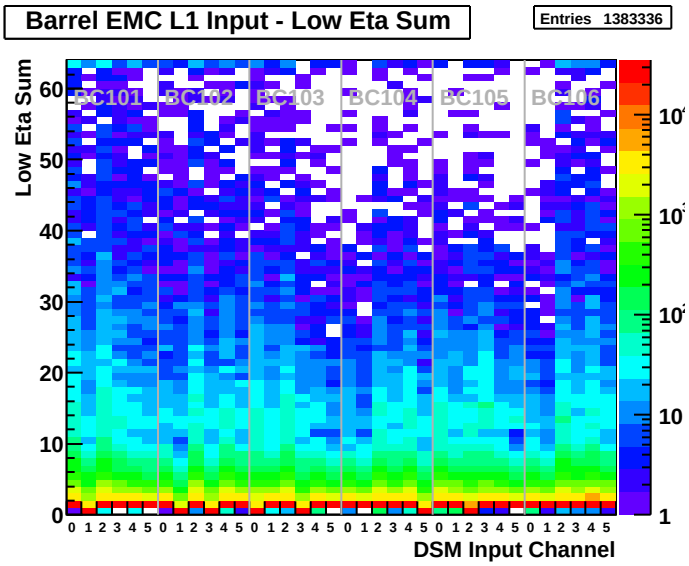
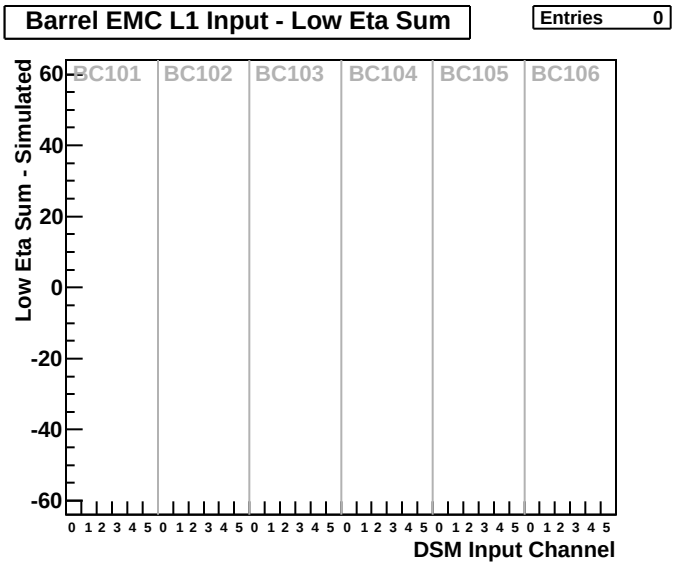
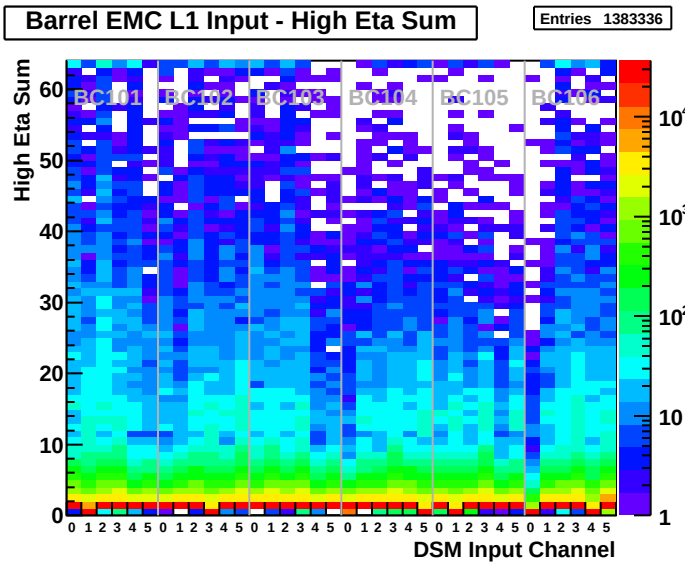
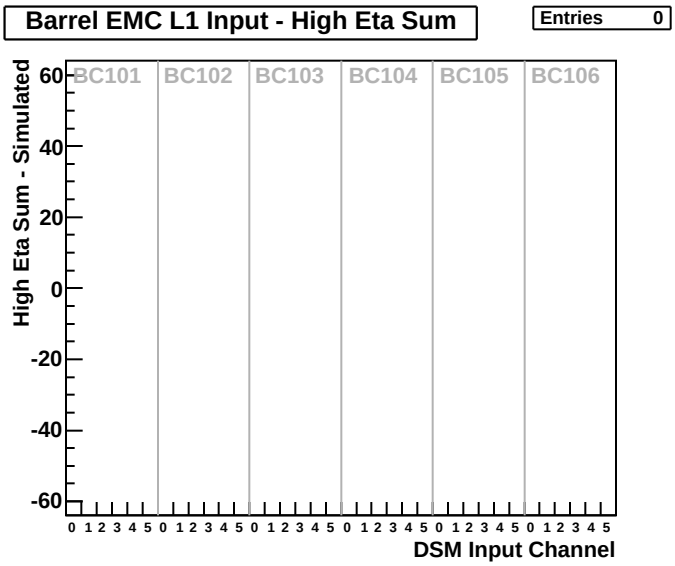
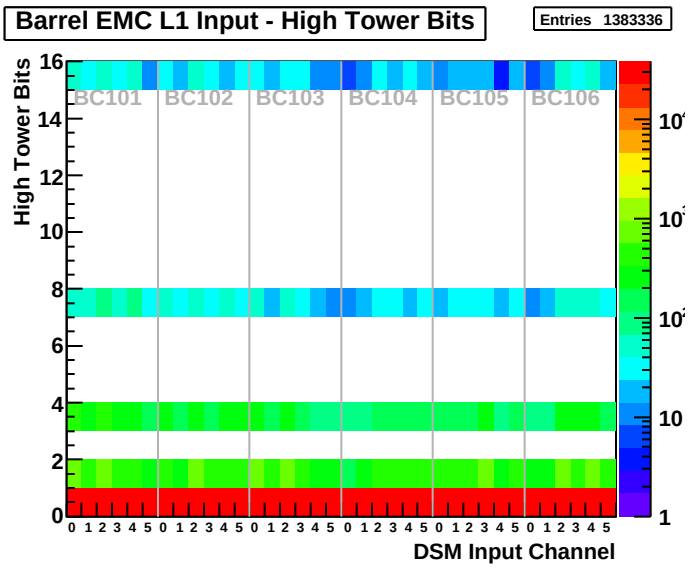
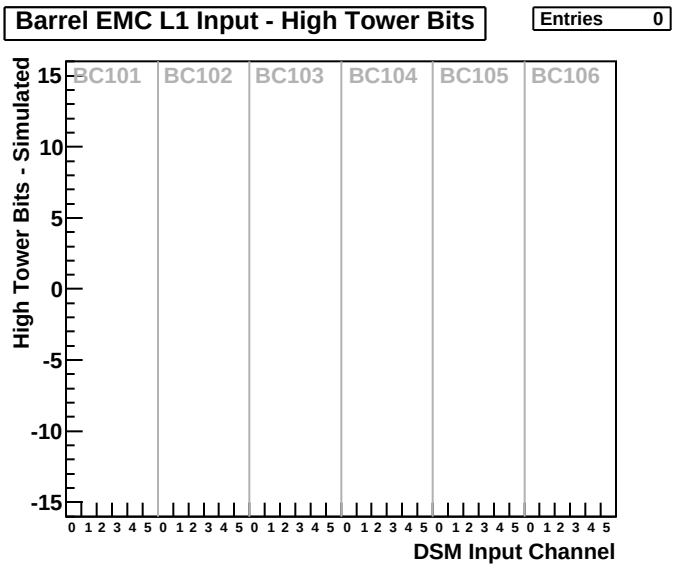

Barrel EMC L1 Input - Low Eta Sum
Entries 1383336
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

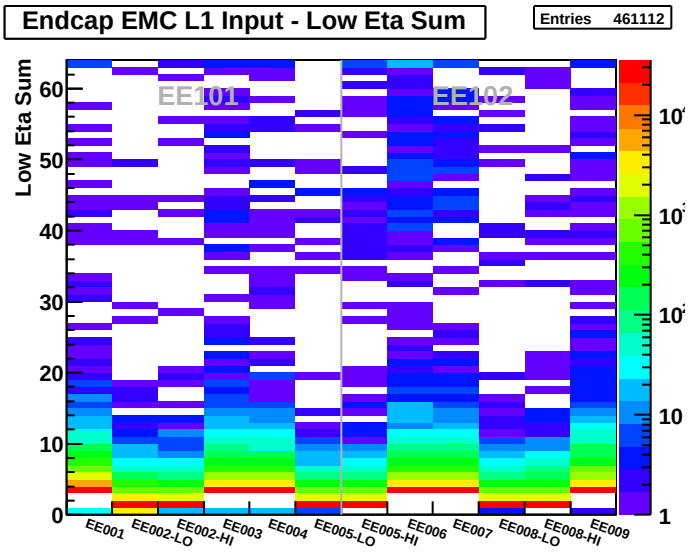

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

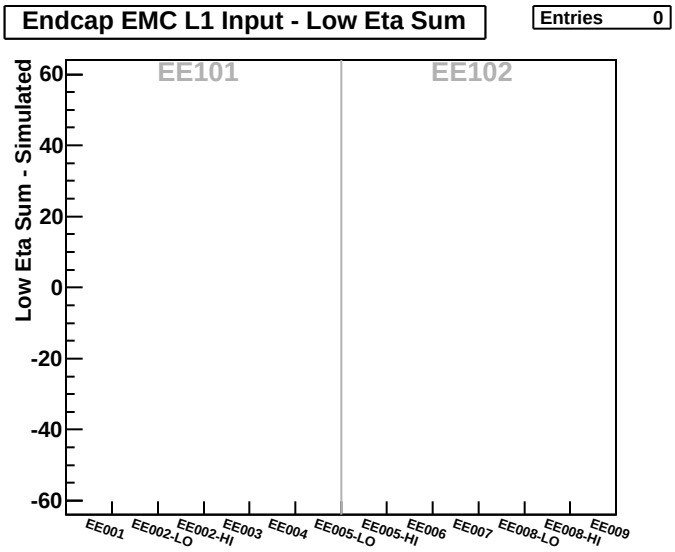

Barrel EMC L1 Input - High Eta Sum
Entries 1383336
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

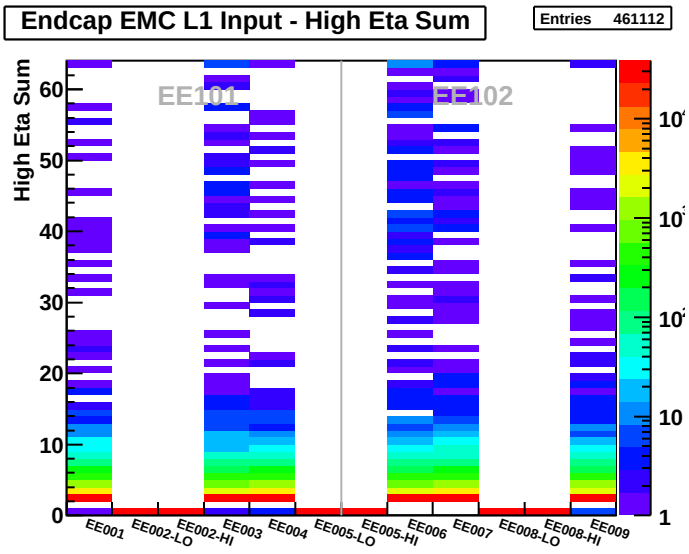

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

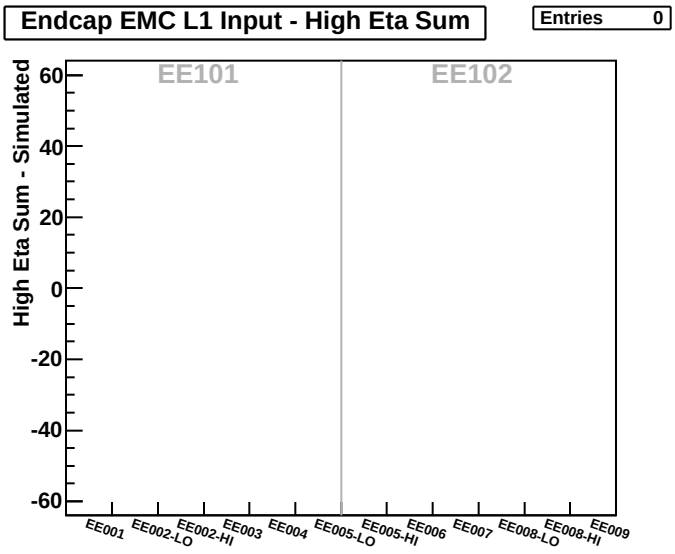

Barrel EMC L1 Input - High Tower Bits
Entries 1383336
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

