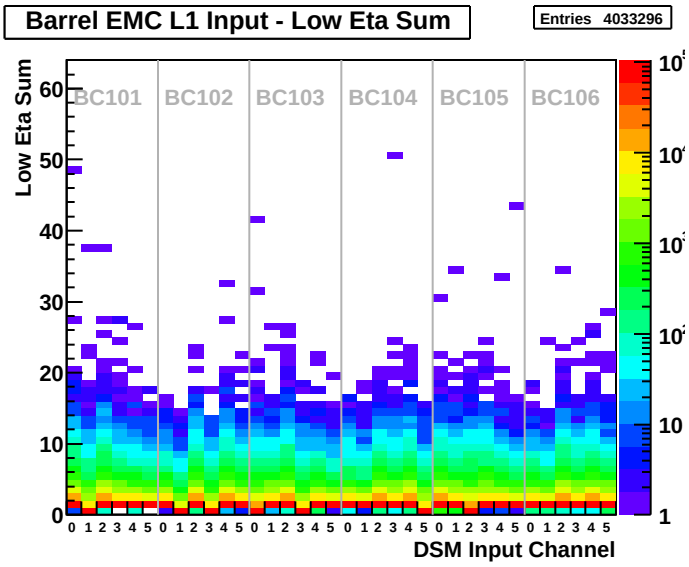
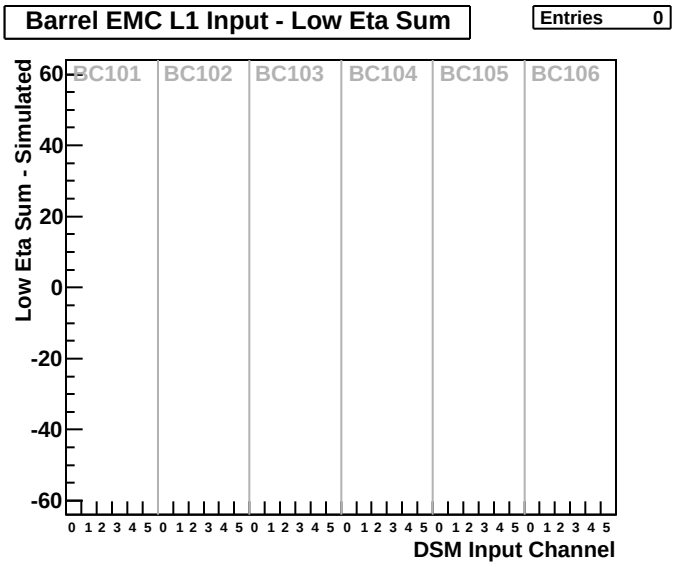
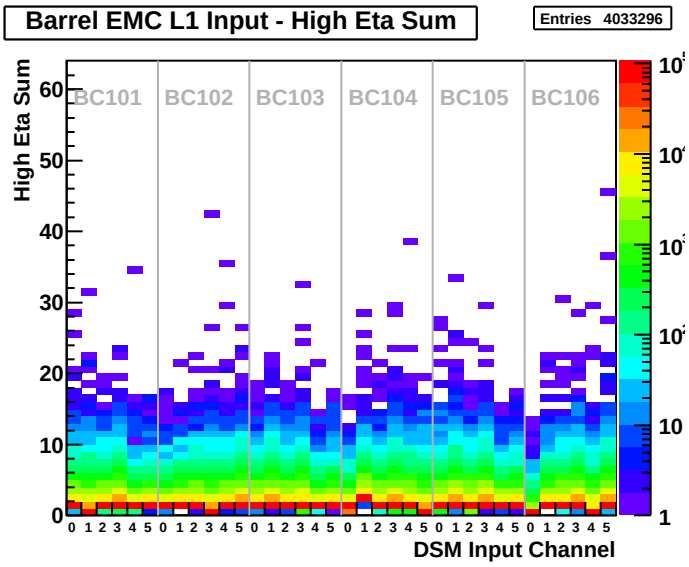
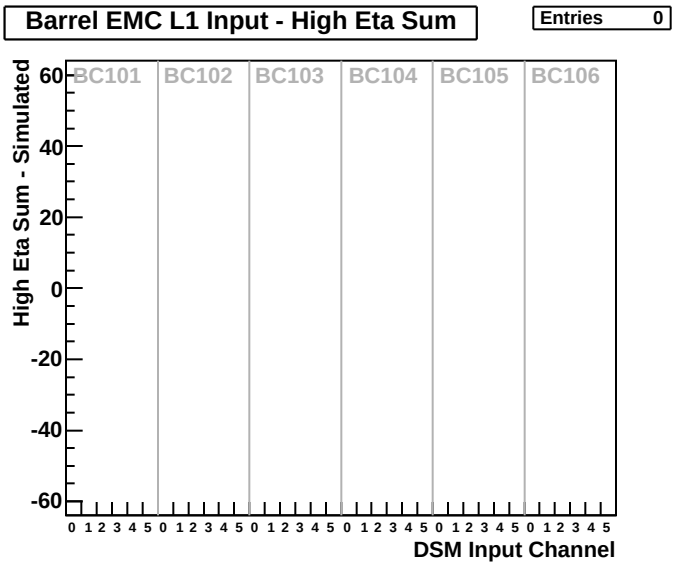
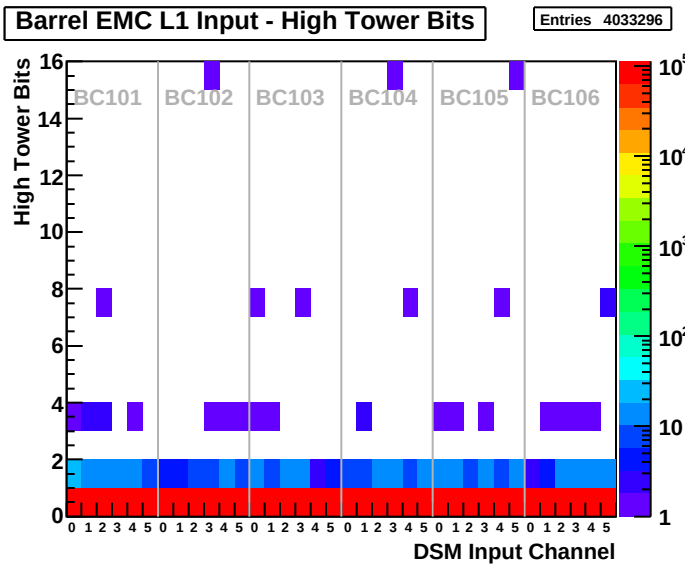
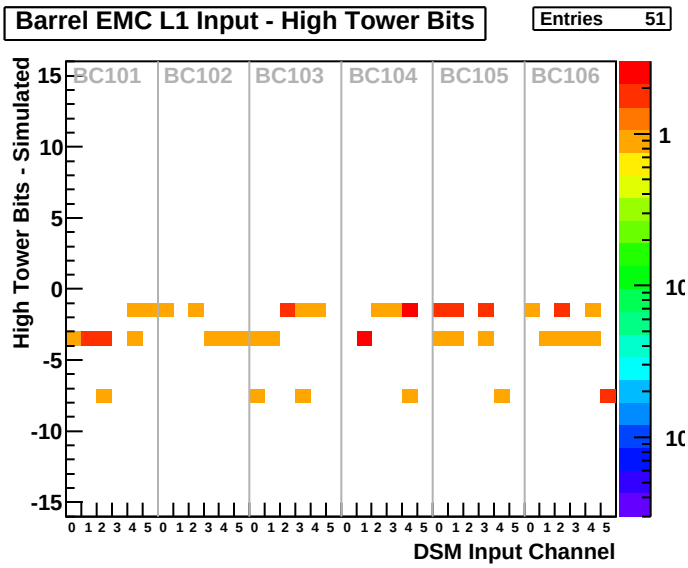

Barrel EMC L1 Input - Low Eta Sum
Entries 4033296
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

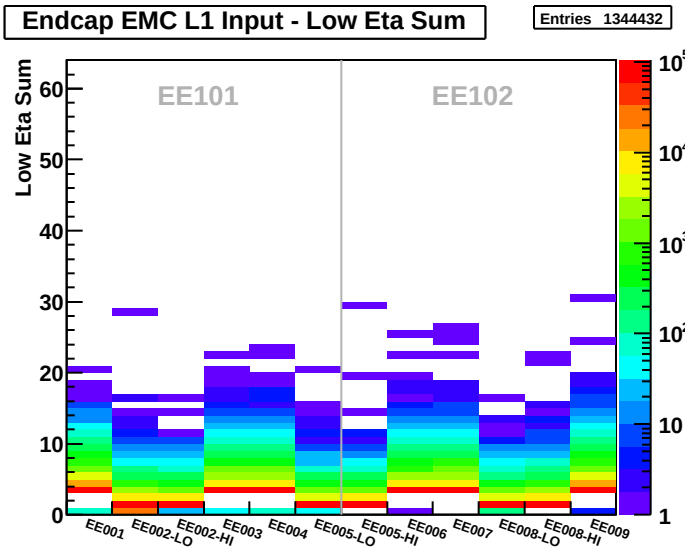

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

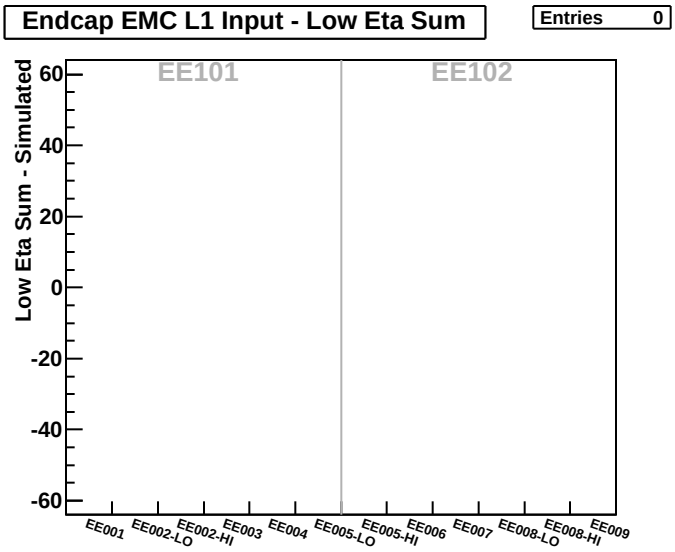

Barrel EMC L1 Input - High Eta Sum
Entries 4033296
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

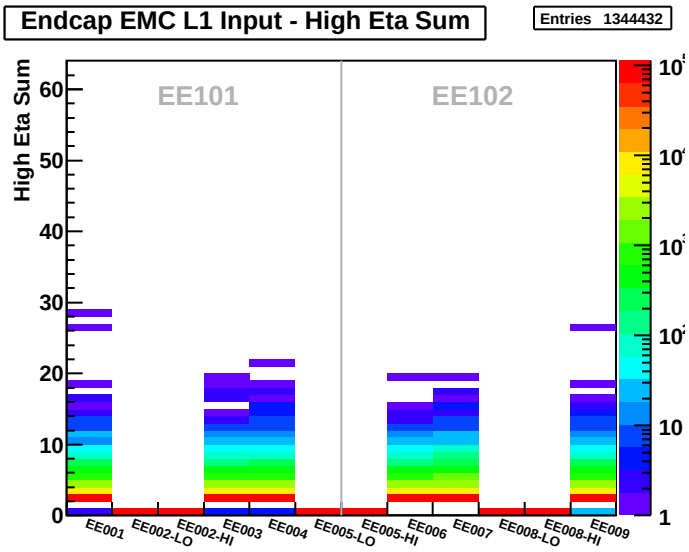

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

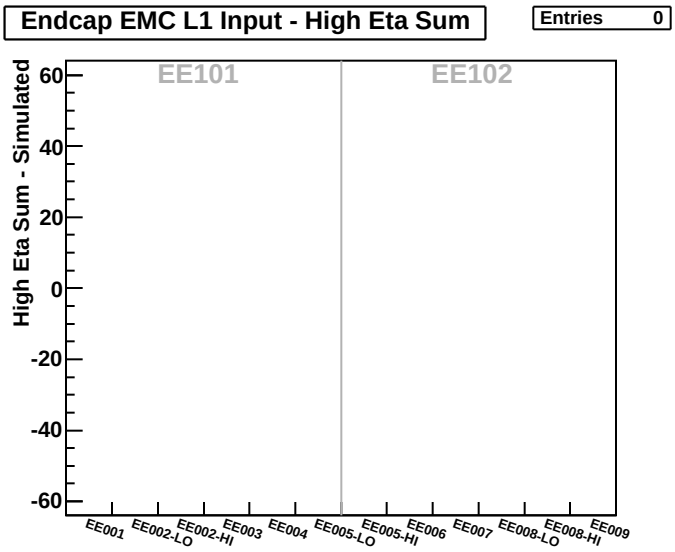

Barrel EMC L1 Input - High Tower Bits
Entries 4033296
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

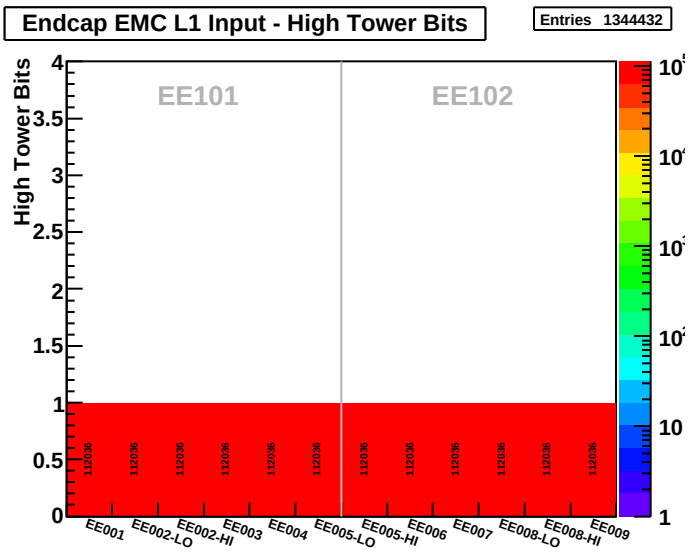

Barrel EMC L1 Input - High Tower Bits
Entries 51
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

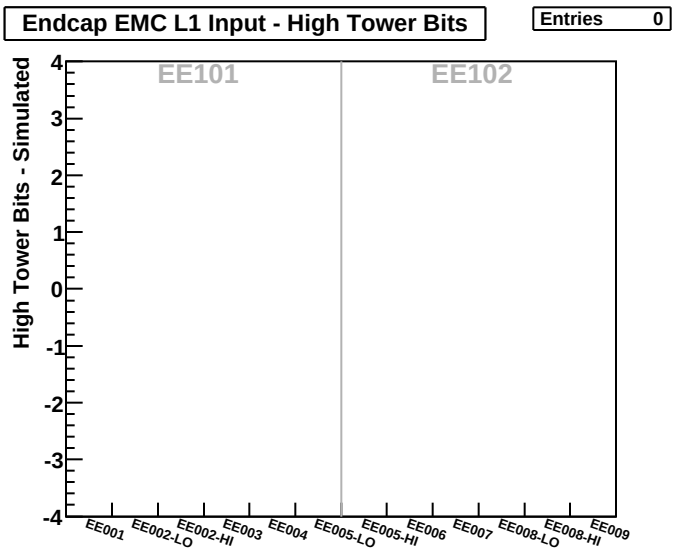

Endcap EMC L1 Input - Low Eta Sum
Entries 1344432
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

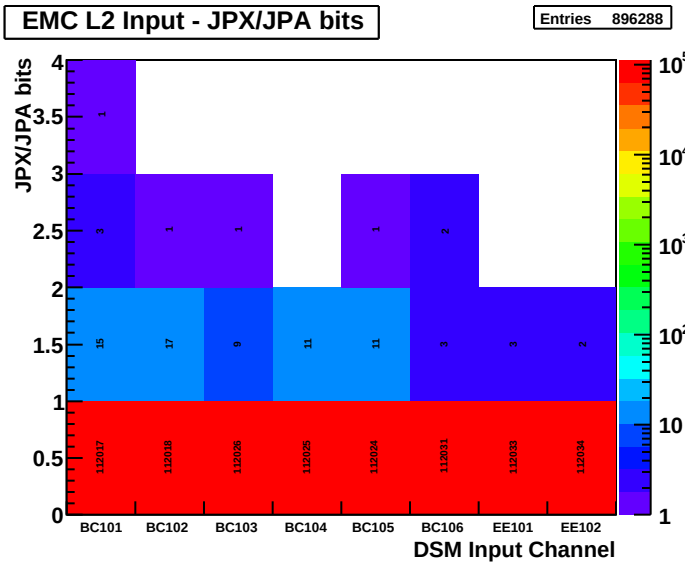

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

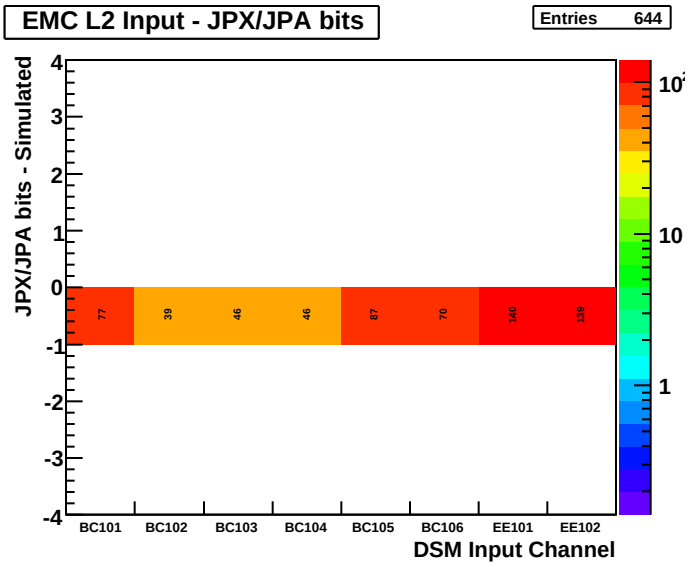

Endcap EMC L1 Input - High Eta Sum
Entries 1344432
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

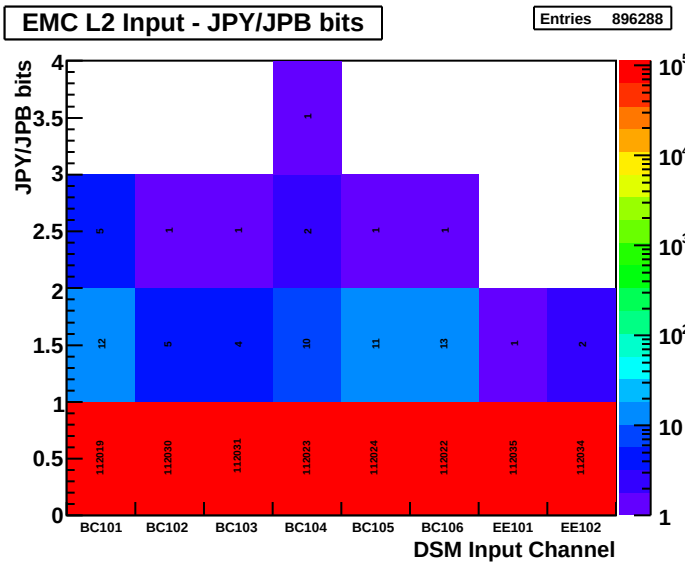

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

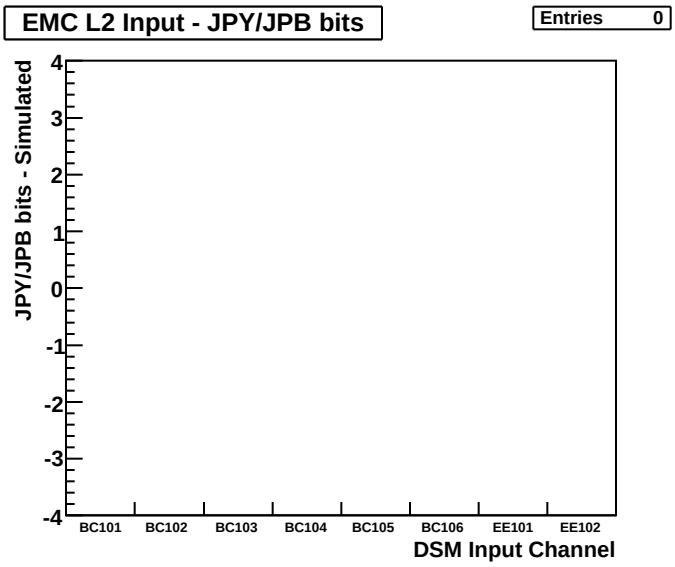

Endcap EMC L1 Input - High Tower Bits
Entries 1344432
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

