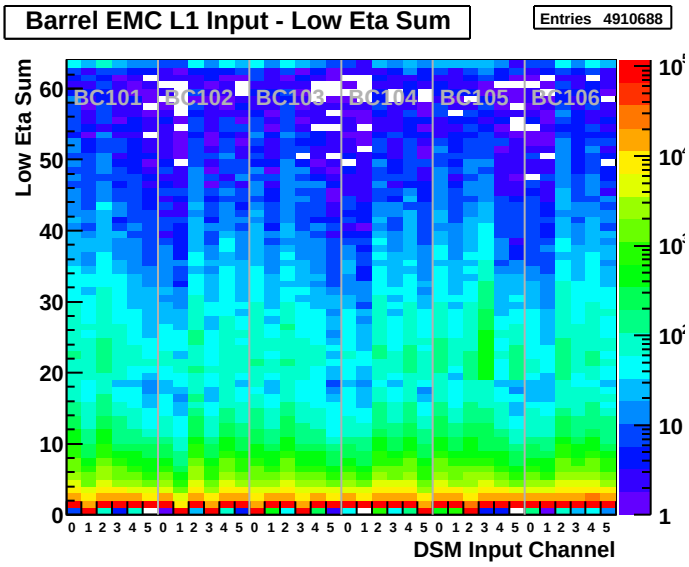
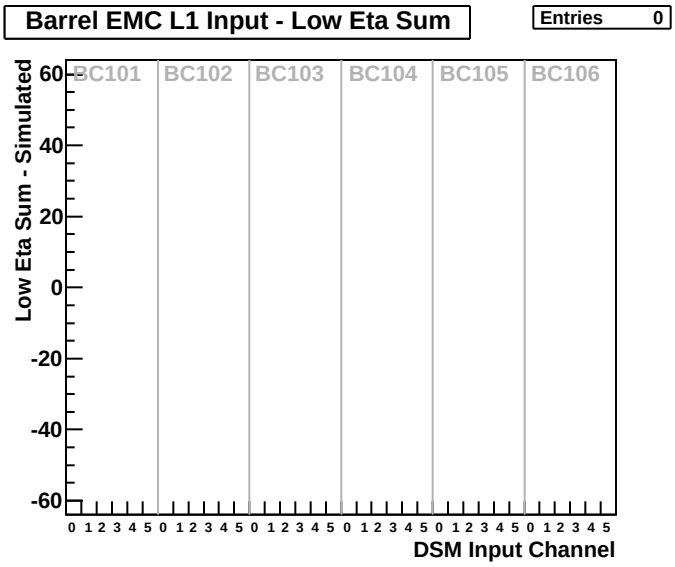
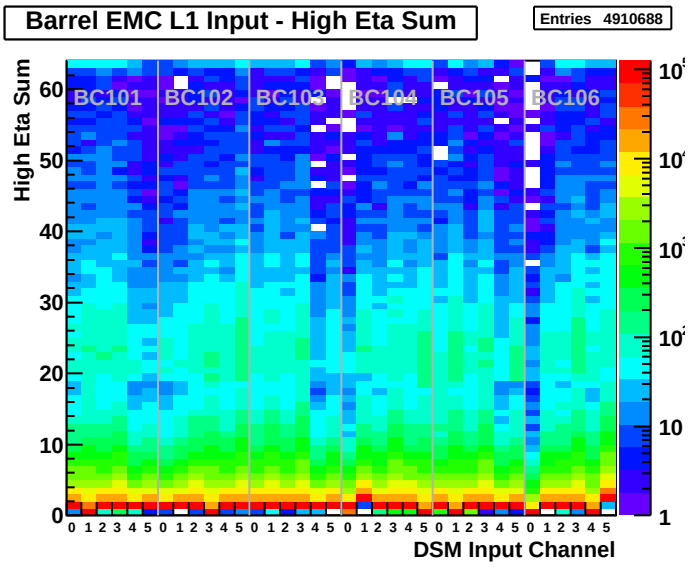
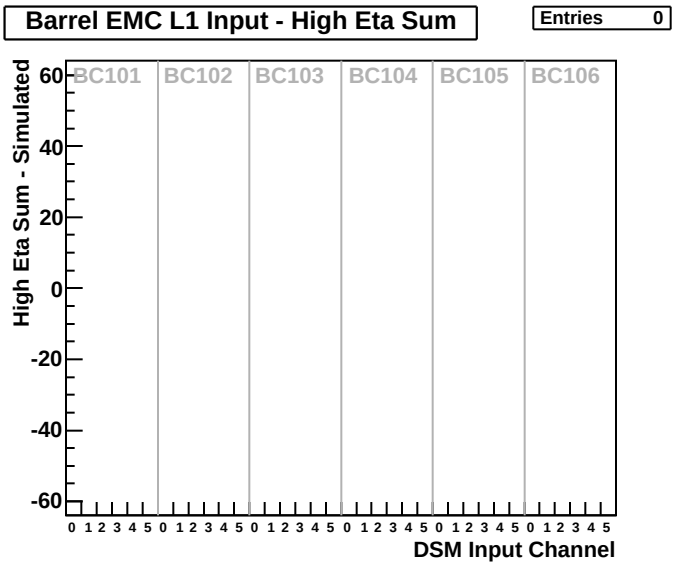
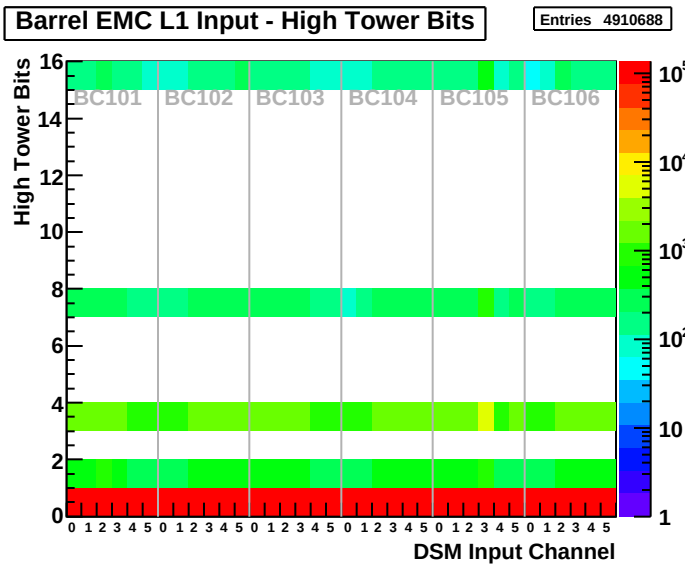
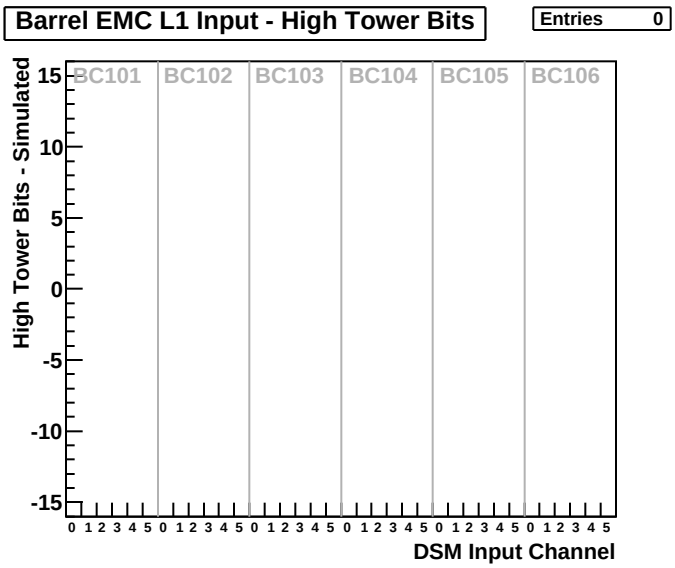

Barrel EMC L1 Input - Low Eta Sum
Entries 4910688
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

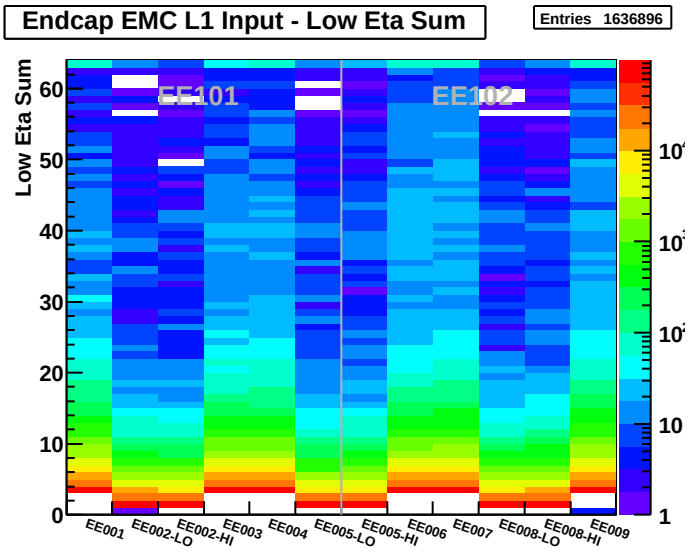

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

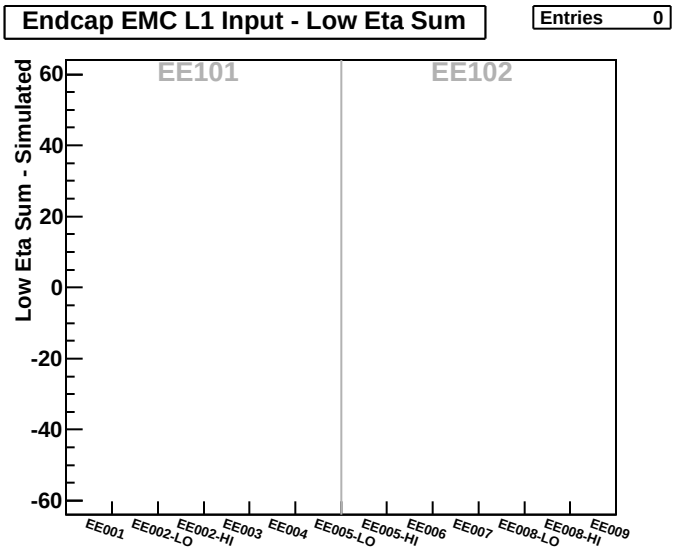

Barrel EMC L1 Input - High Eta Sum
Entries 4910688
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

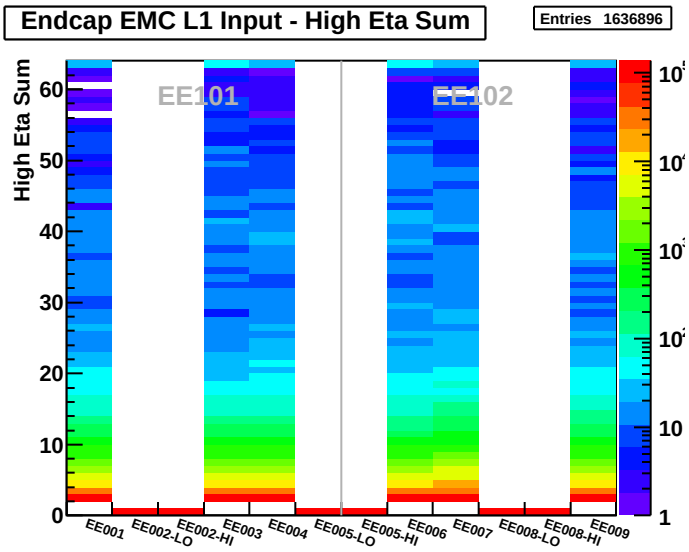

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

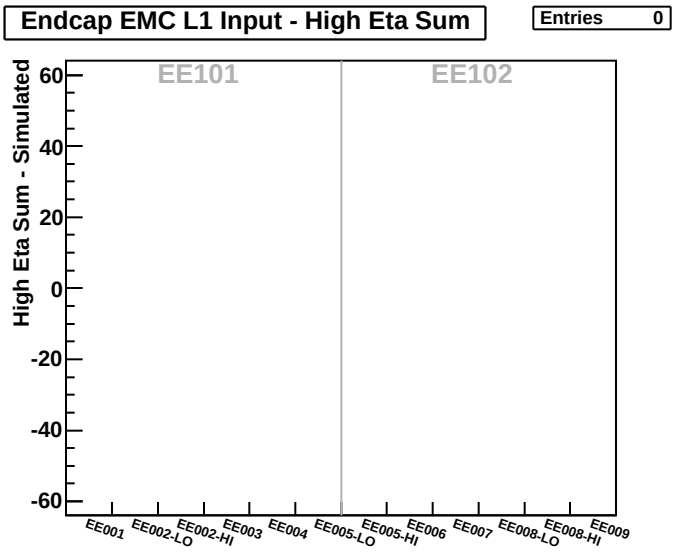

Barrel EMC L1 Input - High Tower Bits
Entries 4910688
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

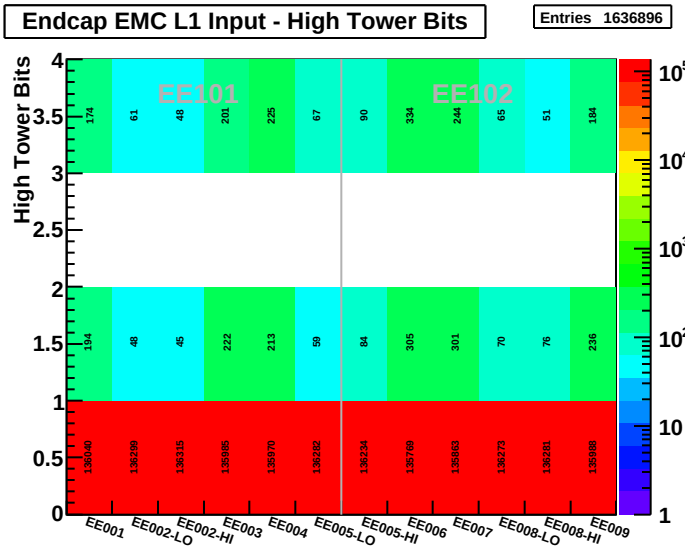

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

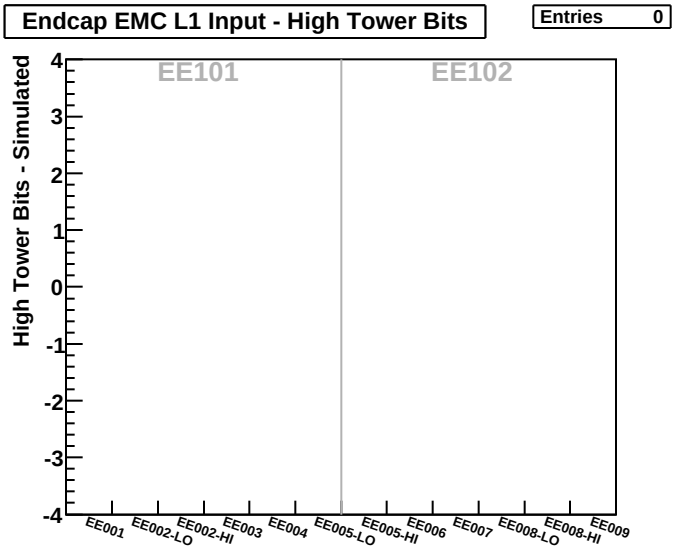

Endcap EMC L1 Input - Low Eta Sum
Entries 1636896
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

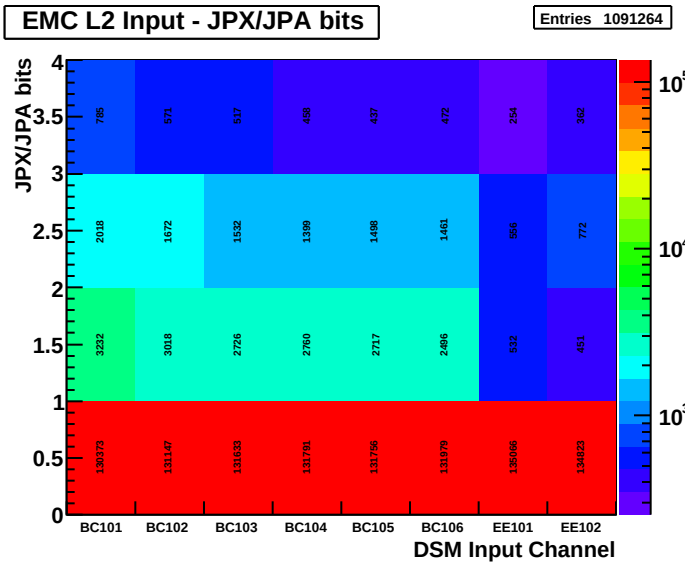

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

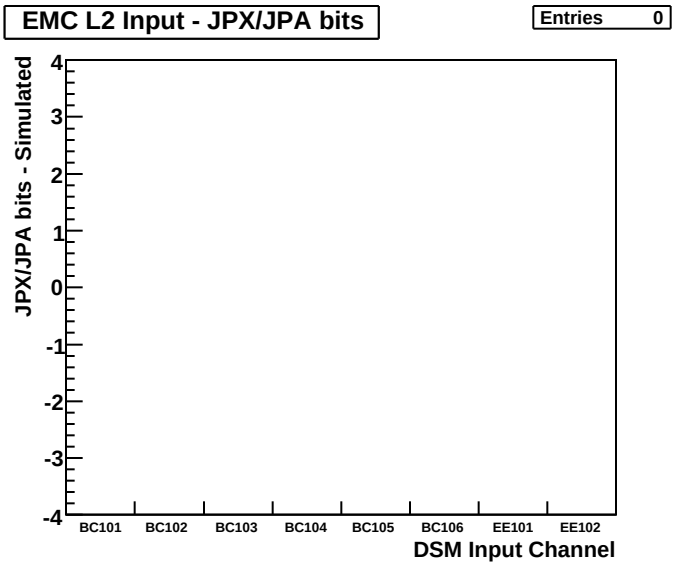

Endcap EMC L1 Input - High Eta Sum
Entries 1636896
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

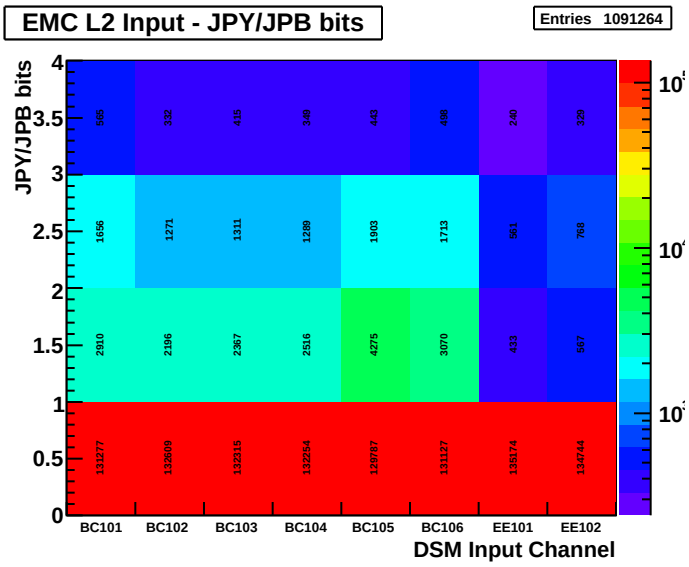

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

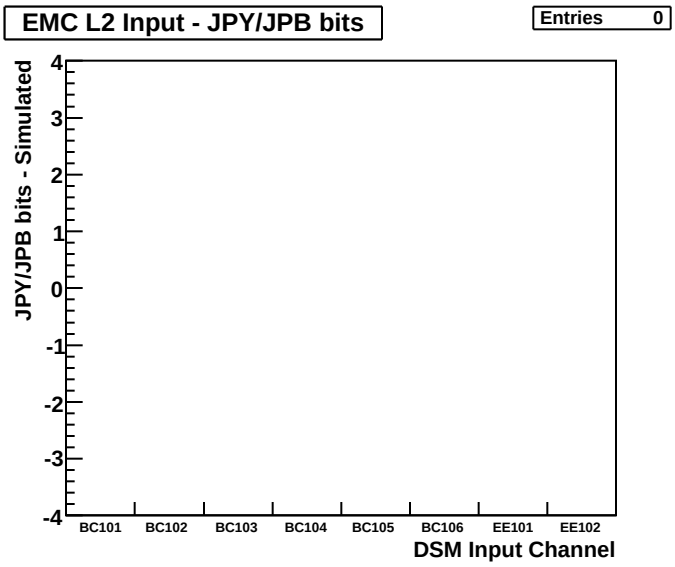

Endcap EMC L1 Input - High Tower Bits
Entries 1636896
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

