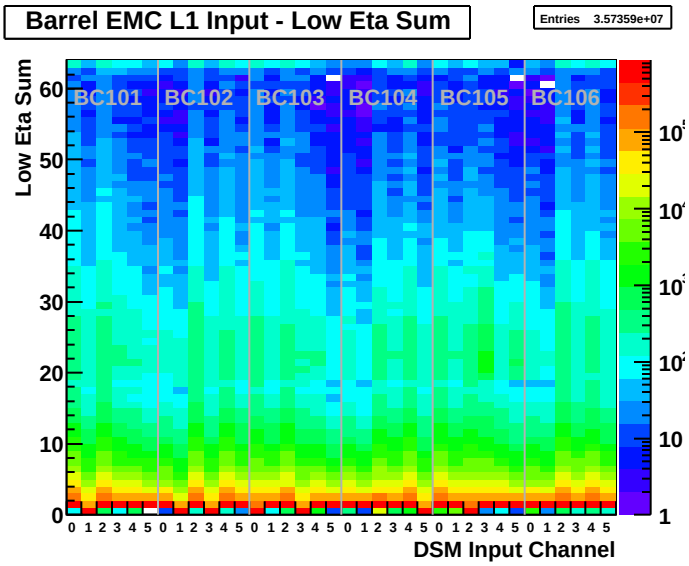
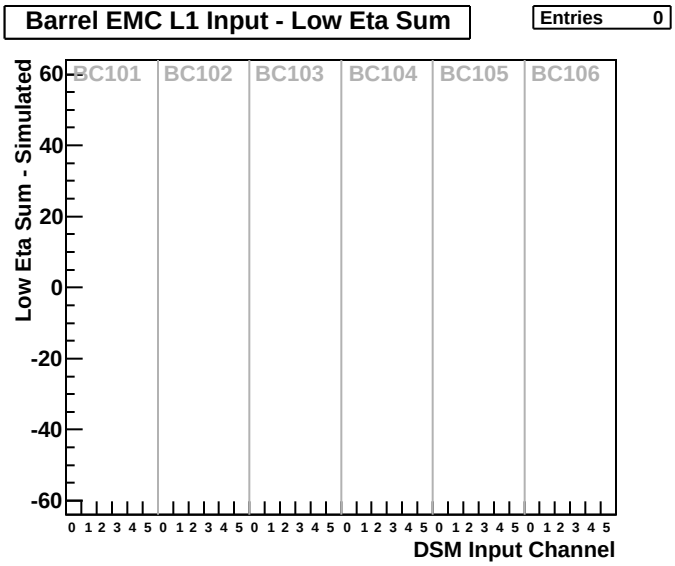
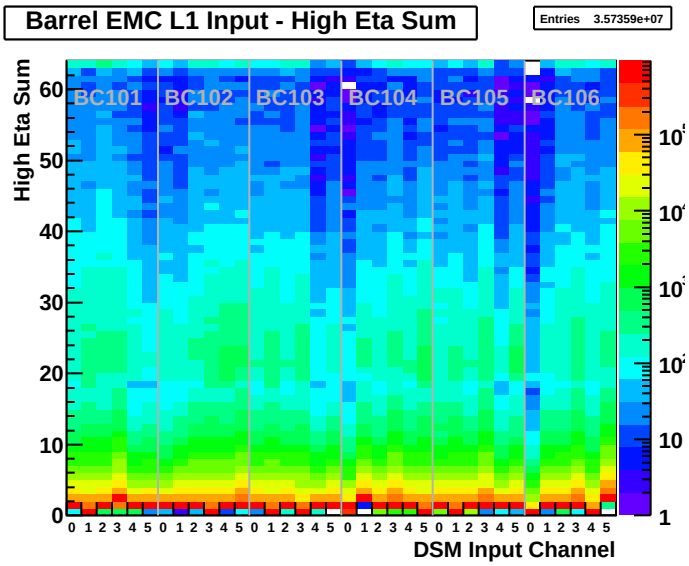
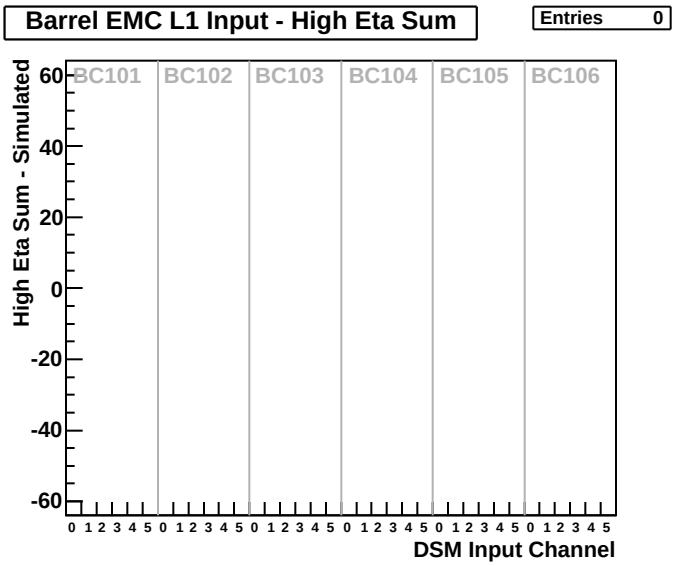
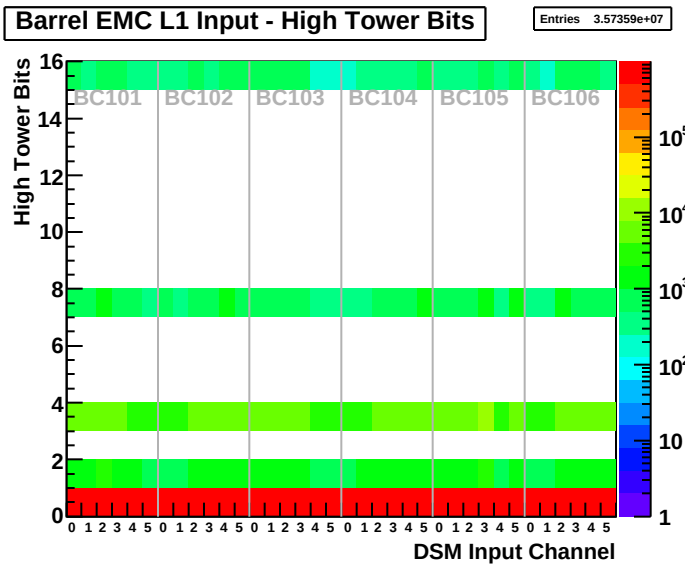
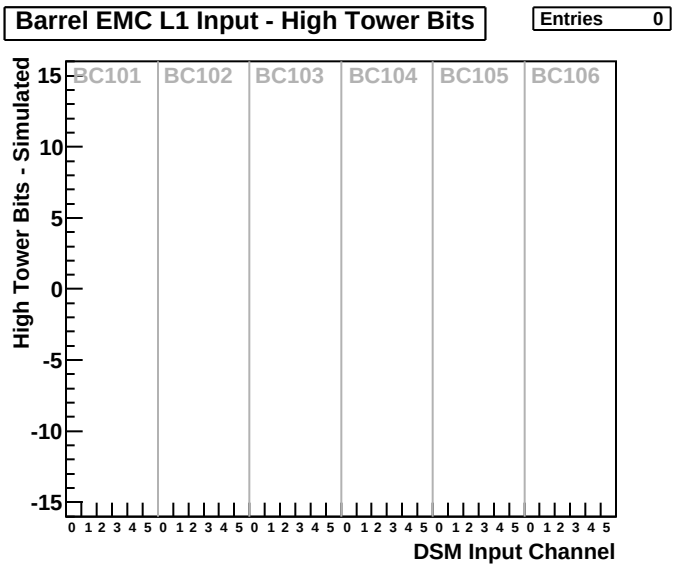

Barrel EMC L1 Input - Low Eta Sum
Entries 3.57359e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

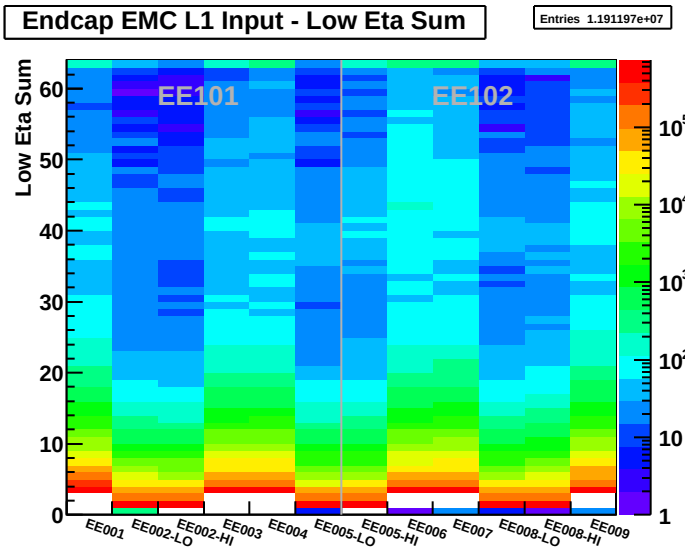

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

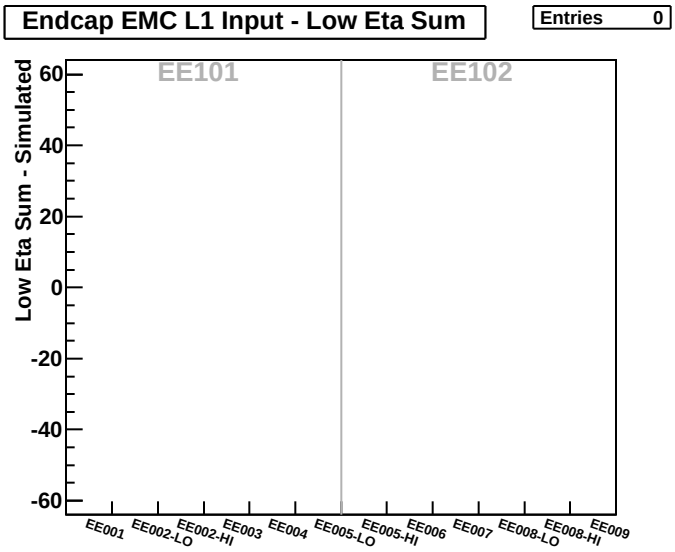

Barrel EMC L1 Input - High Eta Sum
Entries 3.57359e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

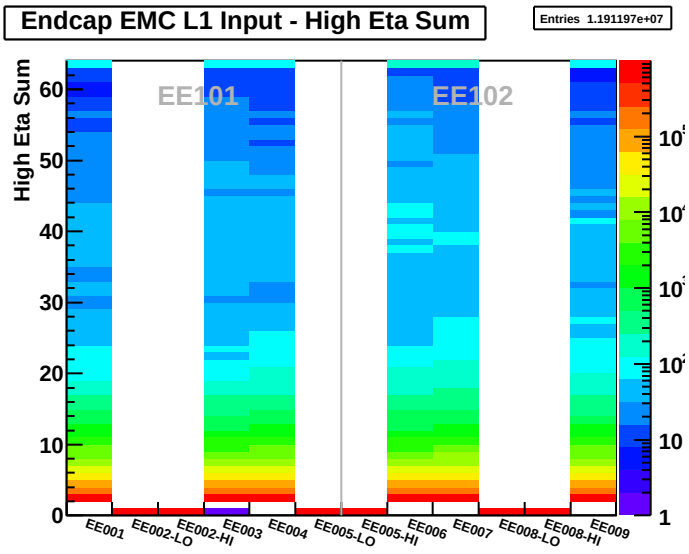

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

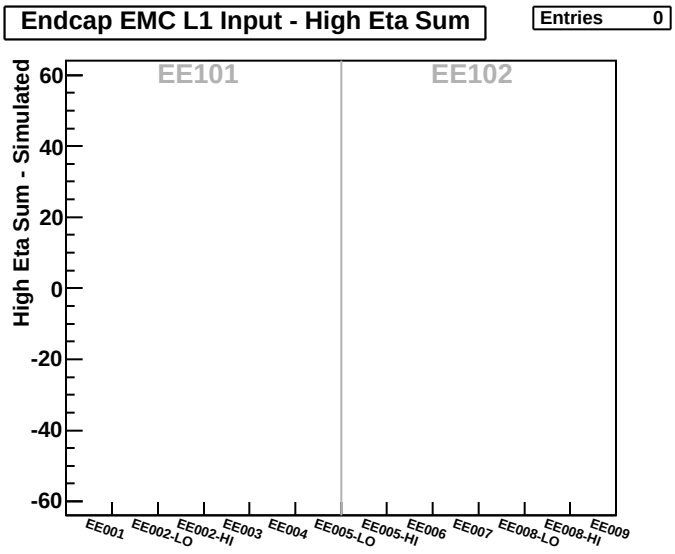

Barrel EMC L1 Input - High Tower Bits
Entries 3.57359e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

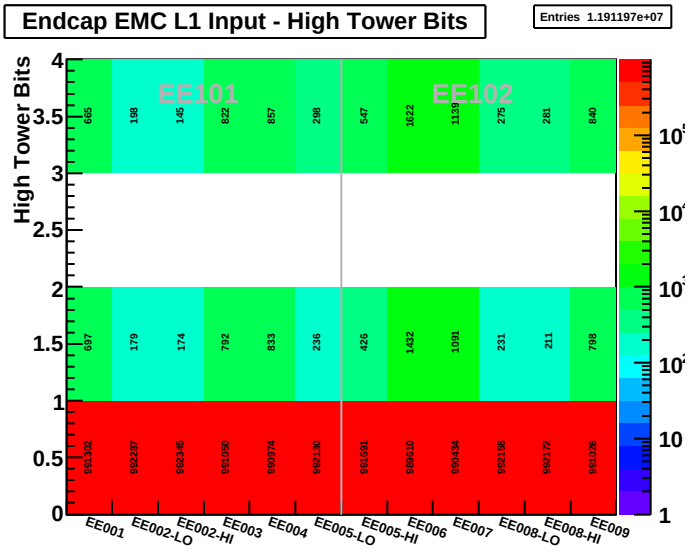

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

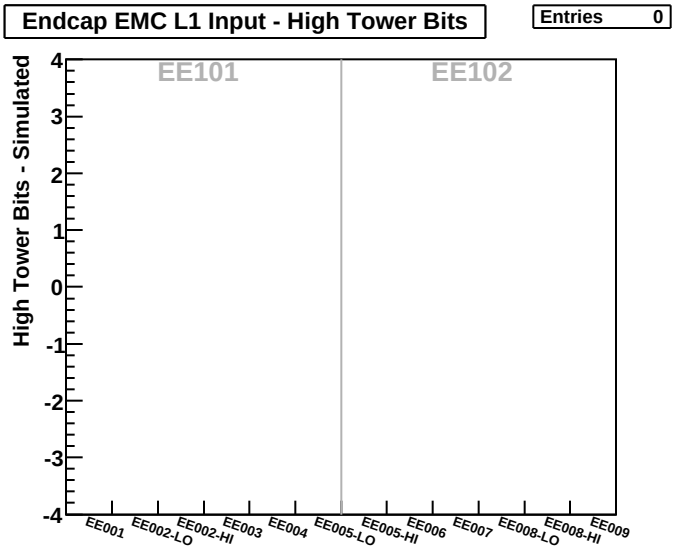

Endcap EMC L1 Input - Low Eta Sum
Entries 1.191197e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

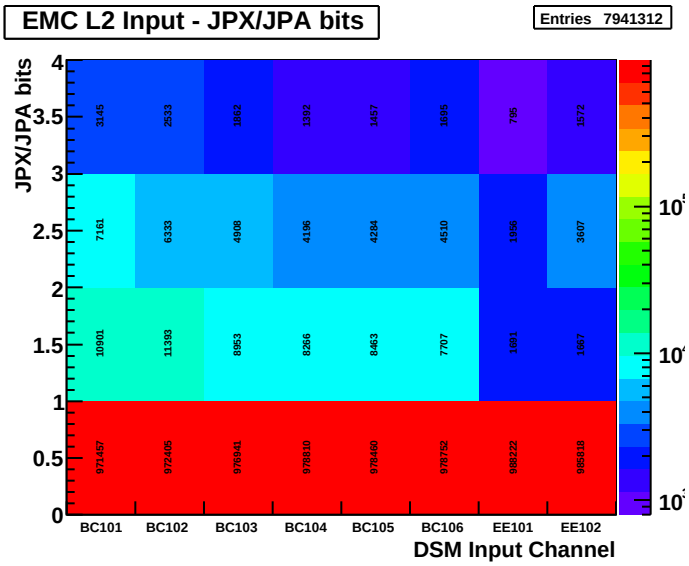

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

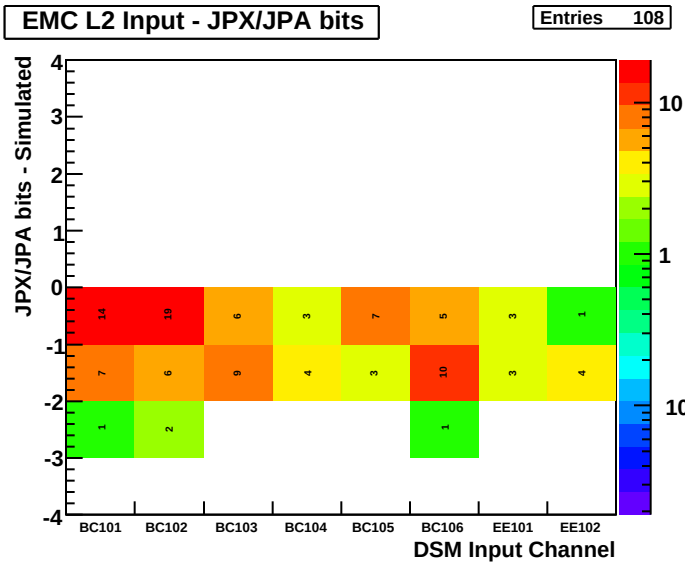

Endcap EMC L1 Input - High Eta Sum
Entries 1.191197e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

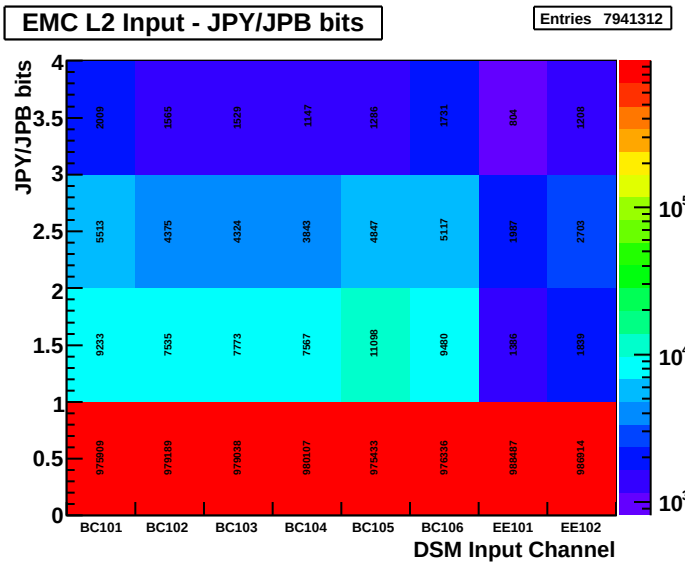

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

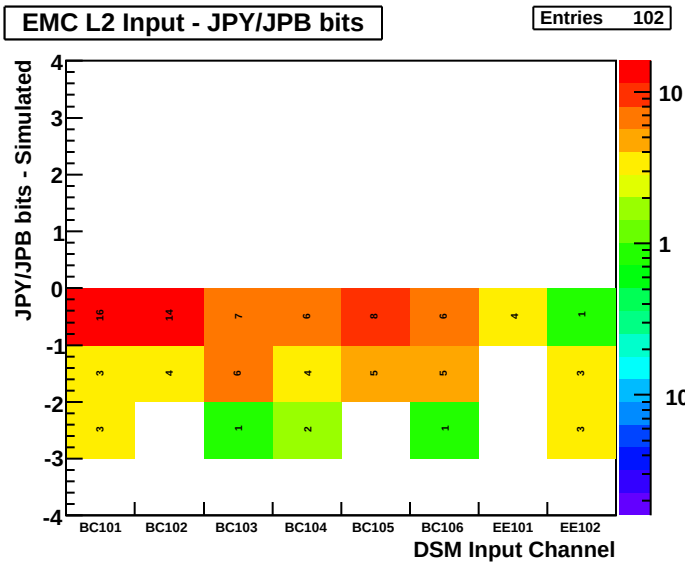

Endcap EMC L1 Input - High Tower Bits
Entries 1.191197e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

