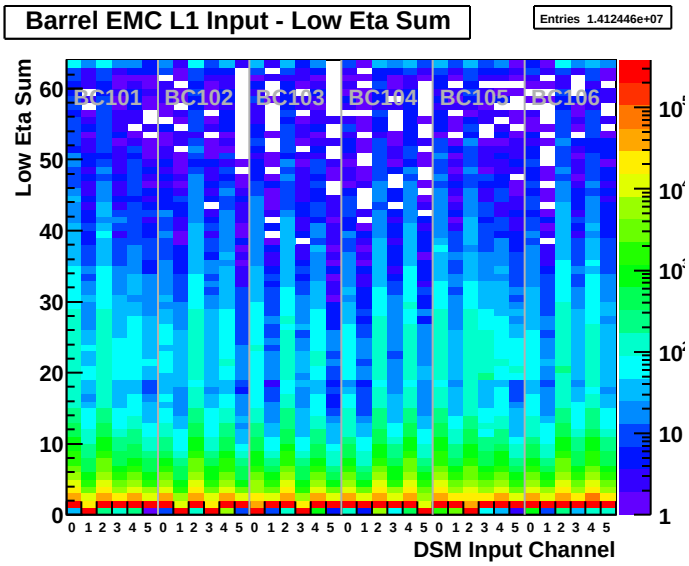
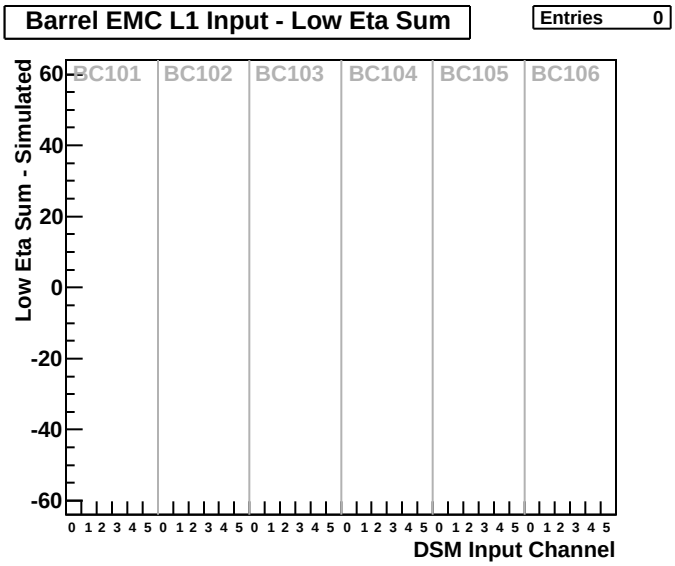
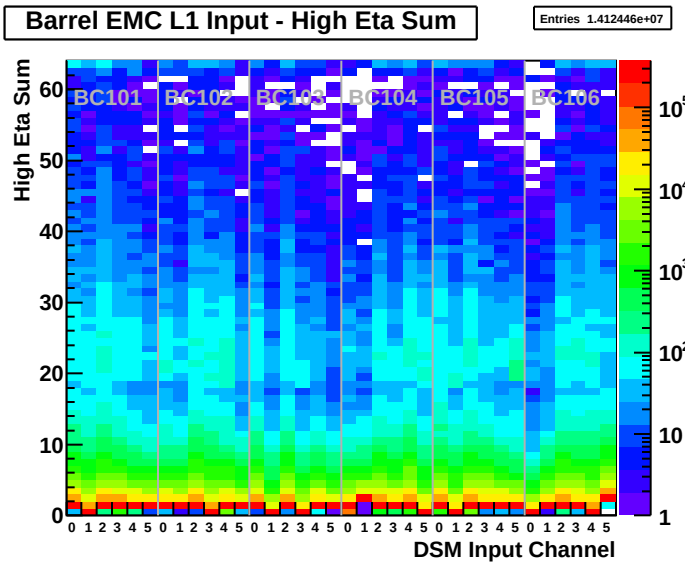
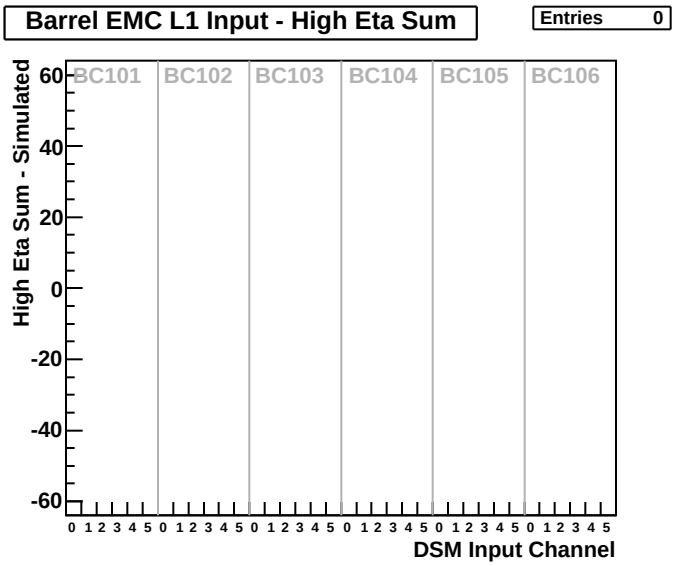
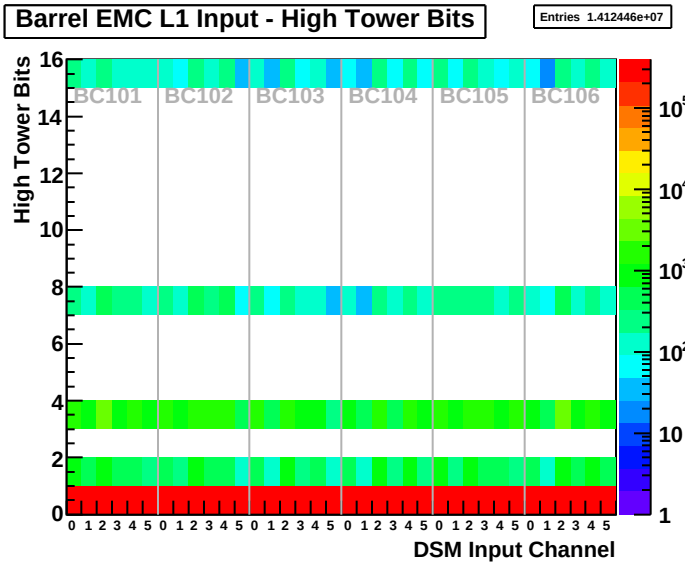
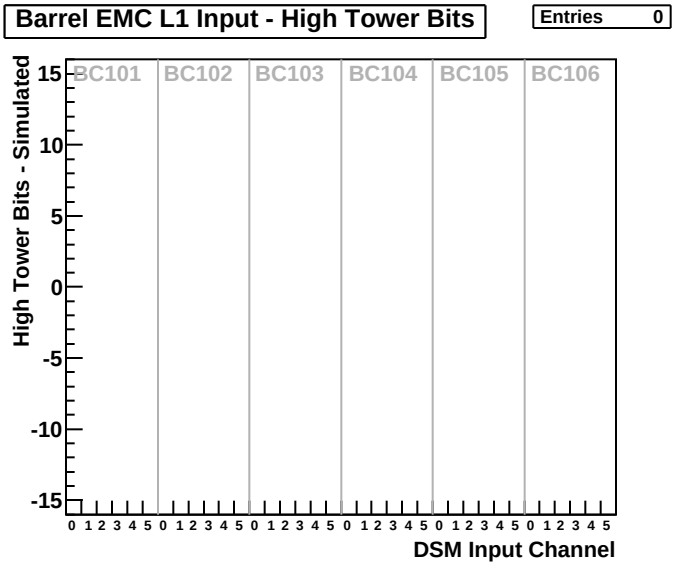

Barrel EMC L1 Input - Low Eta Sum
Entries 1.412446e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

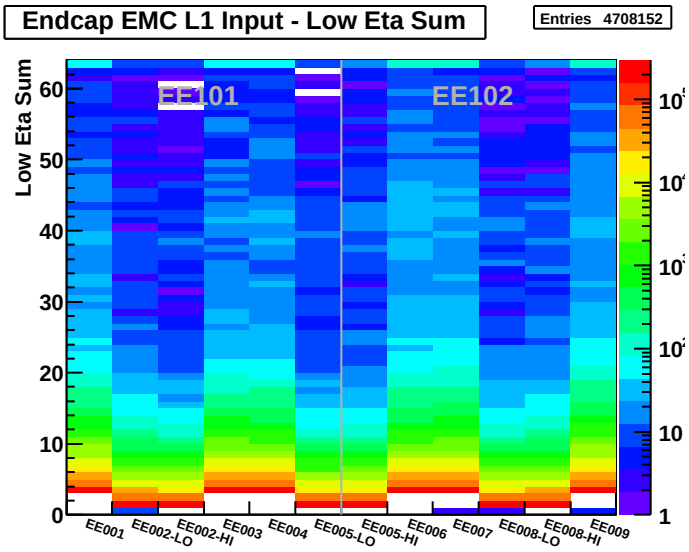

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

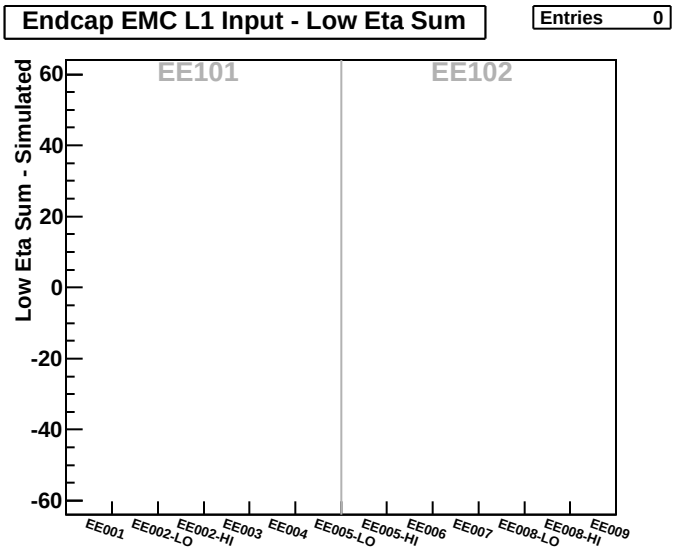

Barrel EMC L1 Input - High Eta Sum
Entries 1.412446e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

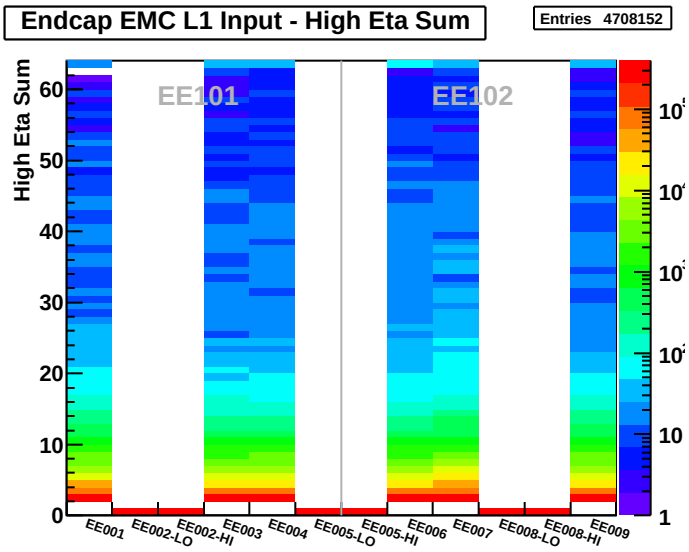

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

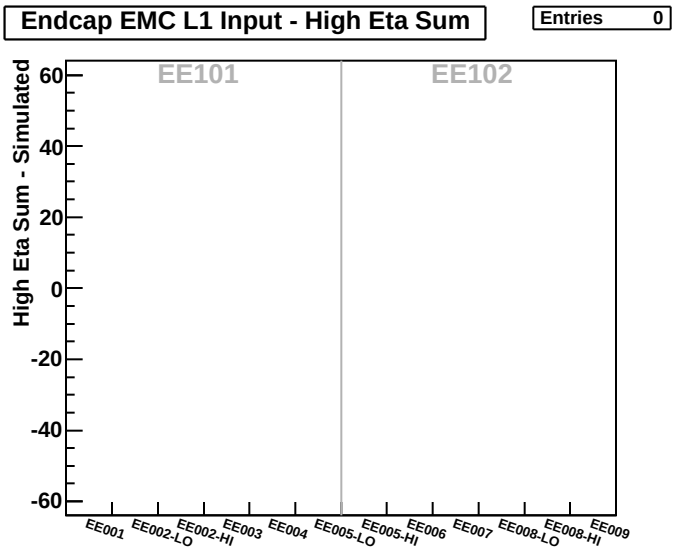

Barrel EMC L1 Input - High Tower Bits
Entries 1.412446e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

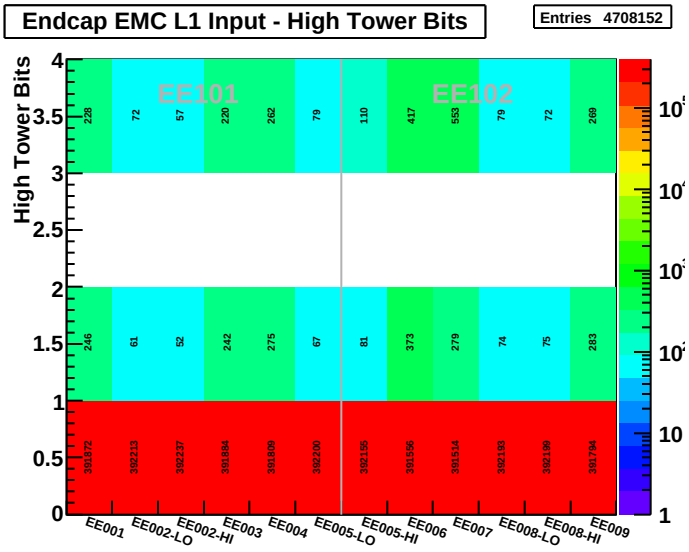

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

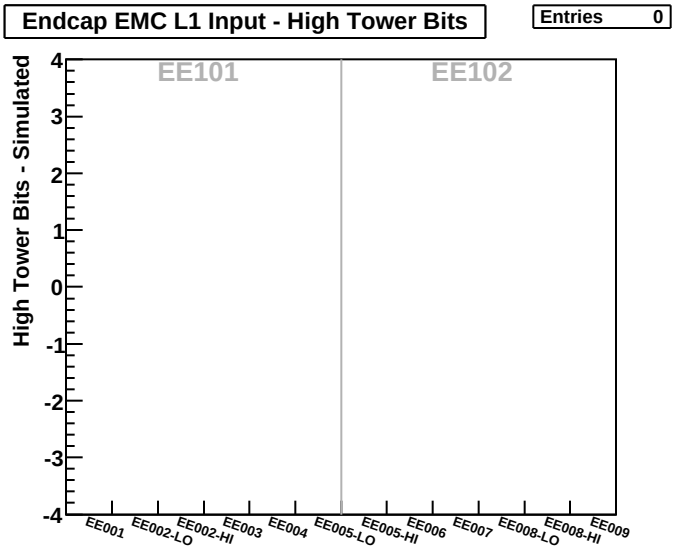

Endcap EMC L1 Input - Low Eta Sum
Entries 4708152
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

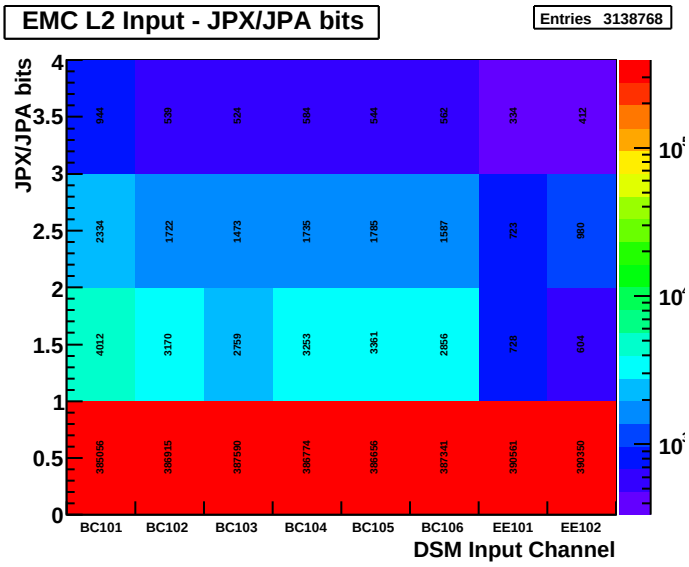

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

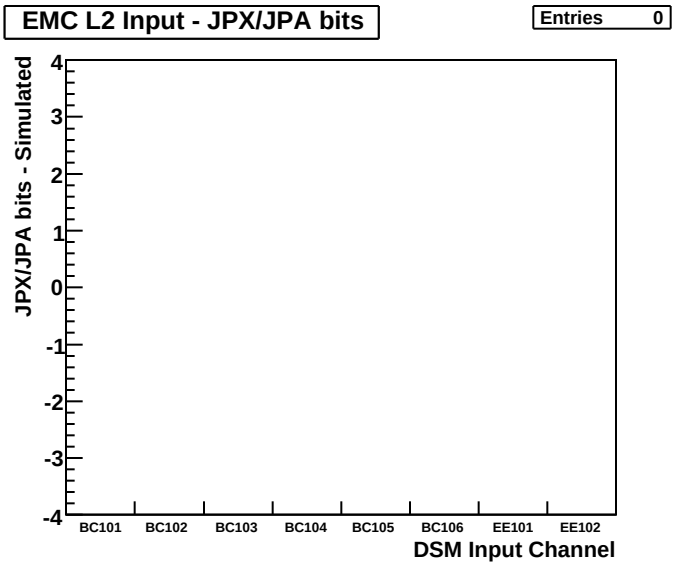

Endcap EMC L1 Input - High Eta Sum
Entries 4708152
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

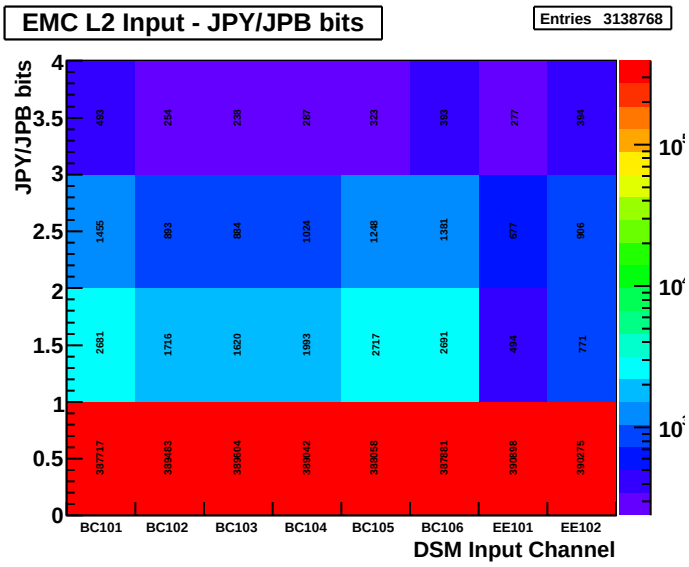

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

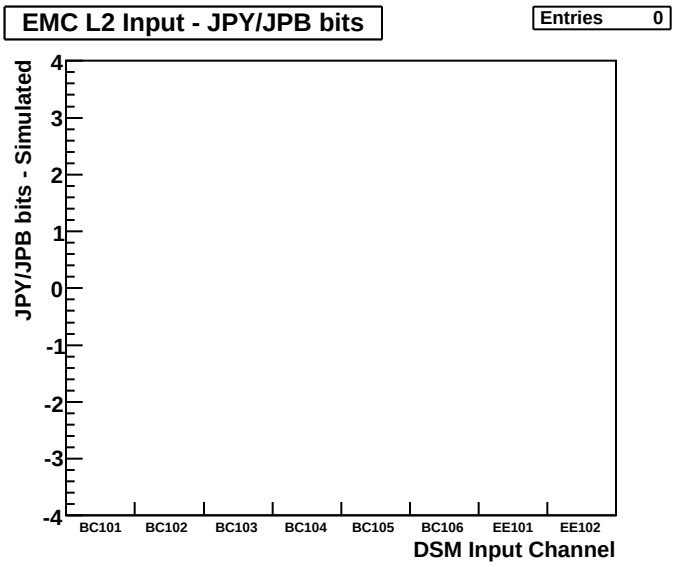

Endcap EMC L1 Input - High Tower Bits
Entries 4708152
High Tower Bits
EE101
EE102
228 72 57 220 262 79 110 417 553 79 72 269
246 61 52 242 275 67 81 373 279 74 75 283
391972 392213 392237 391984 391989 392200 392155 391556 391514 392193 392199 391794
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