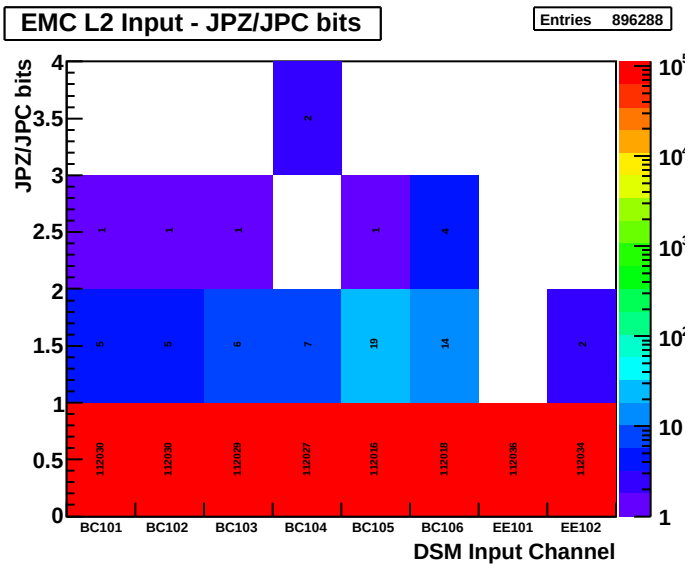

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

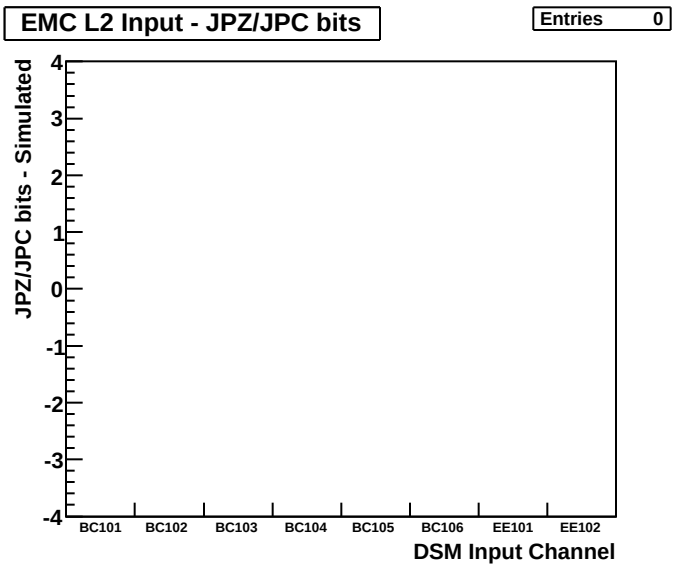

EMC L2 Input - JPX/JPA bits
Entries 896288
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

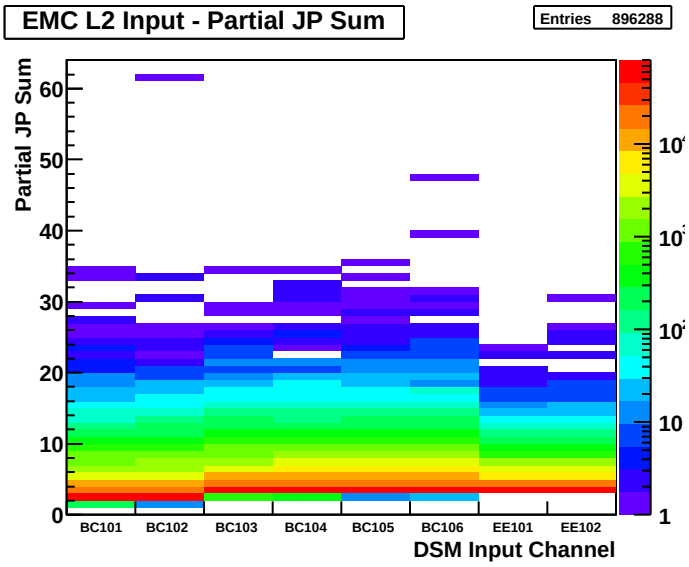

EMC L2 Input - JPX/JPA bits
Entries 644
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

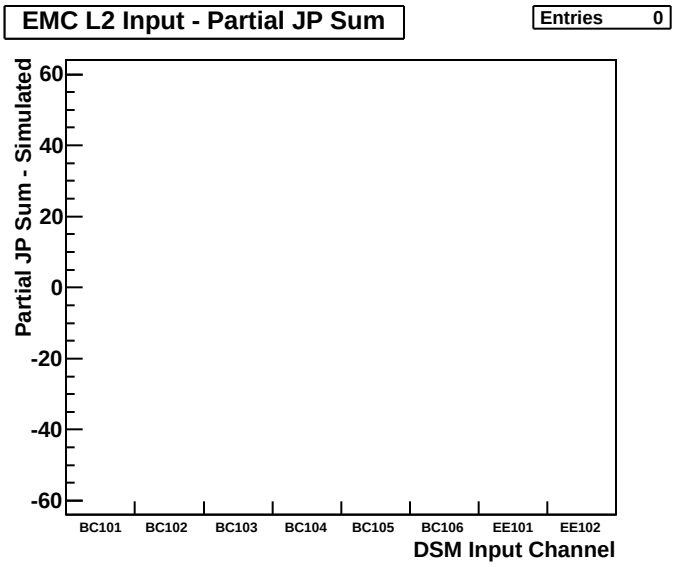

EMC L2 Input - JPY/JPB bits
Entries 896288
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

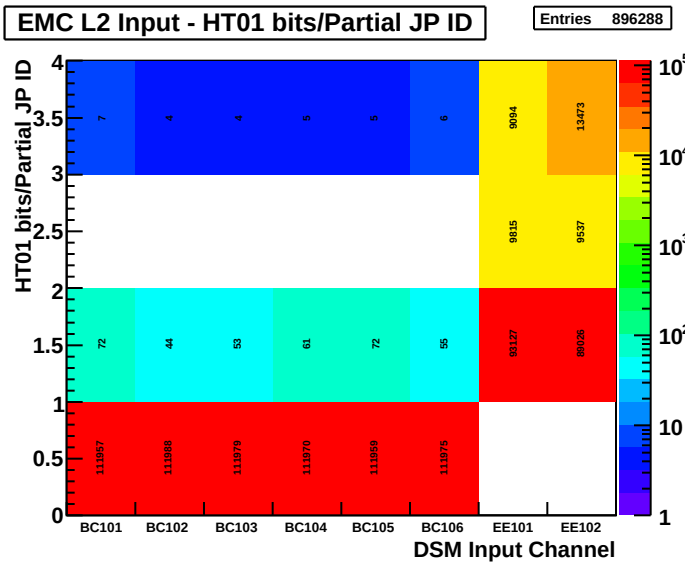

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

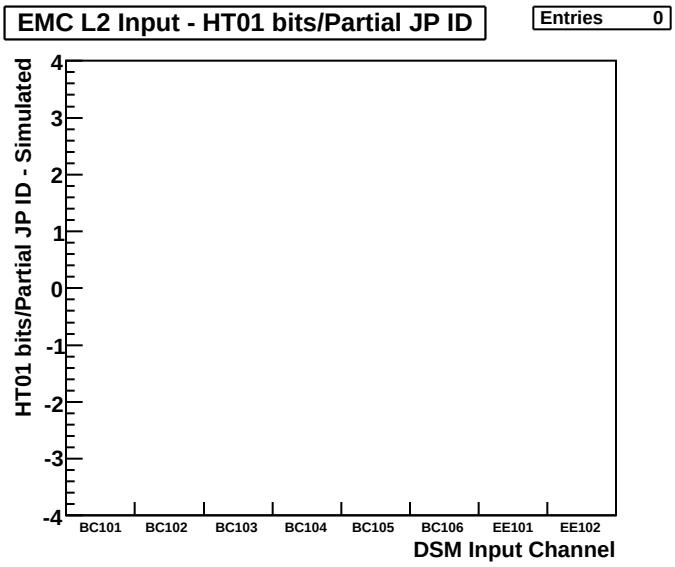

EMC L2 Input - JPZ/JPC bits
Entries 896288
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

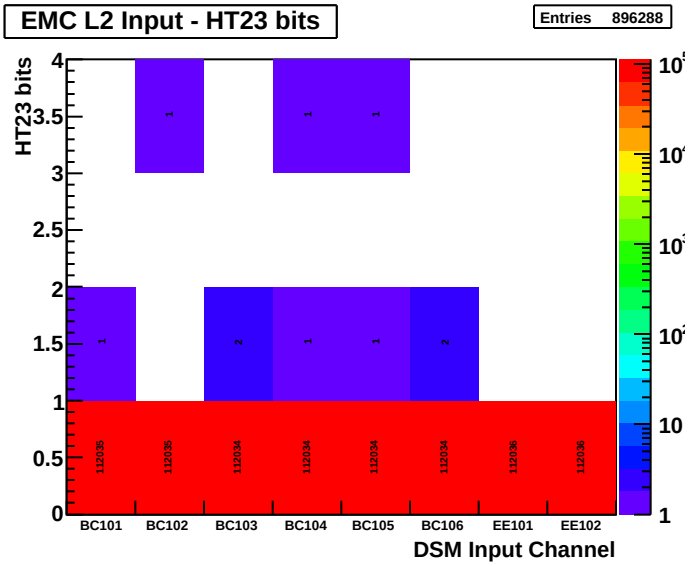

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

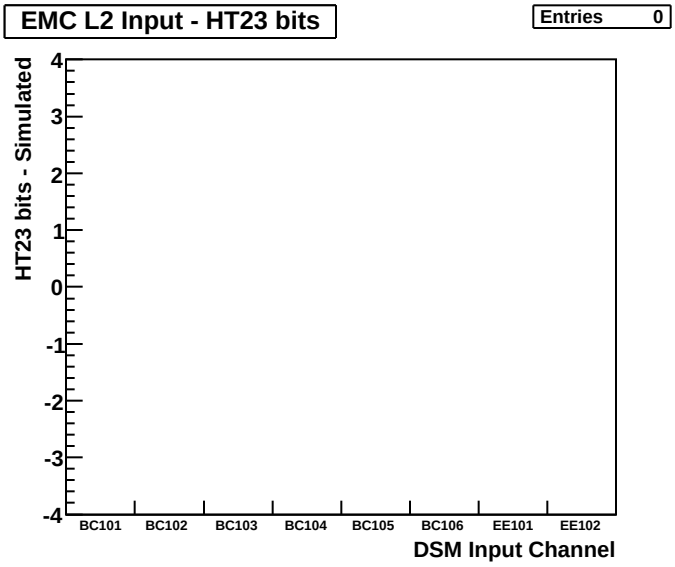

EMC L2 Input - Partial JP Sum
Entries 896288
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

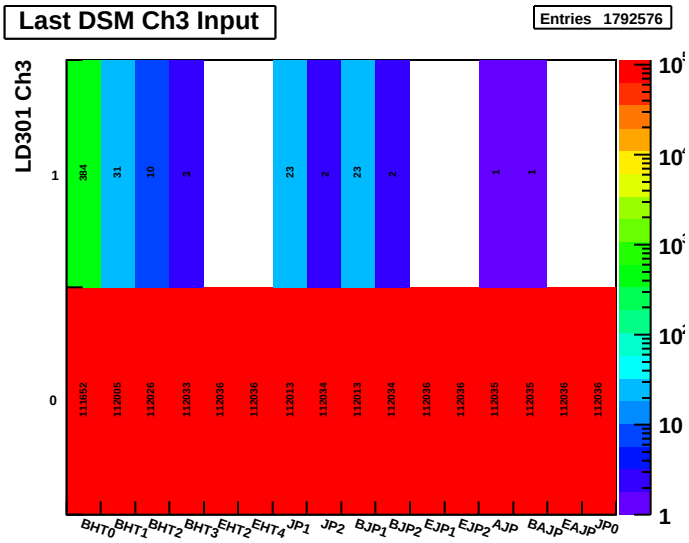

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

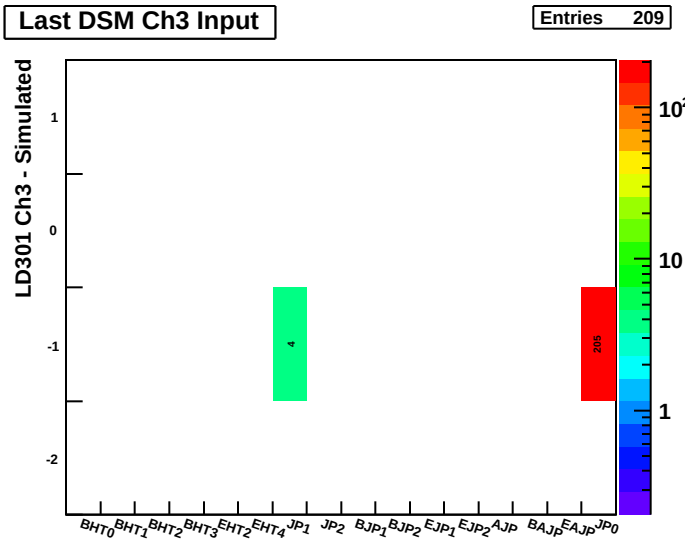

EMC L2 Input - HT01 bits/Partial JP ID
Entries 896288
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

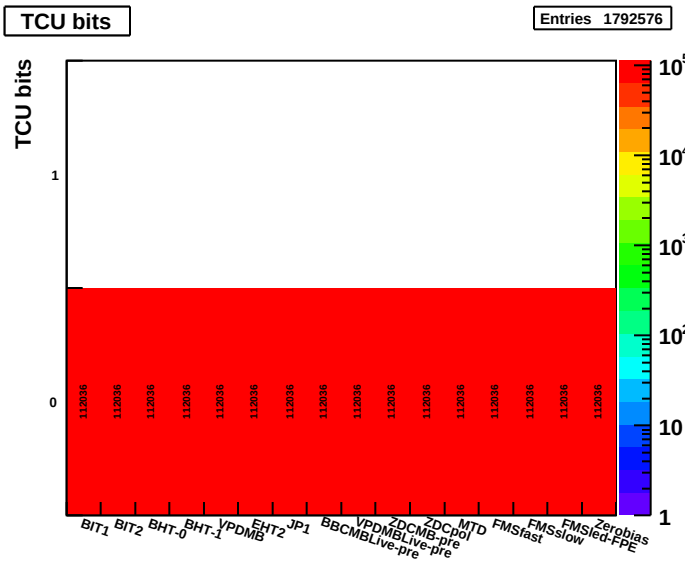

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

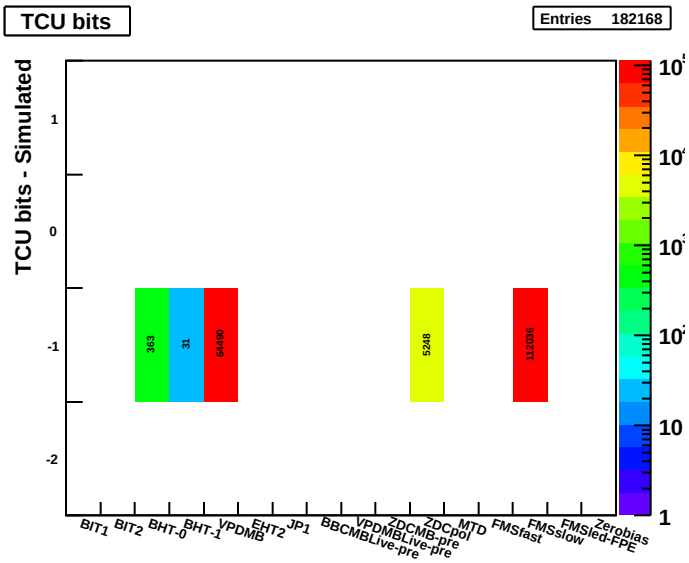

EMC L2 Input - HT23 bits
Entries 896288
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

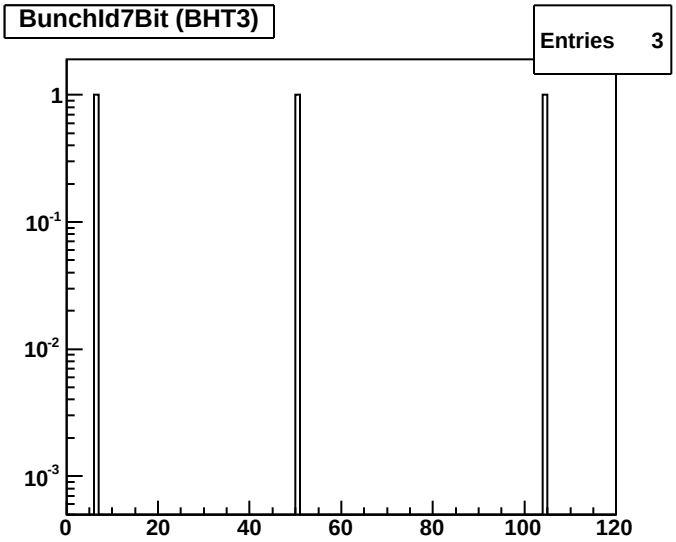

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

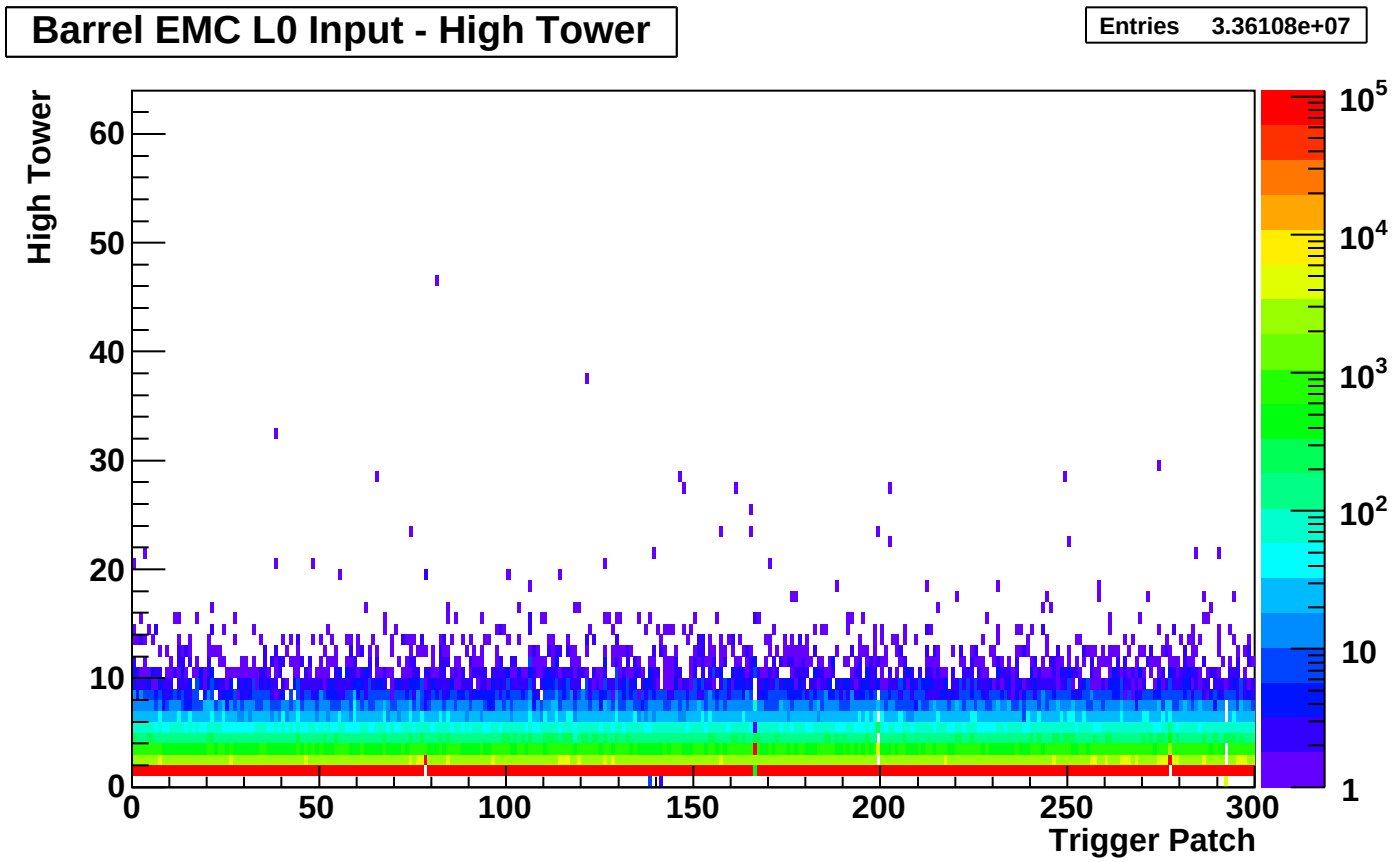

Last DSM Ch3 Input
Entries 1792576
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

