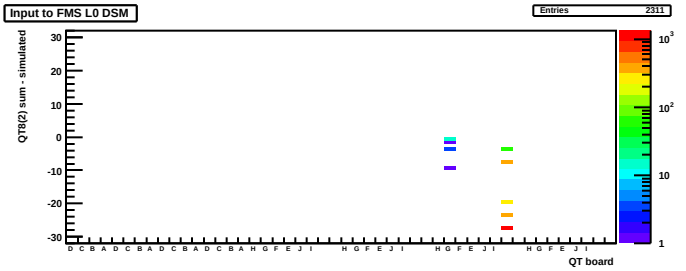

Input to FMS L0 DSM
Entries 155136
QT8(0) sum
QT board

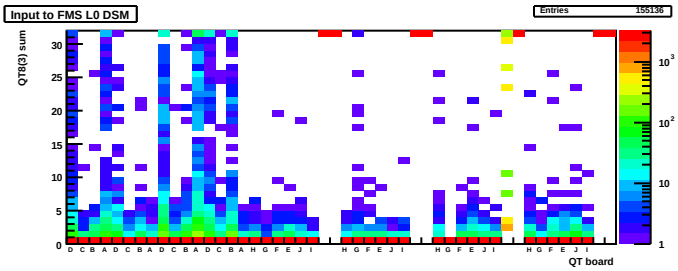

Input to FMS L0 DSM
Entries 7
QT8(0) sum - simulated
QT board

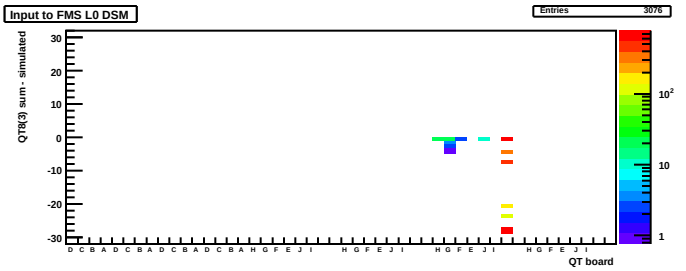

Input to FMS L0 DSM
Entries 155136
QT8(1) sum
QT board

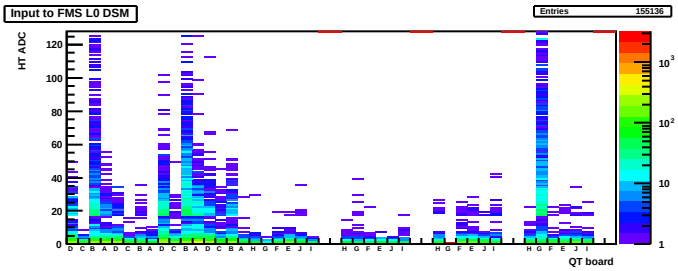

Input to FMS L0 DSM
Entries 15
QT8(1) sum - simulated
QT board

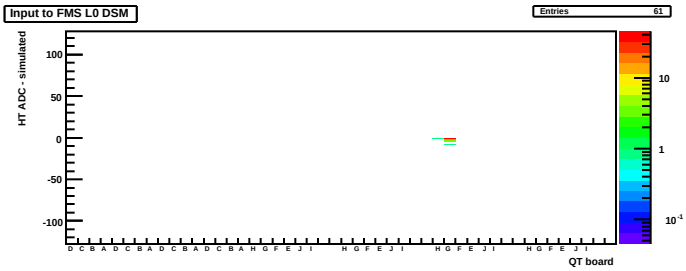

Input to FMS L0 DSM
Entries 155136
QT8(2) sum
QT board

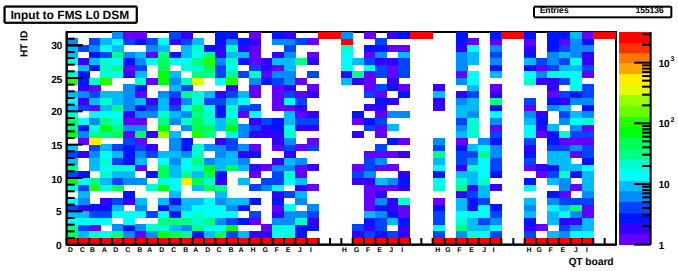

Input to FMS L0 DSM
Entries 2311
QT8(2) sum - simulated
QT board

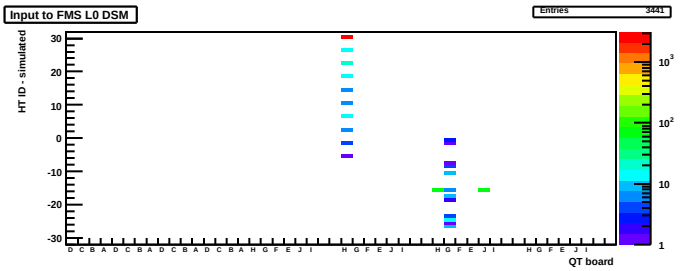

Input to FMS L0 DSM
Entries 155136
QT8(3) sum