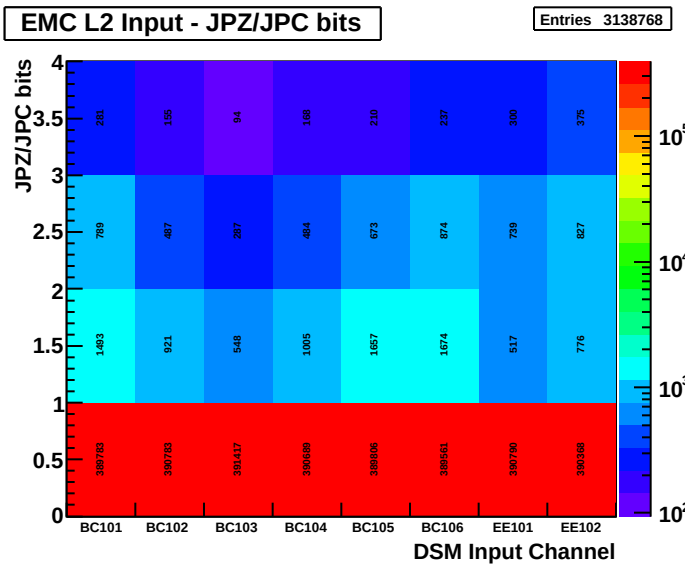

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

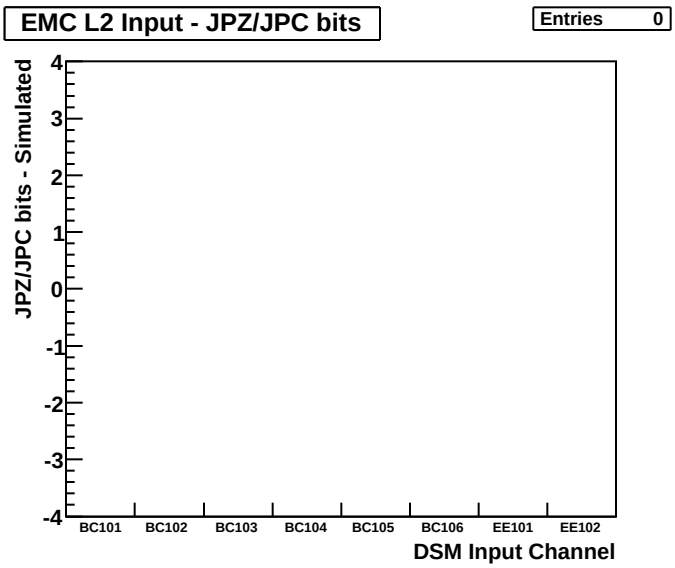

EMC L2 Input - JPX/JPA bits
Entries 3138768
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
944 539 524 584 544 562 334 412
2334 1722 1473 1735 1785 1587 723 980
4012 3170 2759 3253 3361 2856 728 604
386056 386915 387590 388774 386656 387341 390561 390350

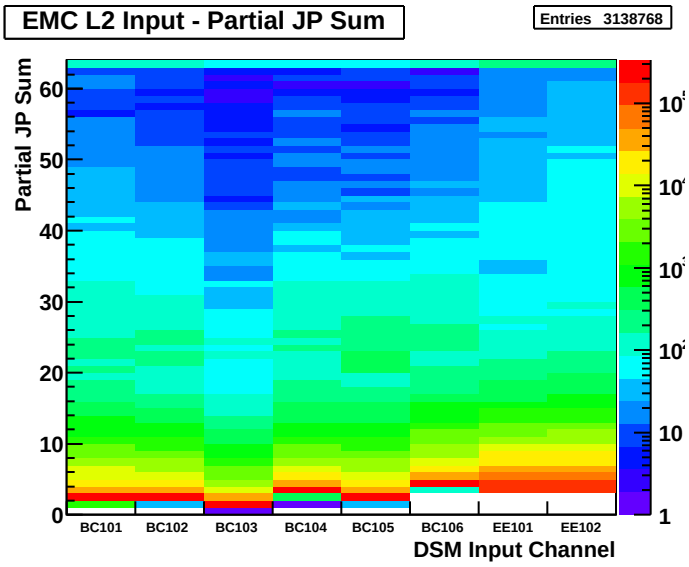

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

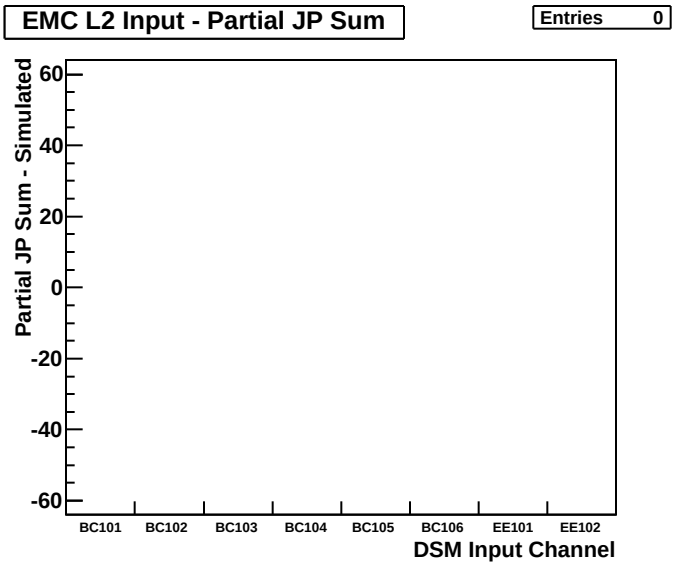

EMC L2 Input - JPY/JPB bits
Entries 3138768
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
455 254 238 287 323 393 277 394
1455 893 884 1024 1248 1381 677 906
2681 1716 1620 1993 2717 2691 494 771
387717 389483 389604 389042 388058 387881 390898 390275

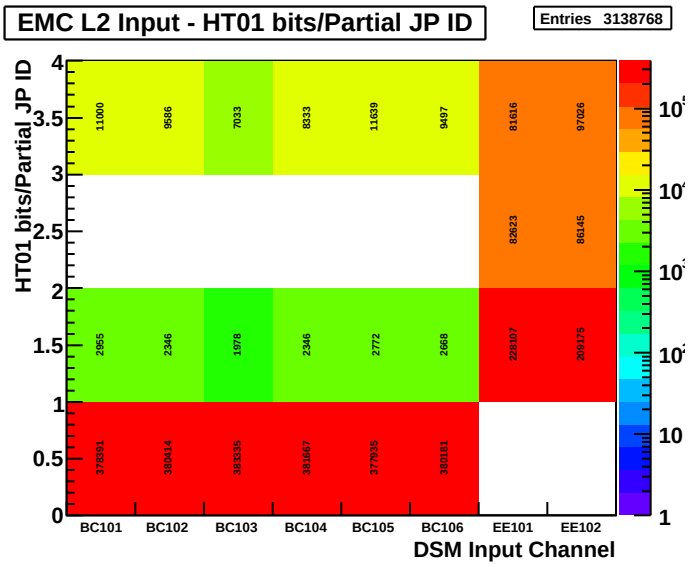

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

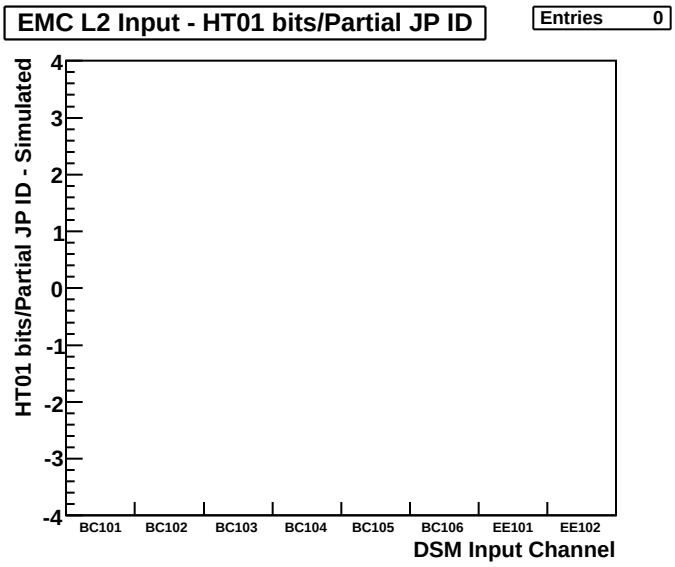

EMC L2 Input - JPZ/JPC bits
Entries 3138768
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
231 155 94 168 210 237 300 375
789 487 287 484 673 874 739 827
1493 921 548 1005 1657 1674 517 776
389783 390783 391417 390589 389806 389561 390790 390388

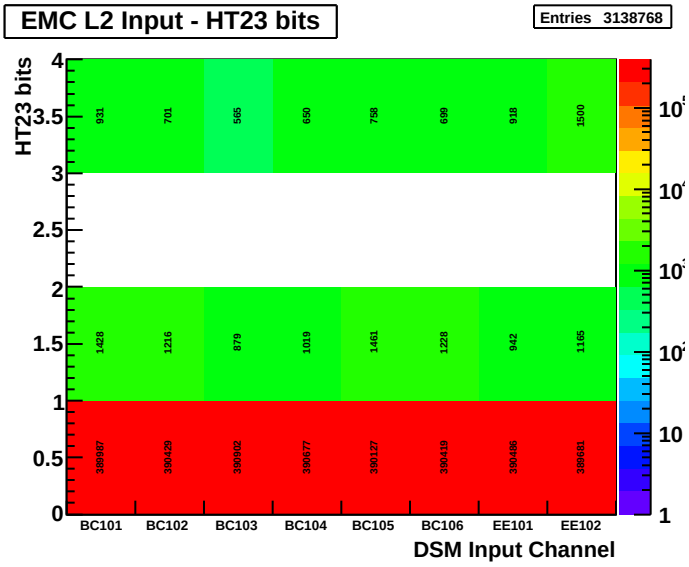

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

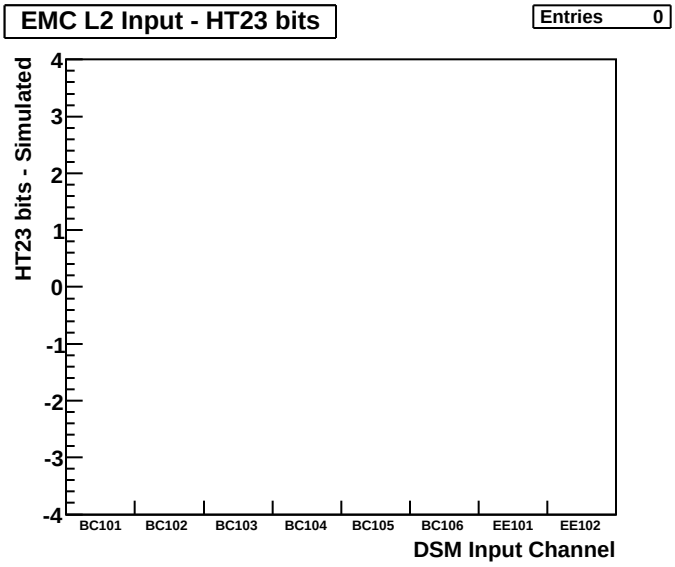

EMC L2 Input - Partial JP Sum
Entries 3138768
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

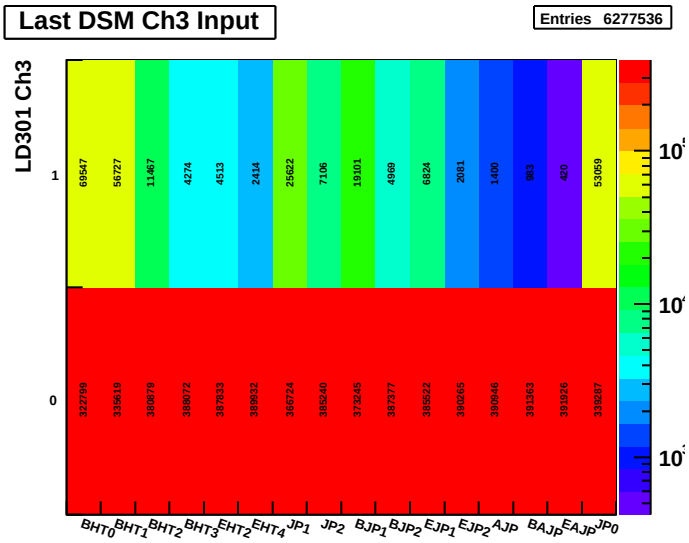

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

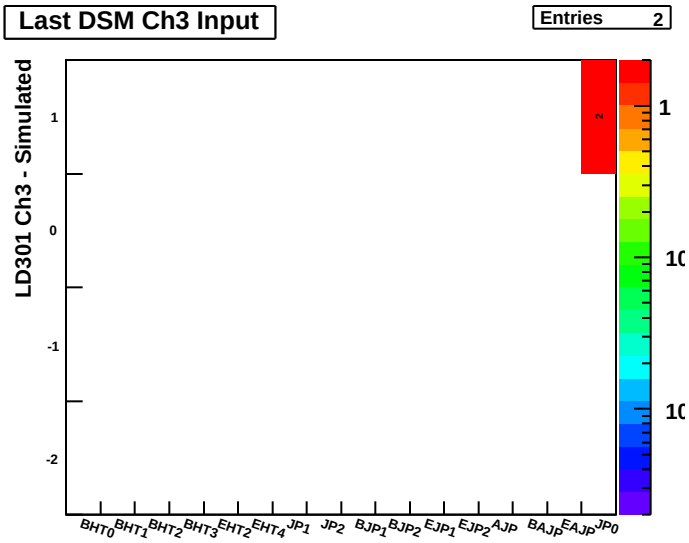

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3138768
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

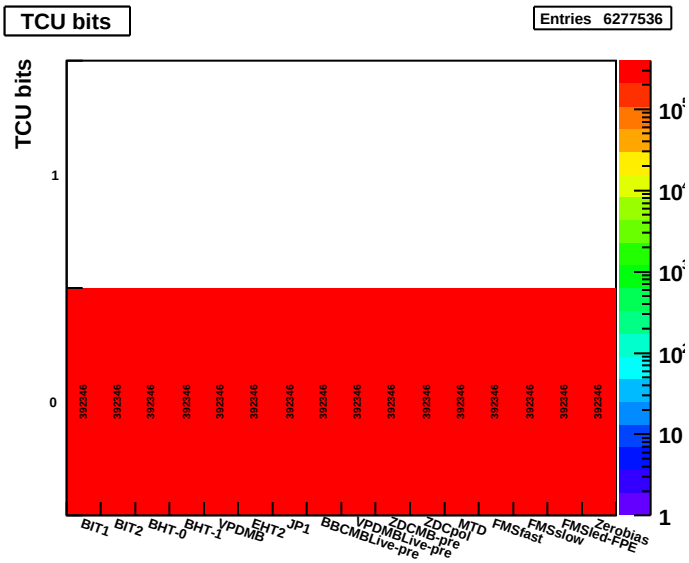

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

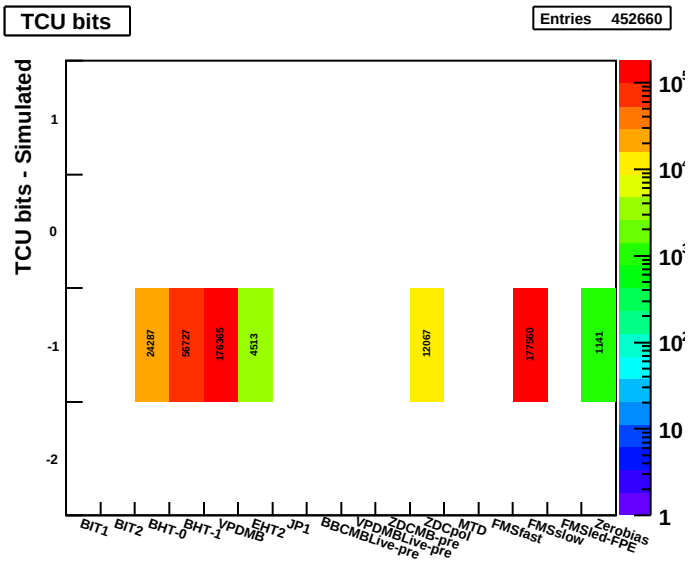

EMC L2 Input - HT23 bits
Entries 3138768
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

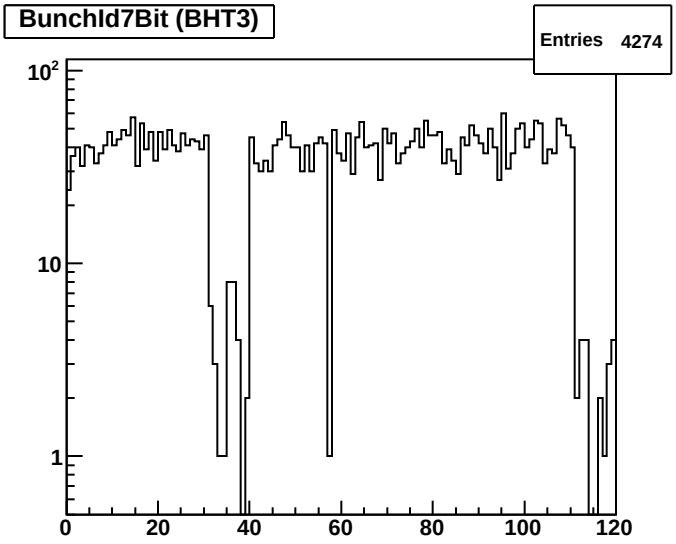

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

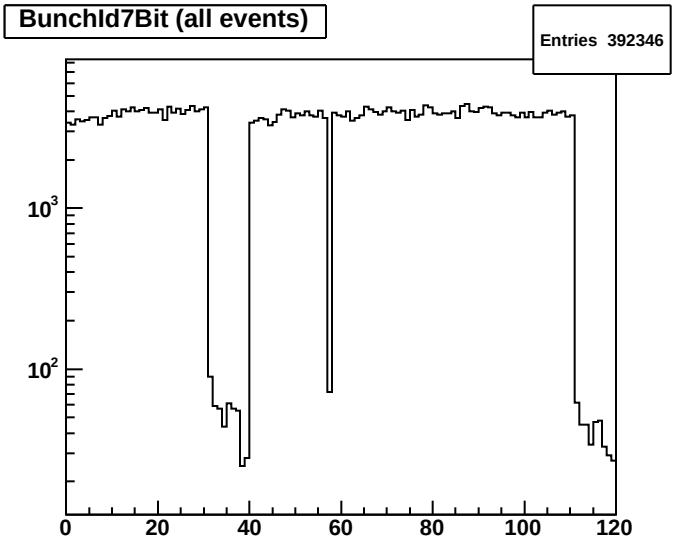

Last DSM Ch3 Input
Entries 6277536
LD301 Ch3
1
0
69547 56727 11467 4274 4513 2414 25622 7106 19101 4969 6824 2081 1400 853 420 53059
322789 335619 380879 388072 387833 388932 366724 385240 373245 387377 385522 390265 390946 391363 391926 339287
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

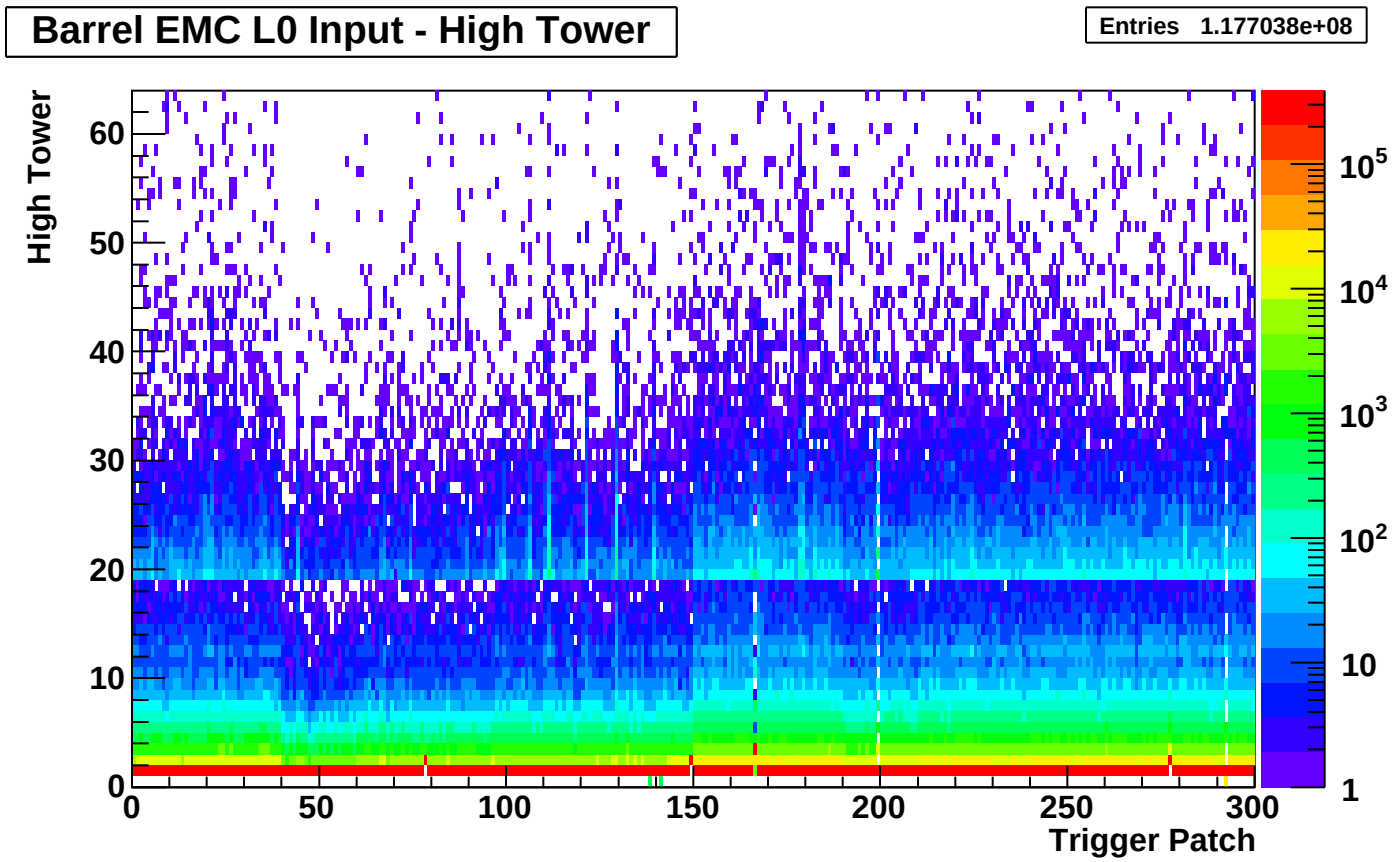

Last DSM Ch3 Input
Entries 2
LD301 Ch3 - Simulated
1
0
-1
-2
2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