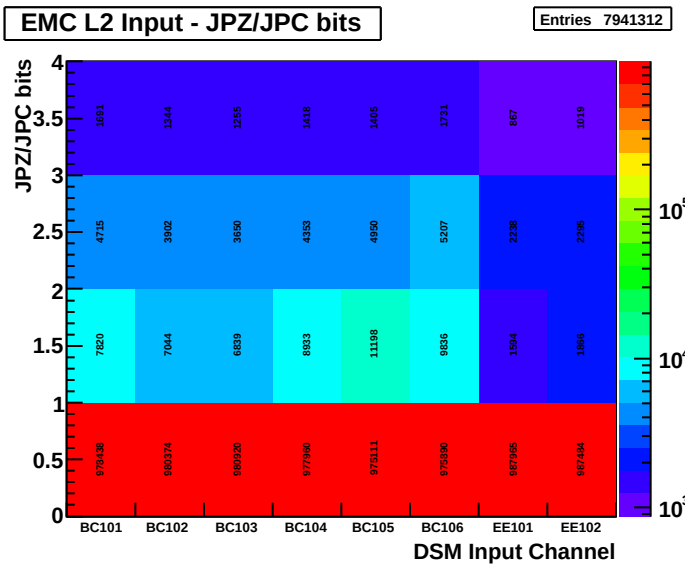

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

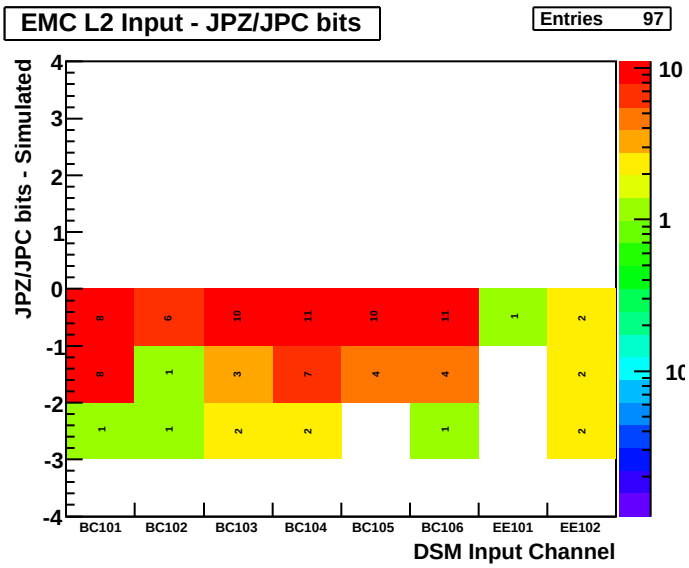

EMC L2 Input - JPX/JPA bits
Entries 7941312
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3145 2533 1862 1392 1457 1595 795 1572
7161 6333 4908 4196 4284 4510 1956 3607
10901 11393 8953 8266 8463 7707 1691 1667
971457 972405 975941 978810 978460 978752 988222 985818

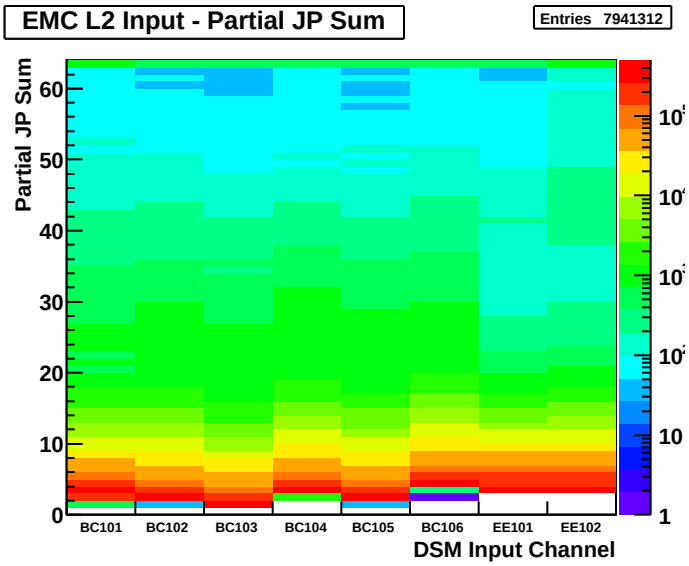

EMC L2 Input - JPX/JPA bits
Entries 108
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
14 19 6 3 7 5 3 1
7 6 9 4 3 10 3 4
1 2 1

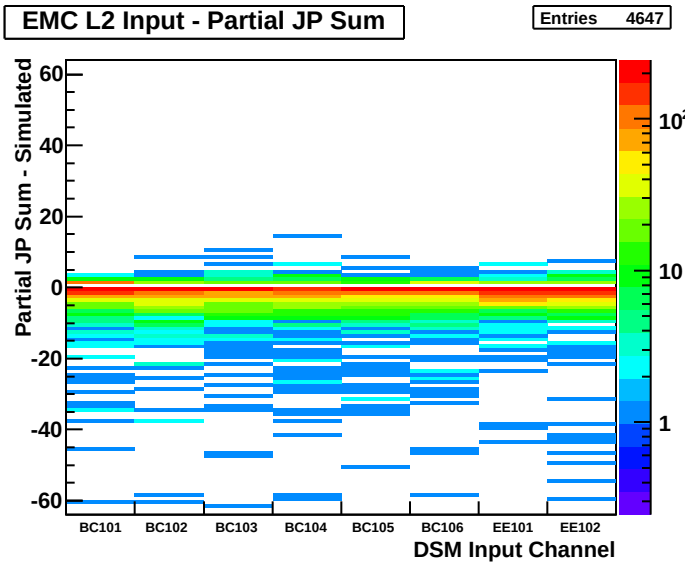

EMC L2 Input - JPY/JPB bits
Entries 7941312
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2009 1565 1520 1147 1286 1731 804 1208
5513 4375 4324 3843 4847 5117 1987 2703
9233 7535 7773 7567 11098 9480 1386 1639
979809 979189 979038 980107 975433 976336 988487 988914

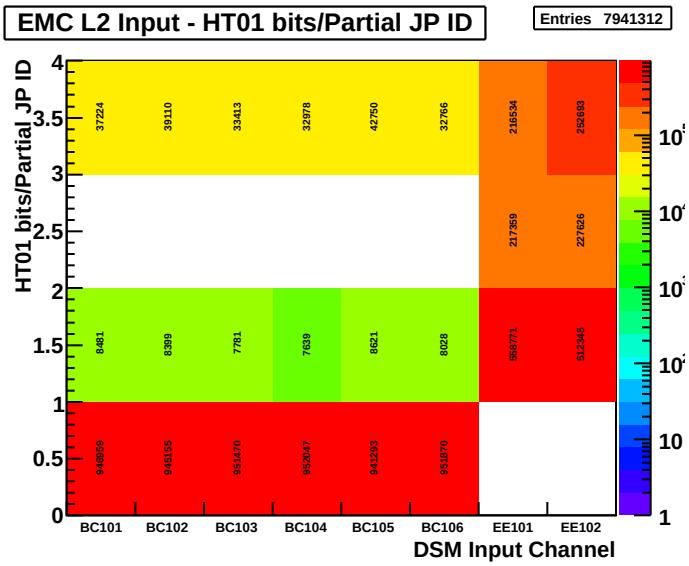

EMC L2 Input - JPY/JPB bits
Entries 102
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
16 14 7 6 8 6 4 1
3 4 6 4 5 5 3
3 1 2 1 3

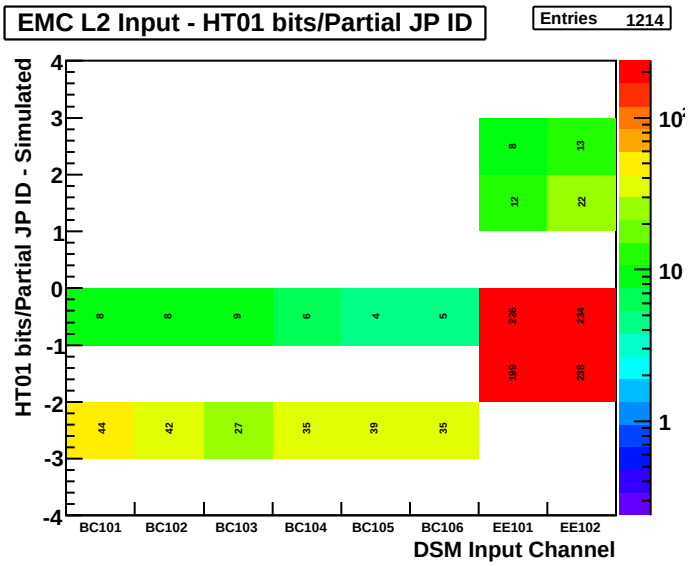

EMC L2 Input - JPZ/JPC bits
Entries 7941312
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1691 1344 1255 1418 1405 1731 867 1019
4715 3902 3650 4353 4950 5207 2238 2295
7820 7044 6839 8933 11198 9836 1594 1866
978438 980374 980920 977960 975111 975890 987965 987484

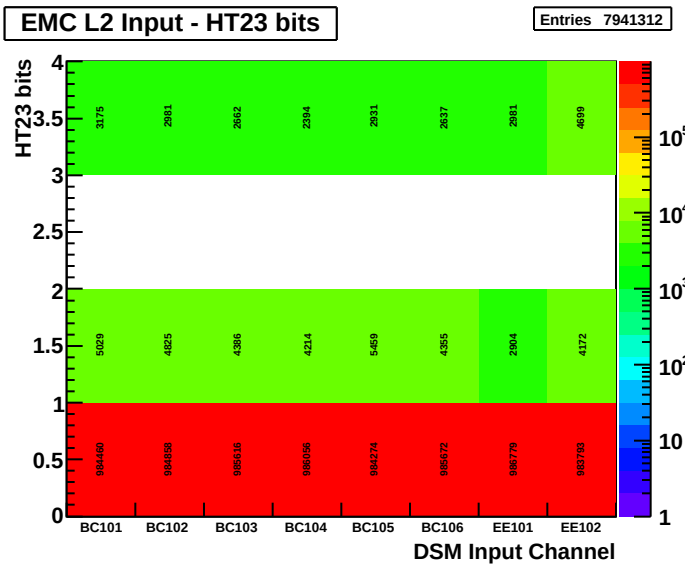

EMC L2 Input - JPZ/JPC bits
Entries 97
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8 6 10 11 10 11 1 2
8 1 3 7 4 4 2
1 1 2 2 1 2

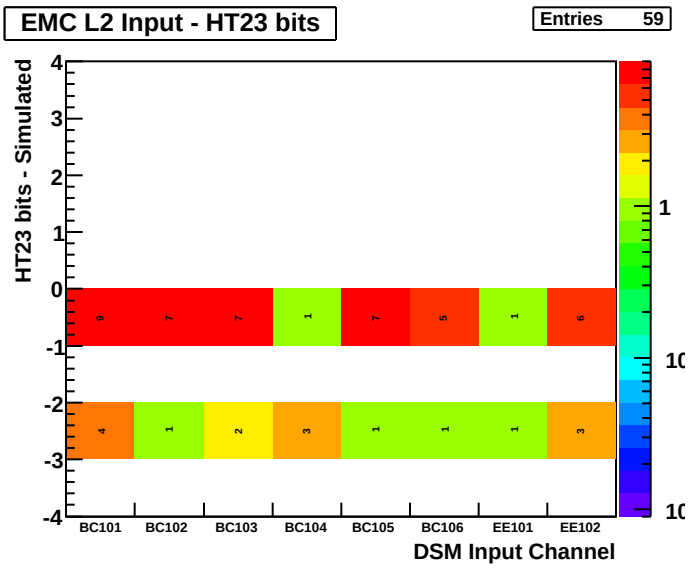

EMC L2 Input - Partial JP Sum
Entries 7941312
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

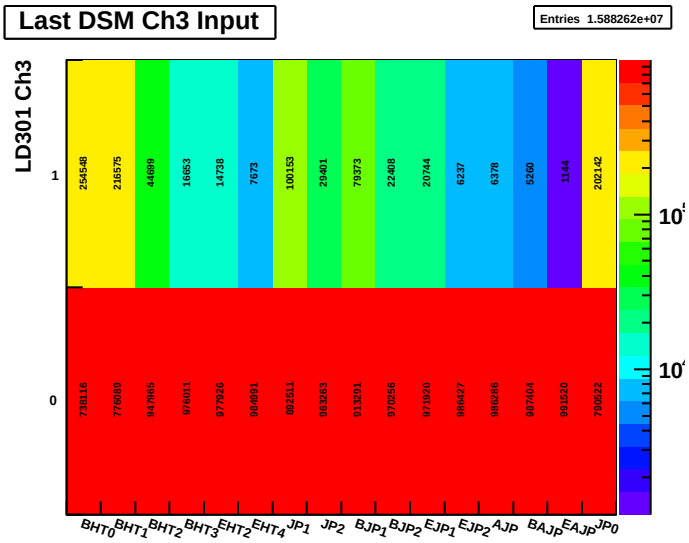

EMC L2 Input - Partial JP Sum
Entries 4647
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

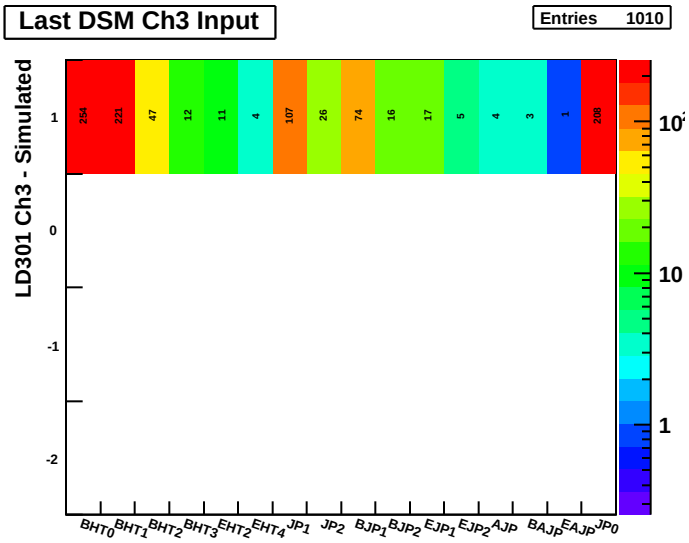

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7941312
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

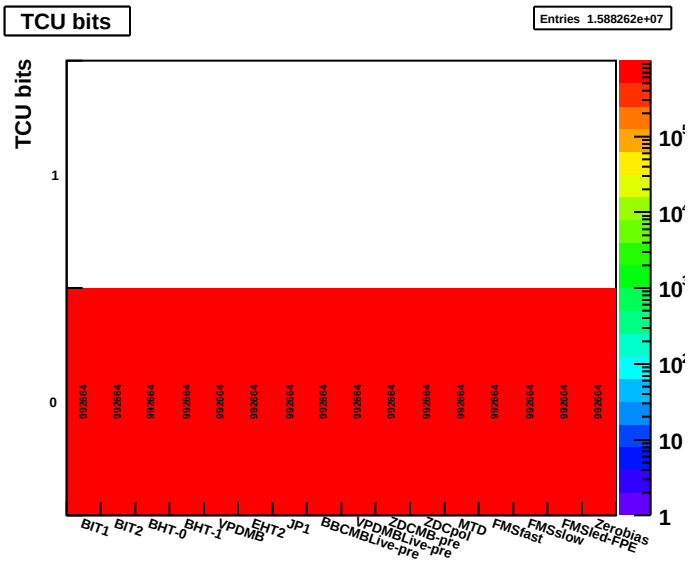

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1214
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

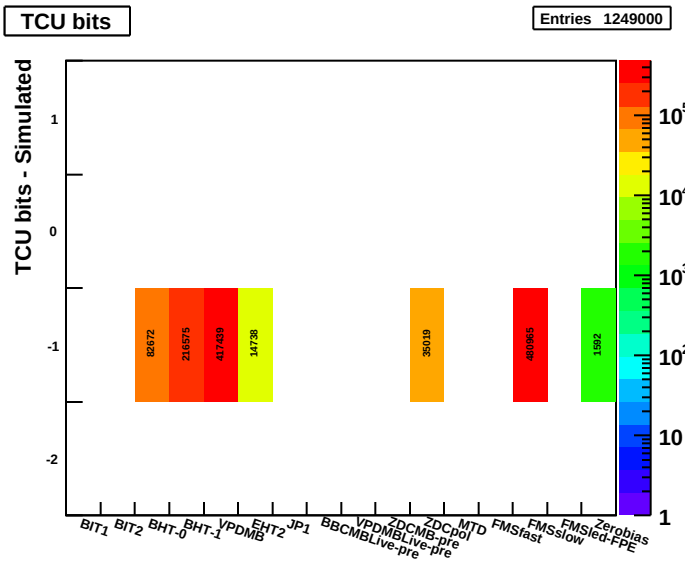

EMC L2 Input - HT23 bits
Entries 7941312
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

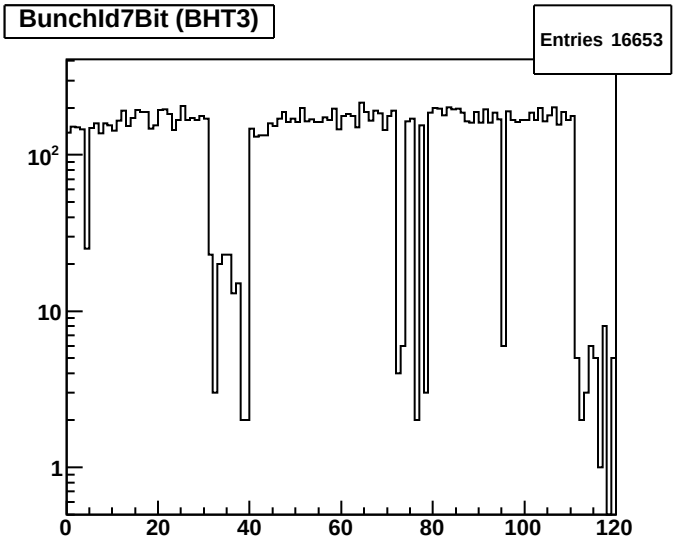

EMC L2 Input - HT23 bits
Entries 59
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

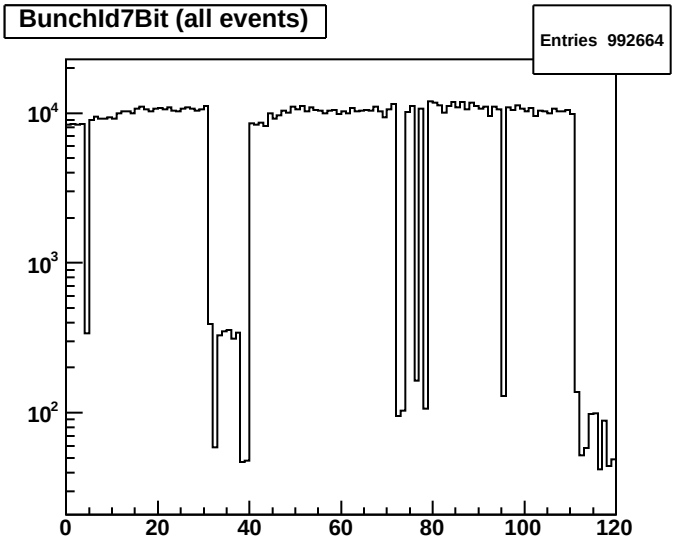

Last DSM Ch3 Input
Entries 1.588262e+07
LD301 Ch3
254548 216575 44699 16653 14738 7673 100153 29401 79373 22408 20744 6237 6378 5260 1144 202142
738116 776089 947965 976011 977926 984991 892511 963263 913291 970256 971920 986427 986286 987404 991520 790522
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

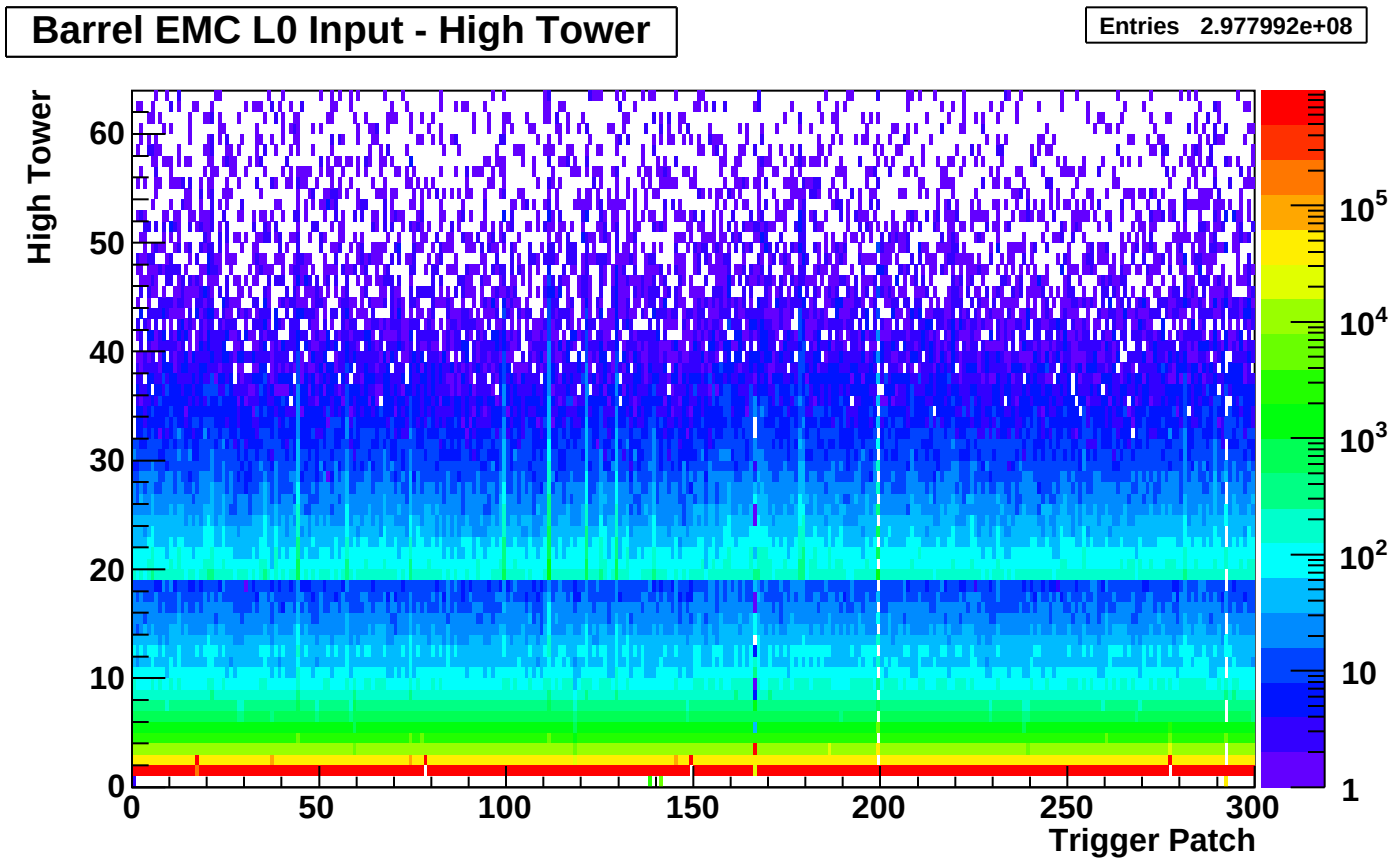

Last DSM Ch3 Input
Entries 1010
LD301 Ch3 - Simulated
254 221 47 12 11 4 107 26 74 16 17 5 4 3 1 208
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

