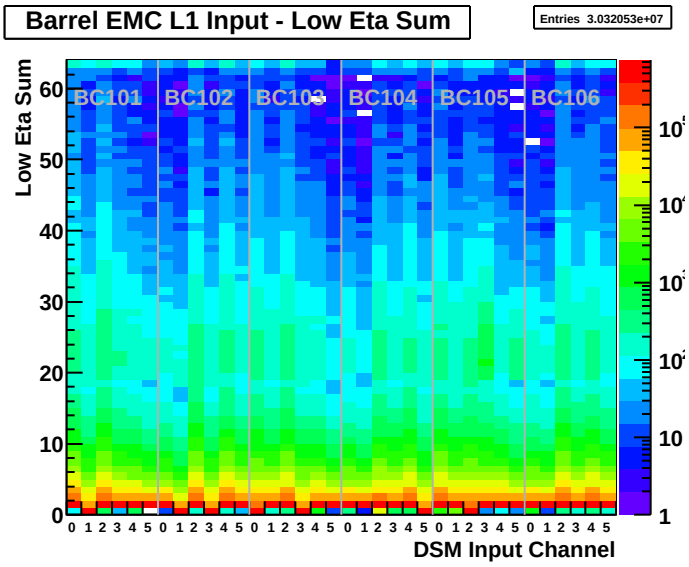
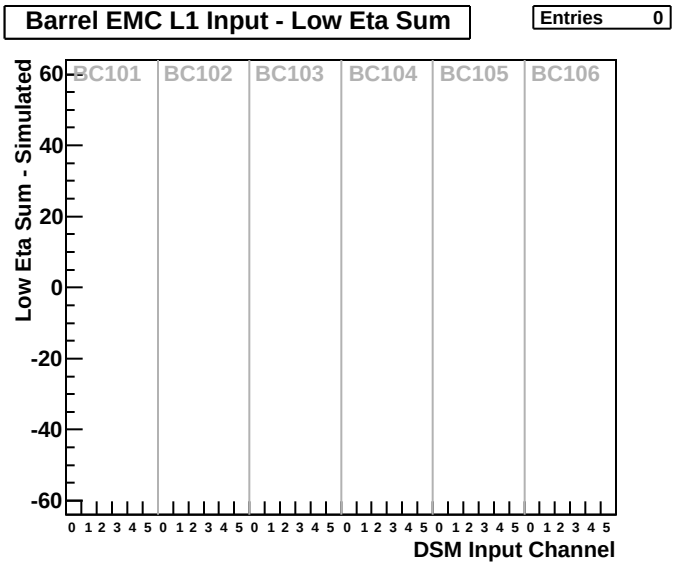
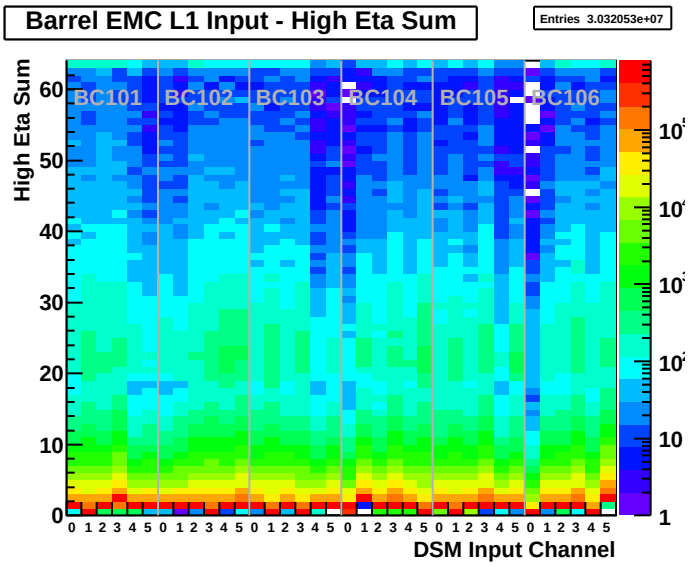
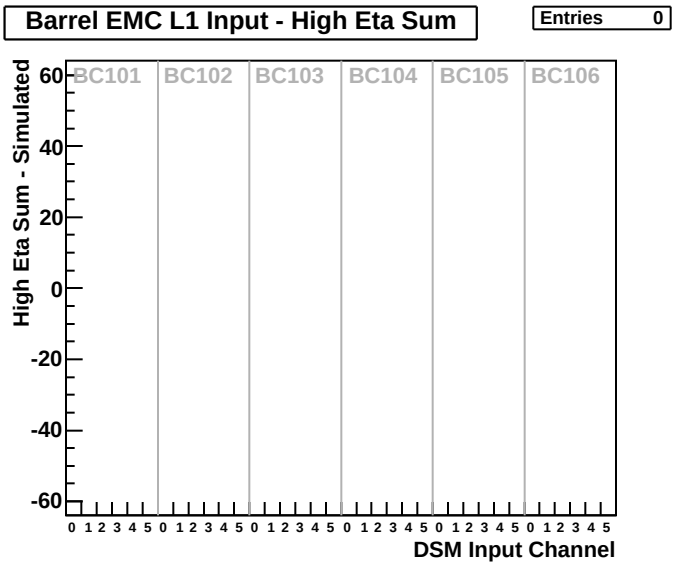
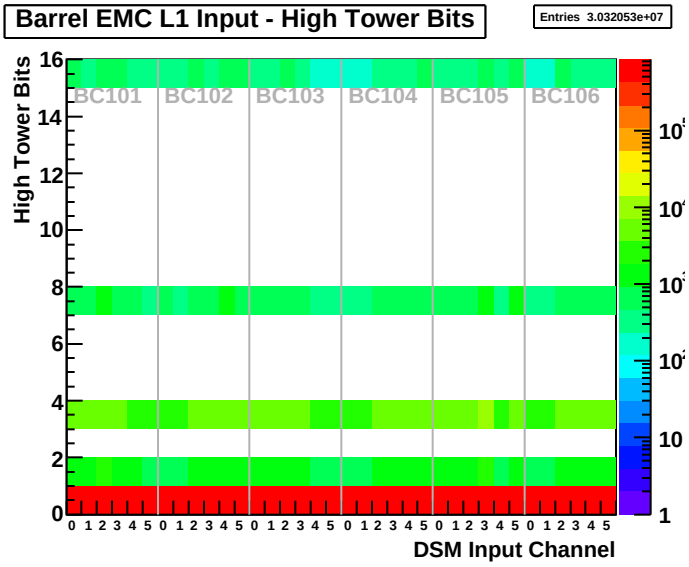
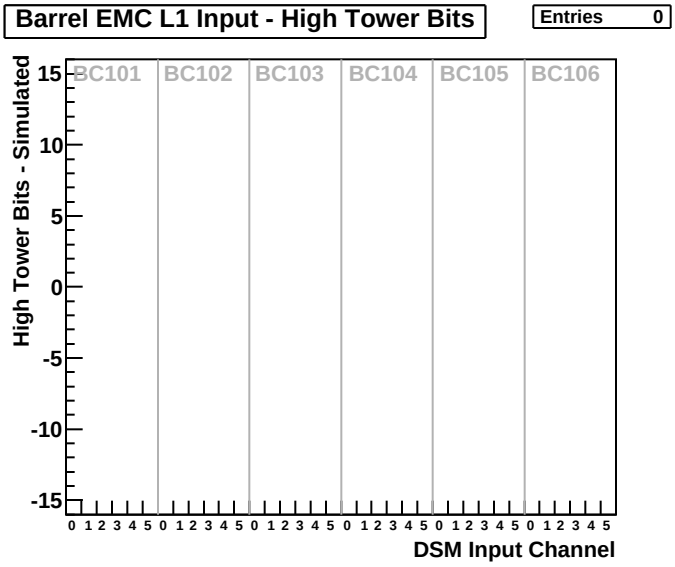

Barrel EMC L1 Input - Low Eta Sum
Entries 3.032053e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

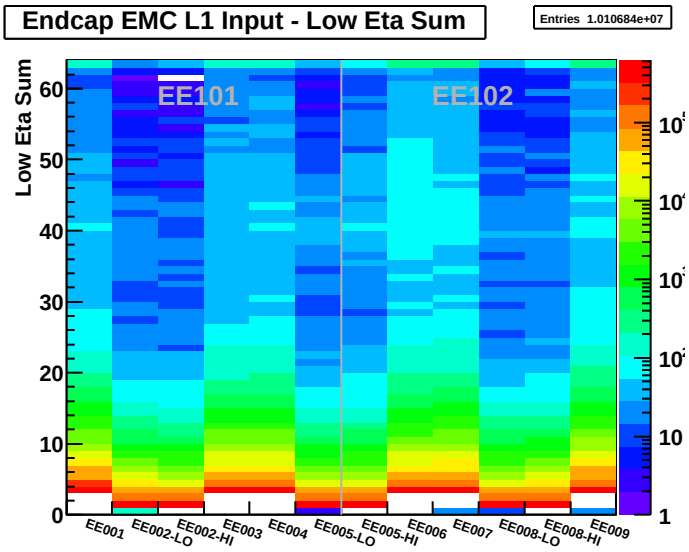

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

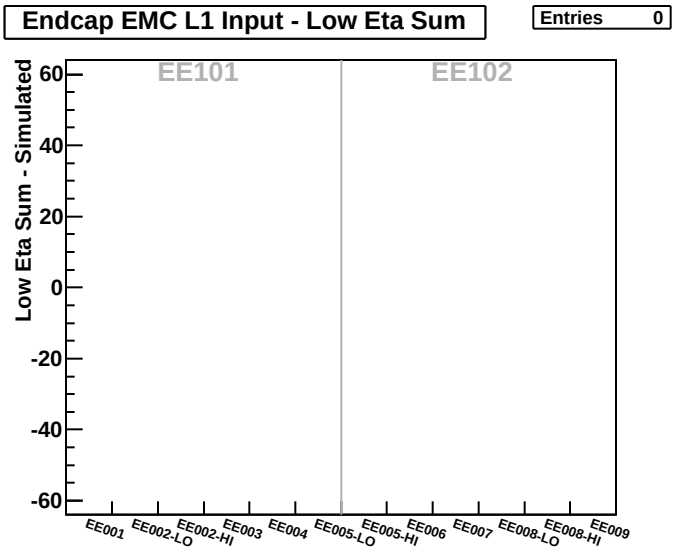

Barrel EMC L1 Input - High Eta Sum
Entries 3.032053e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

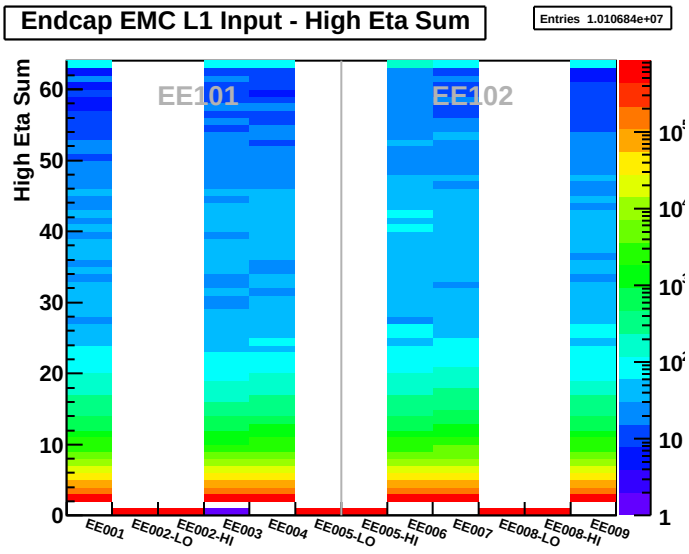

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

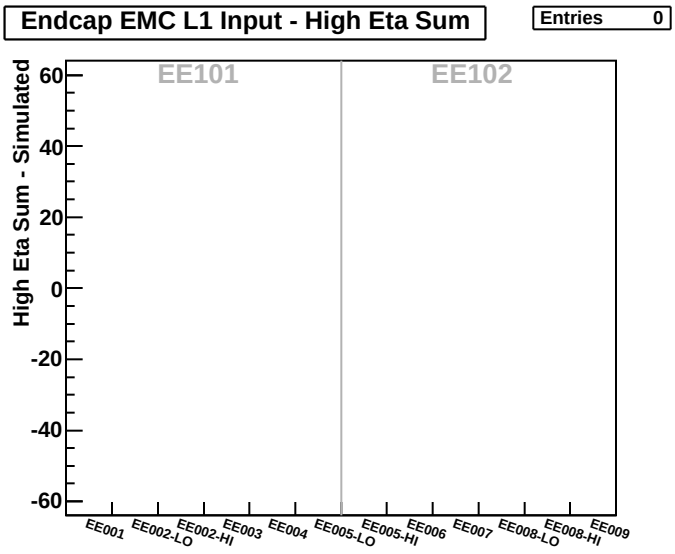

Barrel EMC L1 Input - High Tower Bits
Entries 3.032053e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

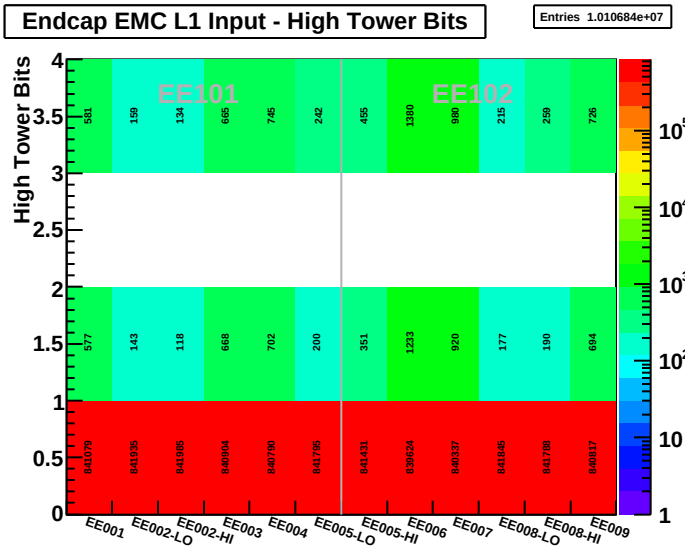

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

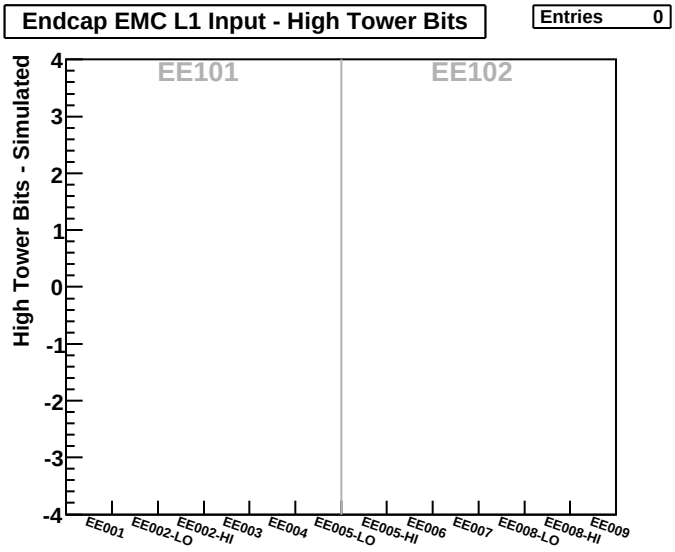

Endcap EMC L1 Input - Low Eta Sum
Entries 1.010684e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

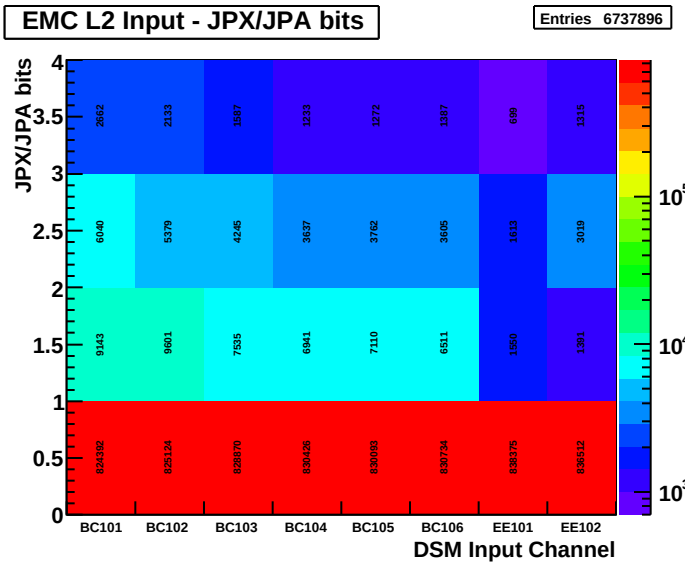

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

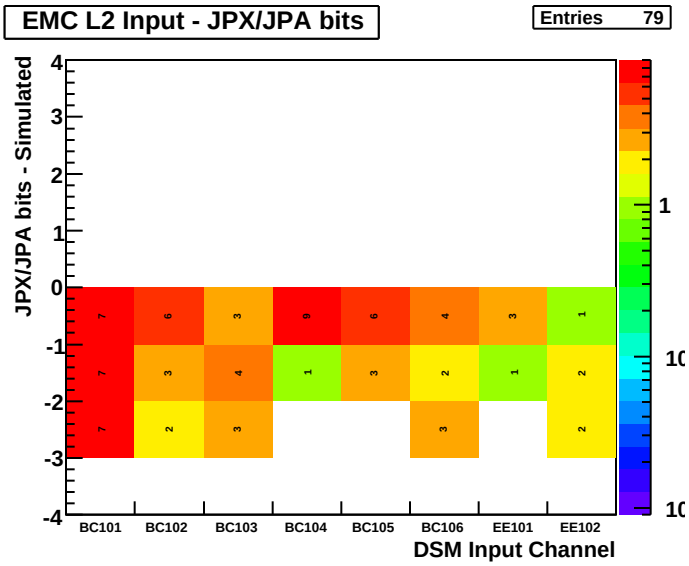

Endcap EMC L1 Input - High Eta Sum
Entries 1.010684e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

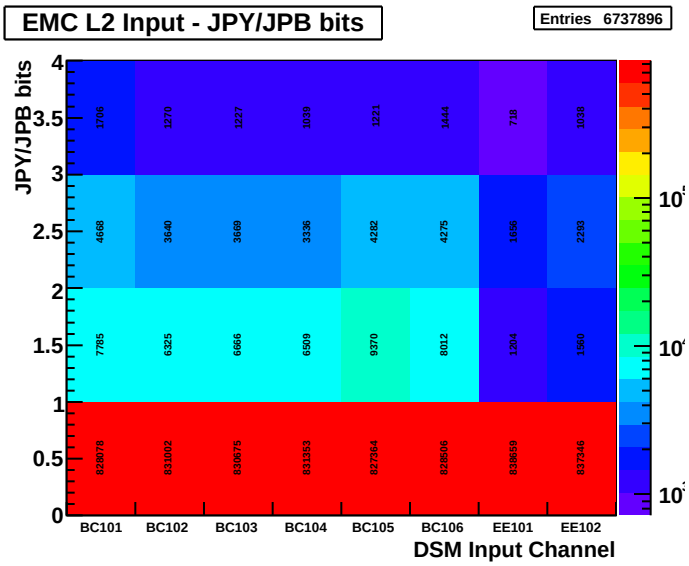

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

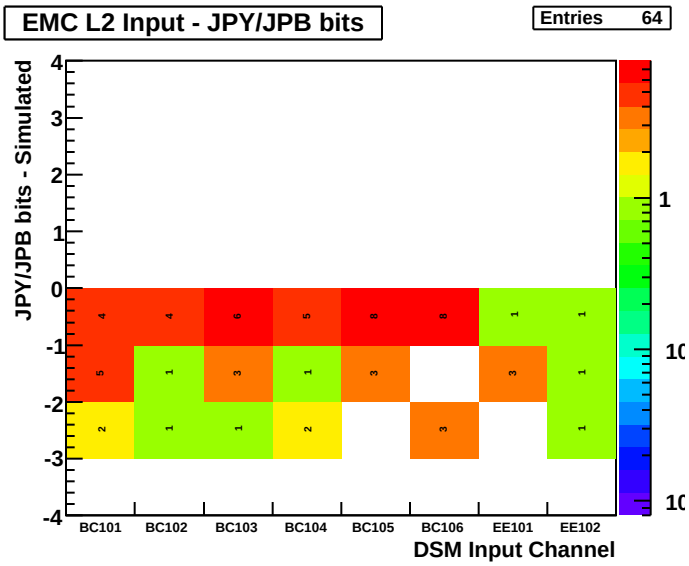

Endcap EMC L1 Input - High Tower Bits
Entries 1.010684e+07
High Tower Bits
EE101
EE102
581 159 134 665 745 242 455 1380 980 215 259 726
577 143 118 668 702 200 351 1233 920 177 190 694
841079 841035 841085 840904 840790 841795 841431 839624 840337 841845 841788 840817
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

