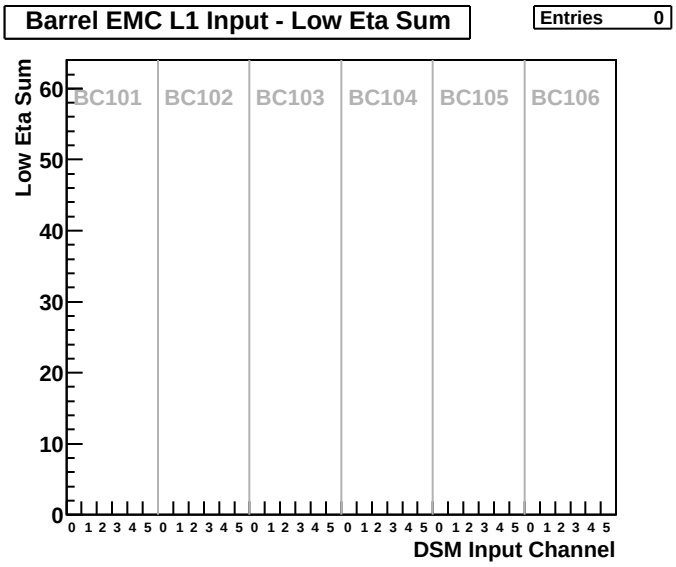
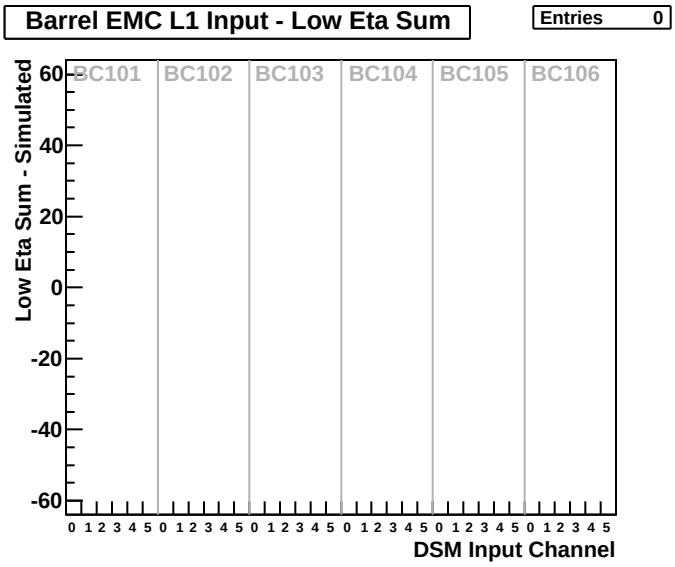
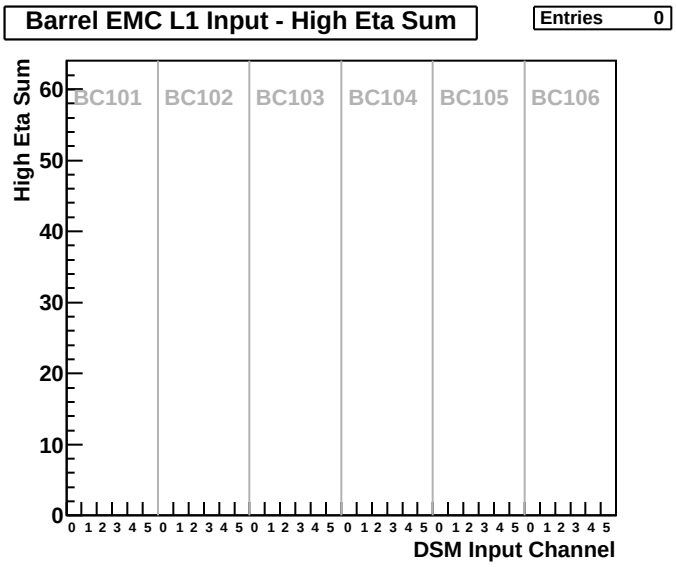
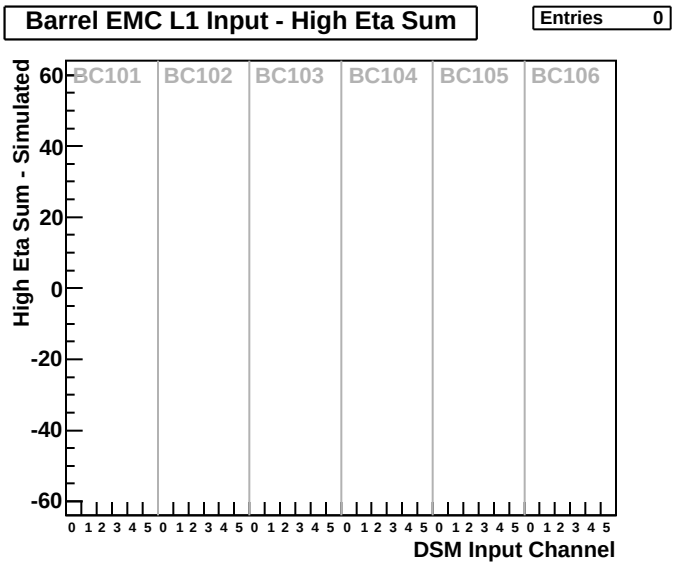
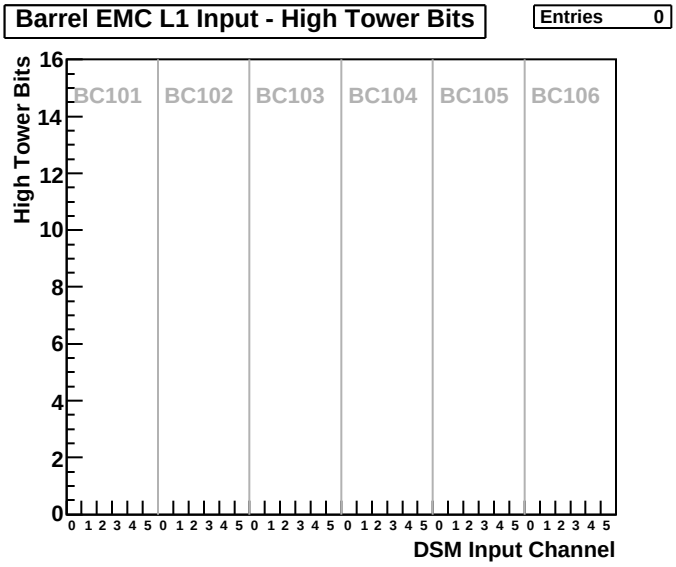
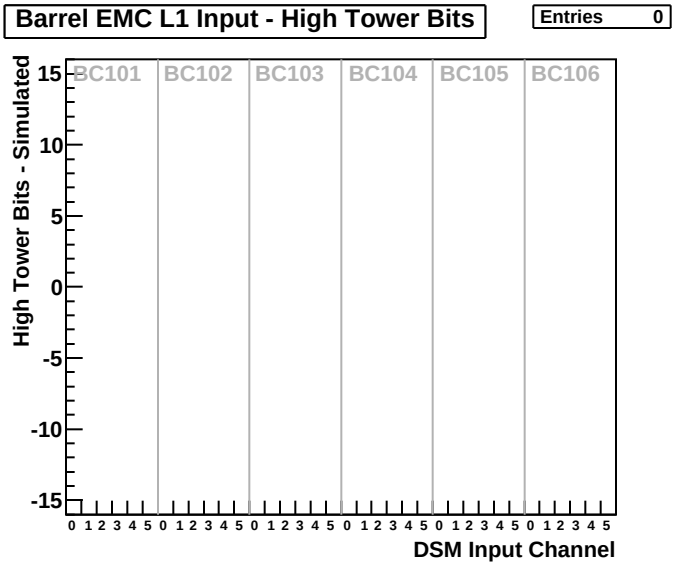

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

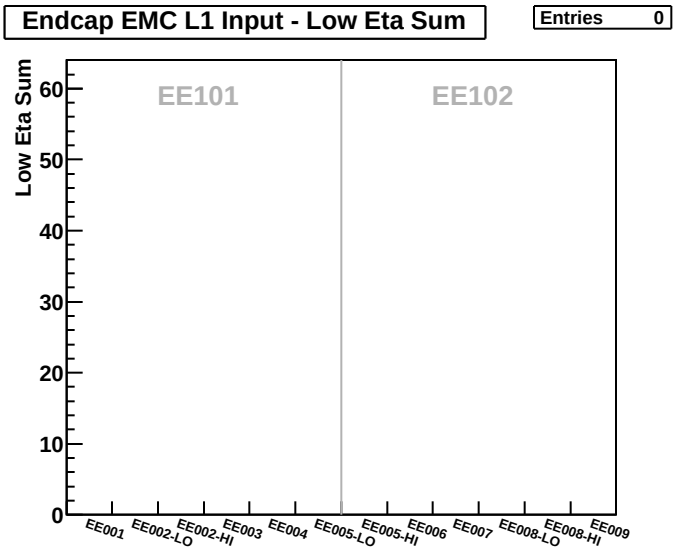

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

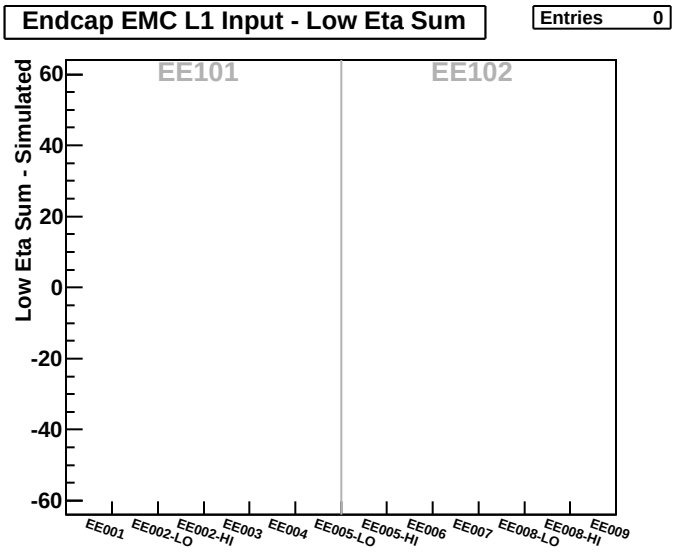

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

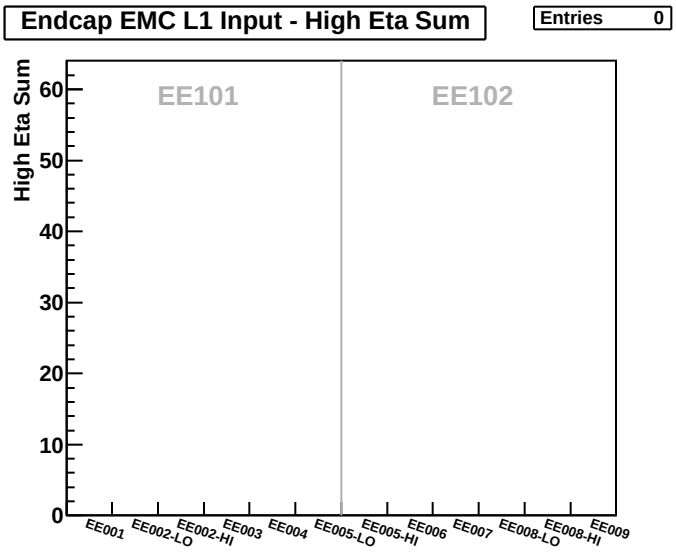

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

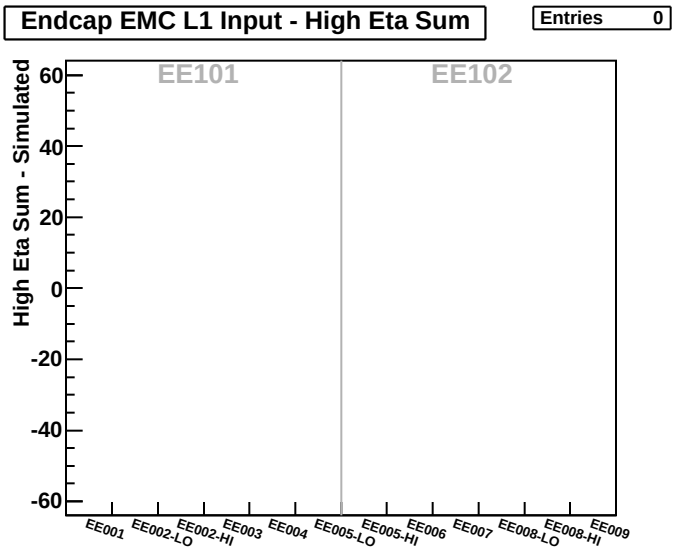

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

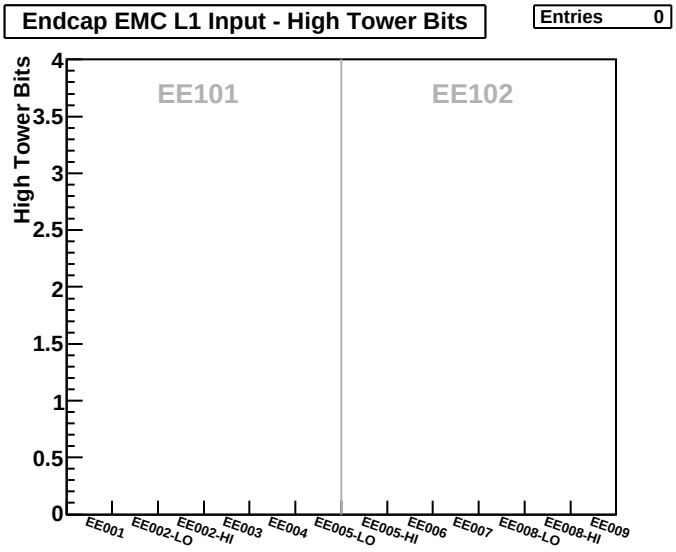

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

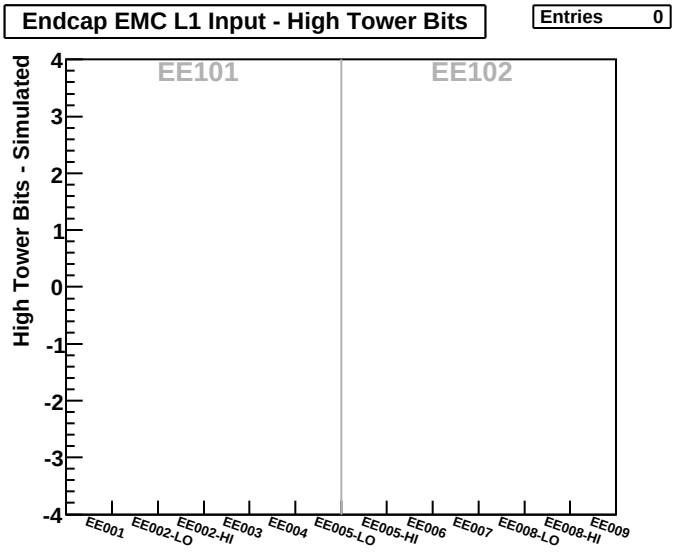

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
EE101
EE102
0
10
20
30
40
50
60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

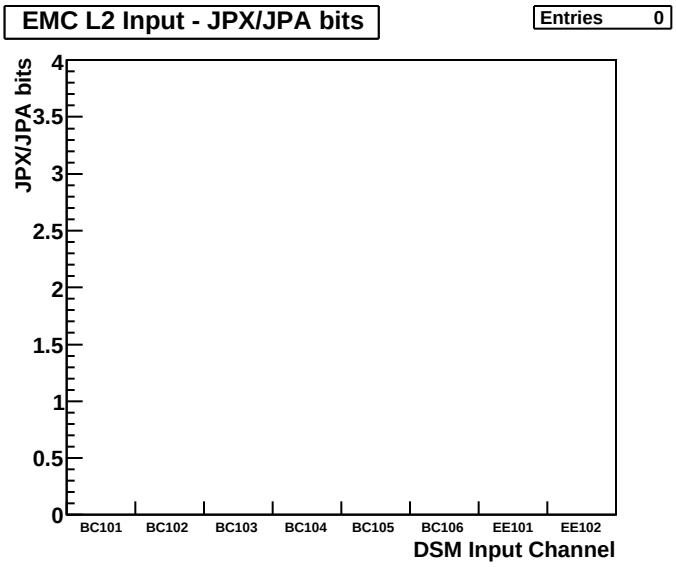

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
60
40
20
0
-20
-40
-60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

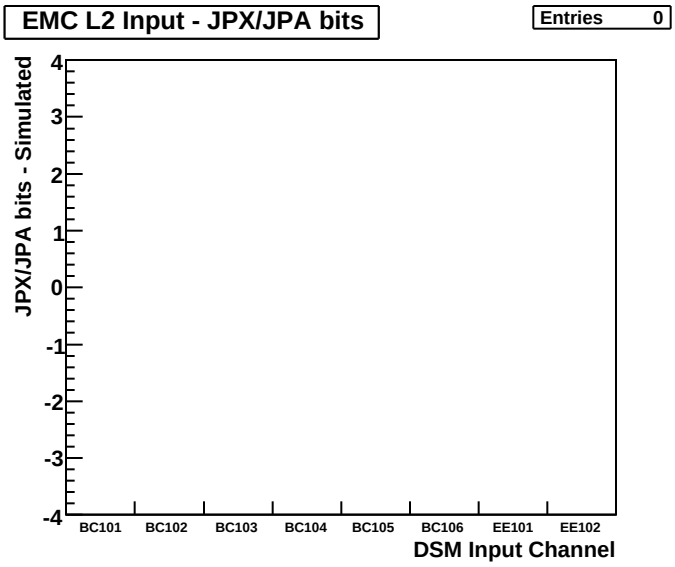

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
EE101
EE102
0
10
20
30
40
50
60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

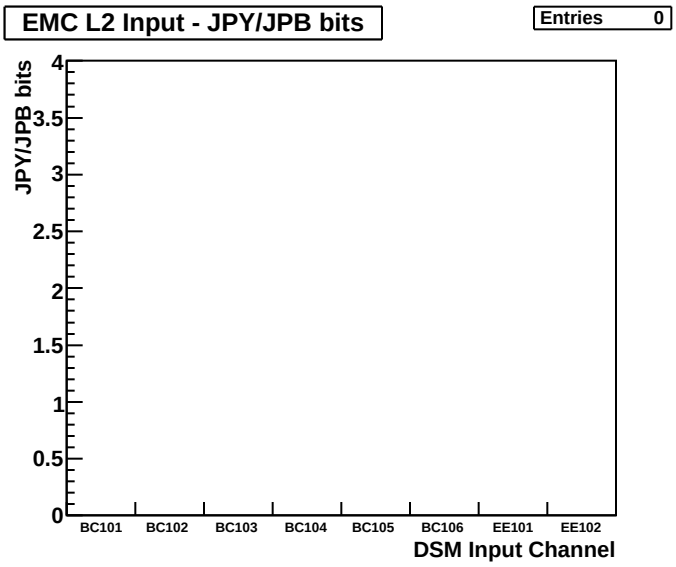

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
60
40
20
0
-20
-40
-60
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

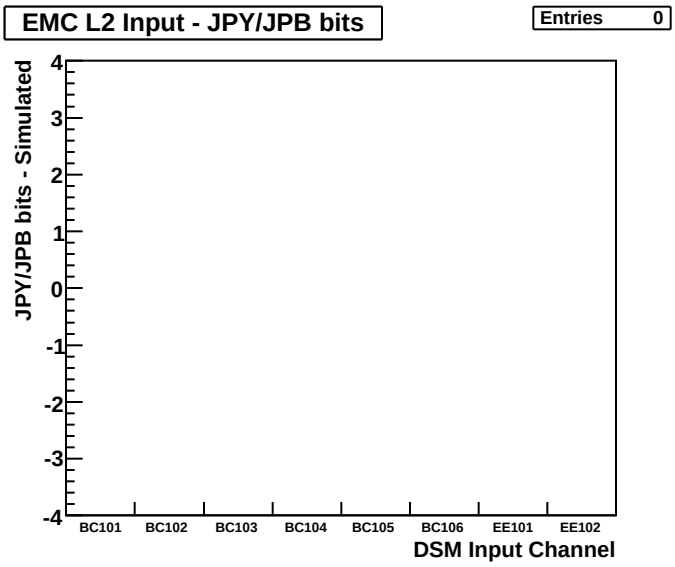

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
EE101
EE102
0
0.5
1
1.5
2
2.5
3
3.5
4
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

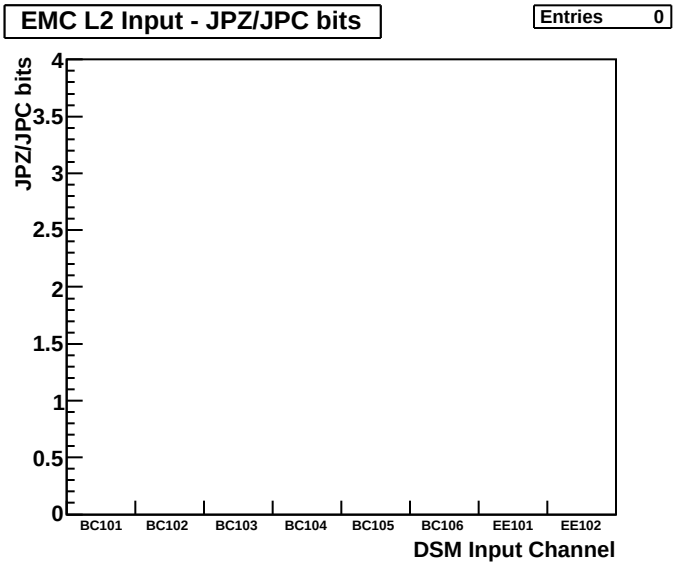

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
4
3
2
1
0
-1
-2
-3
-4
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

