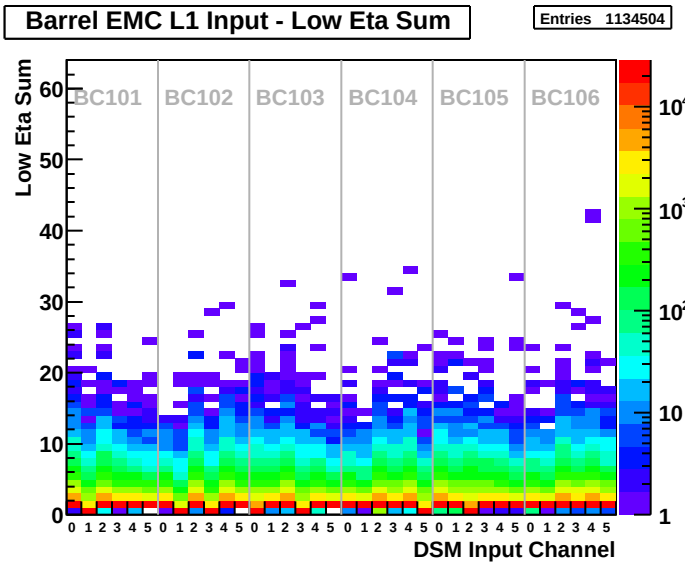
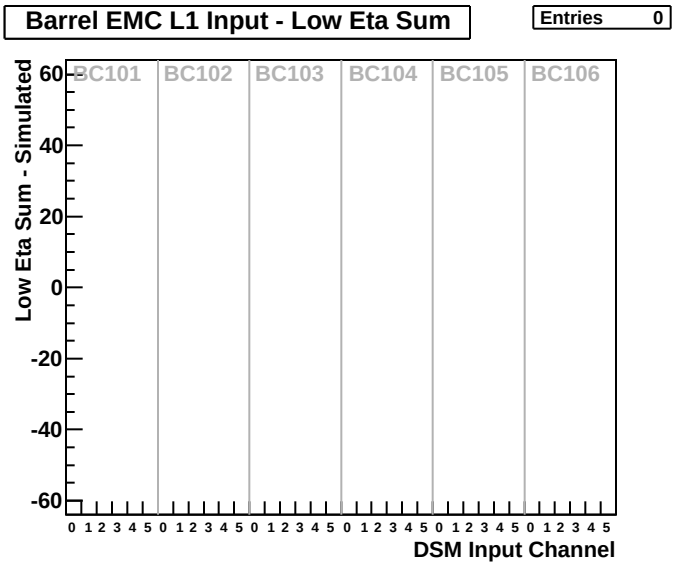
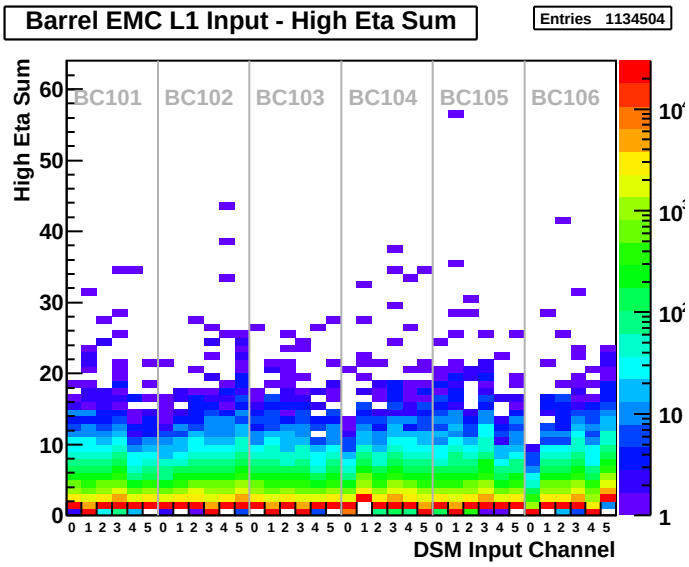
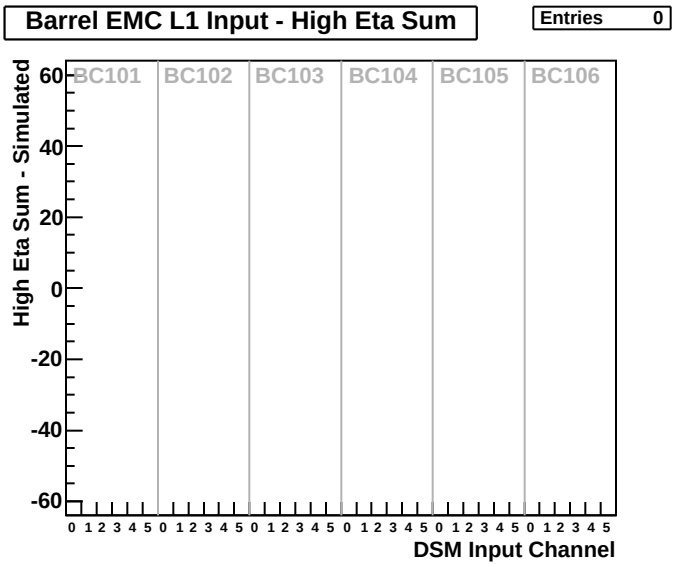
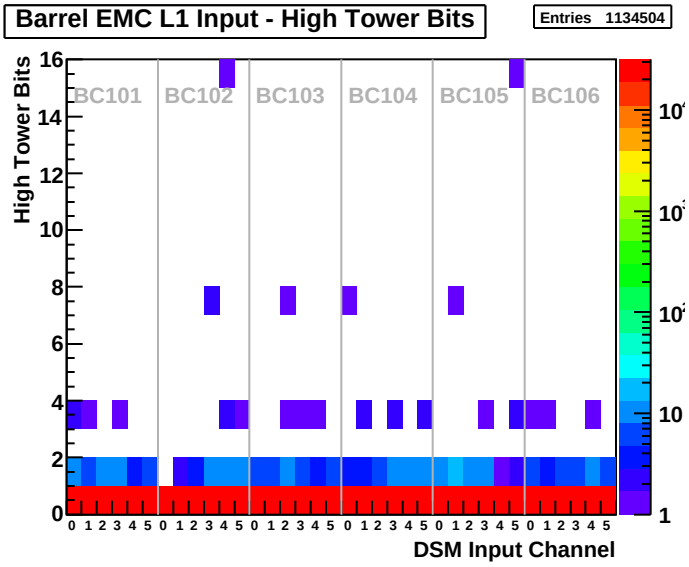
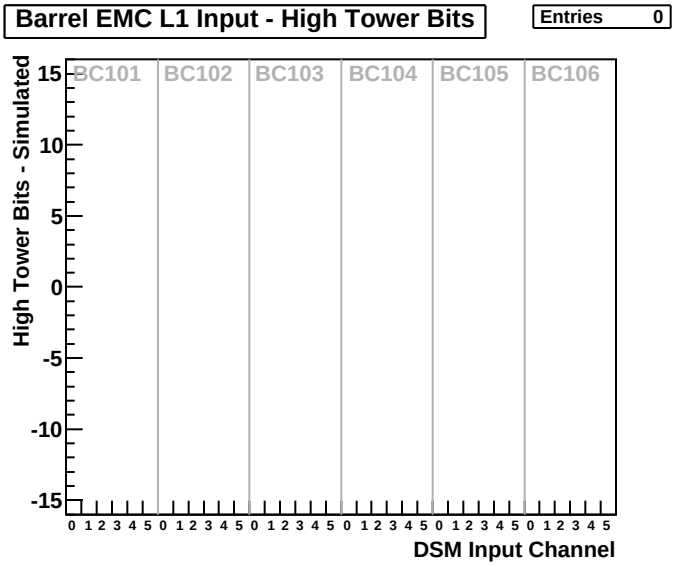

Barrel EMC L1 Input - Low Eta Sum
Entries 1134504
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

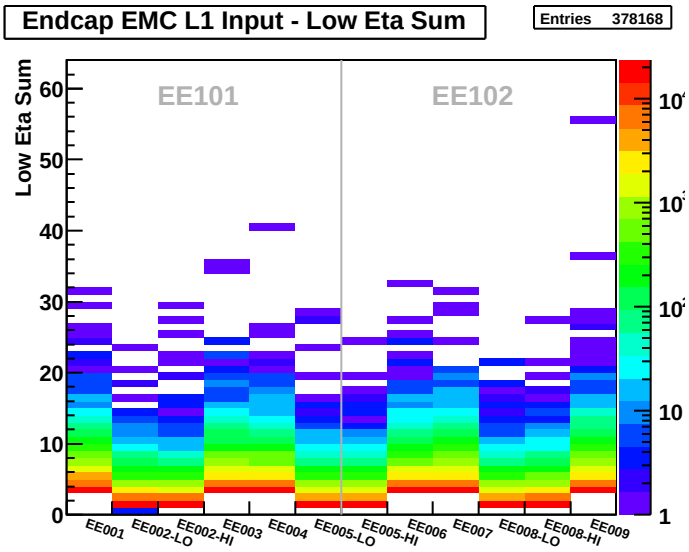

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

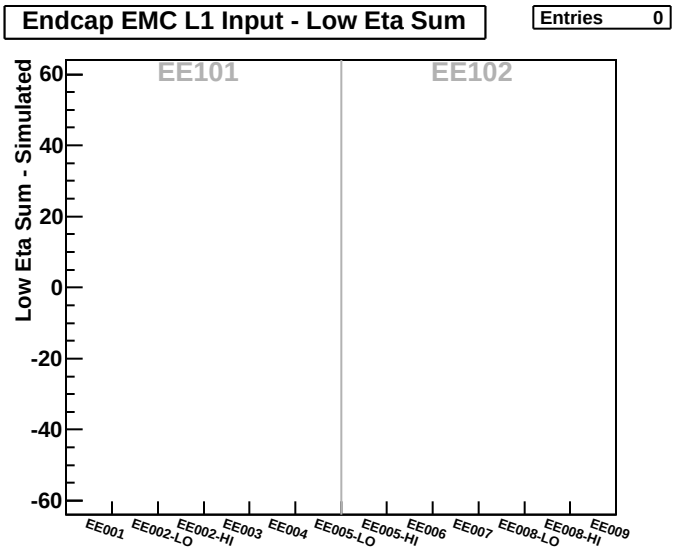

Barrel EMC L1 Input - High Eta Sum
Entries 1134504
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

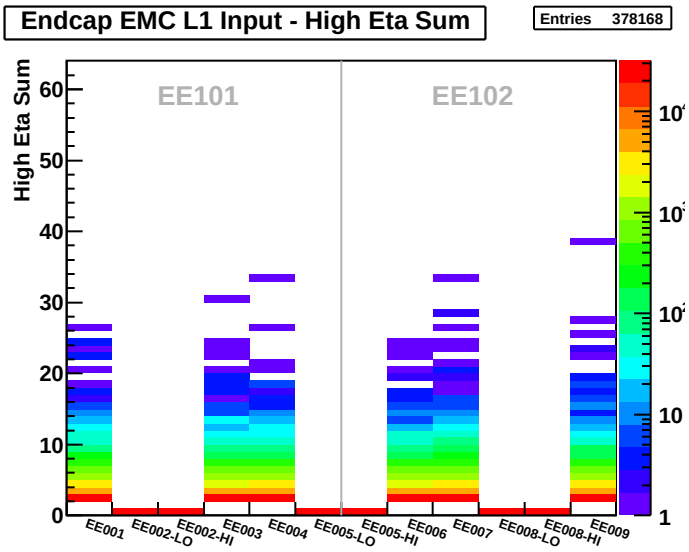

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

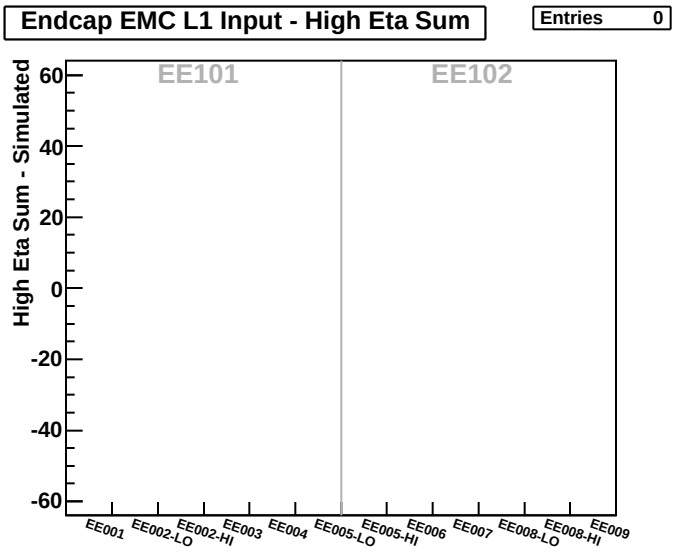

Barrel EMC L1 Input - High Tower Bits
Entries 1134504
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

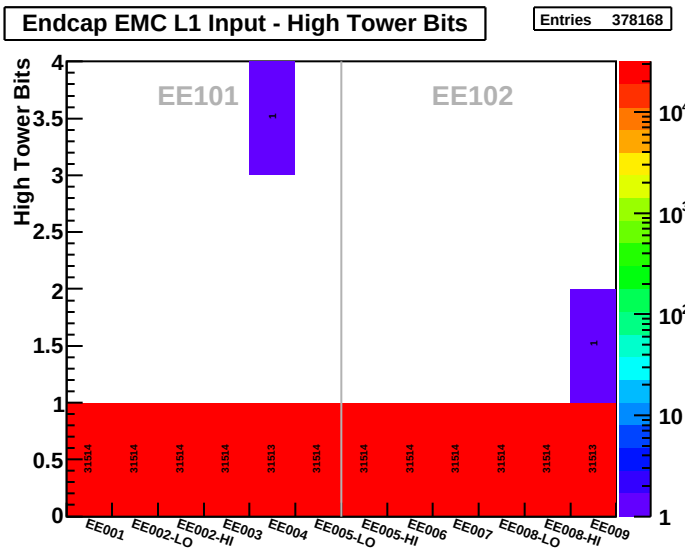

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

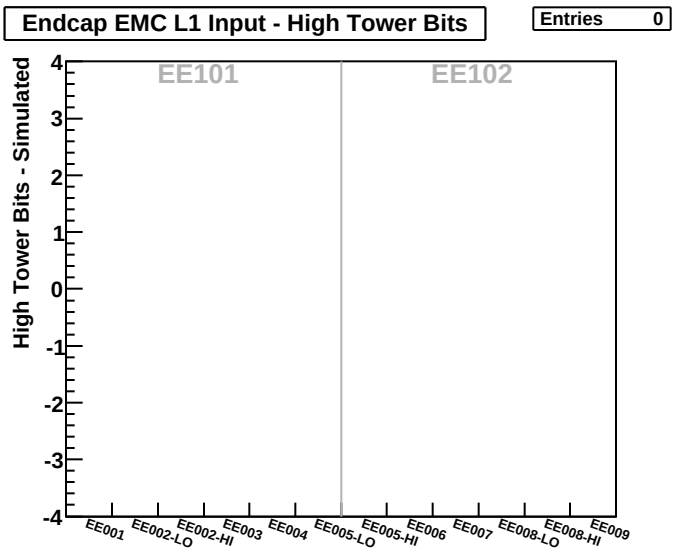

Endcap EMC L1 Input - Low Eta Sum
Entries 378168
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

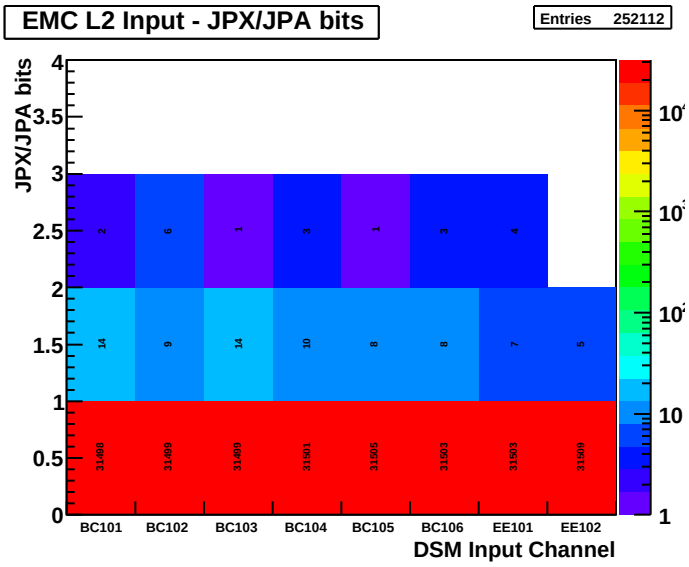

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

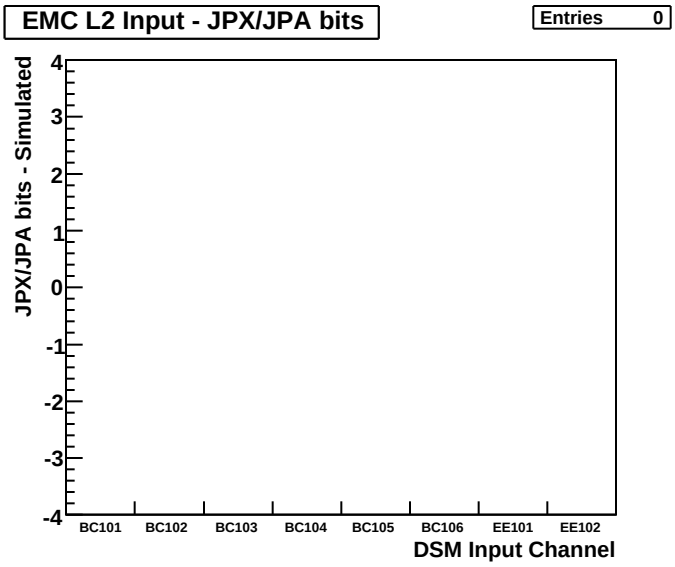

Endcap EMC L1 Input - High Eta Sum
Entries 378168
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

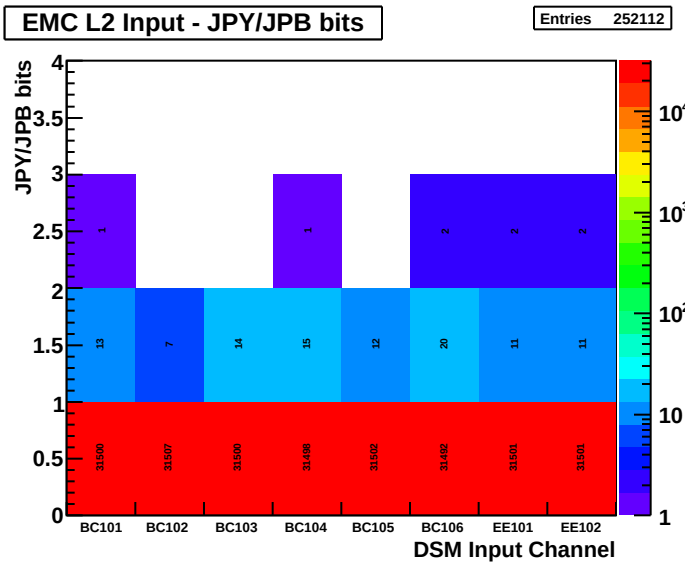

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

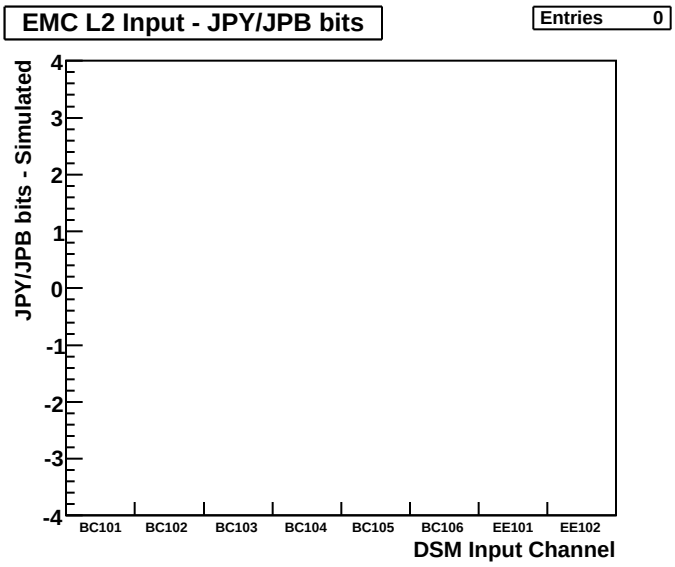

Endcap EMC L1 Input - High Tower Bits
Entries 378168
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

