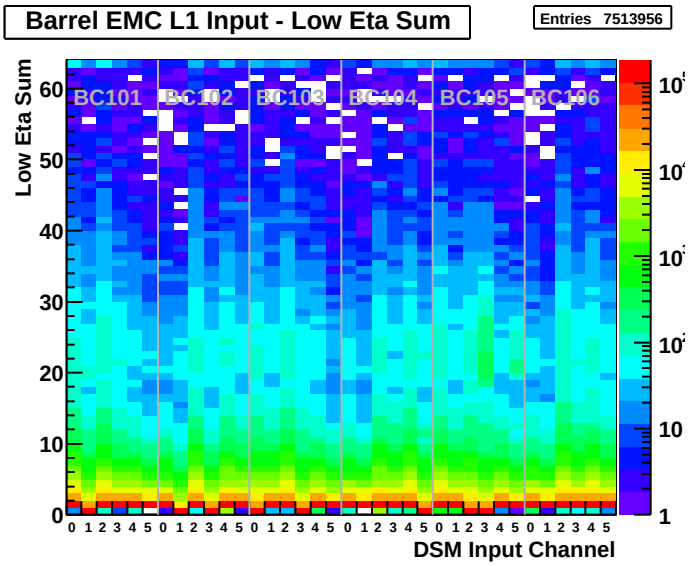
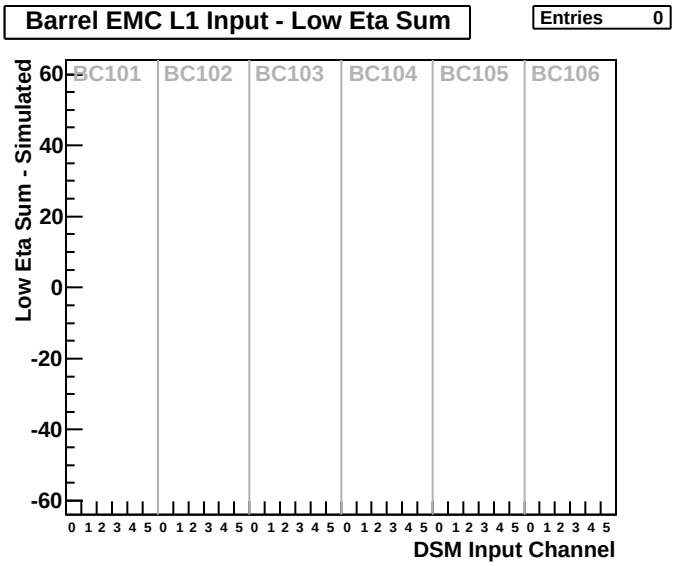
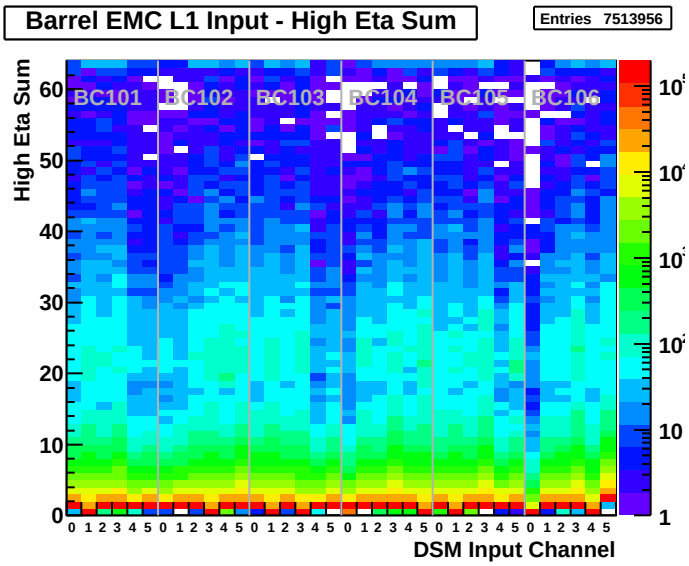
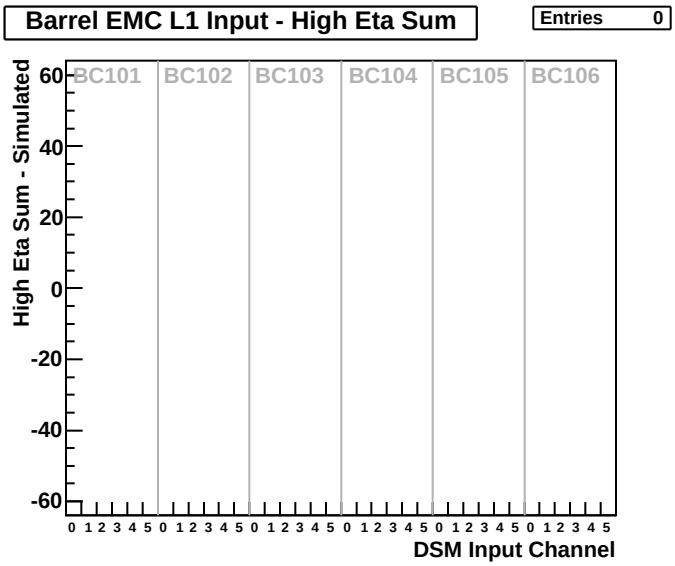
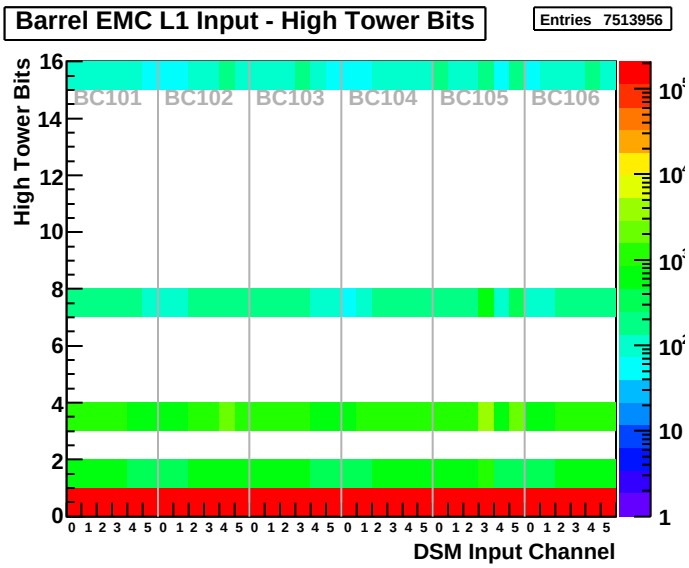
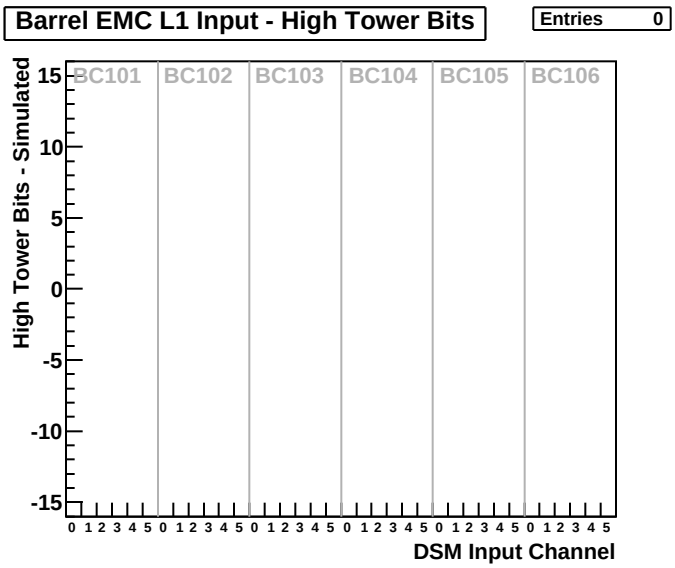

Barrel EMC L1 Input - Low Eta Sum
Entries 7513956
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

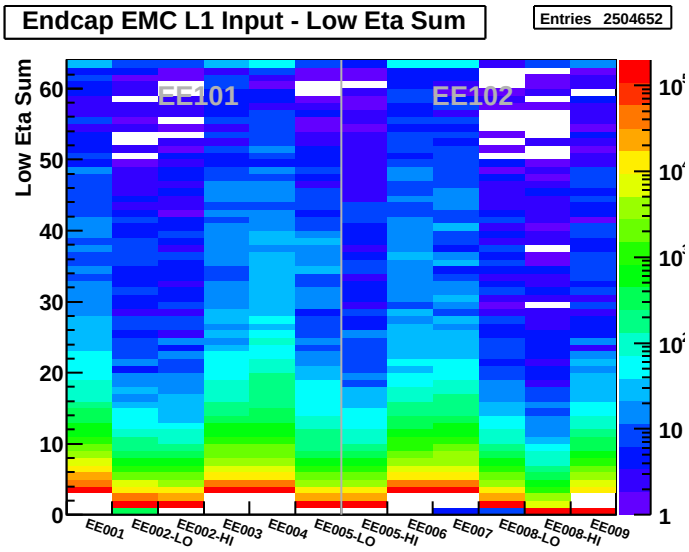

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

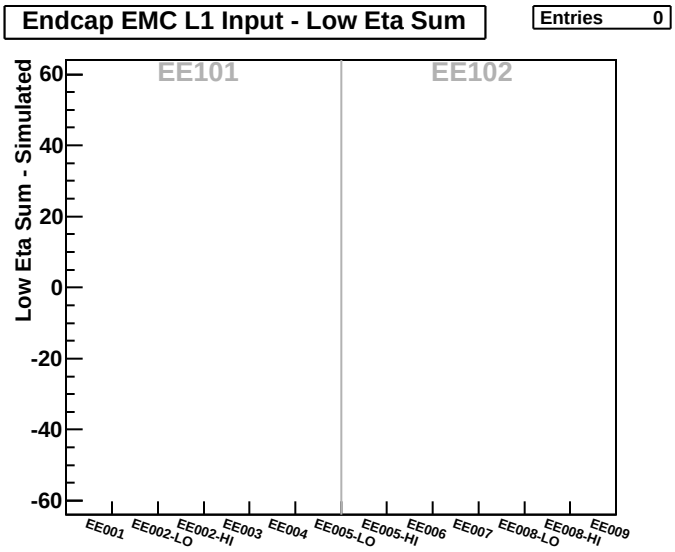

Barrel EMC L1 Input - High Eta Sum
Entries 7513956
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

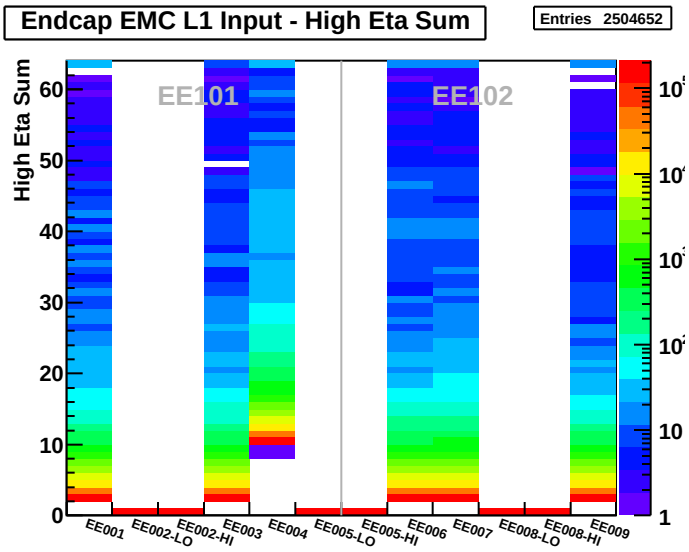

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

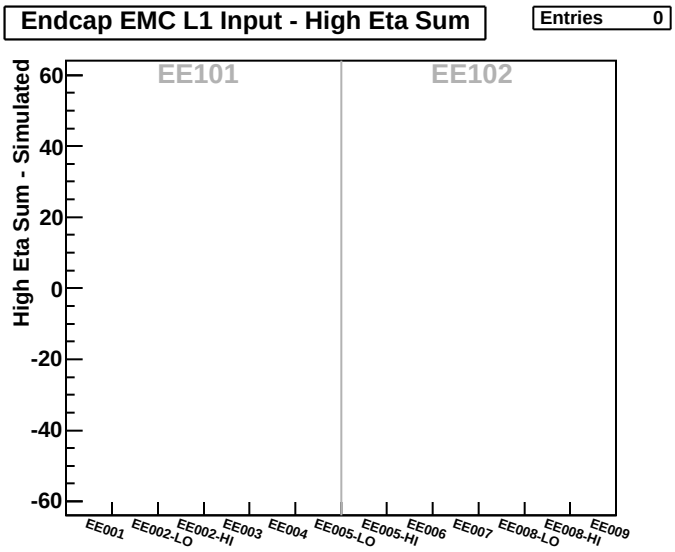

Barrel EMC L1 Input - High Tower Bits
Entries 7513956
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

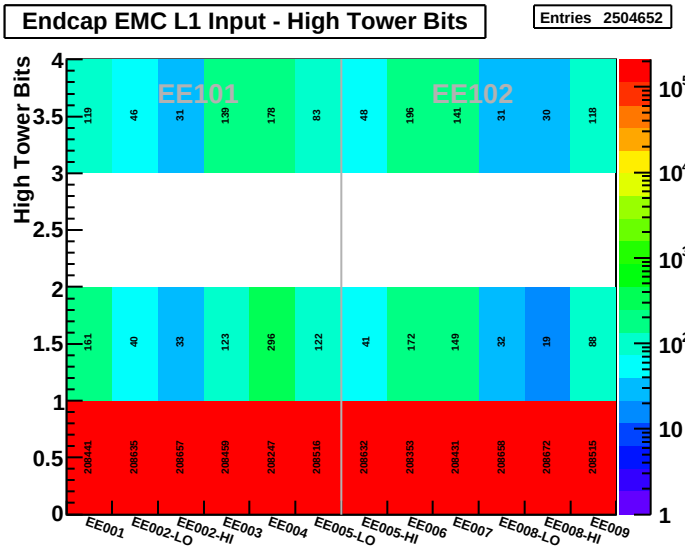

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

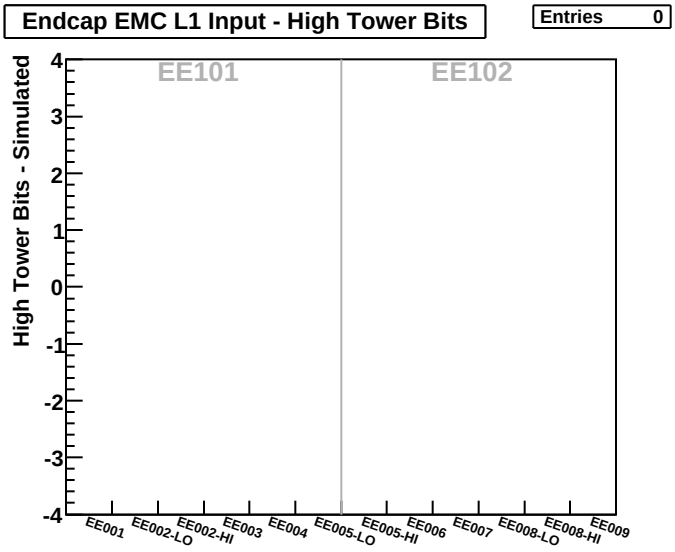

Endcap EMC L1 Input - Low Eta Sum
Entries 2504652
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

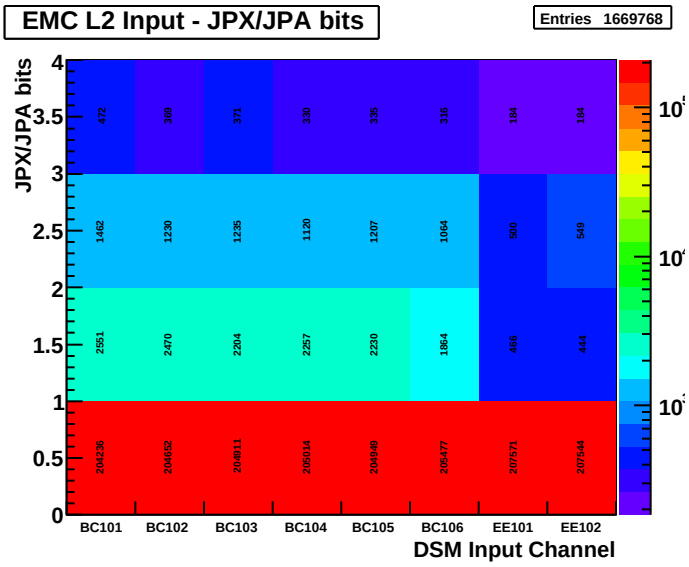

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

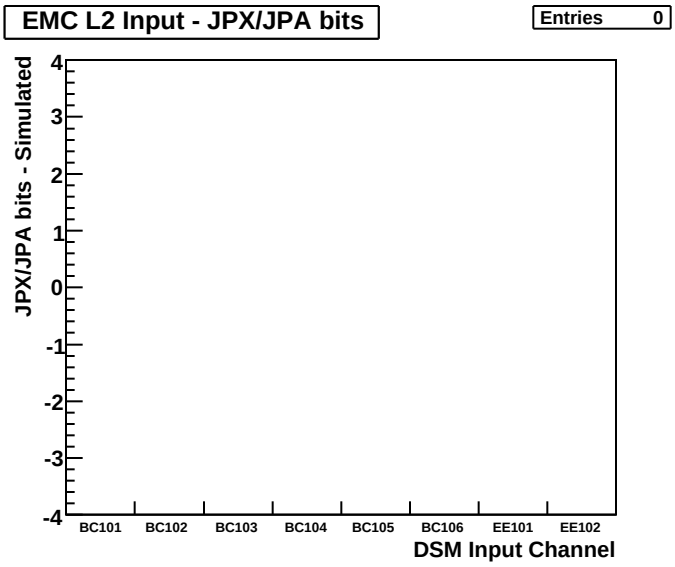

Endcap EMC L1 Input - High Eta Sum
Entries 2504652
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

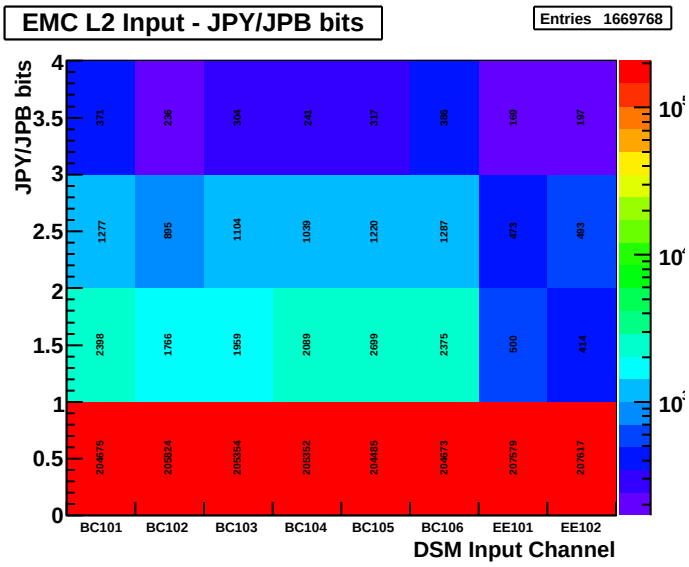

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

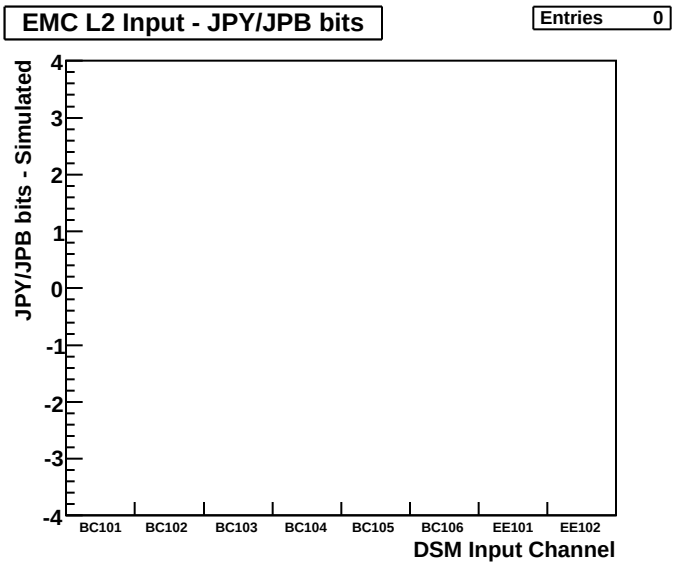

Endcap EMC L1 Input - High Tower Bits
Entries 2504652
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