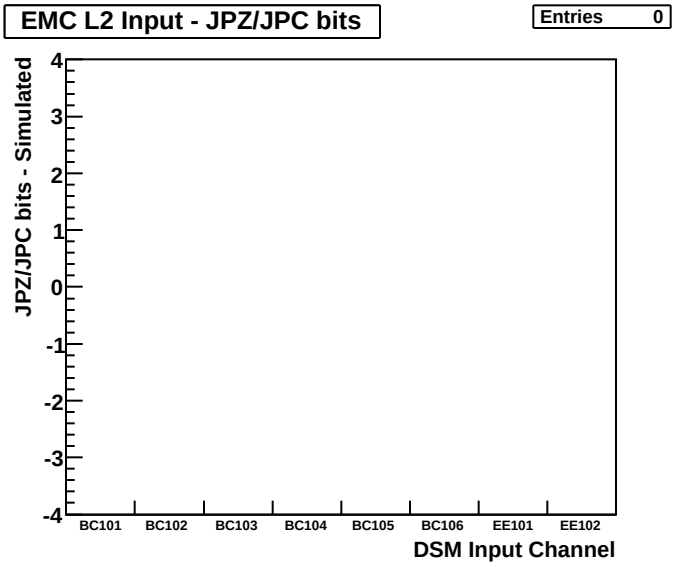

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

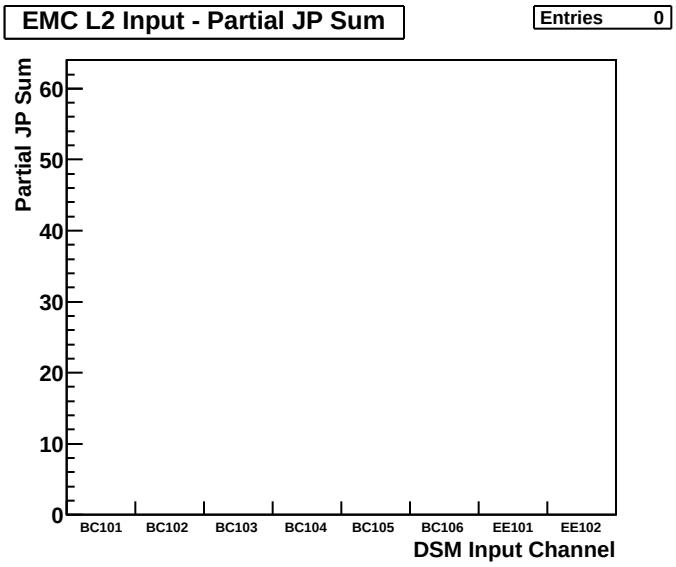

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

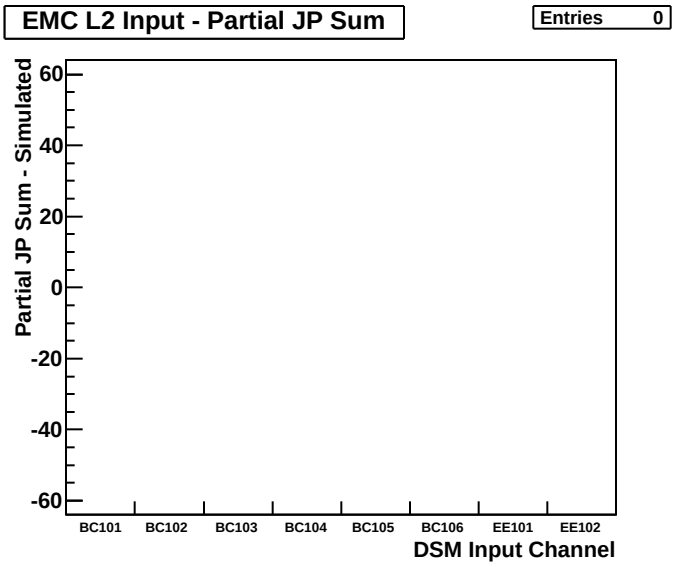

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

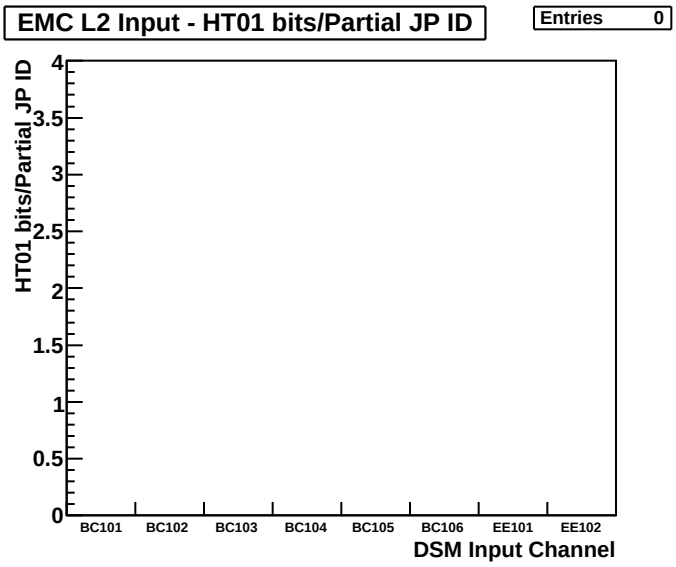

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

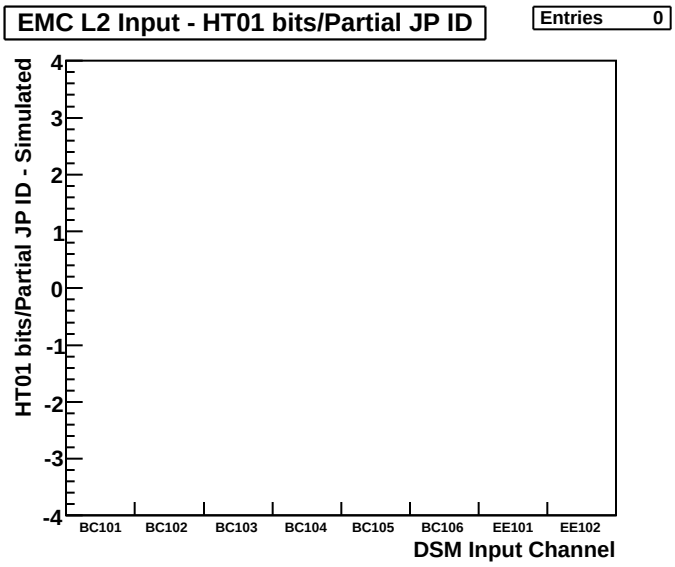

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

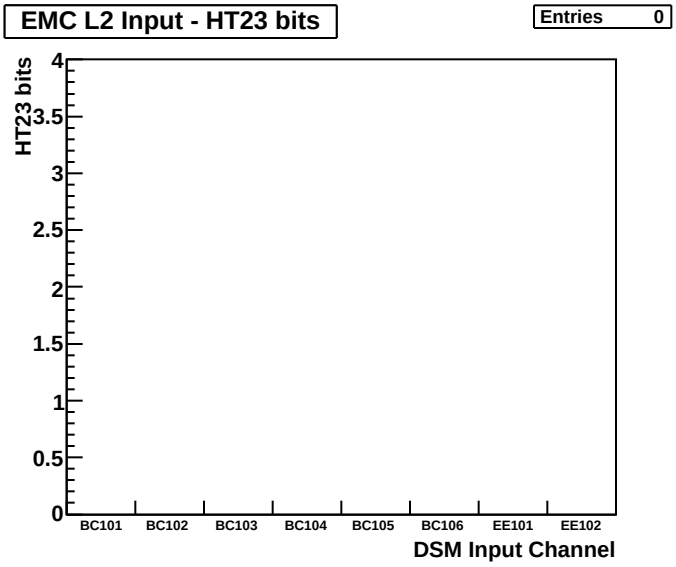

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

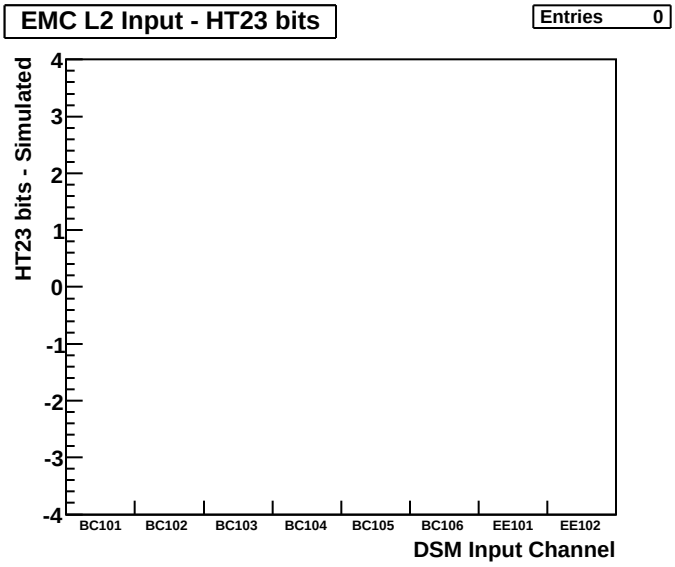

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum
60
50
40
30
20
10
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

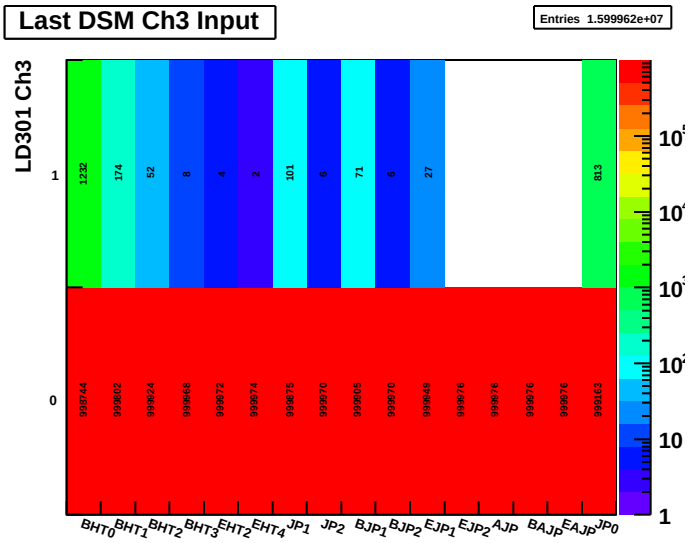

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
60
40
20
0
-20
-40
-60
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

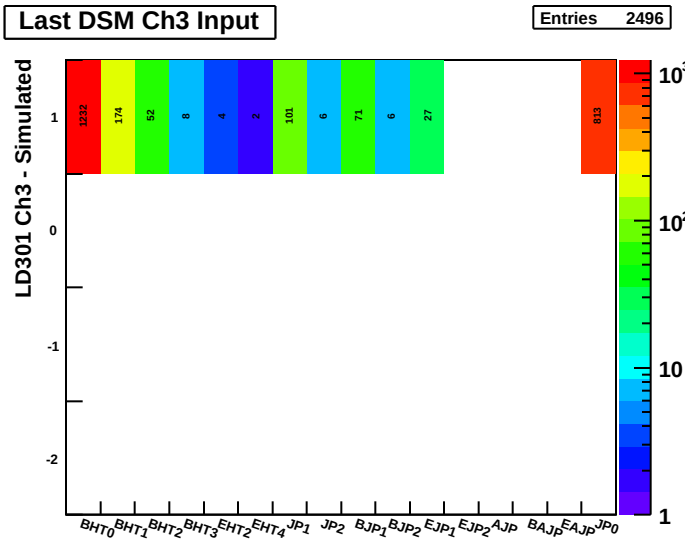

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

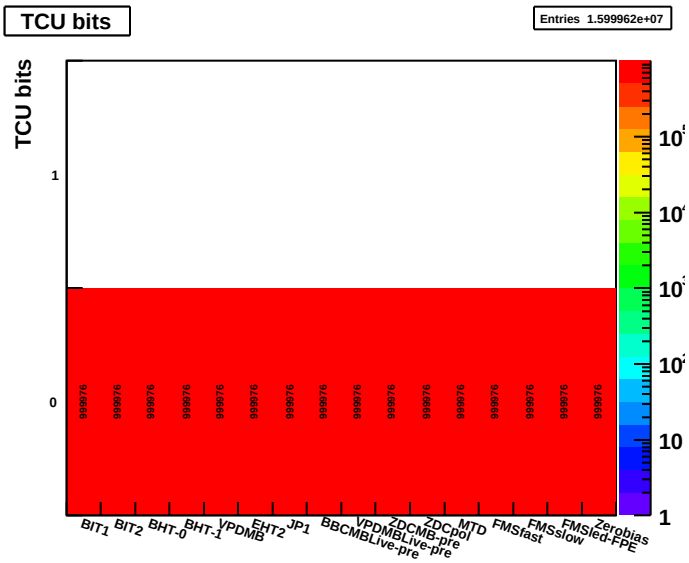

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

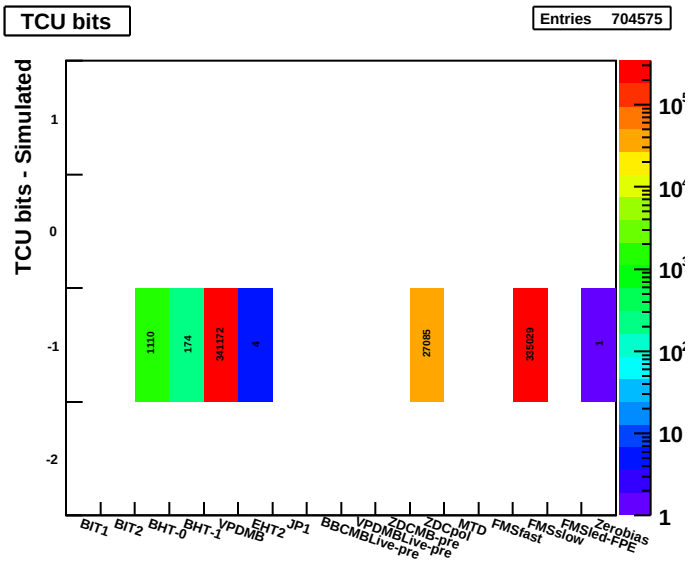

EMC L2 Input - HT23 bits
Entries 0
HT23 bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

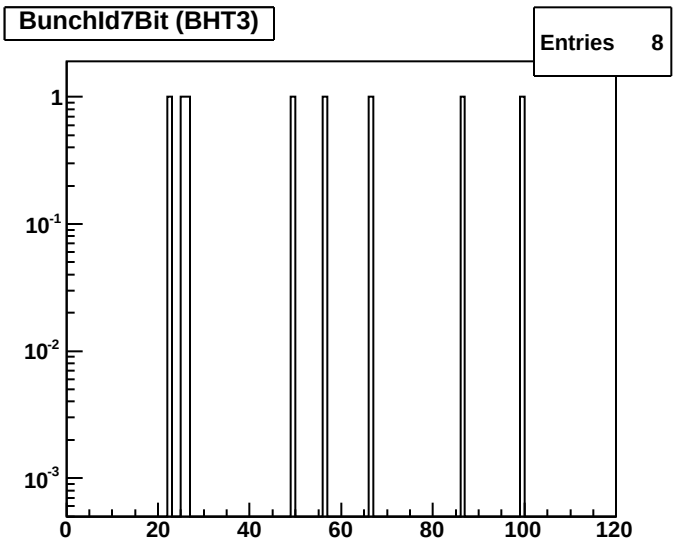

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

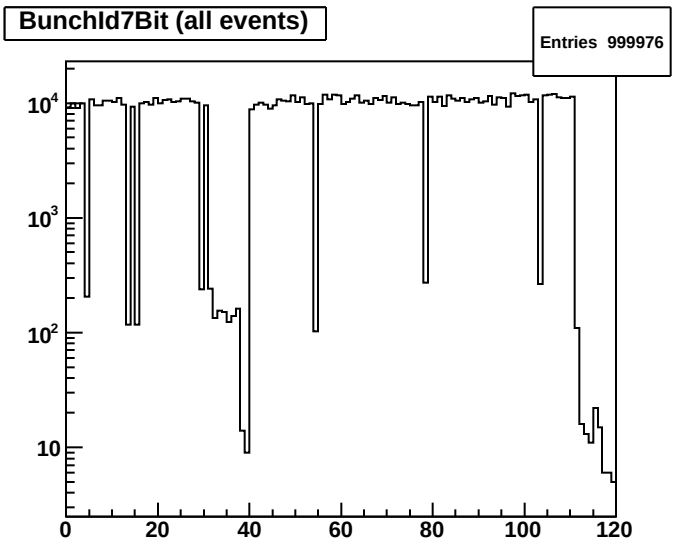

Last DSM Ch3 Input
Entries 1.599962e+07
LD301 Ch3
1232 174 52 8 4 2 101 6 71 6 27 813
998744 999802 999924 999968 999972 999974 999975 999970 999905 999970 999949 999976 999976 999976 999976 999163
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

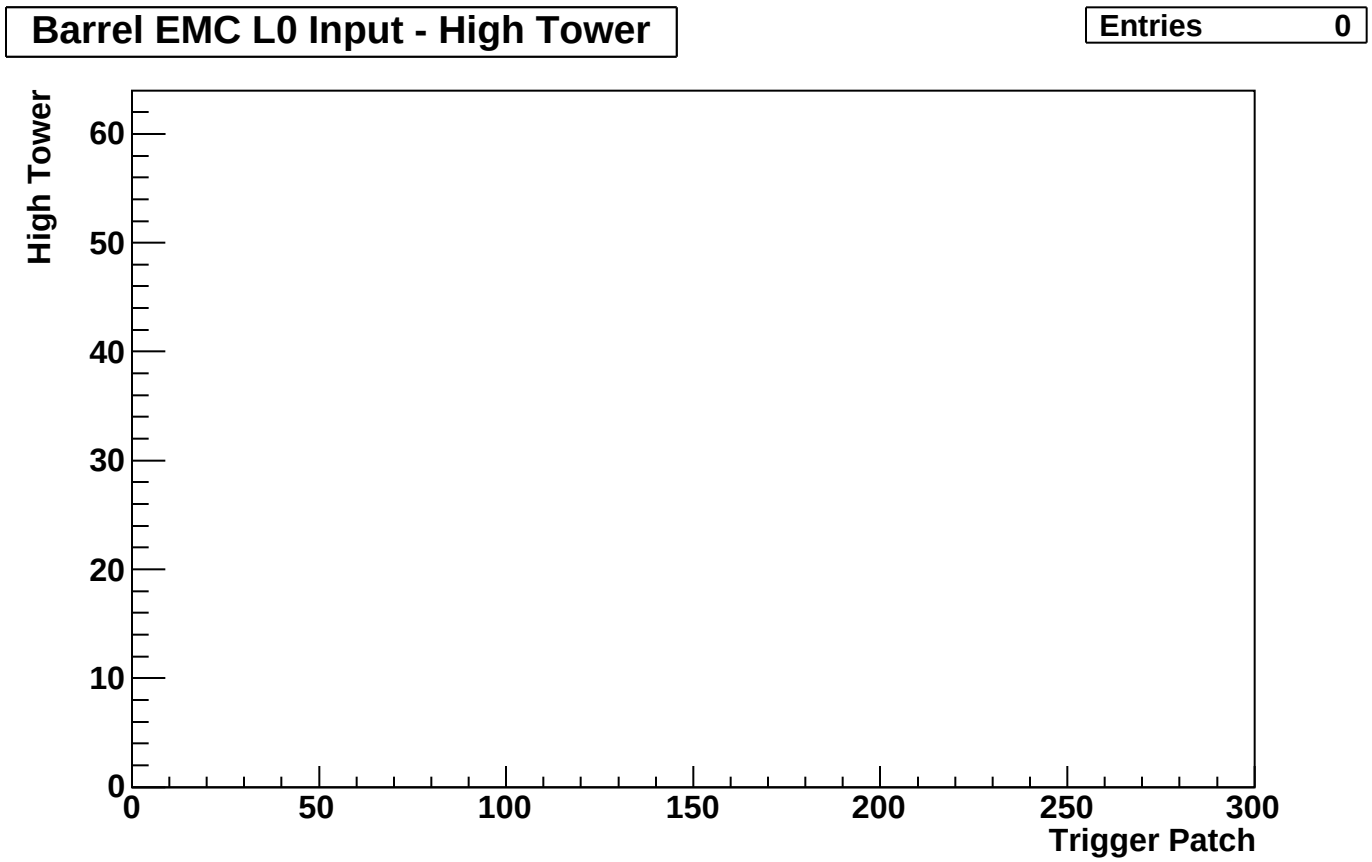

Last DSM Ch3 Input
Entries 2496
LD301 Ch3 - Simulated
1232 174 52 8 4 2 101 6 71 6 27 813
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

