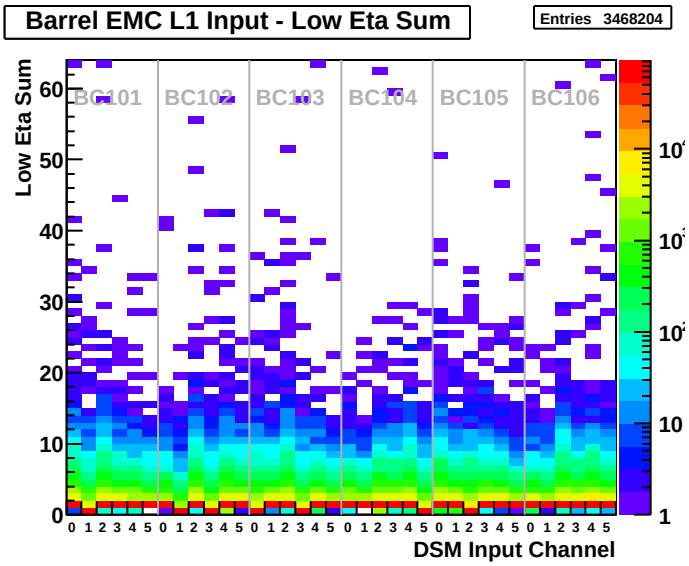
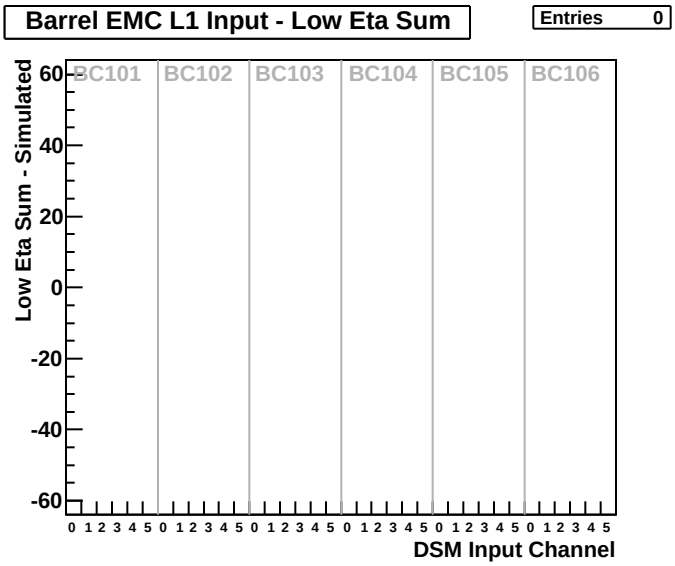
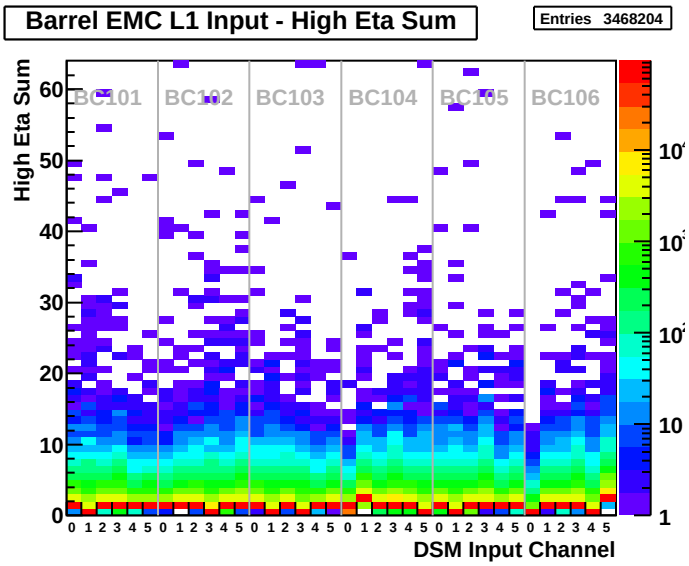
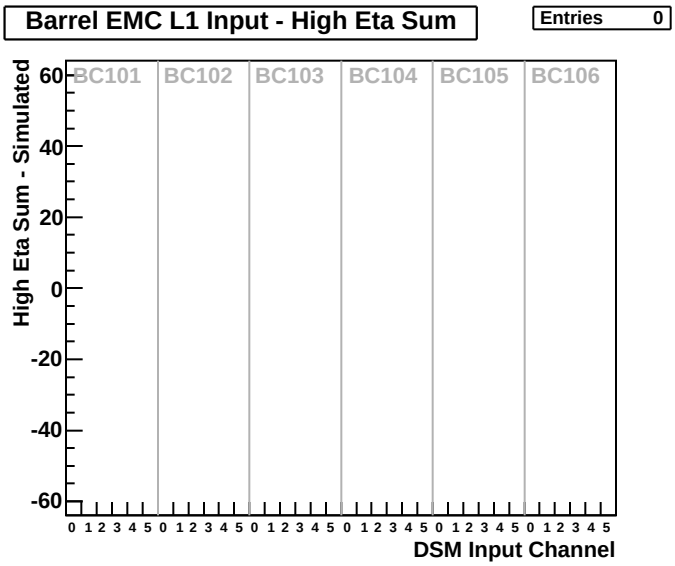
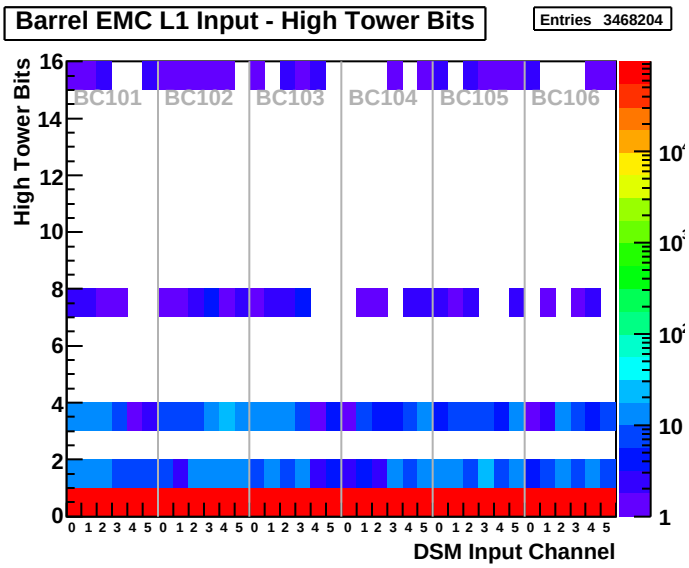
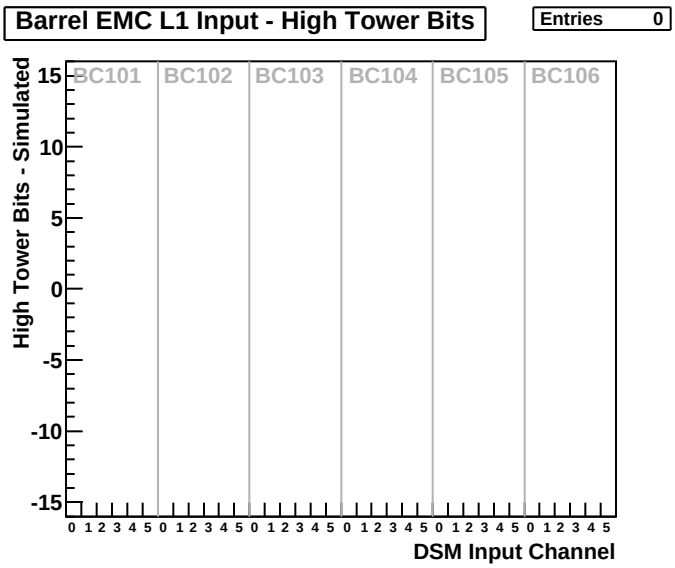

Barrel EMC L1 Input - Low Eta Sum
Entries 3468204
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

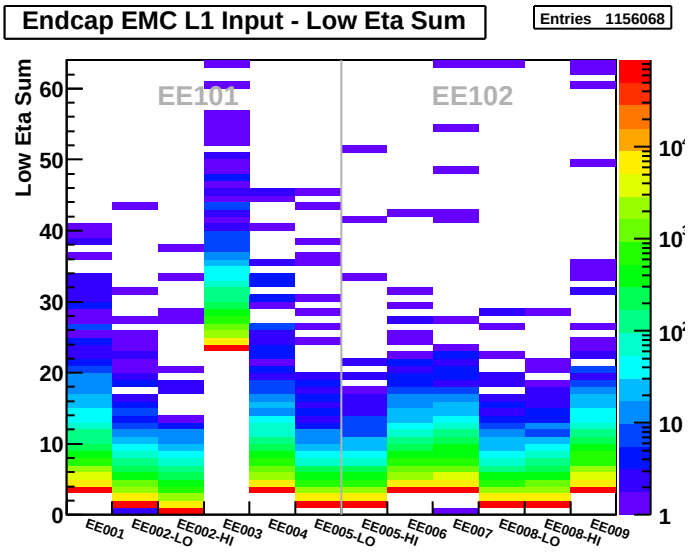

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

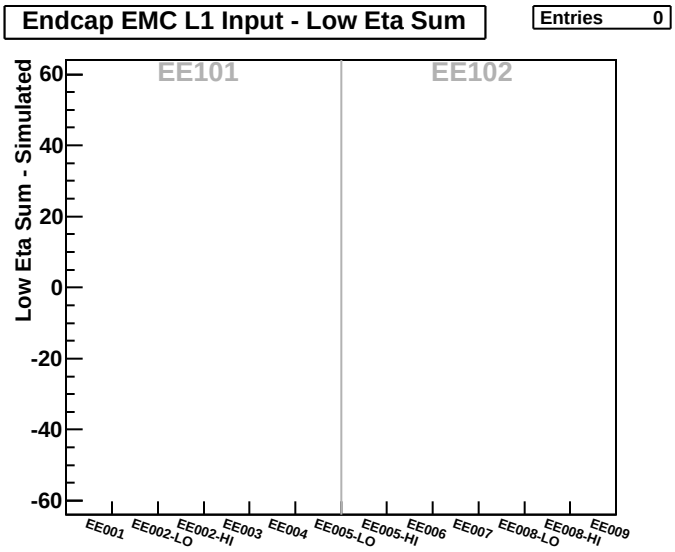

Barrel EMC L1 Input - High Eta Sum
Entries 3468204
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

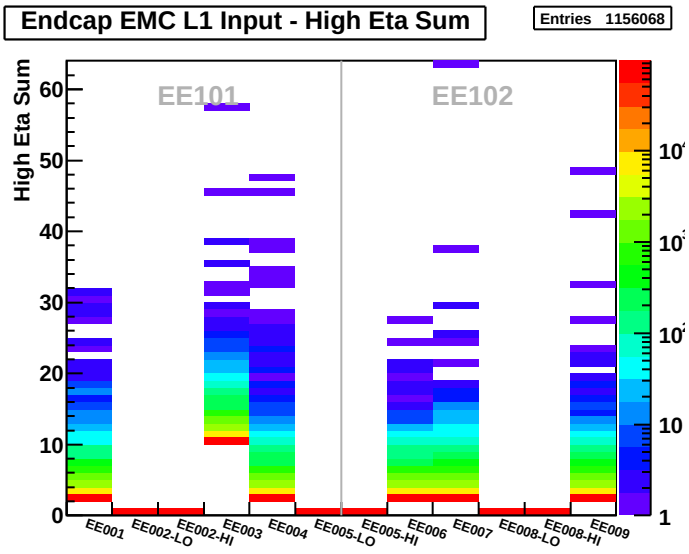

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

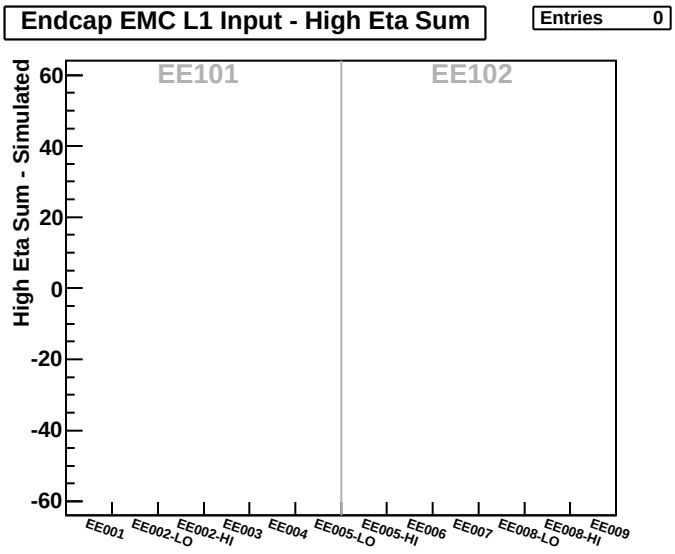

Barrel EMC L1 Input - High Tower Bits
Entries 3468204
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

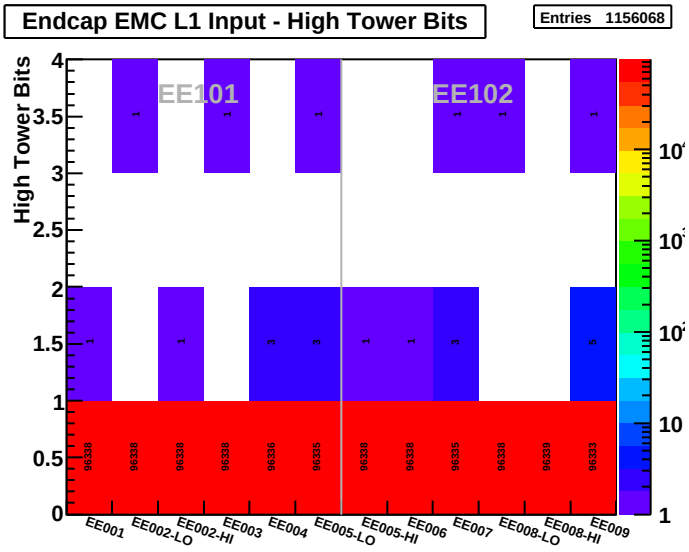

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

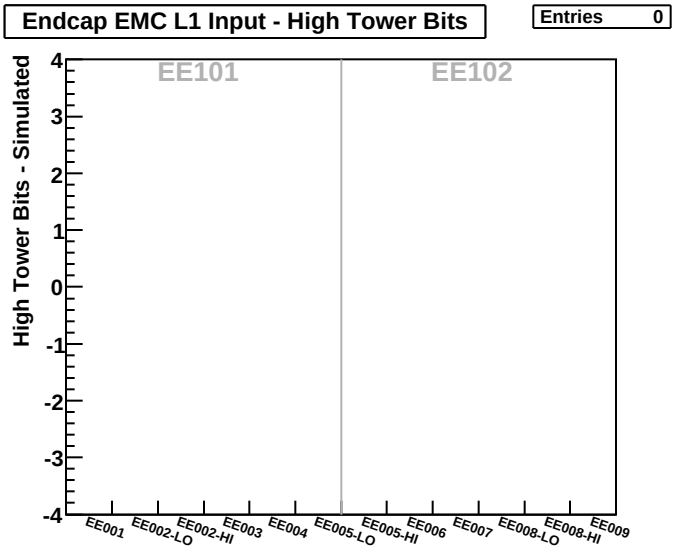

Endcap EMC L1 Input - Low Eta Sum
Entries 1156068
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

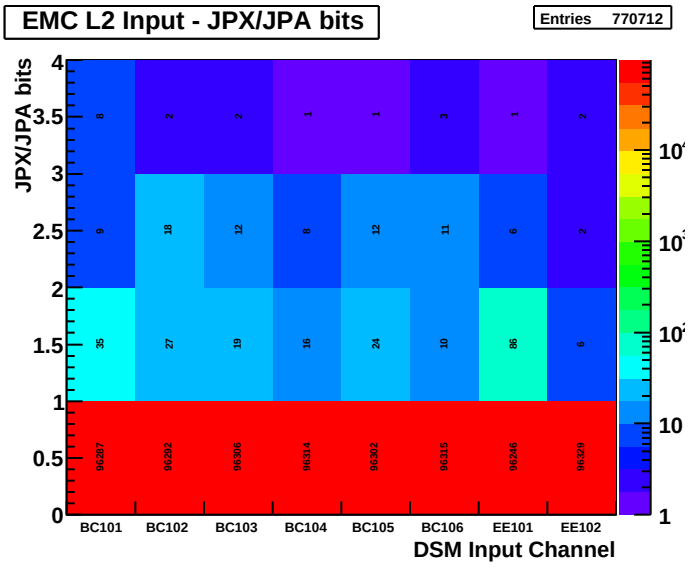

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

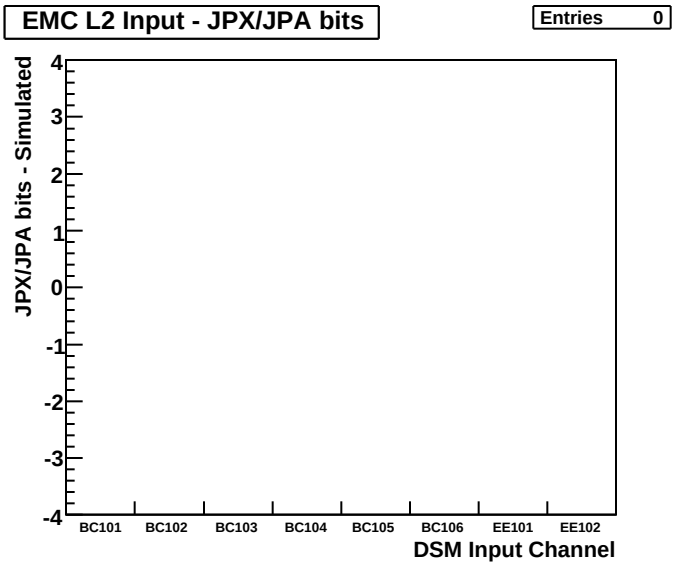

Endcap EMC L1 Input - High Eta Sum
Entries 1156068
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

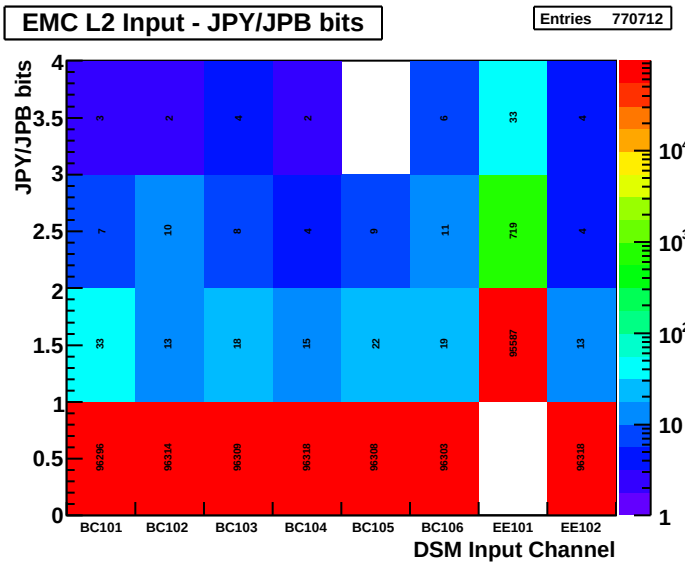

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

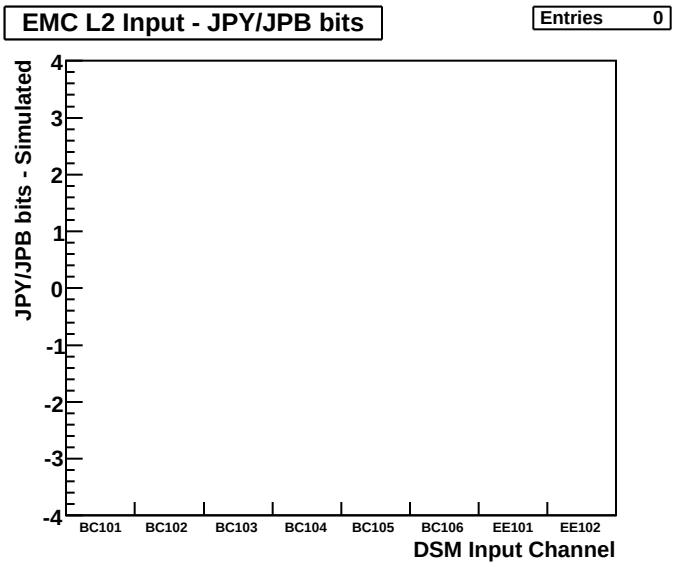

Endcap EMC L1 Input - High Tower Bits
Entries 1156068
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