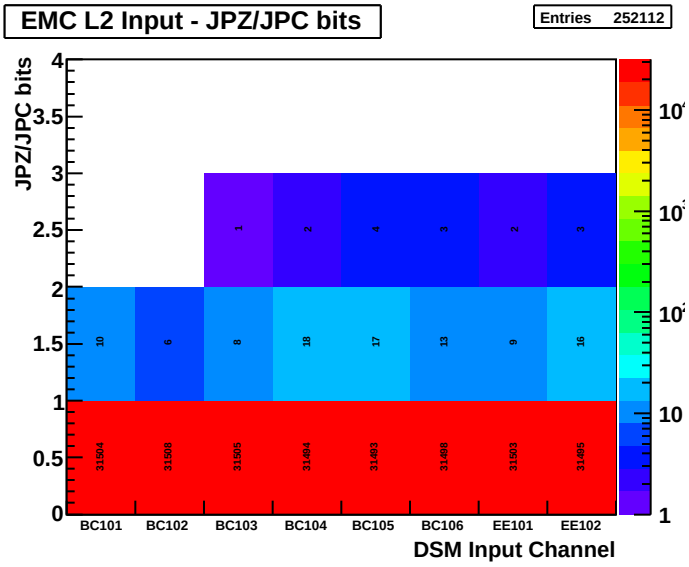

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

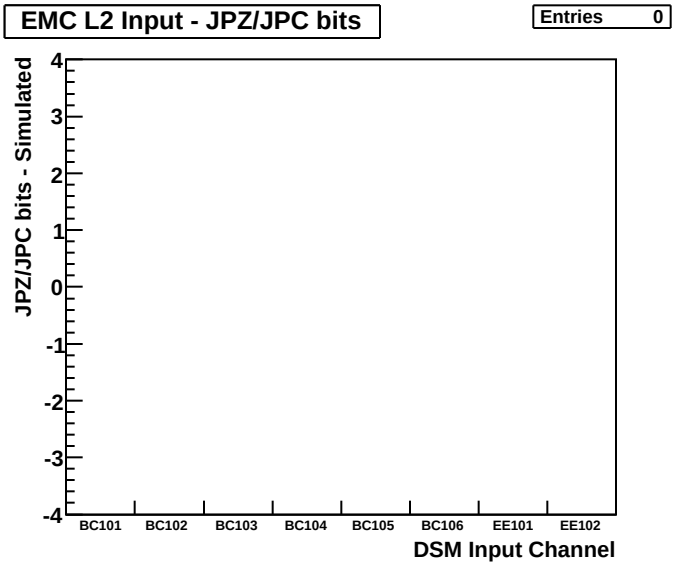

EMC L2 Input - JPX/JPA bits
Entries 252112
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

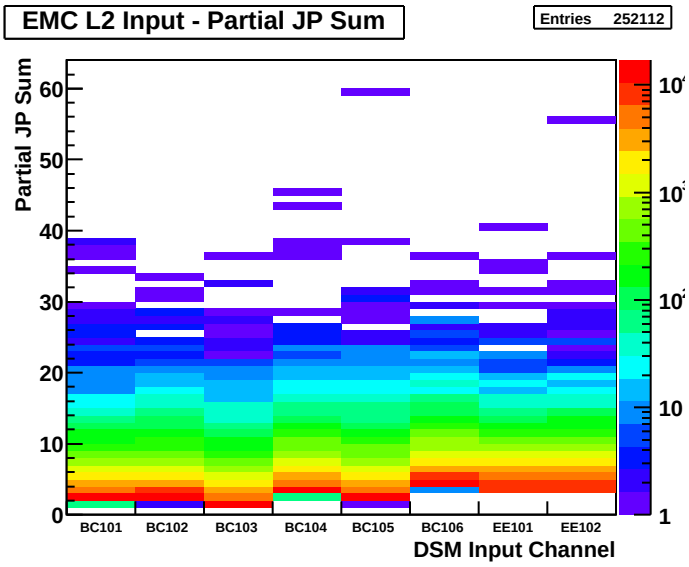

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

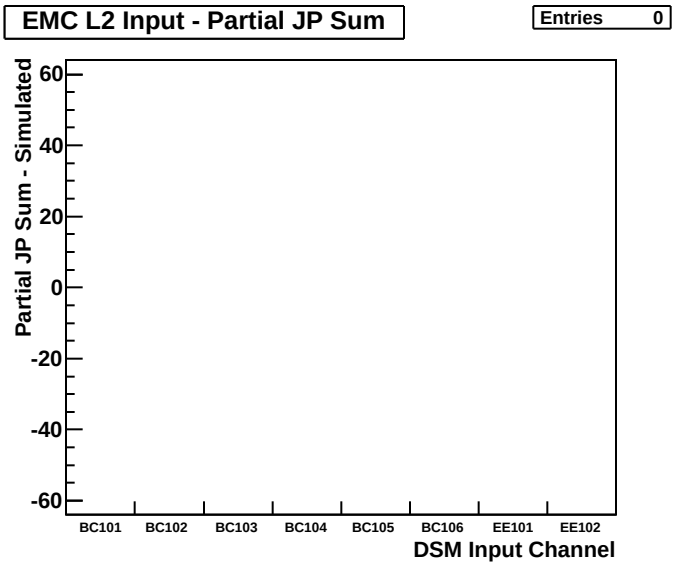

EMC L2 Input - JPY/JPB bits
Entries 252112
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

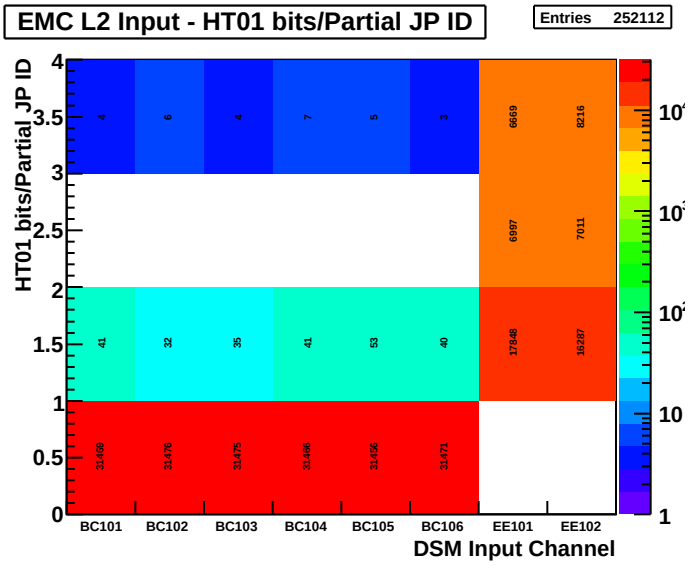

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

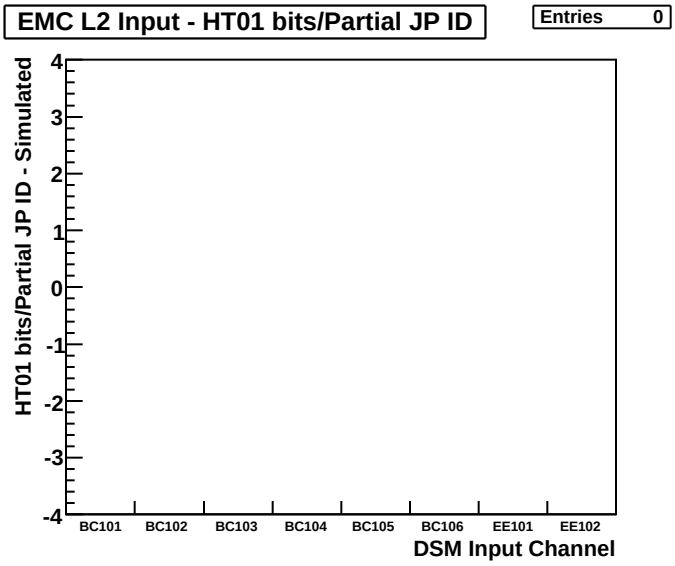

EMC L2 Input - JPZ/JPC bits
Entries 252112
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

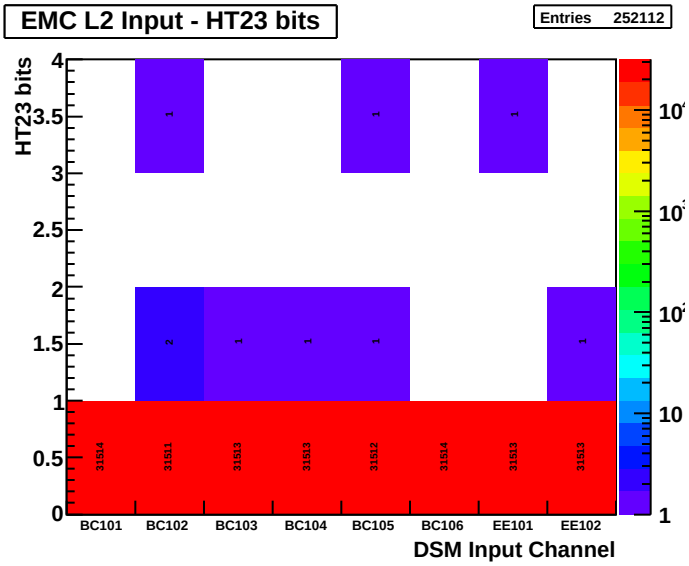

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

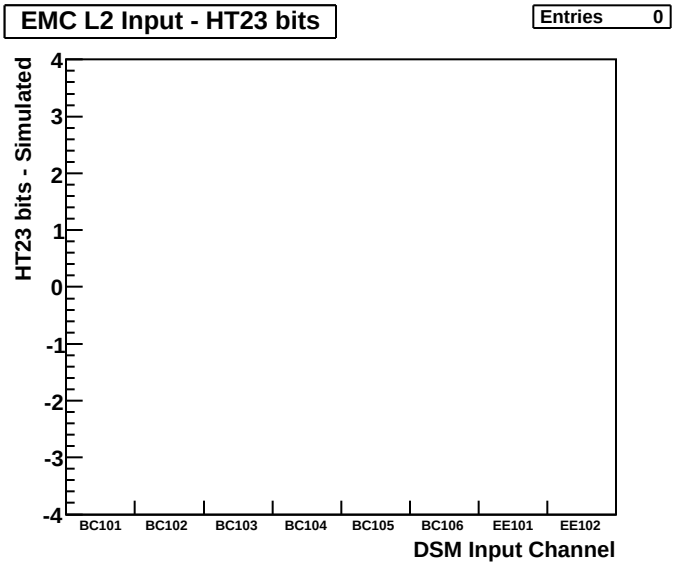

EMC L2 Input - Partial JP Sum
Entries 252112
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

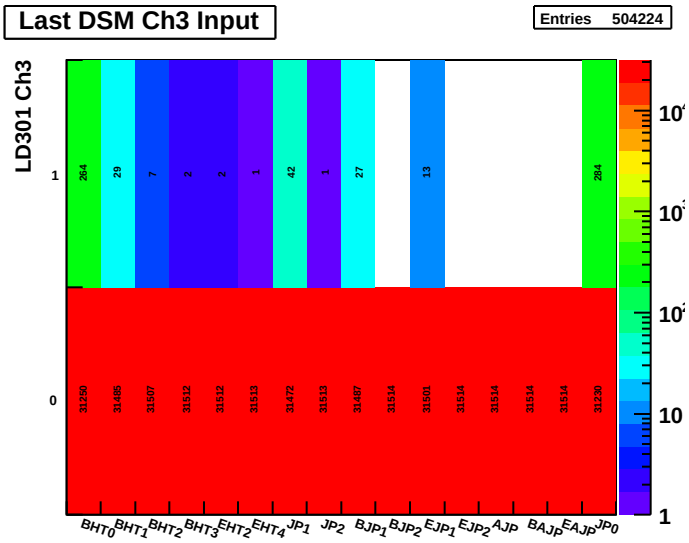

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

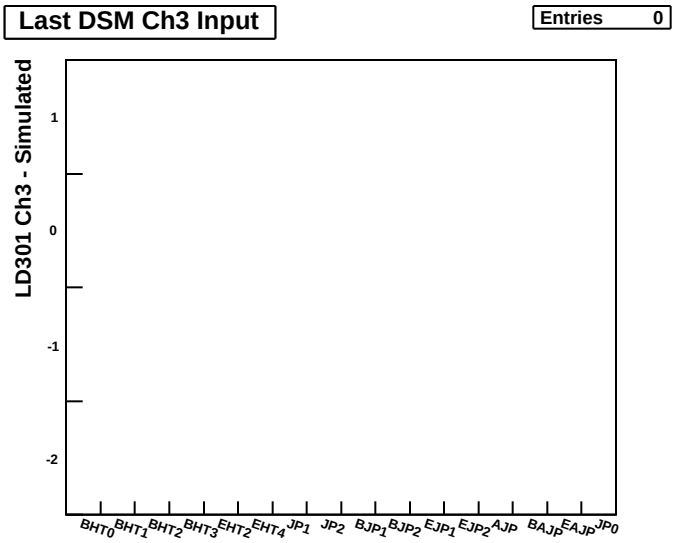

EMC L2 Input - HT01 bits/Partial JP ID
Entries 252112
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

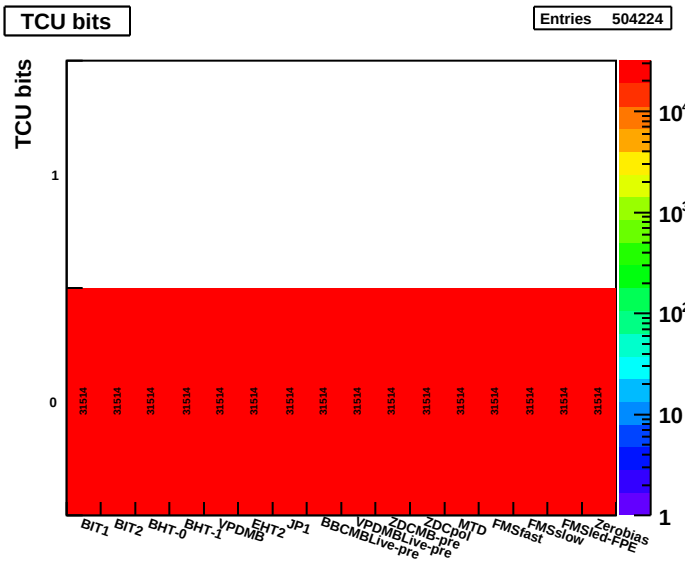

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

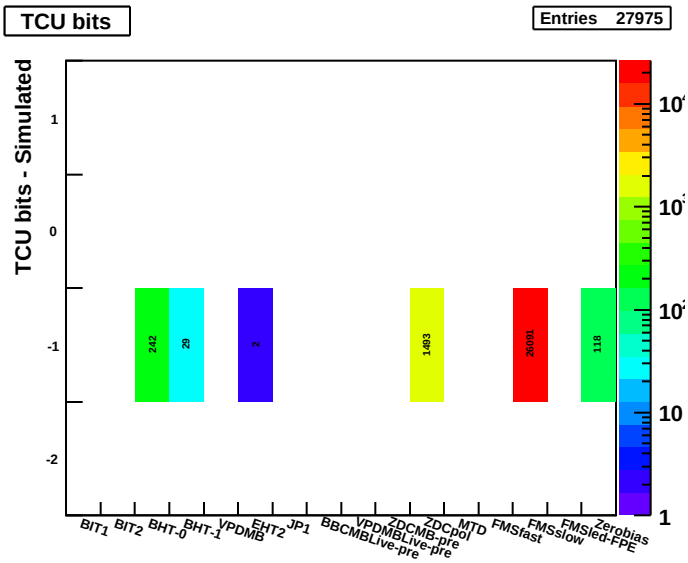

EMC L2 Input - HT23 bits
Entries 252112
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

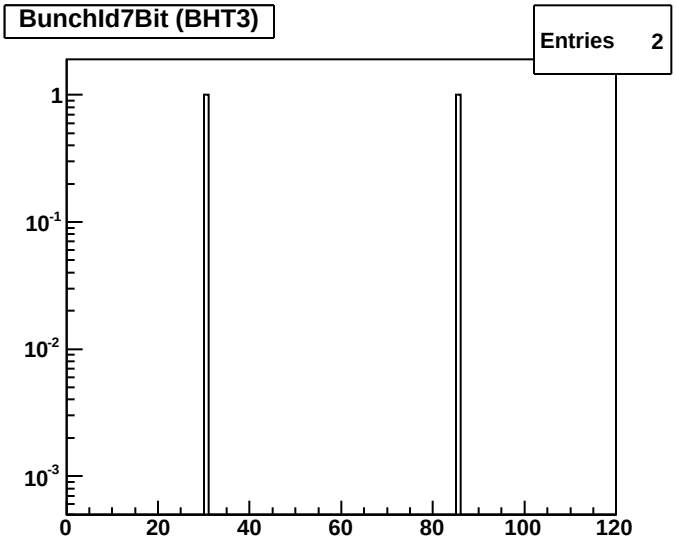

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

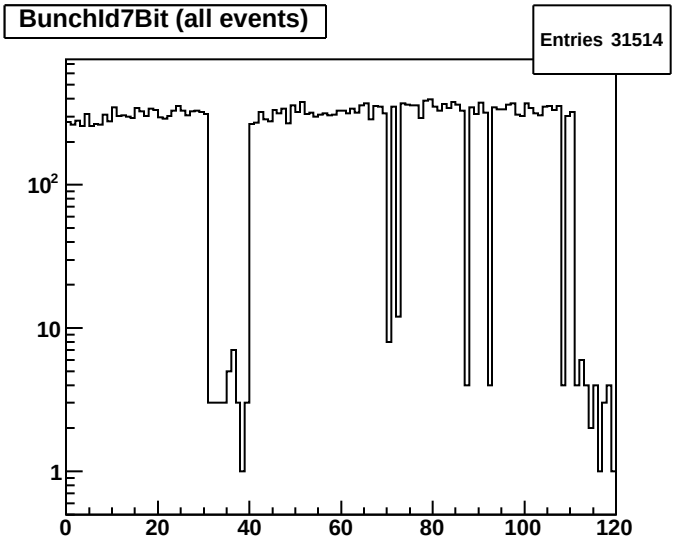

Last DSM Ch3 Input
Entries 504224
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