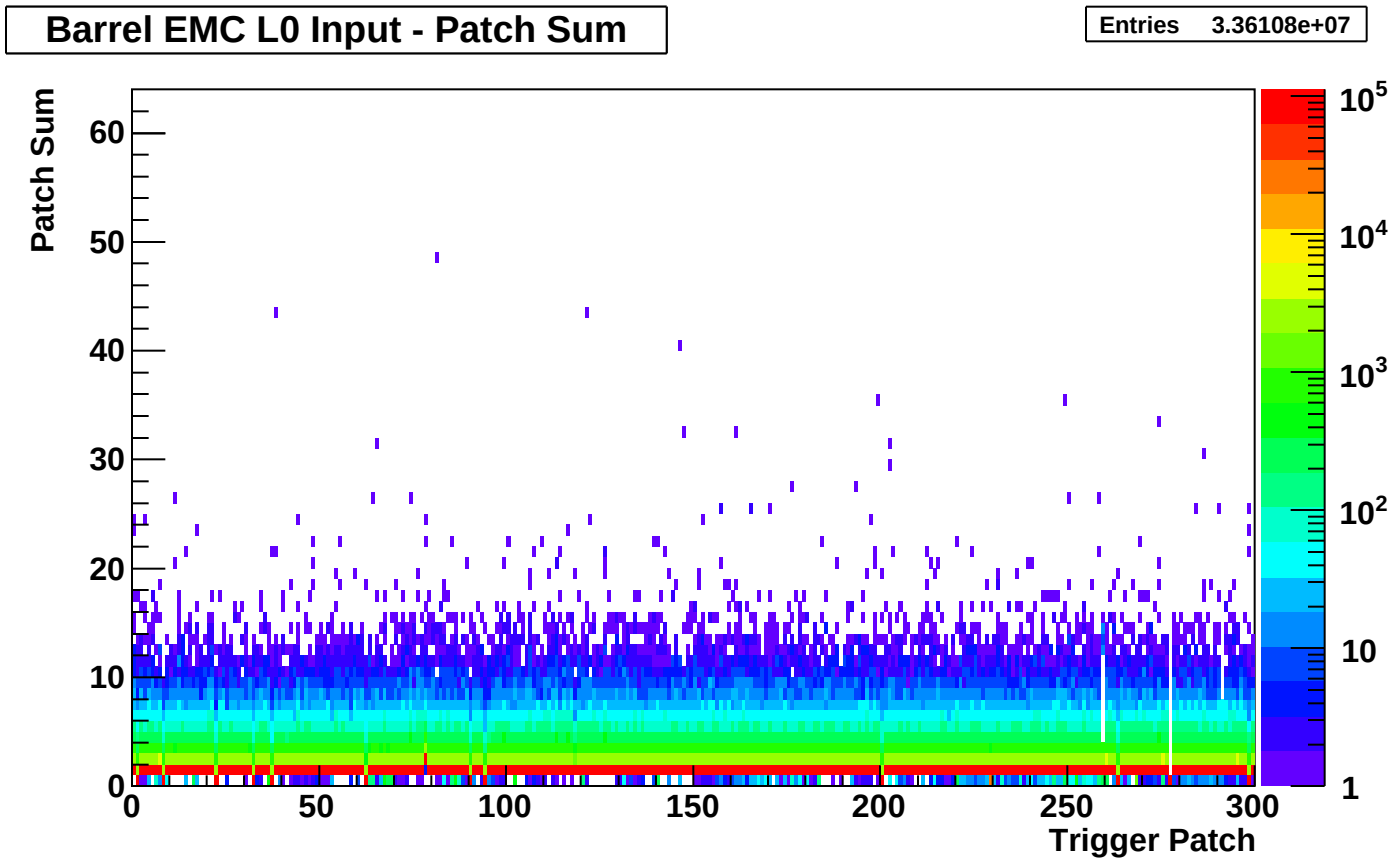

Last DSM Ch3 Input
Entries 209
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

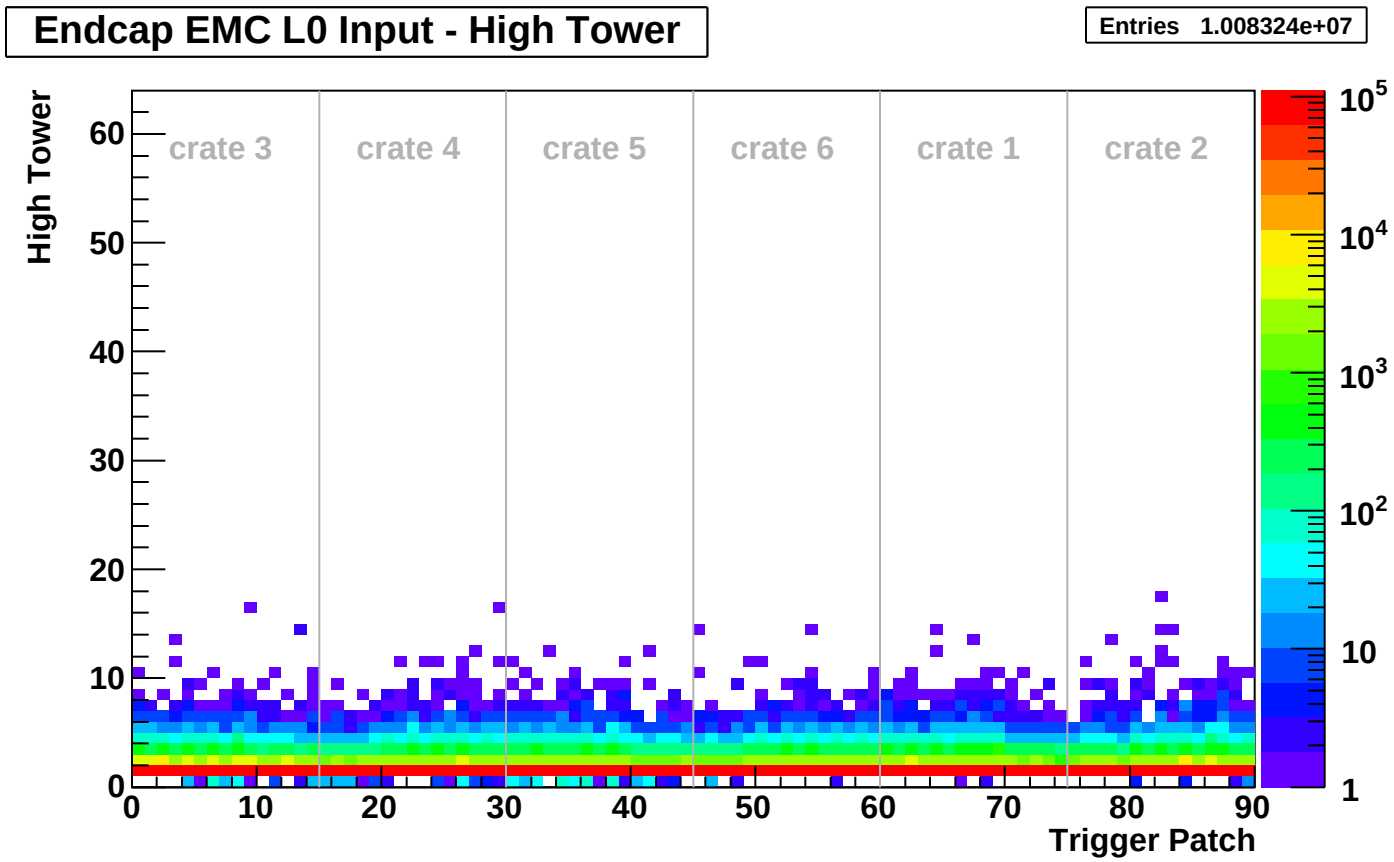

TCU bits
Entries 1792576
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

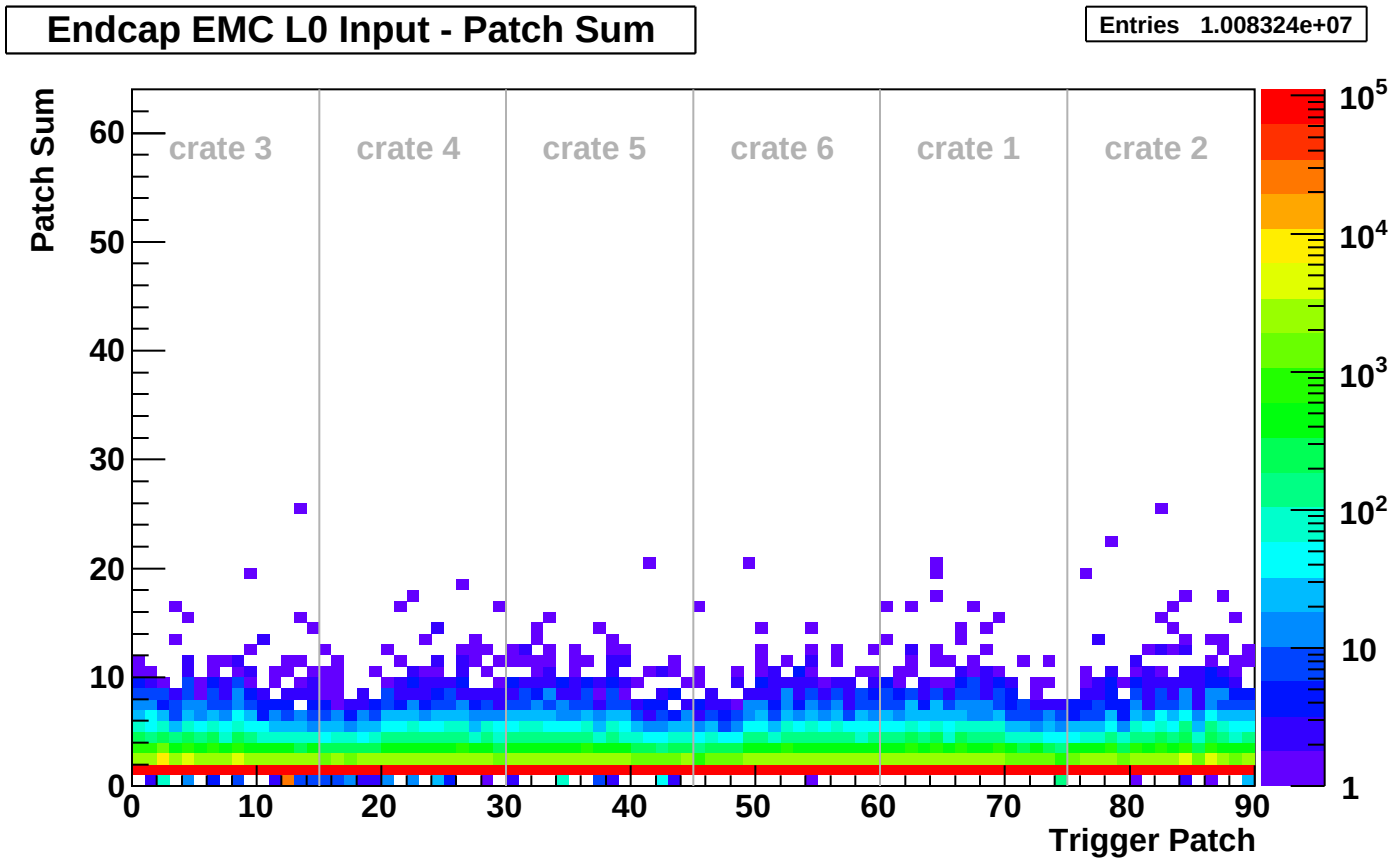

TCU bits
Entries 182168
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

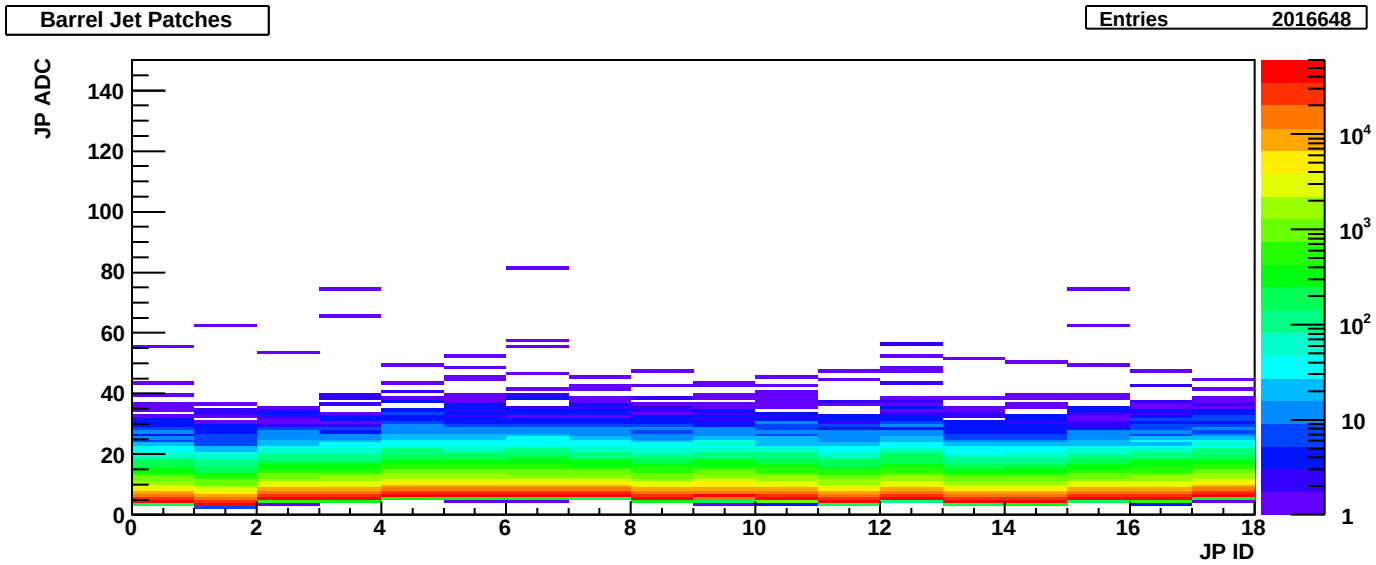

BunchId7Bit (BHT3)
Entries 3

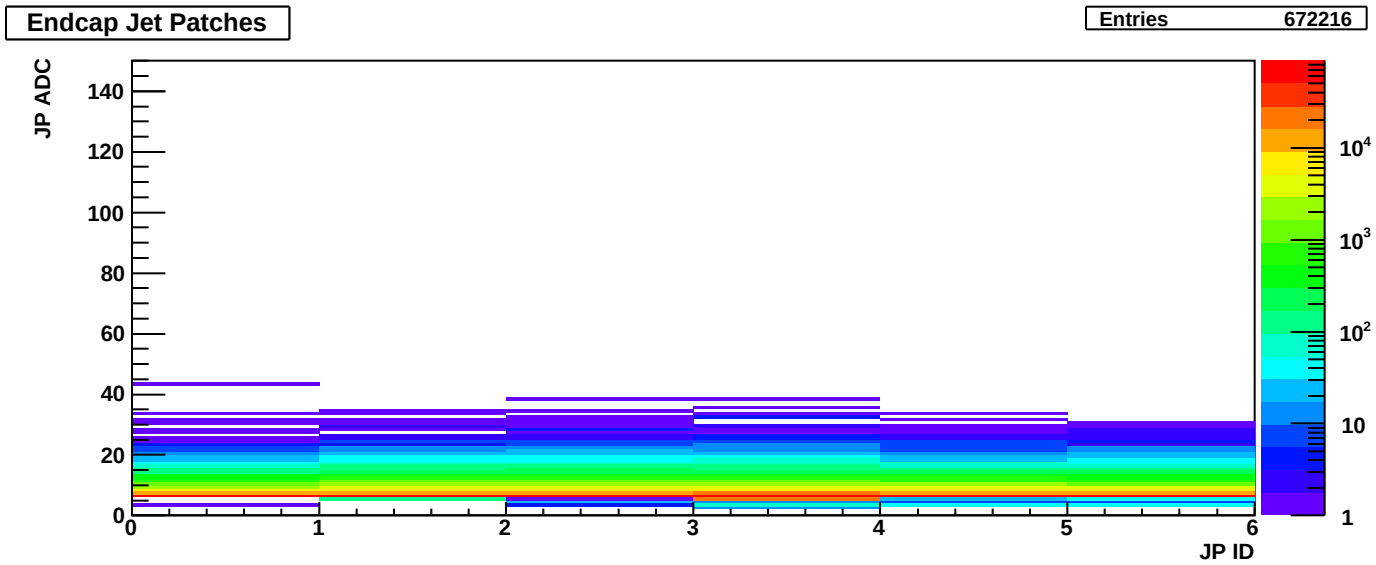

Barrel EMC L0 Input - High Tower
Entries 3.36108e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

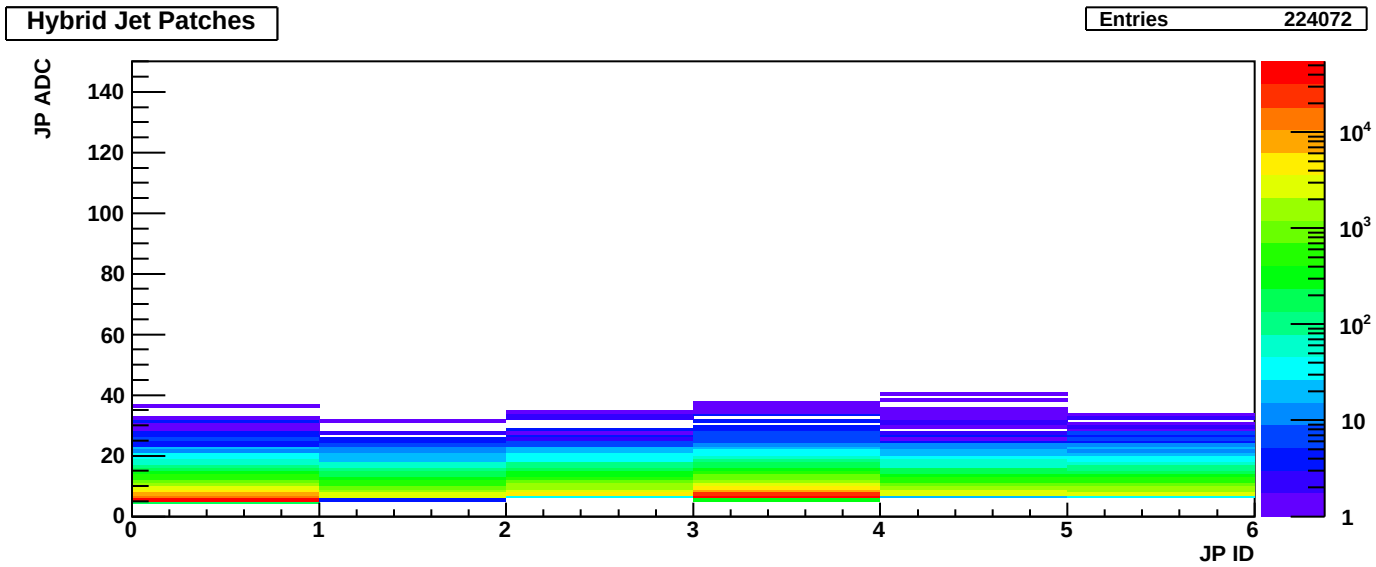

Barrel EMC L0 Input - Patch Sum
Entries 3.36108e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

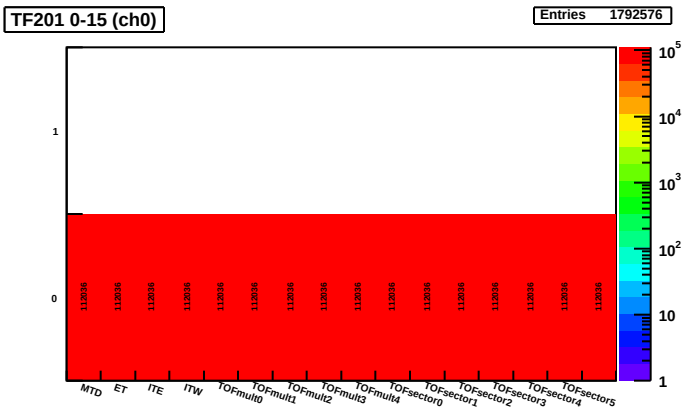

Endcap EMC L0 Input - High Tower
Entries 1.008324e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

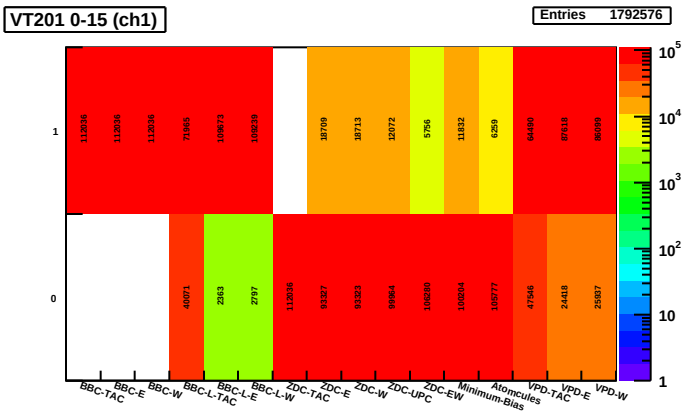

Endcap EMC L0 Input - Patch Sum
Entries 1.008324e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