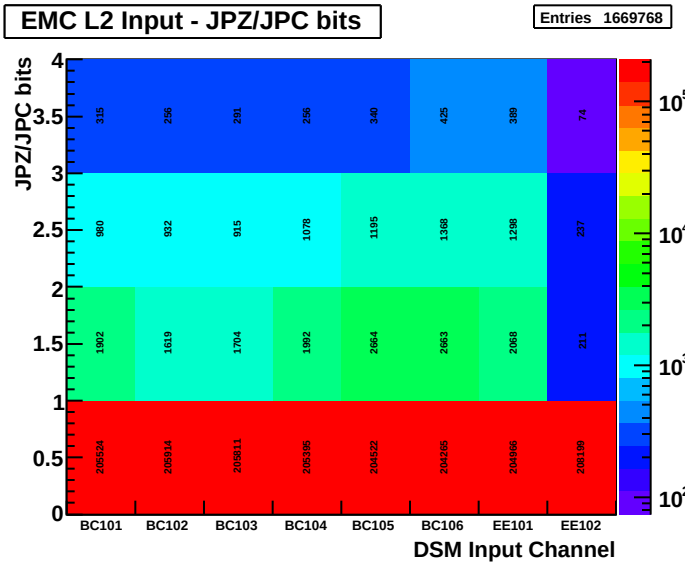

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

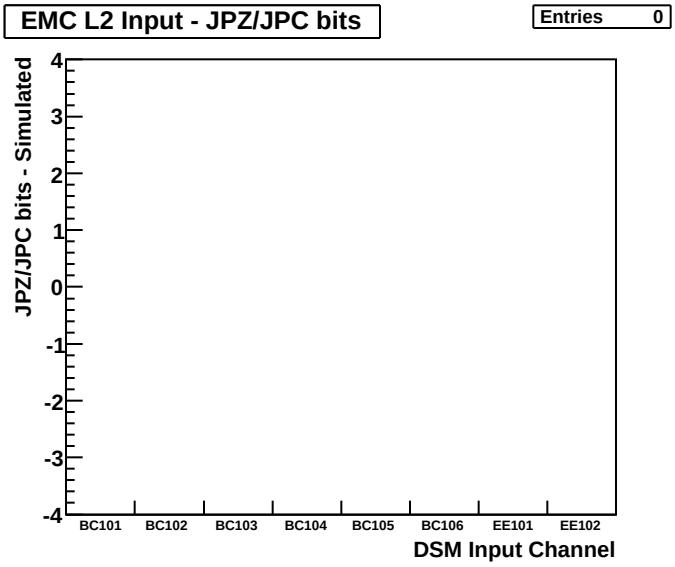

EMC L2 Input - JPX/JPA bits
Entries 1669768
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
472 369 371 330 335 316 184 184
1462 1230 1235 1120 1207 1064 500 549
2551 2470 2204 2257 2230 1864 466 444
204236 204652 204911 205014 204949 205477 207571 207544

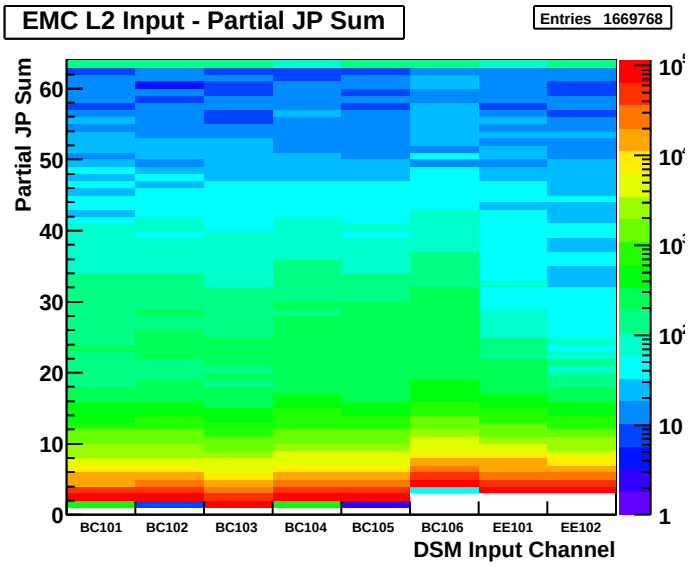

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

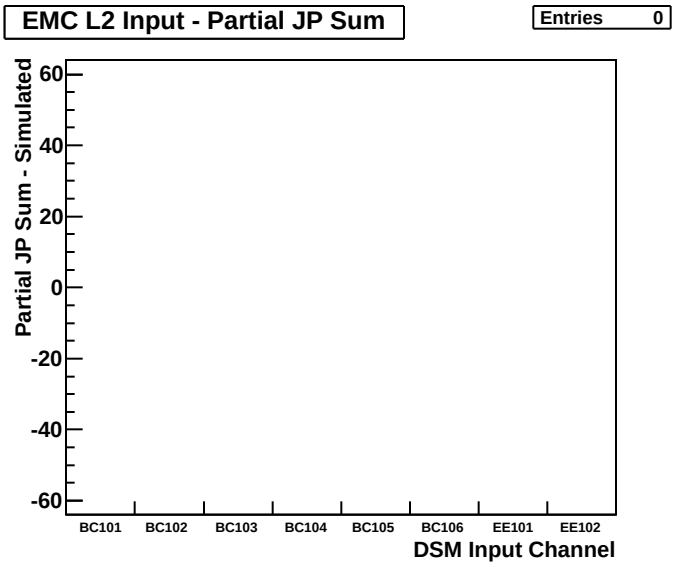

EMC L2 Input - JPY/JPB bits
Entries 1669768
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
371 236 304 241 317 386 169 197
1277 805 1104 1039 1220 1287 473 493
2398 1766 1959 2069 2699 2375 500 414
204675 203824 203354 203352 204485 204673 207579 207617

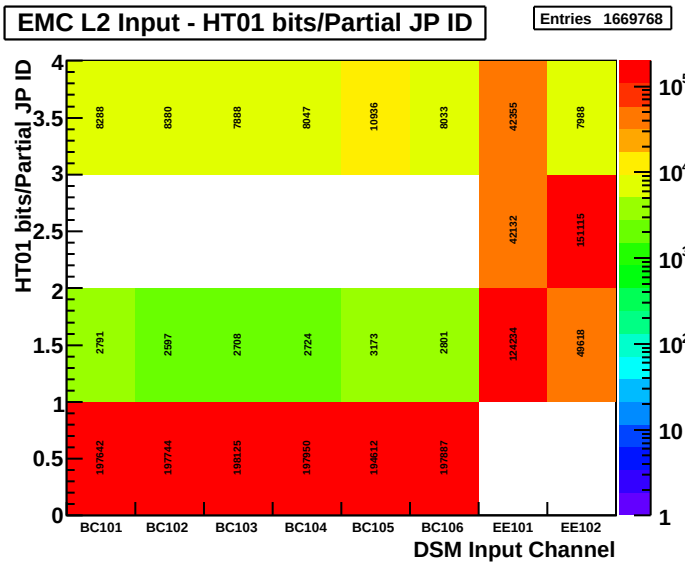

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

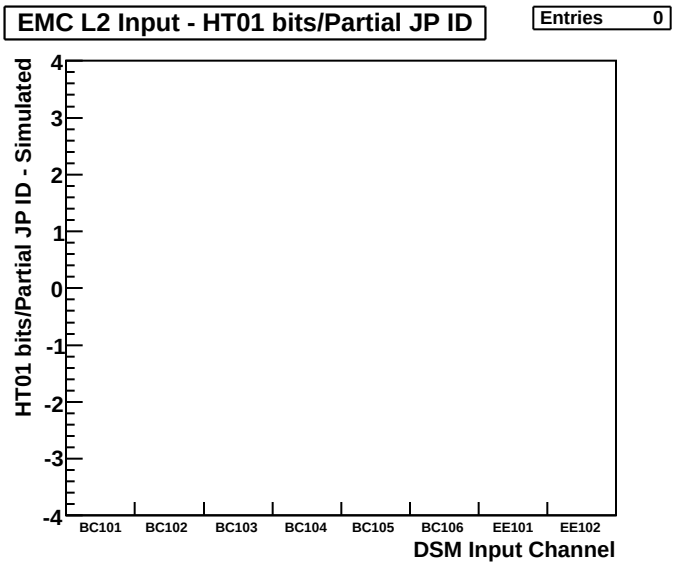

EMC L2 Input - JPZ/JPC bits
Entries 1669768
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
315 256 291 256 340 425 389 74
980 932 915 1078 1195 1368 1298 237
1902 1619 1704 1992 2664 2663 2068 211
205524 205314 205811 205395 204522 204265 204966 208199

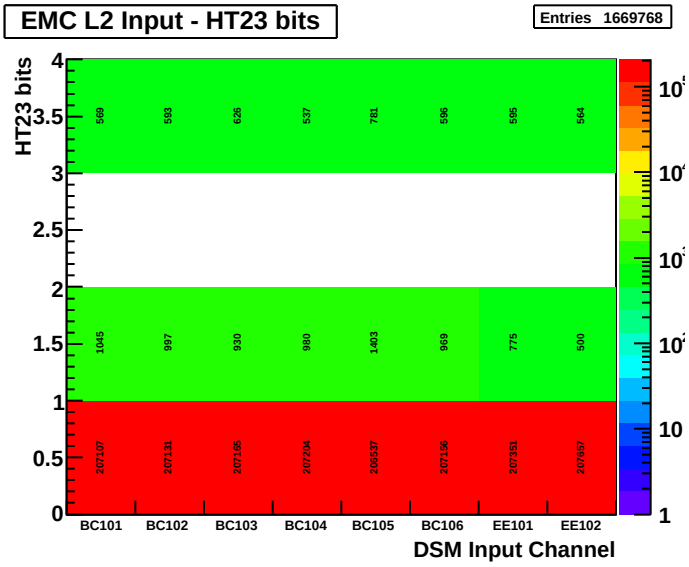

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

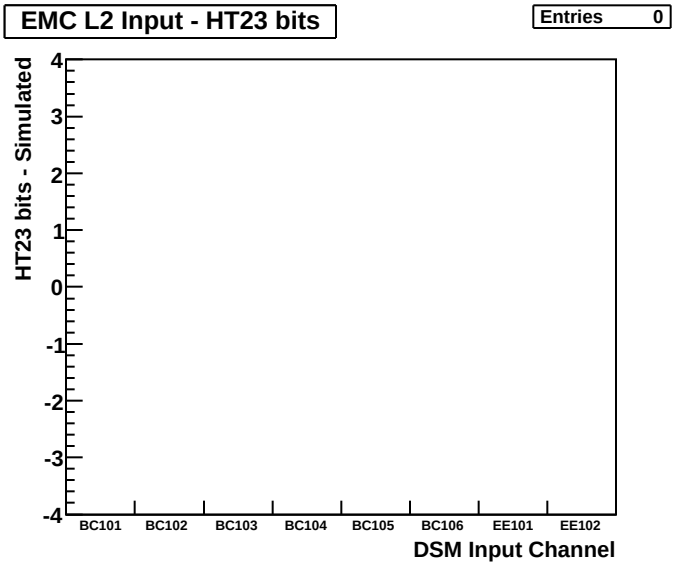

EMC L2 Input - Partial JP Sum
Entries 1669768
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

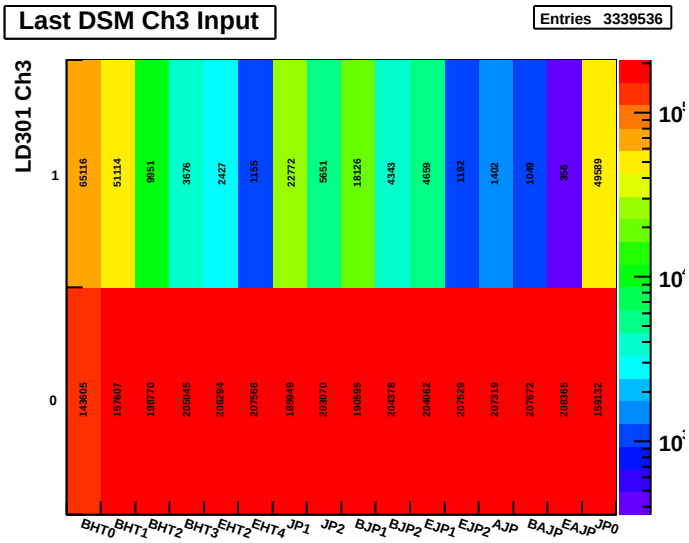

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

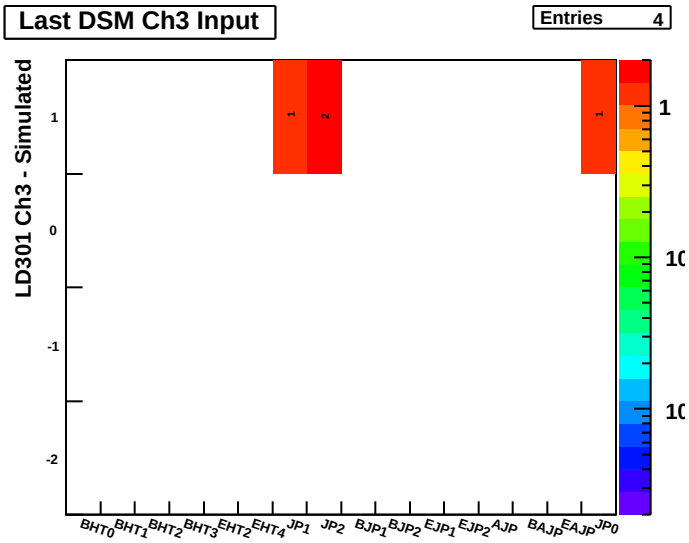

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1669768
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

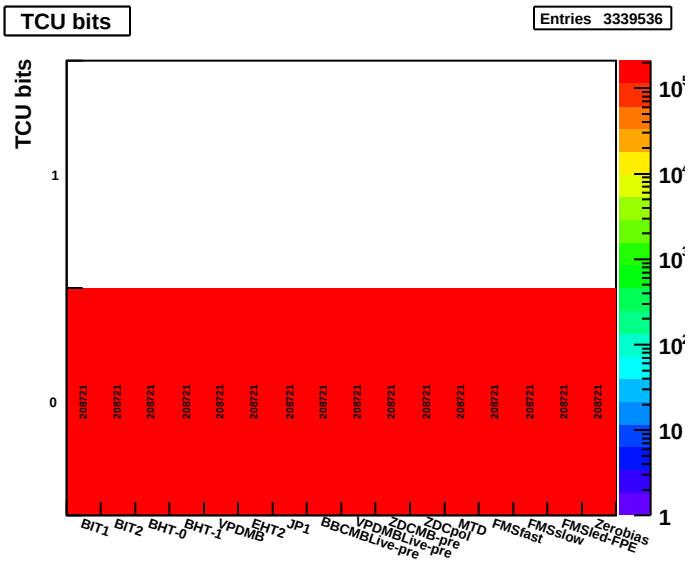

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

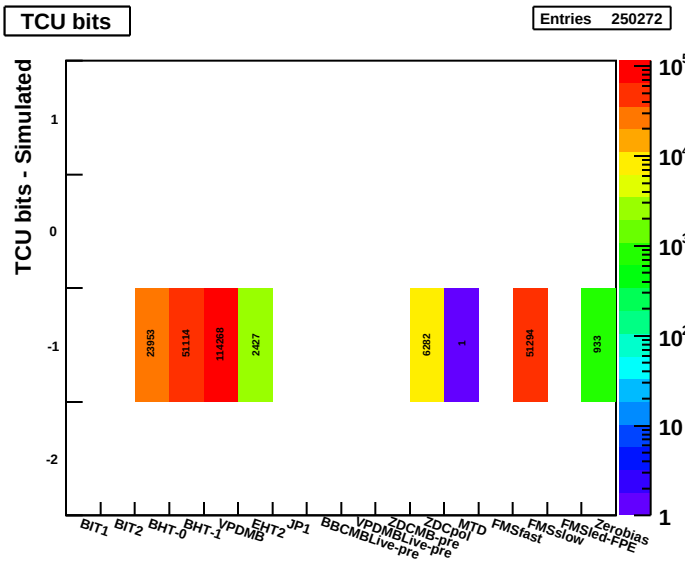

EMC L2 Input - HT23 bits
Entries 1669768
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

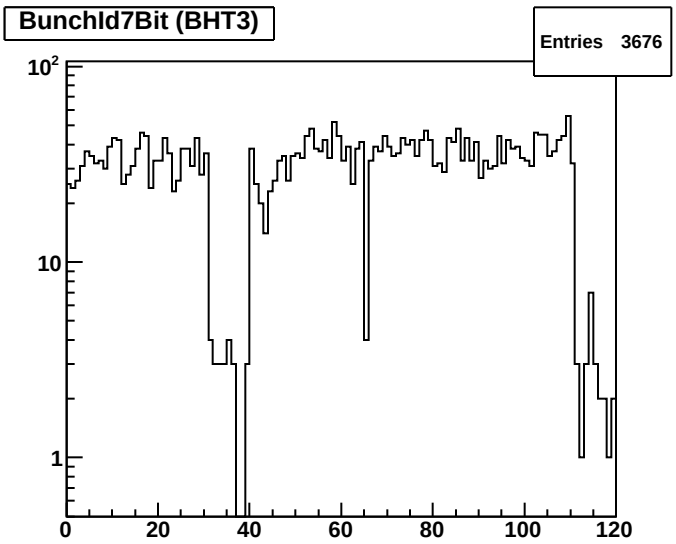

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

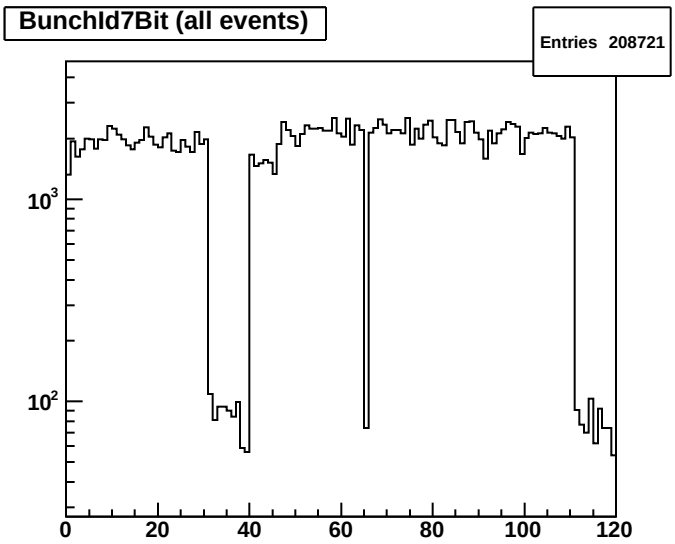

Last DSM Ch3 Input
Entries 3339536
LD301 Ch3
65116 51114 9951 3676 2427 1155 22772 5651 18126 4343 4659 1192 1402 1049 356 49589
143605 157607 198770 205045 206294 207566 185949 203070 190595 204378 204062 207529 207319 207672 208355 159132
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

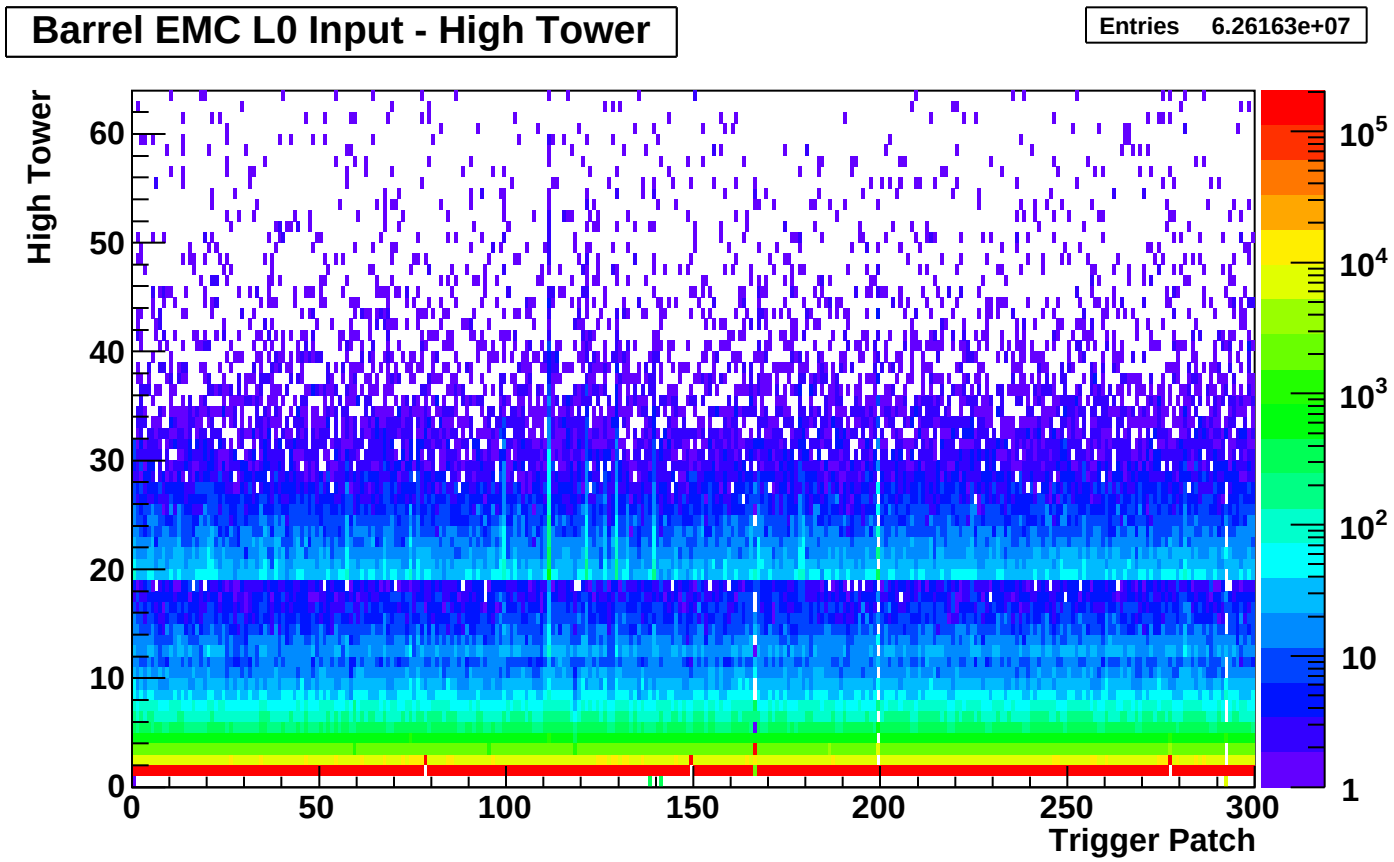

Last DSM Ch3 Input
Entries 4
LD301 Ch3 - Simulated
1 2 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

