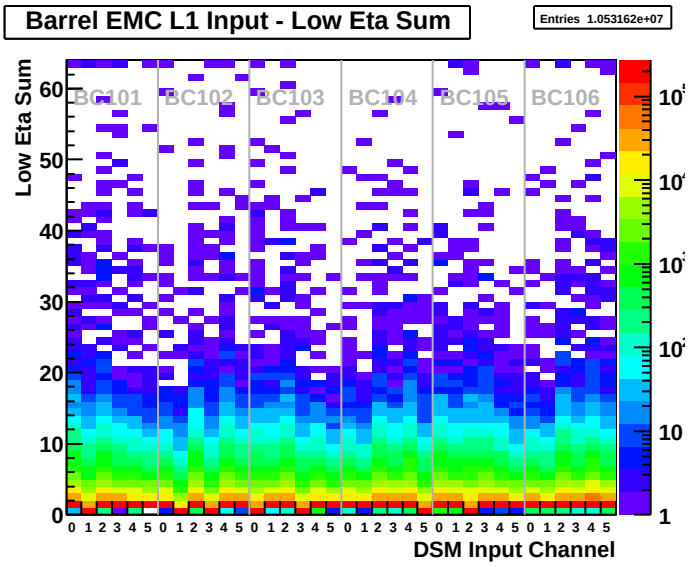
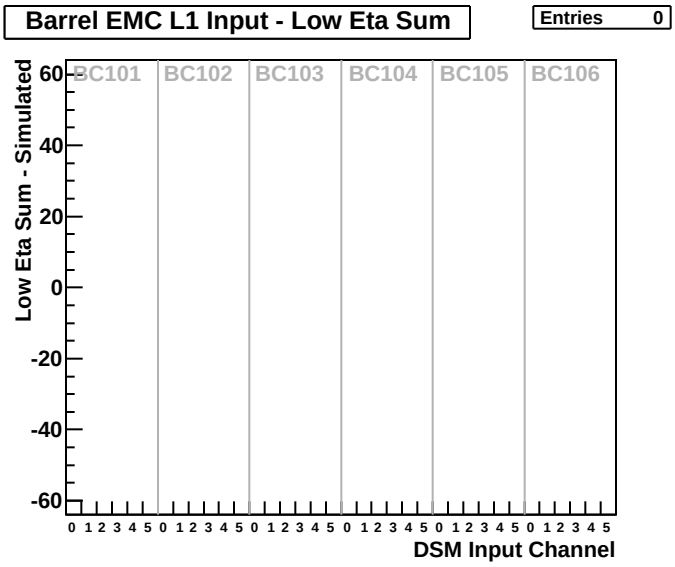
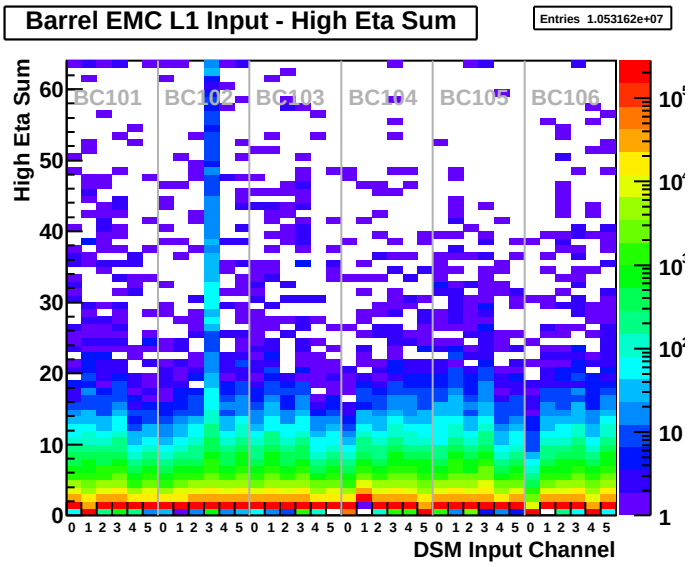
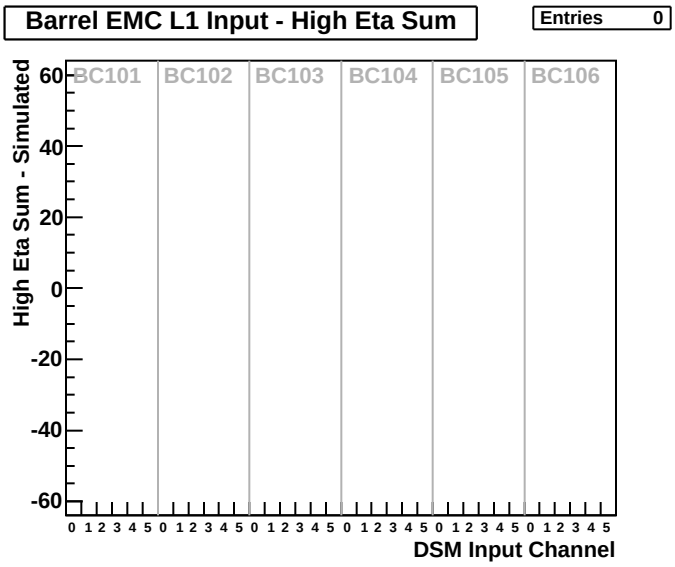
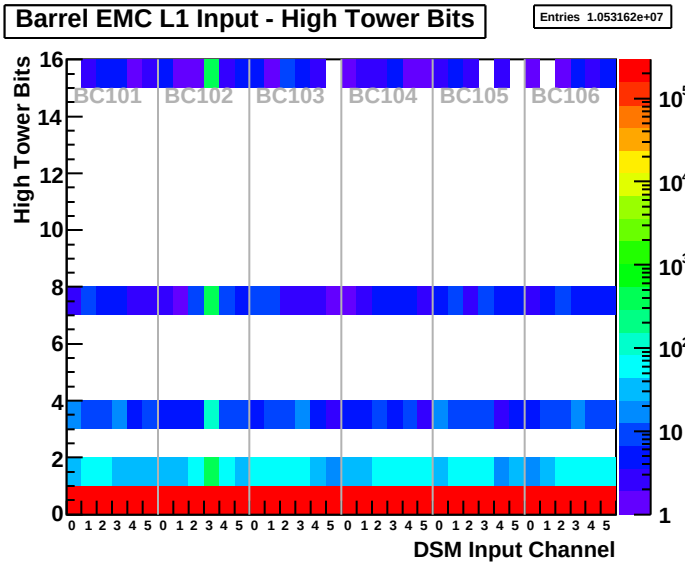
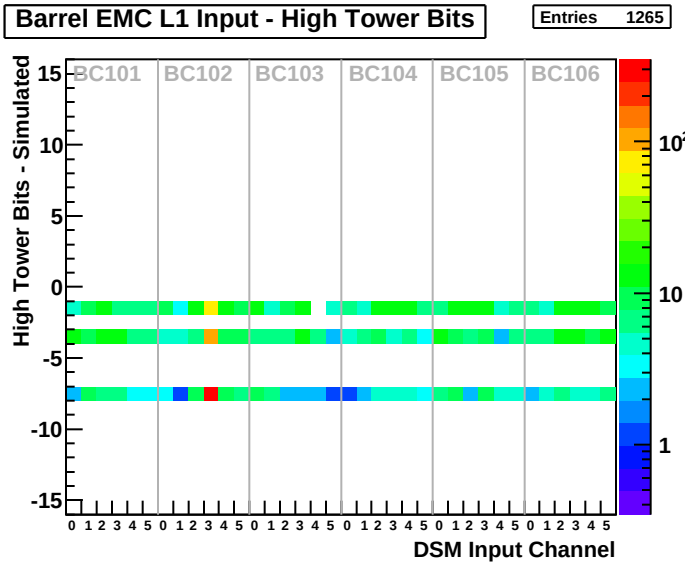

Barrel EMC L1 Input - Low Eta Sum
Entries 1.053162e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

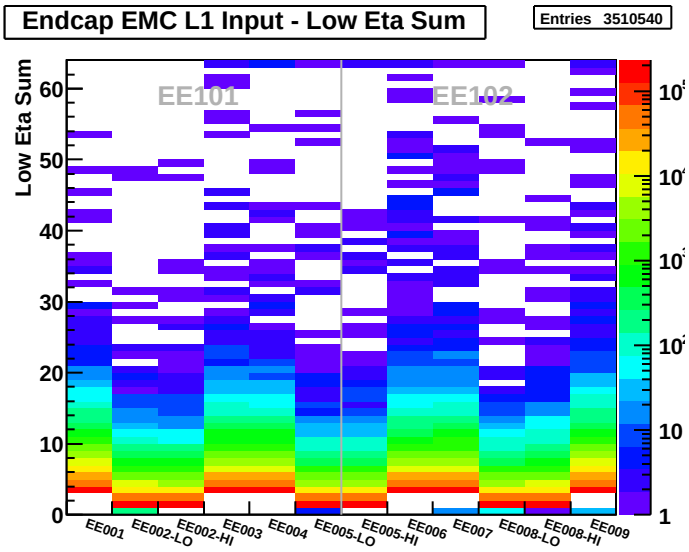

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

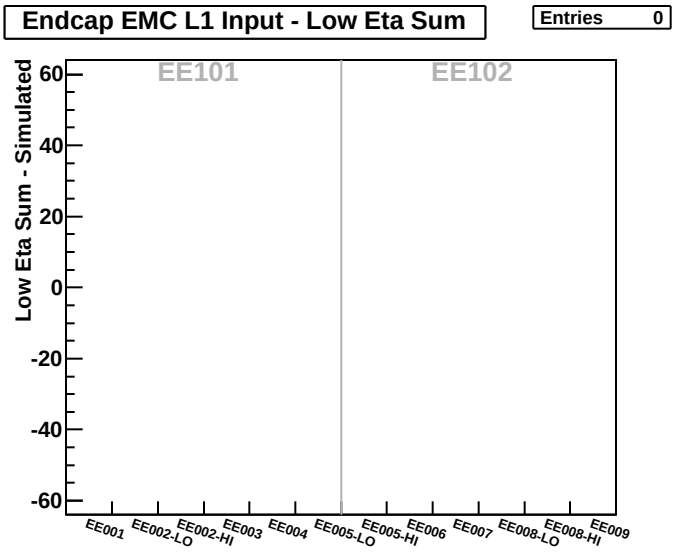

Barrel EMC L1 Input - High Eta Sum
Entries 1.053162e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

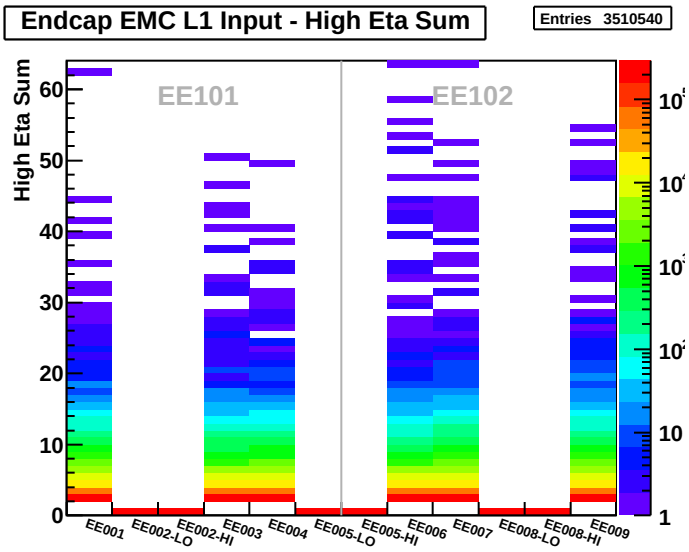

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

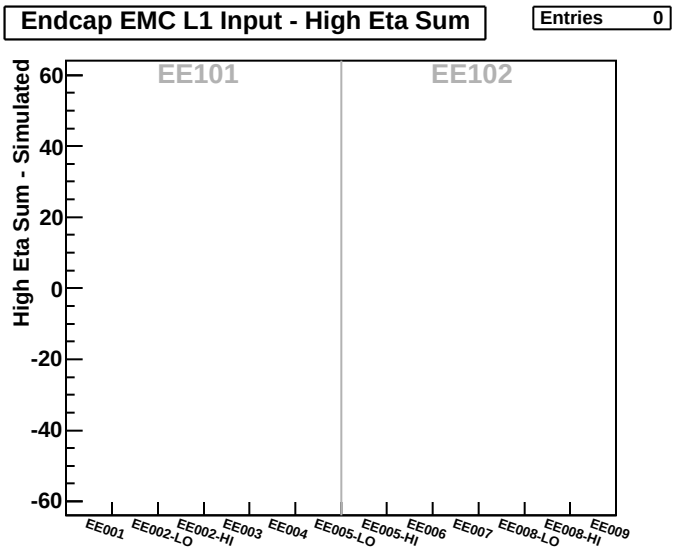

Barrel EMC L1 Input - High Tower Bits
Entries 1.053162e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

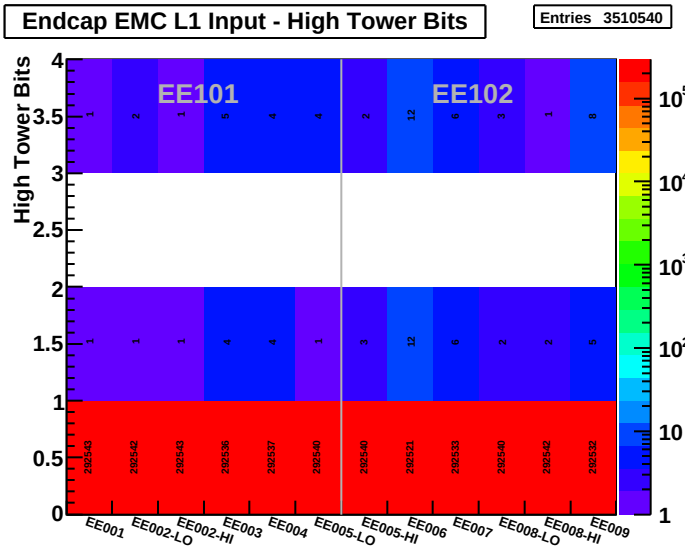

Barrel EMC L1 Input - High Tower Bits
Entries 1265
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

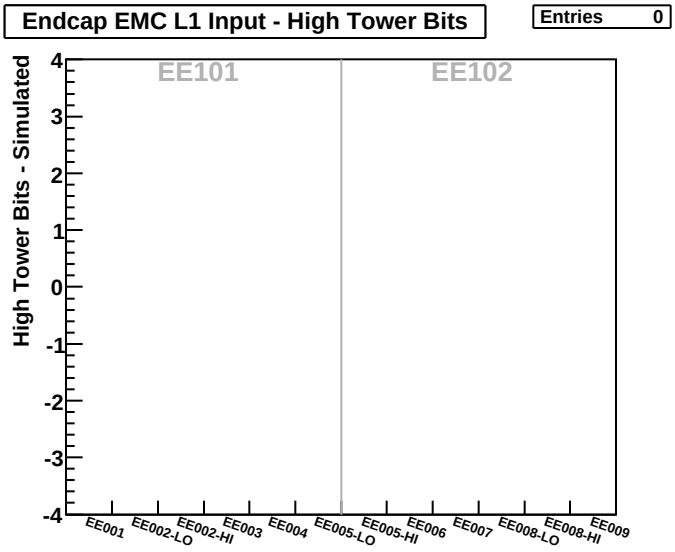

Endcap EMC L1 Input - Low Eta Sum
Entries 3510540
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

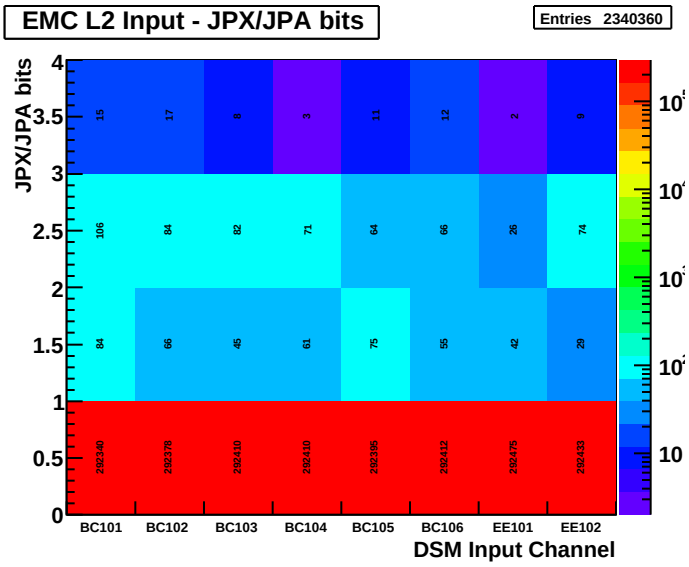

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

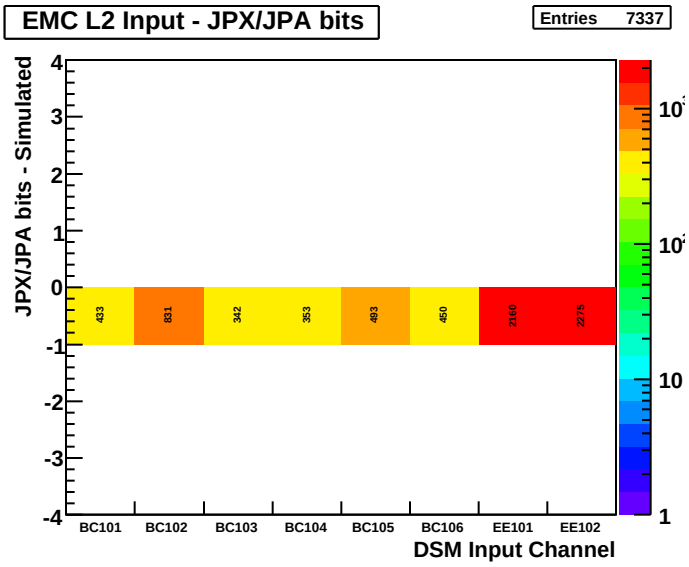

Endcap EMC L1 Input - High Eta Sum
Entries 3510540
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

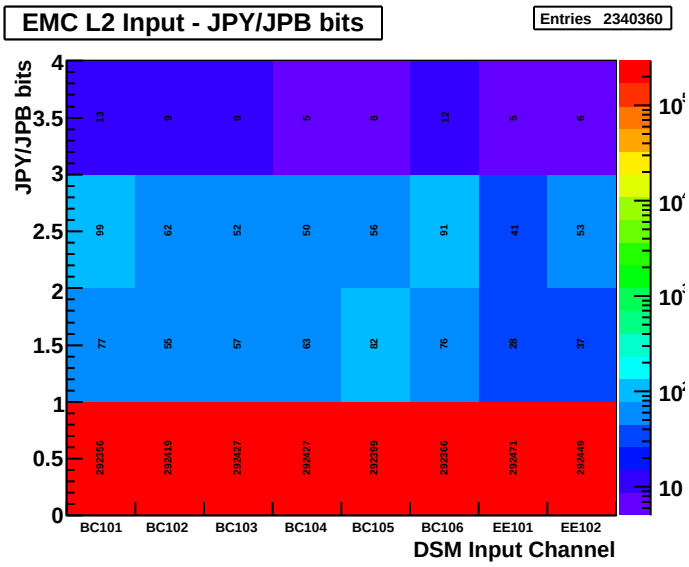

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

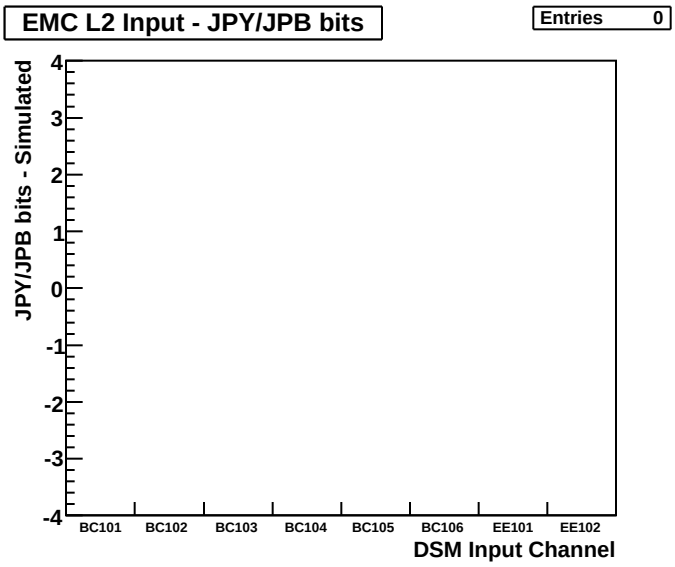

Endcap EMC L1 Input - High Tower Bits
Entries 3510540
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