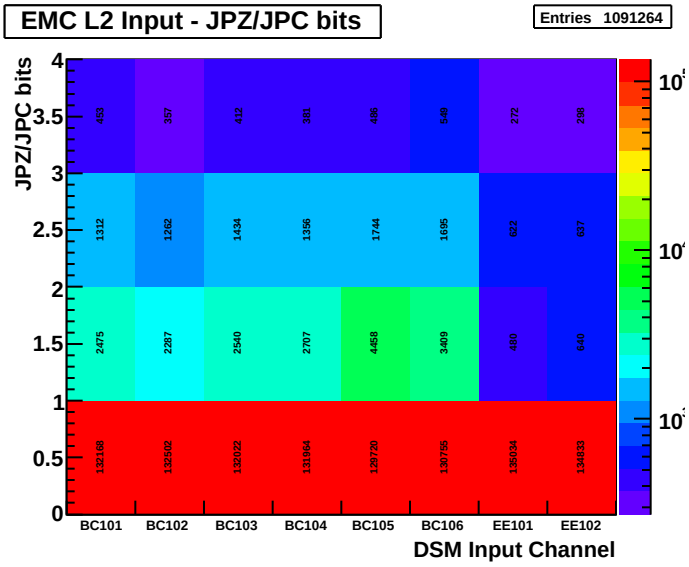

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

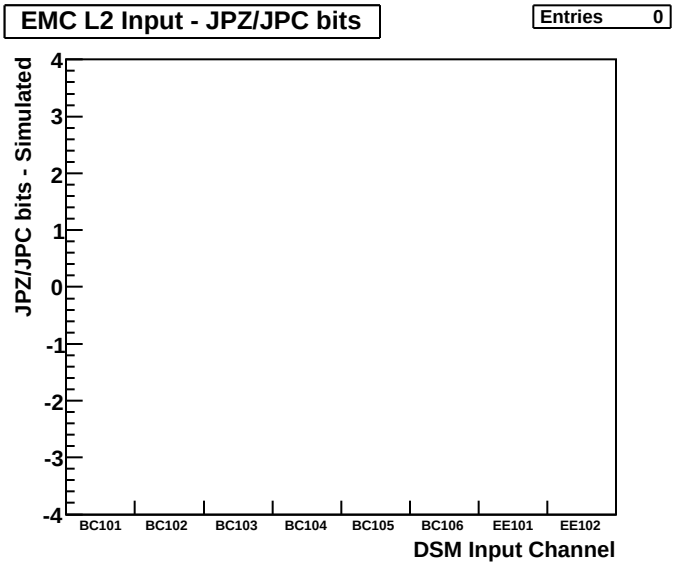

EMC L2 Input - JPX/JPA bits
Entries 1091264
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
785 571 517 458 437 472 254 362
2018 1672 1532 1399 1498 1461 556 772
3232 3018 2726 2760 2717 2496 532 451
130373 131147 131633 131701 131756 131979 135066 134823

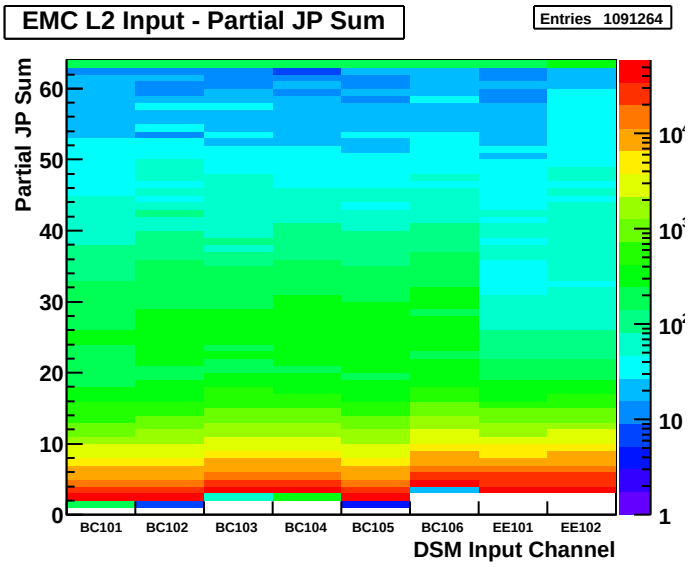

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

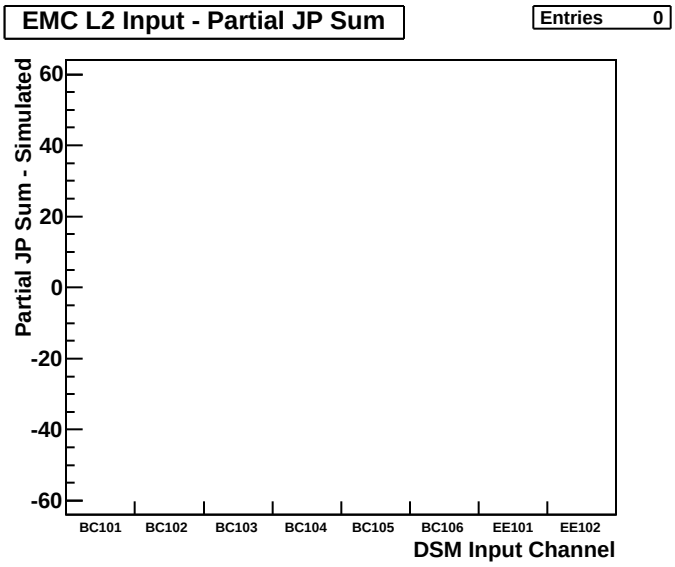

EMC L2 Input - JPY/JPB bits
Entries 1091264
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
565 332 415 340 443 498 240 329
1656 1271 1311 1289 1903 1713 561 768
2910 2196 2367 2516 4275 3070 433 567
131277 132609 132215 132254 129787 131127 135174 134744

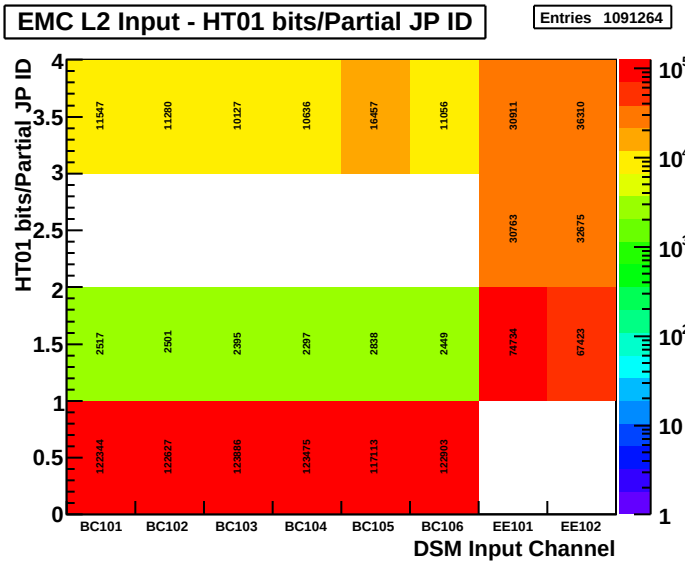

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

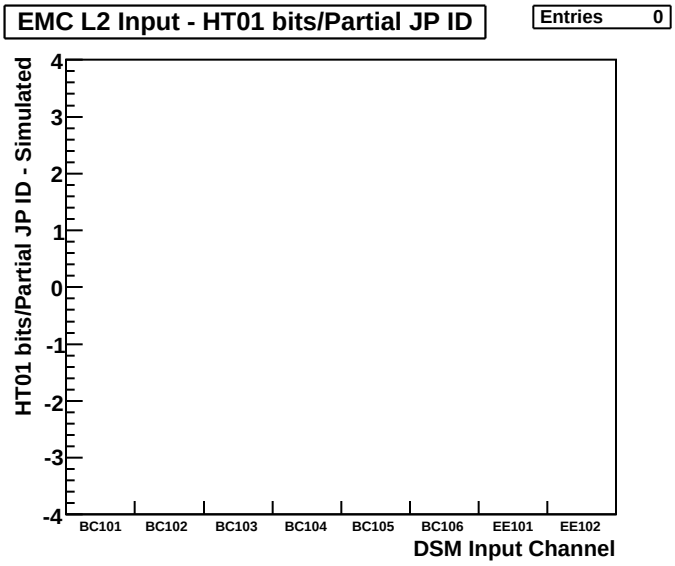

EMC L2 Input - JPZ/JPC bits
Entries 1091264
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
458 357 412 381 486 549 272 288
1312 1262 1434 1356 1744 1695 622 637
2475 2287 2540 2707 4458 3409 400 640
132168 132502 132022 131964 129720 130755 135034 134833

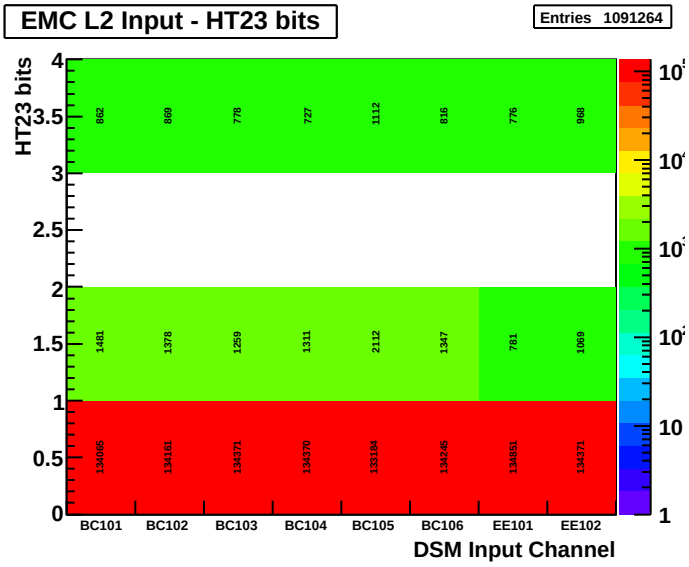

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

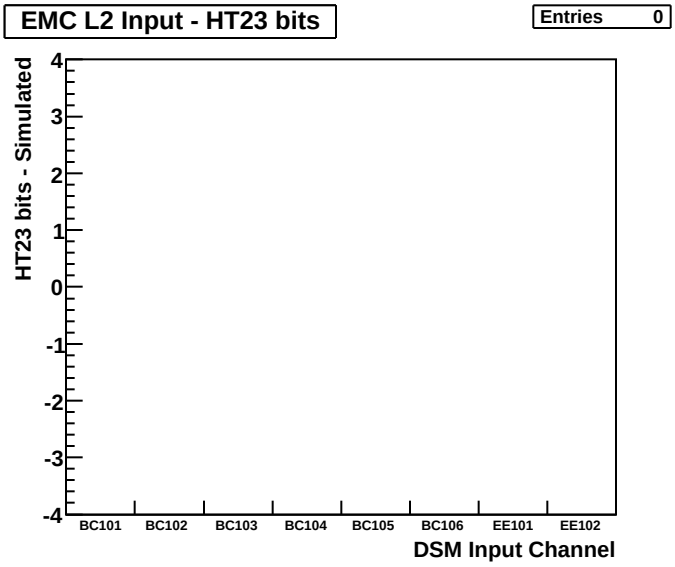

EMC L2 Input - Partial JP Sum
Entries 1091264
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

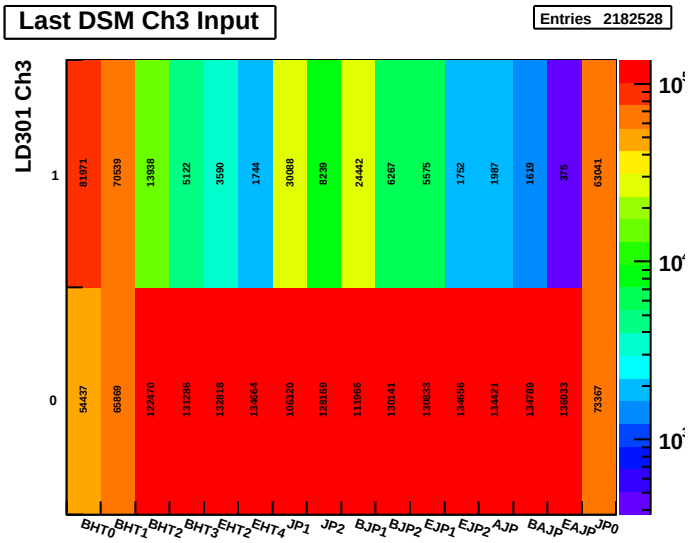

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

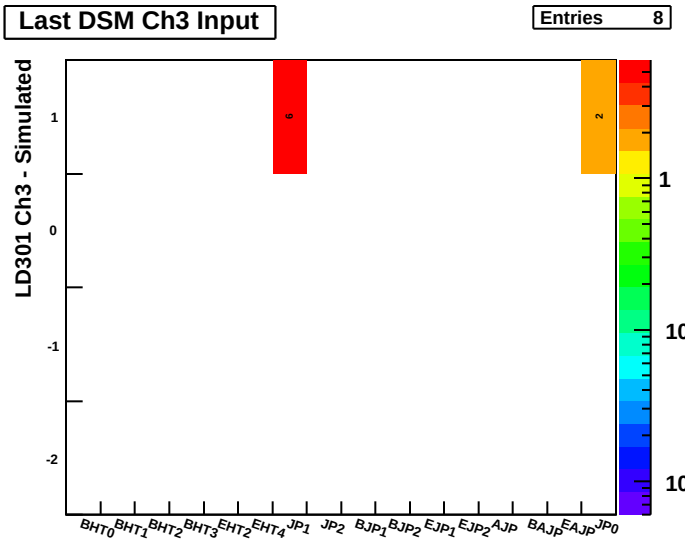

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1091264
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

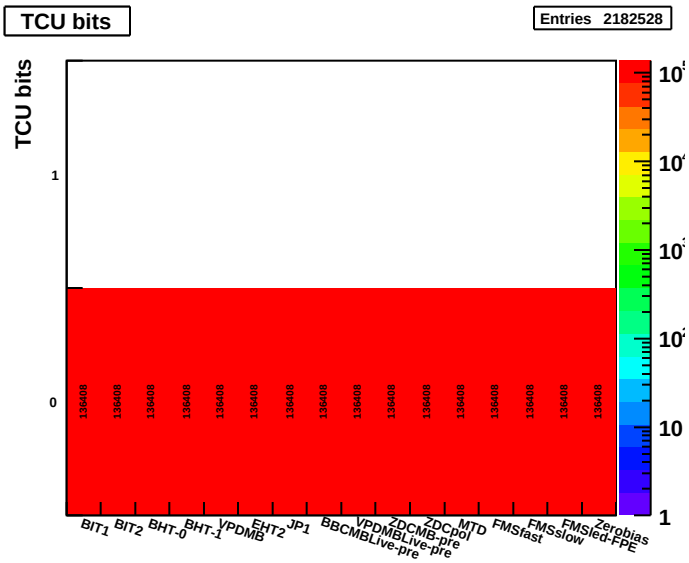

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

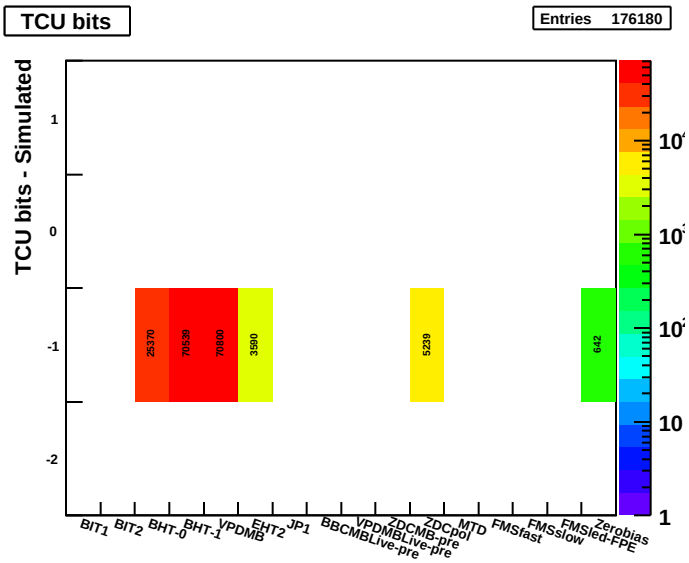

EMC L2 Input - HT23 bits
Entries 1091264
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

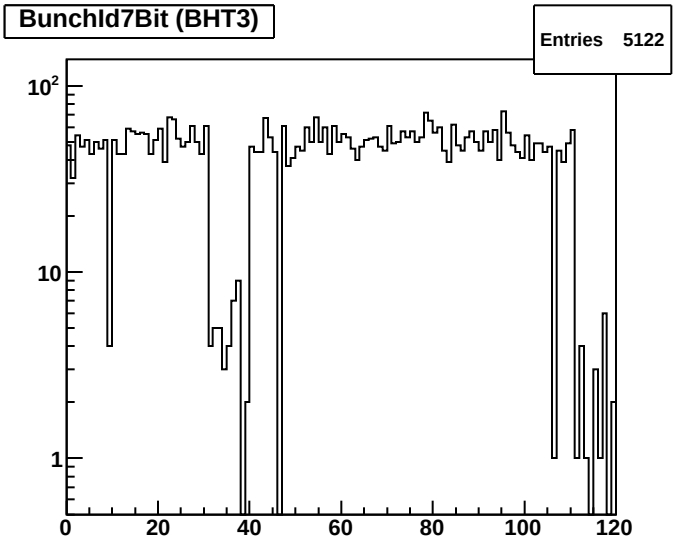

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

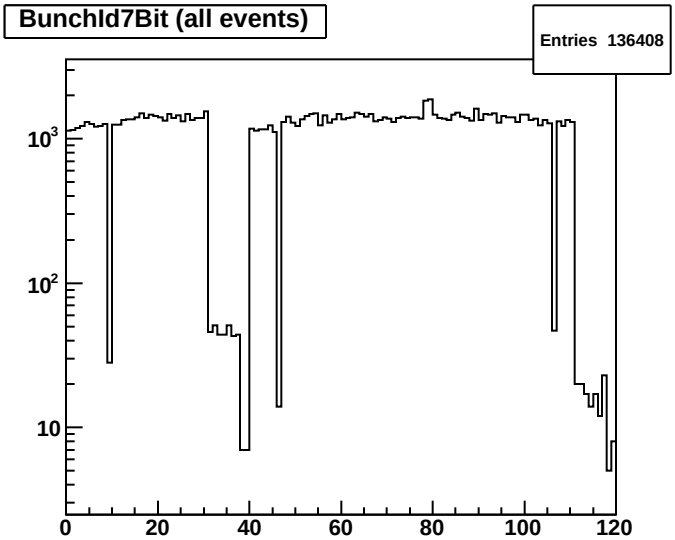

Last DSM Ch3 Input
Entries 2182528
LD301 Ch3
1
0
81971
70539
13938
5122
3590
1744
30088
8239
24442
6267
5575
1752
1987
1619
375
63041
54437
65869
122470
131286
132818
134654
106320
128169
111966
130141
130833
134656
134421
134789
136033
73367
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

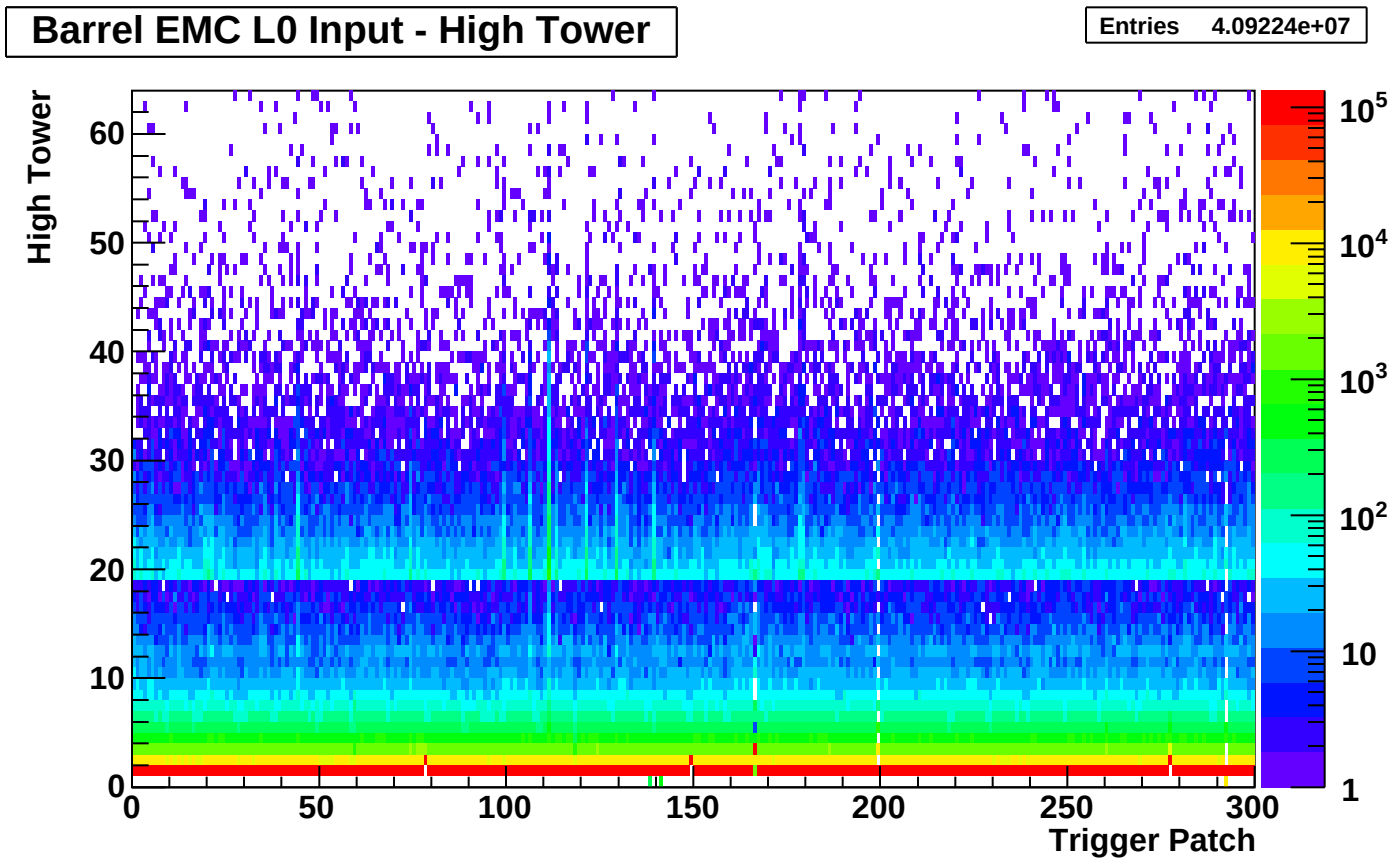

Last DSM Ch3 Input
Entries 8
LD301 Ch3 - Simulated
1
0
-1
-2
6
2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

