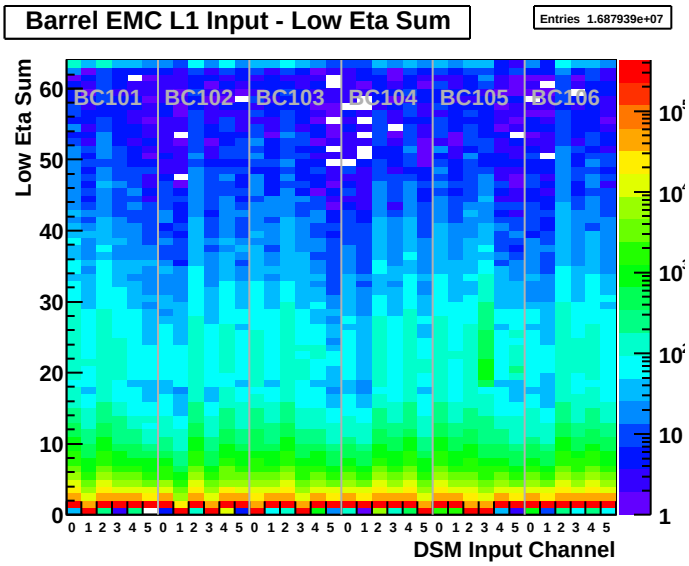
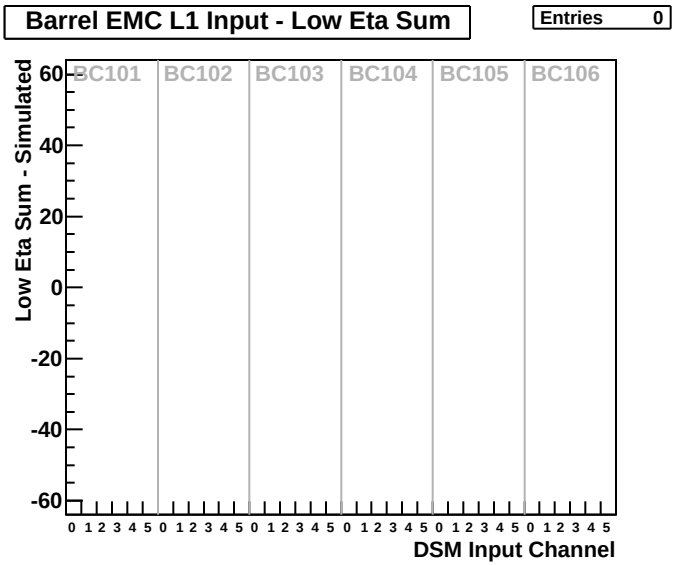
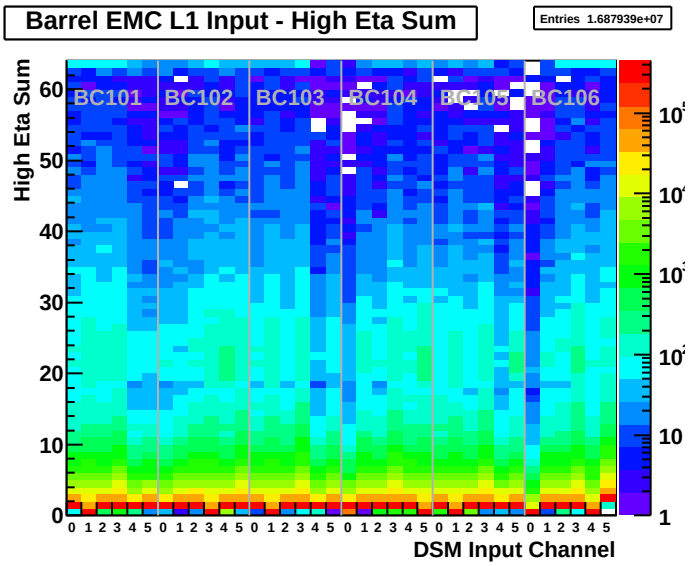
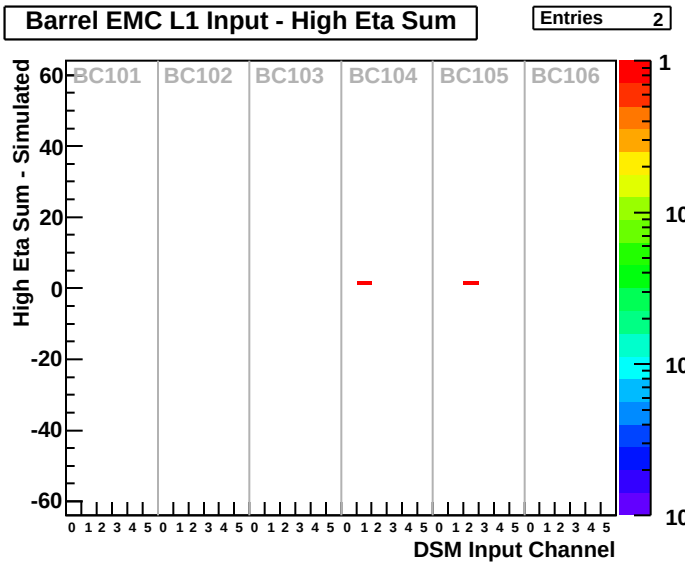
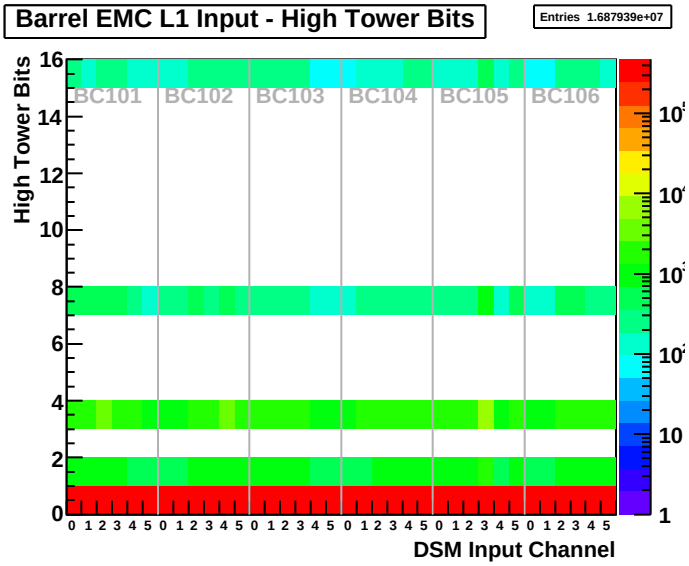
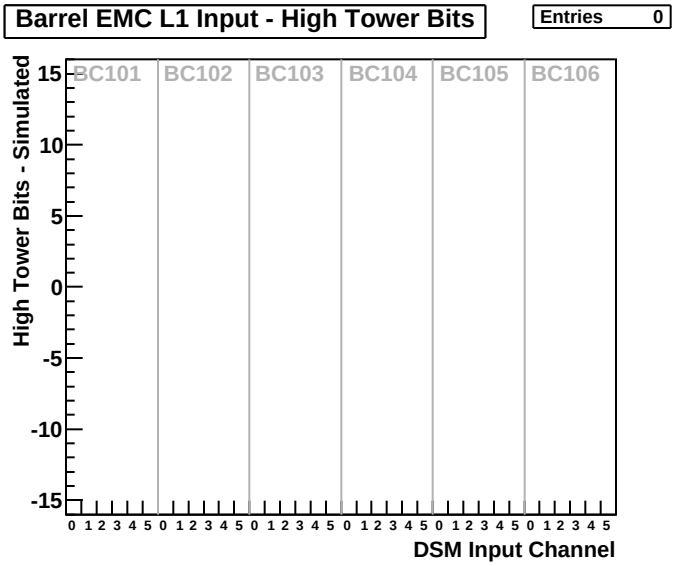

Barrel EMC L1 Input - Low Eta Sum
Entries 1.687939e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

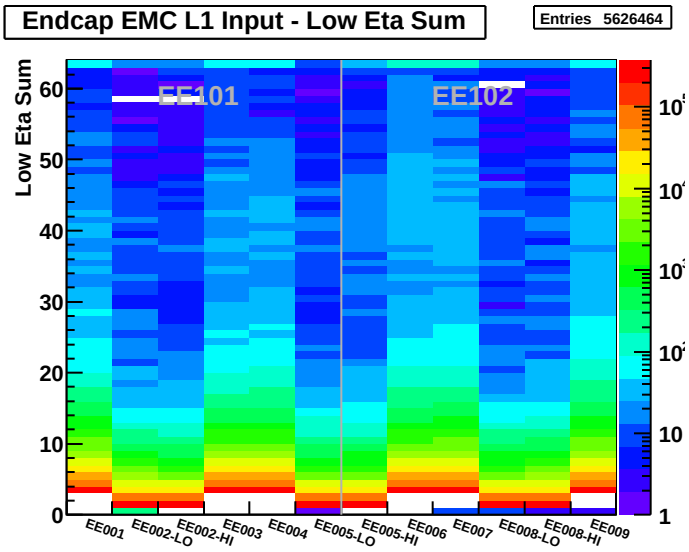

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

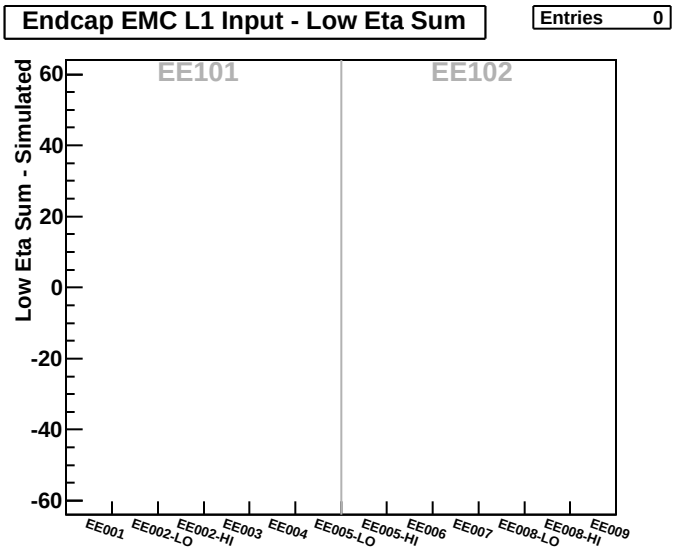

Barrel EMC L1 Input - High Eta Sum
Entries 1.687939e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

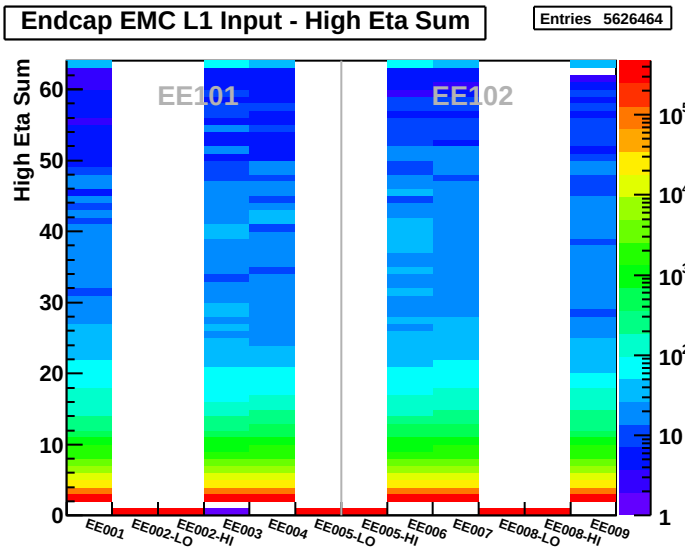

Barrel EMC L1 Input - High Eta Sum
Entries 2
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

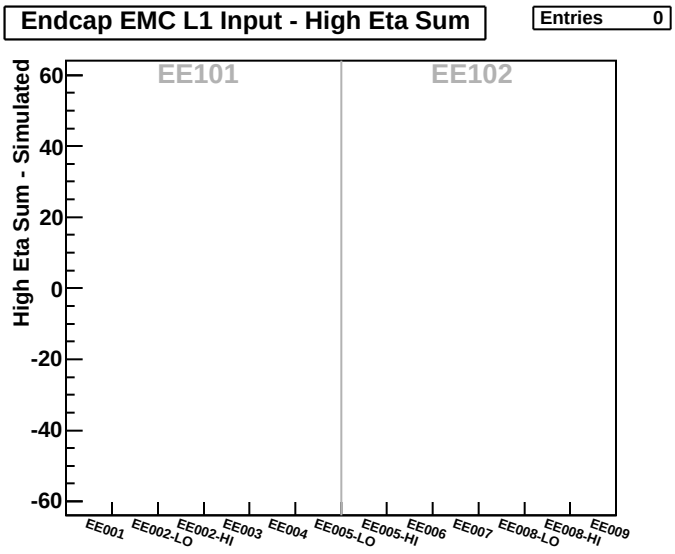

Barrel EMC L1 Input - High Tower Bits
Entries 1.687939e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

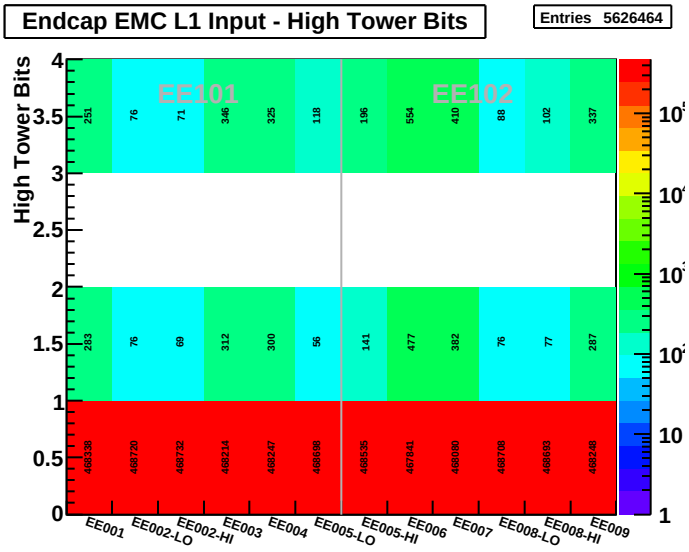

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

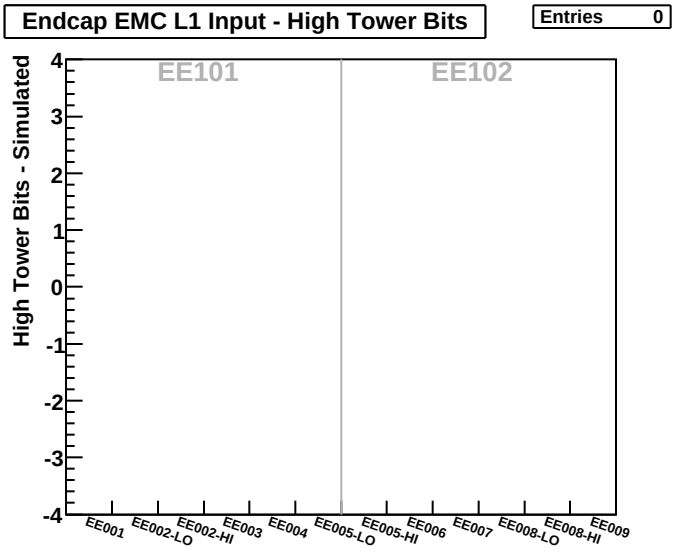

Endcap EMC L1 Input - Low Eta Sum
Entries 5626464
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

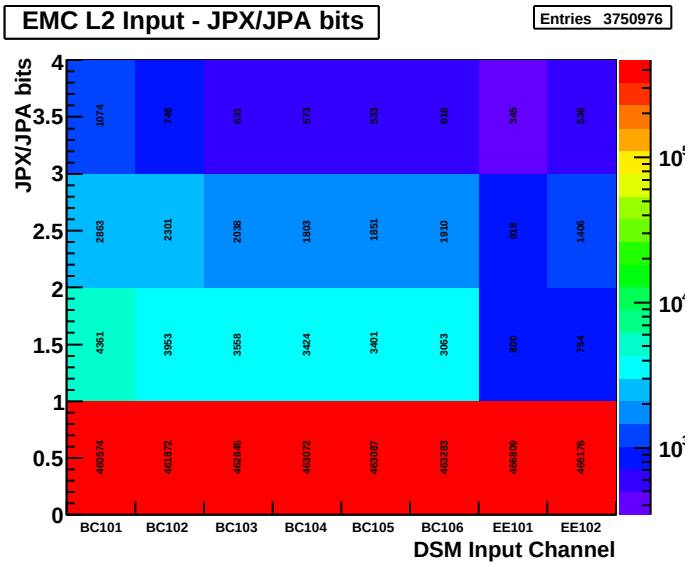

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

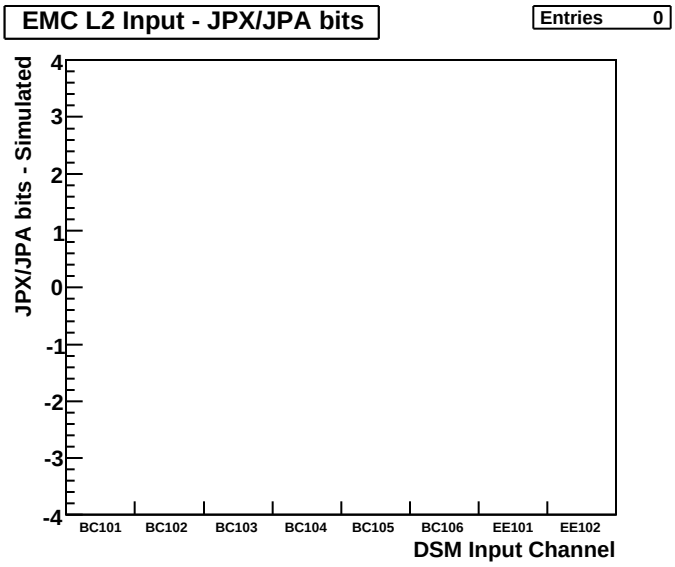

Endcap EMC L1 Input - High Eta Sum
Entries 5626464
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

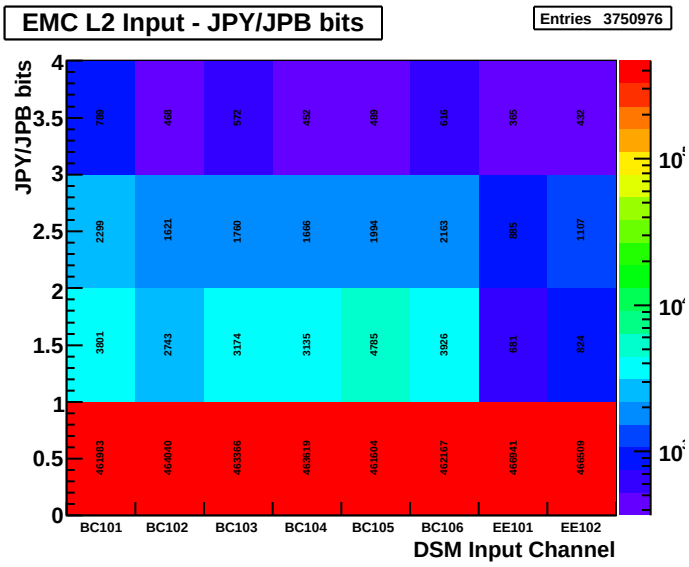

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

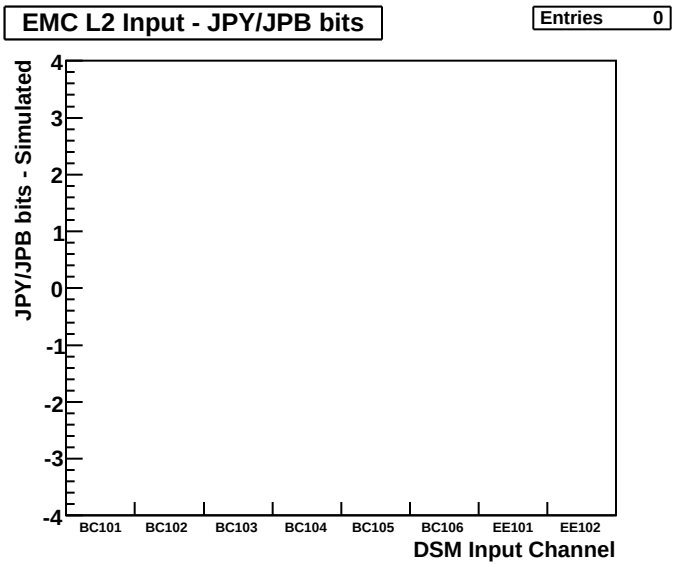

Endcap EMC L1 Input - High Tower Bits
Entries 5626464
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