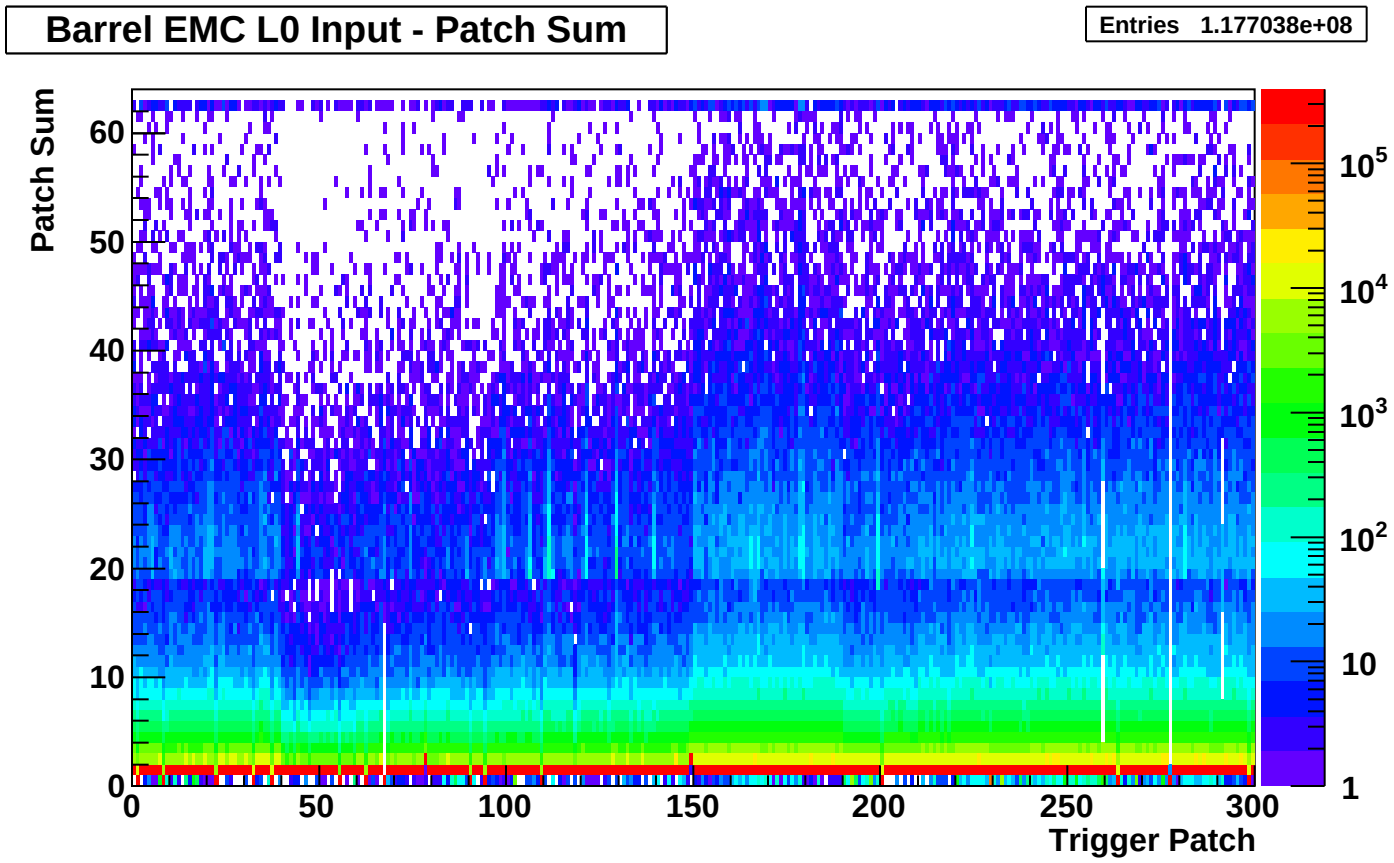

TCU bits
Entries 6277536
TCU bits
1
0
392346 392346 392346 392346 392346 392346 392346 392346 392346 392346 392346 392346 392346 392346 392346 392346
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

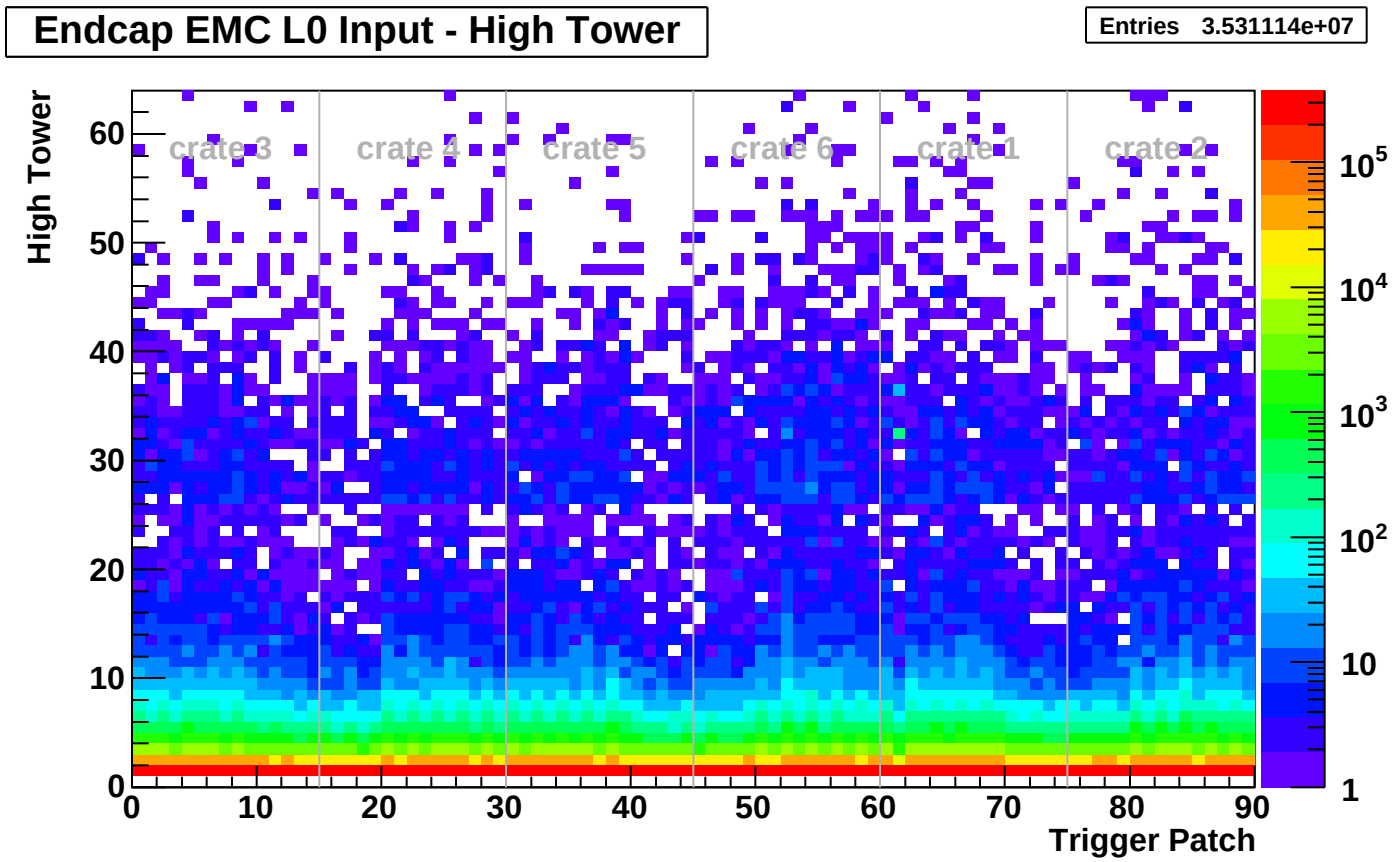

TCU bits
Entries 452660
TCU bits - Simulated
1
0
-1
-2
24287 56727 176365 4513 12067 177560 1141
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

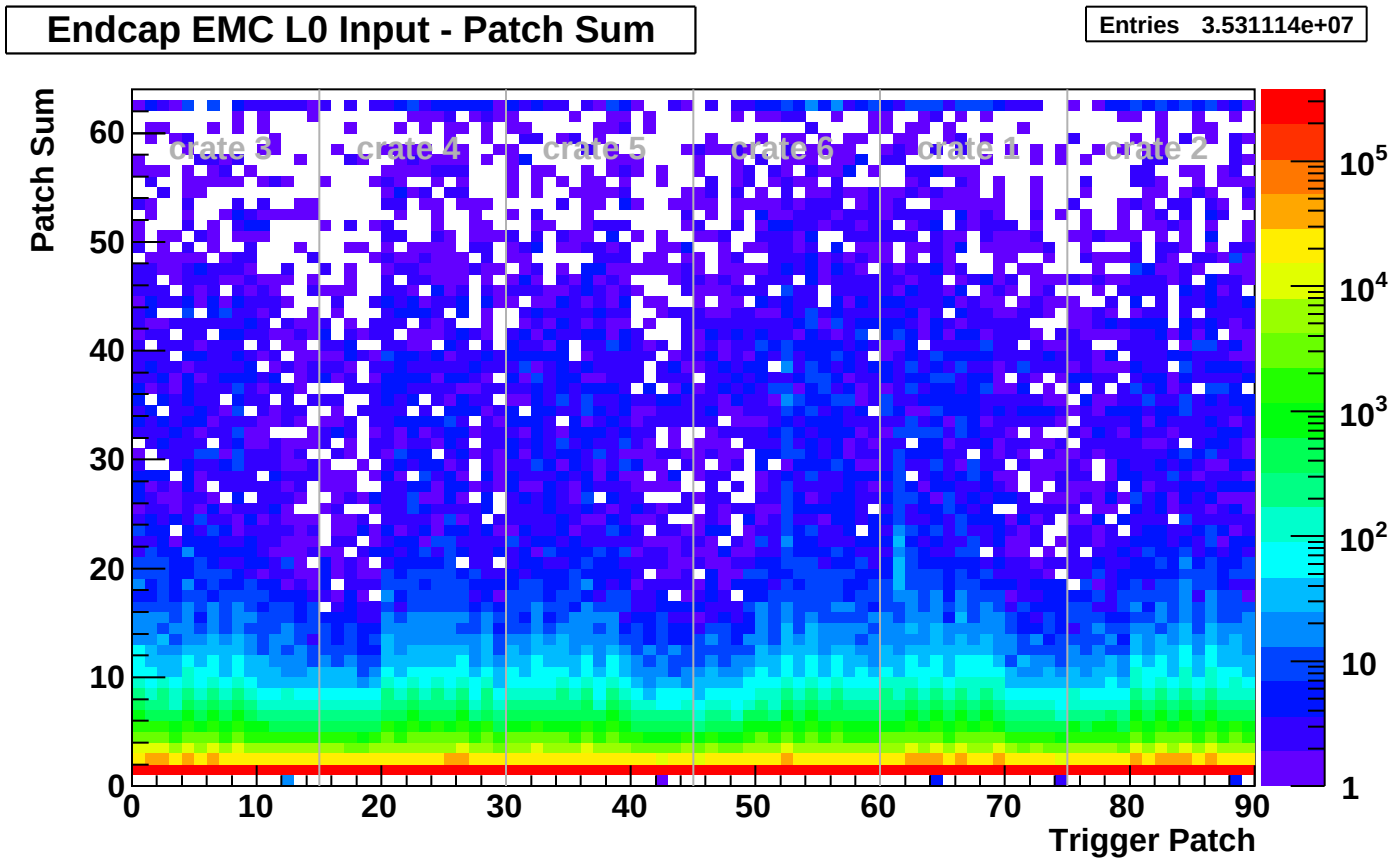

BunchId7Bit (BHT3)
Entries 4274
10^2
10
1
0 20 40 60 80 100 120

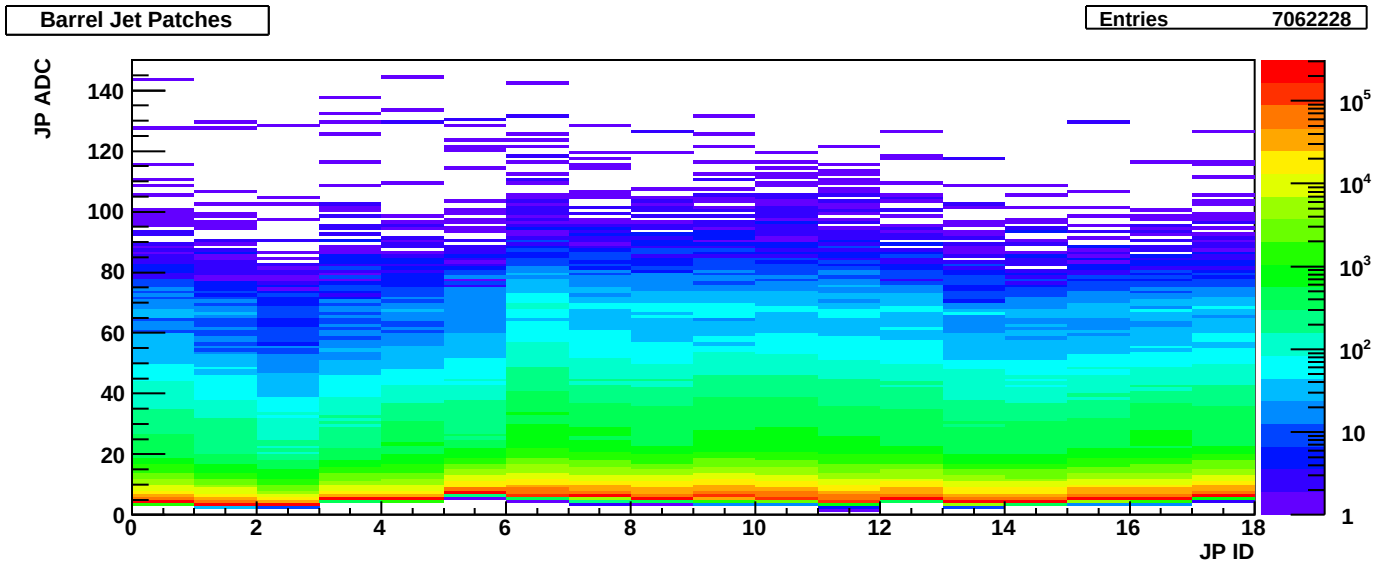

BunchId7Bit (all events)
Entries 392346
10^3
10^2
0 20 40 60 80 100 120

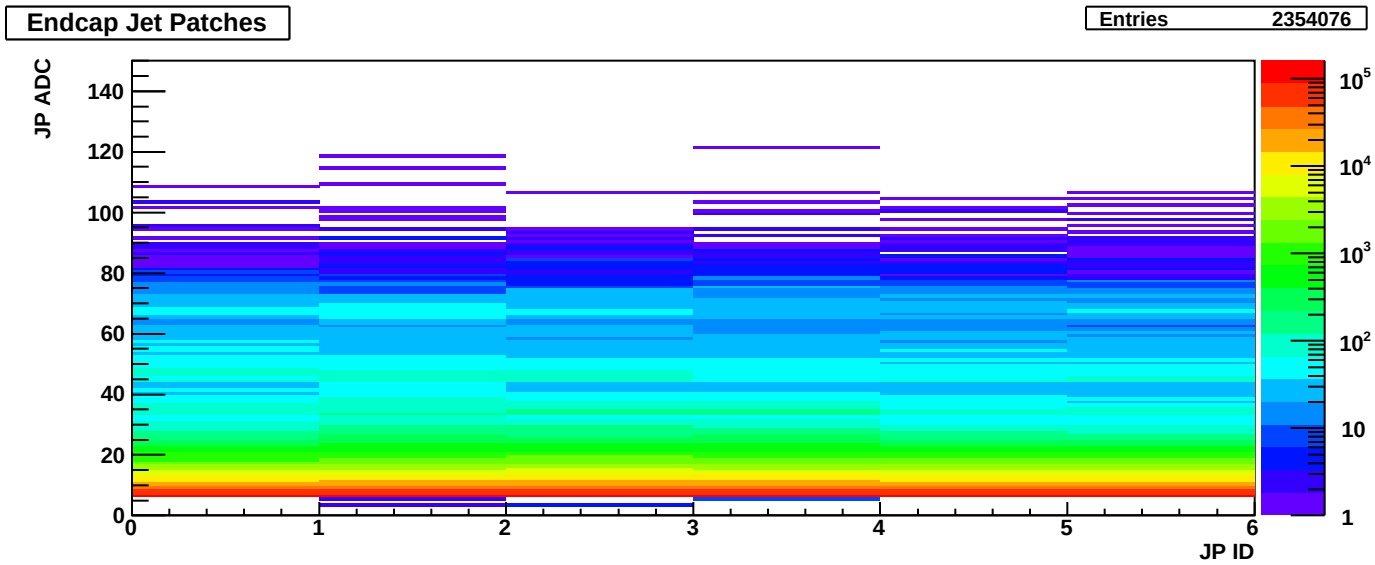

Barrel EMC L0 Input - High Tower
Entries 1.177038e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

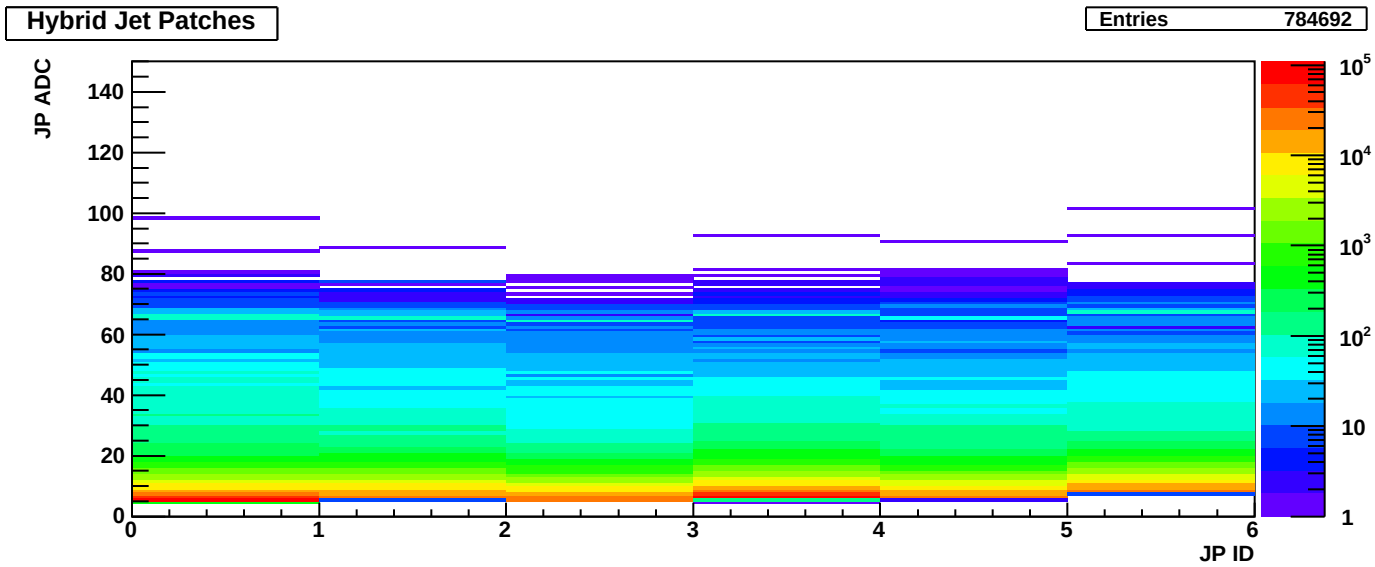

Barrel EMC L0 Input - Patch Sum
Entries 1.177038e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

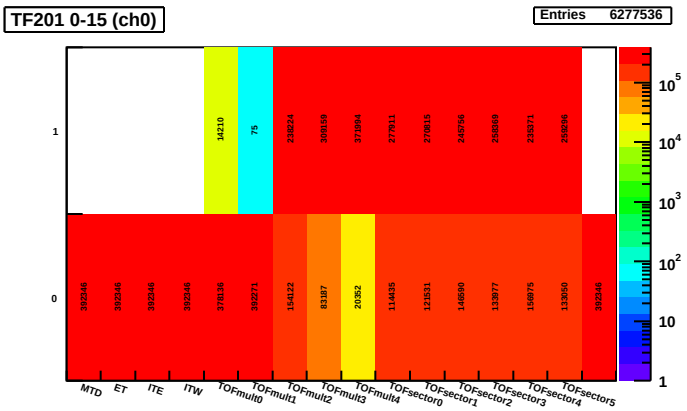

Endcap EMC L0 Input - High Tower
Entries 3.531114e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

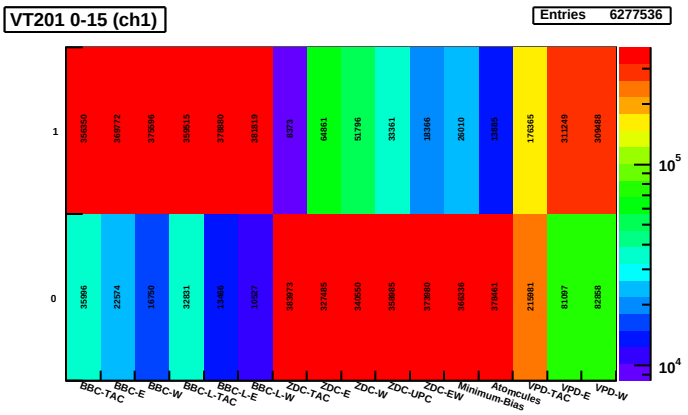

Endcap EMC L0 Input - Patch Sum
Entries 3.531114e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

