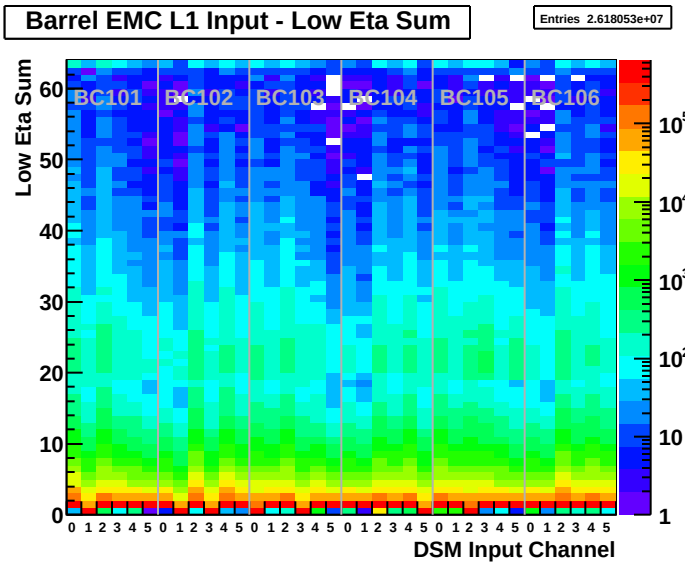
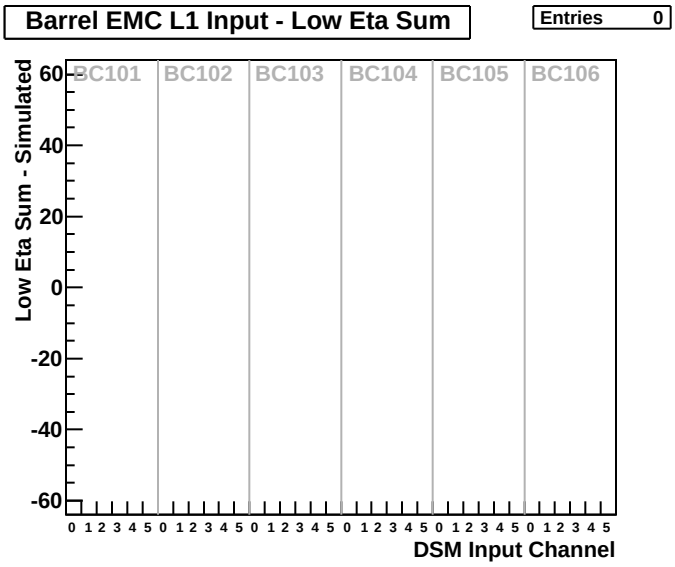
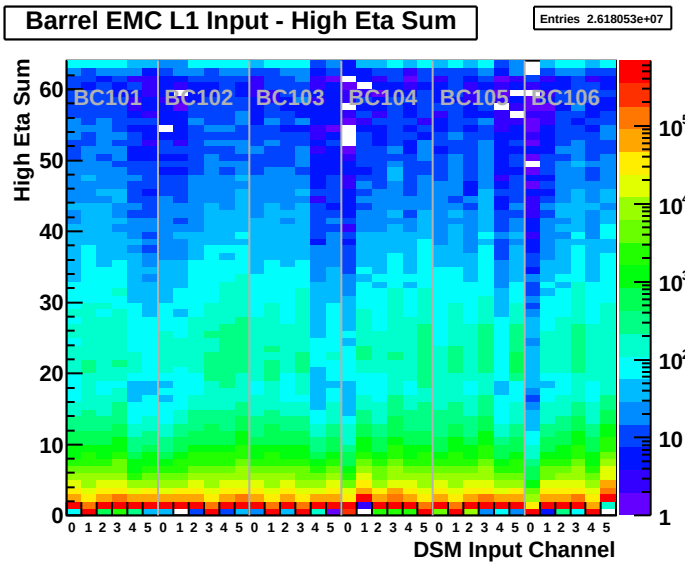
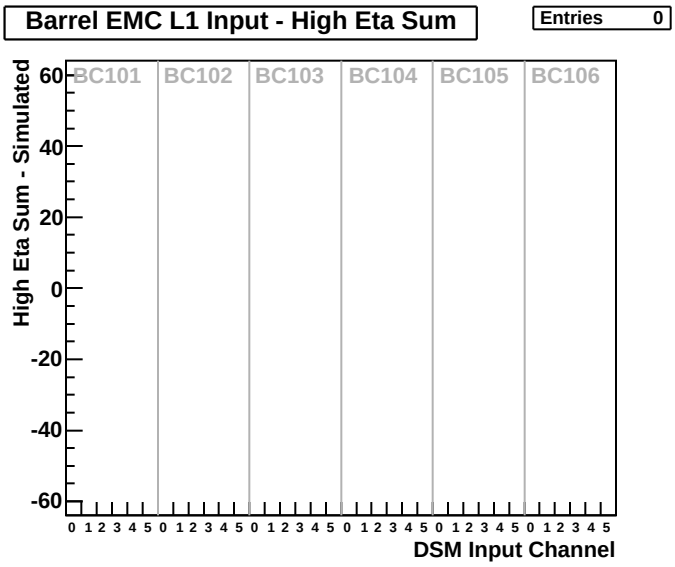
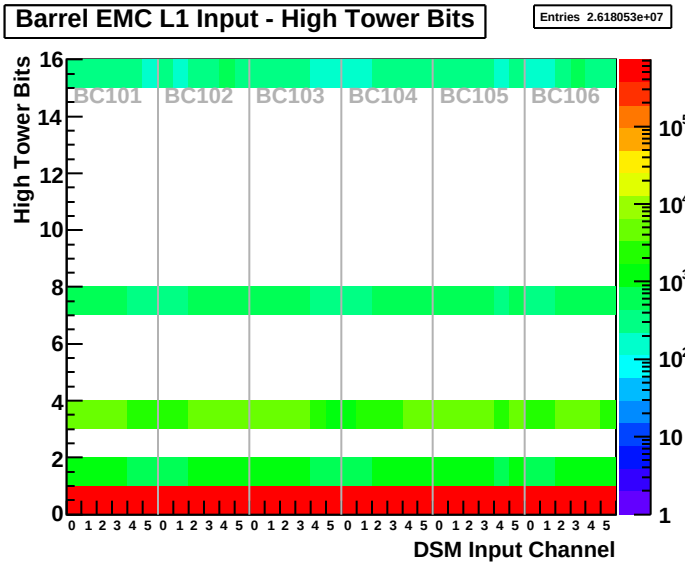
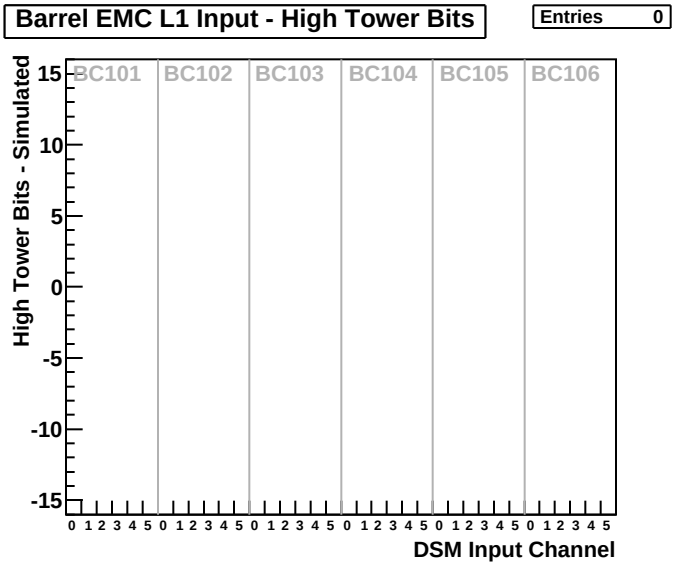

Barrel EMC L1 Input - Low Eta Sum
Entries 2.618053e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

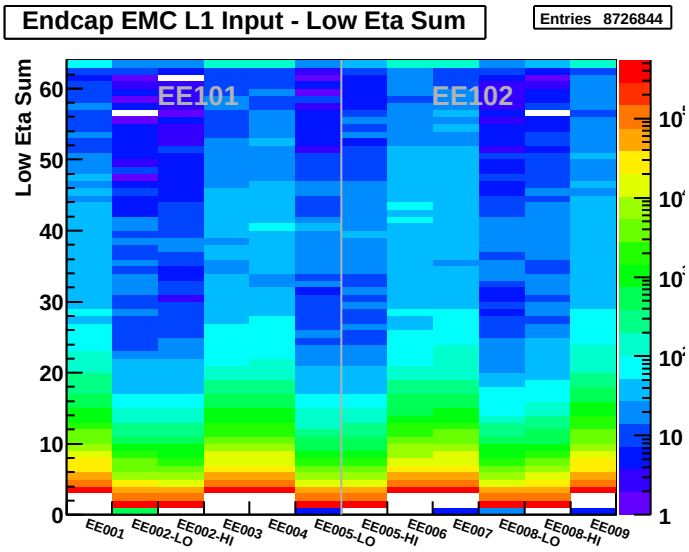

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

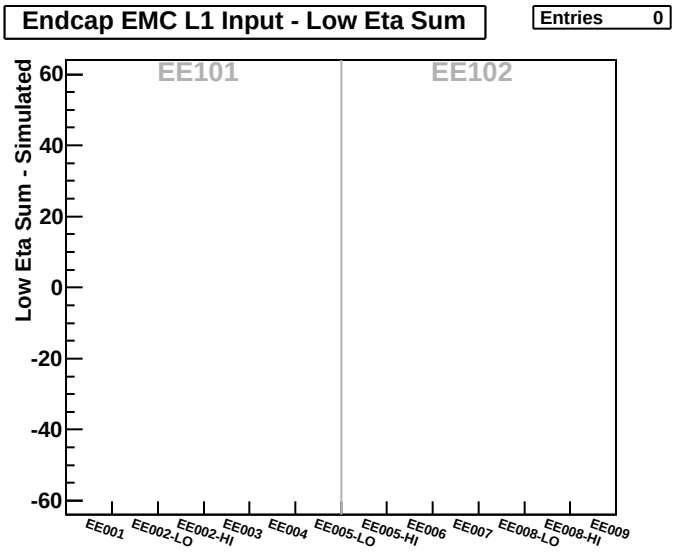

Barrel EMC L1 Input - High Eta Sum
Entries 2.618053e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

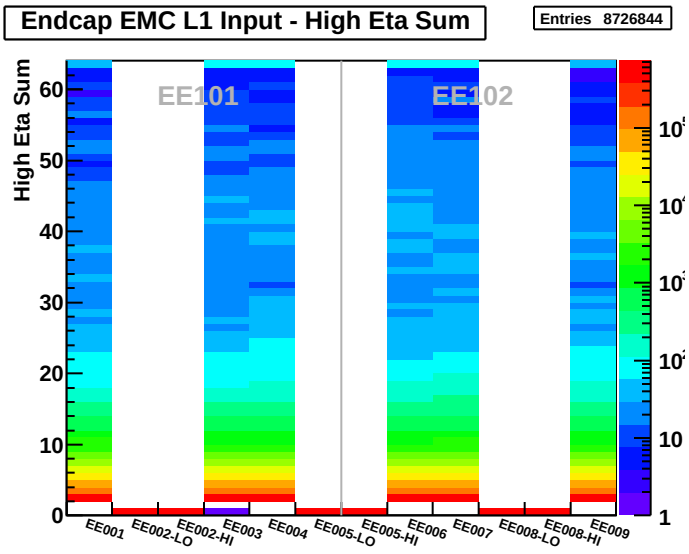

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

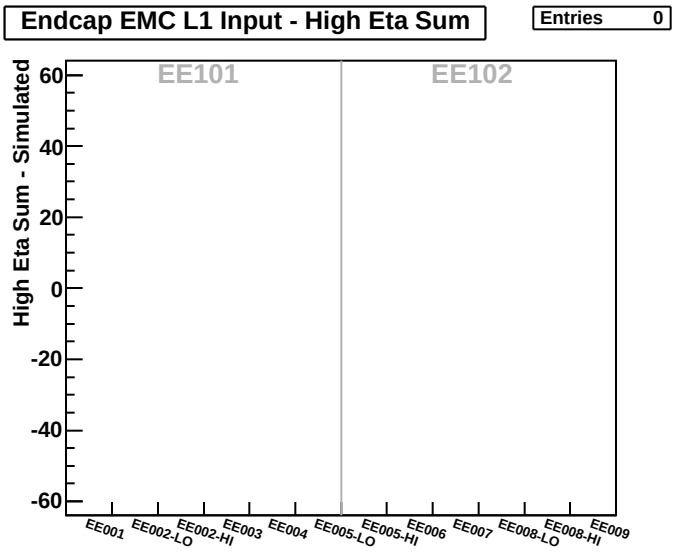

Barrel EMC L1 Input - High Tower Bits
Entries 2.618053e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

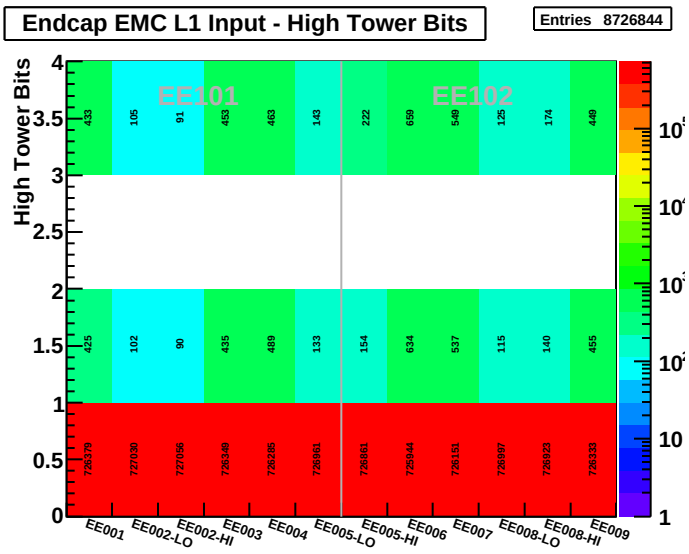

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

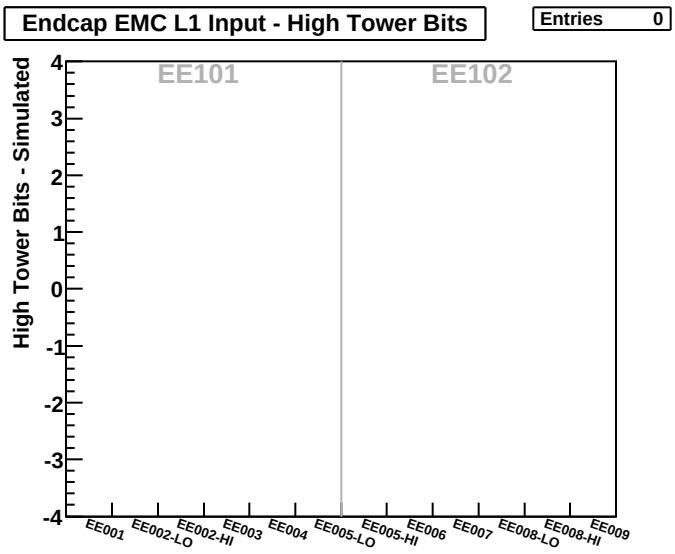

Endcap EMC L1 Input - Low Eta Sum
Entries 8726844
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

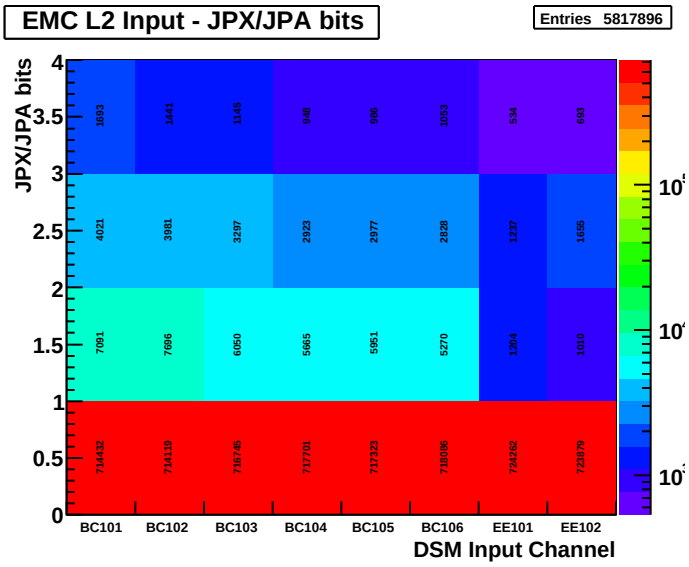

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

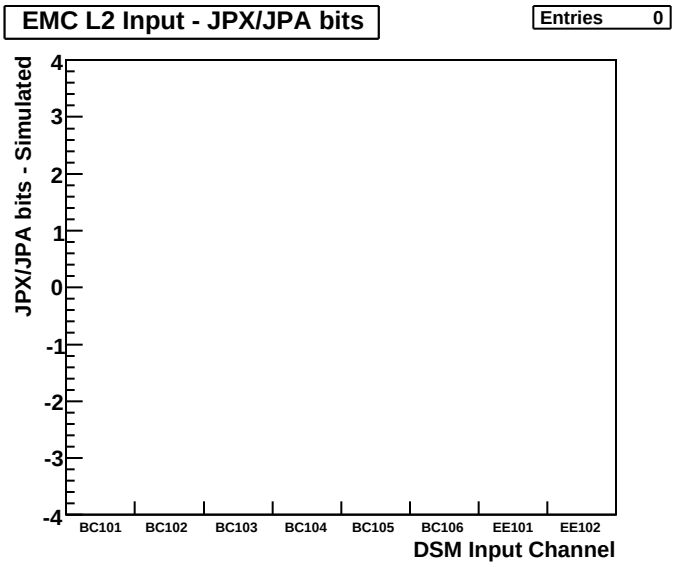

Endcap EMC L1 Input - High Eta Sum
Entries 8726844
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

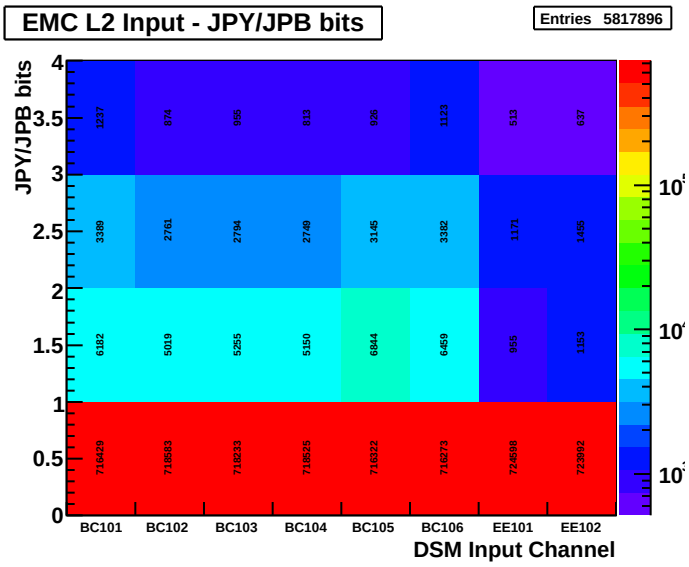

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

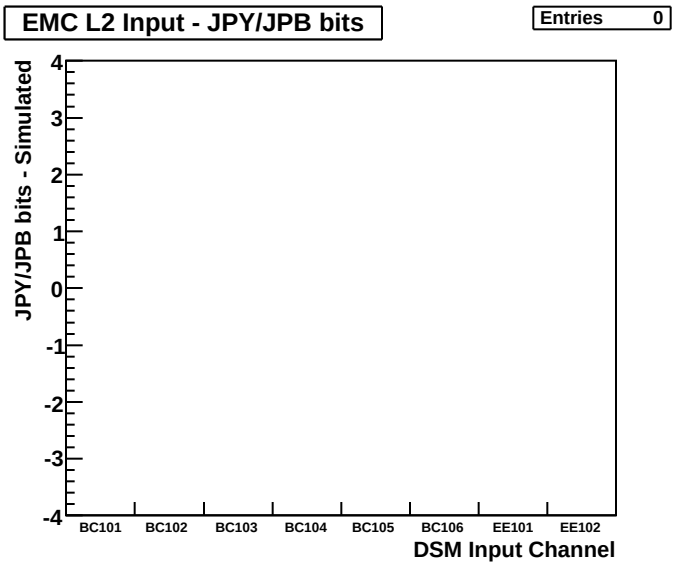

Endcap EMC L1 Input - High Tower Bits
Entries 8726844
High Tower Bits
EE101
EE102
433 105 91 453 463 143 222 659 549 125 174 449
425 102 90 435 489 133 154 634 537 115 140 455
726379 727030 727056 726349 726285 726961 726861 725944 726151 726997 726923 726333
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