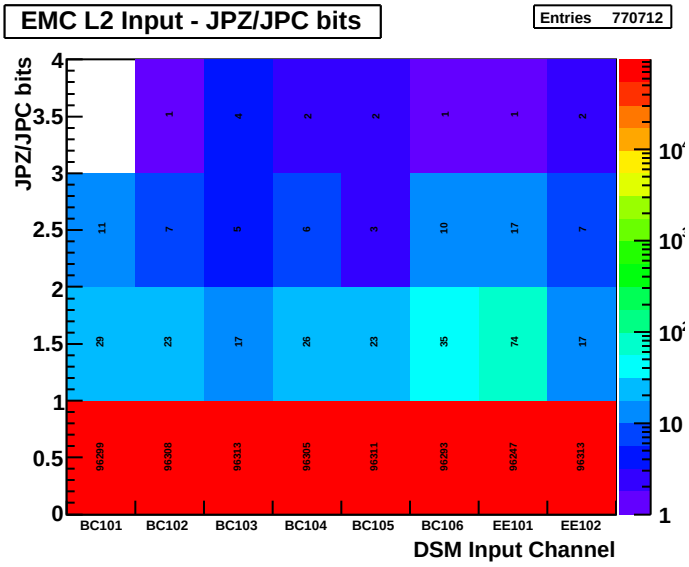

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

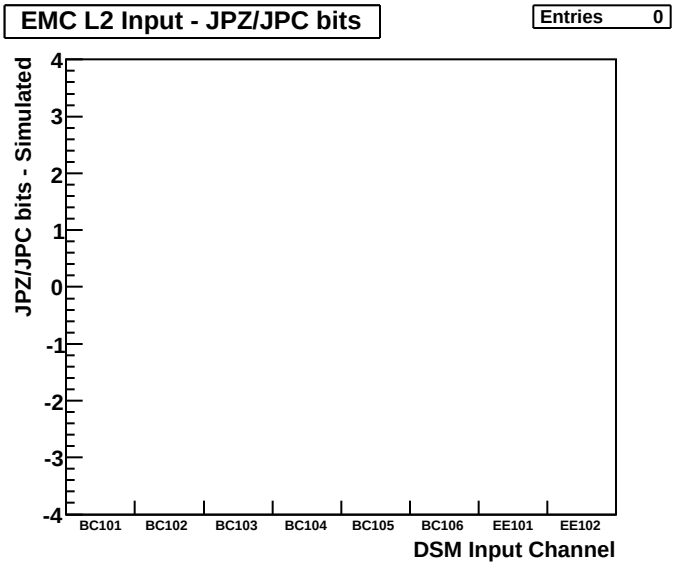

EMC L2 Input - JPX/JPA bits
Entries 770712
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

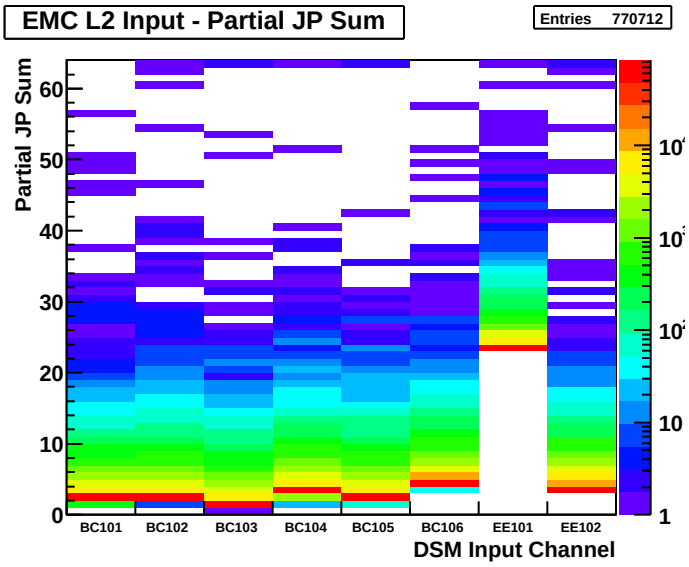

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

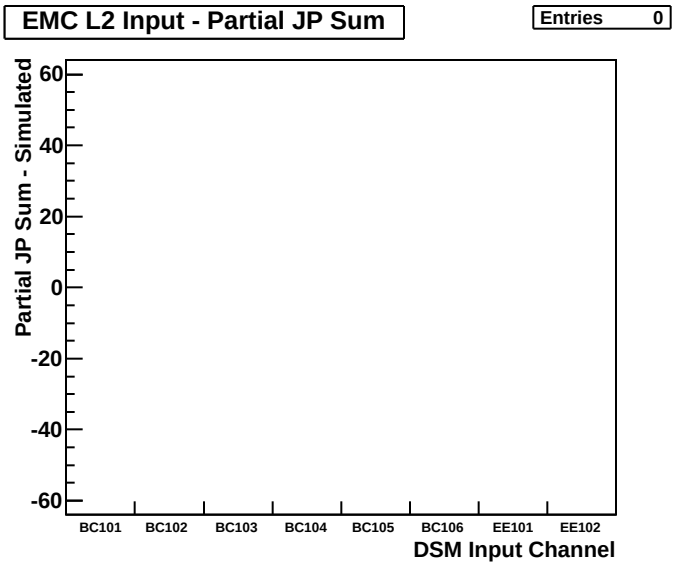

EMC L2 Input - JPY/JPB bits
Entries 770712
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

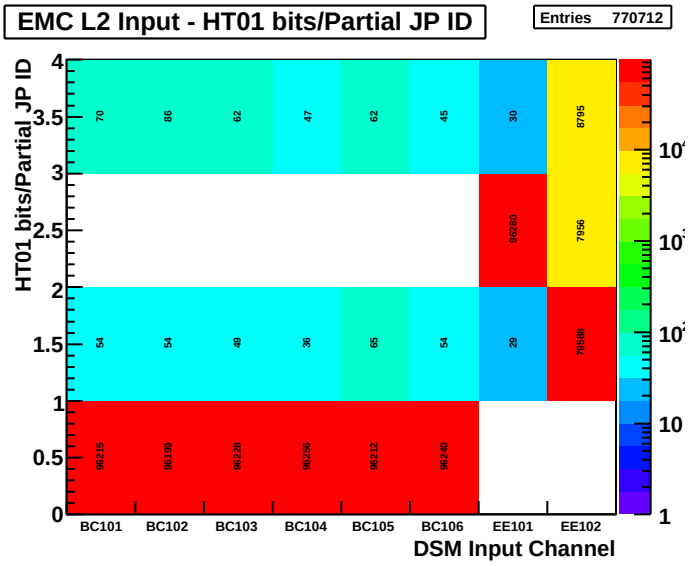

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

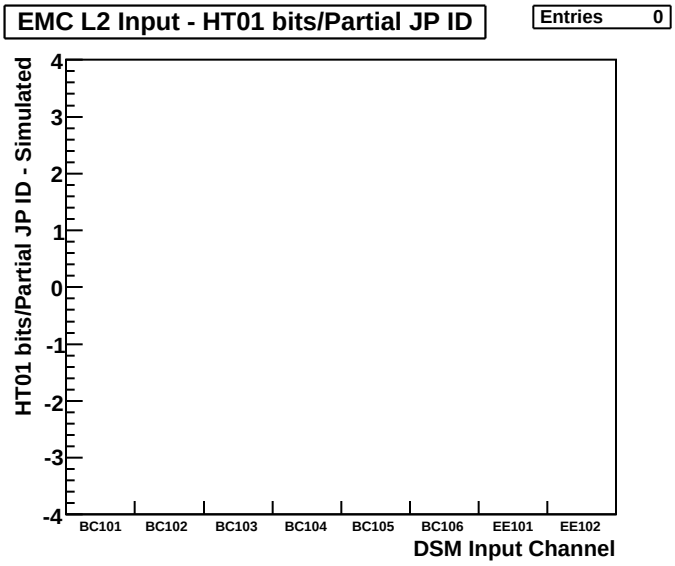

EMC L2 Input - JPZ/JPC bits
Entries 770712
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

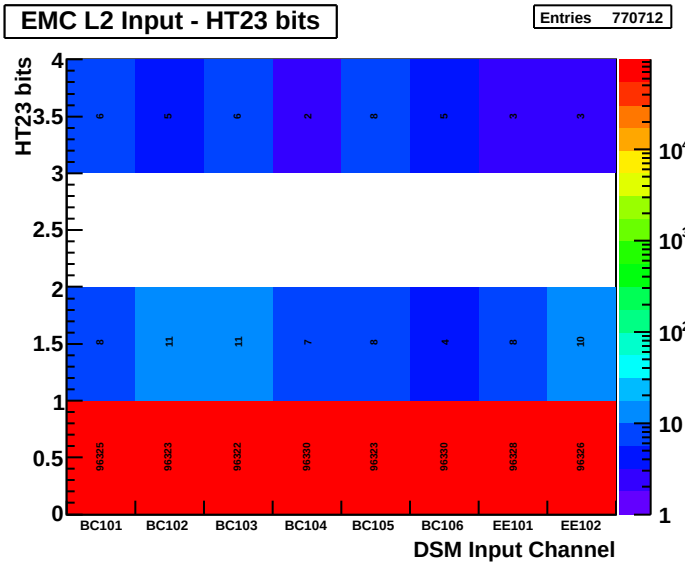

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

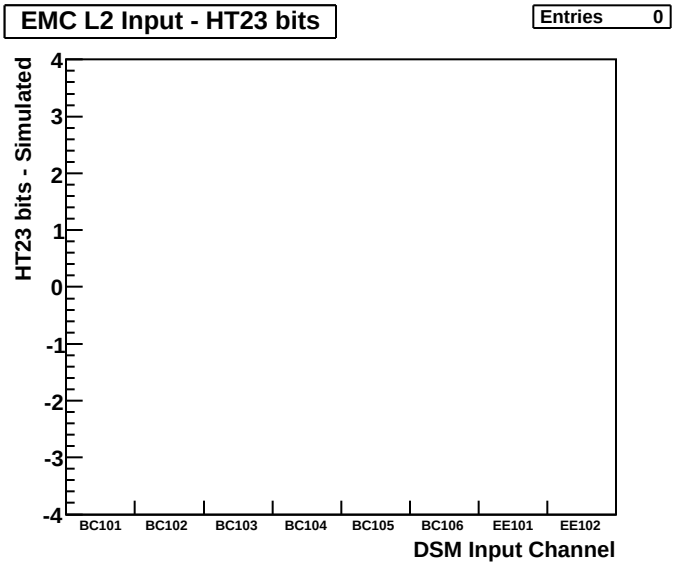

EMC L2 Input - Partial JP Sum
Entries 770712
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

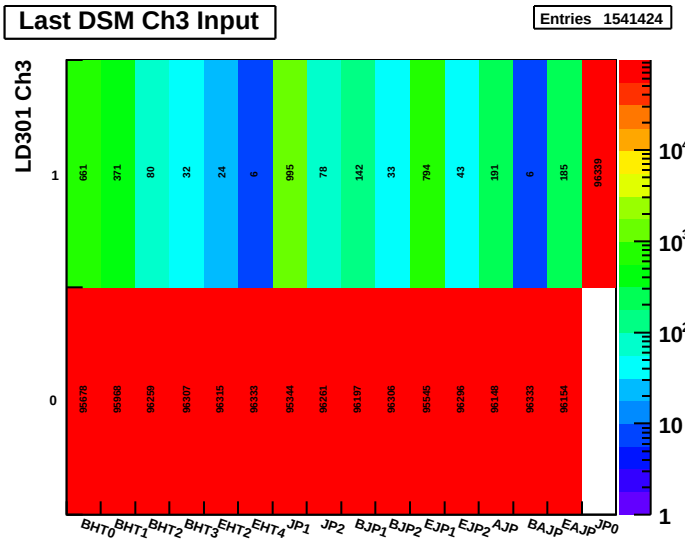

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

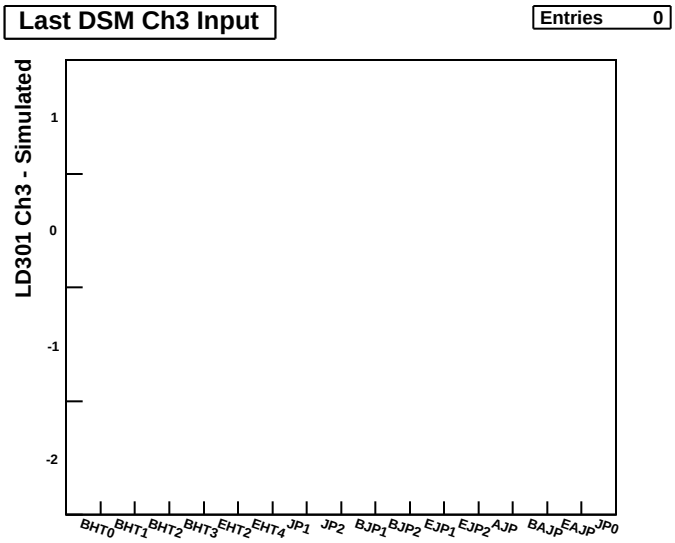

EMC L2 Input - HT01 bits/Partial JP ID
Entries 770712
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

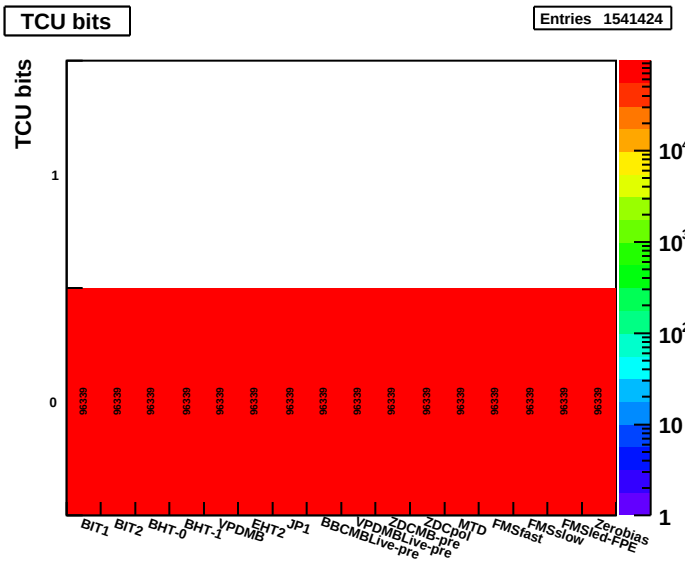

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

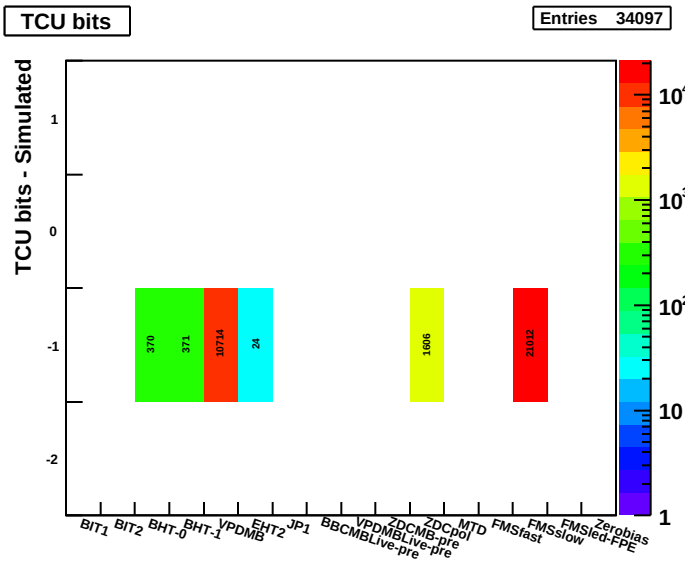

EMC L2 Input - HT23 bits
Entries 770712
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

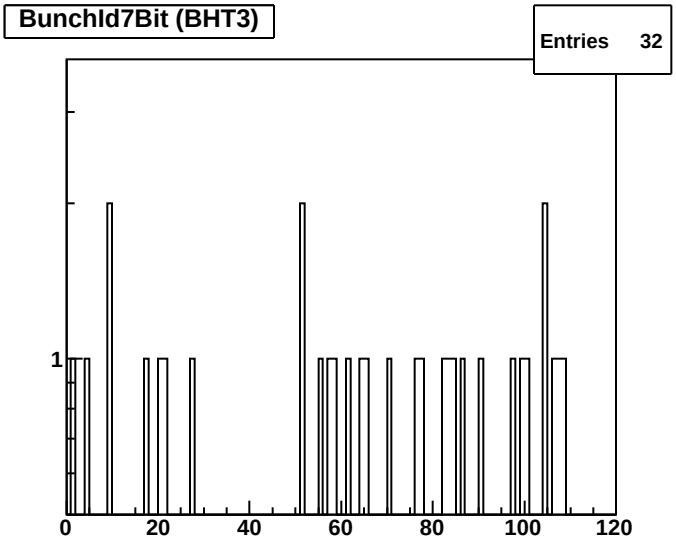

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

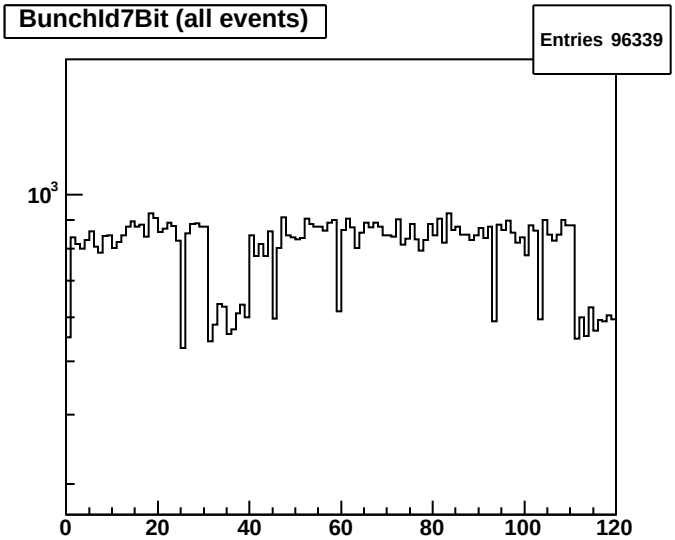

Last DSM Ch3 Input
Entries 1541424
LD301 Ch3
661 371 80 32 24 6 995 78 142 33 794 43 191 6 185 96339
95678 95968 96259 96307 96315 96333 95344 96261 96197 96306 95545 96286 96148 96333 96154
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