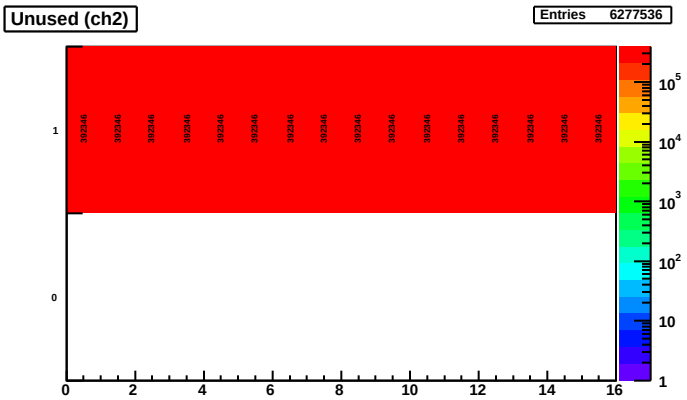

Barrel Jet Patches
Entries 7062228
JP ADC
JP ID

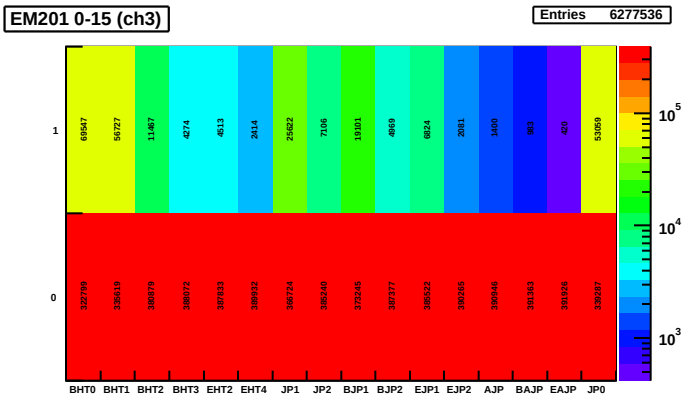

Endcap Jet Patches
Entries 2354076
JP ADC
JP ID

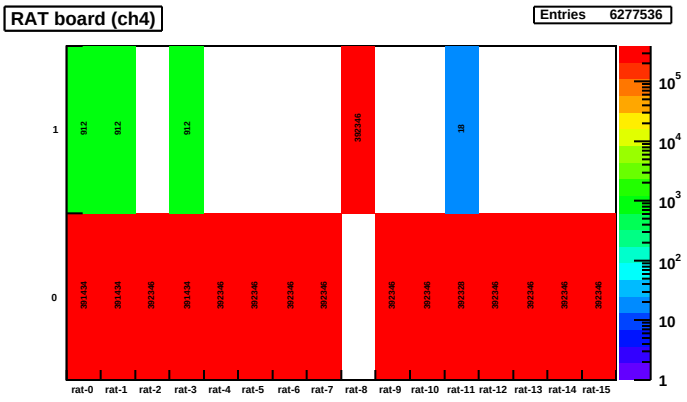

Hybrid Jet Patches
Entries 784692
JP ADC
JP ID

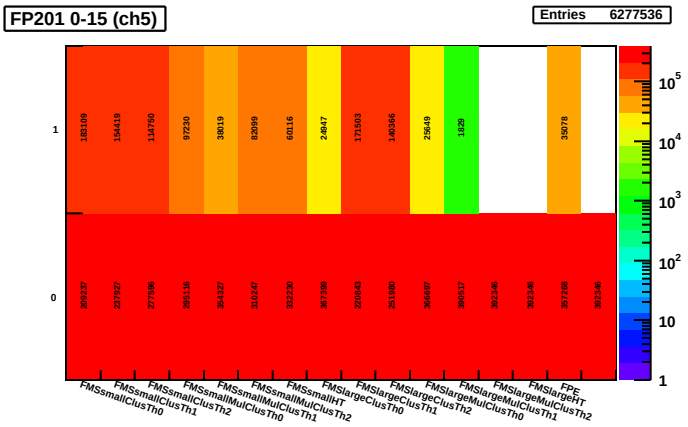

TF201 0-15 (ch0)
Entries 6277536
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

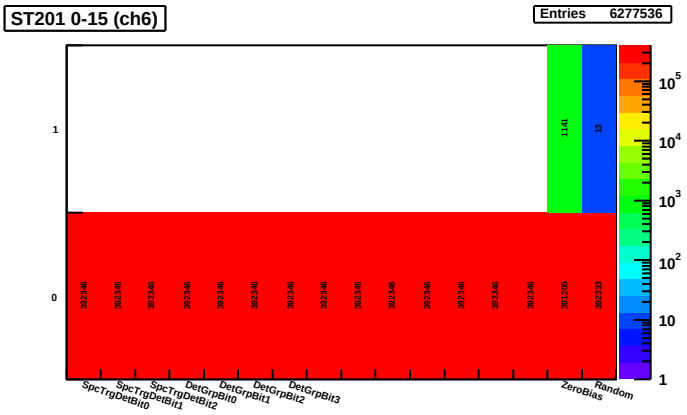

VT201 0-15 (ch1)
Entries 6277536
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

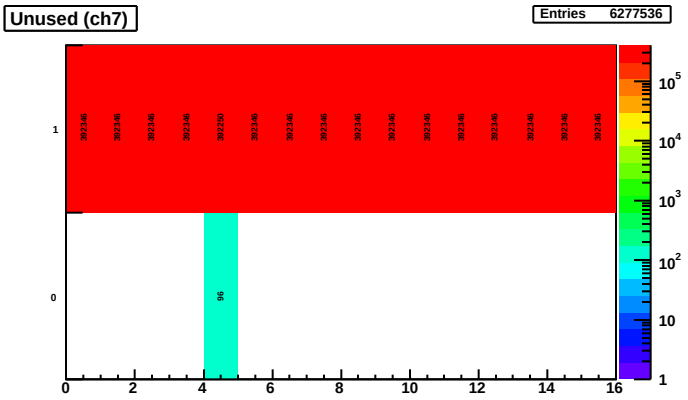

Unused (ch2)
Entries 6277536

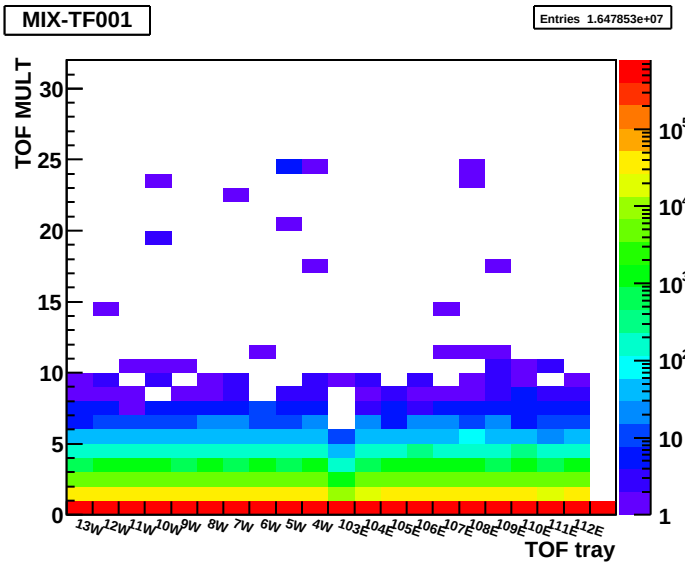

EM201 0-15 (ch3)
Entries 6277536
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

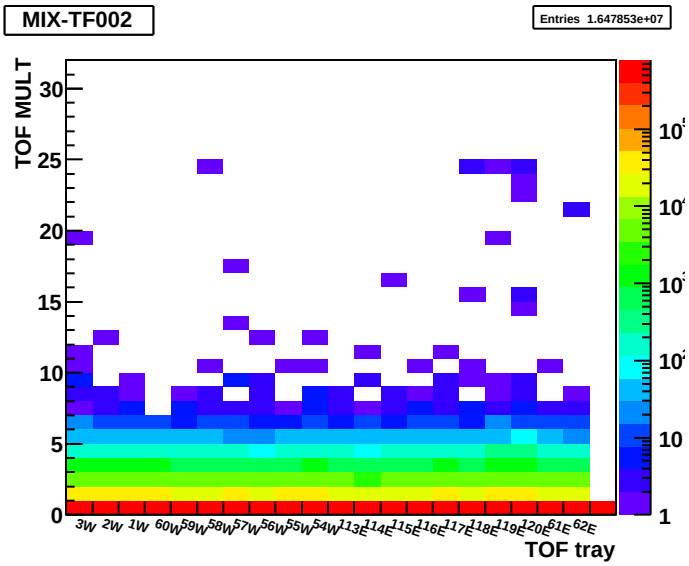

RAT board (ch4)
Entries 6277536
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

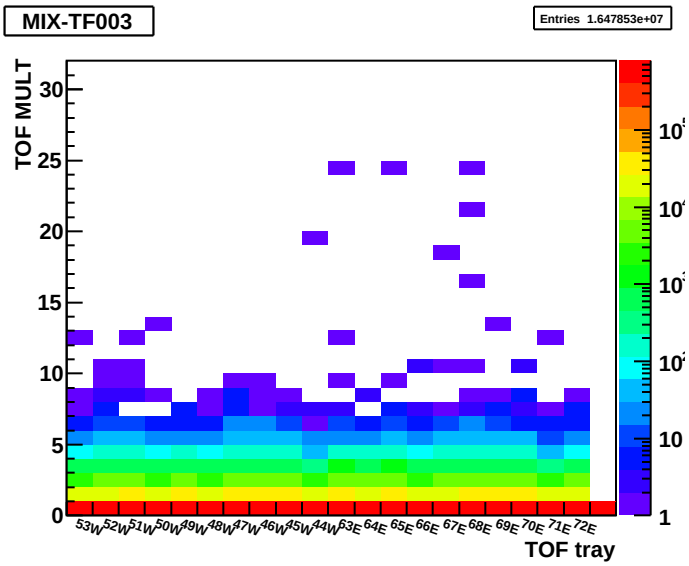

FP201 0-15 (ch5)
Entries 6277536
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

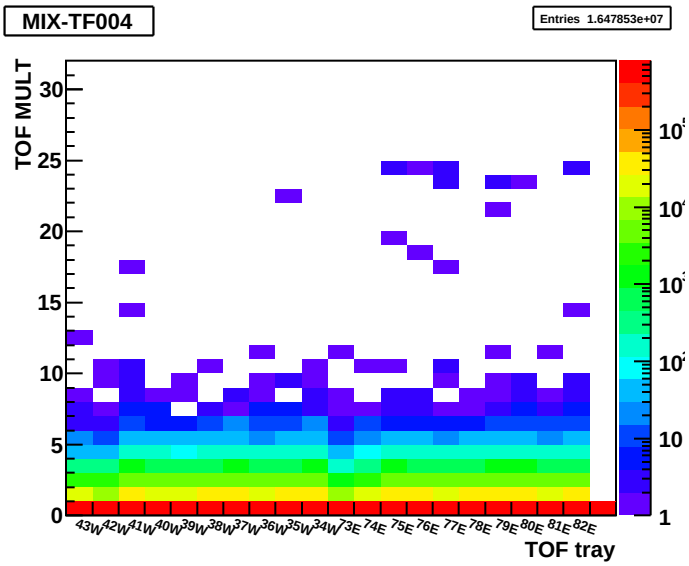

ST201 0-15 (ch6)
Entries 6277536
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

