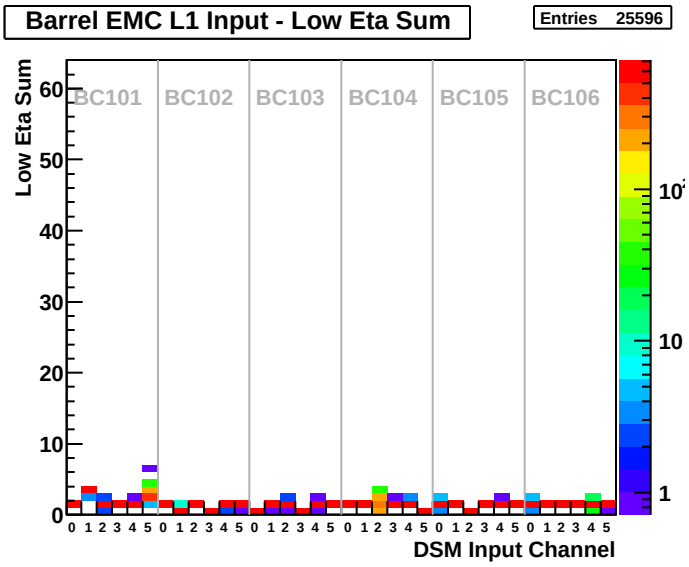
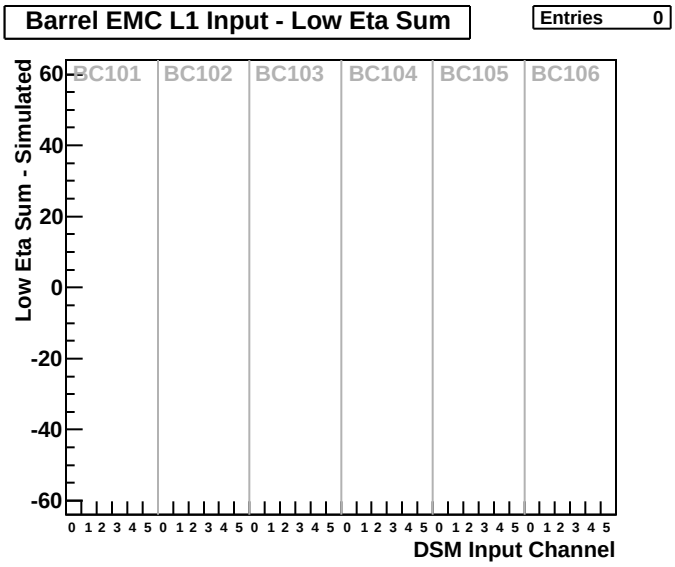
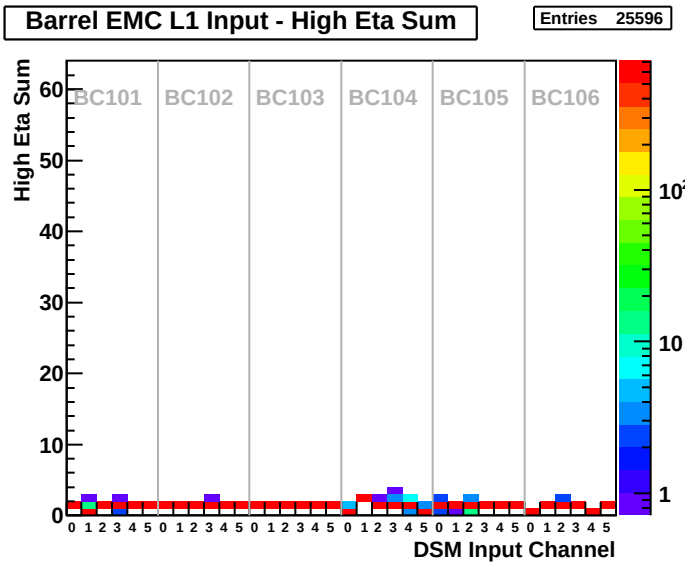
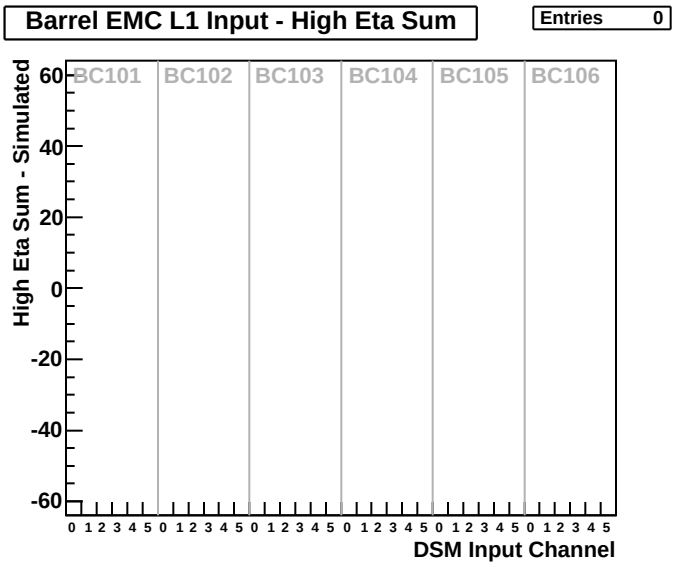
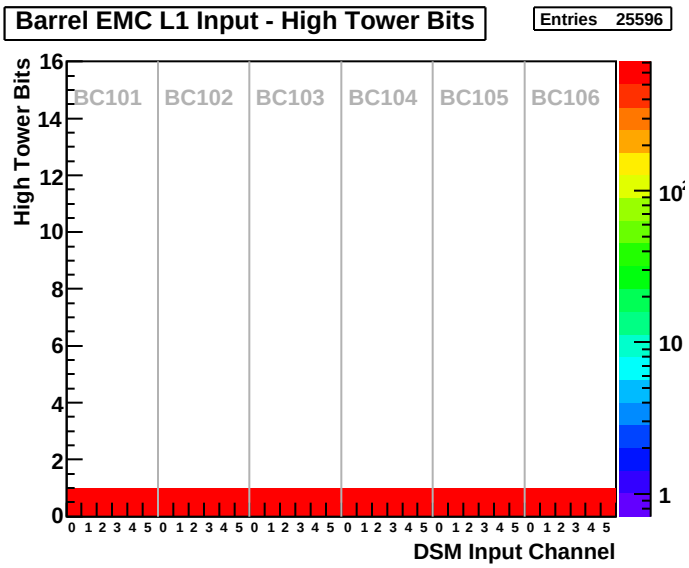
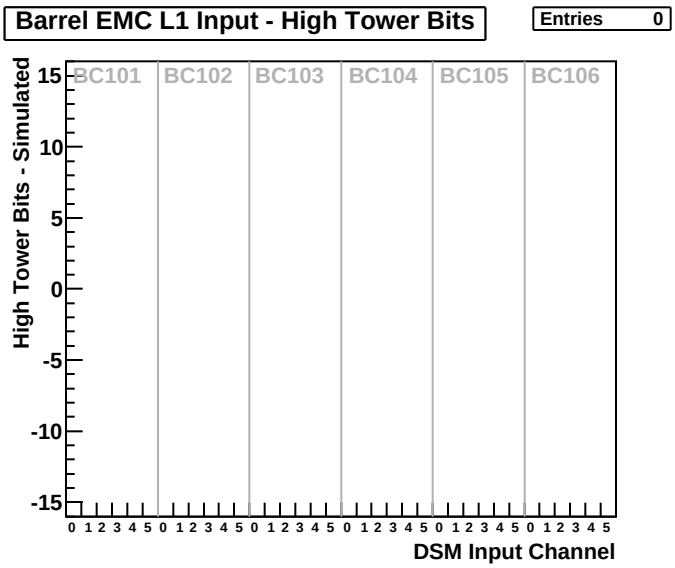

Barrel EMC L1 Input - Low Eta Sum
Entries 25596
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

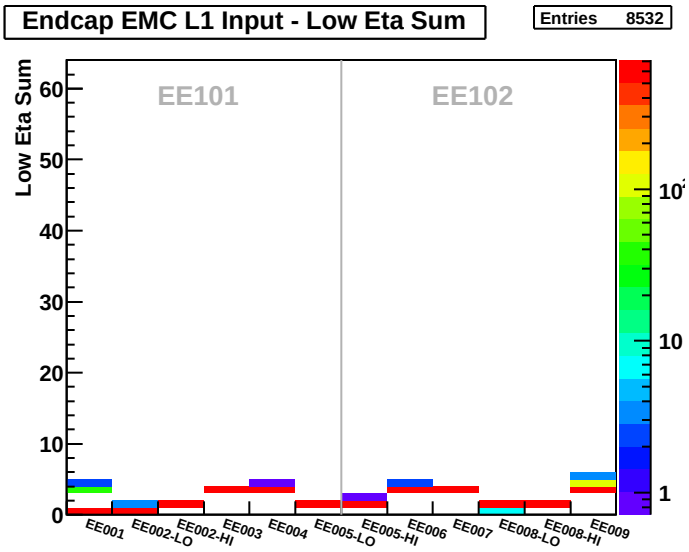

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

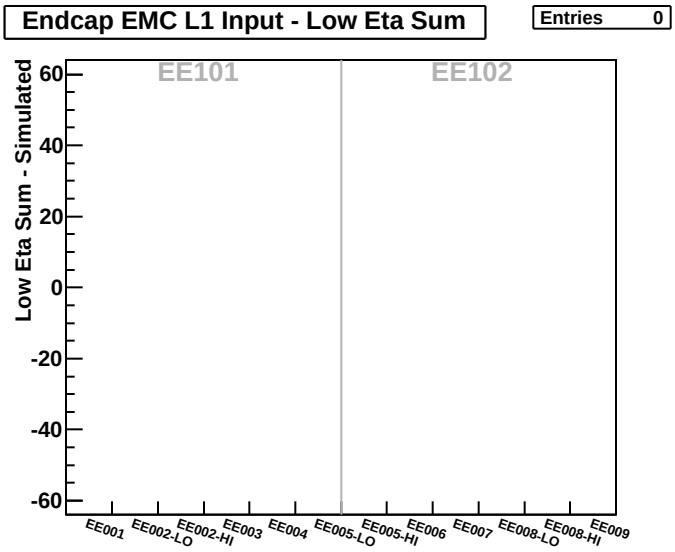

Barrel EMC L1 Input - High Eta Sum
Entries 25596
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

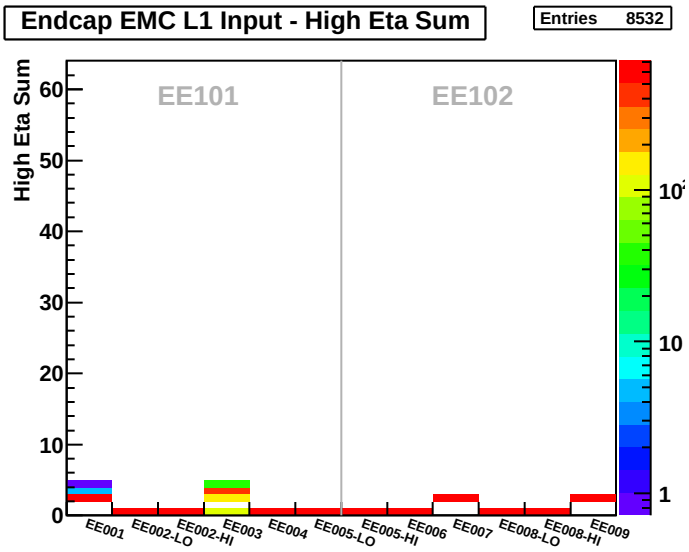

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

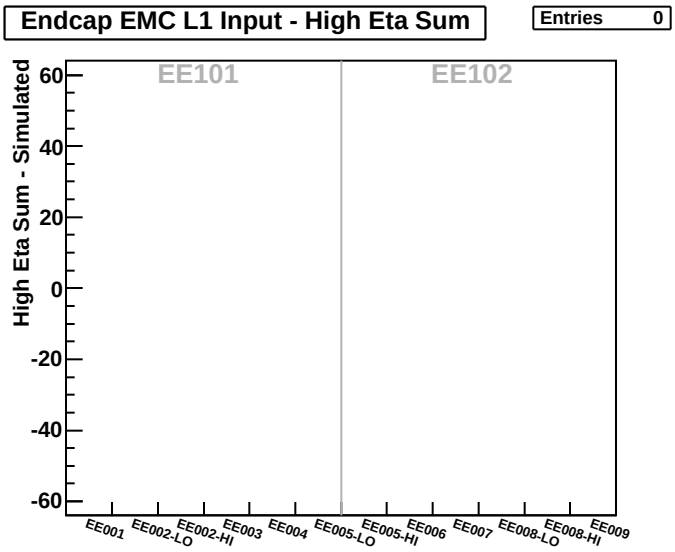

Barrel EMC L1 Input - High Tower Bits
Entries 25596
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

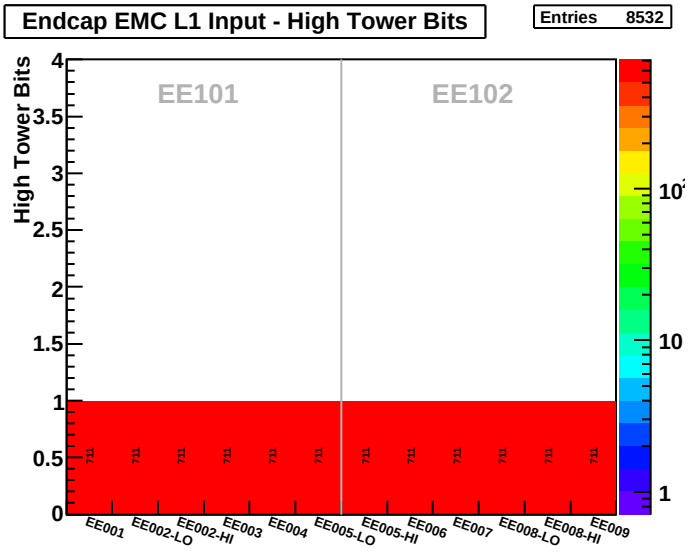

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

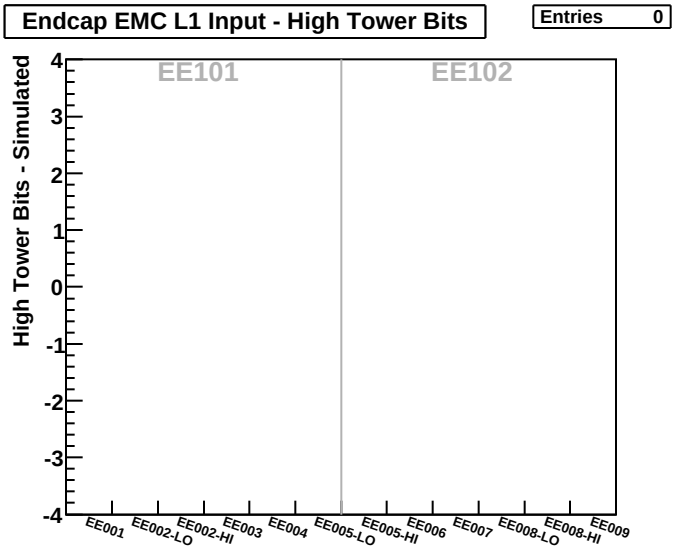

Endcap EMC L1 Input - Low Eta Sum
Entries 8532
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

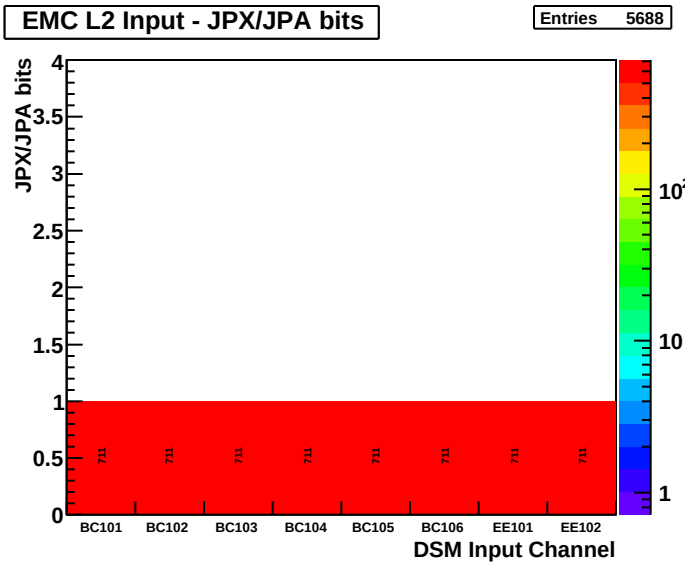

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

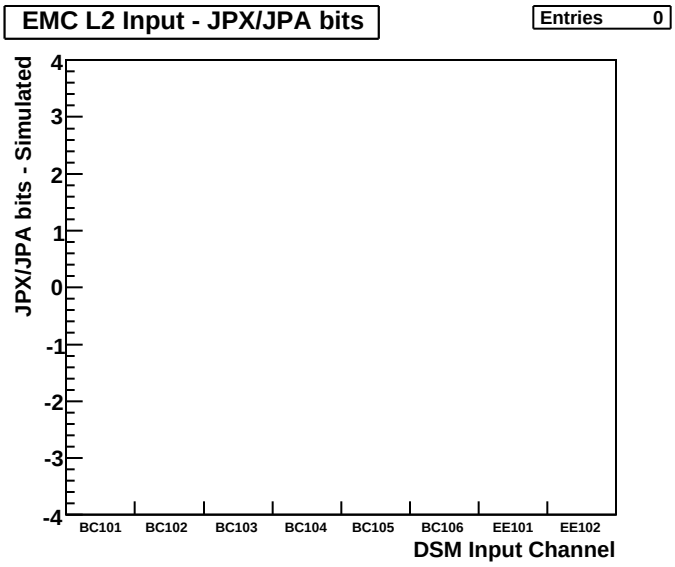

Endcap EMC L1 Input - High Eta Sum
Entries 8532
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

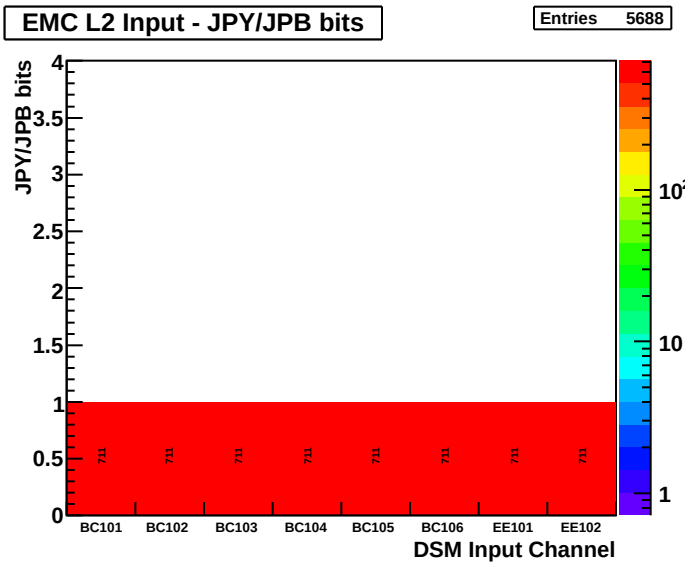

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

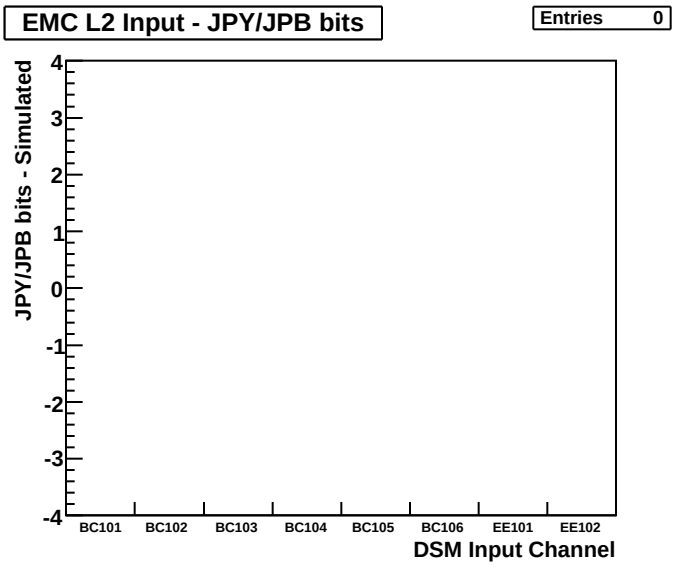

Endcap EMC L1 Input - High Tower Bits
Entries 8532
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

