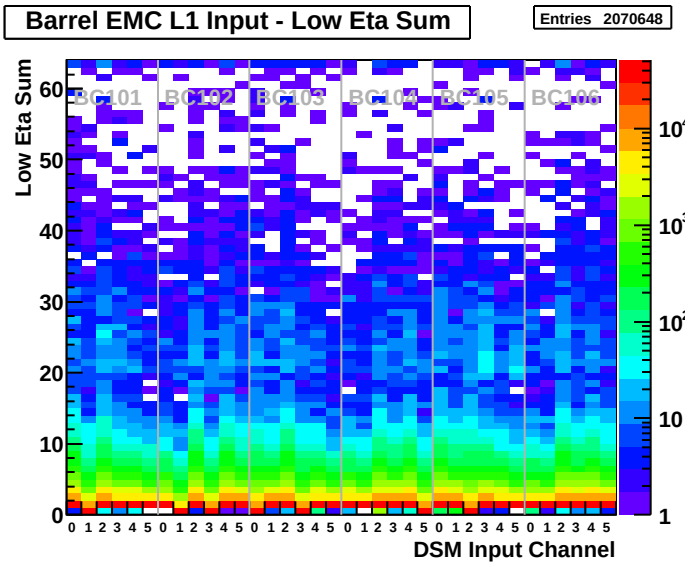
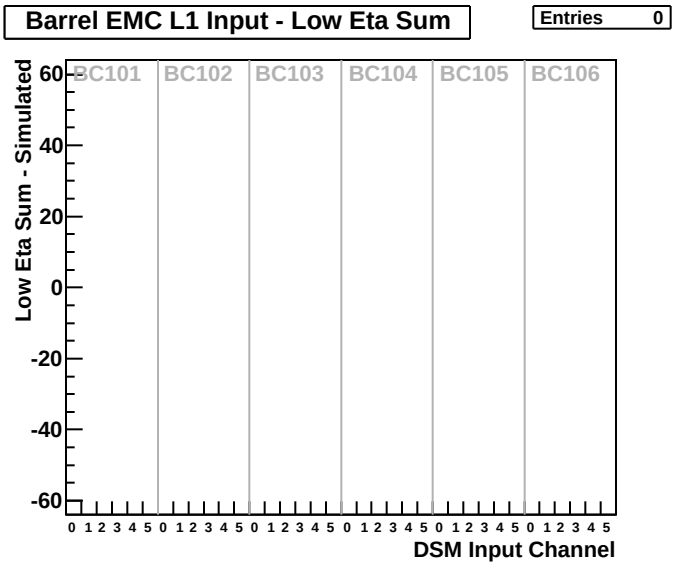
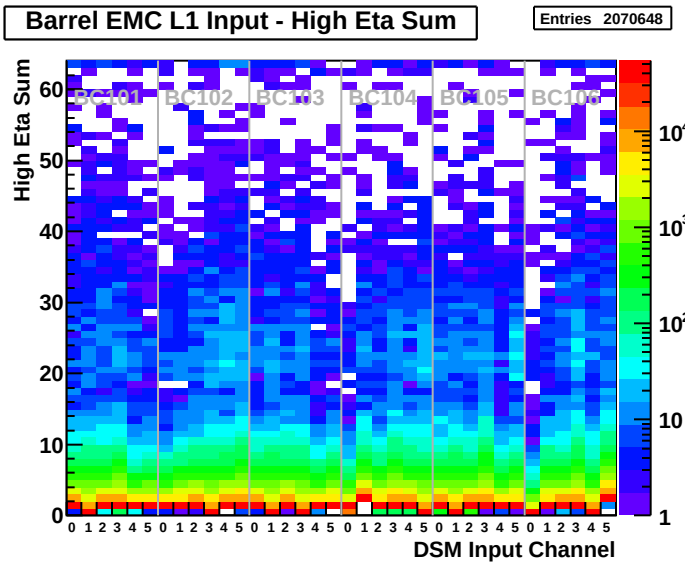
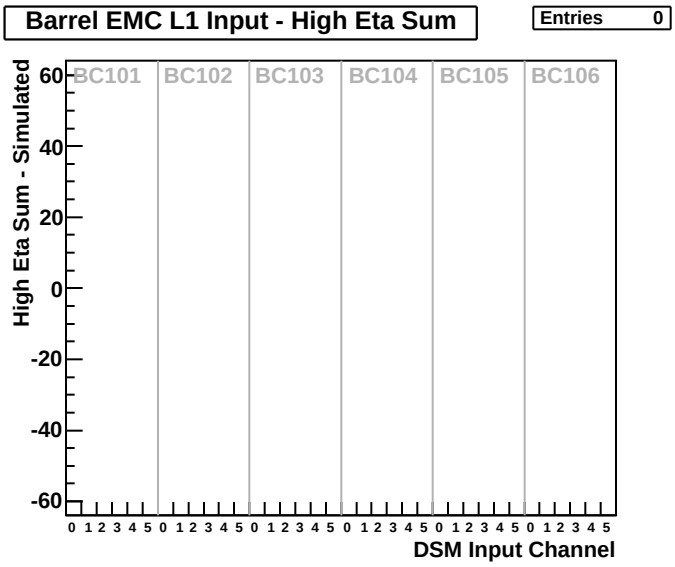
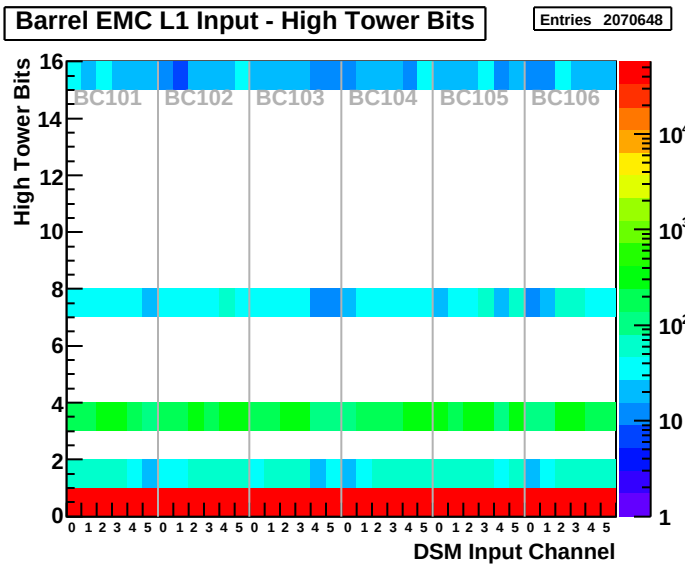
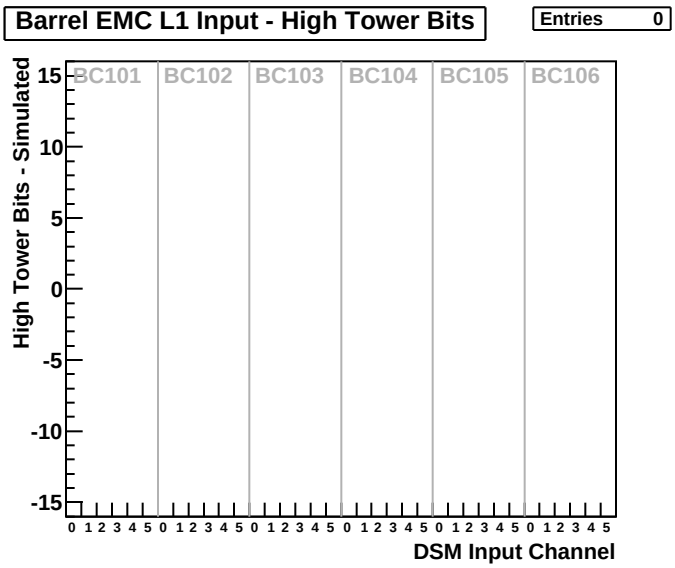

Barrel EMC L1 Input - Low Eta Sum
Entries 2070648
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

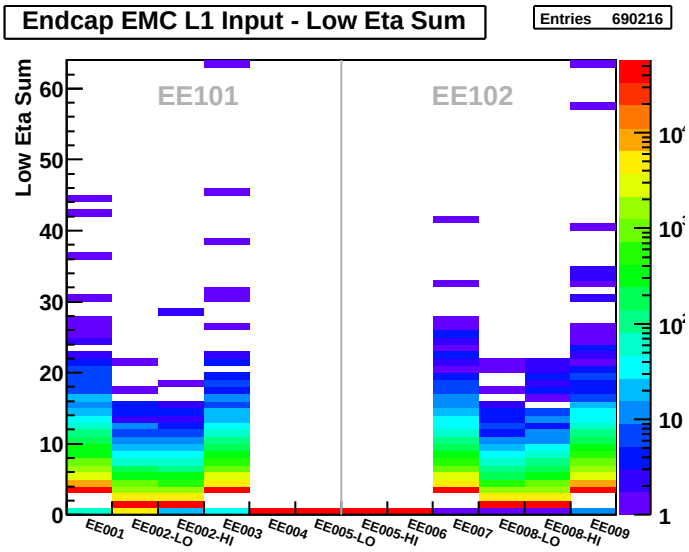

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

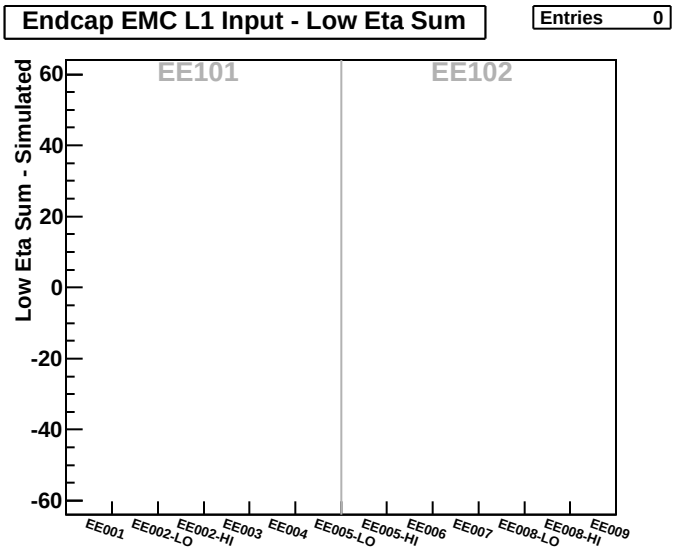

Barrel EMC L1 Input - High Eta Sum
Entries 2070648
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

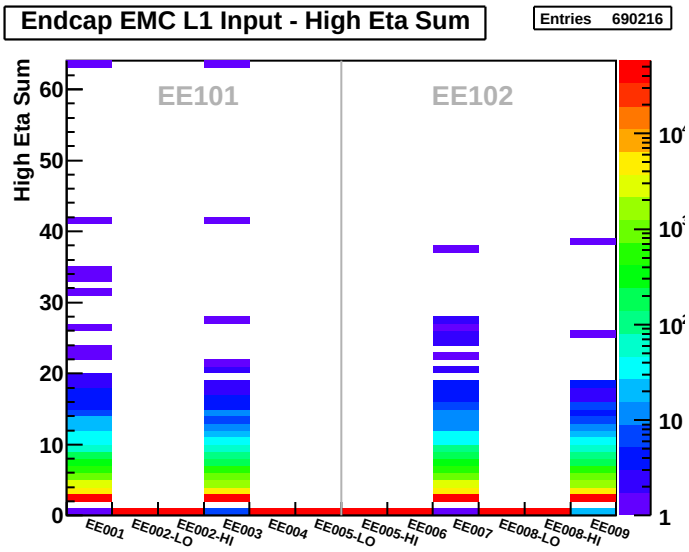

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

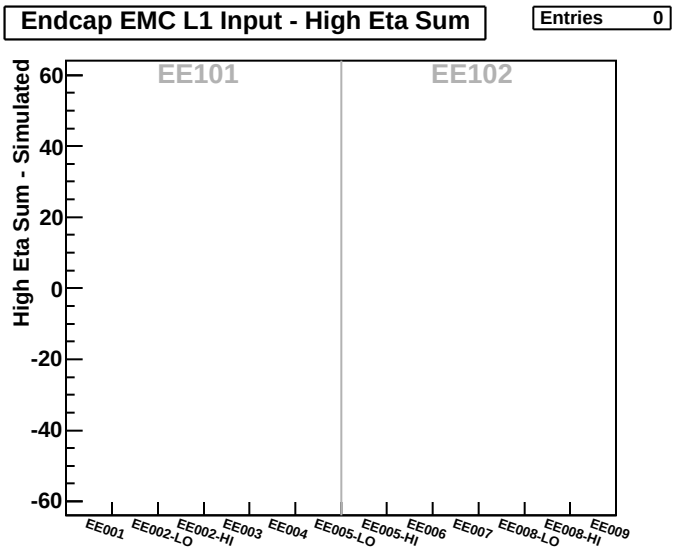

Barrel EMC L1 Input - High Tower Bits
Entries 2070648
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

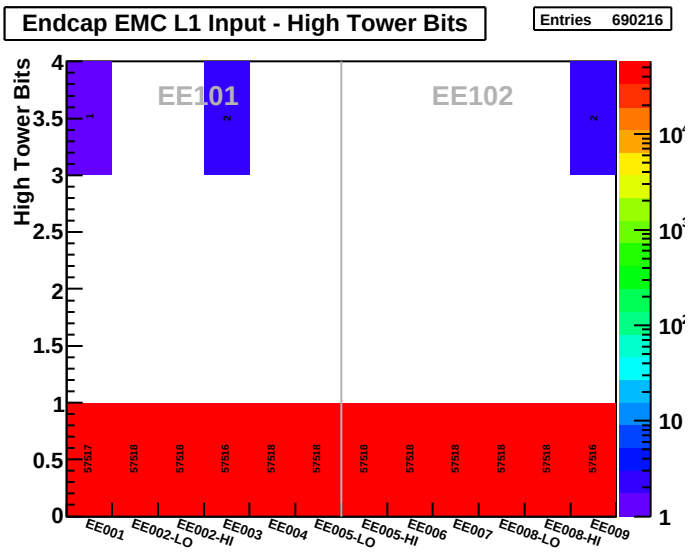

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

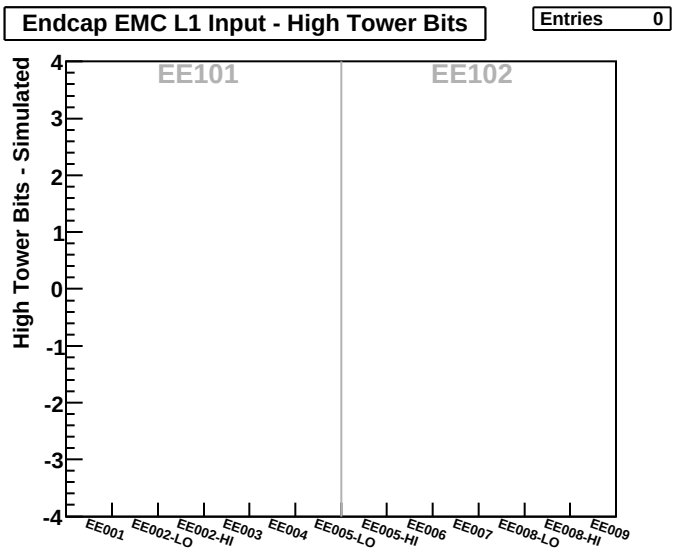

Endcap EMC L1 Input - Low Eta Sum
Entries 690216
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

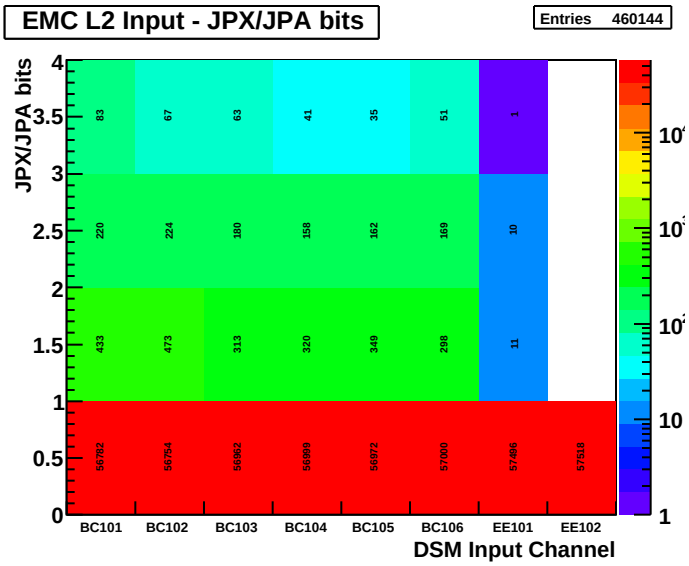

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

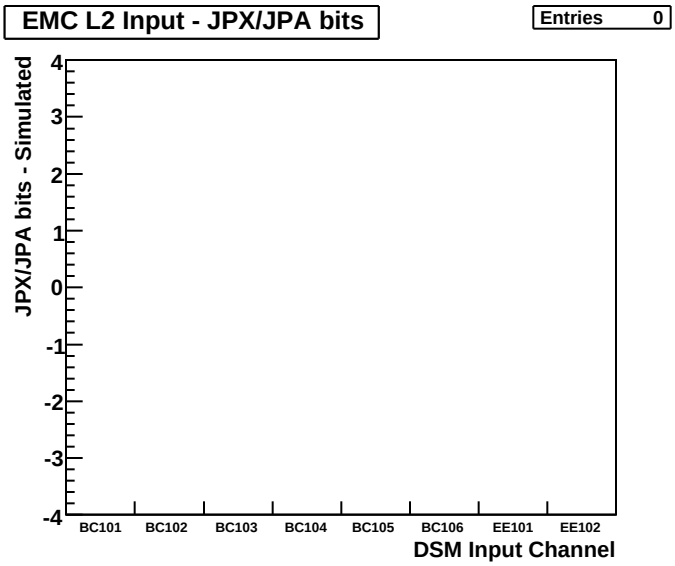

Endcap EMC L1 Input - High Eta Sum
Entries 690216
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

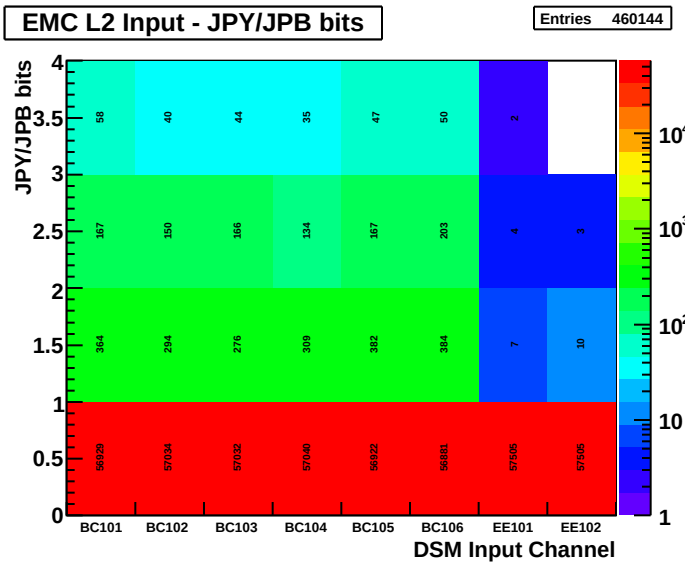

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

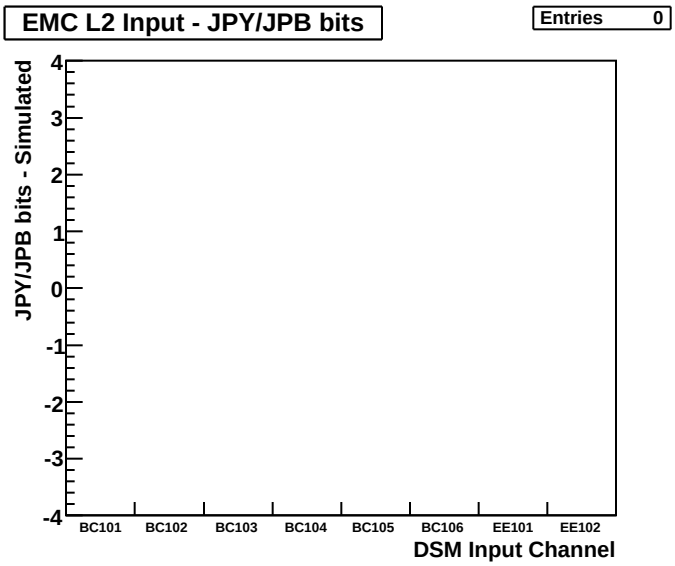

Endcap EMC L1 Input - High Tower Bits
Entries 690216
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