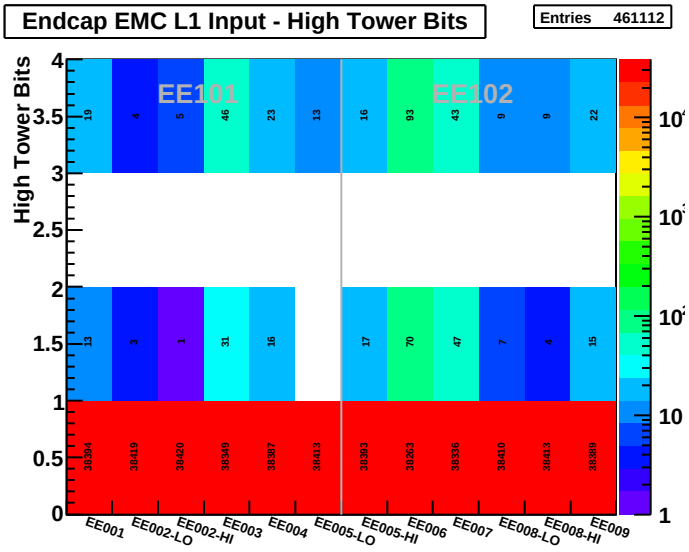

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

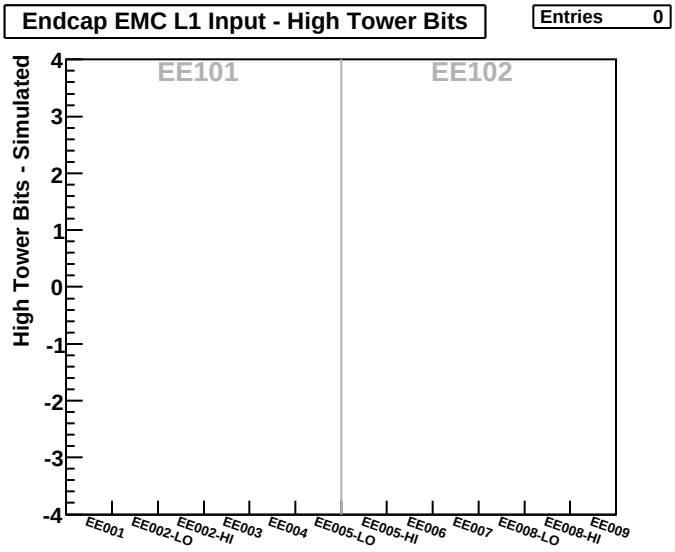

Endcap EMC L1 Input - Low Eta Sum
Entries 461112
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

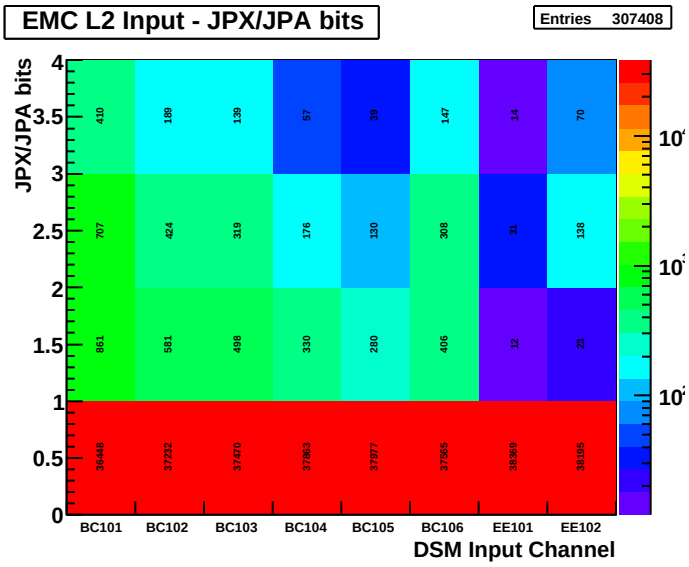

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

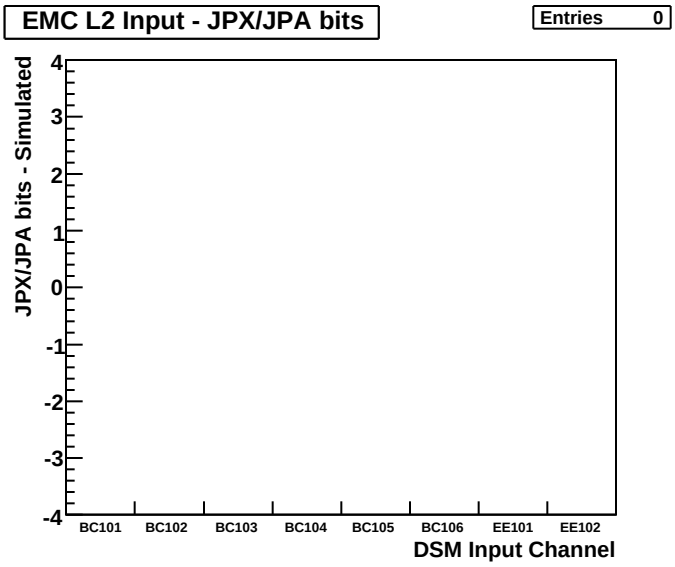

Endcap EMC L1 Input - High Eta Sum
Entries 461112
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

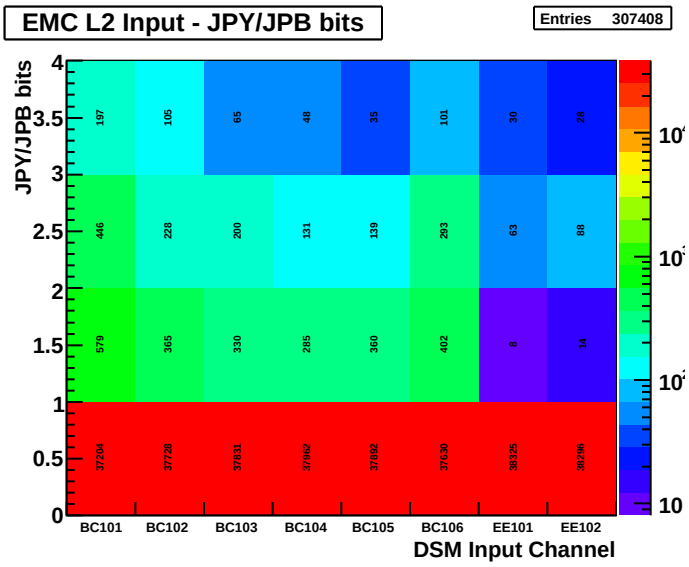

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

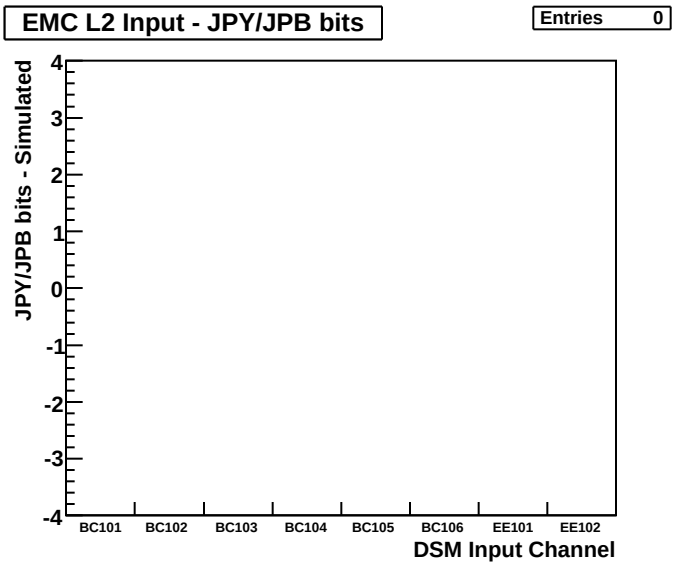

Endcap EMC L1 Input - High Tower Bits
Entries 461112
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

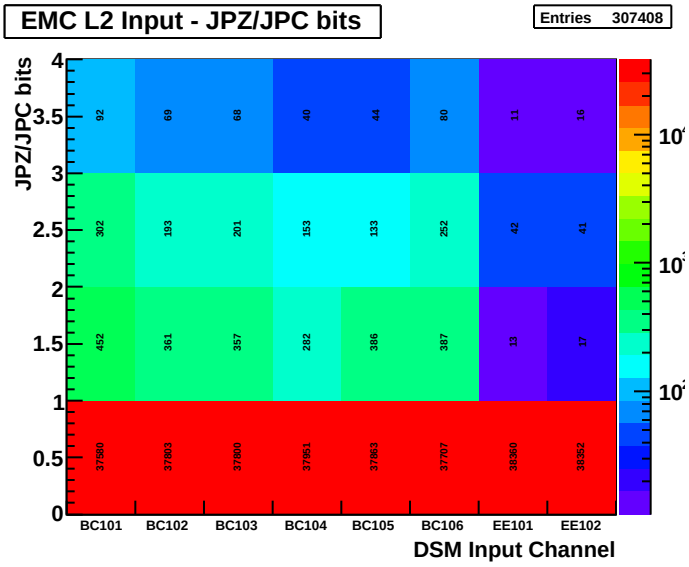

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

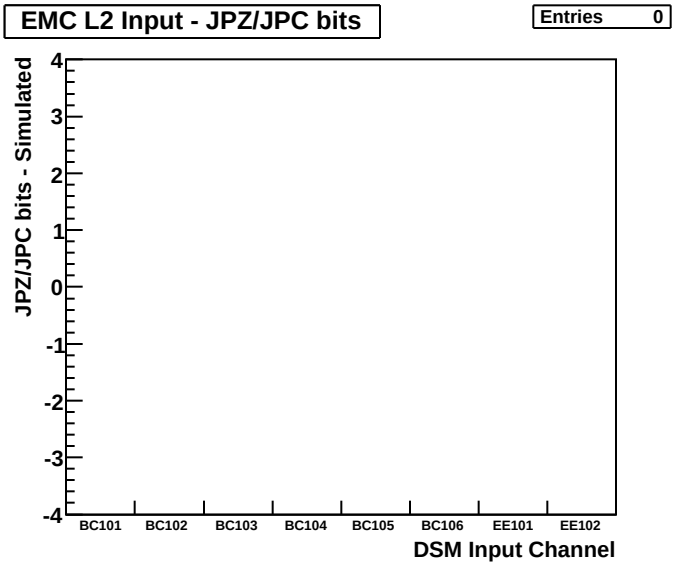

EMC L2 Input - JPX/JPA bits
Entries 307408
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
410 189 139 57 39 147 14 70
707 424 319 176 130 308 31 138
861 581 498 330 280 406 12 23
36448 37232 37470 37863 37977 37565 38369 38195

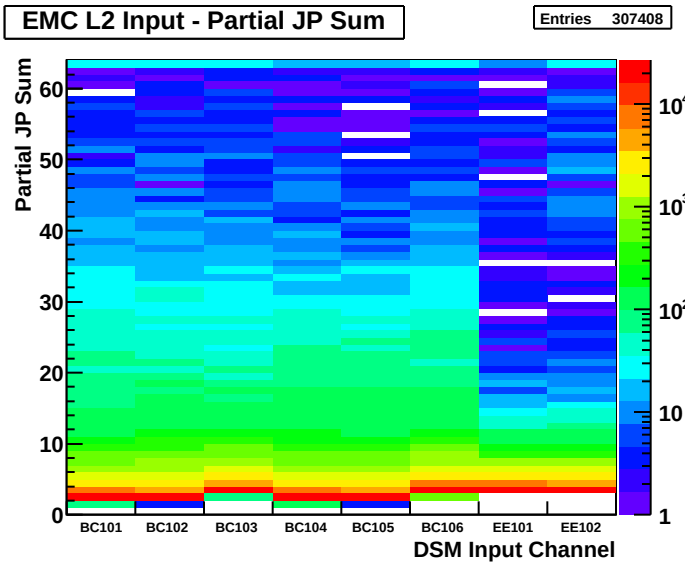

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

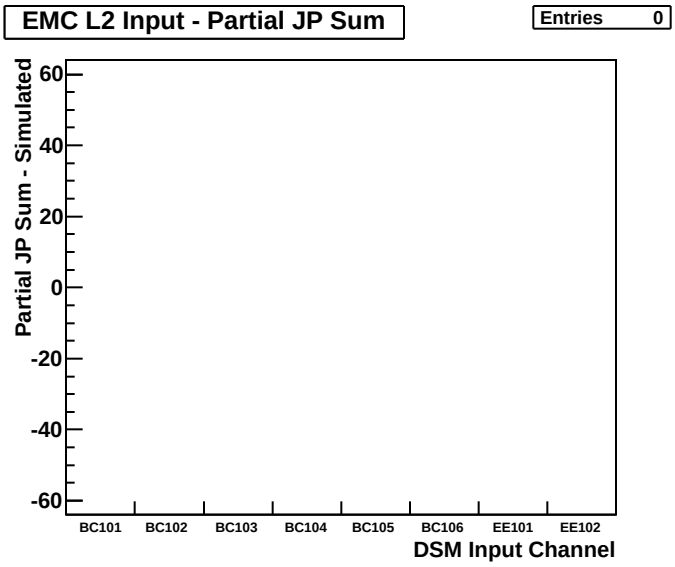

EMC L2 Input - JPY/JPB bits
Entries 307408
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
197 105 65 48 35 101 30 28
446 228 200 131 139 293 63 88
579 365 330 285 360 402 8 14
37204 37728 37831 37962 37892 37630 38325 38296

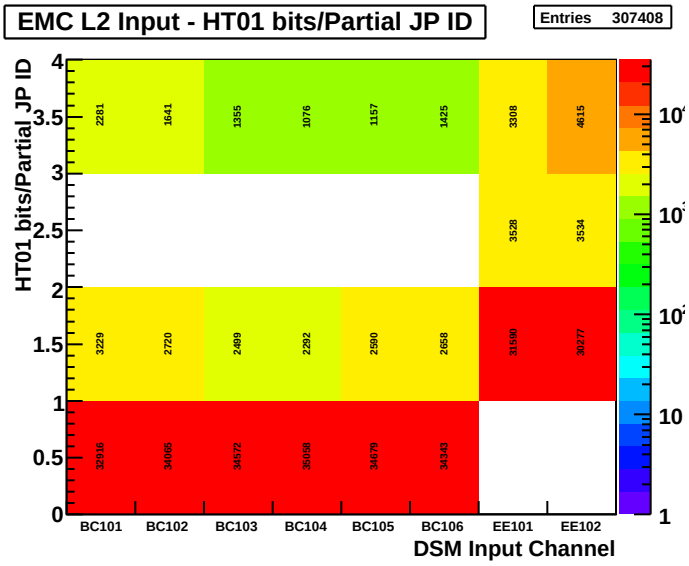

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

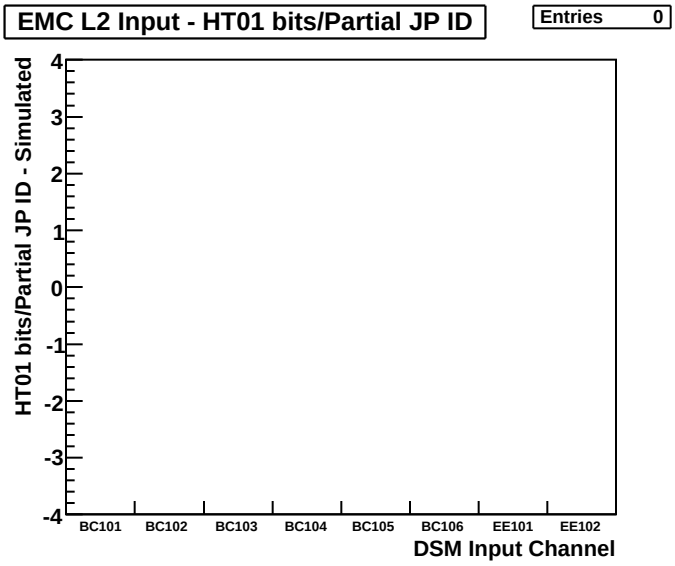

EMC L2 Input - JPZ/JPC bits
Entries 307408
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
92 69 68 40 44 80 11 16
302 193 201 153 133 252 42 41
452 361 357 282 386 387 13 17
37580 37803 37800 37851 37863 37707 38360 38352