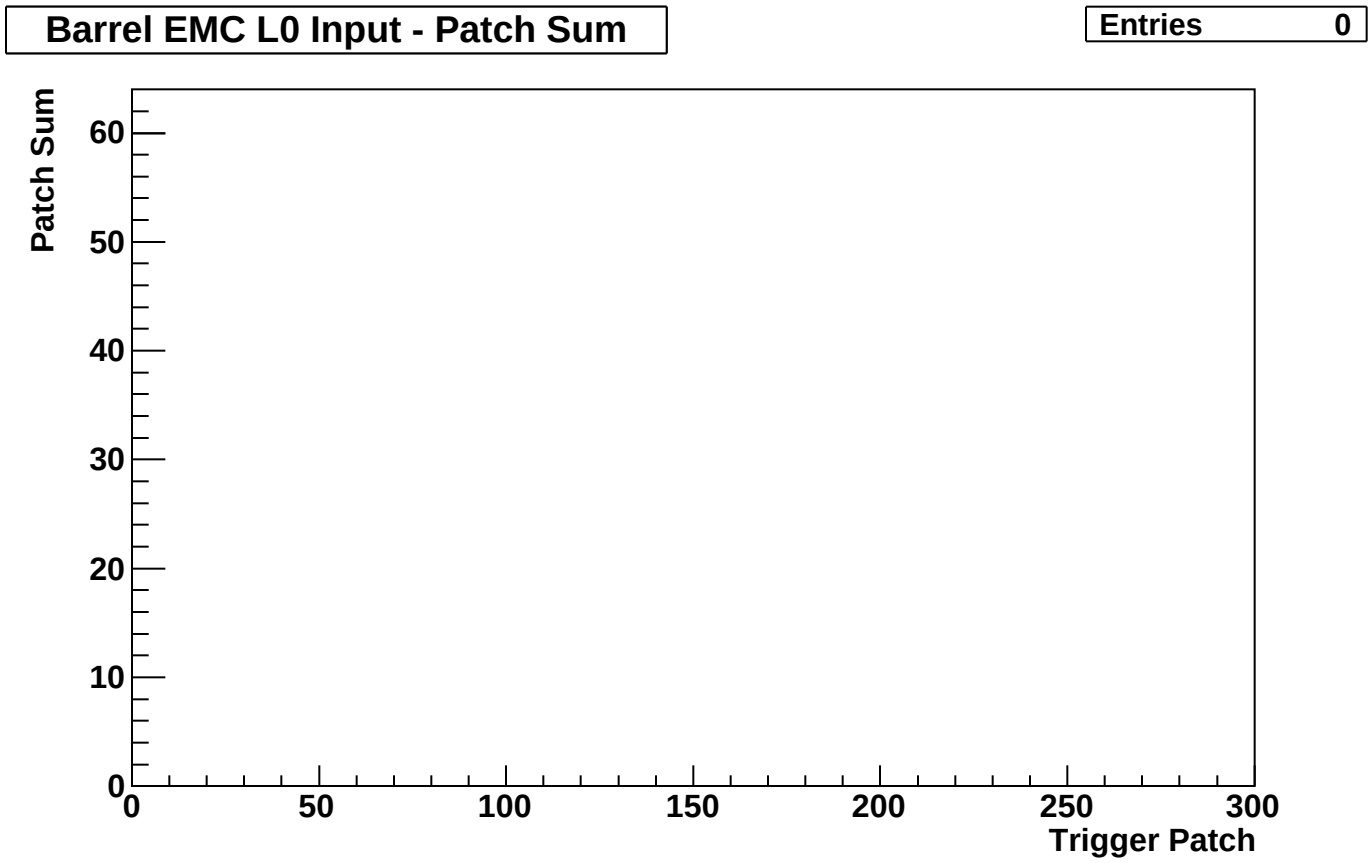

TCU bits
Entries 1.599962e+07
TCU bits
999976 999976 999976 999976 999976 999976 999976 999976 999976 999976 999976 999976 999976 999976 999976 999976
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

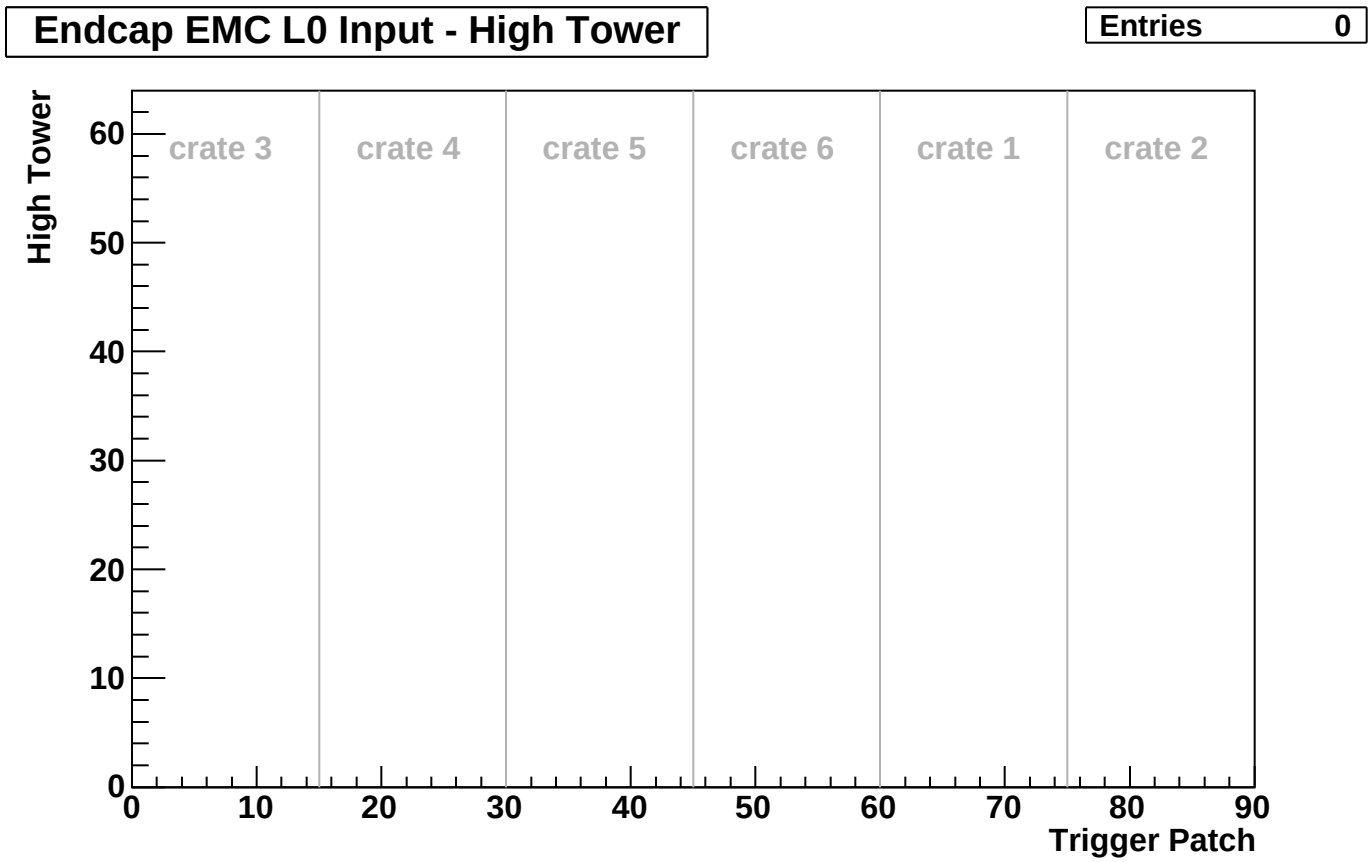

TCU bits
Entries 704575
TCU bits - Simulated
1110 174 341172 4 27085 335029 1
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

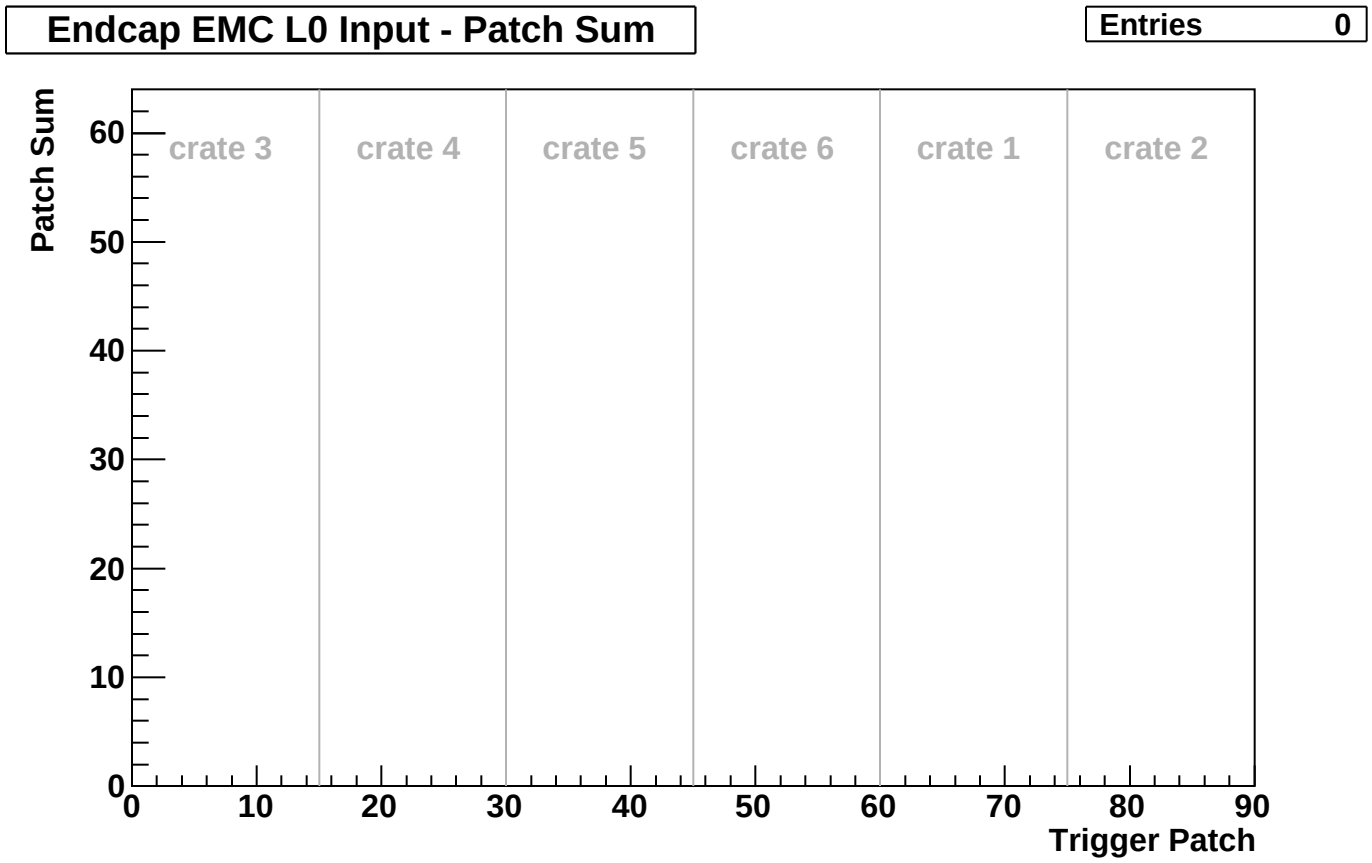

BunchId7Bit (BHT3)
Entries 8

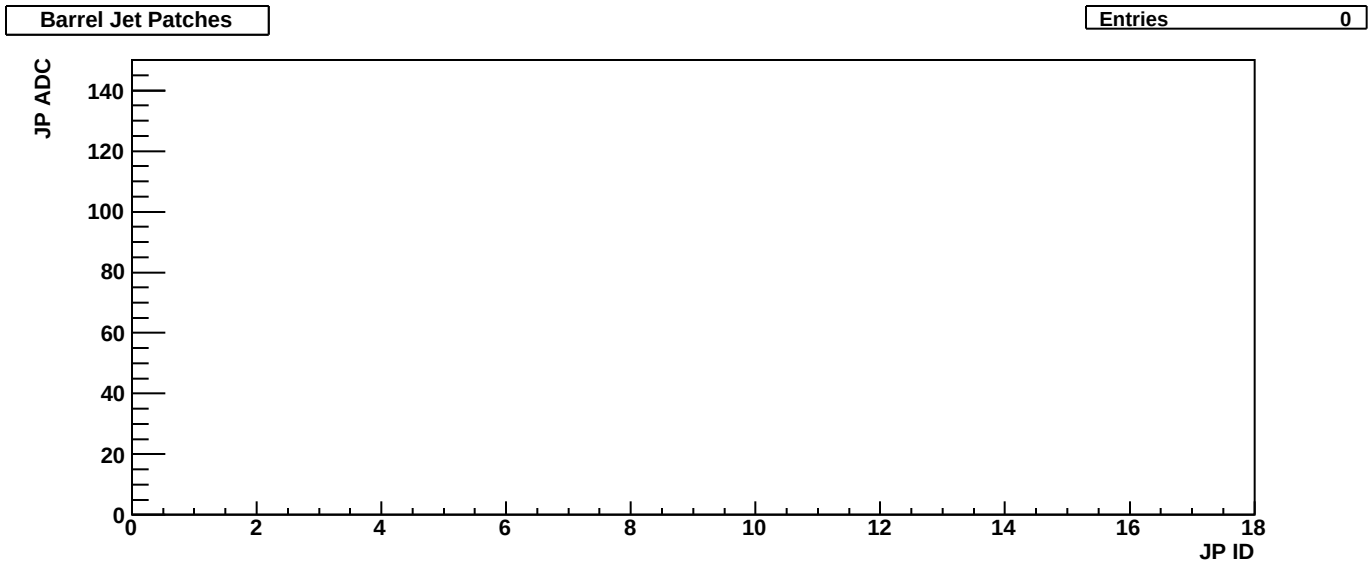

BunchId7Bit (all events)
Entries 999976

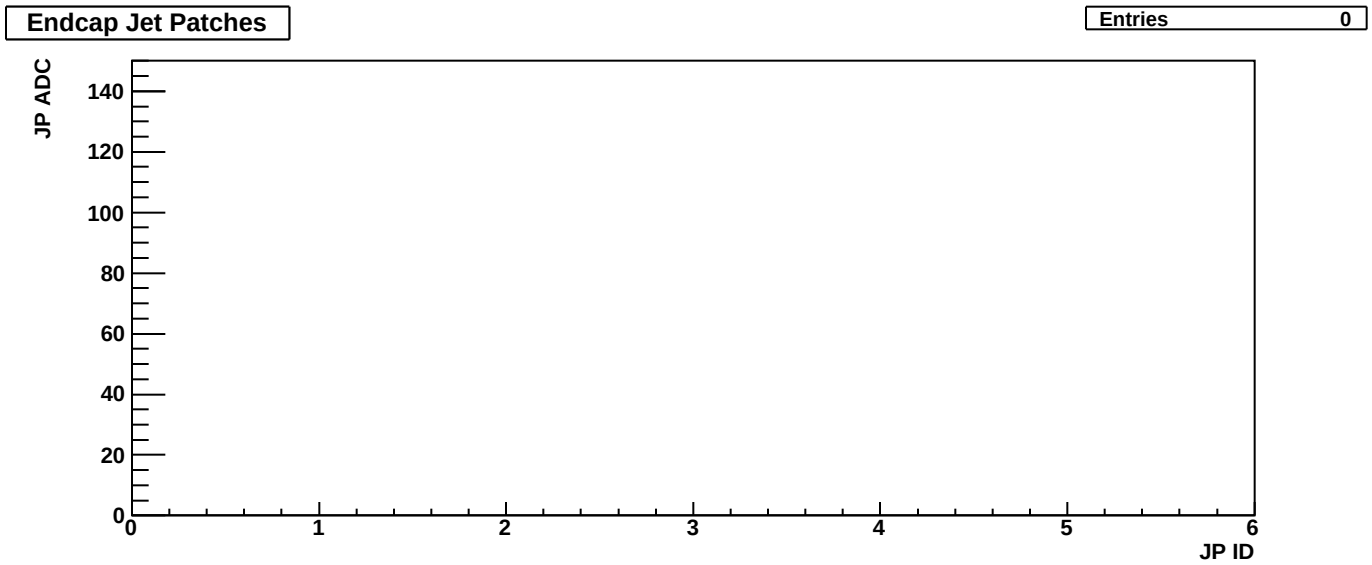

Barrel EMC L0 Input - High Tower
Entries 0
High Tower
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

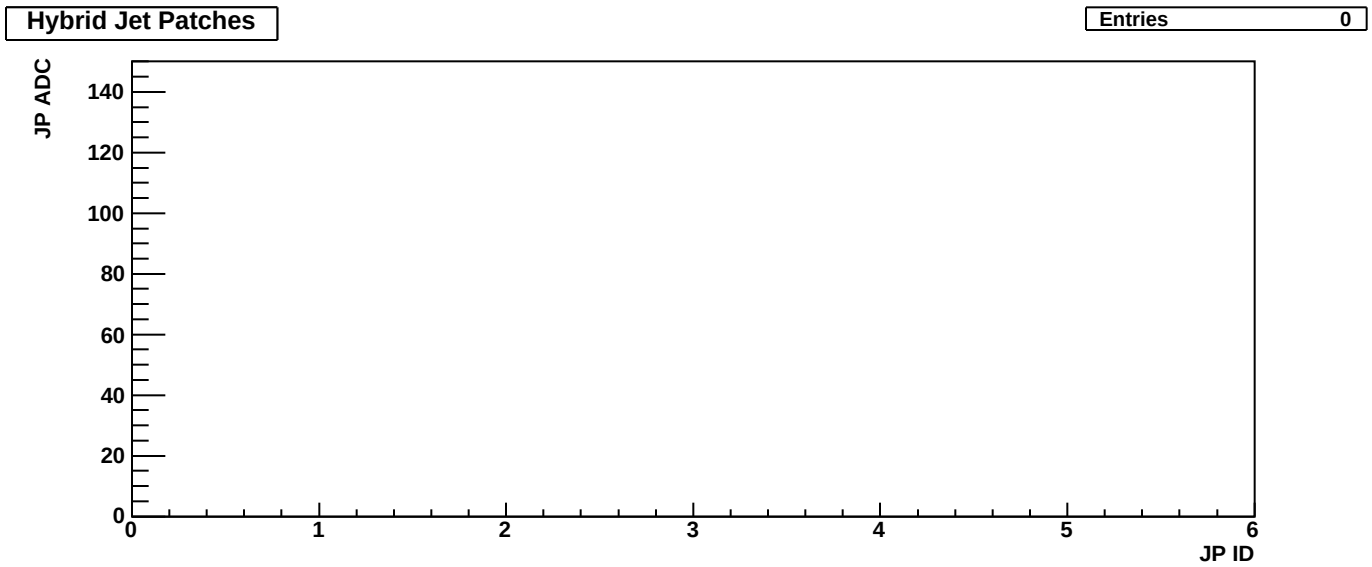

Barrel EMC L0 Input - Patch Sum
Entries 0
Patch Sum
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

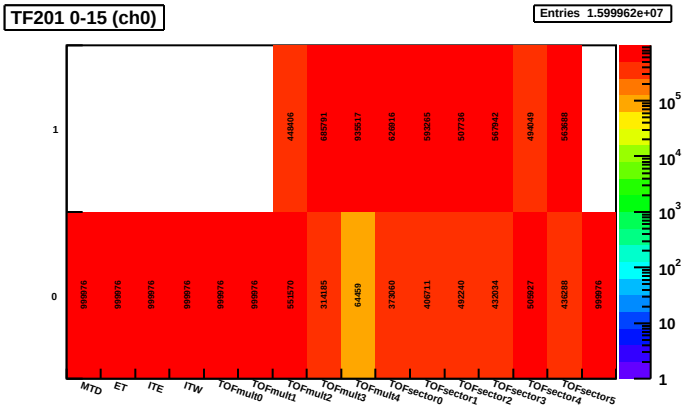

Endcap EMC L0 Input - High Tower
Entries 0
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

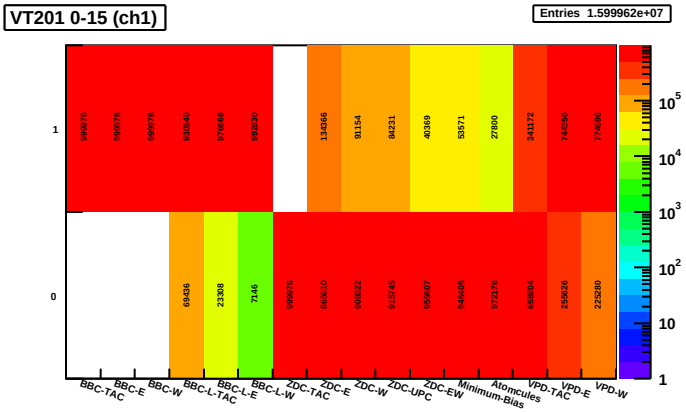

Endcap EMC L0 Input - Patch Sum
Entries 0
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

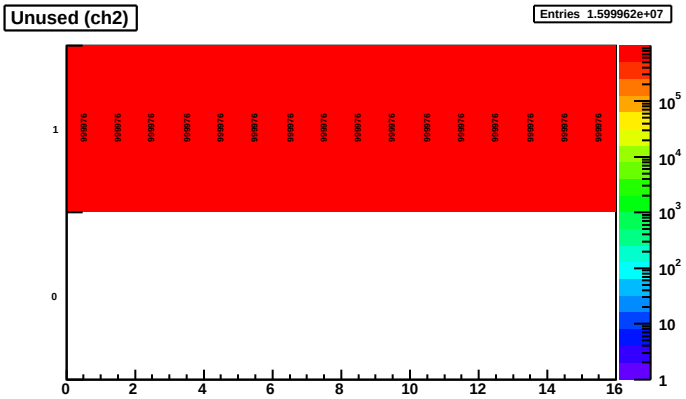

Barrel Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
2
4
6
8
10
12
14
16
18
JP ID

