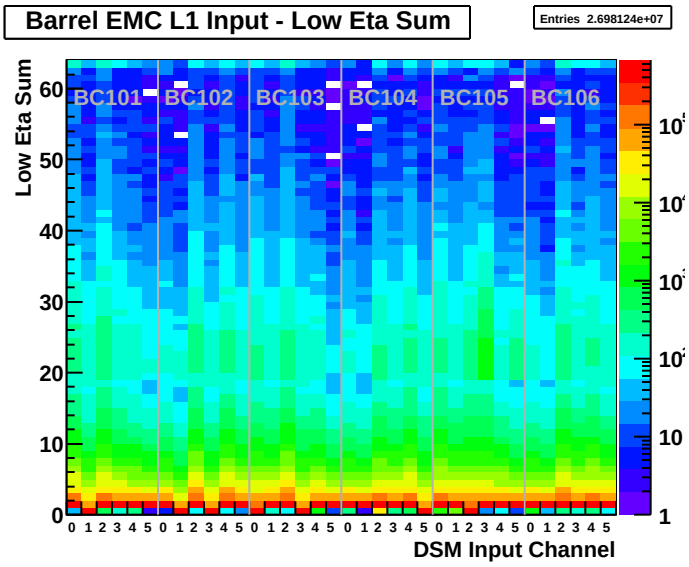
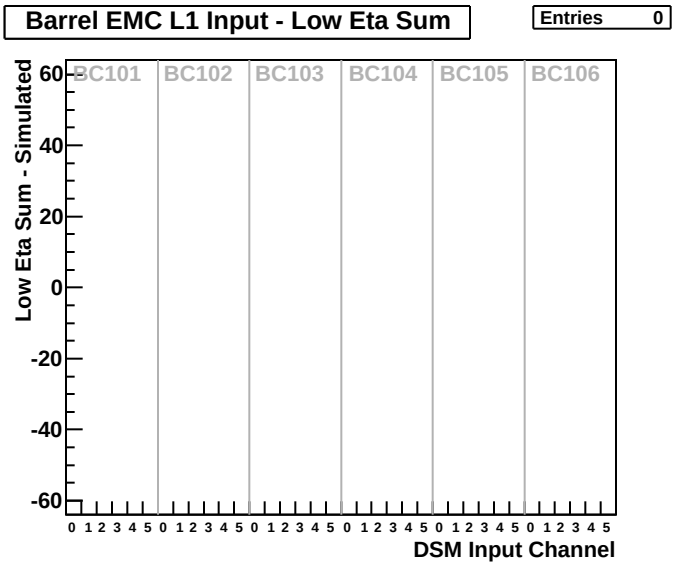
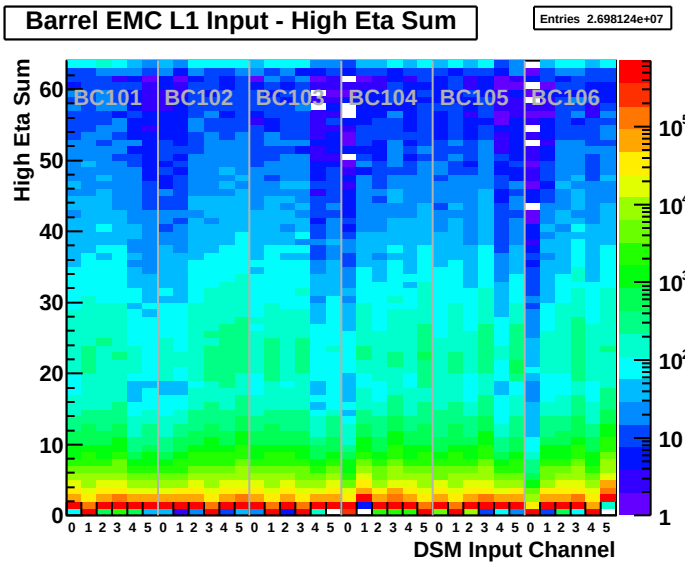
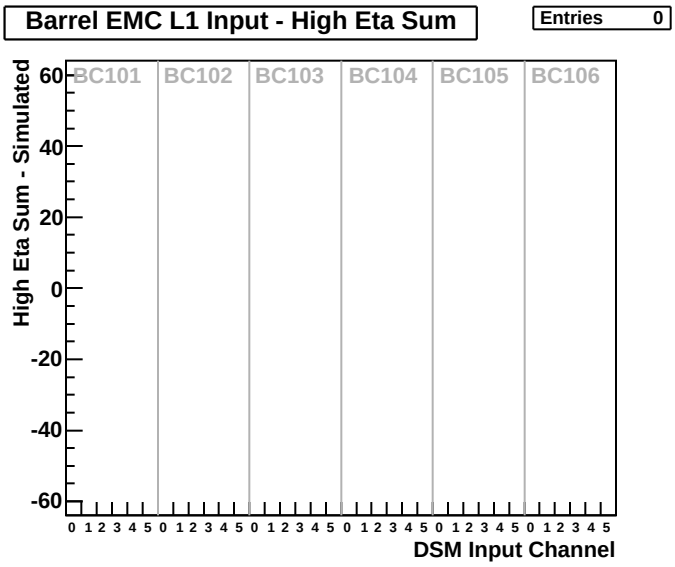
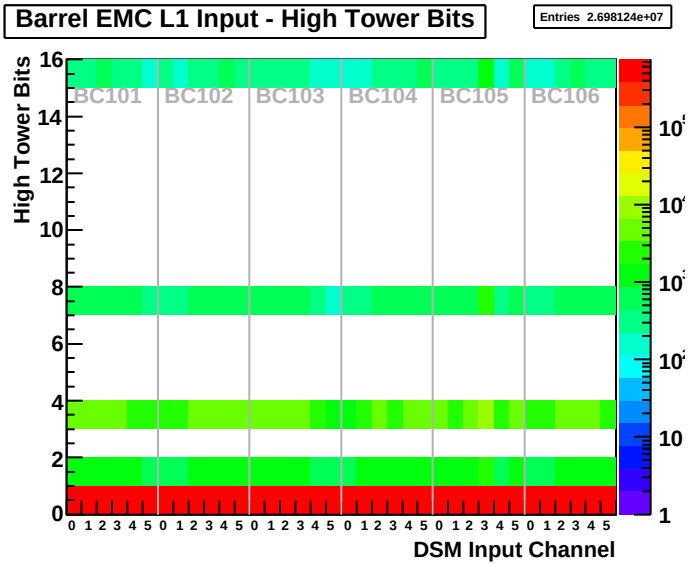
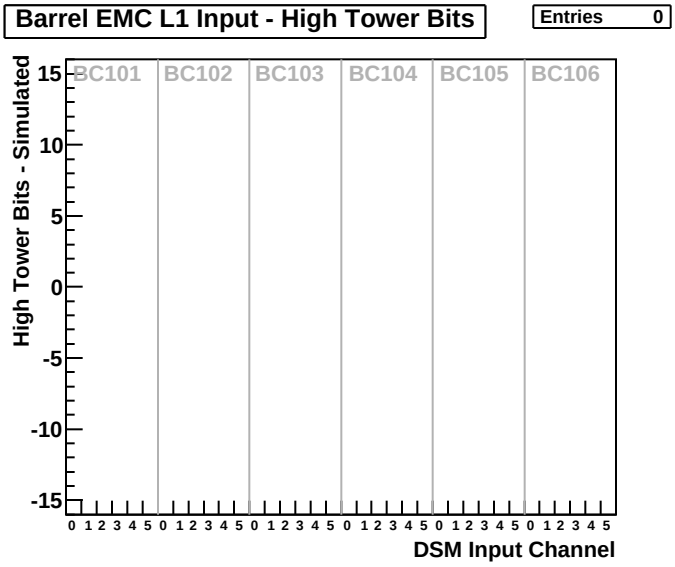

Barrel EMC L1 Input - Low Eta Sum
Entries 2.698124e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

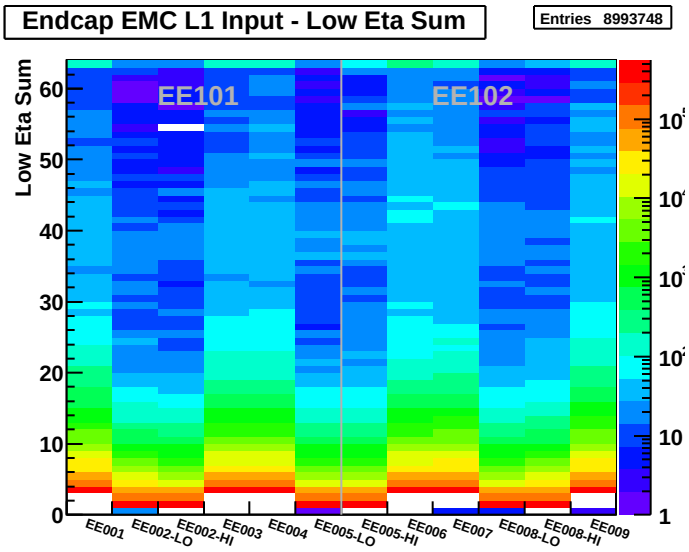

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

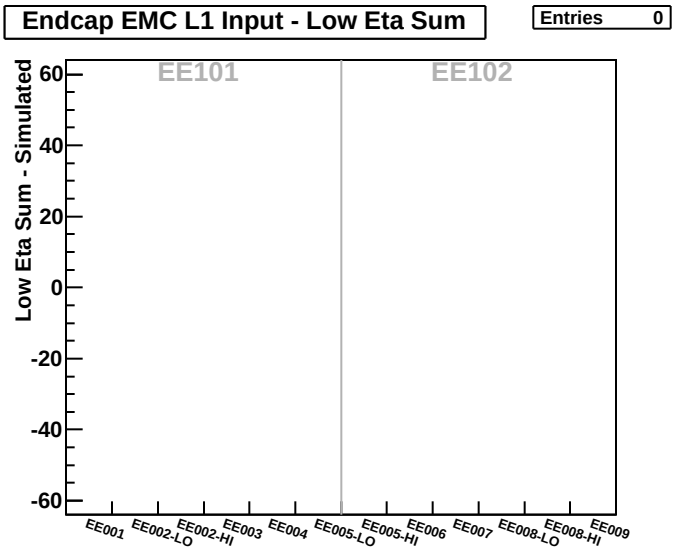

Barrel EMC L1 Input - High Eta Sum
Entries 2.698124e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

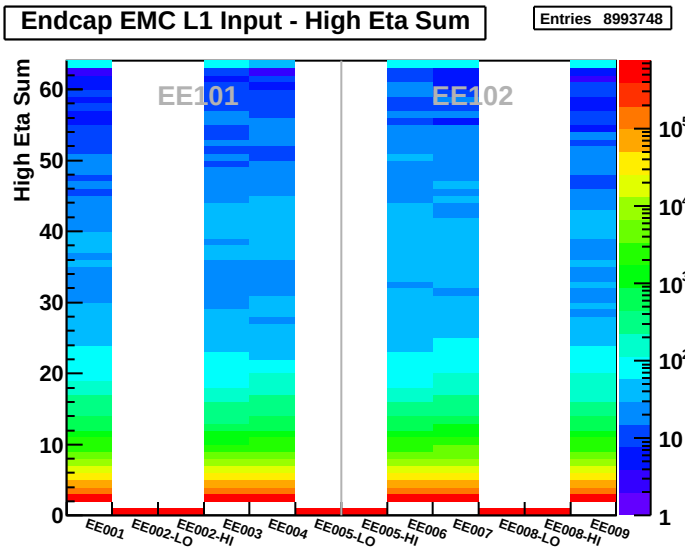

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

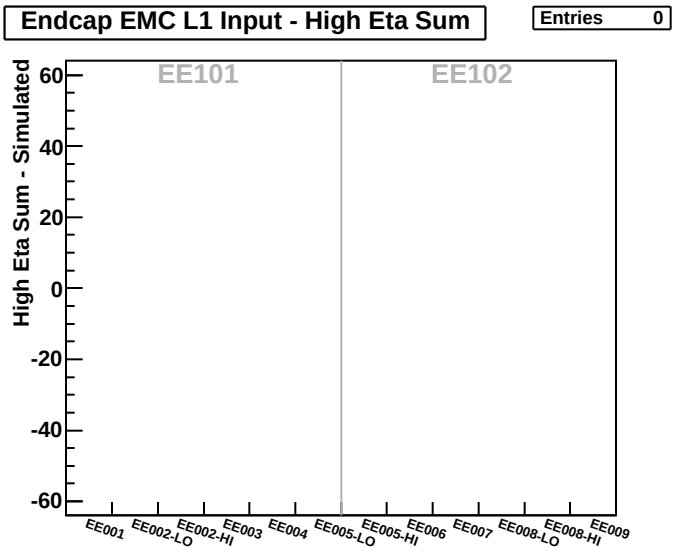

Barrel EMC L1 Input - High Tower Bits
Entries 2.698124e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

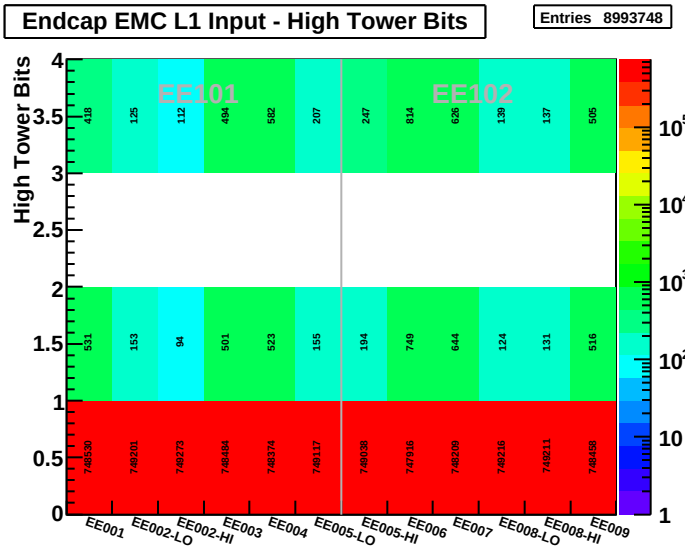

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

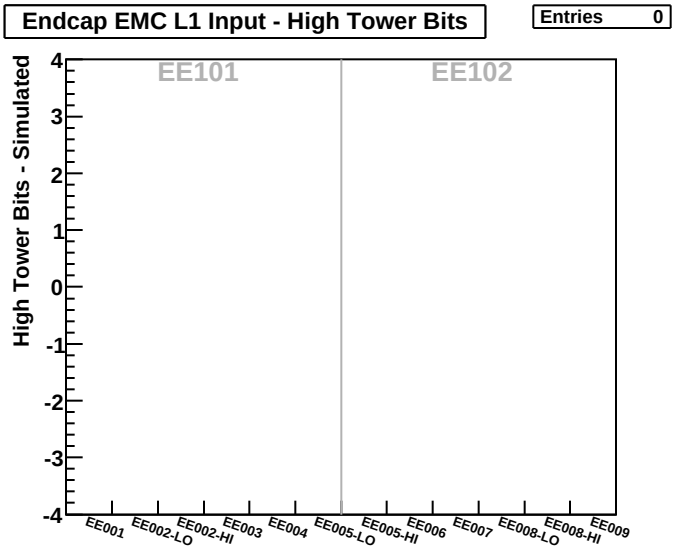

Endcap EMC L1 Input - Low Eta Sum
Entries 8993748
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

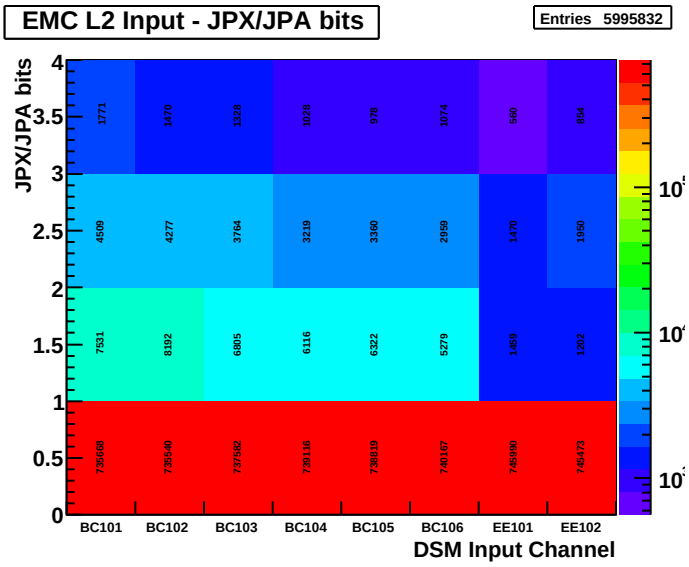

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

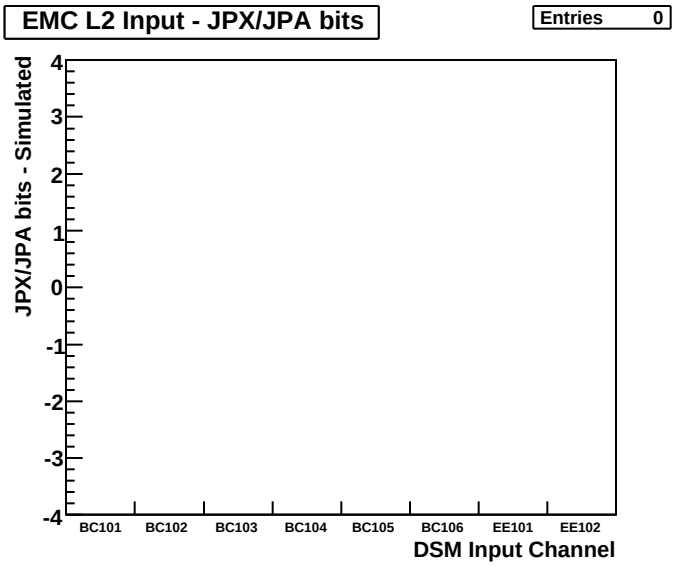

Endcap EMC L1 Input - High Eta Sum
Entries 8993748
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

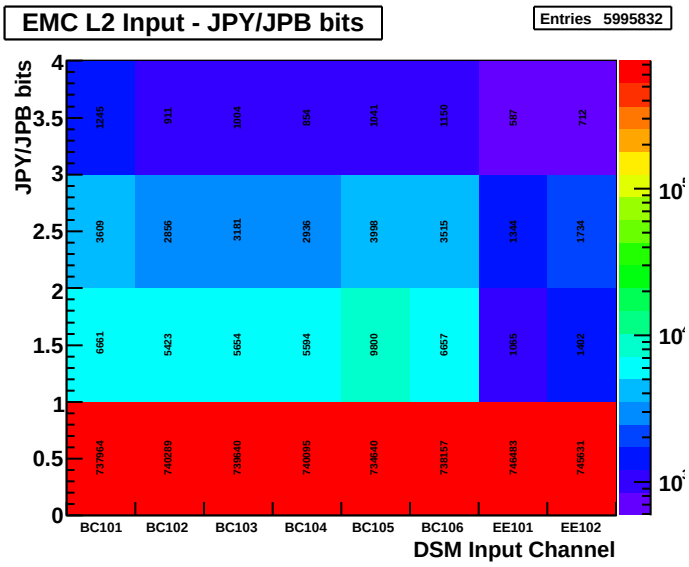

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

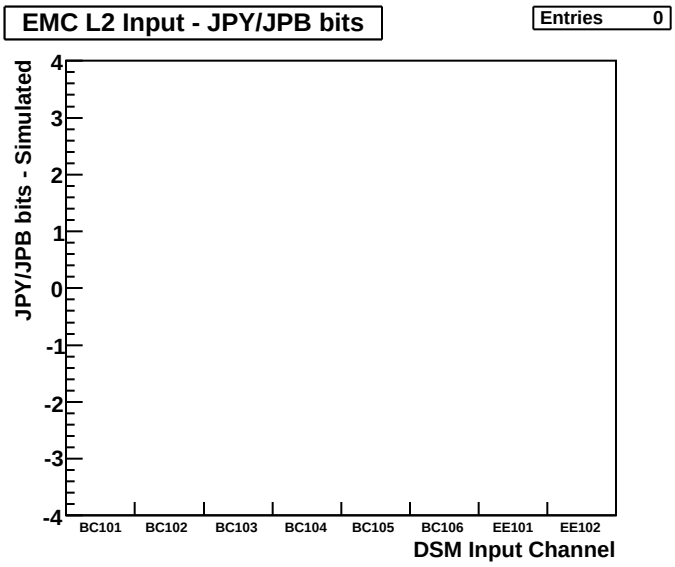

Endcap EMC L1 Input - High Tower Bits
Entries 8993748
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