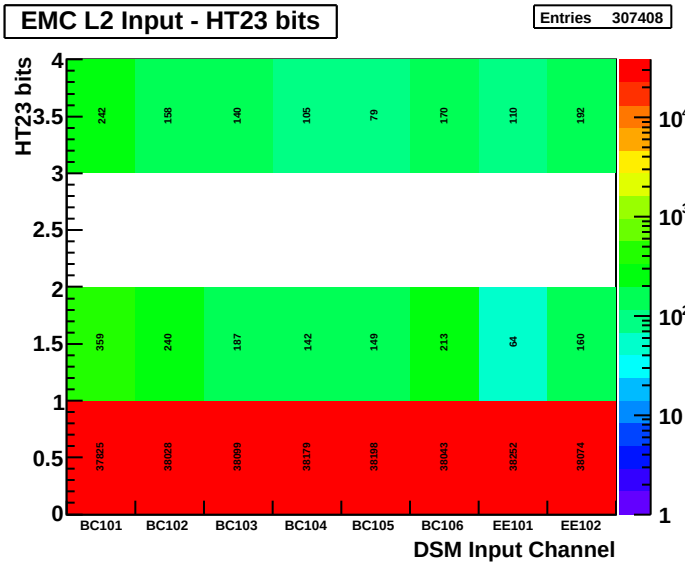

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

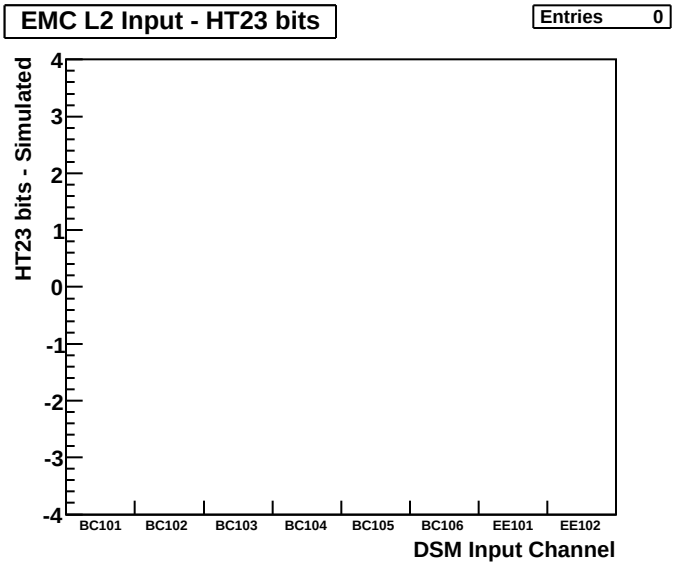

EMC L2 Input - Partial JP Sum
Entries 307408
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

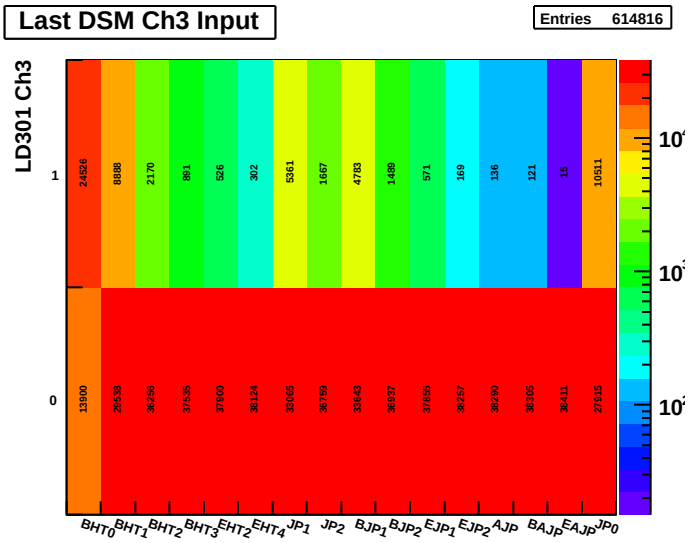

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

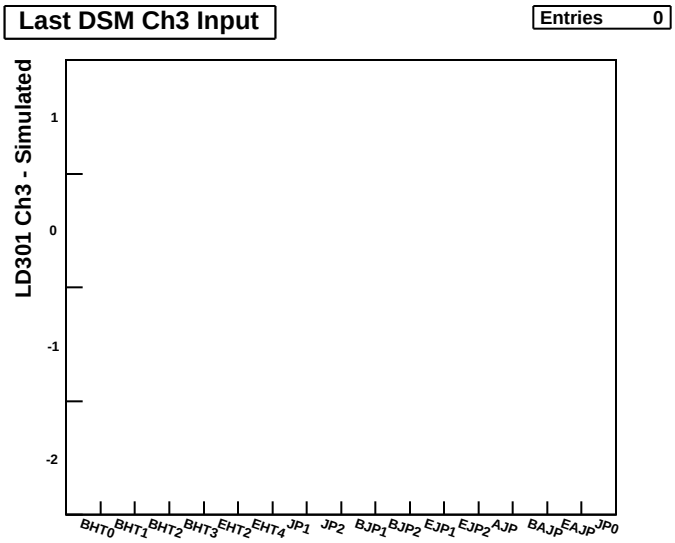

EMC L2 Input - HT01 bits/Partial JP ID
Entries 307408
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

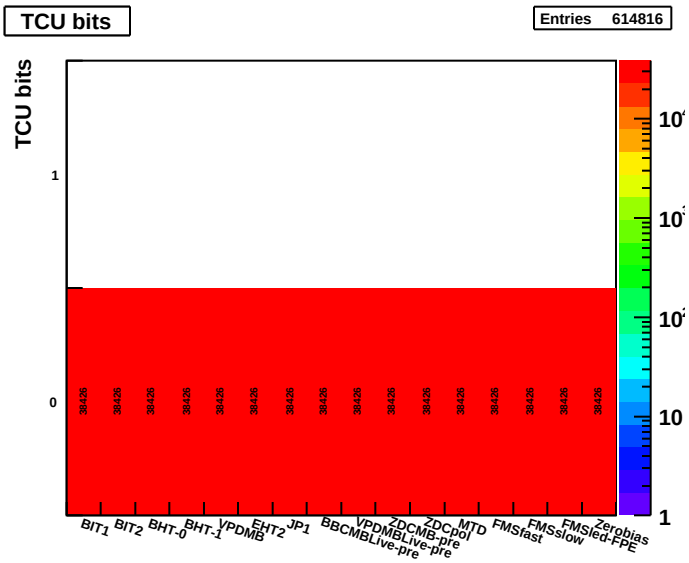

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

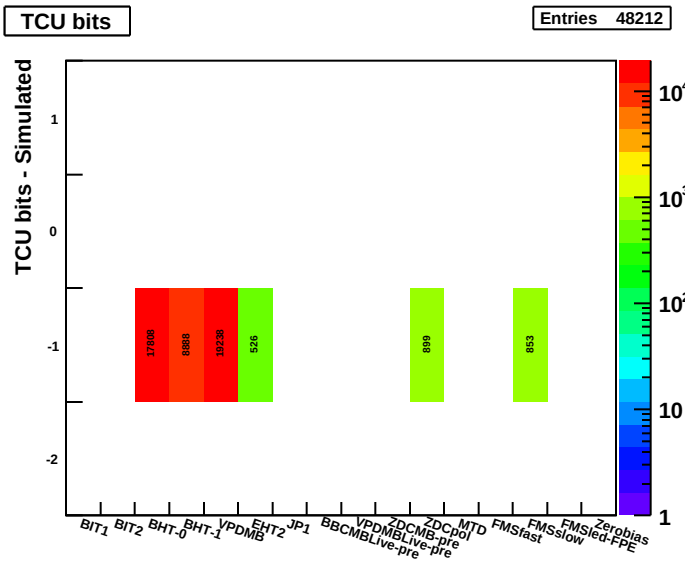

EMC L2 Input - HT23 bits
Entries 307408
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

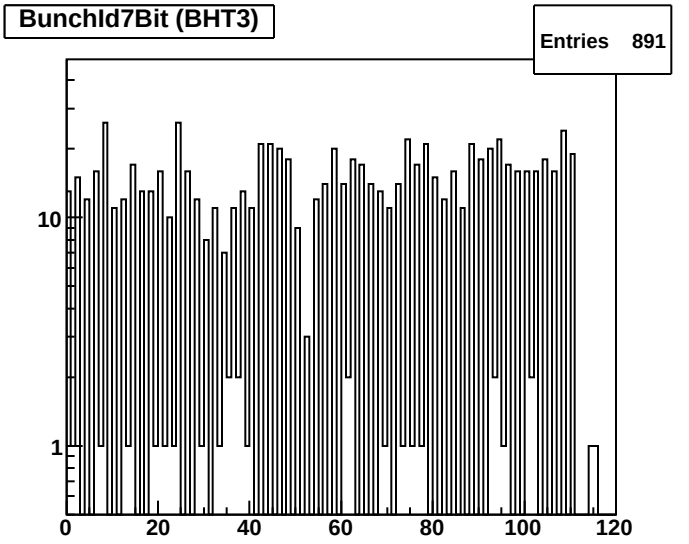

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

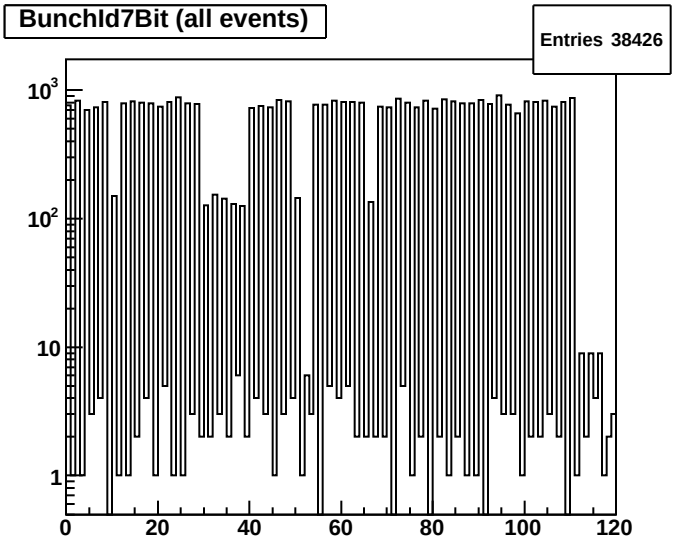

Last DSM Ch3 Input
Entries 614816
LD301 Ch3
1
0
24526 8888 2170 891 526 302 5361 1667 4783 1489 571 169 136 121 15 10511
13900 29538 36256 37535 37900 38124 33065 36759 33643 36937 37855 38257 38290 38305 38411 27915
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

