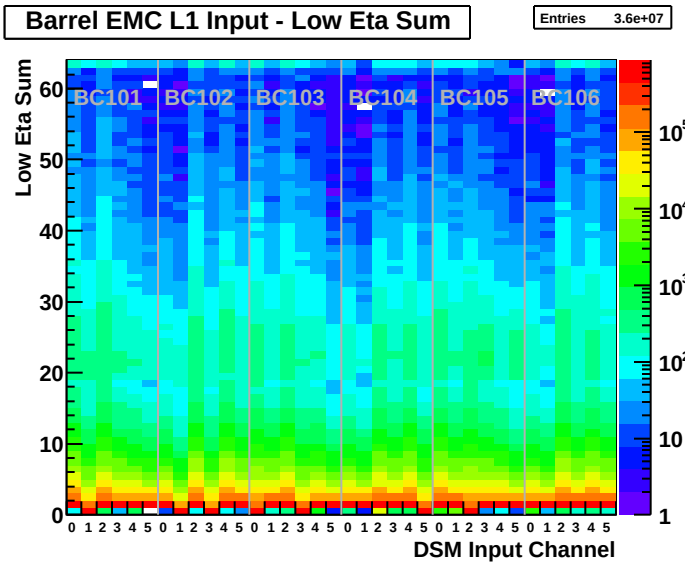
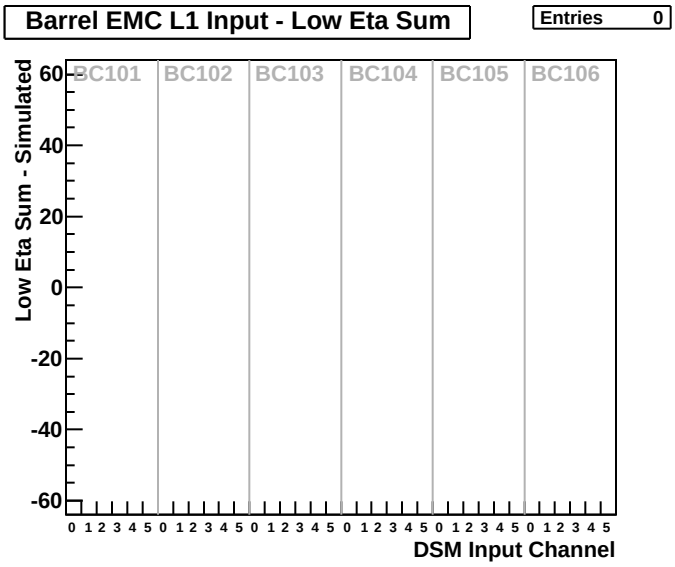
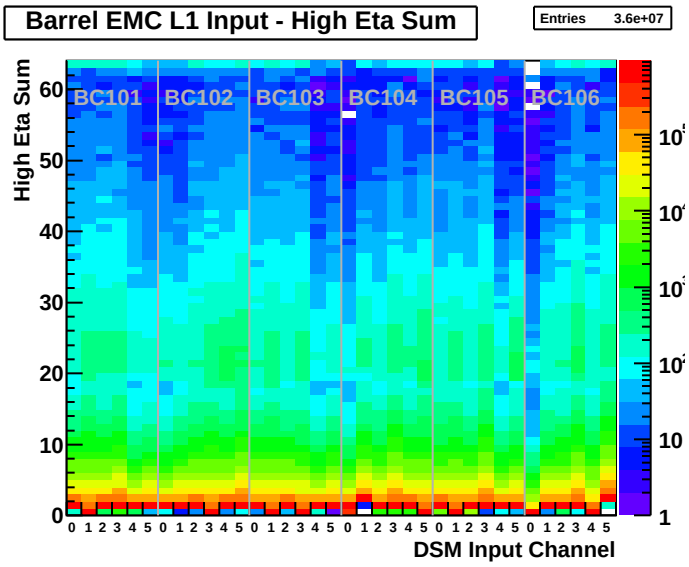
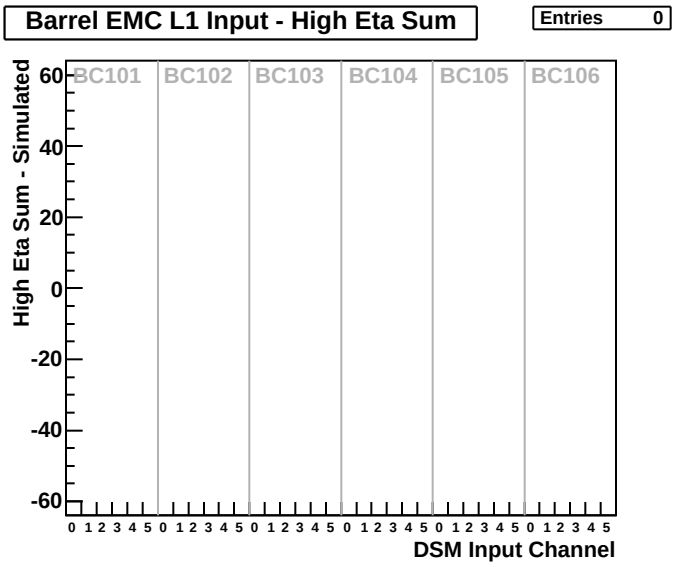
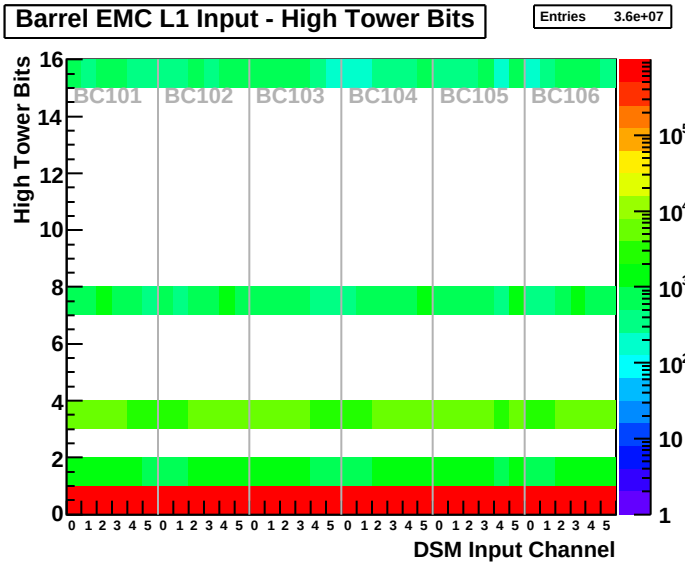
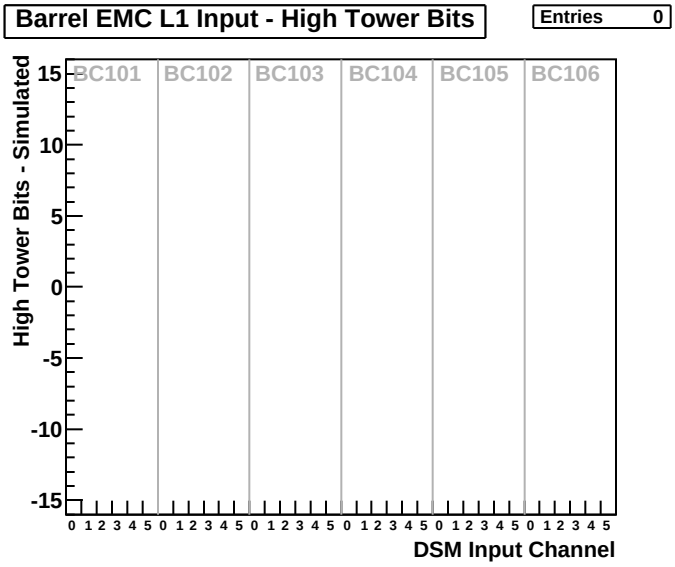

Barrel EMC L1 Input - Low Eta Sum
Entries 3.6e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

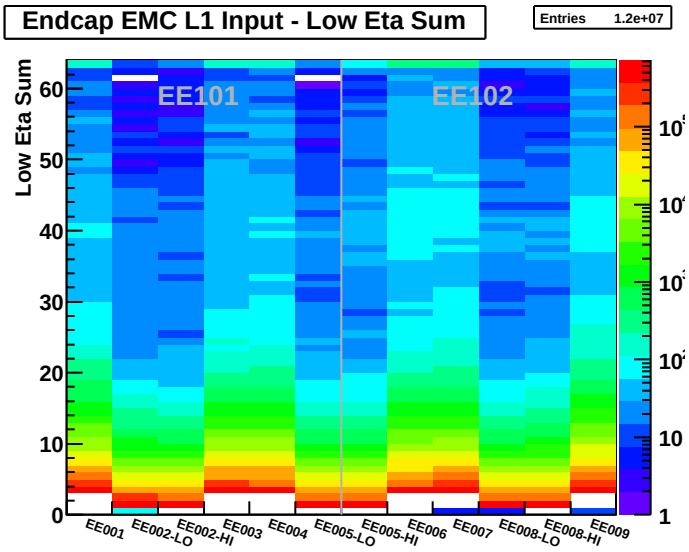

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

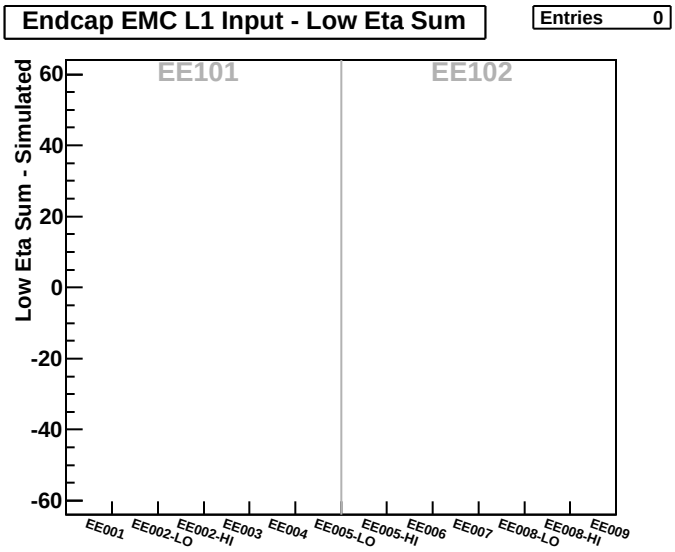

Barrel EMC L1 Input - High Eta Sum
Entries 3.6e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

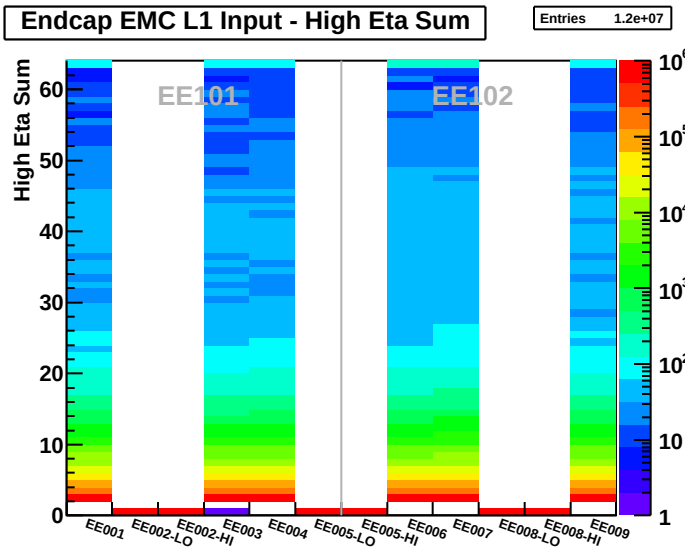

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

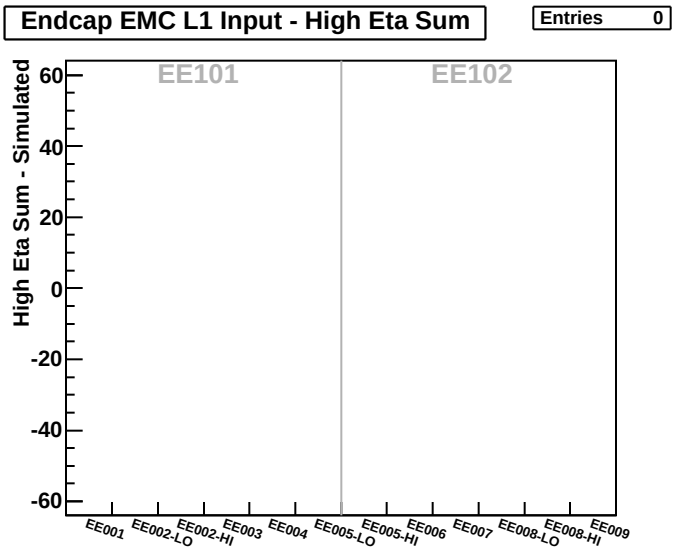

Barrel EMC L1 Input - High Tower Bits
Entries 3.6e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

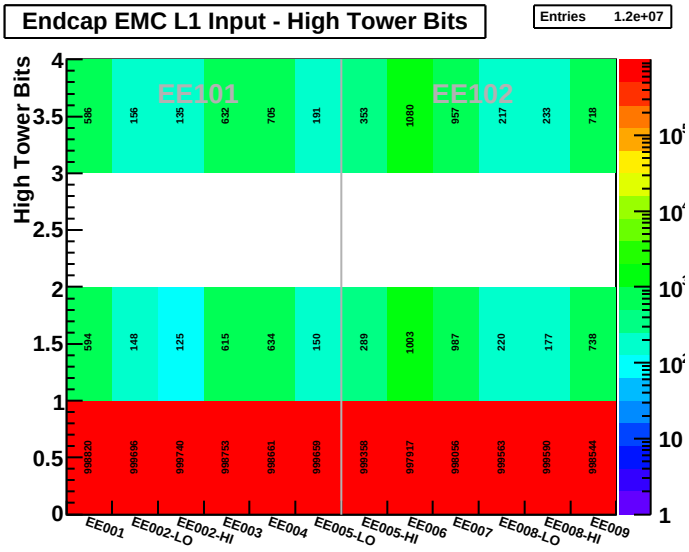

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

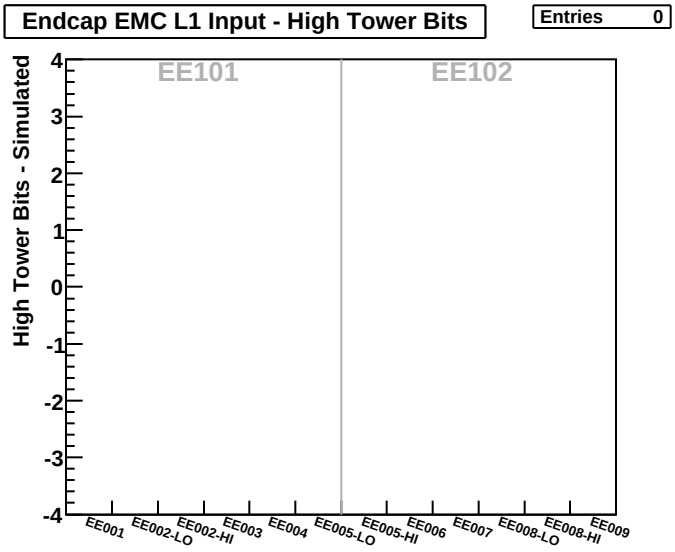

Endcap EMC L1 Input - Low Eta Sum
Entries 1.2e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

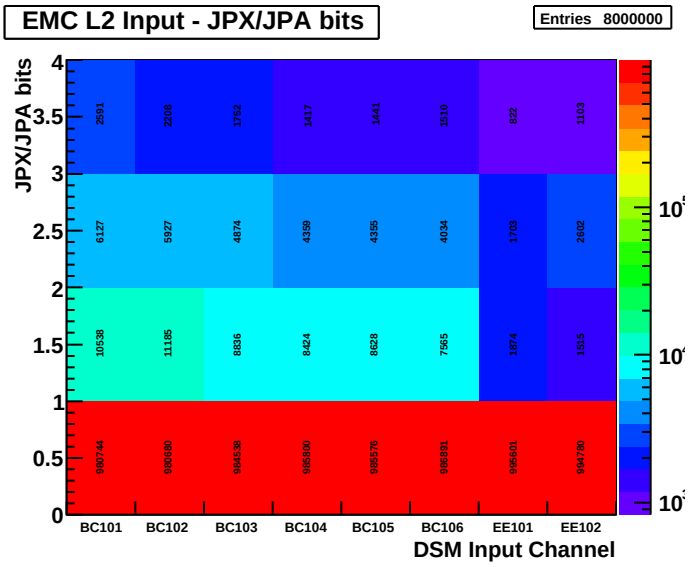

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

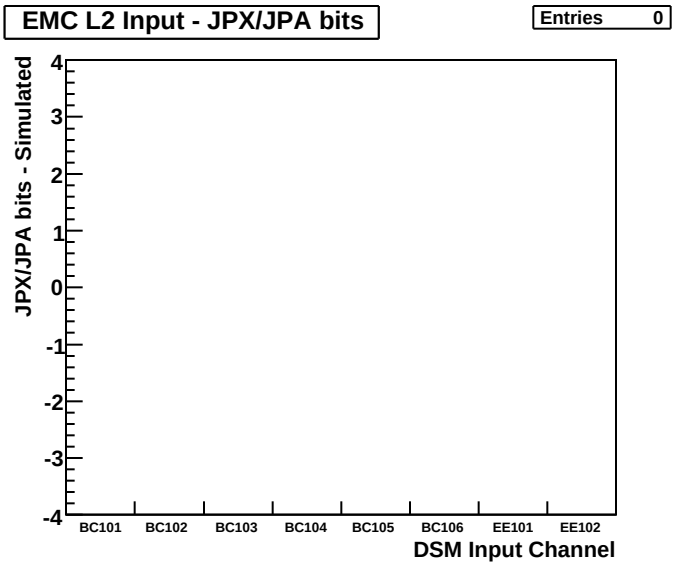

Endcap EMC L1 Input - High Eta Sum
Entries 1.2e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

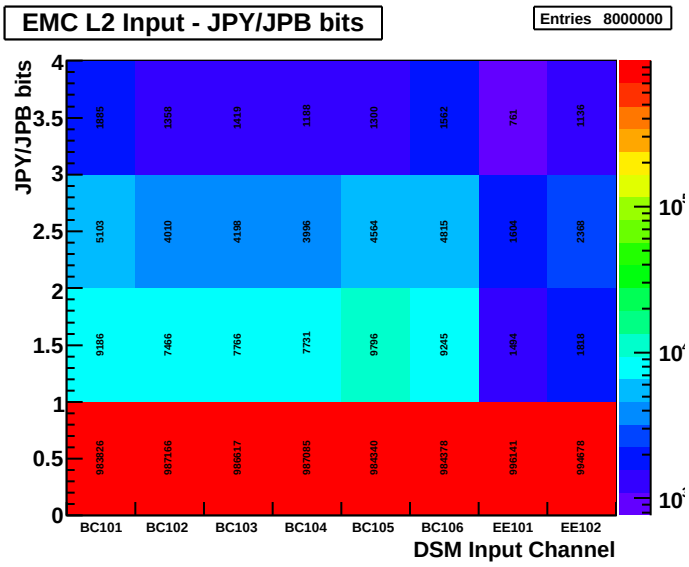

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

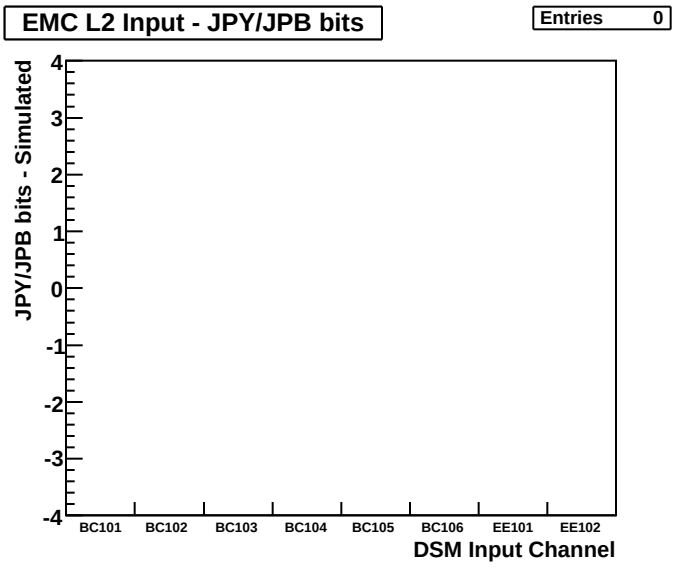

Endcap EMC L1 Input - High Tower Bits
Entries 1.2e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

