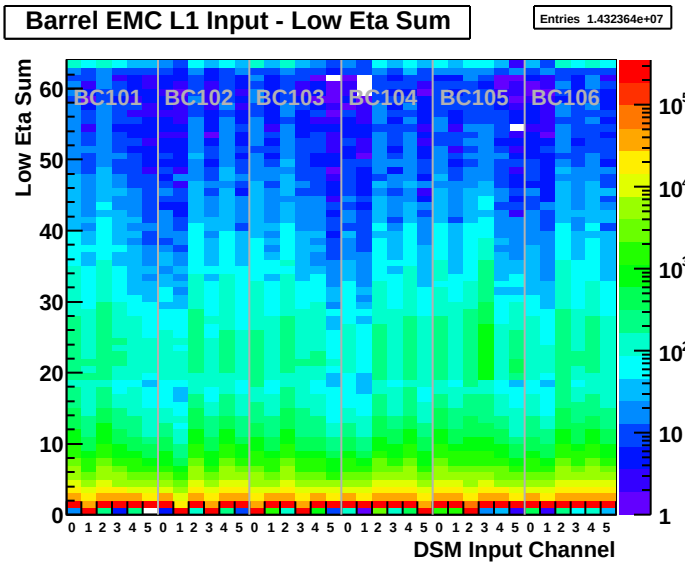
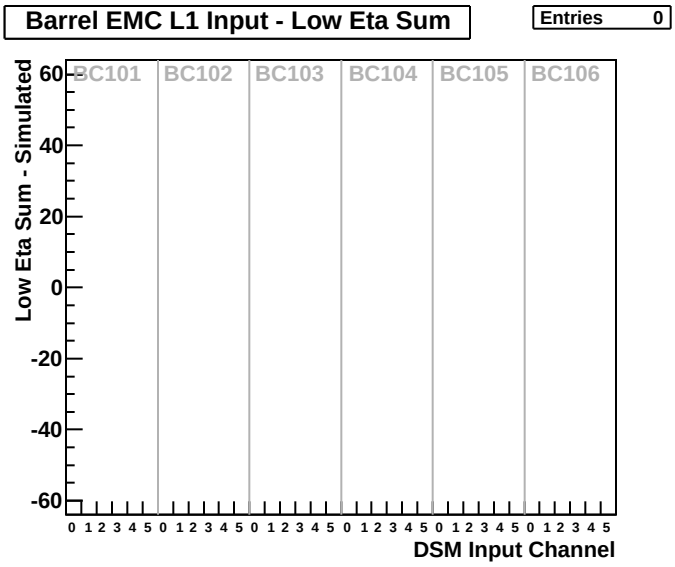
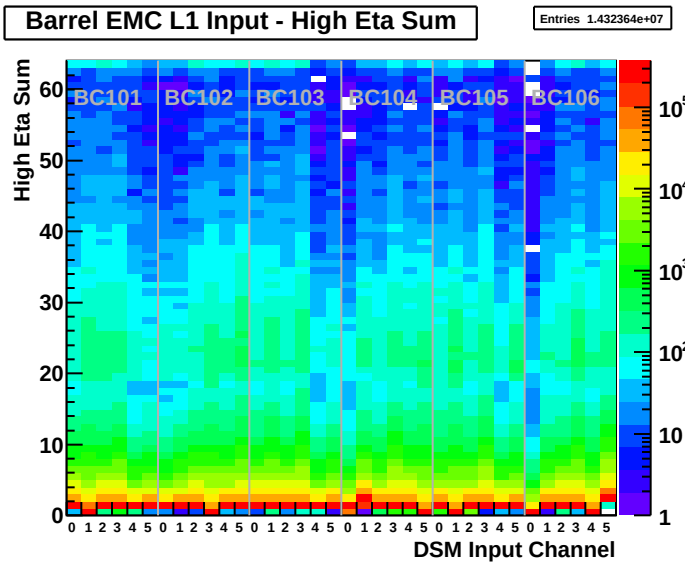
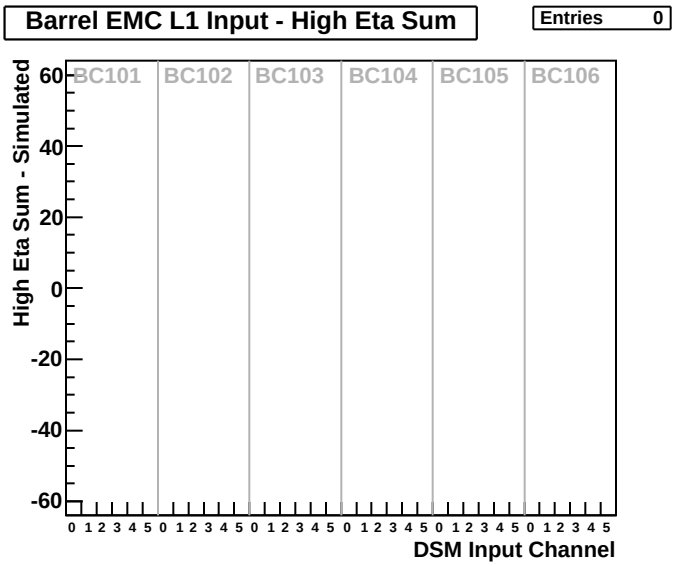
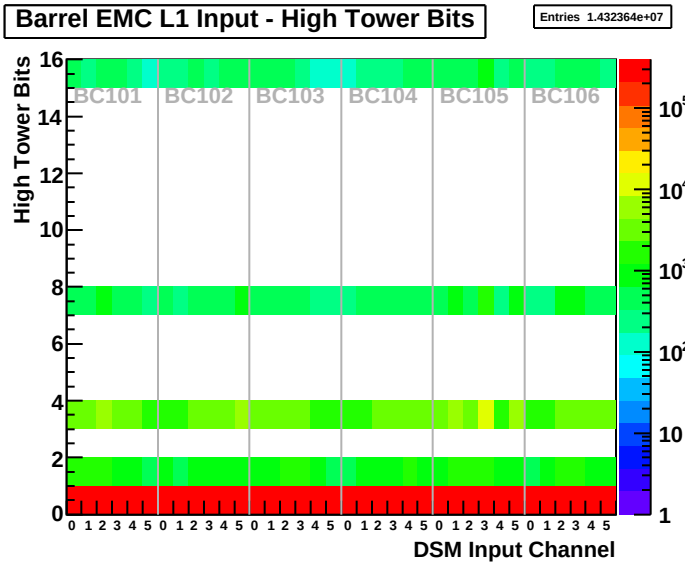
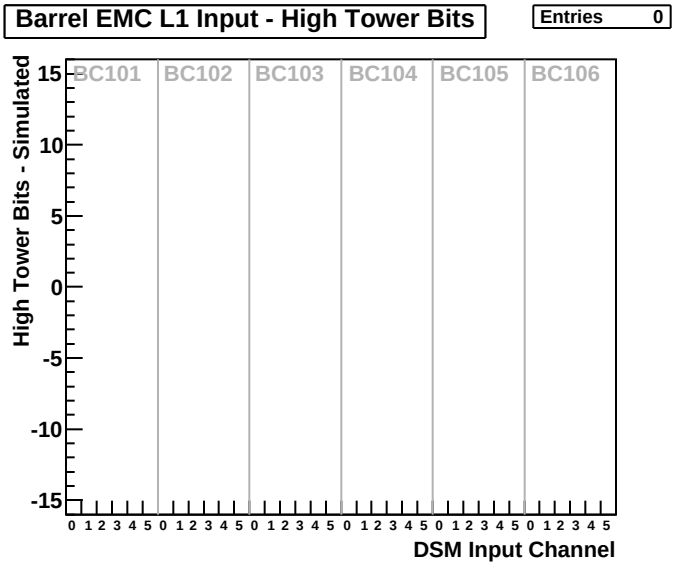

Barrel EMC L1 Input - Low Eta Sum
Entries 1.432364e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

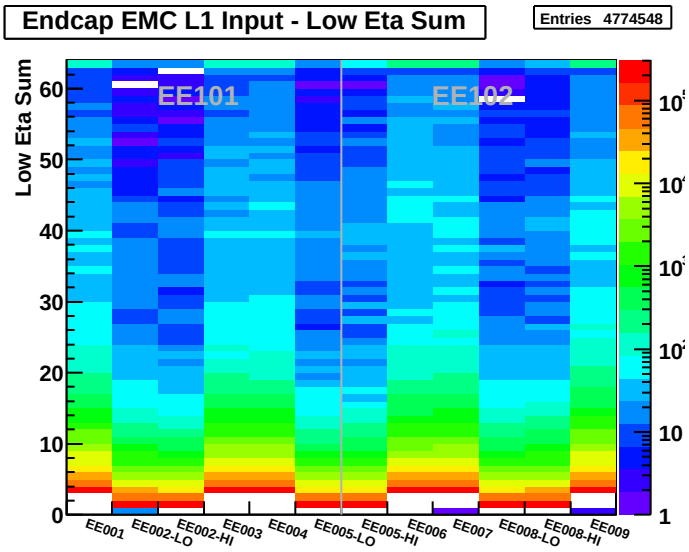

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

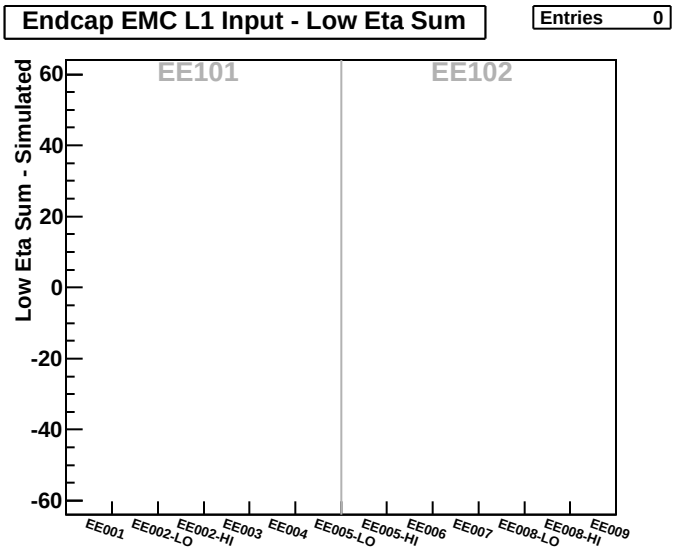

Barrel EMC L1 Input - High Eta Sum
Entries 1.432364e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

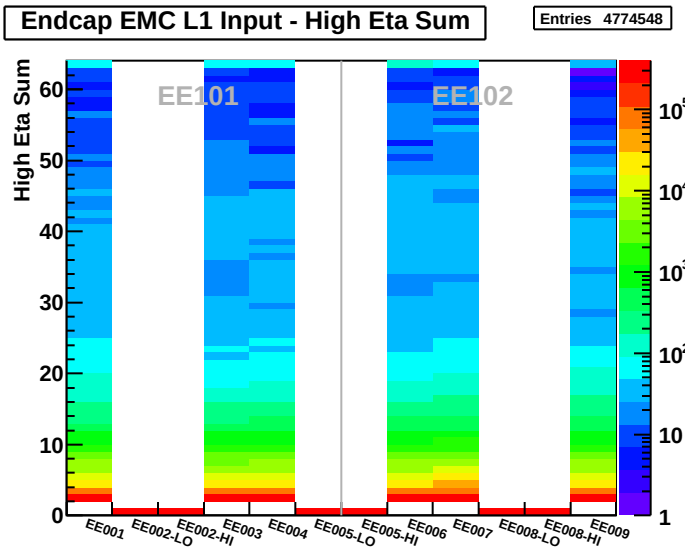

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

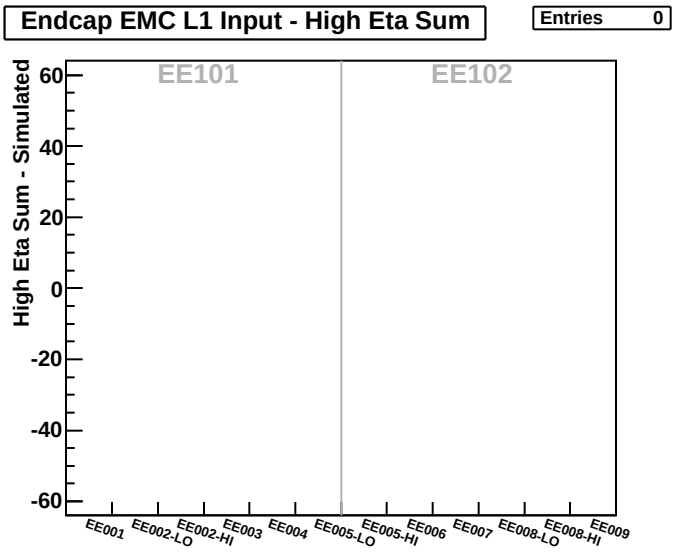

Barrel EMC L1 Input - High Tower Bits
Entries 1.432364e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

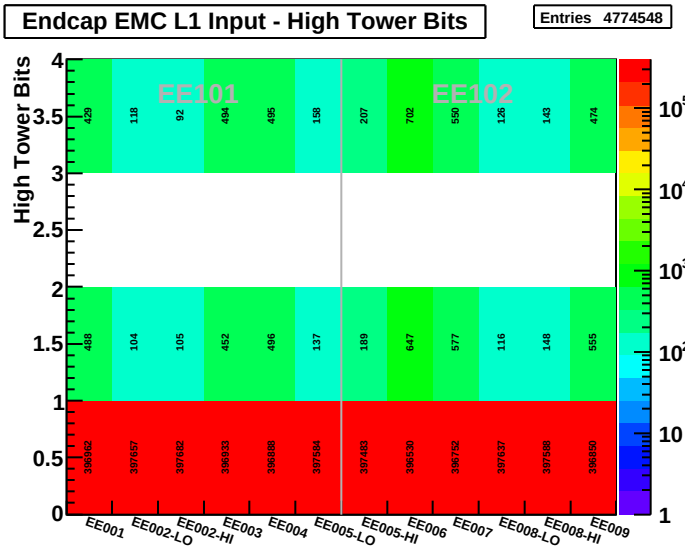

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

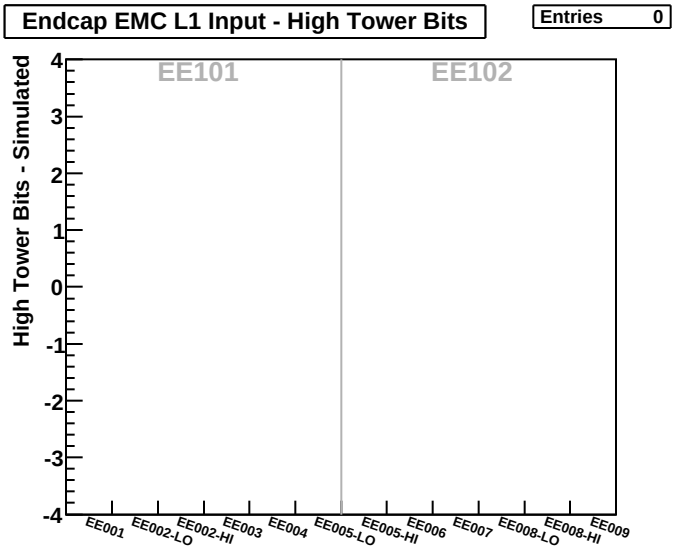

Endcap EMC L1 Input - Low Eta Sum
Entries 4774548
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

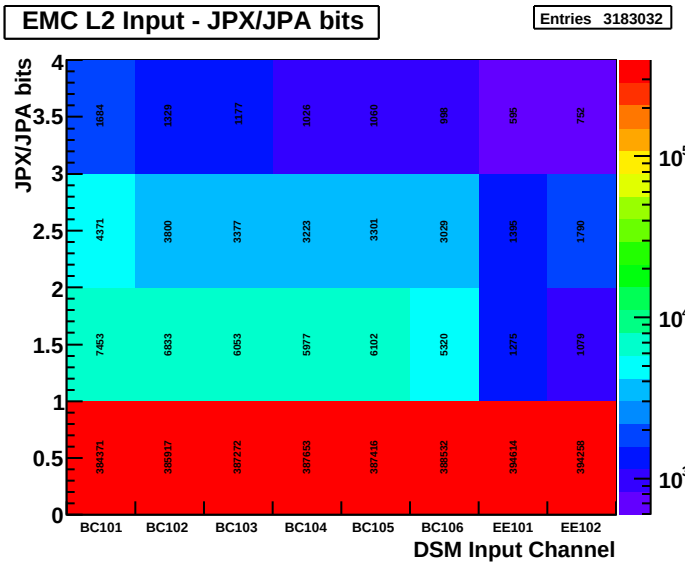

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

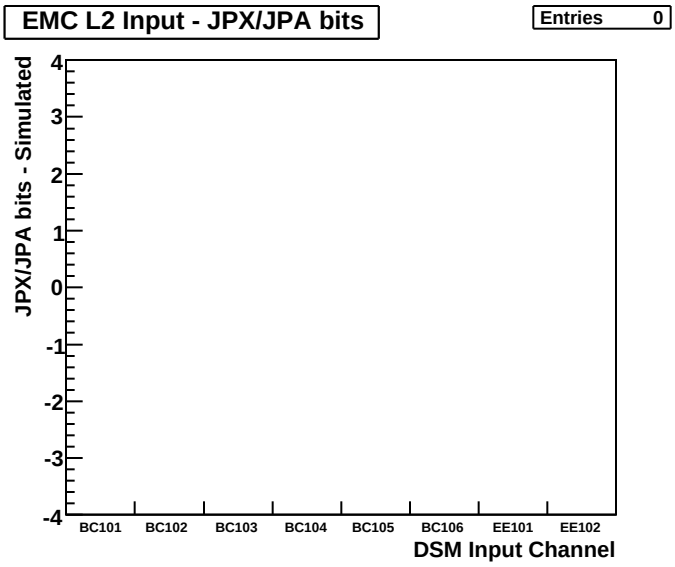

Endcap EMC L1 Input - High Eta Sum
Entries 4774548
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

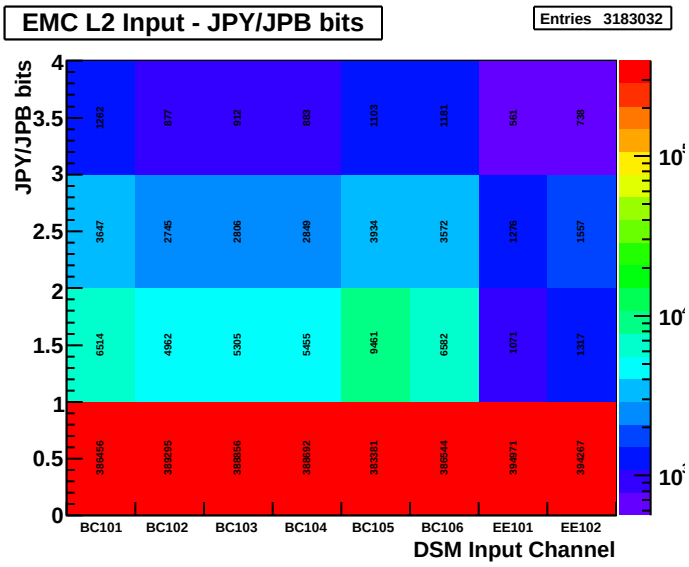

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

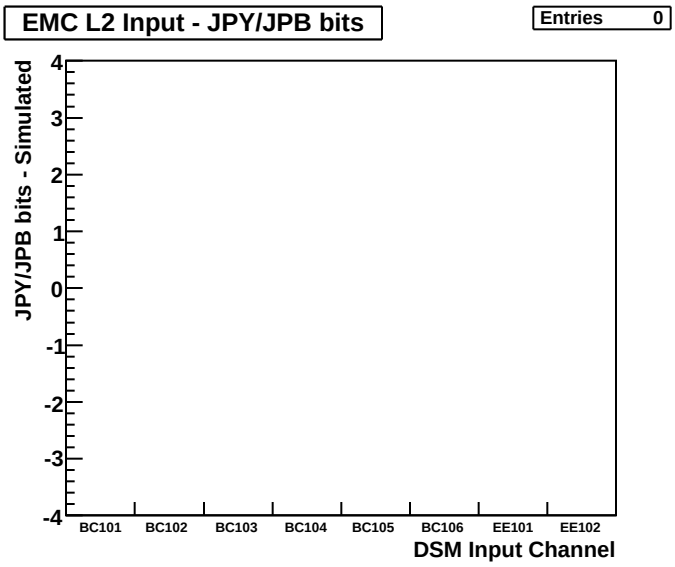

Endcap EMC L1 Input - High Tower Bits
Entries 4774548
High Tower Bits
EE101
EE102
429 118 92 494 495 158 207 702 550 126 143 474
488 104 105 452 496 137 189 647 577 116 148 555
396962 397657 397682 396933 396988 397584 397483 396530 396752 397537 397588 396950
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

