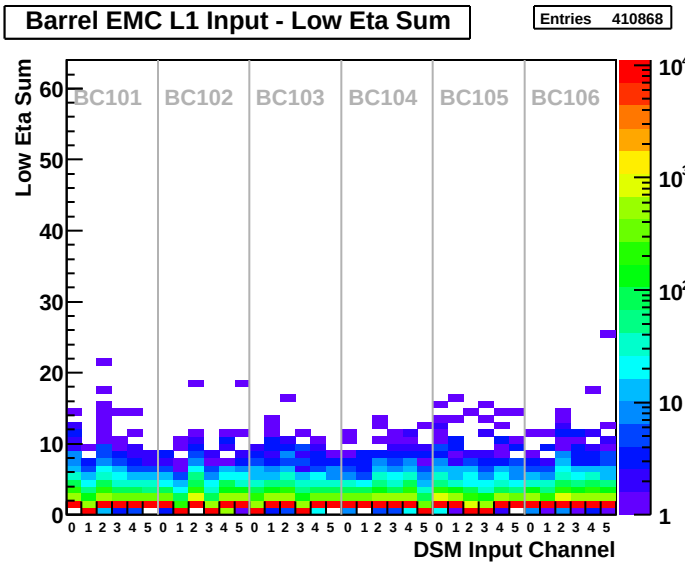
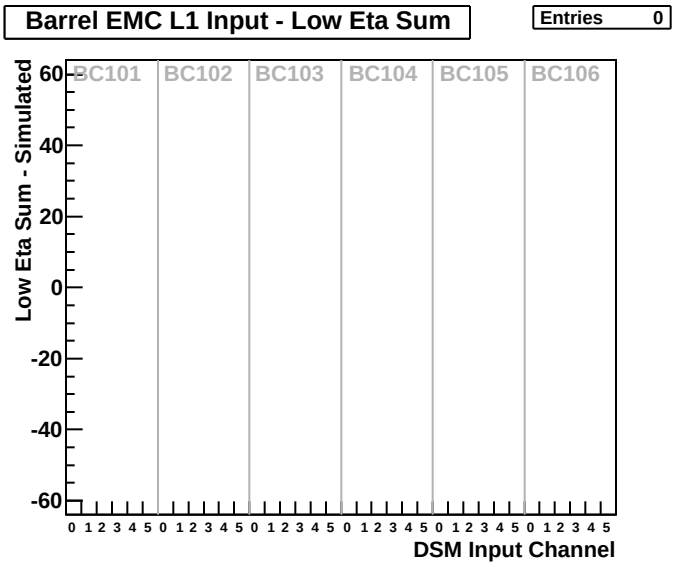
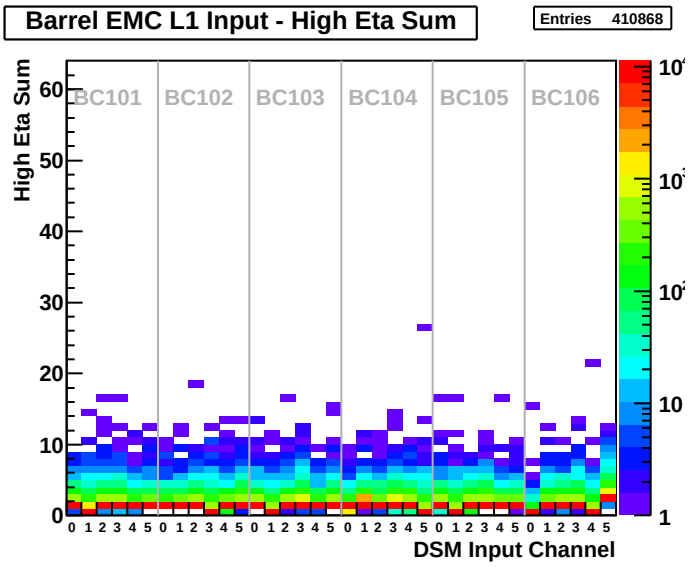
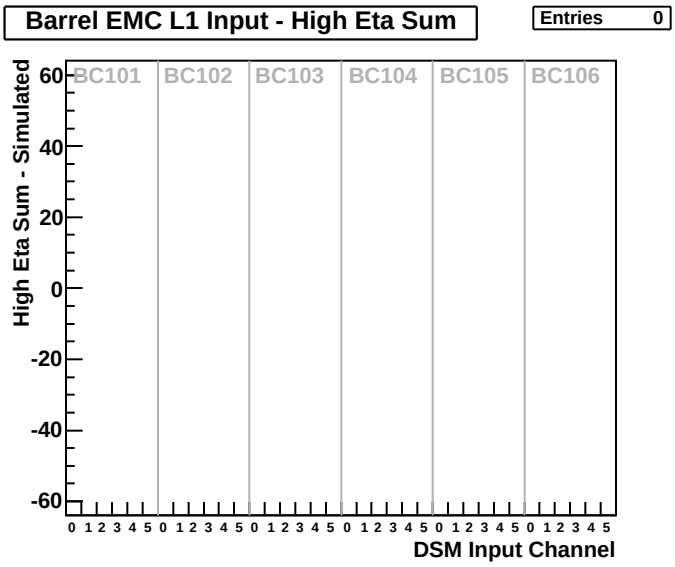
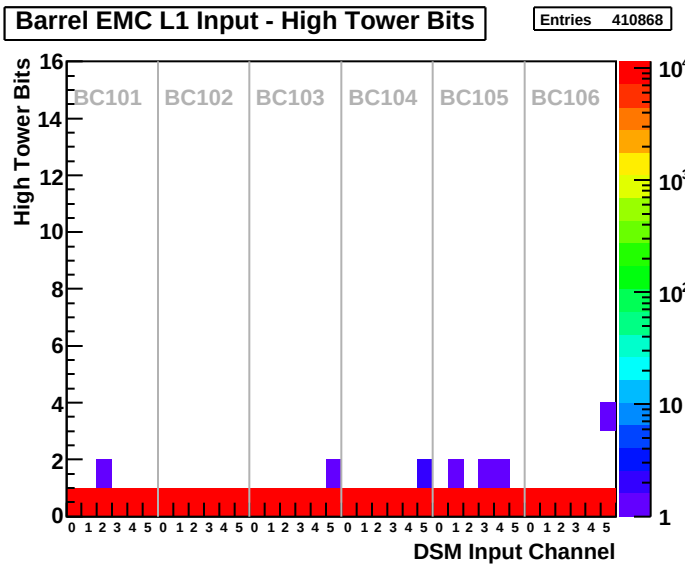
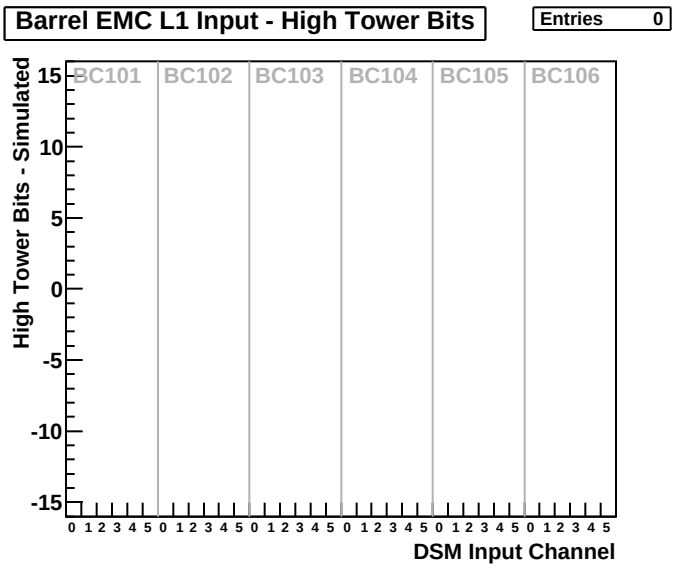

Barrel EMC L1 Input - Low Eta Sum
Entries 410868
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

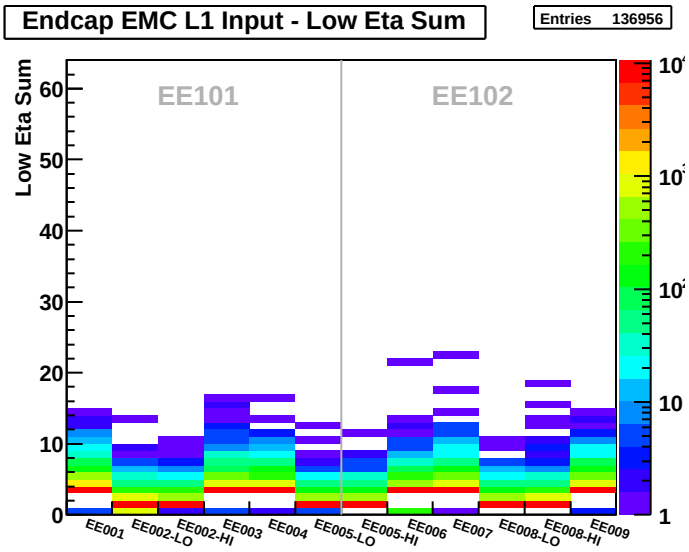

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

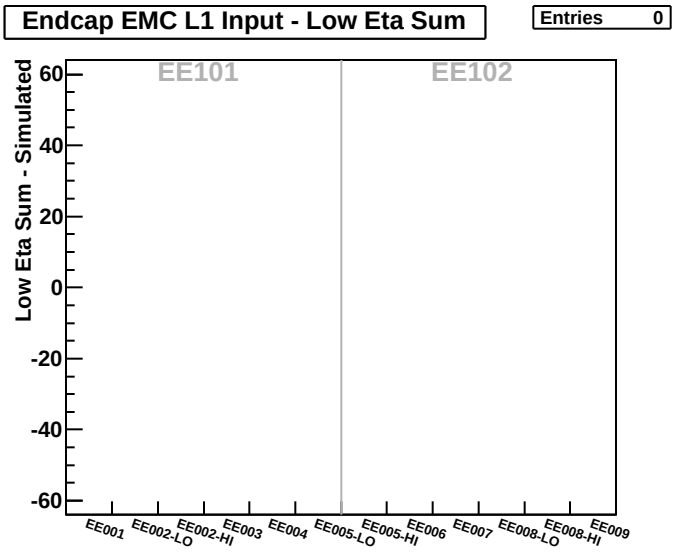

Barrel EMC L1 Input - High Eta Sum
Entries 410868
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

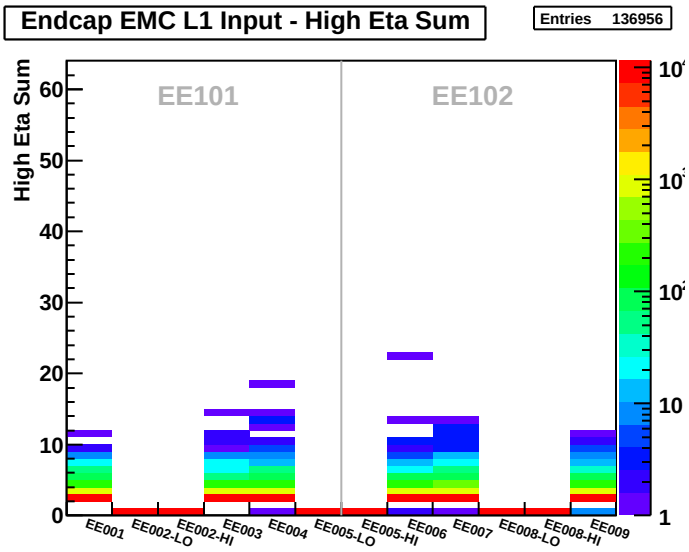

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

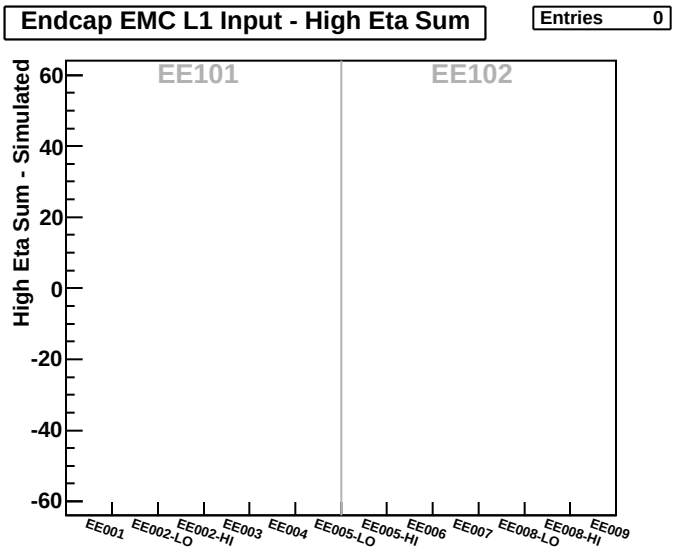

Barrel EMC L1 Input - High Tower Bits
Entries 410868
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

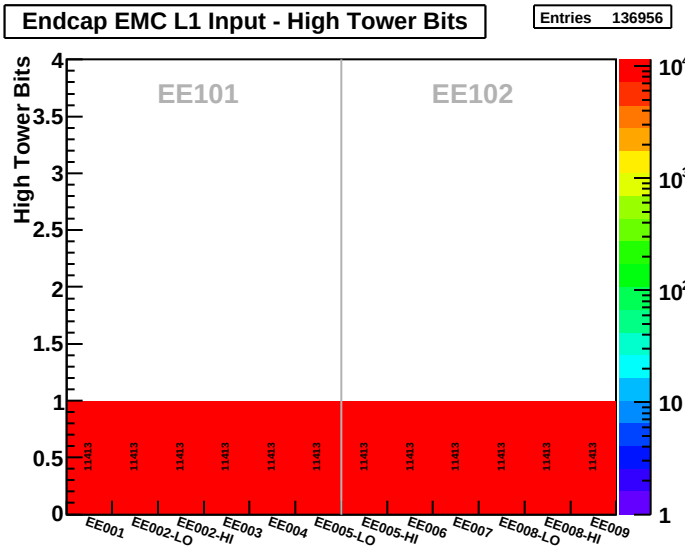

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

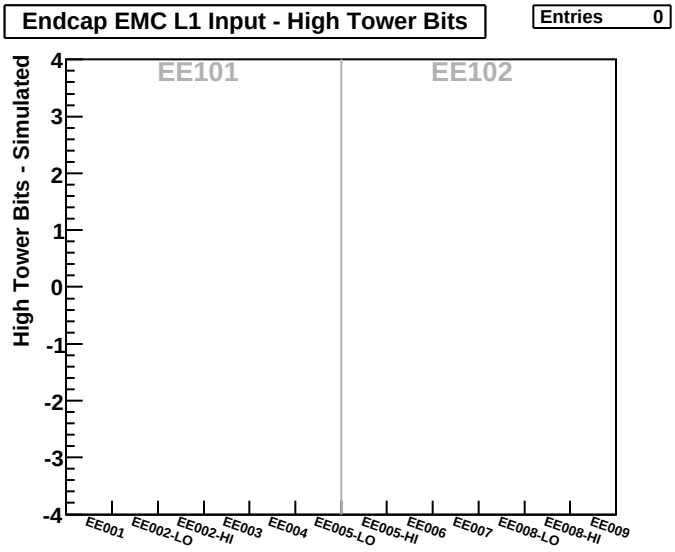

Endcap EMC L1 Input - Low Eta Sum
Entries 136956
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

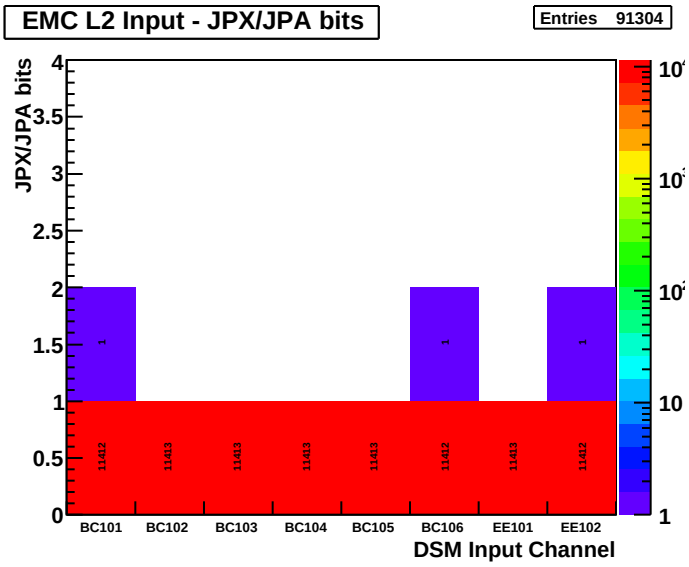

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

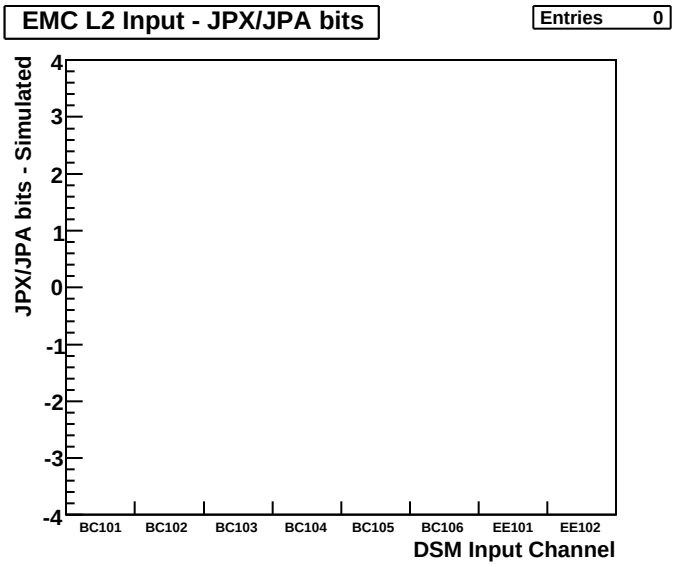

Endcap EMC L1 Input - High Eta Sum
Entries 136956
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

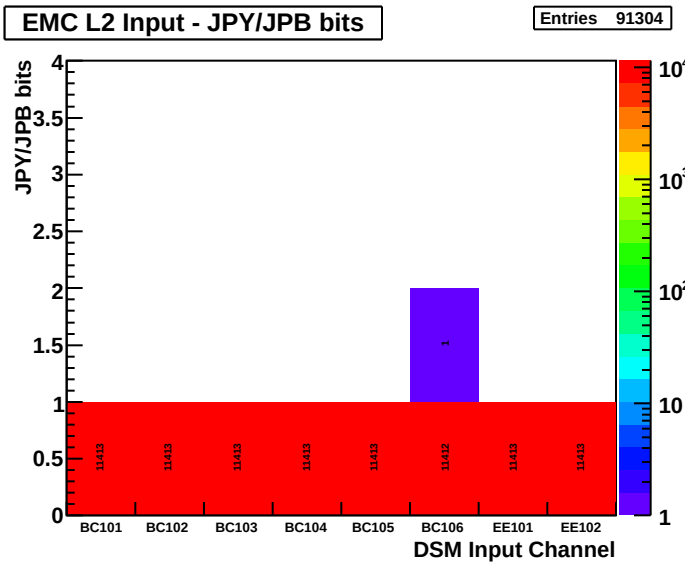

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

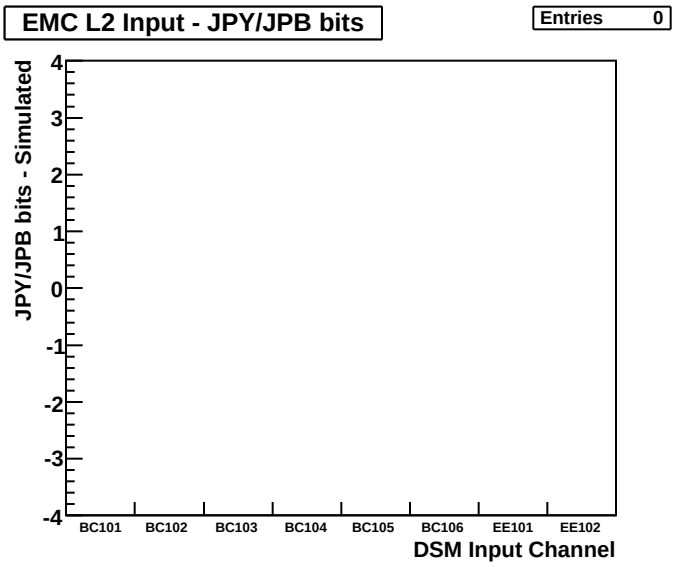

Endcap EMC L1 Input - High Tower Bits
Entries 136956
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