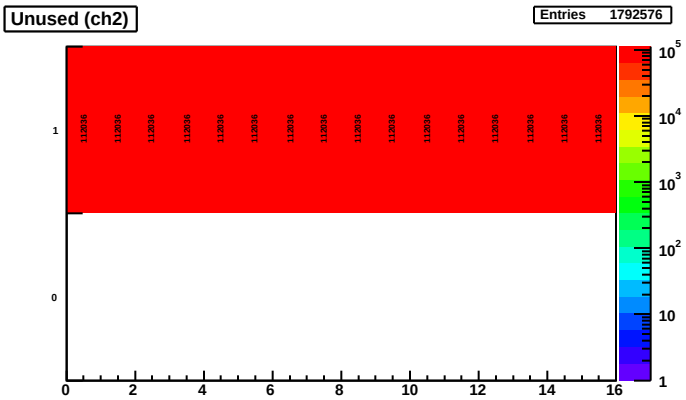

Barrel Jet Patches
Entries 2016648
JP ADC
JP ID

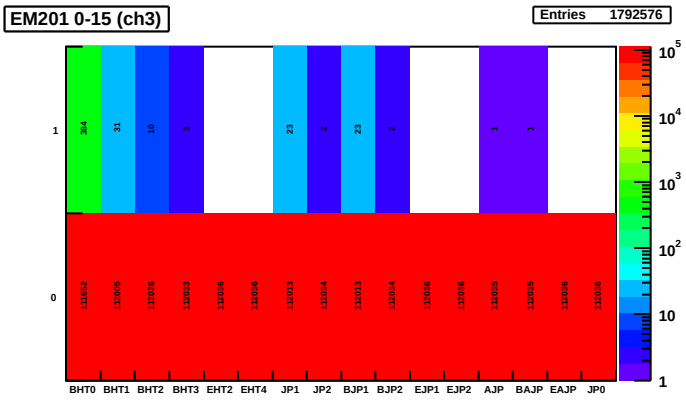

Endcap Jet Patches
Entries 672216
JP ADC
JP ID

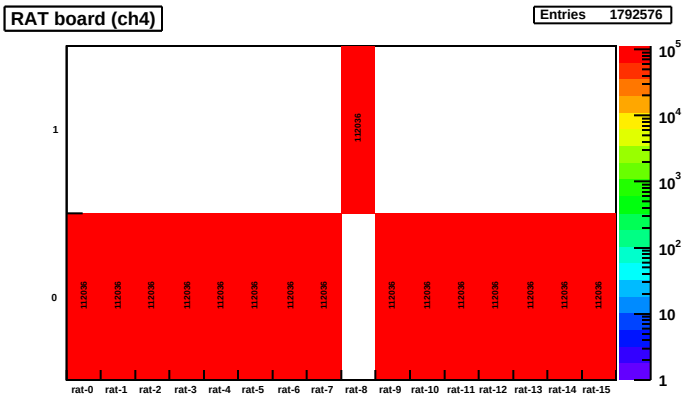

Hybrid Jet Patches
Entries 224072
JP ADC
JP ID

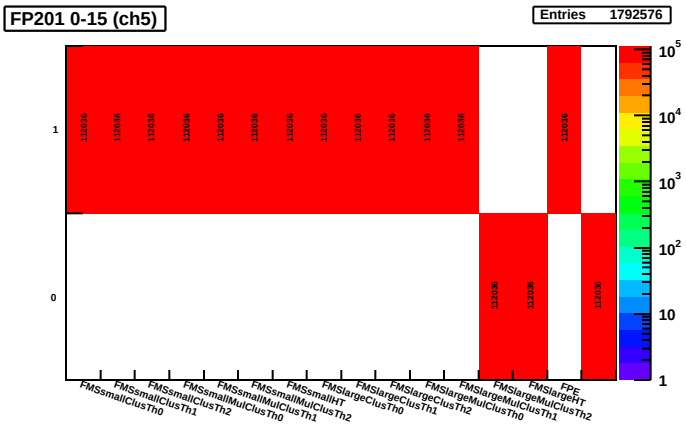

TF201 0-15 (ch0)
Entries 1792576
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

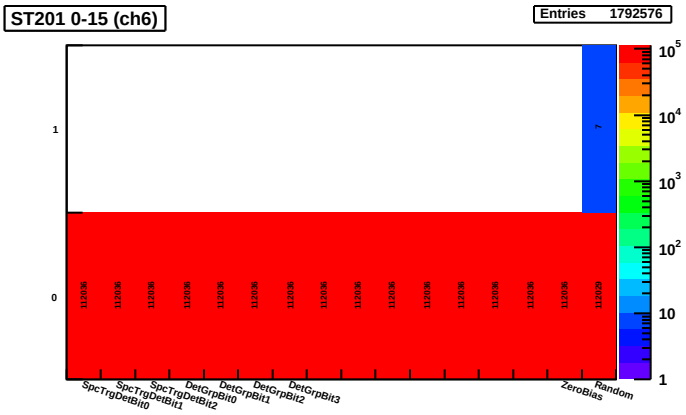

VT201 0-15 (ch1)
Entries 1792576
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

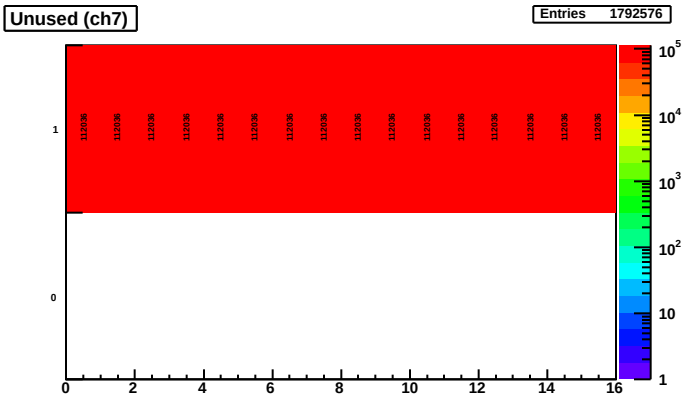

Unused (ch2)
Entries 1792576

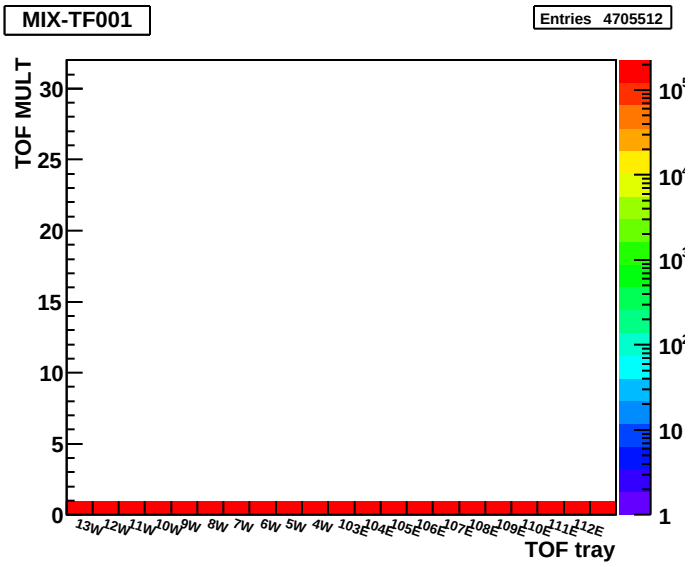

EM201 0-15 (ch3)
Entries 1792576
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

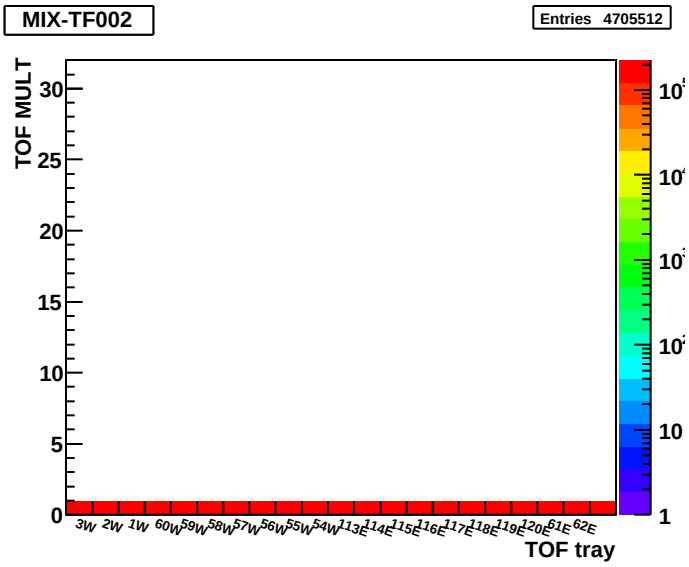

RAT board (ch4)
Entries 1792576
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

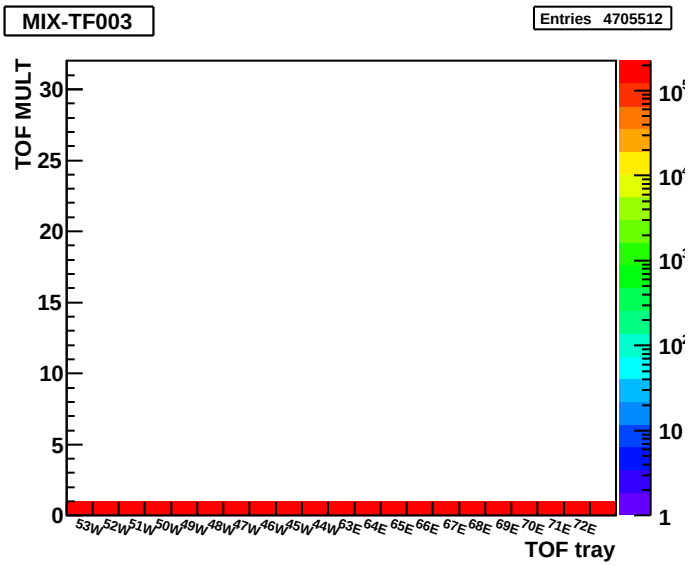

FP201 0-15 (ch5)
Entries 1792576
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

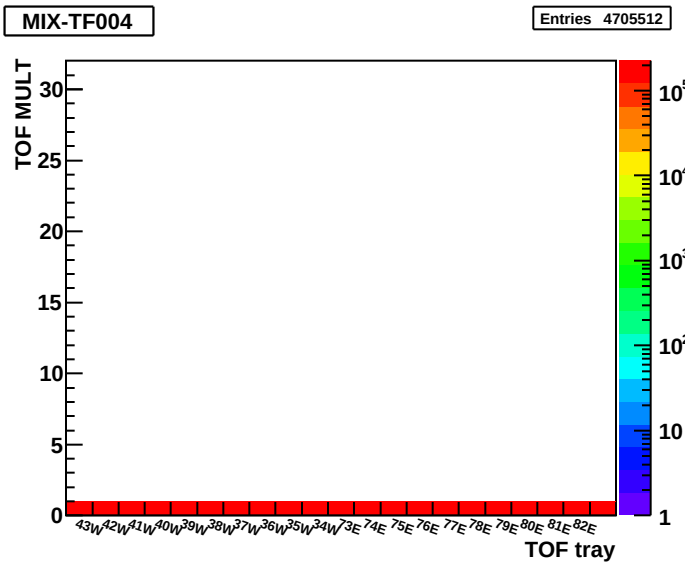

ST201 0-15 (ch6)
Entries 1792576
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

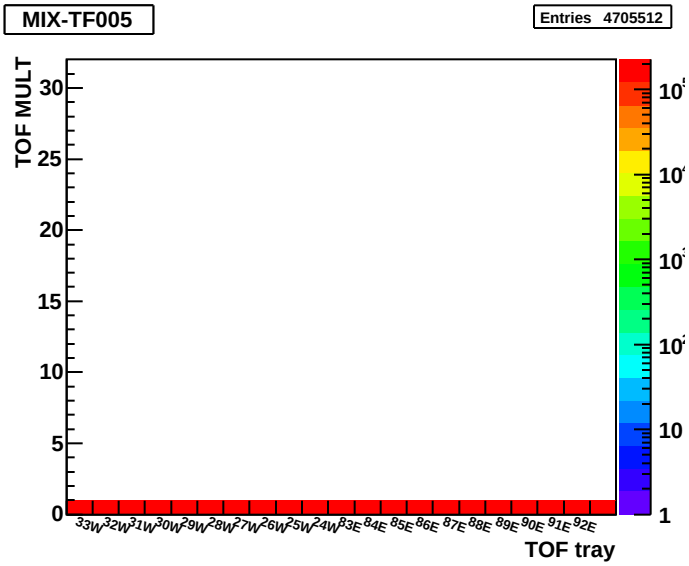

Unused (ch7)
Entries 1792576

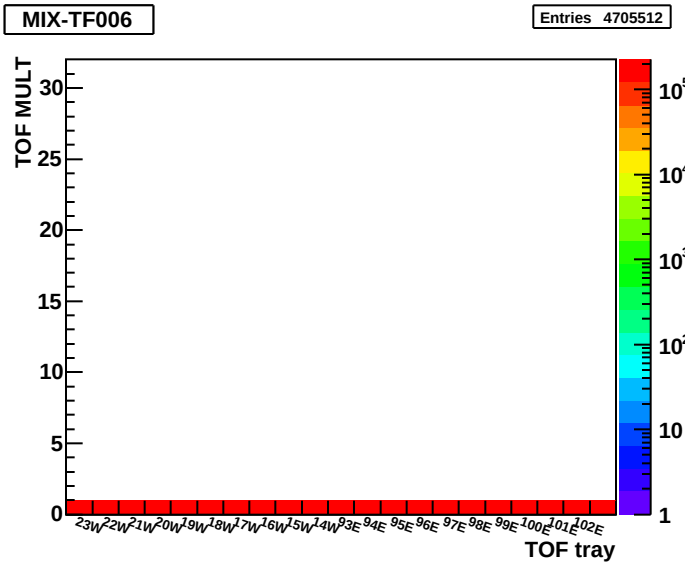

MIX-TF001
Entries 4705512
TOF MULT
TOF tray

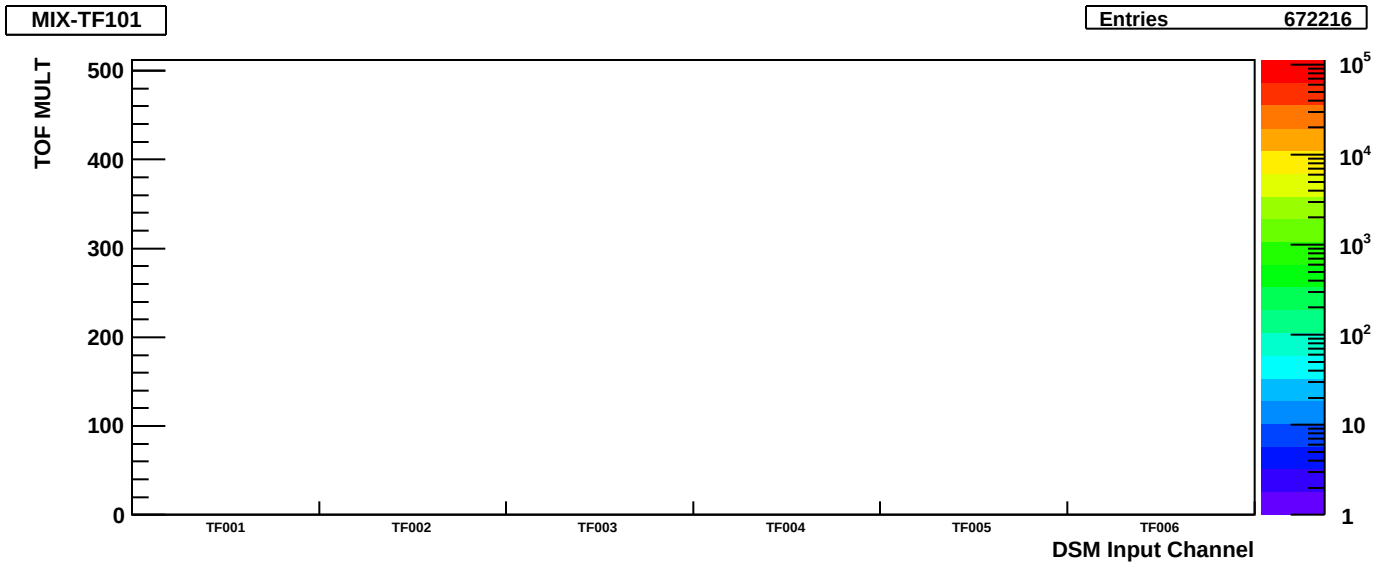

MIX-TF002
Entries 4705512
TOF MULT
TOF tray

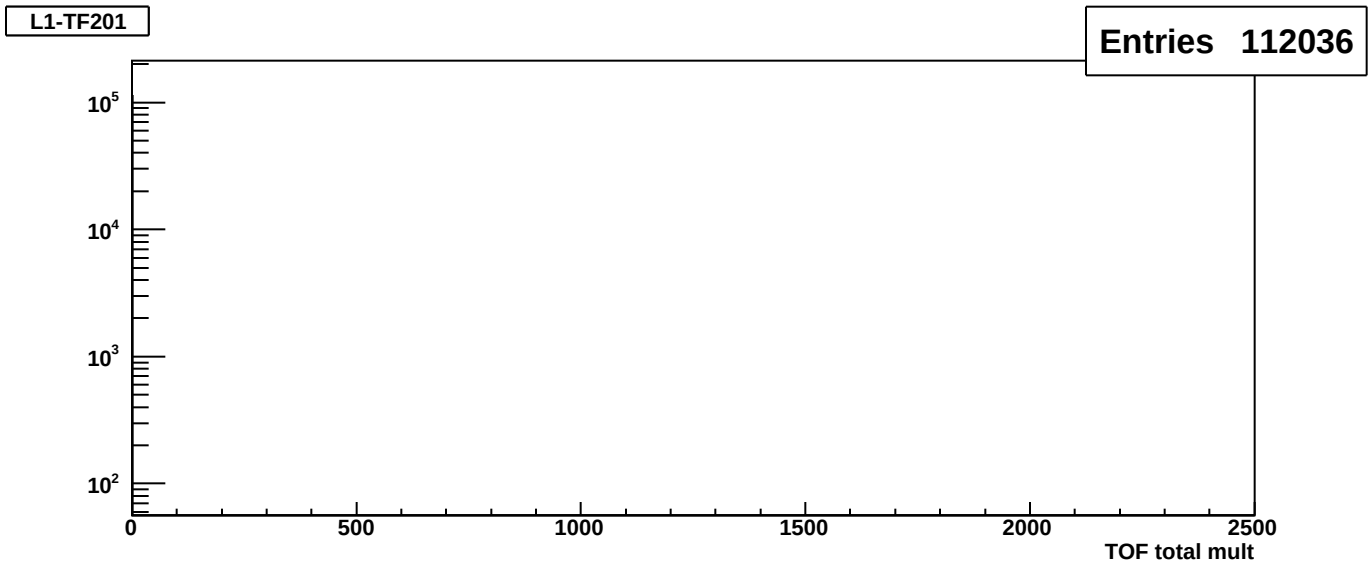

MIX-TF003
Entries 4705512
TOF MULT
TOF tray

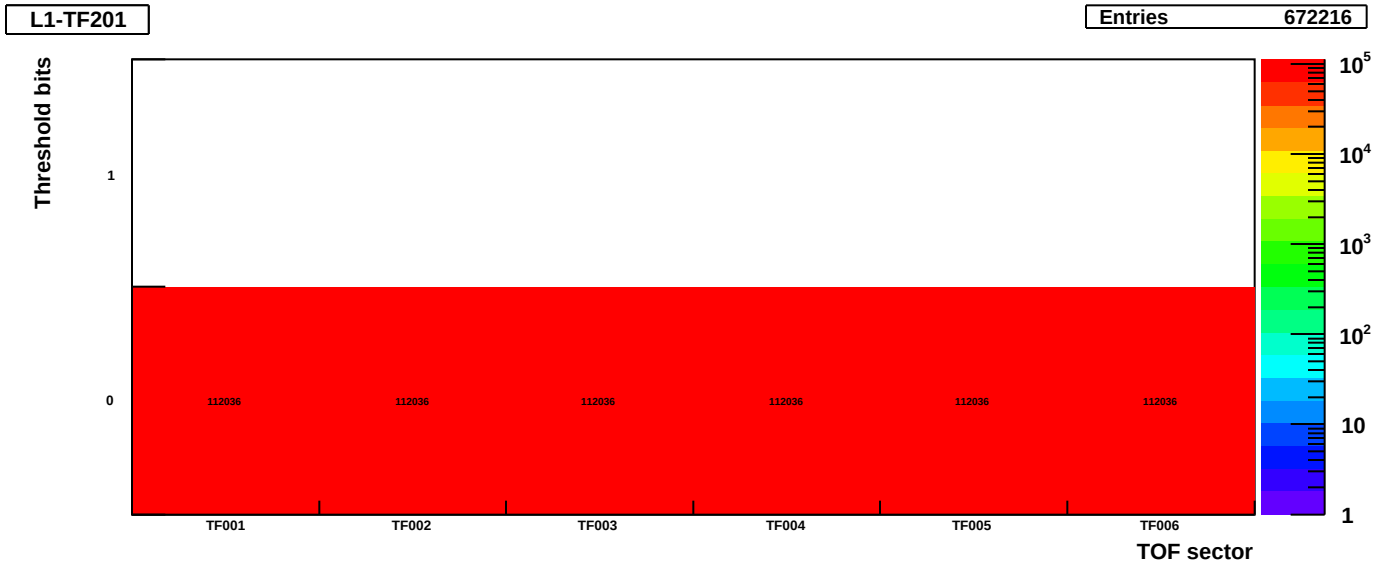

MIX-TF004
Entries 4705512
TOF MULT
TOF tray

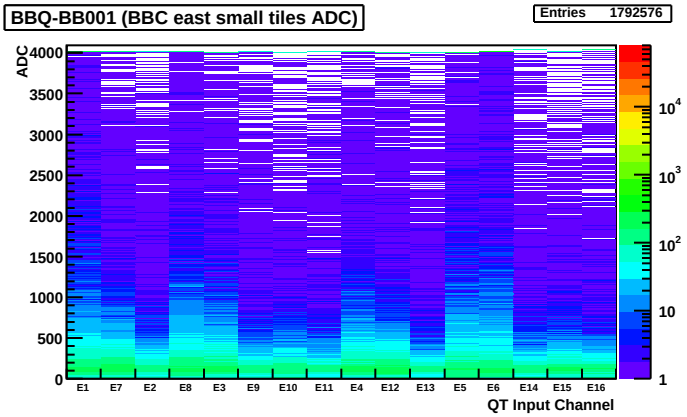

MIX-TF005
Entries 4705512
TOF MULT
TOF tray

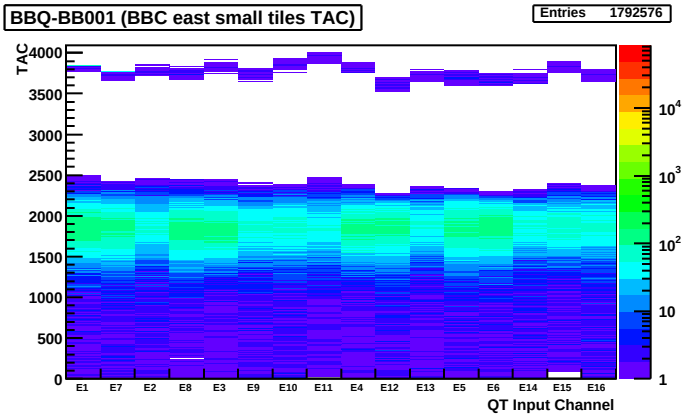

MIX-TF006
Entries 4705512
TOF MULT
TOF tray

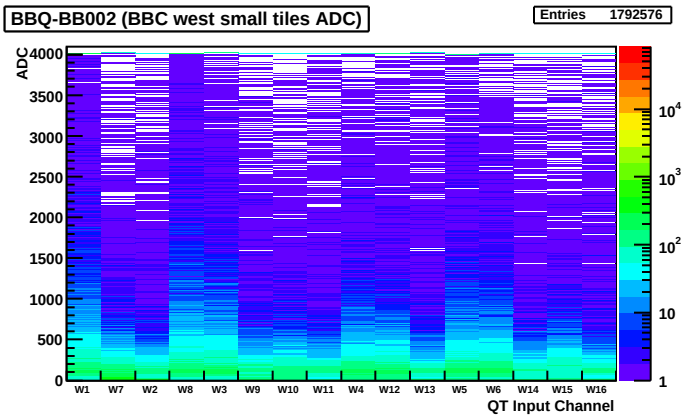

MIX-TF101
Entries 672216
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^5$
$10^4$
$10^3$
$10^2$
10
1