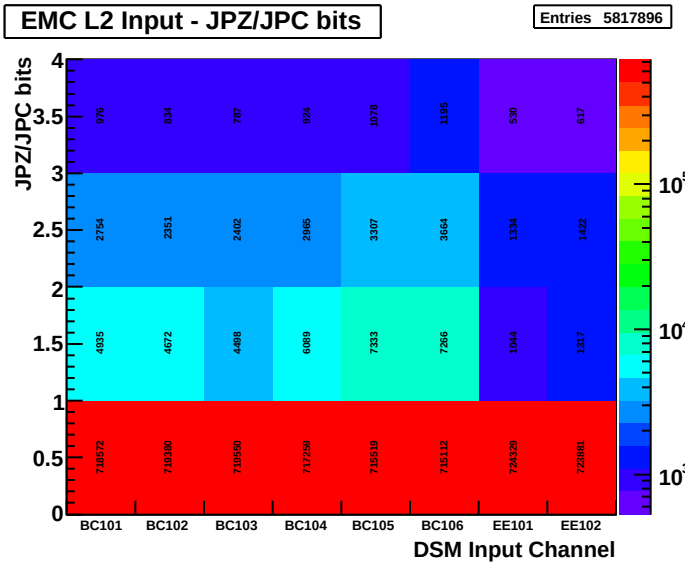

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

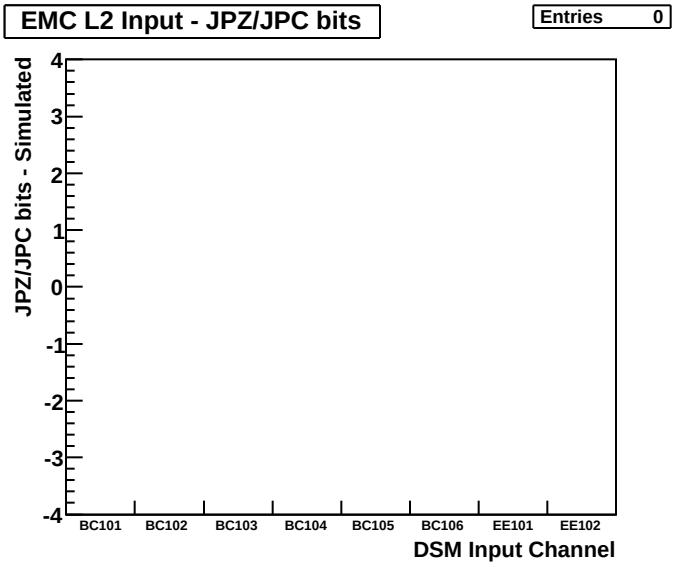

EMC L2 Input - JPX/JPA bits
Entries 5817896
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1693 1441 1145 946 986 1053 534 693
4021 3981 3297 2923 2977 2828 1237 1655
7091 7686 6050 5665 5951 5270 1204 1010
714432 714119 716745 717701 717323 718086 724262 723879

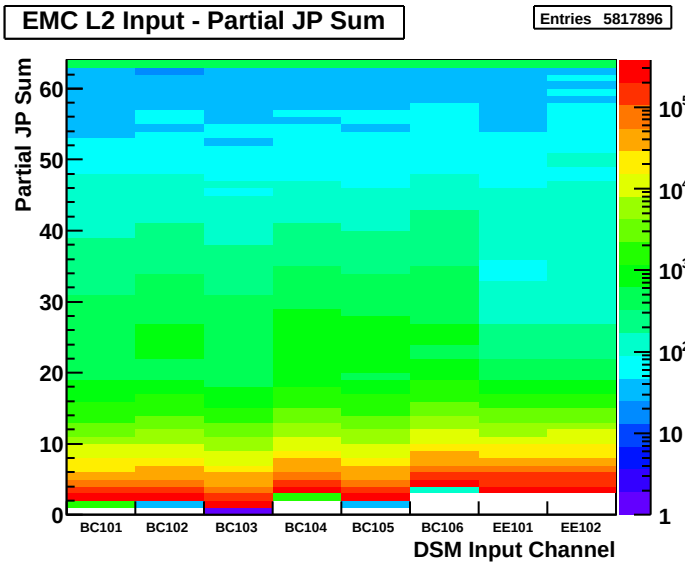

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

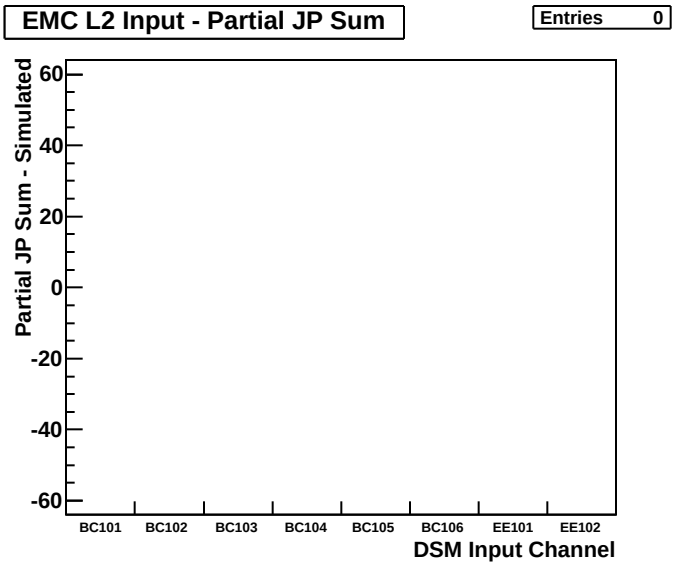

EMC L2 Input - JPY/JPB bits
Entries 5817896
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1237 874 955 813 926 1123 513 637
3389 2761 2794 2749 3145 3382 1171 1455
6182 5019 5255 5150 6844 6459 955 1153
716429 718583 718233 718525 718322 718273 724598 723992

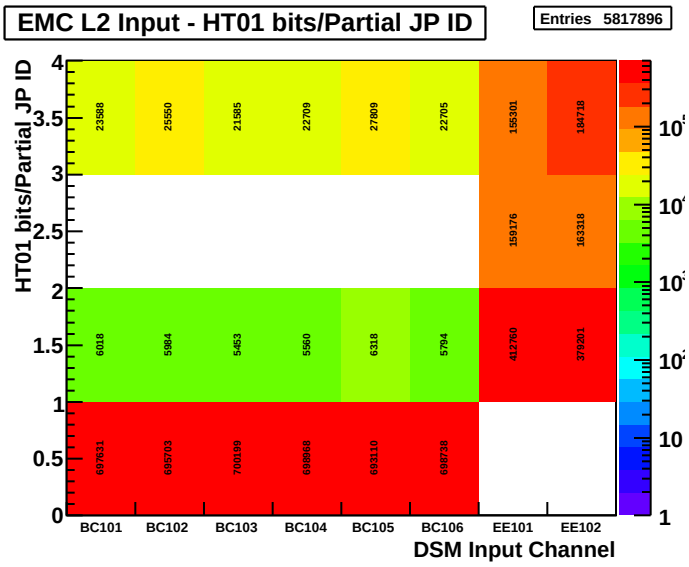

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

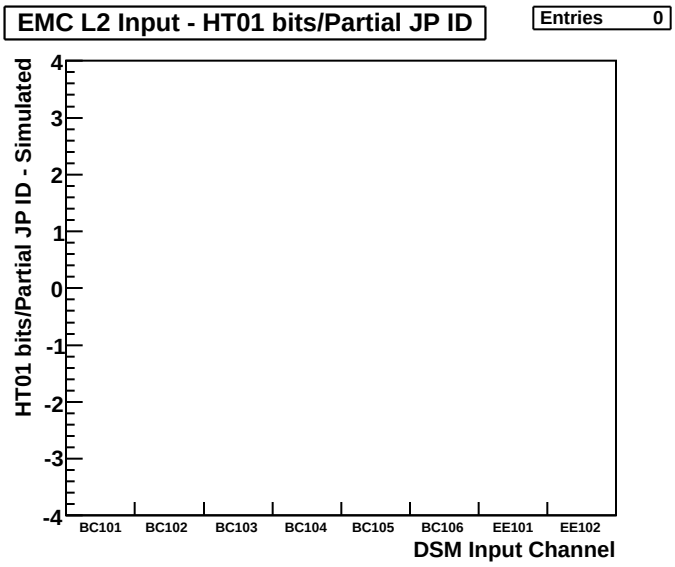

EMC L2 Input - JPZ/JPC bits
Entries 5817896
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
976 824 787 924 1078 1195 530 617
2754 2351 2402 2965 3307 3664 1334 1422
4935 4672 4498 6089 7333 7266 1044 1317
718572 719380 719550 717259 715519 715112 724329 723881

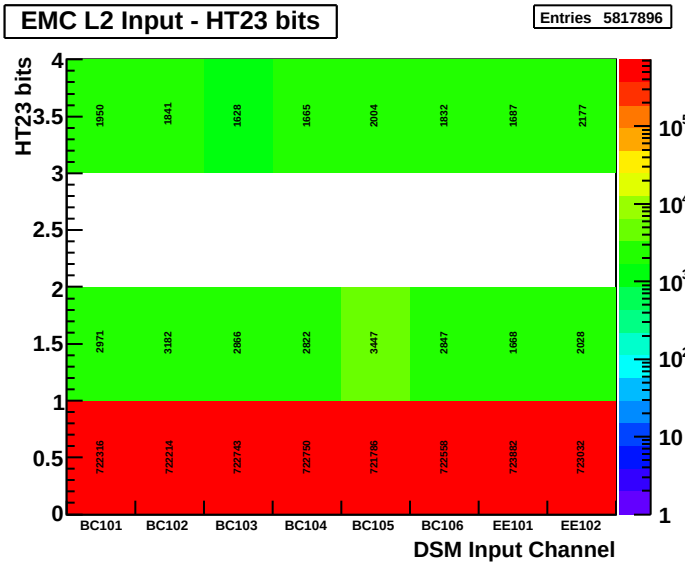

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

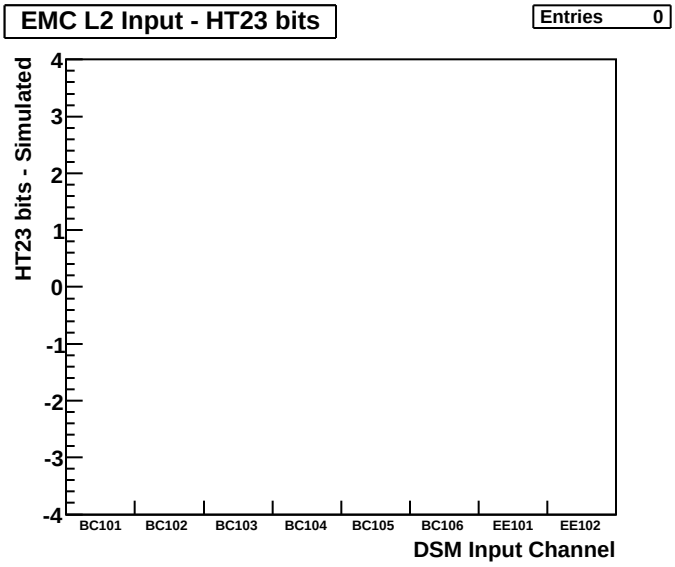

EMC L2 Input - Partial JP Sum
Entries 5817896
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

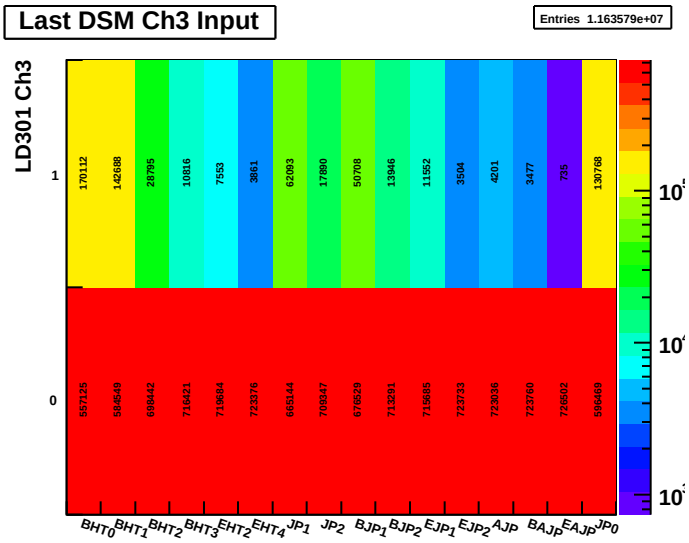

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

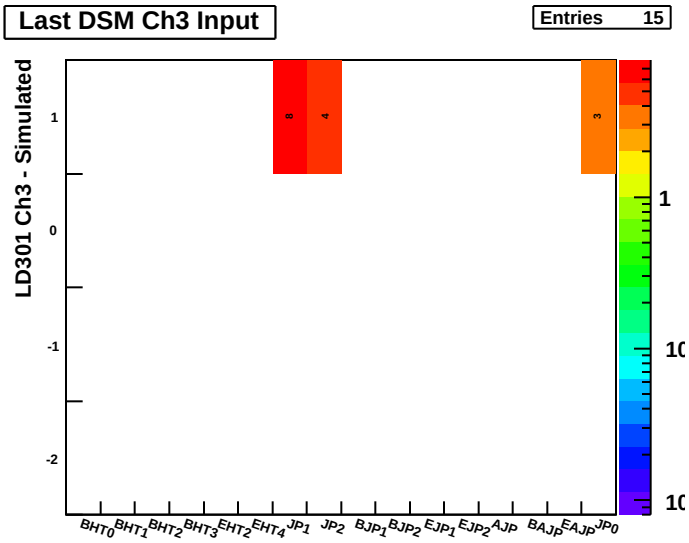

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5817896
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

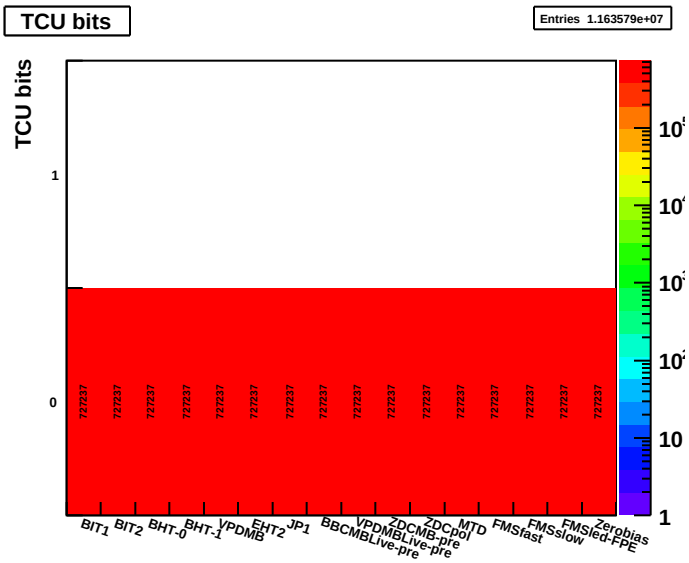

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

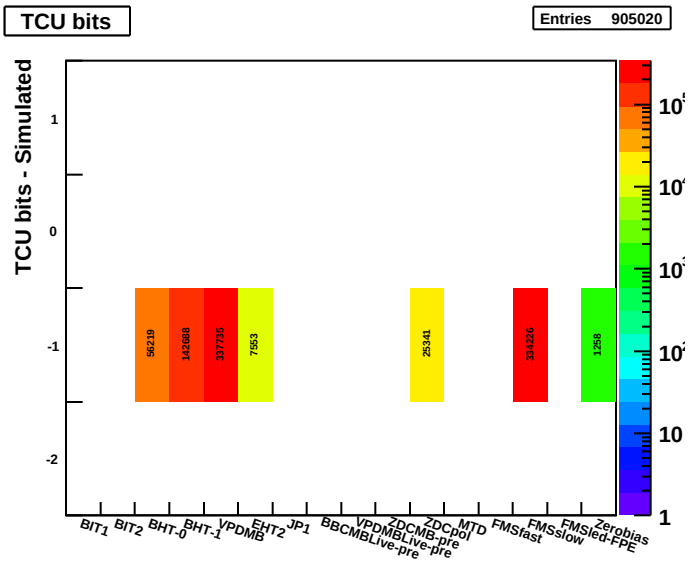

EMC L2 Input - HT23 bits
Entries 5817896
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

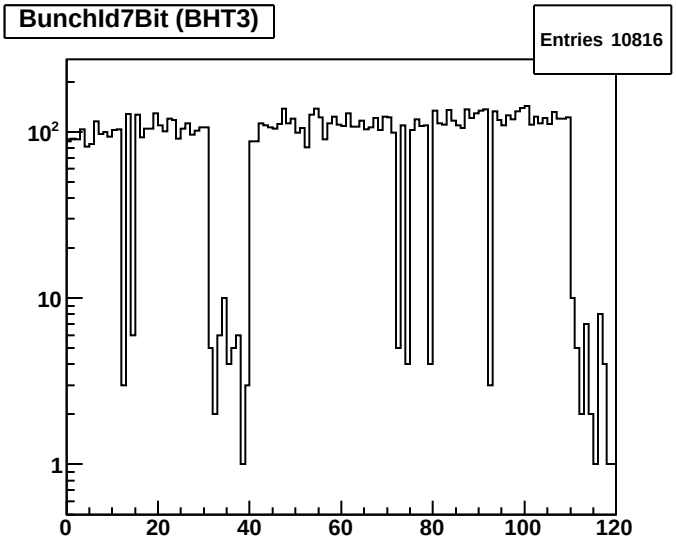

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

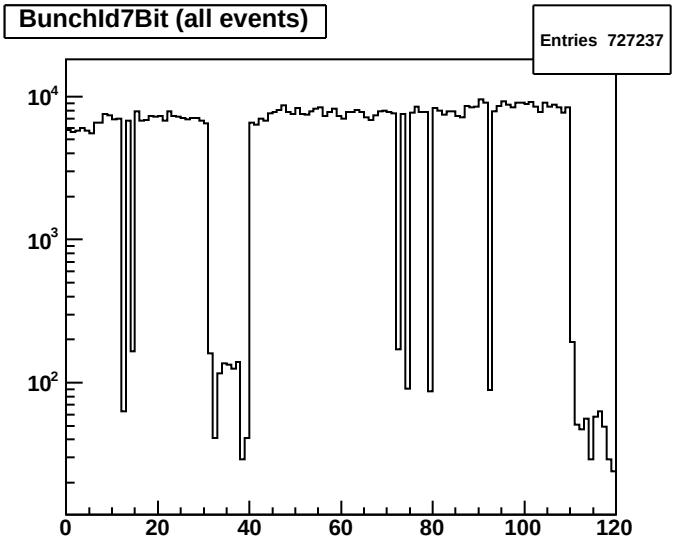

Last DSM Ch3 Input
Entries 1.163579e+07
LD301 Ch3
170112 142688 28795 10816 7553 3861 62093 17890 50708 13946 11552 3504 4201 3477 735 130768
557125 584549 698442 716421 719684 723376 665144 700947 676529 713291 715685 723733 723036 723760 726502 596469
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

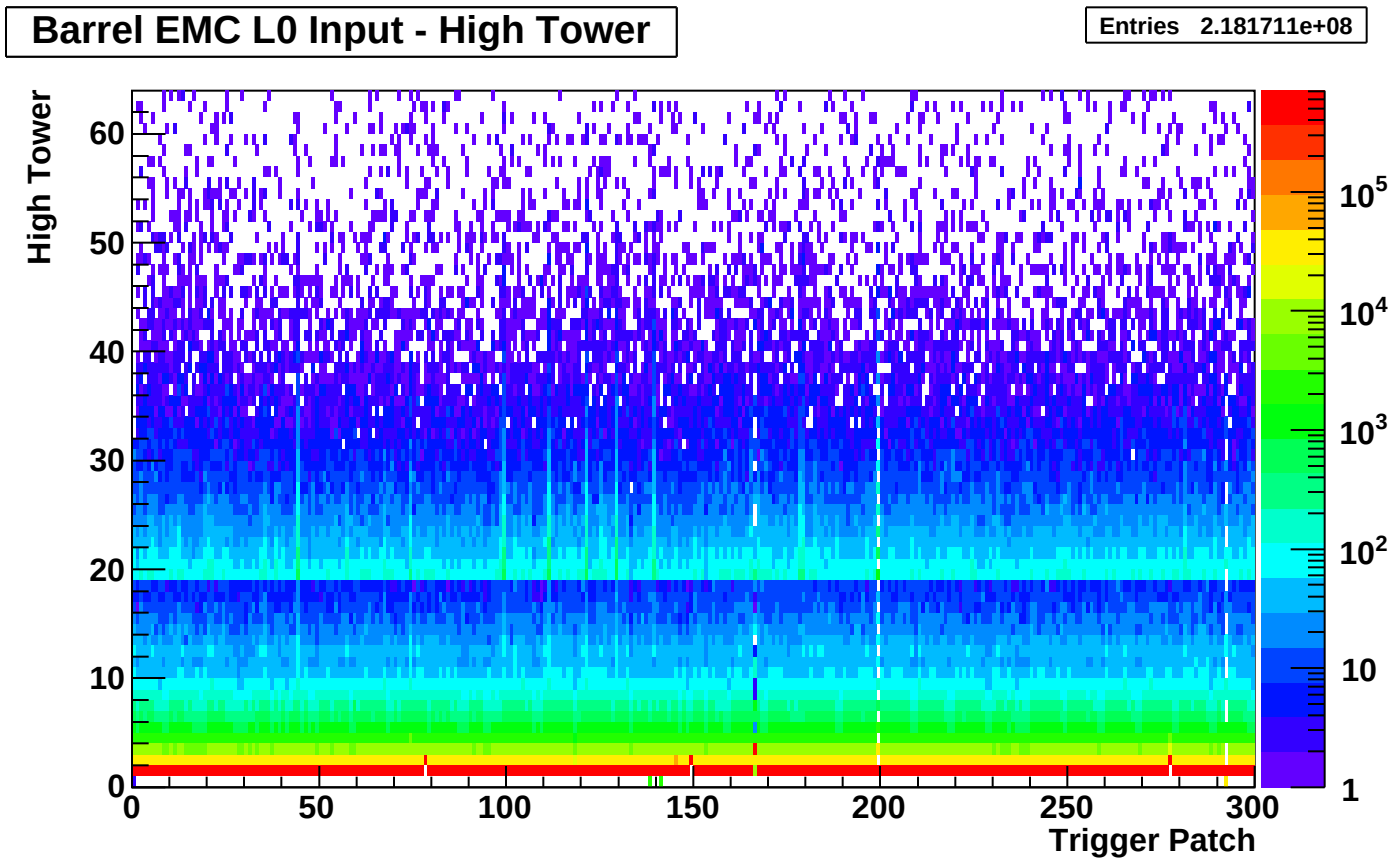

Last DSM Ch3 Input
Entries 15
LD301 Ch3 - Simulated
8 4 3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