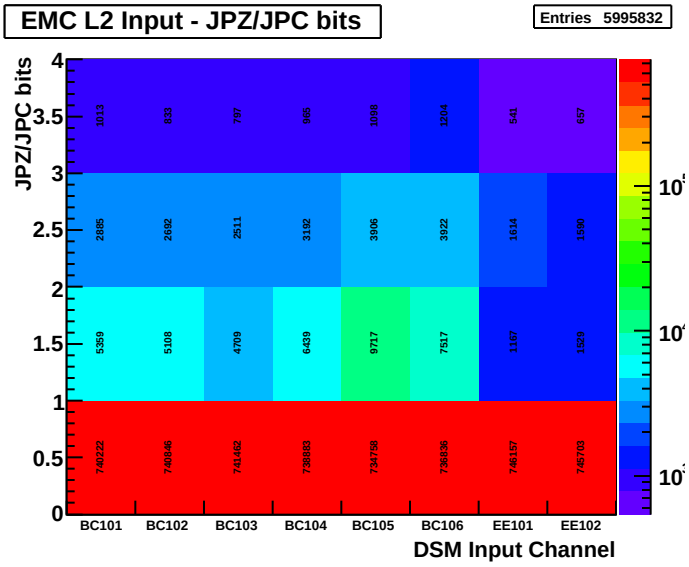

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

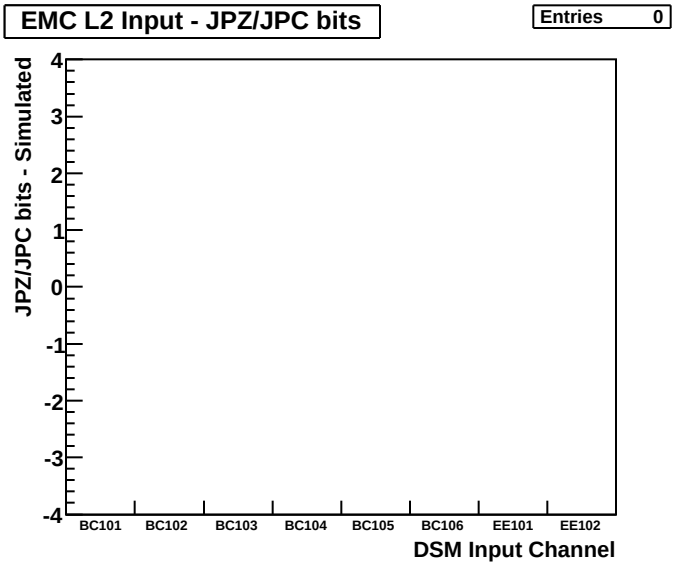

EMC L2 Input - JPX/JPA bits
Entries 5995832
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1771 1470 1328 1028 978 1074 560 854
4509 4277 3764 3219 3360 2959 1470 1950
7531 8192 6805 6116 6322 5279 1659 1202
735668 735540 737582 739116 738819 740167 745990 745473

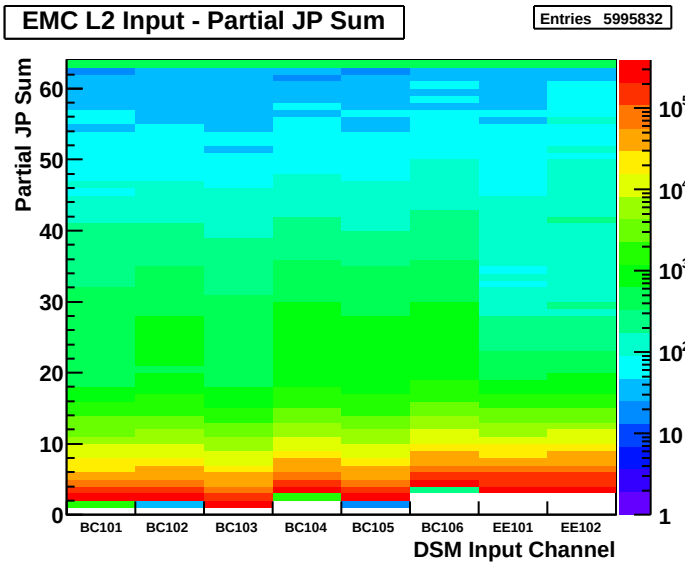

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

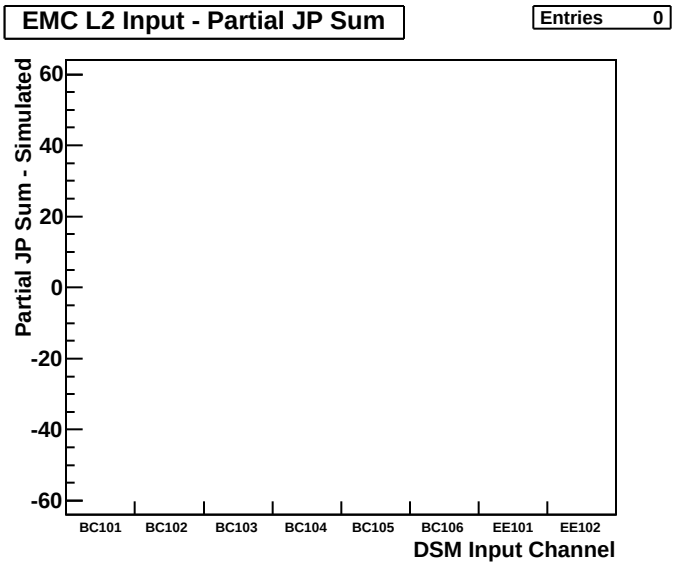

EMC L2 Input - JPY/JPB bits
Entries 5995832
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1245 911 1004 854 1041 1150 587 712
3609 2856 3181 2936 3998 3515 1344 1734
6661 5423 5654 5594 9800 6657 1065 1402
737964 740289 739540 740095 734640 738157 746483 745631

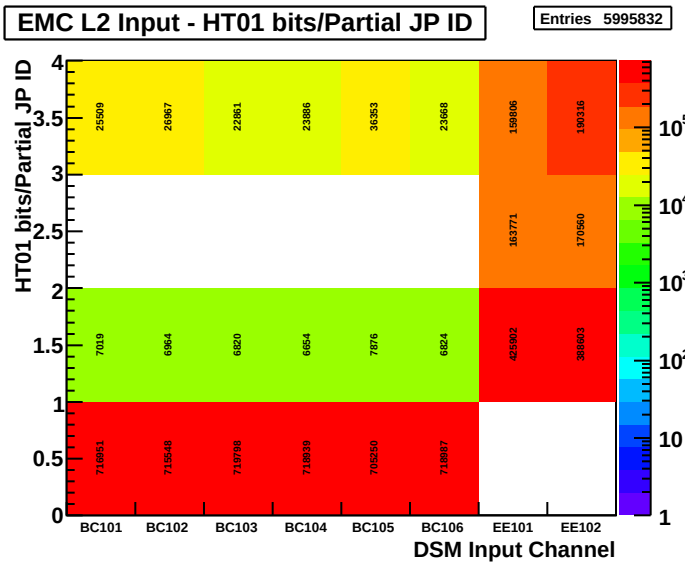

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

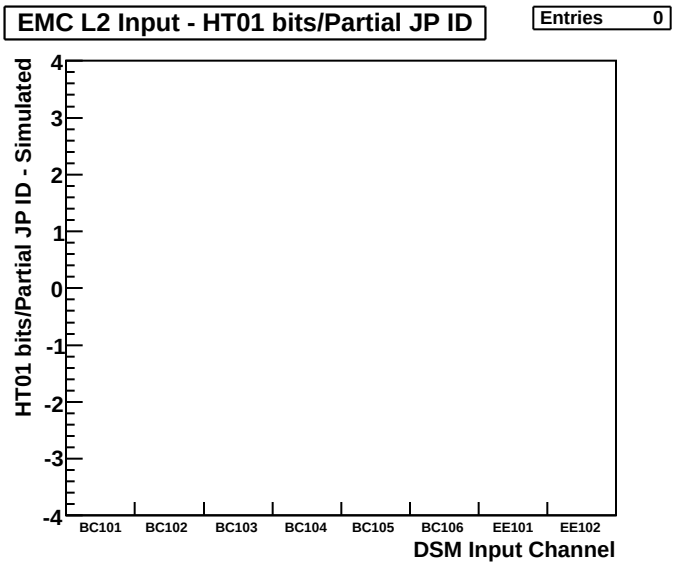

EMC L2 Input - JPZ/JPC bits
Entries 5995832
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1013 833 797 965 1098 1204 541 657
2885 2692 2511 3192 3906 3922 1614 1590
5359 5108 4709 6439 9717 7517 1167 1529
740222 740346 741462 738883 734798 738838 746157 745703

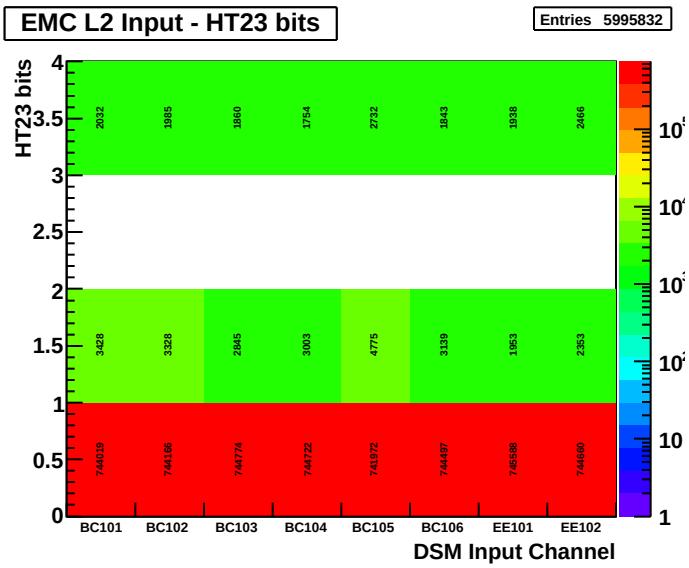

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

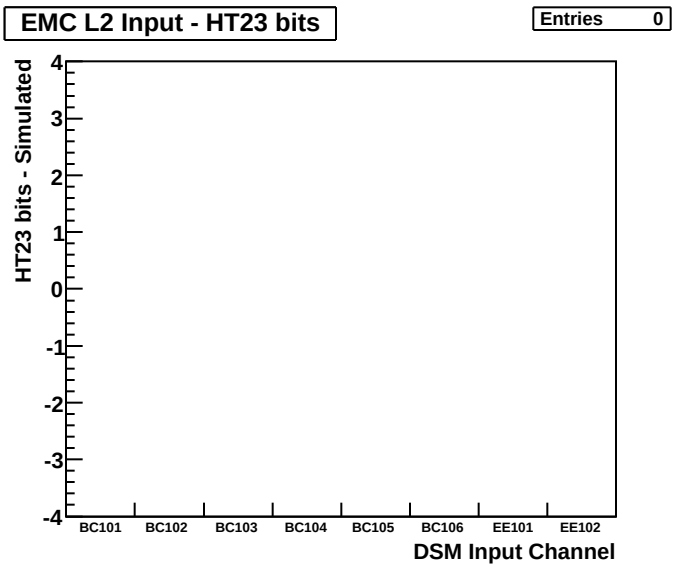

EMC L2 Input - Partial JP Sum
Entries 5995832
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

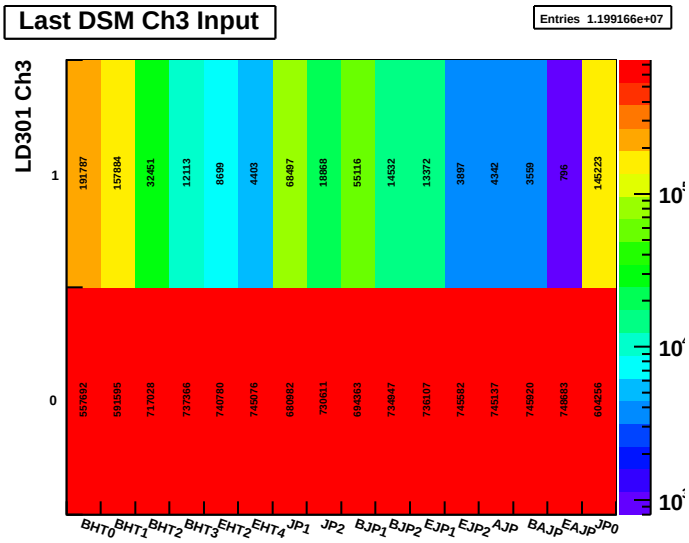

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

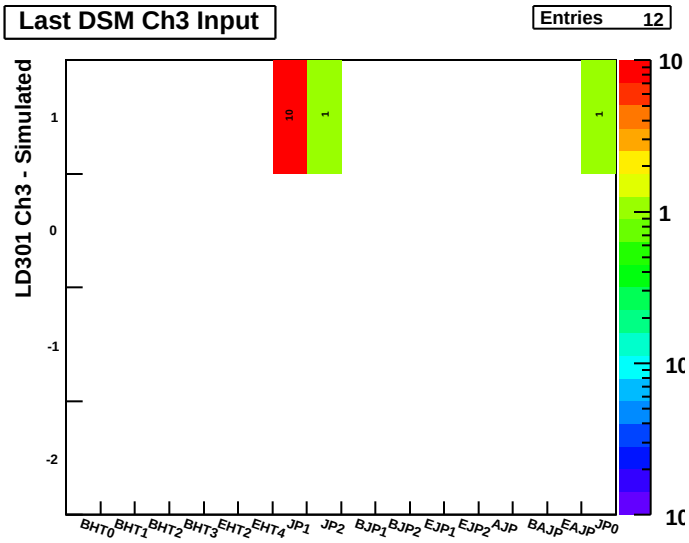

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5995832
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

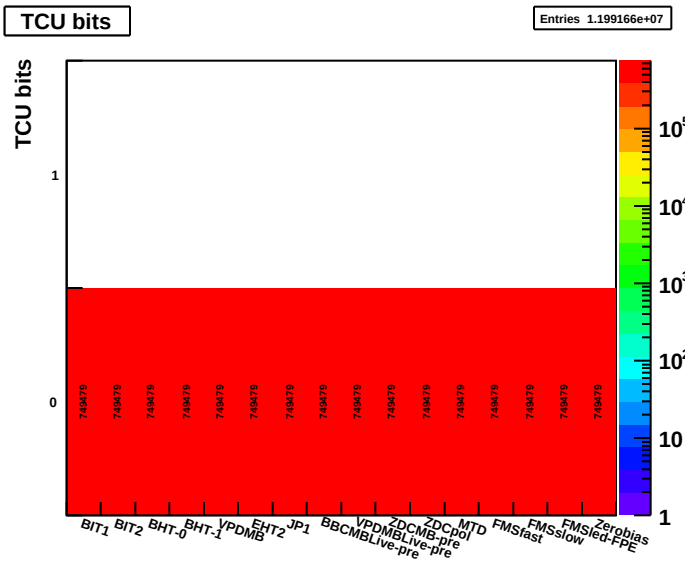

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

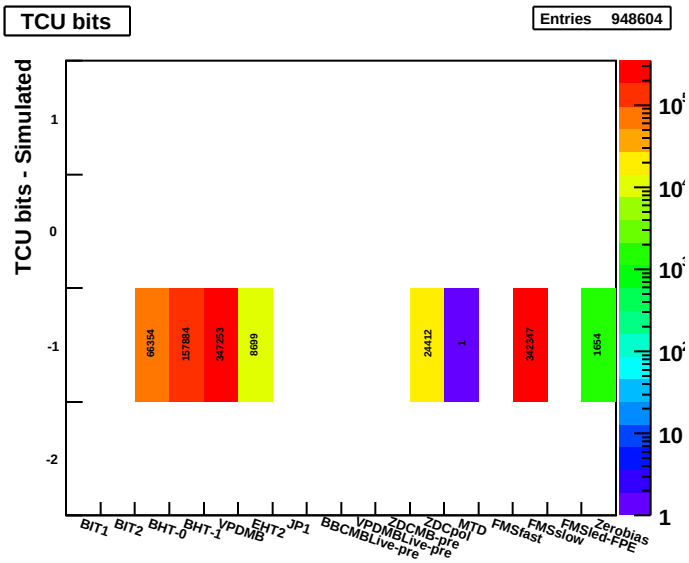

EMC L2 Input - HT23 bits
Entries 5995832
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

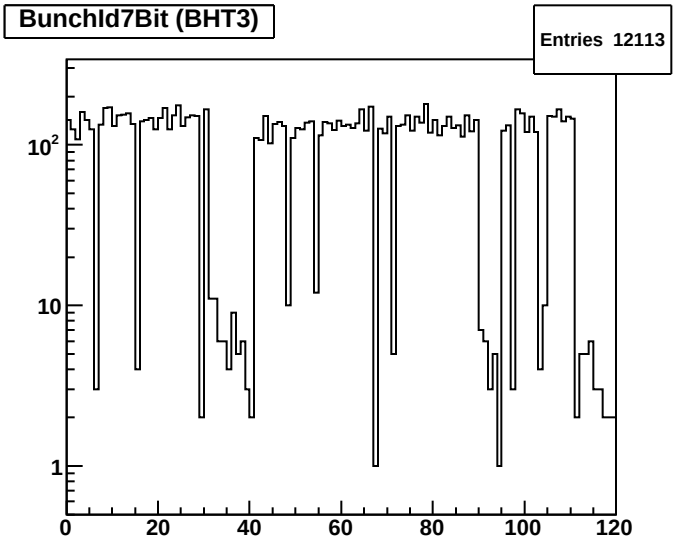

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

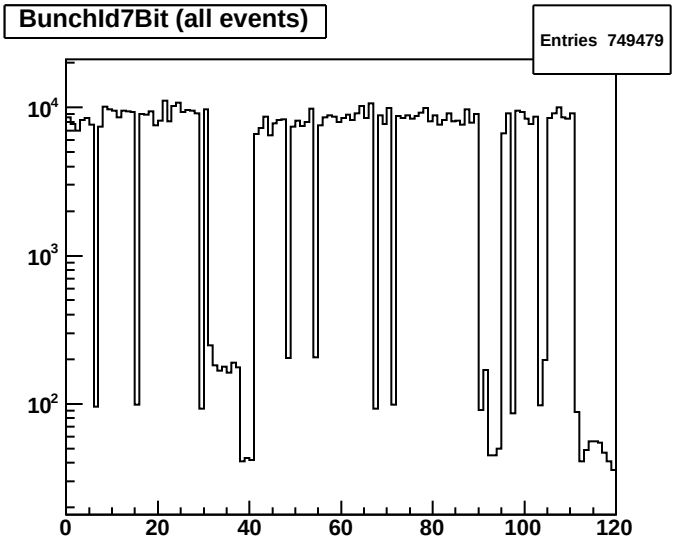

Last DSM Ch3 Input
Entries 1.199166e+07
LD301 Ch3
191787 157884 32451 12113 8699 4403 68497 18868 55116 14532 13372 3897 4342 3559 796 145223
557692 591595 717028 737366 740780 745076 680982 730611 694363 734947 736107 745582 745137 745920 748653 604256
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

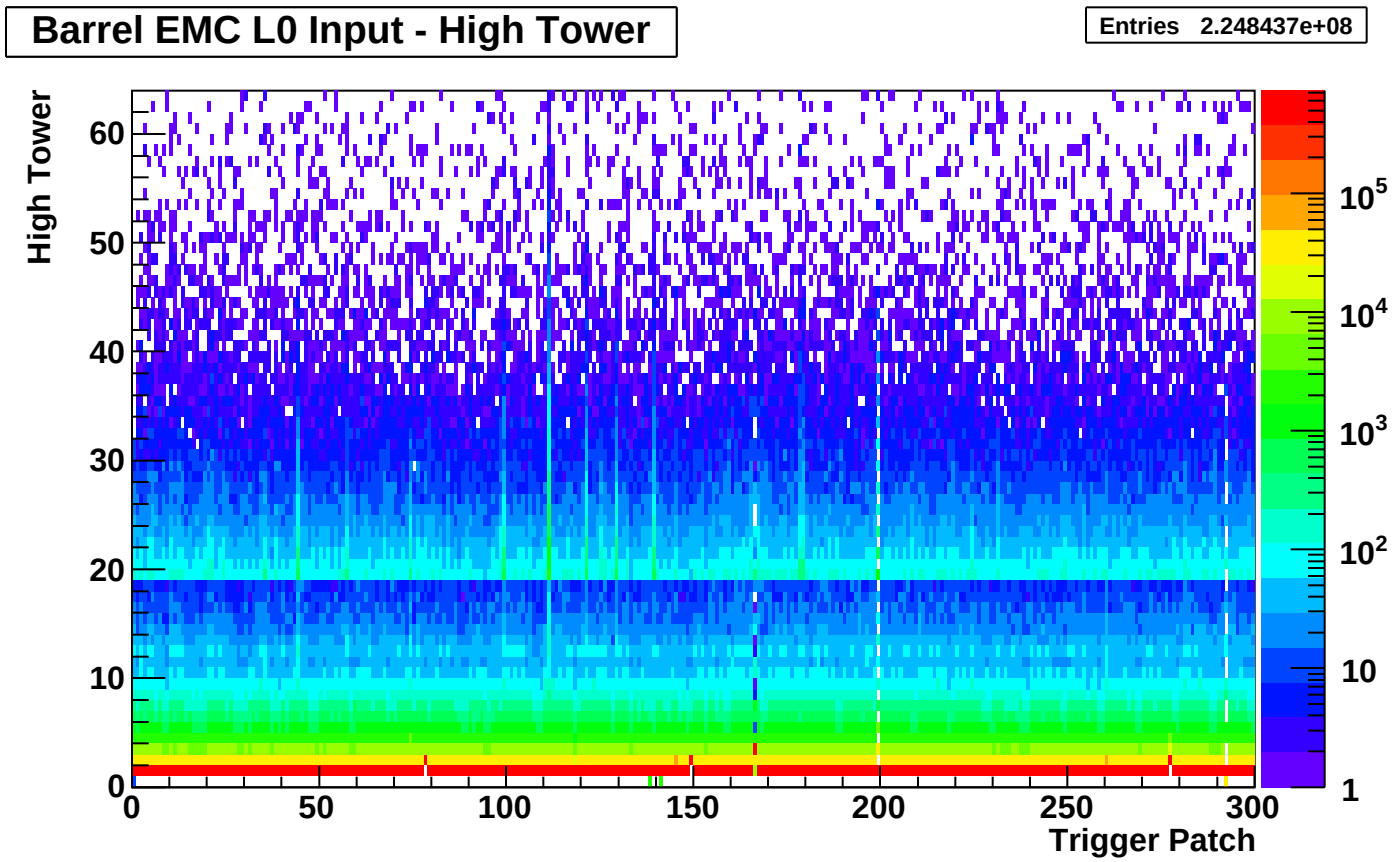

Last DSM Ch3 Input
Entries 12
LD301 Ch3 - Simulated
10 1 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