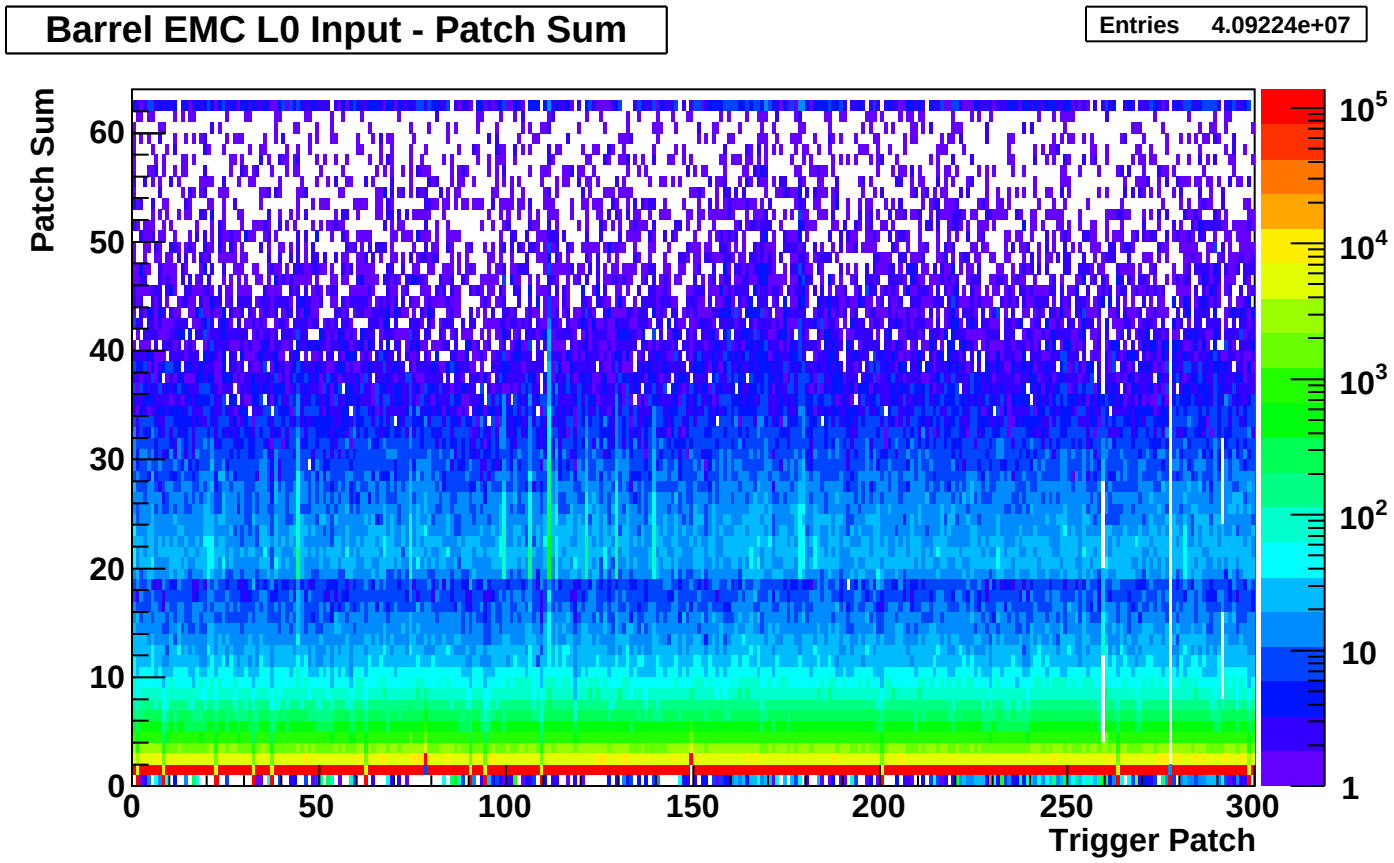

TCU bits
Entries 2182528
TCU bits
1
0
136408
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

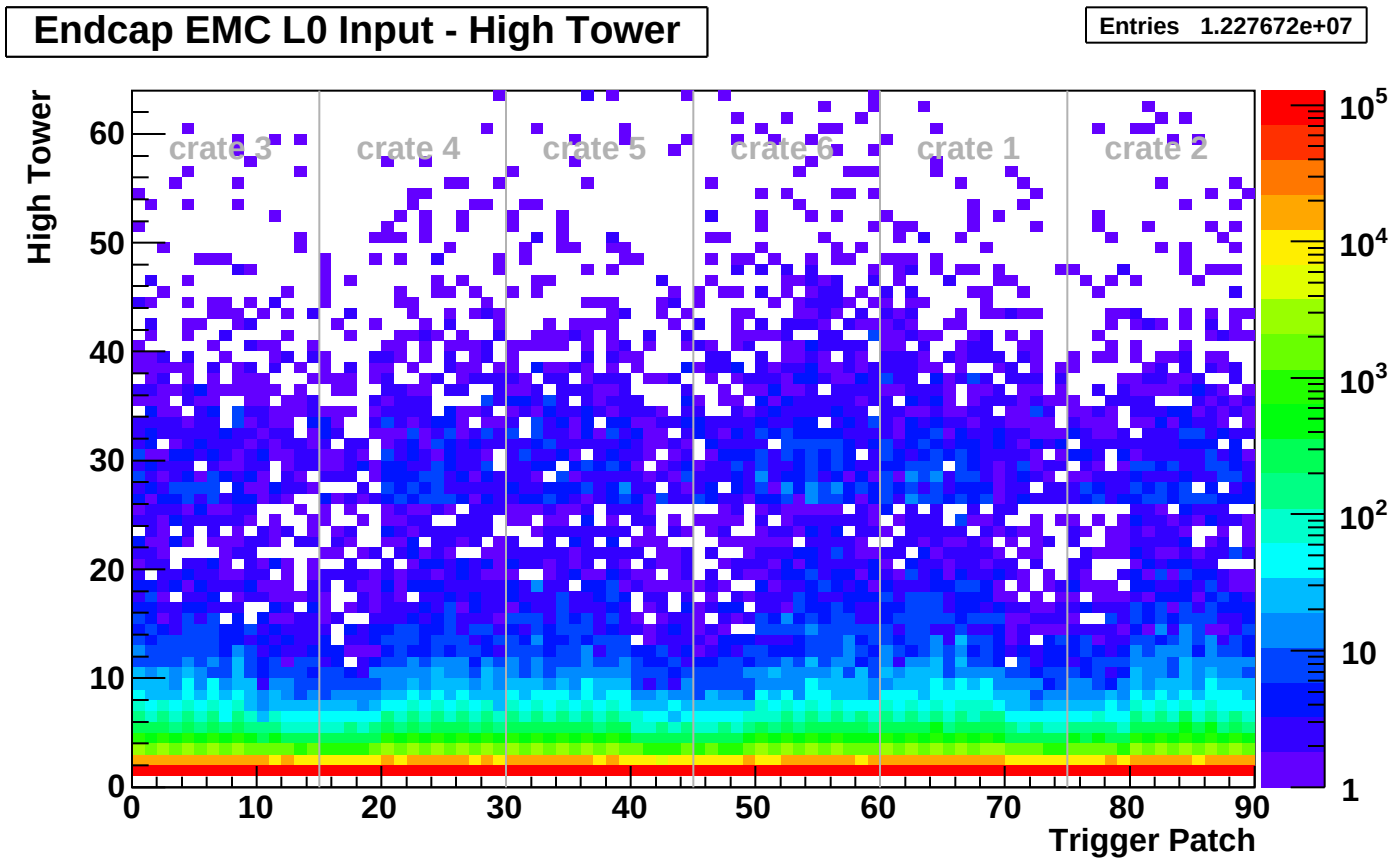

TCU bits
Entries 176180
TCU bits - Simulated
1
0
-1
-2
25370
70539
70800
3590
5239
642
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

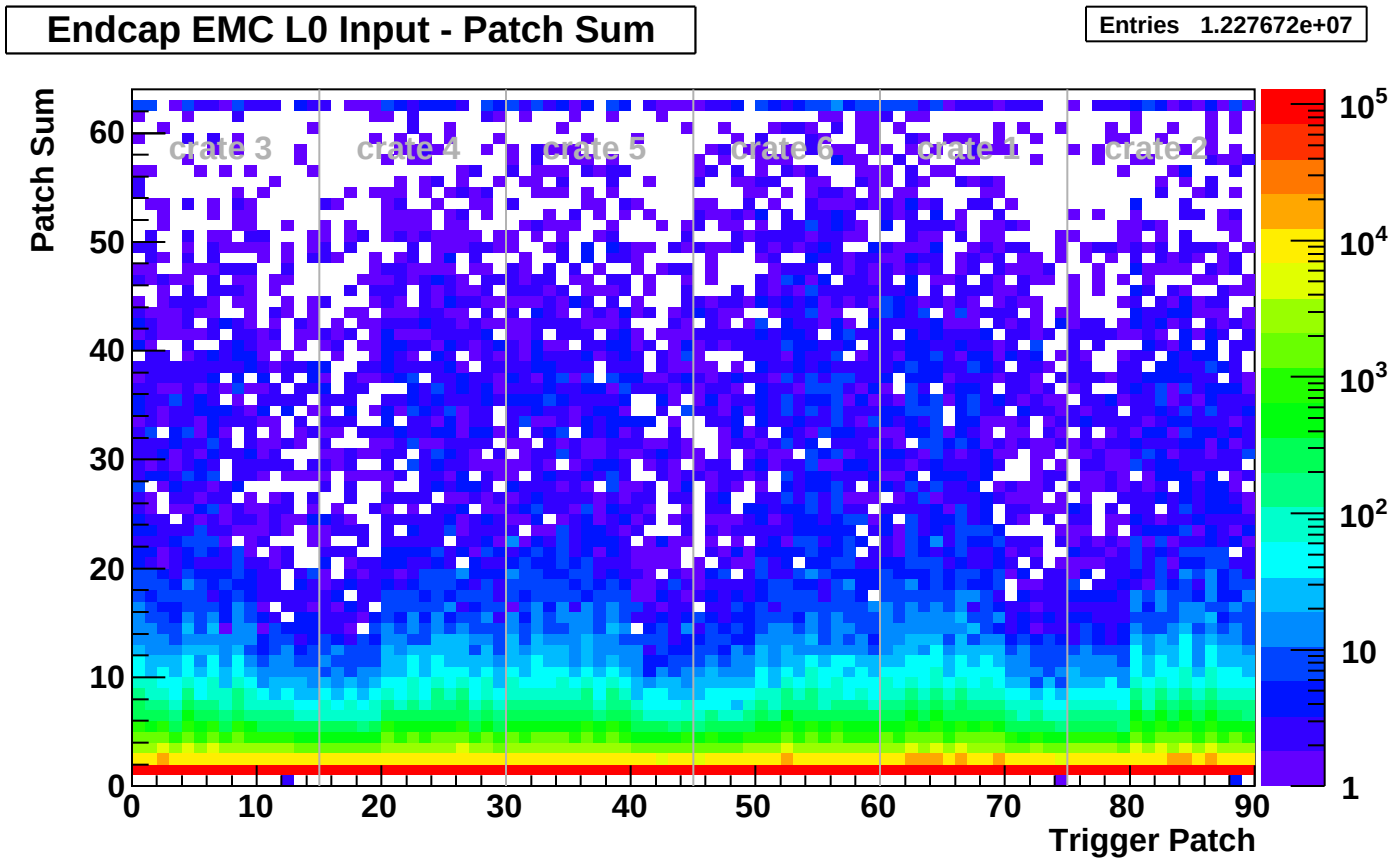

BunchId7Bit (BHT3)
Entries 5122
10^2
10
1
0
20
40
60
80
100
120

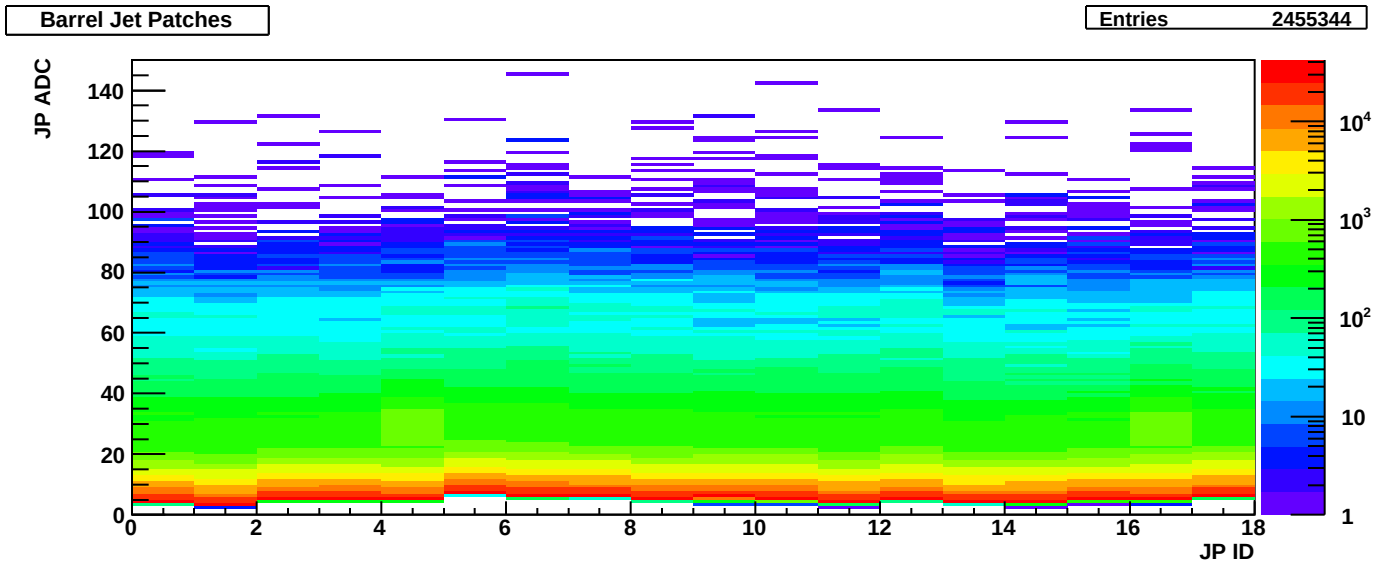

BunchId7Bit (all events)
Entries 136408
10^3
10^2
10
0
20
40
60
80
100
120

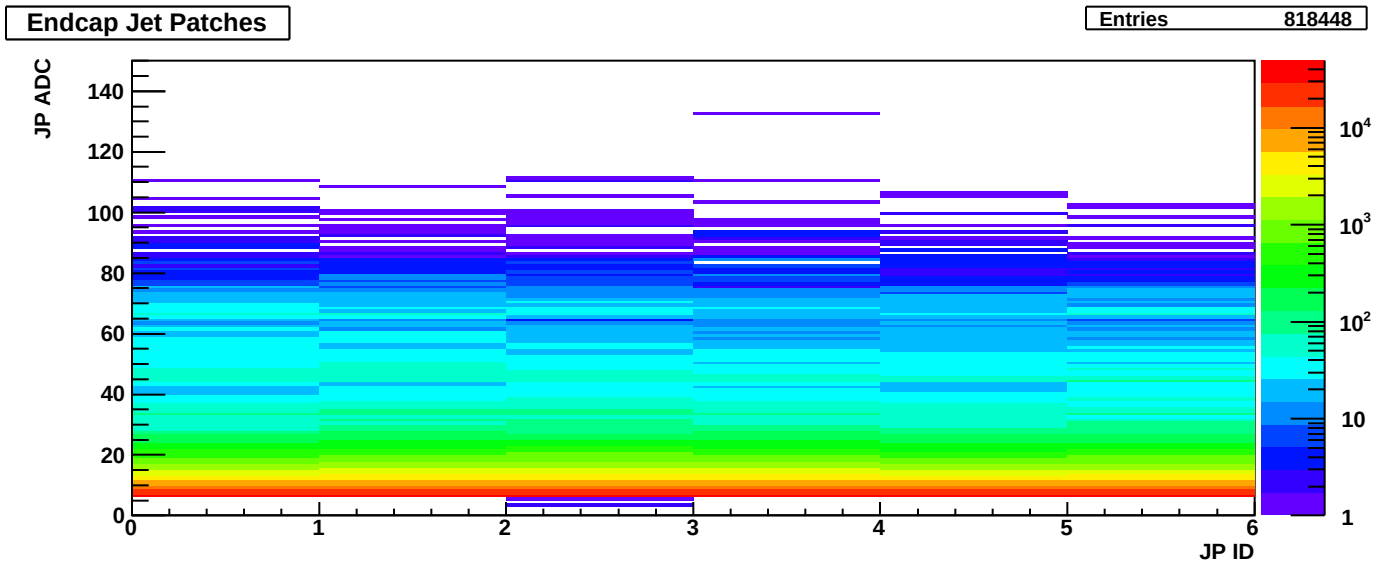

Barrel EMC L0 Input - High Tower
Entries 4.09224e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

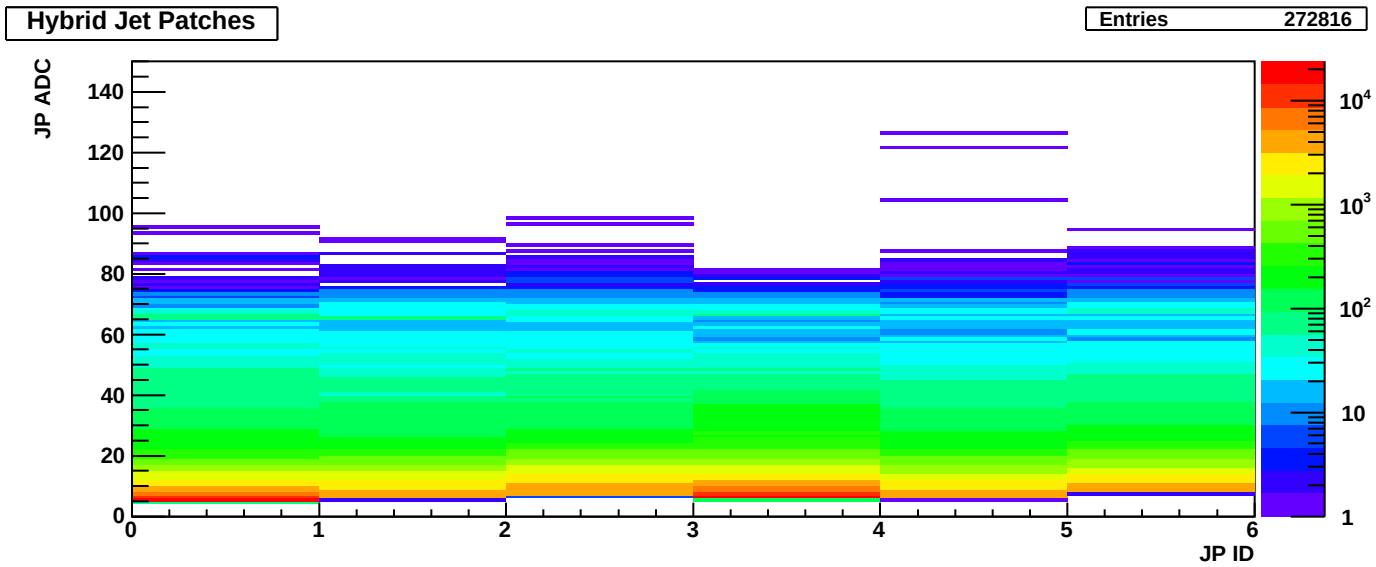

Barrel EMC L0 Input - Patch Sum
Entries 4.09224e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

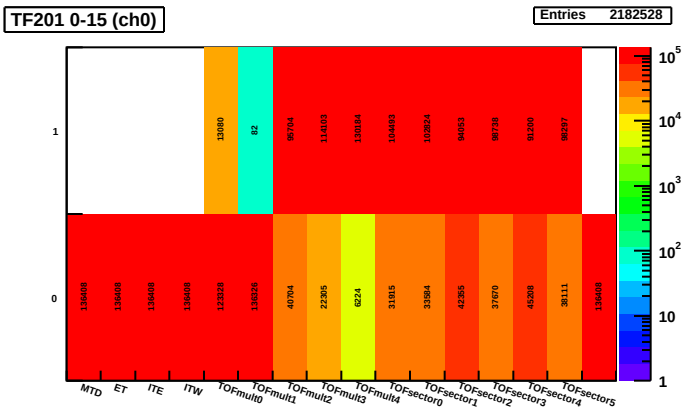

Endcap EMC L0 Input - High Tower
Entries 1.227672e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

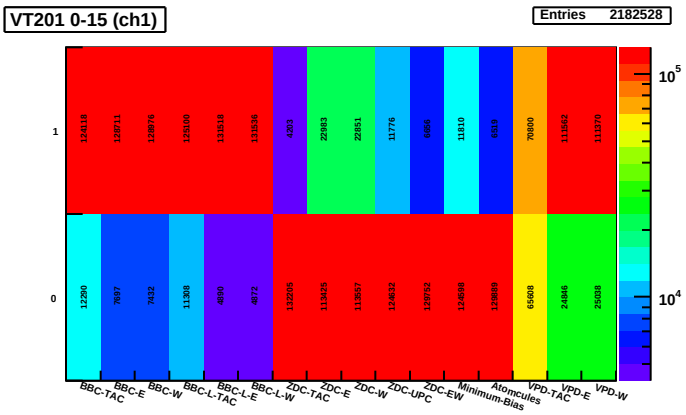

Endcap EMC L0 Input - Patch Sum
Entries 1.227672e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