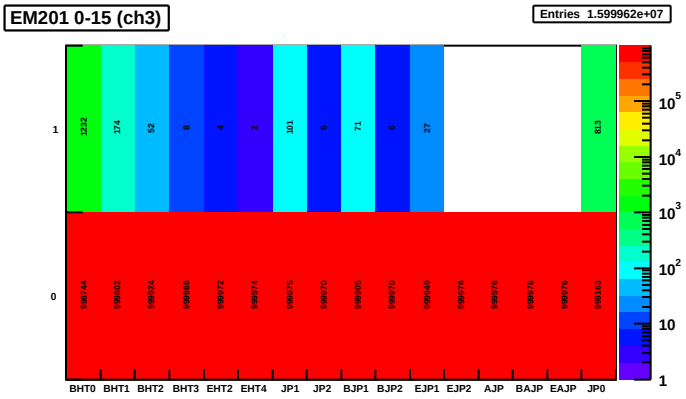

Endcap Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

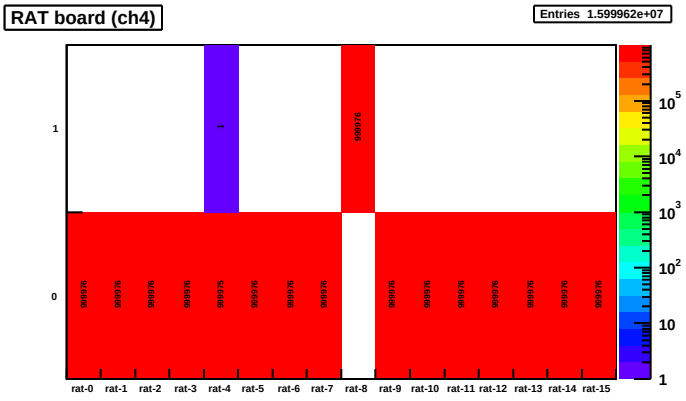

Hybrid Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

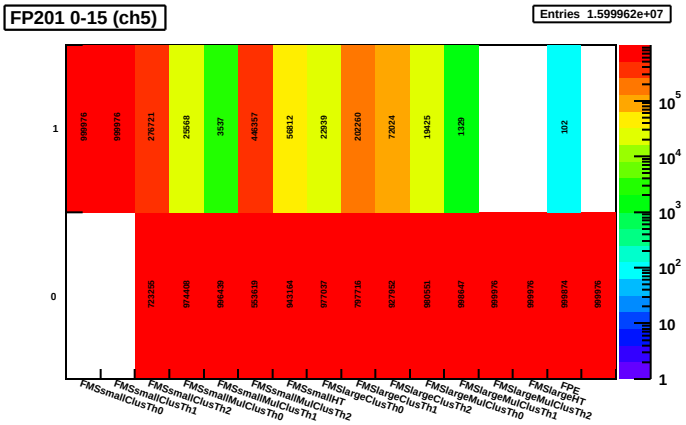

TF201 0-15 (ch0)
Entries 1.599962e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

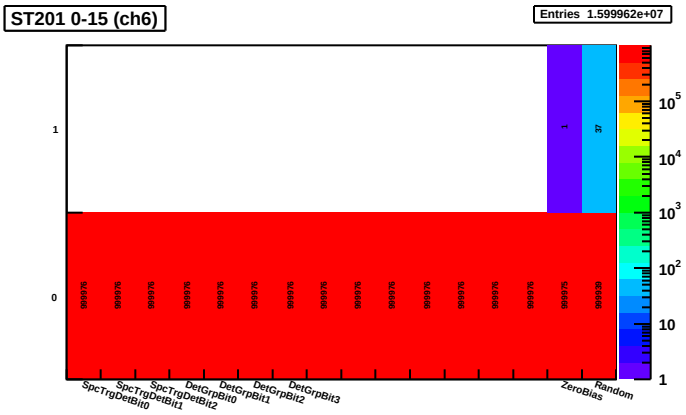

VT201 0-15 (ch1)
Entries 1.599962e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

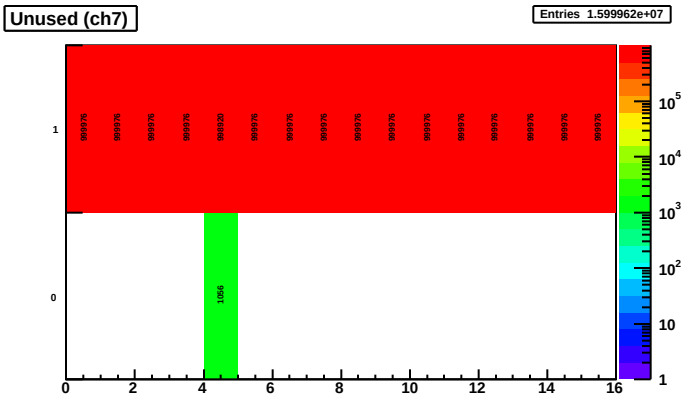

Unused (ch2)
Entries 1.599962e+07

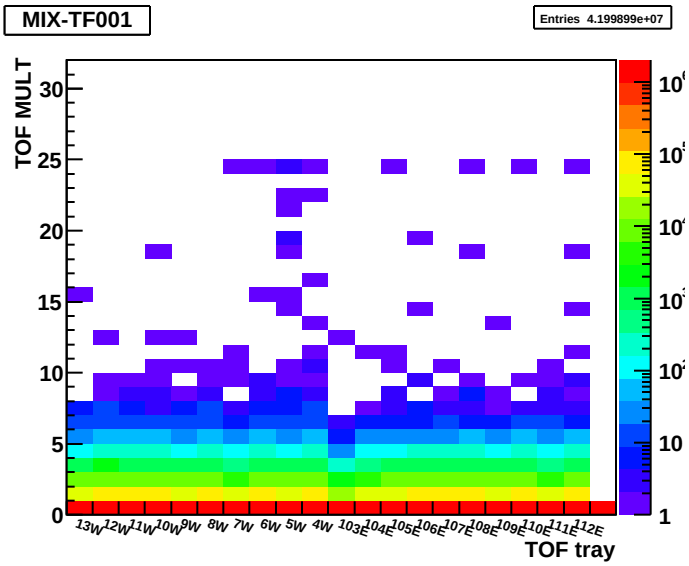

EM201 0-15 (ch3)
Entries 1.599962e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

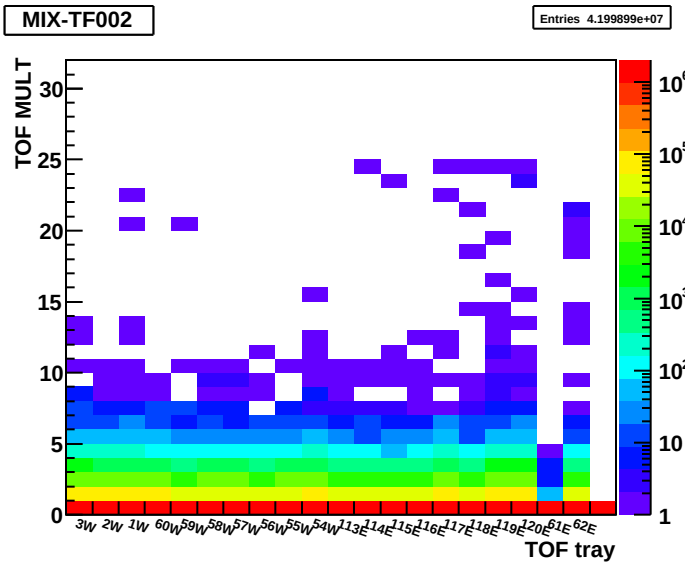

RAT board (ch4)
Entries 1.599962e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

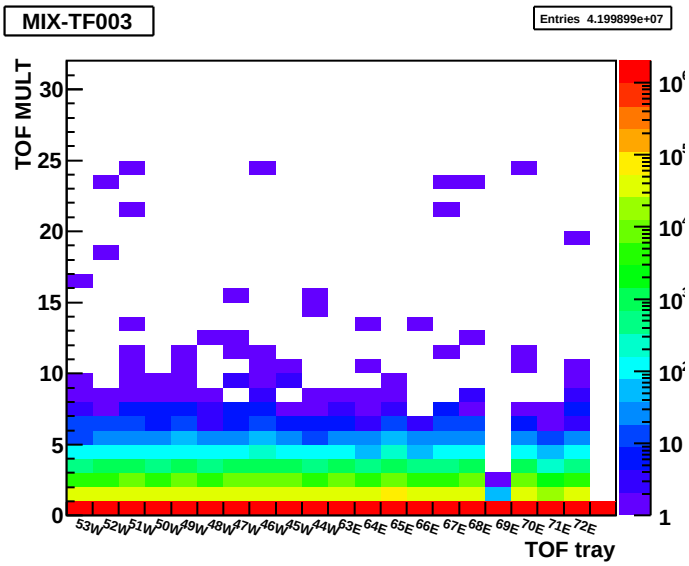

FP201 0-15 (ch5)
Entries 1.599962e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

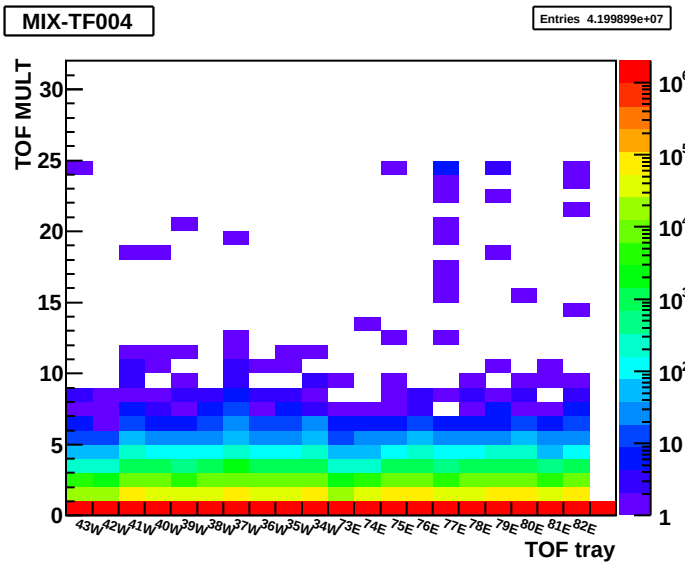

ST201 0-15 (ch6)
Entries 1.599962e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