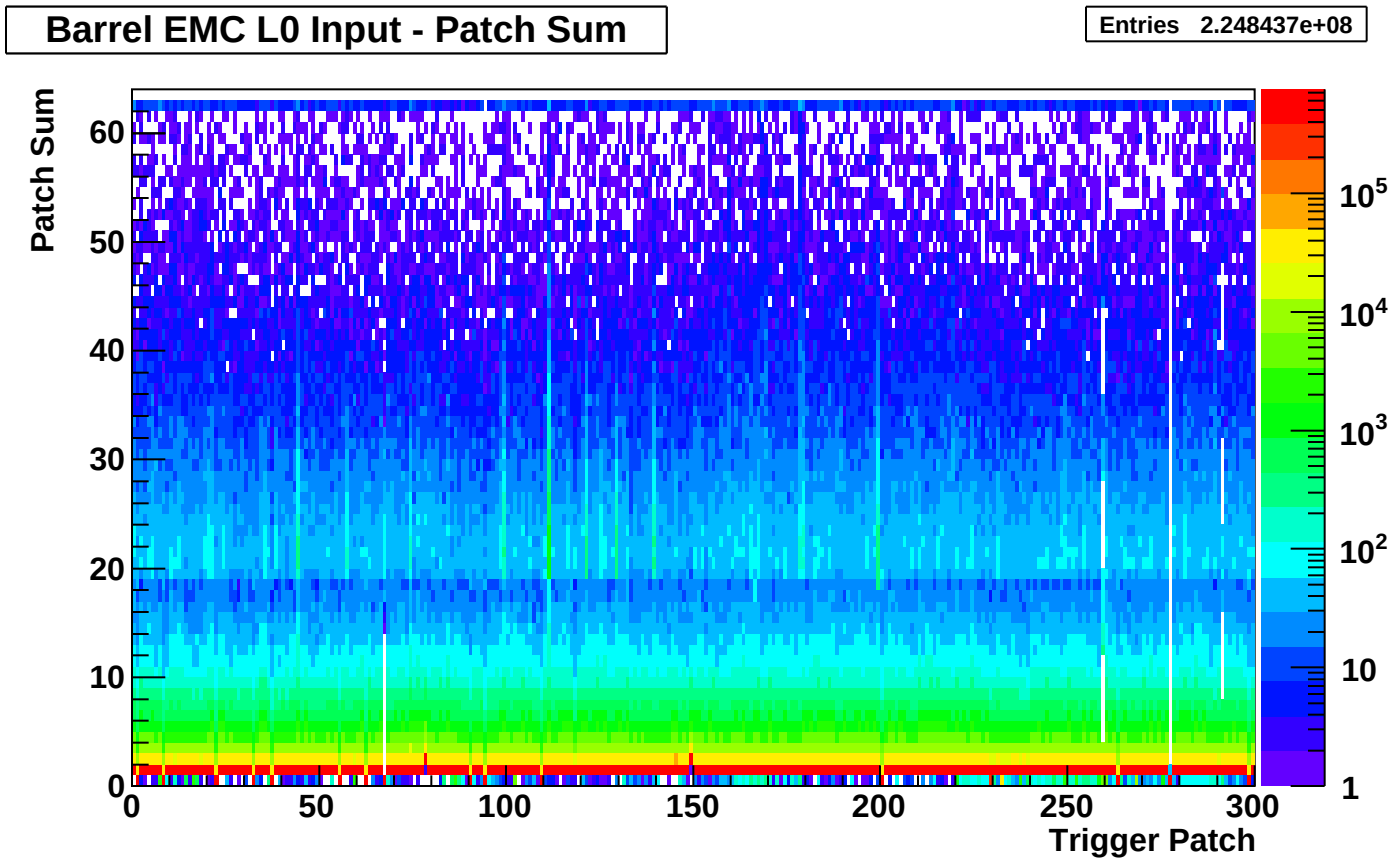

TCU bits
Entries 1.199166e+07
TCU bits
749479
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

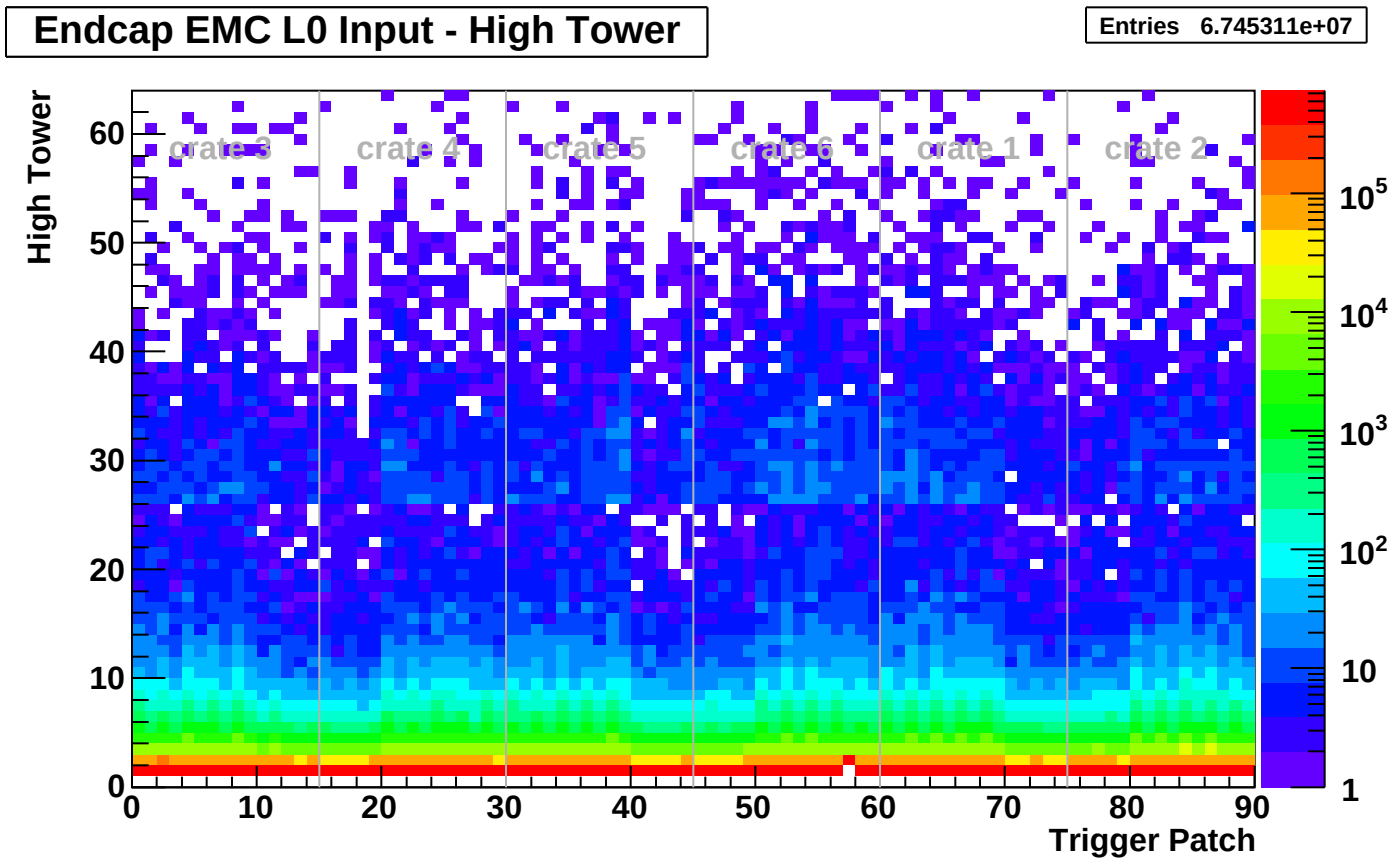

TCU bits
Entries 948604
TCU bits - Simulated
66354 157884 347253 8699 24412 1 342347 1654
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

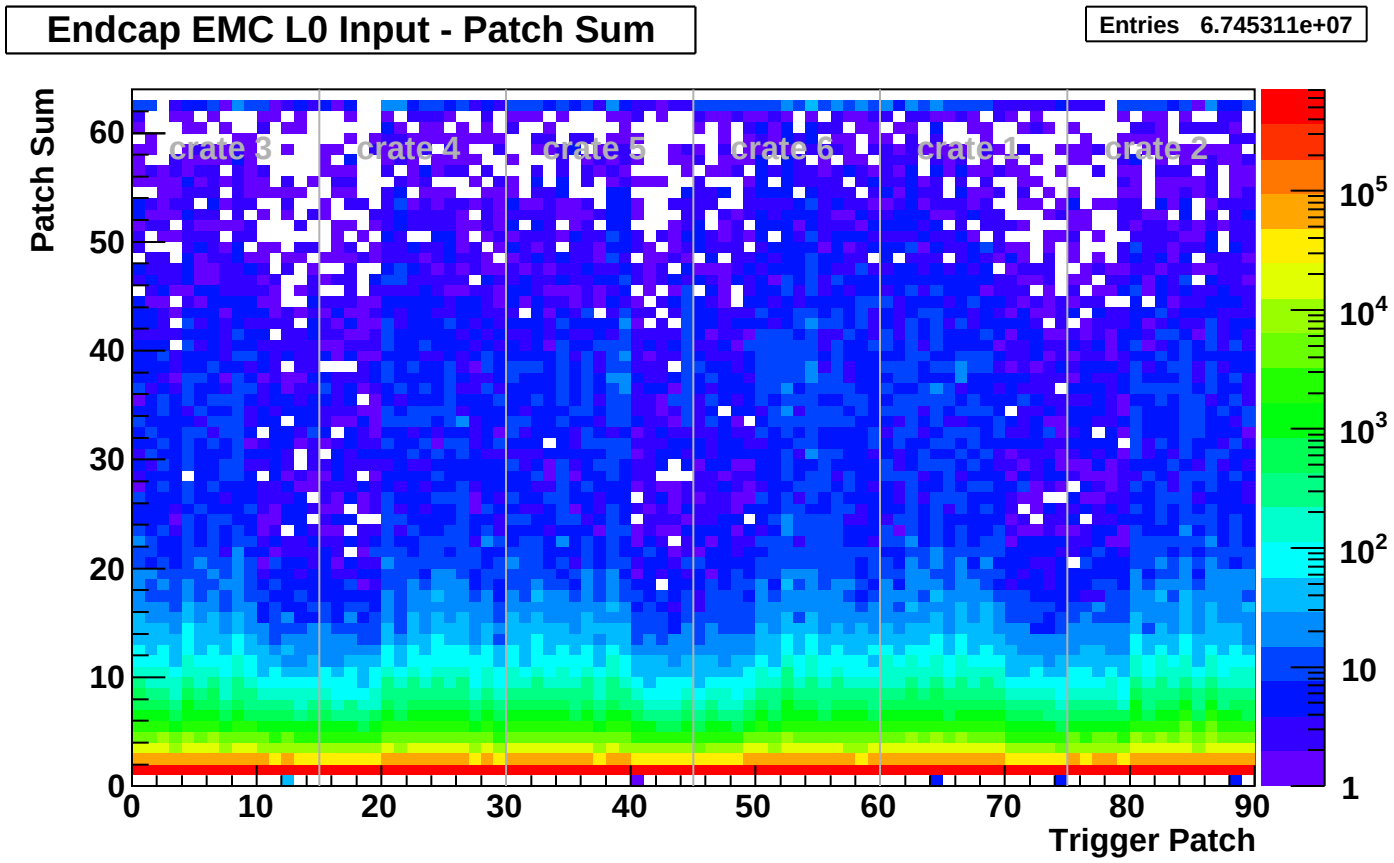

BunchId7Bit (BHT3)
Entries 12113

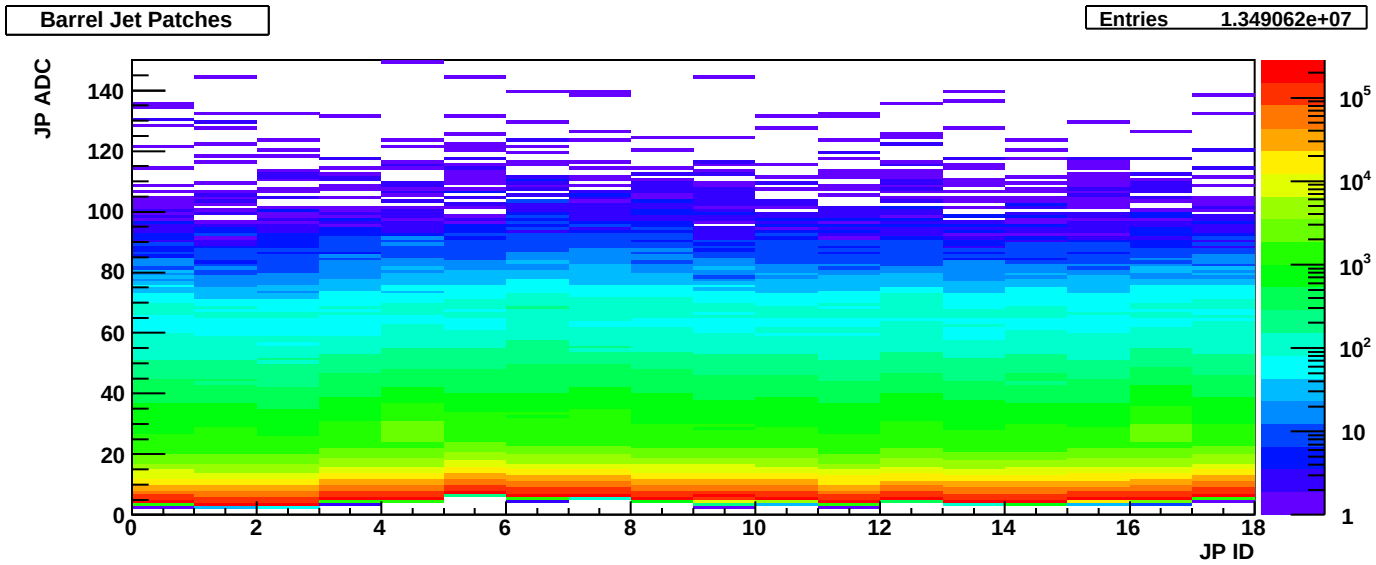

BunchId7Bit (all events)
Entries 749479

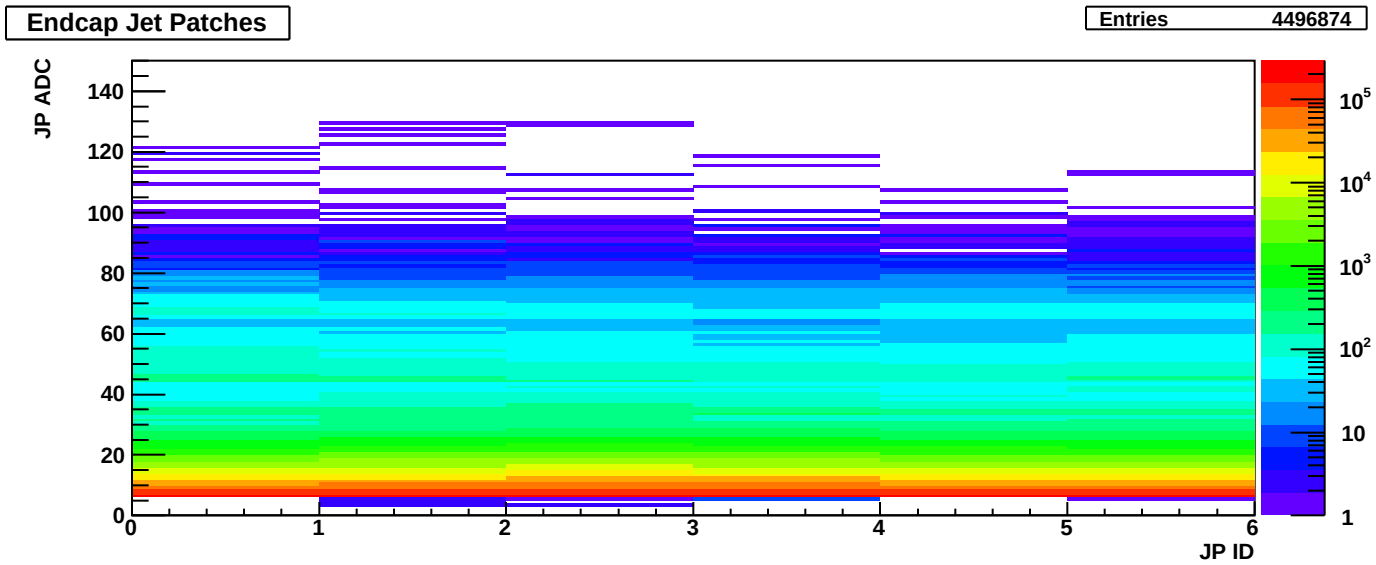

Barrel EMC L0 Input - High Tower
Entries 2.248437e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

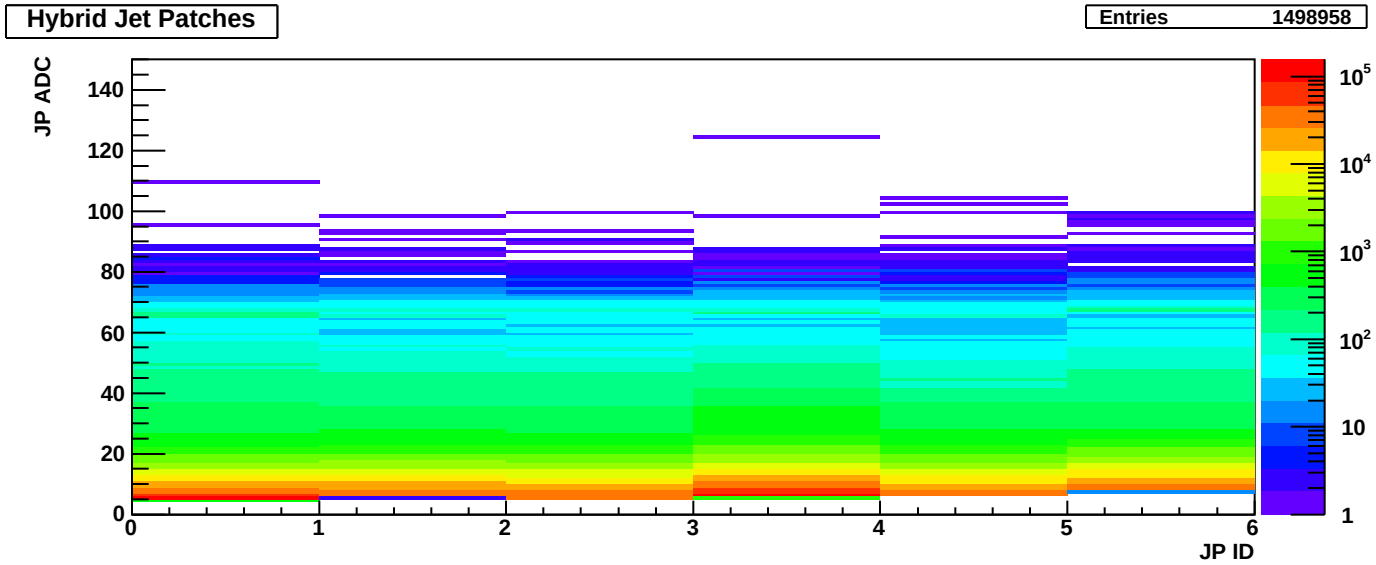

Barrel EMC L0 Input - Patch Sum
Entries 2.248437e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

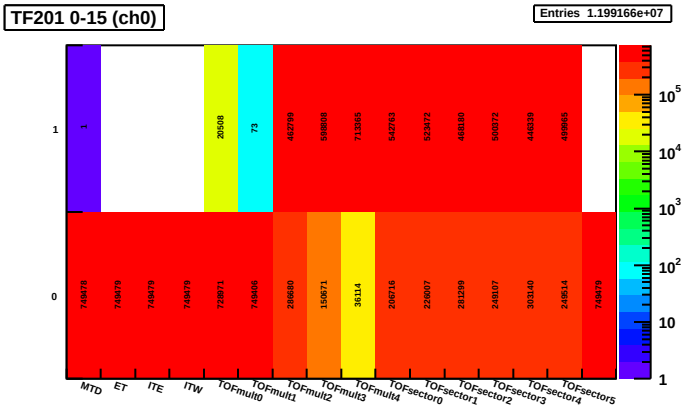

Endcap EMC L0 Input - High Tower
Entries 6.745311e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

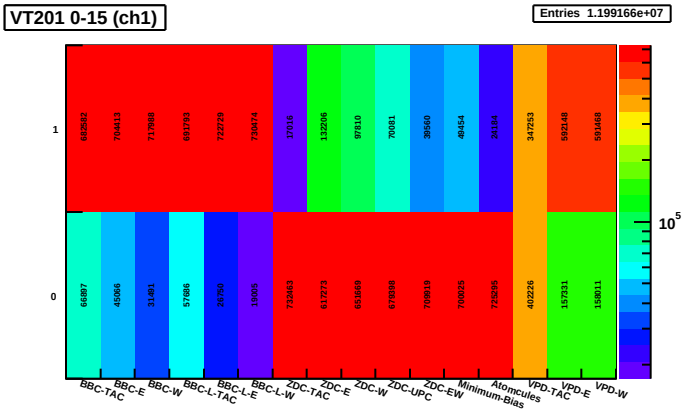

Endcap EMC L0 Input - Patch Sum
Entries 6.745311e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