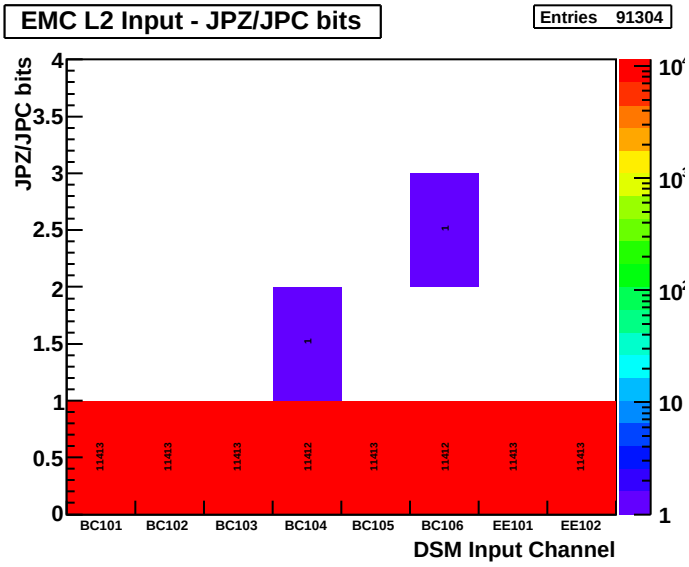

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

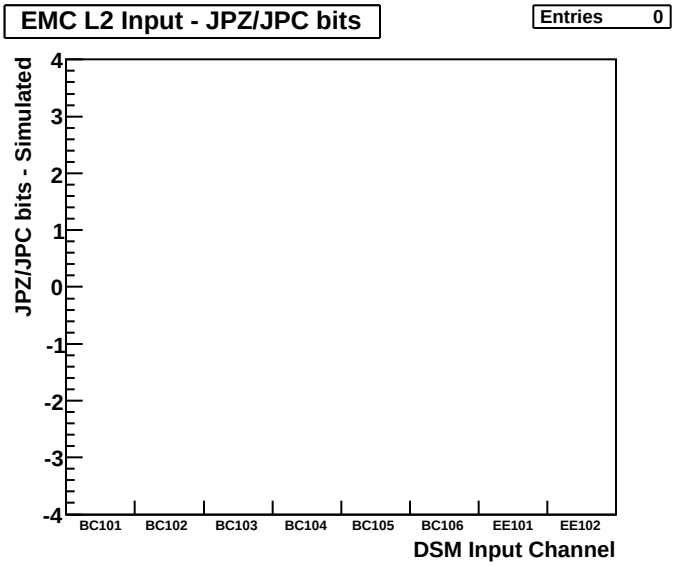

EMC L2 Input - JPX/JPA bits
Entries 91304
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

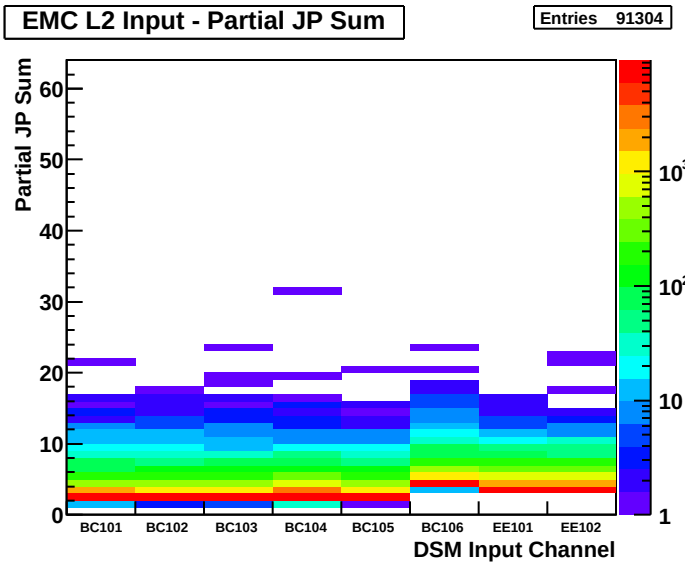

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

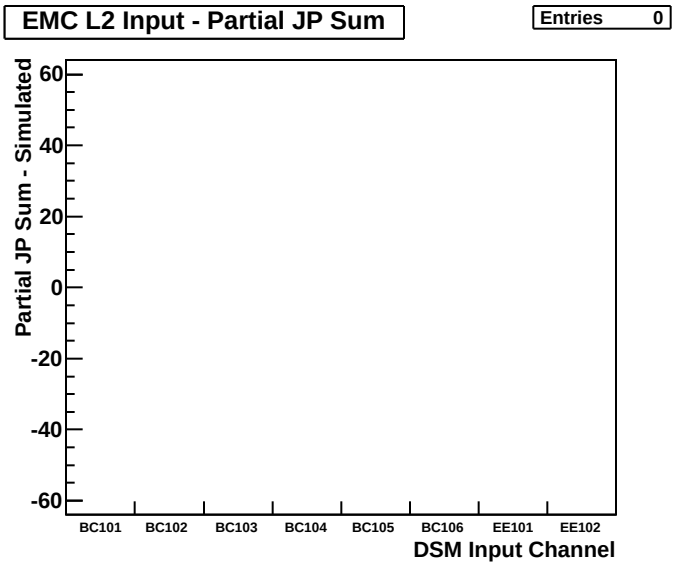

EMC L2 Input - JPY/JPB bits
Entries 91304
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

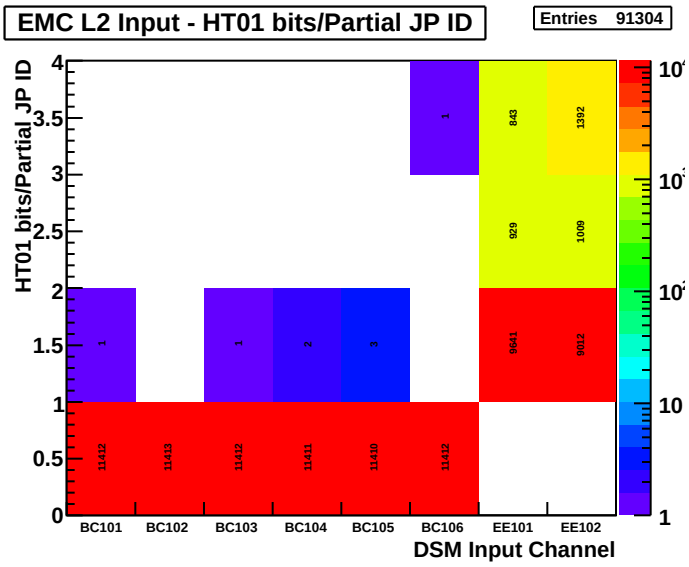

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

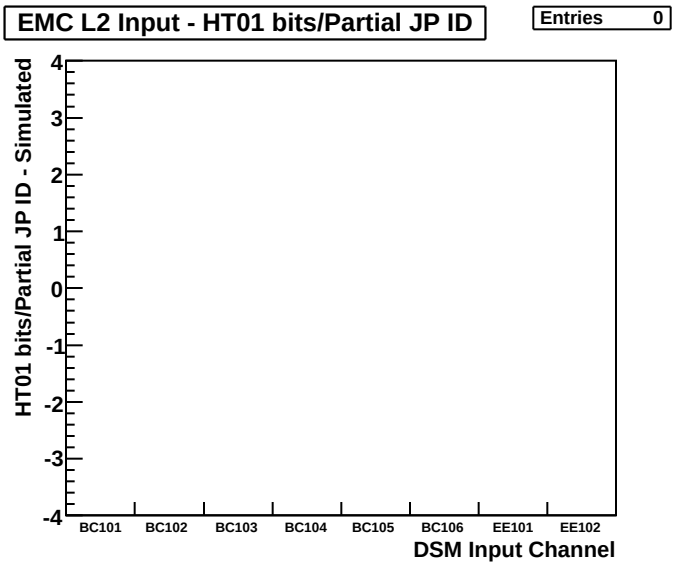

EMC L2 Input - JPZ/JPC bits
Entries 91304
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

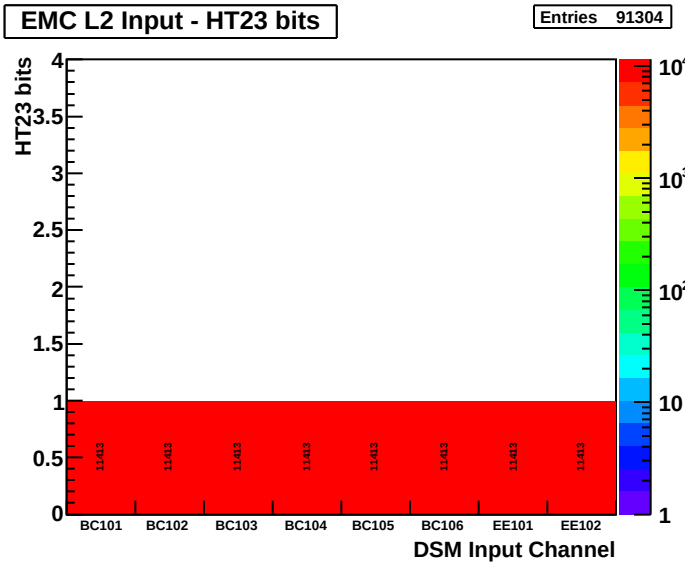

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

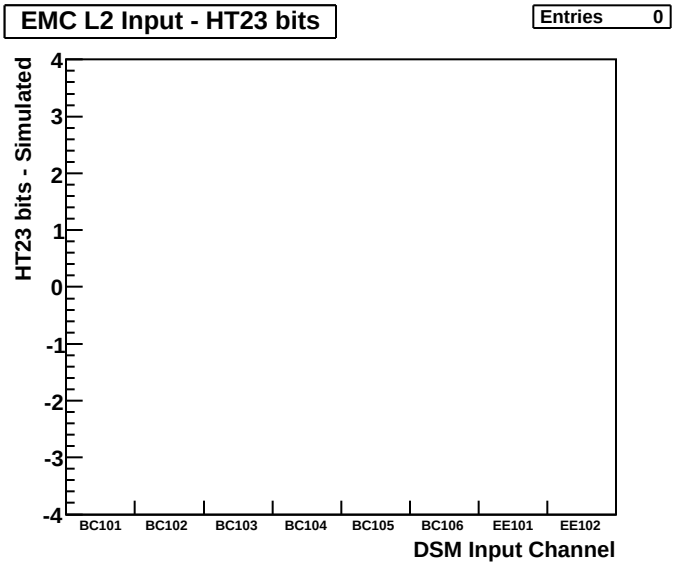

EMC L2 Input - Partial JP Sum
Entries 91304
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

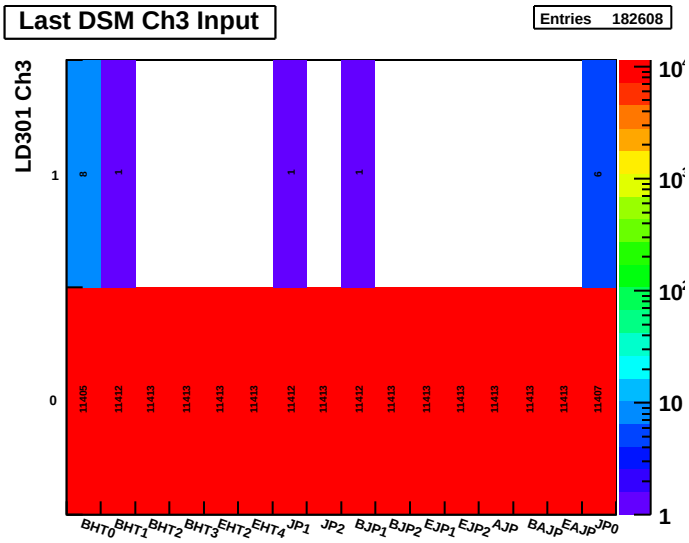

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

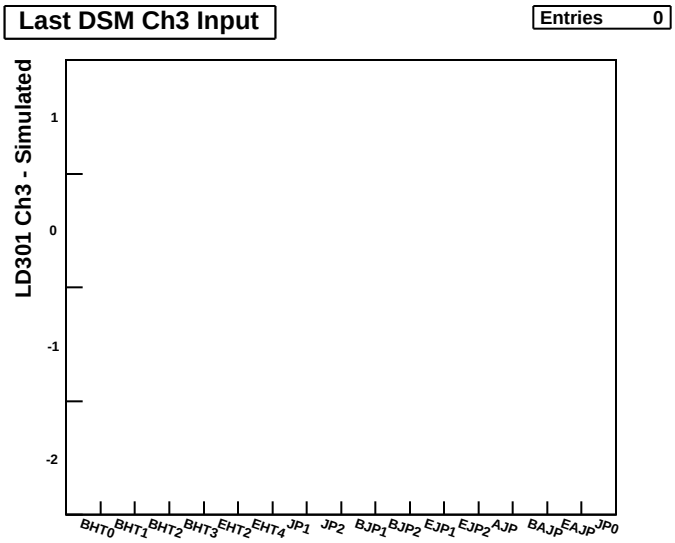

EMC L2 Input - HT01 bits/Partial JP ID
Entries 91304
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

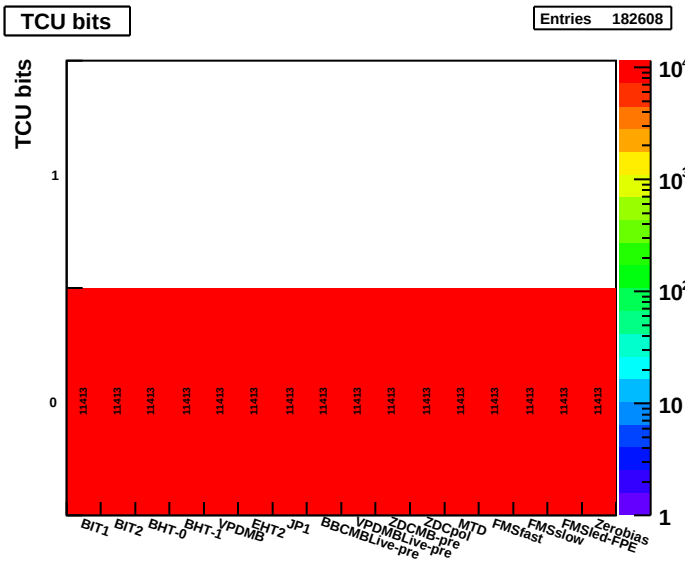

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

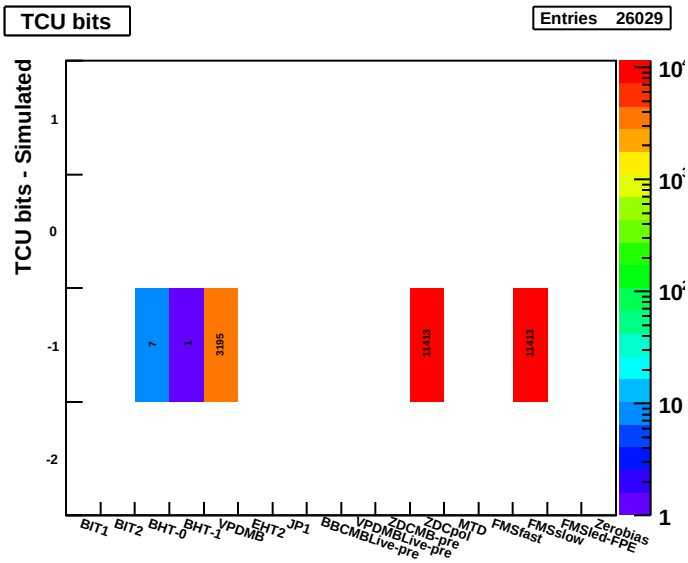

EMC L2 Input - HT23 bits
Entries 91304
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

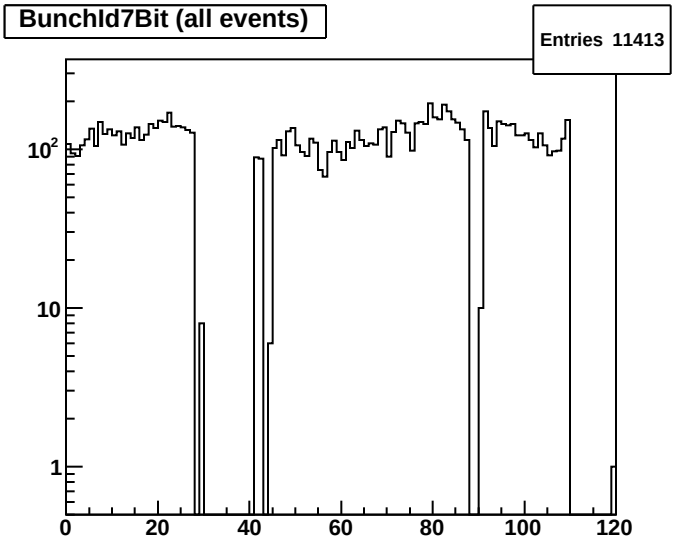

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

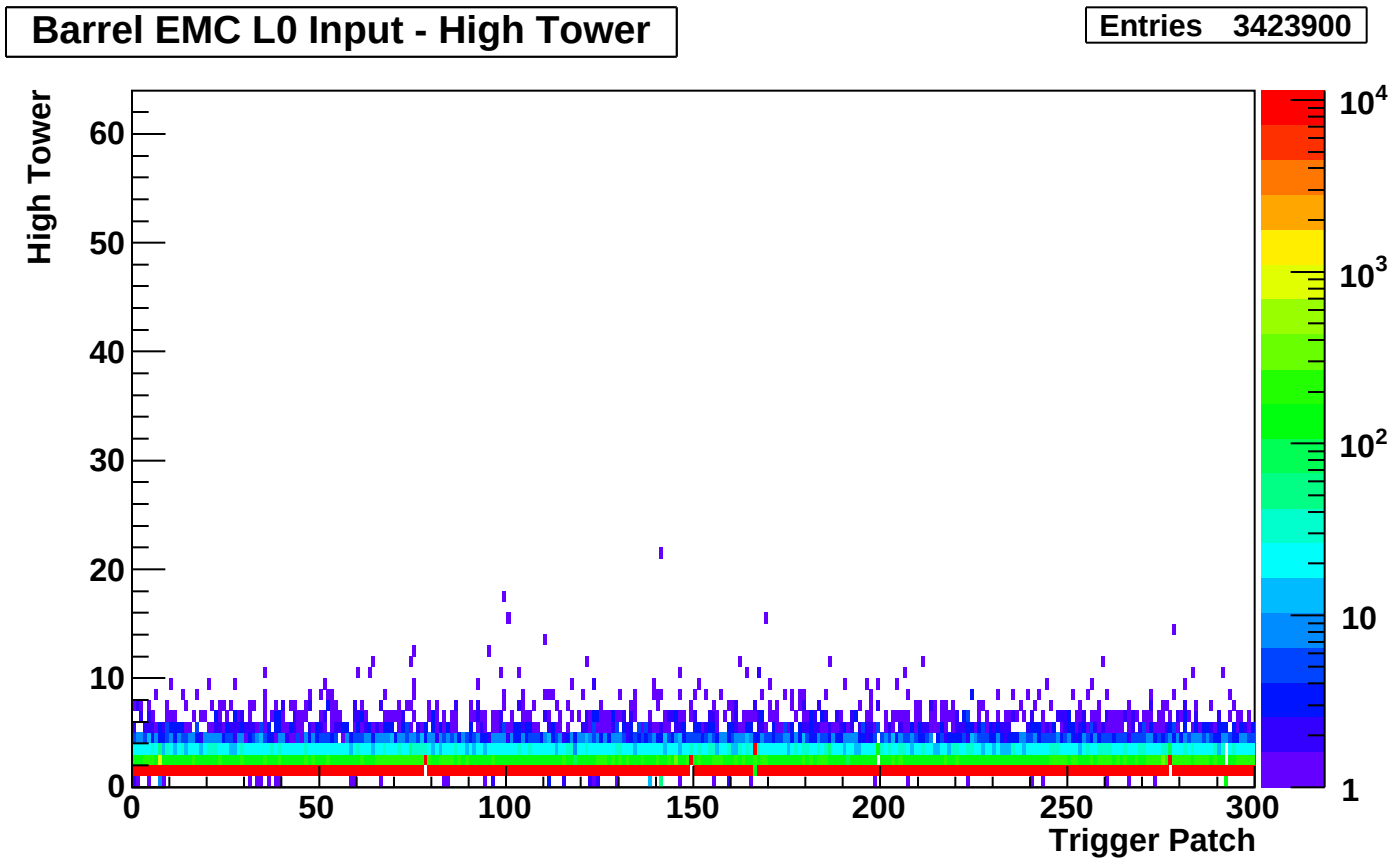

Last DSM Ch3 Input
Entries 182608
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