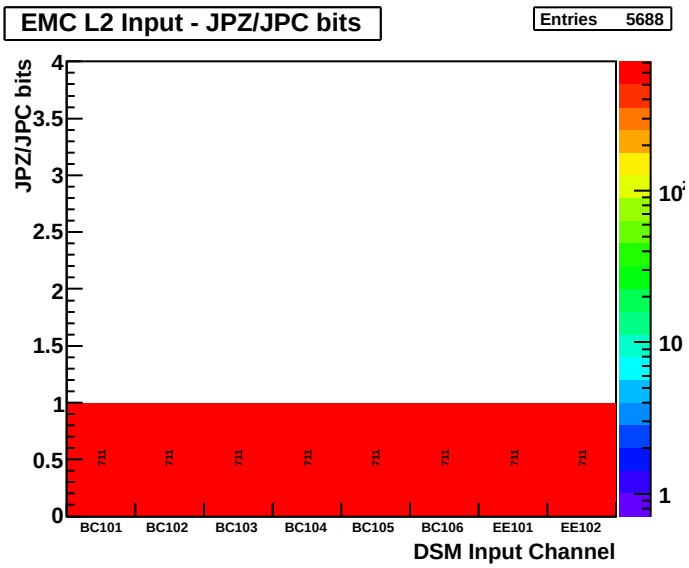

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

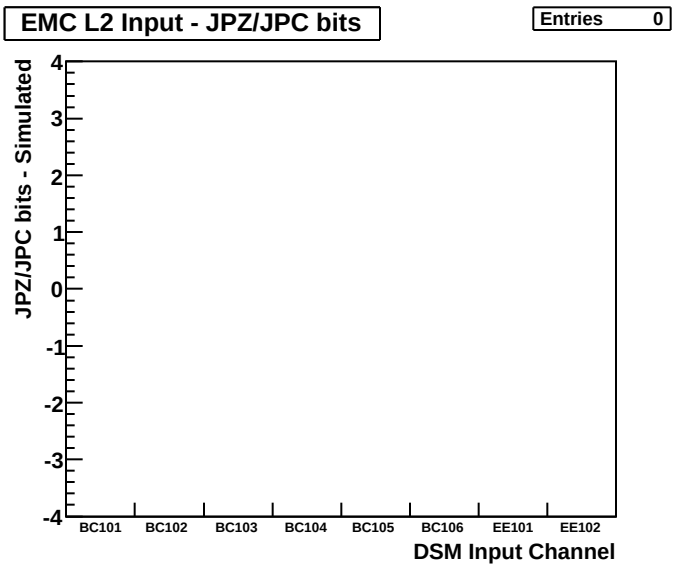

EMC L2 Input - JPX/JPA bits
Entries 5688
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

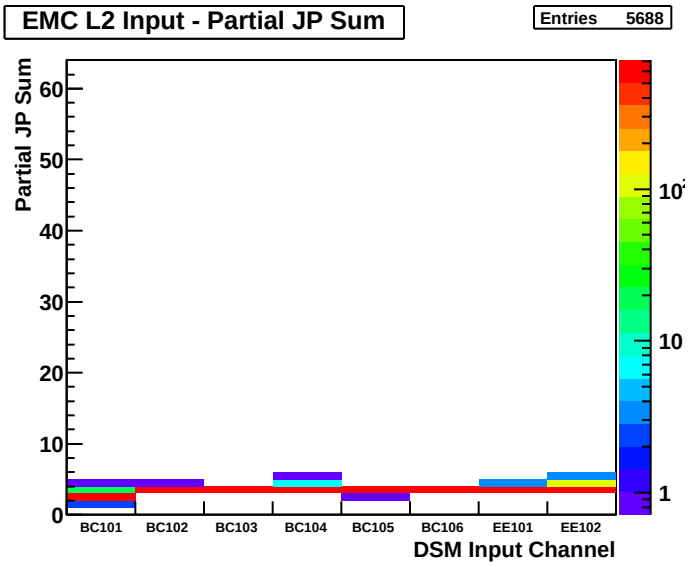

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

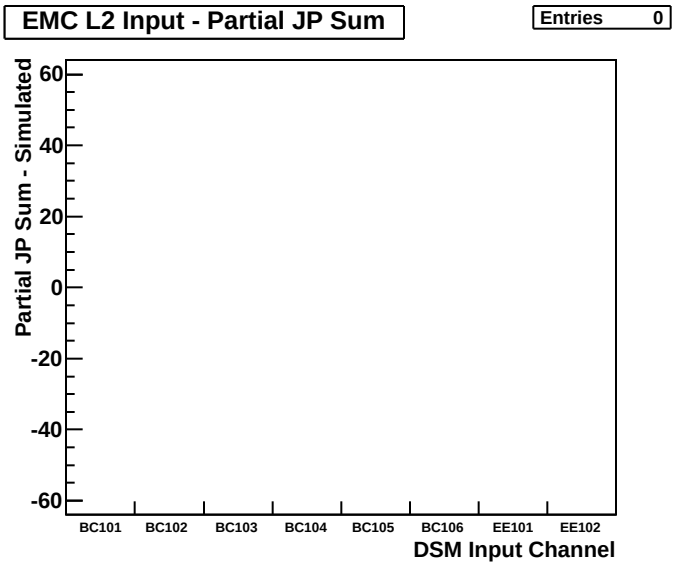

EMC L2 Input - JPY/JPB bits
Entries 5688
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

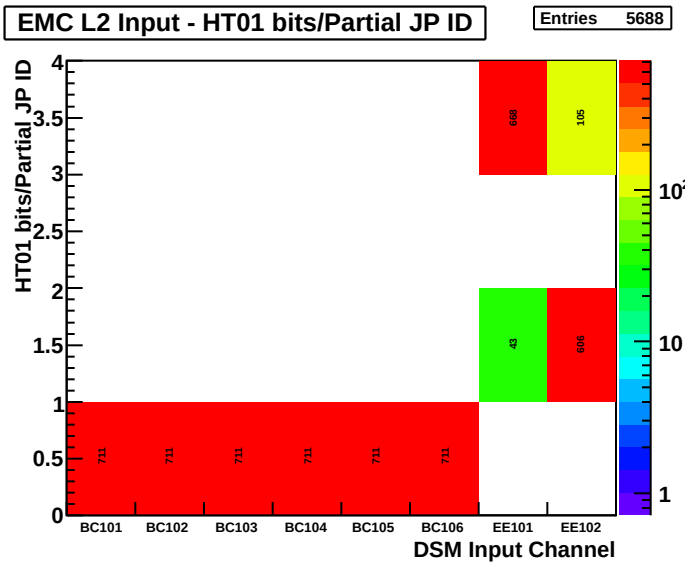

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

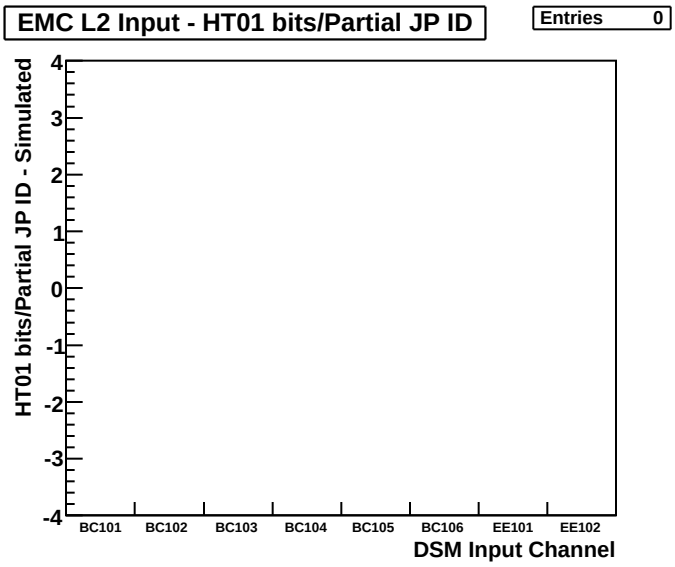

EMC L2 Input - JPZ/JPC bits
Entries 5688
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

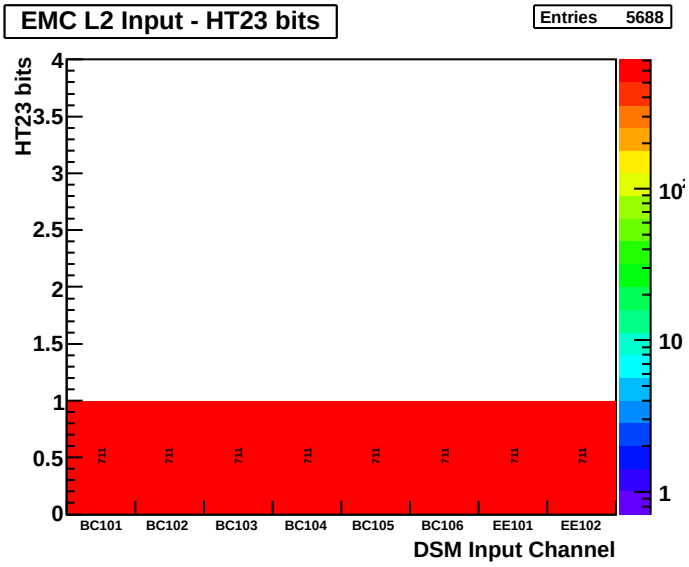

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

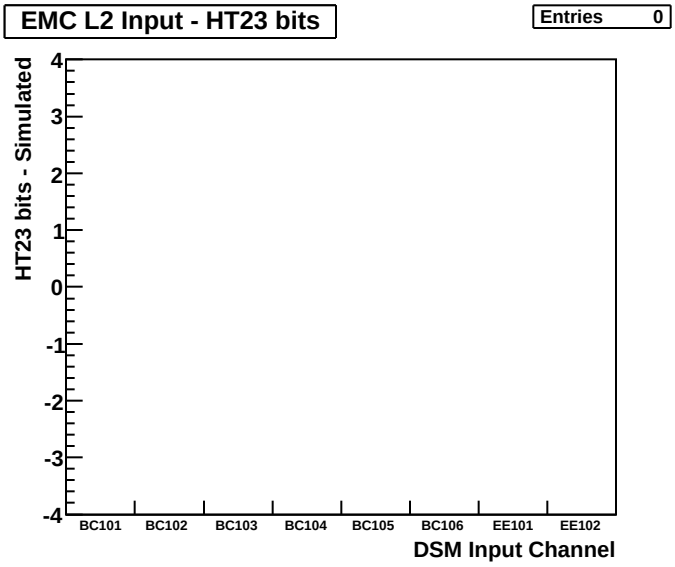

EMC L2 Input - Partial JP Sum
Entries 5688
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

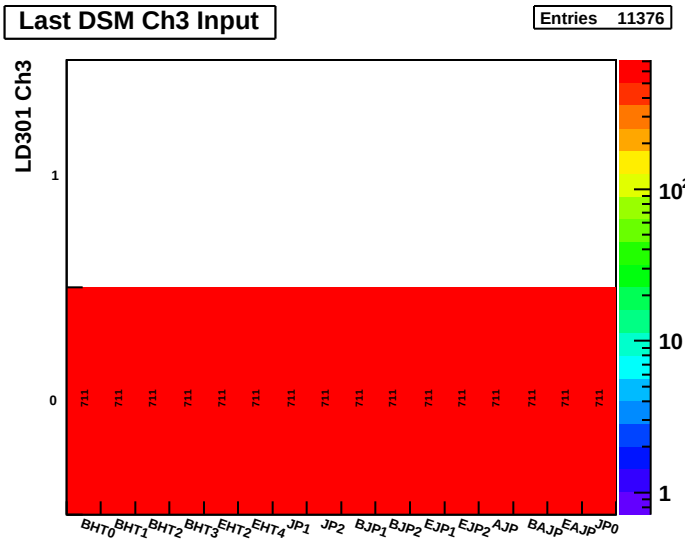

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

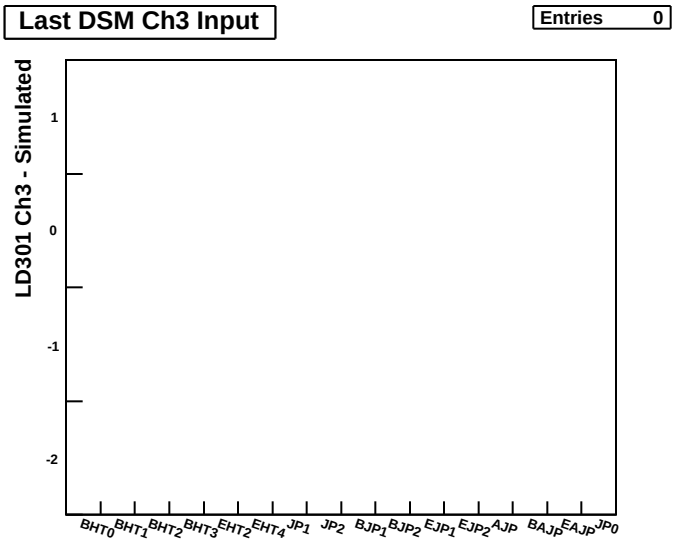

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5688
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

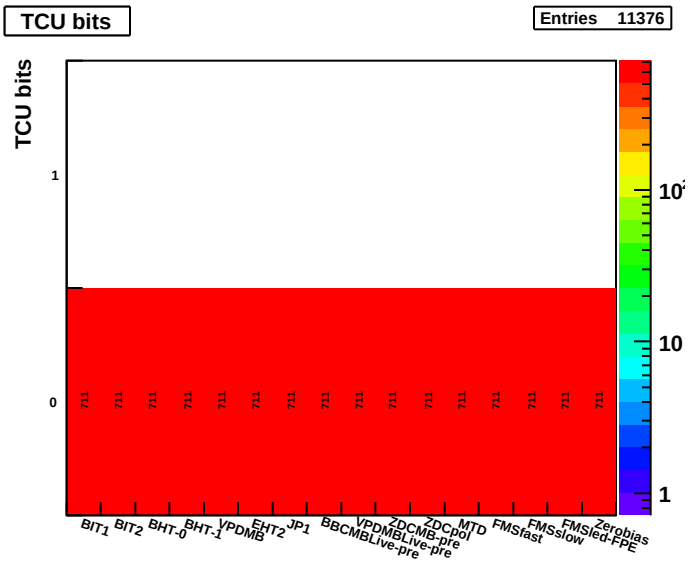

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

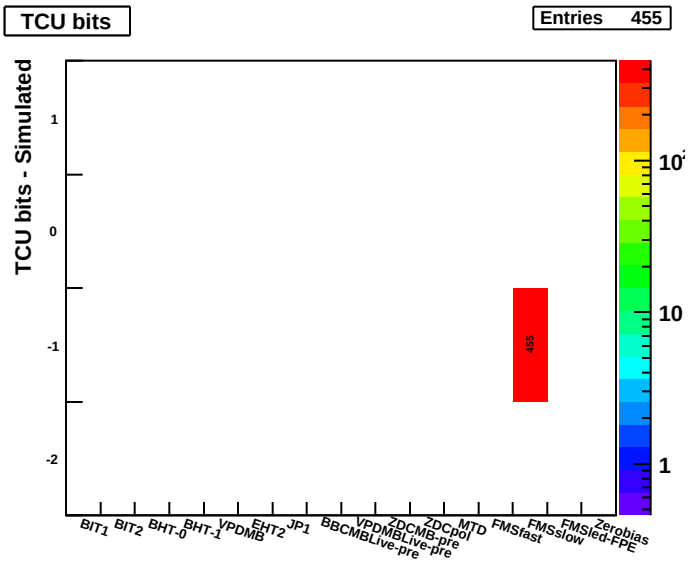

EMC L2 Input - HT23 bits
Entries 5688
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

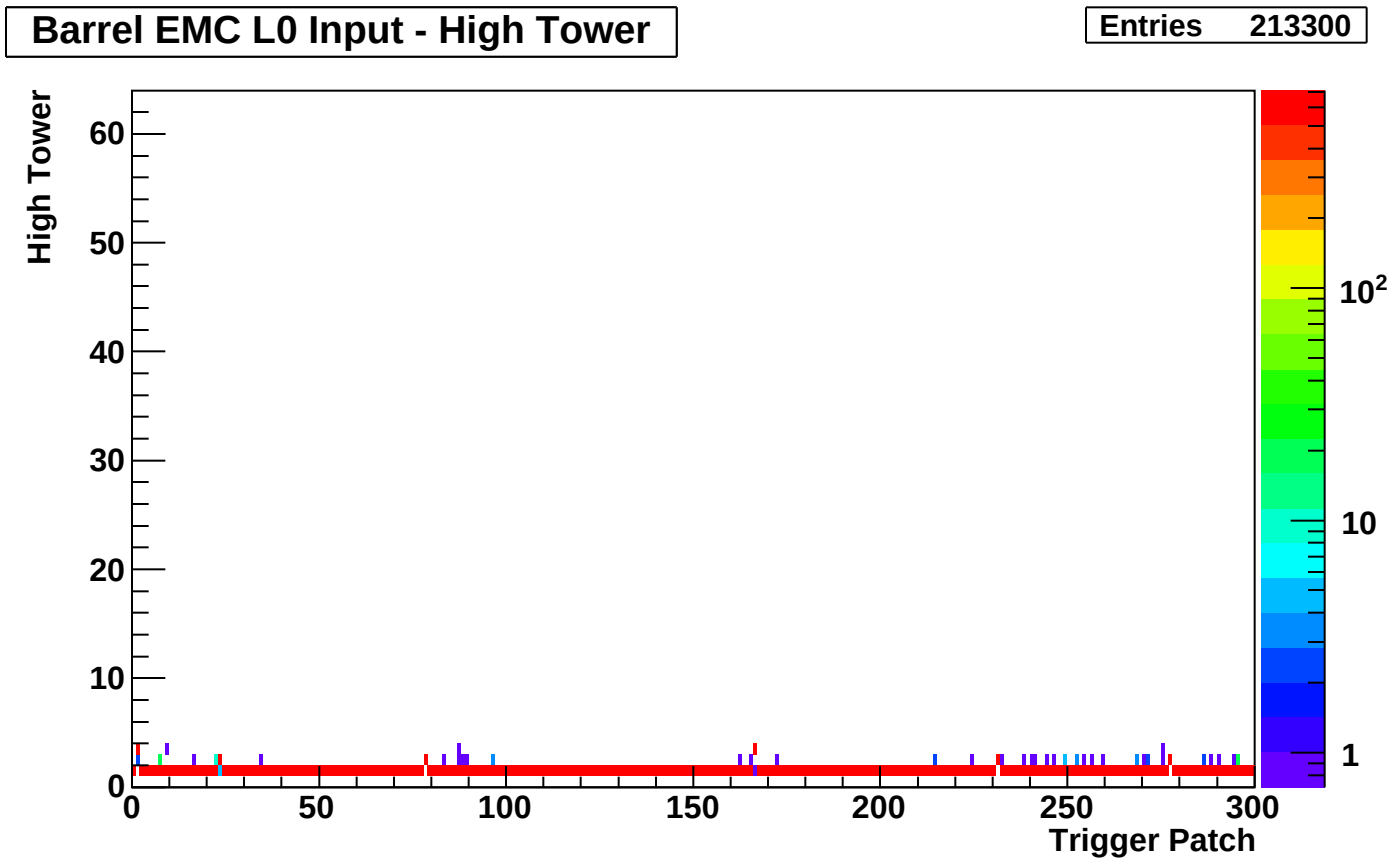

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

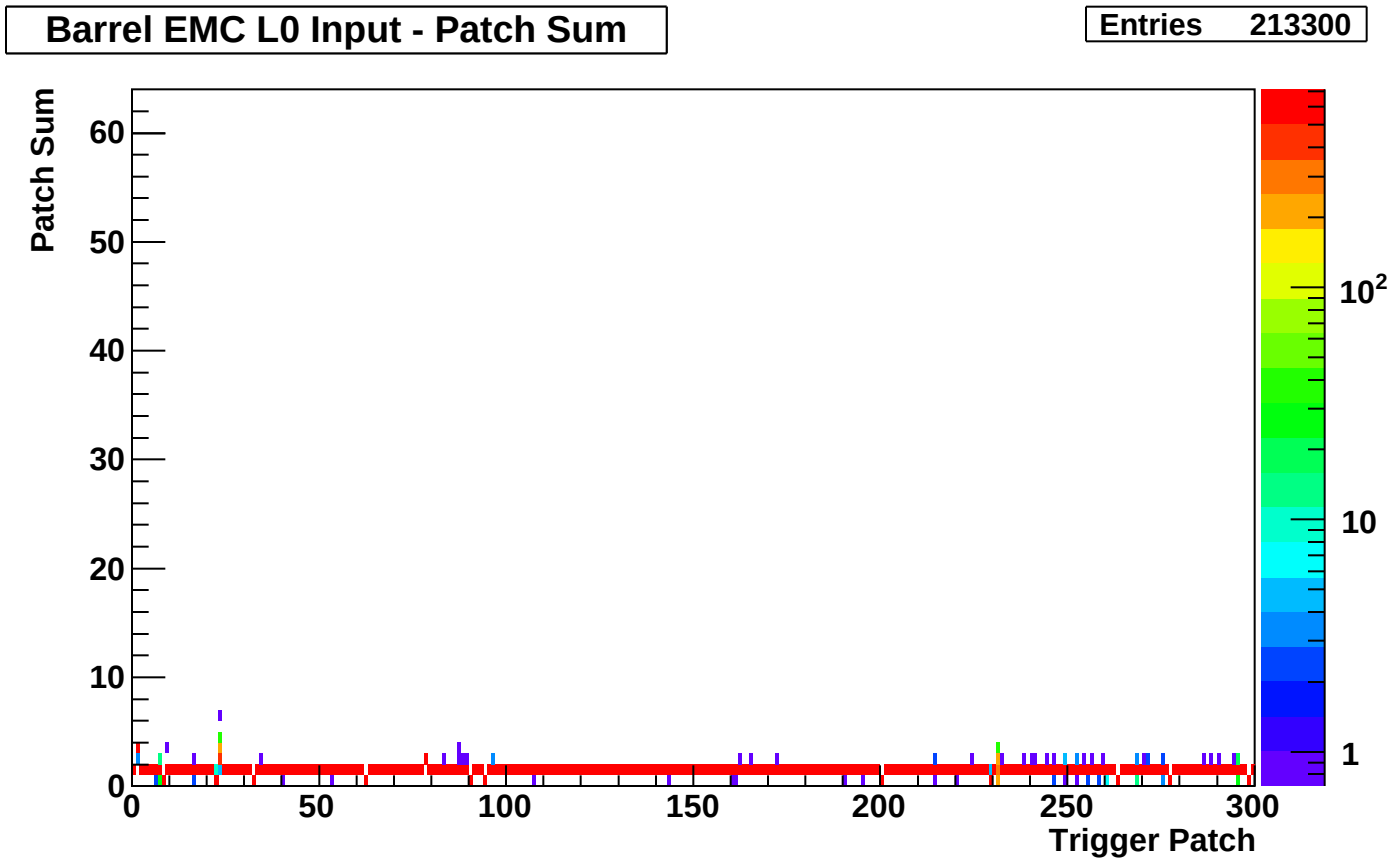

Last DSM Ch3 Input
Entries 11376
LD301 Ch3
1
0
711
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0
10
1