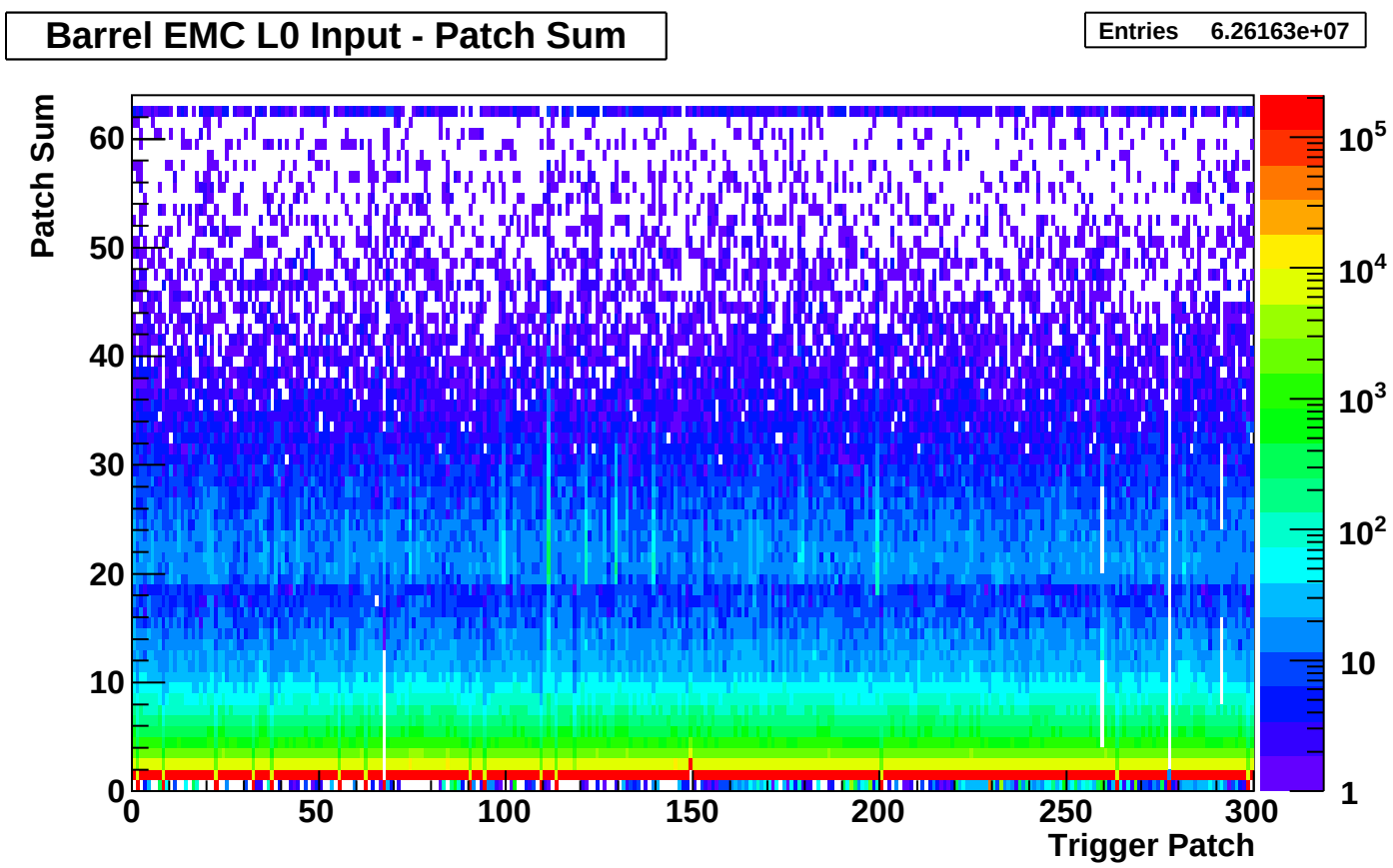

TCU bits
Entries 3339536
TCU bits
208721 208721 208721 208721 208721 208721 208721 208721 208721 208721 208721 208721 208721 208721 208721 208721
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

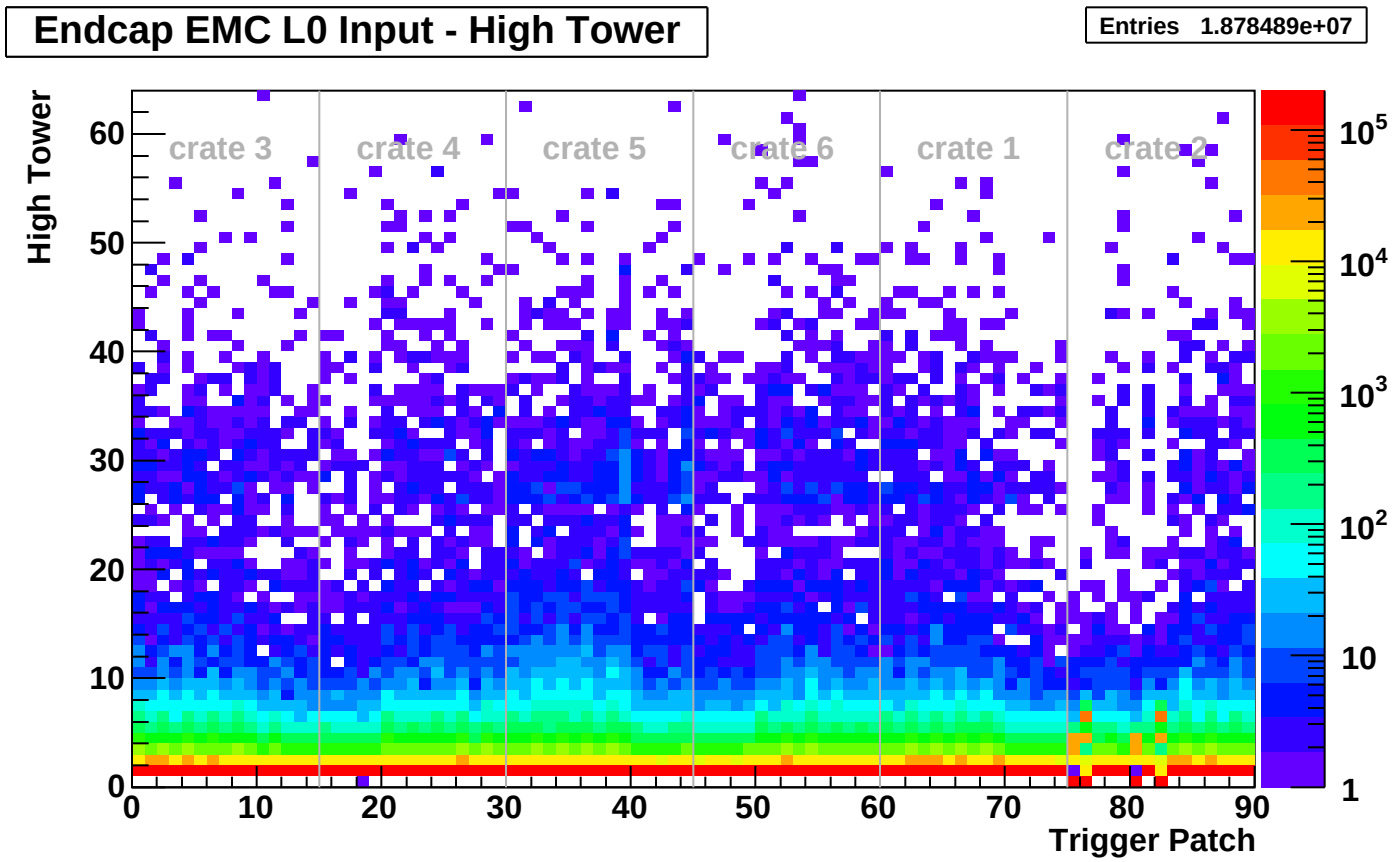

TCU bits
Entries 250272
TCU bits - Simulated
23953 51114 114268 2427 6282 1 51294 933
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

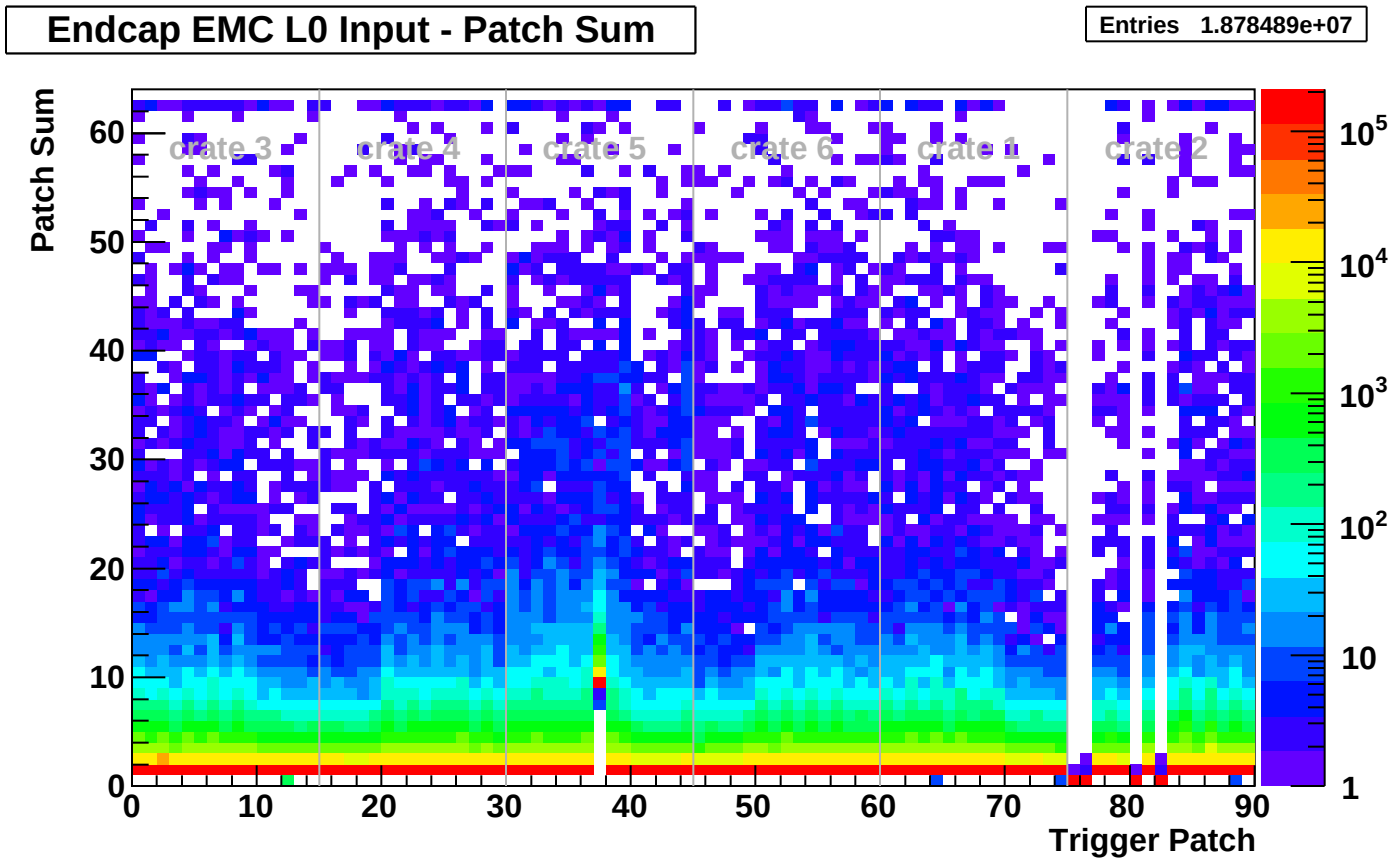

BunchId7Bit (BHT3)
Entries 3676

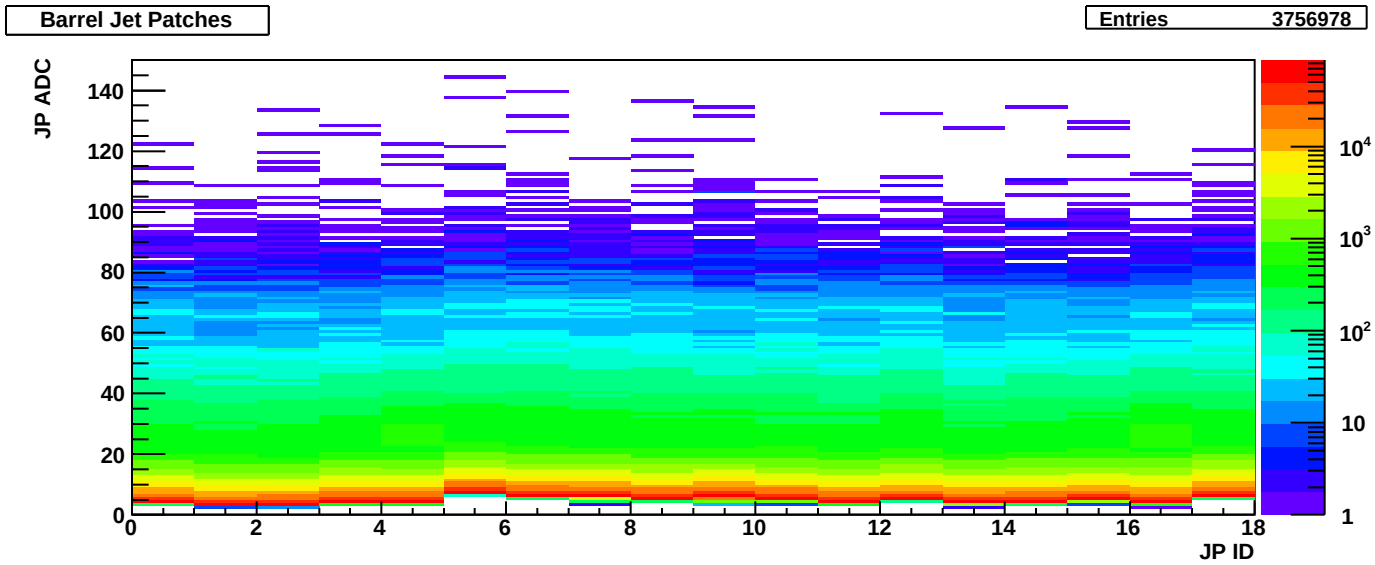

BunchId7Bit (all events)
Entries 208721

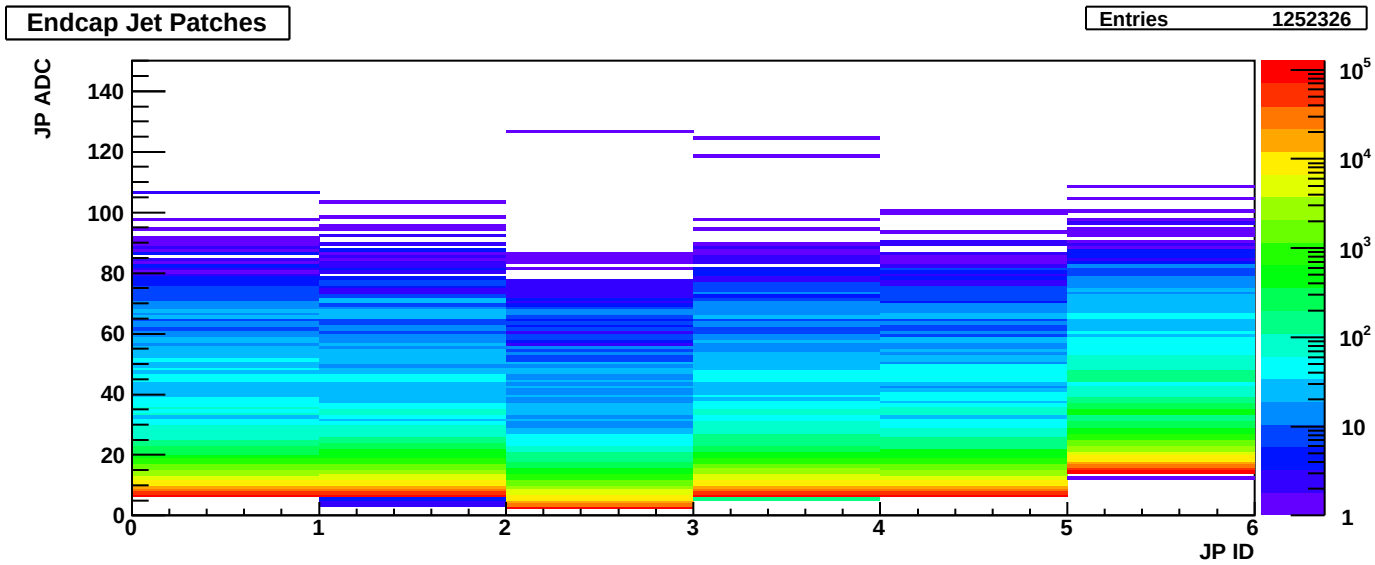

Barrel EMC L0 Input - High Tower
Entries 6.26163e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

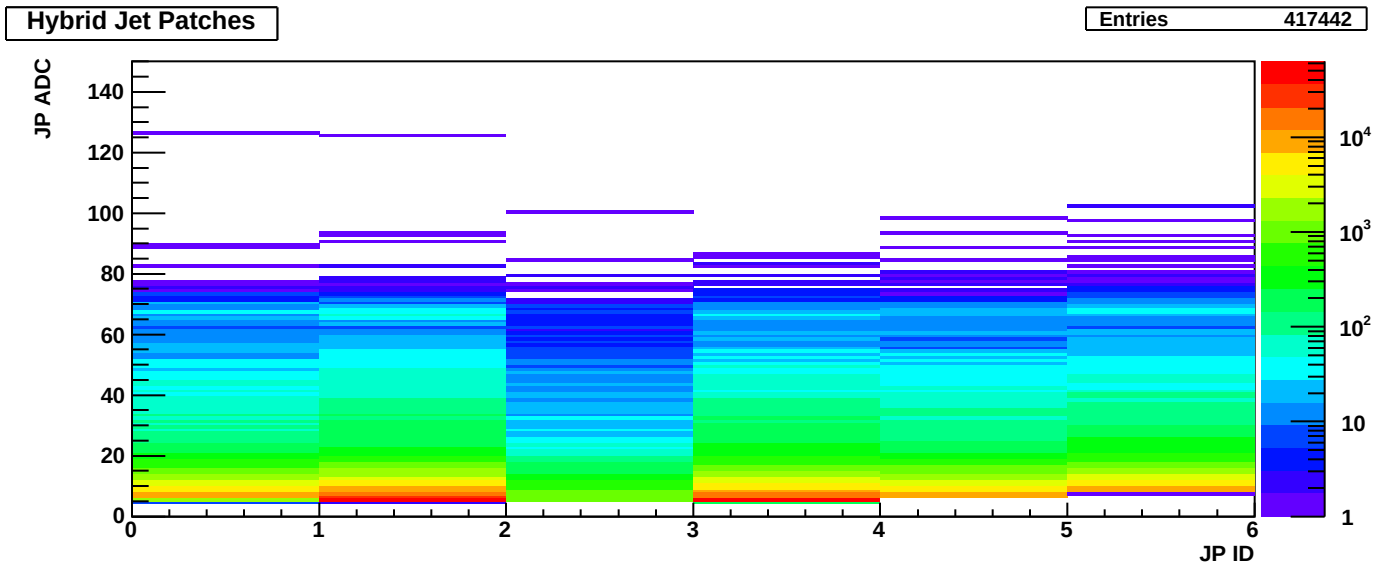

Barrel EMC L0 Input - Patch Sum
Entries 6.26163e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

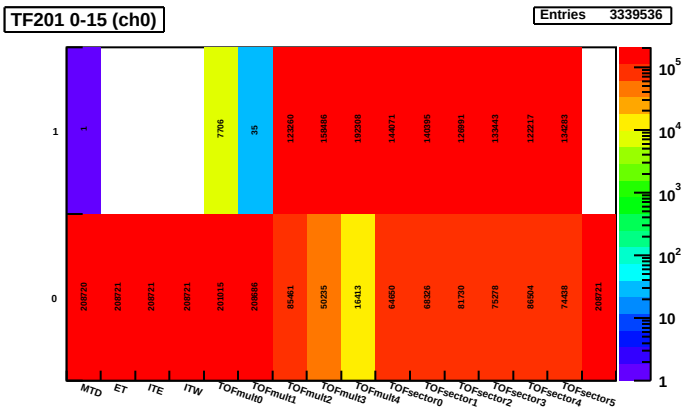

Endcap EMC L0 Input - High Tower
Entries 1.878489e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

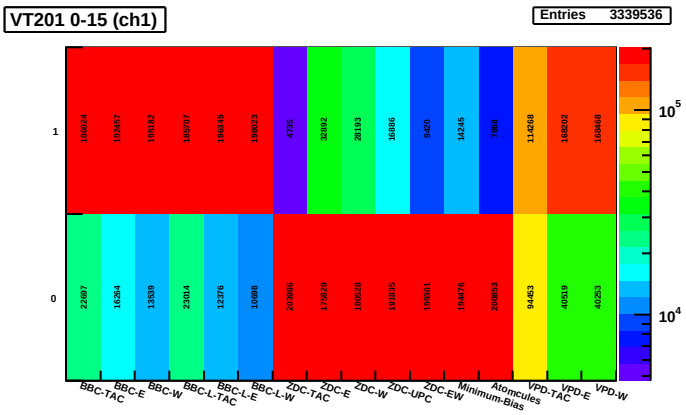

Endcap EMC L0 Input - Patch Sum
Entries 1.878489e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