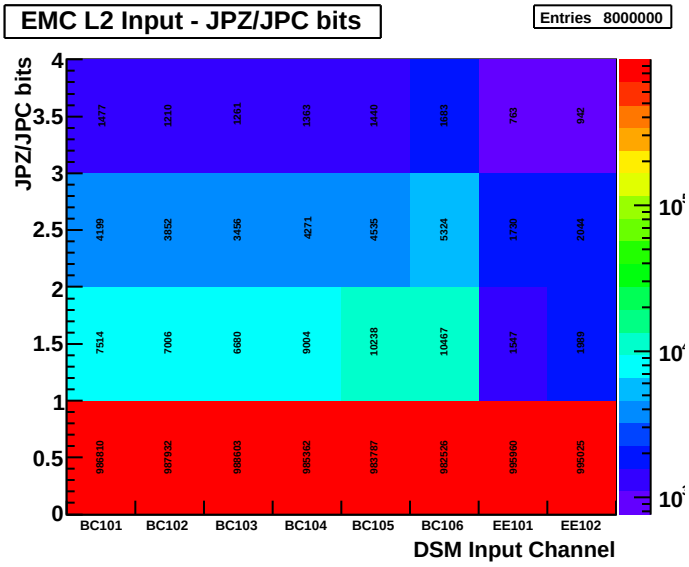

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

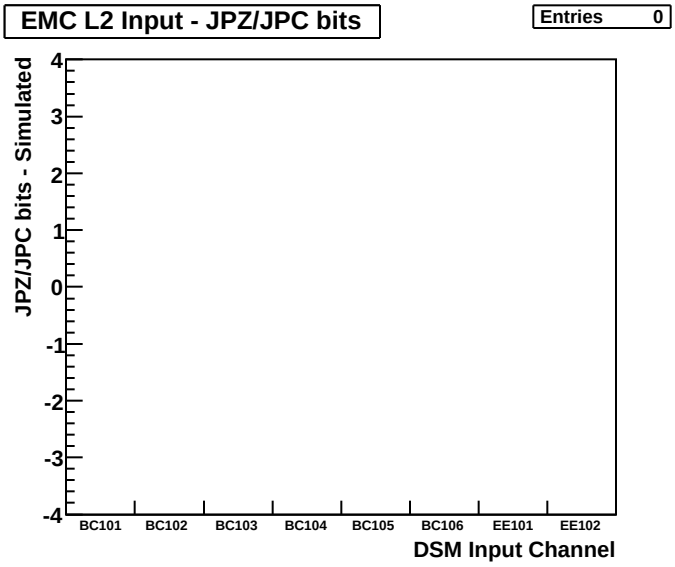

EMC L2 Input - JPX/JPA bits
Entries 8000000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2591 2208 1752 1417 1441 1510 822 1103
6127 5927 4874 4359 4355 4034 1703 2602
10538 11185 8836 8424 8628 7565 1974 1515
980744 980680 984538 985800 985576 986891 995601 994700

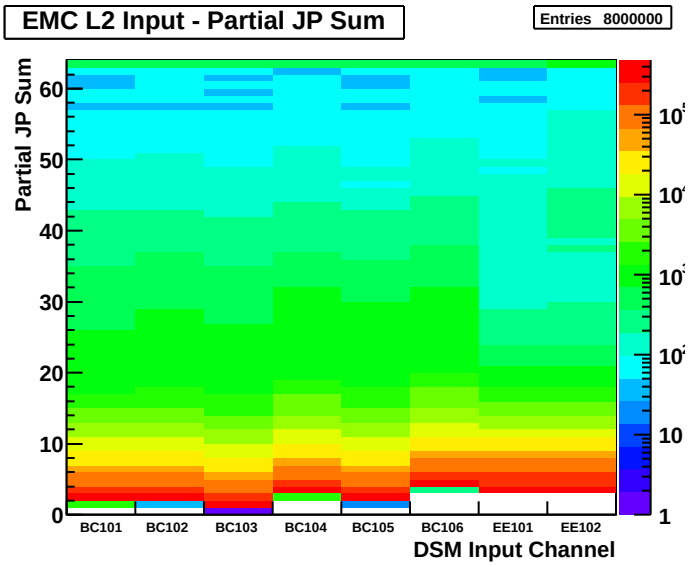

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

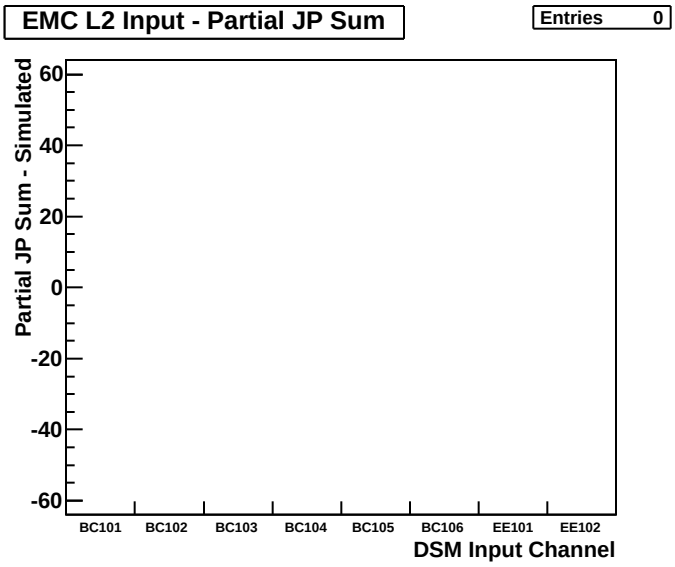

EMC L2 Input - JPY/JPB bits
Entries 8000000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1885 1358 1419 1188 1300 1562 761 1136
5103 4010 4198 3996 4564 4815 1604 2368
9186 7466 7766 7731 9796 9245 1494 1818
983826 987166 986617 987085 984340 984378 996141 994678

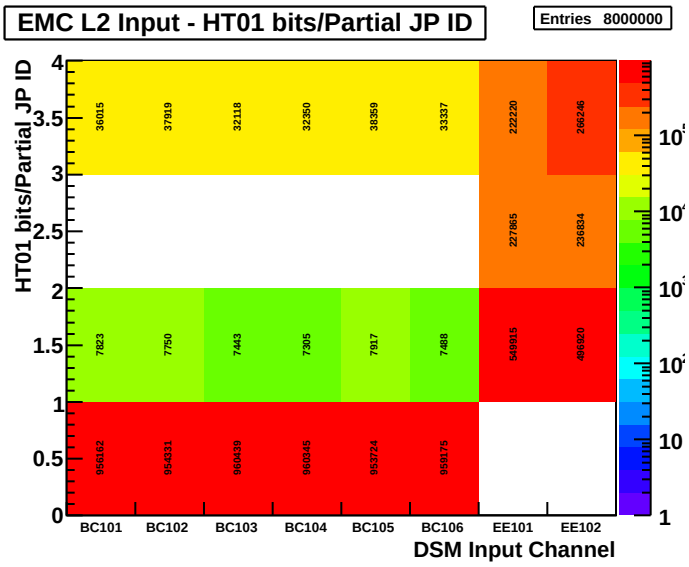

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

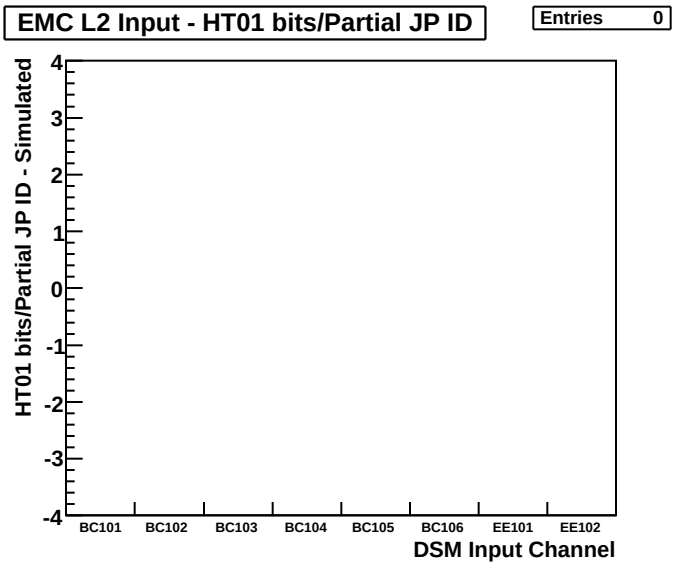

EMC L2 Input - JPZ/JPC bits
Entries 8000000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1477 1210 1261 1363 1440 1683 763 942
4199 3652 3456 4271 4535 5324 1730 2044
7514 7006 6680 9004 10238 10467 1547 1989
986810 987332 988603 985362 983787 982526 995960 995025

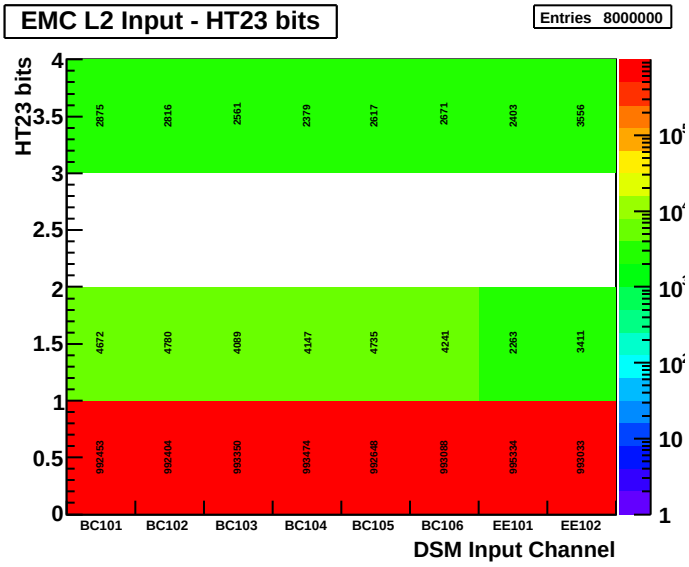

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

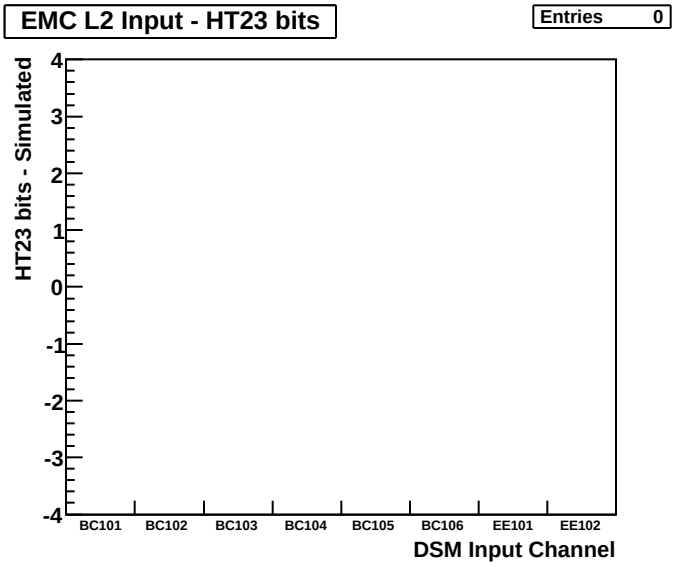

EMC L2 Input - Partial JP Sum
Entries 8000000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

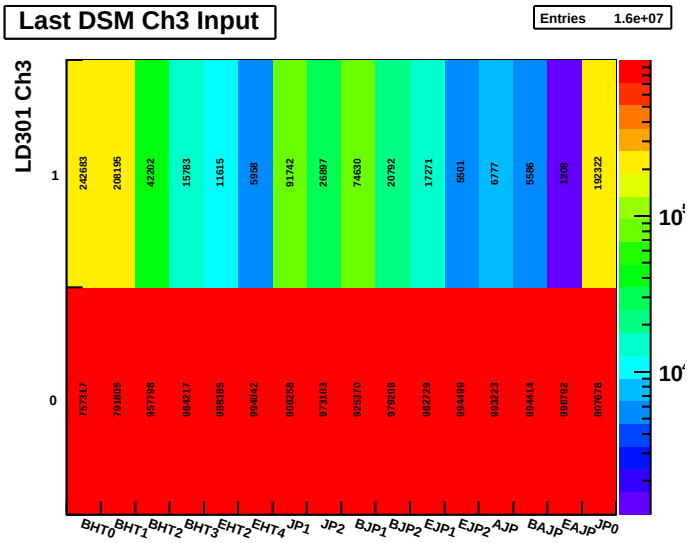

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

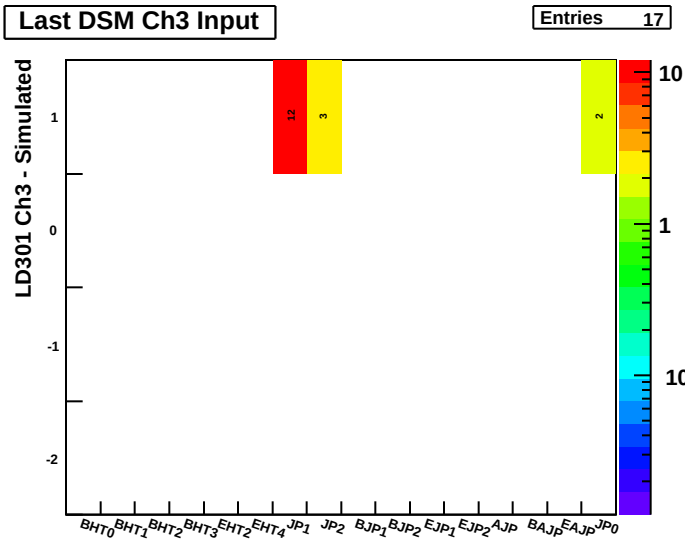

EMC L2 Input - HT01 bits/Partial JP ID
Entries 8000000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

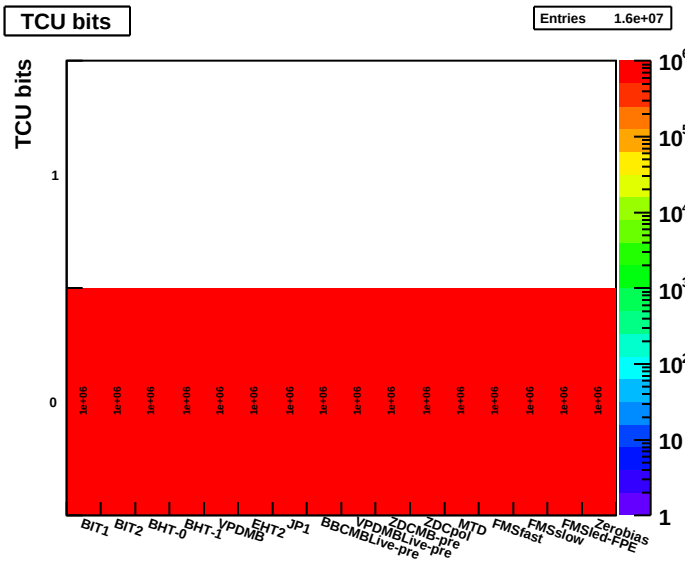

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

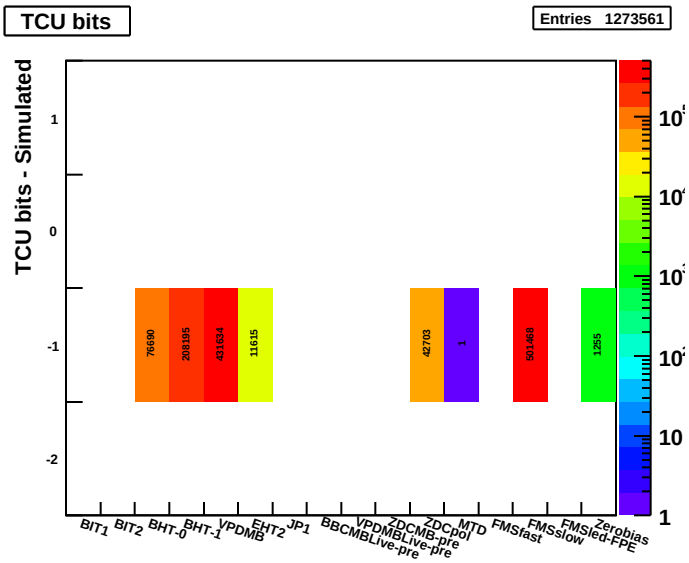

EMC L2 Input - HT23 bits
Entries 8000000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

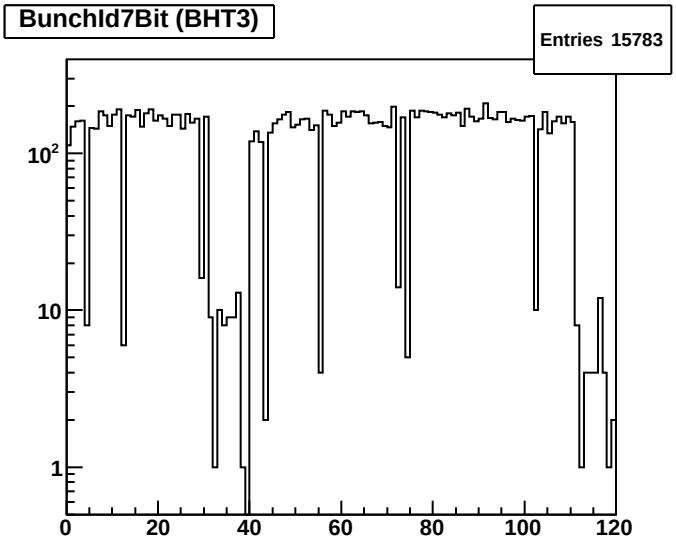

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

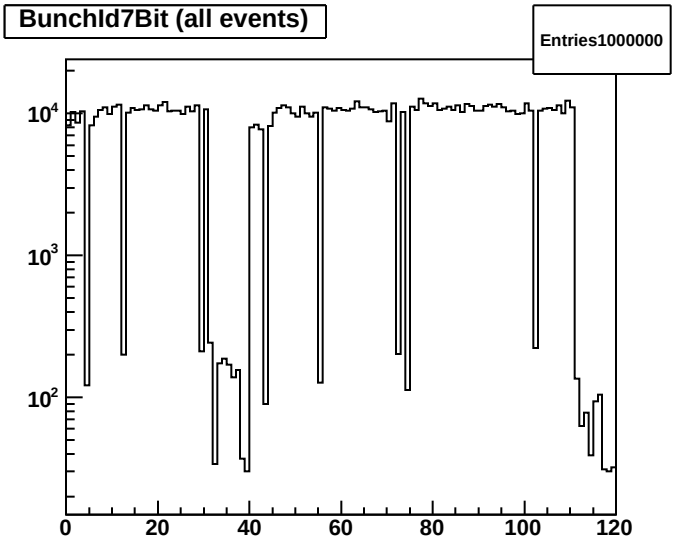

Last DSM Ch3 Input
Entries 1.6e+07
LD301 Ch3
242683 208195 42202 15783 11615 5958 91742 26897 74630 20792 17271 5501 6777 5586 1208 192322
757317 791805 957798 984217 988385 994042 908258 973103 925370 978208 982729 994499 993223 994414 998792 807678
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

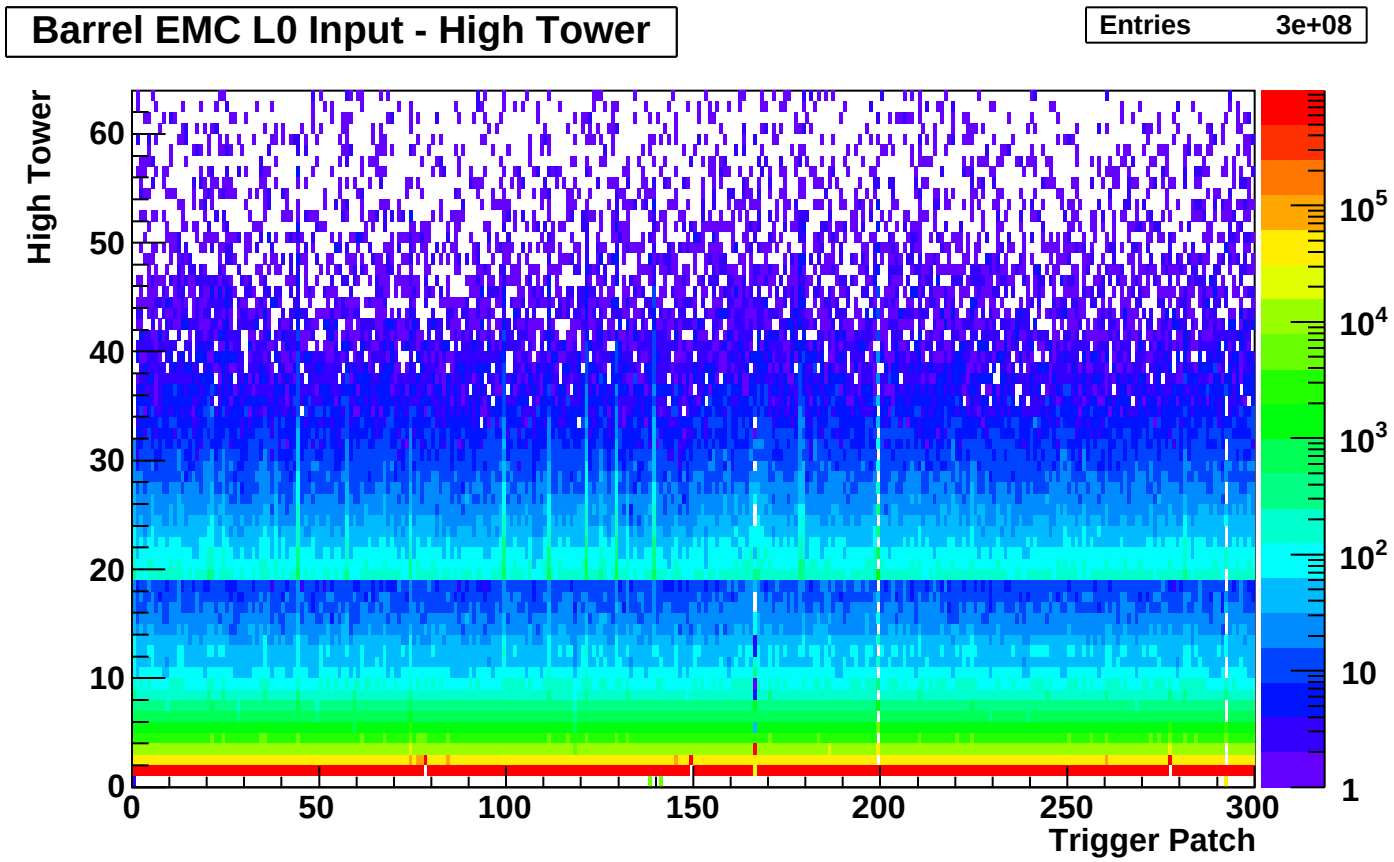

Last DSM Ch3 Input
Entries 17
LD301 Ch3 - Simulated
12 3 2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