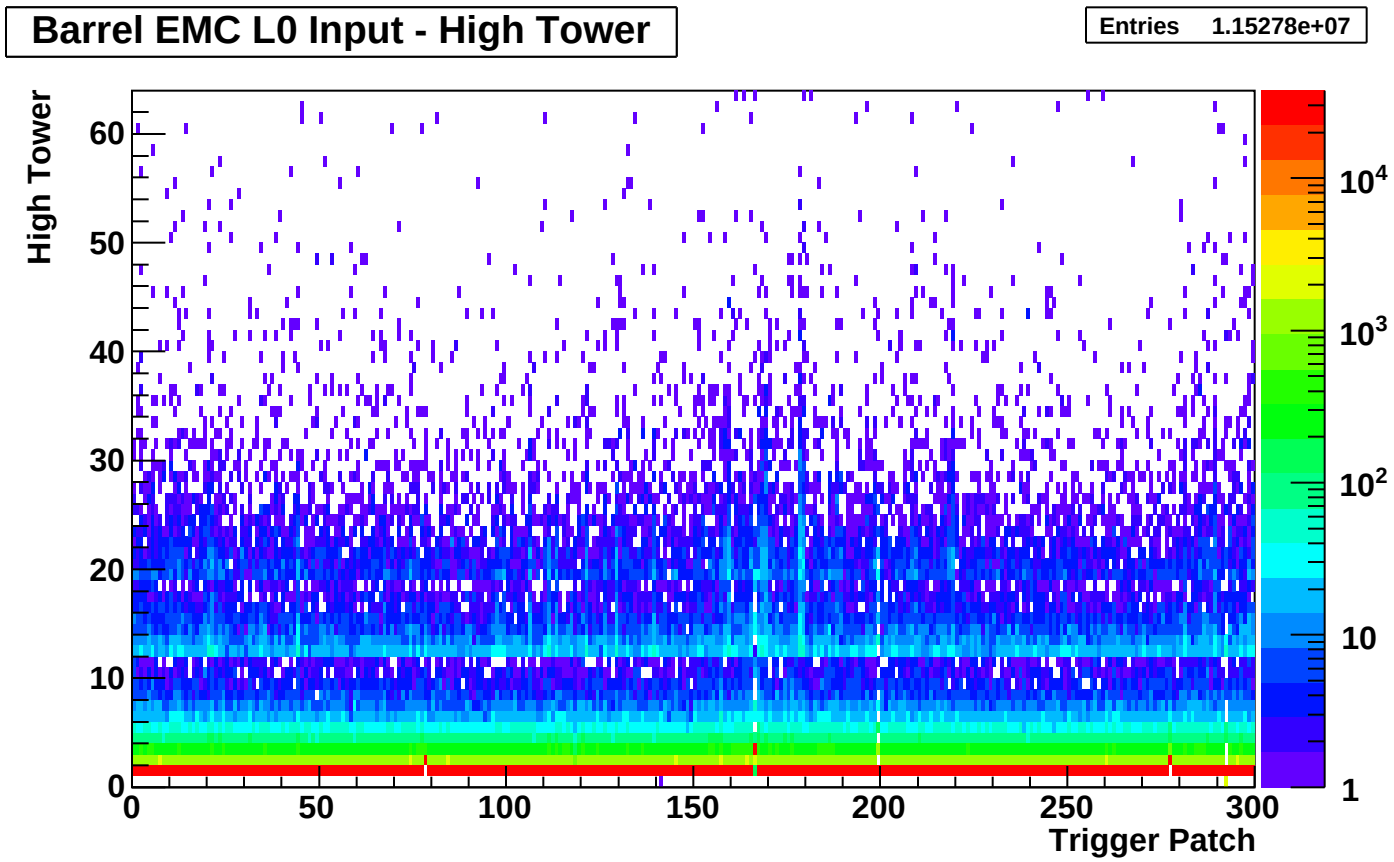

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

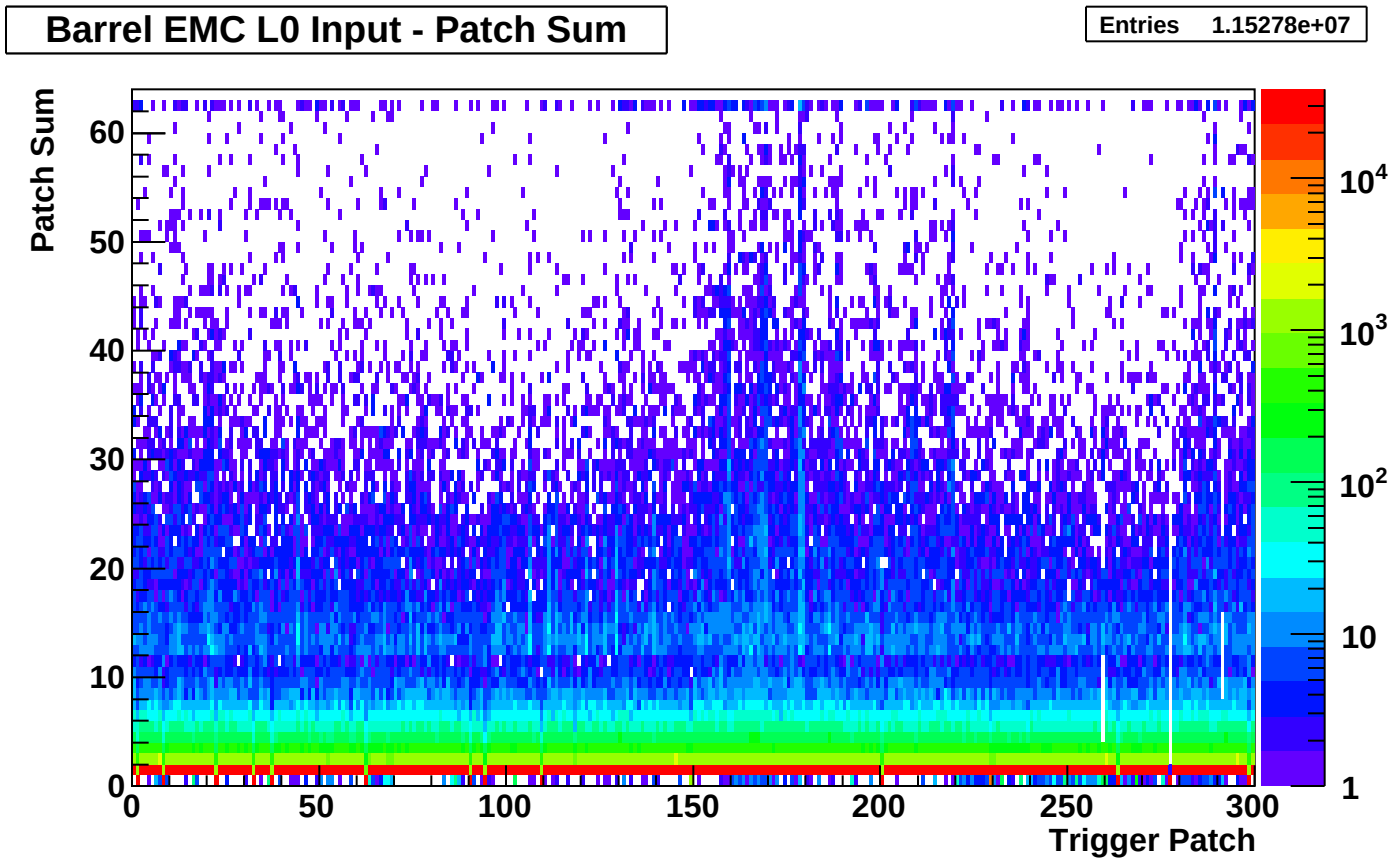

TCU bits
Entries 614816
TCU bits
1
0
38426 38426 38426 38426 38426 38426 38426 38426 38426 38426 38426 38426 38426 38426 38426 38426
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

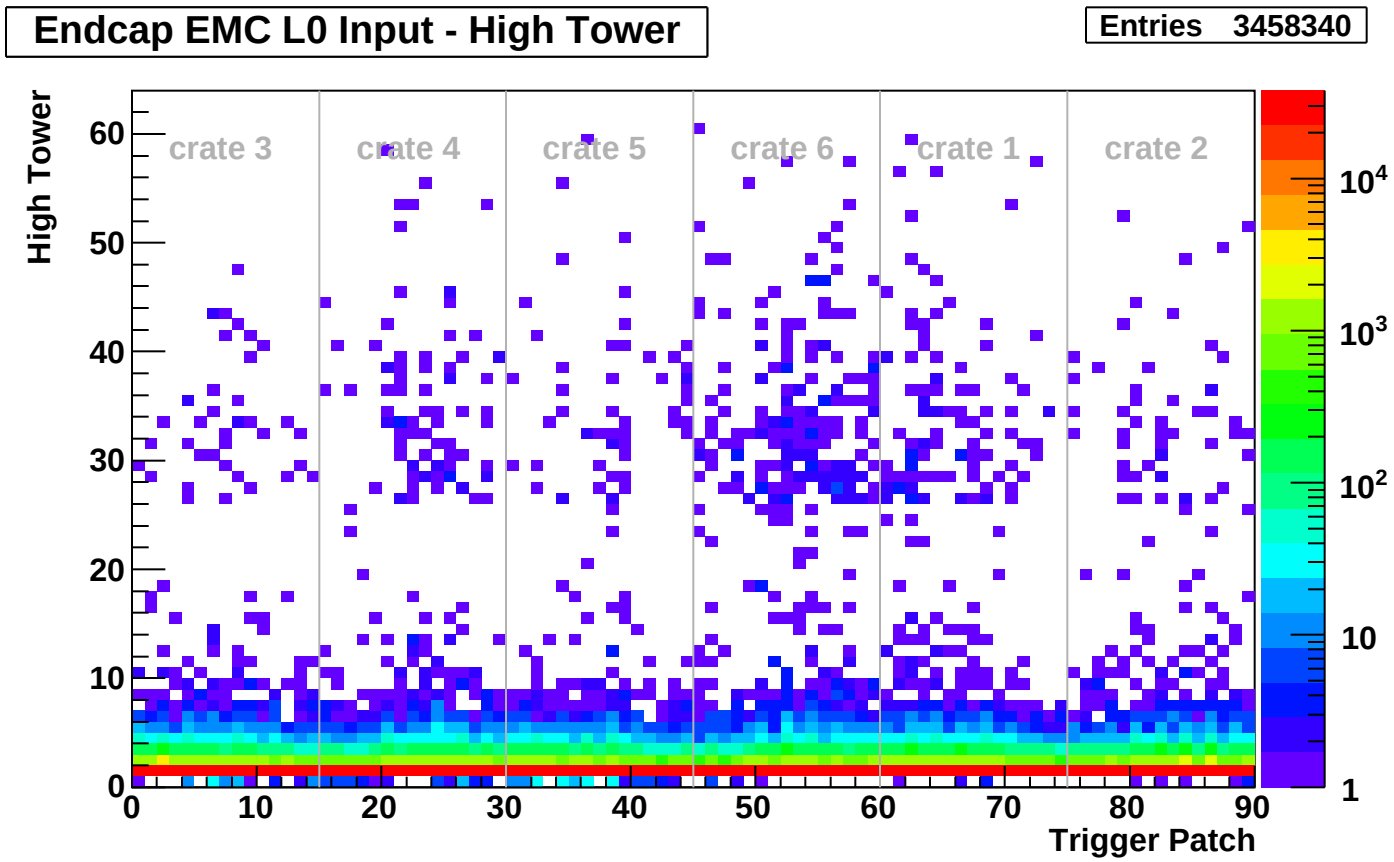

TCU bits
Entries 48212
TCU bits - Simulated
1
0
-1
-2
17608 8888 19238 526 899 853
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