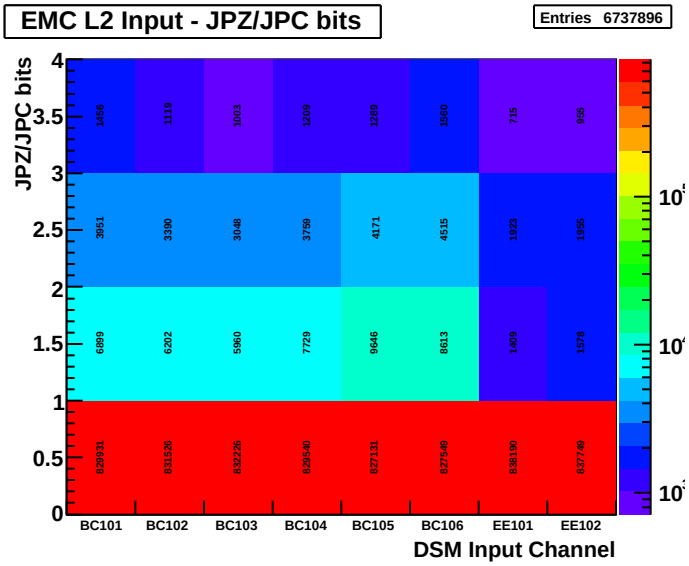

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

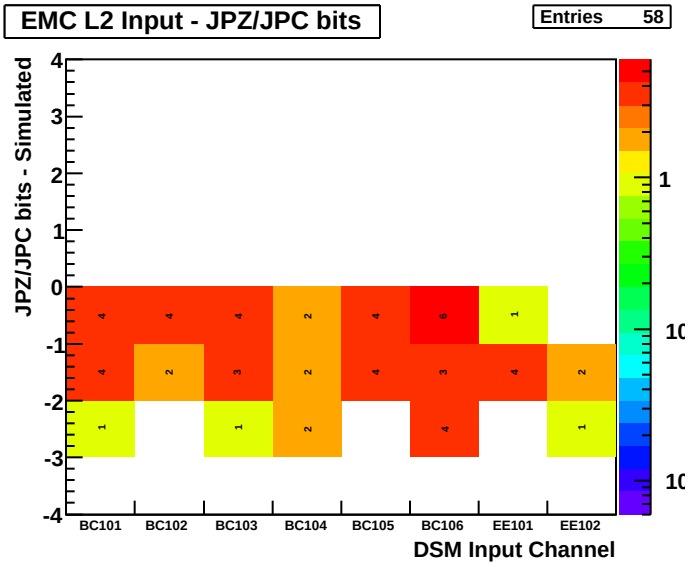

EMC L2 Input - JPX/JPA bits
Entries 6737896
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2862 2133 1587 1233 1272 1387 699 1315
6040 5379 4245 3637 3762 3605 1613 3019
9143 9601 7535 6941 7110 6511 1560 1391
824392 825124 828870 830426 830093 830734 838375 836512

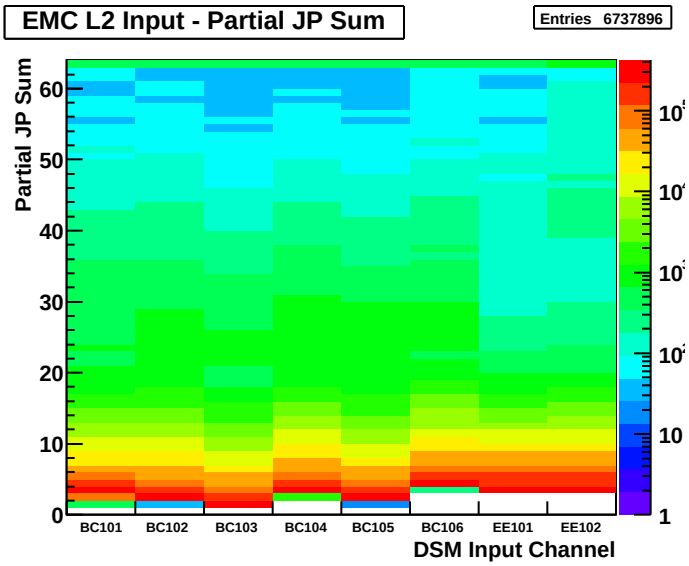

EMC L2 Input - JPX/JPA bits
Entries 79
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

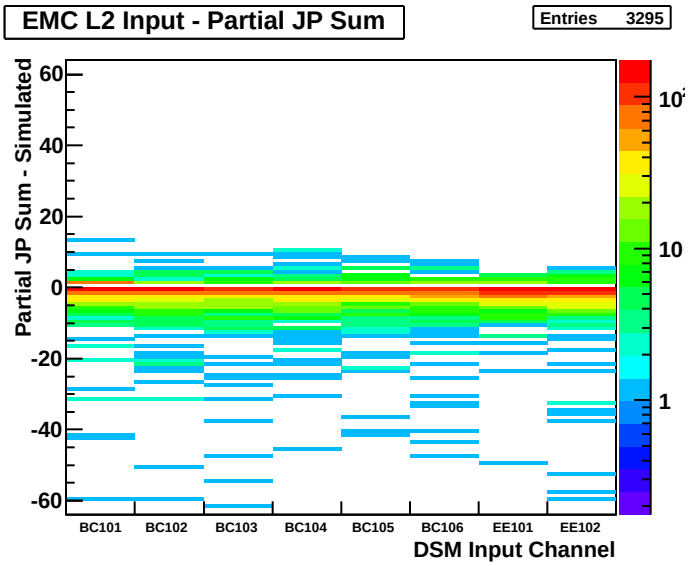

EMC L2 Input - JPY/JPB bits
Entries 6737896
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1706 1270 1227 1039 1221 1444 718 1038
4668 3640 3669 3336 4282 4275 1656 2293
7785 6325 6666 6509 9370 8012 1204 1560
828078 831002 830675 831353 827364 828596 838659 837346

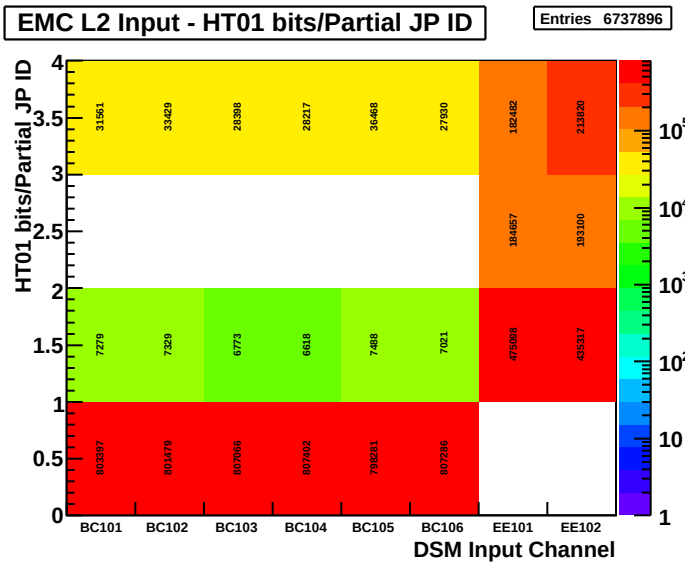

EMC L2 Input - JPY/JPB bits
Entries 64
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

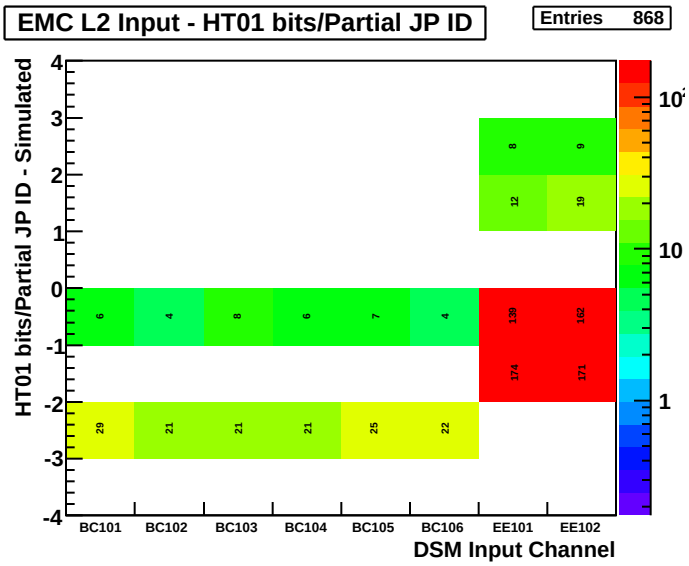

EMC L2 Input - JPZ/JPC bits
Entries 6737896
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1456 1119 1003 1209 1289 1569 715 955
3951 3390 3048 3759 4171 4515 1923 1955
6899 6202 5960 7729 9646 8613 1409 1578
829931 831526 832226 829540 827131 827549 838190 837749

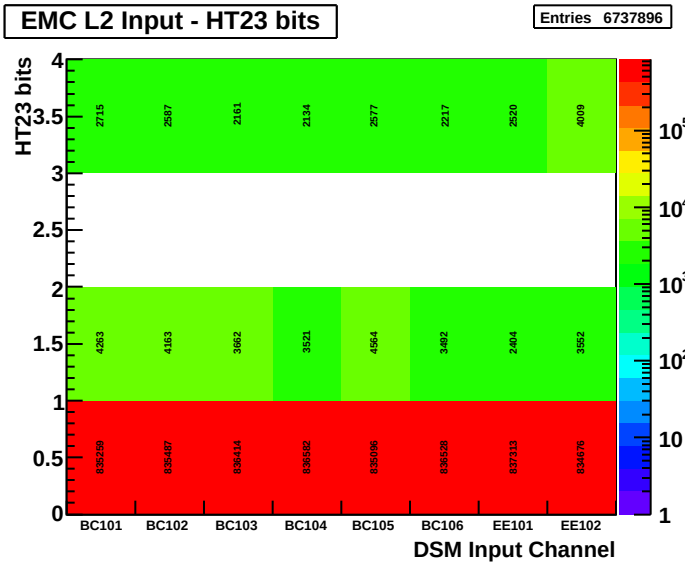

EMC L2 Input - JPZ/JPC bits
Entries 58
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

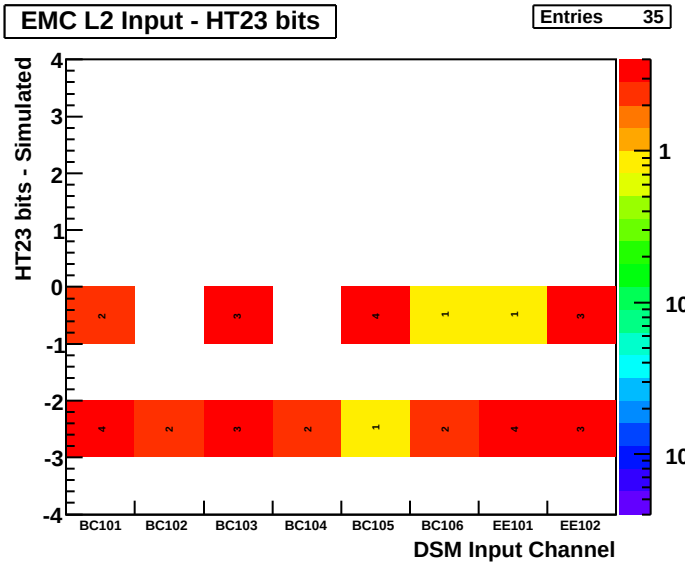

EMC L2 Input - Partial JP Sum
Entries 6737896
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

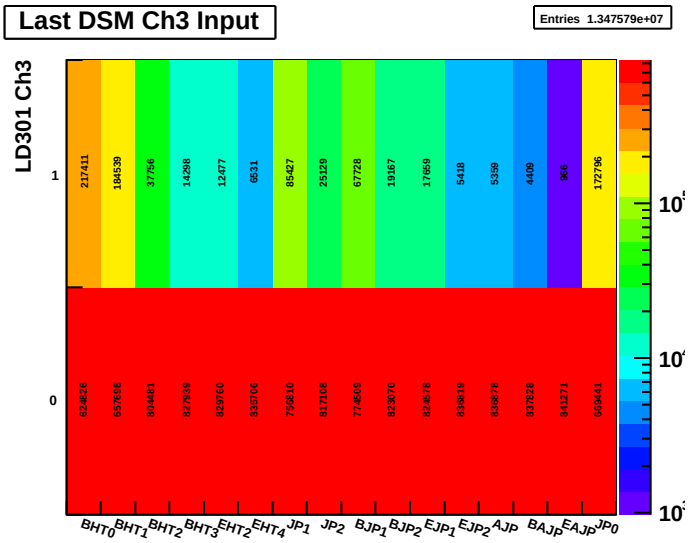

EMC L2 Input - Partial JP Sum
Entries 3295
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

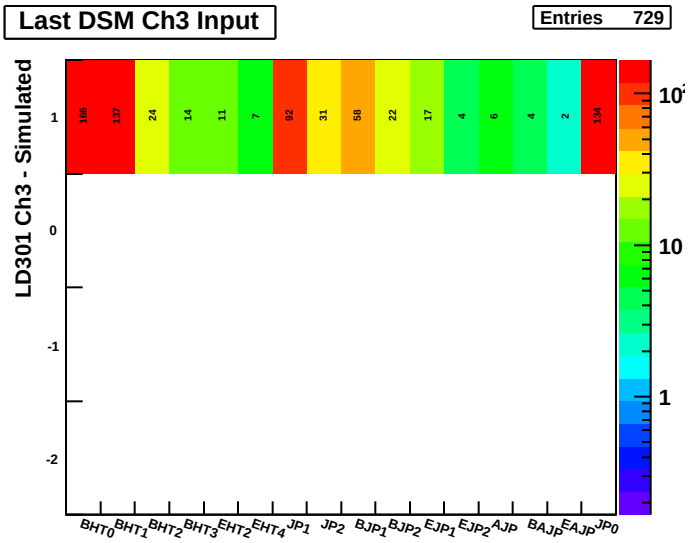

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6737896
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

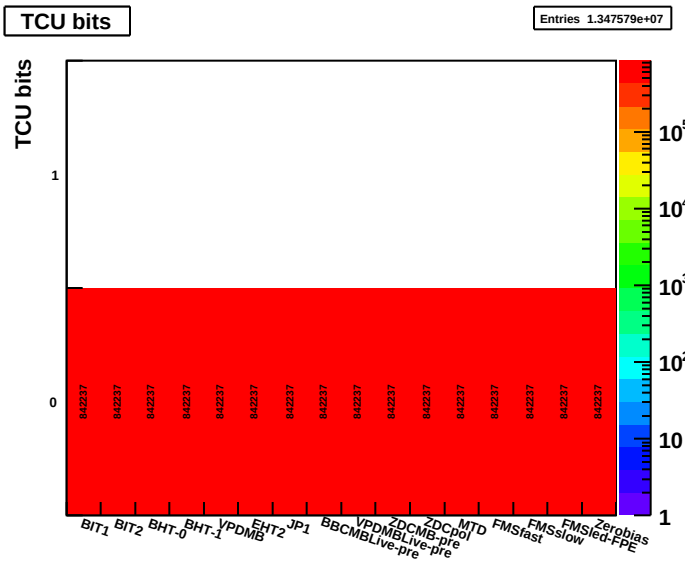

EMC L2 Input - HT01 bits/Partial JP ID
Entries 868
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

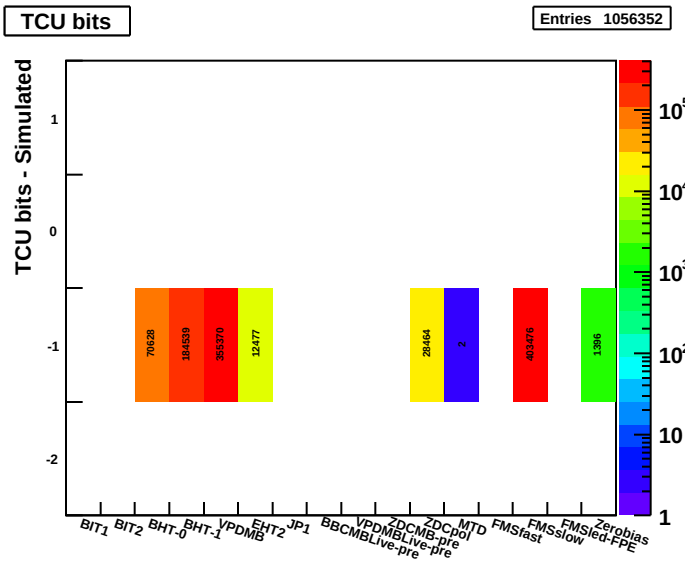

EMC L2 Input - HT23 bits
Entries 6737896
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

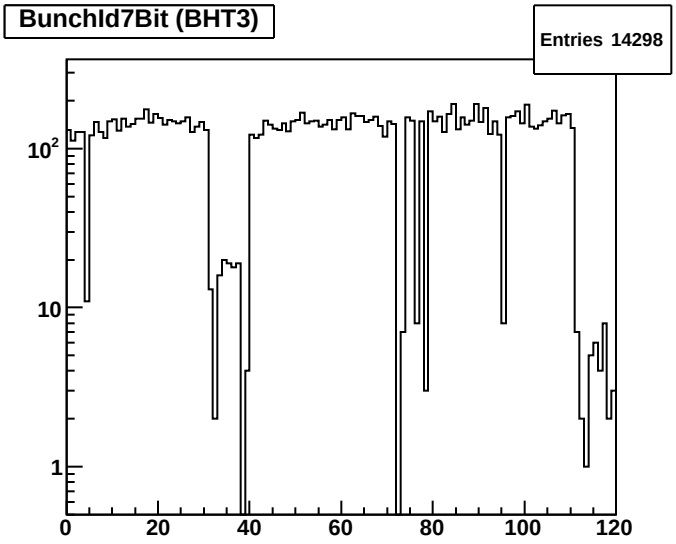

EMC L2 Input - HT23 bits
Entries 35
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

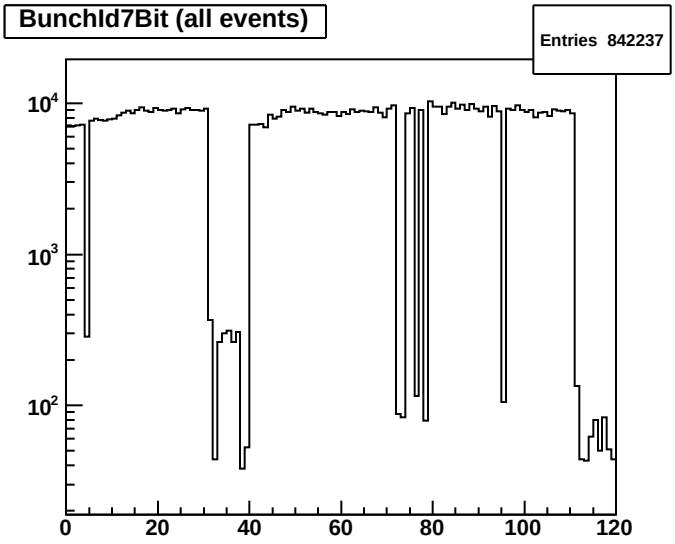

Last DSM Ch3 Input
Entries 1.347579e+07
LD301 Ch3
217411 184539 37756 14298 12477 6531 85427 25129 67728 19167 17659 5418 5359 4409 966 172796
624826 657698 804481 827939 829760 835706 756810 817108 774509 823070 824578 836819 836878 837828 841271 669441
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

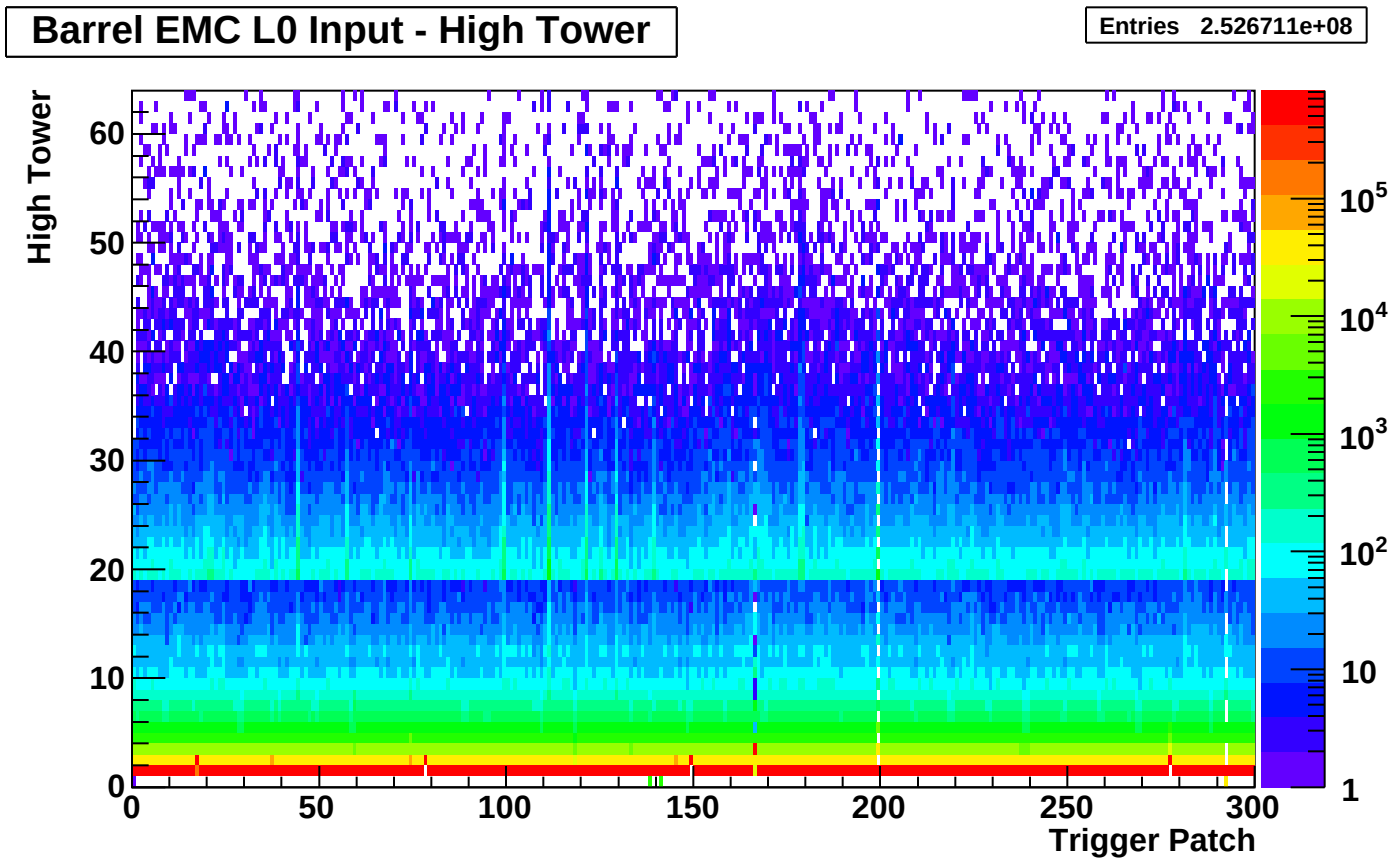

Last DSM Ch3 Input
Entries 729
LD301 Ch3 - Simulated
166 137 24 14 11 7 92 31 58 22 17 4 6 4 2 134
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