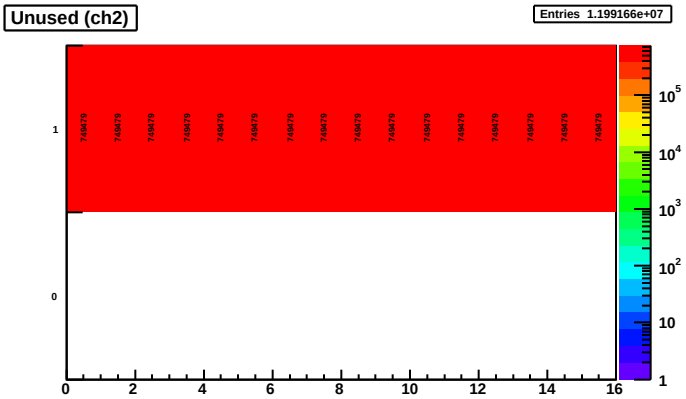

Barrel Jet Patches
Entries 1.349062e+07
JP ADC
JP ID

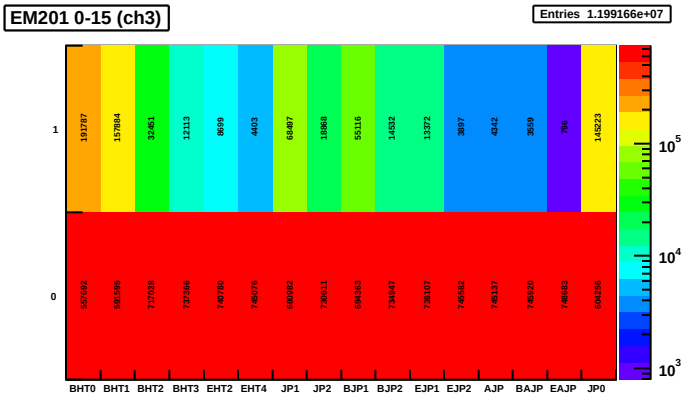

Endcap Jet Patches
Entries 4496874
JP ADC
JP ID

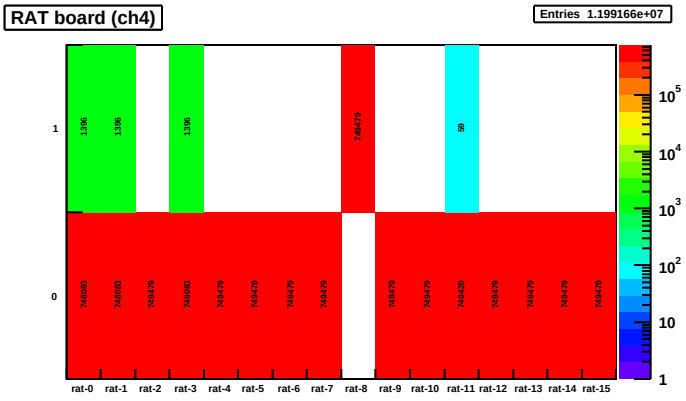

Hybrid Jet Patches
Entries 1498958
JP ADC
JP ID

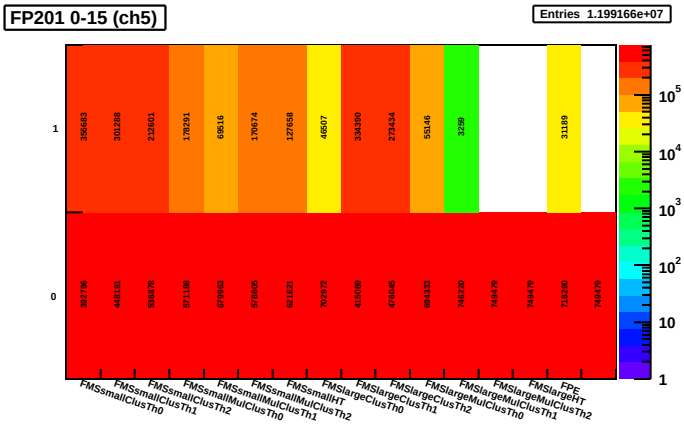

TF201 0-15 (ch0)
Entries 1.199166e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

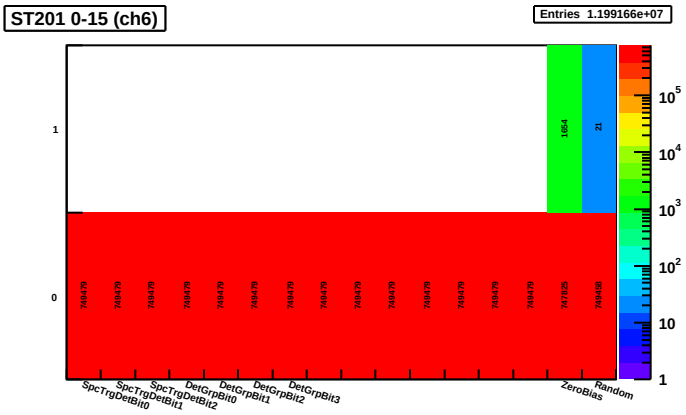

VT201 0-15 (ch1)
Entries 1.199166e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

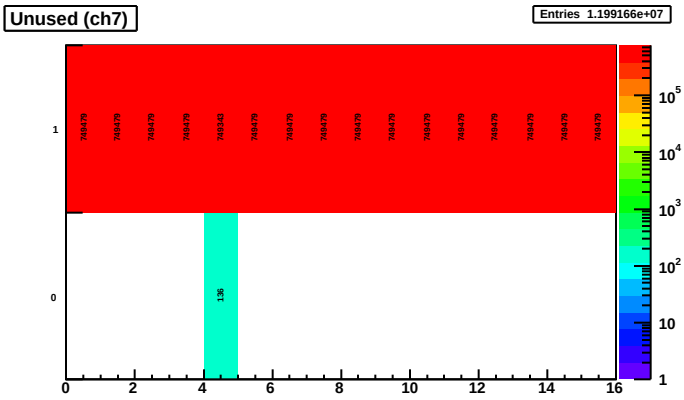

Unused (ch2)
Entries 1.199166e+07

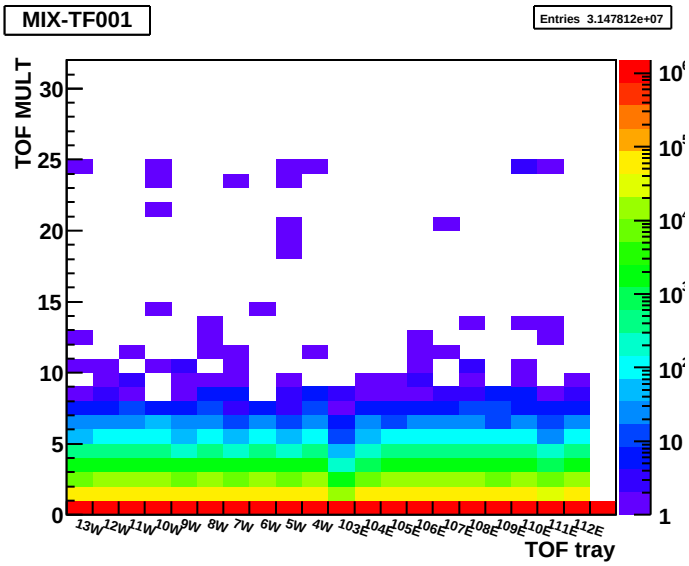

EM201 0-15 (ch3)
Entries 1.199166e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

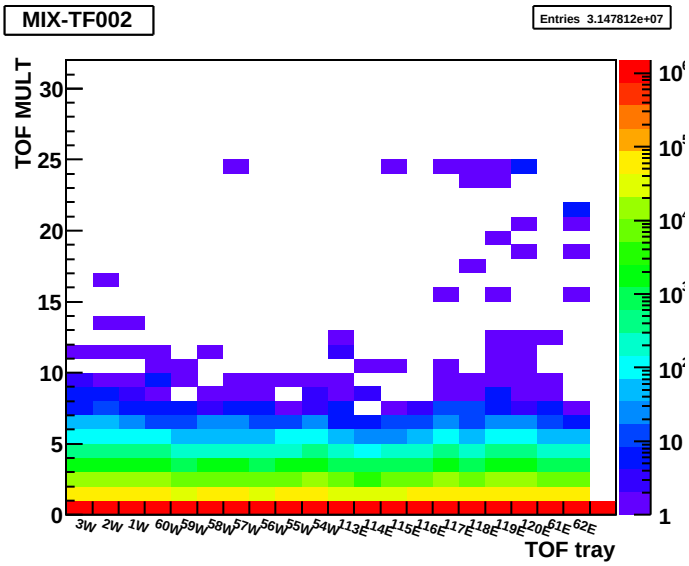

RAT board (ch4)
Entries 1.199166e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

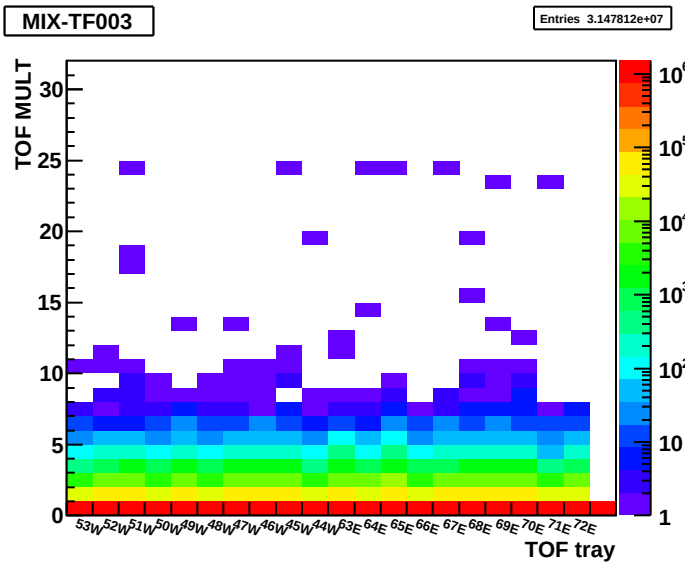

FP201 0-15 (ch5)
Entries 1.199166e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeRT
FPE

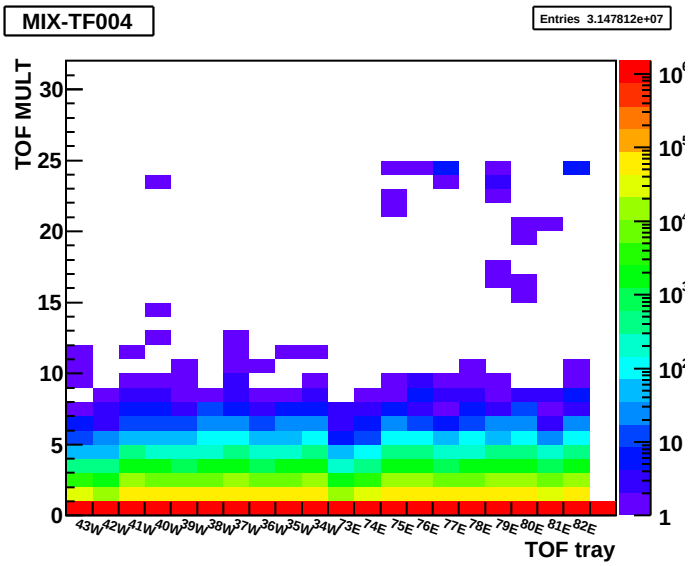

ST201 0-15 (ch6)
Entries 1.199166e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