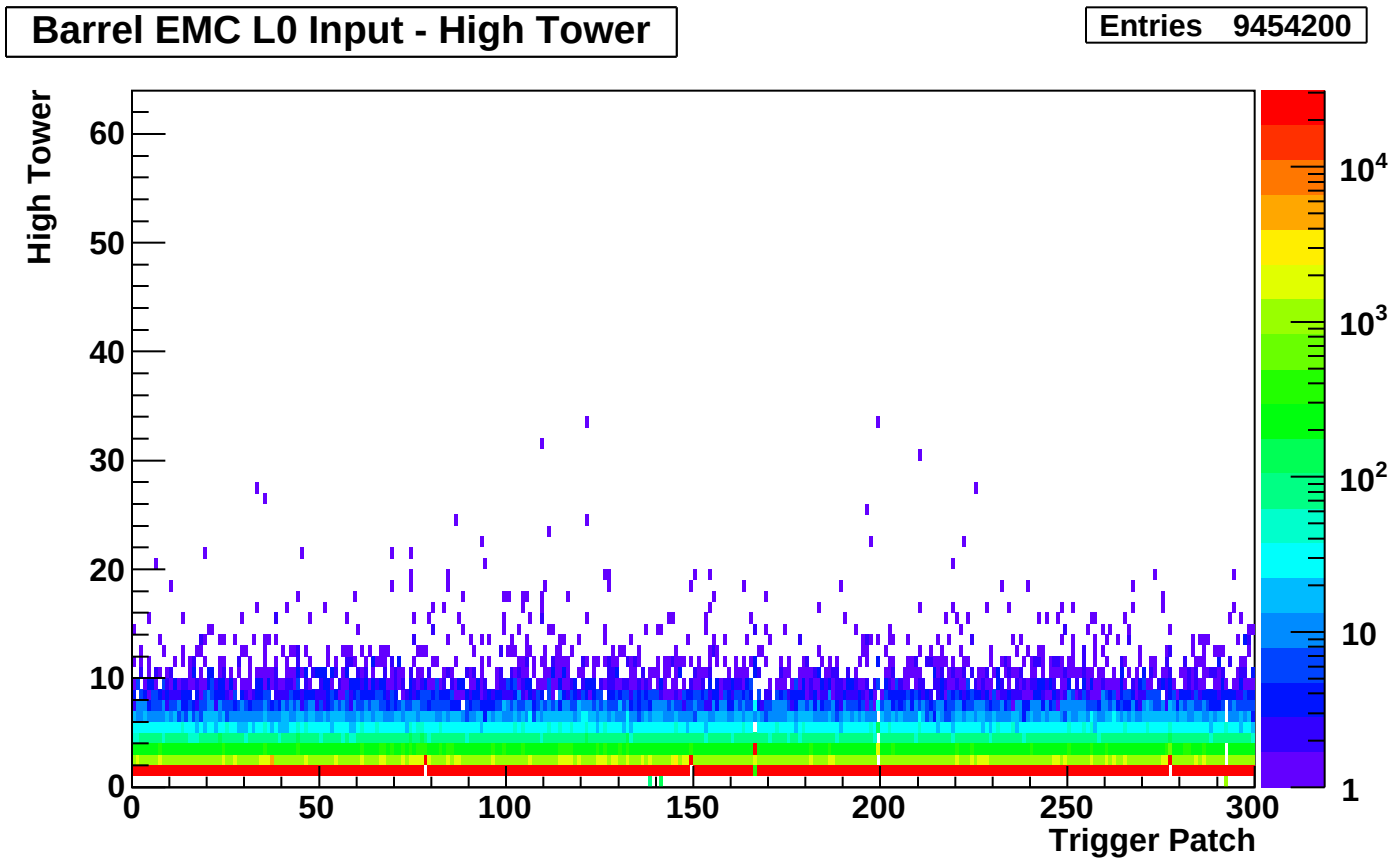

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

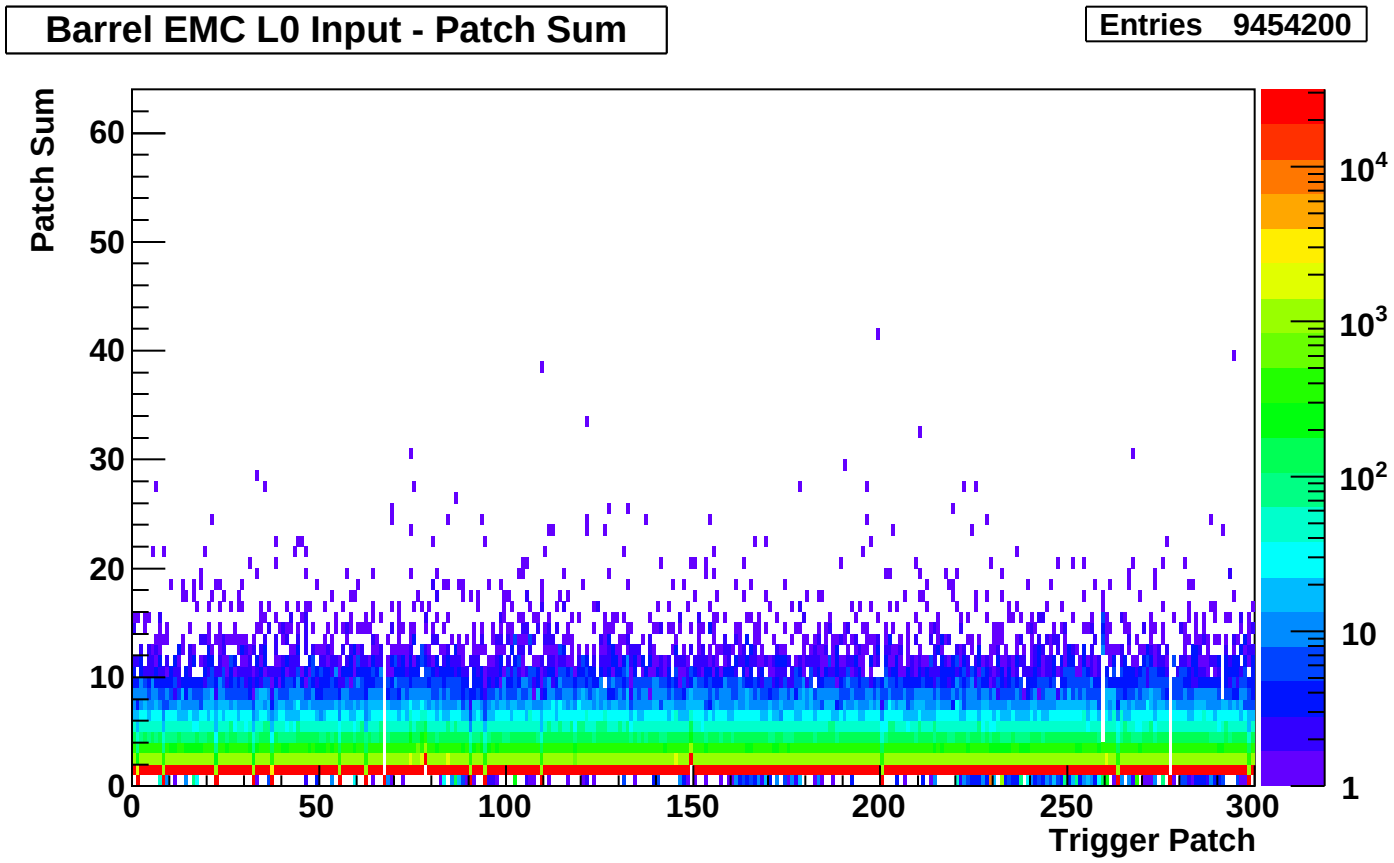

TCU bits
Entries 504224
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

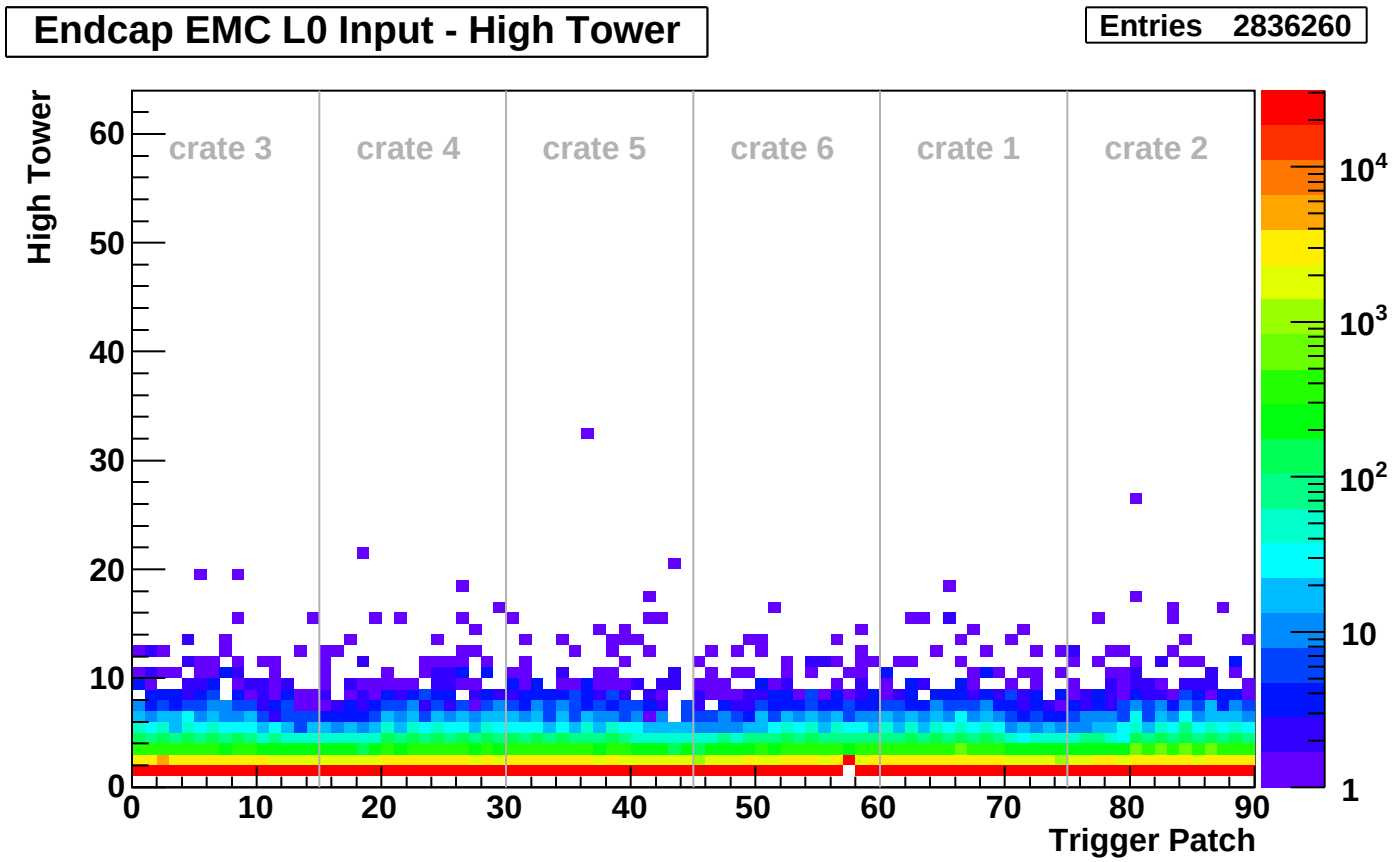

TCU bits
Entries 27975
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

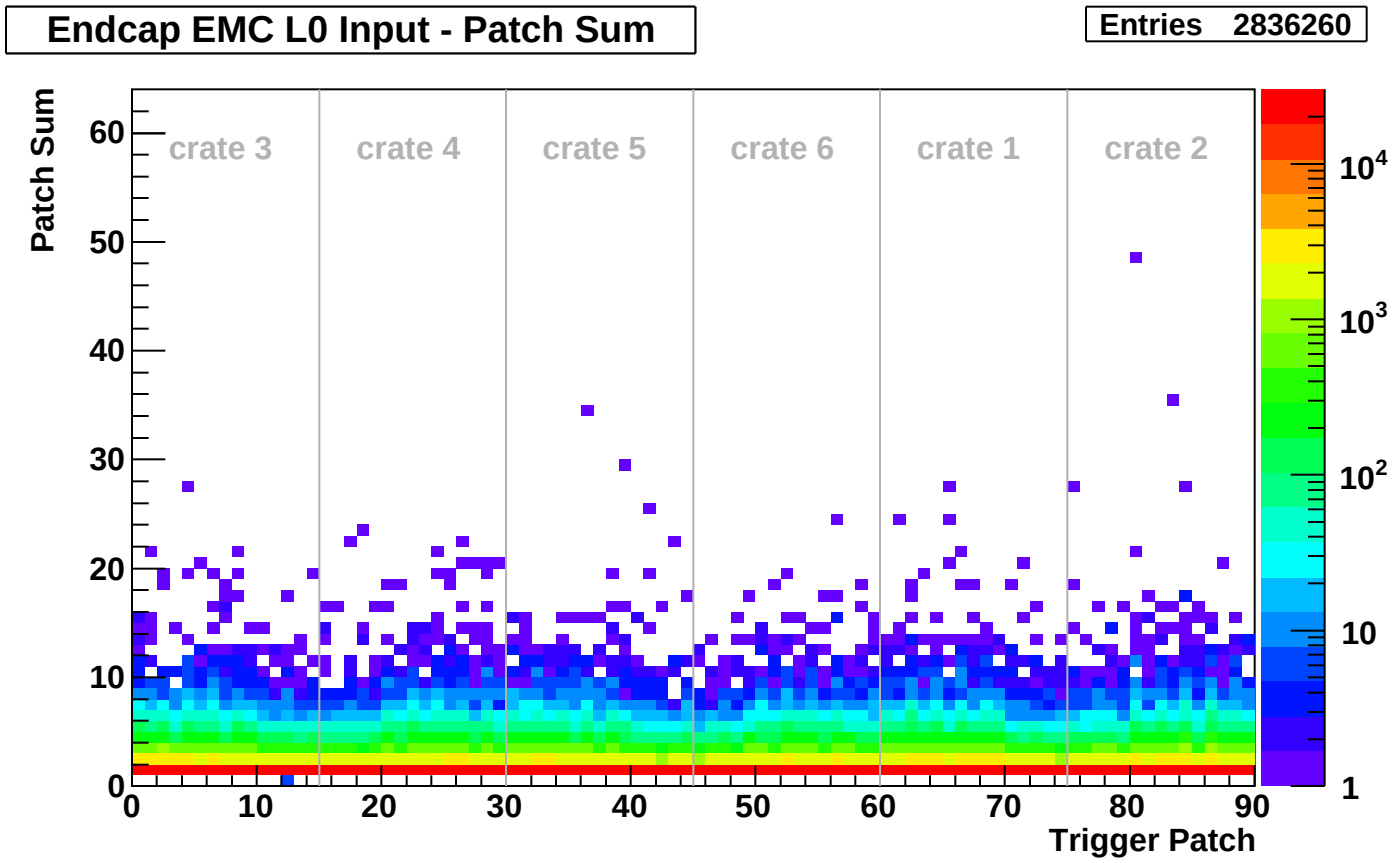

BunchId7Bit (BHT3)
Entries 2

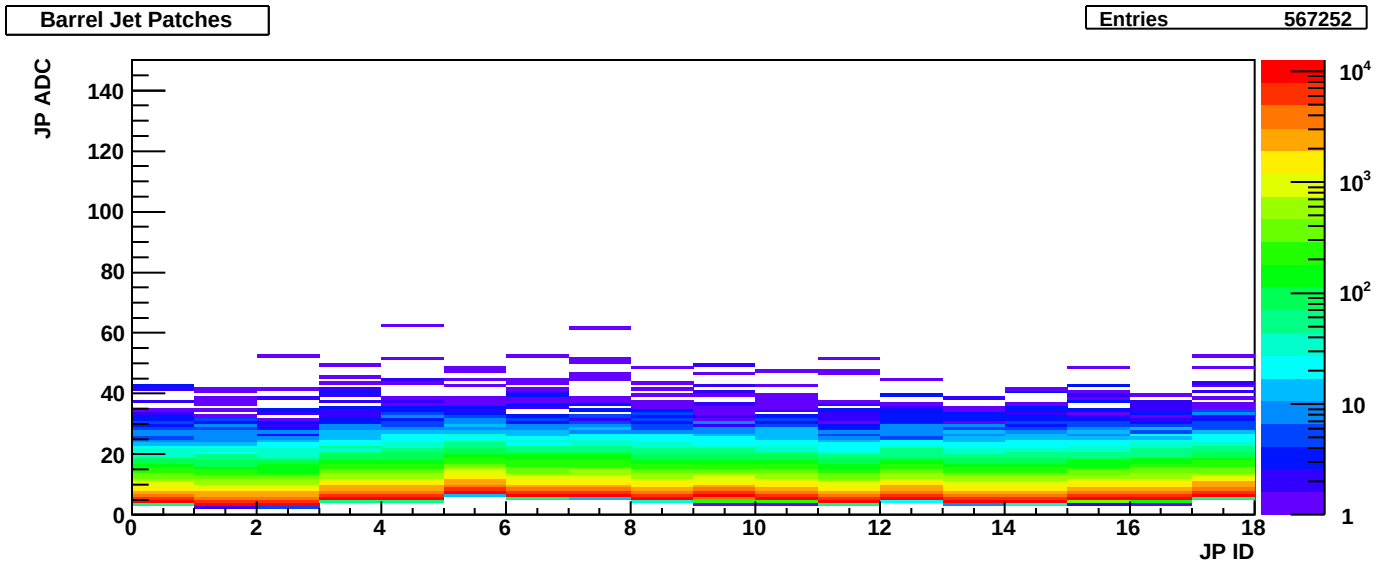

BunchId7Bit (all events)
Entries 31514

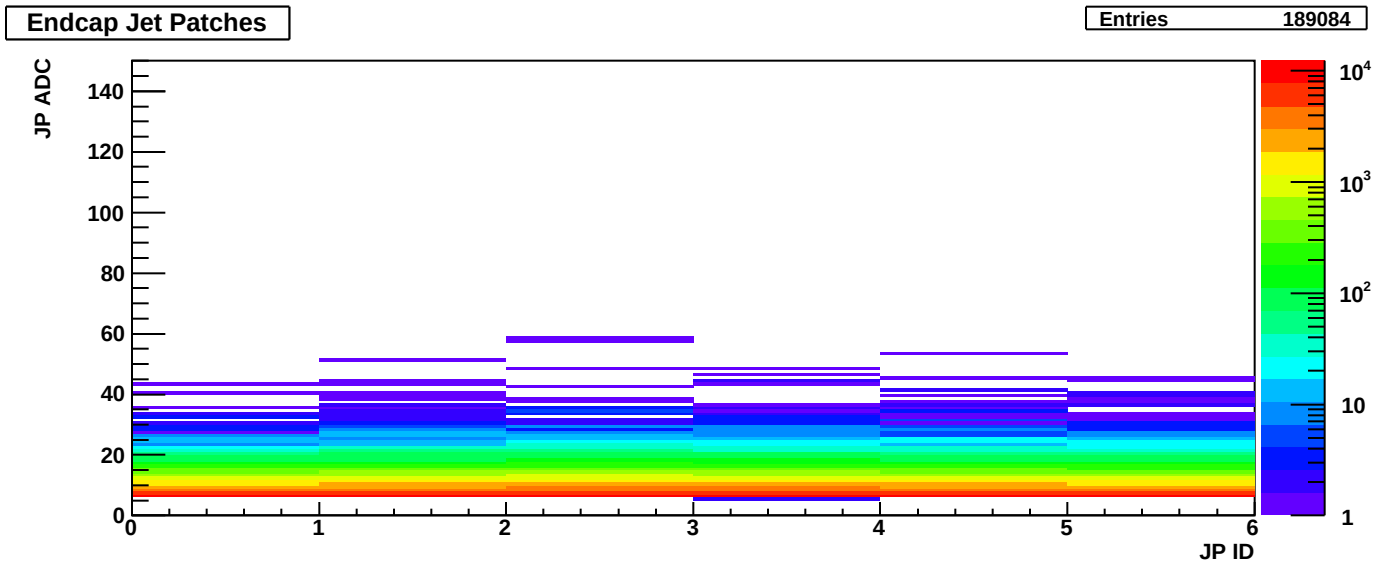

Barrel EMC L0 Input - High Tower
Entries 9454200
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

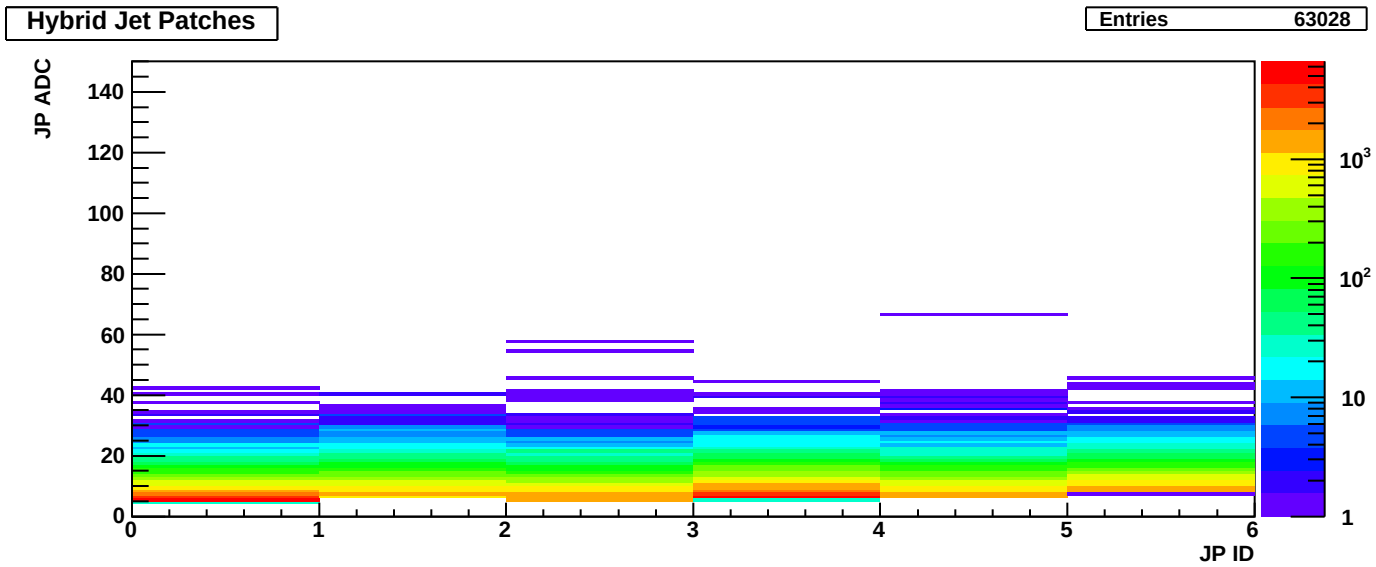

Barrel EMC L0 Input - Patch Sum
Entries 9454200
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

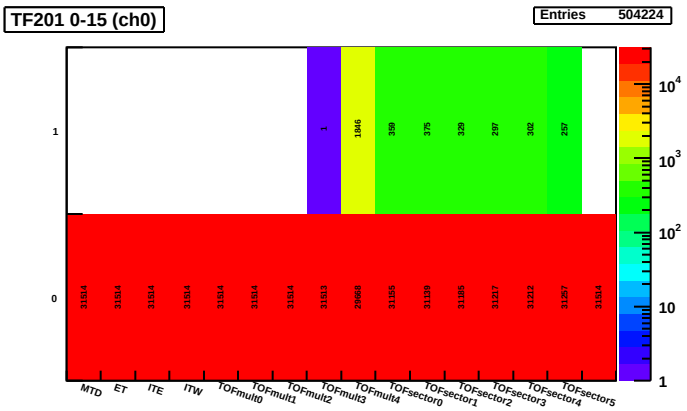

Endcap EMC L0 Input - High Tower
Entries 2836260
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

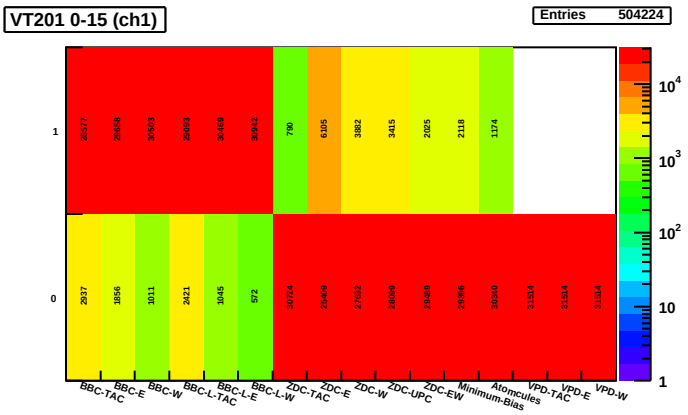

Endcap EMC L0 Input - Patch Sum
Entries 2836260
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