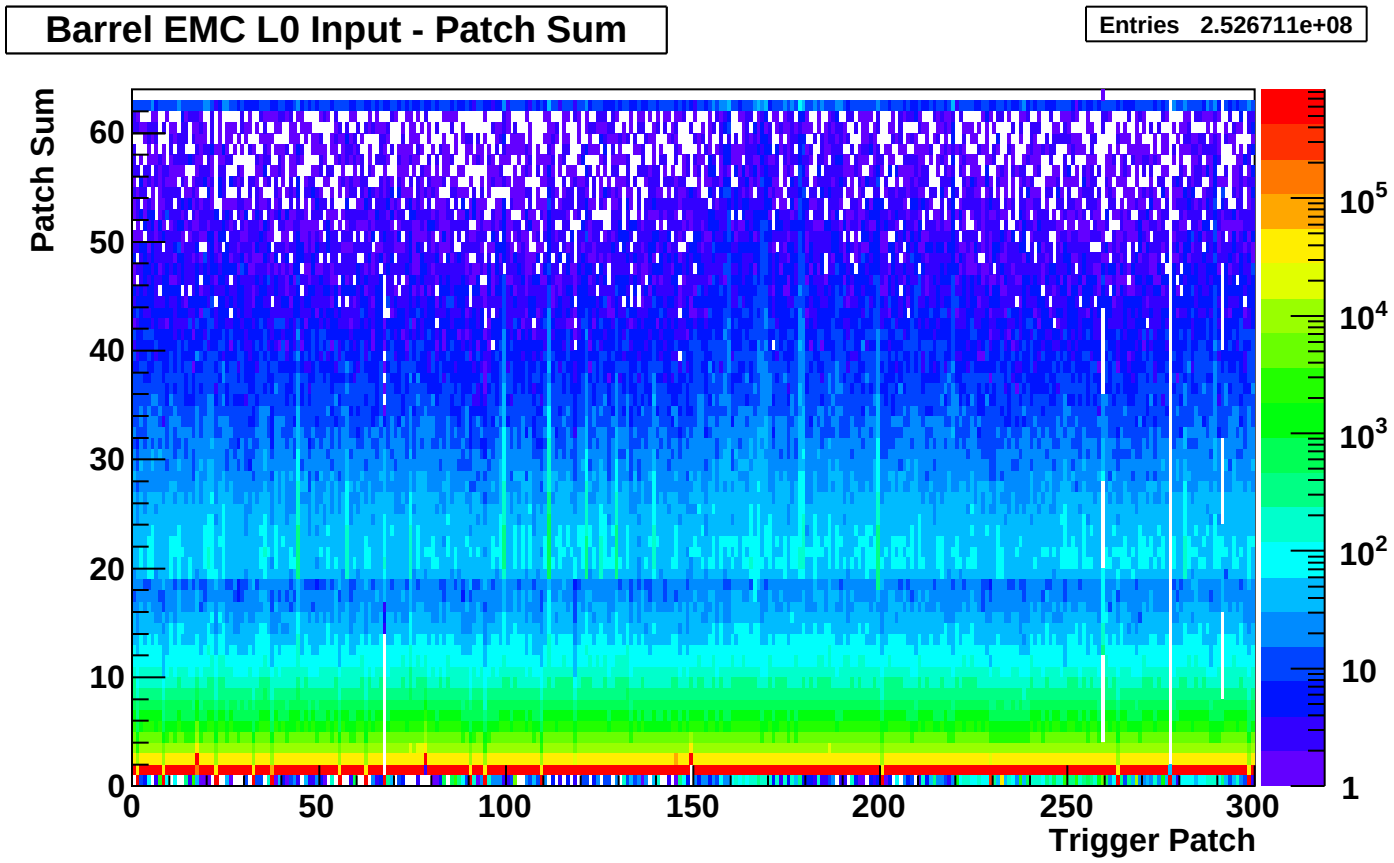

TCU bits
Entries 1.347579e+07
TCU bits
842237
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

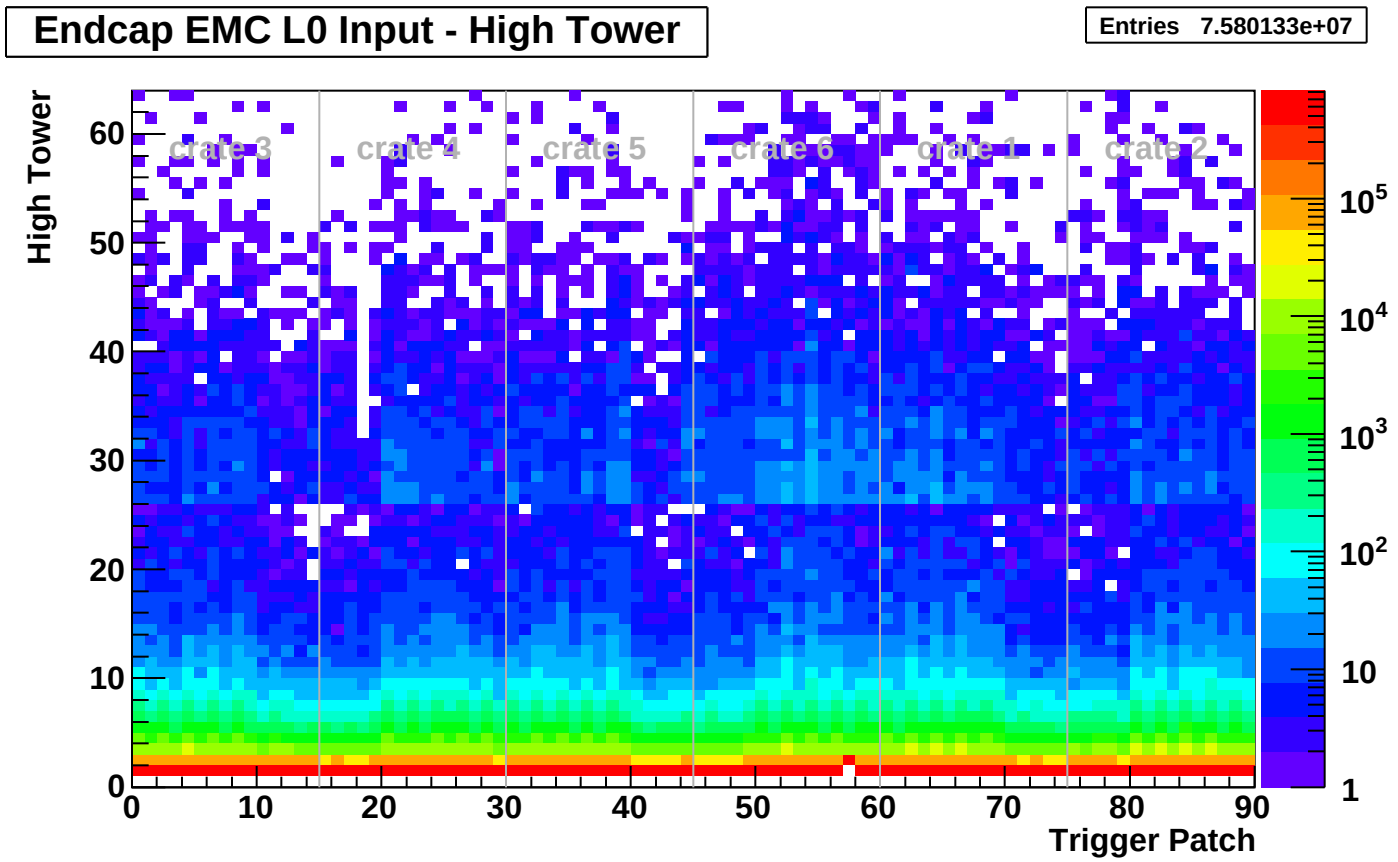

TCU bits
Entries 1056352
TCU bits - Simulated
70628 184539 353370 12477 28464 2 403476 1396
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

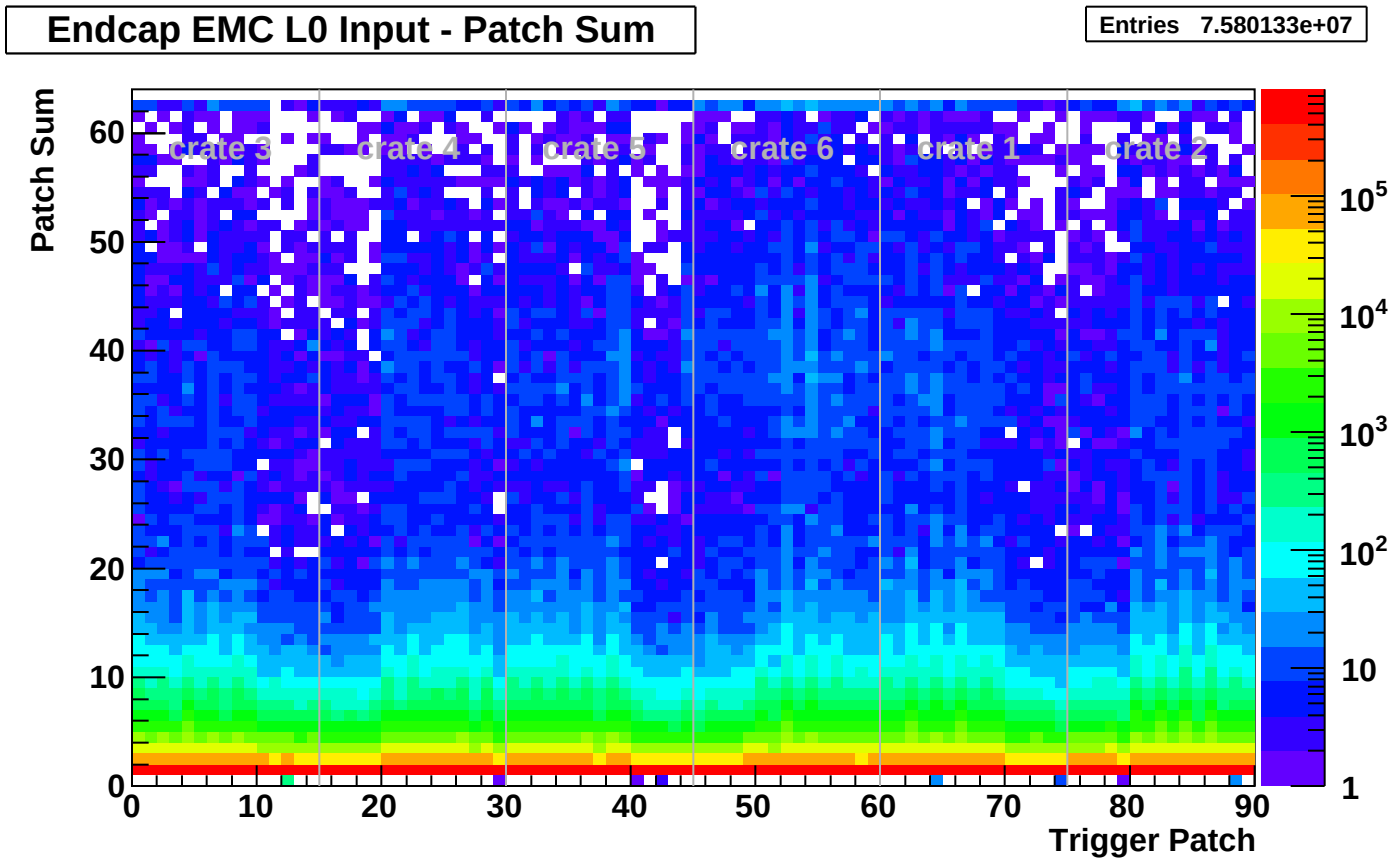

BunchId7Bit (BHT3)
Entries 14298

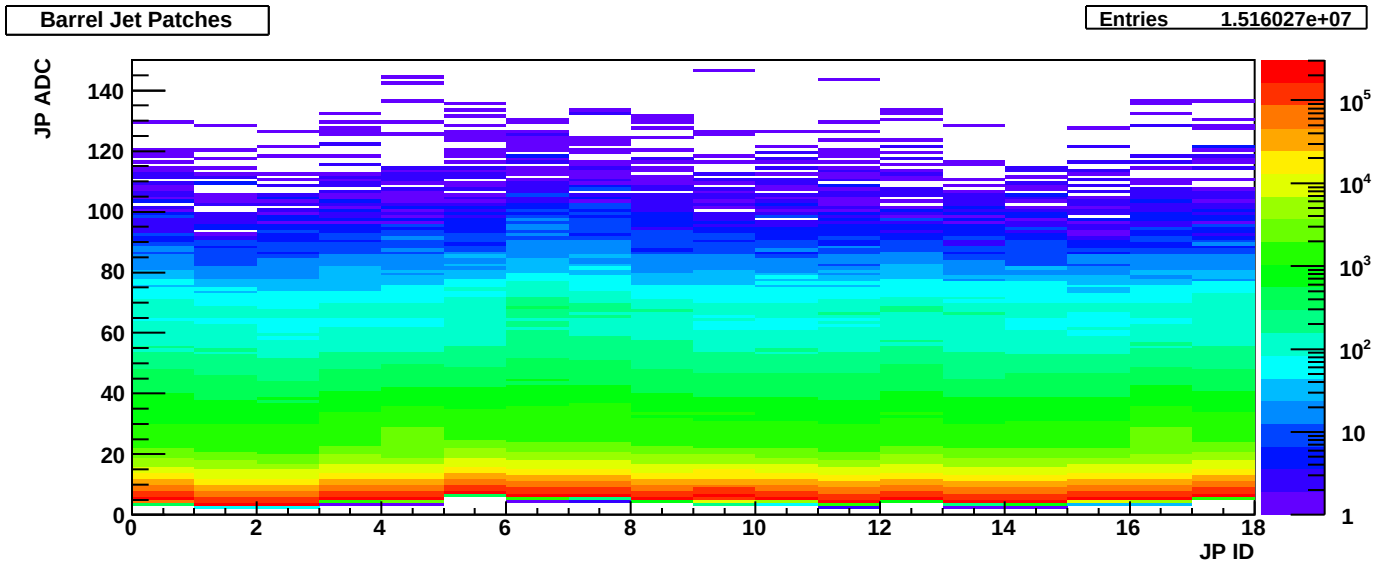

BunchId7Bit (all events)
Entries 842237

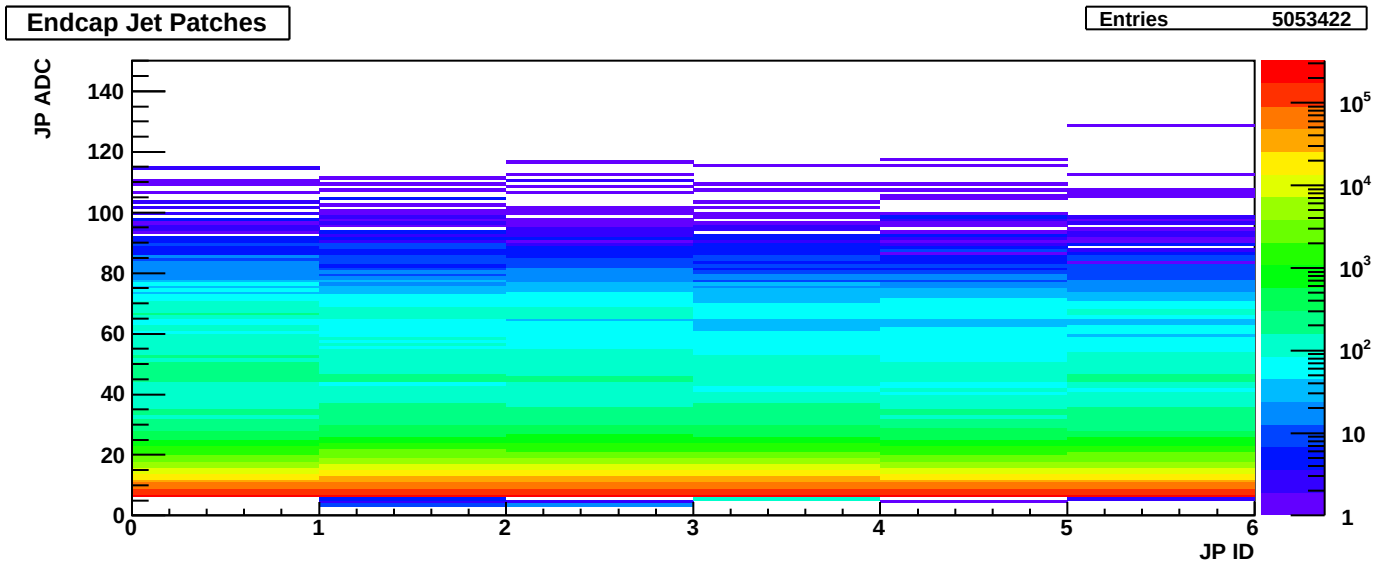

Barrel EMC L0 Input - High Tower
Entries 2.526711e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

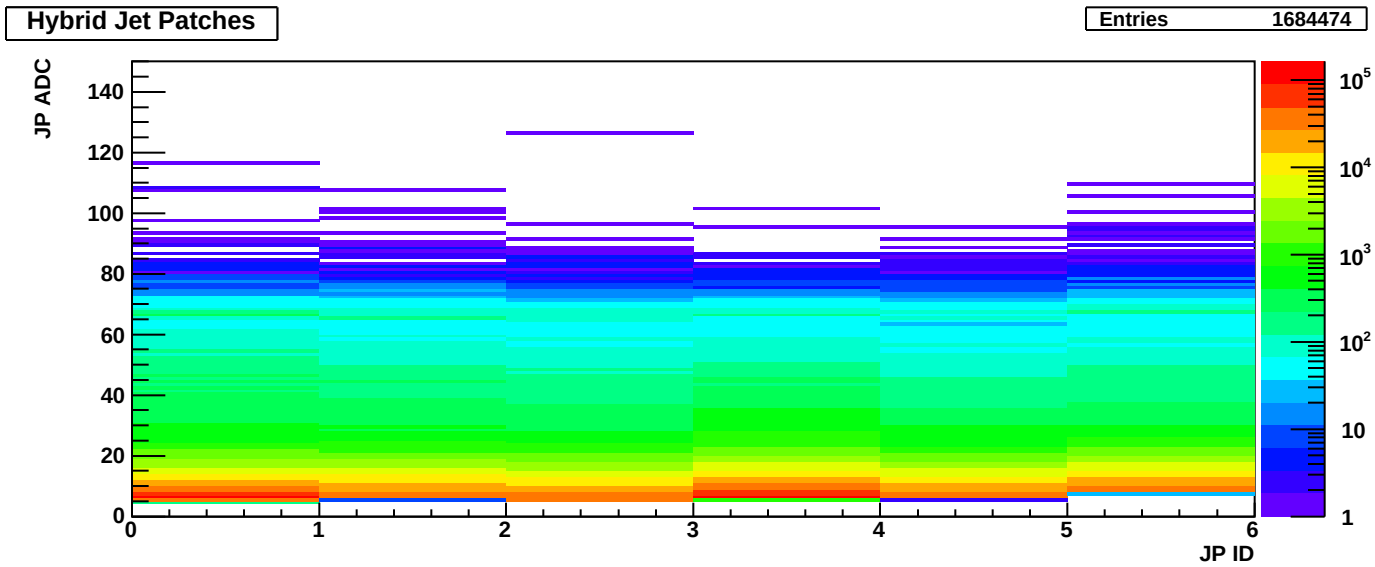

Barrel EMC L0 Input - Patch Sum
Entries 2.526711e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

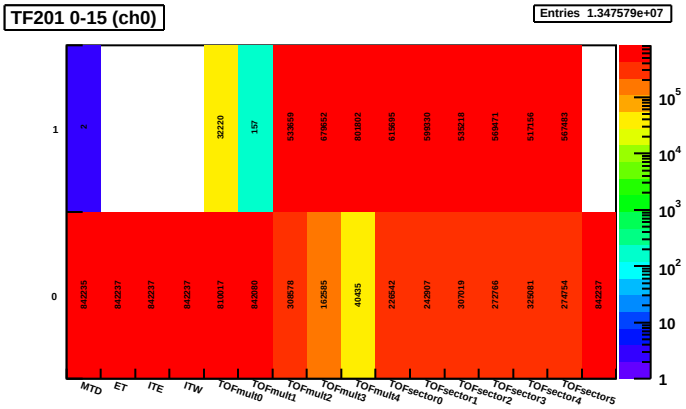

Endcap EMC L0 Input - High Tower
Entries 7.580133e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

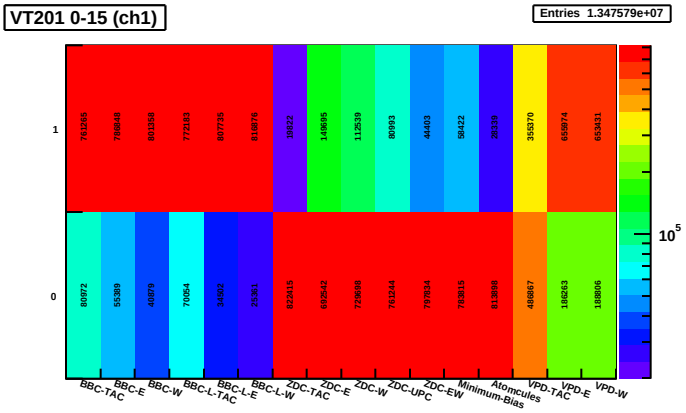

Endcap EMC L0 Input - Patch Sum
Entries 7.580133e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