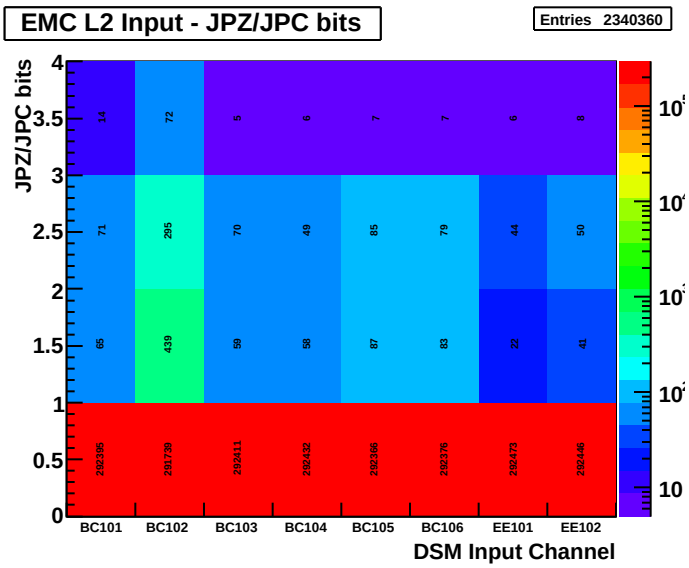

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

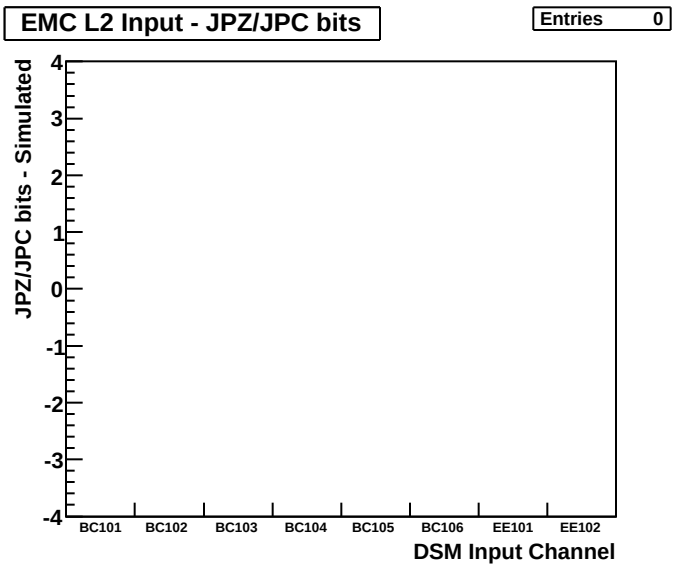

EMC L2 Input - JPX/JPA bits
Entries 2340360
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
15 17 8 3 11 12 2 9
106 84 82 71 64 66 26 74
84 66 45 61 75 55 42 29
292340 292378 292410 292410 292395 292412 292475 292433

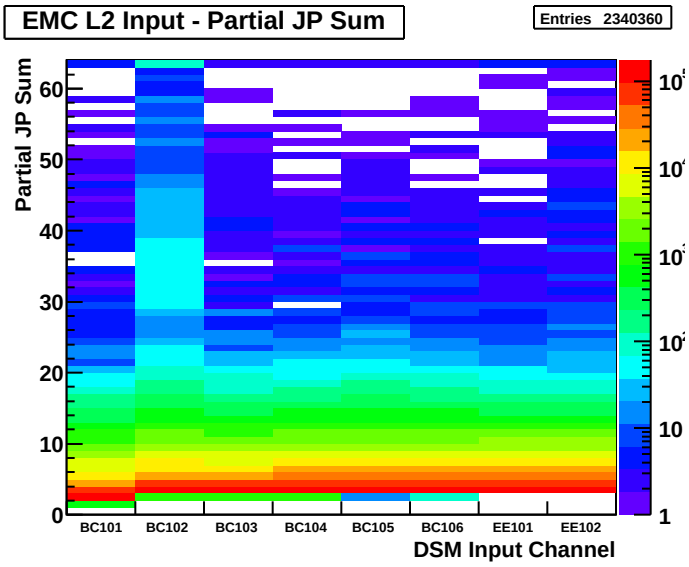

EMC L2 Input - JPX/JPA bits
Entries 7337
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
433 831 342 353 493 450 2160 2275

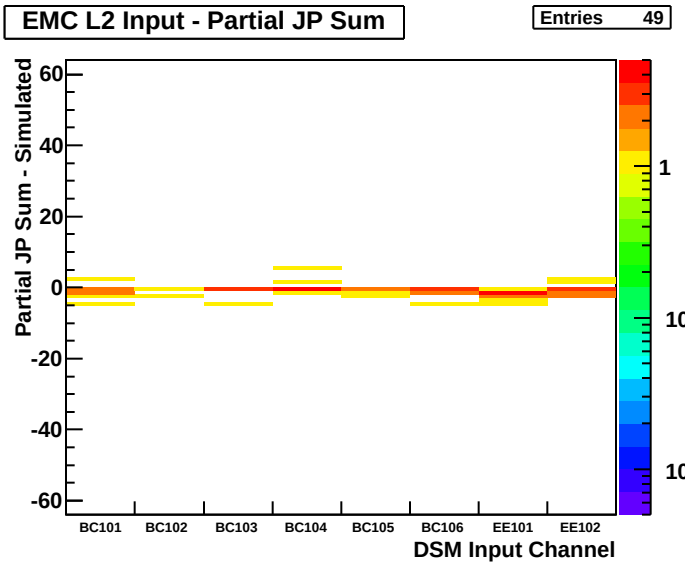

EMC L2 Input - JPY/JPB bits
Entries 2340360
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
13 9 9 5 8 12 5 6
99 62 52 50 56 91 41 53
77 55 57 63 82 76 28 37
292356 292419 292427 292427 292399 292386 292471 292449

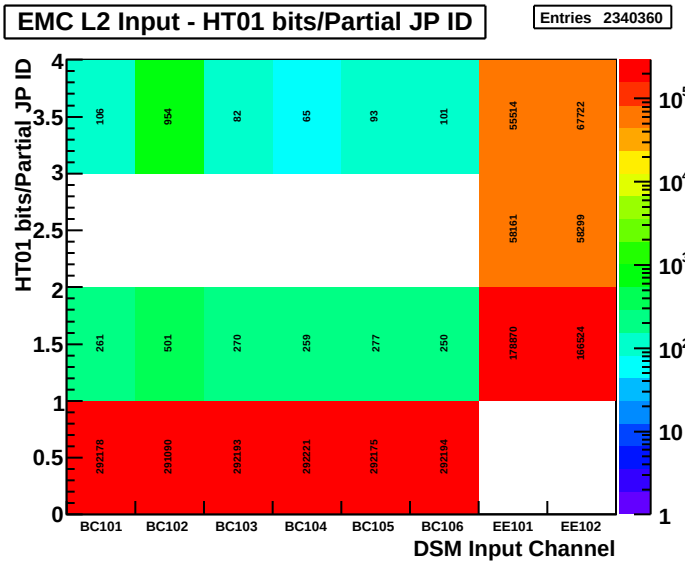

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

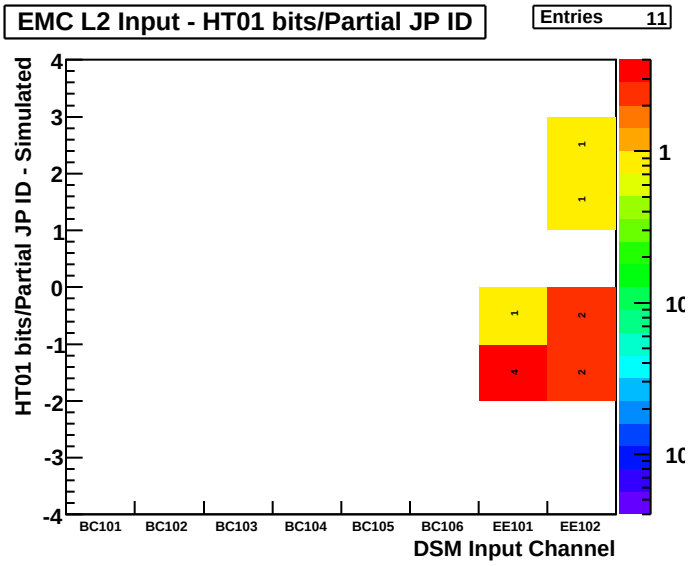

EMC L2 Input - JPZ/JPC bits
Entries 2340360
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
14 72 5 6 7 7 6 8
71 295 70 49 85 79 44 50
65 439 59 58 87 83 22 41
292395 291739 292411 292432 292366 292376 292473 292446

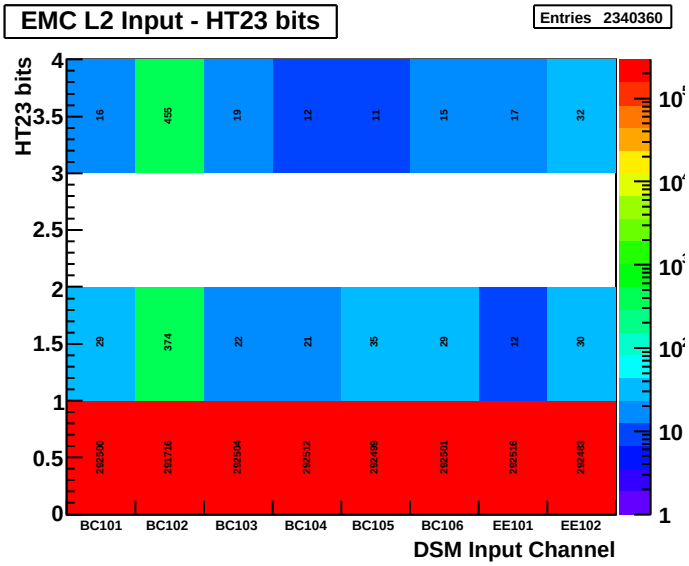

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

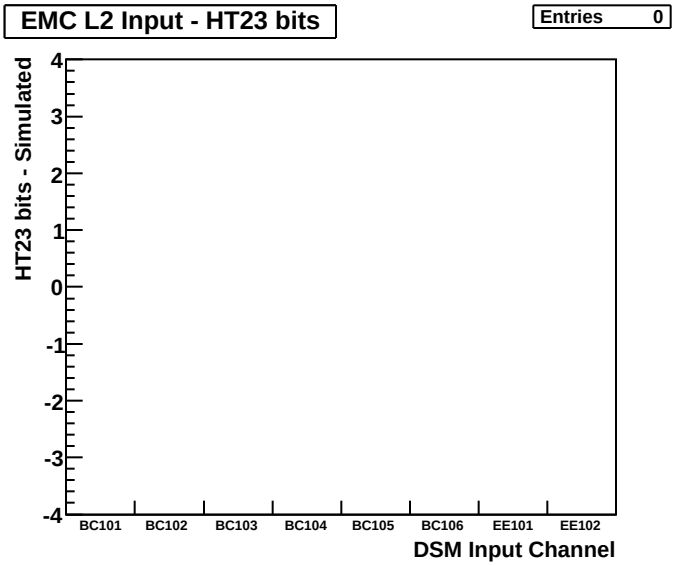

EMC L2 Input - Partial JP Sum
Entries 2340360
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

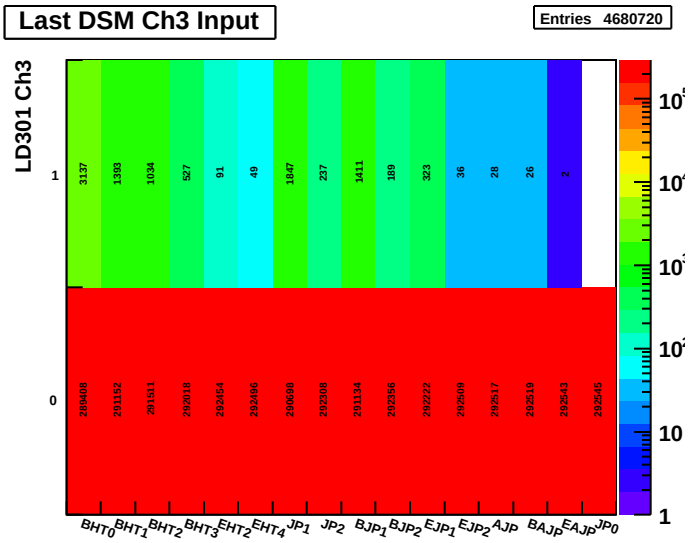

EMC L2 Input - Partial JP Sum
Entries 49
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

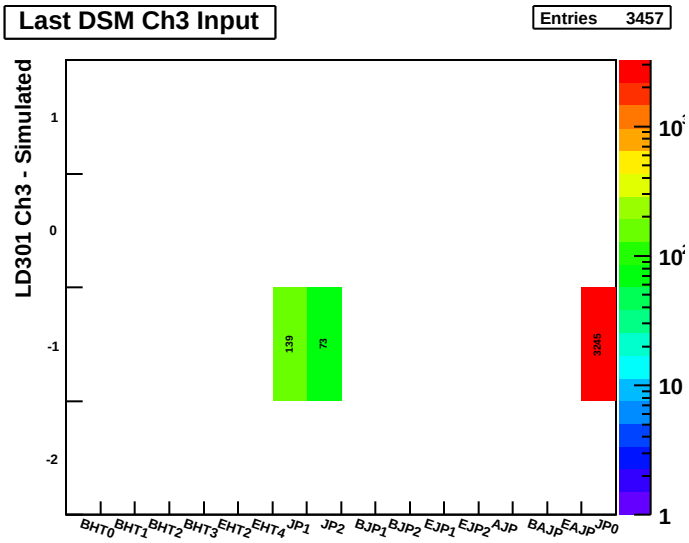

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2340360
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

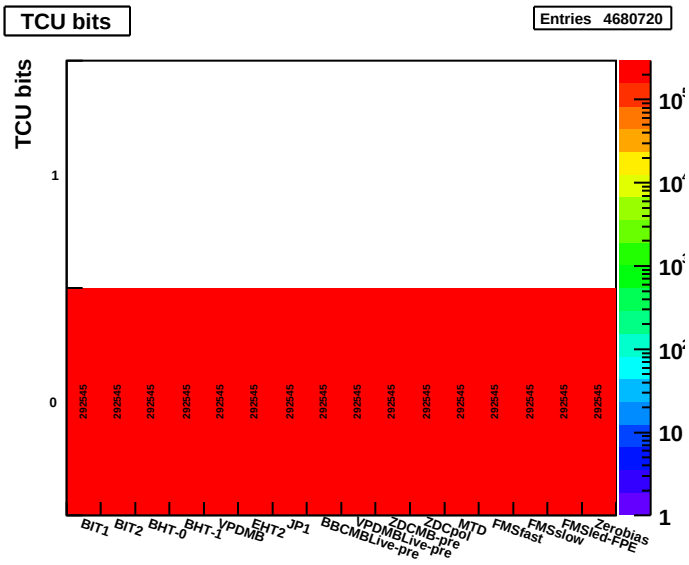

EMC L2 Input - HT01 bits/Partial JP ID
Entries 11
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

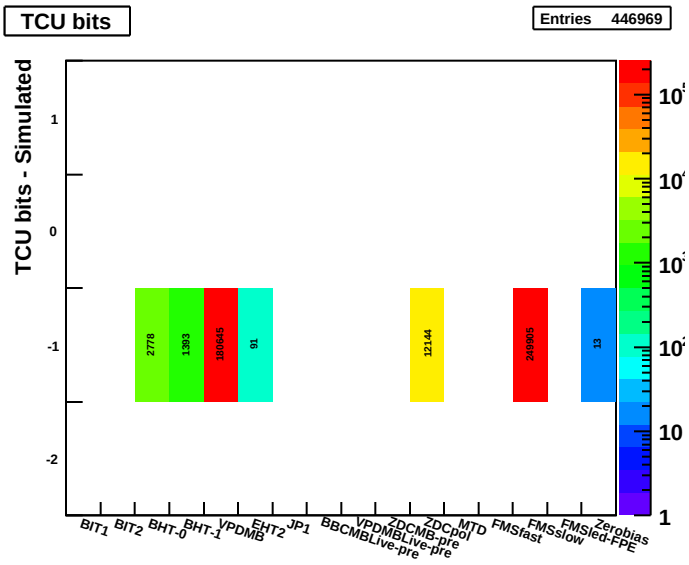

EMC L2 Input - HT23 bits
Entries 2340360
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

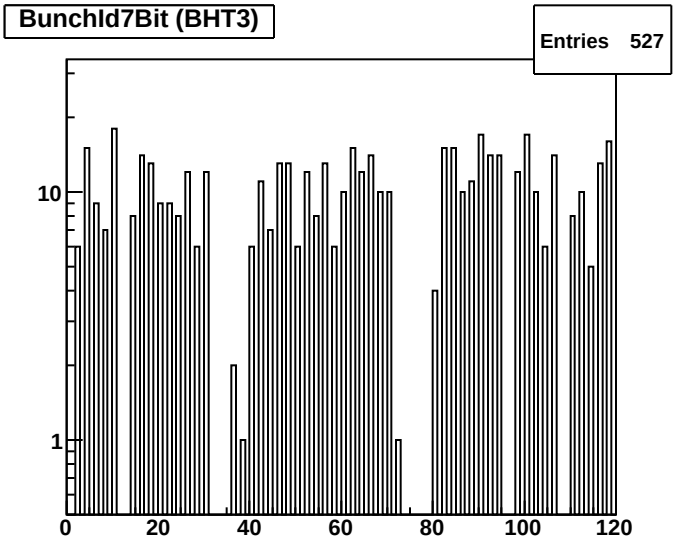

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

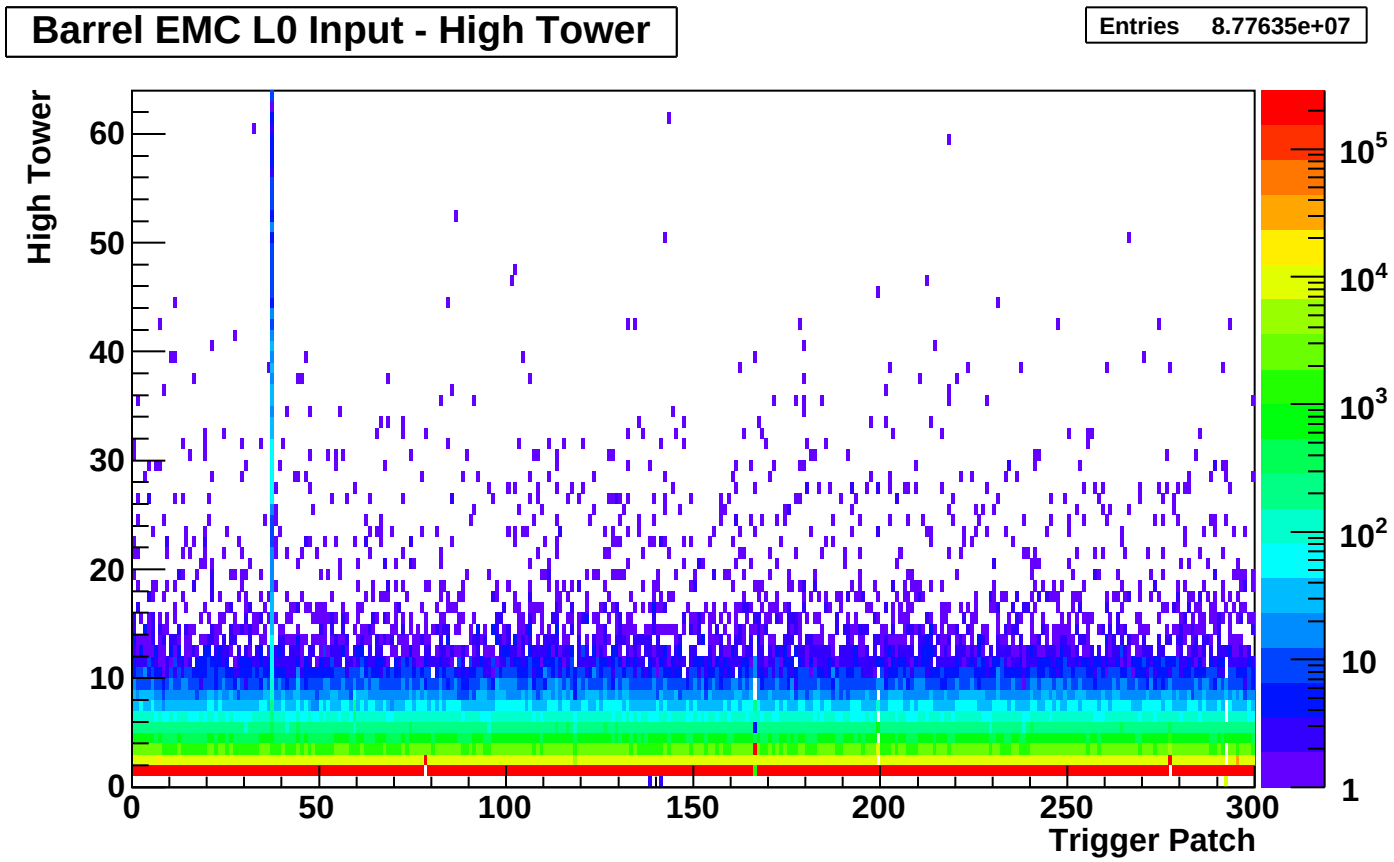

Last DSM Ch3 Input
Entries 4680720
LD301 Ch3
3137
1393
1034
527
91
49
1847
237
1411
189
323
36
28
26
2
289408
291152
291511
292018
292454
292496
290698
292308
291134
292356
292222
292509
292517
292519
292543
292545
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