QT board

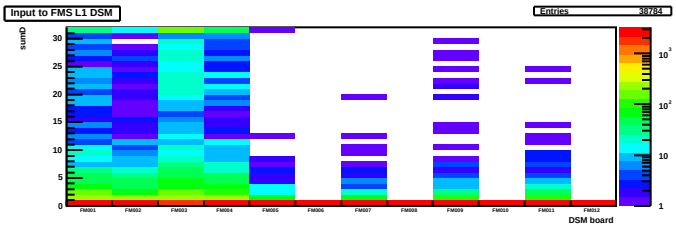

Input to FMS L0 DSM
Entries 3076
QT8(3) sum - simulated
QT board

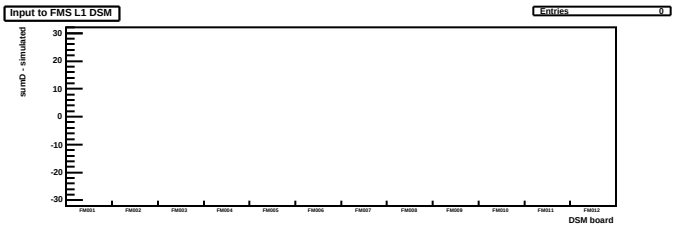

Input to FMS L0 DSM
Entries 155136
HT ADC
QT board

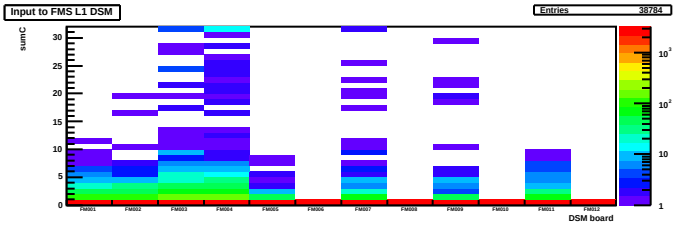

Input to FMS L0 DSM
Entries 61
HT ADC - simulated
QT board

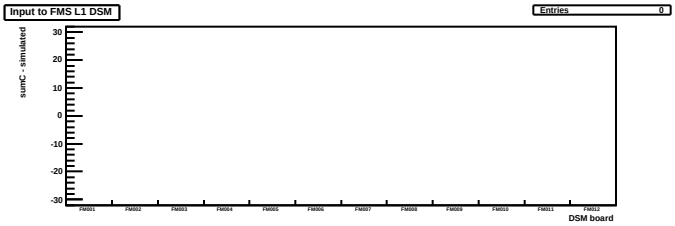

Input to FMS L0 DSM
Entries 155136
HT ID
QT board

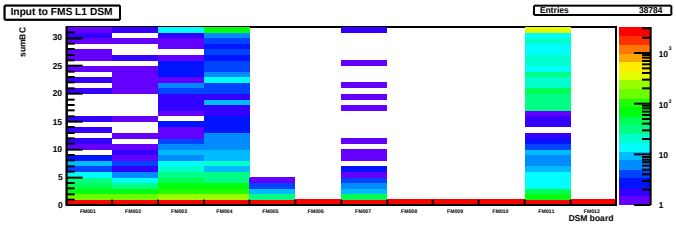

Input to FMS L0 DSM
Entries 3441
HT ID - simulated
QT board

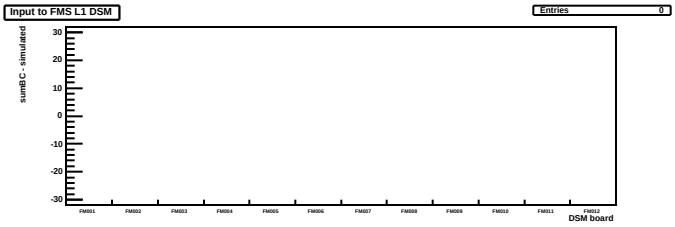

Input to FMS L1 DSM
Entries 38784
sumD
DSM board

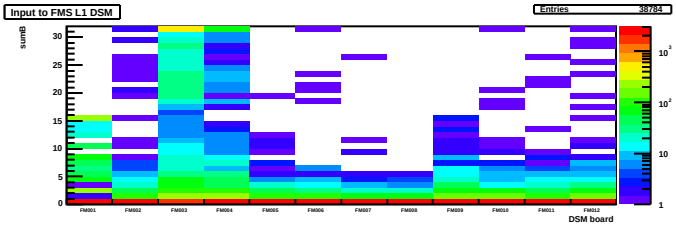

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