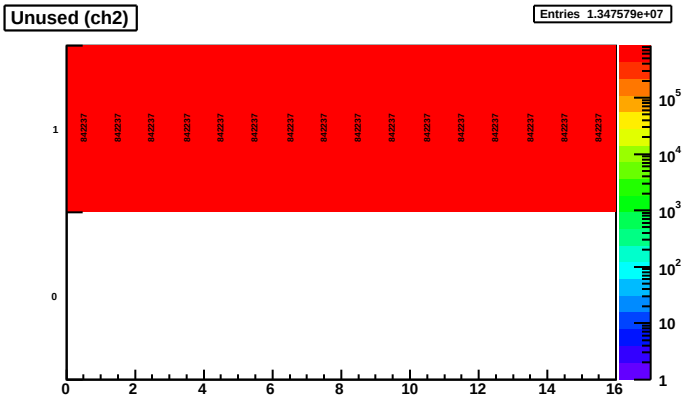

Barrel Jet Patches
Entries 1.516027e+07
JP ADC
JP ID

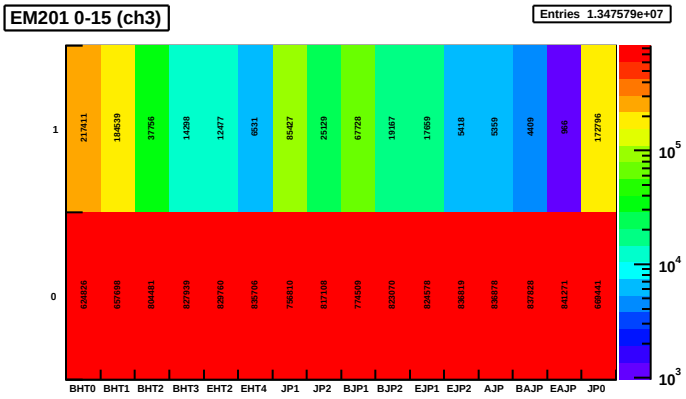

Endcap Jet Patches
Entries 5053422
JP ADC
JP ID

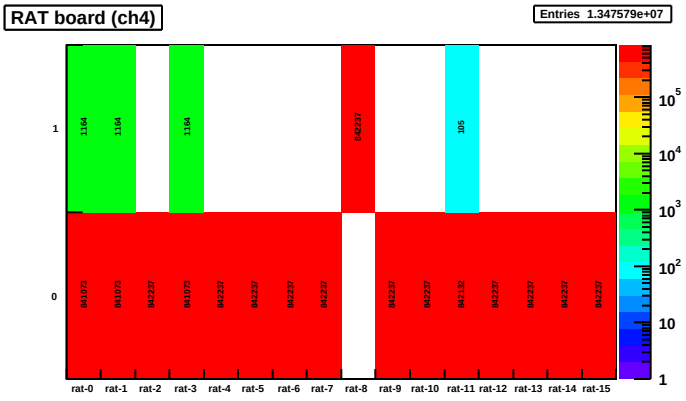

Hybrid Jet Patches
Entries 1684474
JP ADC
JP ID

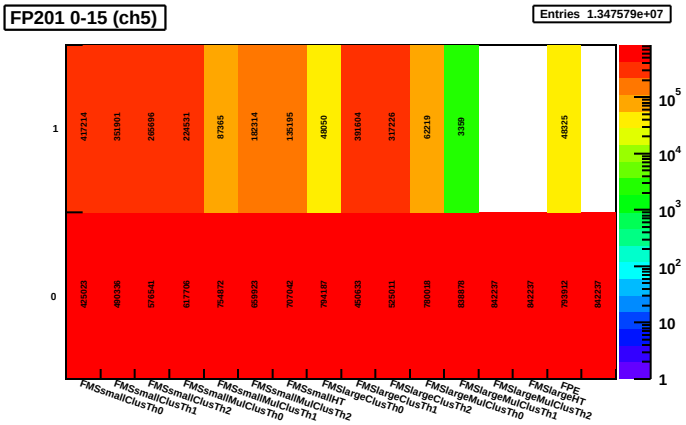

TF201 0-15 (ch0)
Entries 1.347579e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

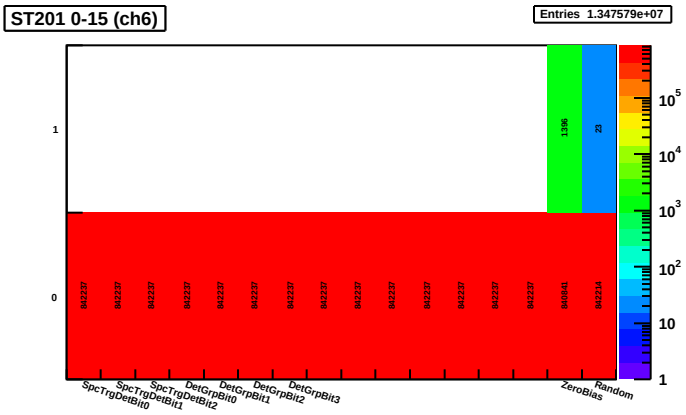

VT201 0-15 (ch1)
Entries 1.347579e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

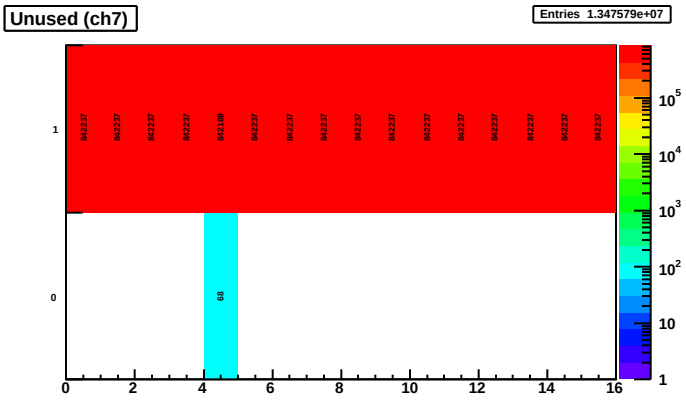

Unused (ch2)
Entries 1.347579e+07

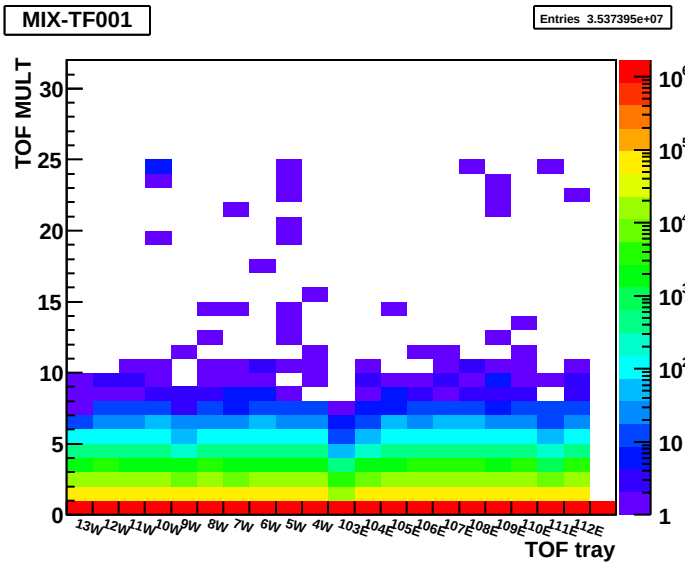

EM201 0-15 (ch3)
Entries 1.347579e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

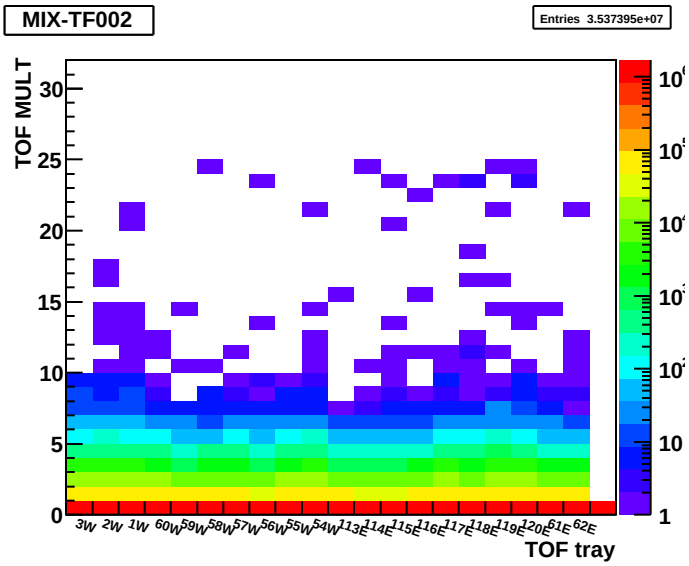

RAT board (ch4)
Entries 1.347579e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

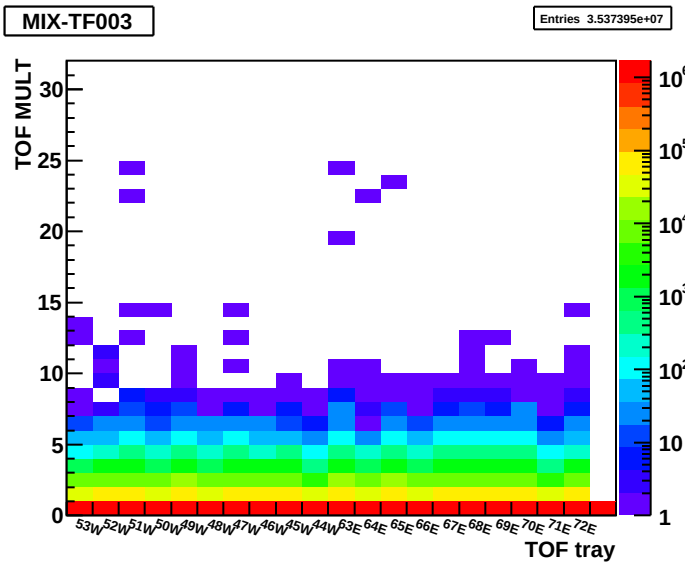

FP201 0-15 (ch5)
Entries 1.347579e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeRT
FPE

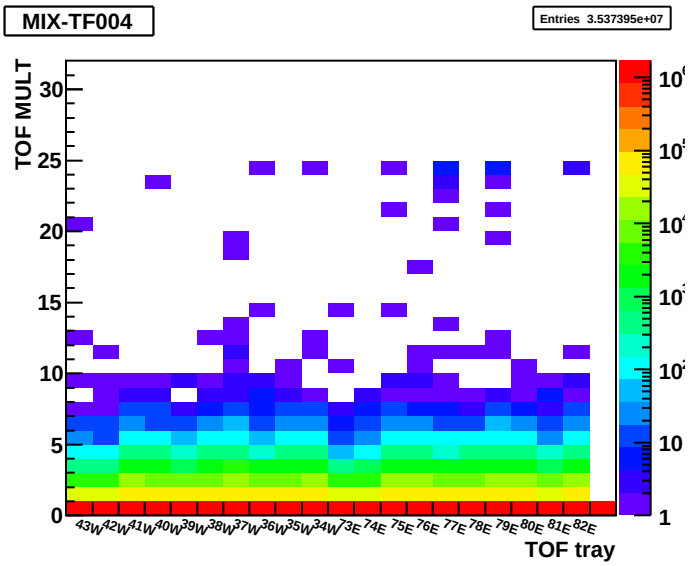

ST201 0-15 (ch6)
Entries 1.347579e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