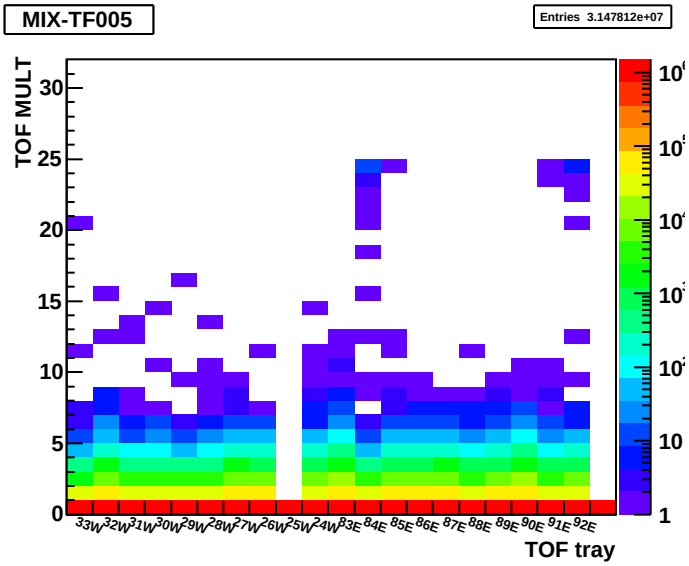

Unused (ch7)
Entries 1.199166e+07

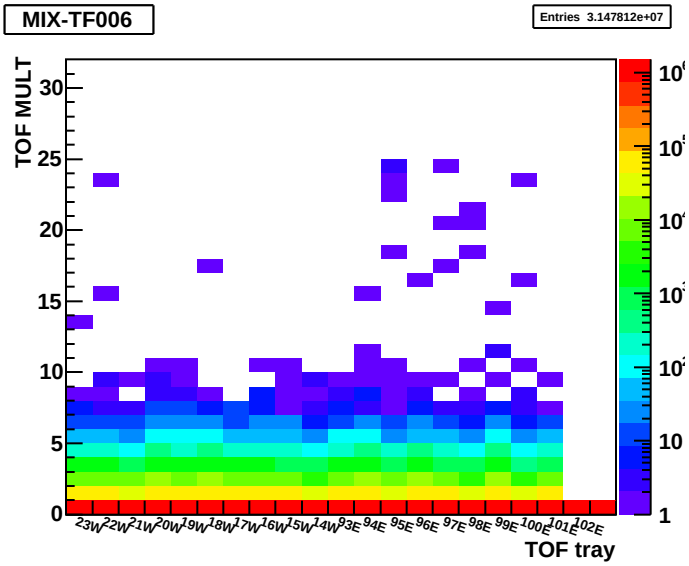

MIX-TF001
Entries 3.147812e+07
TOF MULT
TOF tray

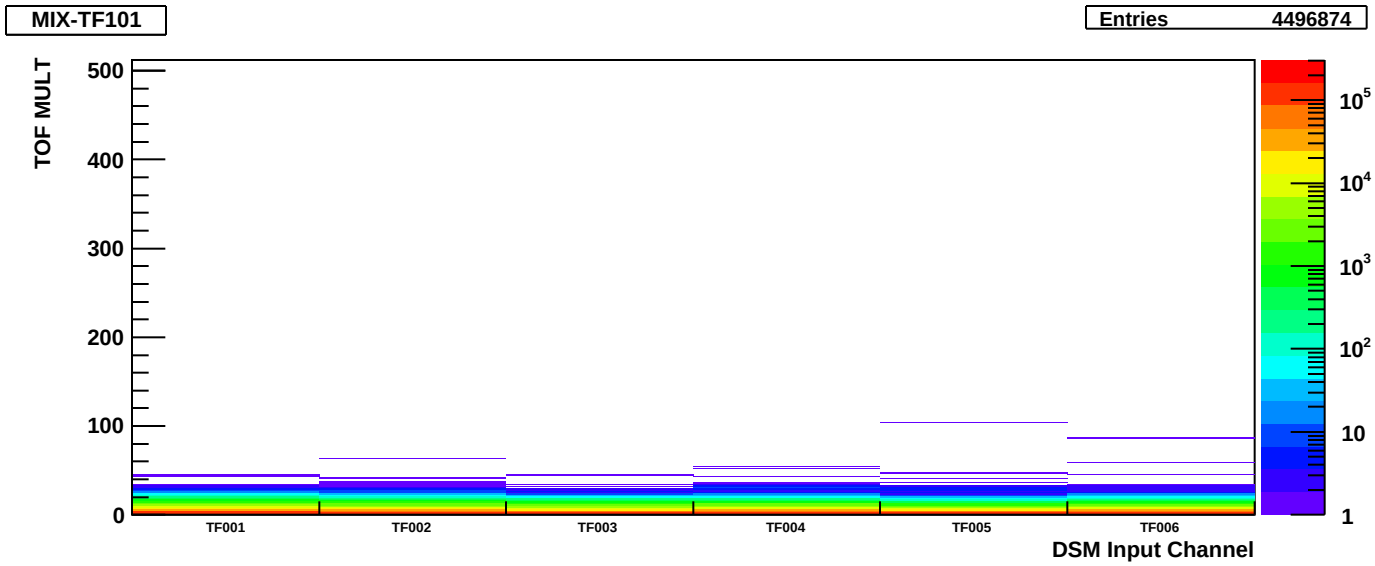

MIX-TF002
Entries 3.147812e+07
TOF MULT
TOF tray

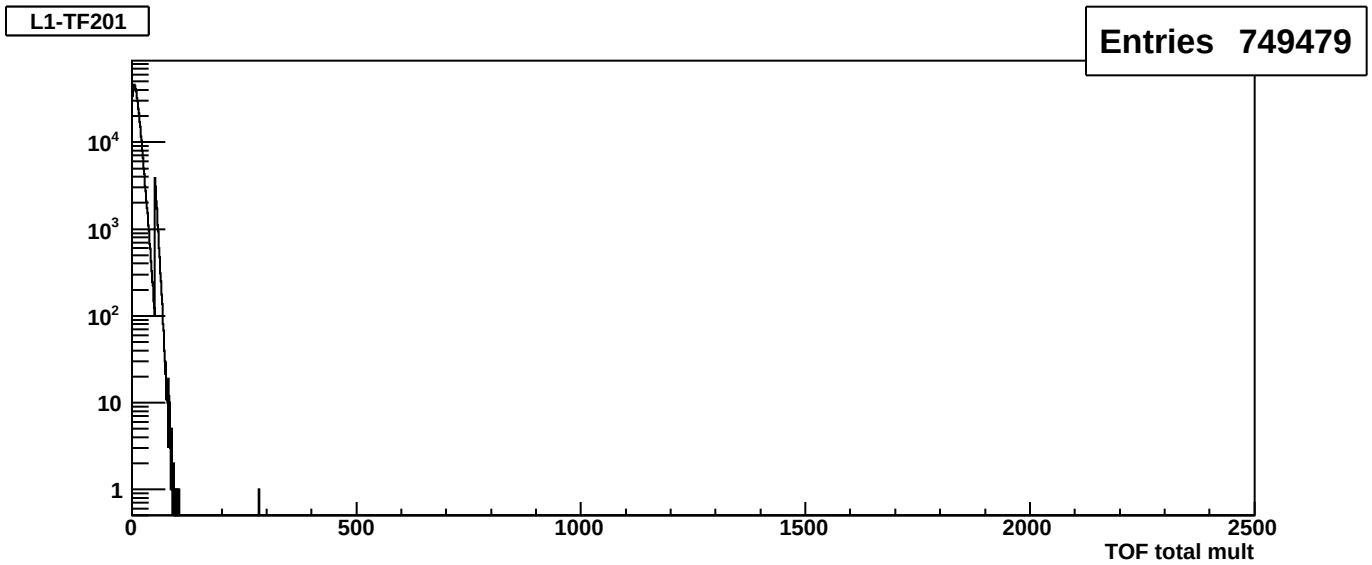

MIX-TF003
Entries 3.147812e+07
TOF MULT
TOF tray

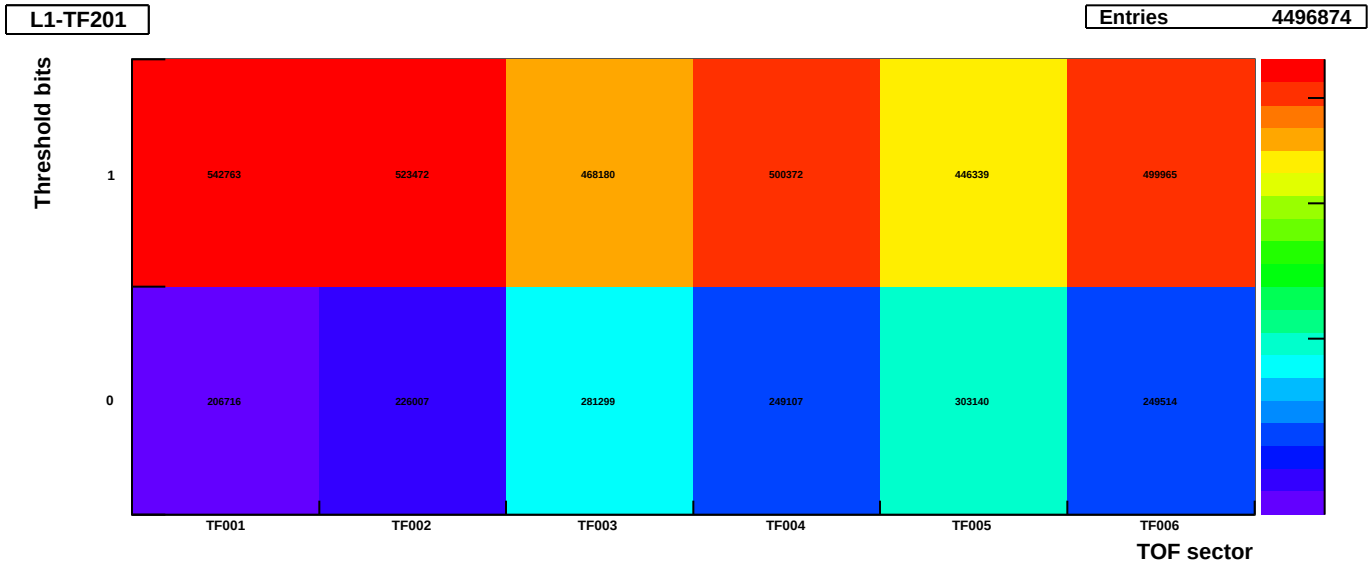

MIX-TF004
Entries 3.147812e+07
TOF MULT
TOF tray

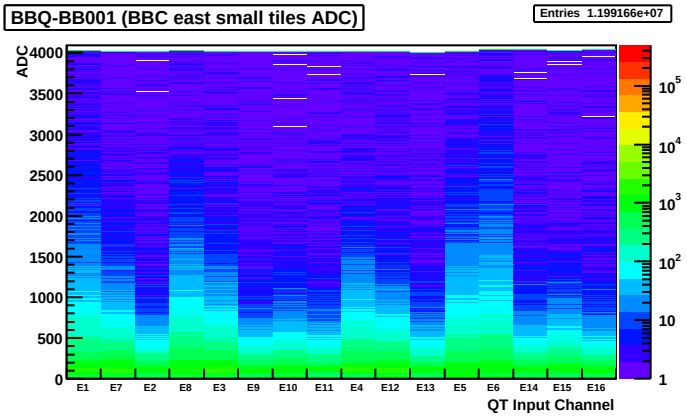

MIX-TF005
Entries 3.147812e+07
TOF MULT
TOF tray

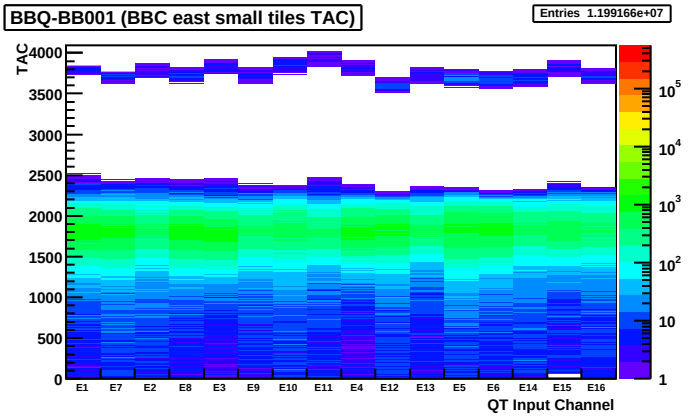

MIX-TF006
Entries 3.147812e+07
TOF MULT
TOF tray

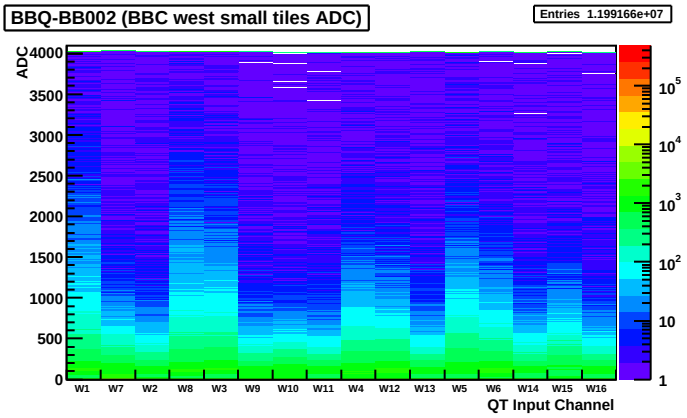

MIX-TF101
Entries 4496874
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

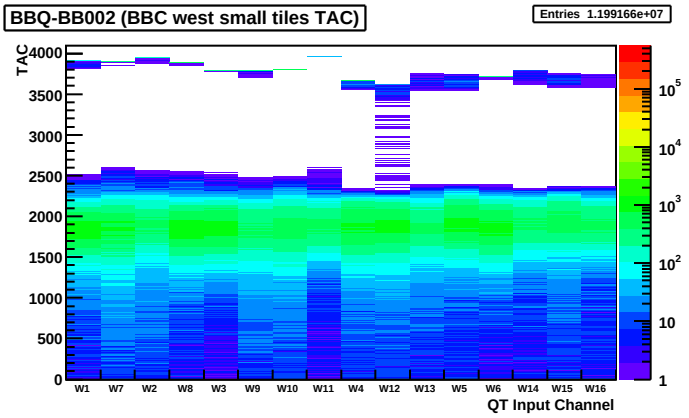

L1-TF201
Entries 749479
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

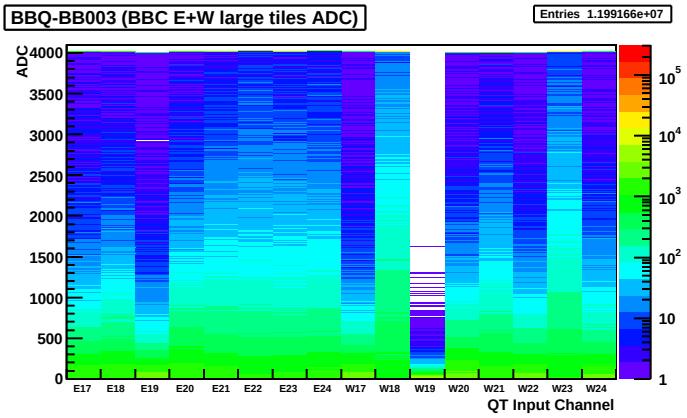

L1-TF201
Entries 4496874
Threshold bits
1
0
542763
523472
468180
500372
446339
499965
206716
226007
281299
249107
303140
249514
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

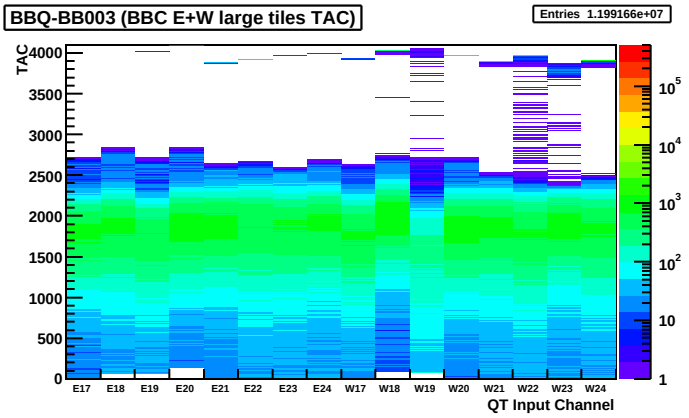

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.199166e+07
ADC
QT Input Channel

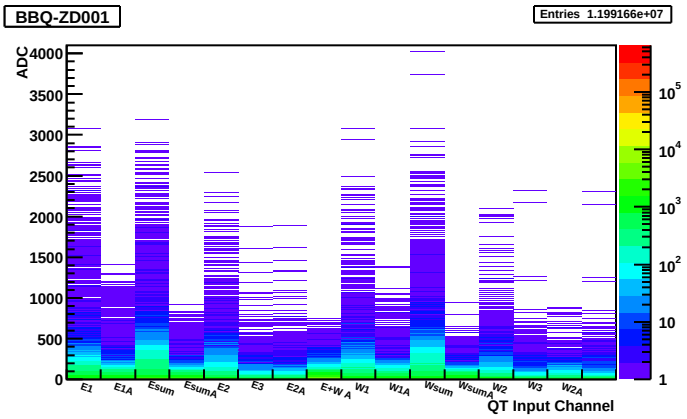

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.199166e+07
TAC
QT Input Channel

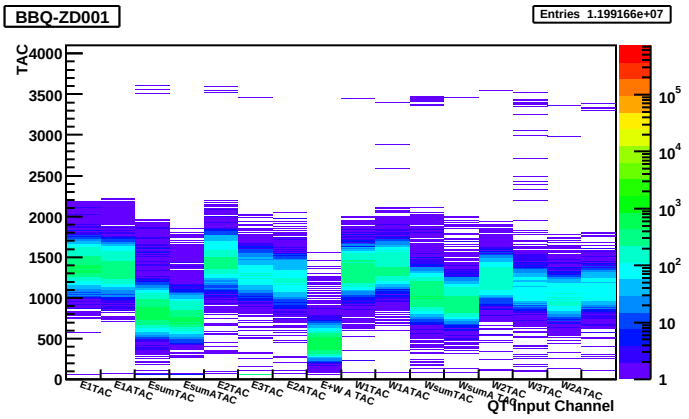

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.199166e+07
ADC
QT Input Channel

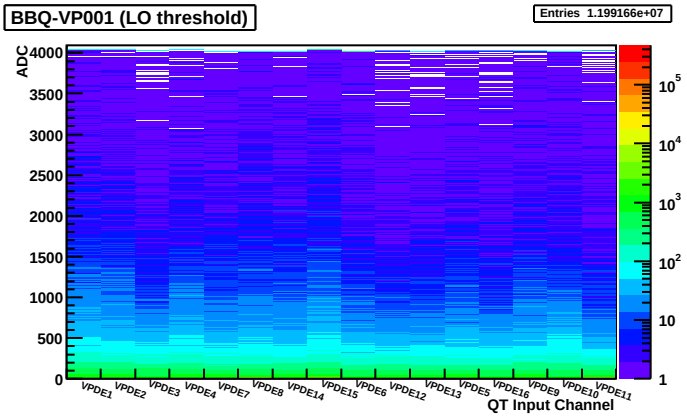

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.199166e+07
TAC
QT Input Channel

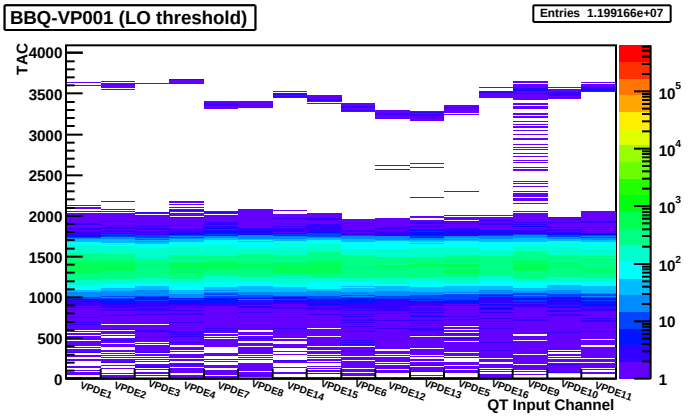

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.199166e+07
ADC
QT Input Channel

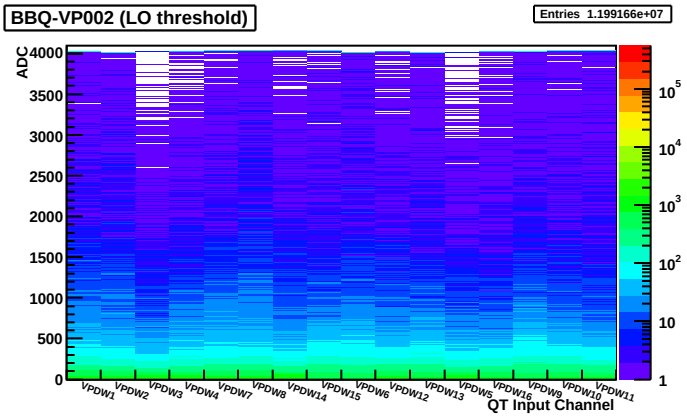

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.199166e+07
TAC
QT Input Channel