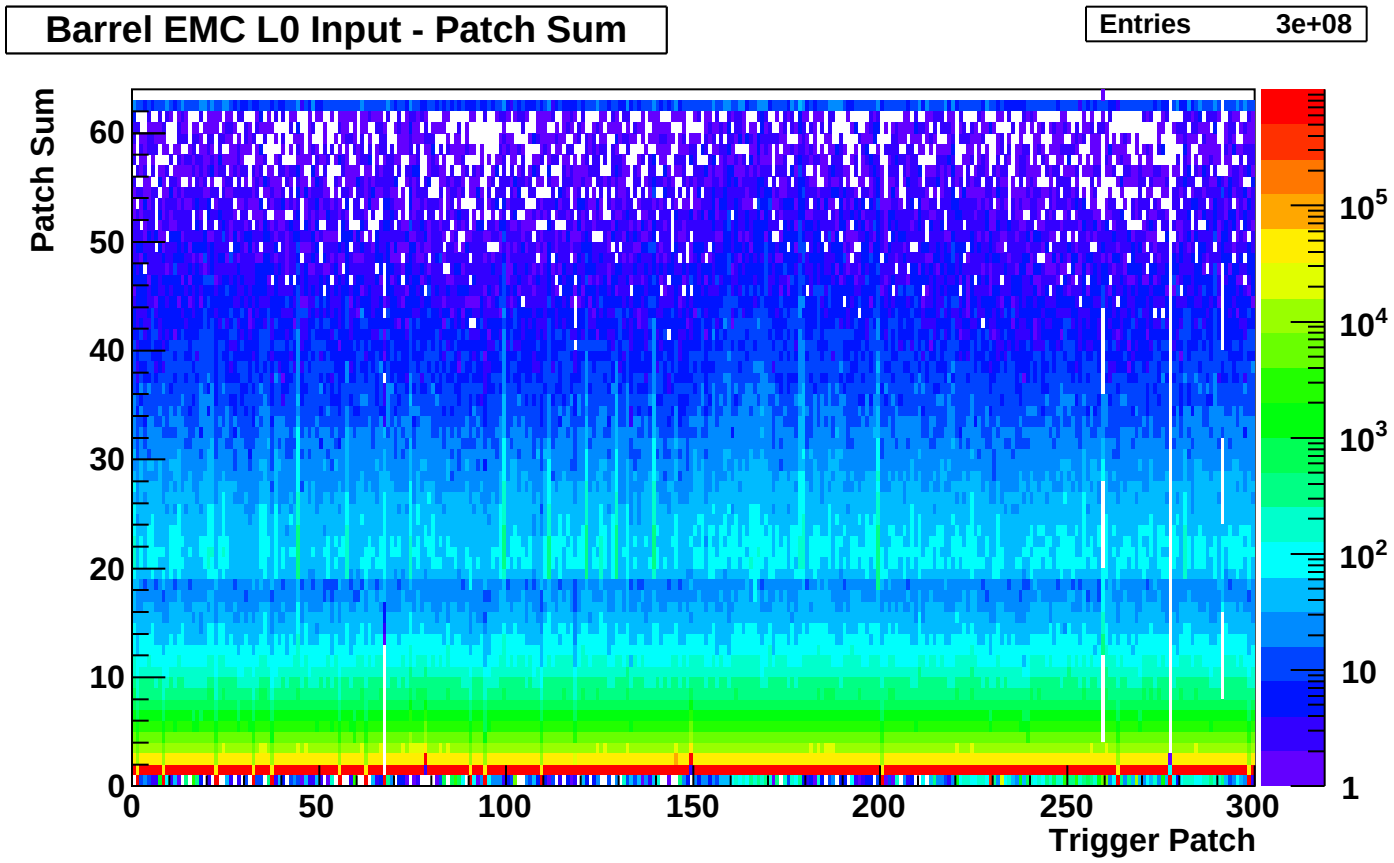

TCU bits
Entries 1.6e+07
TCU bits
1e+06
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

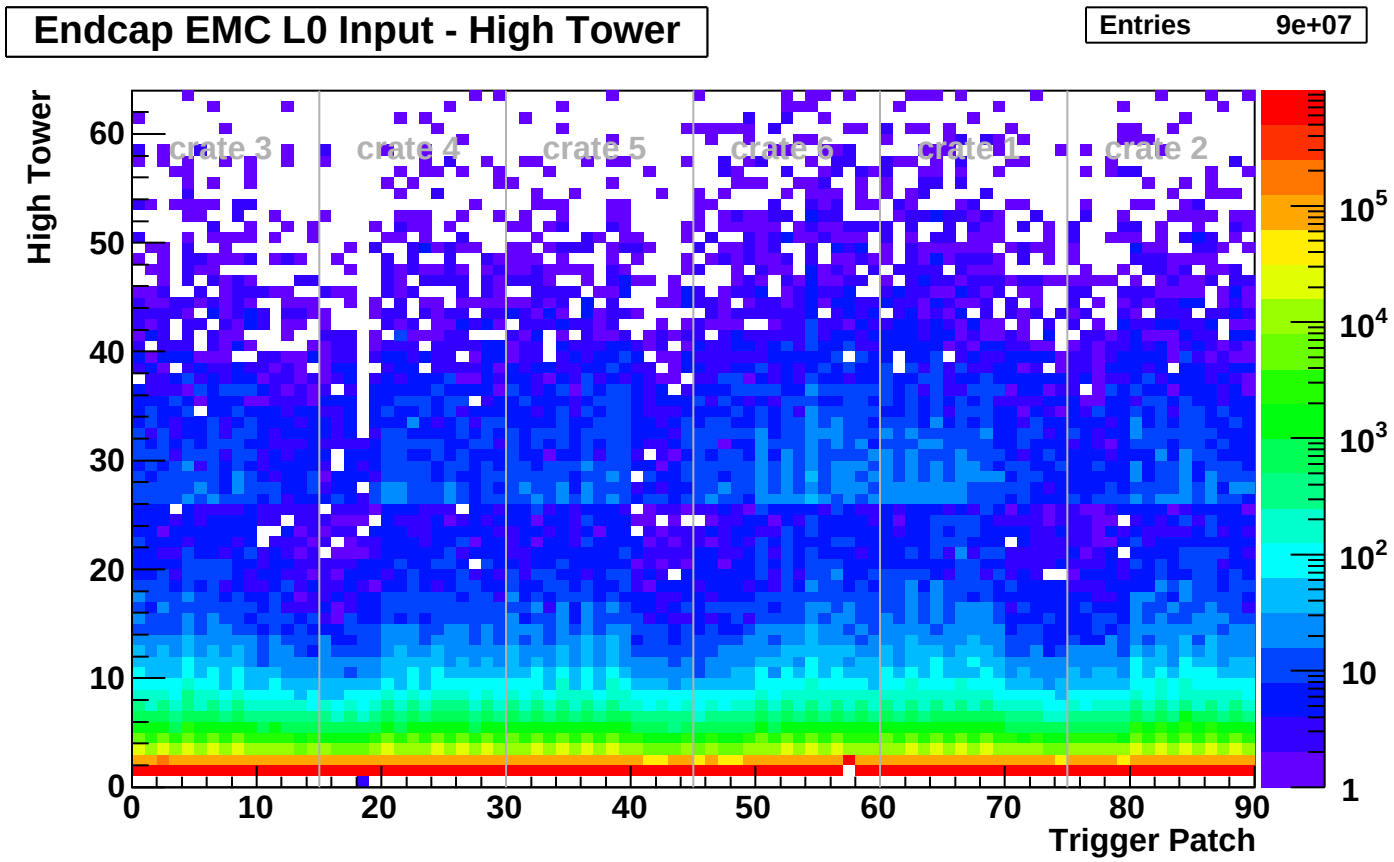

TCU bits
Entries 1273561
TCU bits - Simulated
76690 208195 431634 11615 42703 1 501468 1255
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

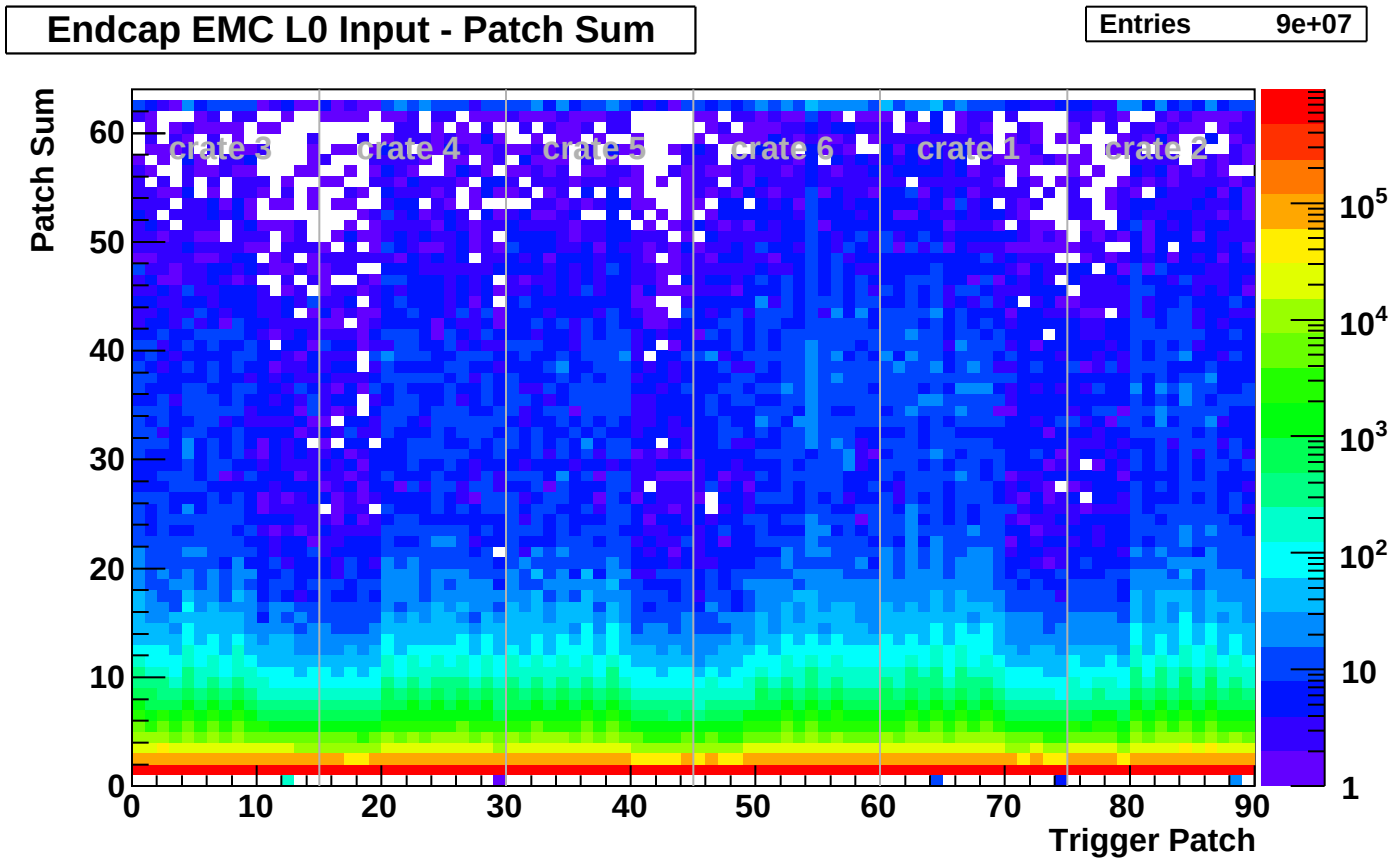

BunchId7Bit (BHT3)
Entries 15783

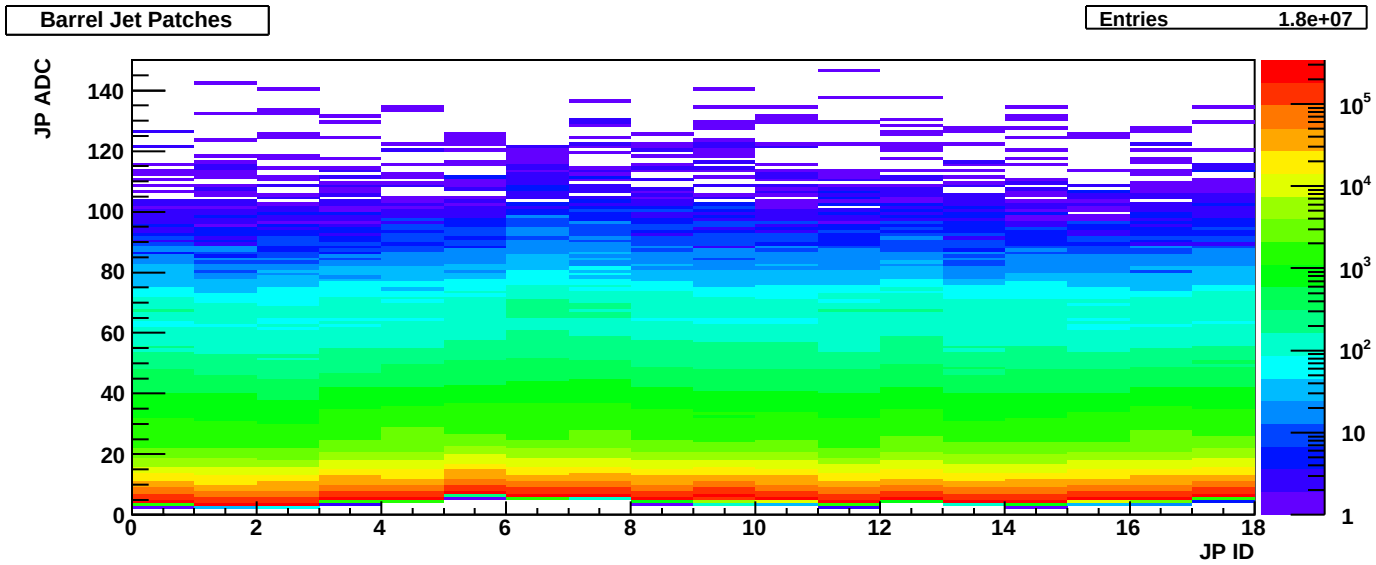

BunchId7Bit (all events)
Entries1000000

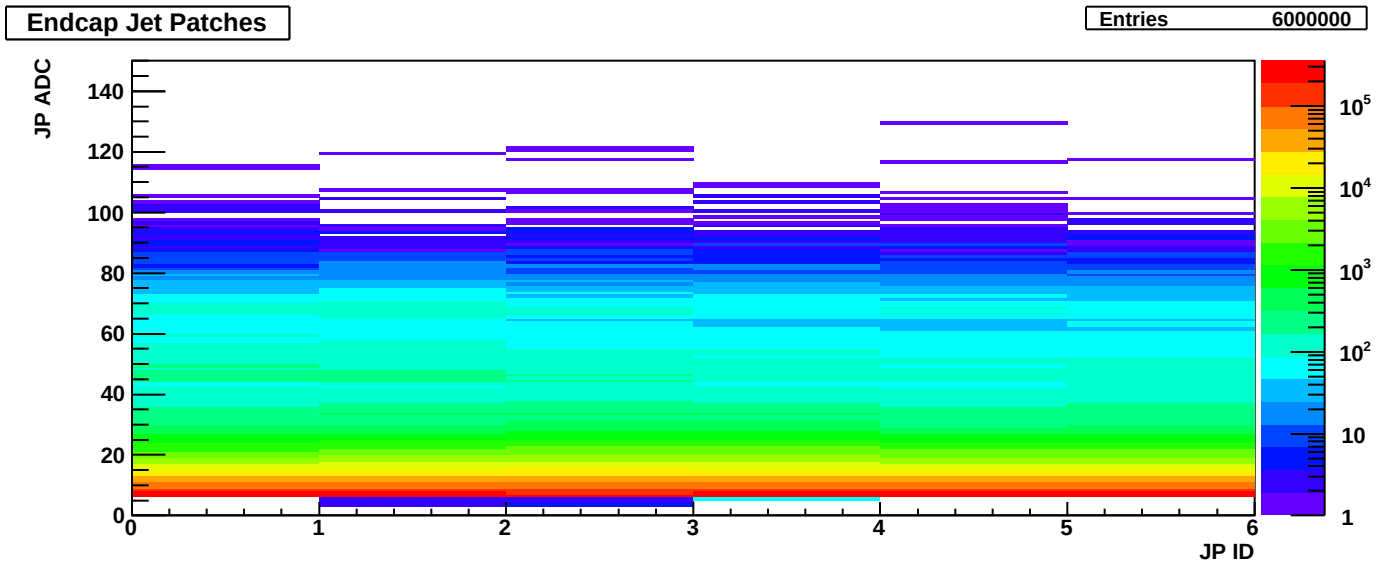

Barrel EMC L0 Input - High Tower
Entries 3e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

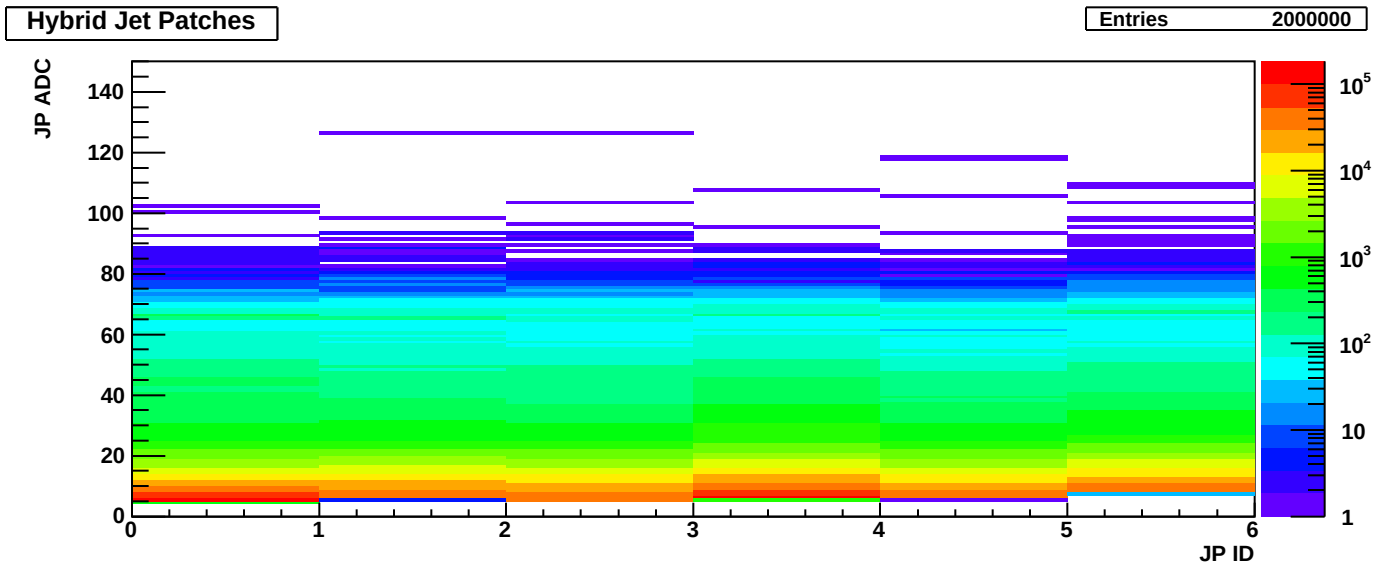

Barrel EMC L0 Input - Patch Sum
Entries 3e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

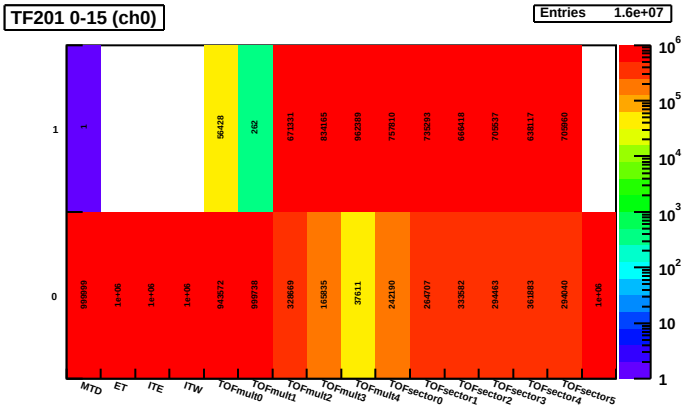

Endcap EMC L0 Input - High Tower
Entries 9e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

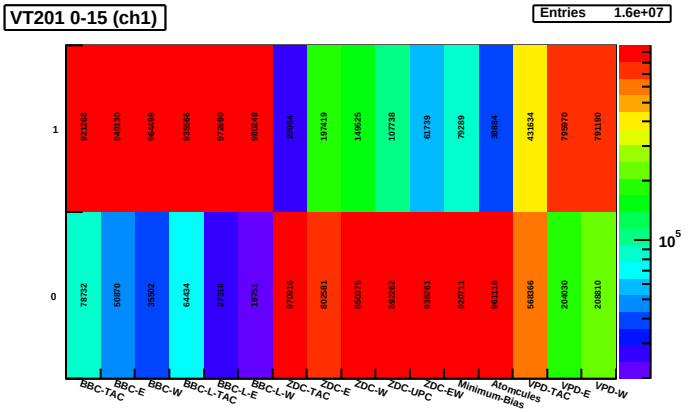

Endcap EMC L0 Input - Patch Sum
Entries 9e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

