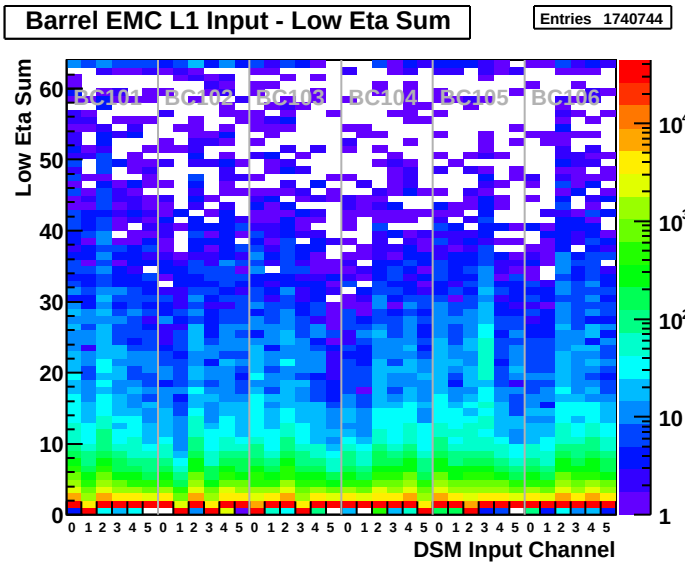
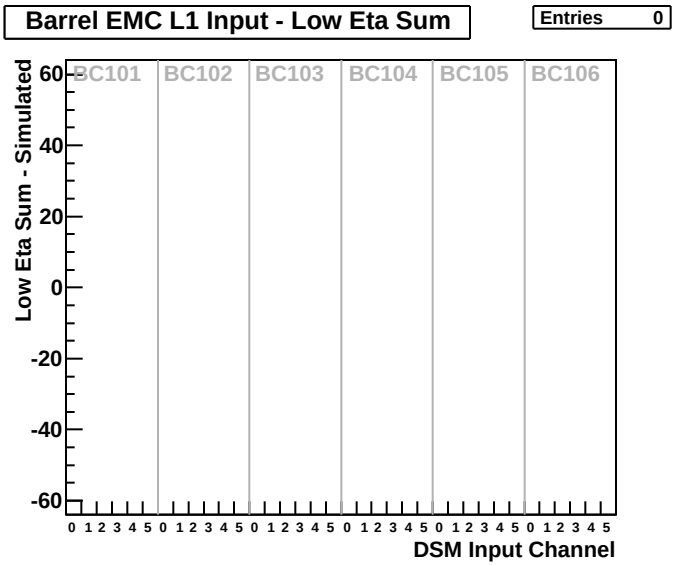
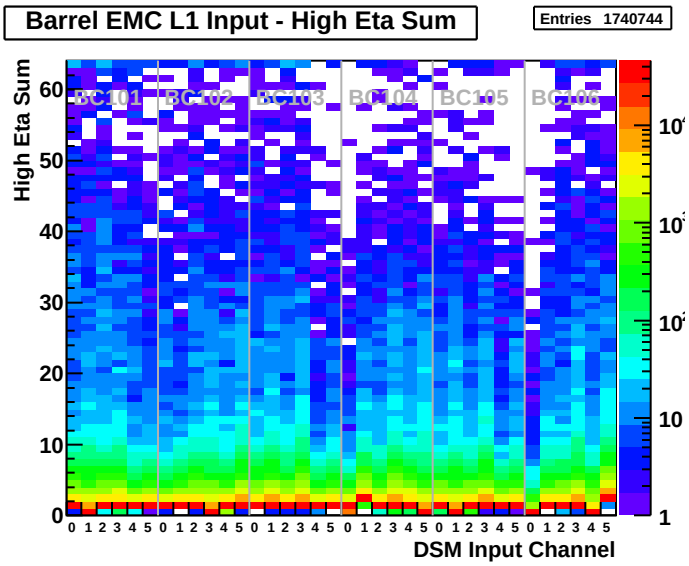
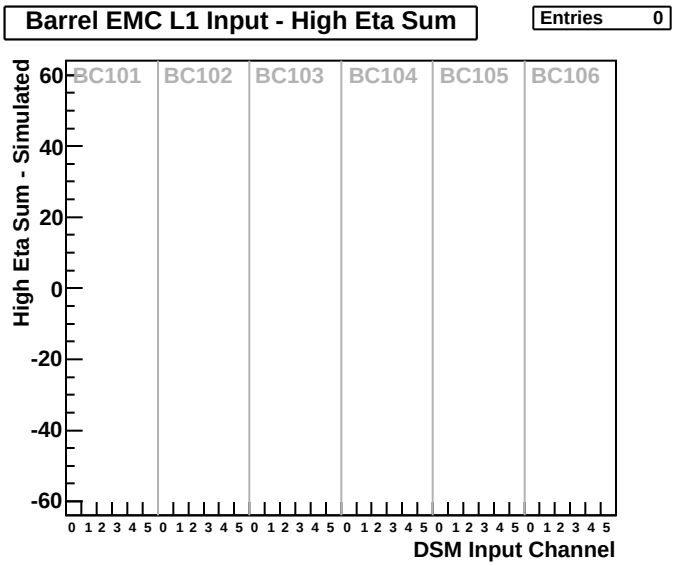
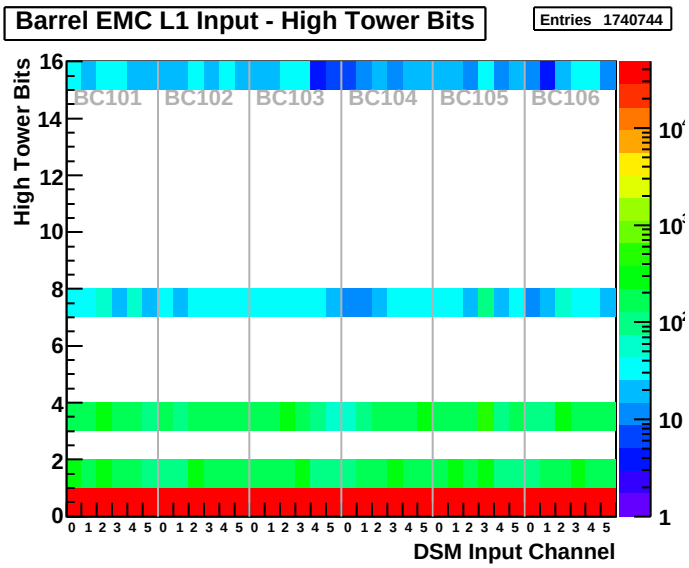
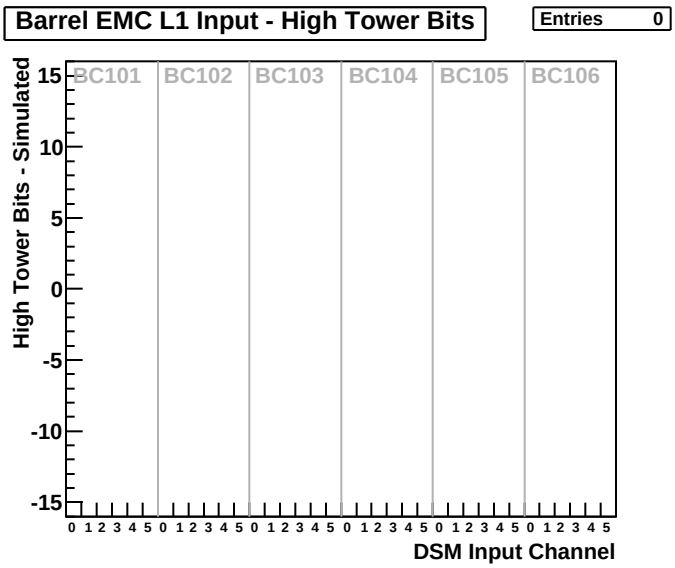

Barrel EMC L1 Input - Low Eta Sum
Entries 1740744
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

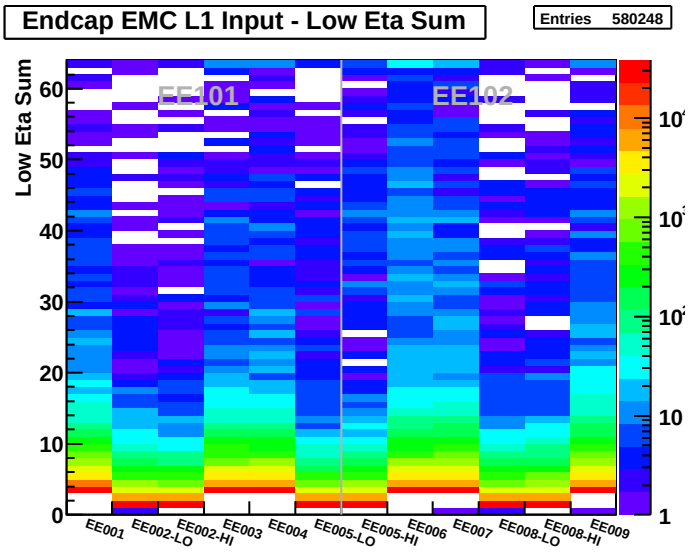

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

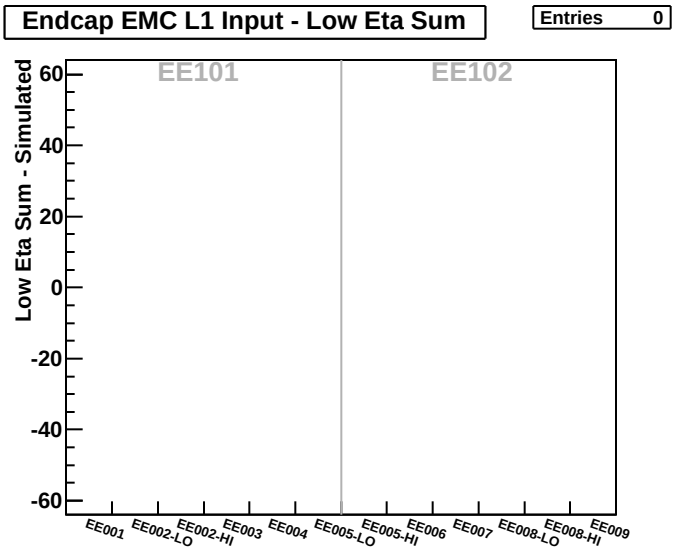

Barrel EMC L1 Input - High Eta Sum
Entries 1740744
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

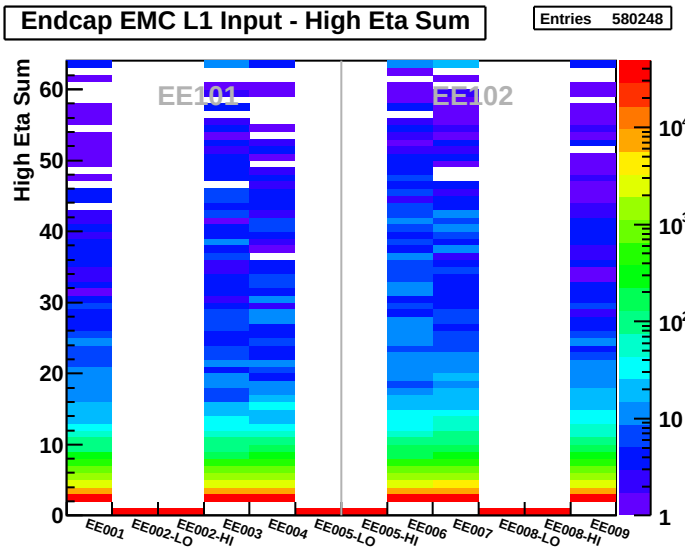

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

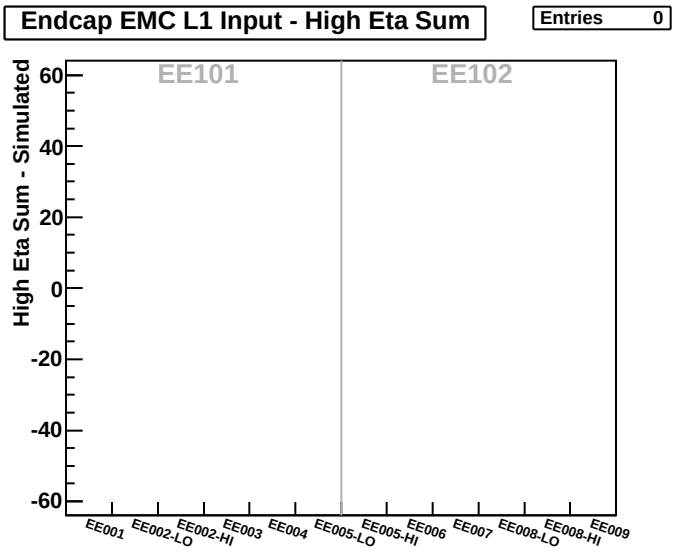

Barrel EMC L1 Input - High Tower Bits
Entries 1740744
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

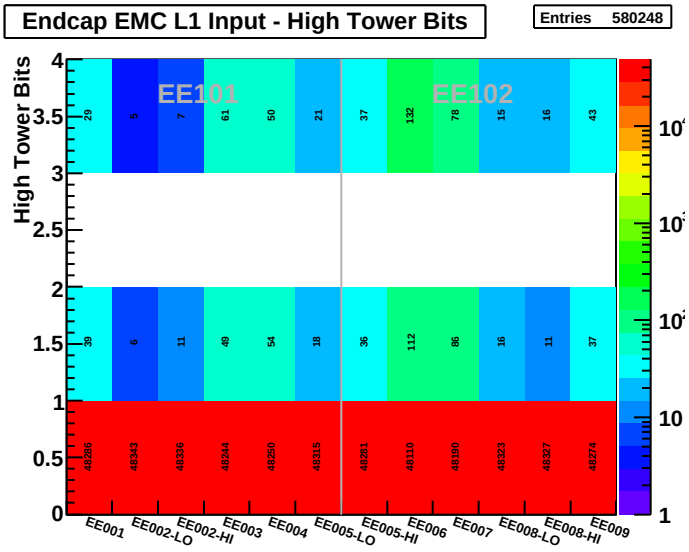

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

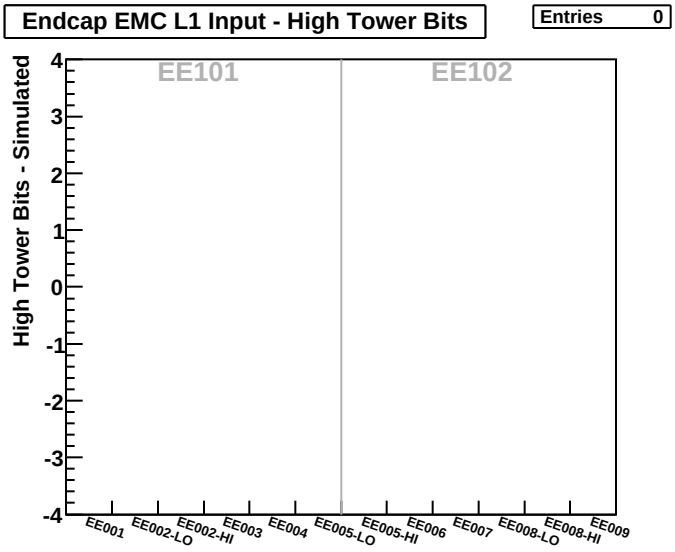

Endcap EMC L1 Input - Low Eta Sum
Entries 580248
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

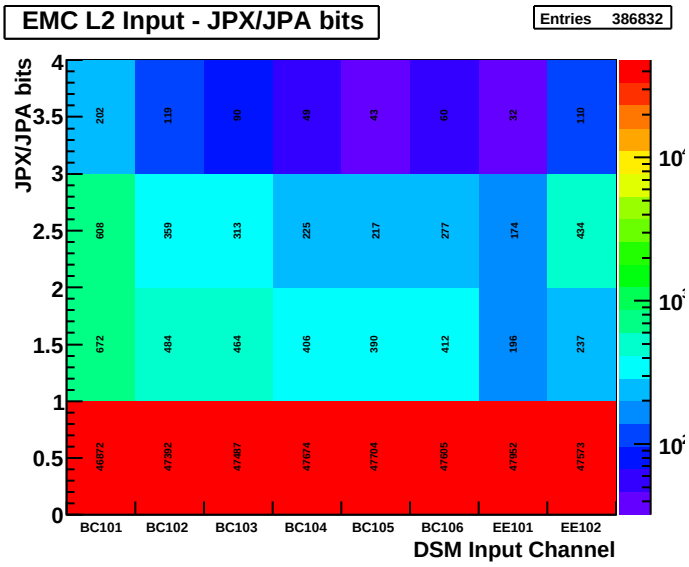

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

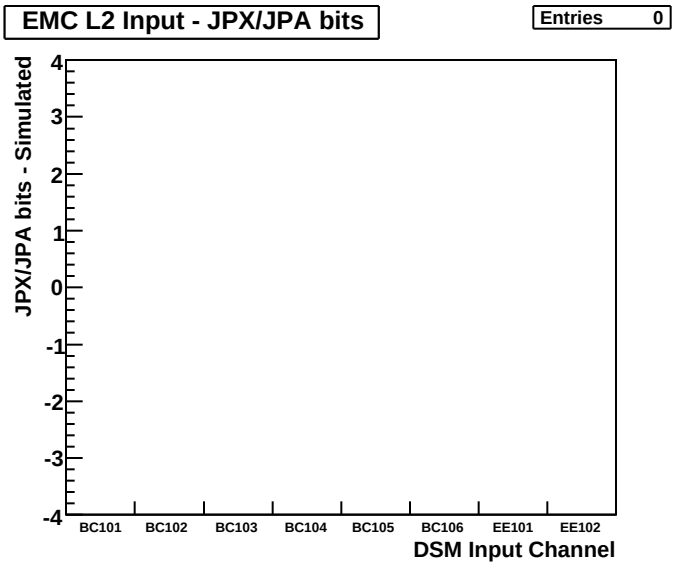

Endcap EMC L1 Input - High Eta Sum
Entries 580248
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

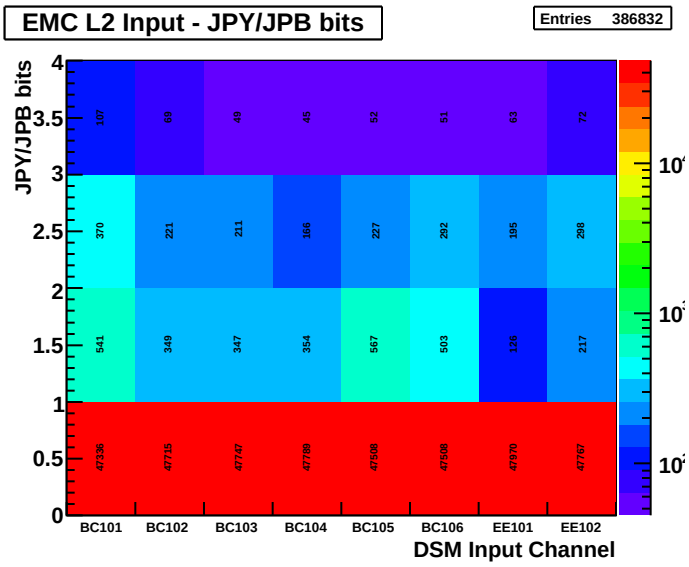

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

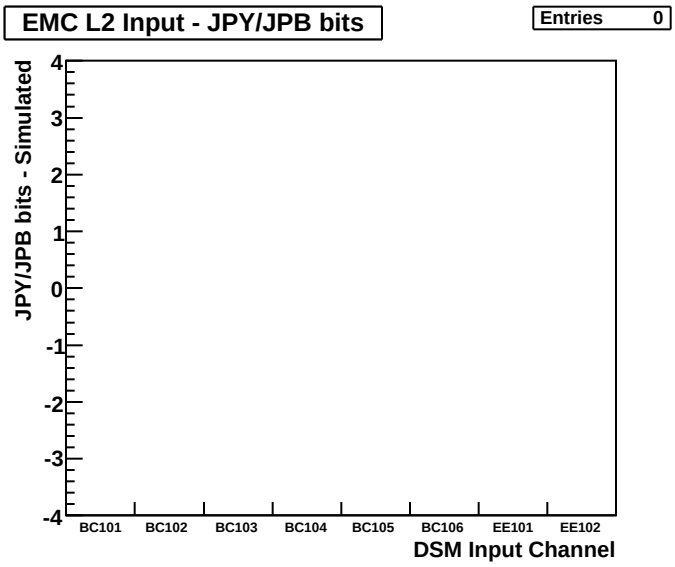

Endcap EMC L1 Input - High Tower Bits
Entries 580248
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