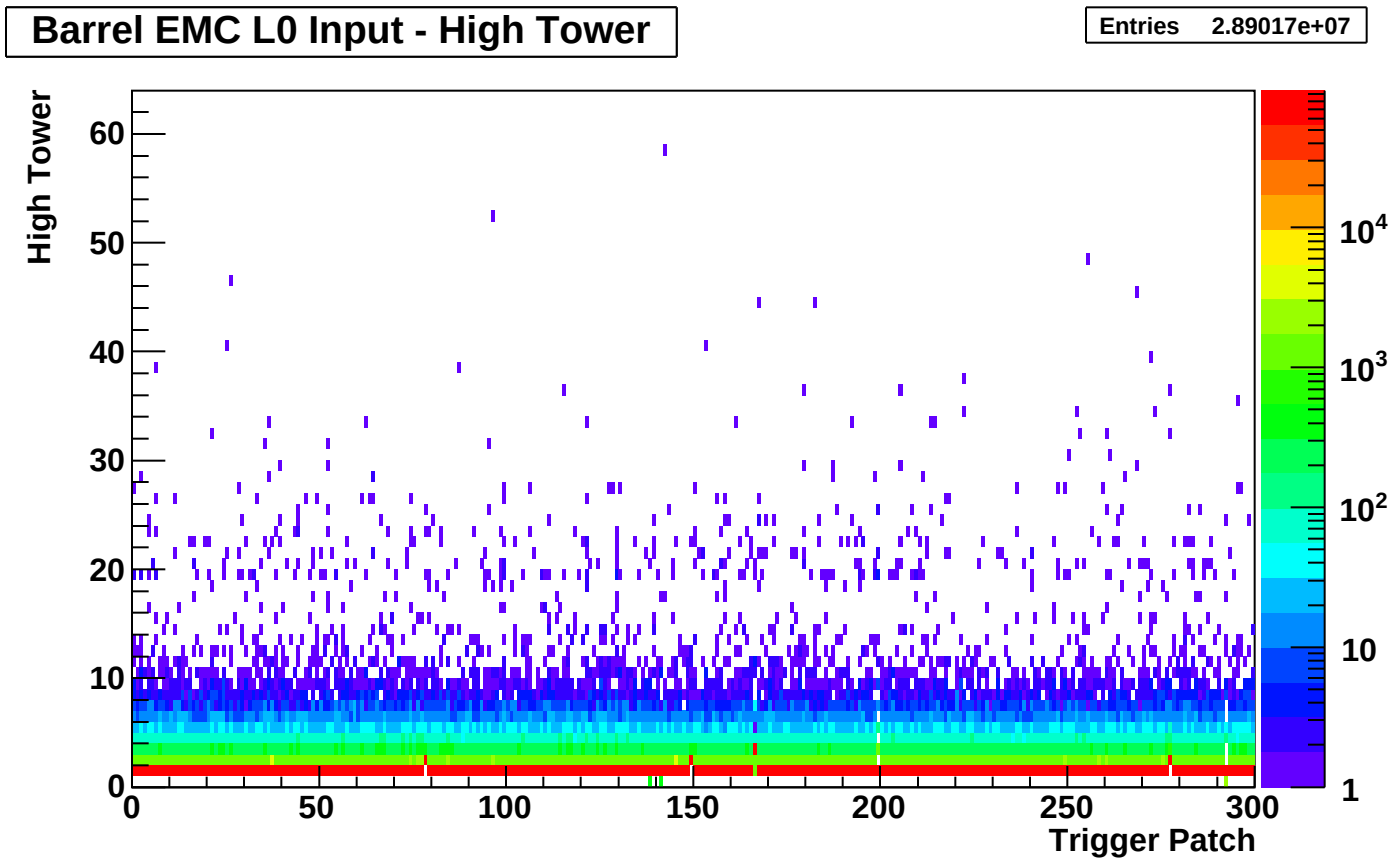

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

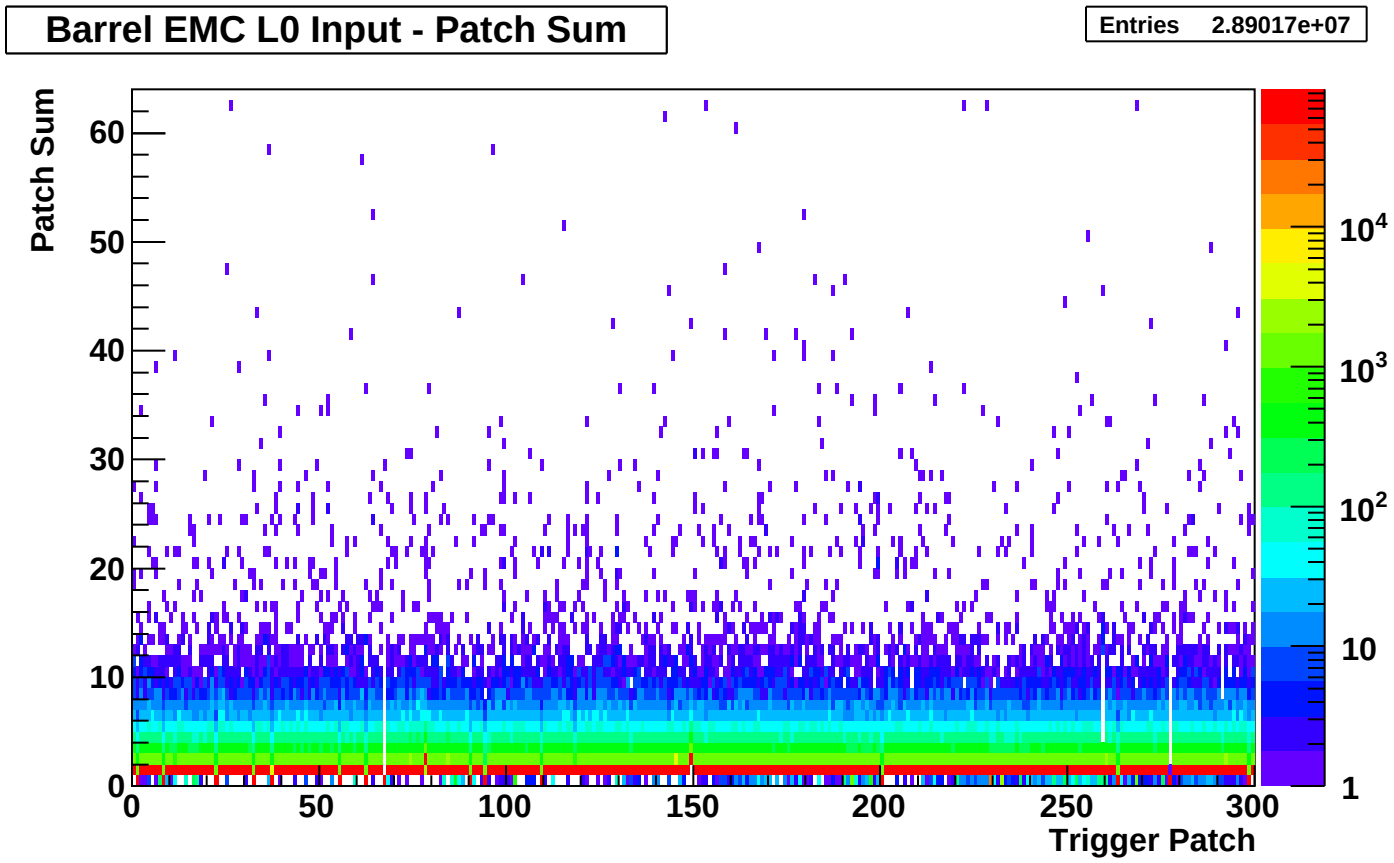

TCU bits
Entries 1541424
TCU bits
96339
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

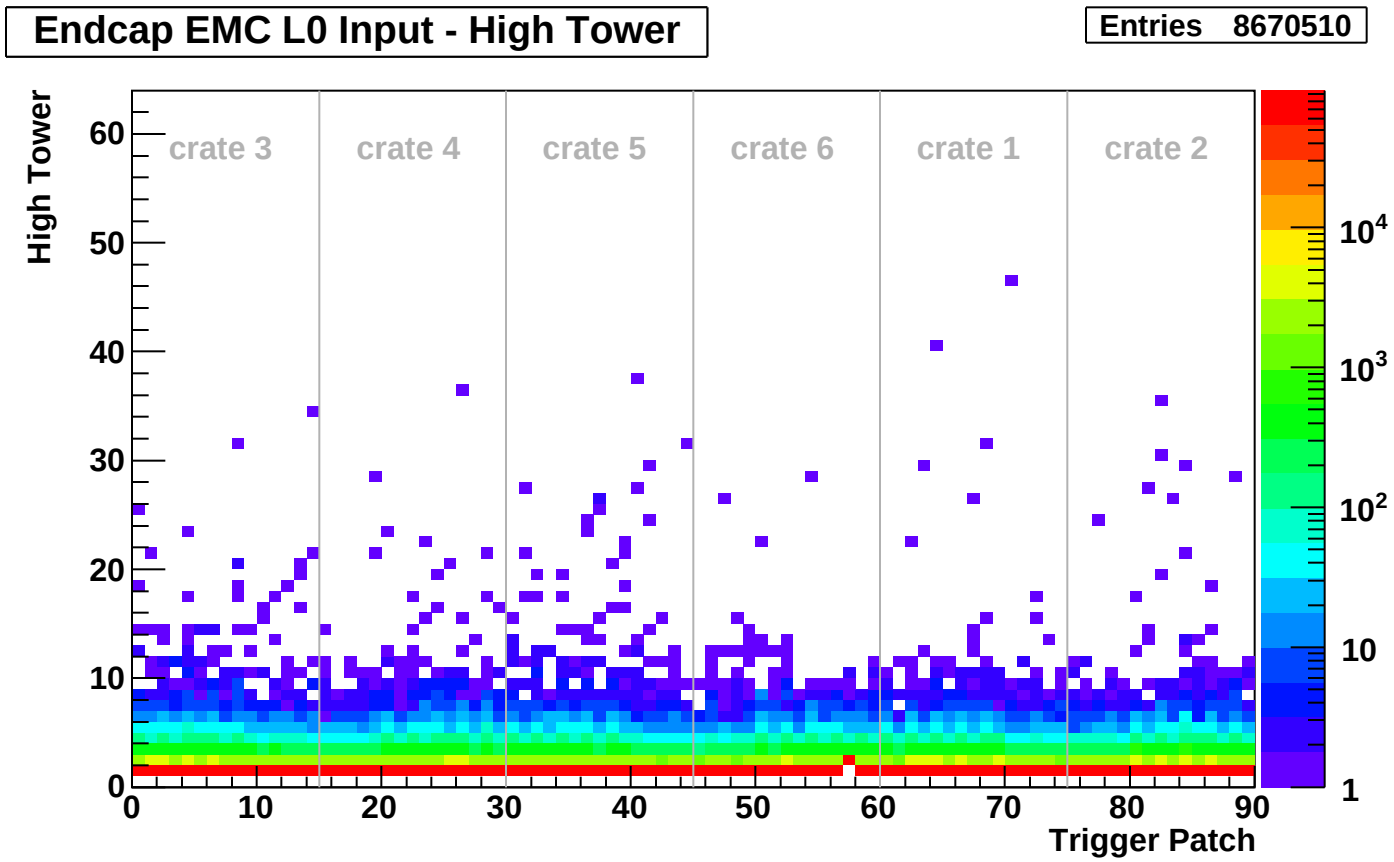

TCU bits
Entries 34097
TCU bits - Simulated
370 371 10714 24 1606 21012
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

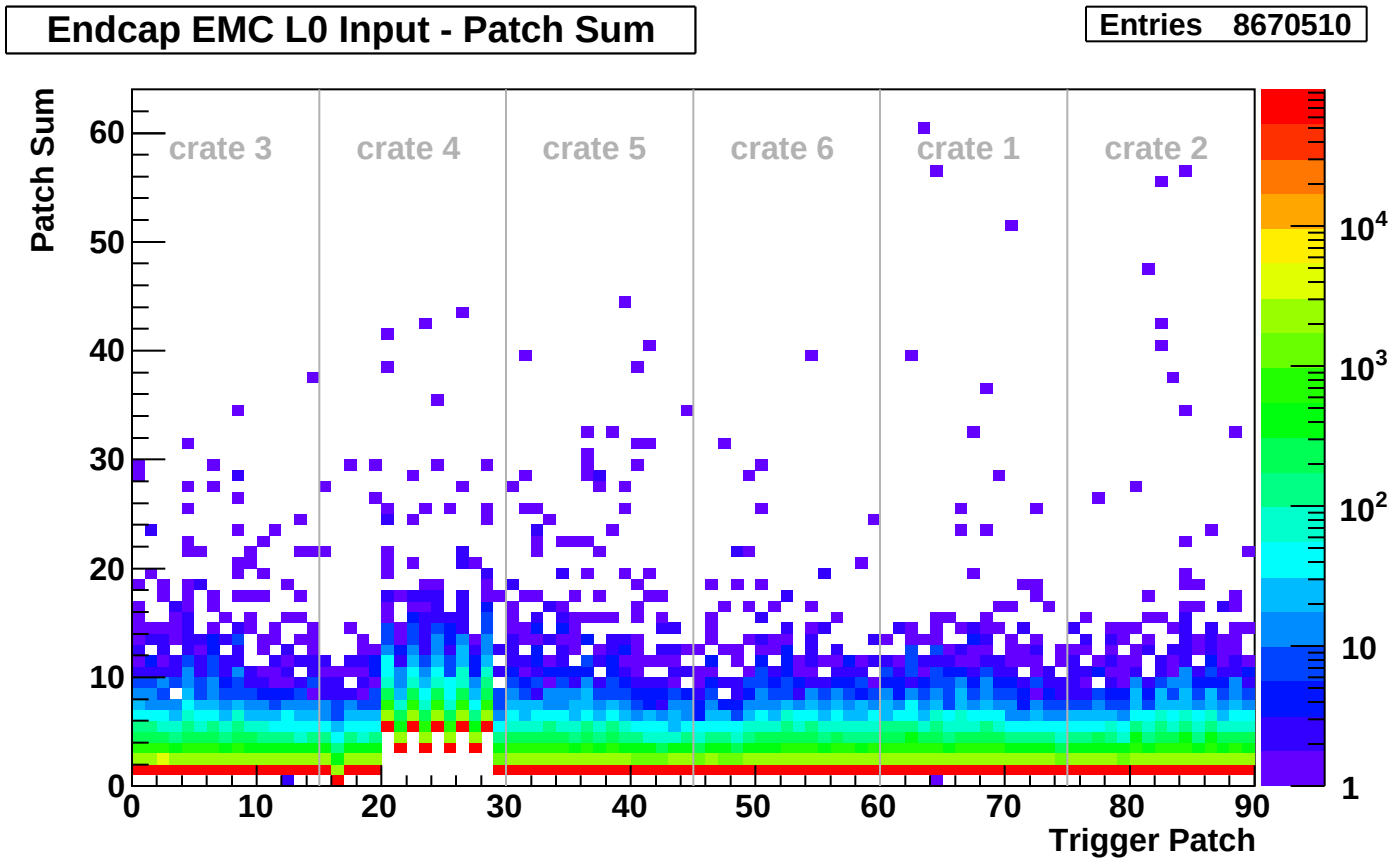

BunchId7Bit (BHT3)
Entries 32
0 20 40 60 80 100 120

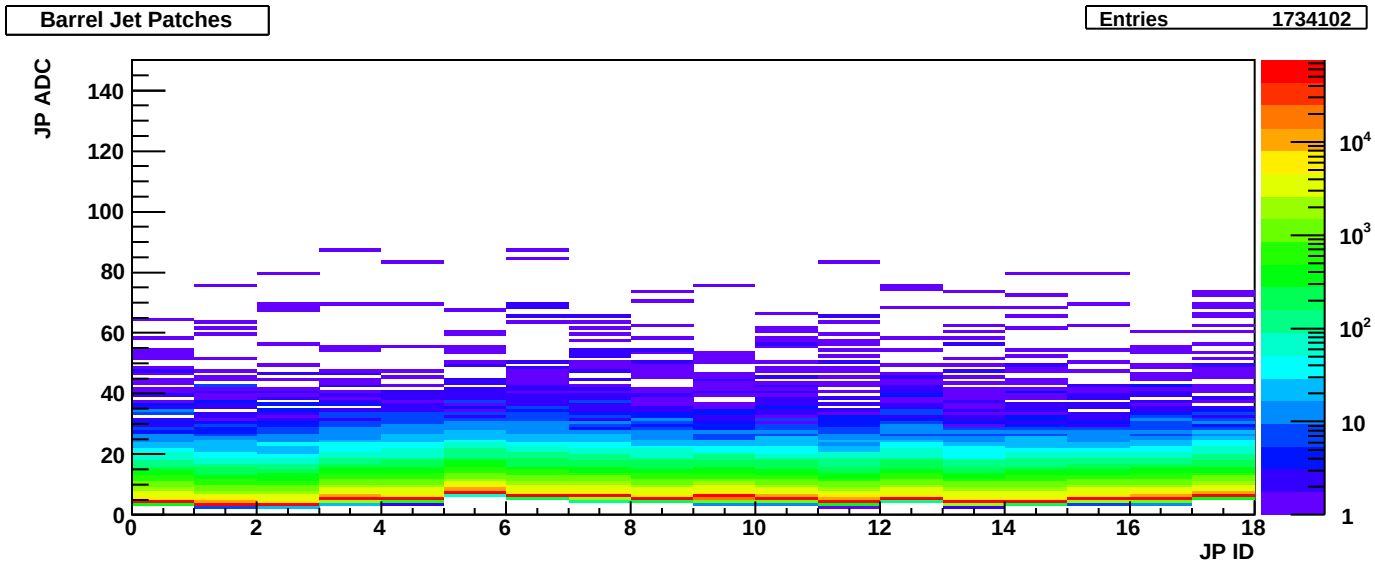

BunchId7Bit (all events)
Entries 96339
0 20 40 60 80 100 120

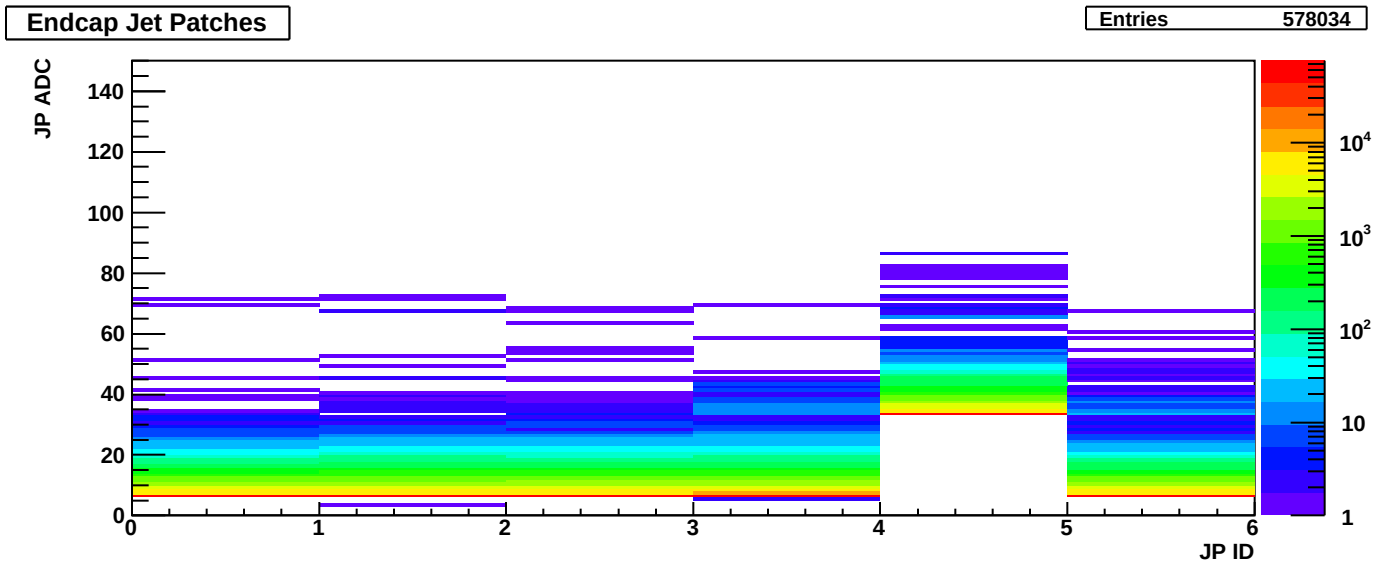

Barrel EMC L0 Input - High Tower
Entries 2.89017e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

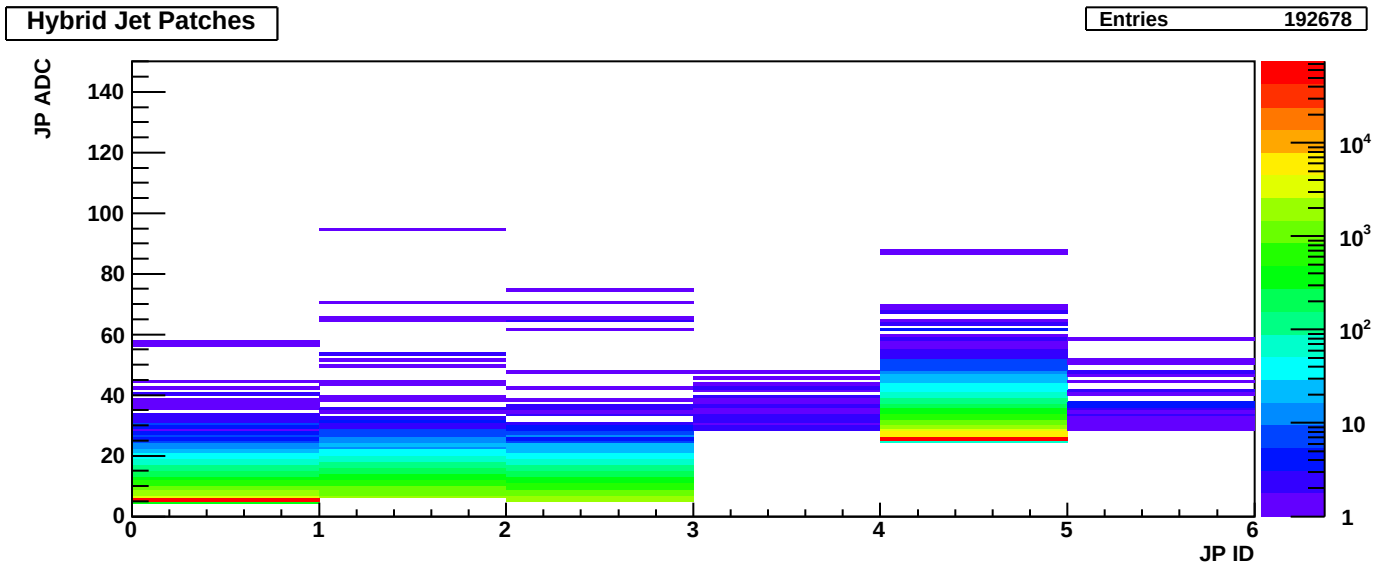

Barrel EMC L0 Input - Patch Sum
Entries 2.89017e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

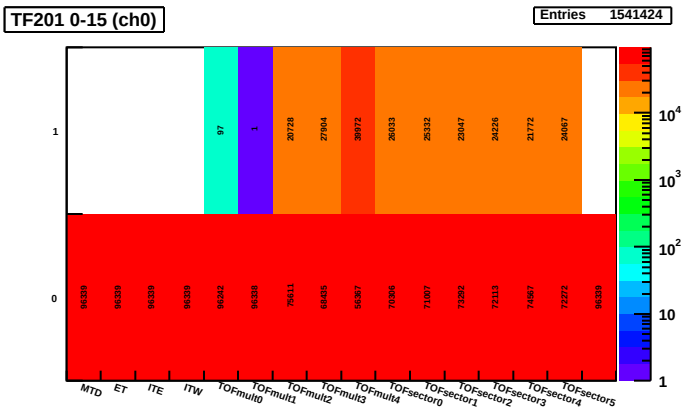

Endcap EMC L0 Input - High Tower
Entries 8670510
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

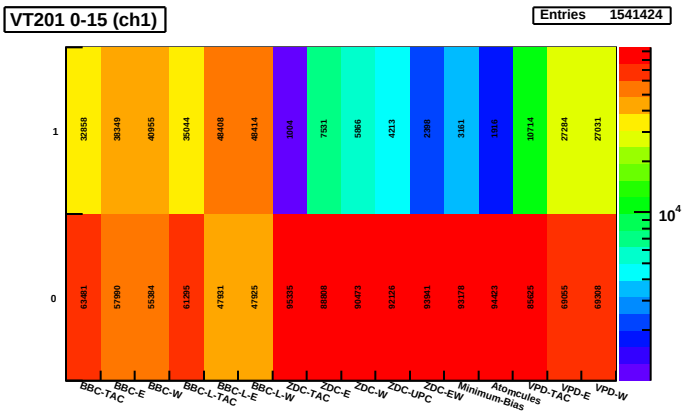

Endcap EMC L0 Input - Patch Sum
Entries 8670510
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