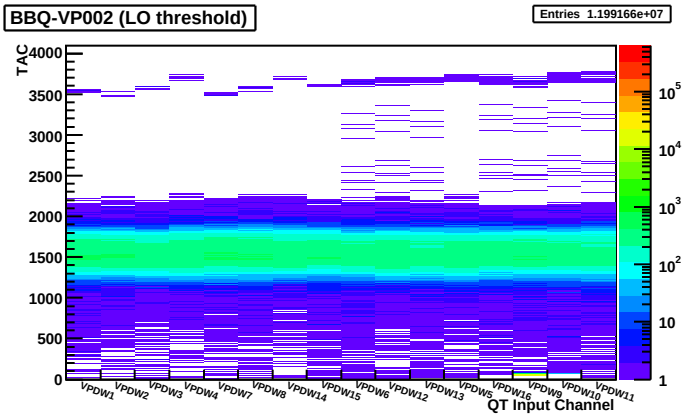

BBQ-ZD001
Entries 1.199166e+07
ADC
QT Input Channel

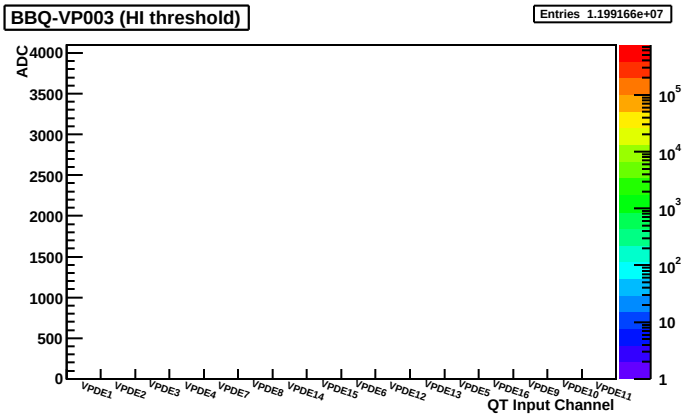

BBQ-ZD001
Entries 1.199166e+07
TAC
QT Input Channel

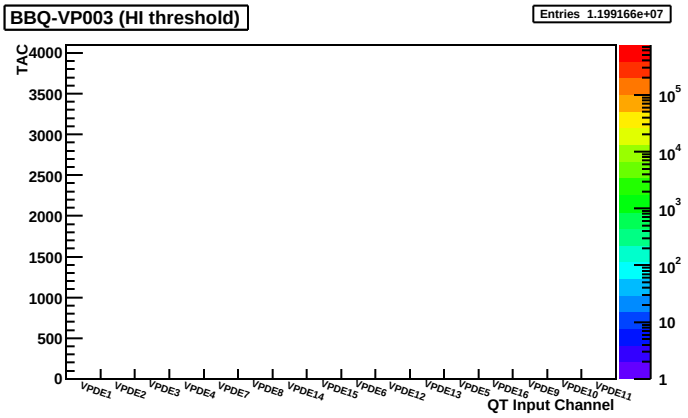

BBQ-VP001 (LO threshold)
Entries 1.199166e+07
ADC
QT Input Channel

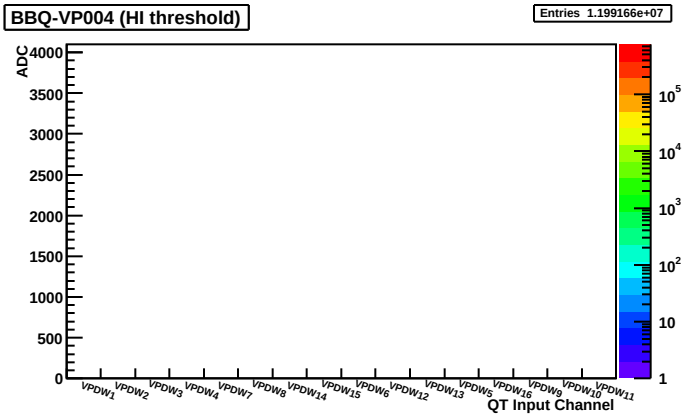

BBQ-VP001 (LO threshold)
Entries 1.199166e+07
TAC
QT Input Channel

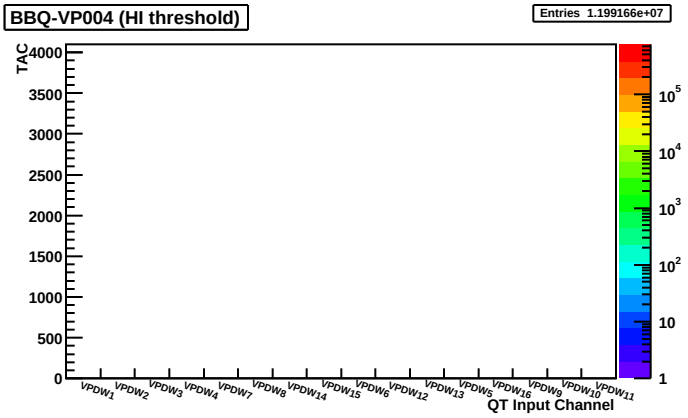

BBQ-VP002 (LO threshold)
Entries 1.199166e+07
ADC
QT Input Channel

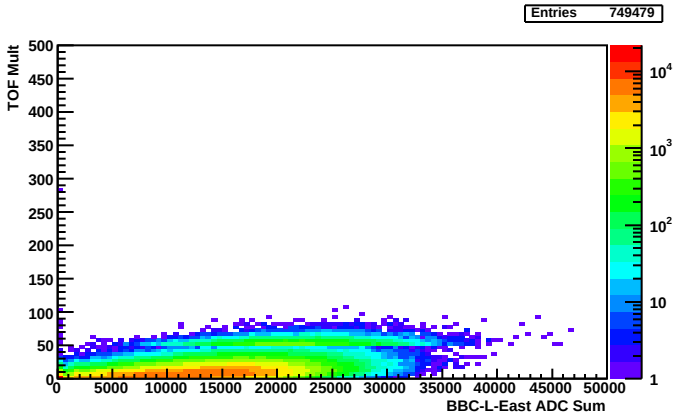

BBQ-VP002 (LO threshold)
Entries 1.199166e+07
TAC
QT Input Channel

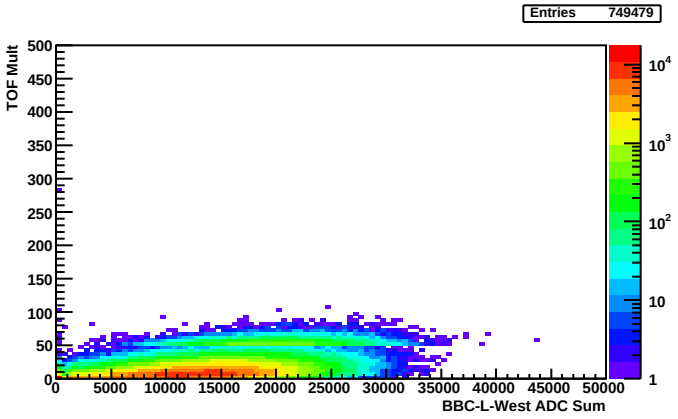

BBQ-VP003 (HI threshold)
Entries 1.199166e+07
ADC
QT Input Channel

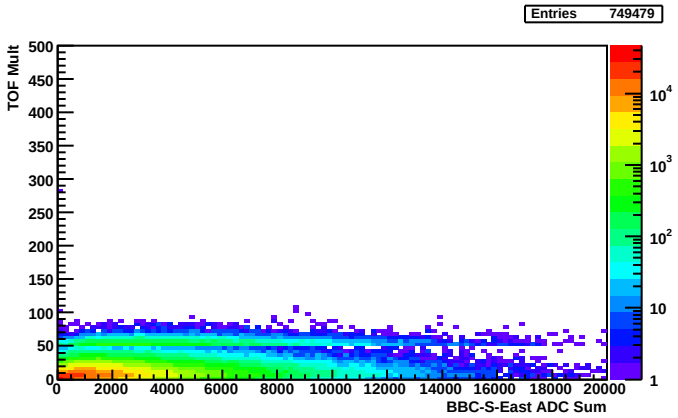

BBQ-VP003 (HI threshold)
Entries 1.199166e+07
TAC
QT Input Channel

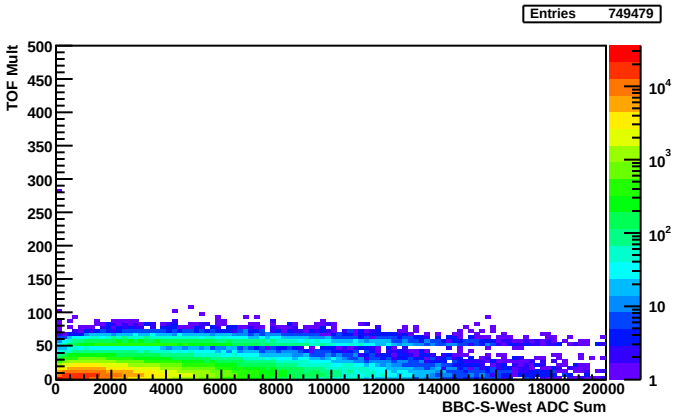

BBQ-VP004 (HI threshold)
Entries 1.199166e+07
ADC
QT Input Channel

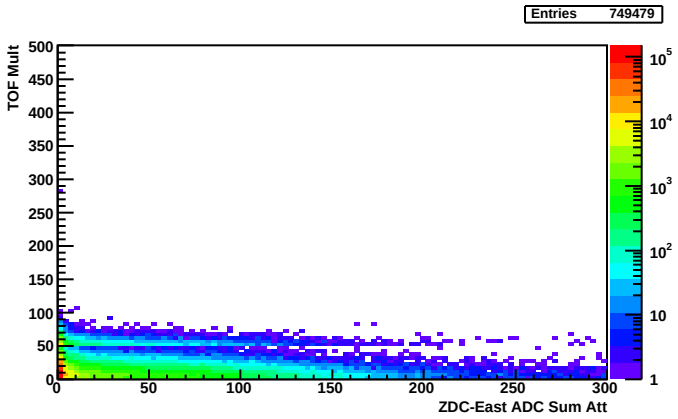

BBQ-VP004 (HI threshold)
Entries 1.199166e+07
TAC
QT Input Channel

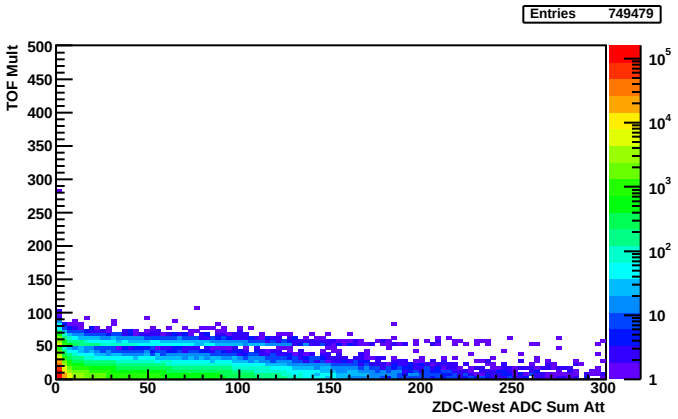

Entries 749479
TOF Mult
BBC-L-East ADC Sum

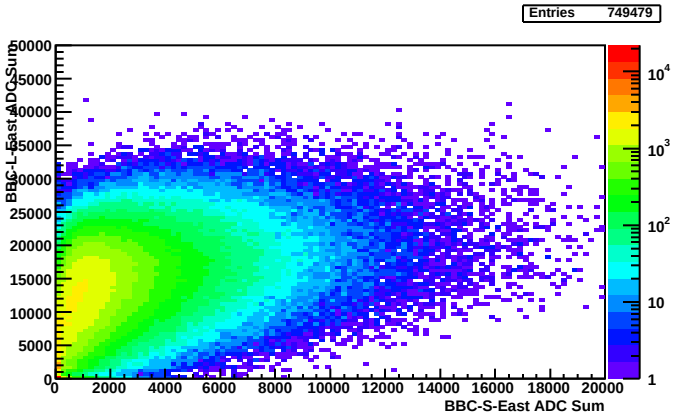

Entries 749479
TOF Mult
BBC-L-West ADC Sum

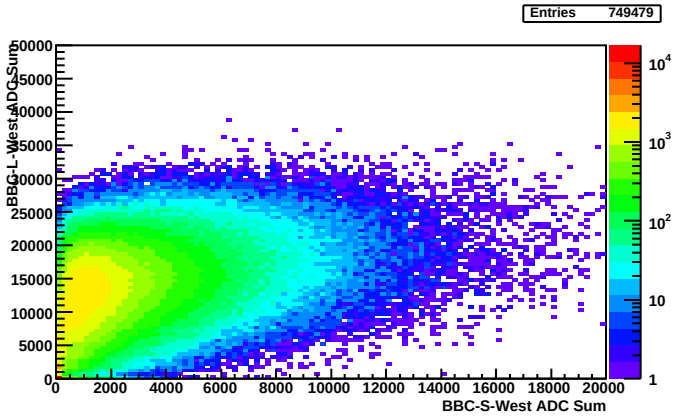

Entries 749479
TOF Mult
BBC-S-East ADC Sum

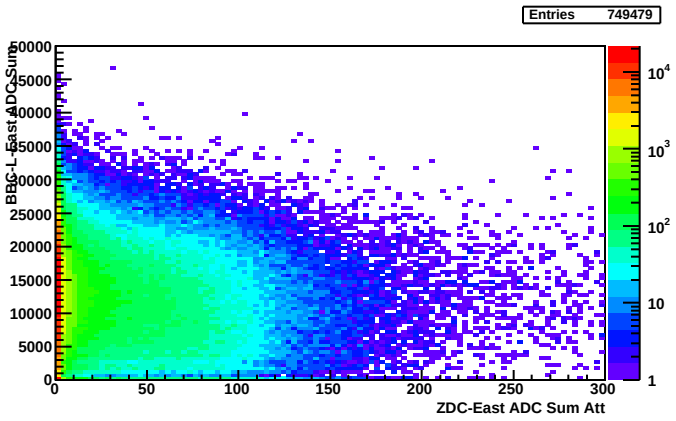

Entries 749479
TOF Mult
BBC-S-West ADC Sum

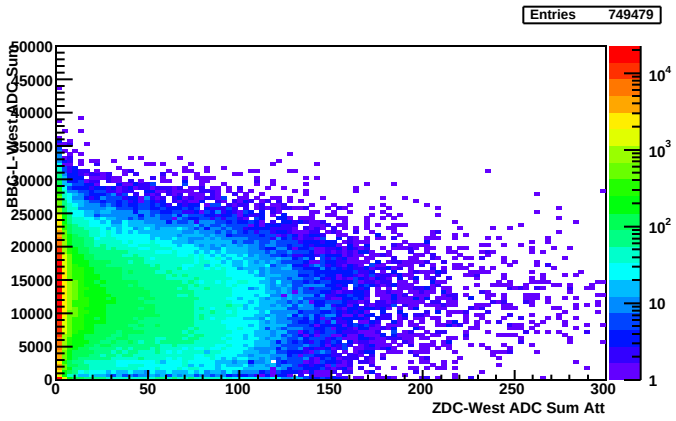

Entries 749479
TOF Mult
ZDC-East ADC Sum Att

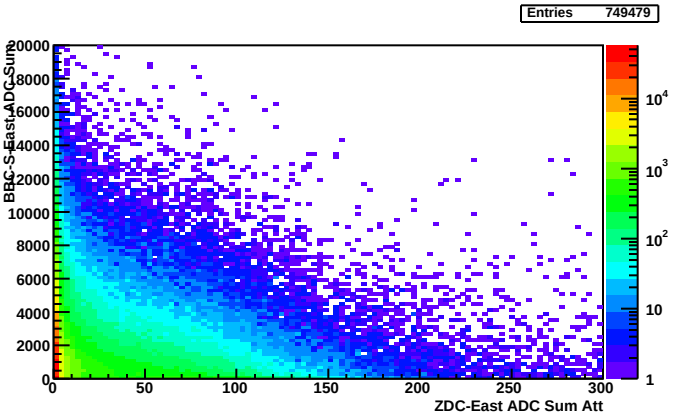

Entries 749479
TOF Mult
ZDC-West ADC Sum Att

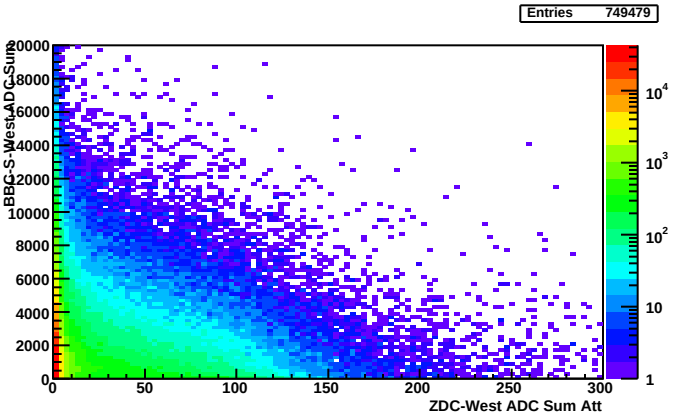

Entries 749479
BBC-L-East ADC Sum
BBC-S-East ADC Sum

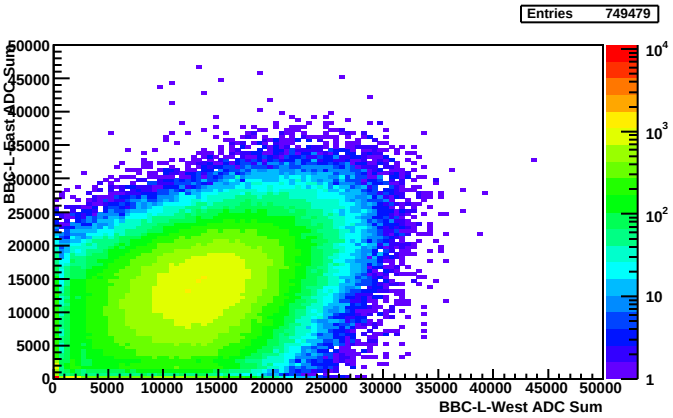

Entries 749479
BBC-L-West ADC Sum
BBC-S-West ADC Sum

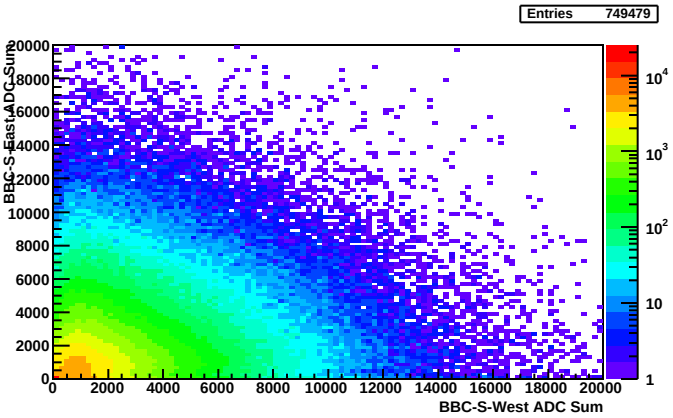

Entries 749479
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

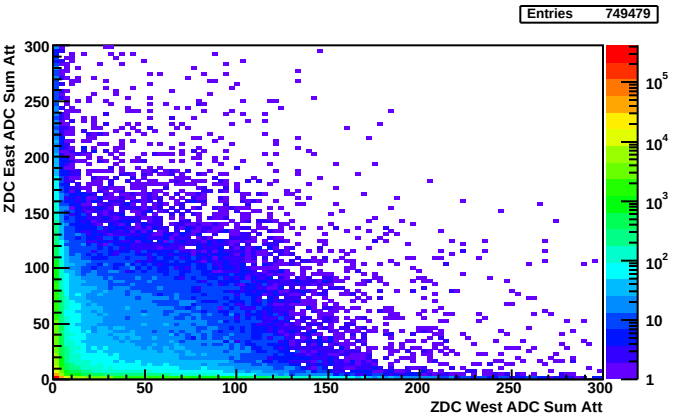

Entries 749479
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

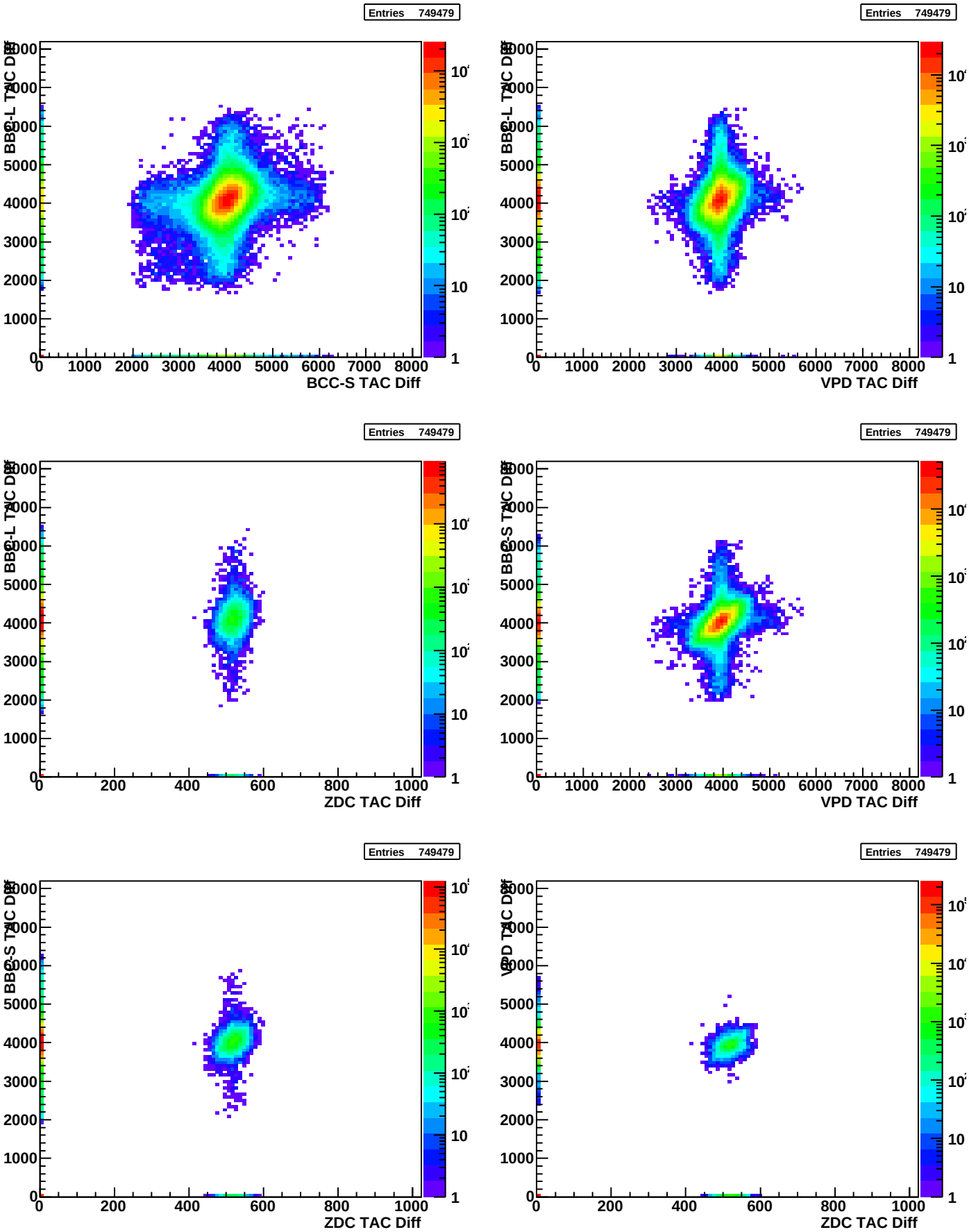

Entries 749479
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

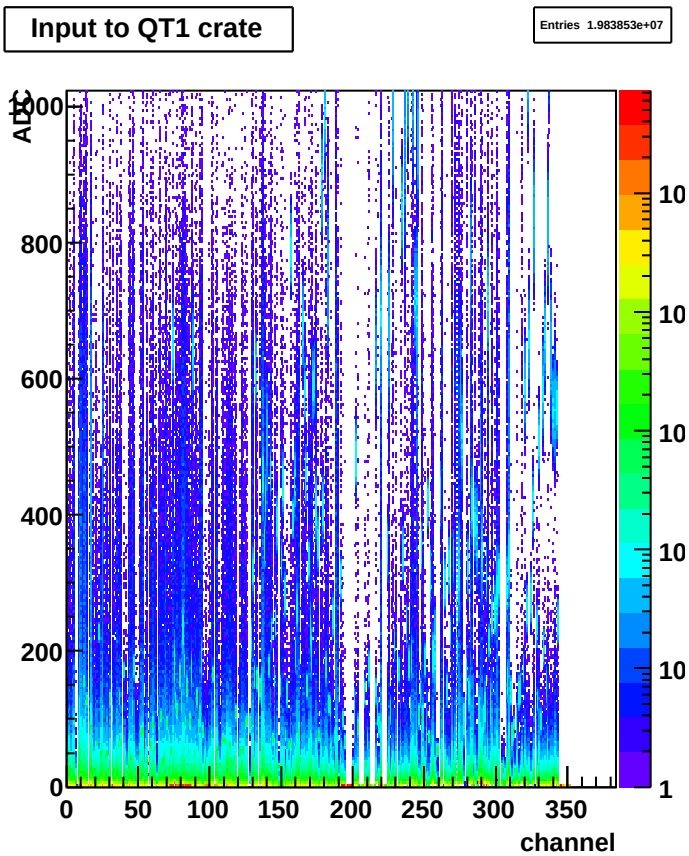

Entries 749479
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

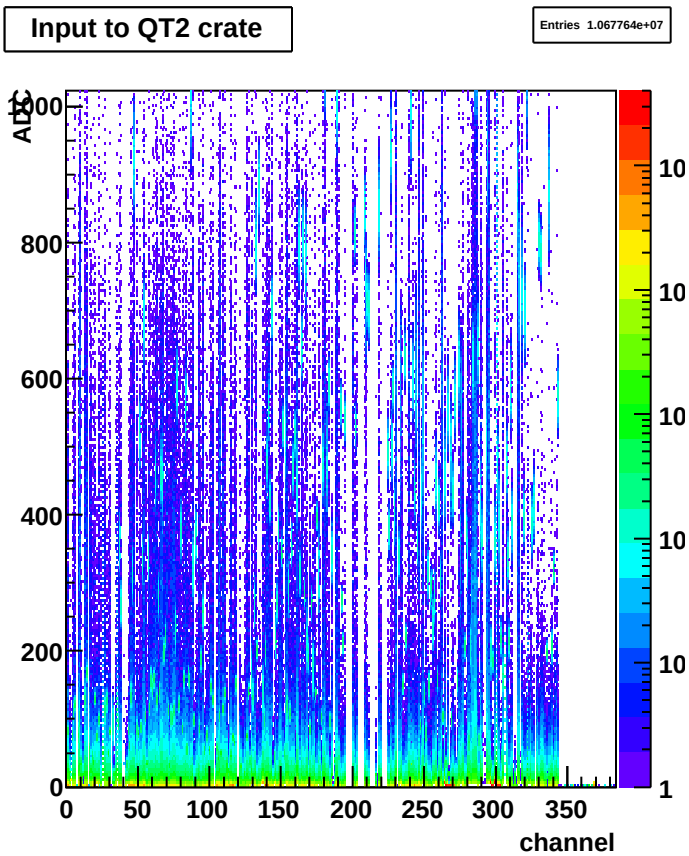

Entries 749479
BBC-L-East ADC Sum
BBC-L-West ADC Sum

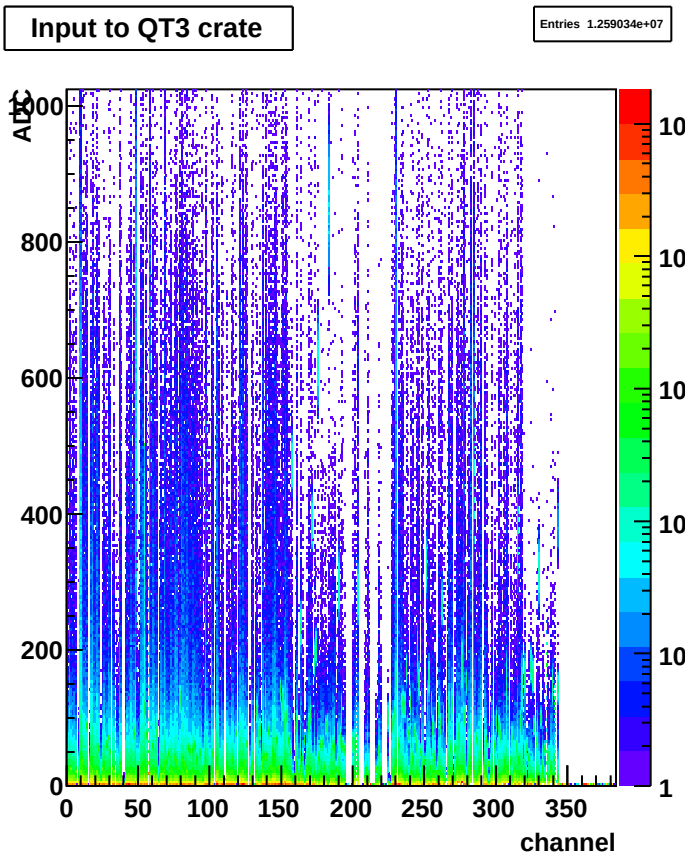

Entries 749479
BBC-S-East ADC Sum
BBC-S-West ADC Sum

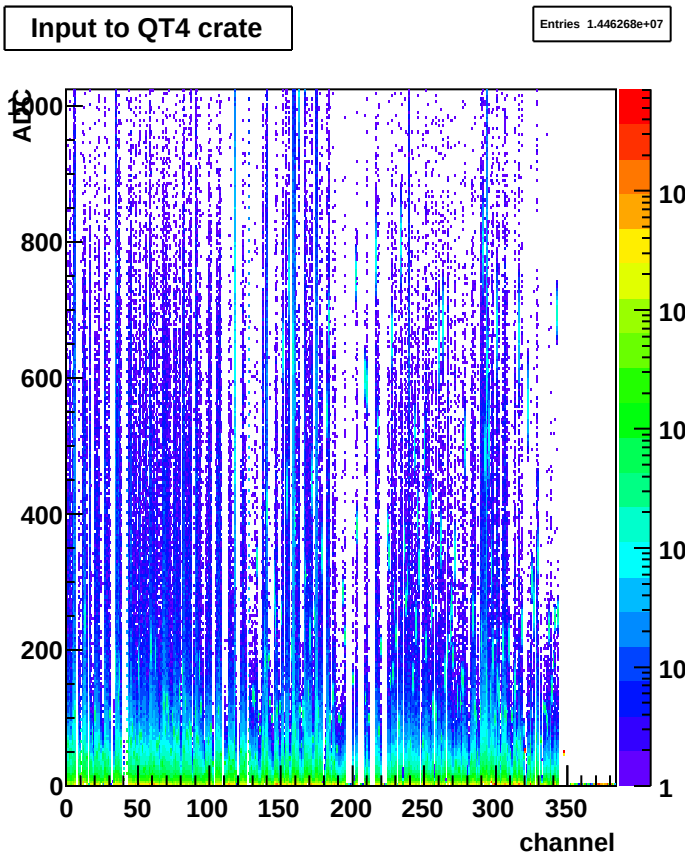

Entries 749479
ZDC East ADC Sum Att
ZDC West ADC Sum Att

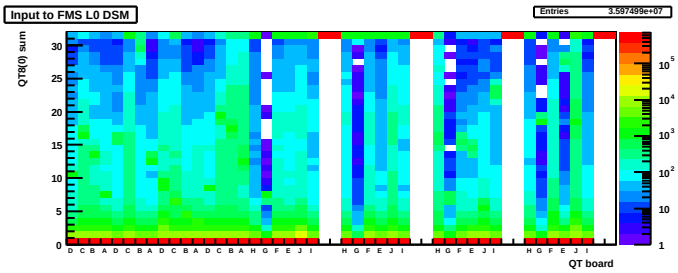

Entries 749479
BBC-L TAC Diff
BCC-S TAC Diff
Entries 749479
BBC-L TAC Diff
VPD TAC Diff
Entries 749479
BBC-L TAC Diff
ZDC TAC Diff
Entries 749479
BBC-S TAC Diff
VPD TAC Diff
Entries 749479
BBC-S TAC Diff
ZDC TAC Diff
Entries 749479
VPD TAC Diff
ZDC TAC Diff