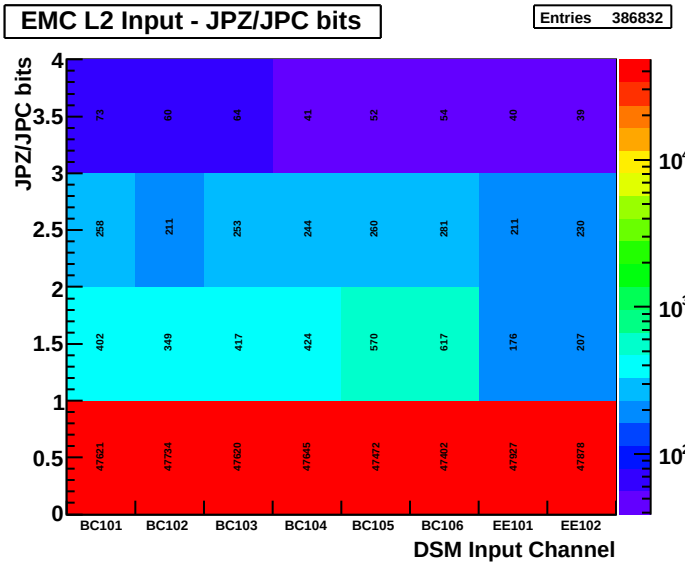

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

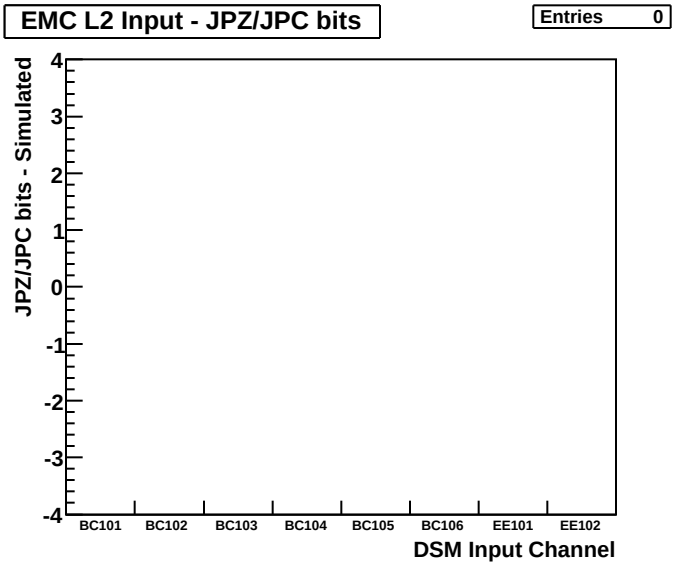

EMC L2 Input - JPX/JPA bits
Entries 386832
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
202 119 90 49 43 60 32 110
608 359 313 225 217 277 174 434
672 484 464 406 390 412 196 237
46872 47392 47487 47674 47704 47605 47952 47573

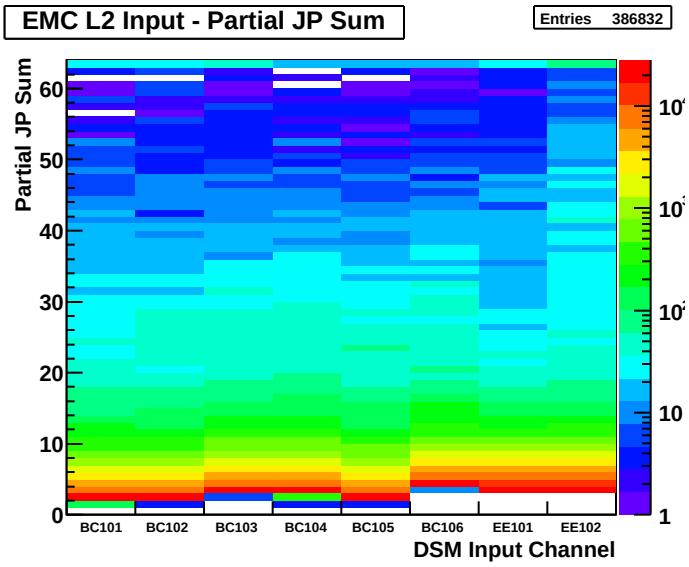

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

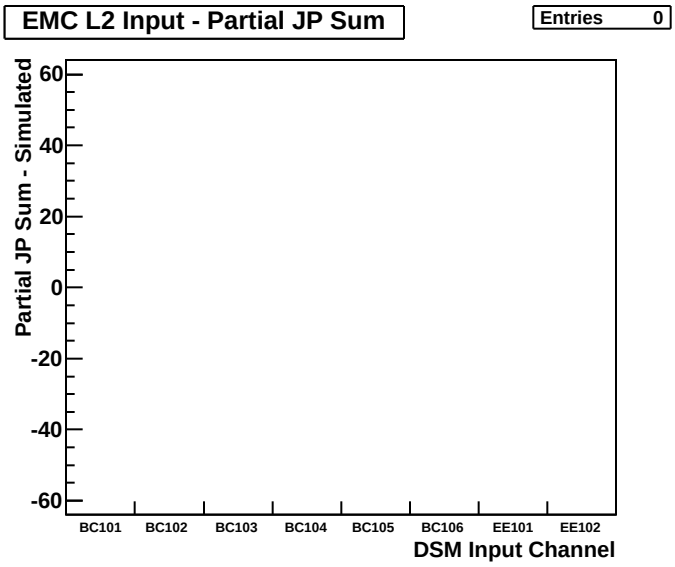

EMC L2 Input - JPY/JPB bits
Entries 386832
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
107 69 49 45 52 51 63 72
370 221 211 166 227 292 195 298
541 349 347 354 567 503 126 217
47336 47715 47747 47789 47508 47508 47970 47767

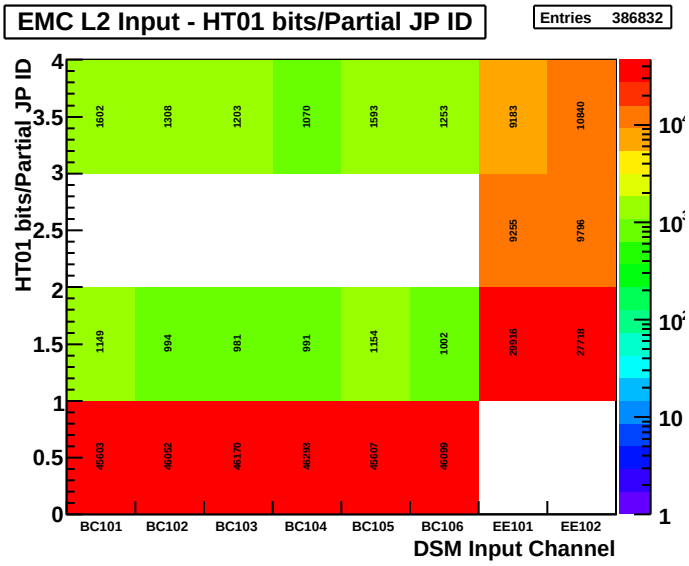

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

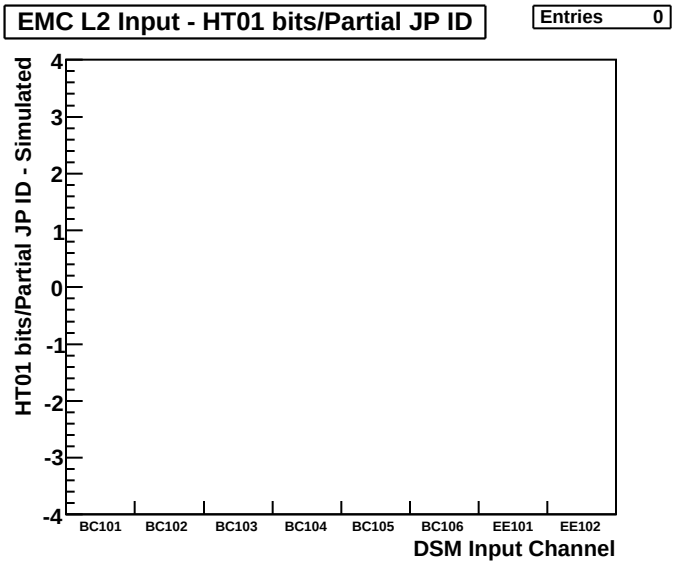

EMC L2 Input - JPZ/JPC bits
Entries 386832
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
73 60 64 41 52 54 40 39
258 211 253 244 260 281 211 230
402 349 417 424 570 617 176 207
47621 47734 47620 47645 47472 47402 47927 47878

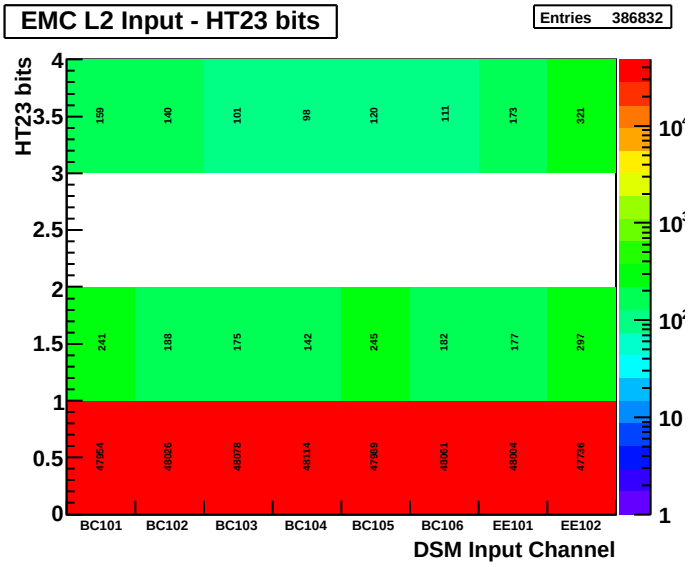

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

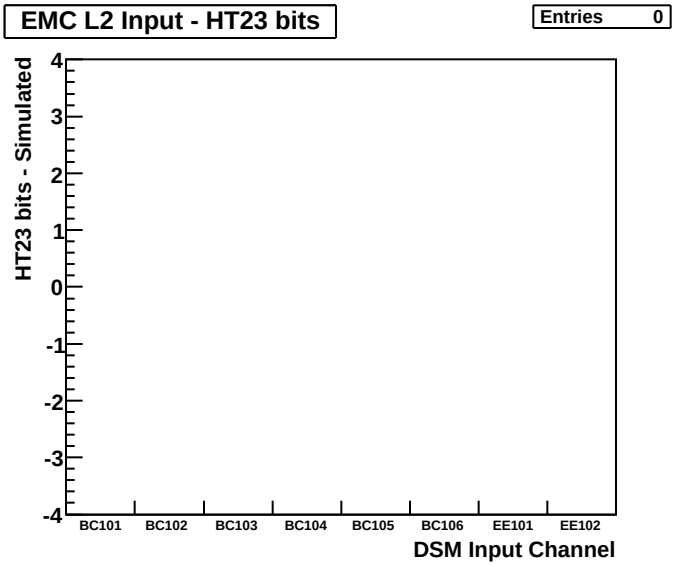

EMC L2 Input - Partial JP Sum
Entries 386832
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

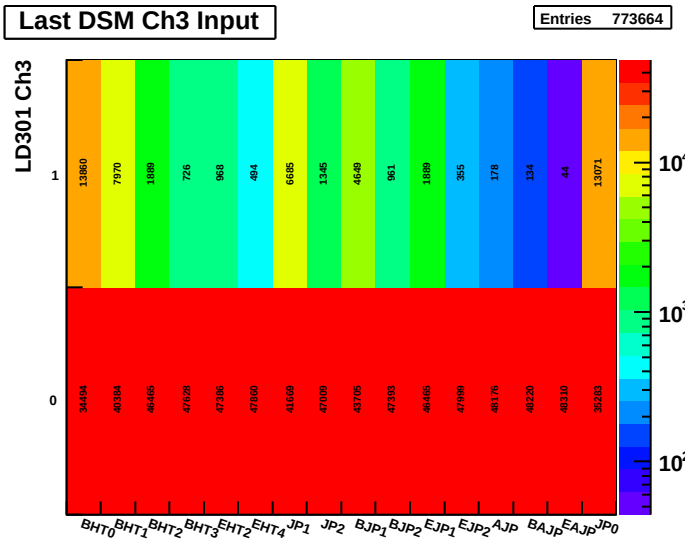

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

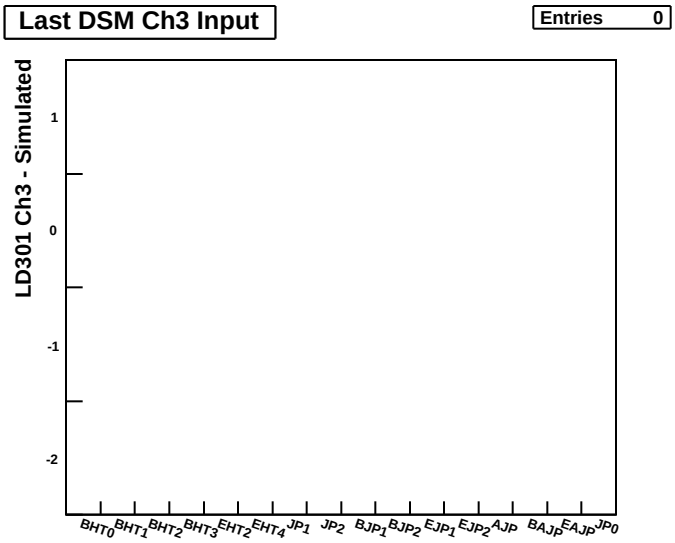

EMC L2 Input - HT01 bits/Partial JP ID
Entries 386832
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

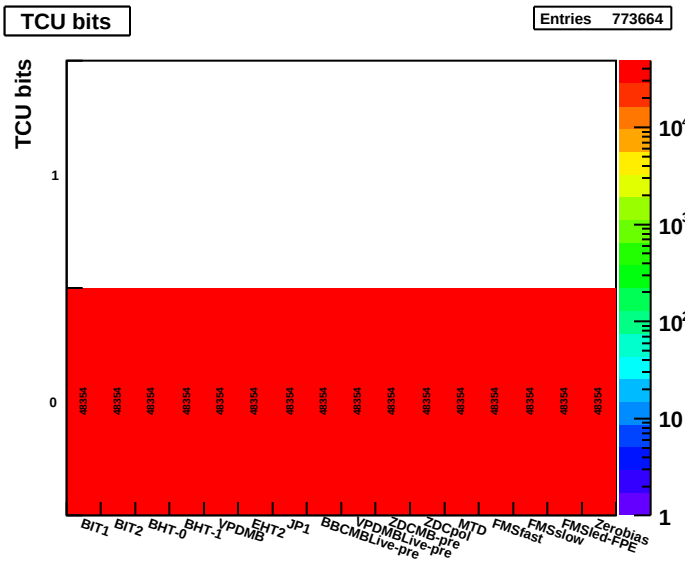

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

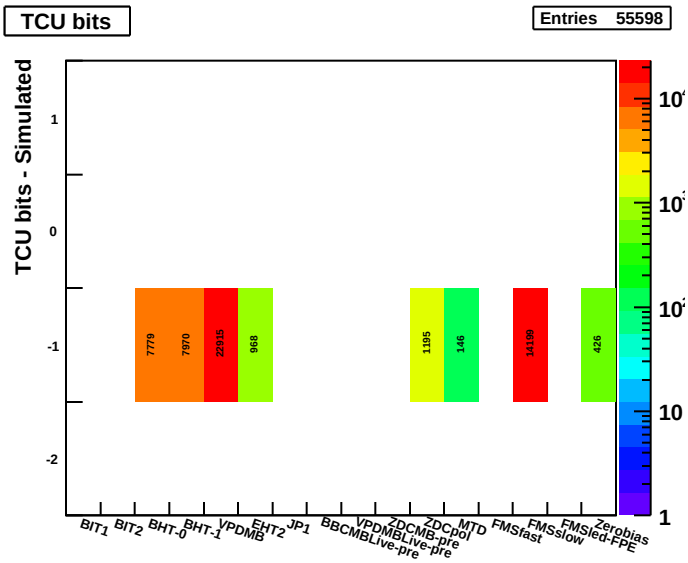

EMC L2 Input - HT23 bits
Entries 386832
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

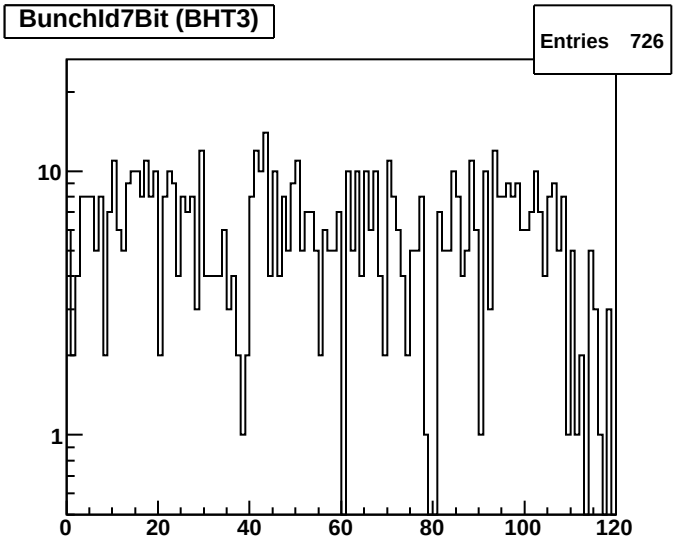

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

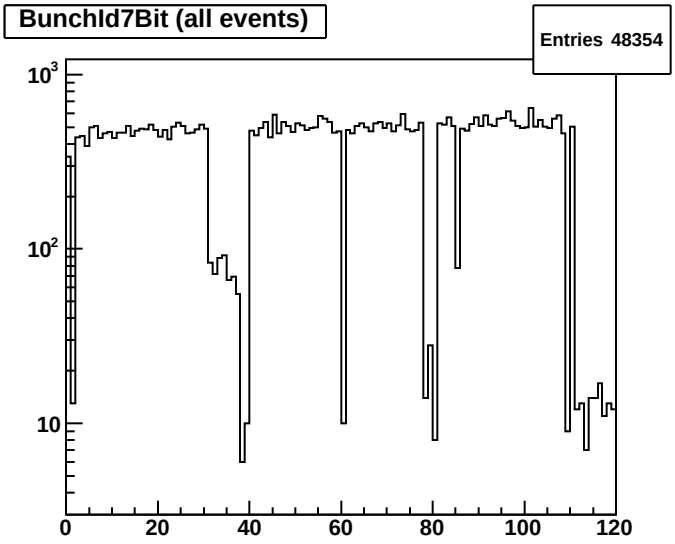

Last DSM Ch3 Input
Entries 773664
LD301 Ch3
13860 7970 1889 726 968 494 6685 1345 4649 961 1889 355 178 134 44 13071
34494 40384 46465 47628 47396 47660 41669 47009 43705 47393 46465 47099 48176 48220 48310 35283
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