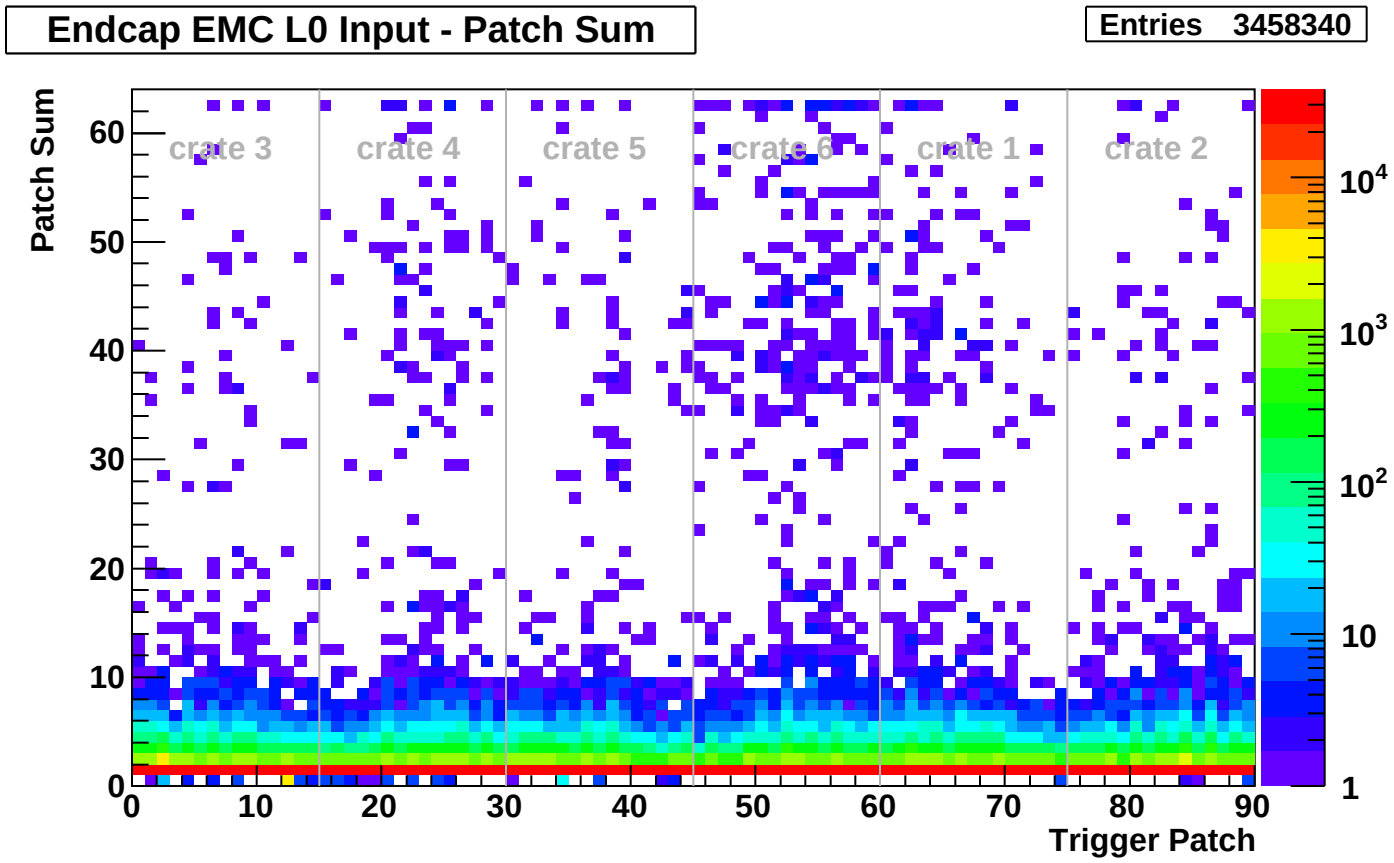

BunchId7Bit (BHT3)
Entries 891
10
1
0 20 40 60 80 100 120

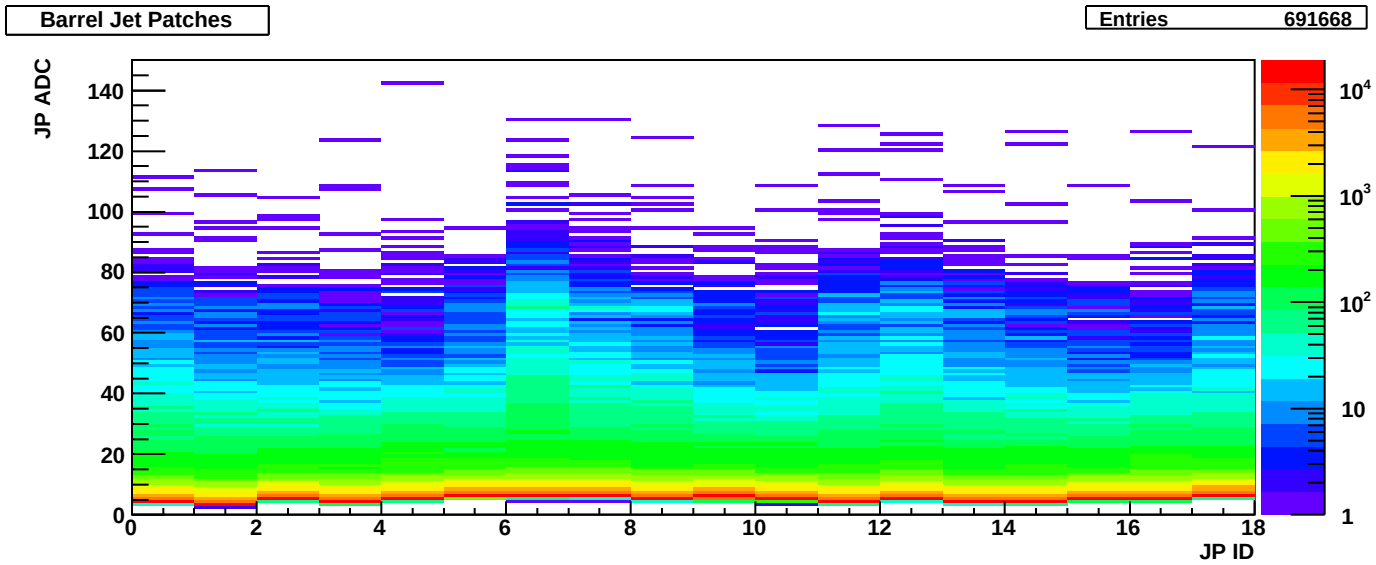

BunchId7Bit (all events)
Entries 38426
$10^3$
$10^2$
10
1
0 20 40 60 80 100 120

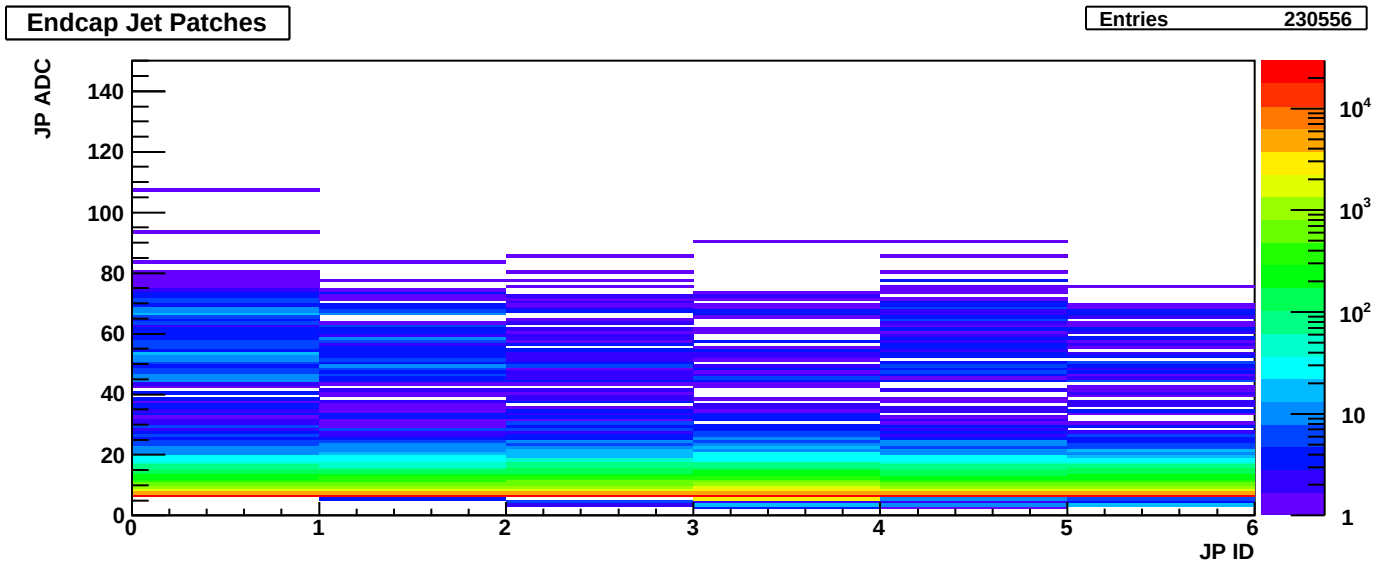

Barrel EMC L0 Input - High Tower
Entries 1.15278e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

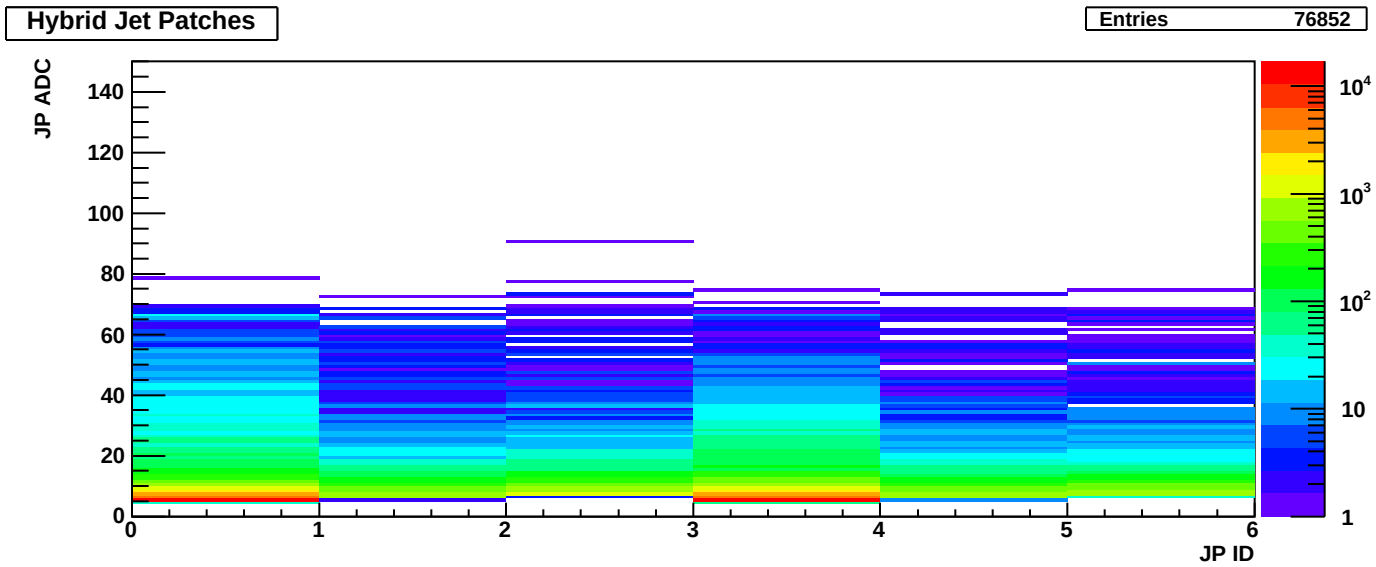

Barrel EMC L0 Input - Patch Sum
Entries 1.15278e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

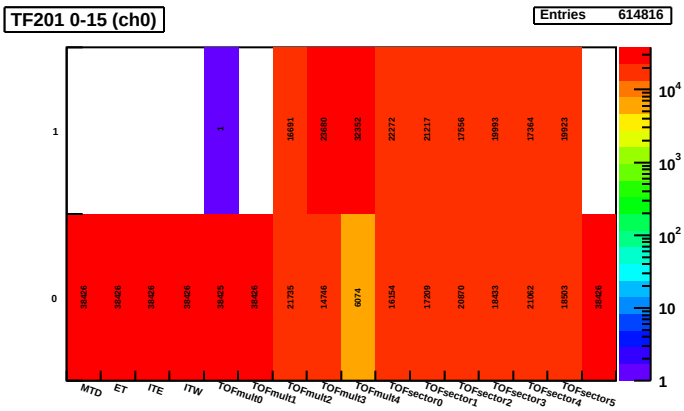

Endcap EMC L0 Input - High Tower
Entries 3458340
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

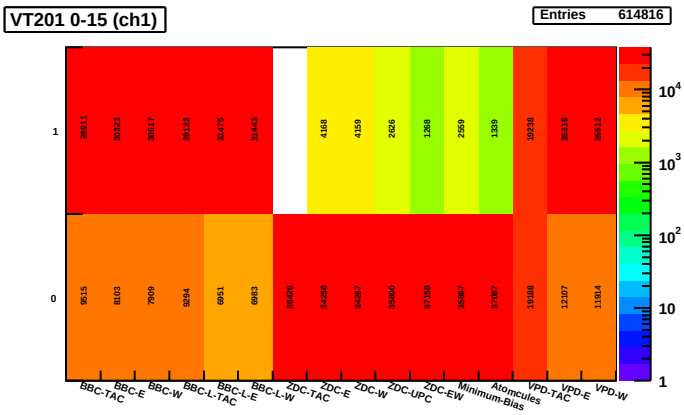

Endcap EMC L0 Input - Patch Sum
Entries 3458340
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

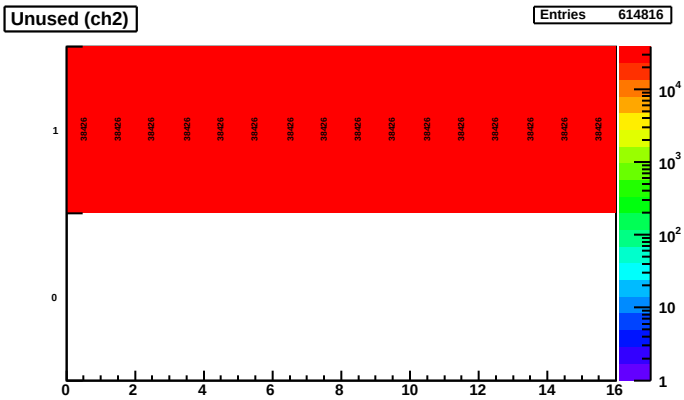

Barrel Jet Patches
Entries 691668
JP ADC
JP ID

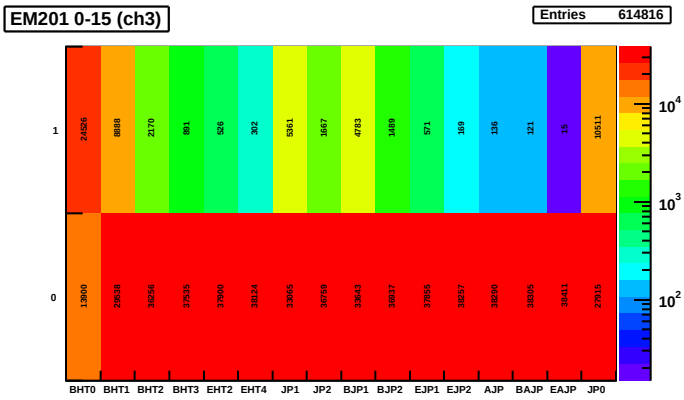

Endcap Jet Patches
Entries 230556
JP ADC
JP ID

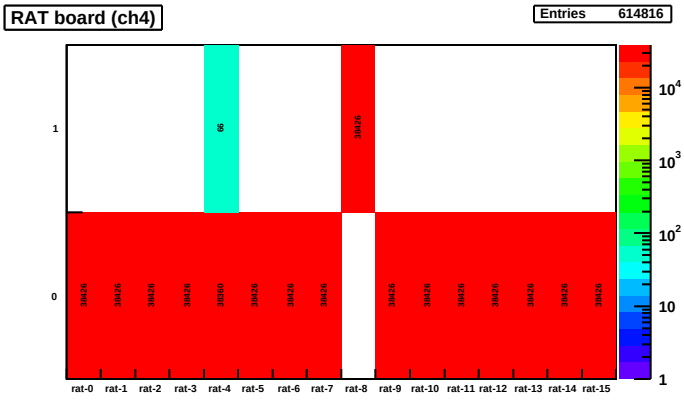

Hybrid Jet Patches
Entries 76852
JP ADC
JP ID

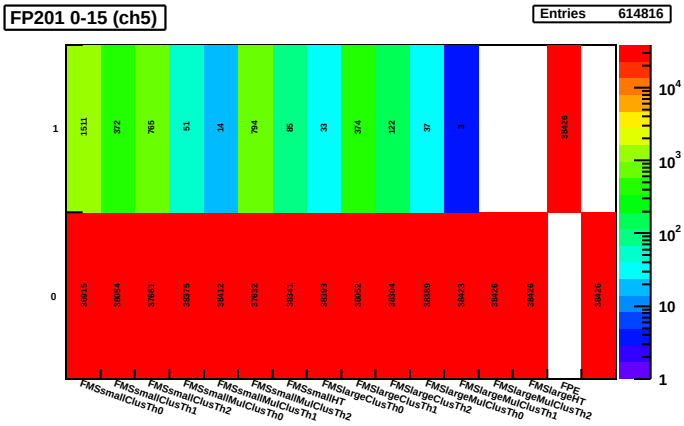

TF201 0-15 (ch0)
Entries 614816
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

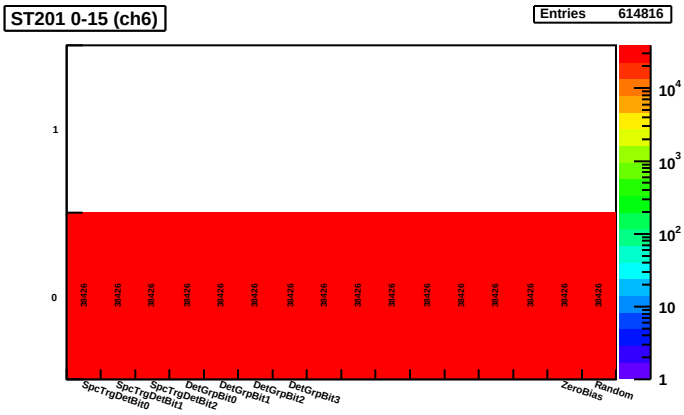

VT201 0-15 (ch1)
Entries 614816
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