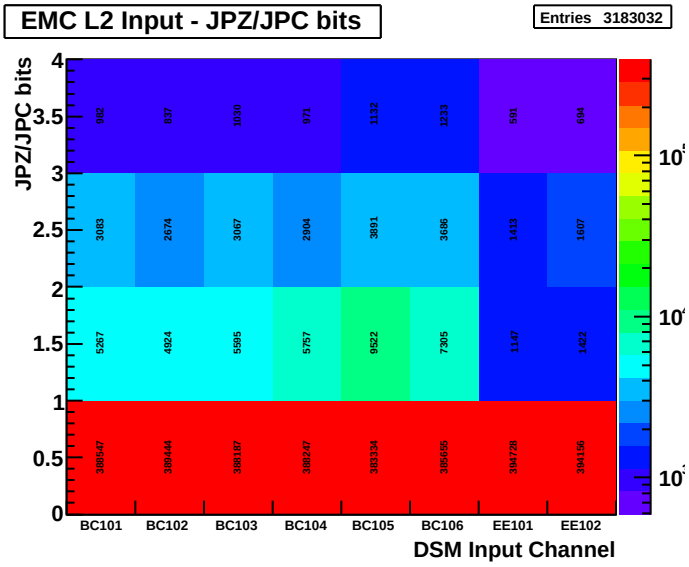

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

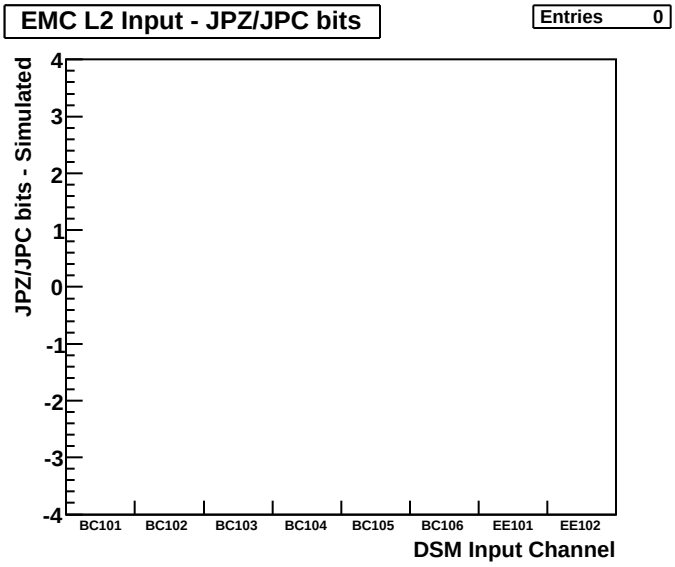

EMC L2 Input - JPX/JPA bits
Entries 3183032
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1684 1329 1177 1026 1060 998 595 752
4371 3800 3377 3223 3301 3029 1395 1790
7453 6833 6053 5977 6102 5320 1275 1079
384371 385917 387272 387653 387416 388532 394634 394258

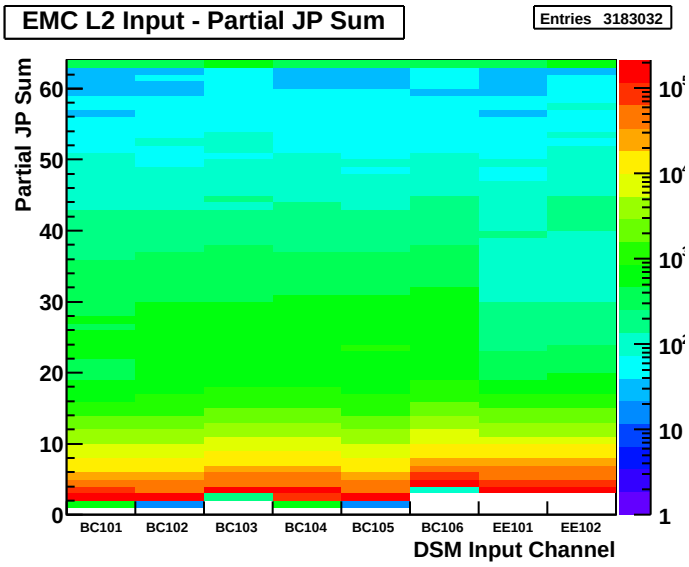

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

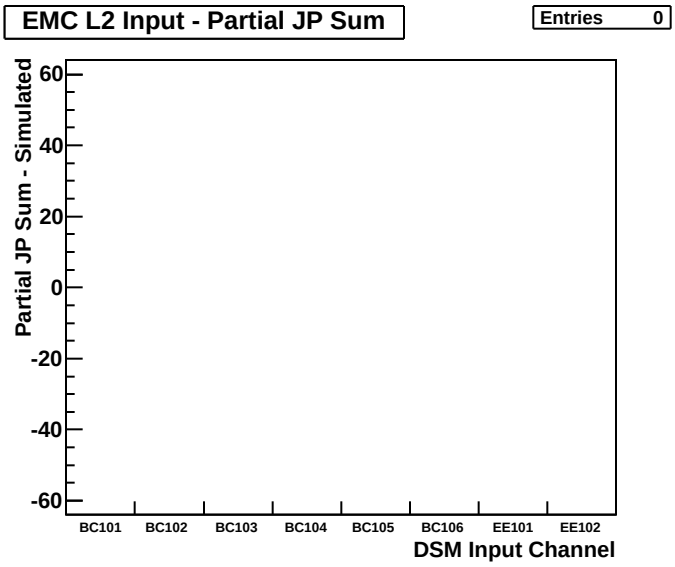

EMC L2 Input - JPY/JPB bits
Entries 3183032
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1262 877 912 888 1103 1181 561 738
3647 2745 2806 2840 3934 3572 1276 1557
6514 4962 5305 5455 9461 6982 1071 1317
386456 388295 388856 388892 383381 386544 394071 394267

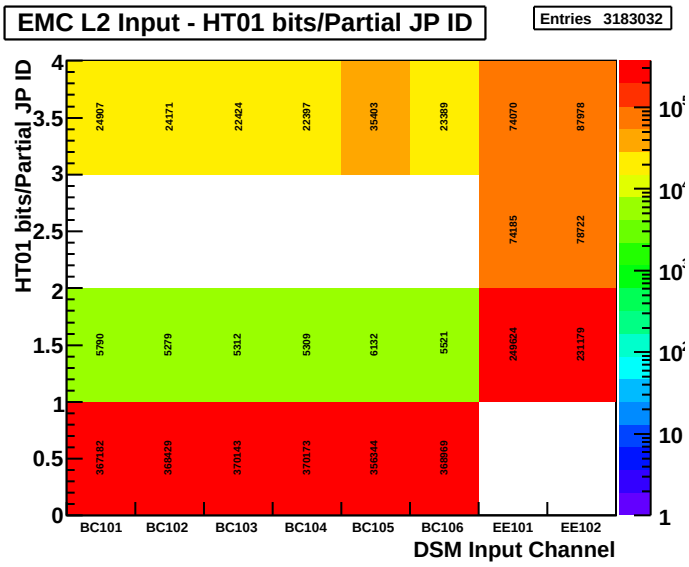

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

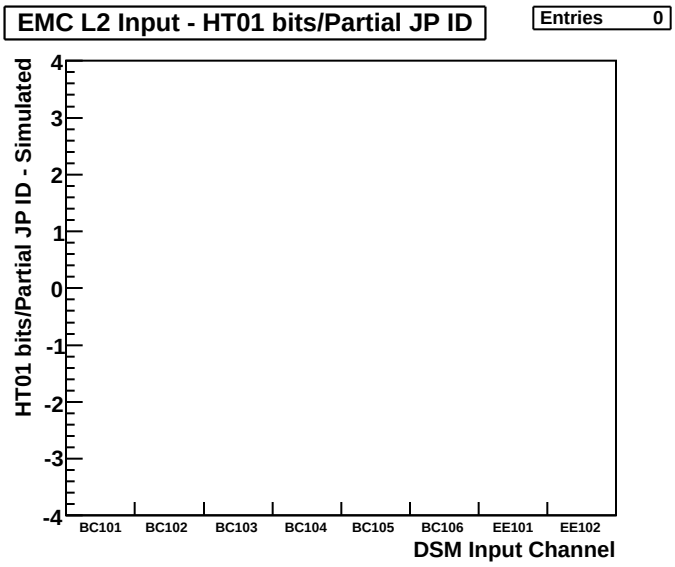

EMC L2 Input - JPZ/JPC bits
Entries 3183032
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
982 837 1020 971 1132 1233 591 694
3083 2674 3067 2904 3891 3686 1413 1607
5267 4924 5595 5757 9522 7305 1147 1422
388547 389444 388187 388247 383334 385655 394728 394156

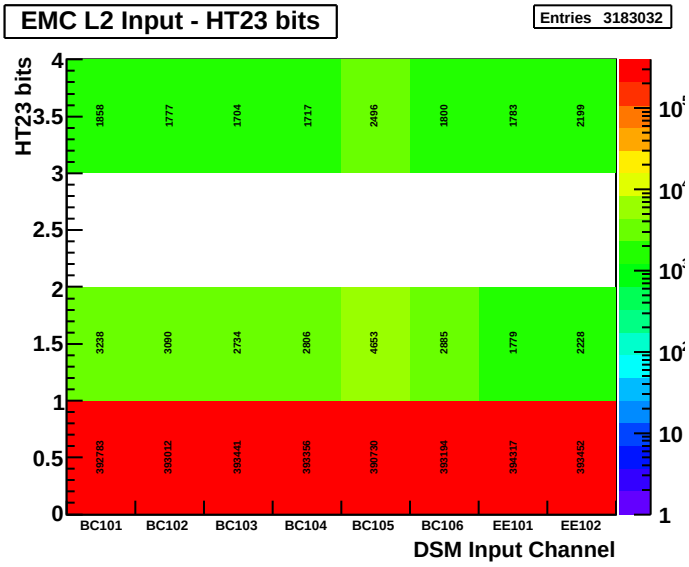

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

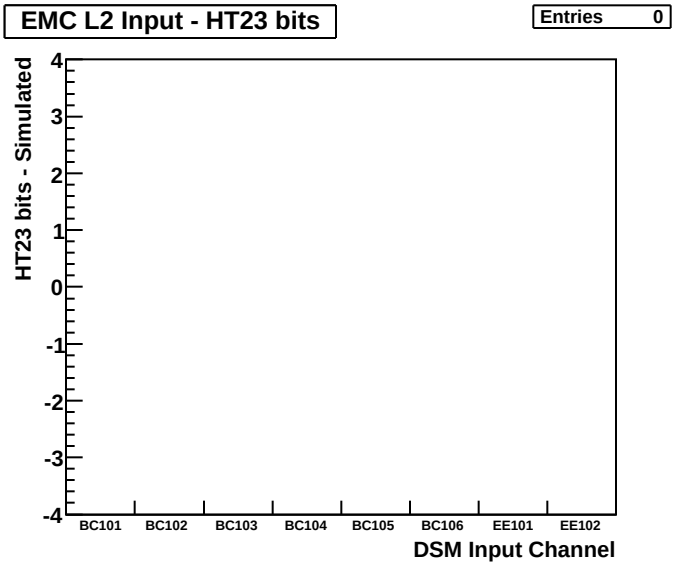

EMC L2 Input - Partial JP Sum
Entries 3183032
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

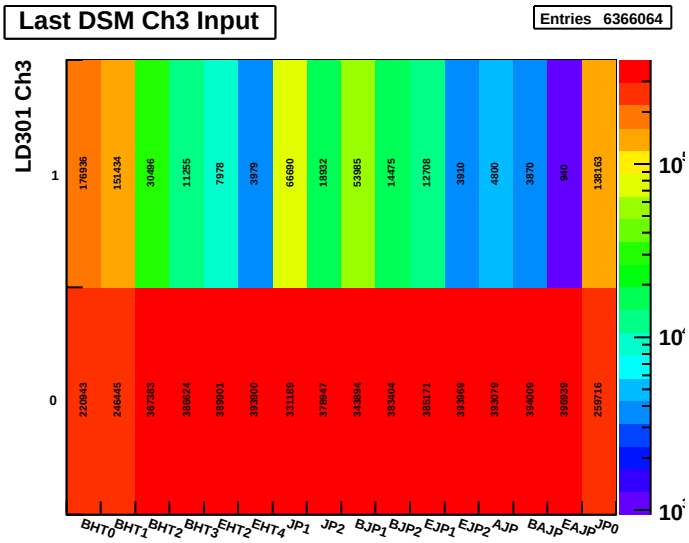

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

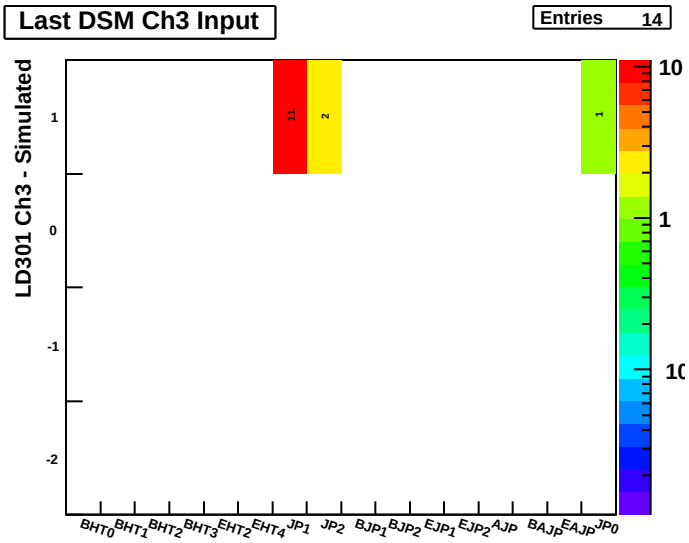

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3183032
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

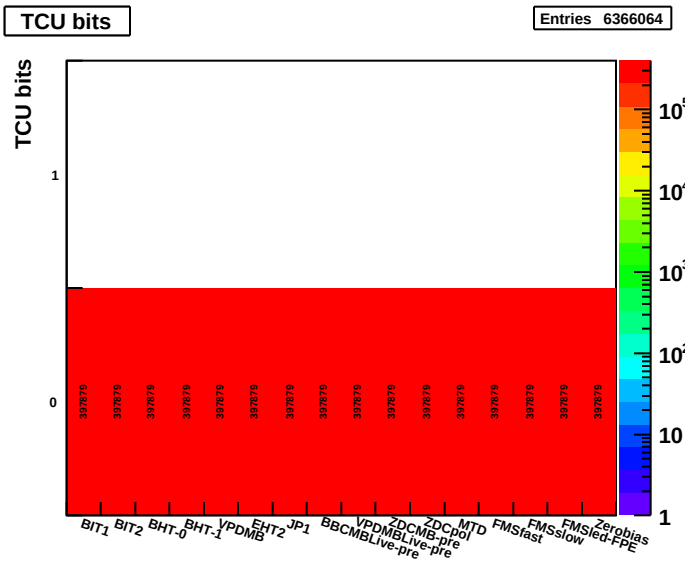

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

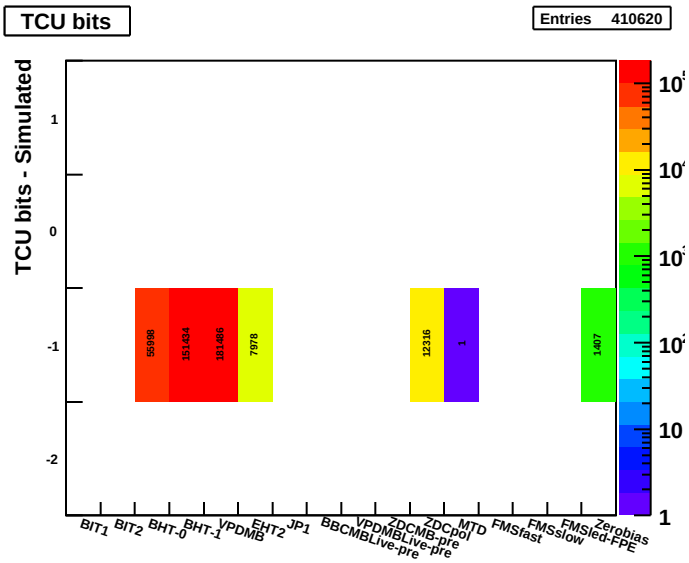

EMC L2 Input - HT23 bits
Entries 3183032
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

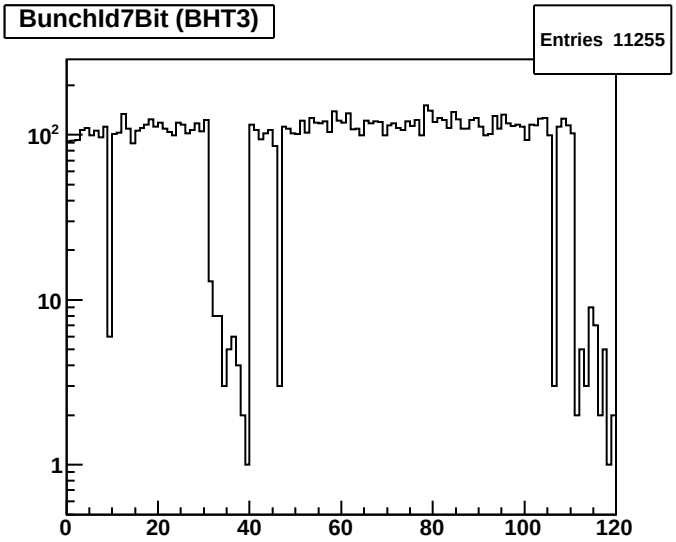

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

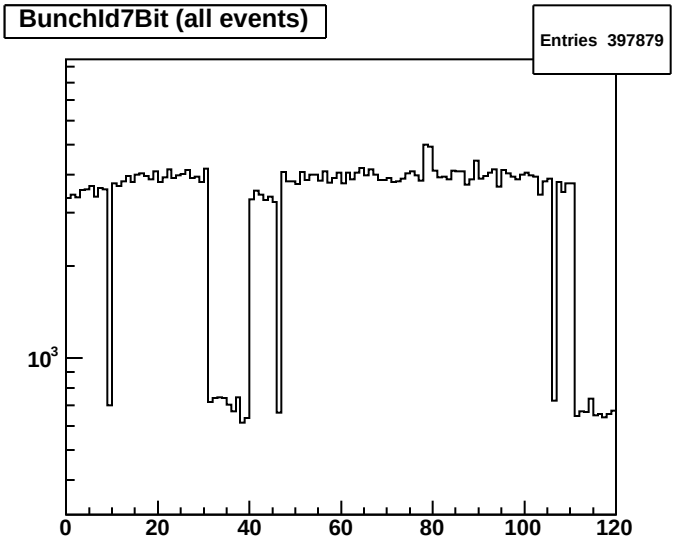

Last DSM Ch3 Input
Entries 6366064
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

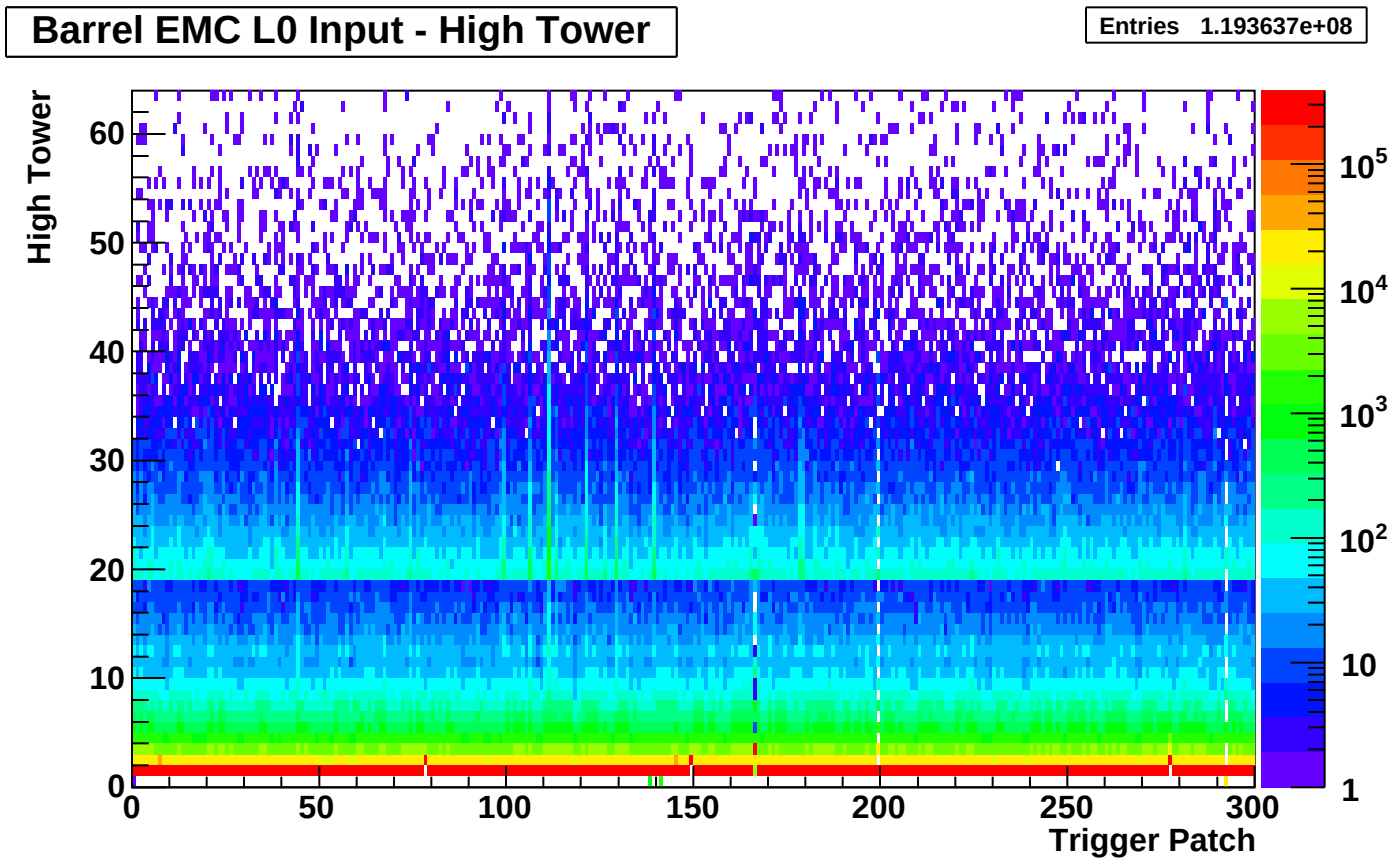

Last DSM Ch3 Input
Entries 14
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