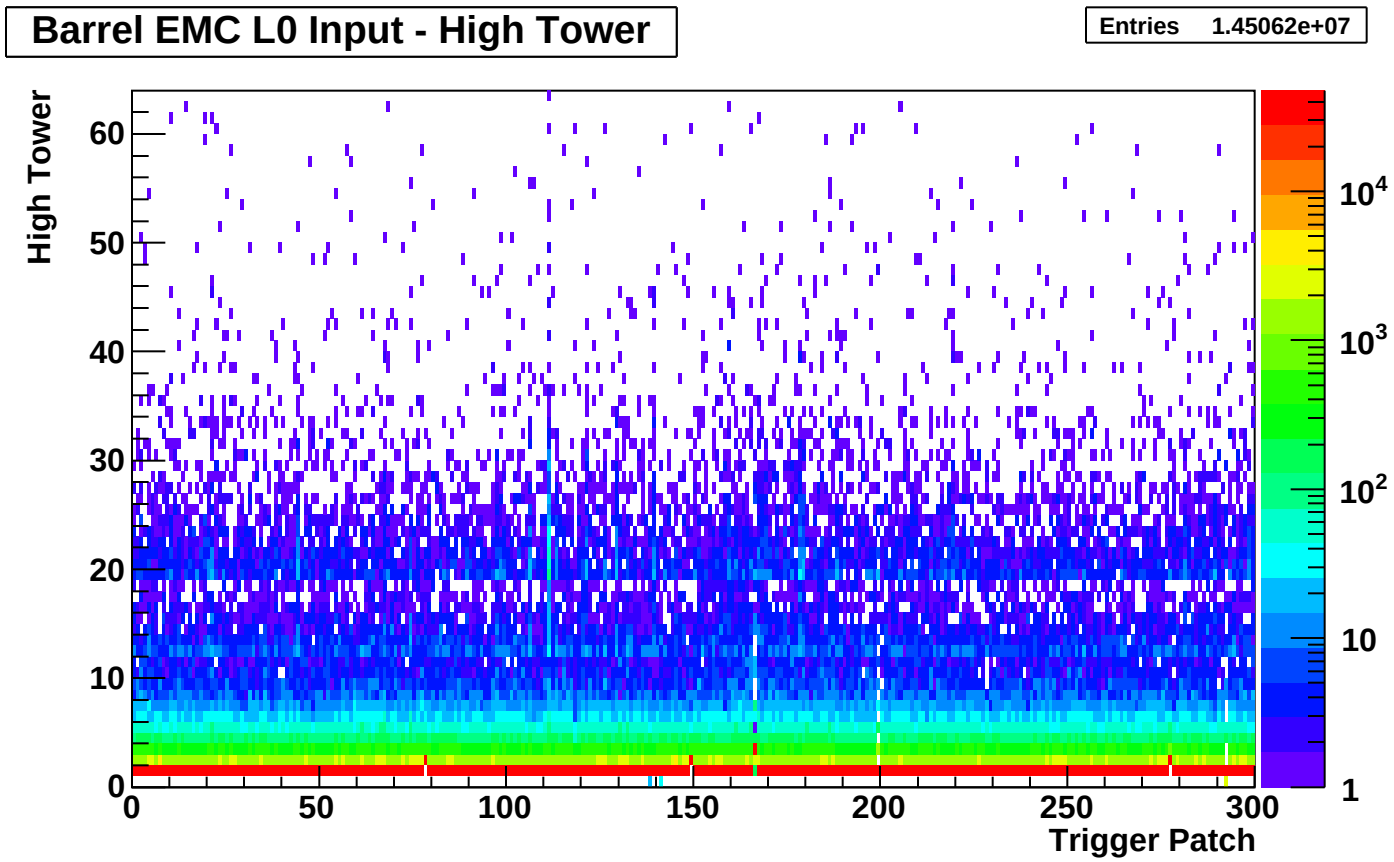

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

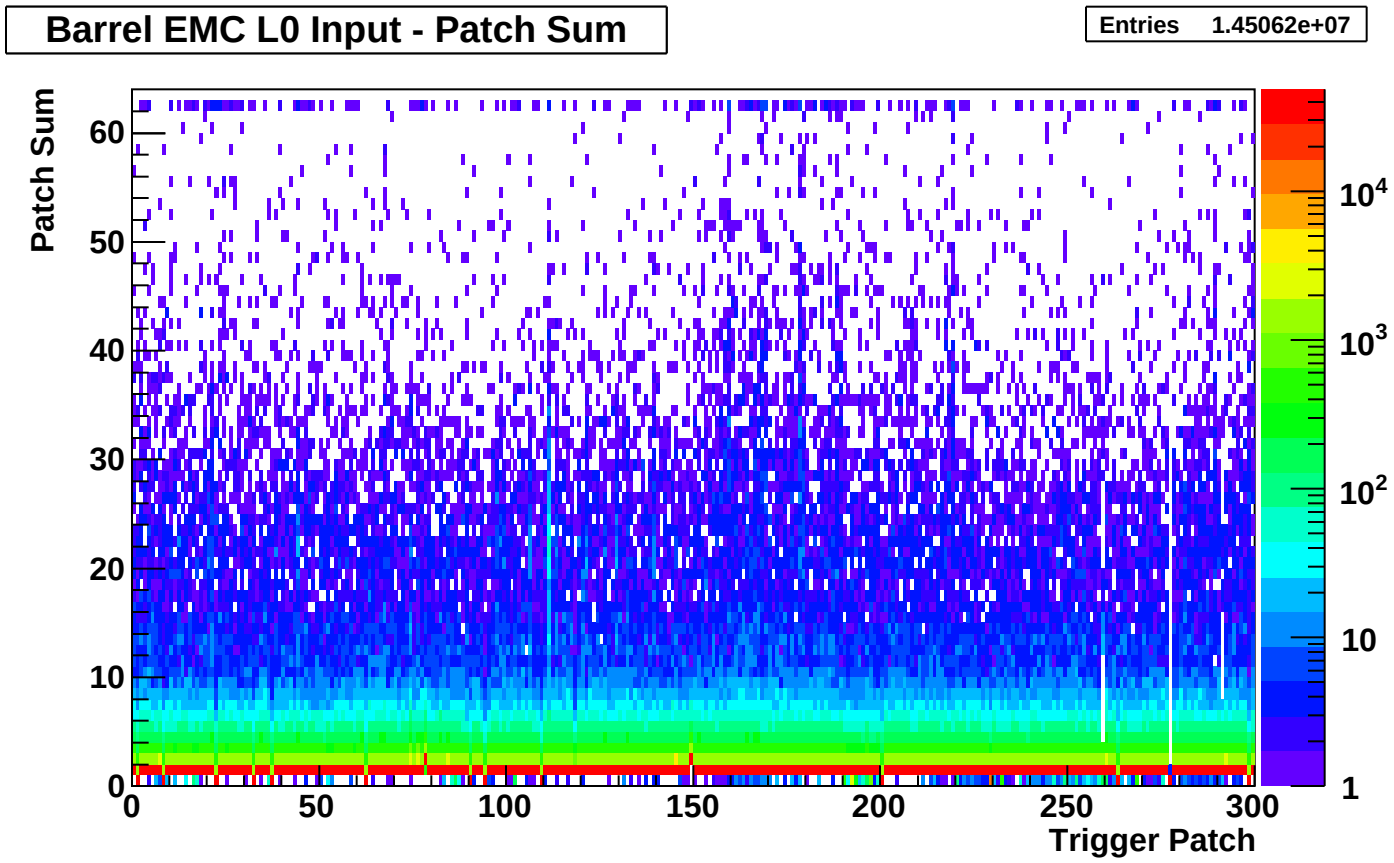

TCU bits
Entries 773664
TCU bits
48354 48354 48354 48354 48354 48354 48354 48354 48354 48354 48354 48354 48354 48354 48354 48354
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

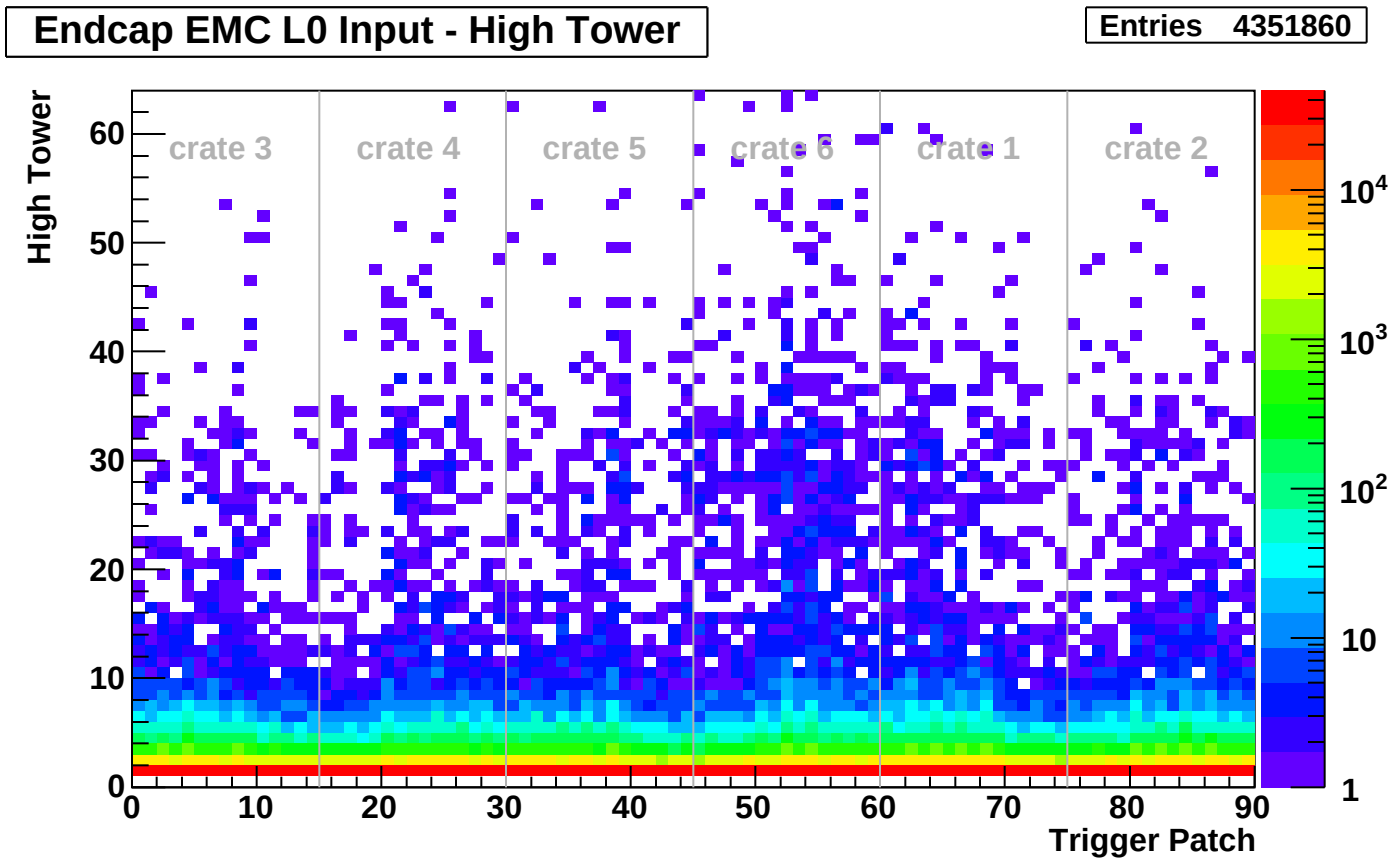

TCU bits
Entries 55598
TCU bits - Simulated
7779 7970 22915 968 1195 146 14199 426
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

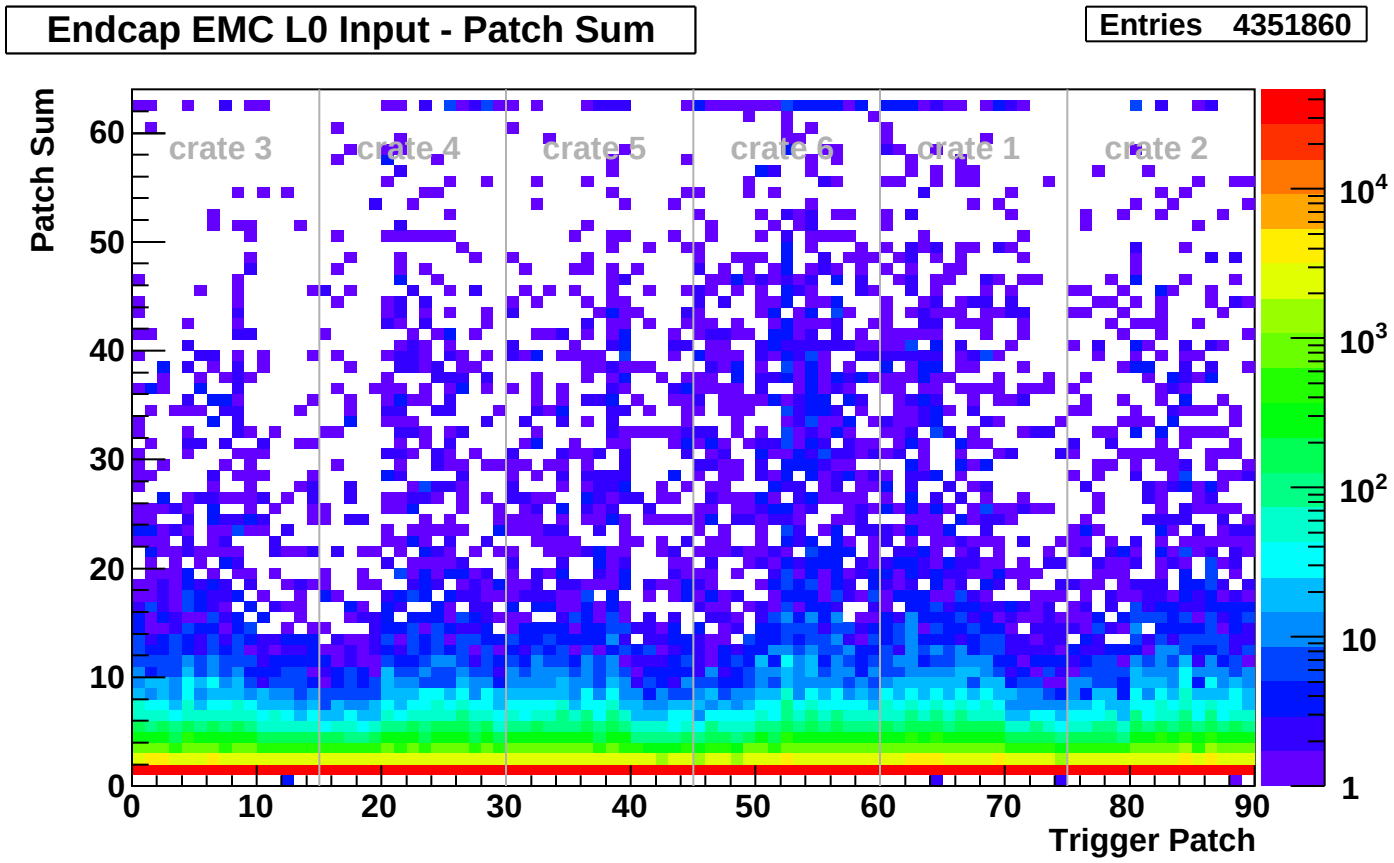

BunchId7Bit (BHT3)
Entries 726

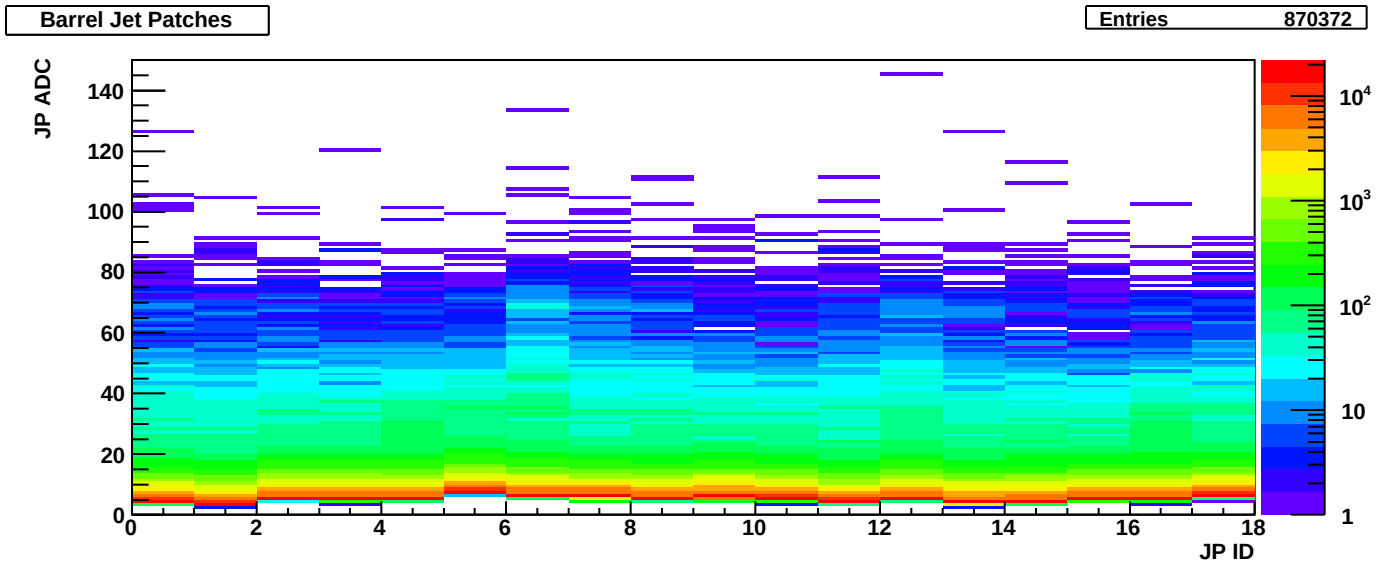

BunchId7Bit (all events)
Entries 48354

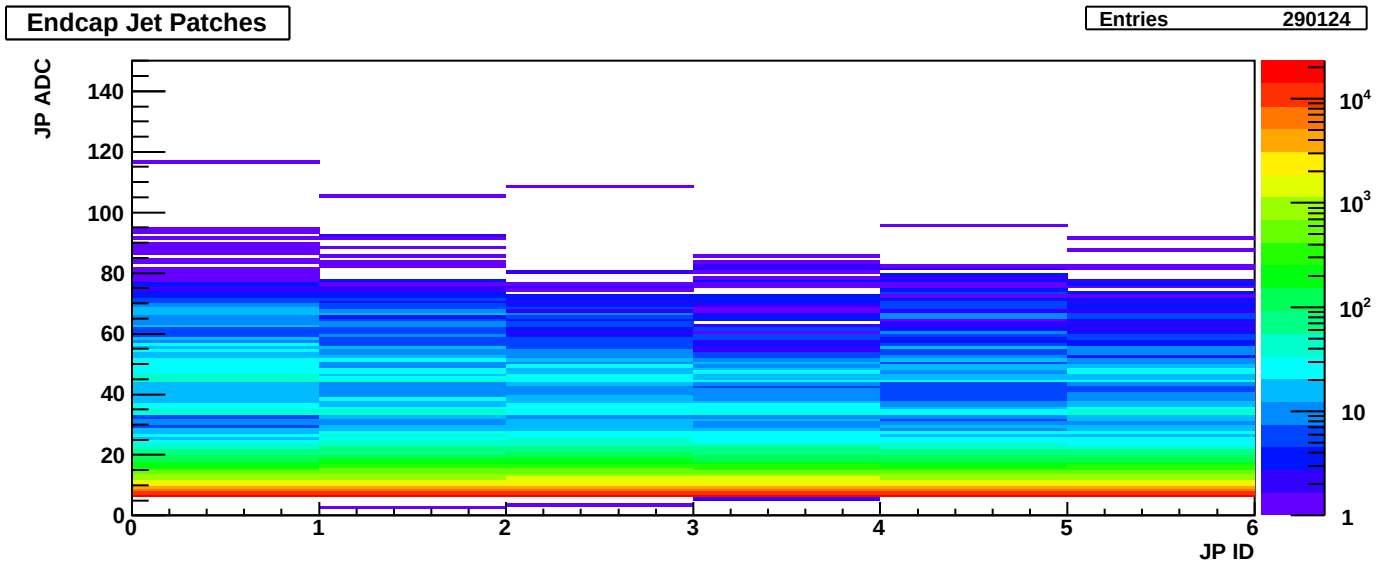

Barrel EMC L0 Input - High Tower
Entries 1.45062e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

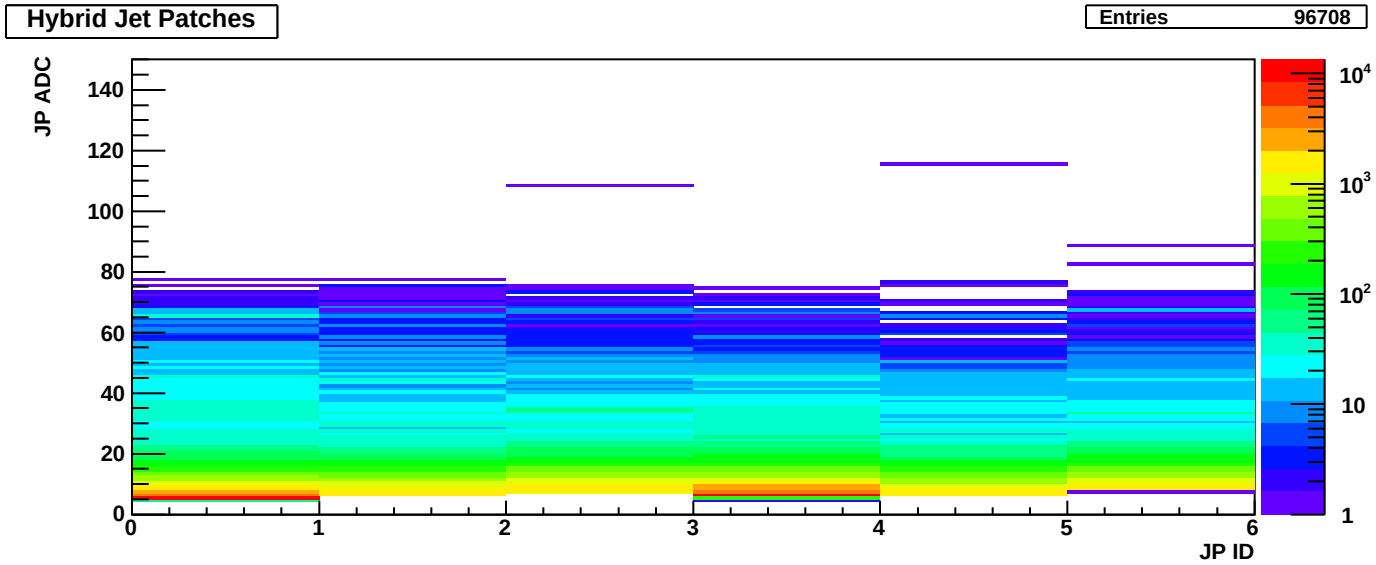

Barrel EMC L0 Input - Patch Sum
Entries 1.45062e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

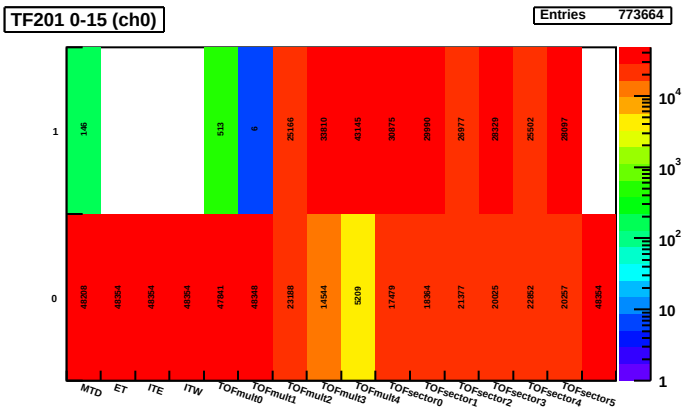

Endcap EMC L0 Input - High Tower
Entries 4351860
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

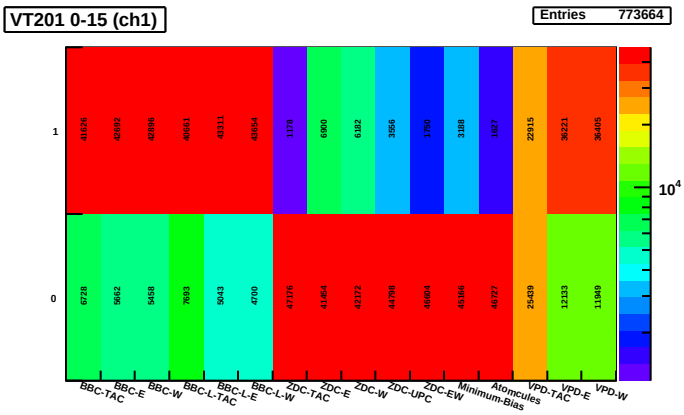

Endcap EMC L0 Input - Patch Sum
Entries 4351860
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