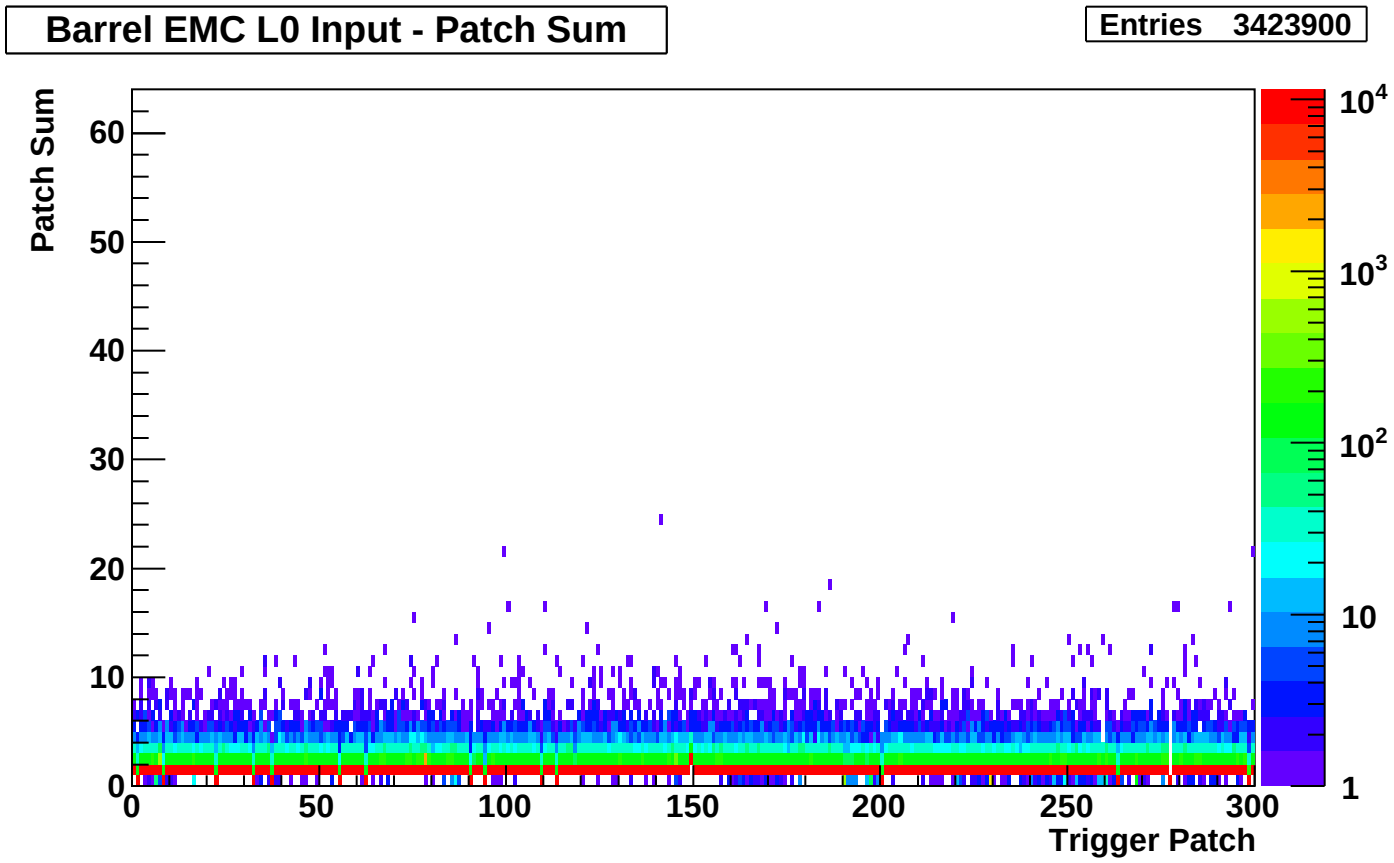

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

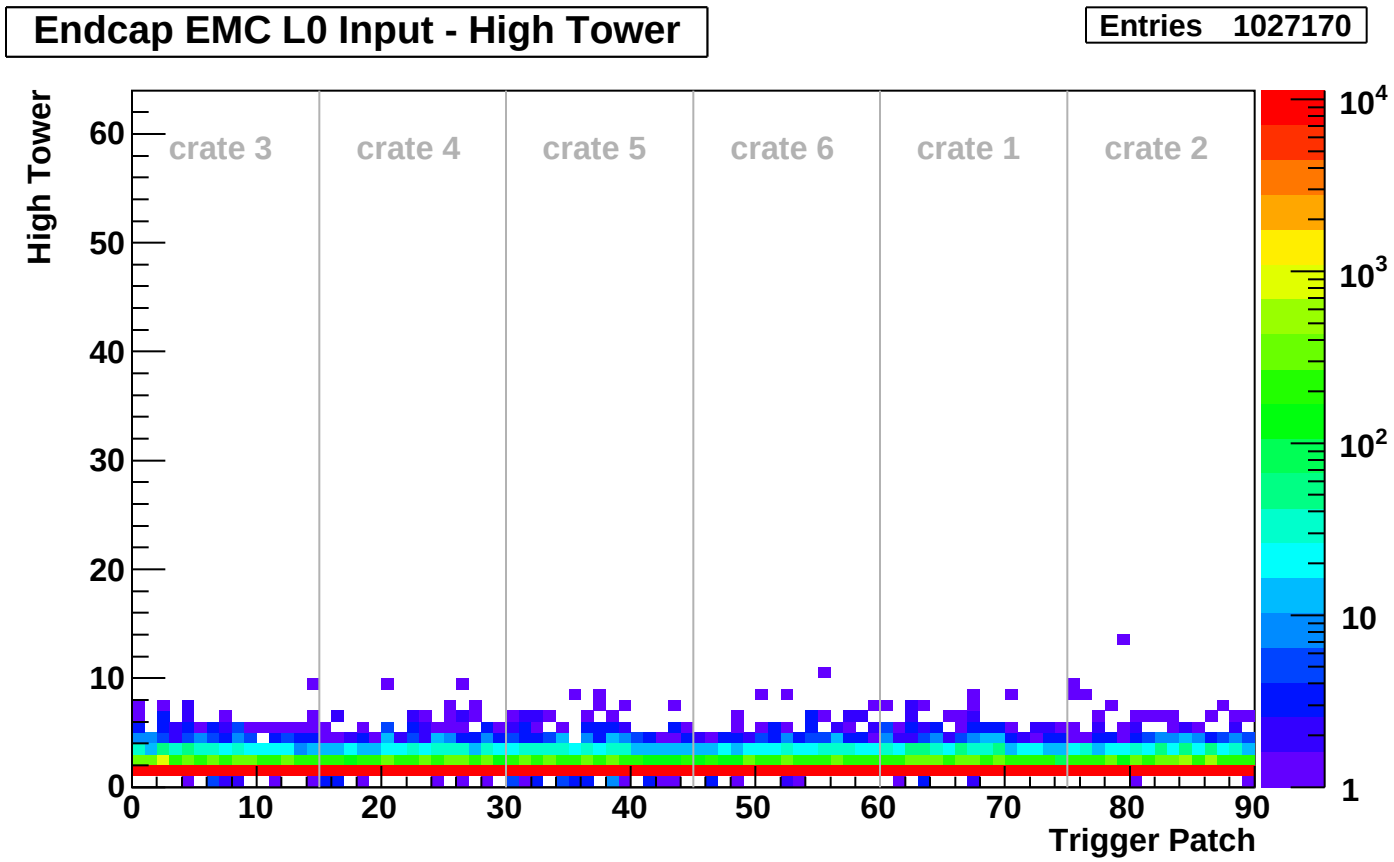

TCU bits
Entries 182608
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

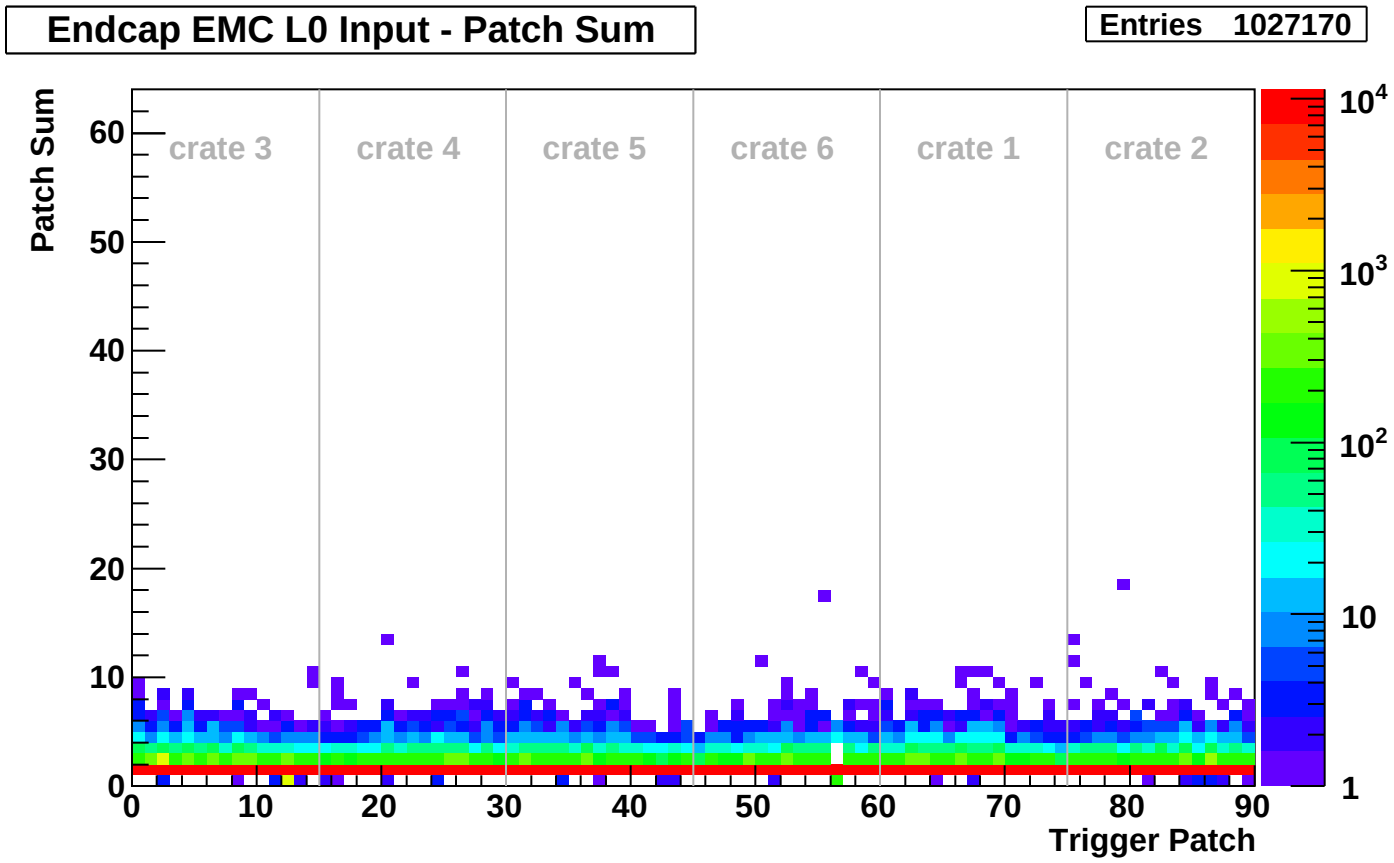

TCU bits
Entries 26029
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

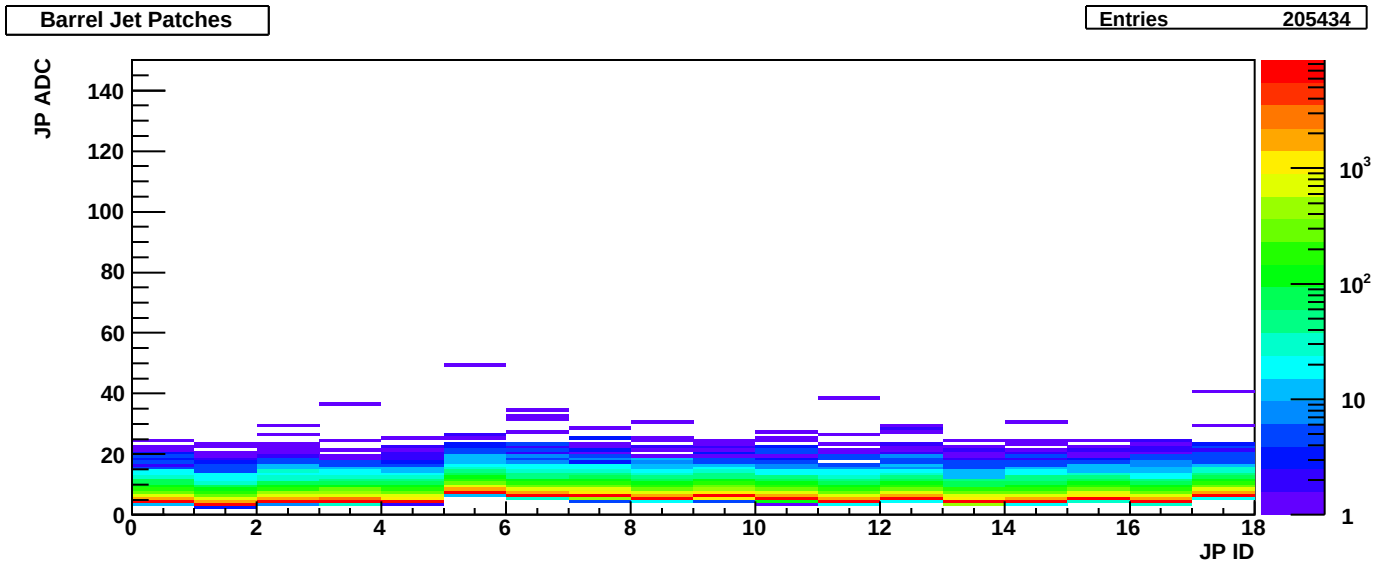

BunchId7Bit (all events)
Entries 11413

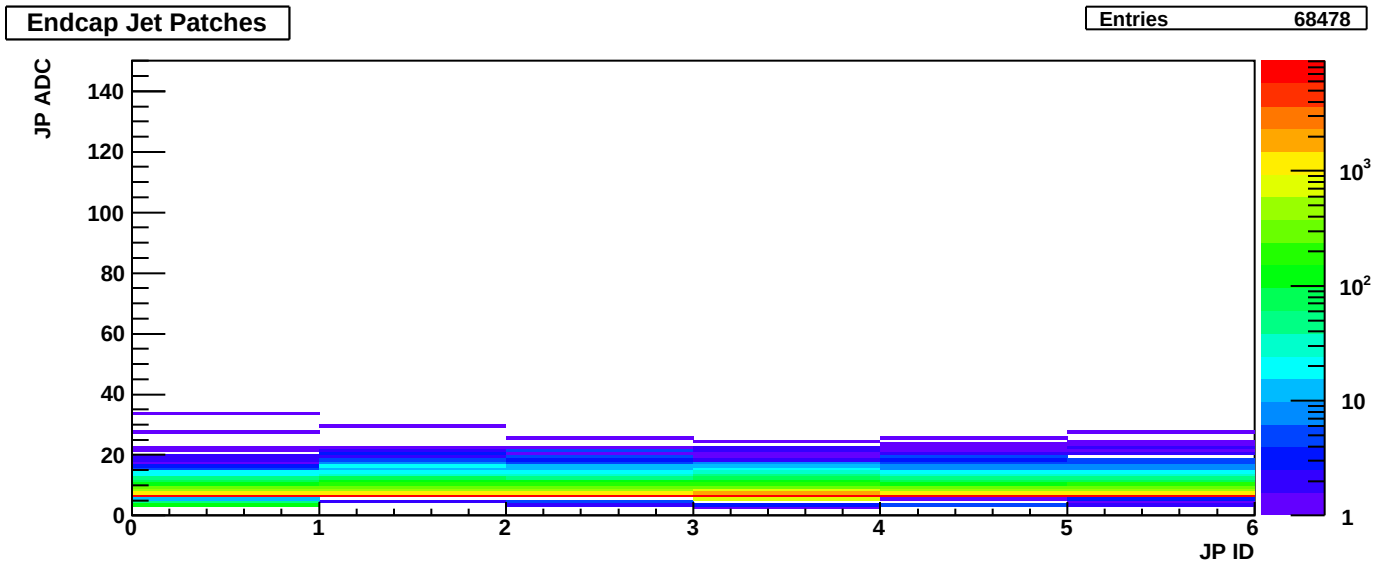

Barrel EMC L0 Input - High Tower
Entries 3423900
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

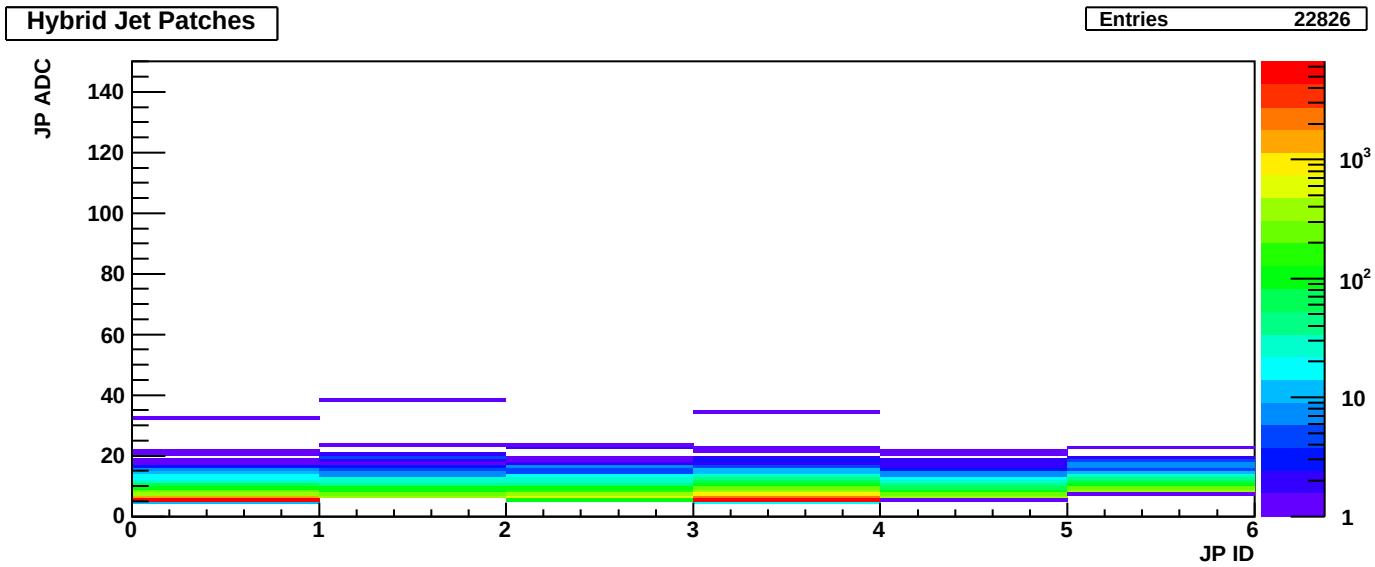

Barrel EMC L0 Input - Patch Sum
Entries 3423900
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

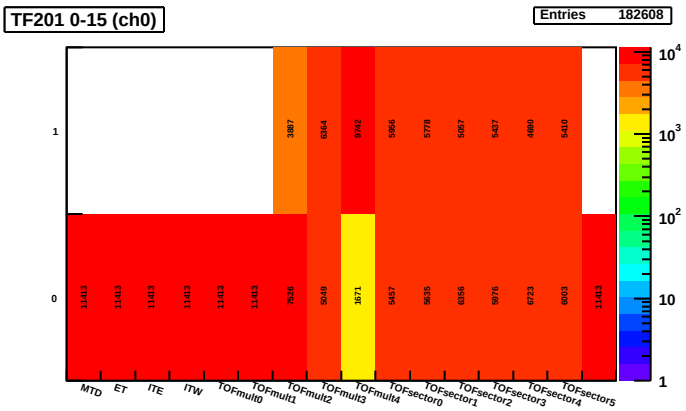

Endcap EMC L0 Input - High Tower
Entries 1027170
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

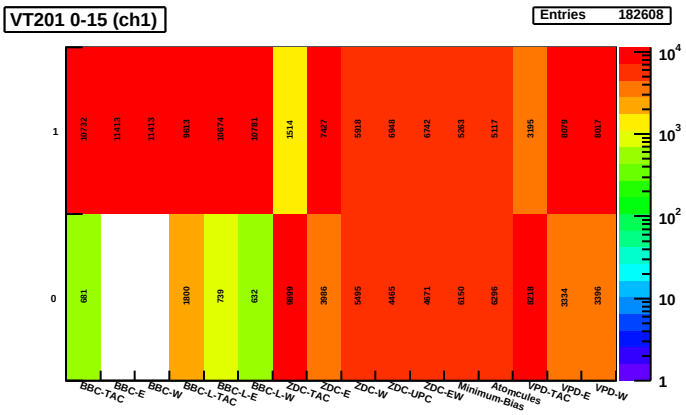

Endcap EMC L0 Input - Patch Sum
Entries 1027170
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