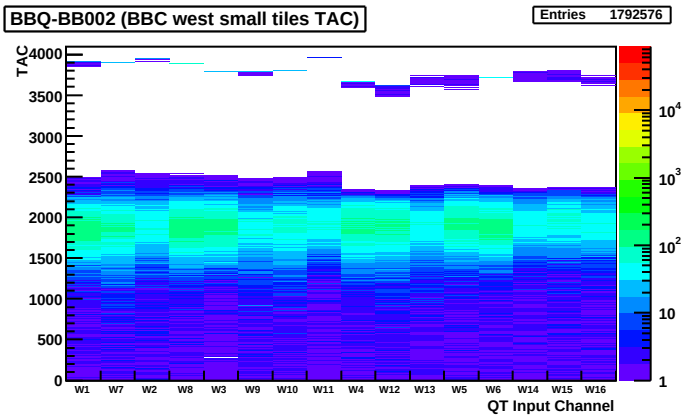

L1-TF201
Entries 112036
$10^5$
$10^4$
$10^3$
$10^2$
0
500
1000
1500
2000
2500
TOF total mult

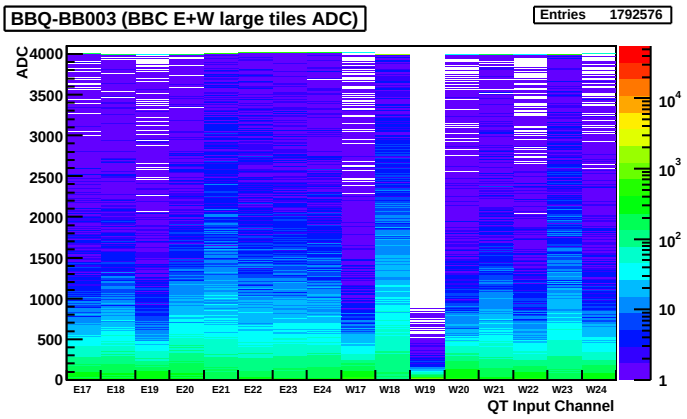

L1-TF201
Entries 672216
Threshold bits
1
0
112036
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
$10^5$
$10^4$
$10^3$
$10^2$
10
1

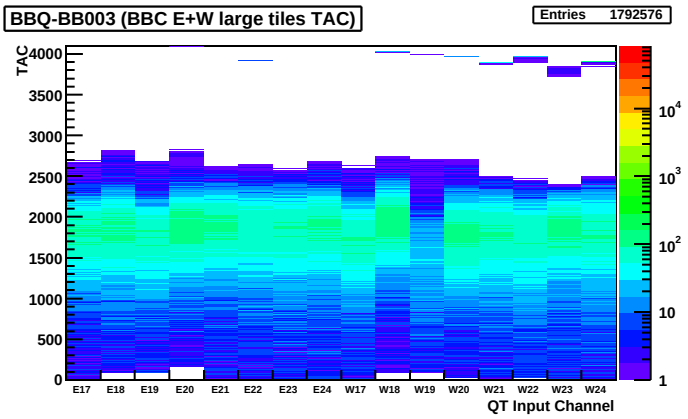

BBQ-BB001 (BBC east small tiles ADC)
Entries 1792576
ADC
QT Input Channel

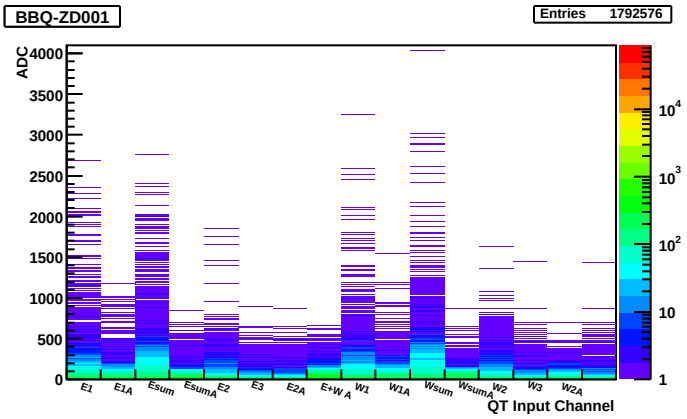

BBQ-BB001 (BBC east small tiles TAC)
Entries 1792576
TAC
QT Input Channel

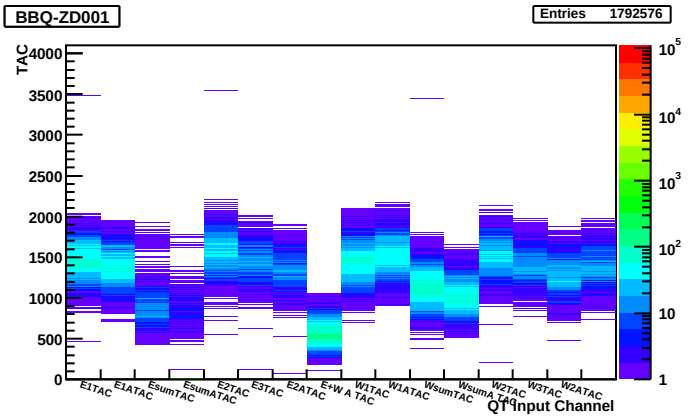

BBQ-BB002 (BBC west small tiles ADC)
Entries 1792576
ADC
QT Input Channel

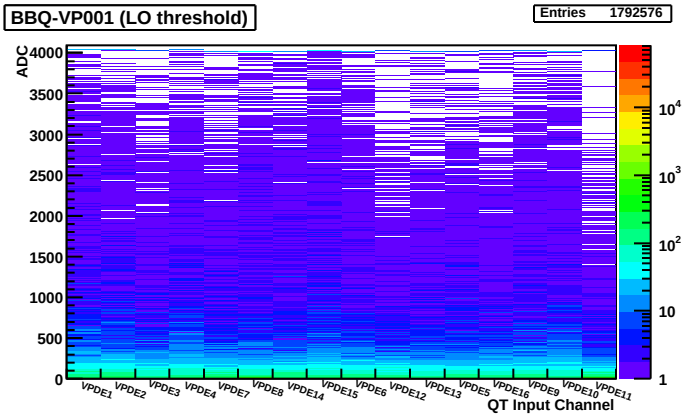

BBQ-BB002 (BBC west small tiles TAC)
Entries 1792576
TAC
QT Input Channel

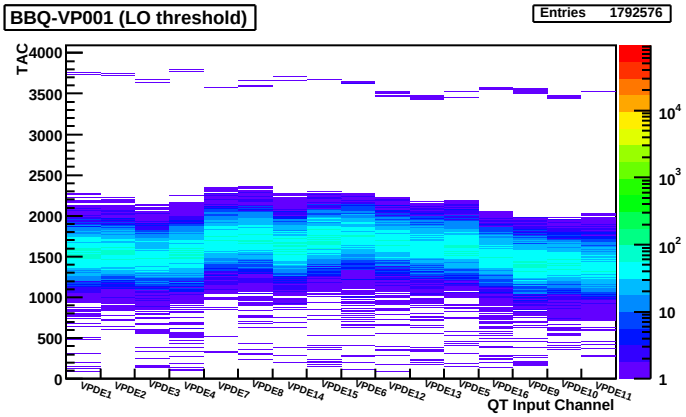

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1792576
ADC
QT Input Channel

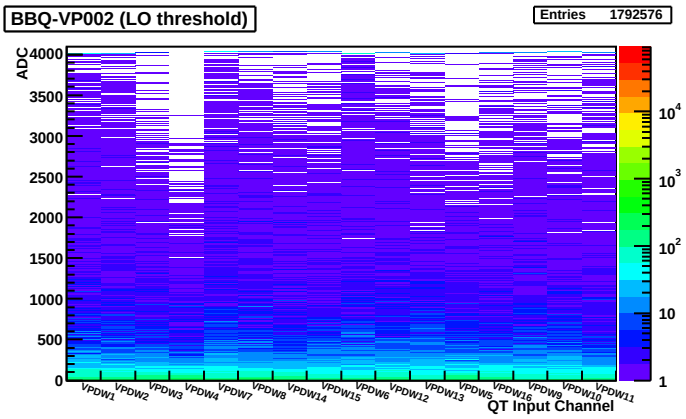

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1792576
TAC
QT Input Channel