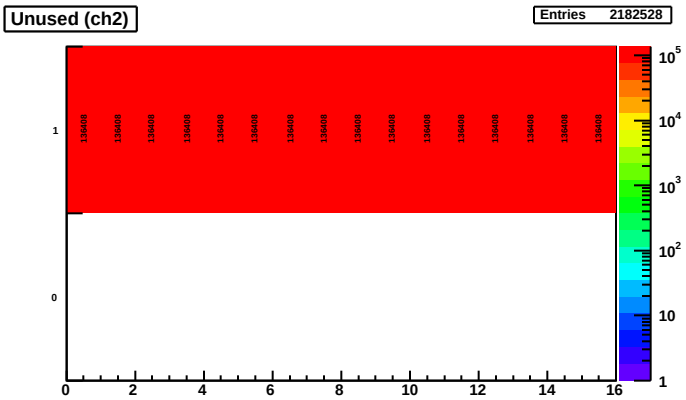

Barrel Jet Patches
Entries 2455344
JP ADC
JP ID

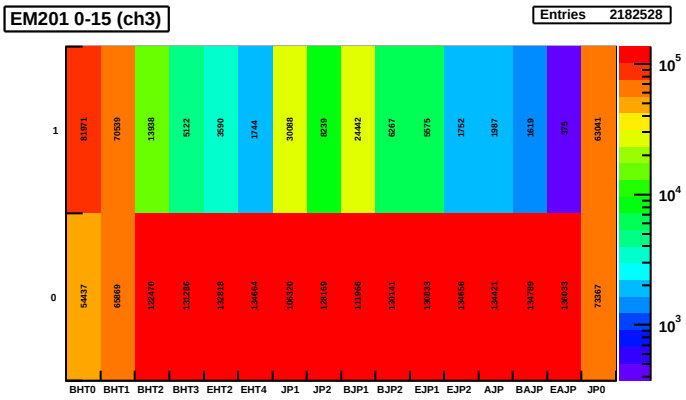

Endcap Jet Patches
Entries 818448
JP ADC
JP ID

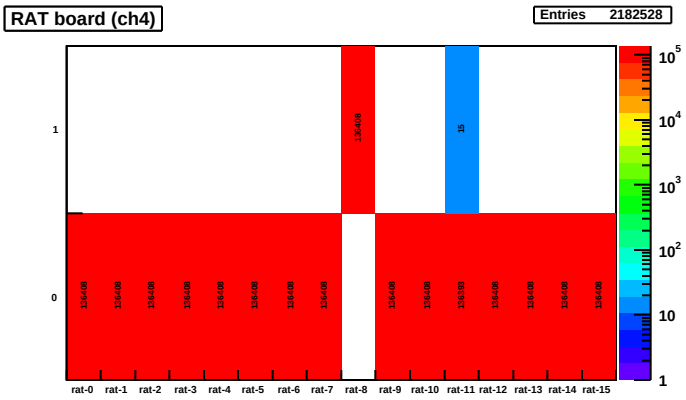

Hybrid Jet Patches
Entries 272816
JP ADC
JP ID

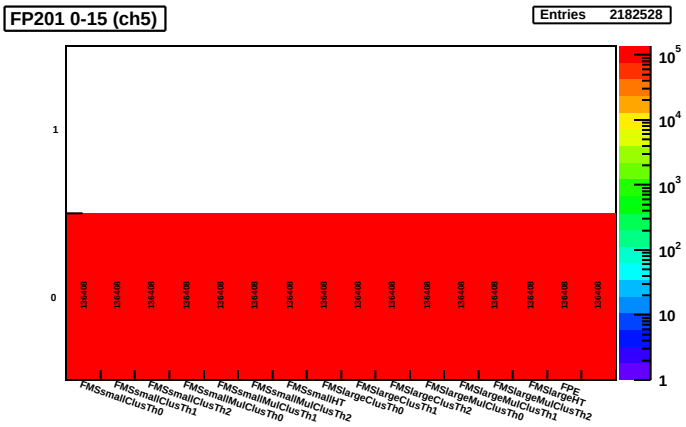

TF201 0-15 (ch0)
Entries 2182528
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

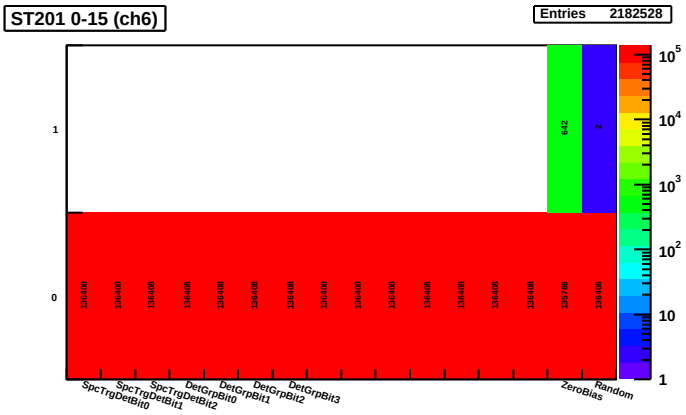

VT201 0-15 (ch1)
Entries 2182528
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

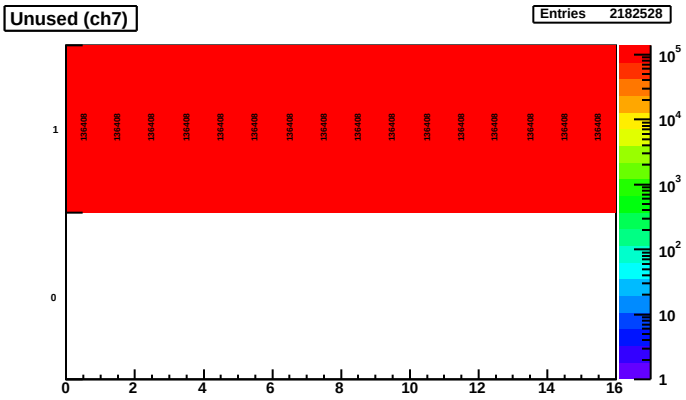

Unused (ch2)
Entries 2182528

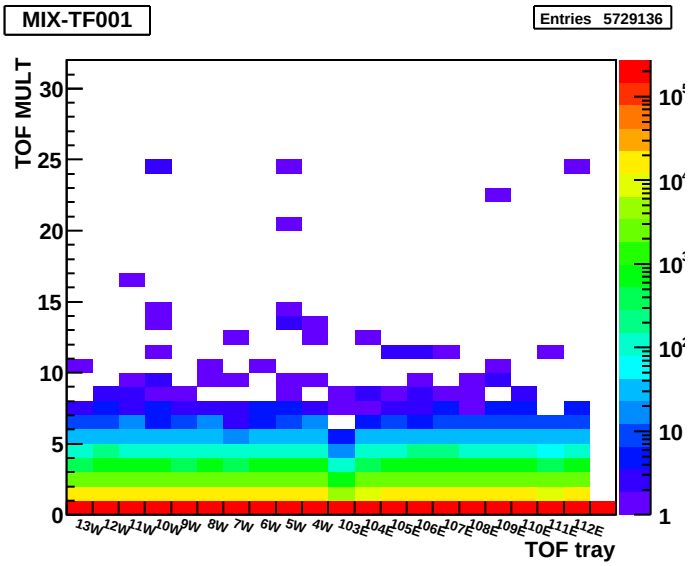

EM201 0-15 (ch3)
Entries 2182528
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

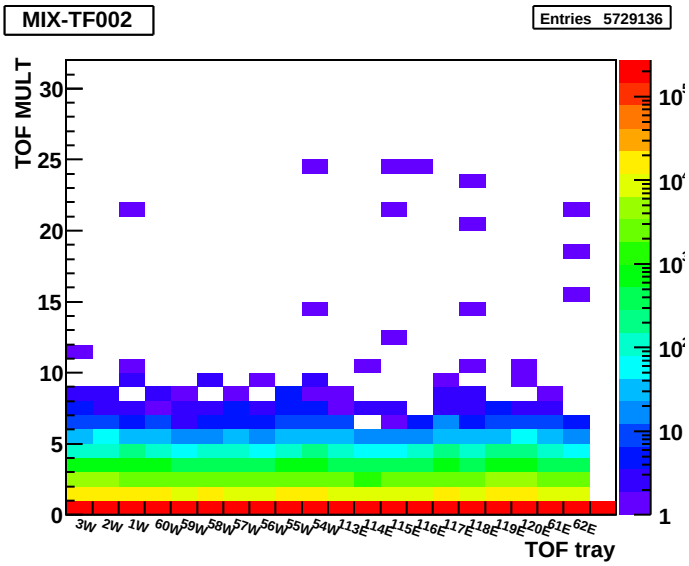

RAT board (ch4)
Entries 2182528
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

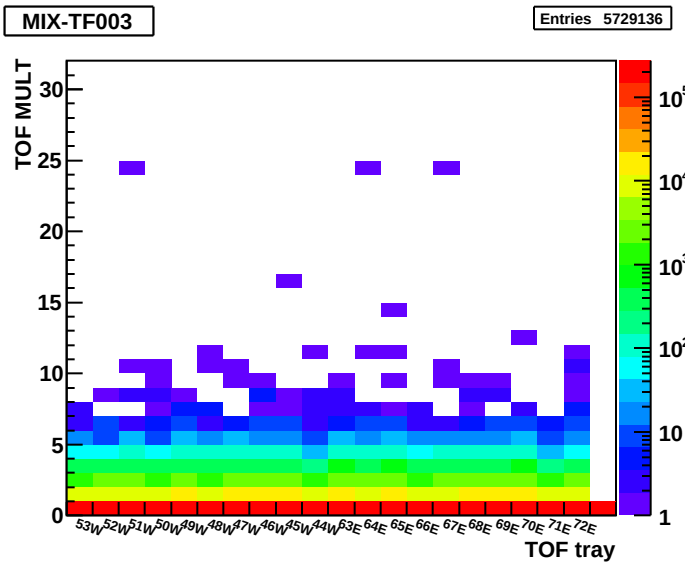

FP201 0-15 (ch5)
Entries 2182528
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

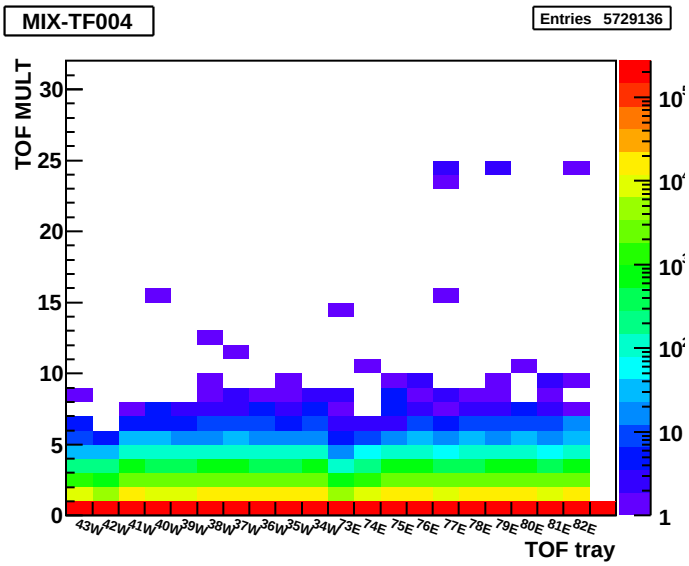

ST201 0-15 (ch6)
Entries 2182528
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