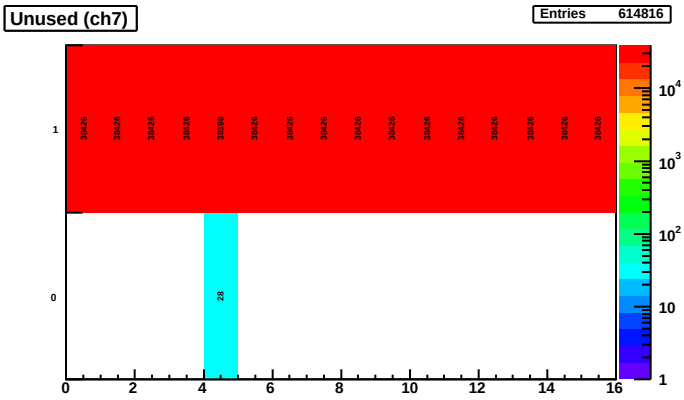

Unused (ch2)
Entries 614816

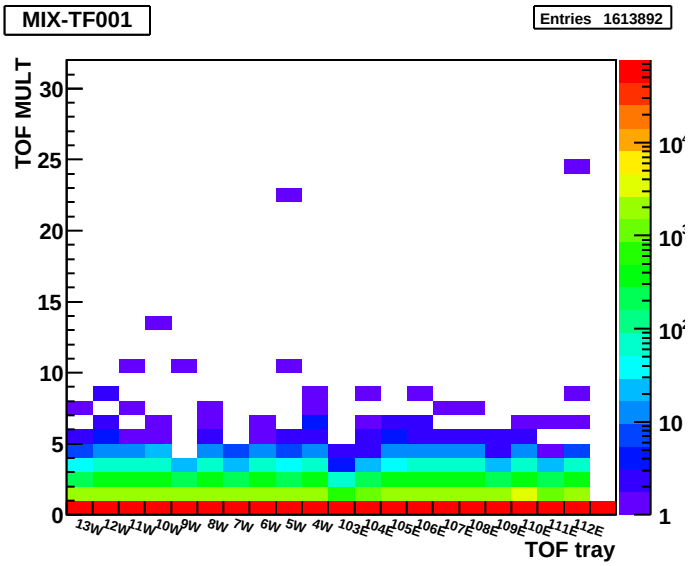

EM201 0-15 (ch3)
Entries 614816
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

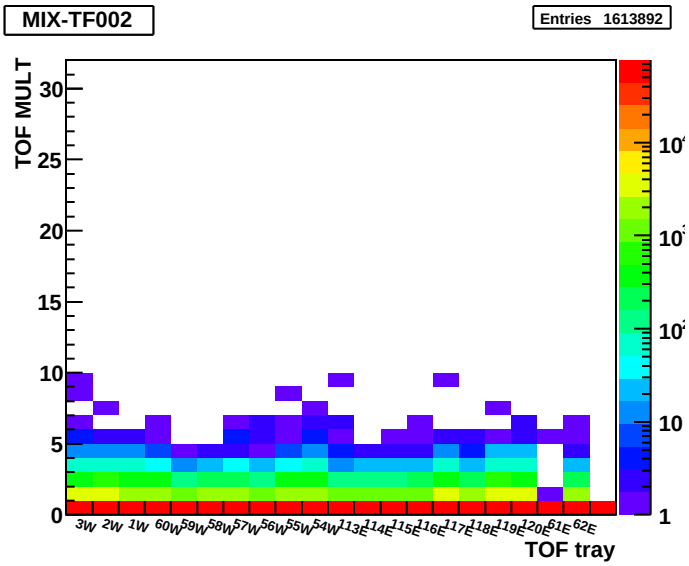

RAT board (ch4)
Entries 614816
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

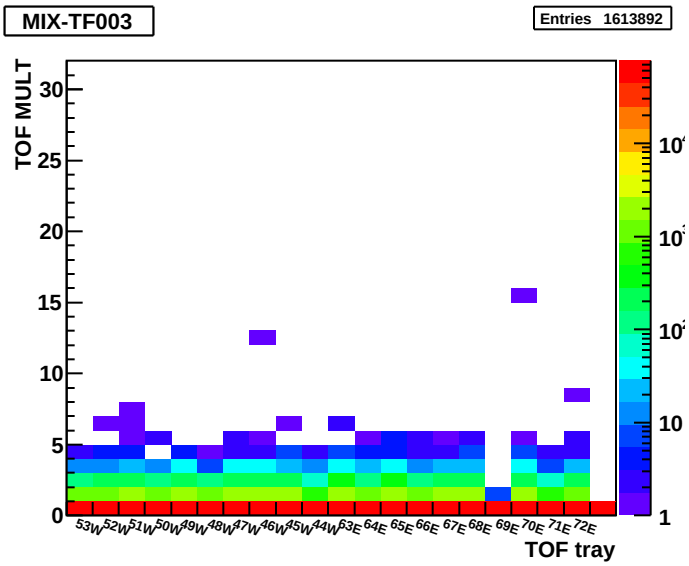

FP201 0-15 (ch5)
Entries 614816
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

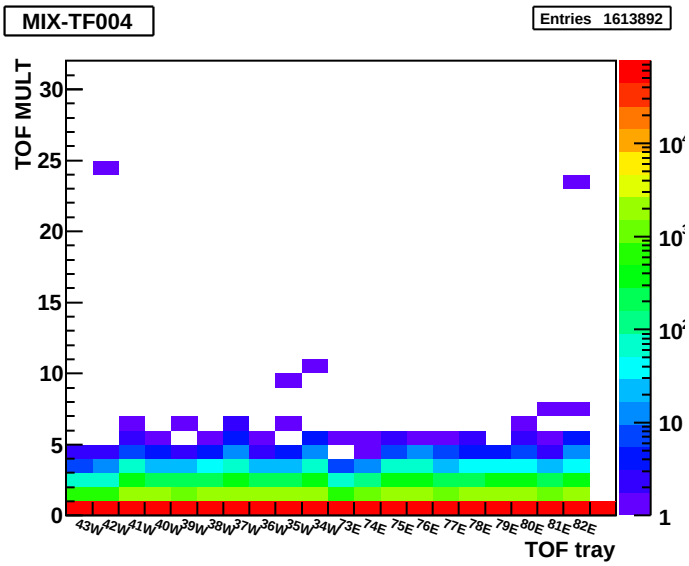

ST201 0-15 (ch6)
Entries 614816
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