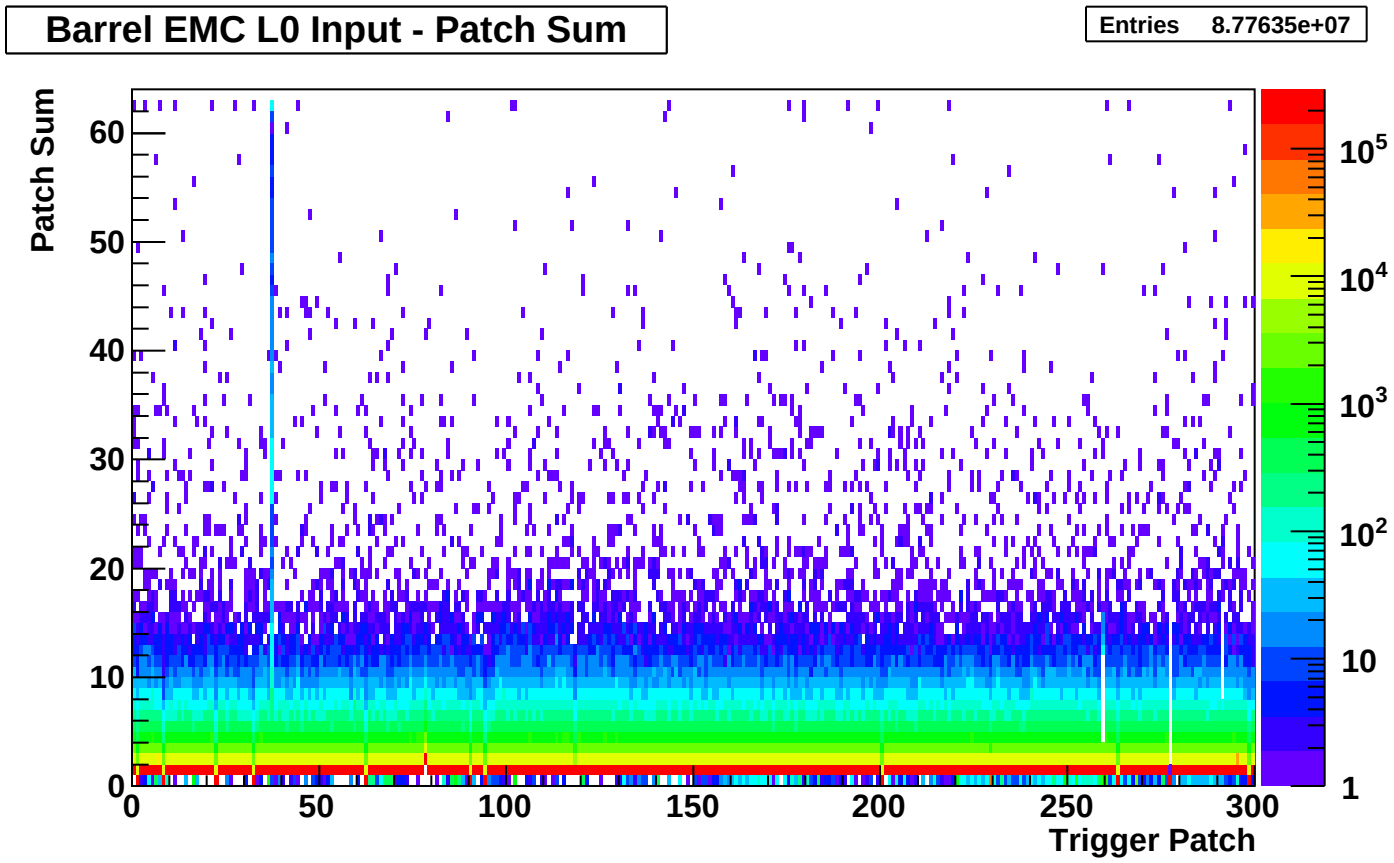

Last DSM Ch3 Input
Entries 3457
LD301 Ch3 - Simulated
139
73
3245
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

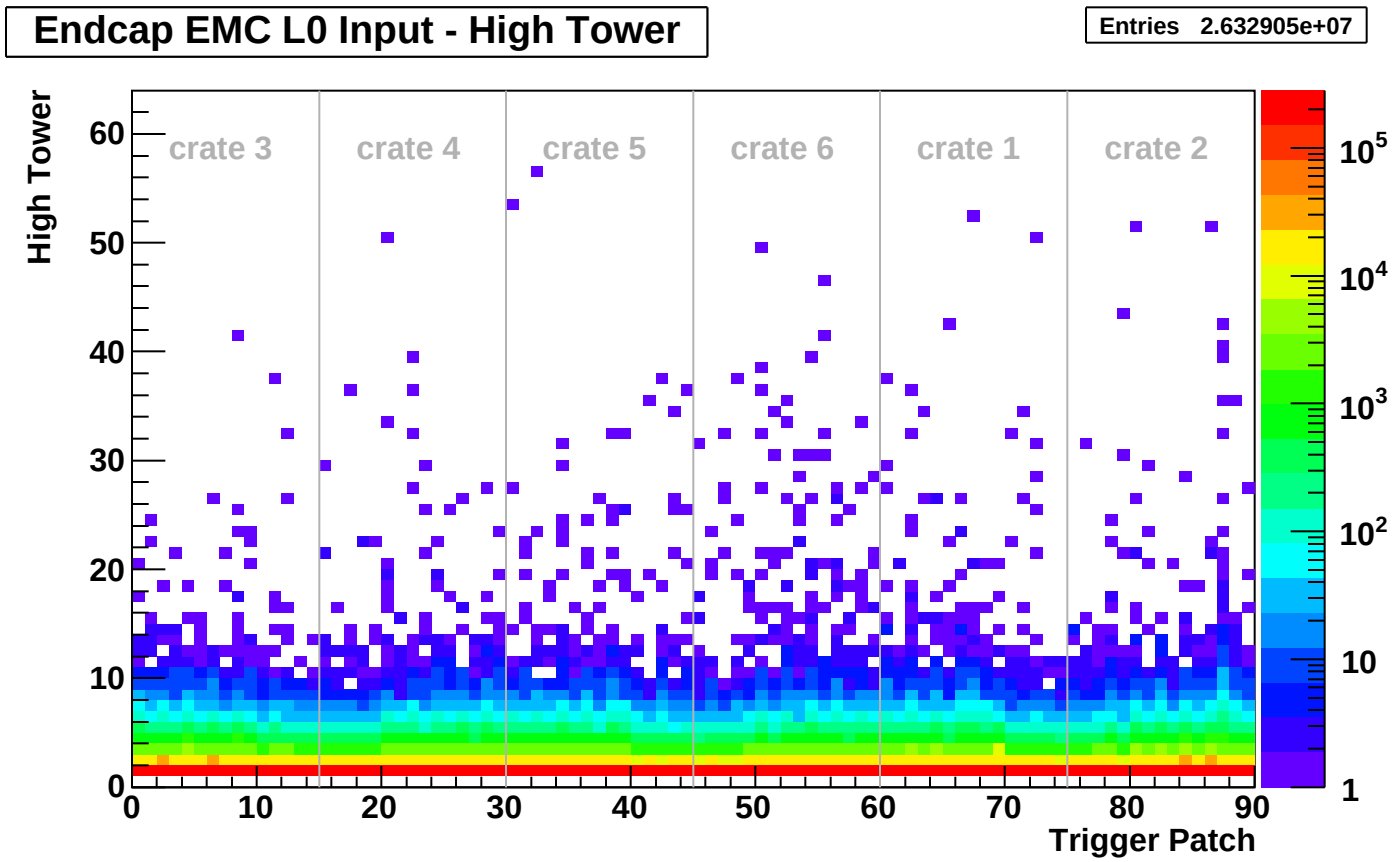

TCU bits
Entries 4680720
TCU bits
292545
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

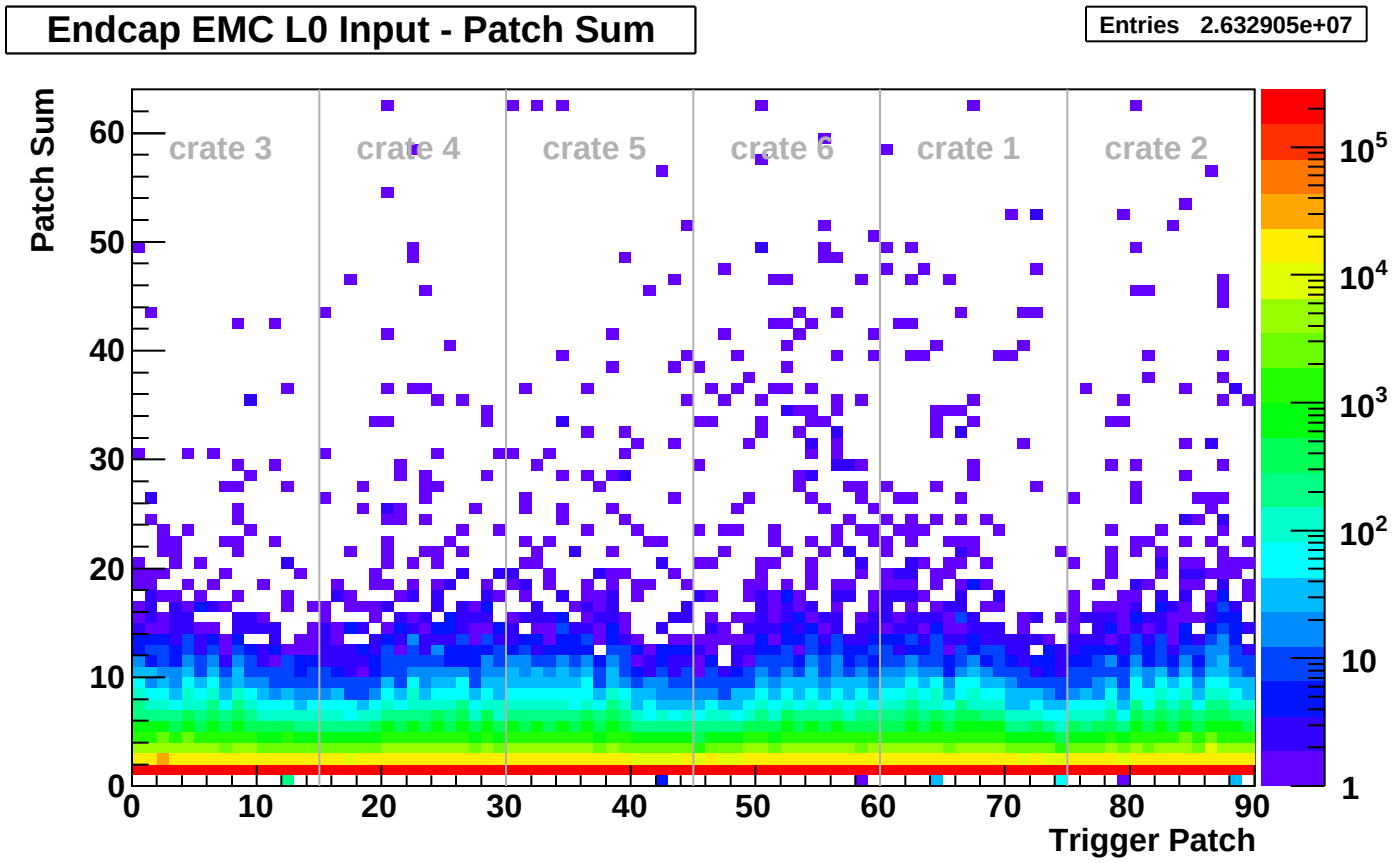

TCU bits
Entries 446969
TCU bits - Simulated
2778
1393
180645
91
12144
249905
13
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

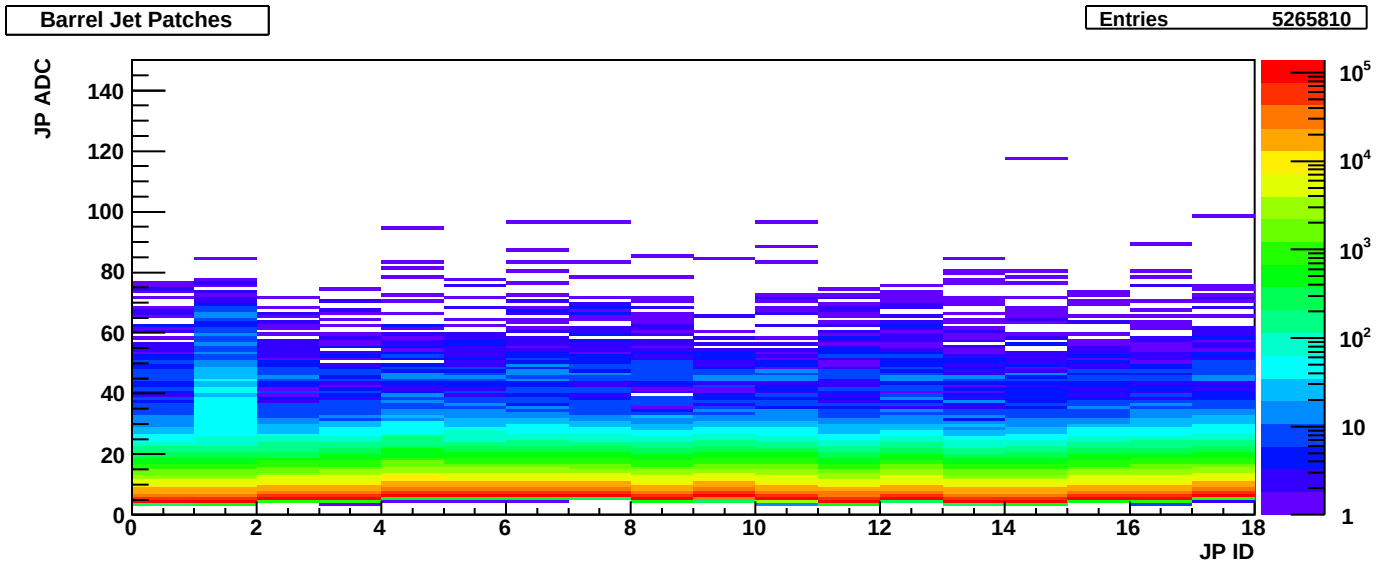

BunchId7Bit (BHT3)
Entries 527
0 20 40 60 80 100 120

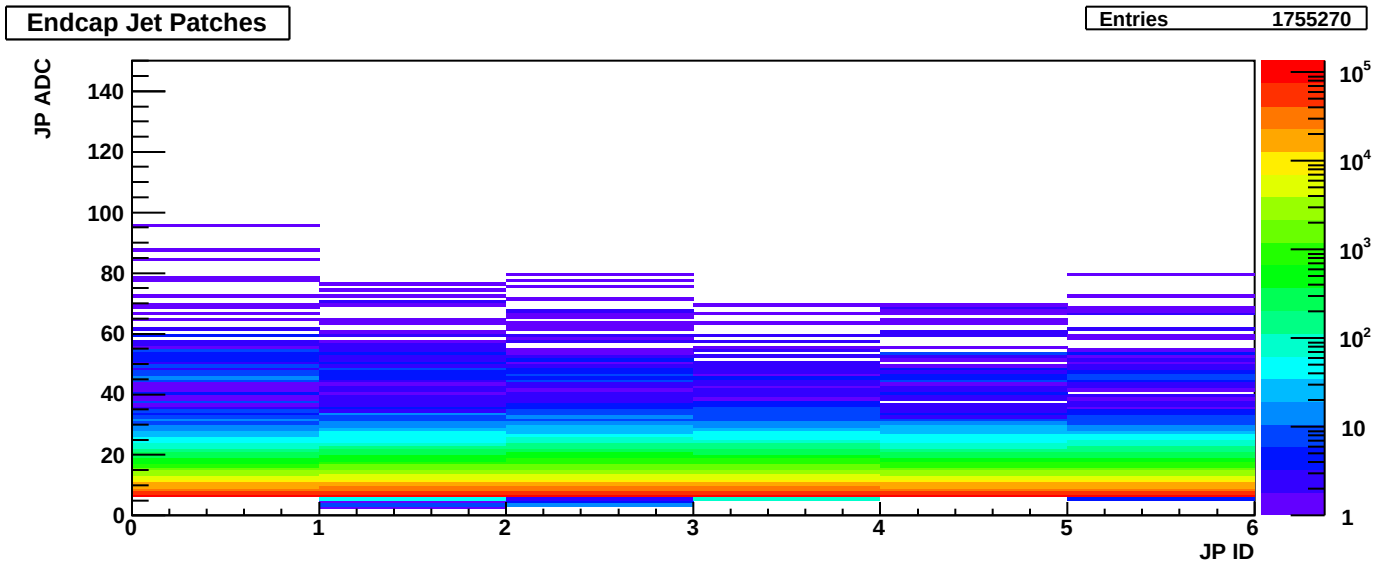

Barrel EMC L0 Input - High Tower
Entries 8.77635e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

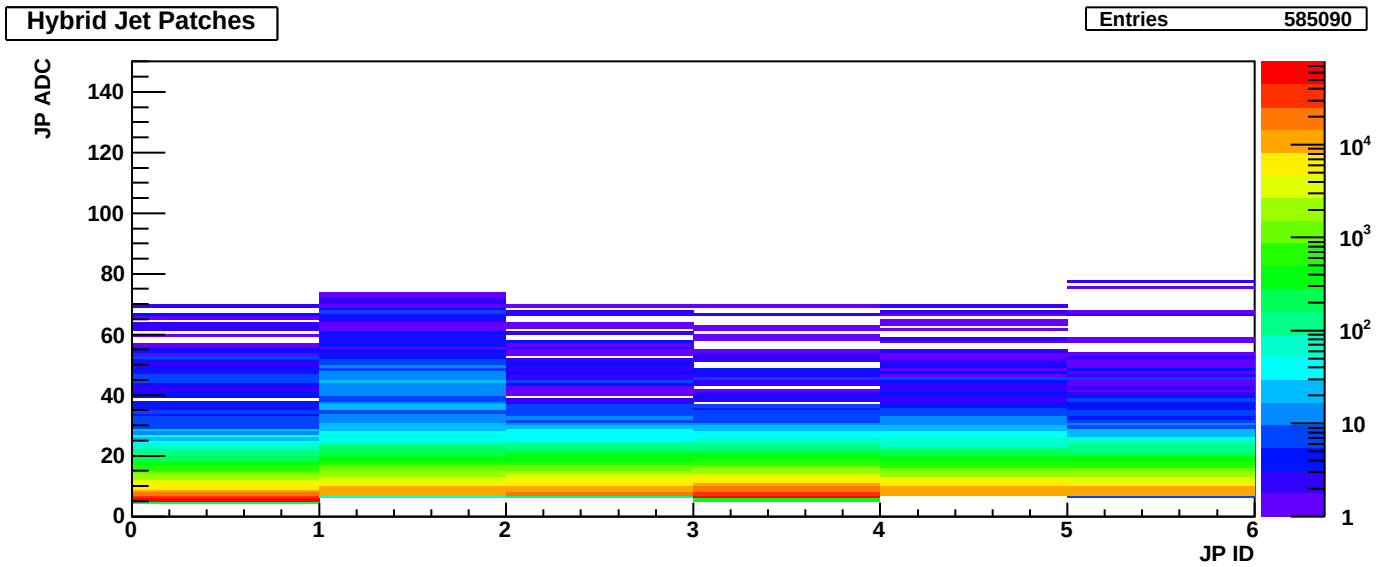

Barrel EMC L0 Input - Patch Sum
Entries 8.77635e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

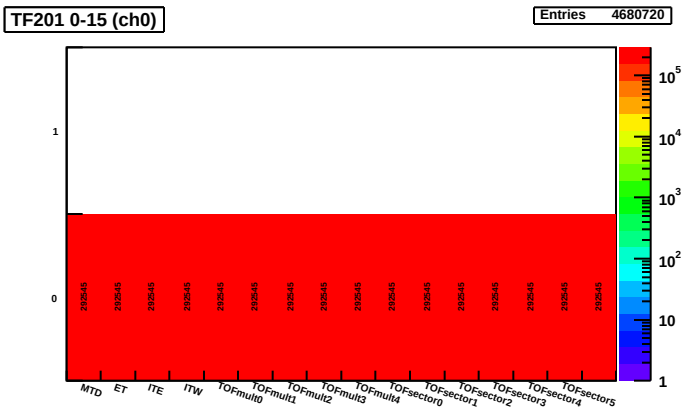

Endcap EMC L0 Input - High Tower
Entries 2.632905e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

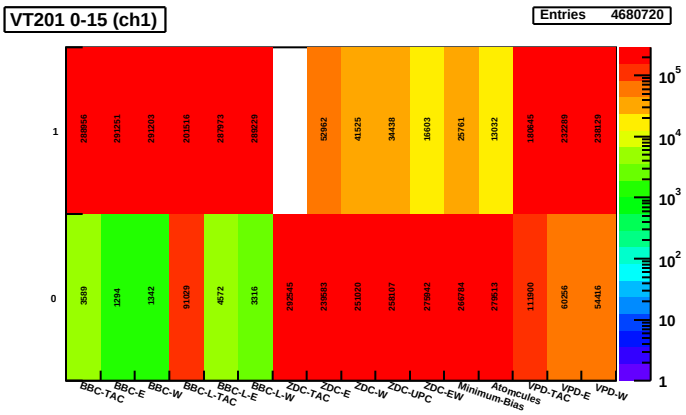

Endcap EMC L0 Input - Patch Sum
Entries 2.632905e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