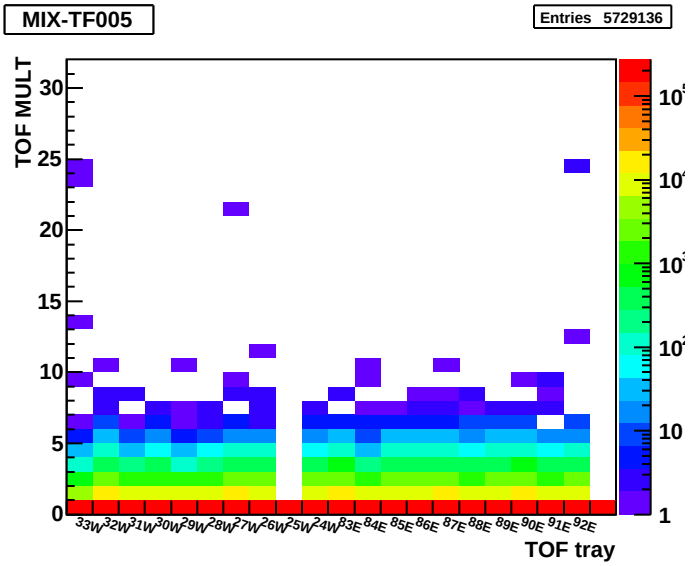

Unused (ch7)
Entries 2182528

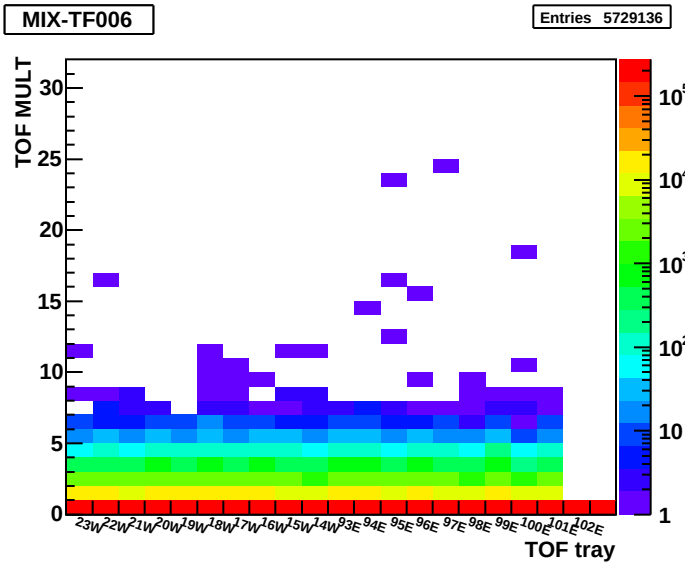

MIX-TF001
Entries 5729136
TOF MULT
TOF tray

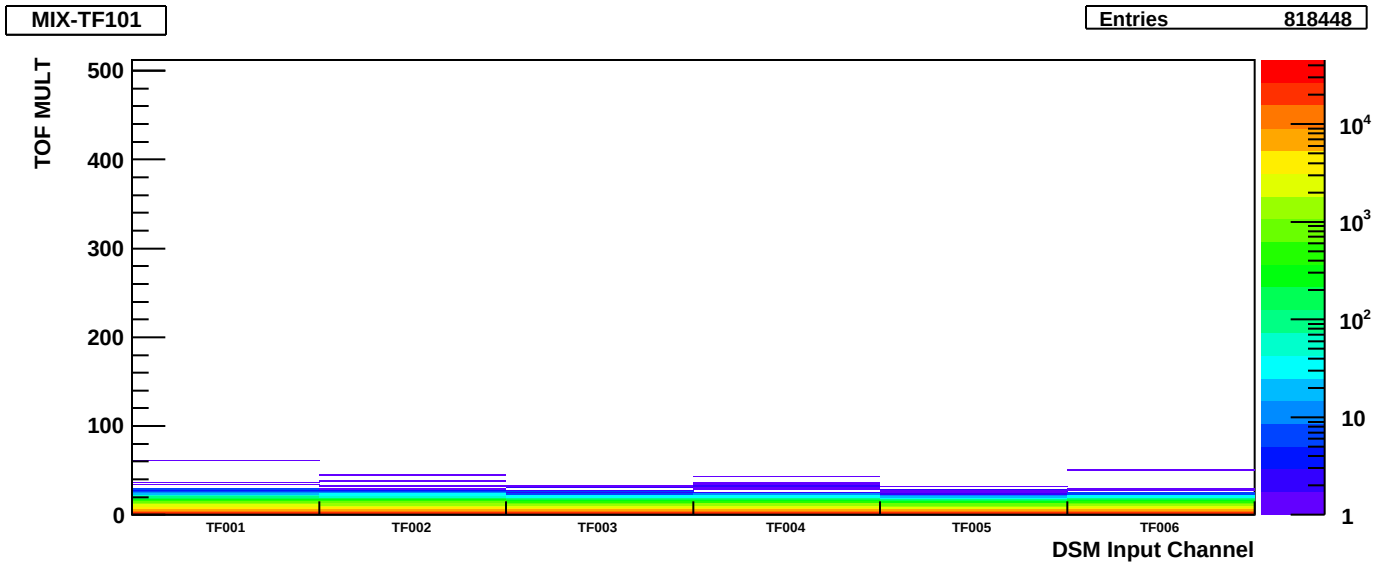

MIX-TF002
Entries 5729136
TOF MULT
TOF tray

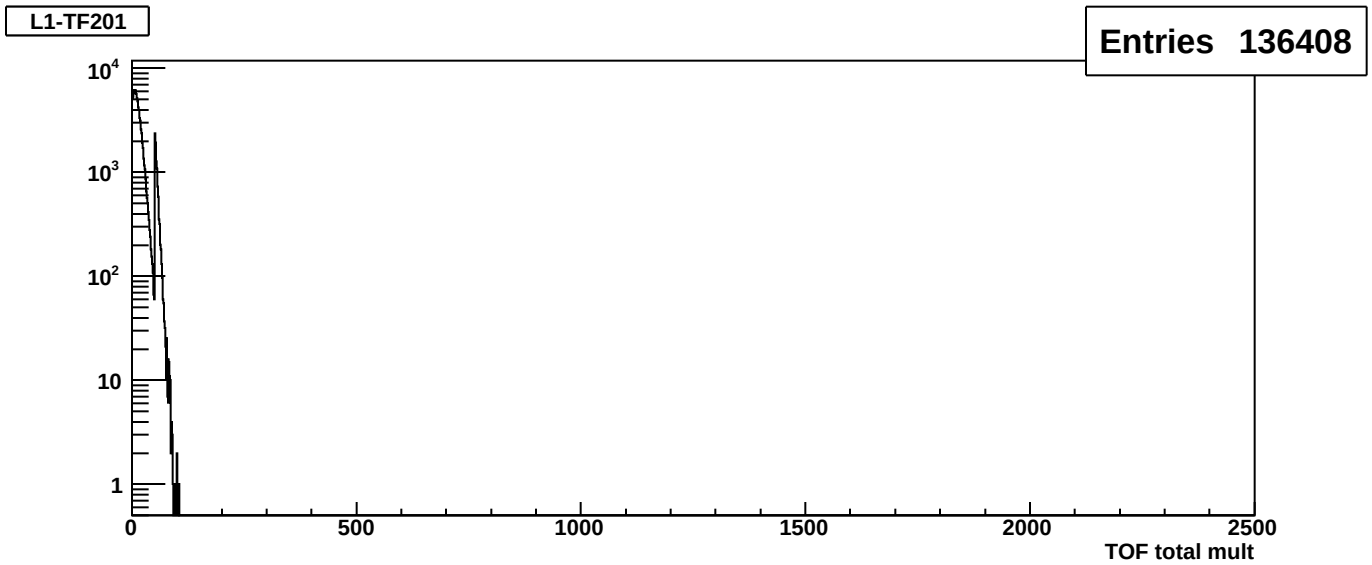

MIX-TF003
Entries 5729136
TOF MULT
TOF tray

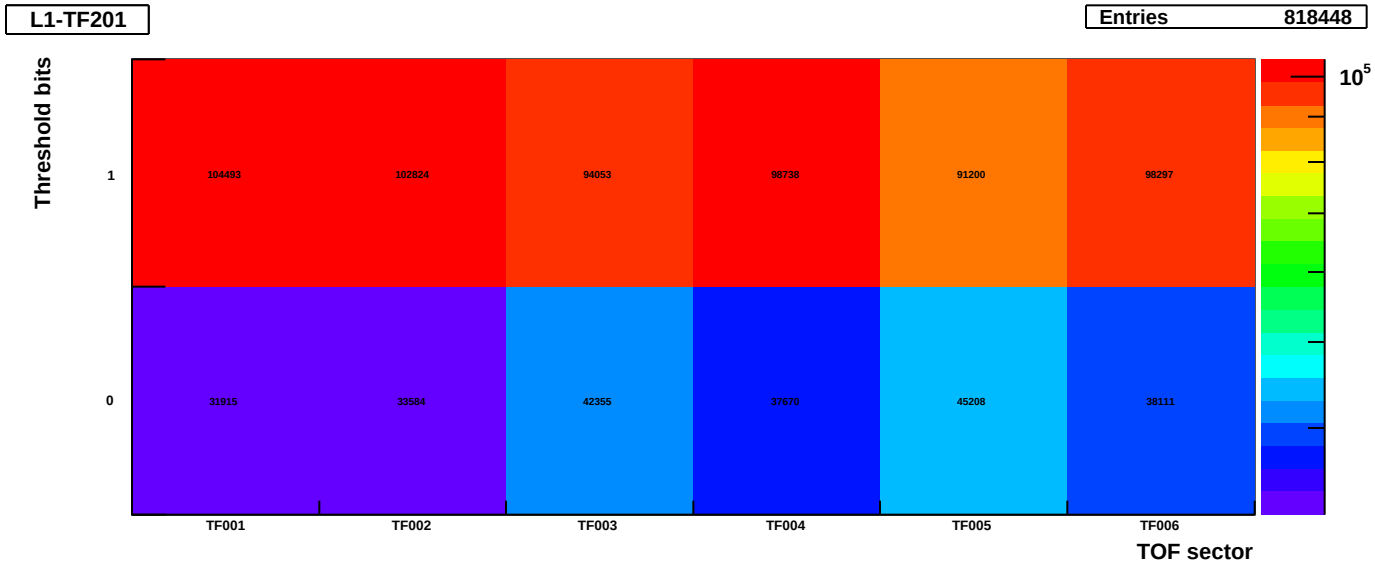

MIX-TF004
Entries 5729136
TOF MULT
TOF tray

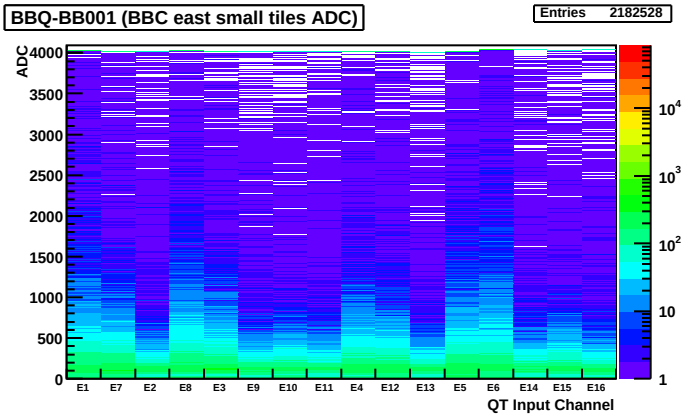

MIX-TF005
Entries 5729136
TOF MULT
TOF tray

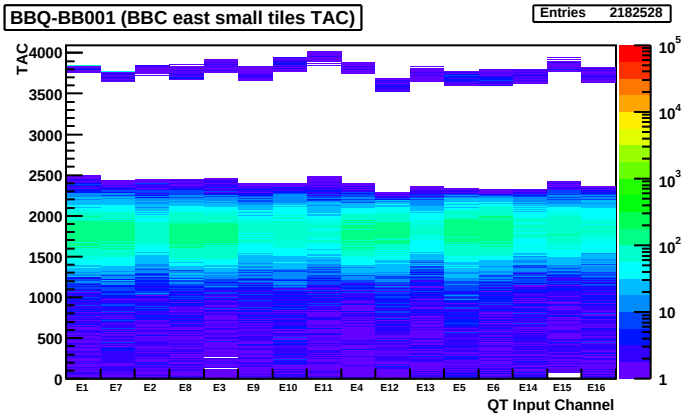

MIX-TF006
Entries 5729136
TOF MULT
TOF tray

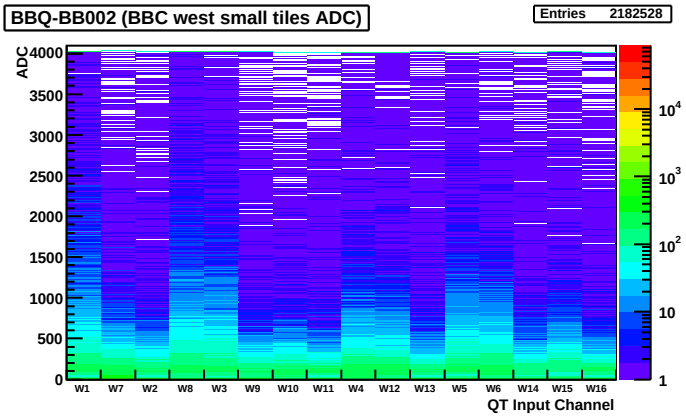

MIX-TF101
Entries 818448
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

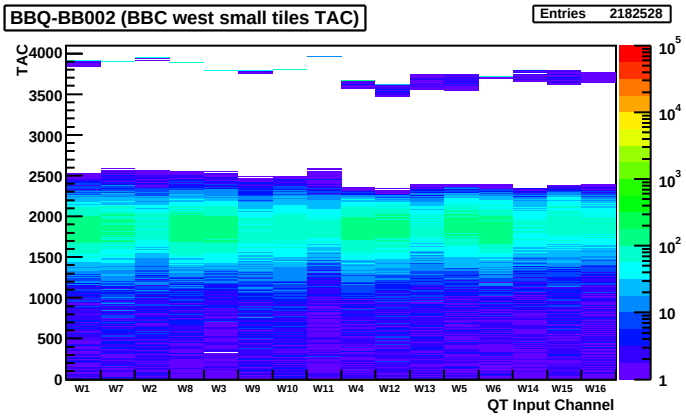

L1-TF201
Entries 136408
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

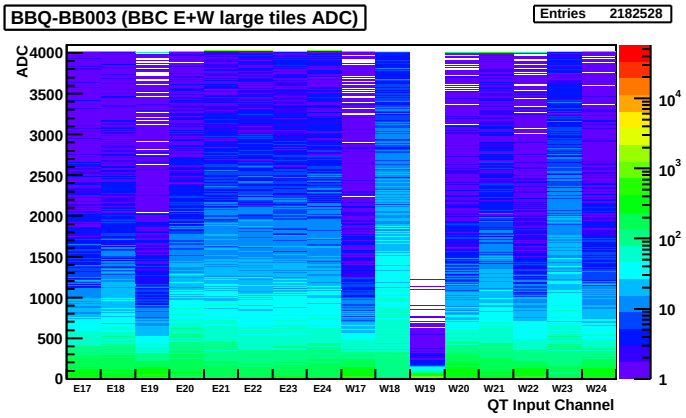

L1-TF201
Entries 818448
Threshold bits
1
0
104493
102824
94053
98738
91200
98297
31915
33584
42355
37670
45208
38111
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

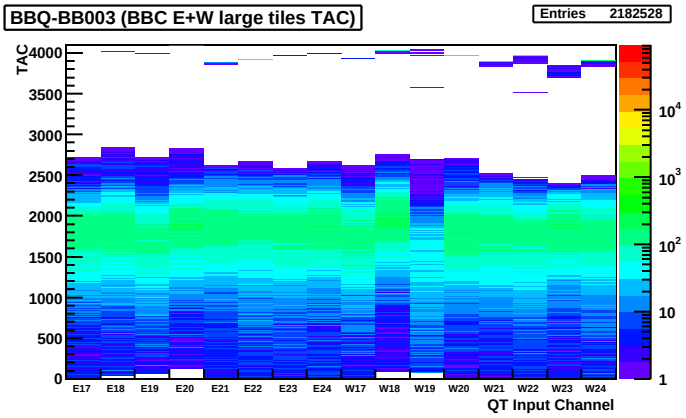

BBQ-BB001 (BBC east small tiles ADC)
Entries 2182528
ADC
QT Input Channel

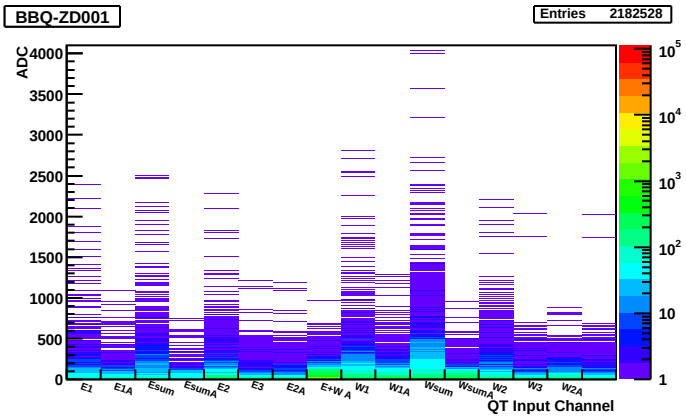

BBQ-BB001 (BBC east small tiles TAC)
Entries 2182528
TAC
QT Input Channel

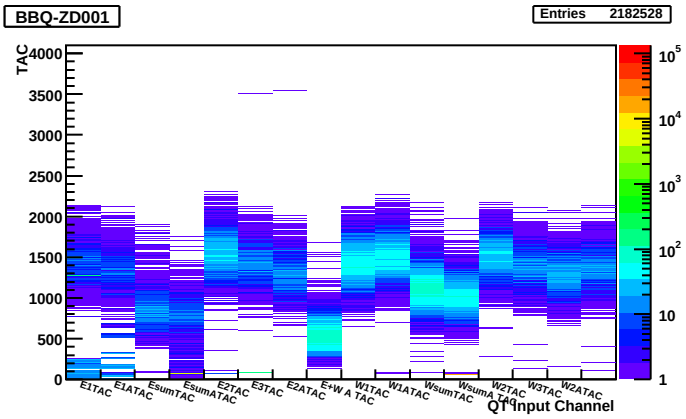

BBQ-BB002 (BBC west small tiles ADC)
Entries 2182528
ADC
QT Input Channel

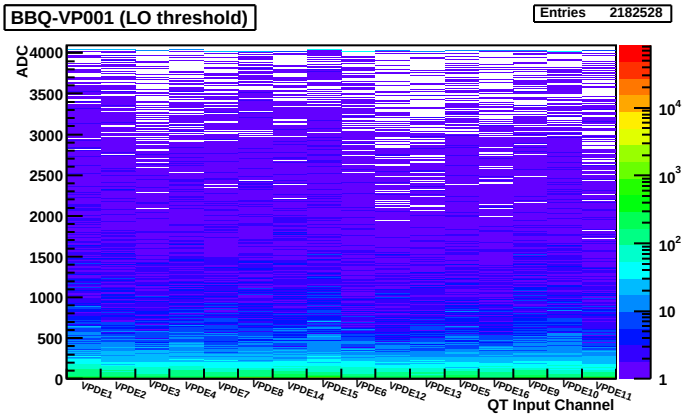

BBQ-BB002 (BBC west small tiles TAC)
Entries 2182528
TAC
QT Input Channel

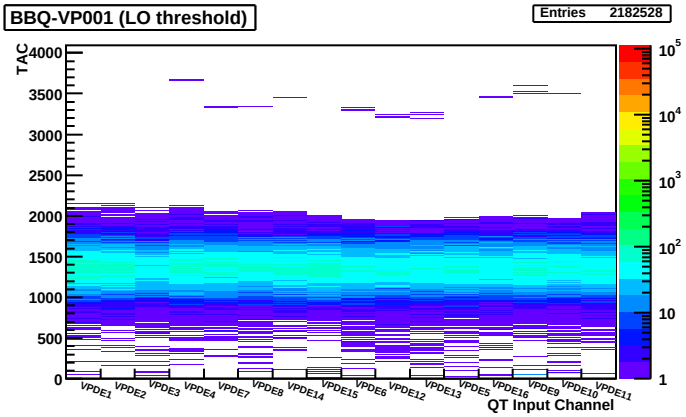

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2182528
ADC
QT Input Channel

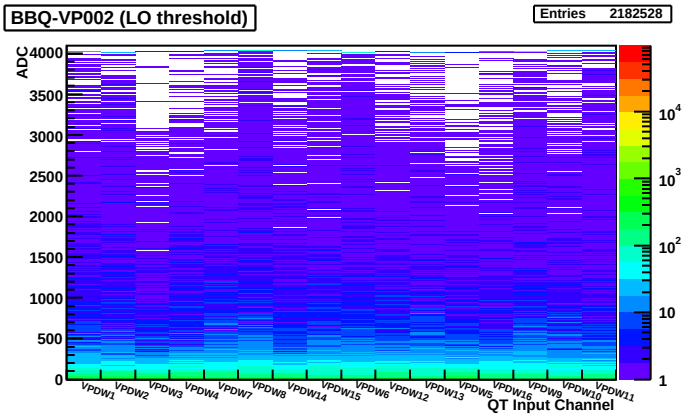

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2182528
TAC
QT Input Channel