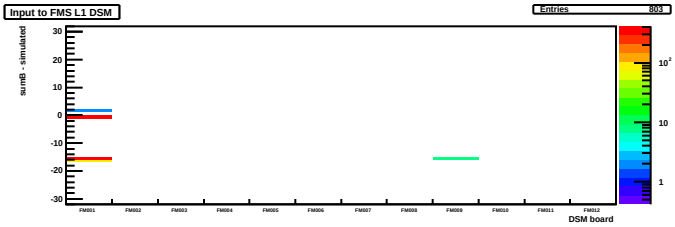

Input to FMS L1 DSM
Entries 38784
sumC
DSM board

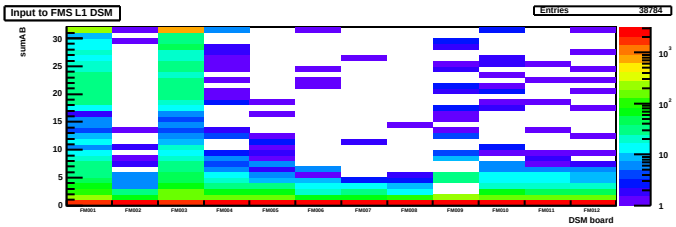

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

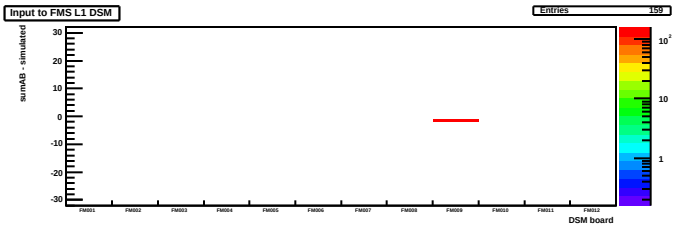

Input to FMS L1 DSM
Entries 38784
sumBC
DSM board

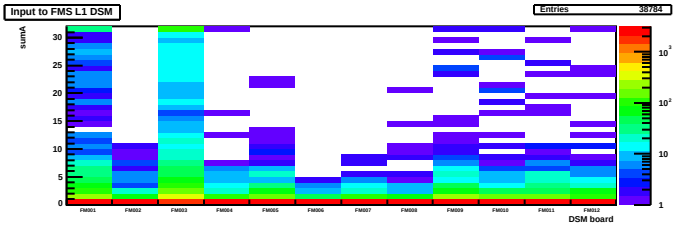

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

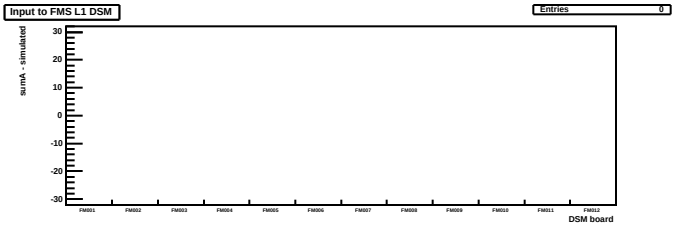

Input to FMS L1 DSM
Entries 38784
sumB
DSM board

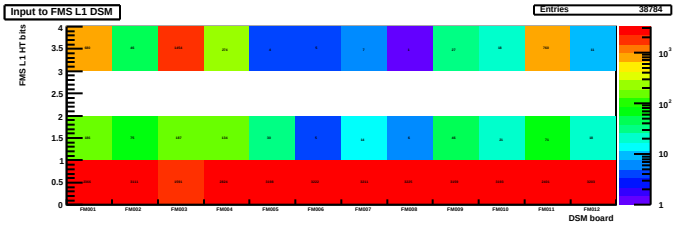

Input to FMS L1 DSM
Entries 803
sumB - simulated
DSM board

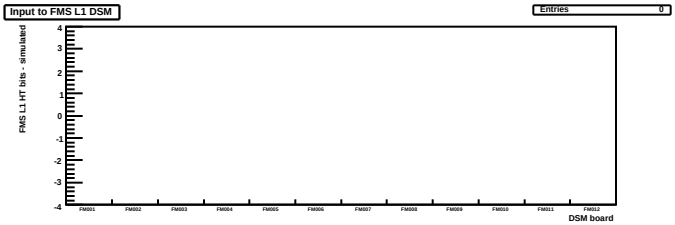

Input to FMS L1 DSM
Entries 38784
sumAB
DSM board

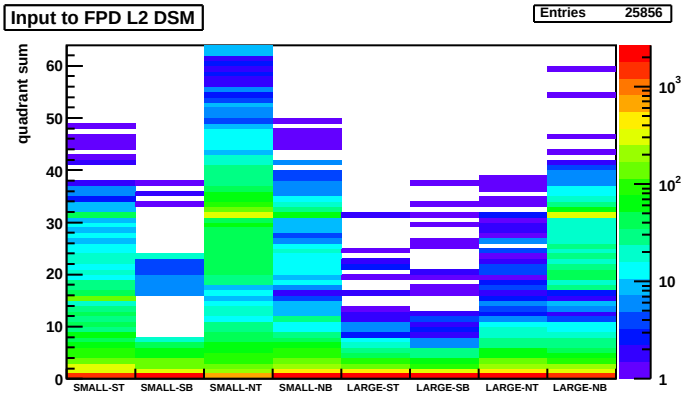