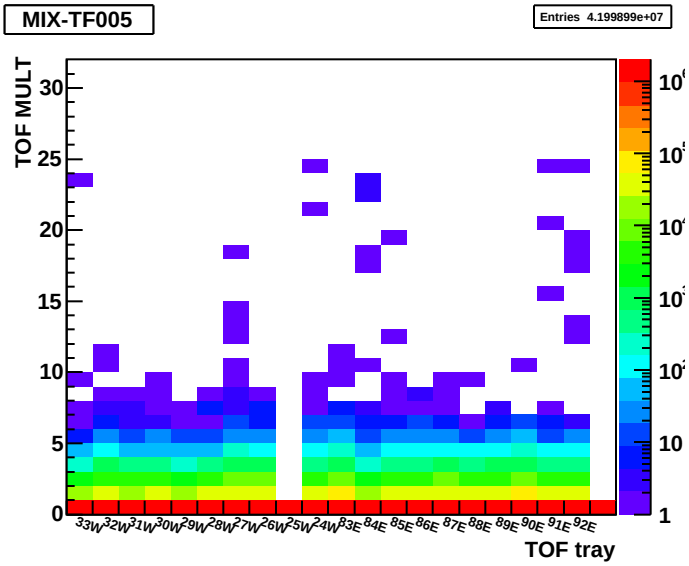

Unused (ch7)
Entries 1.599962e+07

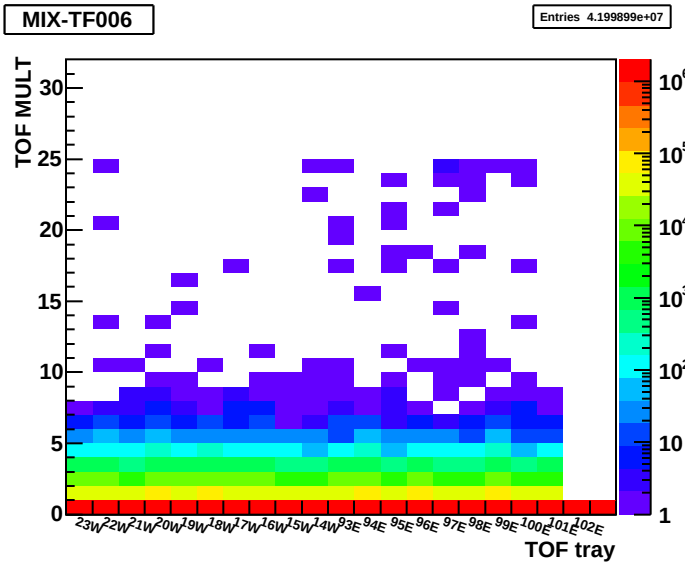

MIX-TF001
Entries 4.199899e+07
TOF MULT
TOF tray

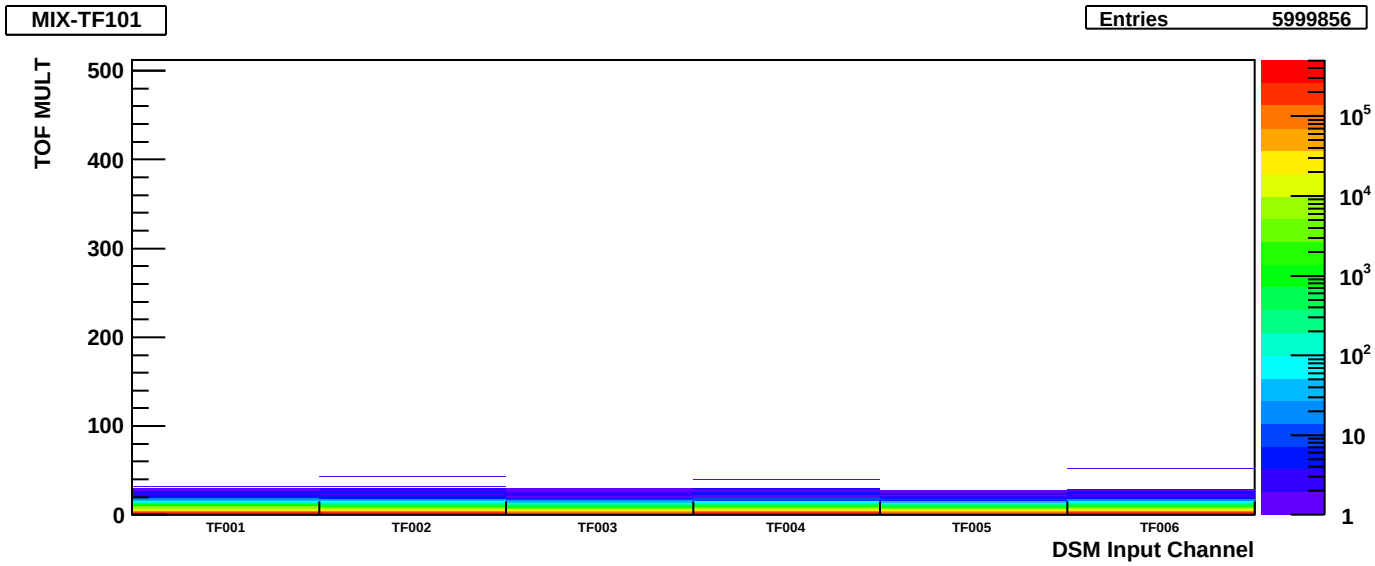

MIX-TF002
Entries 4.199899e+07
TOF MULT
TOF tray

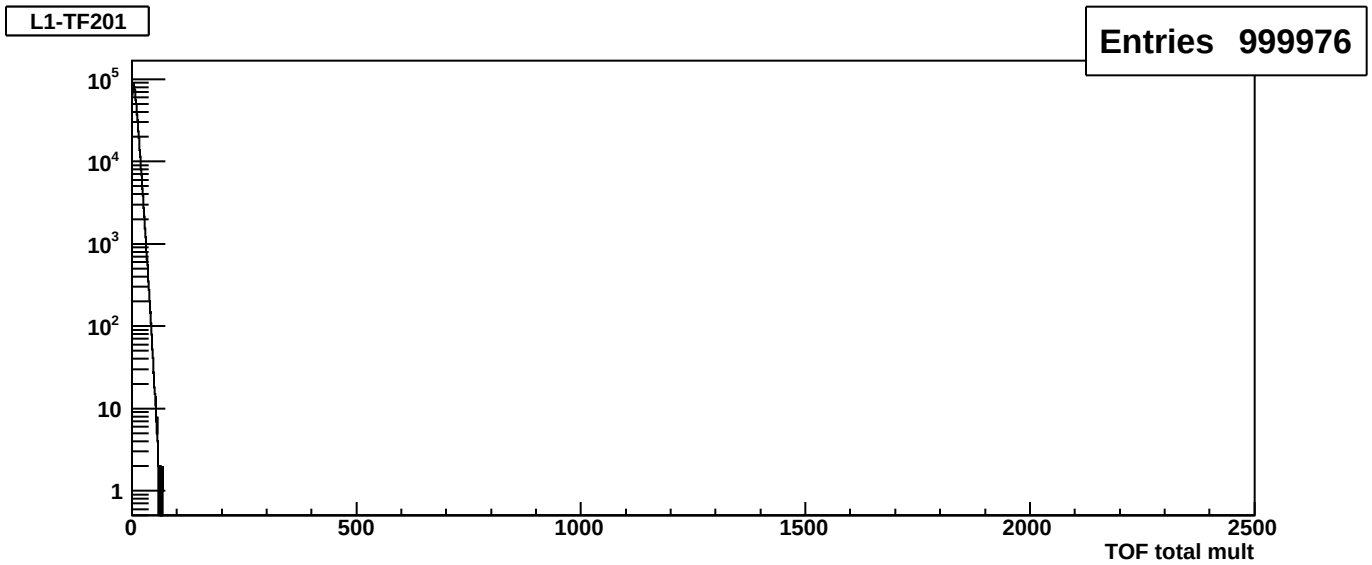

MIX-TF003
Entries 4.199899e+07
TOF MULT
TOF tray

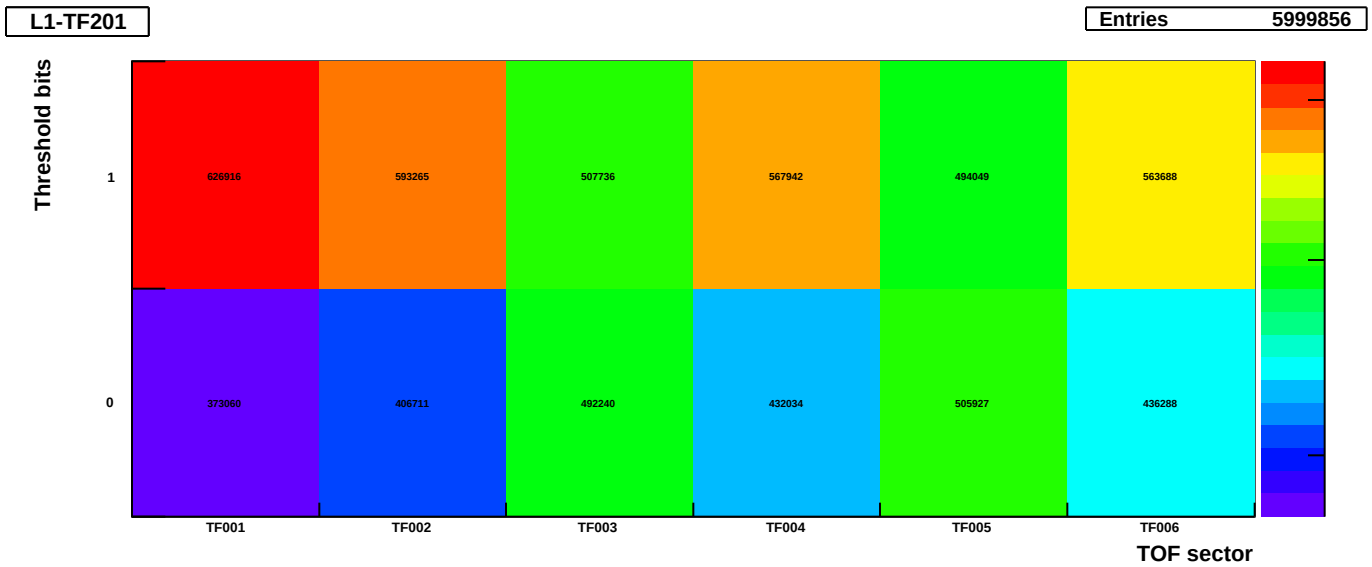

MIX-TF004
Entries 4.199899e+07
TOF MULT
TOF tray

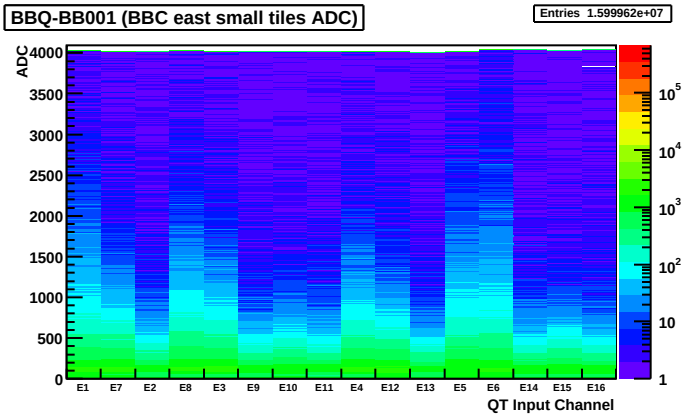

MIX-TF005
Entries 4.199899e+07
TOF MULT
TOF tray

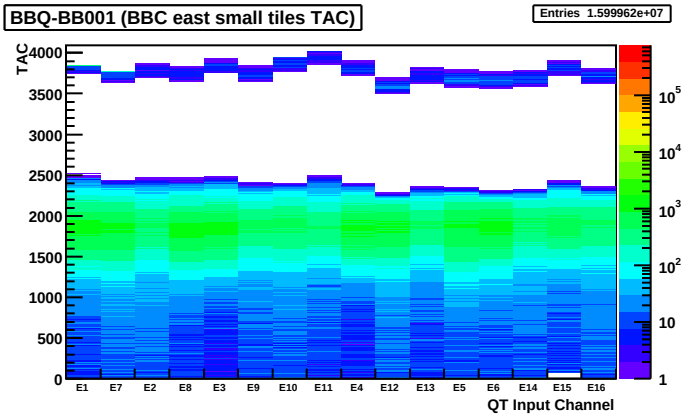

MIX-TF006
Entries 4.199899e+07
TOF MULT
TOF tray

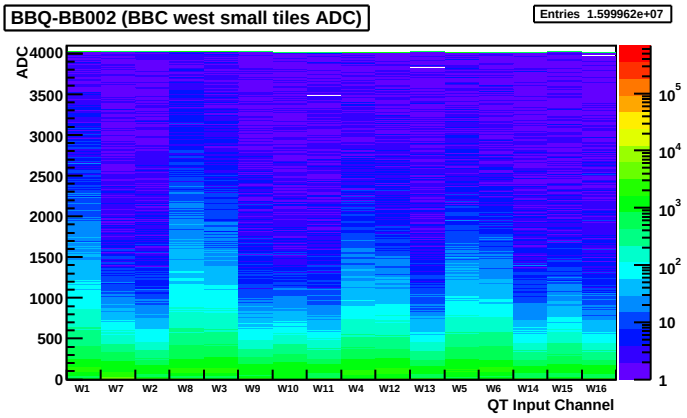

MIX-TF101
Entries 5999856
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

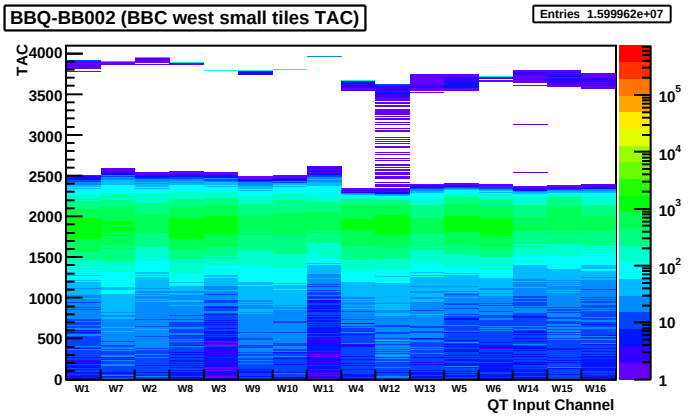

L1-TF201
Entries 999976
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

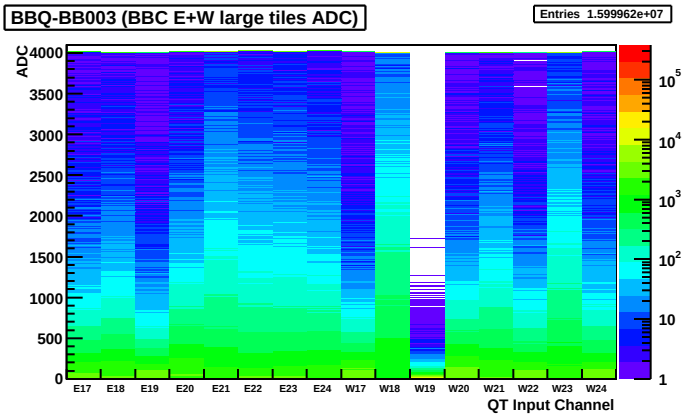

L1-TF201
Entries 5999856
Threshold bits
1
0
626916
593265
507736
567942
494049
563688
373060
406711
492240
432034
505927
436288
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

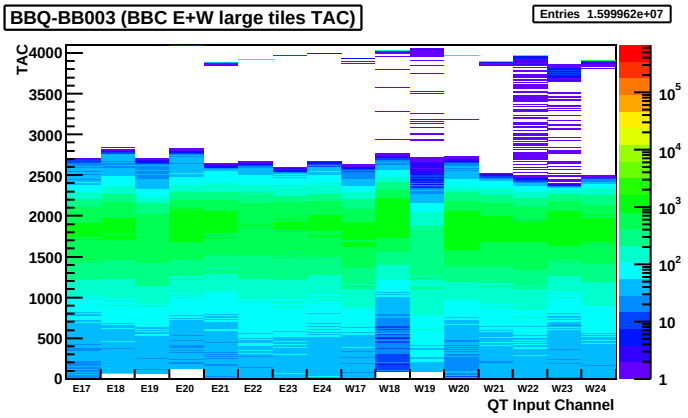

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.599962e+07
ADC
QT Input Channel

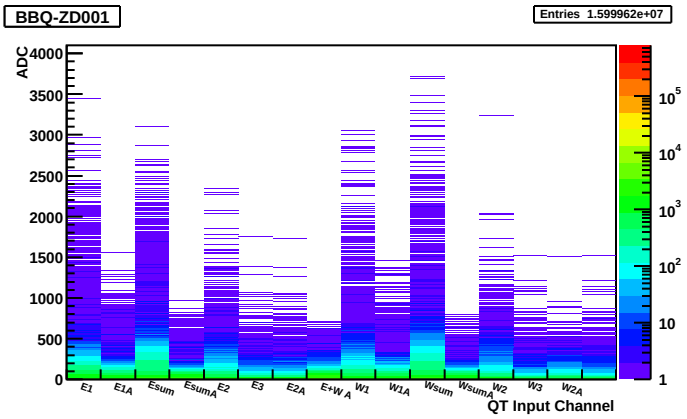

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.599962e+07
TAC
QT Input Channel

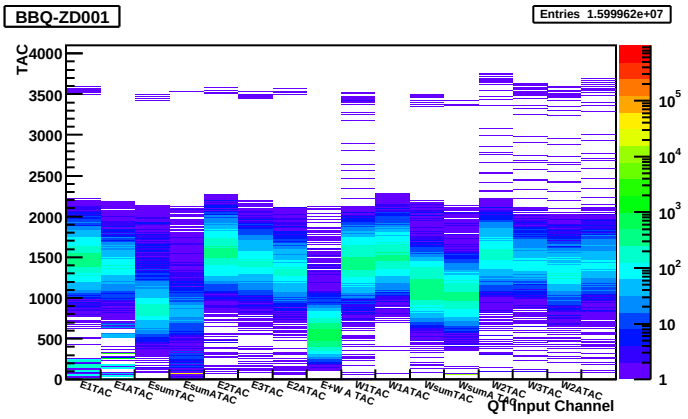

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.599962e+07
ADC
QT Input Channel

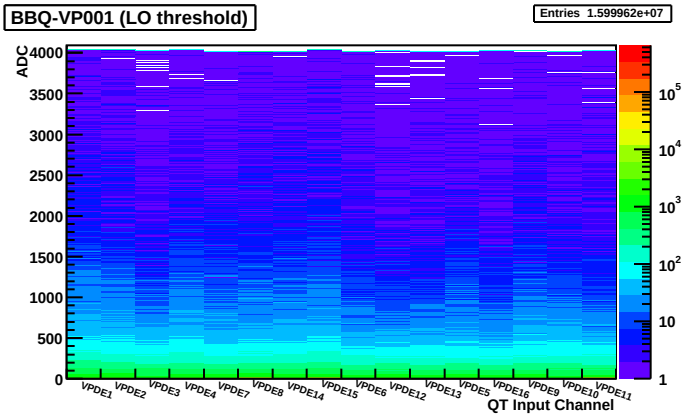

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.599962e+07
TAC
QT Input Channel

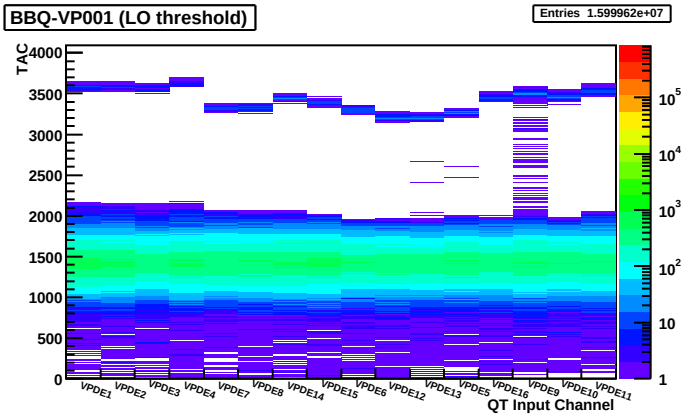

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.599962e+07
ADC
QT Input Channel

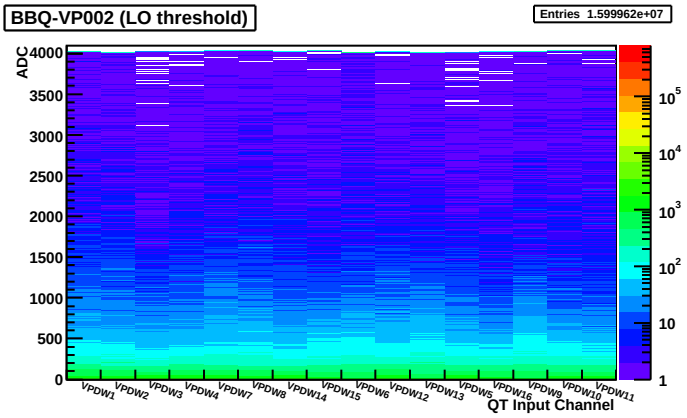

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.599962e+07
TAC
QT Input Channel