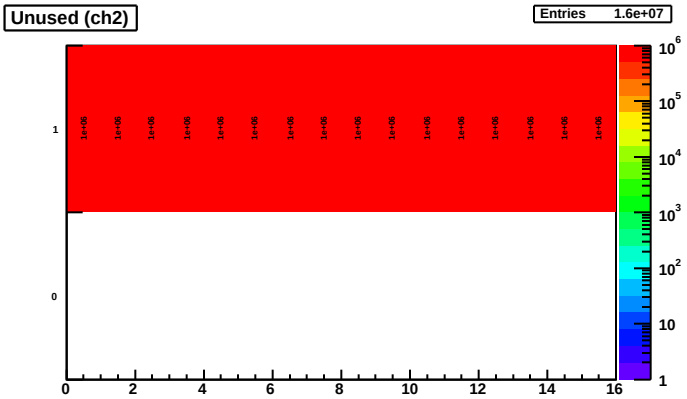

Barrel Jet Patches
Entries 1.8e+07
JP ADC
JP ID

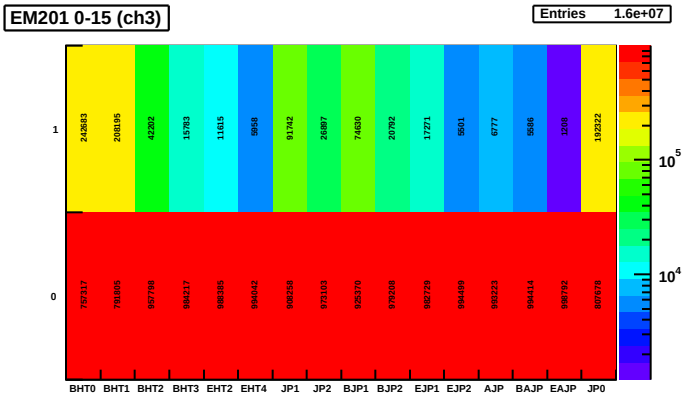

Endcap Jet Patches
Entries 6000000
JP ADC
JP ID

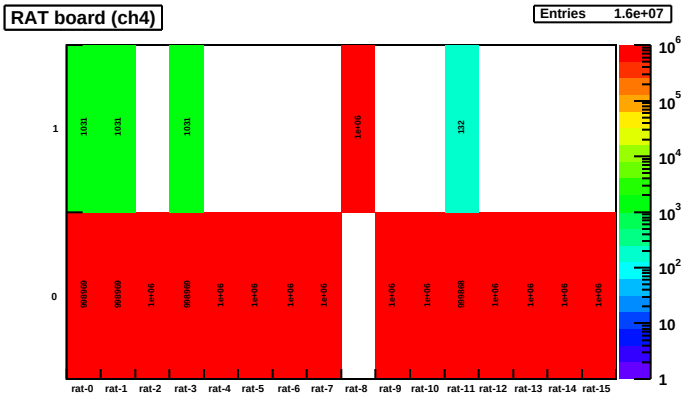

Hybrid Jet Patches
Entries 2000000
JP ADC
JP ID

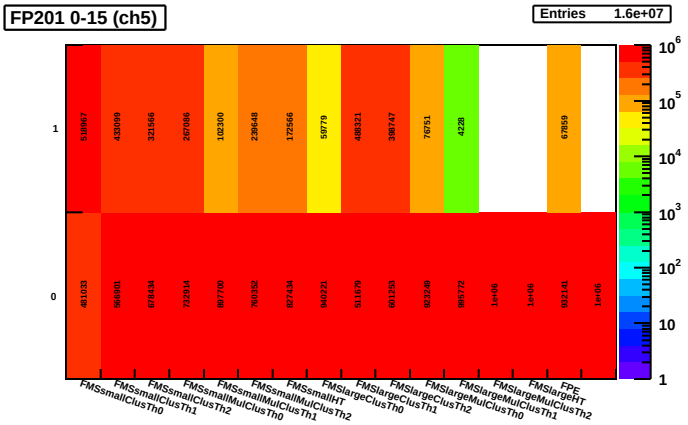

TF201 0-15 (ch0)
Entries 1.6e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

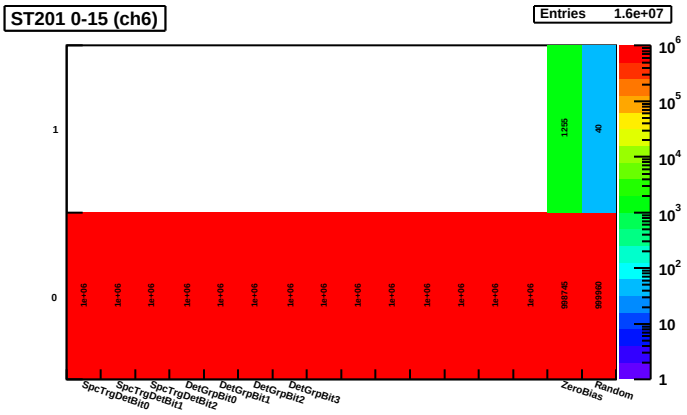

VT201 0-15 (ch1)
Entries 1.6e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

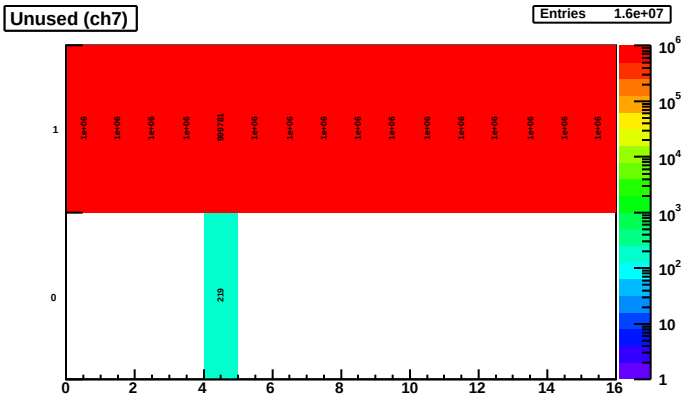

Unused (ch2)
Entries 1.6e+07

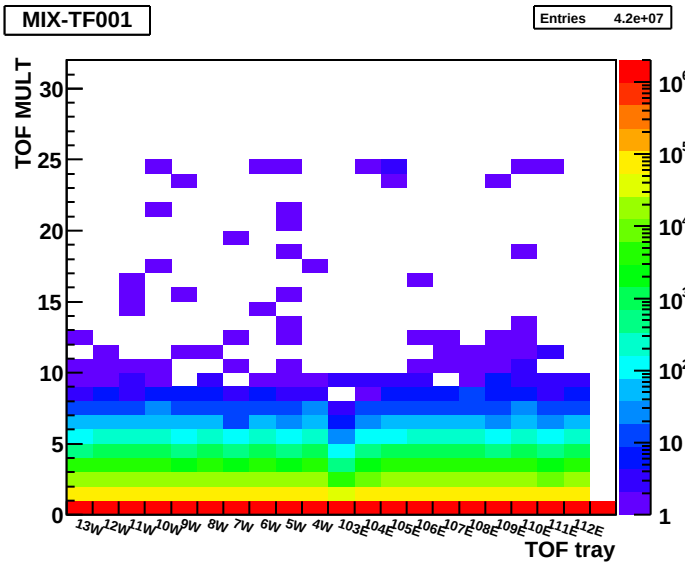

EM201 0-15 (ch3)
Entries 1.6e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

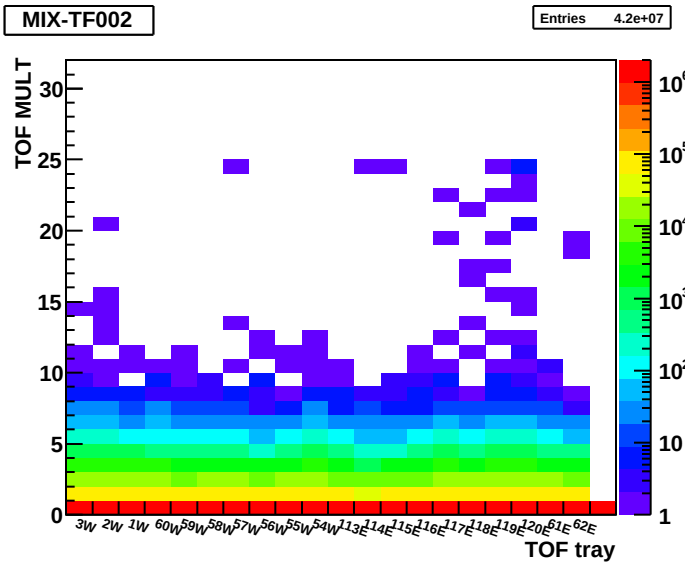

RAT board (ch4)
Entries 1.6e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

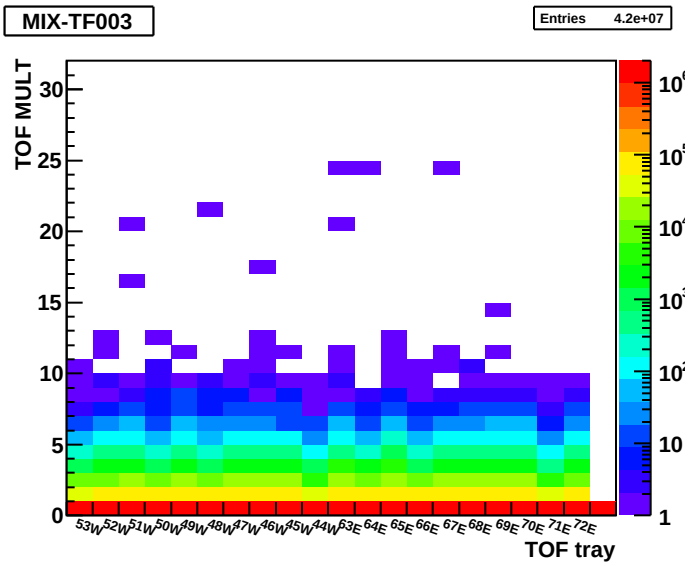

FP201 0-15 (ch5)
Entries 1.6e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

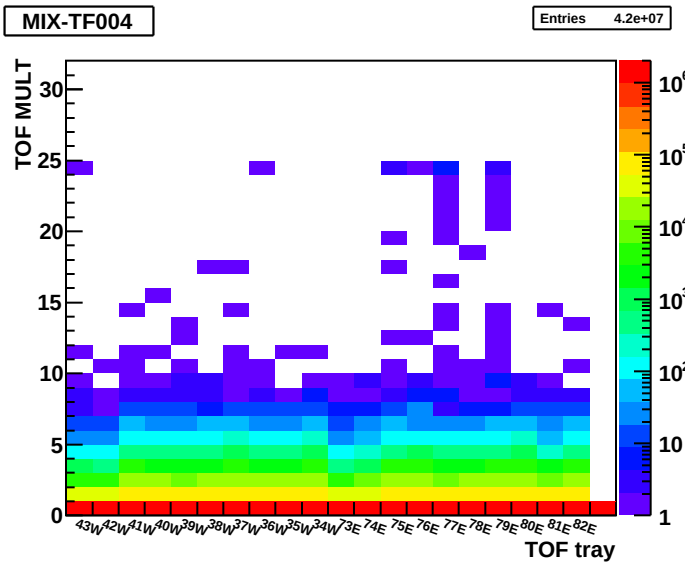

ST201 0-15 (ch6)
Entries 1.6e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