Input to FMS L1 DSM
Entries 159
sumAB - simulated
DSM board

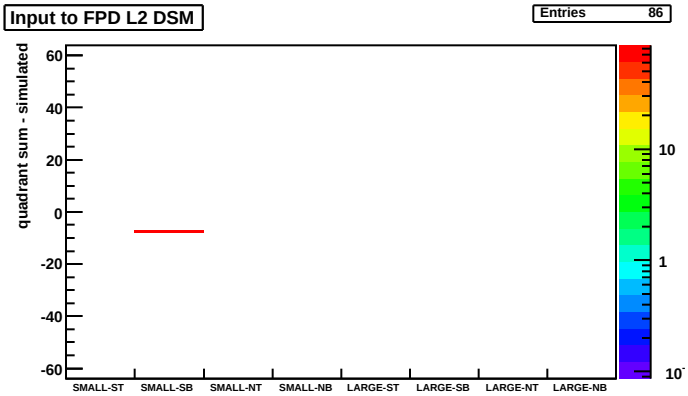

Input to FMS L1 DSM
Entries 38784
sumA
DSM board

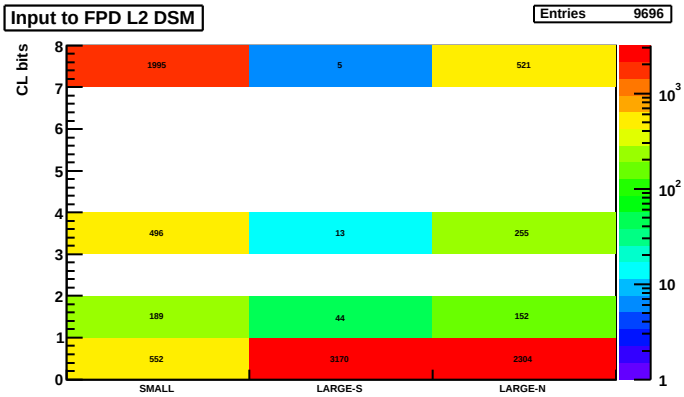

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

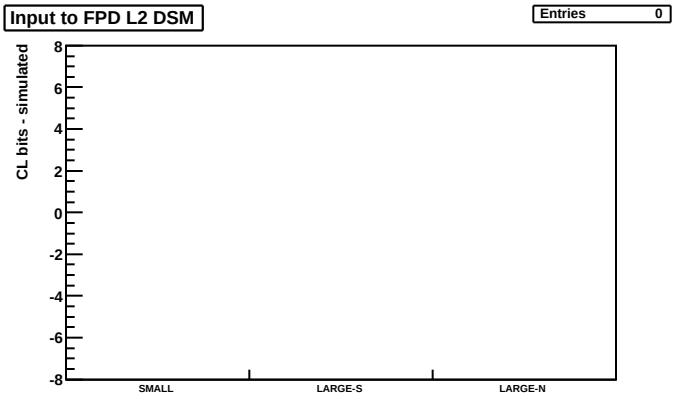

Input to FMS L1 DSM
Entries 38784
FMS L1 HT bits
DSM board

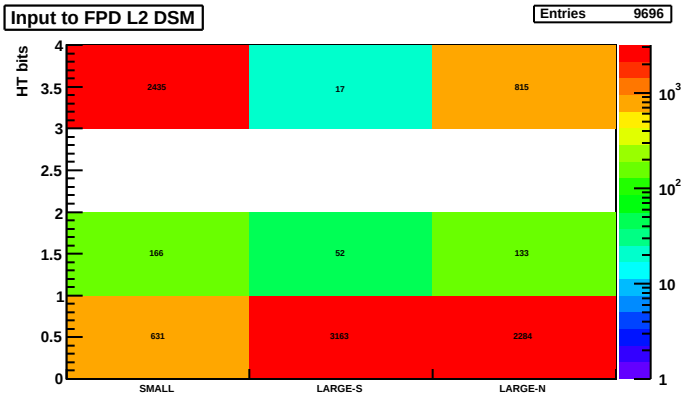

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

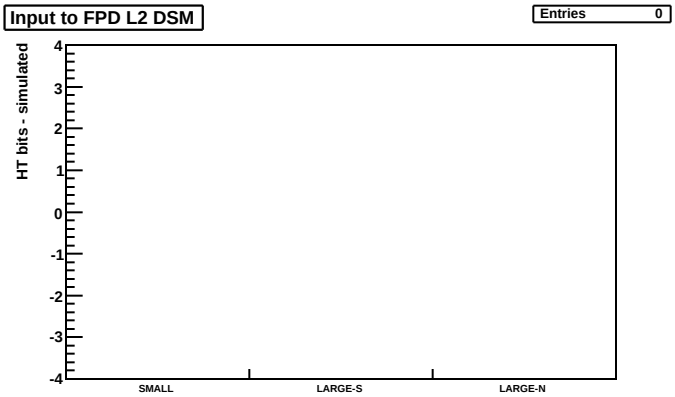

Input to FPD L2 DSM
Entries 25856
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

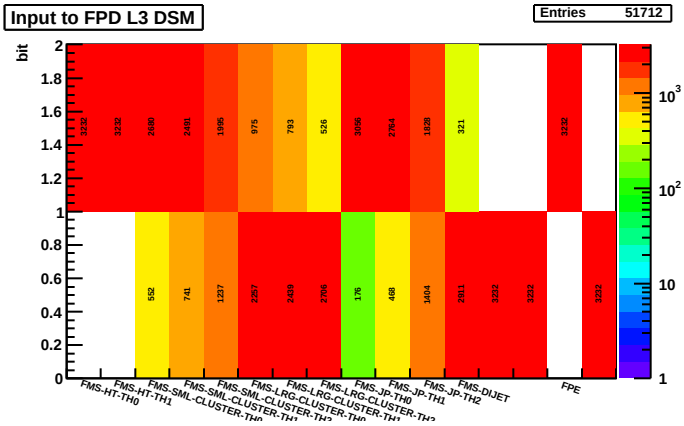

Input to FPD L2 DSM
Entries 86
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