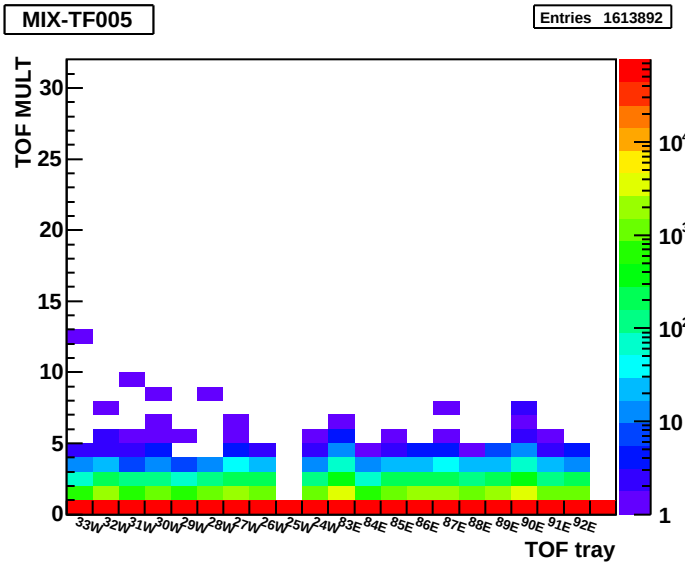

Unused (ch7)
Entries 614816

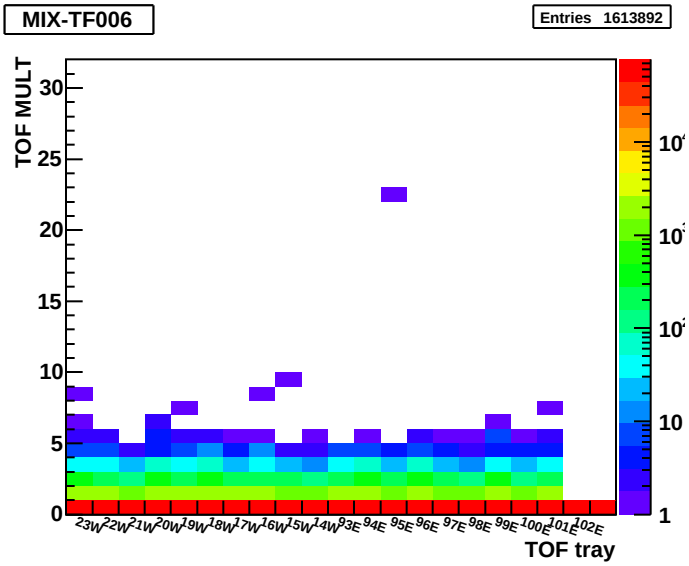

MIX-TF001
Entries 1613892
TOF MULT
TOF tray

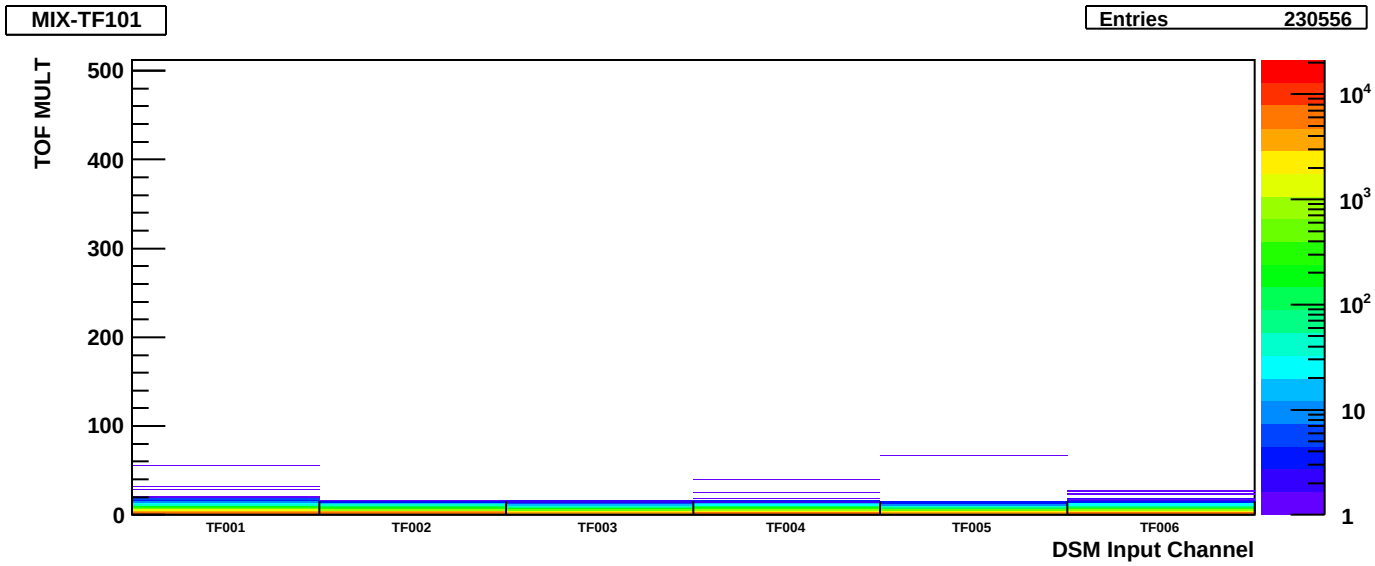

MIX-TF002
Entries 1613892
TOF MULT
TOF tray

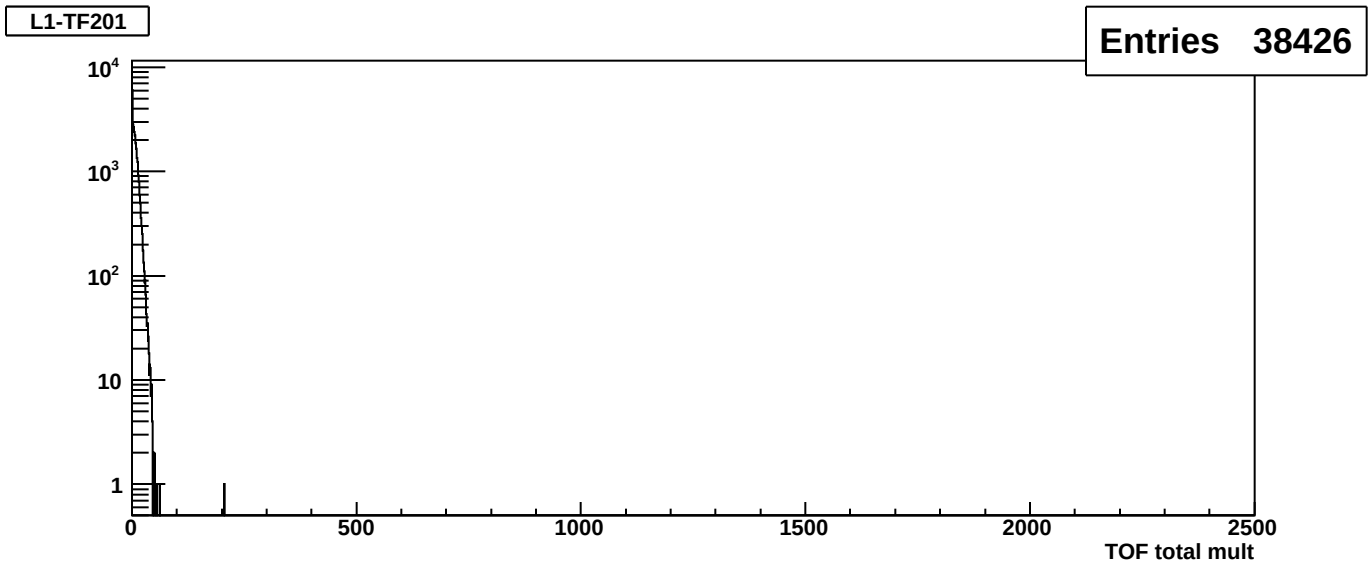

MIX-TF003
Entries 1613892
TOF MULT
TOF tray

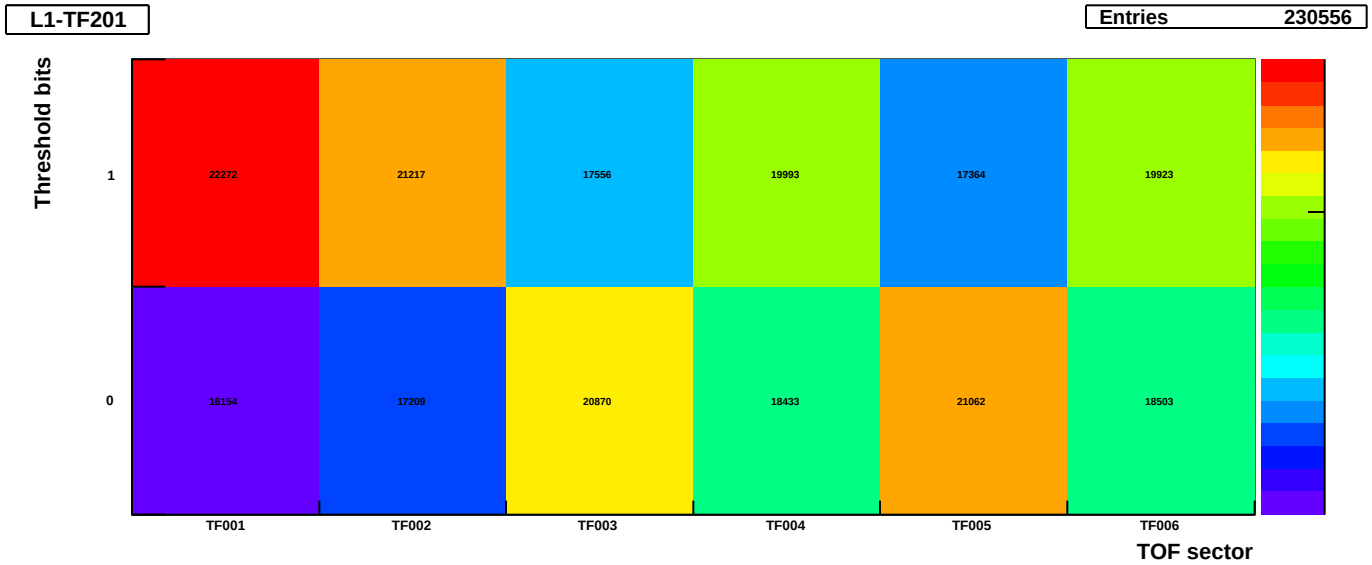

MIX-TF004
Entries 1613892
TOF MULT
TOF tray

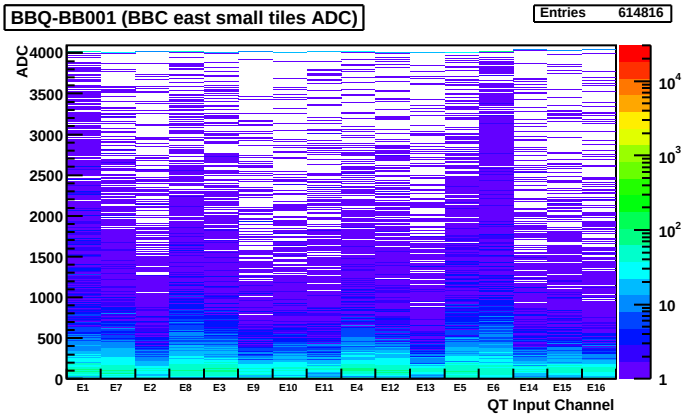

MIX-TF005
Entries 1613892
TOF MULT
TOF tray

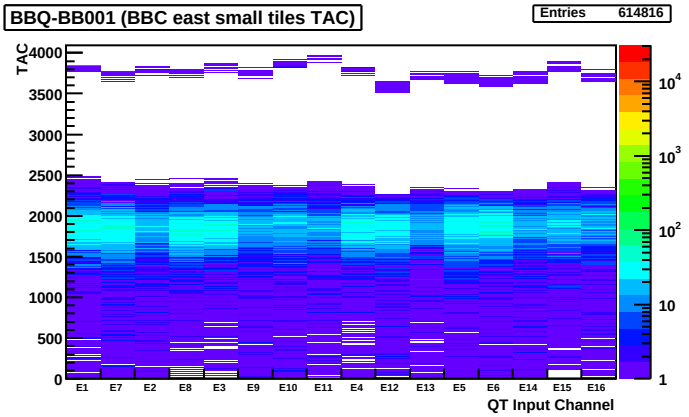

MIX-TF006
Entries 1613892
TOF MULT
TOF tray

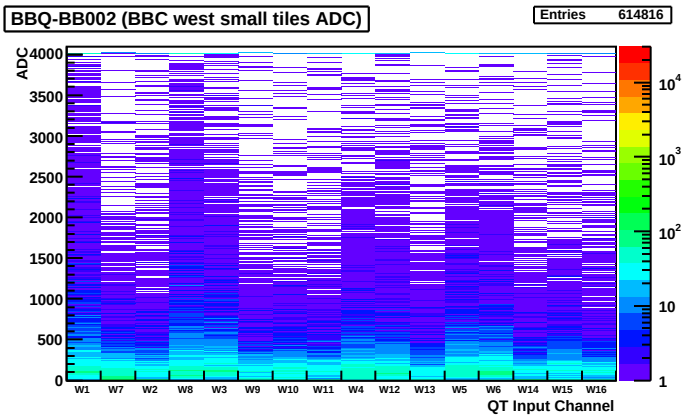

MIX-TF101
Entries 230556
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^4$
$10^3$
$10^2$
10
1

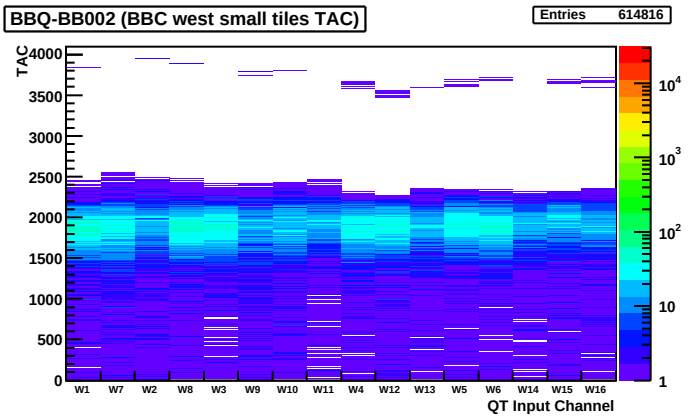

L1-TF201
Entries 38426
$10^4$
$10^3$
$10^2$
10
1
0
500
1000
1500
2000
2500
TOF total mult

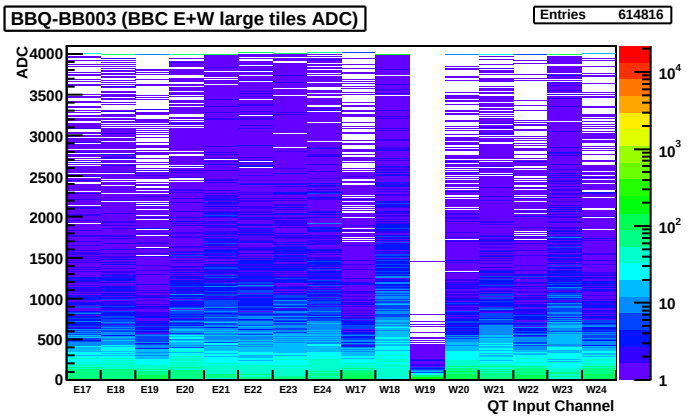

L1-TF201
Entries 230556
Threshold bits
1
0
22272
21217
17556
19993
17364
19923
16154
17209
20870
18433
21062
18503
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

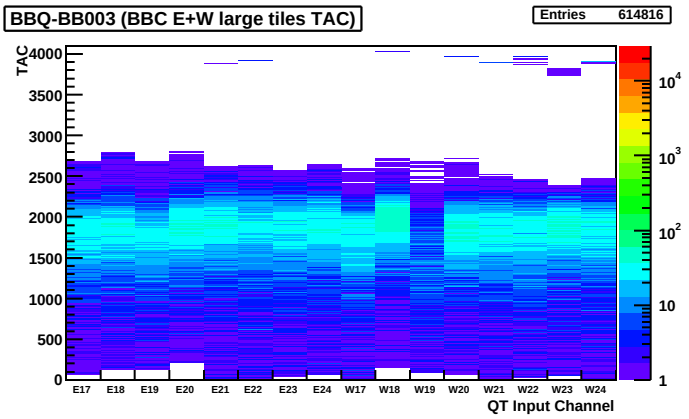

BBQ-BB001 (BBC east small tiles ADC)
Entries 614816
ADC
QT Input Channel

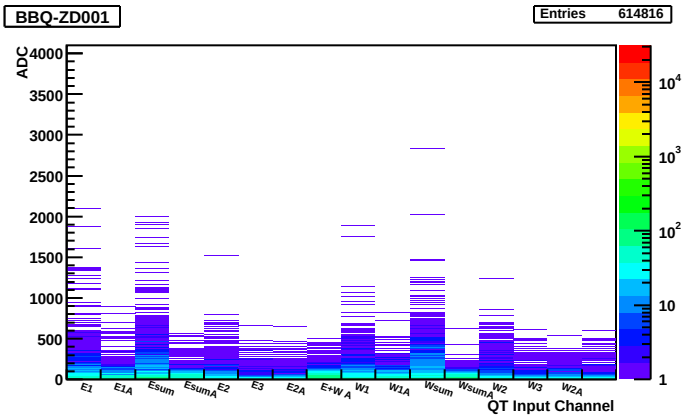

BBQ-BB001 (BBC east small tiles TAC)
Entries 614816
TAC
QT Input Channel

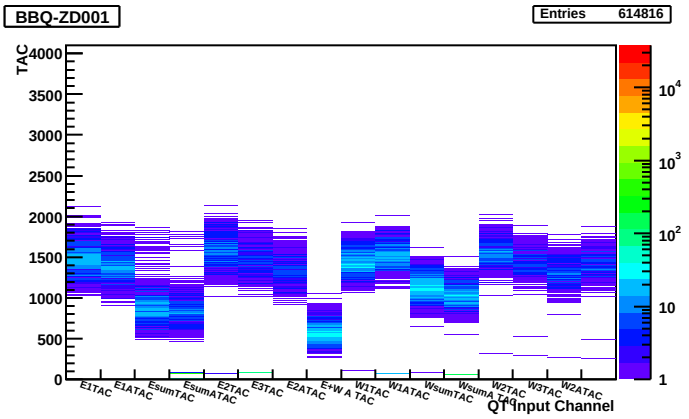

BBQ-BB002 (BBC west small tiles ADC)
Entries 614816
ADC
QT Input Channel

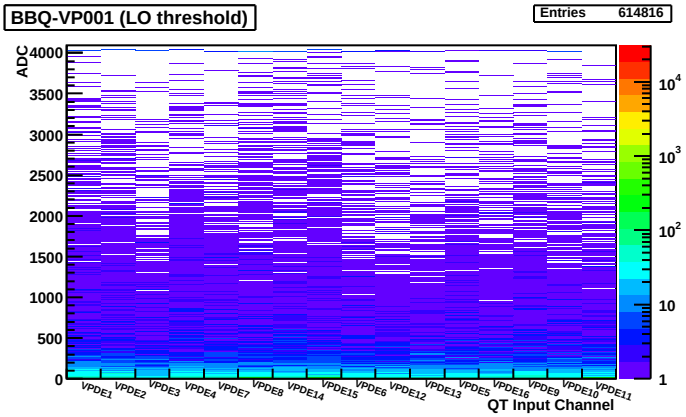

BBQ-BB002 (BBC west small tiles TAC)
Entries 614816
TAC
QT Input Channel

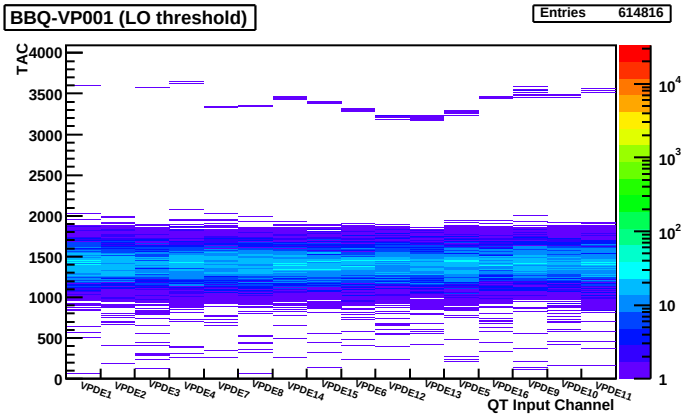

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 614816
ADC
QT Input Channel

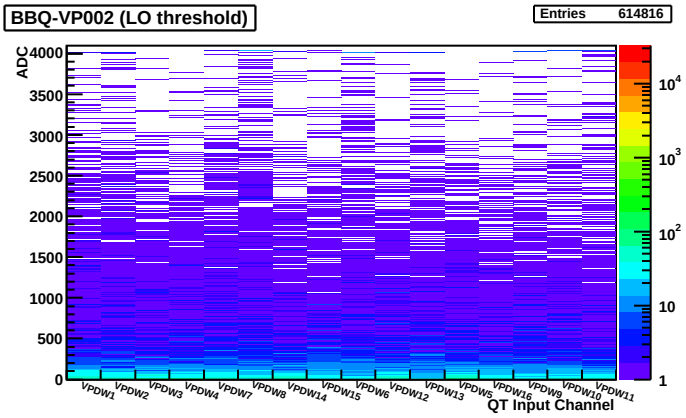

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 614816
TAC
QT Input Channel