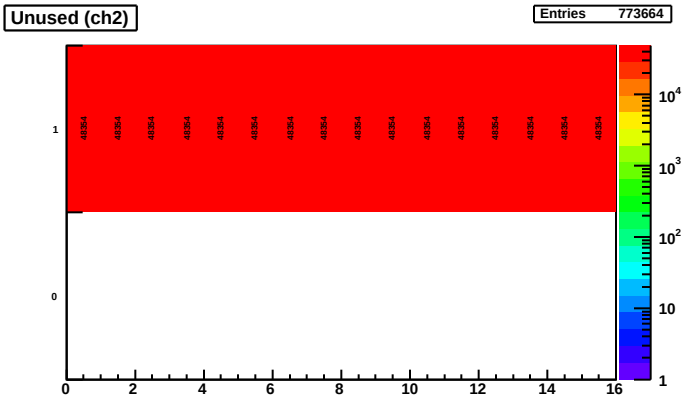

Barrel Jet Patches
Entries 870372
JP ADC
JP ID

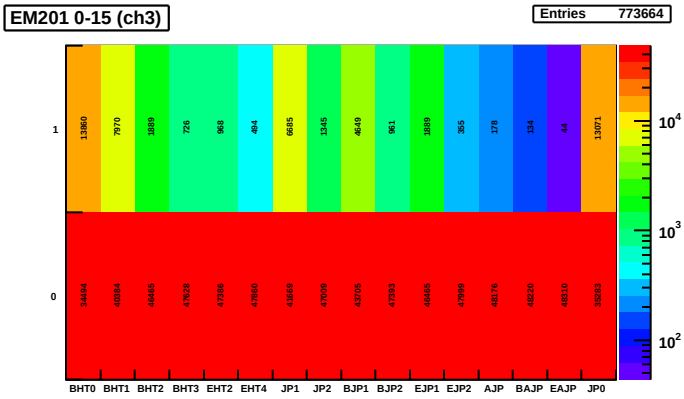

Endcap Jet Patches
Entries 290124
JP ADC
JP ID

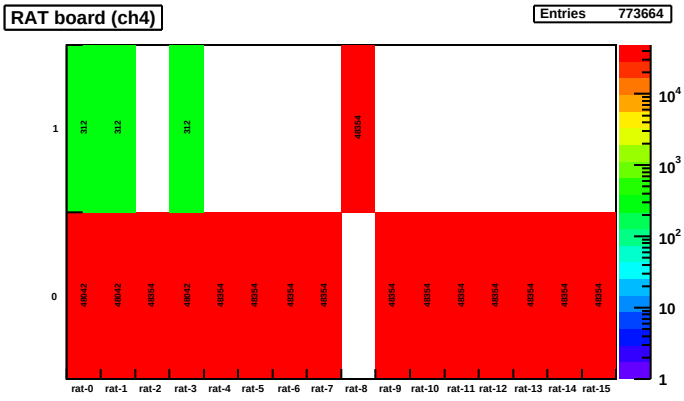

Hybrid Jet Patches
Entries 96708
JP ADC
JP ID

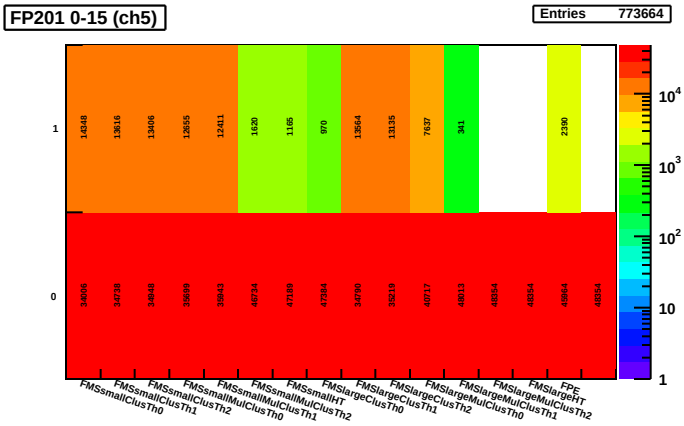

TF201 0-15 (ch0)
Entries 773664
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

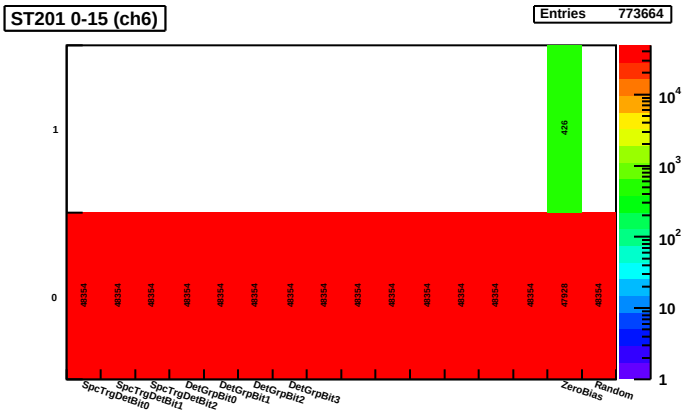

VT201 0-15 (ch1)
Entries 773664
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

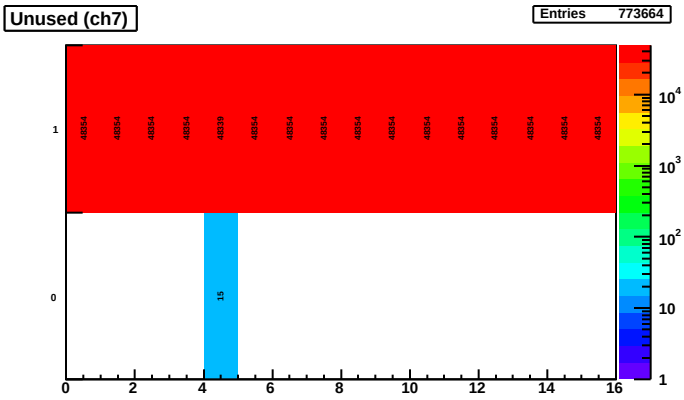

Unused (ch2)
Entries 773664

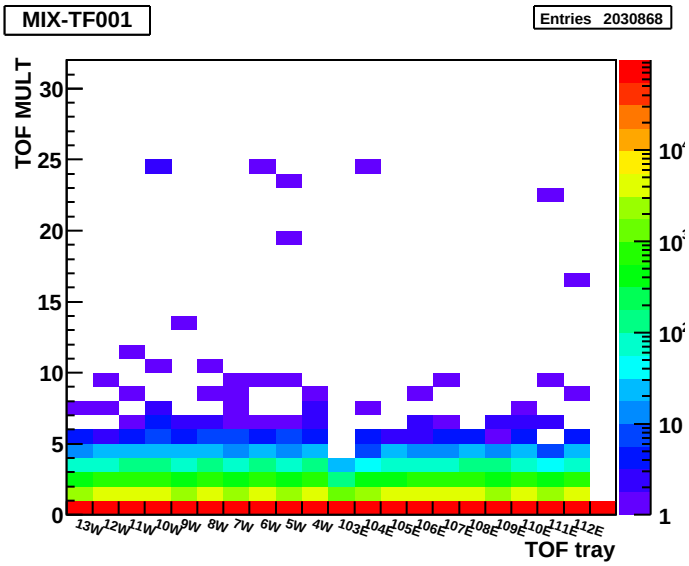

EM201 0-15 (ch3)
Entries 773664
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

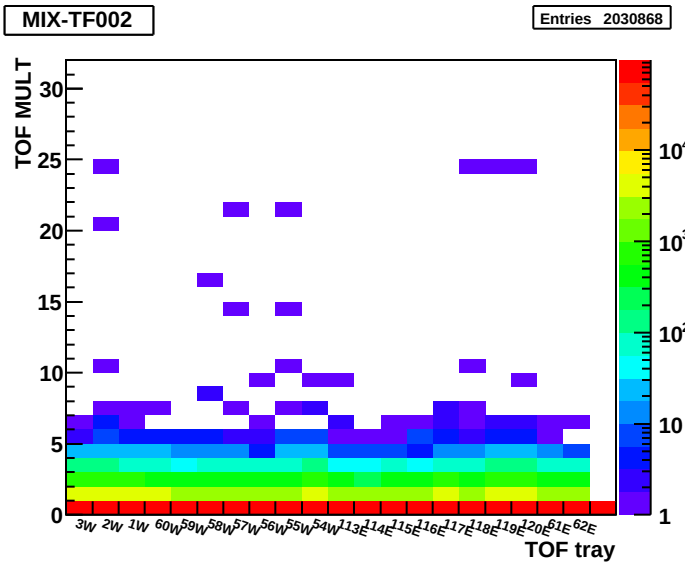

RAT board (ch4)
Entries 773664
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

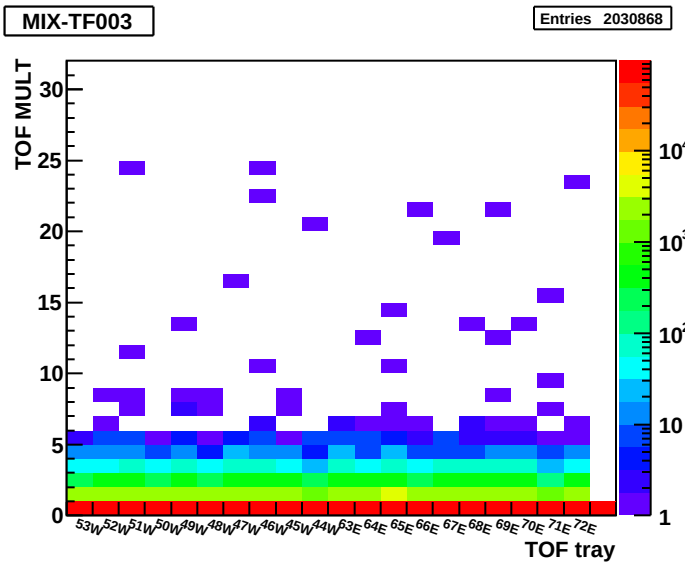

FP201 0-15 (ch5)
Entries 773664
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

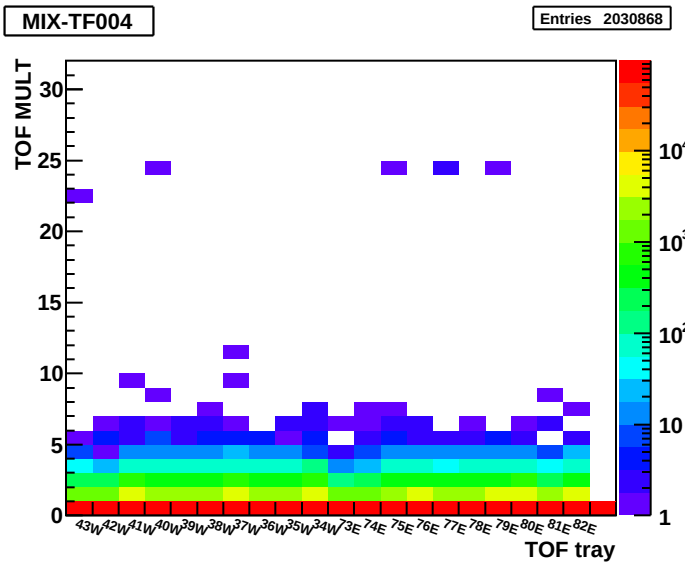

ST201 0-15 (ch6)
Entries 773664
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

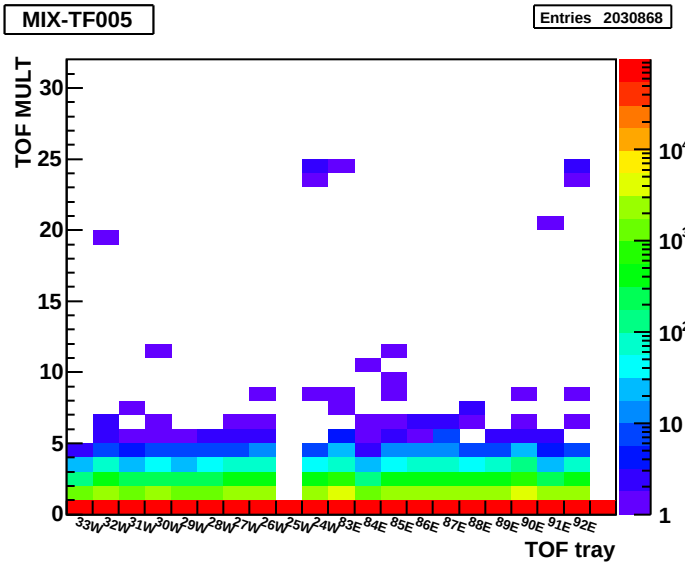

Unused (ch7)
Entries 773664

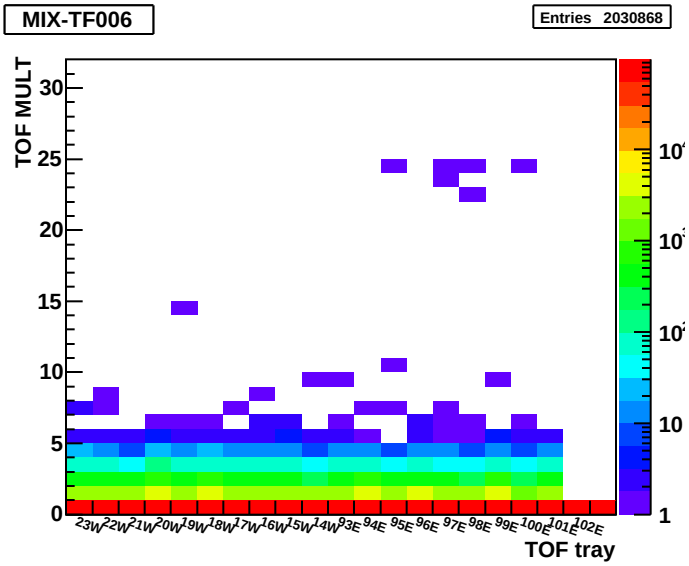

MIX-TF001
Entries 2030868
TOF MULT
TOF tray

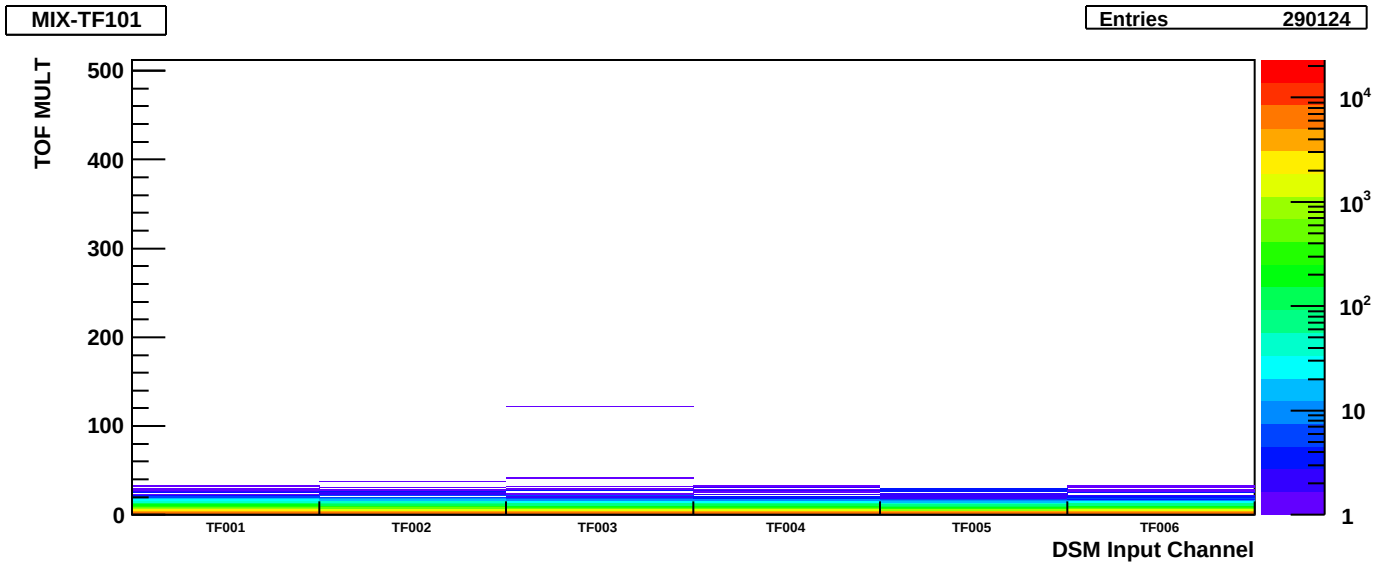

MIX-TF002
Entries 2030868
TOF MULT
TOF tray

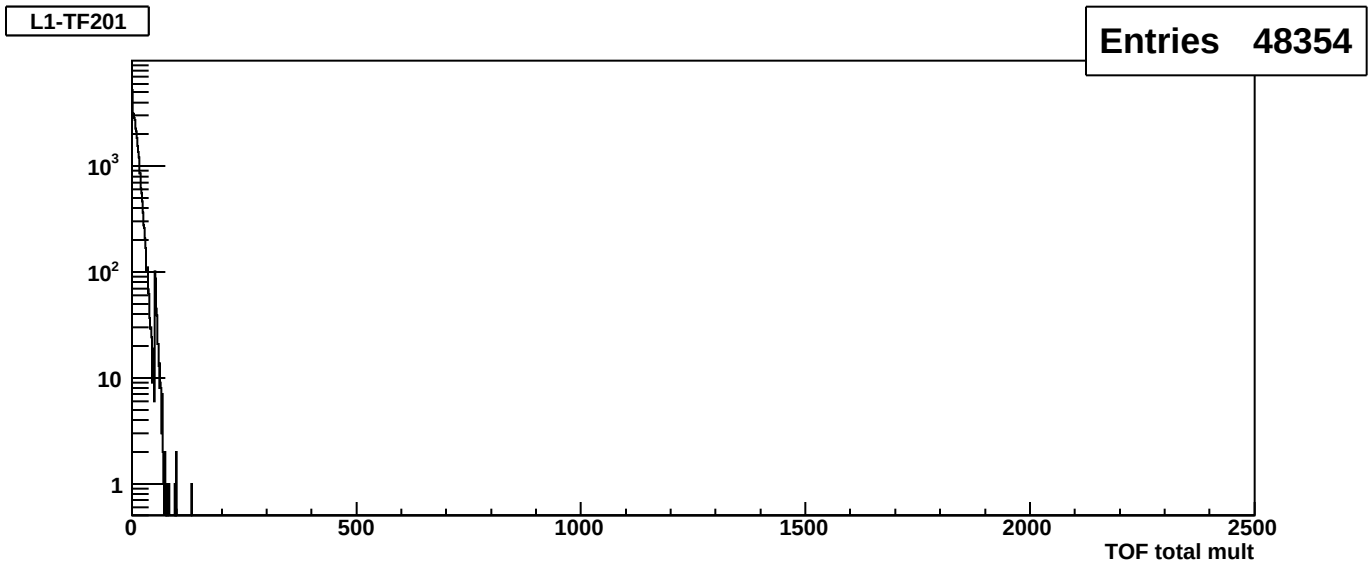

MIX-TF003
Entries 2030868
TOF MULT
TOF tray

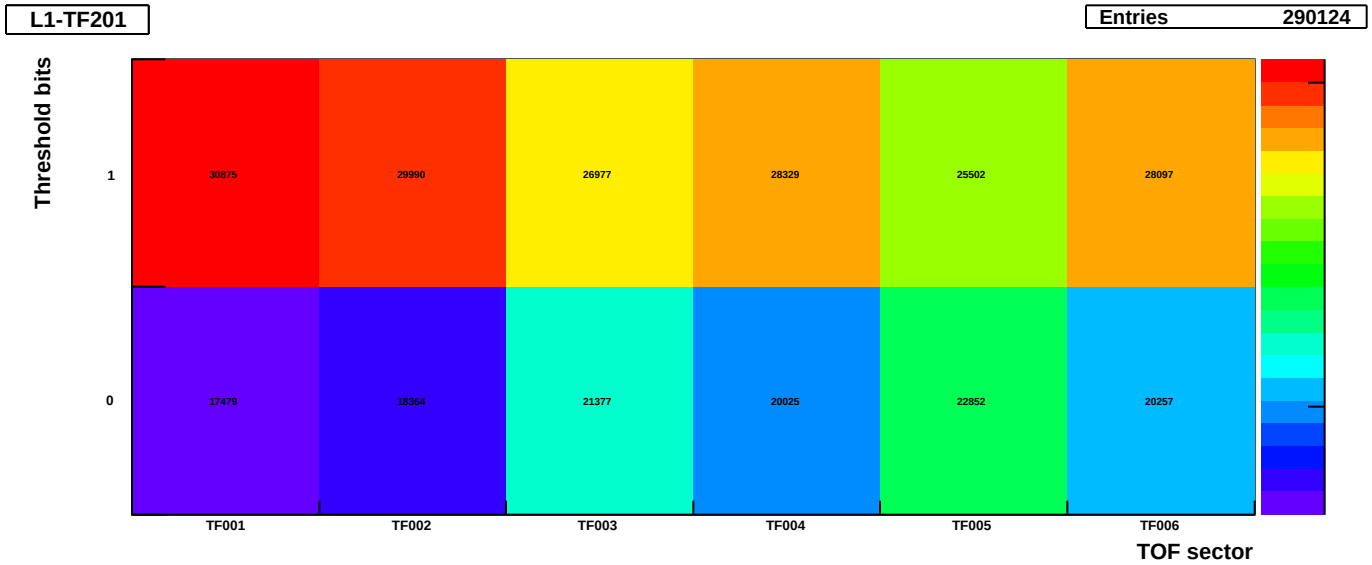

MIX-TF004
Entries 2030868
TOF MULT
TOF tray

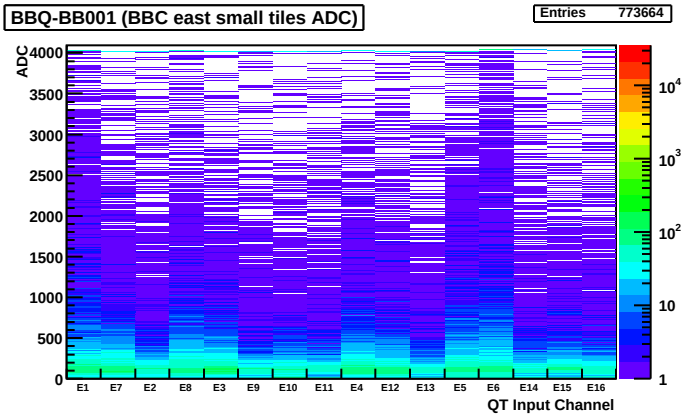

MIX-TF005
Entries 2030868
TOF MULT
TOF tray

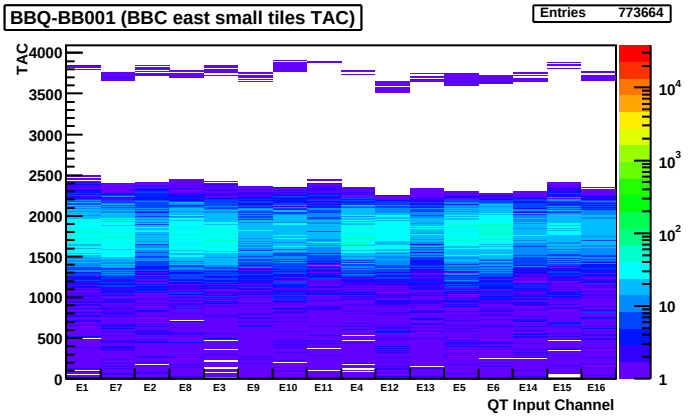

MIX-TF006
Entries 2030868
TOF MULT
TOF tray

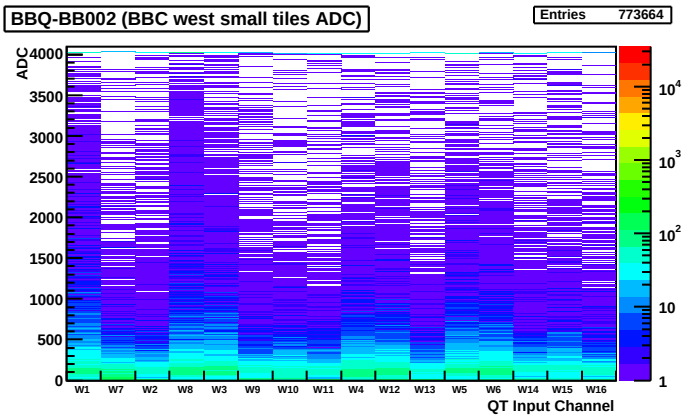

MIX-TF101
Entries 290124
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^4$
$10^3$
$10^2$
10
1