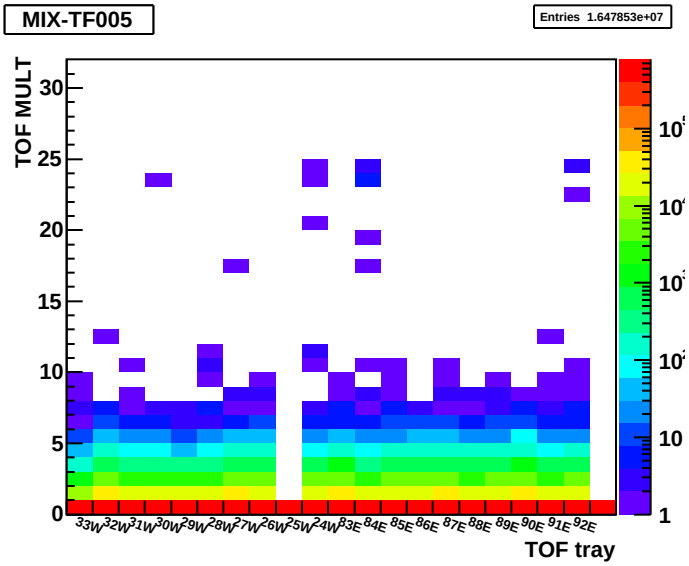

Unused (ch7)
Entries 6277536

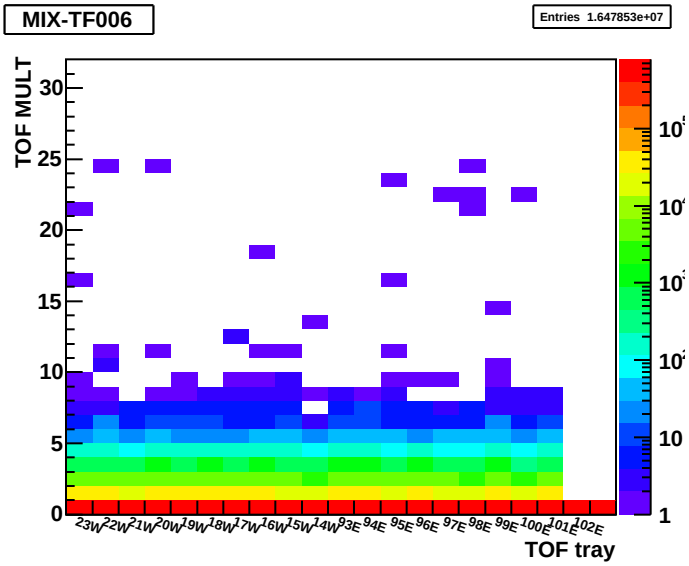

MIX-TF001
Entries 1.647853e+07
TOF MULT
TOF tray

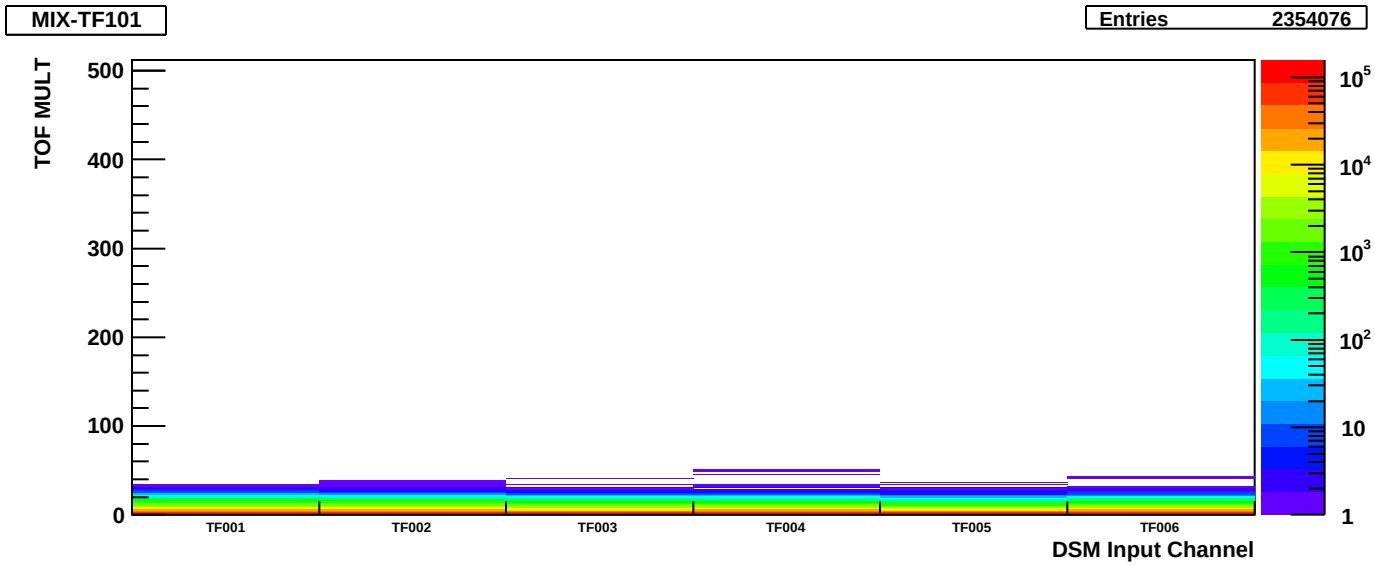

MIX-TF002
Entries 1.647853e+07
TOF MULT
TOF tray

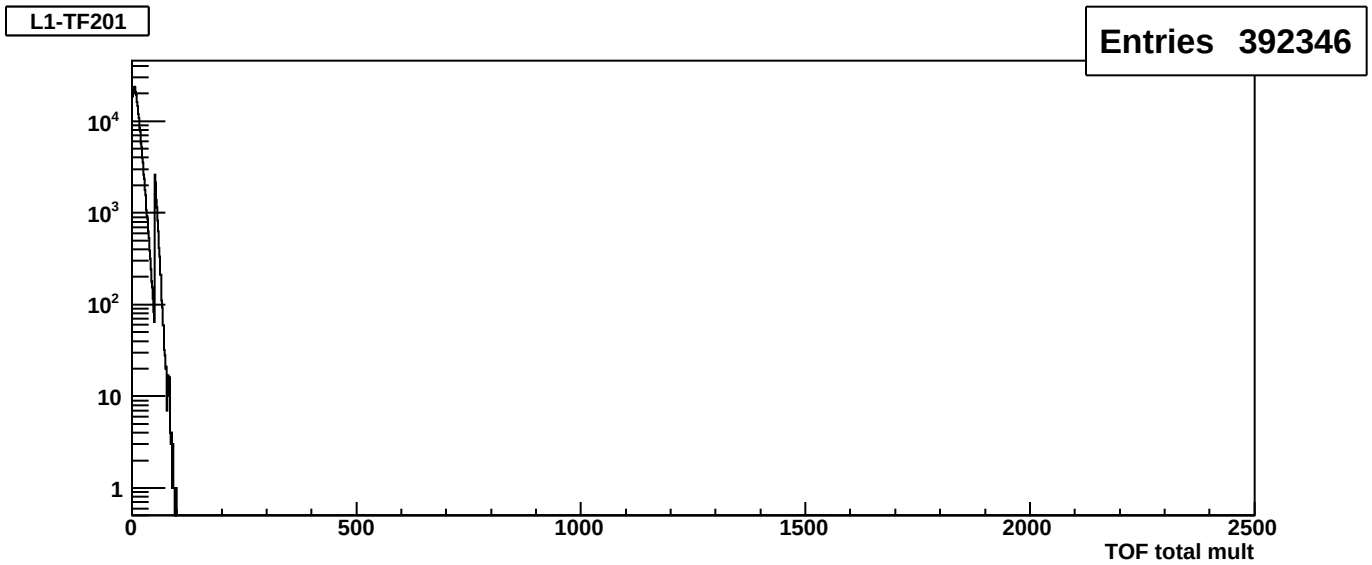

MIX-TF003
Entries 1.647853e+07
TOF MULT
TOF tray

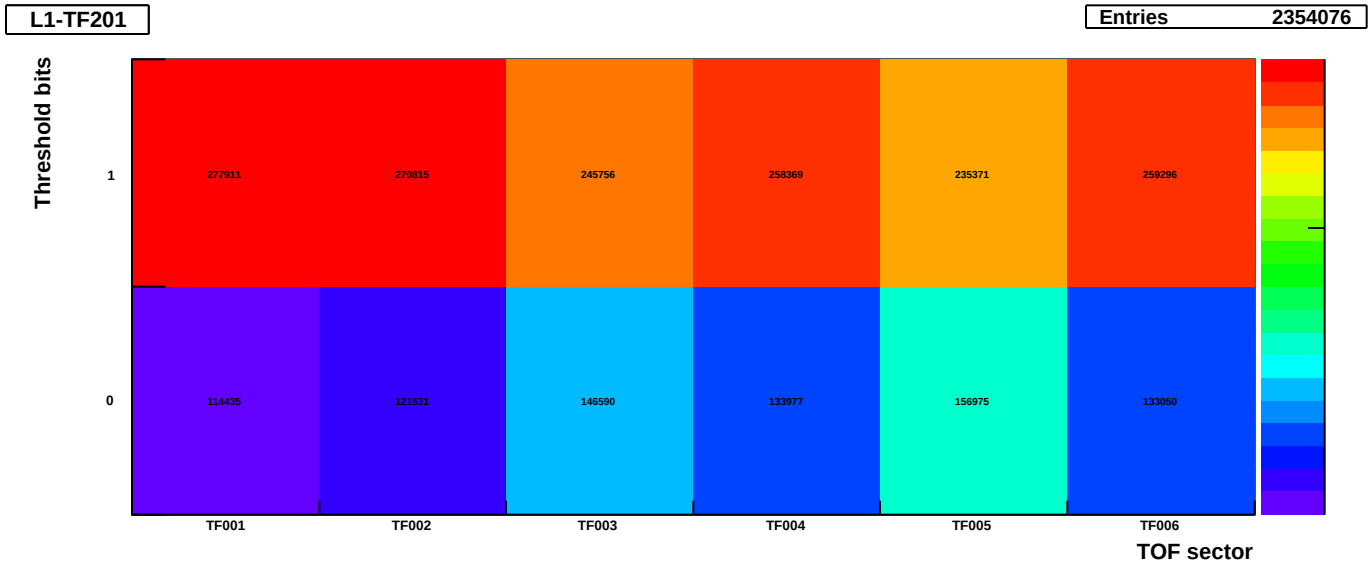

MIX-TF004
Entries 1.647853e+07
TOF MULT
TOF tray

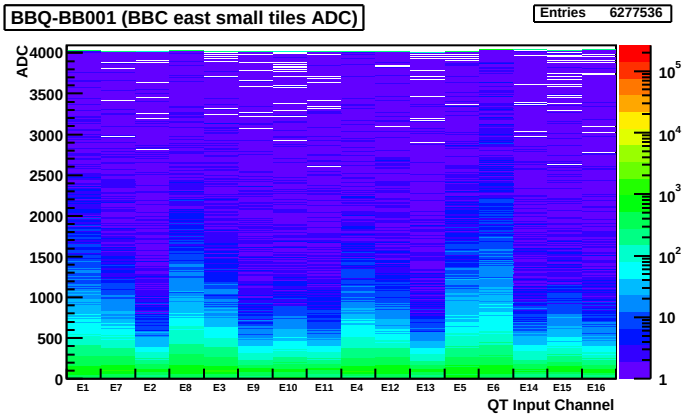

MIX-TF005
Entries 1.647853e+07
TOF MULT
TOF tray

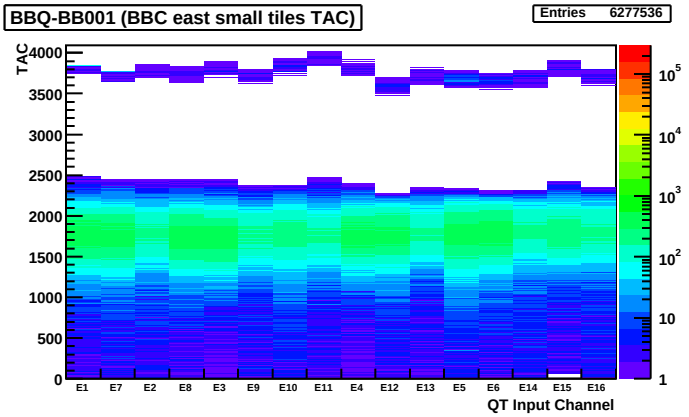

MIX-TF006
Entries 1.647853e+07
TOF MULT
TOF tray

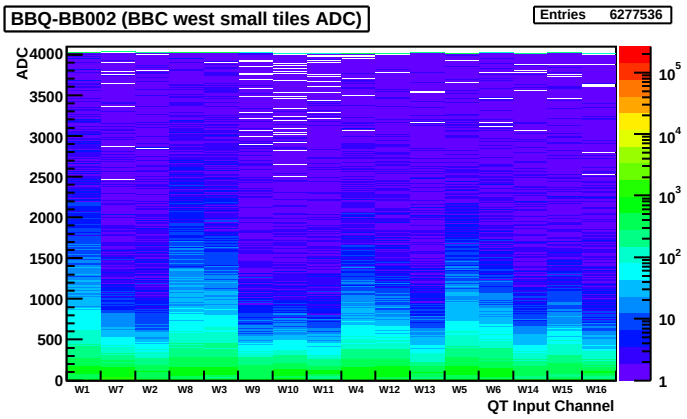

MIX-TF101
Entries 2354076
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

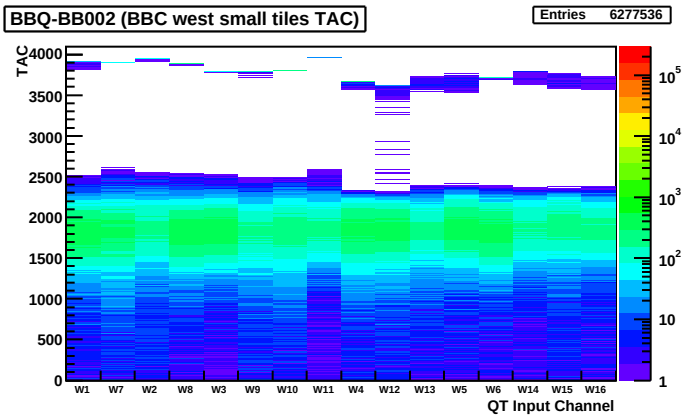

L1-TF201
Entries 392346
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

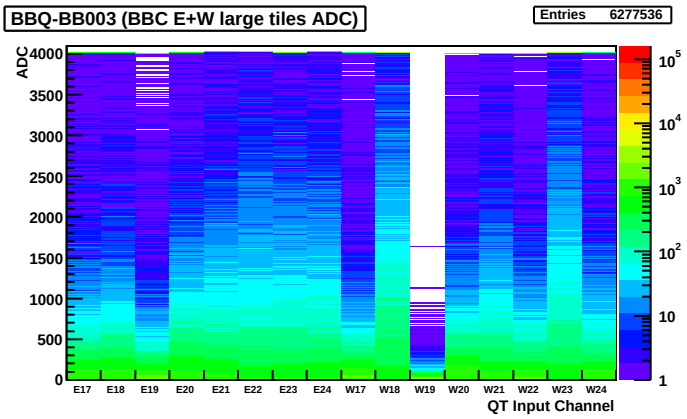

L1-TF201
Entries 2354076
Threshold bits
1
0
277911
270815
245756
258369
235371
259296
114435
121531
146590
133977
156975
133050
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

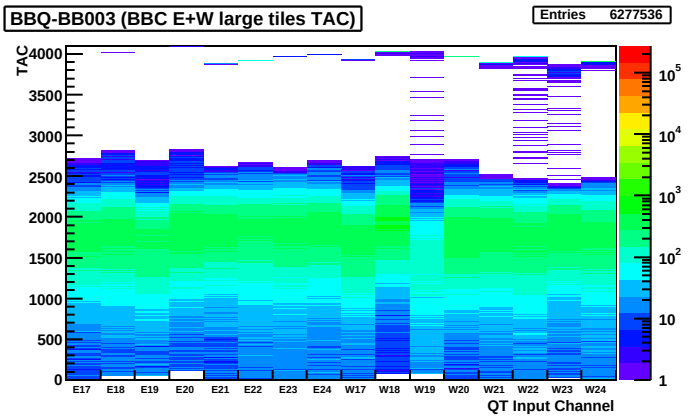

BBQ-BB001 (BBC east small tiles ADC)
Entries 6277536
ADC
QT Input Channel

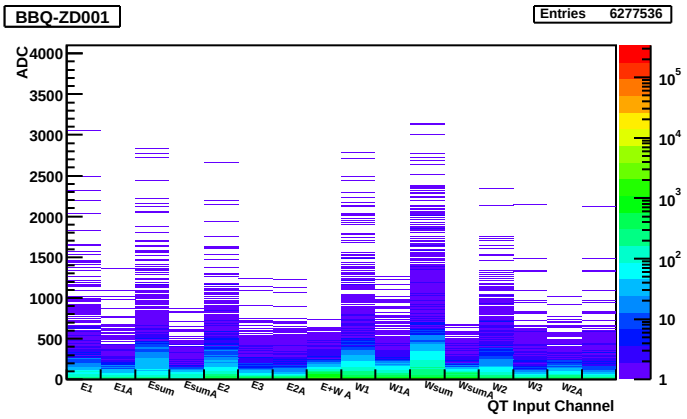

BBQ-BB001 (BBC east small tiles TAC)
Entries 6277536
TAC
QT Input Channel

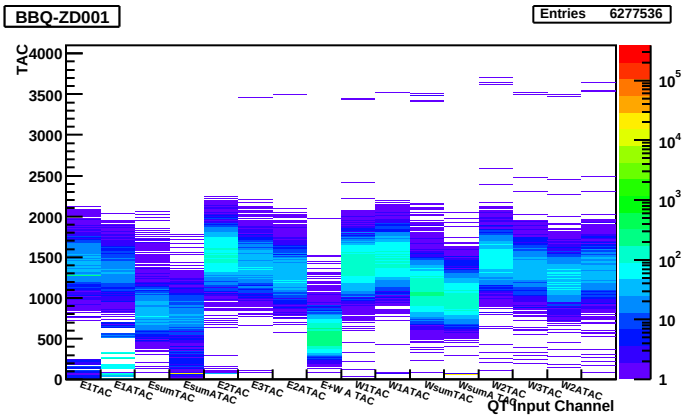

BBQ-BB002 (BBC west small tiles ADC)
Entries 6277536
ADC
QT Input Channel

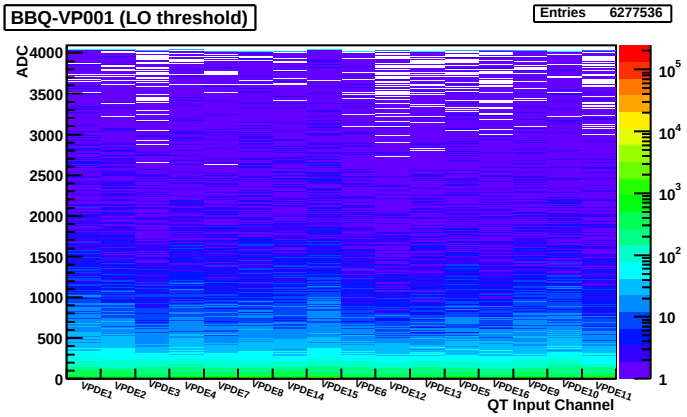

BBQ-BB002 (BBC west small tiles TAC)
Entries 6277536
TAC
QT Input Channel

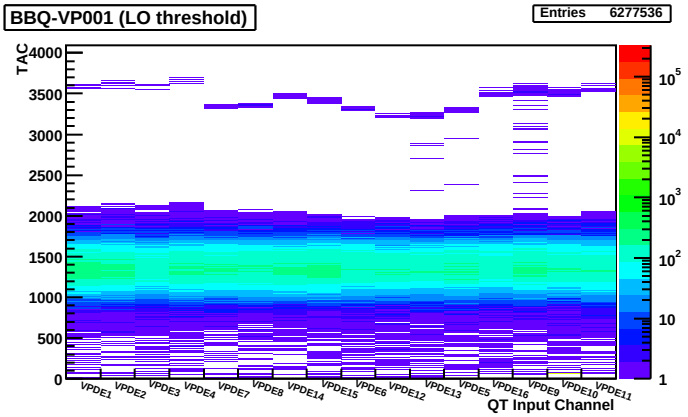

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6277536
ADC
QT Input Channel

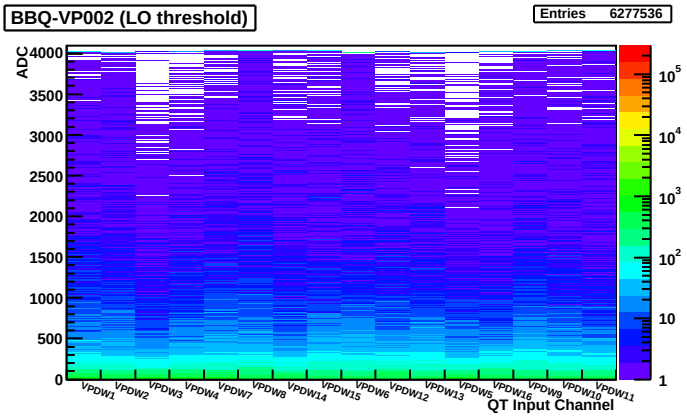

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6277536
TAC
QT Input Channel