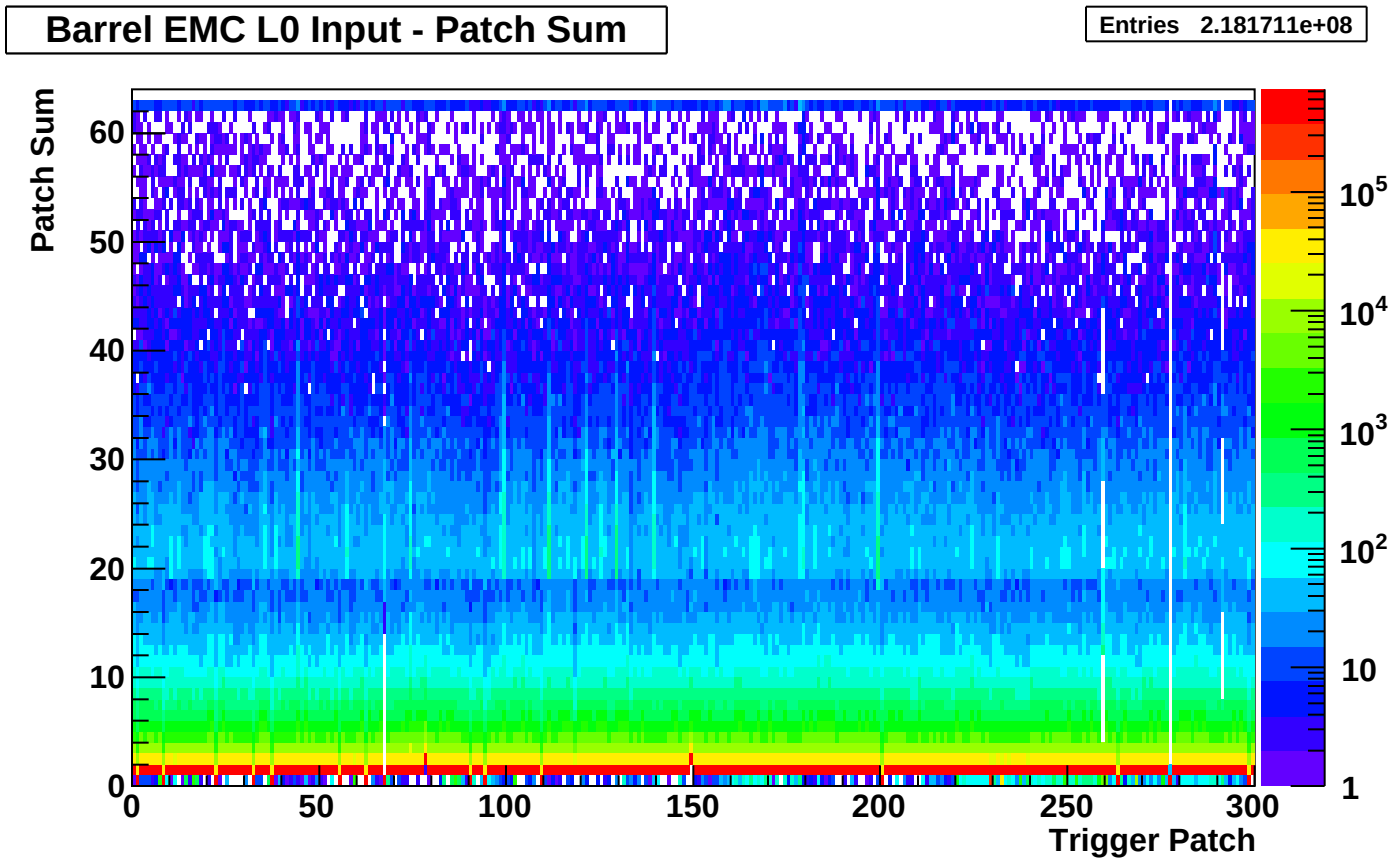

TCU bits
Entries 1.163579e+07
TCU bits
727237 727237 727237 727237 727237 727237 727237 727237 727237 727237 727237 727237 727237 727237 727237 727237
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

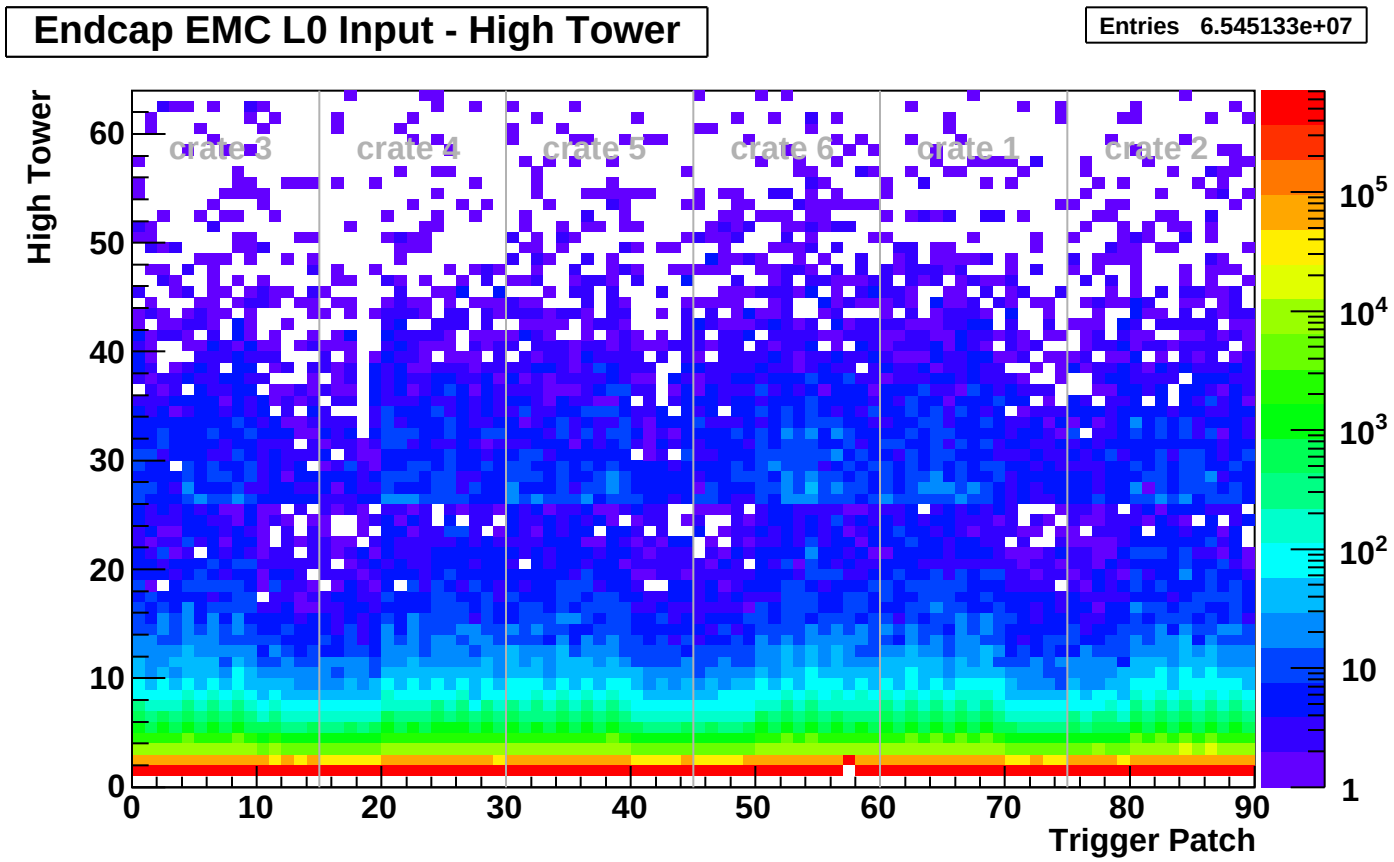

TCU bits
Entries 905020
TCU bits - Simulated
56219 142888 337735 7553 25341 334226 1258
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

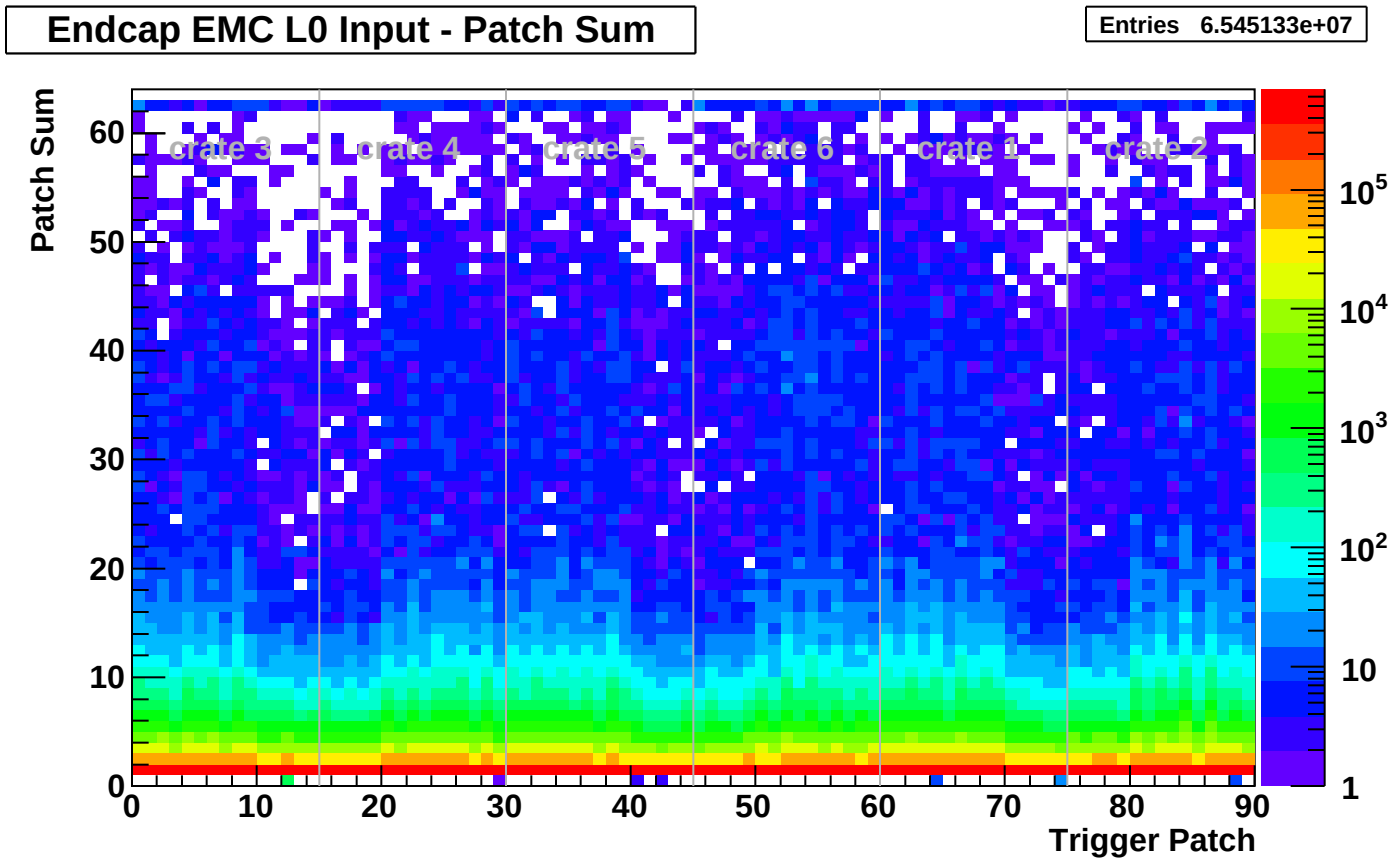

BunchId7Bit (BHT3)
Entries 10816

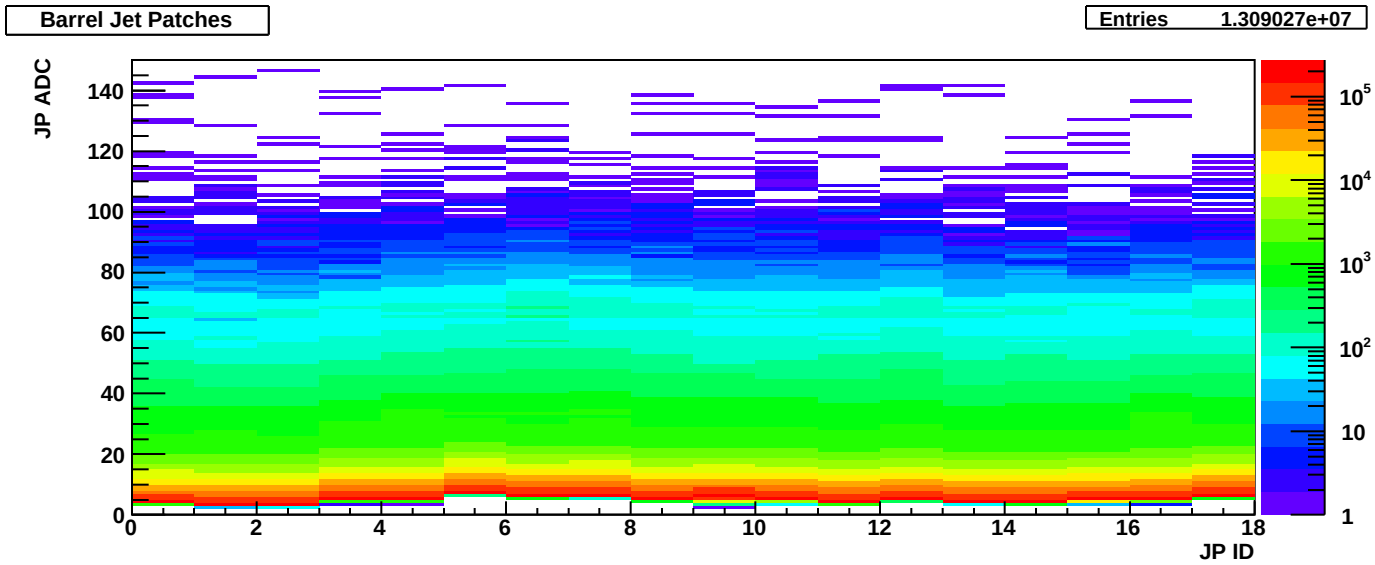

BunchId7Bit (all events)
Entries 727237

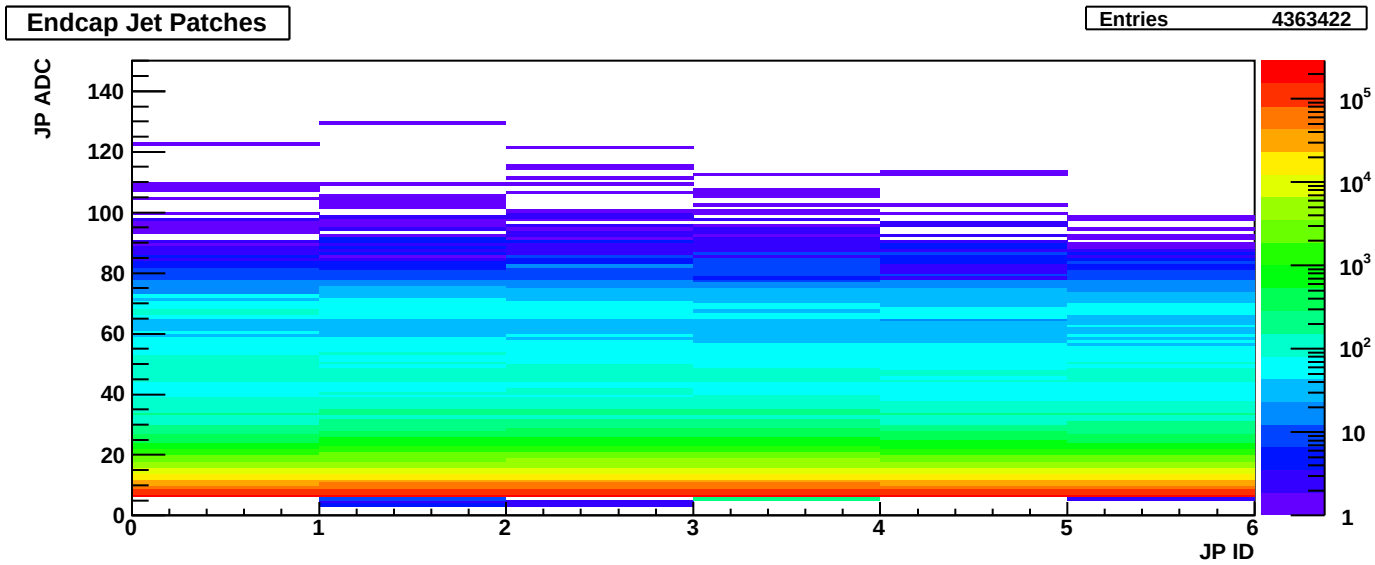

Barrel EMC L0 Input - High Tower
Entries 2.181711e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

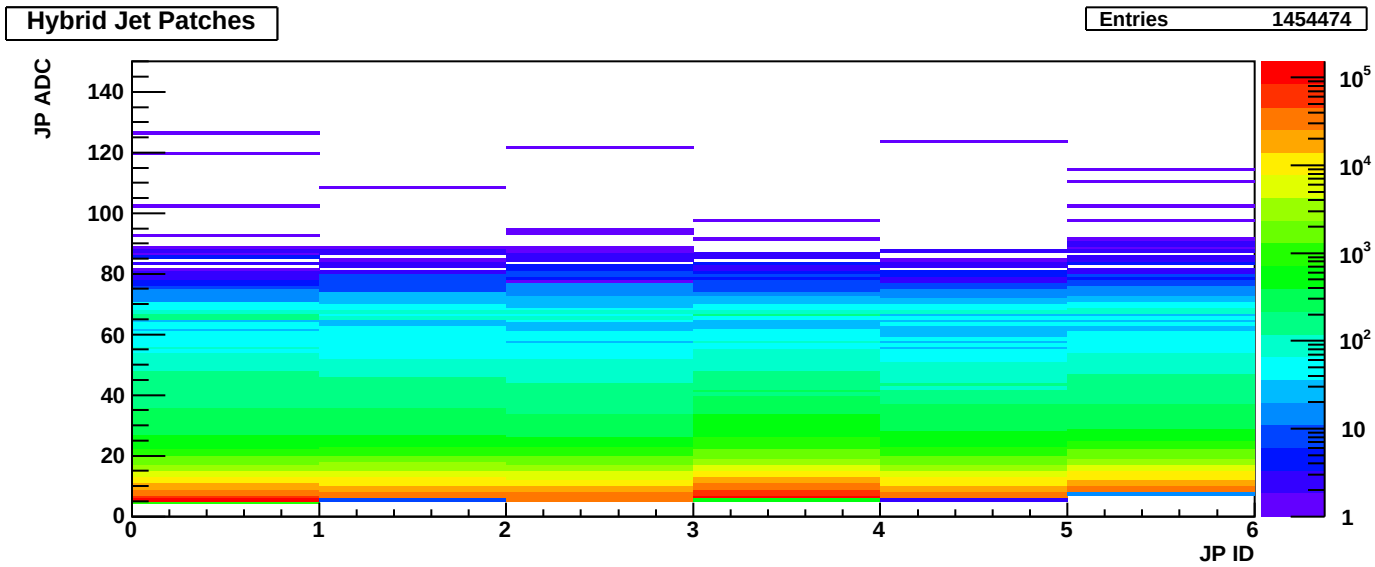

Barrel EMC L0 Input - Patch Sum
Entries 2.181711e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

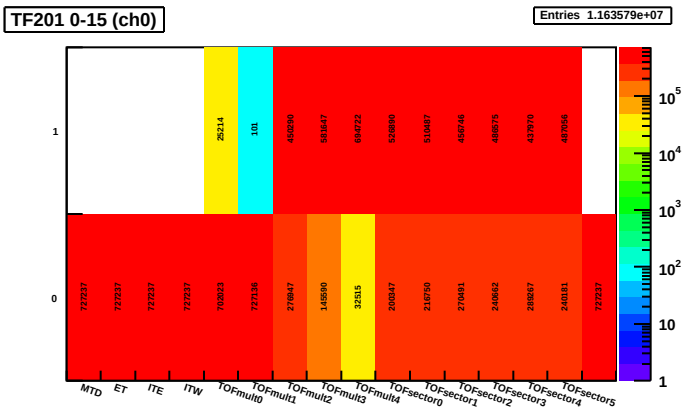

Endcap EMC L0 Input - High Tower
Entries 6.545133e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

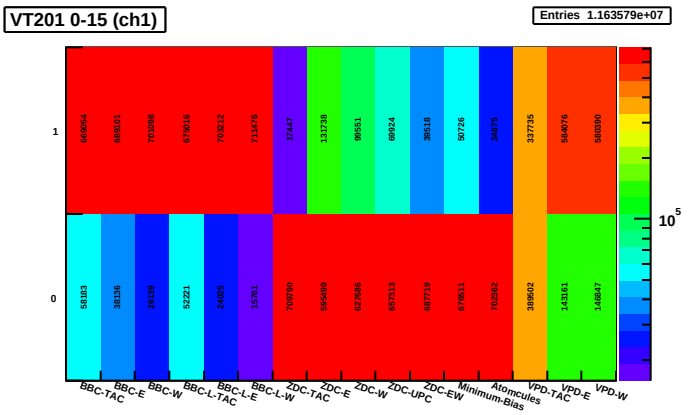

Endcap EMC L0 Input - Patch Sum
Entries 6.545133e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