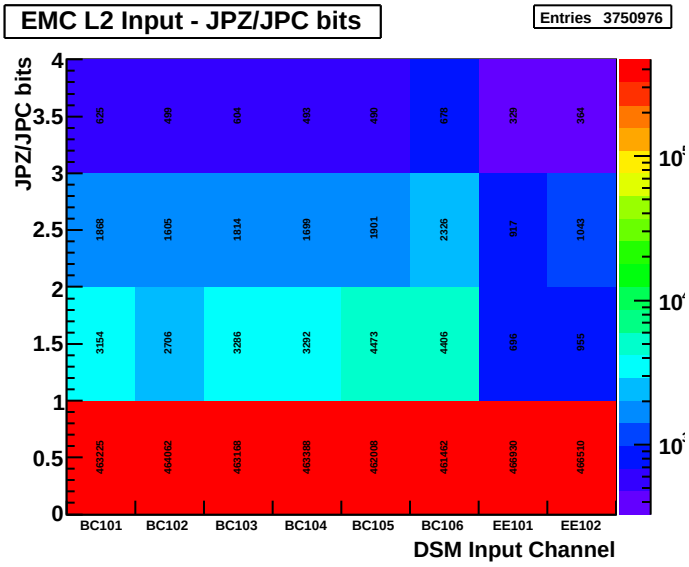

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

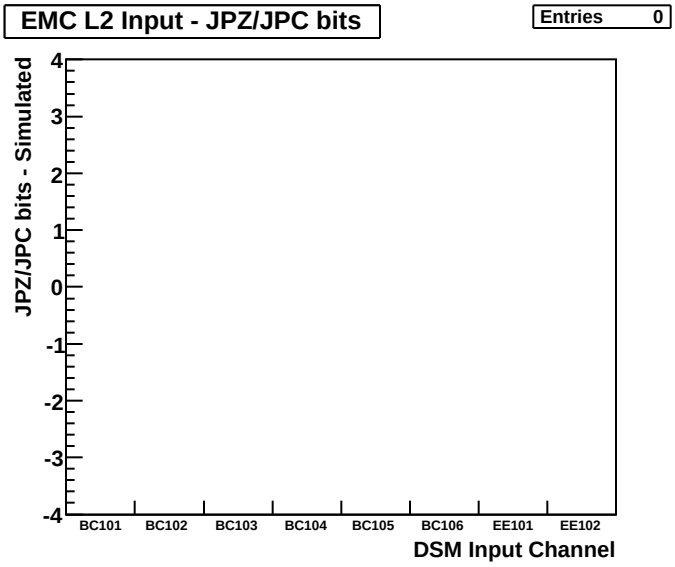

EMC L2 Input - JPX/JPA bits
Entries 3750976
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1074 746 631 573 533 616 345 536
2863 2301 2038 1803 1851 1910 918 1406
4361 3953 3558 3424 3401 3063 800 754
460574 461872 462645 463072 463087 463283 466809 466176

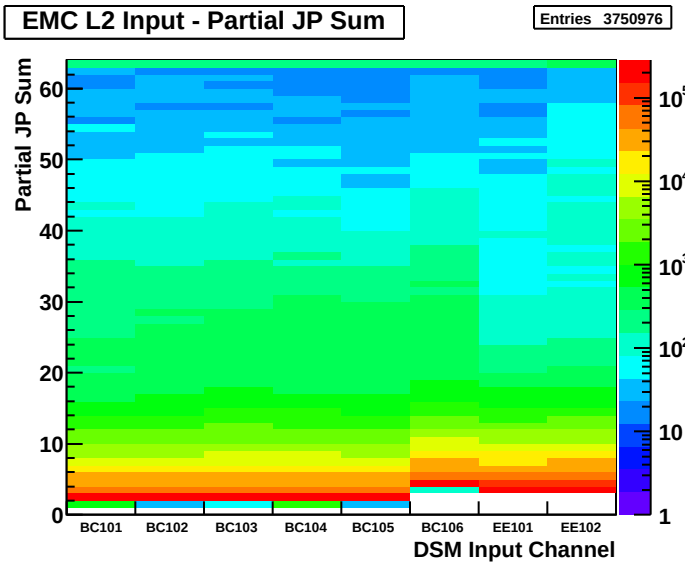

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

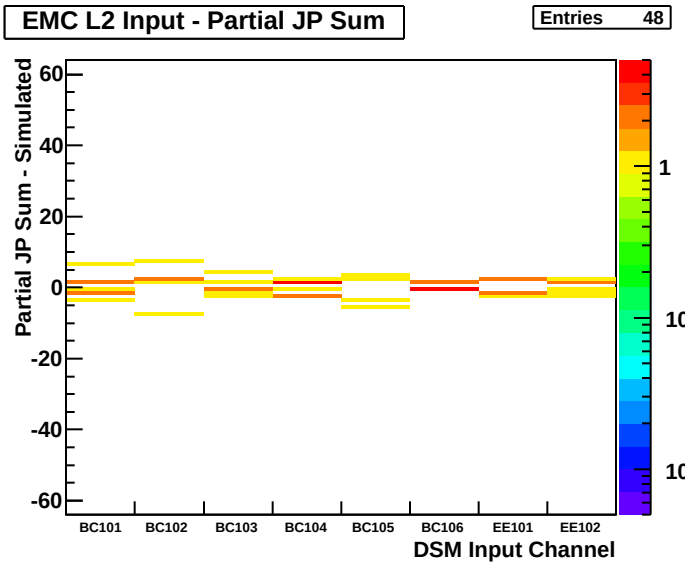

EMC L2 Input - JPY/JPB bits
Entries 3750976
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
789 468 572 452 489 616 365 432
2299 1621 1760 1666 1994 2163 885 1107
3801 2743 3174 3135 4785 3926 631 824
461983 464040 463366 463619 461604 462167 466941 466509

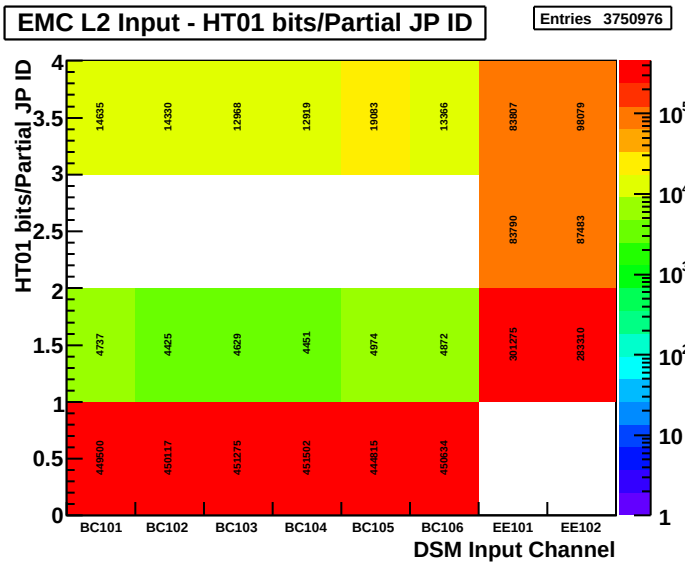

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

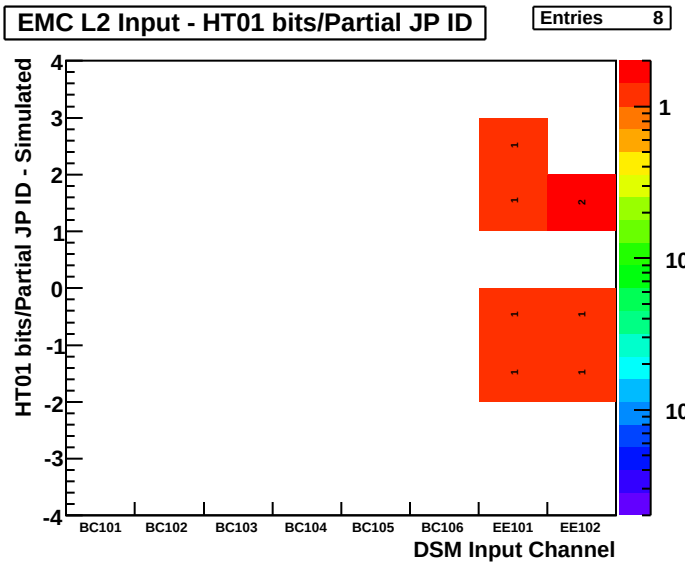

EMC L2 Input - JPZ/JPC bits
Entries 3750976
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
625 499 604 493 490 678 329 364
1868 1605 1814 1699 1901 2326 917 1043
3154 2706 3286 3292 4473 4406 696 955
463225 464062 463168 463388 462008 461462 466930 466510

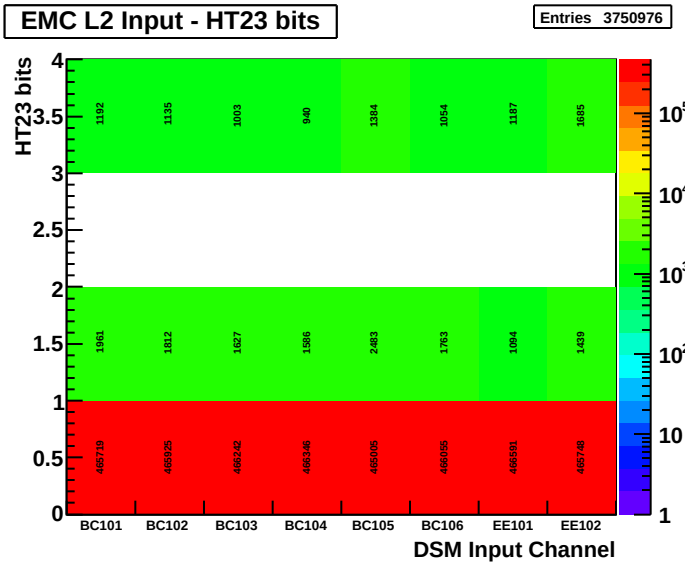

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

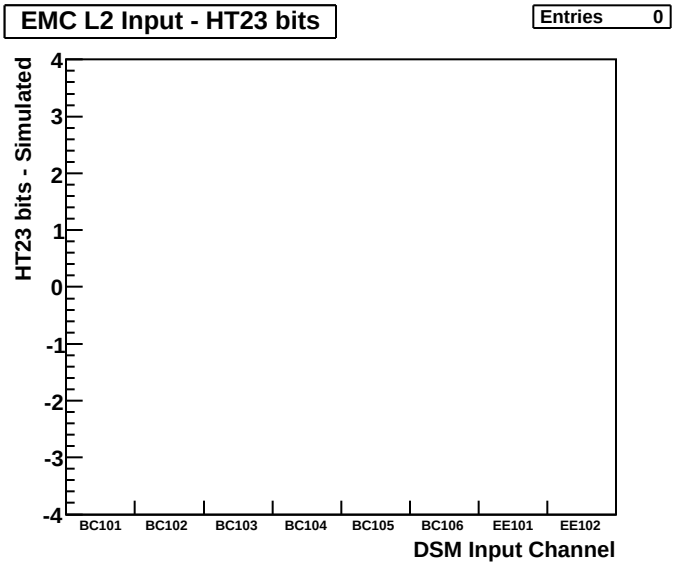

EMC L2 Input - Partial JP Sum
Entries 3750976
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

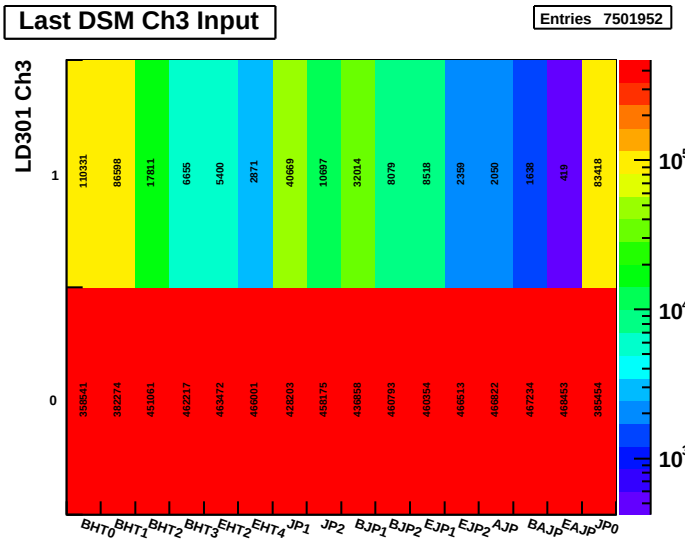

EMC L2 Input - Partial JP Sum
Entries 48
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

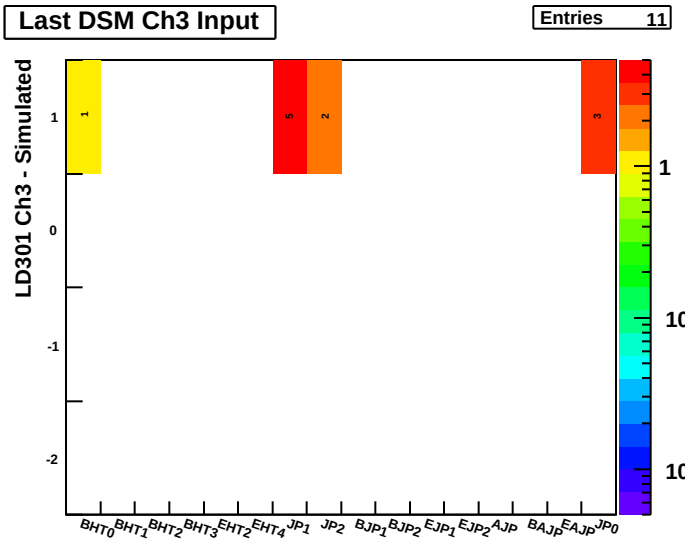

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3750976
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

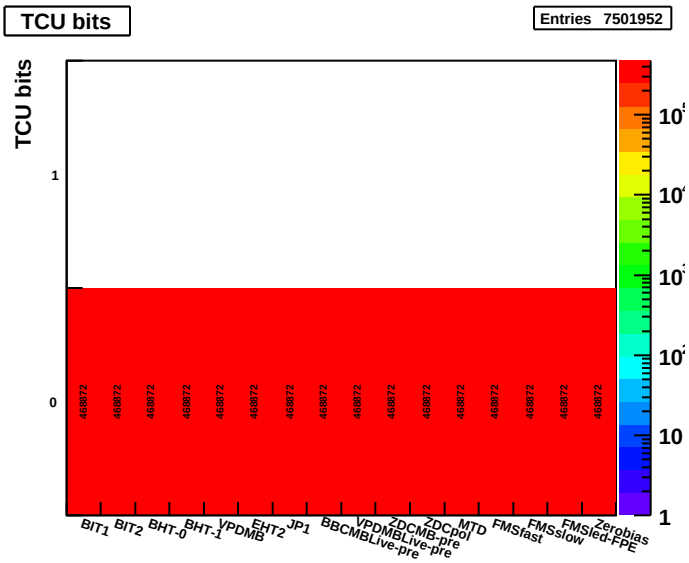

EMC L2 Input - HT01 bits/Partial JP ID
Entries 8
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

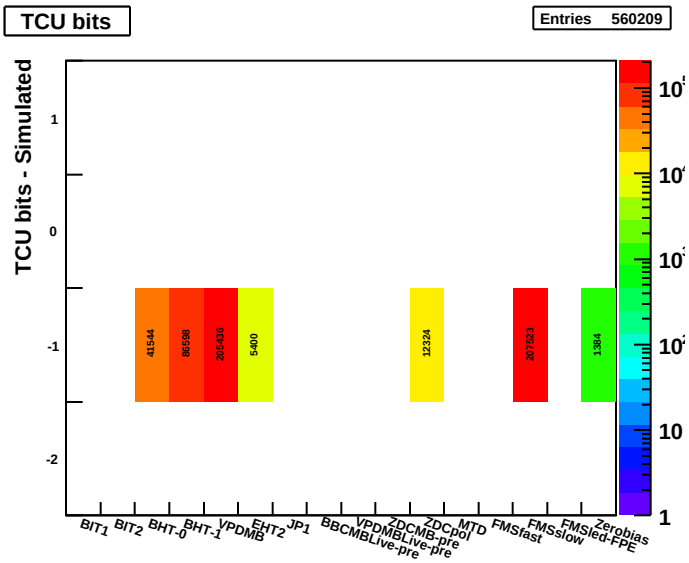

EMC L2 Input - HT23 bits
Entries 3750976
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

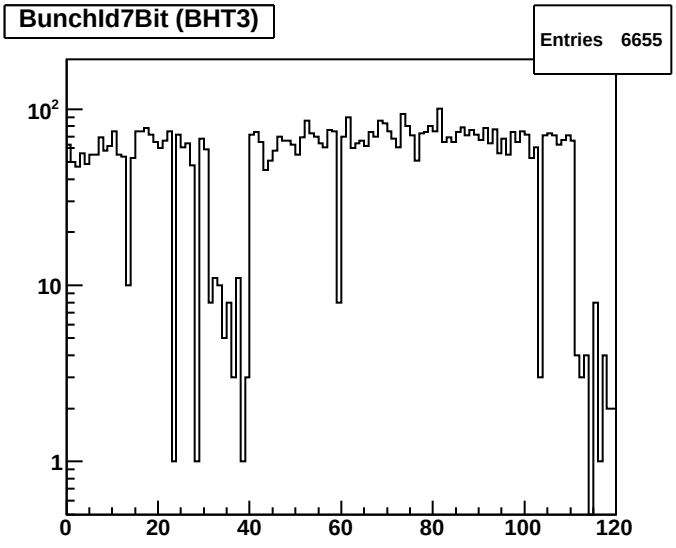

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

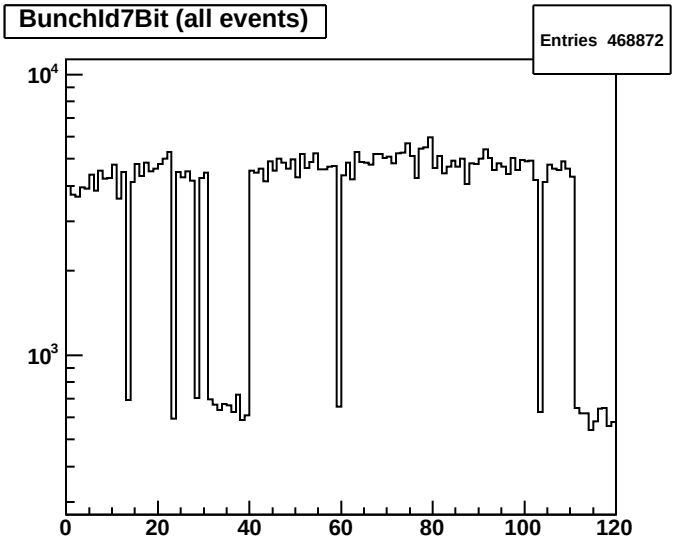

Last DSM Ch3 Input
Entries 7501952
LD301 Ch3
110331 86598 17811 6655 5400 2871 40669 10697 32014 8079 8518 2399 2050 1638 419 83418
358541 382274 451061 462217 463472 466001 428203 458175 436858 460783 460354 466513 466822 467234 468453 385454
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

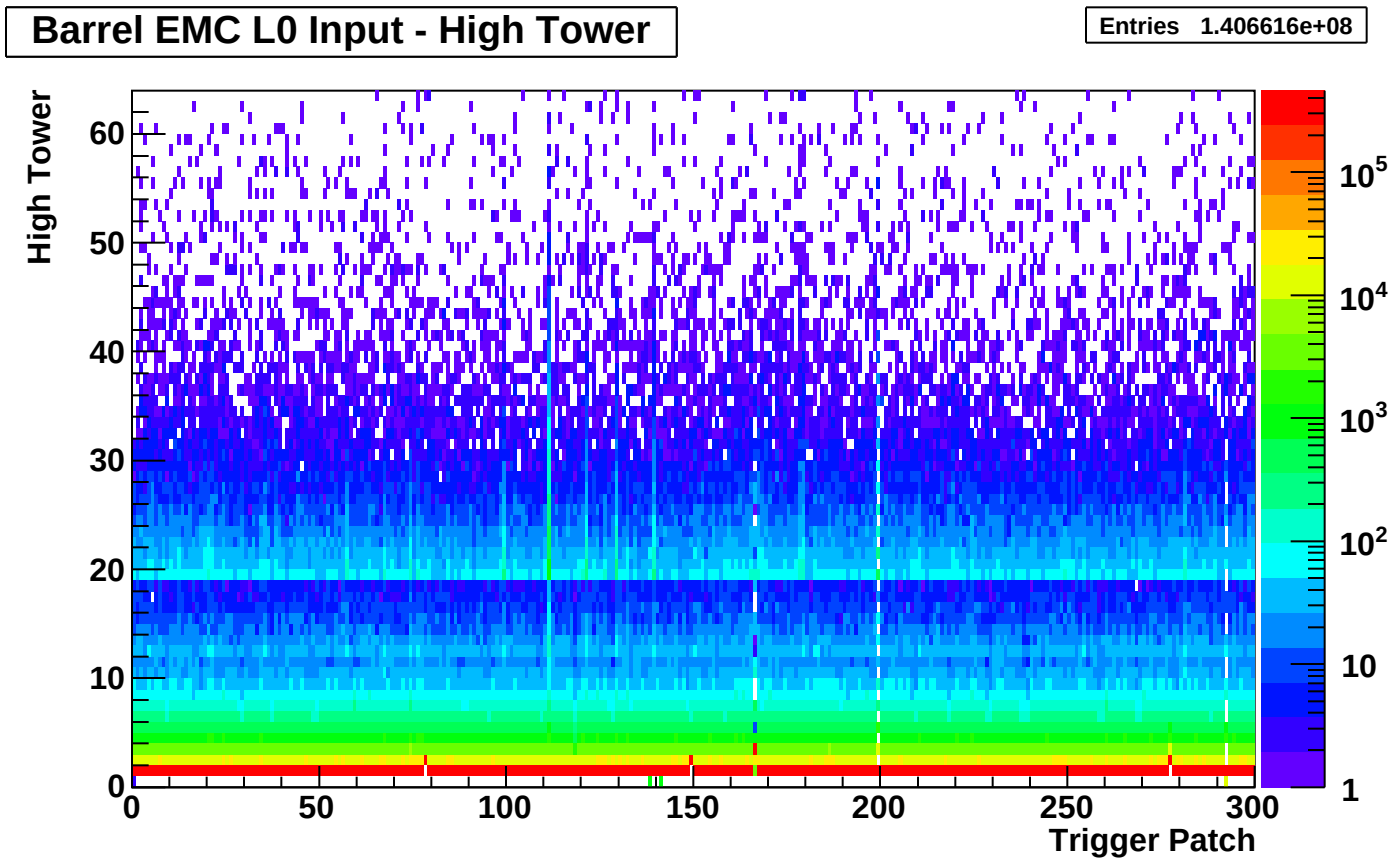

Last DSM Ch3 Input
Entries 11
LD301 Ch3 - Simulated
1 5 2 3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