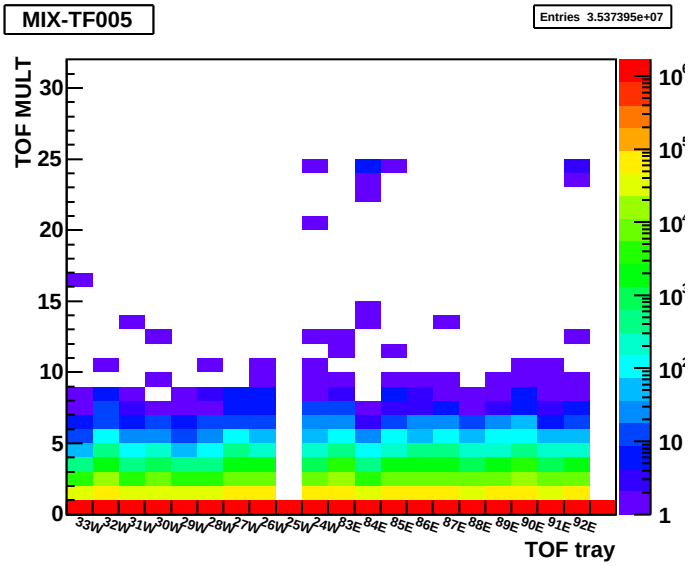

Unused (ch7)
Entries 1.347579e+07

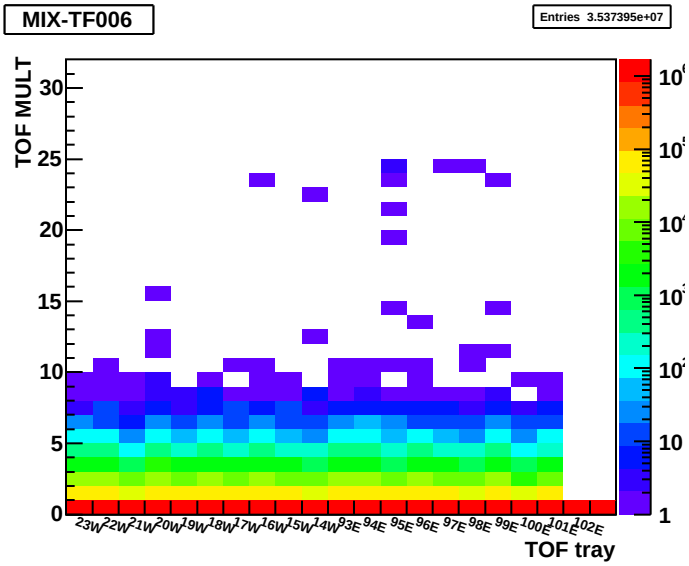

MIX-TF001
Entries 3.537395e+07
TOF MULT
TOF tray

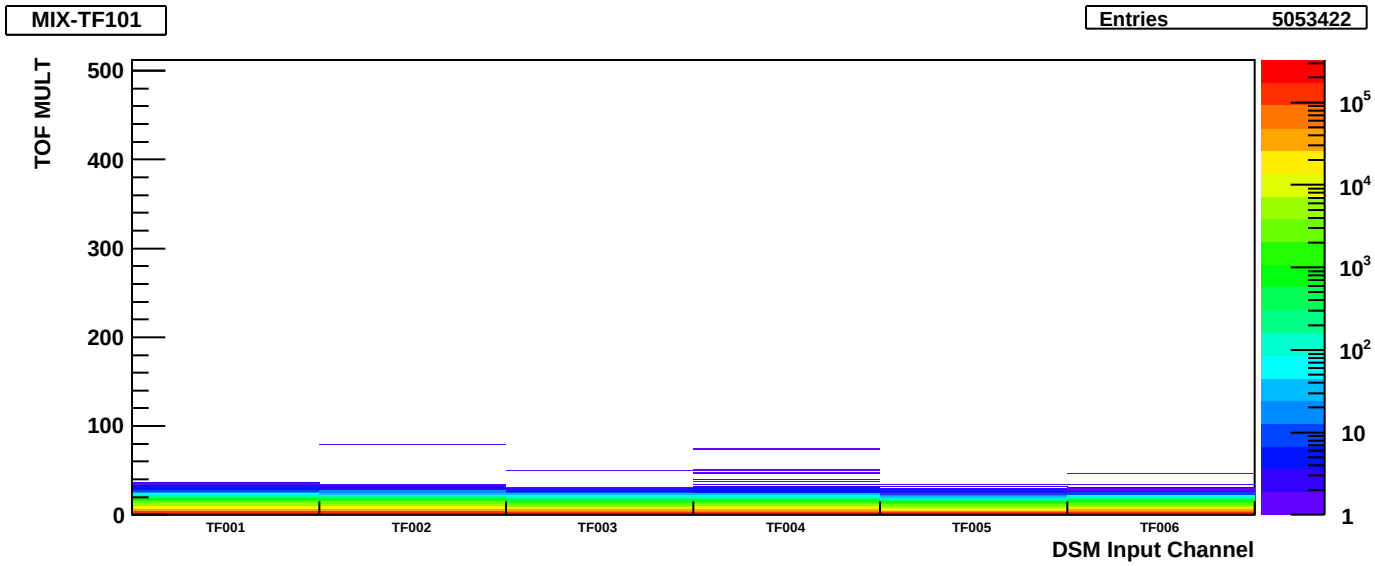

MIX-TF002
Entries 3.537395e+07
TOF MULT
TOF tray

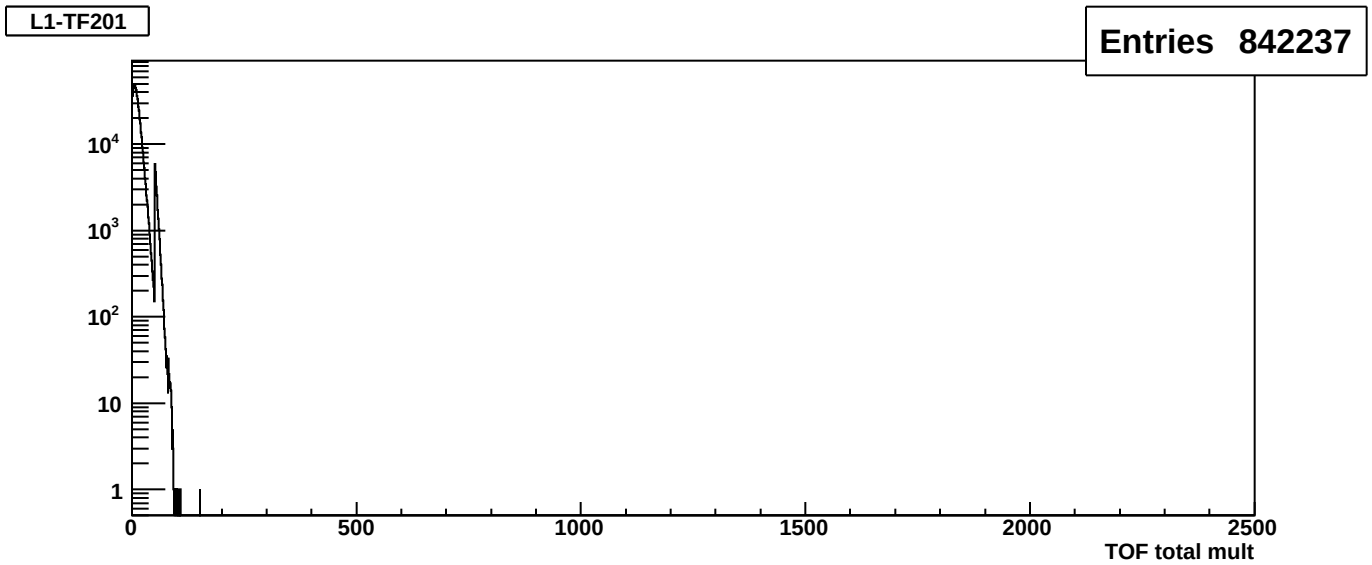

MIX-TF003
Entries 3.537395e+07
TOF MULT
TOF tray

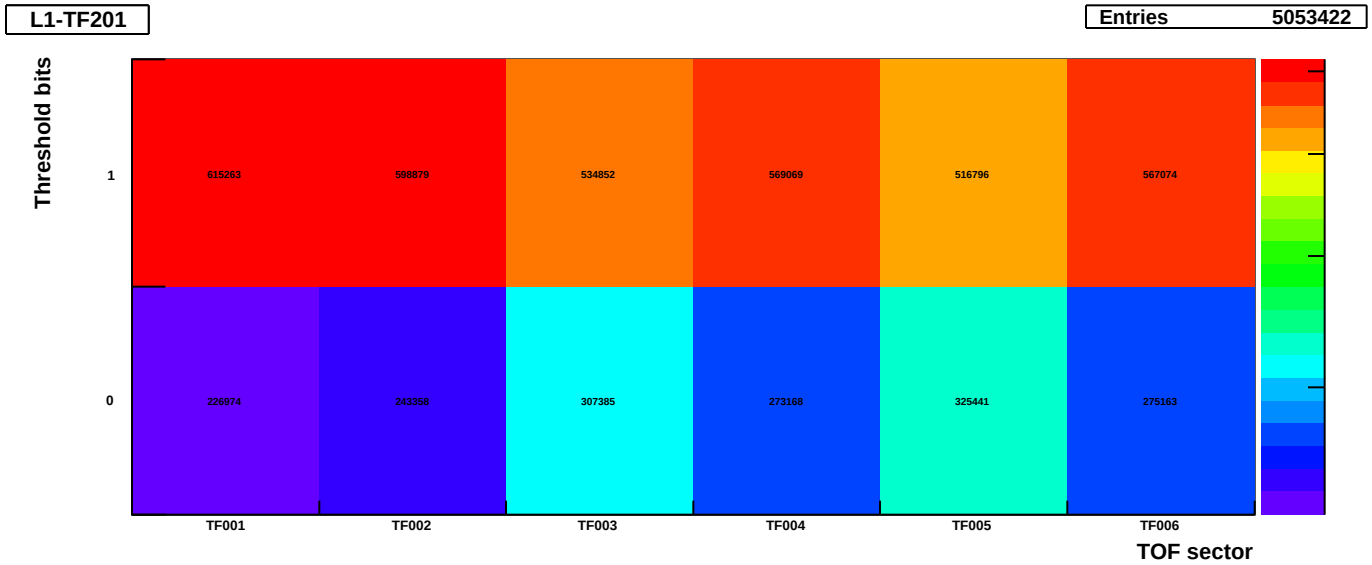

MIX-TF004
Entries 3.537395e+07
TOF MULT
TOF tray

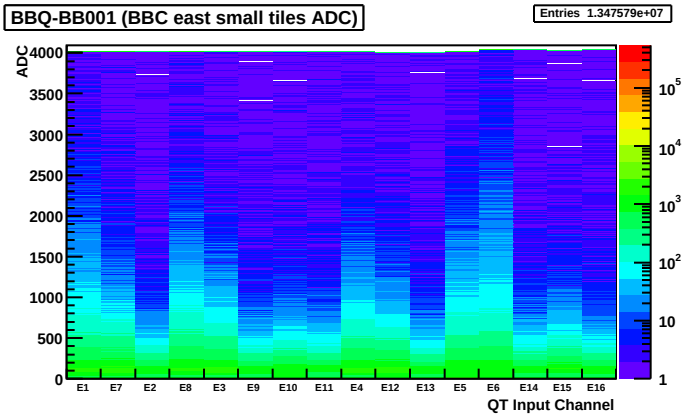

MIX-TF005
Entries 3.537395e+07
TOF MULT
TOF tray

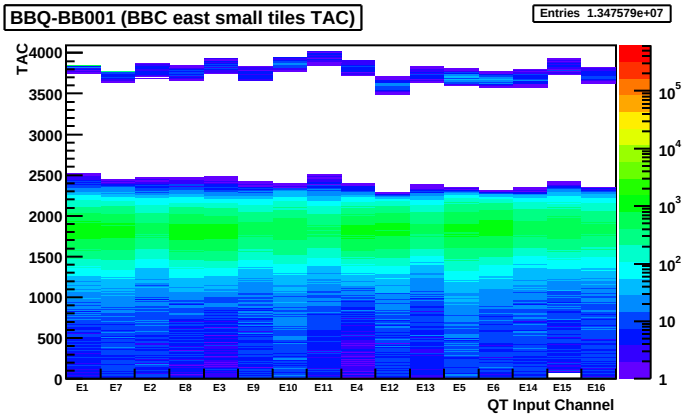

MIX-TF006
Entries 3.537395e+07
TOF MULT
TOF tray

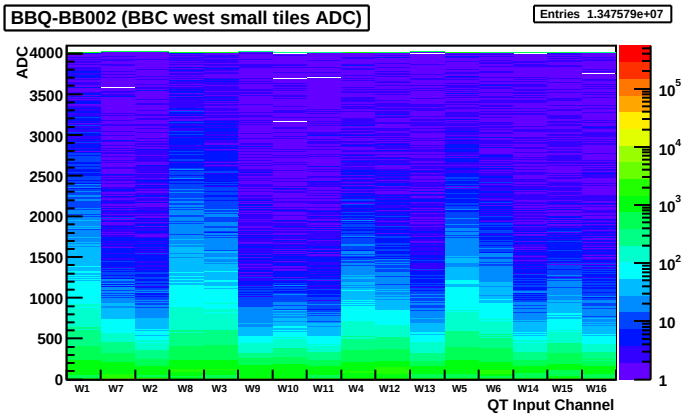

MIX-TF101
Entries 5053422
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

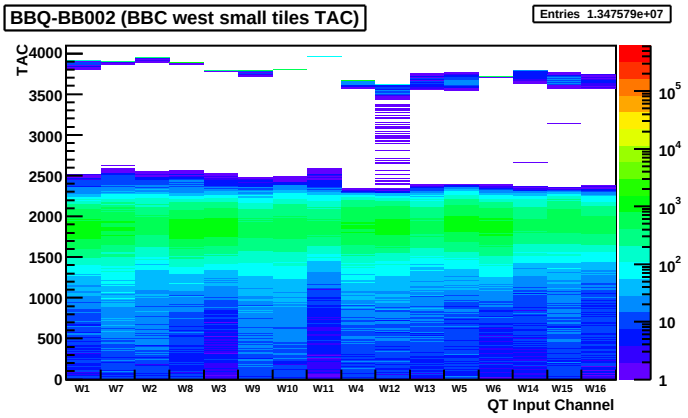

L1-TF201
Entries 842237
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

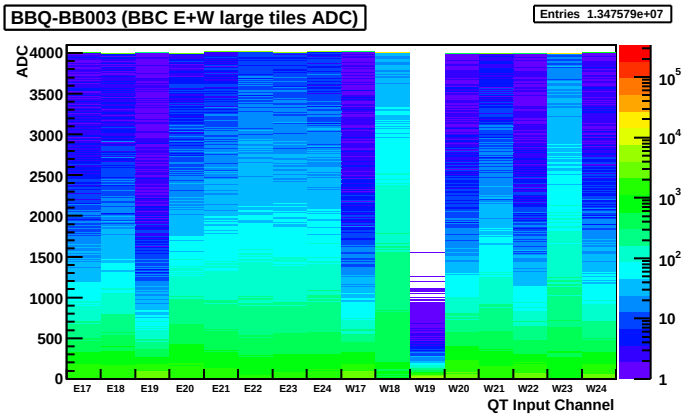

L1-TF201
Entries 5053422
Threshold bits
1
0
615263
598879
534852
569069
516796
567074
226974
243358
307385
273168
325441
275163
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

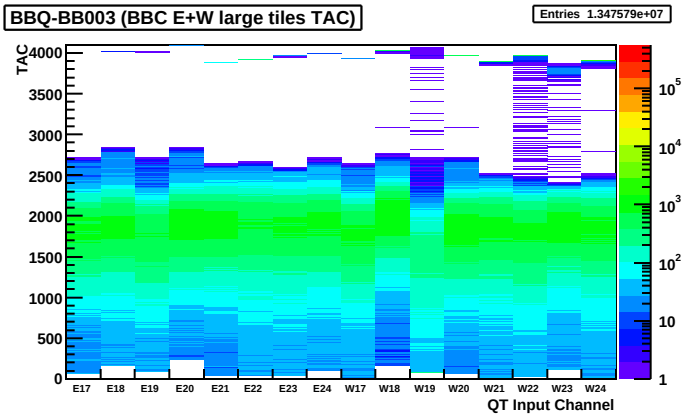

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.347579e+07
ADC
QT Input Channel

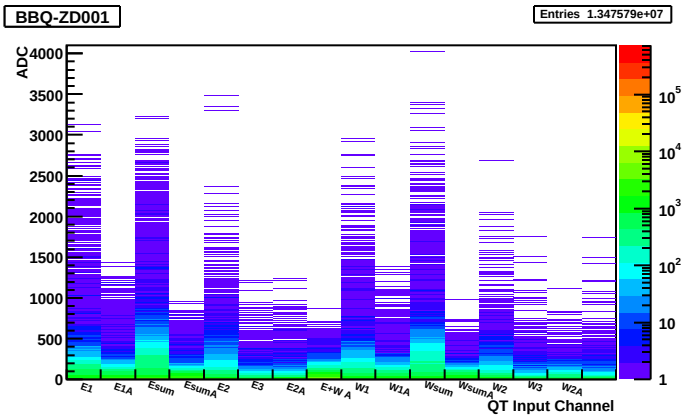

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.347579e+07
TAC
QT Input Channel

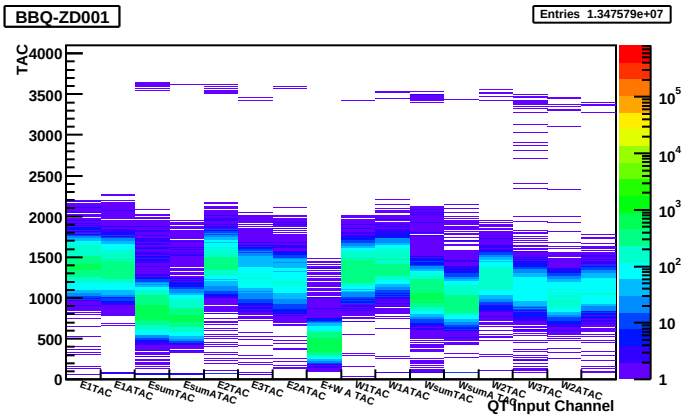

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.347579e+07
ADC
QT Input Channel

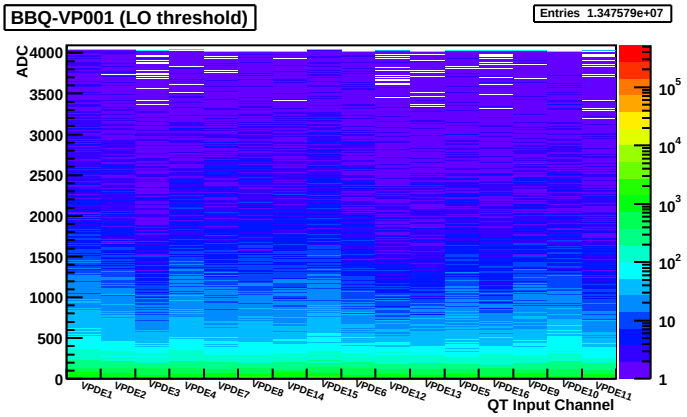

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.347579e+07
TAC
QT Input Channel

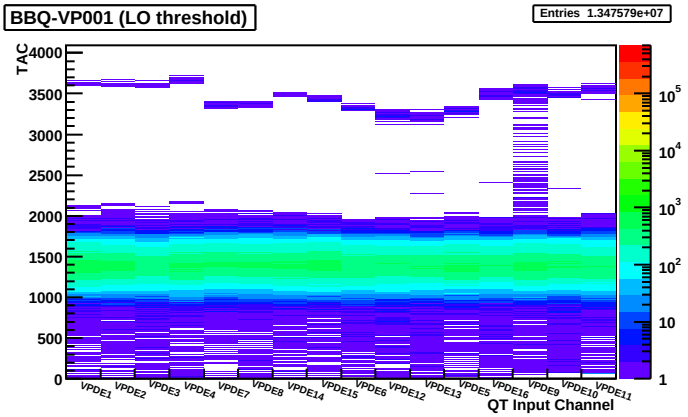

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.347579e+07
ADC
QT Input Channel

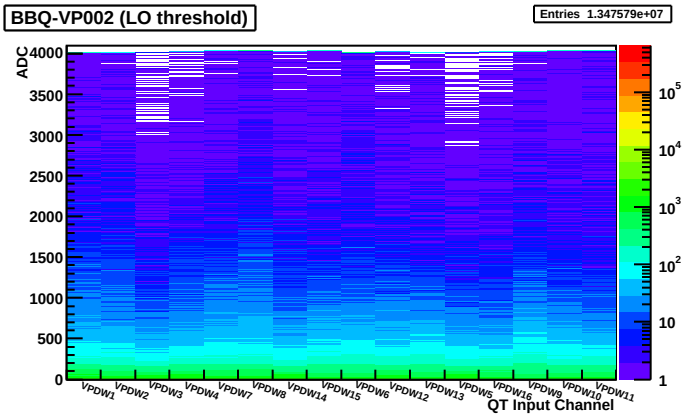

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.347579e+07
TAC
QT Input Channel