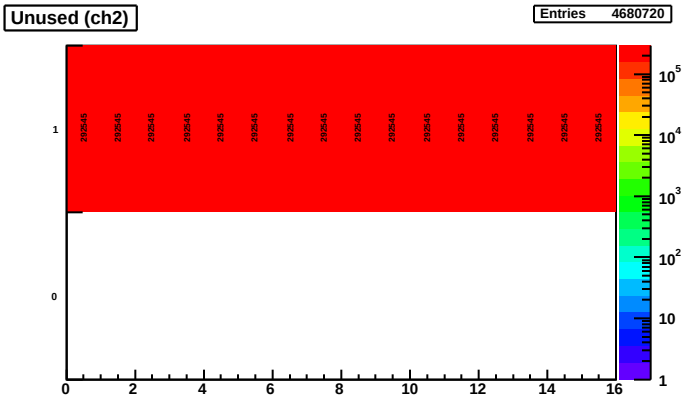

Barrel Jet Patches
Entries 5265810
JP ADC
JP ID

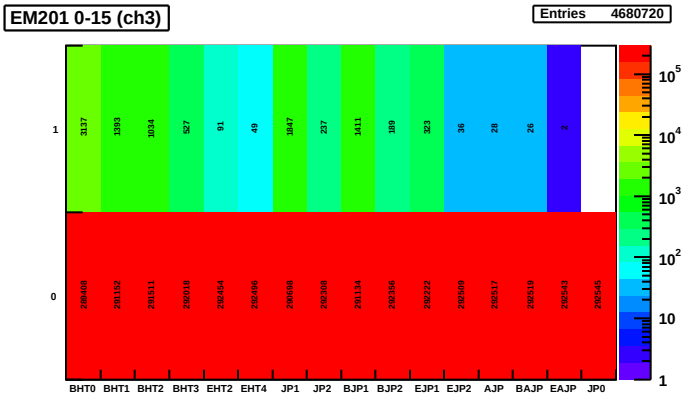

Endcap Jet Patches
Entries 1755270
JP ADC
JP ID

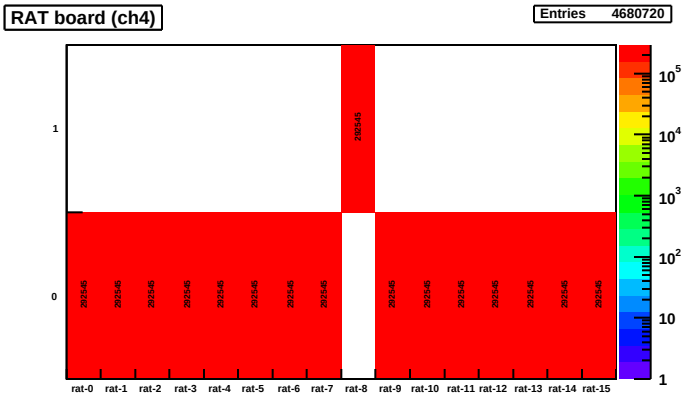

Hybrid Jet Patches
Entries 585090
JP ADC
JP ID

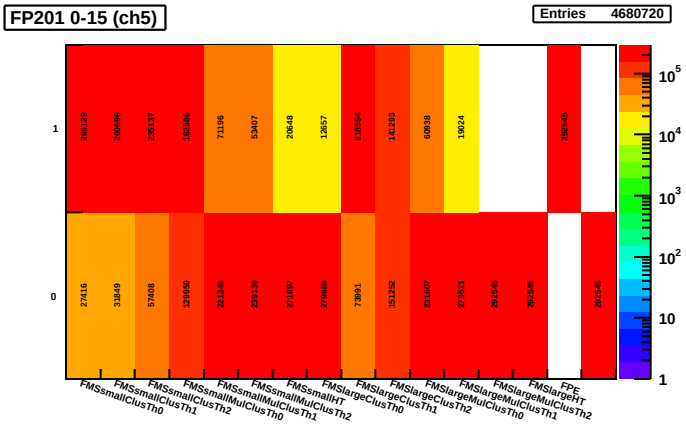

TF201 0-15 (ch0)
Entries 4680720
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

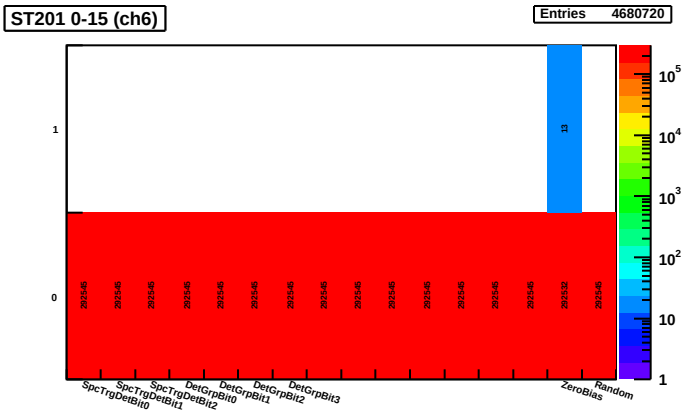

VT201 0-15 (ch1)
Entries 4680720
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

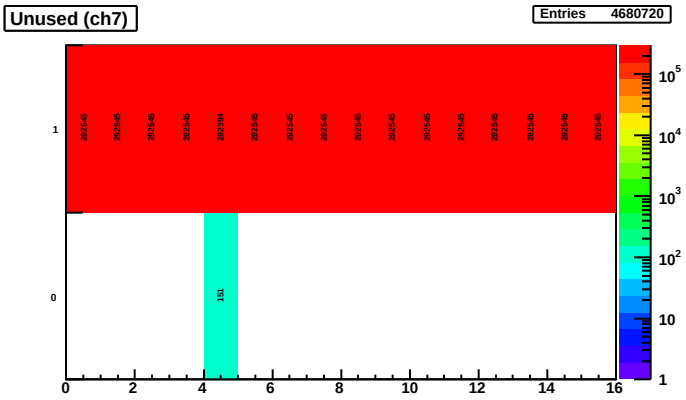

Unused (ch2)
Entries 4680720

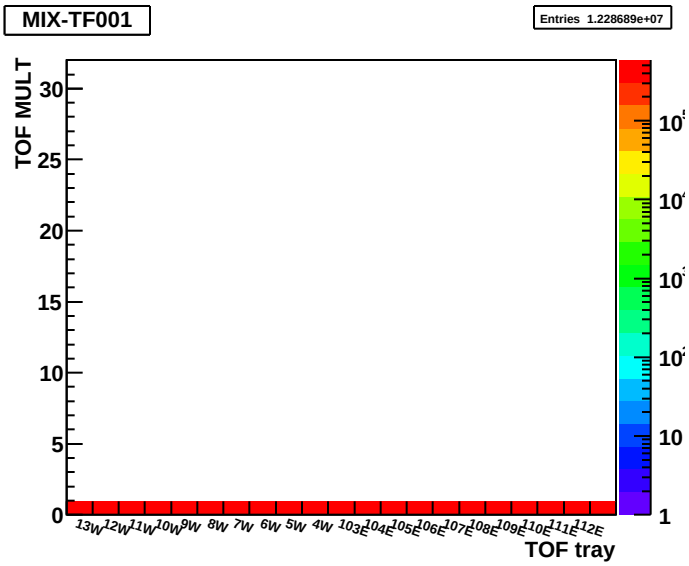

EM201 0-15 (ch3)
Entries 4680720
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

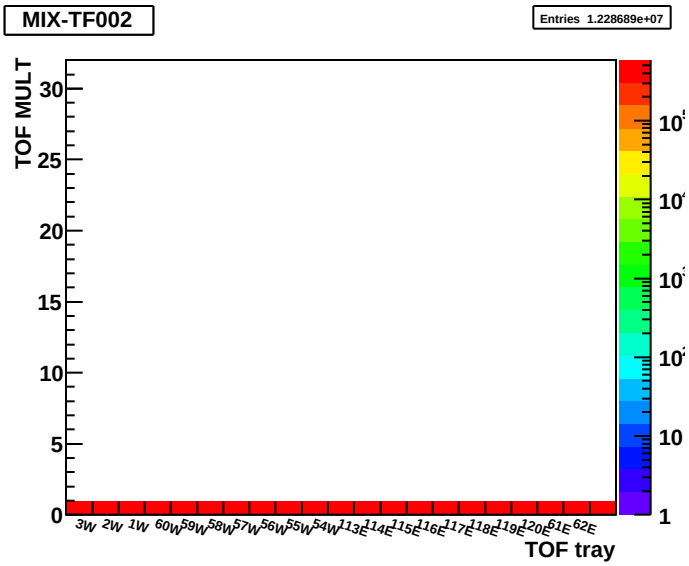

RAT board (ch4)
Entries 4680720
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

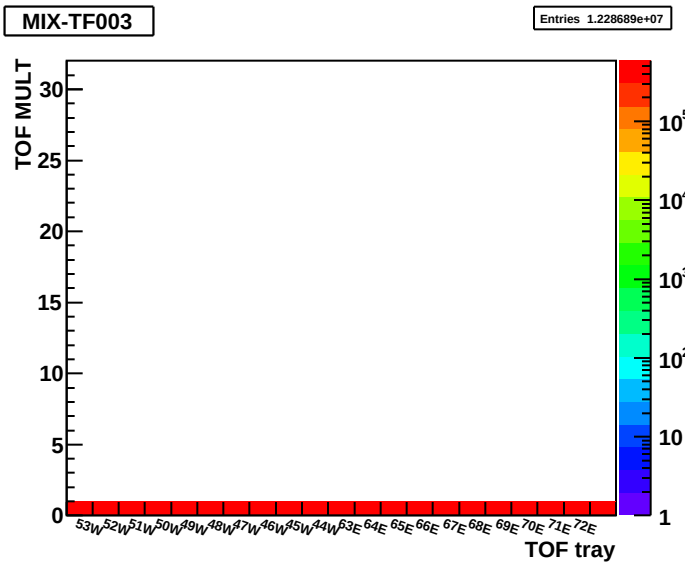

FP201 0-15 (ch5)
Entries 4680720
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

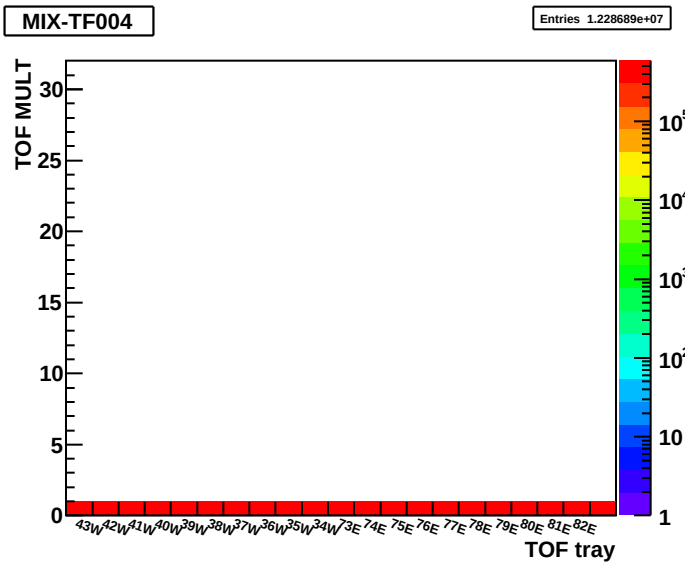

ST201 0-15 (ch6)
Entries 4680720
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