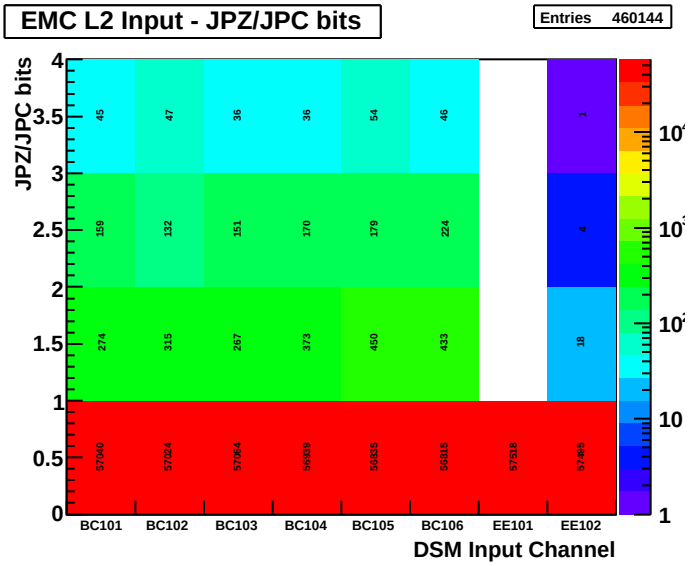

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

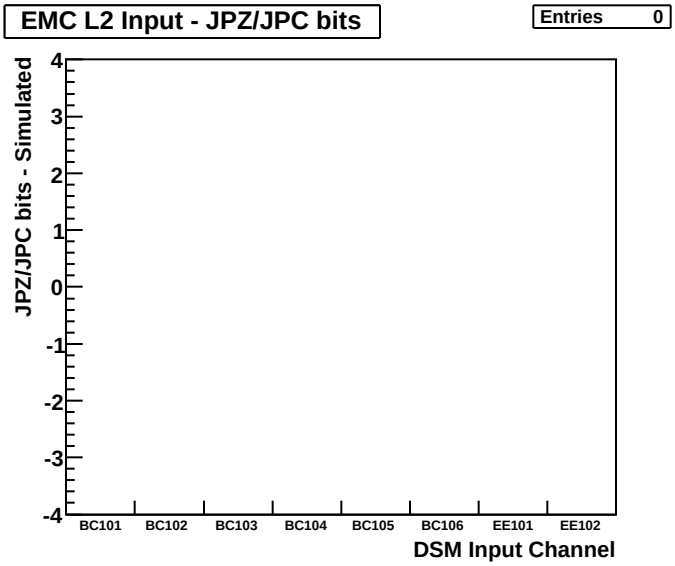

EMC L2 Input - JPX/JPA bits
Entries 460144
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
83 67 63 41 35 51 1
220 224 180 158 162 169 10
433 473 313 320 349 298 11
56782 56754 56862 56999 56972 57000 57496 57518

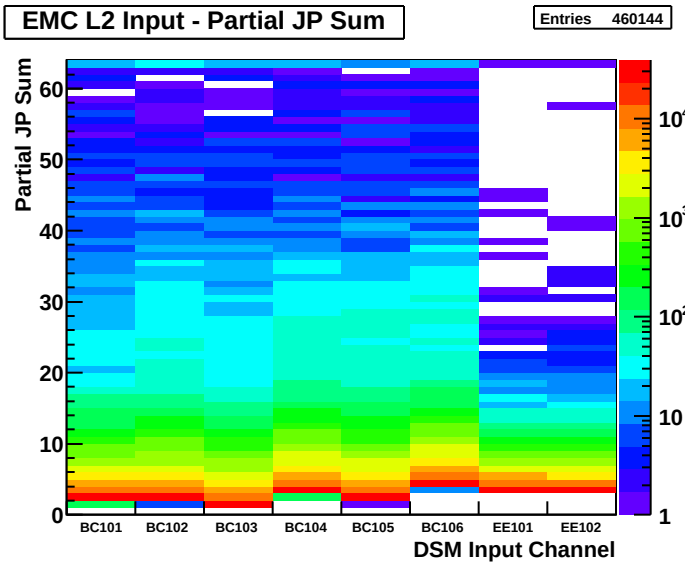

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

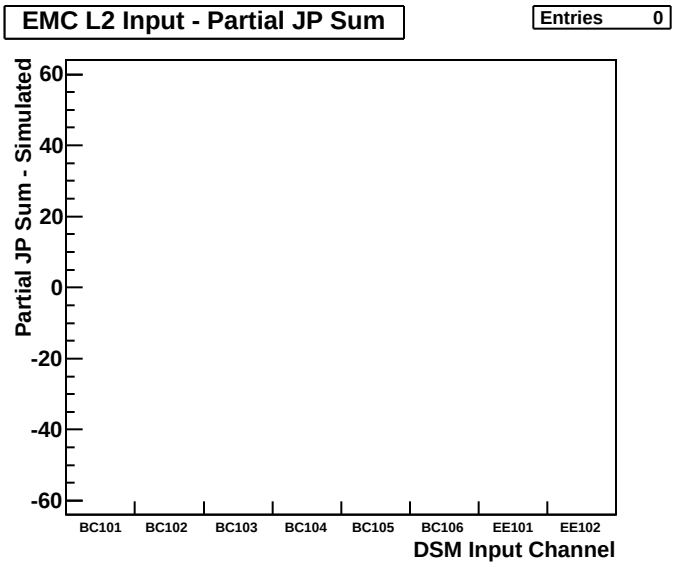

EMC L2 Input - JPY/JPB bits
Entries 460144
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
58 40 44 35 47 50 2
167 150 166 134 167 203 4 3
364 294 276 309 382 384 7 10
56929 57034 57032 57040 56922 56881 57505 57506

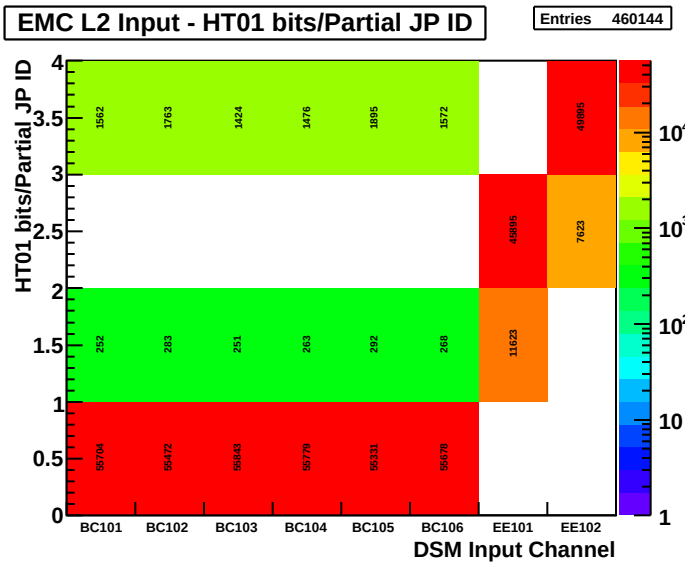

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

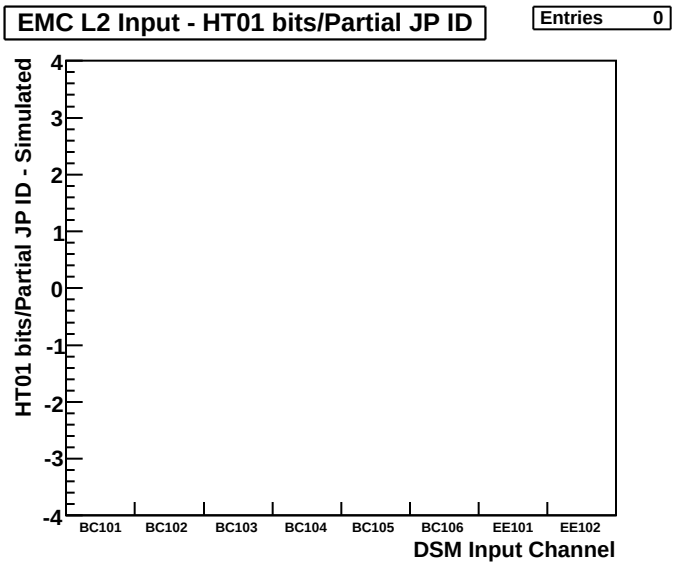

EMC L2 Input - JPZ/JPC bits
Entries 460144
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
45 47 36 36 54 46 1
159 132 151 170 179 224 4
274 315 267 373 450 433 18
57040 57024 57064 56939 56835 56815 57518 57495

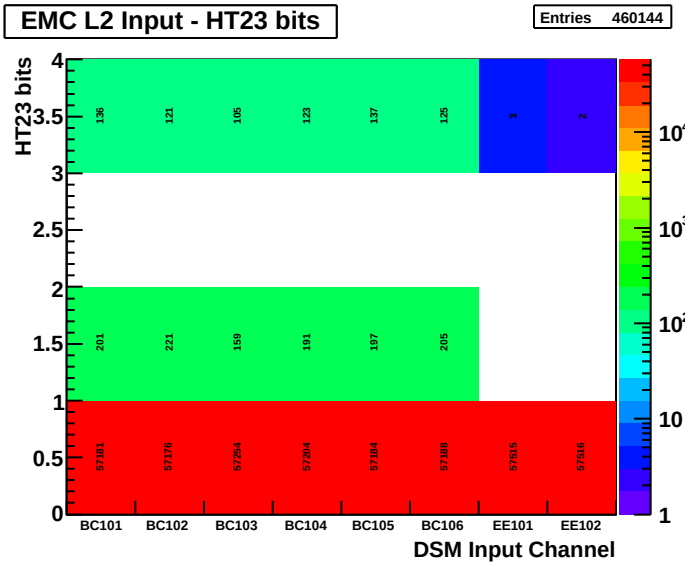

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

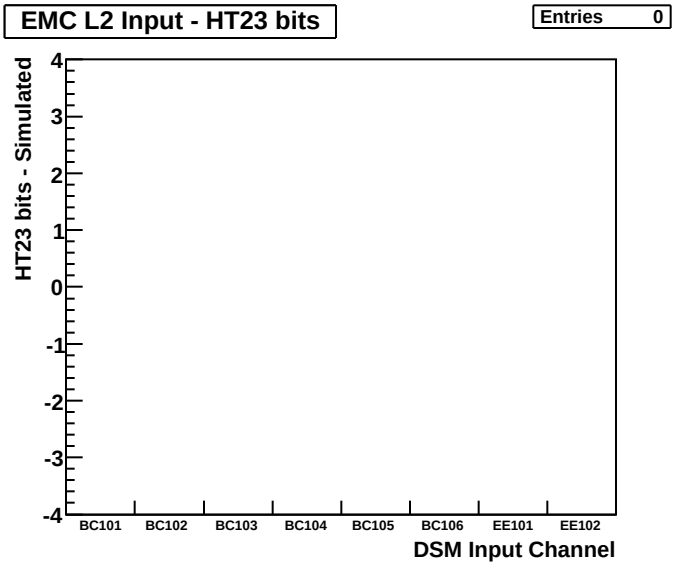

EMC L2 Input - Partial JP Sum
Entries 460144
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

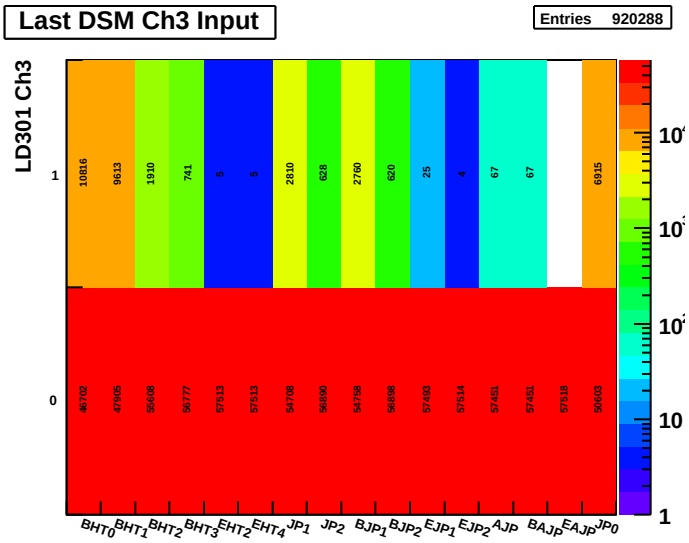

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

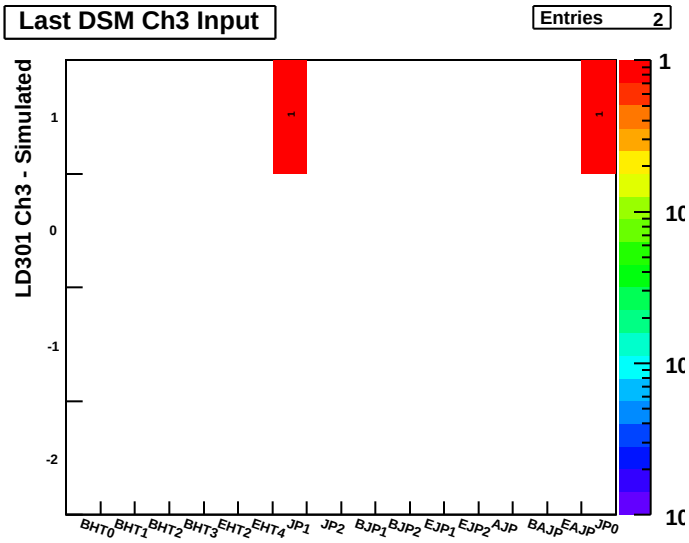

EMC L2 Input - HT01 bits/Partial JP ID
Entries 460144
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

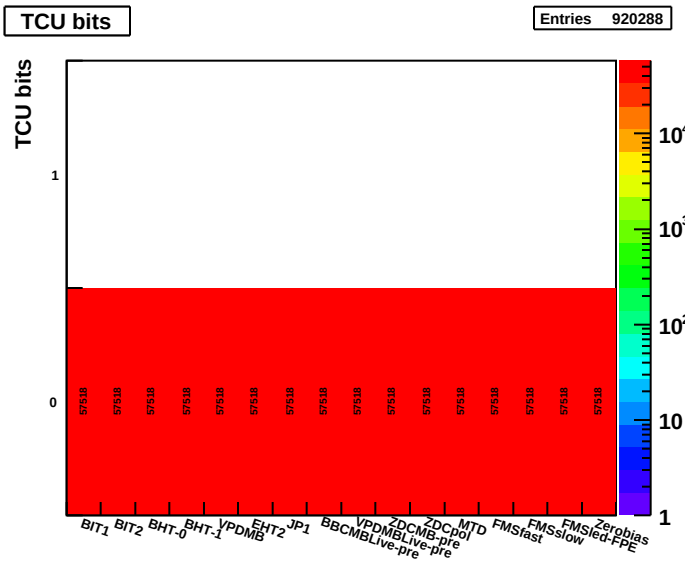

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

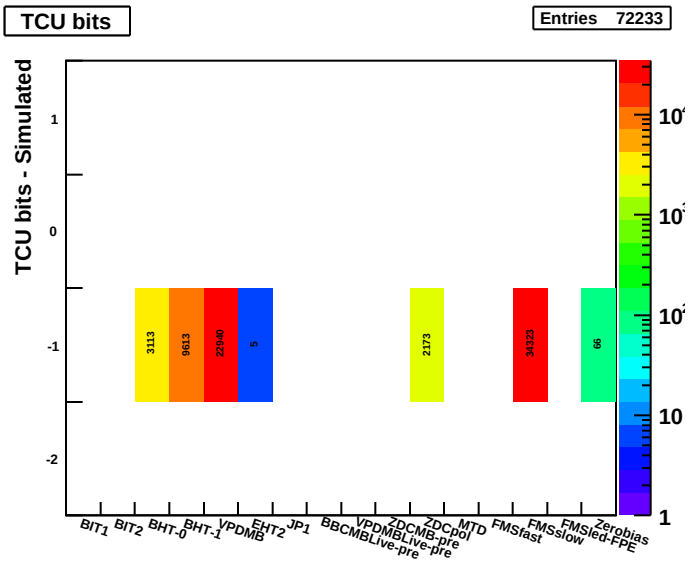

EMC L2 Input - HT23 bits
Entries 460144
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

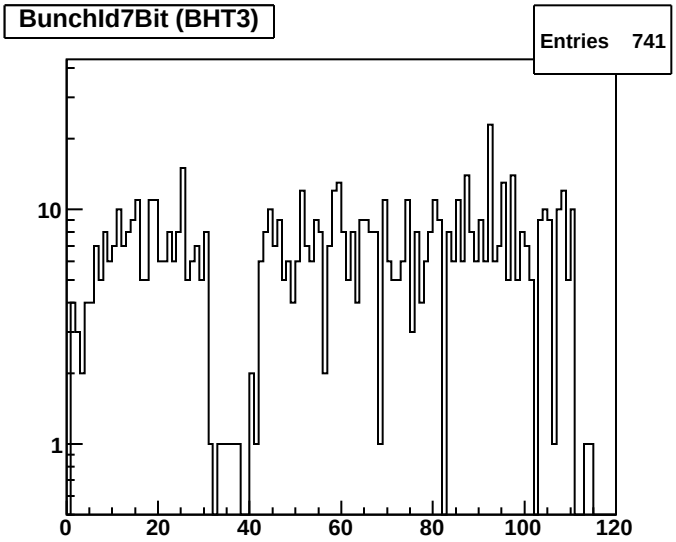

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

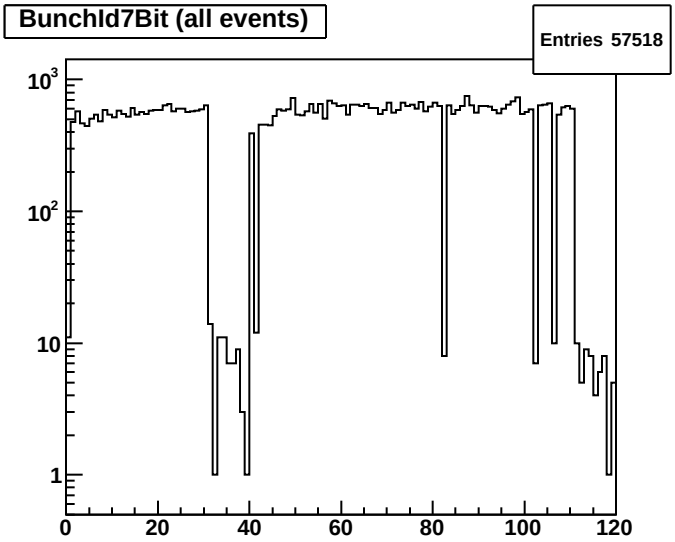

Last DSM Ch3 Input
Entries 920288
LD301 Ch3
10816 9613 1910 741 5 5 2810 628 2760 620 25 4 67 67 6915
46702 47905 55608 56777 57513 57513 54708 56690 54758 56898 57493 57514 57451 57451 57518 50603
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

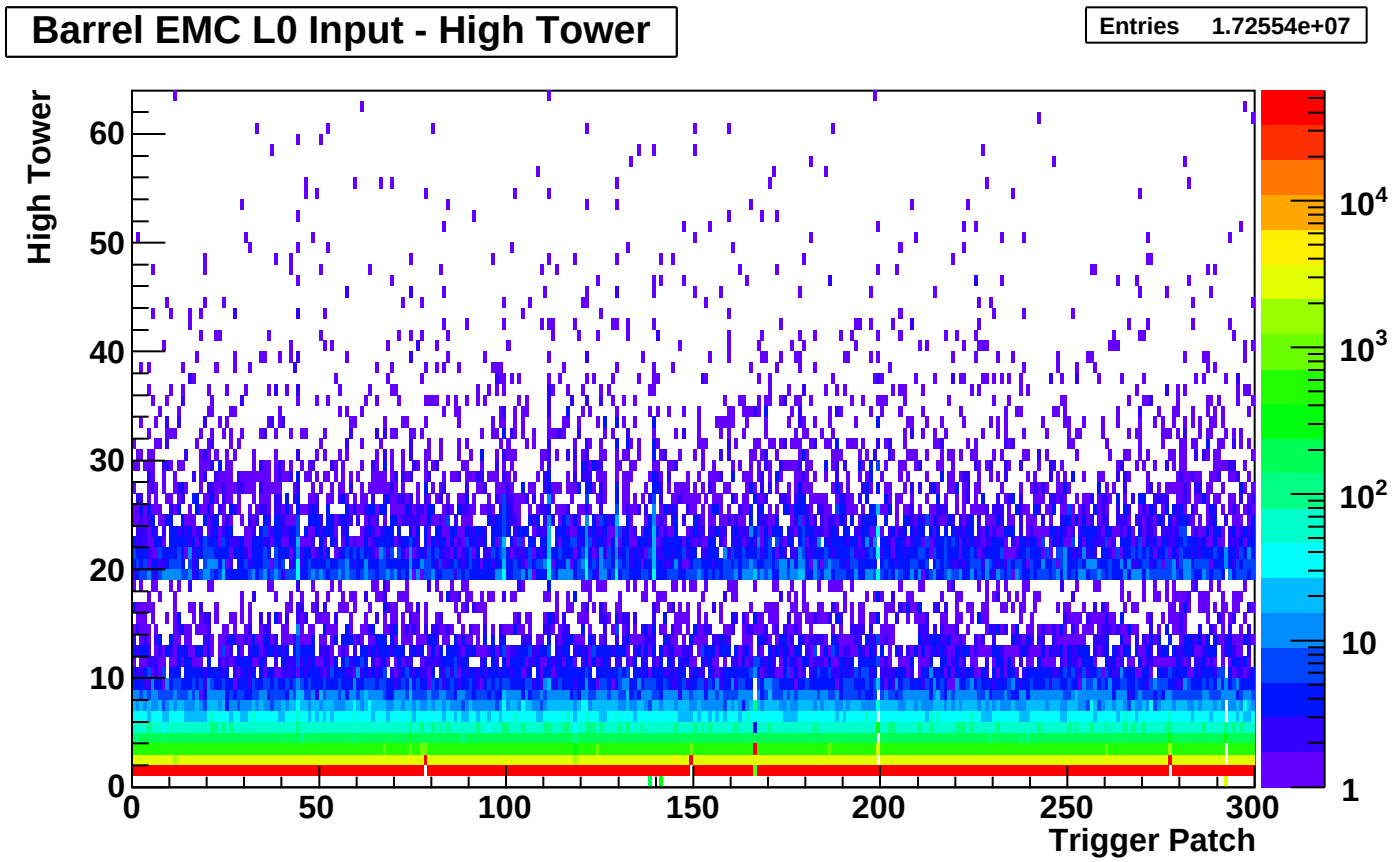

Last DSM Ch3 Input
Entries 2
LD301 Ch3 - Simulated
1 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

