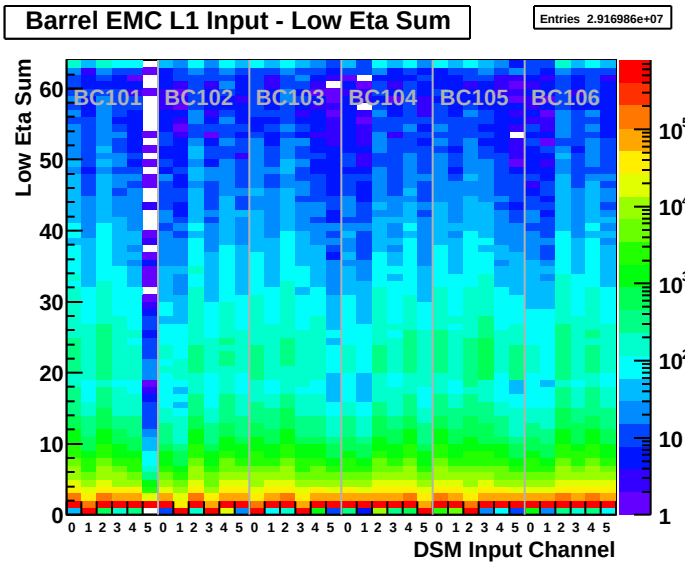
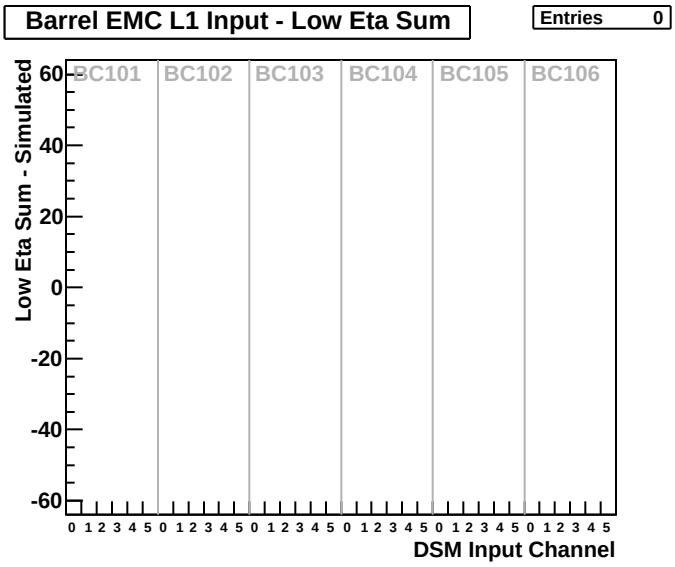
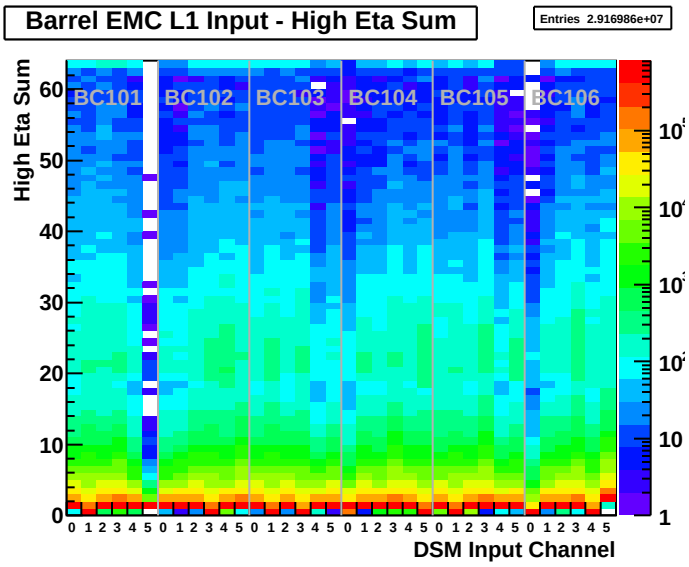
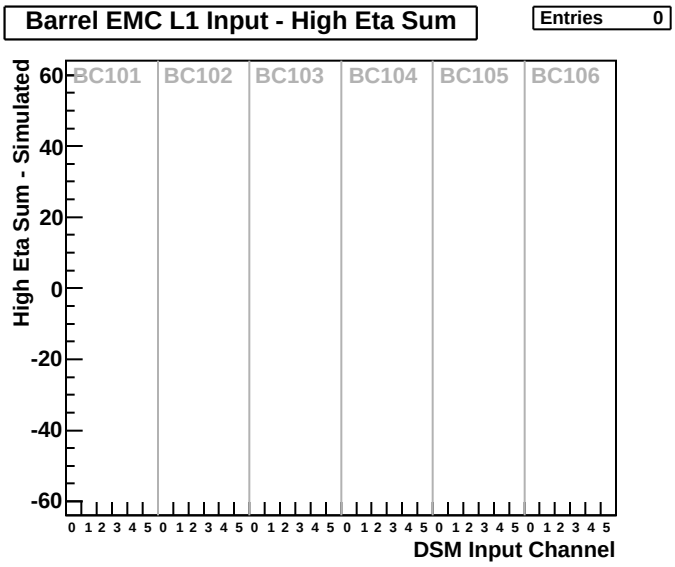
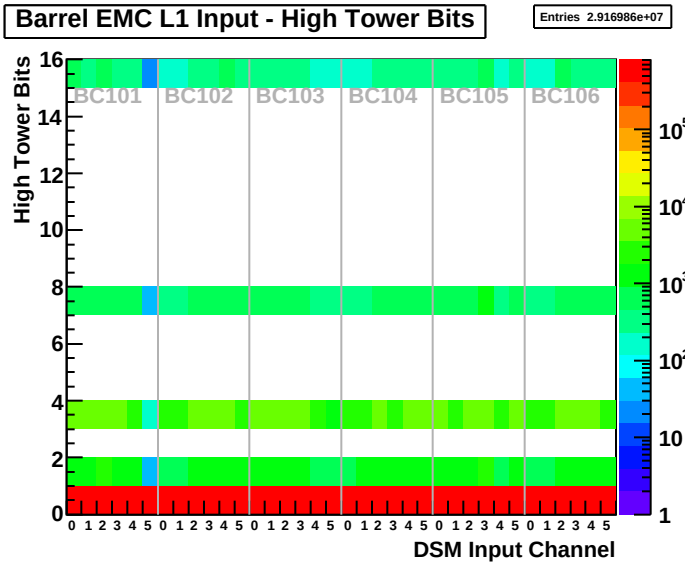
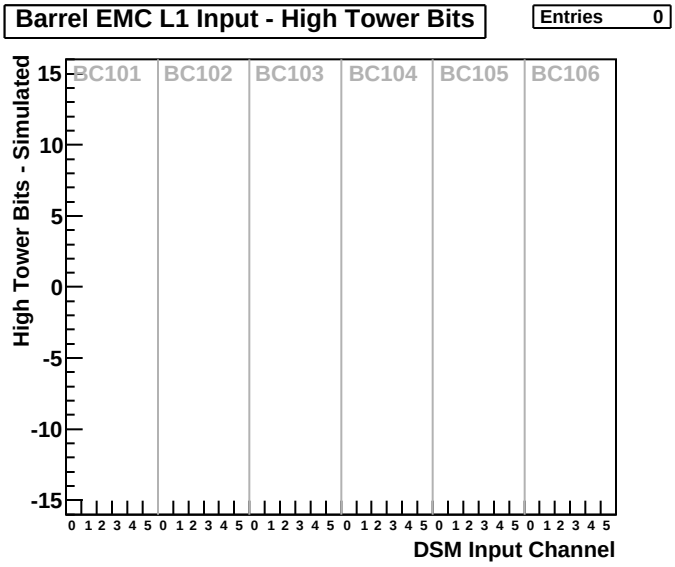

Barrel EMC L1 Input - Low Eta Sum
Entries 2.916986e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

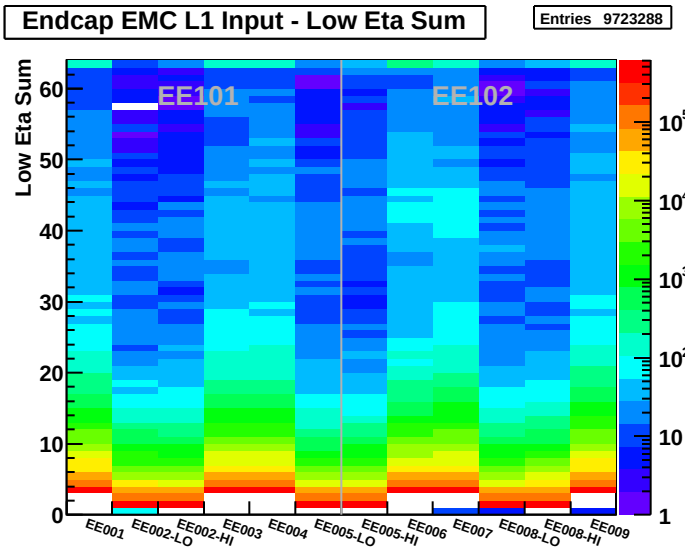

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

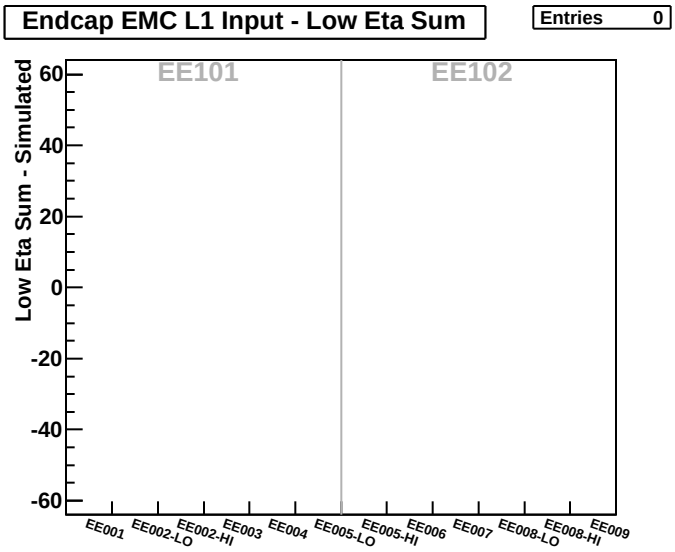

Barrel EMC L1 Input - High Eta Sum
Entries 2.916986e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

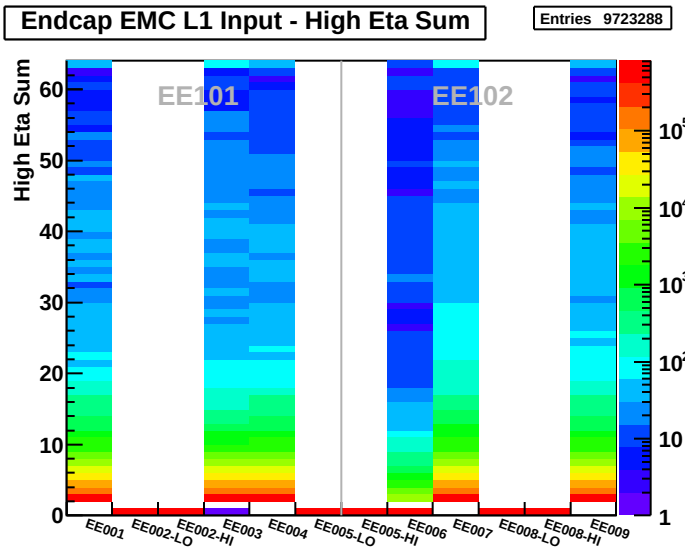

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

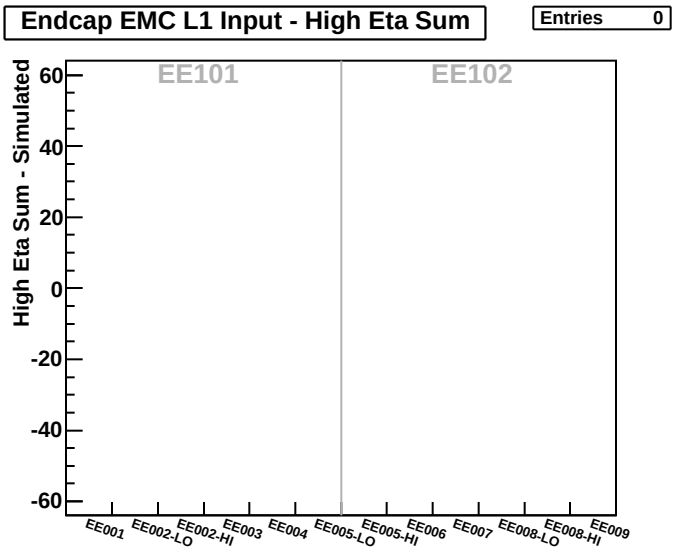

Barrel EMC L1 Input - High Tower Bits
Entries 2.916986e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

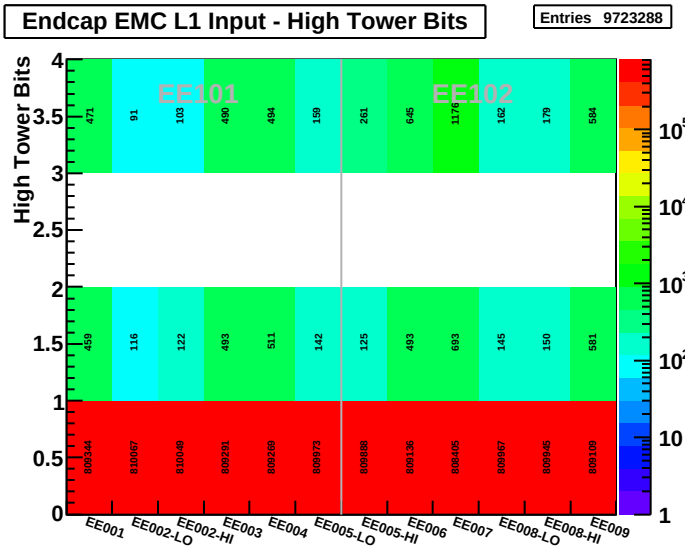

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

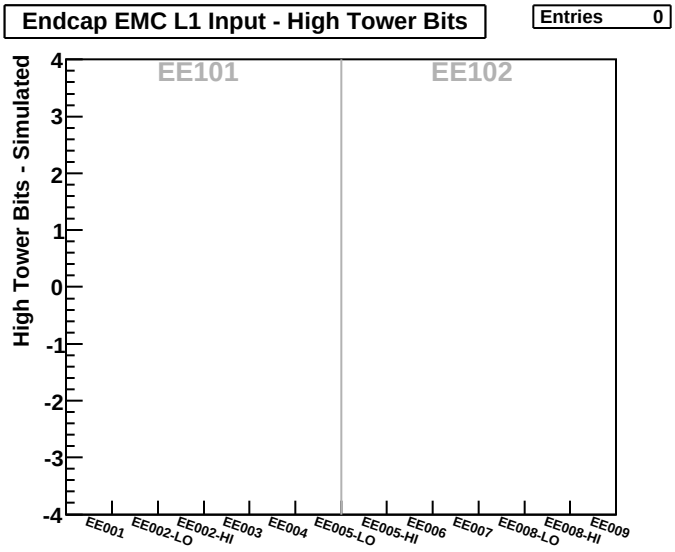

Endcap EMC L1 Input - Low Eta Sum
Entries 9723288
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

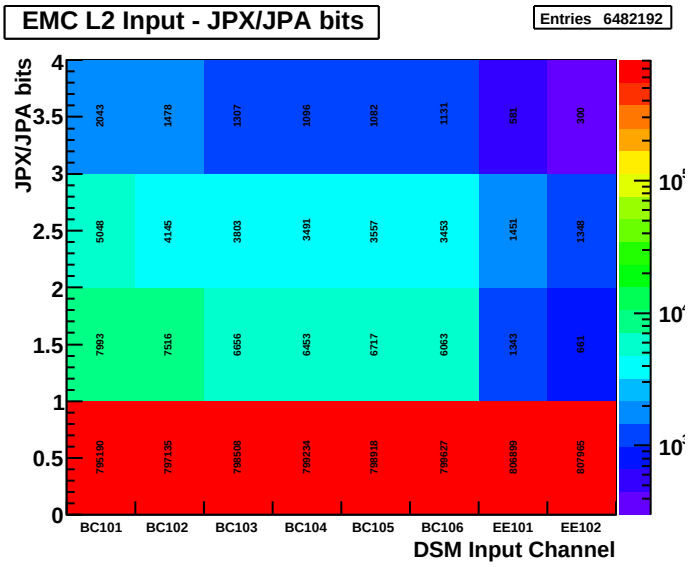

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

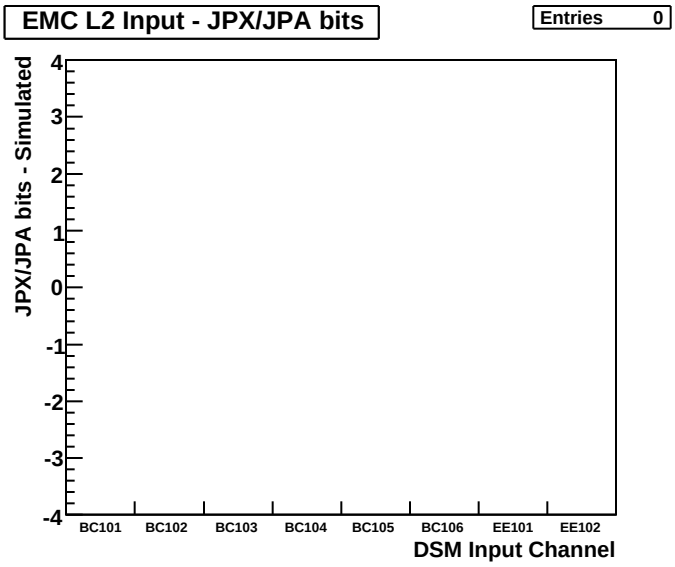

Endcap EMC L1 Input - High Eta Sum
Entries 9723288
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

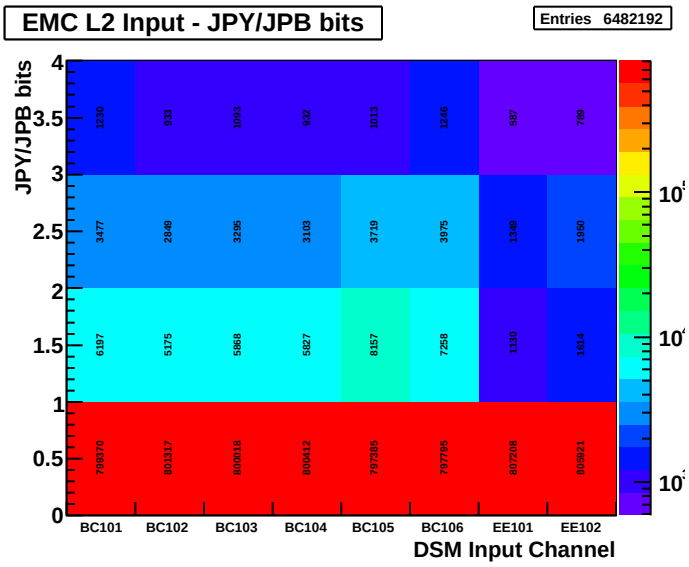

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

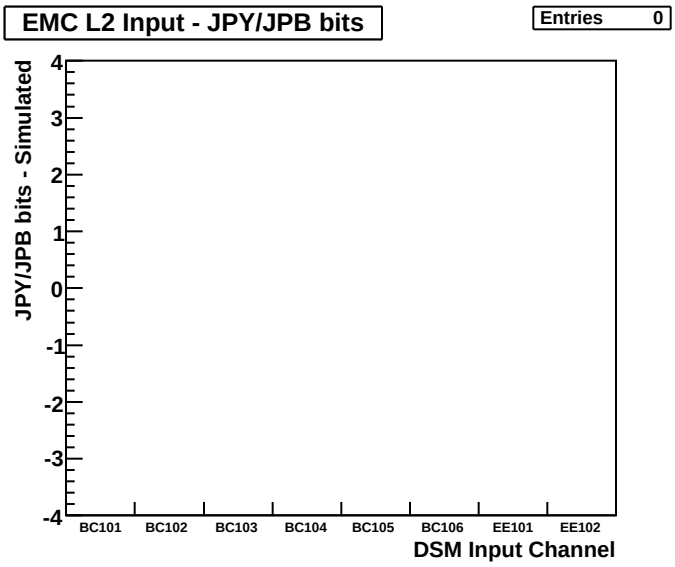

Endcap EMC L1 Input - High Tower Bits
Entries 9723288
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