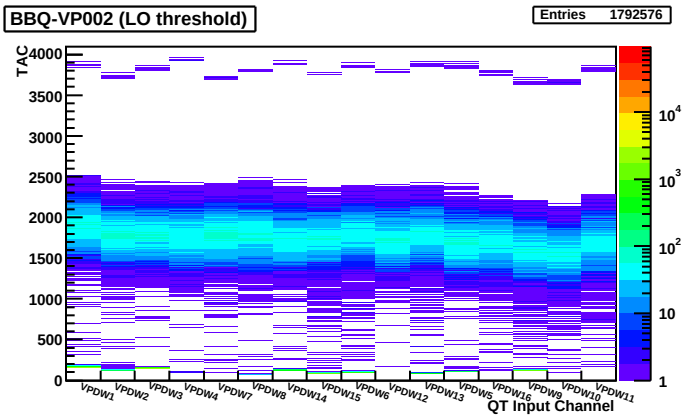

BBQ-ZD001
Entries 1792576
ADC
QT Input Channel

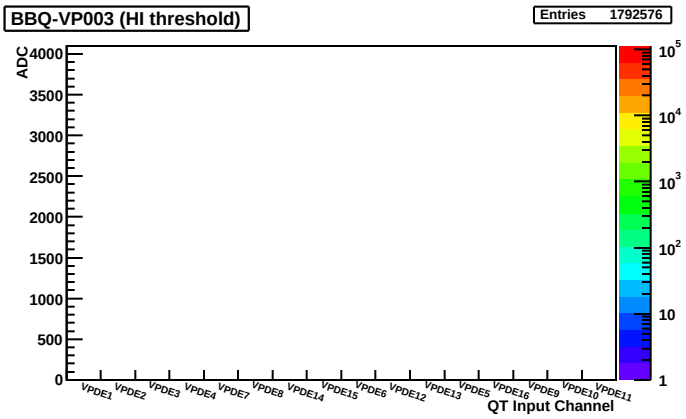

BBQ-ZD001
Entries 1792576
TAC
QT Input Channel

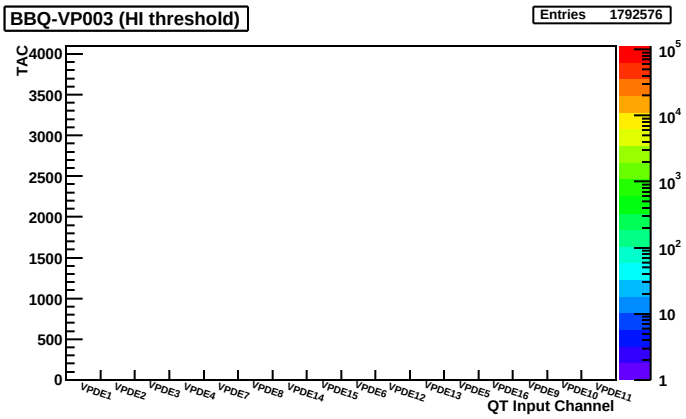

BBQ-VP001 (LO threshold)
Entries 1792576
ADC
QT Input Channel

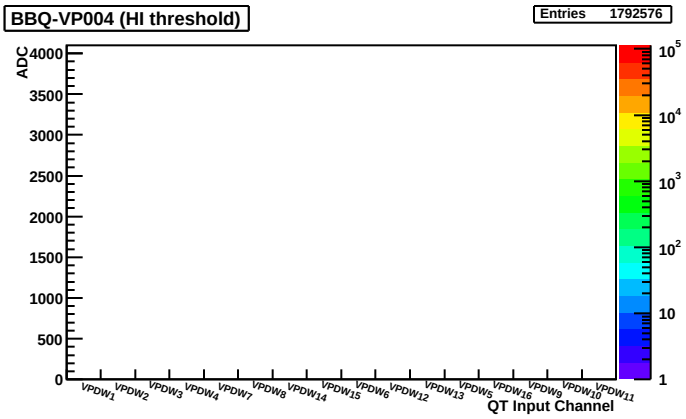

BBQ-VP001 (LO threshold)
Entries 1792576
TAC
QT Input Channel

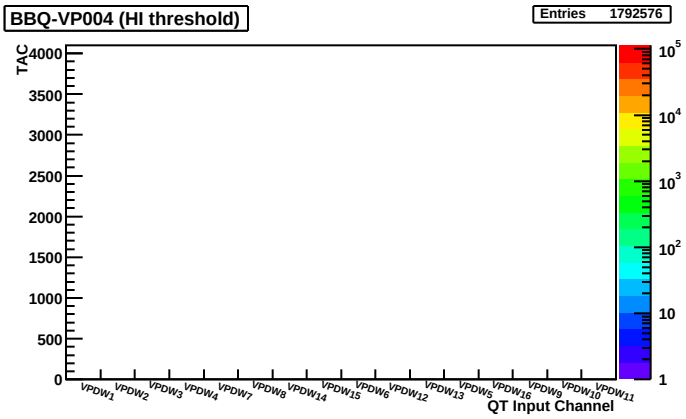

BBQ-VP002 (LO threshold)
Entries 1792576
ADC
QT Input Channel

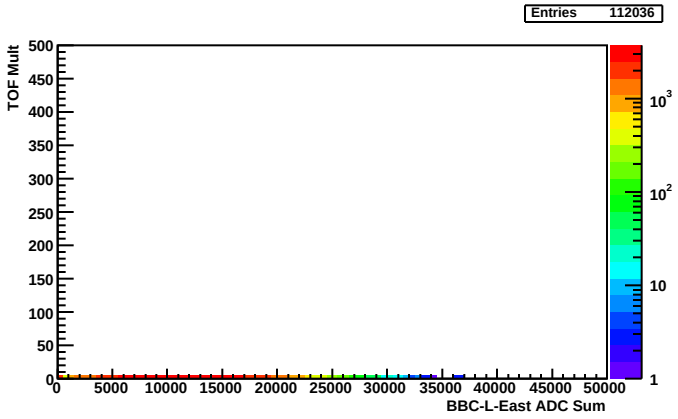

BBQ-VP002 (LO threshold)
Entries 1792576
TAC
QT Input Channel

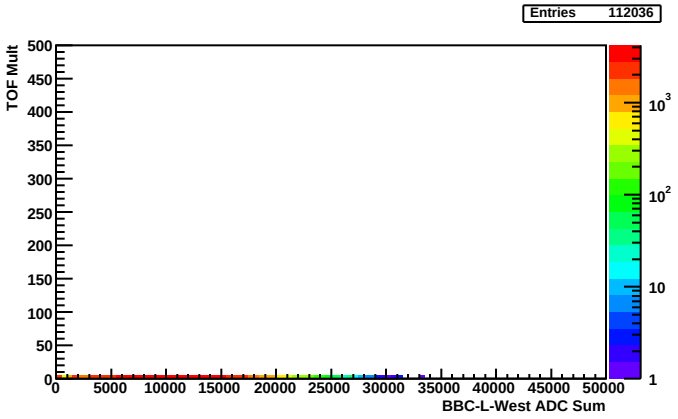

BBQ-VP003 (HI threshold)
Entries 1792576
ADC
QT Input Channel

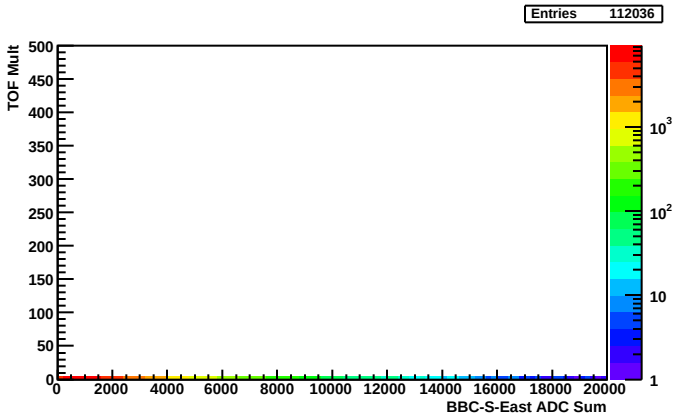

BBQ-VP003 (HI threshold)
Entries 1792576
TAC
QT Input Channel

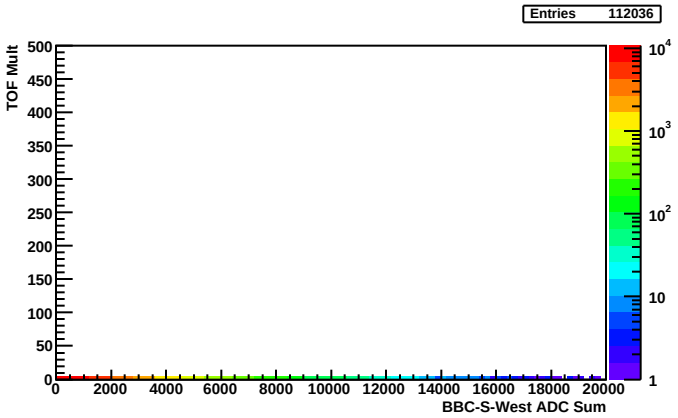

BBQ-VP004 (HI threshold)
Entries 1792576
ADC
QT Input Channel

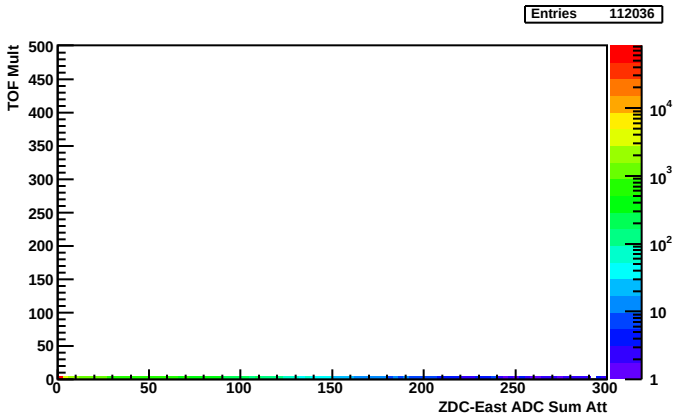

BBQ-VP004 (HI threshold)
Entries 1792576
TAC
QT Input Channel

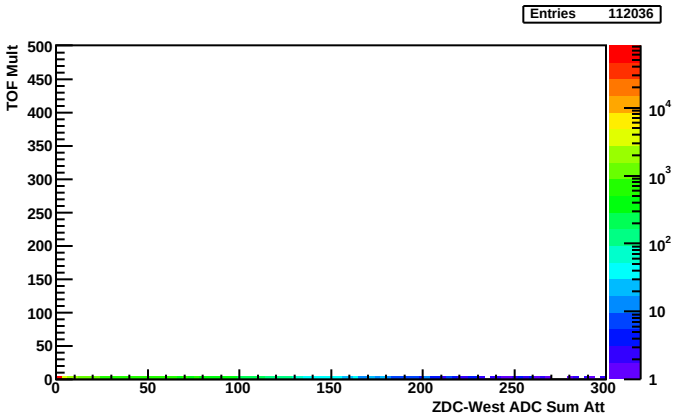

Entries 112036
TOF Mult
BBC-L-East ADC Sum

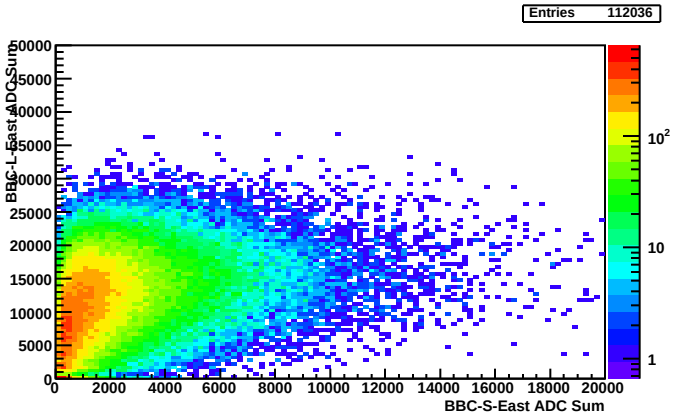

Entries 112036
TOF Mult
BBC-L-West ADC Sum

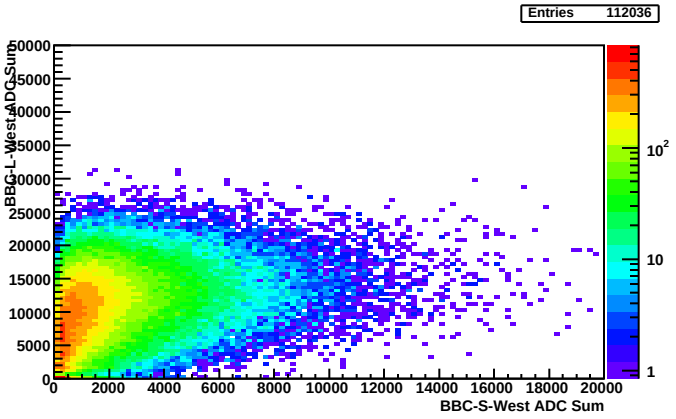

Entries 112036
TOF Mult
BBC-S-East ADC Sum

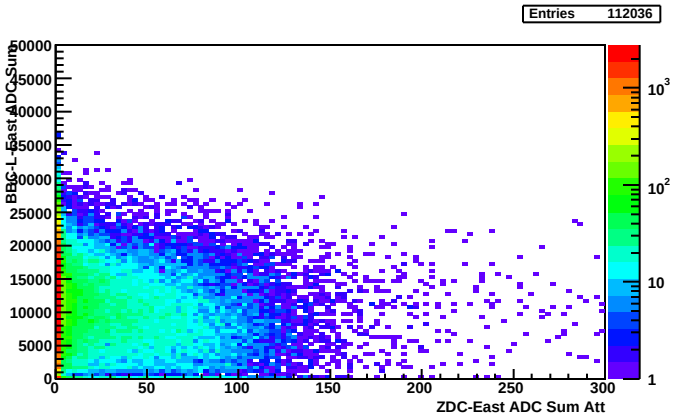

Entries 112036
TOF Mult
BBC-S-West ADC Sum

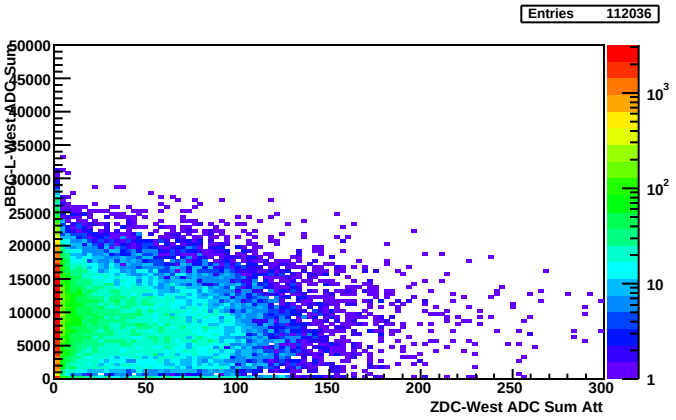

Entries 112036
TOF Mult
ZDC-East ADC Sum Att

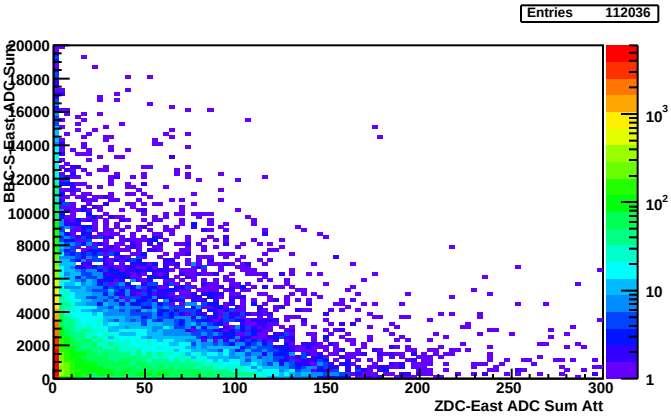

Entries 112036
TOF Mult
ZDC-West ADC Sum Att

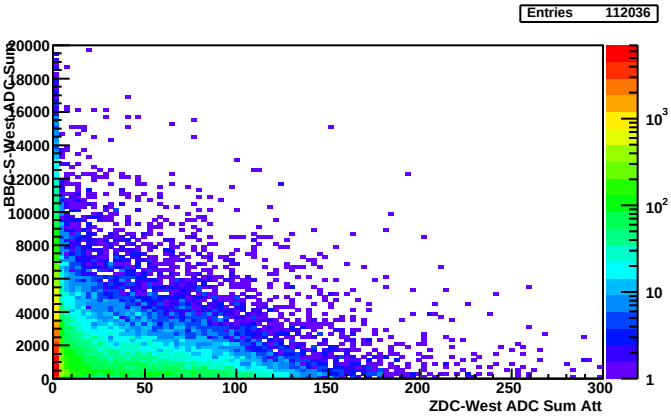

Entries 112036
BBC-L-East ADC Sum
BBC-S-East ADC Sum

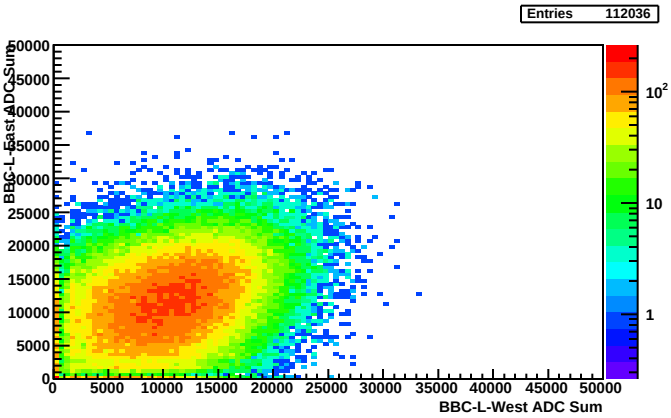

Entries 112036
BBC-L-West ADC Sum
BBC-S-West ADC Sum

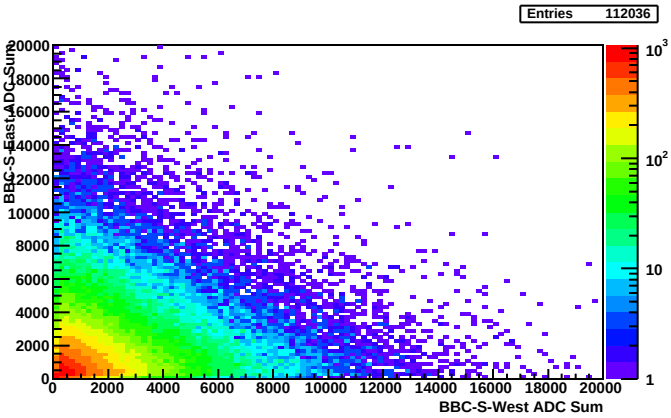

Entries 112036
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

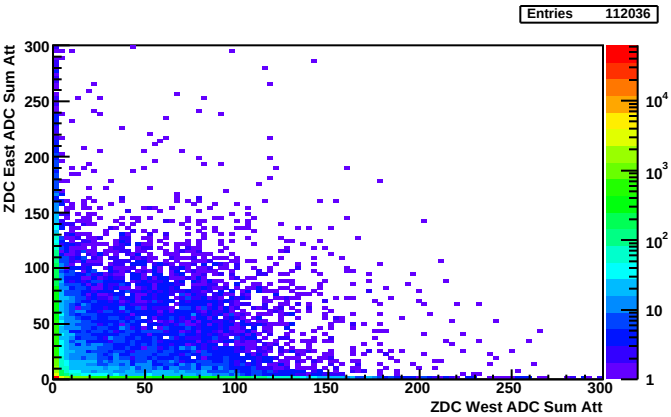

Entries 112036
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

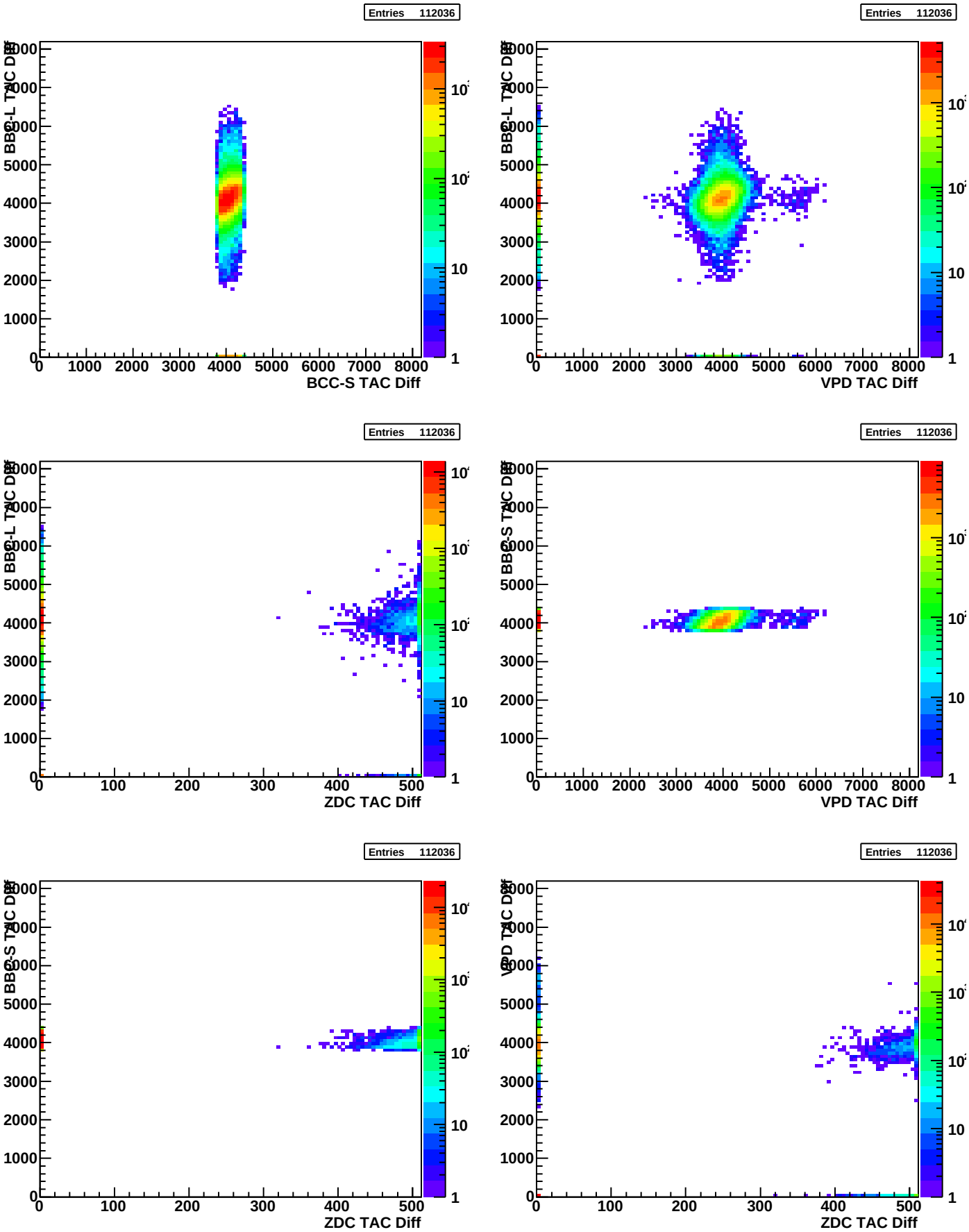

Entries 112036
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

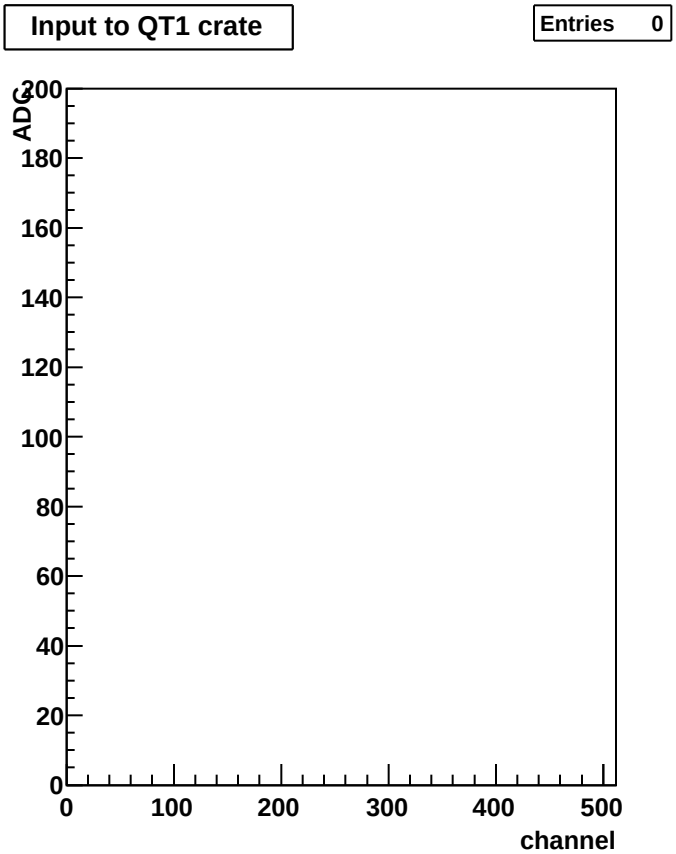

Entries 112036
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

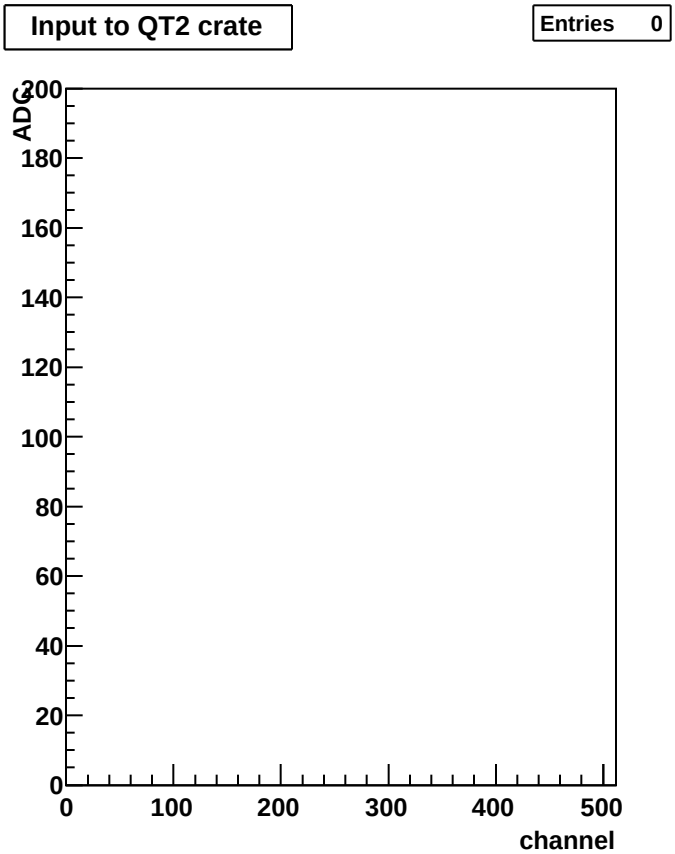

Entries 112036
BBC-L-East ADC Sum
BBC-L-West ADC Sum

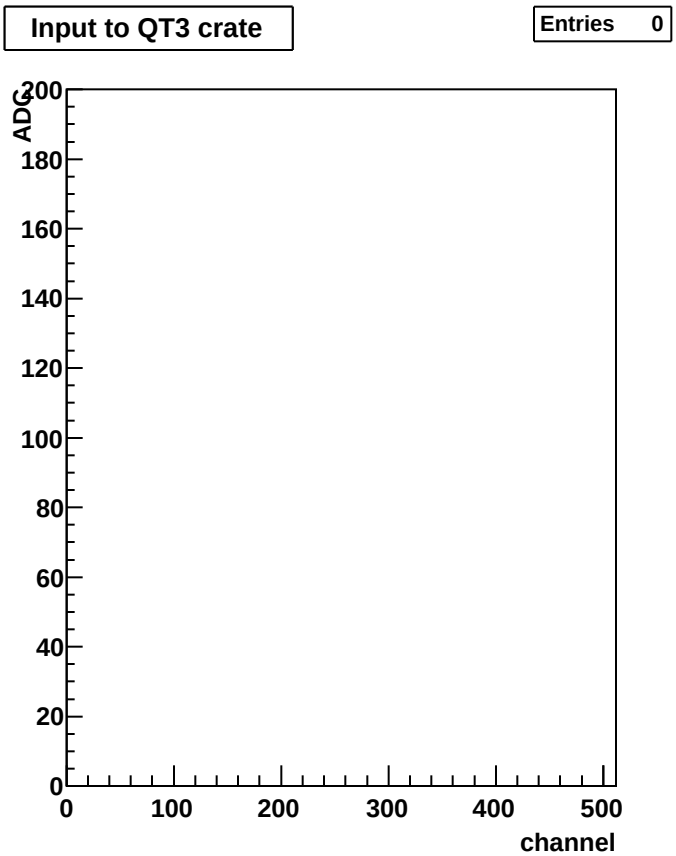

Entries 112036
BBC-S-East ADC Sum
BBC-S-West ADC Sum

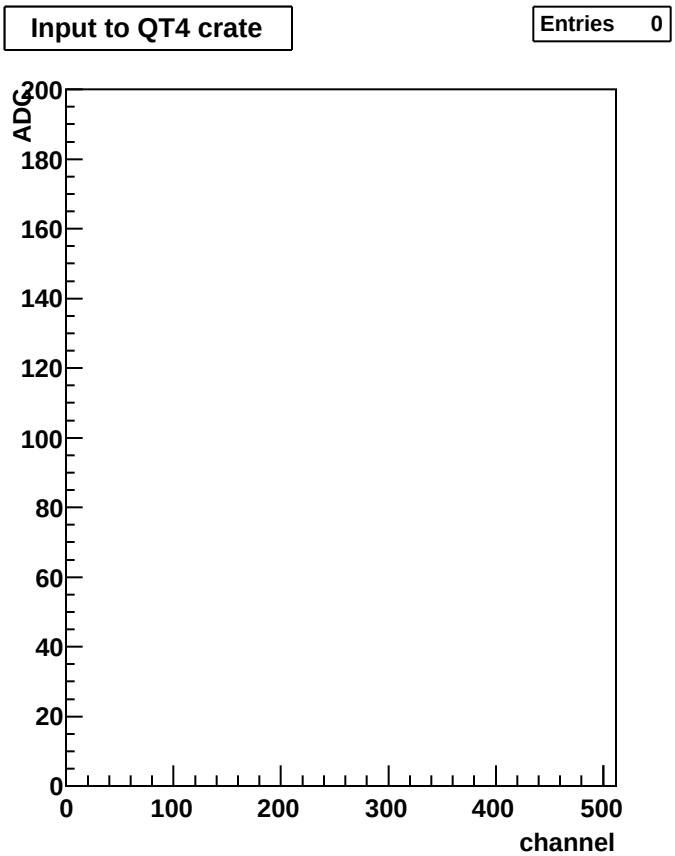

Entries 112036
ZDC East ADC Sum Att
ZDC West ADC Sum Att

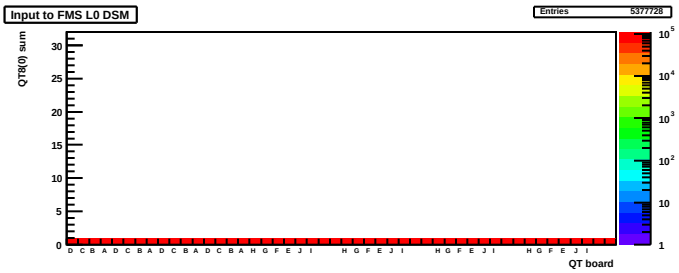

Entries 112036
BBC-L TAC Diff
BCC-S TAC Diff
Entries 112036
BBC-L TAC Diff
VPD TAC Diff
Entries 112036
BBC-L TAC Diff
ZDC TAC Diff
Entries 112036
BBC-S TAC Diff
VPD TAC Diff
Entries 112036
BBC-S TAC Diff
ZDC TAC Diff
Entries 112036
VPD TAC Diff
ZDC TAC Diff