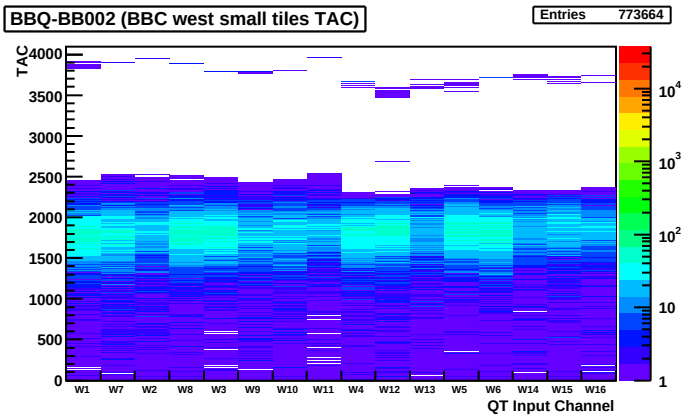

L1-TF201
Entries 48354
$10^3$
$10^2$
10
1
0
500
1000
1500
2000
2500
TOF total mult

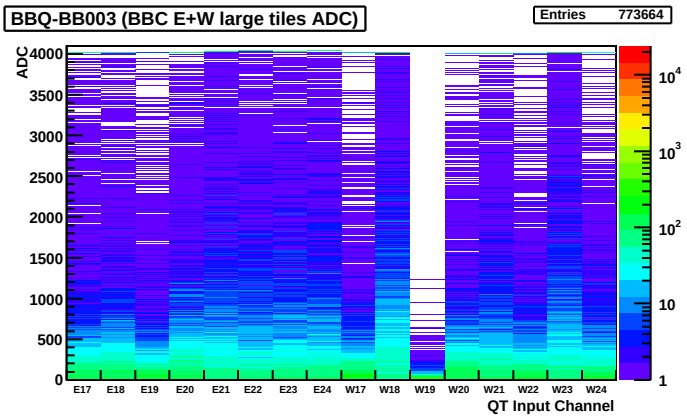

L1-TF201
Entries 290124
Threshold bits
1
0
30875
29990
26977
28329
25502
28097
17479
18364
21377
20025
22852
20257
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

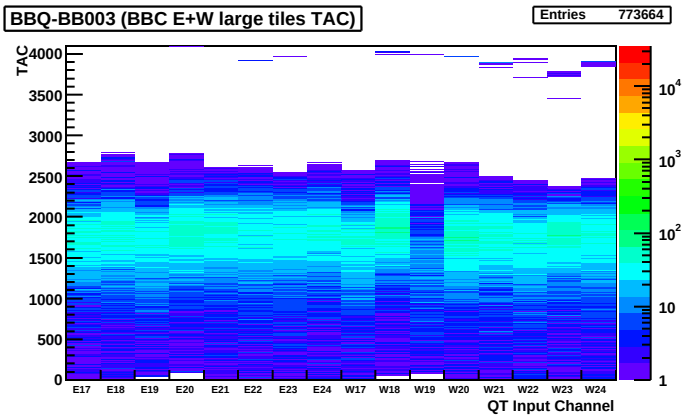

BBQ-BB001 (BBC east small tiles ADC)
Entries 773664
ADC
QT Input Channel

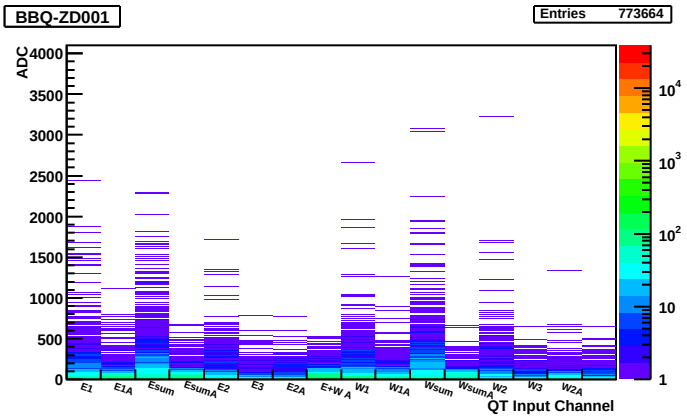

BBQ-BB001 (BBC east small tiles TAC)
Entries 773664
TAC
QT Input Channel

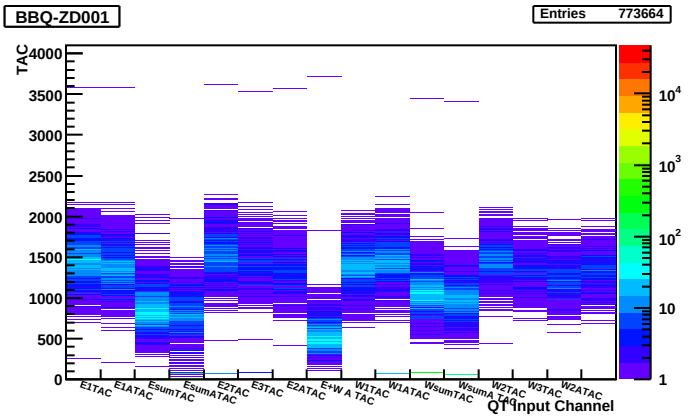

BBQ-BB002 (BBC west small tiles ADC)
Entries 773664
ADC
QT Input Channel

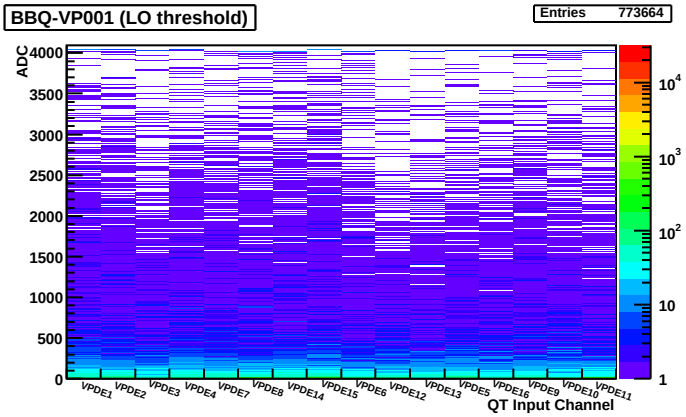

BBQ-BB002 (BBC west small tiles TAC)
Entries 773664
TAC
QT Input Channel

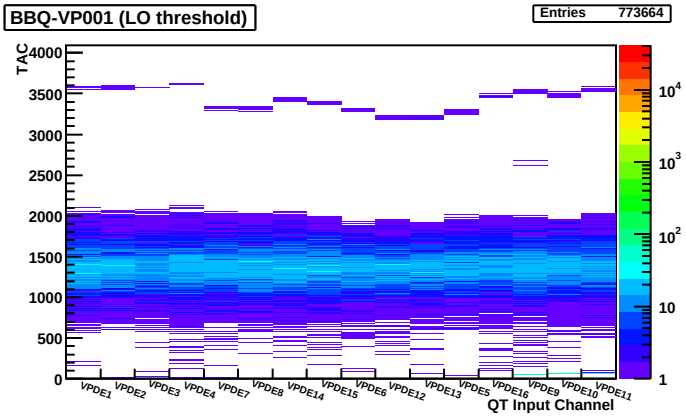

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 773664
ADC
QT Input Channel

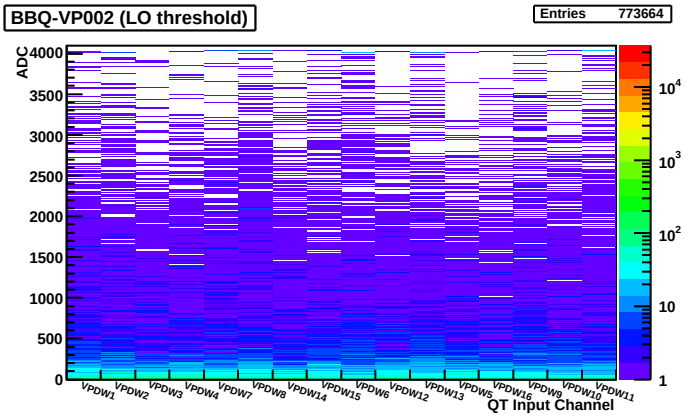

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 773664
TAC
QT Input Channel