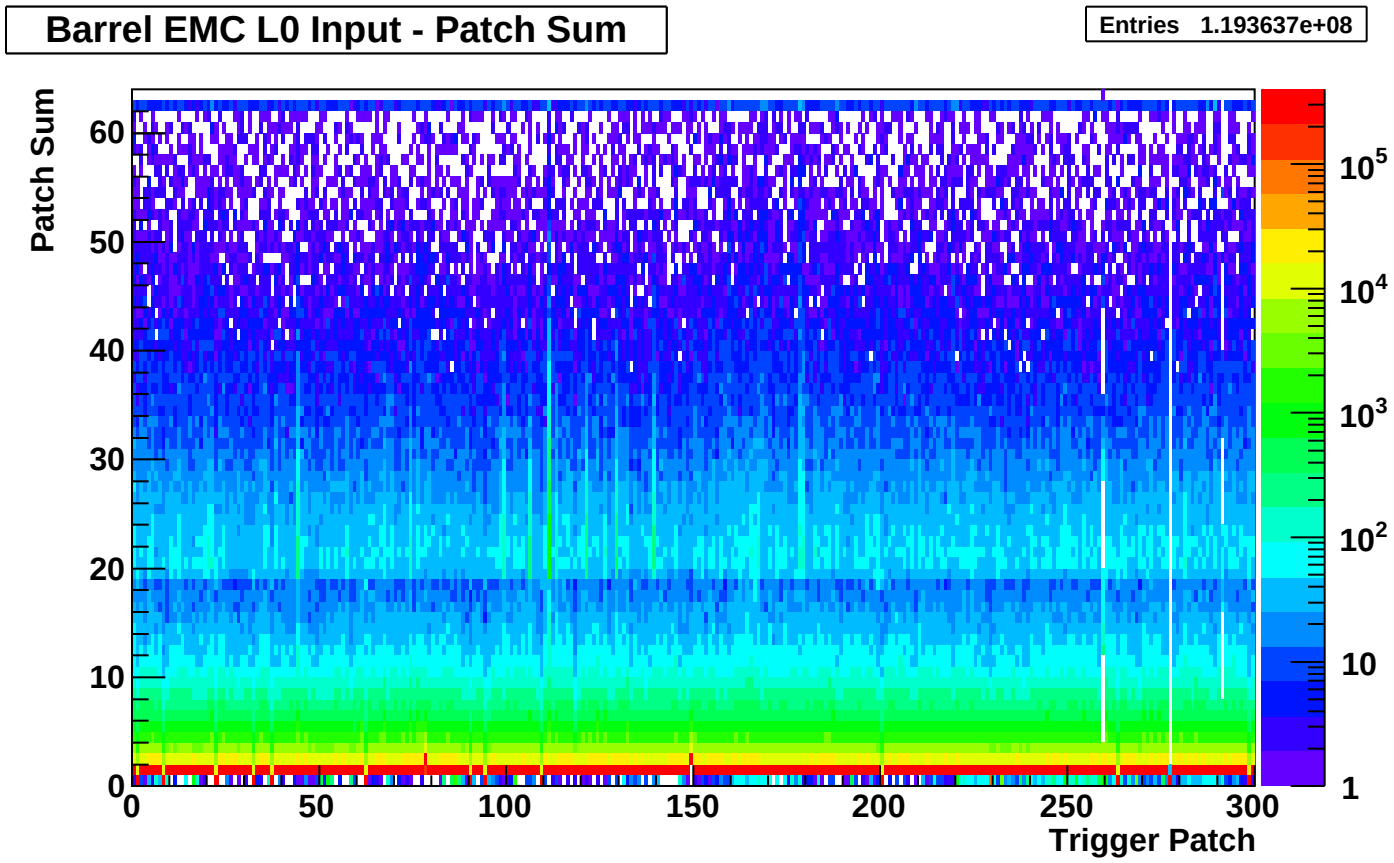

TCU bits
Entries 6366064
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

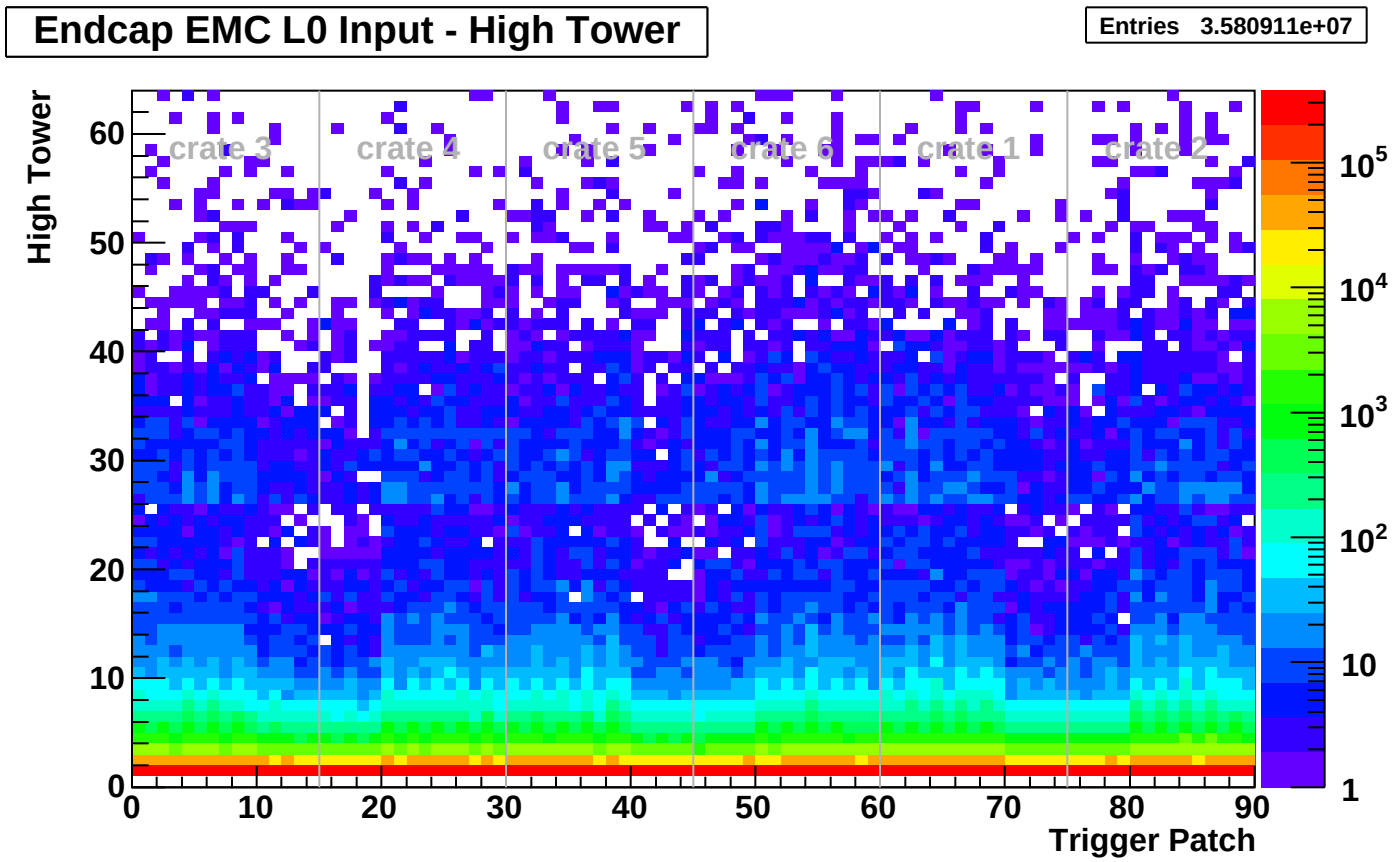

TCU bits
Entries 410620
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

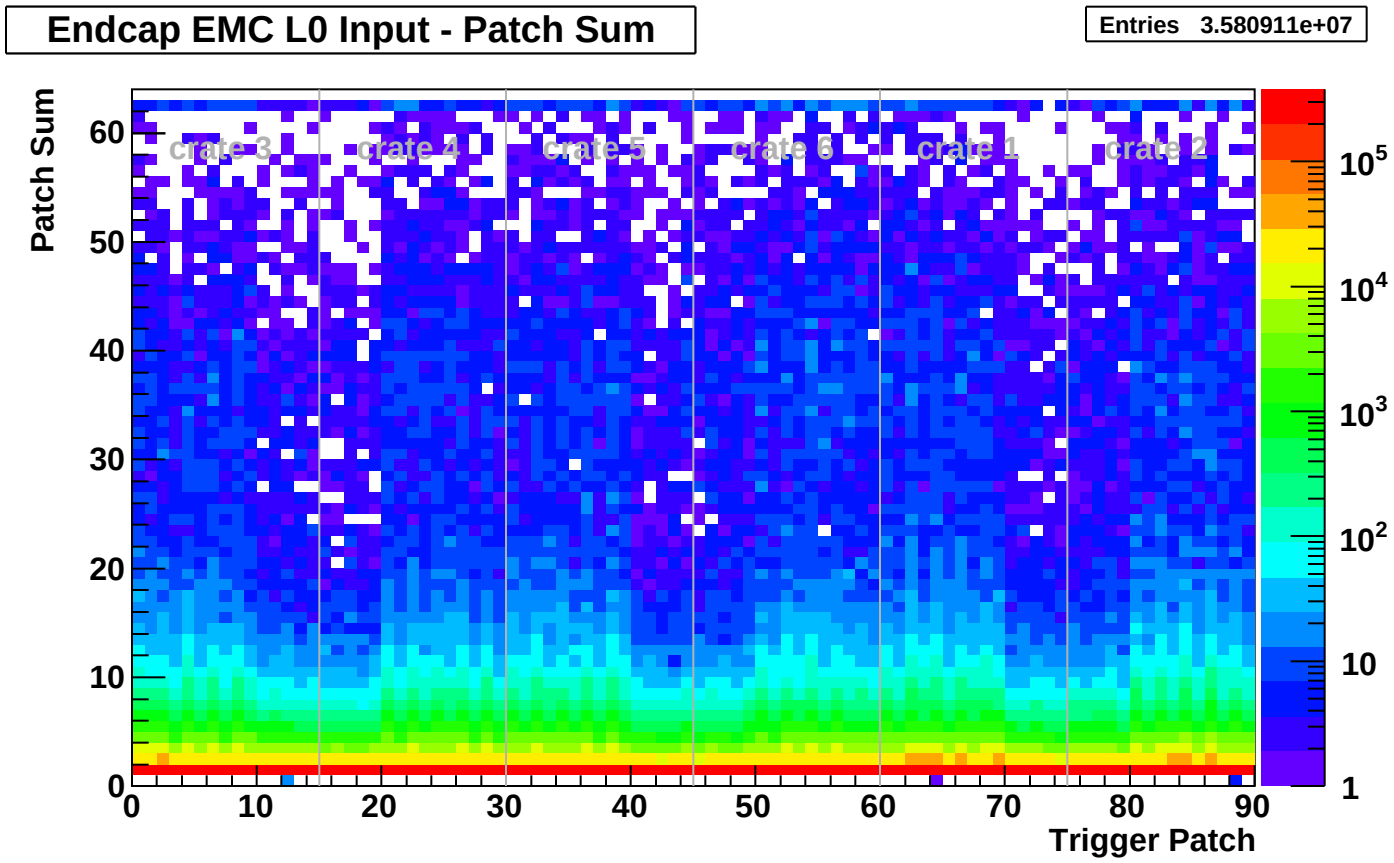

BunchId7Bit (BHT3)
Entries 11255

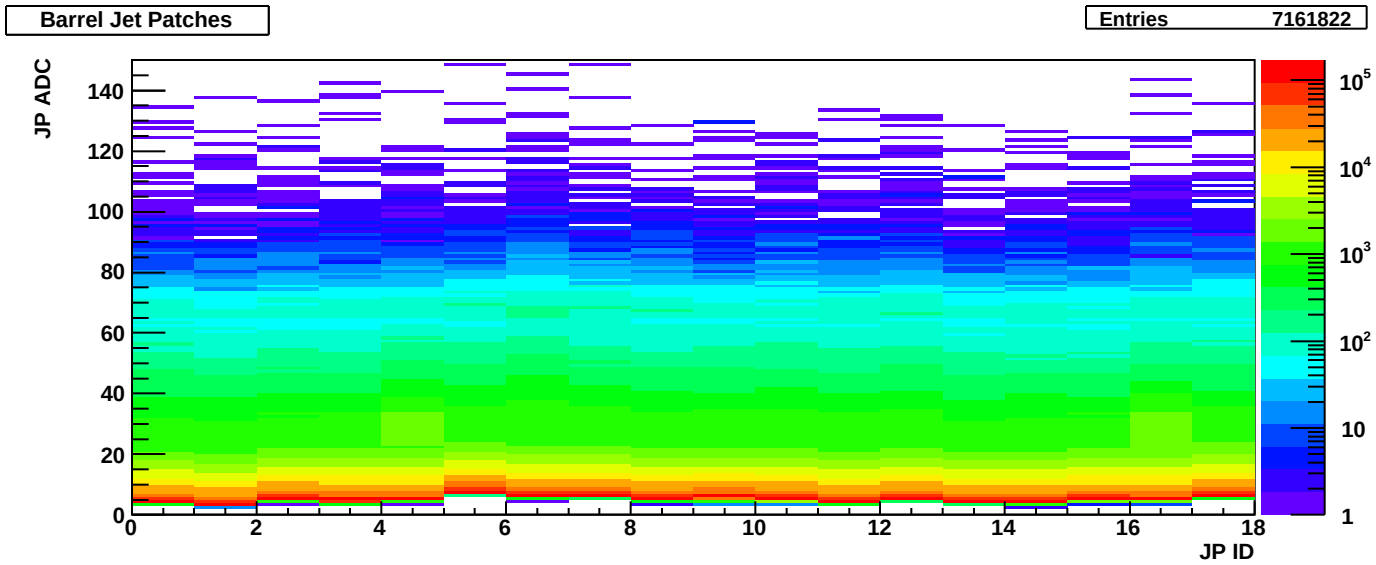

BunchId7Bit (all events)
Entries 397879

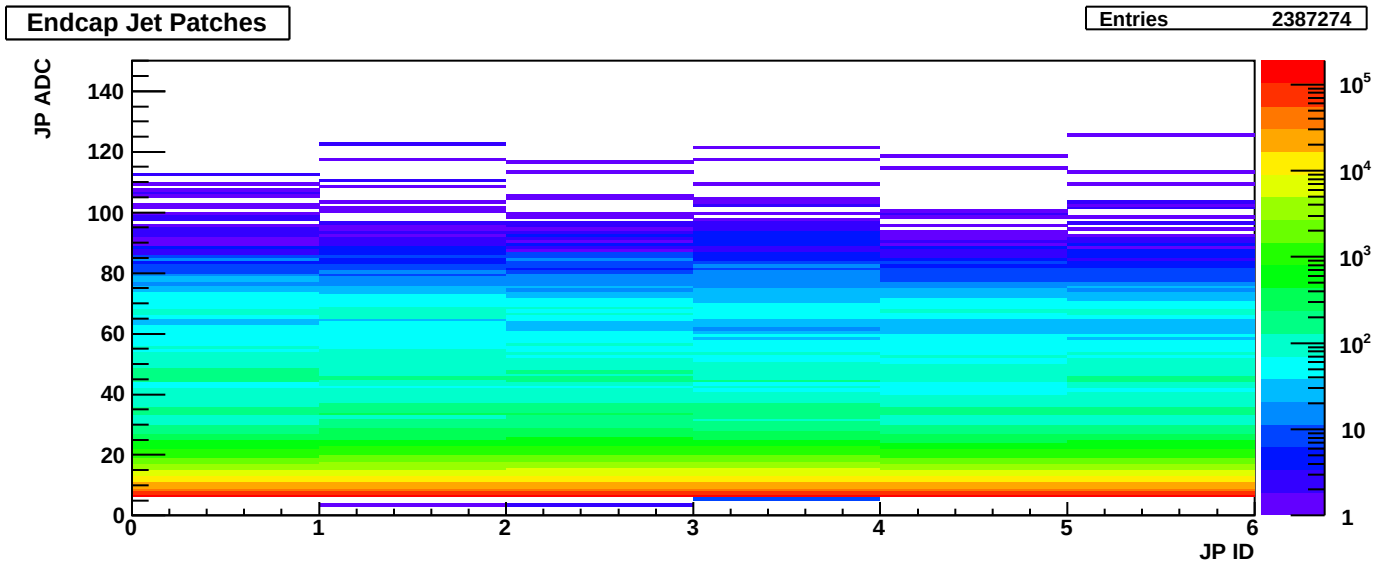

Barrel EMC L0 Input - High Tower
Entries 1.193637e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

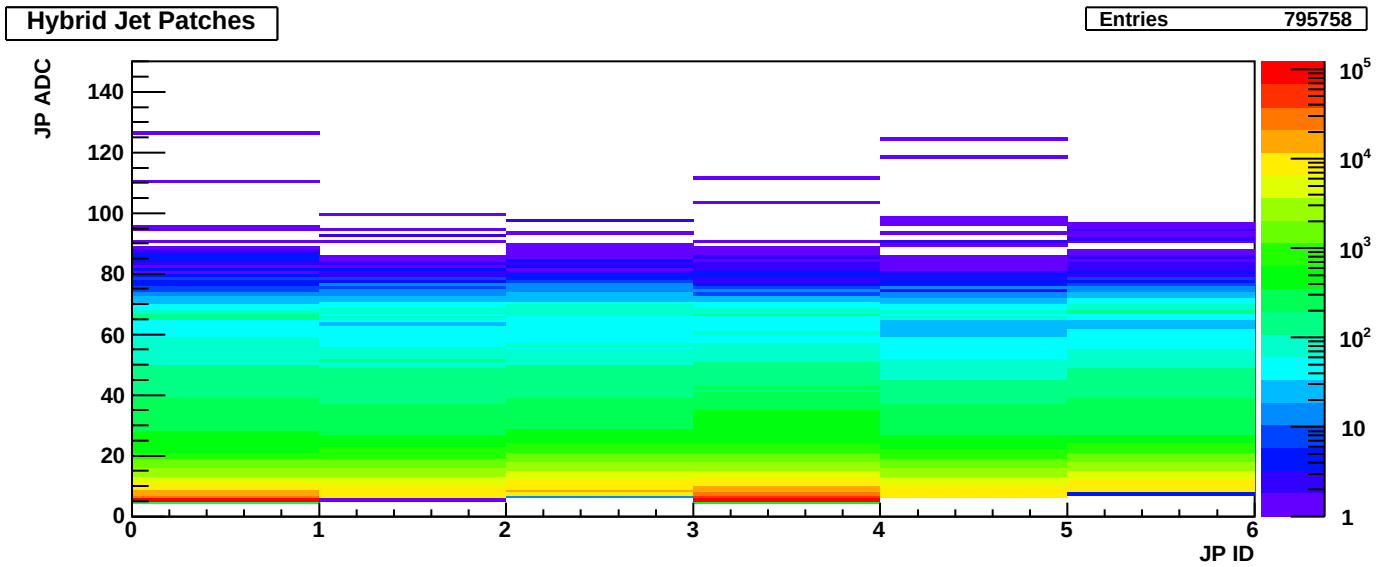

Barrel EMC L0 Input - Patch Sum
Entries 1.193637e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

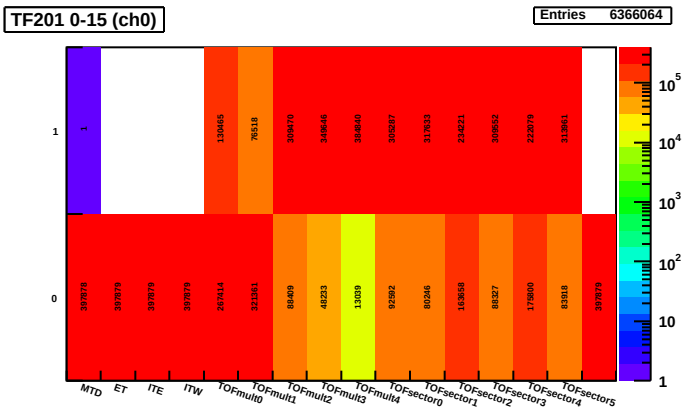

Endcap EMC L0 Input - High Tower
Entries 3.580911e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

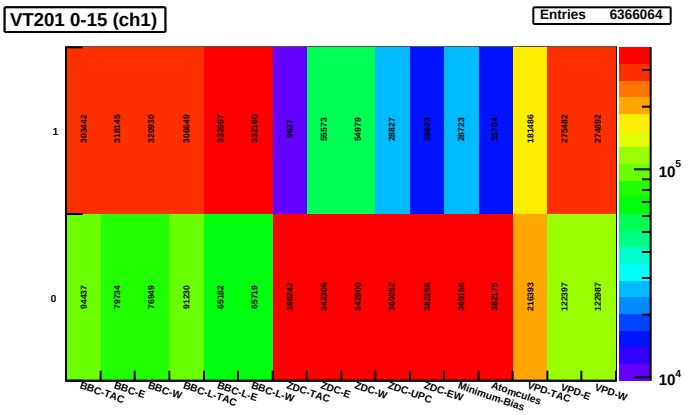

Endcap EMC L0 Input - Patch Sum
Entries 3.580911e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