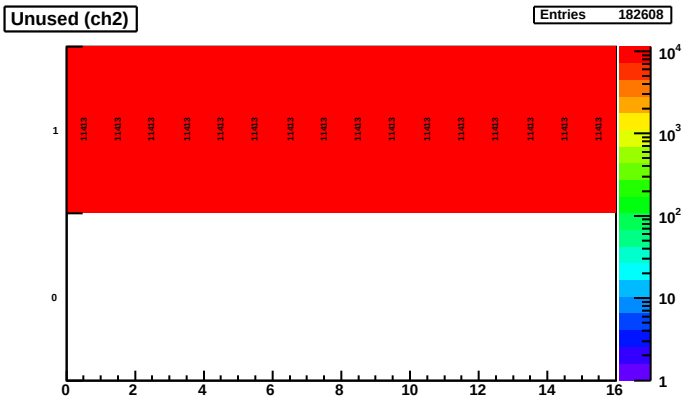

Barrel Jet Patches
Entries 205434
JP ADC
JP ID

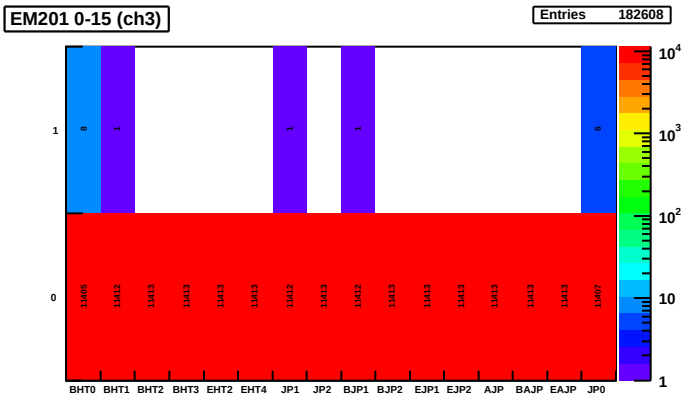

Endcap Jet Patches
Entries 68478
JP ADC
JP ID

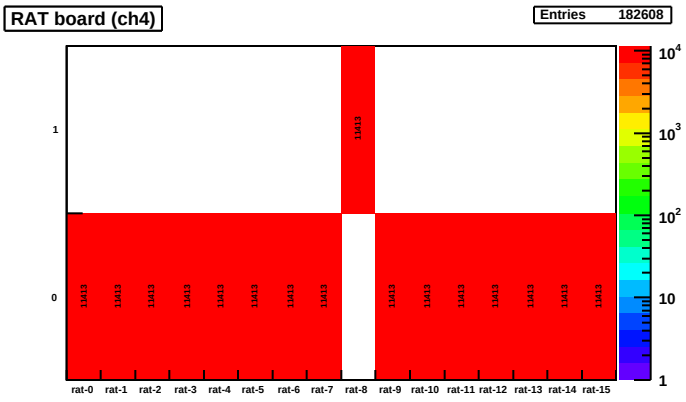

Hybrid Jet Patches
Entries 22826
JP ADC
JP ID

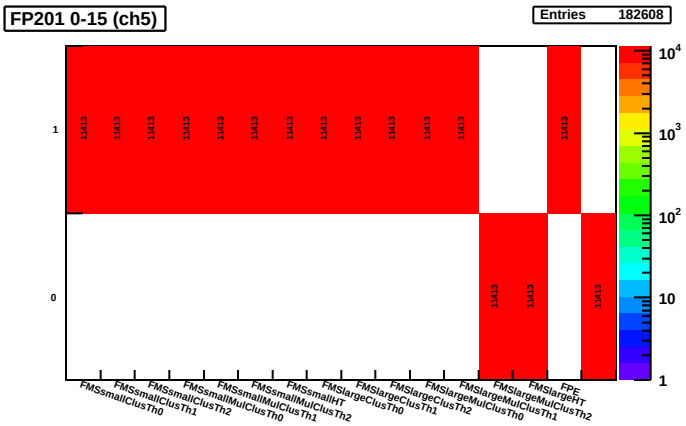

TF201 0-15 (ch0)
Entries 182608
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

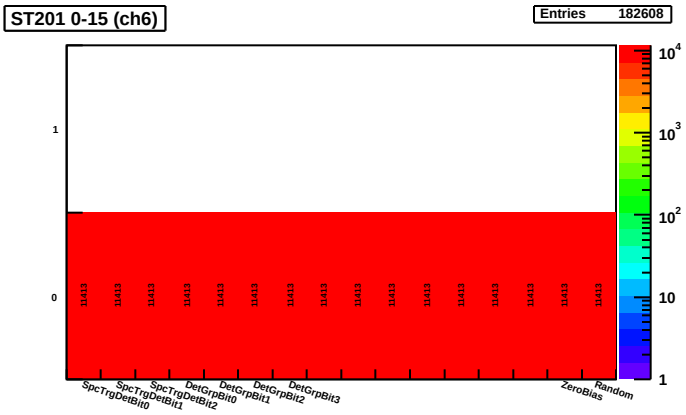

VT201 0-15 (ch1)
Entries 182608
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

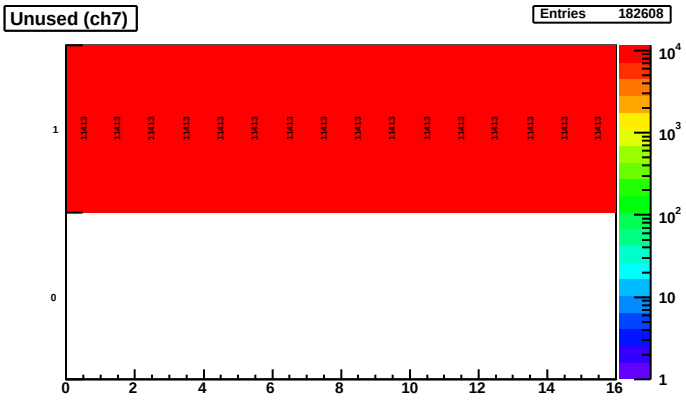

Unused (ch2)
Entries 182608

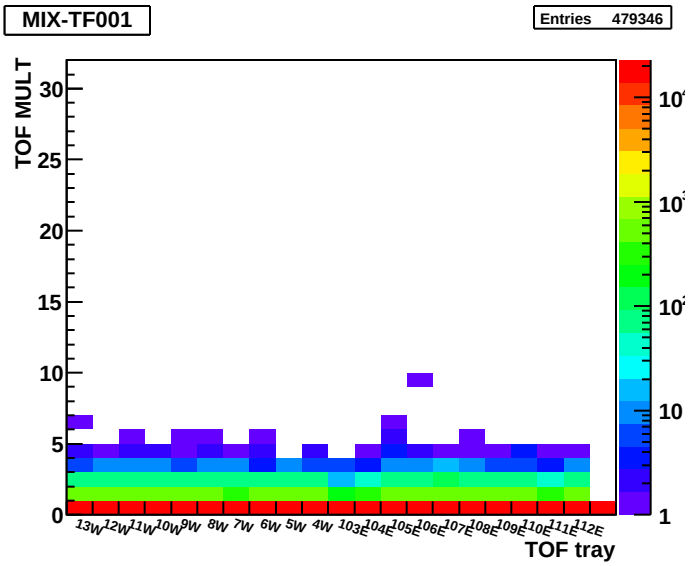

EM201 0-15 (ch3)
Entries 182608
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

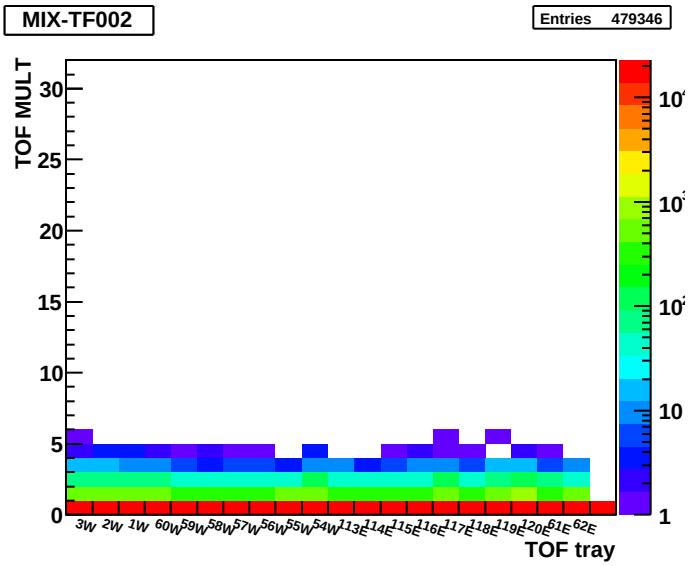

RAT board (ch4)
Entries 182608
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

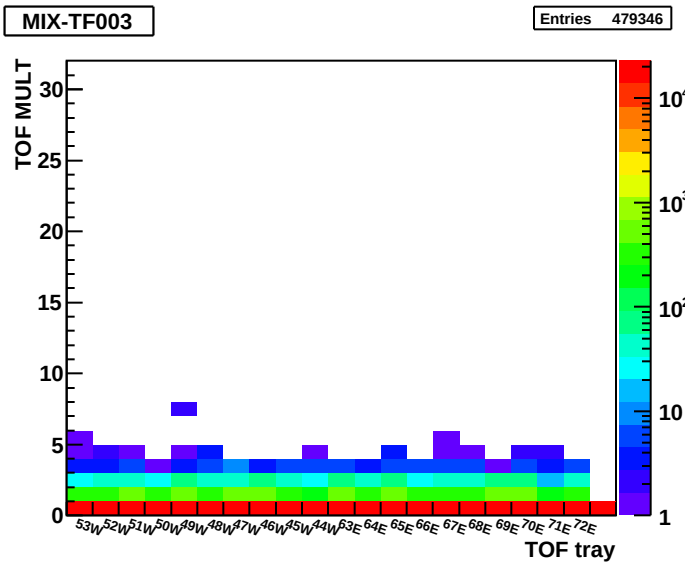

FP201 0-15 (ch5)
Entries 182608
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

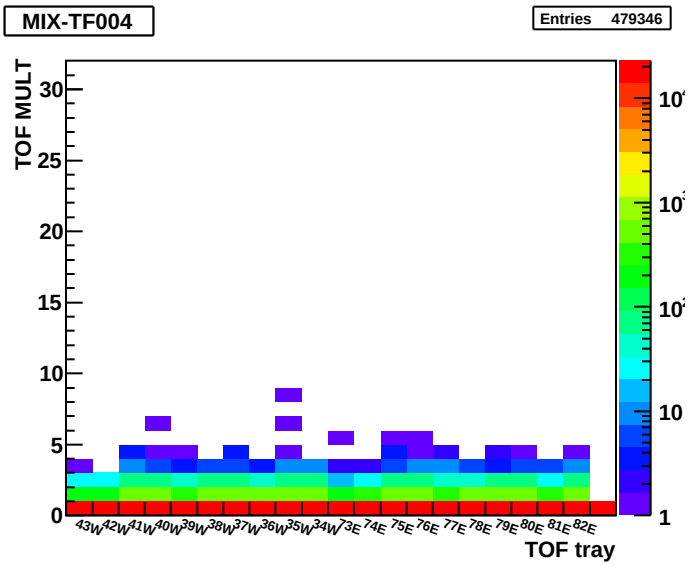

ST201 0-15 (ch6)
Entries 182608
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