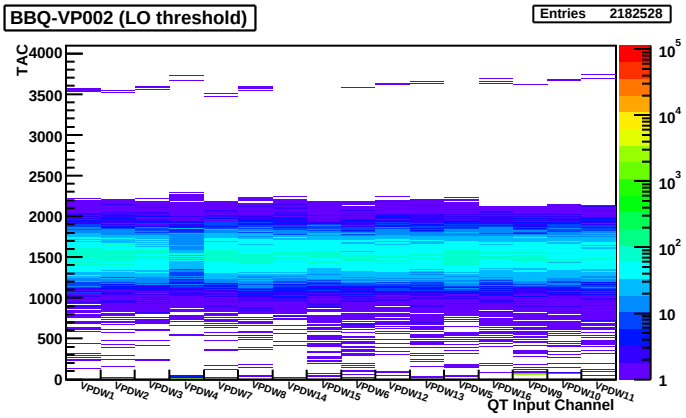

BBQ-ZD001
Entries 2182528
ADC
QT Input Channel

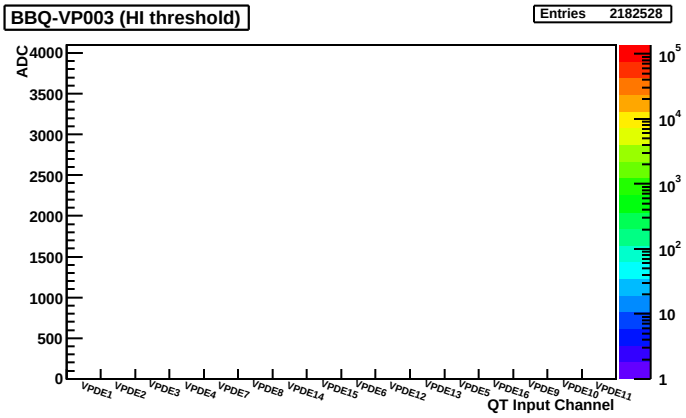

BBQ-ZD001
Entries 2182528
TAC
QT Input Channel

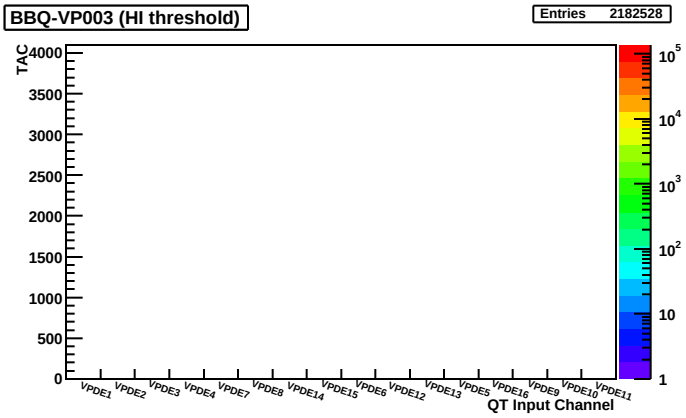

BBQ-VP001 (LO threshold)
Entries 2182528
ADC
QT Input Channel

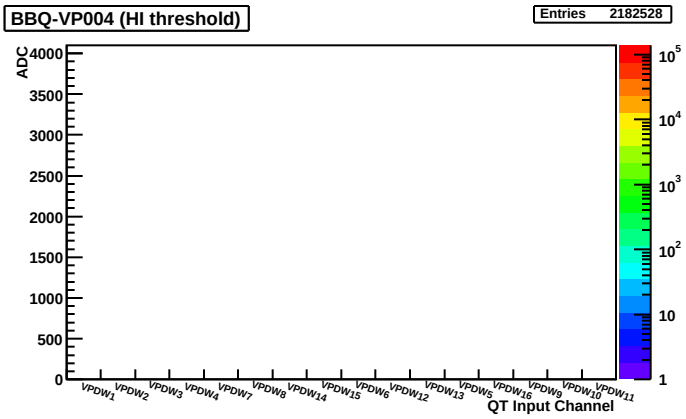

BBQ-VP001 (LO threshold)
Entries 2182528
TAC
QT Input Channel

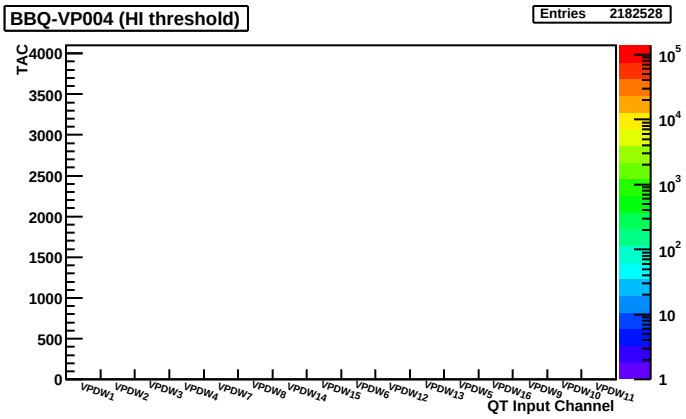

BBQ-VP002 (LO threshold)
Entries 2182528
ADC
QT Input Channel

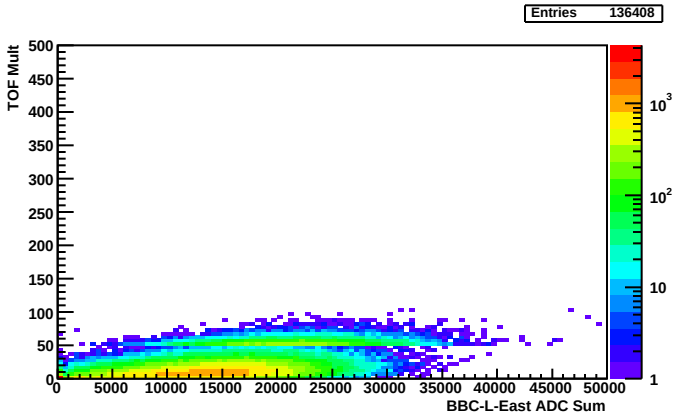

BBQ-VP002 (LO threshold)
Entries 2182528
TAC
QT Input Channel

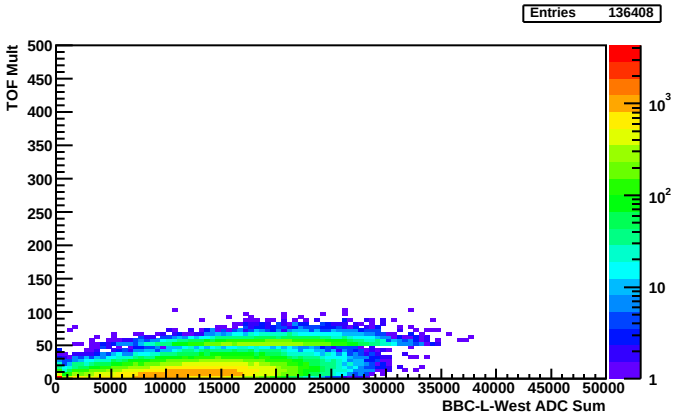

BBQ-VP003 (HI threshold)
Entries 2182528
ADC
QT Input Channel

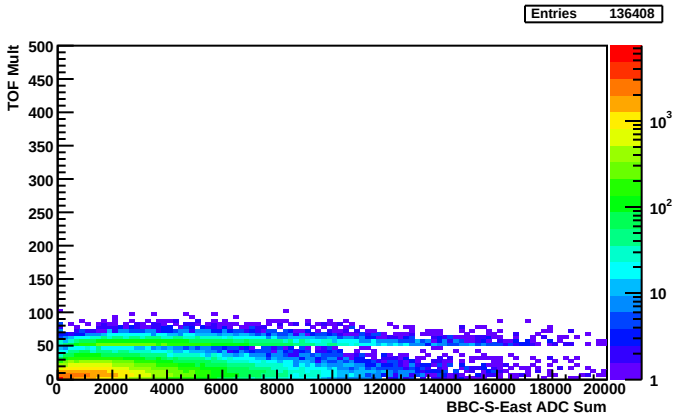

BBQ-VP003 (HI threshold)
Entries 2182528
TAC
QT Input Channel

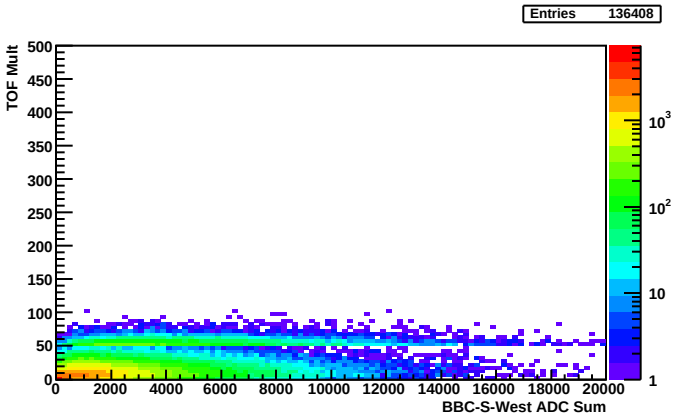

BBQ-VP004 (HI threshold)
Entries 2182528
ADC
QT Input Channel

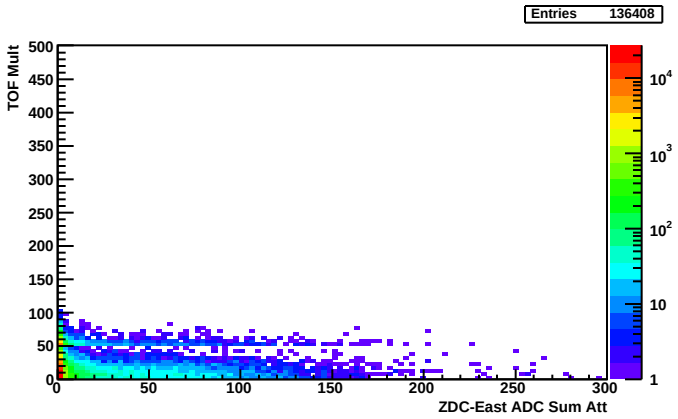

BBQ-VP004 (HI threshold)
Entries 2182528
TAC
QT Input Channel

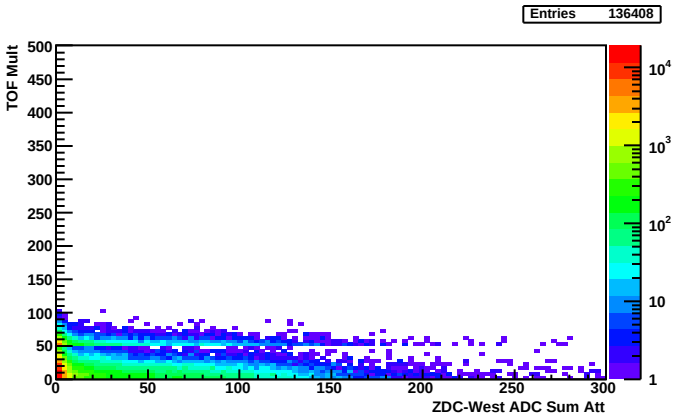

Entries 136408
TOF Mult
BBC-L-East ADC Sum

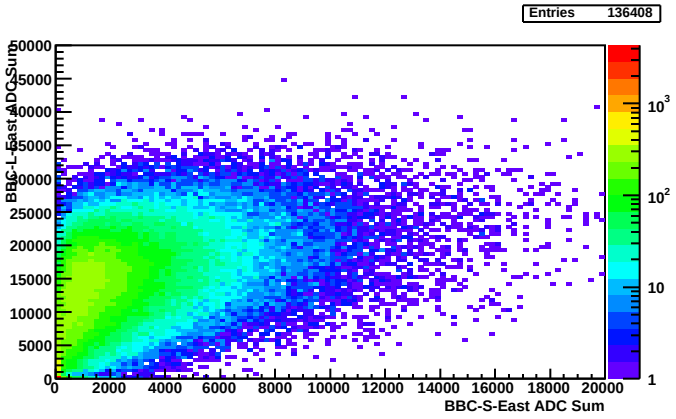

Entries 136408
TOF Mult
BBC-L-West ADC Sum

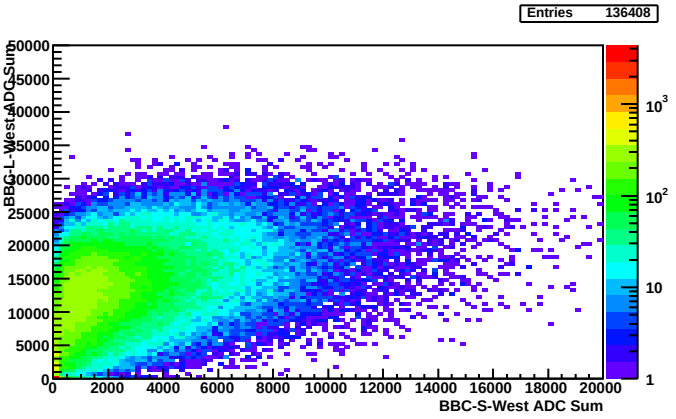

Entries 136408
TOF Mult
BBC-S-East ADC Sum

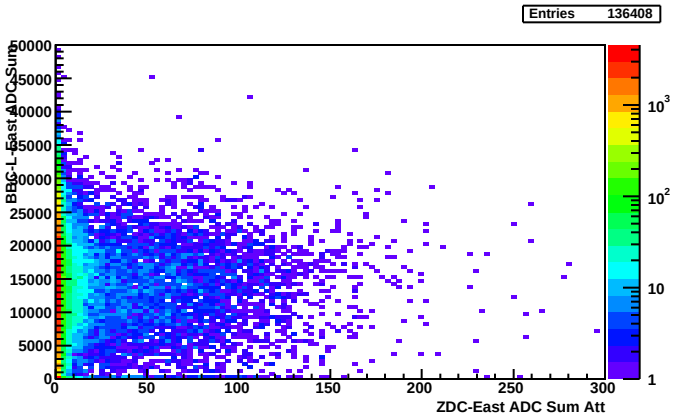

Entries 136408
TOF Mult
BBC-S-West ADC Sum

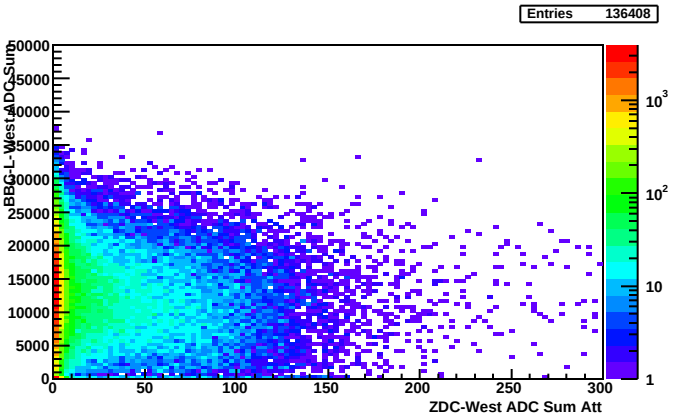

Entries 136408
TOF Mult
ZDC-East ADC Sum Att

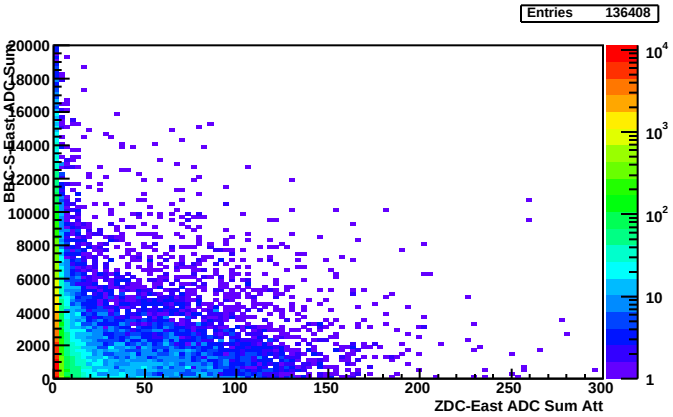

Entries 136408
TOF Mult
ZDC-West ADC Sum Att

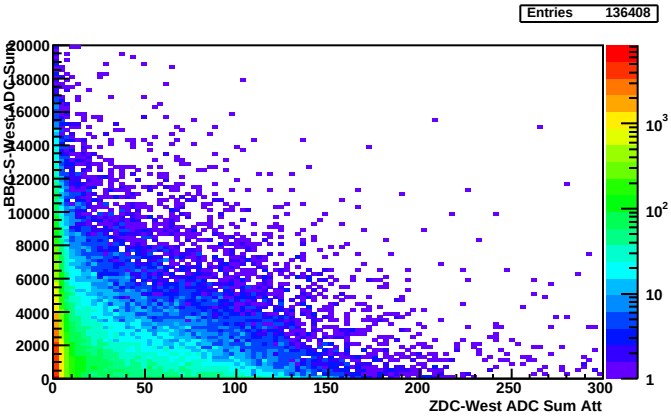

Entries 136408
BBC-L-East ADC Sum
BBC-S-East ADC Sum

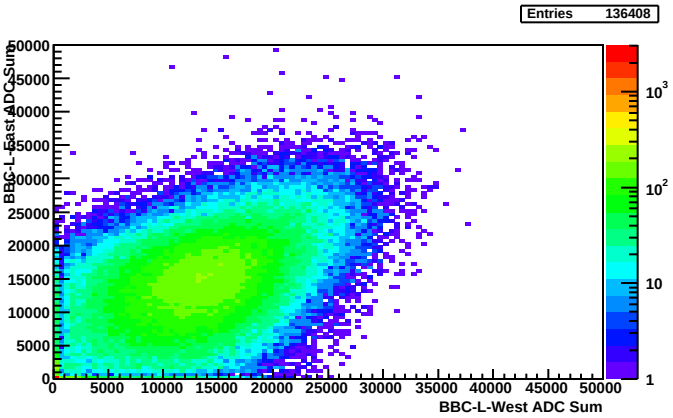

Entries 136408
BBC-L-West ADC Sum
BBC-S-West ADC Sum

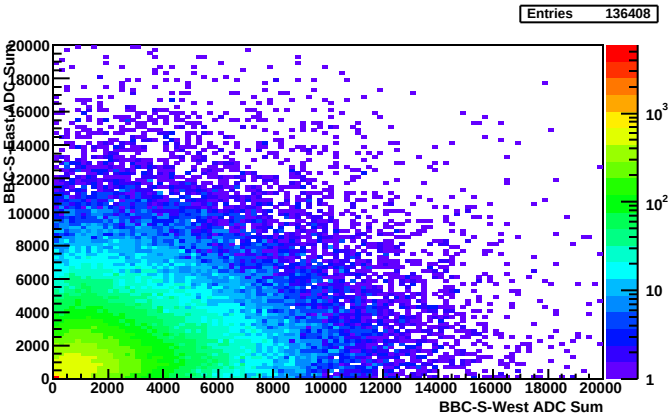

Entries 136408
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

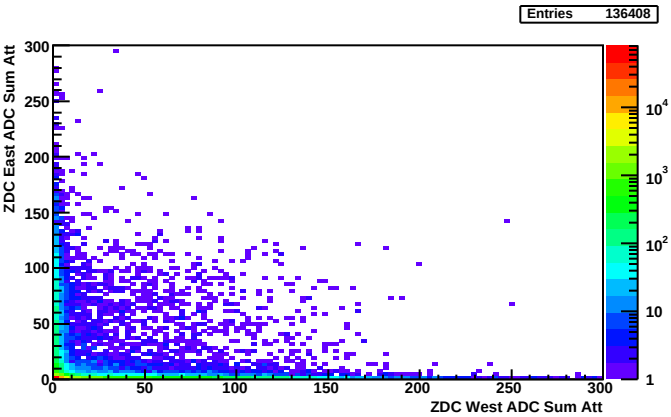

Entries 136408
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

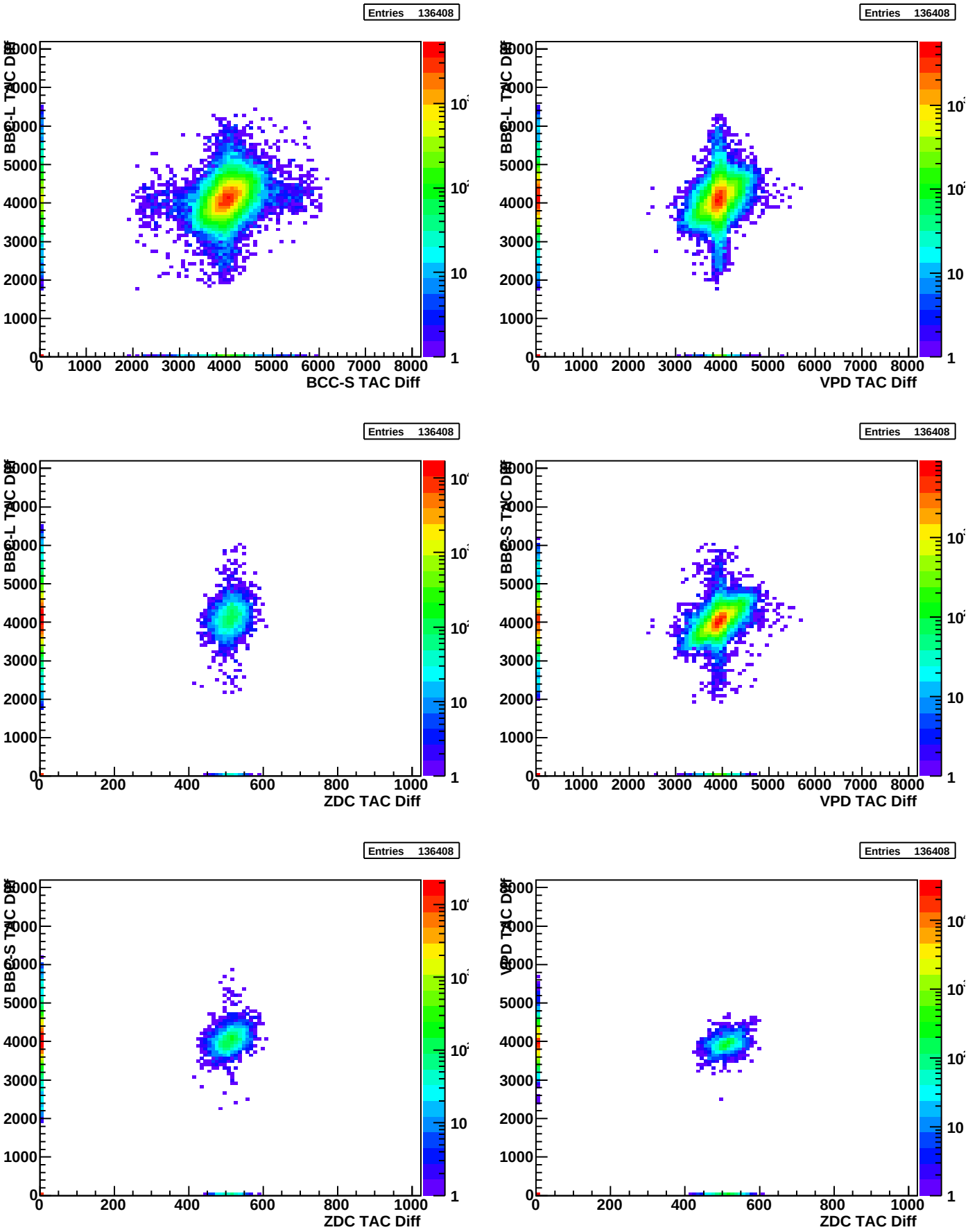

Entries 136408
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

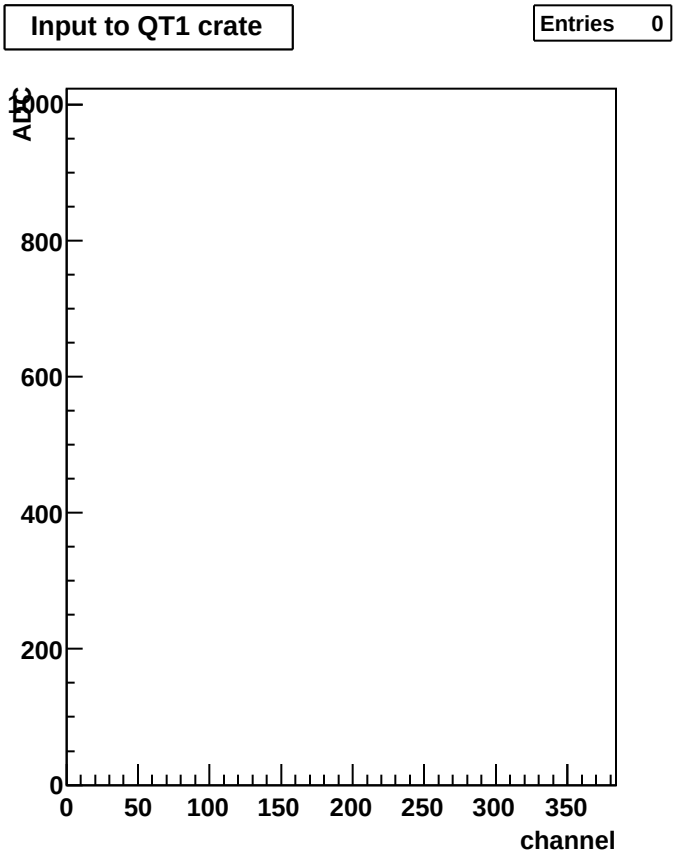

Entries 136408
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

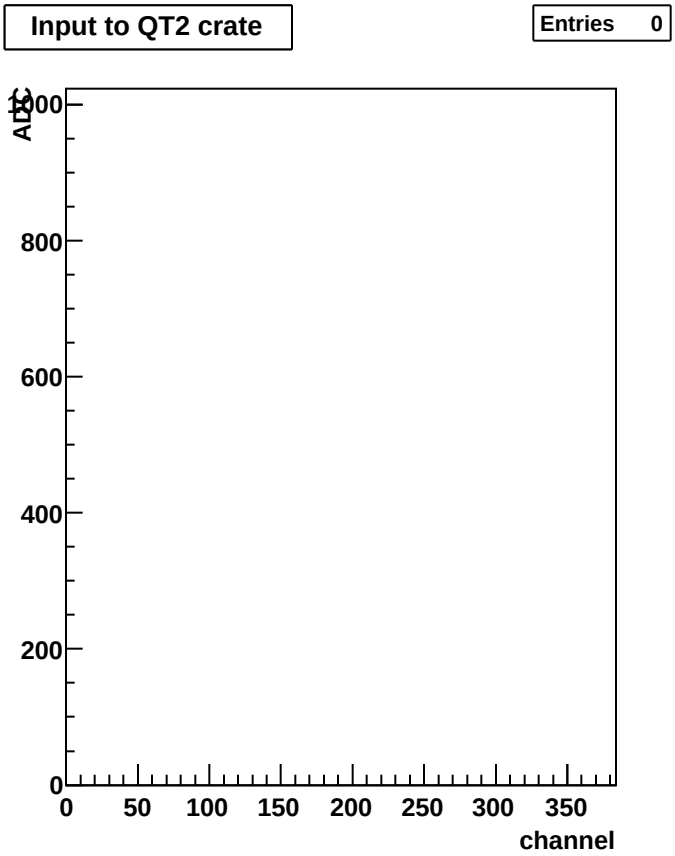

Entries 136408
BBC-L-East ADC Sum
BBC-L-West ADC Sum

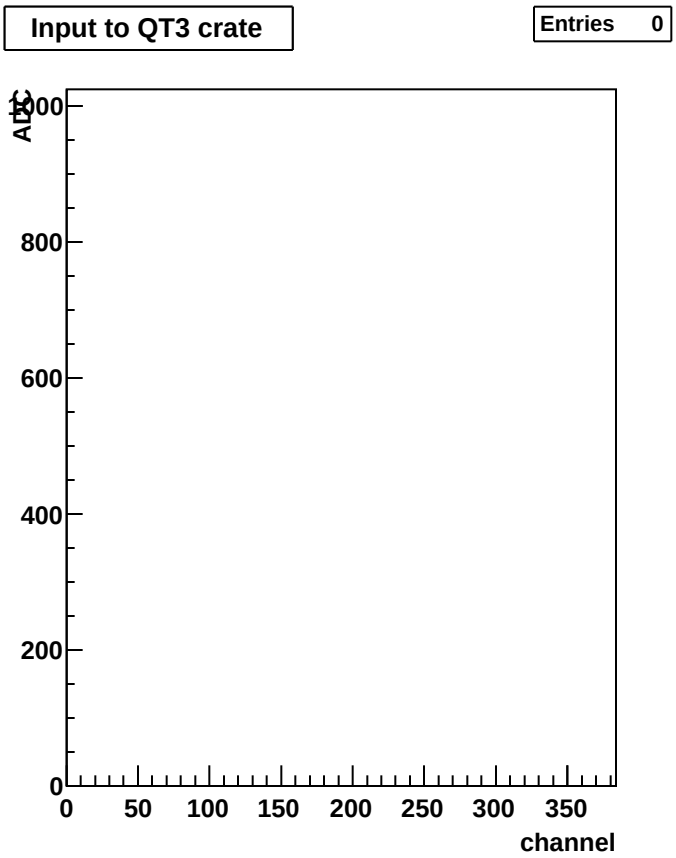

Entries 136408
BBC-S-East ADC Sum
BBC-S-West ADC Sum

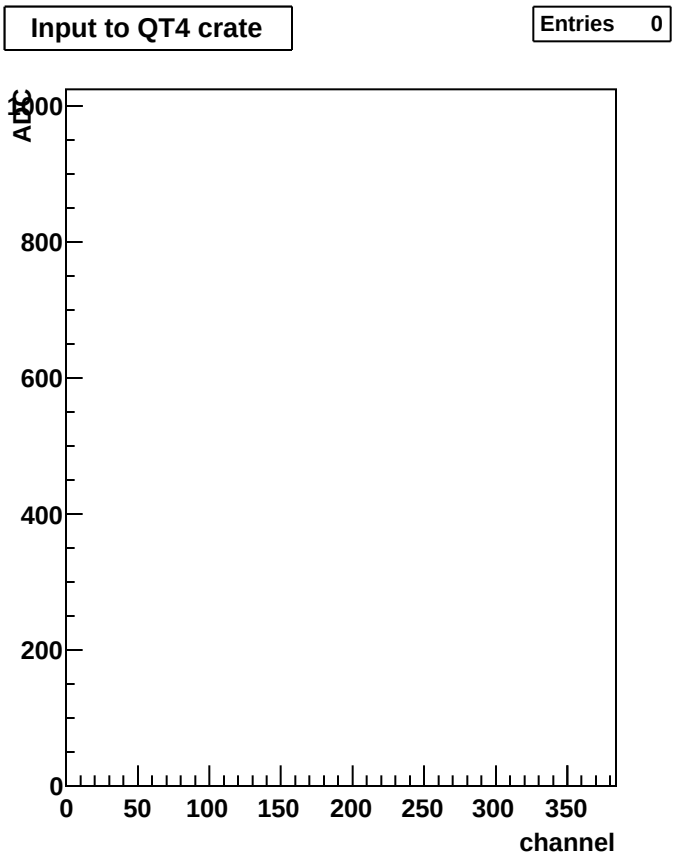

Entries 136408
ZDC East ADC Sum Att
ZDC West ADC Sum Att

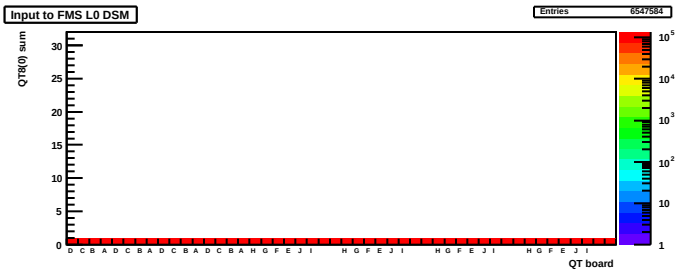

Entries 136408
BBC-L TAC Diff
BCC-S TAC Diff
Entries 136408
BBC-L TAC Diff
VPD TAC Diff
Entries 136408
BBC-L TAC Diff
ZDC TAC Diff
Entries 136408
BBC-S TAC Diff
VPD TAC Diff
Entries 136408
BBC-S TAC Diff
ZDC TAC Diff
Entries 136408
VPD TAC Diff
ZDC TAC Diff