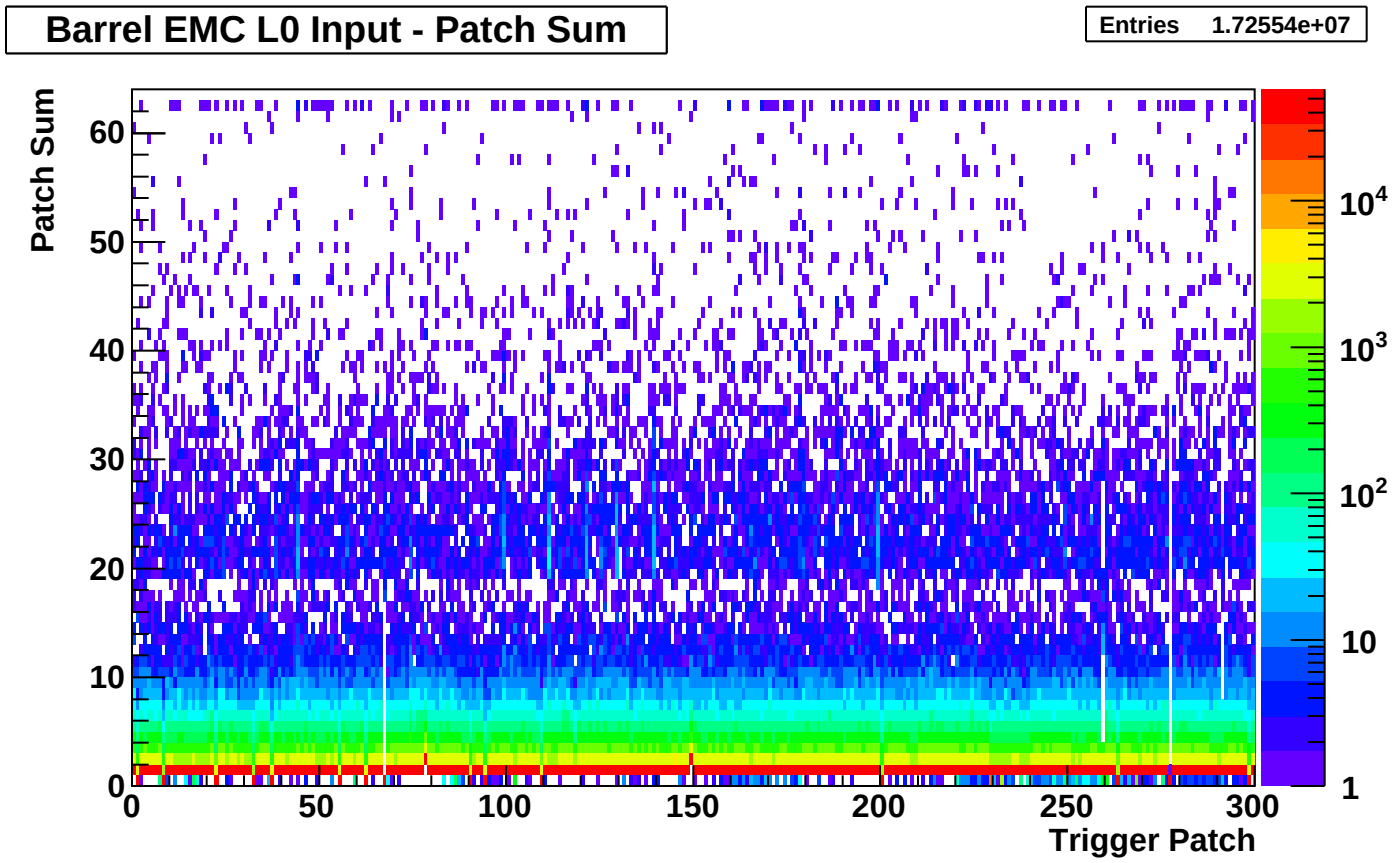

TCU bits
Entries 920288
TCU bits
57518 57518 57518 57518 57518 57518 57518 57518 57518 57518 57518 57518 57518 57518 57518 57518
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

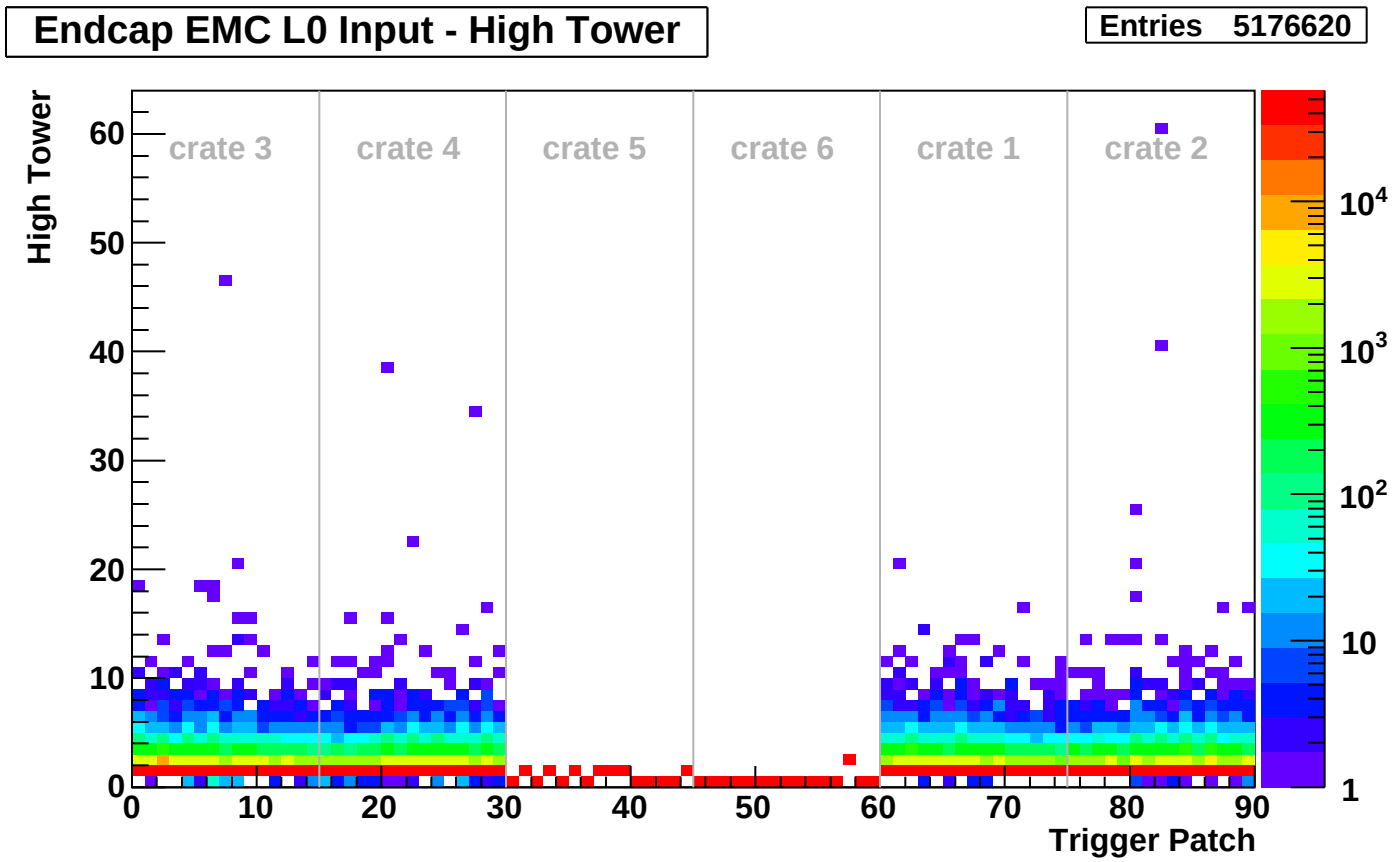

TCU bits
Entries 72233
TCU bits - Simulated
3113 9613 22940 5 2173 34323 66
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

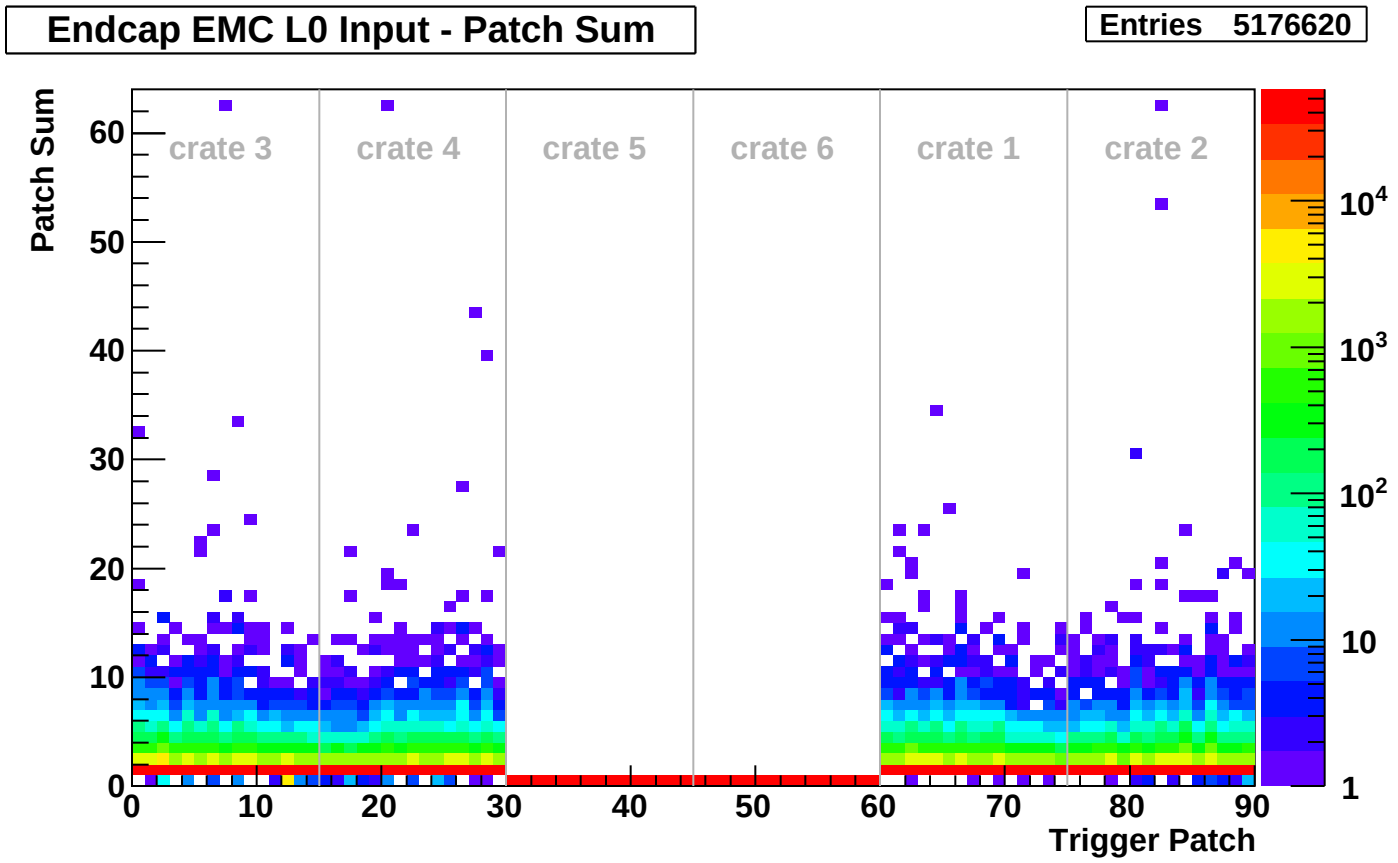

BunchId7Bit (BHT3)
Entries 741
0 20 40 60 80 100 120

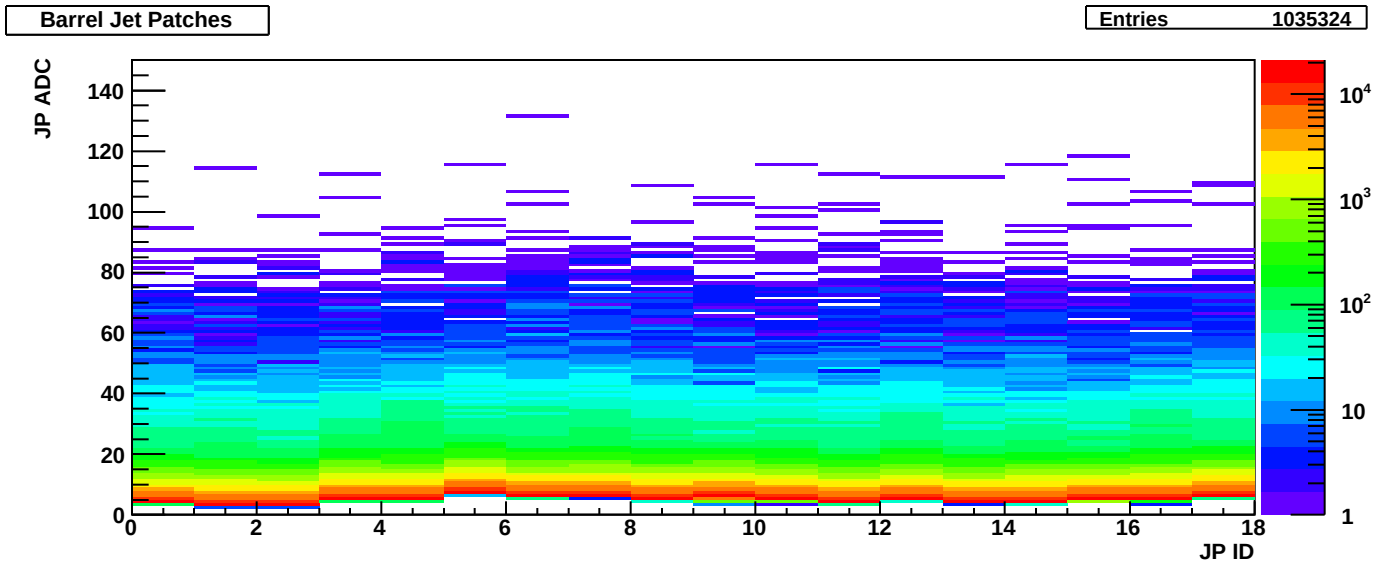

BunchId7Bit (all events)
Entries 57518
0 20 40 60 80 100 120

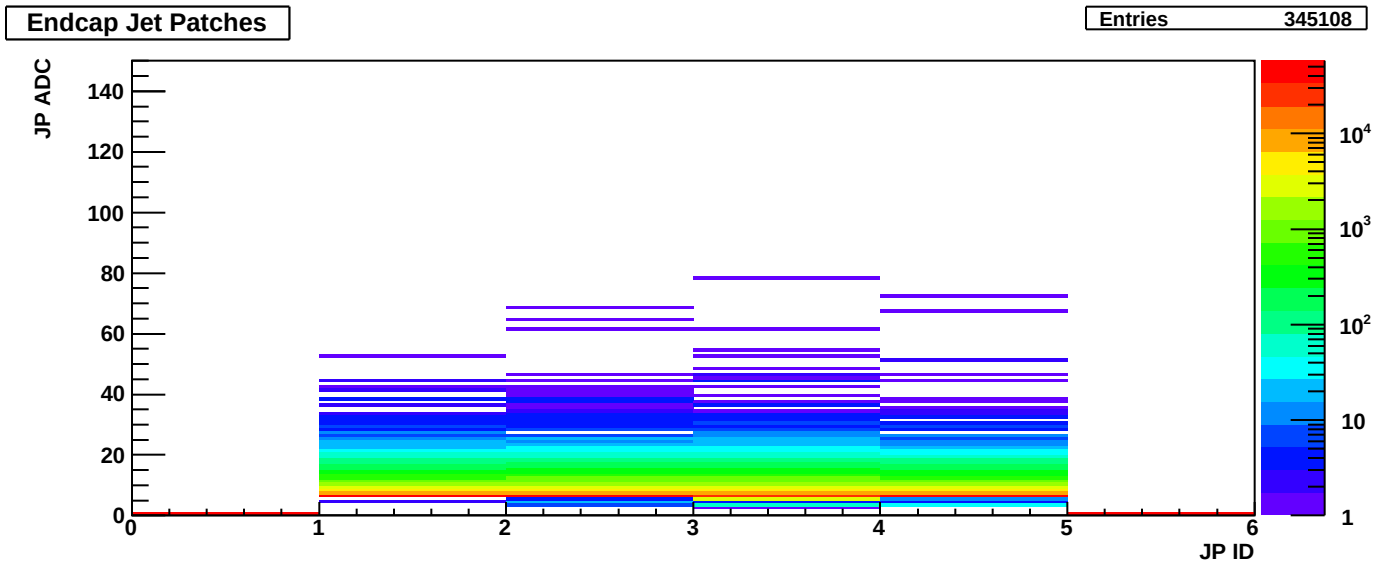

Barrel EMC L0 Input - High Tower
Entries 1.72554e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

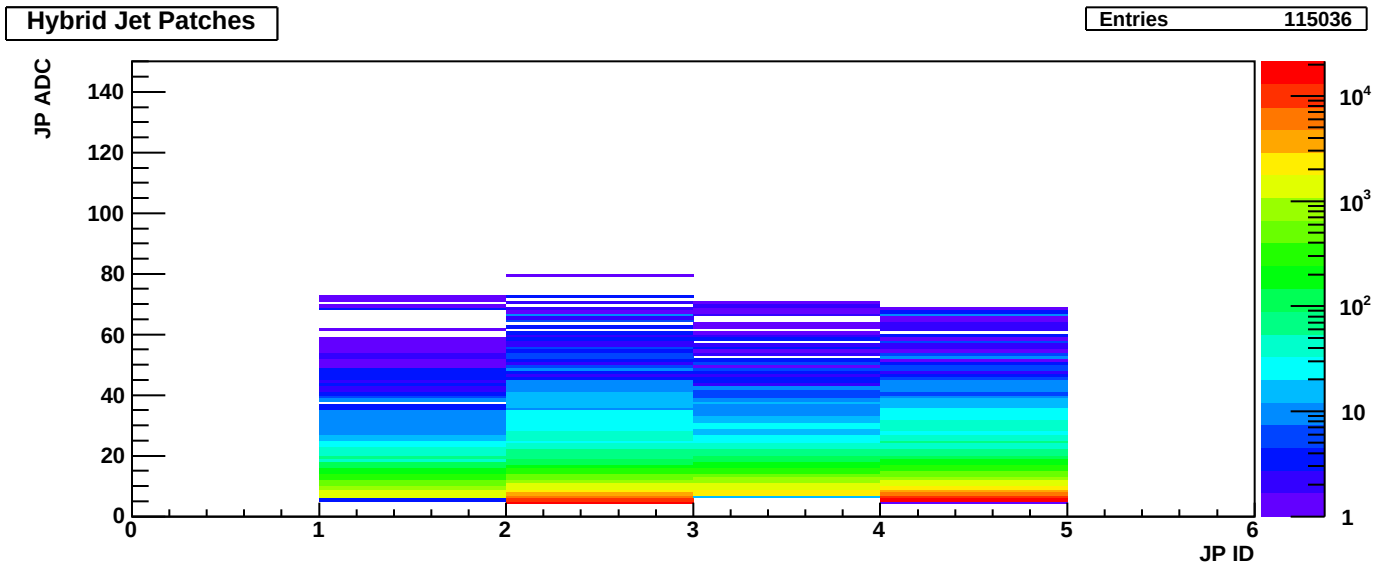

Barrel EMC L0 Input - Patch Sum
Entries 1.72554e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

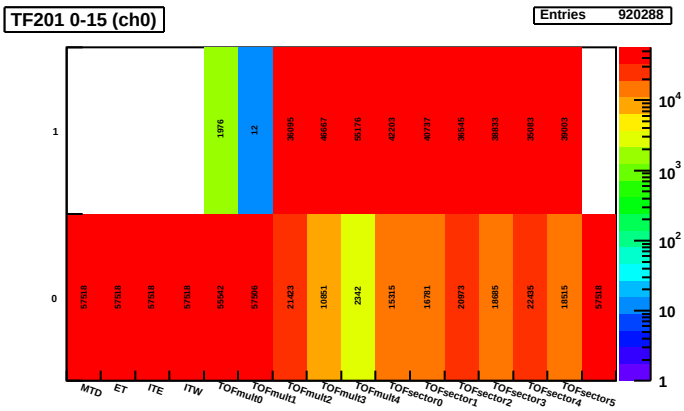

Endcap EMC L0 Input - High Tower
Entries 5176620
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

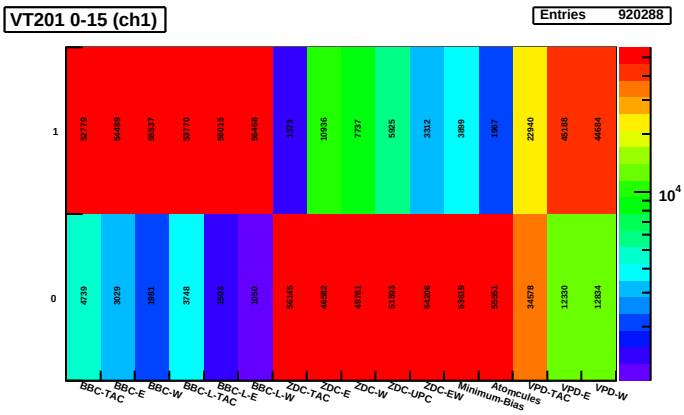

Endcap EMC L0 Input - Patch Sum
Entries 5176620
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