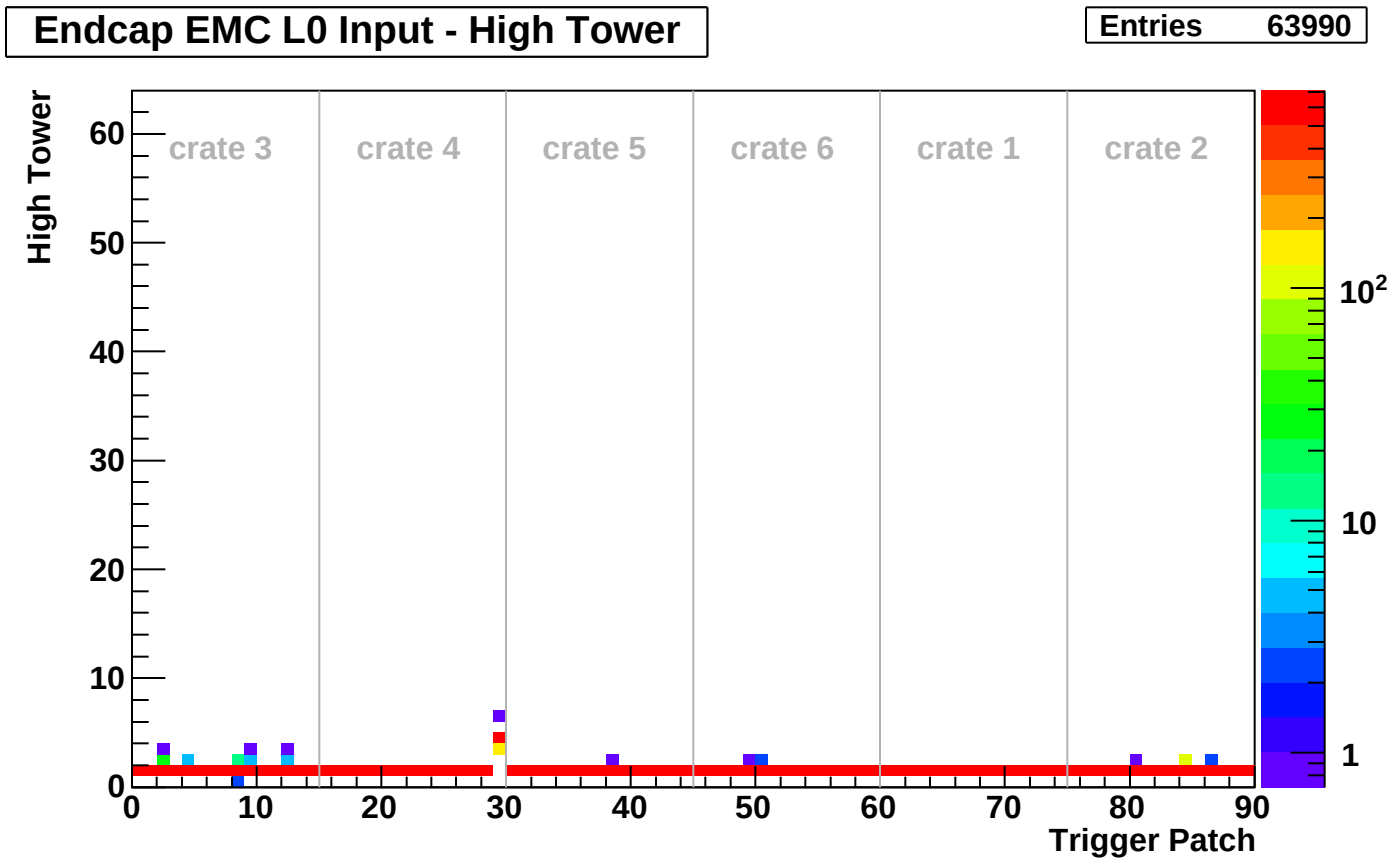

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

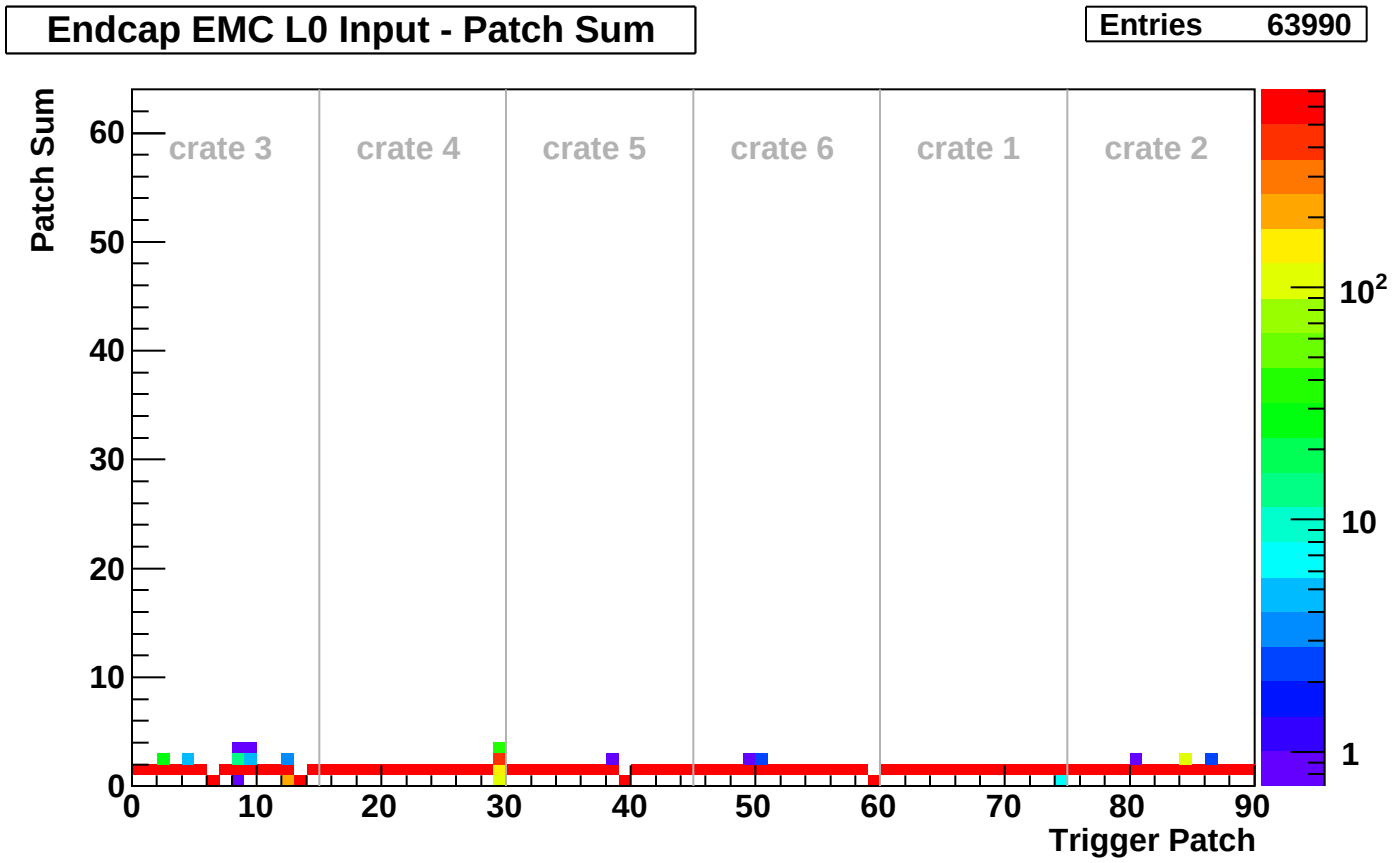

TCU bits
Entries 11376
TCU bits
1
0
711
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

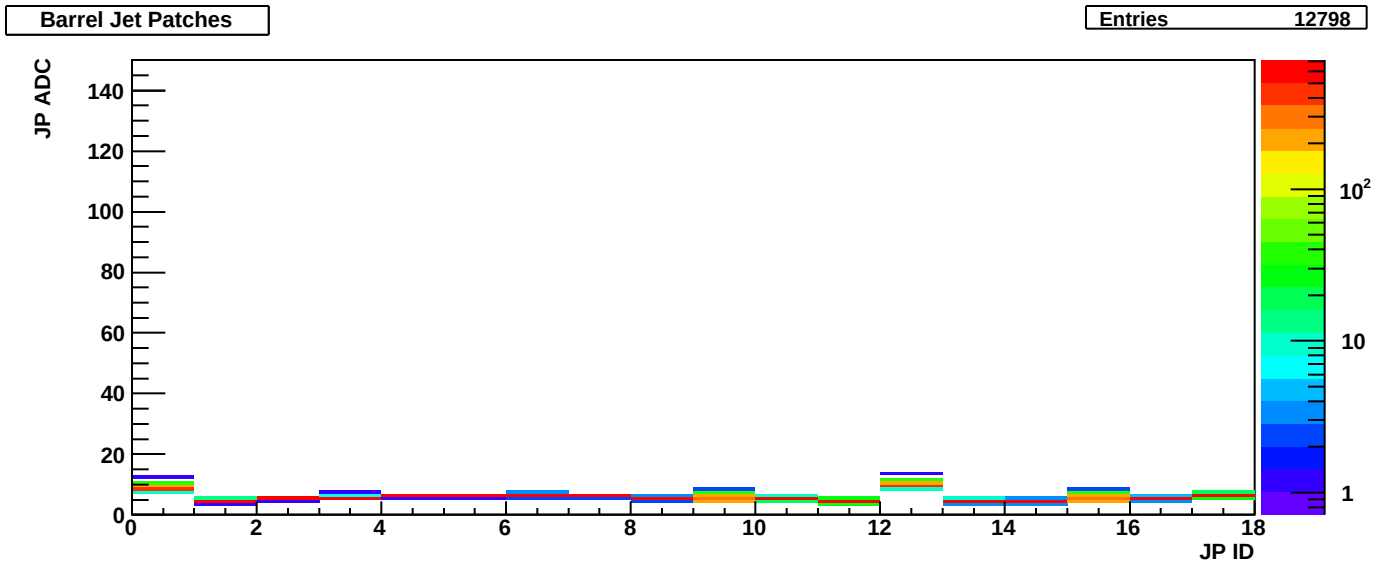

TCU bits
Entries 455
TCU bits - Simulated
1
0
-1
-2
455
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

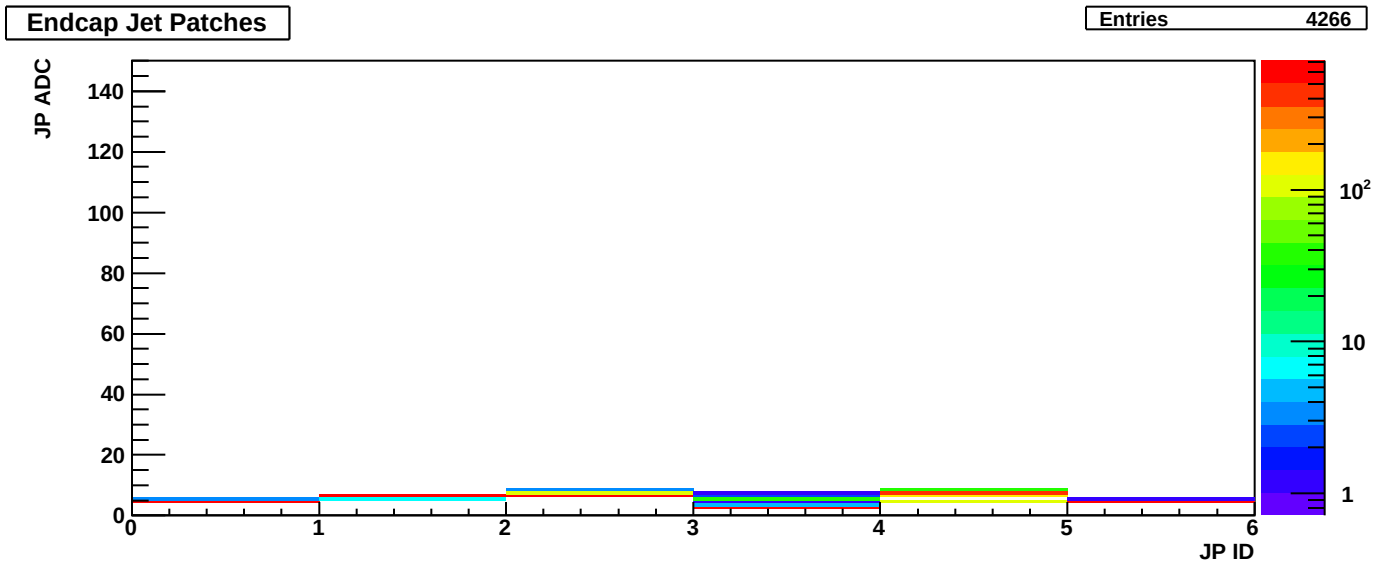

Barrel EMC L0 Input - High Tower
Entries 213300
High Tower
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch
1
10
10^2

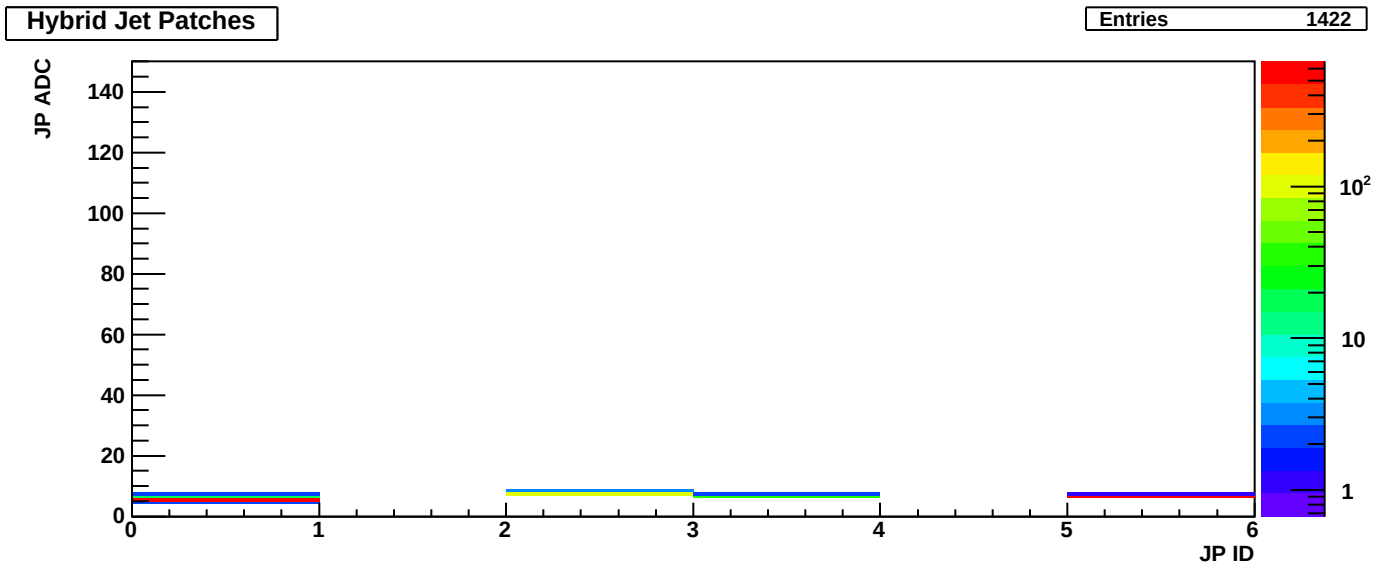

Barrel EMC L0 Input - Patch Sum
Entries 213300
Patch Sum
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch
1
10
10^2

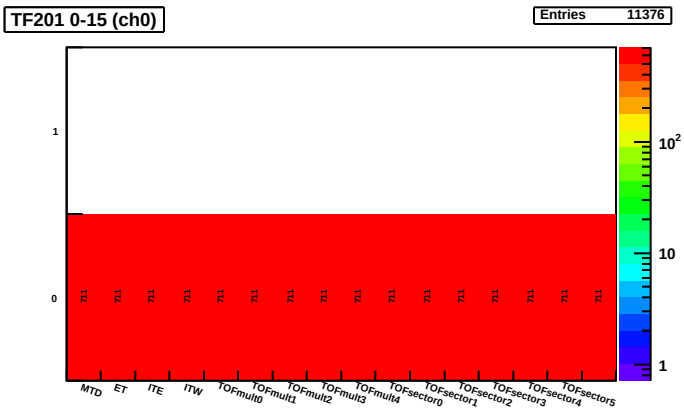

Endcap EMC L0 Input - High Tower
Entries 63990
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2

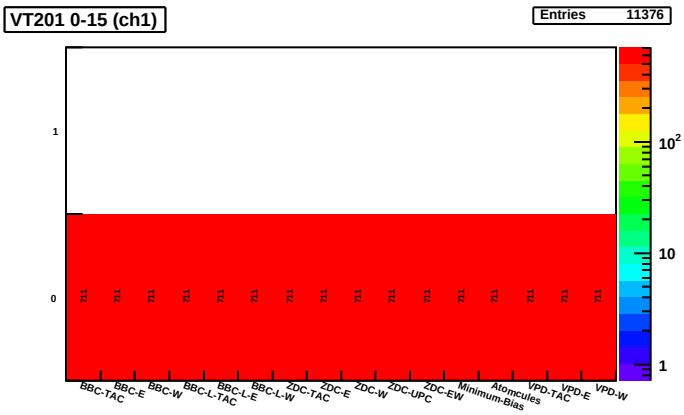

Endcap EMC L0 Input - Patch Sum
Entries 63990
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2

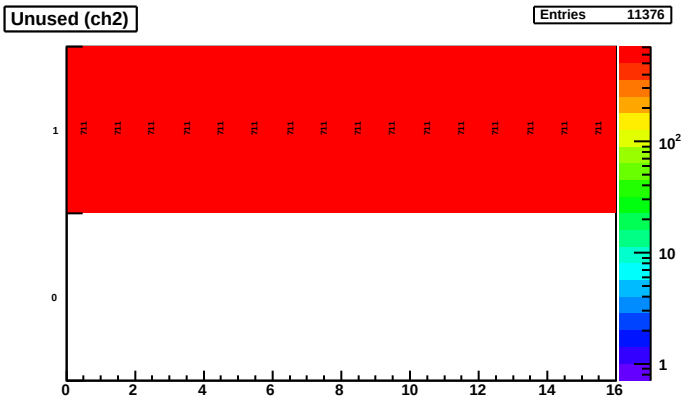

Barrel Jet Patches
Entries 12798
JP ADC
JP ID

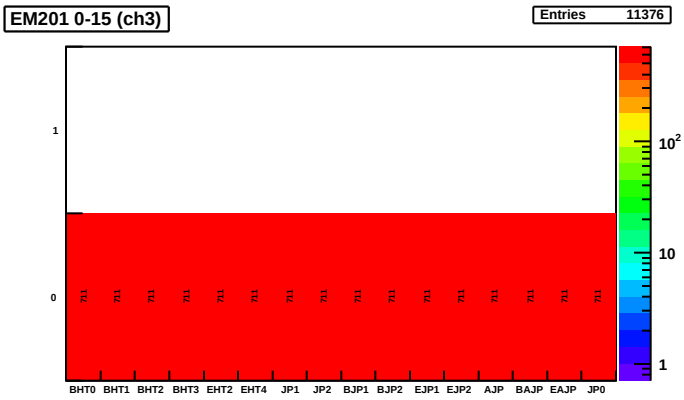

Endcap Jet Patches
Entries 4266
JP ADC
JP ID

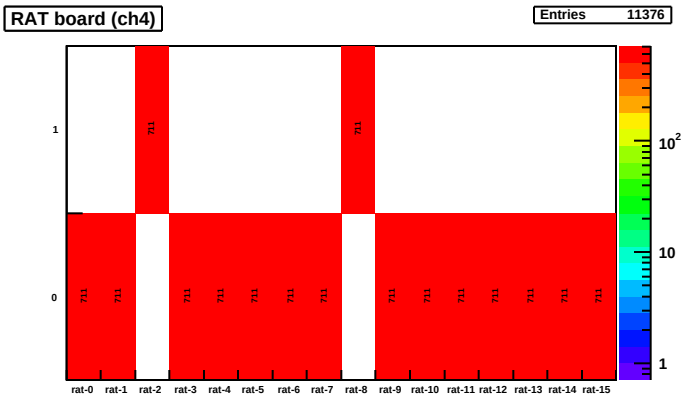

Hybrid Jet Patches
Entries 1422
JP ADC
JP ID

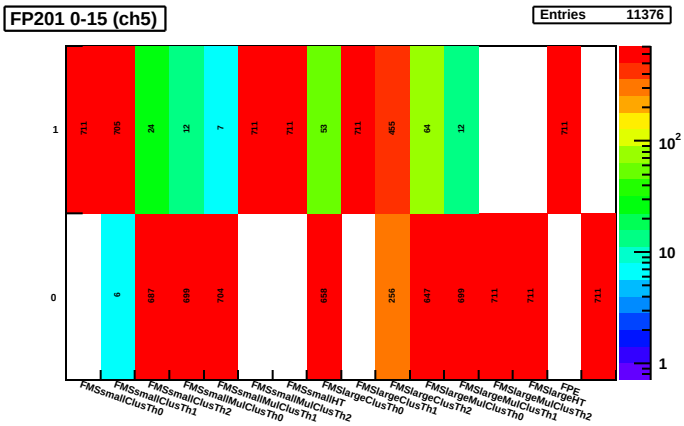

TF201 0-15 (ch0)
Entries 11376
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