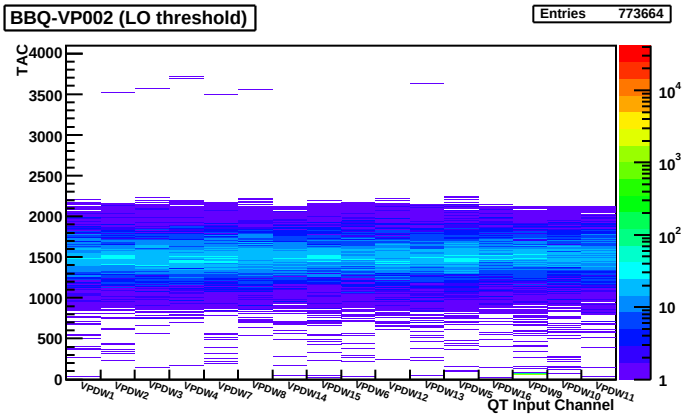

BBQ-ZD001
Entries 773664
ADC
QT Input Channel

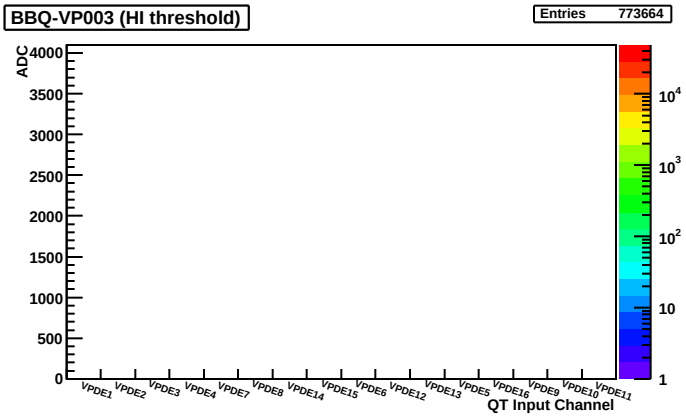

BBQ-ZD001
Entries 773664
TAC
QT Input Channel

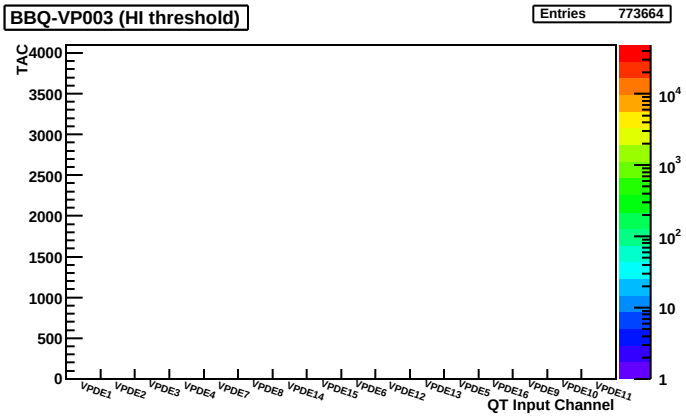

BBQ-VP001 (LO threshold)
Entries 773664
ADC
QT Input Channel

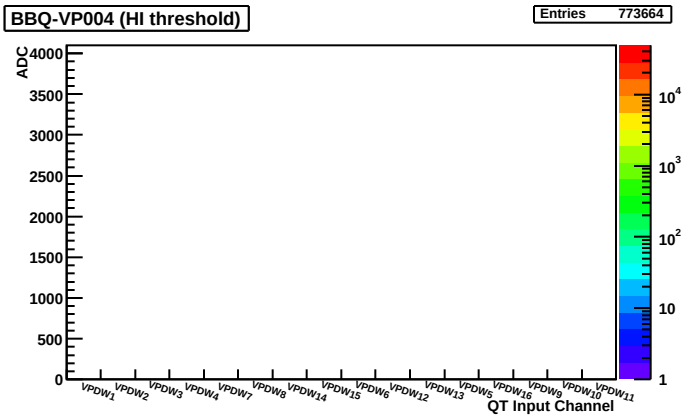

BBQ-VP001 (LO threshold)
Entries 773664
TAC
QT Input Channel

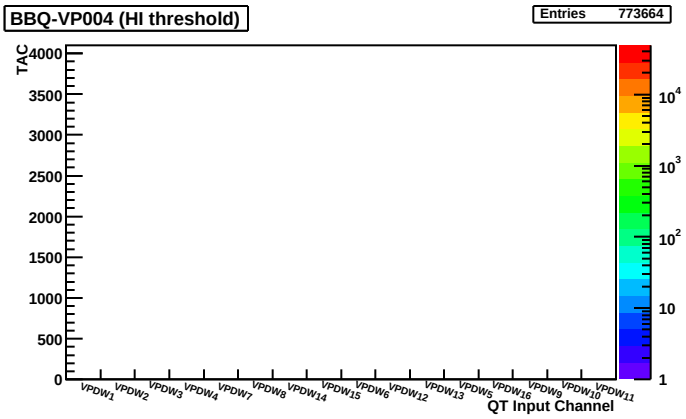

BBQ-VP002 (LO threshold)
Entries 773664
ADC
QT Input Channel

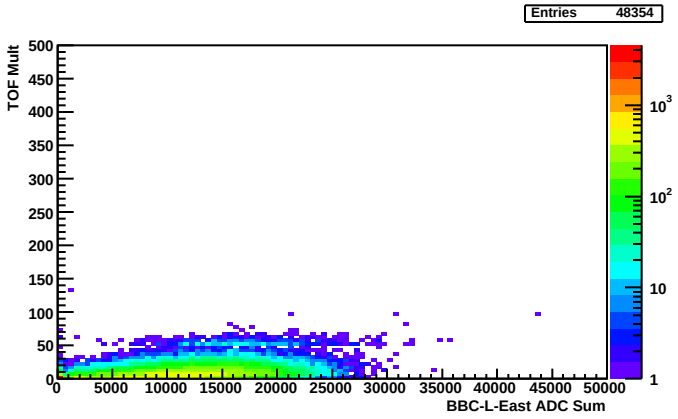

BBQ-VP002 (LO threshold)
Entries 773664
TAC
QT Input Channel

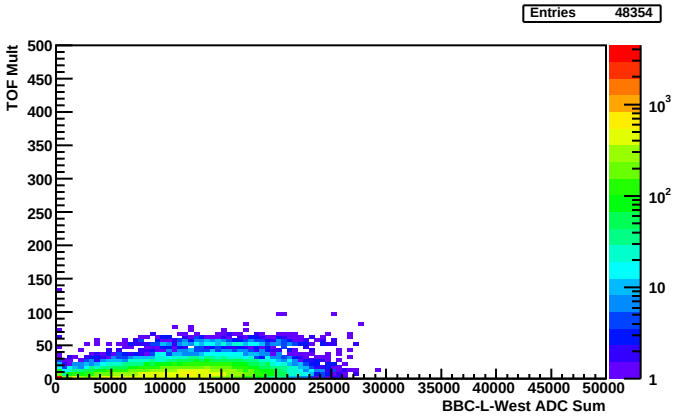

BBQ-VP003 (HI threshold)
Entries 773664
ADC
QT Input Channel

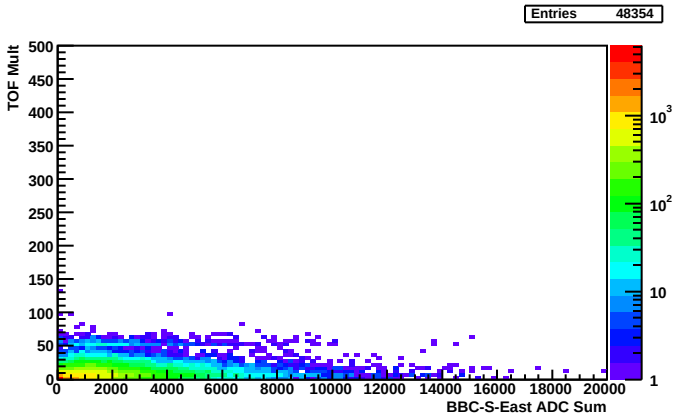

BBQ-VP003 (HI threshold)
Entries 773664
TAC
QT Input Channel

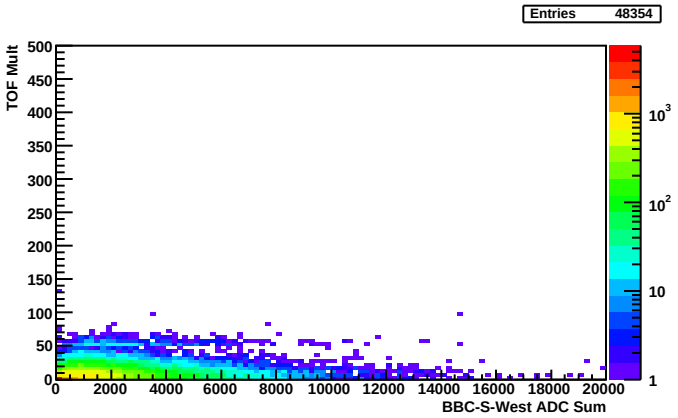

BBQ-VP004 (HI threshold)
Entries 773664
ADC
QT Input Channel

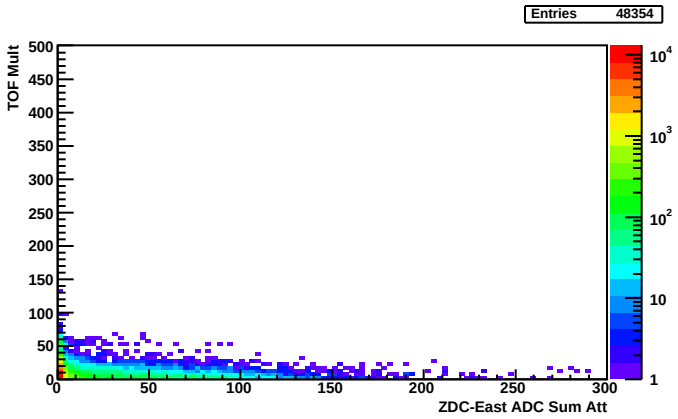

BBQ-VP004 (HI threshold)
Entries 773664
TAC
QT Input Channel

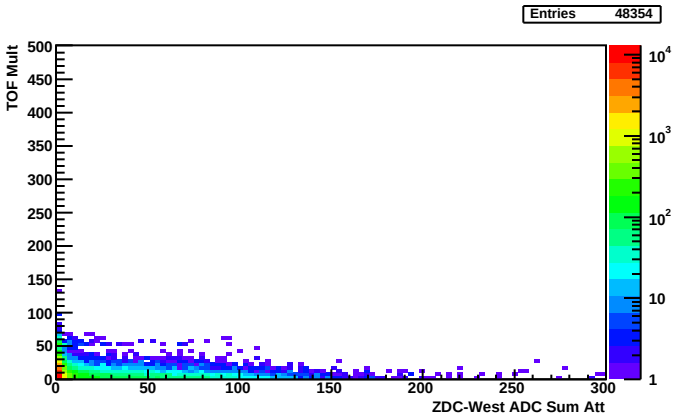

Entries 48354
TOF Mult
BBC-L-East ADC Sum

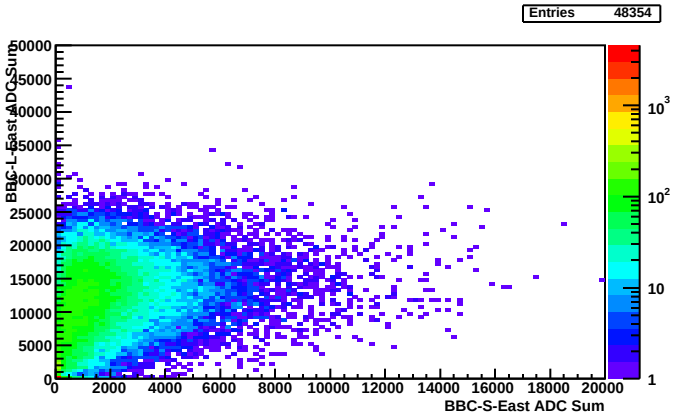

Entries 48354
TOF Mult
BBC-L-West ADC Sum

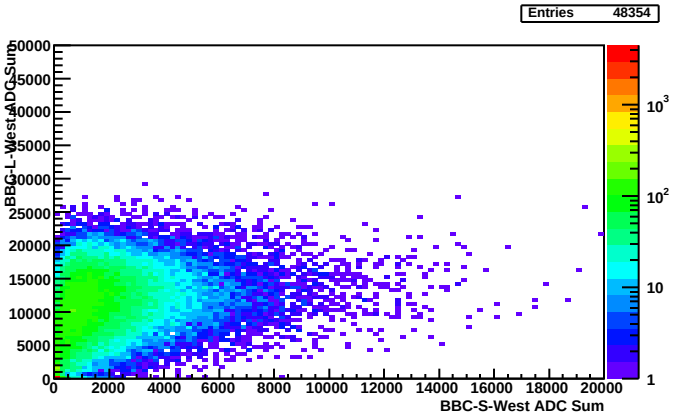

Entries 48354
TOF Mult
BBC-S-East ADC Sum

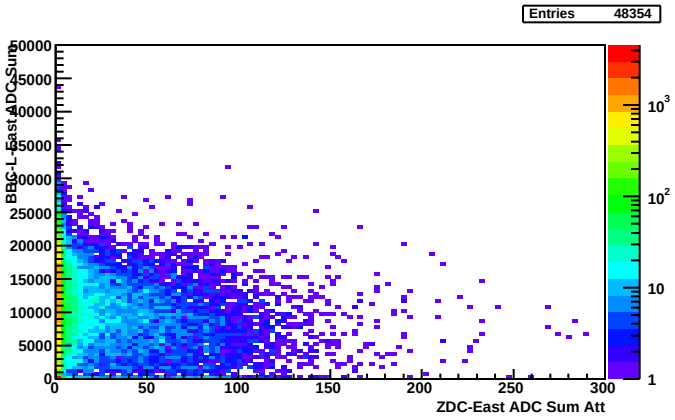

Entries 48354
TOF Mult
BBC-S-West ADC Sum

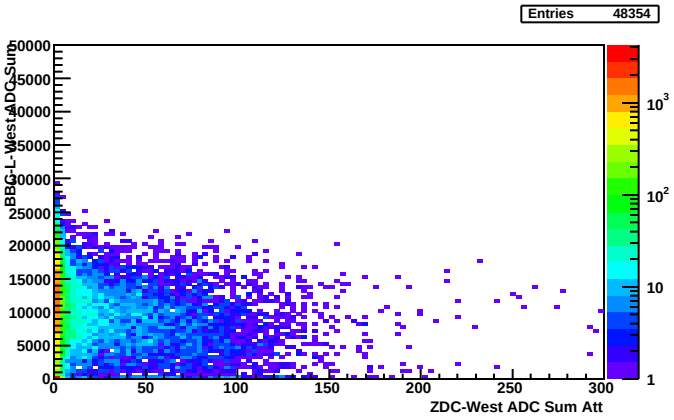

Entries 48354
TOF Mult
ZDC-East ADC Sum Att

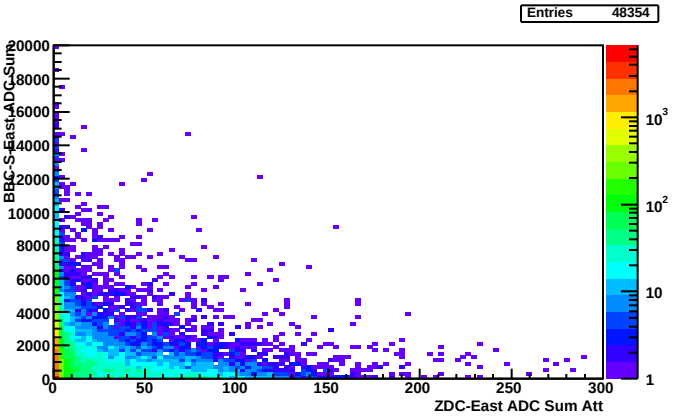

Entries 48354
TOF Mult
ZDC-West ADC Sum Att

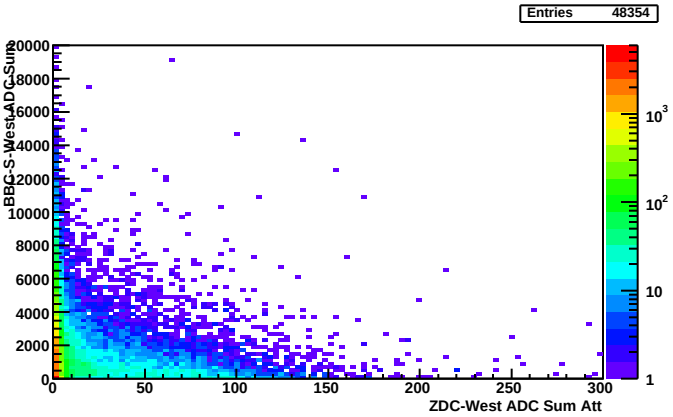

Entries 48354
BBC-L-East ADC Sum
BBC-S-East ADC Sum

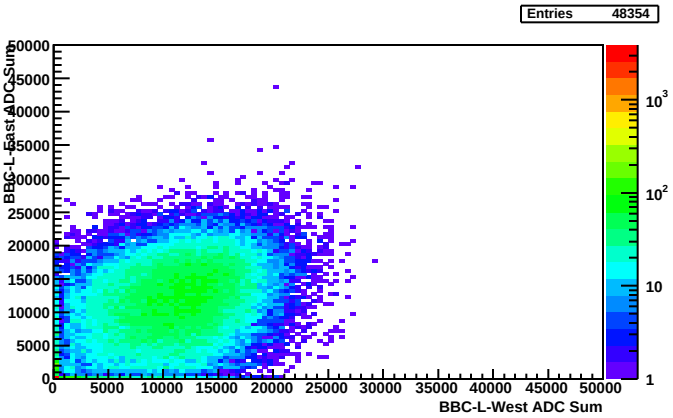

Entries 48354
BBC-L-West ADC Sum
BBC-S-West ADC Sum

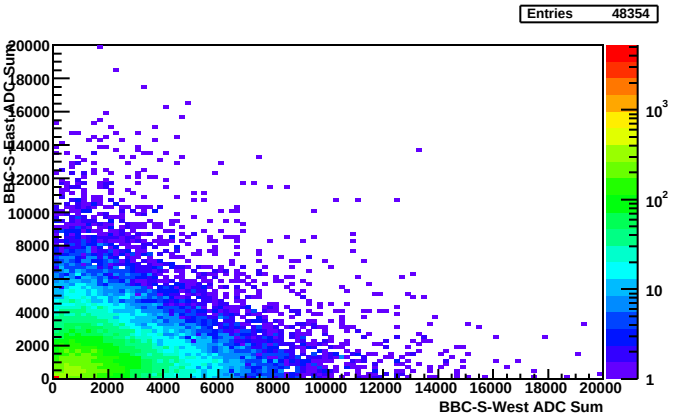

Entries 48354
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

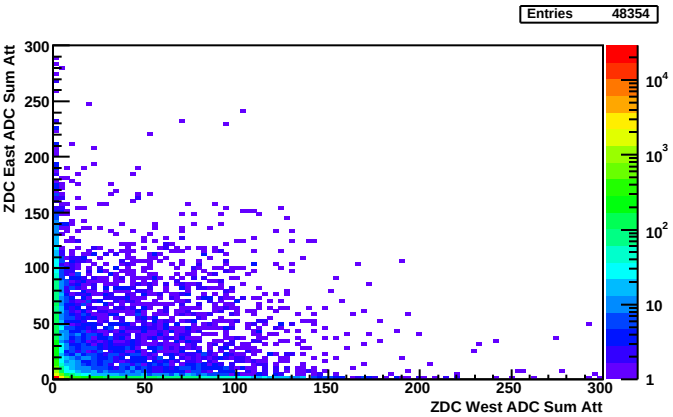

Entries 48354
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

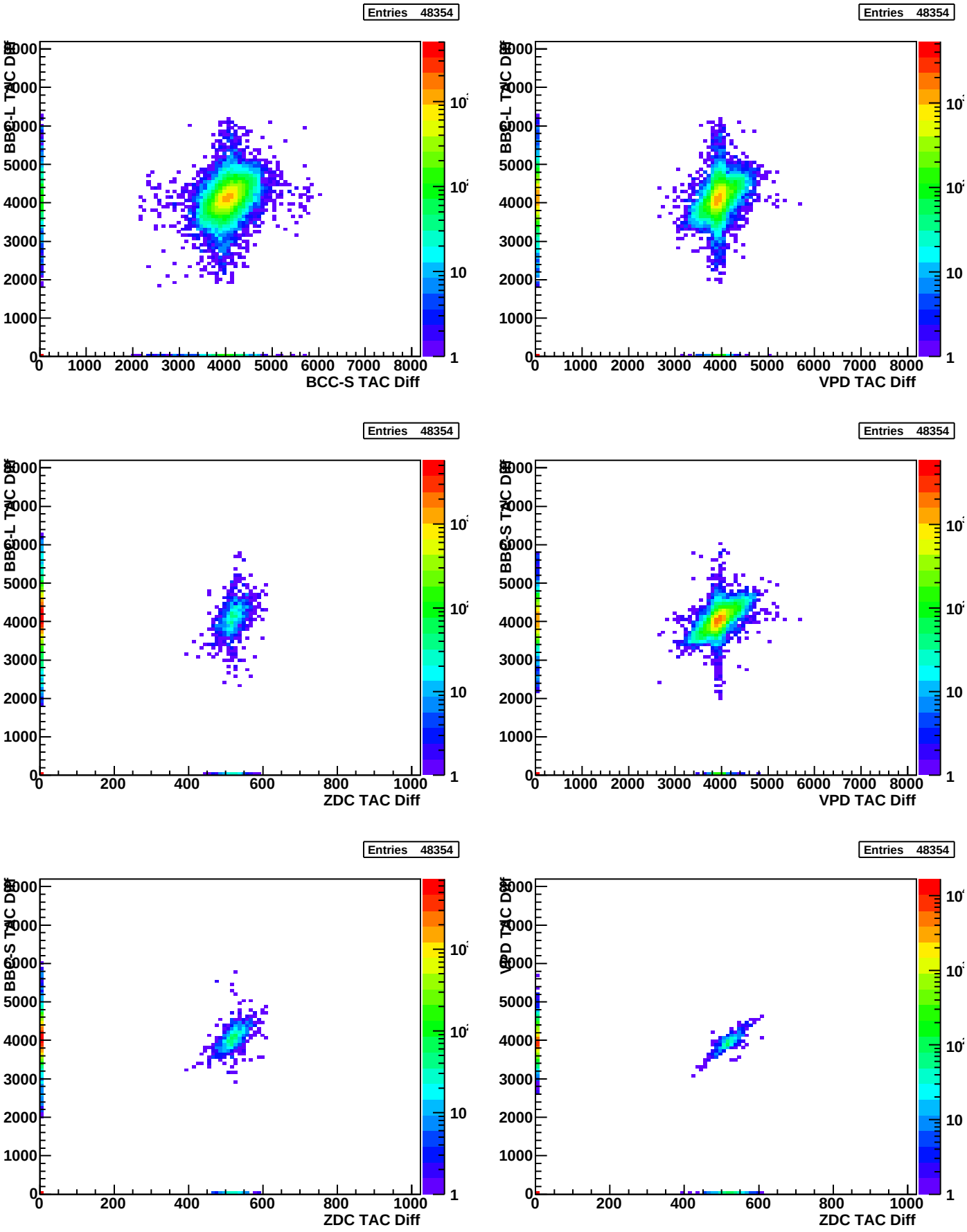

Entries 48354
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

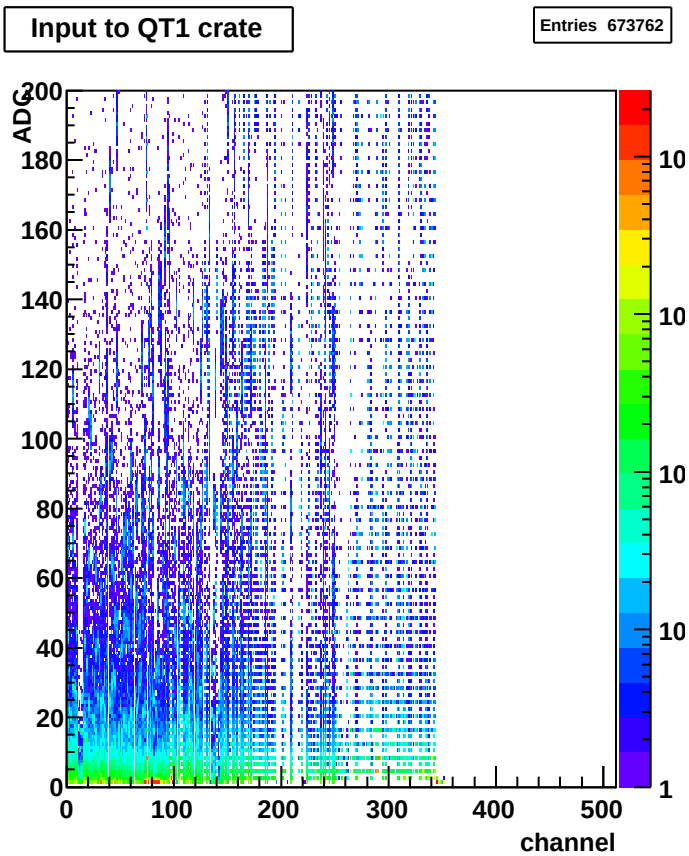

Entries 48354
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

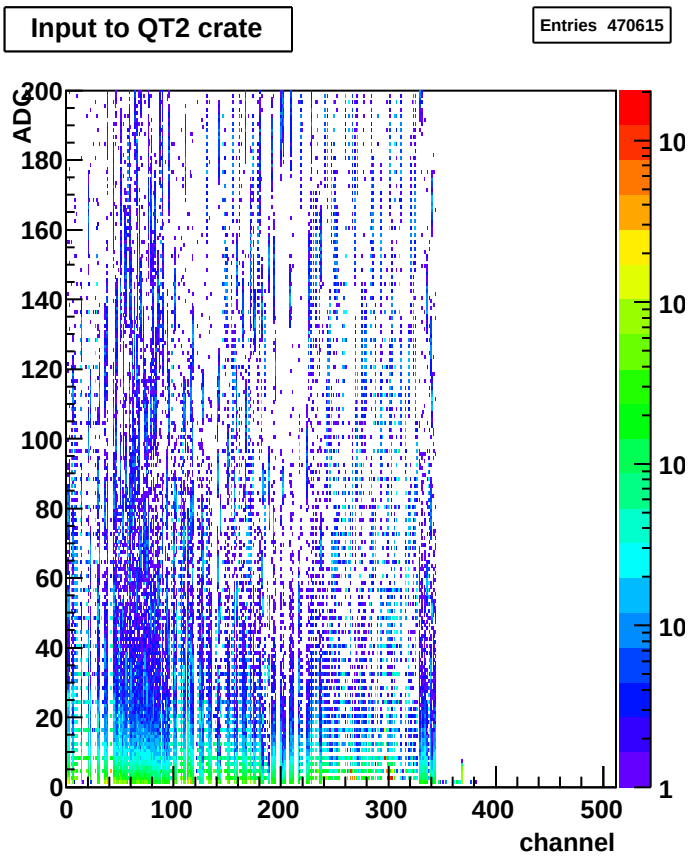

Entries 48354
BBC-L-East ADC Sum
BBC-L-West ADC Sum

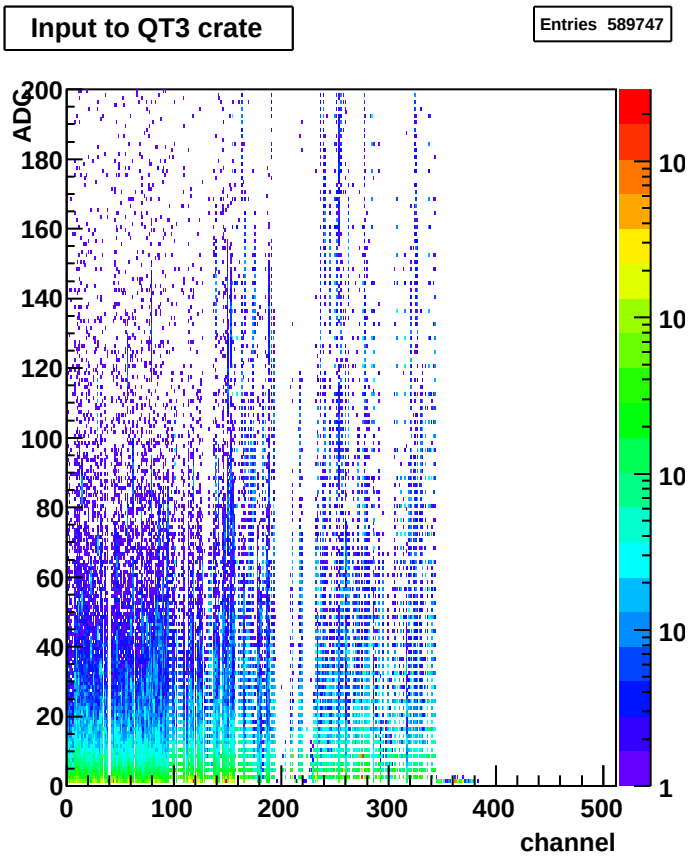

Entries 48354
BBC-S-East ADC Sum
BBC-S-West ADC Sum

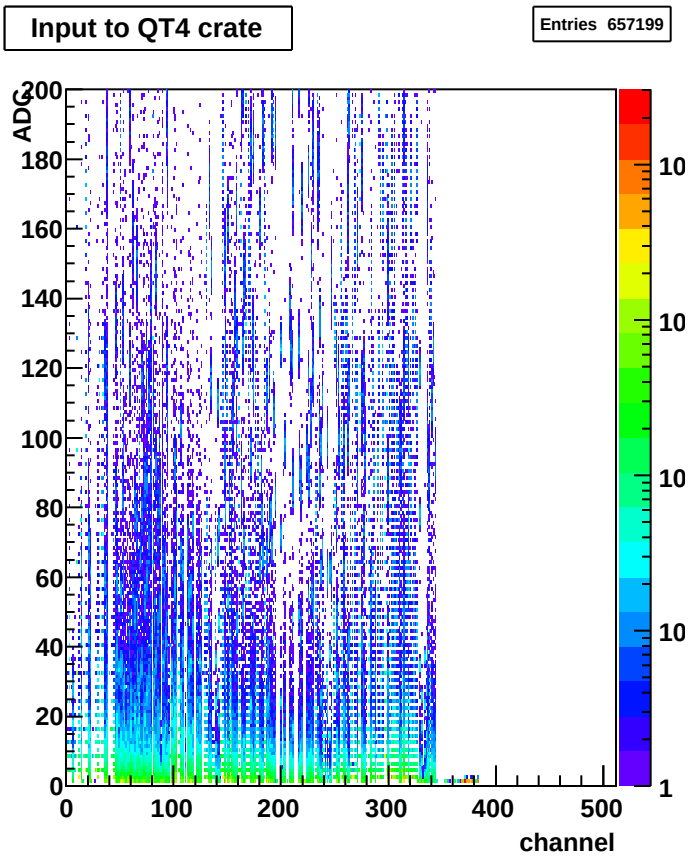

Entries 48354
ZDC East ADC Sum Att
ZDC West ADC Sum Att

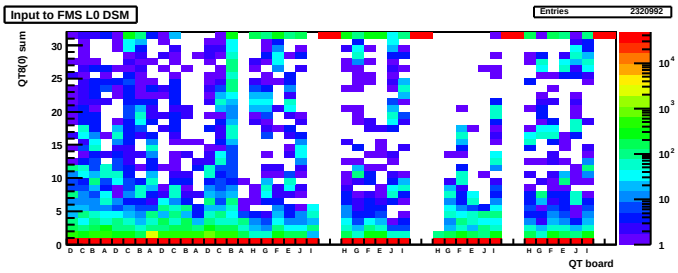

Entries 48354
BBC-L TAC Diff
BCC-S TAC Diff
Entries 48354
BBC-L TAC Diff
VPD TAC Diff
Entries 48354
BBC-L TAC Diff
ZDC TAC Diff
Entries 48354
BBC-S TAC Diff
VPD TAC Diff
Entries 48354
BBC-S TAC Diff
ZDC TAC Diff
Entries 48354
VPD TAC Diff
ZDC TAC Diff