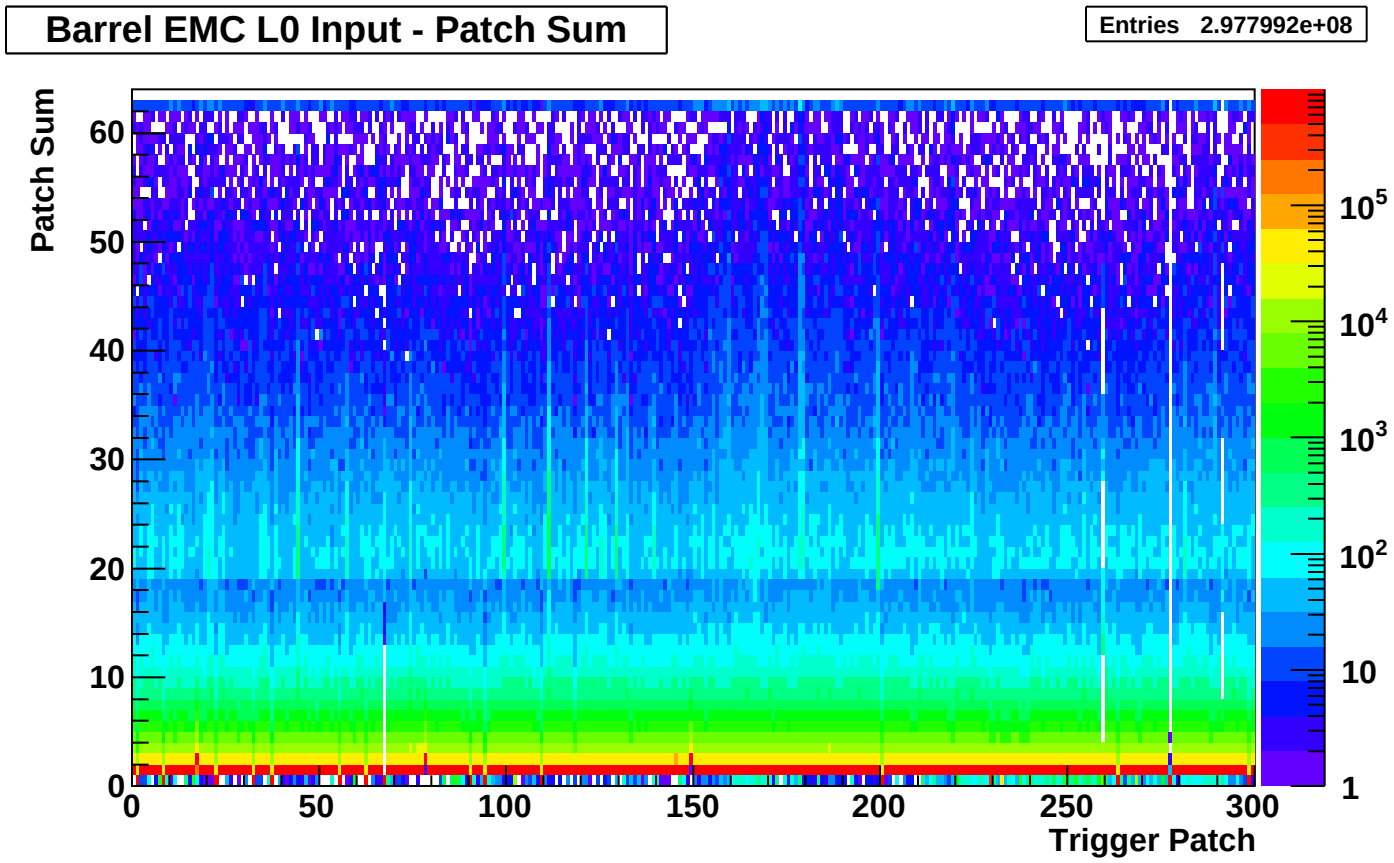

TCU bits
Entries 1.588262e+07
992664 992664 992664 992664 992664 992664 992664 992664 992664 992664 992664 992664 992664 992664 992664
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

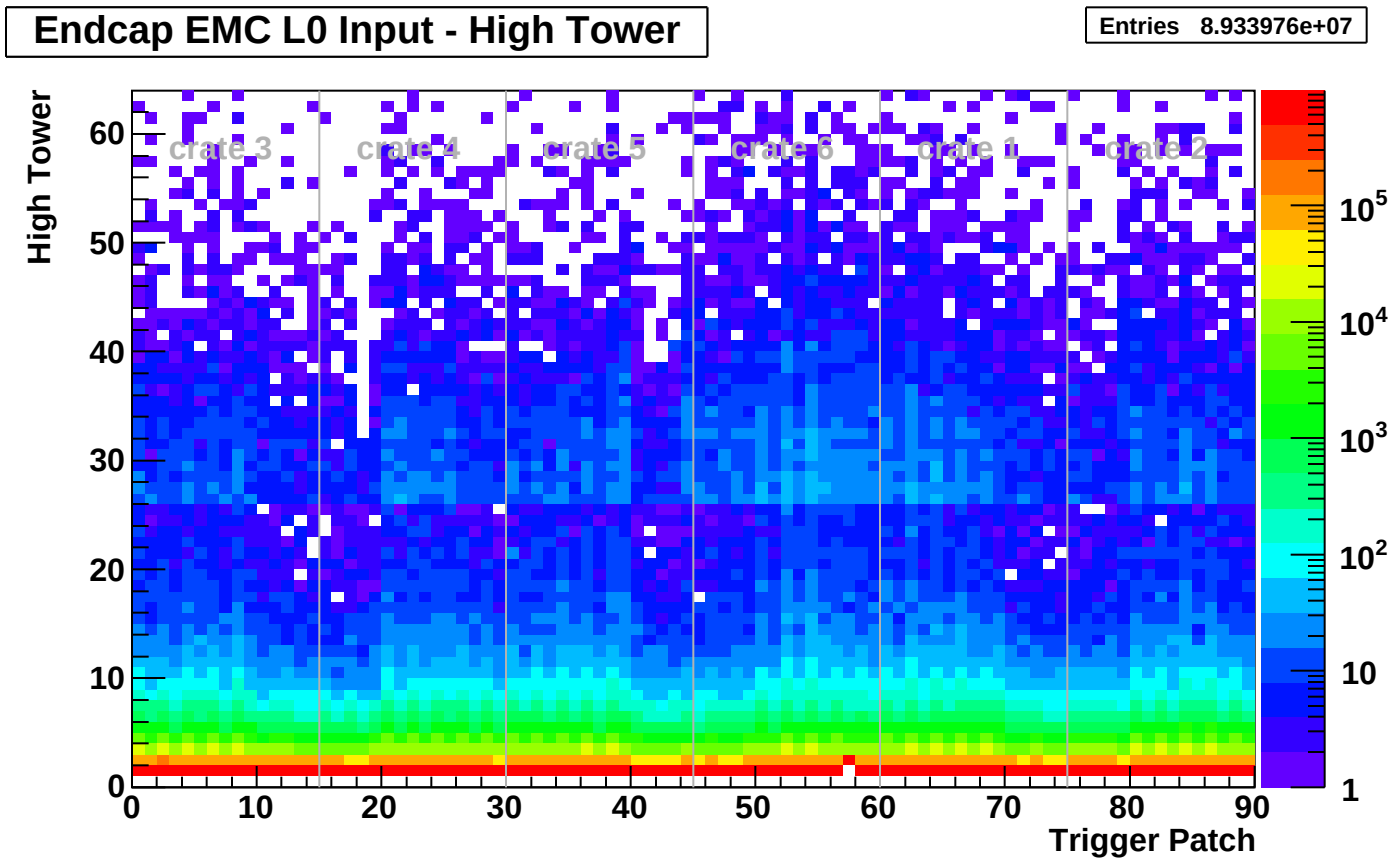

TCU bits
Entries 1249000
TCU bits - Simulated
82672 216575 417439 14738 35019 480965 1592
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

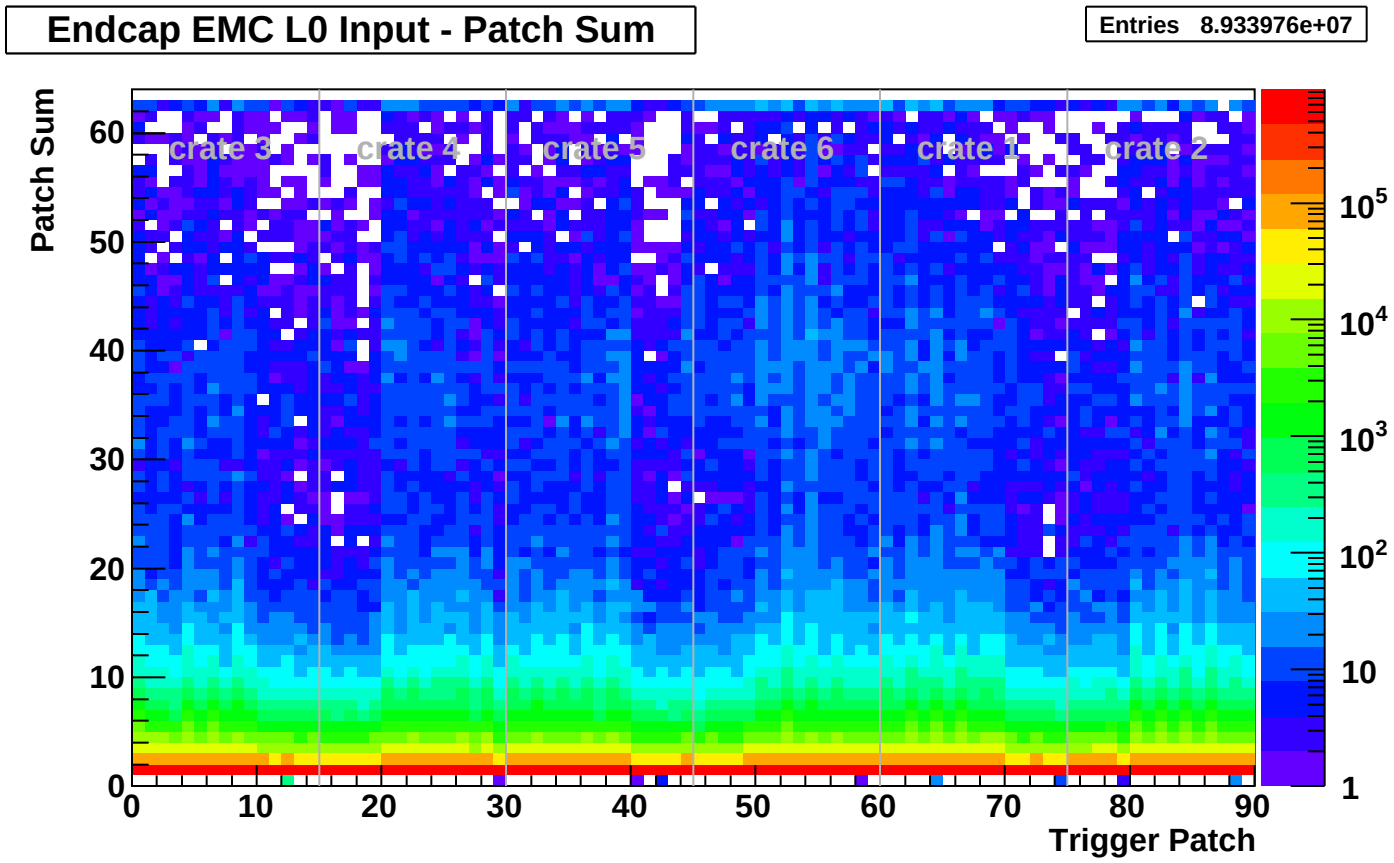

BunchId7Bit (BHT3)
Entries 16653

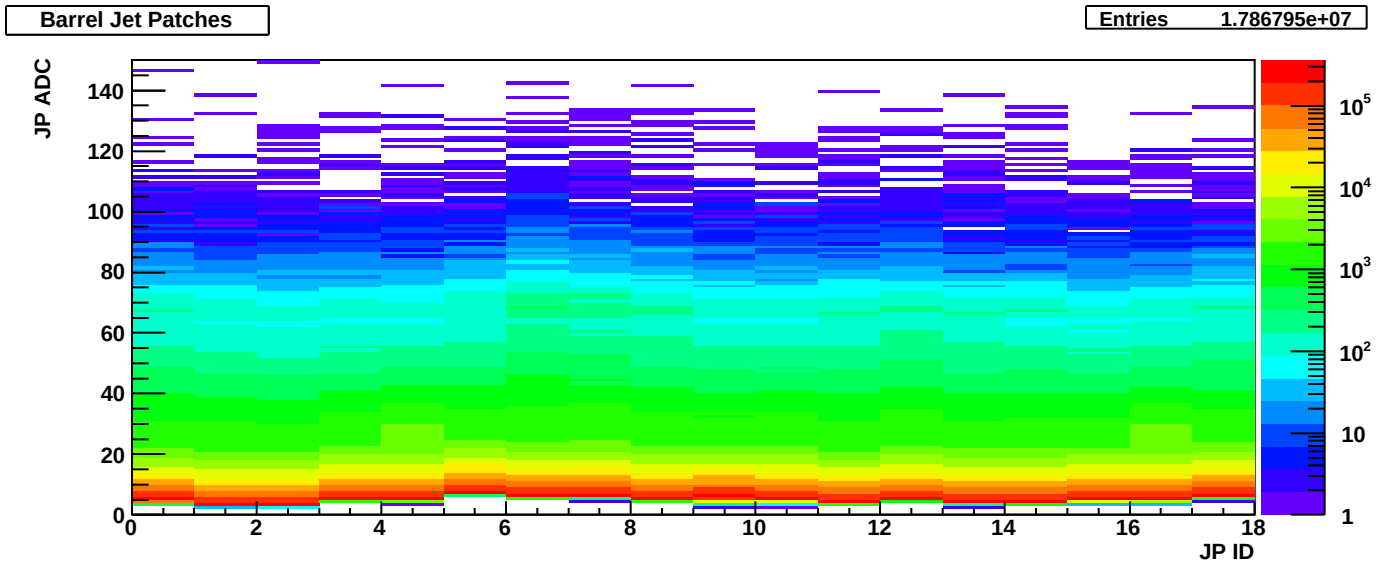

BunchId7Bit (all events)
Entries 992664

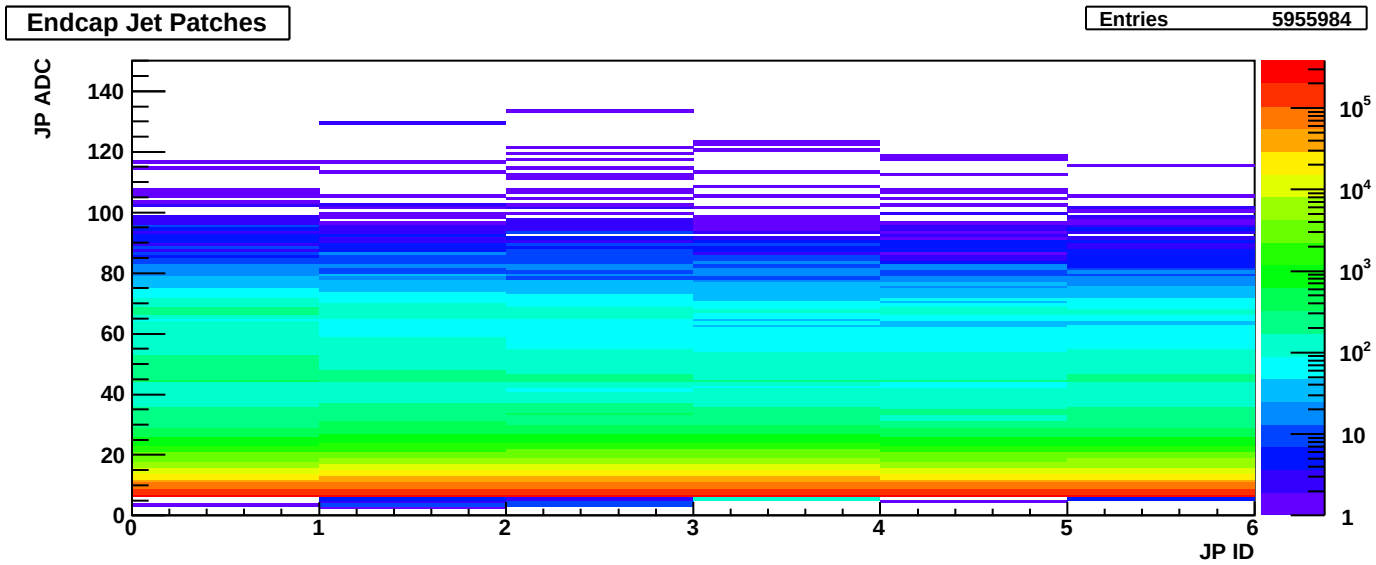

Barrel EMC L0 Input - High Tower
Entries 2.977992e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

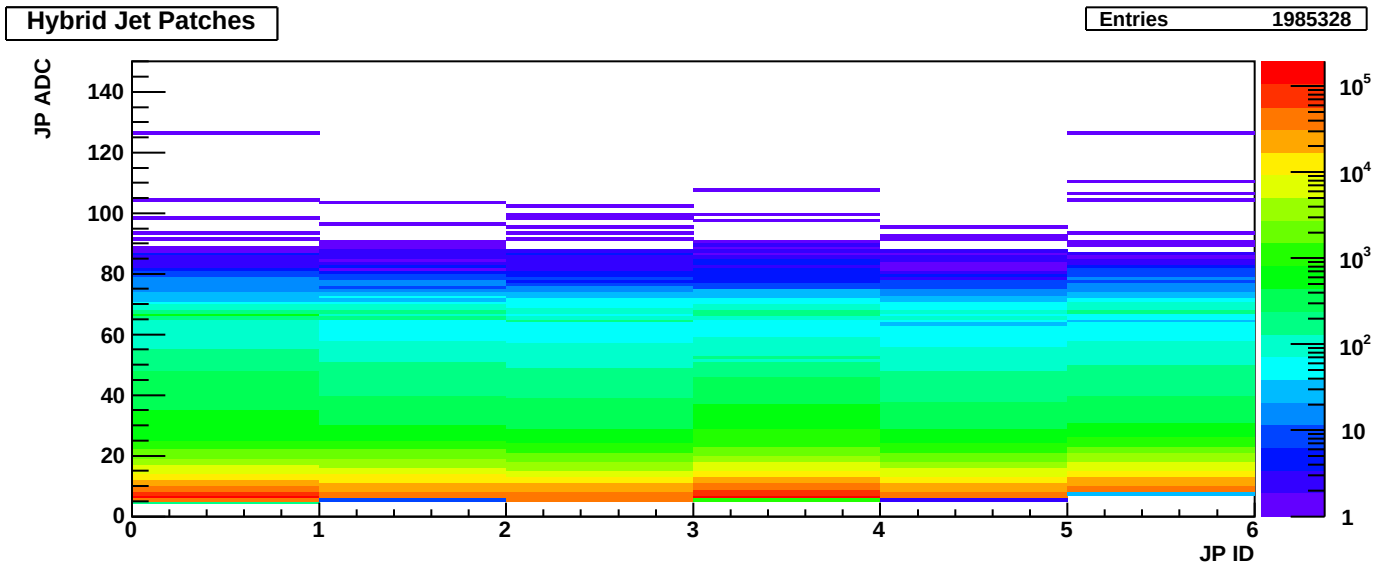

Barrel EMC L0 Input - Patch Sum
Entries 2.977992e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

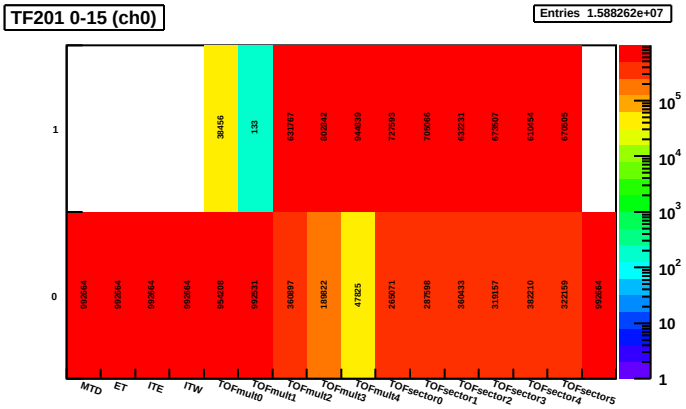

Endcap EMC L0 Input - High Tower
Entries 8.933976e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

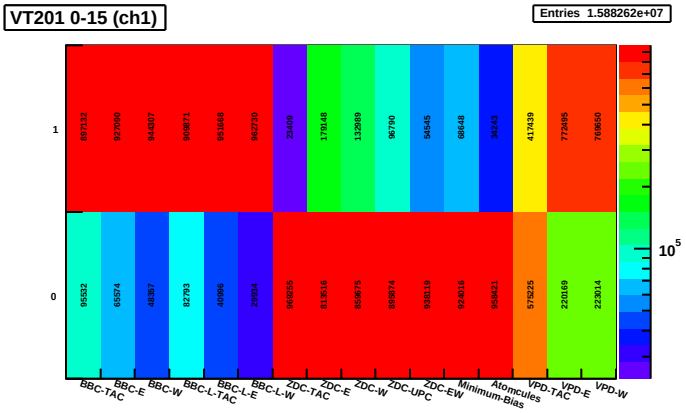

Endcap EMC L0 Input - Patch Sum
Entries 8.933976e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