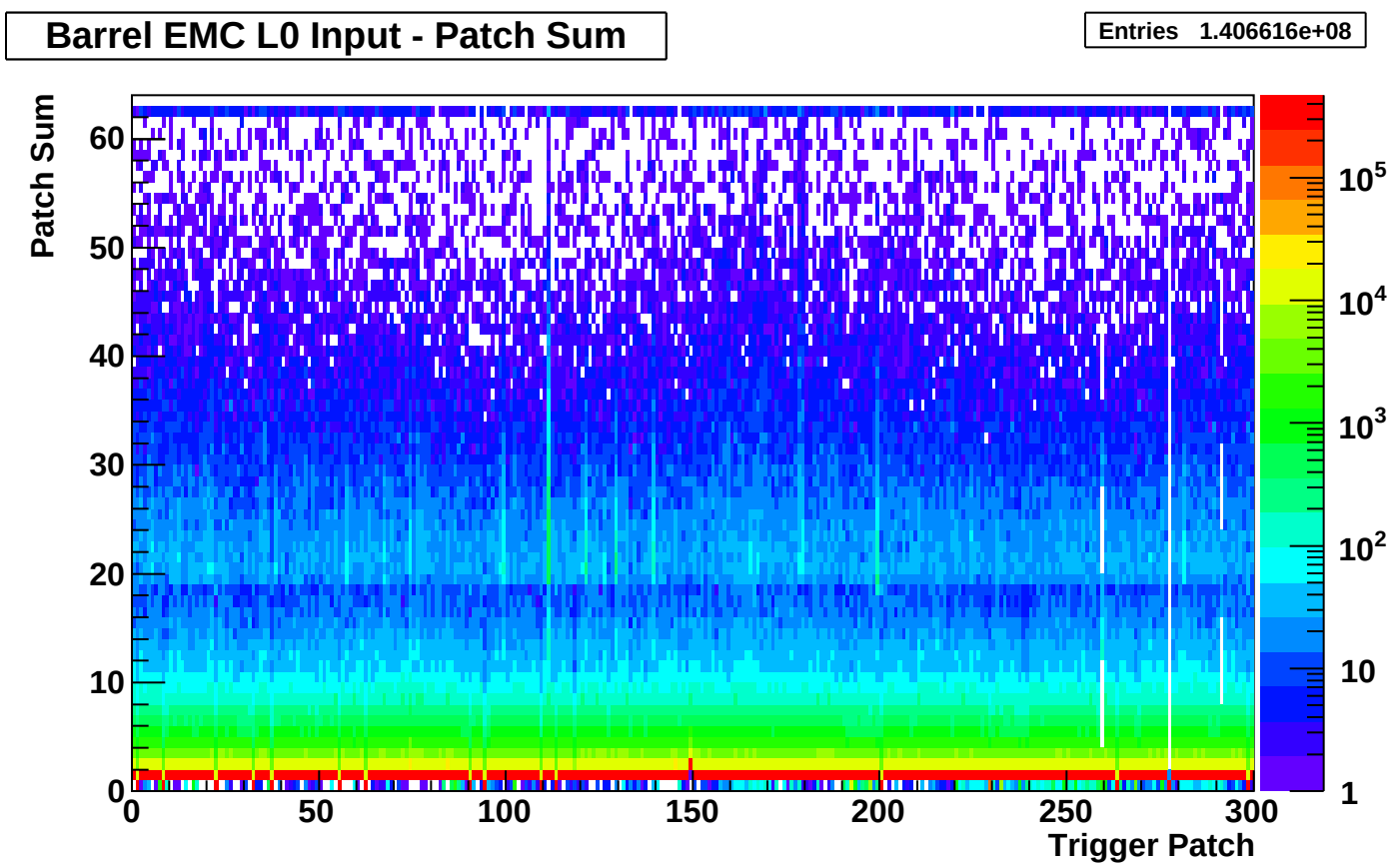

TCU bits
Entries 7501952
TCU bits
468872 468872 468872 468872 468872 468872 468872 468872 468872 468872 468872 468872 468872 468872 468872 468872
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

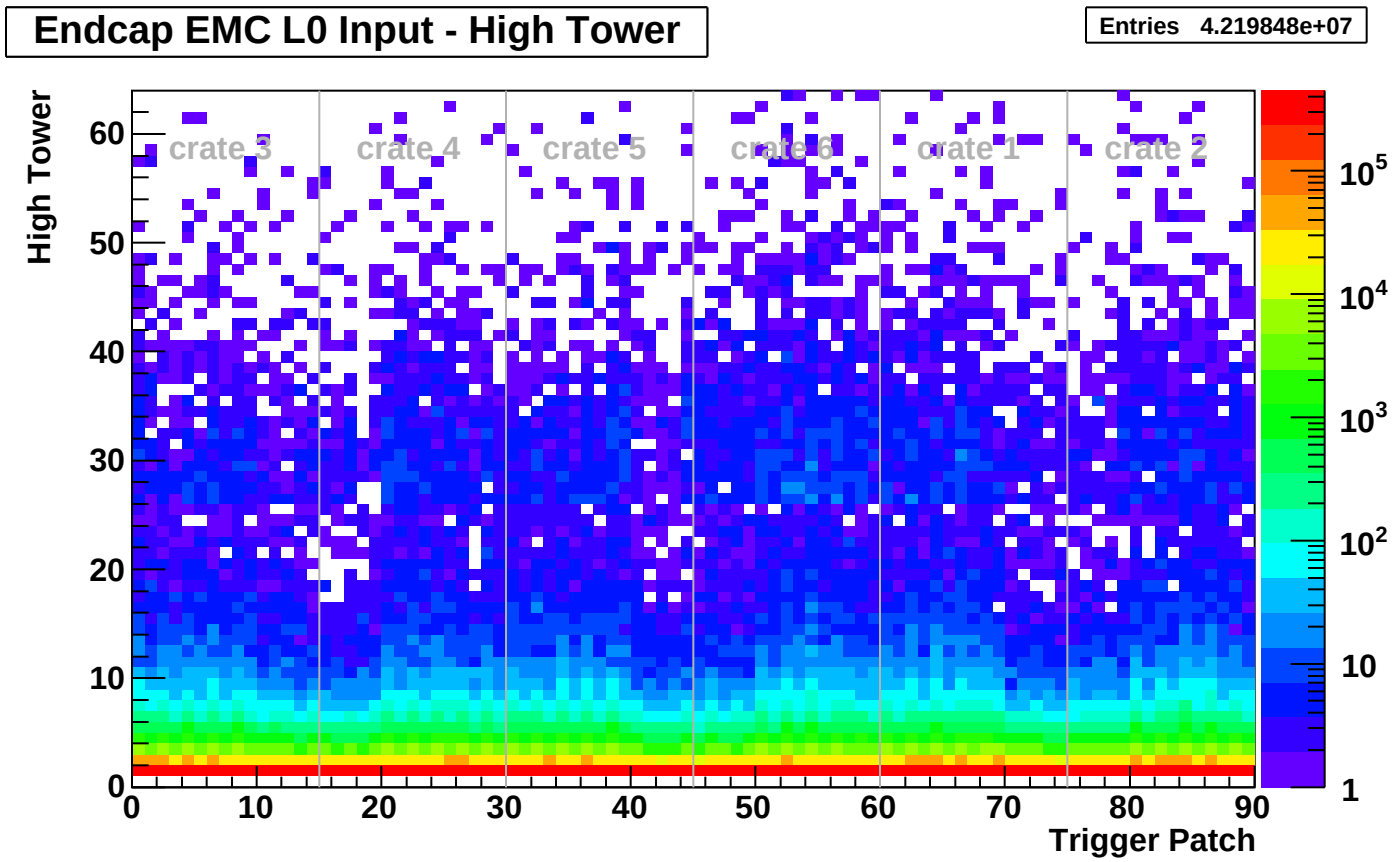

TCU bits
Entries 560209
TCU bits - Simulated
41544 86598 205436 5400 12324 207523 1384
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

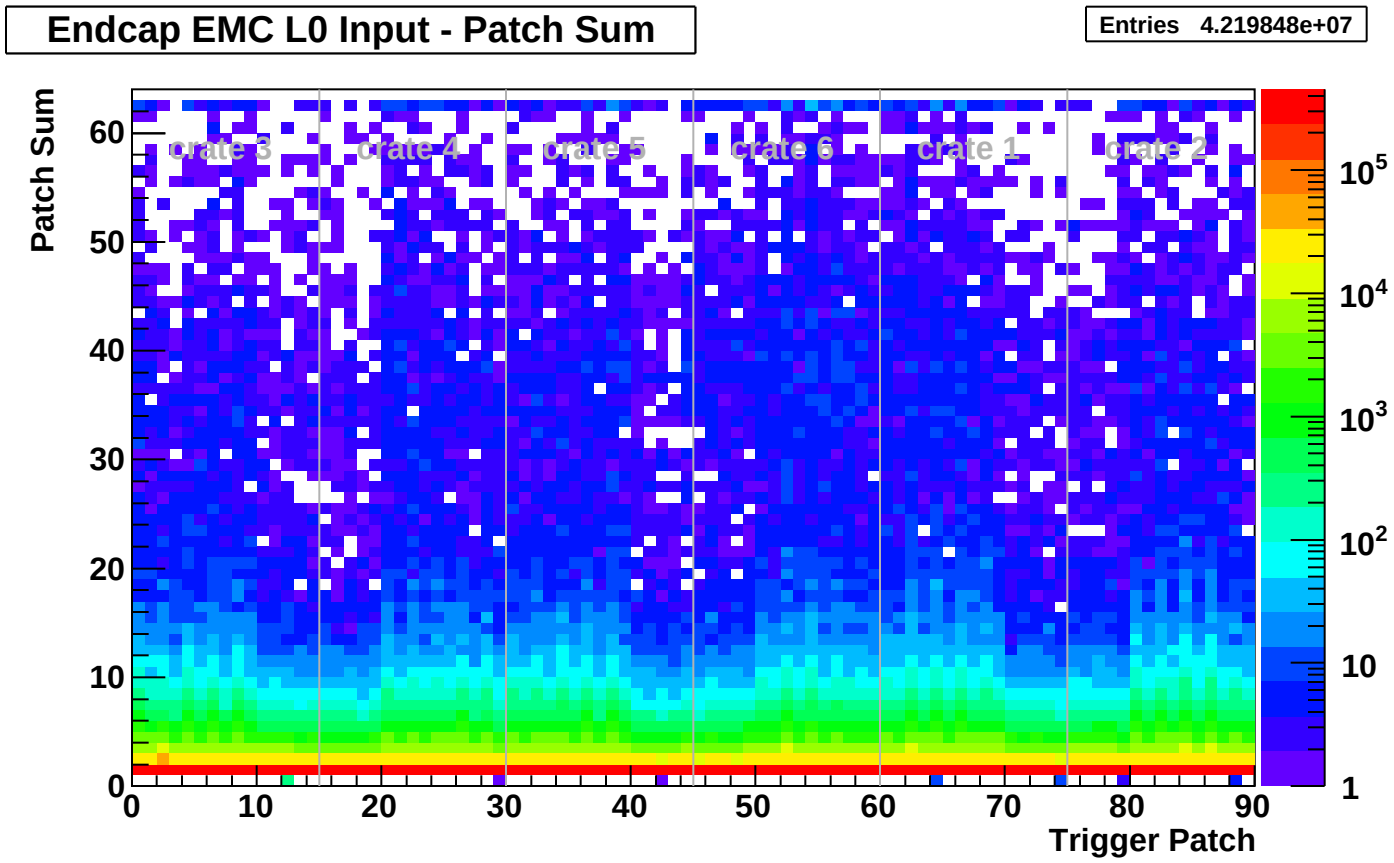

BunchId7Bit (BHT3)
Entries 6655

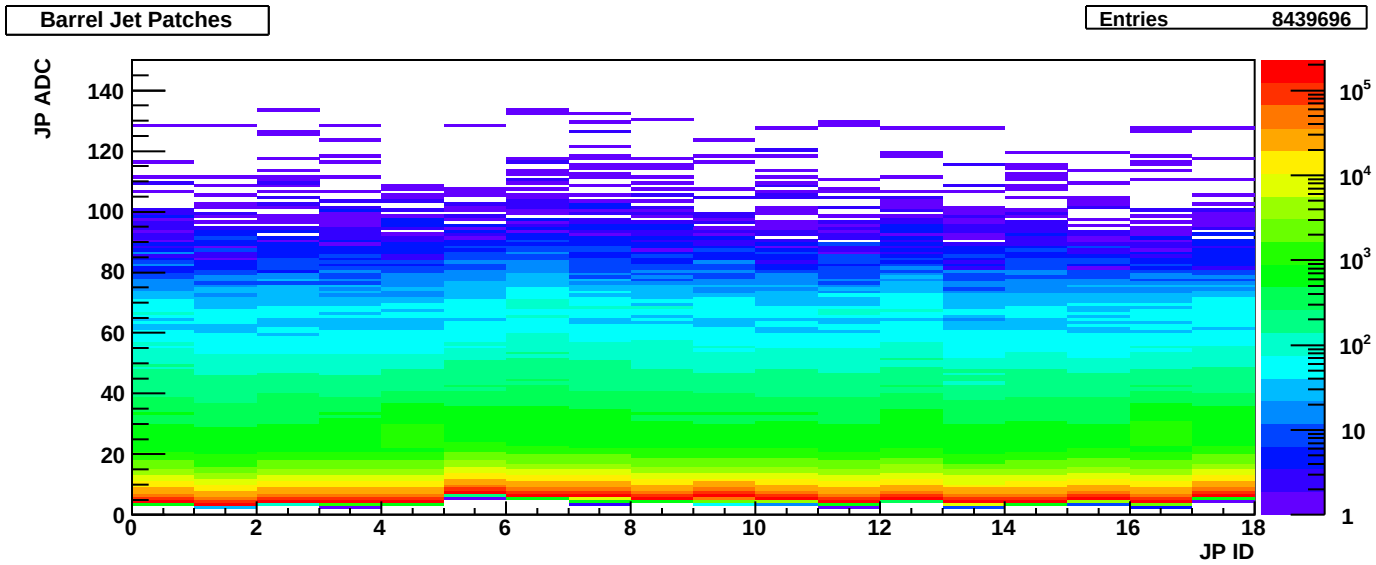

BunchId7Bit (all events)
Entries 468872

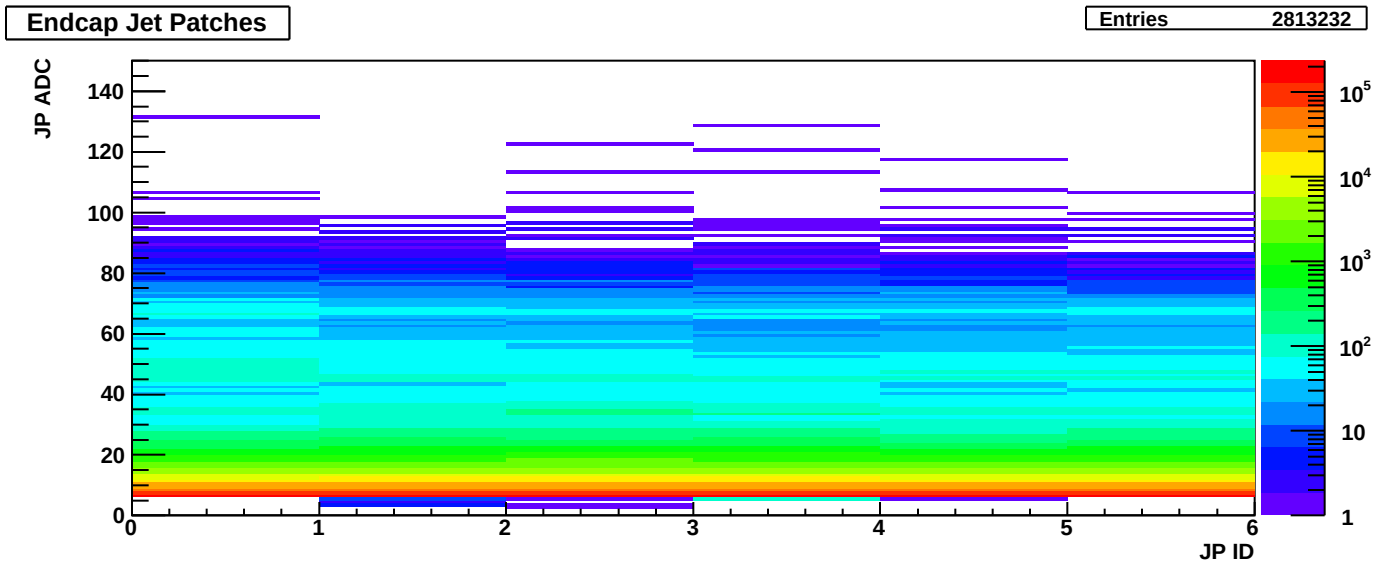

Barrel EMC L0 Input - High Tower
Entries 1.406616e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

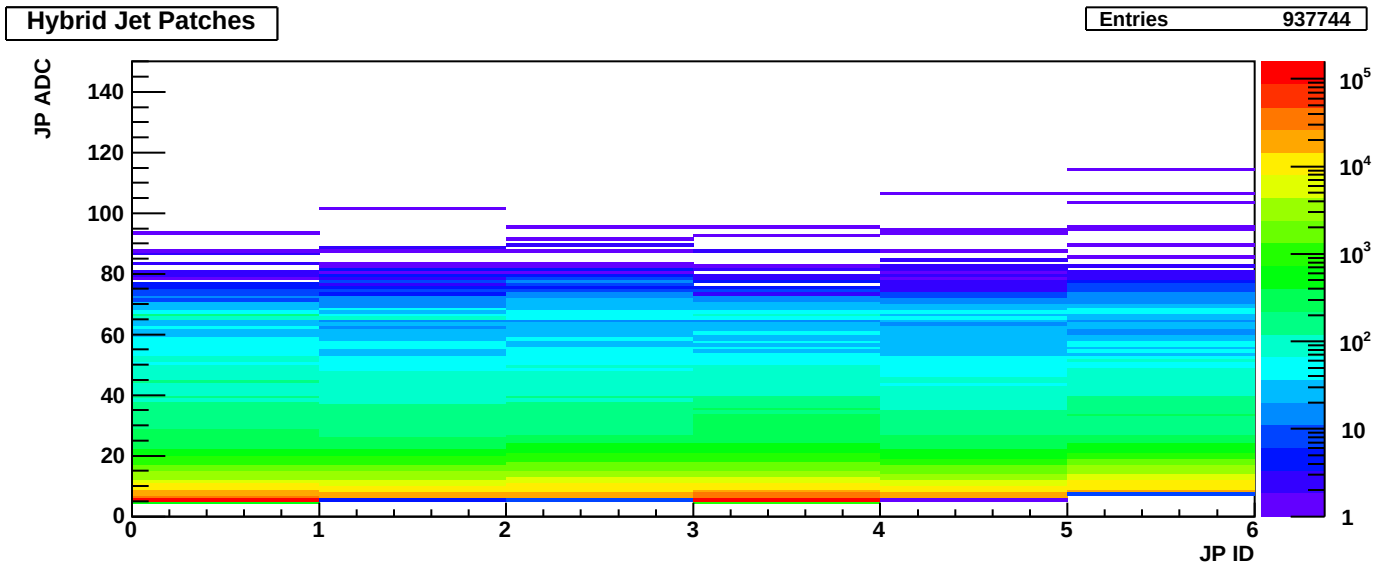

Barrel EMC L0 Input - Patch Sum
Entries 1.406616e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

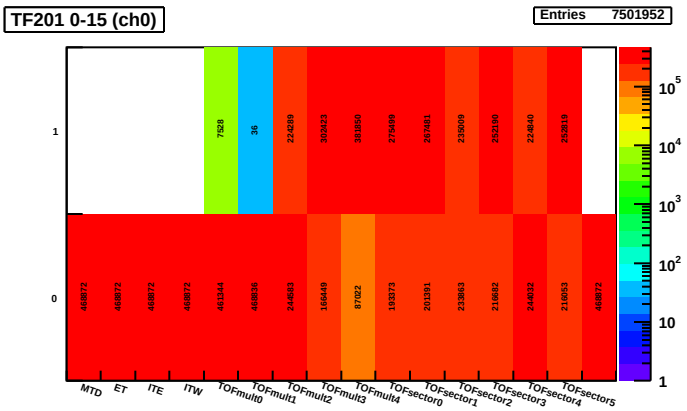

Endcap EMC L0 Input - High Tower
Entries 4.219848e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

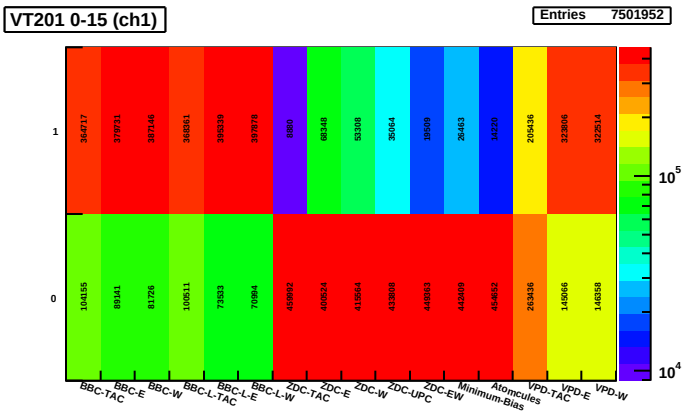

Endcap EMC L0 Input - Patch Sum
Entries 4.219848e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