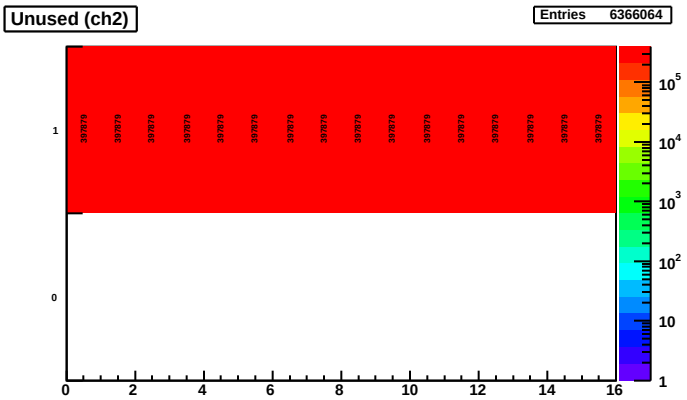

Barrel Jet Patches
Entries 7161822
JP ADC
JP ID

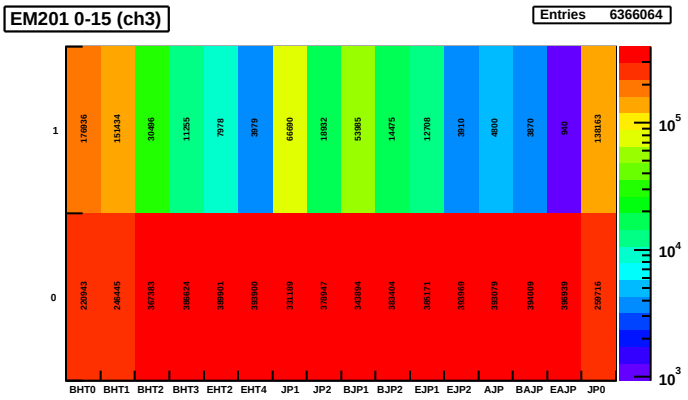

Endcap Jet Patches
Entries 2387274
JP ADC
JP ID

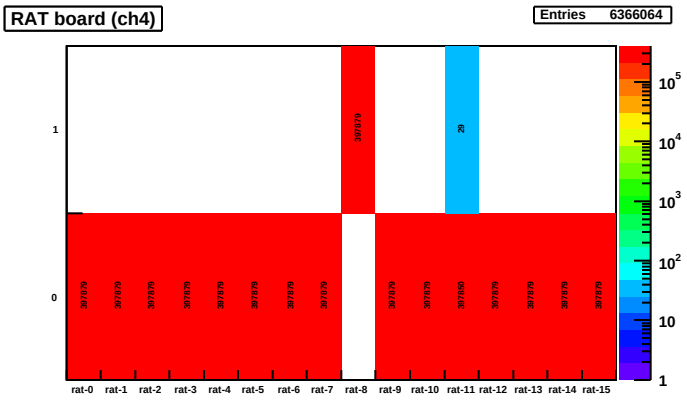

Hybrid Jet Patches
Entries 795758
JP ADC
JP ID

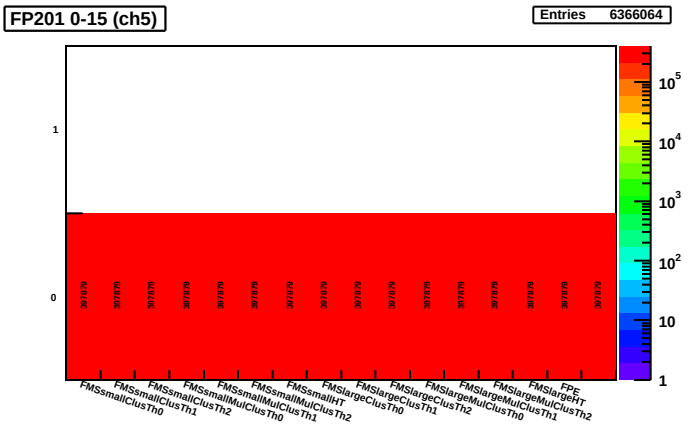

TF201 0-15 (ch0)
Entries 6366064
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

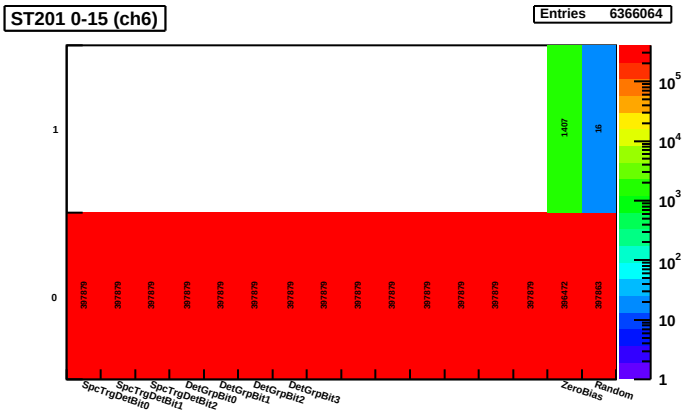

VT201 0-15 (ch1)
Entries 6366064
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

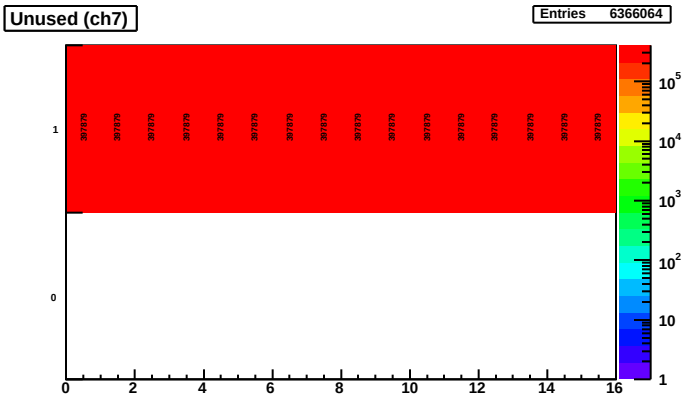

Unused (ch2)
Entries 6366064

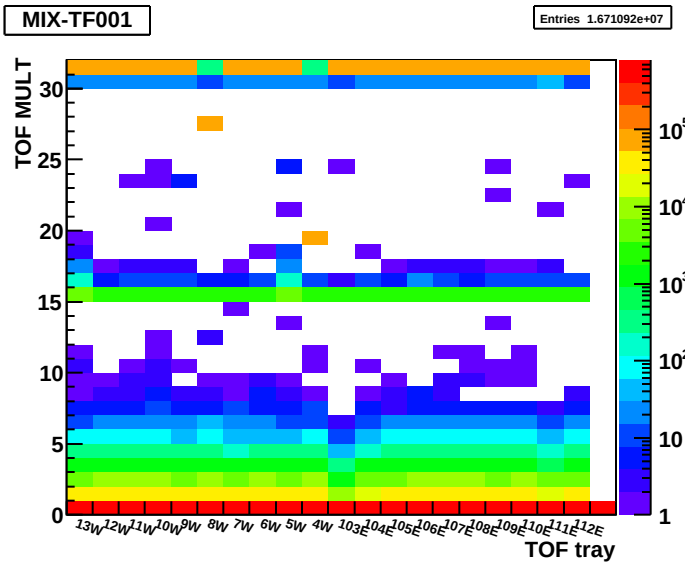

EM201 0-15 (ch3)
Entries 6366064
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

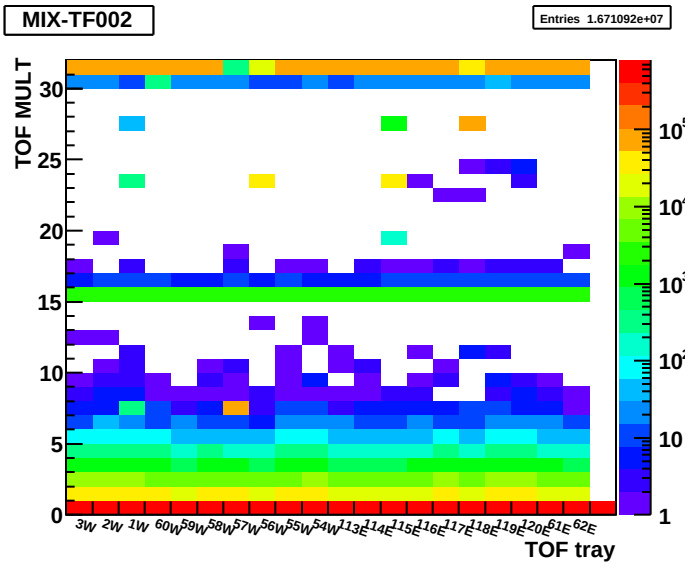

RAT board (ch4)
Entries 6366064
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

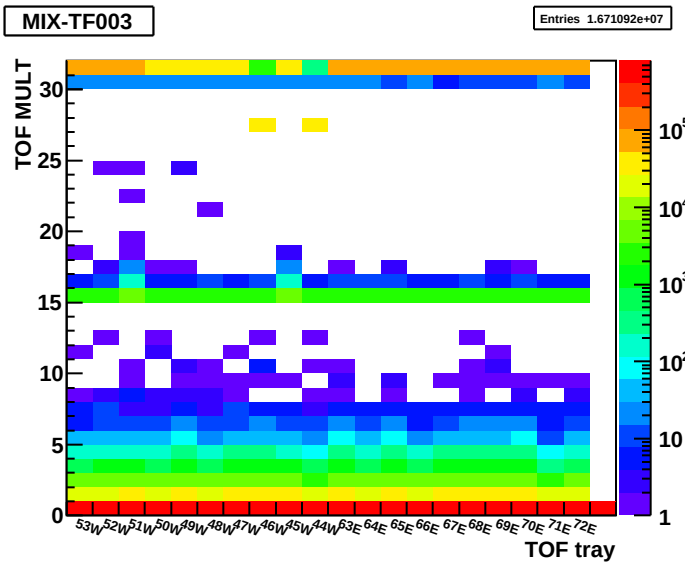

FP201 0-15 (ch5)
Entries 6366064
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

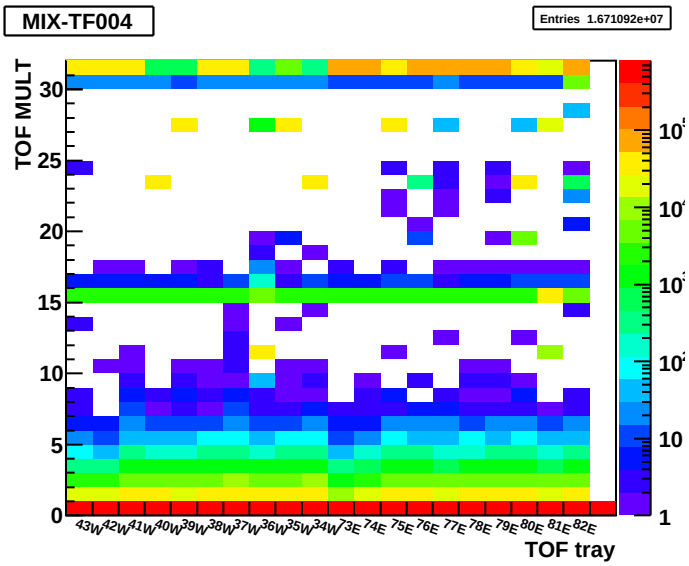

ST201 0-15 (ch6)
Entries 6366064
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