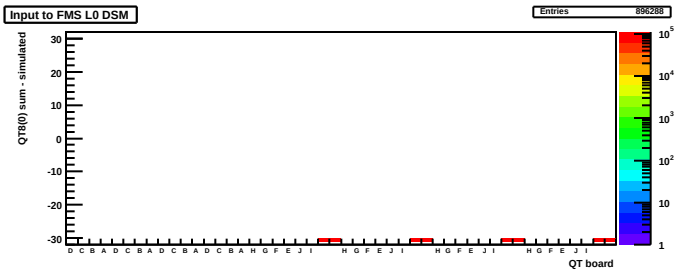

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

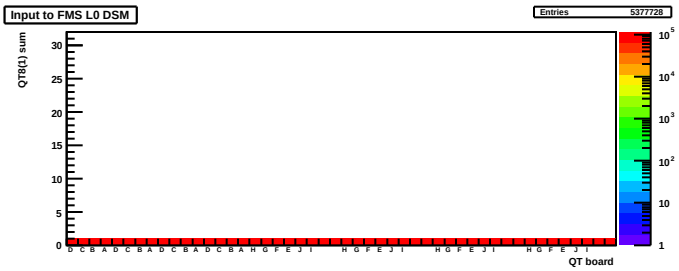

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

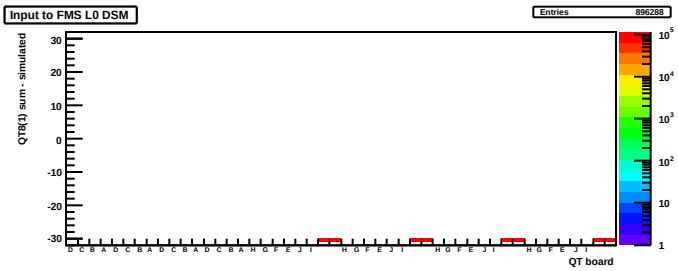

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

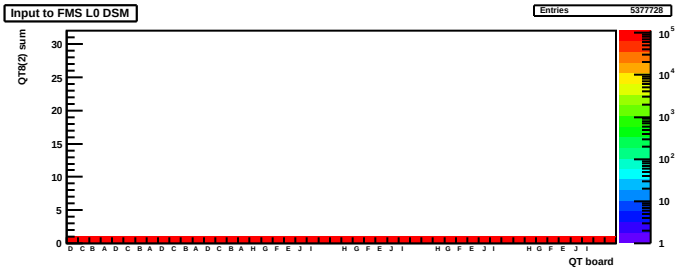

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

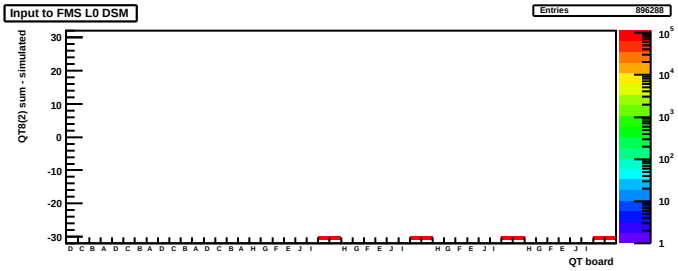

Input to FMS L0 DSM
Entries 5377728
QT8(0) sum
QT board

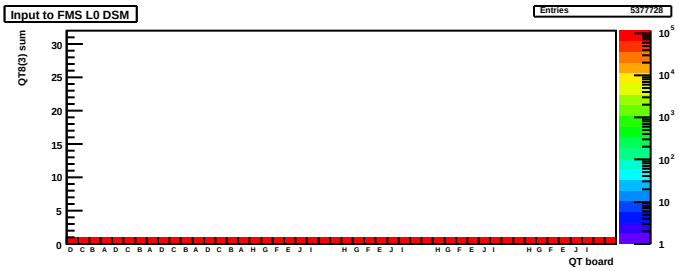

Input to FMS L0 DSM
Entries 896288
QT8(0) sum - simulated
QT board

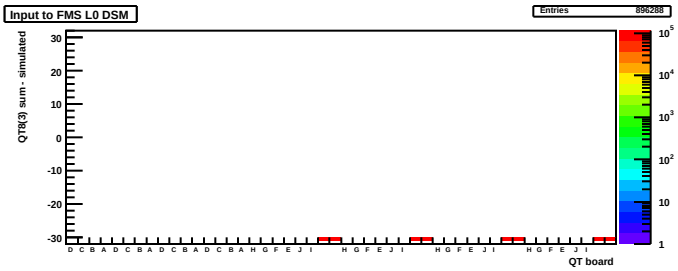

Input to FMS L0 DSM
Entries 5377728
QT8(1) sum
QT board

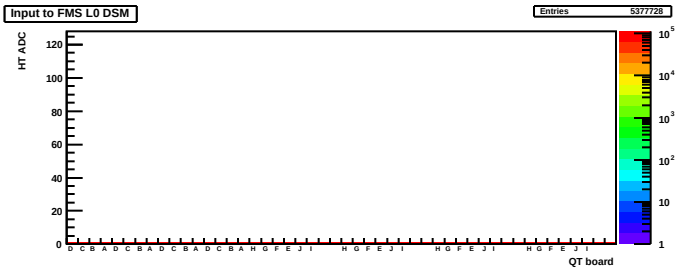

Input to FMS L0 DSM
Entries 896288
QT8(1) sum - simulated
QT board

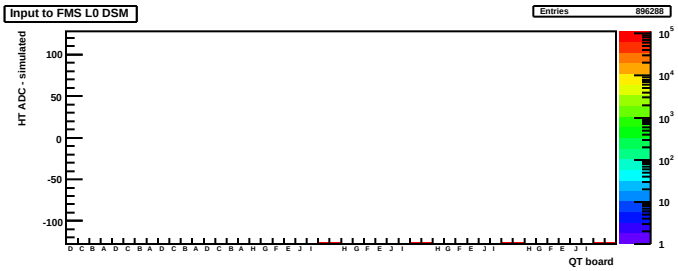

Input to FMS L0 DSM
Entries 5377728
QT8(2) sum
QT board

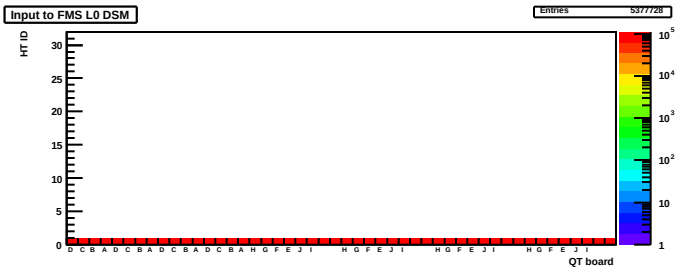

Input to FMS L0 DSM
Entries 896288
QT8(2) sum - simulated
QT board

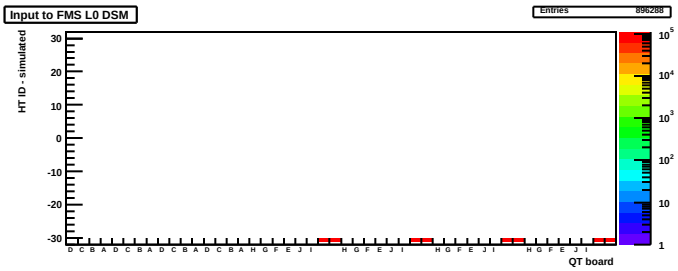

Input to FMS L0 DSM
Entries 5377728
QT8(3) sum
QT board

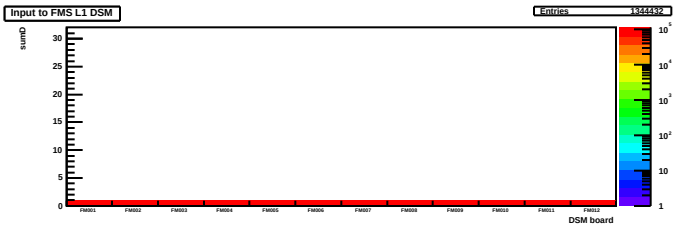

Input to FMS L0 DSM
Entries 896288
QT8(3) sum - simulated
QT board

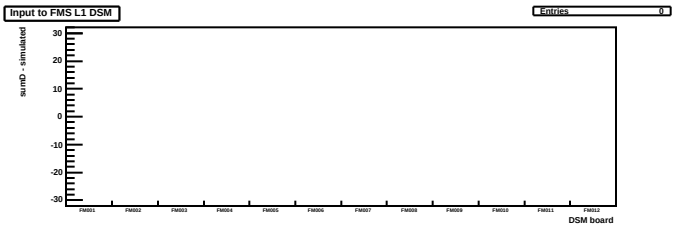

Input to FMS L0 DSM
Entries 5377728
HT ADC
QT board

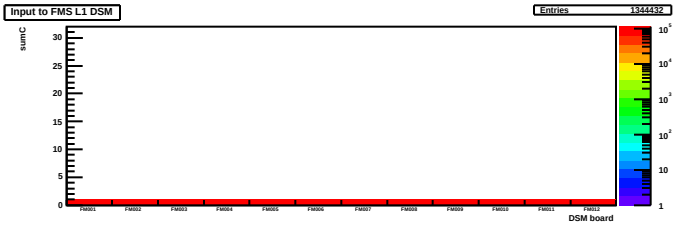

Input to FMS L0 DSM
Entries 896288
HT ADC - simulated
QT board

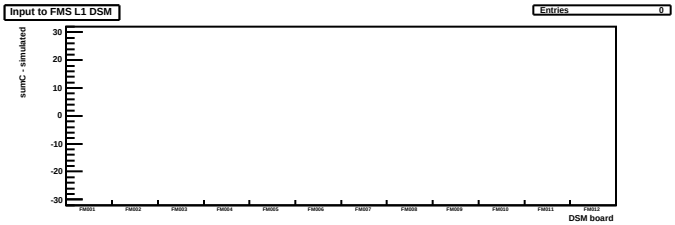

Input to FMS L0 DSM
Entries 5377728
HT ID
QT board

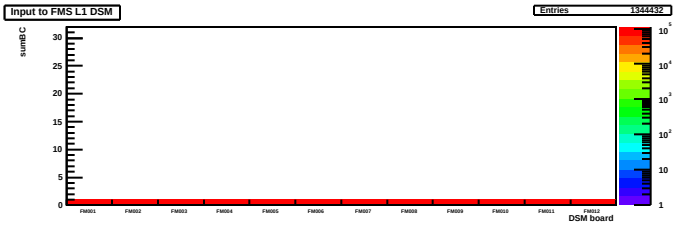

Input to FMS L0 DSM
Entries 896288
HT ID - simulated
QT board

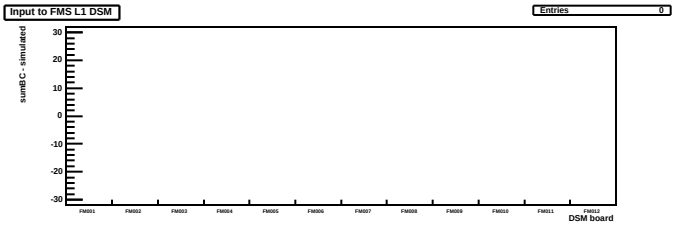

Input to FMS L1 DSM
Entries 1344432
sumD
DSM board

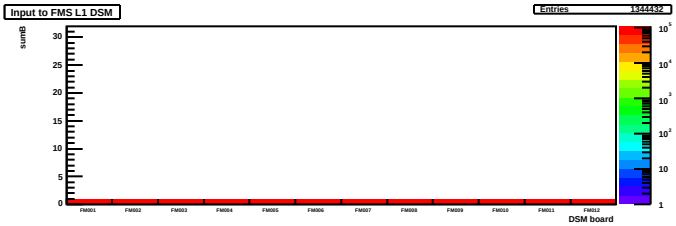

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

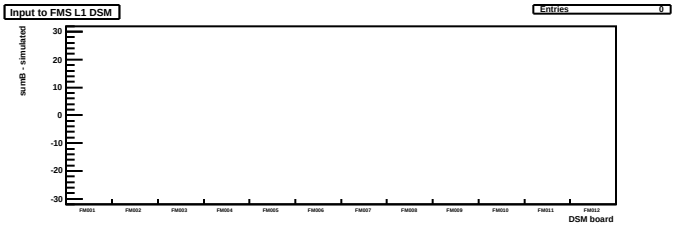

Input to FMS L1 DSM
Entries 1344432
sumC
DSM board

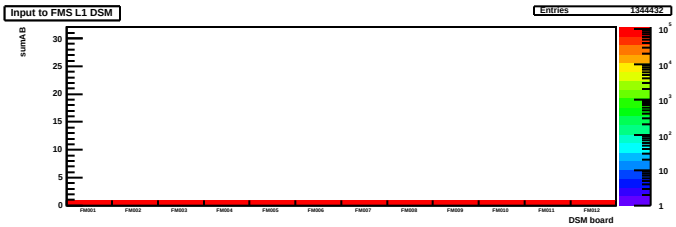

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

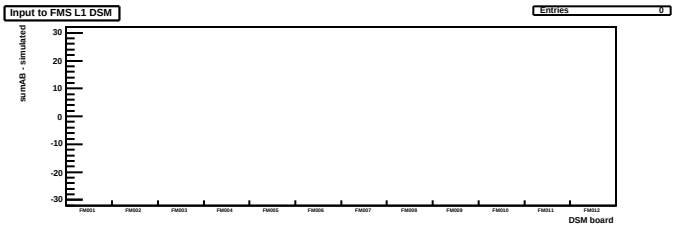

Input to FMS L1 DSM
Entries 1344432
sumBC
DSM board

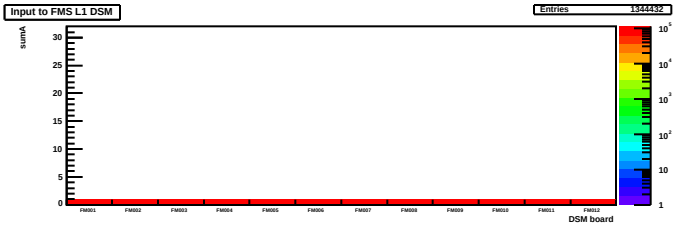

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

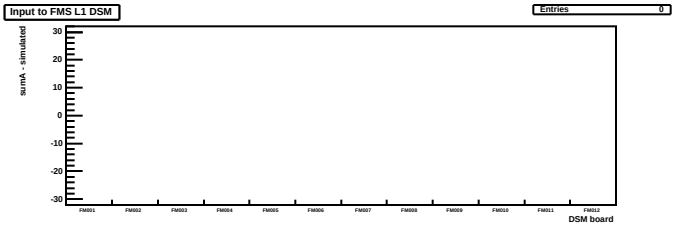

Input to FMS L1 DSM
Entries 1344432
sumB
DSM board

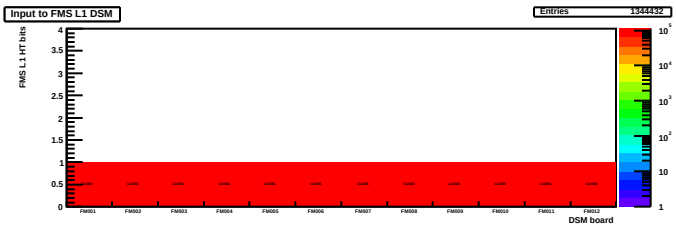

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

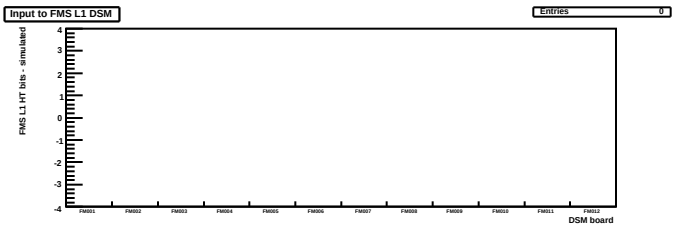

Input to FMS L1 DSM
Entries 1344432
sumAB
DSM board

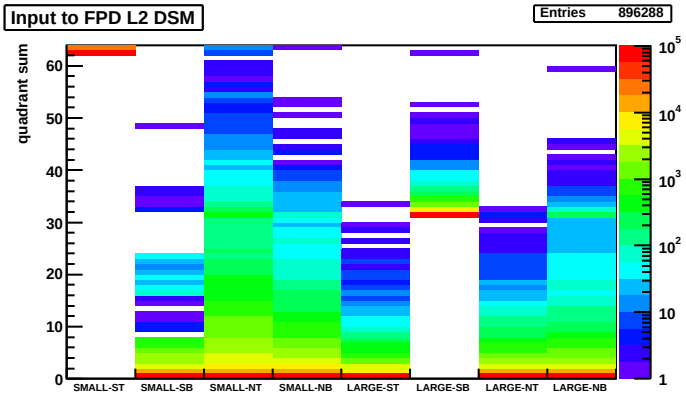

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

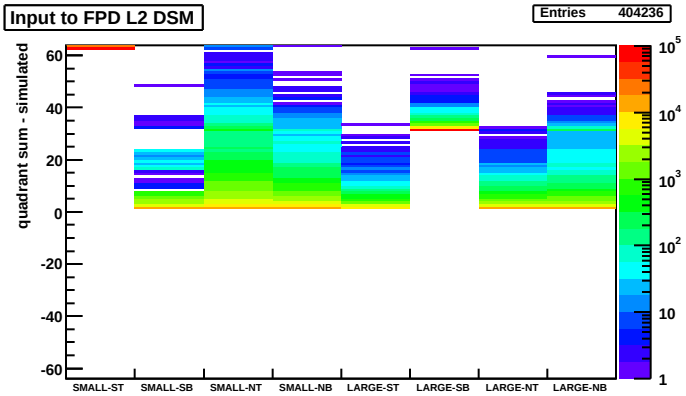

Input to FMS L1 DSM
Entries 1344432
sumA
DSM board

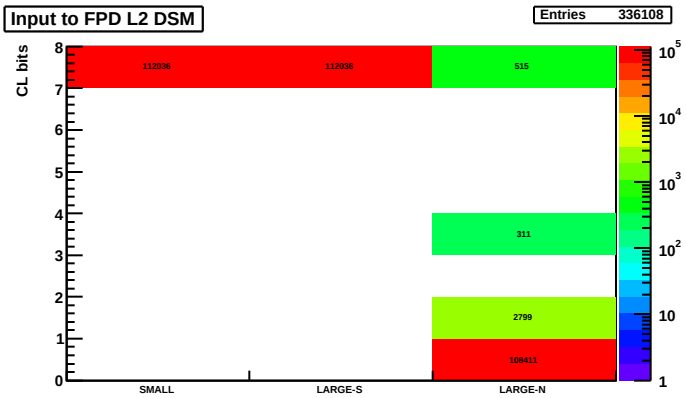

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

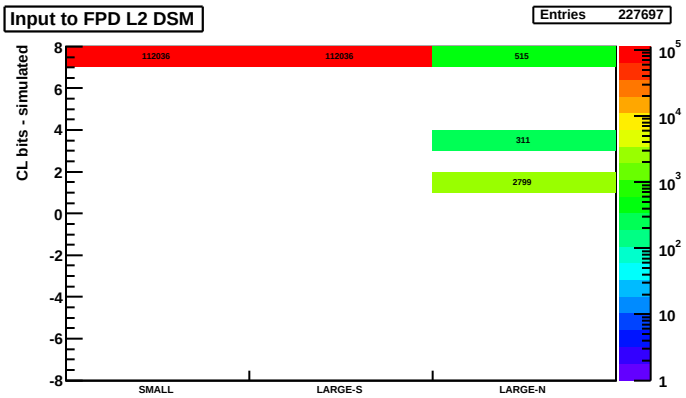

Input to FMS L1 DSM
Entries 1344432
FMS L1 HT bits
DSM board

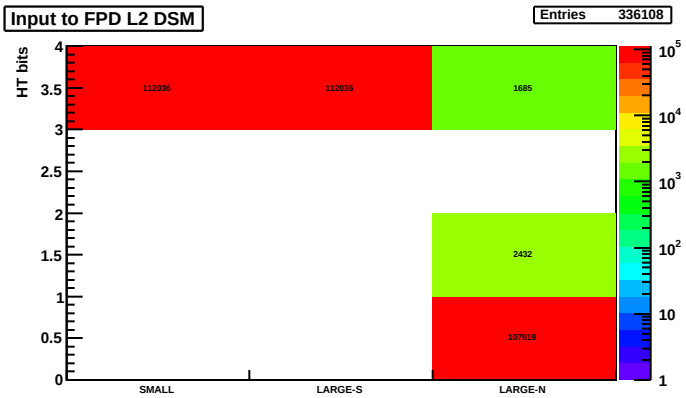

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

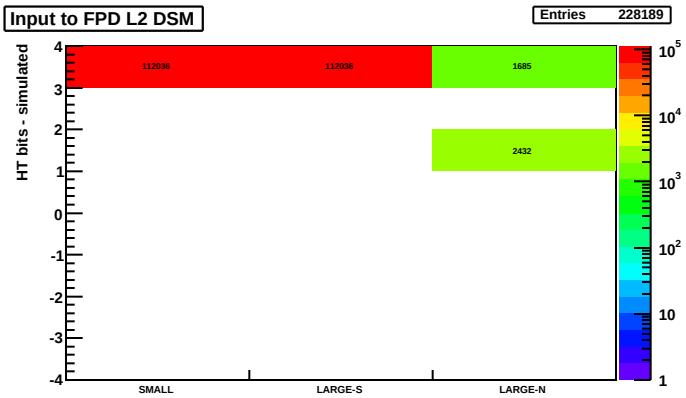

Input to FPD L2 DSM
Entries 896288
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