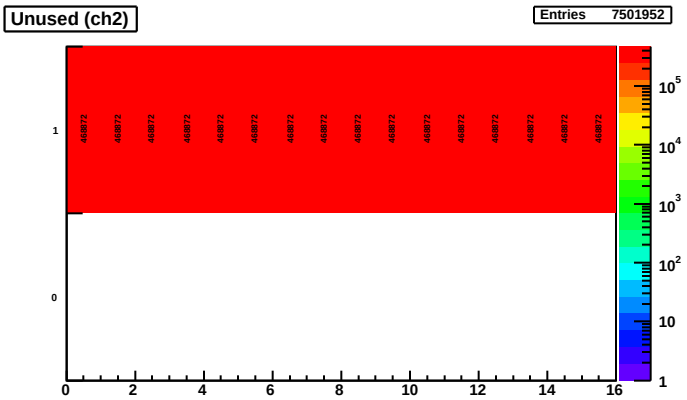

Barrel Jet Patches
Entries 8439696
JP ADC
JP ID

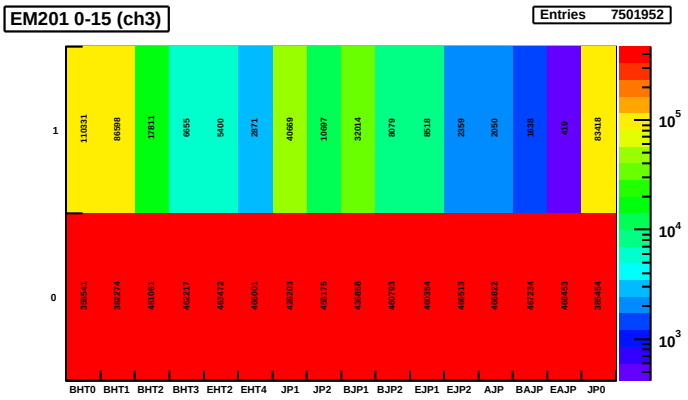

Endcap Jet Patches
Entries 2813232
JP ADC
JP ID

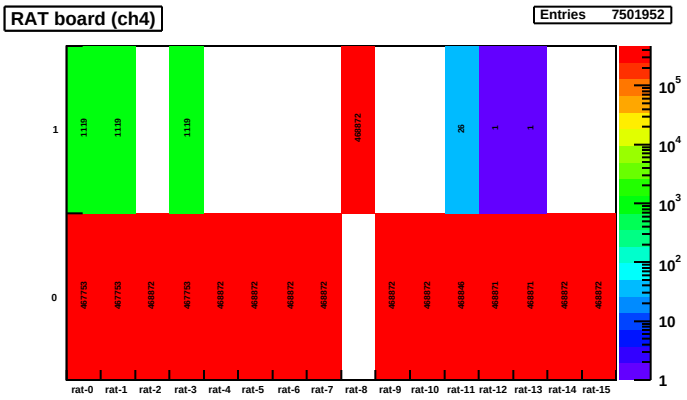

Hybrid Jet Patches
Entries 937744
JP ADC
JP ID

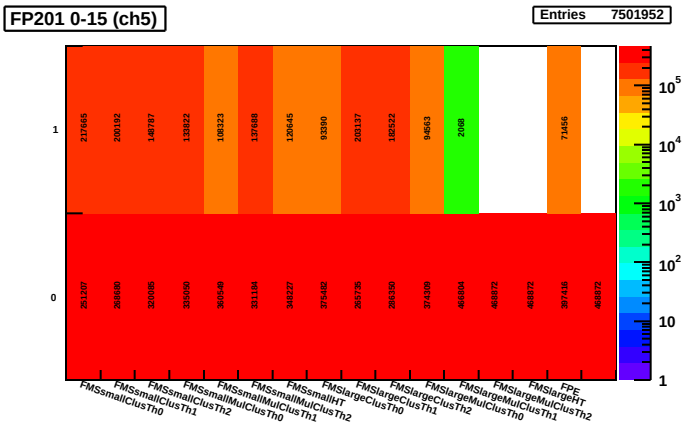

TF201 0-15 (ch0)
Entries 7501952
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

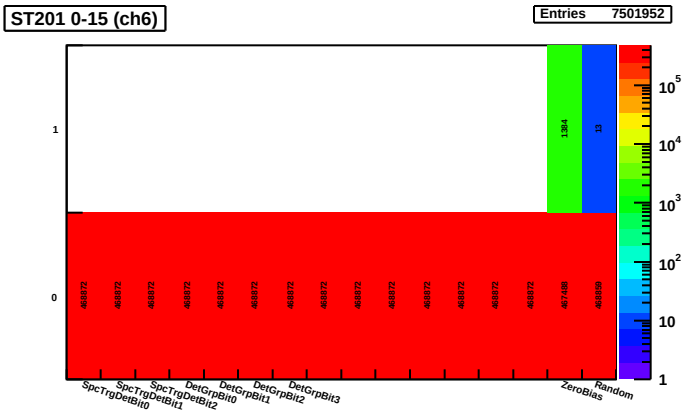

VT201 0-15 (ch1)
Entries 7501952
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

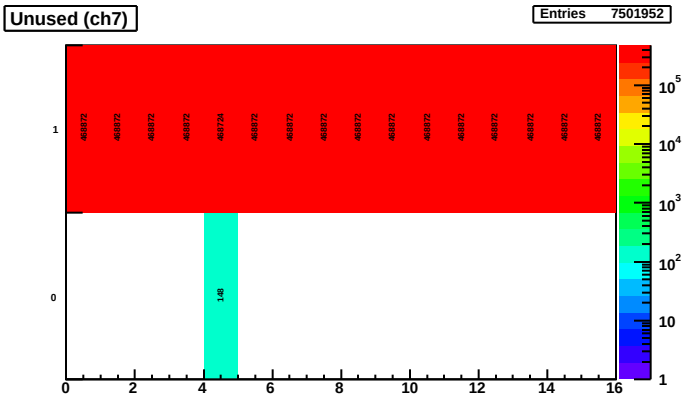

Unused (ch2)
Entries 7501952

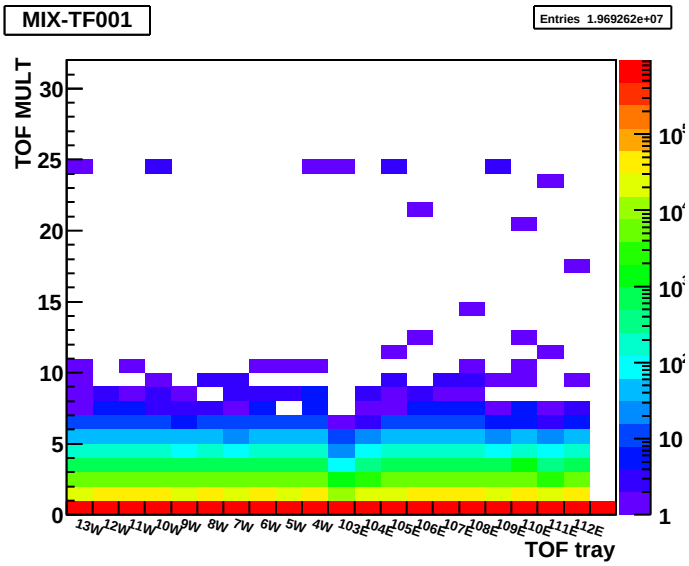

EM201 0-15 (ch3)
Entries 7501952
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

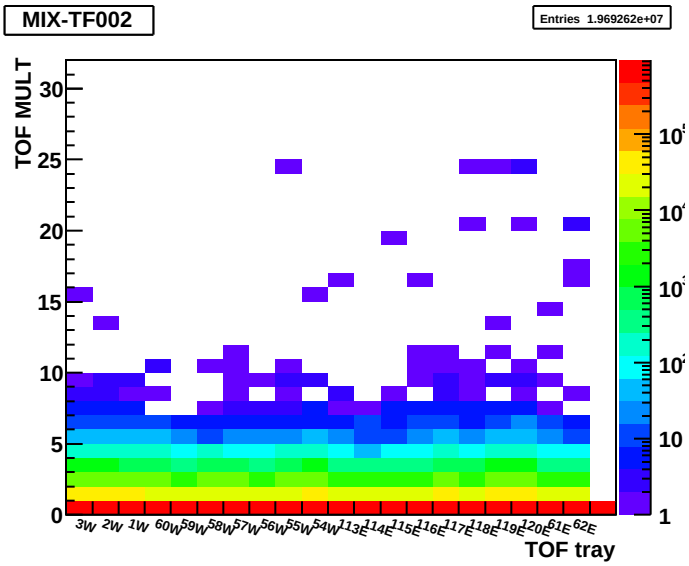

RAT board (ch4)
Entries 7501952
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

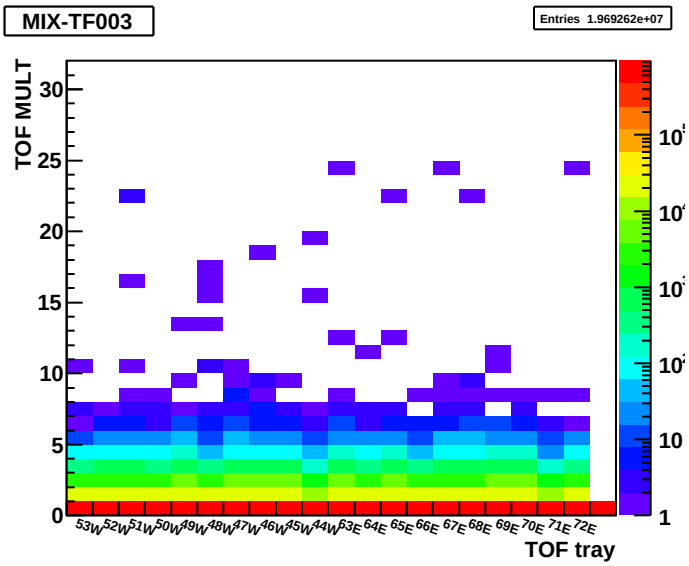

FP201 0-15 (ch5)
Entries 7501952
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

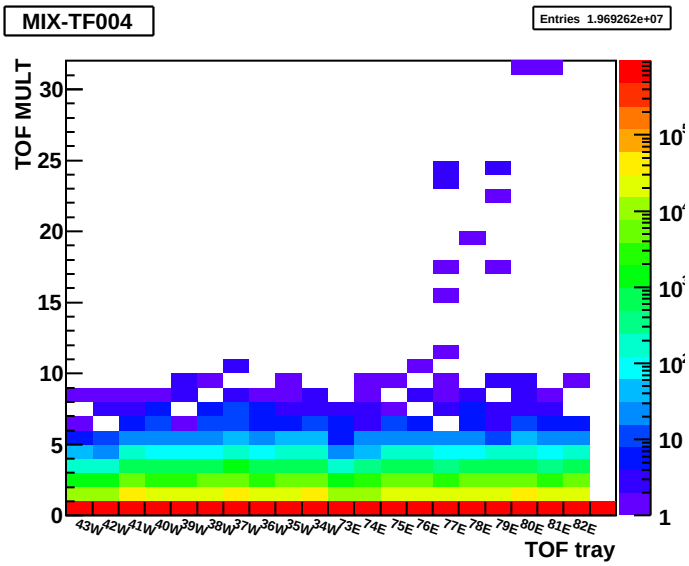

ST201 0-15 (ch6)
Entries 7501952
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