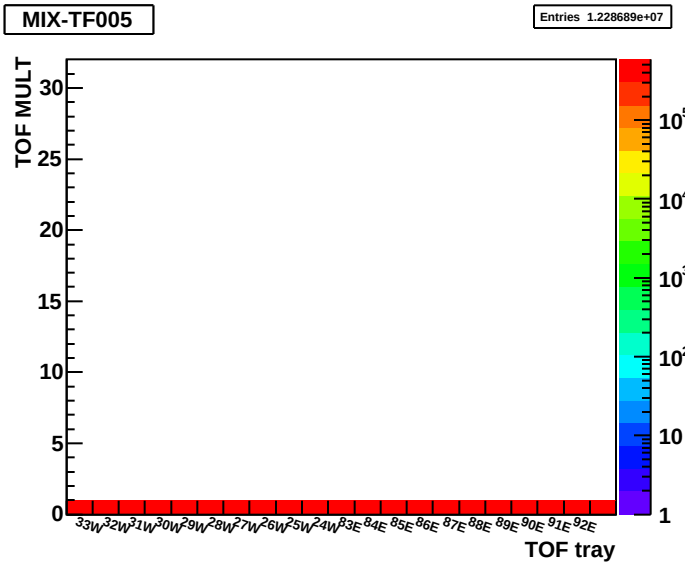

Unused (ch7)
Entries 4680720

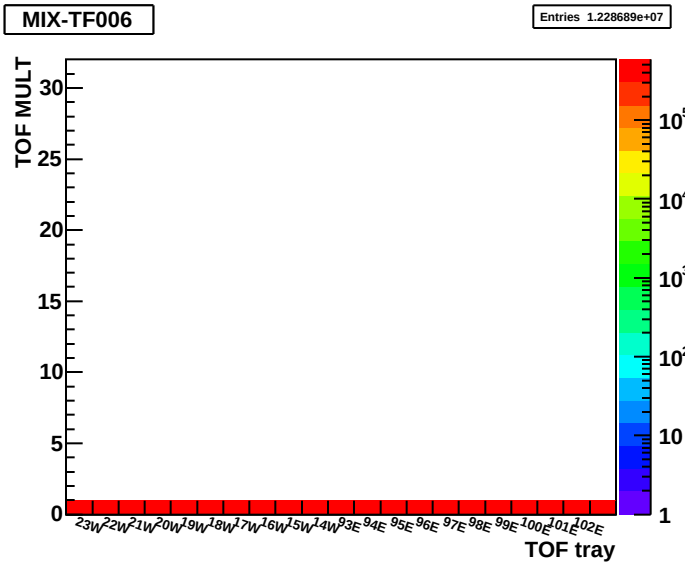

MIX-TF001
Entries 1.228689e+07
TOF MULT
TOF tray

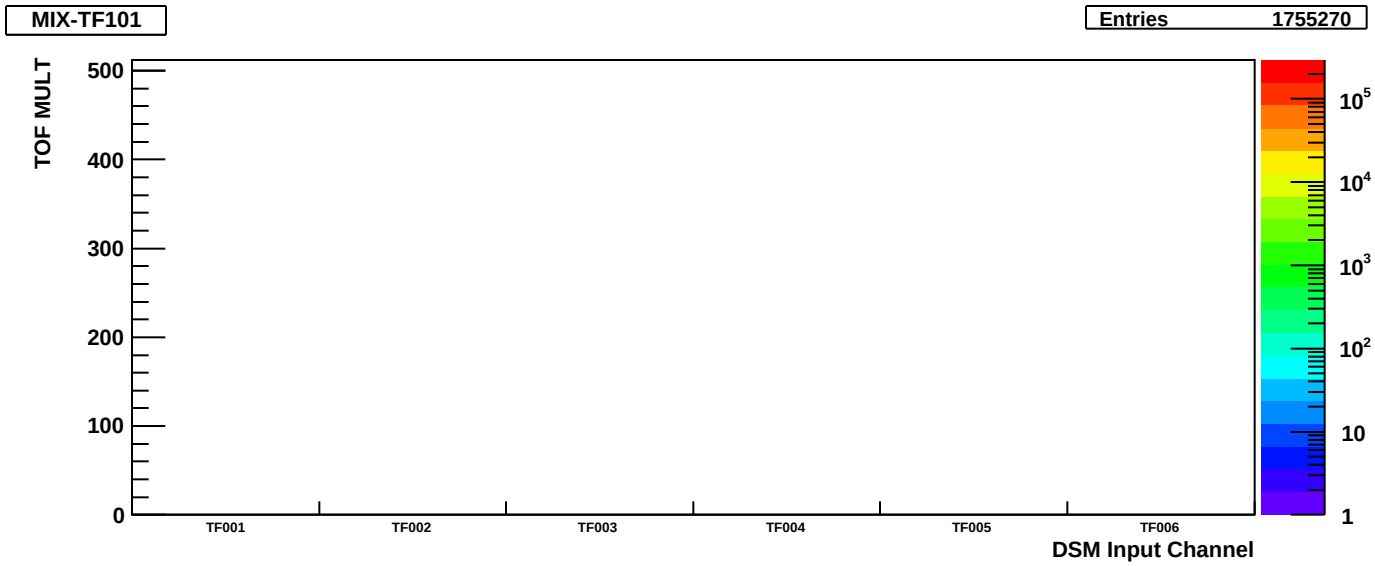

MIX-TF002
Entries 1.228689e+07
TOF MULT
TOF tray

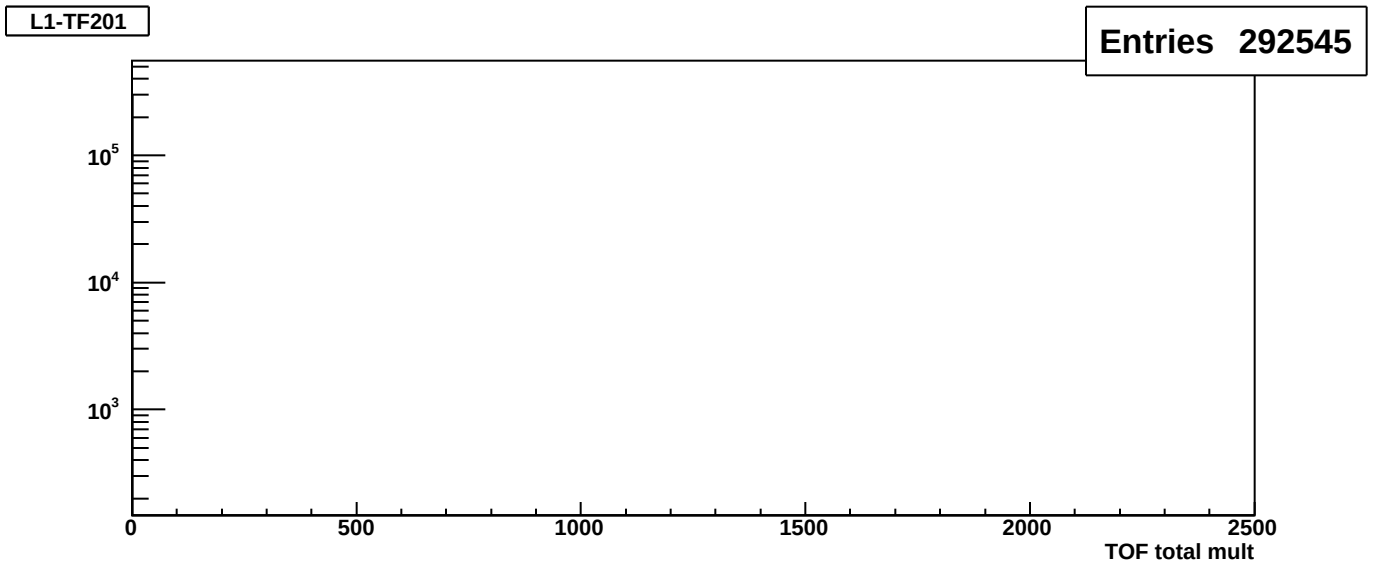

MIX-TF003
Entries 1.228689e+07
TOF MULT
TOF tray

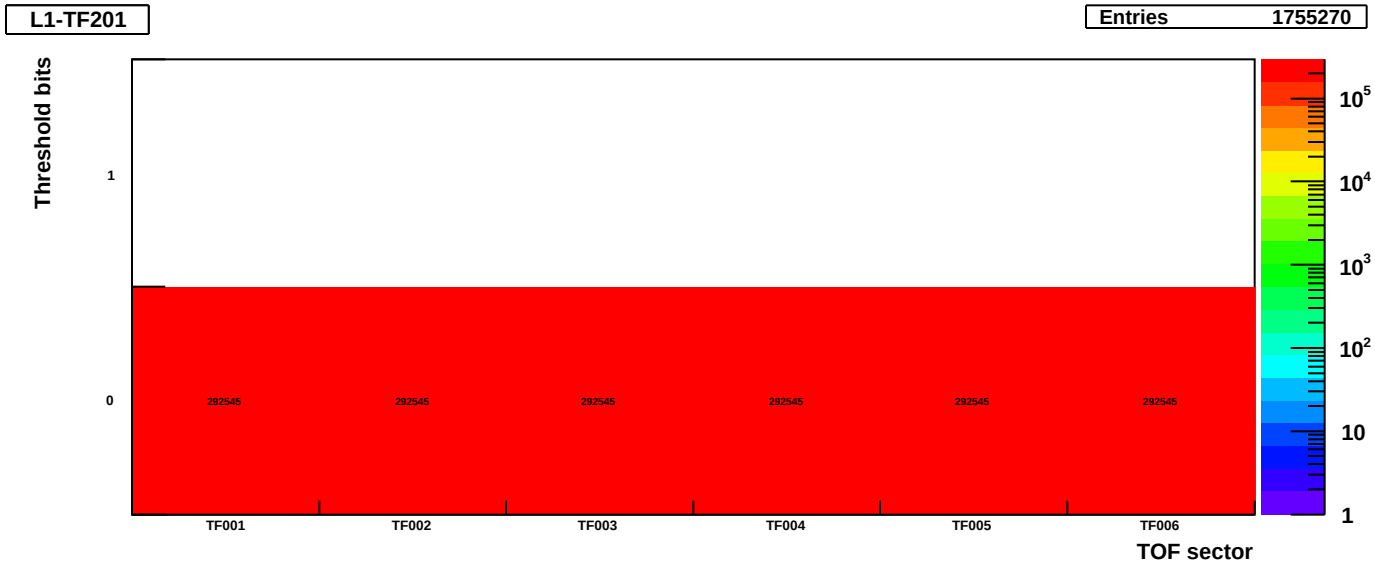

MIX-TF004
Entries 1.228689e+07
TOF MULT
TOF tray

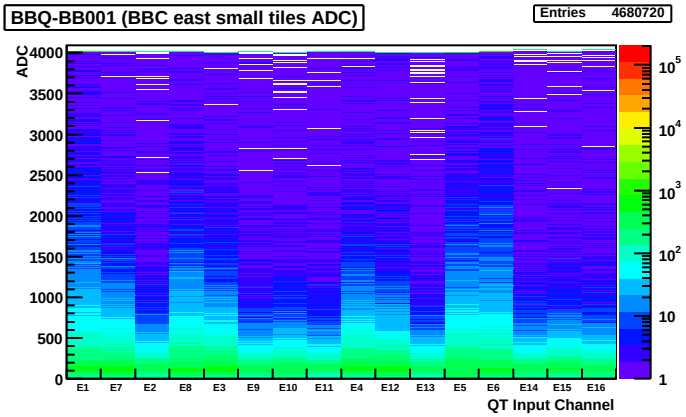

MIX-TF005
Entries 1.228689e+07
TOF MULT
TOF tray

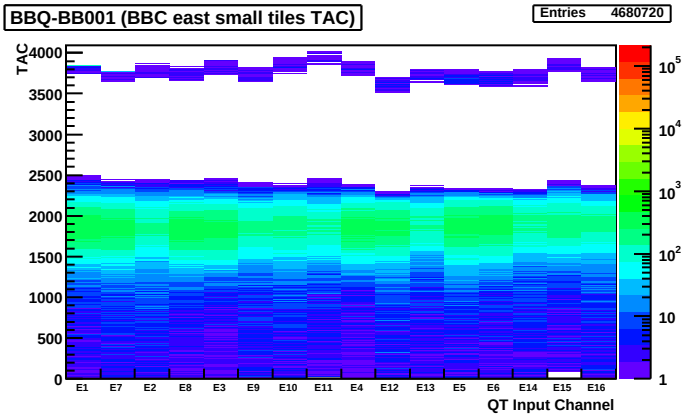

MIX-TF006
Entries 1.228689e+07
TOF MULT
TOF tray

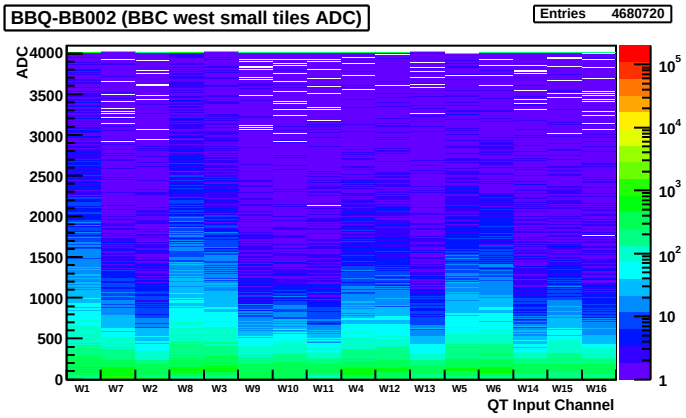

MIX-TF101
Entries 1755270
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

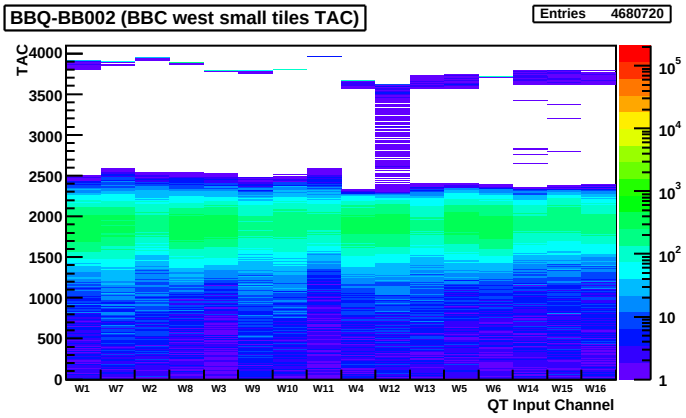

L1-TF201
Entries 292545
10^5
10^4
10^3
0
500
1000
1500
2000
2500
TOF total mult

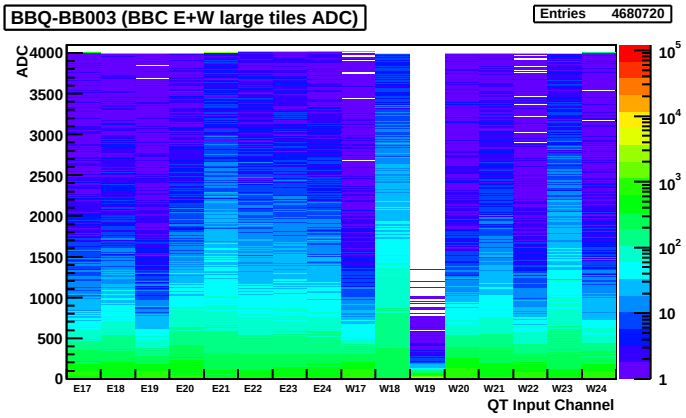

L1-TF201
Entries 1755270
Threshold bits
1
0
292545
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3
10^2
10
1

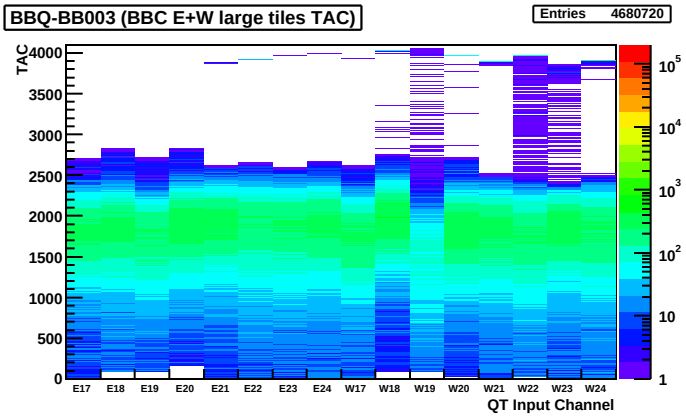

BBQ-BB001 (BBC east small tiles ADC)
Entries 4680720
ADC
QT Input Channel

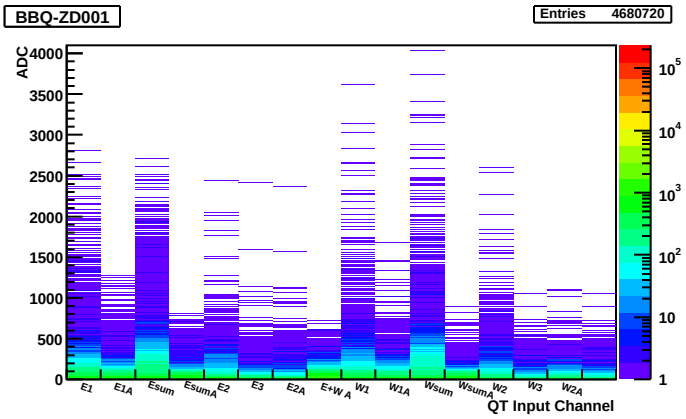

BBQ-BB001 (BBC east small tiles TAC)
Entries 4680720
TAC
QT Input Channel

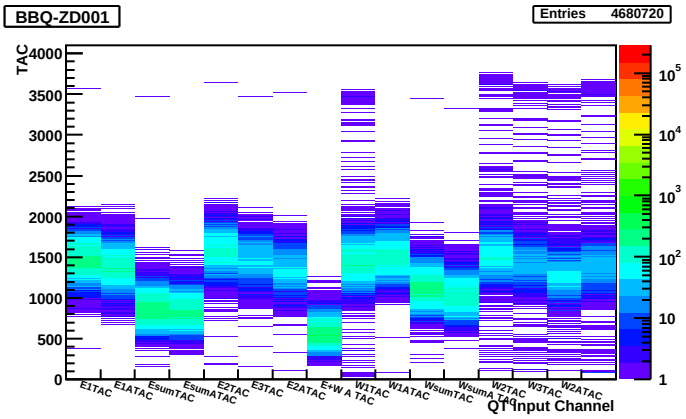

BBQ-BB002 (BBC west small tiles ADC)
Entries 4680720
ADC
QT Input Channel

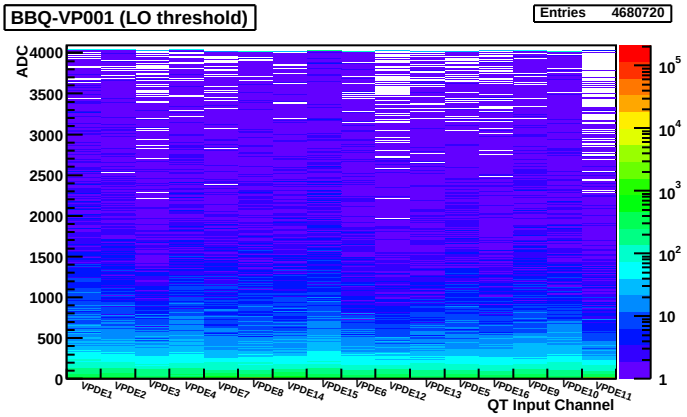

BBQ-BB002 (BBC west small tiles TAC)
Entries 4680720
TAC
QT Input Channel

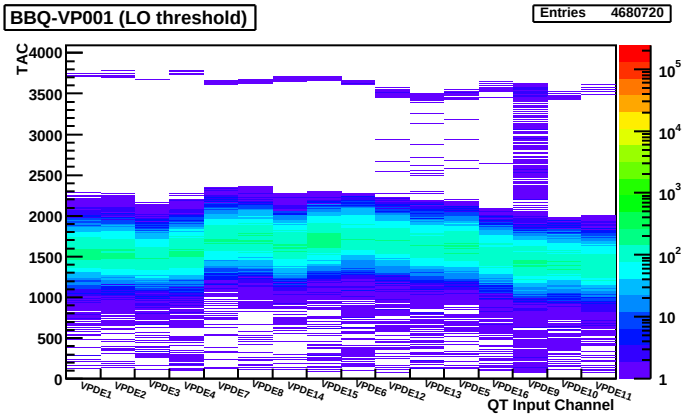

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4680720
ADC
QT Input Channel

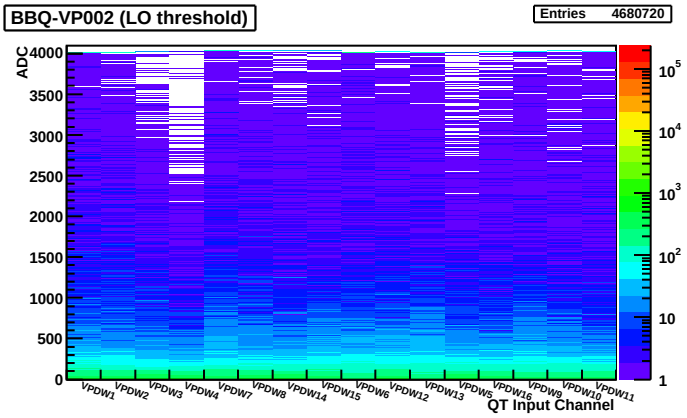

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4680720
TAC
QT Input Channel