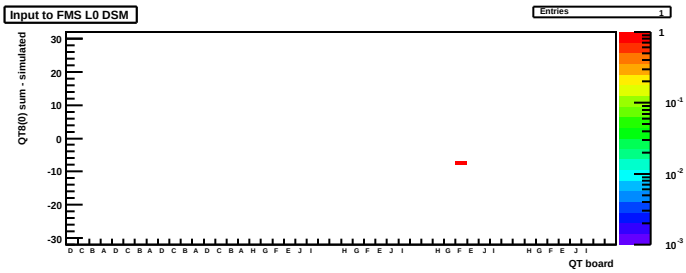

Input to QT1 crate
Entries 673762
ADC
channel

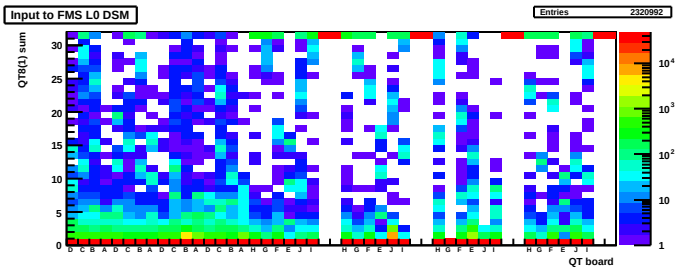

Input to QT2 crate
Entries 470615
ADC
channel

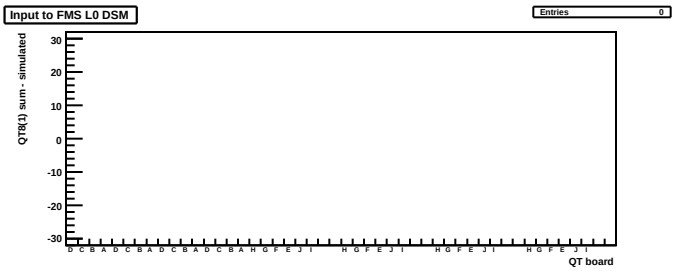

Input to QT3 crate
Entries 589747
ADC
channel

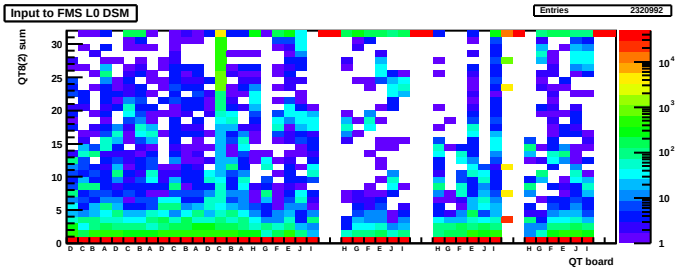

Input to QT4 crate
Entries 657199
ADC
channel

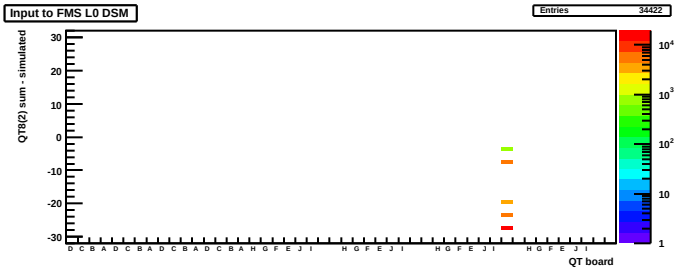

Input to FMS L0 DSM
Entries 2320992
QT8(0) sum
QT board

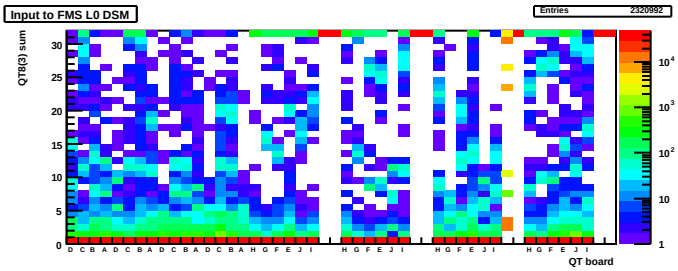

Input to FMS L0 DSM
Entries 1
QT8(0) sum - simulated
QT board

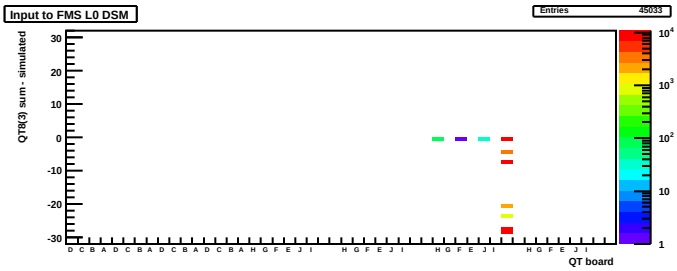

Input to FMS L0 DSM
Entries 2320992
QT8(1) sum
QT board

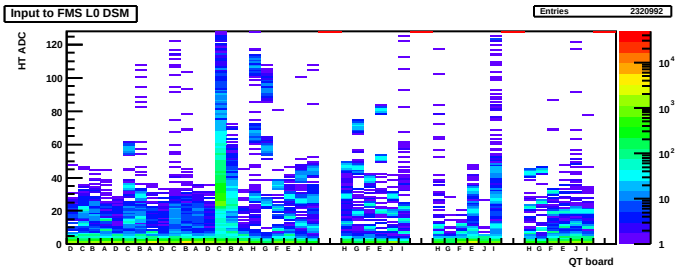

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

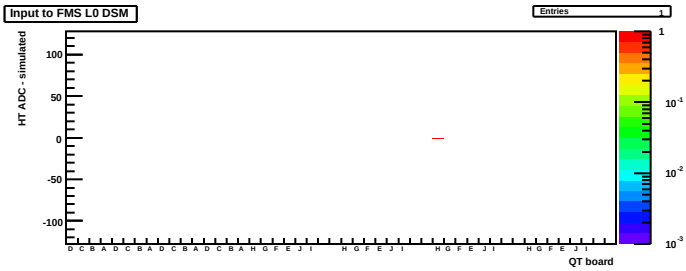

Input to FMS L0 DSM
Entries 2320992
QT8(2) sum
QT board

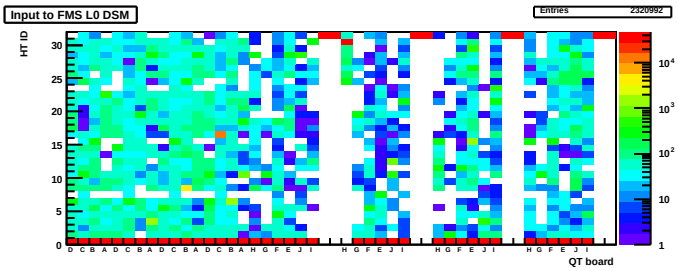

Input to FMS L0 DSM
Entries 34422
QT8(2) sum - simulated
QT board

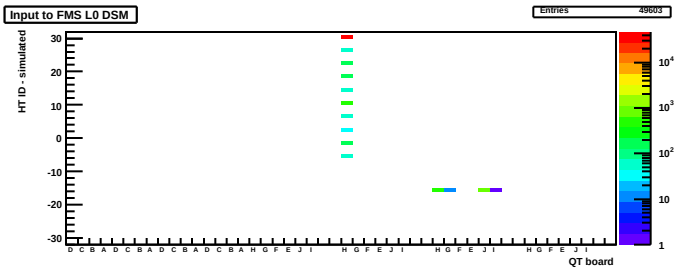

Input to FMS L0 DSM
Entries 2320992
QT8(3) sum
QT board

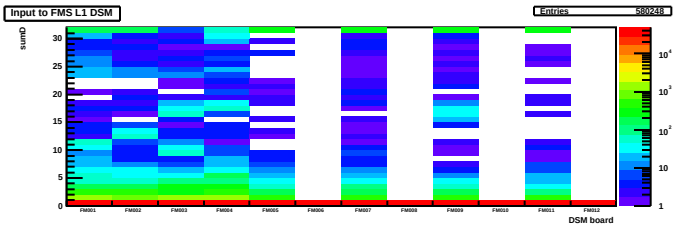

Input to FMS L0 DSM
Entries 45033
QT8(3) sum - simulated
QT board

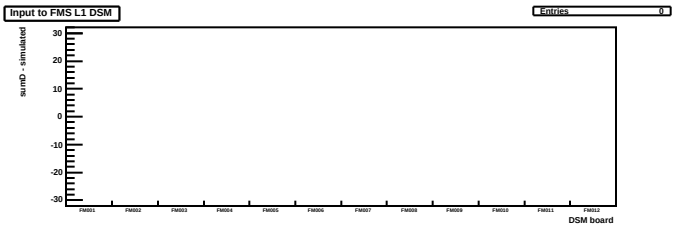

Input to FMS L0 DSM
Entries 2320992
HT ADC
QT board

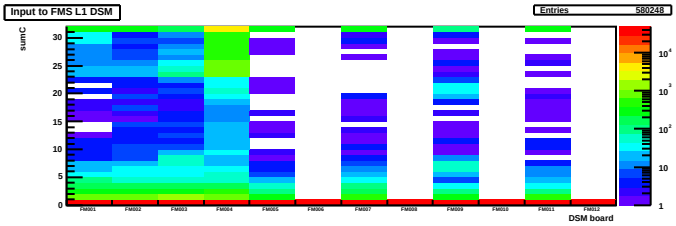

Input to FMS L0 DSM
Entries 1
HT ADC - simulated
QT board

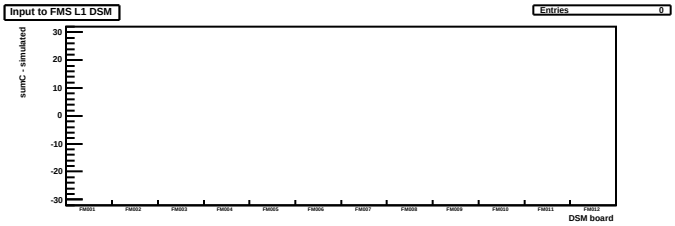

Input to FMS L0 DSM
Entries 2320992
HT ID
QT board

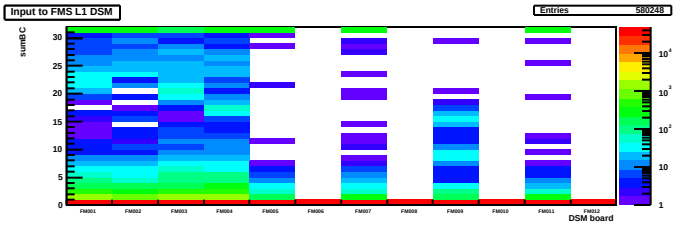

Input to FMS L0 DSM
Entries 49603
HT ID - simulated
QT board

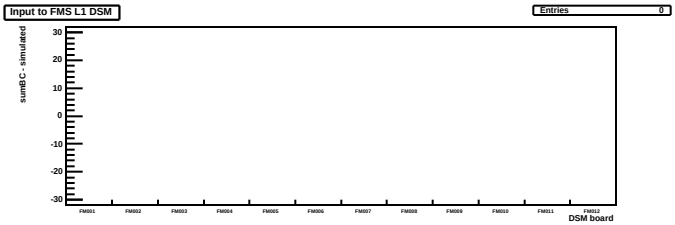

Input to FMS L1 DSM
Entries 580248
sumD
DSM board

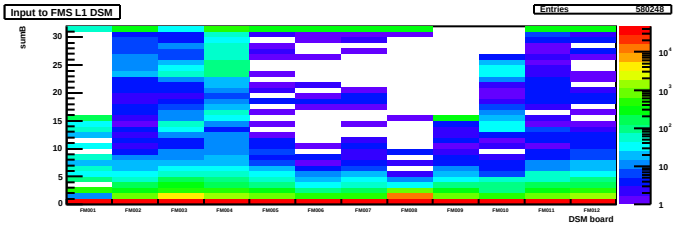

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

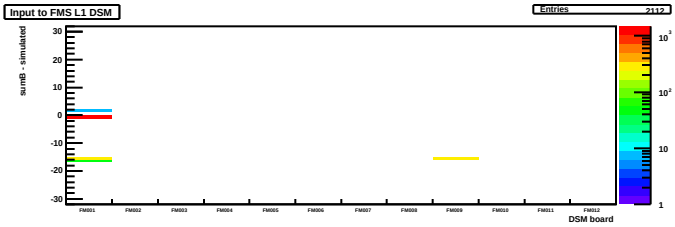

Input to FMS L1 DSM
Entries 580248
sumC
DSM board

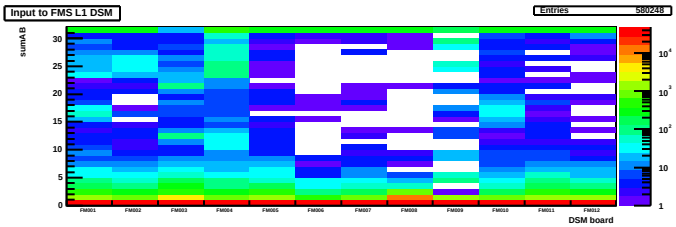

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

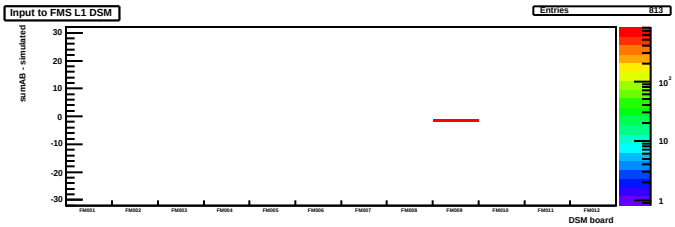

Input to FMS L1 DSM
Entries 580248
sumBC
DSM board

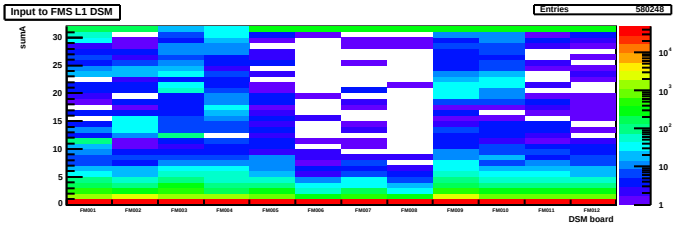

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

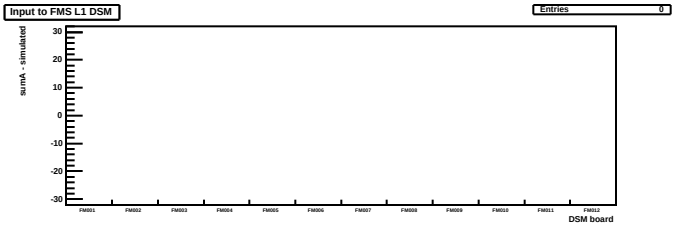

Input to FMS L1 DSM
Entries 580248
sumB
DSM board

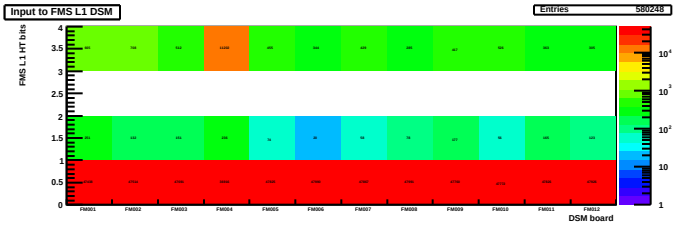

Input to FMS L1 DSM
Entries 2112
sumB - simulated
DSM board

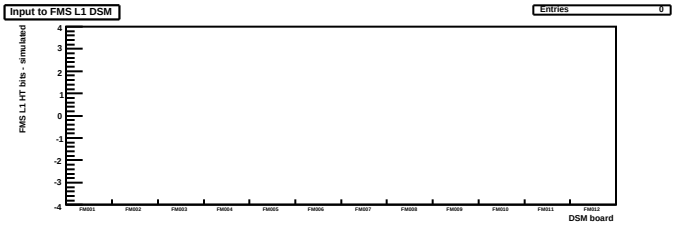

Input to FMS L1 DSM
Entries 580248
sumAB
DSM board

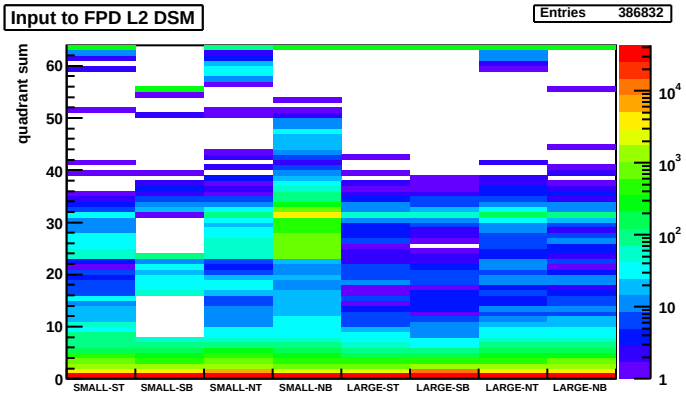

Input to FMS L1 DSM
Entries 813
sumAB - simulated
DSM board

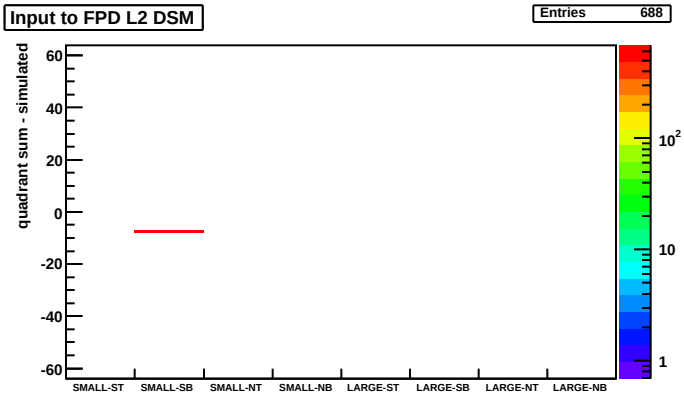

Input to FMS L1 DSM
Entries 580248
sumA
DSM board

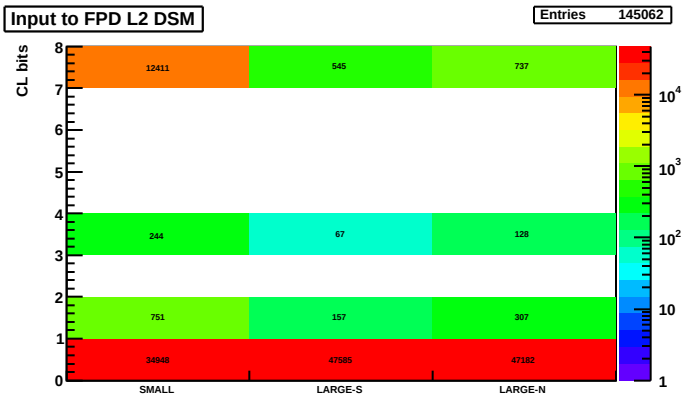

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

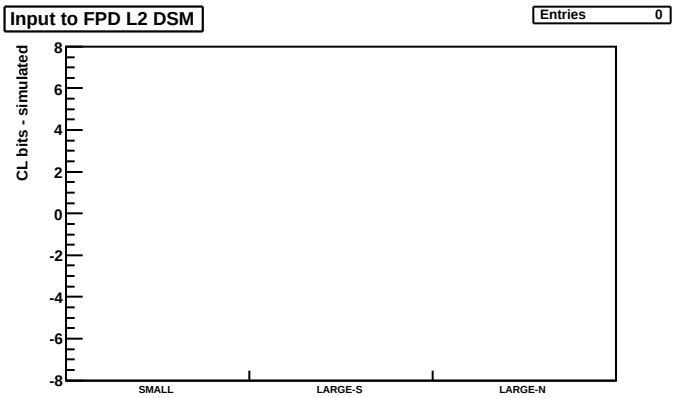

Input to FMS L1 DSM
Entries 580248
FMS L1 HT bits
DSM board

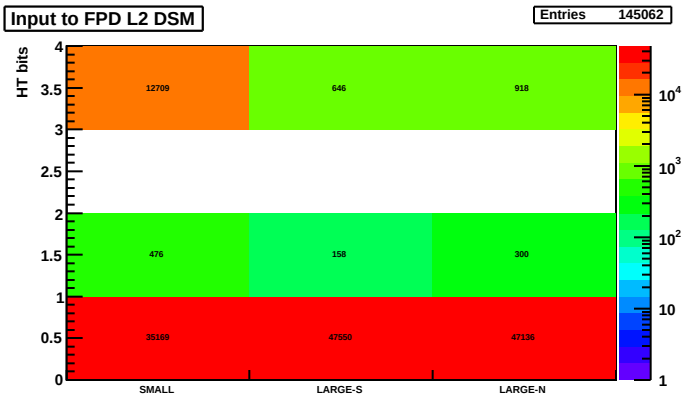

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

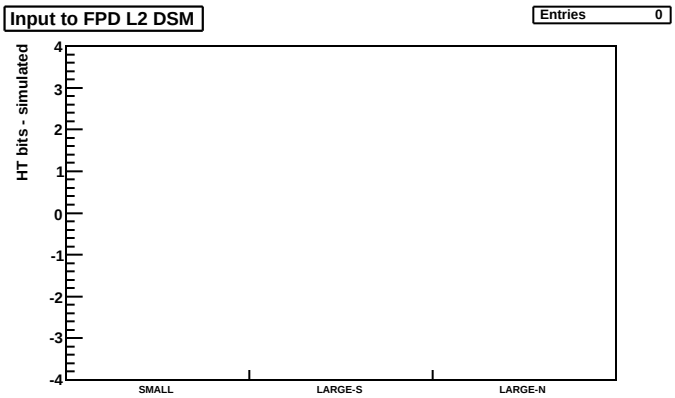

Input to FPD L2 DSM
Entries 386832
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