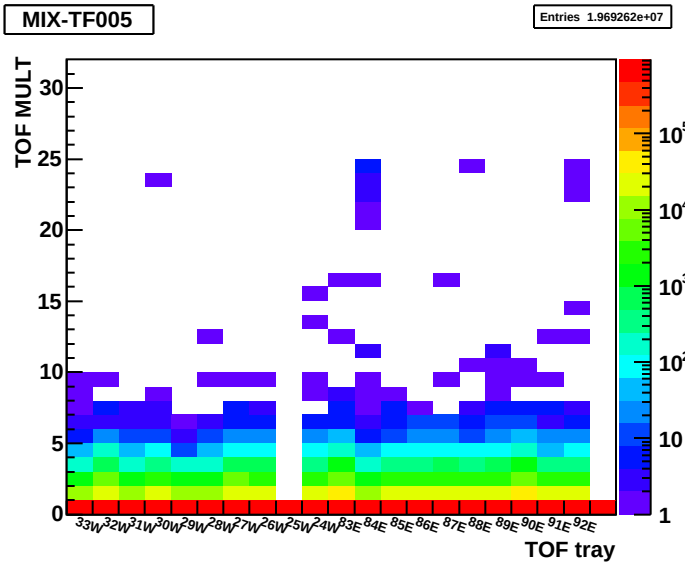

Unused (ch7)
Entries 7501952

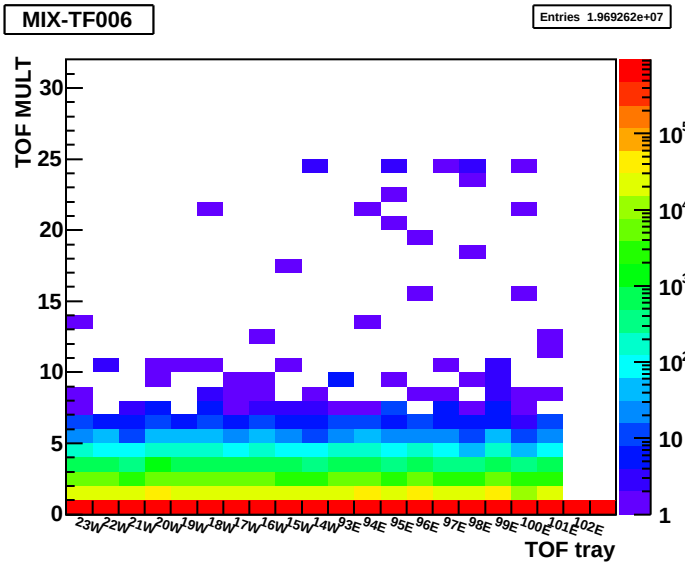

MIX-TF001
Entries 1.969262e+07
TOF MULT
TOF tray

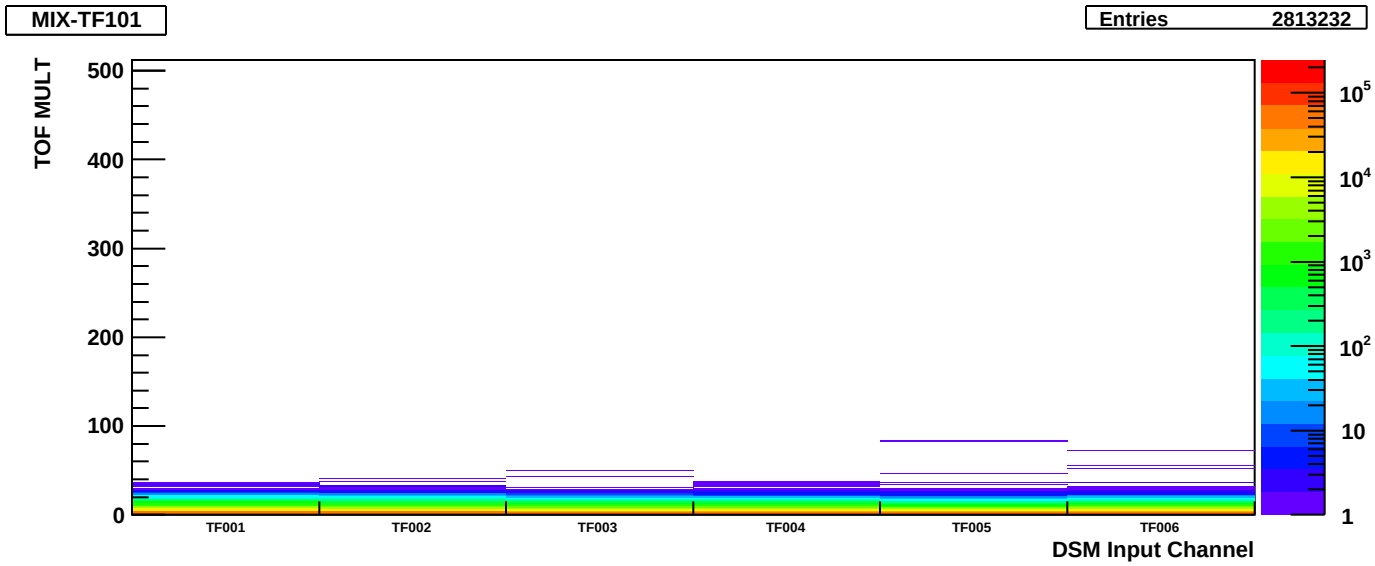

MIX-TF002
Entries 1.969262e+07
TOF MULT
TOF tray

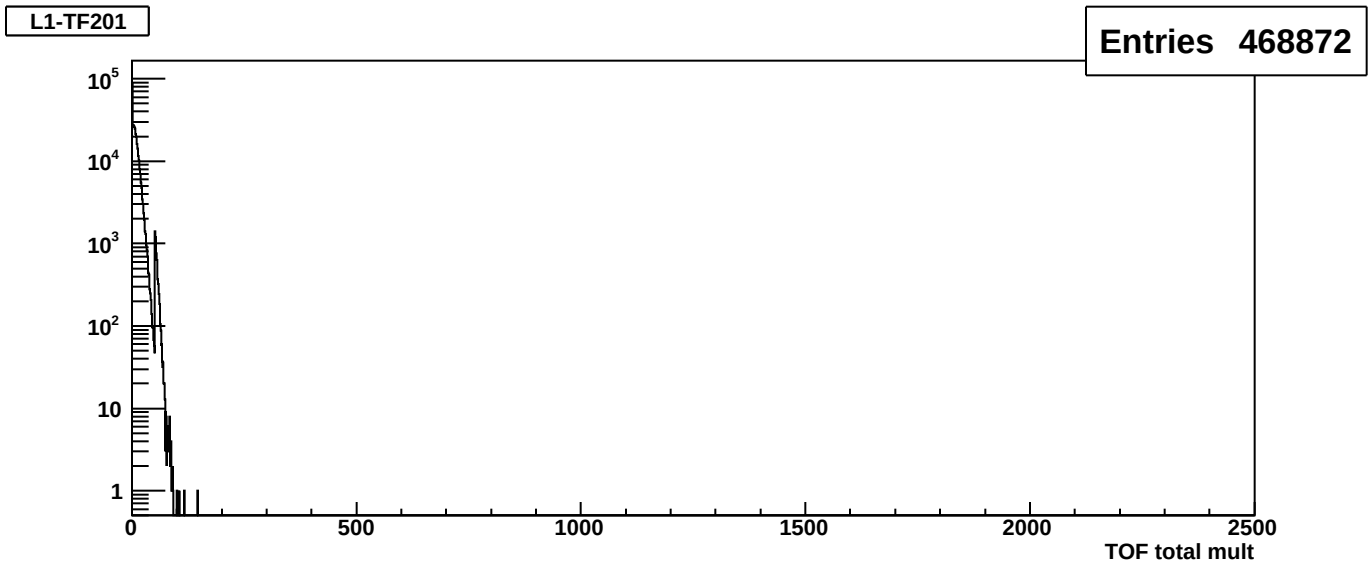

MIX-TF003
Entries 1.969262e+07
TOF MULT
TOF tray

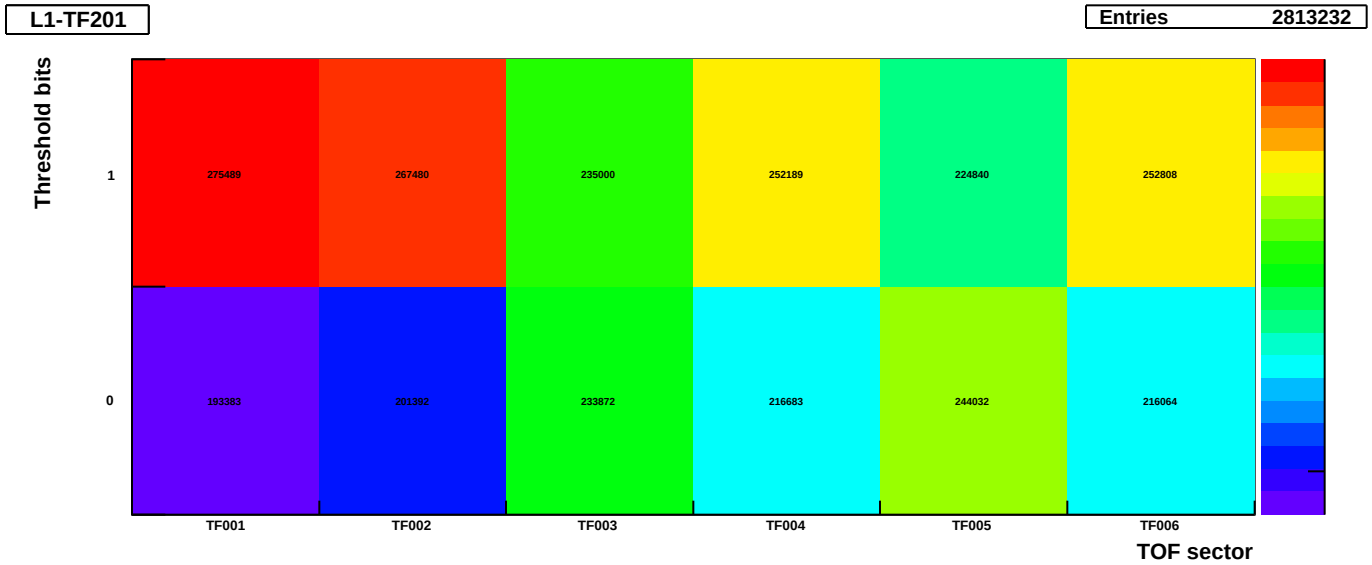

MIX-TF004
Entries 1.969262e+07
TOF MULT
TOF tray

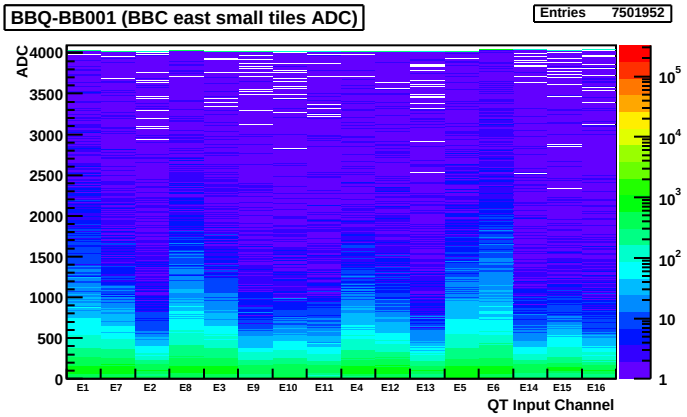

MIX-TF005
Entries 1.969262e+07
TOF MULT
TOF tray

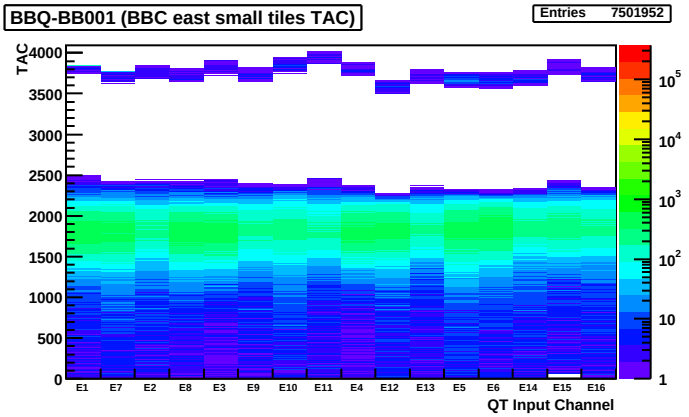

MIX-TF006
Entries 1.969262e+07
TOF MULT
TOF tray

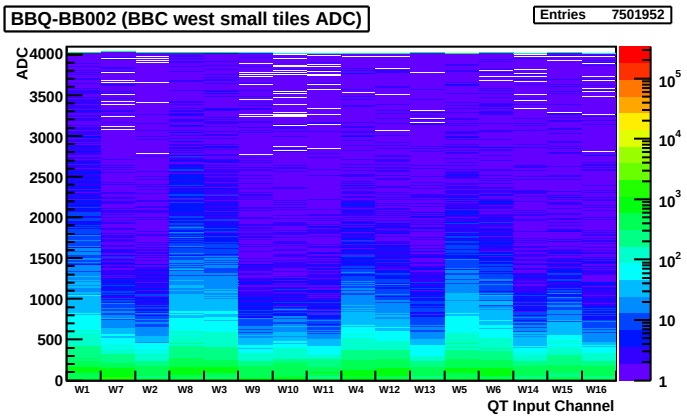

MIX-TF101
Entries 2813232
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

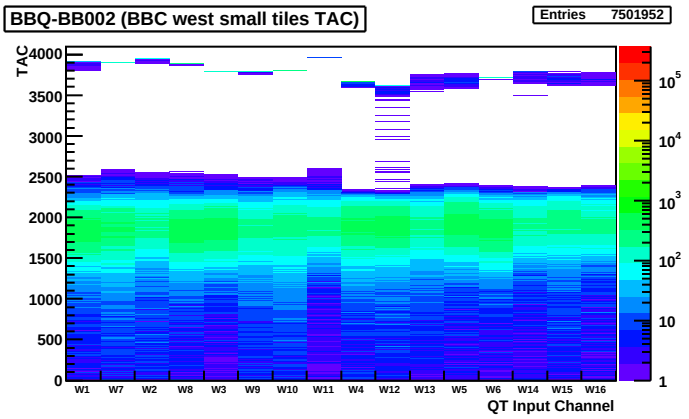

L1-TF201
Entries 468872
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

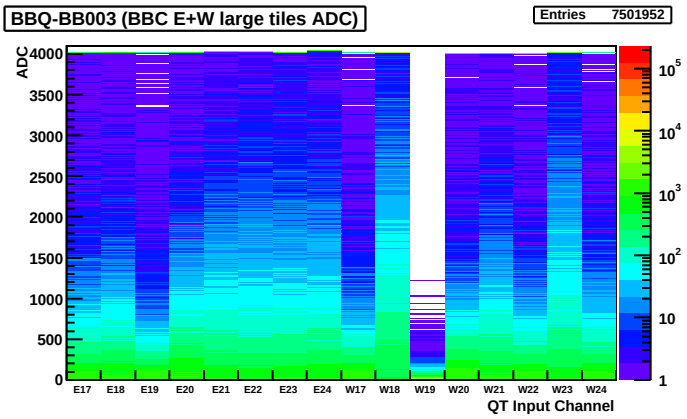

L1-TF201
Entries 2813232
Threshold bits
1
0
275489
267480
235000
252189
224840
252808
193383
201392
233872
216683
244032
216064
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

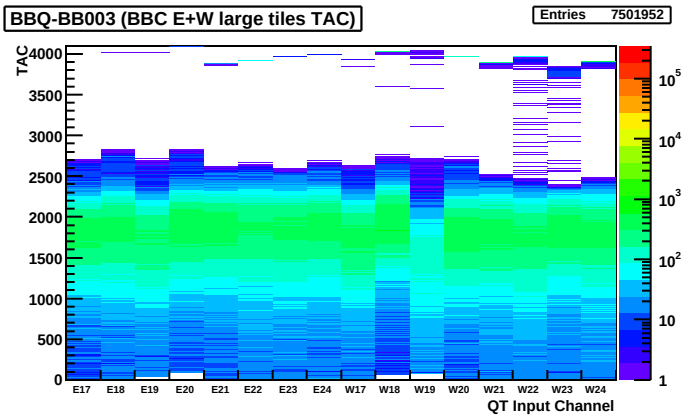

BBQ-BB001 (BBC east small tiles ADC)
Entries 7501952
ADC
QT Input Channel

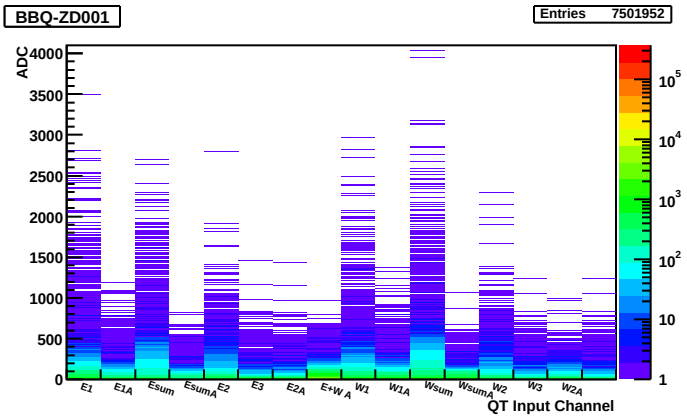

BBQ-BB001 (BBC east small tiles TAC)
Entries 7501952
TAC
QT Input Channel

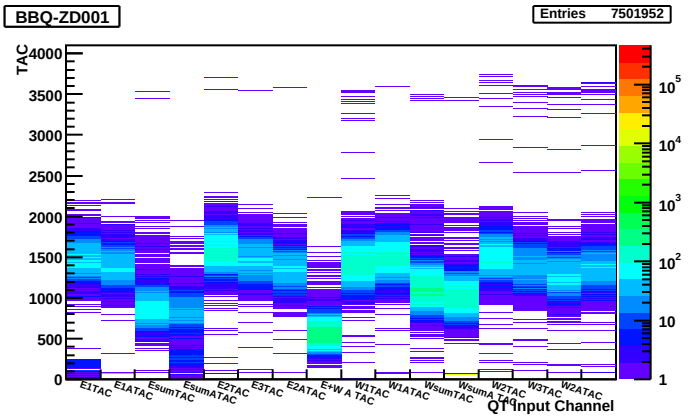

BBQ-BB002 (BBC west small tiles ADC)
Entries 7501952
ADC
QT Input Channel

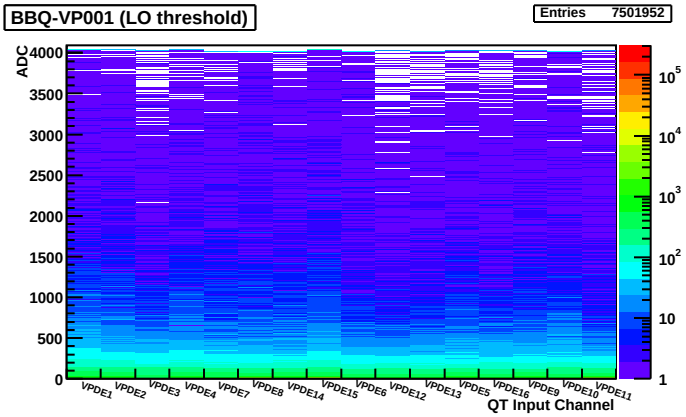

BBQ-BB002 (BBC west small tiles TAC)
Entries 7501952
TAC
QT Input Channel

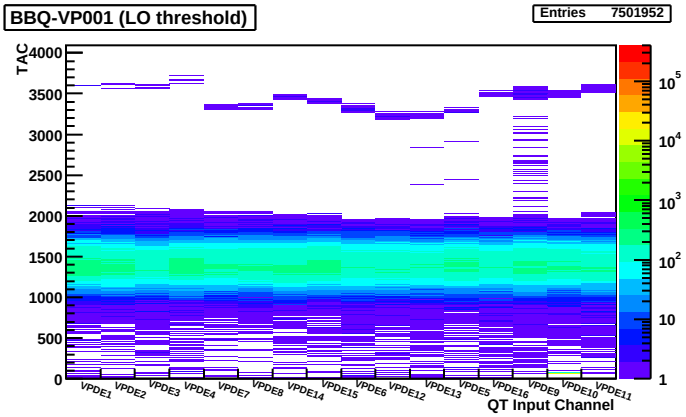

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 7501952
ADC
QT Input Channel

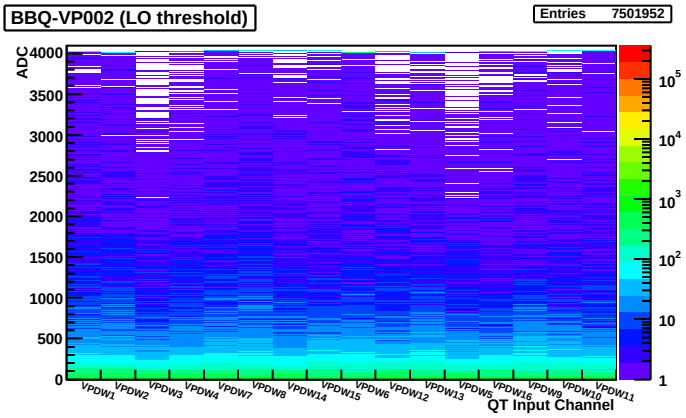

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 7501952
TAC
QT Input Channel