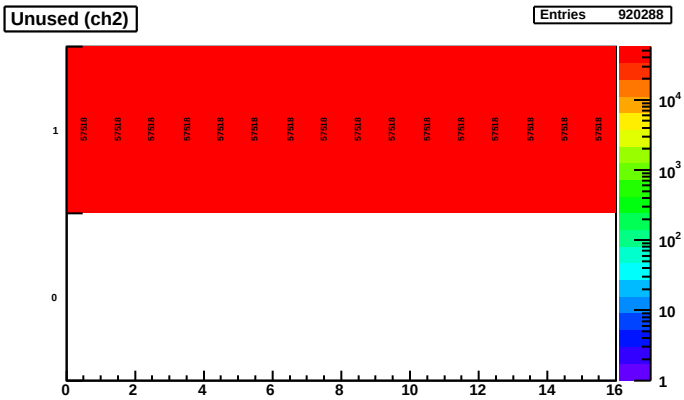

Barrel Jet Patches
Entries 1035324
JP ADC
JP ID

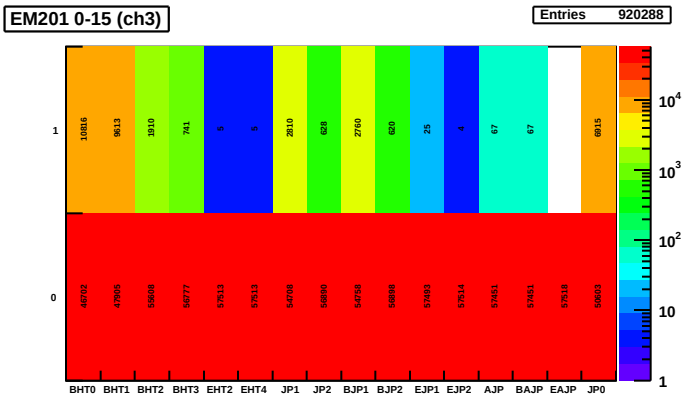

Endcap Jet Patches
Entries 345108
JP ADC
JP ID

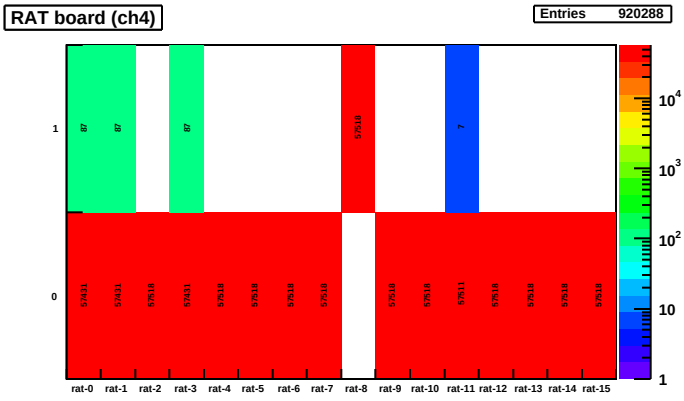

Hybrid Jet Patches
Entries 115036
JP ADC
JP ID

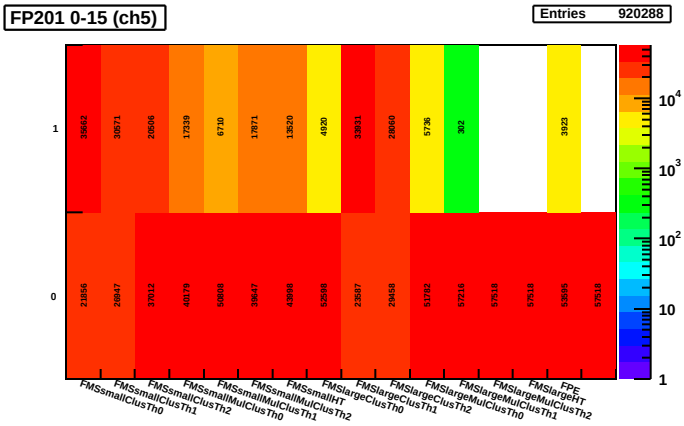

TF201 0-15 (ch0)
Entries 920288
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

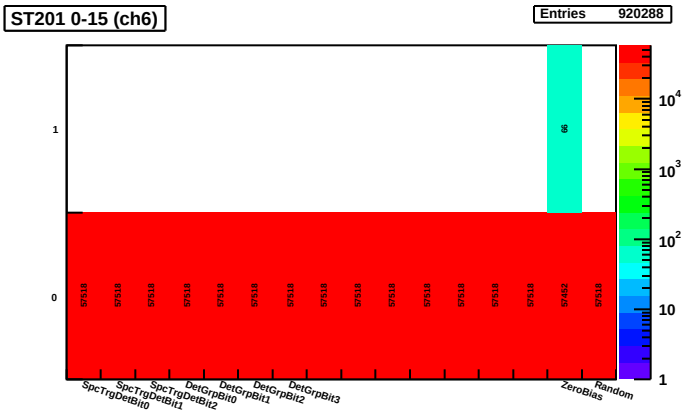

VT201 0-15 (ch1)
Entries 920288
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Atomcules Minimum-Bias VPD-TAC VPD-E VPD-W

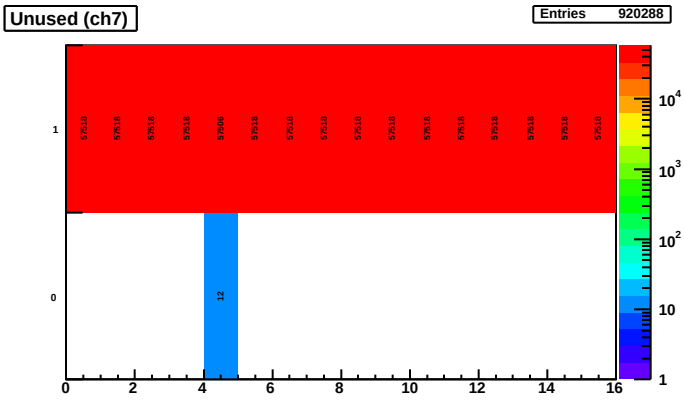

Unused (ch2)
Entries 920288

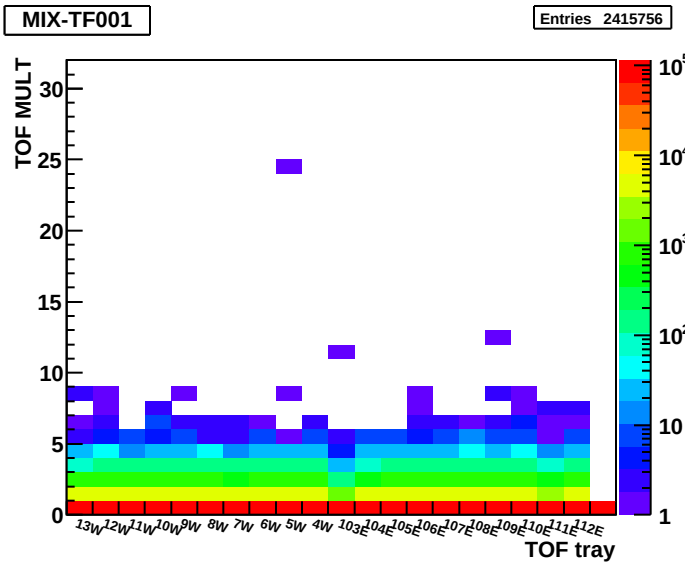

EM201 0-15 (ch3)
Entries 920288
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

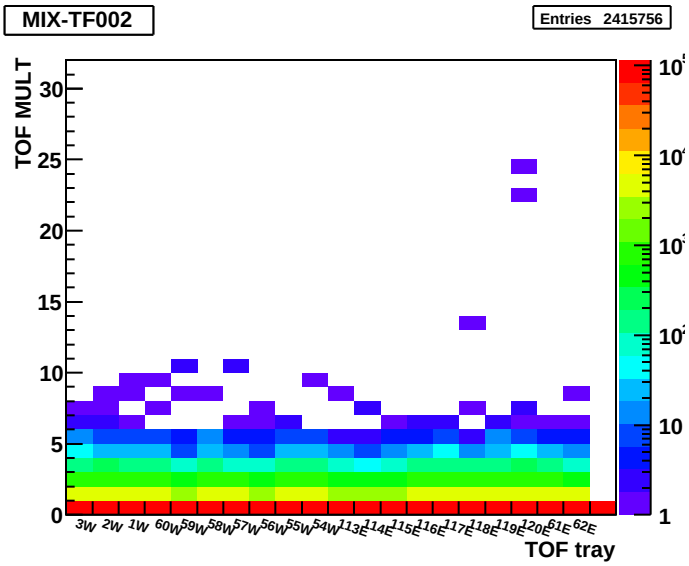

RAT board (ch4)
Entries 920288
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

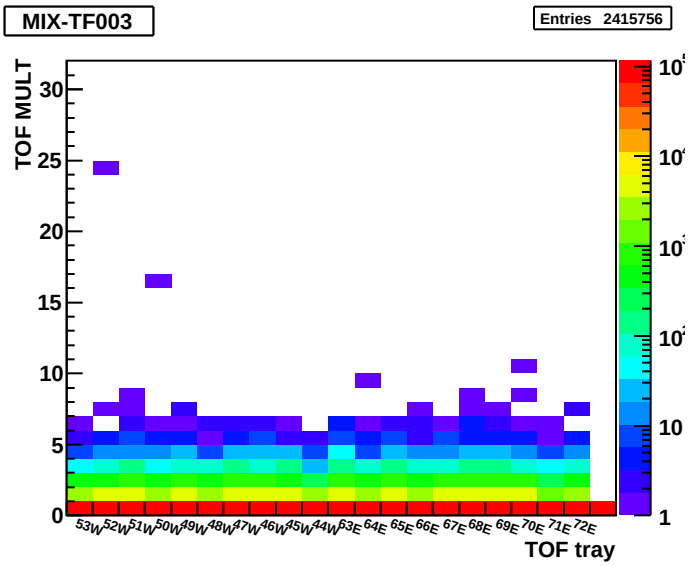

FP201 0-15 (ch5)
Entries 920288
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

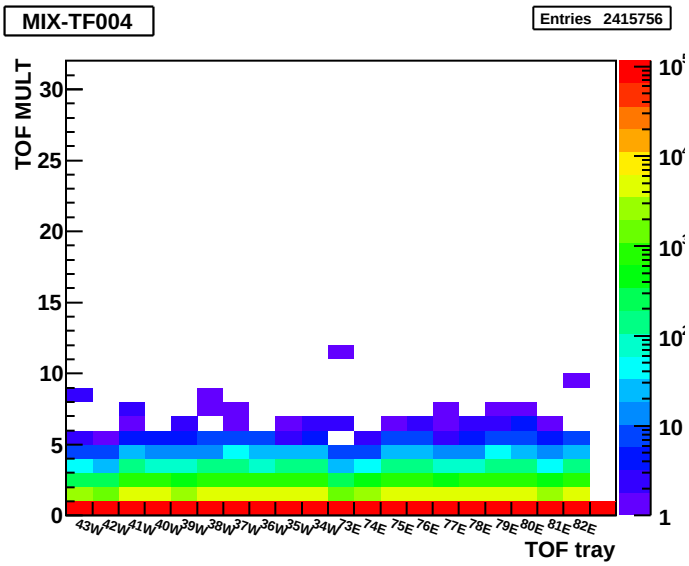

ST201 0-15 (ch6)
Entries 920288
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