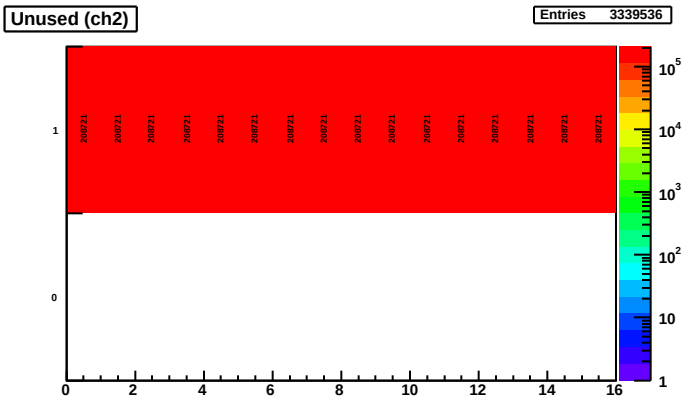

Barrel Jet Patches
Entries 3756978
JP ADC
JP ID

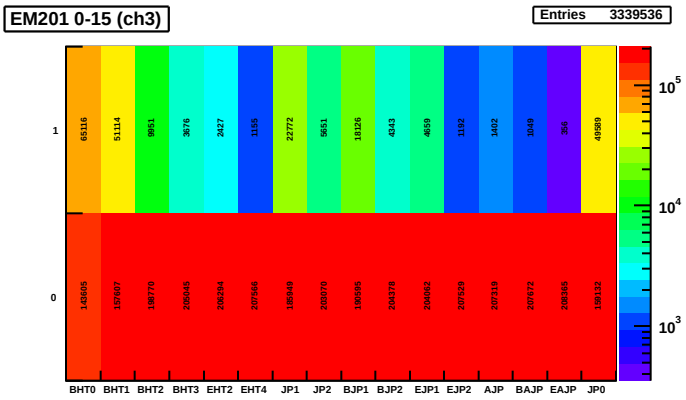

Endcap Jet Patches
Entries 1252326
JP ADC
JP ID

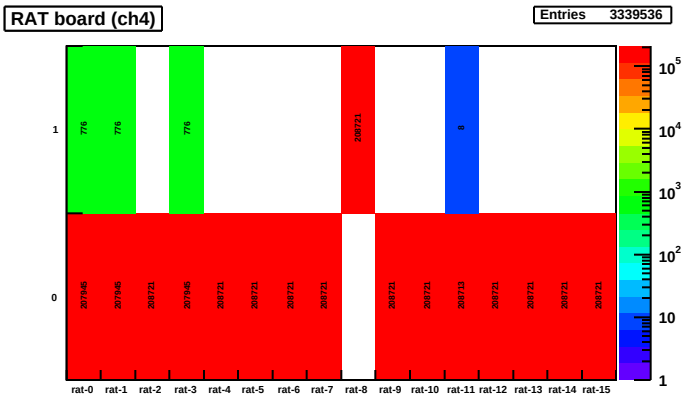

Hybrid Jet Patches
Entries 417442
JP ADC
JP ID

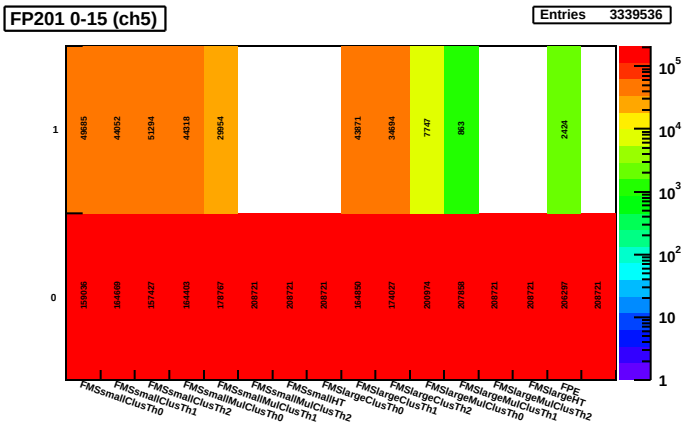

TF201 0-15 (ch0)
Entries 3339536
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

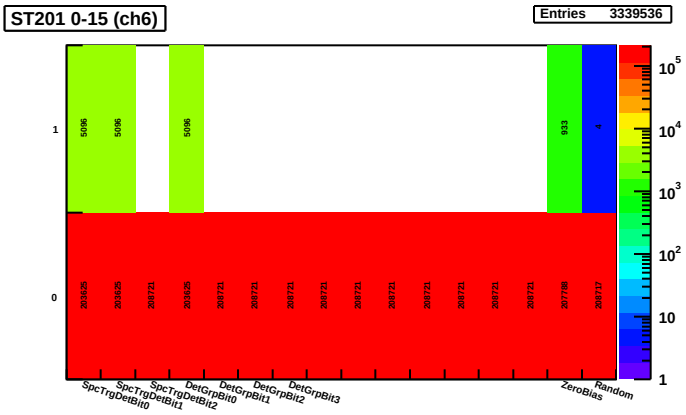

VT201 0-15 (ch1)
Entries 3339536
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

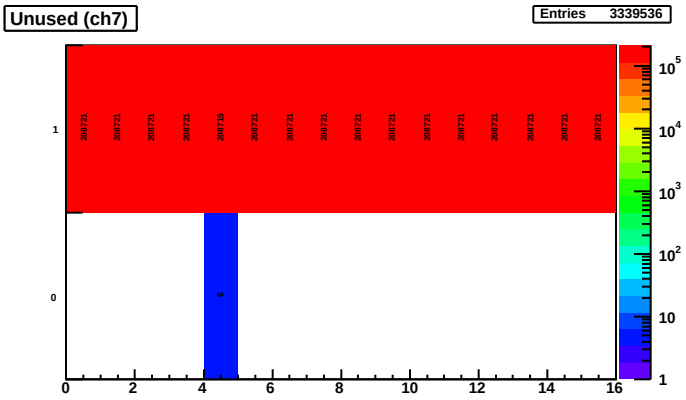

Unused (ch2)
Entries 3339536

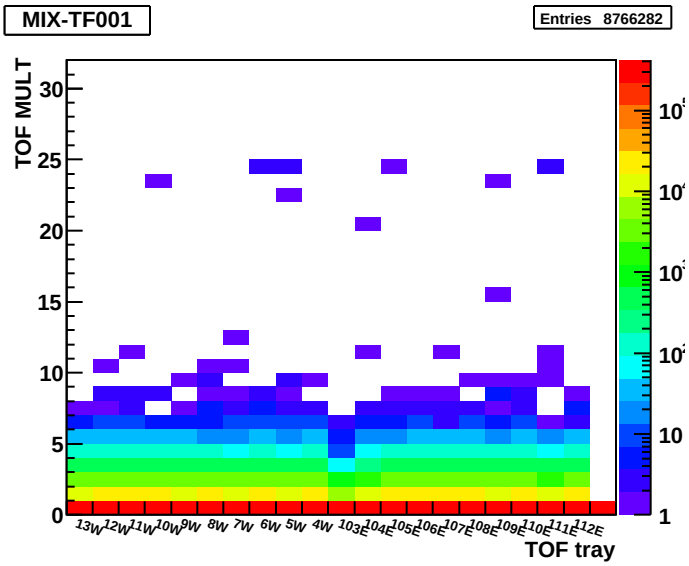

EM201 0-15 (ch3)
Entries 3339536
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

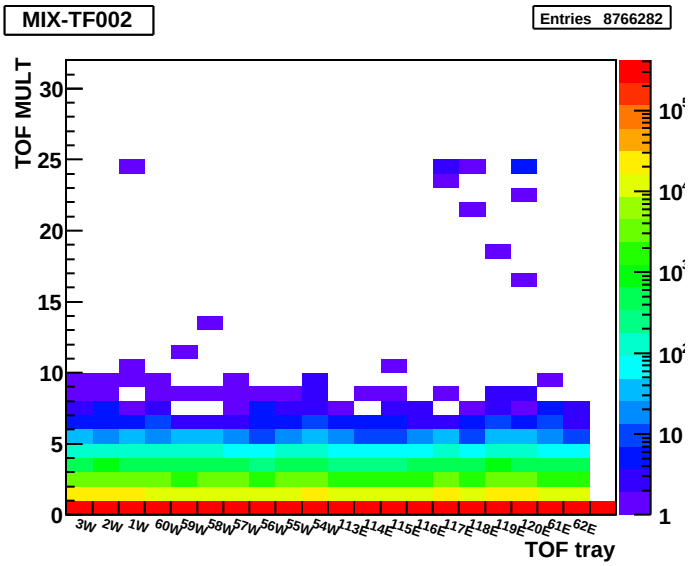

RAT board (ch4)
Entries 3339536
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

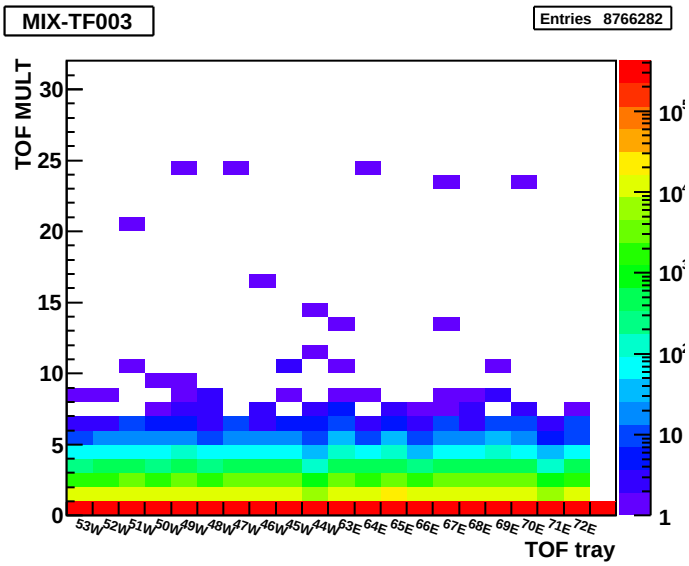

FP201 0-15 (ch5)
Entries 3339536
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeRT
FPE

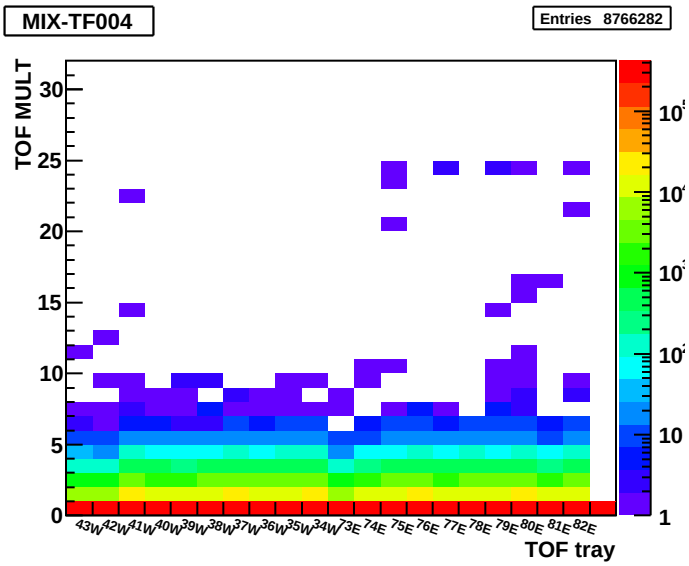

ST201 0-15 (ch6)
Entries 3339536
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