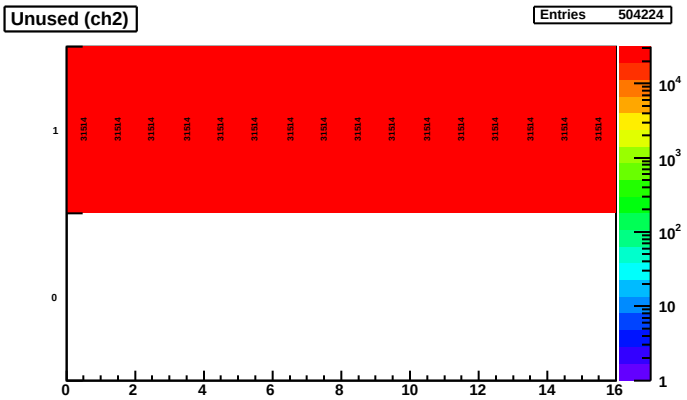

Barrel Jet Patches
Entries 567252
JP ADC
JP ID

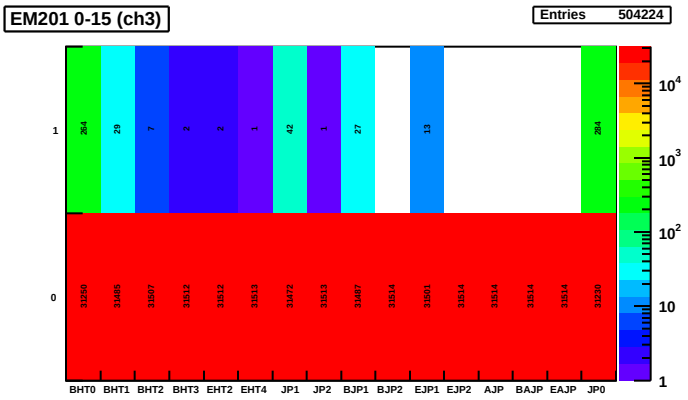

Endcap Jet Patches
Entries 189084
JP ADC
JP ID

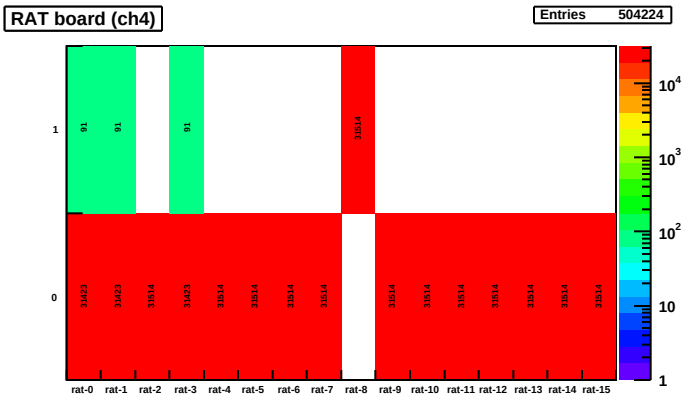

Hybrid Jet Patches
Entries 63028
JP ADC
JP ID

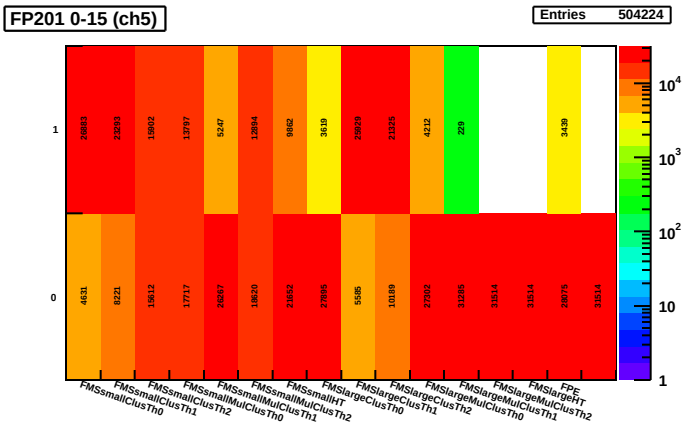

TF201 0-15 (ch0)
Entries 504224
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

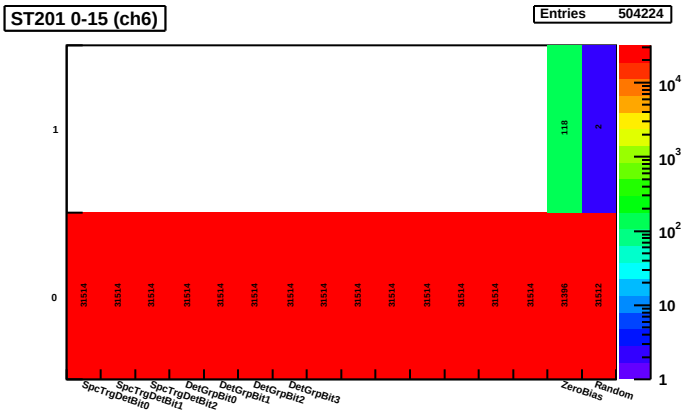

VT201 0-15 (ch1)
Entries 504224
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

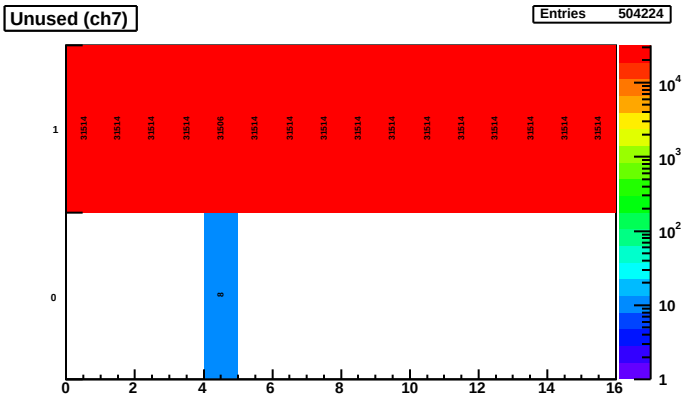

Unused (ch2)
Entries 504224

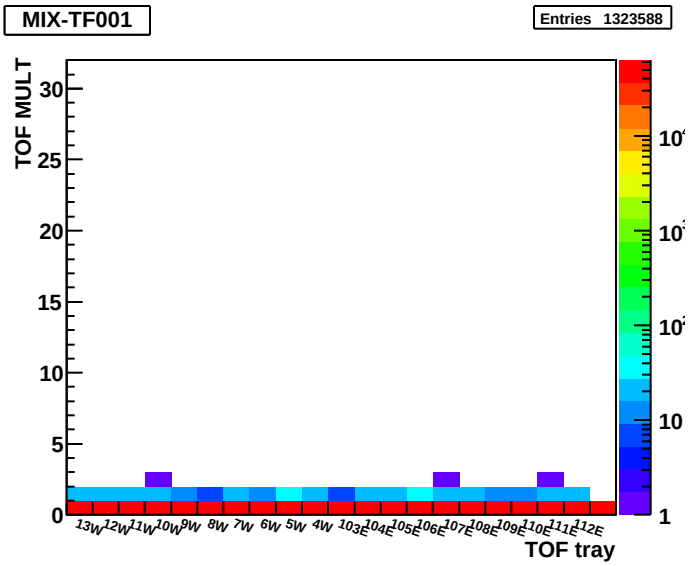

EM201 0-15 (ch3)
Entries 504224
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

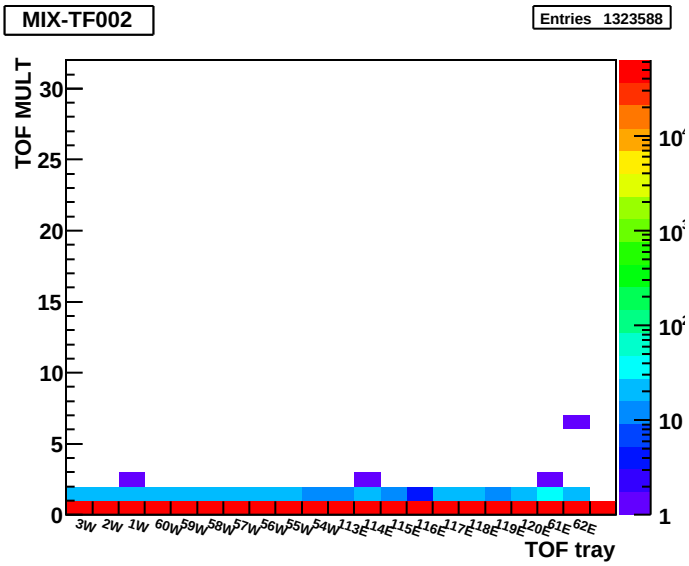

RAT board (ch4)
Entries 504224
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

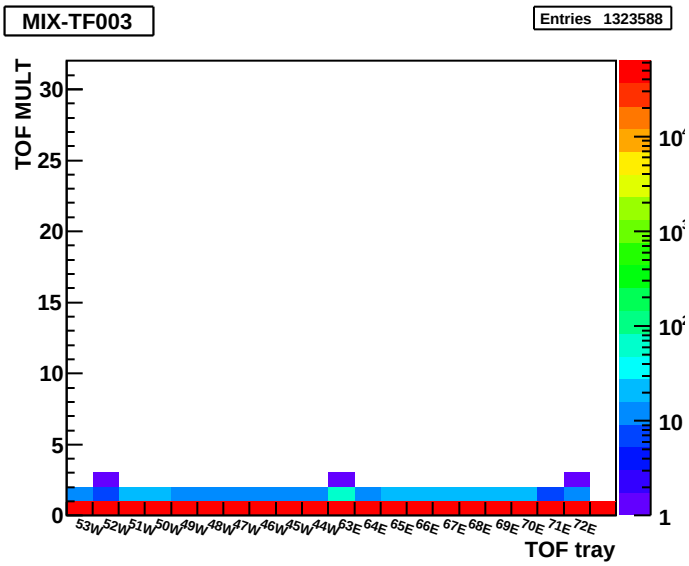

FP201 0-15 (ch5)
Entries 504224
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

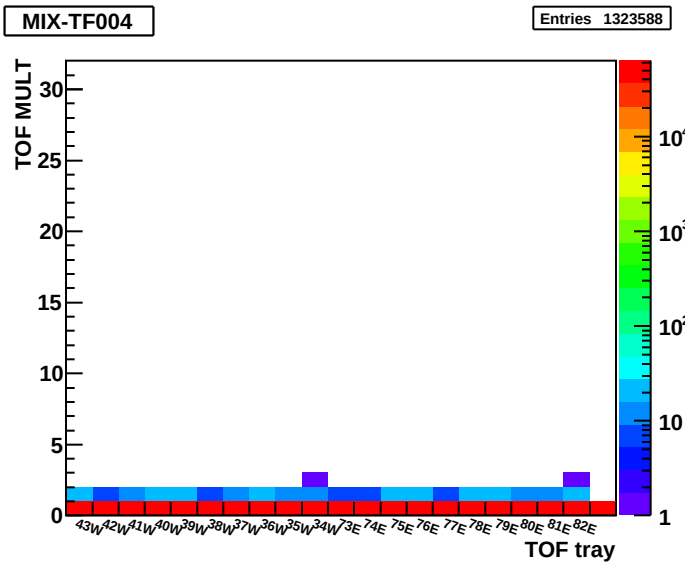

ST201 0-15 (ch6)
Entries 504224
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