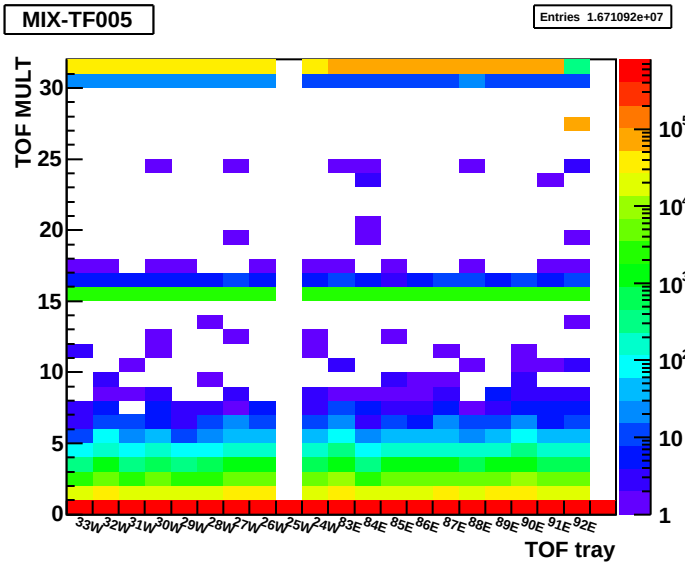

Unused (ch7)
Entries 6366064

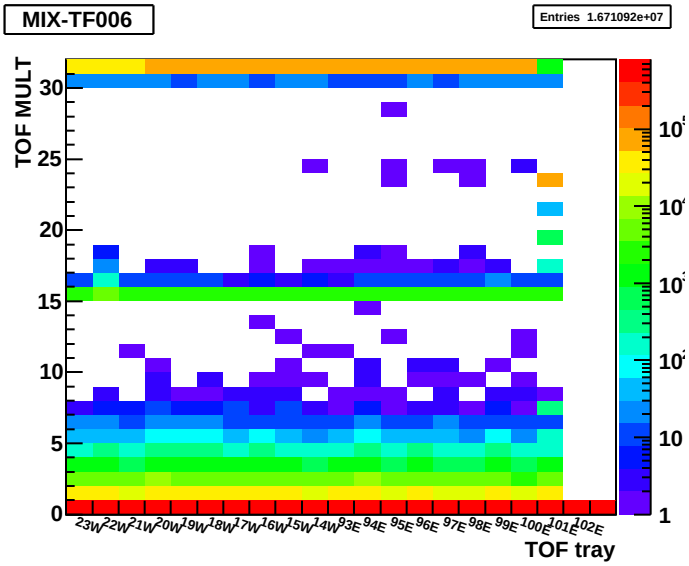

MIX-TF001
Entries 1.671092e+07
TOF MULT
TOF tray

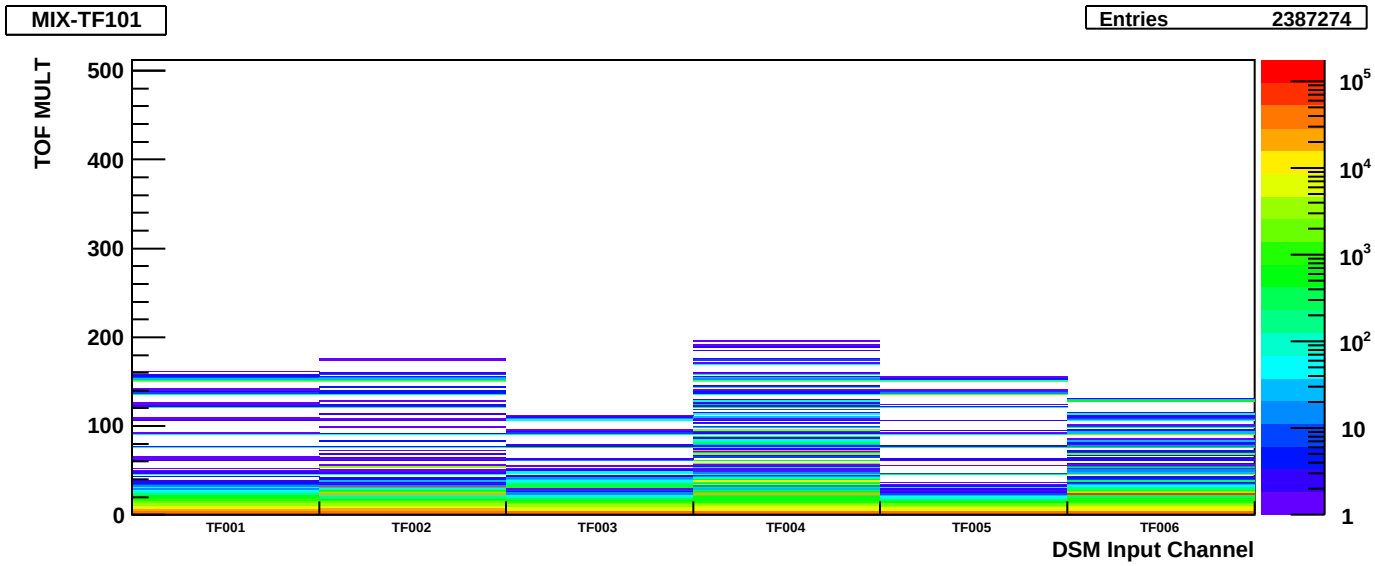

MIX-TF002
Entries 1.671092e+07
TOF MULT
TOF tray

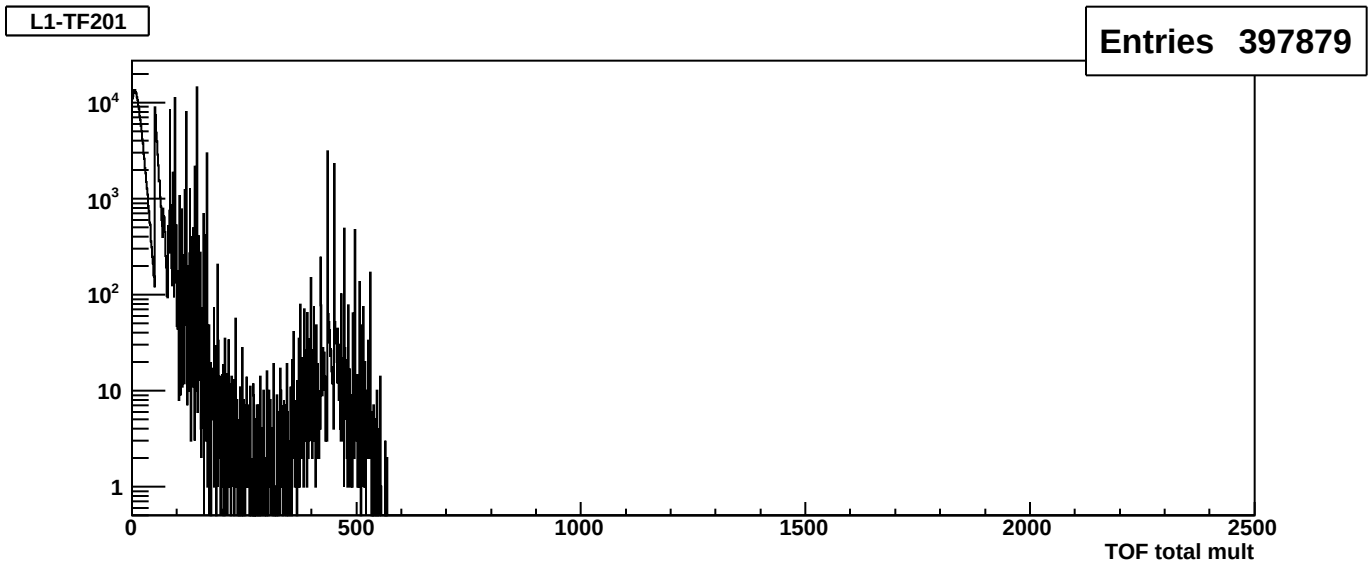

MIX-TF003
Entries 1.671092e+07
TOF MULT
TOF tray

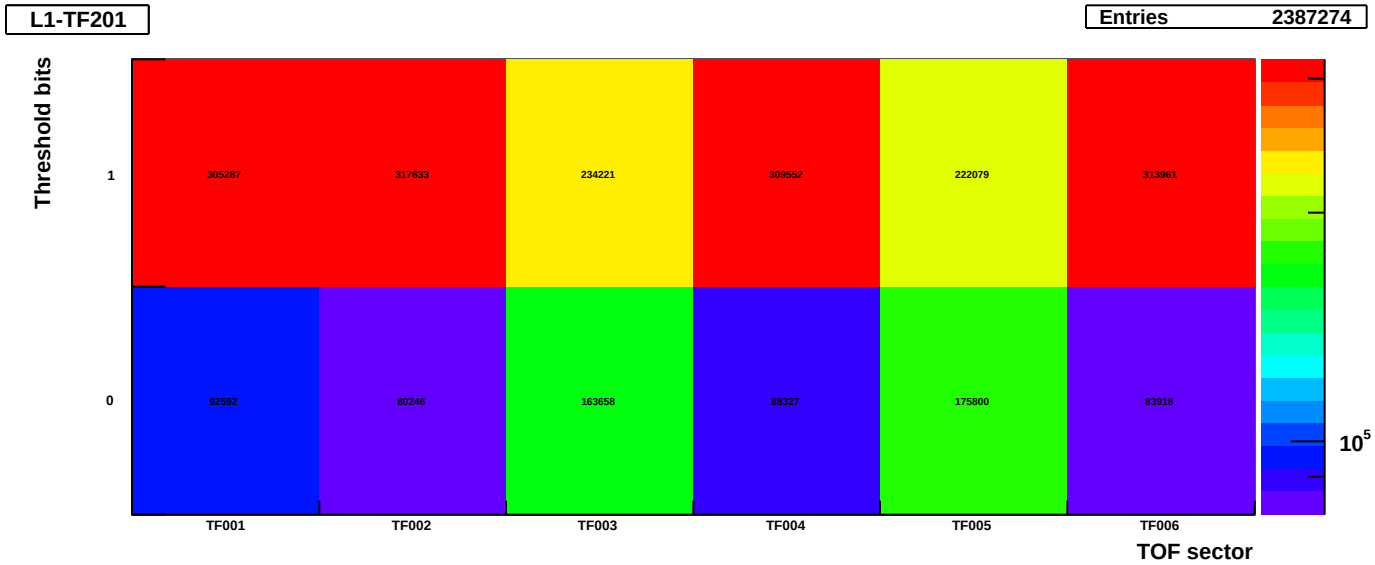

MIX-TF004
Entries 1.671092e+07
TOF MULT
TOF tray

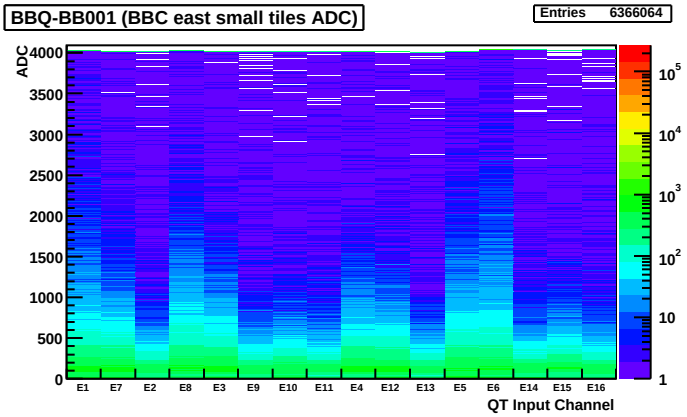

MIX-TF005
Entries 1.671092e+07
TOF MULT
TOF tray

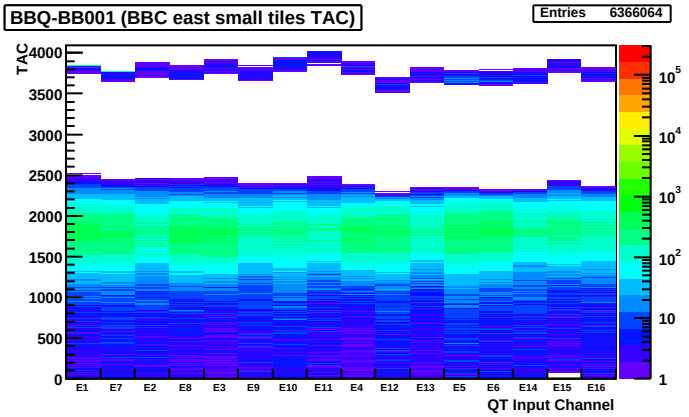

MIX-TF006
Entries 1.671092e+07
TOF MULT
TOF tray

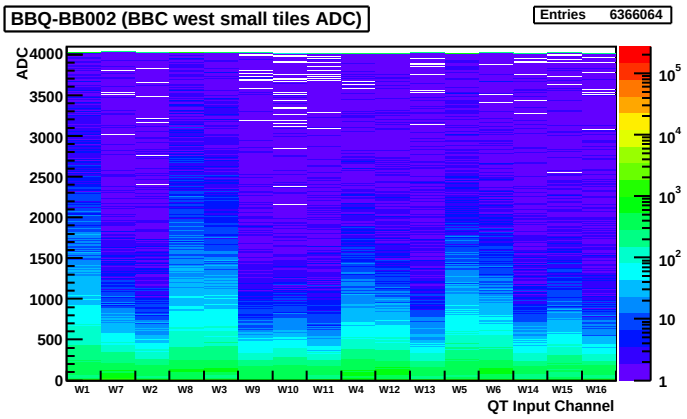

MIX-TF101
Entries 2387274
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

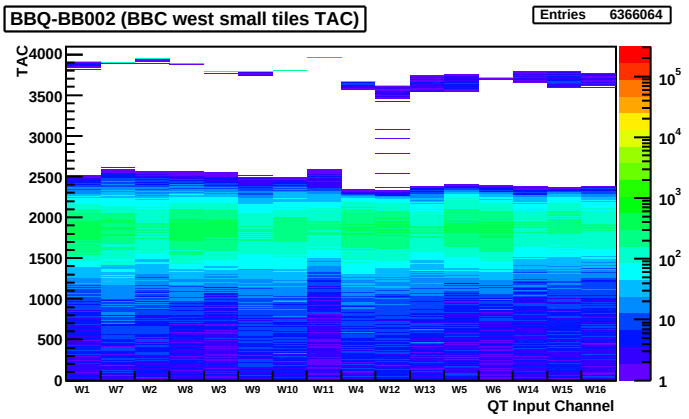

L1-TF201
Entries 397879
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

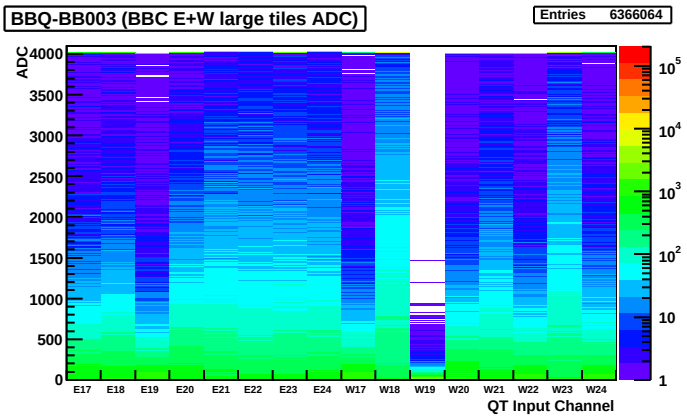

L1-TF201
Entries 2387274
Threshold bits
1
0
305287
317633
234221
309552
222079
313961
92592
80246
163658
88327
175800
83918
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

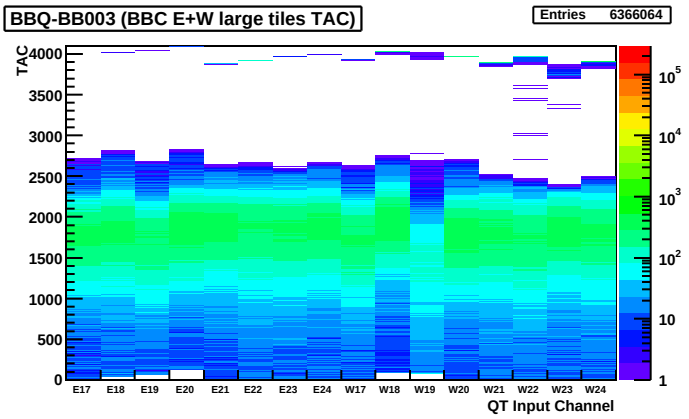

BBQ-BB001 (BBC east small tiles ADC)
Entries 6366064
ADC
QT Input Channel

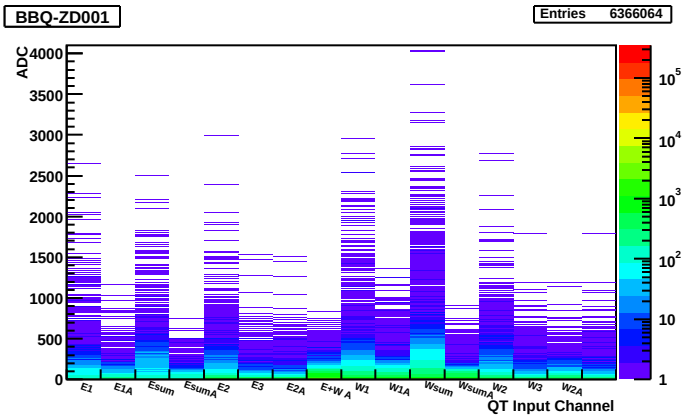

BBQ-BB001 (BBC east small tiles TAC)
Entries 6366064
TAC
QT Input Channel

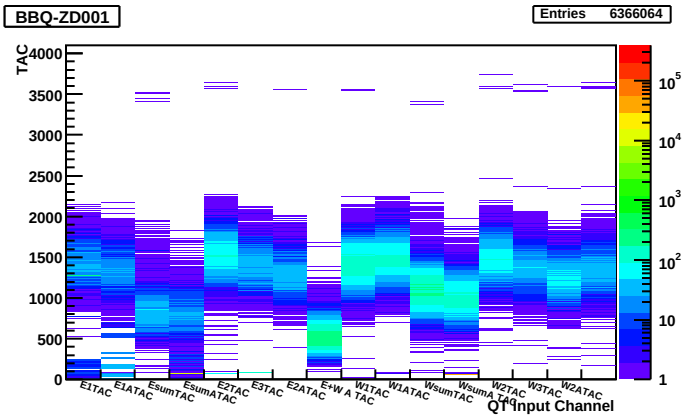

BBQ-BB002 (BBC west small tiles ADC)
Entries 6366064
ADC
QT Input Channel

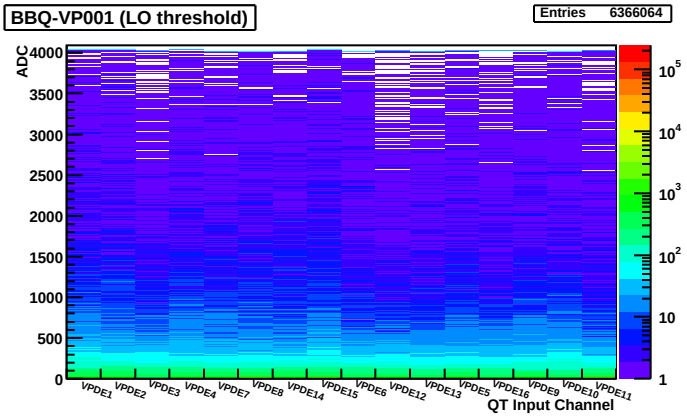

BBQ-BB002 (BBC west small tiles TAC)
Entries 6366064
TAC
QT Input Channel

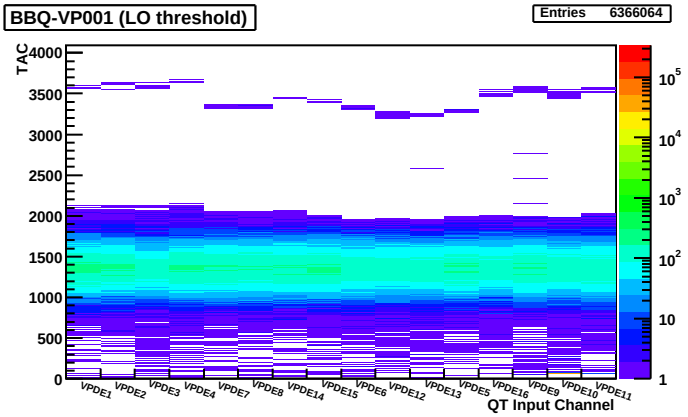

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6366064
ADC
QT Input Channel

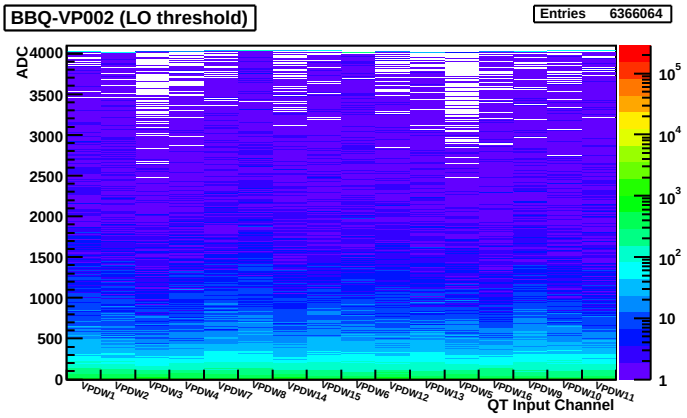

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6366064
TAC
QT Input Channel