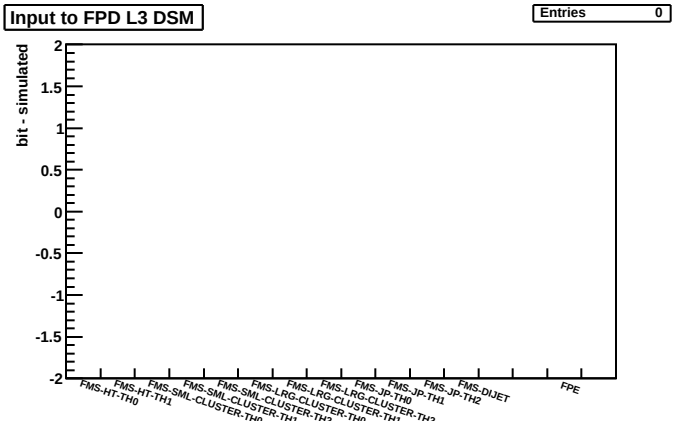

Input to FPD L2 DSM
Entries 9696
CL bits
1995
5
521
496
13
255
189
44
152
552
3170
2304
SMALL
LARGE-S
LARGE-N

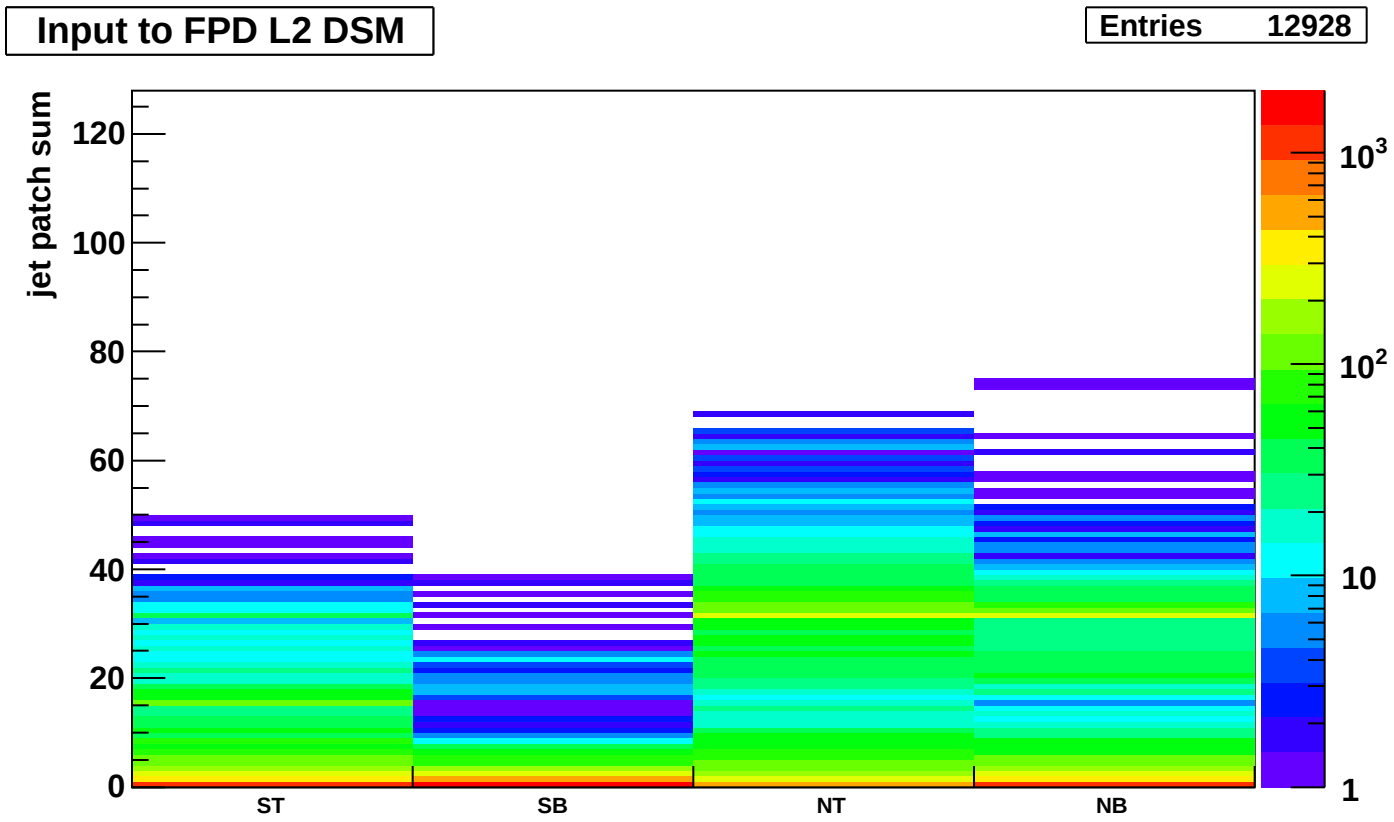

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

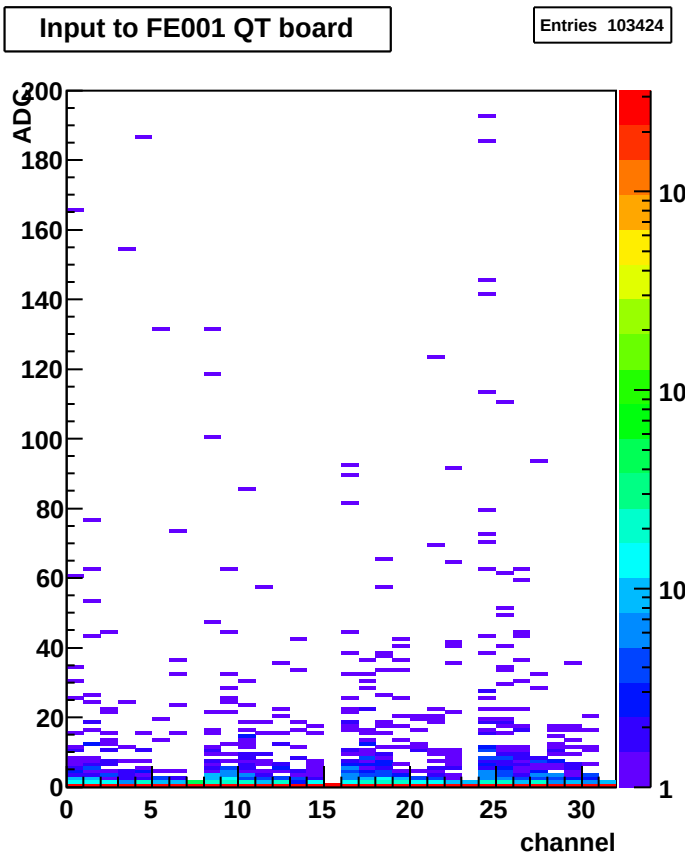

Input to FPD L2 DSM
Entries 9696
HT bits
2435
17
815
166
52
133
631
3163
2284
SMALL