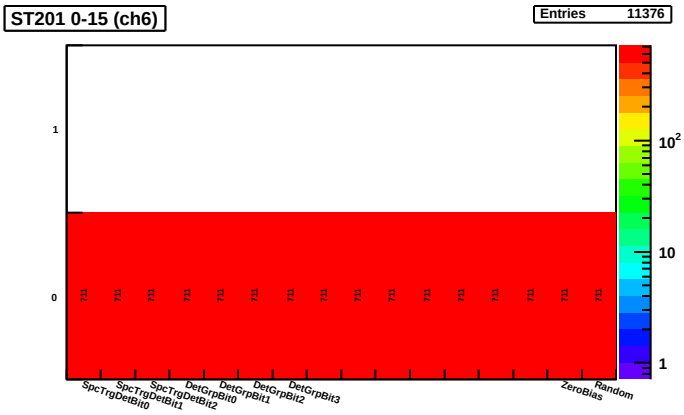

VT201 0-15 (ch1)
Entries 11376
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

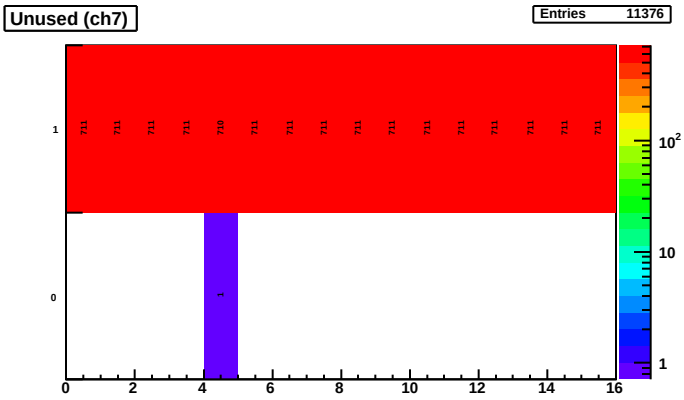

Unused (ch2)
Entries 11376

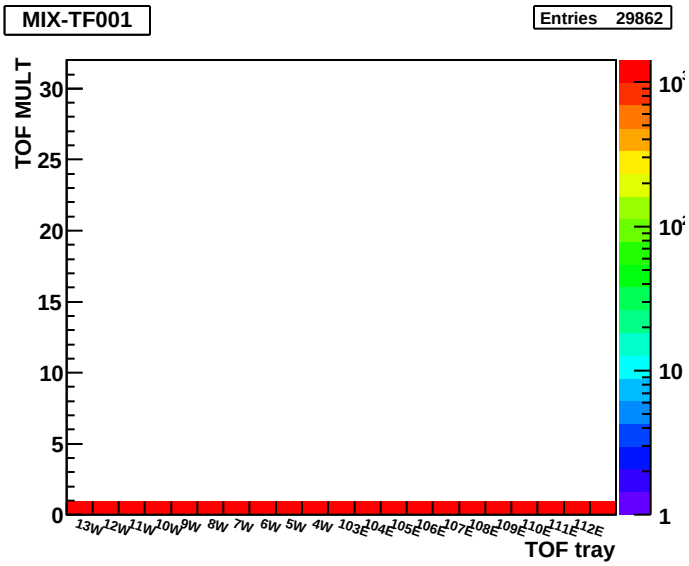

EM201 0-15 (ch3)
Entries 11376
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

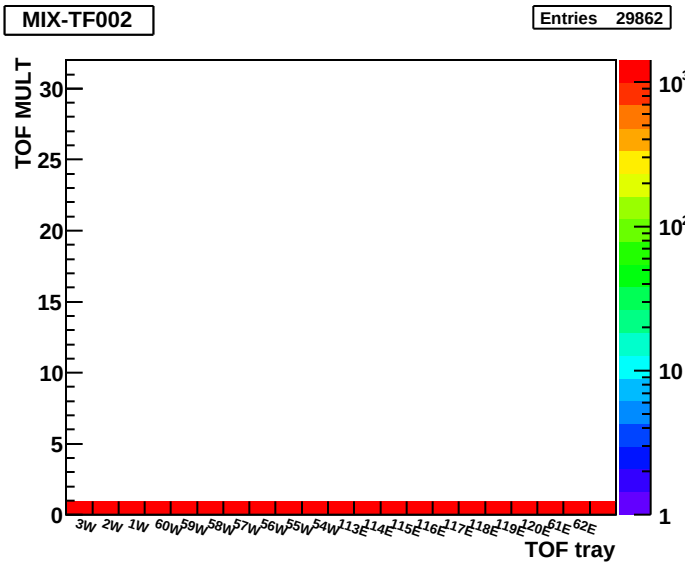

RAT board (ch4)
Entries 11376
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

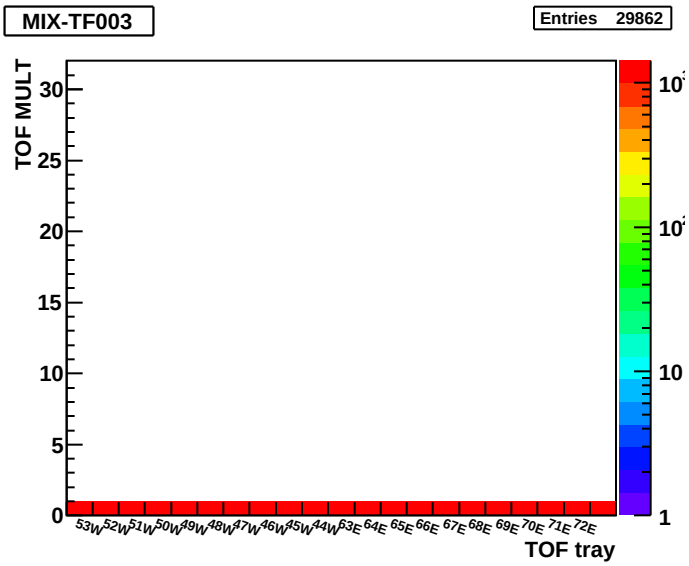

FP201 0-15 (ch5)
Entries 11376
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeHT
FPE

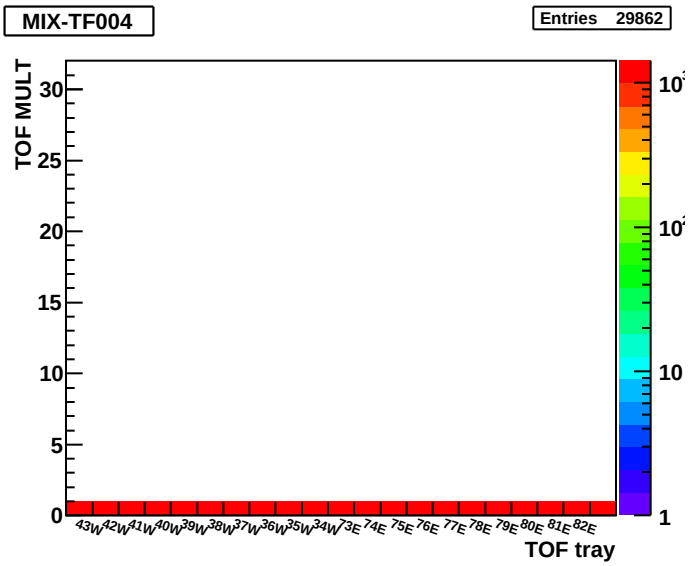

ST201 0-15 (ch6)
Entries 11376
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

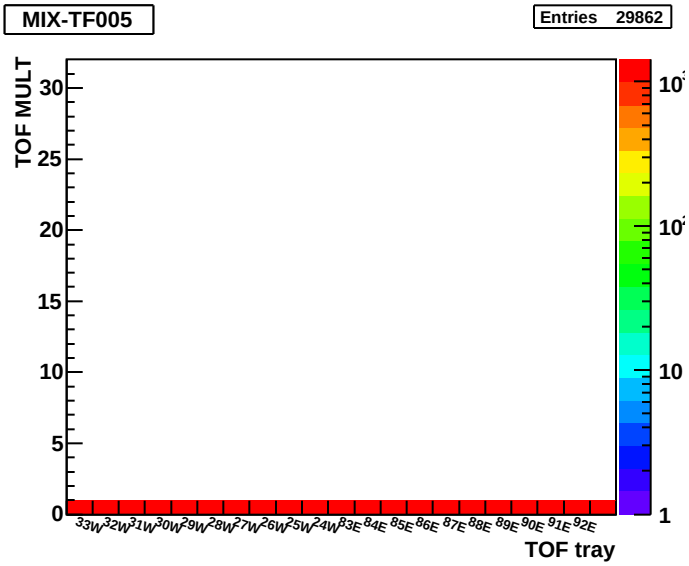

Unused (ch7)
Entries 11376

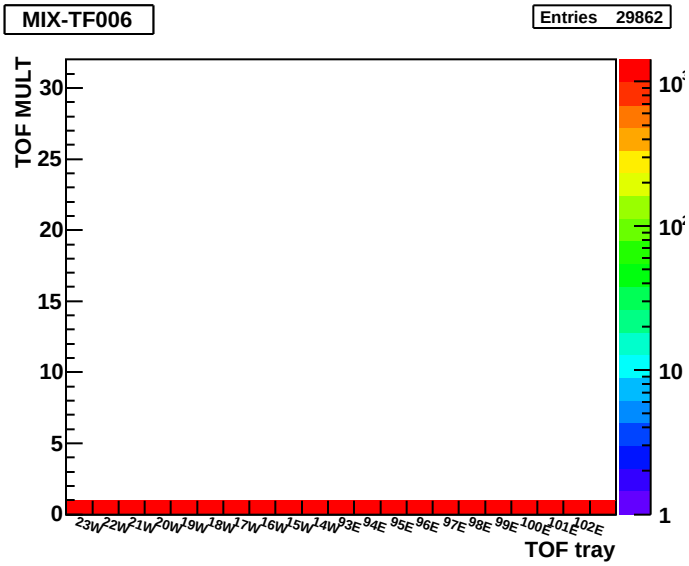

MIX-TF001
Entries 29862
TOF MULT
TOF tray

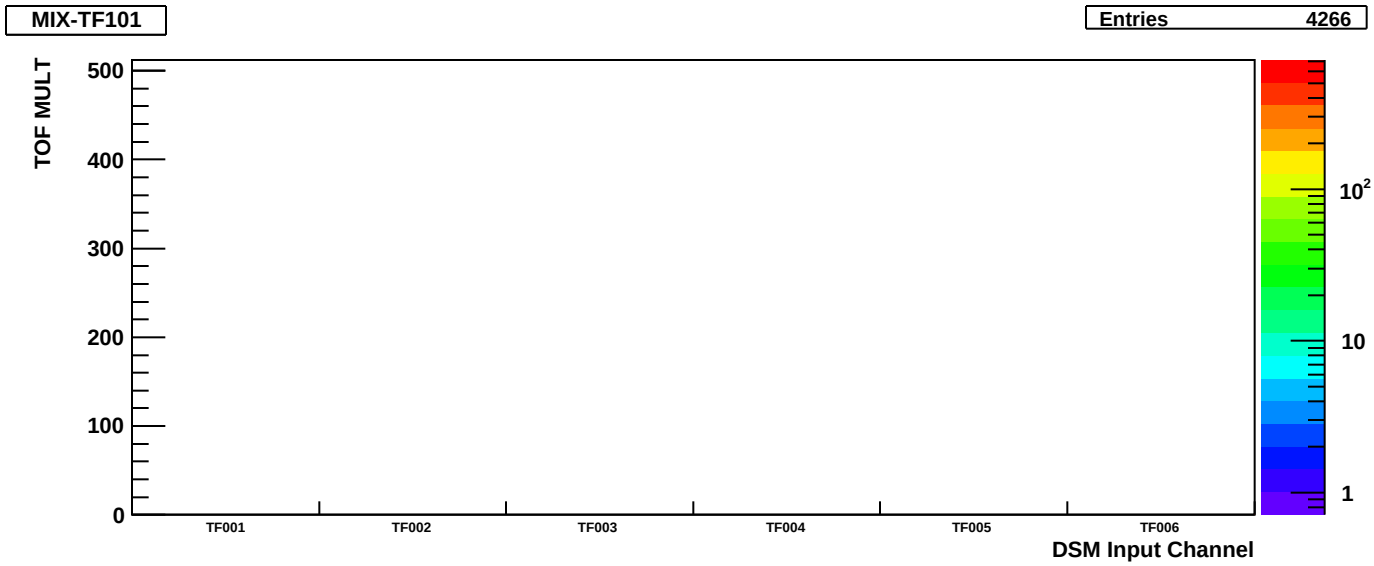

MIX-TF002
Entries 29862
TOF MULT
TOF tray

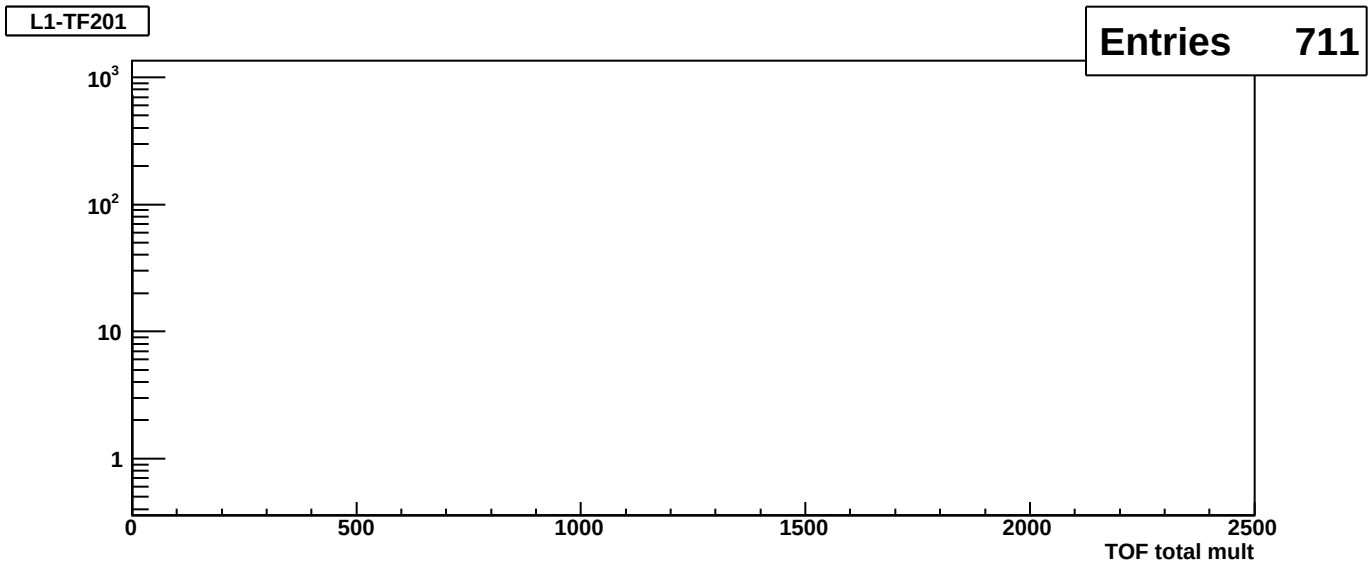

MIX-TF003
Entries 29862
TOF MULT
TOF tray

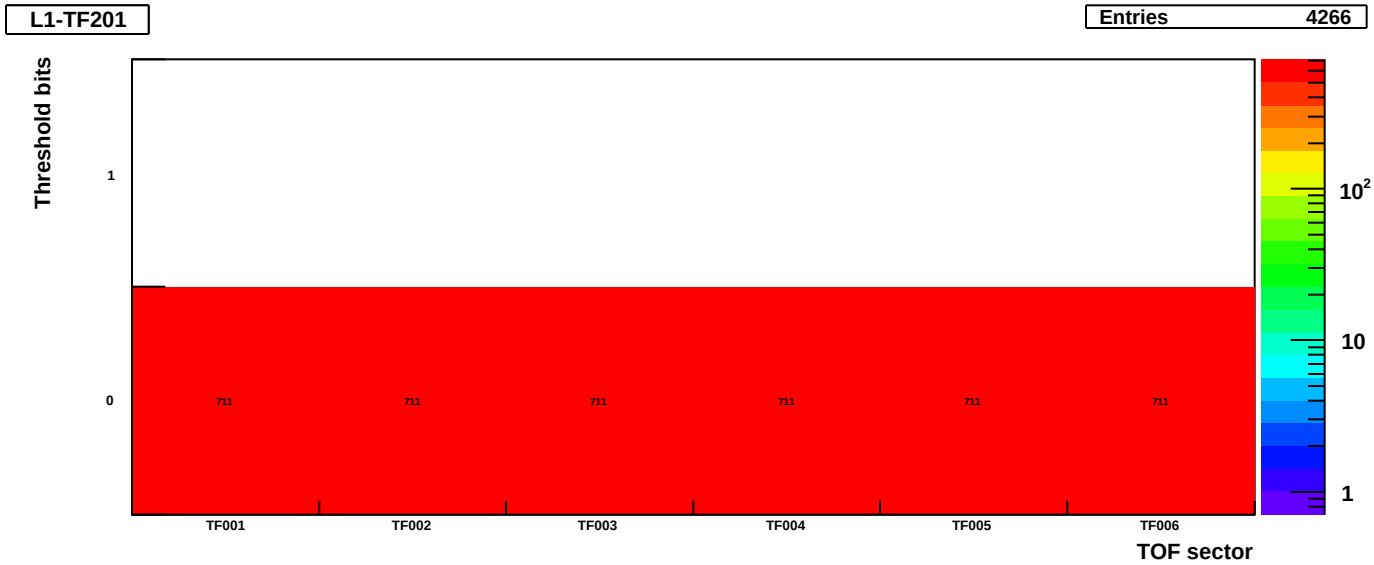

MIX-TF004
Entries 29862
TOF MULT
TOF tray

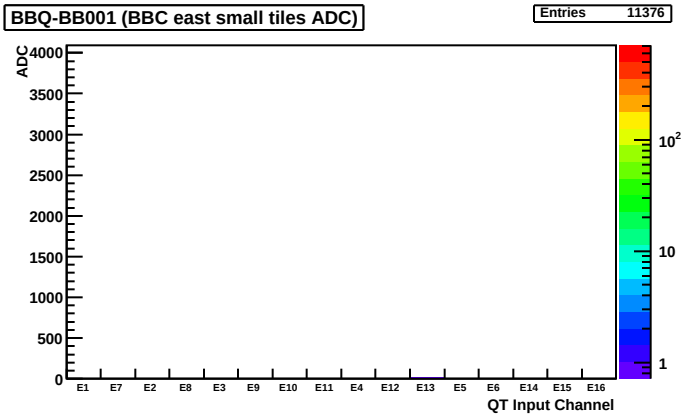

MIX-TF005
Entries 29862
TOF MULT
TOF tray

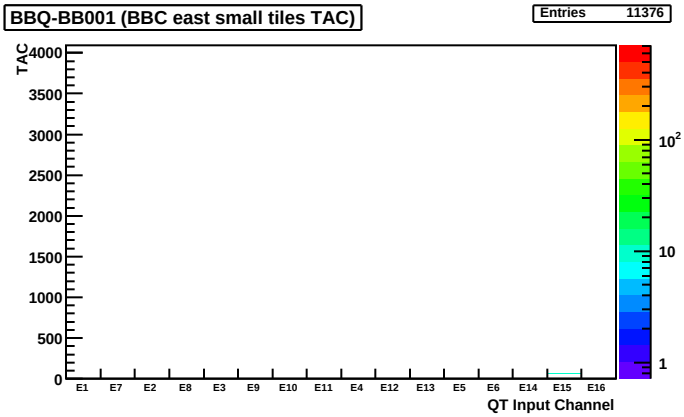

MIX-TF006
Entries 29862
TOF MULT
TOF tray

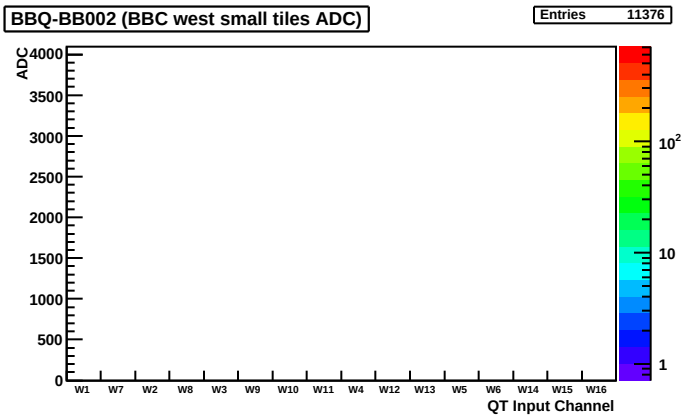

MIX-TF101
Entries 4266
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^2
10
1