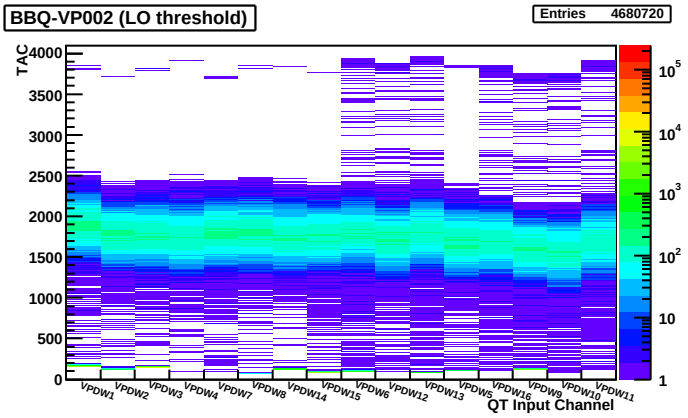

BBQ-ZD001
Entries 4680720
ADC
QT Input Channel

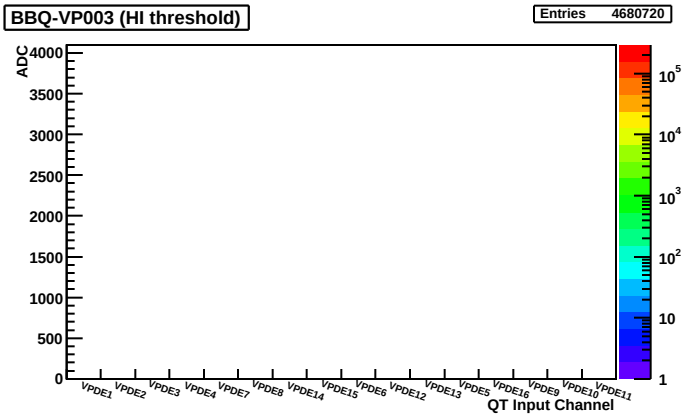

BBQ-ZD001
Entries 4680720
TAC
QT Input Channel

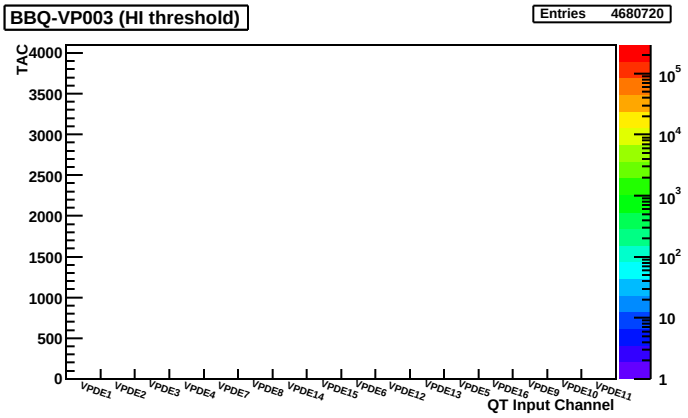

BBQ-VP001 (LO threshold)
Entries 4680720
ADC
QT Input Channel

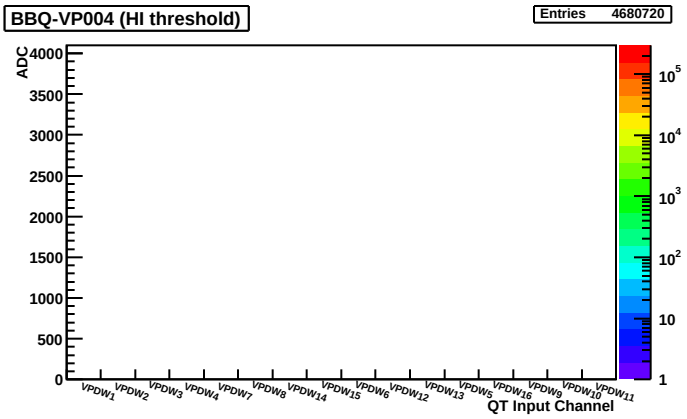

BBQ-VP001 (LO threshold)
Entries 4680720
TAC
QT Input Channel

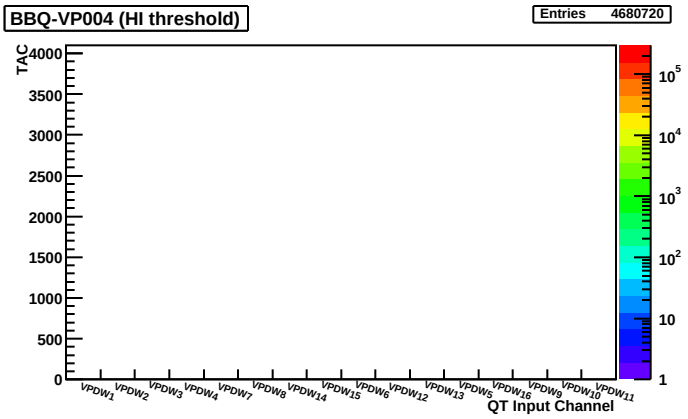

BBQ-VP002 (LO threshold)
Entries 4680720
ADC
QT Input Channel

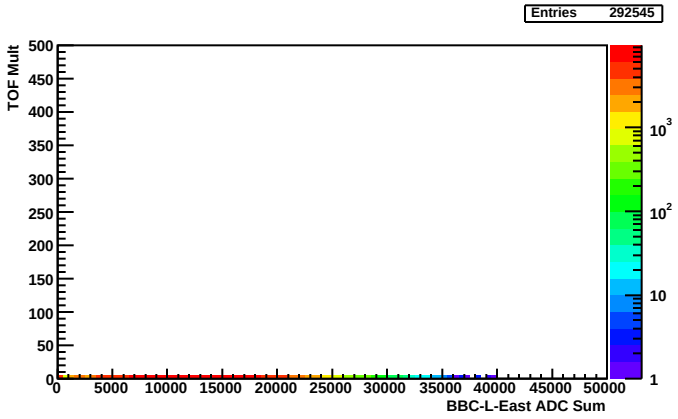

BBQ-VP002 (LO threshold)
Entries 4680720
TAC
QT Input Channel

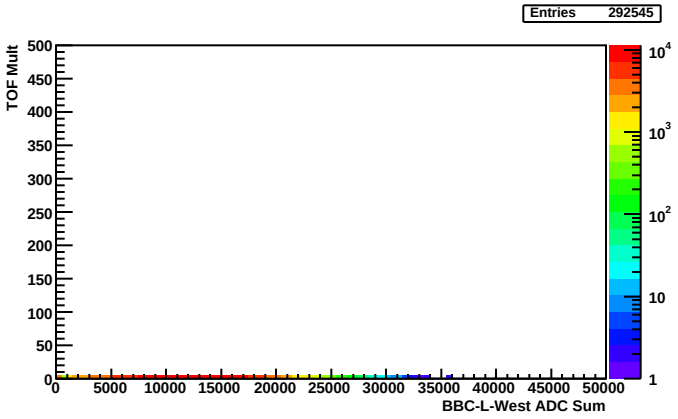

BBQ-VP003 (HI threshold)
Entries 4680720
ADC
QT Input Channel

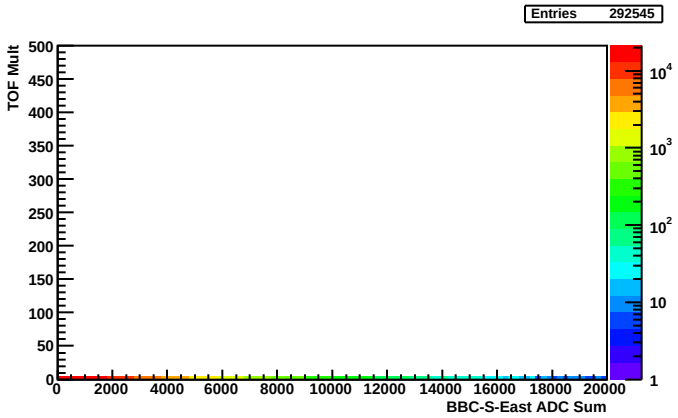

BBQ-VP003 (HI threshold)
Entries 4680720
TAC
QT Input Channel

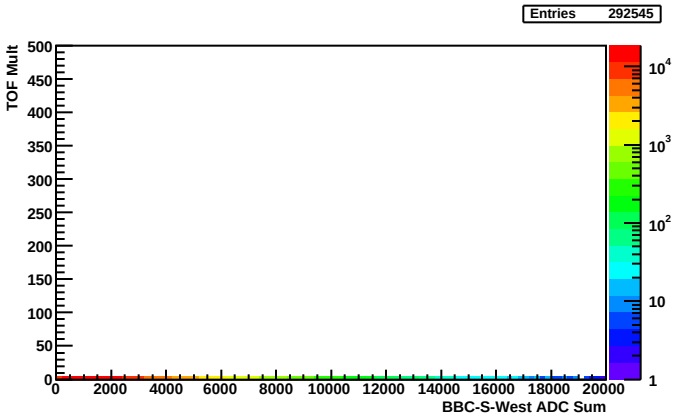

BBQ-VP004 (HI threshold)
Entries 4680720
ADC
QT Input Channel

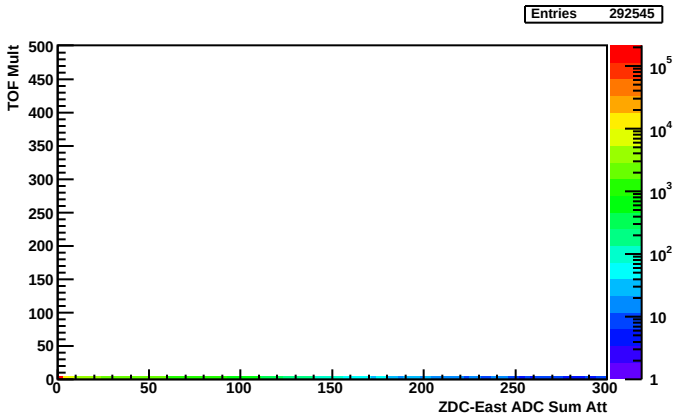

BBQ-VP004 (HI threshold)
Entries 4680720
TAC
QT Input Channel

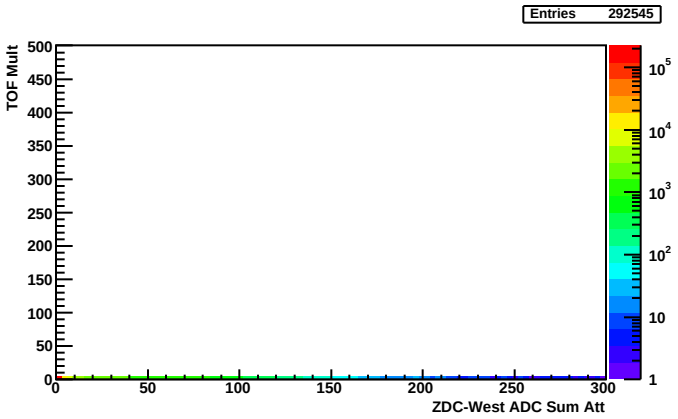

Entries 292545
TOF Mult
BBC-L-East ADC Sum

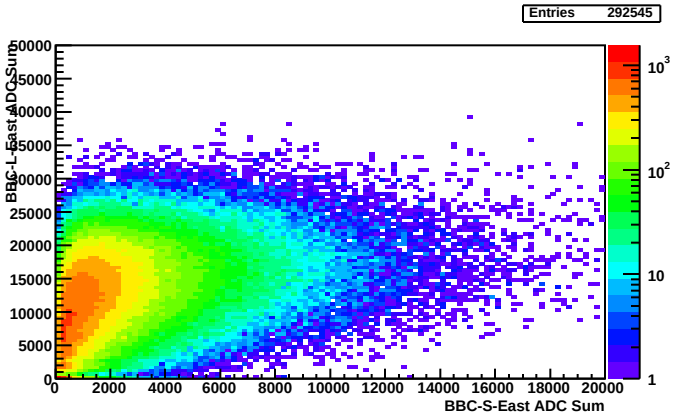

Entries 292545
TOF Mult
BBC-L-West ADC Sum

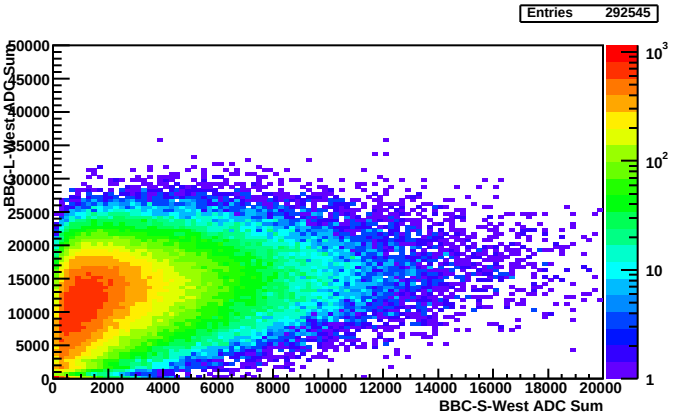

Entries 292545
TOF Mult
BBC-S-East ADC Sum

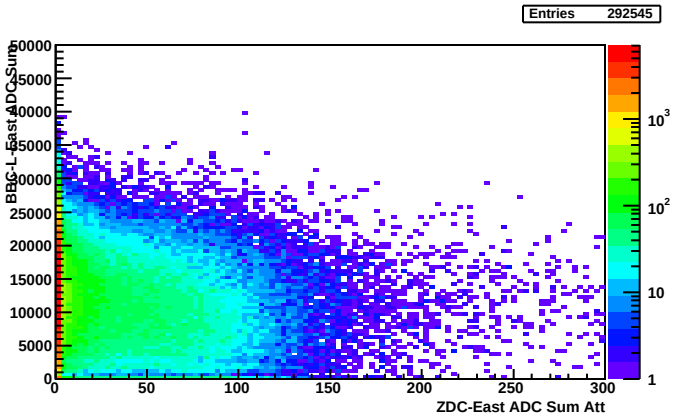

Entries 292545
TOF Mult
BBC-S-West ADC Sum

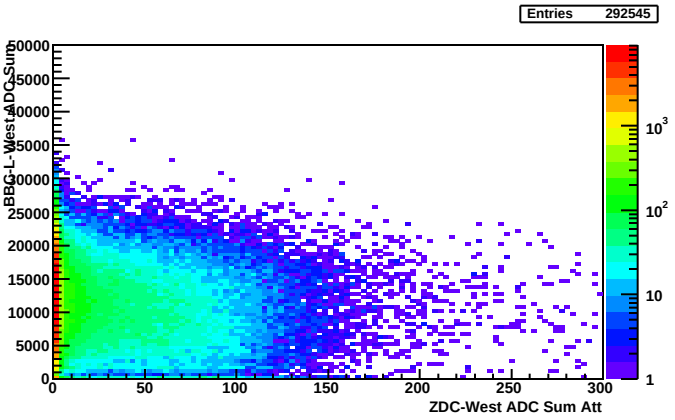

Entries 292545
TOF Mult
ZDC-East ADC Sum Att

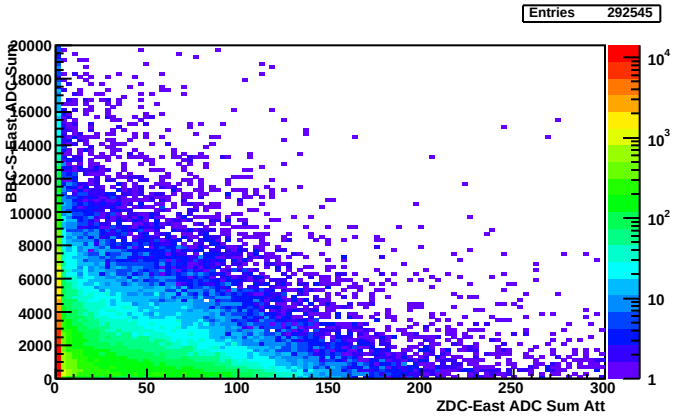

Entries 292545
TOF Mult
ZDC-West ADC Sum Att

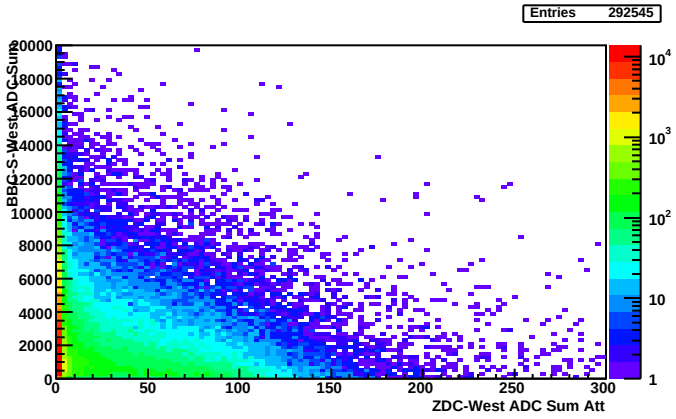

Entries 292545
BBC-L-East ADC Sum
BBC-S-East ADC Sum

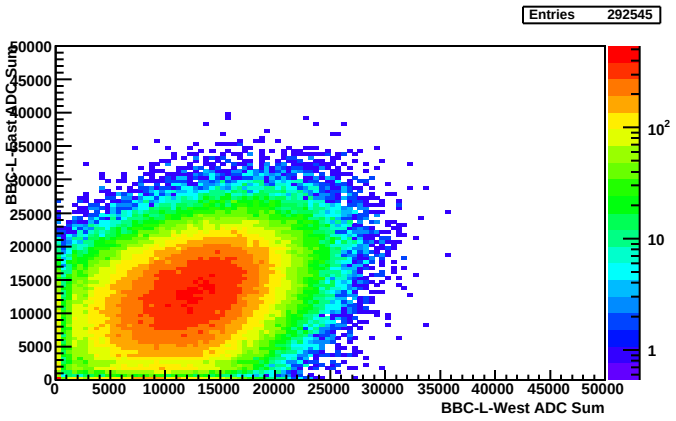

Entries 292545
BBC-L-West ADC Sum
BBC-S-West ADC Sum

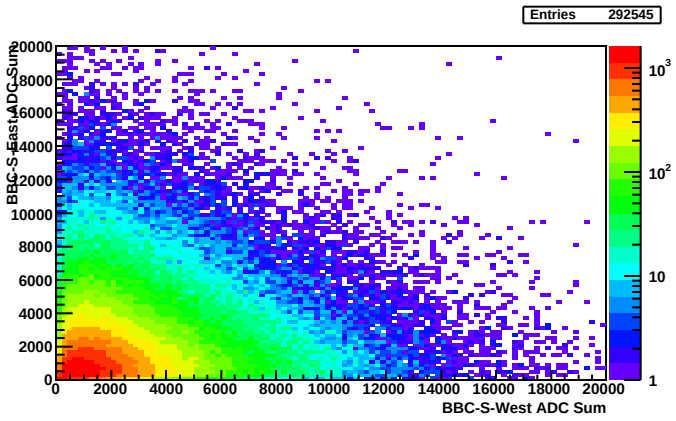

Entries 292545
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

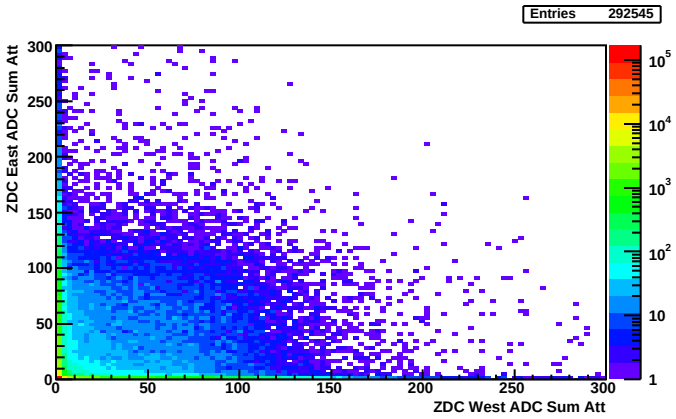

Entries 292545
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

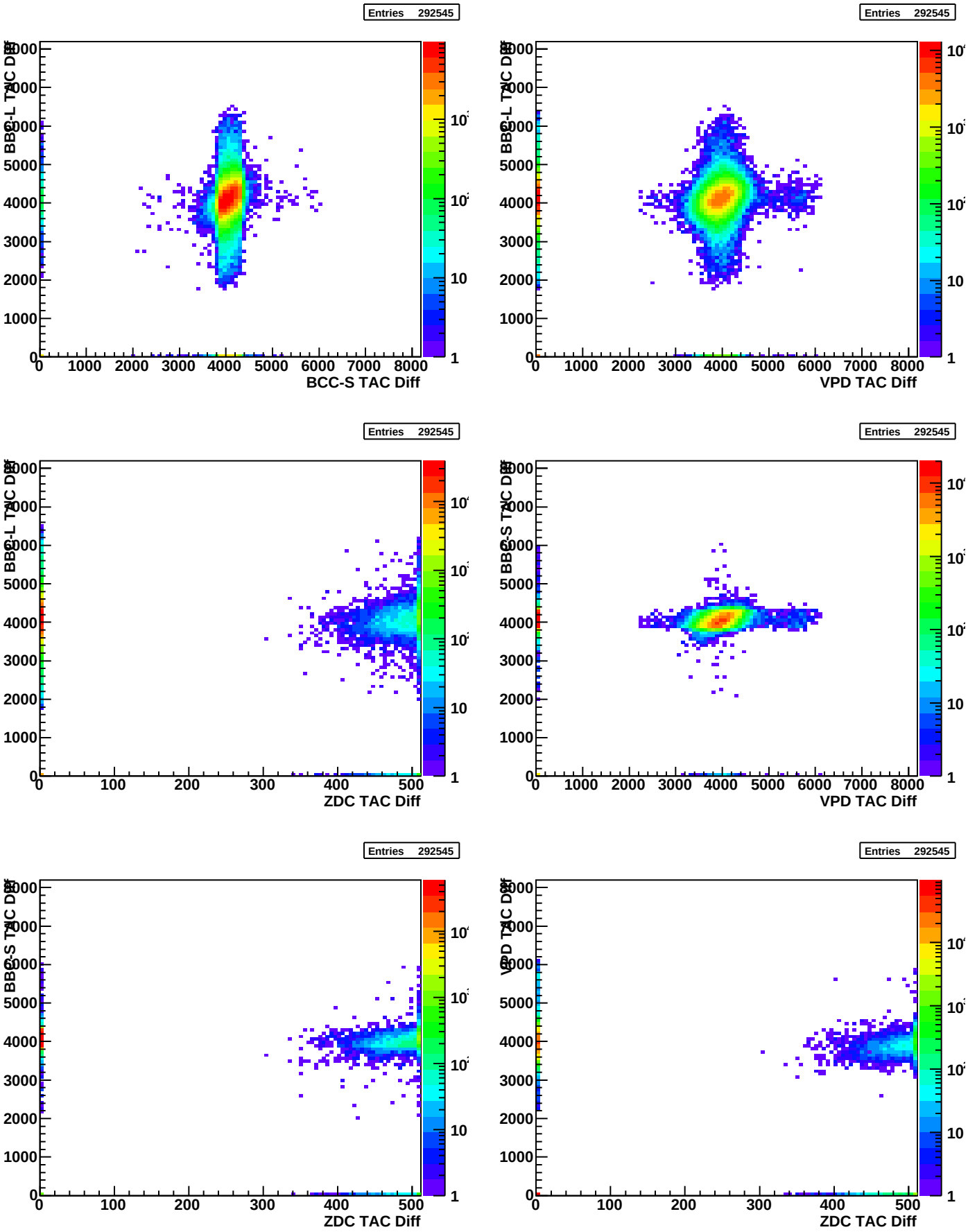

Entries 292545
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

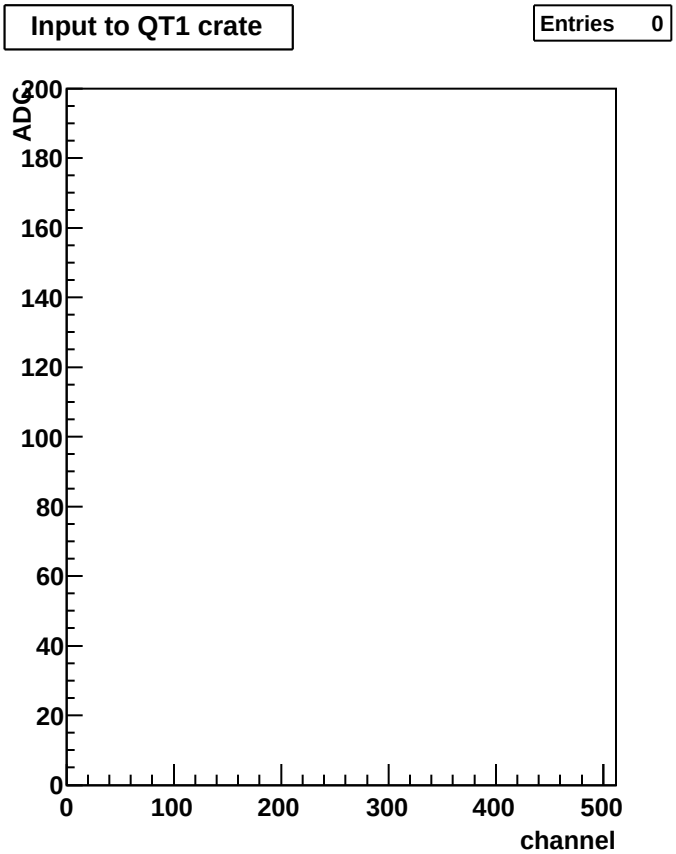

Entries 292545
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

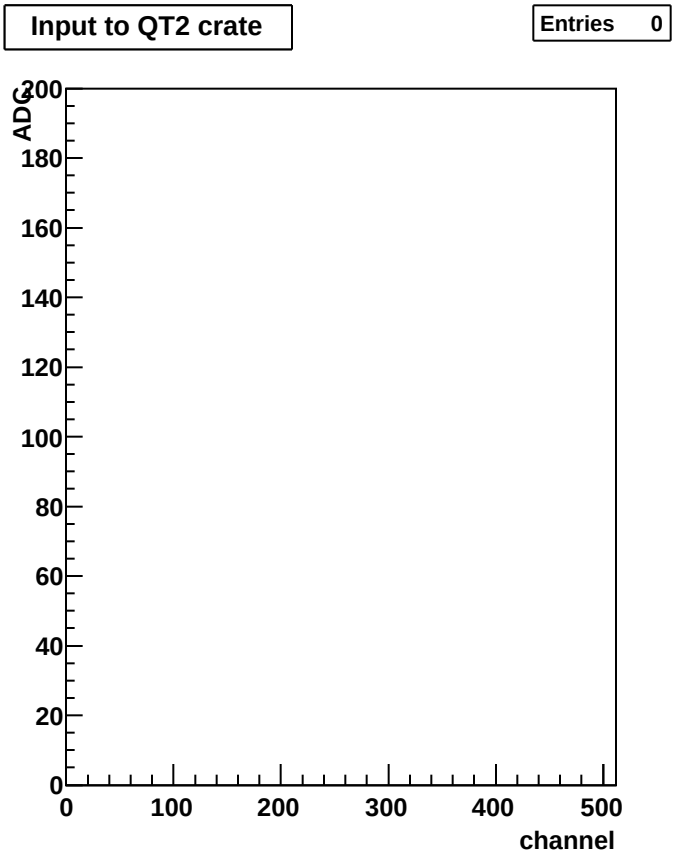

Entries 292545
BBC-L-East ADC Sum
BBC-L-West ADC Sum

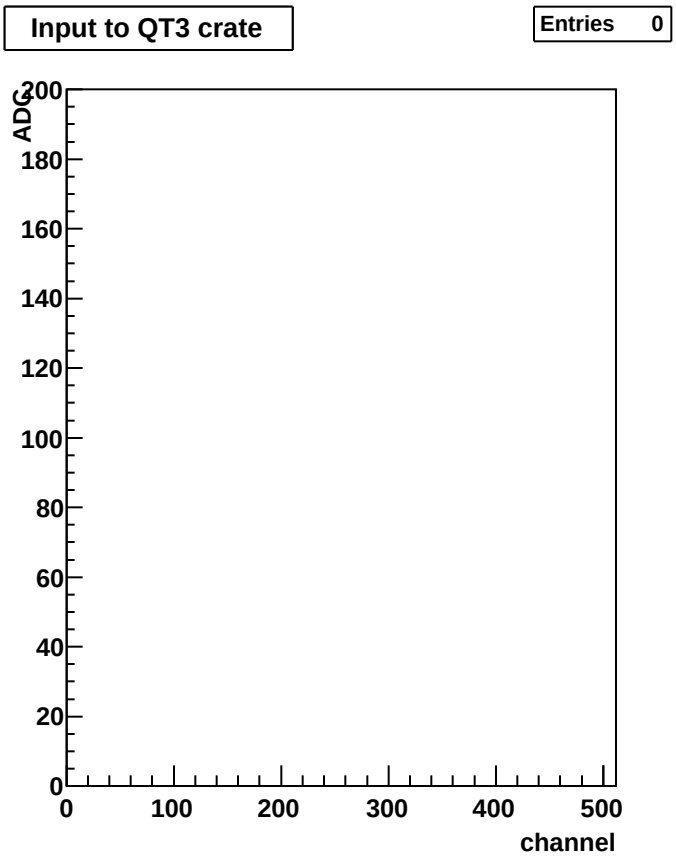

Entries 292545
BBC-S-East ADC Sum
BBC-S-West ADC Sum

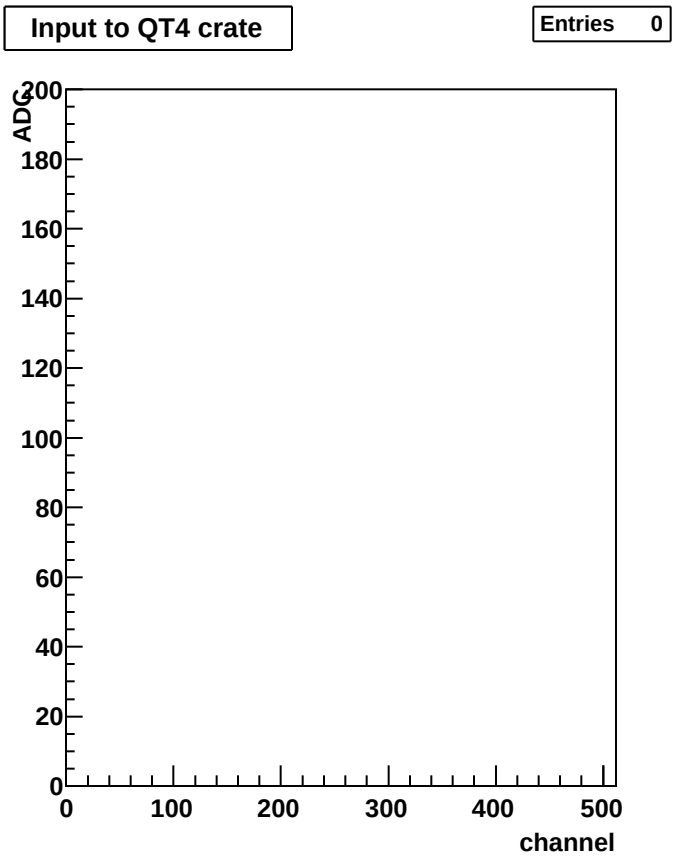

Entries 292545
ZDC East ADC Sum Att
ZDC West ADC Sum Att

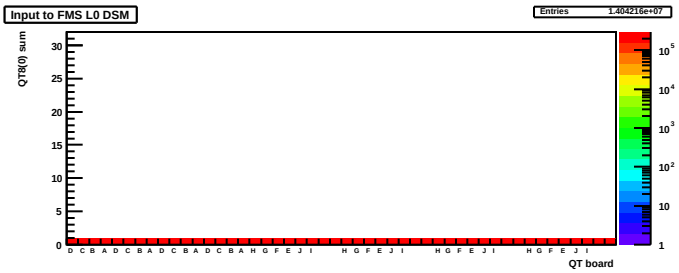

Entries 292545
BBC-L TAC Diff
BCC-S TAC Diff
Entries 292545
BBC-L TAC Diff
VPD TAC Diff
Entries 292545
BBC-L TAC Diff
ZDC TAC Diff
Entries 292545
BBC-S TAC Diff
VPD TAC Diff
Entries 292545
BBC-S TAC Diff
ZDC TAC Diff
Entries 292545
VPD TAC Diff
ZDC TAC Diff