LARGE-S
LARGE-N

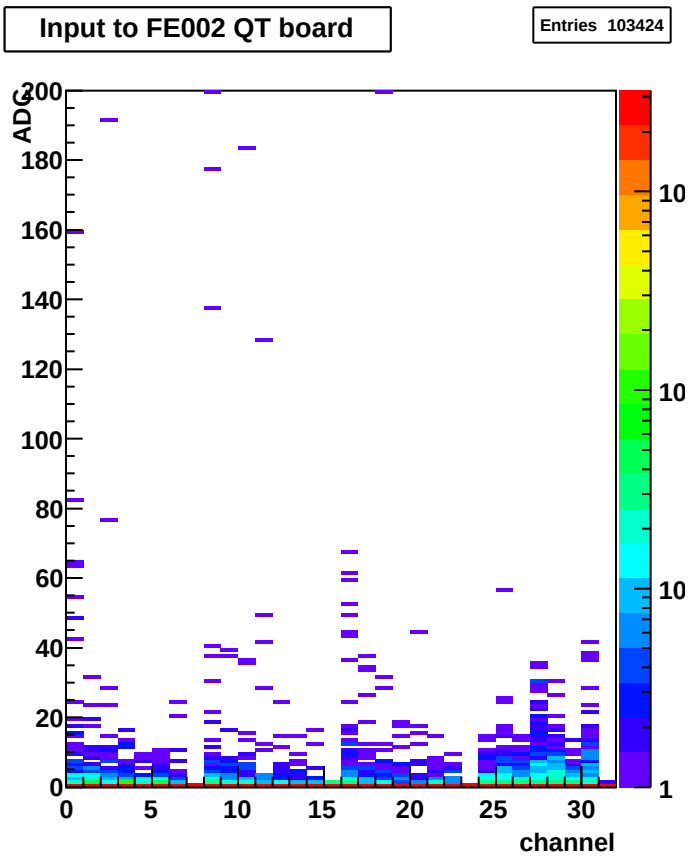

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

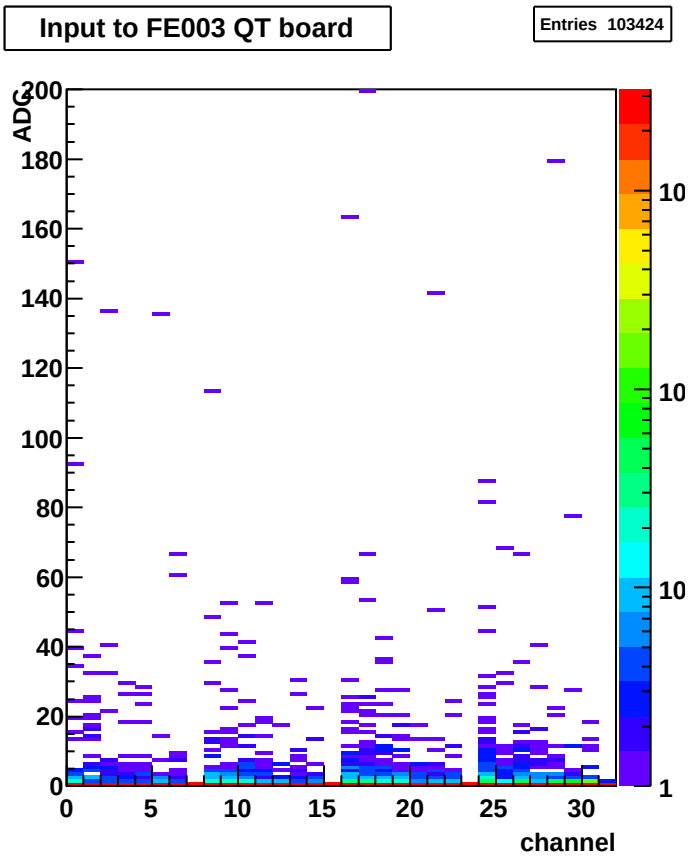

Input to FPD L3 DSM
Entries 51712
bit
3232
3232
2690
2491
1995
975
793
526
3056
2764
1828
321
3232
552
741
1237
2257
2439
2706
176
488
1404
2911
3232
3232
3232
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