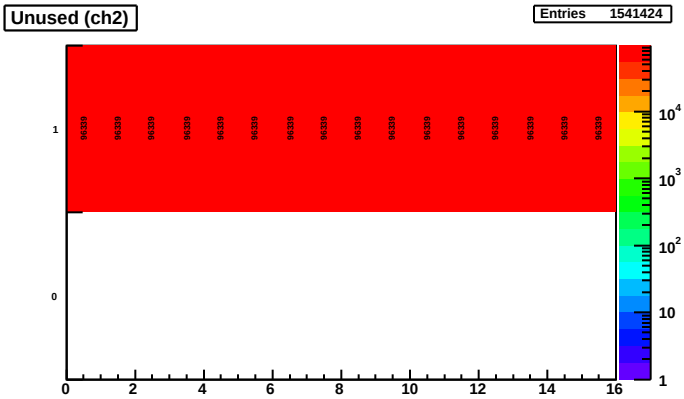

Barrel Jet Patches
Entries 1734102
JP ADC
JP ID

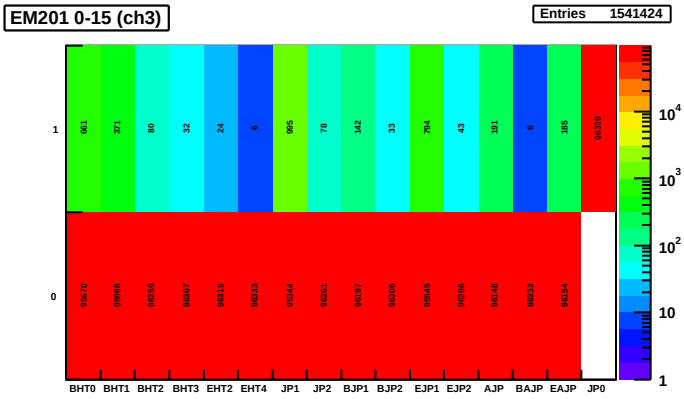

Endcap Jet Patches
Entries 578034
JP ADC
JP ID

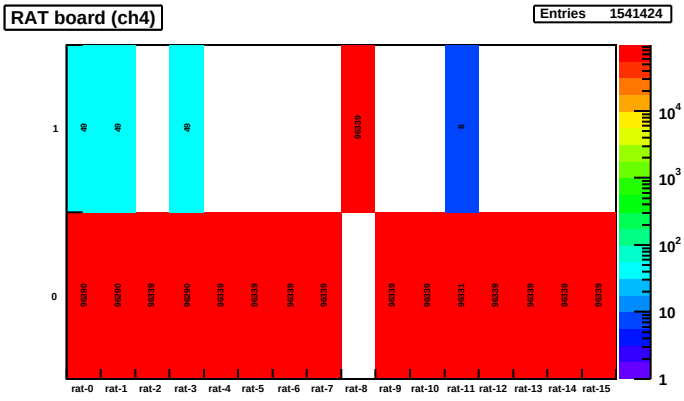

Hybrid Jet Patches
Entries 192678
JP ADC
JP ID

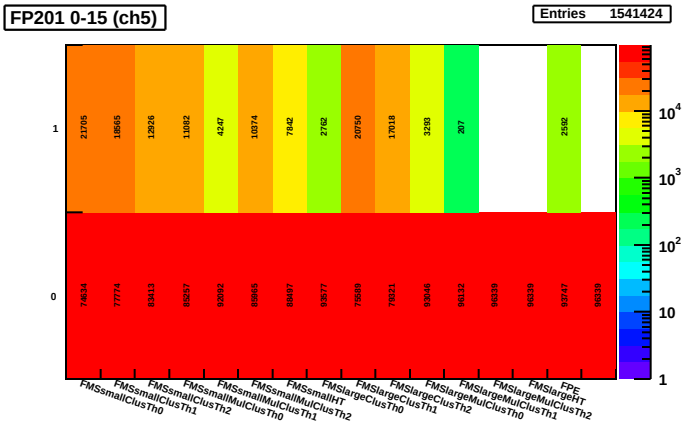

TF201 0-15 (ch0)
Entries 1541424
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

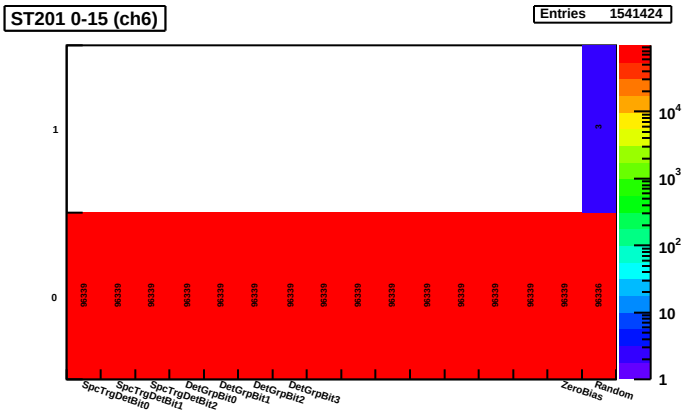

VT201 0-15 (ch1)
Entries 1541424
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

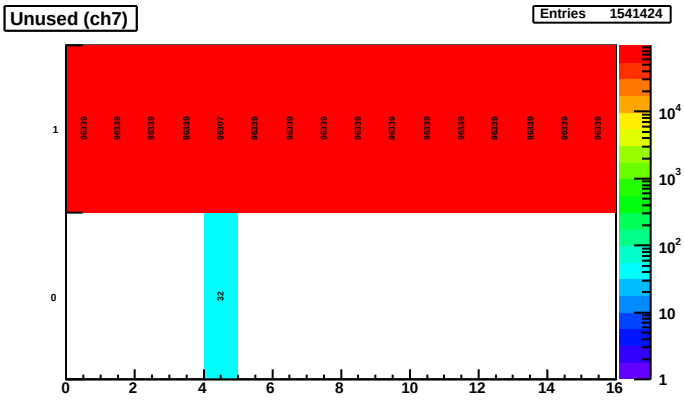

Unused (ch2)
Entries 1541424

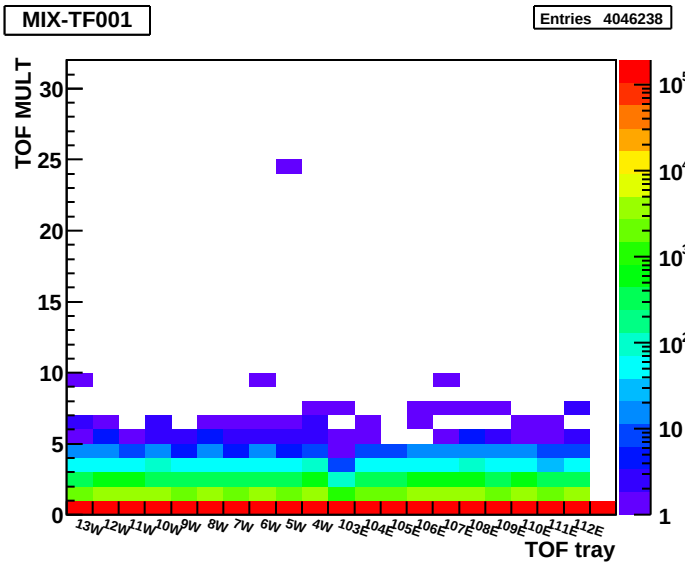

EM201 0-15 (ch3)
Entries 1541424
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

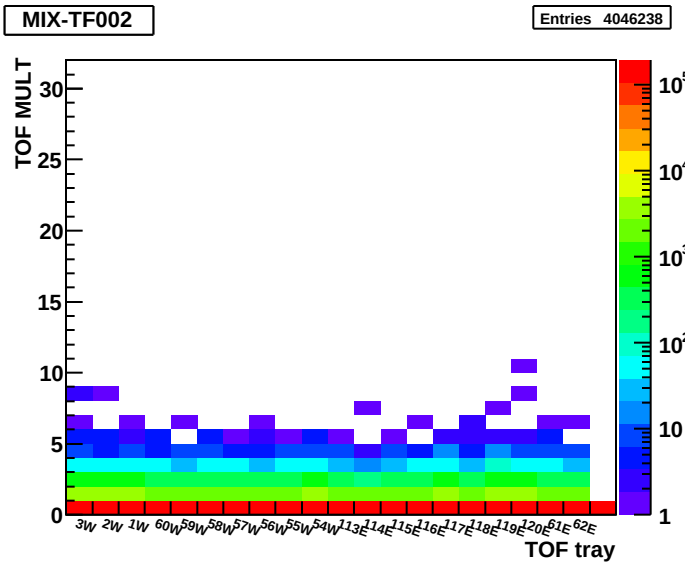

RAT board (ch4)
Entries 1541424
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

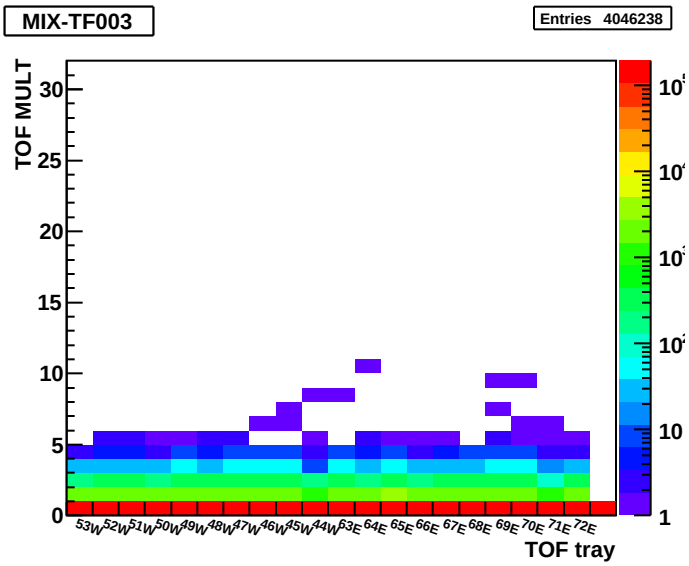

FP201 0-15 (ch5)
Entries 1541424
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

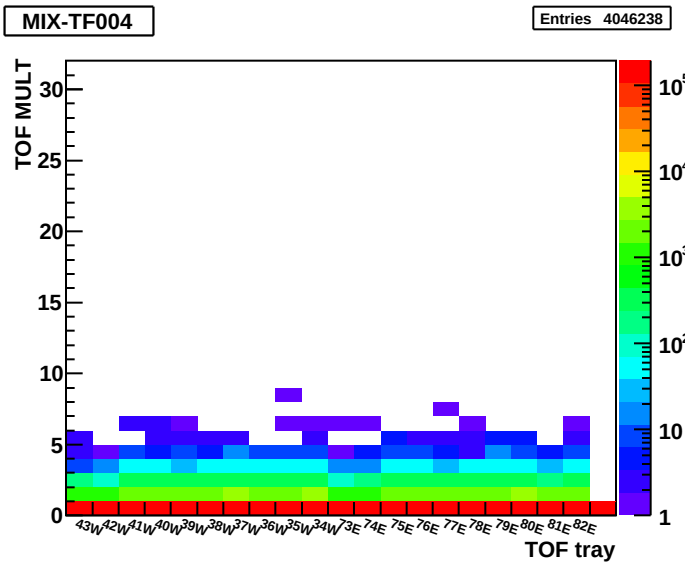

ST201 0-15 (ch6)
Entries 1541424
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