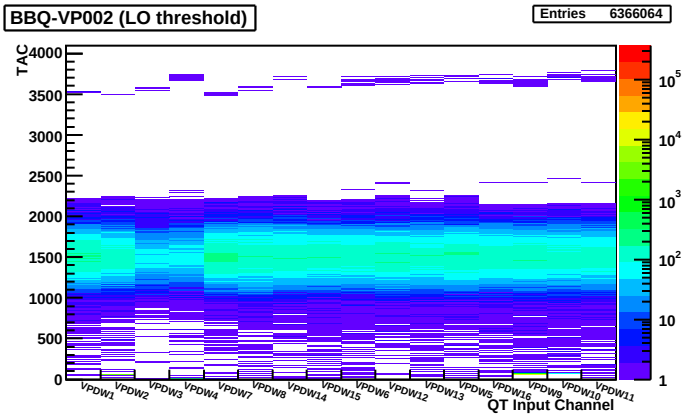

BBQ-ZD001
Entries 6366064
ADC
QT Input Channel

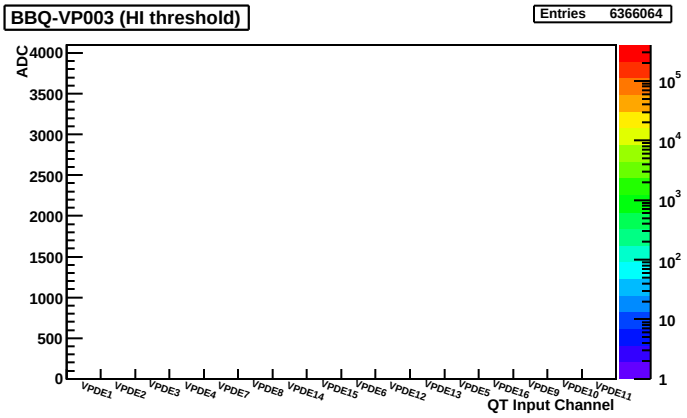

BBQ-ZD001
Entries 6366064
TAC
QT Input Channel

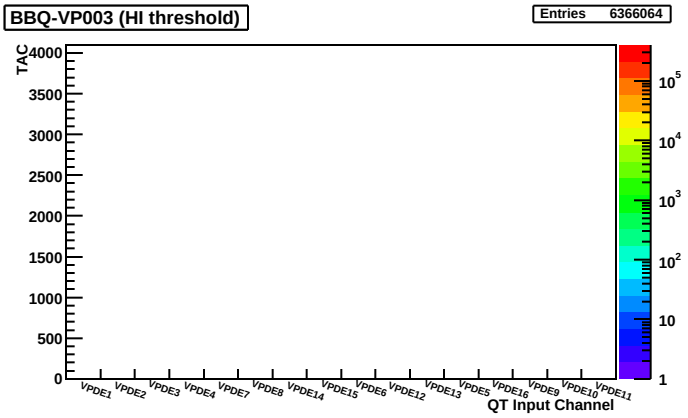

BBQ-VP001 (LO threshold)
Entries 6366064
ADC
QT Input Channel

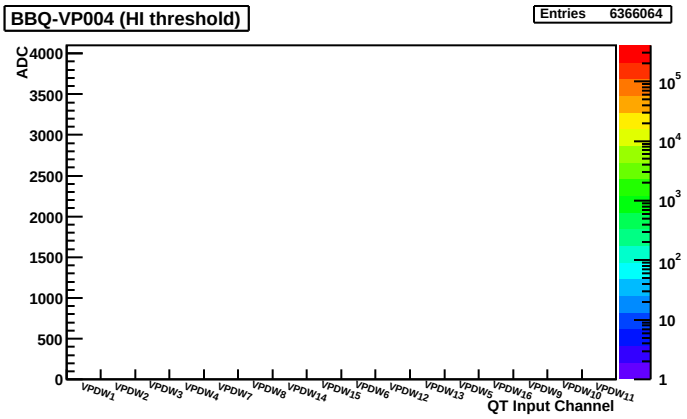

BBQ-VP001 (LO threshold)
Entries 6366064
TAC
QT Input Channel

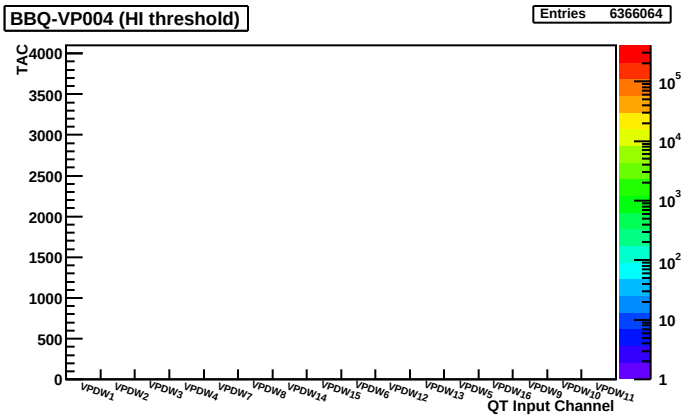

BBQ-VP002 (LO threshold)
Entries 6366064
ADC
QT Input Channel

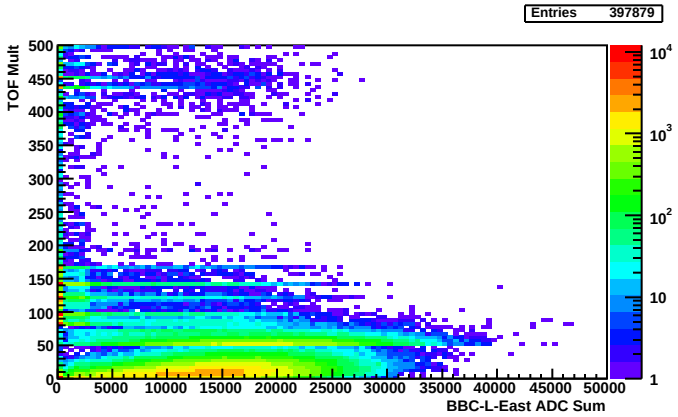

BBQ-VP002 (LO threshold)
Entries 6366064
TAC
QT Input Channel

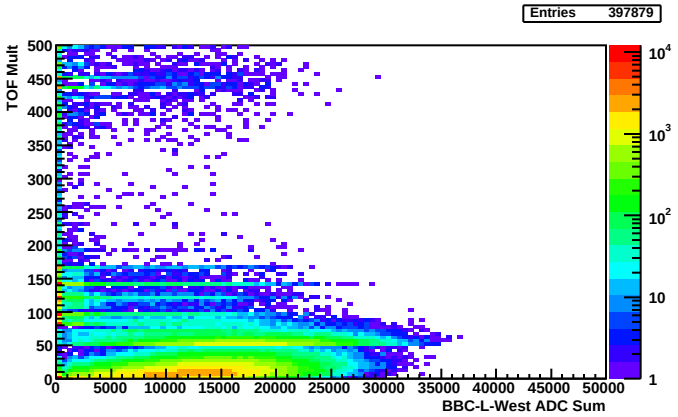

BBQ-VP003 (HI threshold)
Entries 6366064
ADC
QT Input Channel

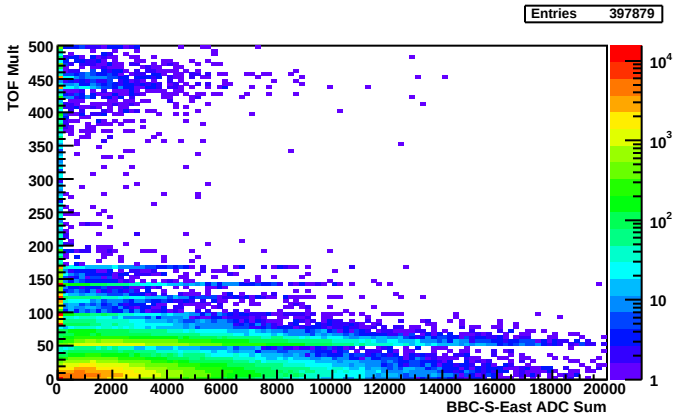

BBQ-VP003 (HI threshold)
Entries 6366064
TAC
QT Input Channel

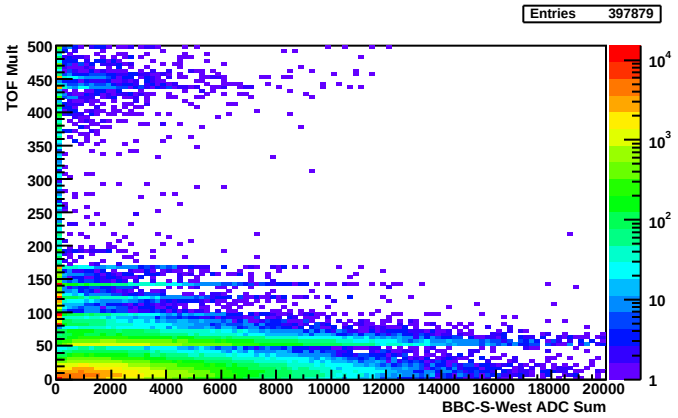

BBQ-VP004 (HI threshold)
Entries 6366064
ADC
QT Input Channel

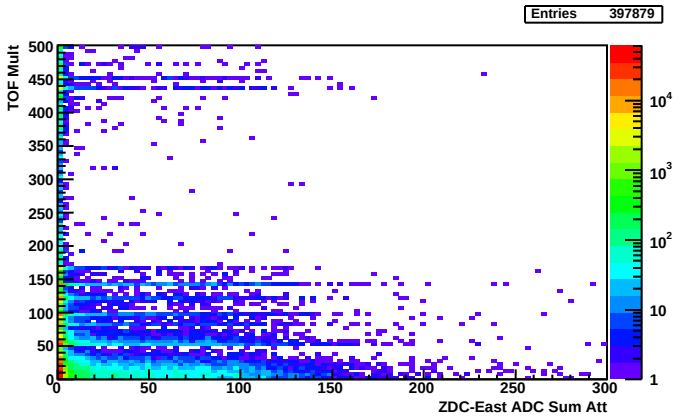

BBQ-VP004 (HI threshold)
Entries 6366064
TAC
QT Input Channel

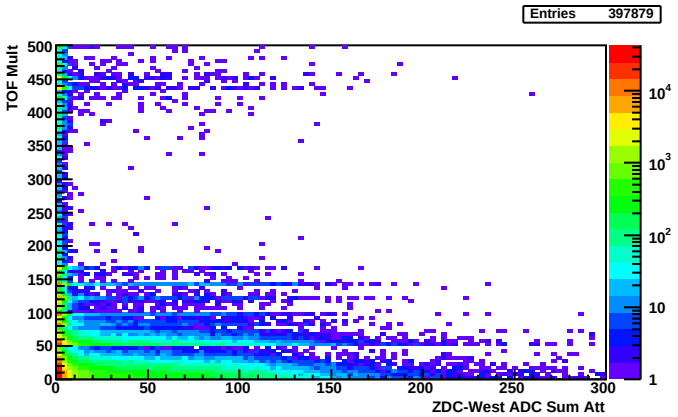

Entries 397879
TOF Mult
BBC-L-East ADC Sum

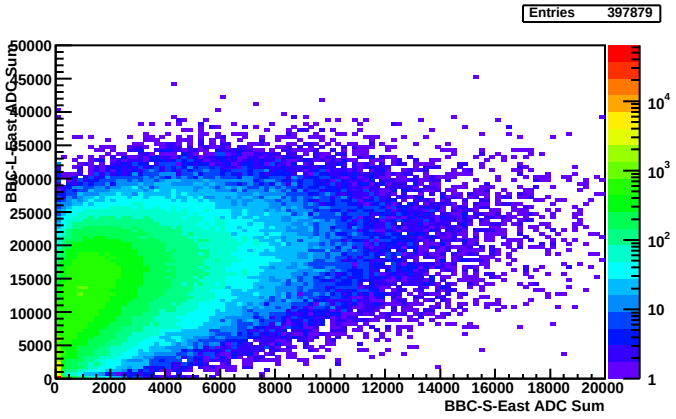

Entries 397879
TOF Mult
BBC-L-West ADC Sum

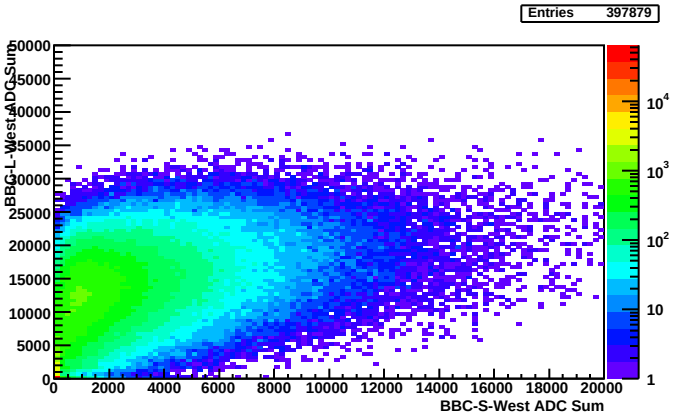

Entries 397879
TOF Mult
BBC-S-East ADC Sum

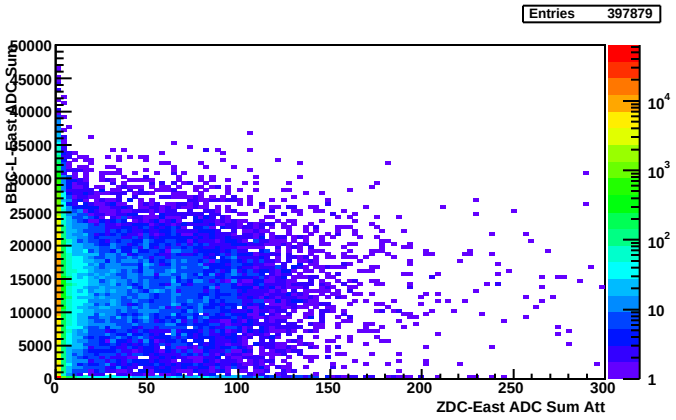

Entries 397879
TOF Mult
BBC-S-West ADC Sum

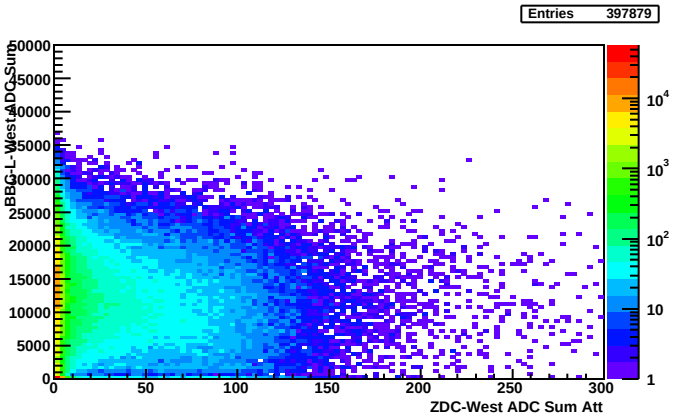

Entries 397879
TOF Mult
ZDC-East ADC Sum Att

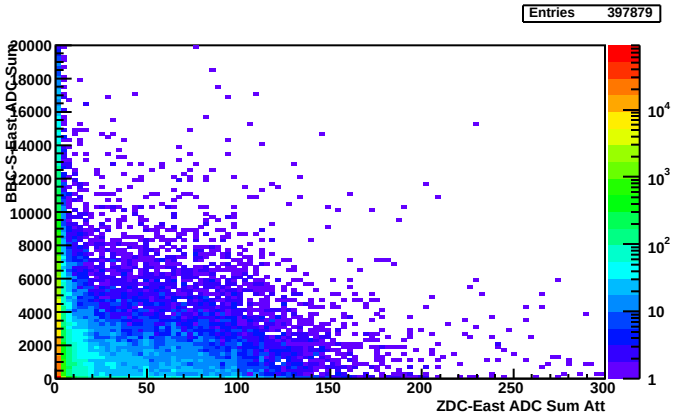

Entries 397879
TOF Mult
ZDC-West ADC Sum Att

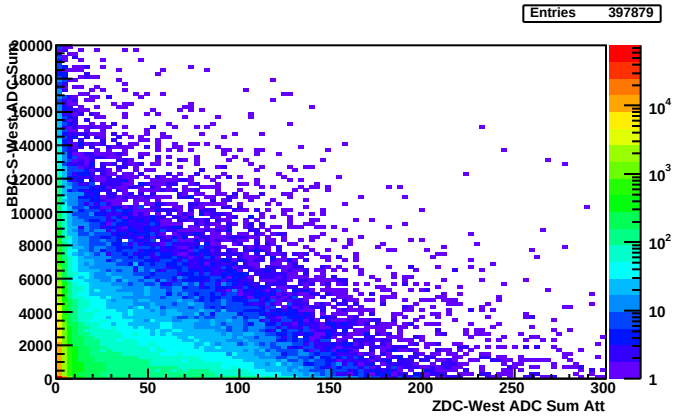

Entries 397879
BBC-L-East ADC Sum
BBC-S-East ADC Sum

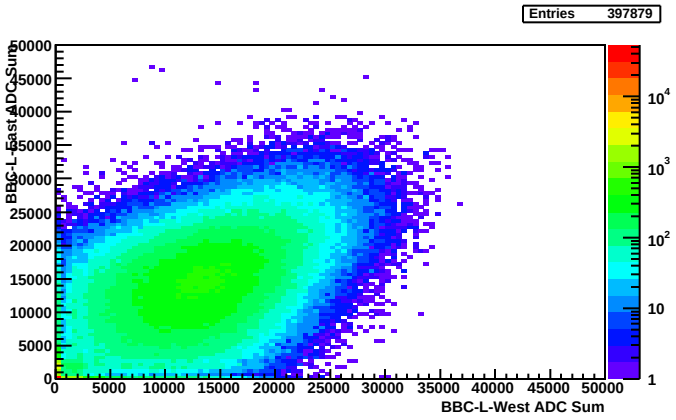

Entries 397879
BBC-L-West ADC Sum
BBC-S-West ADC Sum

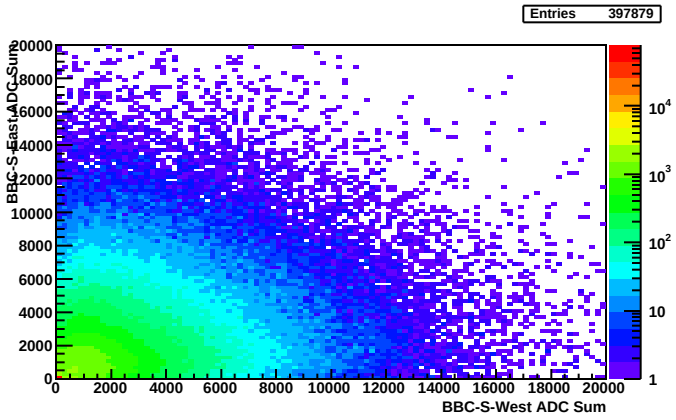

Entries 397879
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

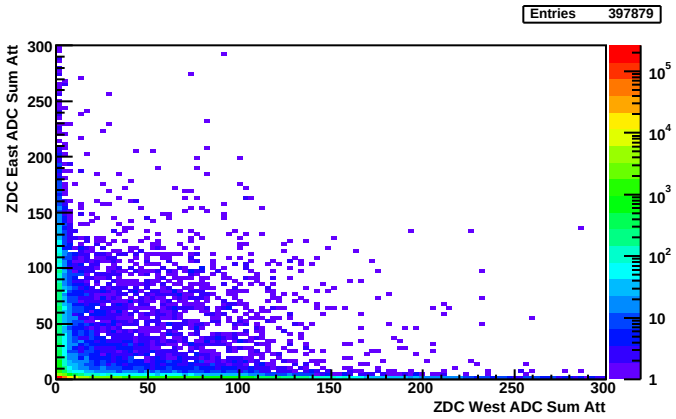

Entries 397879
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

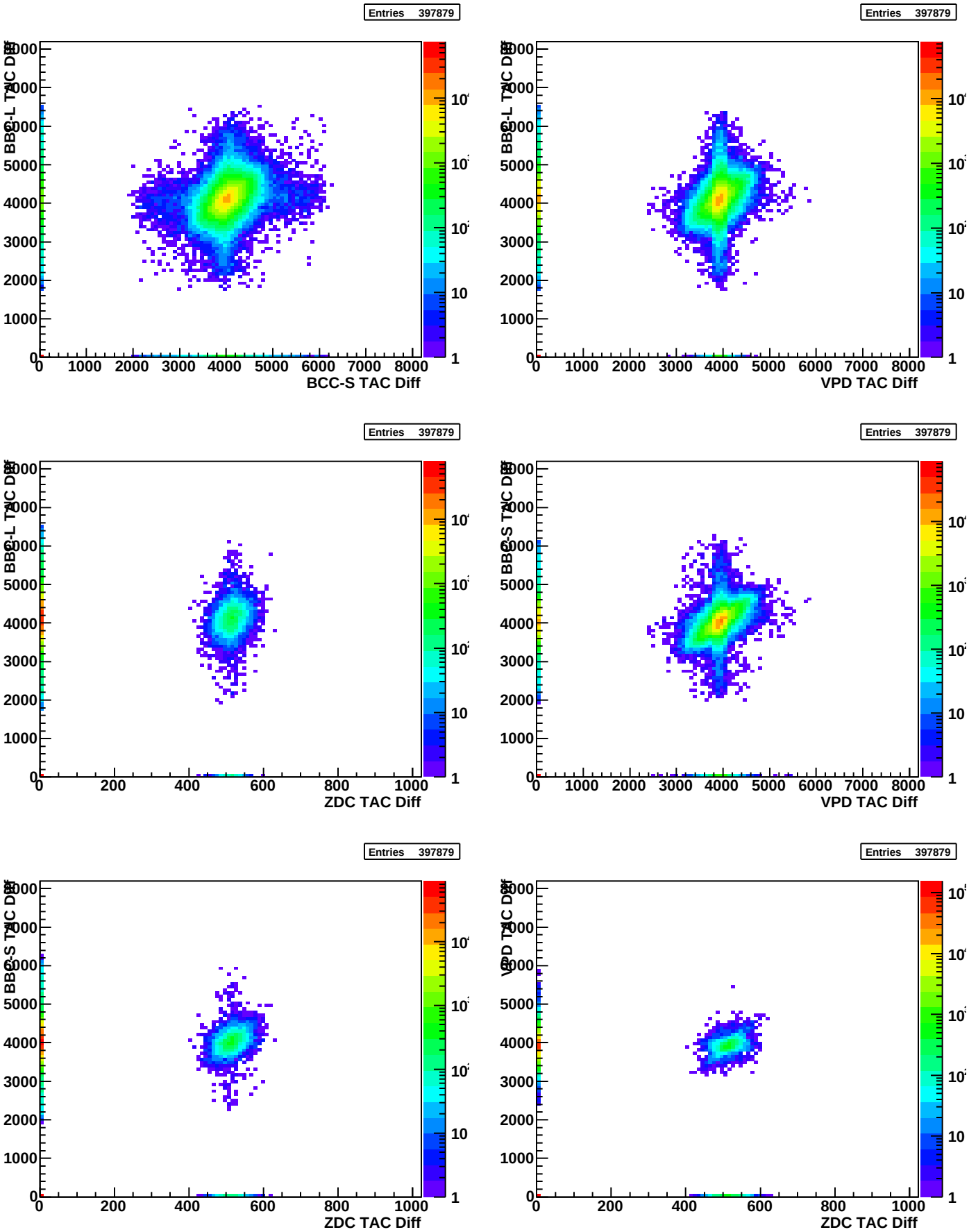

Entries 397879
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

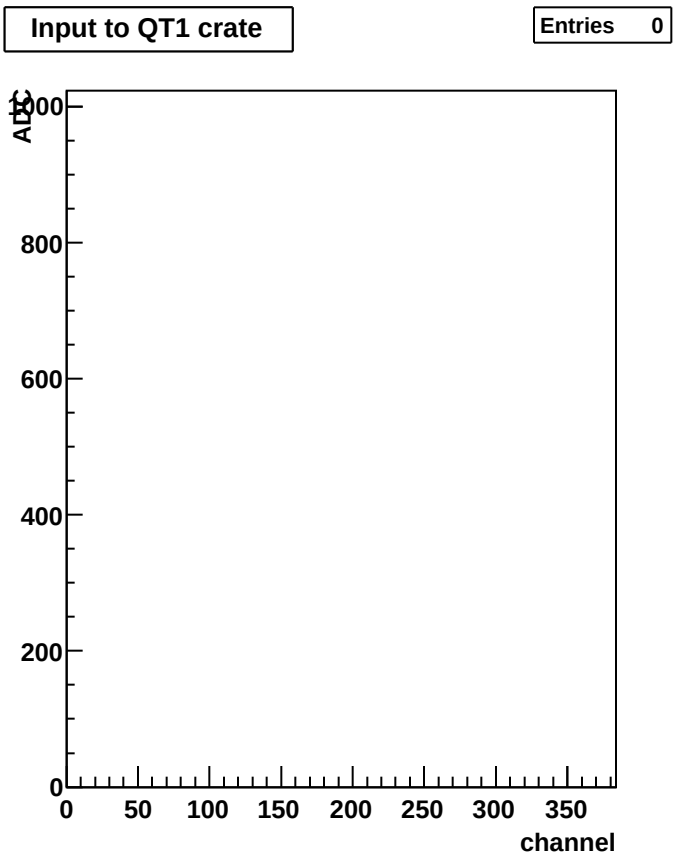

Entries 397879
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

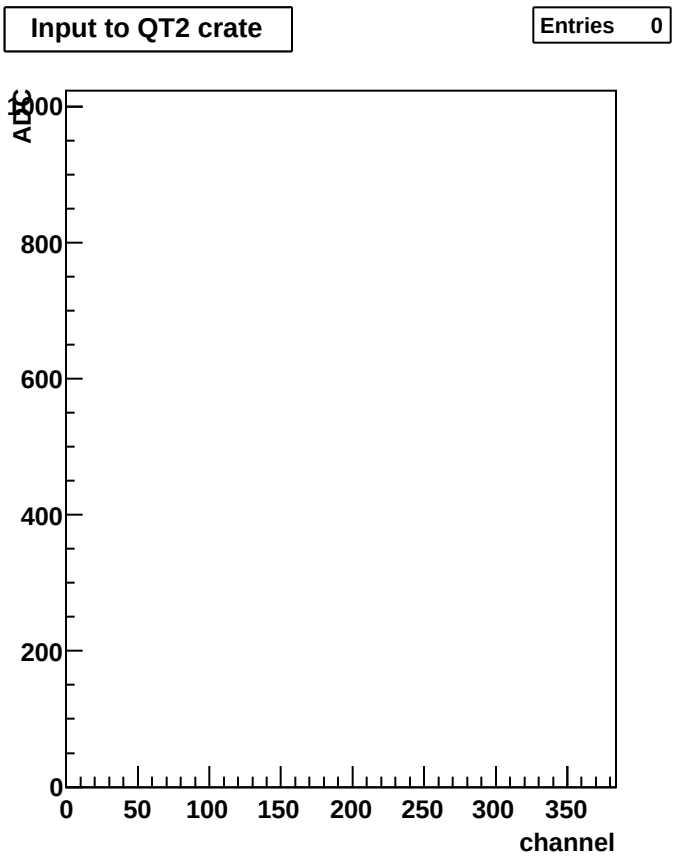

Entries 397879
BBC-L-East ADC Sum
BBC-L-West ADC Sum

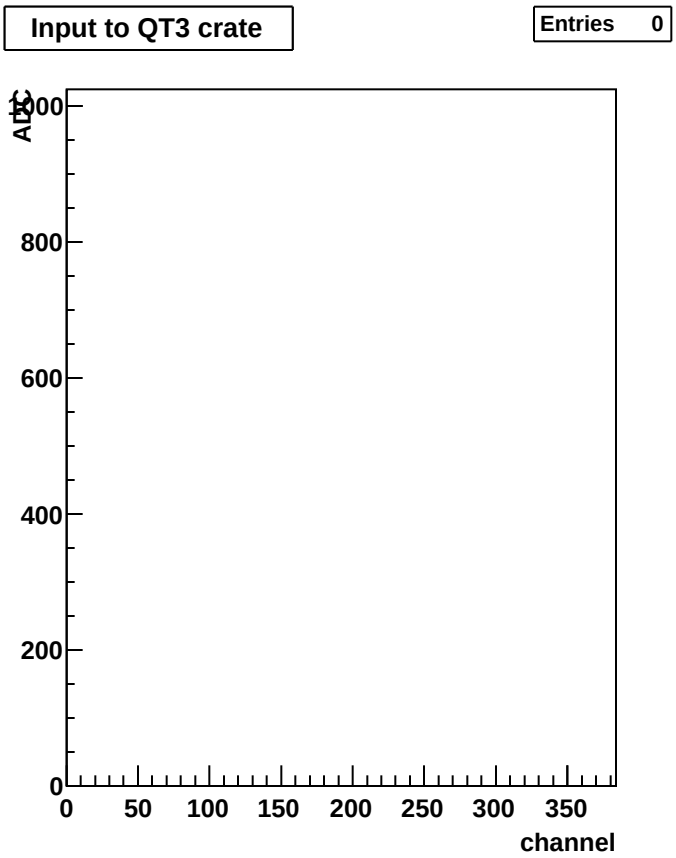

Entries 397879
BBC-S-East ADC Sum
BBC-S-West ADC Sum

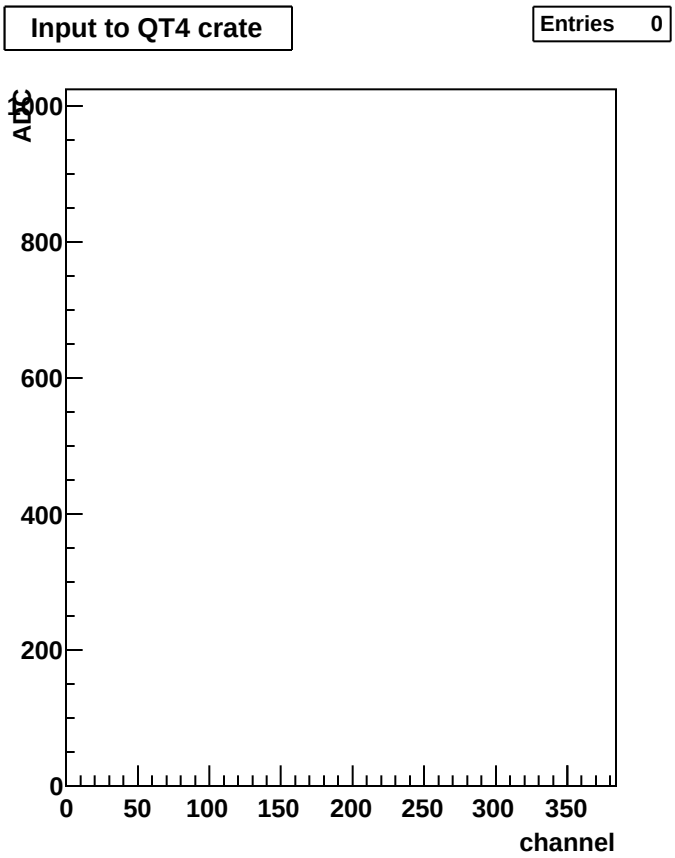

Entries 397879
ZDC East ADC Sum Att
ZDC West ADC Sum Att

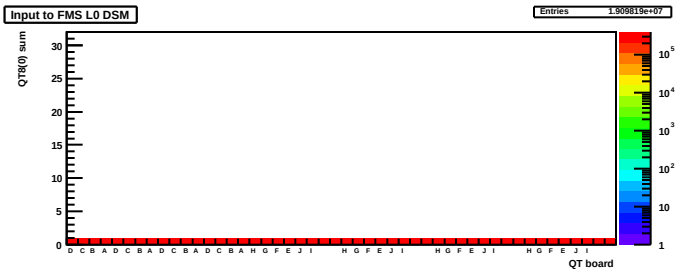

Entries 397879
BBC-L TAC Diff
BCC-S TAC Diff
Entries 397879
BBC-L TAC Diff
VPD TAC Diff
Entries 397879
BBC-L TAC Diff
ZDC TAC Diff
Entries 397879
BBC-S TAC Diff
VPD TAC Diff
Entries 397879
BBC-S TAC Diff
ZDC TAC Diff
Entries 397879
VPD TAC Diff
ZDC TAC Diff