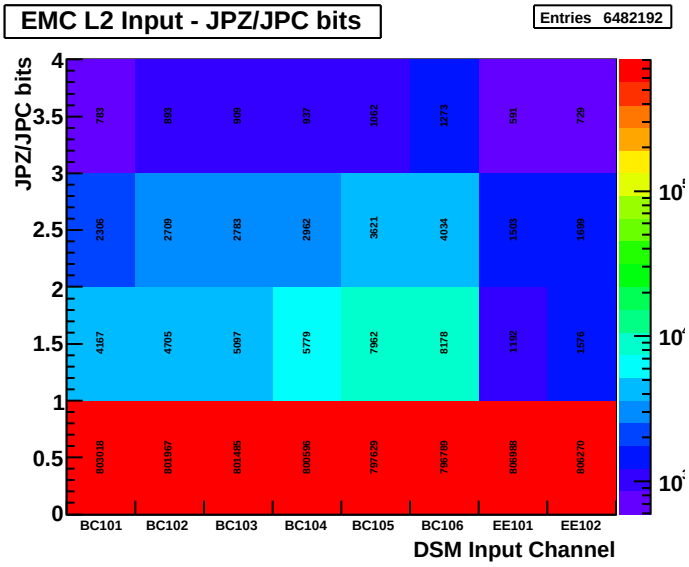

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

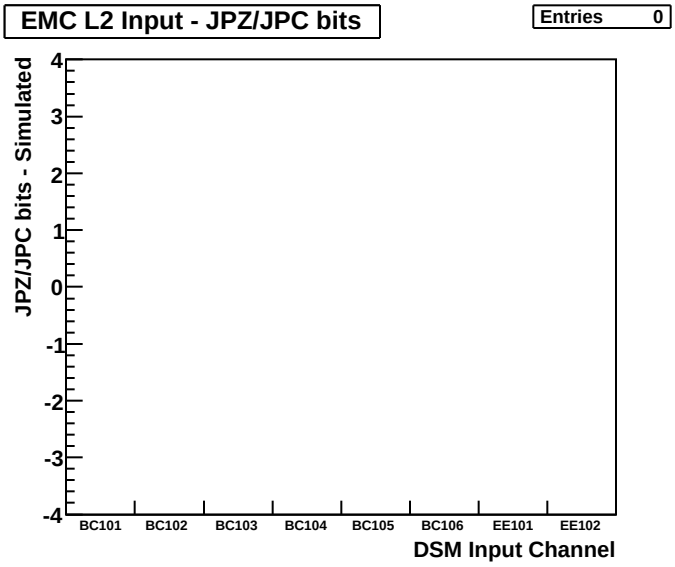

EMC L2 Input - JPX/JPA bits
Entries 6482192
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2043 1478 1207 1096 1082 1131 581 300
5048 4145 3803 3491 3557 3453 1451 1348
7993 7516 6656 6453 6717 6063 1343 661
795160 797125 798508 798234 798918 799627 806899 807965

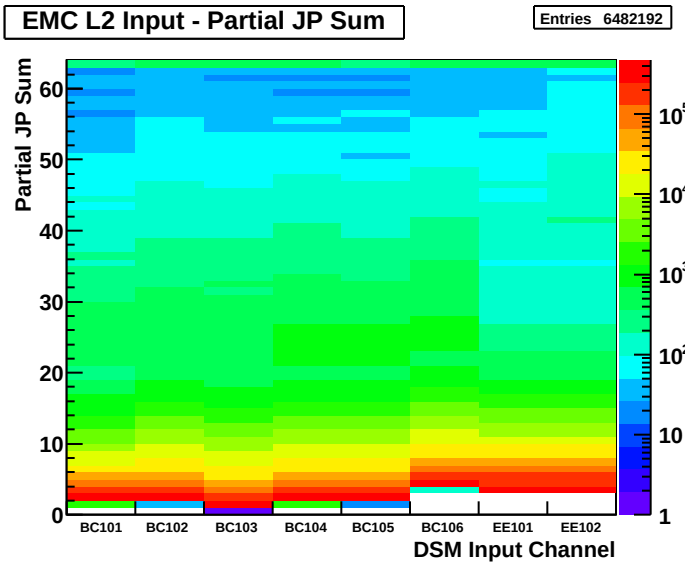

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

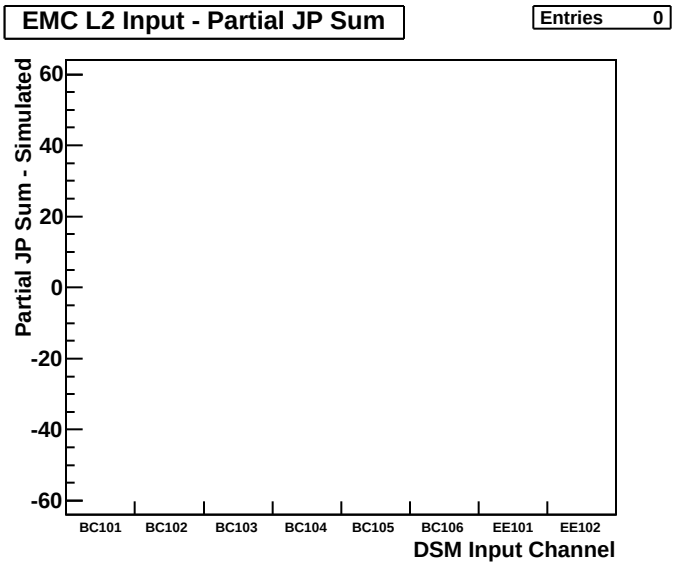

EMC L2 Input - JPY/JPB bits
Entries 6482192
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1230 933 1093 932 1013 1246 597 789
3477 2849 3295 3103 3719 3975 1349 1950
6197 5375 5868 5827 8157 7258 1130 1614
799370 801317 800018 800412 797385 797795 807208 805921

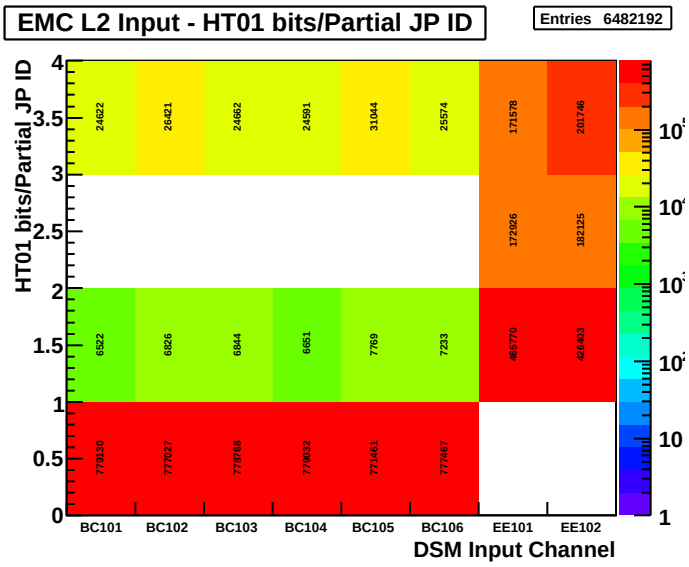

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

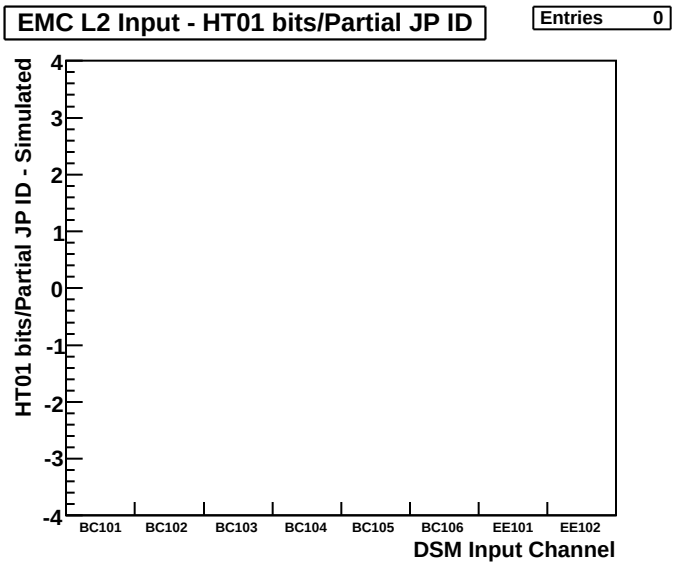

EMC L2 Input - JPZ/JPC bits
Entries 6482192
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
783 883 909 937 1062 1273 591 729
2306 2709 2783 2962 3621 4034 1503 1699
4187 4705 5097 5779 7962 8178 1192 1576
803918 801967 801485 800596 797629 796789 806988 806270

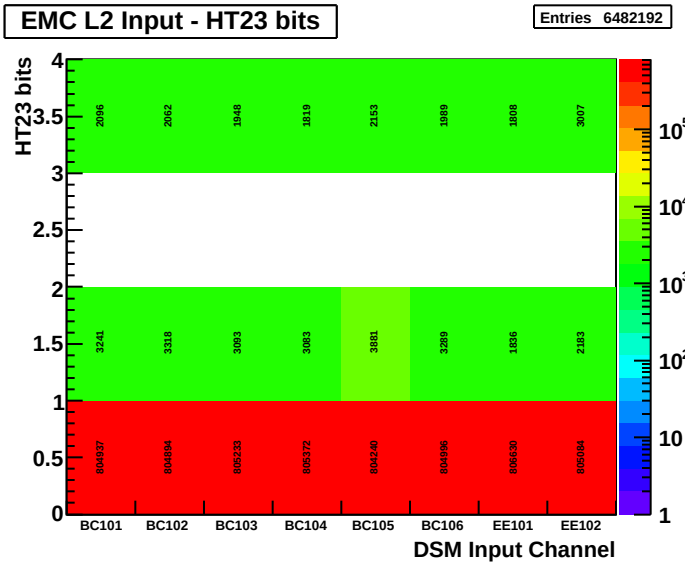

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

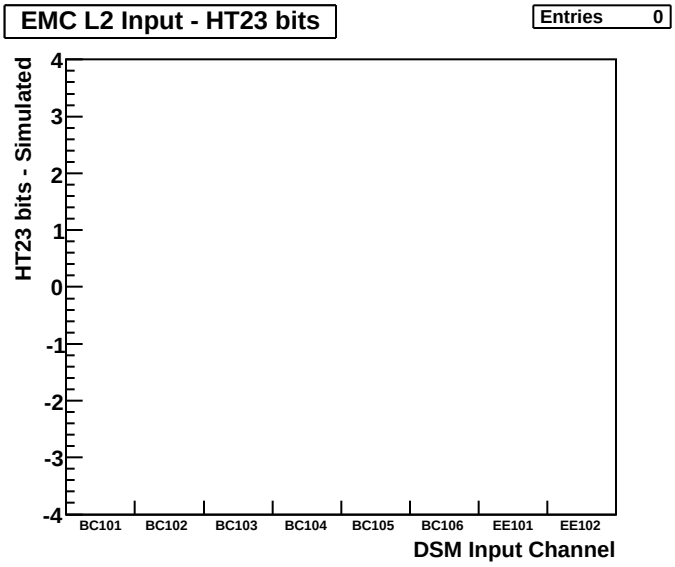

EMC L2 Input - Partial JP Sum
Entries 6482192
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

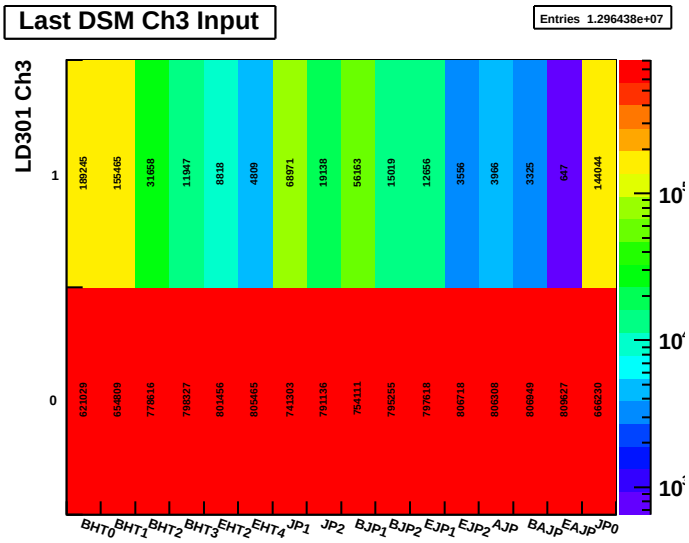

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

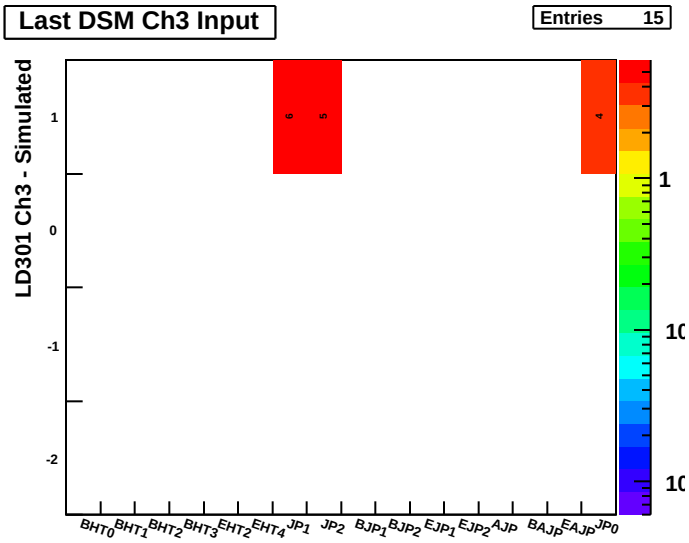

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6482192
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

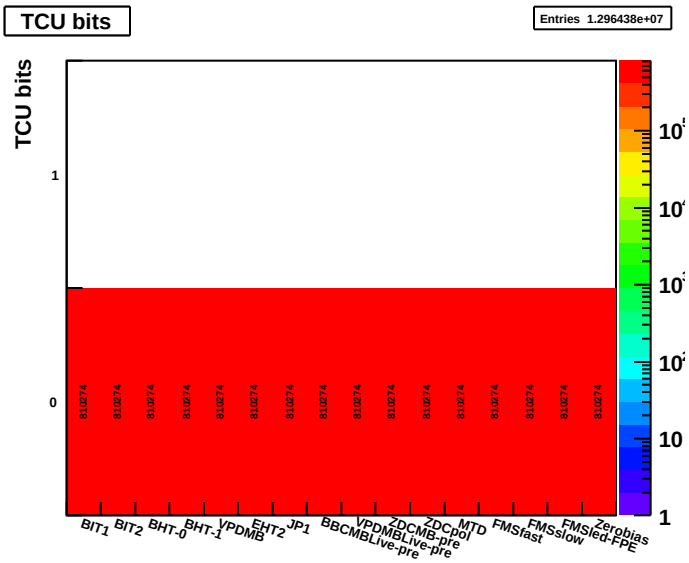

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

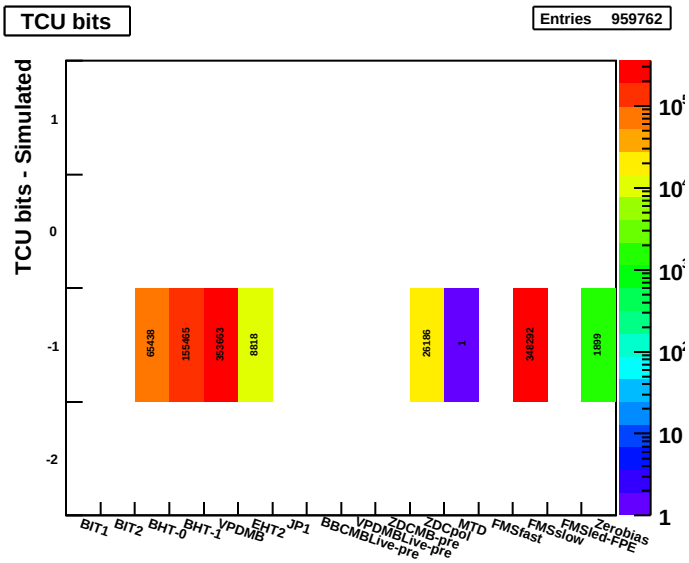

EMC L2 Input - HT23 bits
Entries 6482192
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

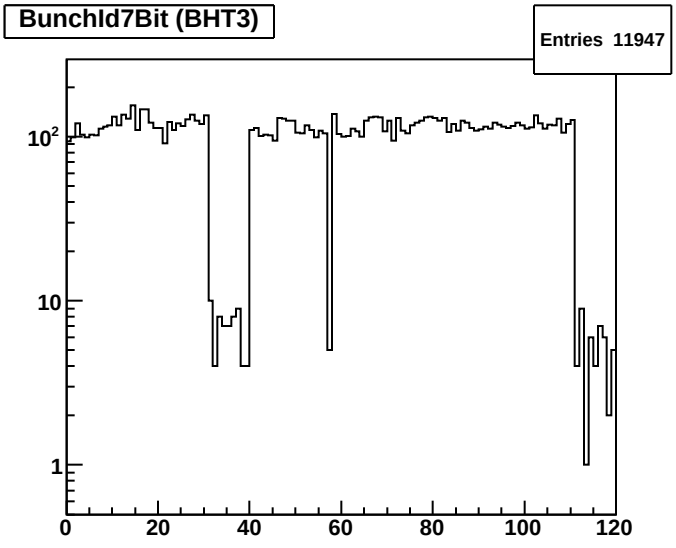

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

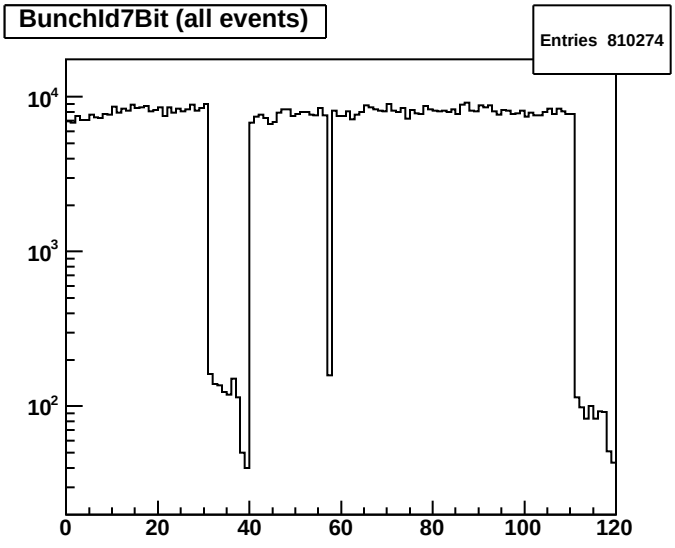

Last DSM Ch3 Input
Entries 1.296438e+07
LD301 Ch3
189245 155465 31658 11947 8818 4809 68971 19138 56163 15019 12656 3556 3966 3325 647 144044
621029 654809 778616 798327 801456 805465 741303 791136 754111 795265 797618 806718 806308 806949 809627 666230
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

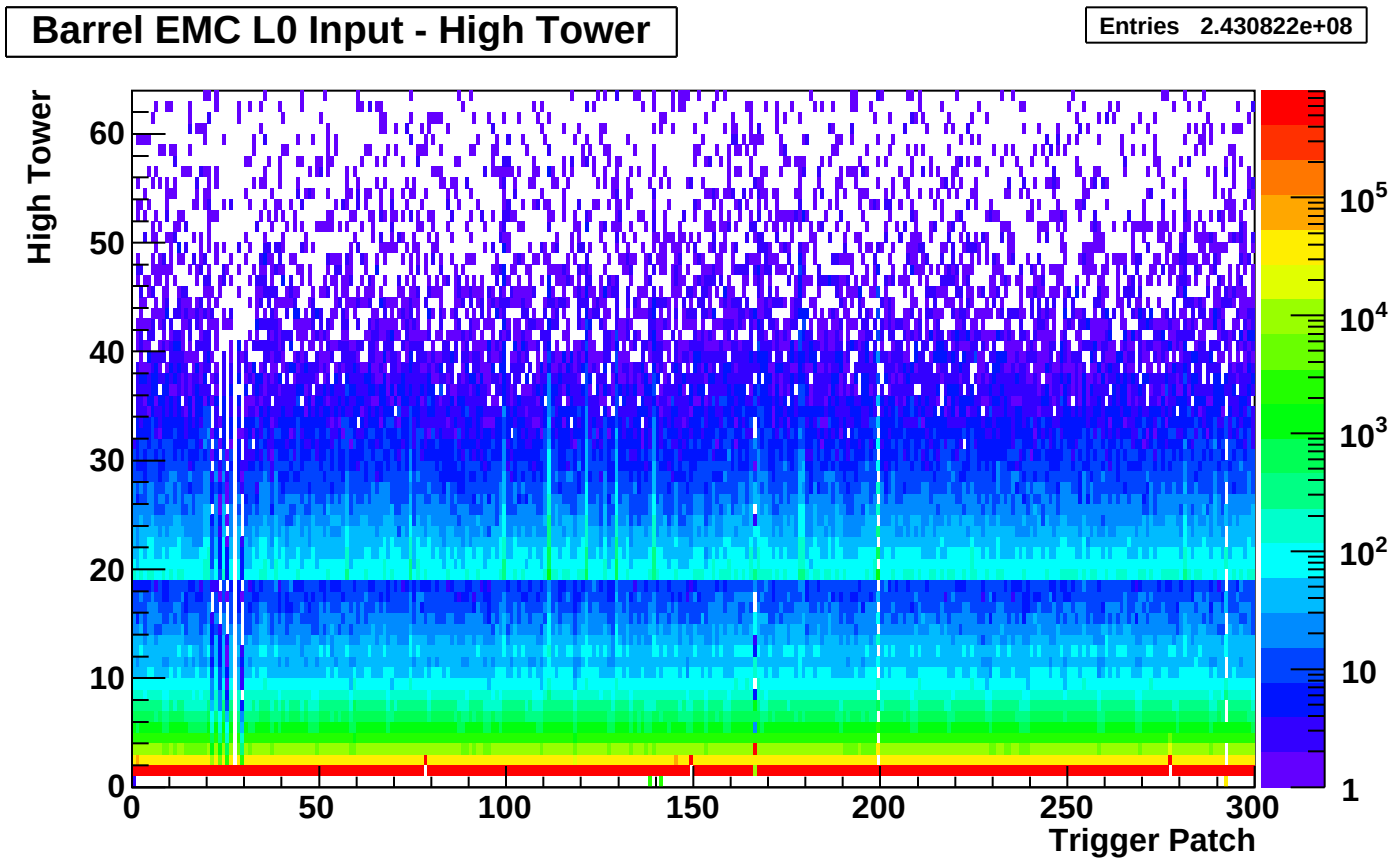

Last DSM Ch3 Input
Entries 15
LD301 Ch3 - Simulated
6 5 4
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