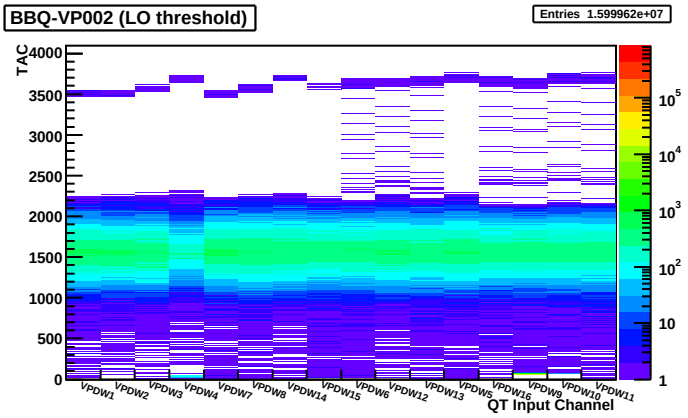

BBQ-ZD001
Entries 1.599962e+07
ADC
QT Input Channel

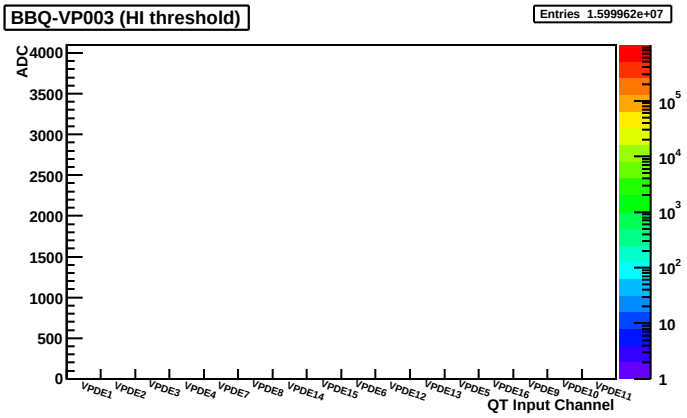

BBQ-ZD001
Entries 1.599962e+07
TAC
QT Input Channel

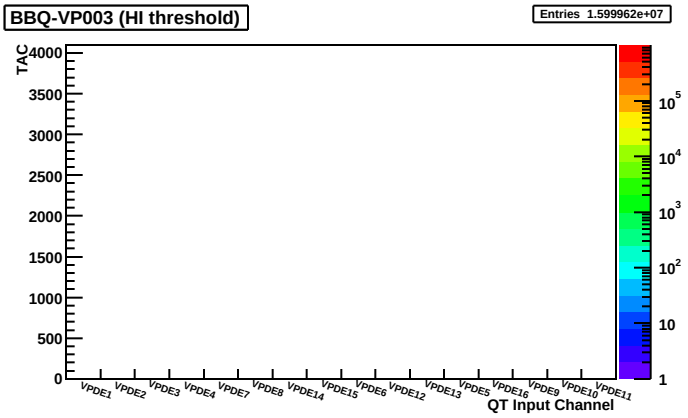

BBQ-VP001 (LO threshold)
Entries 1.599962e+07
ADC
QT Input Channel

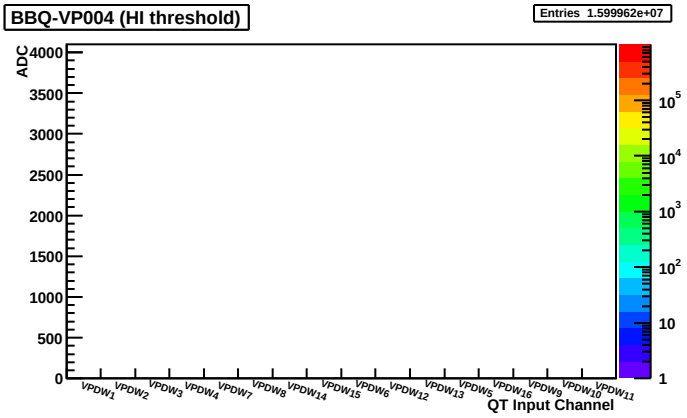

BBQ-VP001 (LO threshold)
Entries 1.599962e+07
TAC
QT Input Channel

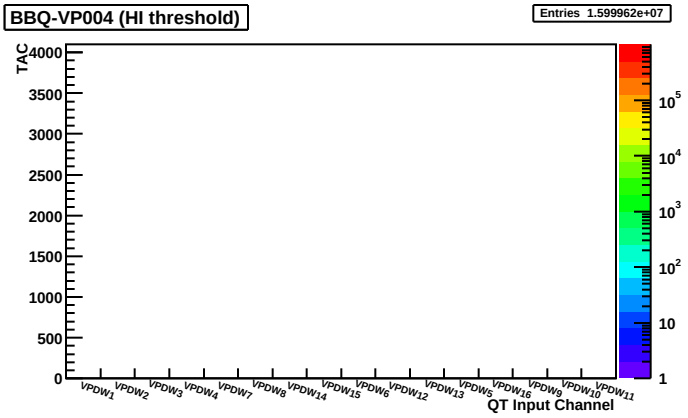

BBQ-VP002 (LO threshold)
Entries 1.599962e+07
ADC
QT Input Channel

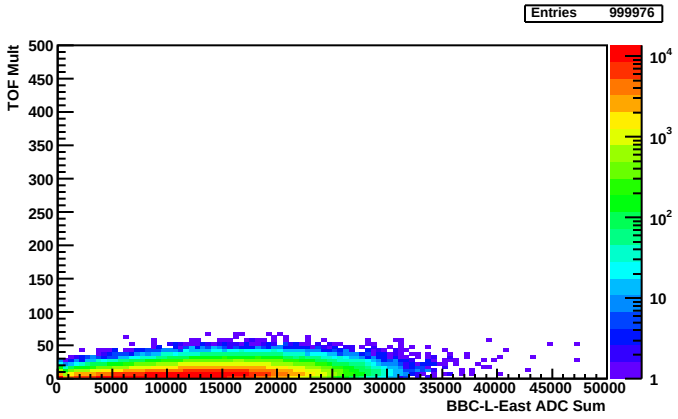

BBQ-VP002 (LO threshold)
Entries 1.599962e+07
TAC
QT Input Channel

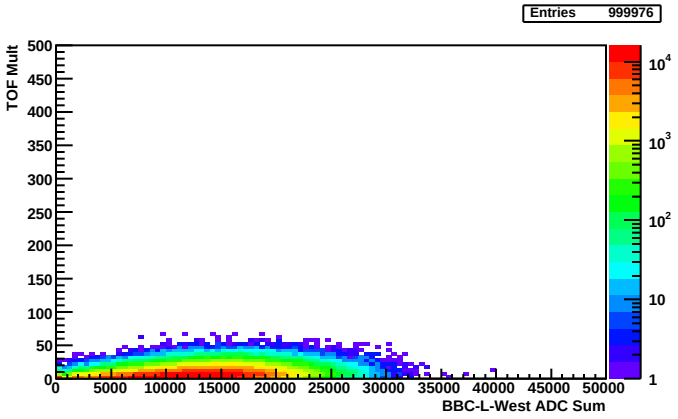

BBQ-VP003 (HI threshold)
Entries 1.599962e+07
ADC
QT Input Channel

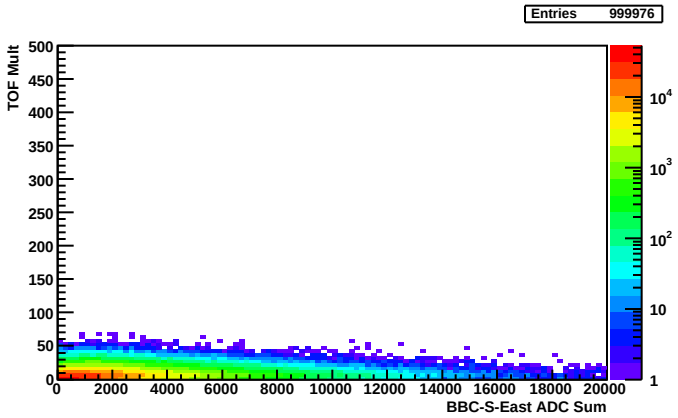

BBQ-VP003 (HI threshold)
Entries 1.599962e+07
TAC
QT Input Channel

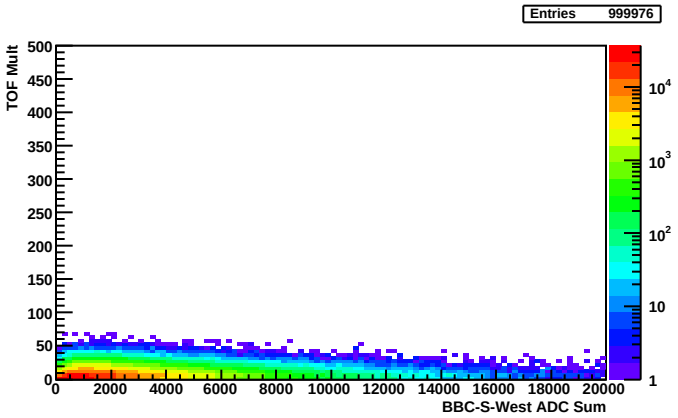

BBQ-VP004 (HI threshold)
Entries 1.599962e+07
ADC
QT Input Channel

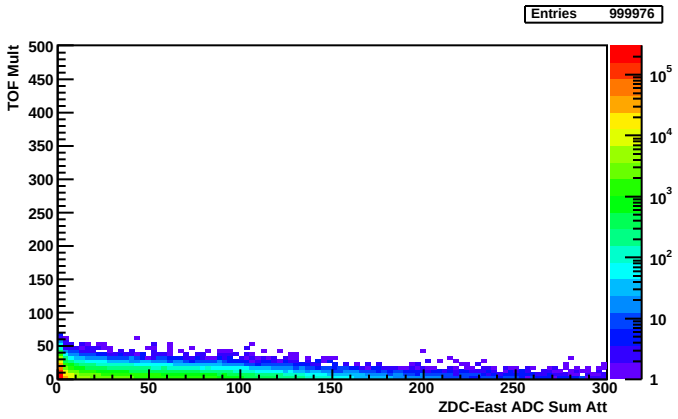

BBQ-VP004 (HI threshold)
Entries 1.599962e+07
TAC
QT Input Channel

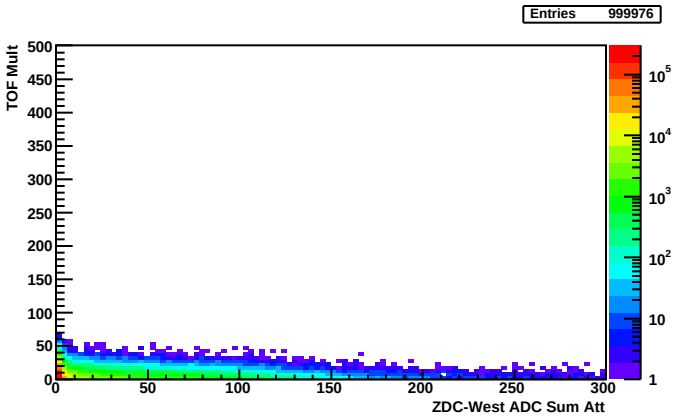

Entries 999976
TOF Mult
BBC-L-East ADC Sum

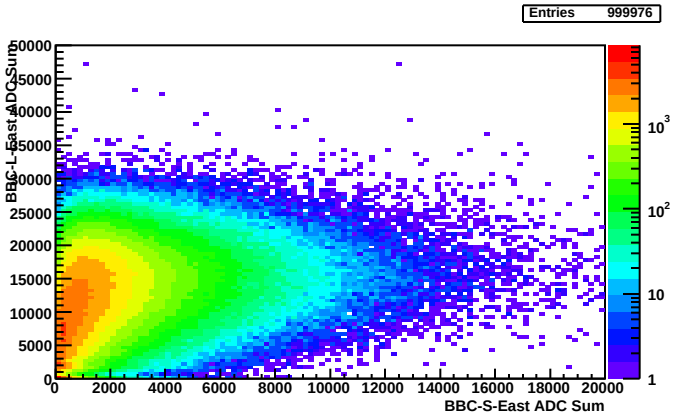

Entries 999976
TOF Mult
BBC-L-West ADC Sum

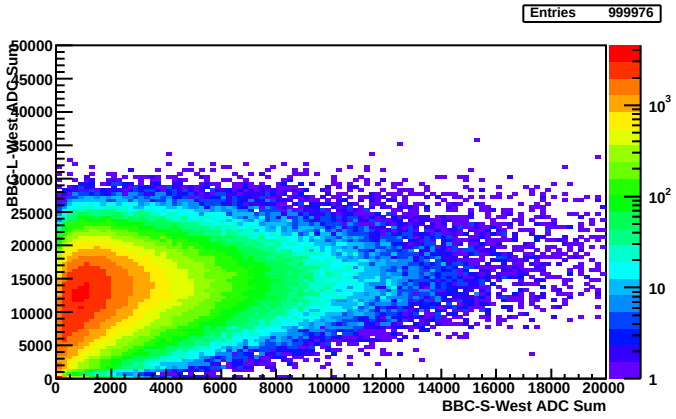

Entries 999976
TOF Mult
BBC-S-East ADC Sum

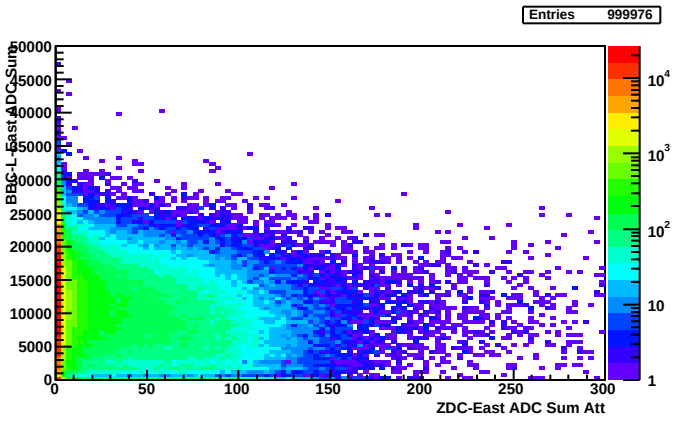

Entries 999976
TOF Mult
BBC-S-West ADC Sum

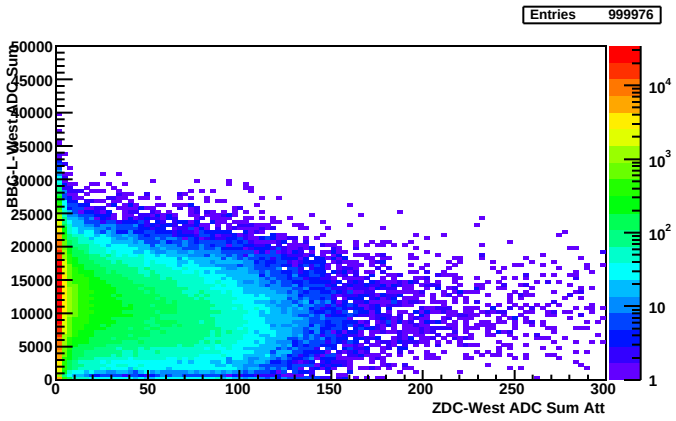

Entries 999976
TOF Mult
ZDC-East ADC Sum Att

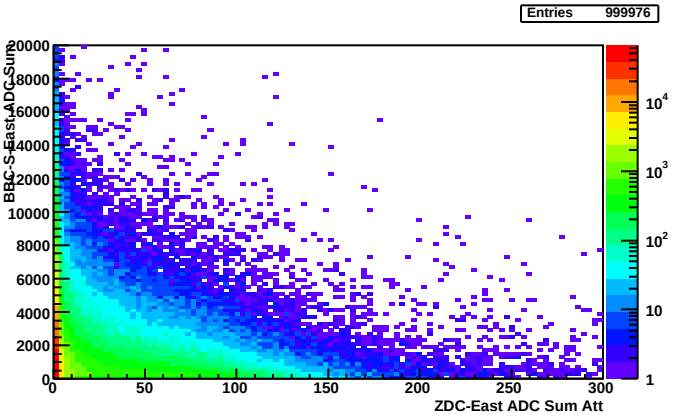

Entries 999976
TOF Mult
ZDC-West ADC Sum Att

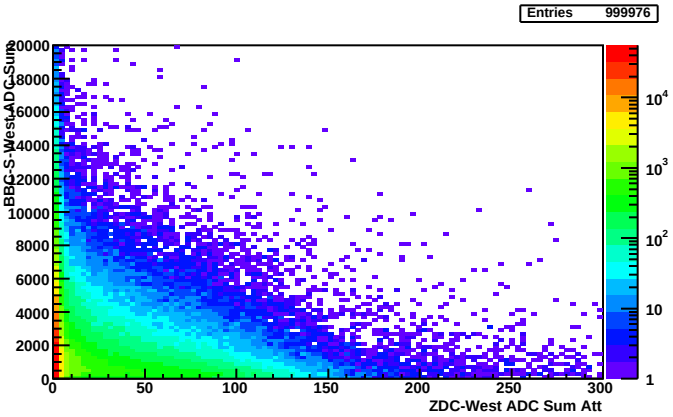

Entries 999976
BBC-L-East ADC Sum
BBC-S-East ADC Sum

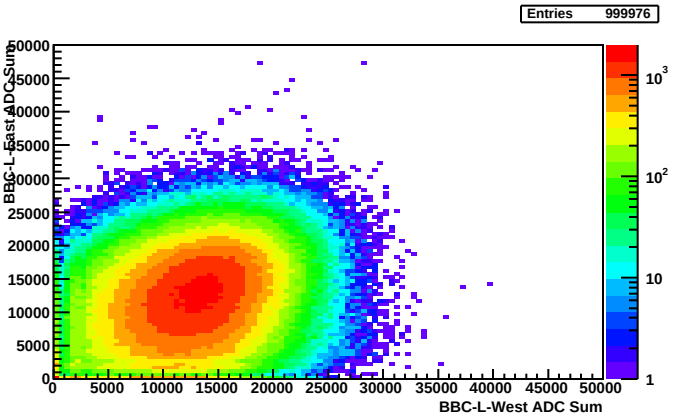

Entries 999976
BBC-L-West ADC Sum
BBC-S-West ADC Sum

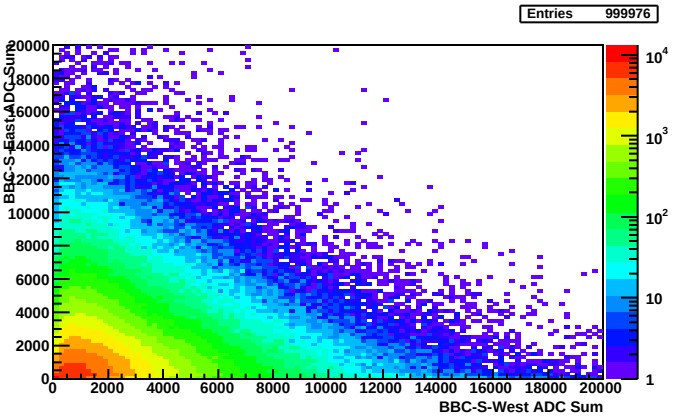

Entries 999976
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

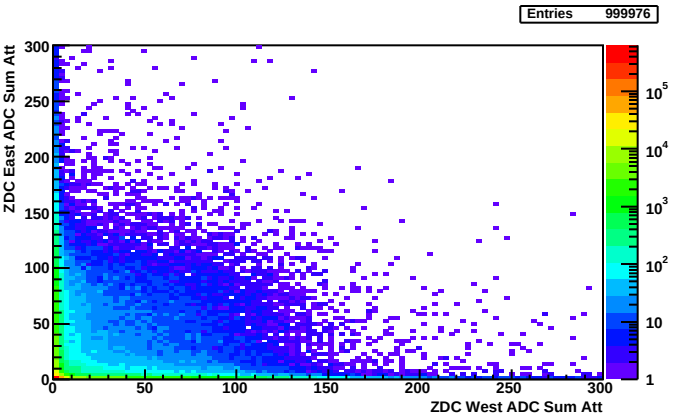

Entries 999976
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

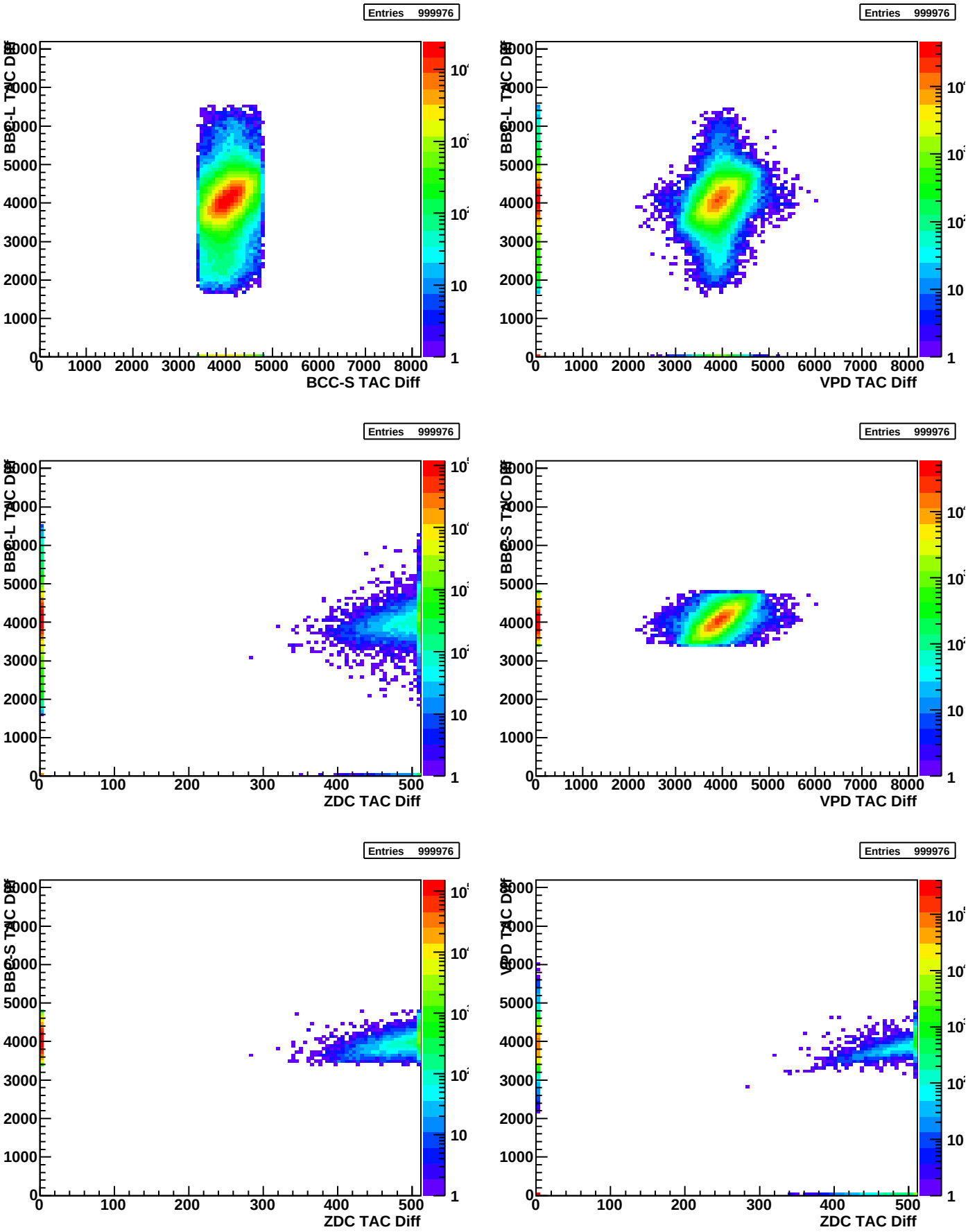

Entries 999976
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

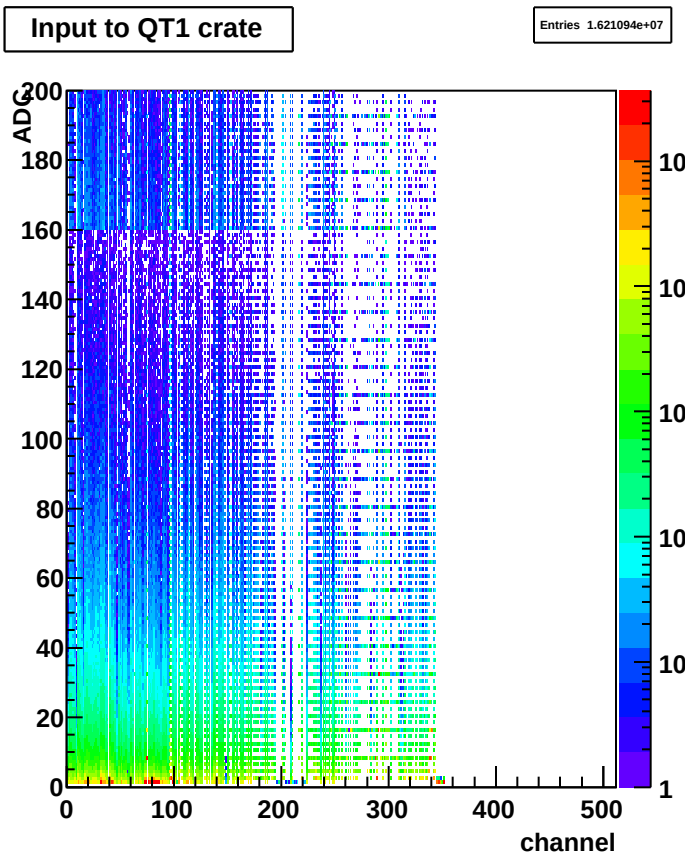

Entries 999976
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

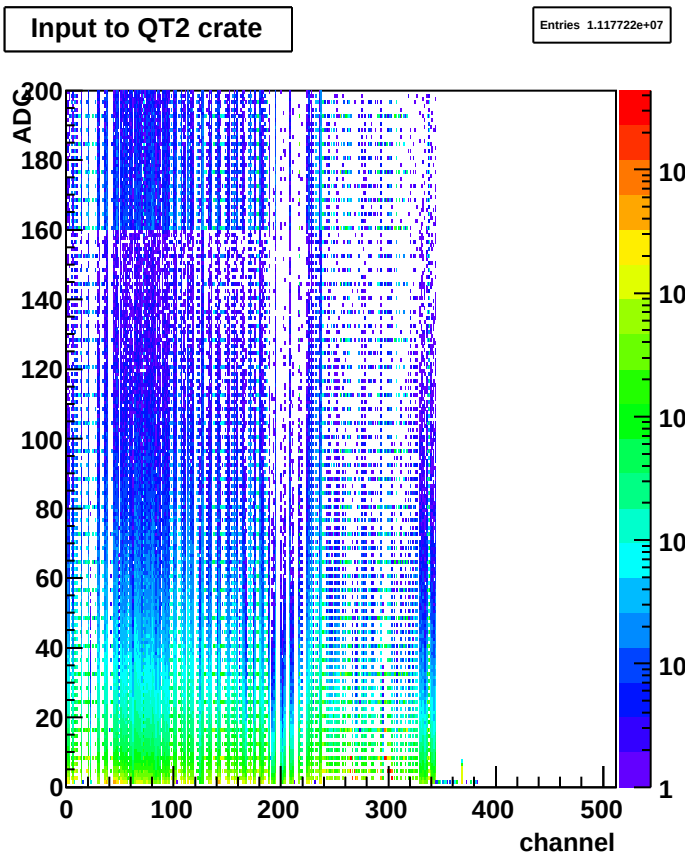

Entries 999976
BBC-L-East ADC Sum
BBC-L-West ADC Sum

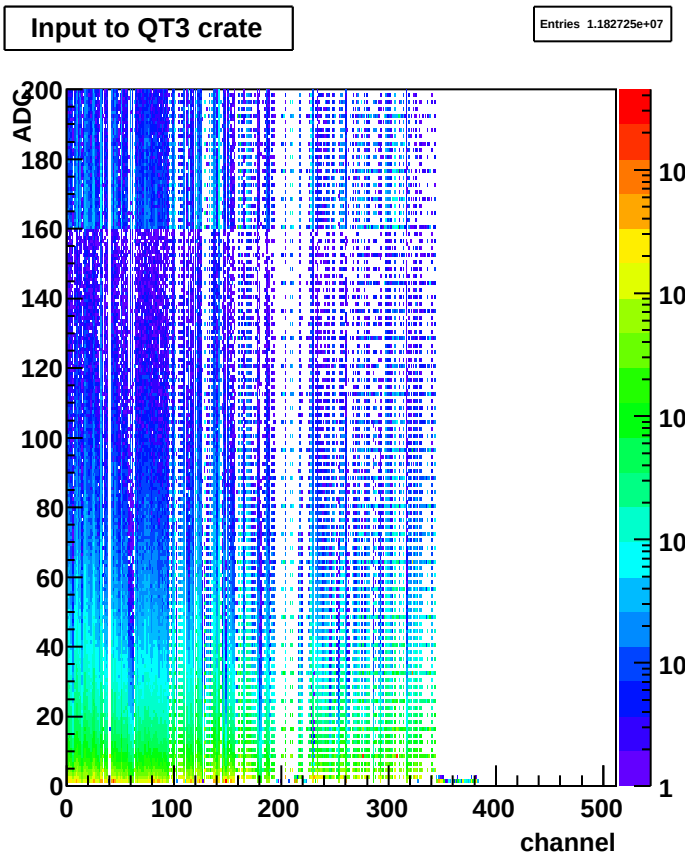

Entries 999976
BBC-S-East ADC Sum
BBC-S-West ADC Sum

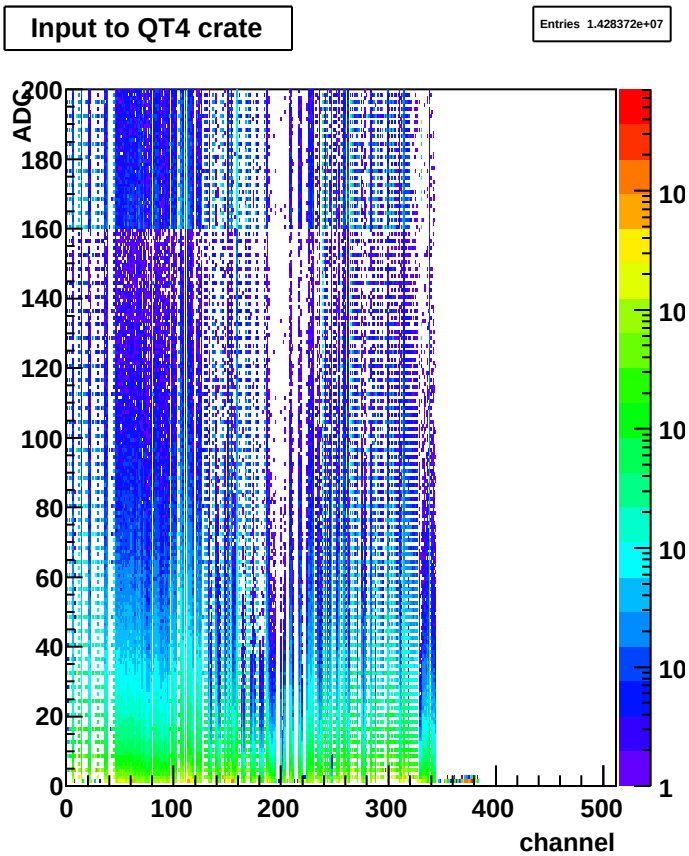

Entries 999976
ZDC East ADC Sum Att
ZDC West ADC Sum Att

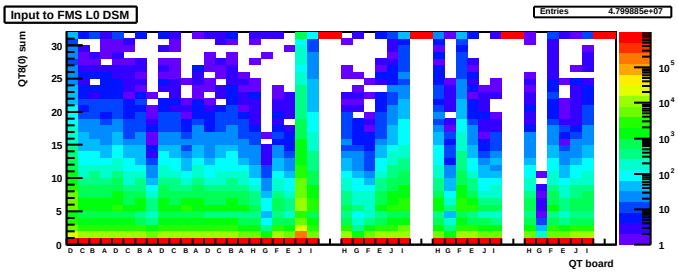

Entries 999976
BBC-L TAC Diff
BCC-S TAC Diff
Entries 999976
BBC-L TAC Diff
VPD TAC Diff
Entries 999976
BBC-L TAC Diff
ZDC TAC Diff
Entries 999976
BBC-S TAC Diff
VPD TAC Diff
Entries 999976
BBC-S TAC Diff
ZDC TAC Diff
Entries 999976
VPD TAC Diff
ZDC TAC Diff