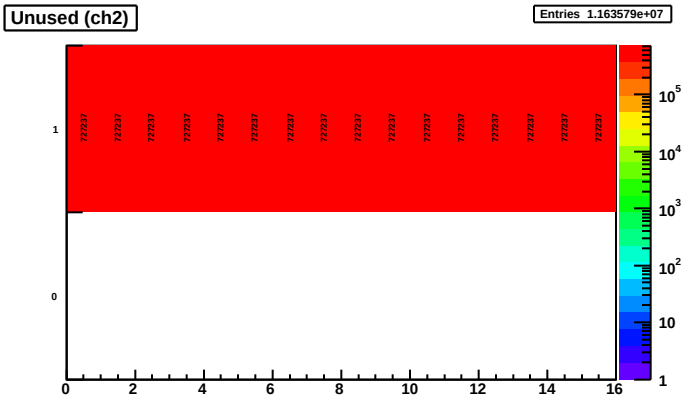

Barrel Jet Patches
Entries 1.309027e+07
JP ADC
JP ID

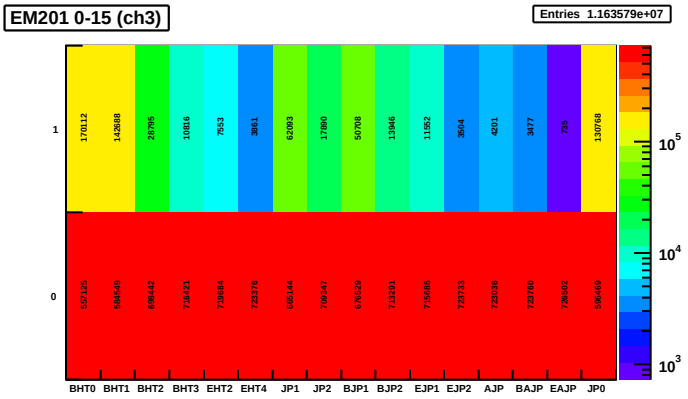

Endcap Jet Patches
Entries 4363422
JP ADC
JP ID

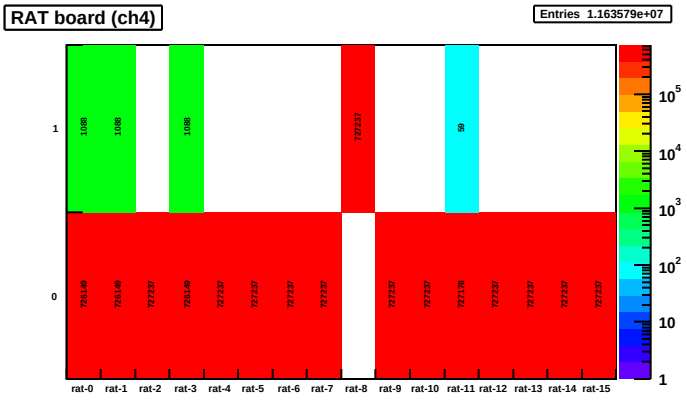

Hybrid Jet Patches
Entries 1454474
JP ADC
JP ID

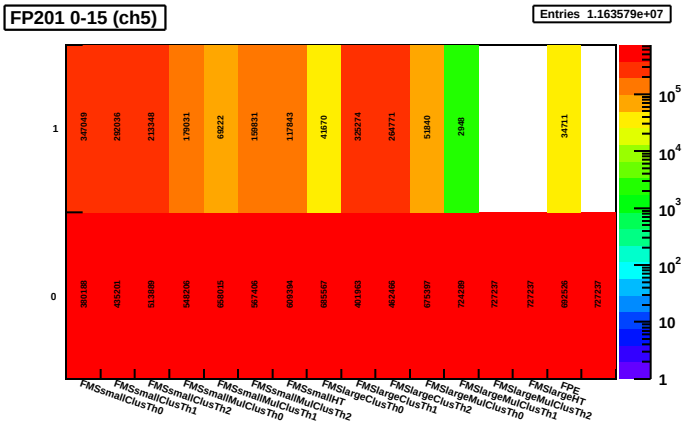

TF201 0-15 (ch0)
Entries 1.163579e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

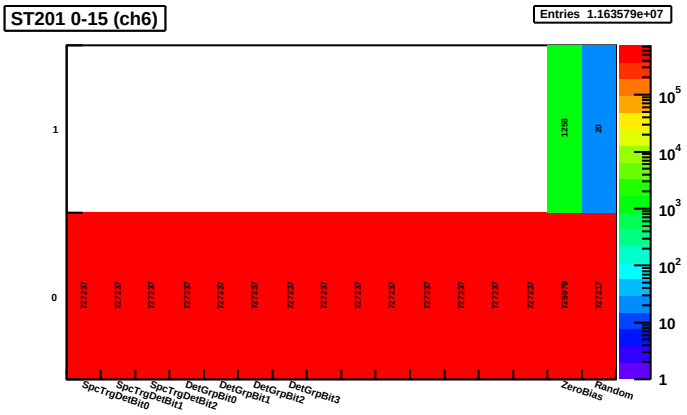

VT201 0-15 (ch1)
Entries 1.163579e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

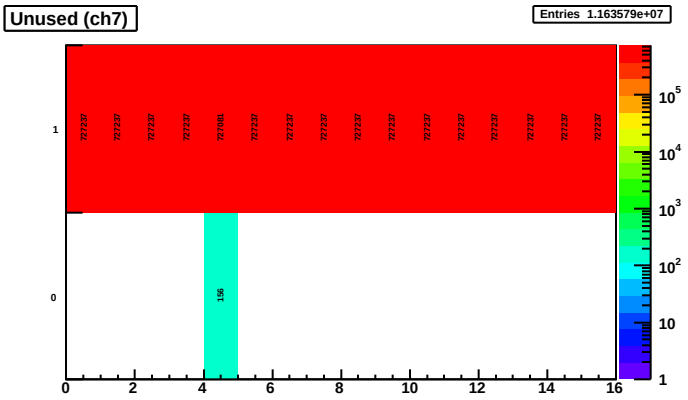

Unused (ch2)
Entries 1.163579e+07

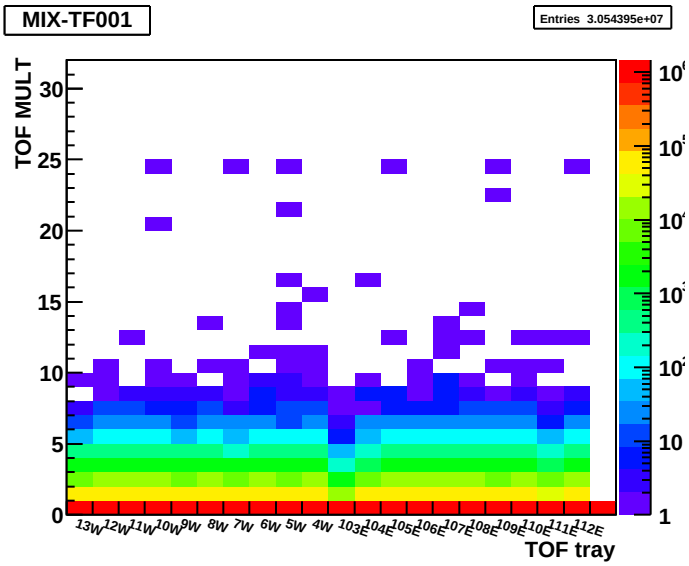

EM201 0-15 (ch3)
Entries 1.163579e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

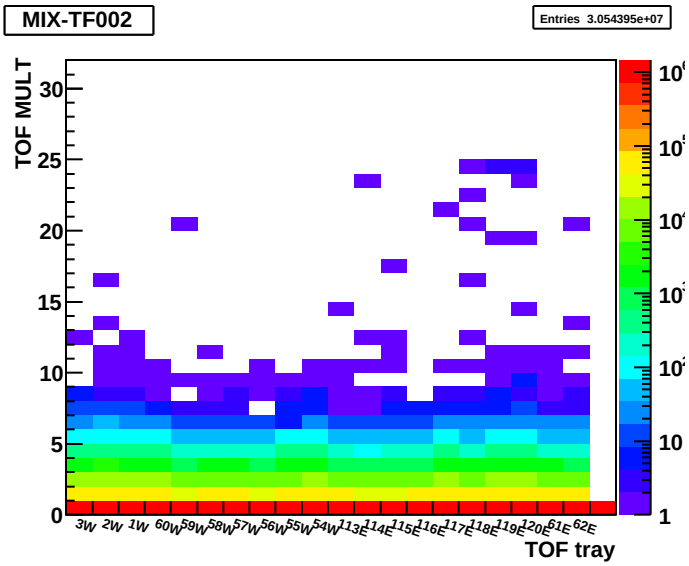

RAT board (ch4)
Entries 1.163579e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

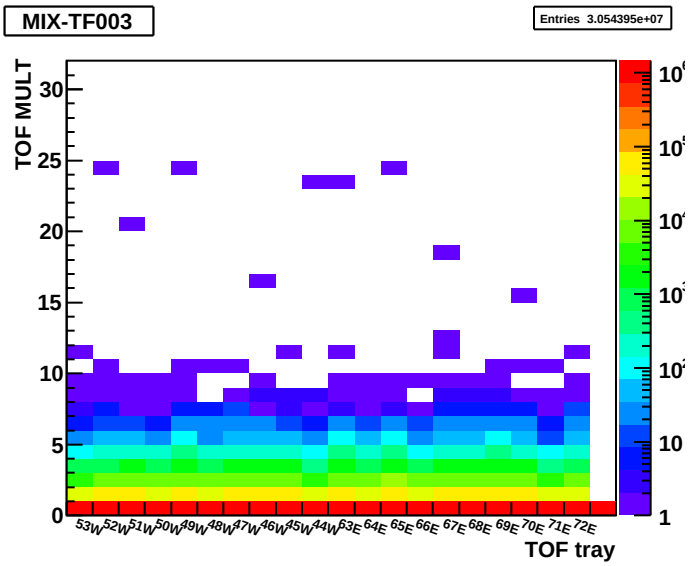

FP201 0-15 (ch5)
Entries 1.163579e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

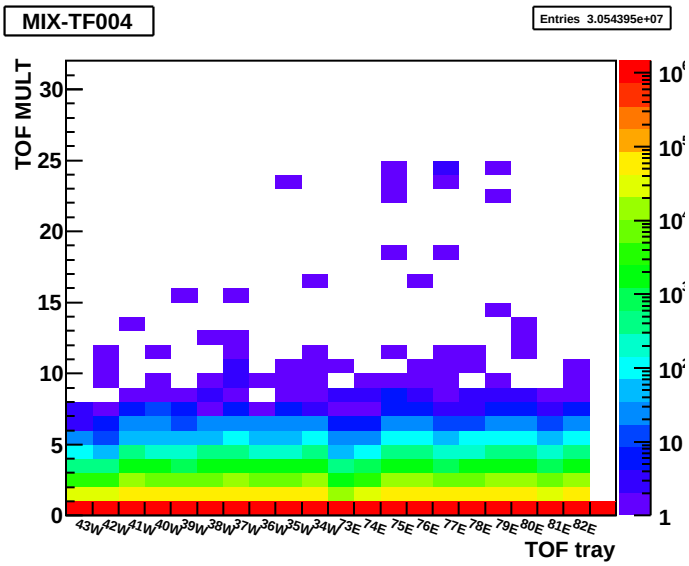

ST201 0-15 (ch6)
Entries 1.163579e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