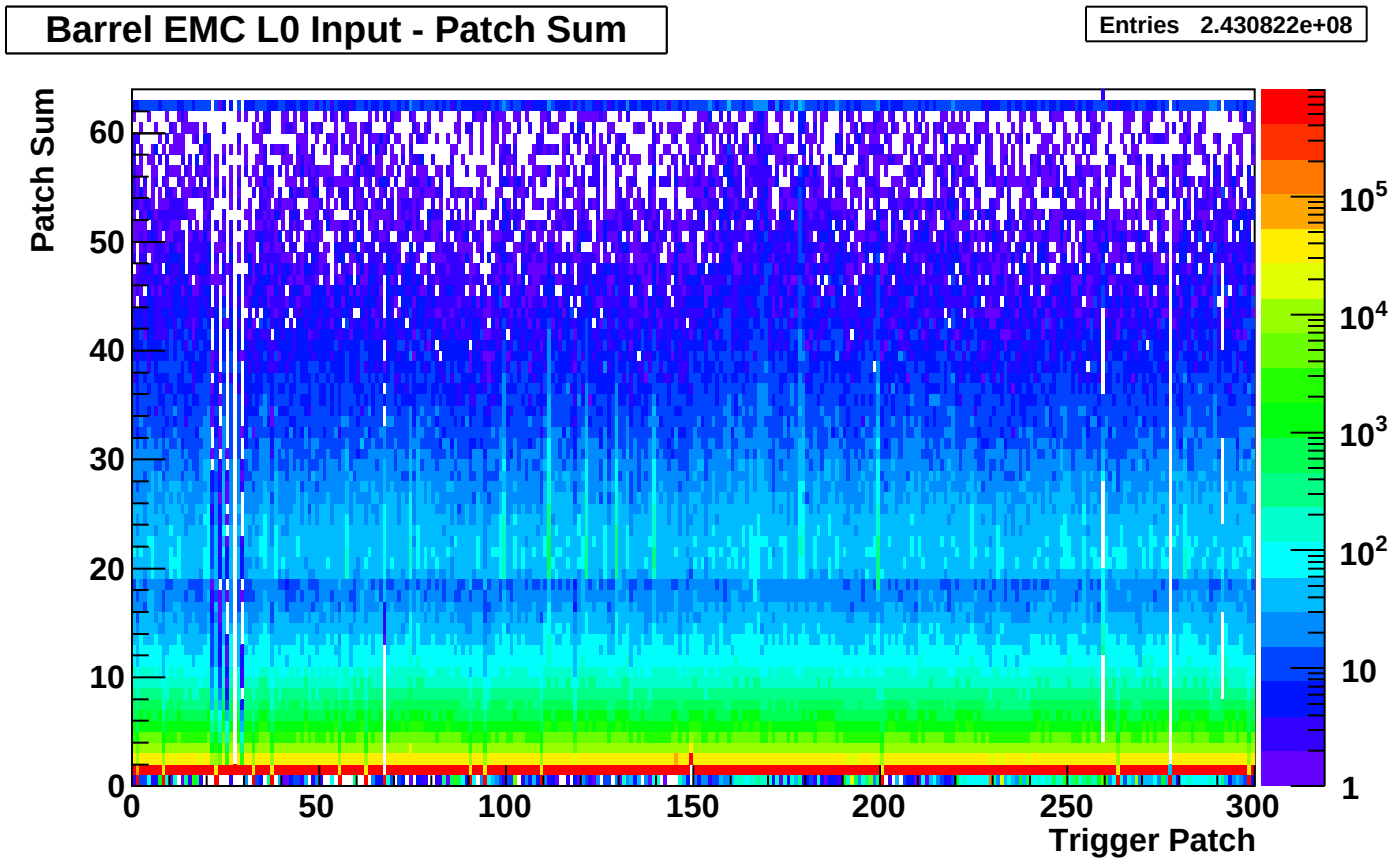

TCU bits
Entries 1.296438e+07
TCU bits
810274 810274 810274 810274 810274 810274 810274 810274 810274 810274 810274 810274 810274 810274 810274 810274
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

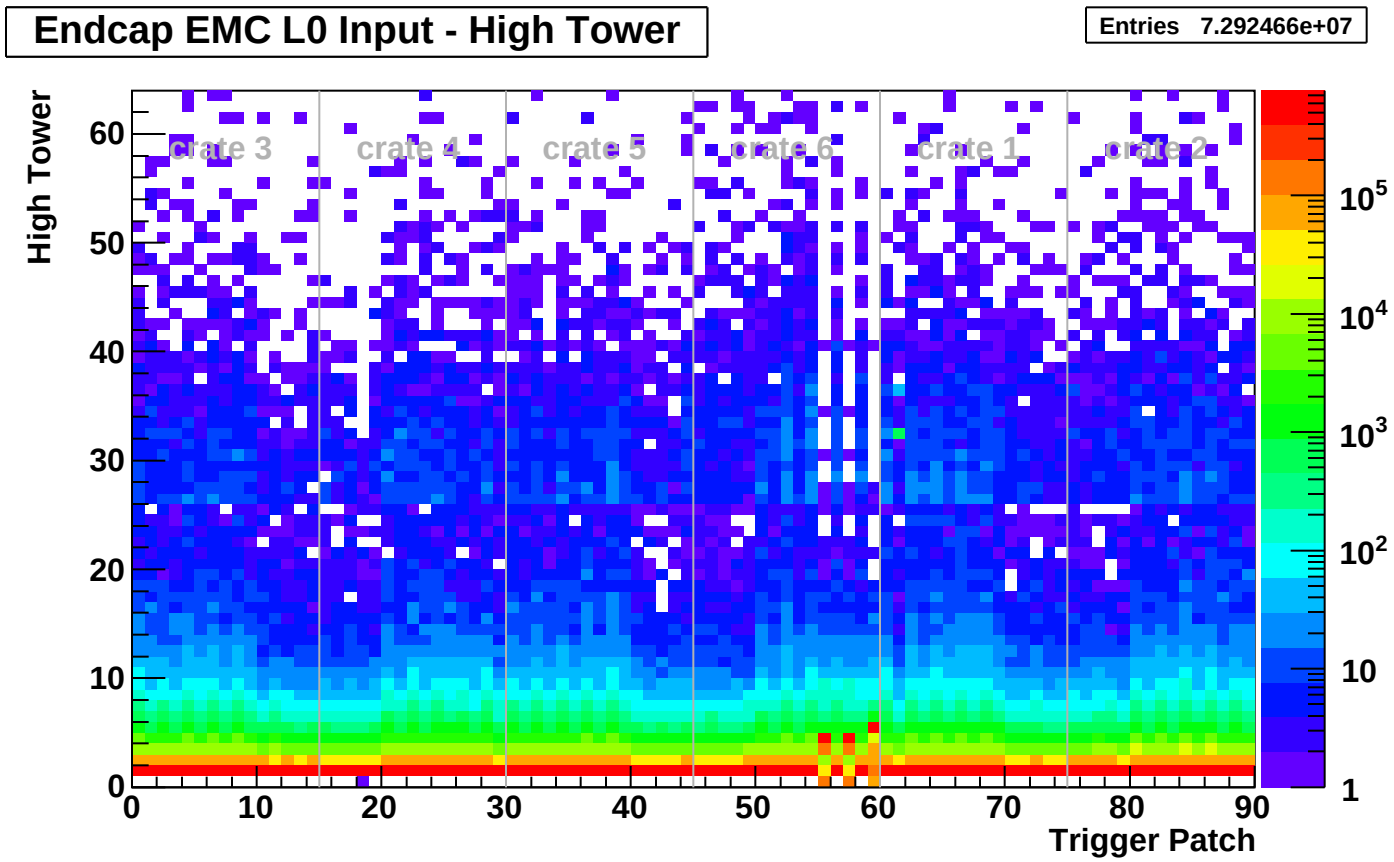

TCU bits
Entries 959762
TCU bits - Simulated
65438 155465 353663 8818 26186 1 348232 1899
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

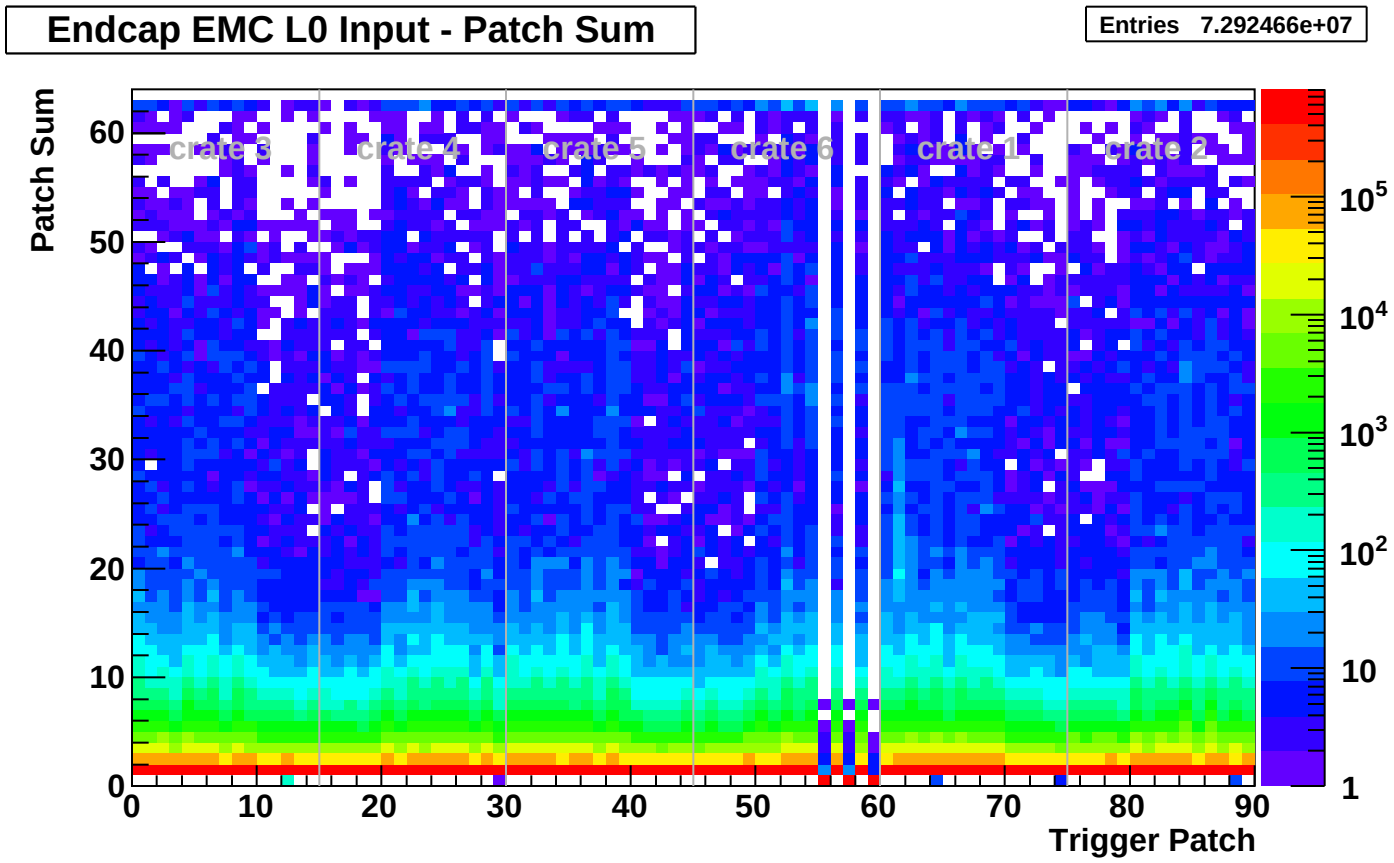

BunchId7Bit (BHT3)
Entries 11947

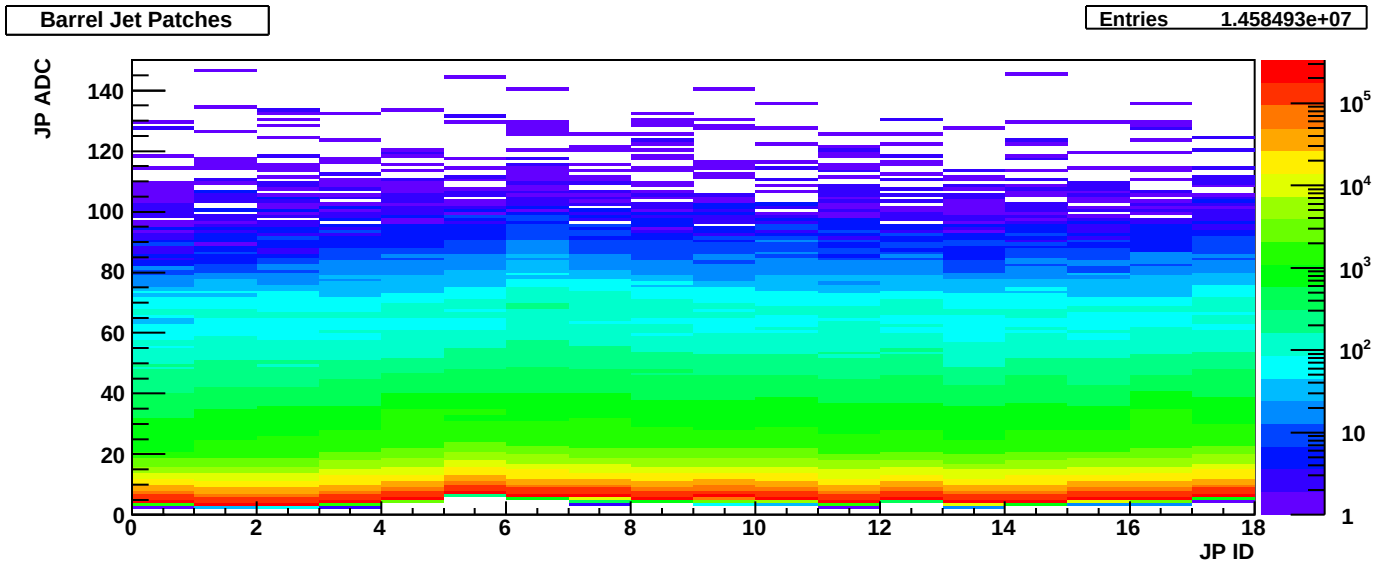

BunchId7Bit (all events)
Entries 810274

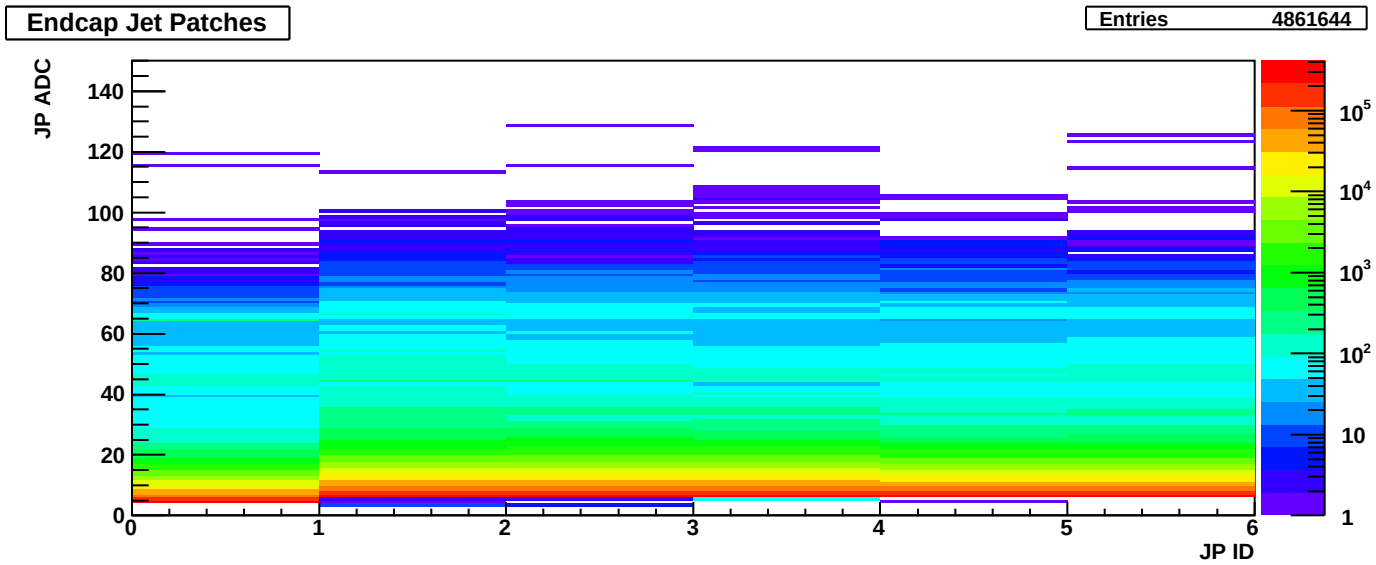

Barrel EMC L0 Input - High Tower
Entries 2.430822e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

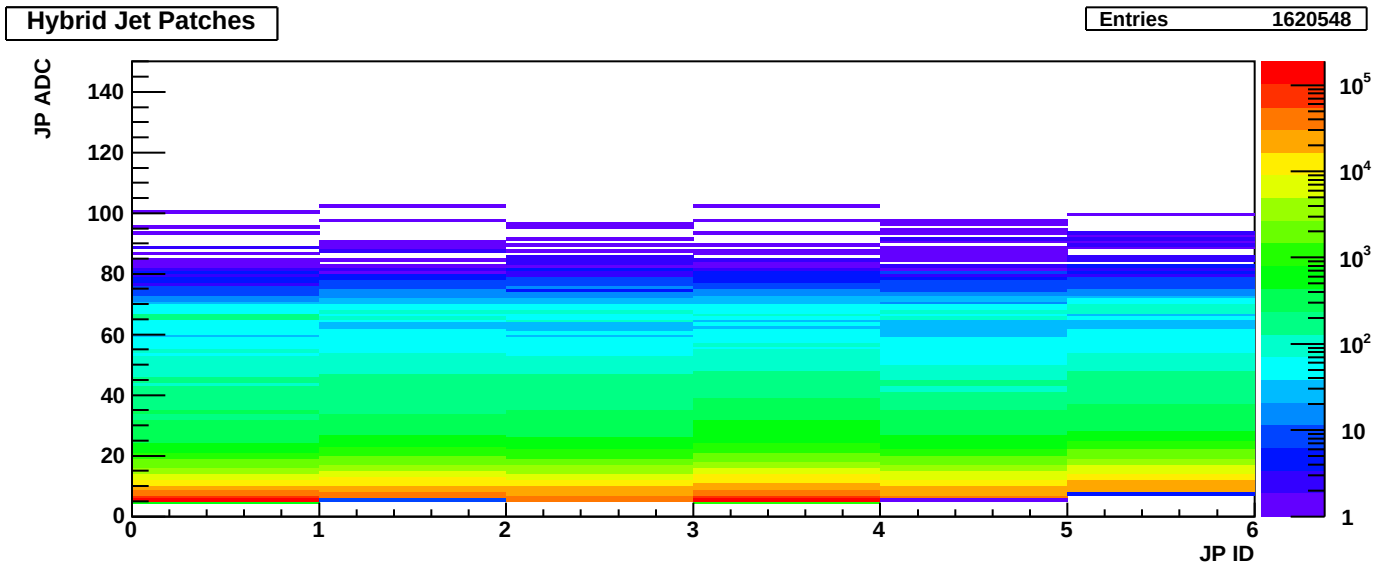

Barrel EMC L0 Input - Patch Sum
Entries 2.430822e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

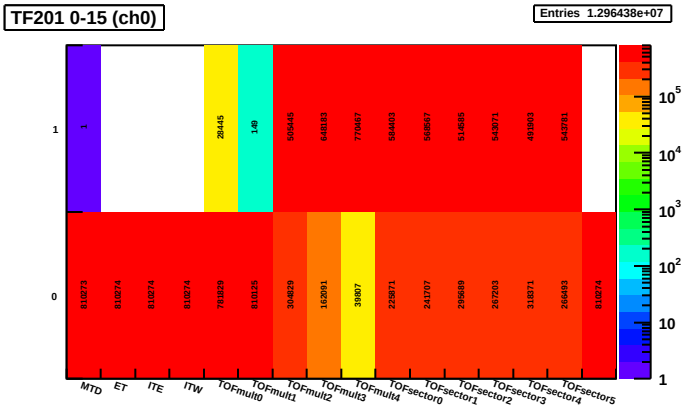

Endcap EMC L0 Input - High Tower
Entries 7.292466e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

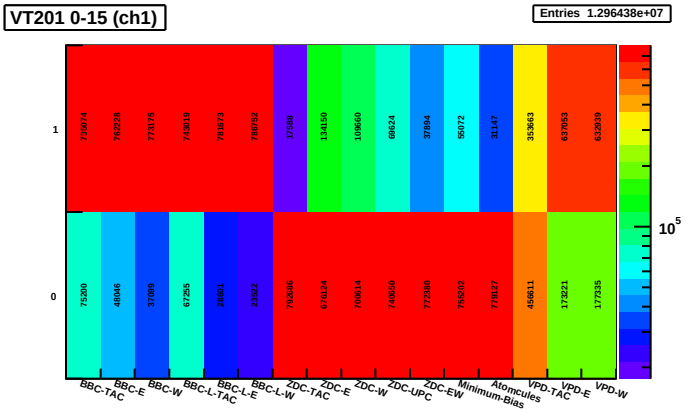

Endcap EMC L0 Input - Patch Sum
Entries 7.292466e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