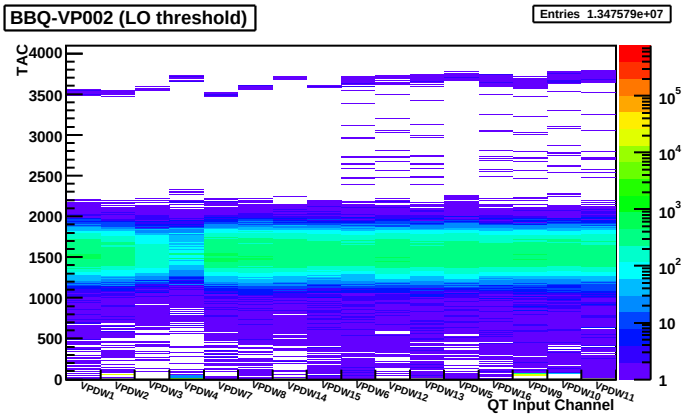

BBQ-ZD001
Entries 1.347579e+07
ADC
QT Input Channel

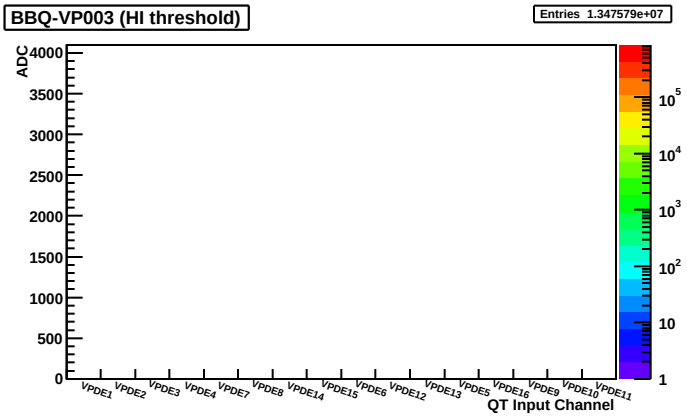

BBQ-ZD001
Entries 1.347579e+07
TAC
QT Input Channel

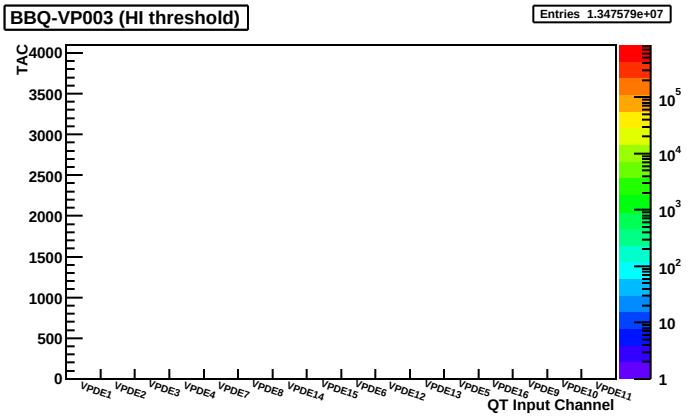

BBQ-VP001 (LO threshold)
Entries 1.347579e+07
ADC
QT Input Channel

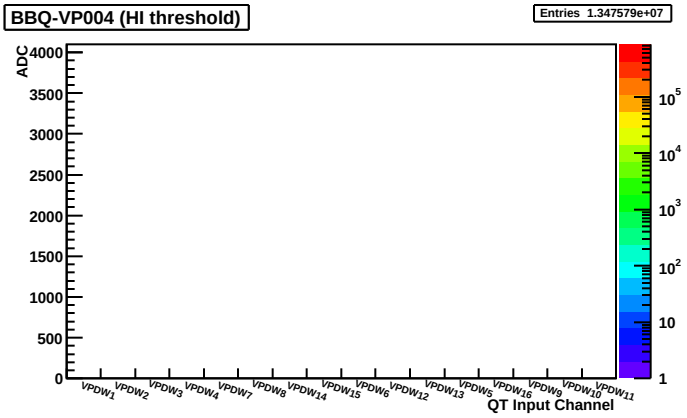

BBQ-VP001 (LO threshold)
Entries 1.347579e+07
TAC
QT Input Channel

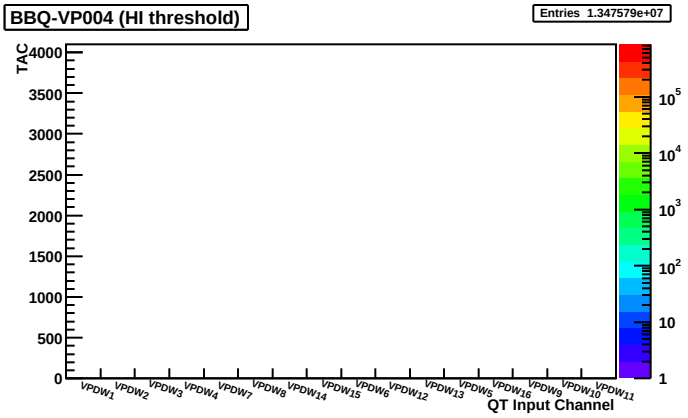

BBQ-VP002 (LO threshold)
Entries 1.347579e+07
ADC
QT Input Channel

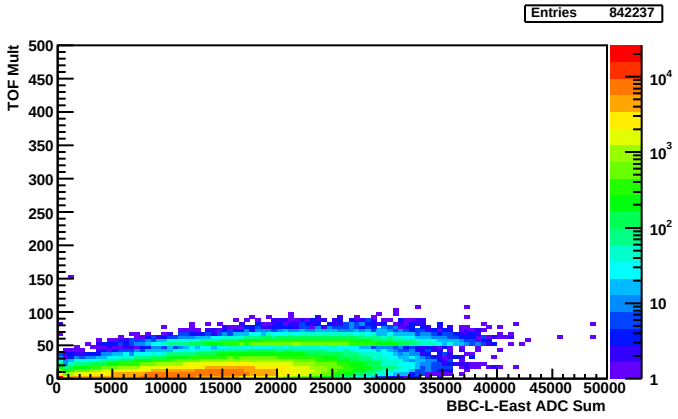

BBQ-VP002 (LO threshold)
Entries 1.347579e+07
TAC
QT Input Channel

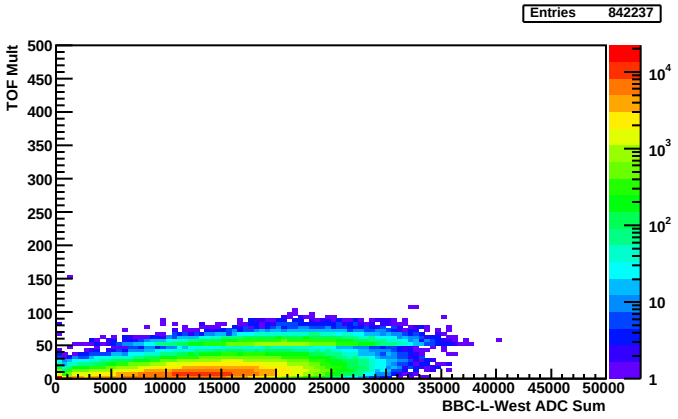

BBQ-VP003 (HI threshold)
Entries 1.347579e+07
ADC
QT Input Channel

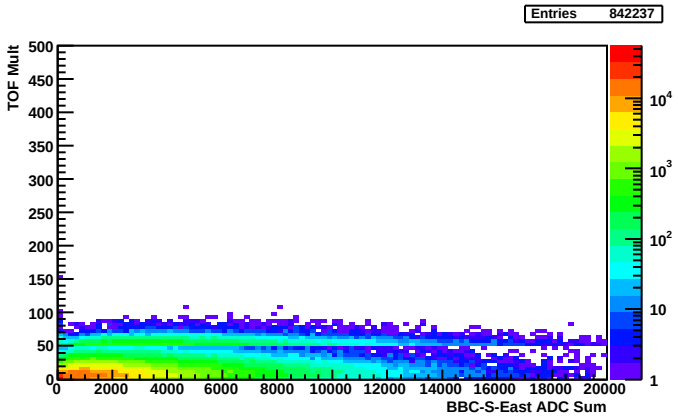

BBQ-VP003 (HI threshold)
Entries 1.347579e+07
TAC
QT Input Channel

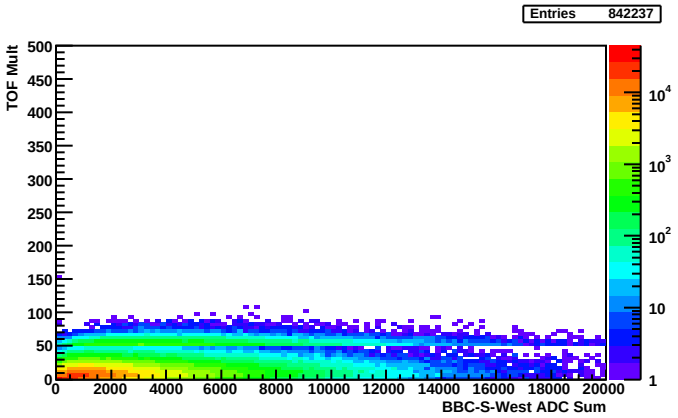

BBQ-VP004 (HI threshold)
Entries 1.347579e+07
ADC
QT Input Channel

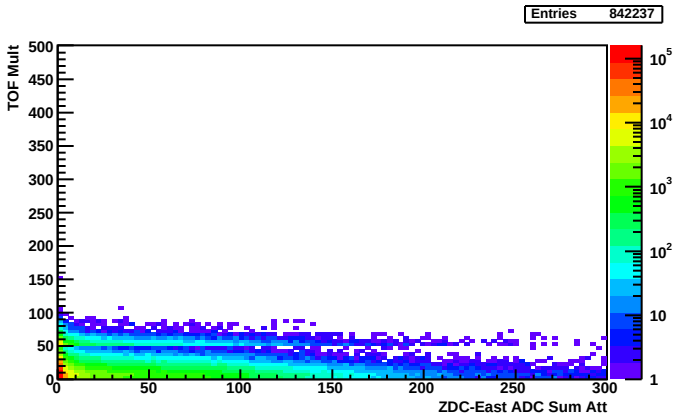

BBQ-VP004 (HI threshold)
Entries 1.347579e+07
TAC
QT Input Channel

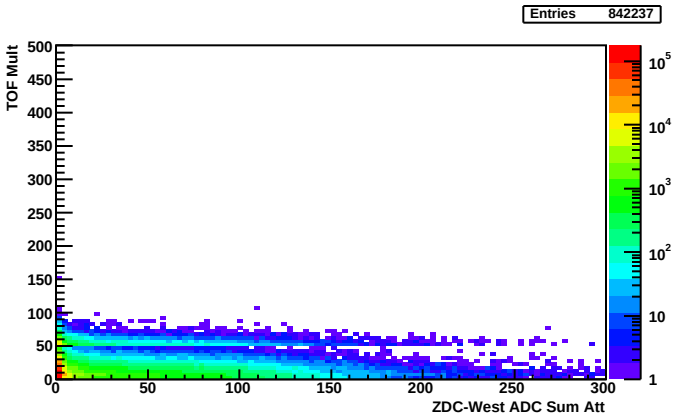

Entries 842237
TOF Mult
BBC-L-East ADC Sum

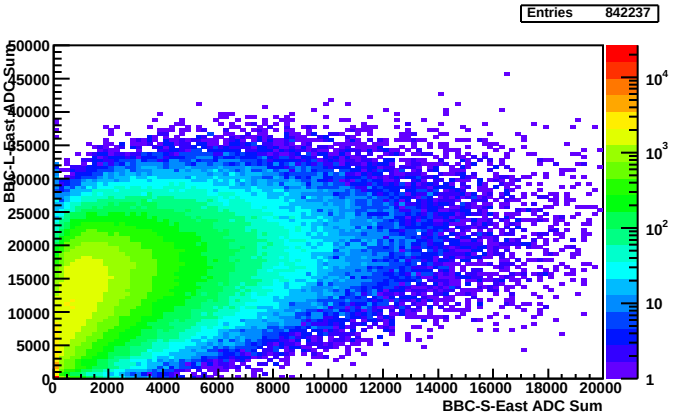

Entries 842237
TOF Mult
BBC-L-West ADC Sum

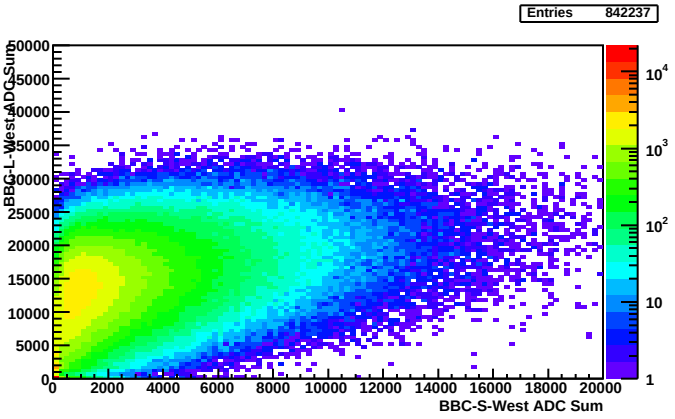

Entries 842237
TOF Mult
BBC-S-East ADC Sum

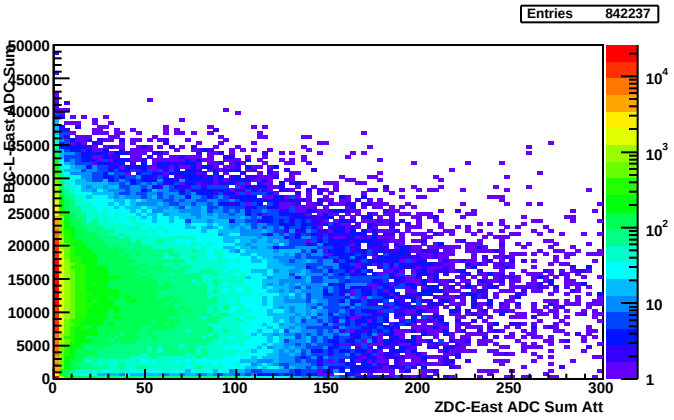

Entries 842237
TOF Mult
BBC-S-West ADC Sum

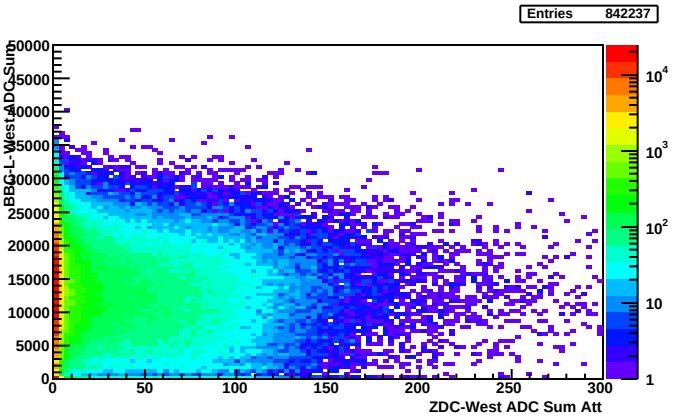

Entries 842237
TOF Mult
ZDC-East ADC Sum Att

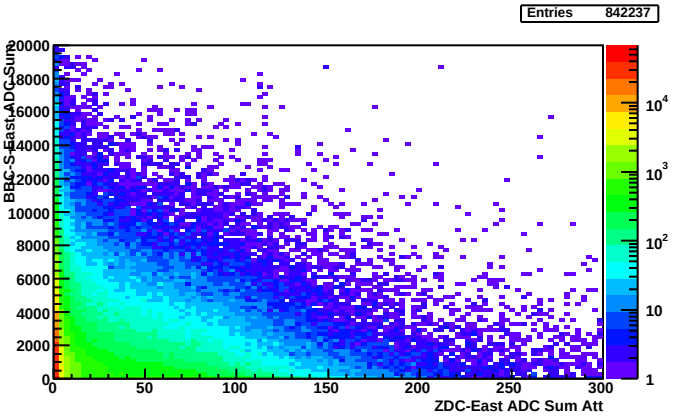

Entries 842237
TOF Mult
ZDC-West ADC Sum Att

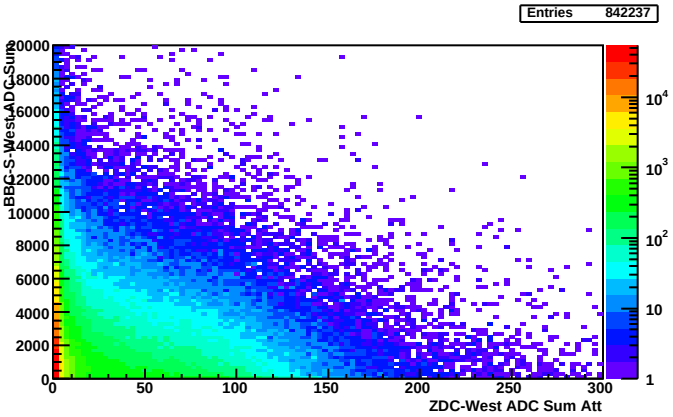

Entries 842237
BBC-L-East ADC Sum
BBC-S-East ADC Sum

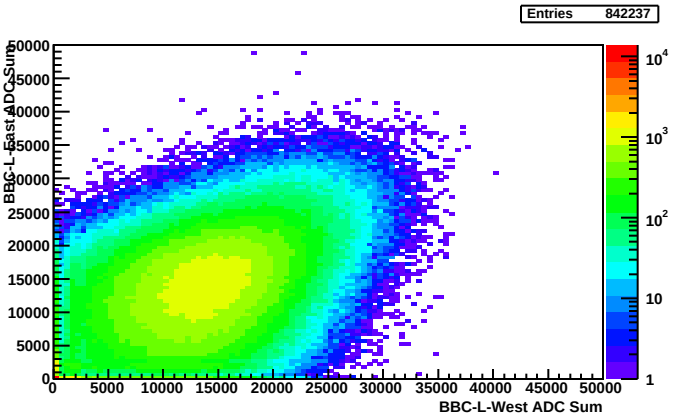

Entries 842237
BBC-L-West ADC Sum
BBC-S-West ADC Sum

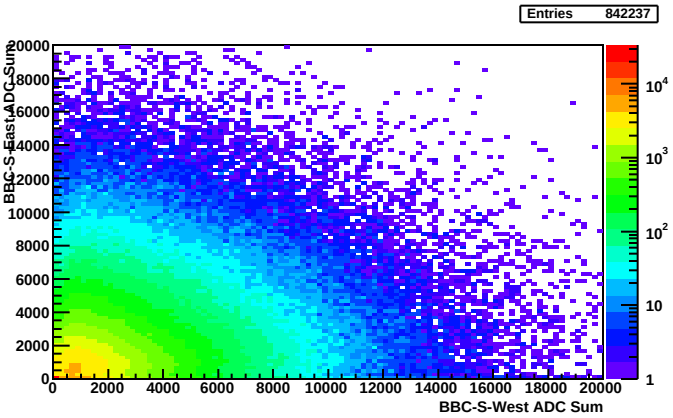

Entries 842237
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

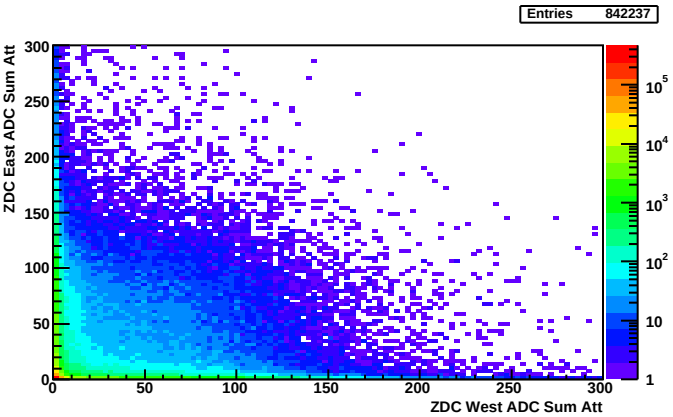

Entries 842237
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

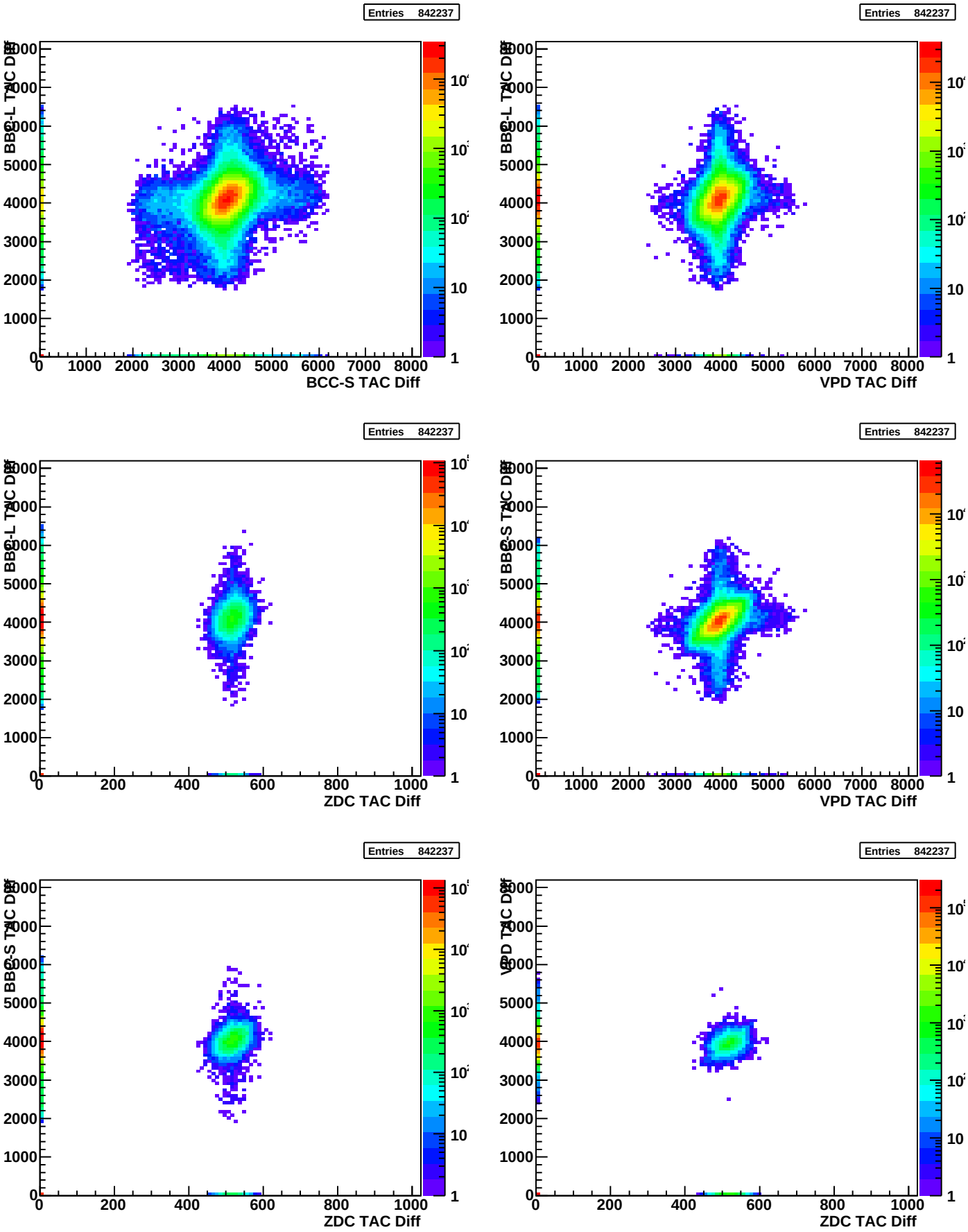

Entries 842237
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

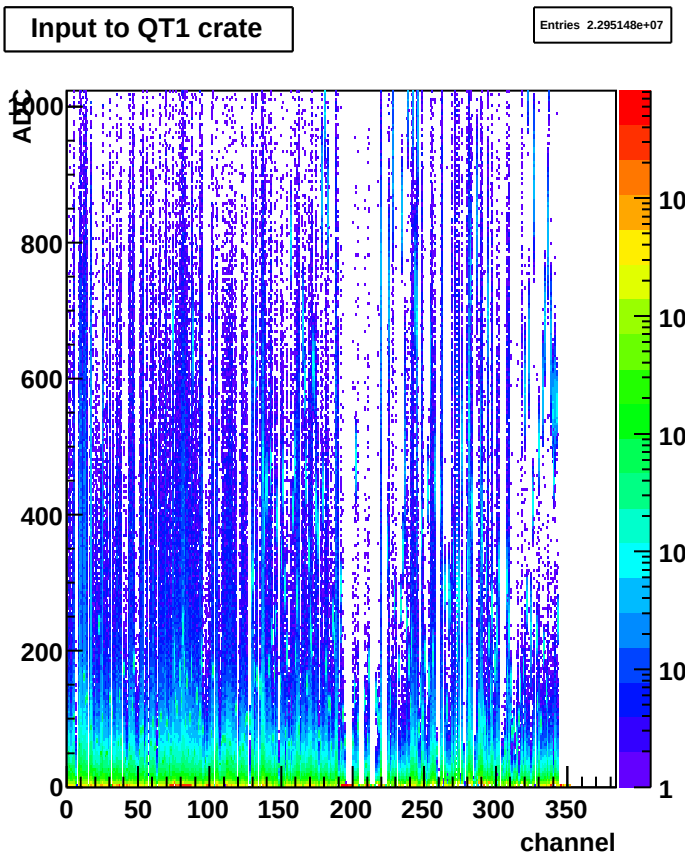

Entries 842237
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

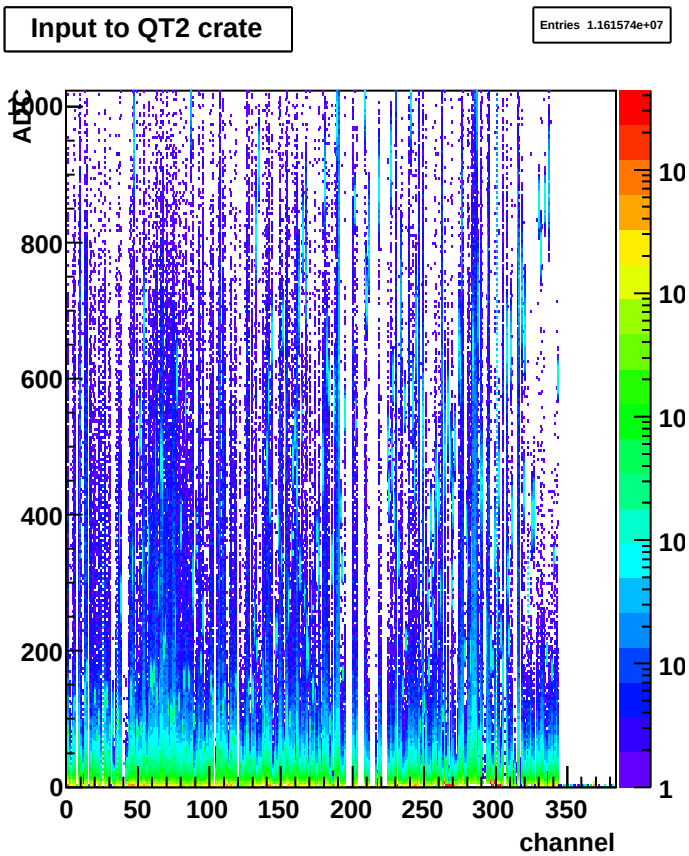

Entries 842237
BBC-L-East ADC Sum
BBC-L-West ADC Sum

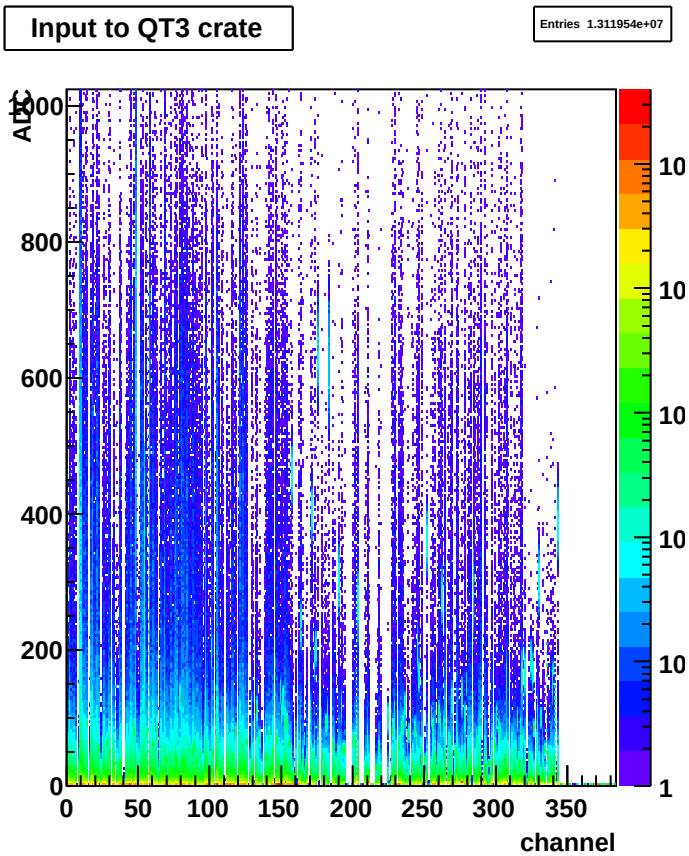

Entries 842237
BBC-S-East ADC Sum
BBC-S-West ADC Sum

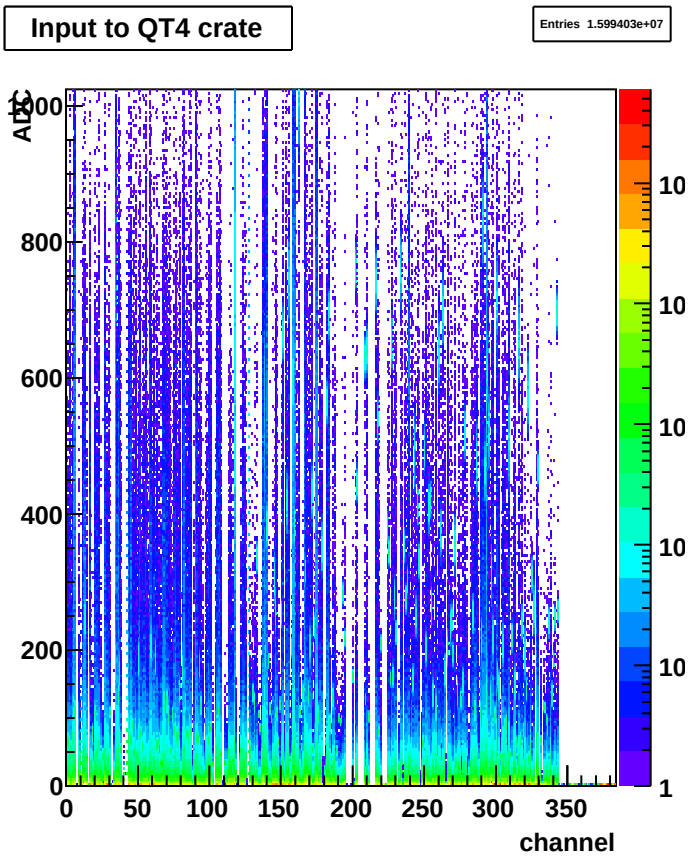

Entries 842237
ZDC East ADC Sum Att
ZDC West ADC Sum Att

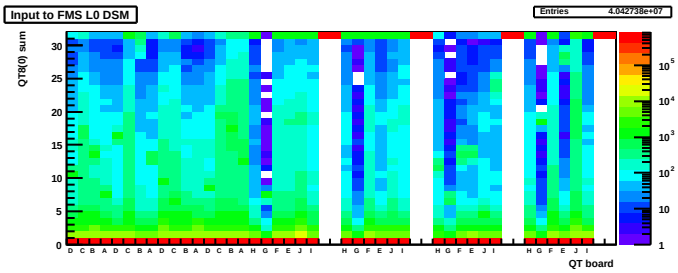

Entries 842237
BBC-L TAC Diff
BCC-S TAC Diff
Entries 842237
BBC-L TAC Diff
VPD TAC Diff
Entries 842237
BBC-L TAC Diff
ZDC TAC Diff
Entries 842237
BBC-S TAC Diff
VPD TAC Diff
Entries 842237
BBC-S TAC Diff
ZDC TAC Diff
Entries 842237
VPD TAC Diff
ZDC TAC Diff