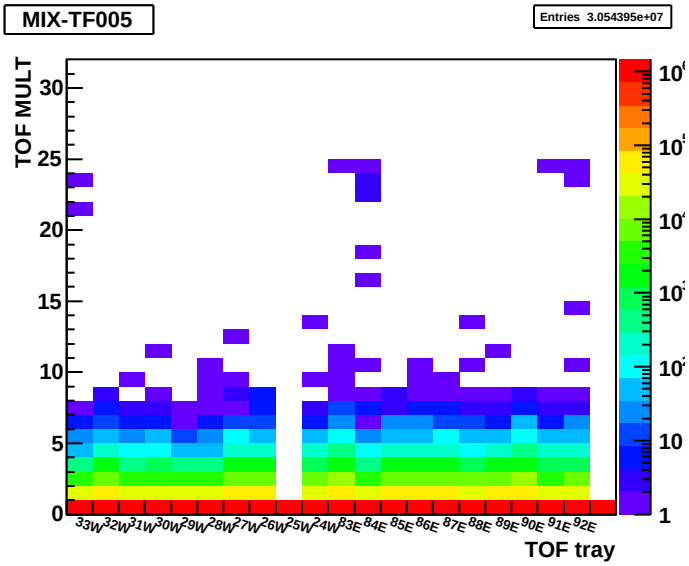

Unused (ch7)
Entries 1.163579e+07

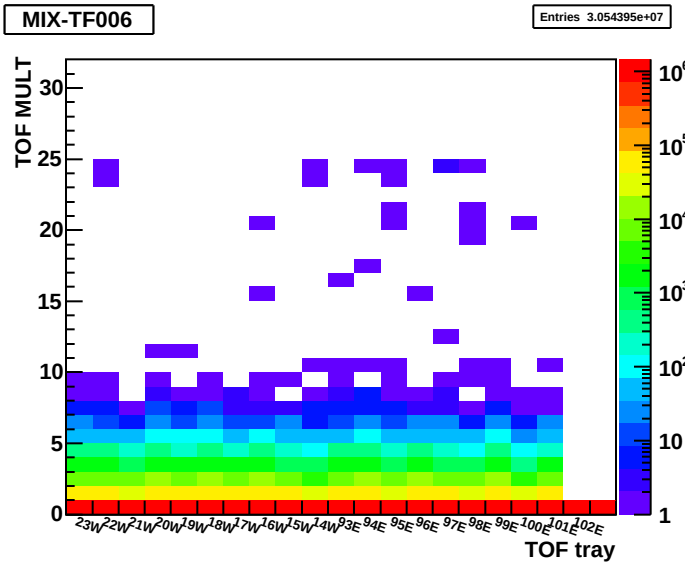

MIX-TF001
Entries 3.054395e+07
TOF MULT
TOF tray

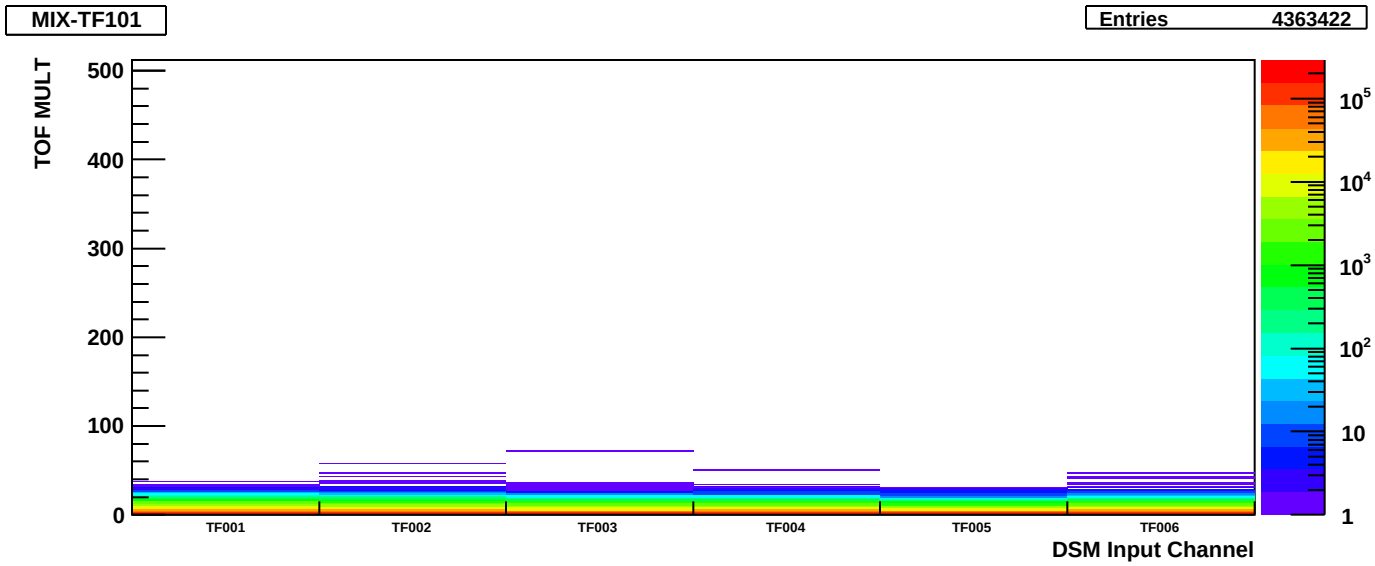

MIX-TF002
Entries 3.054395e+07
TOF MULT
TOF tray

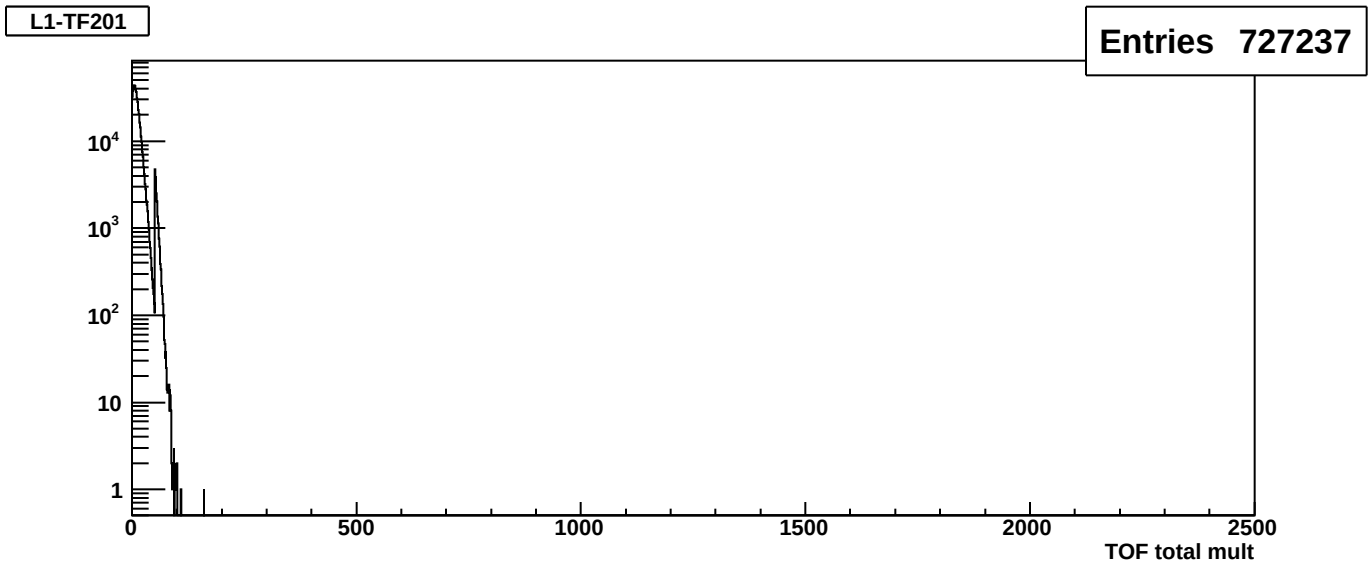

MIX-TF003
Entries 3.054395e+07
TOF MULT
TOF tray

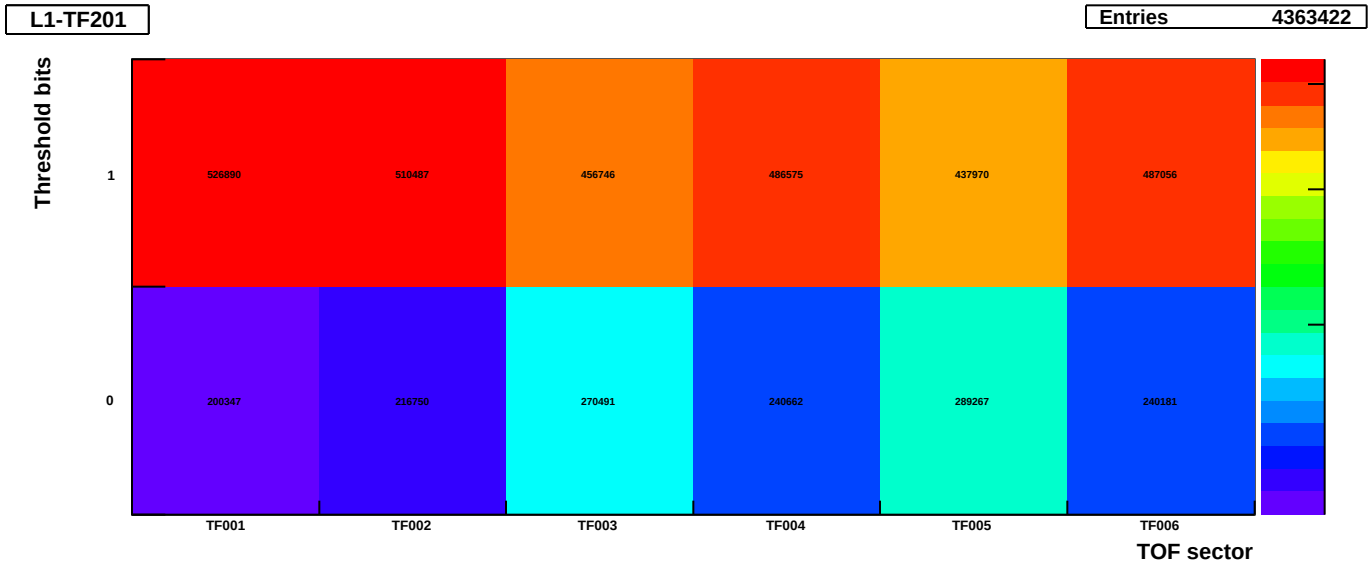

MIX-TF004
Entries 3.054395e+07
TOF MULT
TOF tray

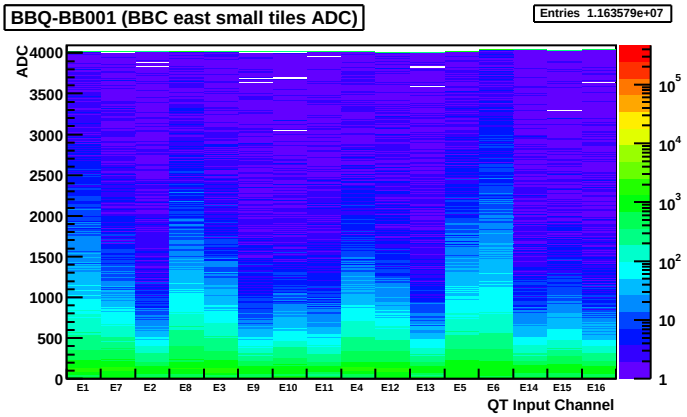

MIX-TF005
Entries 3.054395e+07
TOF MULT
TOF tray

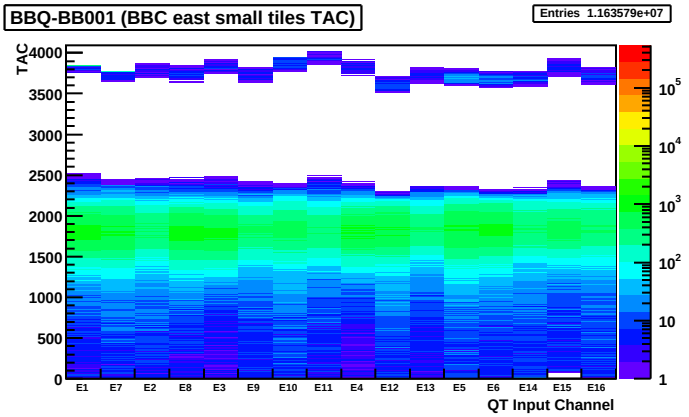

MIX-TF006
Entries 3.054395e+07
TOF MULT
TOF tray

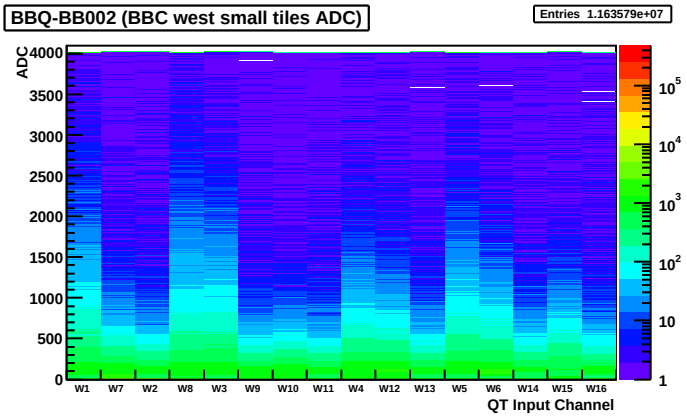

MIX-TF101
Entries 4363422
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

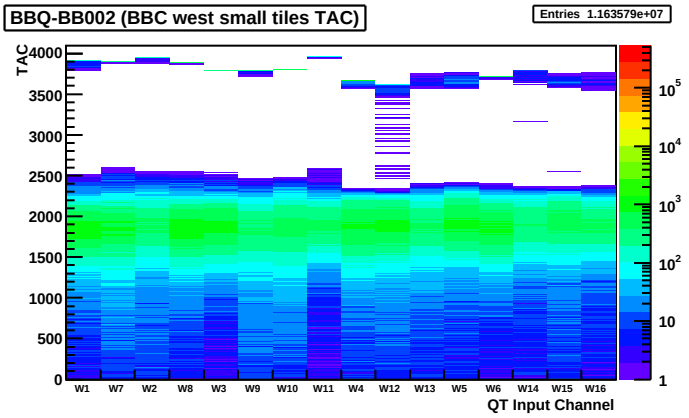

L1-TF201
Entries 727237
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

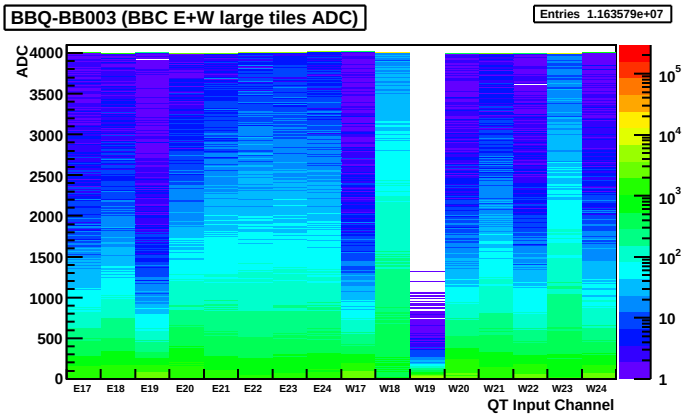

L1-TF201
Entries 4363422
Threshold bits
1
0
526890
510487
456746
486575
437970
487056
200347
216750
270491
240662
289267
240181
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

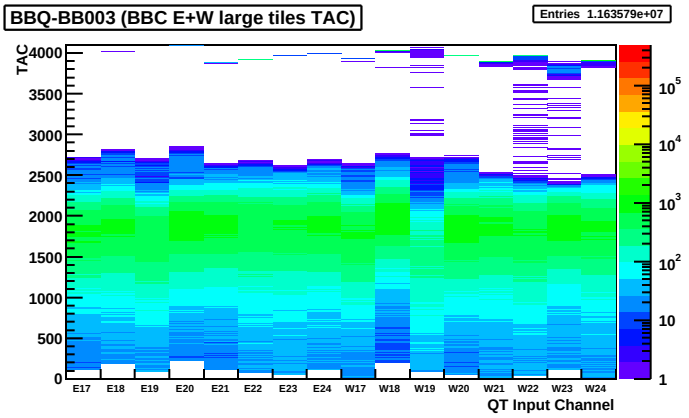

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.163579e+07
ADC
QT Input Channel

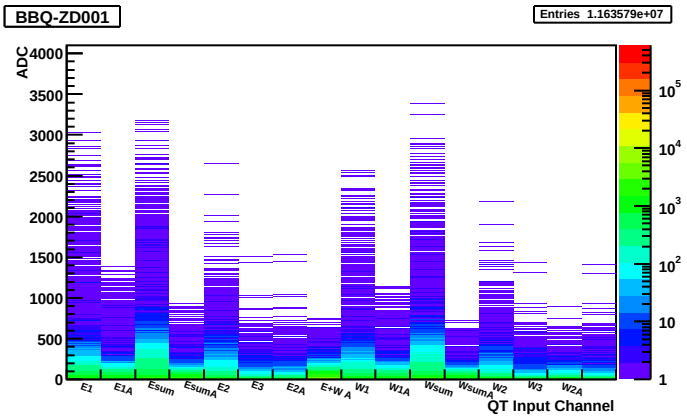

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.163579e+07
TAC
QT Input Channel

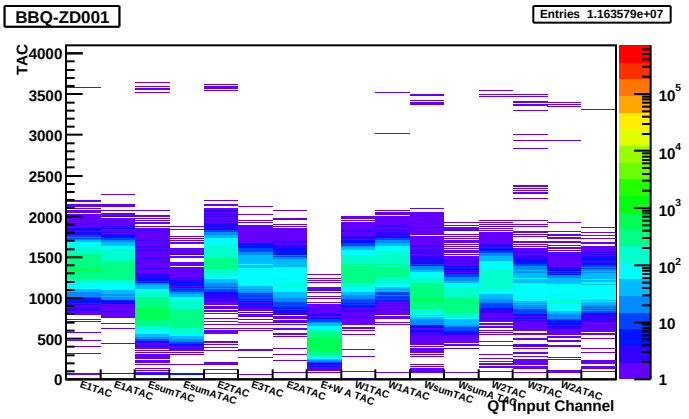

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.163579e+07
ADC
QT Input Channel

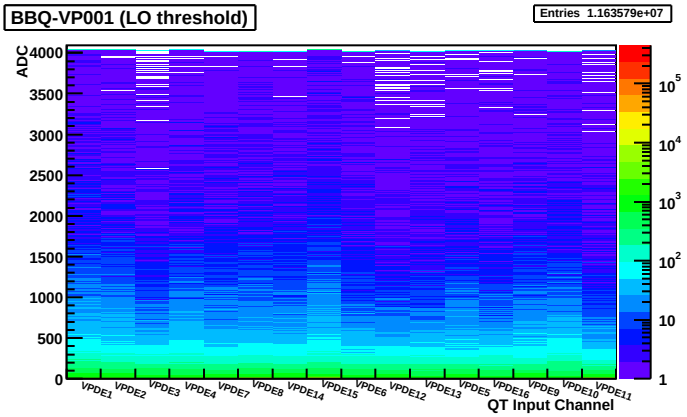

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.163579e+07
TAC
QT Input Channel

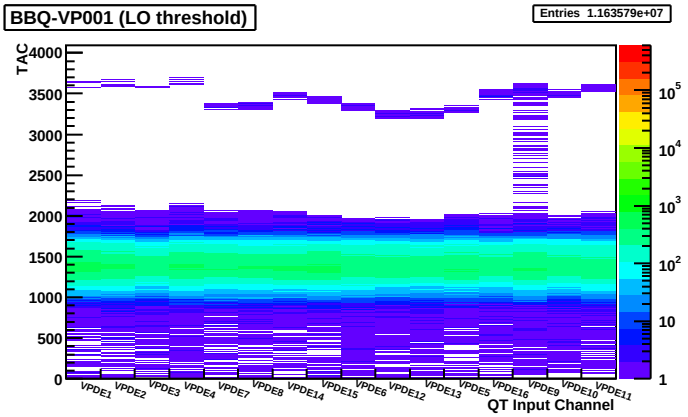

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.163579e+07
ADC
QT Input Channel

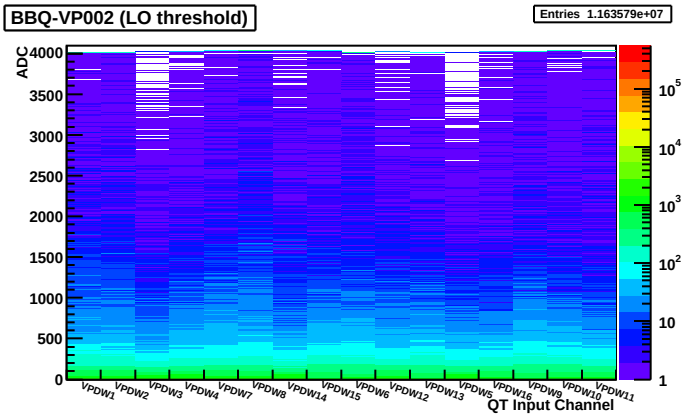

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.163579e+07
TAC
QT Input Channel