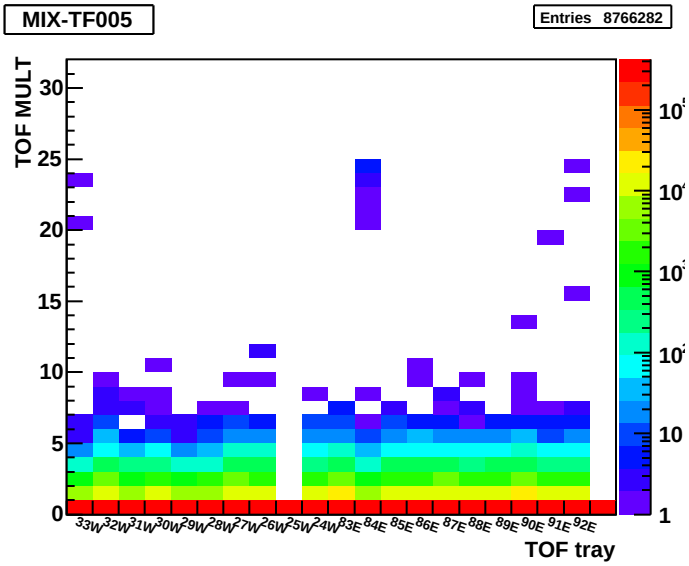

Unused (ch7)
Entries 3339536

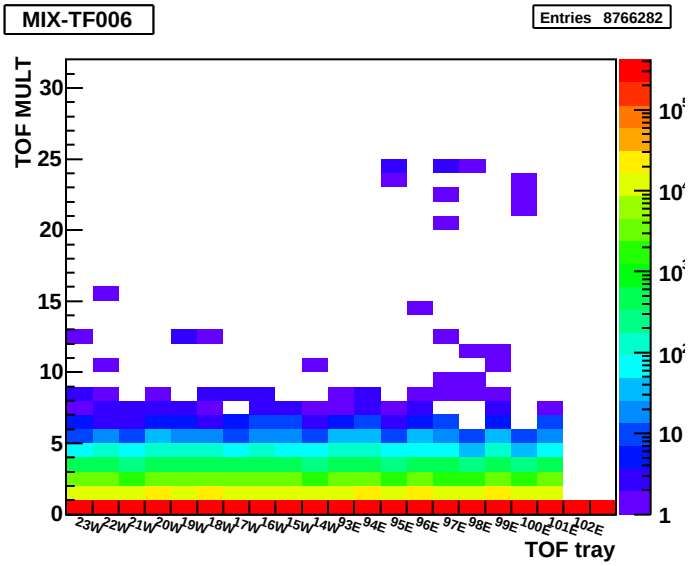

MIX-TF001
Entries 8766282
TOF MULT
TOF tray

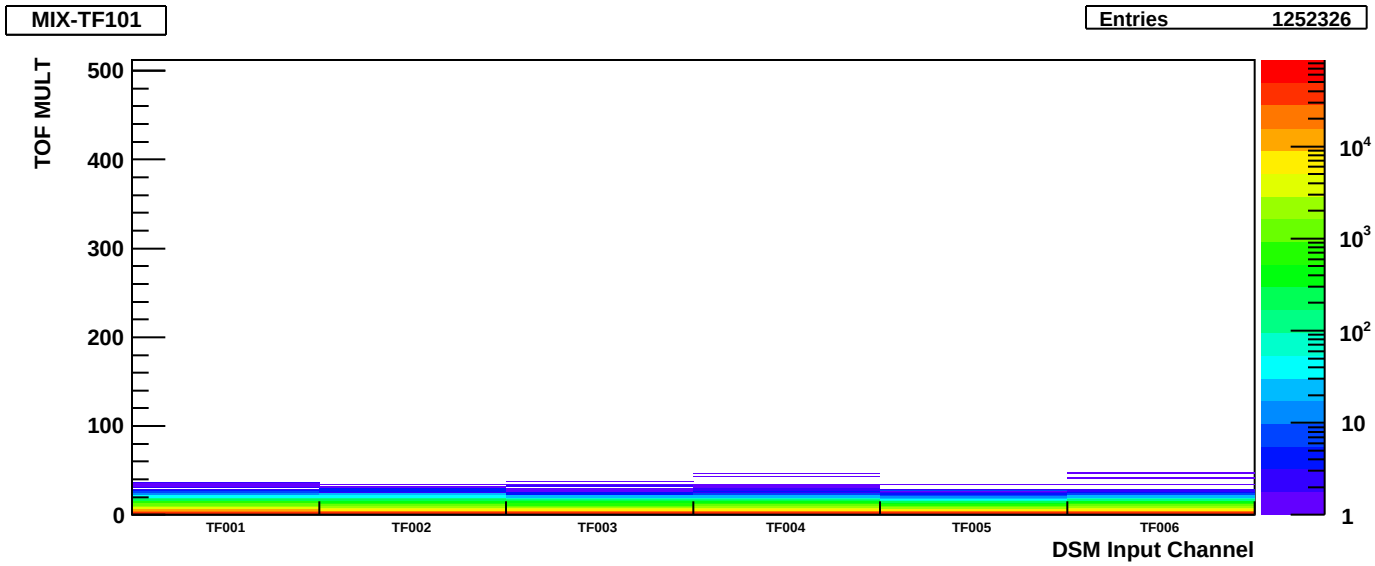

MIX-TF002
Entries 8766282
TOF MULT
TOF tray

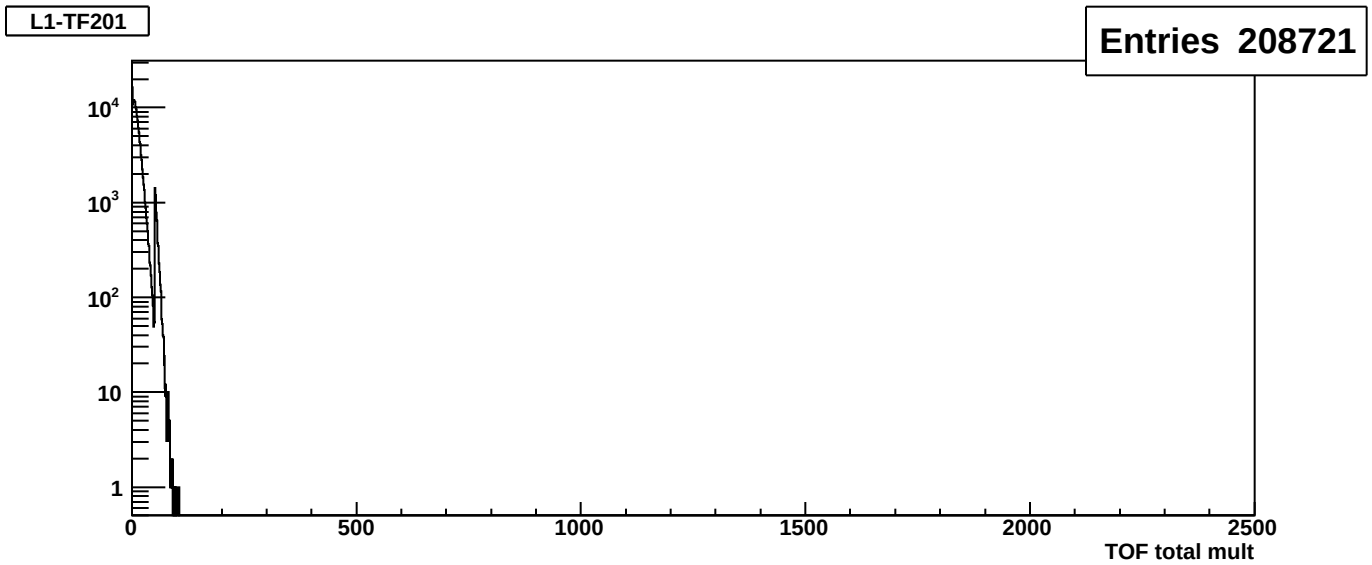

MIX-TF003
Entries 8766282
TOF MULT
TOF tray

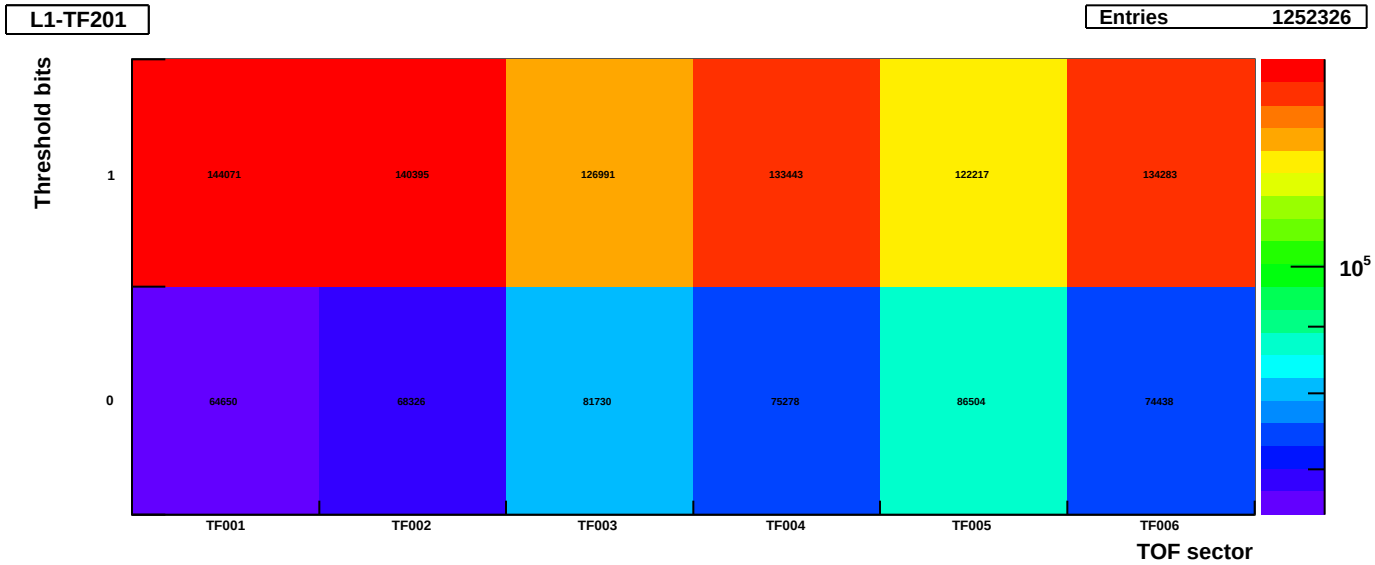

MIX-TF004
Entries 8766282
TOF MULT
TOF tray

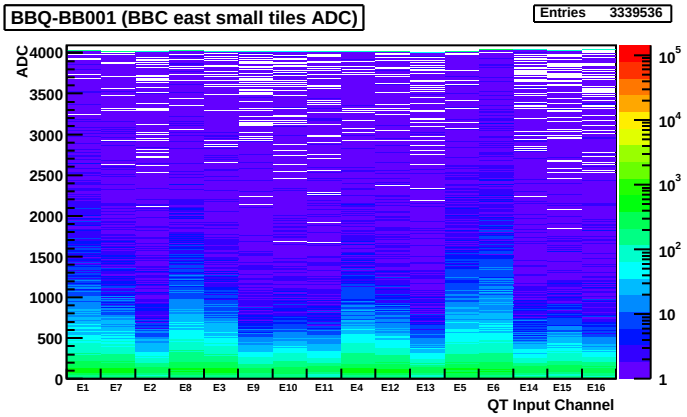

MIX-TF005
Entries 8766282
TOF MULT
TOF tray

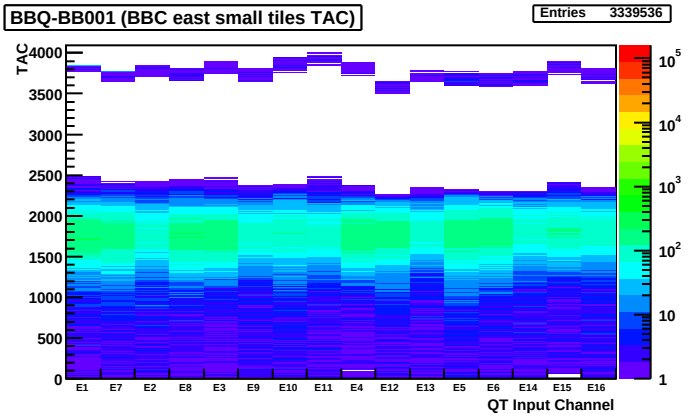

MIX-TF006
Entries 8766282
TOF MULT
TOF tray

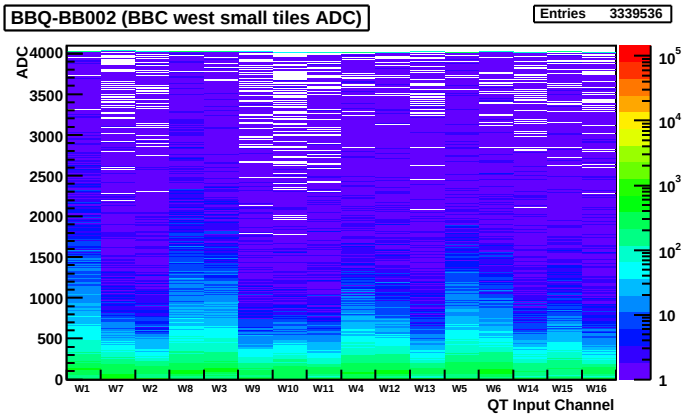

MIX-TF101
Entries 1252326
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

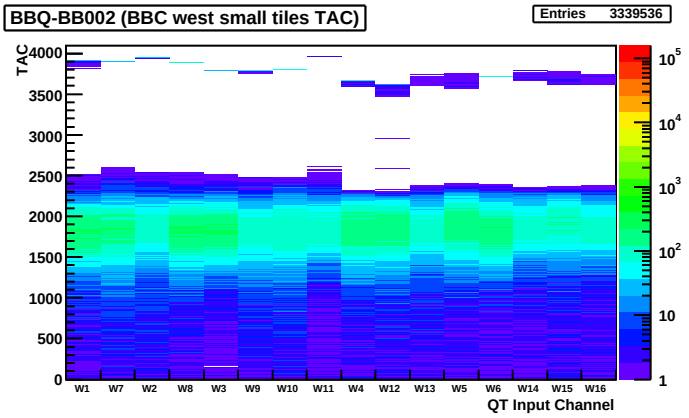

L1-TF201
Entries 208721
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

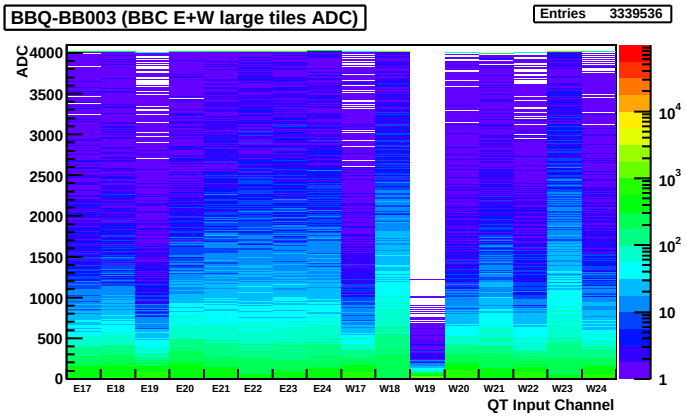

L1-TF201
Entries 1252326
Threshold bits
1
0
144071
140395
126991
133443
122217
134283
64650
68326
81730
75278
86504
74438
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

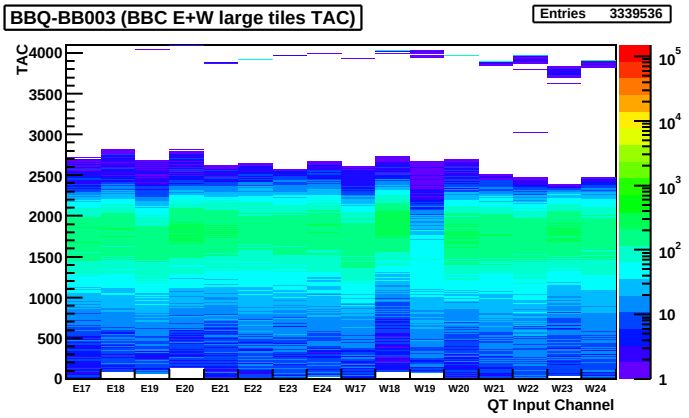

BBQ-BB001 (BBC east small tiles ADC)
Entries 3339536
ADC
QT Input Channel

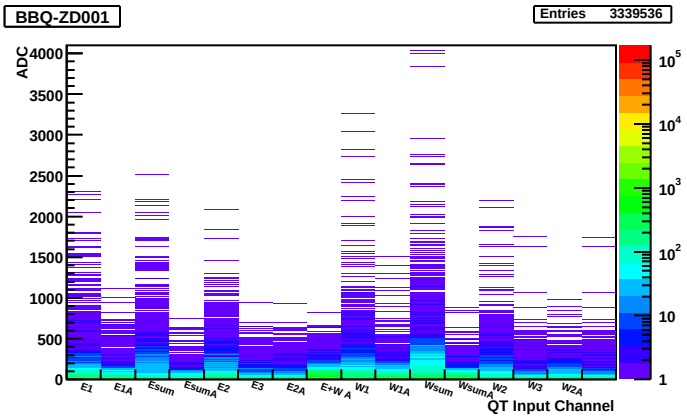

BBQ-BB001 (BBC east small tiles TAC)
Entries 3339536
TAC
QT Input Channel

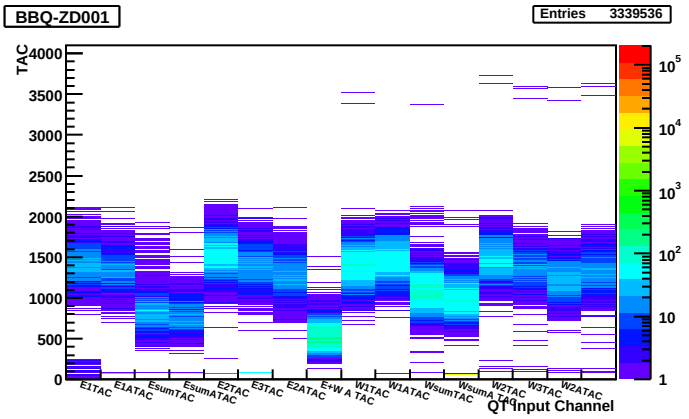

BBQ-BB002 (BBC west small tiles ADC)
Entries 3339536
ADC
QT Input Channel

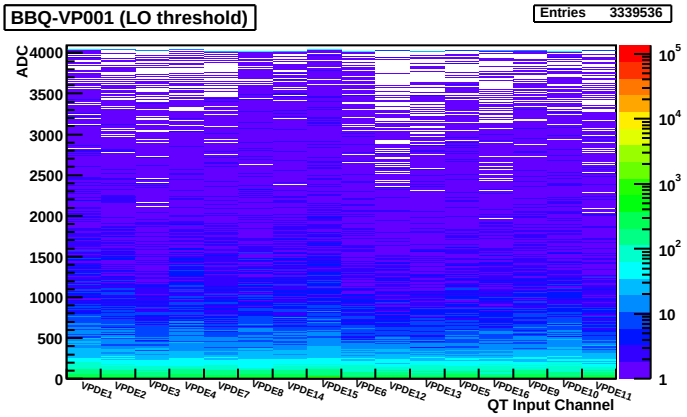

BBQ-BB002 (BBC west small tiles TAC)
Entries 3339536
TAC
QT Input Channel

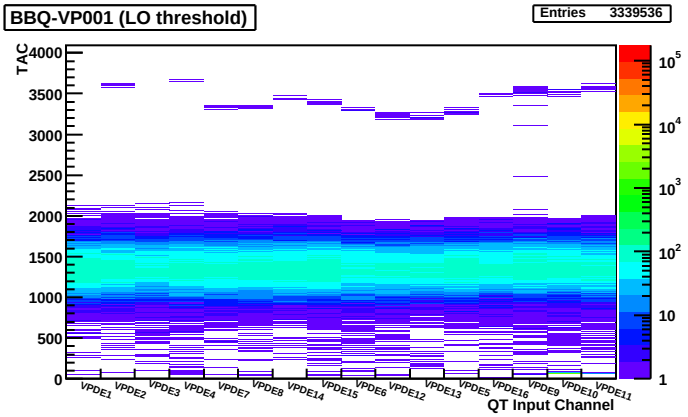

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3339536
ADC
QT Input Channel

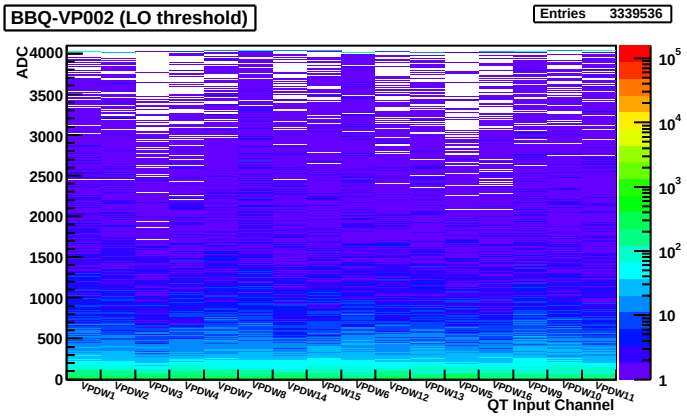

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3339536
TAC
QT Input Channel