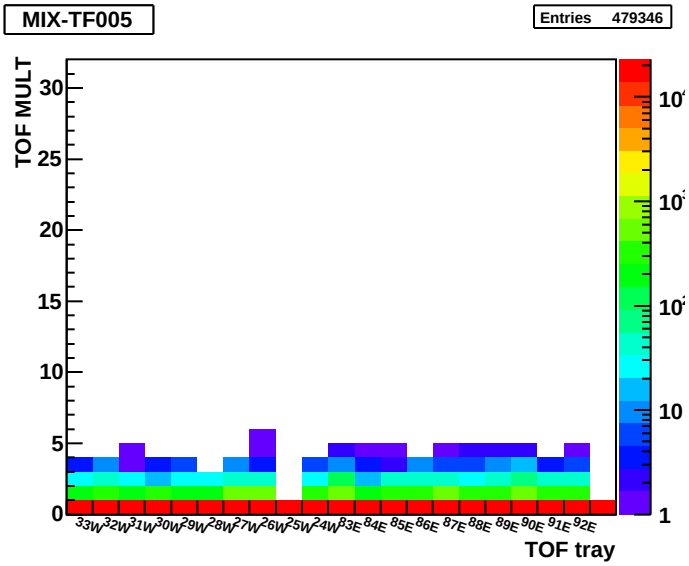

Unused (ch7)
Entries 182608

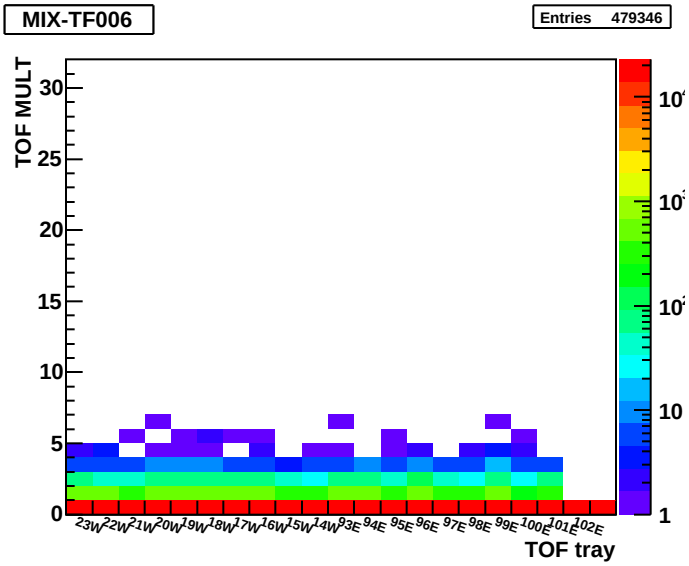

MIX-TF001
Entries 479346
TOF MULT
TOF tray

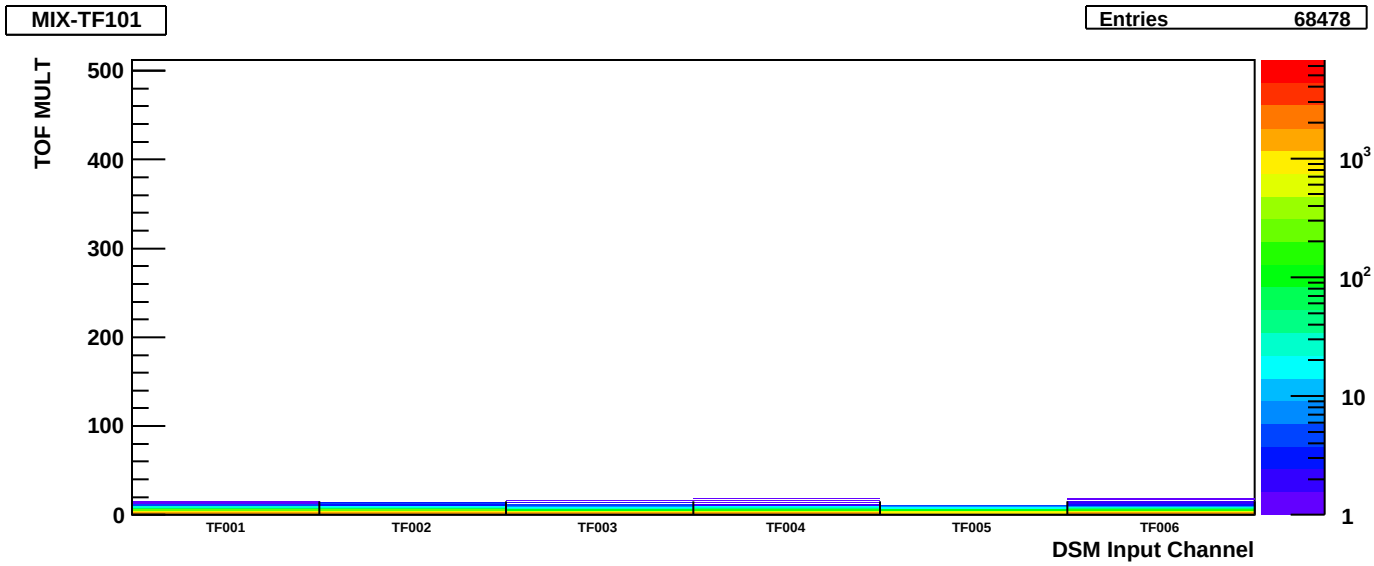

MIX-TF002
Entries 479346
TOF MULT
TOF tray

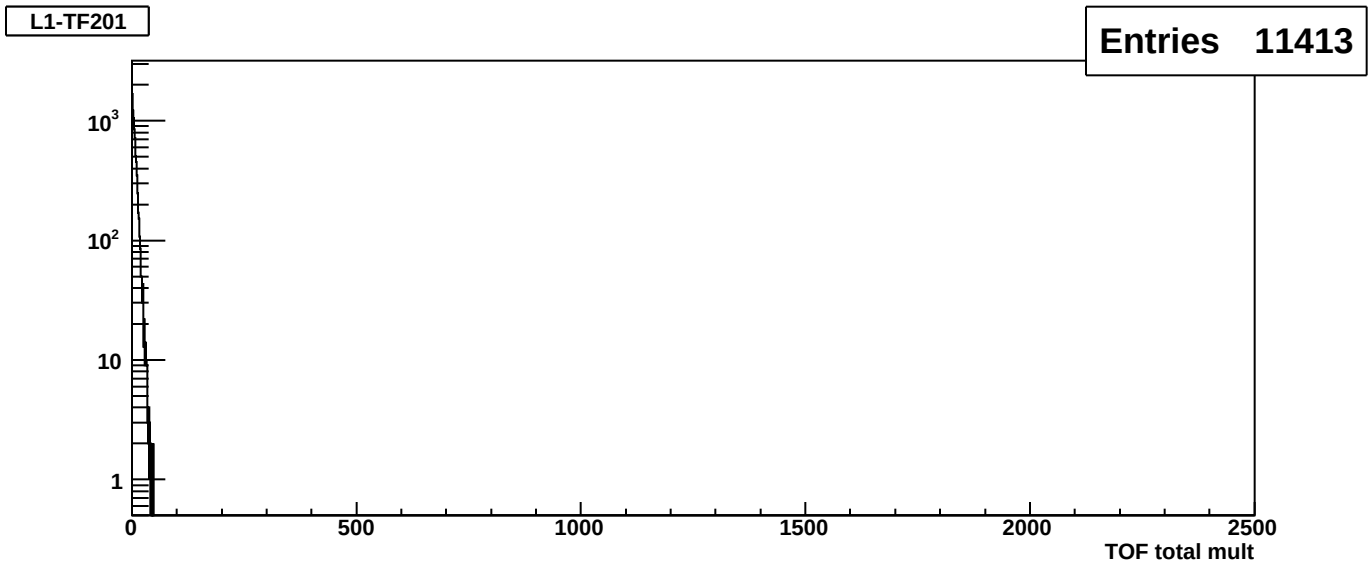

MIX-TF003
Entries 479346
TOF MULT
TOF tray

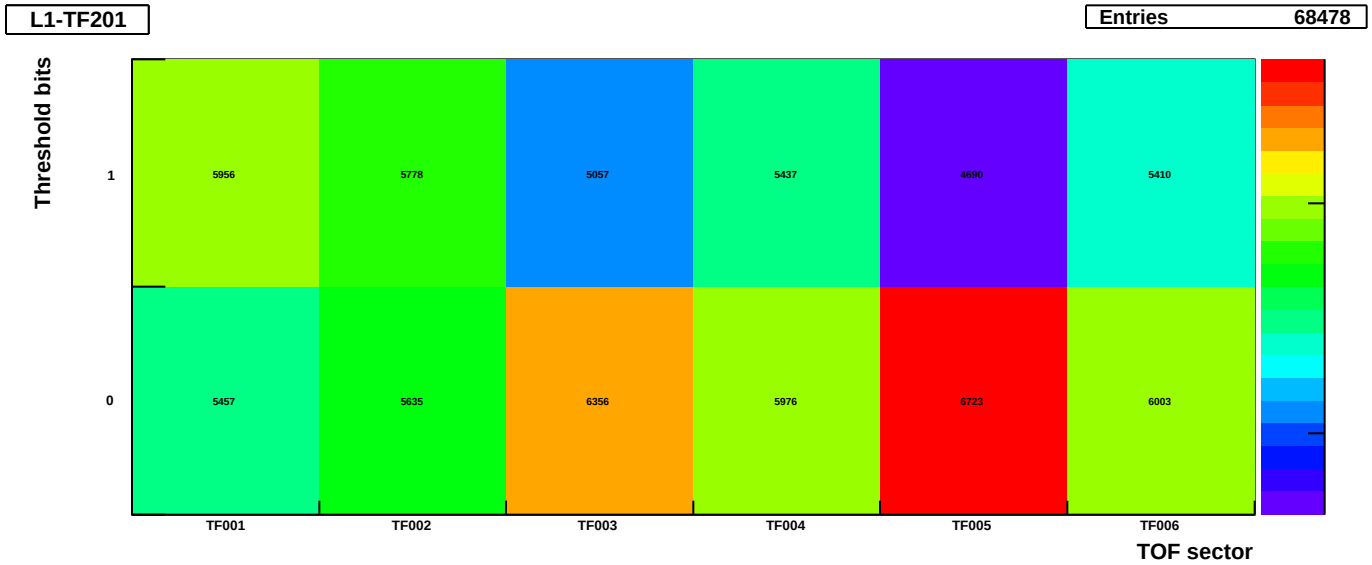

MIX-TF004
Entries 479346
TOF MULT
TOF tray

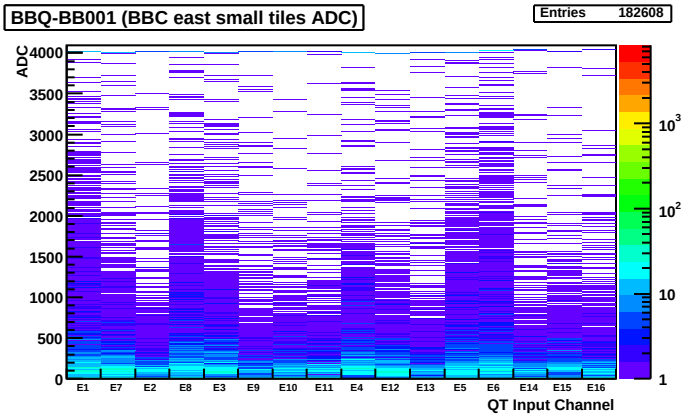

MIX-TF005
Entries 479346
TOF MULT
TOF tray

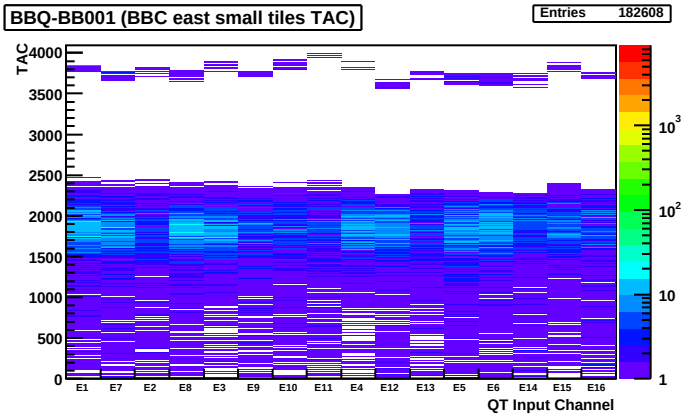

MIX-TF006
Entries 479346
TOF MULT
TOF tray

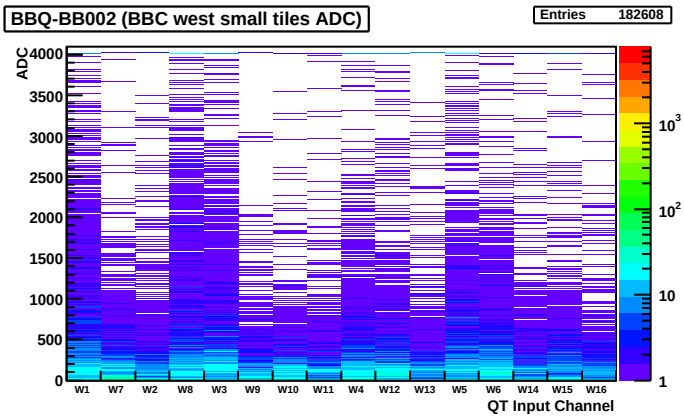

MIX-TF101
Entries 68478
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

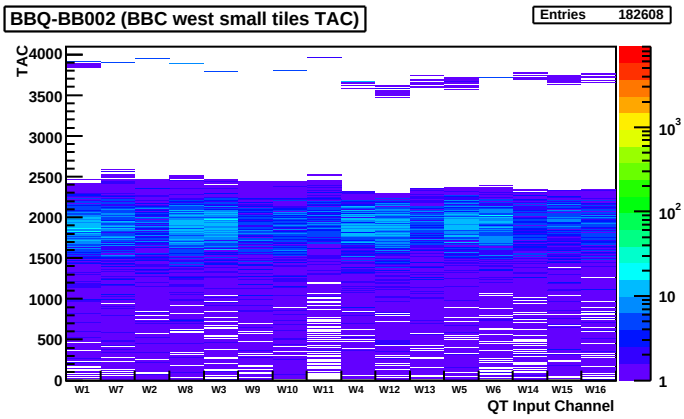

L1-TF201
Entries 11413
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

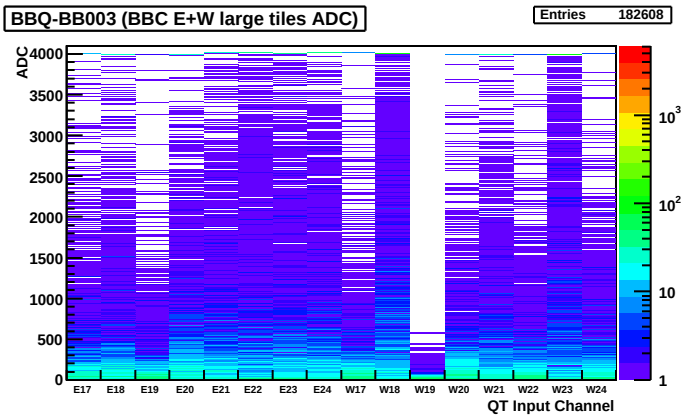

L1-TF201
Entries 68478
Threshold bits
1
0
5956
5778
5057
5437
4690
5410
5457
5635
6356
5976
6723
6003
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

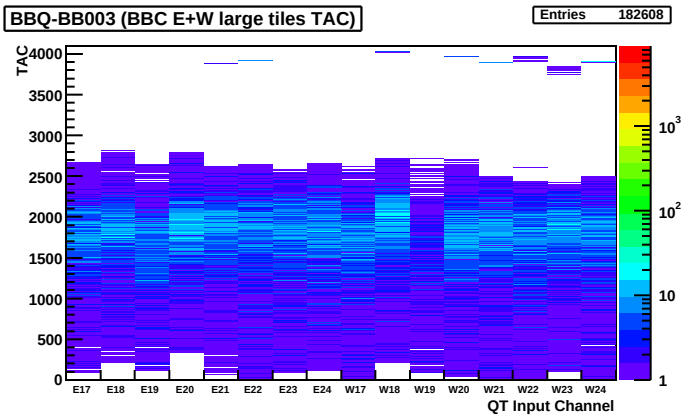

BBQ-BB001 (BBC east small tiles ADC)
Entries 182608
ADC
QT Input Channel

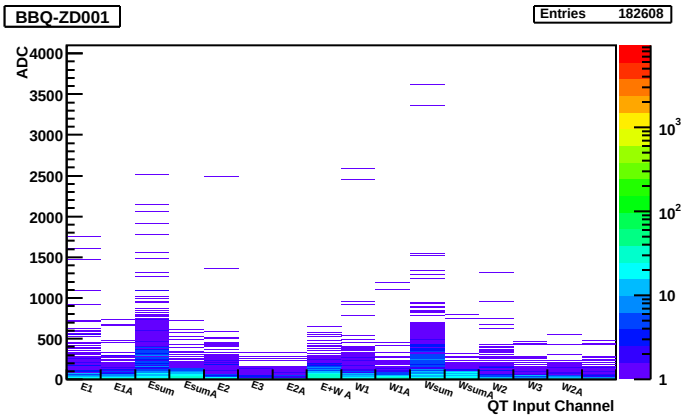

BBQ-BB001 (BBC east small tiles TAC)
Entries 182608
TAC
QT Input Channel

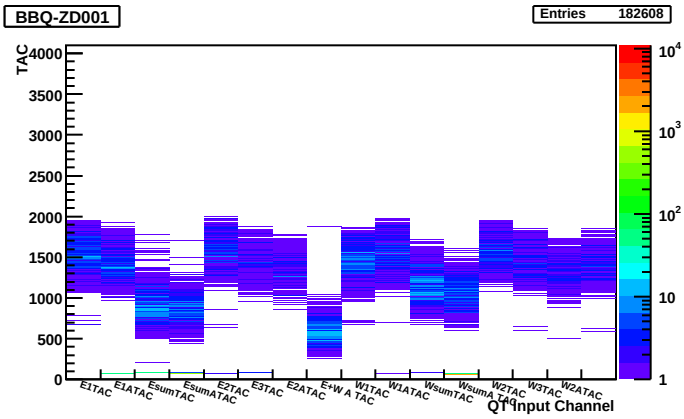

BBQ-BB002 (BBC west small tiles ADC)
Entries 182608
ADC
QT Input Channel

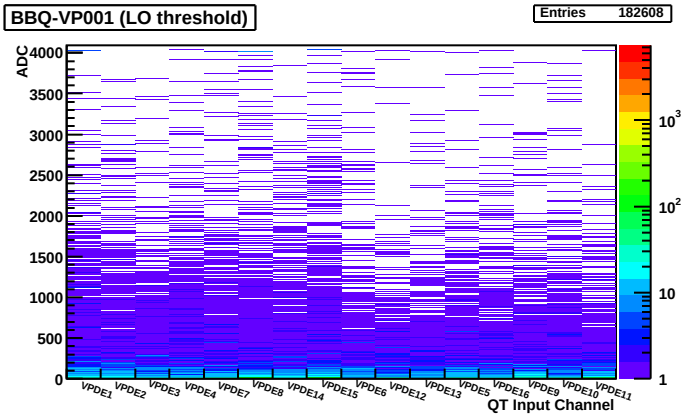

BBQ-BB002 (BBC west small tiles TAC)
Entries 182608
TAC
QT Input Channel

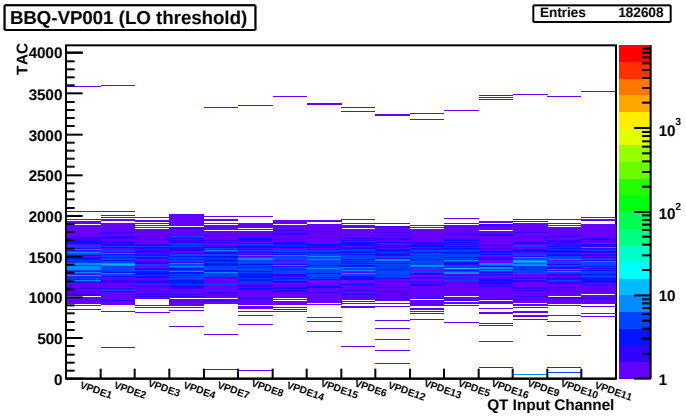

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 182608
ADC
QT Input Channel

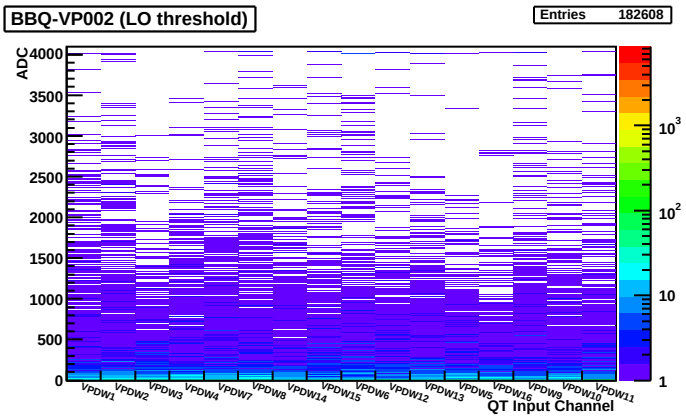

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 182608
TAC
QT Input Channel