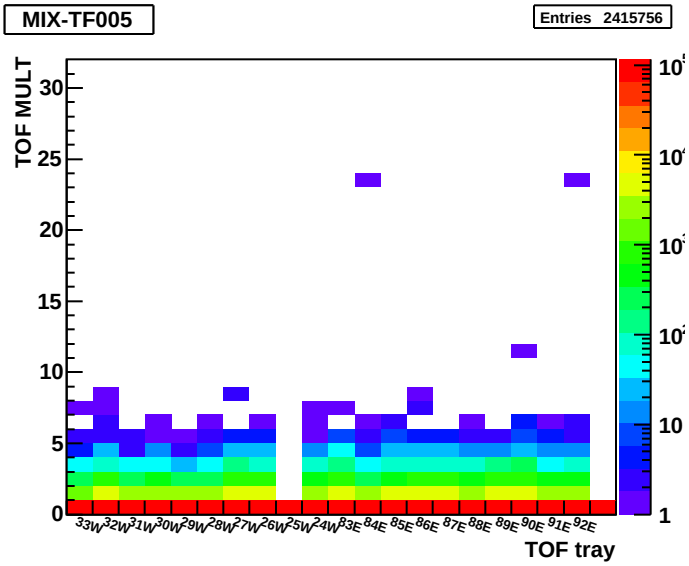

Unused (ch7)
Entries 920288

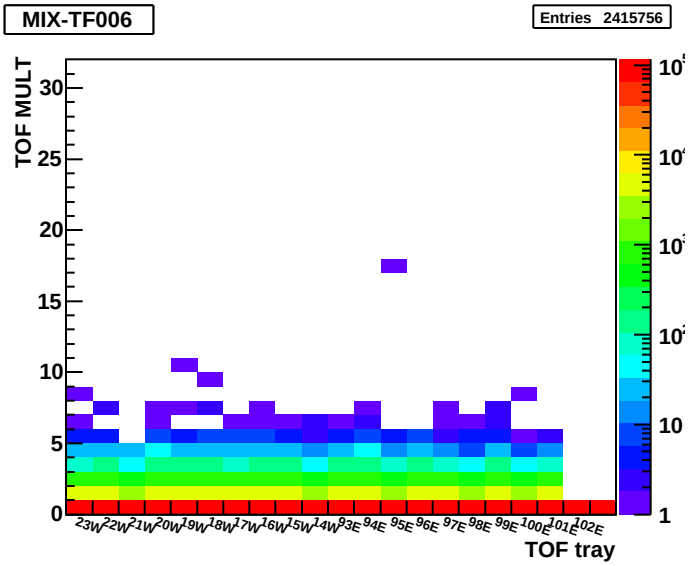

MIX-TF001
Entries 2415756
TOF MULT
TOF tray

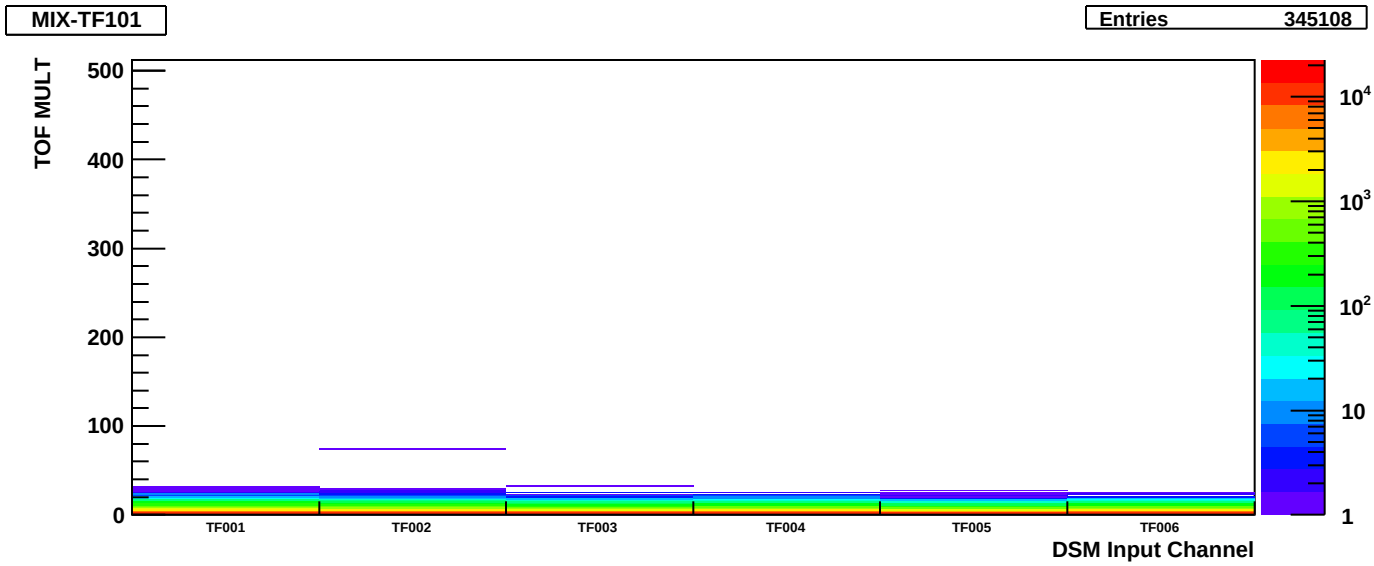

MIX-TF002
Entries 2415756
TOF MULT
TOF tray

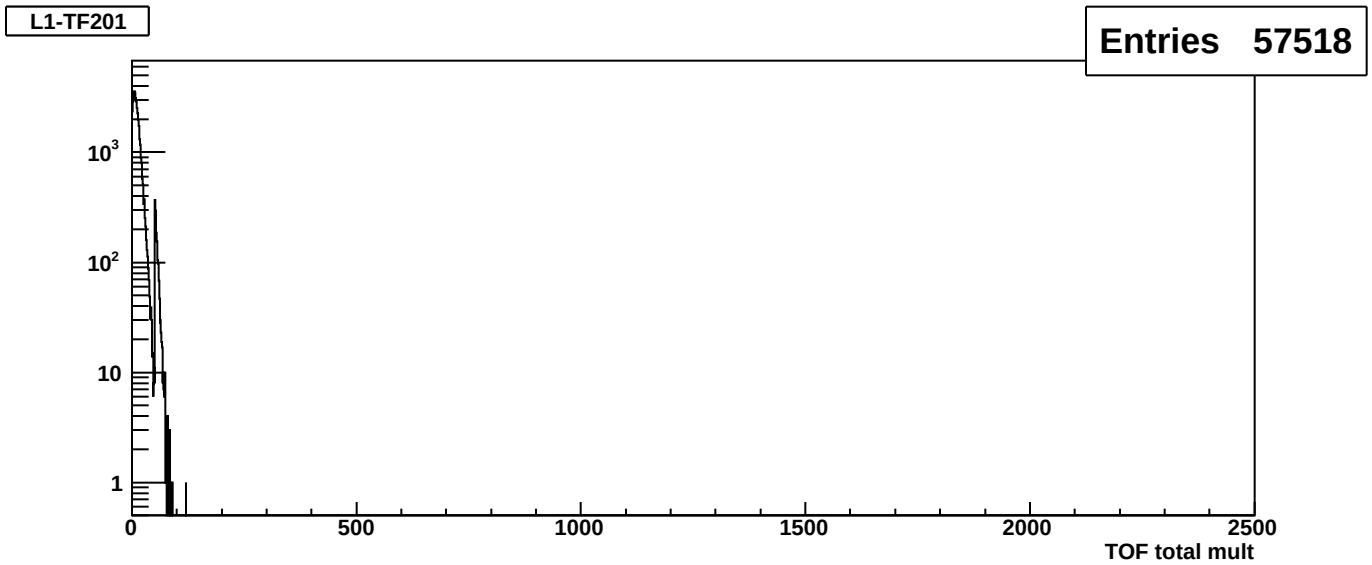

MIX-TF003
Entries 2415756
TOF MULT
TOF tray

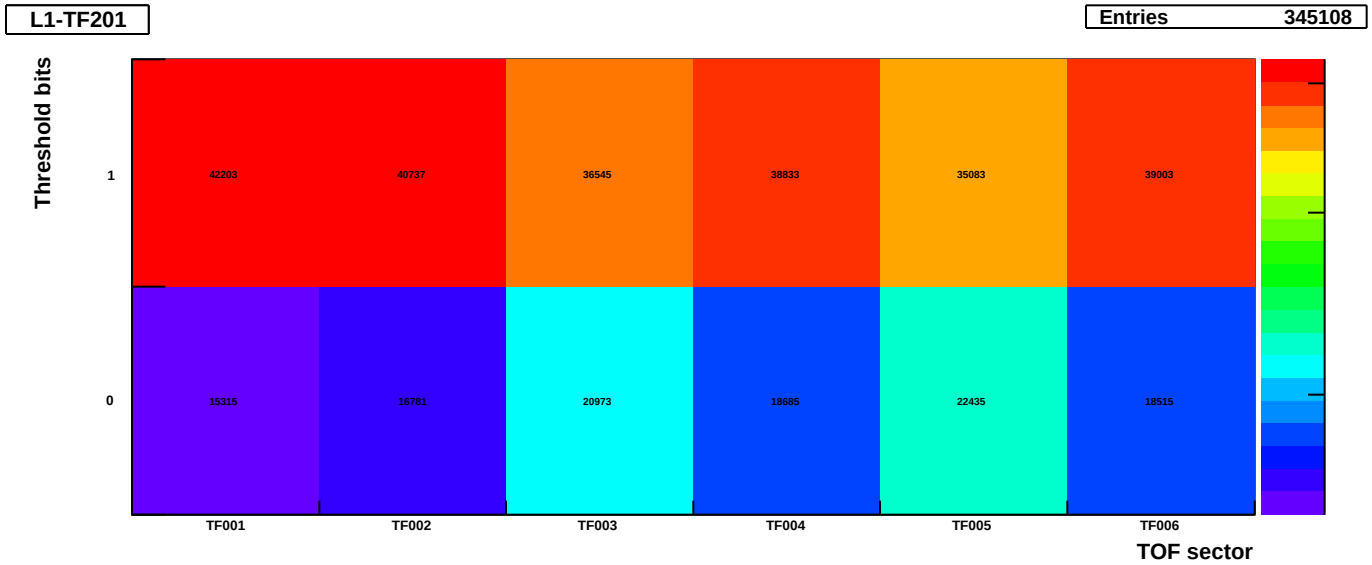

MIX-TF004
Entries 2415756
TOF MULT
TOF tray

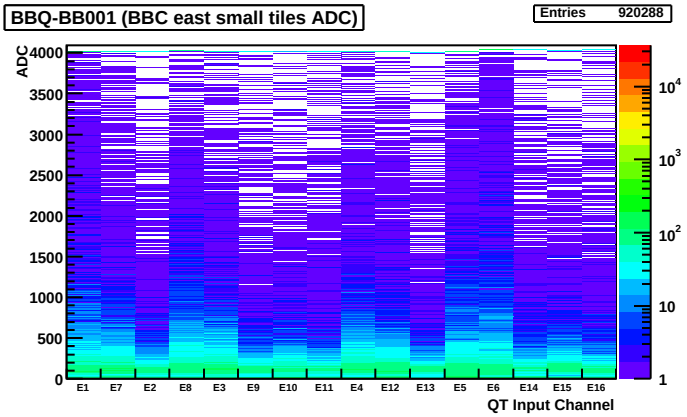

MIX-TF005
Entries 2415756
TOF MULT
TOF tray

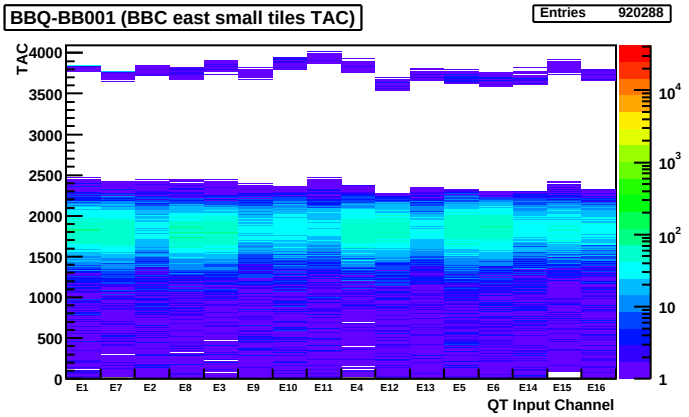

MIX-TF006
Entries 2415756
TOF MULT
TOF tray

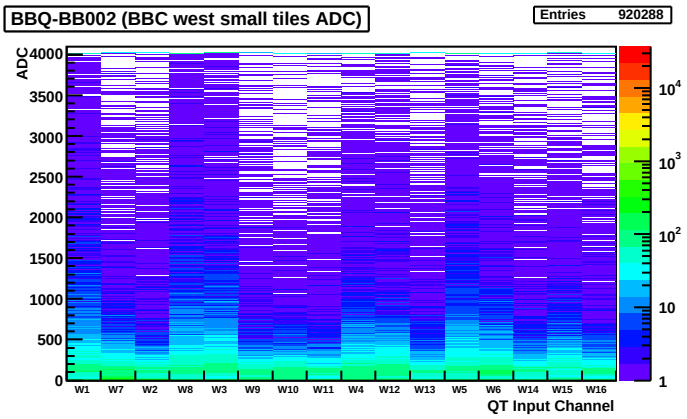

MIX-TF101
Entries 345108
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

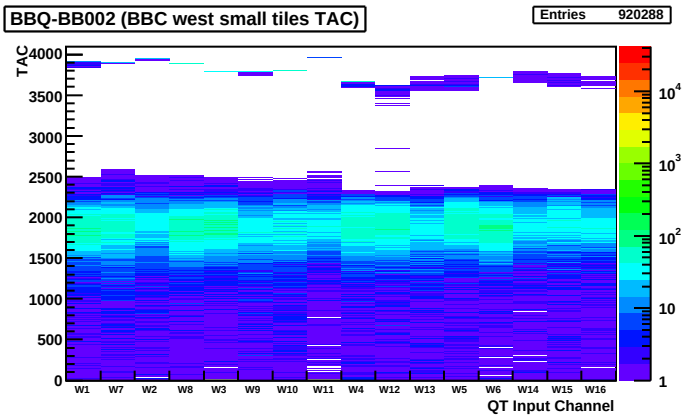

L1-TF201
Entries 57518
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

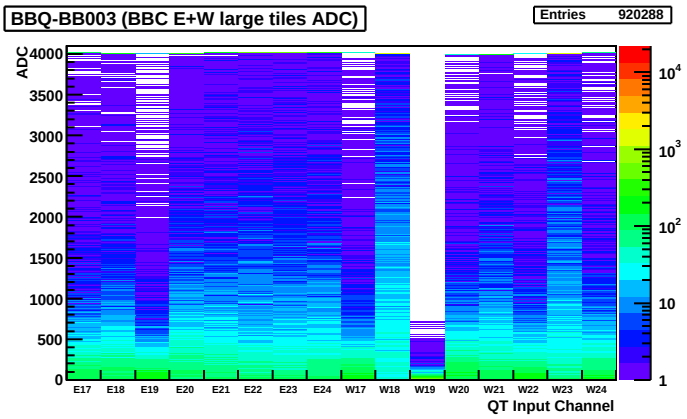

L1-TF201
Entries 345108
Threshold bits
1
0
42203
40737
36545
38833
35083
39003
15315
16781
20973
18685
22435
18515
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

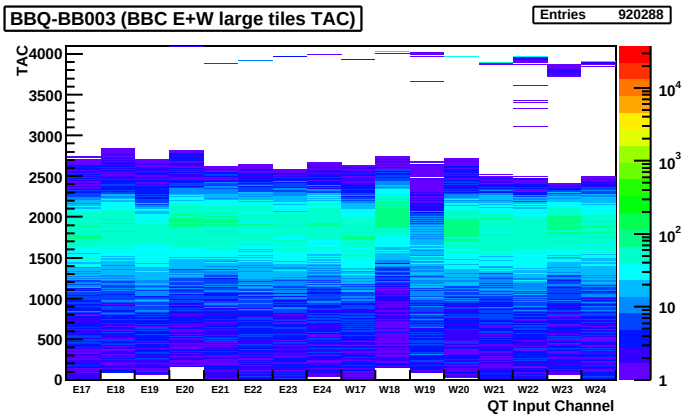

BBQ-BB001 (BBC east small tiles ADC)
Entries 920288
ADC
QT Input Channel

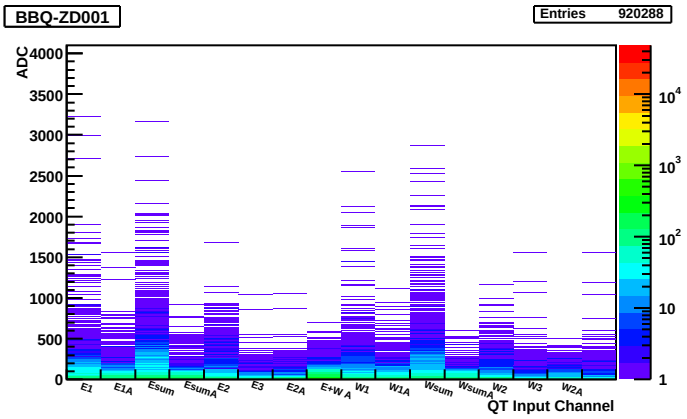

BBQ-BB001 (BBC east small tiles TAC)
Entries 920288
TAC
QT Input Channel

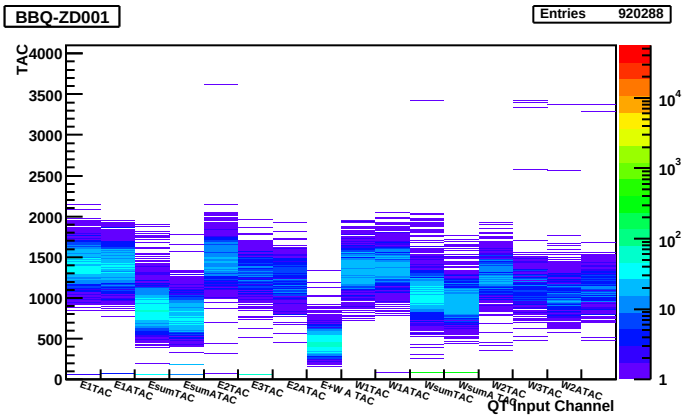

BBQ-BB002 (BBC west small tiles ADC)
Entries 920288
ADC
QT Input Channel

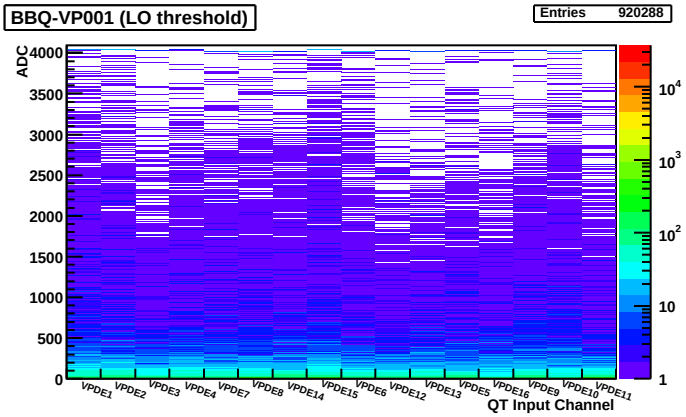

BBQ-BB002 (BBC west small tiles TAC)
Entries 920288
TAC
QT Input Channel

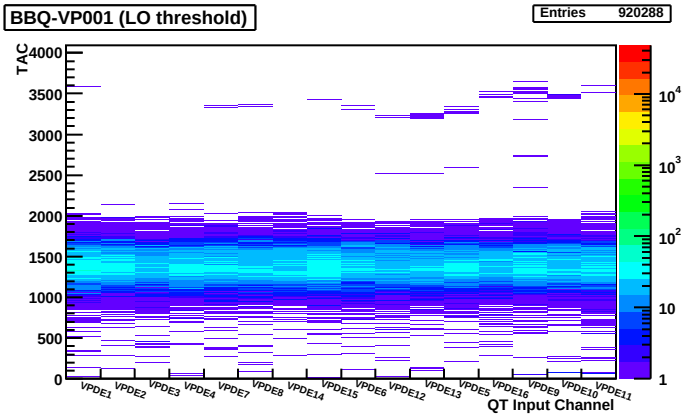

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 920288
ADC
QT Input Channel

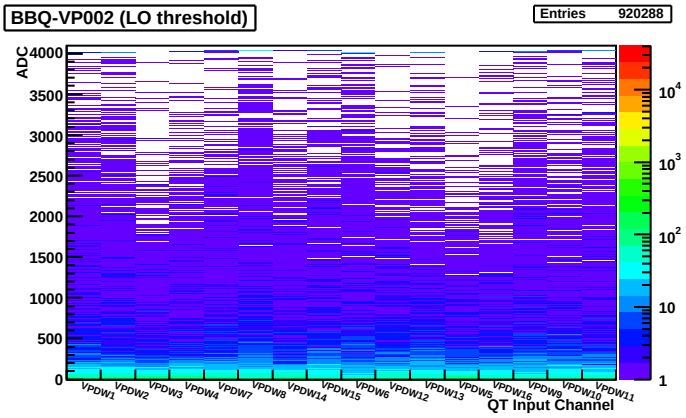

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 920288
TAC
QT Input Channel