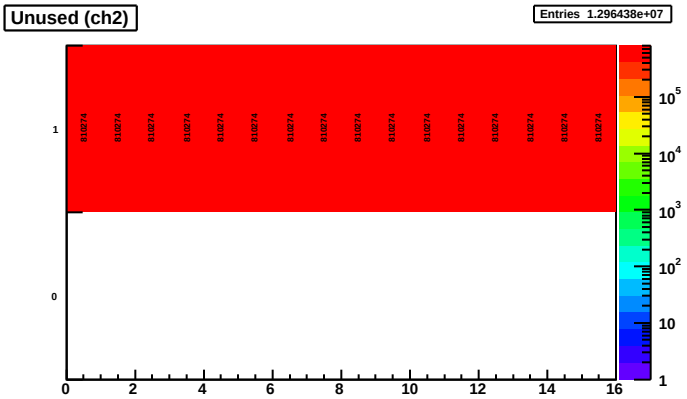

Barrel Jet Patches
Entries 1.458493e+07
JP ADC
JP ID

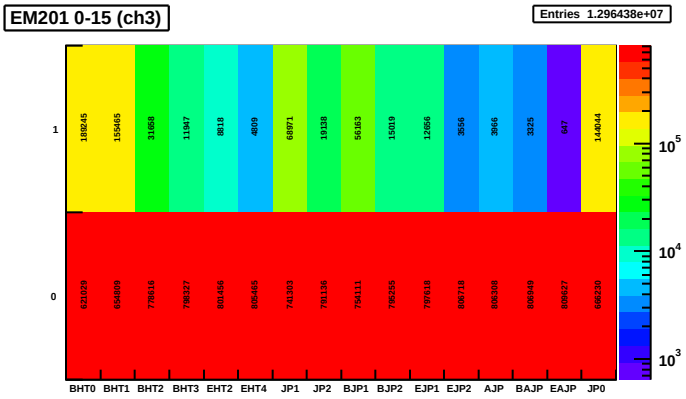

Endcap Jet Patches
Entries 4861644
JP ADC
JP ID

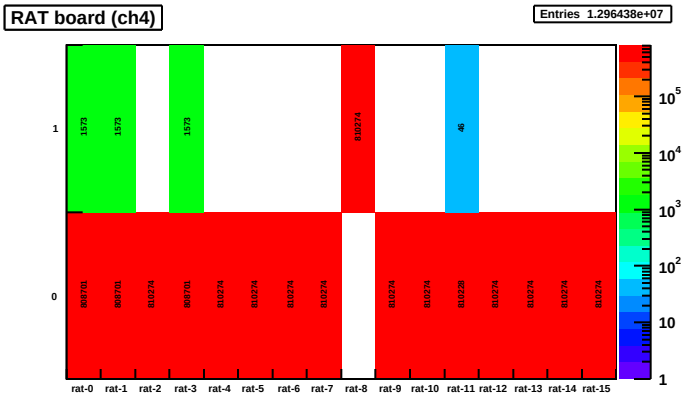

Hybrid Jet Patches
Entries 1620548
JP ADC
JP ID

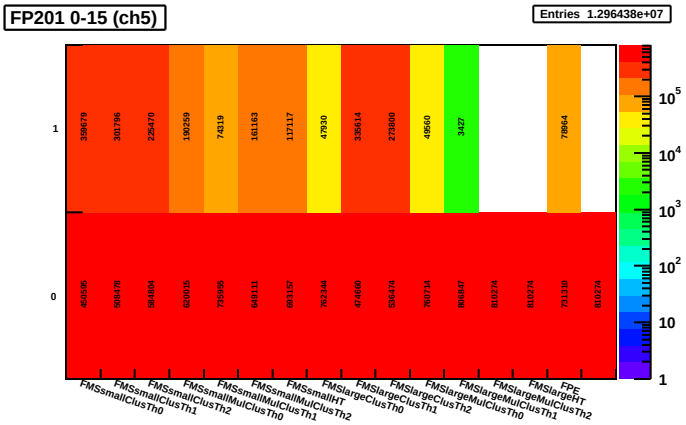

TF201 0-15 (ch0)
Entries 1.296438e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

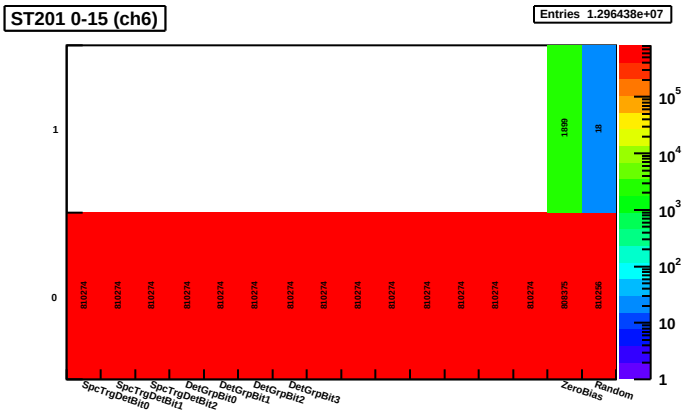

VT201 0-15 (ch1)
Entries 1.296438e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

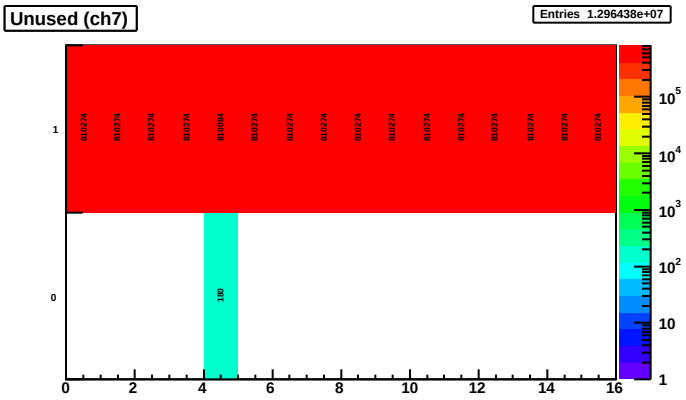

Unused (ch2)
Entries 1.296438e+07

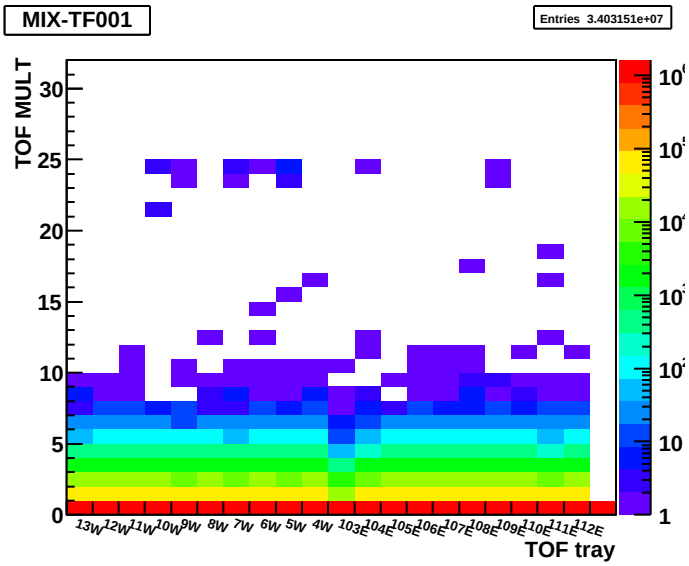

EM201 0-15 (ch3)
Entries 1.296438e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

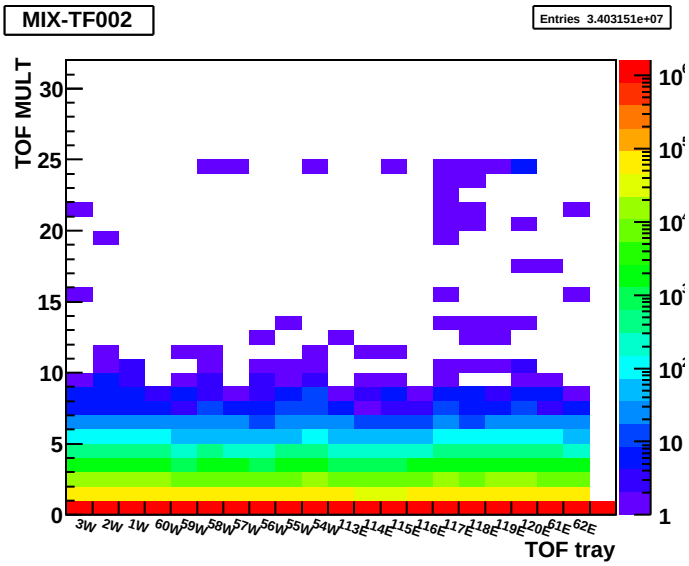

RAT board (ch4)
Entries 1.296438e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

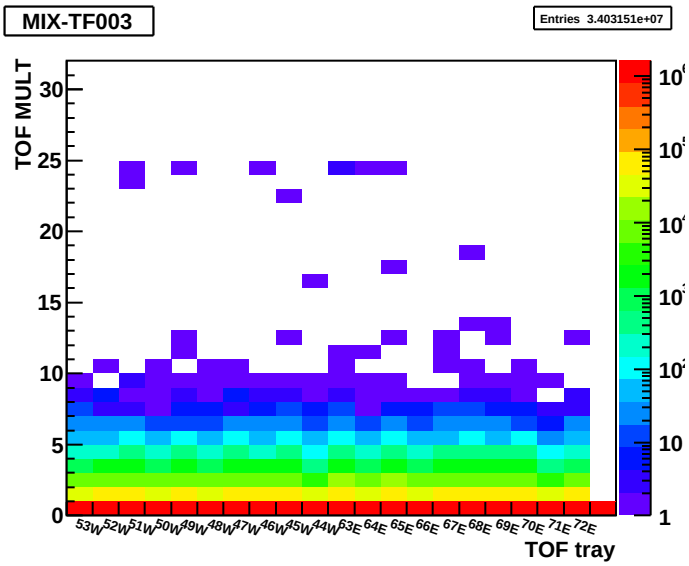

FP201 0-15 (ch5)
Entries 1.296438e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

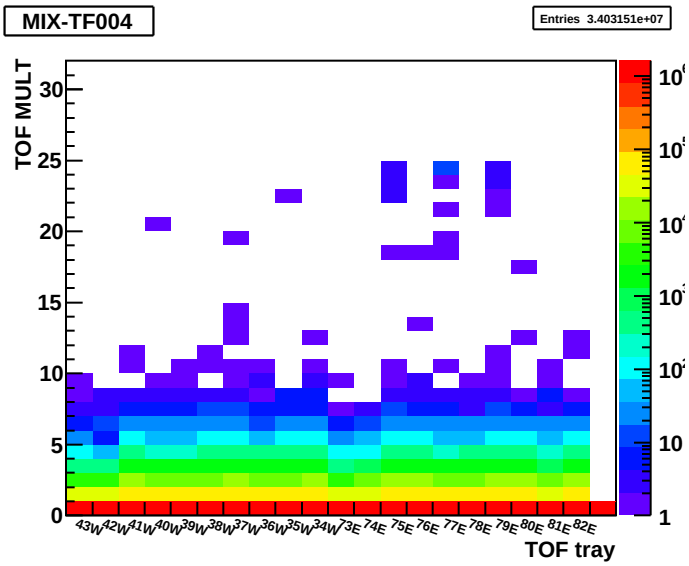

ST201 0-15 (ch6)
Entries 1.296438e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