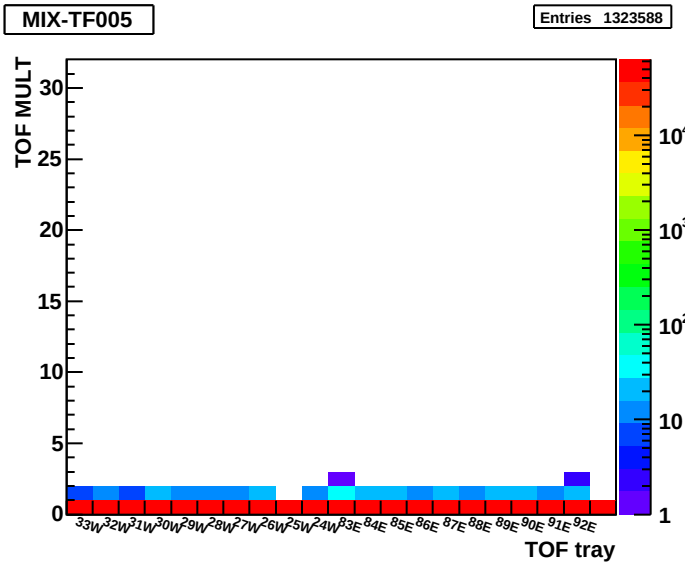

Unused (ch7)
Entries 504224

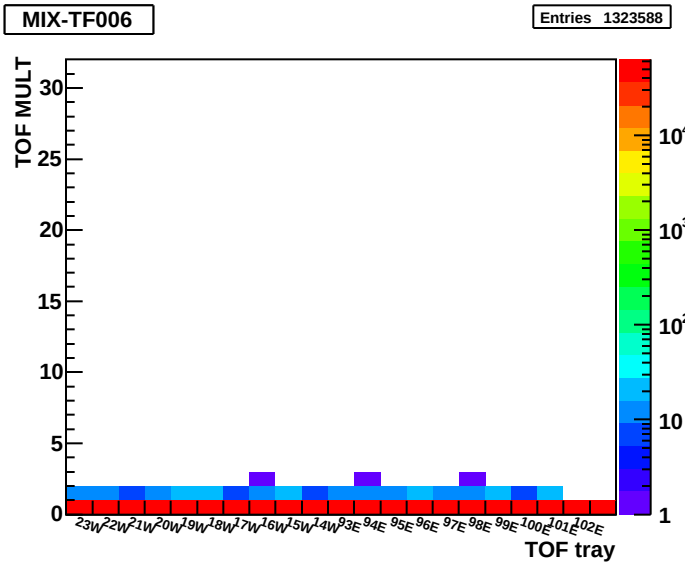

MIX-TF001
Entries 1323588
TOF MULT
TOF tray

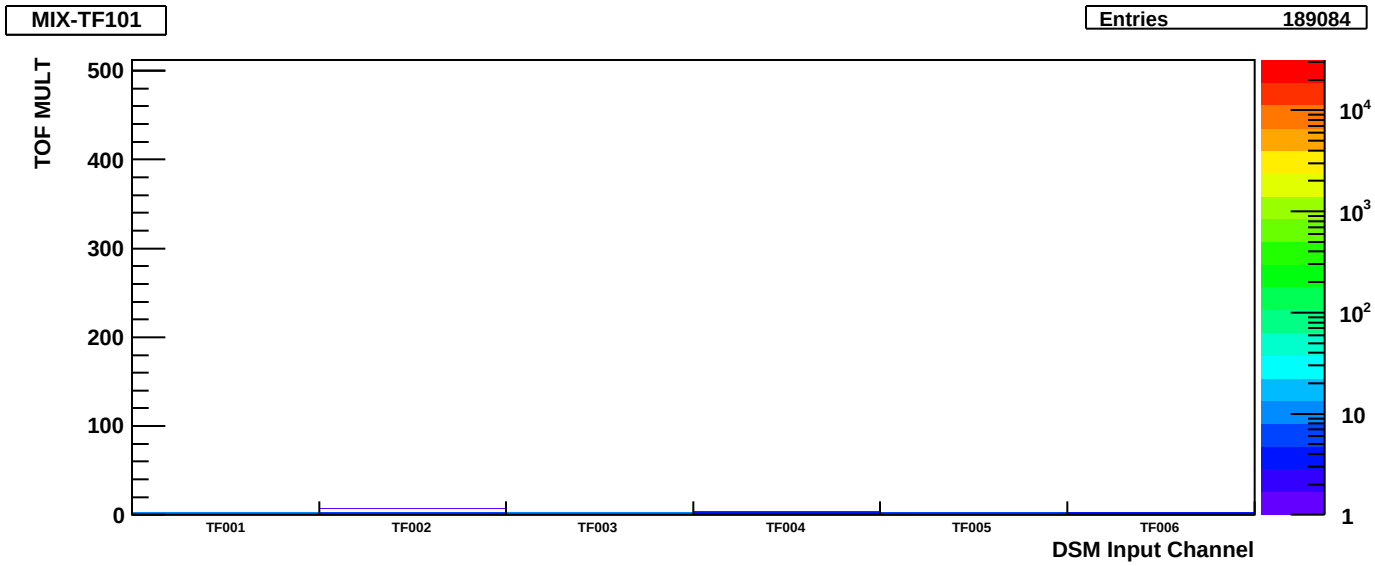

MIX-TF002
Entries 1323588
TOF MULT
TOF tray

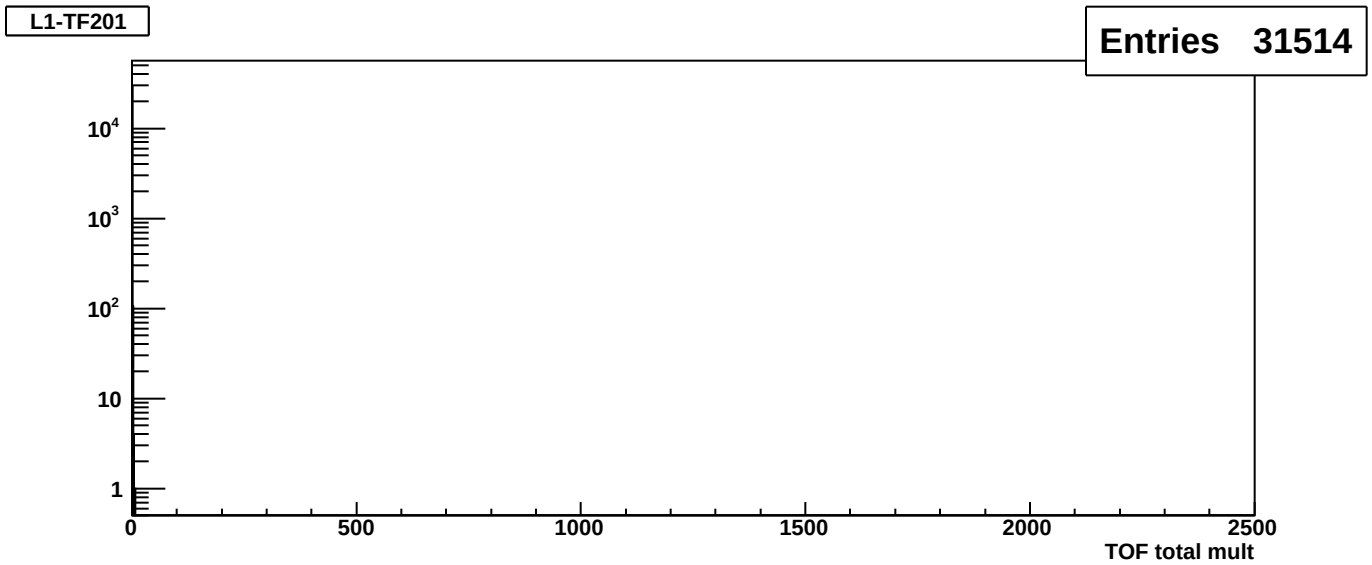

MIX-TF003
Entries 1323588
TOF MULT
TOF tray

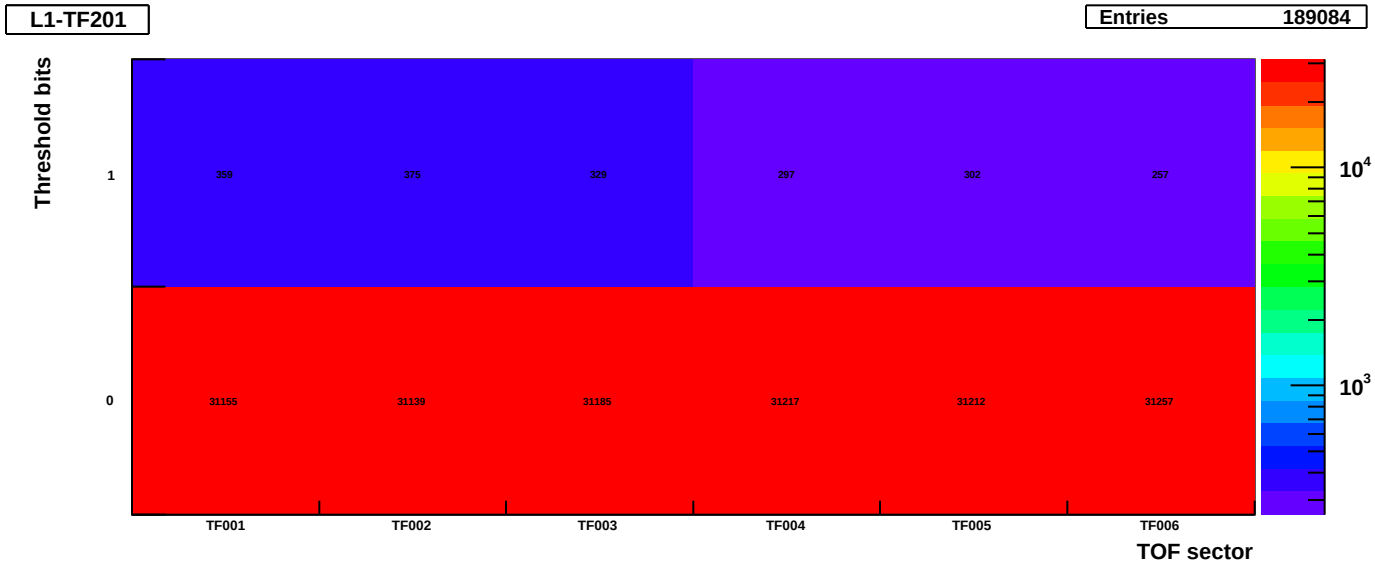

MIX-TF004
Entries 1323588
TOF MULT
TOF tray

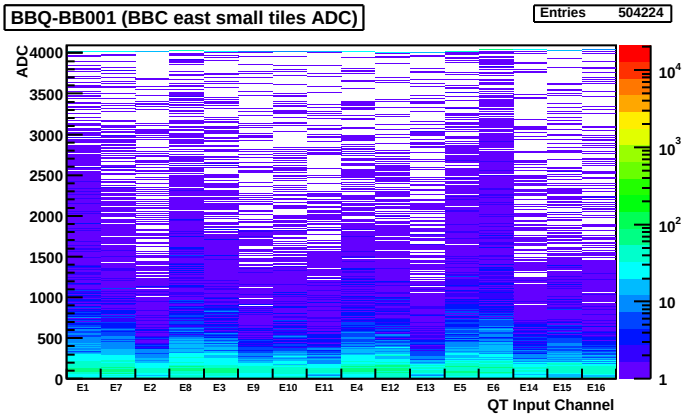

MIX-TF005
Entries 1323588
TOF MULT
TOF tray

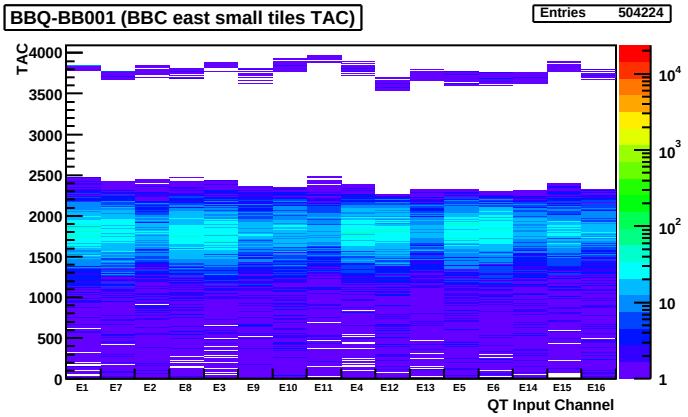

MIX-TF006
Entries 1323588
TOF MULT
TOF tray

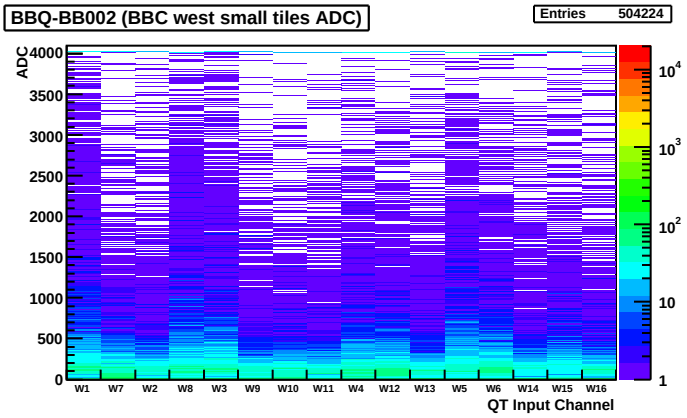

MIX-TF101
Entries 189084
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

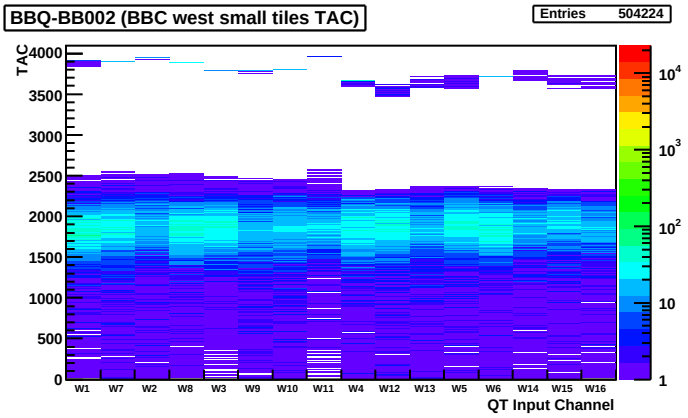

L1-TF201
Entries 31514
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

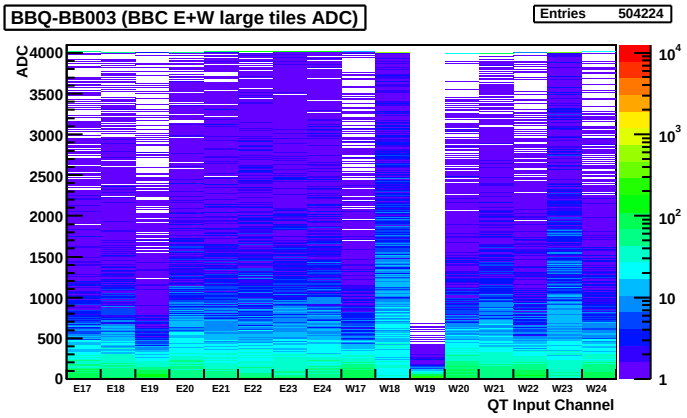

L1-TF201
Entries 189084
Threshold bits
1
0
359
375
329
297
302
257
31155
31139
31185
31217
31212
31257
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3

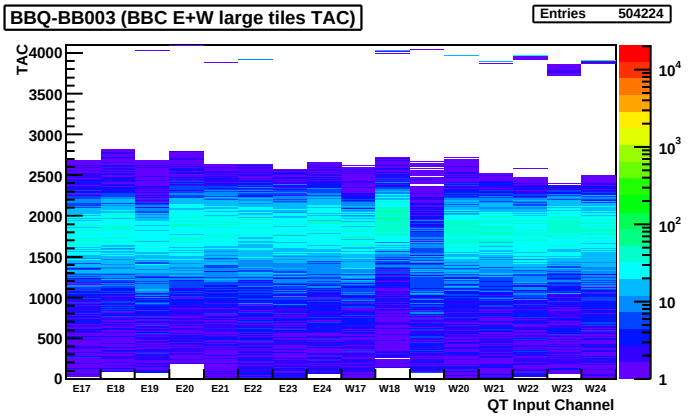

BBQ-BB001 (BBC east small tiles ADC)
Entries 504224
ADC
QT Input Channel

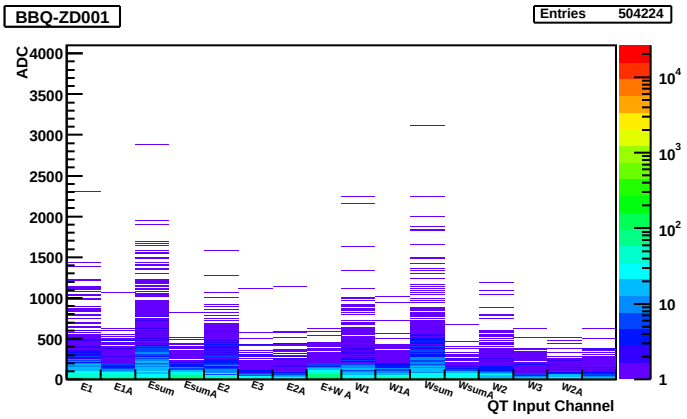

BBQ-BB001 (BBC east small tiles TAC)
Entries 504224
TAC
QT Input Channel

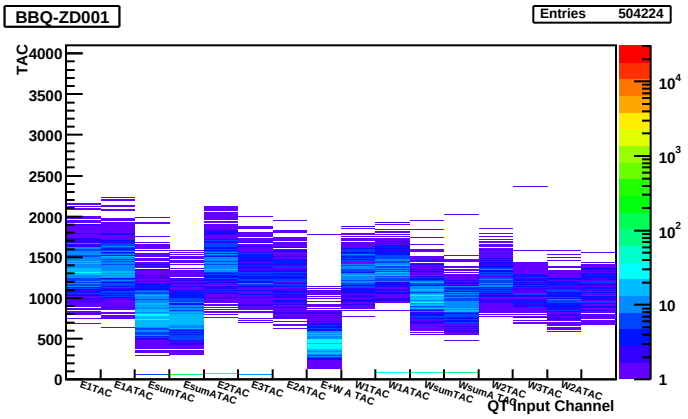

BBQ-BB002 (BBC west small tiles ADC)
Entries 504224
ADC
QT Input Channel

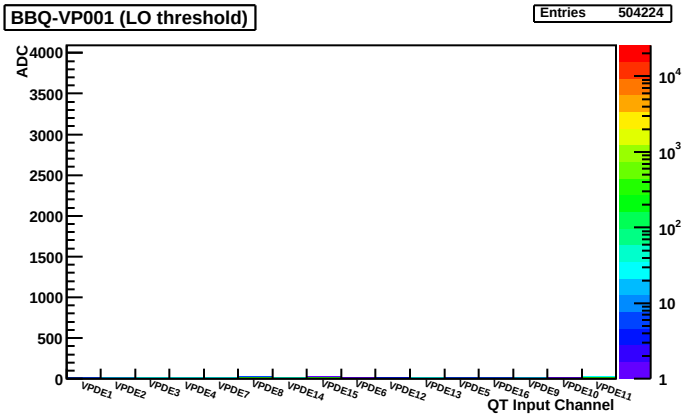

BBQ-BB002 (BBC west small tiles TAC)
Entries 504224
TAC
QT Input Channel

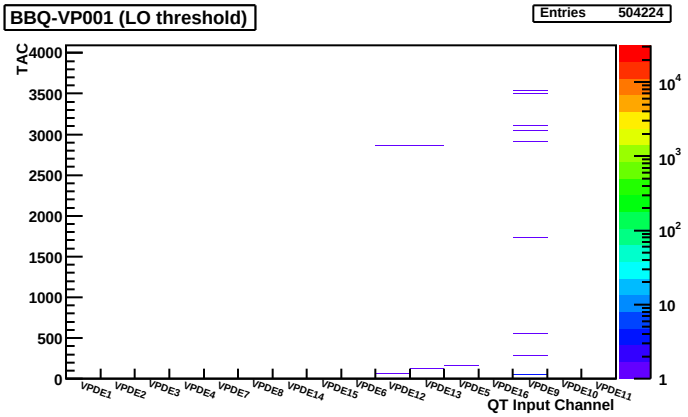

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 504224
ADC
QT Input Channel

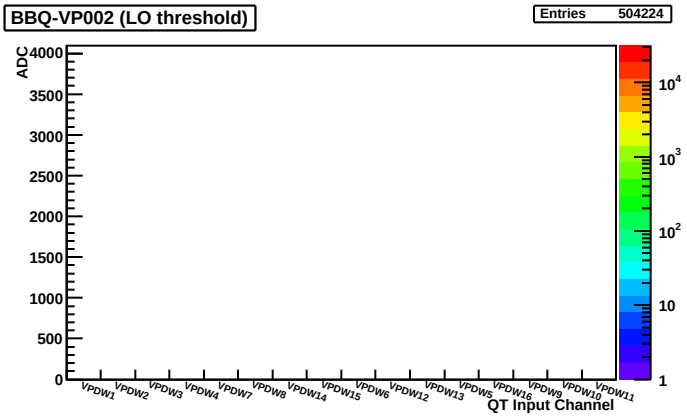

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 504224
TAC
QT Input Channel