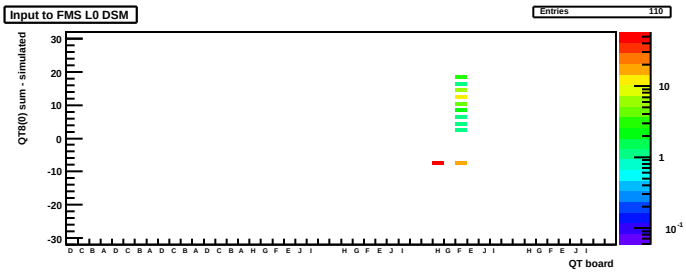

Input to QT1 crate
Entries 2.295148e+07
ADC
channel

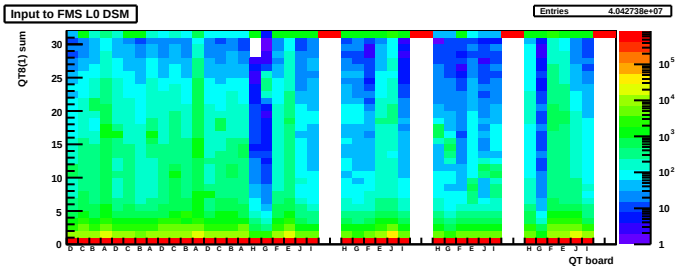

Input to QT2 crate
Entries 1.161574e+07
ADC
channel

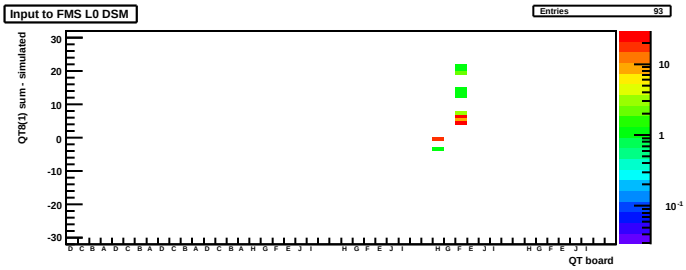

Input to QT3 crate
Entries 1.311954e+07
ADC
channel

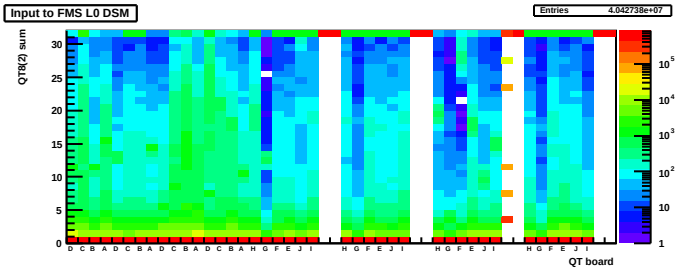

Input to QT4 crate
Entries 1.599403e+07
ADC
channel

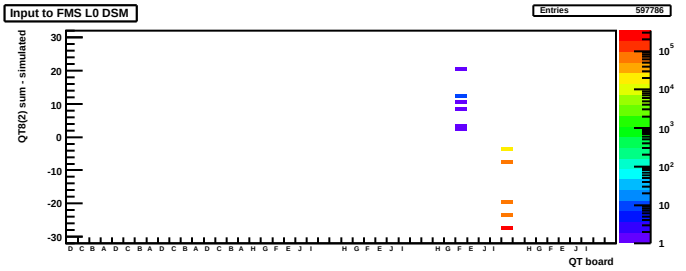

Input to FMS L0 DSM
Entries 4.042738e+07
QT8(0) sum
QT board

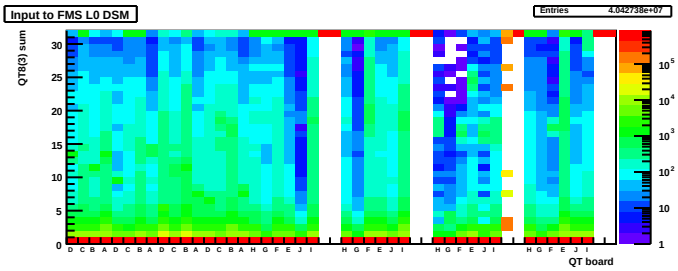

Input to FMS L0 DSM
Entries 110
QT8(0) sum - simulated
QT board

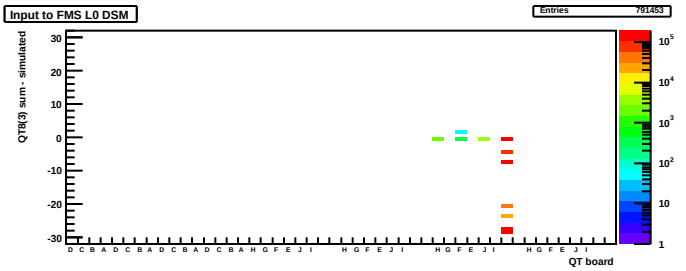

Input to FMS L0 DSM
Entries 4.042738e+07
QT8(1) sum
QT board

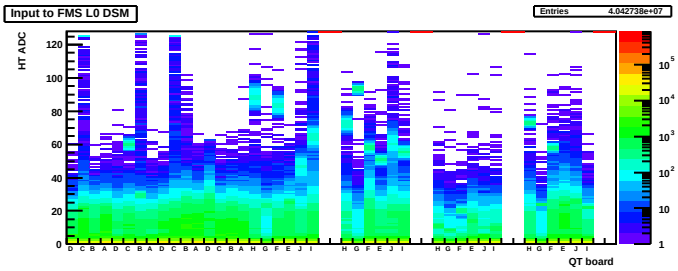

Input to FMS L0 DSM
Entries 93
QT8(1) sum - simulated
QT board

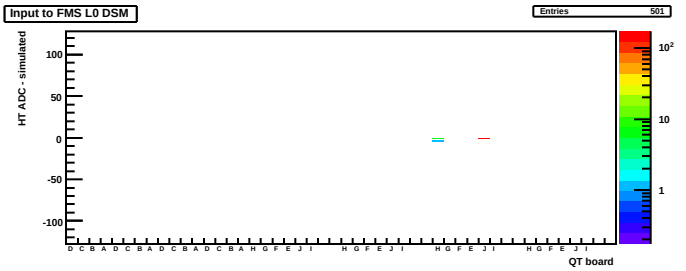

Input to FMS L0 DSM
Entries 4.042738e+07
QT8(2) sum
QT board

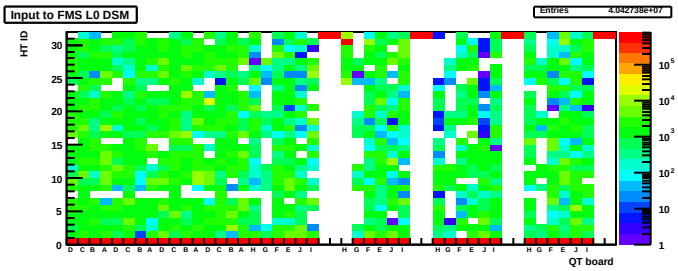

Input to FMS L0 DSM
Entries 597786
QT8(2) sum - simulated
QT board

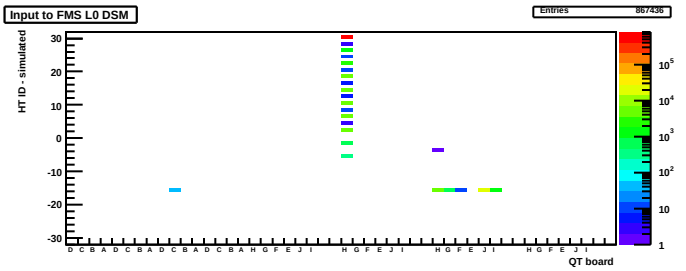

Input to FMS L0 DSM
Entries 4.042738e+07
QT8(3) sum
QT board

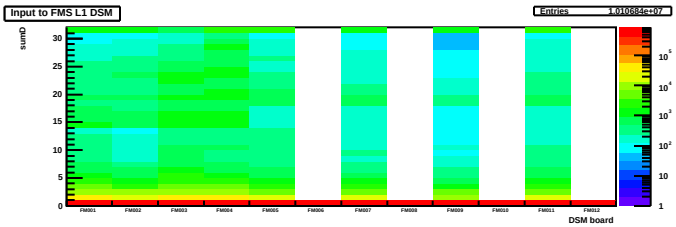

Input to FMS L0 DSM
Entries 791453
QT8(3) sum - simulated
QT board

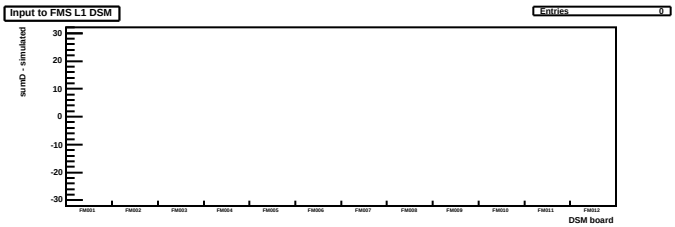

Input to FMS L0 DSM
Entries 4.042738e+07
HT ADC
QT board

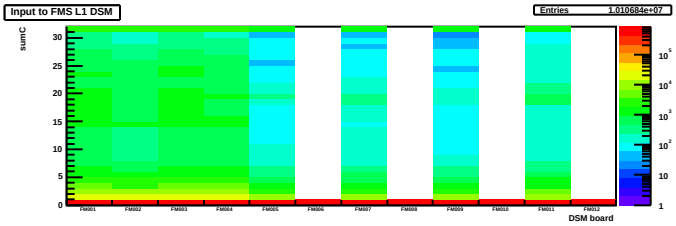

Input to FMS L0 DSM
Entries 501
HT ADC - simulated
QT board

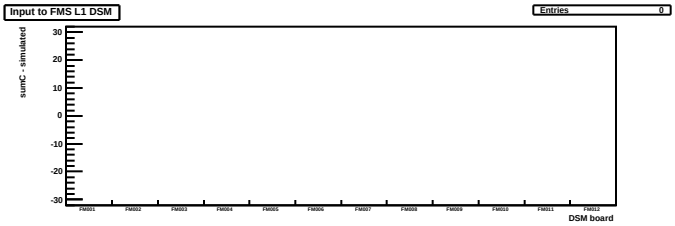

Input to FMS L0 DSM
Entries 4.042738e+07
HT ID
QT board

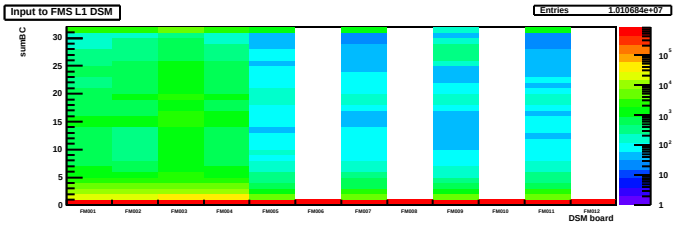

Input to FMS L0 DSM
Entries 867436
HT ID - simulated
QT board

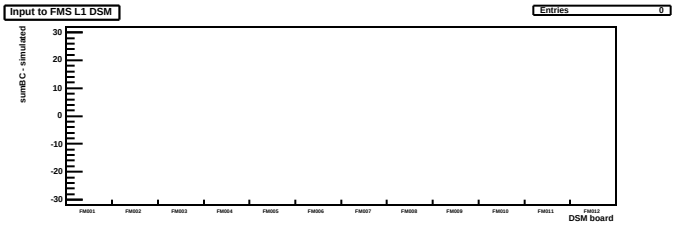

Input to FMS L1 DSM
Entries 1.010684e+07
sumD
DSM board

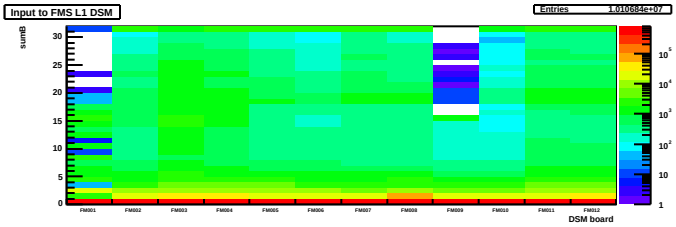

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

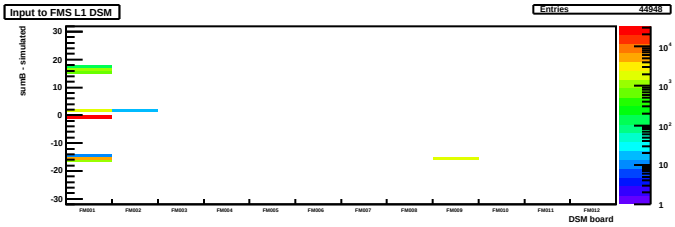

Input to FMS L1 DSM
Entries 1.010684e+07
sumC
DSM board

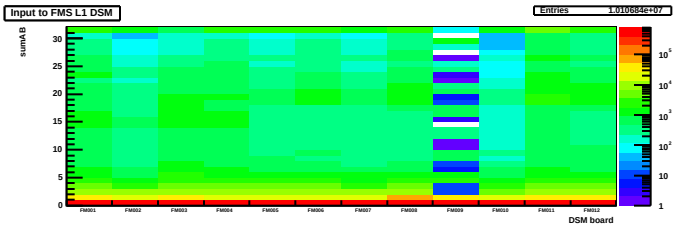

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

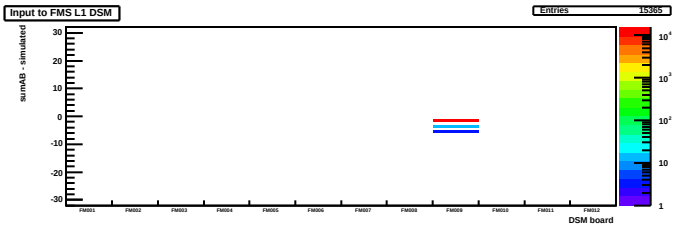

Input to FMS L1 DSM
Entries 1.010684e+07
sumBC
DSM board

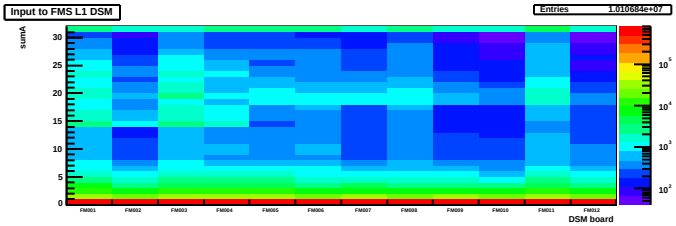

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

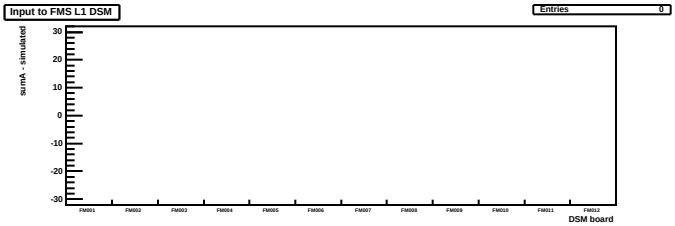

Input to FMS L1 DSM
Entries 1.010684e+07
sumB
DSM board

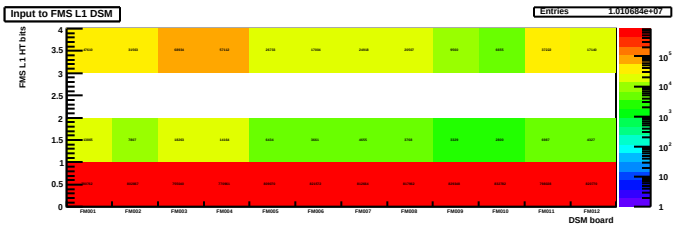

Input to FMS L1 DSM
Entries 44948
sumB - simulated
DSM board

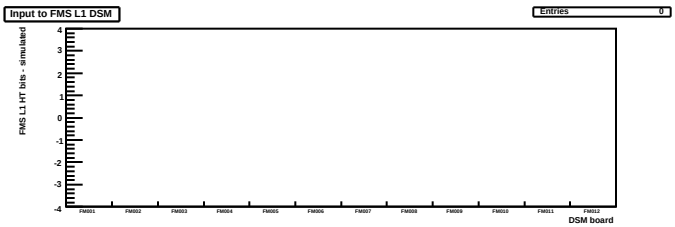

Input to FMS L1 DSM
Entries 1.010684e+07
sumAB
DSM board

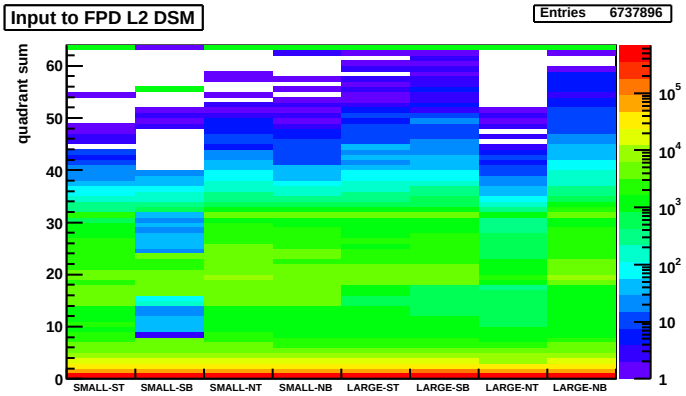

Input to FMS L1 DSM
Entries 15365
sumAB - simulated
DSM board

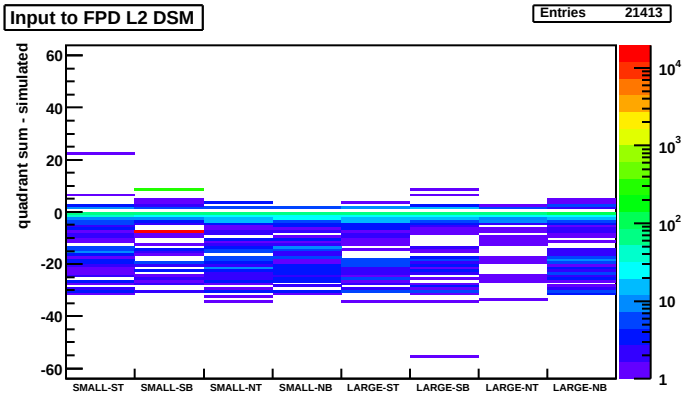

Input to FMS L1 DSM
Entries 1.010684e+07
sumA
DSM board

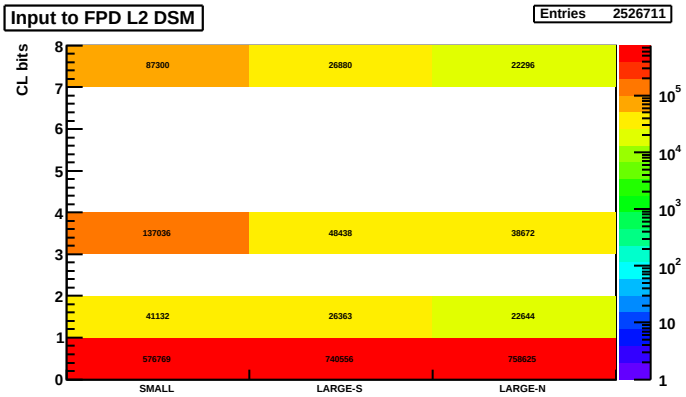

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

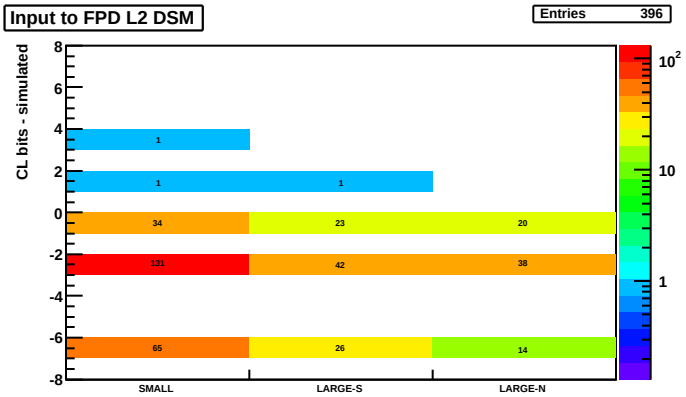

Input to FMS L1 DSM
Entries 1.010684e+07
FMS L1 HT bits
DSM board

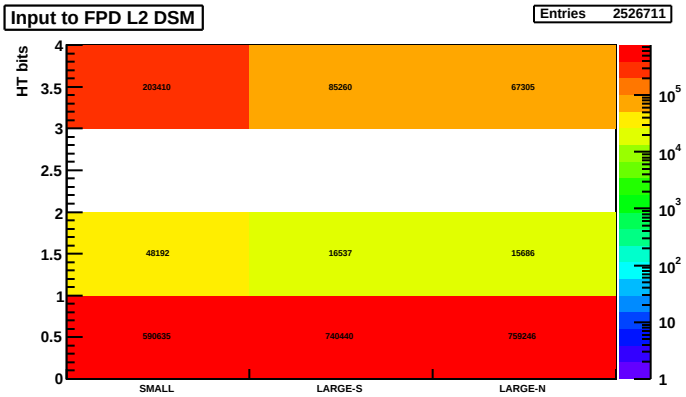

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

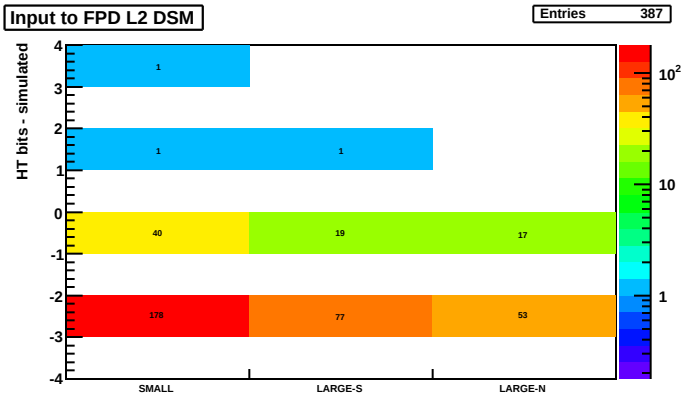

Input to FPD L2 DSM
Entries 6737896
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