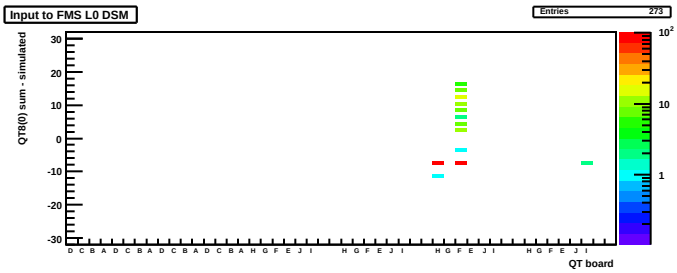

Input to QT1 crate
Entries 1.983853e+07
ADC
channel

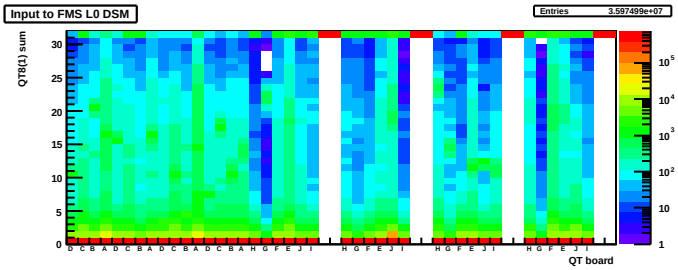

Input to QT2 crate
Entries 1.067764e+07
ADC
channel

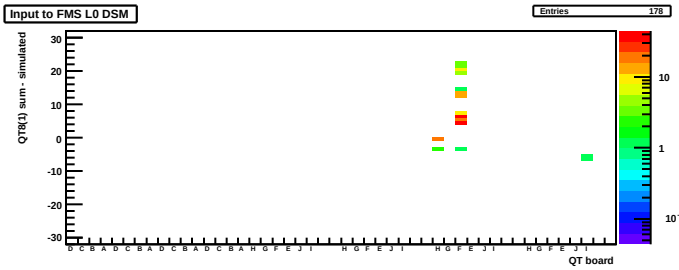

Input to QT3 crate
Entries 1.259034e+07
ADC
channel

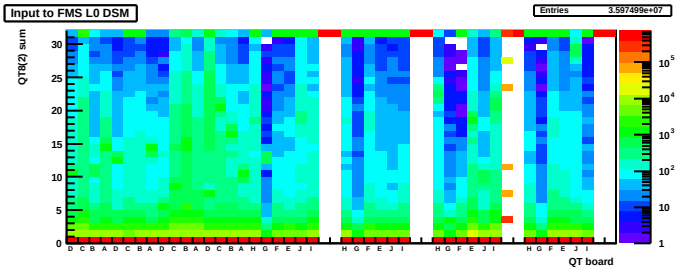

Input to QT4 crate
Entries 1.446268e+07
ADC
channel

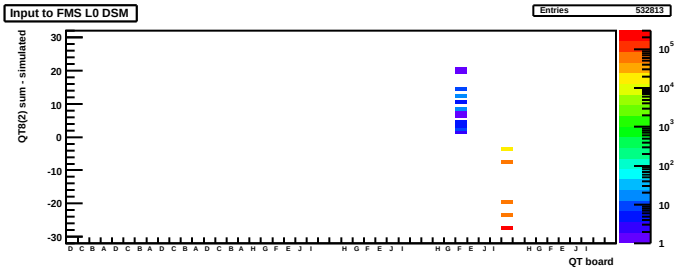

Input to FMS L0 DSM
Entries 3.597499e+07
QT8(0) sum
QT board

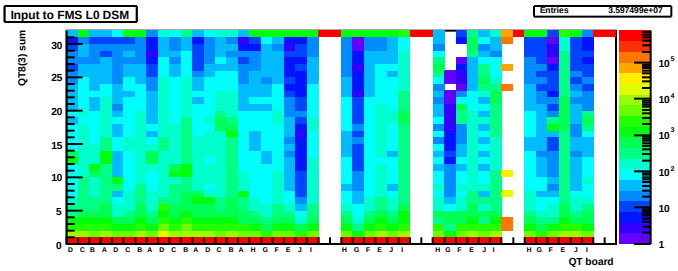

Input to FMS L0 DSM
Entries 273
QT8(0) sum - simulated
QT board

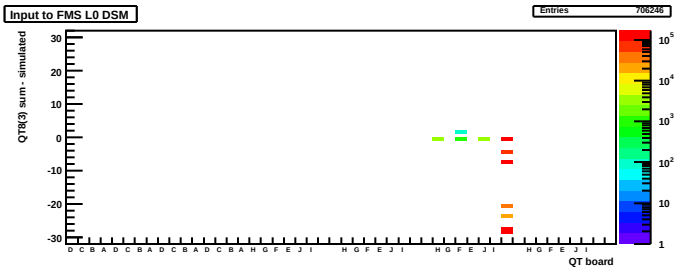

Input to FMS L0 DSM
Entries 3.597499e+07
QT8(1) sum
QT board

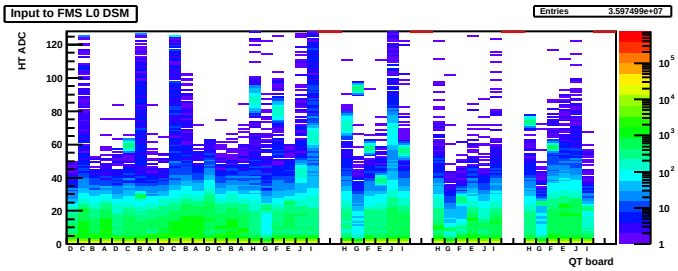

Input to FMS L0 DSM
Entries 178
QT8(1) sum - simulated
QT board

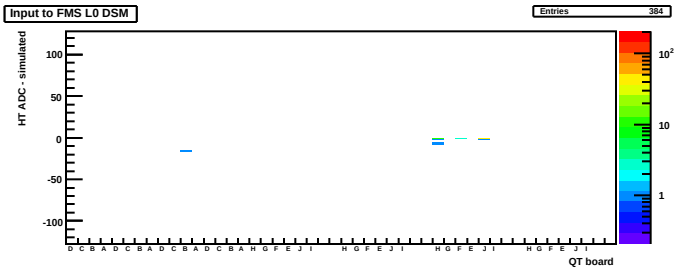

Input to FMS L0 DSM
Entries 3.597499e+07
QT8(2) sum
QT board

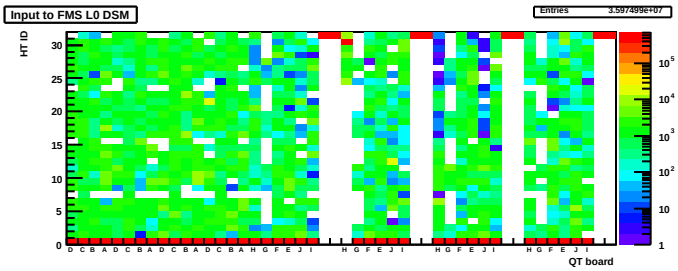

Input to FMS L0 DSM
Entries 532813
QT8(2) sum - simulated
QT board

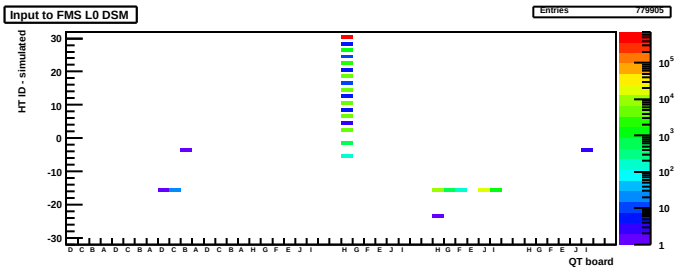

Input to FMS L0 DSM
Entries 3.597499e+07
QT8(3) sum
QT board

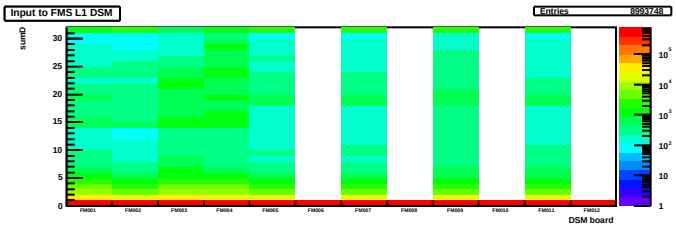

Input to FMS L0 DSM
Entries 706246
QT8(3) sum - simulated
QT board

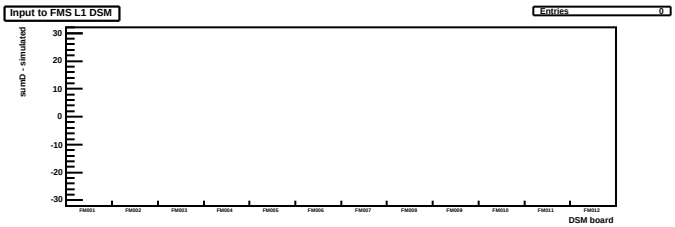

Input to FMS L0 DSM
Entries 3.597499e+07
HT ADC
QT board

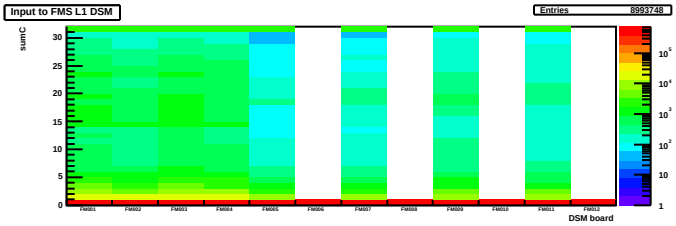

Input to FMS L0 DSM
Entries 384
HT ADC - simulated
QT board

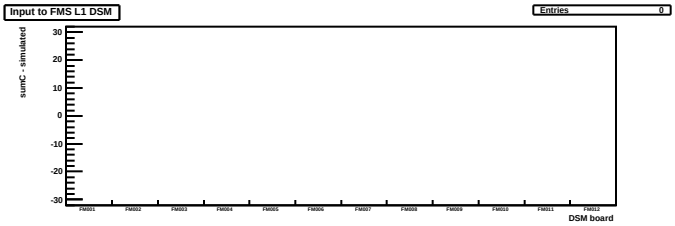

Input to FMS L0 DSM
Entries 3.597499e+07
HT ID
QT board

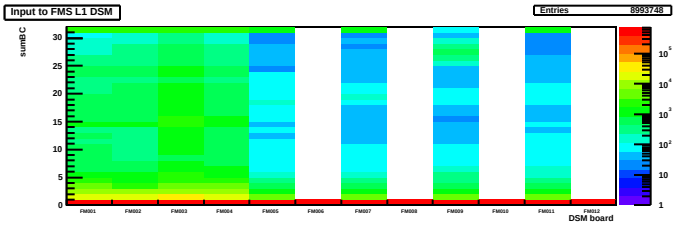

Input to FMS L0 DSM
Entries 779905
HT ID - simulated
QT board

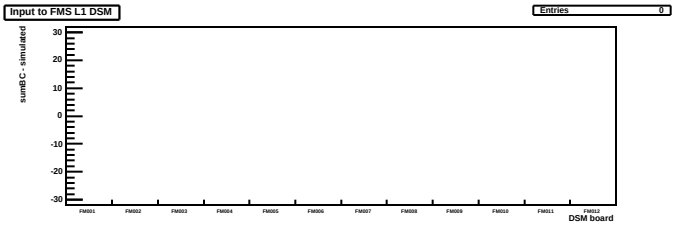

Input to FMS L1 DSM
Entries 8993748
sumD
DSM board

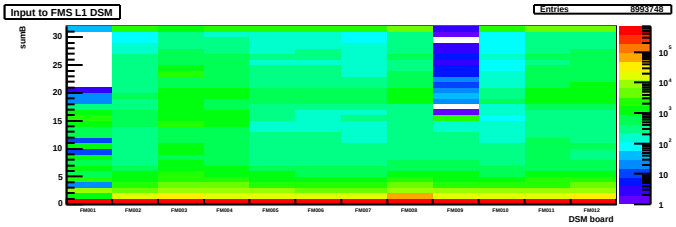

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

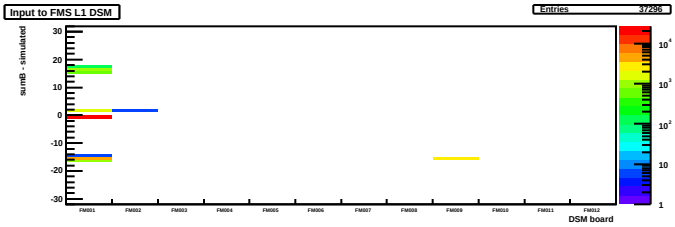

Input to FMS L1 DSM
Entries 8993748
sumC
DSM board

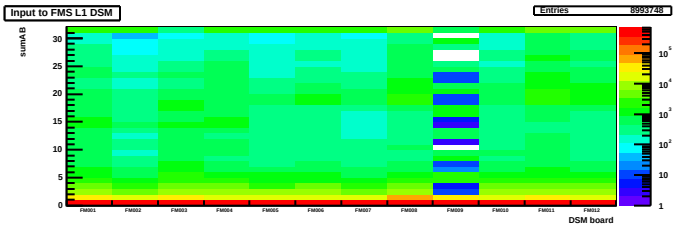

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

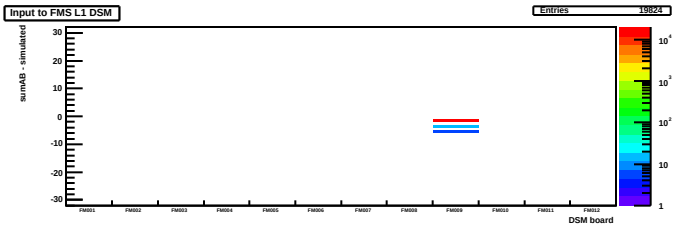

Input to FMS L1 DSM
Entries 8993748
sumBC
DSM board

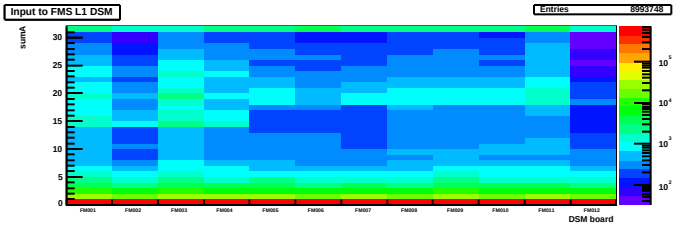

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

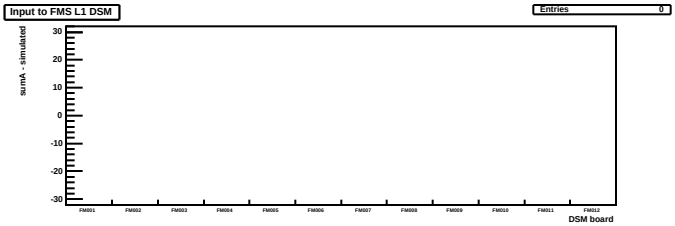

Input to FMS L1 DSM
Entries 8993748
sumB
DSM board

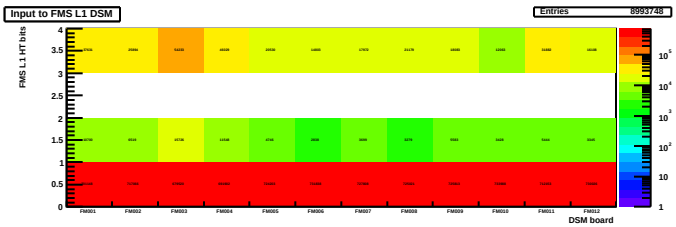

Input to FMS L1 DSM
Entries 37296
sumB - simulated
DSM board

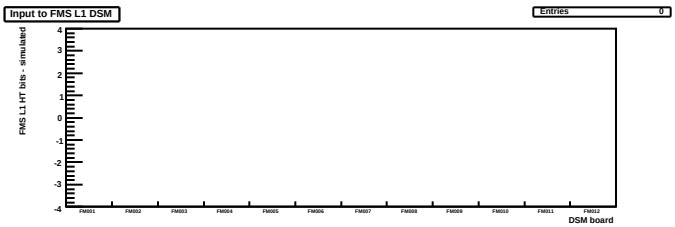

Input to FMS L1 DSM
Entries 8993748
sumAB
DSM board

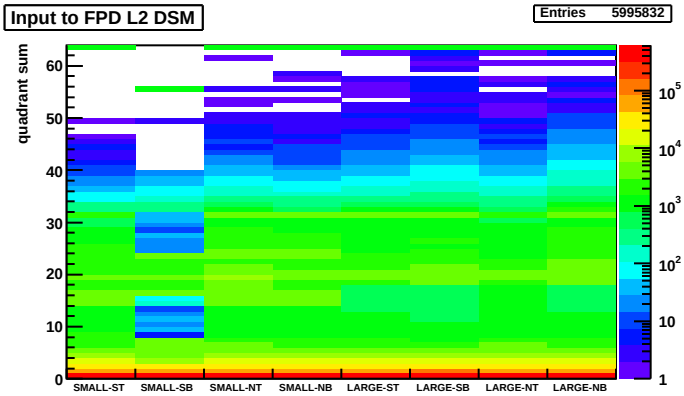

Input to FMS L1 DSM
Entries 19824
sumAB - simulated
DSM board

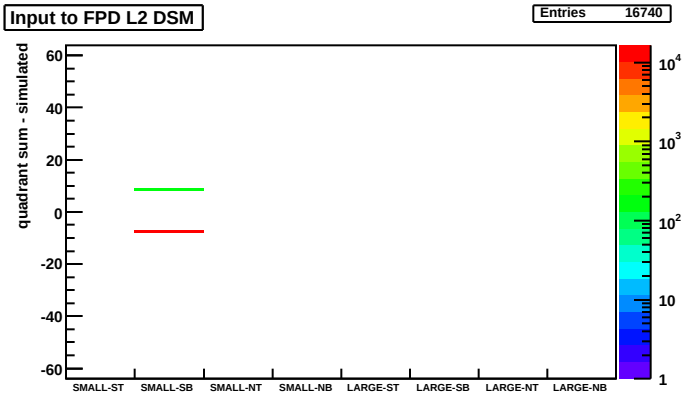

Input to FMS L1 DSM
Entries 8993748
sumA
DSM board

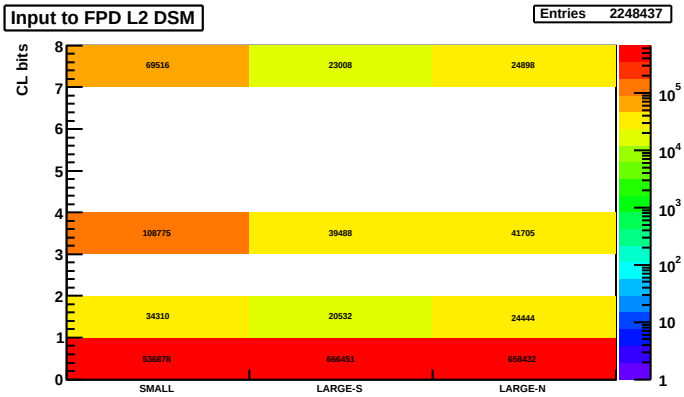

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

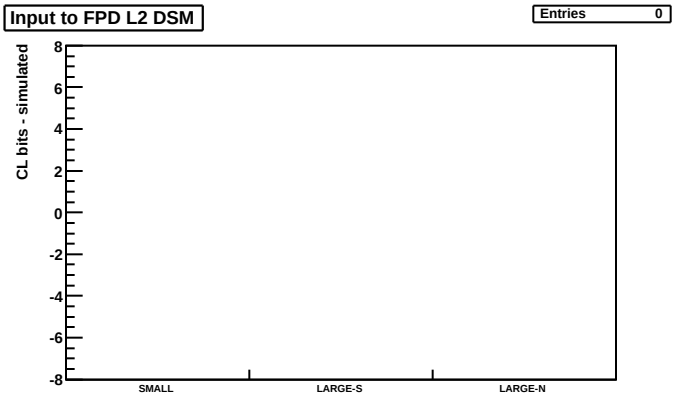

Input to FMS L1 DSM
Entries 8993748
FMS L1 HT bits
DSM board

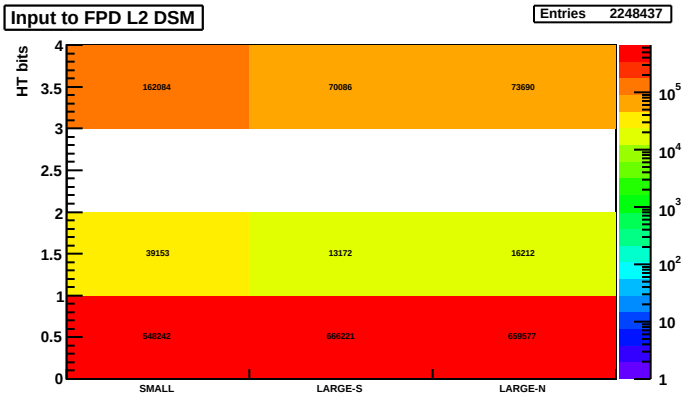

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

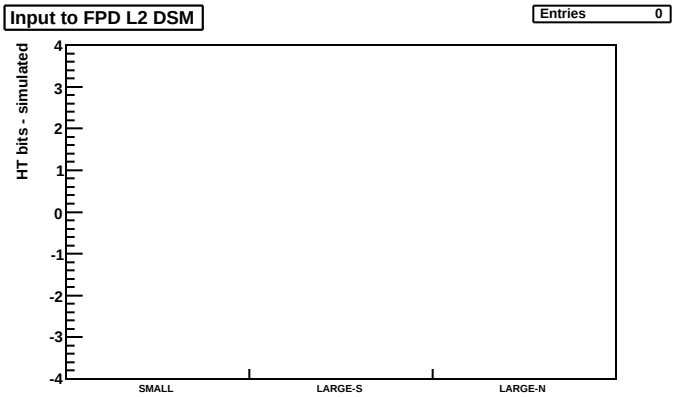

Input to FPD L2 DSM
Entries 5995832
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