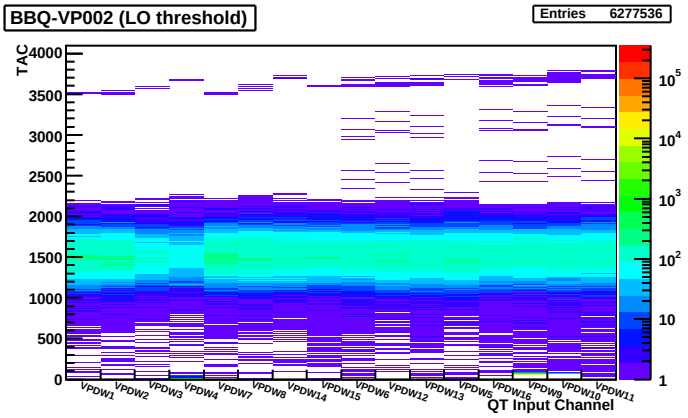

BBQ-ZD001
Entries 6277536
ADC
QT Input Channel

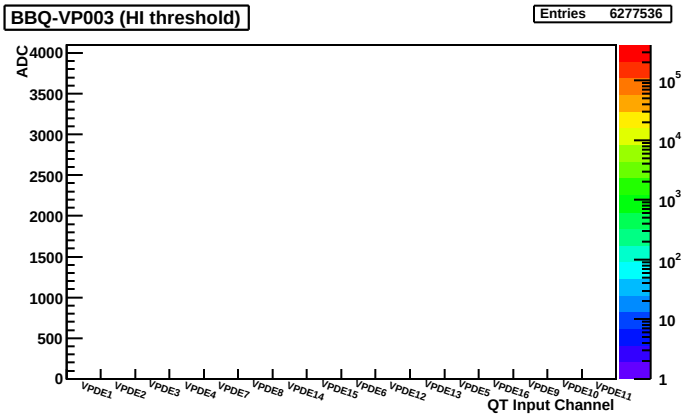

BBQ-ZD001
Entries 6277536
TAC
QT Input Channel

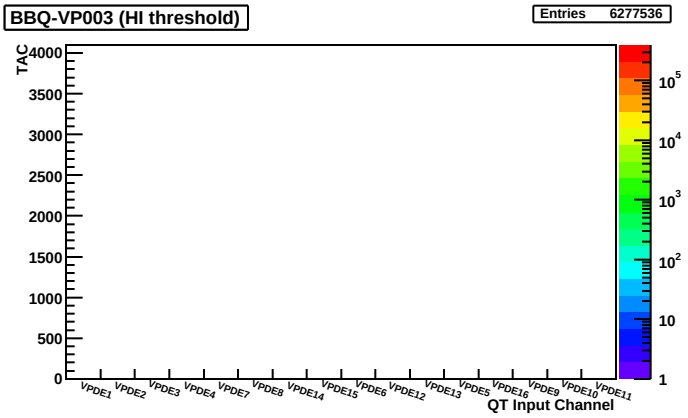

BBQ-VP001 (LO threshold)
Entries 6277536
ADC
QT Input Channel

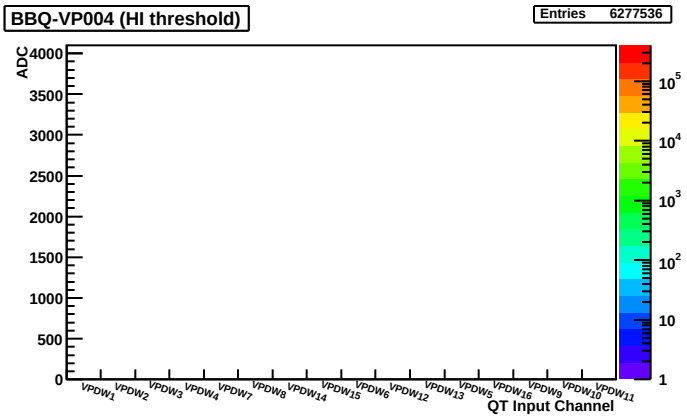

BBQ-VP001 (LO threshold)
Entries 6277536
TAC
QT Input Channel

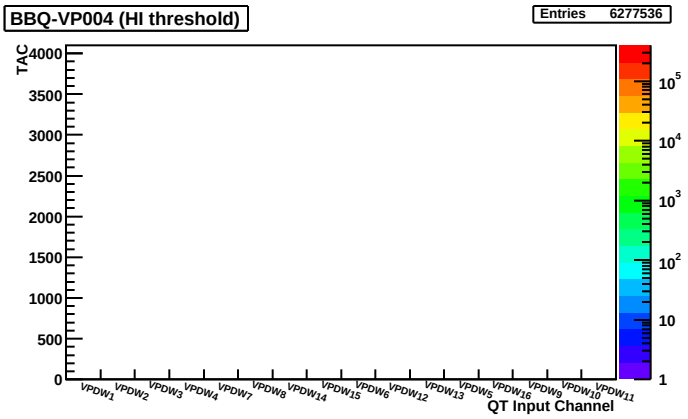

BBQ-VP002 (LO threshold)
Entries 6277536
ADC
QT Input Channel

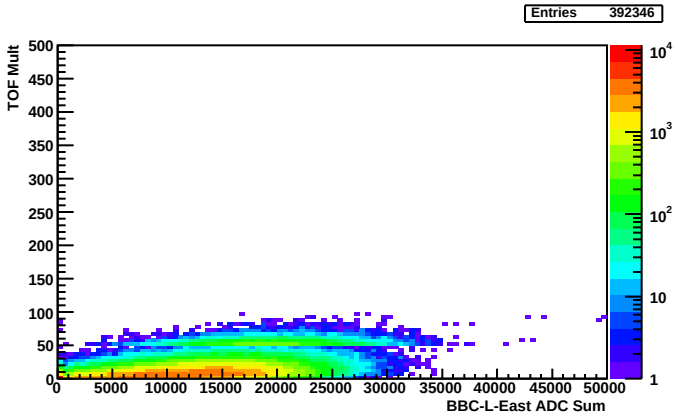

BBQ-VP002 (LO threshold)
Entries 6277536
TAC
QT Input Channel

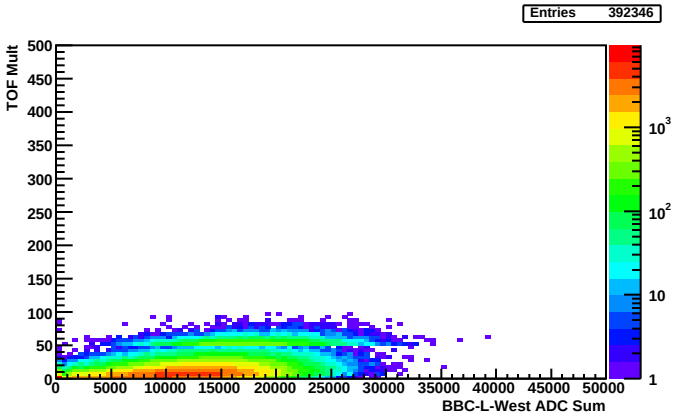

BBQ-VP003 (HI threshold)
Entries 6277536
ADC
QT Input Channel

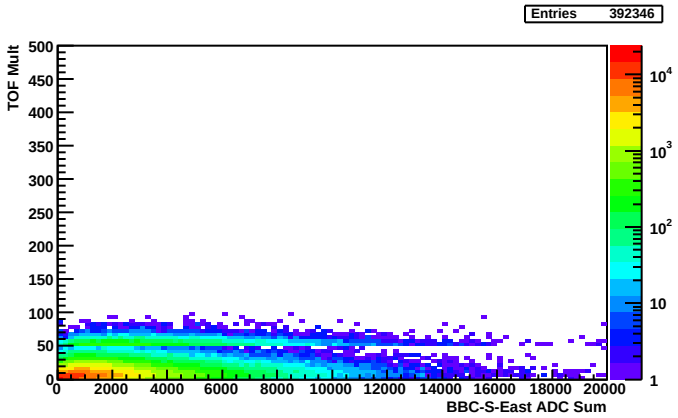

BBQ-VP003 (HI threshold)
Entries 6277536
TAC
QT Input Channel

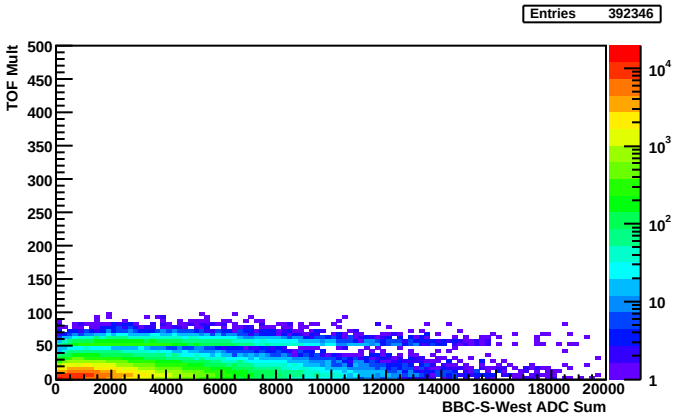

BBQ-VP004 (HI threshold)
Entries 6277536
ADC
QT Input Channel

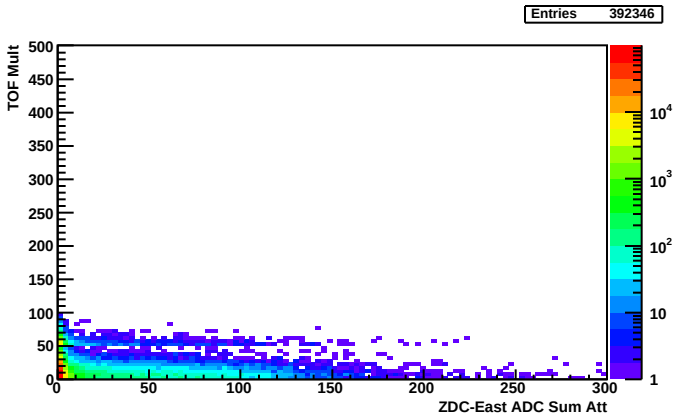

BBQ-VP004 (HI threshold)
Entries 6277536
TAC
QT Input Channel

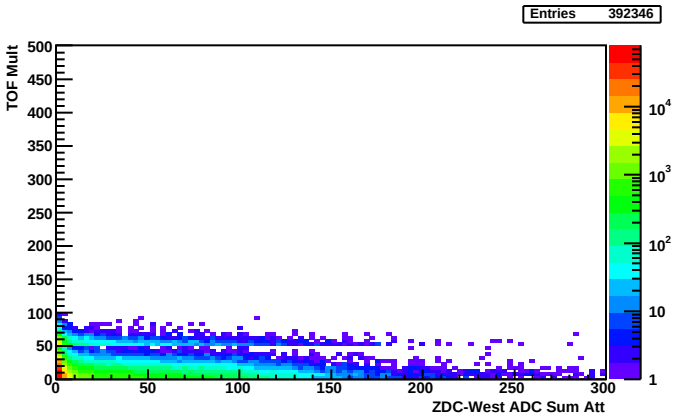

Entries 392346
TOF Mult
BBC-L-East ADC Sum

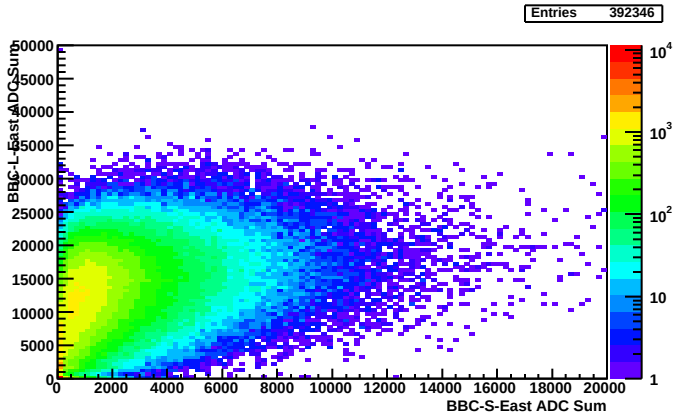

Entries 392346
TOF Mult
BBC-L-West ADC Sum

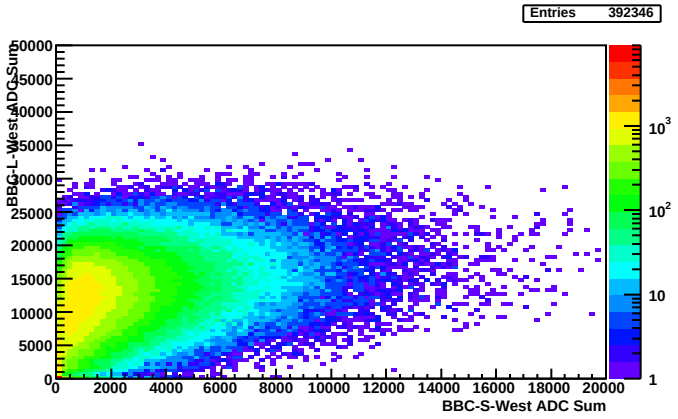

Entries 392346
TOF Mult
BBC-S-East ADC Sum

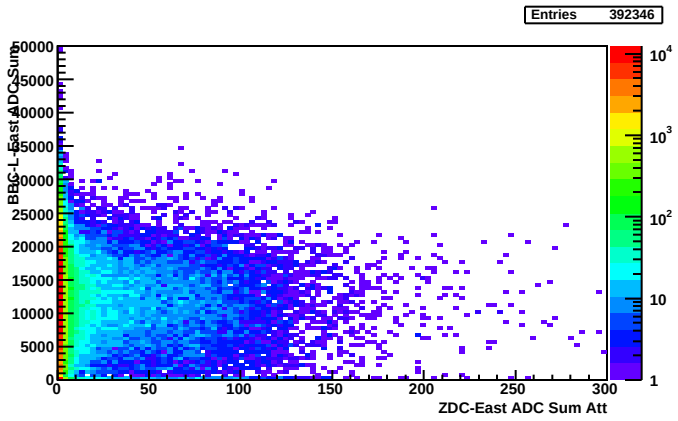

Entries 392346
TOF Mult
BBC-S-West ADC Sum

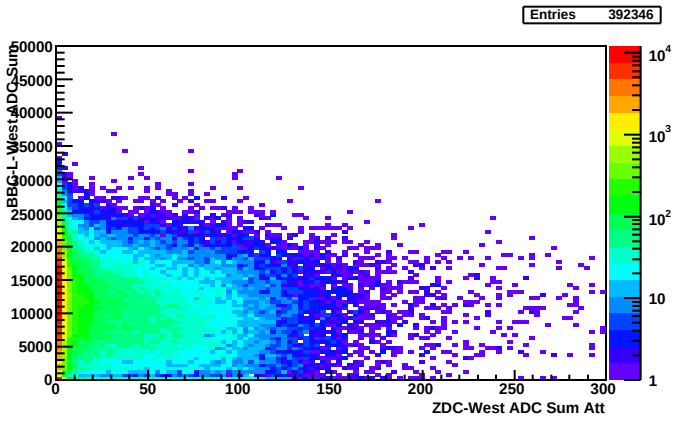

Entries 392346
TOF Mult
ZDC-East ADC Sum Att

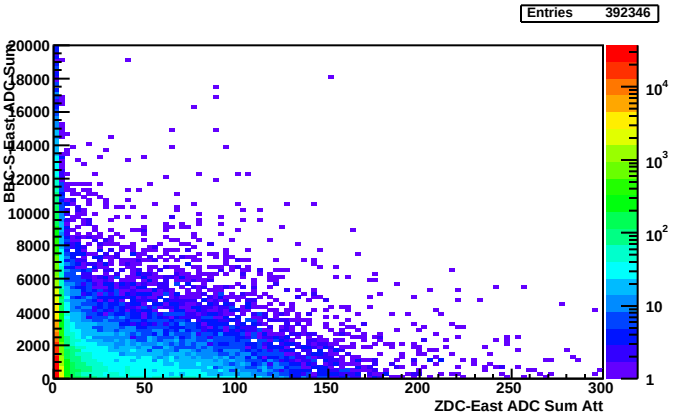

Entries 392346
TOF Mult
ZDC-West ADC Sum Att

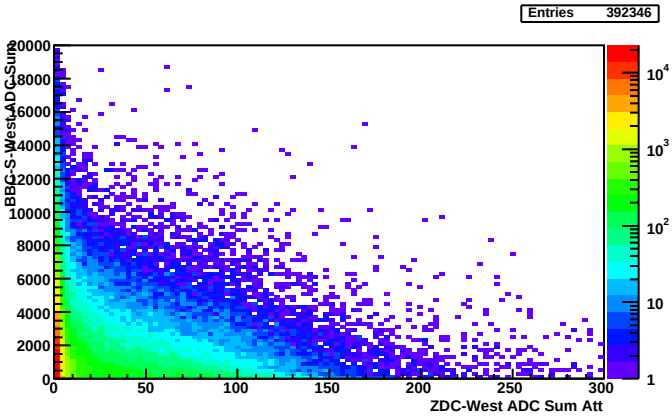

Entries 392346
BBC-L-East ADC Sum
BBC-S-East ADC Sum

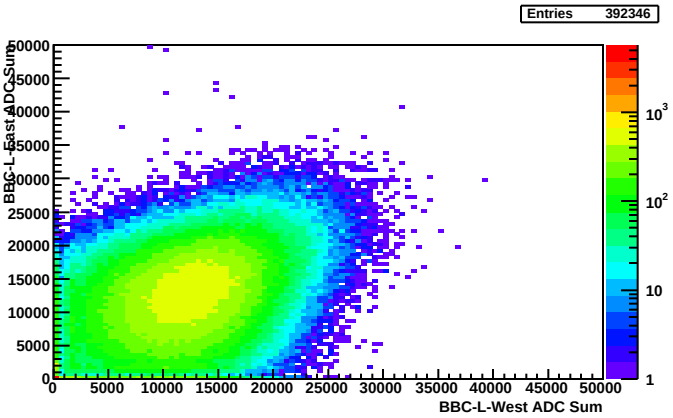

Entries 392346
BBC-L-West ADC Sum
BBC-S-West ADC Sum

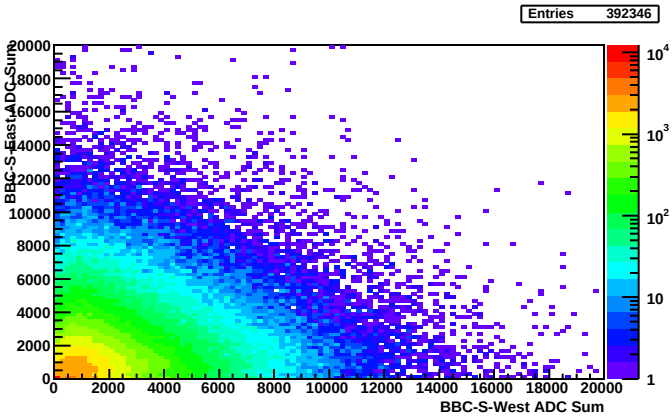

Entries 392346
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

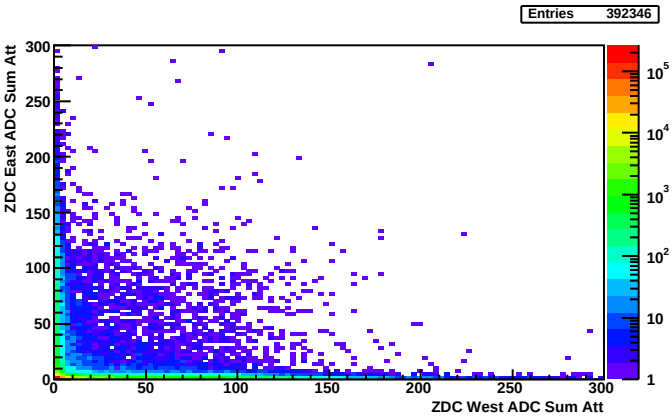

Entries 392346
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

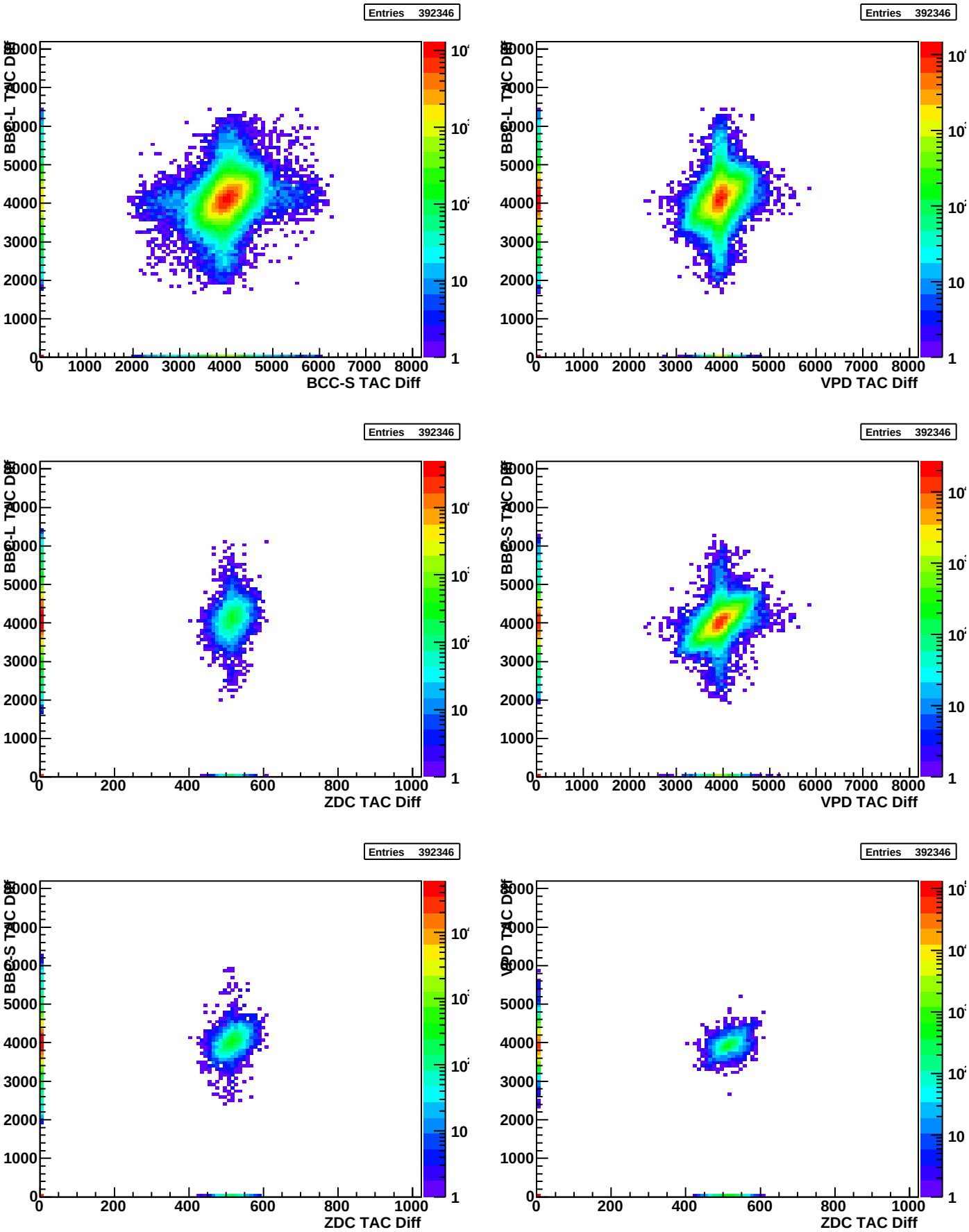

Entries 392346
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

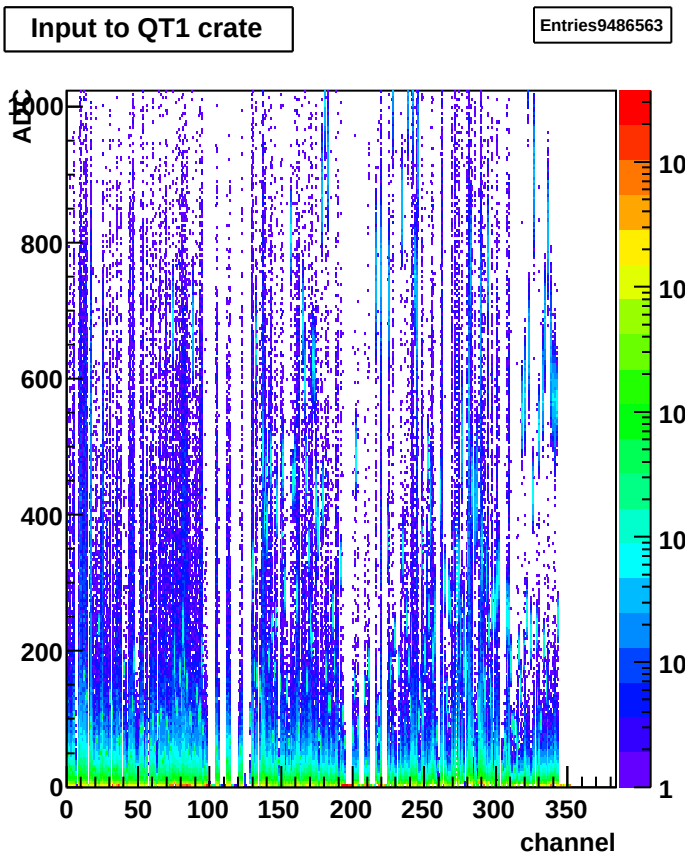

Entries 392346
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

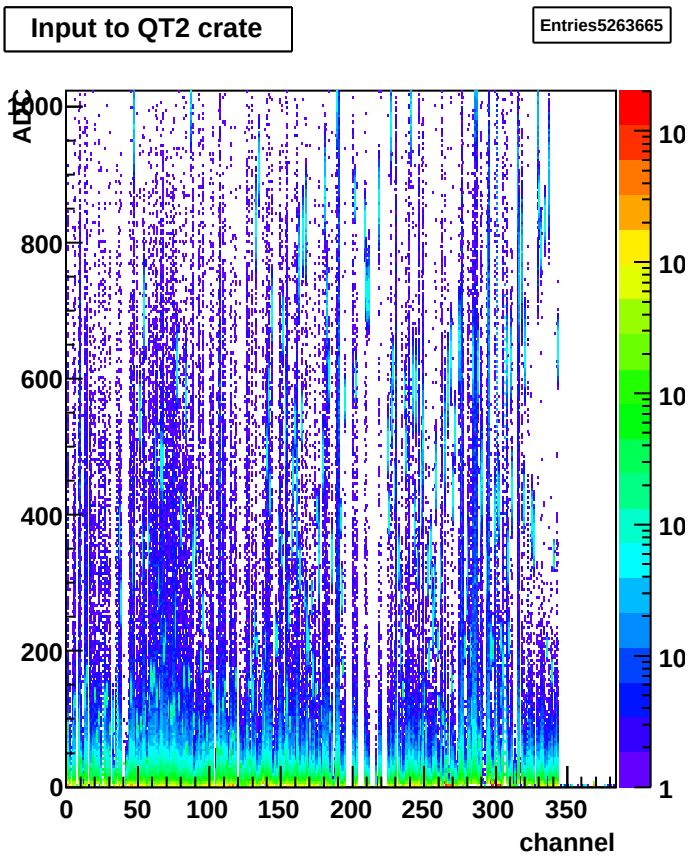

Entries 392346
BBC-L-East ADC Sum
BBC-L-West ADC Sum

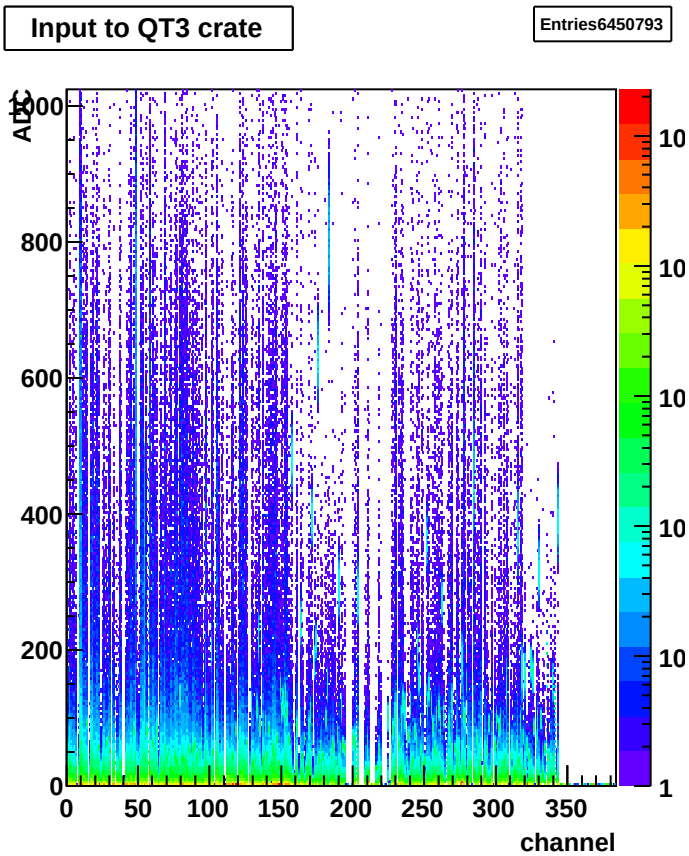

Entries 392346
BBC-S-East ADC Sum
BBC-S-West ADC Sum

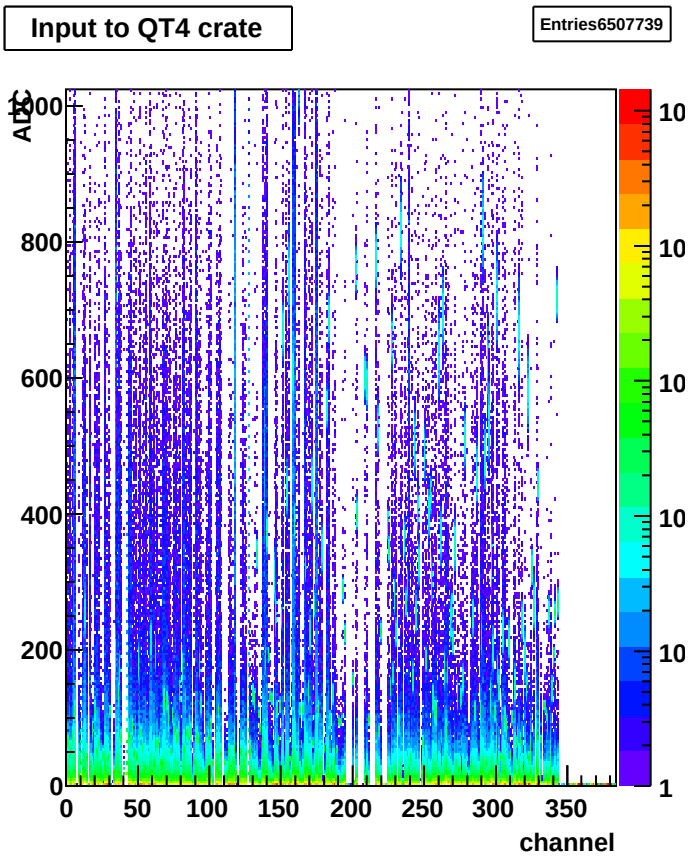

Entries 392346
ZDC East ADC Sum Att
ZDC West ADC Sum Att

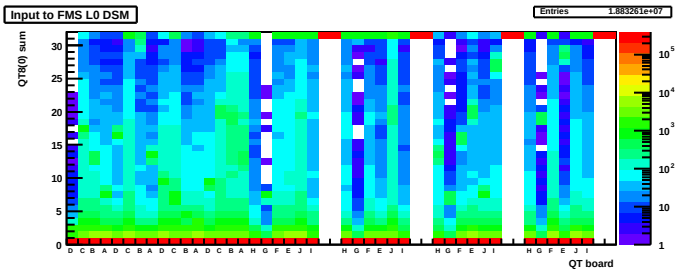

Entries 392346
BBC-L TAC Diff
BCC-S TAC Diff
Entries 392346
BBC-L TAC Diff
VPD TAC Diff
Entries 392346
BBC-L TAC Diff
ZDC TAC Diff
Entries 392346
BBC-S TAC Diff
VPD TAC Diff
Entries 392346
BBC-S TAC Diff
ZDC TAC Diff
Entries 392346
VPD TAC Diff
ZDC TAC Diff