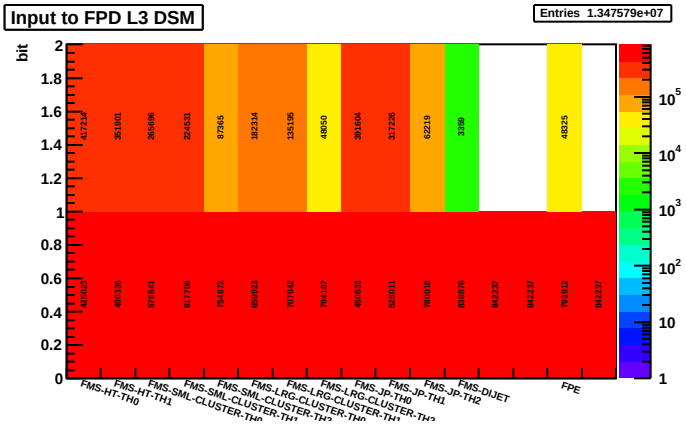

Input to FPD L2 DSM
Entries 21413
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

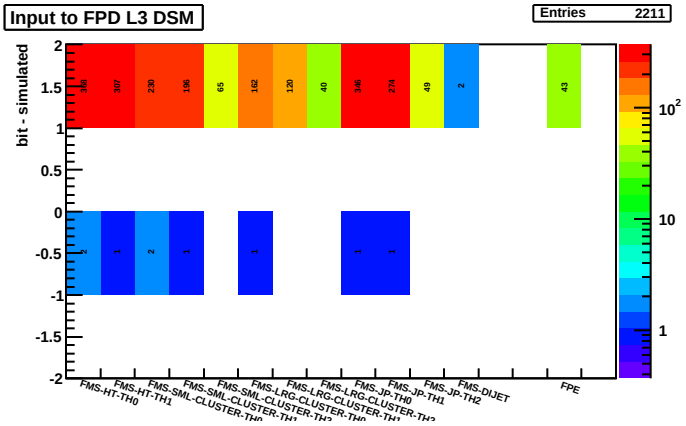

Input to FPD L2 DSM
Entries 2526711
CL bits
87300
26880
22296
137036
48438
38672
41132
26363
22644
576769
740556
758625
SMALL
LARGE-S
LARGE-N

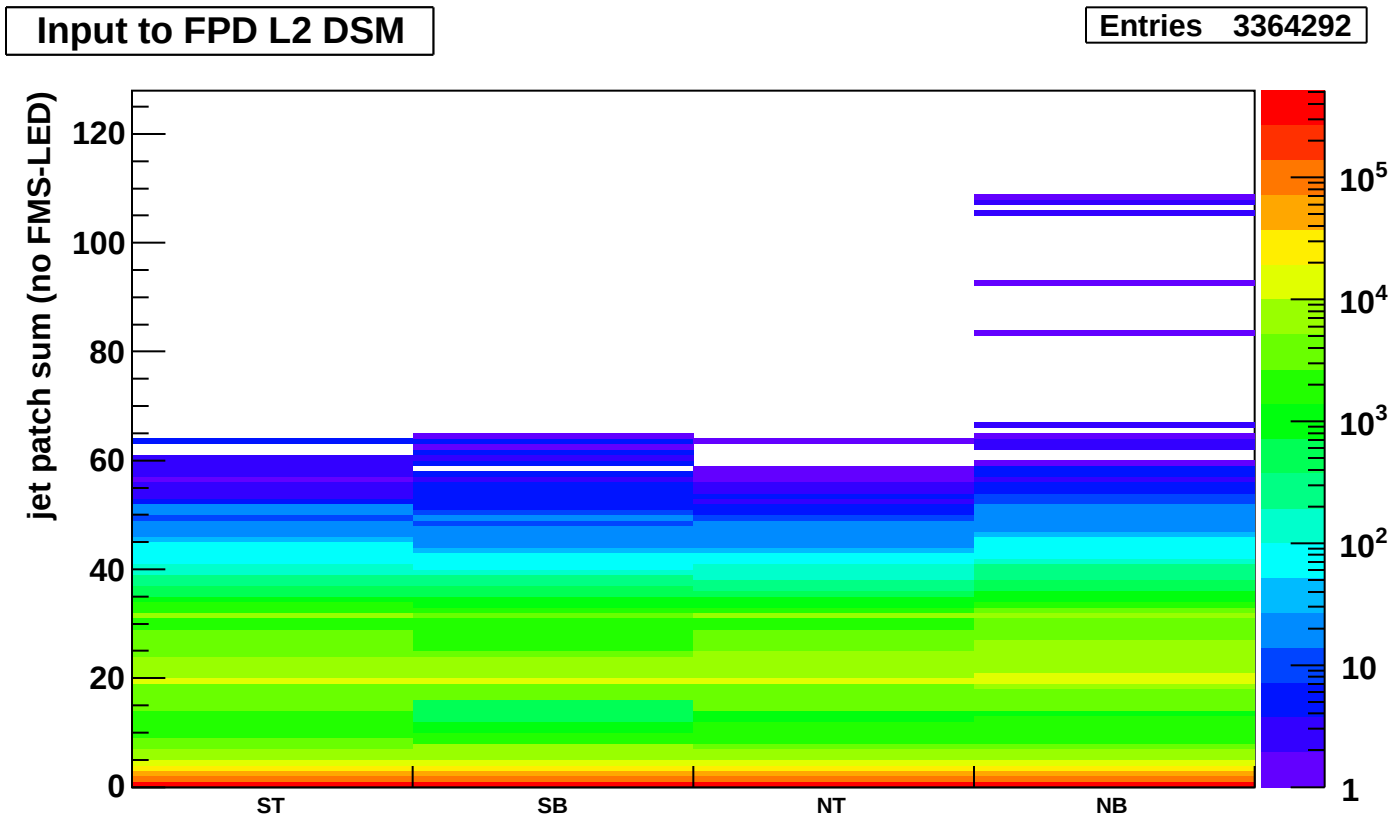

Input to FPD L2 DSM
Entries 396
CL bits - simulated
1
1
1
34
23
20
131
42
38
65
26
14
SMALL
LARGE-S
LARGE-N

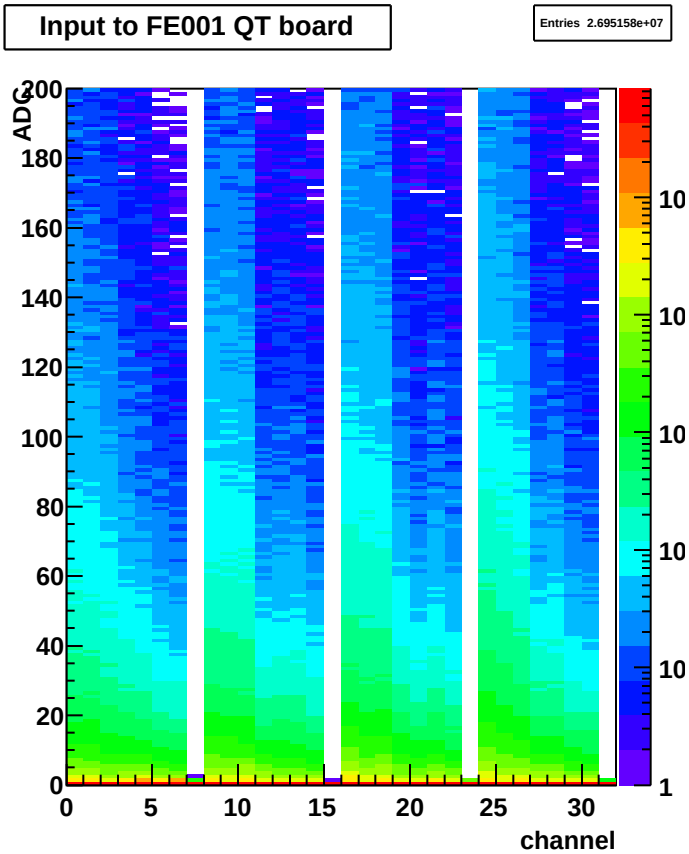

Input to FPD L2 DSM
Entries 2526711
HT bits
203410
85260
67305
48192
16537
15686
590635
740440
759246
SMALL
LARGE-S
LARGE-N

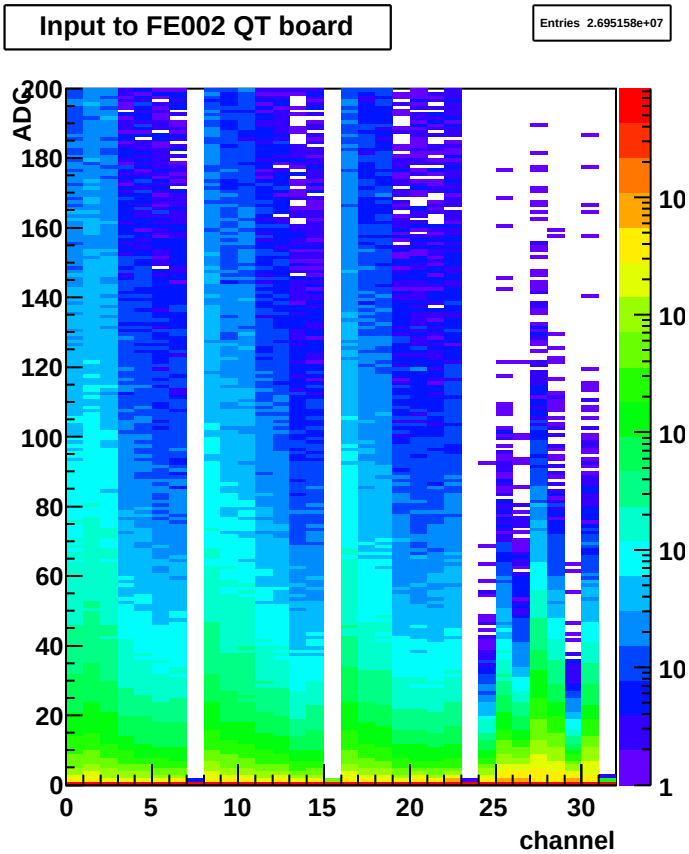

Input to FPD L2 DSM
Entries 387
HT bits - simulated
1
1
1
40
19
17
178
77
53
SMALL
LARGE-S
LARGE-N

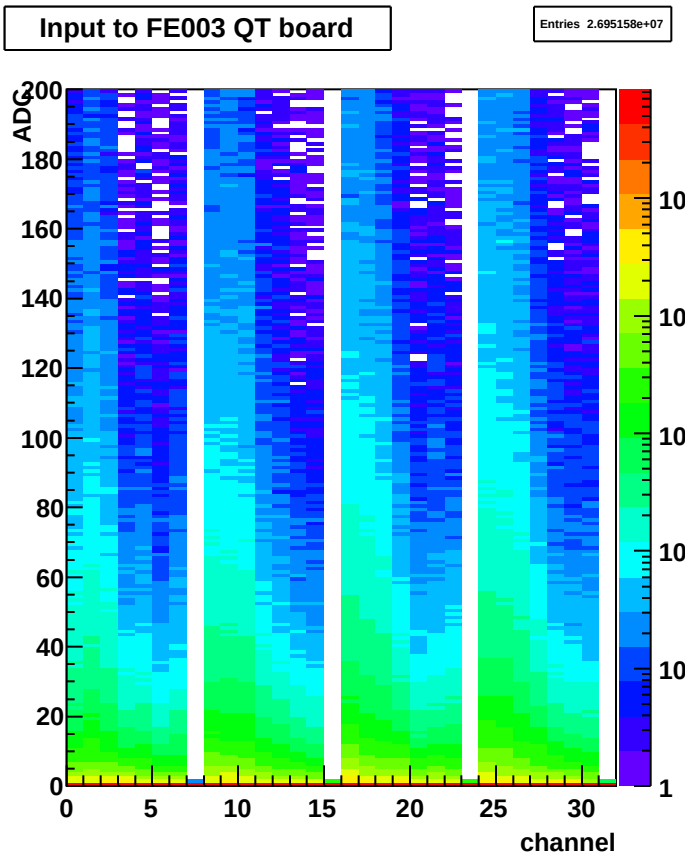

Input to FPD L3 DSM
Entries 1.347579e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

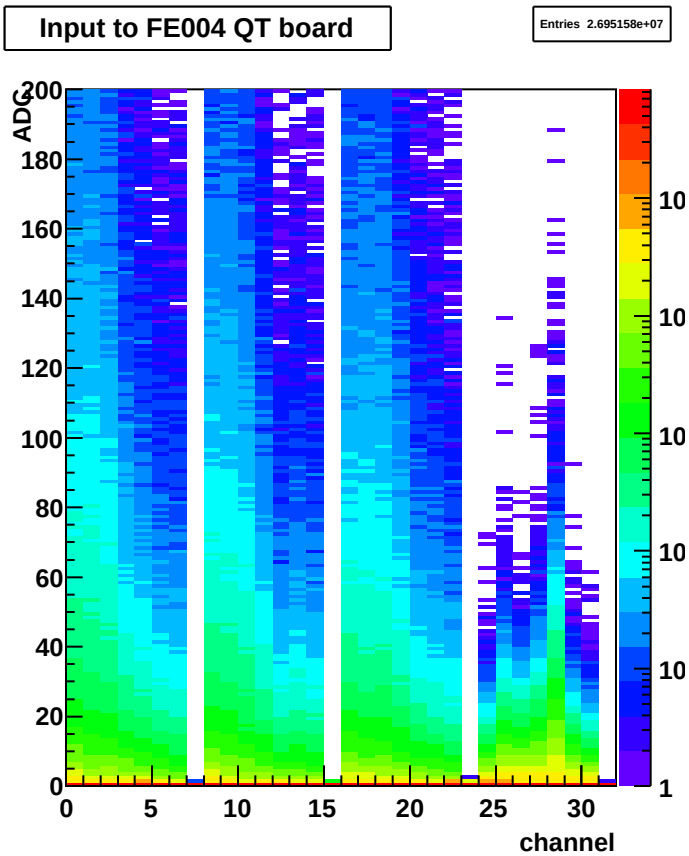

Input to FPD L3 DSM
Entries 2211
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

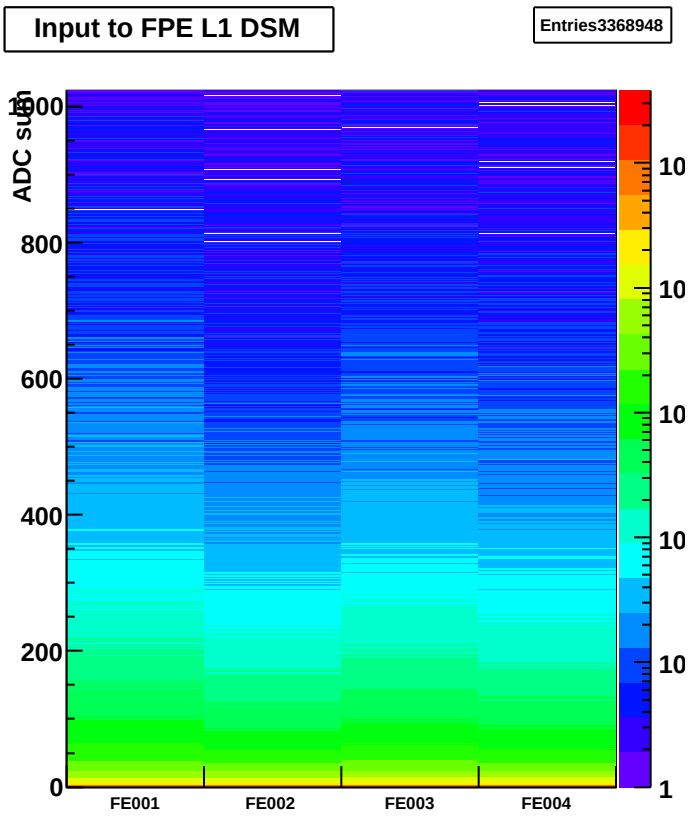

Input to FPD L2 DSM
Entries 3364292
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

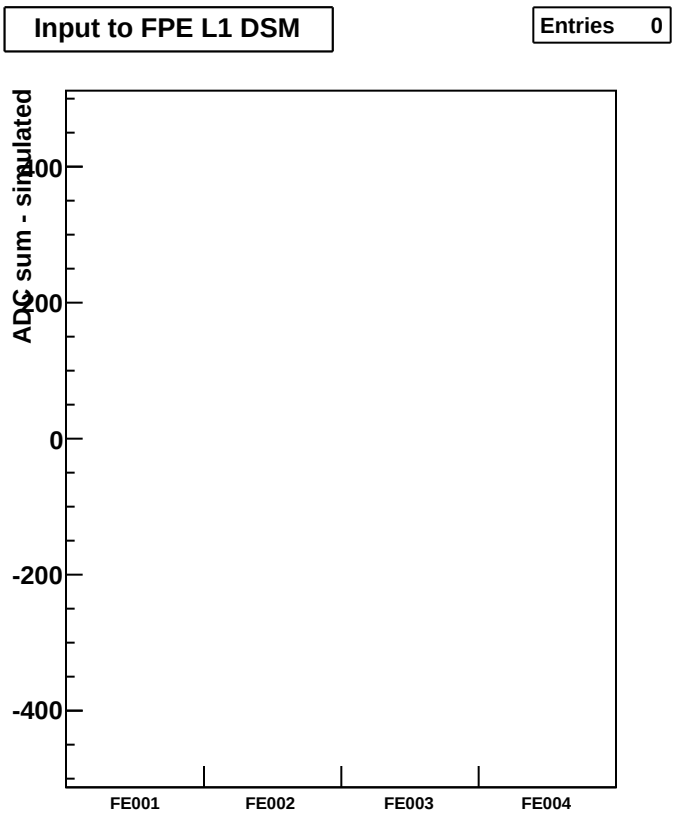

Input to FE001 QT board
Entries 2.695158e+07
ADC
channel

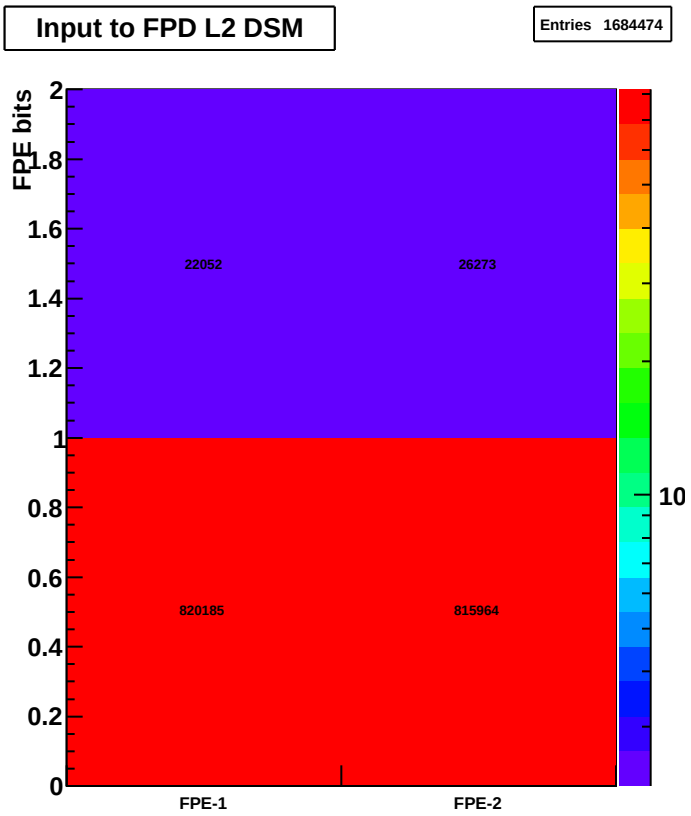

Input to FE002 QT board
Entries 2.695158e+07
ADC
channel

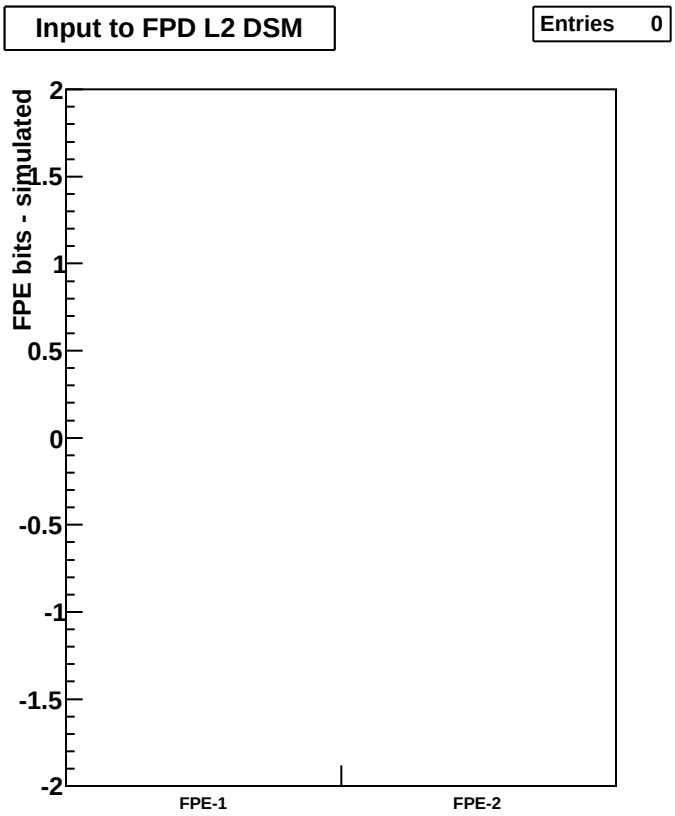

Input to FE003 QT board
Entries 2.695158e+07
ADC
channel


Input to FE004 QT board
Entries 2.695158e+07
ADC
channel


Input to FPE L1 DSM
Entries3368948
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 1684474
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
22052
26273
820185
815964
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