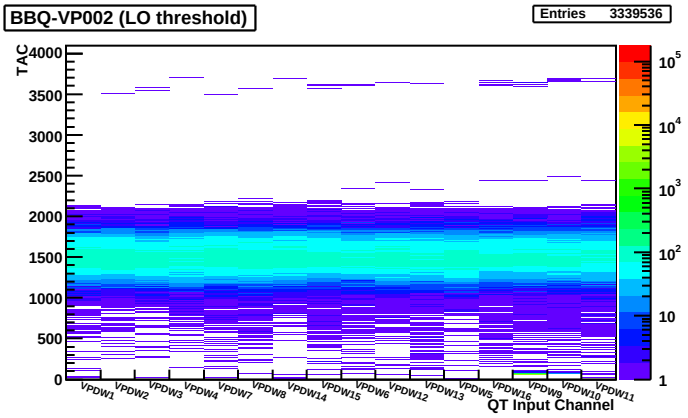

BBQ-ZD001
Entries 3339536
ADC
QT Input Channel

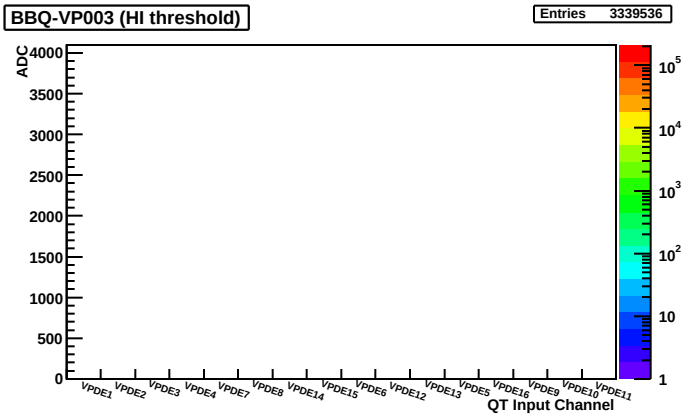

BBQ-ZD001
Entries 3339536
TAC
QT Input Channel

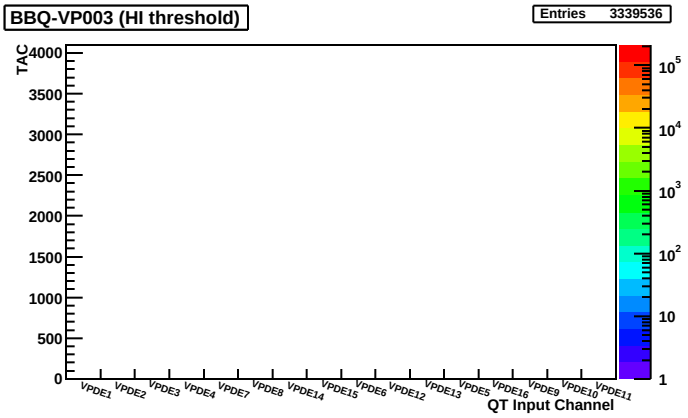

BBQ-VP001 (LO threshold)
Entries 3339536
ADC
QT Input Channel

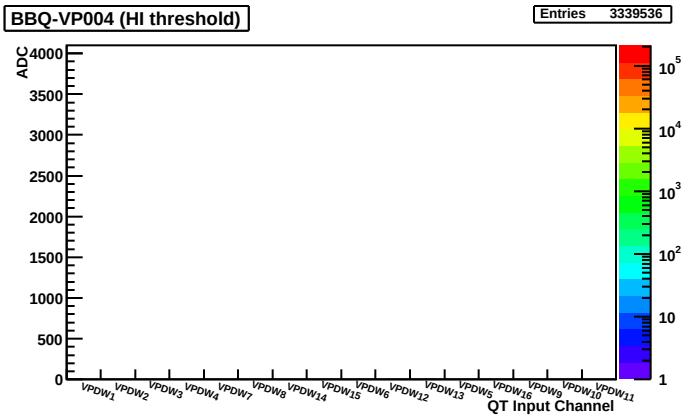

BBQ-VP001 (LO threshold)
Entries 3339536
TAC
QT Input Channel

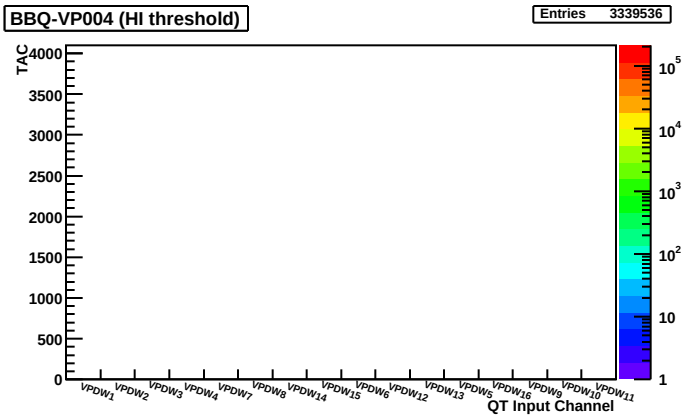

BBQ-VP002 (LO threshold)
Entries 3339536
ADC
QT Input Channel

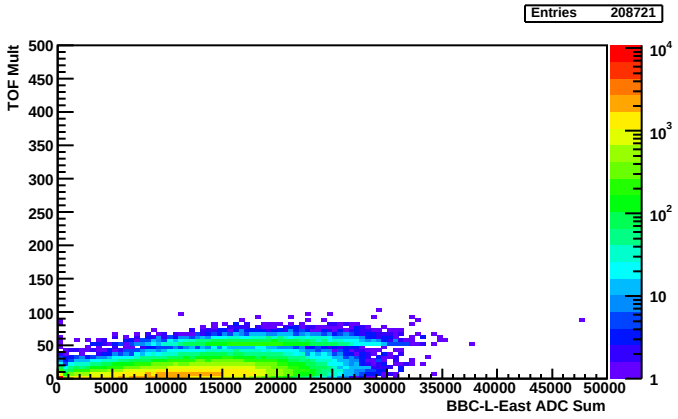

BBQ-VP002 (LO threshold)
Entries 3339536
TAC
QT Input Channel

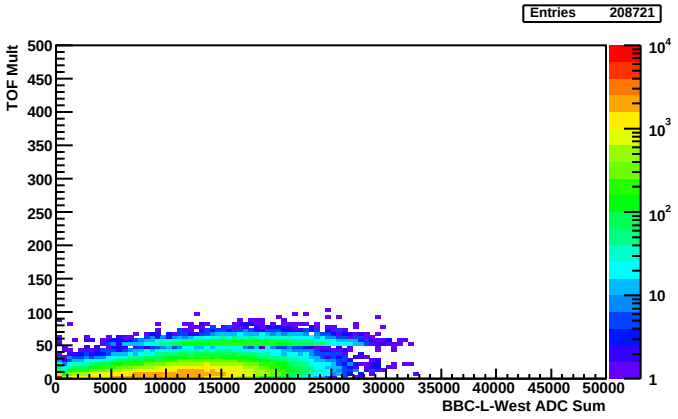

BBQ-VP003 (HI threshold)
Entries 3339536
ADC
QT Input Channel

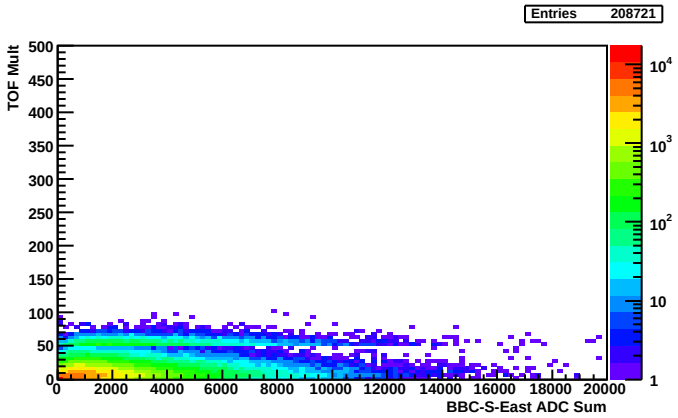

BBQ-VP003 (HI threshold)
Entries 3339536
TAC
QT Input Channel

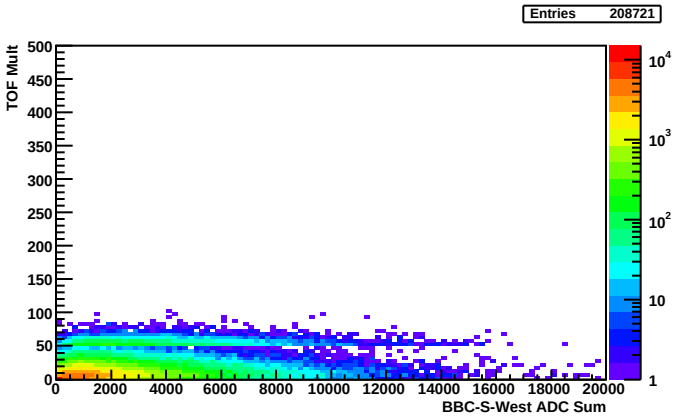

BBQ-VP004 (HI threshold)
Entries 3339536
ADC
QT Input Channel

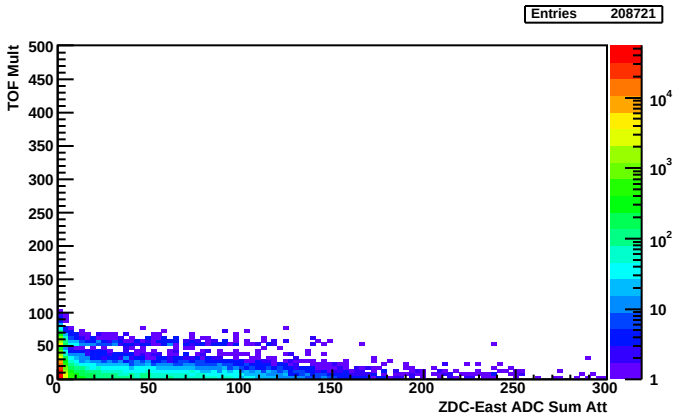

BBQ-VP004 (HI threshold)
Entries 3339536
TAC
QT Input Channel

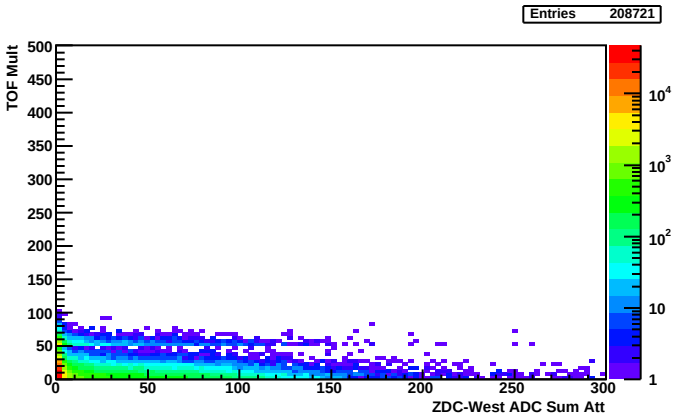

Entries 208721
TOF Mult
BBC-L-East ADC Sum

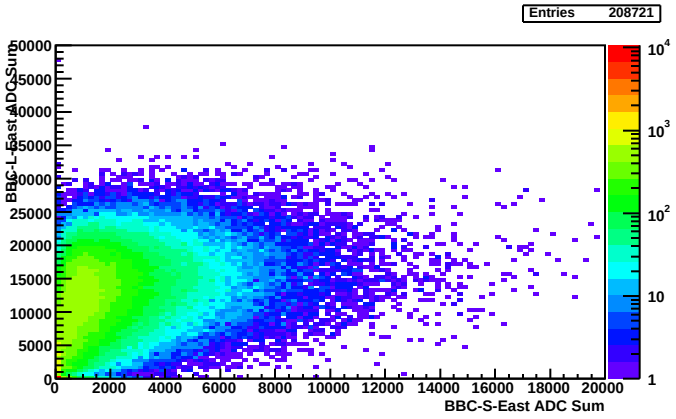

Entries 208721
TOF Mult
BBC-L-West ADC Sum

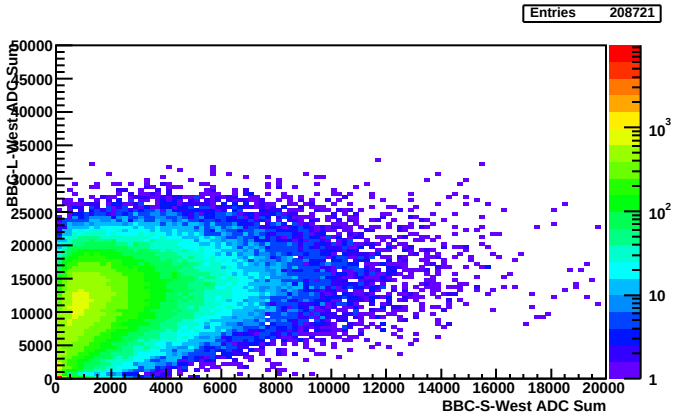

Entries 208721
TOF Mult
BBC-S-East ADC Sum

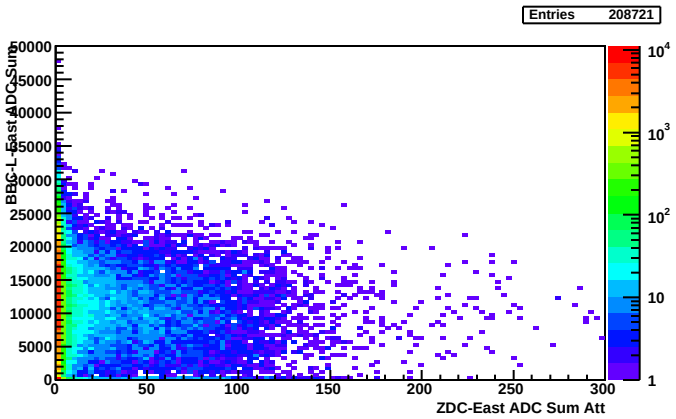

Entries 208721
TOF Mult
BBC-S-West ADC Sum

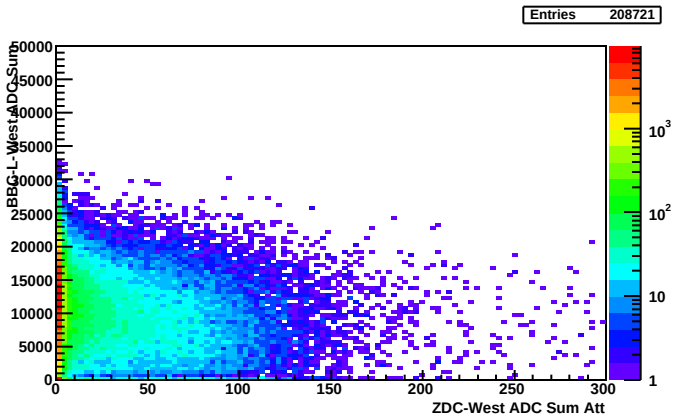

Entries 208721
TOF Mult
ZDC-East ADC Sum Att

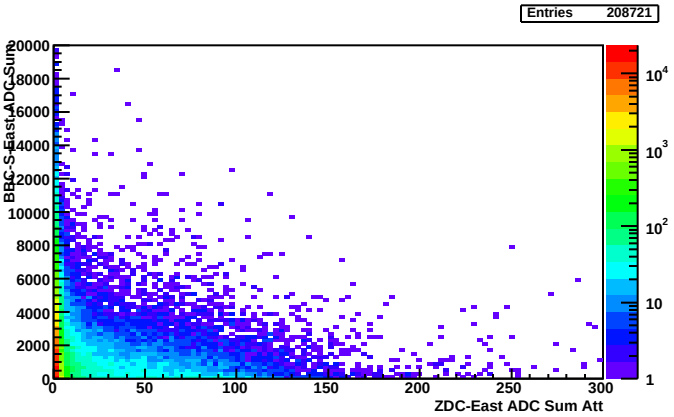

Entries 208721
TOF Mult
ZDC-West ADC Sum Att

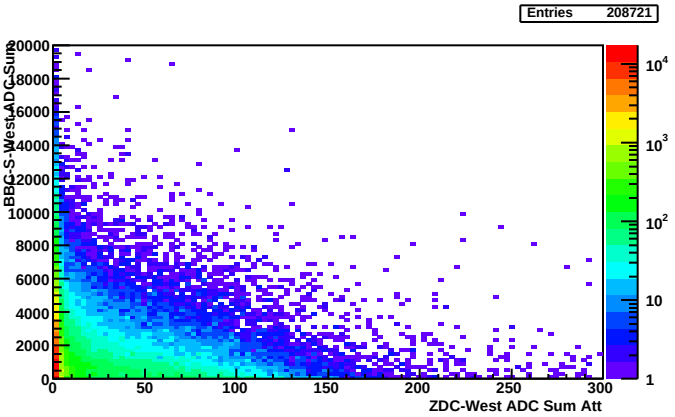

Entries 208721
BBC-L-East ADC Sum
BBC-S-East ADC Sum

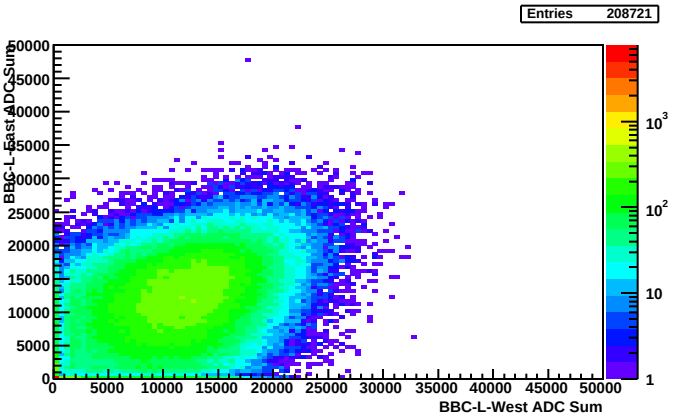

Entries 208721
BBC-L-West ADC Sum
BBC-S-West ADC Sum

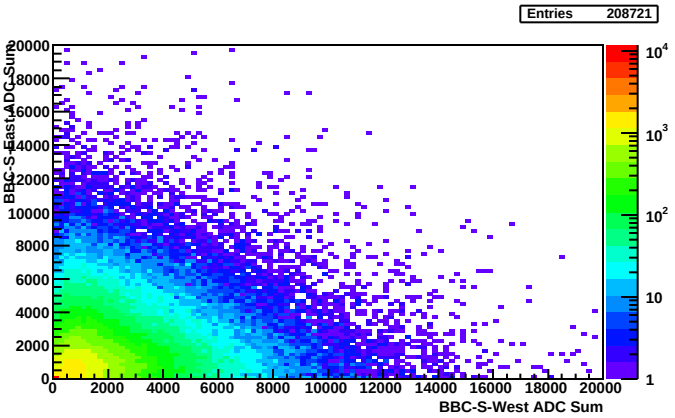

Entries 208721
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

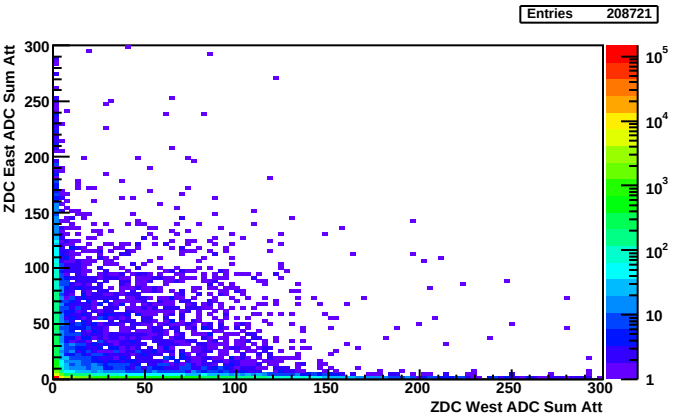

Entries 208721
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

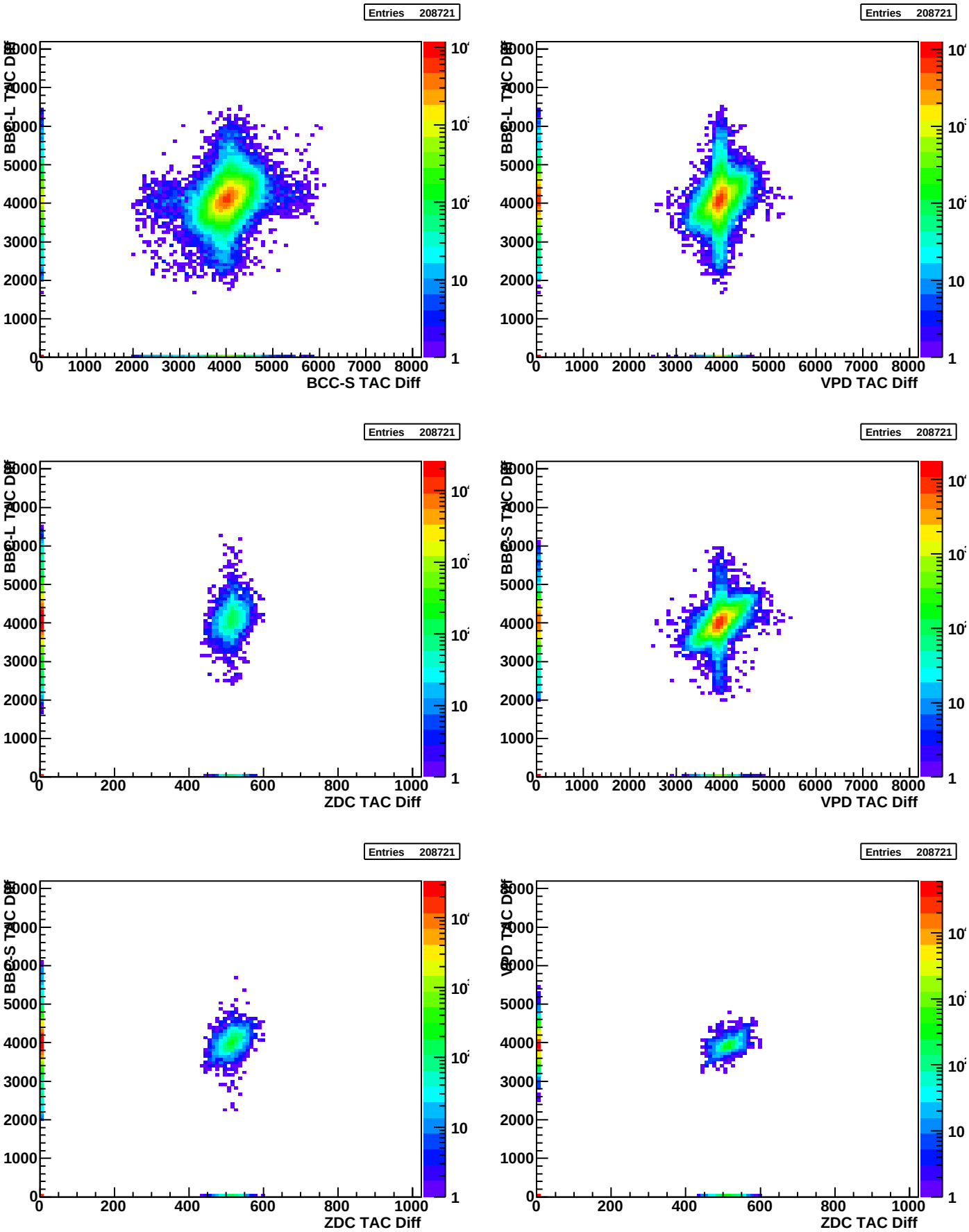

Entries 208721
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

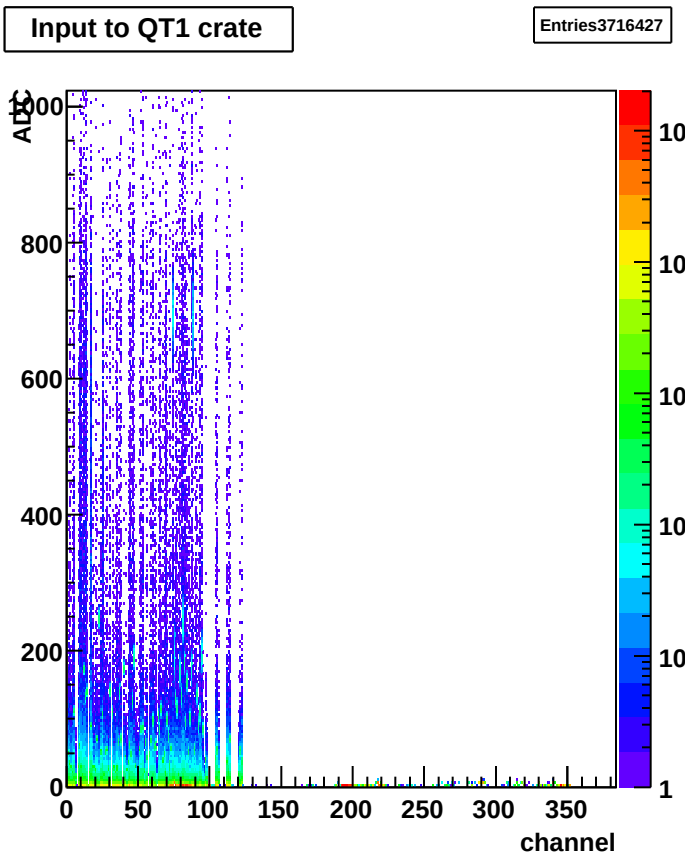

Entries 208721
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

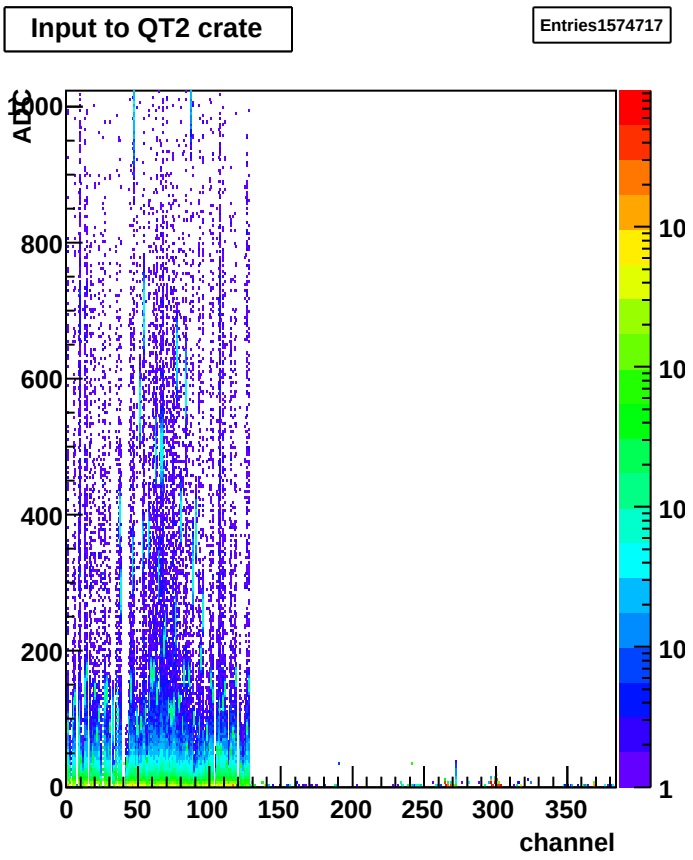

Entries 208721
BBC-L-East ADC Sum
BBC-L-West ADC Sum

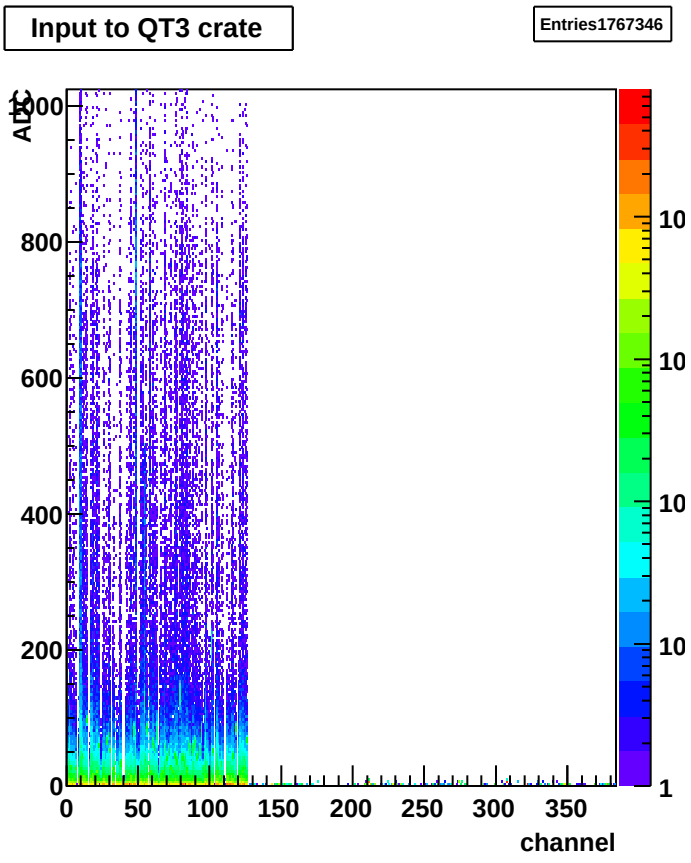

Entries 208721
BBC-S-East ADC Sum
BBC-S-West ADC Sum

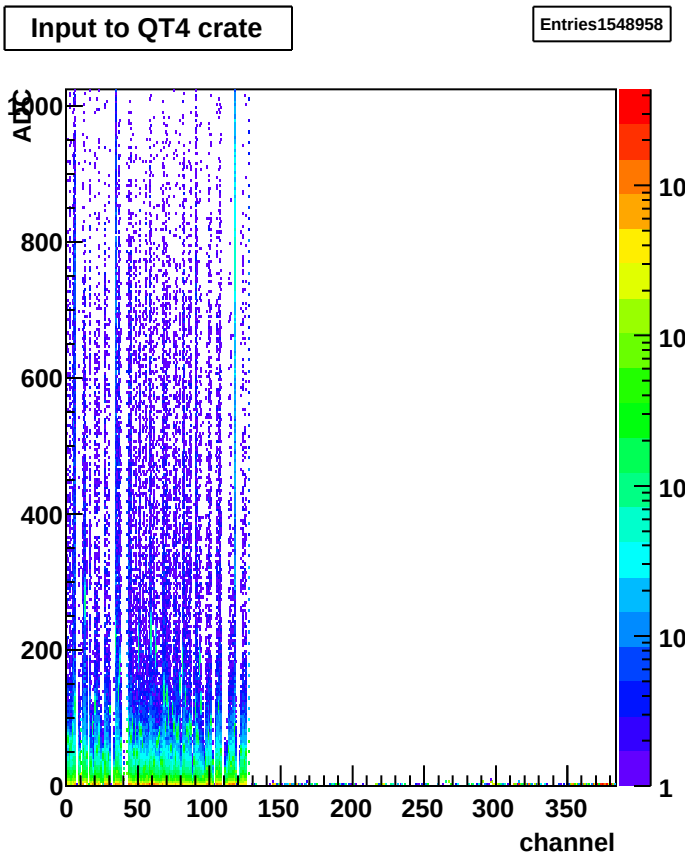

Entries 208721
ZDC East ADC Sum Att
ZDC West ADC Sum Att

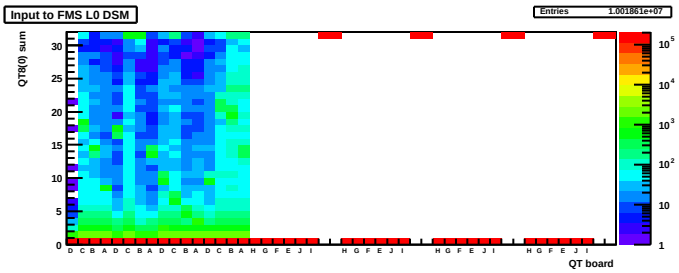

Entries 208721
BBC-L TAC Diff
BCC-S TAC Diff
Entries 208721
BBC-L TAC Diff
VPD TAC Diff
Entries 208721
BBC-L TAC Diff
ZDC TAC Diff
Entries 208721
BBC-S TAC Diff
VPD TAC Diff
Entries 208721
BBC-S TAC Diff
ZDC TAC Diff
Entries 208721
VPD TAC Diff
ZDC TAC Diff