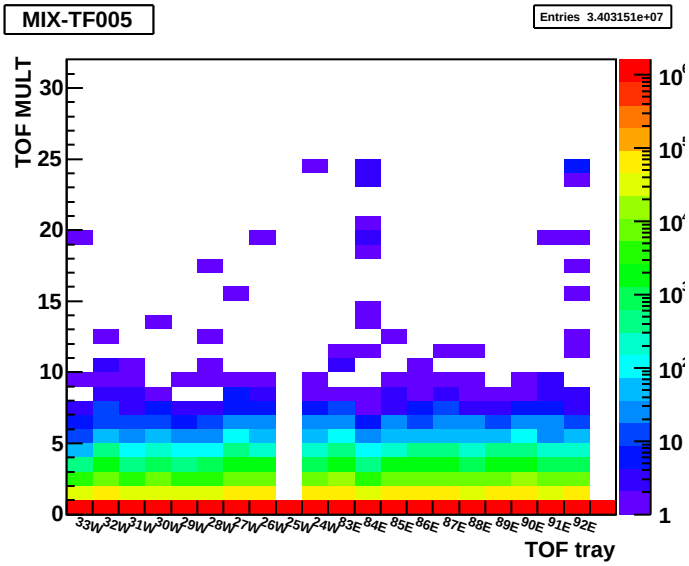

Unused (ch7)
Entries 1.296438e+07

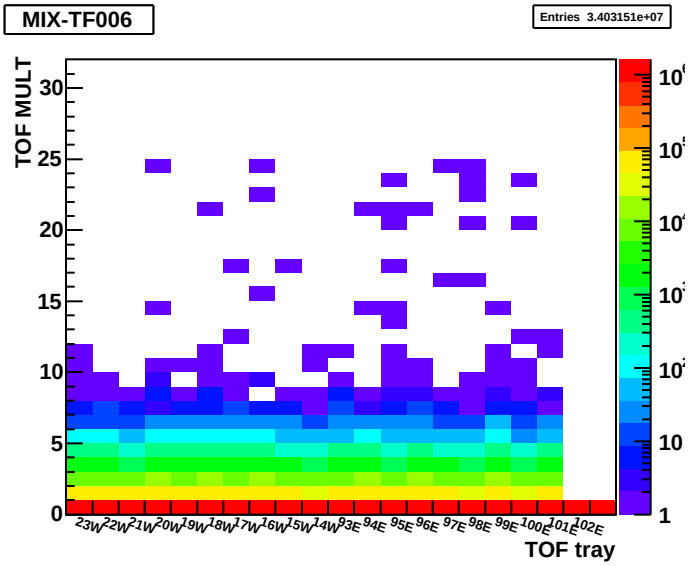

MIX-TF001
Entries 3.403151e+07
TOF MULT
TOF tray

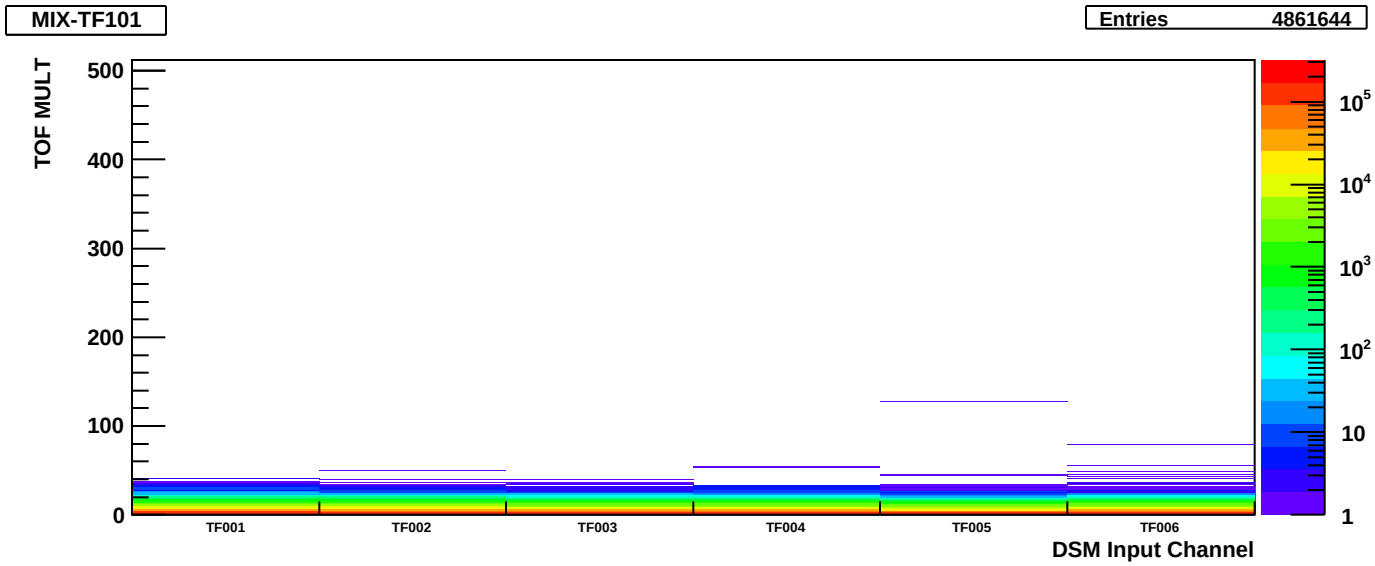

MIX-TF002
Entries 3.403151e+07
TOF MULT
TOF tray

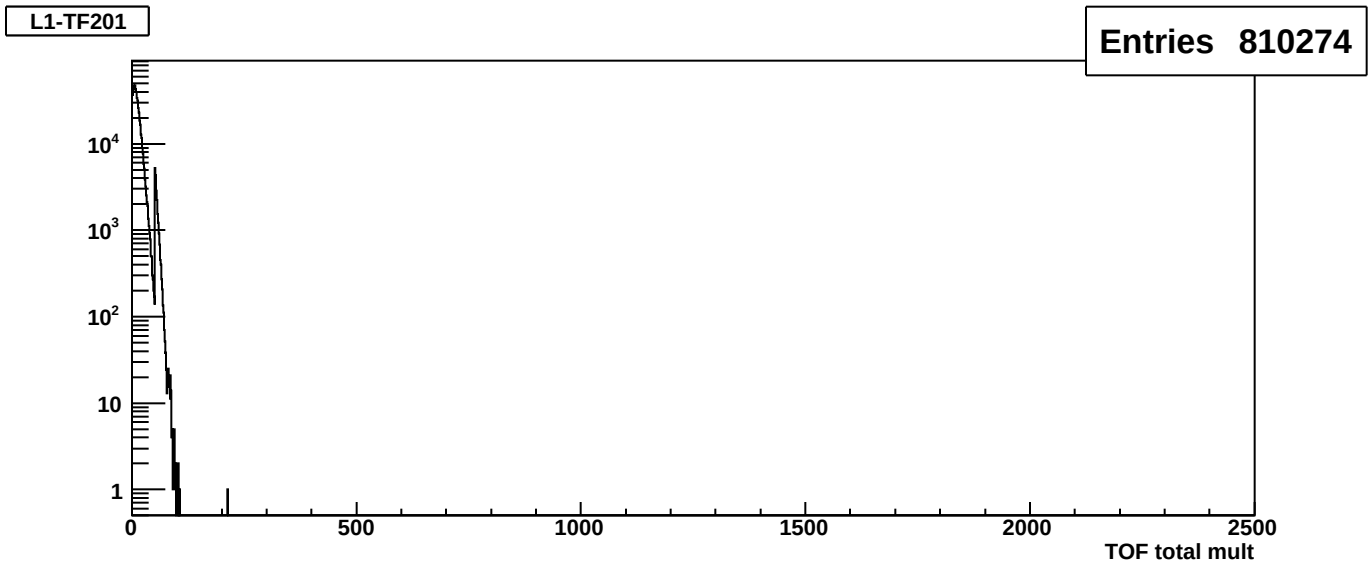

MIX-TF003
Entries 3.403151e+07
TOF MULT
TOF tray

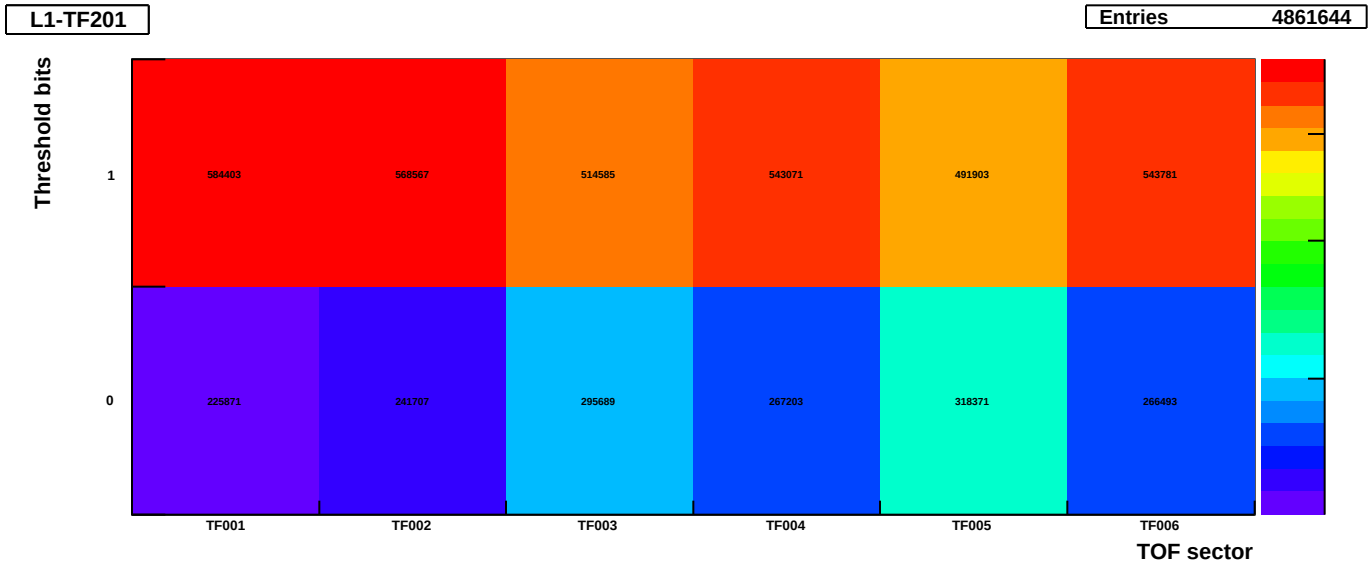

MIX-TF004
Entries 3.403151e+07
TOF MULT
TOF tray

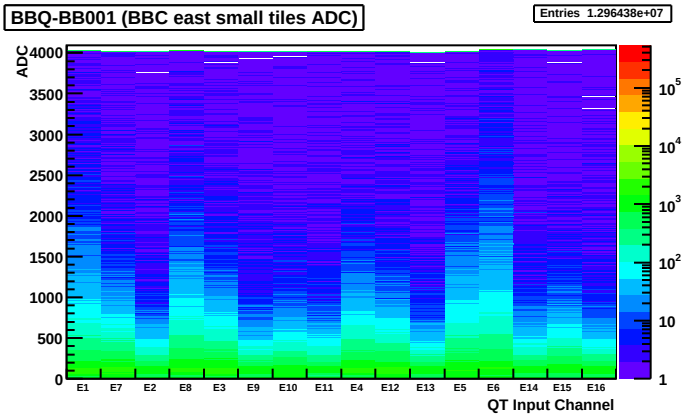

MIX-TF005
Entries 3.403151e+07
TOF MULT
TOF tray

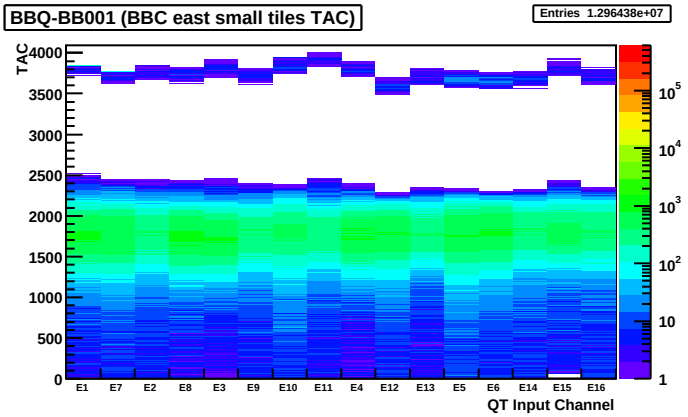

MIX-TF006
Entries 3.403151e+07
TOF MULT
TOF tray

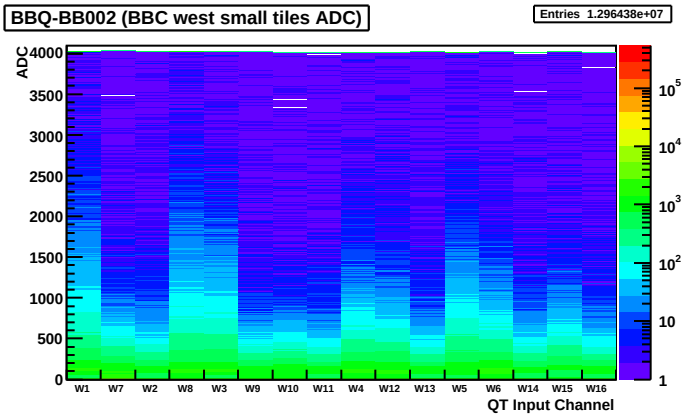

MIX-TF101
Entries 4861644
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

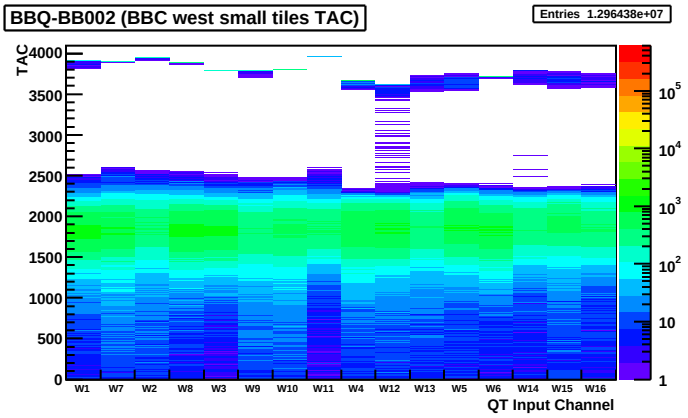

L1-TF201
Entries 810274
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

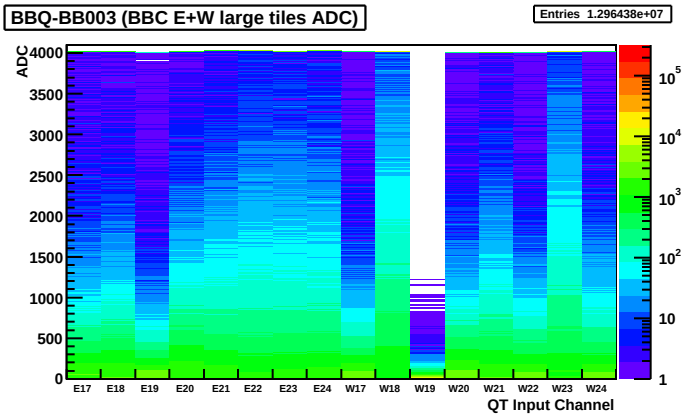

L1-TF201
Entries 4861644
Threshold bits
1
0
584403
568567
514585
543071
491903
543781
225871
241707
295689
267203
318371
266493
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

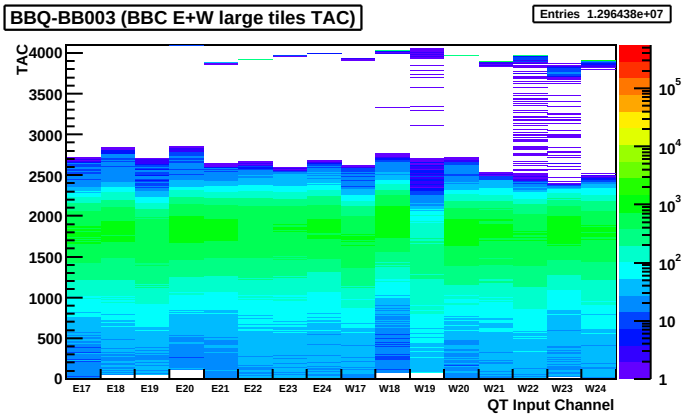

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.296438e+07
ADC
QT Input Channel

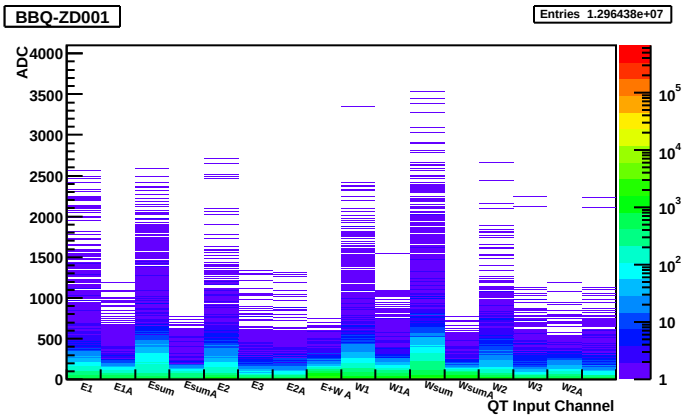

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.296438e+07
TAC
QT Input Channel

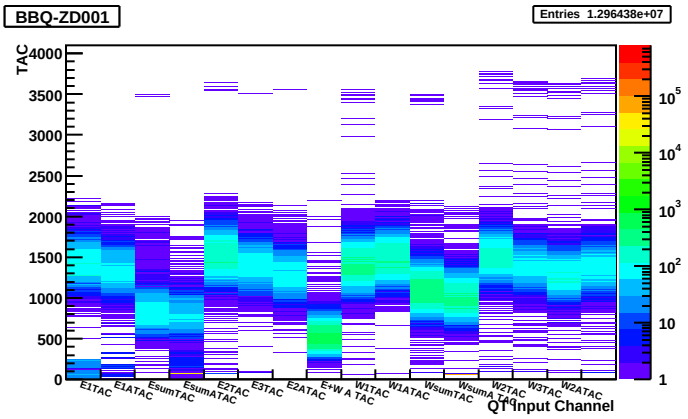

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.296438e+07
ADC
QT Input Channel

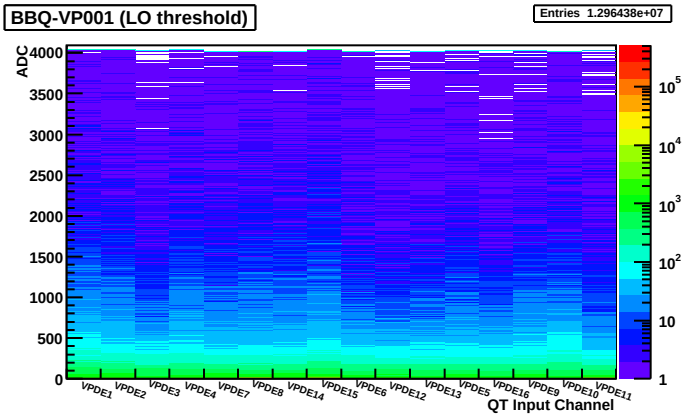

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.296438e+07
TAC
QT Input Channel

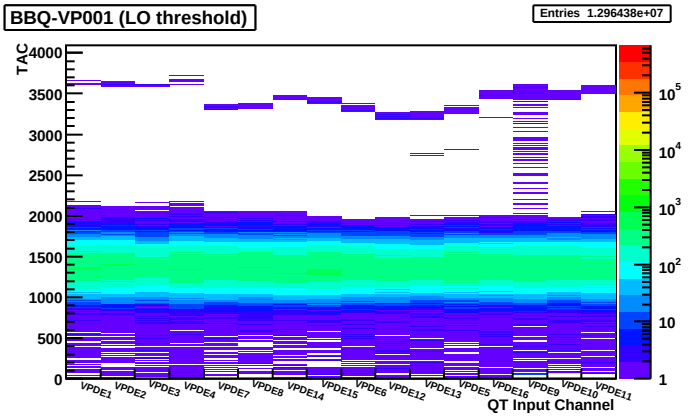

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.296438e+07
ADC
QT Input Channel

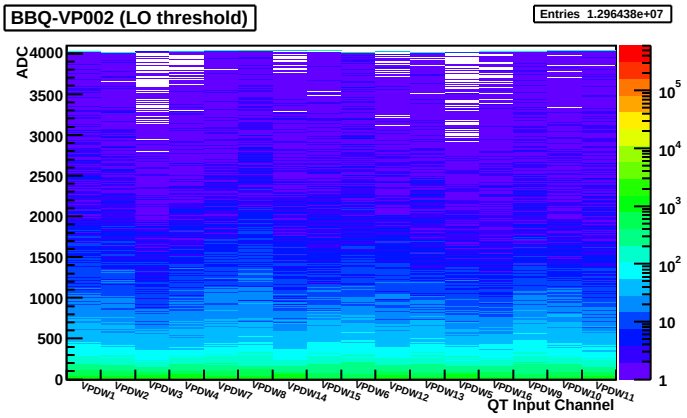

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.296438e+07
TAC
QT Input Channel