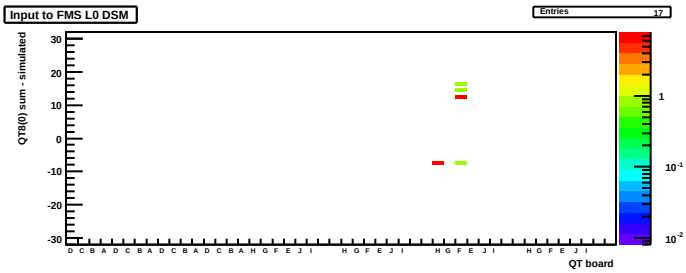

Input to QT1 crate
Entries9486563
ADC
channel

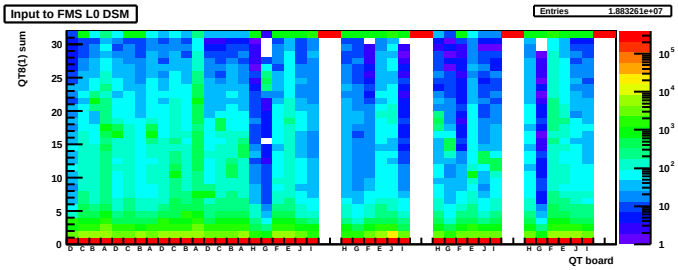

Input to QT2 crate
Entries5263665
ADC
channel

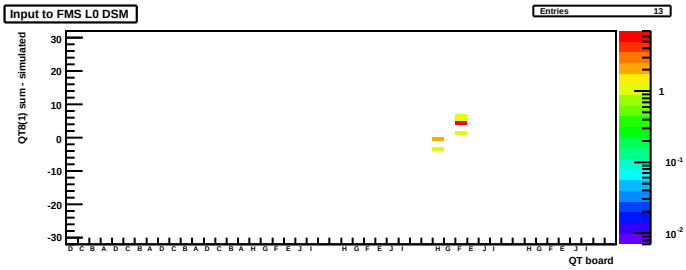

Input to QT3 crate
Entries6450793
ADC
channel

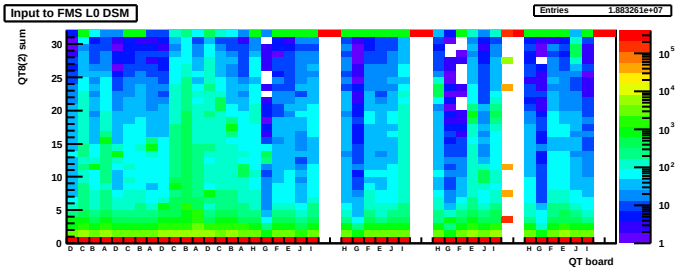

Input to QT4 crate
Entries6507739
ADC
channel

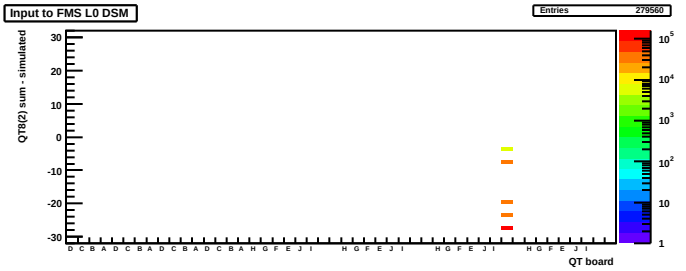

Input to FMS L0 DSM
Entries 1.883261e+07
QT8(0) sum
QT board

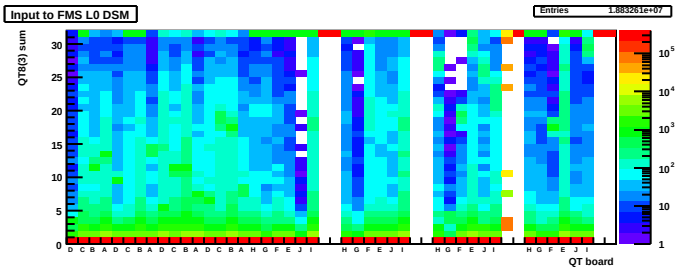

Input to FMS L0 DSM
Entries 17
QT8(0) sum - simulated
QT board

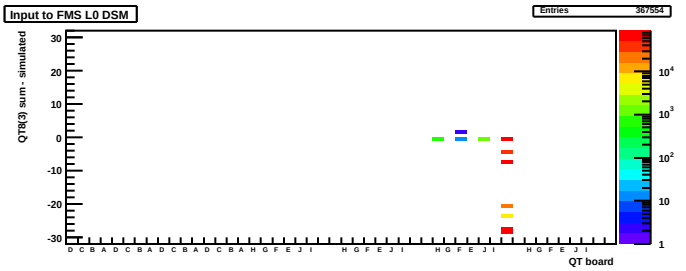

Input to FMS L0 DSM
Entries 1.883261e+07
QT8(1) sum
QT board

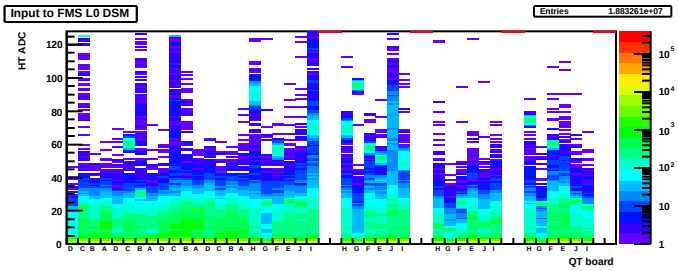

Input to FMS L0 DSM
Entries 13
QT8(1) sum - simulated
QT board

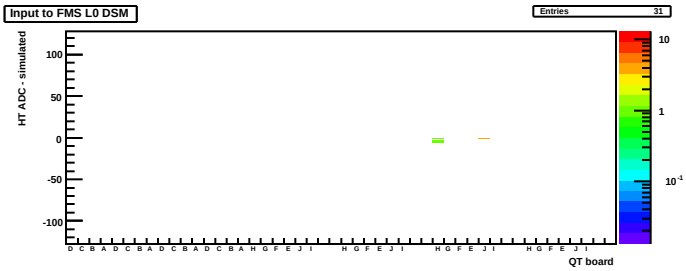

Input to FMS L0 DSM
Entries 1.883261e+07
QT8(2) sum
QT board

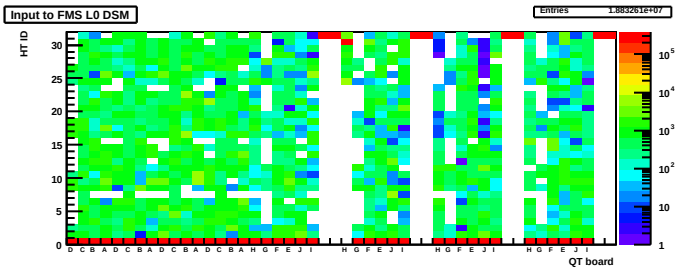

Input to FMS L0 DSM
Entries 279560
QT8(2) sum - simulated
QT board

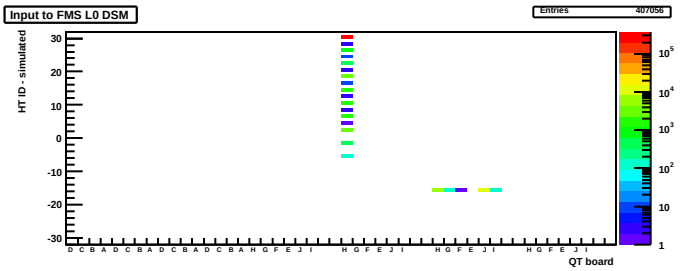

Input to FMS L0 DSM
Entries 1.883261e+07
QT8(3) sum
QT board

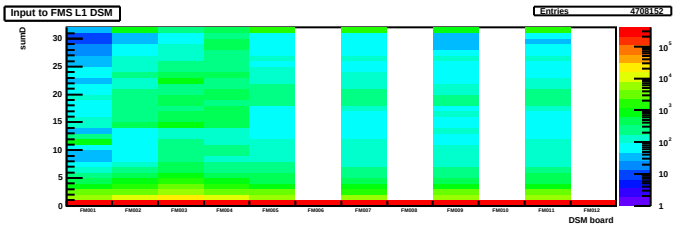

Input to FMS L0 DSM
Entries 367554
QT8(3) sum - simulated
QT board

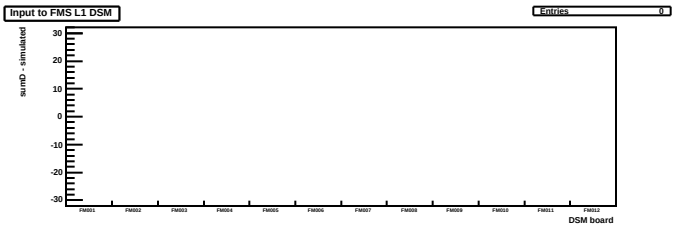

Input to FMS L0 DSM
Entries 1.883261e+07
HT ADC
QT board

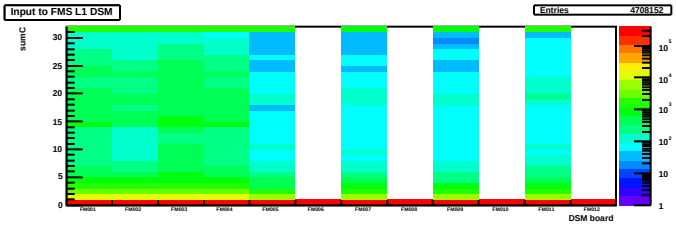

Input to FMS L0 DSM
Entries 31
HT ADC - simulated
QT board

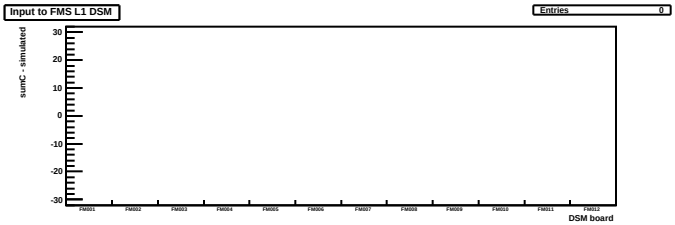

Input to FMS L0 DSM
Entries 1.883261e+07
HT ID
QT board

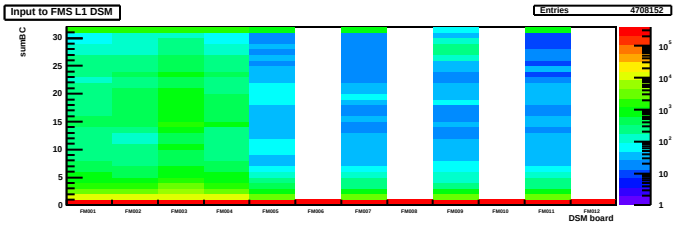

Input to FMS L0 DSM
Entries 407056
HT ID - simulated
QT board

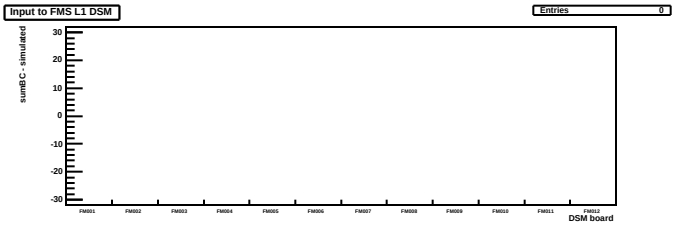

Input to FMS L1 DSM
Entries 4708152
sumD
DSM board

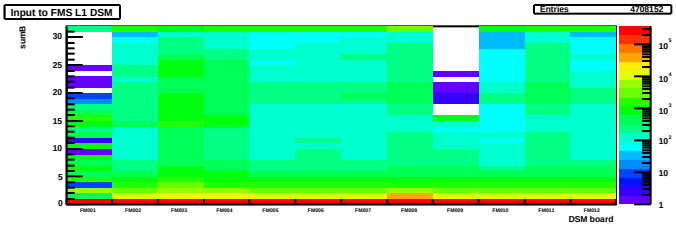

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

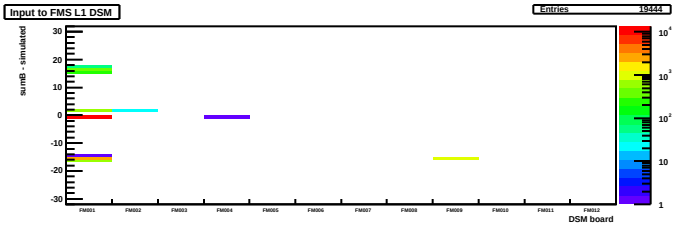

Input to FMS L1 DSM
Entries 4708152
sumC
DSM board

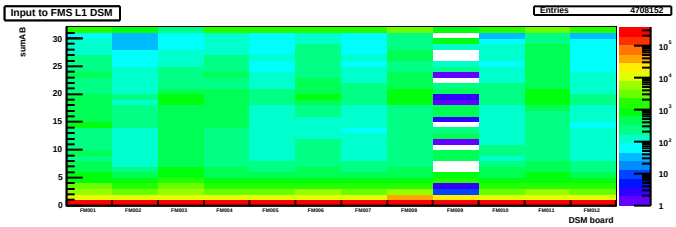

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

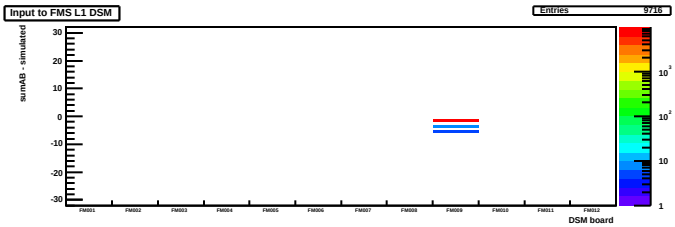

Input to FMS L1 DSM
Entries 4708152
sumBC
DSM board

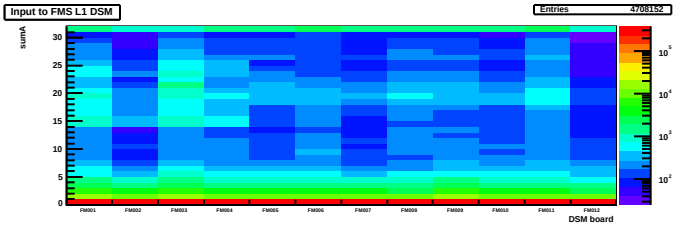

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

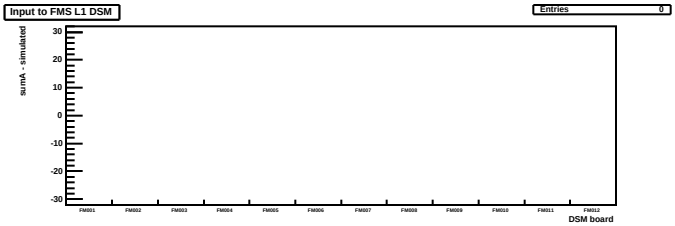

Input to FMS L1 DSM
Entries 4708152
sumB
DSM board

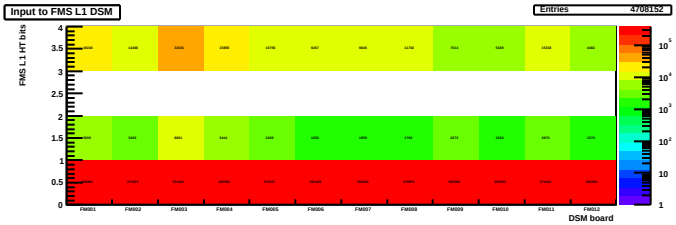

Input to FMS L1 DSM
Entries 19444
sumB - simulated
DSM board

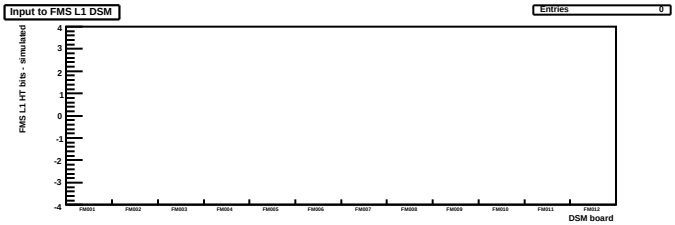

Input to FMS L1 DSM
Entries 4708152
sumAB
DSM board

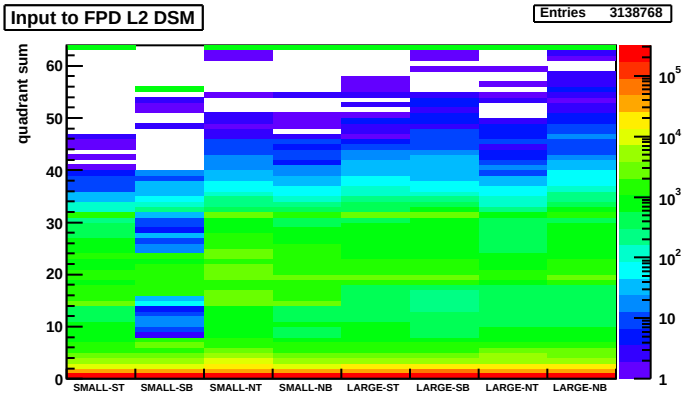

Input to FMS L1 DSM
Entries 9716
sumAB - simulated
DSM board

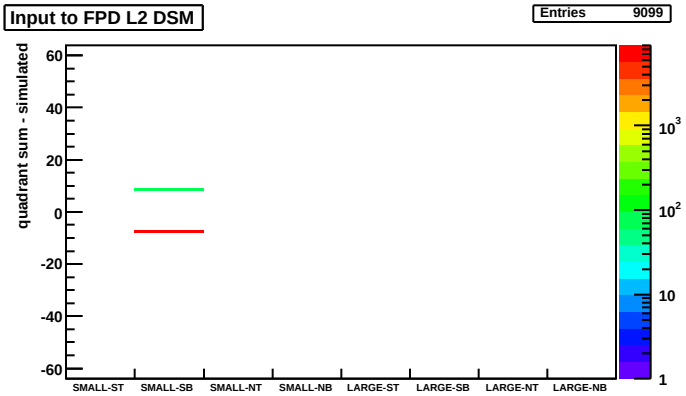

Input to FMS L1 DSM
Entries 4708152
sumA
DSM board

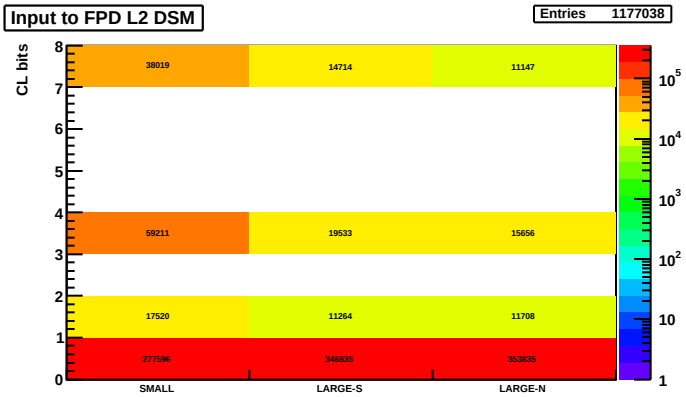

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

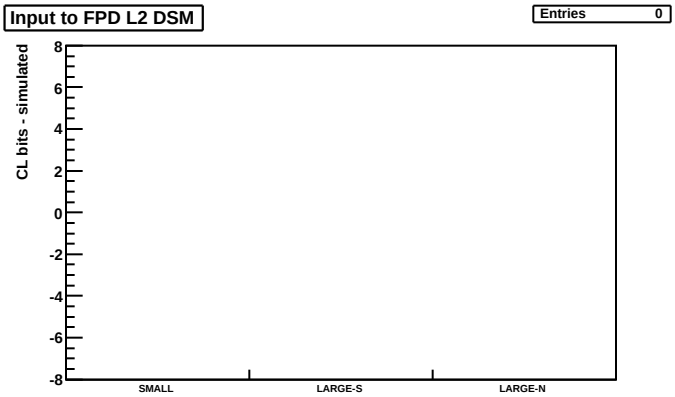

Input to FMS L1 DSM
Entries 4708152
FMS L1 HT bits
DSM board

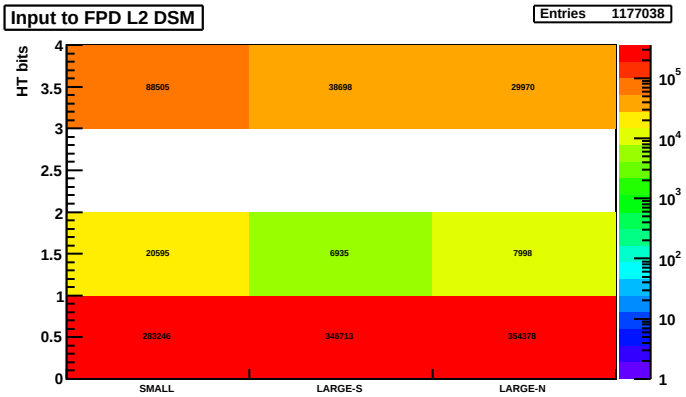

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

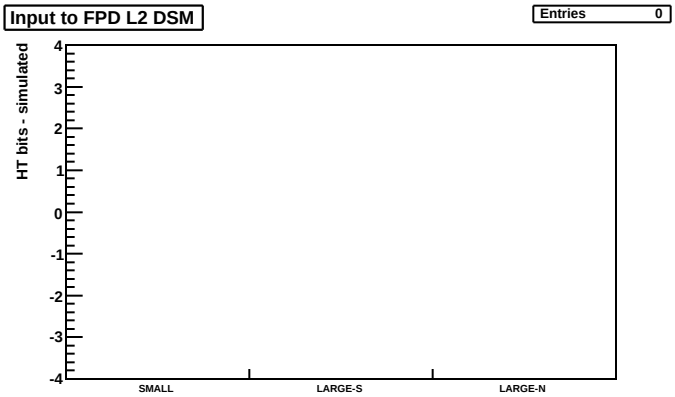

Input to FPD L2 DSM
Entries 3138768
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