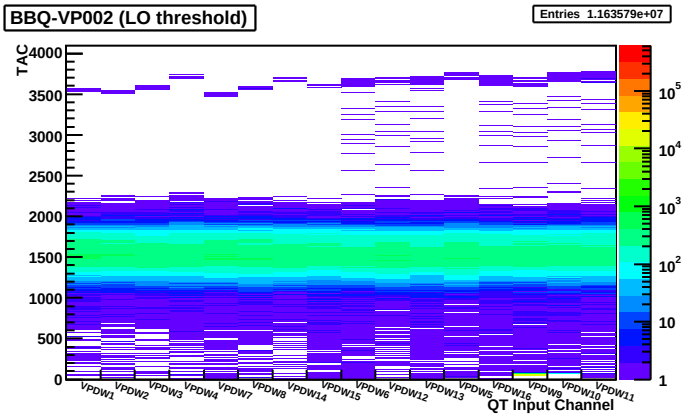

BBQ-ZD001
Entries 1.163579e+07
ADC
QT Input Channel

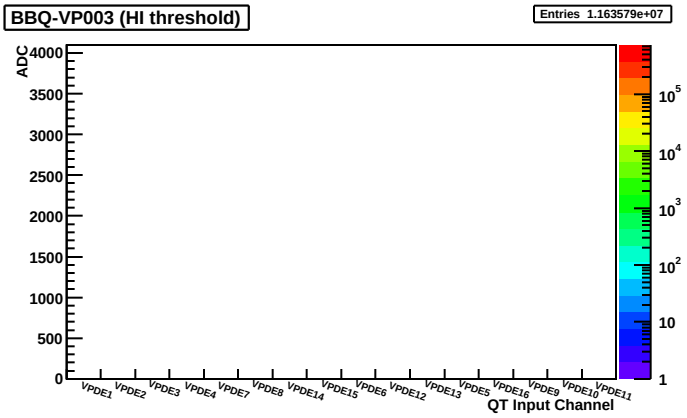

BBQ-ZD001
Entries 1.163579e+07
TAC
QT Input Channel

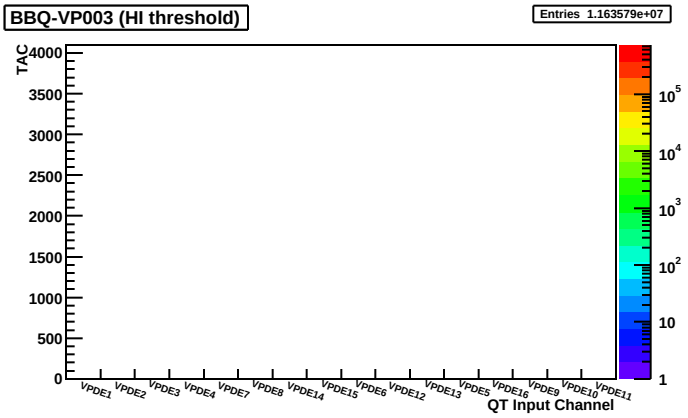

BBQ-VP001 (LO threshold)
Entries 1.163579e+07
ADC
QT Input Channel

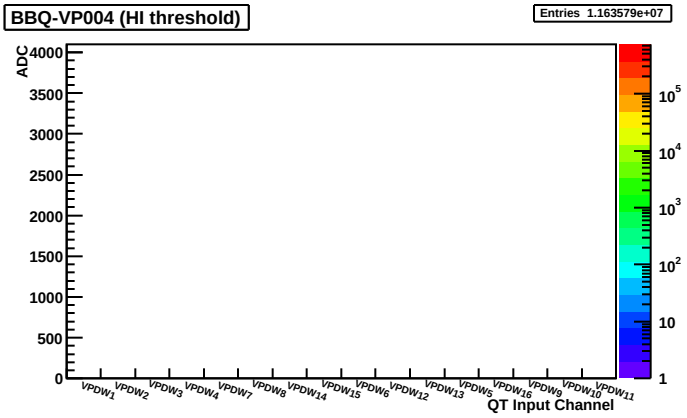

BBQ-VP001 (LO threshold)
Entries 1.163579e+07
TAC
QT Input Channel

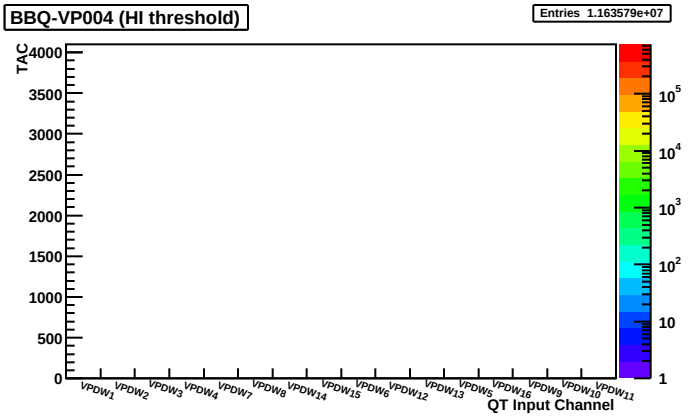

BBQ-VP002 (LO threshold)
Entries 1.163579e+07
ADC
QT Input Channel

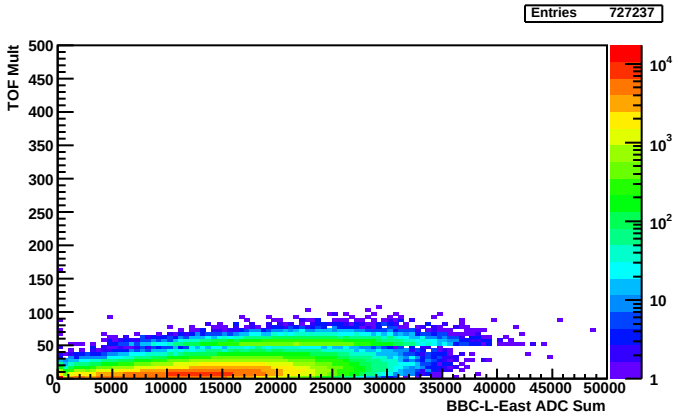

BBQ-VP002 (LO threshold)
Entries 1.163579e+07
TAC
QT Input Channel

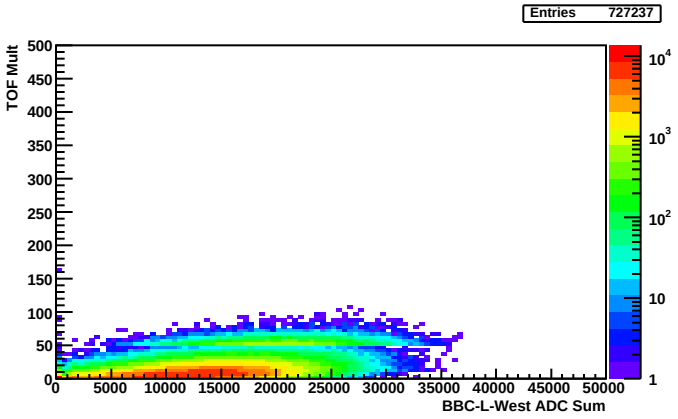

BBQ-VP003 (HI threshold)
Entries 1.163579e+07
ADC
QT Input Channel

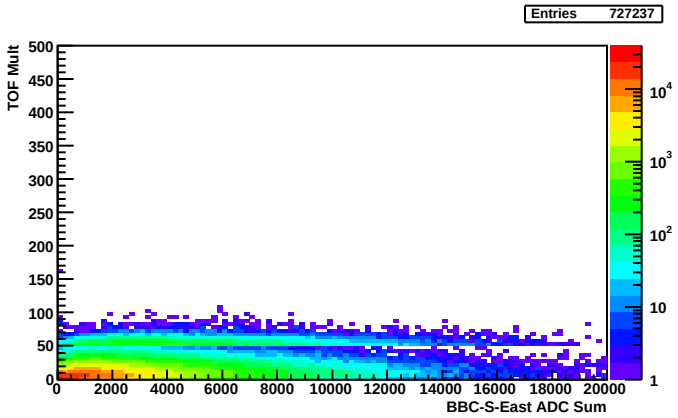

BBQ-VP003 (HI threshold)
Entries 1.163579e+07
TAC
QT Input Channel

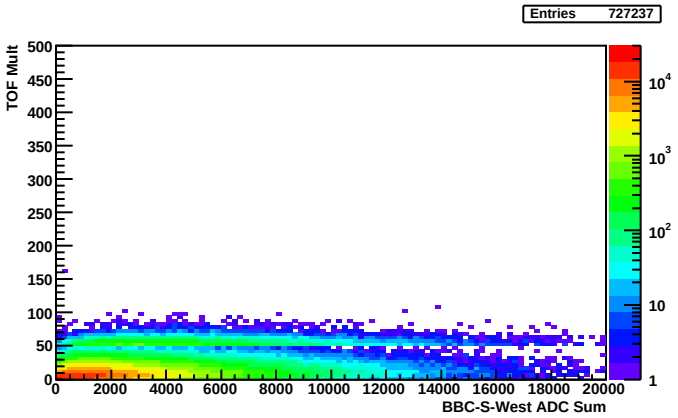

BBQ-VP004 (HI threshold)
Entries 1.163579e+07
ADC
QT Input Channel

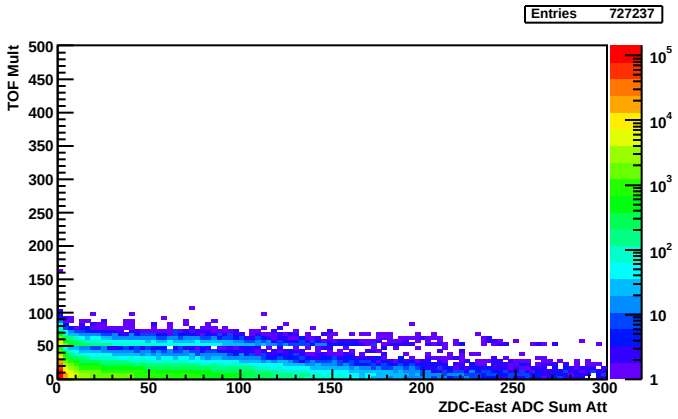

BBQ-VP004 (HI threshold)
Entries 1.163579e+07
TAC
QT Input Channel

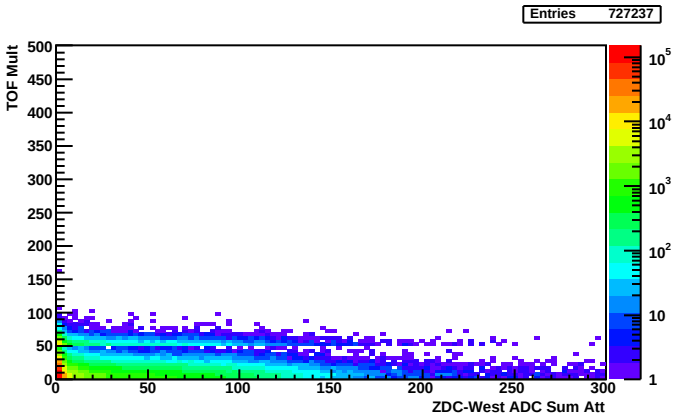

Entries 727237
TOF Mult
BBC-L-East ADC Sum

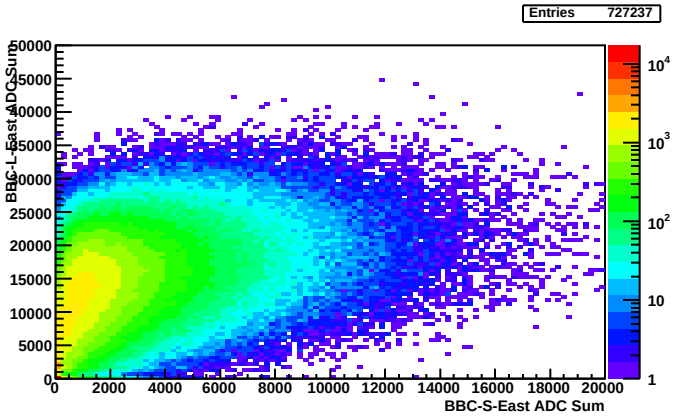

Entries 727237
TOF Mult
BBC-L-West ADC Sum

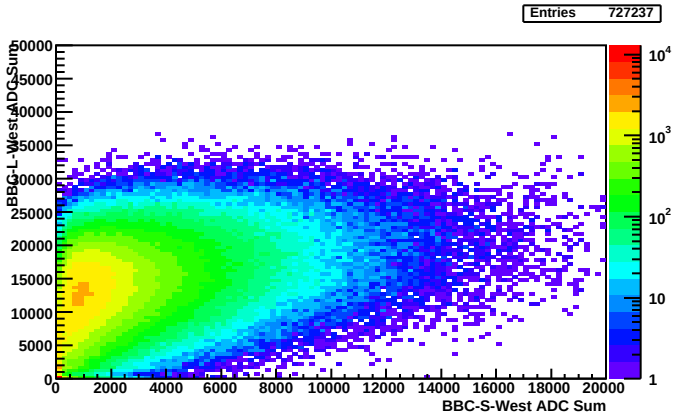

Entries 727237
TOF Mult
BBC-S-East ADC Sum

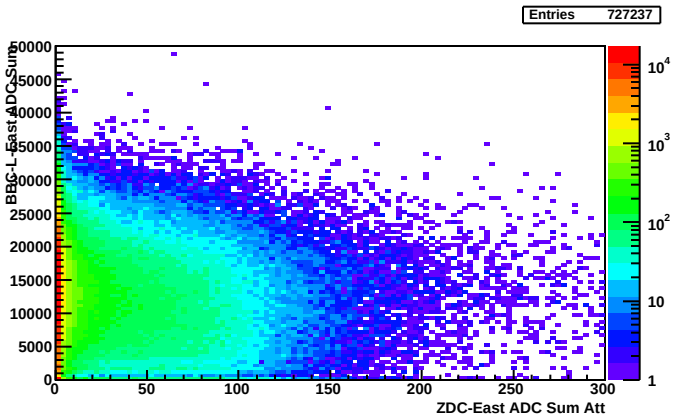

Entries 727237
TOF Mult
BBC-S-West ADC Sum

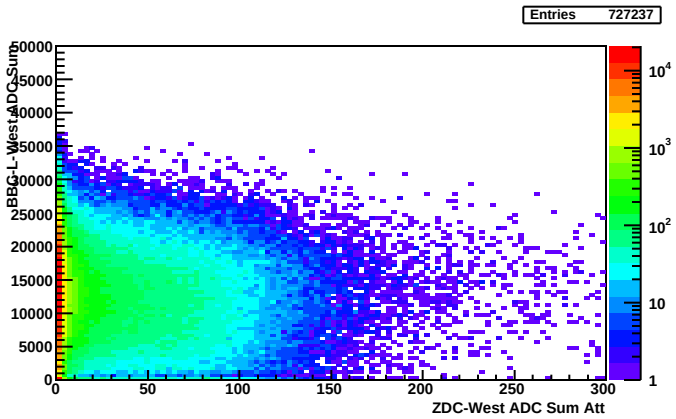

Entries 727237
TOF Mult
ZDC-East ADC Sum Att

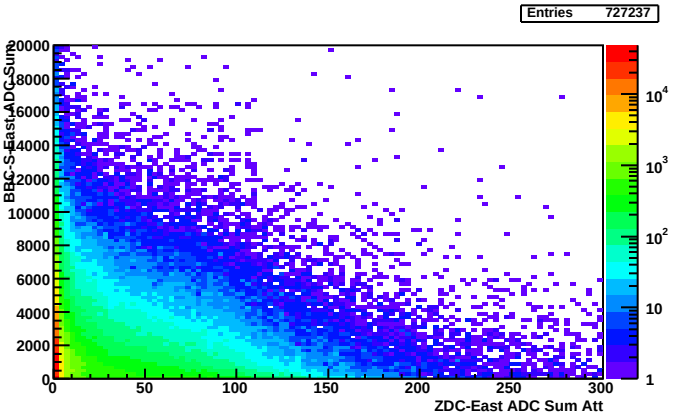

Entries 727237
TOF Mult
ZDC-West ADC Sum Att

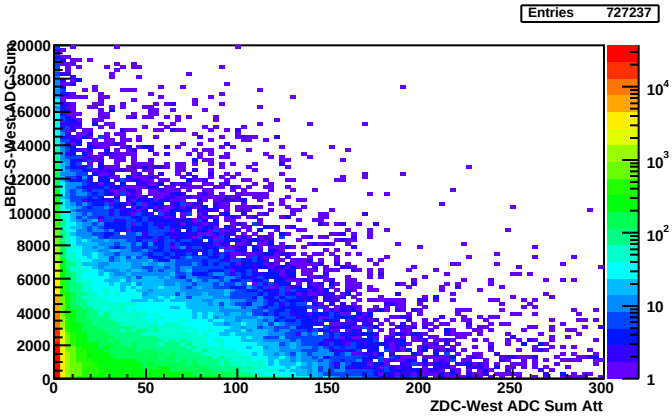

Entries 727237
BBC-L-East ADC Sum
BBC-S-East ADC Sum

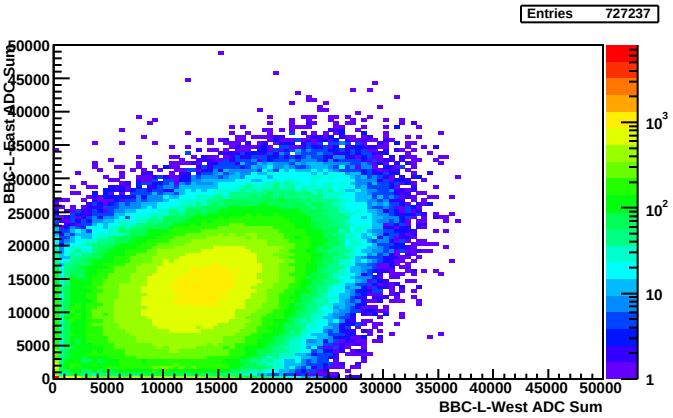

Entries 727237
BBC-L-West ADC Sum
BBC-S-West ADC Sum

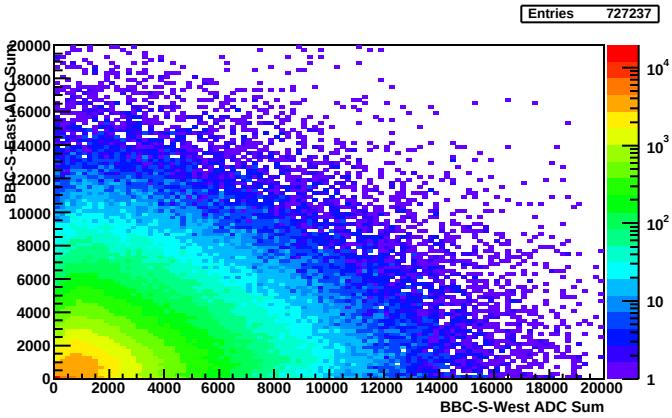

Entries 727237
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

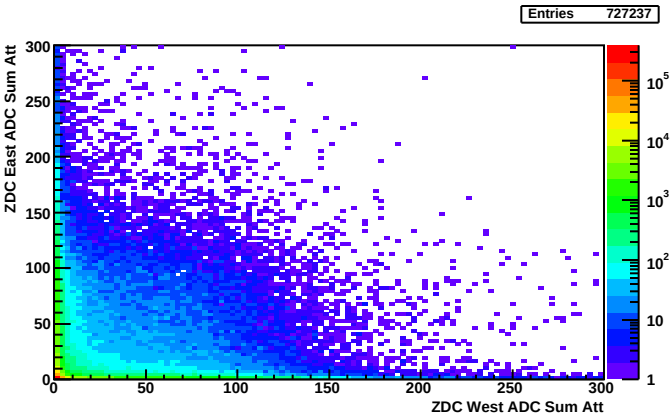

Entries 727237
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

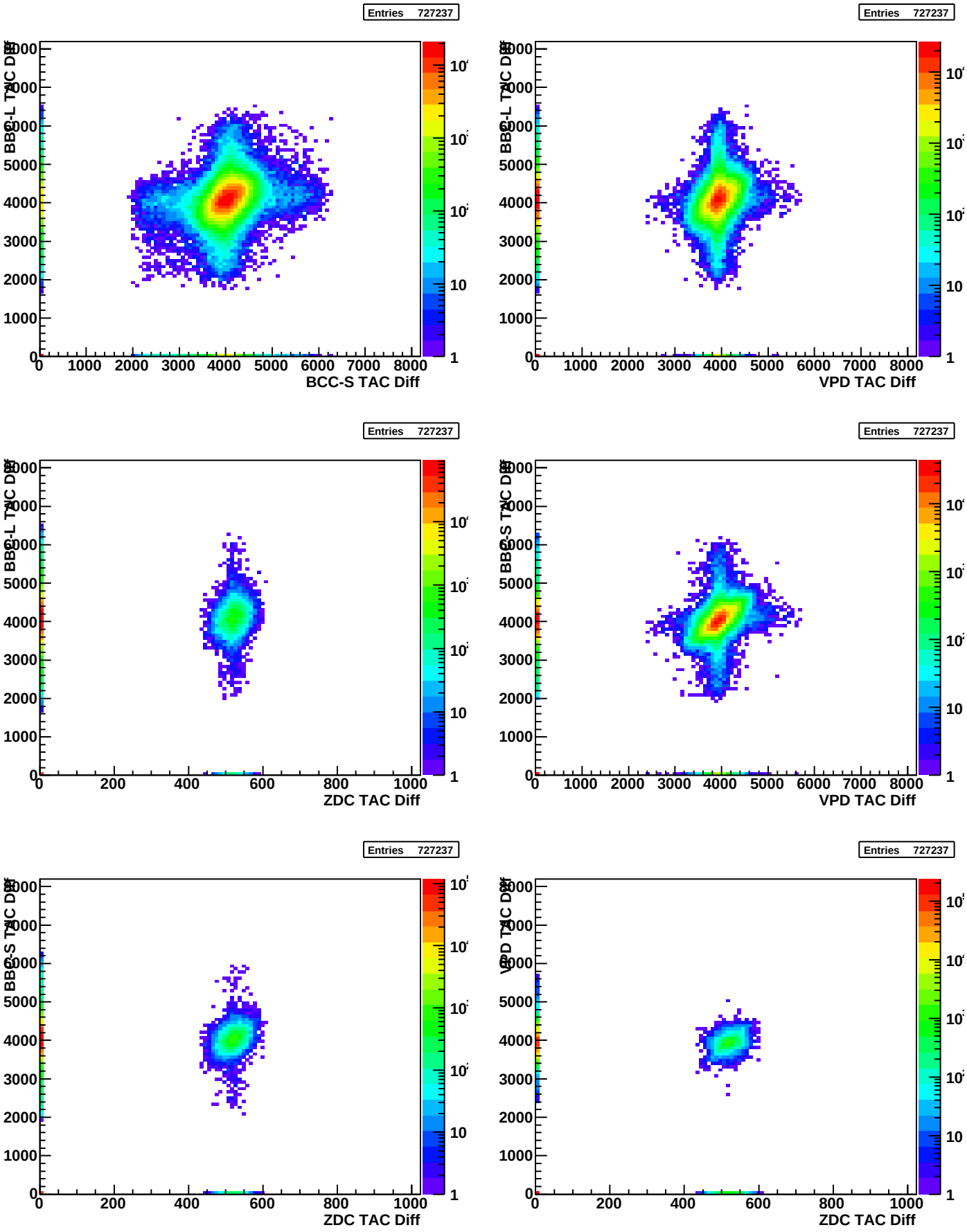

Entries 727237
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

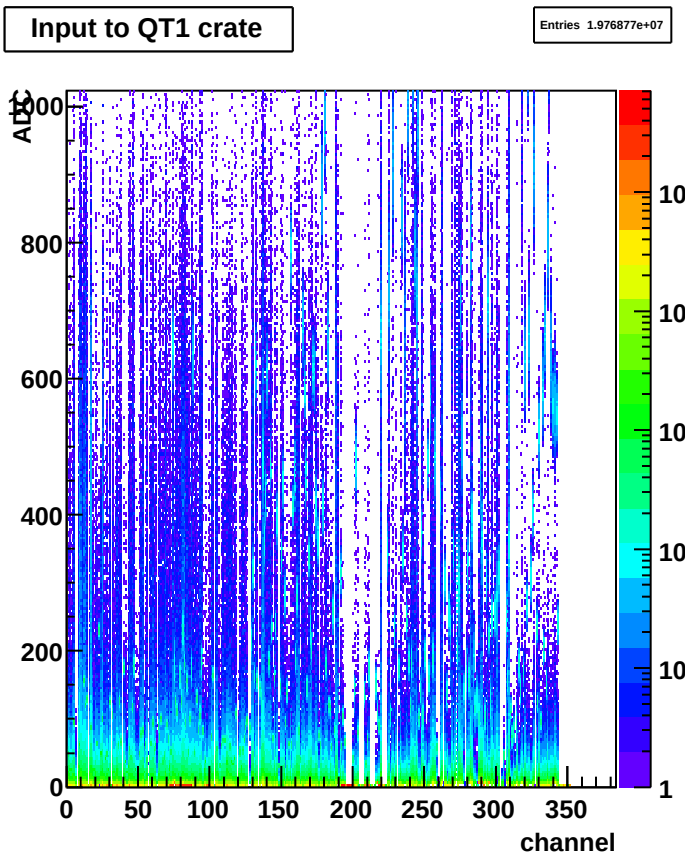

Entries 727237
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

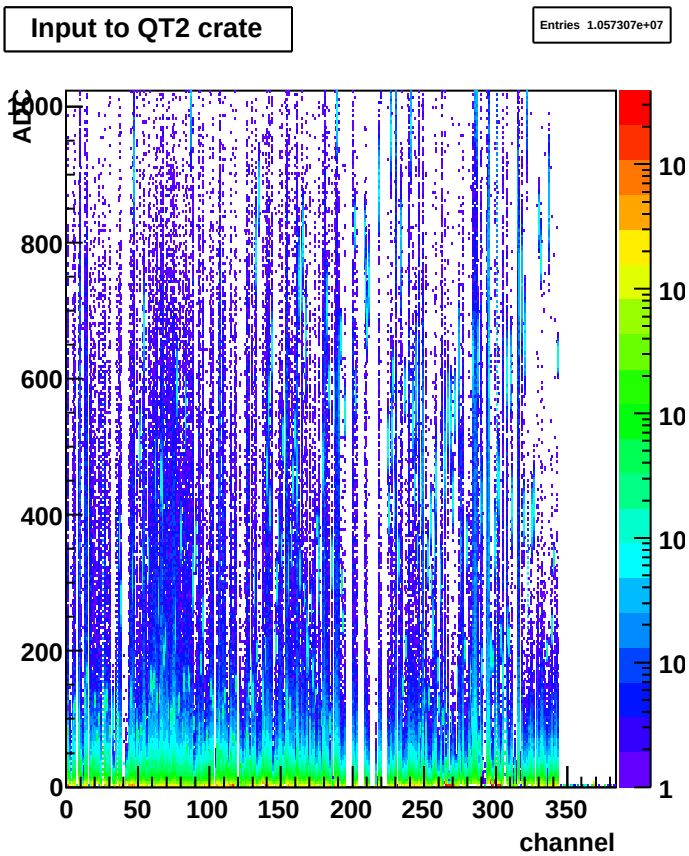

Entries 727237
BBC-L-East ADC Sum
BBC-L-West ADC Sum

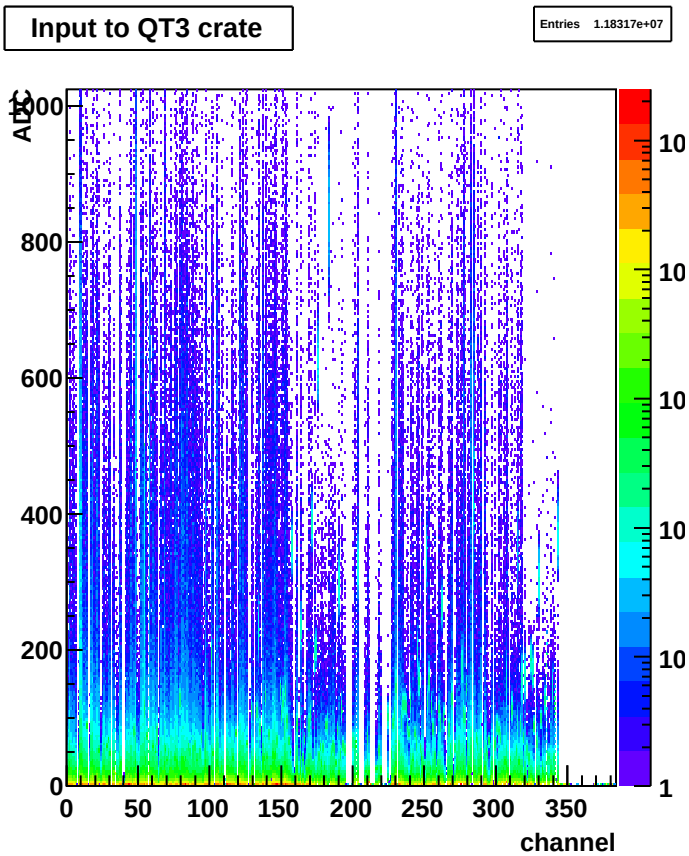

Entries 727237
BBC-S-East ADC Sum
BBC-S-West ADC Sum

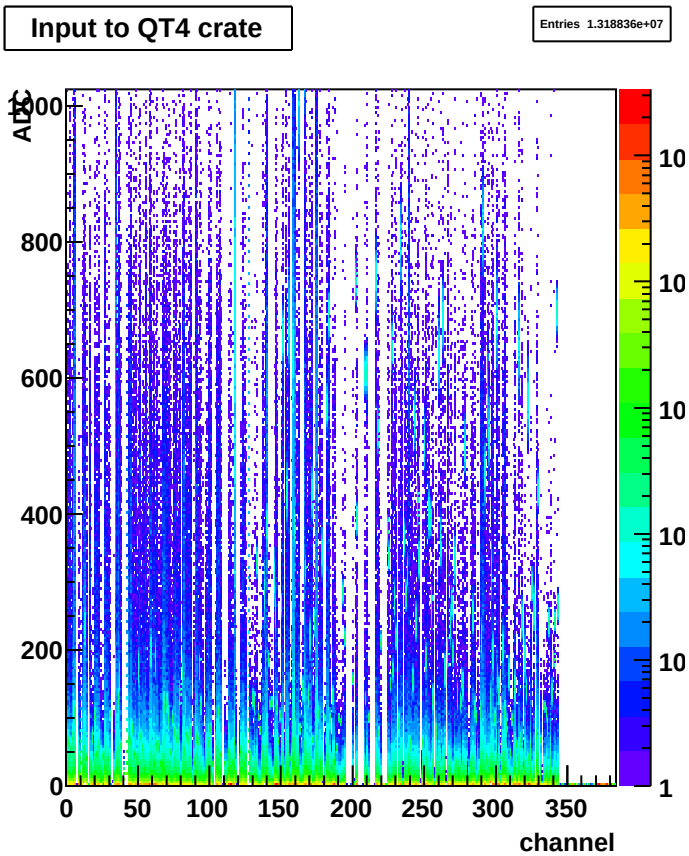

Entries 727237
ZDC East ADC Sum Att
ZDC West ADC Sum Att

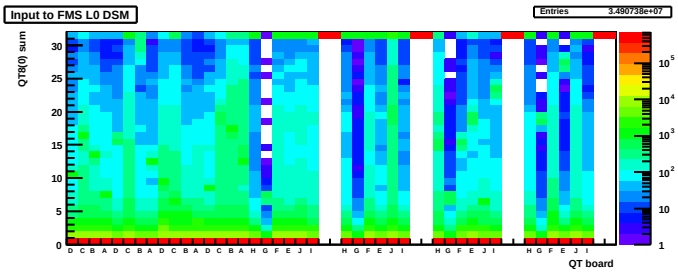

Entries 727237
BBC-L TAC Diff
BCC-S TAC Diff
Entries 727237
BBC-L TAC Diff
VPD TAC Diff
Entries 727237
BBC-L TAC Diff
ZDC TAC Diff
Entries 727237
BBC-S TAC Diff
VPD TAC Diff
Entries 727237
BBC-S TAC Diff
ZDC TAC Diff
Entries 727237
VPD TAC Diff
ZDC TAC Diff