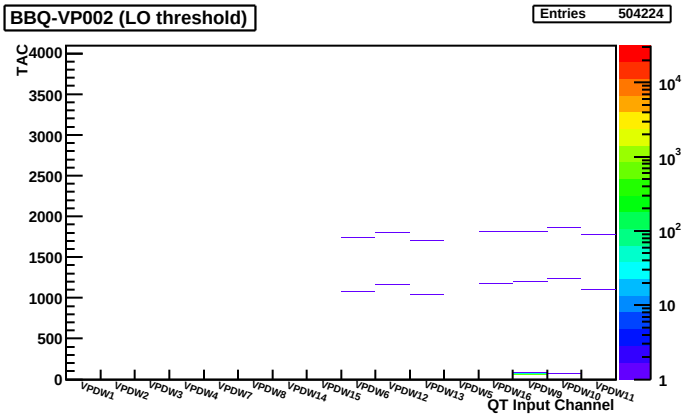

BBQ-ZD001
Entries 504224
ADC
QT Input Channel

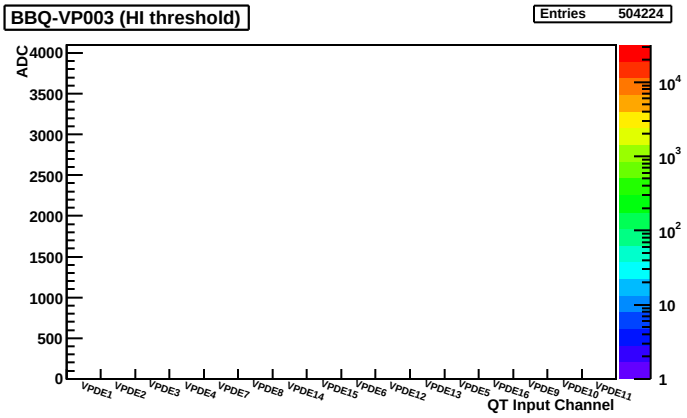

BBQ-ZD001
Entries 504224
TAC
QT Input Channel

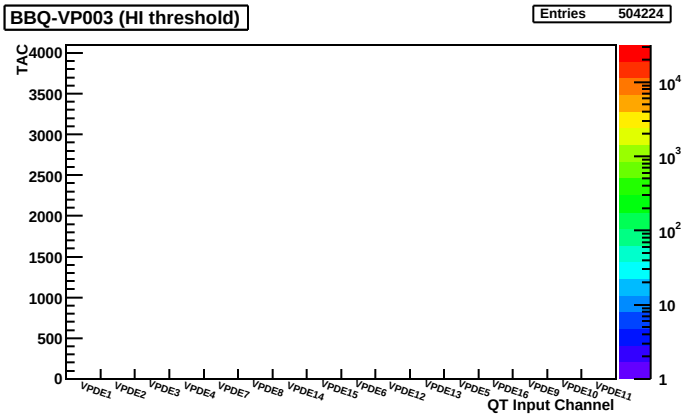

BBQ-VP001 (LO threshold)
Entries 504224
ADC
QT Input Channel

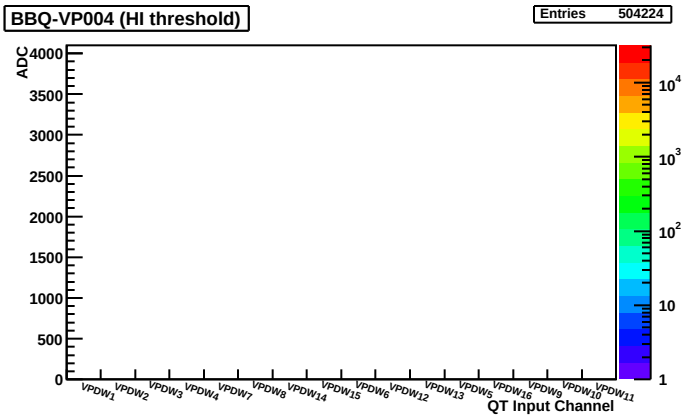

BBQ-VP001 (LO threshold)
Entries 504224
TAC
QT Input Channel

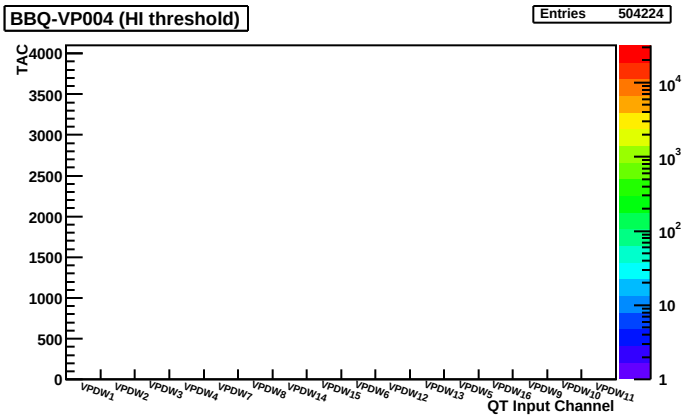

BBQ-VP002 (LO threshold)
Entries 504224
ADC
QT Input Channel

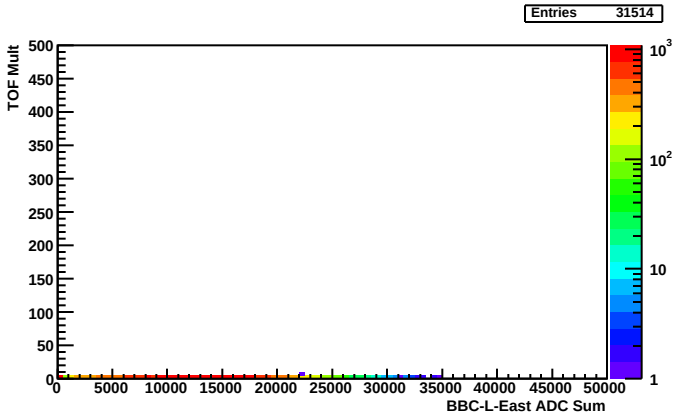

BBQ-VP002 (LO threshold)
Entries 504224
TAC
QT Input Channel

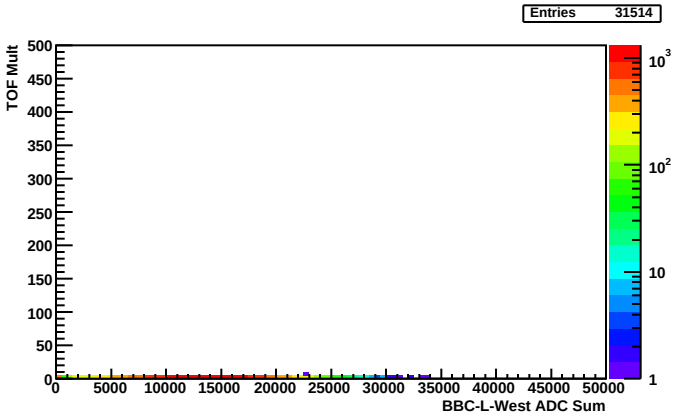

BBQ-VP003 (HI threshold)
Entries 504224
ADC
QT Input Channel

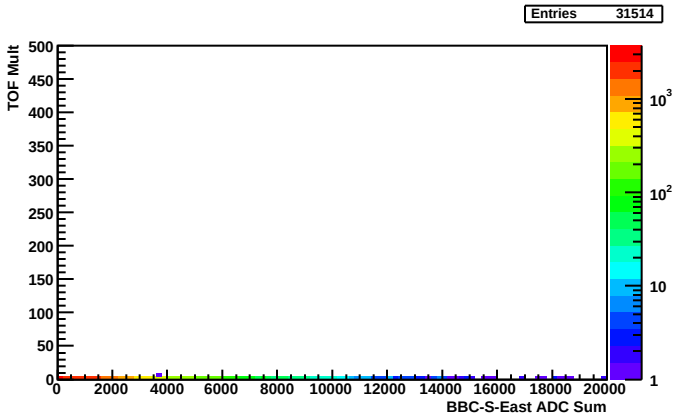

BBQ-VP003 (HI threshold)
Entries 504224
TAC
QT Input Channel

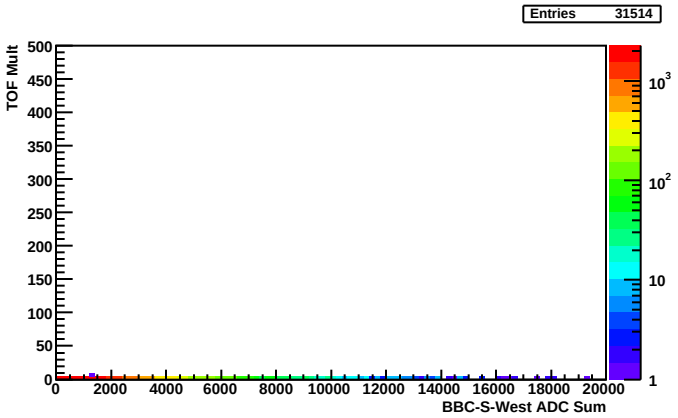

BBQ-VP004 (HI threshold)
Entries 504224
ADC
QT Input Channel

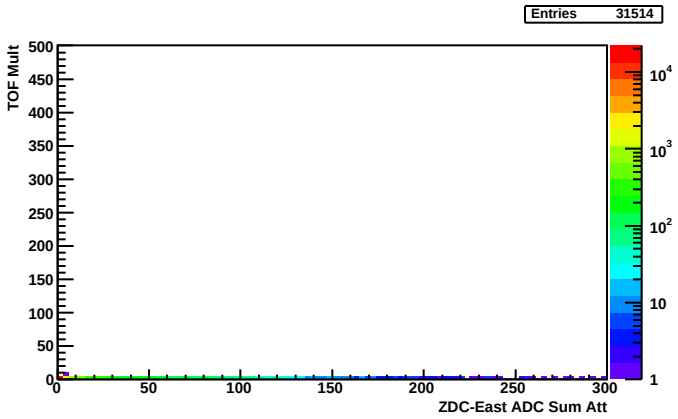

BBQ-VP004 (HI threshold)
Entries 504224
TAC
QT Input Channel

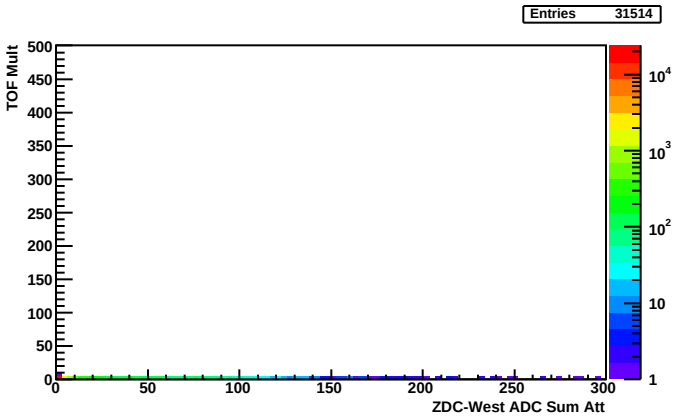

Entries 31514
TOF Mult
BBC-L-East ADC Sum

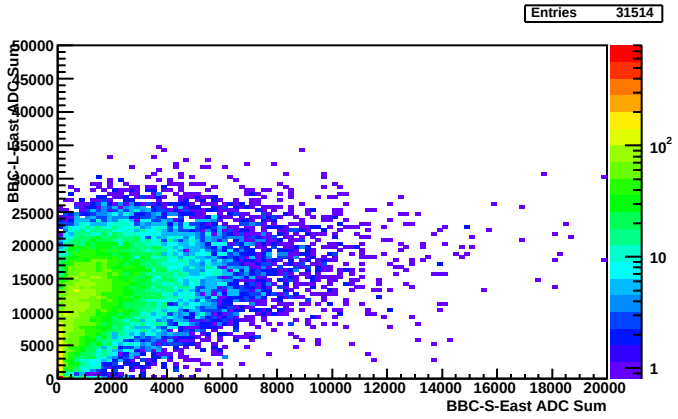

Entries 31514
TOF Mult
BBC-L-West ADC Sum

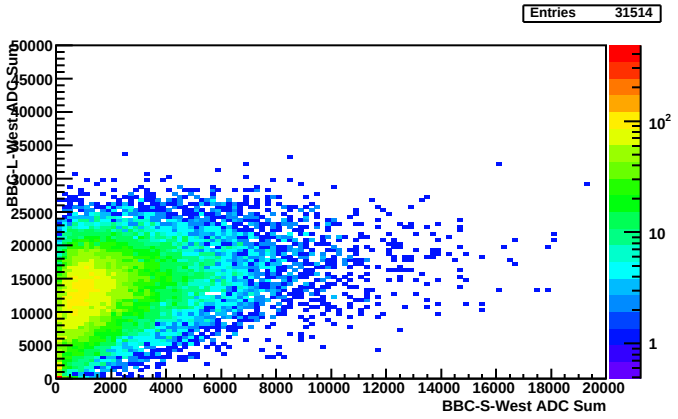

Entries 31514
TOF Mult
BBC-S-East ADC Sum

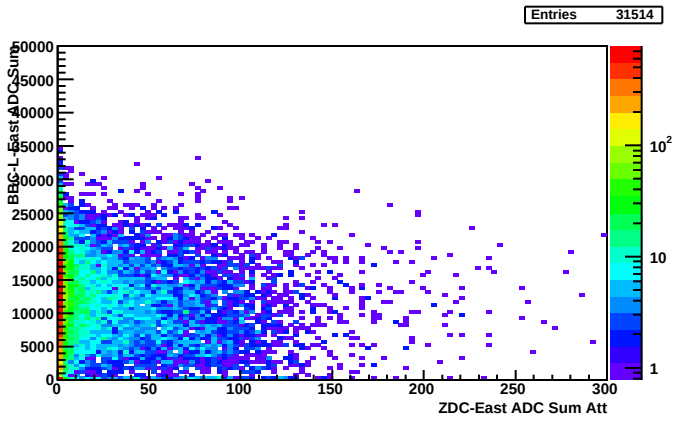

Entries 31514
TOF Mult
BBC-S-West ADC Sum

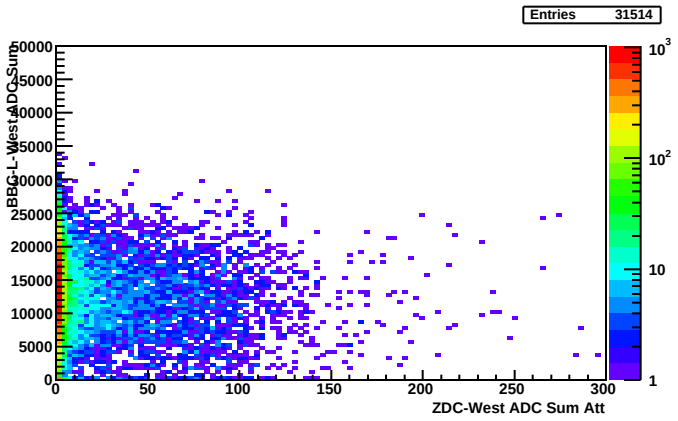

Entries 31514
TOF Mult
ZDC-East ADC Sum Att

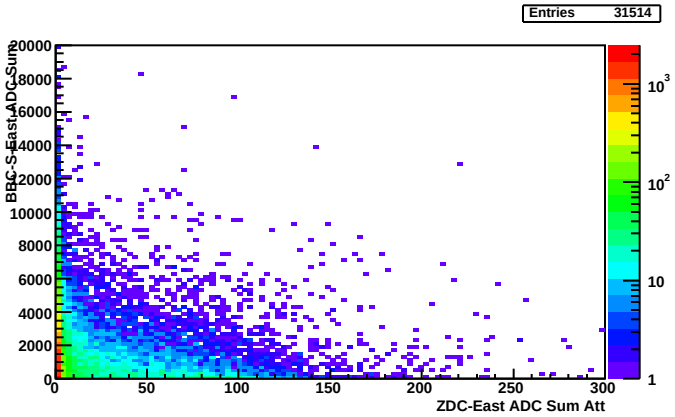

Entries 31514
TOF Mult
ZDC-West ADC Sum Att

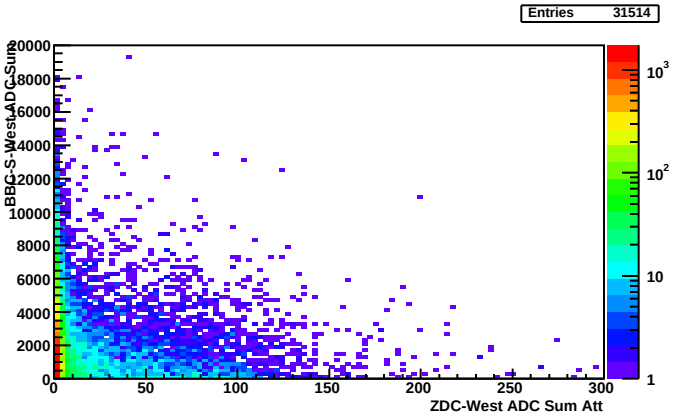

Entries 31514
BBC-L-East ADC Sum
BBC-S-East ADC Sum

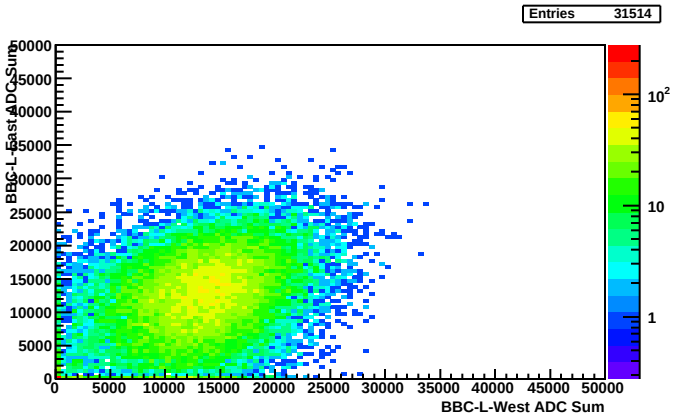

Entries 31514
BBC-L-West ADC Sum
BBC-S-West ADC Sum

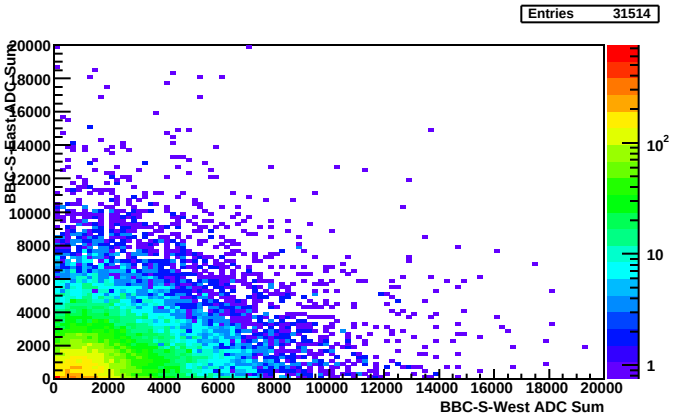

Entries 31514
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

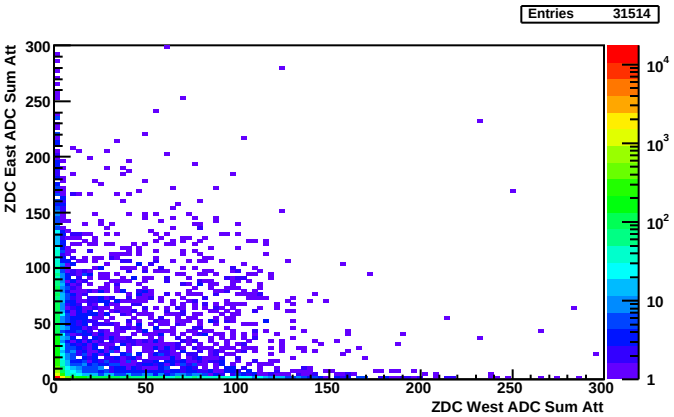

Entries 31514
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

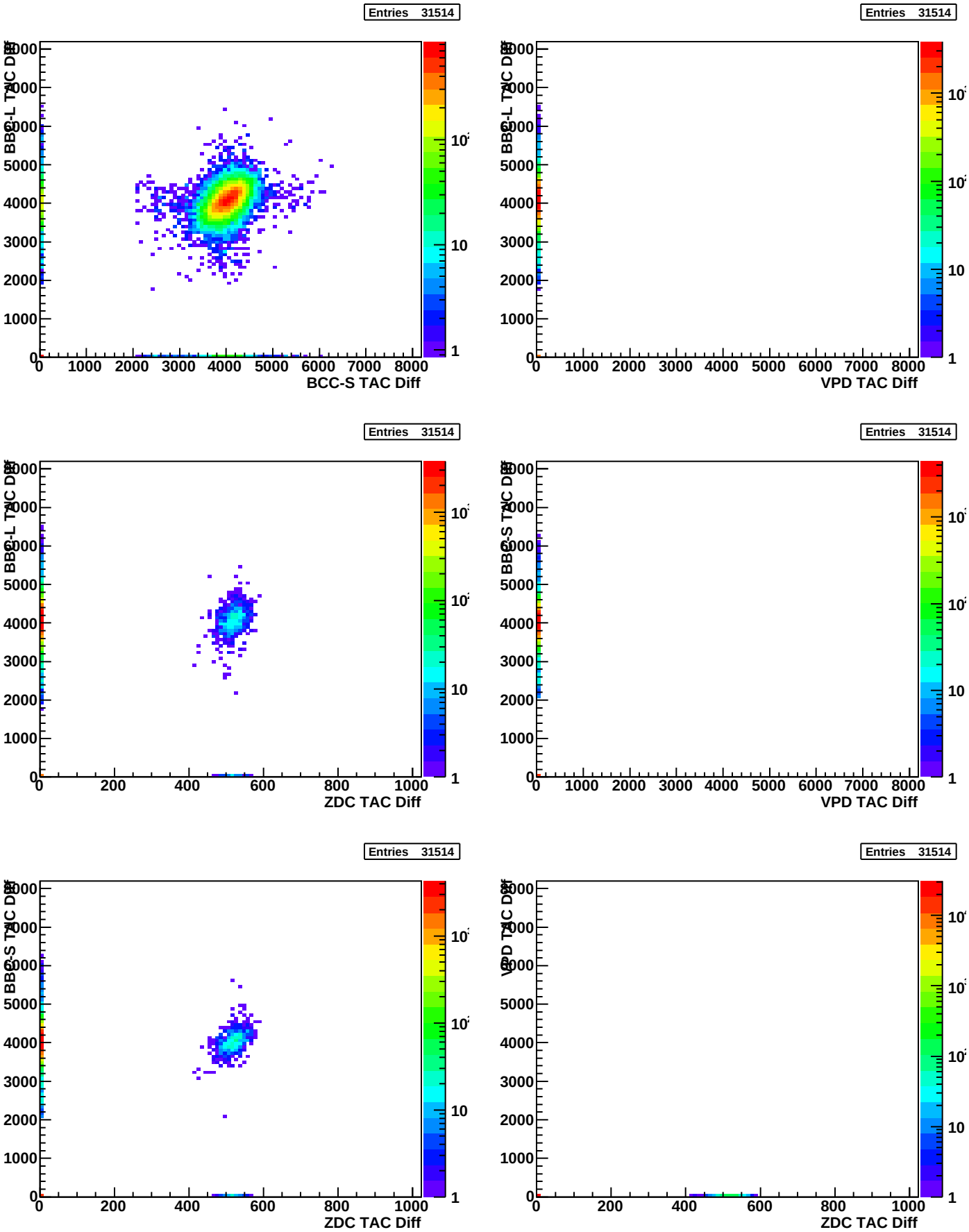

Entries 31514
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

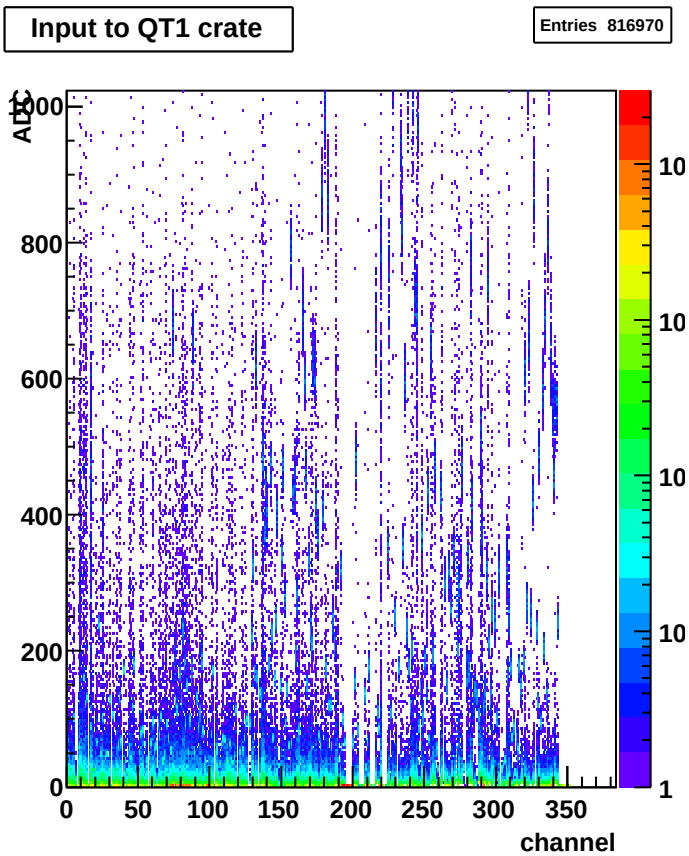

Entries 31514
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

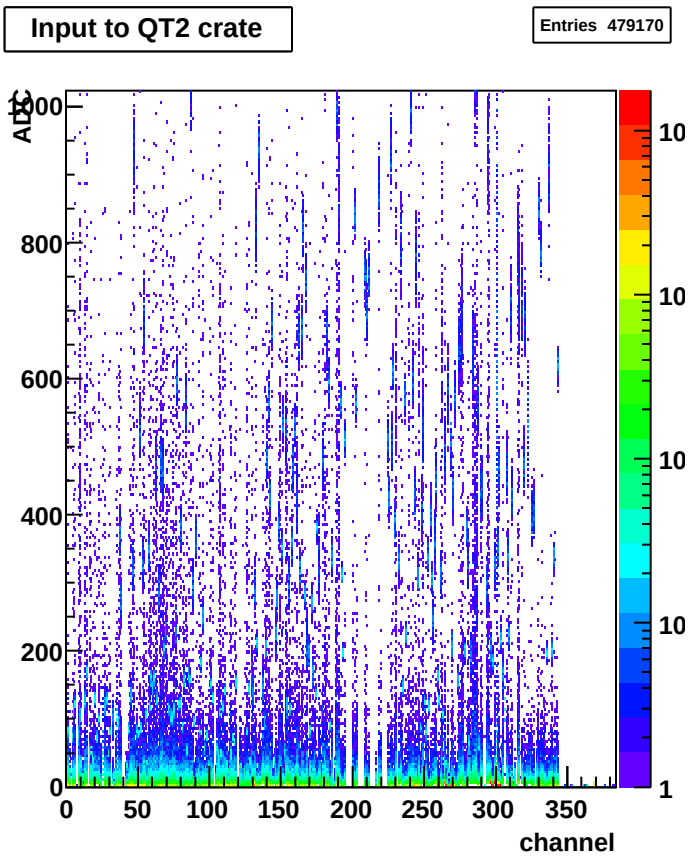

Entries 31514
BBC-L-East ADC Sum
BBC-L-West ADC Sum

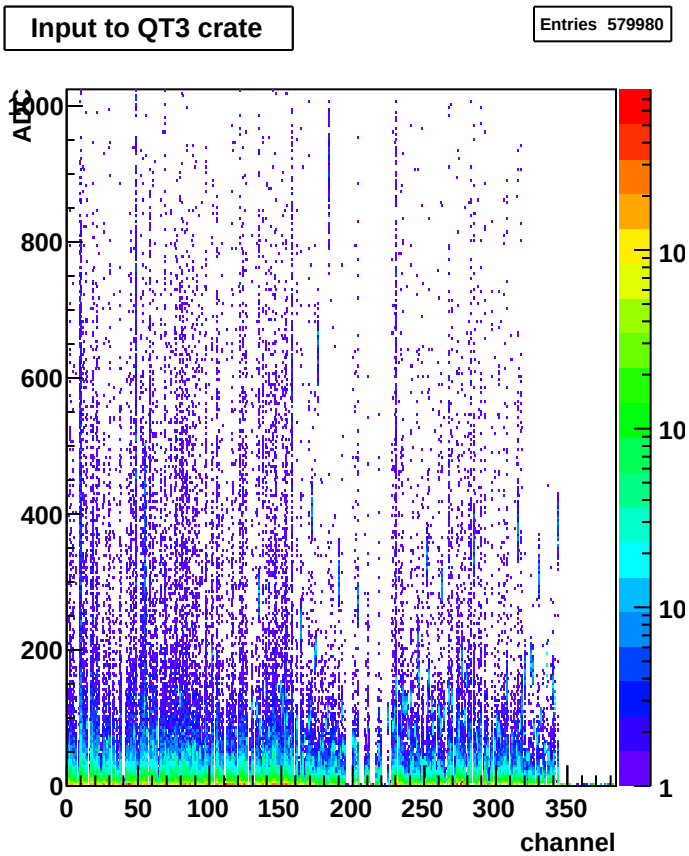

Entries 31514
BBC-S-East ADC Sum
BBC-S-West ADC Sum

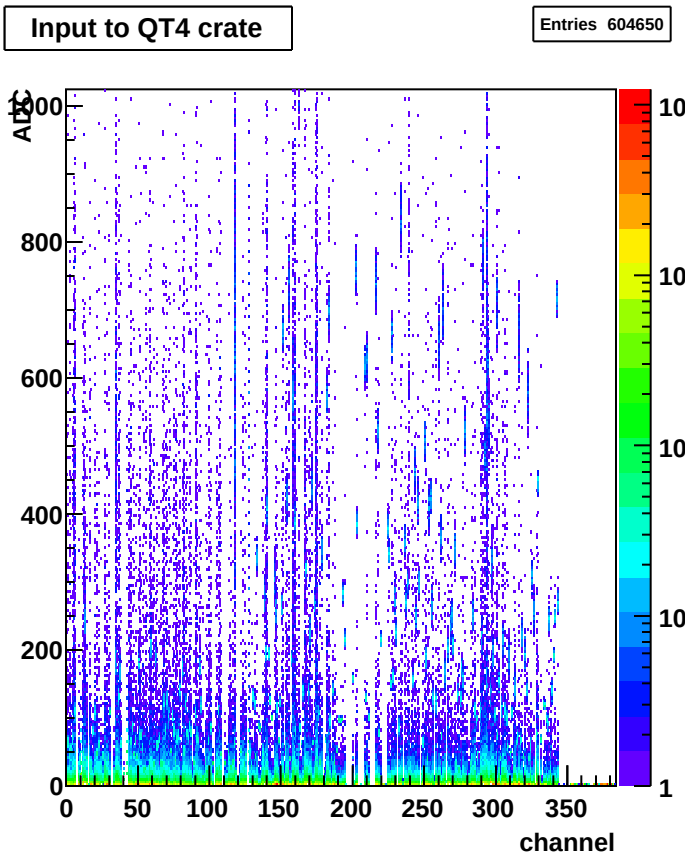

Entries 31514
ZDC East ADC Sum Att
ZDC West ADC Sum Att

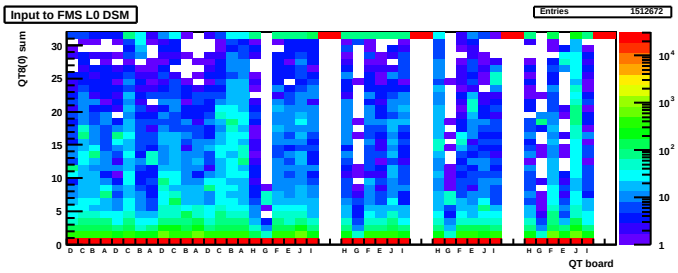

Entries 31514
BBC-L TAC Diff
BCC-S TAC Diff
Entries 31514
BBC-L TAC Diff
VPD TAC Diff
Entries 31514
BBC-L TAC Diff
ZDC TAC Diff
Entries 31514
BBC-S TAC Diff
VPD TAC Diff
Entries 31514
BBC-S TAC Diff
ZDC TAC Diff
Entries 31514
VPD TAC Diff
ZDC TAC Diff