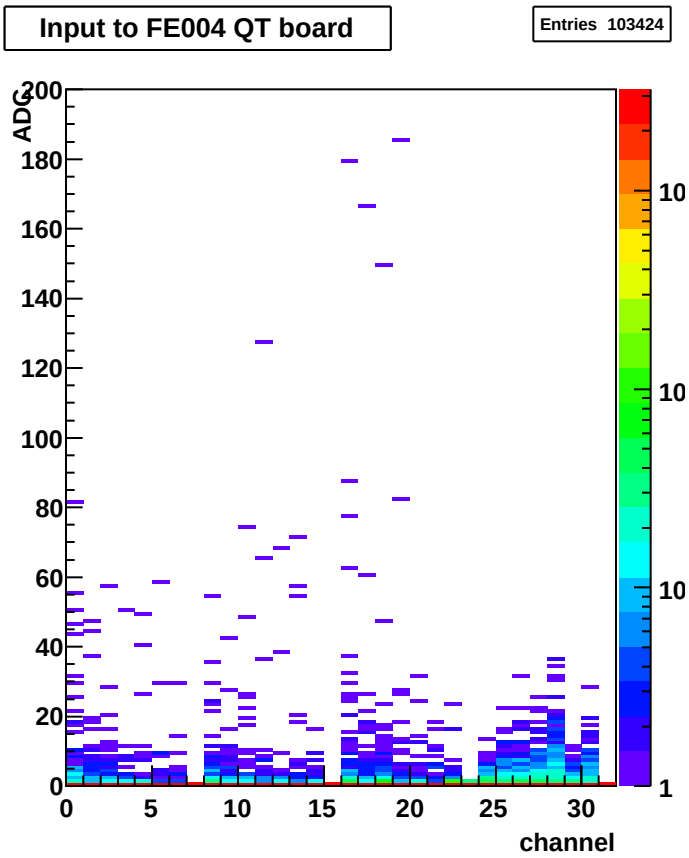

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

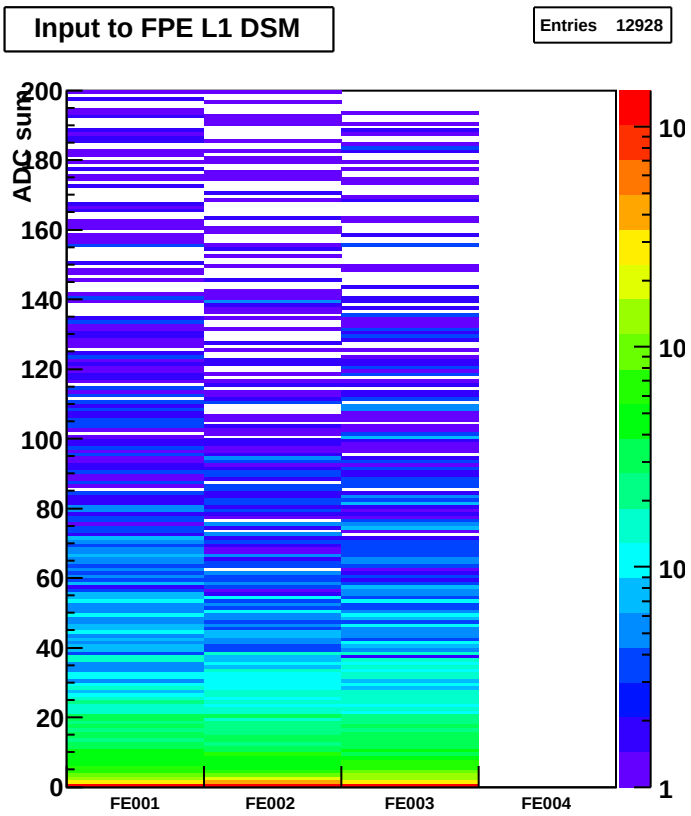

Input to FPD L2 DSM
Entries 12928
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3