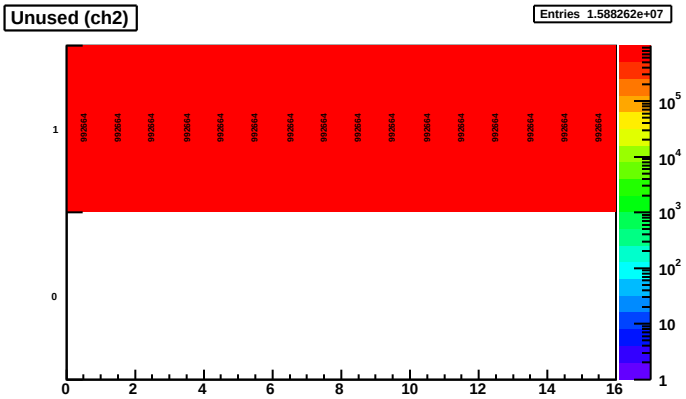

Barrel Jet Patches
Entries 1.786795e+07
JP ADC
JP ID

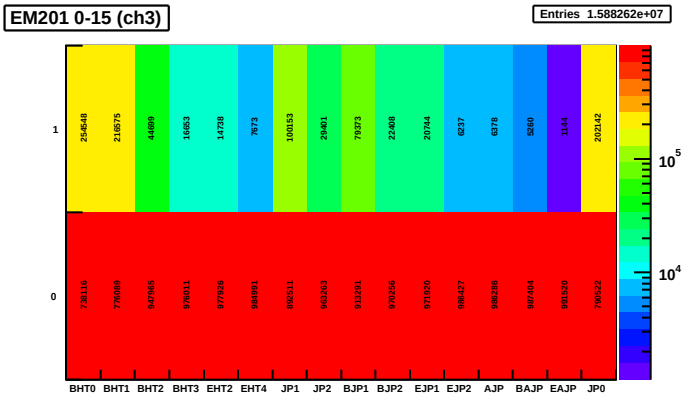

Endcap Jet Patches
Entries 5955984
JP ADC
JP ID

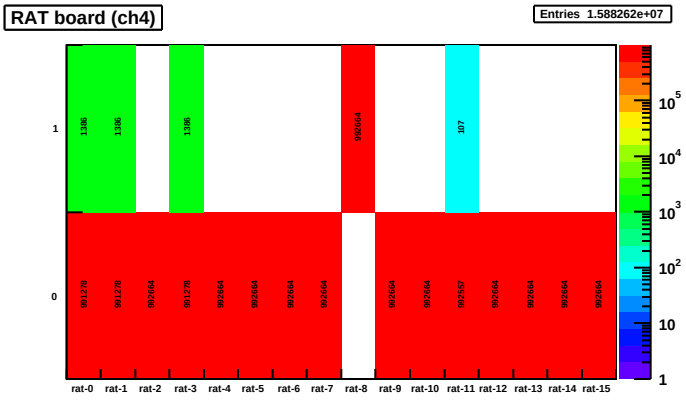

Hybrid Jet Patches
Entries 1985328
JP ADC
JP ID

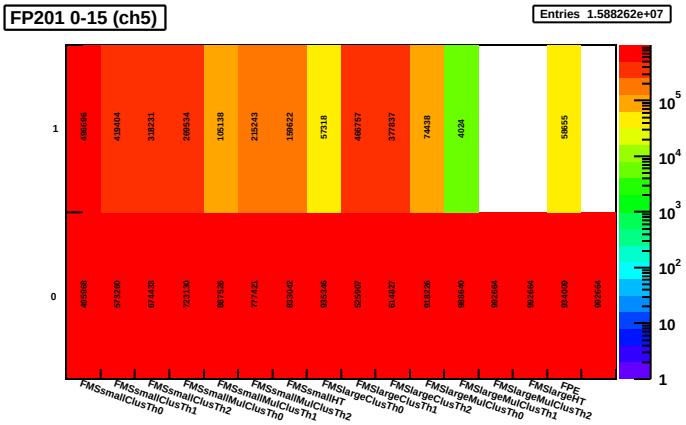

TF201 0-15 (ch0)
Entries 1.588262e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

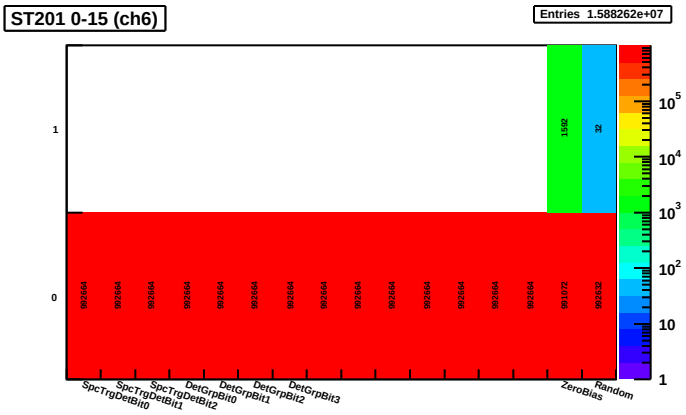

VT201 0-15 (ch1)
Entries 1.588262e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

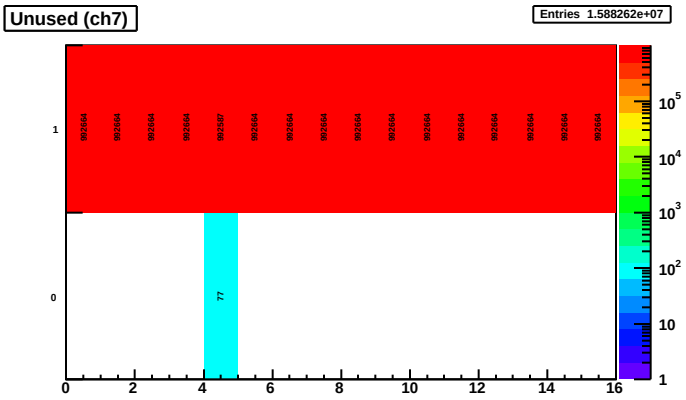

Unused (ch2)
Entries 1.588262e+07

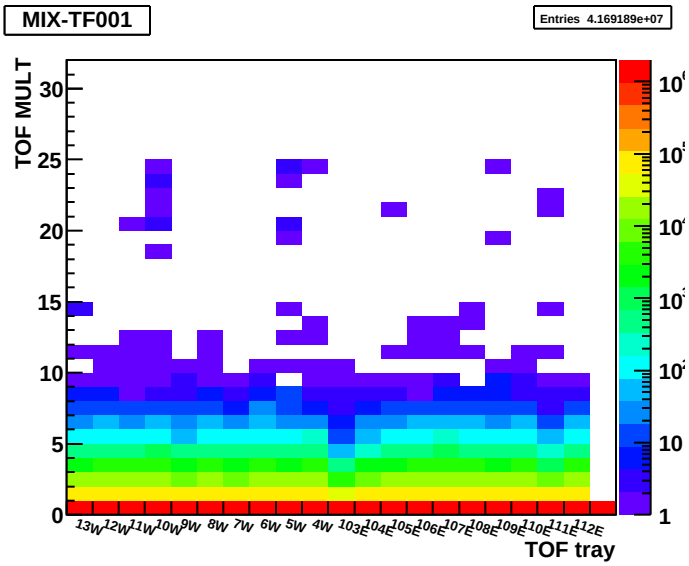

EM201 0-15 (ch3)
Entries 1.588262e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

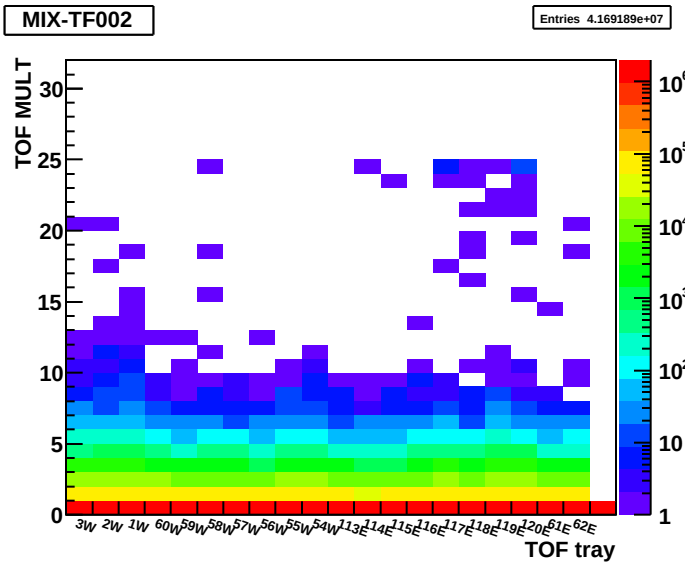

RAT board (ch4)
Entries 1.588262e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

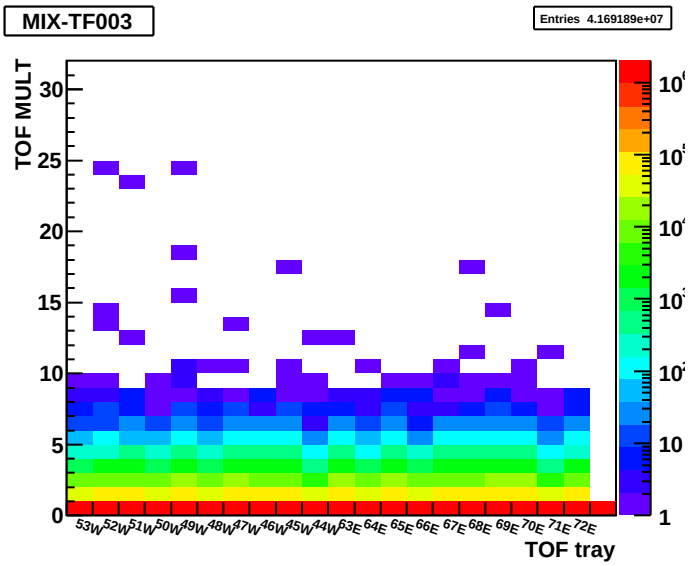

FP201 0-15 (ch5)
Entries 1.588262e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

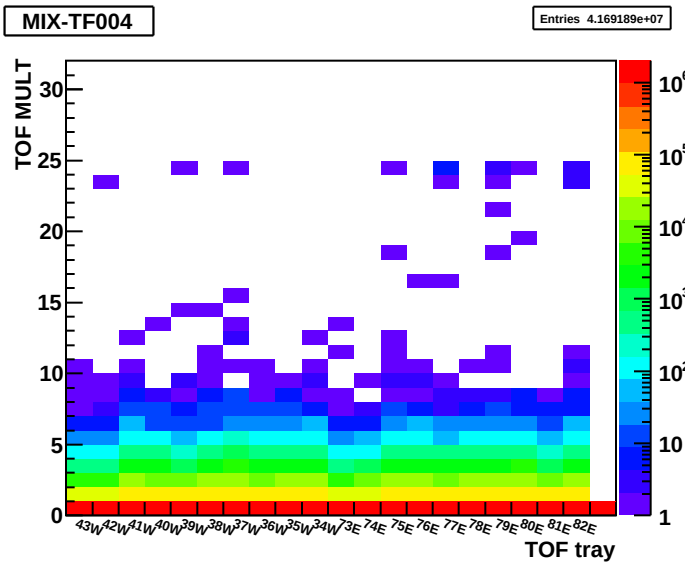

ST201 0-15 (ch6)
Entries 1.588262e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