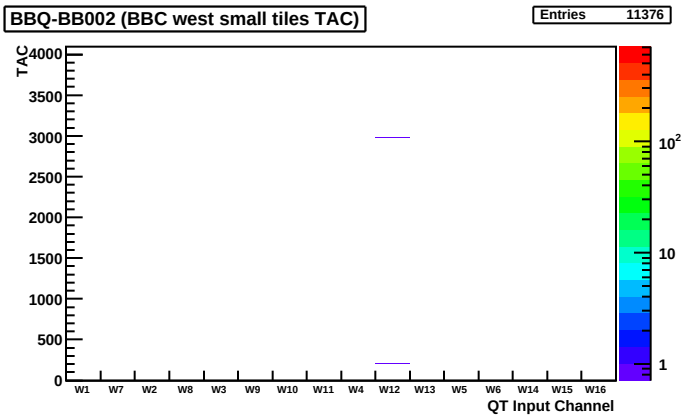

L1-TF201
Entries 711
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

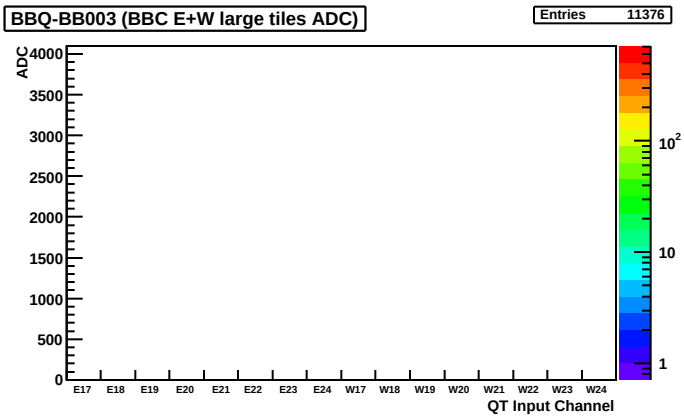

L1-TF201
Entries 4266
Threshold bits
1
0
711
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^2
10
1