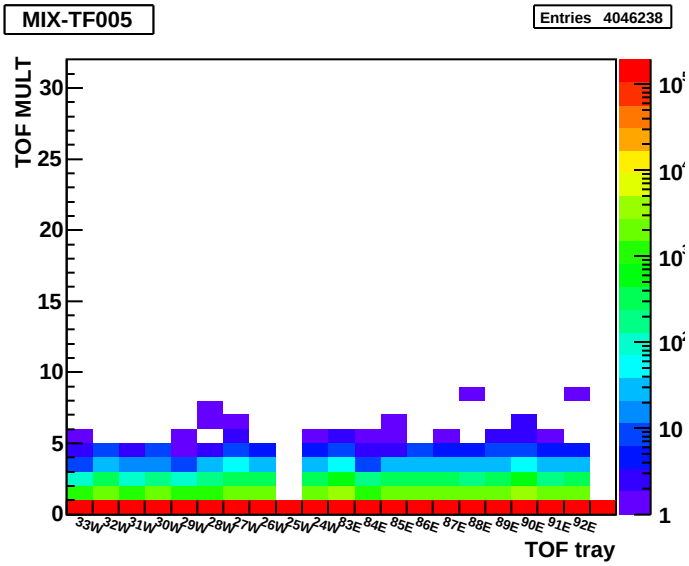

Unused (ch7)
Entries 1541424

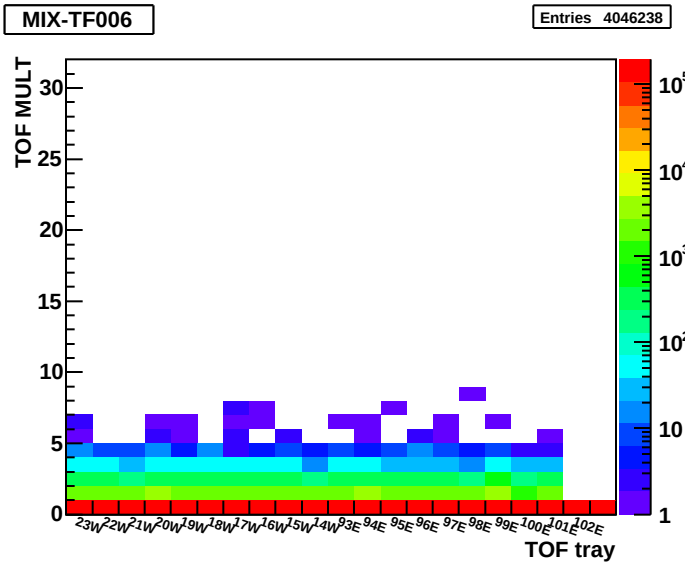

MIX-TF001
Entries 4046238
TOF MULT
TOF tray

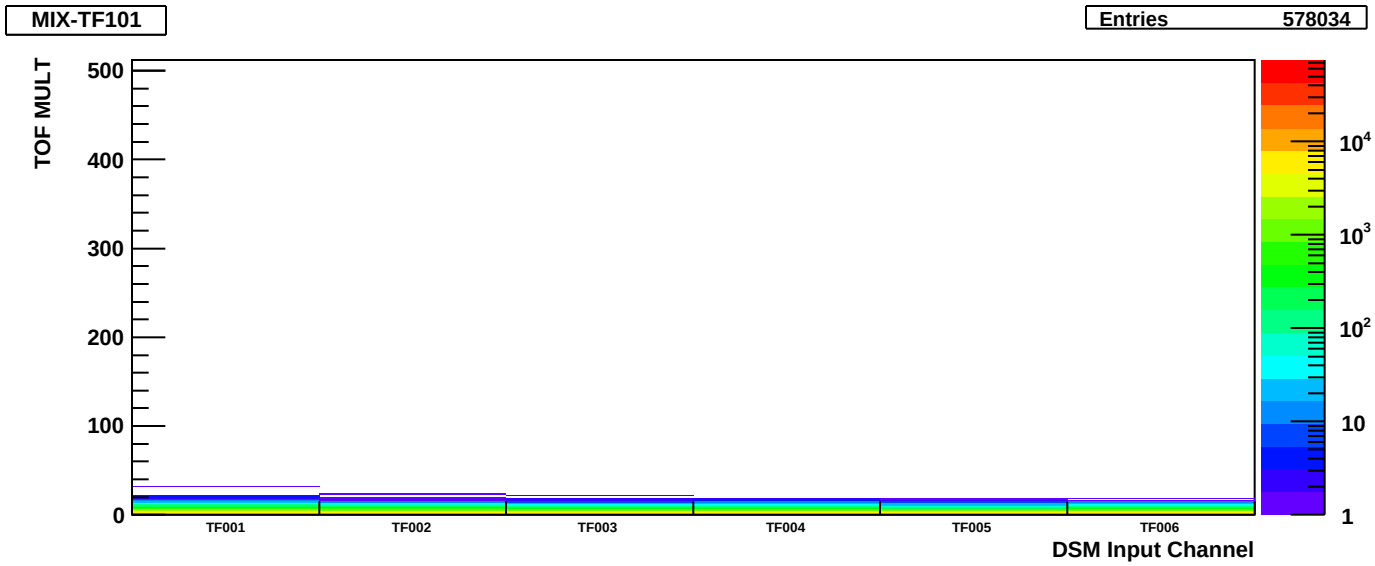

MIX-TF002
Entries 4046238
TOF MULT
TOF tray

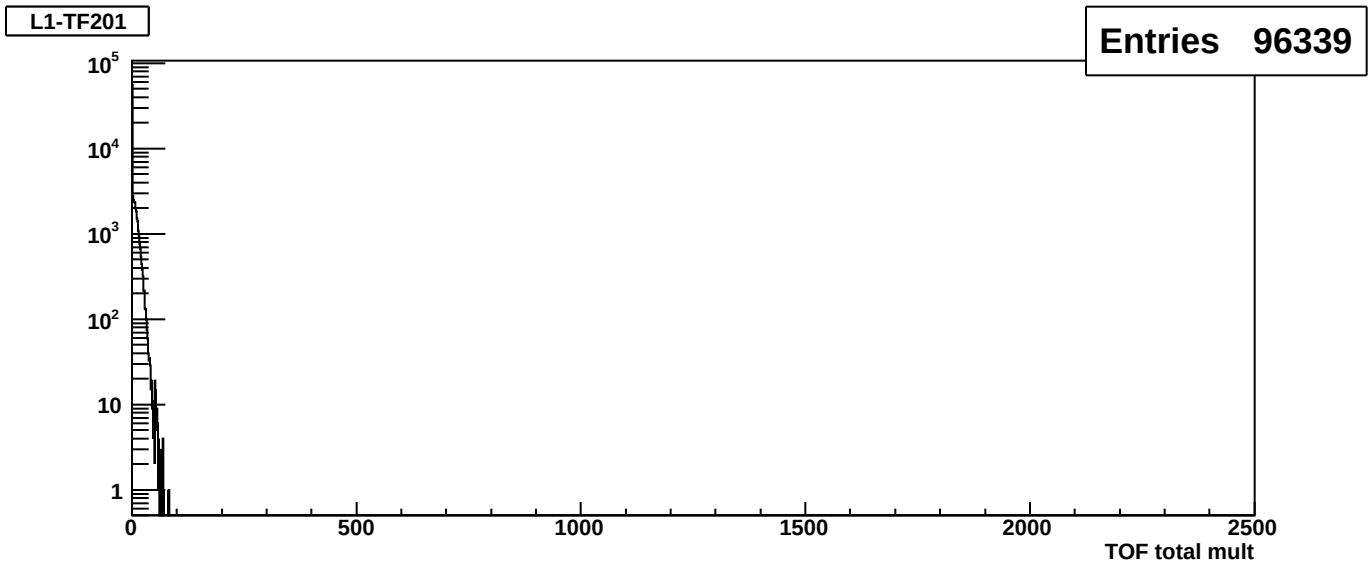

MIX-TF003
Entries 4046238
TOF MULT
TOF tray

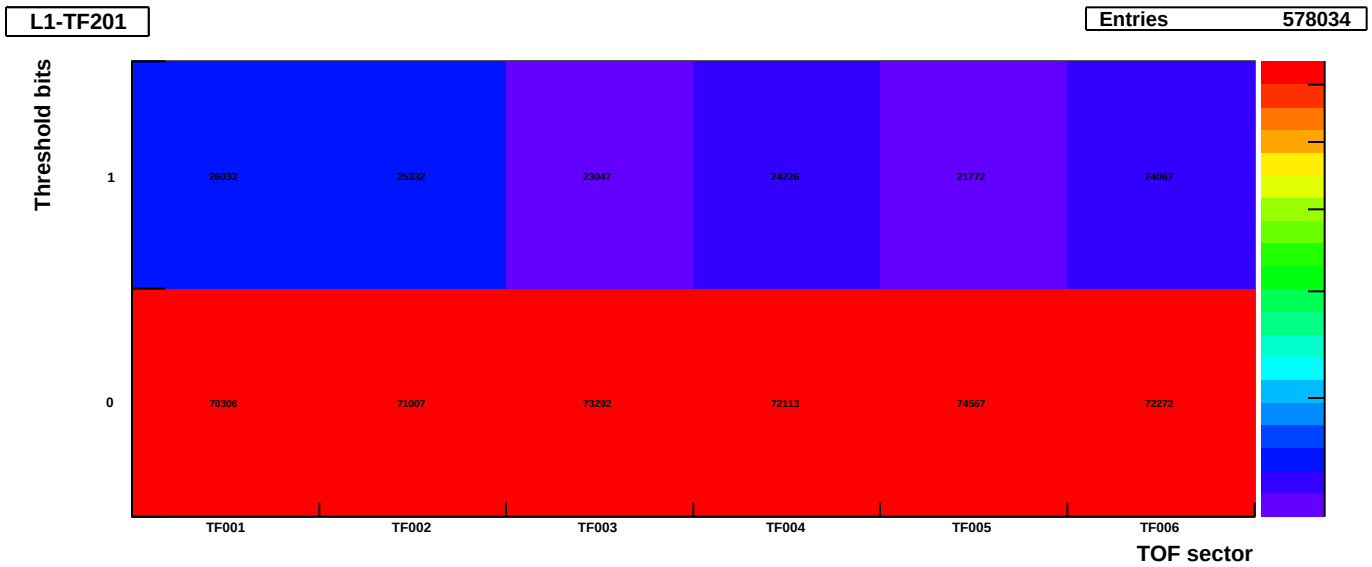

MIX-TF004
Entries 4046238
TOF MULT
TOF tray

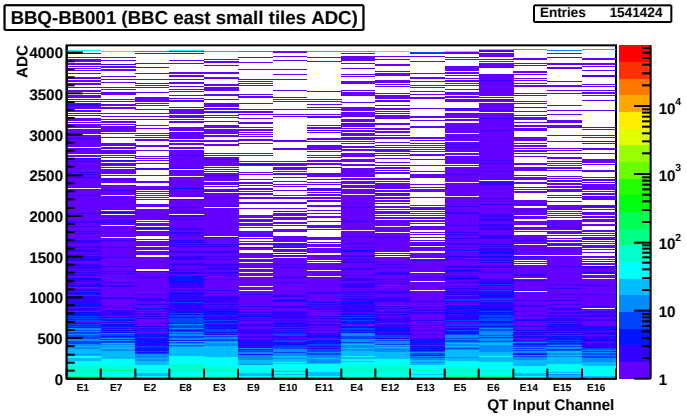

MIX-TF005
Entries 4046238
TOF MULT
TOF tray

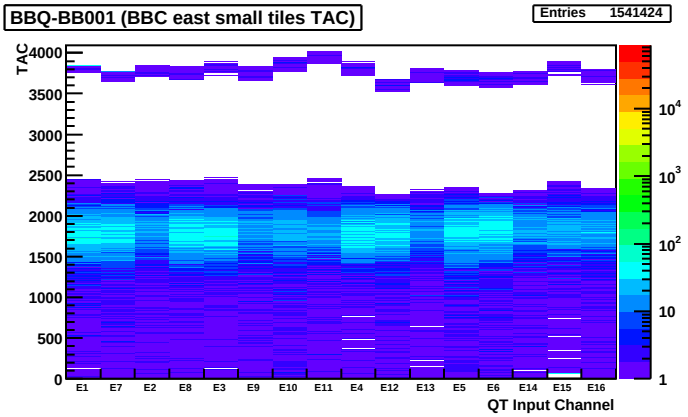

MIX-TF006
Entries 4046238
TOF MULT
TOF tray

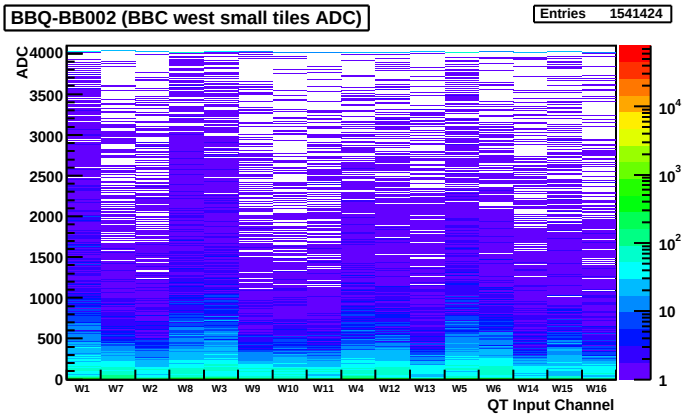

MIX-TF101
Entries 578034
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

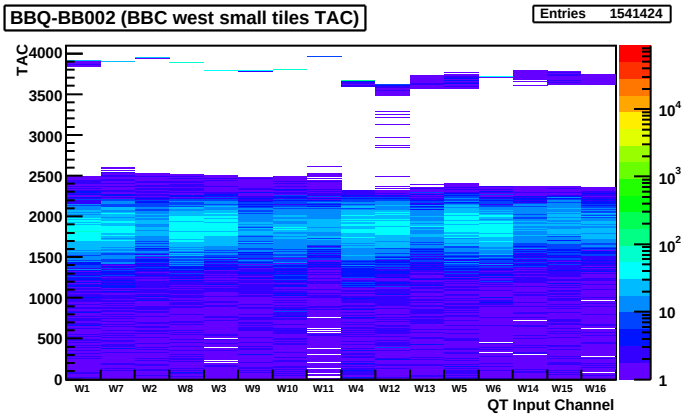

L1-TF201
Entries 96339
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

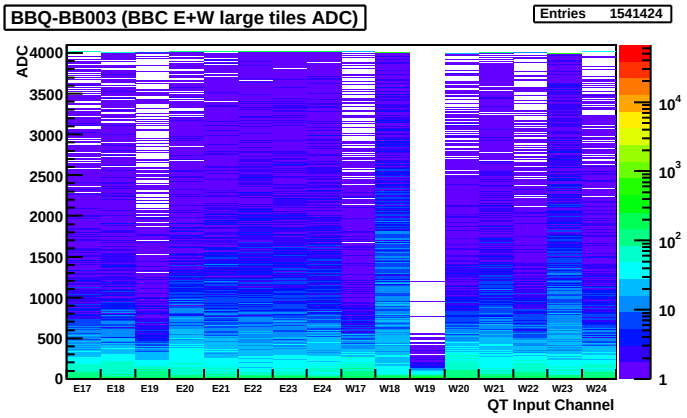

L1-TF201
Entries 578034
Threshold bits
1
0
26033
25332
23047
24226
21772
24067
70306
71007
73292
72113
74567
72272
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

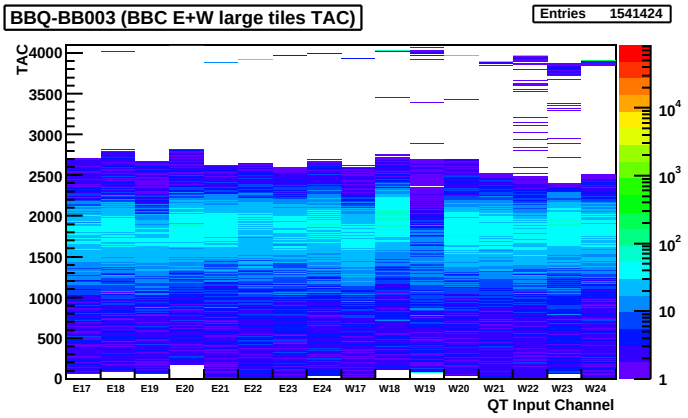

BBQ-BB001 (BBC east small tiles ADC)
Entries 1541424
ADC
QT Input Channel

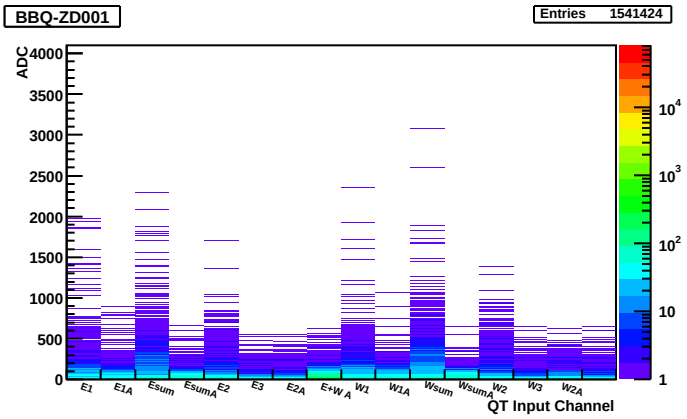

BBQ-BB001 (BBC east small tiles TAC)
Entries 1541424
TAC
QT Input Channel

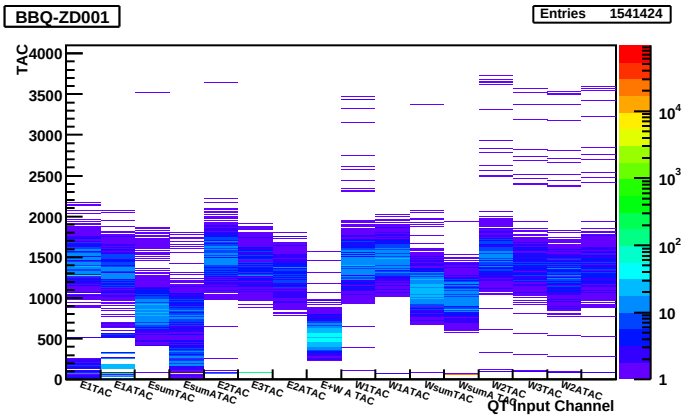

BBQ-BB002 (BBC west small tiles ADC)
Entries 1541424
ADC
QT Input Channel

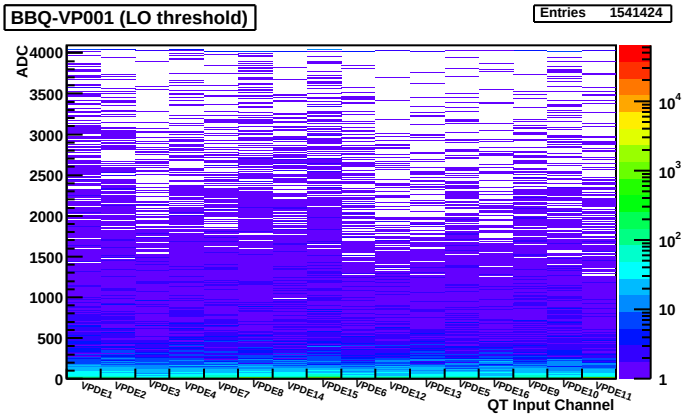

BBQ-BB002 (BBC west small tiles TAC)
Entries 1541424
TAC
QT Input Channel

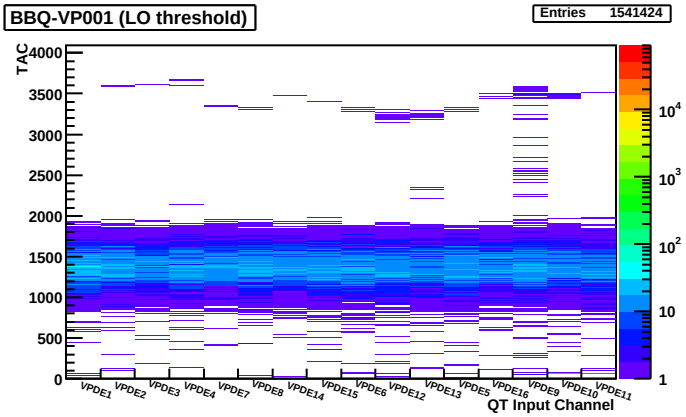

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1541424
ADC
QT Input Channel

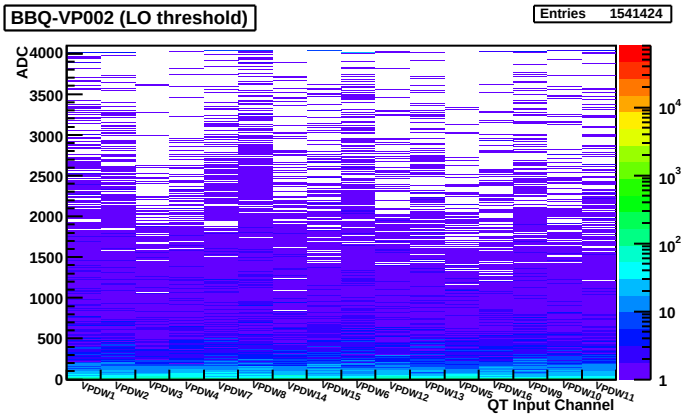

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1541424
TAC
QT Input Channel