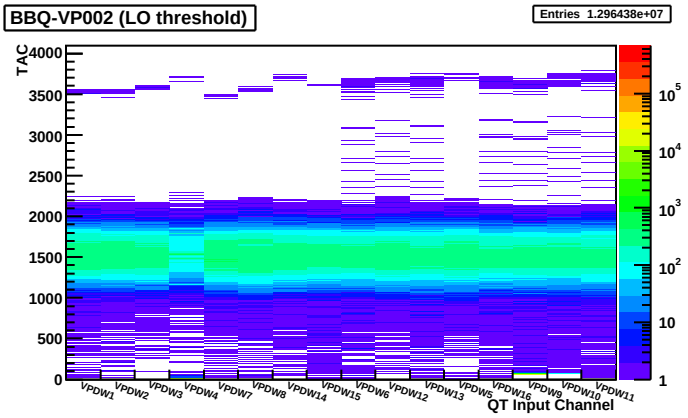

BBQ-ZD001
Entries 1.296438e+07
ADC
QT Input Channel

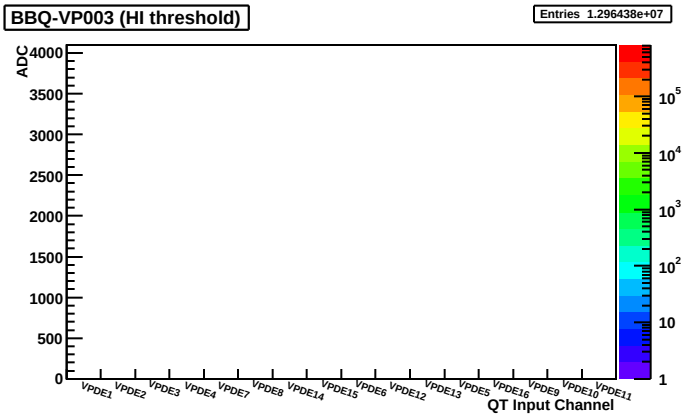

BBQ-ZD001
Entries 1.296438e+07
TAC
QT Input Channel

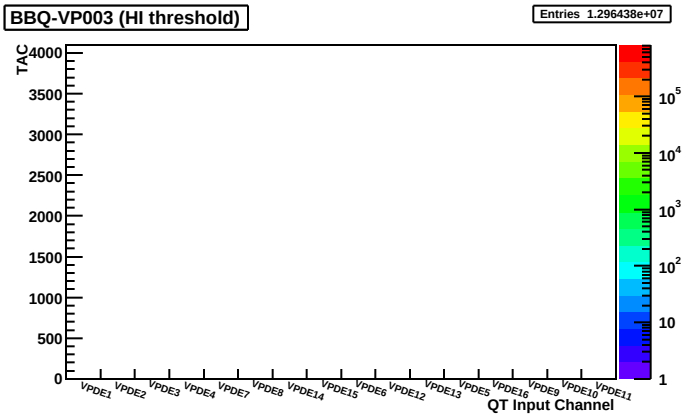

BBQ-VP001 (LO threshold)
Entries 1.296438e+07
ADC
QT Input Channel

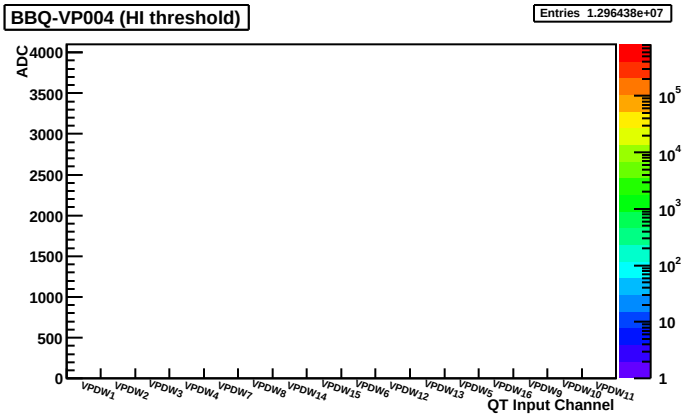

BBQ-VP001 (LO threshold)
Entries 1.296438e+07
TAC
QT Input Channel

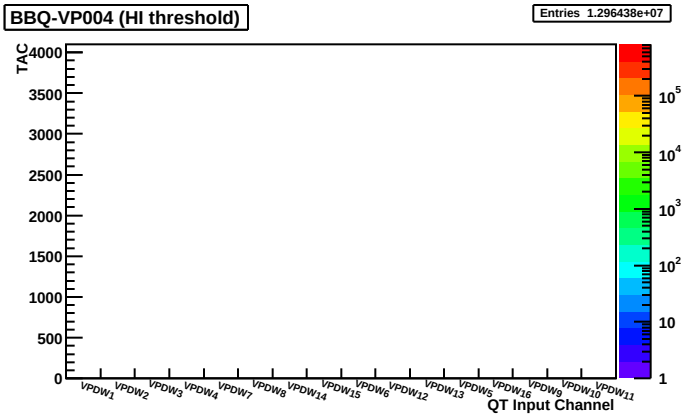

BBQ-VP002 (LO threshold)
Entries 1.296438e+07
ADC
QT Input Channel

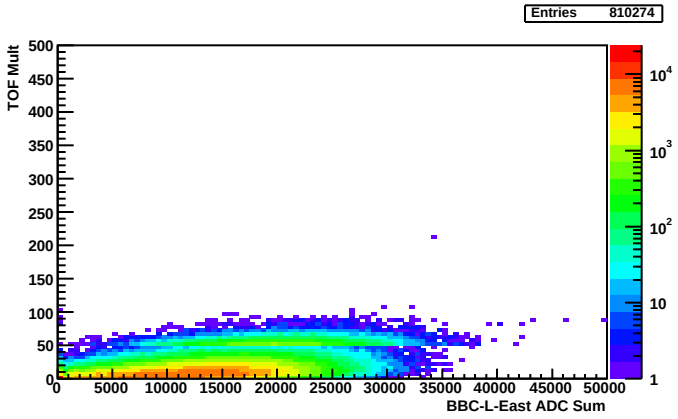

BBQ-VP002 (LO threshold)
Entries 1.296438e+07
TAC
QT Input Channel

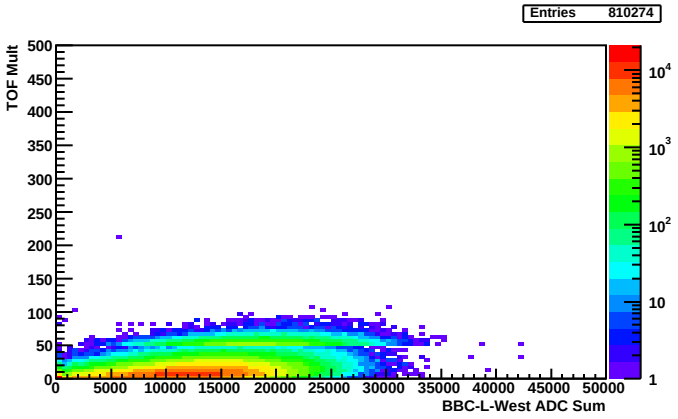

BBQ-VP003 (HI threshold)
Entries 1.296438e+07
ADC
QT Input Channel

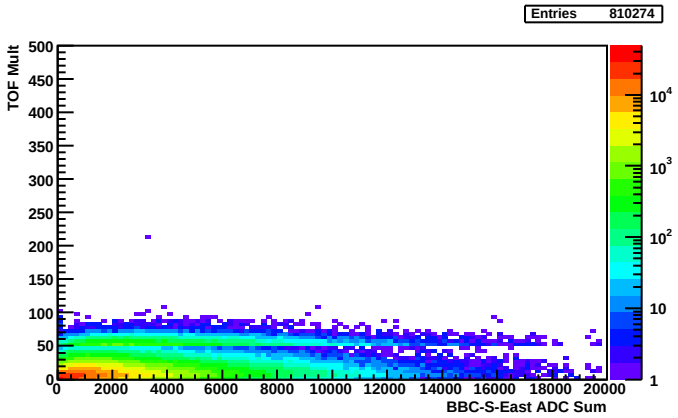

BBQ-VP003 (HI threshold)
Entries 1.296438e+07
TAC
QT Input Channel

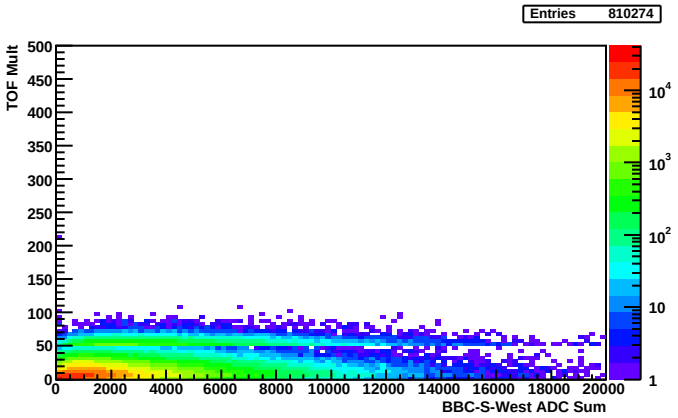

BBQ-VP004 (HI threshold)
Entries 1.296438e+07
ADC
QT Input Channel

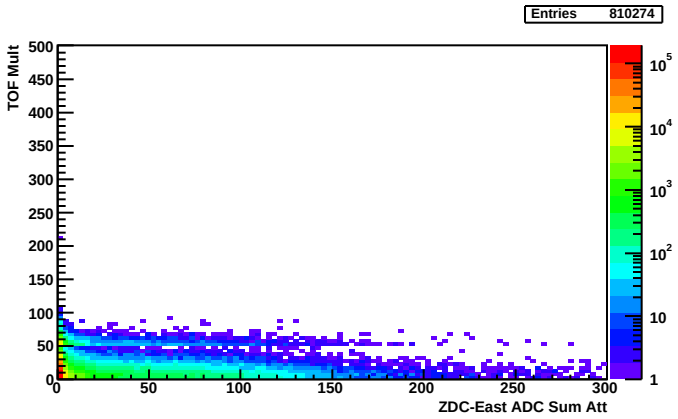

BBQ-VP004 (HI threshold)
Entries 1.296438e+07
TAC
QT Input Channel

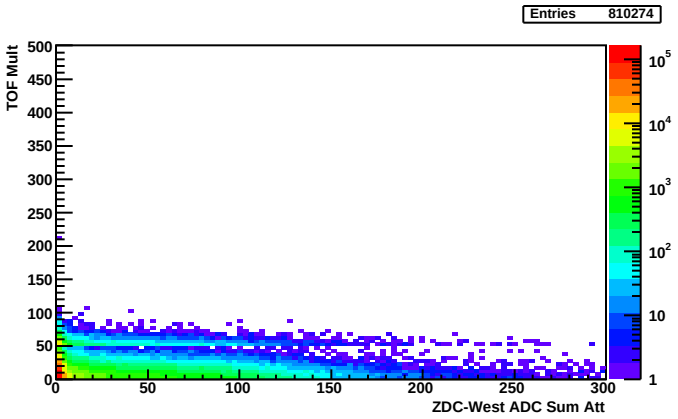

Entries 810274
TOF Mult
BBC-L-East ADC Sum

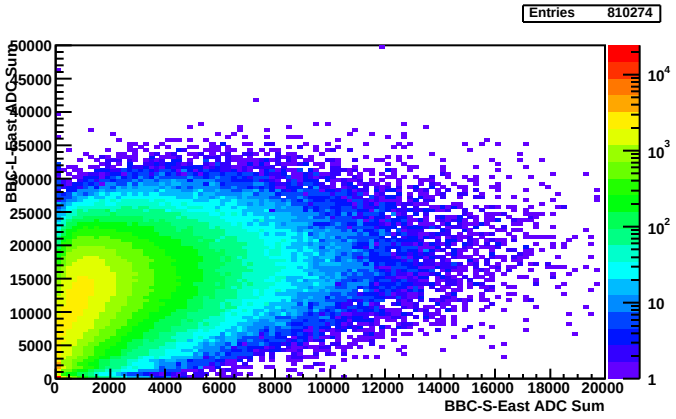

Entries 810274
TOF Mult
BBC-L-West ADC Sum

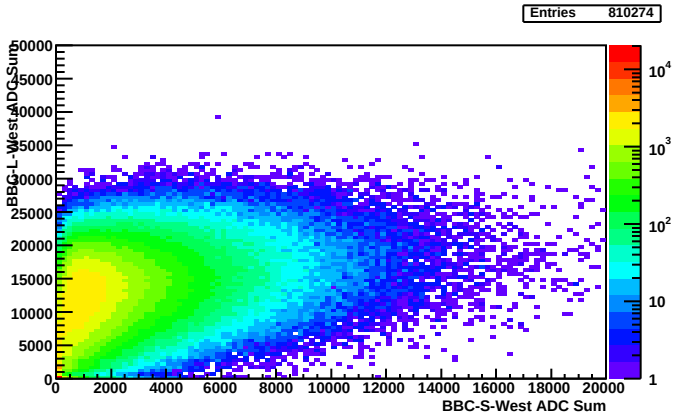

Entries 810274
TOF Mult
BBC-S-East ADC Sum

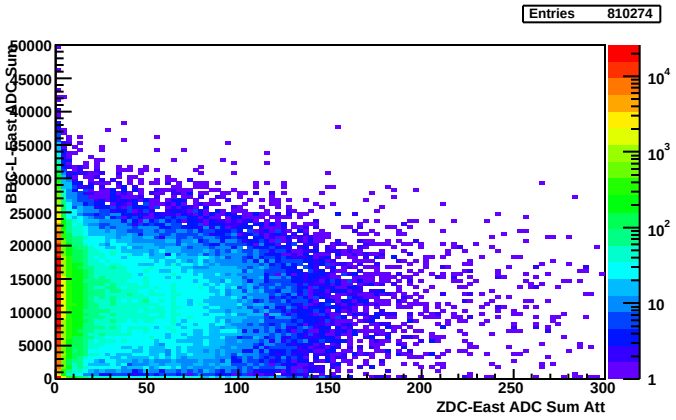

Entries 810274
TOF Mult
BBC-S-West ADC Sum

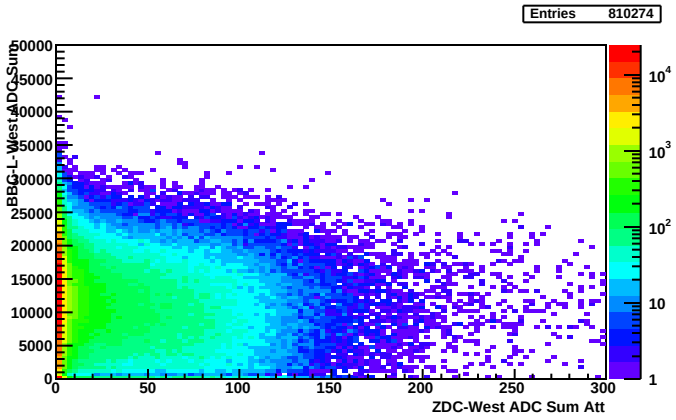

Entries 810274
TOF Mult
ZDC-East ADC Sum Att

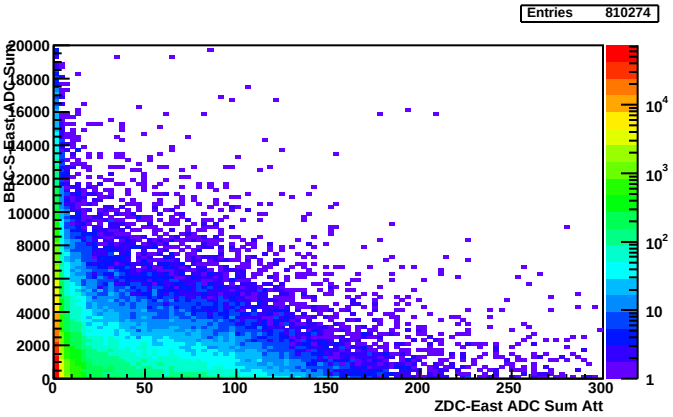

Entries 810274
TOF Mult
ZDC-West ADC Sum Att

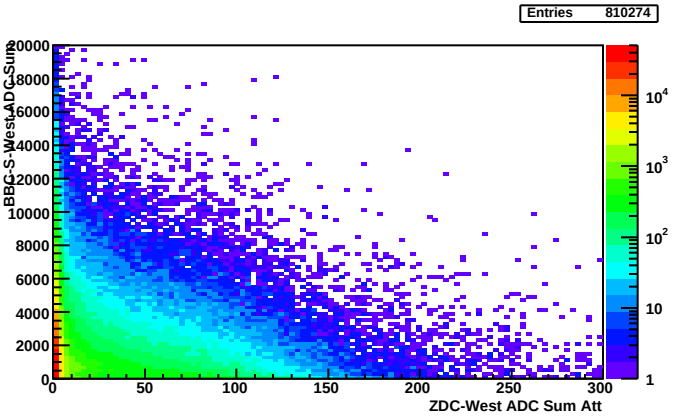

Entries 810274
BBC-L-East ADC Sum
BBC-S-East ADC Sum

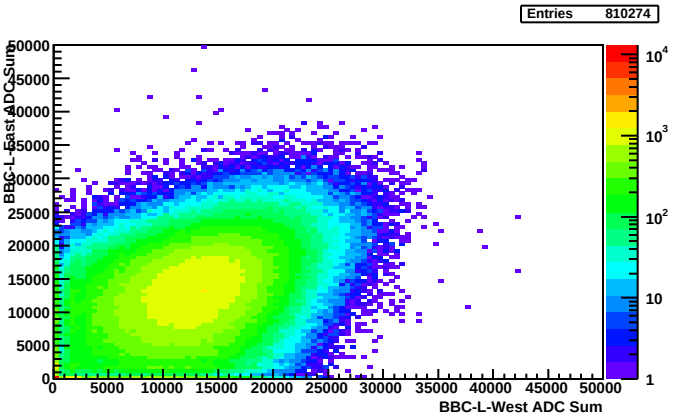

Entries 810274
BBC-L-West ADC Sum
BBC-S-West ADC Sum

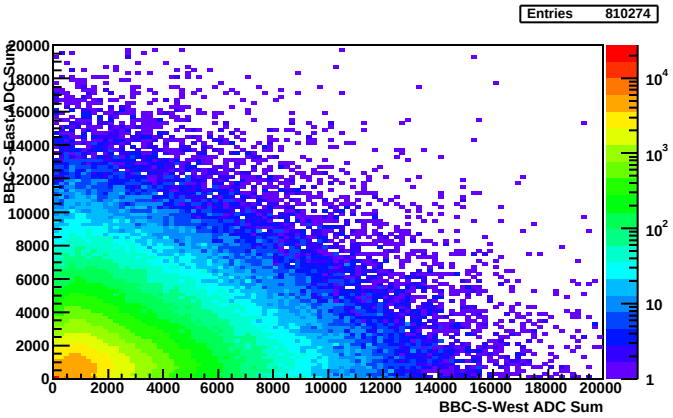

Entries 810274
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

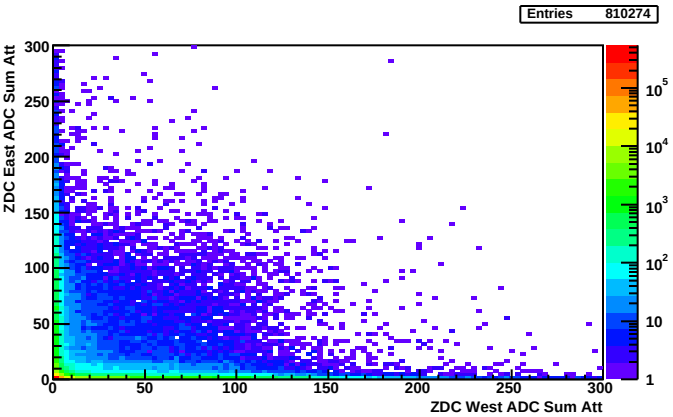

Entries 810274
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

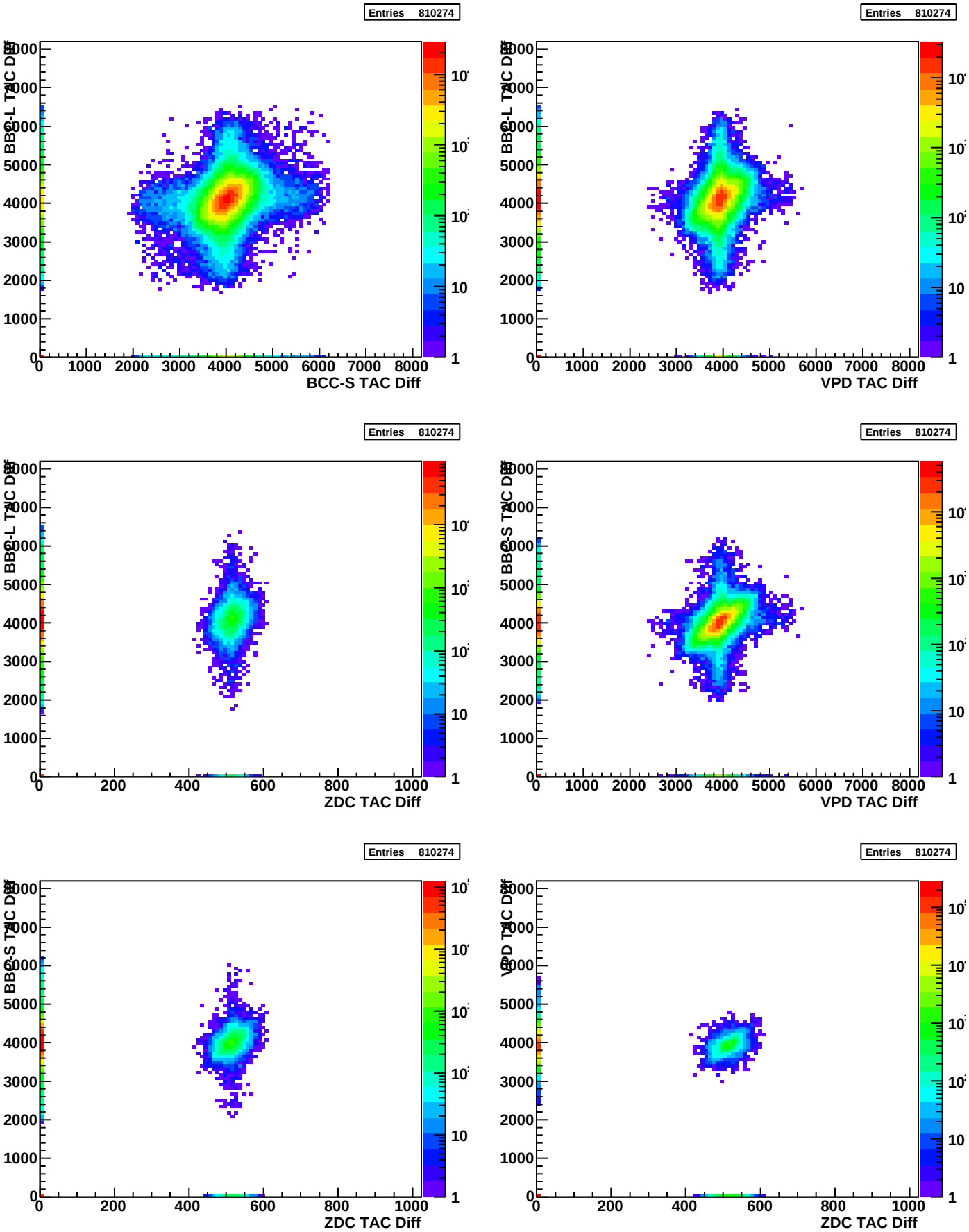

Entries 810274
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

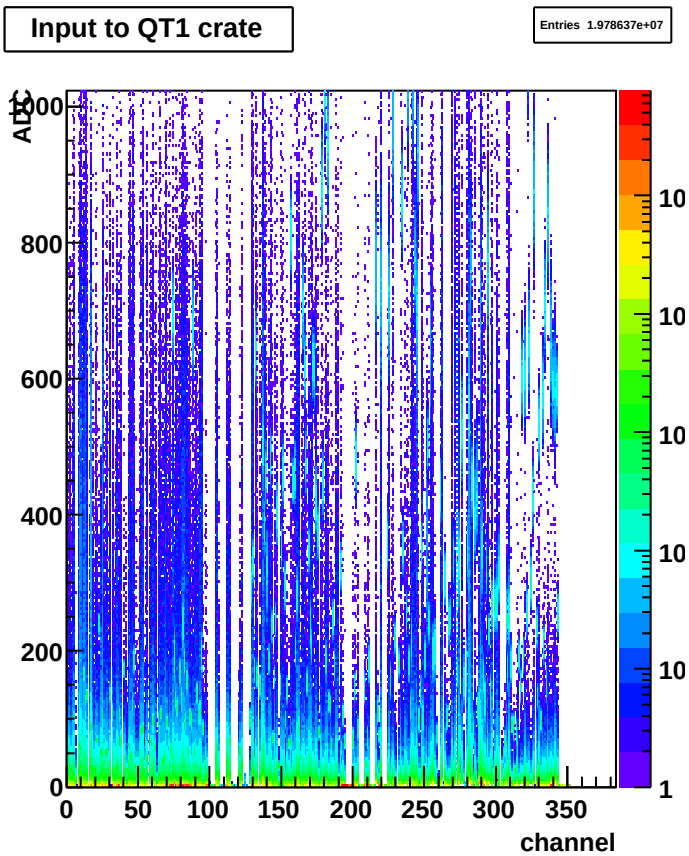

Entries 810274
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

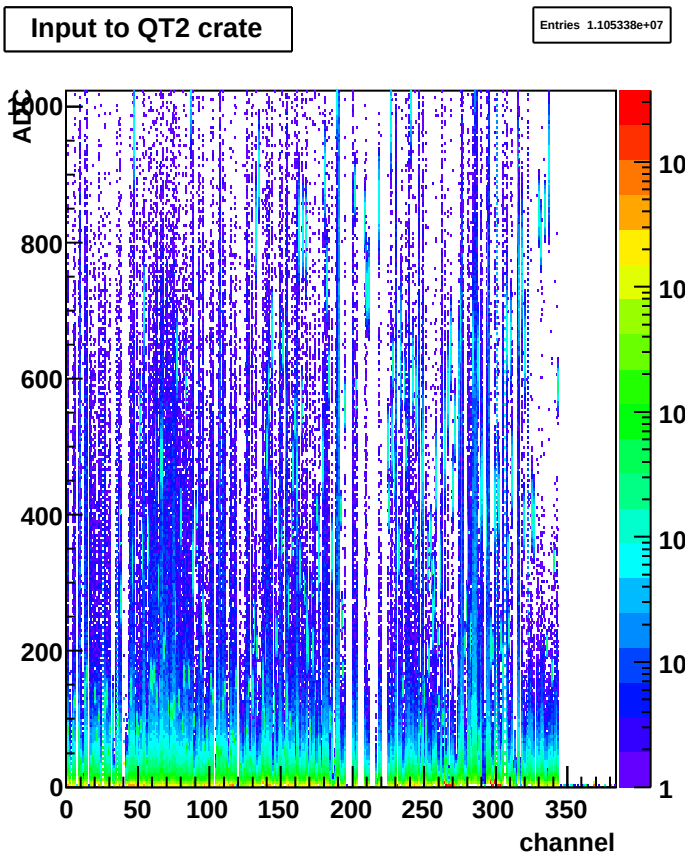

Entries 810274
BBC-L-East ADC Sum
BBC-L-West ADC Sum

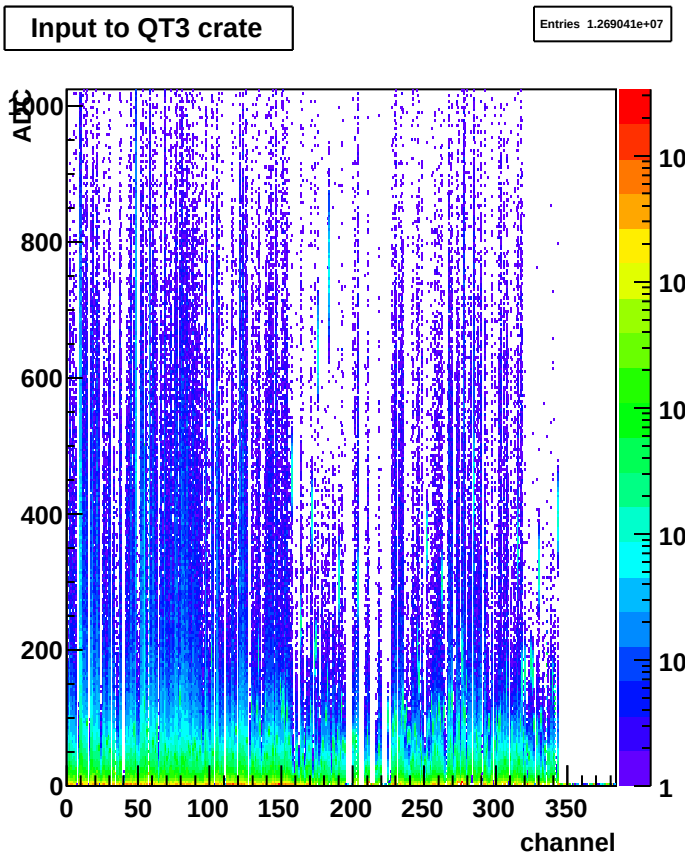

Entries 810274
BBC-S-East ADC Sum
BBC-S-West ADC Sum

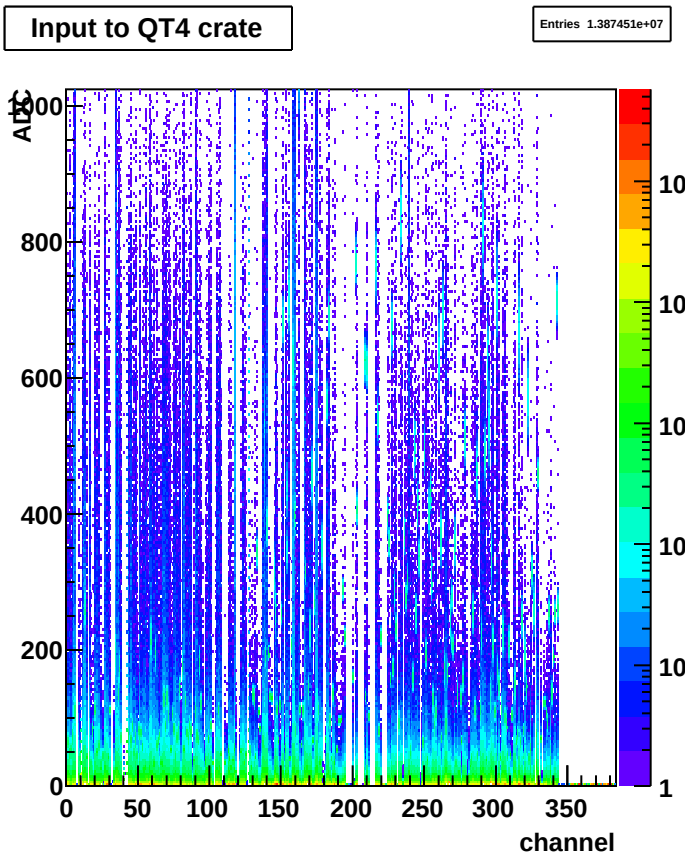

Entries 810274
ZDC East ADC Sum Att
ZDC West ADC Sum Att

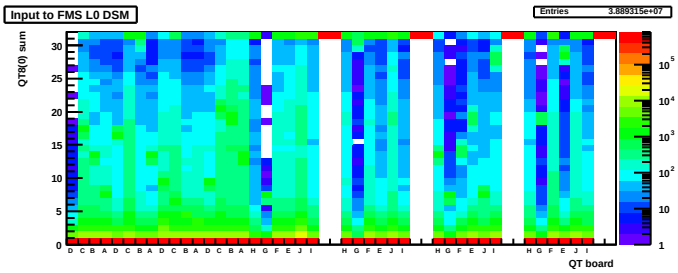

Entries 810274
BBC-L TAC Diff
BCC-S TAC Diff
Entries 810274
BBC-L TAC Diff
VPD TAC Diff
Entries 810274
BBC-L TAC Diff
ZDC TAC Diff
Entries 810274
BBC-S TAC Diff
VPD TAC Diff
Entries 810274
BBC-S TAC Diff
ZDC TAC Diff
Entries 810274
VPD TAC Diff
ZDC TAC Diff