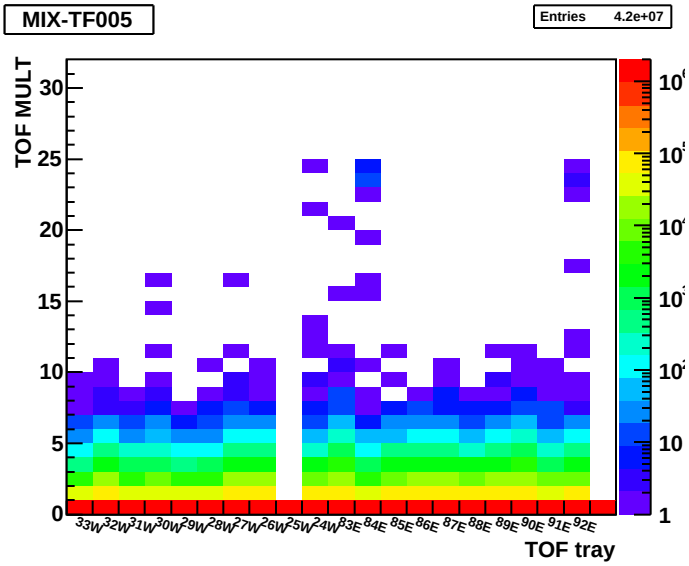

Unused (ch7)
Entries 1.6e+07

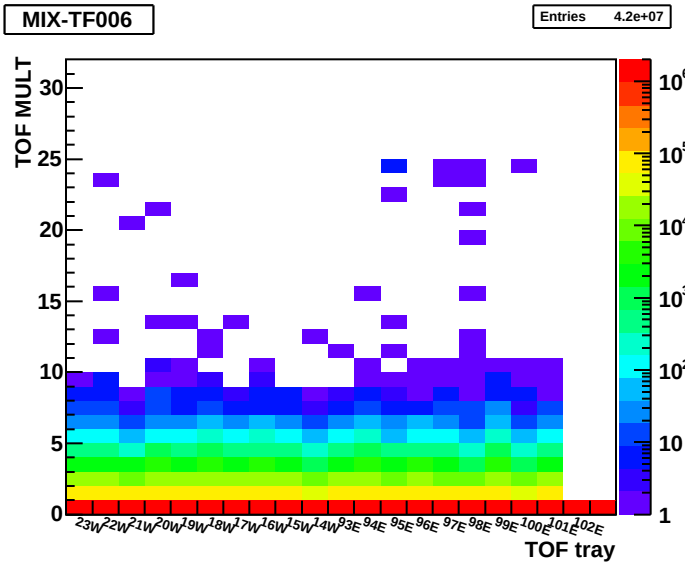

MIX-TF001
Entries 4.2e+07
TOF MULT
TOF tray

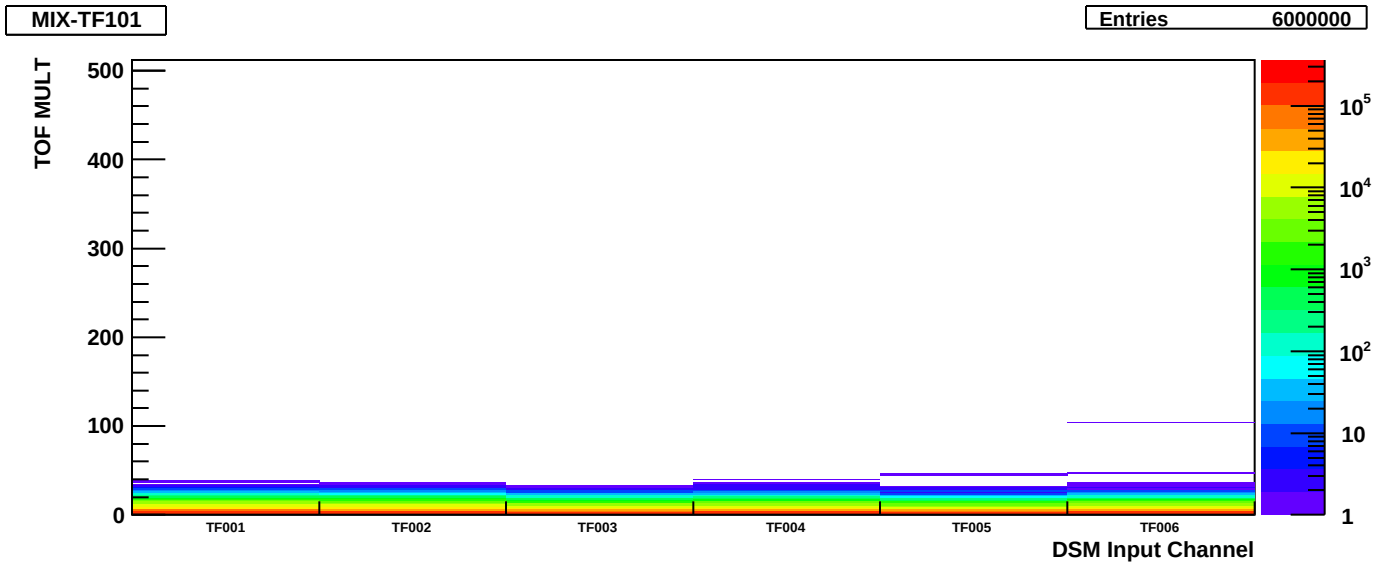

MIX-TF002
Entries 4.2e+07
TOF MULT
TOF tray

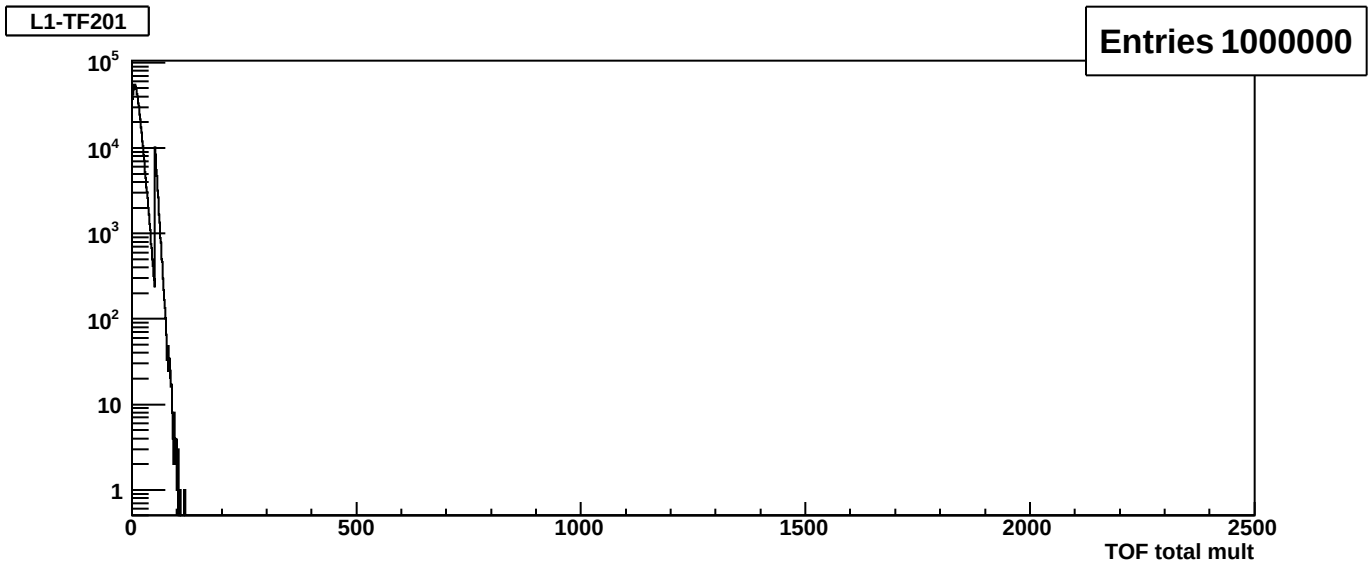

MIX-TF003
Entries 4.2e+07
TOF MULT
TOF tray

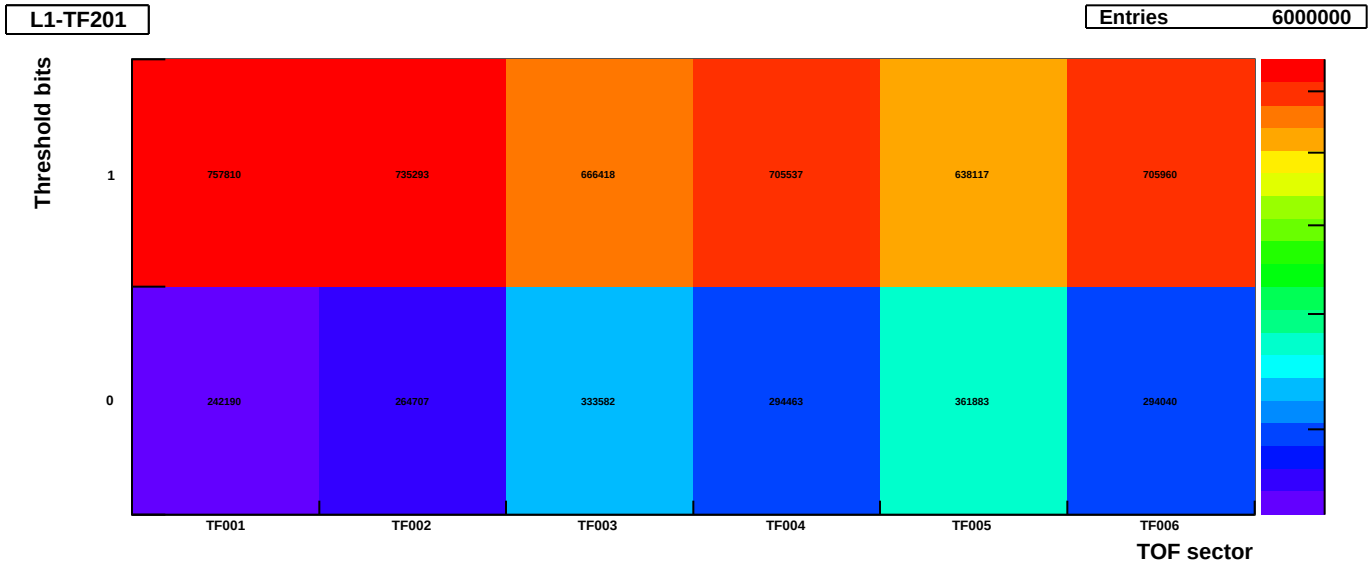

MIX-TF004
Entries 4.2e+07
TOF MULT
TOF tray

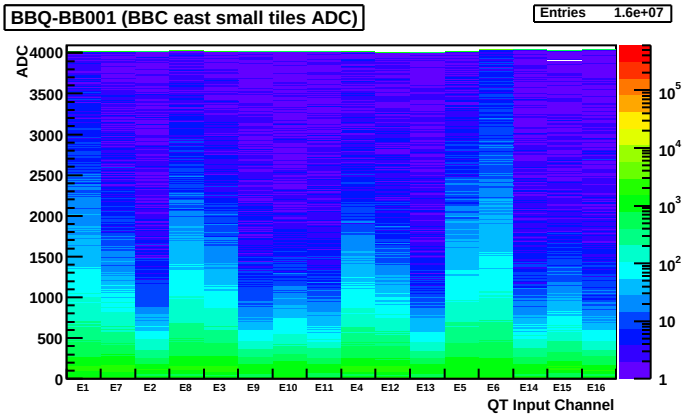

MIX-TF005
Entries 4.2e+07
TOF MULT
TOF tray

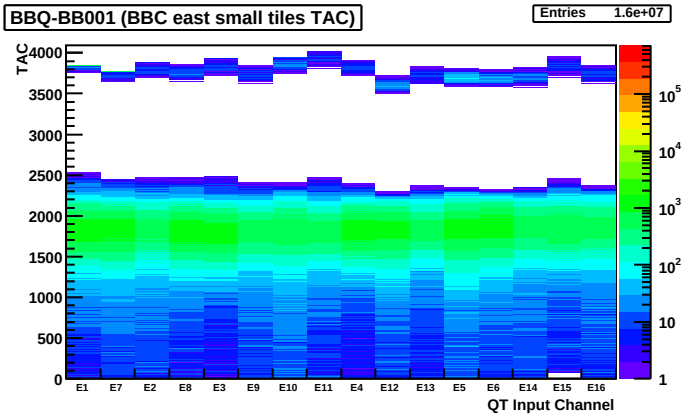

MIX-TF006
Entries 4.2e+07
TOF MULT
TOF tray

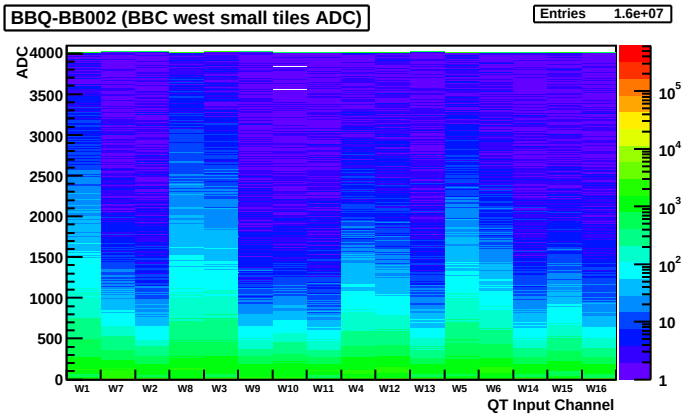

MIX-TF101
Entries 6000000
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

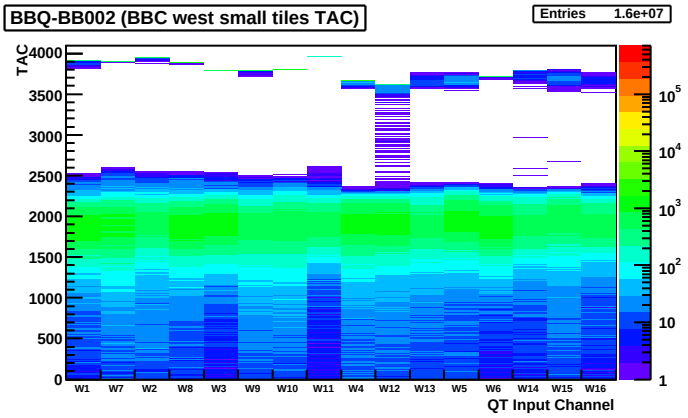

L1-TF201
Entries 1000000
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

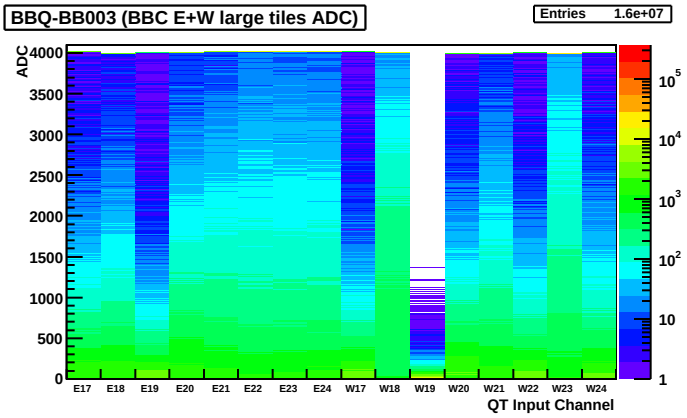

L1-TF201
Entries 6000000
Threshold bits
1
0
757810
735293
666418
705537
638117
705960
242190
264707
333582
294463
361883
294040
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