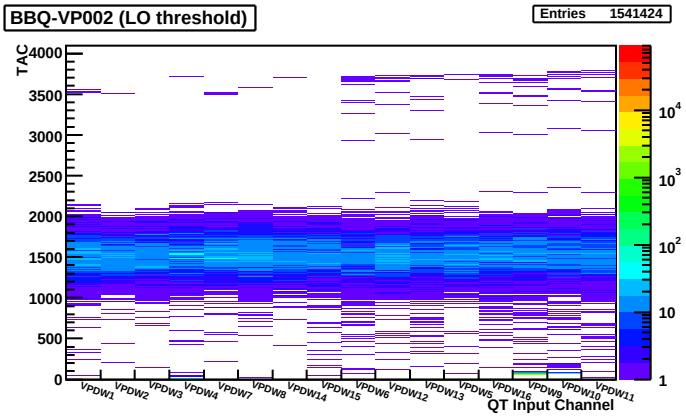

BBQ-ZD001
Entries 1541424
ADC
QT Input Channel

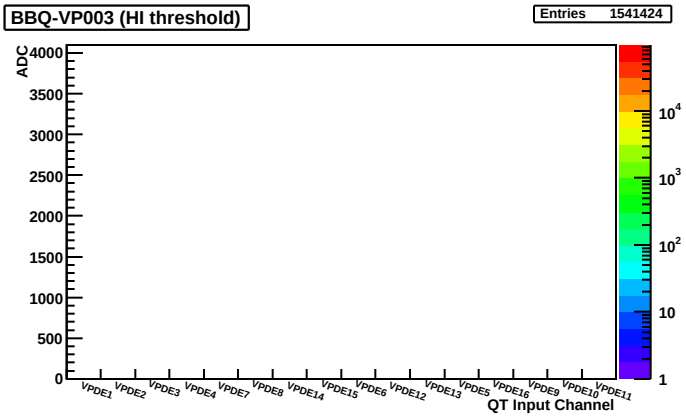

BBQ-ZD001
Entries 1541424
TAC
QT Input Channel

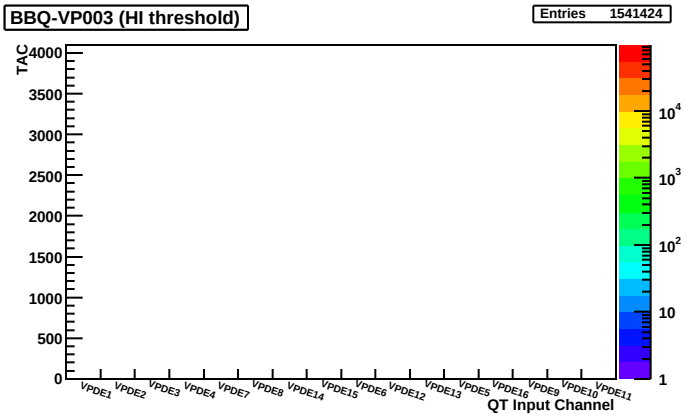

BBQ-VP001 (LO threshold)
Entries 1541424
ADC
QT Input Channel

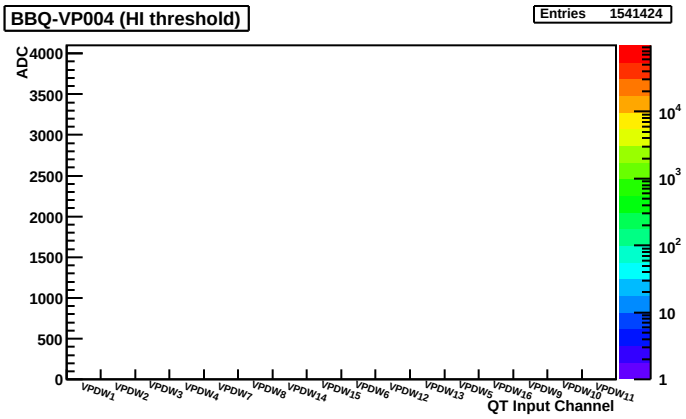

BBQ-VP001 (LO threshold)
Entries 1541424
TAC
QT Input Channel

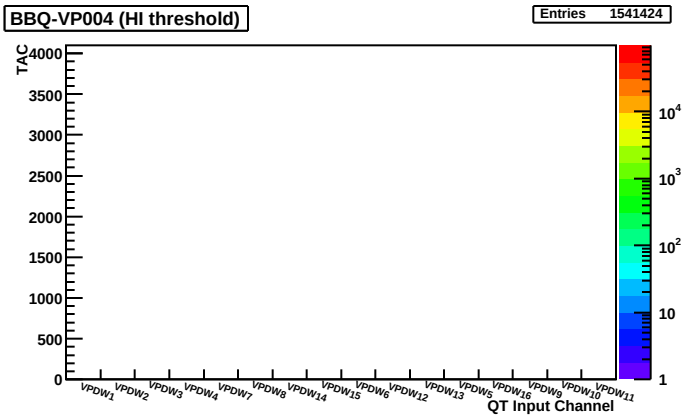

BBQ-VP002 (LO threshold)
Entries 1541424
ADC
QT Input Channel

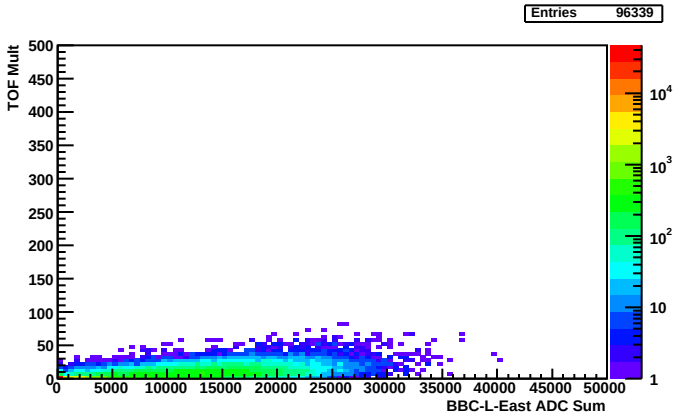

BBQ-VP002 (LO threshold)
Entries 1541424
TAC
QT Input Channel

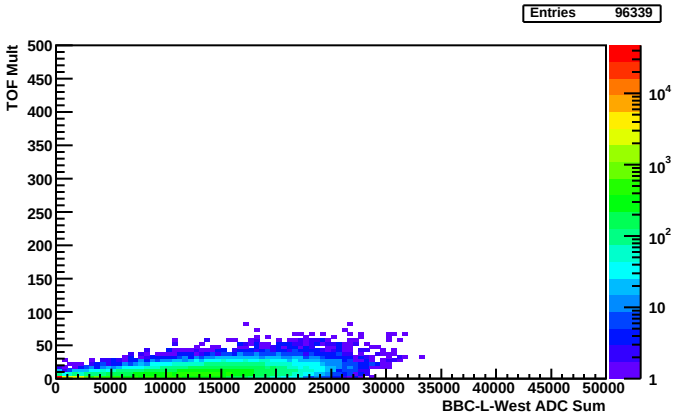

BBQ-VP003 (HI threshold)
Entries 1541424
ADC
QT Input Channel

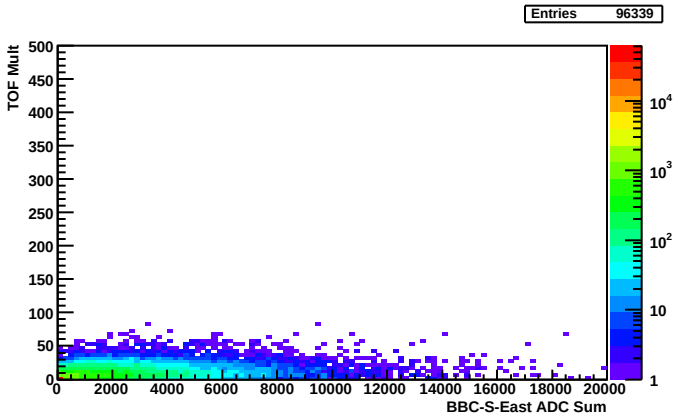

BBQ-VP003 (HI threshold)
Entries 1541424
TAC
QT Input Channel

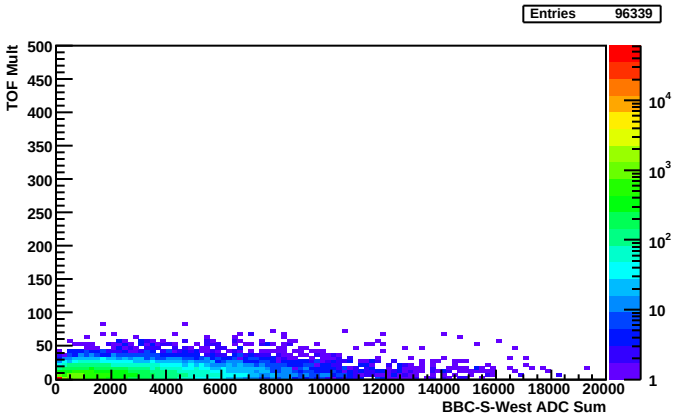

BBQ-VP004 (HI threshold)
Entries 1541424
ADC
QT Input Channel

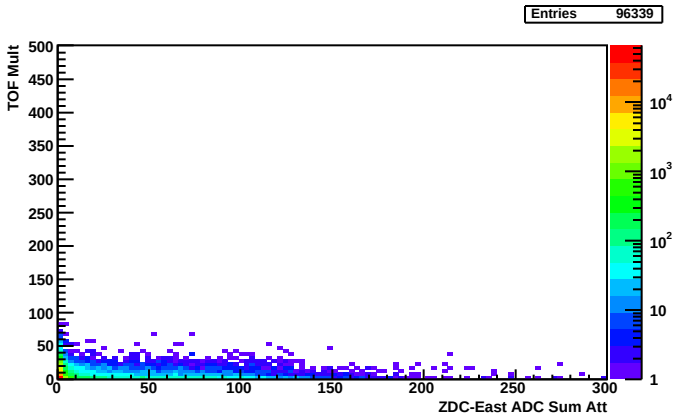

BBQ-VP004 (HI threshold)
Entries 1541424
TAC
QT Input Channel

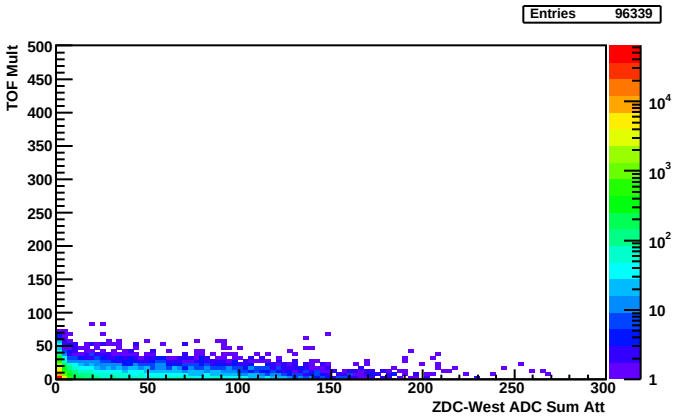

Entries 96339
TOF Mult
BBC-L-East ADC Sum

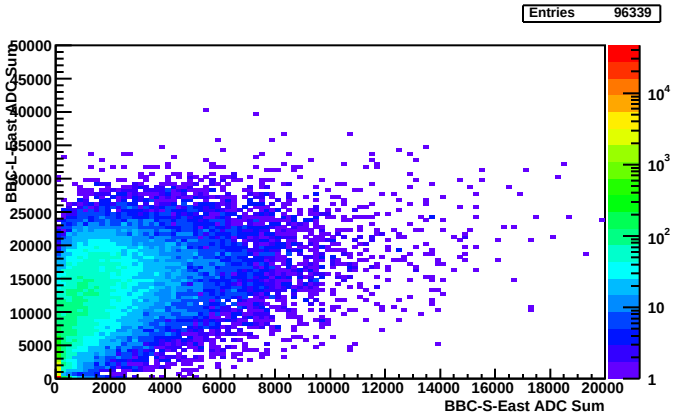

Entries 96339
TOF Mult
BBC-L-West ADC Sum

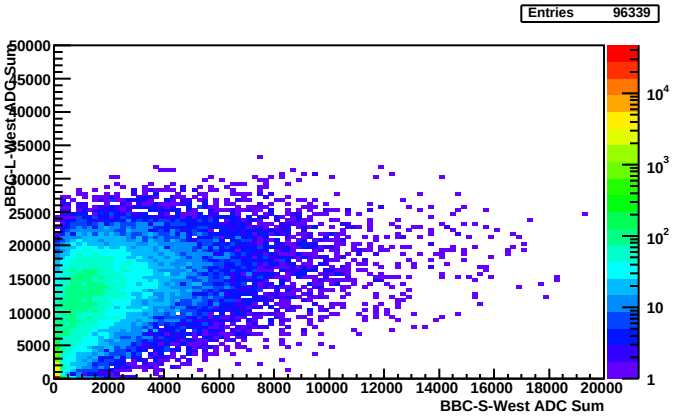

Entries 96339
TOF Mult
BBC-S-East ADC Sum

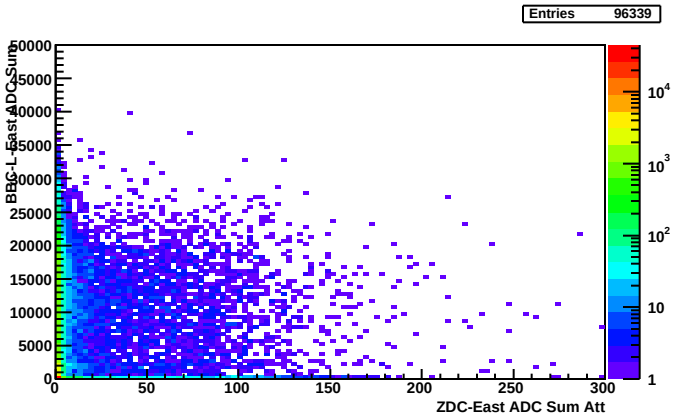

Entries 96339
TOF Mult
BBC-S-West ADC Sum

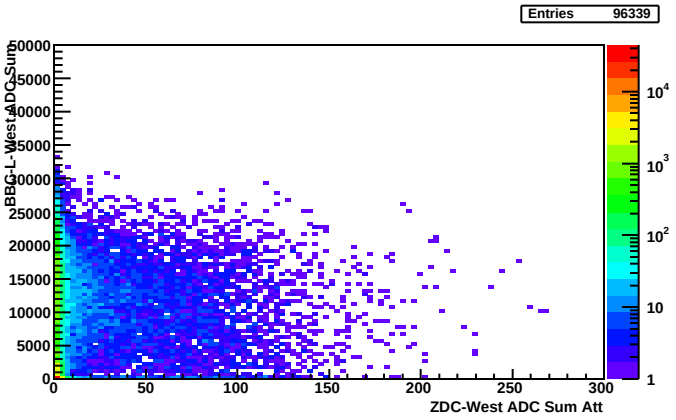

Entries 96339
TOF Mult
ZDC-East ADC Sum Att

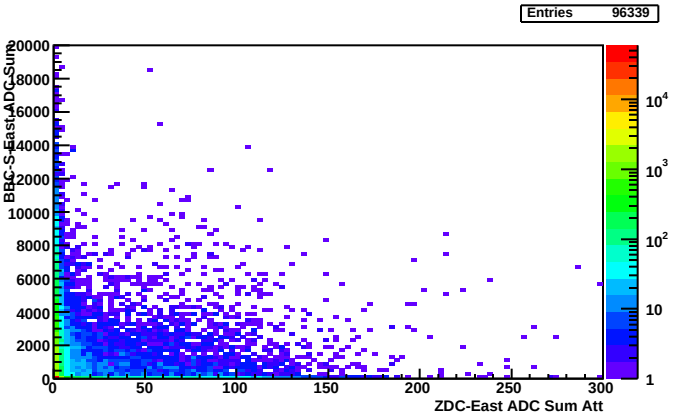

Entries 96339
TOF Mult
ZDC-West ADC Sum Att

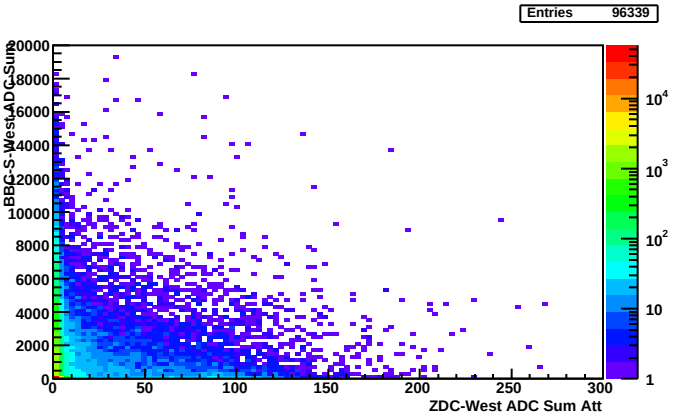

Entries 96339
BBC-L-East ADC Sum
BBC-S-East ADC Sum

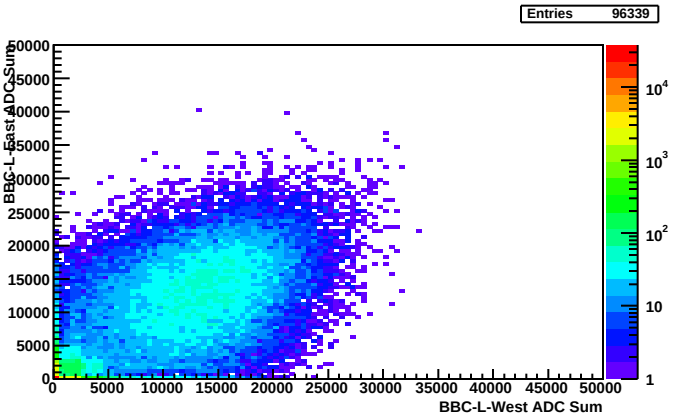

Entries 96339
BBC-L-West ADC Sum
BBC-S-West ADC Sum

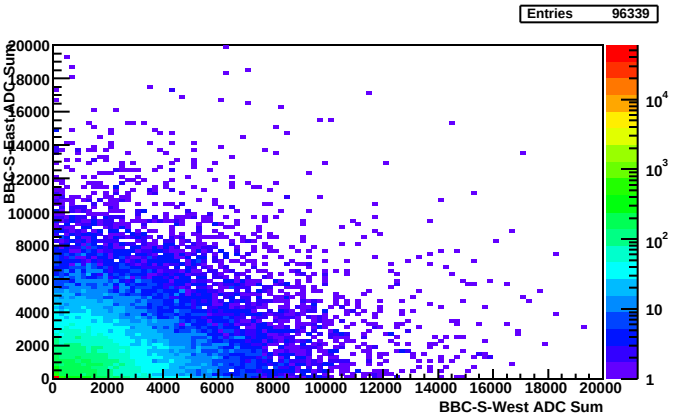

Entries 96339
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

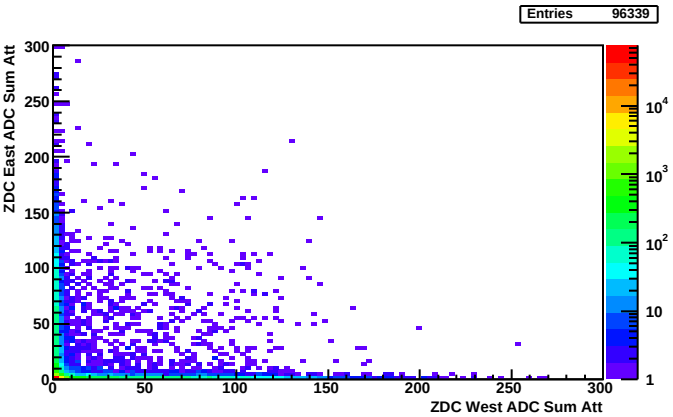

Entries 96339
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

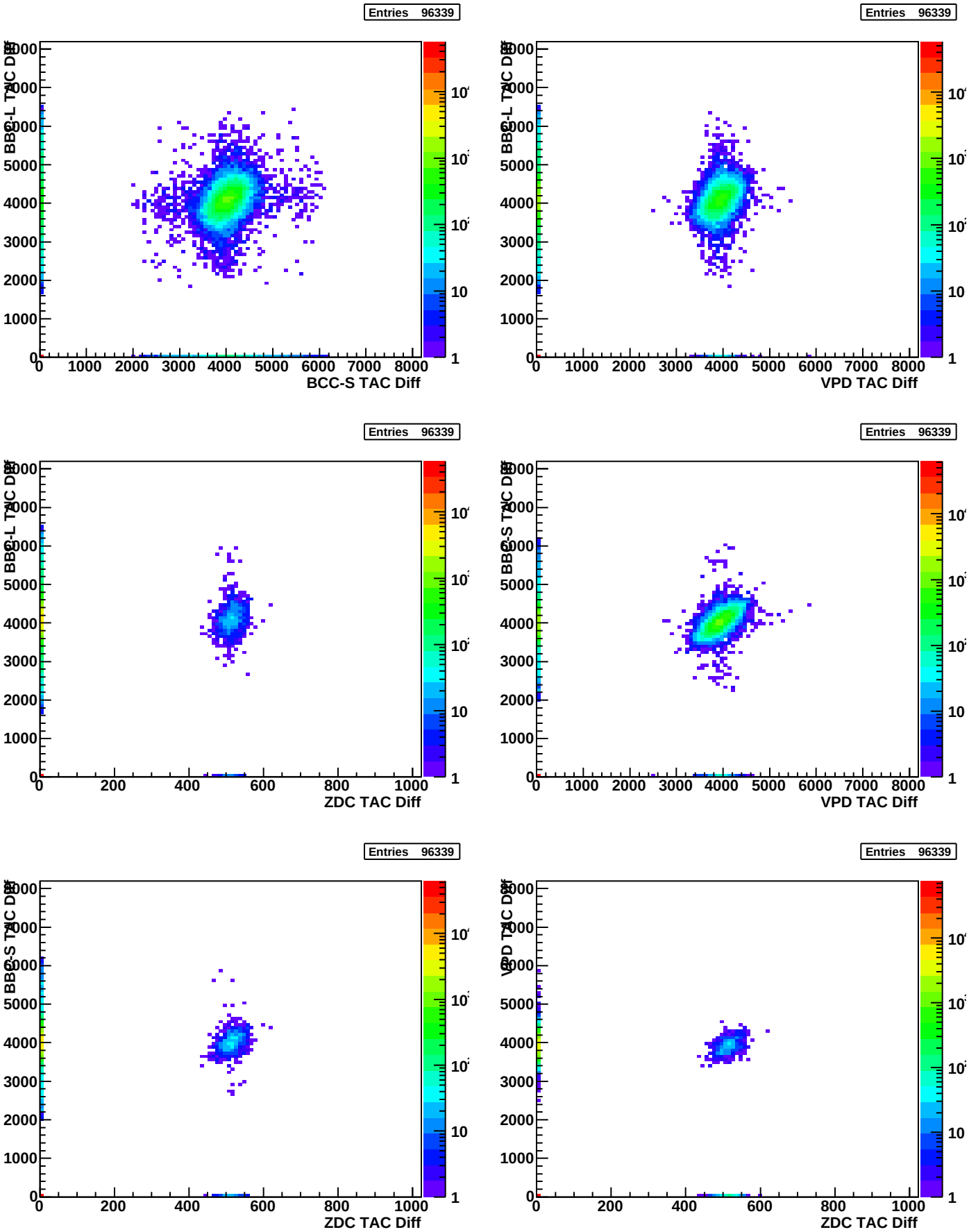

Entries 96339
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

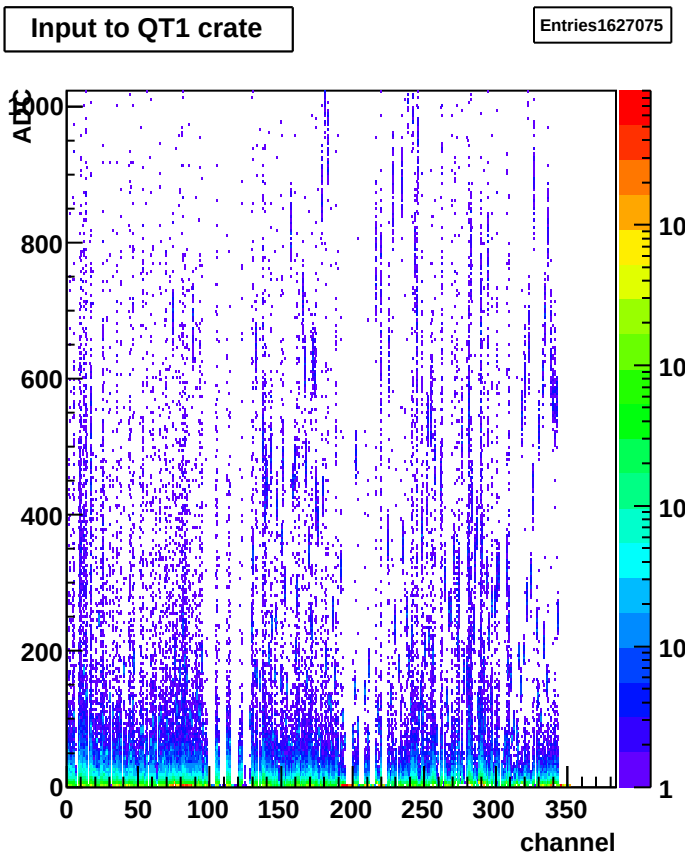

Entries 96339
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

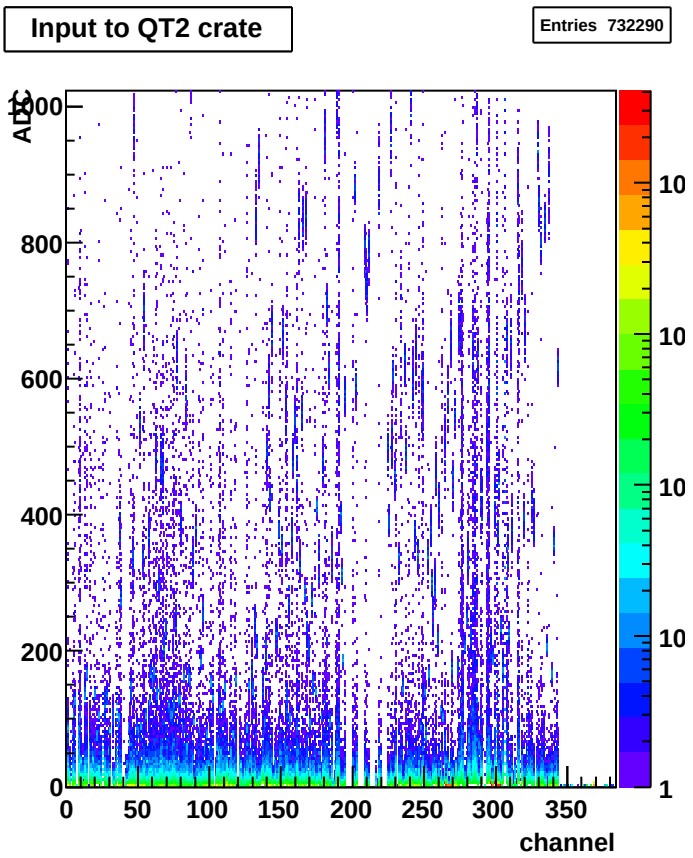

Entries 96339
BBC-L-East ADC Sum
BBC-L-West ADC Sum

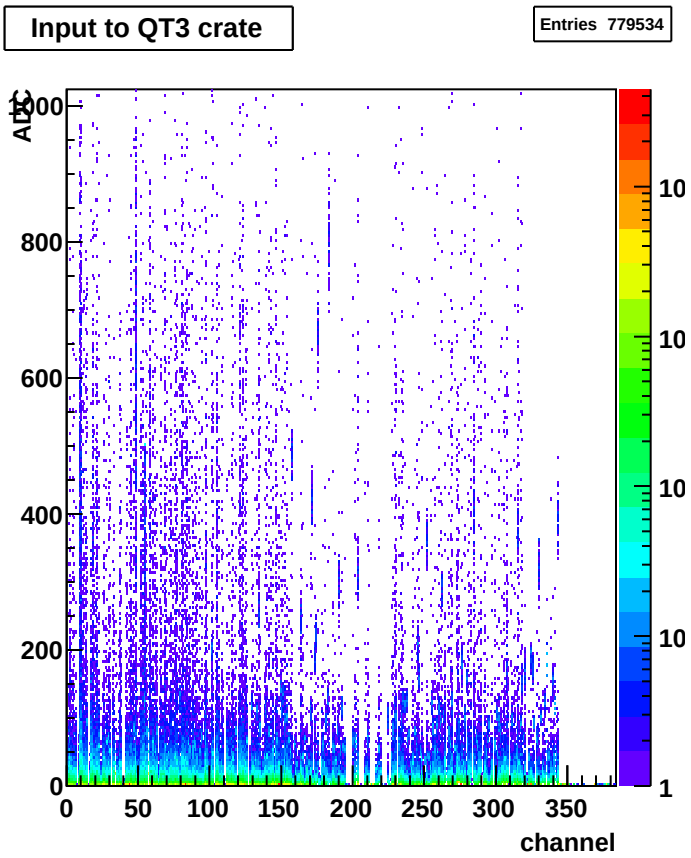

Entries 96339
BBC-S-East ADC Sum
BBC-S-West ADC Sum

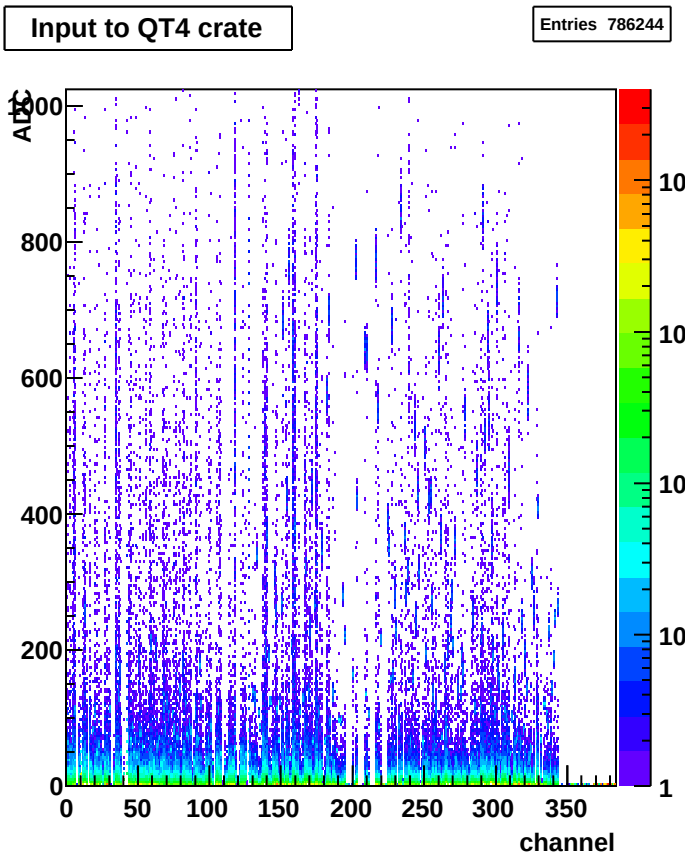

Entries 96339
ZDC East ADC Sum Att
ZDC West ADC Sum Att

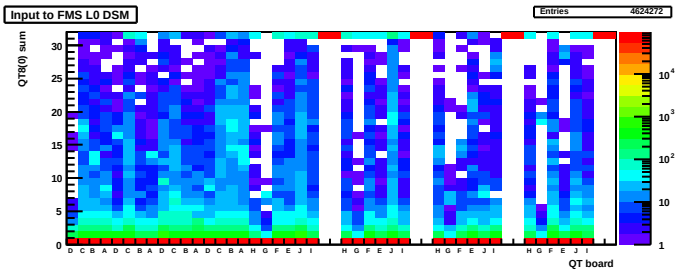

Entries 96339
BBC-L TAC Diff
BCC-S TAC Diff
Entries 96339
BBC-L TAC Diff
VPD TAC Diff
Entries 96339
BBC-L TAC Diff
ZDC TAC Diff
Entries 96339
BBC-S TAC Diff
VPD TAC Diff
Entries 96339
BBC-S TAC Diff
ZDC TAC Diff
Entries 96339
VPD TAC Diff
ZDC TAC Diff