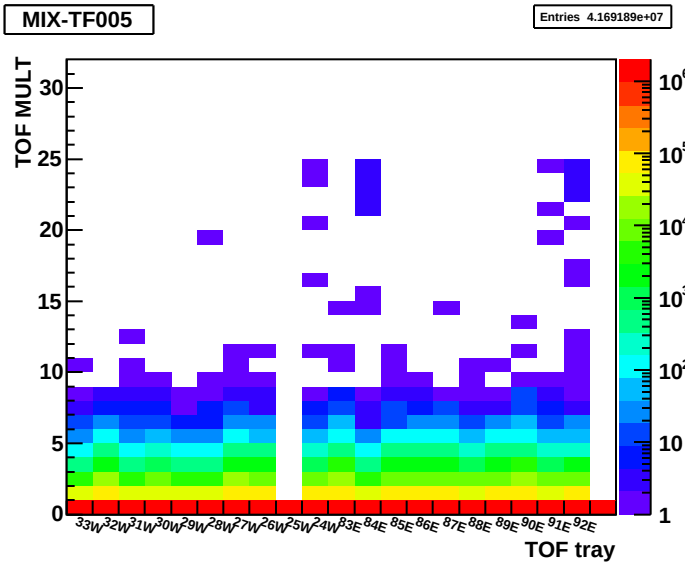

Unused (ch7)
Entries 1.588262e+07

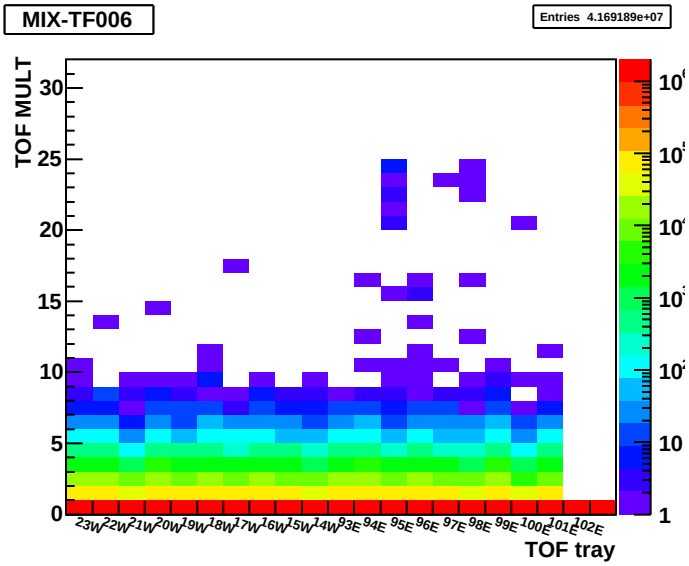

MIX-TF001
Entries 4.169189e+07
TOF MULT
TOF tray

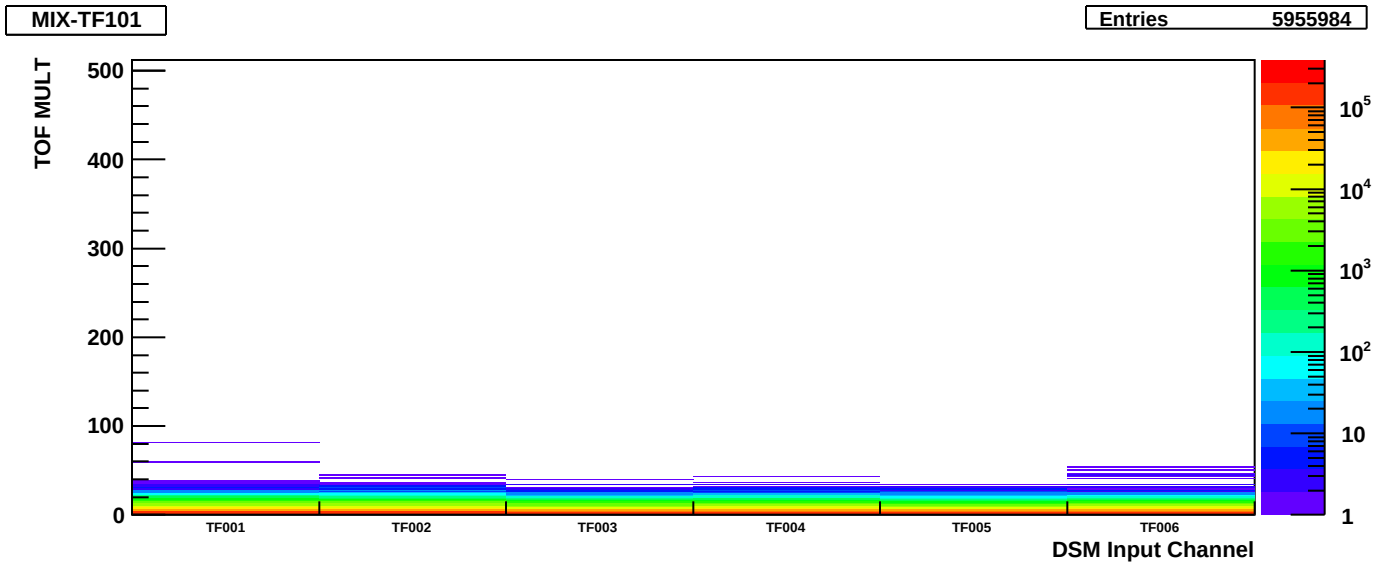

MIX-TF002
Entries 4.169189e+07
TOF MULT
TOF tray

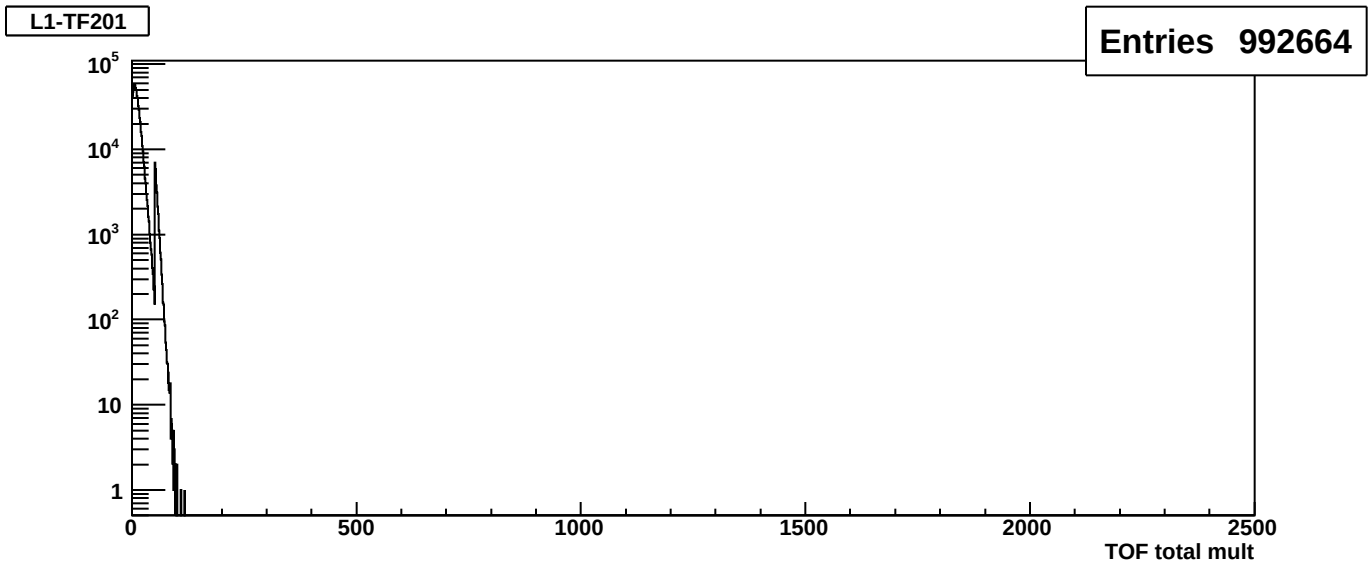

MIX-TF003
Entries 4.169189e+07
TOF MULT
TOF tray

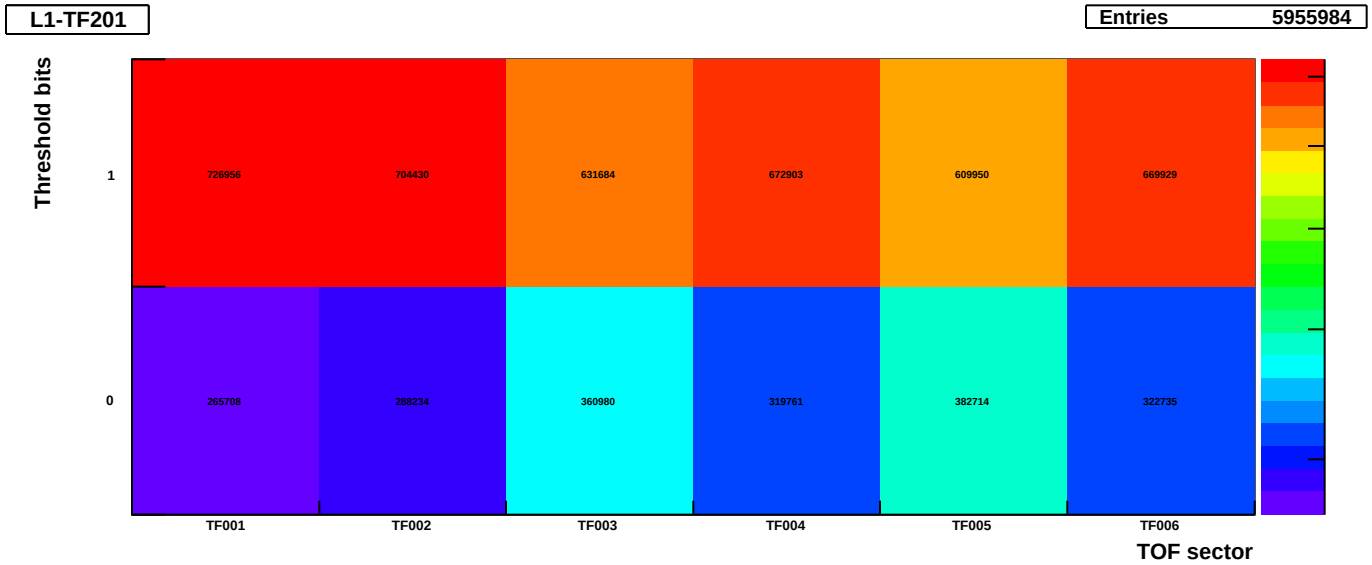

MIX-TF004
Entries 4.169189e+07
TOF MULT
TOF tray

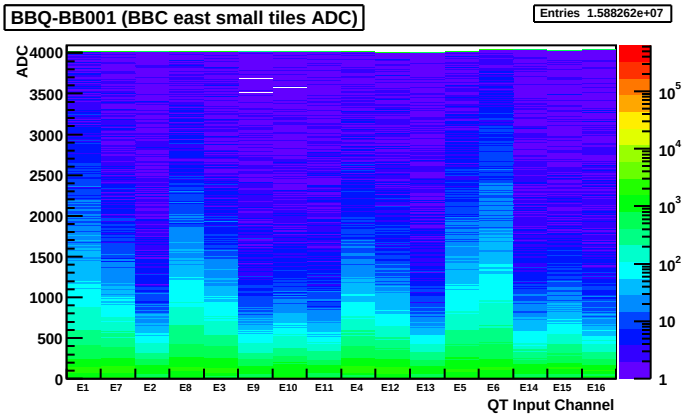

MIX-TF005
Entries 4.169189e+07
TOF MULT
TOF tray

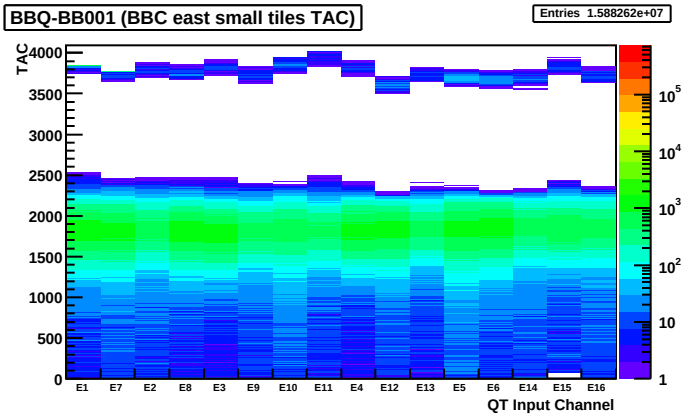

MIX-TF006
Entries 4.169189e+07
TOF MULT
TOF tray

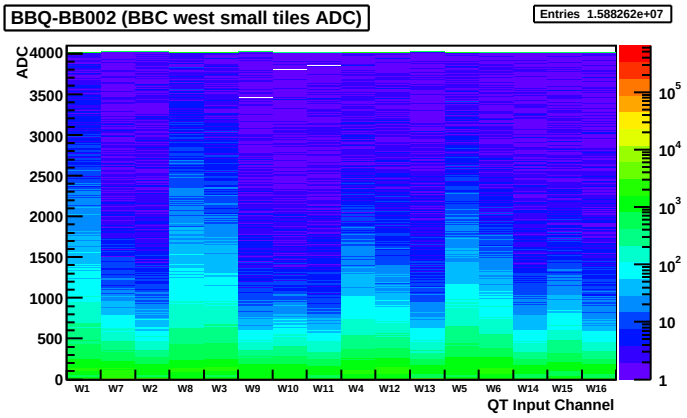

MIX-TF101
Entries 5955984
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

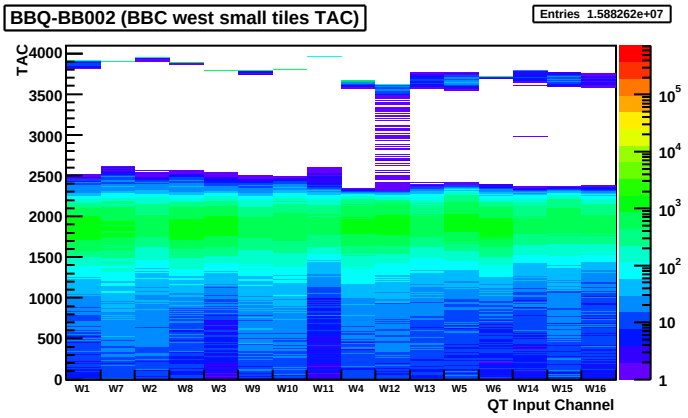

L1-TF201
Entries 992664
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

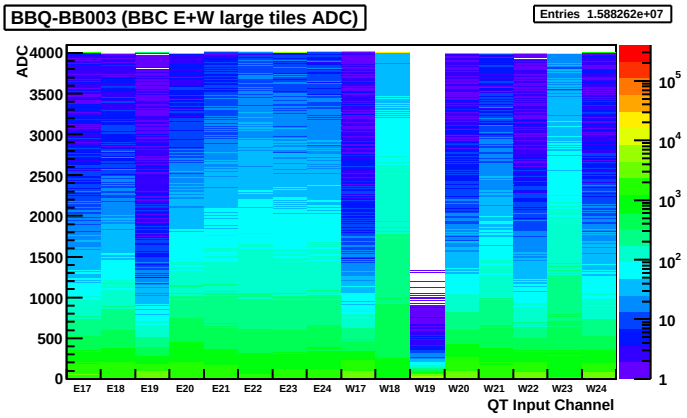

L1-TF201
Entries 5955984
Threshold bits
1
0
726956
704430
631684
672903
609950
669929
265708
288234
360980
319761
382714
322735
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

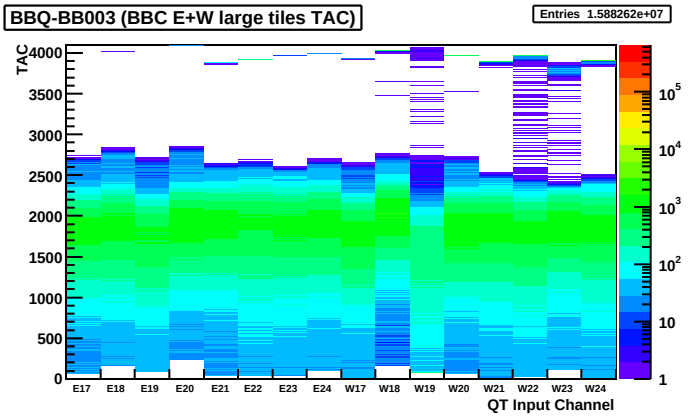

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.588262e+07
ADC
QT Input Channel

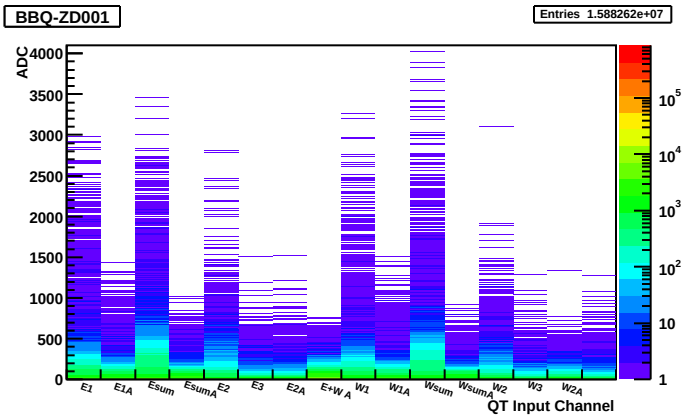

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.588262e+07
TAC
QT Input Channel

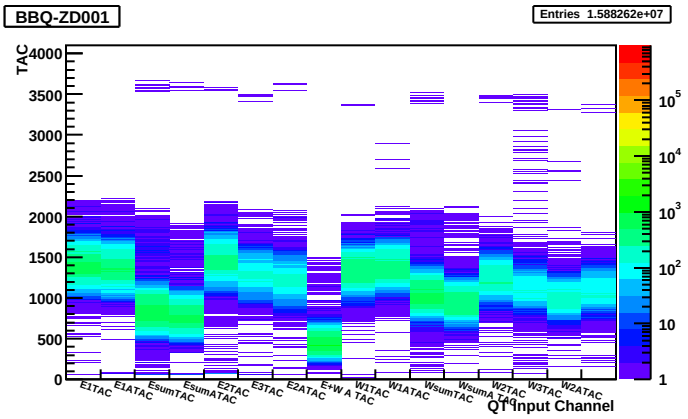

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.588262e+07
ADC
QT Input Channel

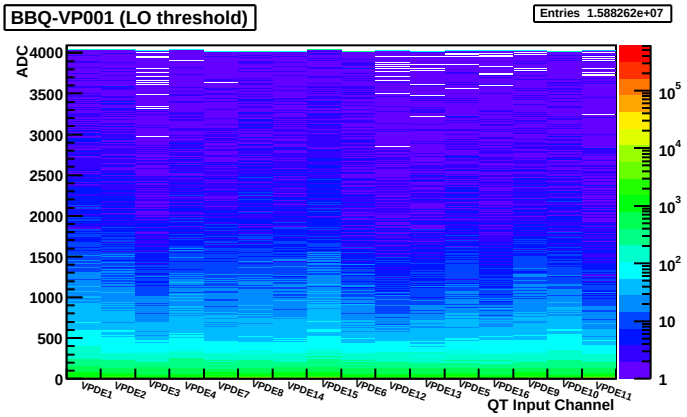

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.588262e+07
TAC
QT Input Channel

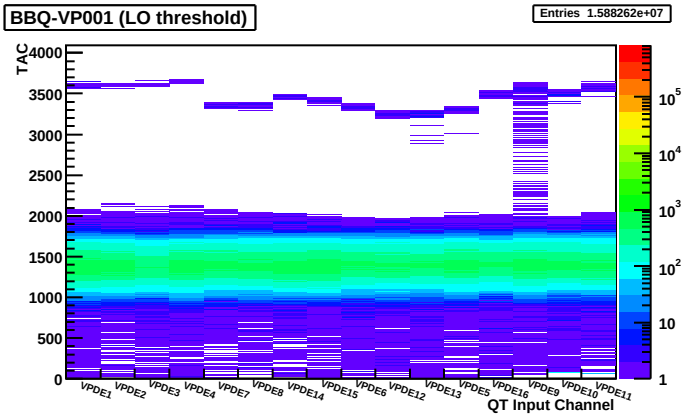

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.588262e+07
ADC
QT Input Channel

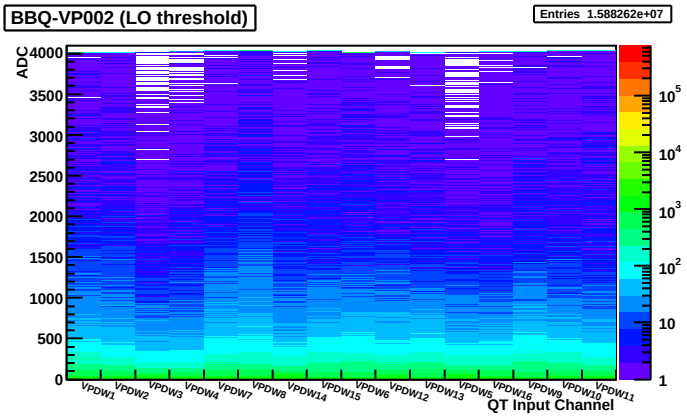

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.588262e+07
TAC
QT Input Channel