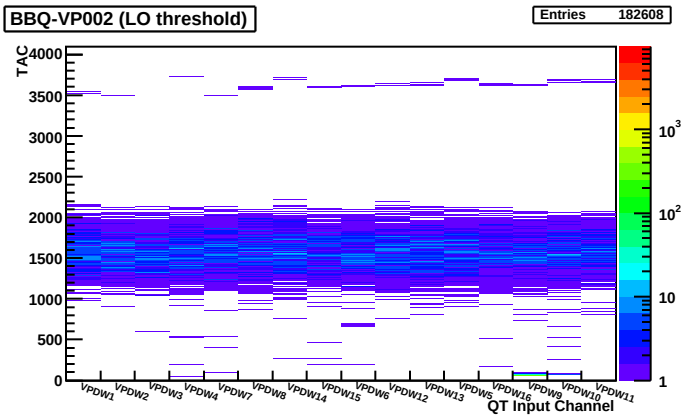

BBQ-ZD001
Entries 182608
ADC
QT Input Channel

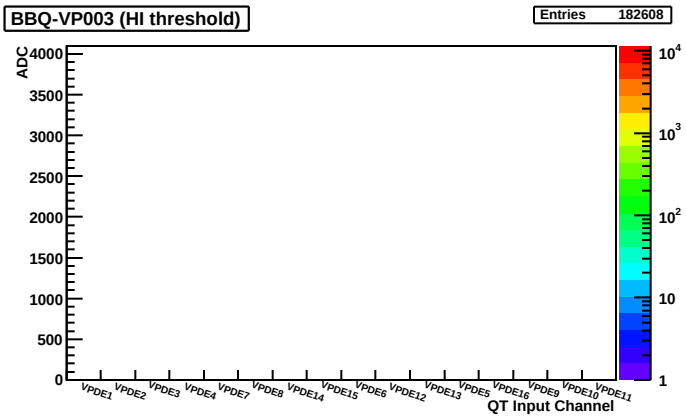

BBQ-ZD001
Entries 182608
TAC
QT Input Channel

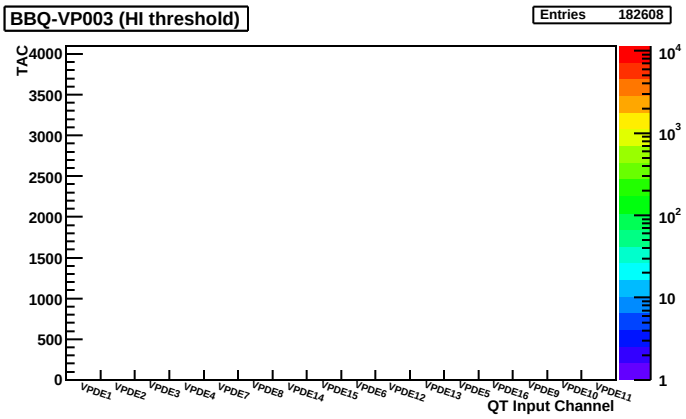

BBQ-VP001 (LO threshold)
Entries 182608
ADC
QT Input Channel

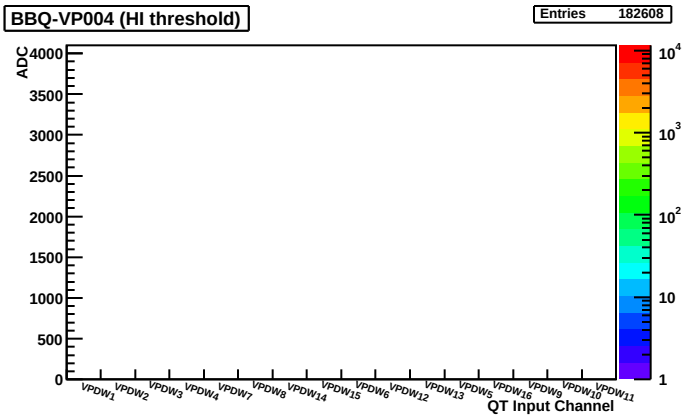

BBQ-VP001 (LO threshold)
Entries 182608
TAC
QT Input Channel

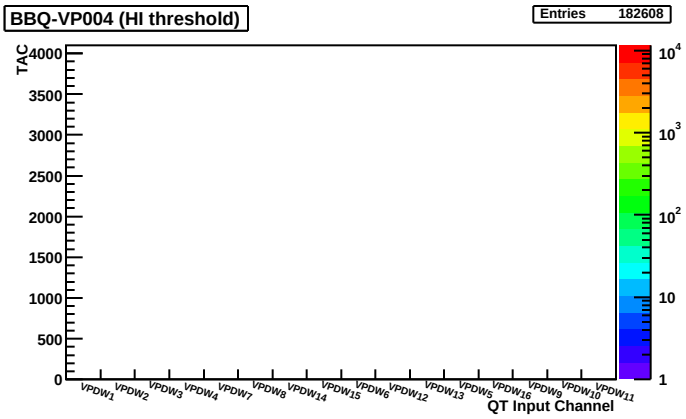

BBQ-VP002 (LO threshold)
Entries 182608
ADC
QT Input Channel

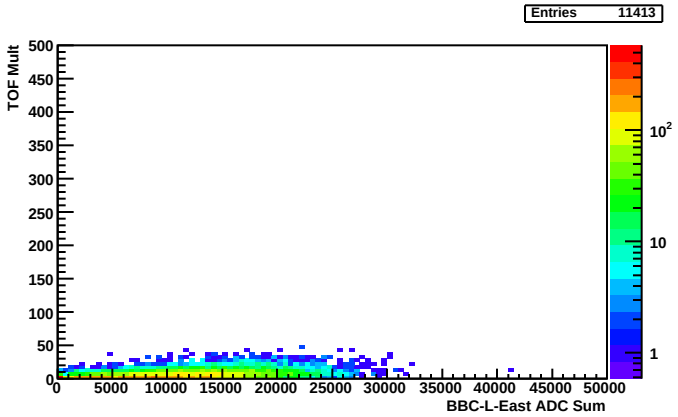

BBQ-VP002 (LO threshold)
Entries 182608
TAC
QT Input Channel

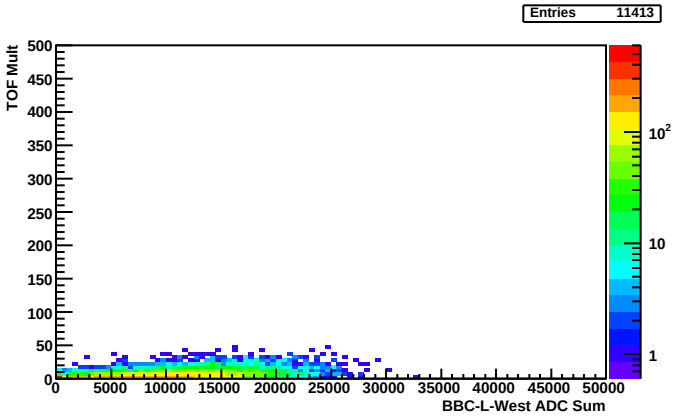

BBQ-VP003 (HI threshold)
Entries 182608
ADC
QT Input Channel

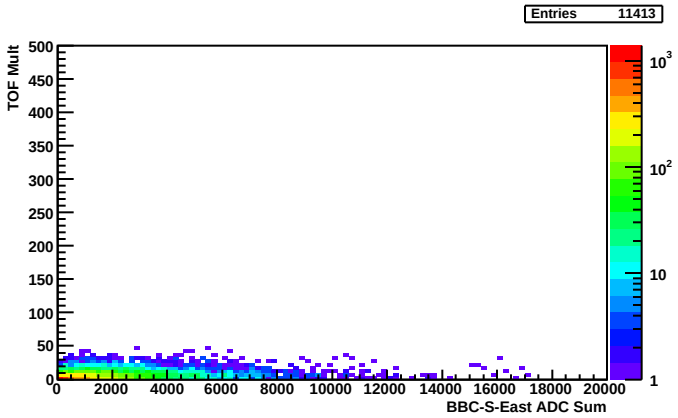

BBQ-VP003 (HI threshold)
Entries 182608
TAC
QT Input Channel

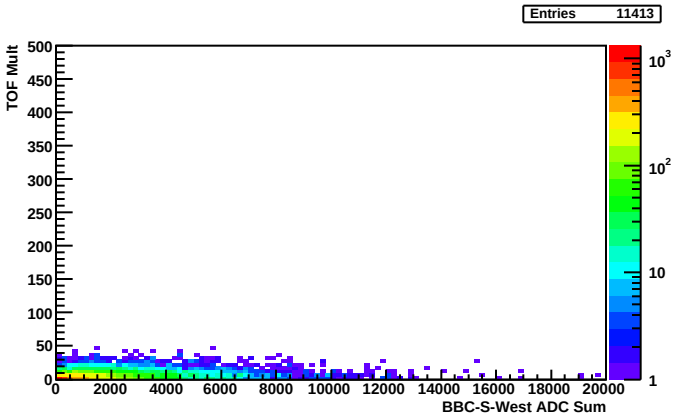

BBQ-VP004 (HI threshold)
Entries 182608
ADC
QT Input Channel

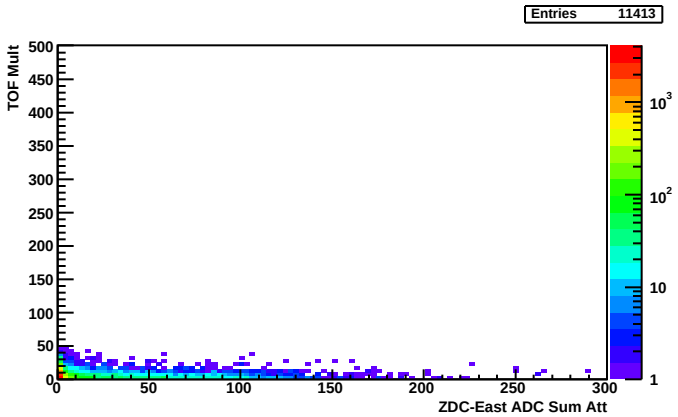

BBQ-VP004 (HI threshold)
Entries 182608
TAC
QT Input Channel

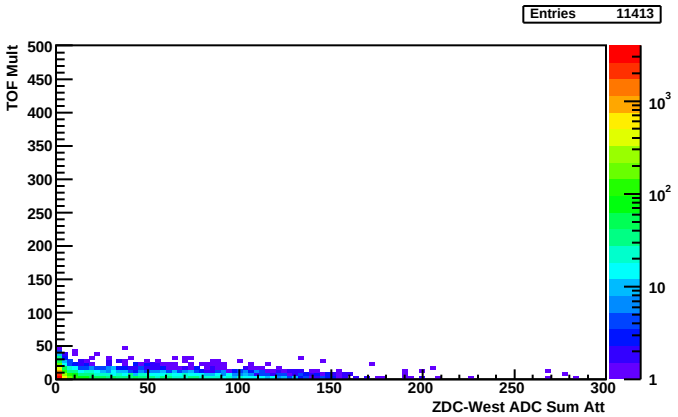

Entries 11413
TOF Mult
BBC-L-East ADC Sum

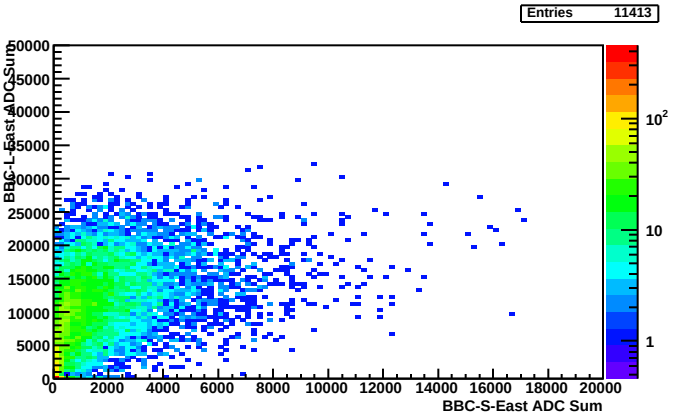

Entries 11413
TOF Mult
BBC-L-West ADC Sum

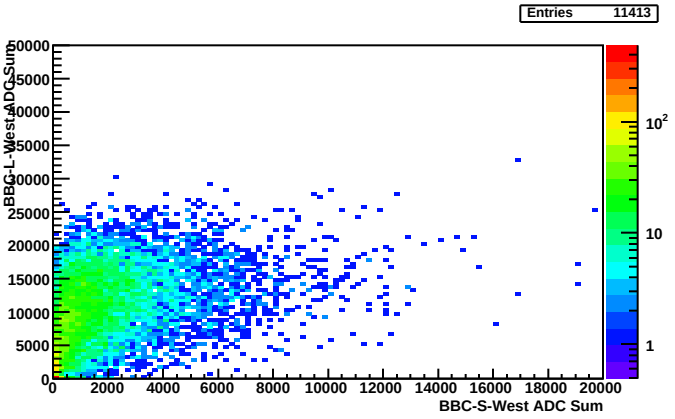

Entries 11413
TOF Mult
BBC-S-East ADC Sum

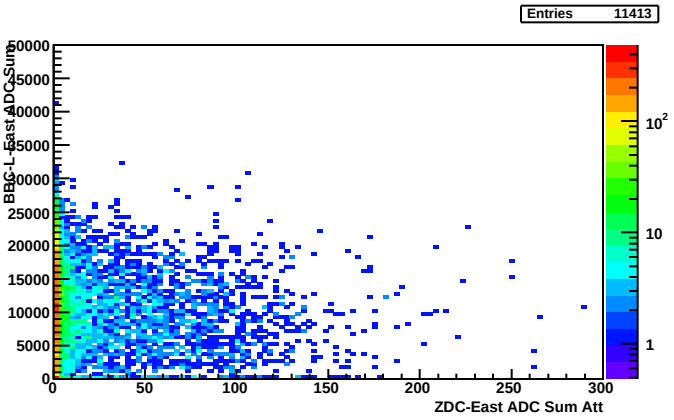

Entries 11413
TOF Mult
BBC-S-West ADC Sum

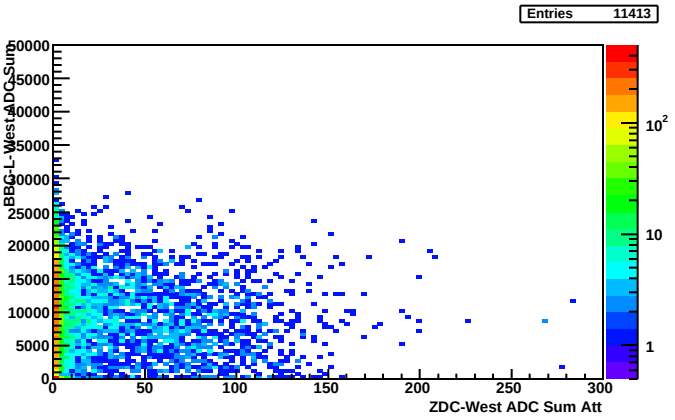

Entries 11413
TOF Mult
ZDC-East ADC Sum Att

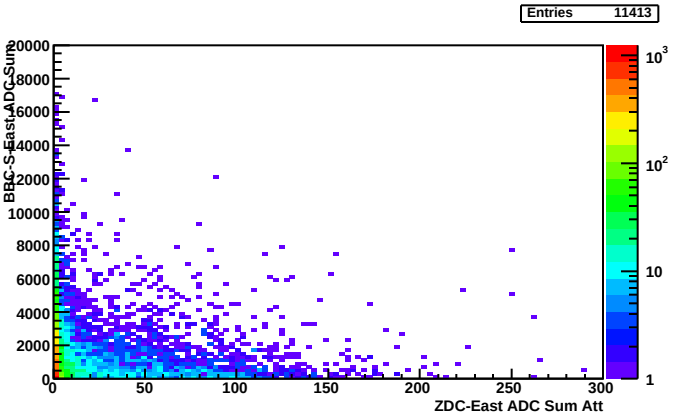

Entries 11413
TOF Mult
ZDC-West ADC Sum Att

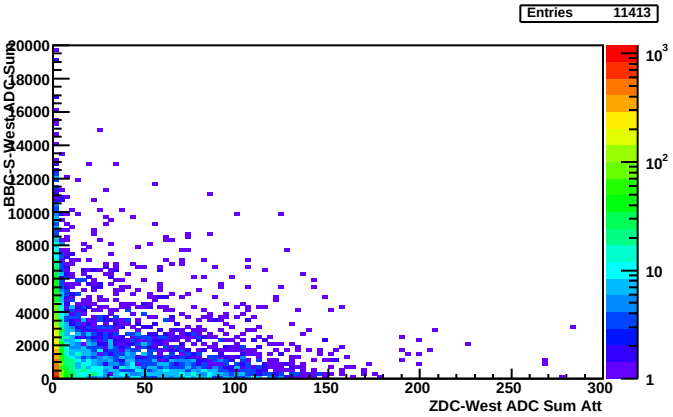

Entries 11413
BBC-L-East ADC Sum
BBC-S-East ADC Sum

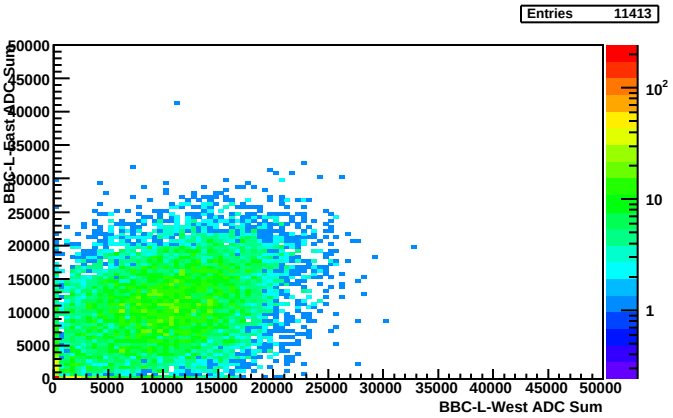

Entries 11413
BBC-L-West ADC Sum
BBC-S-West ADC Sum

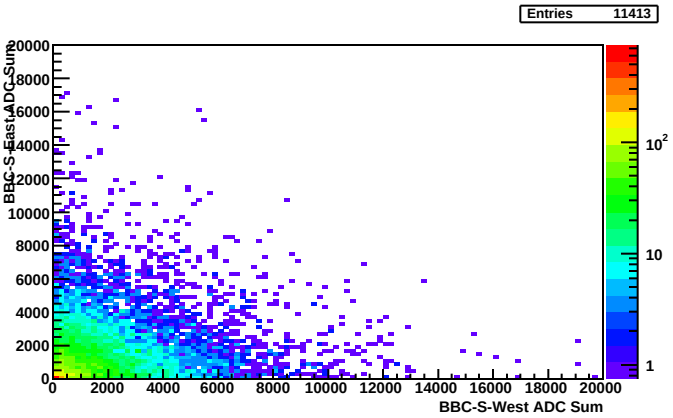

Entries 11413
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

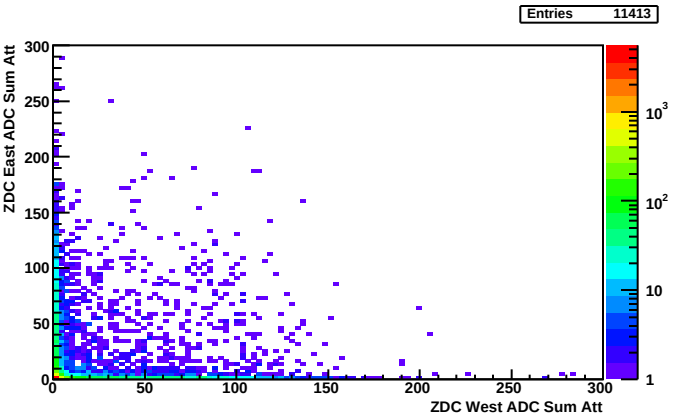

Entries 11413
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

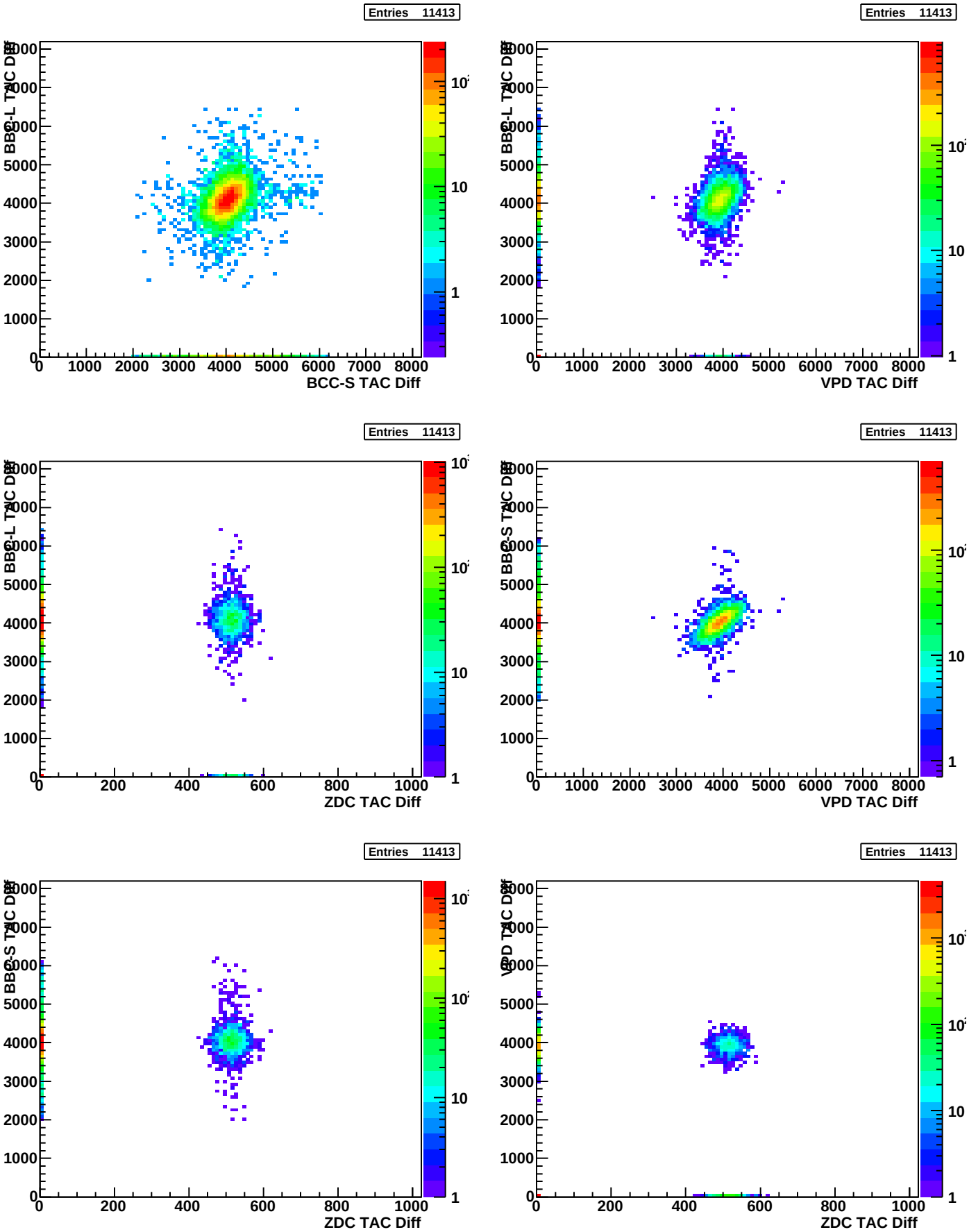

Entries 11413
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

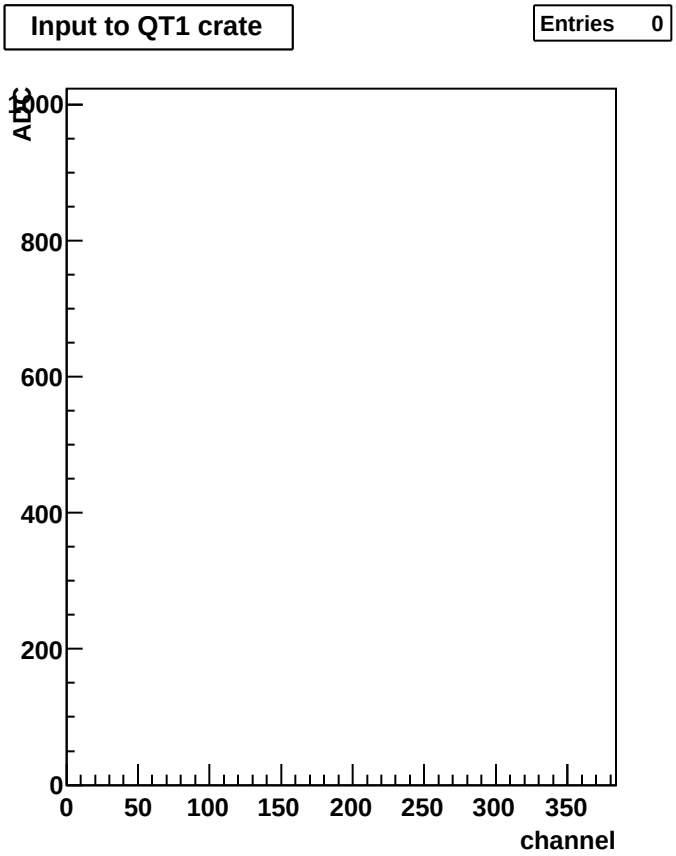

Entries 11413
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

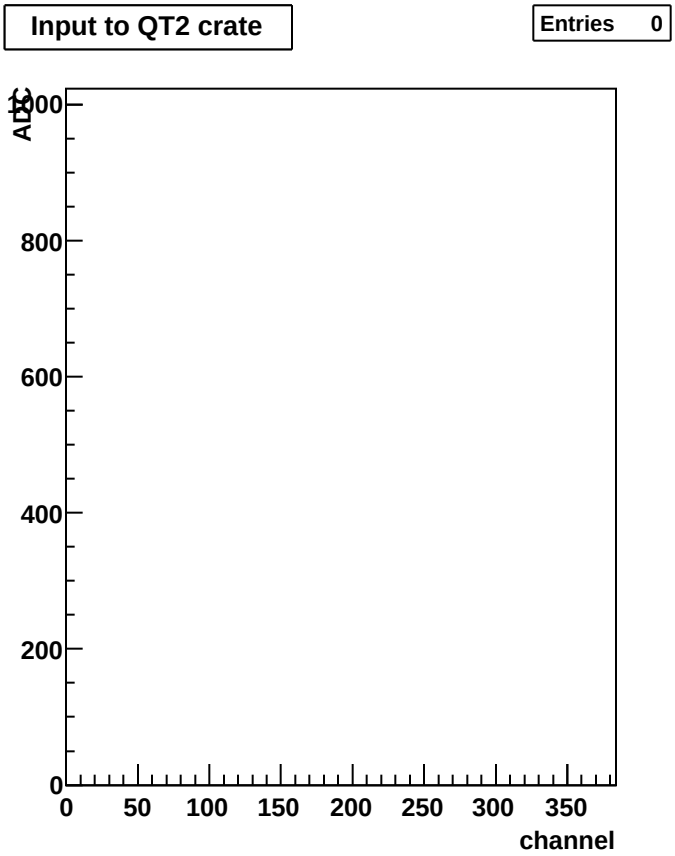

Entries 11413
BBC-L-East ADC Sum
BBC-L-West ADC Sum

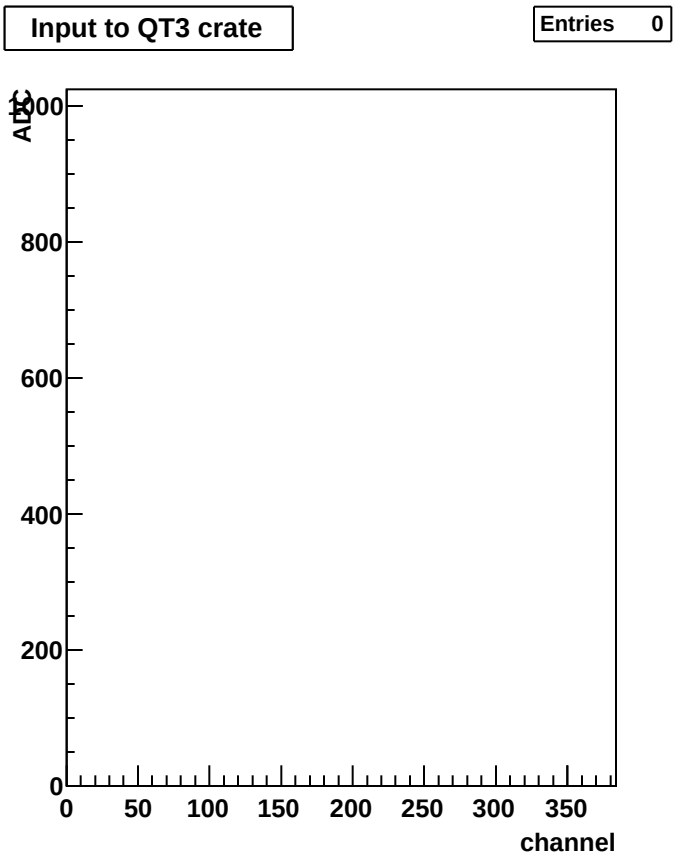

Entries 11413
BBC-S-East ADC Sum
BBC-S-West ADC Sum

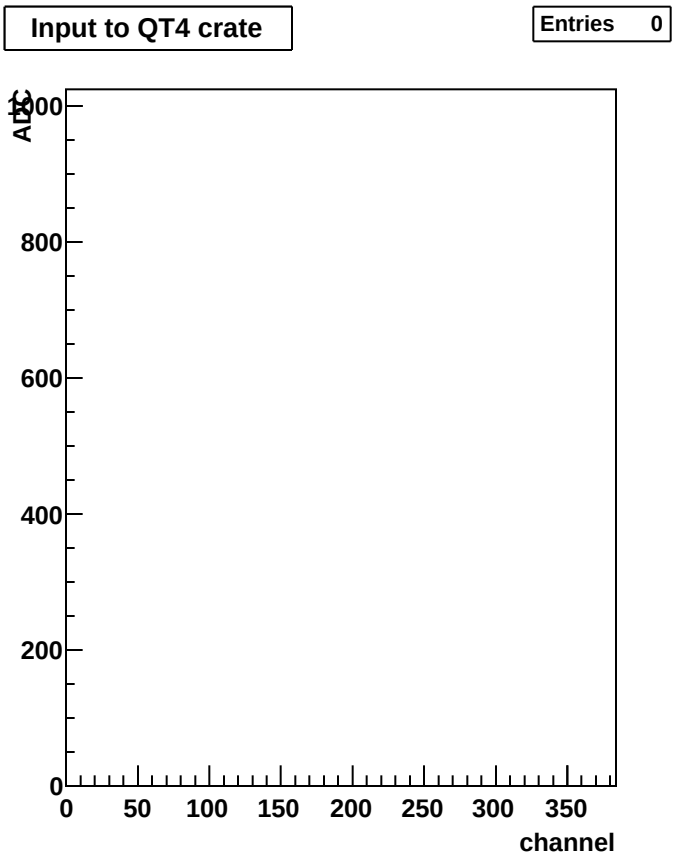

Entries 11413
ZDC East ADC Sum Att
ZDC West ADC Sum Att

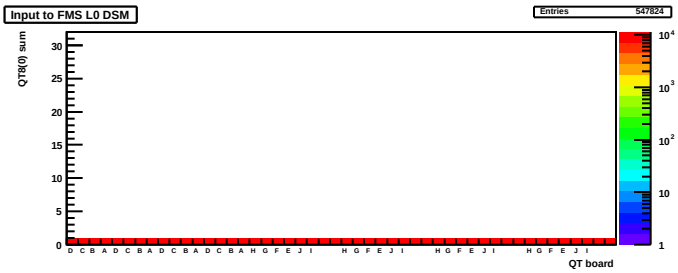

Entries 11413
BBC-L TAC Diff
BCC-S TAC Diff
Entries 11413
BBC-L TAC Diff
VPD TAC Diff
Entries 11413
BBC-L TAC Diff
ZDC TAC Diff
Entries 11413
BBC-S TAC Diff
VPD TAC Diff
Entries 11413
BBC-S TAC Diff
ZDC TAC Diff
Entries 11413
VPD TAC Diff
ZDC TAC Diff