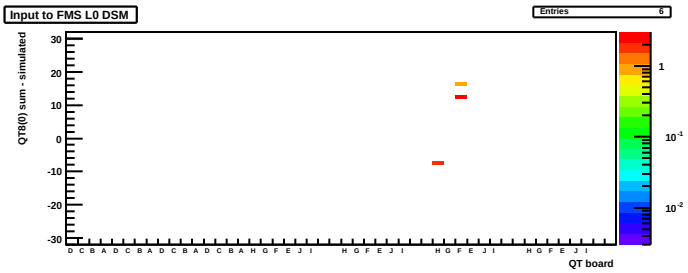

Input to QT1 crate
Entries 816970
ADC
channel

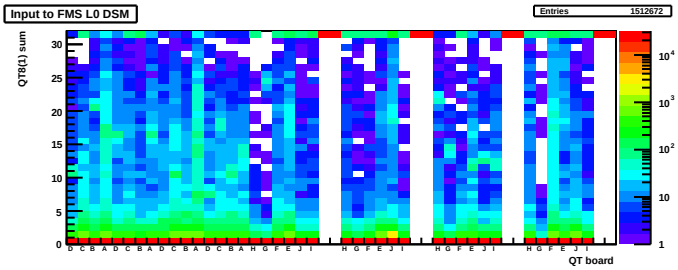

Input to QT2 crate
Entries 479170
ADC
channel

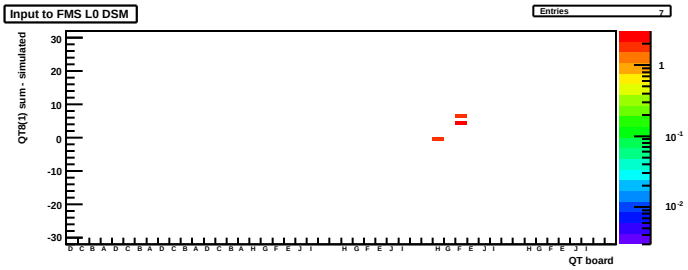

Input to QT3 crate
Entries 579980
ADC
channel

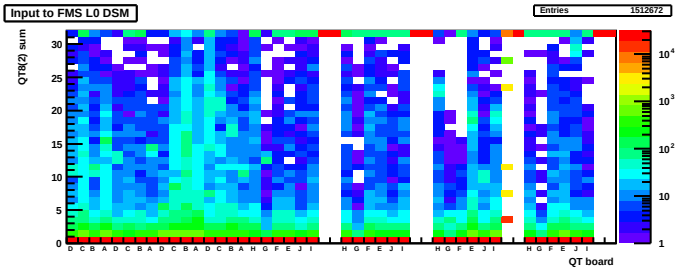

Input to QT4 crate
Entries 604650
ADC
channel

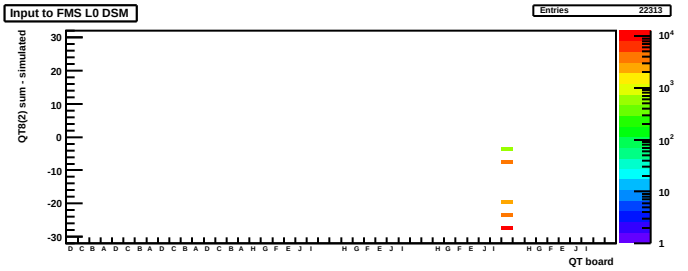

Input to FMS L0 DSM
Entries 1512672
QT8(0) sum
QT board

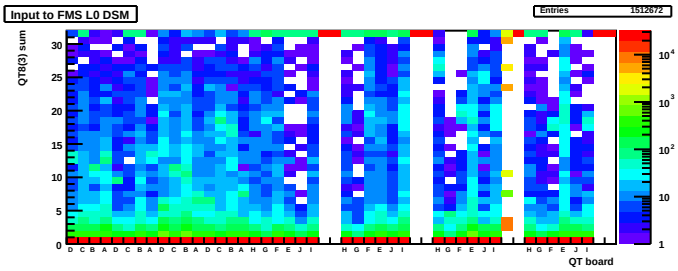

Input to FMS L0 DSM
Entries 6
QT8(0) sum - simulated
QT board

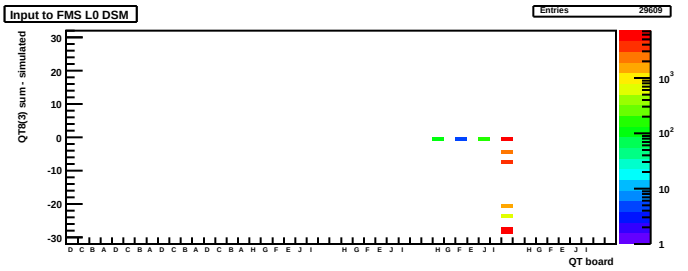

Input to FMS L0 DSM
Entries 1512672
QT8(1) sum
QT board

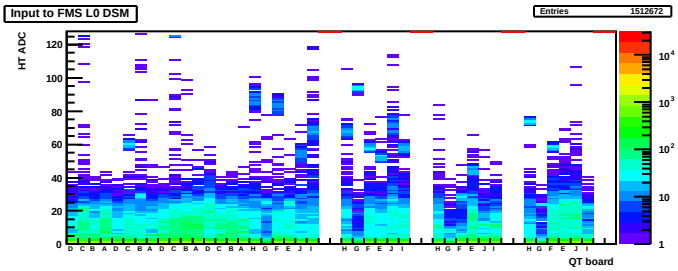

Input to FMS L0 DSM
Entries 7
QT8(1) sum - simulated
QT board

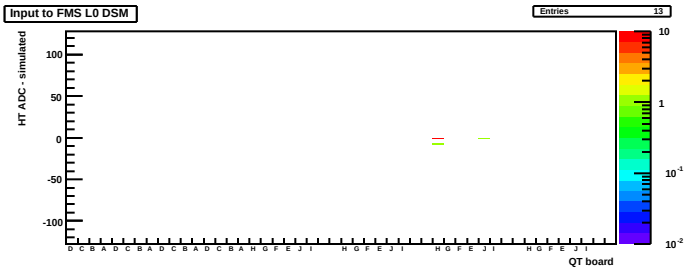

Input to FMS L0 DSM
Entries 1512672
QT8(2) sum
QT board

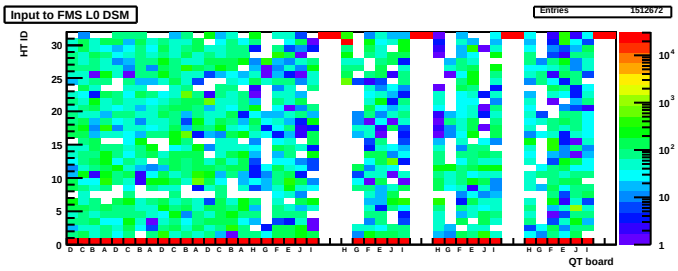

Input to FMS L0 DSM
Entries 22313
QT8(2) sum - simulated
QT board

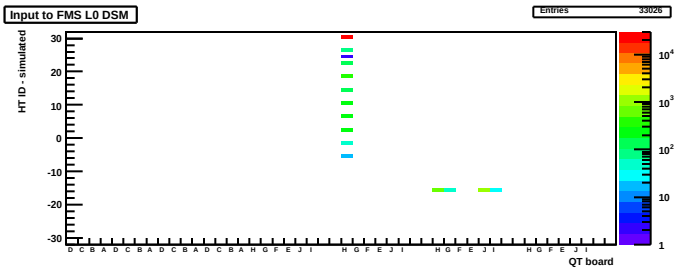

Input to FMS L0 DSM
Entries 1512672
QT8(3) sum
QT board

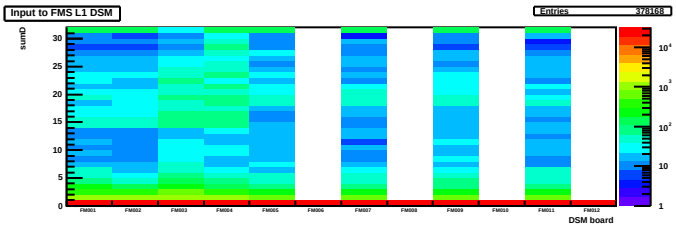

Input to FMS L0 DSM
Entries 29609
QT8(3) sum - simulated
QT board

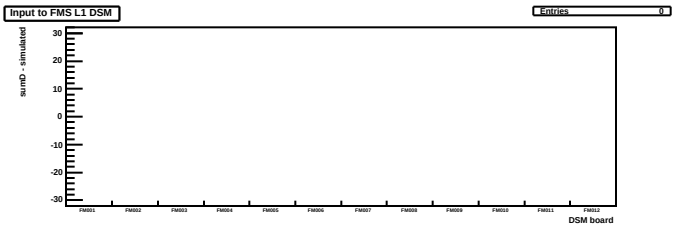

Input to FMS L0 DSM
Entries 1512672
HT ADC
QT board

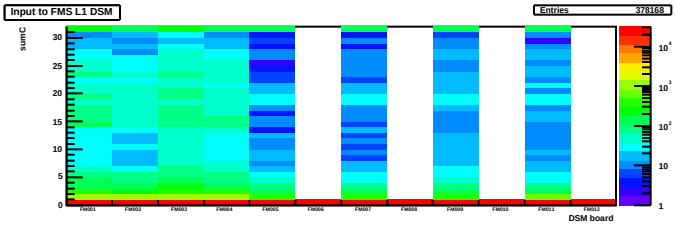

Input to FMS L0 DSM
Entries 13
HT ADC - simulated
QT board

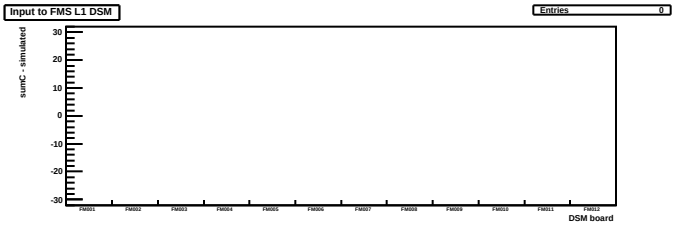

Input to FMS L0 DSM
Entries 1512672
HT ID
QT board

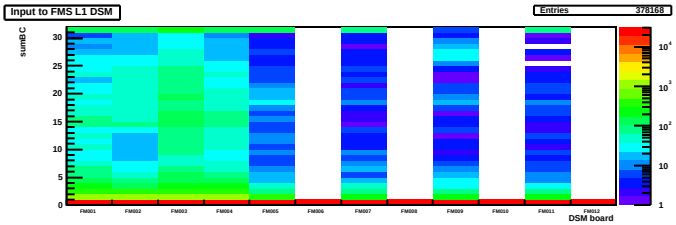

Input to FMS L0 DSM
Entries 33026
HT ID - simulated
QT board

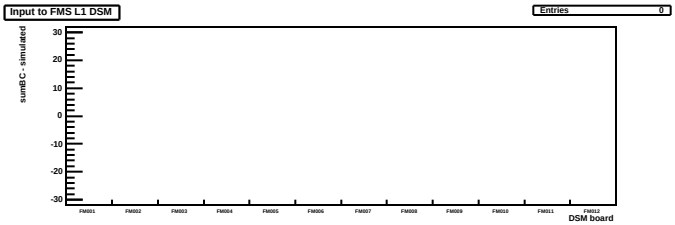

Input to FMS L1 DSM
Entries 378168
sumD
DSM board

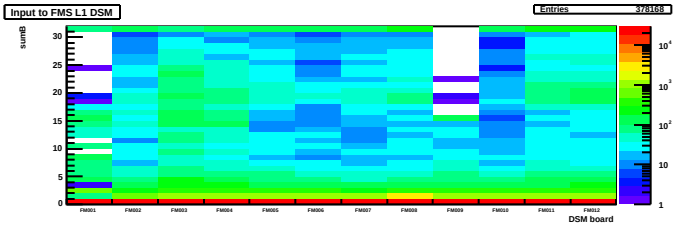

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

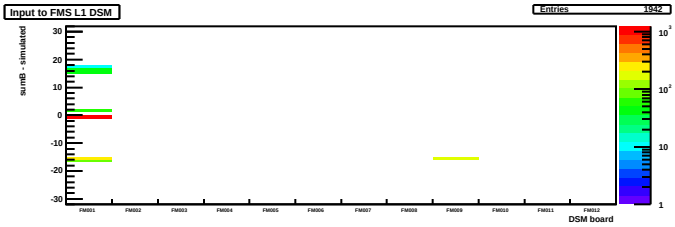

Input to FMS L1 DSM
Entries 378168
sumC
DSM board

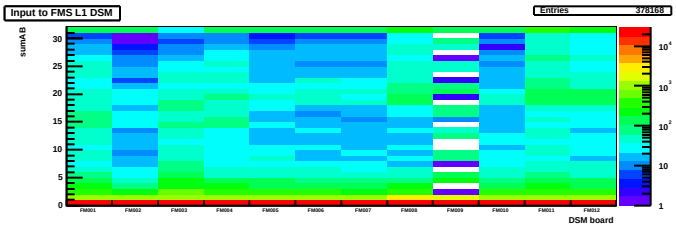

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

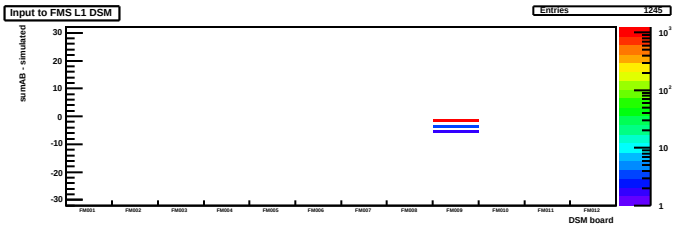

Input to FMS L1 DSM
Entries 378168
sumBC
DSM board

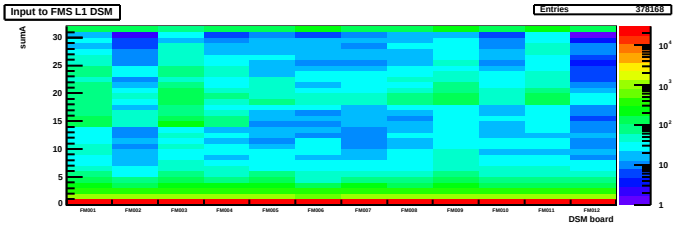

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

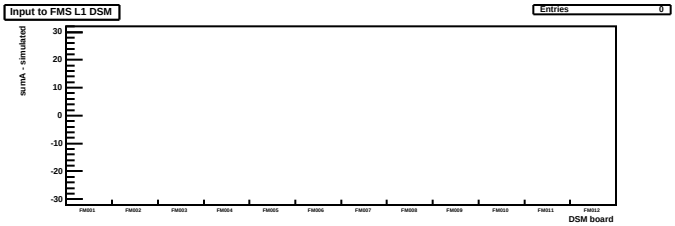

Input to FMS L1 DSM
Entries 378168
sumB
DSM board

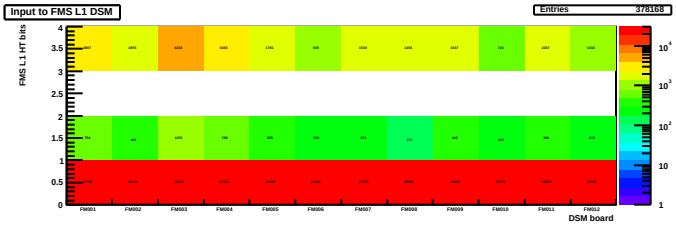

Input to FMS L1 DSM
Entries 1942
sumB - simulated
DSM board

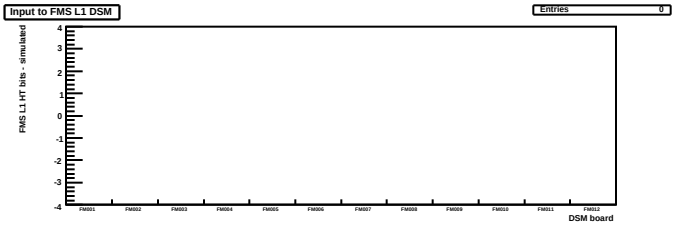

Input to FMS L1 DSM
Entries 378168
sumAB
DSM board

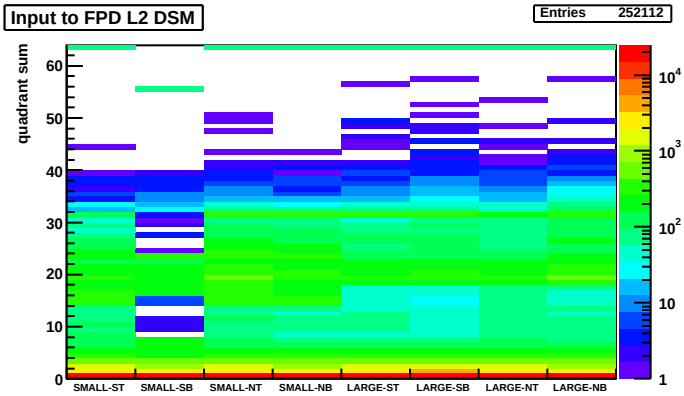

Input to FMS L1 DSM
Entries 1245
sumAB - simulated
DSM board

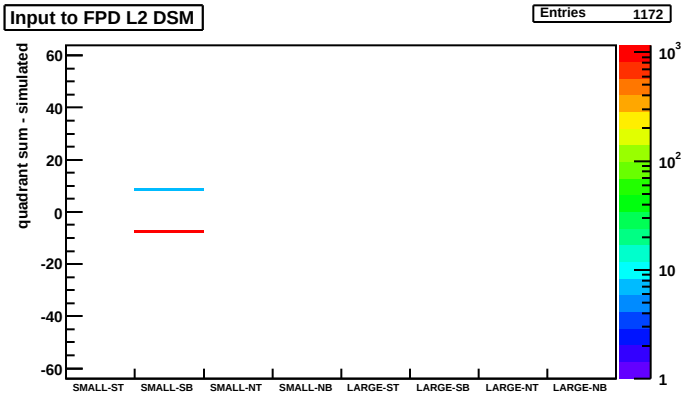

Input to FMS L1 DSM
Entries 378168
sumA
DSM board

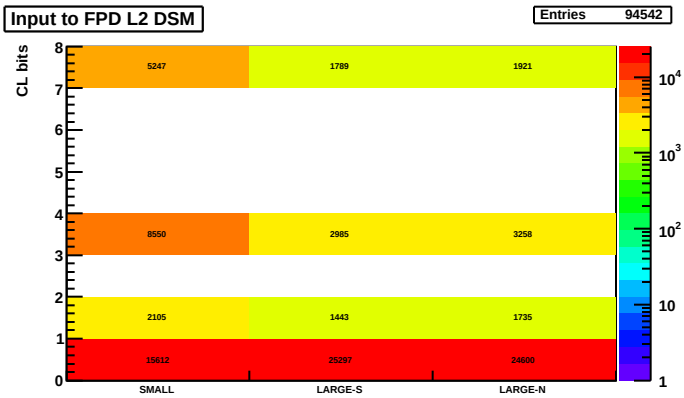

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

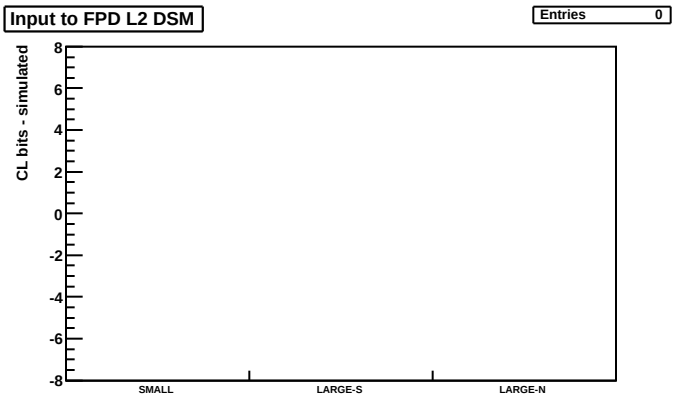

Input to FMS L1 DSM
Entries 378168
FMS L1 HT bits
DSM board

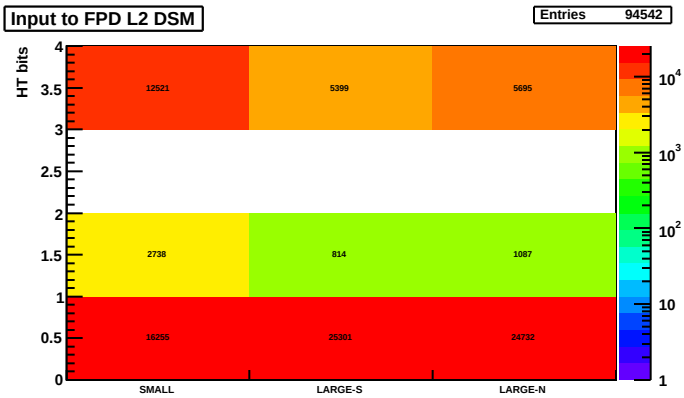

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

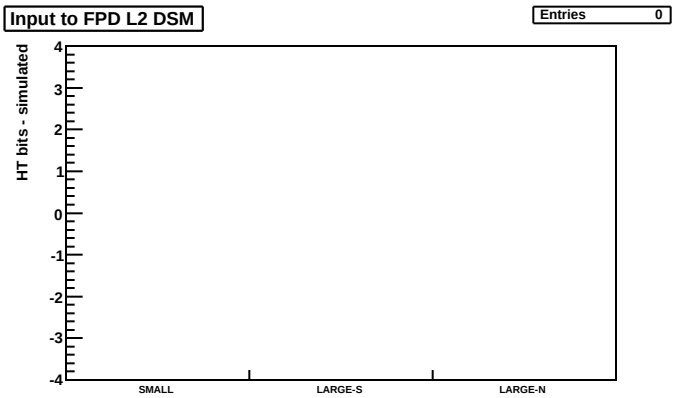

Input to FPD L2 DSM
Entries 252112
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