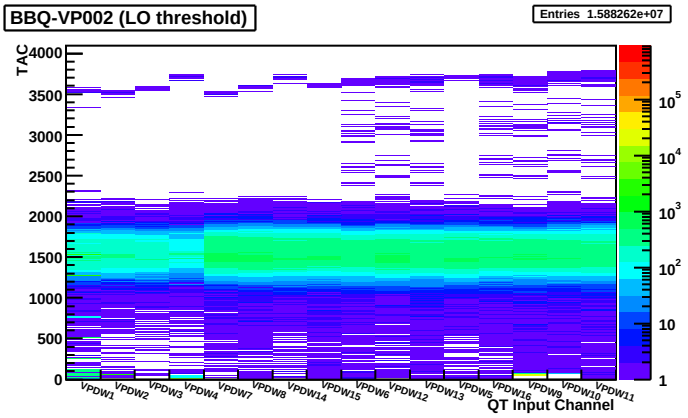

BBQ-ZD001
Entries 1.588262e+07
ADC
QT Input Channel

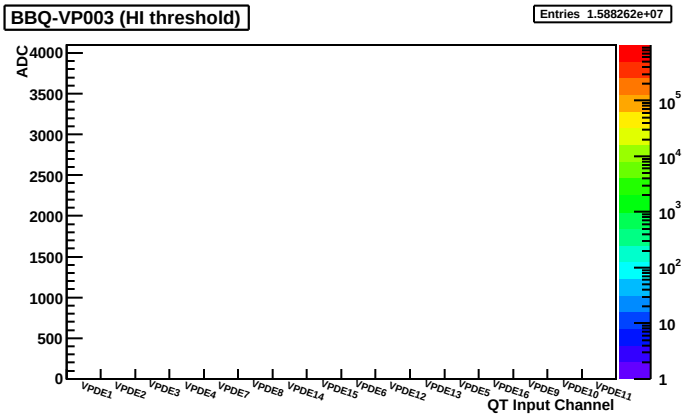

BBQ-ZD001
Entries 1.588262e+07
TAC
QT Input Channel

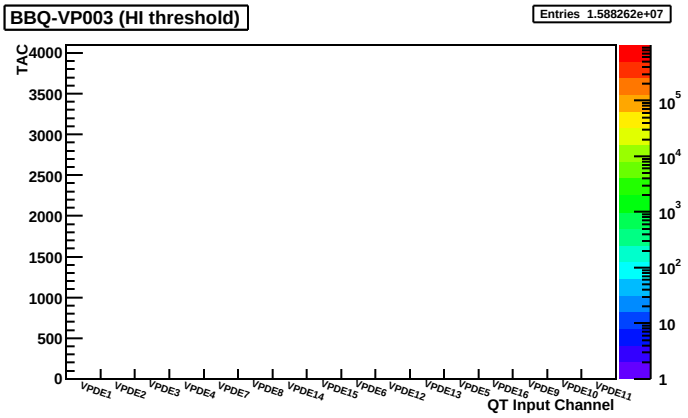

BBQ-VP001 (LO threshold)
Entries 1.588262e+07
ADC
QT Input Channel

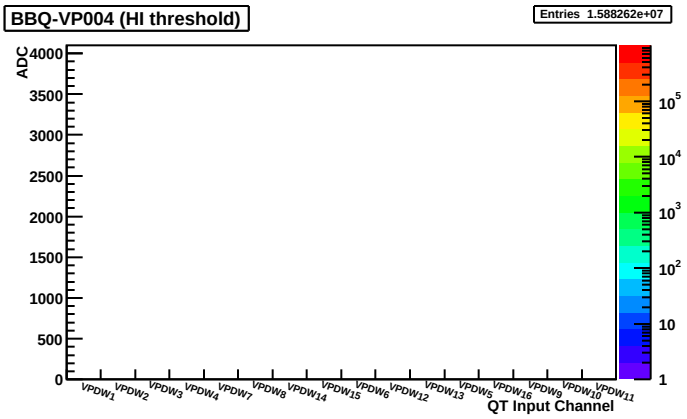

BBQ-VP001 (LO threshold)
Entries 1.588262e+07
TAC
QT Input Channel

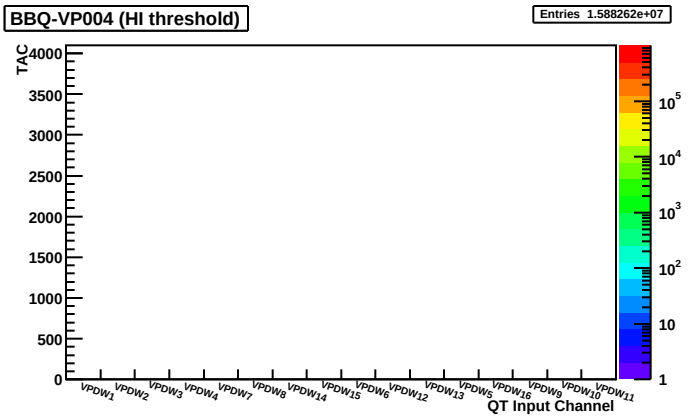

BBQ-VP002 (LO threshold)
Entries 1.588262e+07
ADC
QT Input Channel

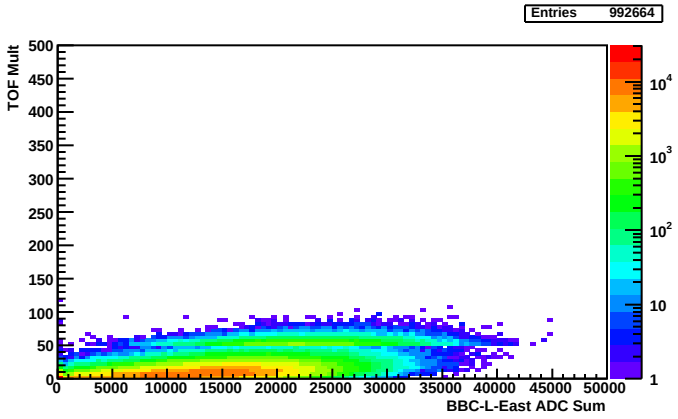

BBQ-VP002 (LO threshold)
Entries 1.588262e+07
TAC
QT Input Channel

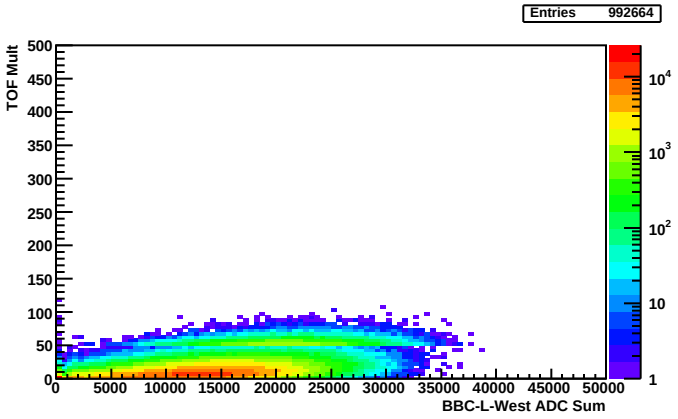

BBQ-VP003 (HI threshold)
Entries 1.588262e+07
ADC
QT Input Channel

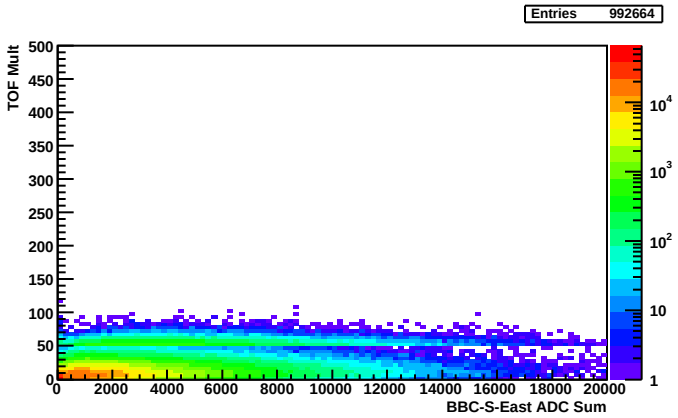

BBQ-VP003 (HI threshold)
Entries 1.588262e+07
TAC
QT Input Channel

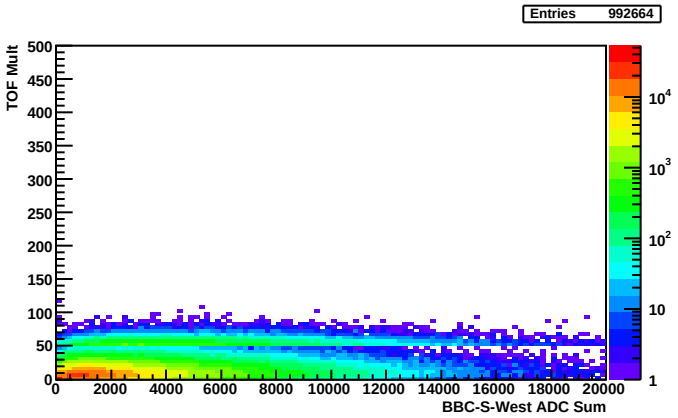

BBQ-VP004 (HI threshold)
Entries 1.588262e+07
ADC
QT Input Channel

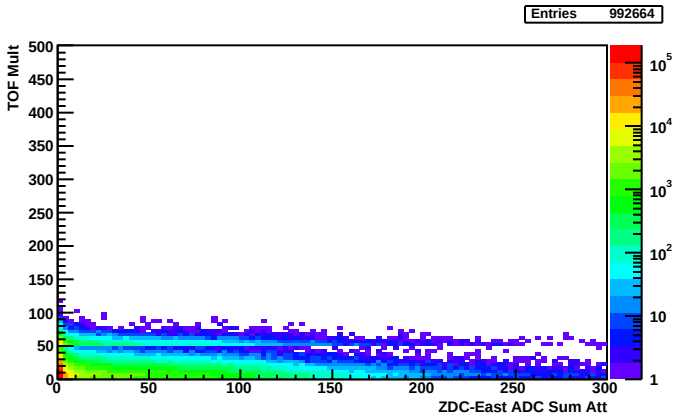

BBQ-VP004 (HI threshold)
Entries 1.588262e+07
TAC
QT Input Channel

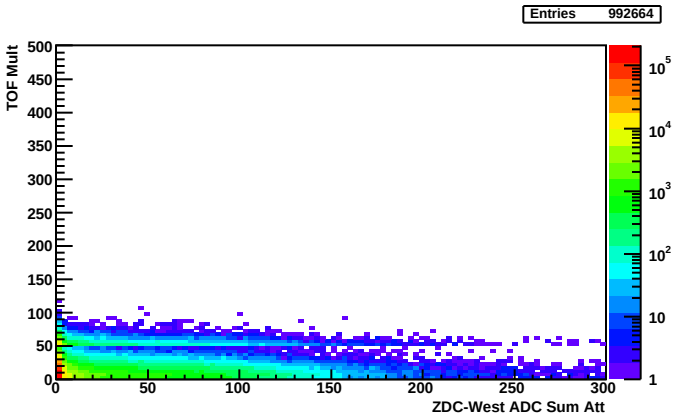

Entries 992664
TOF Mult
BBC-L-East ADC Sum

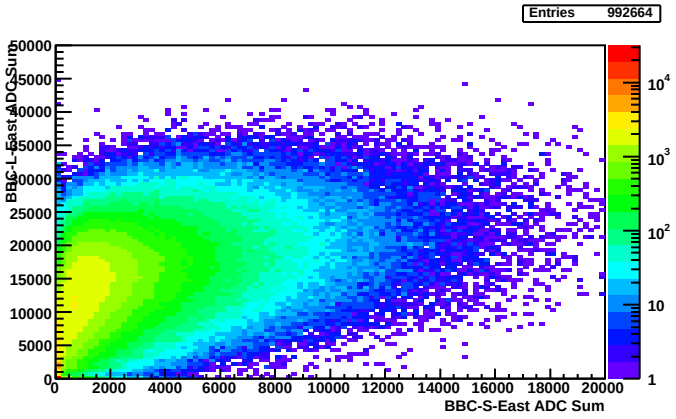

Entries 992664
TOF Mult
BBC-L-West ADC Sum

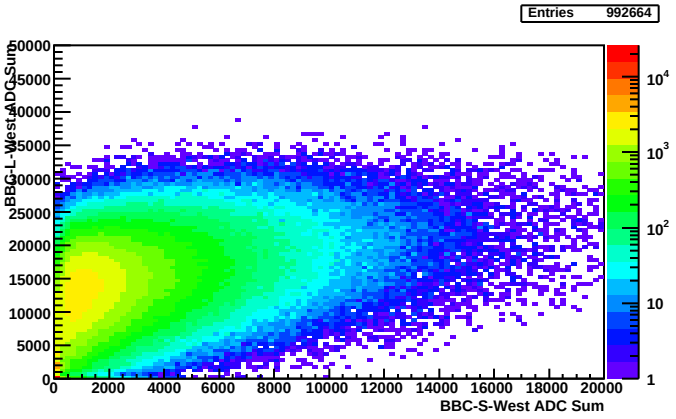

Entries 992664
TOF Mult
BBC-S-East ADC Sum

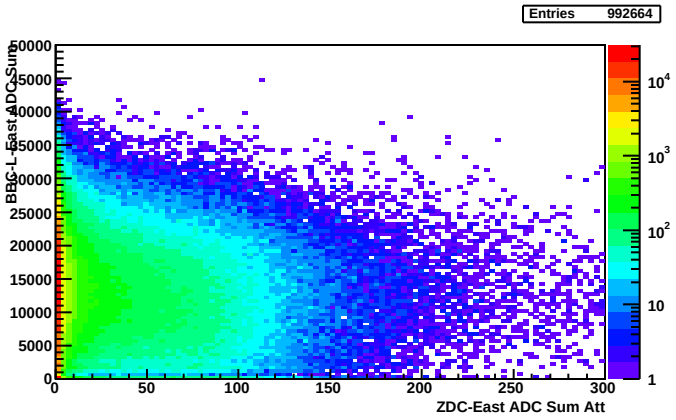

Entries 992664
TOF Mult
BBC-S-West ADC Sum

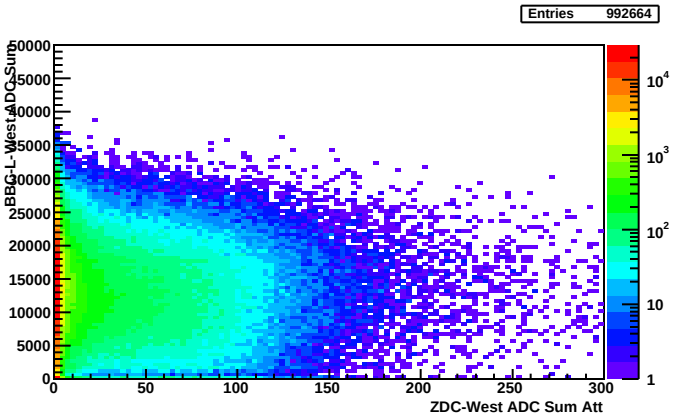

Entries 992664
TOF Mult
ZDC-East ADC Sum Att

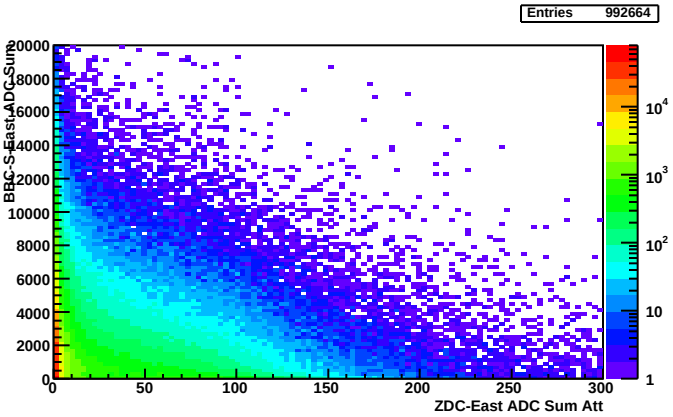

Entries 992664
TOF Mult
ZDC-West ADC Sum Att

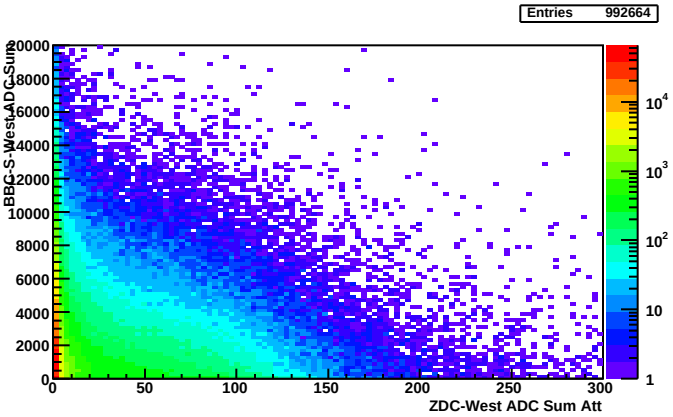

Entries 992664
BBC-L-East ADC Sum
BBC-S-East ADC Sum

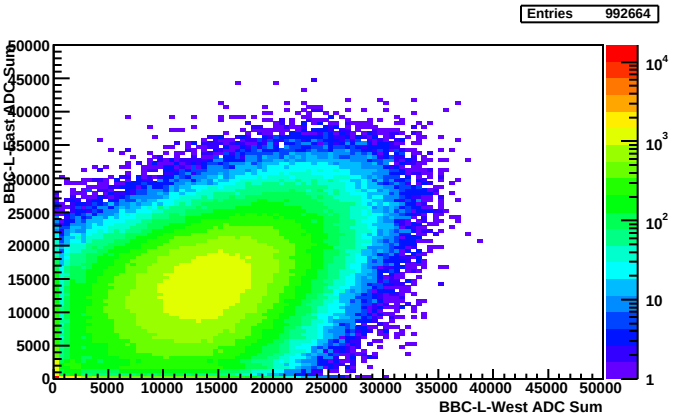

Entries 992664
BBC-L-West ADC Sum
BBC-S-West ADC Sum

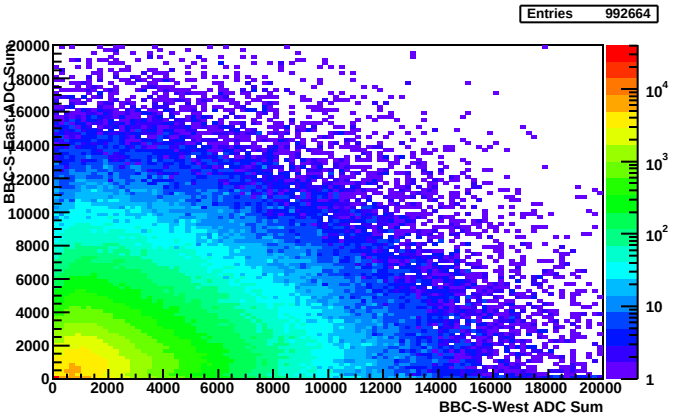

Entries 992664
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

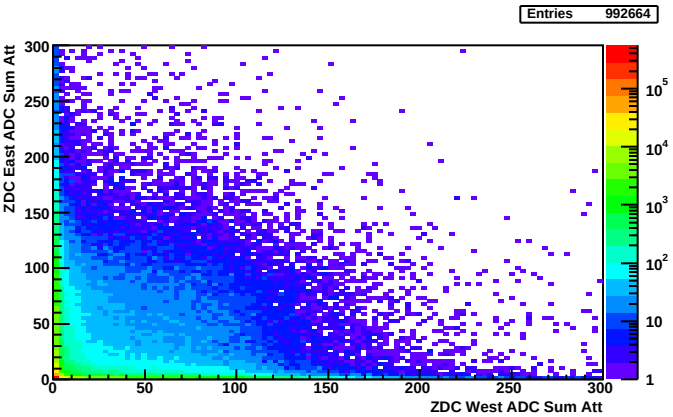

Entries 992664
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

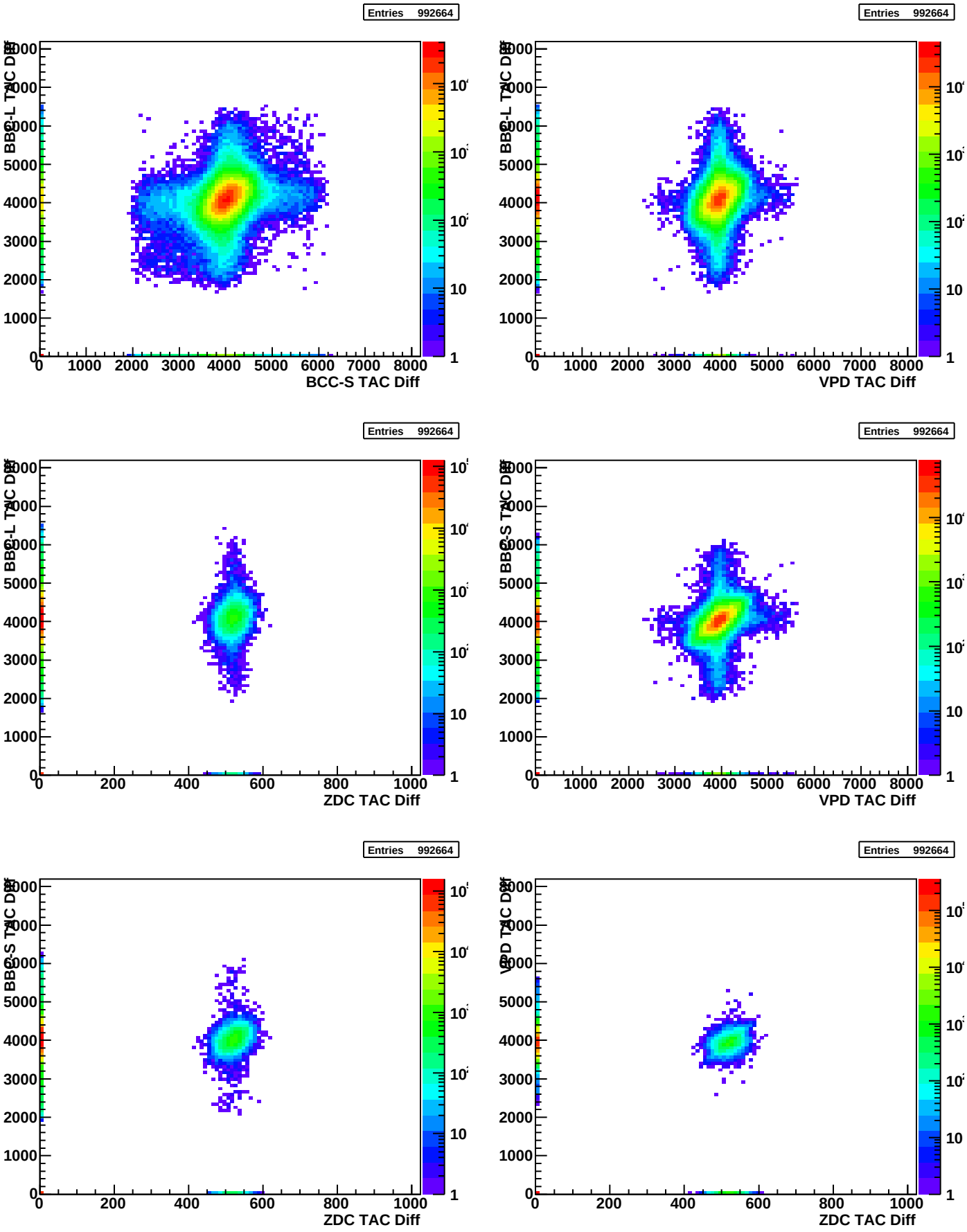

Entries 992664
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

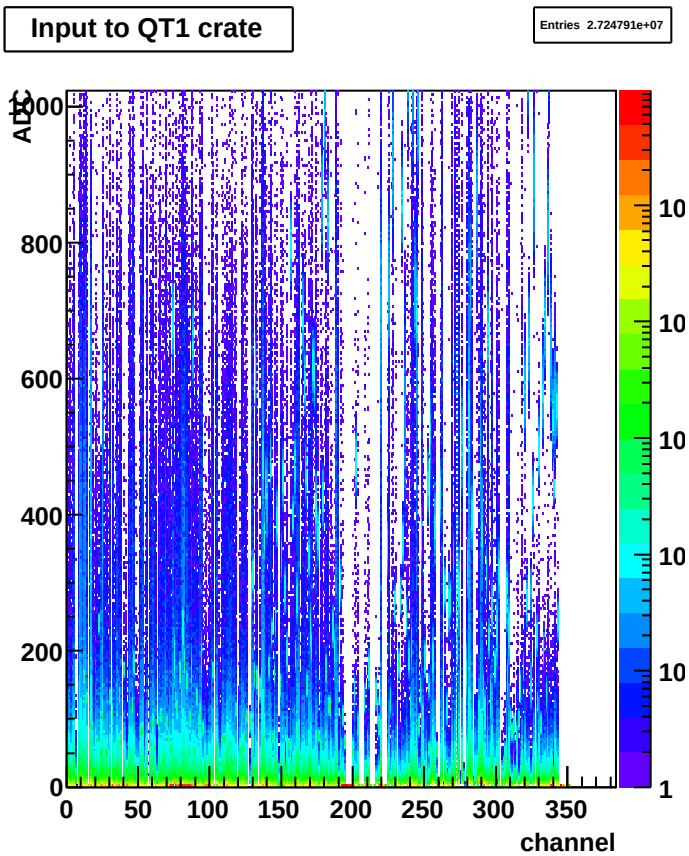

Entries 992664
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

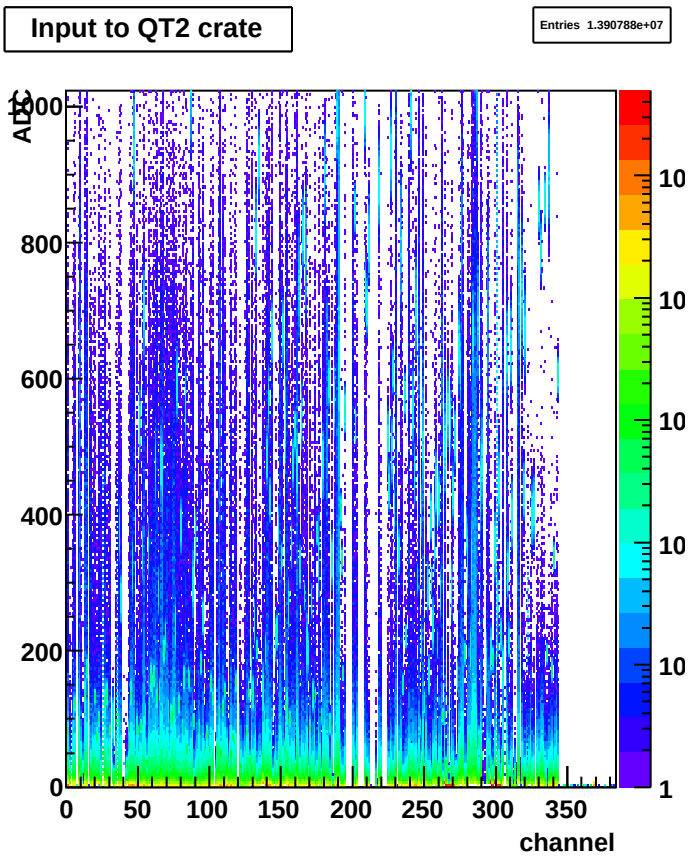

Entries 992664
BBC-L-East ADC Sum
BBC-L-West ADC Sum

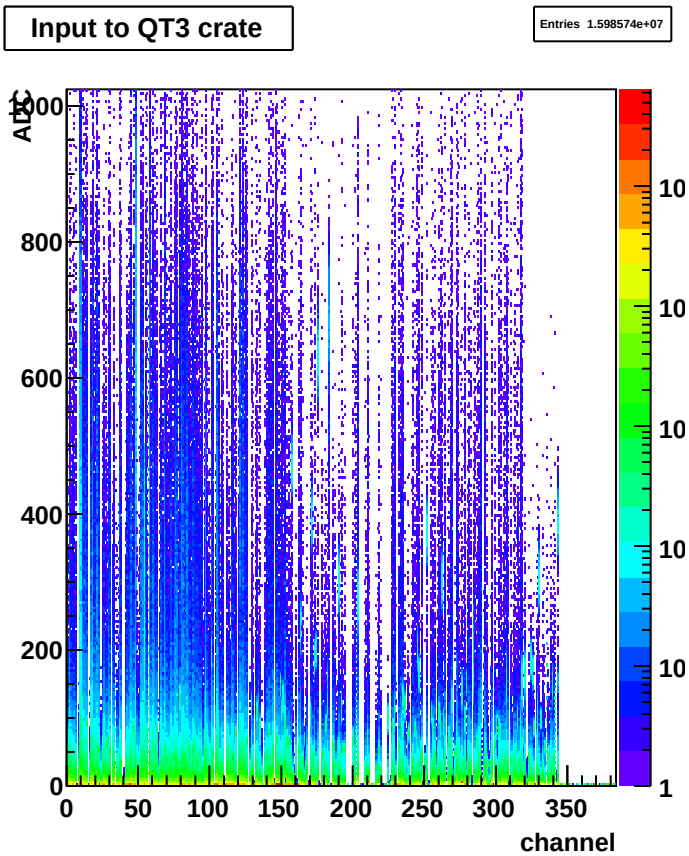

Entries 992664
BBC-S-East ADC Sum
BBC-S-West ADC Sum

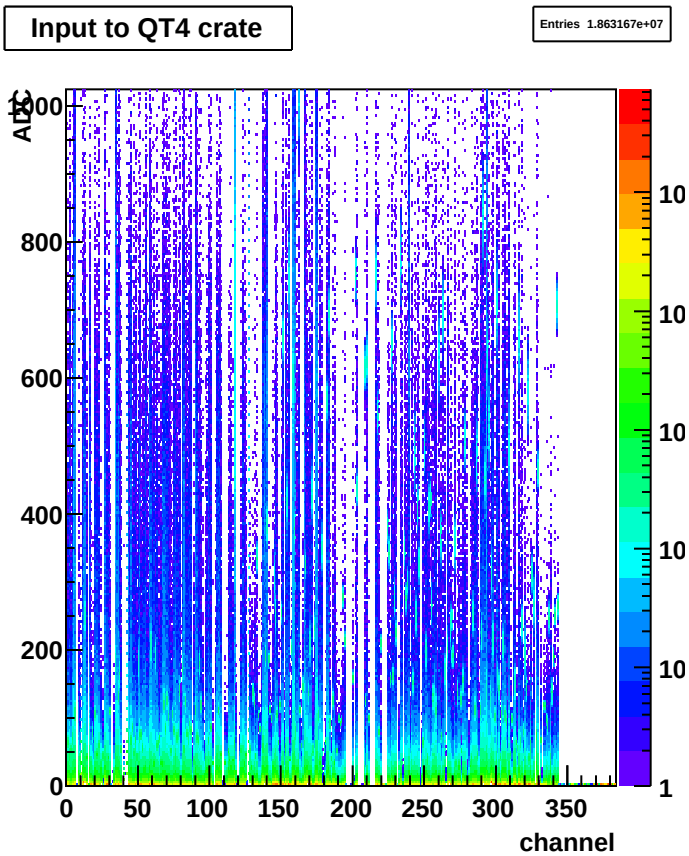

Entries 992664
ZDC East ADC Sum Att
ZDC West ADC Sum Att

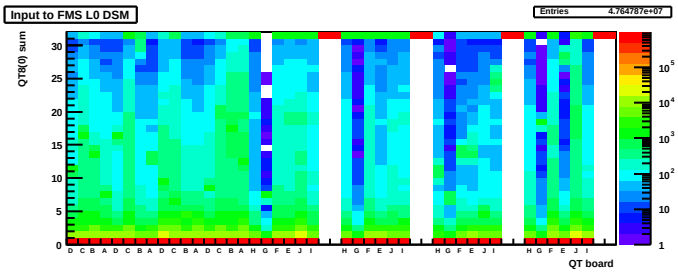

Entries 992664
BBC-L TAC Diff
BCC-S TAC Diff
Entries 992664
BBC-L TAC Diff
VPD TAC Diff
Entries 992664
BBC-L TAC Diff
ZDC TAC Diff
Entries 992664
BBC-S TAC Diff
VPD TAC Diff
Entries 992664
BBC-S TAC Diff
ZDC TAC Diff
Entries 992664
VPD TAC Diff
ZDC TAC Diff