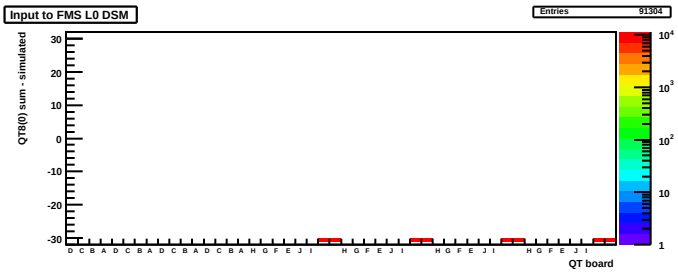

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

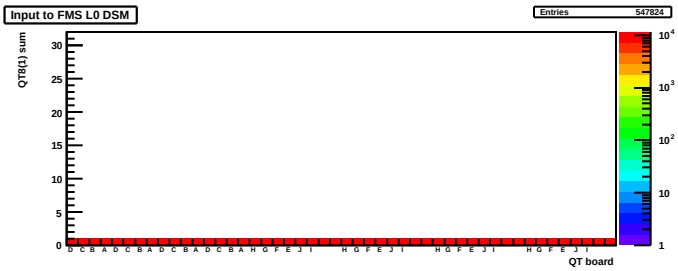

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

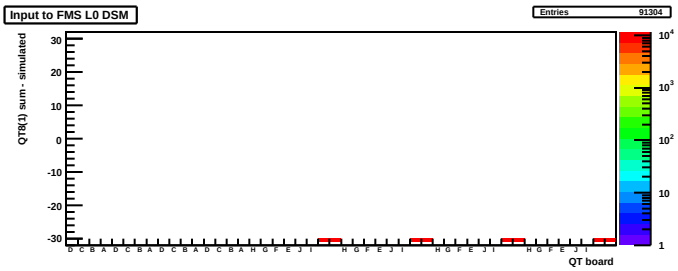

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

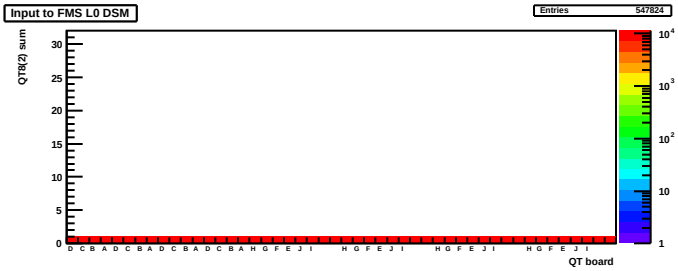

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

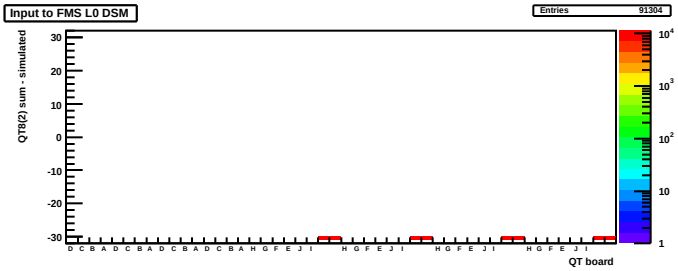

Input to FMS L0 DSM
Entries 547824
QT8(0) sum
QT board

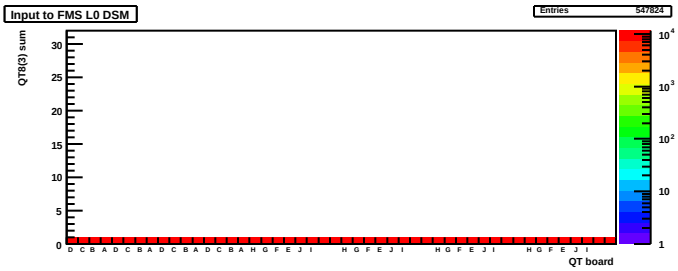

Input to FMS L0 DSM
Entries 91304
QT8(0) sum - simulated
QT board

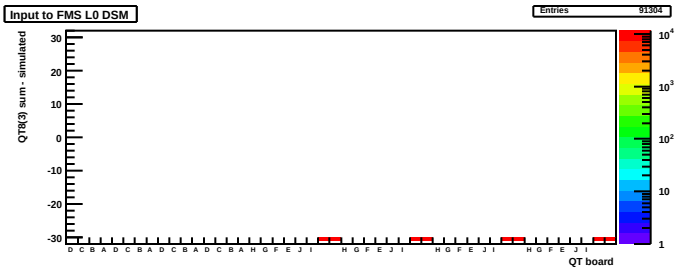

Input to FMS L0 DSM
Entries 547824
QT8(1) sum
QT board

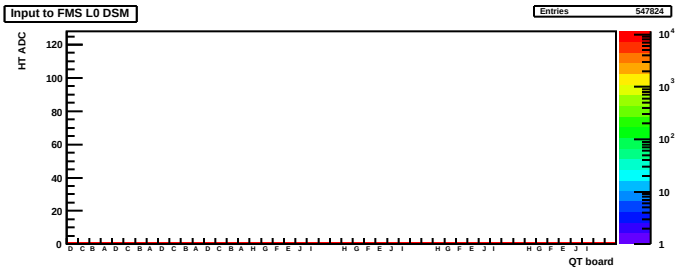

Input to FMS L0 DSM
Entries 91304
QT8(1) sum - simulated
QT board

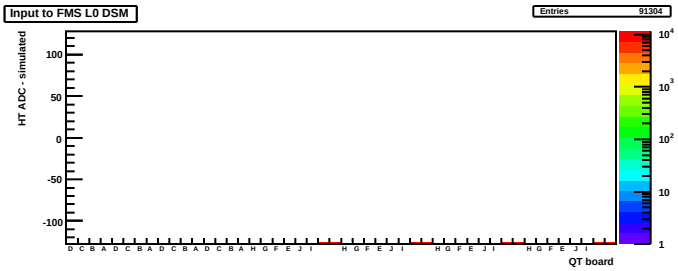

Input to FMS L0 DSM
Entries 547824
QT8(2) sum
QT board

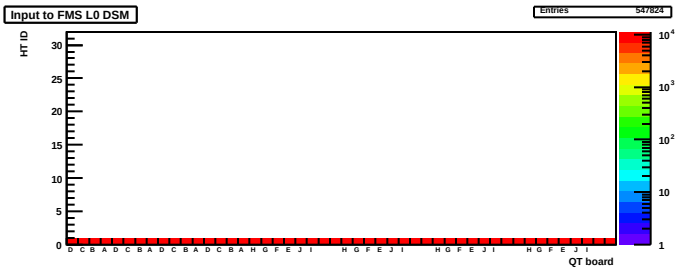

Input to FMS L0 DSM
Entries 91304
QT8(2) sum - simulated
QT board

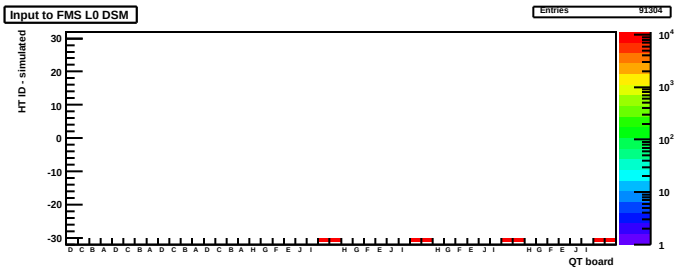

Input to FMS L0 DSM
Entries 547824
QT8(3) sum
QT board

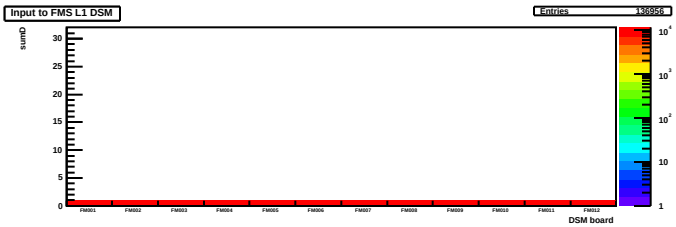

Input to FMS L0 DSM
Entries 91304
QT8(3) sum - simulated
QT board

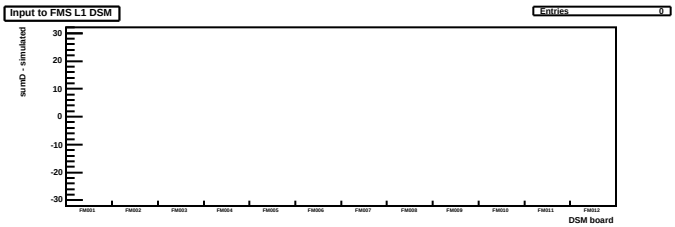

Input to FMS L0 DSM
Entries 547824
HT ADC
QT board

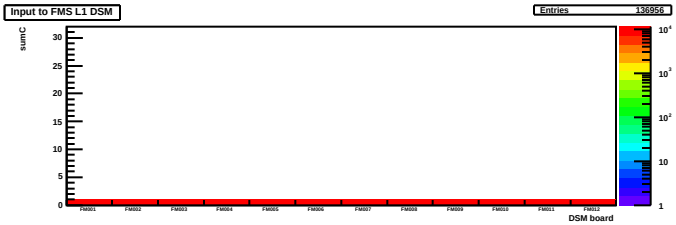

Input to FMS L0 DSM
Entries 91304
HT ADC - simulated
QT board

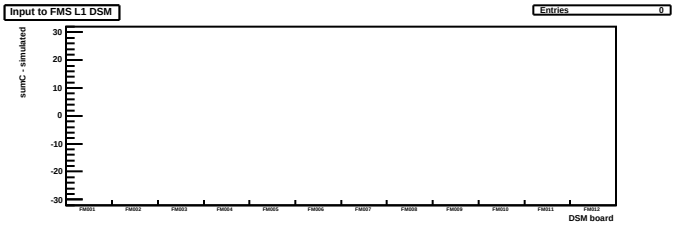

Input to FMS L0 DSM
Entries 547824
HT ID
QT board

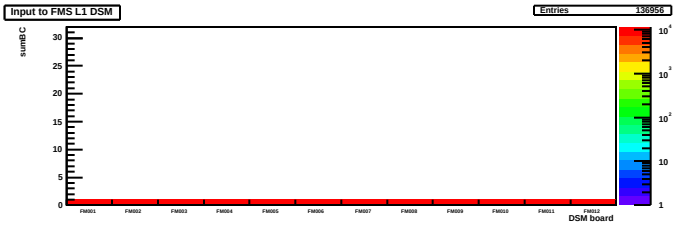

Input to FMS L0 DSM
Entries 91304
HT ID - simulated
QT board

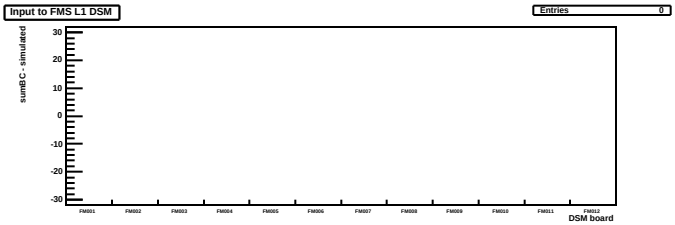

Input to FMS L1 DSM
Entries 136956
sumD
DSM board

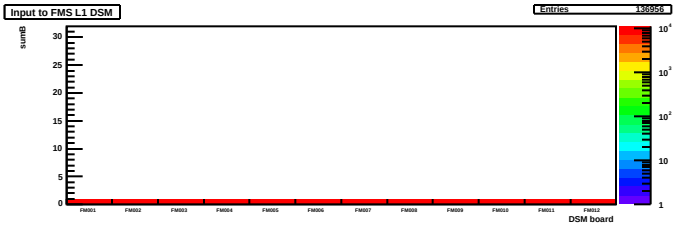

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

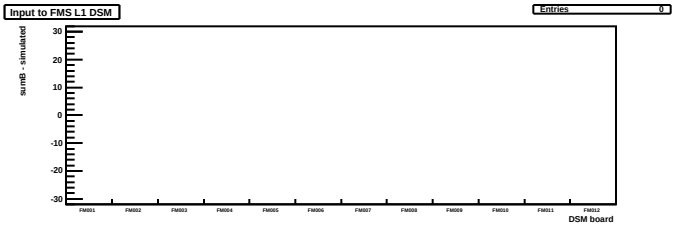

Input to FMS L1 DSM
Entries 136956
sumC
DSM board

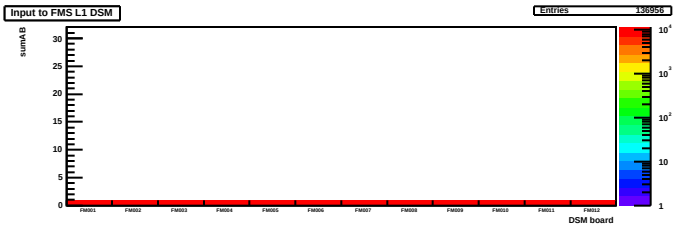

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

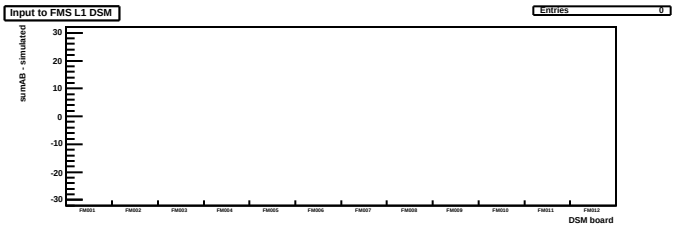

Input to FMS L1 DSM
Entries 136956
sumBC
DSM board

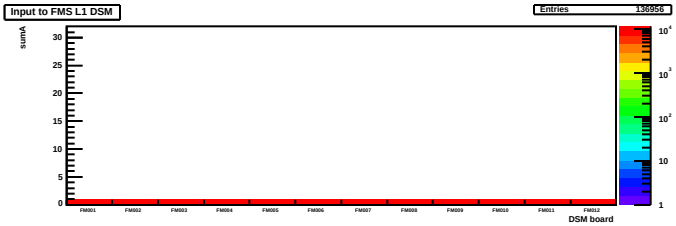

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

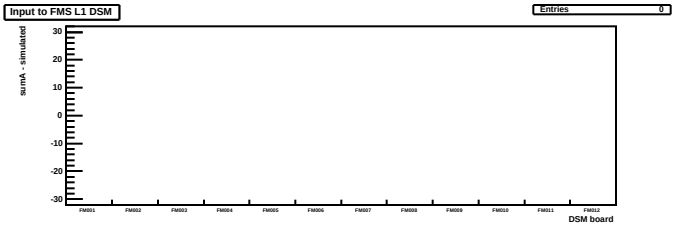

Input to FMS L1 DSM
Entries 136956
sumB
DSM board

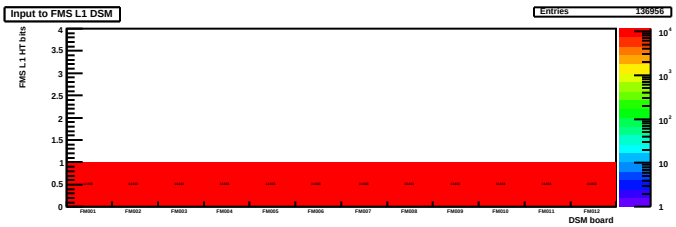

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

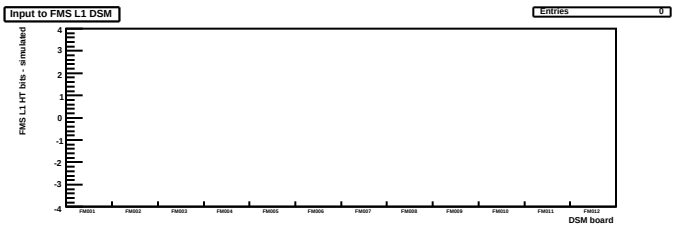

Input to FMS L1 DSM
Entries 136956
sumAB
DSM board

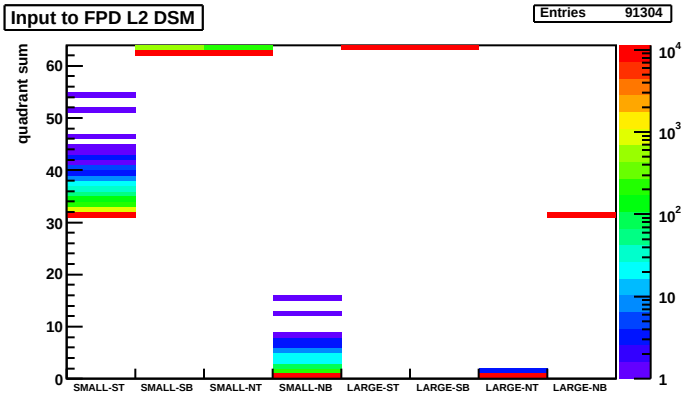

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

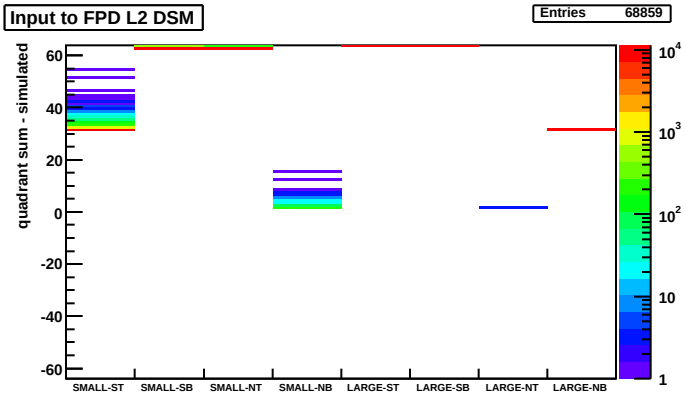

Input to FMS L1 DSM
Entries 136956
sumA
DSM board

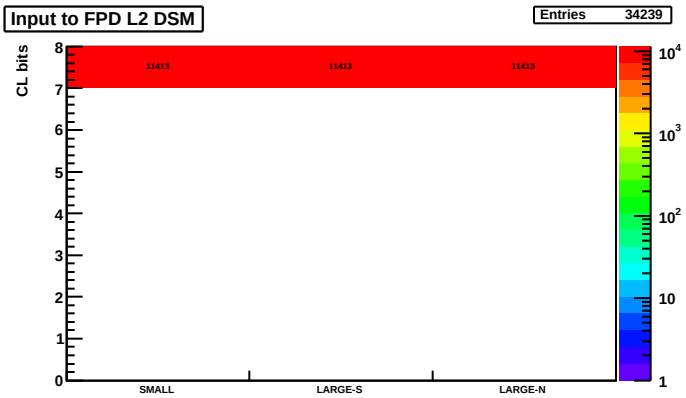

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

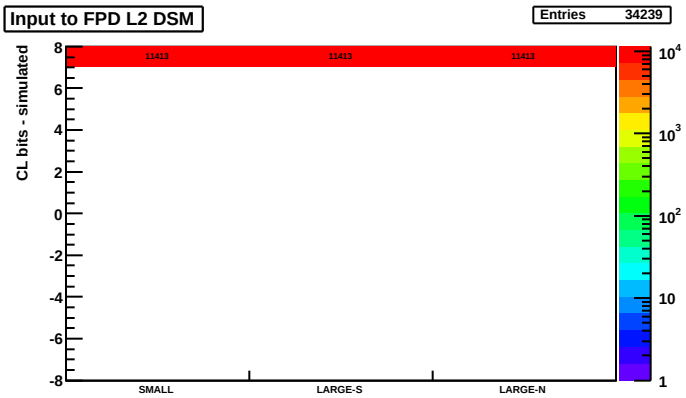

Input to FMS L1 DSM
Entries 136956
FMS L1 HT bits
DSM board

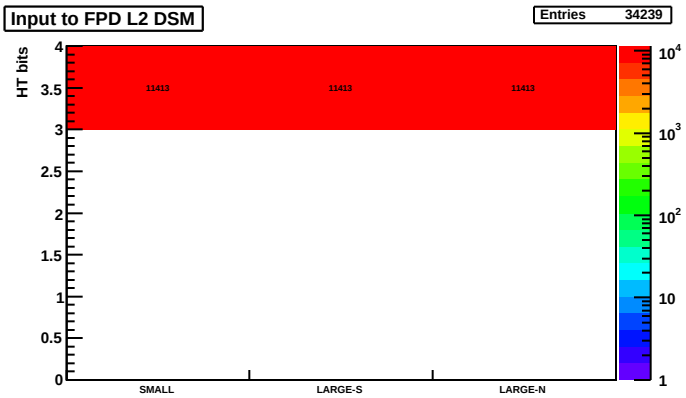

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

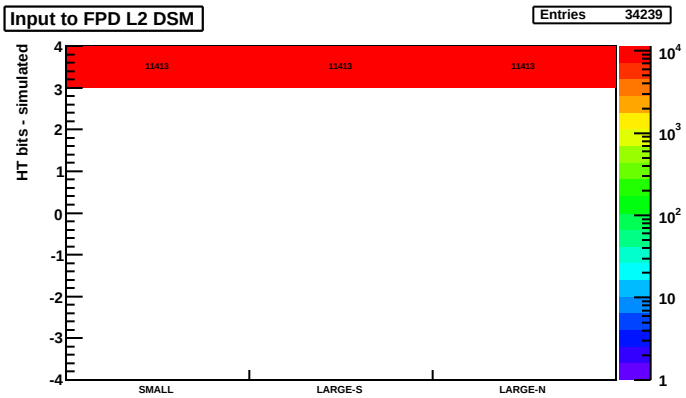

Input to FPD L2 DSM
Entries 91304
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