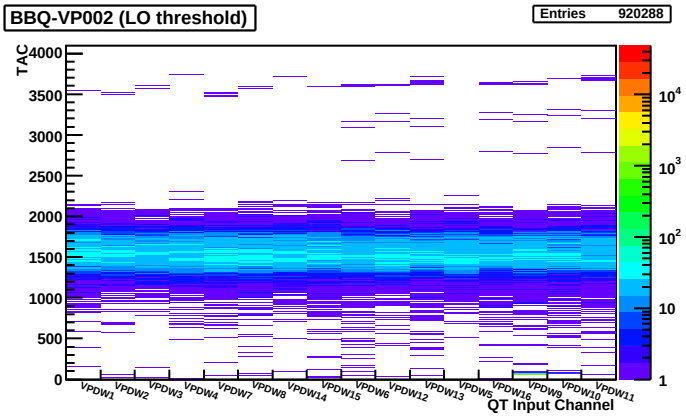

BBQ-ZD001
Entries 920288
ADC
QT Input Channel

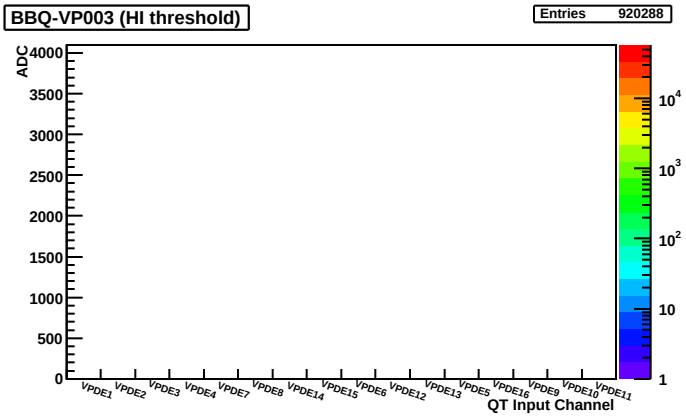

BBQ-ZD001
Entries 920288
TAC
QT Input Channel

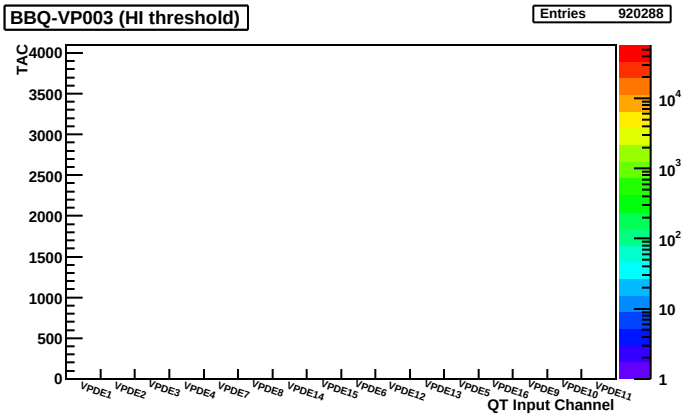

BBQ-VP001 (LO threshold)
Entries 920288
ADC
QT Input Channel

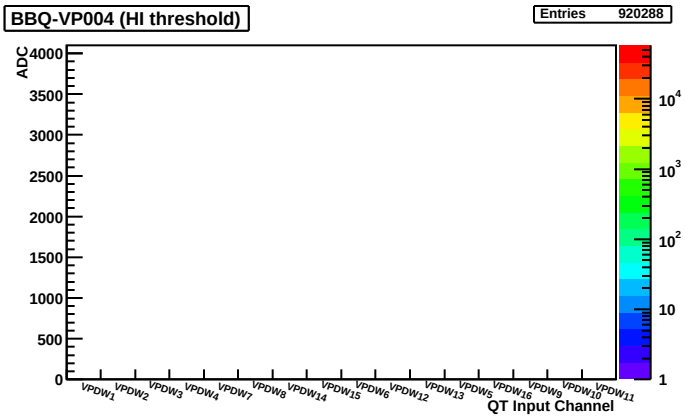

BBQ-VP001 (LO threshold)
Entries 920288
TAC
QT Input Channel

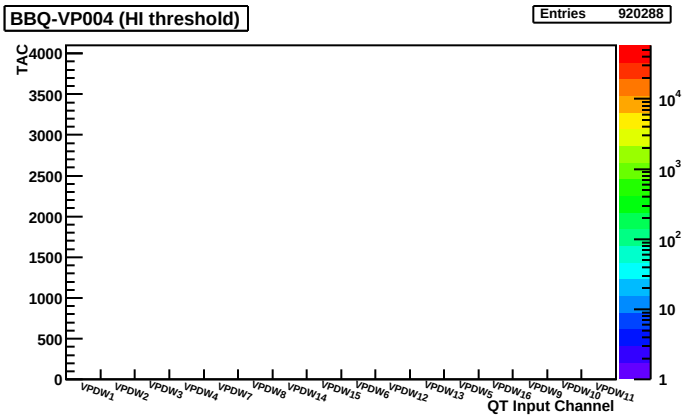

BBQ-VP002 (LO threshold)
Entries 920288
ADC
QT Input Channel

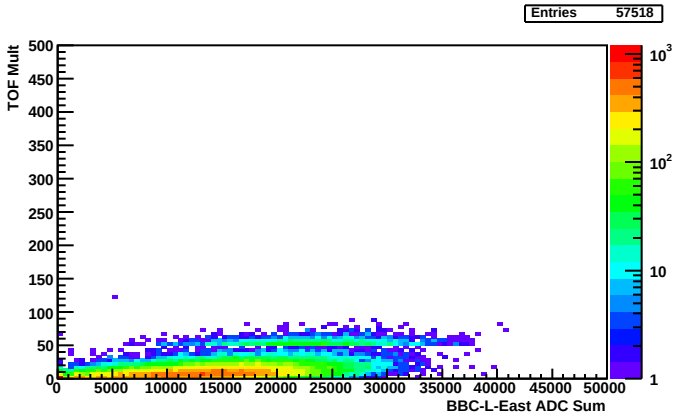

BBQ-VP002 (LO threshold)
Entries 920288
TAC
QT Input Channel

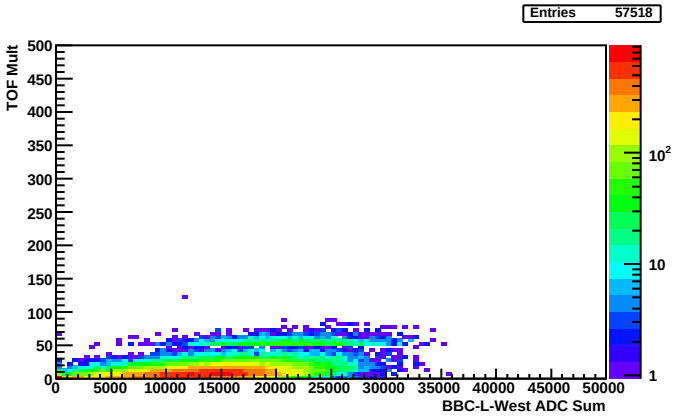

BBQ-VP003 (HI threshold)
Entries 920288
ADC
QT Input Channel

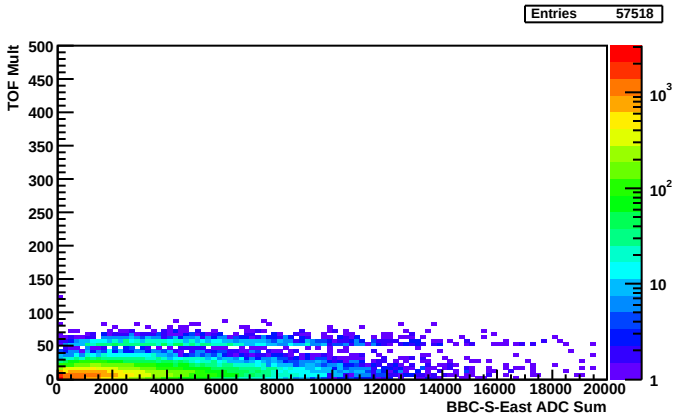

BBQ-VP003 (HI threshold)
Entries 920288
TAC
QT Input Channel

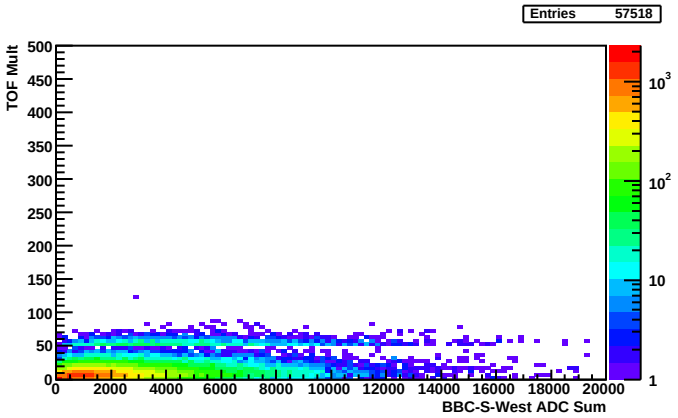

BBQ-VP004 (HI threshold)
Entries 920288
ADC
QT Input Channel

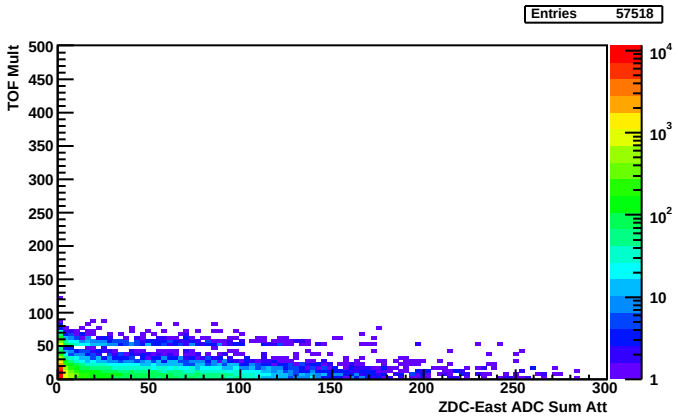

BBQ-VP004 (HI threshold)
Entries 920288
TAC
QT Input Channel

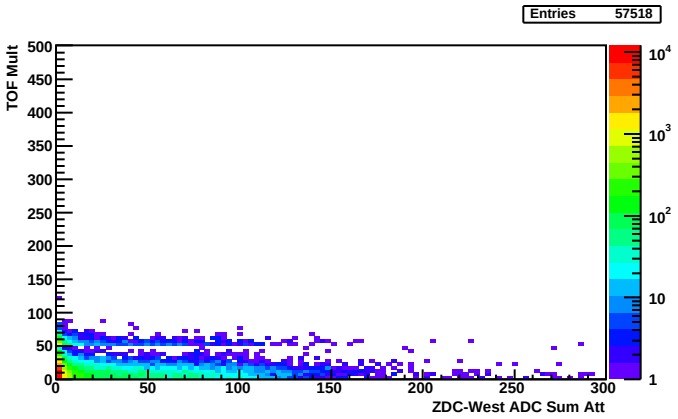

Entries 57518
TOF Mult
BBC-L-East ADC Sum

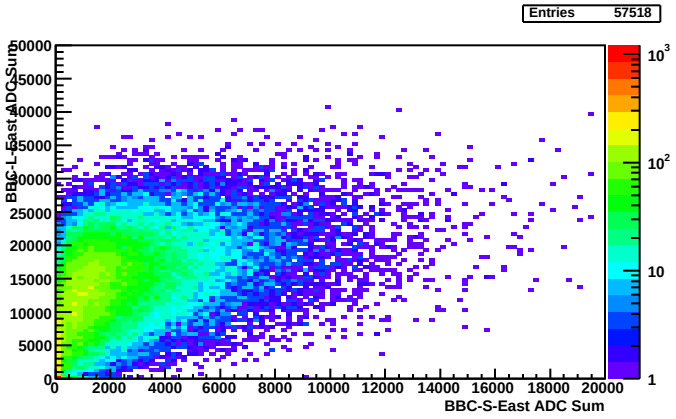

Entries 57518
TOF Mult
BBC-L-West ADC Sum

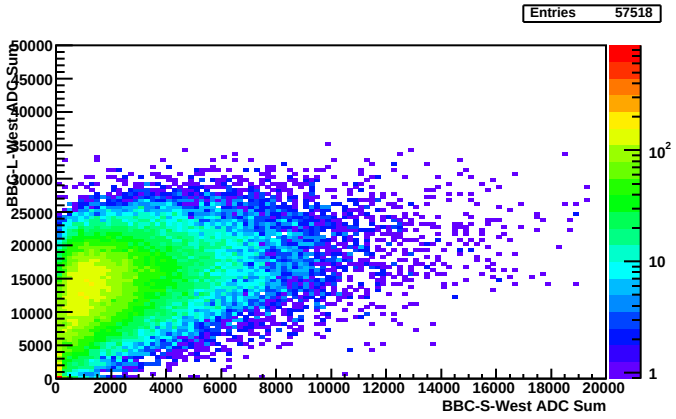

Entries 57518
TOF Mult
BBC-S-East ADC Sum

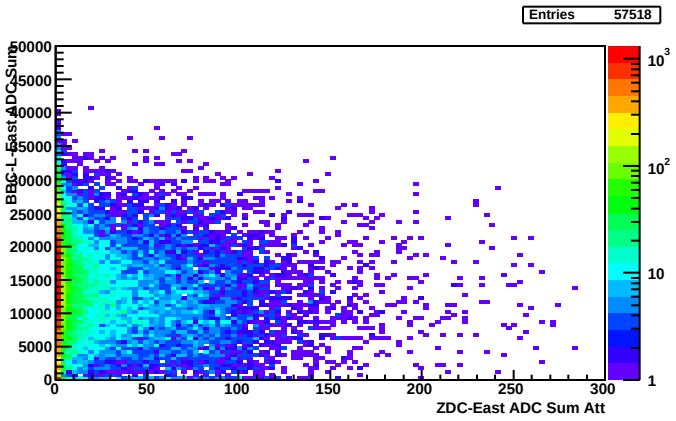

Entries 57518
TOF Mult
BBC-S-West ADC Sum

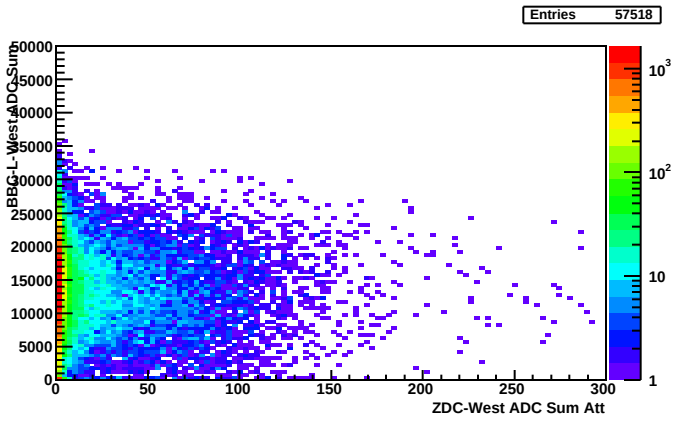

Entries 57518
TOF Mult
ZDC-East ADC Sum Att

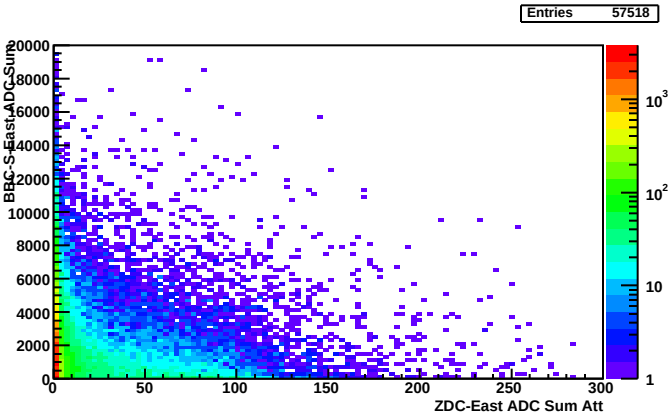

Entries 57518
TOF Mult
ZDC-West ADC Sum Att

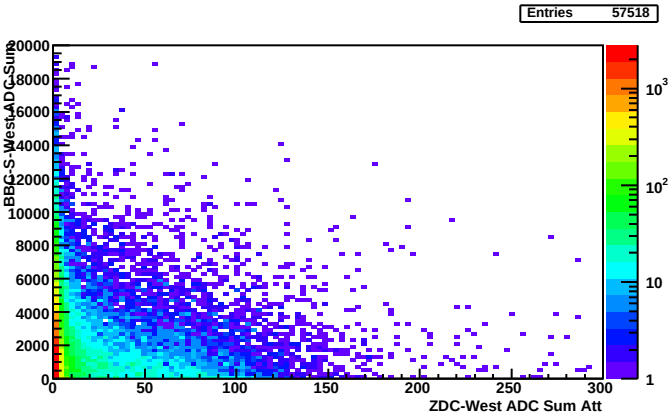

Entries 57518
BBC-L-East ADC Sum
BBC-S-East ADC Sum

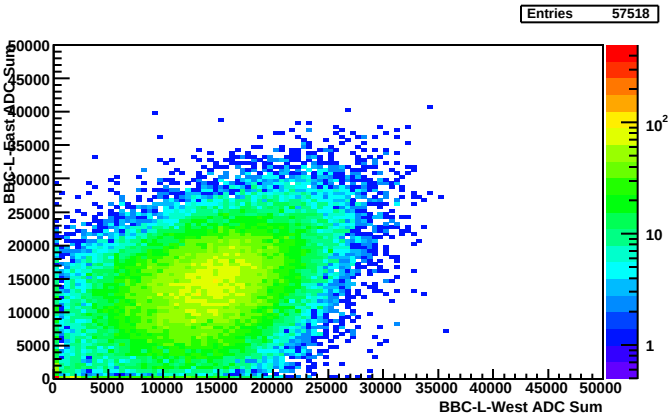

Entries 57518
BBC-L-West ADC Sum
BBC-S-West ADC Sum

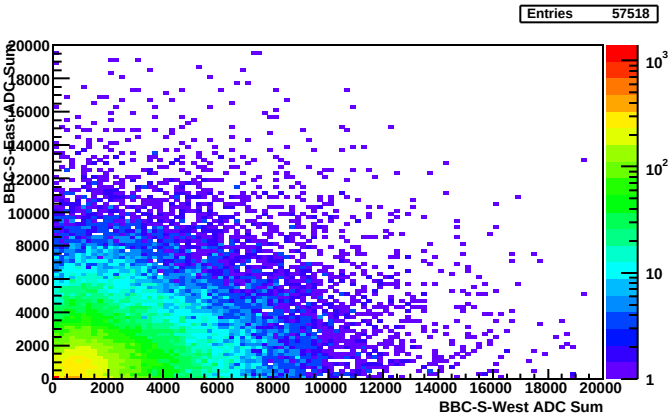

Entries 57518
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

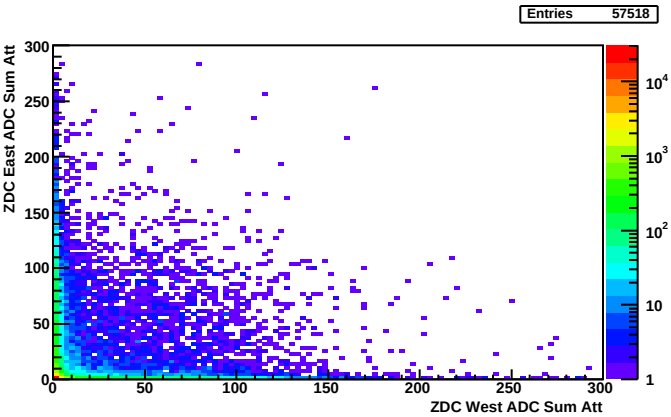

Entries 57518
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

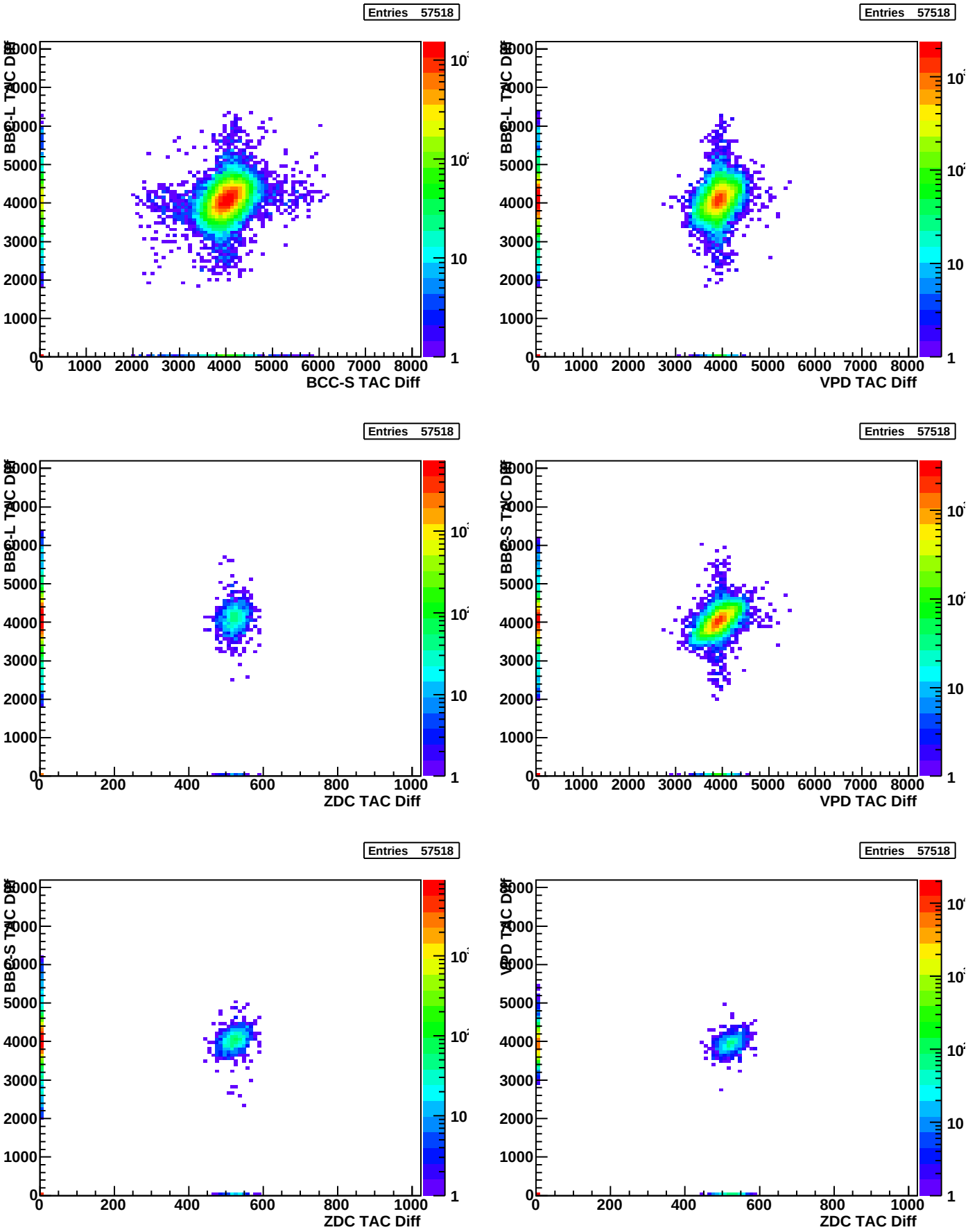

Entries 57518
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

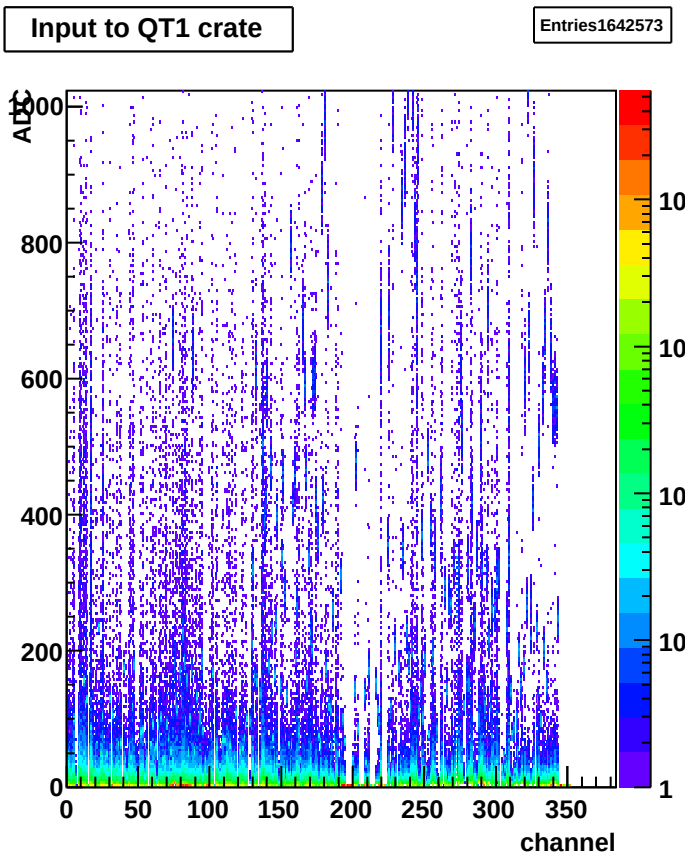

Entries 57518
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

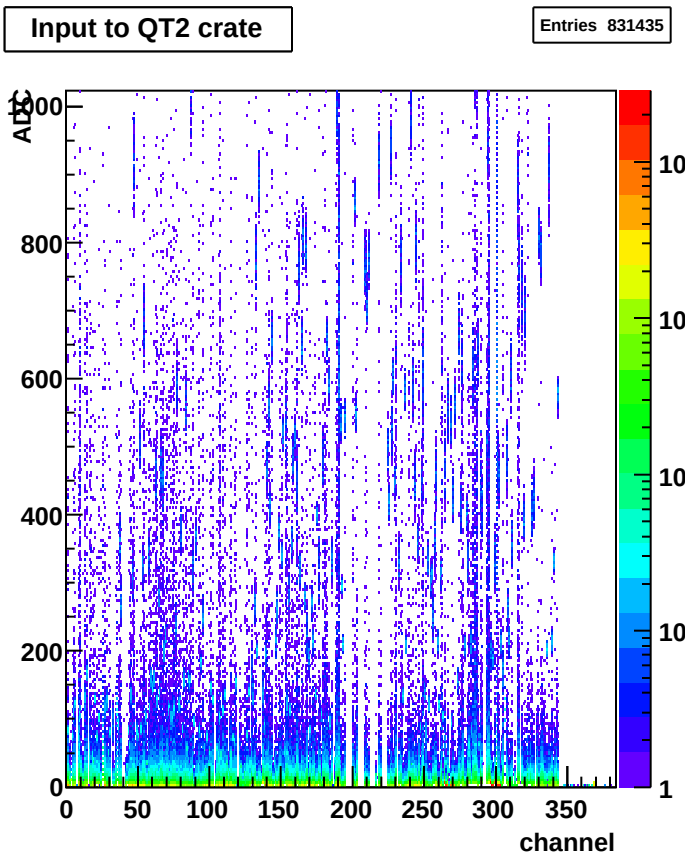

Entries 57518
BBC-L-East ADC Sum
BBC-L-West ADC Sum

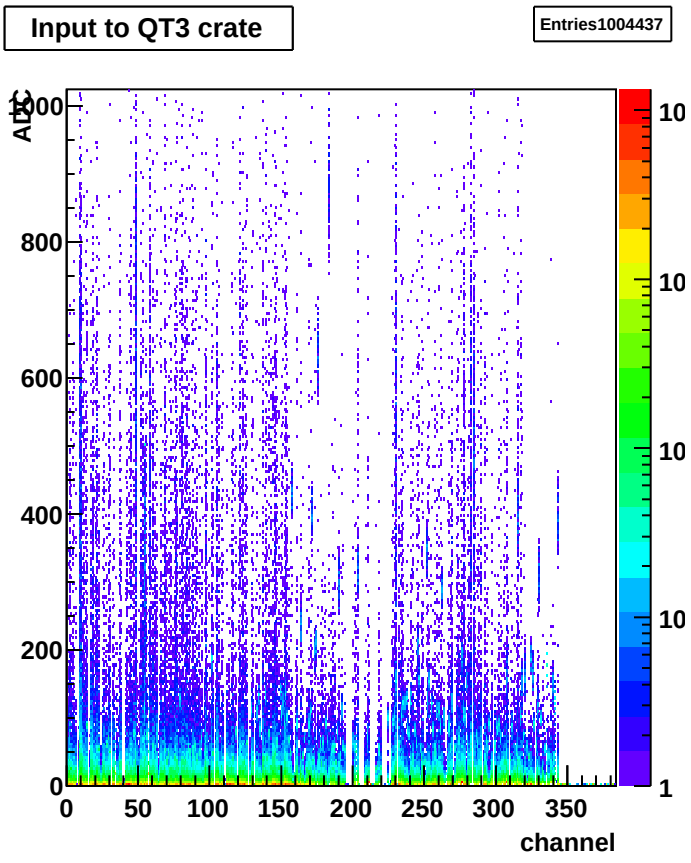

Entries 57518
BBC-S-East ADC Sum
BBC-S-West ADC Sum

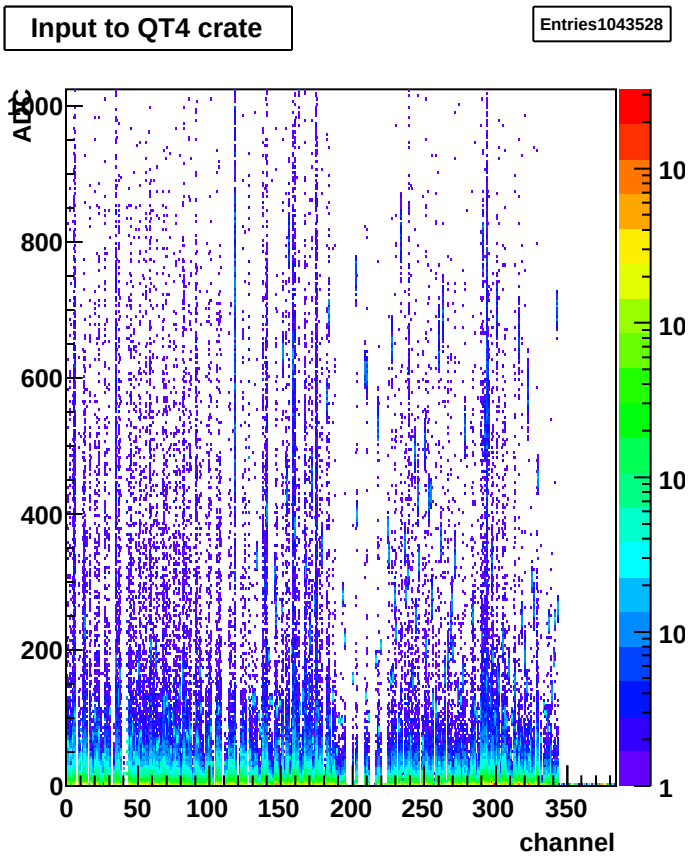

Entries 57518
ZDC East ADC Sum Att
ZDC West ADC Sum Att

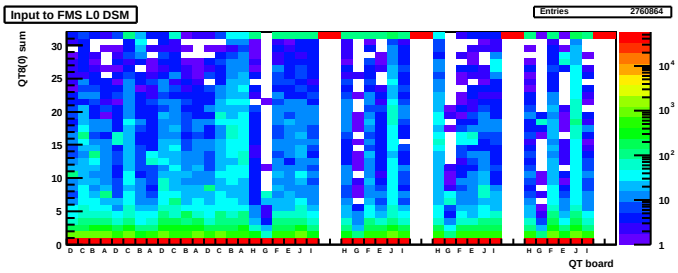

Entries 57518
BBC-L TAC Diff
BCC-S TAC Diff
Entries 57518
BBC-L TAC Diff
VPD TAC Diff
Entries 57518
BBC-L TAC Diff
ZDC TAC Diff
Entries 57518
BBC-S TAC Diff
VPD TAC Diff
Entries 57518
BBC-S TAC Diff
ZDC TAC Diff
Entries 57518
VPD TAC Diff
ZDC TAC Diff