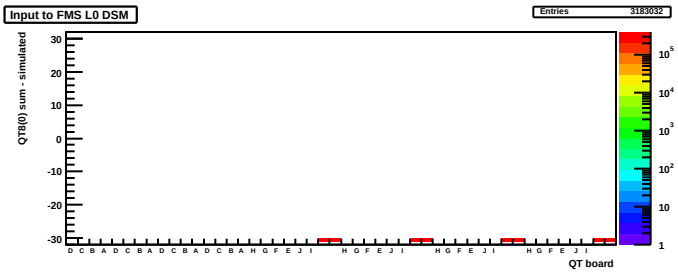

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

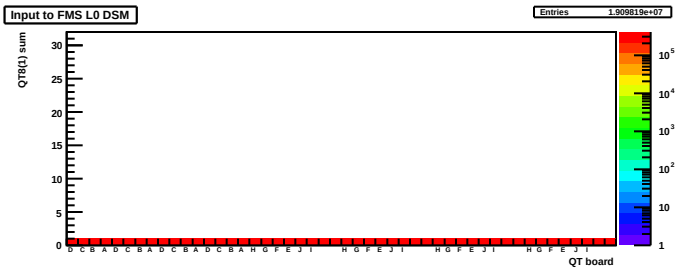

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

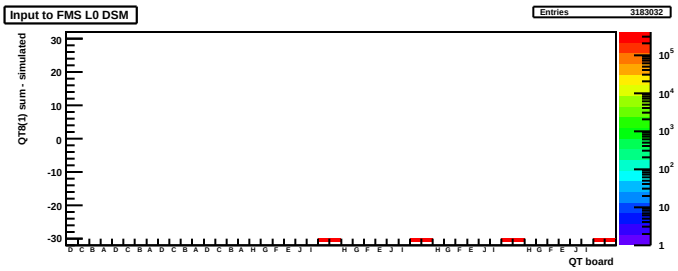

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

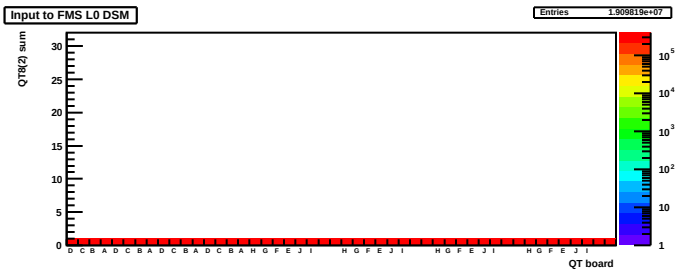

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

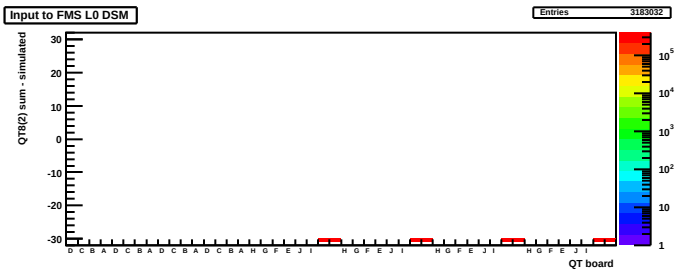

Input to FMS L0 DSM
Entries 1.909819e+07
QT8(0) sum
QT board

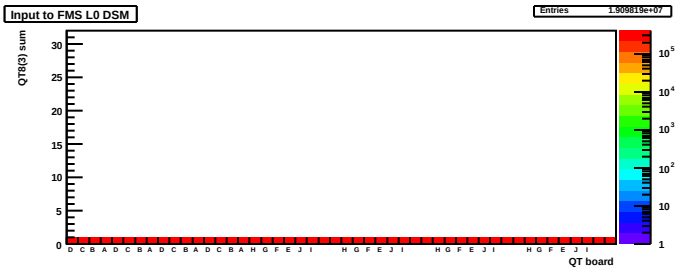

Input to FMS L0 DSM
Entries 3183032
QT8(0) sum - simulated
QT board

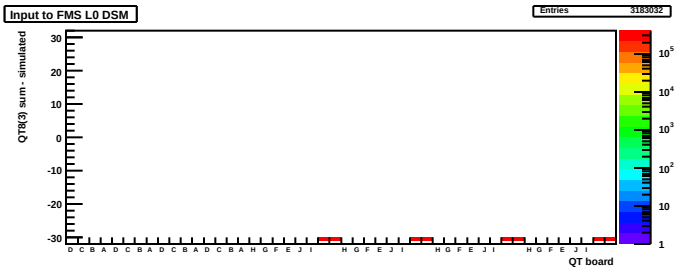

Input to FMS L0 DSM
Entries 1.909819e+07
QT8(1) sum
QT board

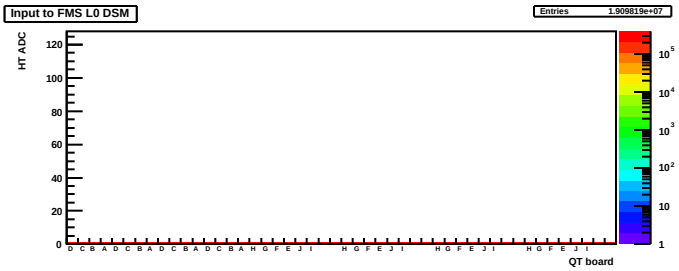

Input to FMS L0 DSM
Entries 3183032
QT8(1) sum - simulated
QT board

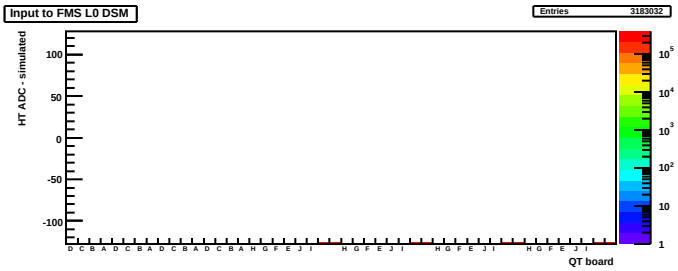

Input to FMS L0 DSM
Entries 1.909819e+07
QT8(2) sum
QT board

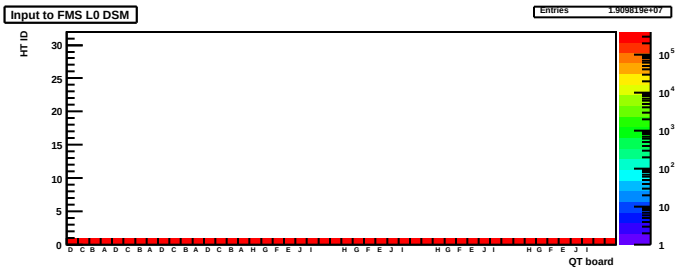

Input to FMS L0 DSM
Entries 3183032
QT8(2) sum - simulated
QT board

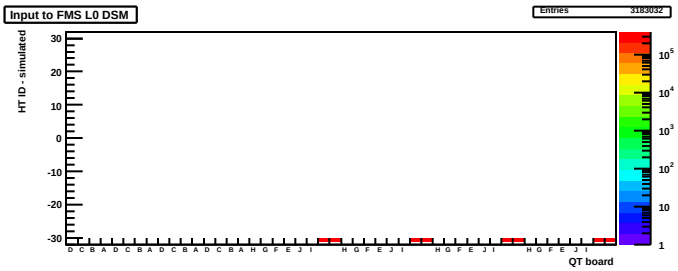

Input to FMS L0 DSM
Entries 1.909819e+07
QT8(3) sum
QT board

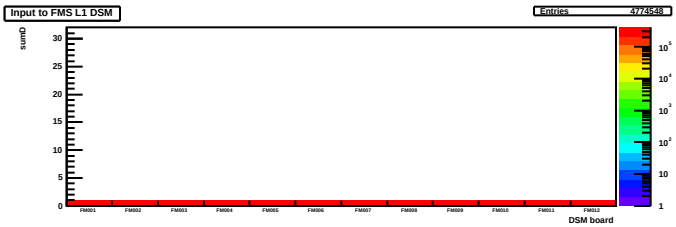

Input to FMS L0 DSM
Entries 3183032
QT8(3) sum - simulated
QT board

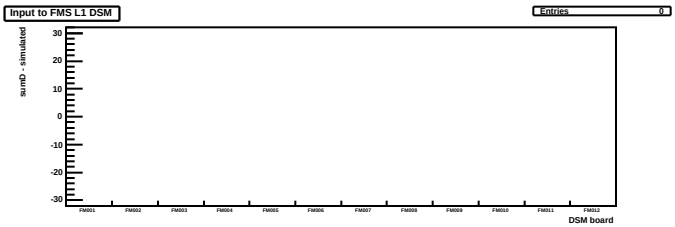

Input to FMS L0 DSM
Entries 1.909819e+07
HT ADC
QT board

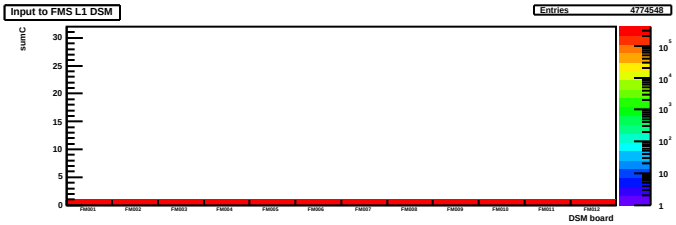

Input to FMS L0 DSM
Entries 3183032
HT ADC - simulated
QT board

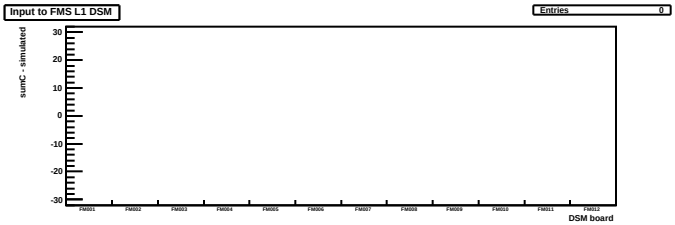

Input to FMS L0 DSM
Entries 1.909819e+07
HT ID
QT board

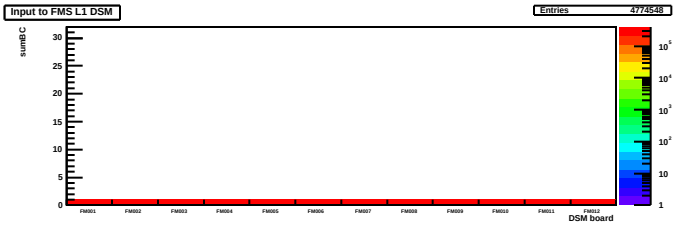

Input to FMS L0 DSM
Entries 3183032
HT ID - simulated
QT board

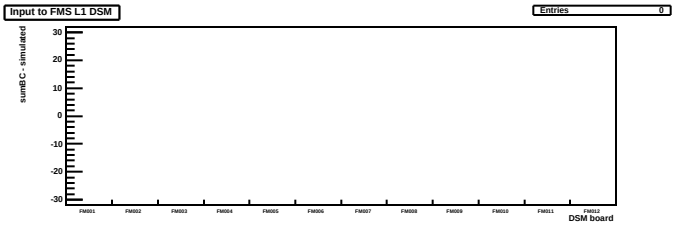

Input to FMS L1 DSM
Entries 4774548
sumD
DSM board

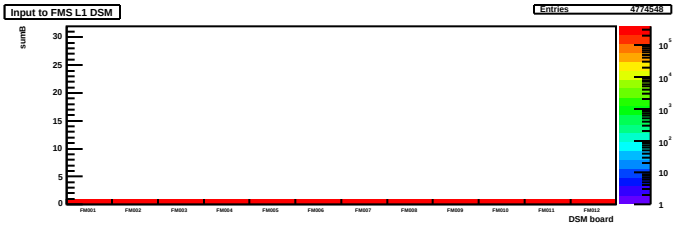

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

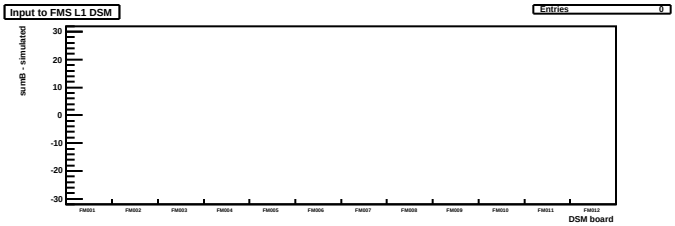

Input to FMS L1 DSM
Entries 4774548
sumC
DSM board

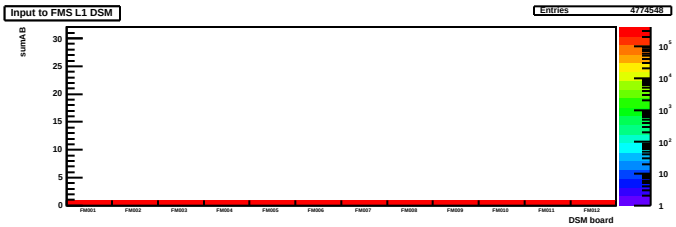

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

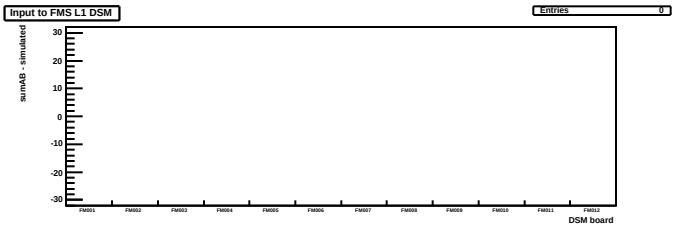

Input to FMS L1 DSM
Entries 4774548
sumBC
DSM board

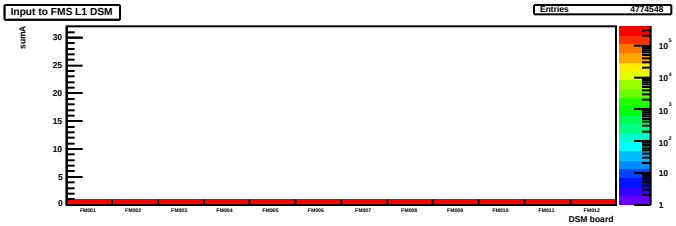

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

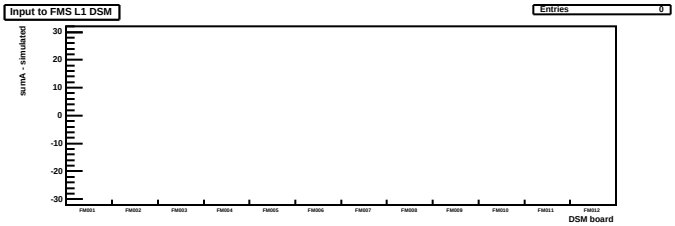

Input to FMS L1 DSM
Entries 4774548
sumB
DSM board

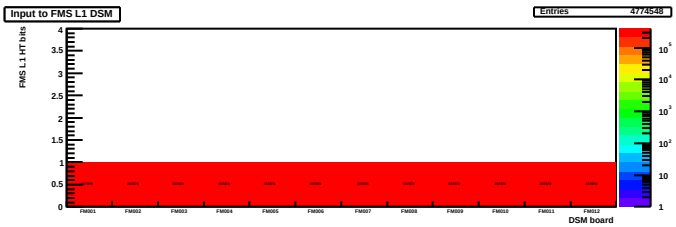

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

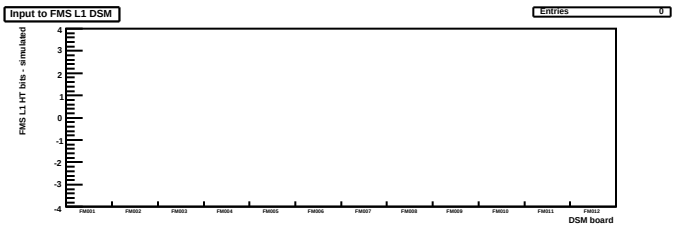

Input to FMS L1 DSM
Entries 4774548
sumAB
DSM board

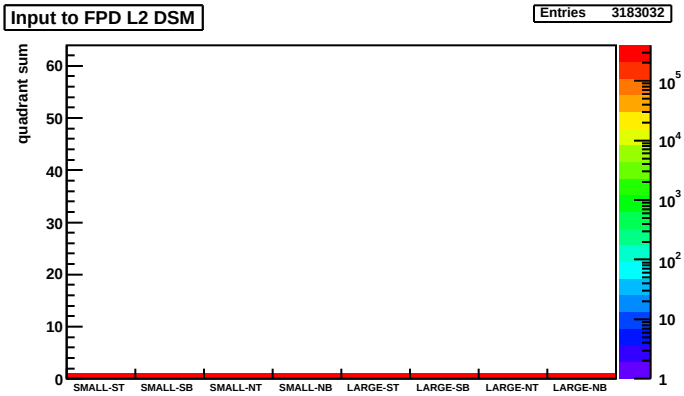

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

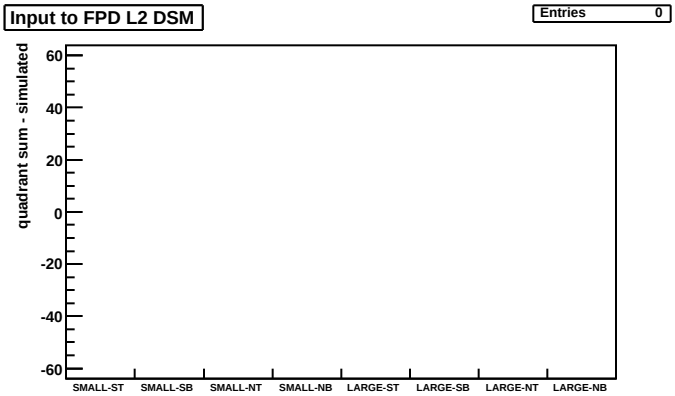

Input to FMS L1 DSM
Entries 4774548
sumA
DSM board

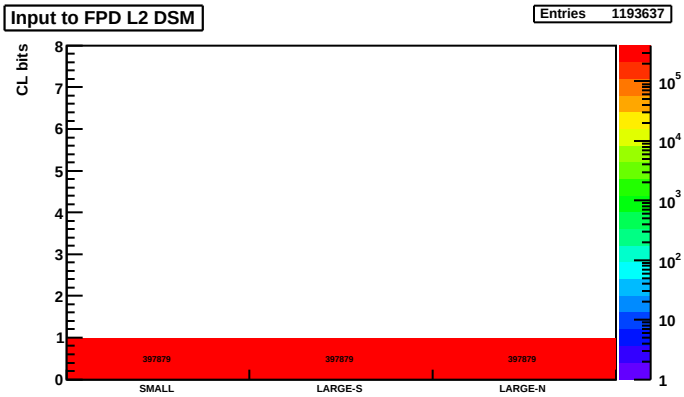

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

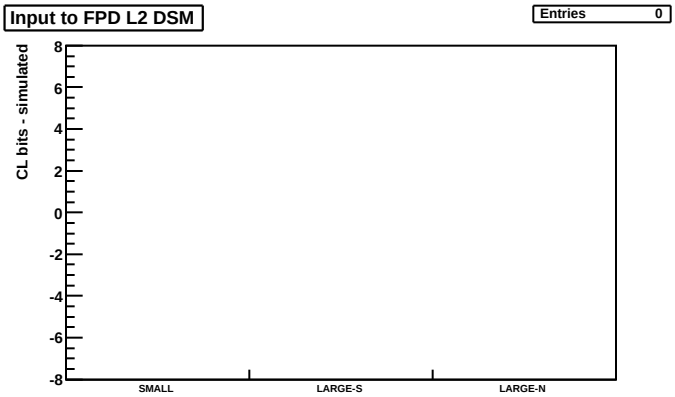

Input to FMS L1 DSM
Entries 4774548
FMS L1 HT bits
DSM board

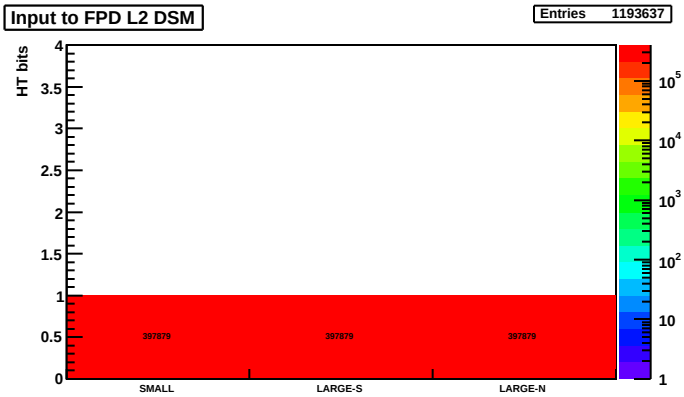

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

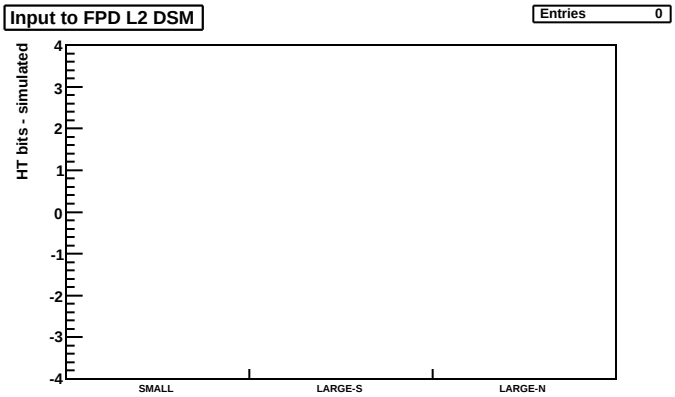

Input to FPD L2 DSM
Entries 3183032
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