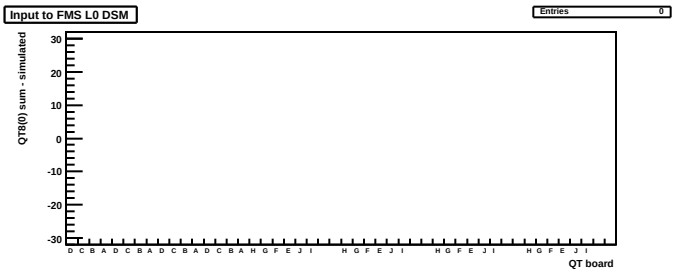

Input to QT1 crate
Entries3716427
ADC
channel

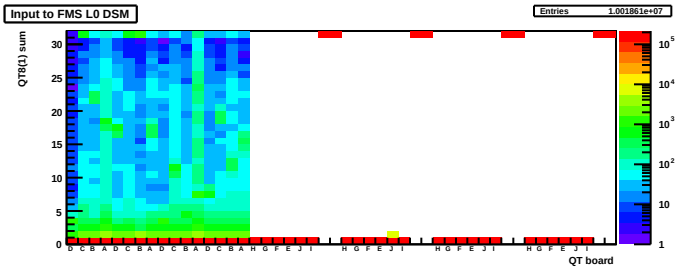

Input to QT2 crate
Entries1574717
ADC
channel

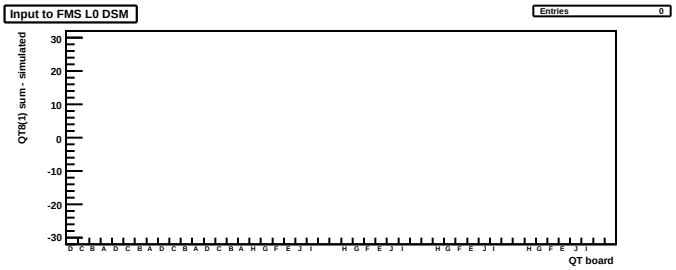

Input to QT3 crate
Entries1767346
ADC
channel

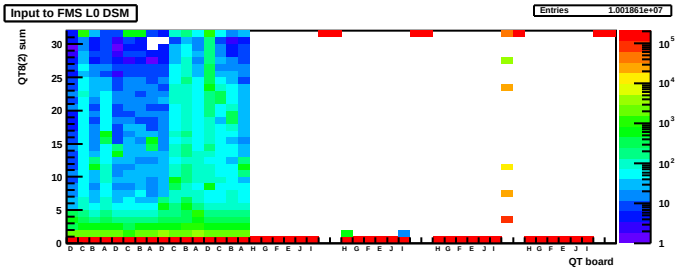

Input to QT4 crate
Entries1548958
ADC
channel

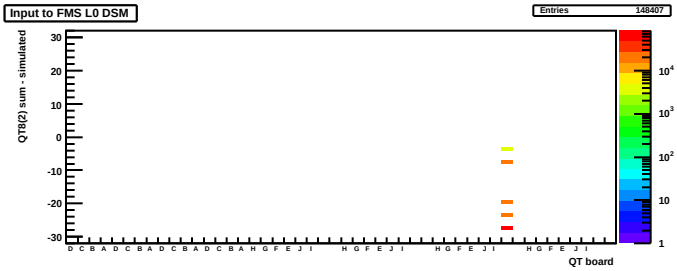

Input to FMS L0 DSM
Entries 1.001861e+07
QT8(0) sum
QT board

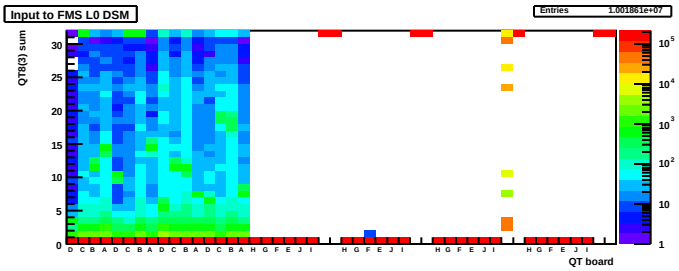

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

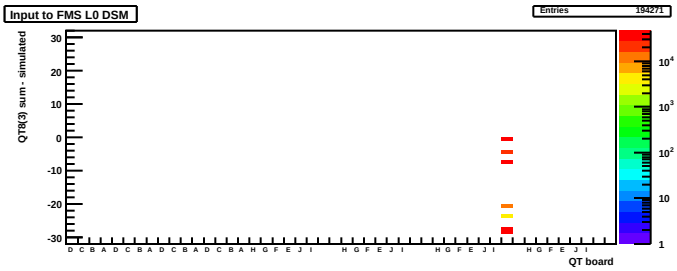

Input to FMS L0 DSM
Entries 1.001861e+07
QT8(1) sum
QT board

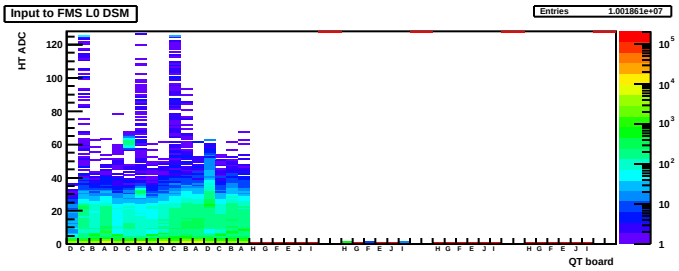

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

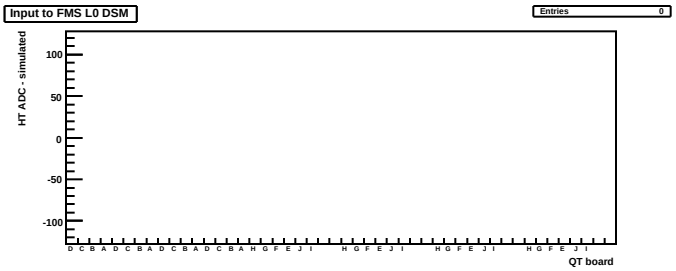

Input to FMS L0 DSM
Entries 1.001861e+07
QT8(2) sum
QT board

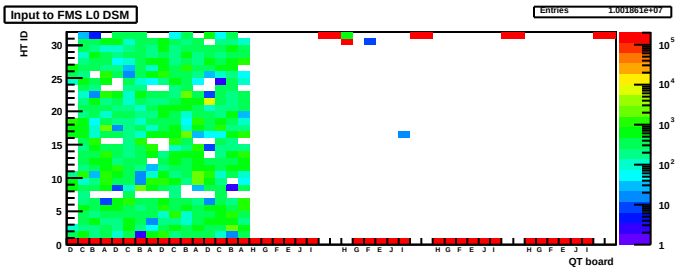

Input to FMS L0 DSM
Entries 148407
QT8(2) sum - simulated
QT board

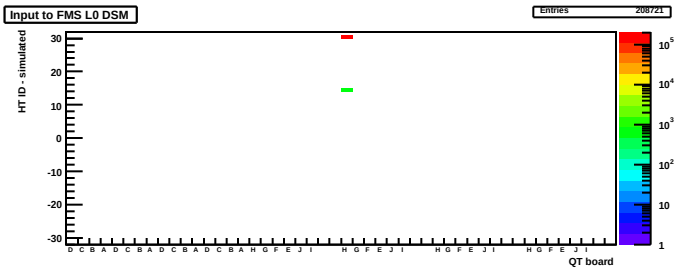

Input to FMS L0 DSM
Entries 1.001861e+07
QT8(3) sum
QT board

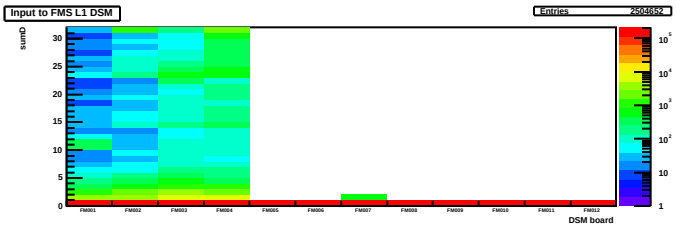

Input to FMS L0 DSM
Entries 194271
QT8(3) sum - simulated
QT board

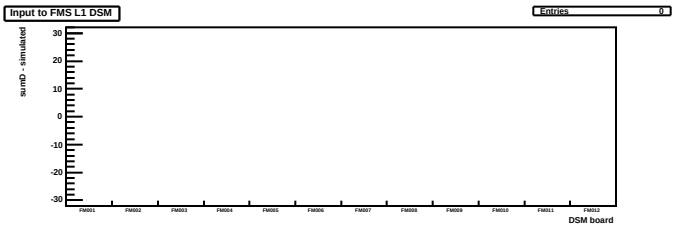

Input to FMS L0 DSM
Entries 1.001861e+07
HT ADC
QT board

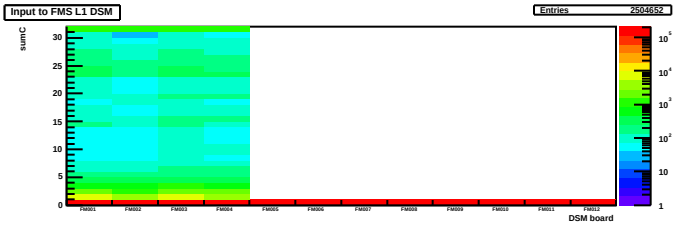

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

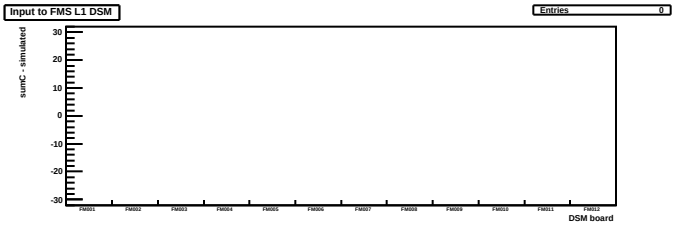

Input to FMS L0 DSM
Entries 1.001861e+07
HT ID
QT board

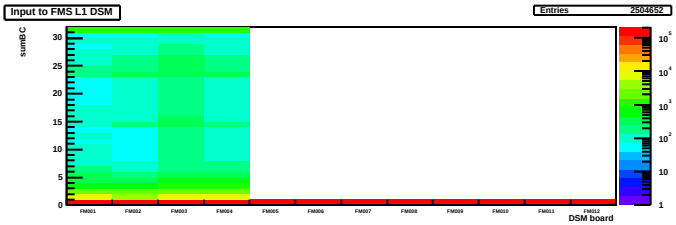

Input to FMS L0 DSM
Entries 208721
HT ID - simulated
QT board

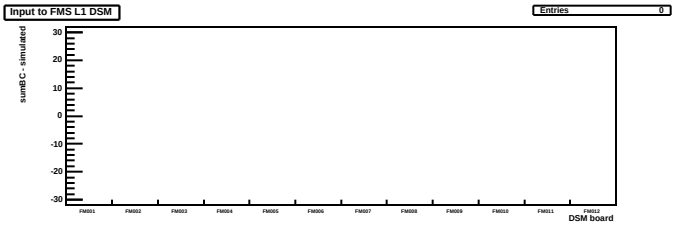

Input to FMS L1 DSM
Entries 2504652
sumD
DSM board

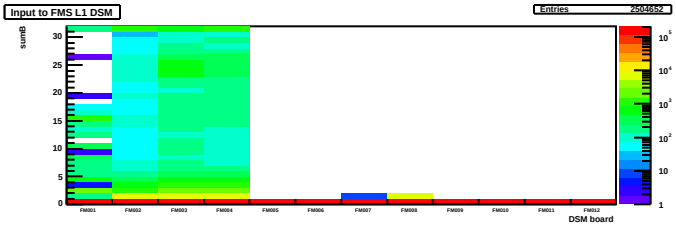

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

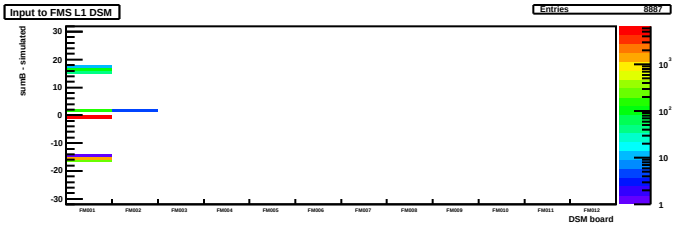

Input to FMS L1 DSM
Entries 2504652
sumC
DSM board

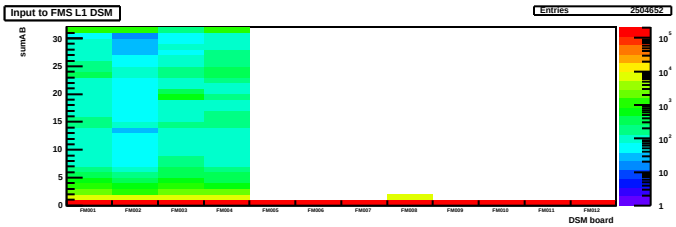

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

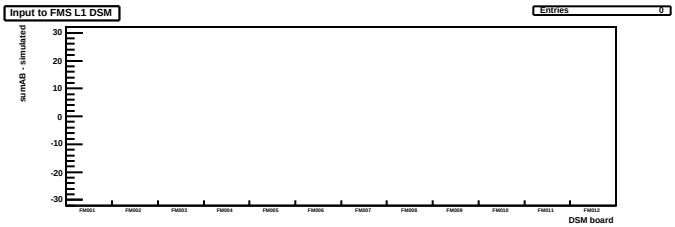

Input to FMS L1 DSM
Entries 2504652
sumBC
DSM board

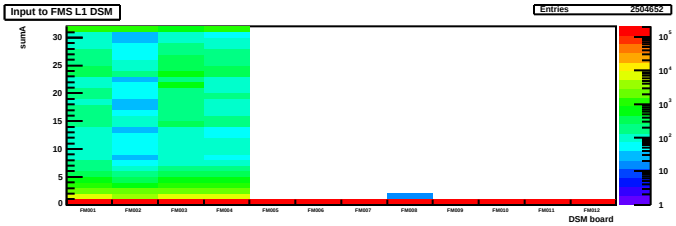

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

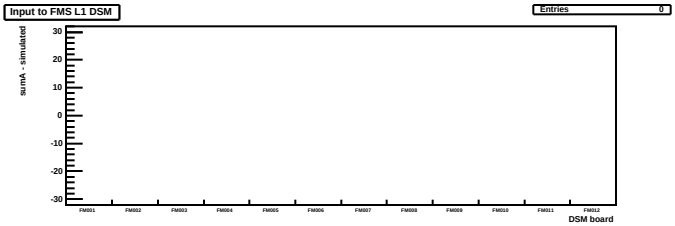

Input to FMS L1 DSM
Entries 2504652
sumB
DSM board

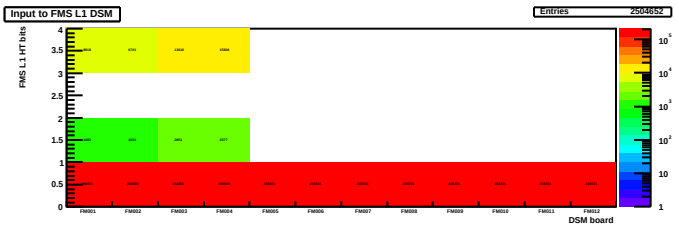

Input to FMS L1 DSM
Entries 8887
sumB - simulated
DSM board

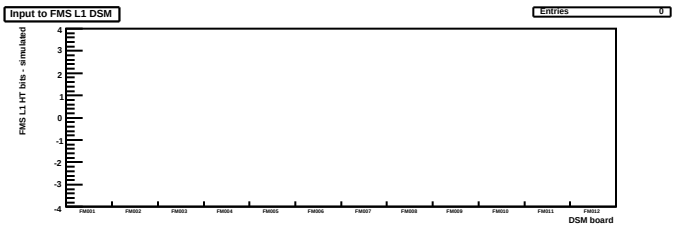

Input to FMS L1 DSM
Entries 2504652
sumAB
DSM board

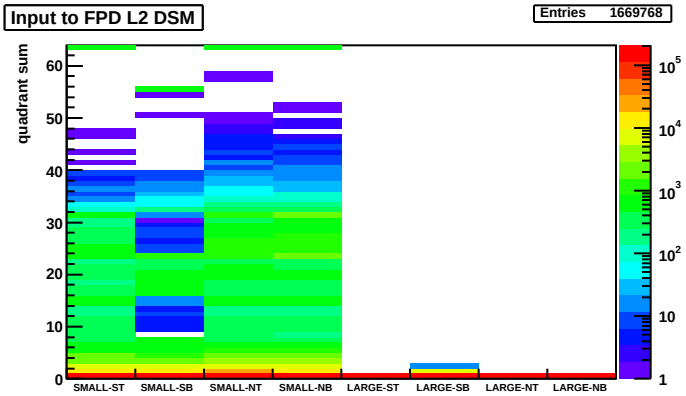

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

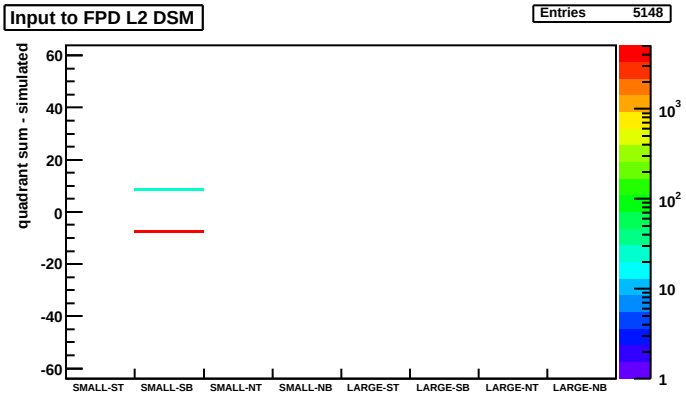

Input to FMS L1 DSM
Entries 2504652
sumA
DSM board

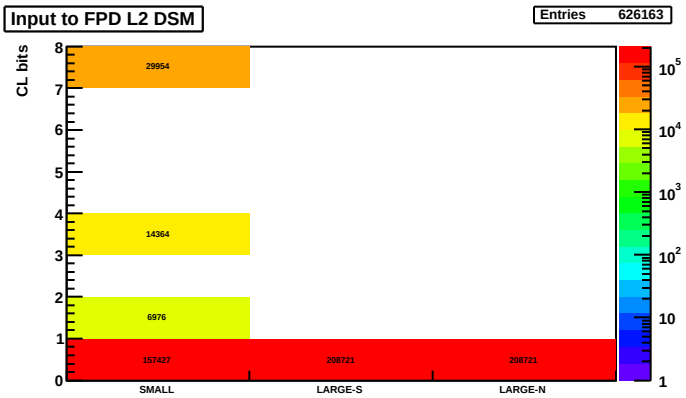

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

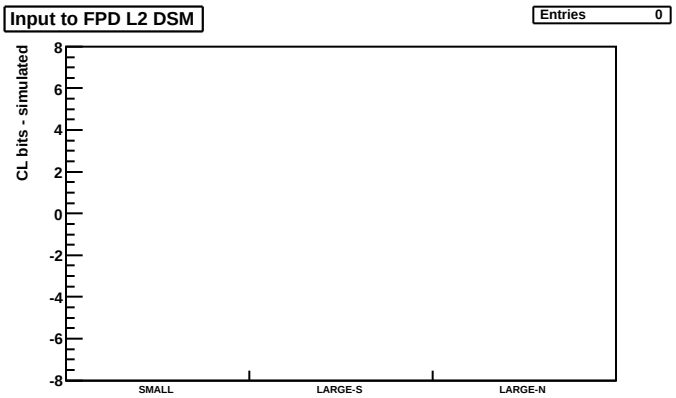

Input to FMS L1 DSM
Entries 2504652
FMS L1 HT bits
DSM board

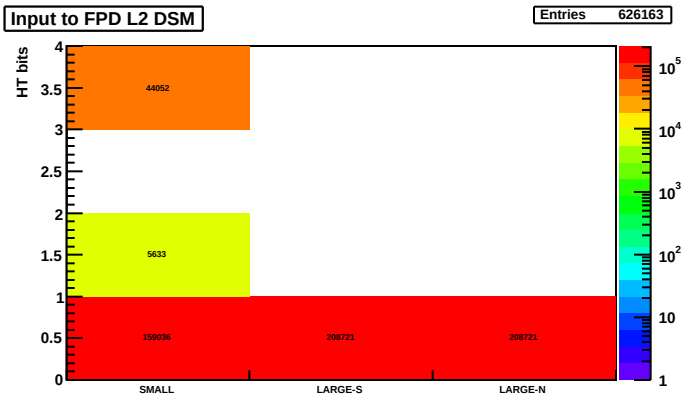

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

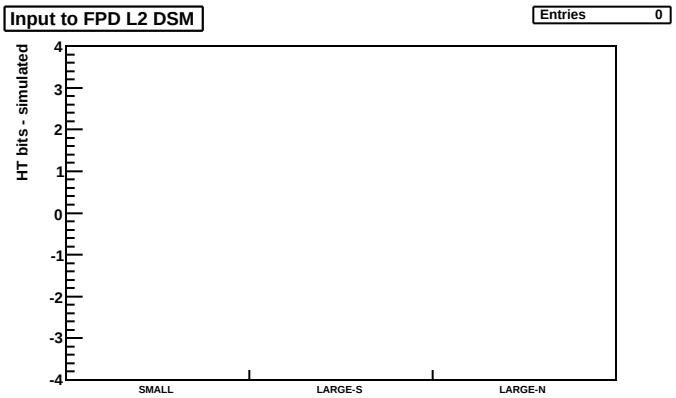

Input to FPD L2 DSM
Entries 1669768
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