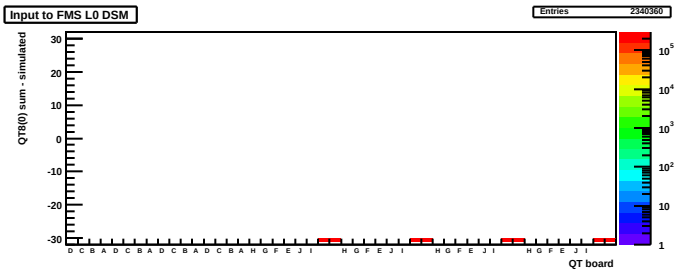

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

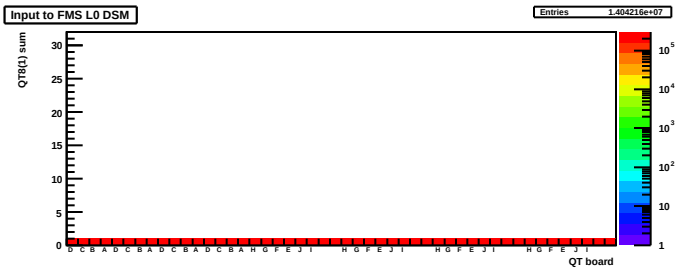

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

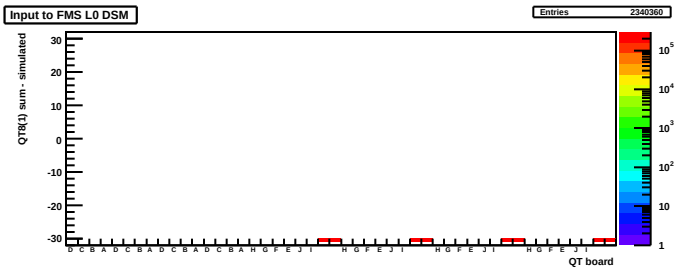

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

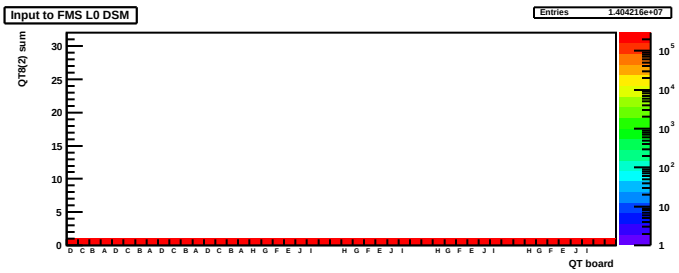

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

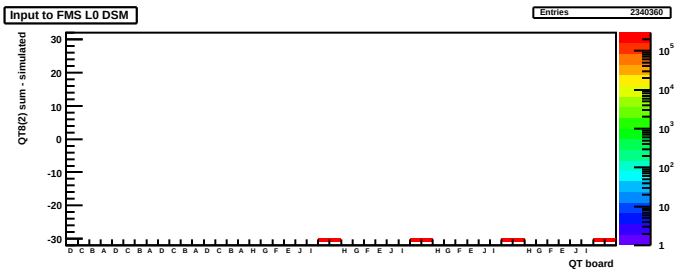

Input to FMS L0 DSM
Entries 1.404216e+07
QT8(0) sum
QT board

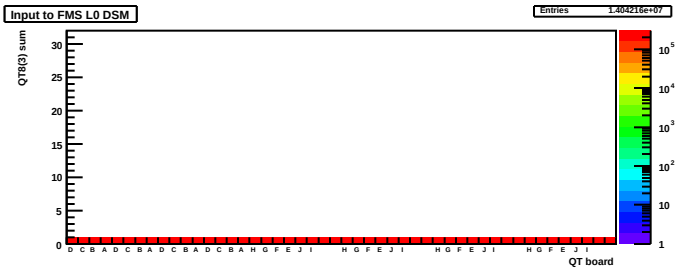

Input to FMS L0 DSM
Entries 2340360
QT8(0) sum - simulated
QT board

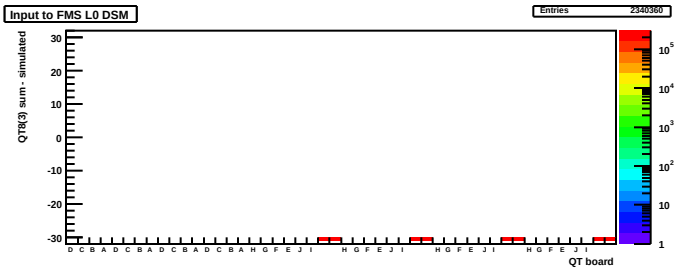

Input to FMS L0 DSM
Entries 1.404216e+07
QT8(1) sum
QT board

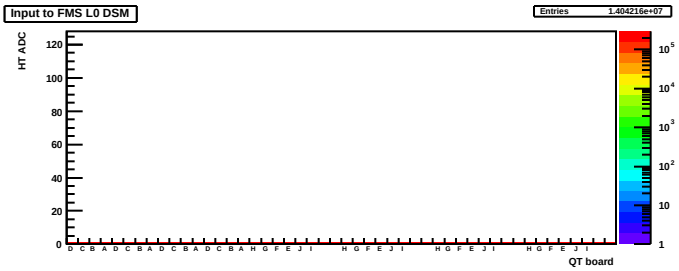

Input to FMS L0 DSM
Entries 2340360
QT8(1) sum - simulated
QT board

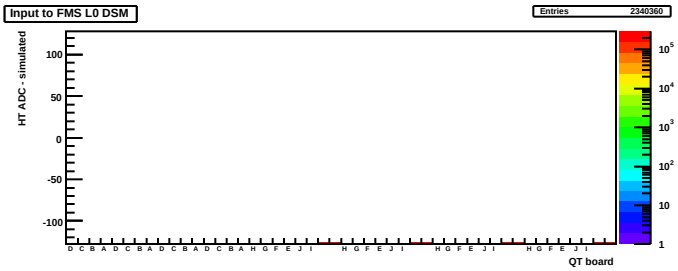

Input to FMS L0 DSM
Entries 1.404216e+07
QT8(2) sum
QT board

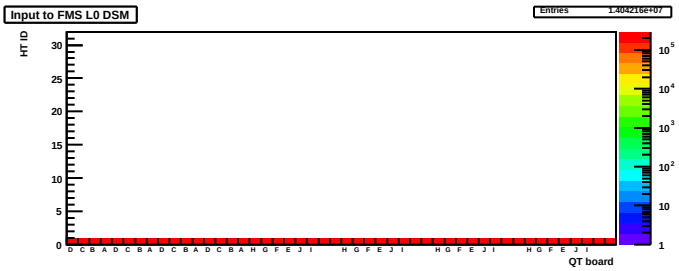

Input to FMS L0 DSM
Entries 2340360
QT8(2) sum - simulated
QT board

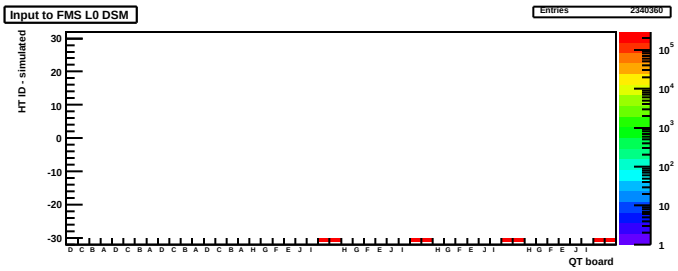

Input to FMS L0 DSM
Entries 1.404216e+07
QT8(3) sum
QT board

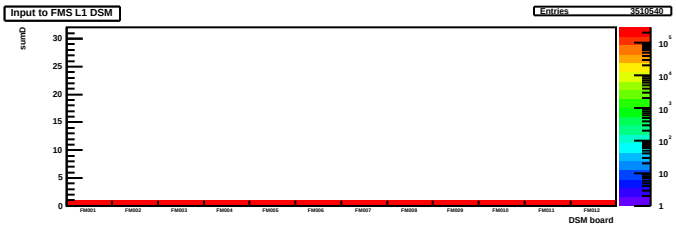

Input to FMS L0 DSM
Entries 2340360
QT8(3) sum - simulated
QT board

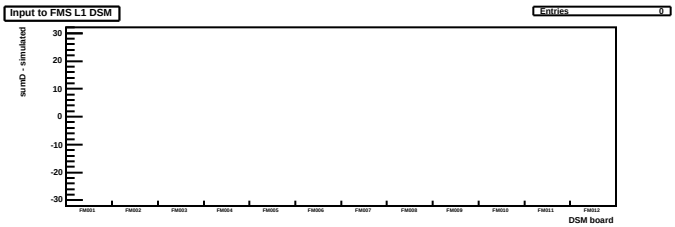

Input to FMS L0 DSM
Entries 1.404216e+07
HT ADC
QT board

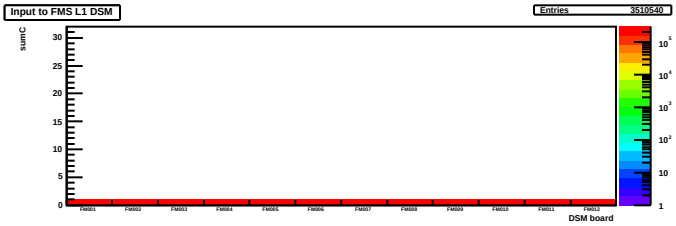

Input to FMS L0 DSM
Entries 2340360
HT ADC - simulated
QT board

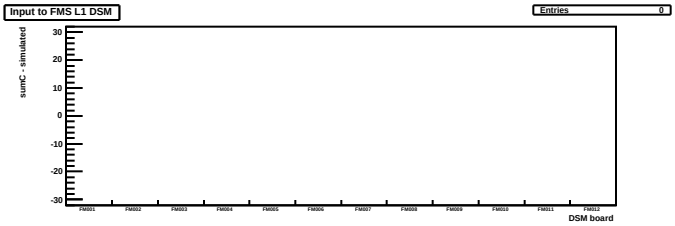

Input to FMS L0 DSM
Entries 1.404216e+07
HT ID
QT board

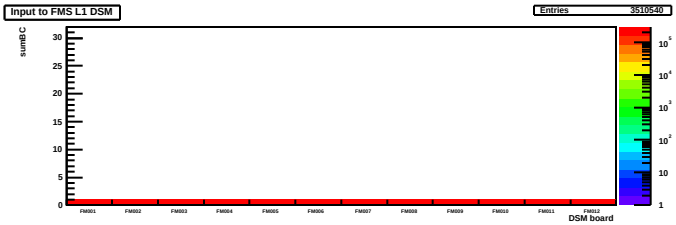

Input to FMS L0 DSM
Entries 2340360
HT ID - simulated
QT board

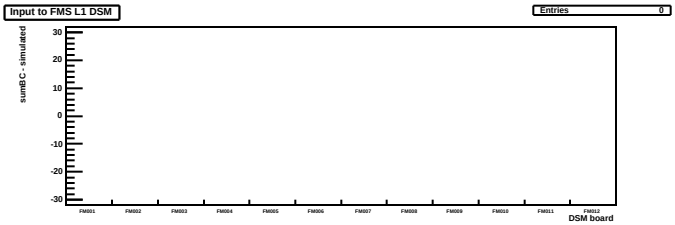

Input to FMS L1 DSM
Entries 3510540
sumD
DSM board

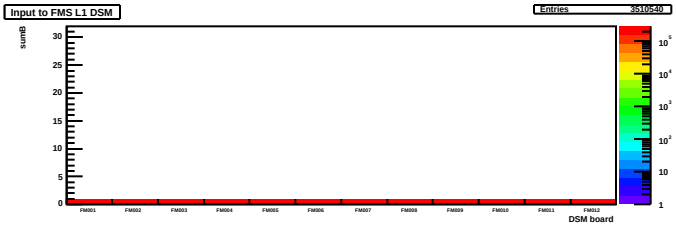

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

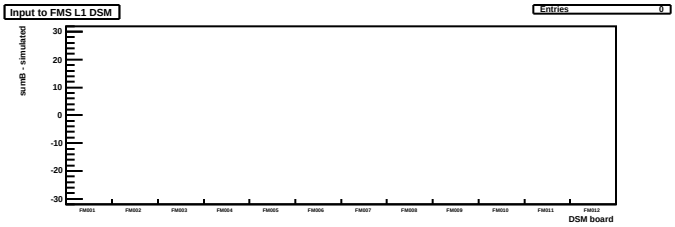

Input to FMS L1 DSM
Entries 3510540
sumC
DSM board

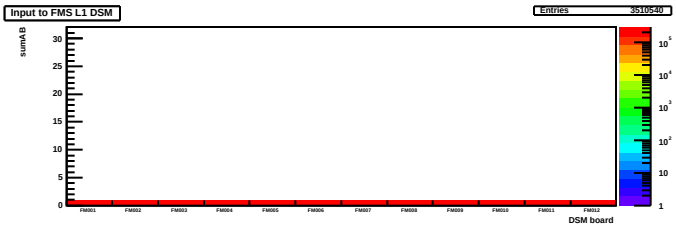

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

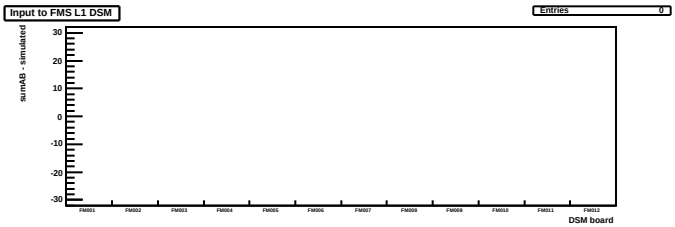

Input to FMS L1 DSM
Entries 3510540
sumBC
DSM board

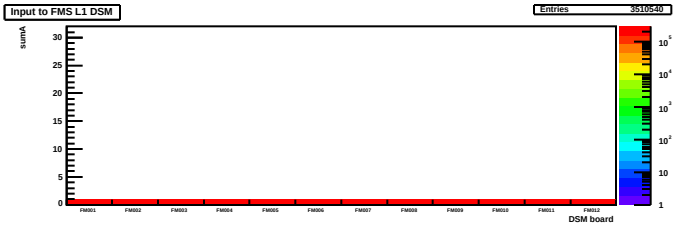

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

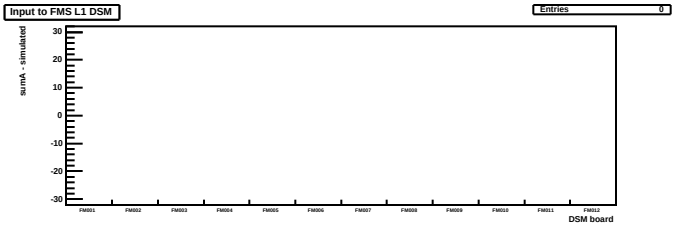

Input to FMS L1 DSM
Entries 3510540
sumB
DSM board

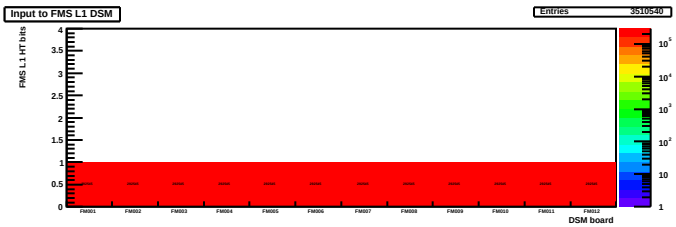

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

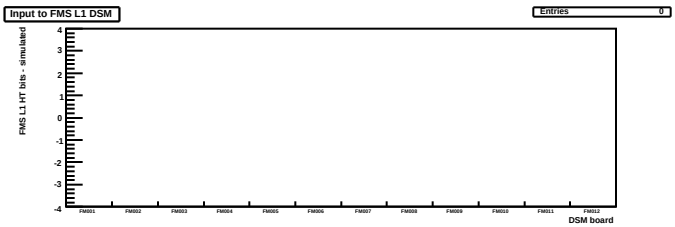

Input to FMS L1 DSM
Entries 3510540
sumAB
DSM board

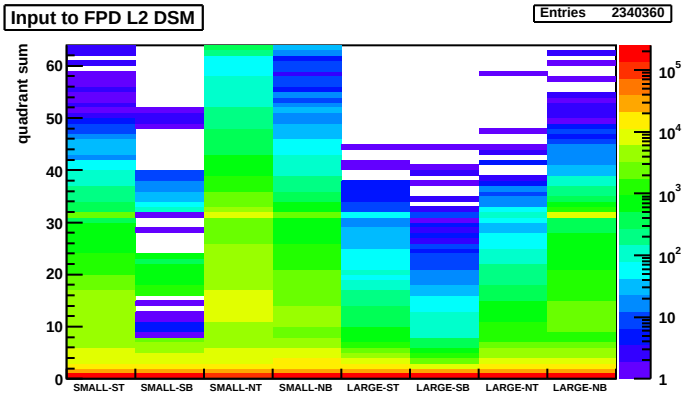

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

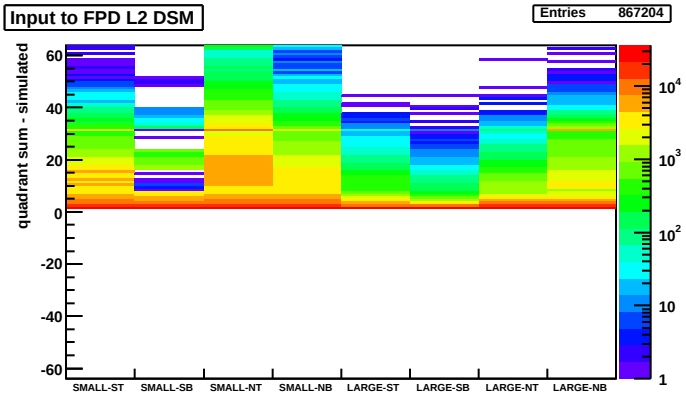

Input to FMS L1 DSM
Entries 3510540
sumA
DSM board

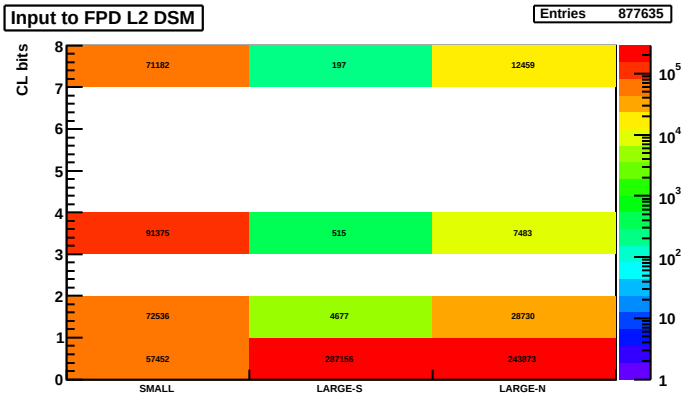

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

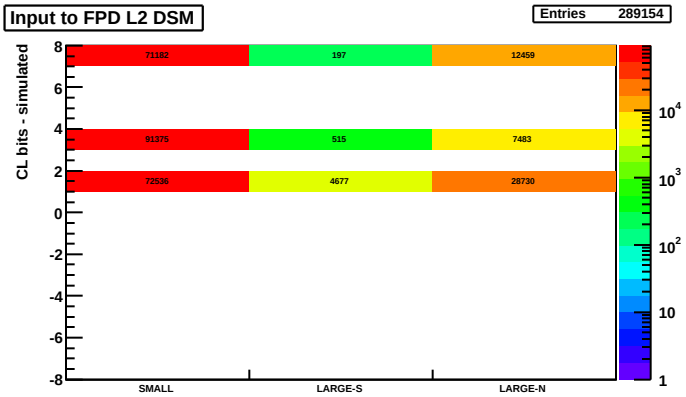

Input to FMS L1 DSM
Entries 3510540
FMS L1 HT bits
DSM board

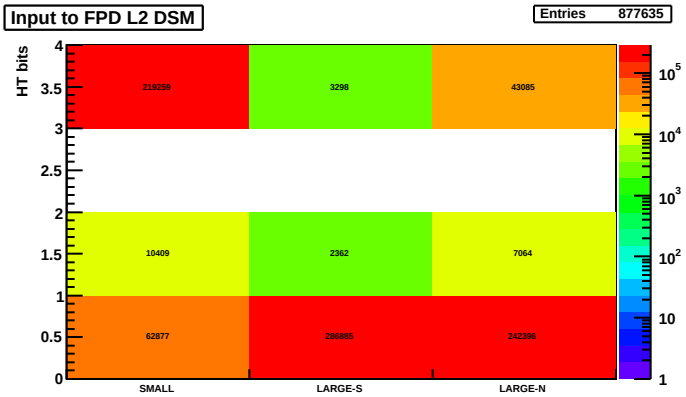

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

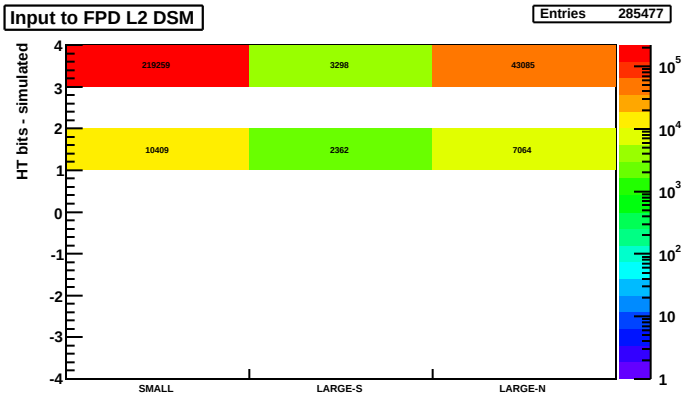

Input to FPD L2 DSM
Entries 2340360
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