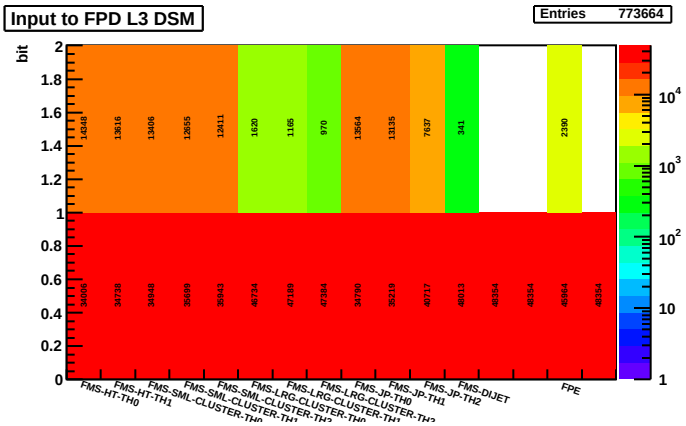

Input to FPD L2 DSM
Entries 688
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

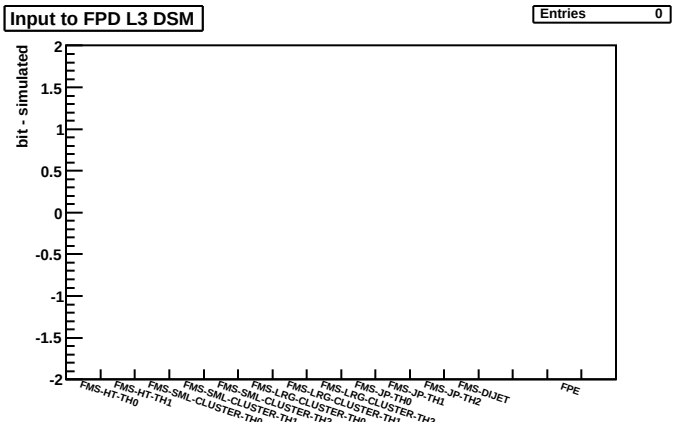

Input to FPD L2 DSM
Entries 145062
CL bits
12411
545
737
244
67
128
751
157
307
34948
47585
47182
SMALL
LARGE-S
LARGE-N

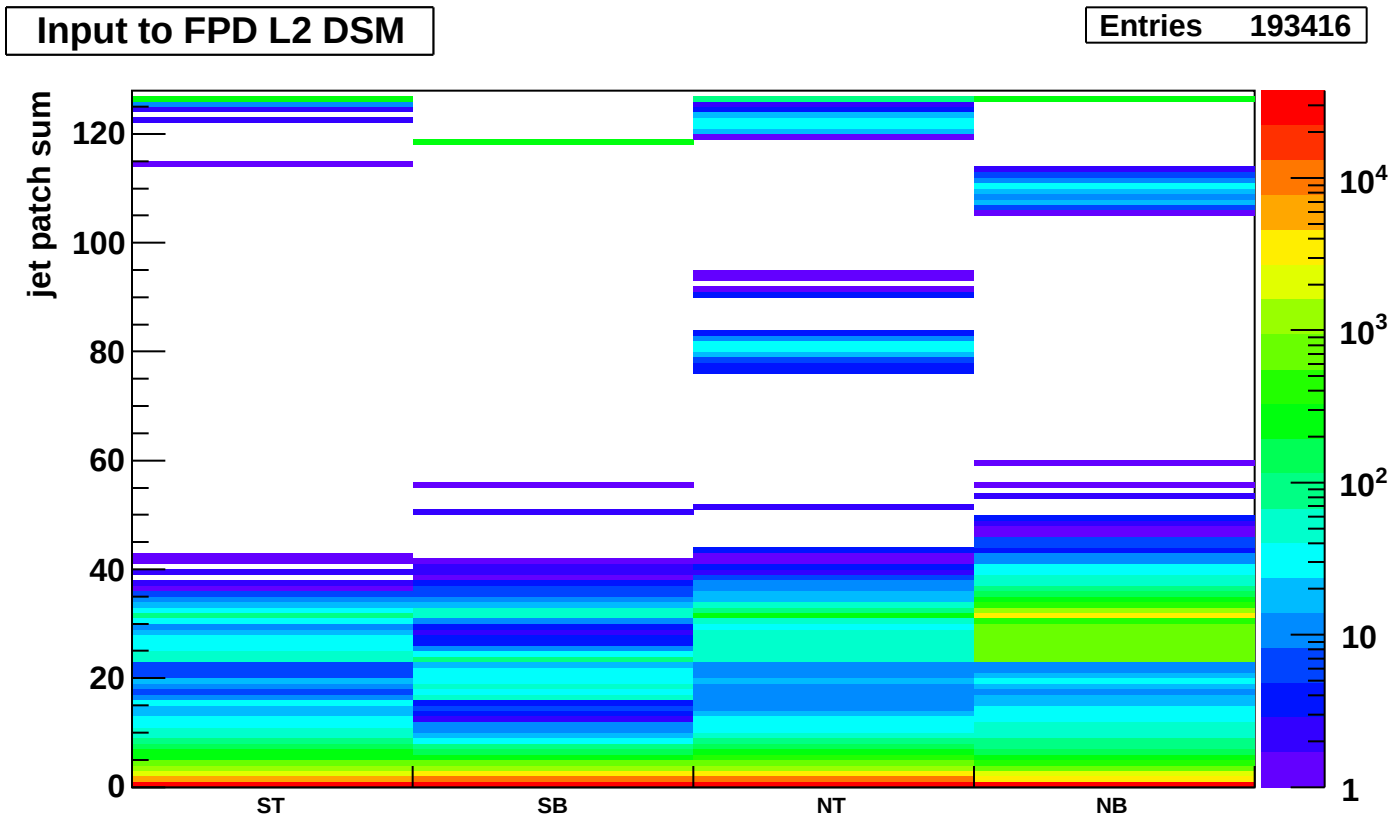

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

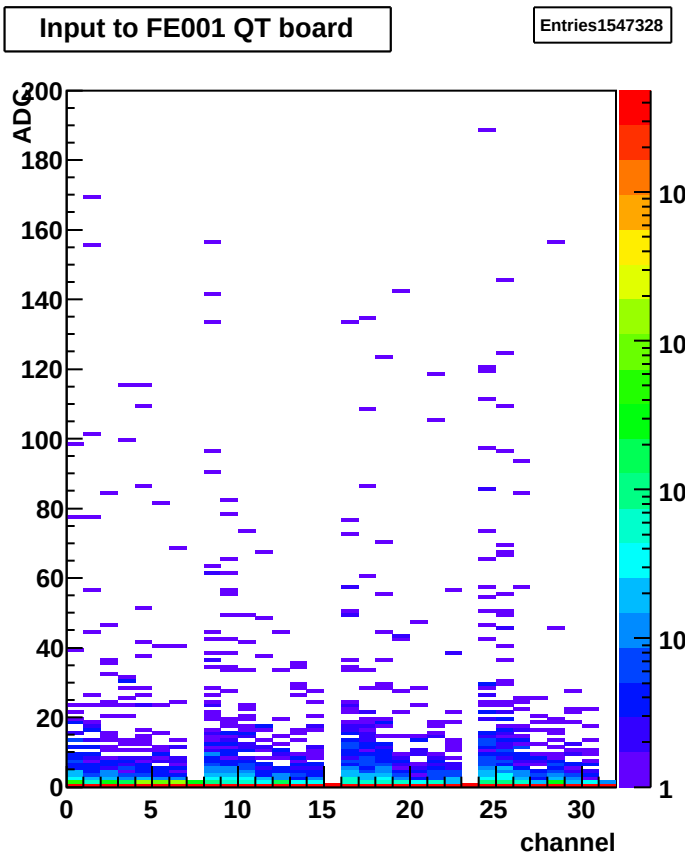

Input to FPD L2 DSM
Entries 145062
HT bits
12709
646
918
476
158
300
35169
47550
47136
SMALL
LARGE-S
LARGE-N

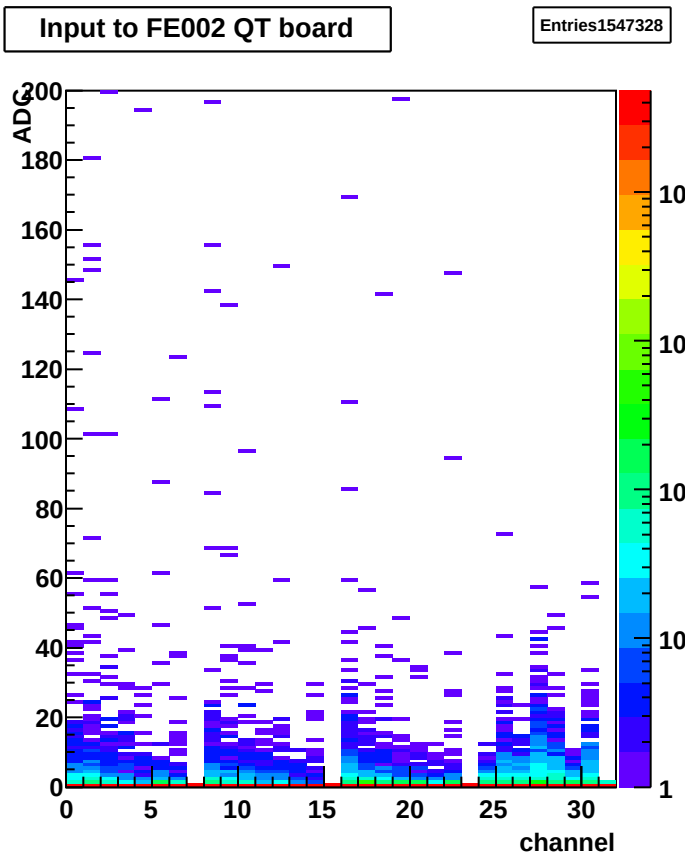

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

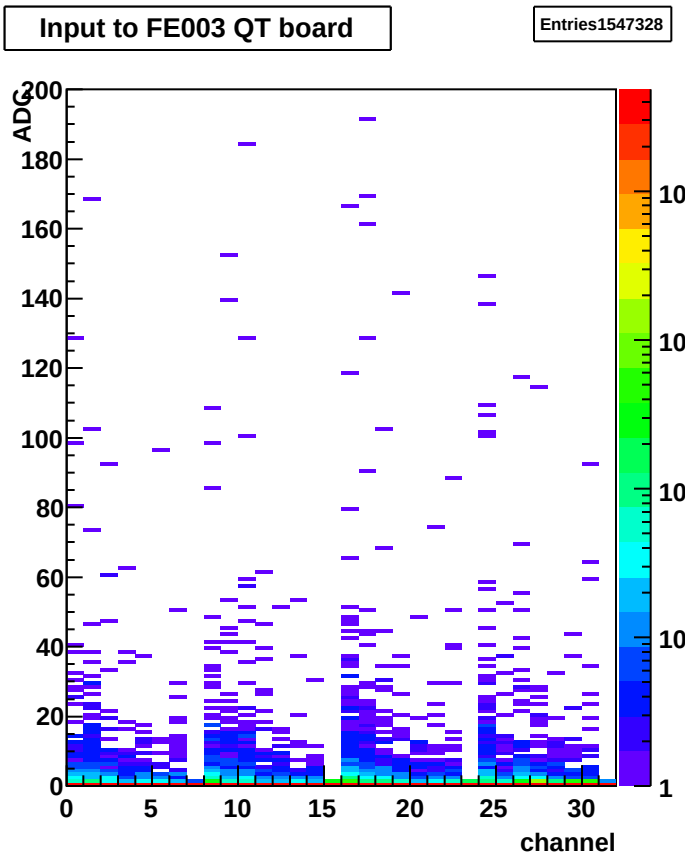

Input to FPD L3 DSM
Entries 773664
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

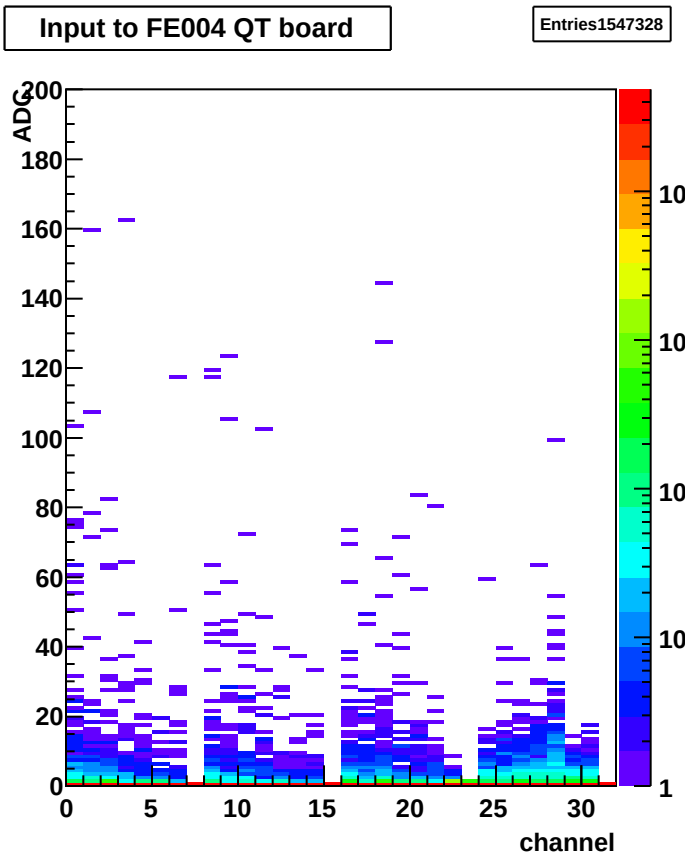

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

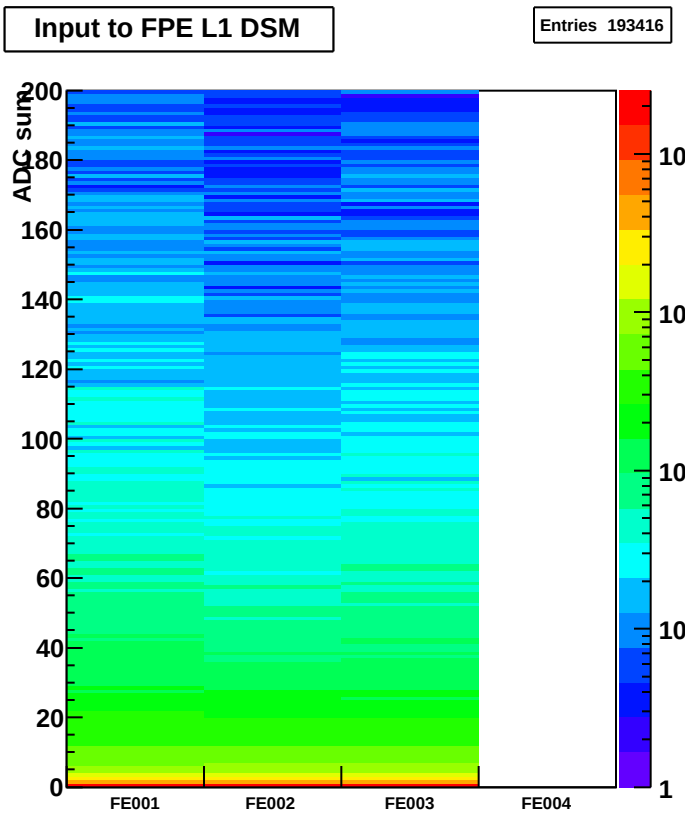

Input to FPD L2 DSM
Entries 193416
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
$10^2$
$10^3$
$10^4$

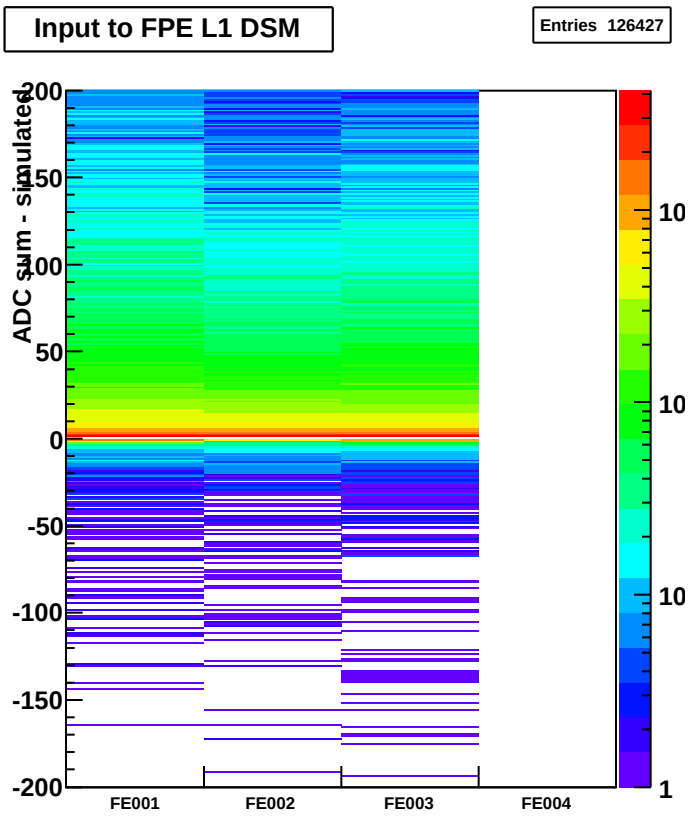

Input to FE001 QT board
Entries1547328
ADC
channel

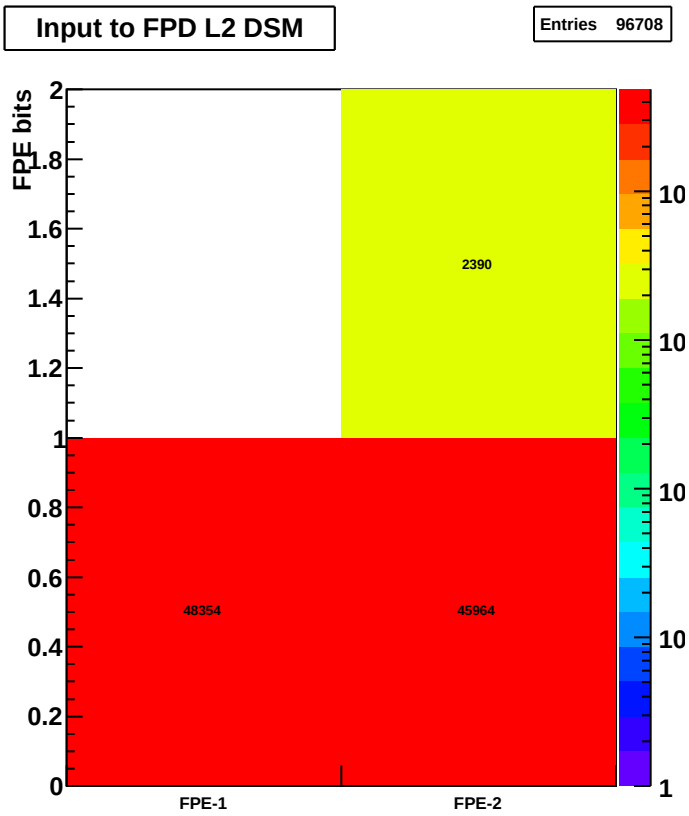

Input to FE002 QT board
Entries1547328
ADC
channel

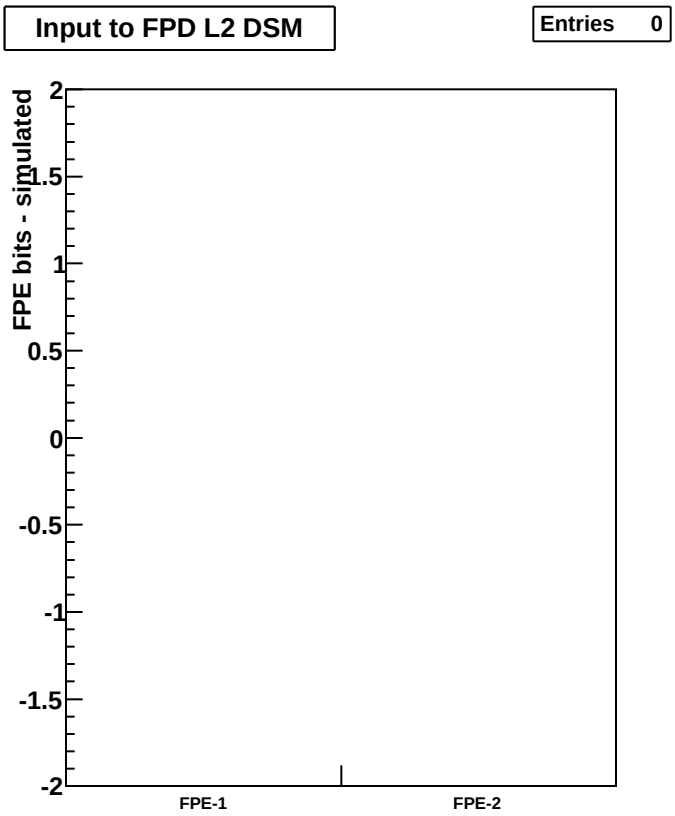

Input to FE003 QT board
Entries1547328
ADC
channel


Input to FE004 QT board
Entries1547328
ADC
channel


Input to FPE L1 DSM
Entries 193416
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 126427
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 96708
FPE bits
2390
48354
45964
FPE-1
FPE-2


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