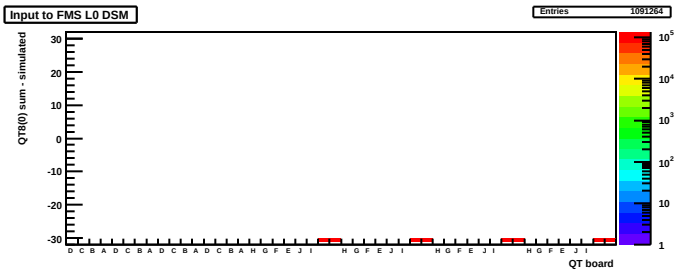

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

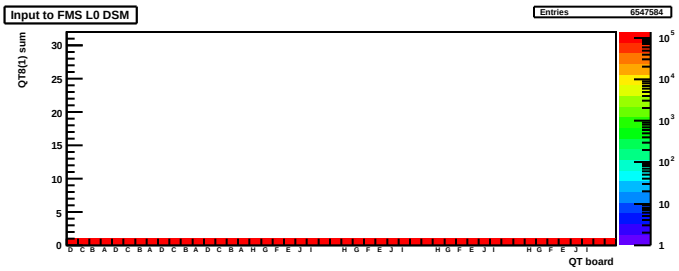

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

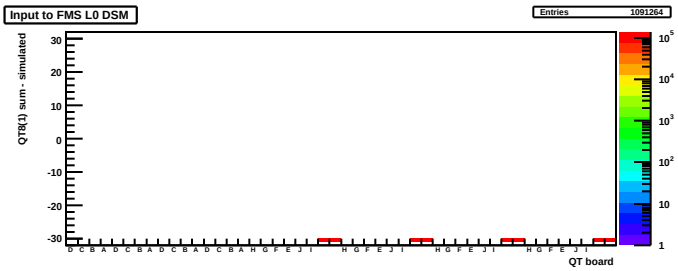

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

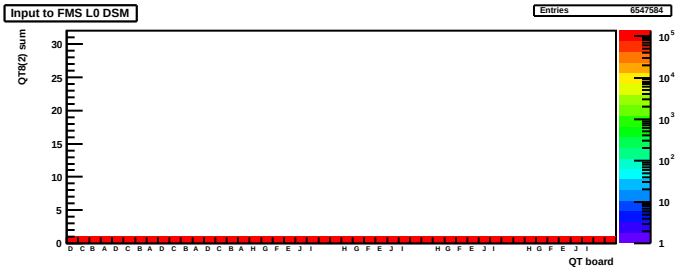

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

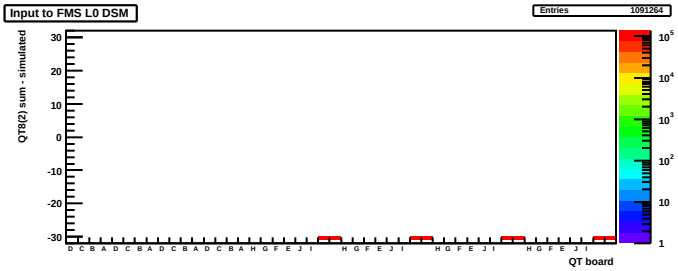

Input to FMS L0 DSM
Entries 6547584
QT8(0) sum
QT board

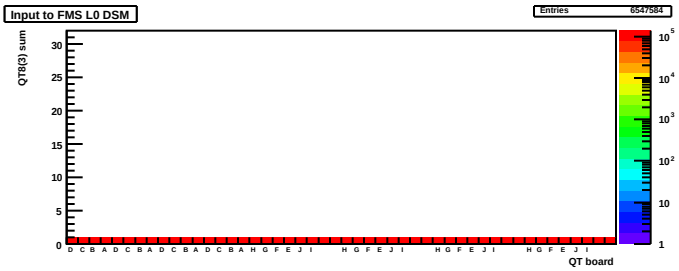

Input to FMS L0 DSM
Entries 1091264
QT8(0) sum - simulated
QT board

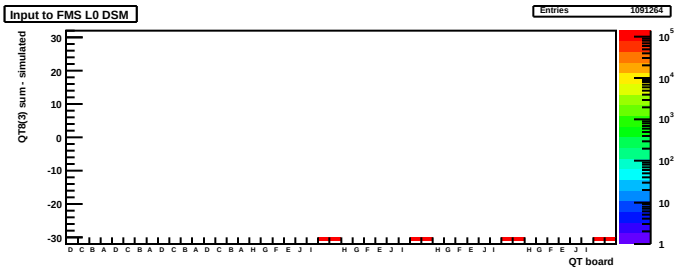

Input to FMS L0 DSM
Entries 6547584
QT8(1) sum
QT board

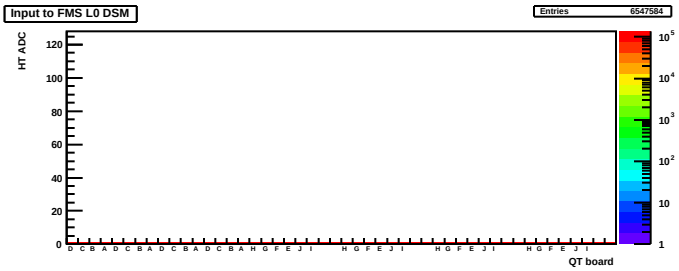

Input to FMS L0 DSM
Entries 1091264
QT8(1) sum - simulated
QT board

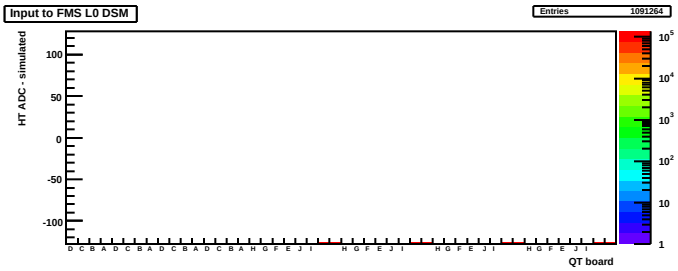

Input to FMS L0 DSM
Entries 6547584
QT8(2) sum
QT board

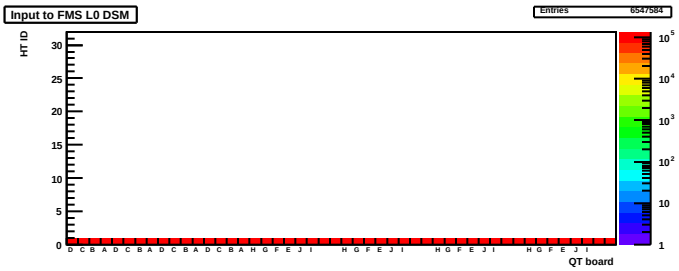

Input to FMS L0 DSM
Entries 1091264
QT8(2) sum - simulated
QT board

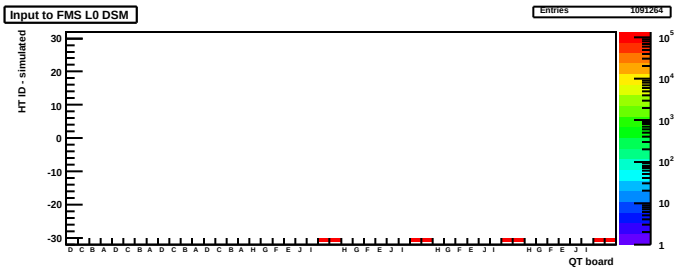

Input to FMS L0 DSM
Entries 6547584
QT8(3) sum
QT board

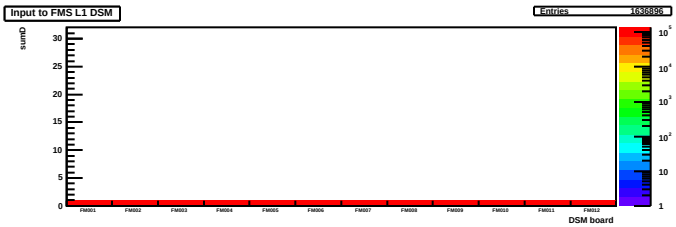

Input to FMS L0 DSM
Entries 1091264
QT8(3) sum - simulated
QT board

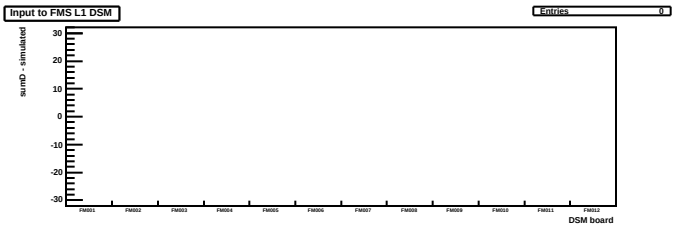

Input to FMS L0 DSM
Entries 6547584
HT ADC
QT board

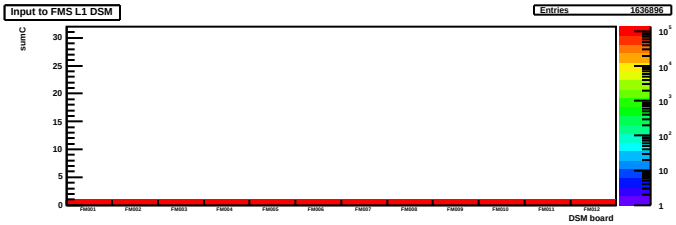

Input to FMS L0 DSM
Entries 1091264
HT ADC - simulated
QT board

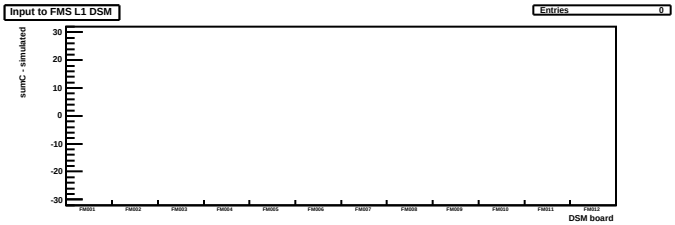

Input to FMS L0 DSM
Entries 6547584
HT ID
QT board

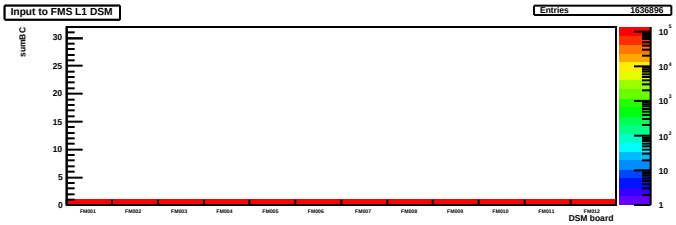

Input to FMS L0 DSM
Entries 1091264
HT ID - simulated
QT board

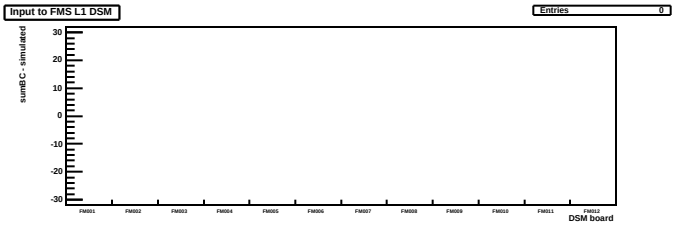

Input to FMS L1 DSM
Entries 1636896
sumD
DSM board

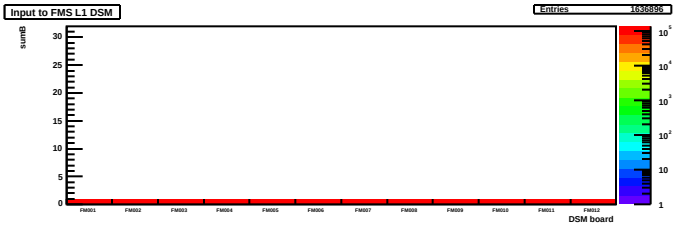

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

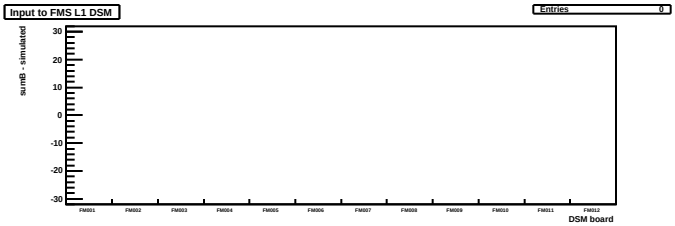

Input to FMS L1 DSM
Entries 1636896
sumC
DSM board

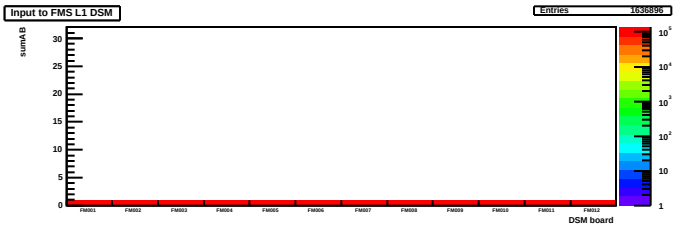

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

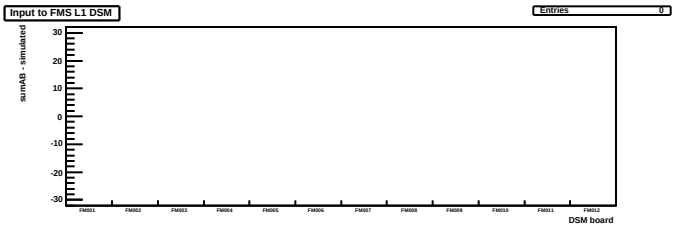

Input to FMS L1 DSM
Entries 1636896
sumBC
DSM board

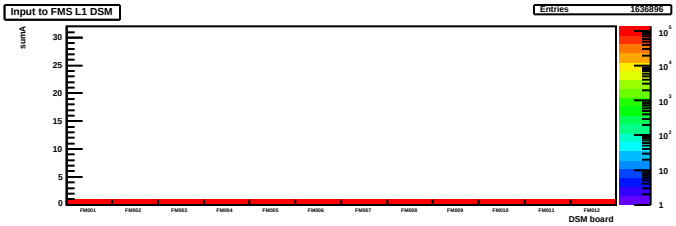

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

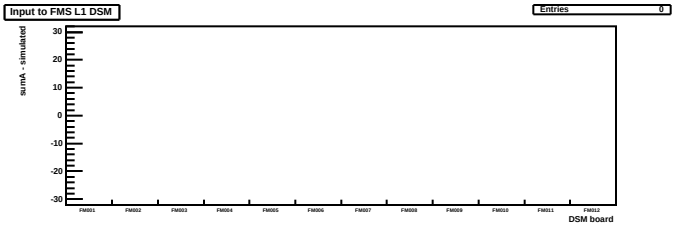

Input to FMS L1 DSM
Entries 1636896
sumB
DSM board

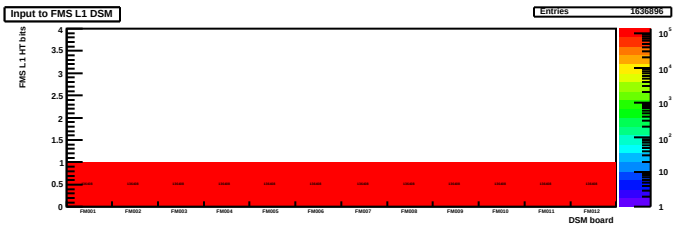

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

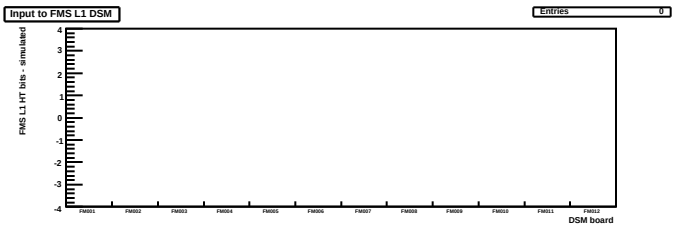

Input to FMS L1 DSM
Entries 1636896
sumAB
DSM board

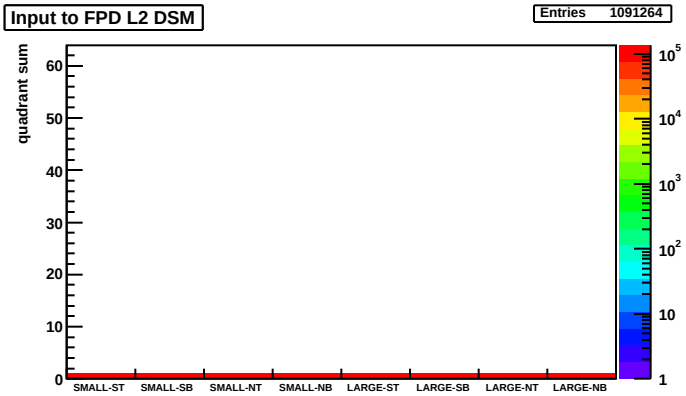

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

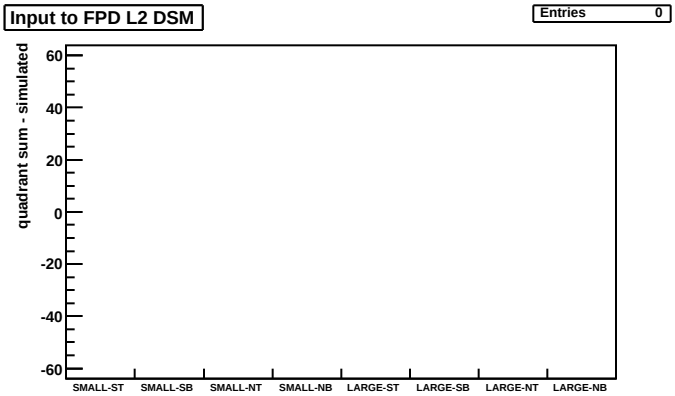

Input to FMS L1 DSM
Entries 1636896
sumA
DSM board

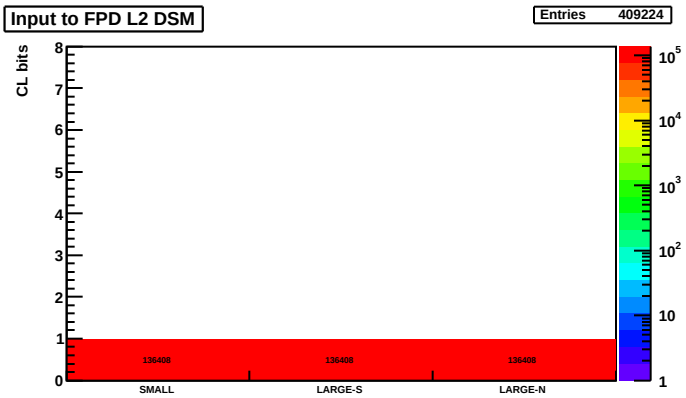

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

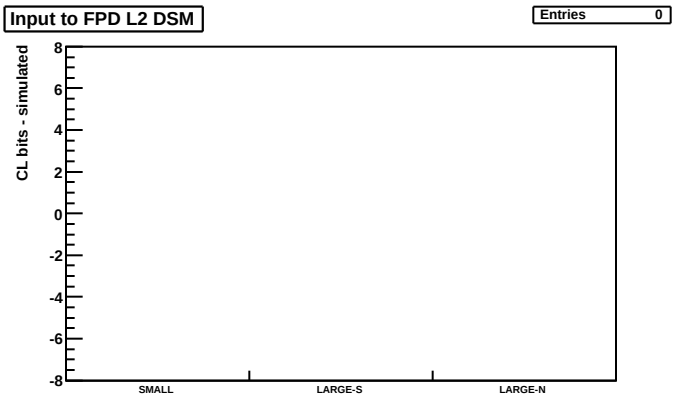

Input to FMS L1 DSM
Entries 1636896
FMS L1 HT bits
DSM board

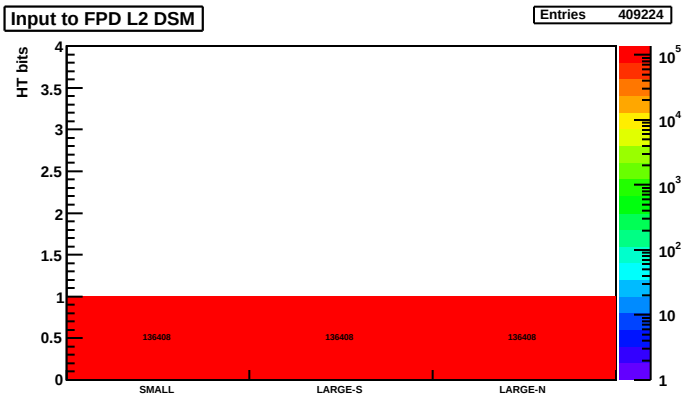

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

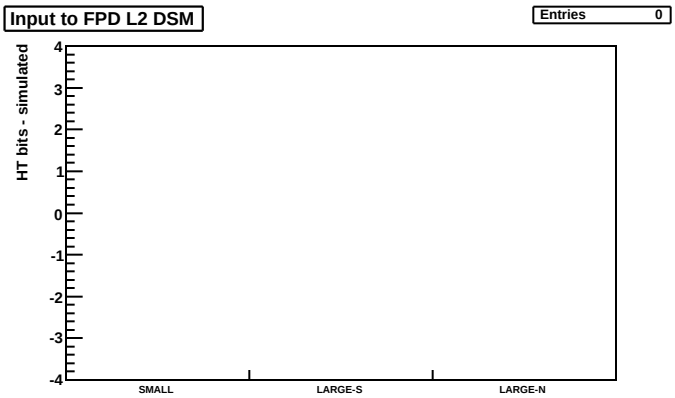

Input to FPD L2 DSM
Entries 1091264
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