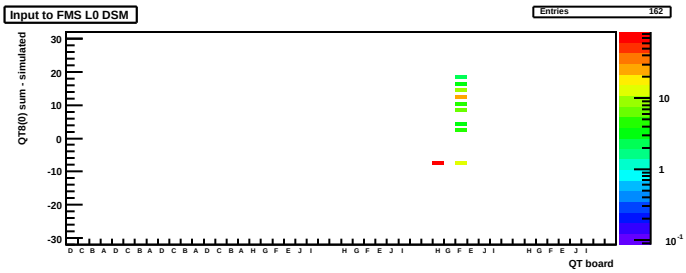

Input to QT1 crate
Entries 2.724791e+07
ADC
channel

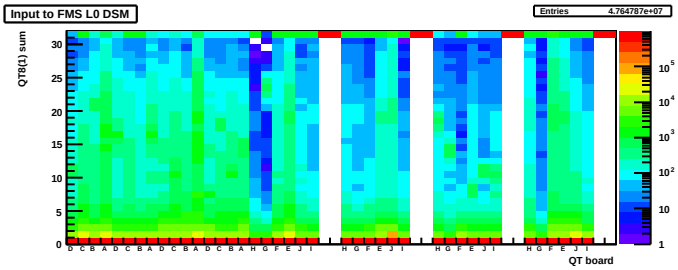

Input to QT2 crate
Entries 1.390788e+07
ADC
channel

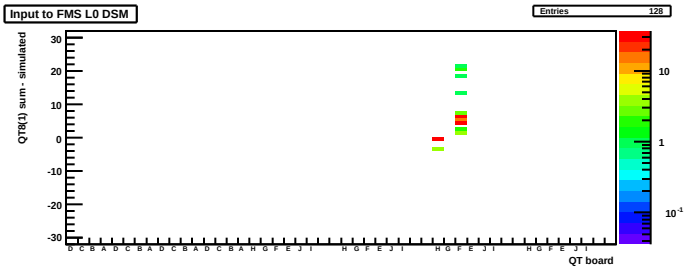

Input to QT3 crate
Entries 1.598574e+07
ADC
channel

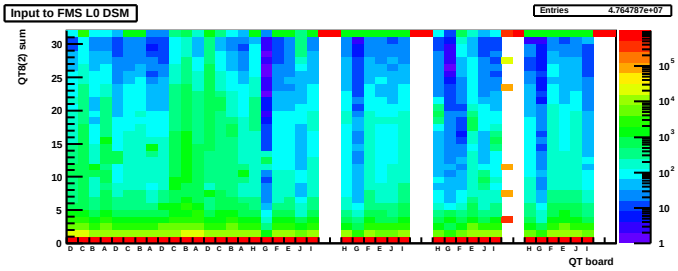

Input to QT4 crate
Entries 1.863167e+07
ADC
channel

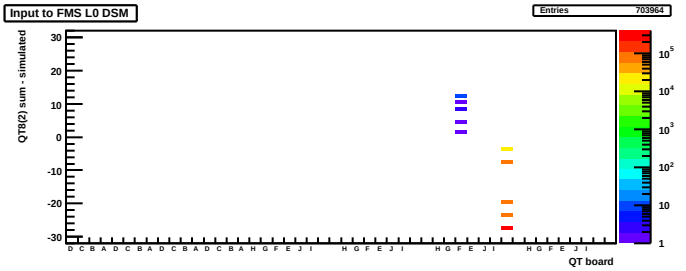

Input to FMS L0 DSM
Entries 4.764787e+07
QT8(0) sum
QT board

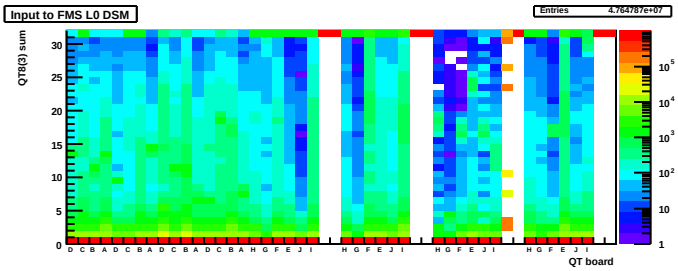

Input to FMS L0 DSM
Entries 162
QT8(0) sum - simulated
QT board

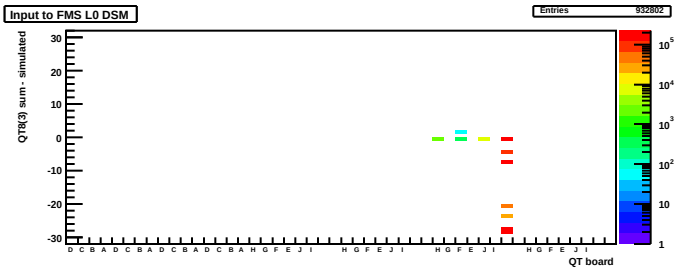

Input to FMS L0 DSM
Entries 4.764787e+07
QT8(1) sum
QT board

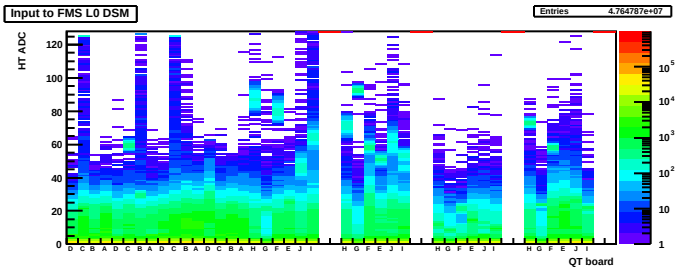

Input to FMS L0 DSM
Entries 128
QT8(1) sum - simulated
QT board

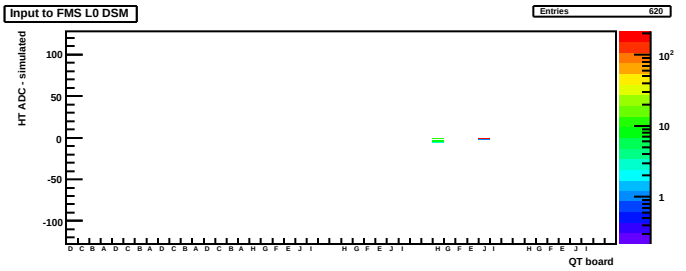

Input to FMS L0 DSM
Entries 4.764787e+07
QT8(2) sum
QT board

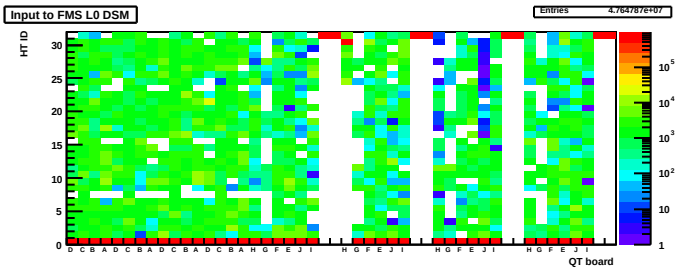

Input to FMS L0 DSM
Entries 703964
QT8(2) sum - simulated
QT board

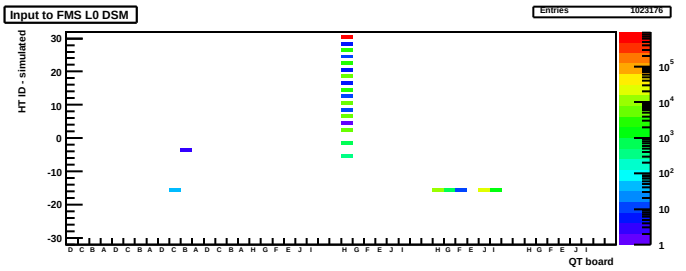

Input to FMS L0 DSM
Entries 4.764787e+07
QT8(3) sum
QT board

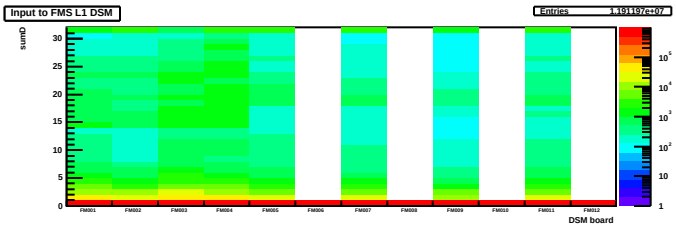

Input to FMS L0 DSM
Entries 932802
QT8(3) sum - simulated
QT board

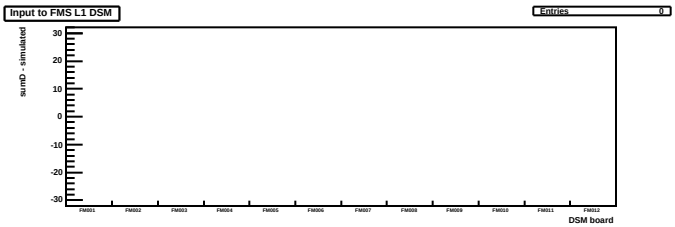

Input to FMS L0 DSM
Entries 4.764787e+07
HT ADC
QT board

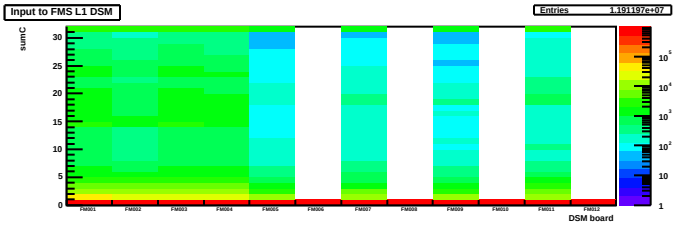

Input to FMS L0 DSM
Entries 620
HT ADC - simulated
QT board

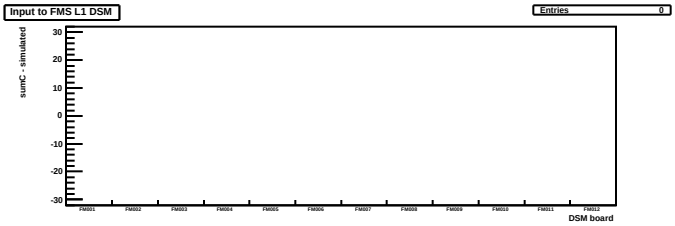

Input to FMS L0 DSM
Entries 4.764787e+07
HT ID
QT board

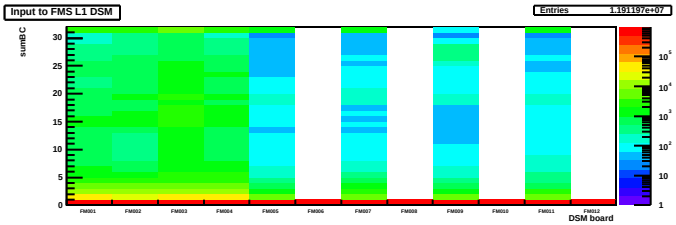

Input to FMS L0 DSM
Entries 1023176
HT ID - simulated
QT board

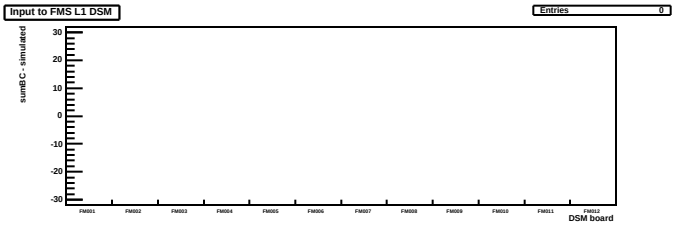

Input to FMS L1 DSM
Entries 1.191197e+07
sumD
DSM board

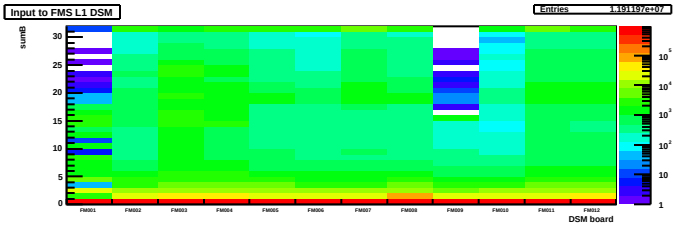

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

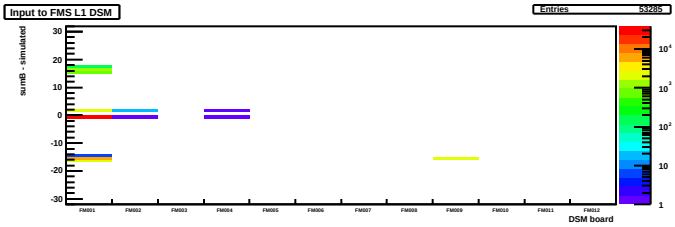

Input to FMS L1 DSM
Entries 1.191197e+07
sumC
DSM board

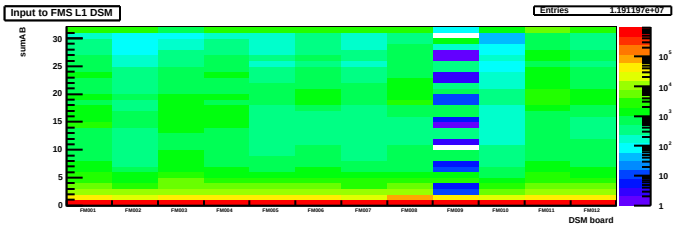

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

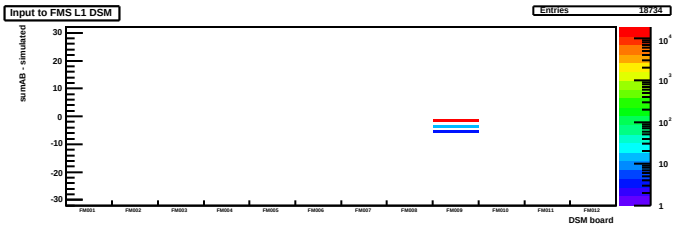

Input to FMS L1 DSM
Entries 1.191197e+07
sumBC
DSM board

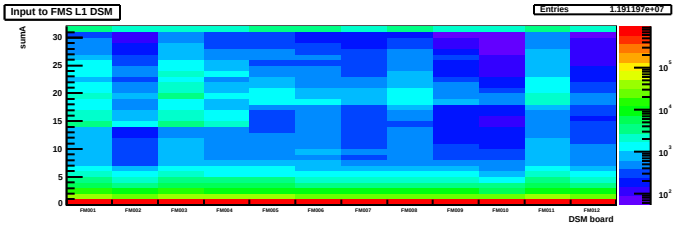

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

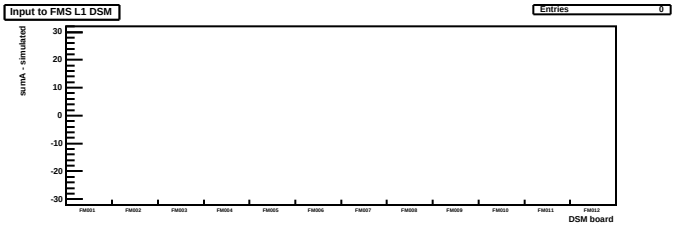

Input to FMS L1 DSM
Entries 1.191197e+07
sumB
DSM board

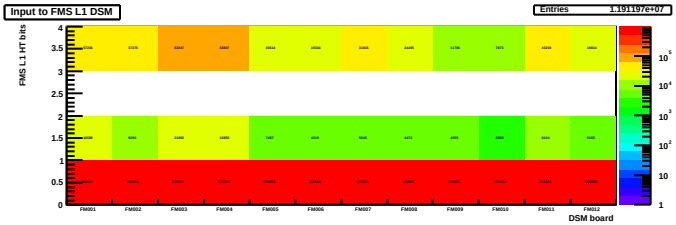

Input to FMS L1 DSM
Entries 53285
sumB - simulated
DSM board

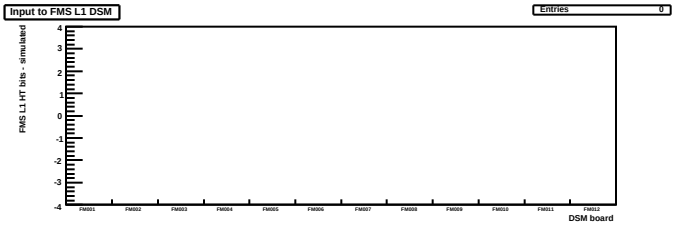

Input to FMS L1 DSM
Entries 1.191197e+07
sumAB
DSM board

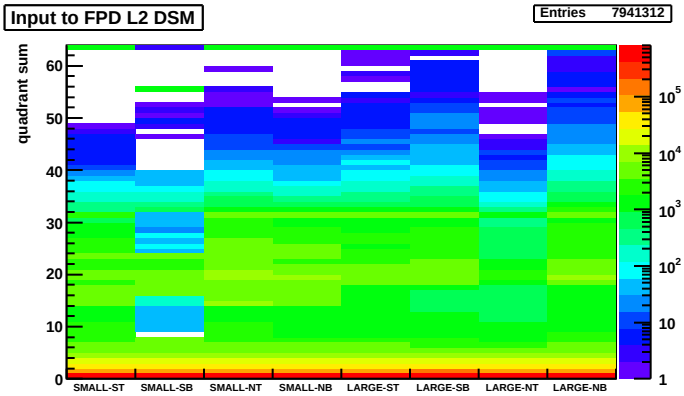

Input to FMS L1 DSM
Entries 18734
sumAB - simulated
DSM board

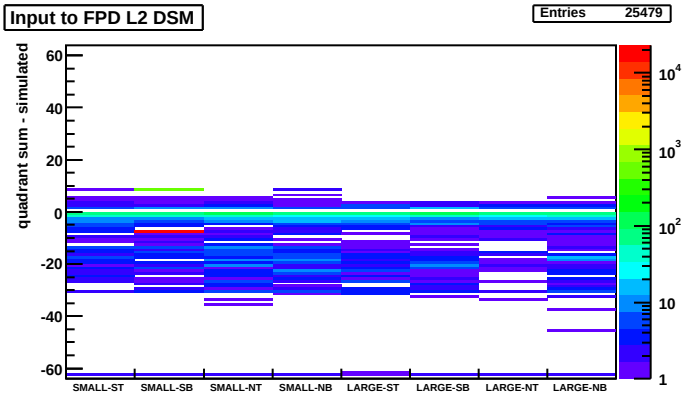

Input to FMS L1 DSM
Entries 1.191197e+07
sumA
DSM board

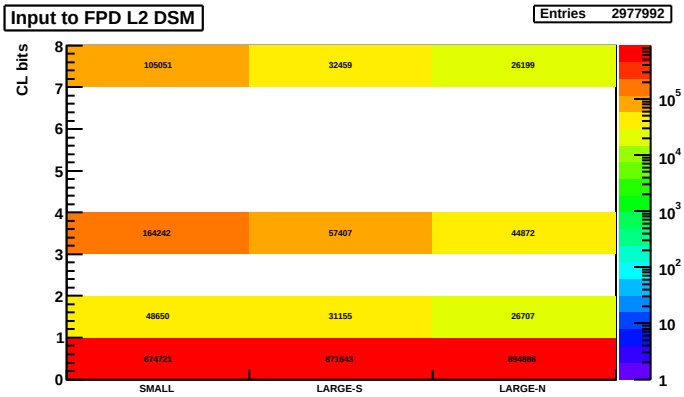

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

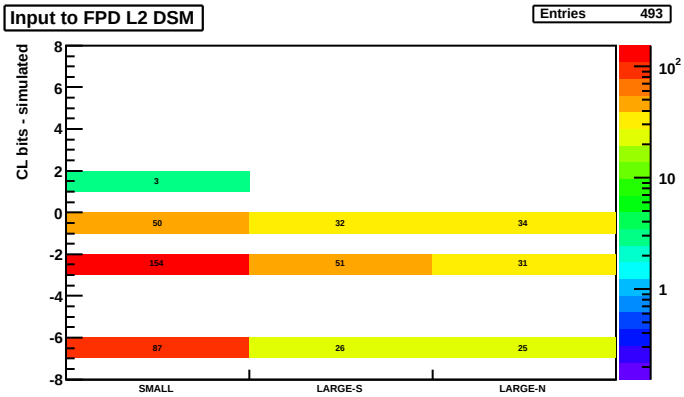

Input to FMS L1 DSM
Entries 1.191197e+07
FMS L1 HT bits
DSM board

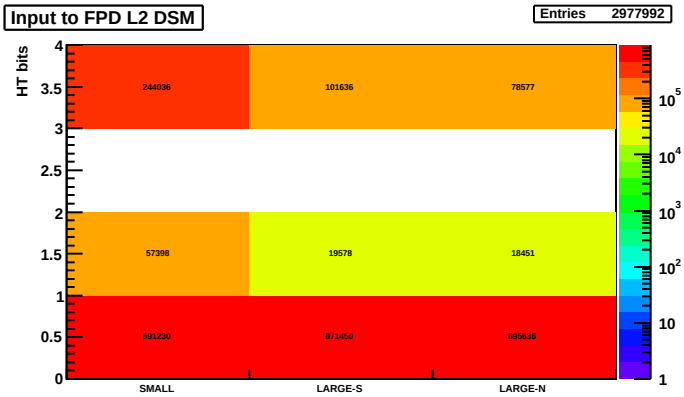

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

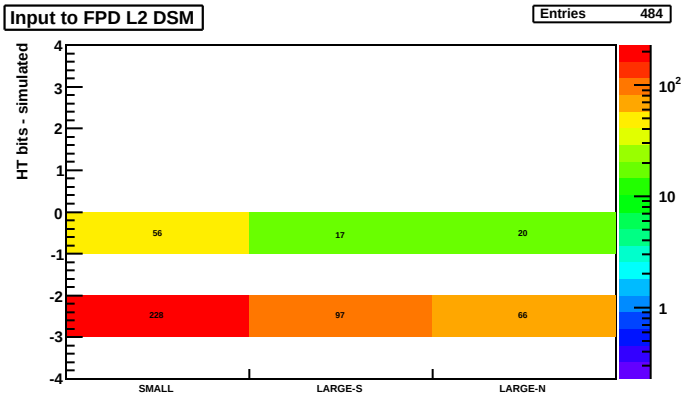

Input to FPD L2 DSM
Entries 7941312
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