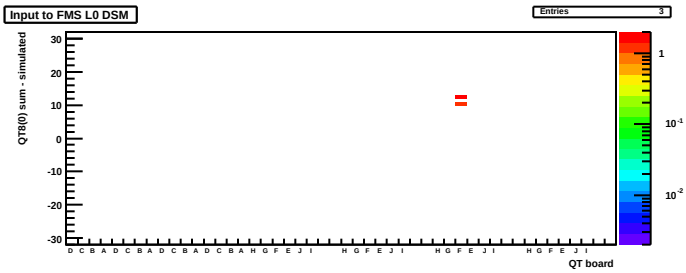

Input to QT1 crate
Entries1627075
ADC
channel

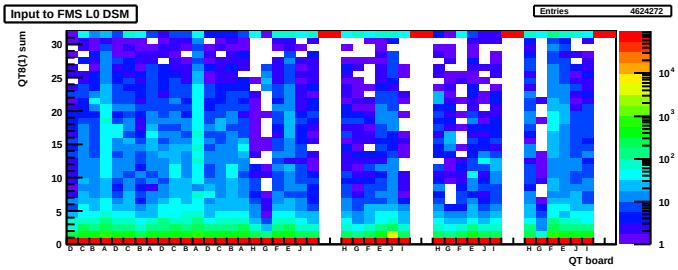

Input to QT2 crate
Entries 732290
ADC
channel

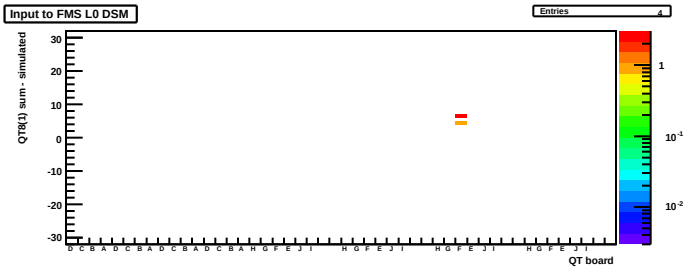

Input to QT3 crate
Entries 779534
ADC
channel

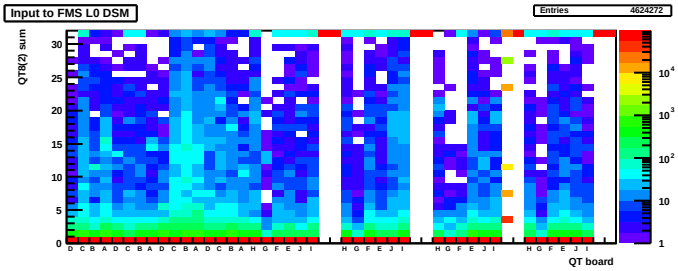

Input to QT4 crate
Entries 786244
ADC
channel

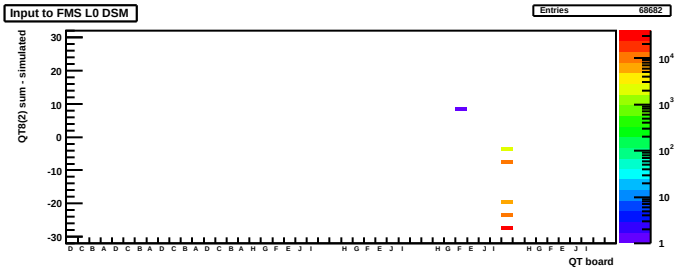

Input to FMS L0 DSM
Entries 4624272
QT8(0) sum
QT board

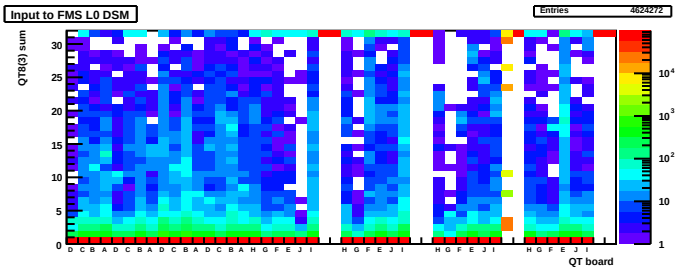

Input to FMS L0 DSM
Entries 3
QT8(0) sum - simulated
QT board

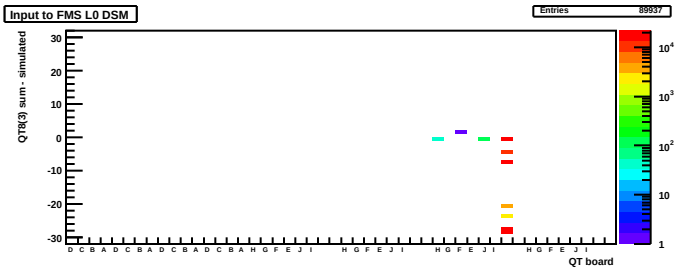

Input to FMS L0 DSM
Entries 4624272
QT8(1) sum
QT board

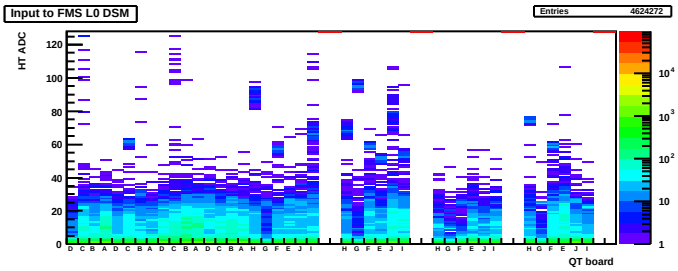

Input to FMS L0 DSM
Entries 4
QT8(1) sum - simulated
QT board

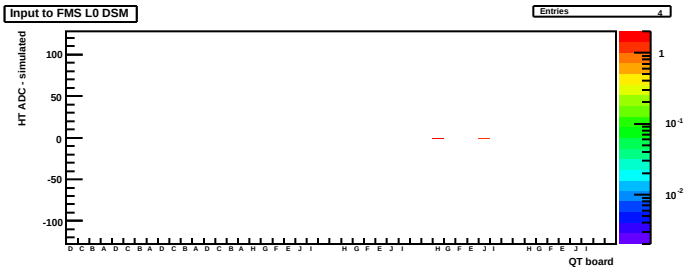

Input to FMS L0 DSM
Entries 4624272
QT8(2) sum
QT board

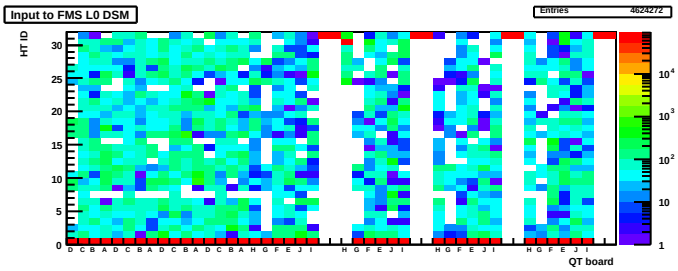

Input to FMS L0 DSM
Entries 68682
QT8(2) sum - simulated
QT board

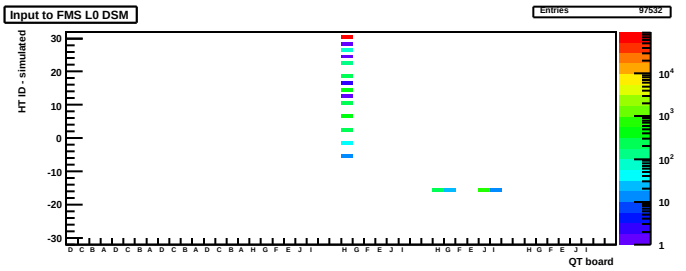

Input to FMS L0 DSM
Entries 4624272
QT8(3) sum
QT board

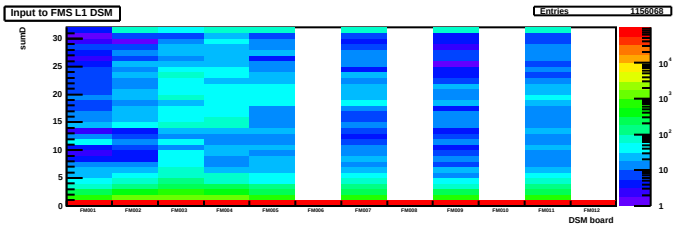

Input to FMS L0 DSM
Entries 89937
QT8(3) sum - simulated
QT board

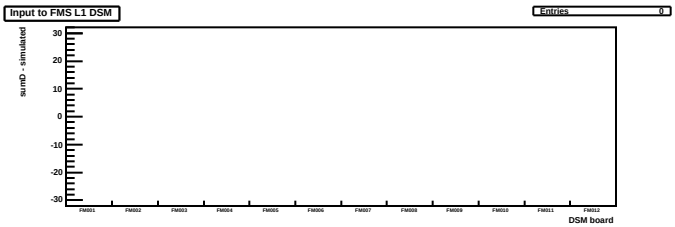

Input to FMS L0 DSM
Entries 4624272
HT ADC
QT board

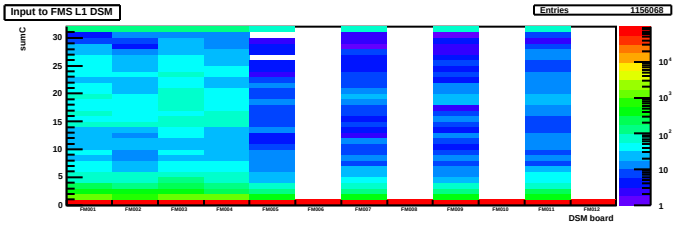

Input to FMS L0 DSM
Entries 4
HT ADC - simulated
QT board

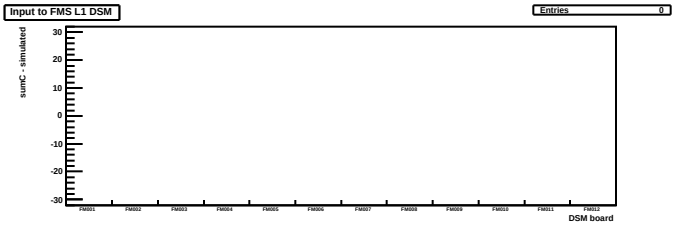

Input to FMS L0 DSM
Entries 4624272
HT ID
QT board

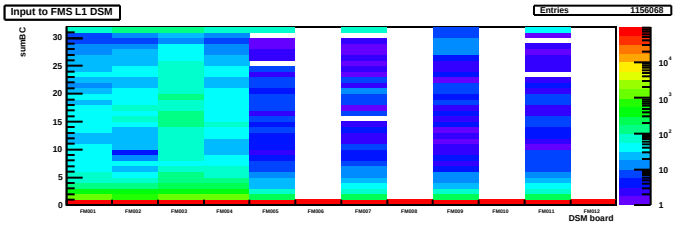

Input to FMS L0 DSM
Entries 97532
HT ID - simulated
QT board

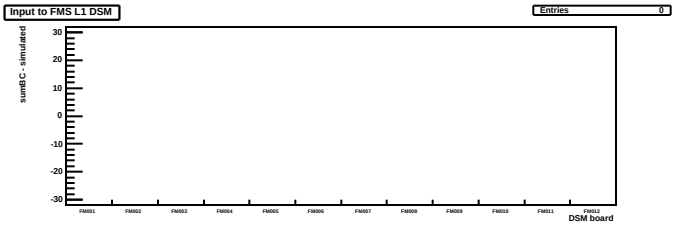

Input to FMS L1 DSM
Entries 1156068
sumD
DSM board

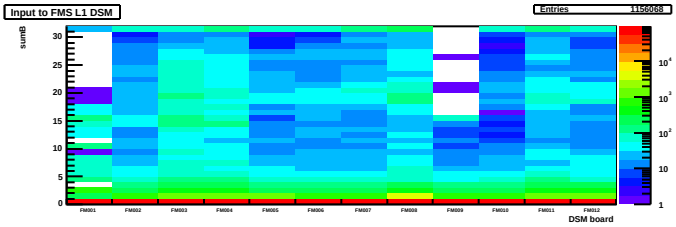

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

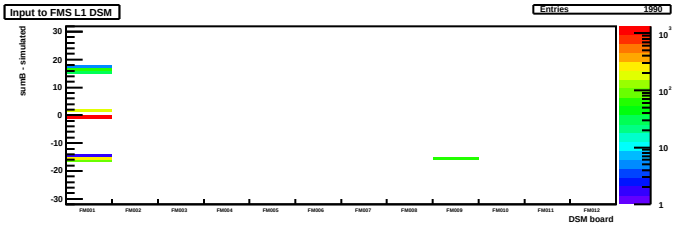

Input to FMS L1 DSM
Entries 1156068
sumC
DSM board

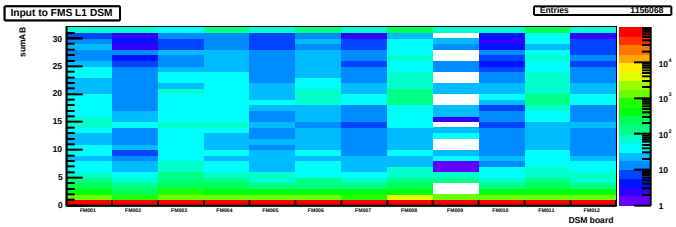

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

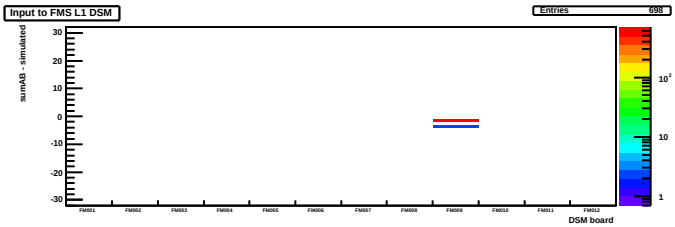

Input to FMS L1 DSM
Entries 1156068
sumBC
DSM board

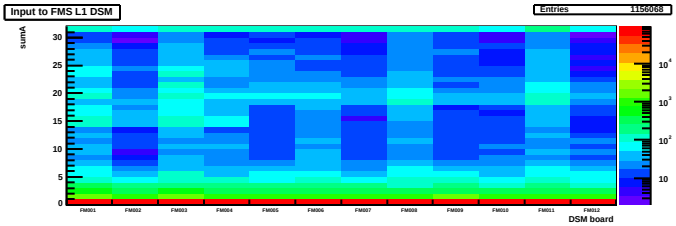

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

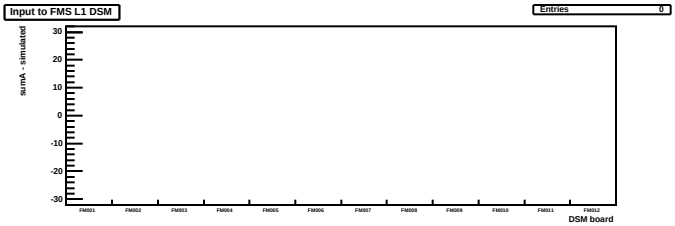

Input to FMS L1 DSM
Entries 1156068
sumB
DSM board

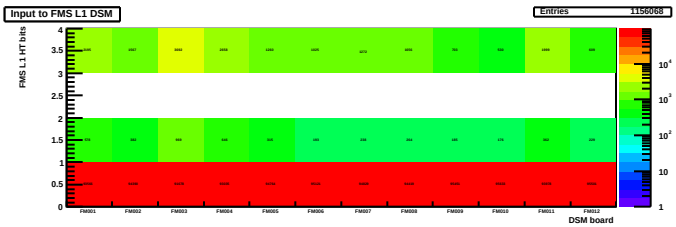

Input to FMS L1 DSM
Entries 1990
sumB - simulated
DSM board

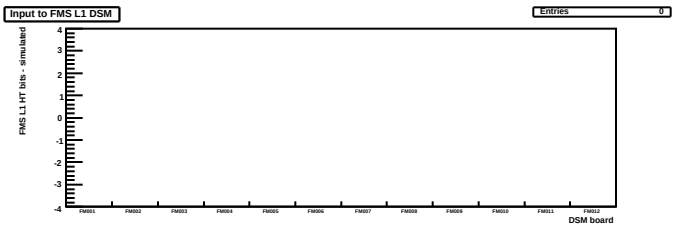

Input to FMS L1 DSM
Entries 1156068
sumAB
DSM board

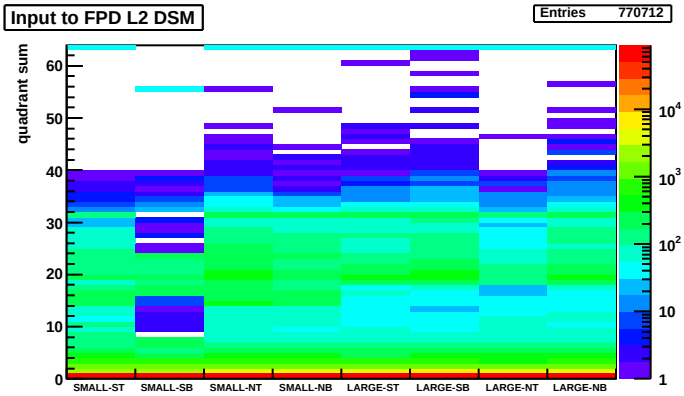

Input to FMS L1 DSM
Entries 698
sumAB - simulated
DSM board

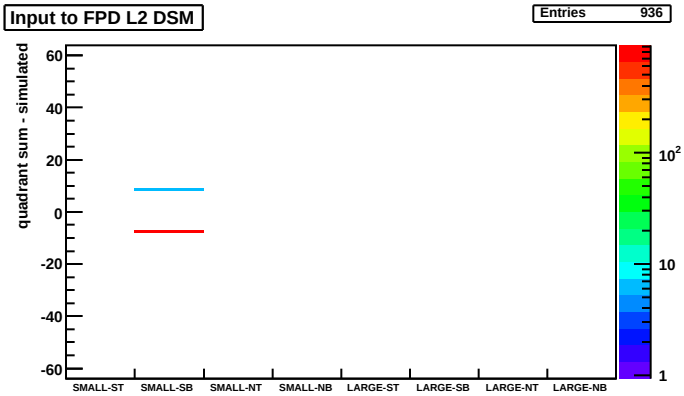

Input to FMS L1 DSM
Entries 1156068
sumA
DSM board

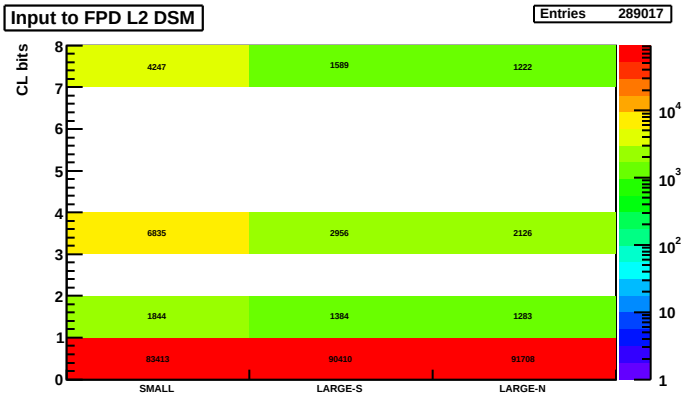

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

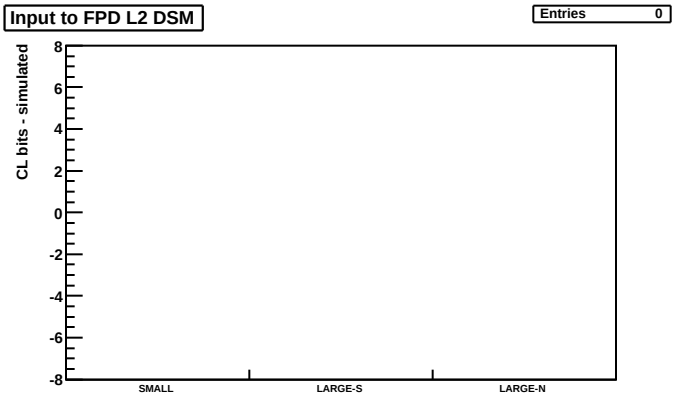

Input to FMS L1 DSM
Entries 1156068
FMS L1 HT bits
DSM board

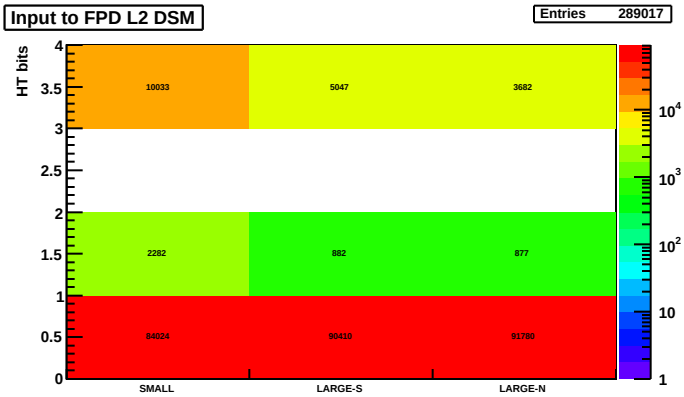

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

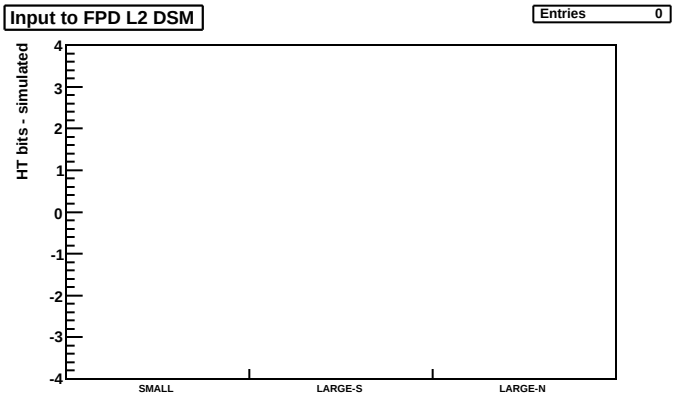

Input to FPD L2 DSM
Entries 770712
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