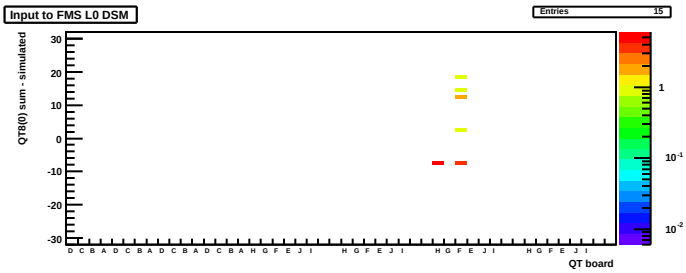

Input to QT1 crate
Entries1642573
ADC
channel

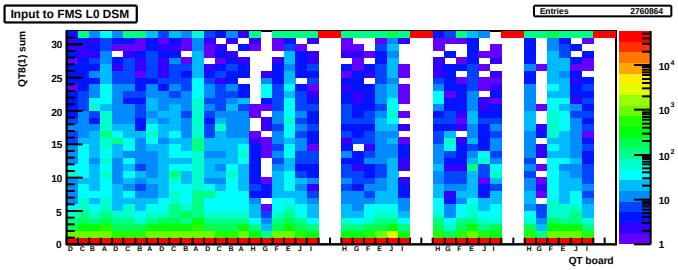

Input to QT2 crate
Entries 831435
ADC
channel

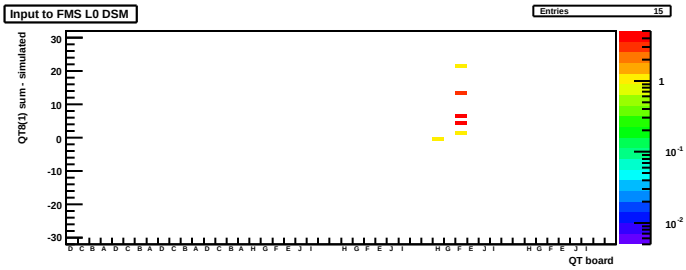

Input to QT3 crate
Entries1004437
ADC
channel

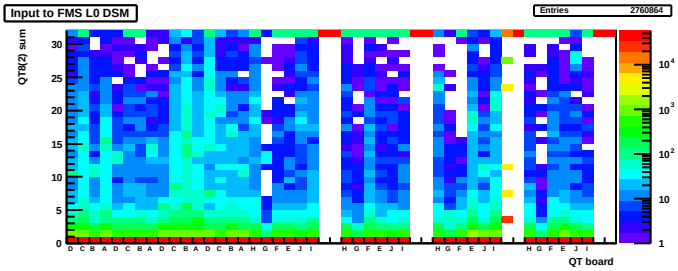

Input to QT4 crate
Entries1043528
ADC
channel

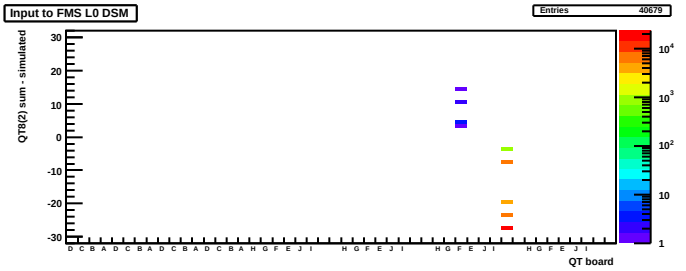

Input to FMS L0 DSM
Entries 2760864
QT8(0) sum
QT board

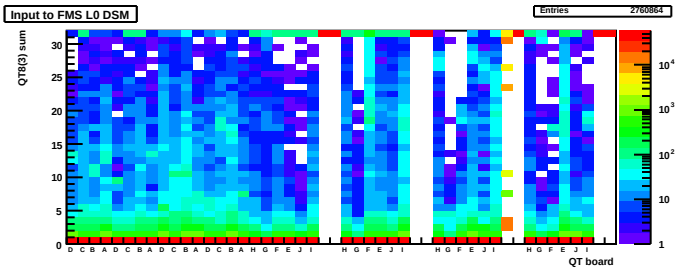

Input to FMS L0 DSM
Entries 15
QT8(0) sum - simulated
QT board

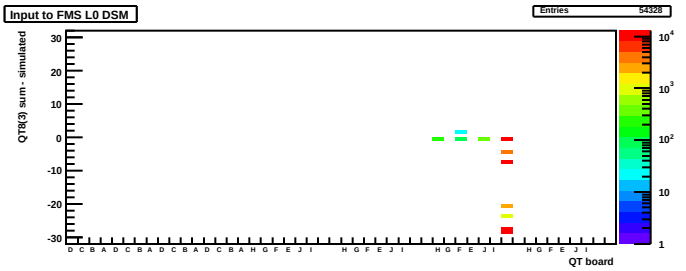

Input to FMS L0 DSM
Entries 2760864
QT8(1) sum
QT board

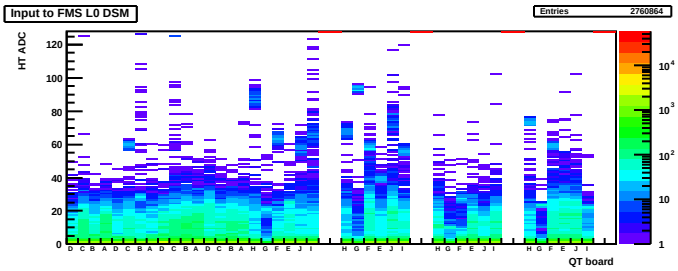

Input to FMS L0 DSM
Entries 15
QT8(1) sum - simulated
QT board

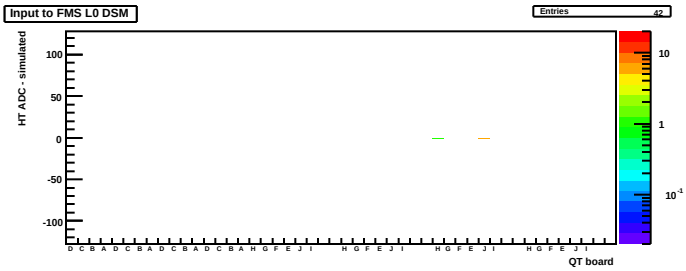

Input to FMS L0 DSM
Entries 2760864
QT8(2) sum
QT board

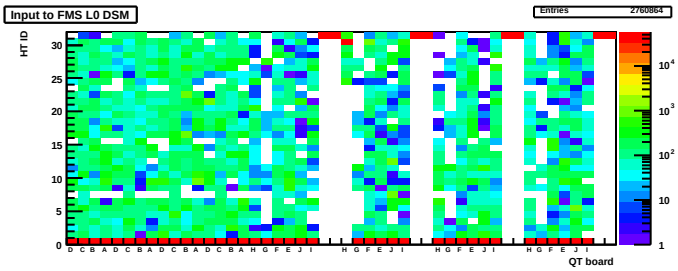

Input to FMS L0 DSM
Entries 40679
QT8(2) sum - simulated
QT board

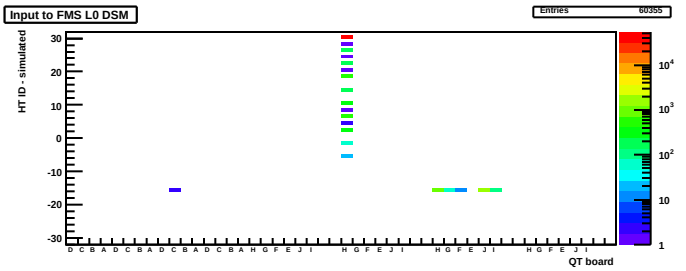

Input to FMS L0 DSM
Entries 2760864
QT8(3) sum
QT board

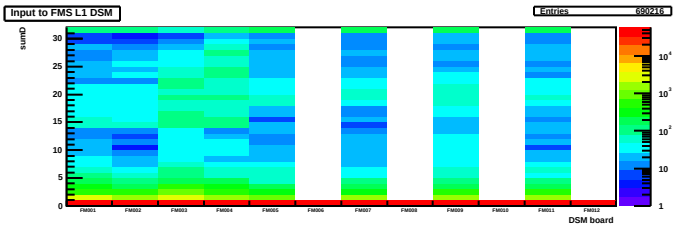

Input to FMS L0 DSM
Entries 54328
QT8(3) sum - simulated
QT board

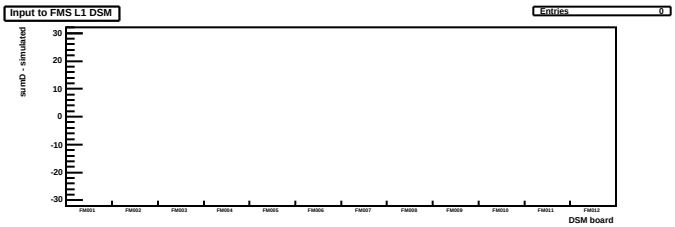

Input to FMS L0 DSM
Entries 2760864
HT ADC
QT board

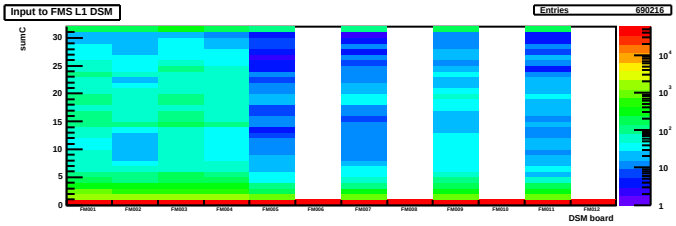

Input to FMS L0 DSM
Entries 42
HT ADC - simulated
QT board

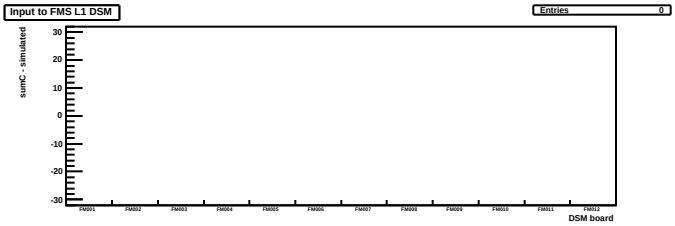

Input to FMS L0 DSM
Entries 2760864
HT ID
QT board

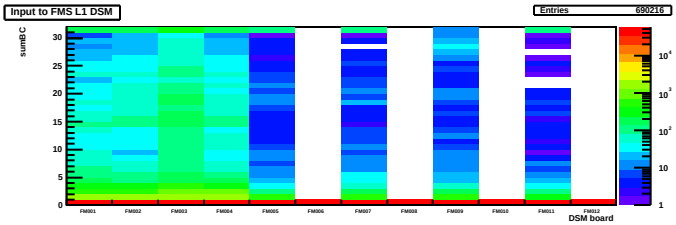

Input to FMS L0 DSM
Entries 60355
HT ID - simulated
QT board

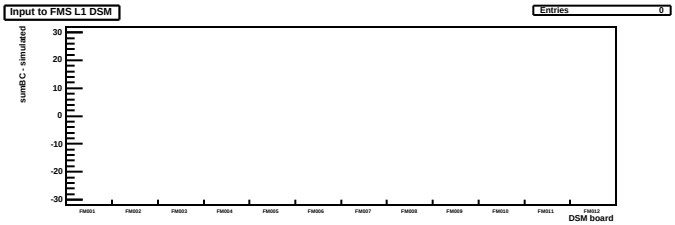

Input to FMS L1 DSM
Entries 690216
sumD
DSM board

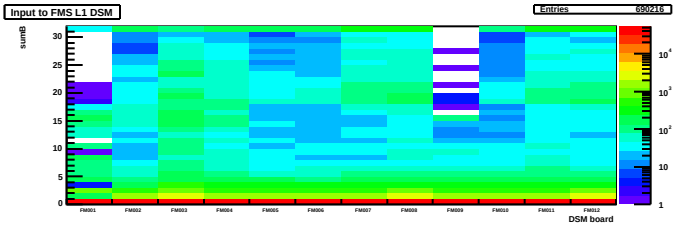

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

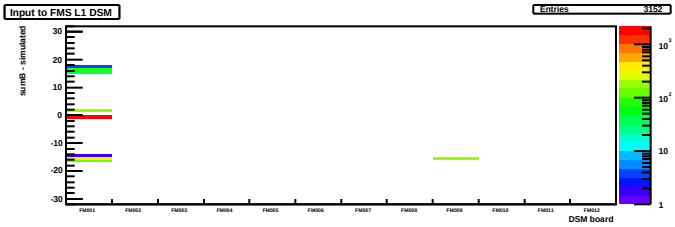

Input to FMS L1 DSM
Entries 690216
sumC
DSM board

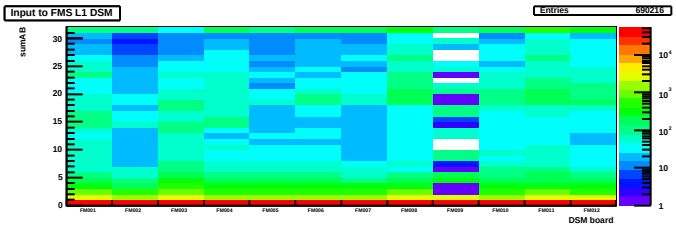

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

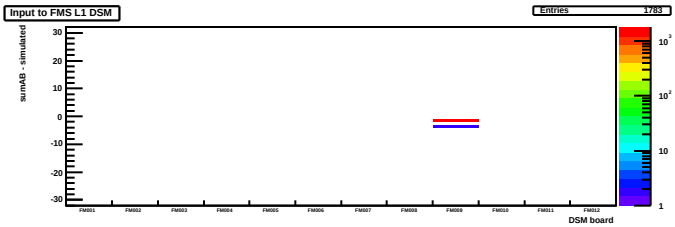

Input to FMS L1 DSM
Entries 690216
sumBC
DSM board

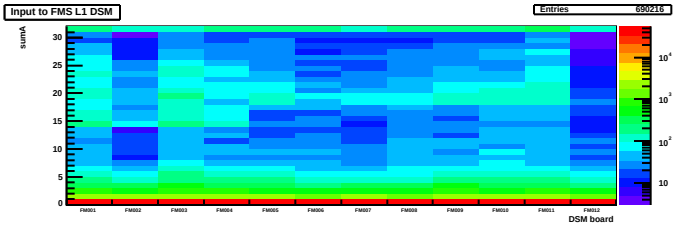

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

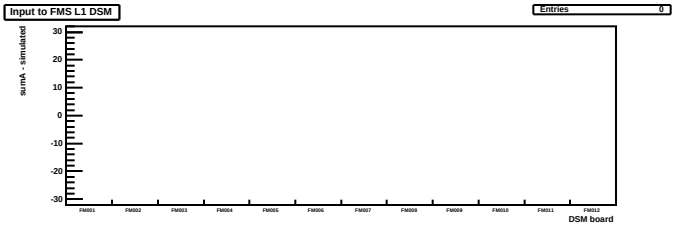

Input to FMS L1 DSM
Entries 690216
sumB
DSM board

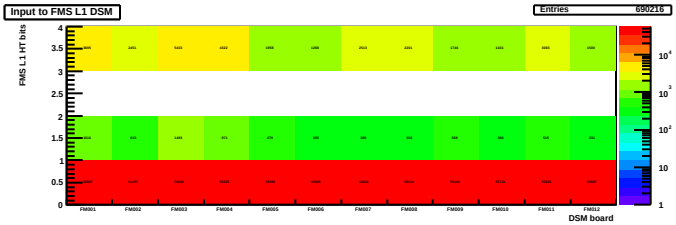

Input to FMS L1 DSM
Entries 3152
sumB - simulated
DSM board

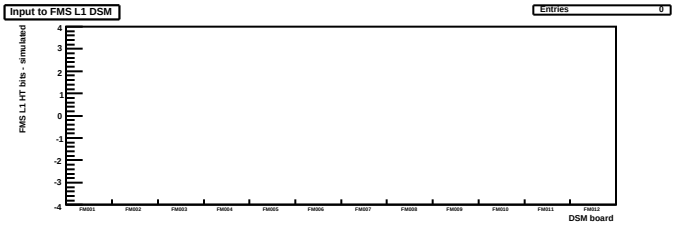

Input to FMS L1 DSM
Entries 690216
sumAB
DSM board

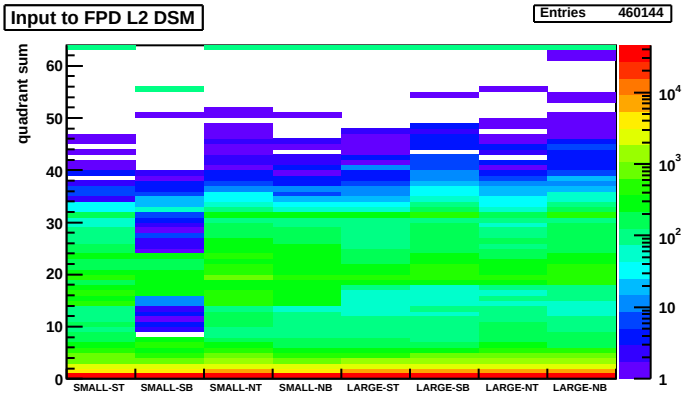

Input to FMS L1 DSM
Entries 1783
sumAB - simulated
DSM board

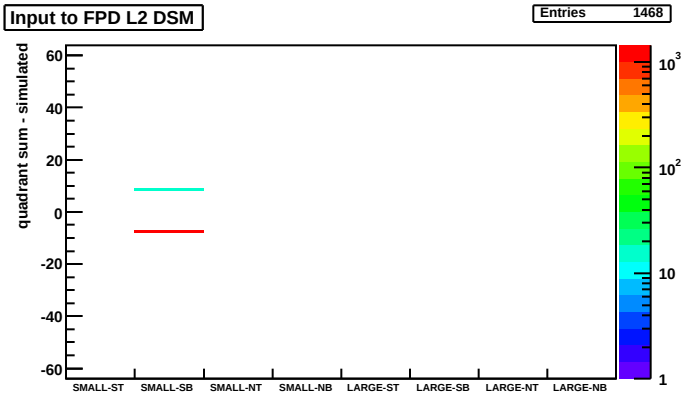

Input to FMS L1 DSM
Entries 690216
sumA
DSM board

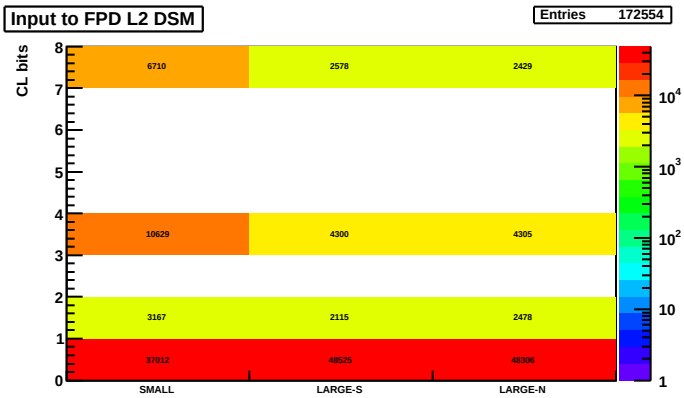

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

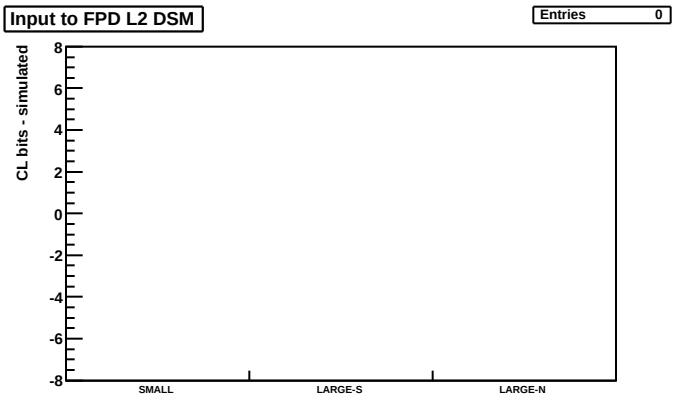

Input to FMS L1 DSM
Entries 690216
FMS L1 HT bits
DSM board

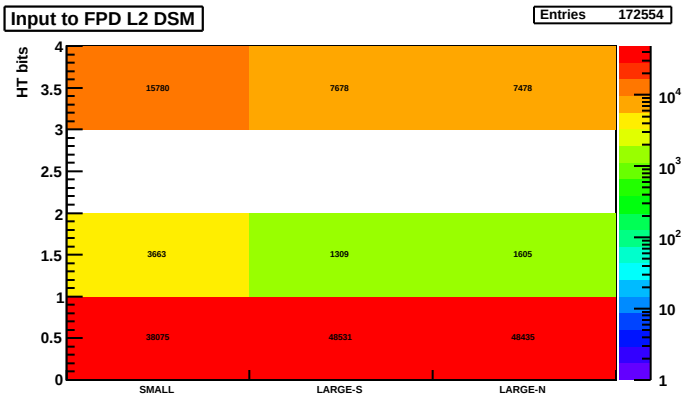

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

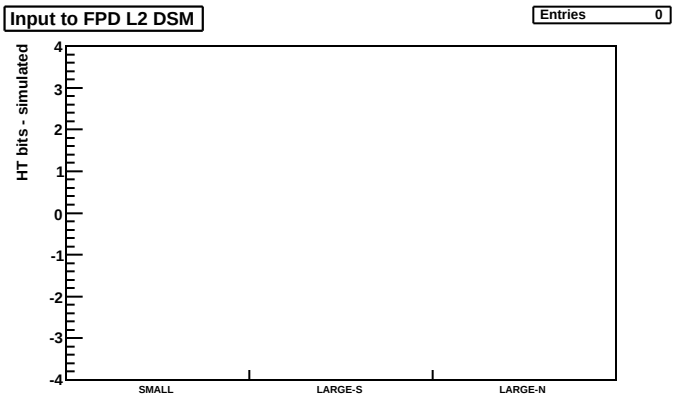

Input to FPD L2 DSM
Entries 460144
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