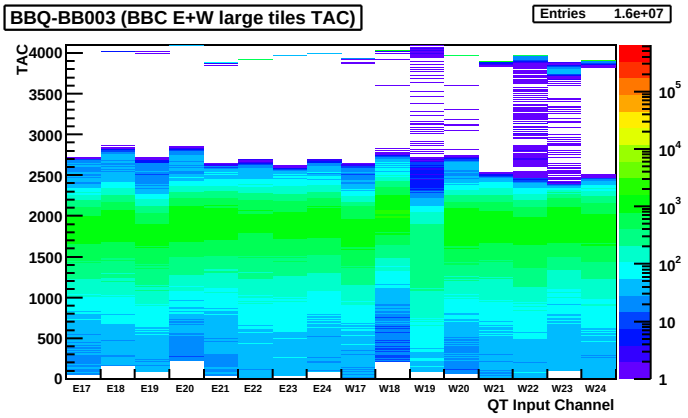

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.6e+07
ADC
QT Input Channel

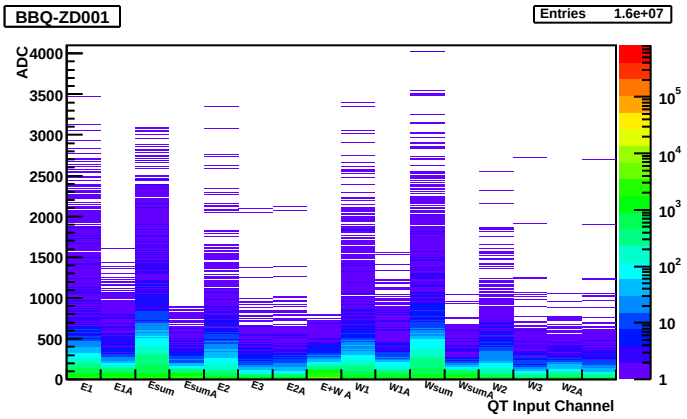

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.6e+07
TAC
QT Input Channel

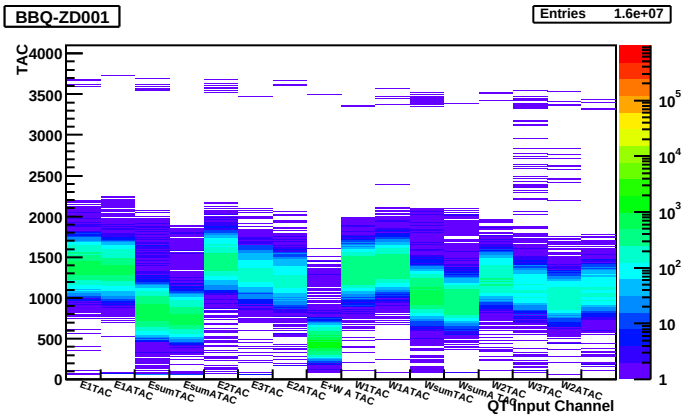

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.6e+07
ADC
QT Input Channel

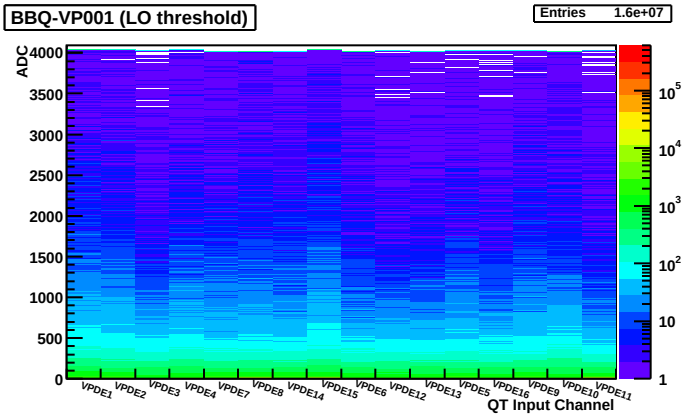

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.6e+07
TAC
QT Input Channel

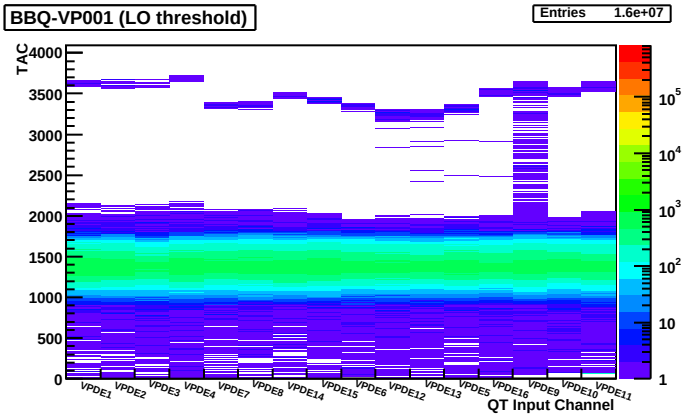

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.6e+07
ADC
QT Input Channel

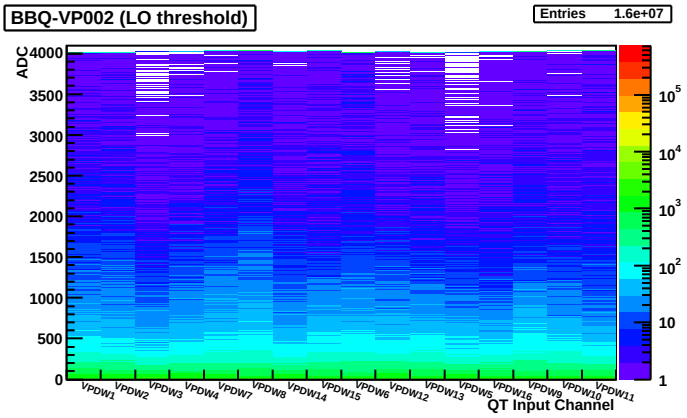

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.6e+07
TAC
QT Input Channel

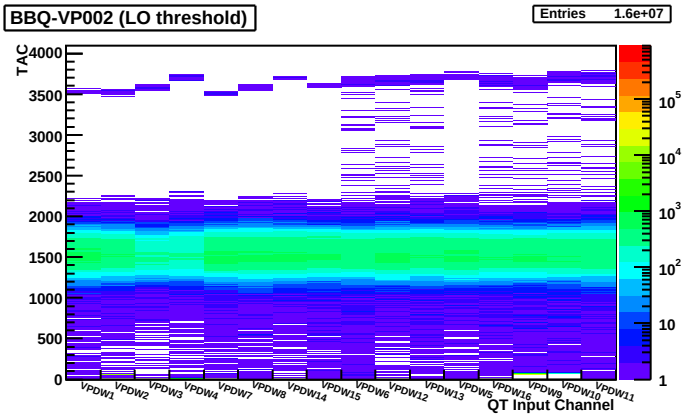

BBQ-ZD001
Entries 1.6e+07
ADC
QT Input Channel

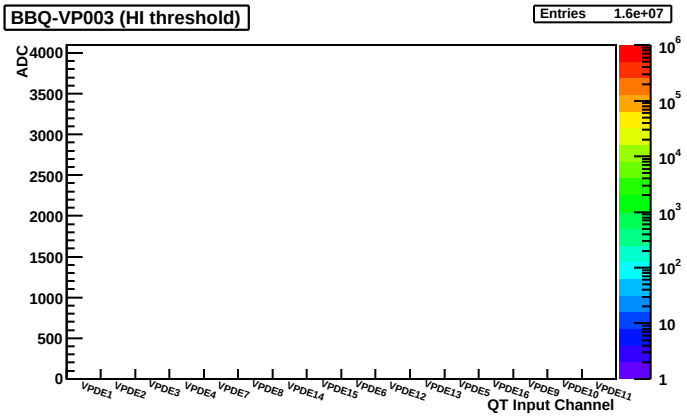

BBQ-ZD001
Entries 1.6e+07
TAC
QT Input Channel

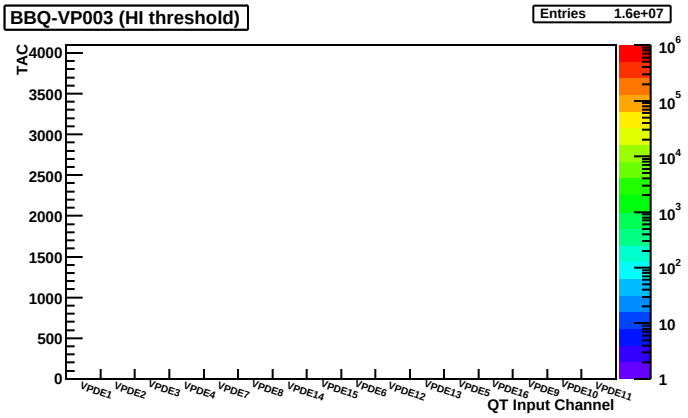

BBQ-VP001 (LO threshold)
Entries 1.6e+07
ADC
QT Input Channel

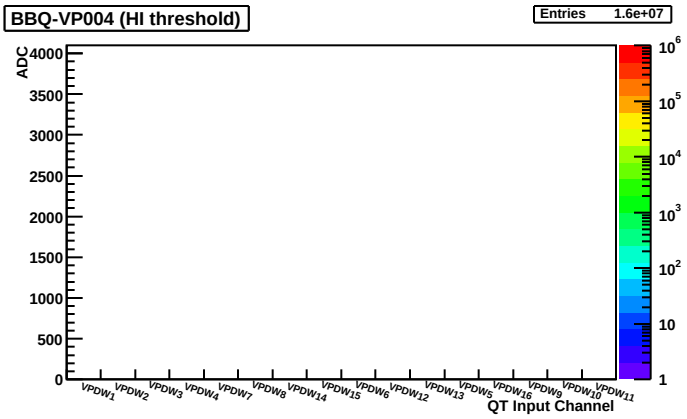

BBQ-VP001 (LO threshold)
Entries 1.6e+07
TAC
QT Input Channel

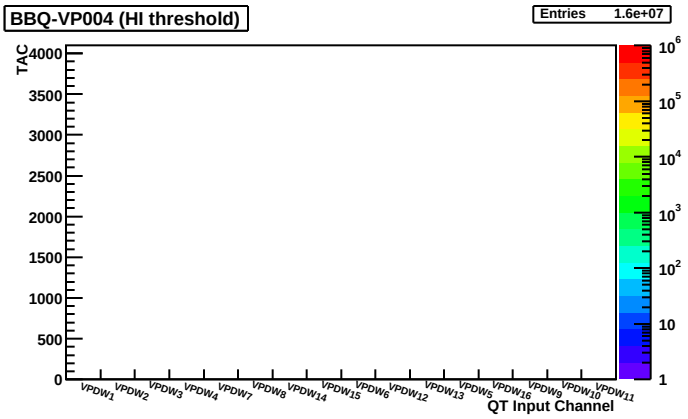

BBQ-VP002 (LO threshold)
Entries 1.6e+07
ADC
QT Input Channel

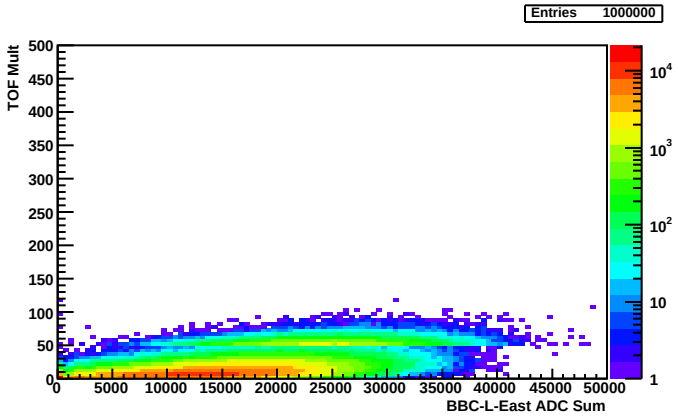

BBQ-VP002 (LO threshold)
Entries 1.6e+07
TAC
QT Input Channel

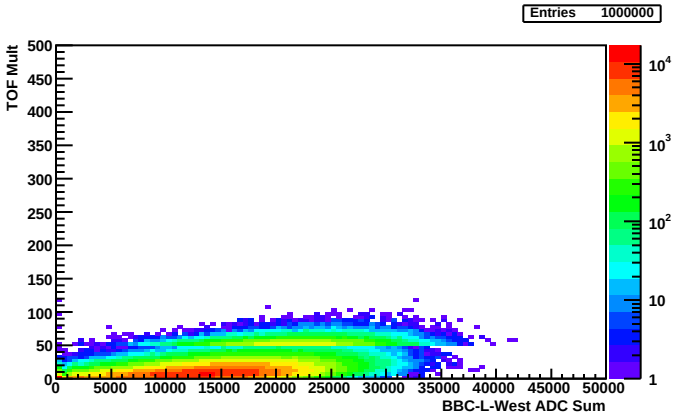

BBQ-VP003 (HI threshold)
Entries 1.6e+07
ADC
QT Input Channel

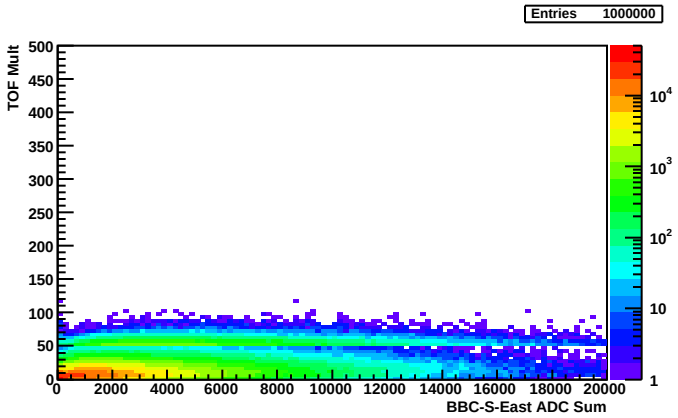

BBQ-VP003 (HI threshold)
Entries 1.6e+07
TAC
QT Input Channel

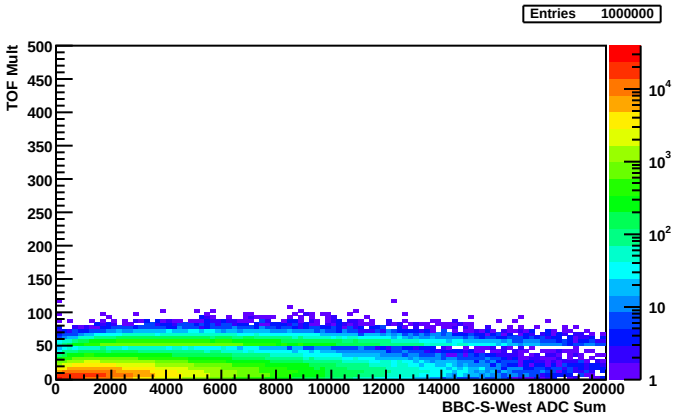

BBQ-VP004 (HI threshold)
Entries 1.6e+07
ADC
QT Input Channel

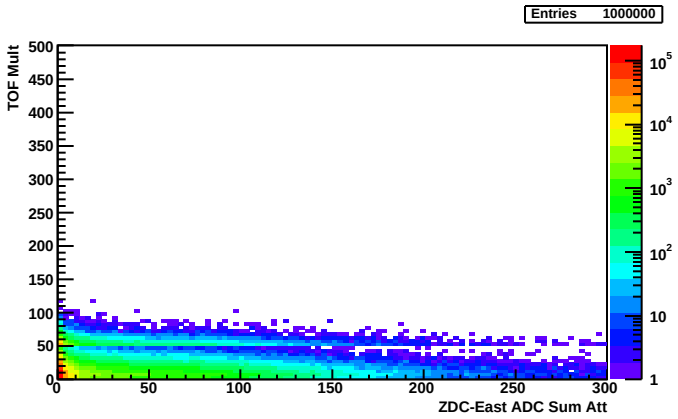

BBQ-VP004 (HI threshold)
Entries 1.6e+07
TAC
QT Input Channel

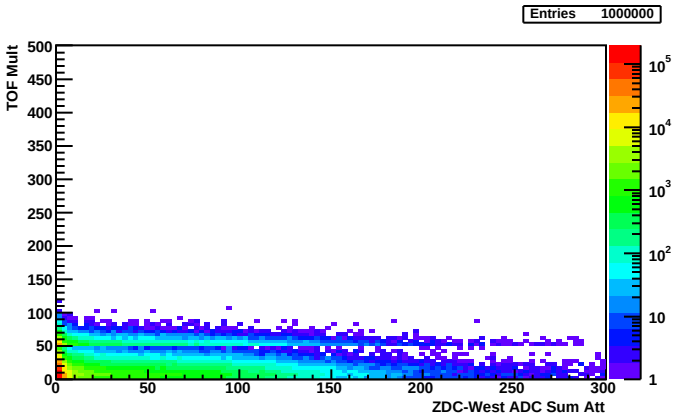

Entries 1000000
TOF Mult
BBC-L-East ADC Sum

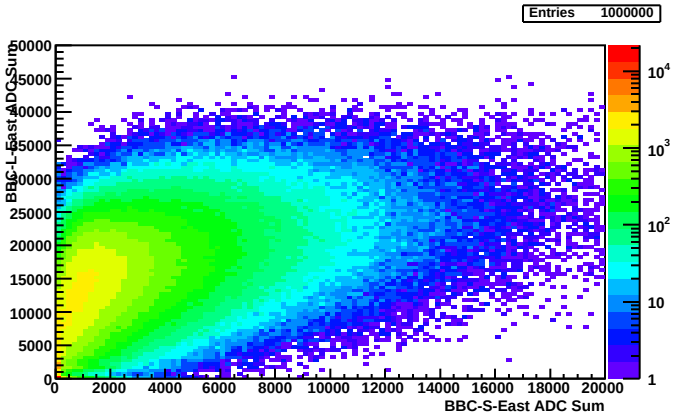

Entries 1000000
TOF Mult
BBC-L-West ADC Sum

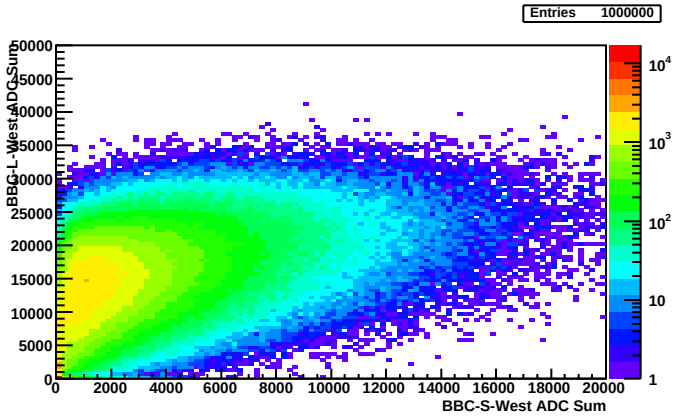

Entries 1000000
TOF Mult
BBC-S-East ADC Sum

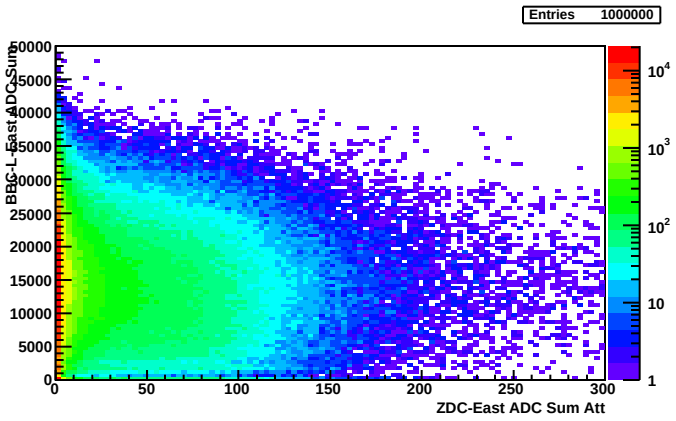

Entries 1000000
TOF Mult
BBC-S-West ADC Sum

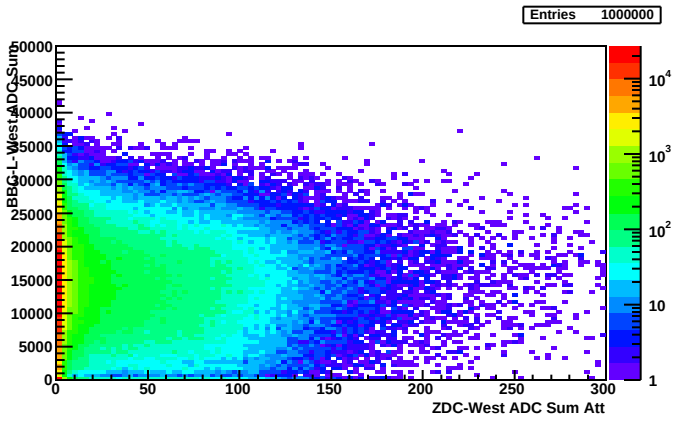

Entries 1000000
TOF Mult
ZDC-East ADC Sum Att

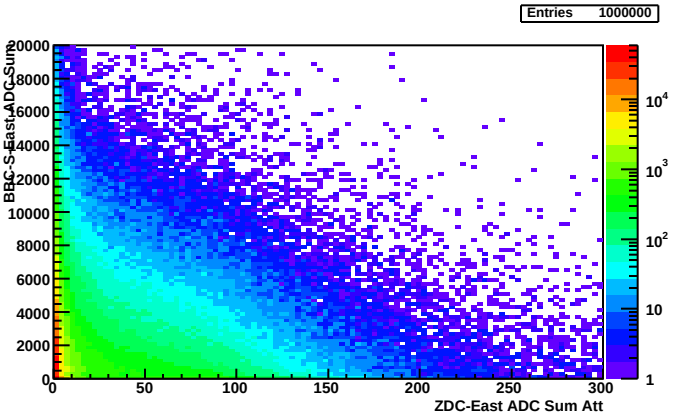

Entries 1000000
TOF Mult
ZDC-West ADC Sum Att

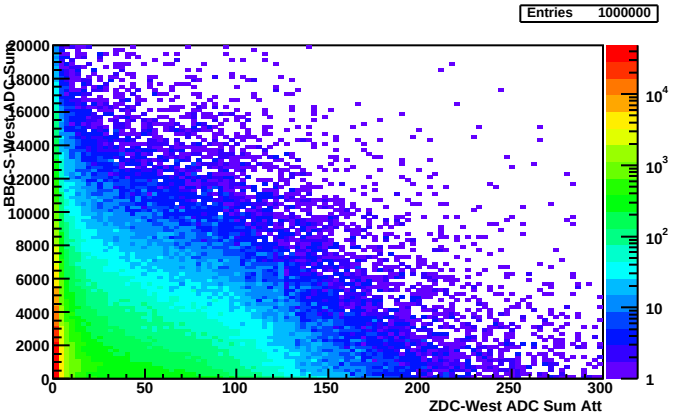

Entries 1000000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

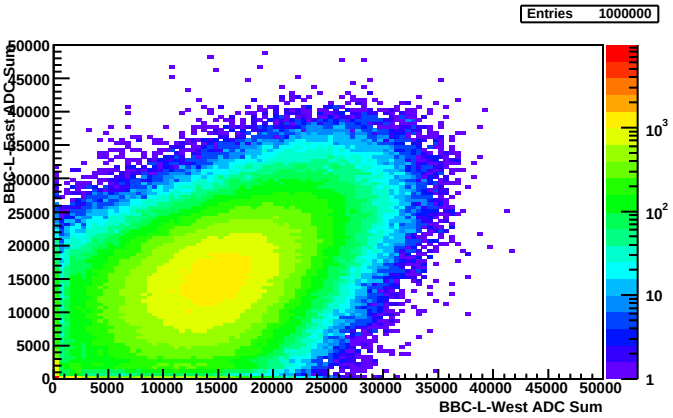

Entries 1000000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

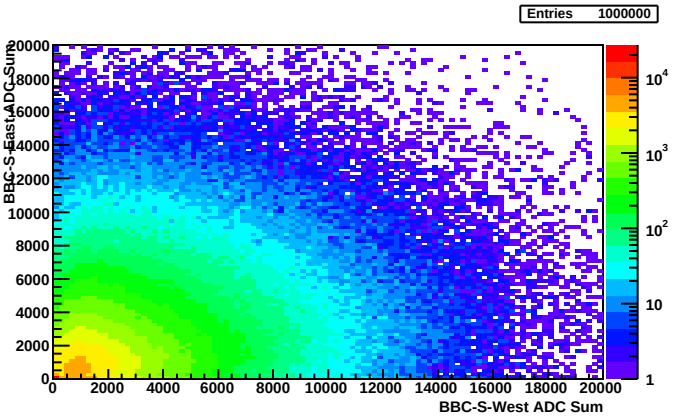

Entries 1000000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

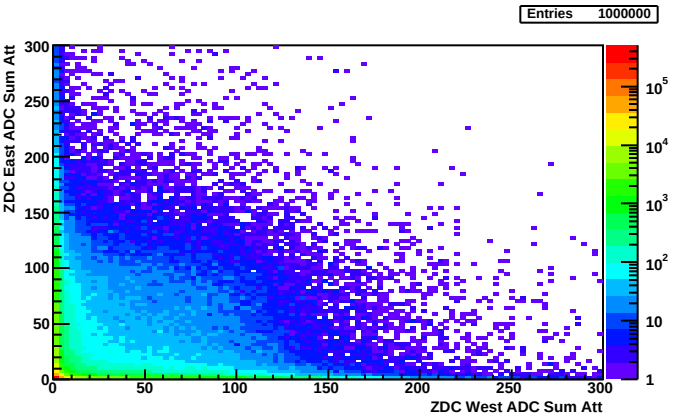

Entries 1000000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

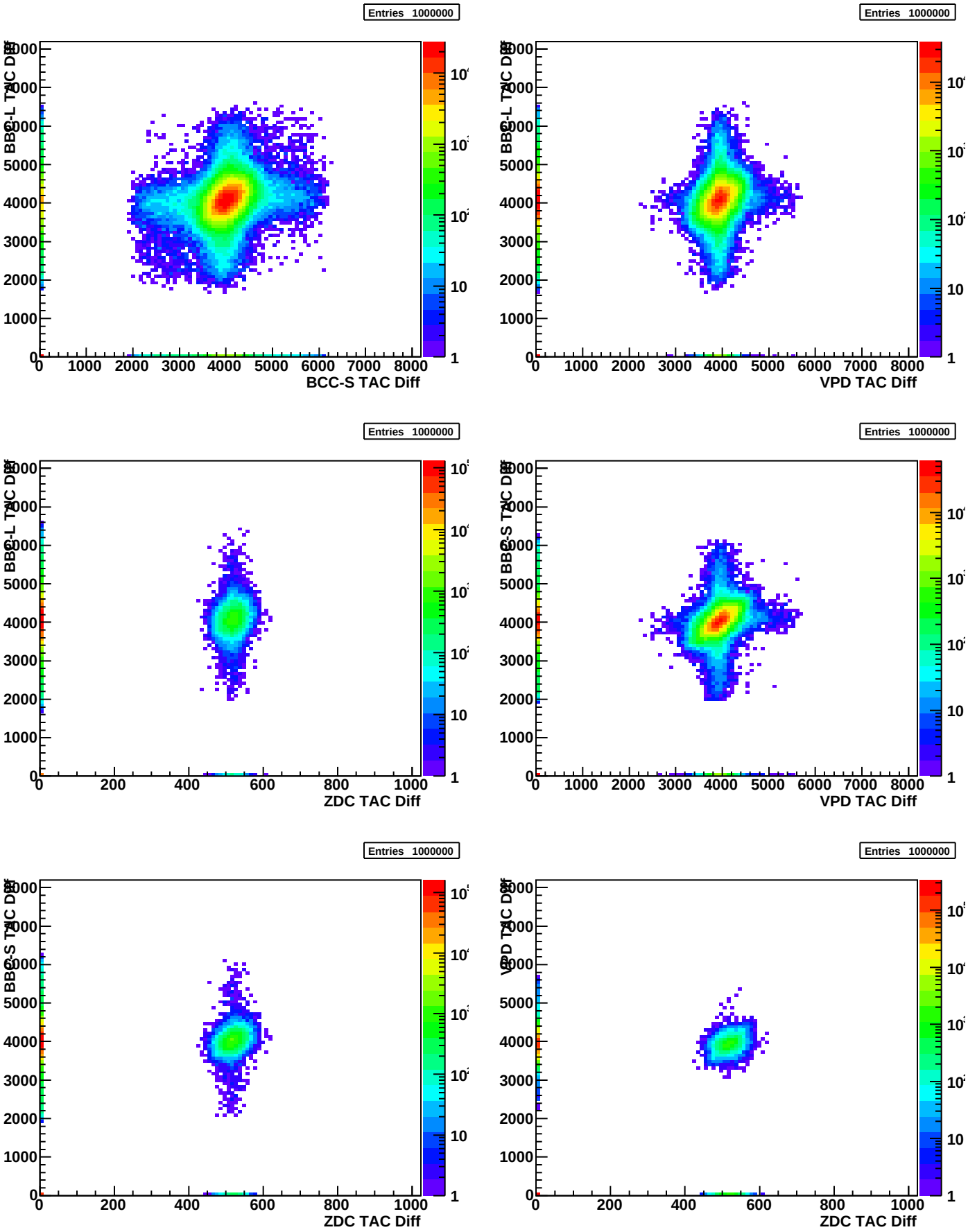

Entries 1000000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

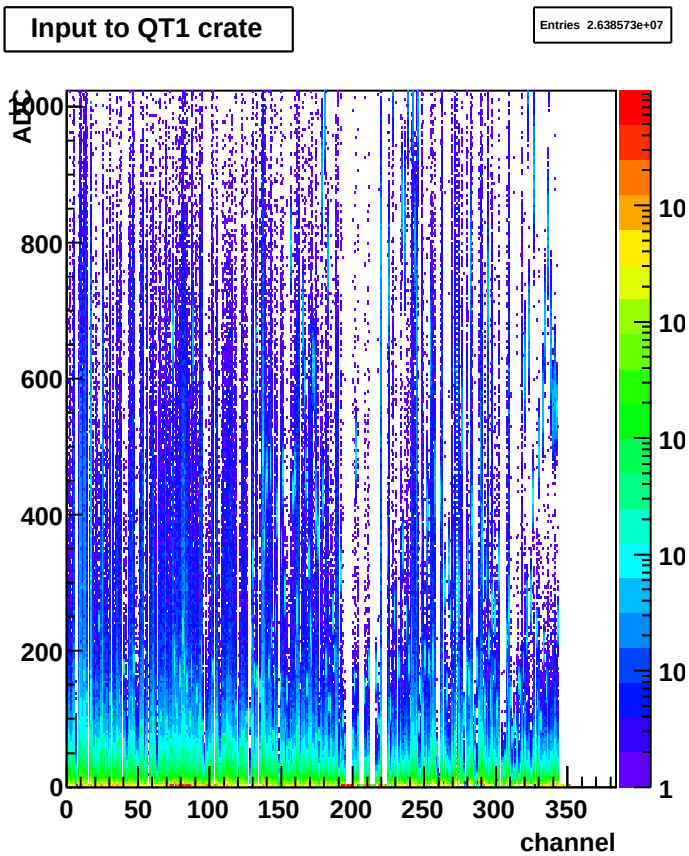

Entries 1000000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

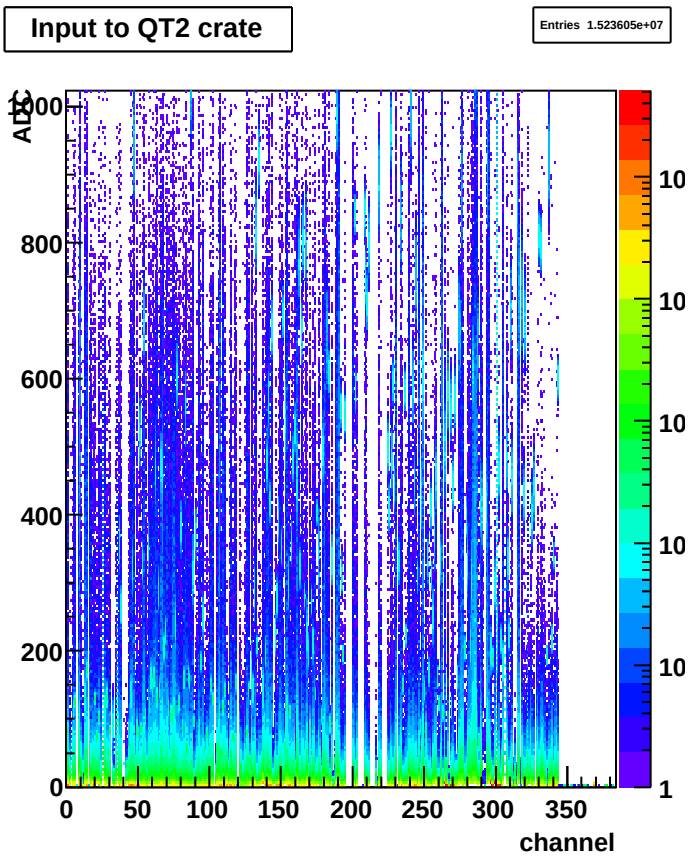

Entries 1000000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

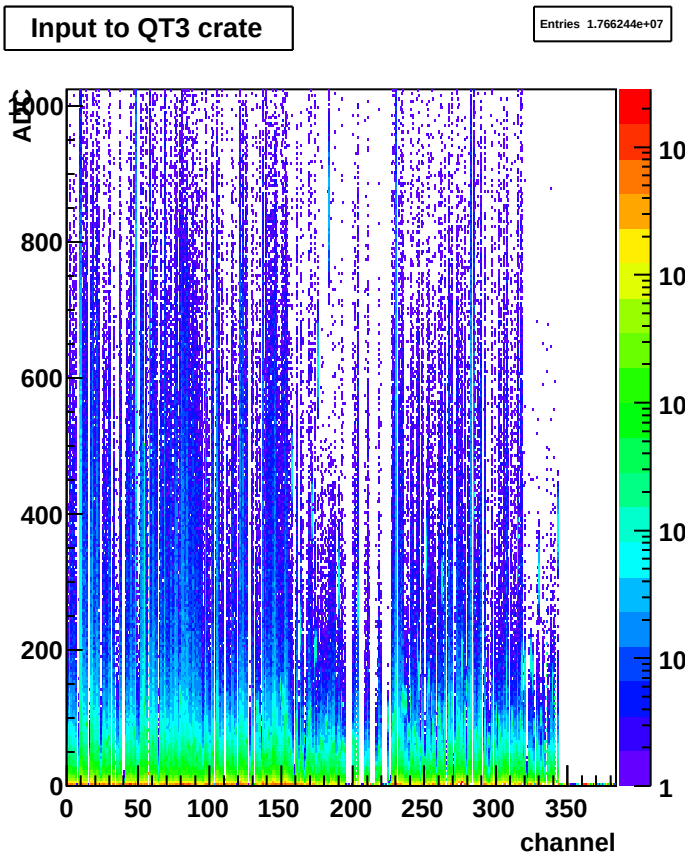

Entries 1000000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

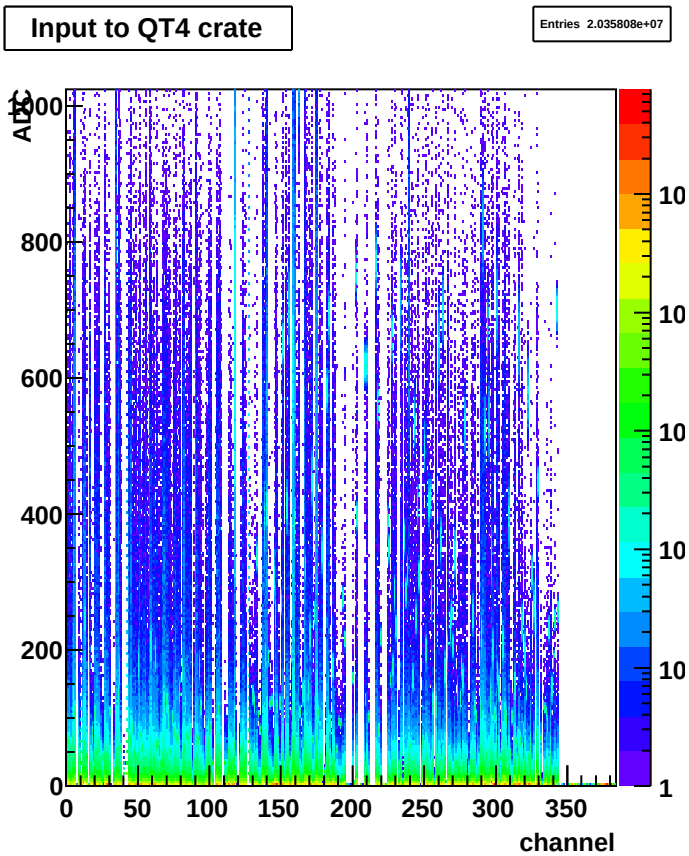

Entries 1000000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

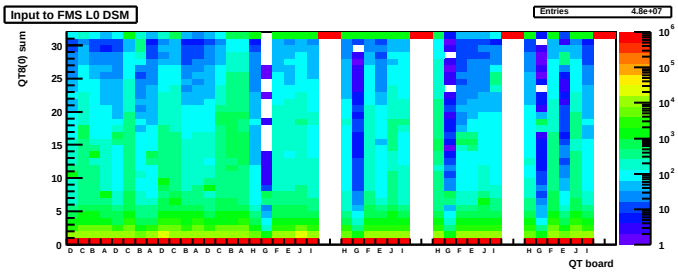

Entries 1000000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1000000
BBC-L TAC Diff
VPD TAC Diff
Entries 1000000
BBC-L TAC Diff
ZDC TAC Diff
Entries 1000000
BBC-S TAC Diff
VPD TAC Diff
Entries 1000000
BBC-S TAC Diff
ZDC TAC Diff
Entries 1000000
VPD TAC Diff
ZDC TAC Diff