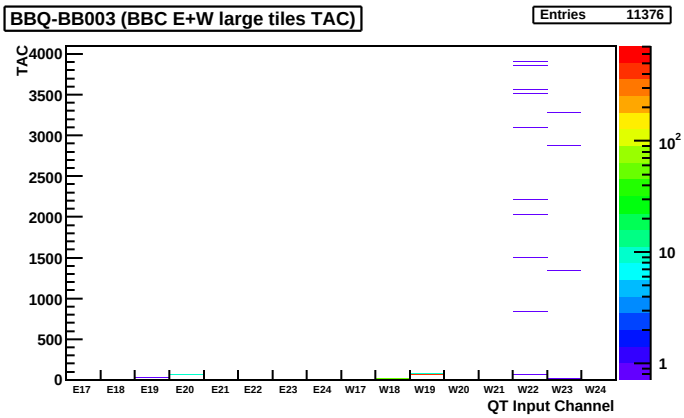

BBQ-BB001 (BBC east small tiles ADC)
Entries 11376
ADC
QT Input Channel

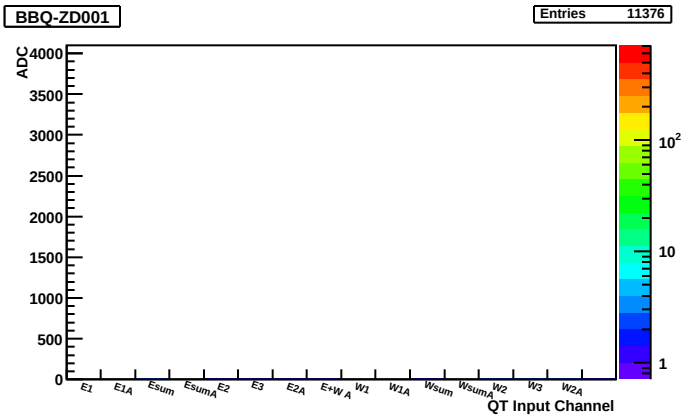

BBQ-BB001 (BBC east small tiles TAC)
Entries 11376
TAC
QT Input Channel

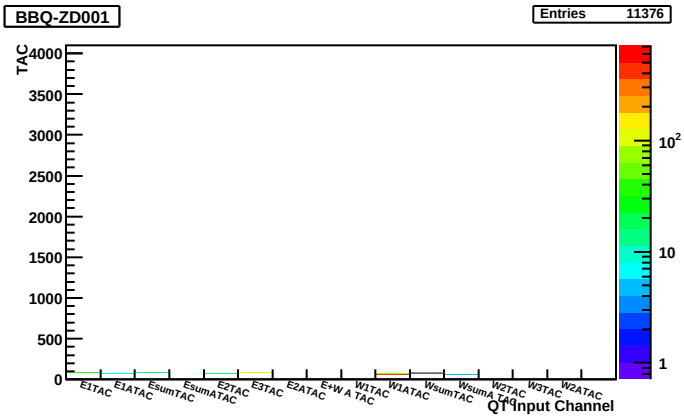

BBQ-BB002 (BBC west small tiles ADC)
Entries 11376
ADC
QT Input Channel

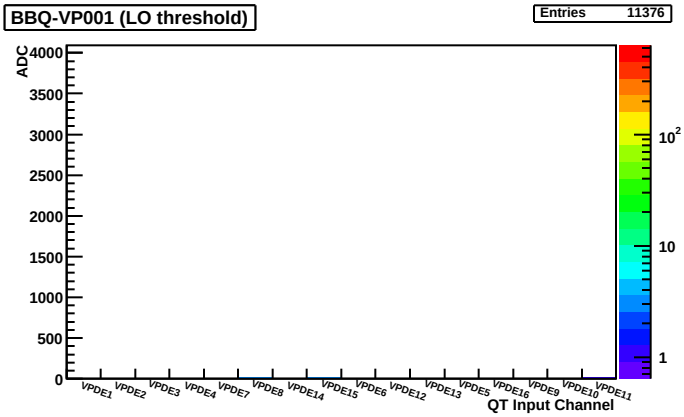

BBQ-BB002 (BBC west small tiles TAC)
Entries 11376
TAC
QT Input Channel

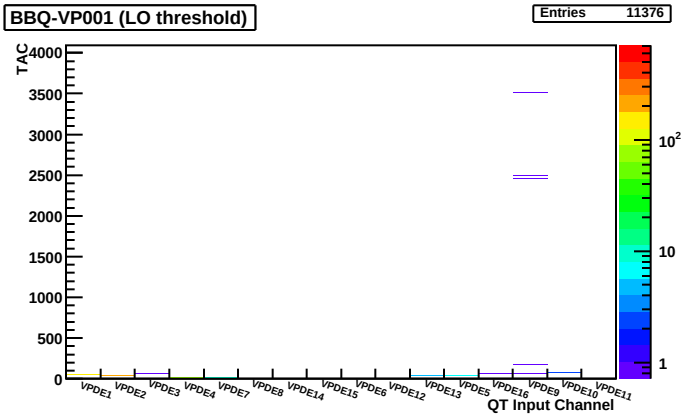

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 11376
ADC
QT Input Channel

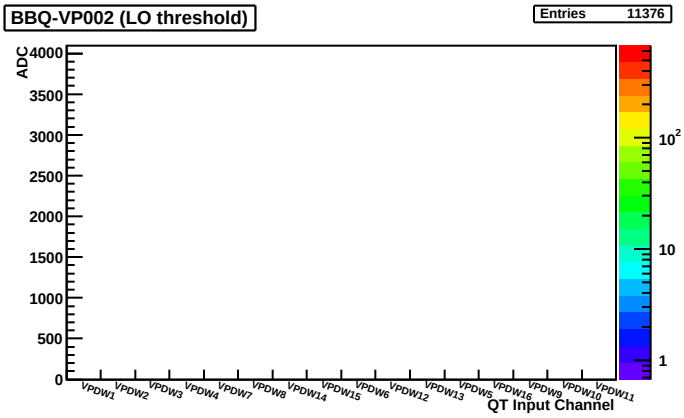

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 11376
TAC
QT Input Channel

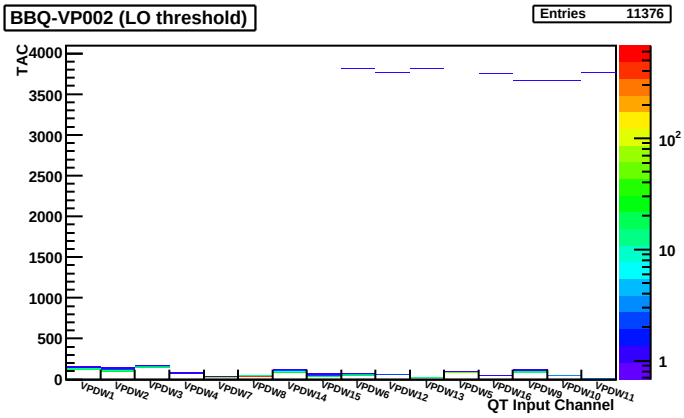

BBQ-ZD001
Entries 11376
ADC
QT Input Channel

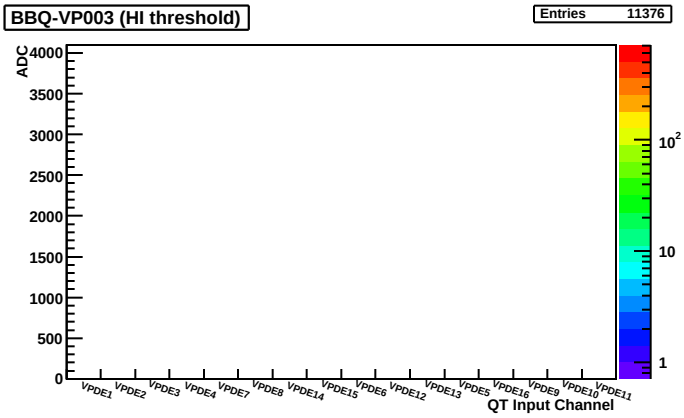

BBQ-ZD001
Entries 11376
TAC
QT Input Channel

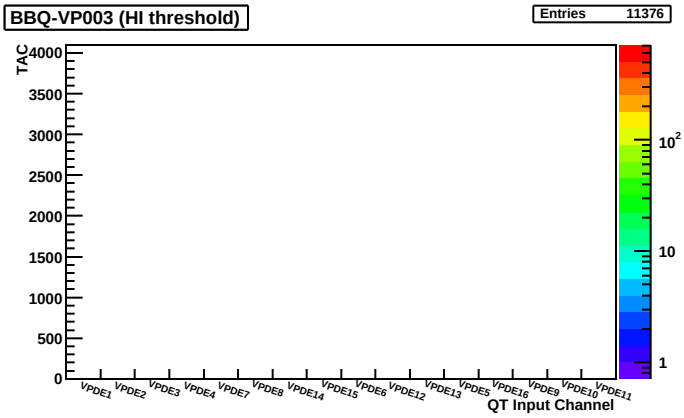

BBQ-VP001 (LO threshold)
Entries 11376
ADC
QT Input Channel

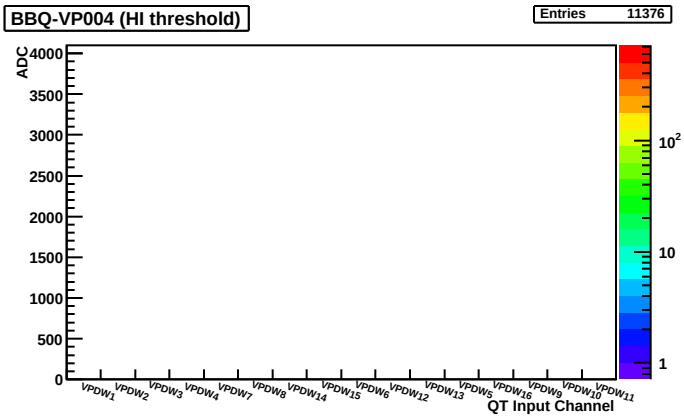

BBQ-VP001 (LO threshold)
Entries 11376
TAC
QT Input Channel

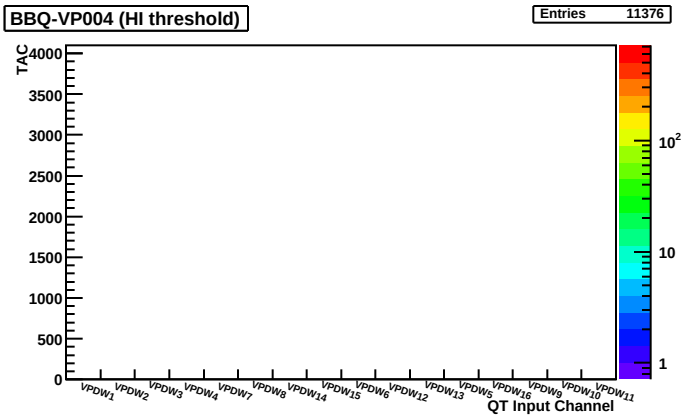

BBQ-VP002 (LO threshold)
Entries 11376
ADC
QT Input Channel

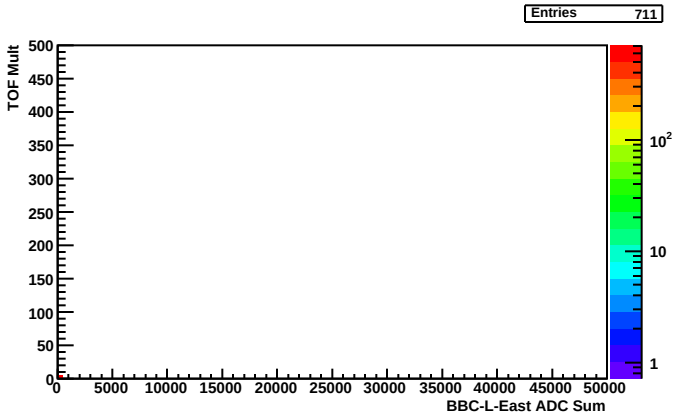

BBQ-VP002 (LO threshold)
Entries 11376
TAC
QT Input Channel

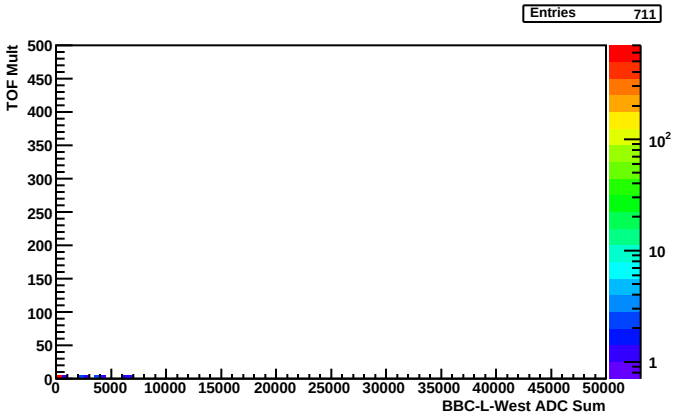

BBQ-VP003 (HI threshold)
Entries 11376
ADC
QT Input Channel

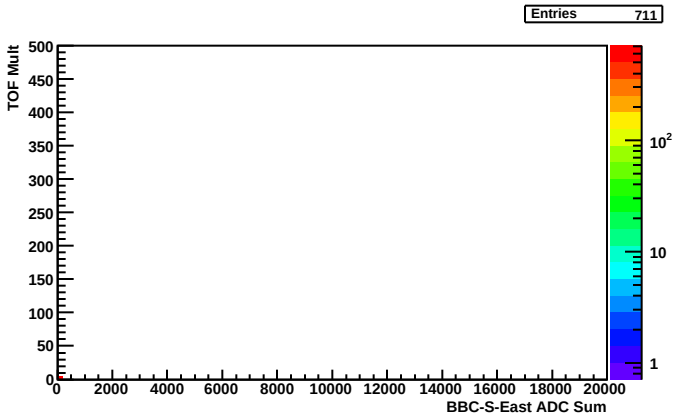

BBQ-VP003 (HI threshold)
Entries 11376
TAC
QT Input Channel

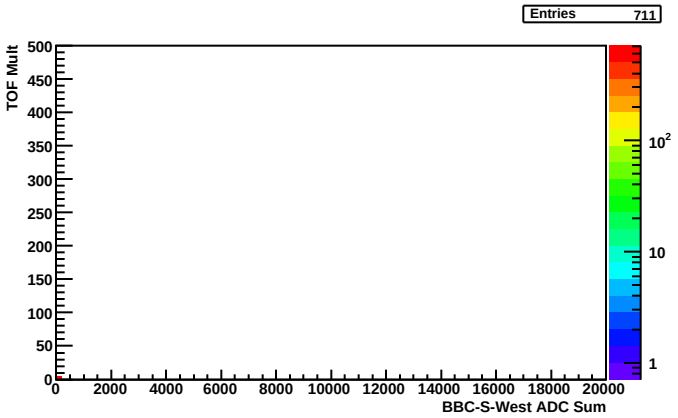

BBQ-VP004 (HI threshold)
Entries 11376
ADC
QT Input Channel

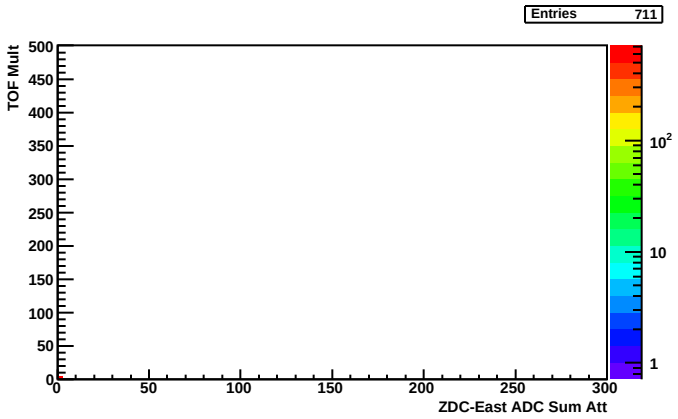

BBQ-VP004 (HI threshold)
Entries 11376
TAC
QT Input Channel

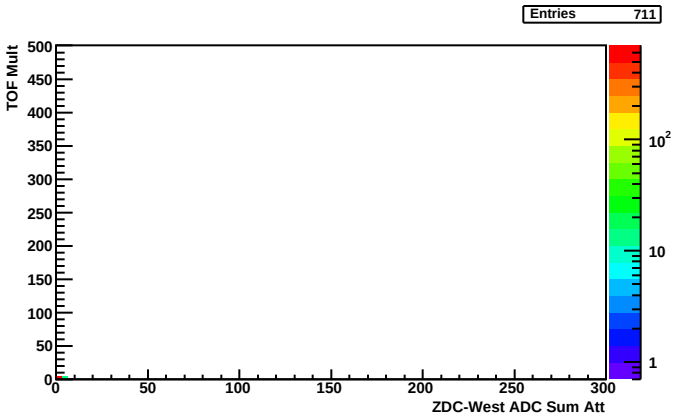

Entries 711
TOF Mult
BBC-L-East ADC Sum

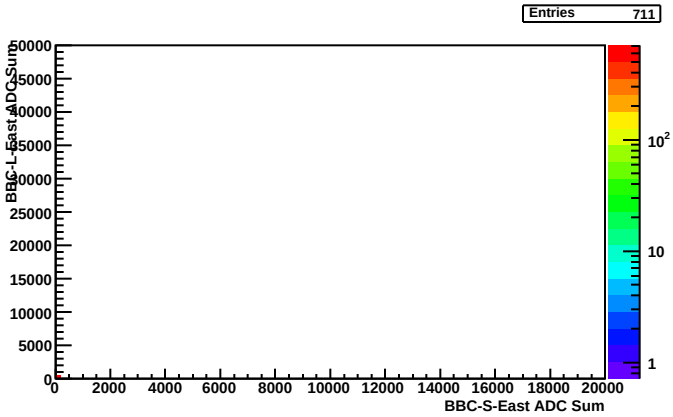

Entries 711
TOF Mult
BBC-L-West ADC Sum

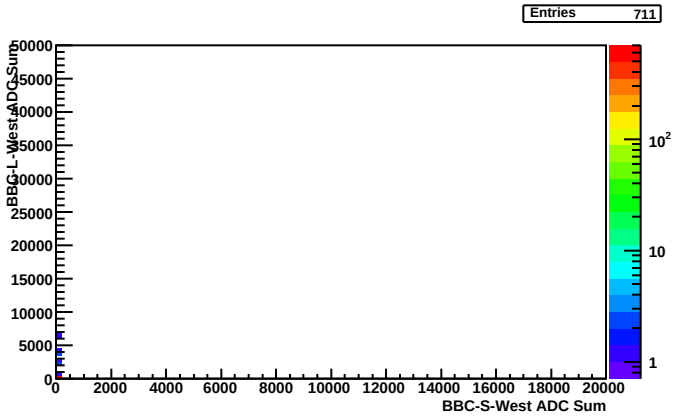

Entries 711
TOF Mult
BBC-S-East ADC Sum

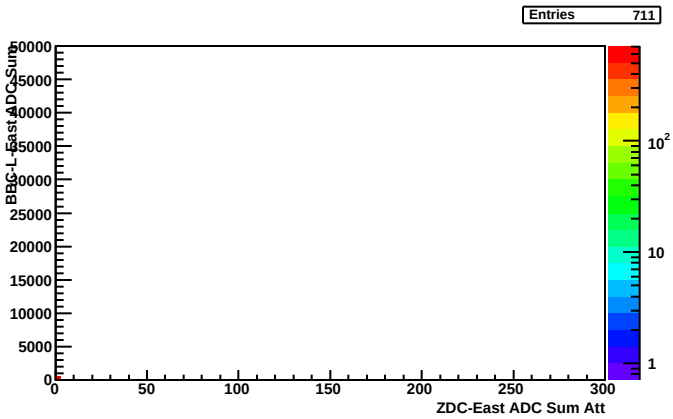

Entries 711
TOF Mult
BBC-S-West ADC Sum

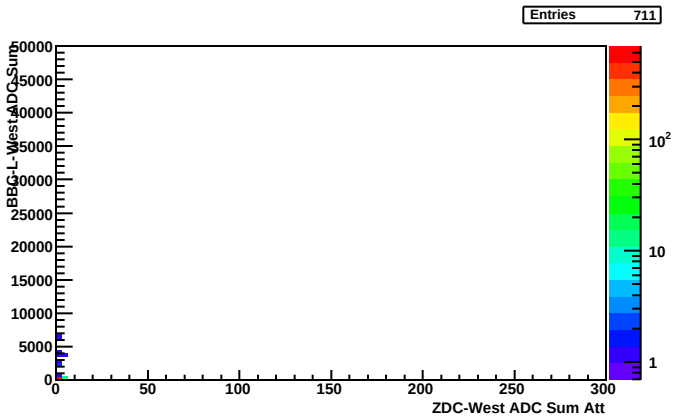

Entries 711
TOF Mult
ZDC-East ADC Sum Att

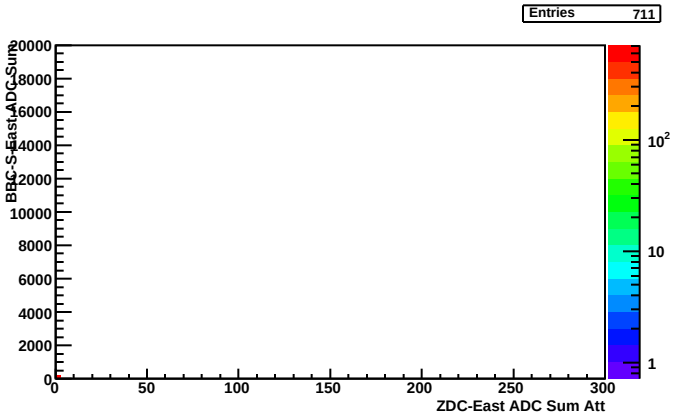

Entries 711
TOF Mult
ZDC-West ADC Sum Att

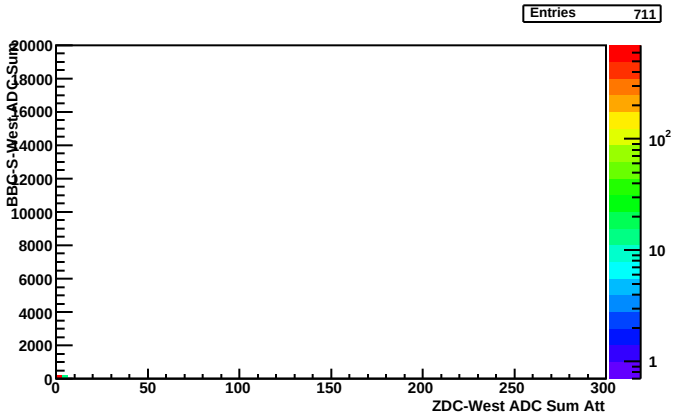

Entries 711
BBC-L-East ADC Sum
BBC-S-East ADC Sum

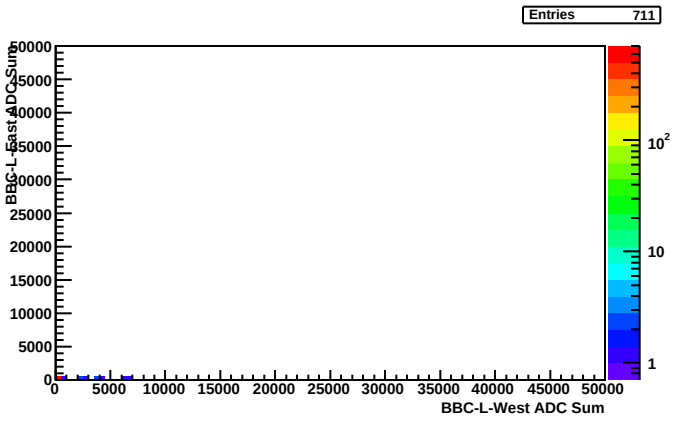

Entries 711
BBC-L-West ADC Sum
BBC-S-West ADC Sum

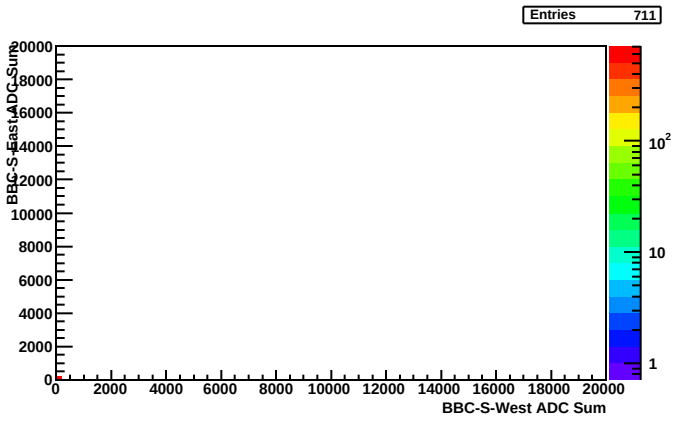

Entries 711
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

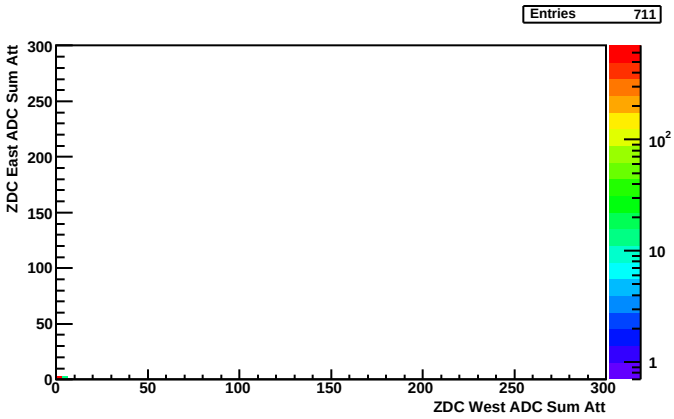

Entries 711
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

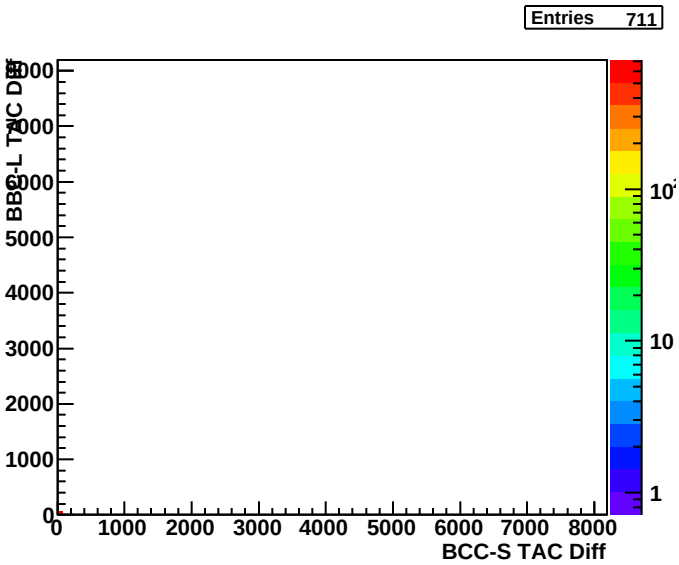

Entries 711
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

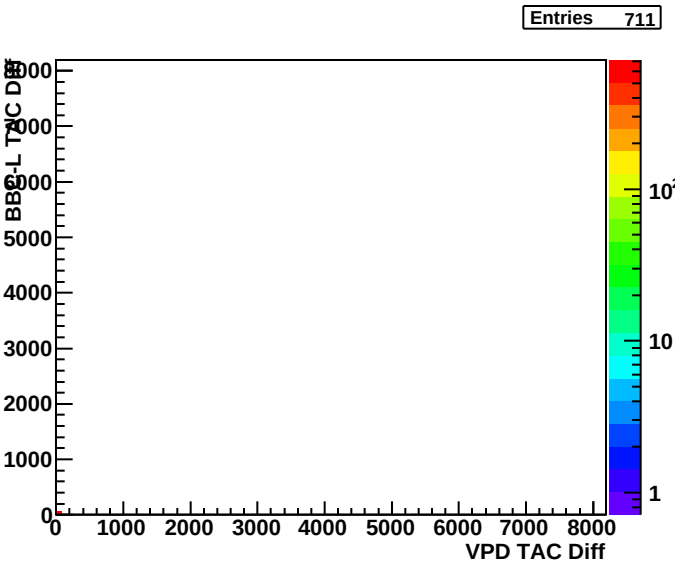

Entries 711
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

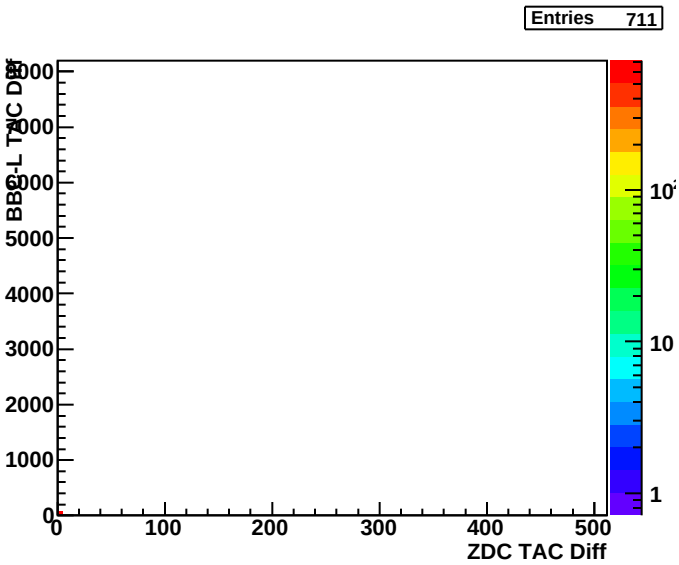

Entries 711
BBC-L-East ADC Sum
BBC-L-West ADC Sum

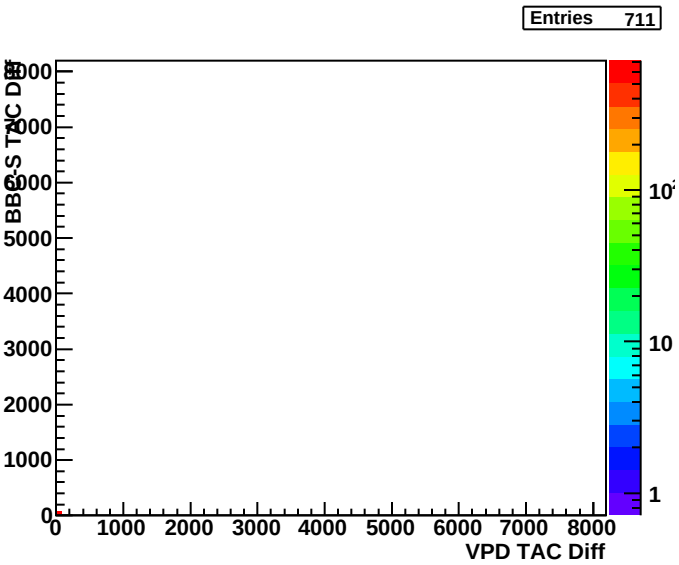

Entries 711
BBC-S-East ADC Sum
BBC-S-West ADC Sum

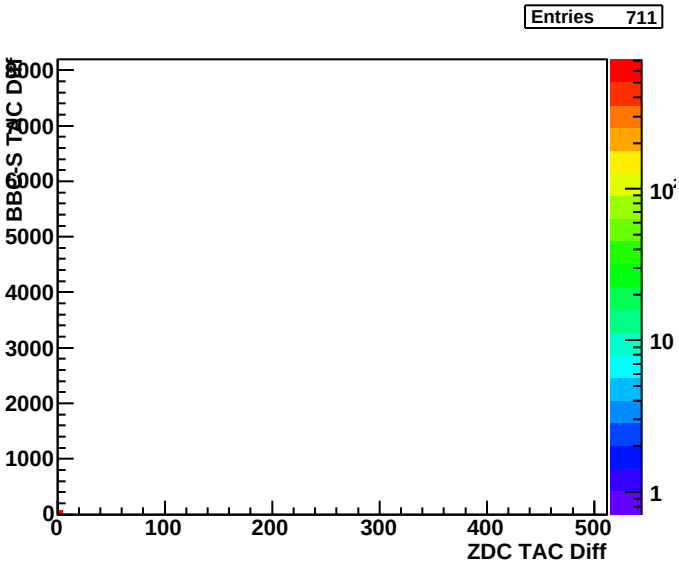

Entries 711
ZDC East ADC Sum Att
ZDC West ADC Sum Att

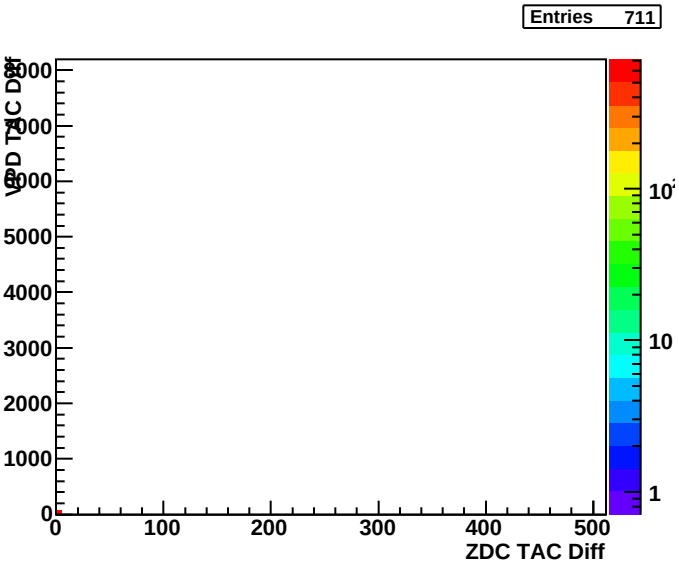

Entries 711
BBC-L TAC Diff
BCC-S TAC Diff

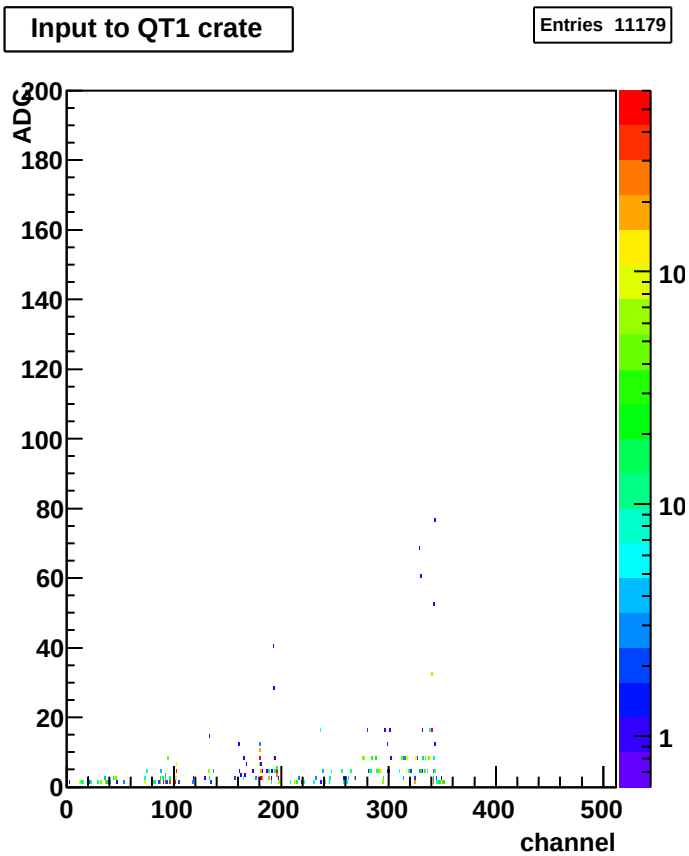

Entries 711
BBC-L TAC Diff
VPD TAC Diff

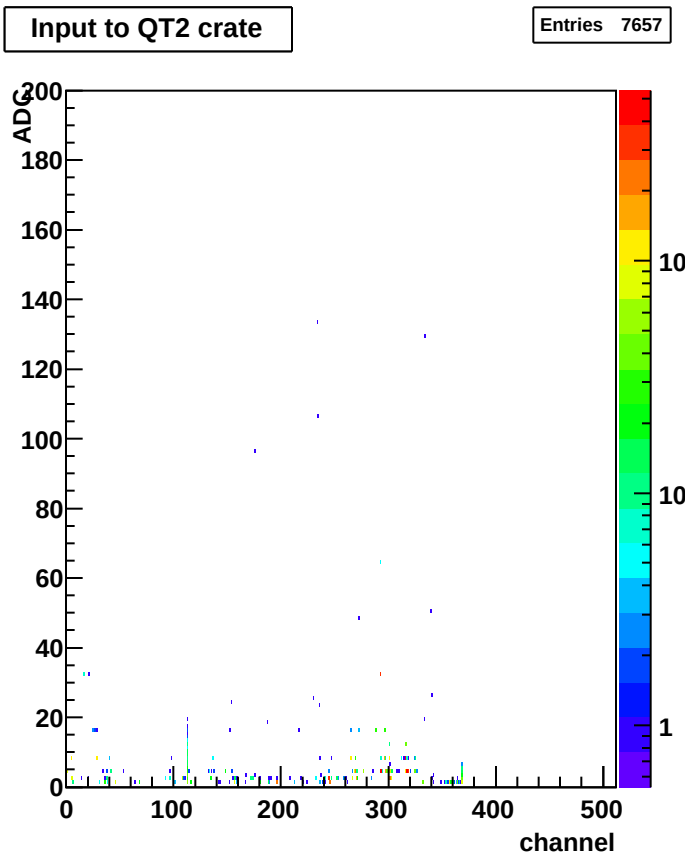