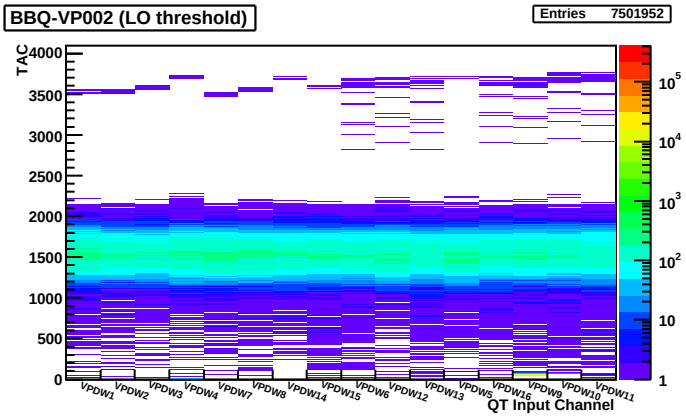

BBQ-ZD001
Entries 7501952
ADC
QT Input Channel

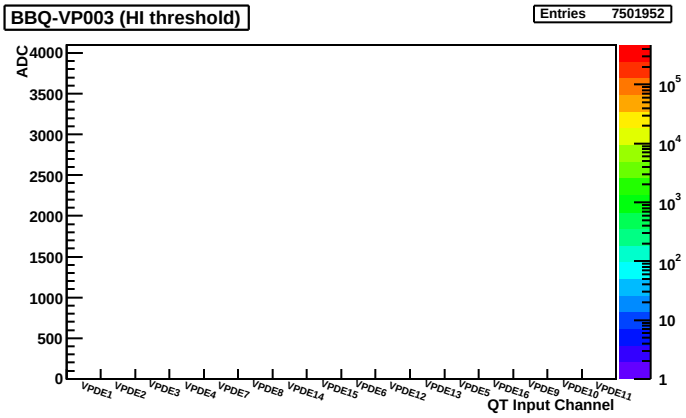

BBQ-ZD001
Entries 7501952
TAC
QT Input Channel

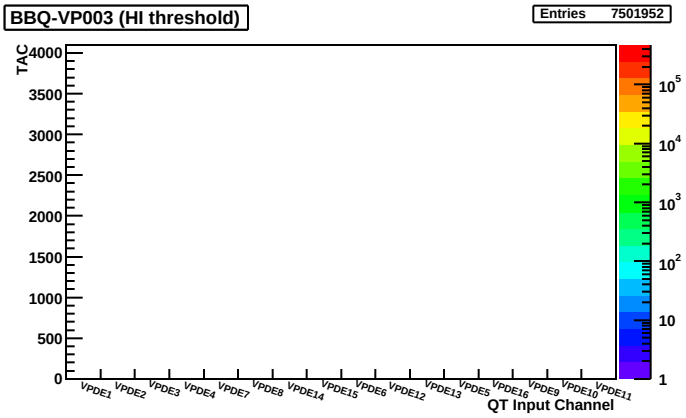

BBQ-VP001 (LO threshold)
Entries 7501952
ADC
QT Input Channel

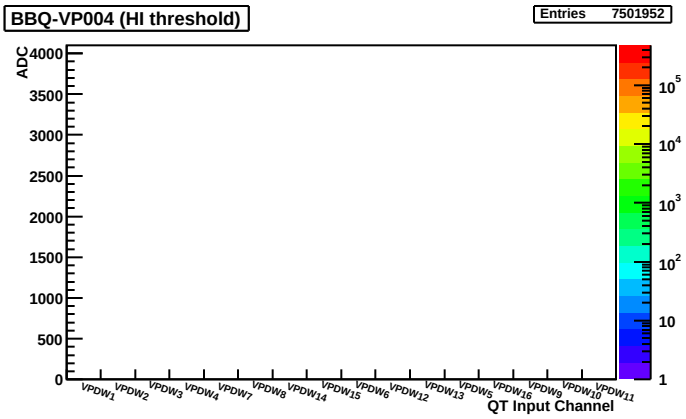

BBQ-VP001 (LO threshold)
Entries 7501952
TAC
QT Input Channel

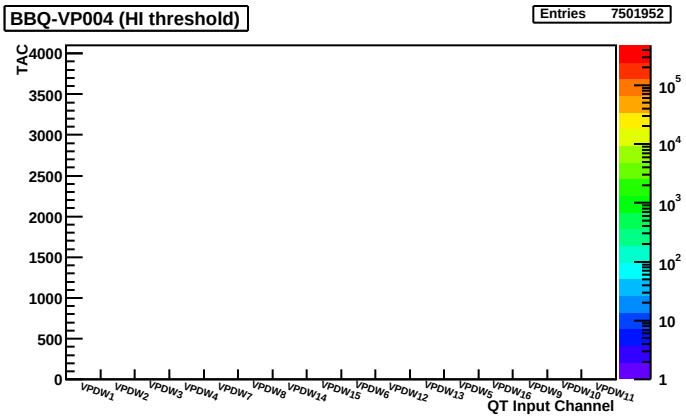

BBQ-VP002 (LO threshold)
Entries 7501952
ADC
QT Input Channel

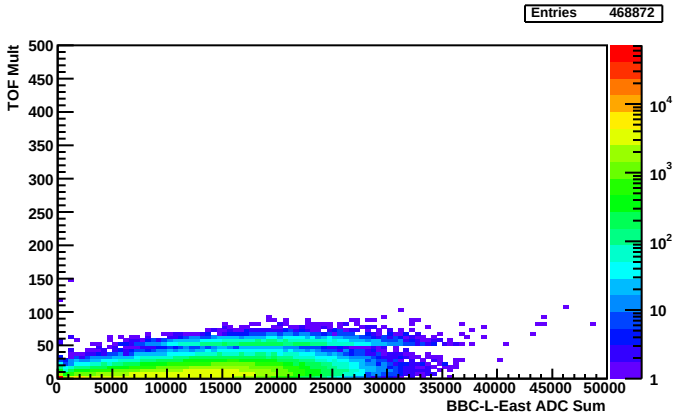

BBQ-VP002 (LO threshold)
Entries 7501952
TAC
QT Input Channel

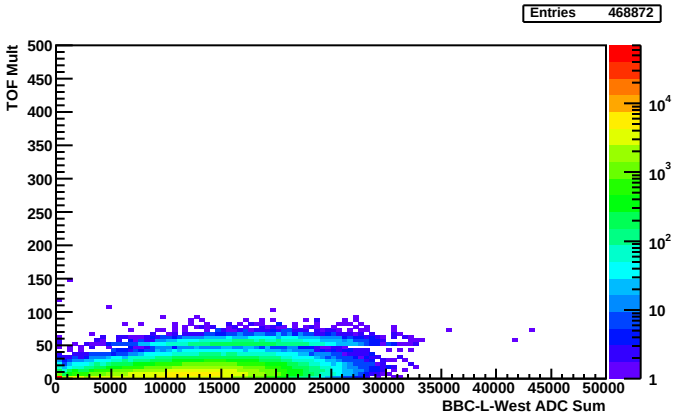

BBQ-VP003 (HI threshold)
Entries 7501952
ADC
QT Input Channel

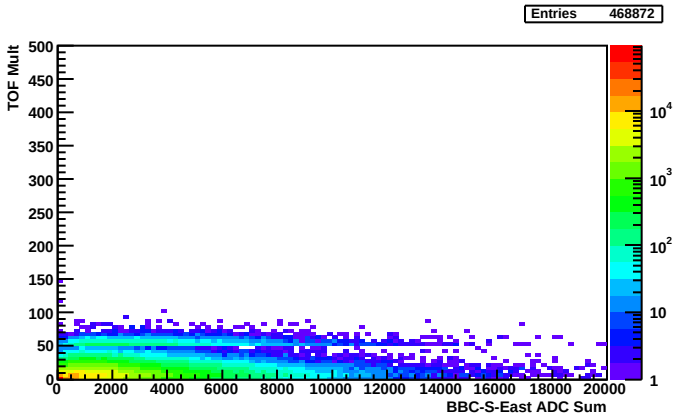

BBQ-VP003 (HI threshold)
Entries 7501952
TAC
QT Input Channel

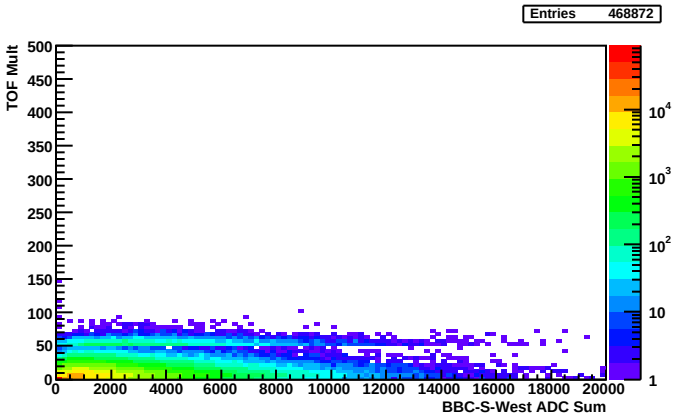

BBQ-VP004 (HI threshold)
Entries 7501952
ADC
QT Input Channel

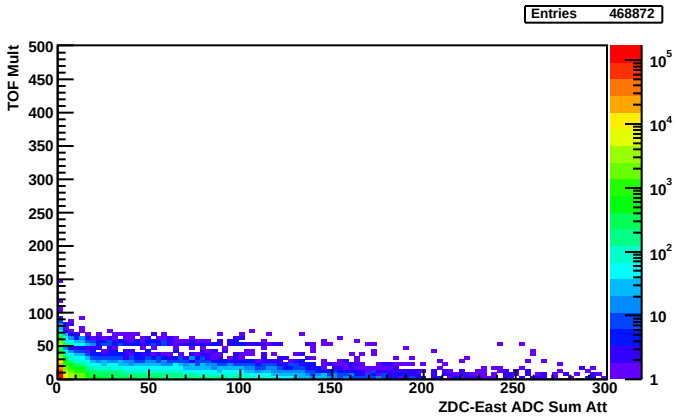

BBQ-VP004 (HI threshold)
Entries 7501952
TAC
QT Input Channel

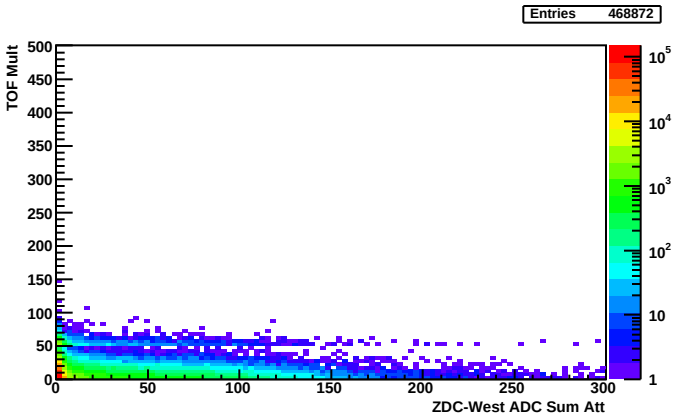

Entries 468872
TOF Mult
BBC-L-East ADC Sum

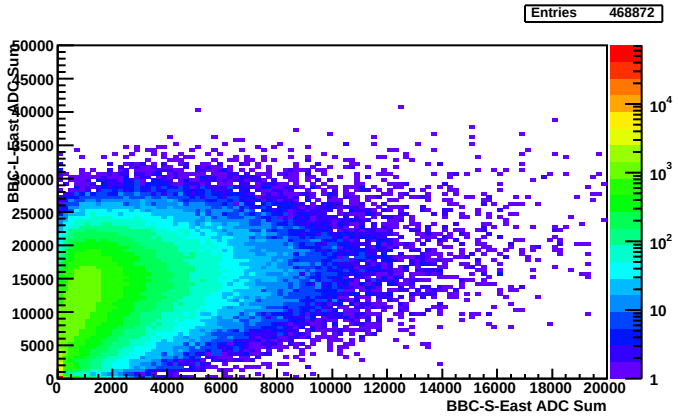

Entries 468872
TOF Mult
BBC-L-West ADC Sum

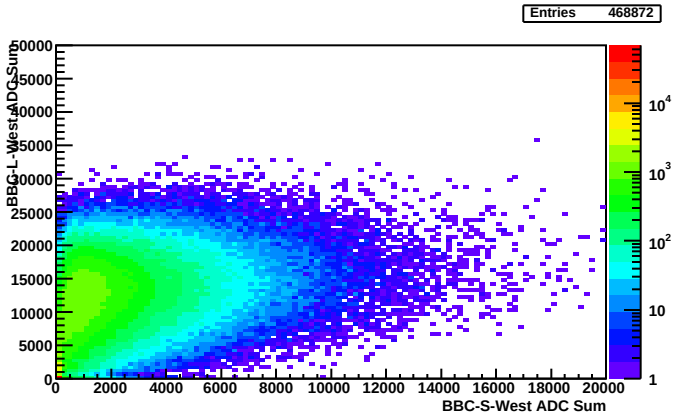

Entries 468872
TOF Mult
BBC-S-East ADC Sum

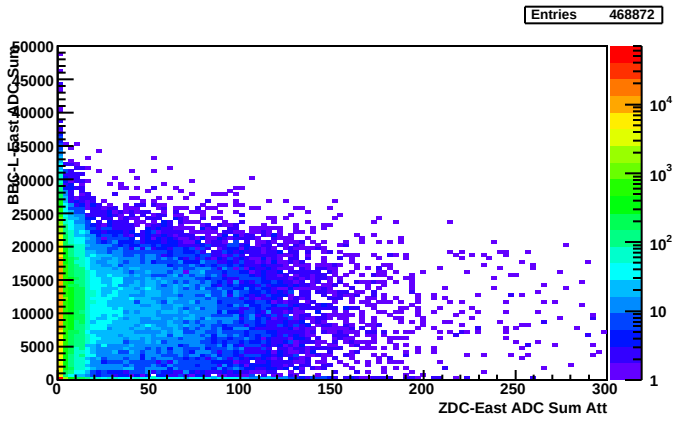

Entries 468872
TOF Mult
BBC-S-West ADC Sum

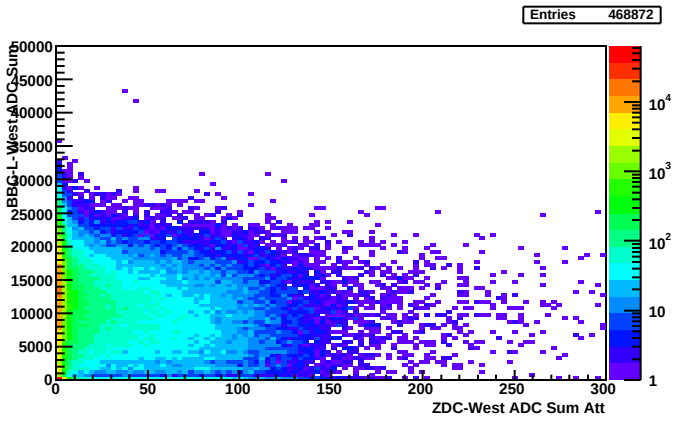

Entries 468872
TOF Mult
ZDC-East ADC Sum Att

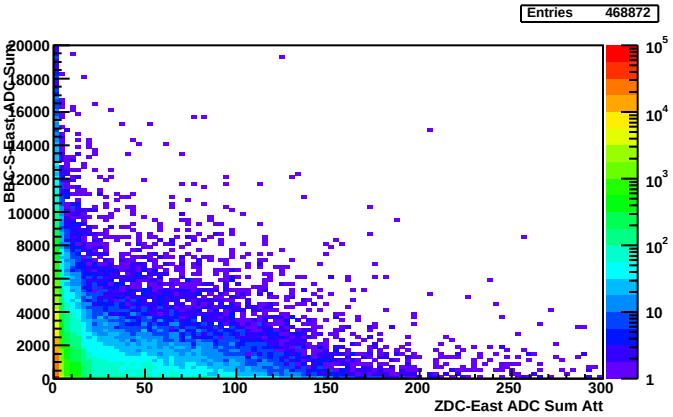

Entries 468872
TOF Mult
ZDC-West ADC Sum Att

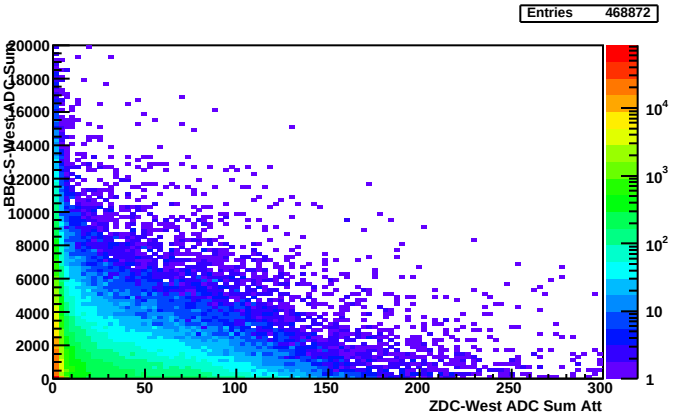

Entries 468872
BBC-L-East ADC Sum
BBC-S-East ADC Sum

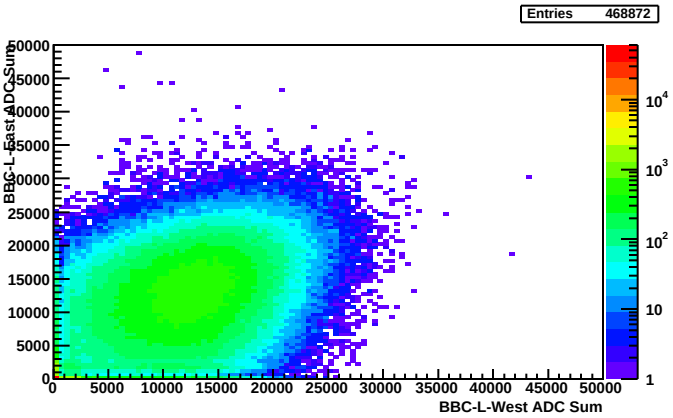

Entries 468872
BBC-L-West ADC Sum
BBC-S-West ADC Sum

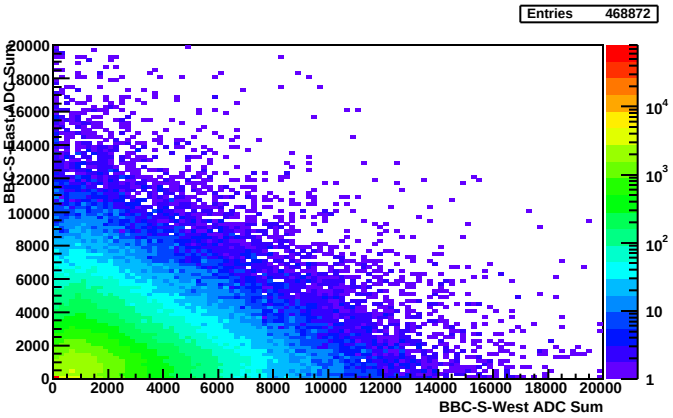

Entries 468872
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

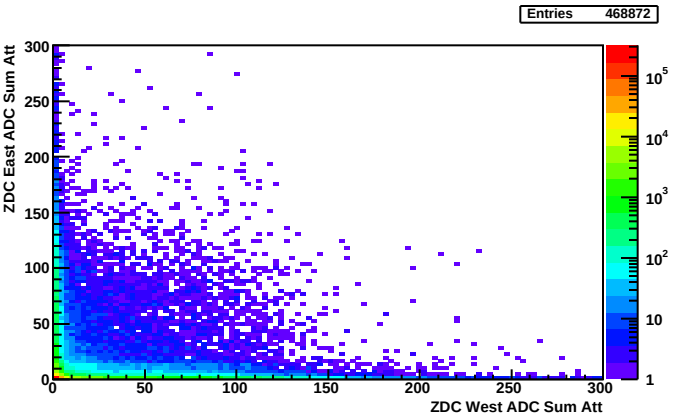

Entries 468872
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

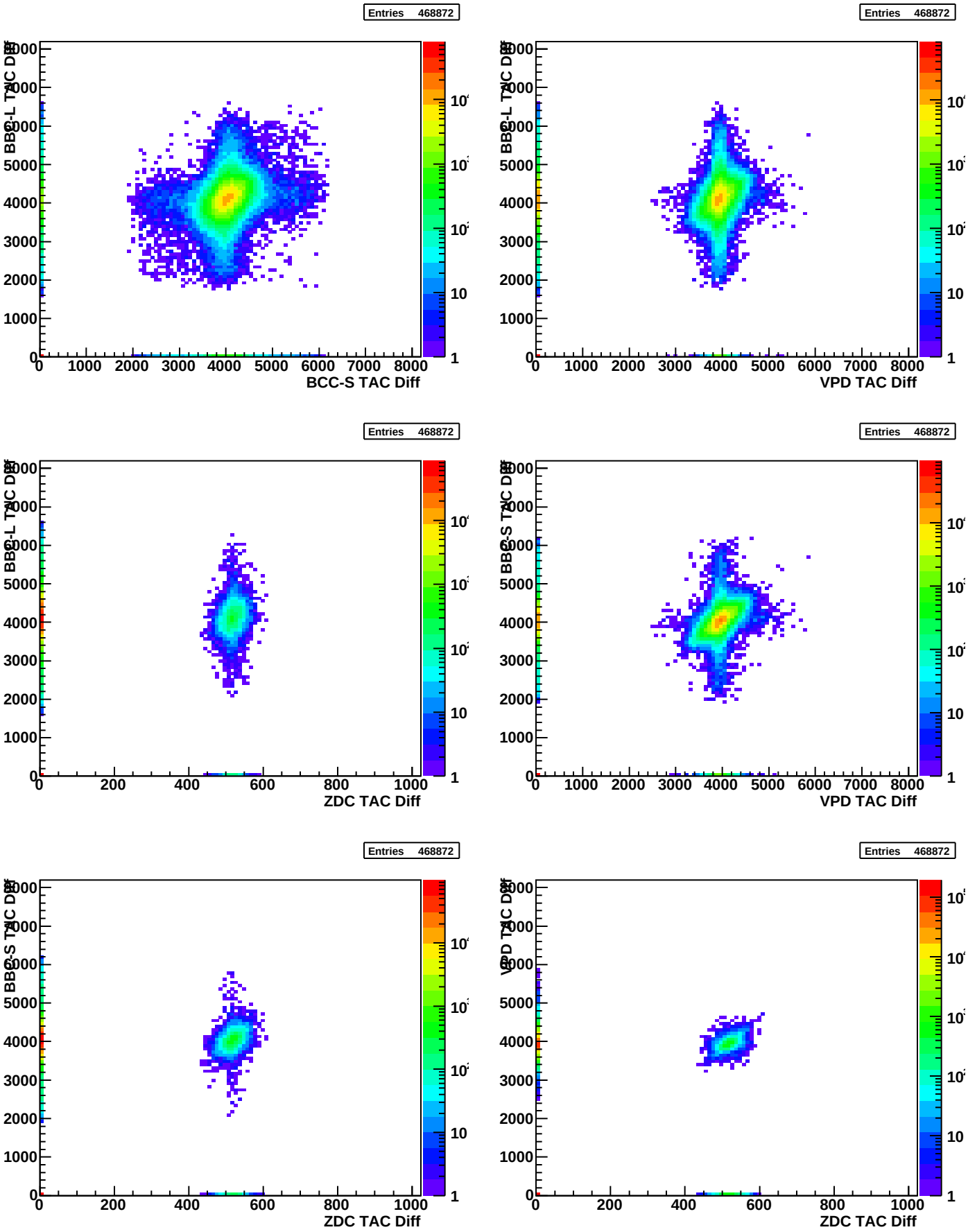

Entries 468872
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

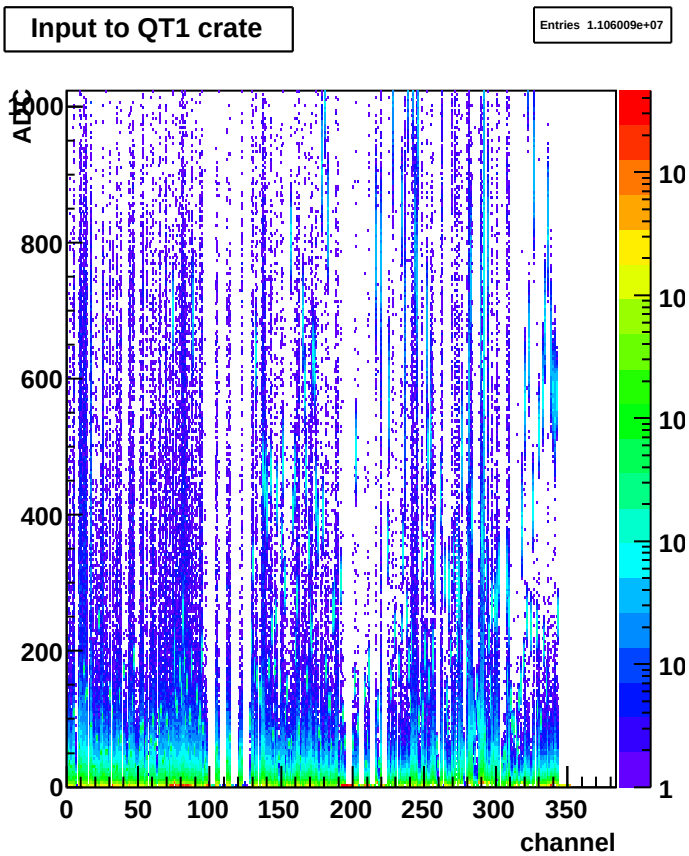

Entries 468872
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

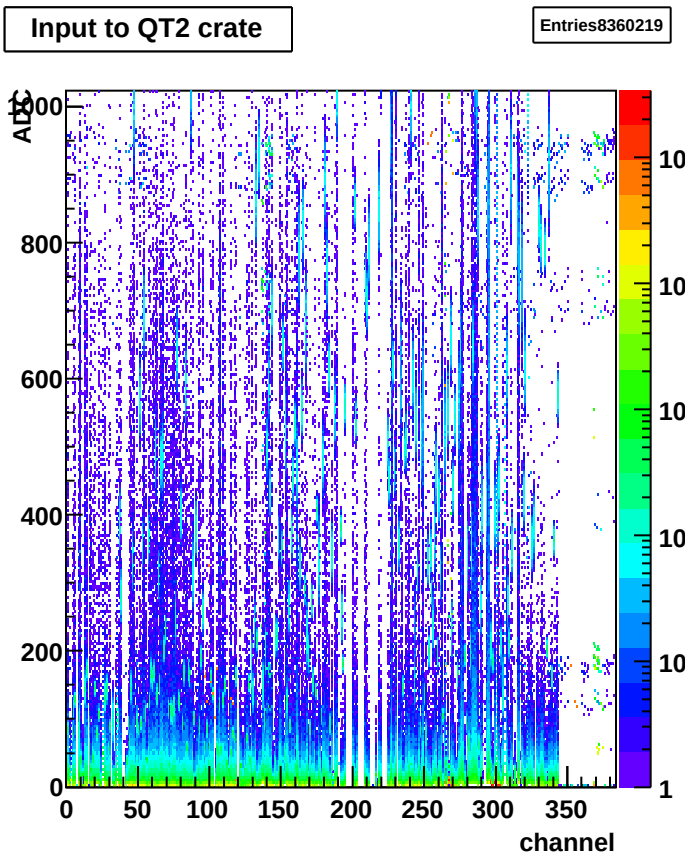

Entries 468872
BBC-L-East ADC Sum
BBC-L-West ADC Sum

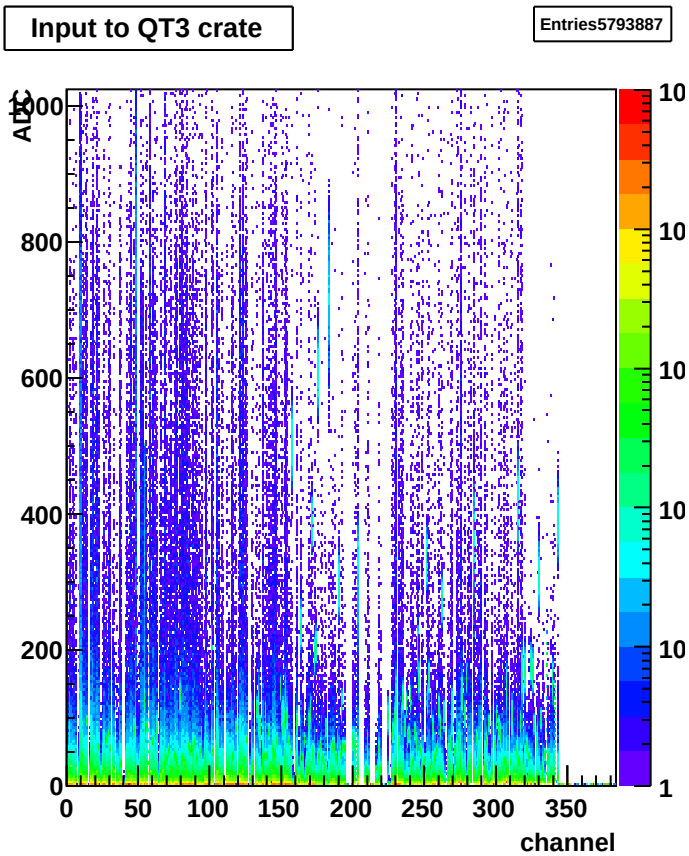

Entries 468872
BBC-S-East ADC Sum
BBC-S-West ADC Sum

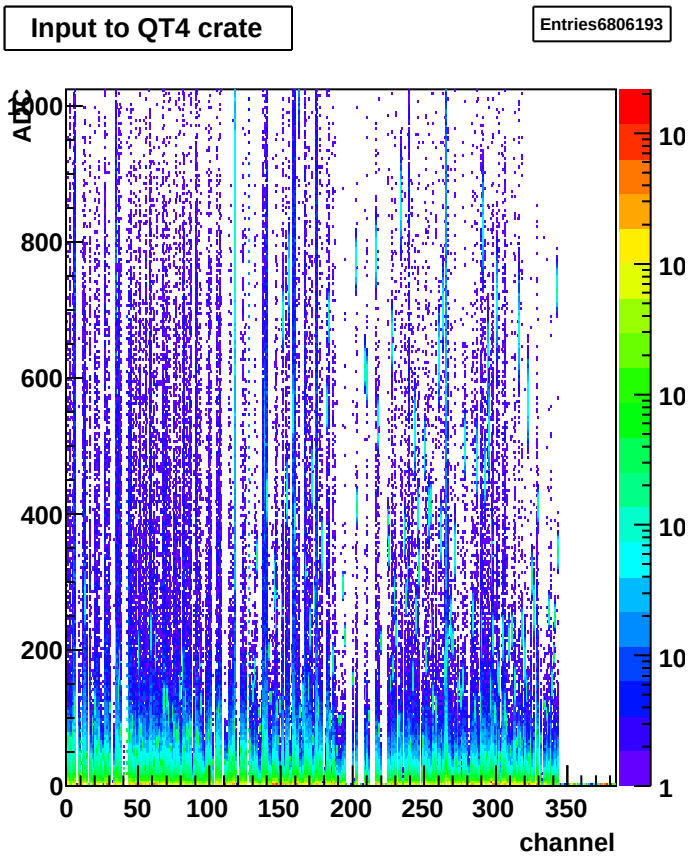

Entries 468872
ZDC East ADC Sum Att
ZDC West ADC Sum Att

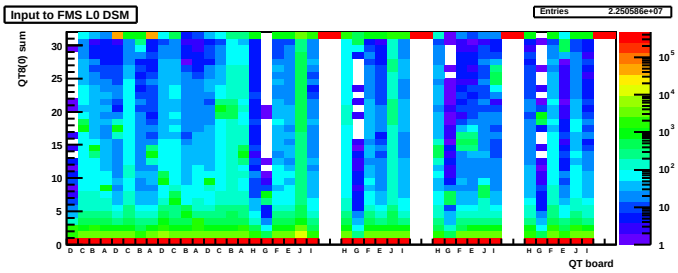

Entries 468872
BBC-L TAC Diff
BCC-S TAC Diff
Entries 468872
BBC-L TAC Diff
VPD TAC Diff
Entries 468872
BBC-L TAC Diff
ZDC TAC Diff
Entries 468872
BBC-S TAC Diff
VPD TAC Diff
Entries 468872
BBC-S TAC Diff
ZDC TAC Diff
Entries 468872
VPD TAC Diff
ZDC TAC Diff