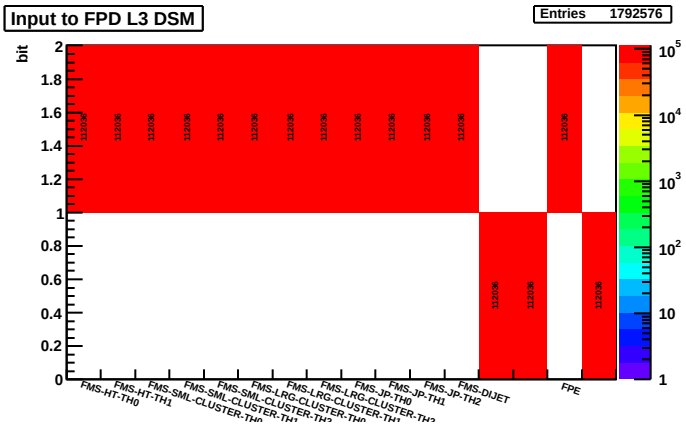

Input to FPD L2 DSM
Entries 404236
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

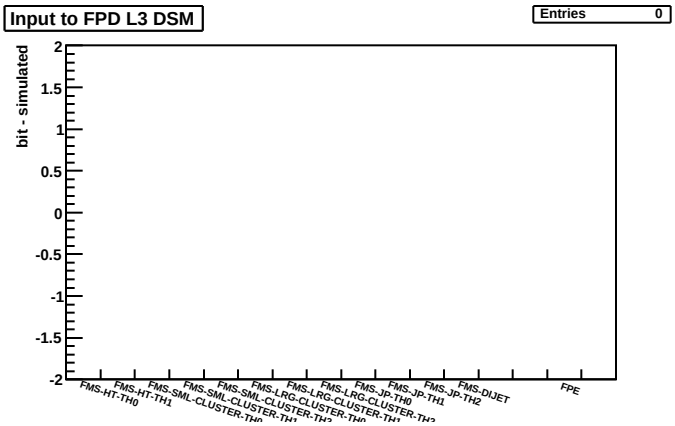

Input to FPD L2 DSM
Entries 336108
CL bits
112036
112036
515
311
2799
108411
SMALL
LARGE-S
LARGE-N

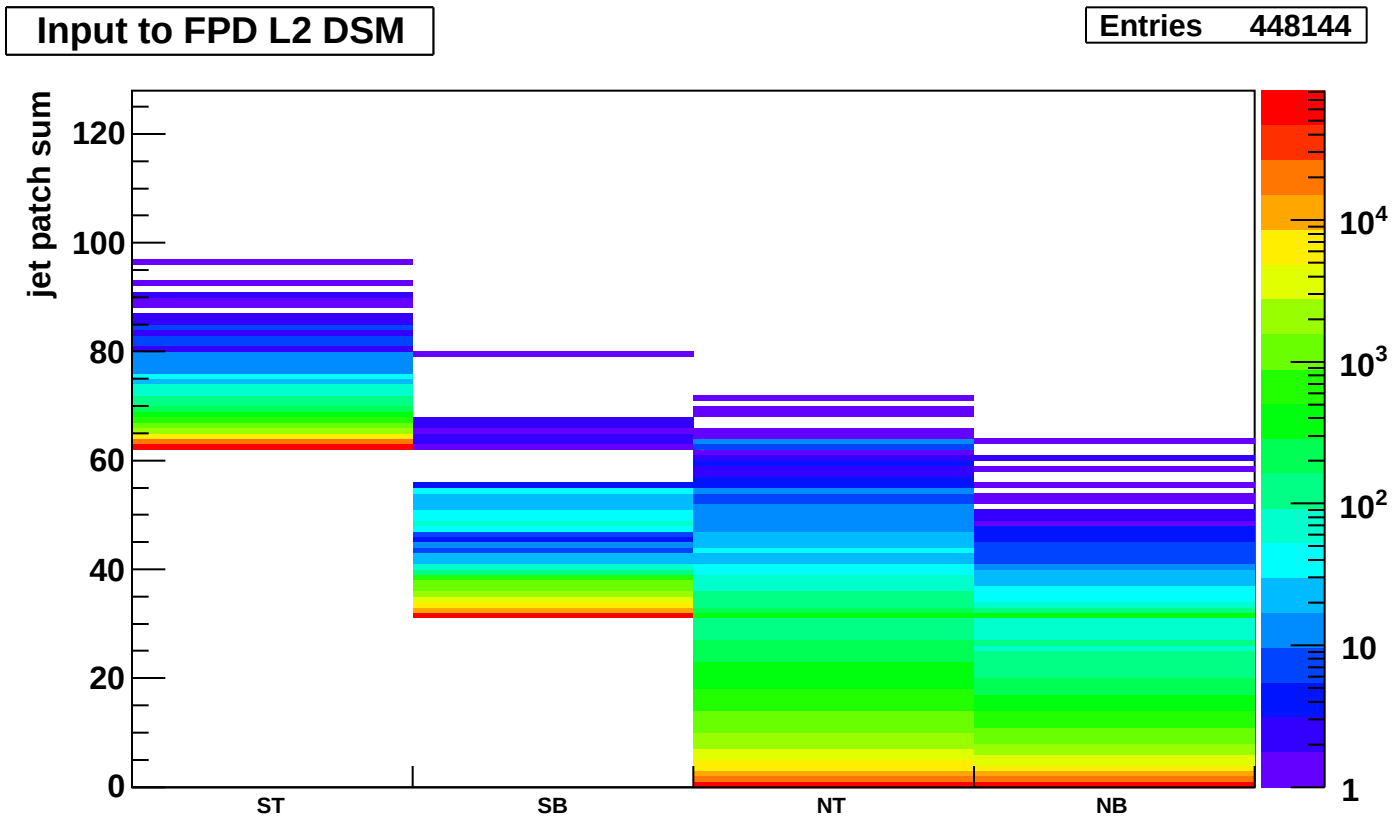

Input to FPD L2 DSM
Entries 227697
CL bits - simulated
112036
112036
515
311
2799
SMALL
LARGE-S
LARGE-N

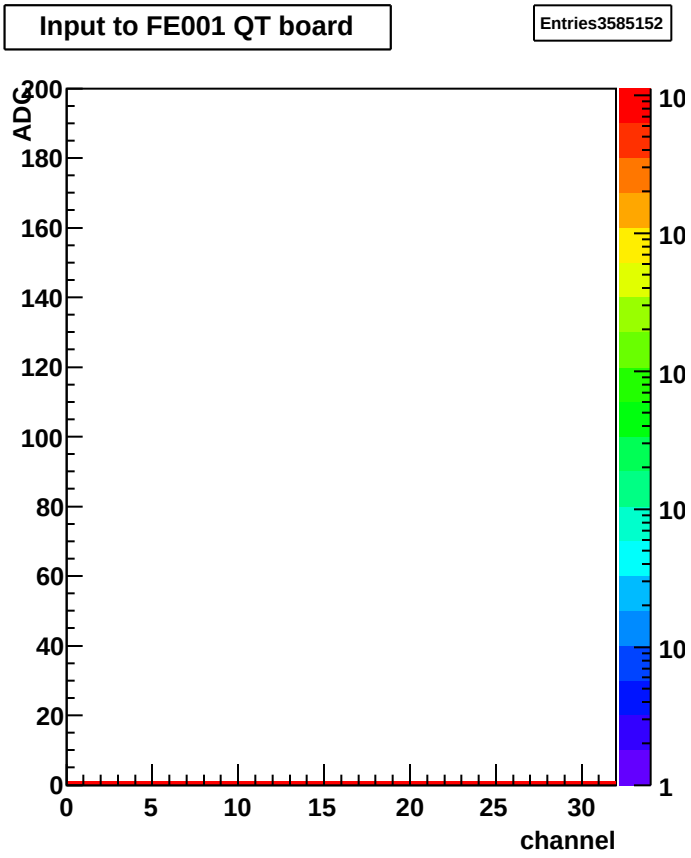

Input to FPD L2 DSM
Entries 336108
HT bits
112036
112036
1685
2432
107919
SMALL
LARGE-S
LARGE-N

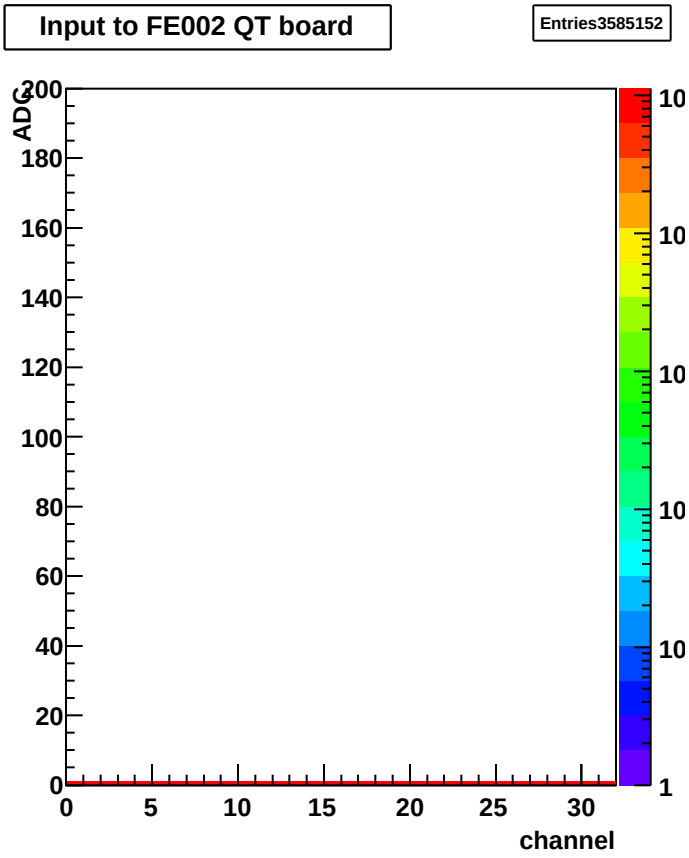

Input to FPD L2 DSM
Entries 228189
HT bits - simulated
112036
112036
1685
2432
SMALL
LARGE-S
LARGE-N

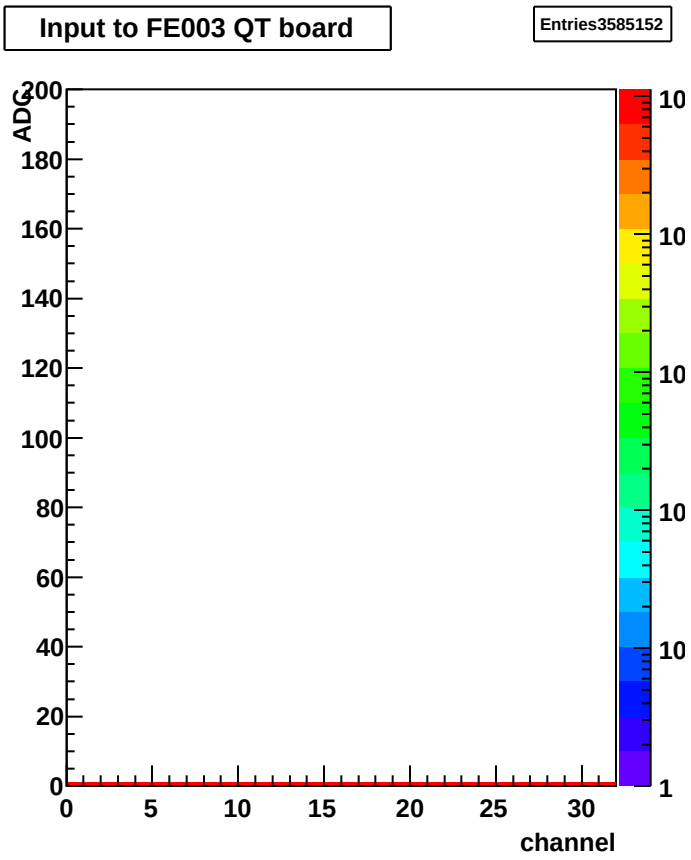

Input to FPD L3 DSM
Entries 1792576
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

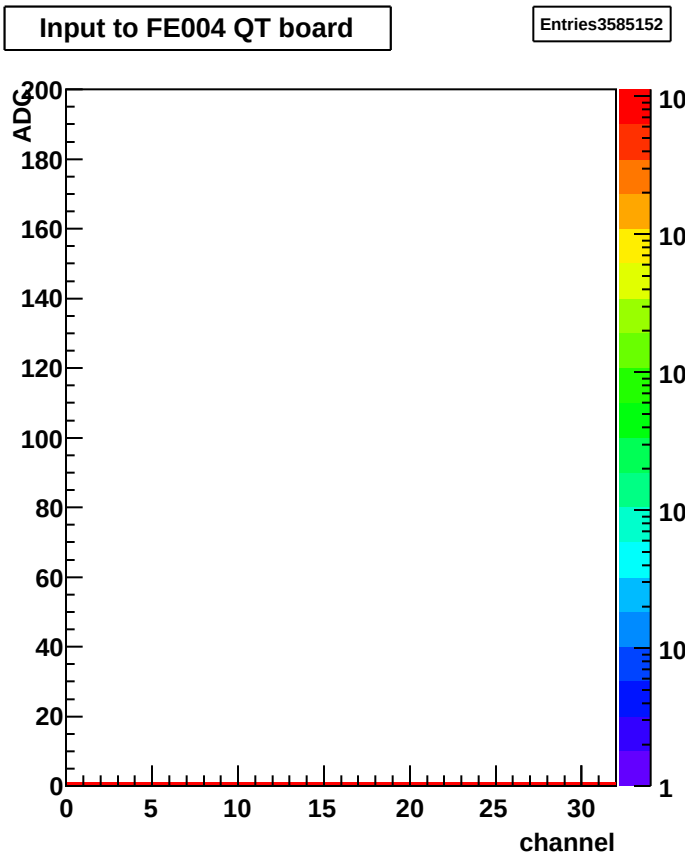

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

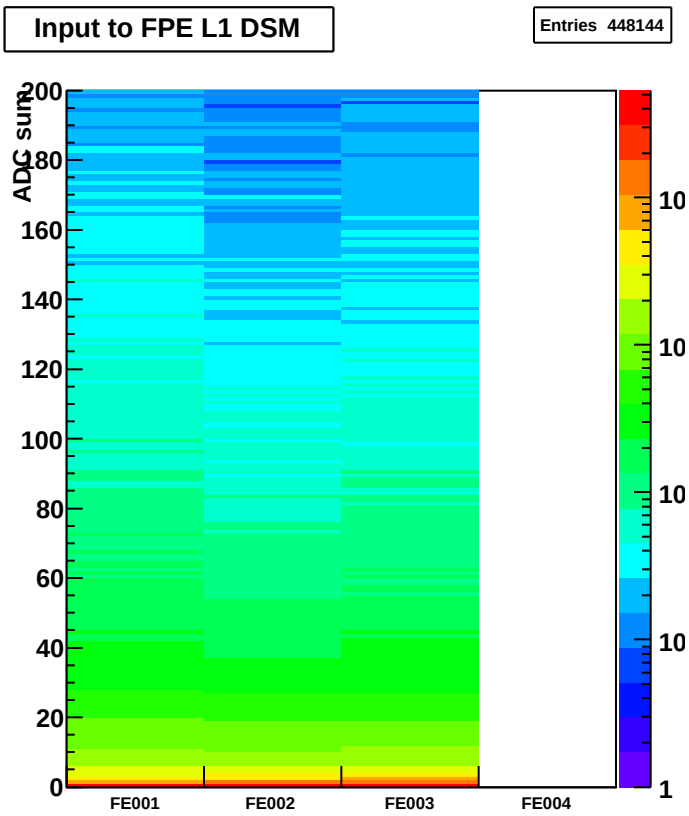

Input to FPD L2 DSM
Entries 448144
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
$10^2$
$10^3$
$10^4$

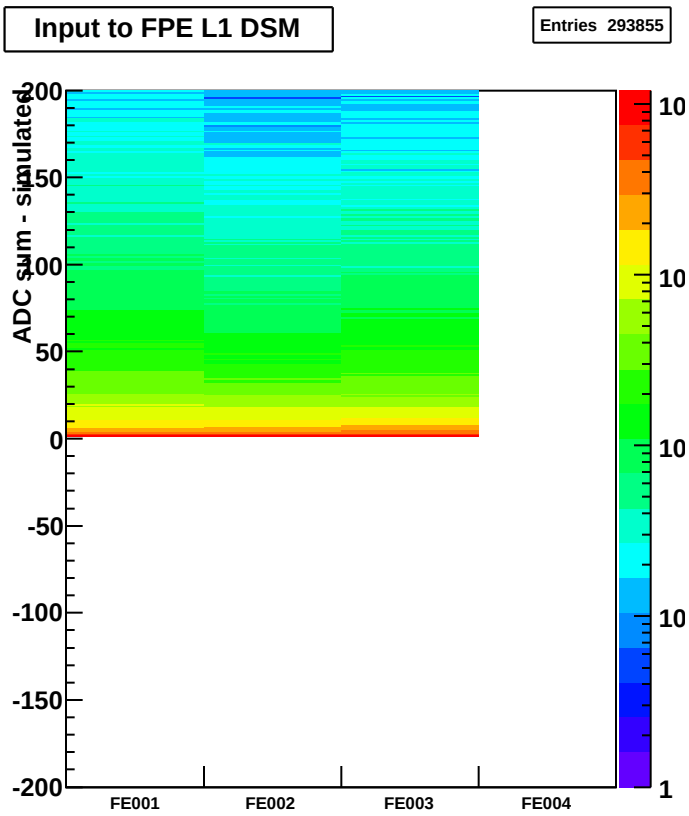

Input to FE001 QT board
Entries3585152
ADC
channel

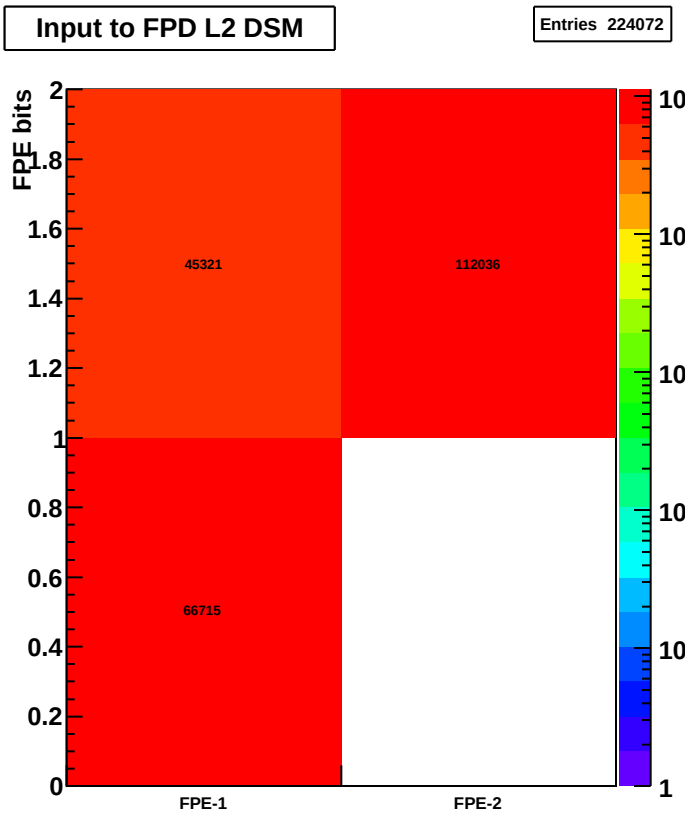

Input to FE002 QT board
Entries3585152
ADC
channel

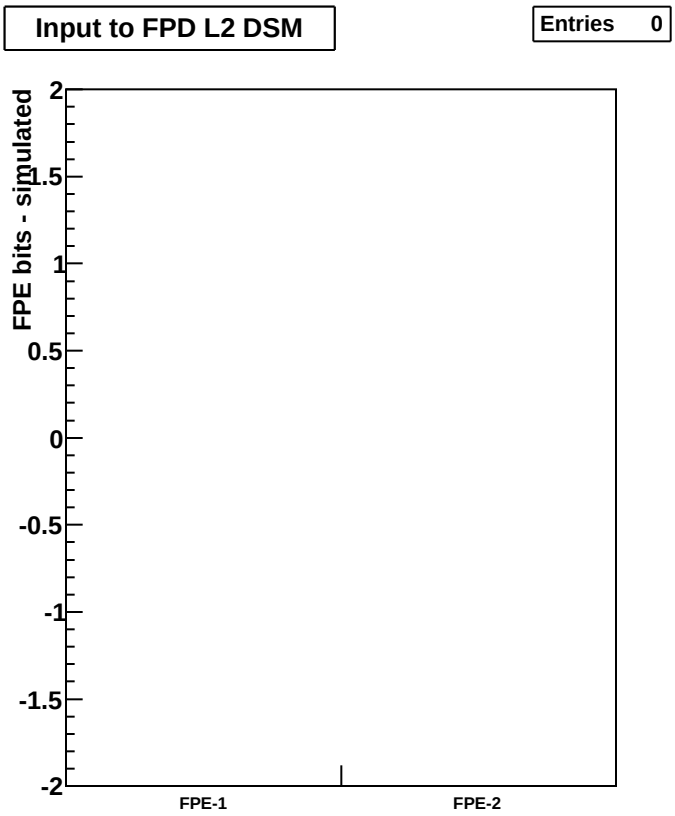

Input to FE003 QT board
Entries3585152
ADC
channel


Input to FE004 QT board
Entries3585152
ADC
channel


Input to FPE L1 DSM
Entries 448144
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 293855
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 224072
FPE bits
45321
112036
66715
FPE-1
FPE-2


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