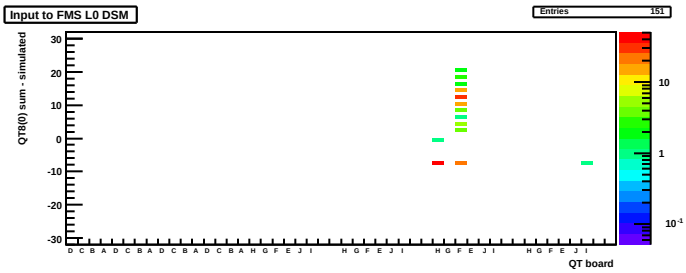

Input to QT1 crate
Entries 2.638573e+07
ADC
channel

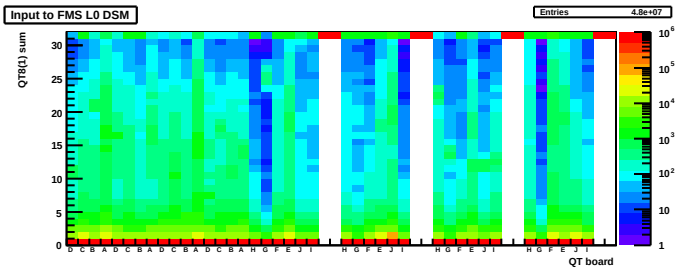

Input to QT2 crate
Entries 1.523605e+07
ADC
channel

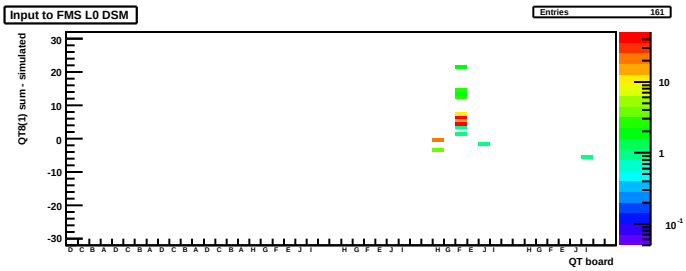

Input to QT3 crate
Entries 1.766244e+07
ADC
channel

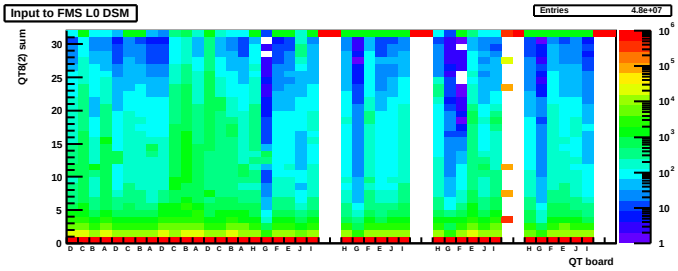

Input to QT4 crate
Entries 2.035808e+07
ADC
channel

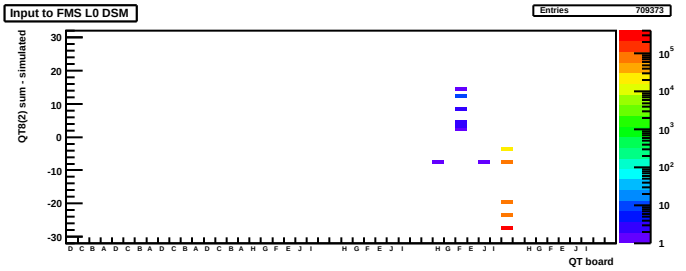

Input to FMS L0 DSM
Entries 4.8e+07
QT8(0) sum
QT board

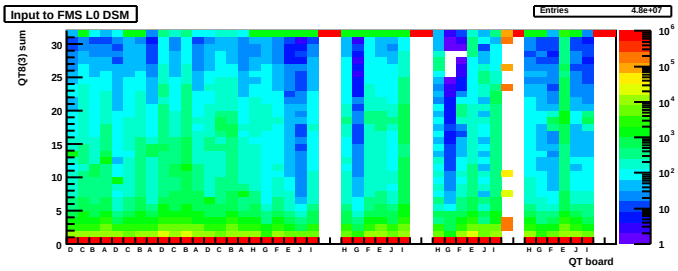

Input to FMS L0 DSM
Entries 151
QT8(0) sum - simulated
QT board

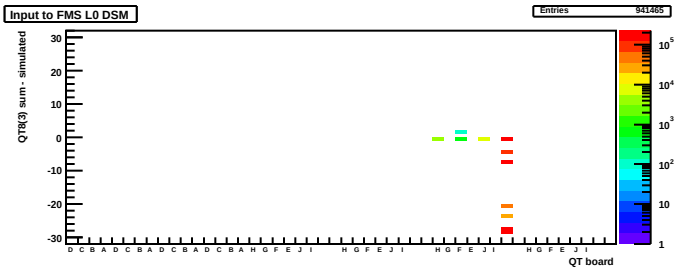

Input to FMS L0 DSM
Entries 4.8e+07
QT8(1) sum
QT board

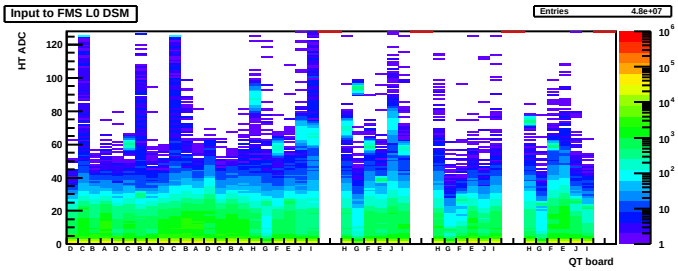

Input to FMS L0 DSM
Entries 161
QT8(1) sum - simulated
QT board

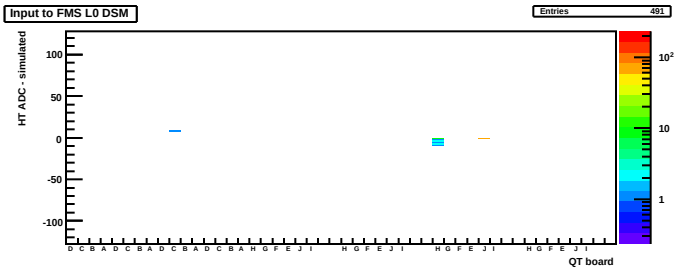

Input to FMS L0 DSM
Entries 4.8e+07
QT8(2) sum
QT board

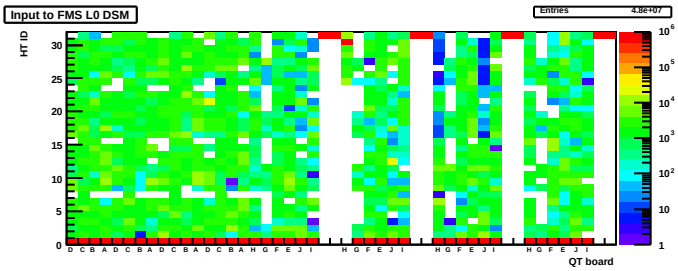

Input to FMS L0 DSM
Entries 709373
QT8(2) sum - simulated
QT board

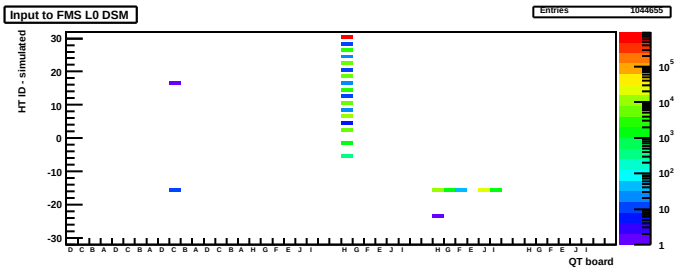

Input to FMS L0 DSM
Entries 4.8e+07
QT8(3) sum
QT board

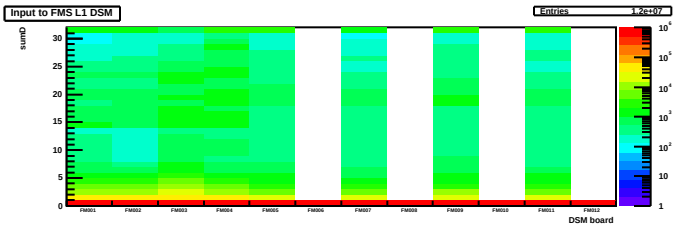

Input to FMS L0 DSM
Entries 941465
QT8(3) sum - simulated
QT board

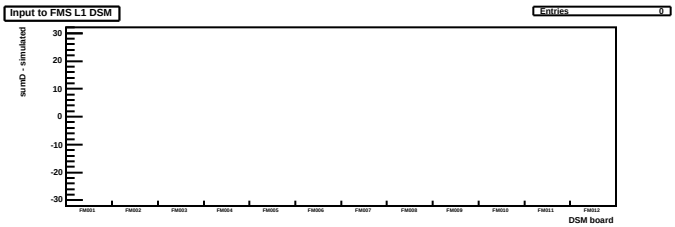

Input to FMS L0 DSM
Entries 4.8e+07
HT ADC
QT board

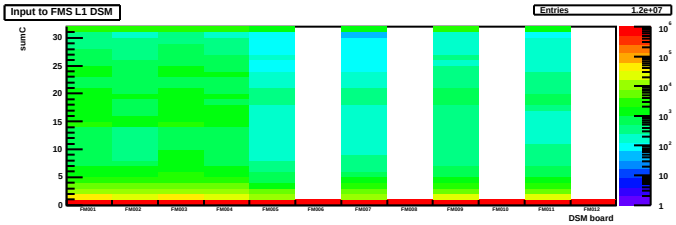

Input to FMS L0 DSM
Entries 491
HT ADC - simulated
QT board

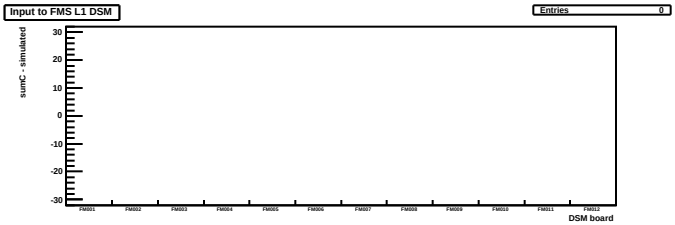

Input to FMS L0 DSM
Entries 4.8e+07
HT ID
QT board

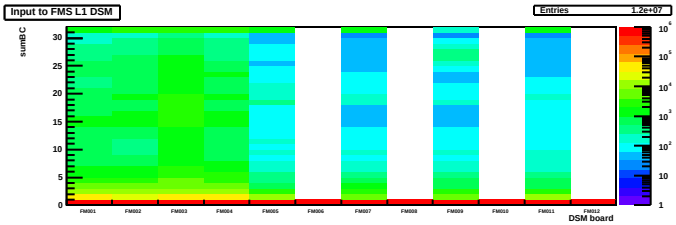

Input to FMS L0 DSM
Entries 1044655
HT ID - simulated
QT board

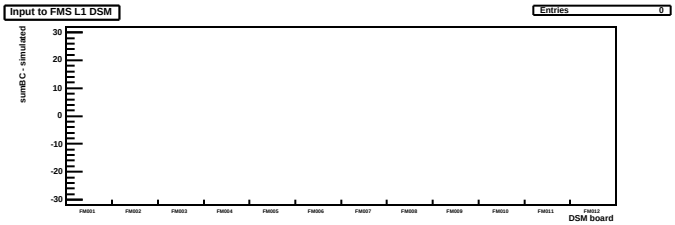

Input to FMS L1 DSM
Entries 1.2e+07
sumD
DSM board

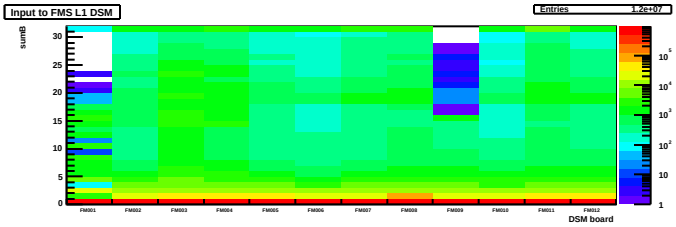

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

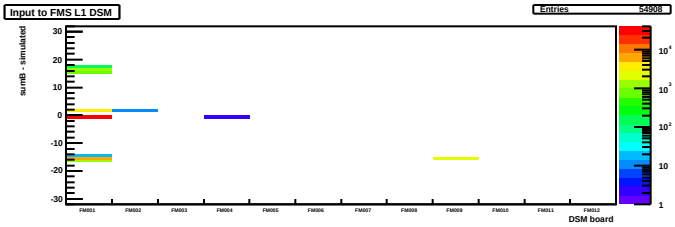

Input to FMS L1 DSM
Entries 1.2e+07
sumC
DSM board

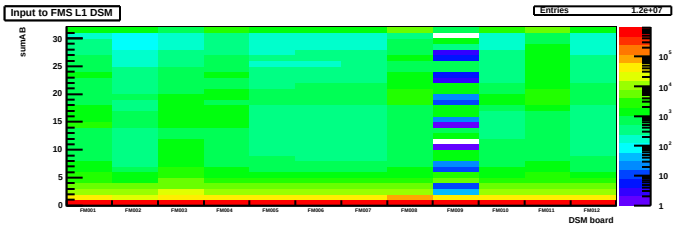

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

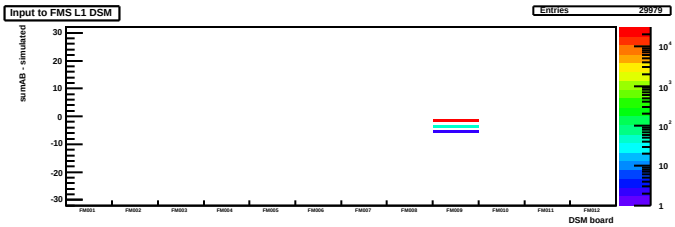

Input to FMS L1 DSM
Entries 1.2e+07
sumBC
DSM board

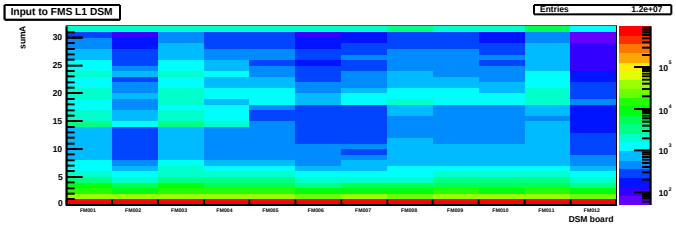

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

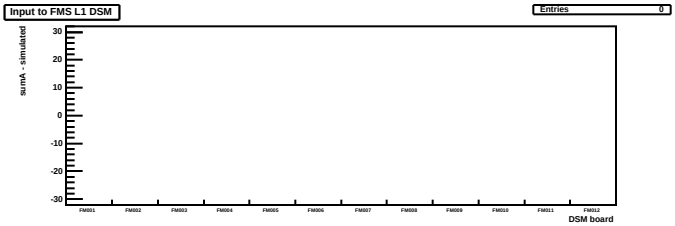

Input to FMS L1 DSM
Entries 1.2e+07
sumB
DSM board

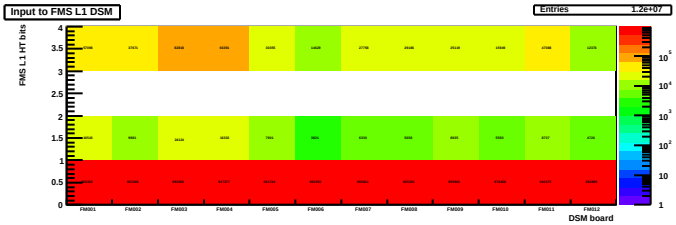

Input to FMS L1 DSM
Entries 54908
sumB - simulated
DSM board

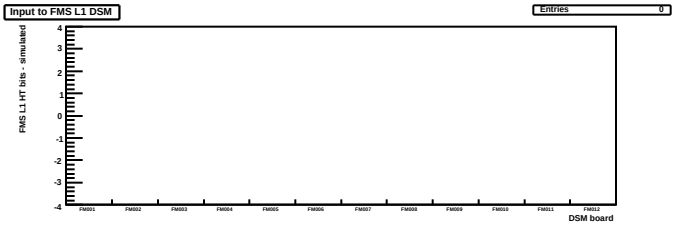

Input to FMS L1 DSM
Entries 1.2e+07
sumAB
DSM board

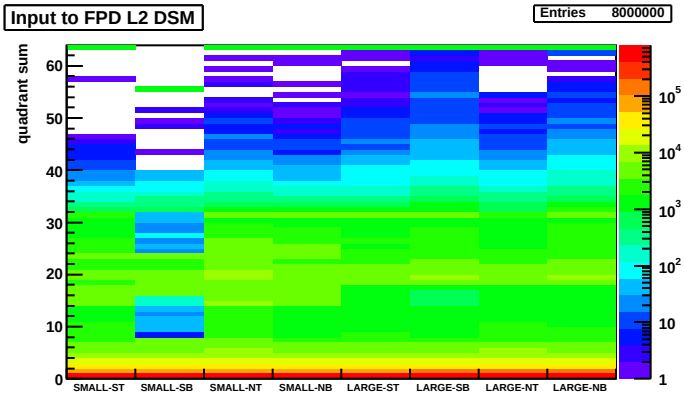

Input to FMS L1 DSM
Entries 29979
sumAB - simulated
DSM board

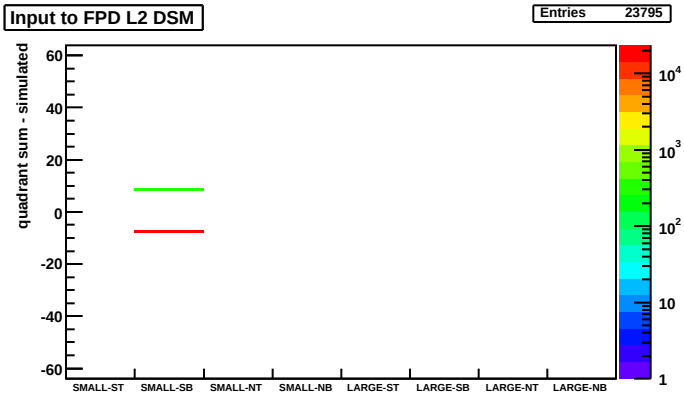

Input to FMS L1 DSM
Entries 1.2e+07
sumA
DSM board

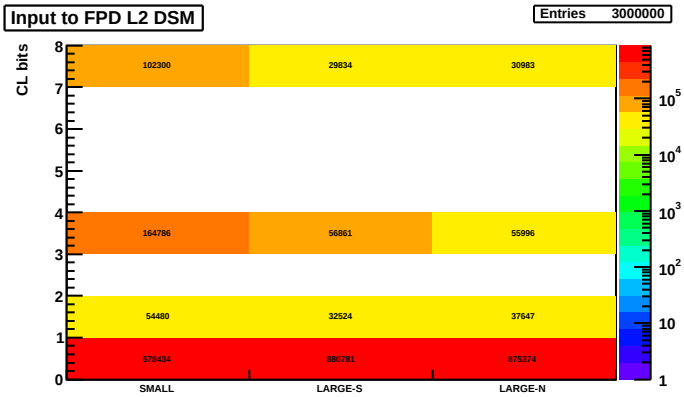

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

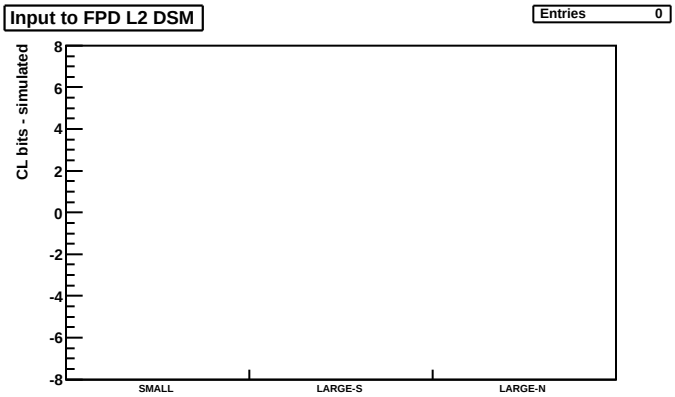

Input to FMS L1 DSM
Entries 1.2e+07
FMS L1 HT bits
DSM board

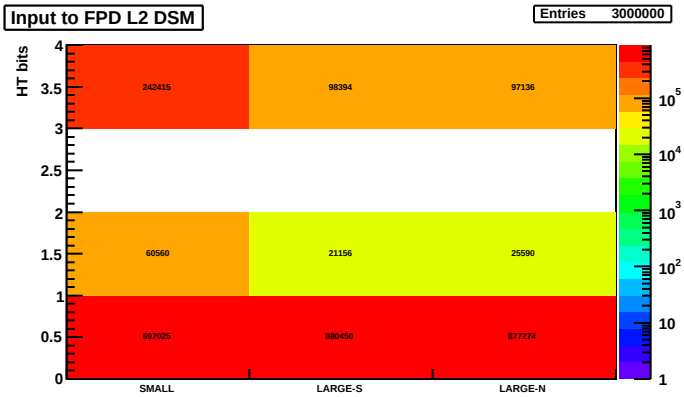

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

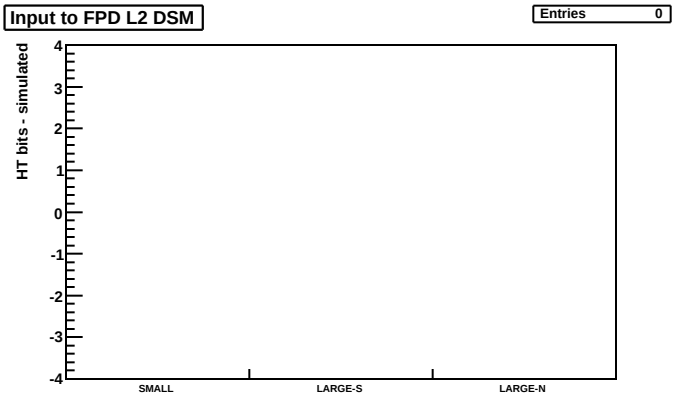

Input to FPD L2 DSM
Entries 8000000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