Entries 711
BBC-L TAC Diff
ZDC TAC Diff

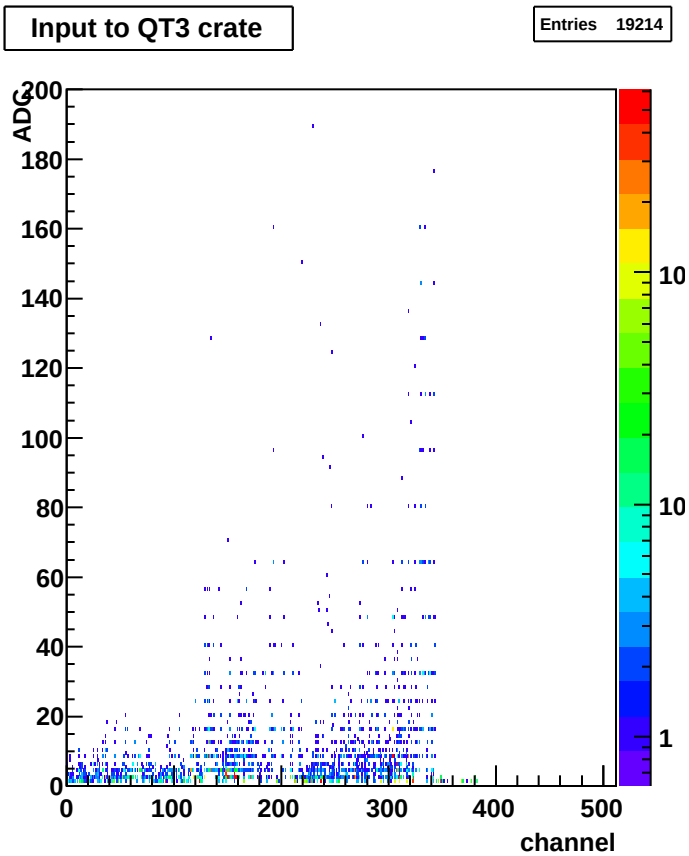

Entries 711
BBC-S TAC Diff
VPD TAC Diff

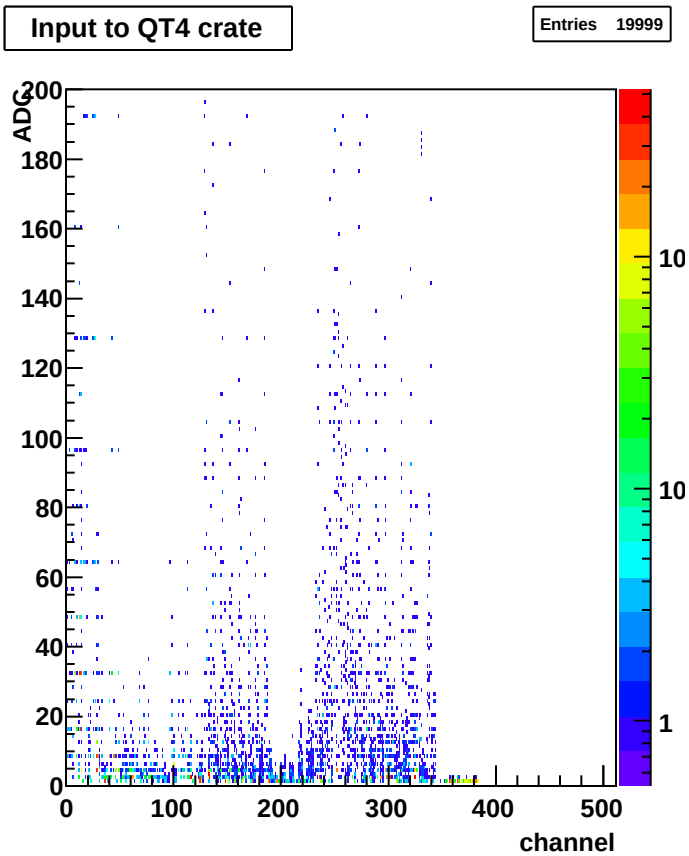

Entries 711
BBC-S TAC Diff
ZDC TAC Diff

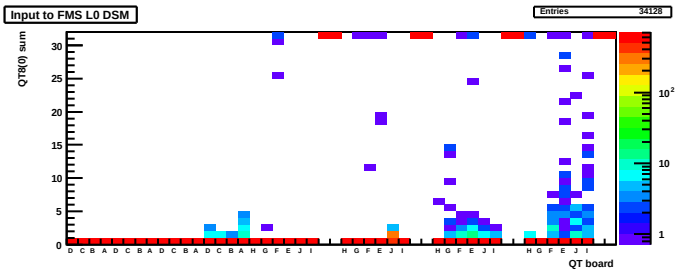

Entries 711
VPD TAC Diff
ZDC TAC Diff

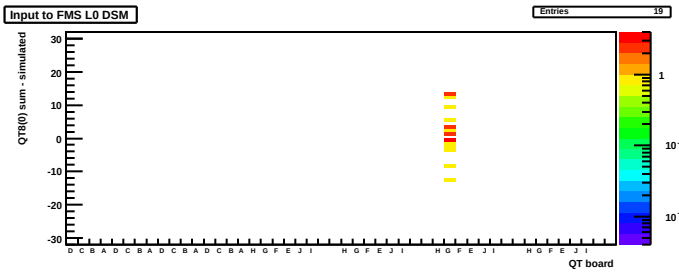

Input to QT1 crate
Entries 11179
ADC
channel

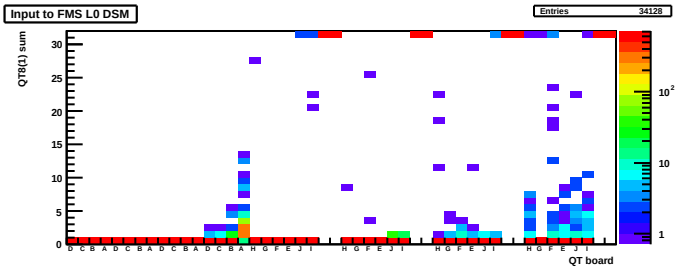

Input to QT2 crate
Entries 7657
ADC
channel

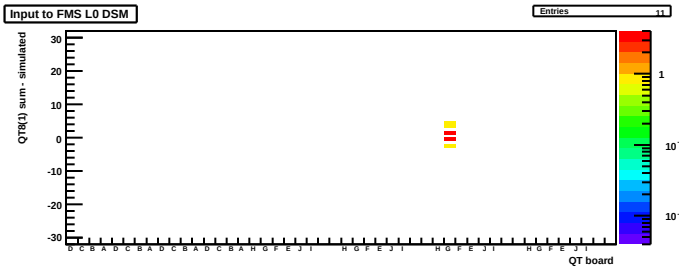

Input to QT3 crate
Entries 19214
ADC
channel

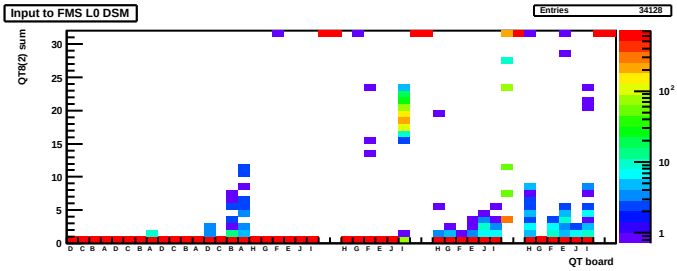

Input to QT4 crate
Entries 19999
ADC
channel

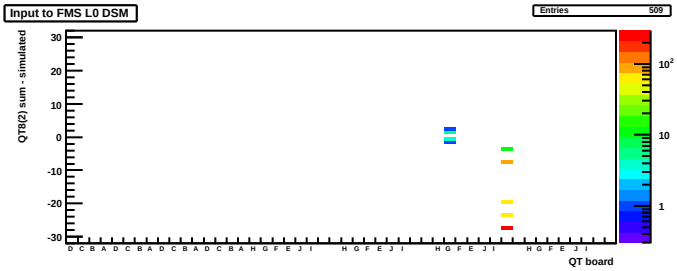

Input to FMS L0 DSM
Entries 34128
QT8(0) sum
QT board

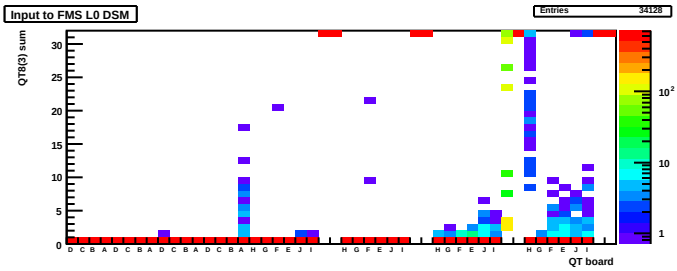

Input to FMS L0 DSM
Entries 19
QT8(0) sum - simulated
QT board

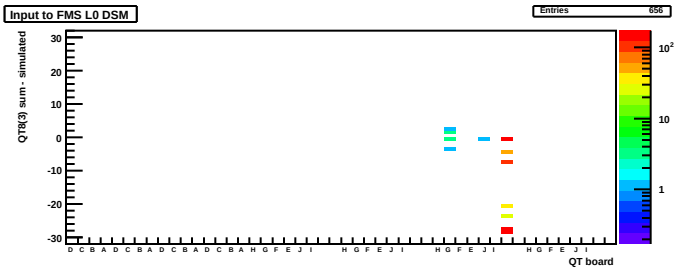

Input to FMS L0 DSM
Entries 34128
QT8(1) sum
QT board

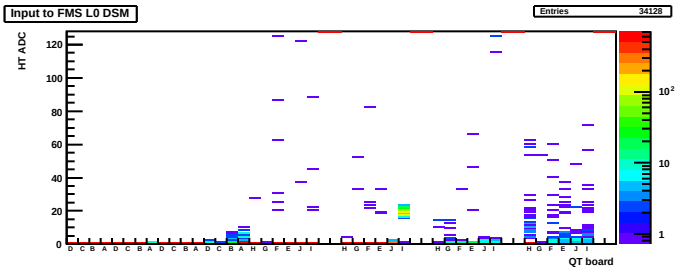

Input to FMS L0 DSM
Entries 11
QT8(1) sum - simulated
QT board

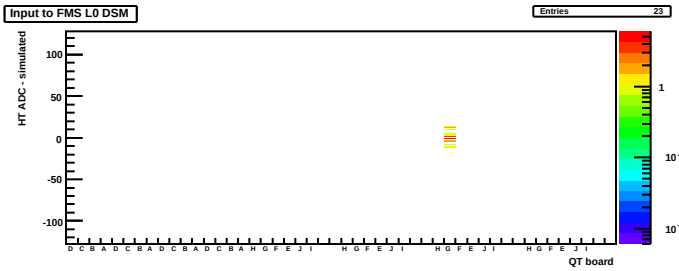

Input to FMS L0 DSM
Entries 34128
QT8(2) sum
QT board

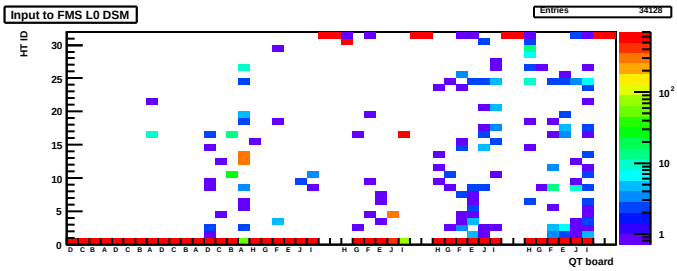

Input to FMS L0 DSM
Entries 509
QT8(2) sum - simulated
QT board

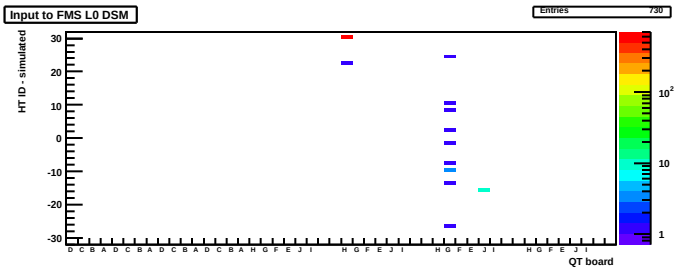

Input to FMS L0 DSM
Entries 34128
QT8(3) sum
QT board

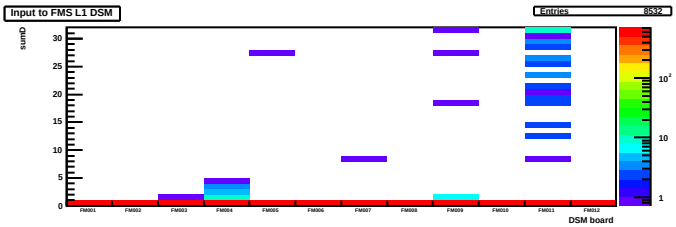

Input to FMS L0 DSM
Entries 656
QT8(3) sum - simulated
QT board

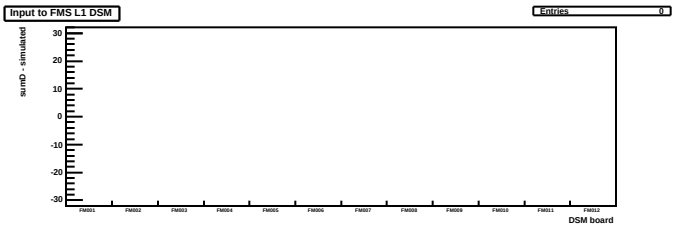

Input to FMS L0 DSM
Entries 34128
HT ADC
QT board

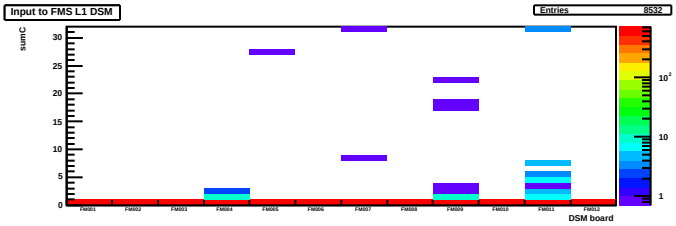

Input to FMS L0 DSM
Entries 23
HT ADC - simulated
QT board

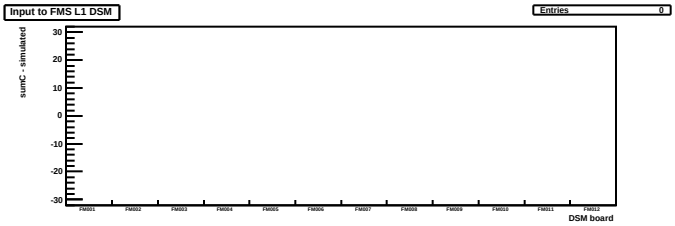

Input to FMS L0 DSM
Entries 34128
HT ID
QT board

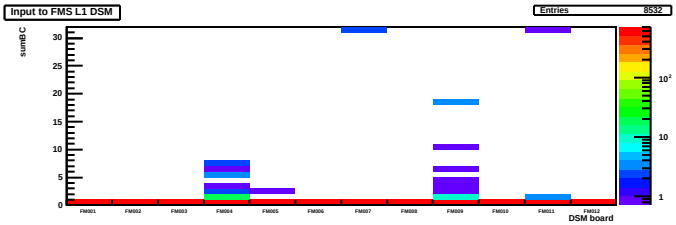

Input to FMS L0 DSM
Entries 730
HT ID - simulated
QT board

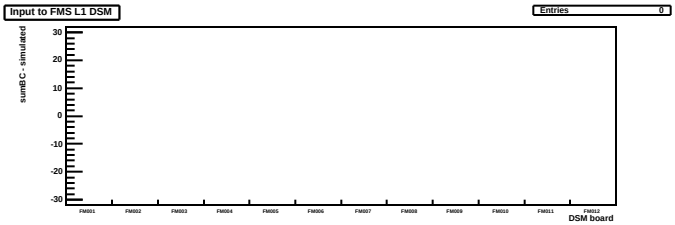

Input to FMS L1 DSM
Entries 8532
sumD
DSM board

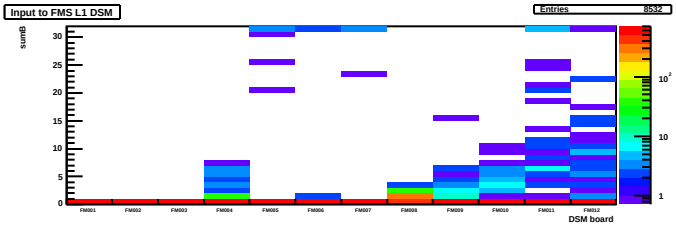

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

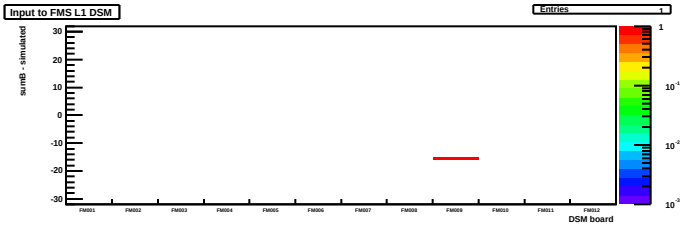

Input to FMS L1 DSM
Entries 8532
sumC
DSM board

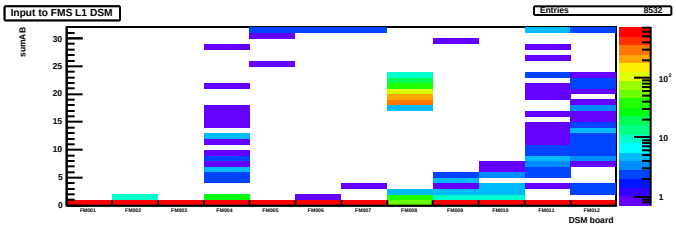

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

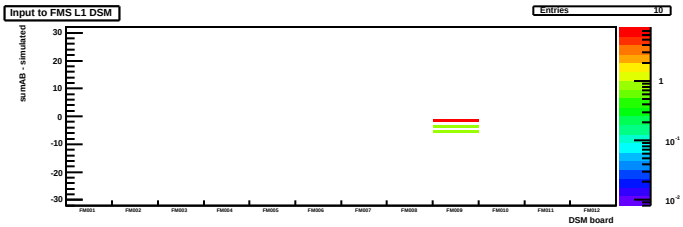

Input to FMS L1 DSM
Entries 8532
sumBC
DSM board

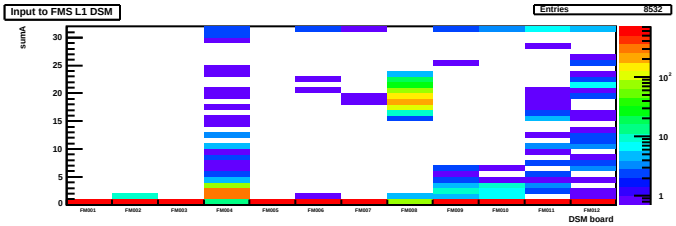

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

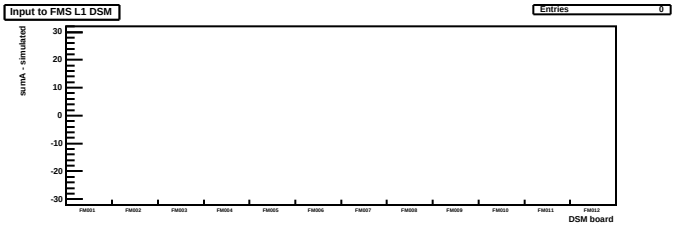

Input to FMS L1 DSM
Entries 8532
sumB
DSM board

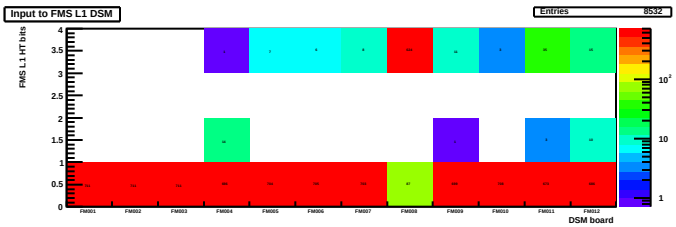

Input to FMS L1 DSM
Entries 1
sumB - simulated
DSM board

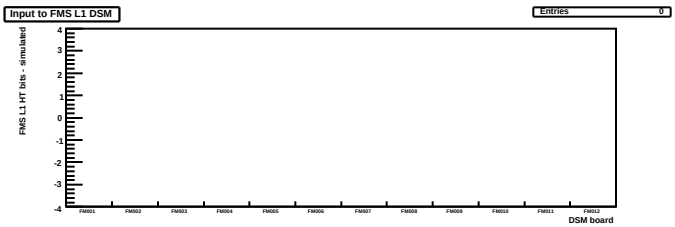

Input to FMS L1 DSM
Entries 8532
sumAB
DSM board

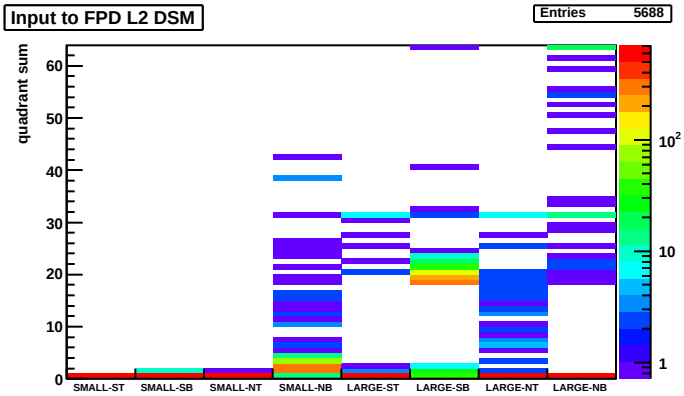

Input to FMS L1 DSM
Entries 10
sumAB - simulated
DSM board

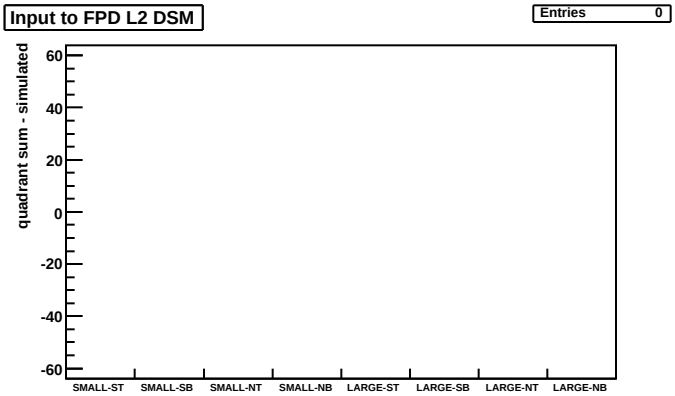

Input to FMS L1 DSM
Entries 8532
sumA
DSM board

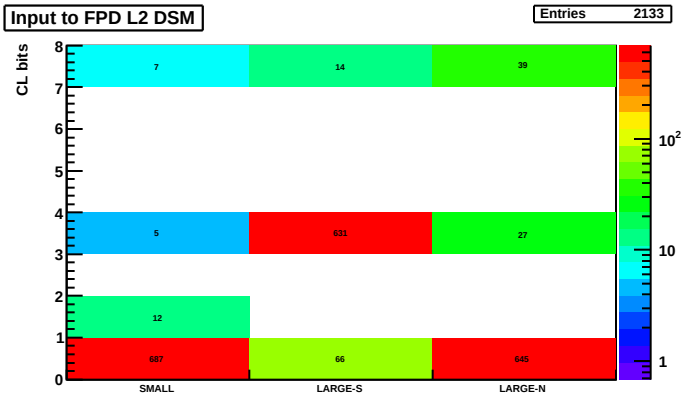

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

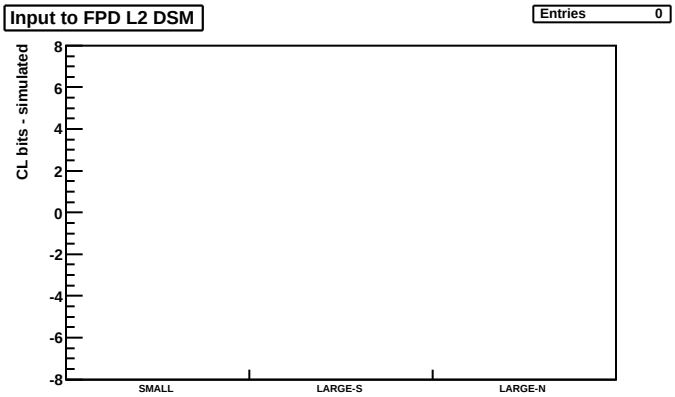

Input to FMS L1 DSM
Entries 8532
FMS L1 HT bits
DSM board

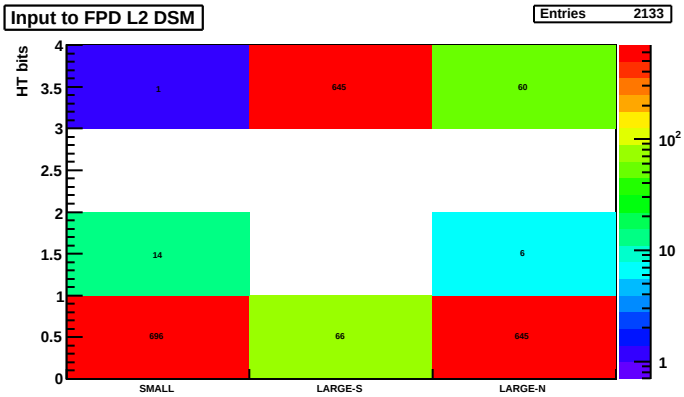

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

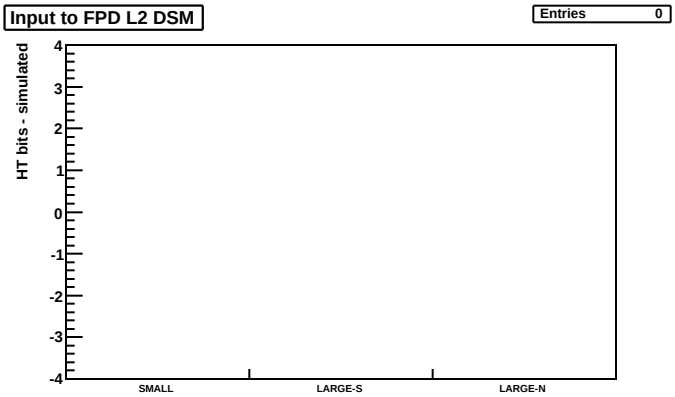

Input to FPD L2 DSM
Entries 5688
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