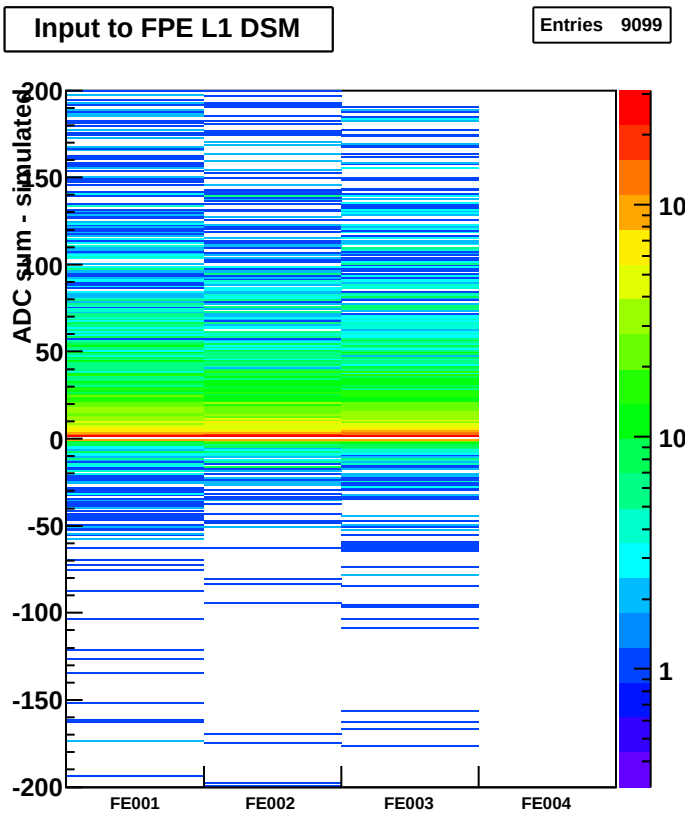

Input to FE001 QT board
Entries 103424
ADC
channel

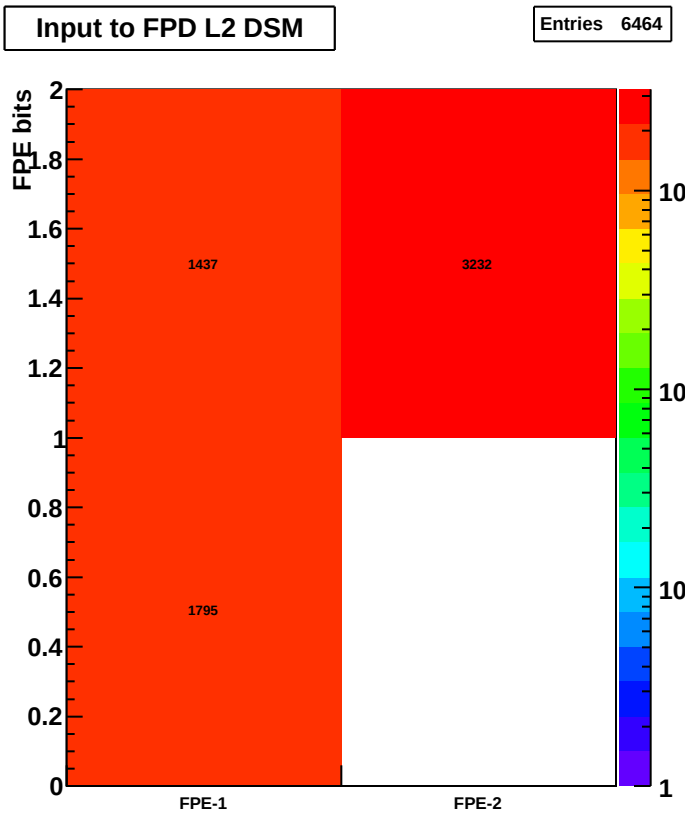

Input to FE002 QT board
Entries 103424
ADC
channel

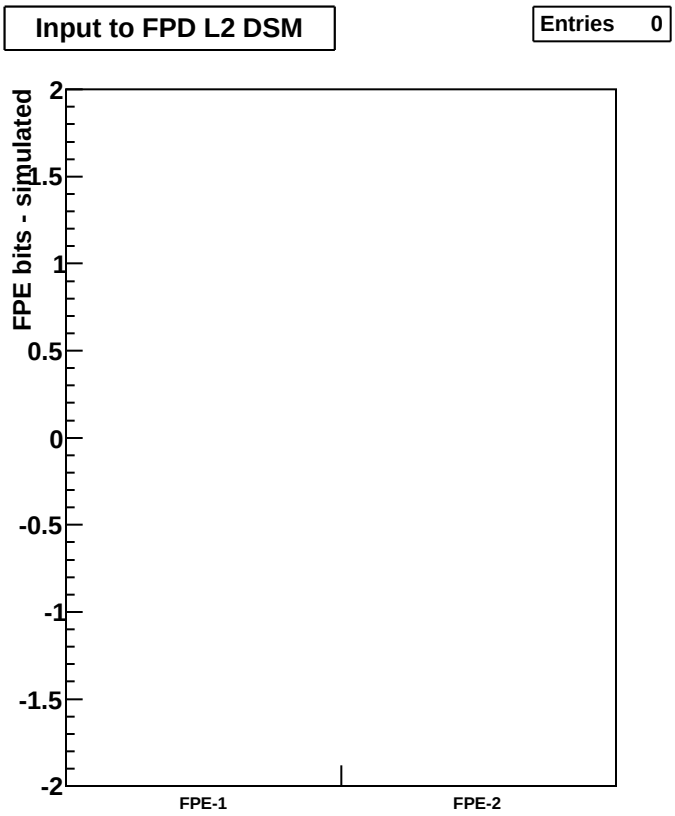

Input to FE003 QT board
Entries 103424
ADC
channel


Input to FE004 QT board
Entries 103424
ADC
channel


Input to FPE L1 DSM
Entries 12928
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 9099
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 6464
FPE bits
1437
3232
1795
FPE-1
FPE-2


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