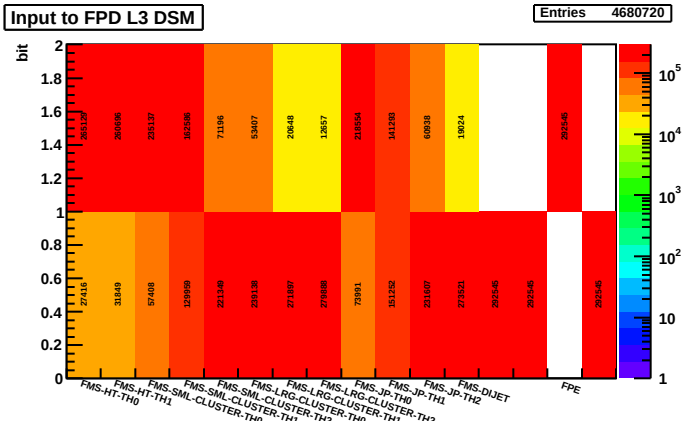

Input to FPD L2 DSM
Entries 867204
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

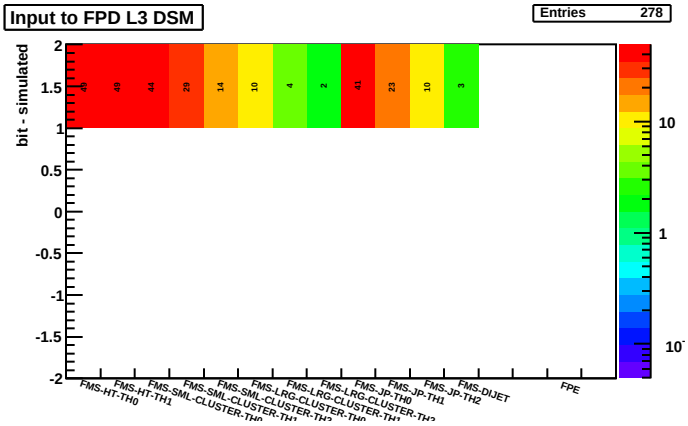

Input to FPD L2 DSM
Entries 877635
CL bits
71182
197
12459
91375
515
7483
72536
4677
28730
57452
287156
243873
SMALL
LARGE-S
LARGE-N

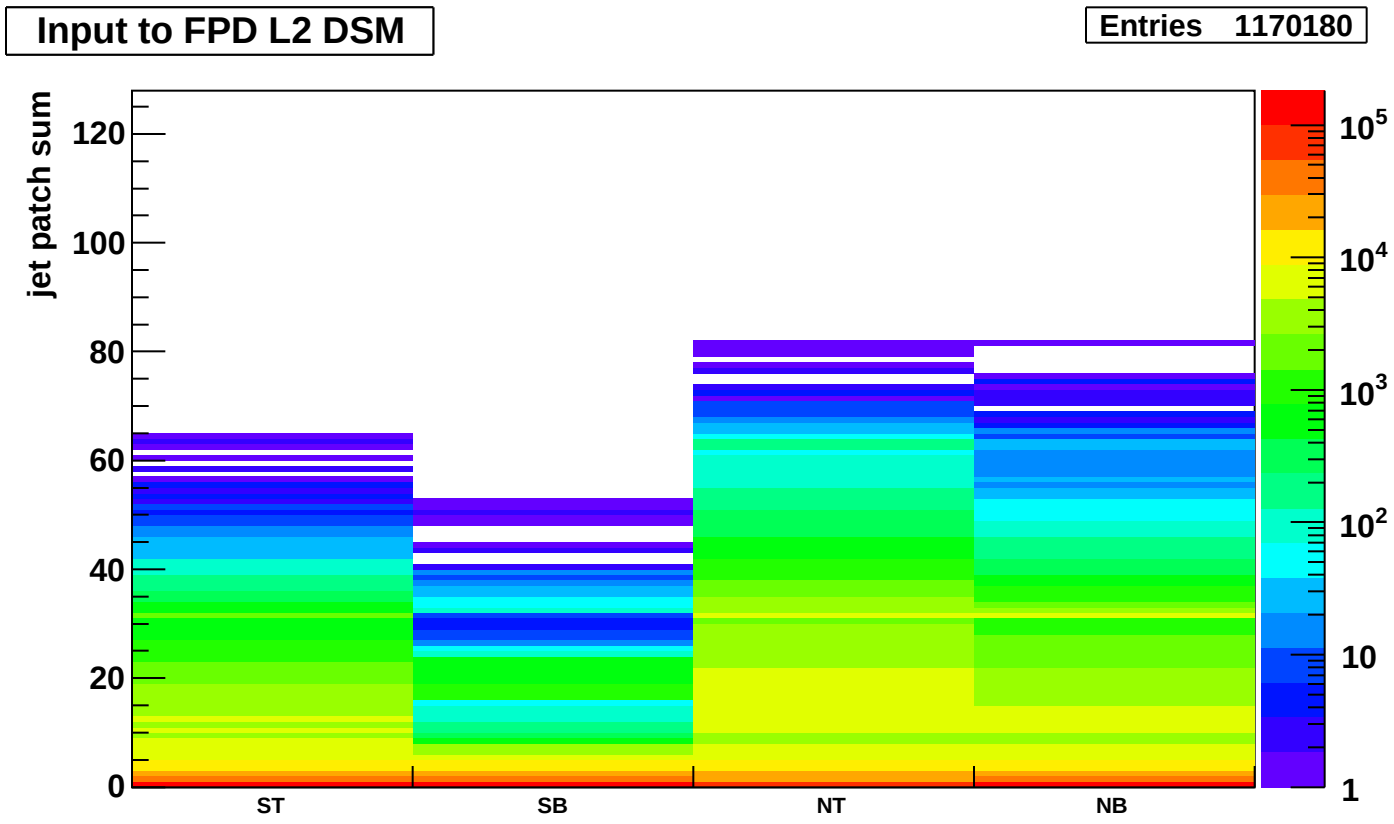

Input to FPD L2 DSM
Entries 289154
CL bits - simulated
71182
197
12459
91375
515
7483
72536
4677
28730
SMALL
LARGE-S
LARGE-N

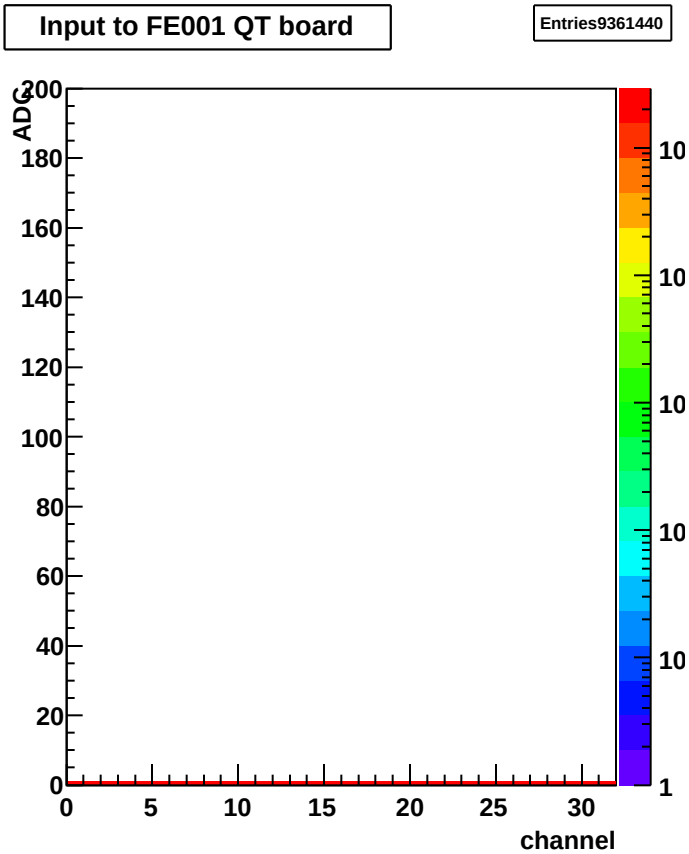

Input to FPD L2 DSM
Entries 877635
HT bits
219259
3298
43085
10409
2362
7064
62877
286885
242396
SMALL
LARGE-S
LARGE-N

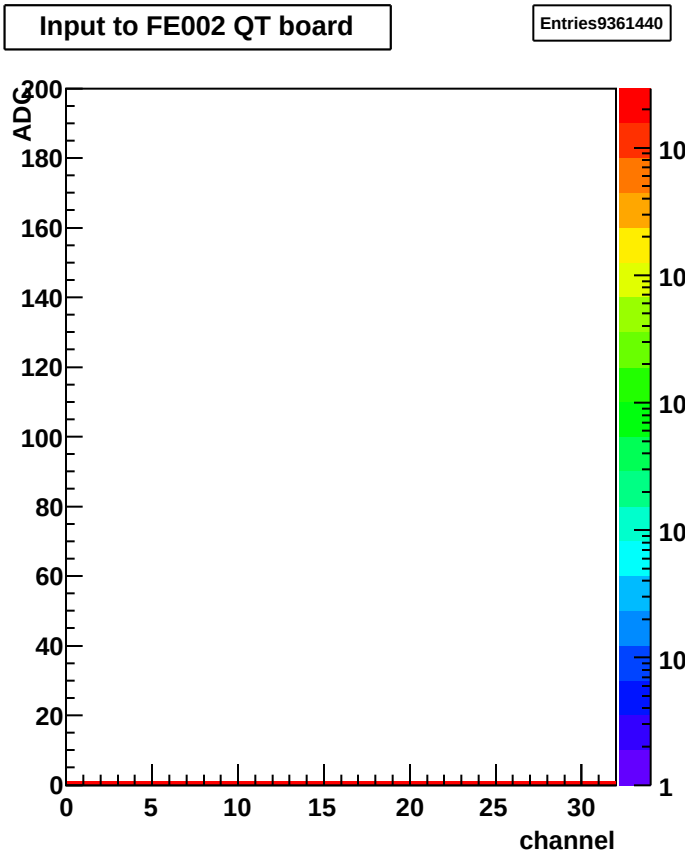

Input to FPD L2 DSM
Entries 285477
HT bits - simulated
219259
3298
43085
10409
2362
7064
SMALL
LARGE-S
LARGE-N

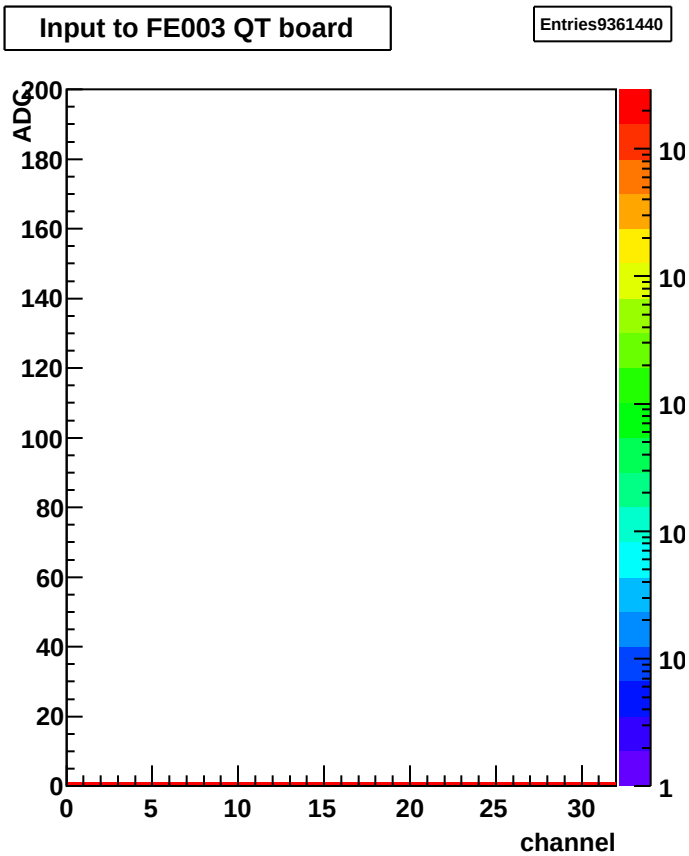

Input to FPD L3 DSM
Entries 4680720
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

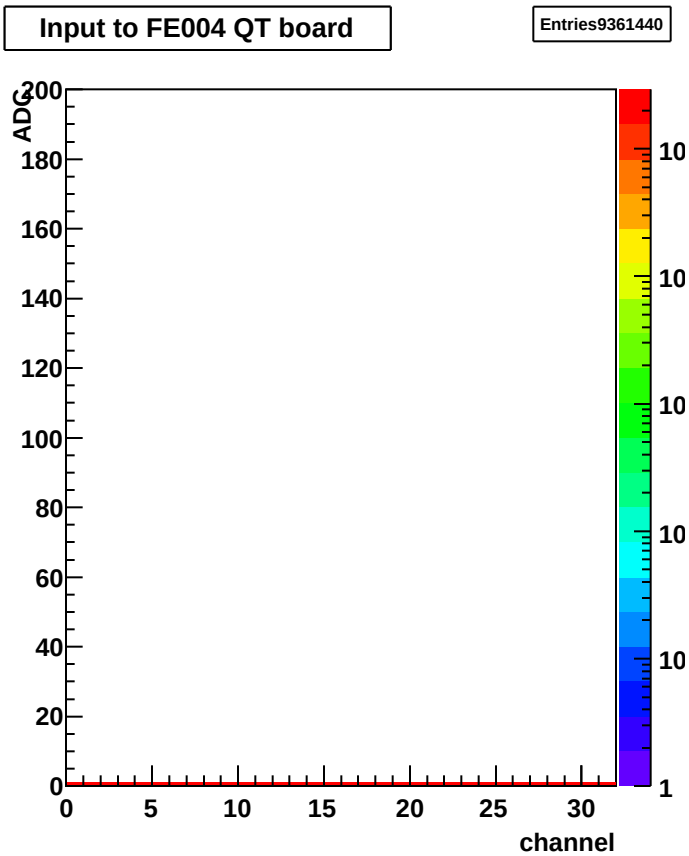

Input to FPD L3 DSM
Entries 278
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

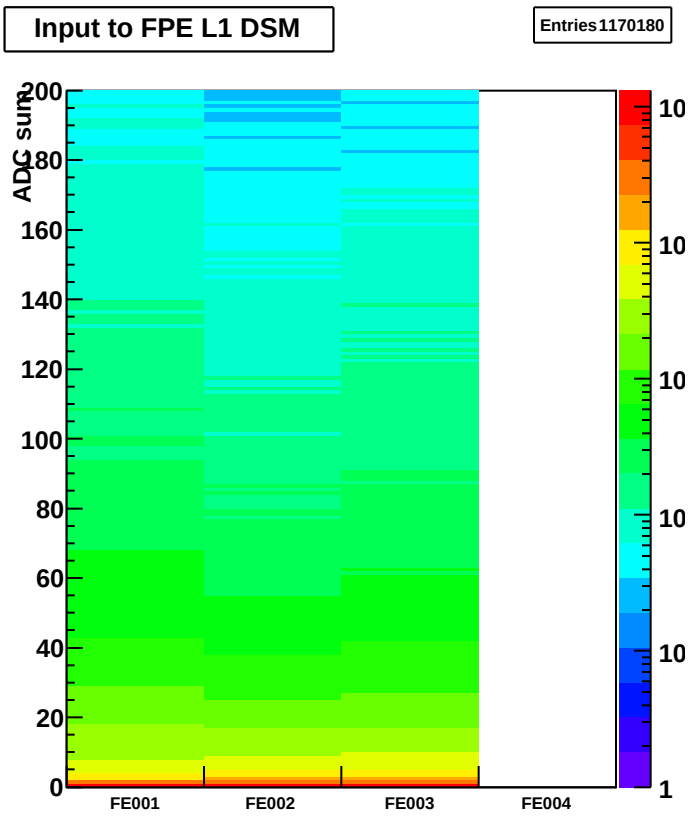

Input to FPD L2 DSM
Entries 1170180
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

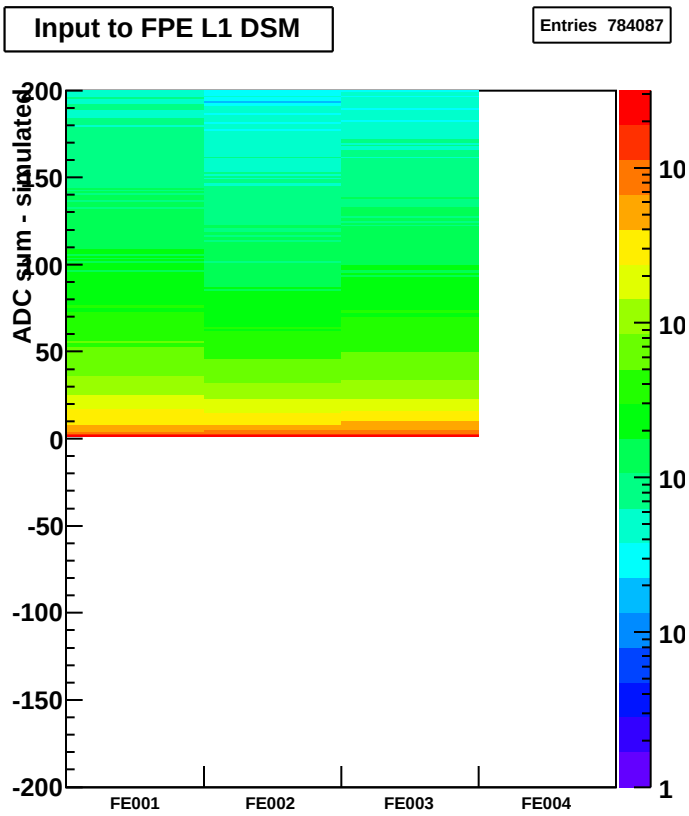

Input to FE001 QT board
Entries9361440
ADC
channel

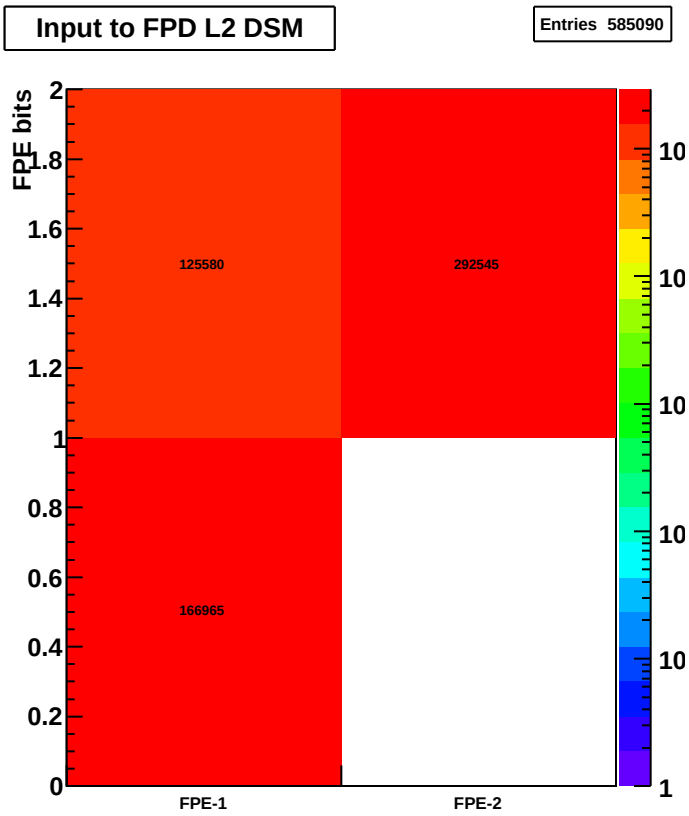

Input to FE002 QT board
Entries9361440
ADC
channel

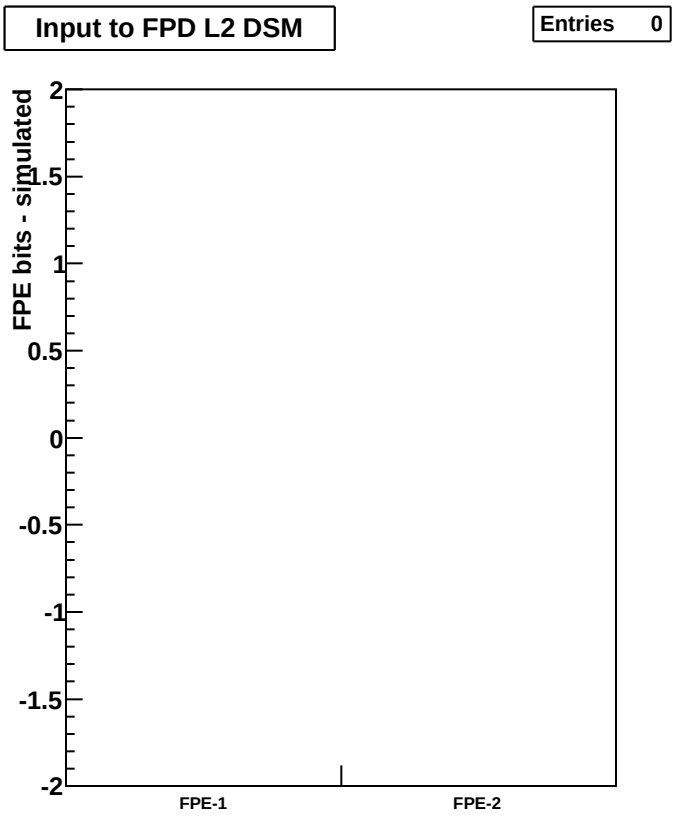

Input to FE003 QT board
Entries9361440
ADC
channel


Input to FE004 QT board
Entries9361440
ADC
channel


Input to FPE L1 DSM
Entries 1170180
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 784087
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 585090
FPE bits
125580
292545
166965
FPE-1
FPE-2


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
FPE-1
FPE-2