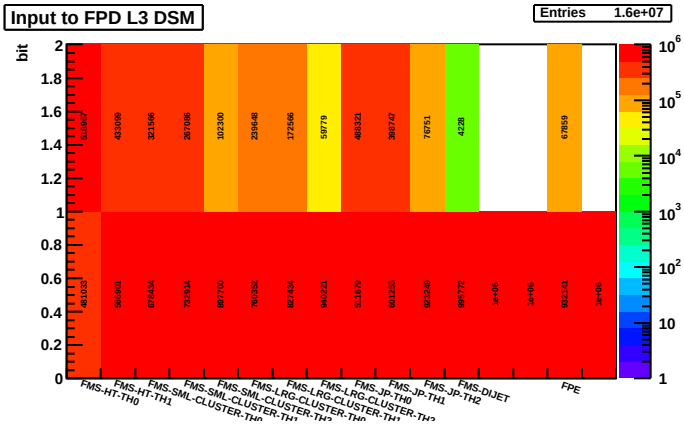

Input to FPD L2 DSM
Entries 23795
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

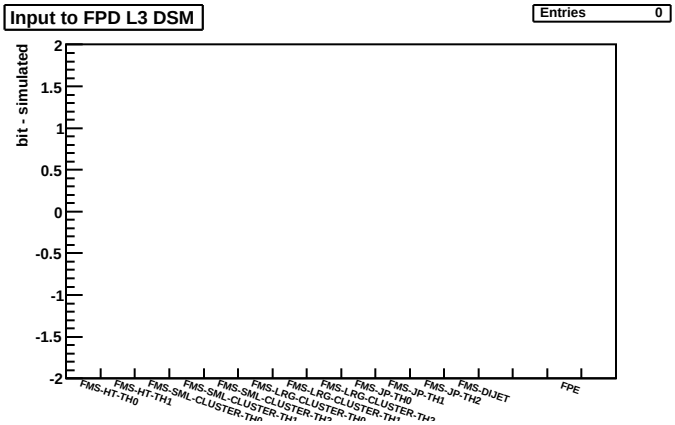

Input to FPD L2 DSM
Entries 3000000
CL bits
102300
29834
30983
164786
56861
55996
54480
32524
37647
678434
880781
875374
SMALL
LARGE-S
LARGE-N

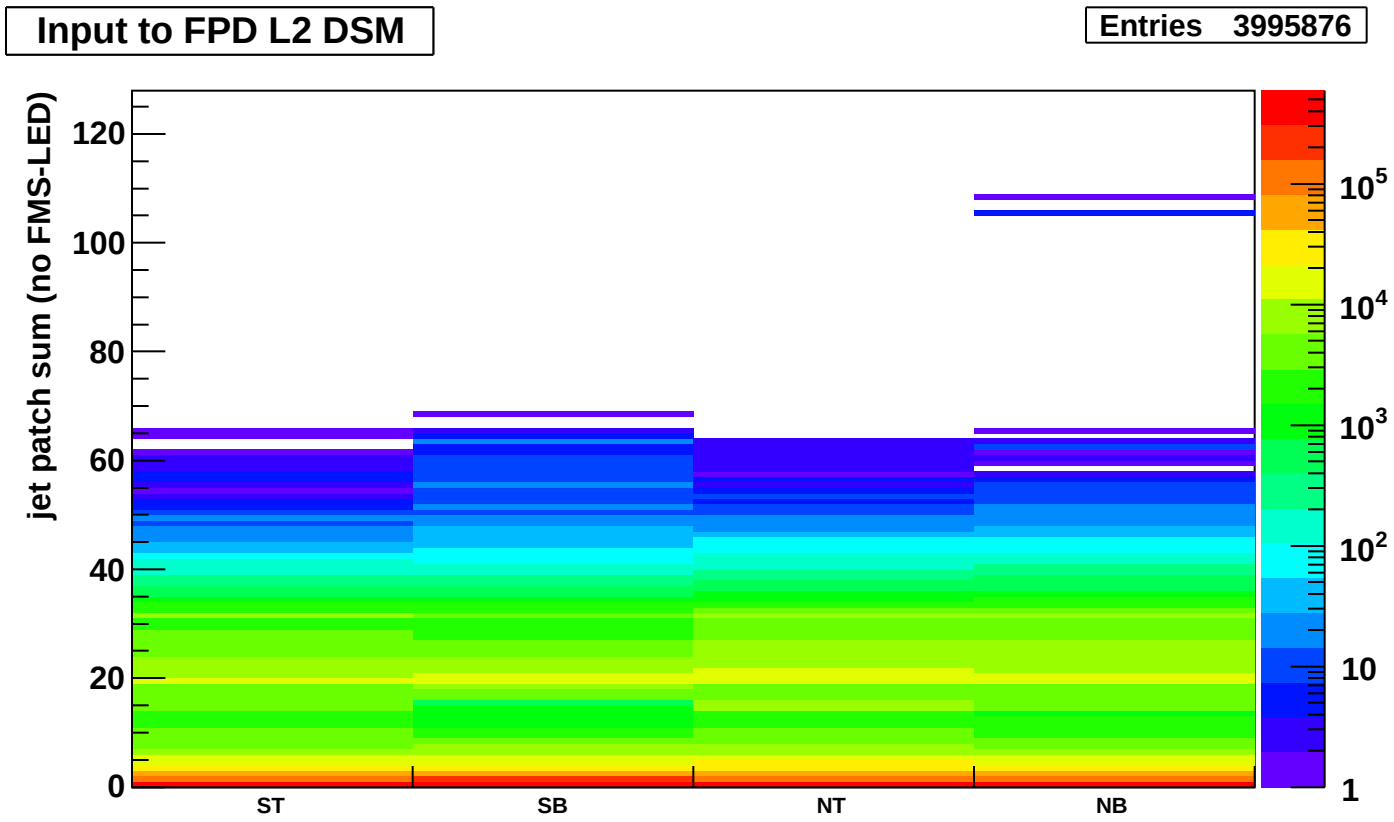

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

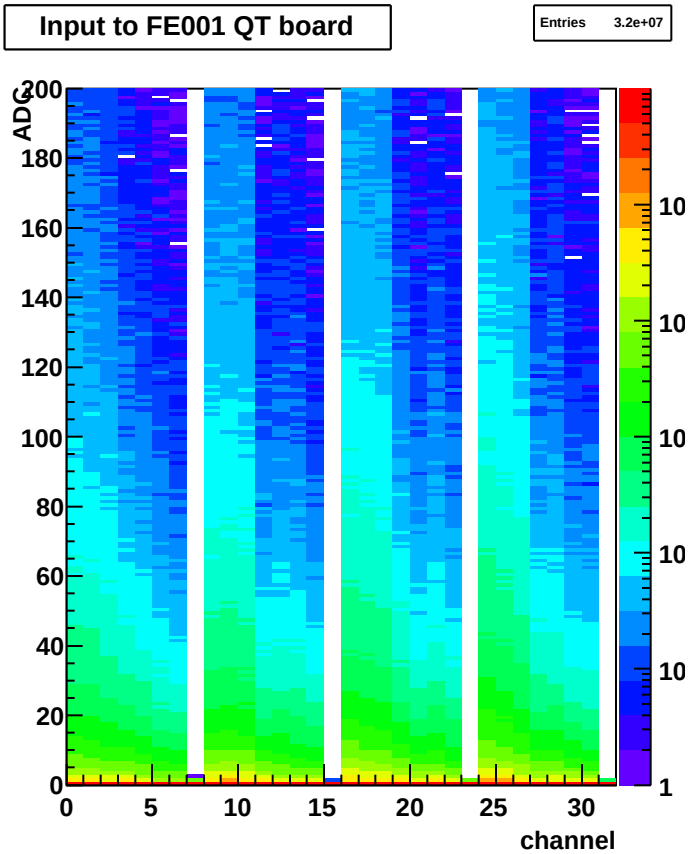

Input to FPD L2 DSM
Entries 3000000
HT bits
242415
98394
97136
60560
21156
25590
697025
880450
877274
SMALL
LARGE-S
LARGE-N

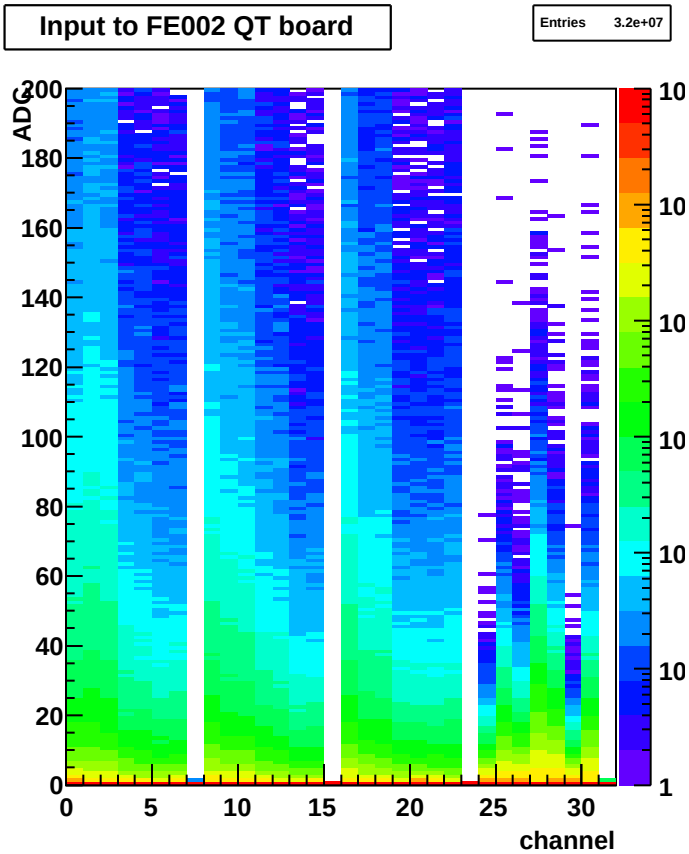

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

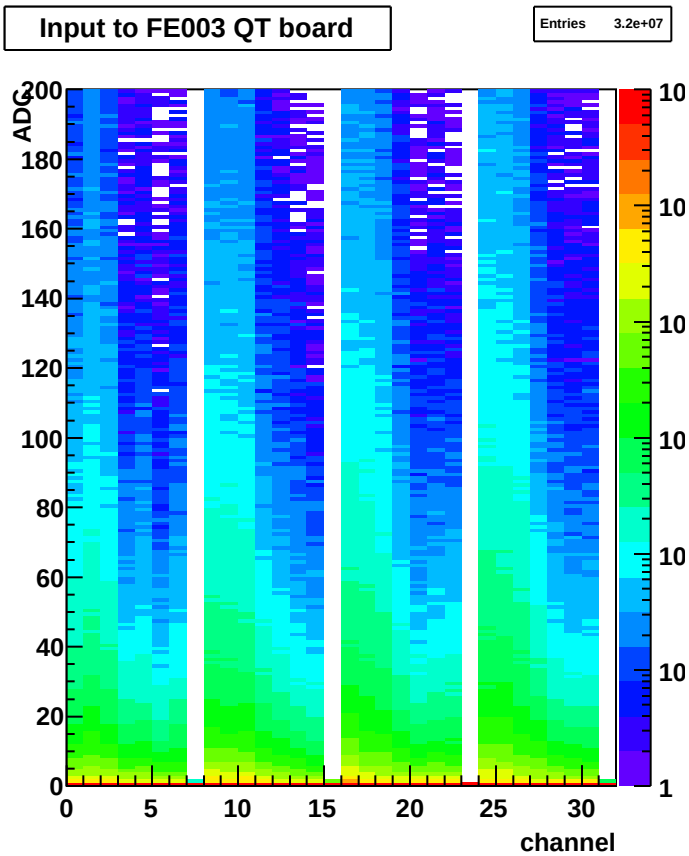

Input to FPD L3 DSM
Entries 1.6e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

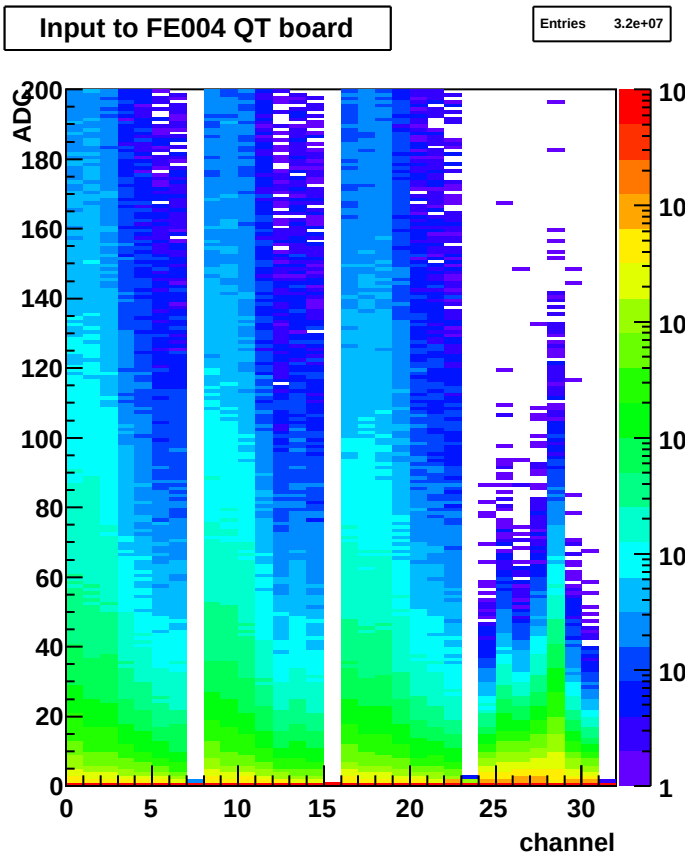

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

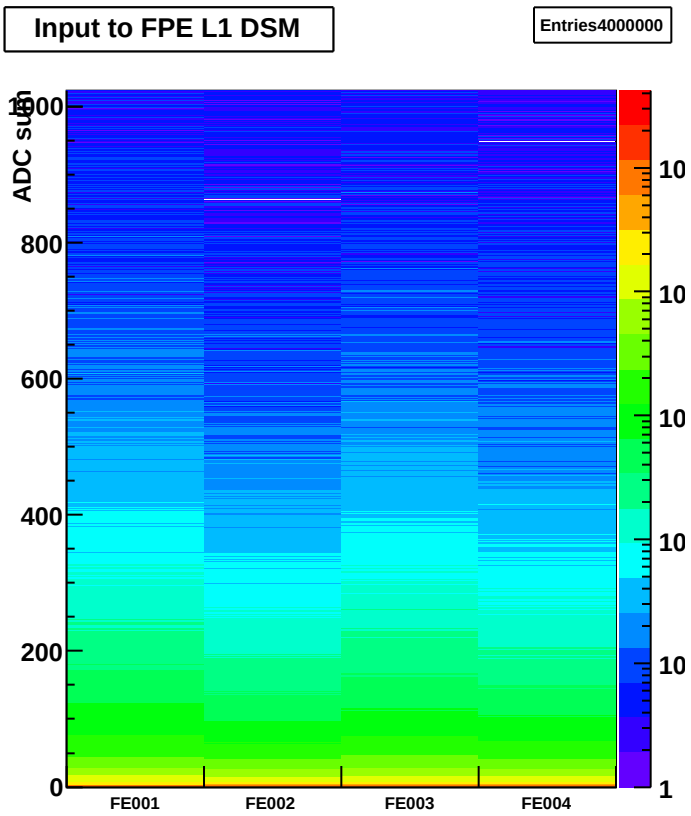

Input to FPD L2 DSM
Entries 3995876
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

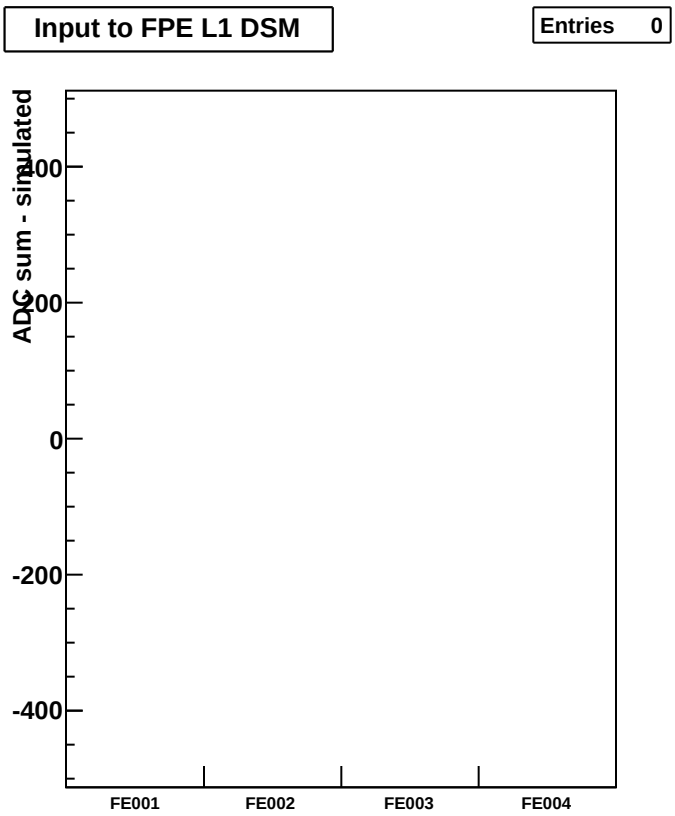

Input to FE001 QT board
Entries 3.2e+07
ADC
channel

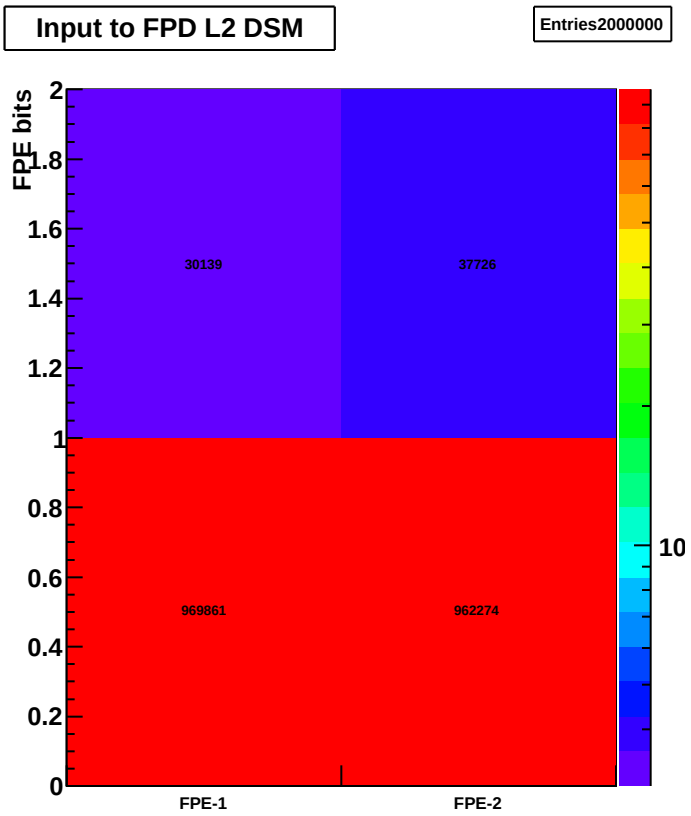

Input to FE002 QT board
Entries 3.2e+07
ADC
channel

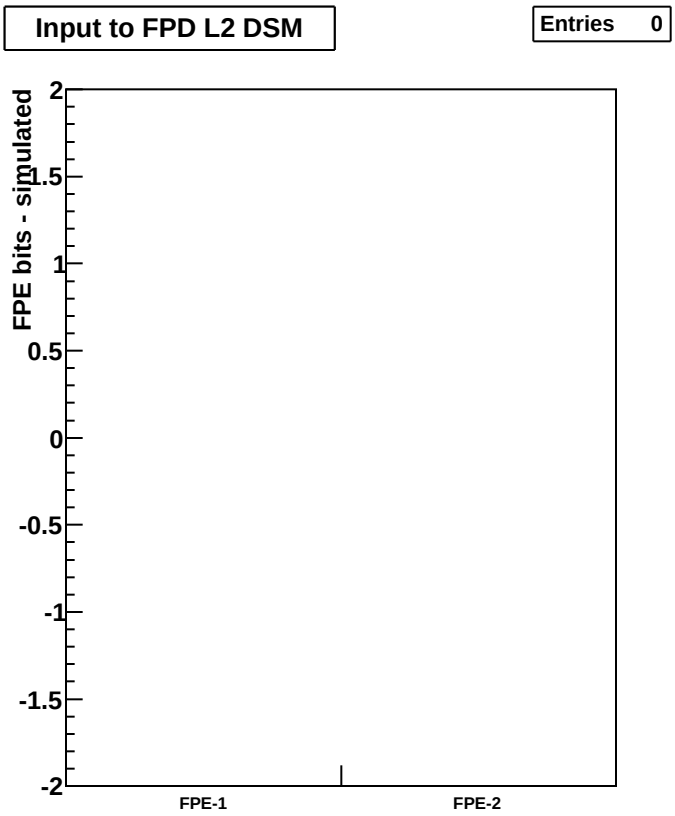

Input to FE003 QT board
Entries 3.2e+07
ADC
channel


Input to FE004 QT board
Entries 3.2e+07
ADC
channel


Input to FPE L1 DSM
Entries4000000
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
Entries2000000
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
30139
37726
969861
962274
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