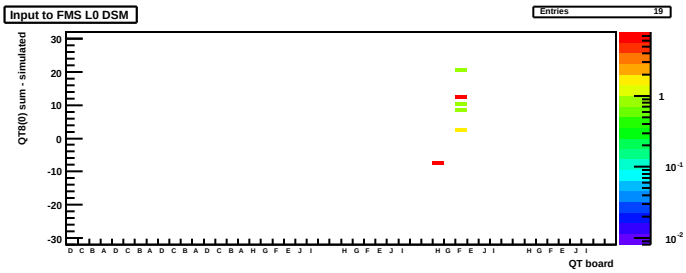

Input to QT1 crate
Entries 1.978637e+07
ADC
channel

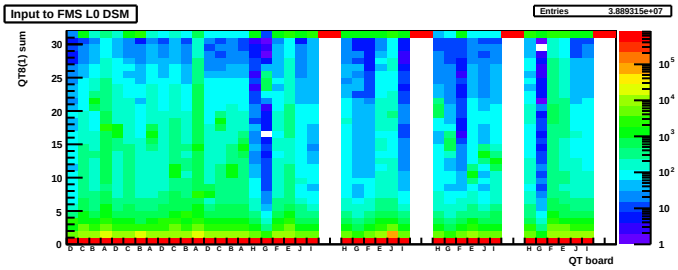

Input to QT2 crate
Entries 1.105338e+07
ADC
channel

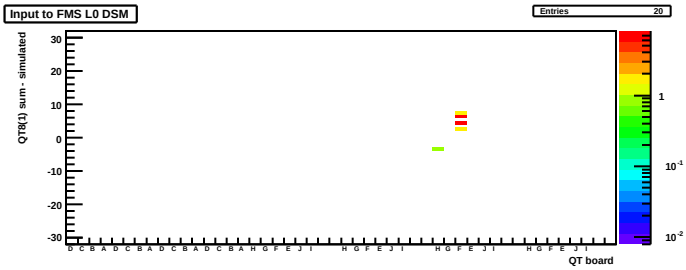

Input to QT3 crate
Entries 1.269041e+07
ADC
channel

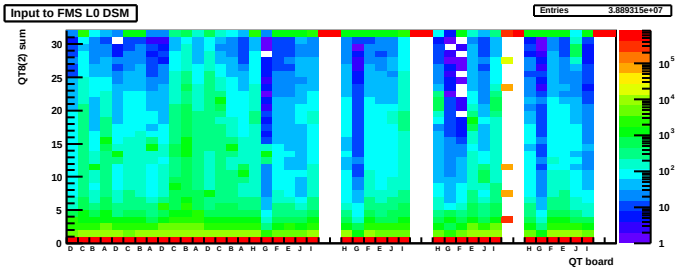

Input to QT4 crate
Entries 1.387451e+07
ADC
channel

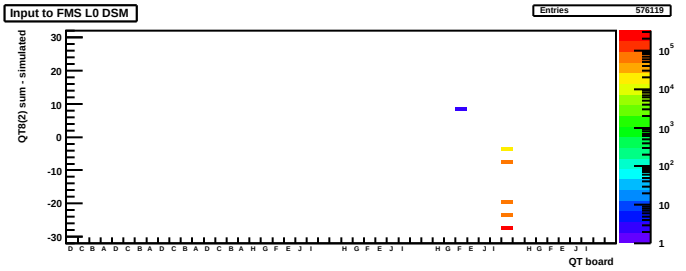

Input to FMS L0 DSM
Entries 3.889315e+07
QT8(0) sum
QT board

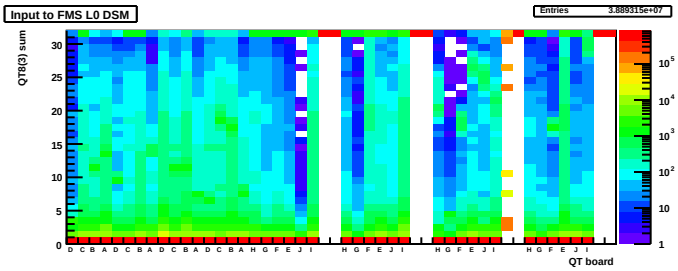

Input to FMS L0 DSM
Entries 19
QT8(0) sum - simulated
QT board

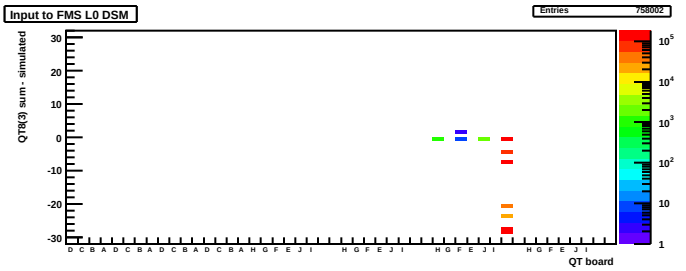

Input to FMS L0 DSM
Entries 3.889315e+07
QT8(1) sum
QT board

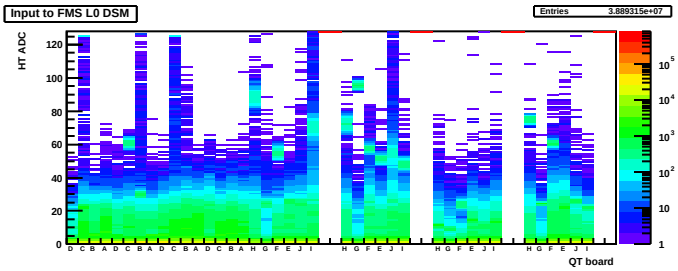

Input to FMS L0 DSM
Entries 20
QT8(1) sum - simulated
QT board

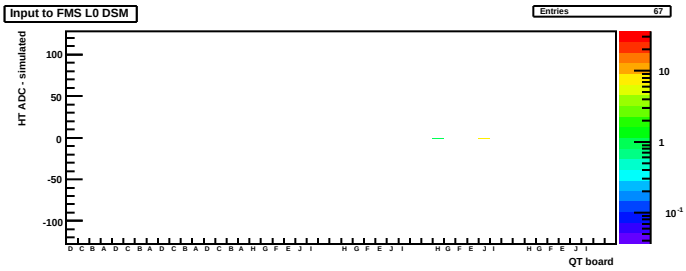

Input to FMS L0 DSM
Entries 3.889315e+07
QT8(2) sum
QT board

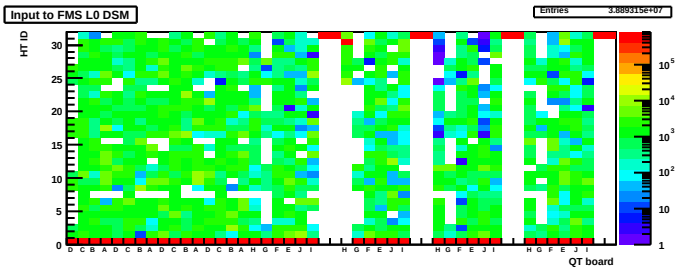

Input to FMS L0 DSM
Entries 576119
QT8(2) sum - simulated
QT board

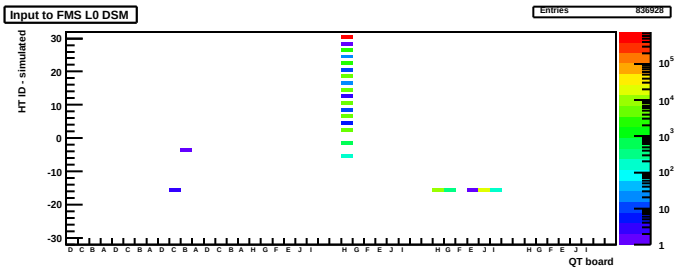

Input to FMS L0 DSM
Entries 3.889315e+07
QT8(3) sum
QT board

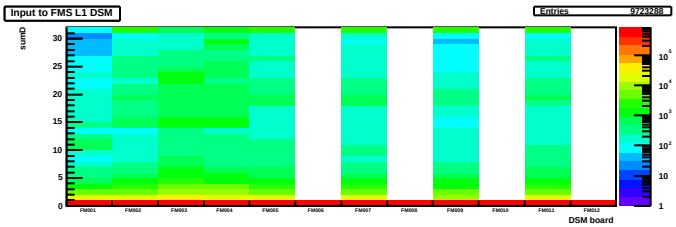

Input to FMS L0 DSM
Entries 758002
QT8(3) sum - simulated
QT board

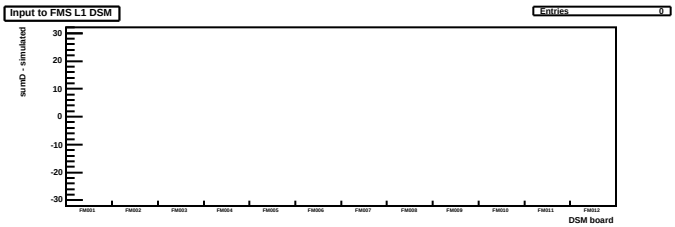

Input to FMS L0 DSM
Entries 3.889315e+07
HT ADC
QT board

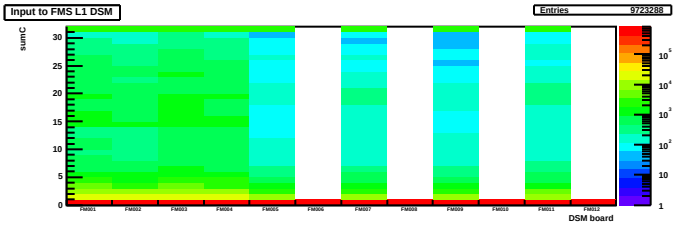

Input to FMS L0 DSM
Entries 67
HT ADC - simulated
QT board

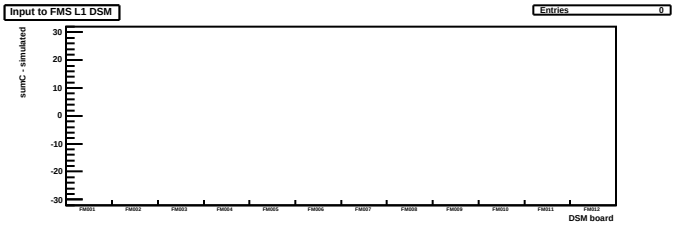

Input to FMS L0 DSM
Entries 3.889315e+07
HT ID
QT board

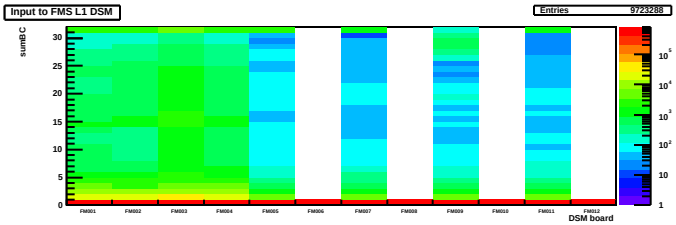

Input to FMS L0 DSM
Entries 836928
HT ID - simulated
QT board

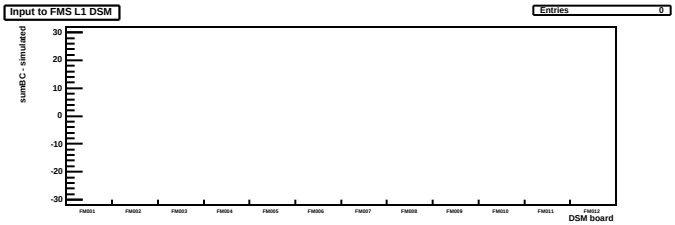

Input to FMS L1 DSM
Entries 9723288
sumD
DSM board

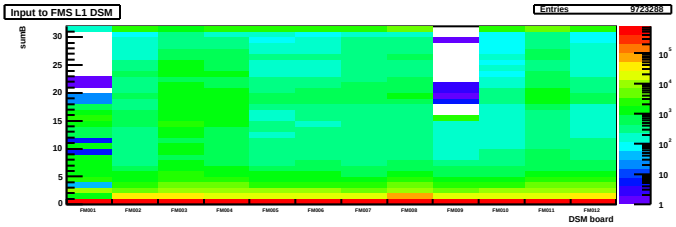

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

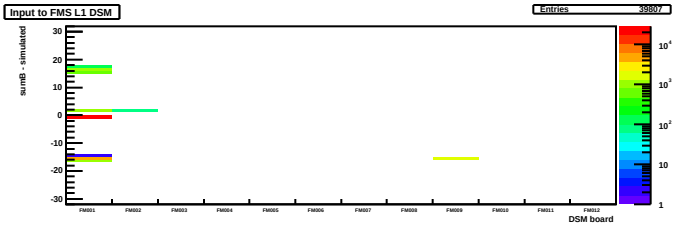

Input to FMS L1 DSM
Entries 9723288
sumC
DSM board

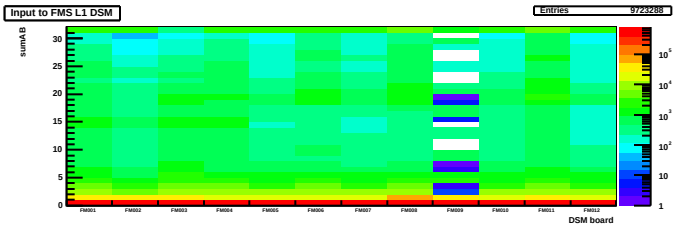

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

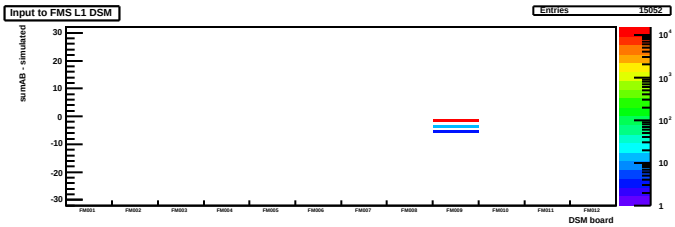

Input to FMS L1 DSM
Entries 9723288
sumBC
DSM board

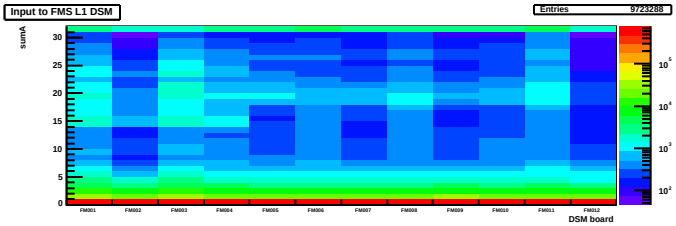

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

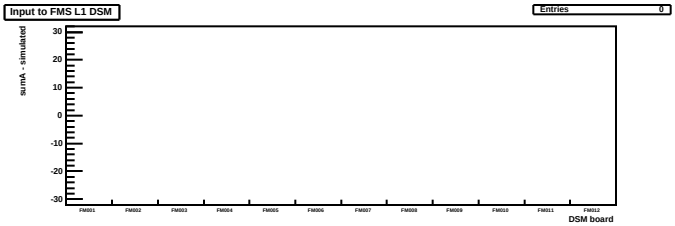

Input to FMS L1 DSM
Entries 9723288
sumB
DSM board

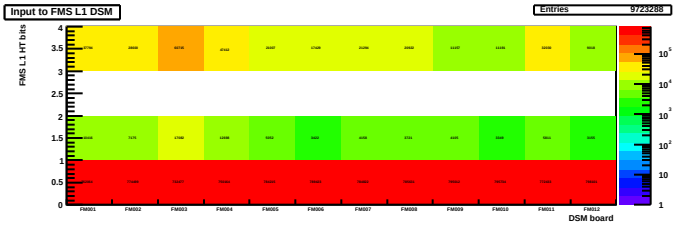

Input to FMS L1 DSM
Entries 39807
sumB - simulated
DSM board

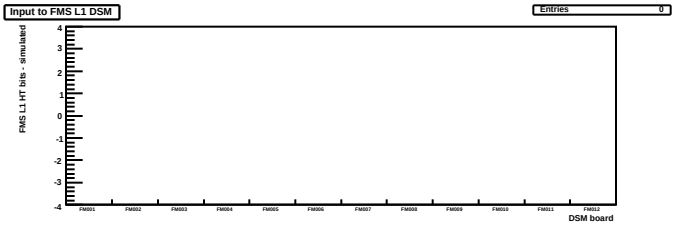

Input to FMS L1 DSM
Entries 9723288
sumAB
DSM board

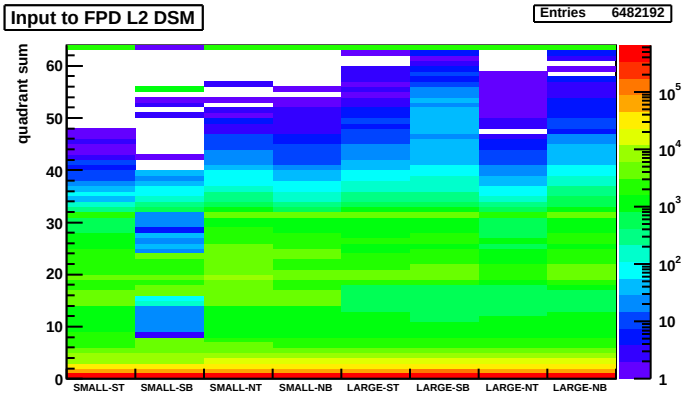

Input to FMS L1 DSM
Entries 15052
sumAB - simulated
DSM board

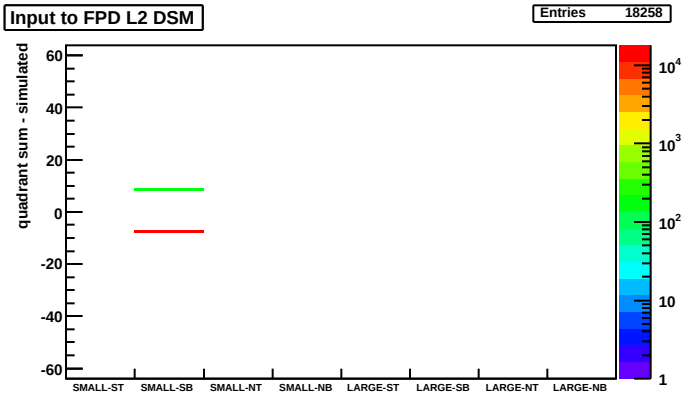

Input to FMS L1 DSM
Entries 9723288
sumA
DSM board

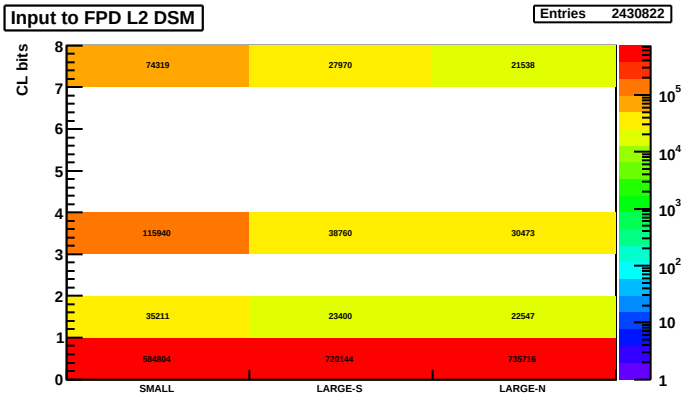

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

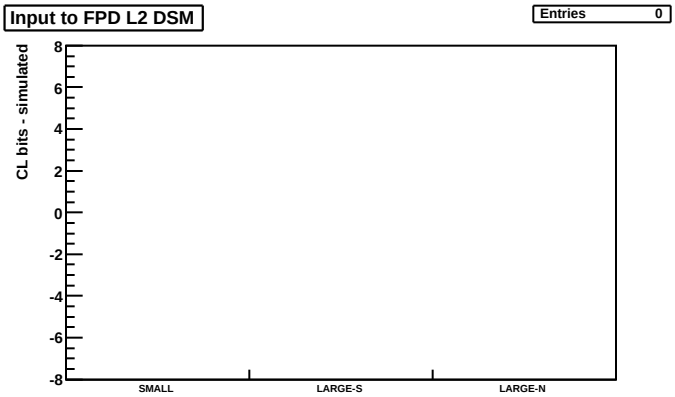

Input to FMS L1 DSM
Entries 9723288
FMS L1 HT bits
DSM board

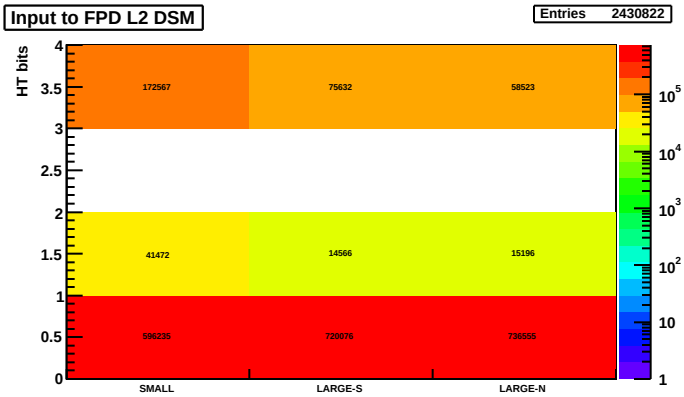

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

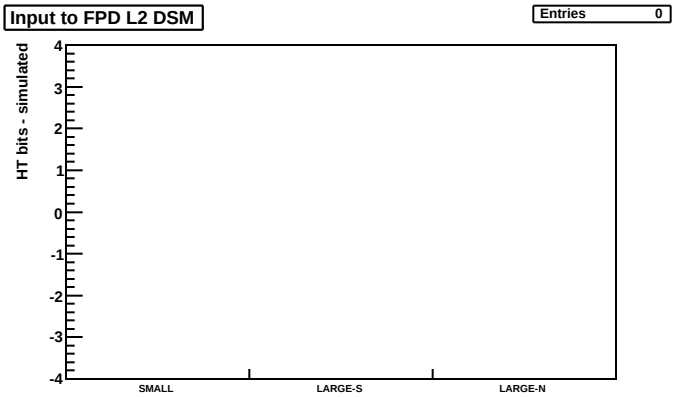

Input to FPD L2 DSM
Entries 6482192
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