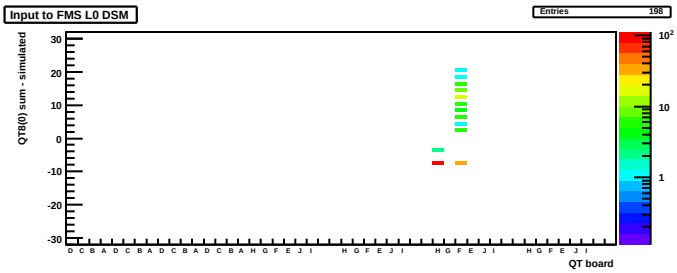

Input to QT1 crate
Entries 1.976877e+07
ADC
channel

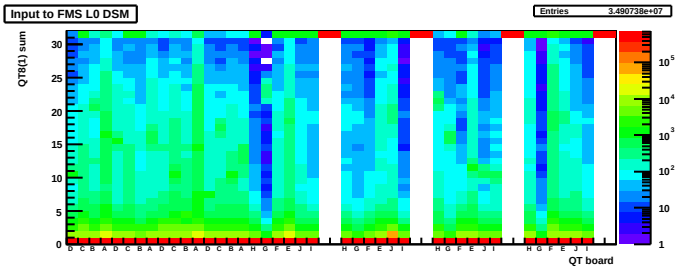

Input to QT2 crate
Entries 1.057307e+07
ADC
channel

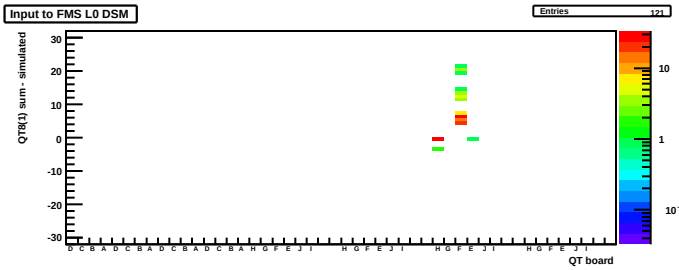

Input to QT3 crate
Entries 1.18317e+07
ADC
channel

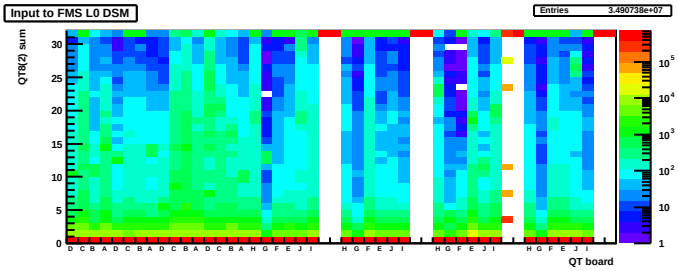

Input to QT4 crate
Entries 1.318836e+07
ADC
channel

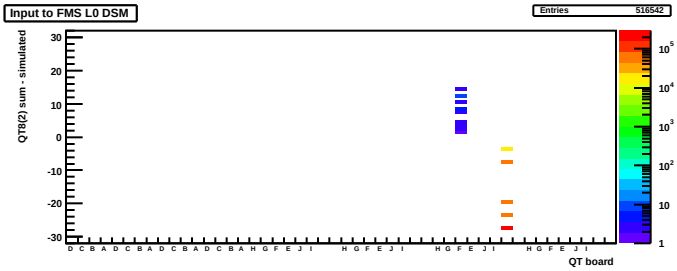

Input to FMS L0 DSM
Entries 3.490738e+07
QT8(0) sum
QT board

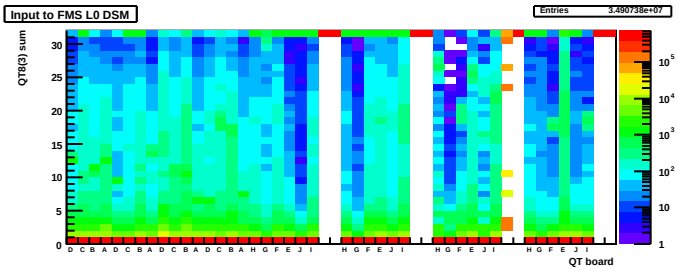

Input to FMS L0 DSM
Entries 198
QT8(0) sum - simulated
QT board

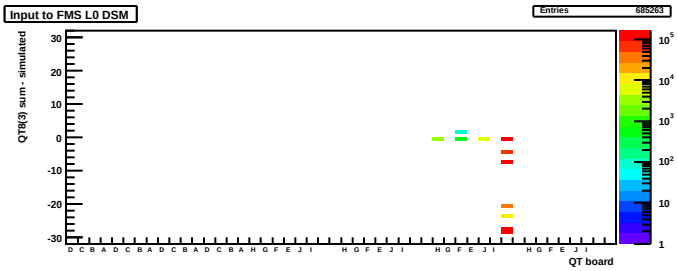

Input to FMS L0 DSM
Entries 3.490738e+07
QT8(1) sum
QT board

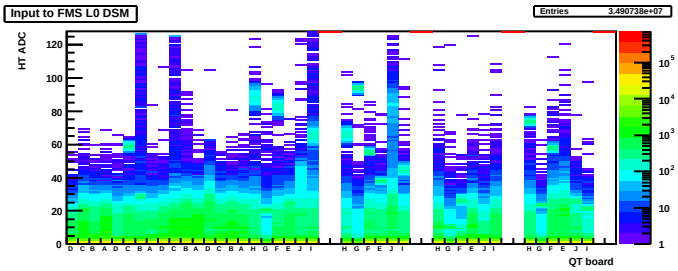

Input to FMS L0 DSM
Entries 121
QT8(1) sum - simulated
QT board

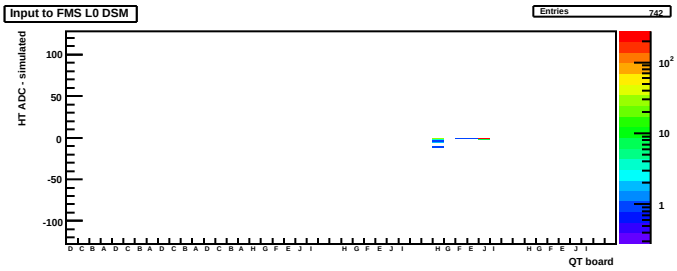

Input to FMS L0 DSM
Entries 3.490738e+07
QT8(2) sum
QT board

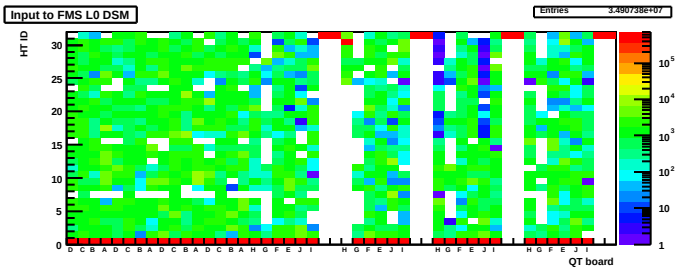

Input to FMS L0 DSM
Entries 516542
QT8(2) sum - simulated
QT board

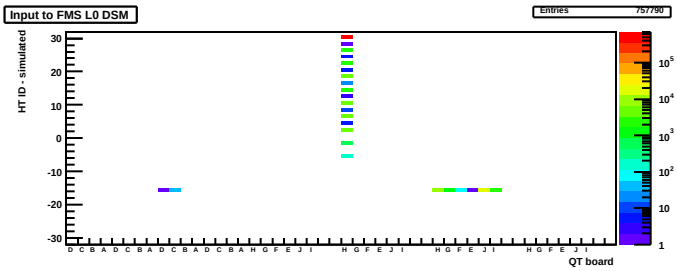

Input to FMS L0 DSM
Entries 3.490738e+07
QT8(3) sum
QT board

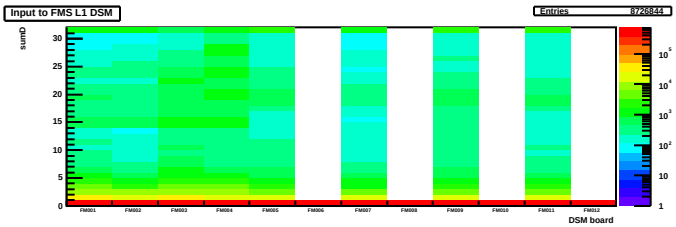

Input to FMS L0 DSM
Entries 685263
QT8(3) sum - simulated
QT board

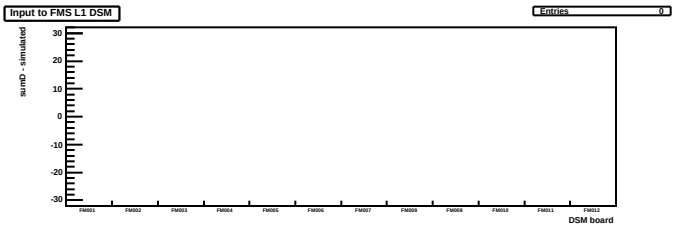

Input to FMS L0 DSM
Entries 3.490738e+07
HT ADC
QT board

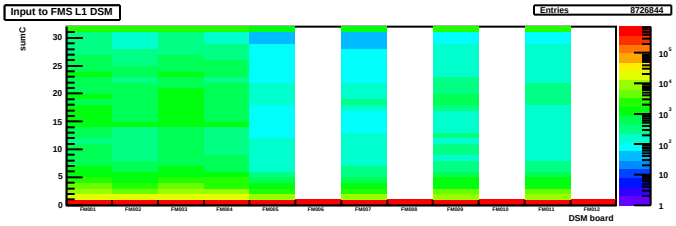

Input to FMS L0 DSM
Entries 742
HT ADC - simulated
QT board

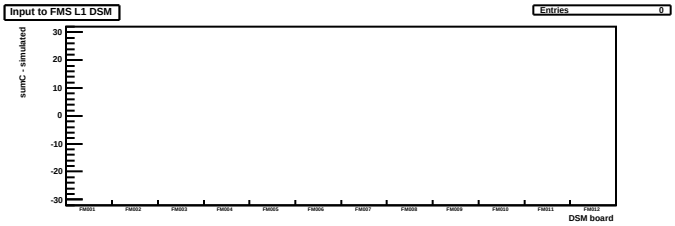

Input to FMS L0 DSM
Entries 3.490738e+07
HT ID
QT board

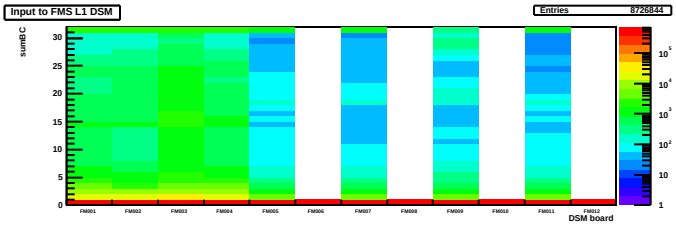

Input to FMS L0 DSM
Entries 757790
HT ID - simulated
QT board

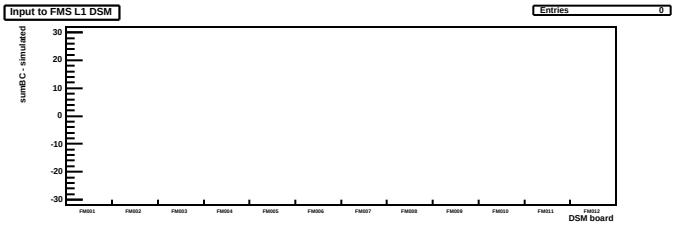

Input to FMS L1 DSM
Entries 8726844
sumD
DSM board

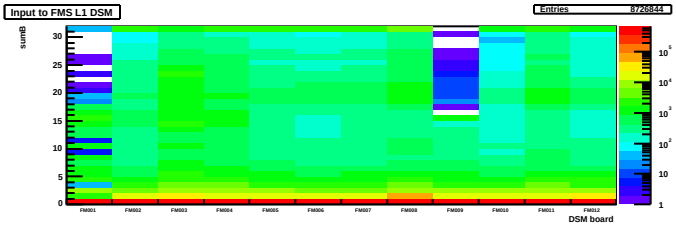

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

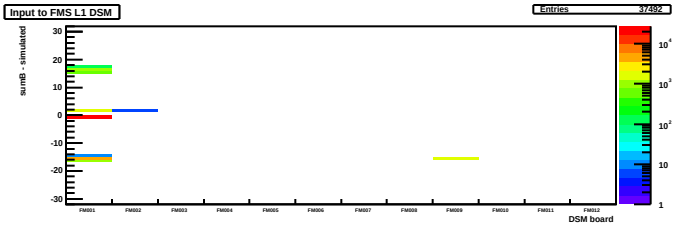

Input to FMS L1 DSM
Entries 8726844
sumC
DSM board

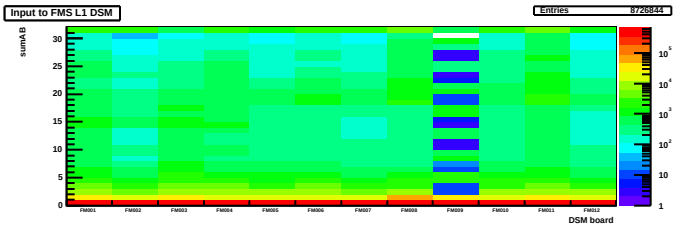

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

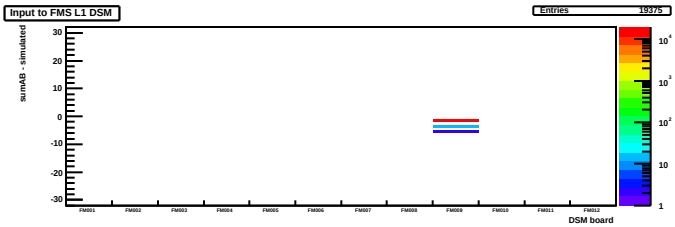

Input to FMS L1 DSM
Entries 8726844
sumBC
DSM board

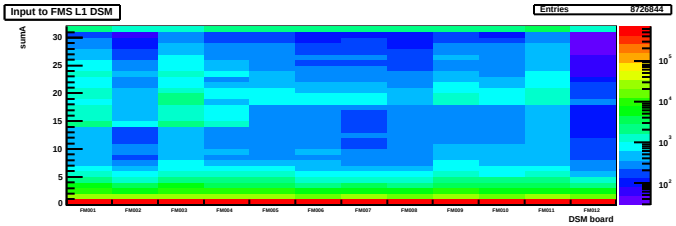

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

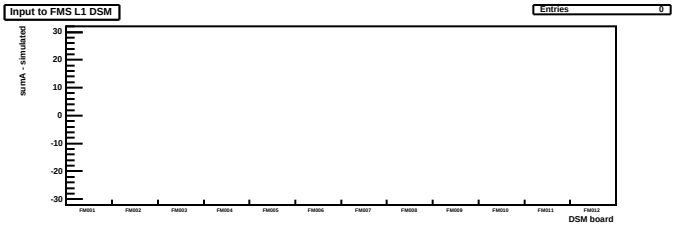

Input to FMS L1 DSM
Entries 8726844
sumB
DSM board

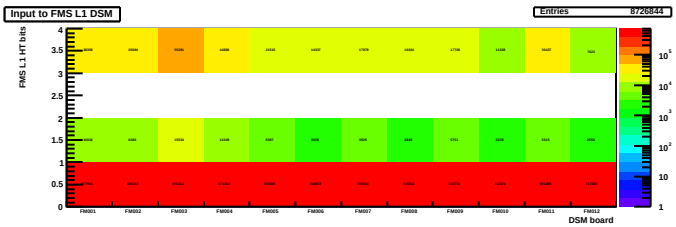

Input to FMS L1 DSM
Entries 37492
sumB - simulated
DSM board

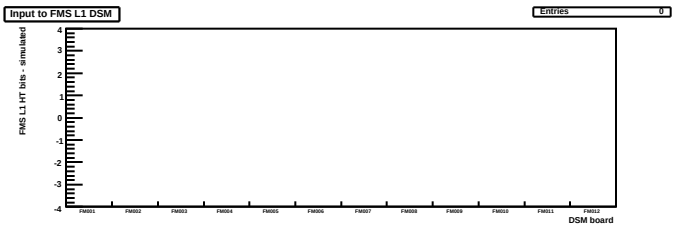

Input to FMS L1 DSM
Entries 8726844
sumAB
DSM board

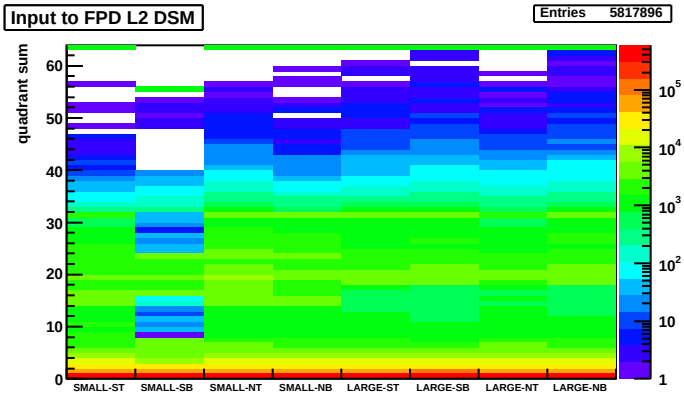

Input to FMS L1 DSM
Entries 19375
sumAB - simulated
DSM board

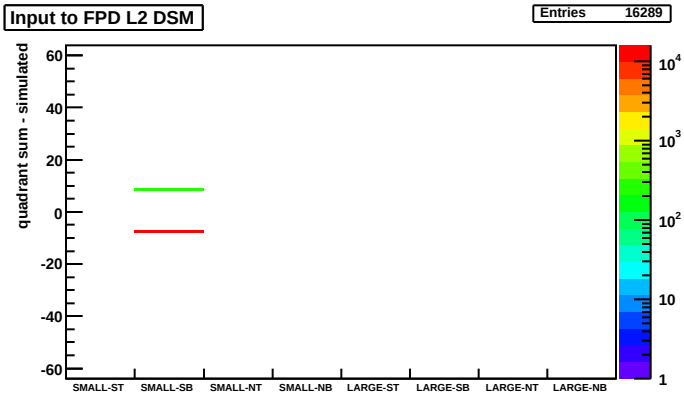

Input to FMS L1 DSM
Entries 8726844
sumA
DSM board

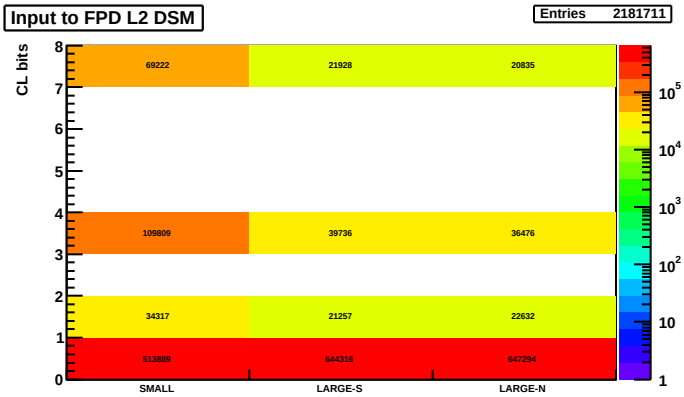

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

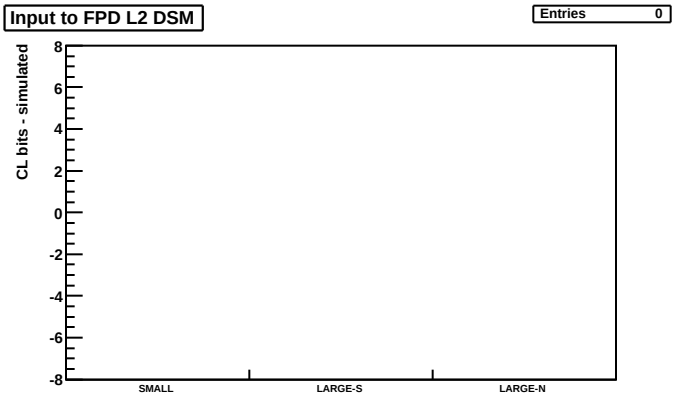

Input to FMS L1 DSM
Entries 8726844
FMS L1 HT bits
DSM board

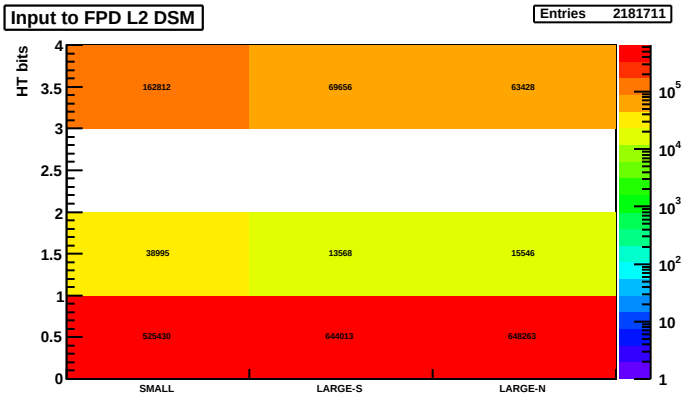

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

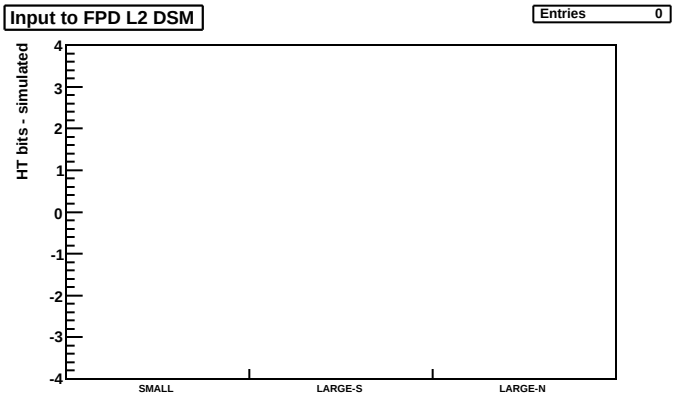

Input to FPD L2 DSM
Entries 5817896
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