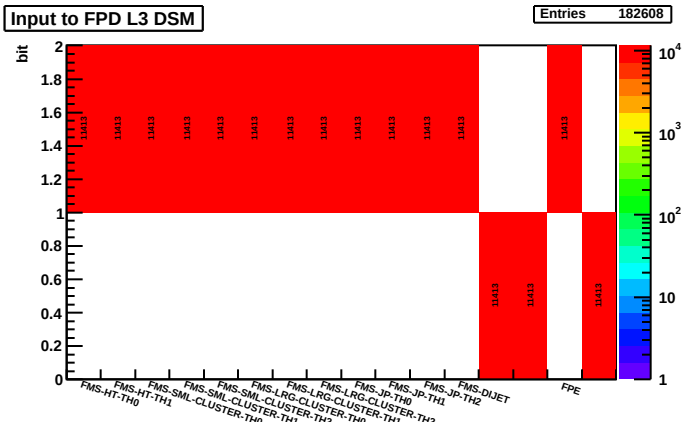

Input to FPD L2 DSM
Entries 68859
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

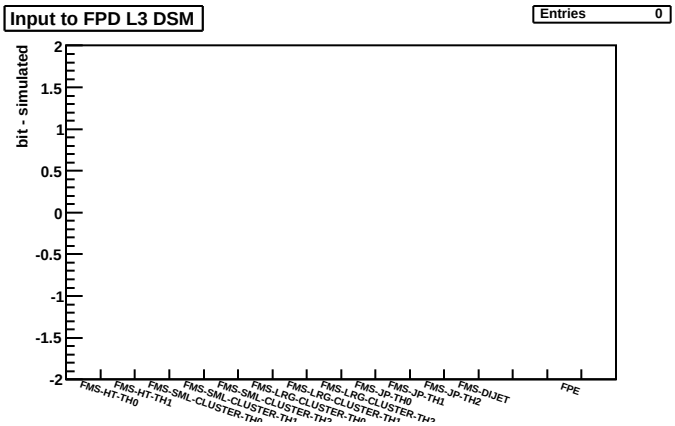

Input to FPD L2 DSM
Entries 34239
CL bits
SMALL LARGE-S LARGE-N

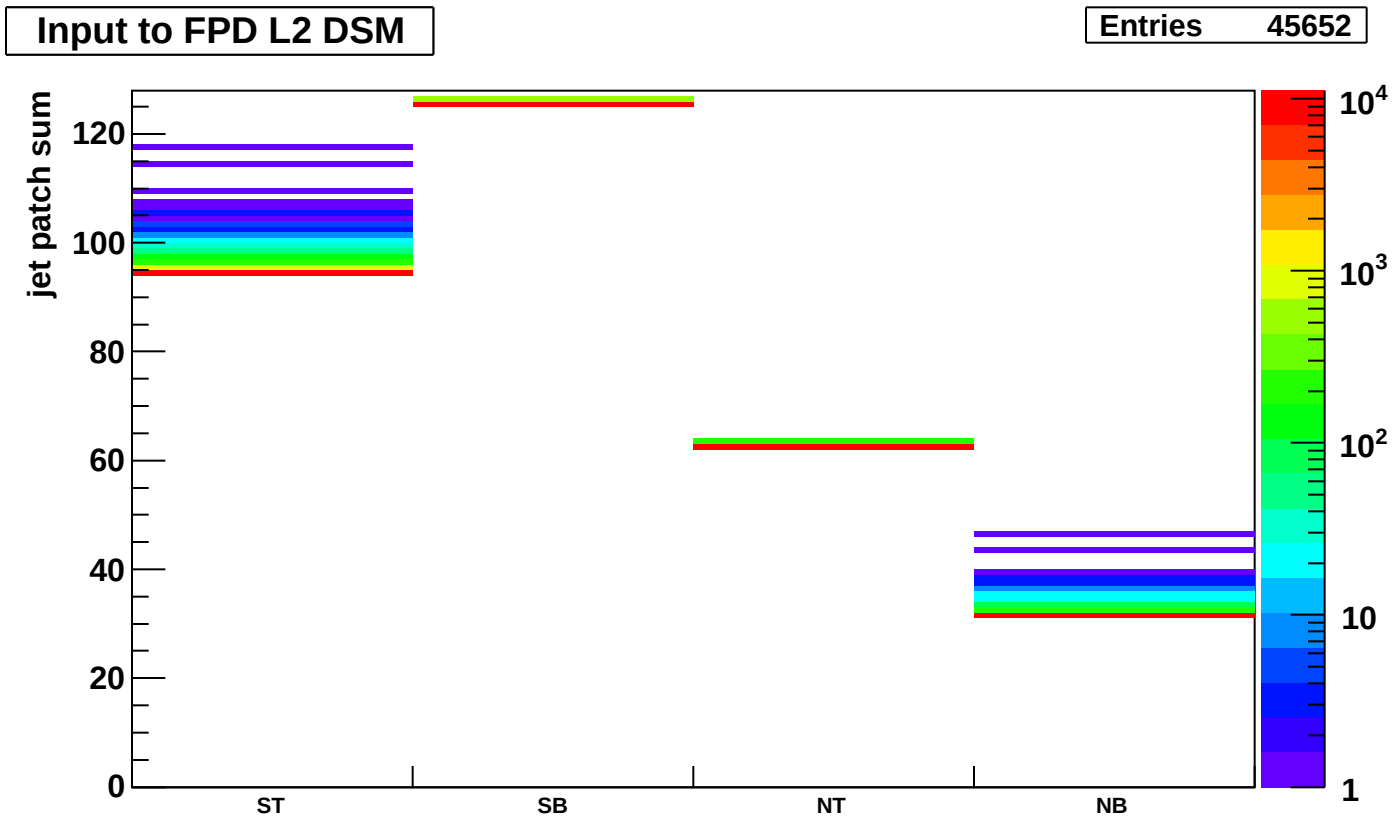

Input to FPD L2 DSM
Entries 34239
CL bits - simulated
SMALL LARGE-S LARGE-N

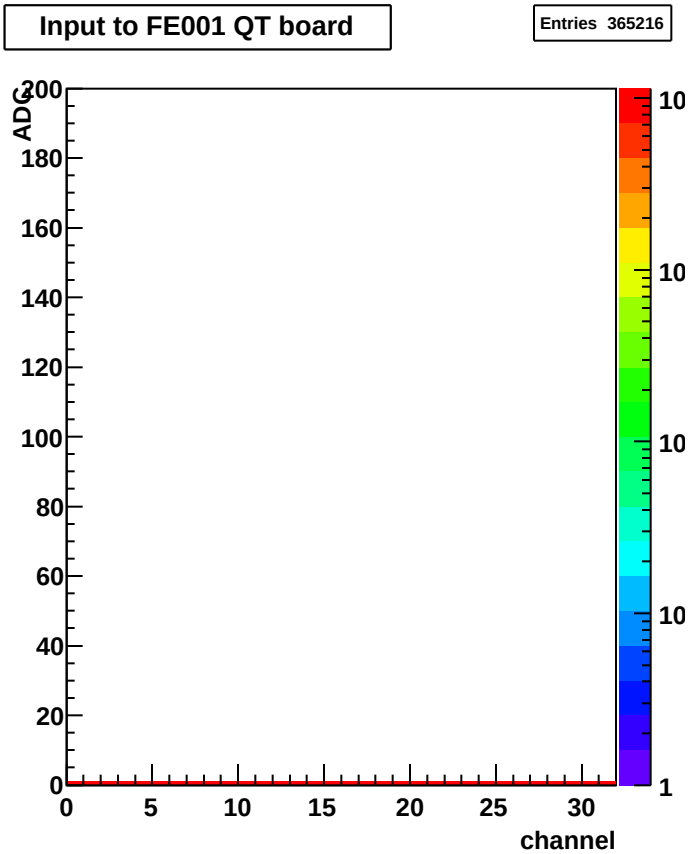

Input to FPD L2 DSM
Entries 34239
HT bits
SMALL LARGE-S LARGE-N

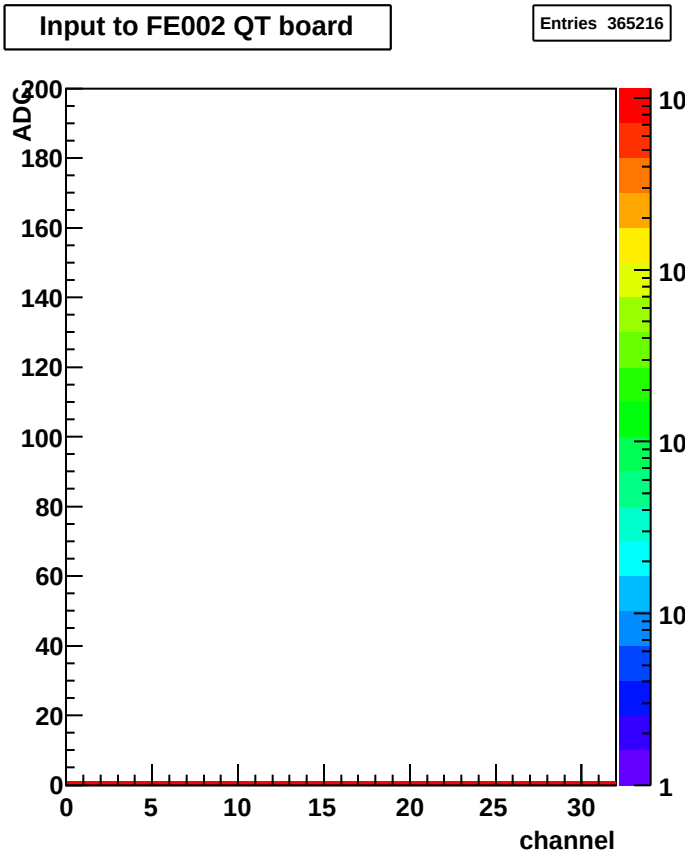

Input to FPD L2 DSM
Entries 34239
HT bits - simulated
SMALL LARGE-S LARGE-N

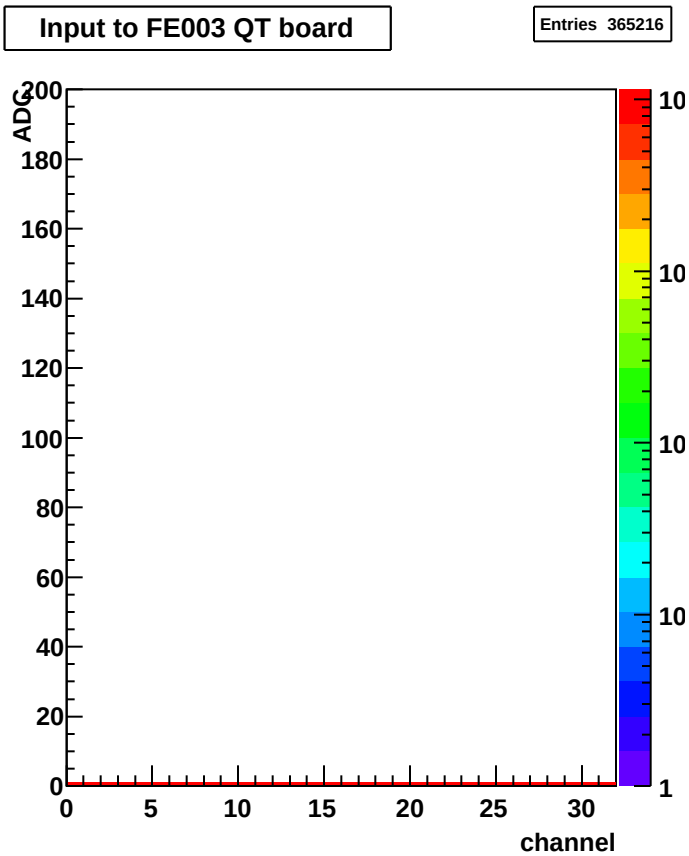

Input to FPD L3 DSM
Entries 182608
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

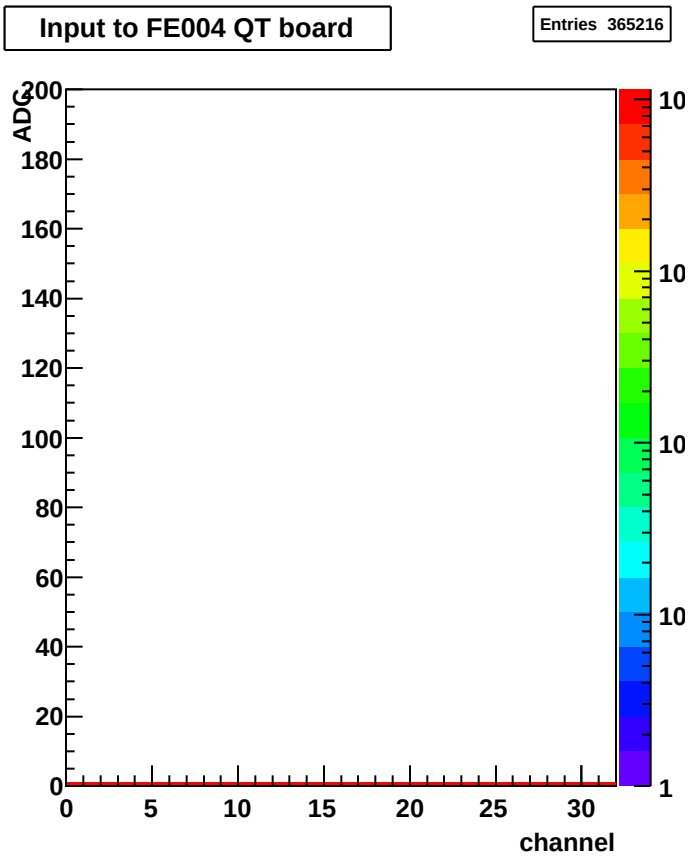

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

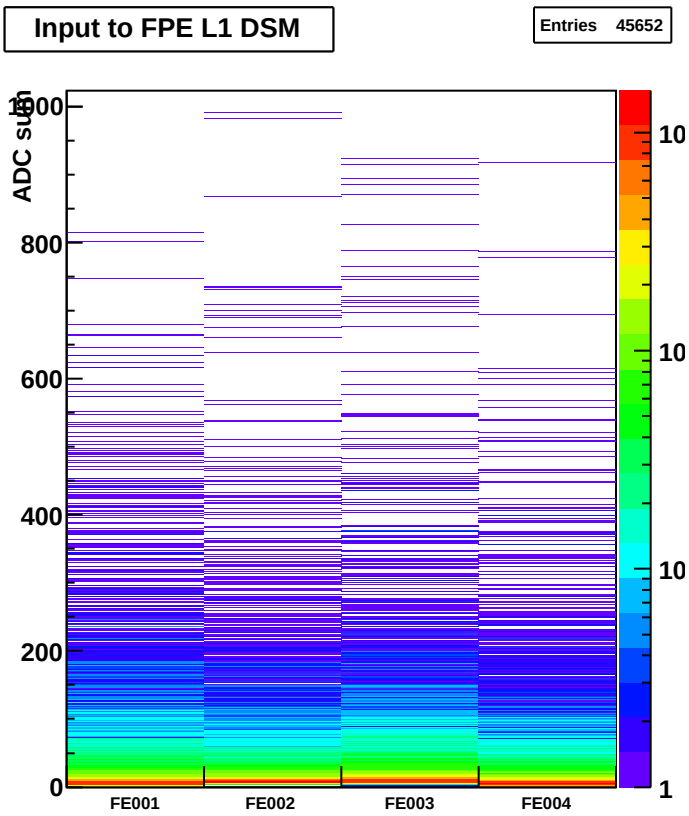

Input to FPD L2 DSM
Entries 45652
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

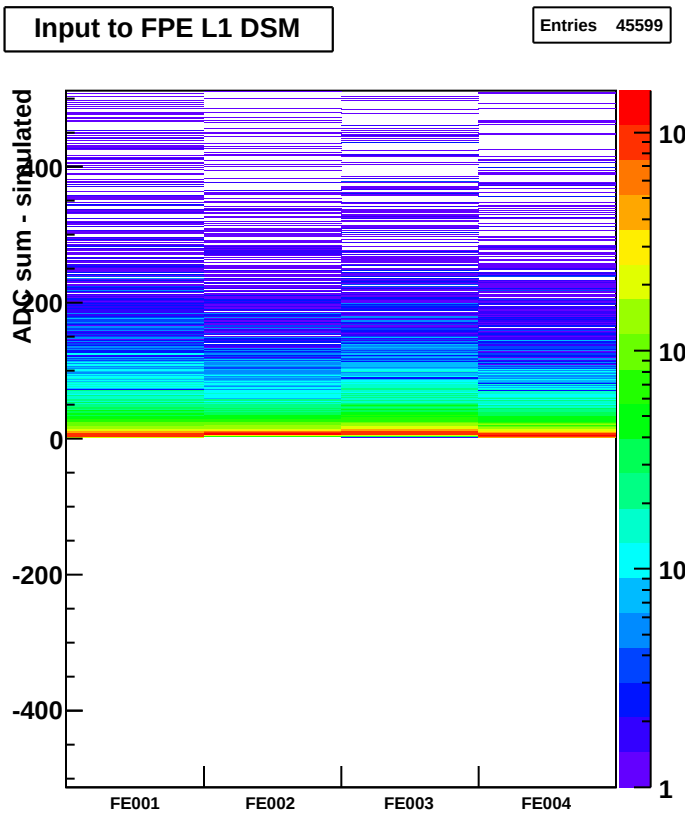

Input to FE001 QT board
Entries 365216
ADC
channel

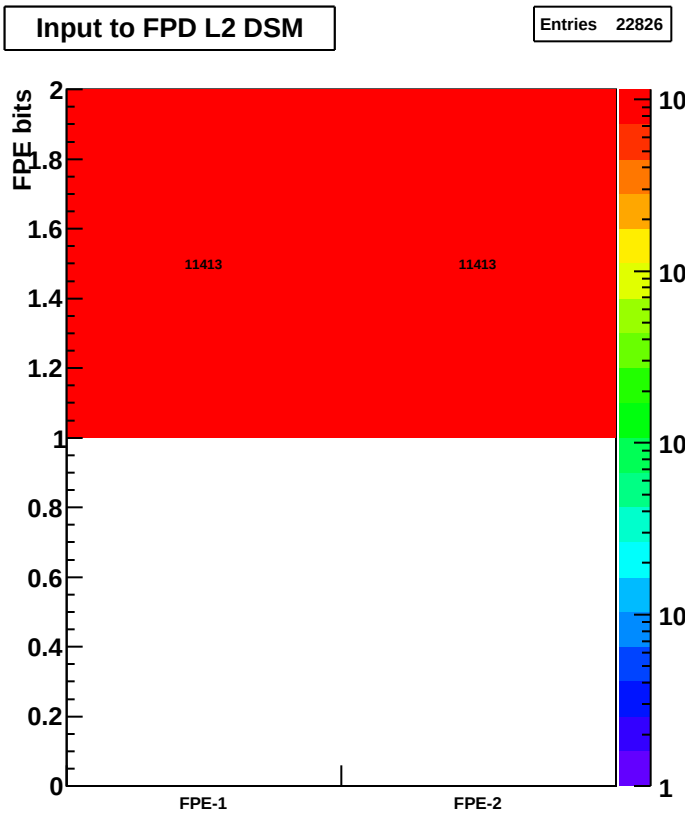

Input to FE002 QT board
Entries 365216
ADC
channel

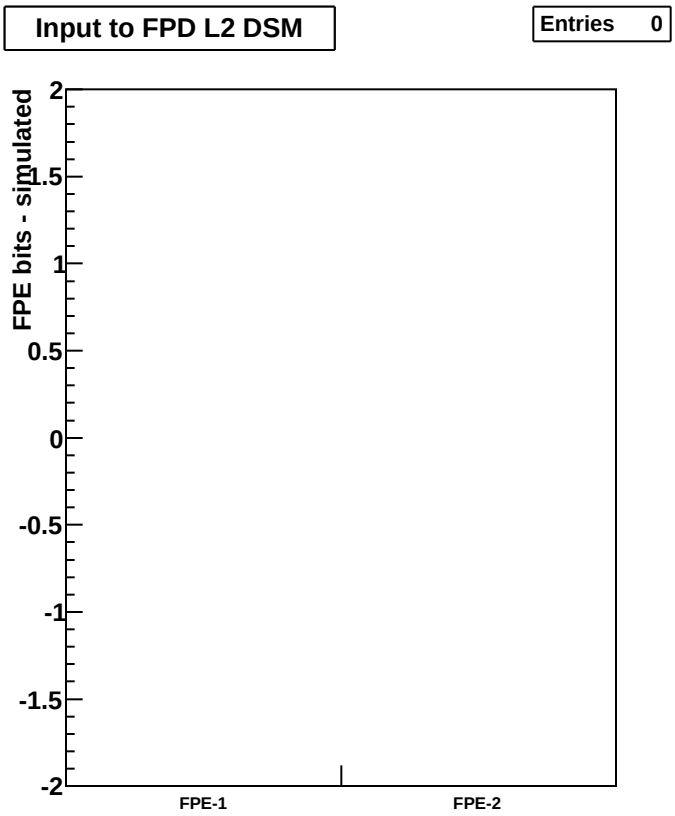

Input to FE003 QT board
Entries 365216
ADC
channel


Input to FE004 QT board
Entries 365216
ADC
channel


Input to FPE L1 DSM
Entries 45652
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
1


Input to FPE L1 DSM
Entries 45599
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1


Input to FPD L2 DSM
Entries 22826
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
11413
11413
FPE-1
FPE-2
10
10
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