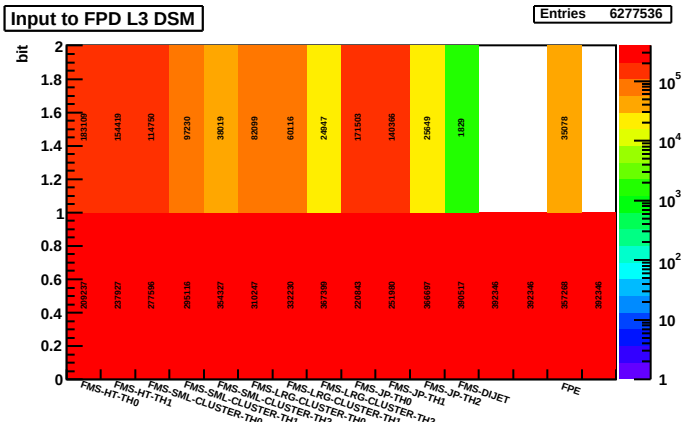

Input to FPD L2 DSM
Entries 9099
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

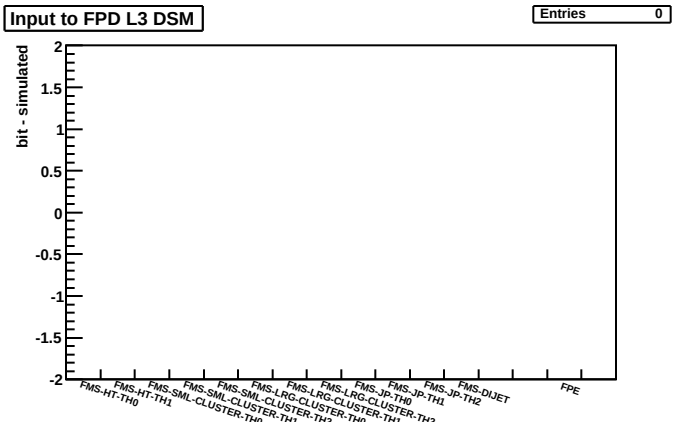

Input to FPD L2 DSM
Entries 1177038
CL bits
38019
14714
11147
59211
19533
15656
17520
11264
11708
277596
346835
353835
SMALL
LARGE-S
LARGE-N

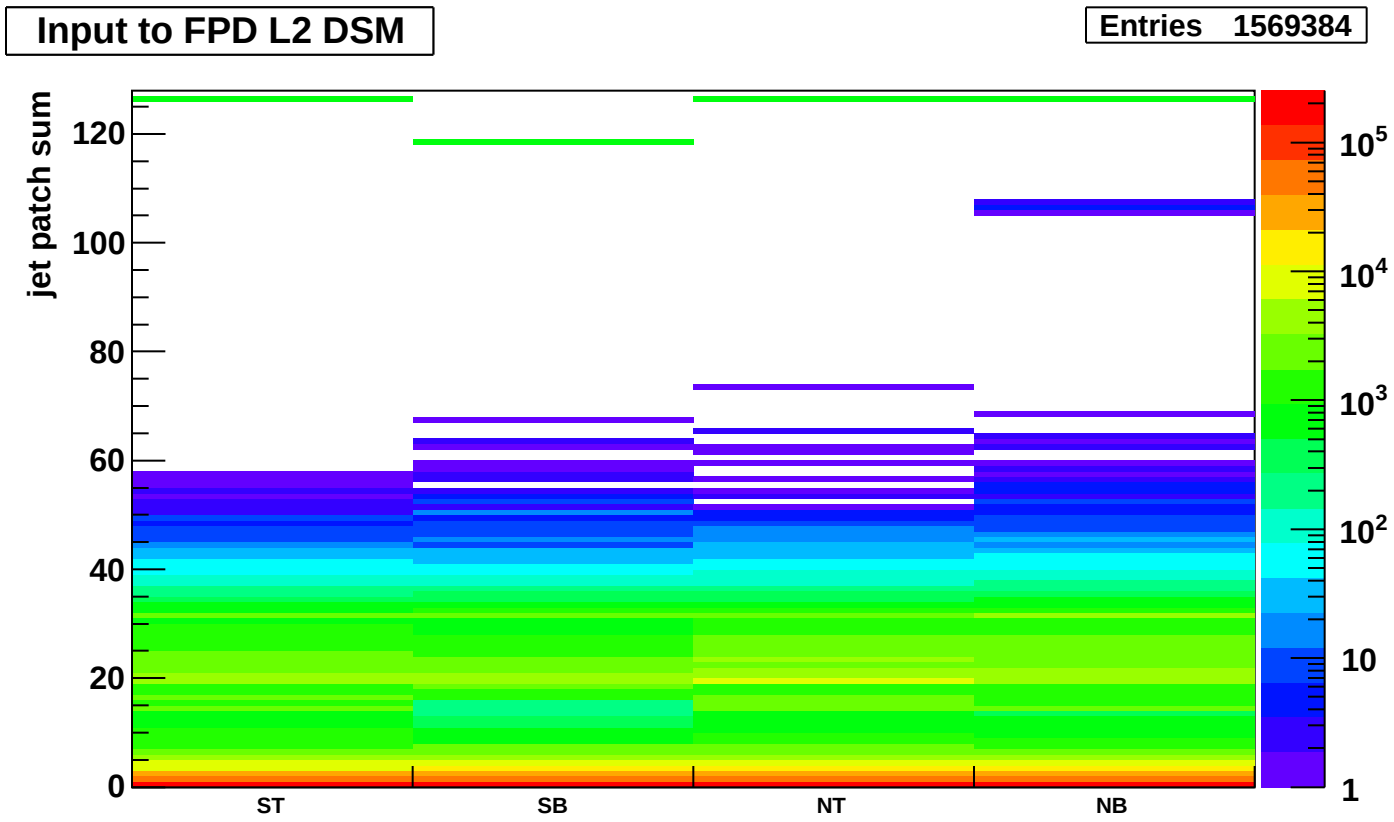

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

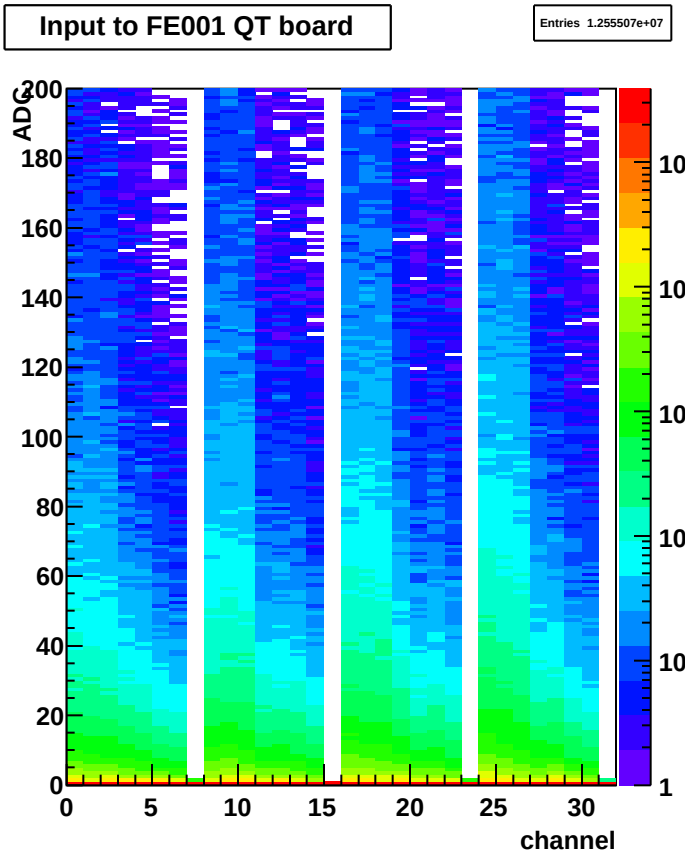

Input to FPD L2 DSM
Entries 1177038
HT bits
88505
38698
29970
20595
6935
7998
283246
346713
354378
SMALL
LARGE-S
LARGE-N

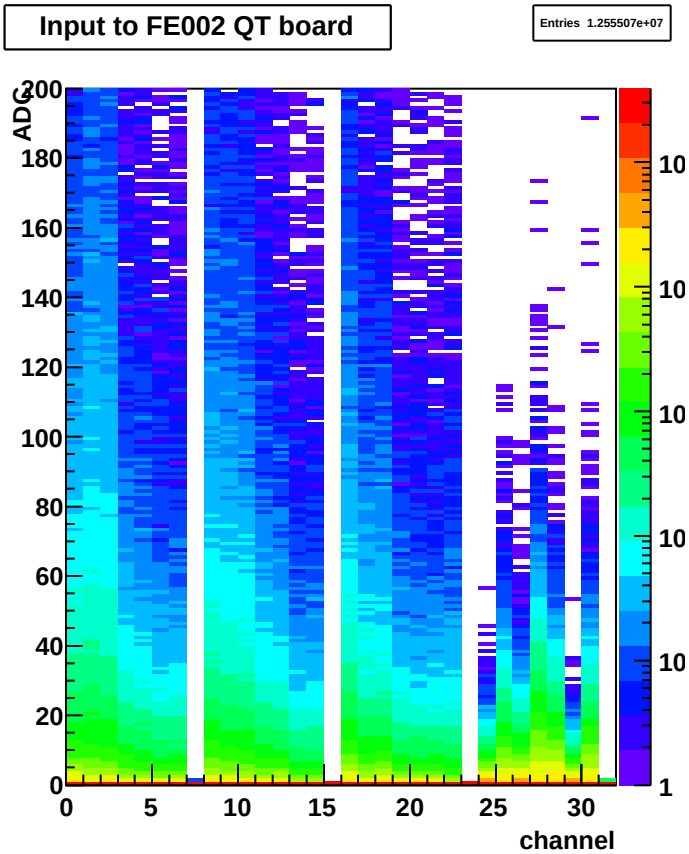

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

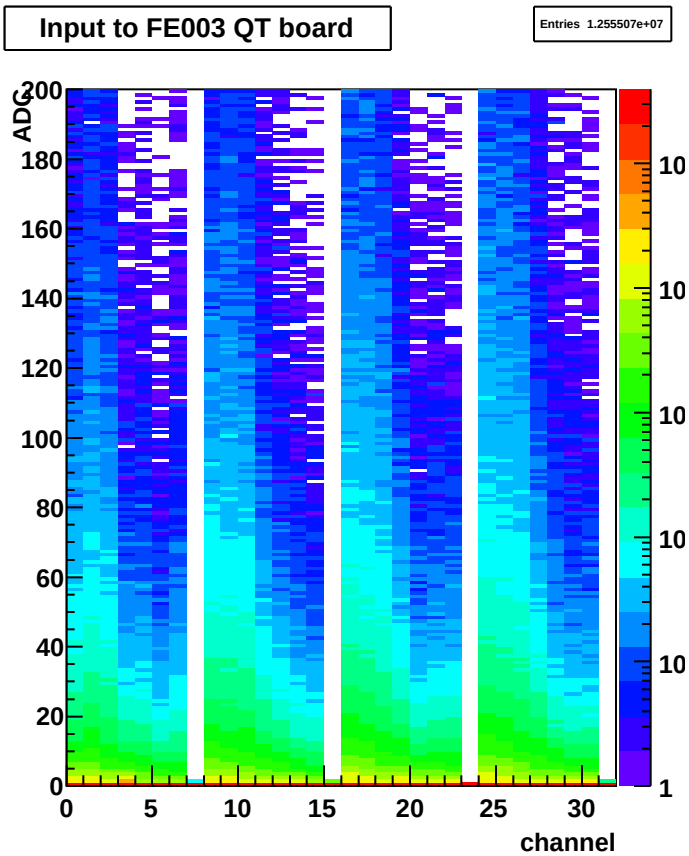

Input to FPD L3 DSM
Entries 6277536
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

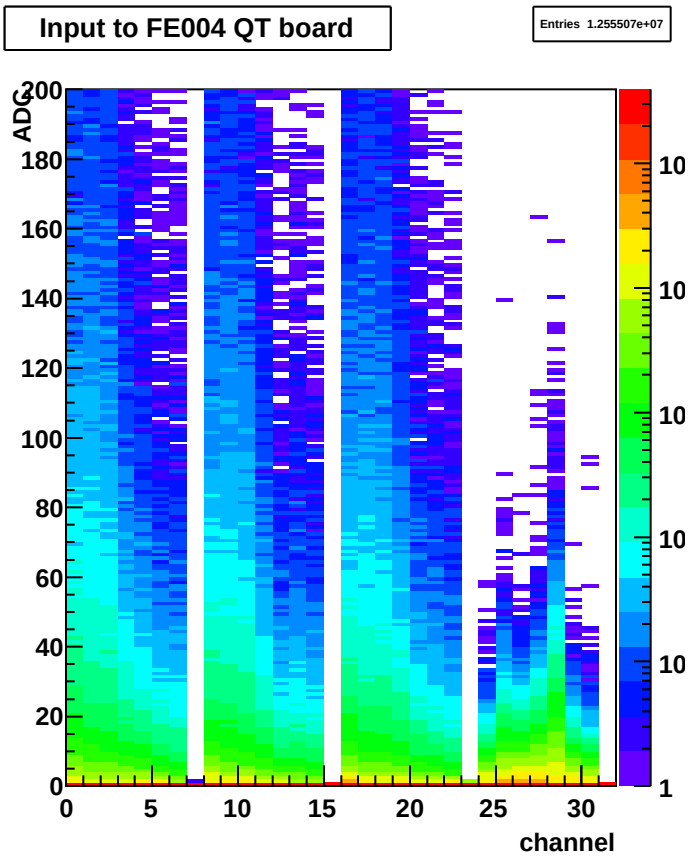

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

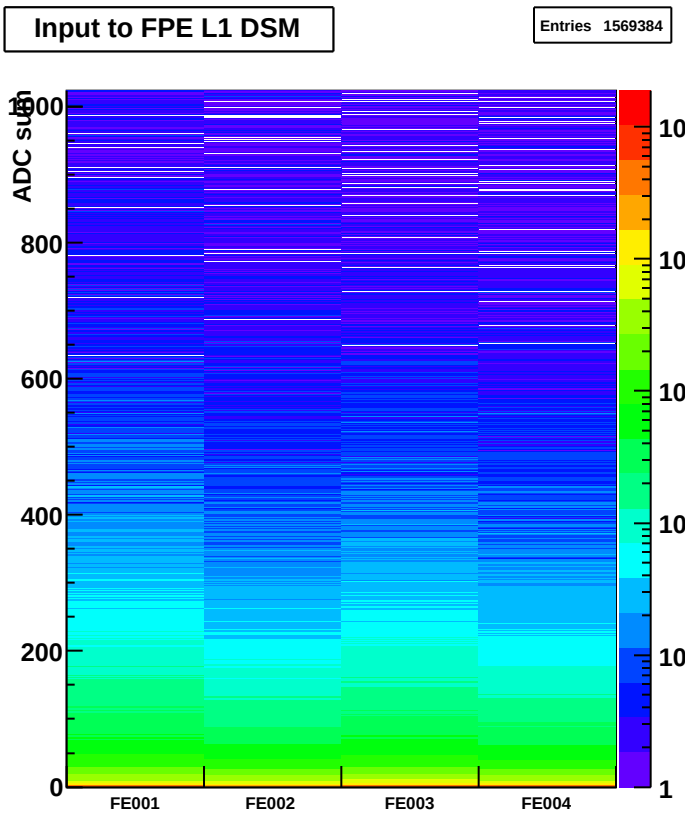

Input to FPD L2 DSM
Entries 1569384
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

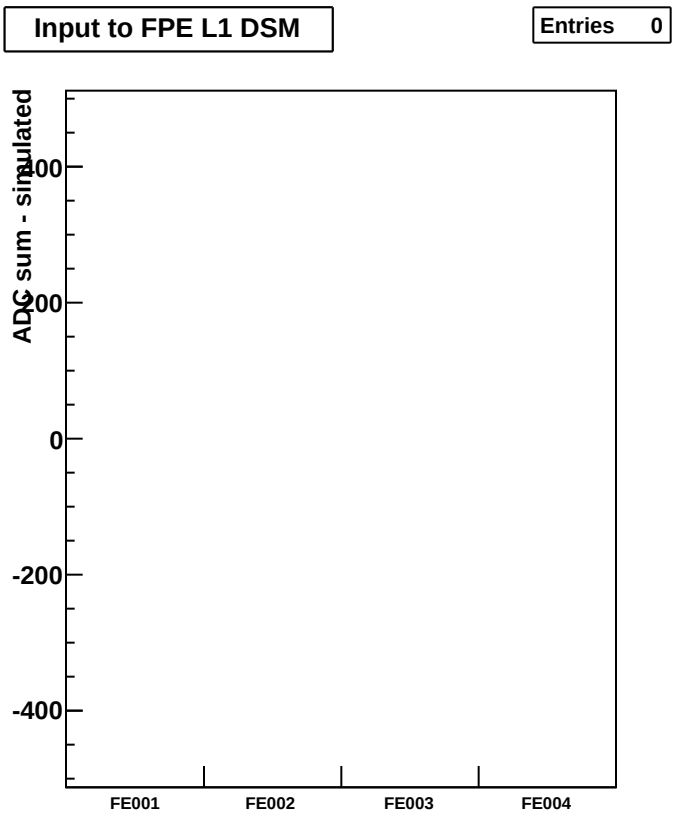

Input to FE001 QT board
Entries 1.255507e+07
ADC
channel

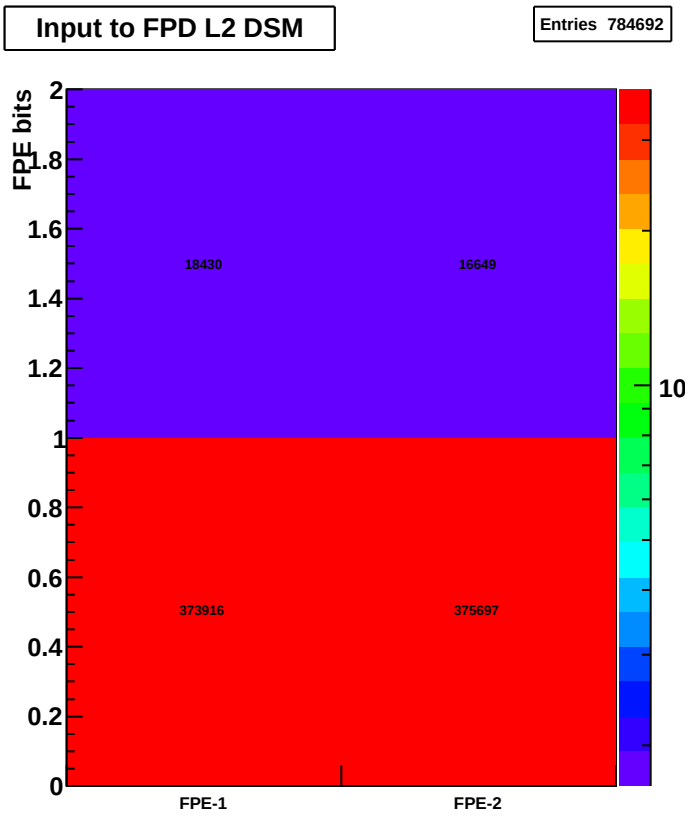

Input to FE002 QT board
Entries 1.255507e+07
ADC
channel

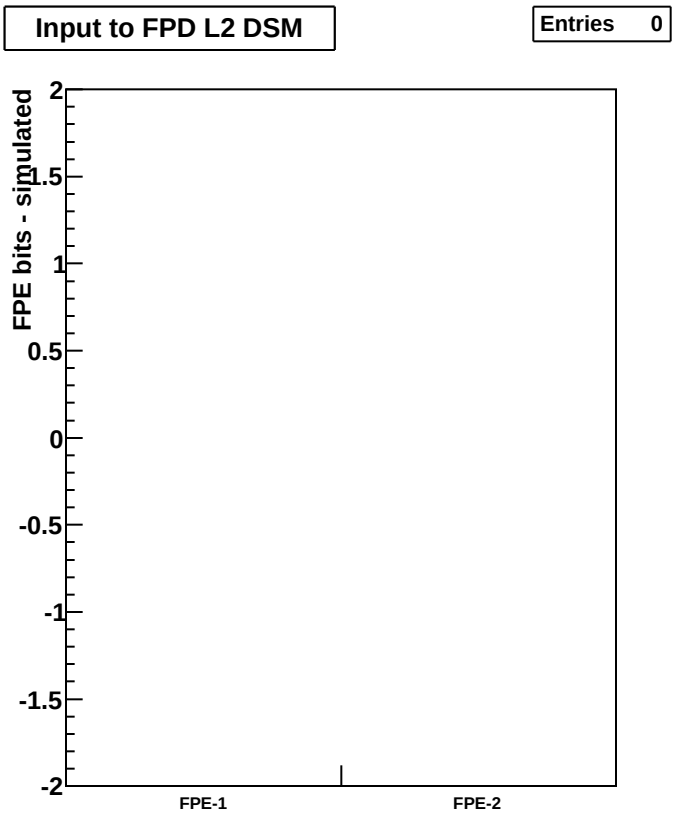

Input to FE003 QT board
Entries 1.255507e+07
ADC
channel


Input to FE004 QT board
Entries 1.255507e+07
ADC
channel


Input to FPE L1 DSM
Entries 1569384
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 784692
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
18430
16649
373916
375697
FPE-1
FPE-2
10


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
FPE-1
FPE-2