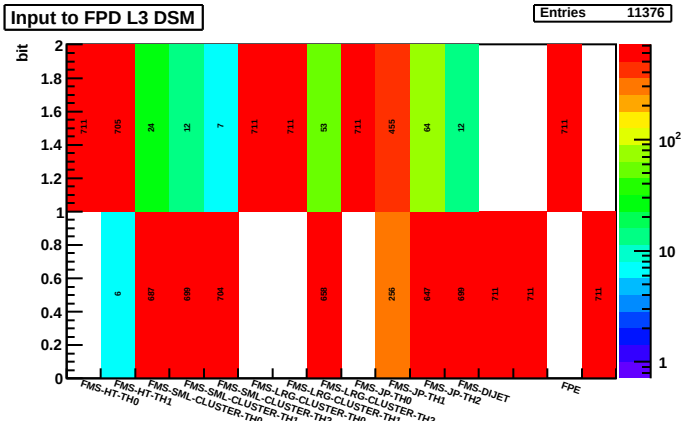

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

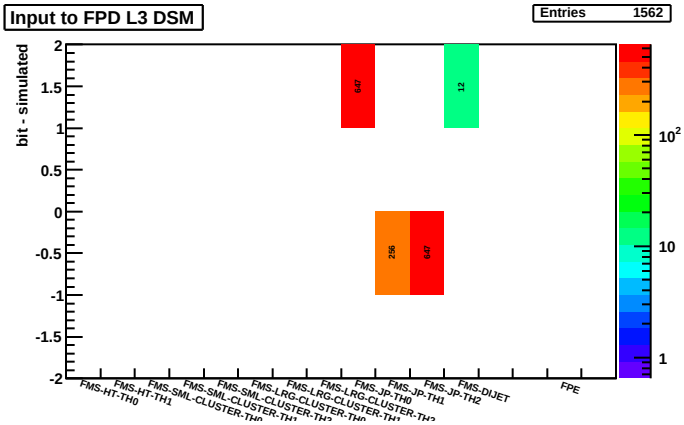

Input to FPD L2 DSM
Entries 2133
CL bits
7
14
39
5
631
27
12
687
66
645
SMALL
LARGE-S
LARGE-N

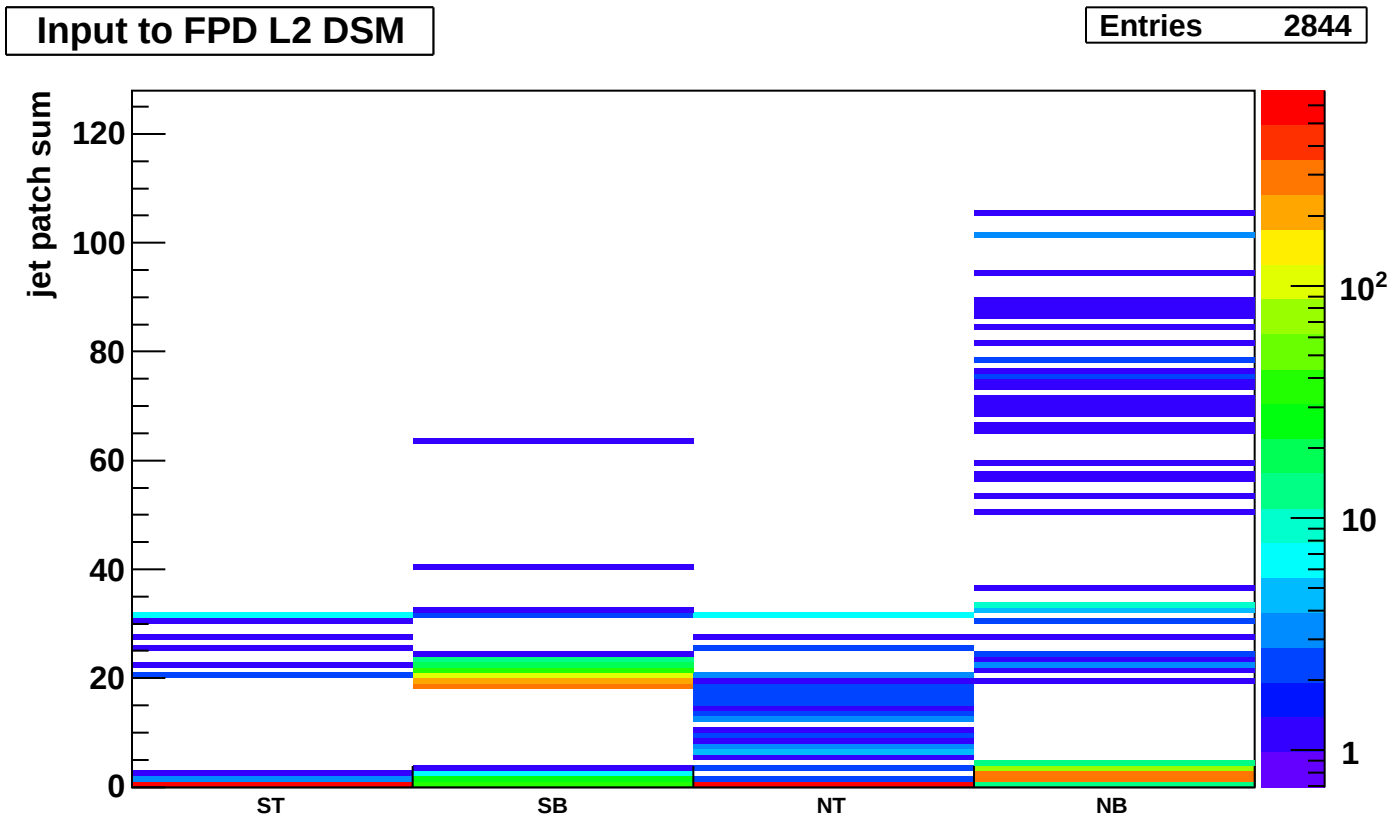

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

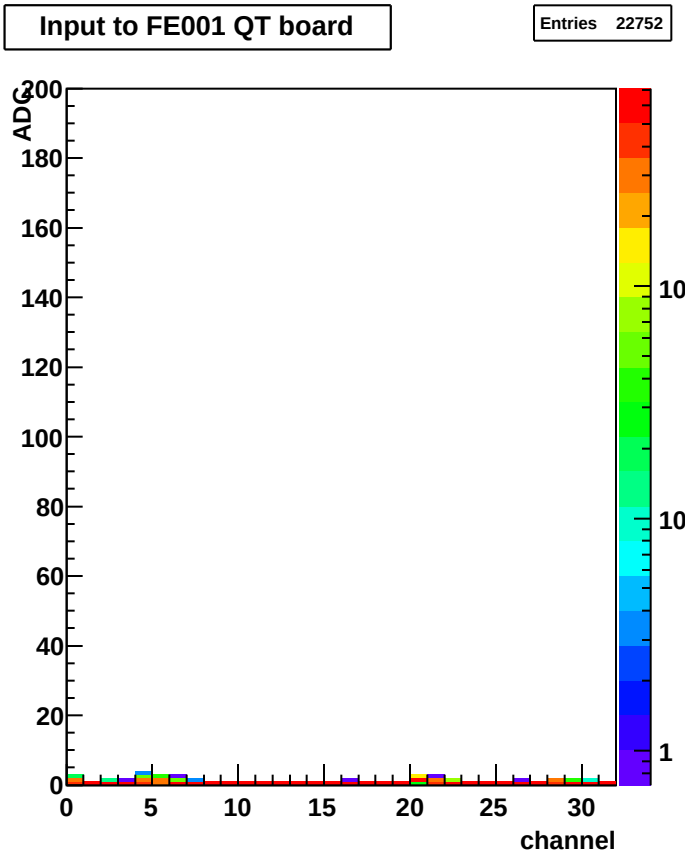

Input to FPD L2 DSM
Entries 2133
HT bits
1
645
60
14
6
696
66
645
SMALL
LARGE-S
LARGE-N

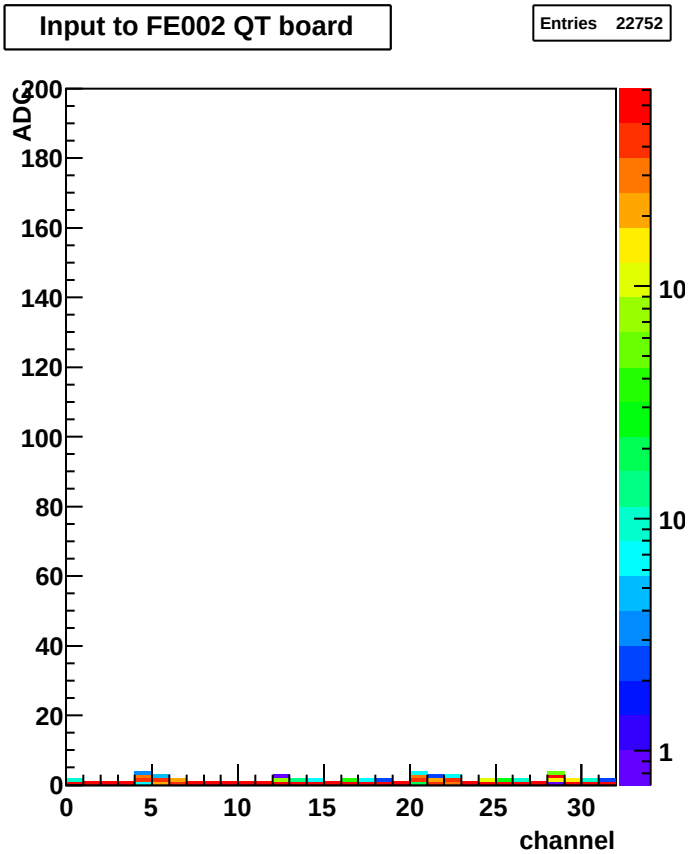

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

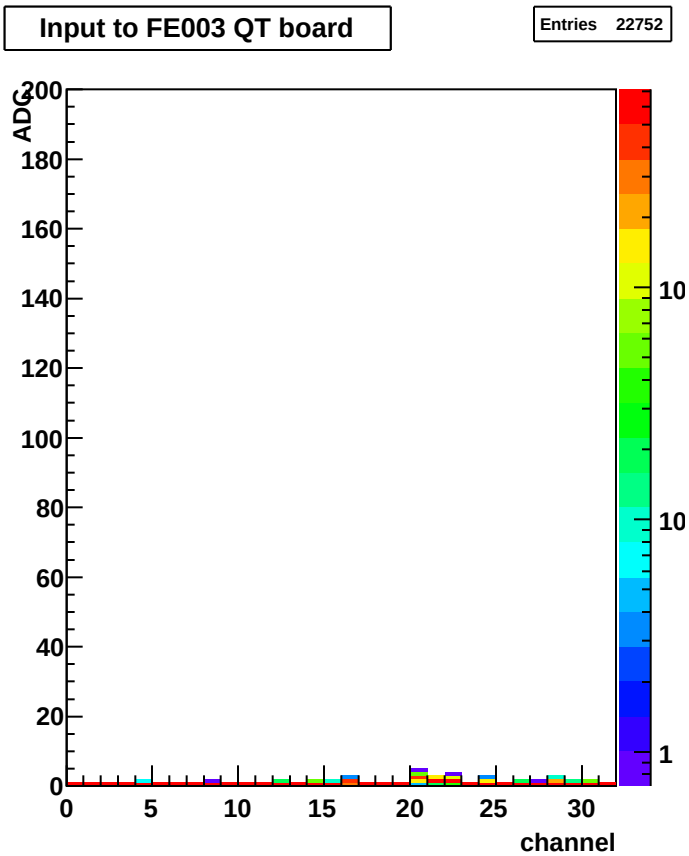

Input to FPD L3 DSM
Entries 11376
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

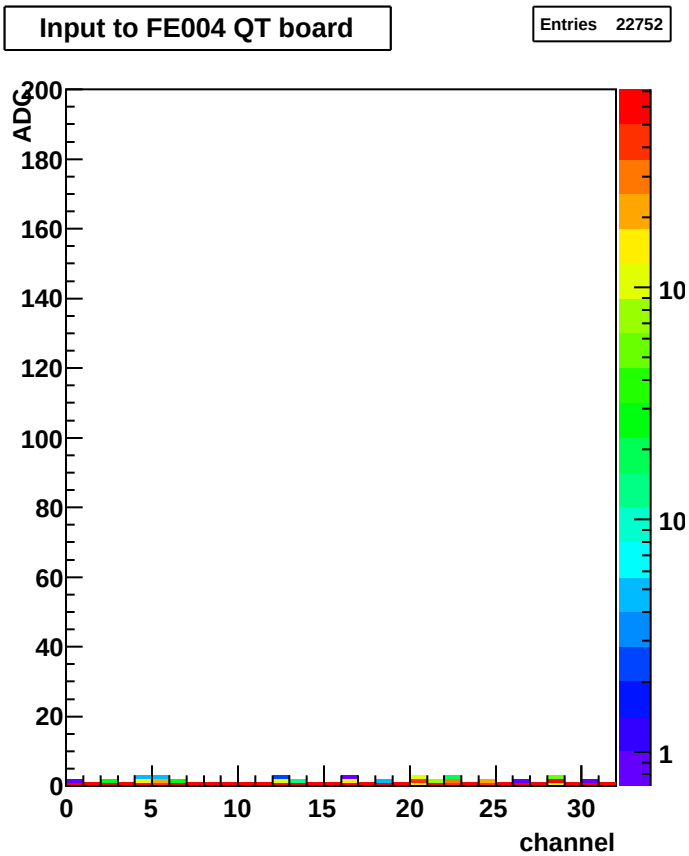

Input to FPD L3 DSM
Entries 1562
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

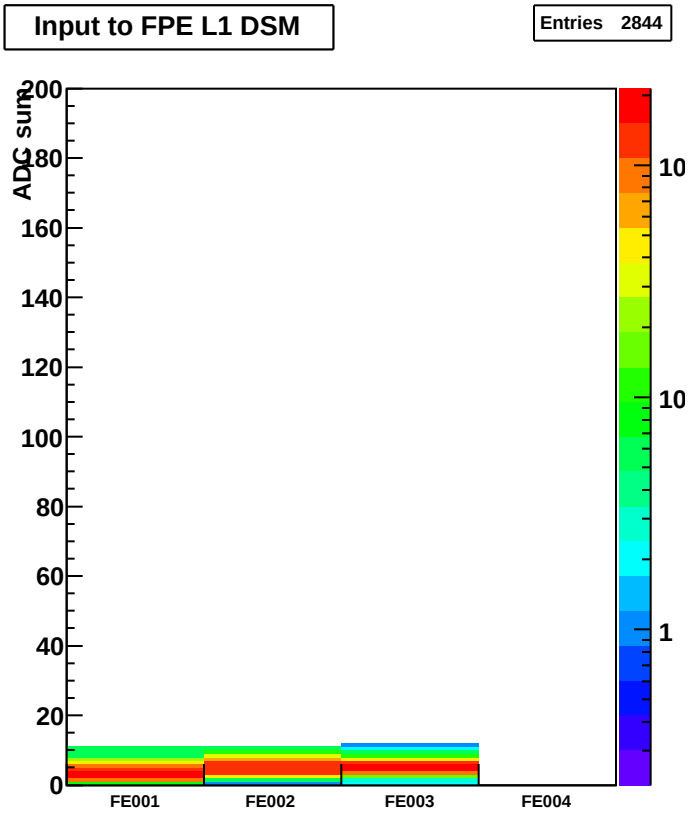

Input to FPD L2 DSM
Entries 2844
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^2
10
1

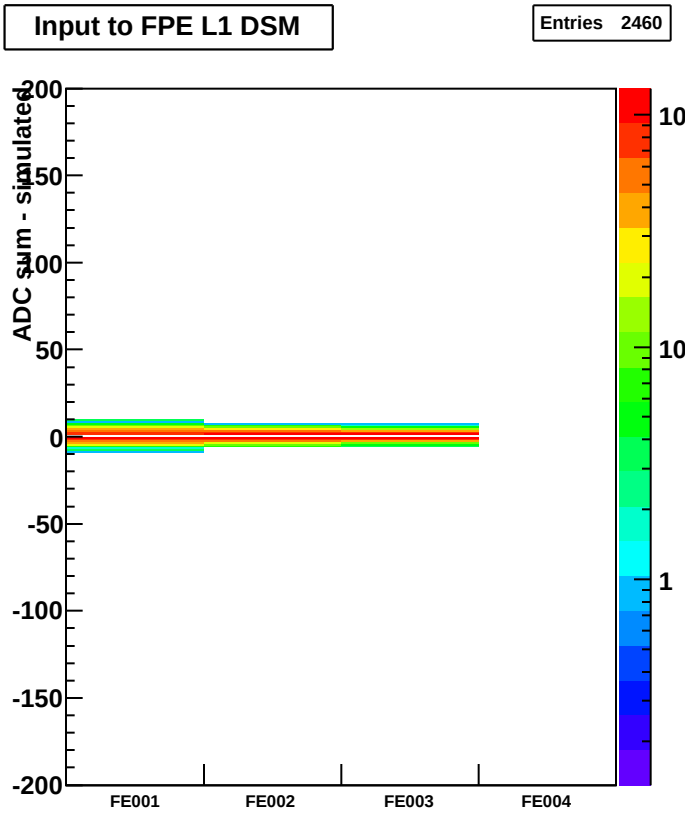

Input to FE001 QT board
Entries 22752
ADC
channel

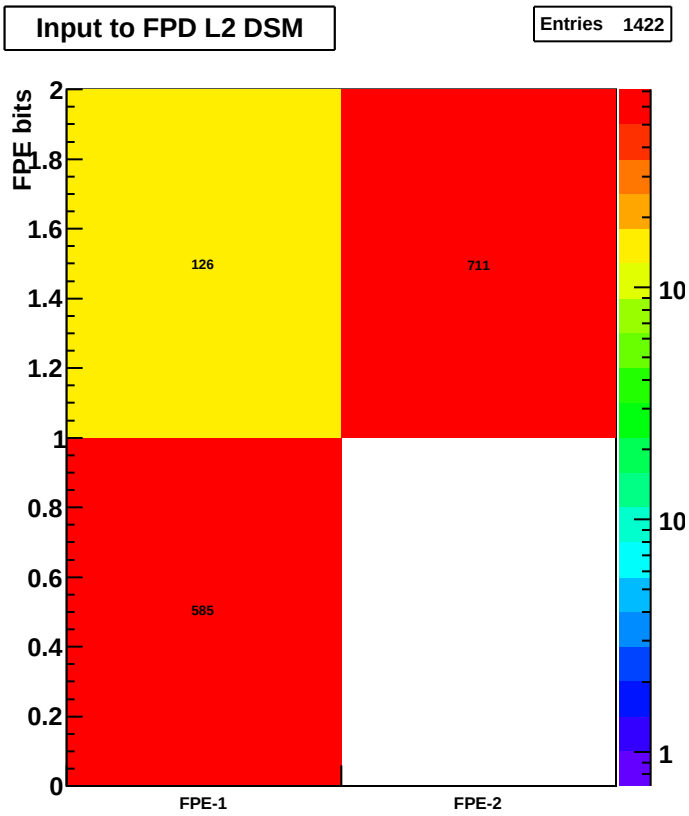

Input to FE002 QT board
Entries 22752
ADC
channel

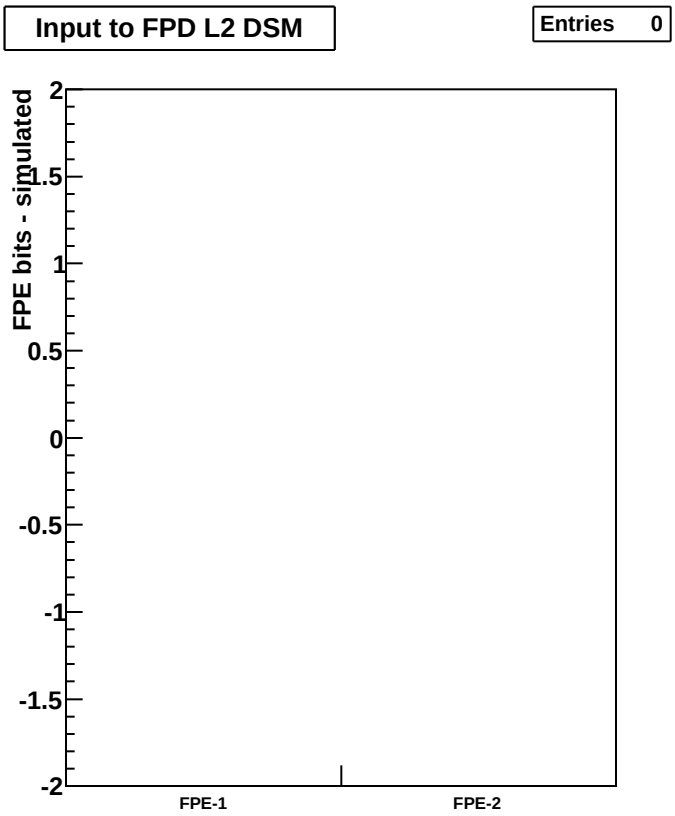

Input to FE003 QT board
Entries 22752
ADC
channel


Input to FE004 QT board
Entries 22752
ADC
channel


Input to FPE L1 DSM
Entries 2844
ADC sum
200
180
160
140
120
100
80
60
40
20
0
FE001
FE002
FE003
FE004
10
10
1


Input to FPE L1 DSM
Entries 2460
ADC sum - simulated
200
150
100
50
0
-50
-100
-150
-200
FE001
FE002
FE003
FE004
10
10
1


Input to FPD L2 DSM
Entries 1422
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
126
711
585
FPE-1
FPE-2
10
10
1


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