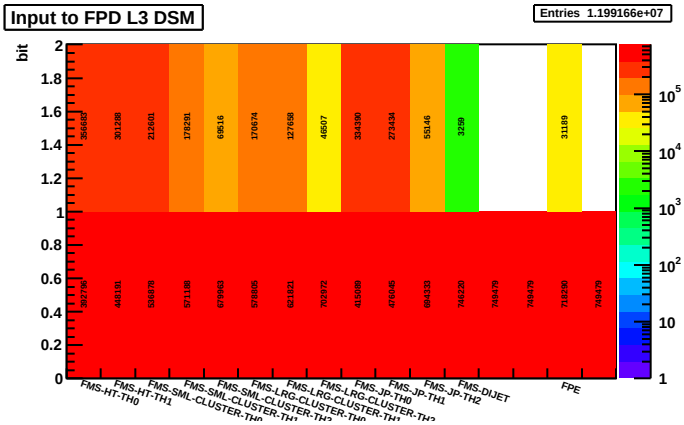

Input to FPD L2 DSM
Entries 16740
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

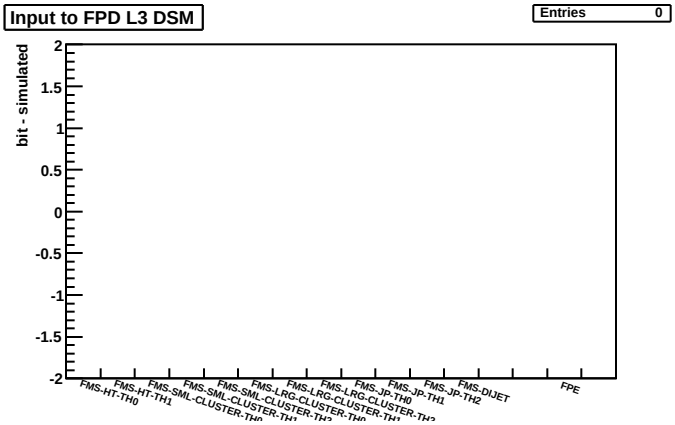

Input to FPD L2 DSM
Entries 2248437
CL bits
69516
23008
24898
108775
39488
41705
34310
20532
24444
536878
666451
658432
SMALL
LARGE-S
LARGE-N

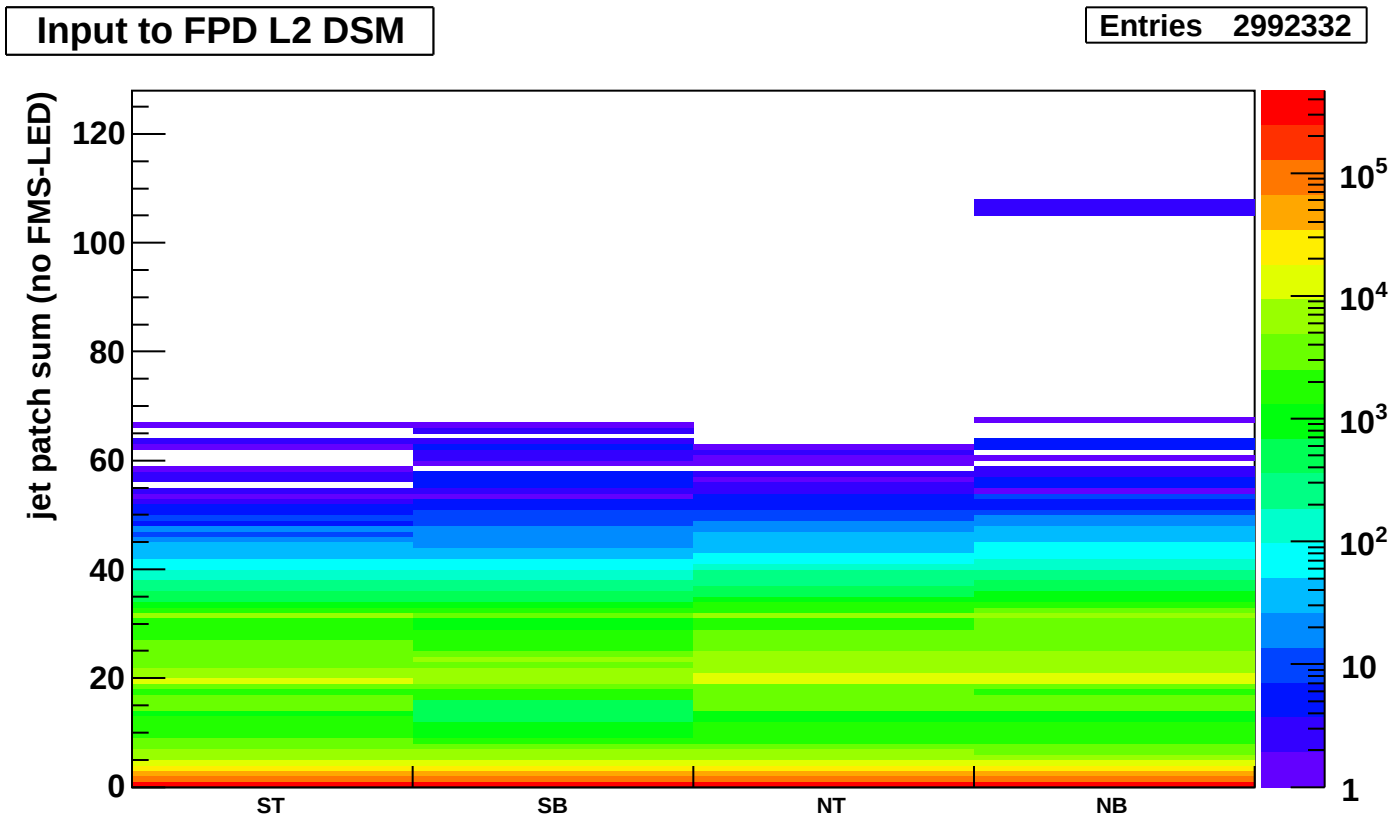

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

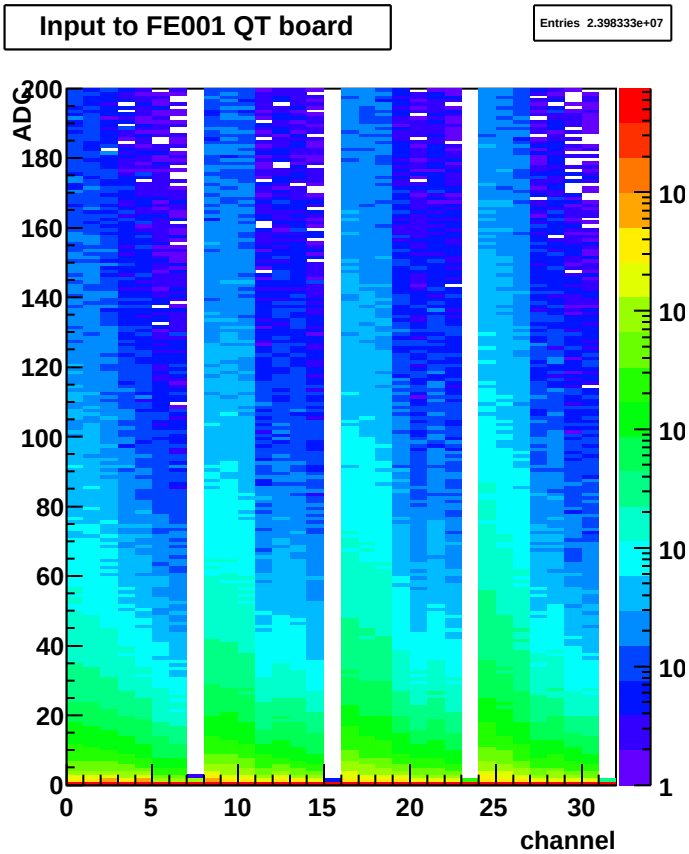

Input to FPD L2 DSM
Entries 2248437
HT bits
162084
70086
73690
39153
13172
16212
548242
666221
659577
SMALL
LARGE-S
LARGE-N

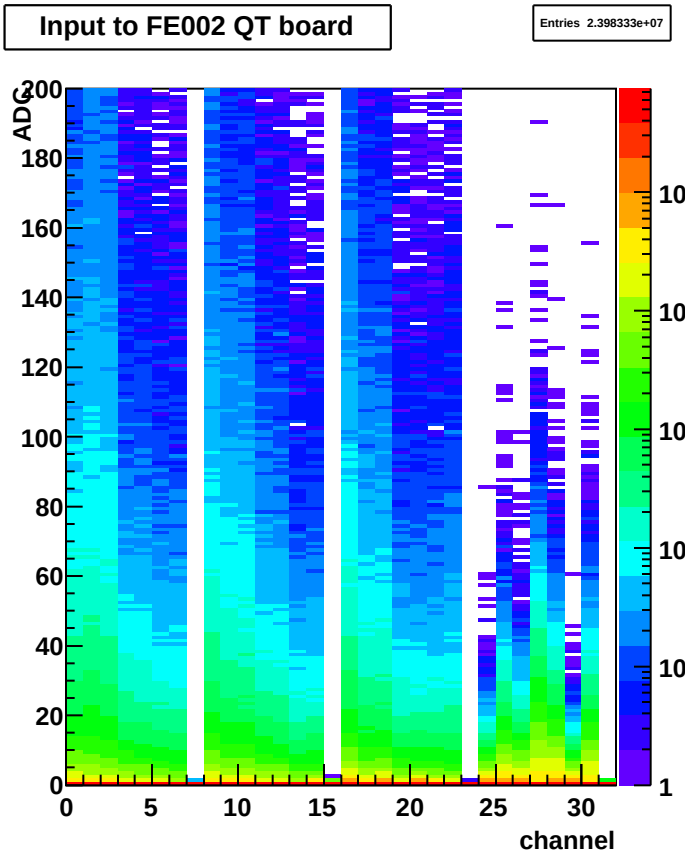

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

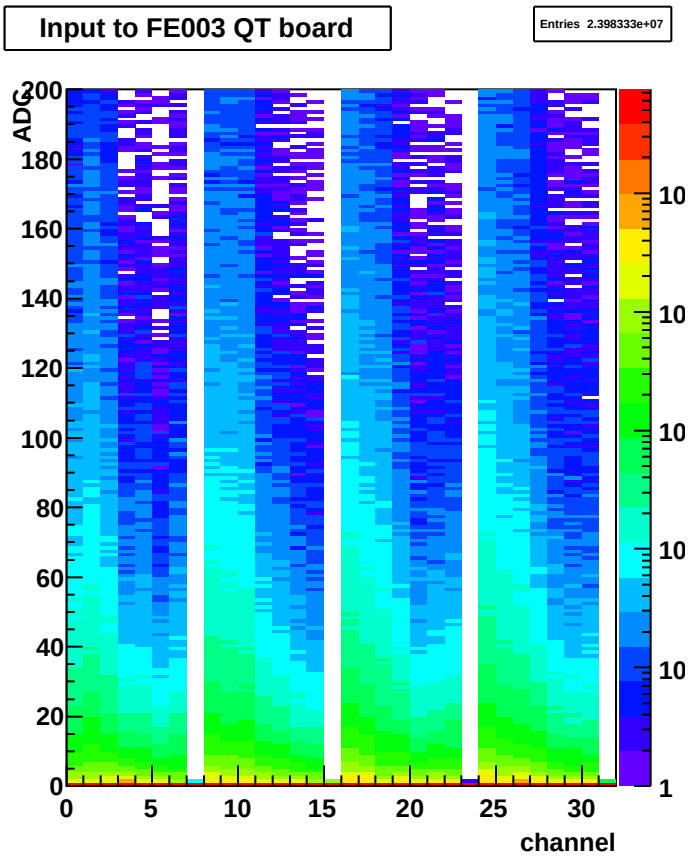

Input to FPD L3 DSM
Entries 1.199166e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

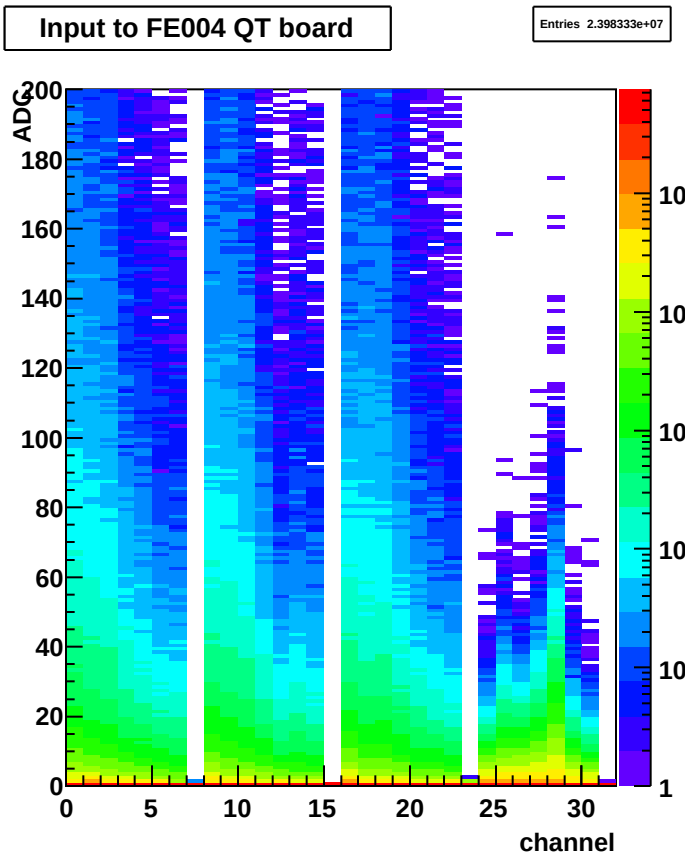

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

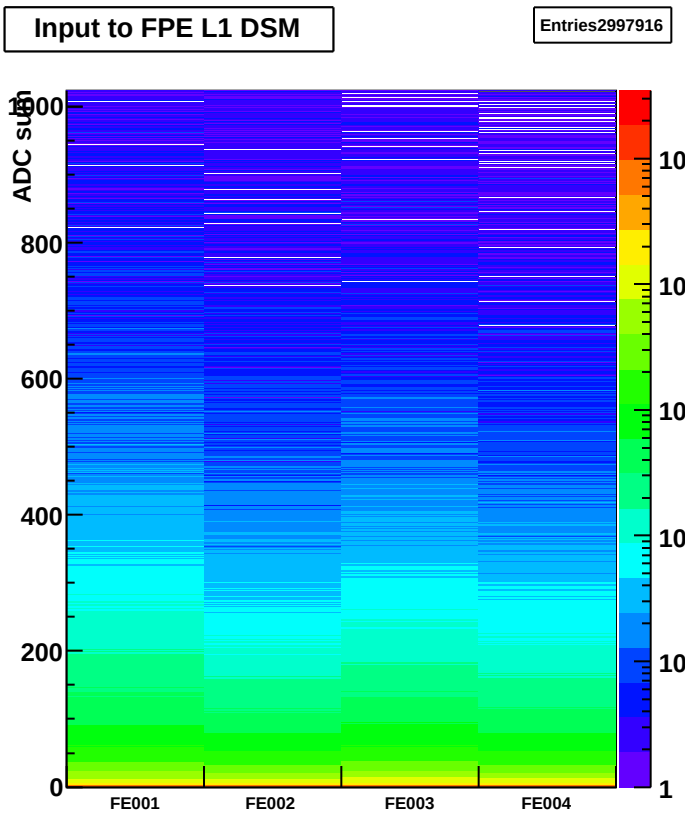

Input to FPD L2 DSM
Entries 2992332
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

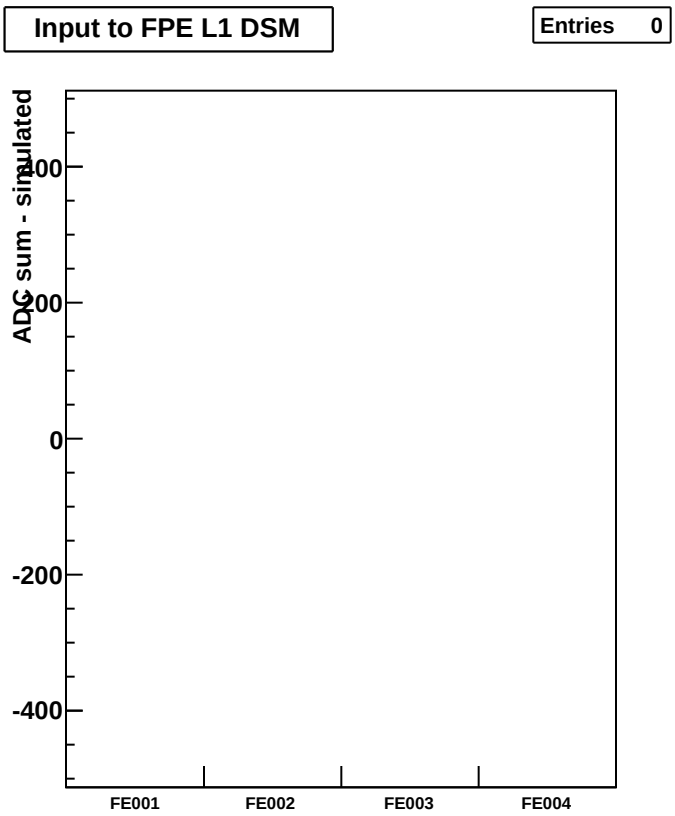

Input to FE001 QT board
Entries 2.398333e+07
ADC
channel

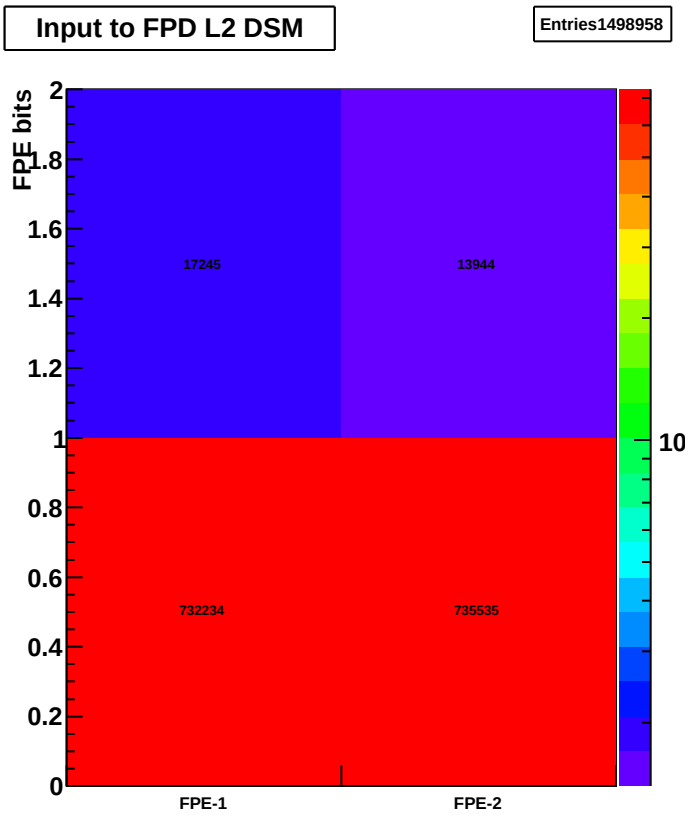

Input to FE002 QT board
Entries 2.398333e+07
ADC
channel

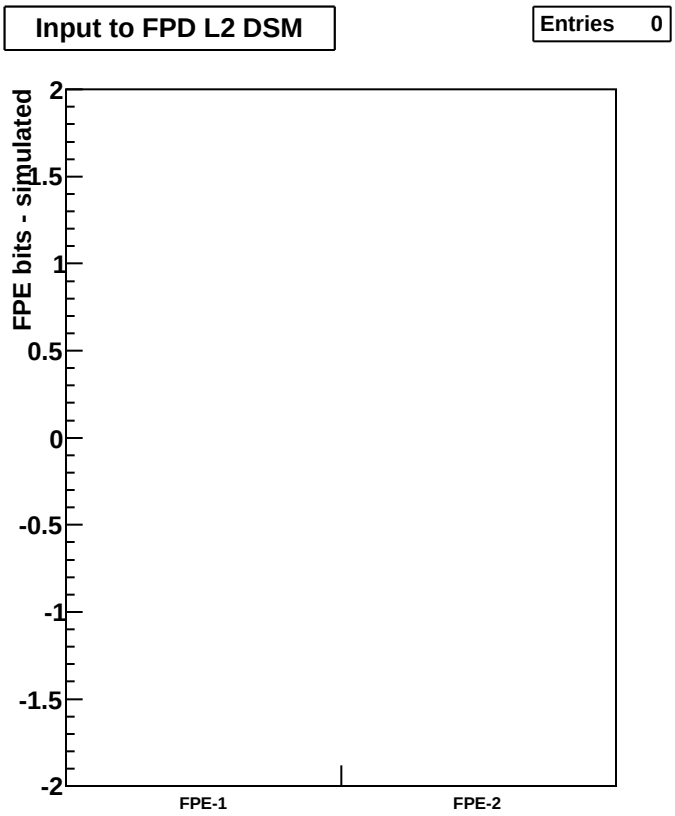

Input to FE003 QT board
Entries 2.398333e+07
ADC
channel


Input to FE004 QT board
Entries 2.398333e+07
ADC
channel


Input to FPE L1 DSM
Entries2997916
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
Entries1498958
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
17245
13944
732234
735535
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