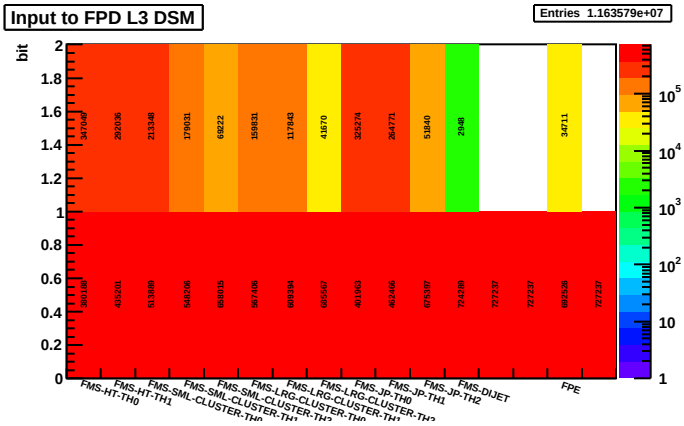

Input to FPD L2 DSM
Entries 16289
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

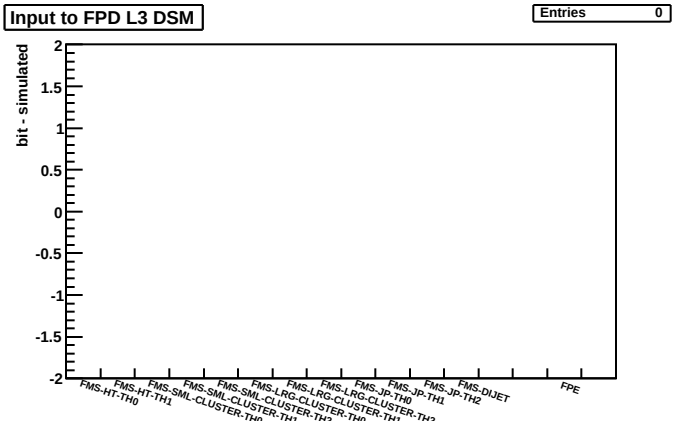

Input to FPD L2 DSM
Entries 2181711
CL bits
69222
21928
20835
109809
39736
36476
34317
21257
22632
513889
644316
647294
SMALL
LARGE-S
LARGE-N

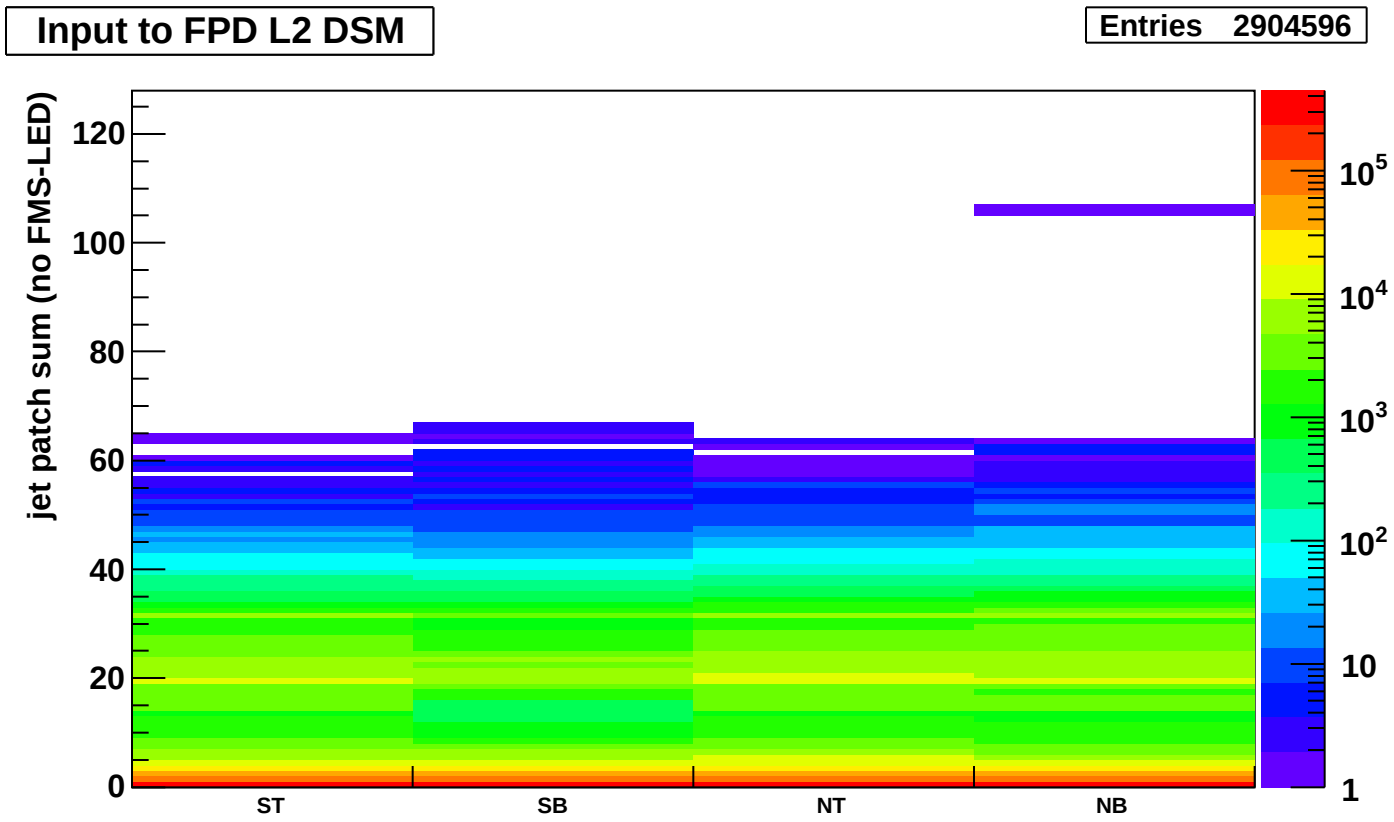

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

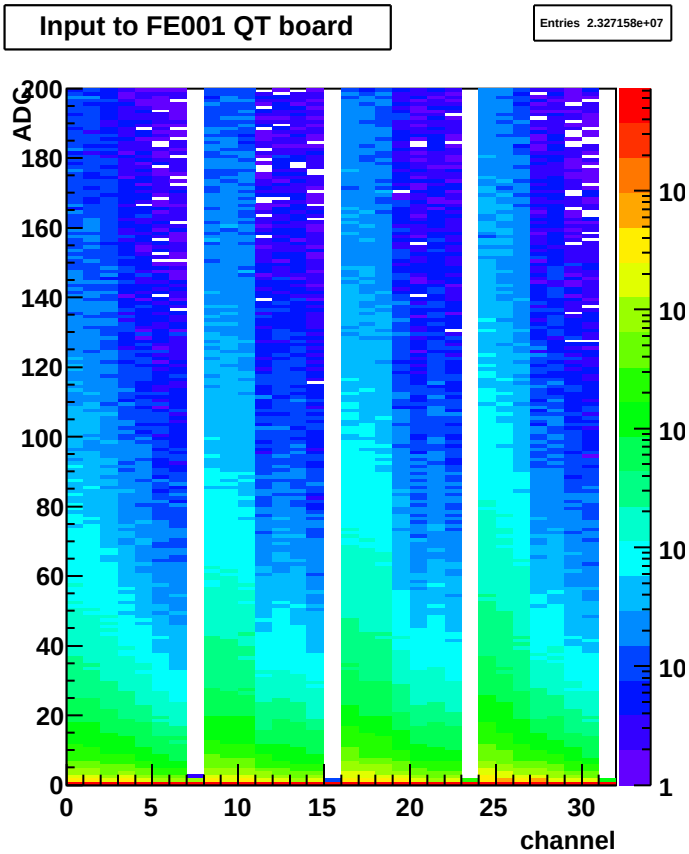

Input to FPD L2 DSM
Entries 2181711
HT bits
162812
69656
63428
38995
13568
15546
525430
644013
648263
SMALL
LARGE-S
LARGE-N

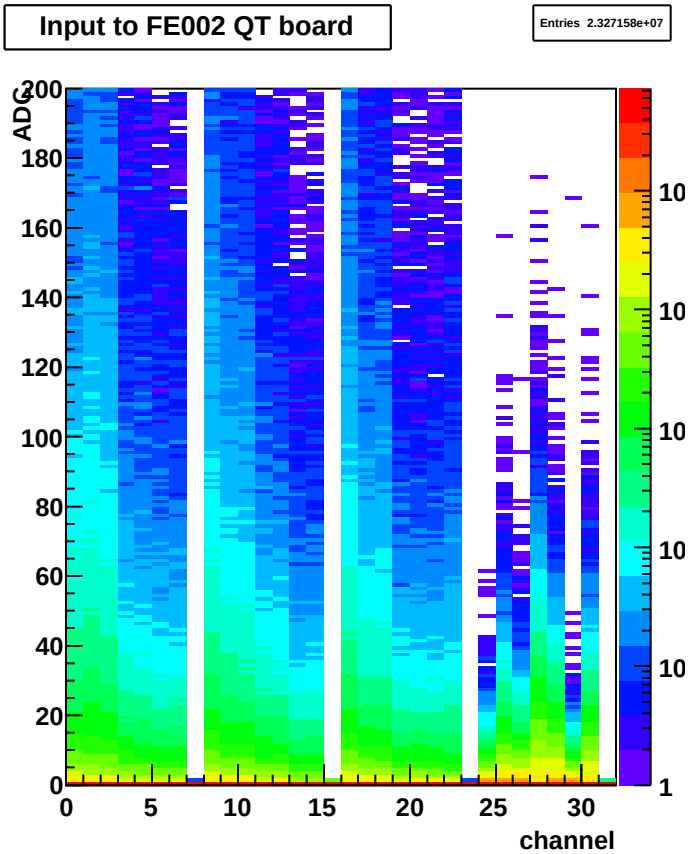

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

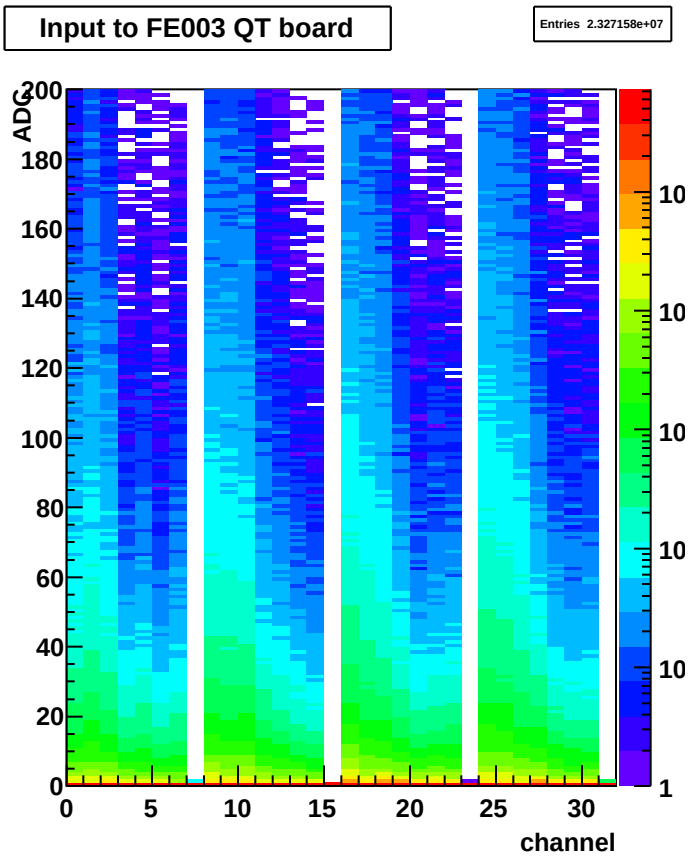

Input to FPD L3 DSM
Entries 1.163579e+07
bit
347048
292036
213348
179031
69222
159831
117843
41870
325274
264771
51840
2948
34711
301185
435201
513889
548206
658015
587406
609394
685567
401963
462466
675397
724389
727237
727237
727237
692526
727237
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
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

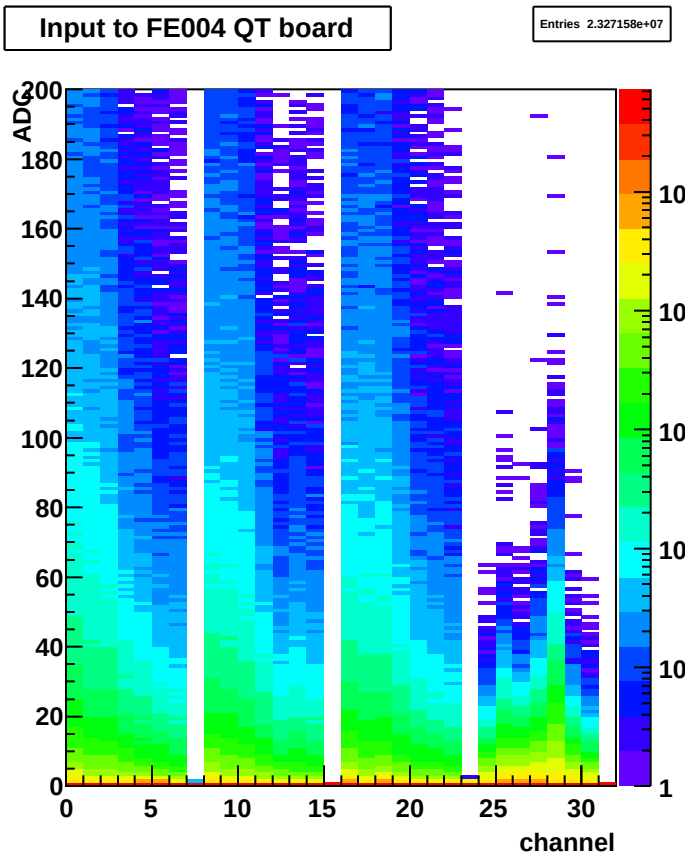

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

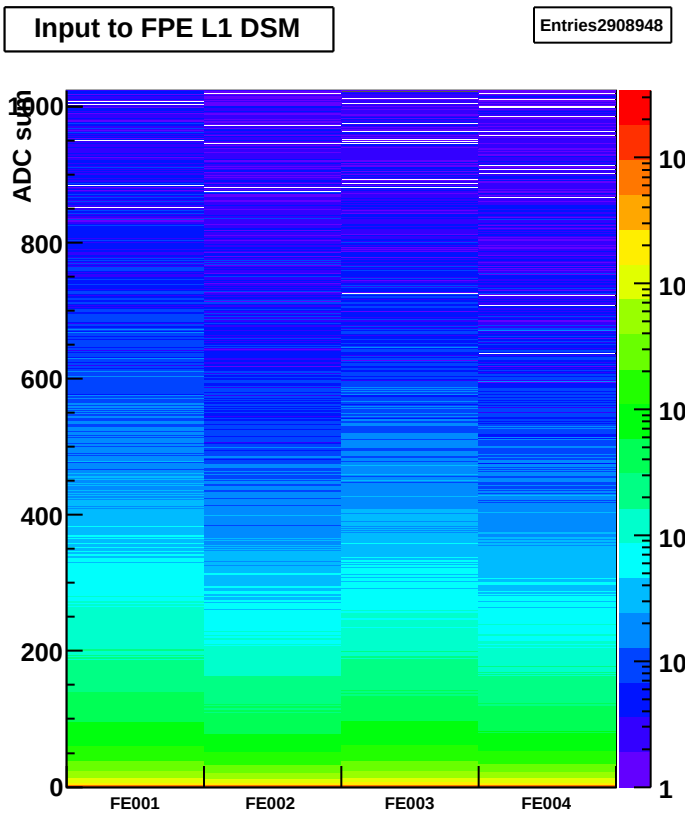

Input to FPD L2 DSM
Entries 2904596
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

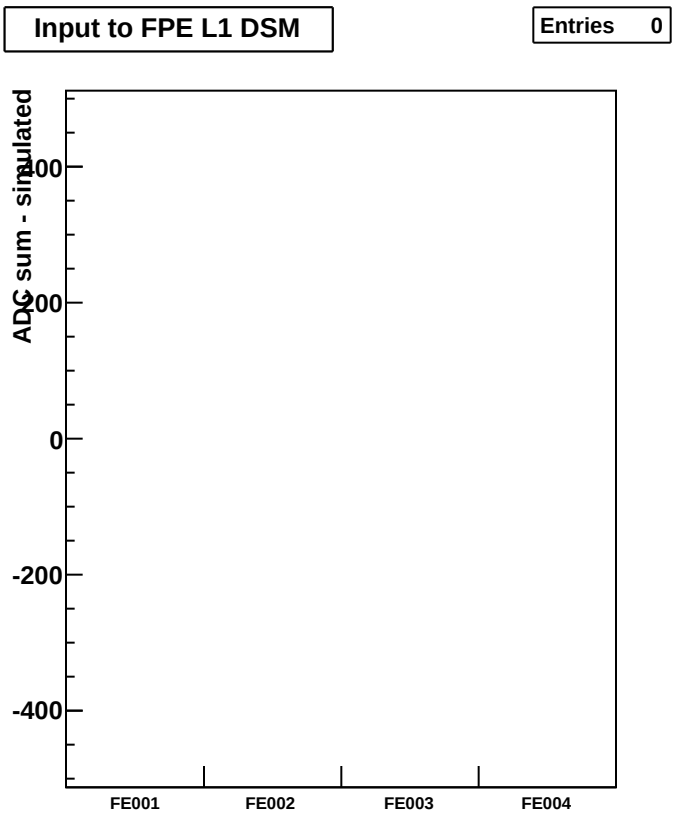

Input to FE001 QT board
Entries 2.327158e+07
ADC
channel

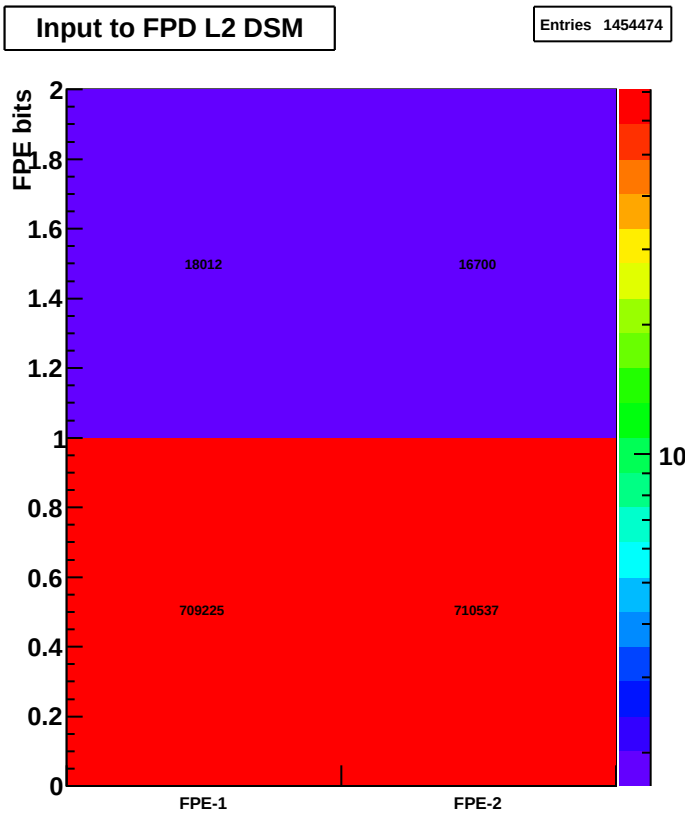

Input to FE002 QT board
Entries 2.327158e+07
ADC
channel

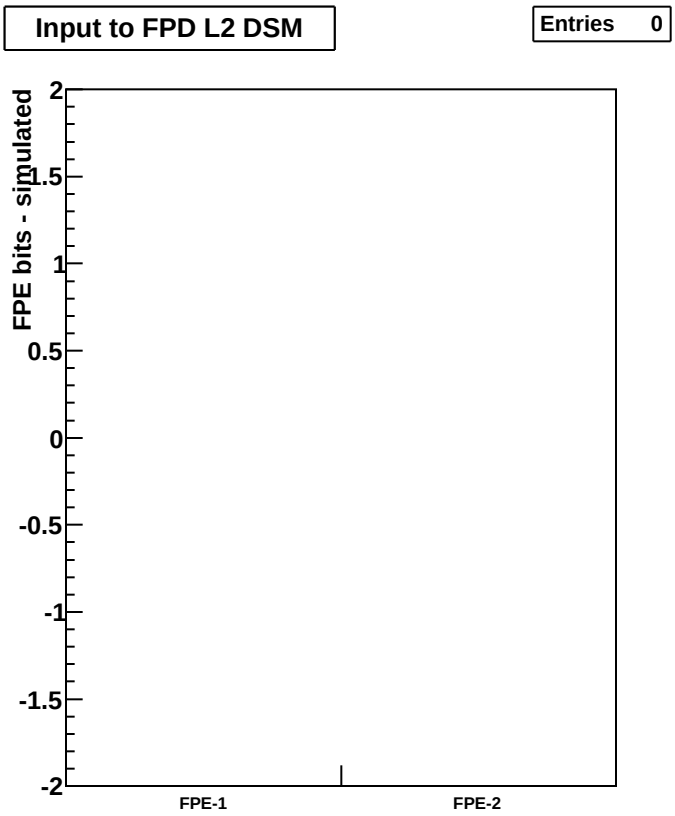

Input to FE003 QT board
Entries 2.327158e+07
ADC
channel


Input to FE004 QT board
Entries 2.327158e+07
ADC
channel


Input to FPE L1 DSM
Entries2908948
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 1454474
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
18012
16700
709225
710537
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