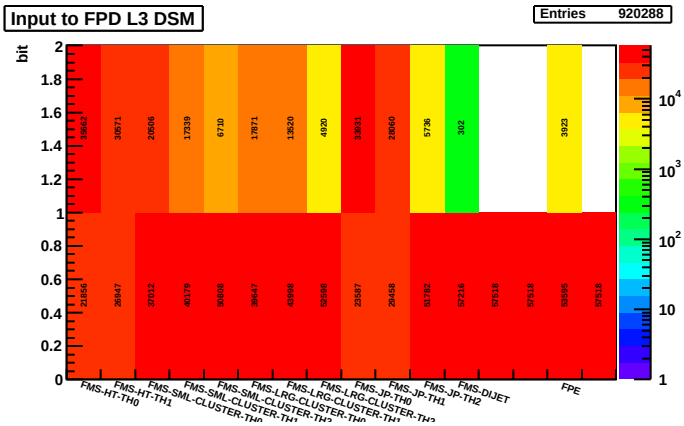

Input to FPD L2 DSM
Entries 1468
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

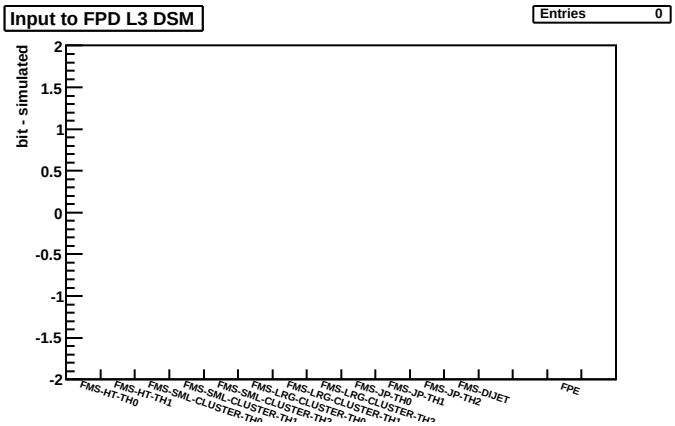

Input to FPD L2 DSM
Entries 172554
CL bits
6710 2578 2429
10629 4300 4305
3167 2115 2478
37012 48525 48306
SMALL LARGE-S LARGE-N

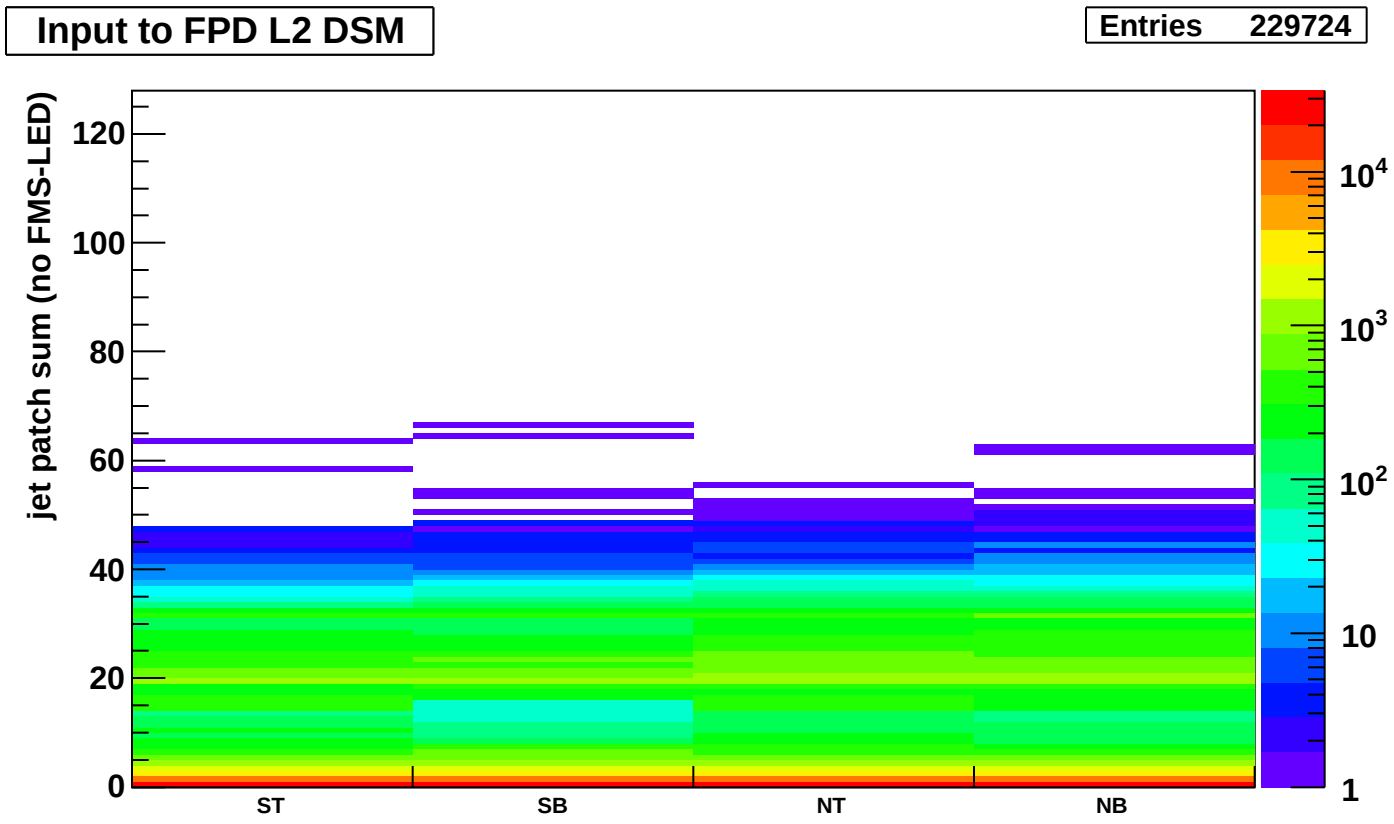

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL LARGE-S LARGE-N

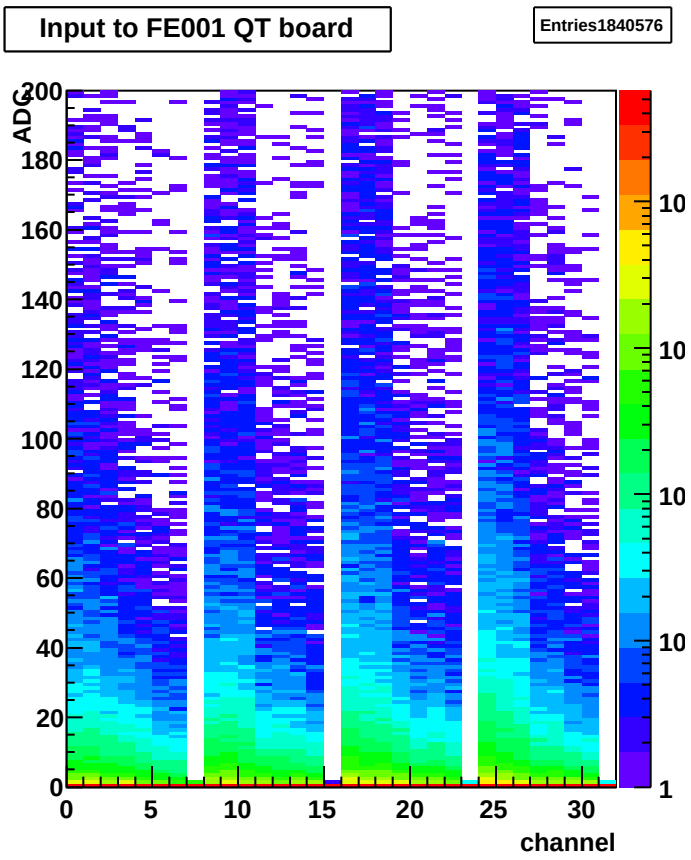

Input to FPD L2 DSM
Entries 172554
HT bits
15780 7678 7478
3663 1309 1605
38075 48531 48435
SMALL LARGE-S LARGE-N

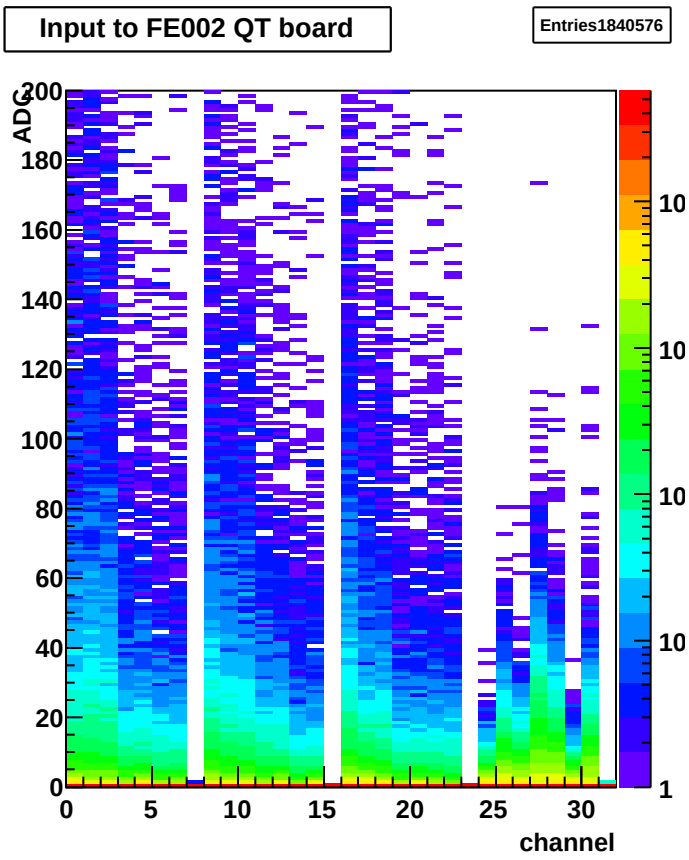

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL LARGE-S LARGE-N

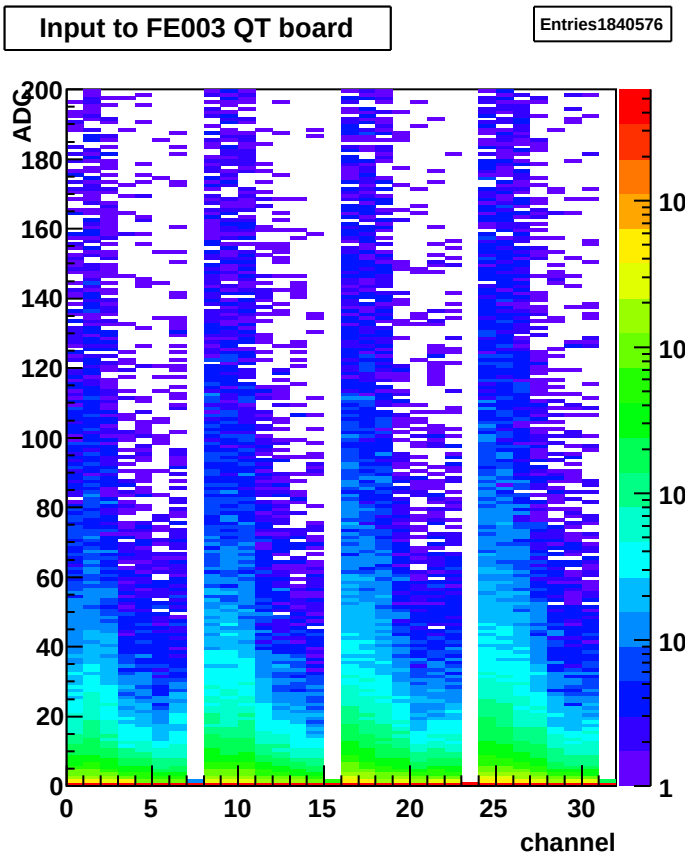

Input to FPD L3 DSM
Entries 920288
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

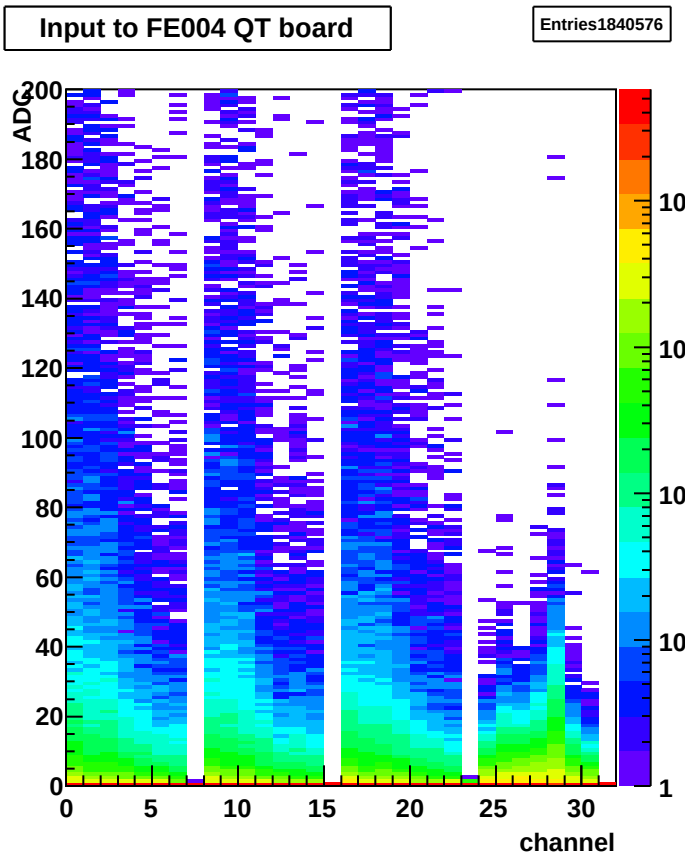

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

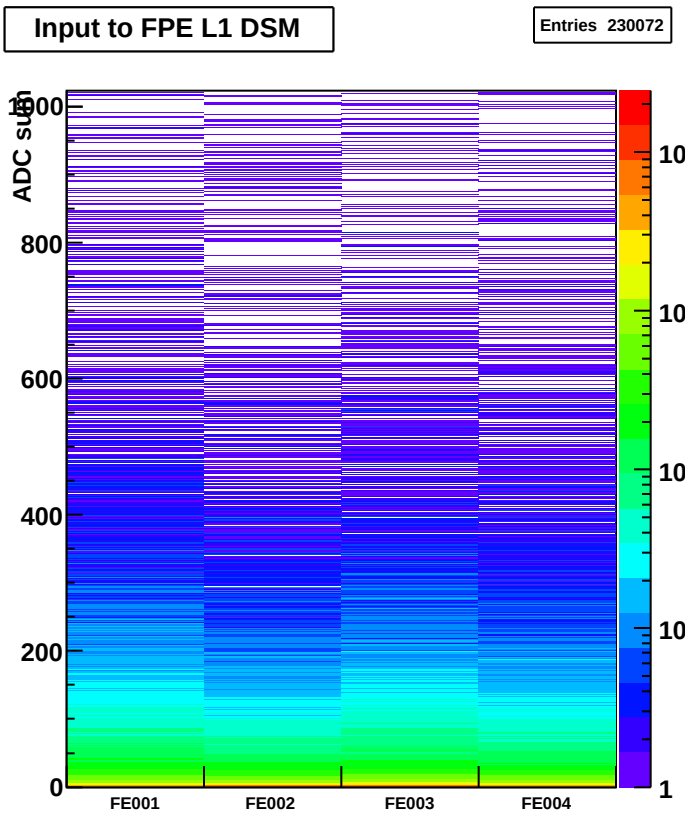

Input to FPD L2 DSM
Entries 229724
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

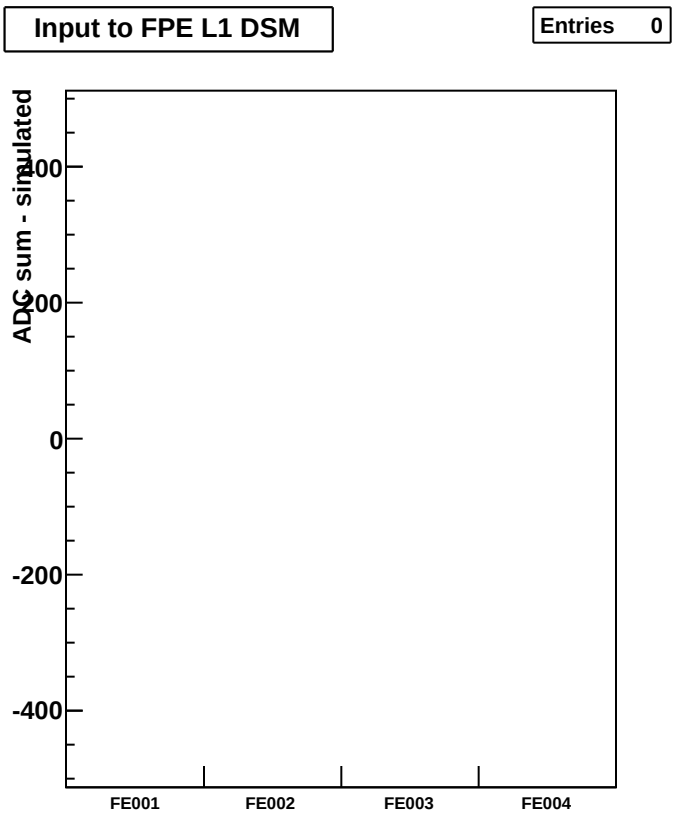

Input to FE001 QT board
Entries1840576
ADC
channel

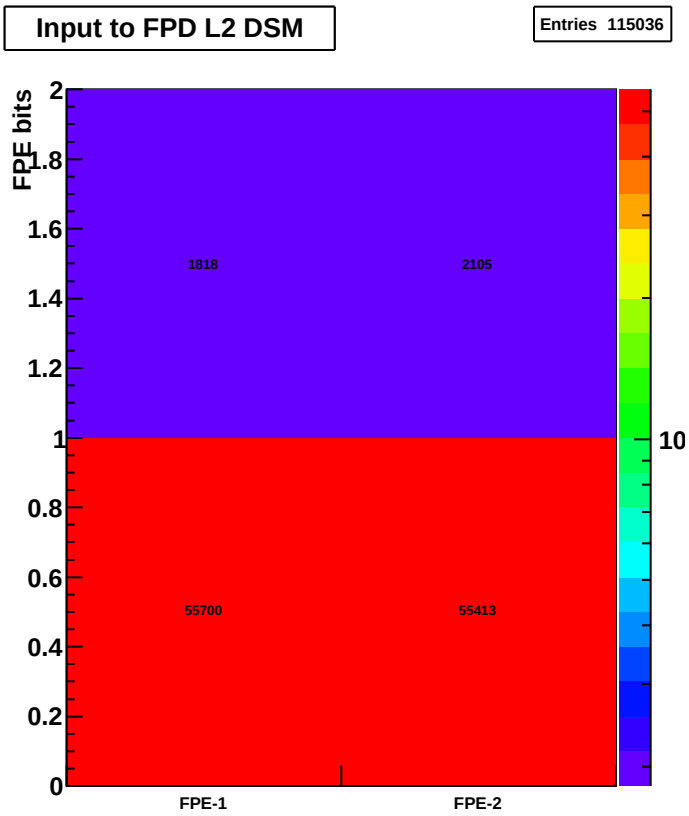

Input to FE002 QT board
Entries1840576
ADC
channel

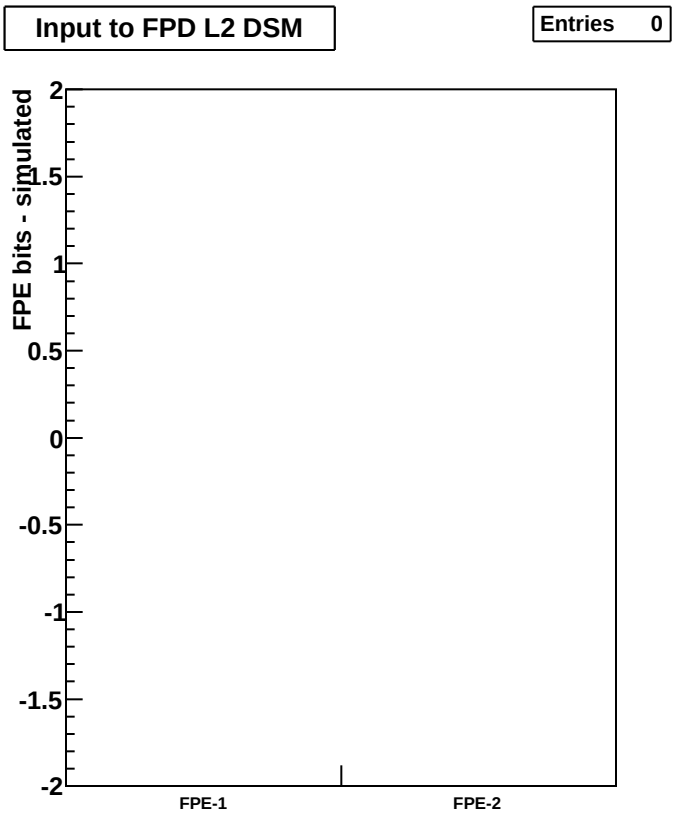

Input to FE003 QT board
Entries1840576
ADC
channel


Input to FE004 QT board
Entries1840576
ADC
channel


Input to FPE L1 DSM
Entries 230072
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 115036
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1818
2105
55700
55413
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