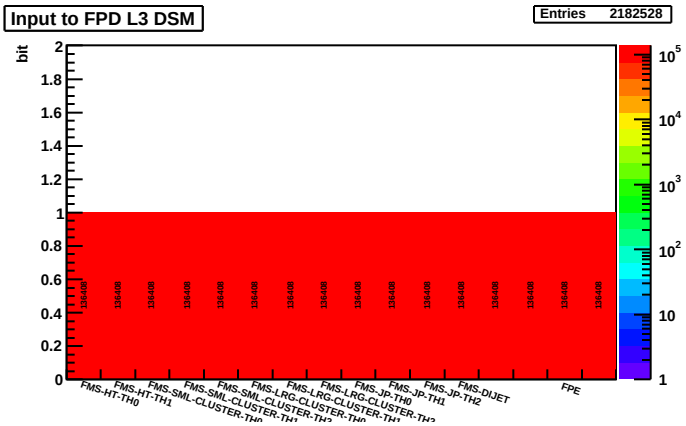

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

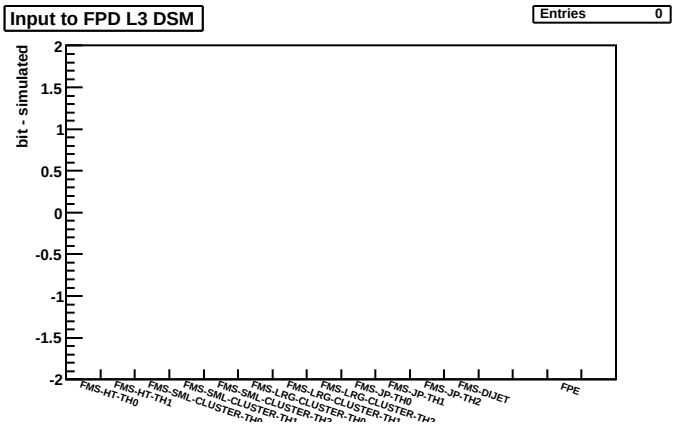

Input to FPD L2 DSM
Entries 409224
CL bits
136408
136408
136408
SMALL
LARGE-S
LARGE-N

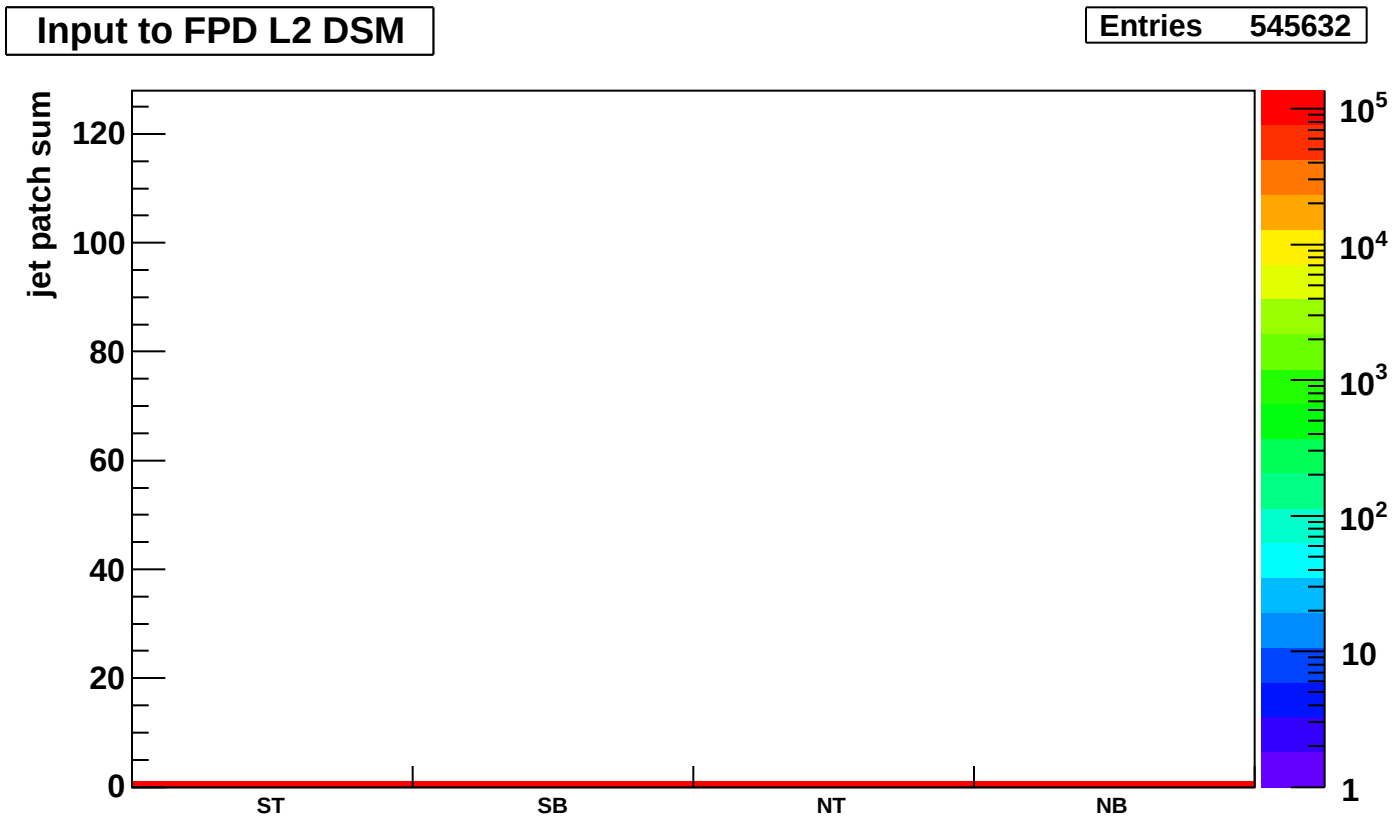

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

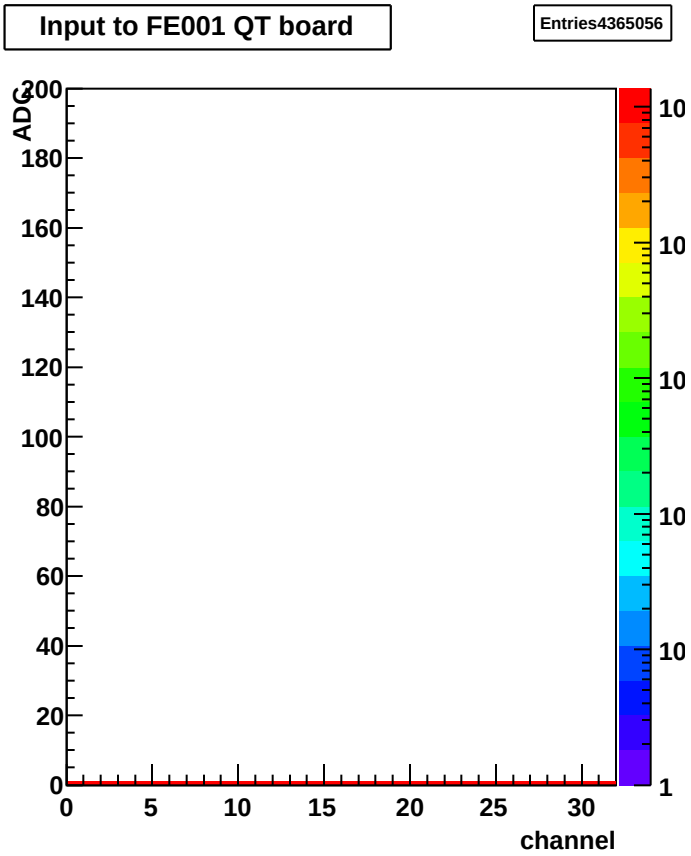

Input to FPD L2 DSM
Entries 409224
HT bits
136408
136408
136408
SMALL
LARGE-S
LARGE-N

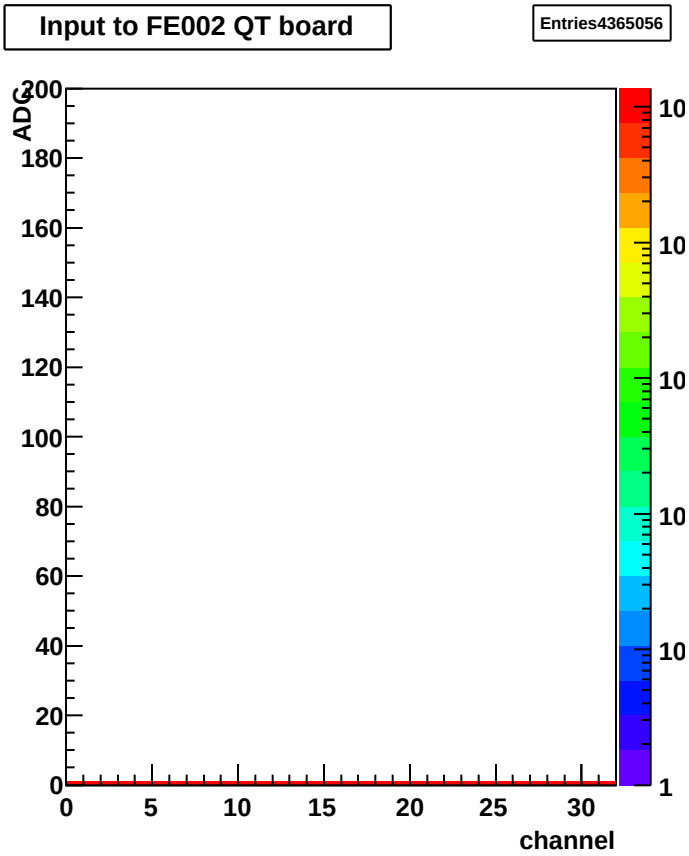

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

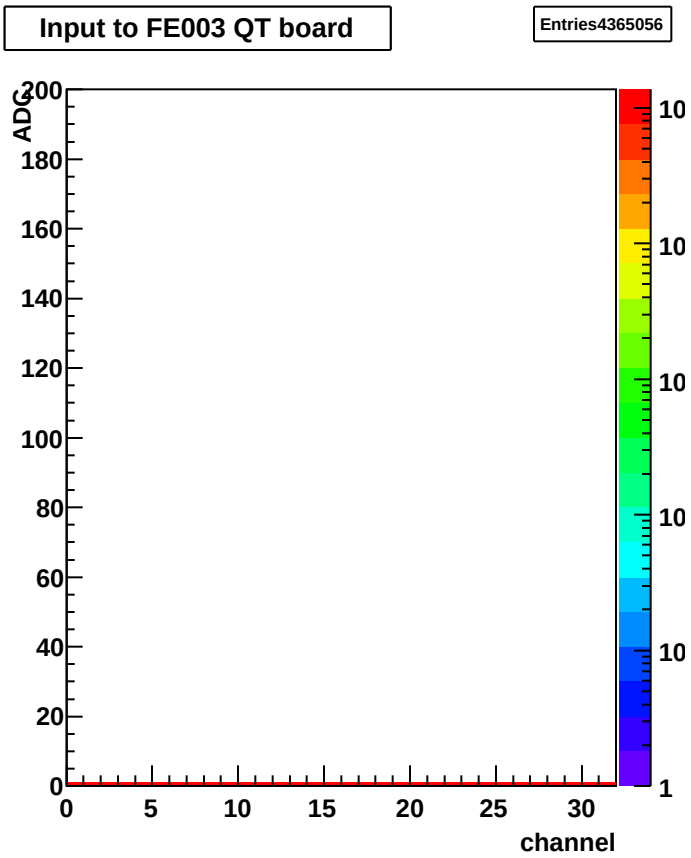

Input to FPD L3 DSM
Entries 2182528
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

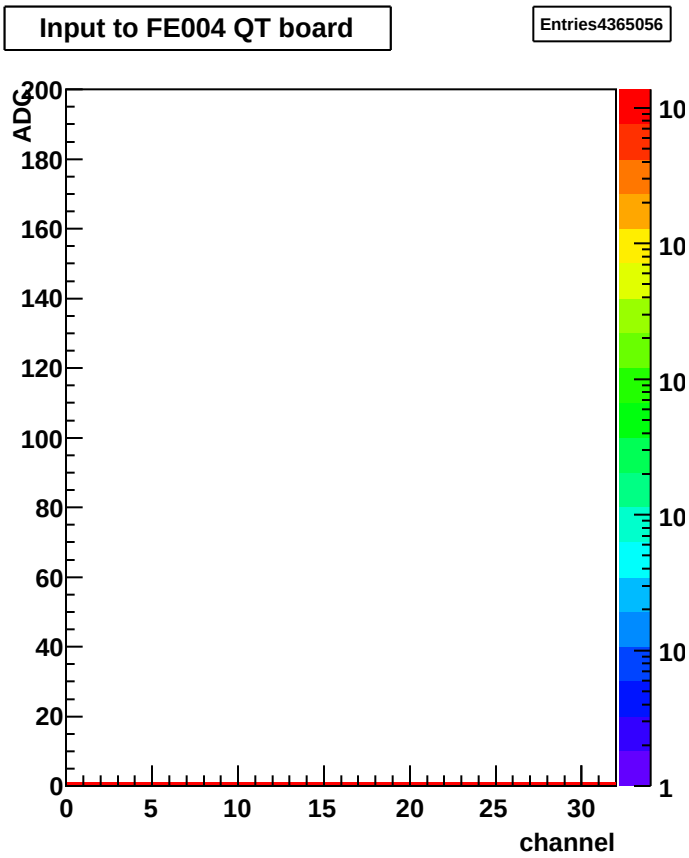

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

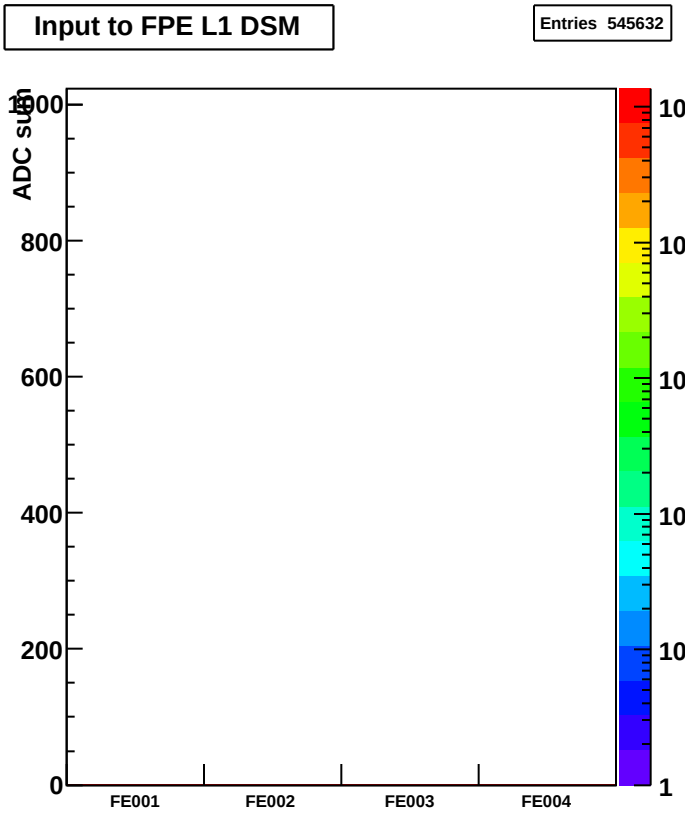

Input to FPD L2 DSM
Entries 545632
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

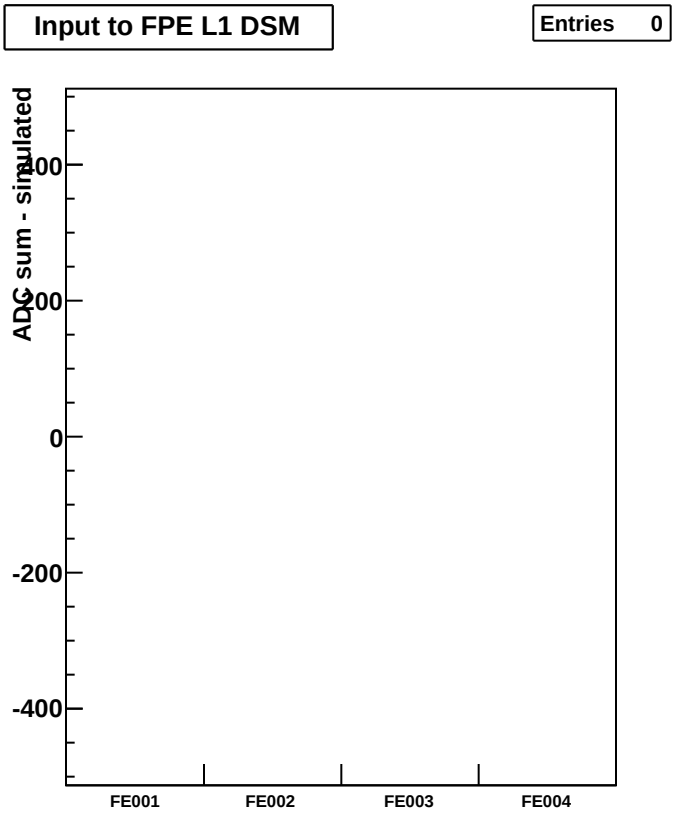

Input to FE001 QT board
Entries4365056
ADC
channel

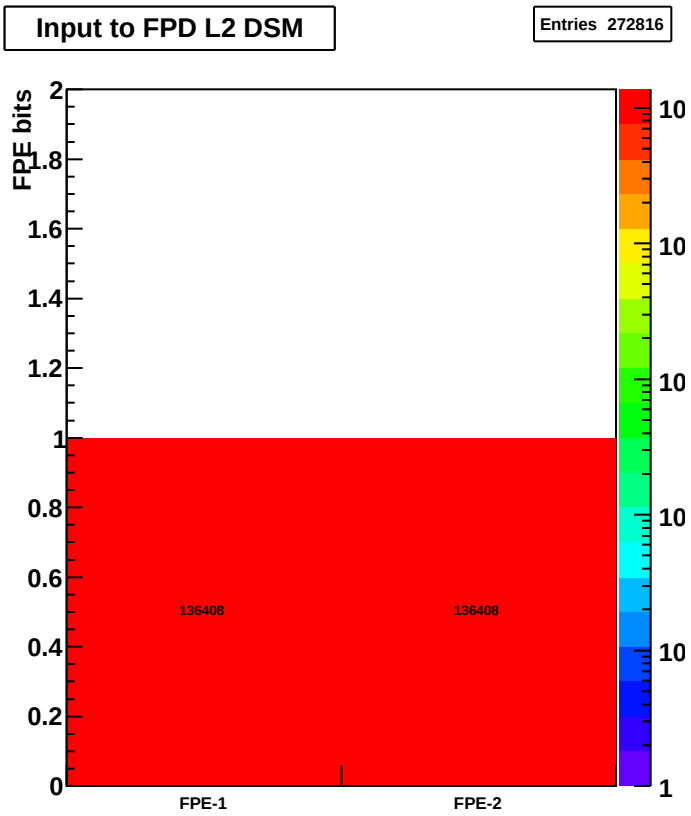

Input to FE002 QT board
Entries4365056
ADC
channel

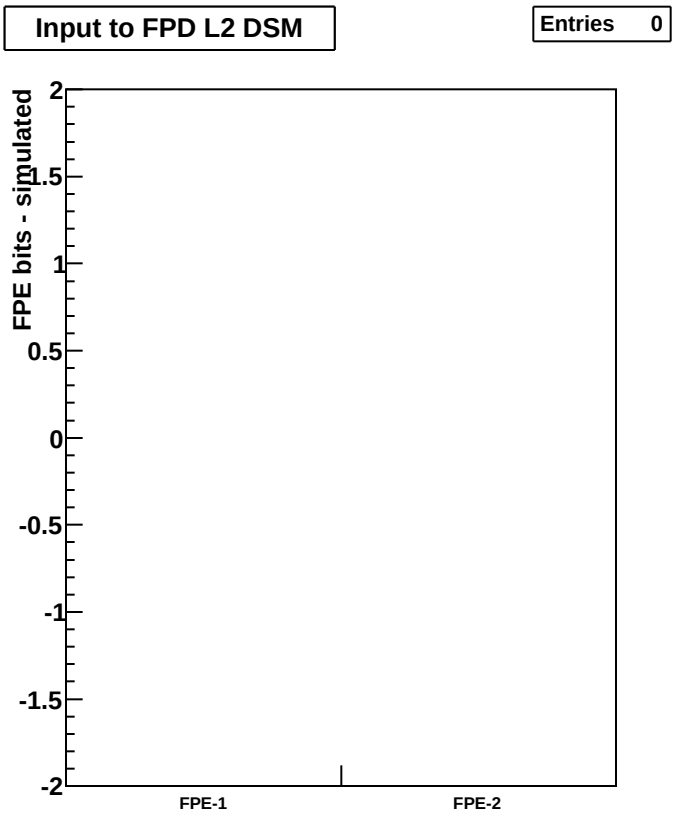

Input to FE003 QT board
Entries4365056
ADC
channel


Input to FE004 QT board
Entries4365056
ADC
channel


Input to FPE L1 DSM
Entries 545632
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
0
-200
-400
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 272816
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
136408
136408
FPE-1
FPE-2
10
10
10
10
10
1


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