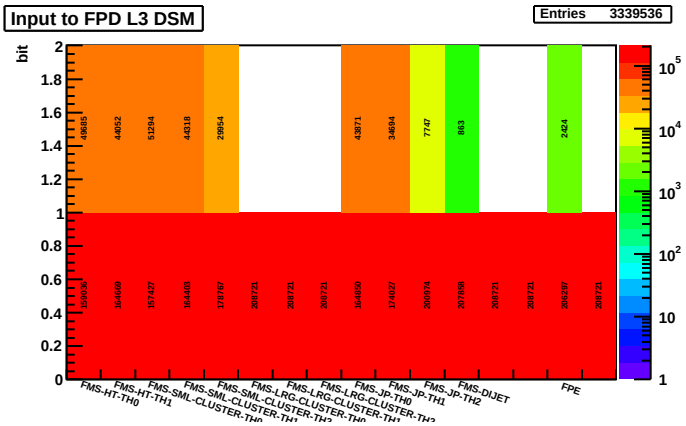

Input to FPD L2 DSM
Entries 5148
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

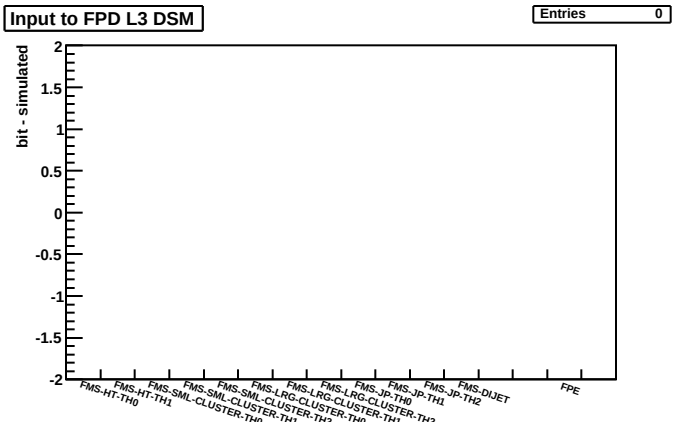

Input to FPD L2 DSM
Entries 626163
CL bits
29954
14364
6976
157427
208721
208721
SMALL
LARGE-S
LARGE-N

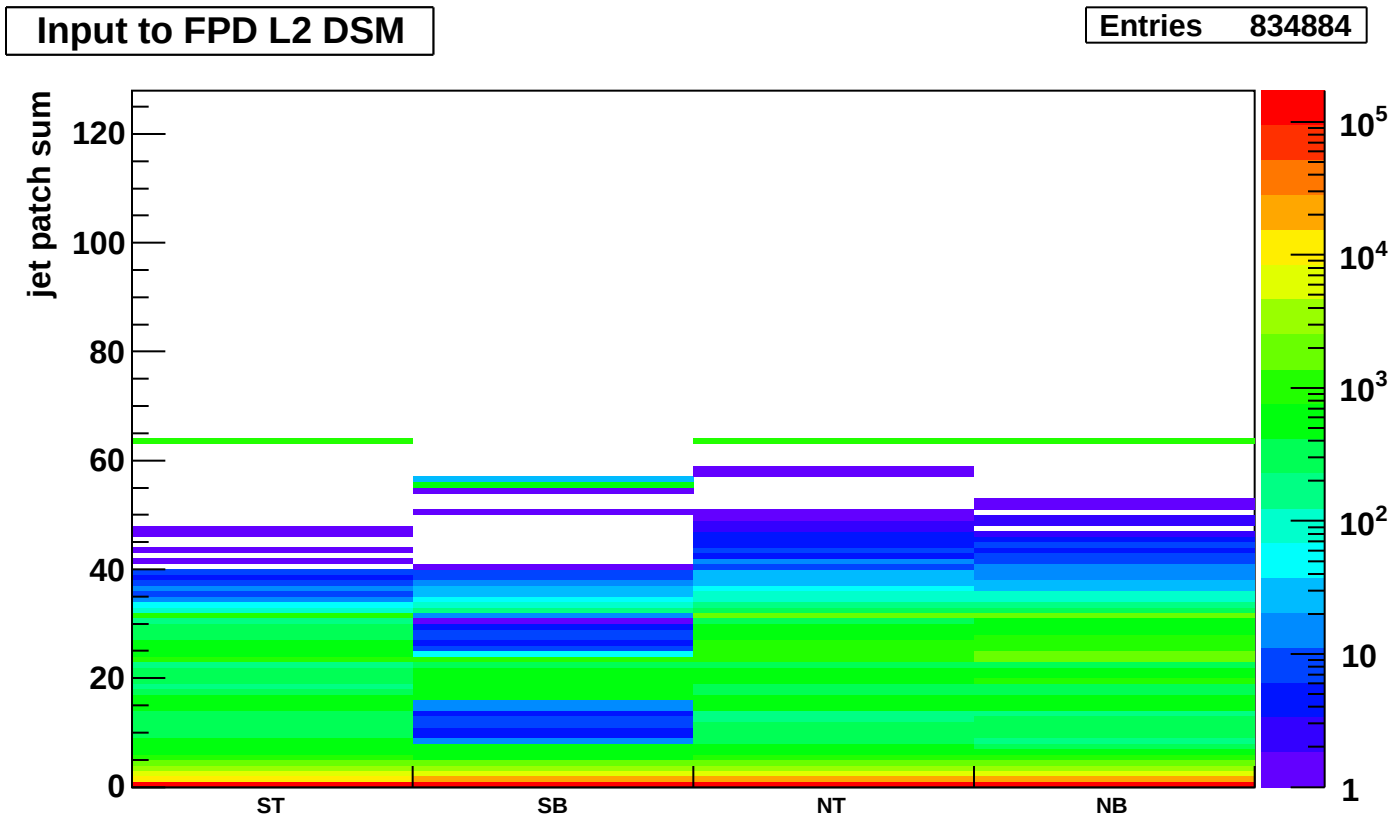

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

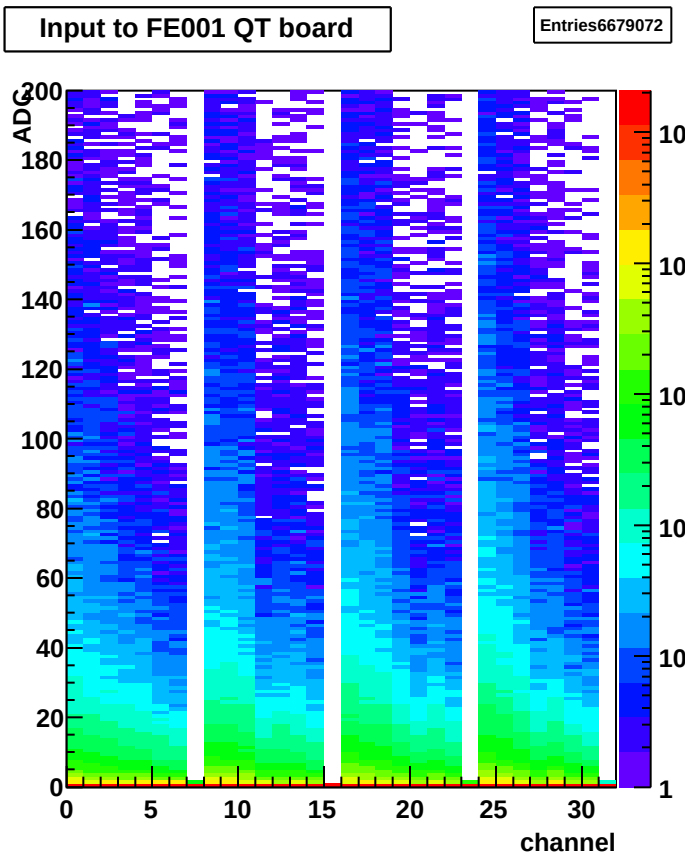

Input to FPD L2 DSM
Entries 626163
HT bits
44052
5633
159036
208721
208721
SMALL
LARGE-S
LARGE-N

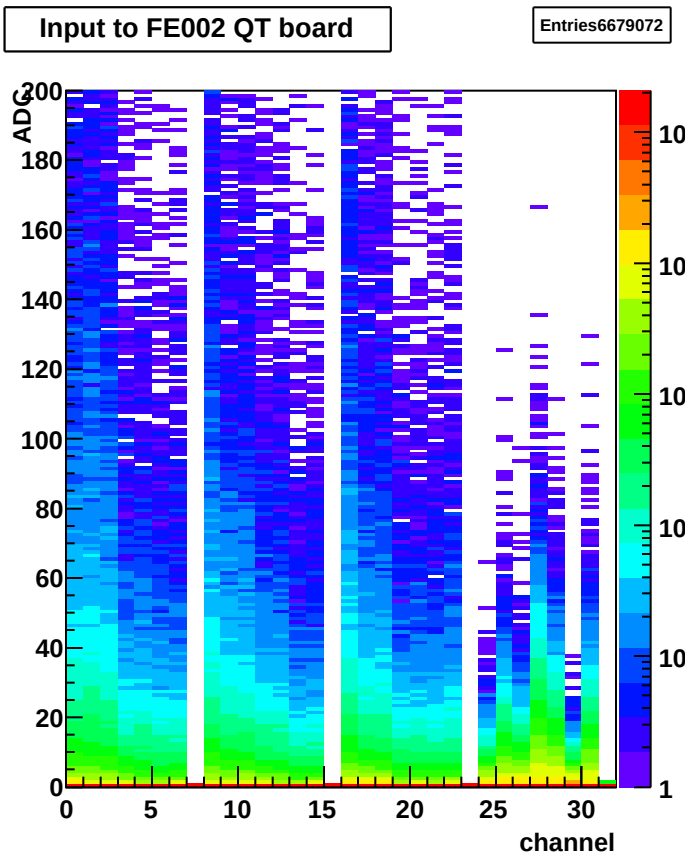

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

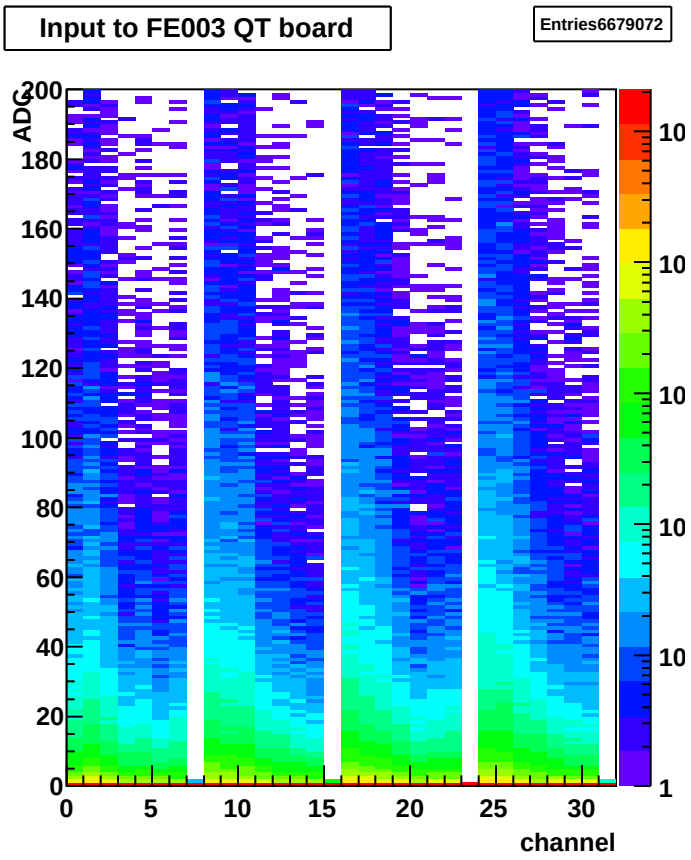

Input to FPD L3 DSM
Entries 3339536
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

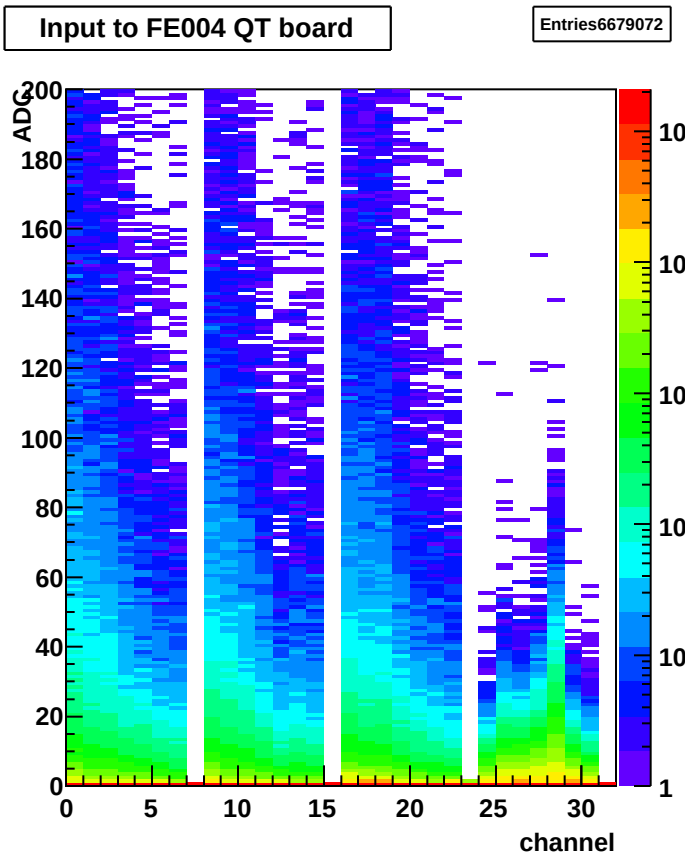

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

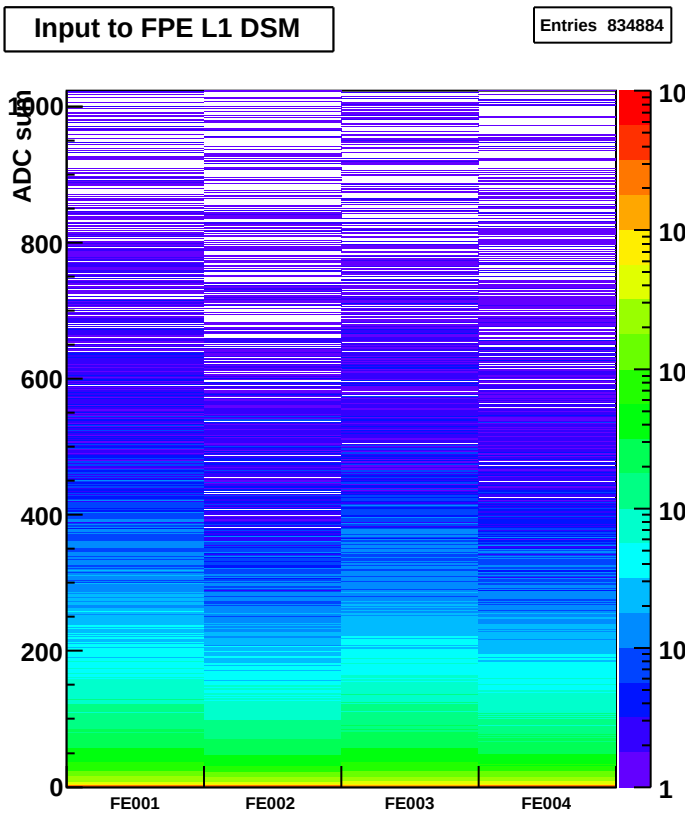

Input to FPD L2 DSM
Entries 834884
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

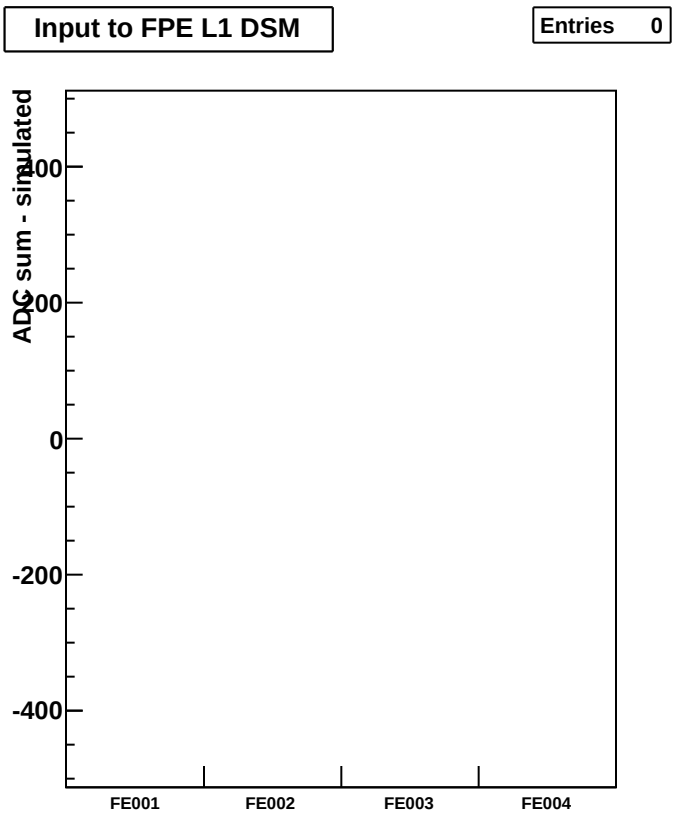

Input to FE001 QT board
Entries6679072
ADC
channel

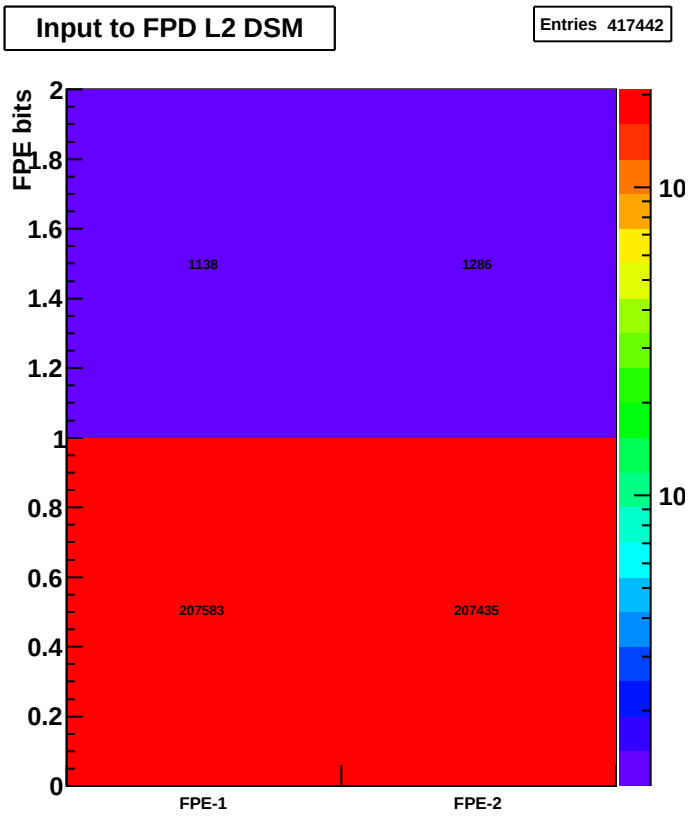

Input to FE002 QT board
Entries6679072
ADC
channel

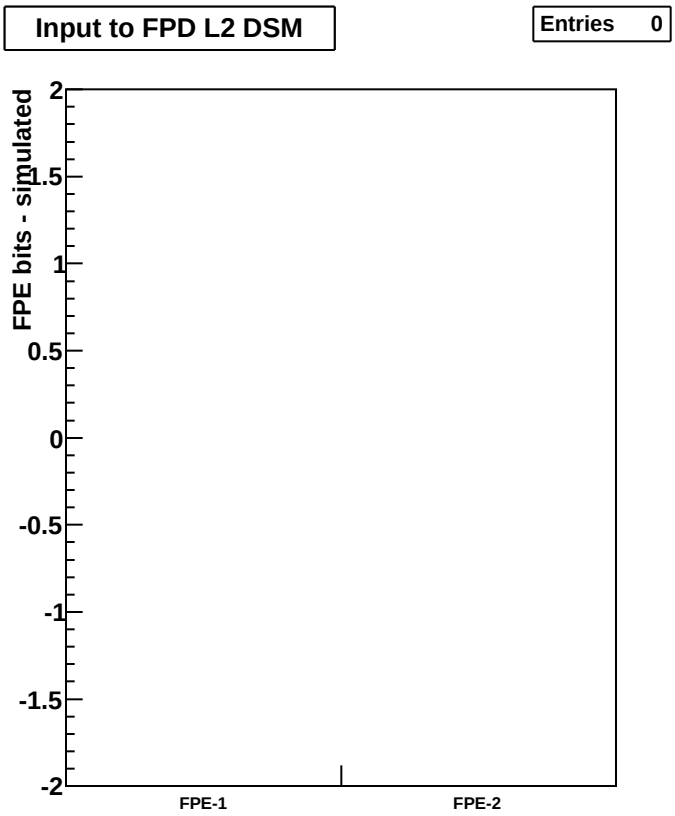

Input to FE003 QT board
Entries6679072
ADC
channel


Input to FE004 QT board
Entries6679072
ADC
channel


Input to FPE L1 DSM
Entries 834884
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
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 417442
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1138
1286
207583
207435
FPE-1
FPE-2
10
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