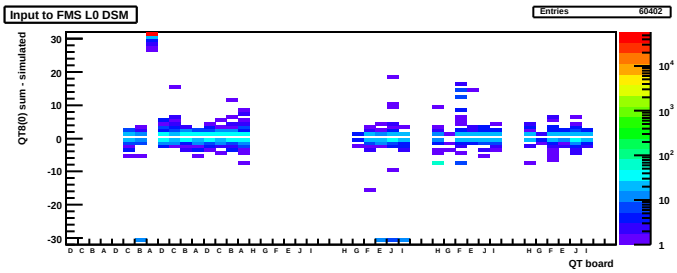

Input to QT1 crate
Entries 1.106009e+07
ADC
channel

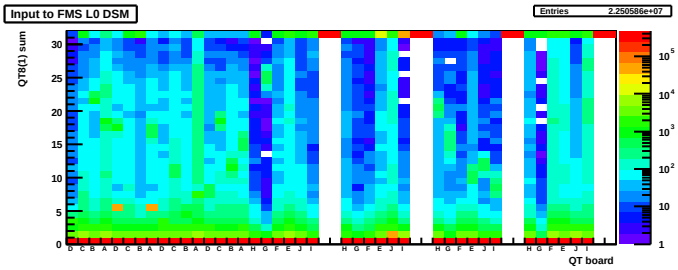

Input to QT2 crate
Entries8360219
ADC
channel

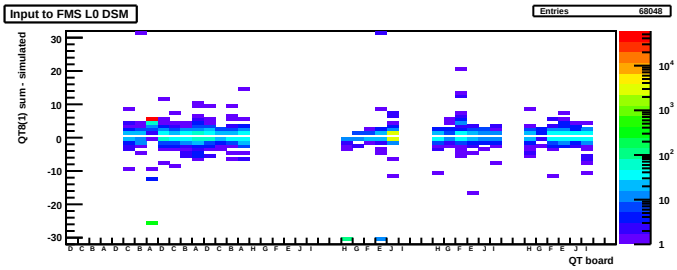

Input to QT3 crate
Entries5793887
ADC
channel

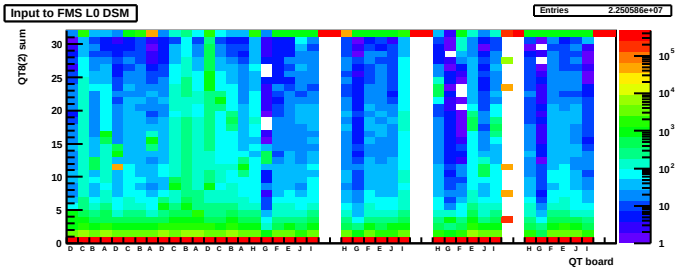

Input to QT4 crate
Entries6806193
ADC
channel

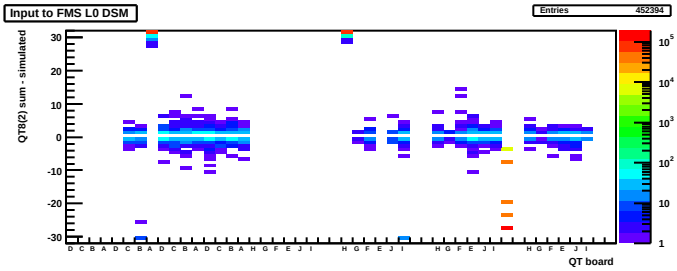

Input to FMS L0 DSM
Entries 2.250586e+07
QT8(0) sum
QT board

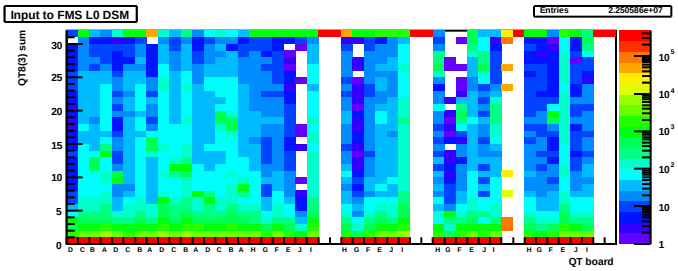

Input to FMS L0 DSM
Entries 60402
QT8(0) sum - simulated
QT board

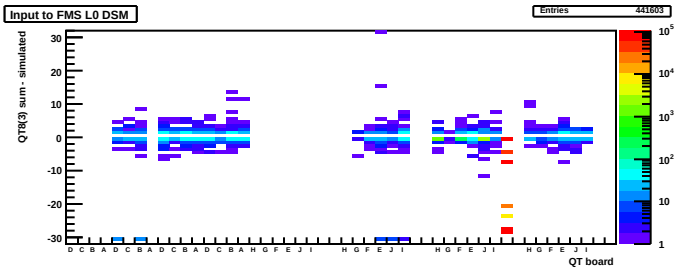

Input to FMS L0 DSM
Entries 2.250586e+07
QT8(1) sum
QT board

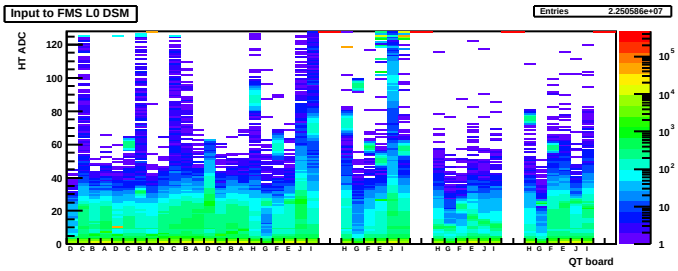

Input to FMS L0 DSM
Entries 68048
QT8(1) sum - simulated
QT board

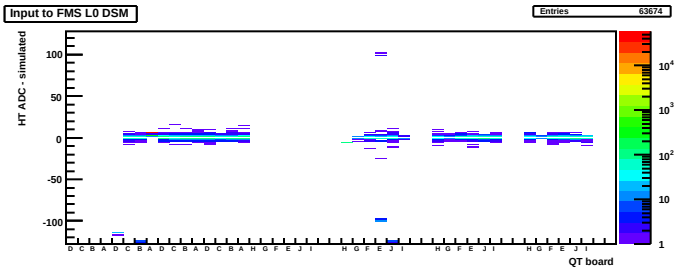

Input to FMS L0 DSM
Entries 2.250586e+07
QT8(2) sum
QT board

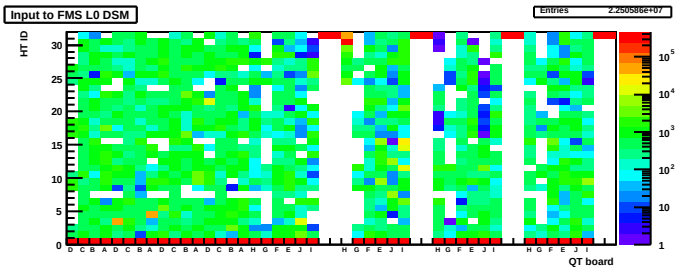

Input to FMS L0 DSM
Entries 452394
QT8(2) sum - simulated
QT board

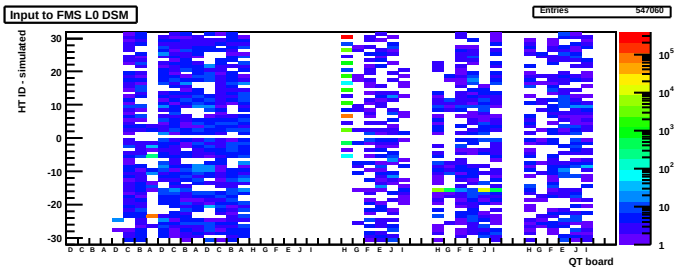

Input to FMS L0 DSM
Entries 2.250586e+07
QT8(3) sum
QT board

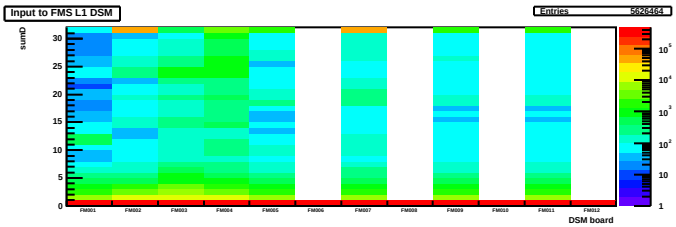

Input to FMS L0 DSM
Entries 441603
QT8(3) sum - simulated
QT board

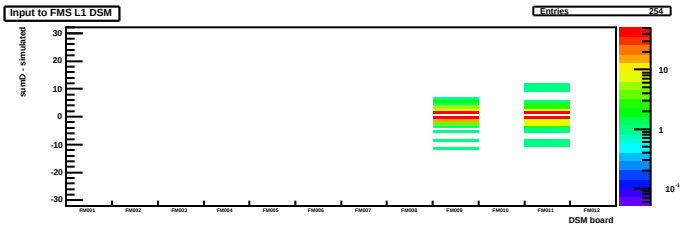

Input to FMS L0 DSM
Entries 2.250586e+07
HT ADC
QT board

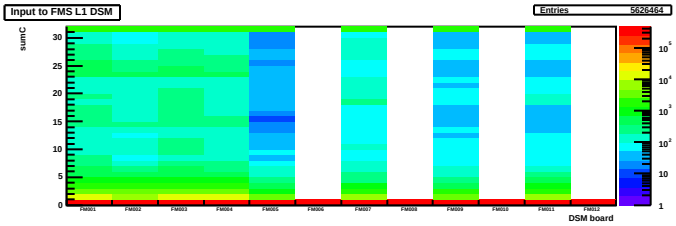

Input to FMS L0 DSM
Entries 63674
HT ADC - simulated
QT board

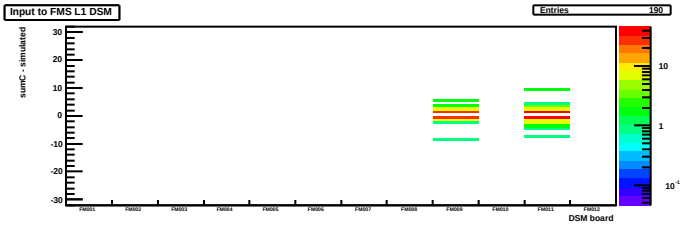

Input to FMS L0 DSM
Entries 2.250586e+07
HT ID
QT board

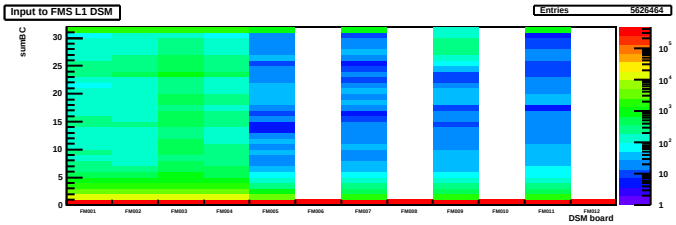

Input to FMS L0 DSM
Entries 547060
HT ID - simulated
QT board

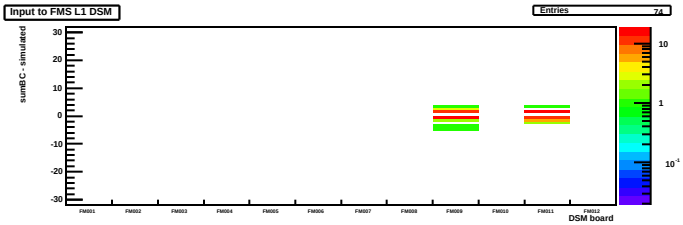

Input to FMS L1 DSM
Entries 5626464
sumD
DSM board

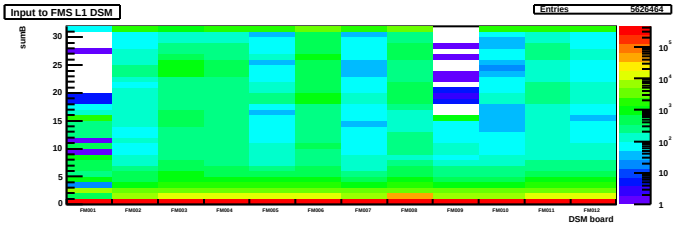

Input to FMS L1 DSM
Entries 254
sumD - simulated
DSM board

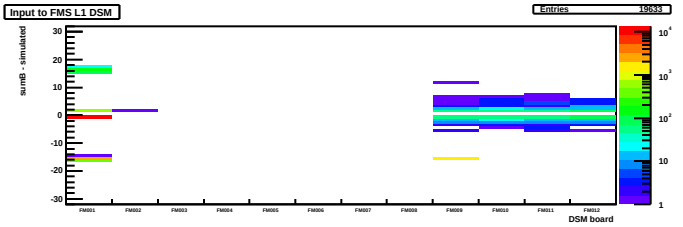

Input to FMS L1 DSM
Entries 5626464
sumC
DSM board

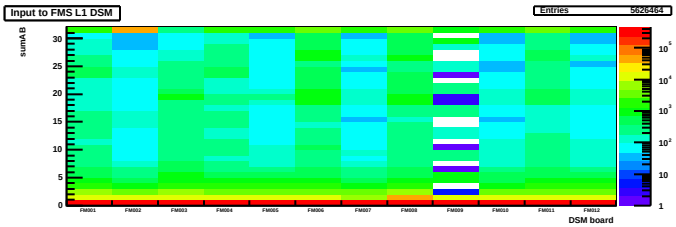

Input to FMS L1 DSM
Entries 190
sumC - simulated
DSM board

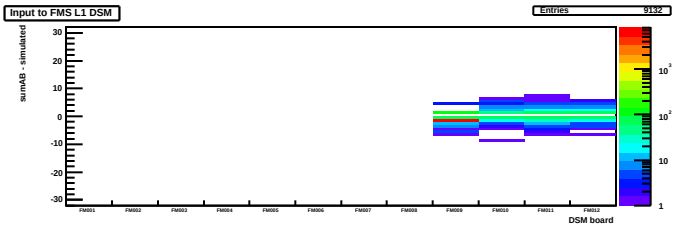

Input to FMS L1 DSM
Entries 5626464
sumBC
DSM board

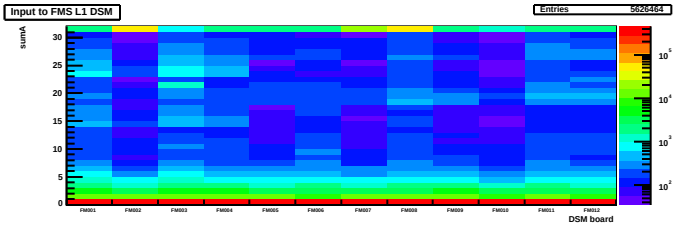

Input to FMS L1 DSM
Entries 74
sumBC - simulated
DSM board

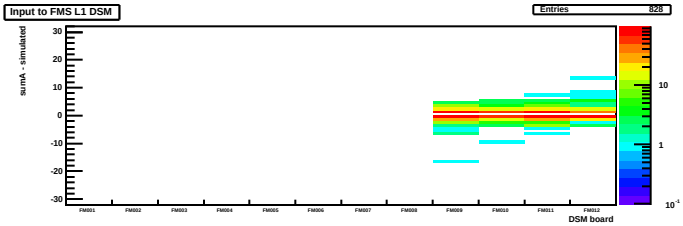

Input to FMS L1 DSM
Entries 5626464
sumB
DSM board

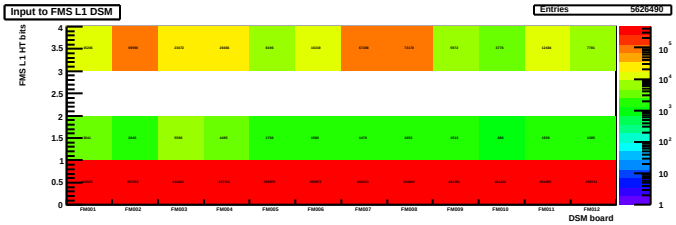

Input to FMS L1 DSM
Entries 19633
sumB - simulated
DSM board

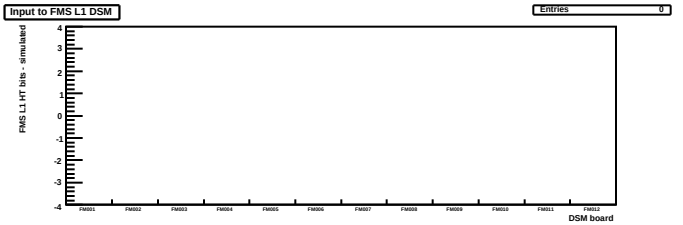

Input to FMS L1 DSM
Entries 5626464
sumAB
DSM board

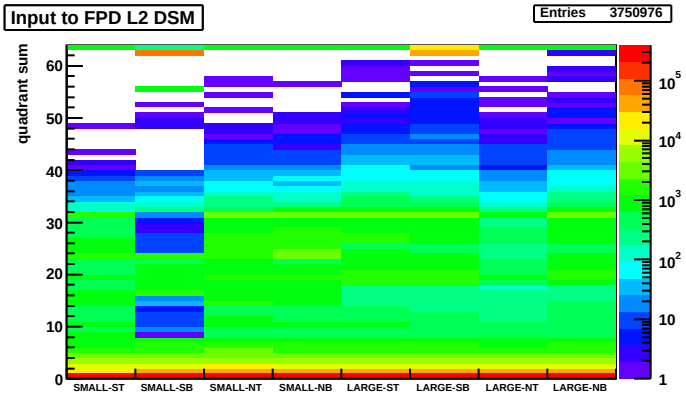

Input to FMS L1 DSM
Entries 9132
sumAB - simulated
DSM board

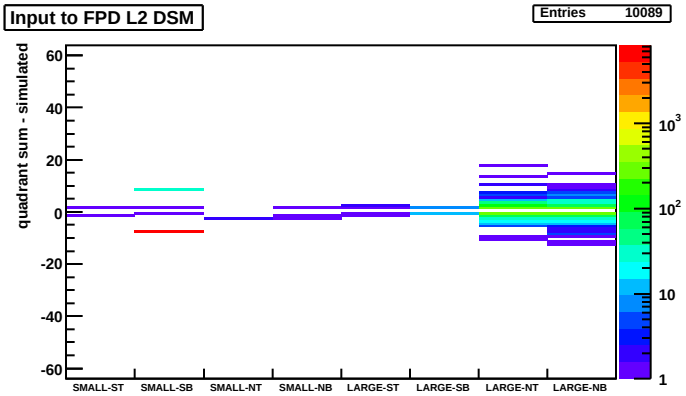

Input to FMS L1 DSM
Entries 5626464
sumA
DSM board

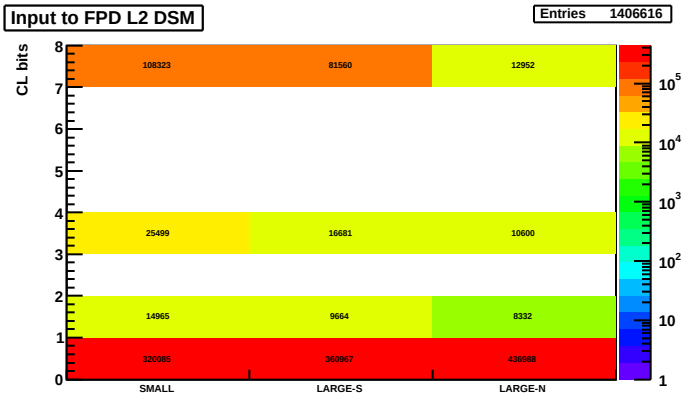

Input to FMS L1 DSM
Entries 828
sumA - simulated
DSM board

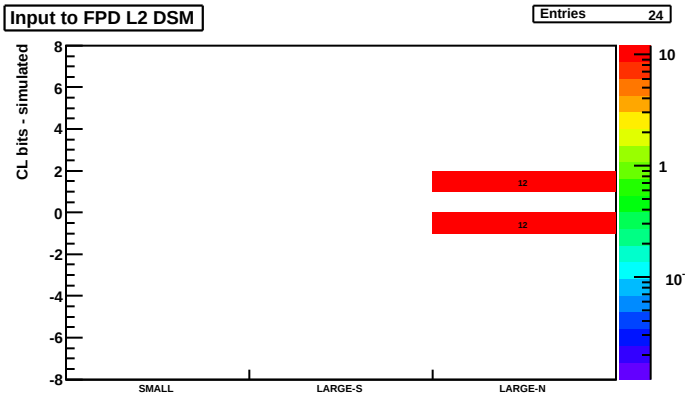

Input to FMS L1 DSM
Entries 5626490
FMS L1 HT bits
DSM board

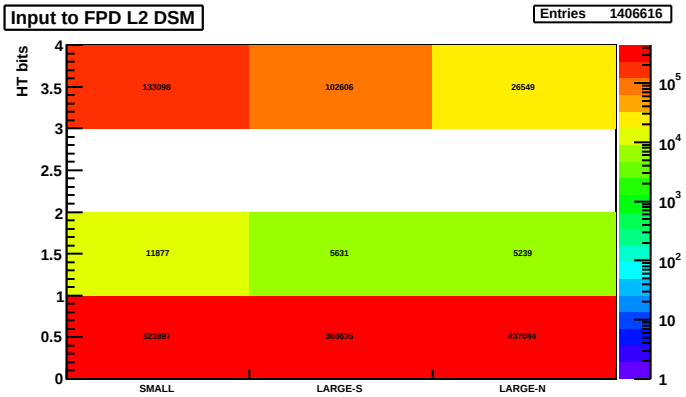

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

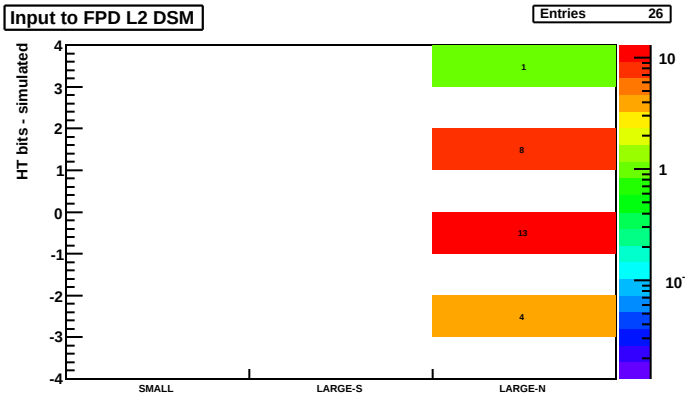

Input to FPD L2 DSM
Entries 3750976
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