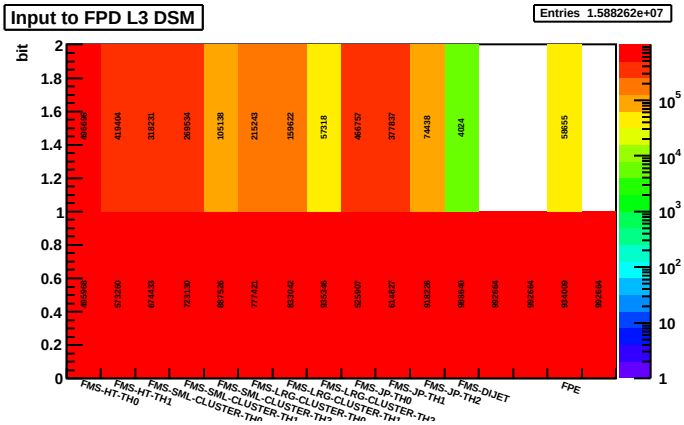

Input to FPD L2 DSM
Entries 25479
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

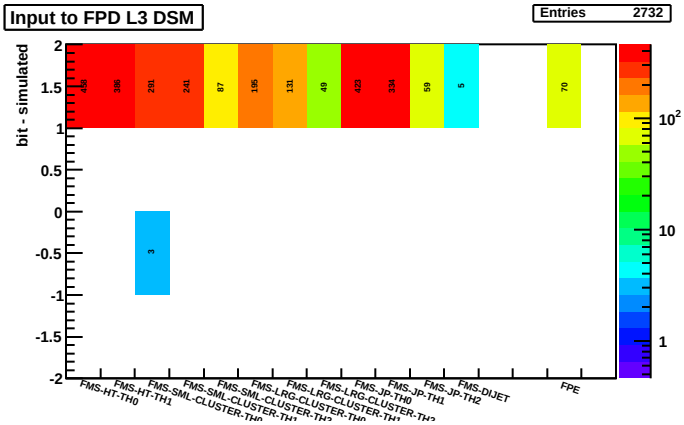

Input to FPD L2 DSM
Entries 2977992
CL bits
105051
32459
26199
164242
57407
44872
48650
31155
26707
674721
871643
894886
SMALL
LARGE-S
LARGE-N

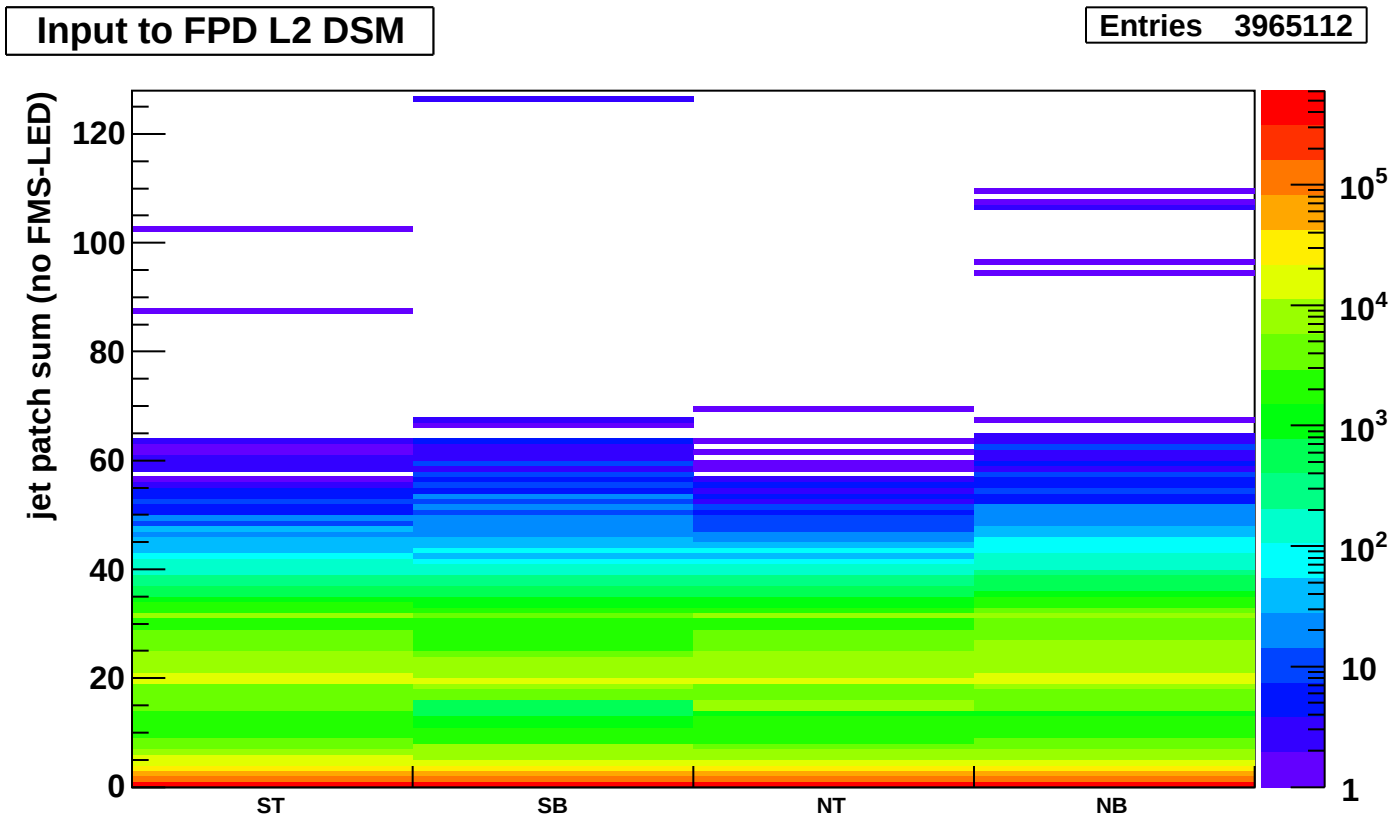

Input to FPD L2 DSM
Entries 493
CL bits - simulated
3
50
32
34
154
51
31
87
26
25
SMALL
LARGE-S
LARGE-N

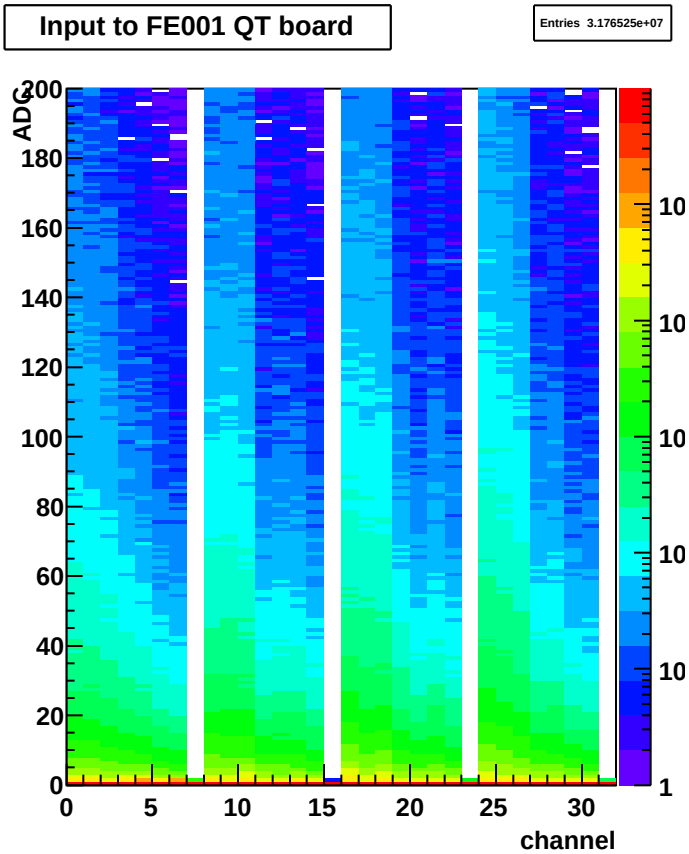

Input to FPD L2 DSM
Entries 2977992
HT bits
244036
101636
78577
57398
19578
18451
691230
871450
895636
SMALL
LARGE-S
LARGE-N

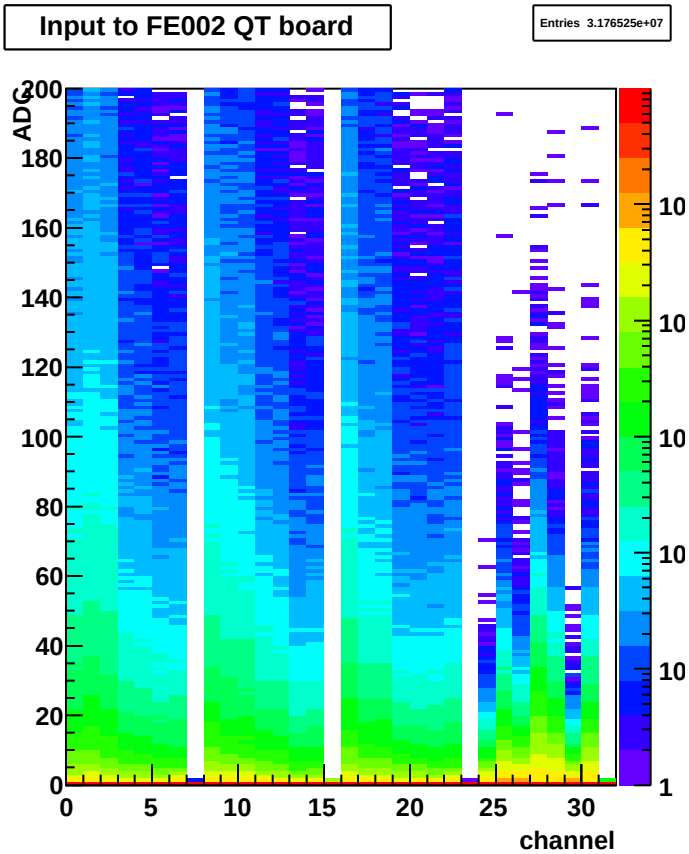

Input to FPD L2 DSM
Entries 484
HT bits - simulated
56
17
20
228
97
66
SMALL
LARGE-S
LARGE-N

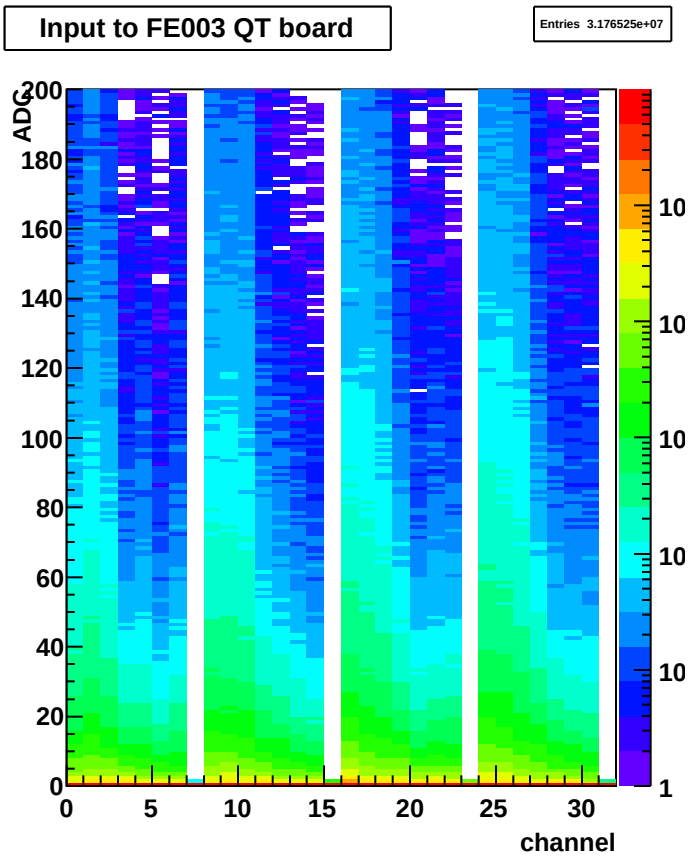

Input to FPD L3 DSM
Entries 1.588262e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

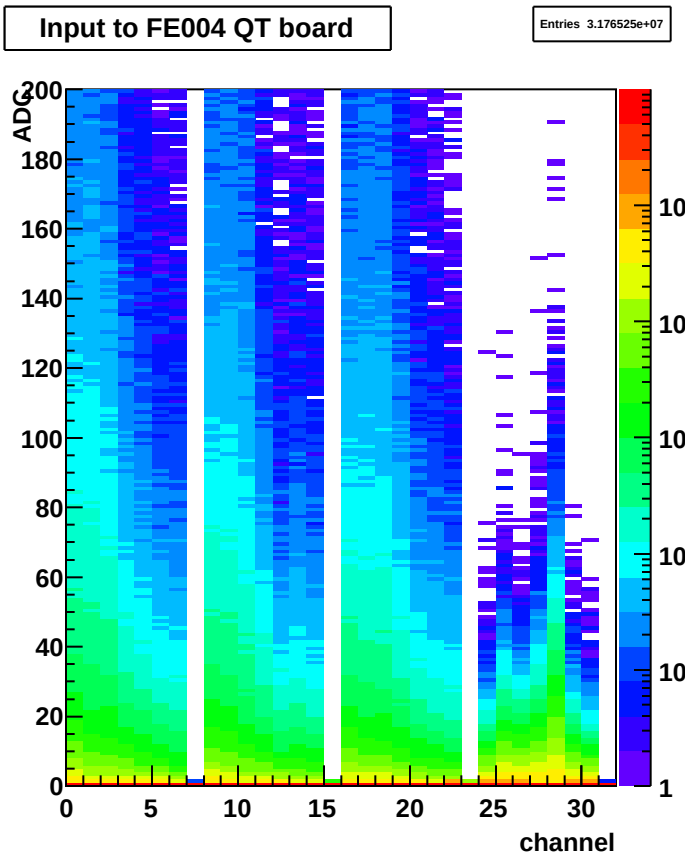

Input to FPD L3 DSM
Entries 2732
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

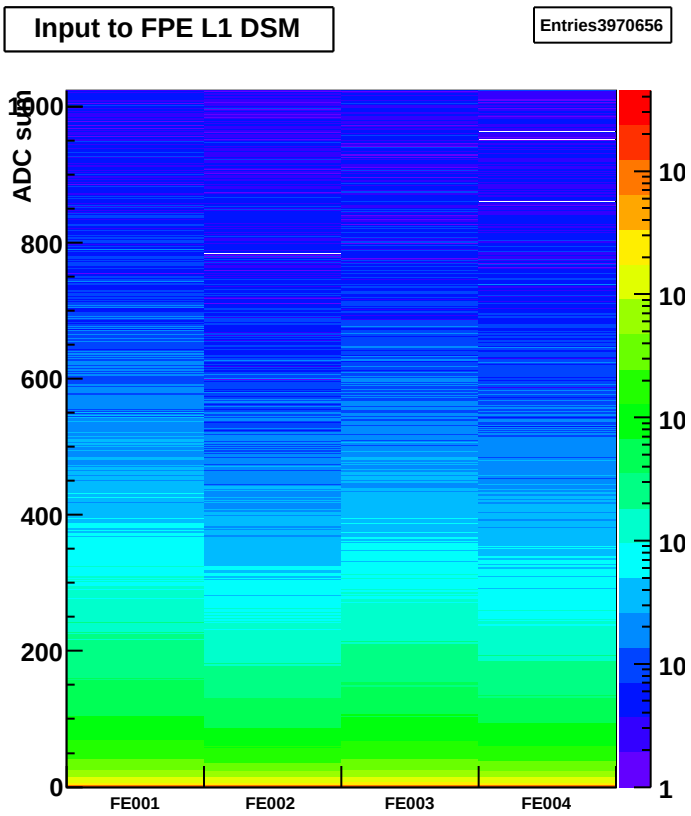

Input to FPD L2 DSM
Entries 3965112
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

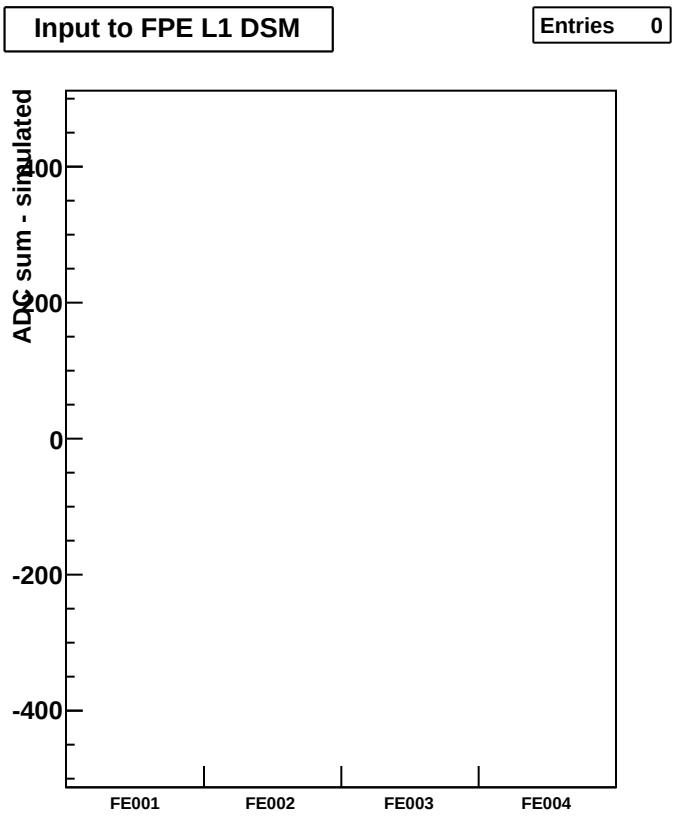

Input to FE001 QT board
Entries 3.176525e+07
ADC
channel

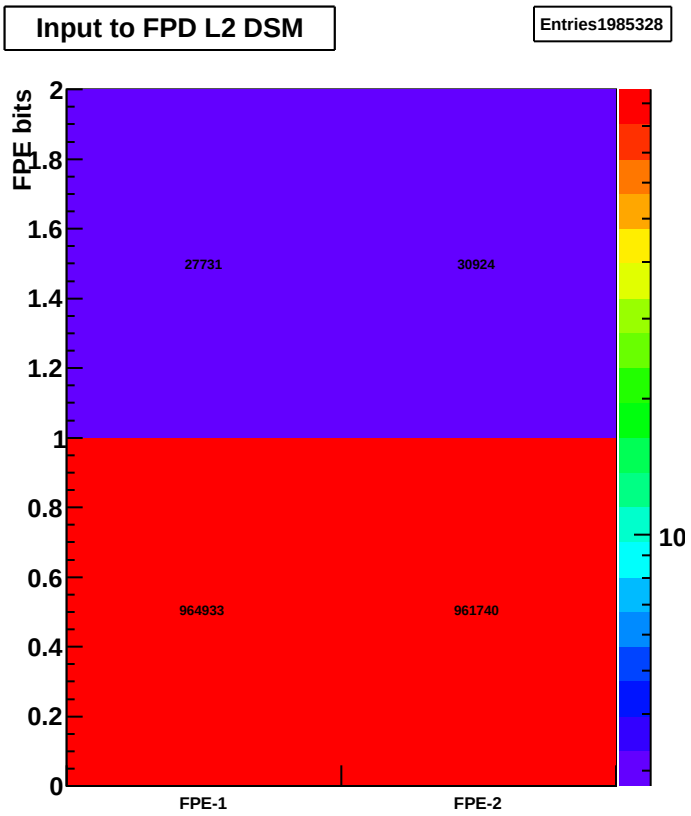

Input to FE002 QT board
Entries 3.176525e+07
ADC
channel

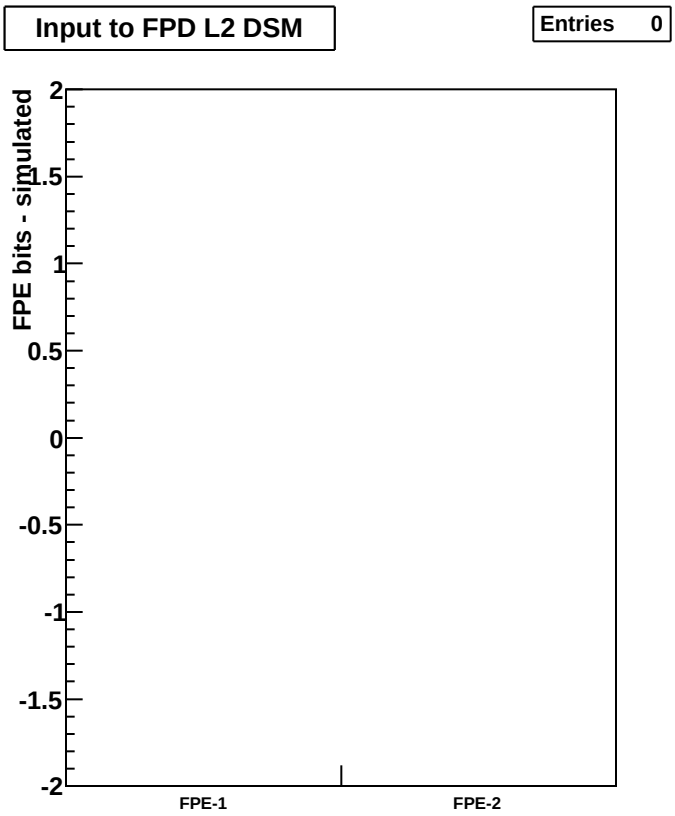

Input to FE003 QT board
Entries 3.176525e+07
ADC
channel


Input to FE004 QT board
Entries 3.176525e+07
ADC
channel


Input to FPE L1 DSM
Entries3970656
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
Entries1985328
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
27731
30924
964933
961740
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