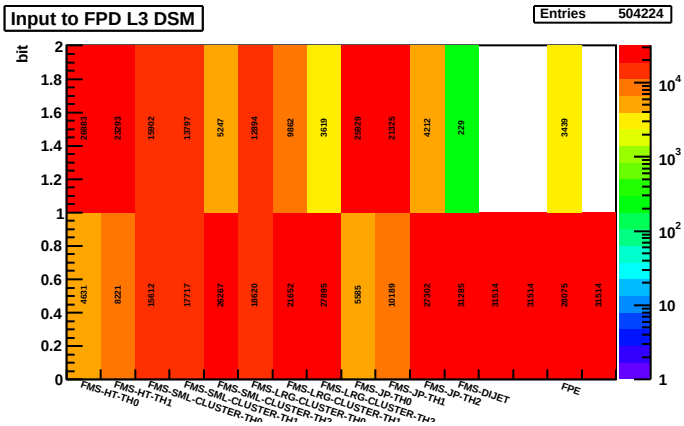

Input to FPD L2 DSM
Entries 1172
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

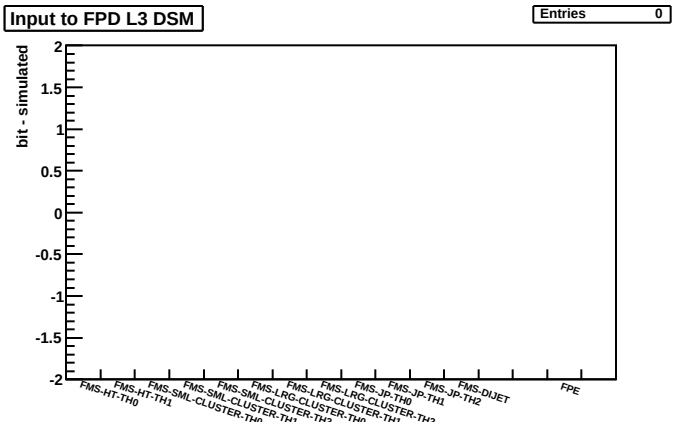

Input to FPD L2 DSM
Entries 94542
CL bits
5247 1789 1921
8550 2985 3258
2105 1443 1735
15612 25297 24600
SMALL LARGE-S LARGE-N

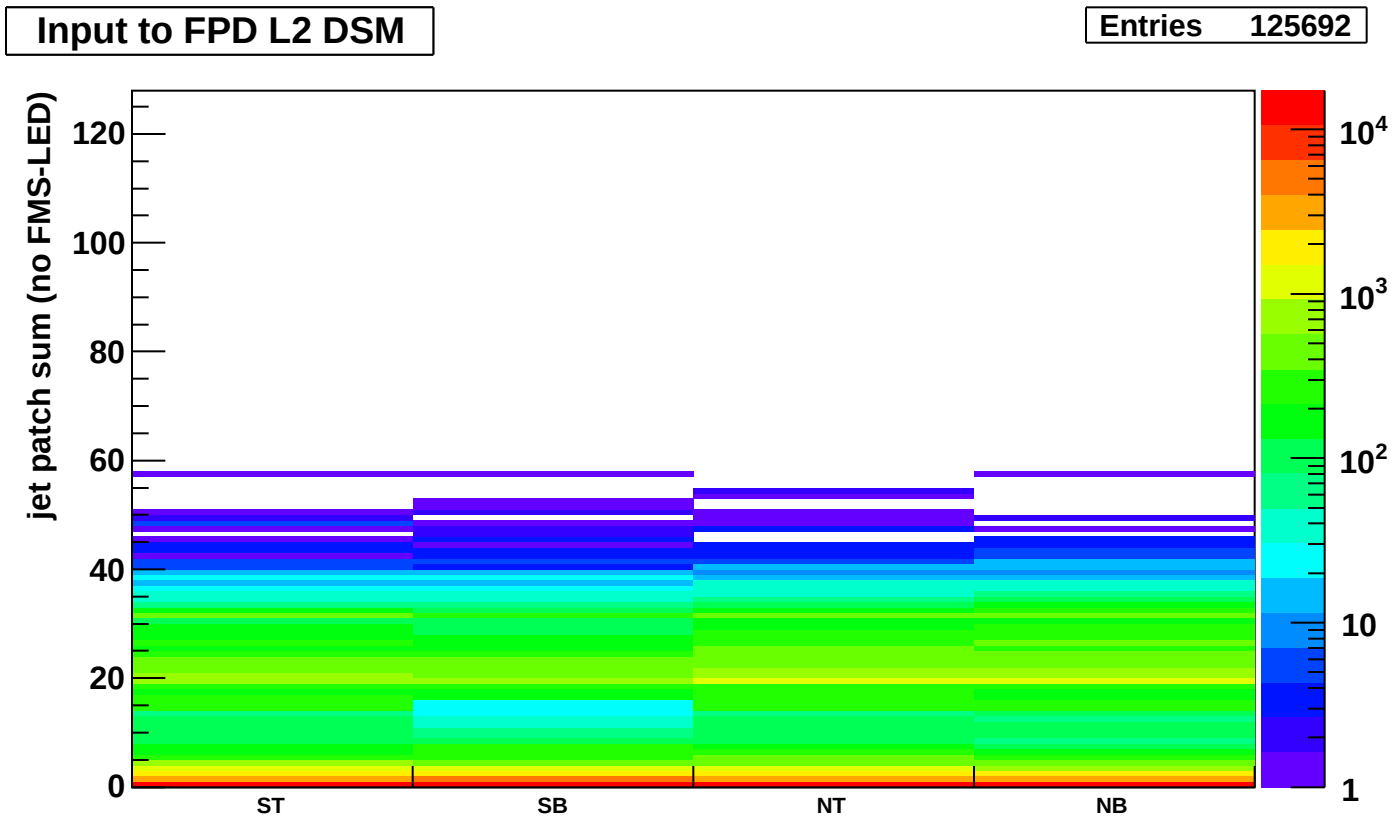

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL LARGE-S LARGE-N

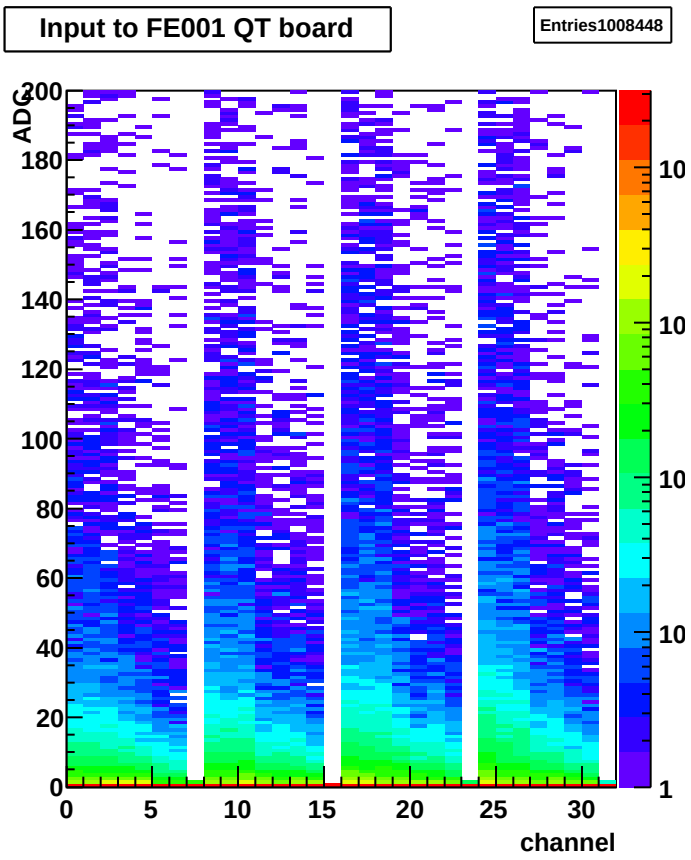

Input to FPD L2 DSM
Entries 94542
HT bits
12521 5399 5695
2738 814 1087
16255 25301 24732
SMALL LARGE-S LARGE-N

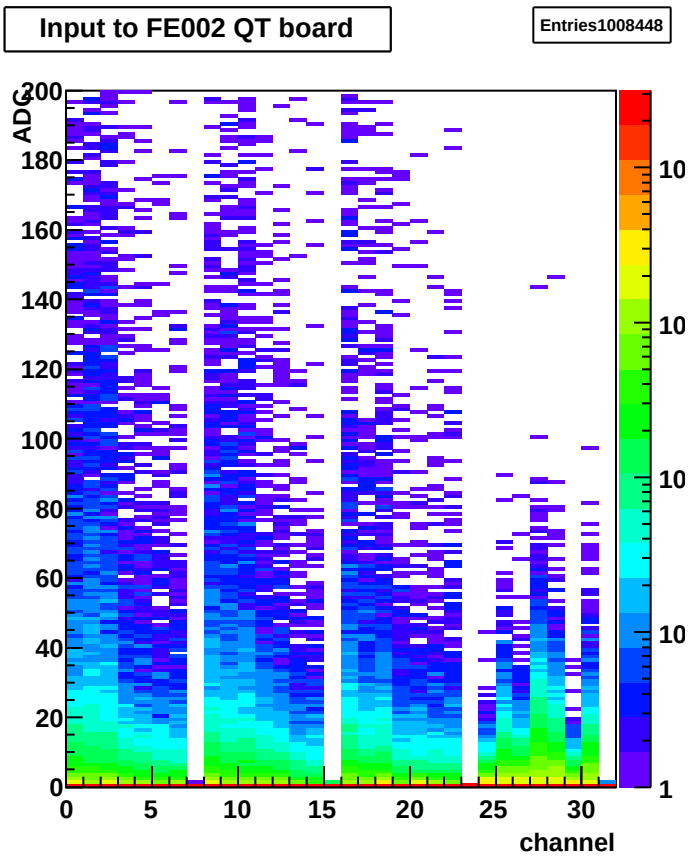

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL LARGE-S LARGE-N

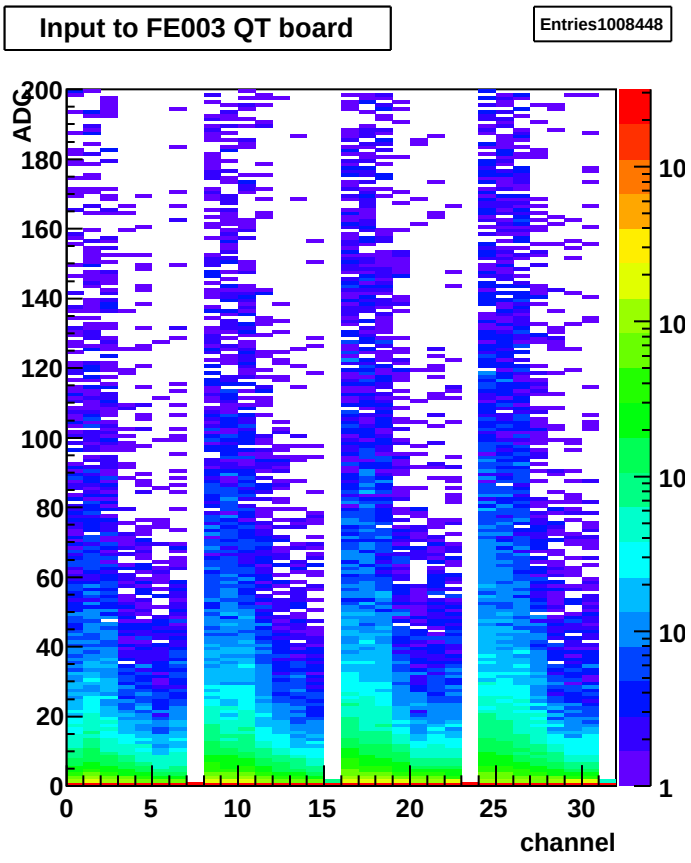

Input to FPD L3 DSM
Entries 504224
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

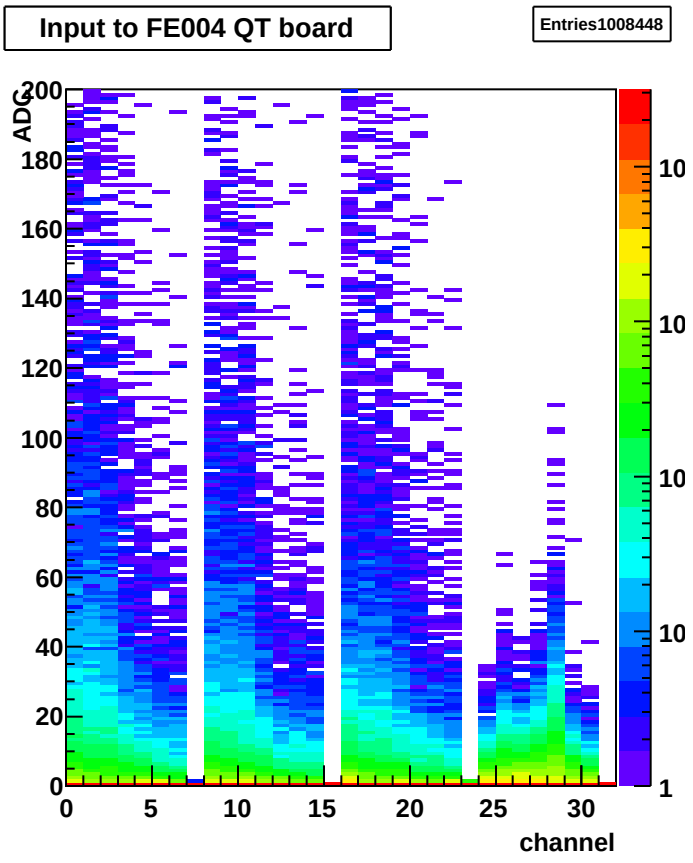

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

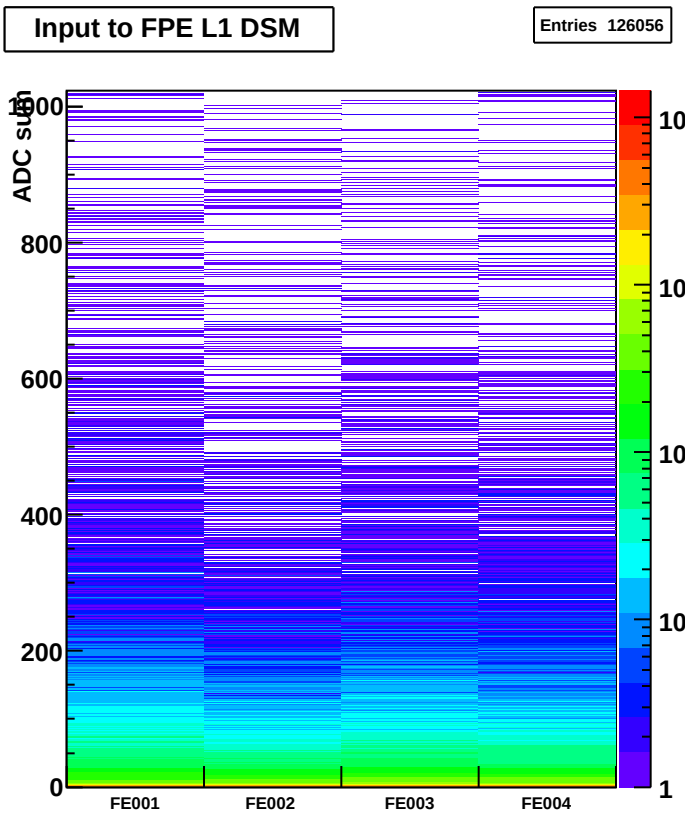

Input to FPD L2 DSM
Entries 125692
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

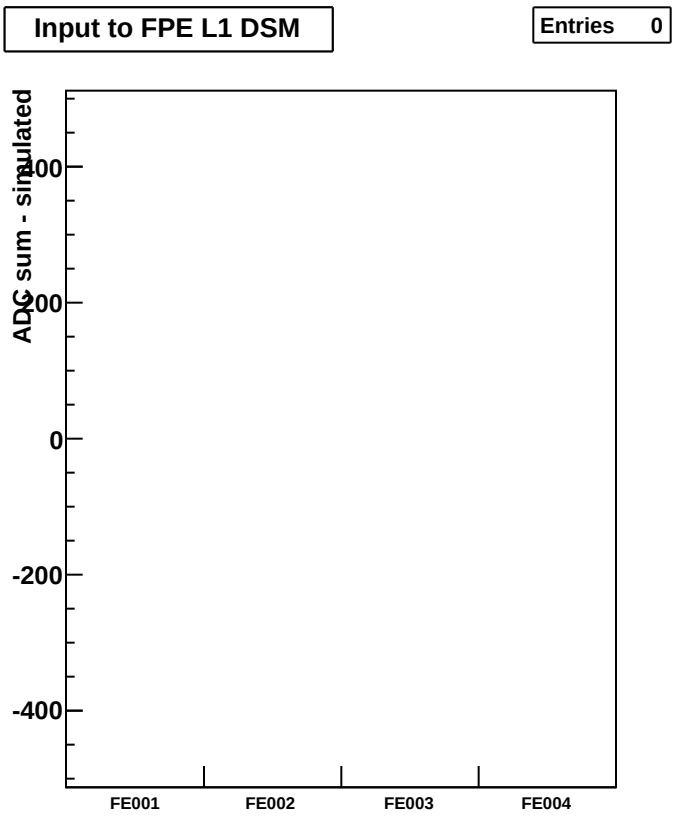

Input to FE001 QT board
Entries1008448
ADC
channel

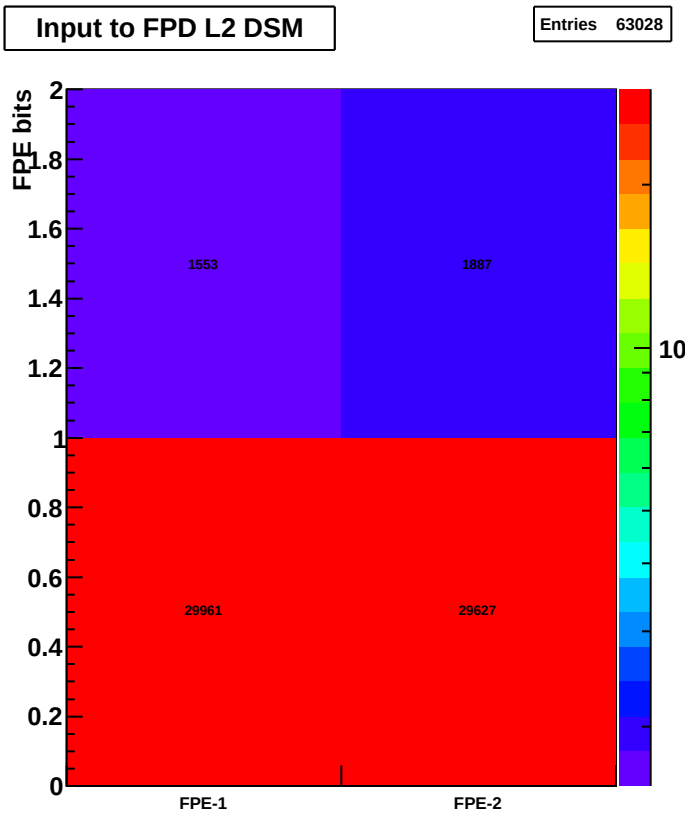

Input to FE002 QT board
Entries1008448
ADC
channel

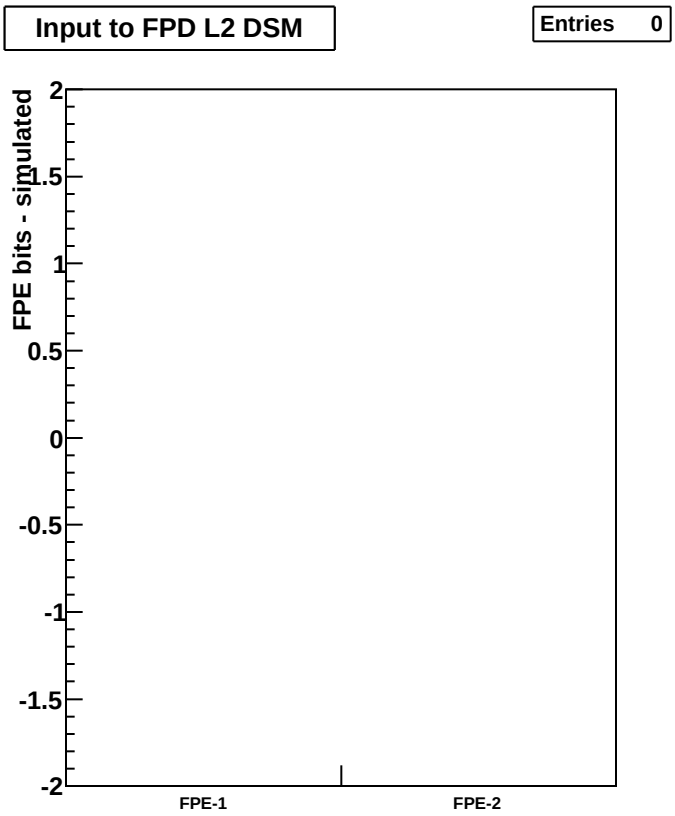

Input to FE003 QT board
Entries1008448
ADC
channel


Input to FE004 QT board
Entries1008448
ADC
channel


Input to FPE L1 DSM
Entries 126056
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 63028
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1553
1887
29961
29627
FPE-1
FPE-2
10


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