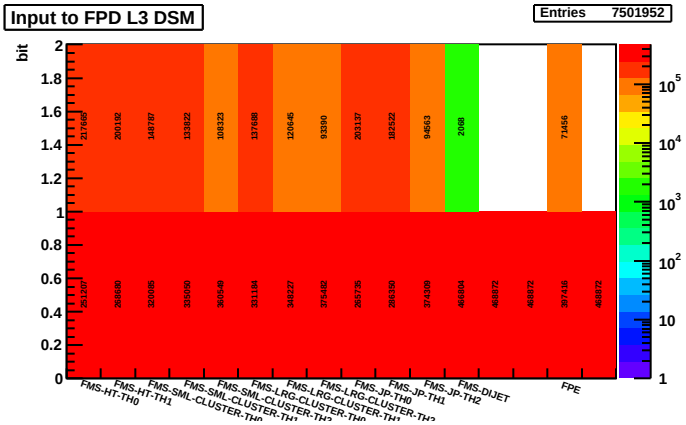

Input to FPD L2 DSM
Entries 10089
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

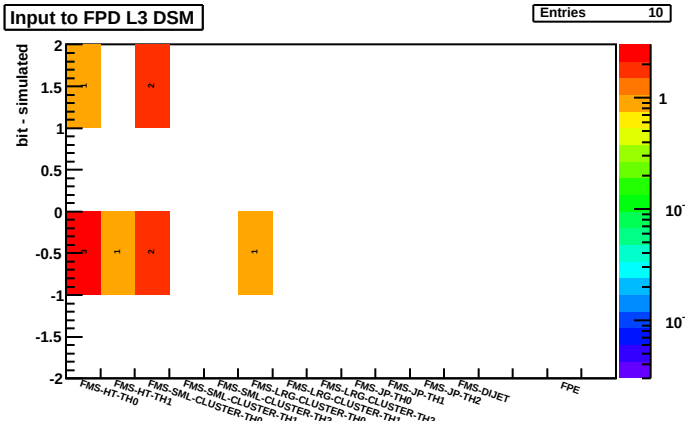

Input to FPD L2 DSM
Entries 1406616
CL bits
108323
81560
12952
25499
16681
10600
14965
9664
8332
320085
360967
436988
SMALL
LARGE-S
LARGE-N

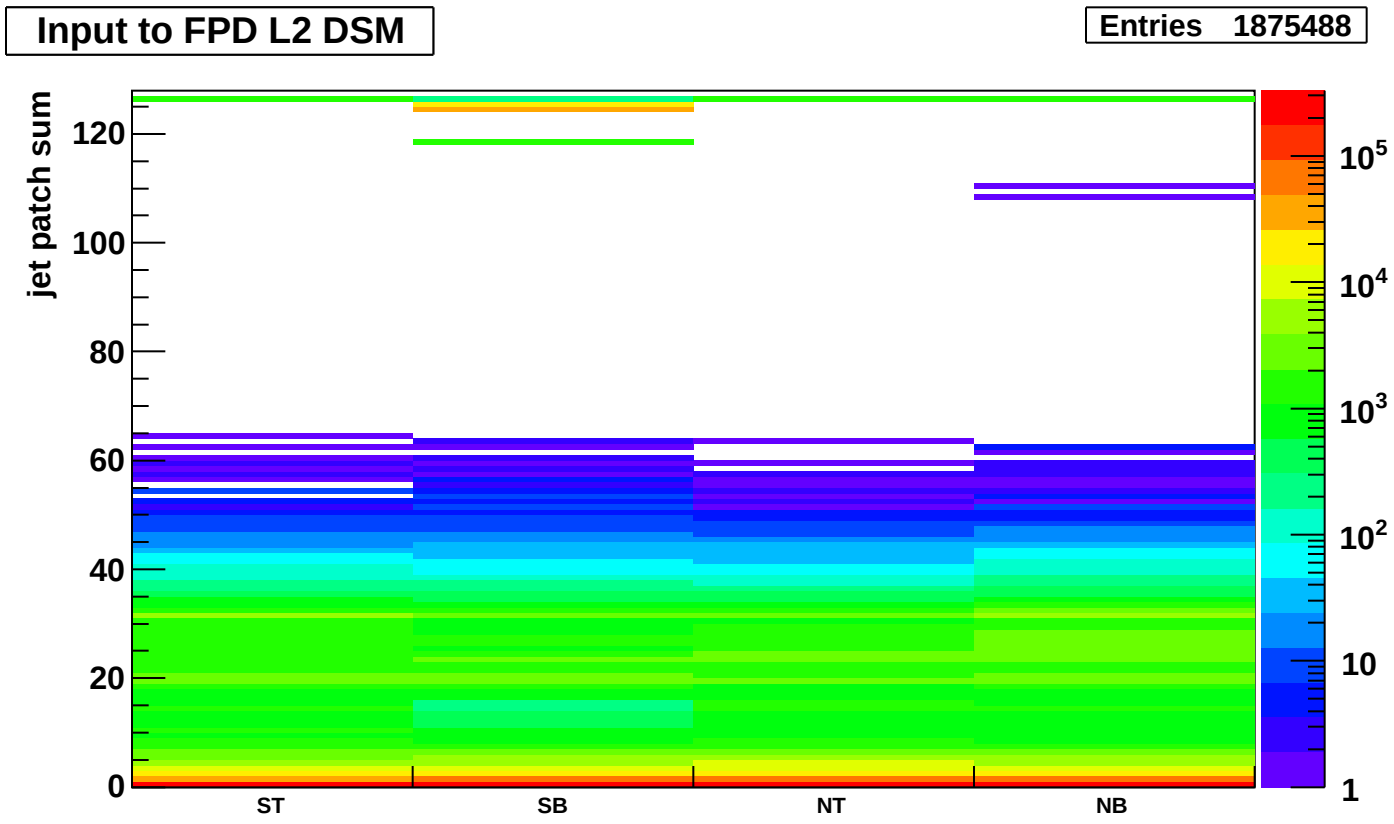

Input to FPD L2 DSM
Entries 24
CL bits - simulated
12
12
SMALL
LARGE-S
LARGE-N

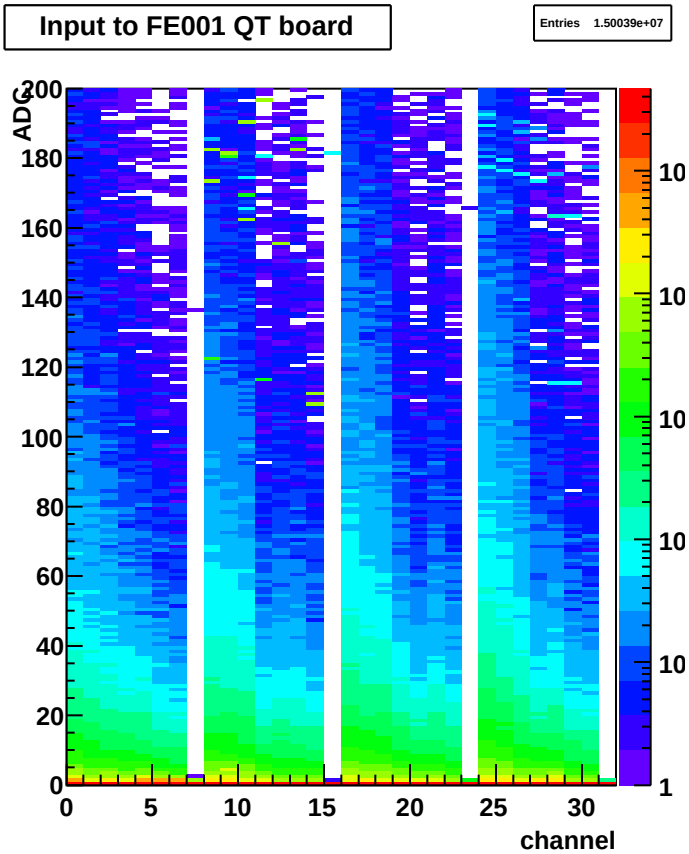

Input to FPD L2 DSM
Entries 1406616
HT bits
133098
102606
26549
11877
5631
5239
323897
360635
437084
SMALL
LARGE-S
LARGE-N

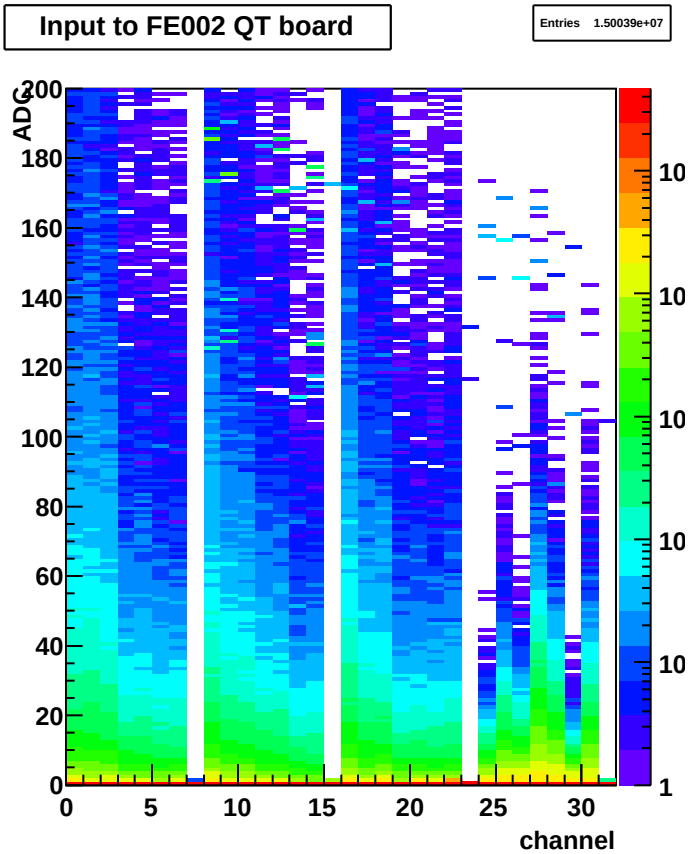

Input to FPD L2 DSM
Entries 26
HT bits - simulated
1
8
13
4
SMALL
LARGE-S
LARGE-N

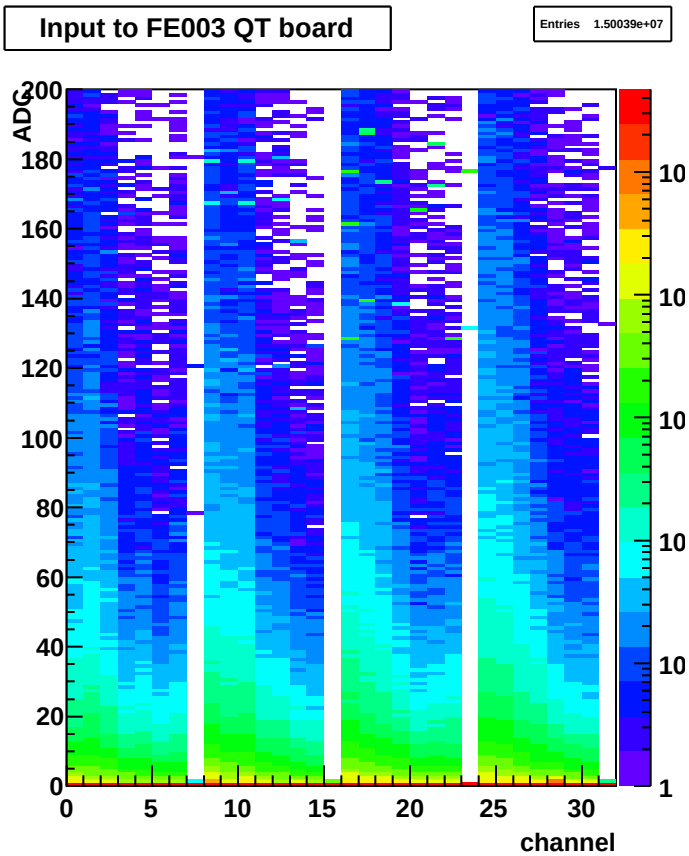

Input to FPD L3 DSM
Entries 7501952
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

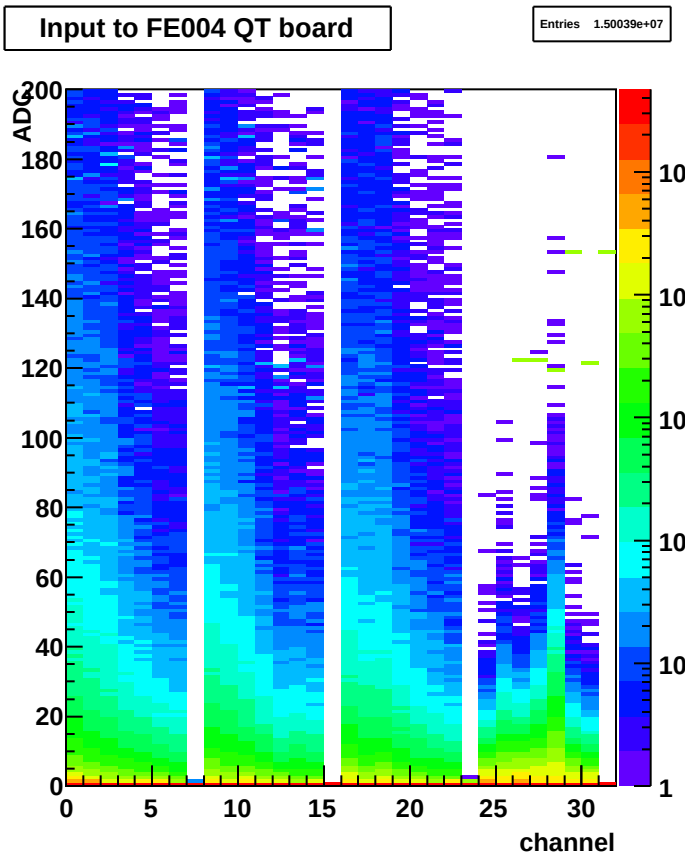

Input to FPD L3 DSM
Entries 10
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

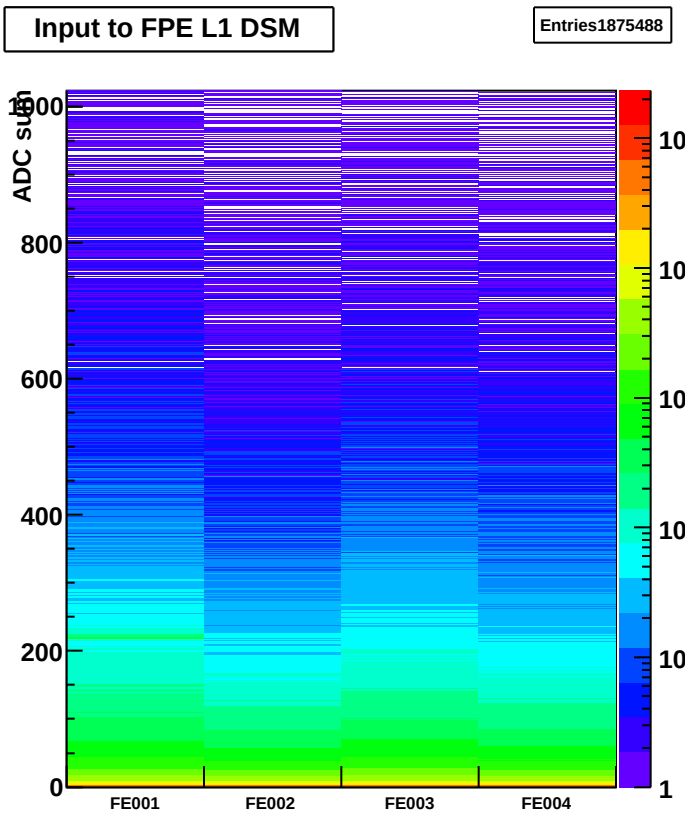

Input to FPD L2 DSM
Entries 1875488
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

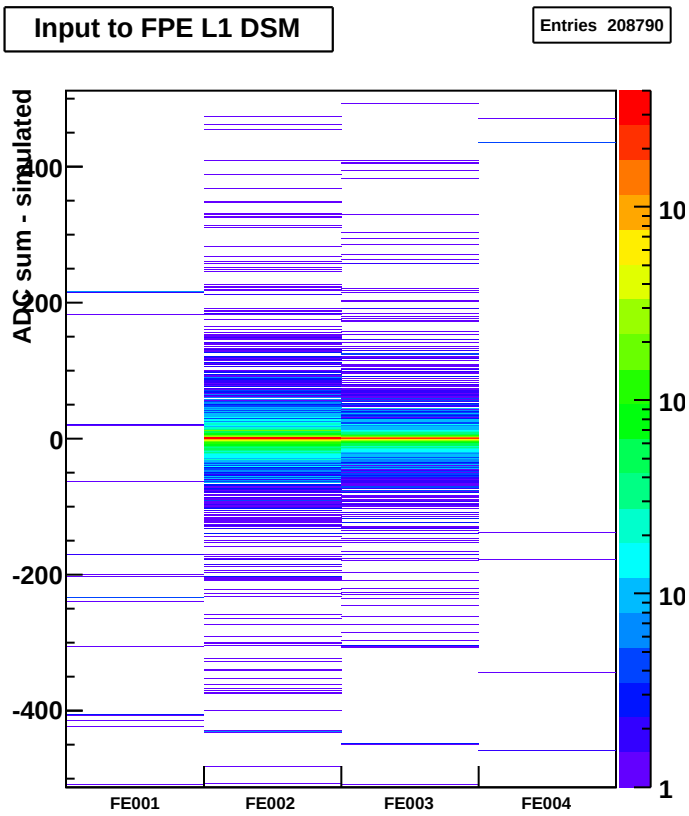

Input to FE001 QT board
Entries 1.50039e+07
ADC
channel

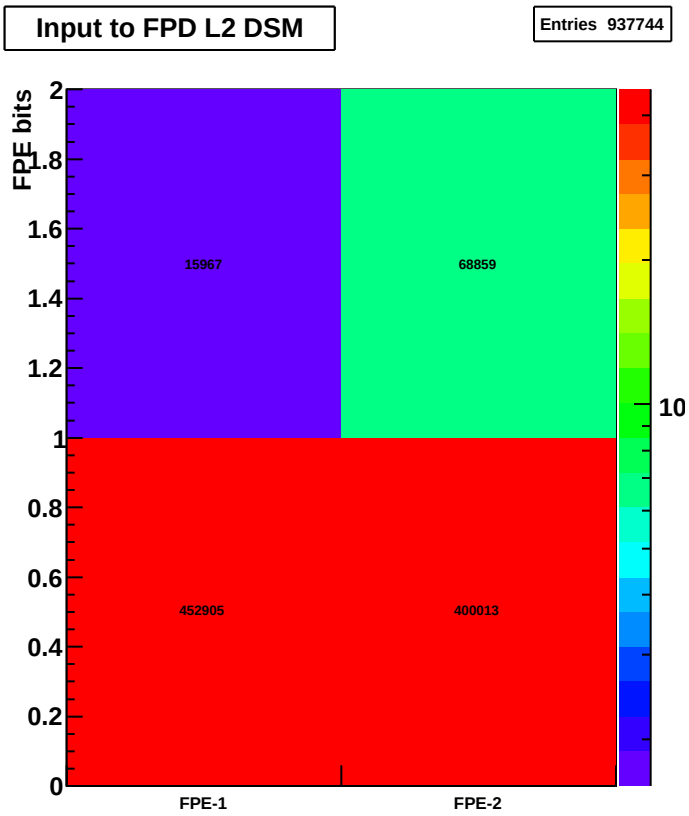

Input to FE002 QT board
Entries 1.50039e+07
ADC
channel

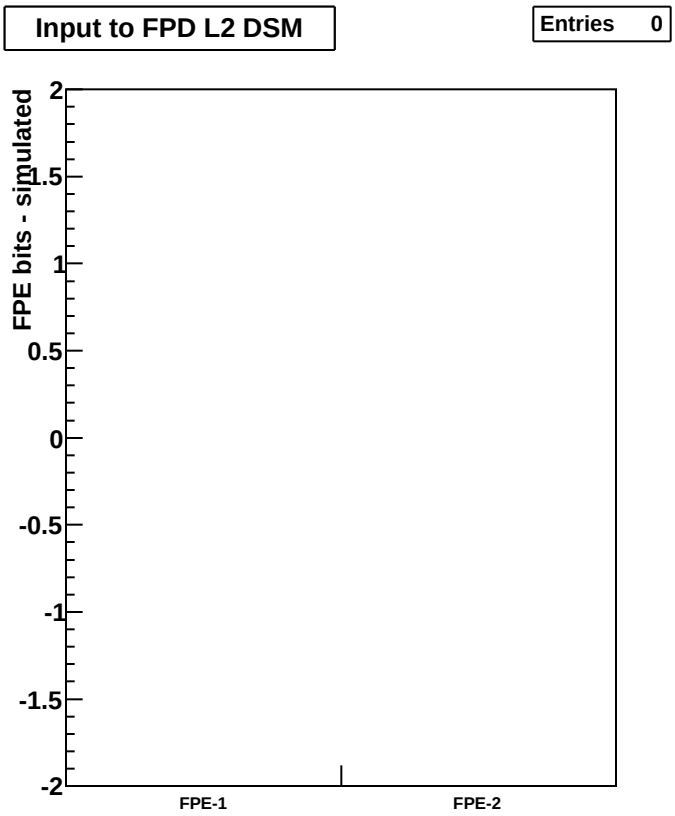

Input to FE003 QT board
Entries 1.50039e+07
ADC
channel


Input to FE004 QT board
Entries 1.50039e+07
ADC
channel


Input to FPE L1 DSM
Entries1875488
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 208790
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 937744
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
15967
68859
452905
400013
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