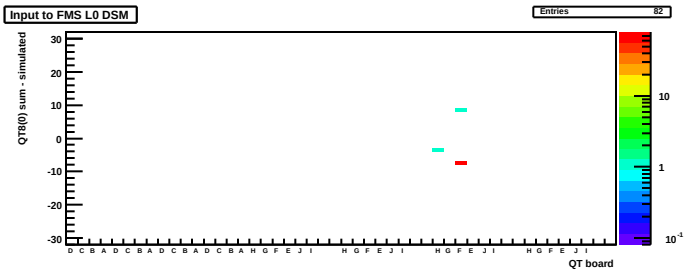

Input to QT1 crate
Entries 1.621094e+07
ADC
channel

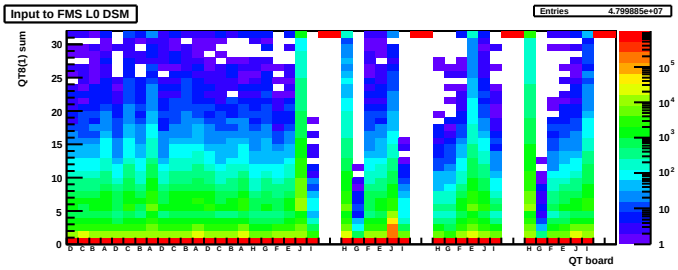

Input to QT2 crate
Entries 1.117722e+07
ADC
channel

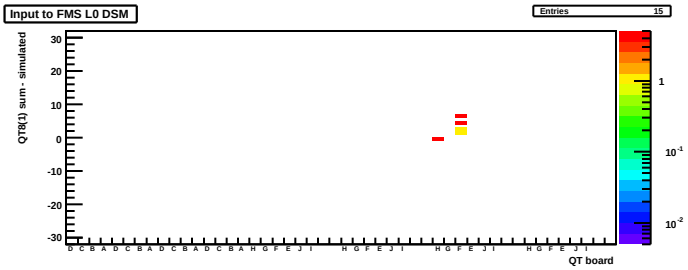

Input to QT3 crate
Entries 1.182725e+07
ADC
channel

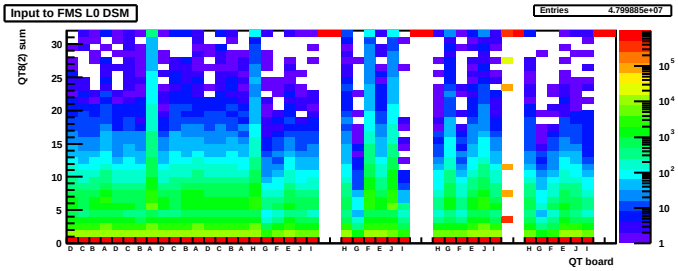

Input to QT4 crate
Entries 1.428372e+07
ADC
channel

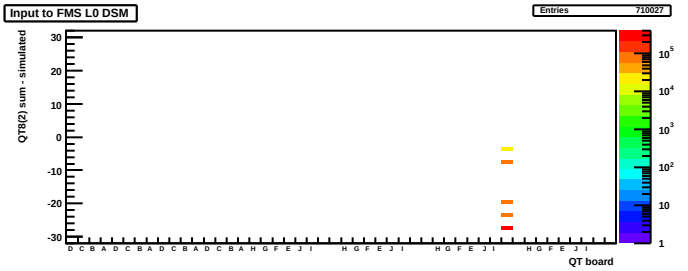

Input to FMS L0 DSM
Entries 4.799885e+07
QT8(0) sum
QT board

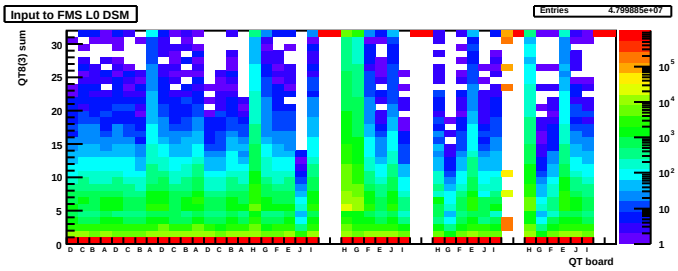

Input to FMS L0 DSM
Entries 82
QT8(0) sum - simulated
QT board

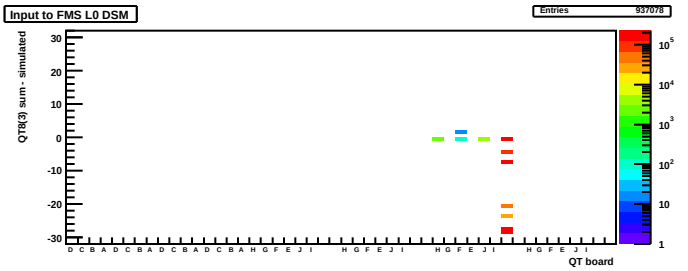

Input to FMS L0 DSM
Entries 4.799885e+07
QT8(1) sum
QT board

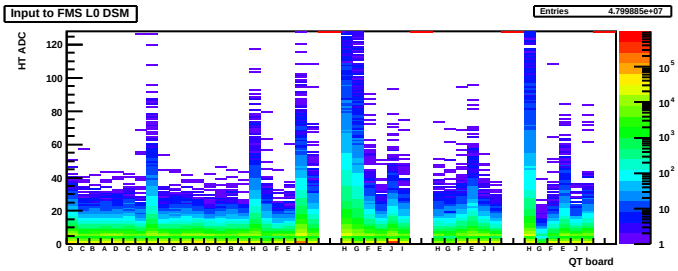

Input to FMS L0 DSM
Entries 15
QT8(1) sum - simulated
QT board

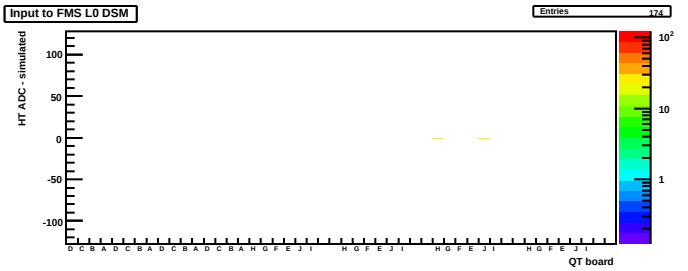

Input to FMS L0 DSM
Entries 4.799885e+07
QT8(2) sum
QT board

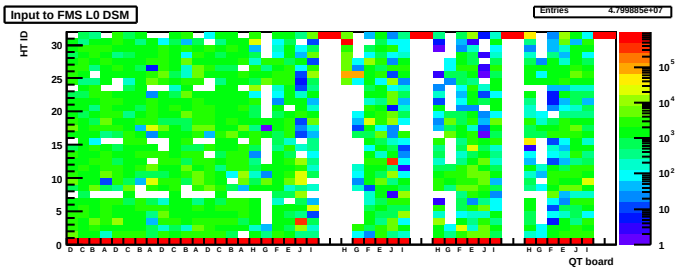

Input to FMS L0 DSM
Entries 710027
QT8(2) sum - simulated
QT board

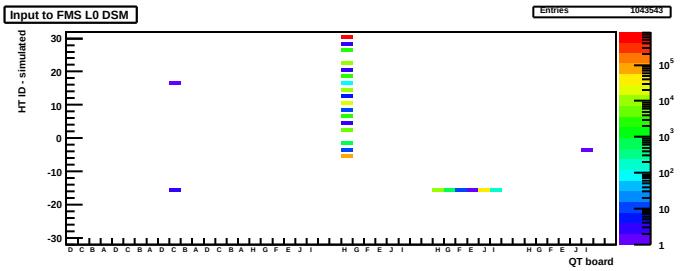

Input to FMS L0 DSM
Entries 4.799885e+07
QT8(3) sum
QT board

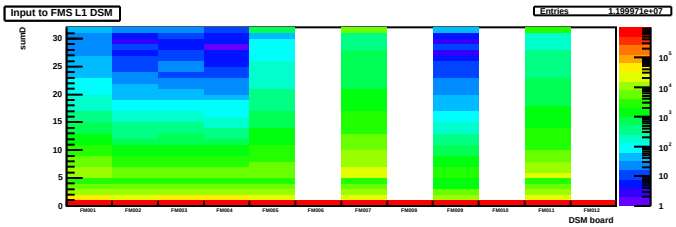

Input to FMS L0 DSM
Entries 937078
QT8(3) sum - simulated
QT board

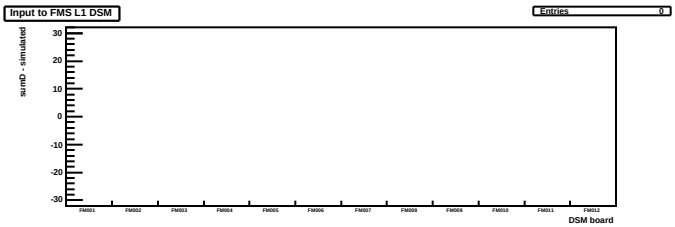

Input to FMS L0 DSM
Entries 4.799885e+07
HT ADC
QT board

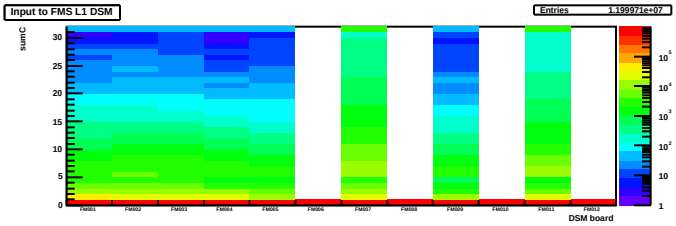

Input to FMS L0 DSM
Entries 174
HT ADC - simulated
QT board

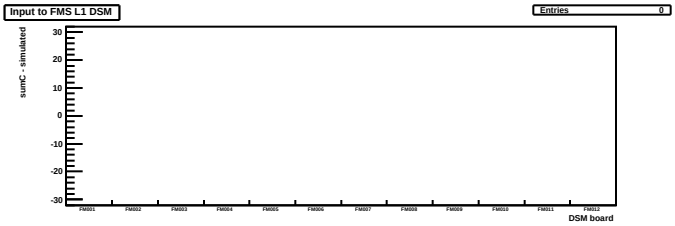

Input to FMS L0 DSM
Entries 4.799885e+07
HT ID
QT board

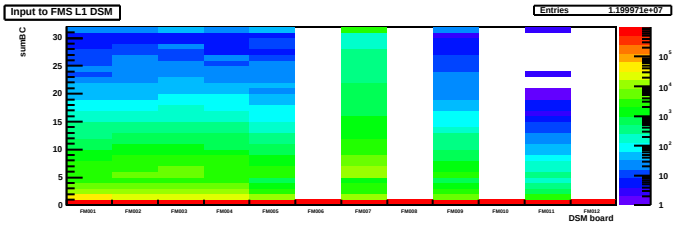

Input to FMS L0 DSM
Entries 1043543
HT ID - simulated
QT board

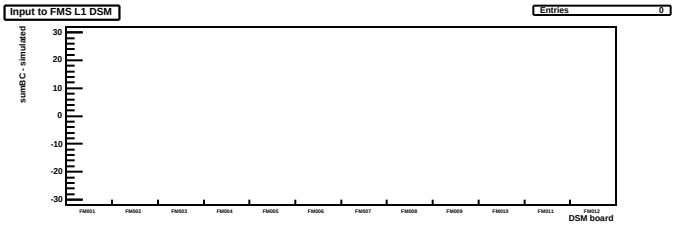

Input to FMS L1 DSM
Entries 1.199971e+07
sumD
DSM board

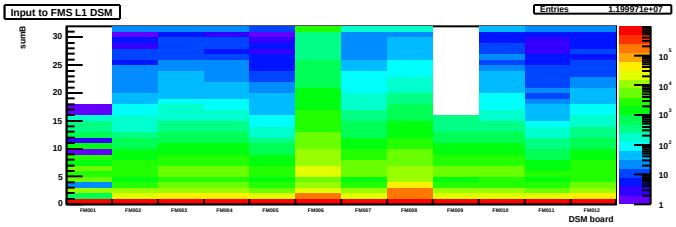

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

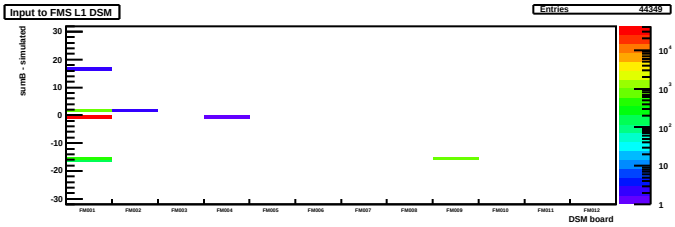

Input to FMS L1 DSM
Entries 1.199971e+07
sumC
DSM board

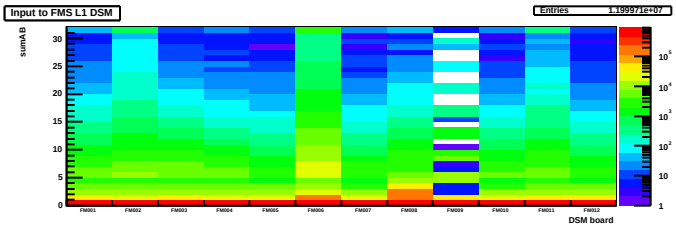

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

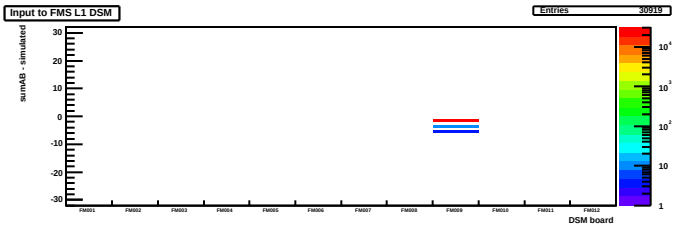

Input to FMS L1 DSM
Entries 1.199971e+07
sumBC
DSM board

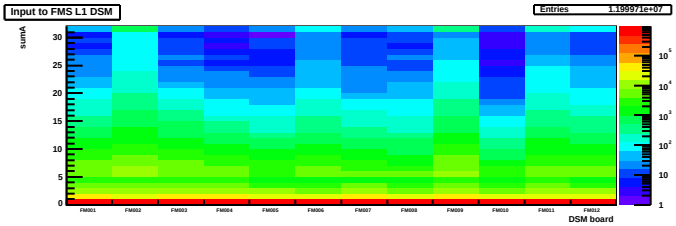

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

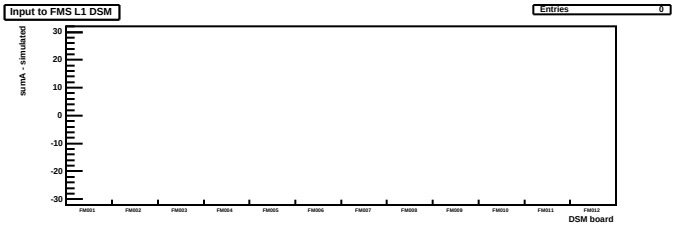

Input to FMS L1 DSM
Entries 1.199971e+07
sumB
DSM board

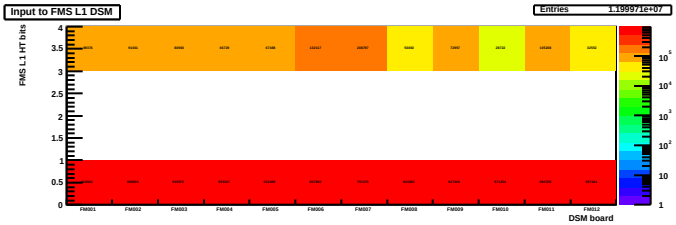

Input to FMS L1 DSM
Entries 44349
sumB - simulated
DSM board

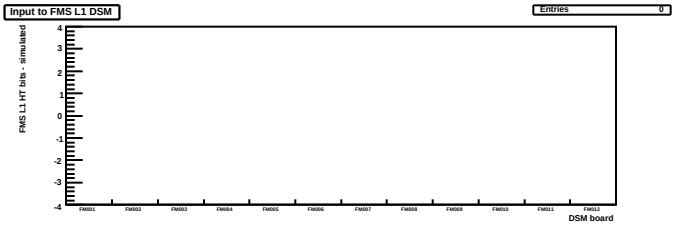

Input to FMS L1 DSM
Entries 1.199971e+07
sumAB
DSM board

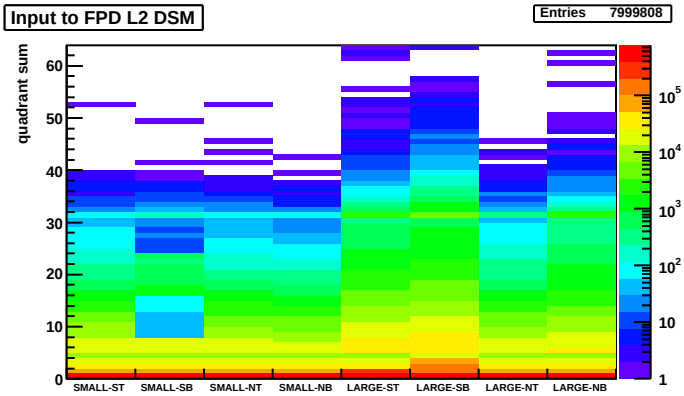

Input to FMS L1 DSM
Entries 30919
sumAB - simulated
DSM board

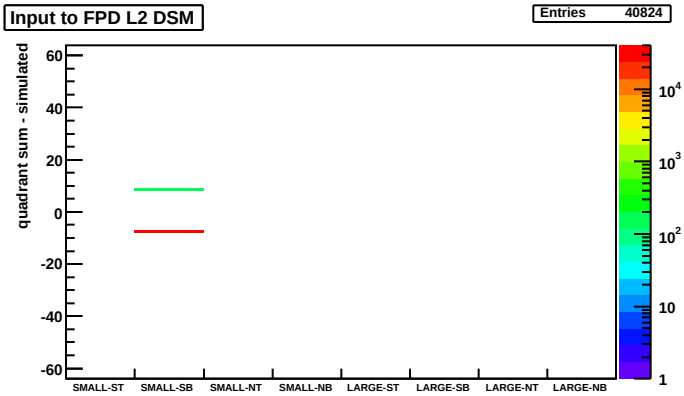

Input to FMS L1 DSM
Entries 1.199971e+07
sumA
DSM board

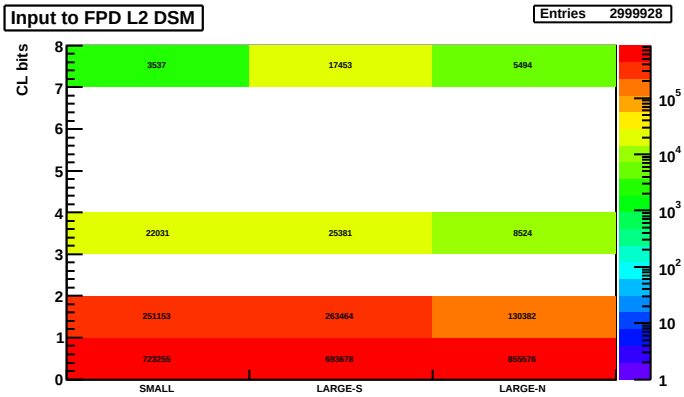

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

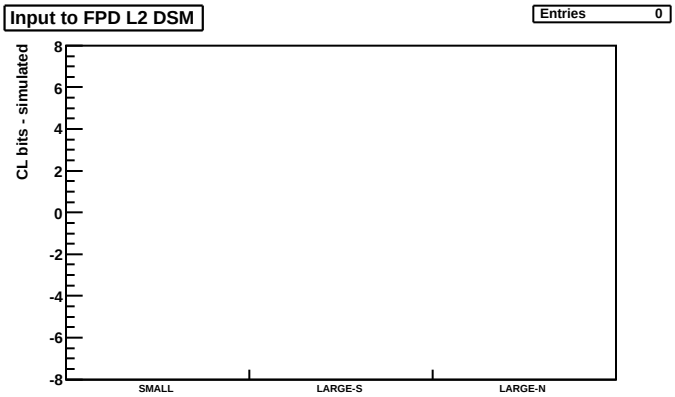

Input to FMS L1 DSM
Entries 1.199971e+07
FMS L1 HT bits
DSM board

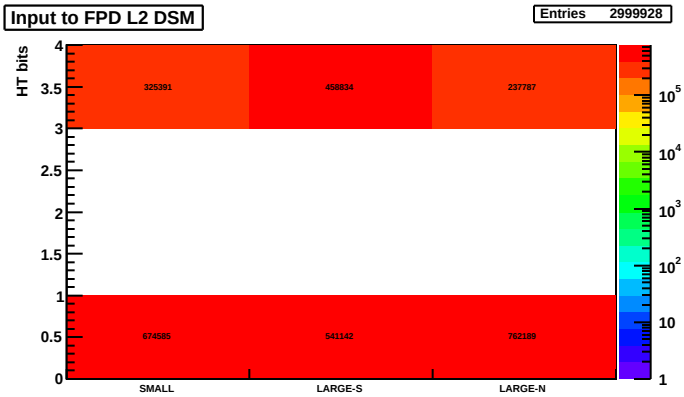

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

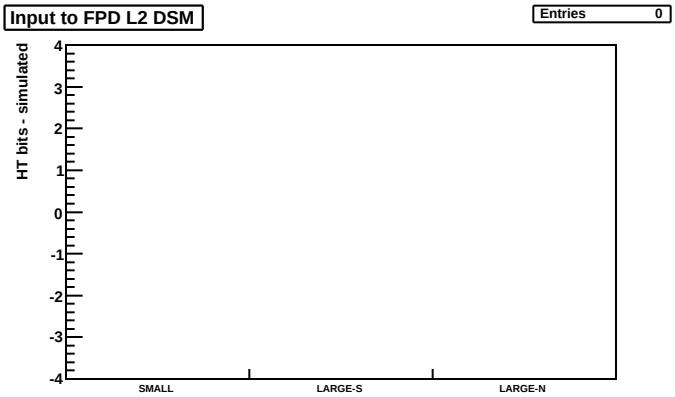

Input to FPD L2 DSM
Entries 7999808
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