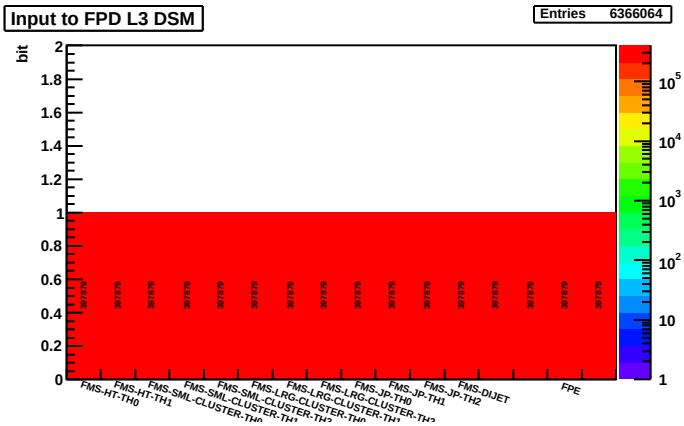

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

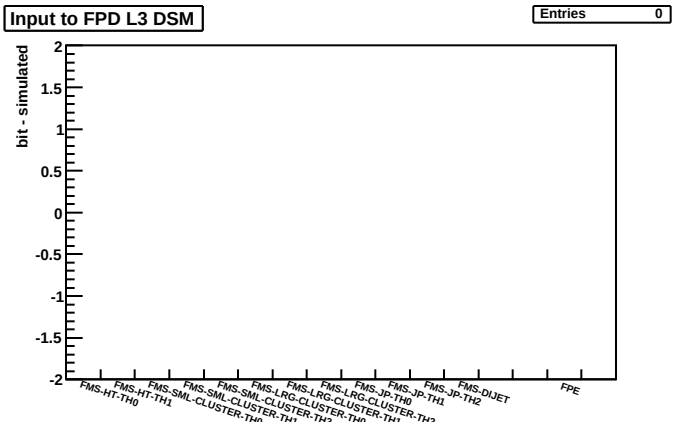

Input to FPD L2 DSM
Entries 1193637
CL bits
397879
397879
397879
SMALL
LARGE-S
LARGE-N

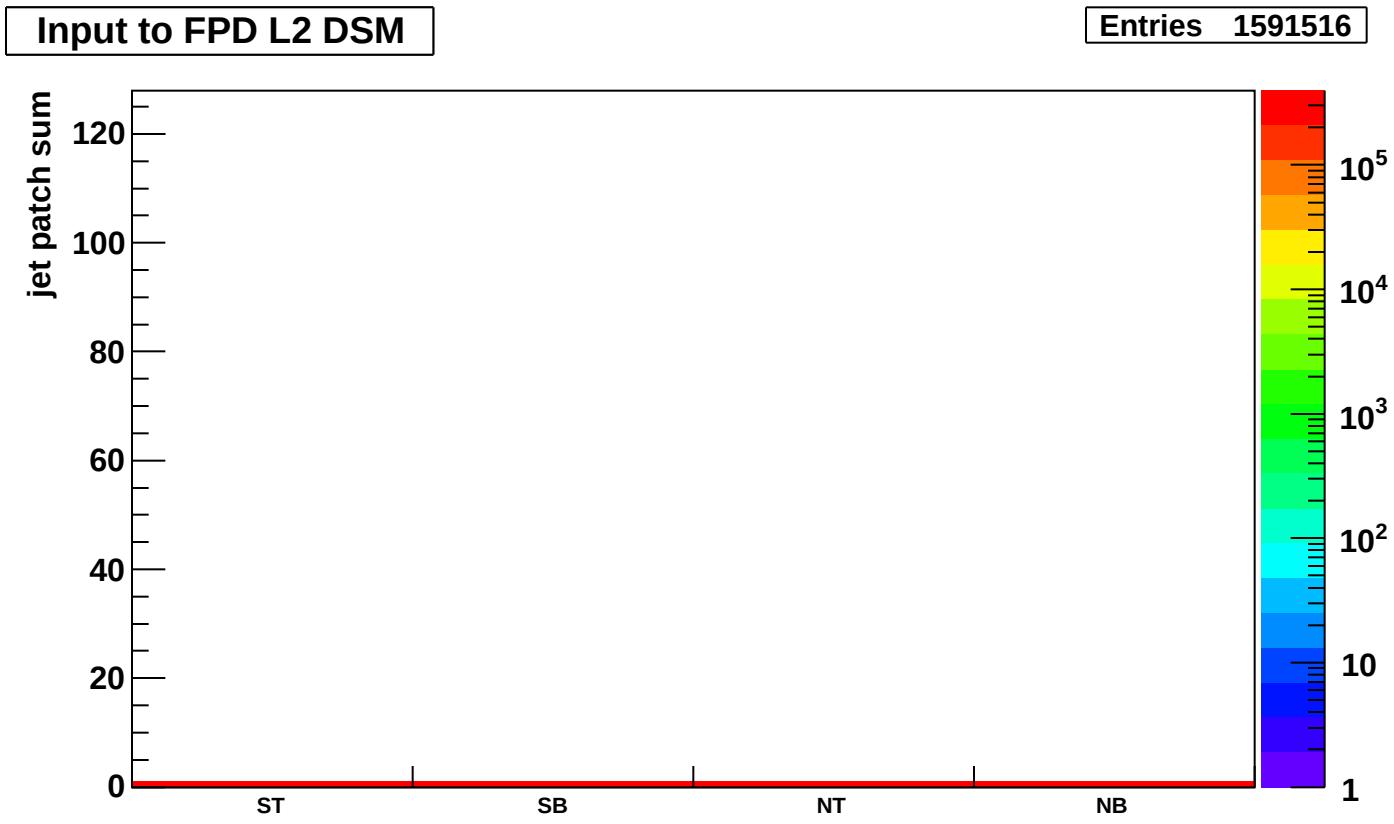

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

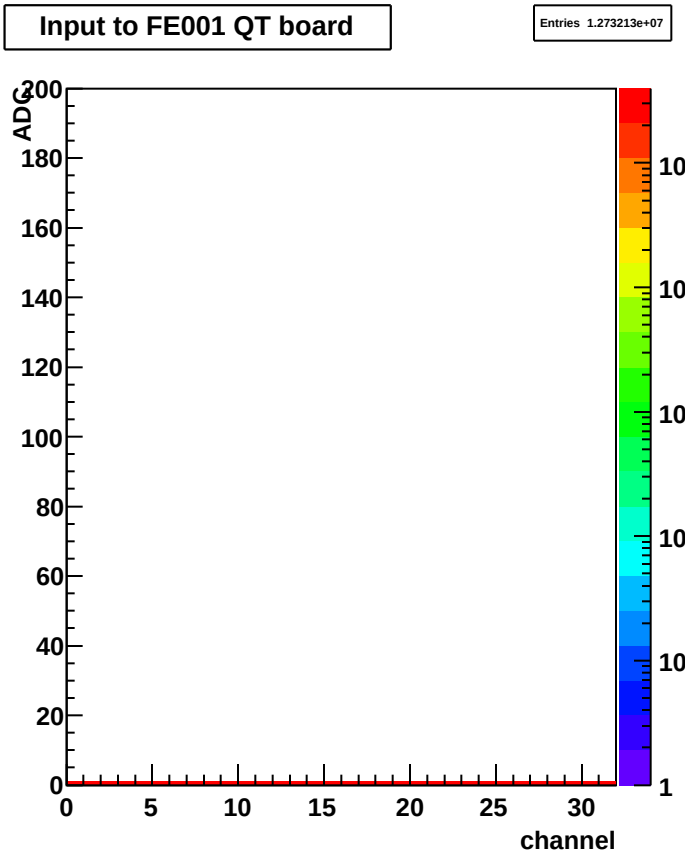

Input to FPD L2 DSM
Entries 1193637
HT bits
397879
397879
397879
SMALL
LARGE-S
LARGE-N

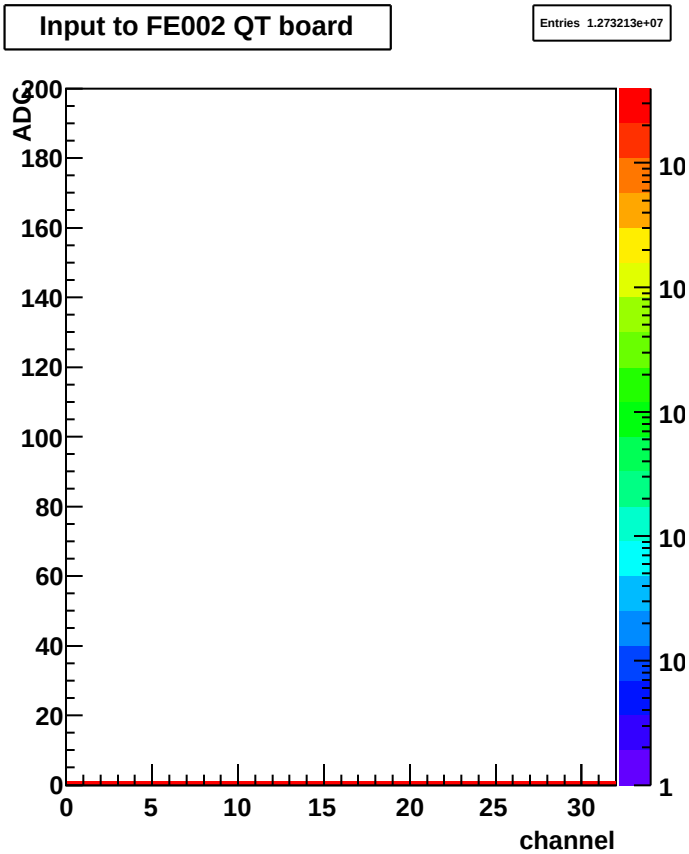

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

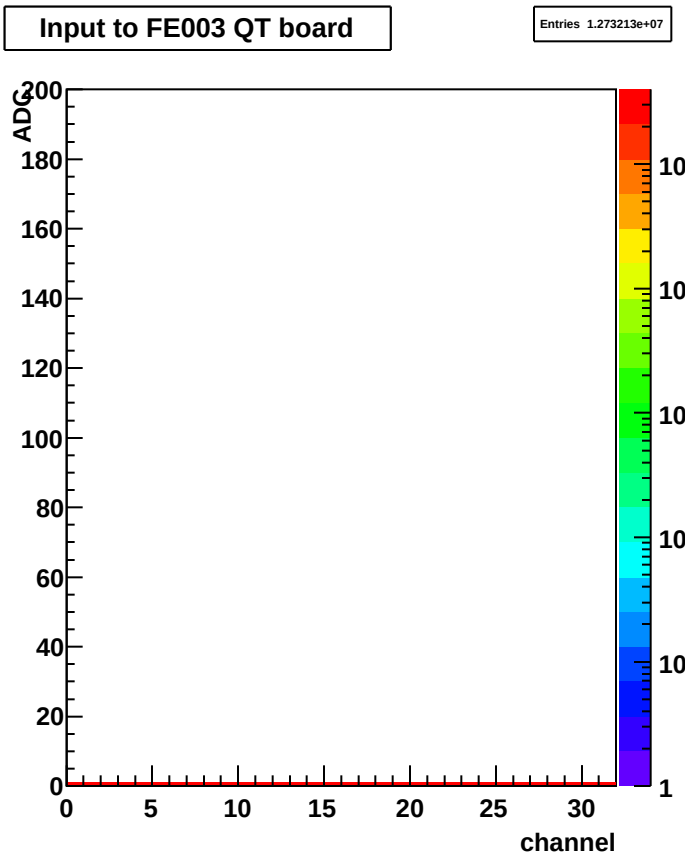

Input to FPD L3 DSM
Entries 6366064
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

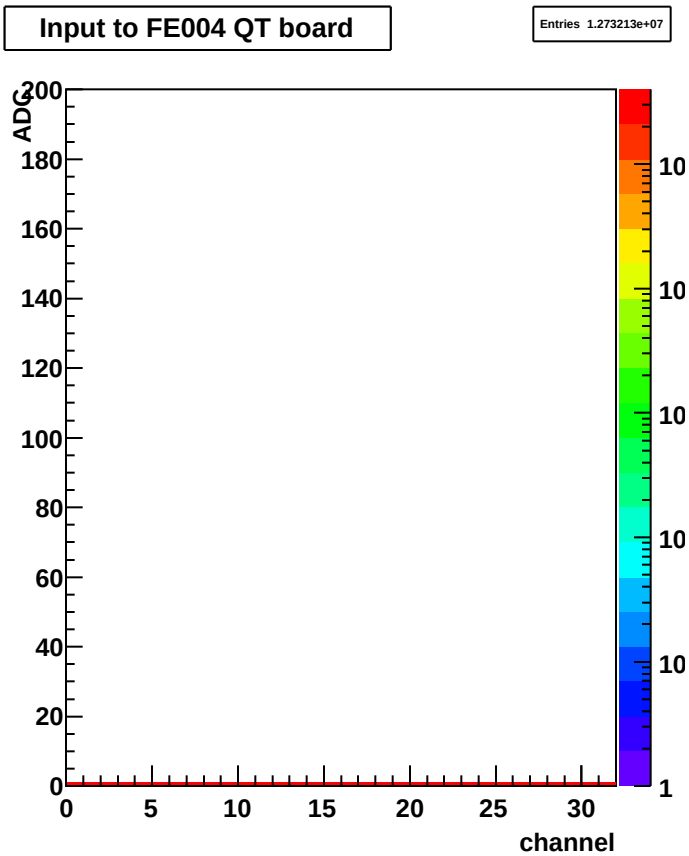

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

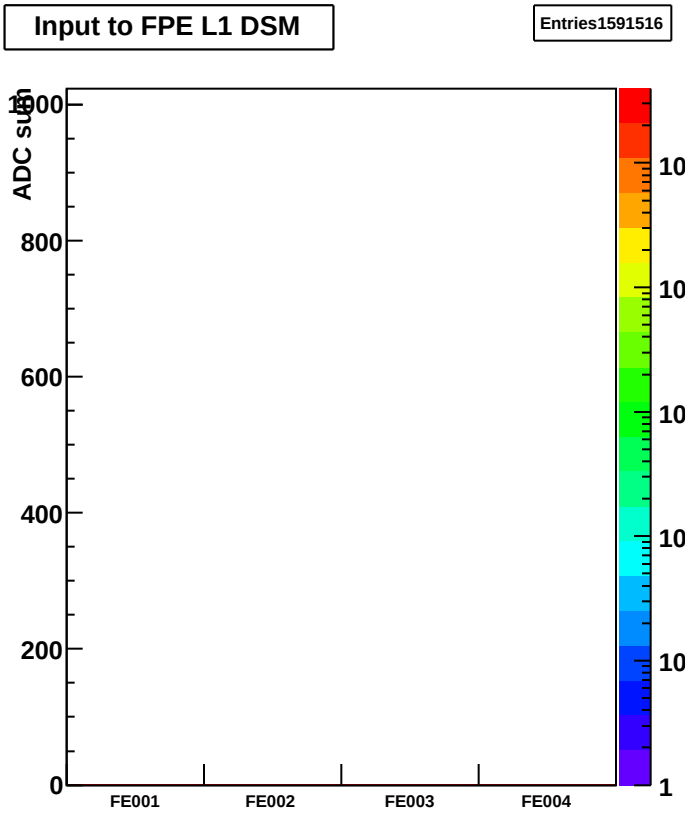

Input to FPD L2 DSM
Entries 1591516
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

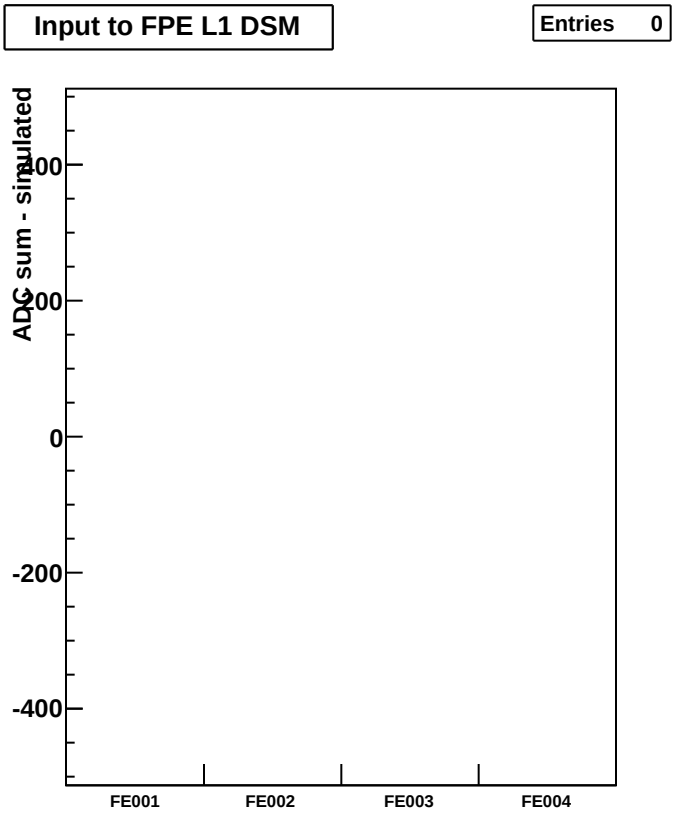

Input to FE001 QT board
Entries 1.273213e+07
ADC
channel

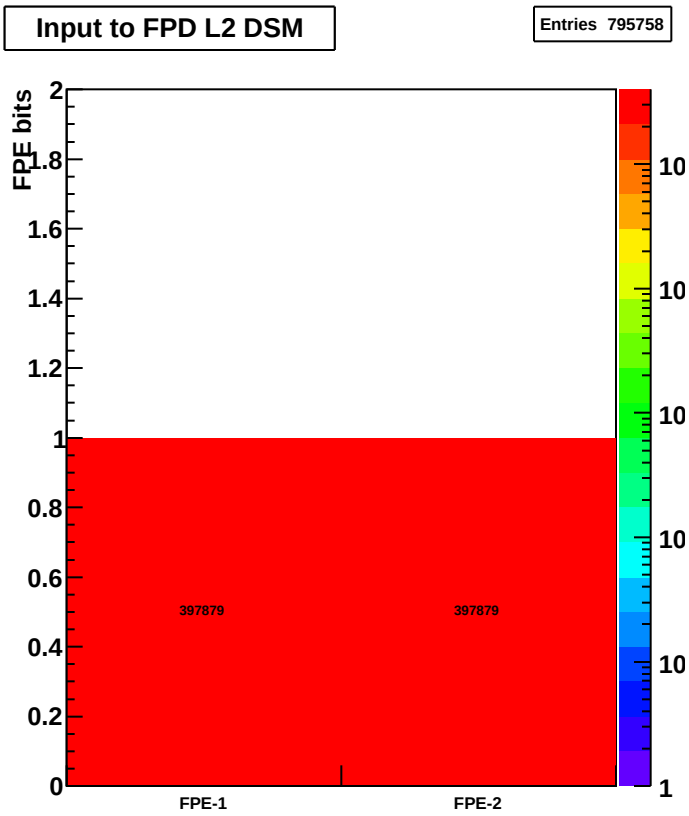

Input to FE002 QT board
Entries 1.273213e+07
ADC
channel

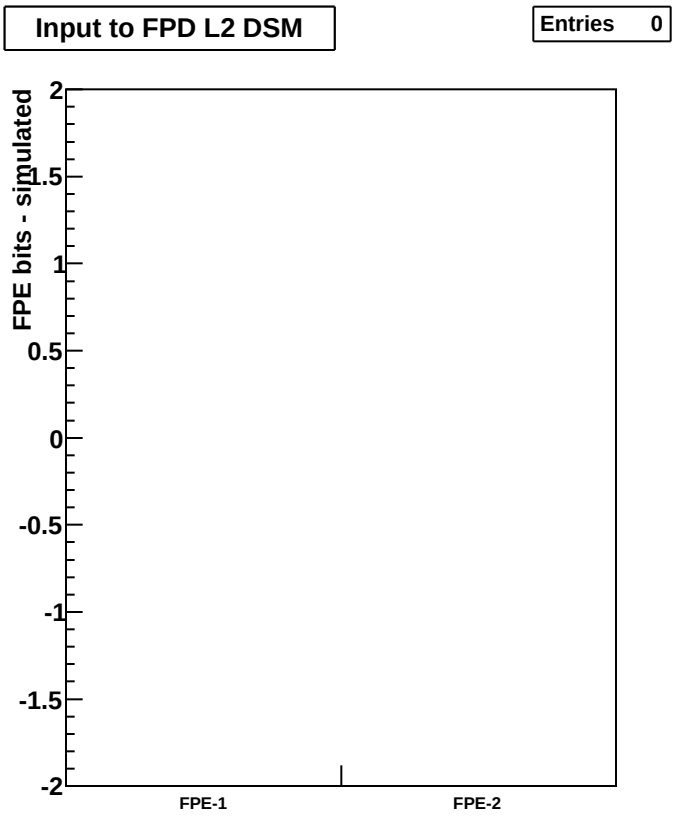

Input to FE003 QT board
Entries 1.273213e+07
ADC
channel


Input to FE004 QT board
Entries 1.273213e+07
ADC
channel


Input to FPE L1 DSM
Entries1591516
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 795758
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
397879
397879
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