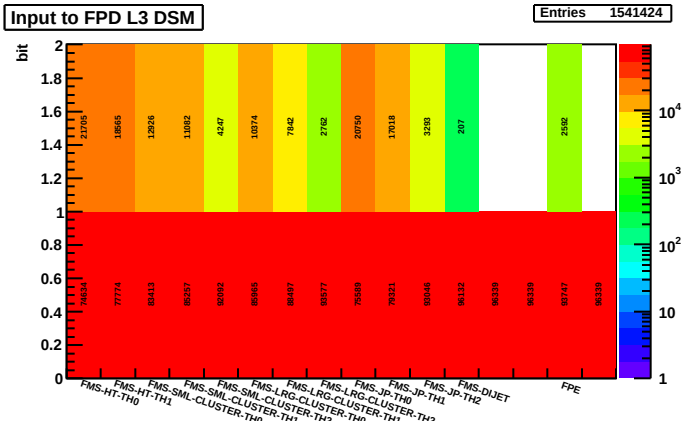

Input to FPD L2 DSM
Entries 936
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

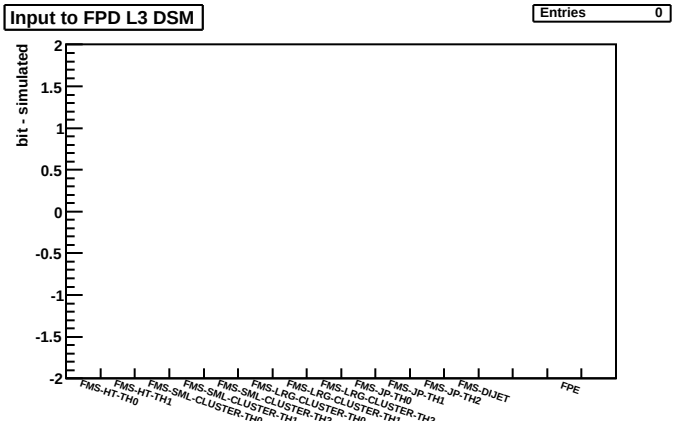

Input to FPD L2 DSM
Entries 289017
CL bits
4247
1589
1222
6835
2956
2126
1844
1384
1283
83413
90410
91708
SMALL
LARGE-S
LARGE-N

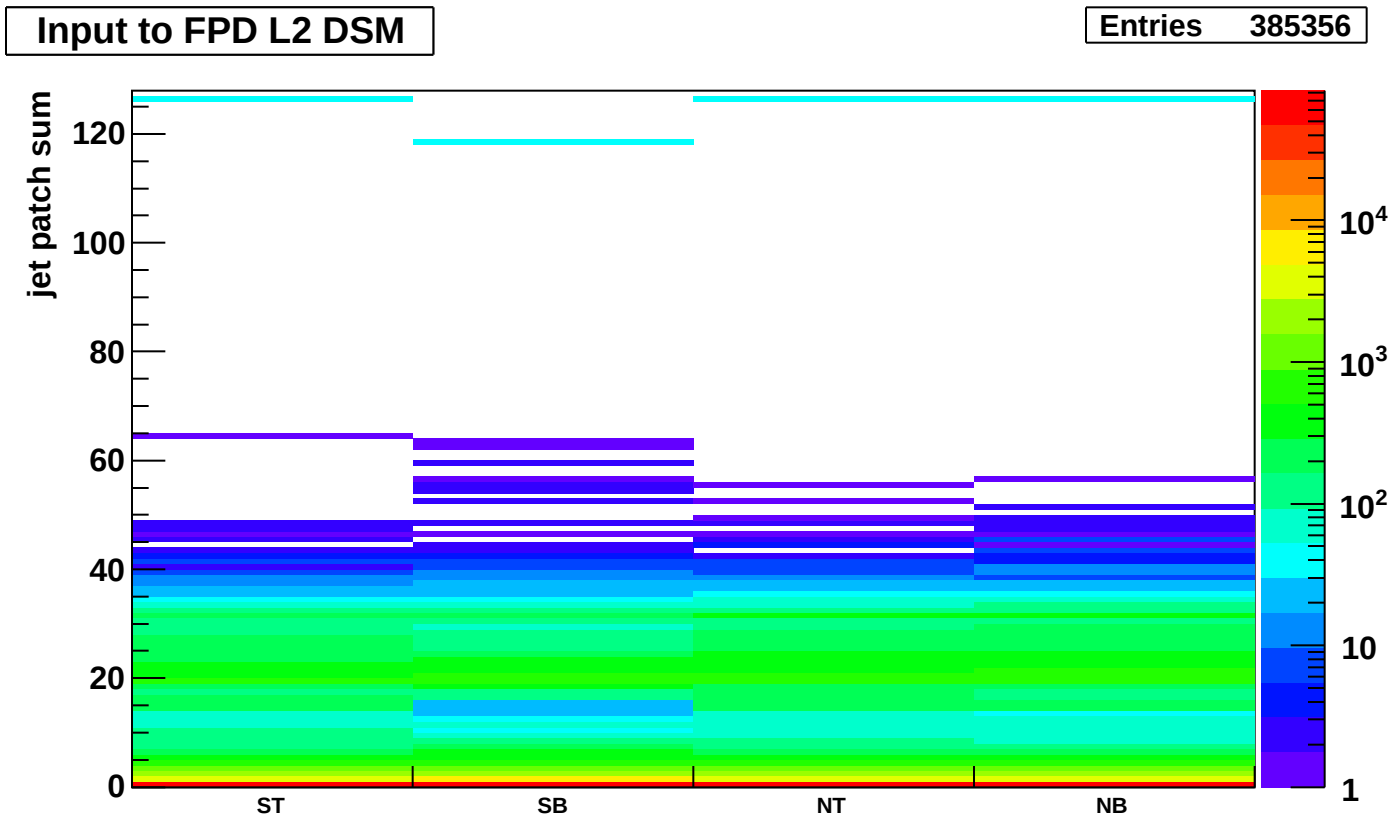

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

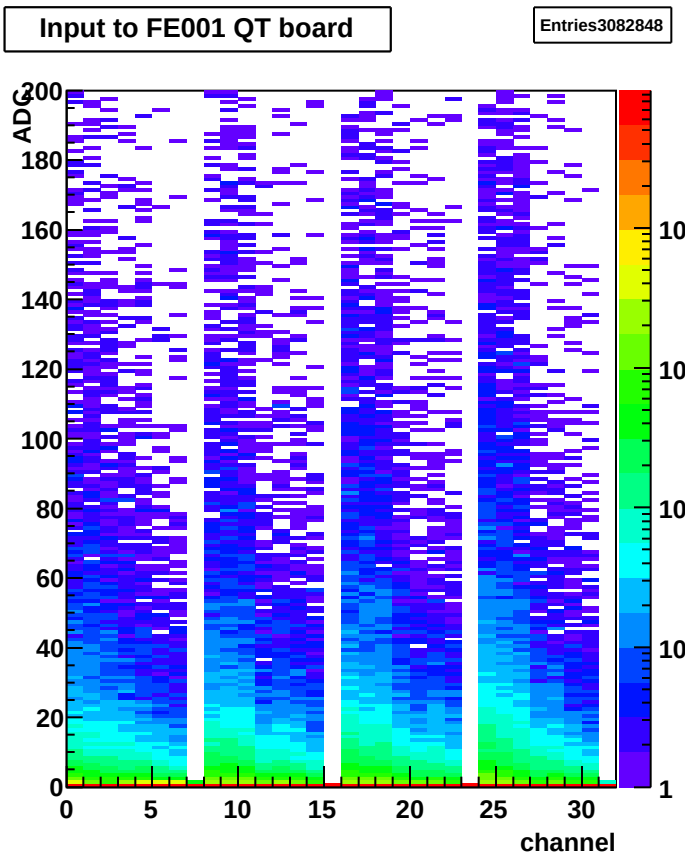

Input to FPD L2 DSM
Entries 289017
HT bits
10033
5047
3682
2282
882
877
84024
90410
91780
SMALL
LARGE-S
LARGE-N

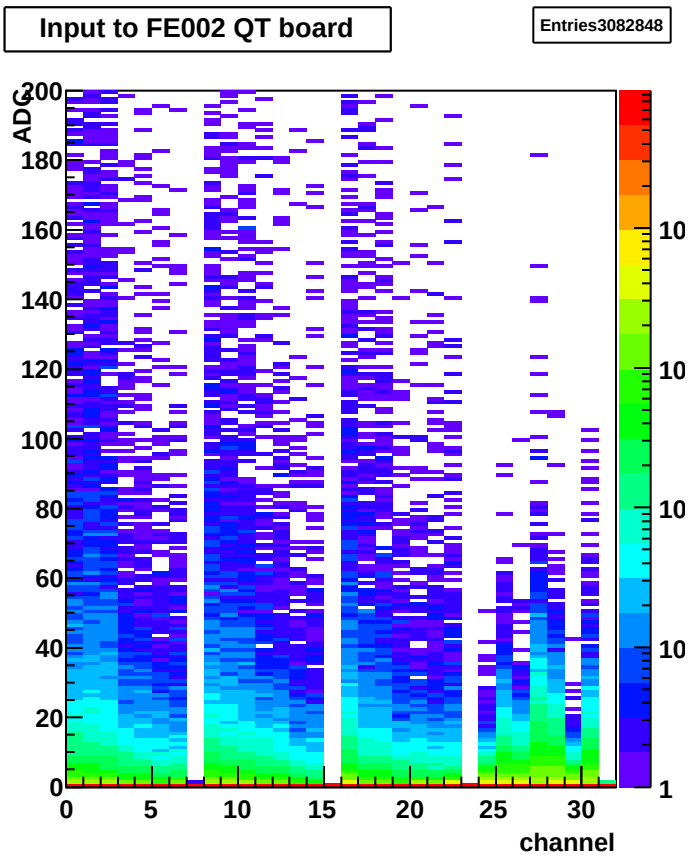

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

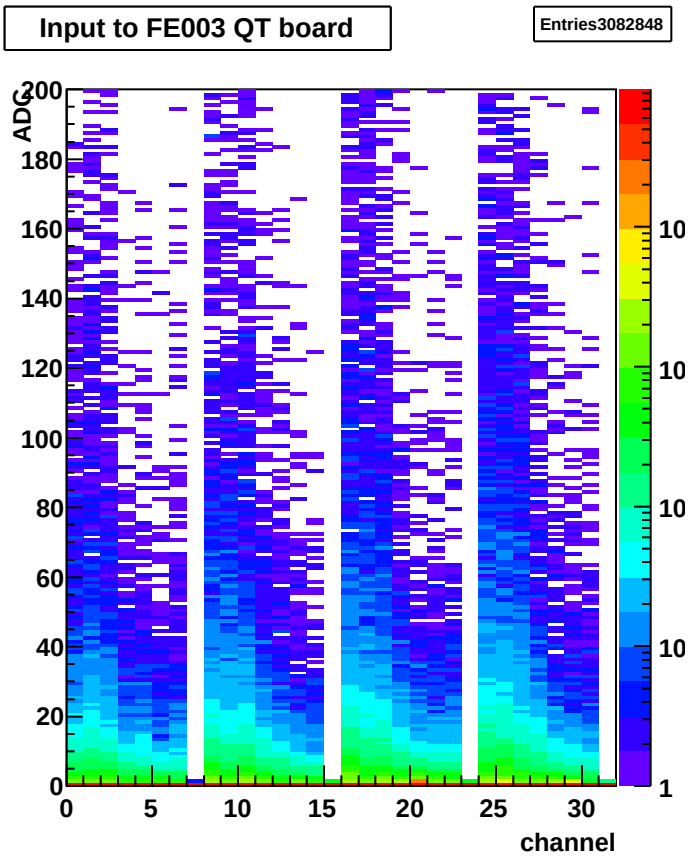

Input to FPD L3 DSM
Entries 1541424
bit
21705
18565
12926
11082
4247
10374
7842
2762
20750
17018
3293
207
2592
74634
77774
83413
85257
90092
85965
88497
88577
75589
79321
90046
96132
96339
96339
93747
96339
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

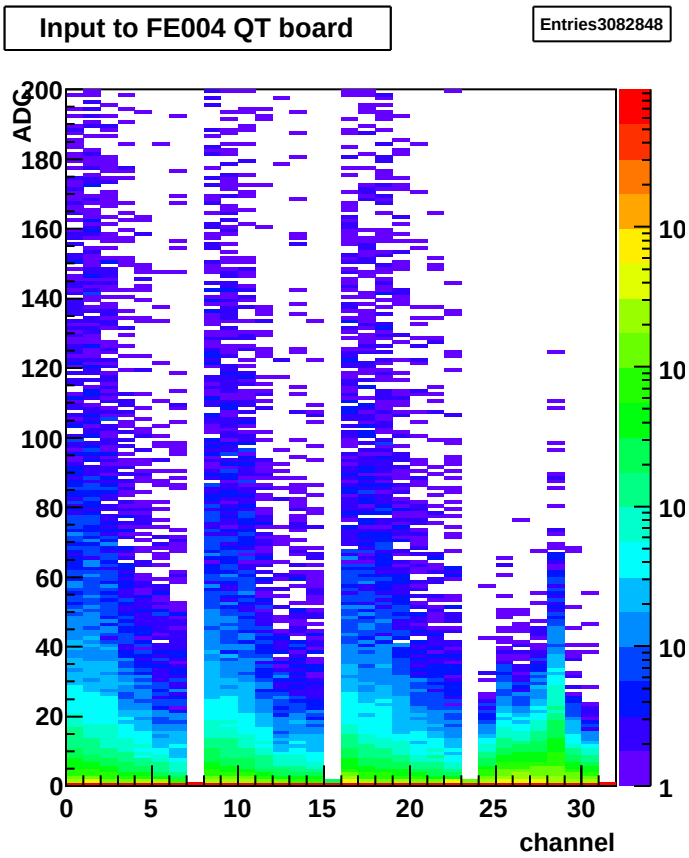

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

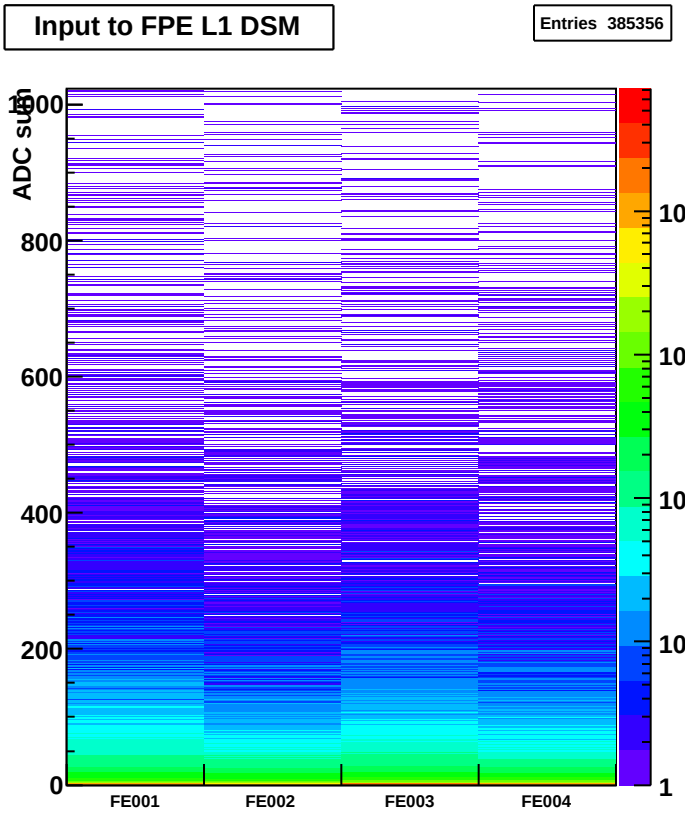

Input to FPD L2 DSM
Entries 385356
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^4
10^3
10^2
10
1

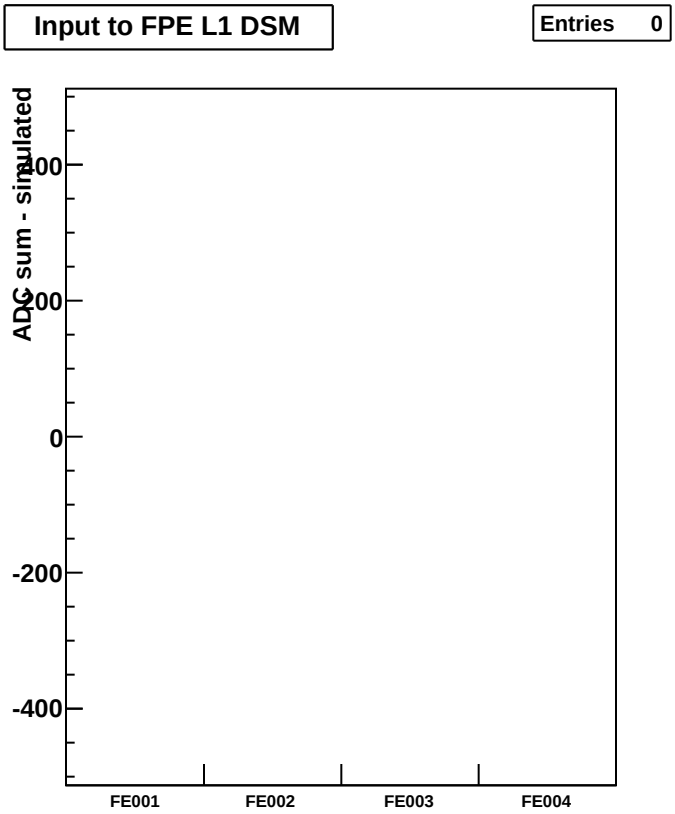

Input to FE001 QT board
Entries3082848
ADC
channel

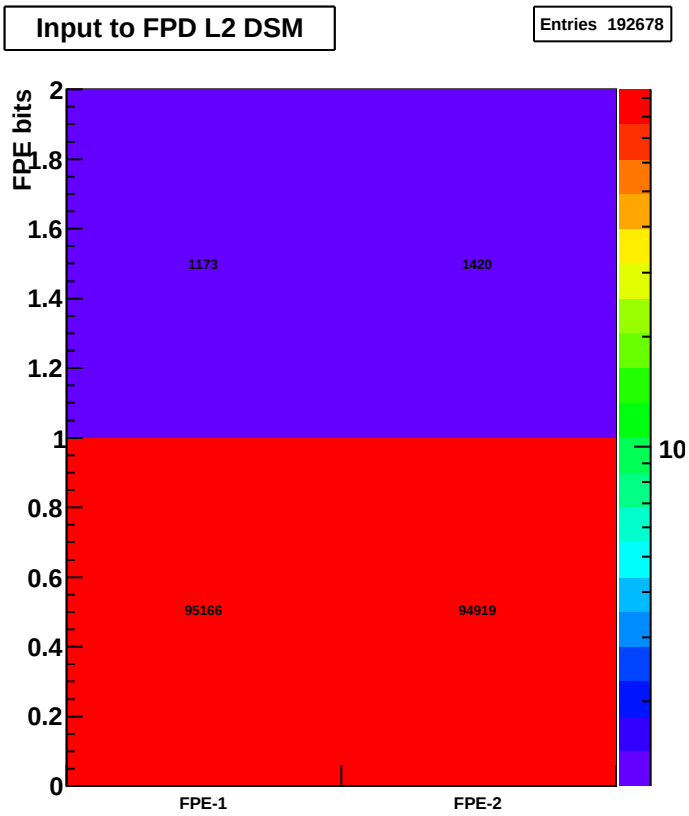

Input to FE002 QT board
Entries3082848
ADC
channel

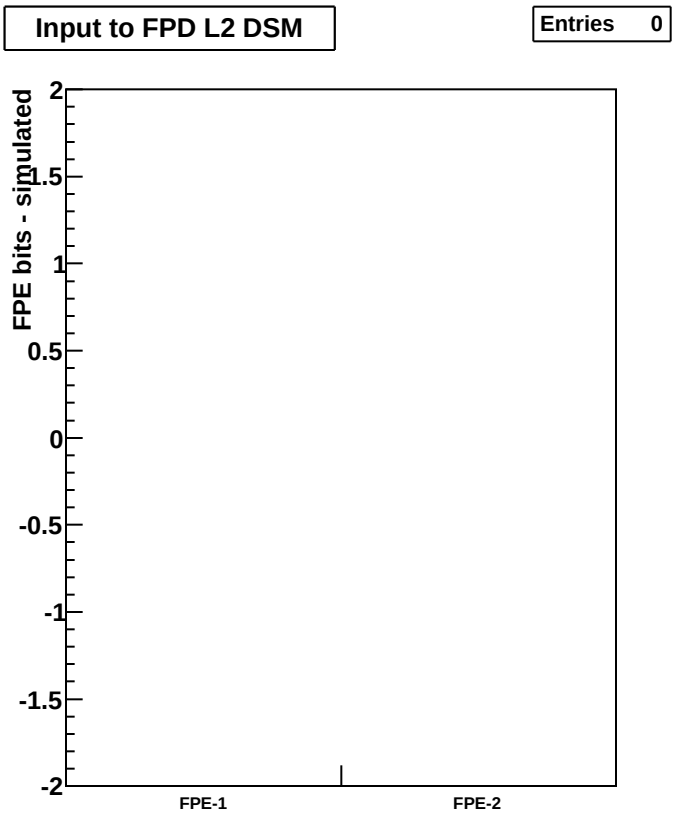

Input to FE003 QT board
Entries3082848
ADC
channel


Input to FE004 QT board
Entries3082848
ADC
channel


Input to FPE L1 DSM
Entries 385356
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 192678
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1173
1420
95166
94919
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