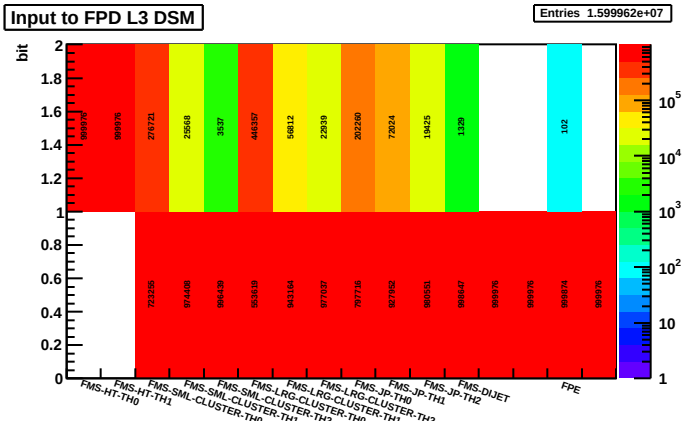

Input to FPD L2 DSM
Entries 40824
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

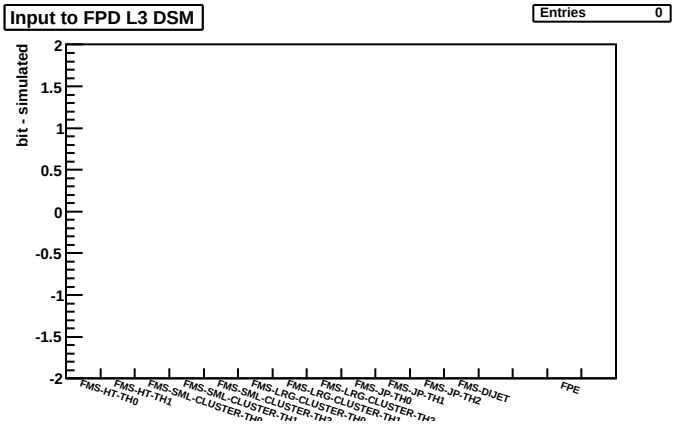

Input to FPD L2 DSM
Entries 2999928
CL bits
3537
17453
5494
22031
25381
8524
251153
263464
130382
723255
693678
855576
SMALL
LARGE-S
LARGE-N

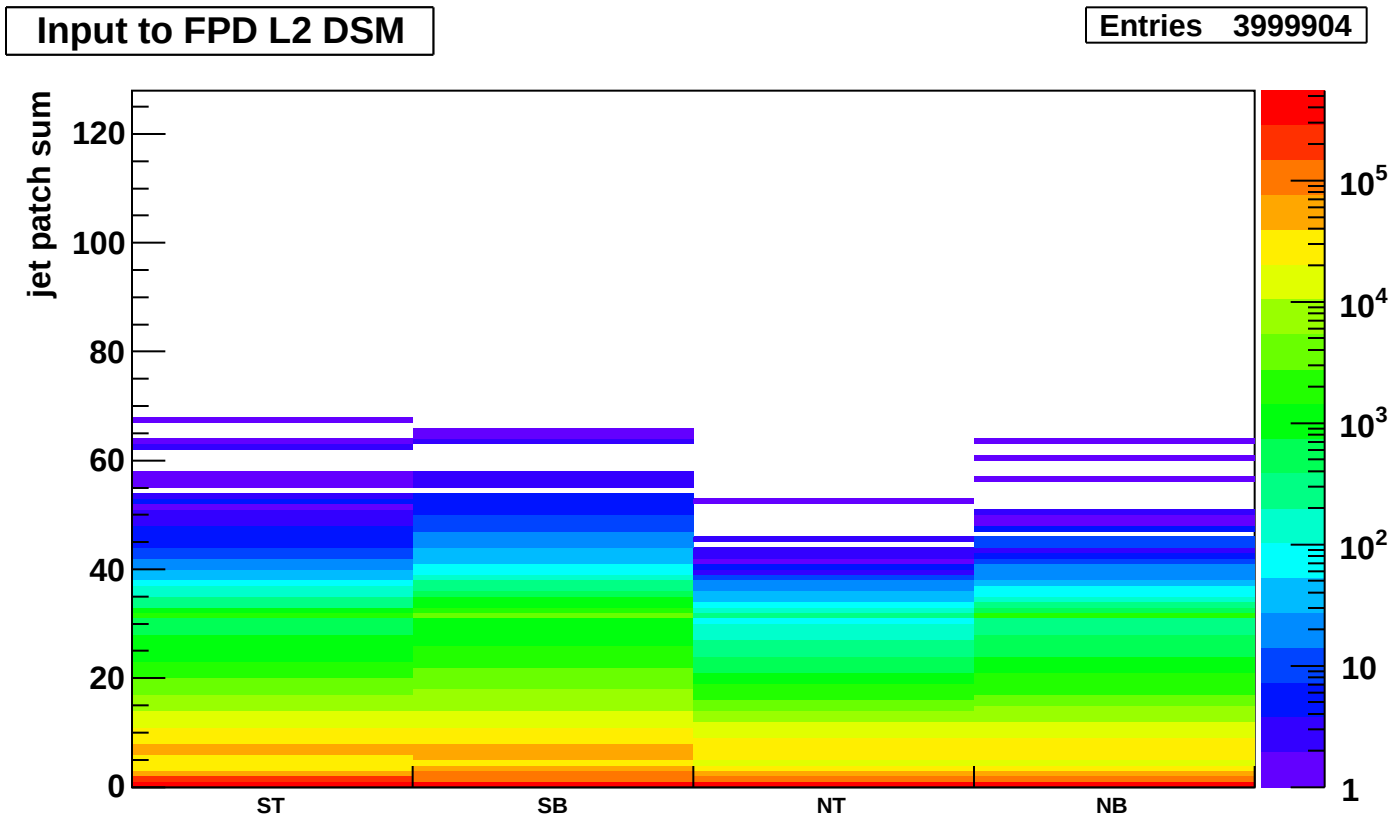

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

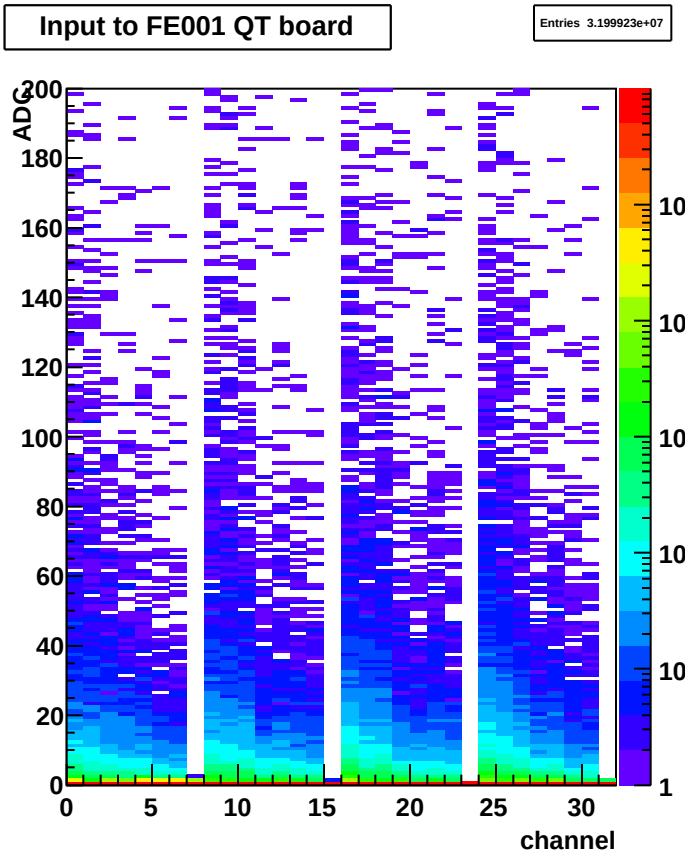

Input to FPD L2 DSM
Entries 2999928
HT bits
325391
458834
237787
674585
541142
762189
SMALL
LARGE-S
LARGE-N

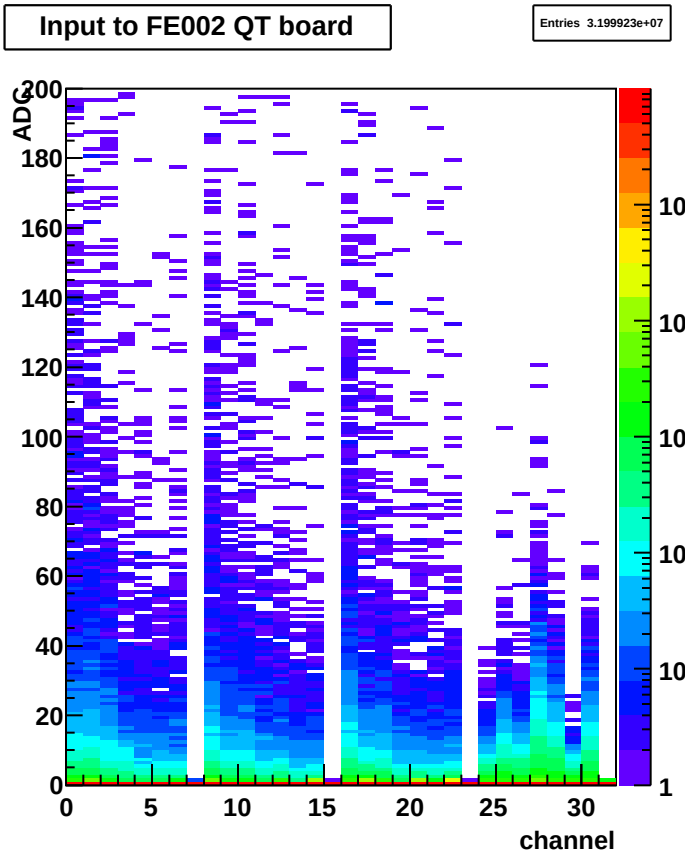

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

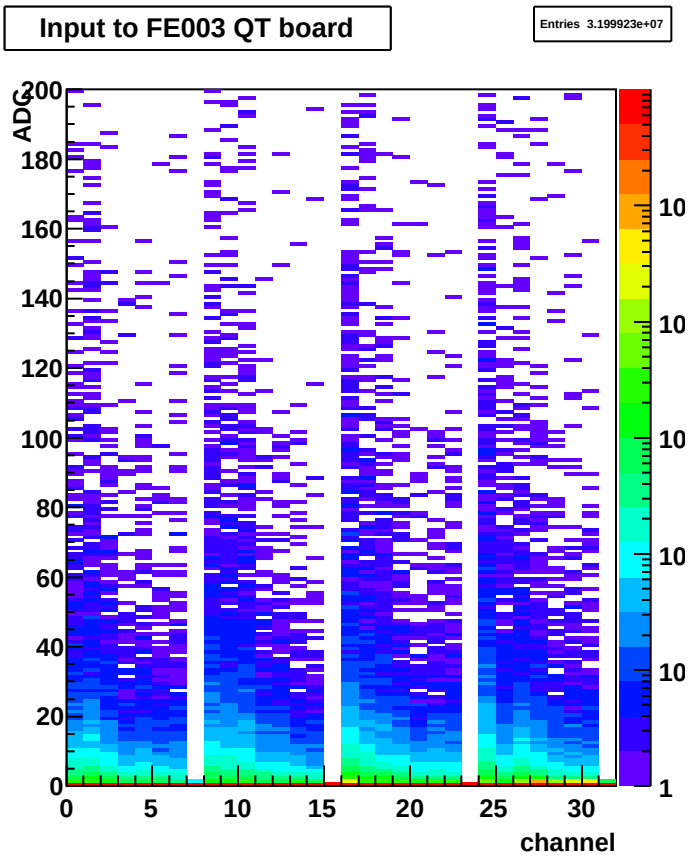

Input to FPD L3 DSM
Entries 1.599962e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

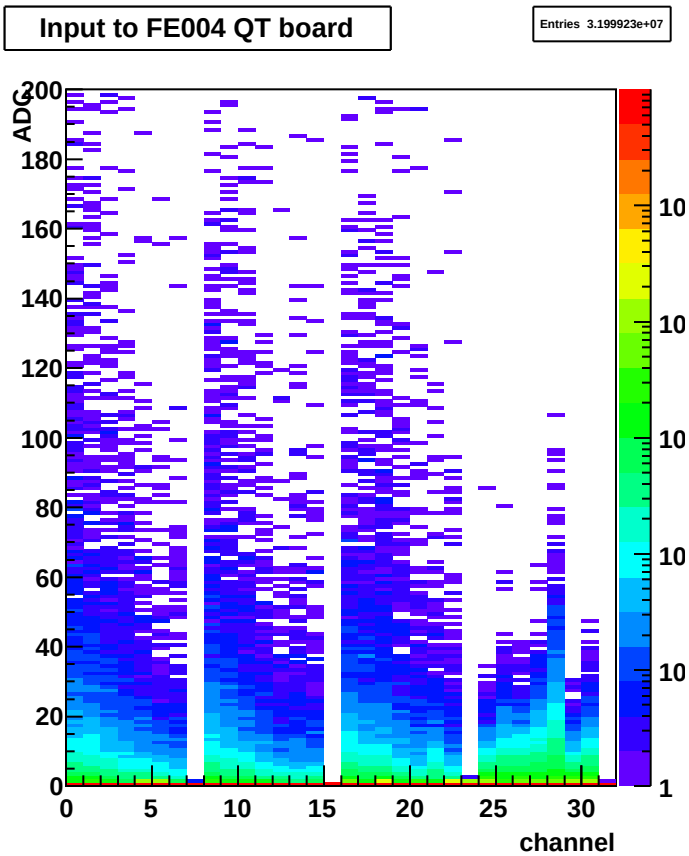

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

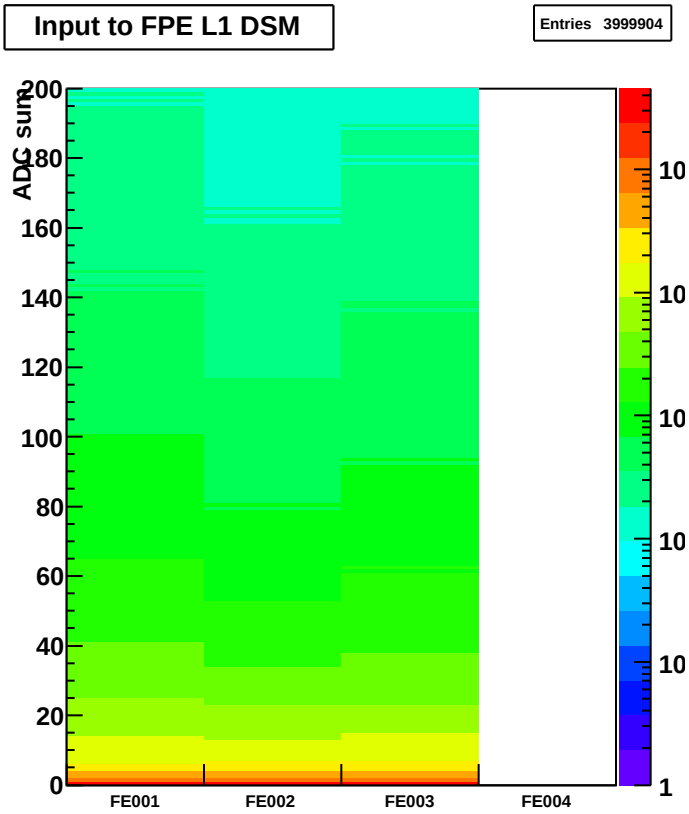

Input to FPD L2 DSM
Entries 3999904
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

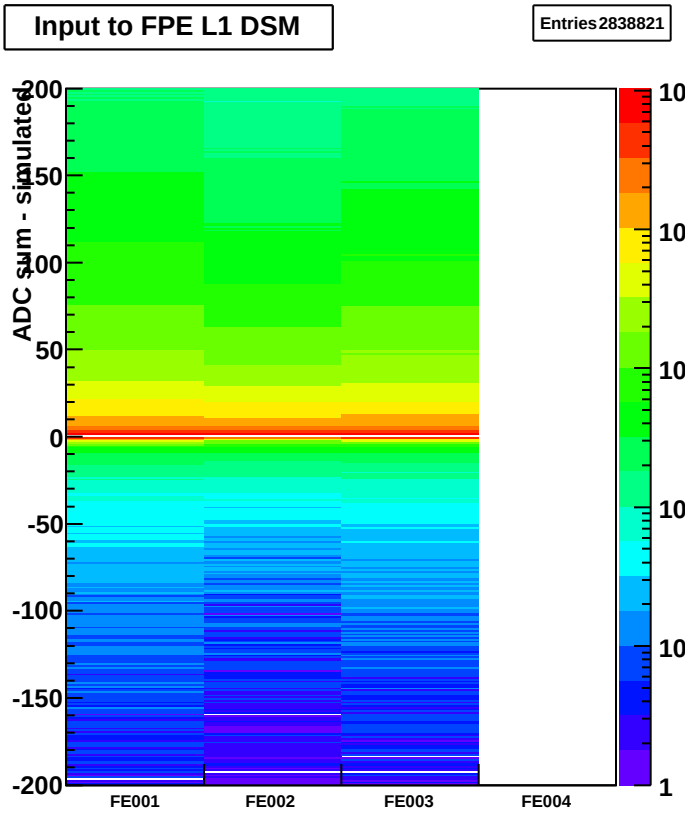

Input to FE001 QT board
Entries 3.199923e+07
ADC
channel

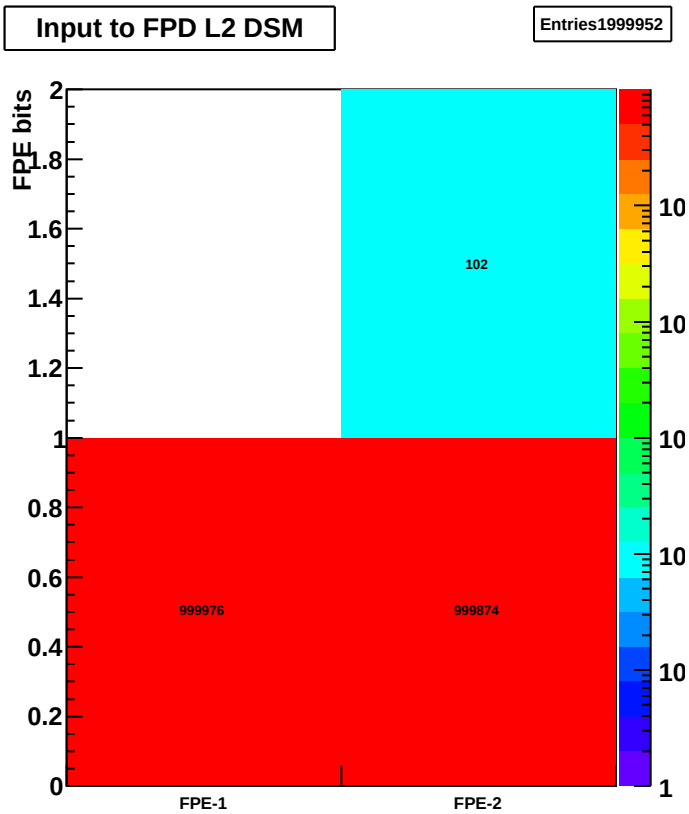

Input to FE002 QT board
Entries 3.199923e+07
ADC
channel

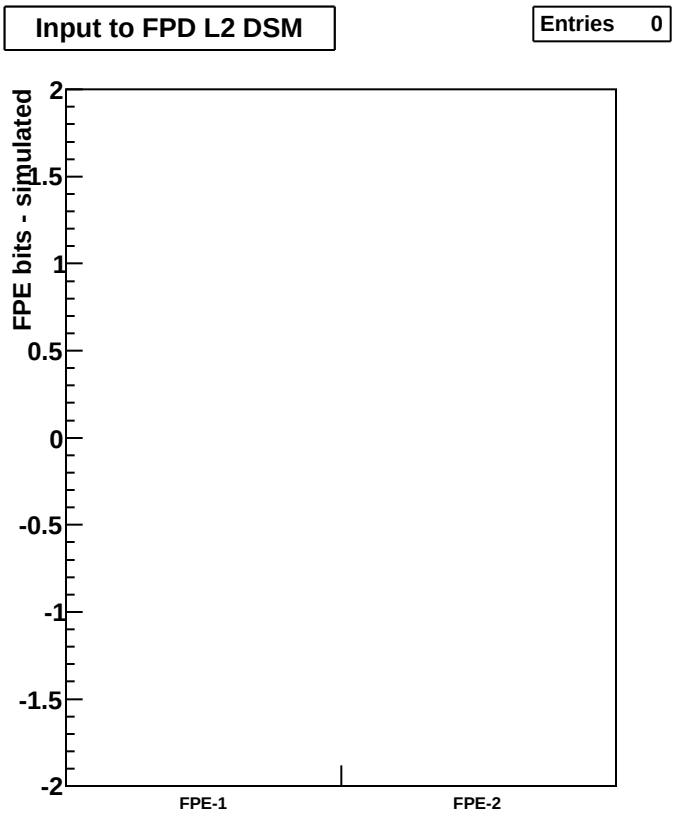

Input to FE003 QT board
Entries 3.199923e+07
ADC
channel


Input to FE004 QT board
Entries 3.199923e+07
ADC
channel


Input to FPE L1 DSM
Entries 3999904
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 2838821
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 1999952
FPE bits
102
999976
999874
FPE-1
FPE-2


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