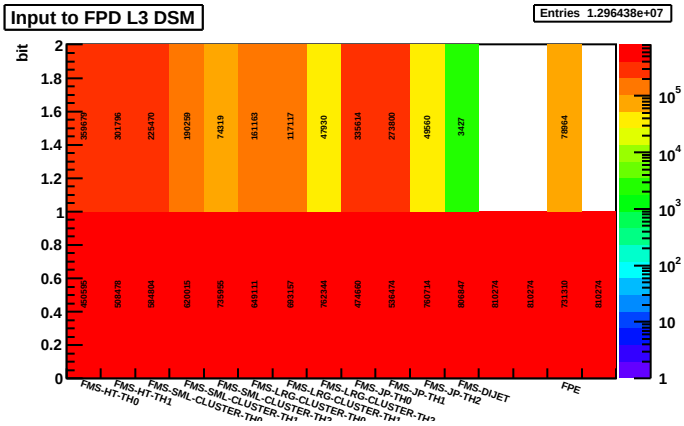

Input to FPD L2 DSM
Entries 18258
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

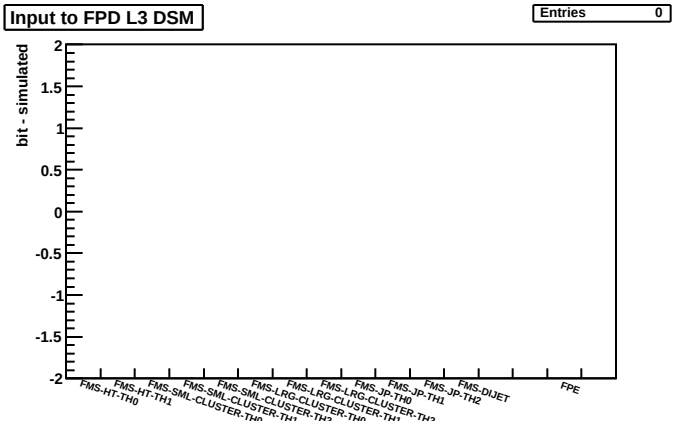

Input to FPD L2 DSM
Entries 2430822
CL bits
74319
27970
21538
115940
38760
30473
35211
23400
22547
584804
720144
735716
SMALL
LARGE-S
LARGE-N

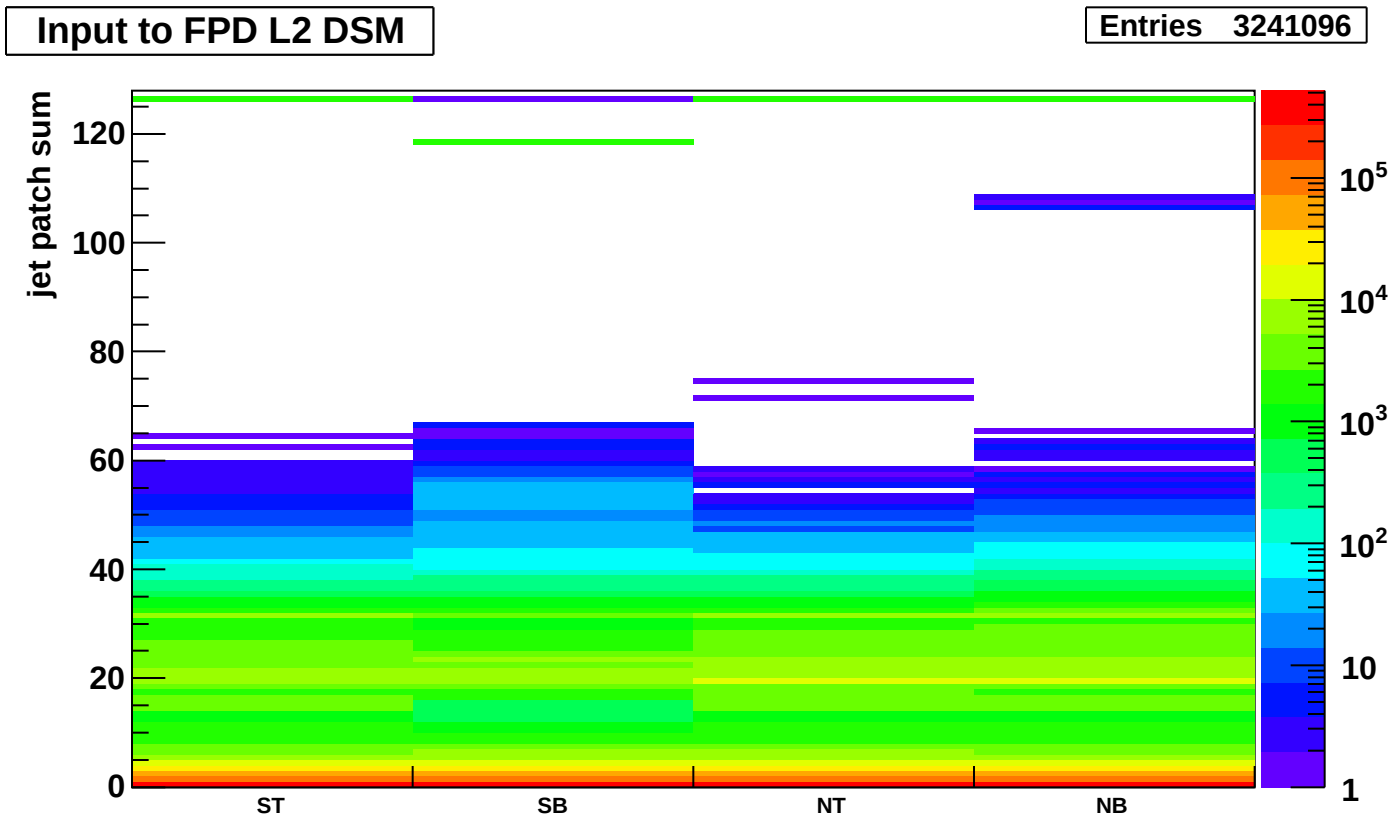

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

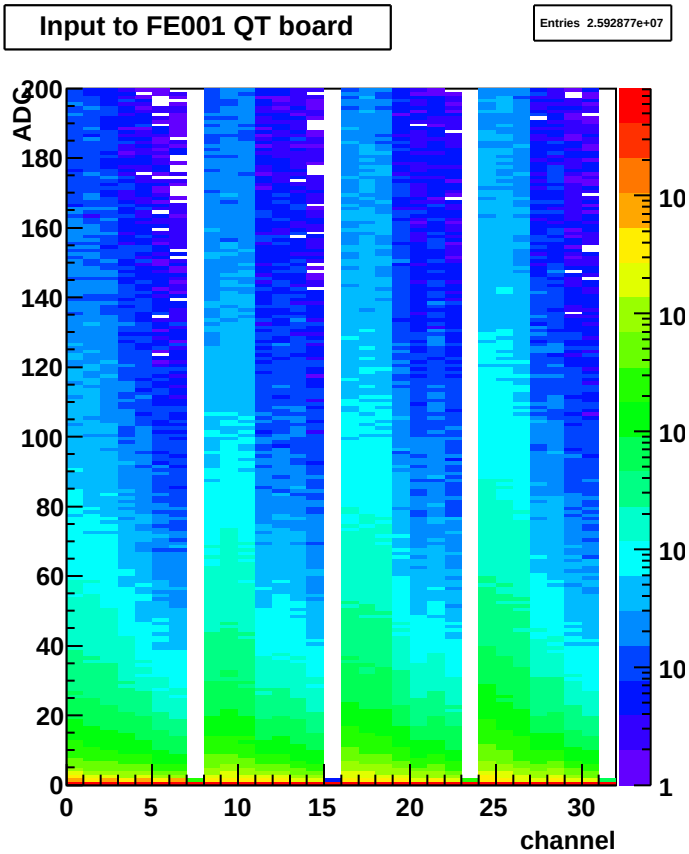

Input to FPD L2 DSM
Entries 2430822
HT bits
172567
75632
58523
41472
14566
15196
596235
720076
736555
SMALL
LARGE-S
LARGE-N

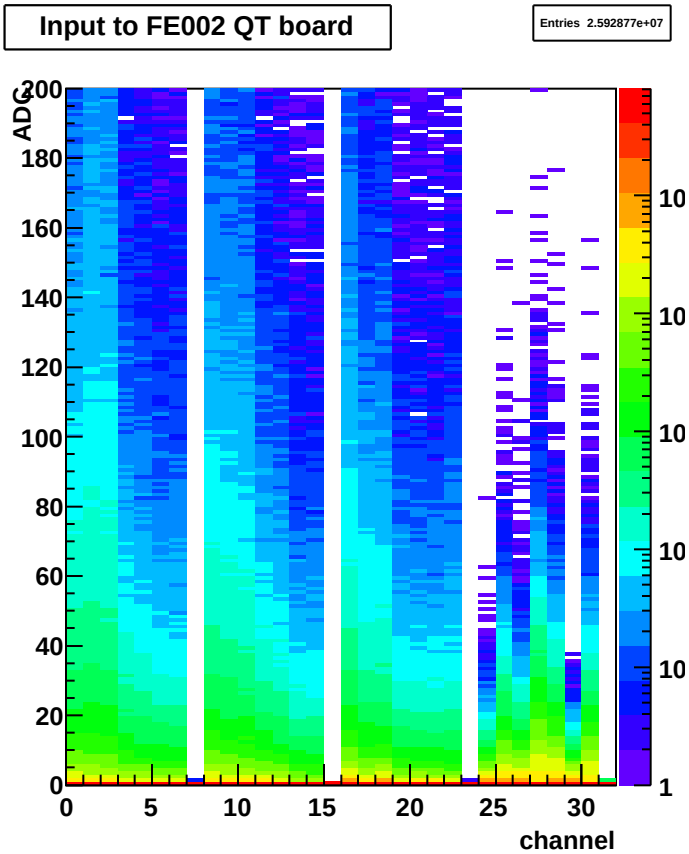

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

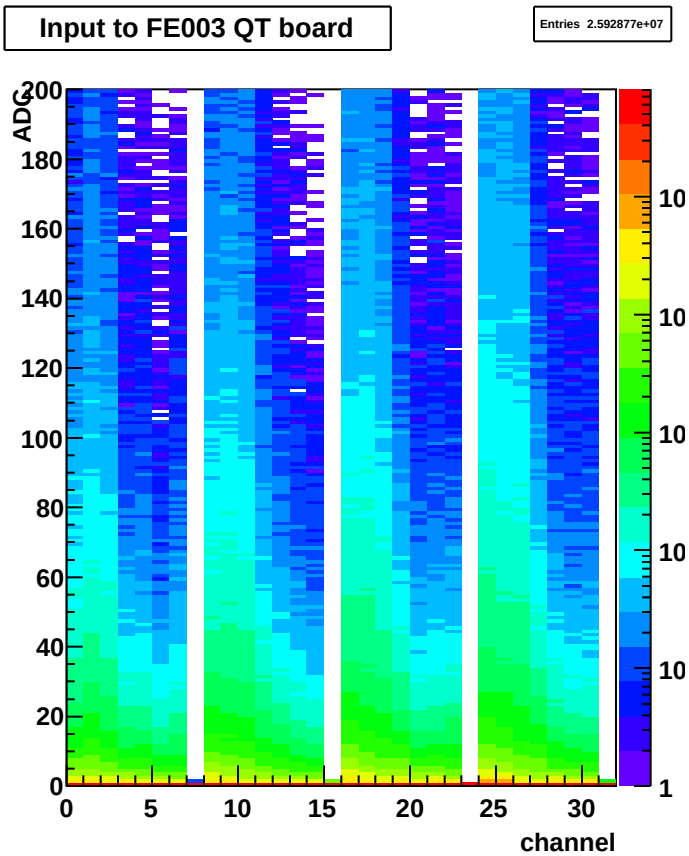

Input to FPD L3 DSM
Entries 1.296438e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

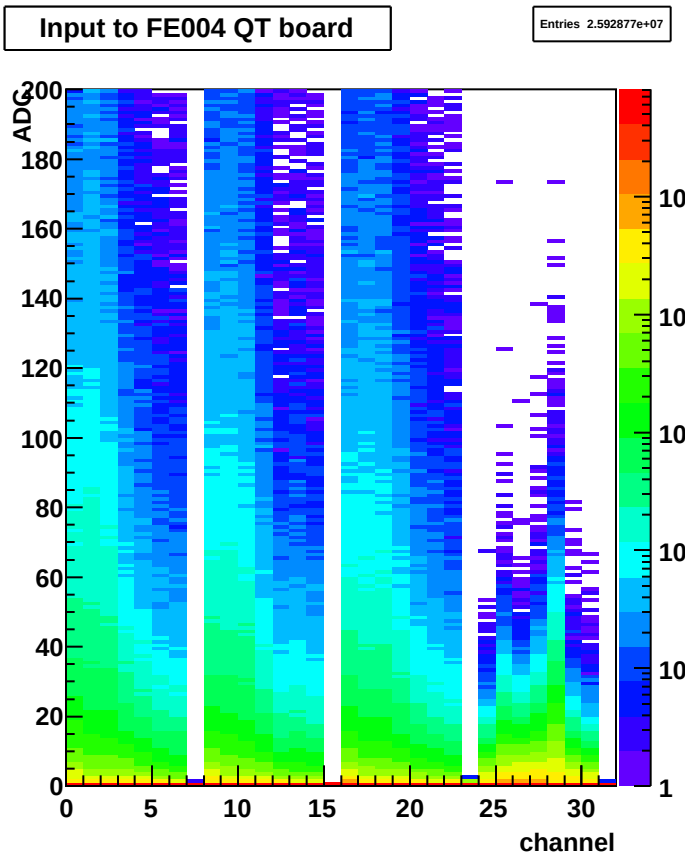

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

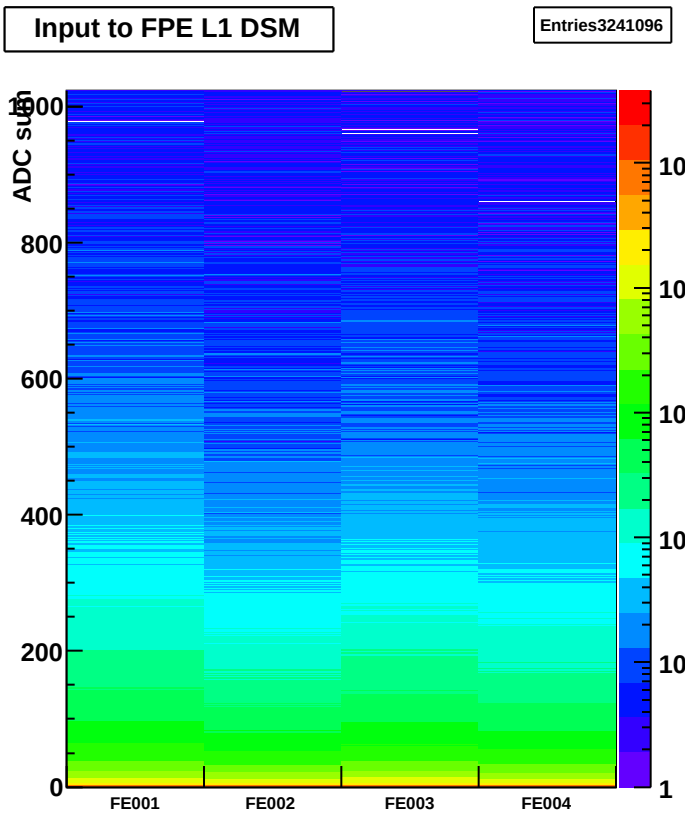

Input to FPD L2 DSM
Entries 3241096
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

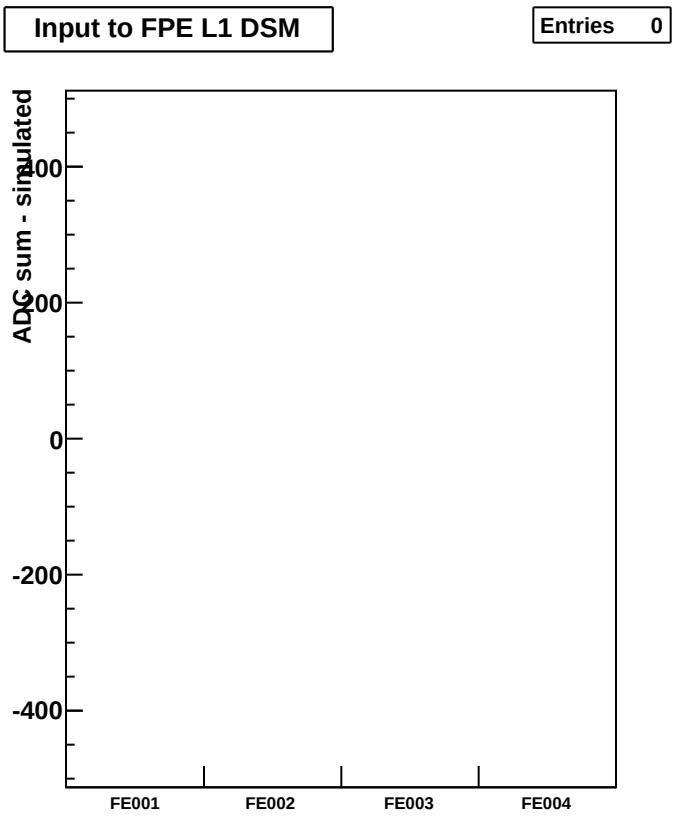

Input to FE001 QT board
Entries 2.592877e+07
ADC
channel

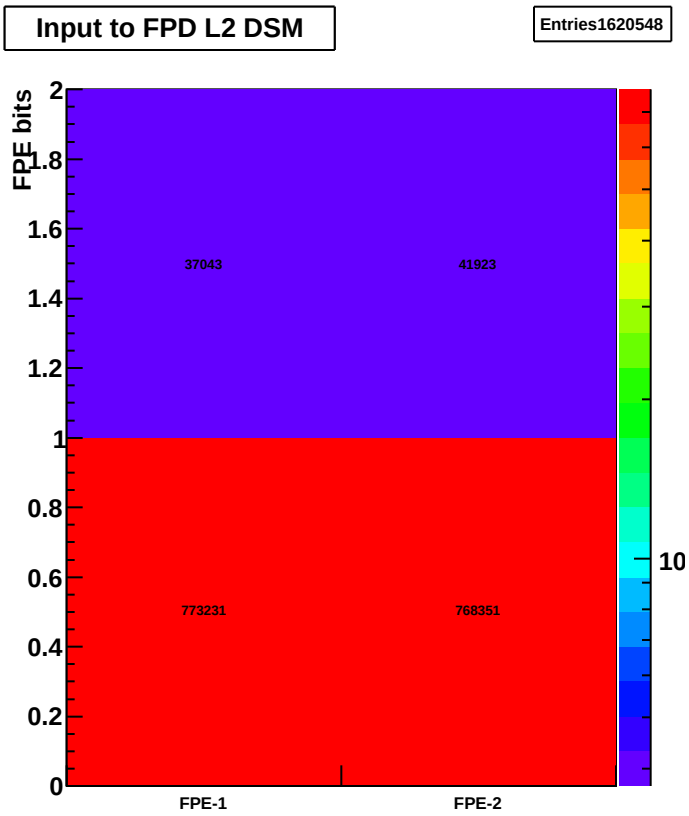

Input to FE002 QT board
Entries 2.592877e+07
ADC
channel

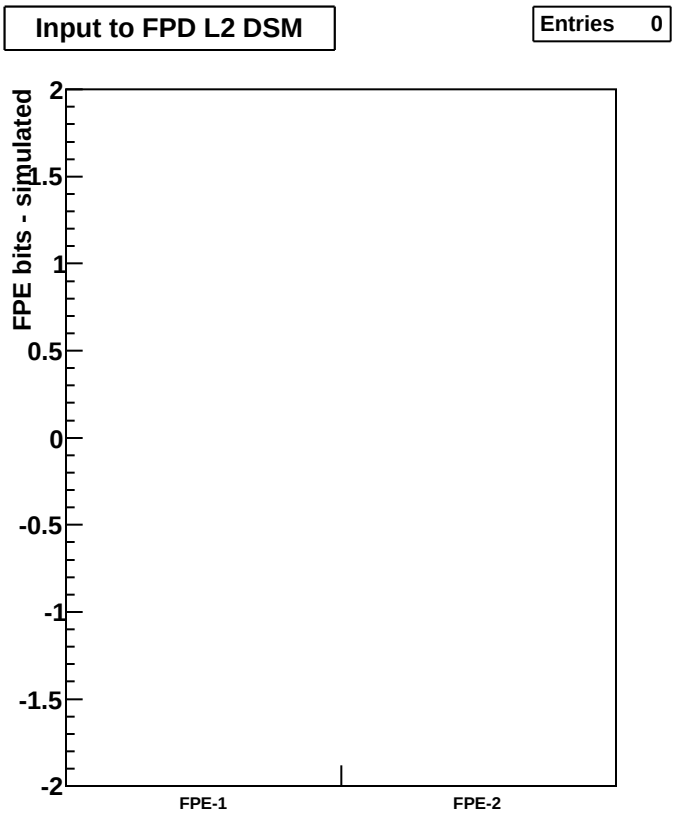

Input to FE003 QT board
Entries 2.592877e+07
ADC
channel


Input to FE004 QT board
Entries 2.592877e+07
ADC
channel


Input to FPE L1 DSM
Entries3241096
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
Entries1620548
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
37043
41923
773231
768351
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