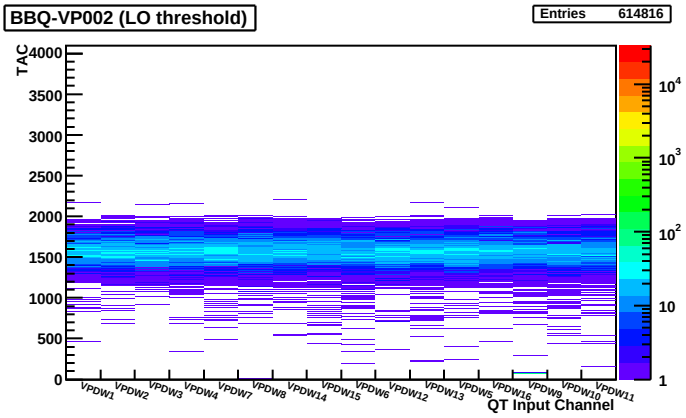

BBQ-ZD001
Entries 614816
ADC
QT Input Channel

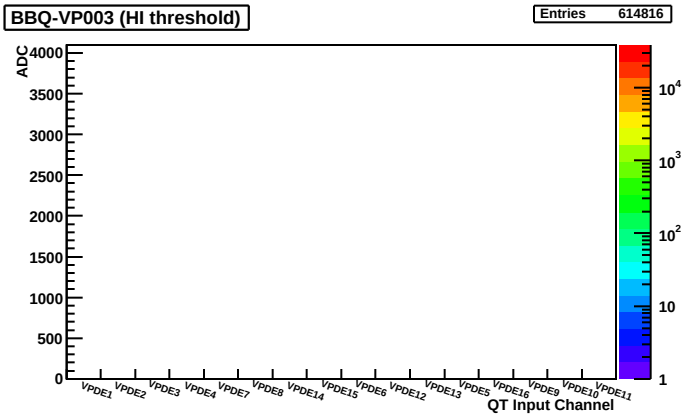

BBQ-ZD001
Entries 614816
TAC
QT Input Channel

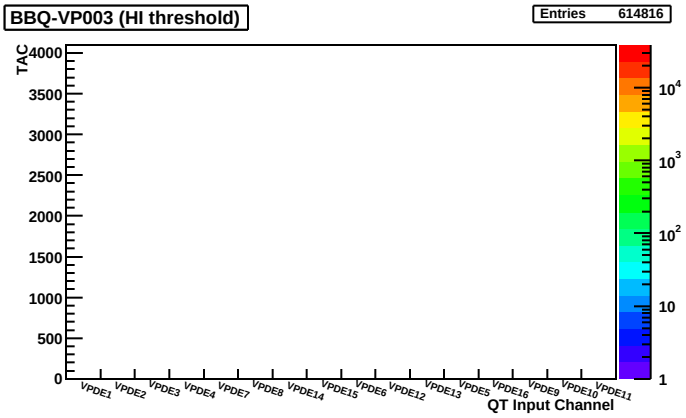

BBQ-VP001 (LO threshold)
Entries 614816
ADC
QT Input Channel

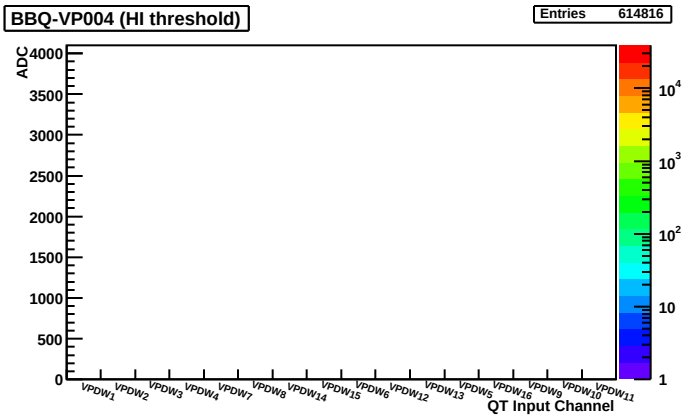

BBQ-VP001 (LO threshold)
Entries 614816
TAC
QT Input Channel

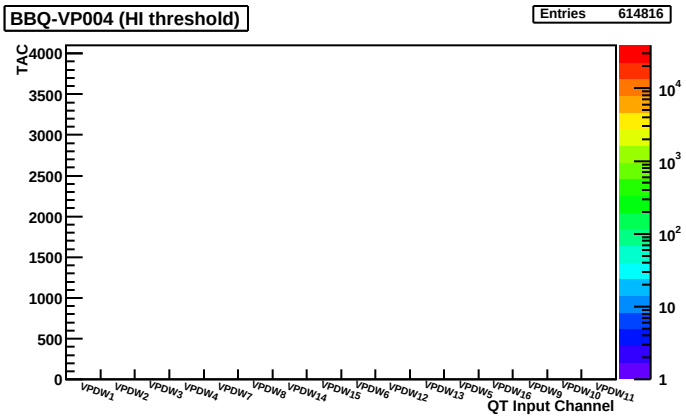

BBQ-VP002 (LO threshold)
Entries 614816
ADC
QT Input Channel

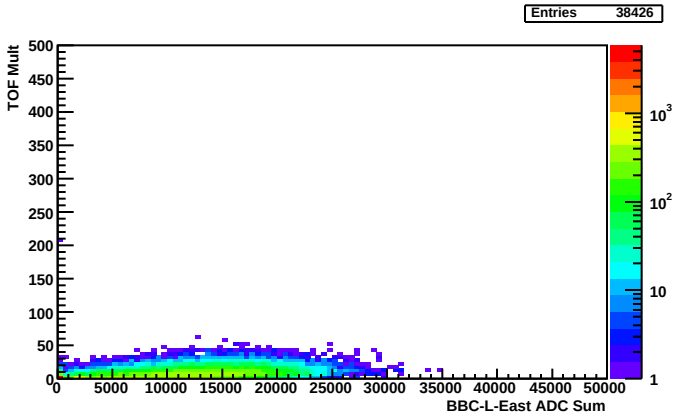

BBQ-VP002 (LO threshold)
Entries 614816
TAC
QT Input Channel

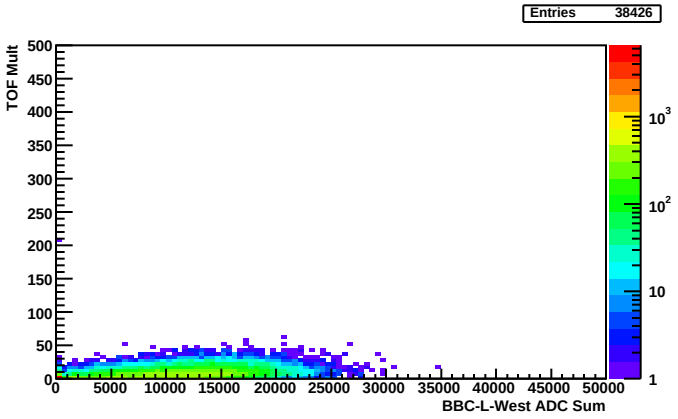

BBQ-VP003 (HI threshold)
Entries 614816
ADC
QT Input Channel

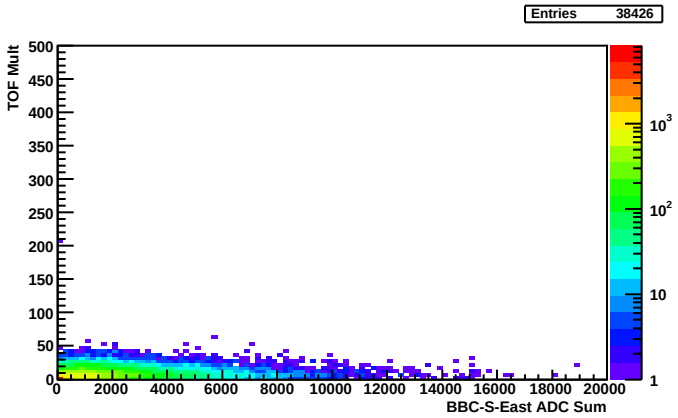

BBQ-VP003 (HI threshold)
Entries 614816
TAC
QT Input Channel

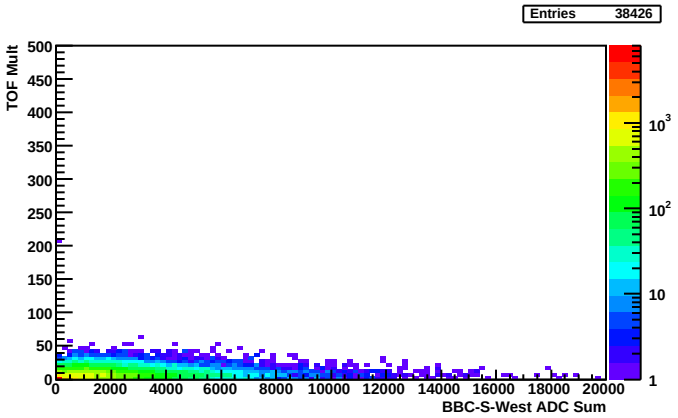

BBQ-VP004 (HI threshold)
Entries 614816
ADC
QT Input Channel

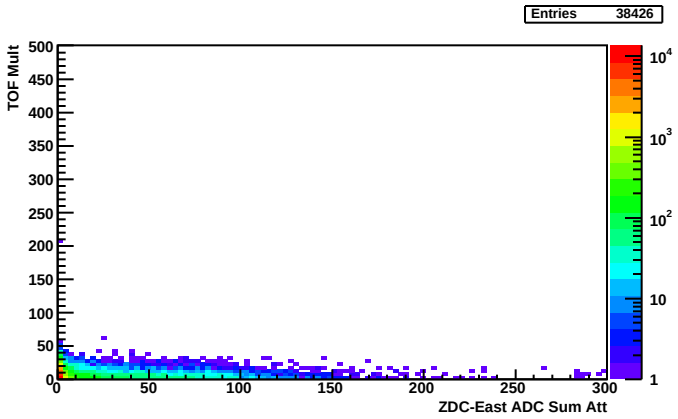

BBQ-VP004 (HI threshold)
Entries 614816
TAC
QT Input Channel

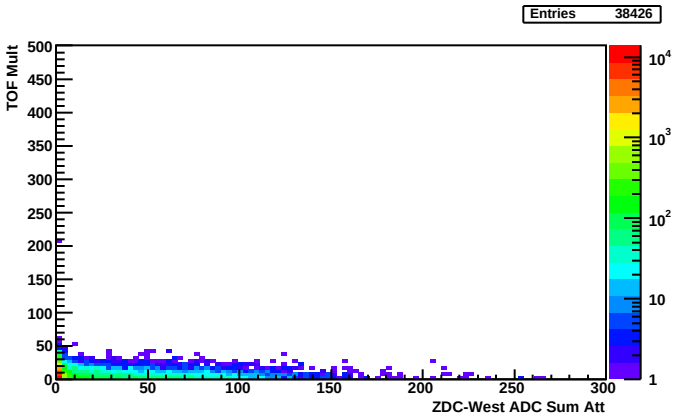

Entries 38426
TOF Mult
BBC-L-East ADC Sum

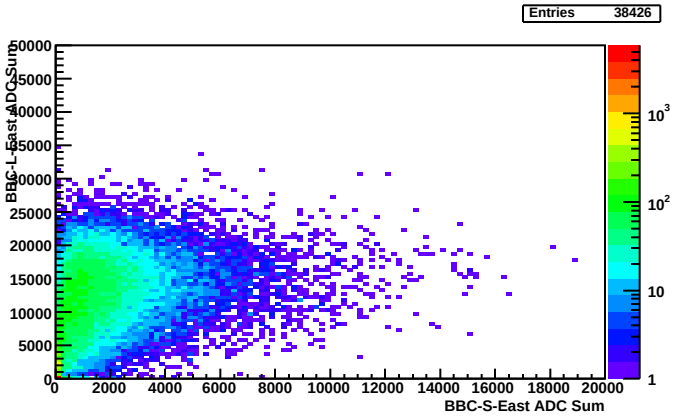

Entries 38426
TOF Mult
BBC-L-West ADC Sum

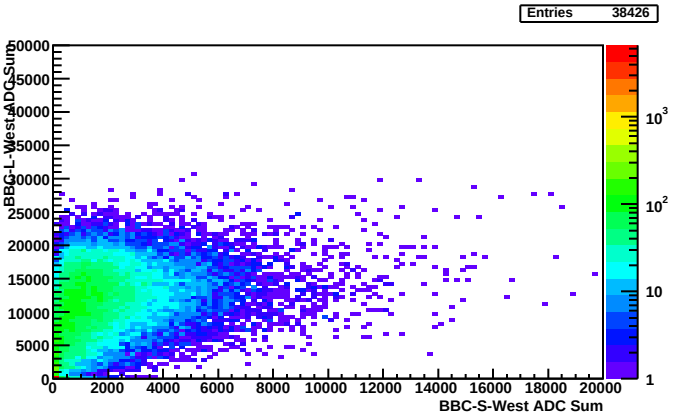

Entries 38426
TOF Mult
BBC-S-East ADC Sum

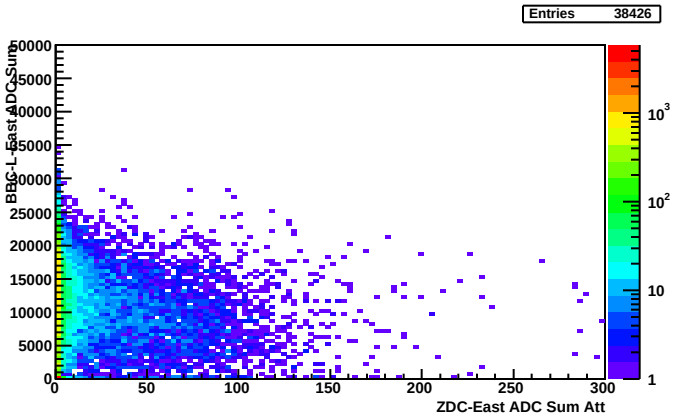

Entries 38426
TOF Mult
BBC-S-West ADC Sum

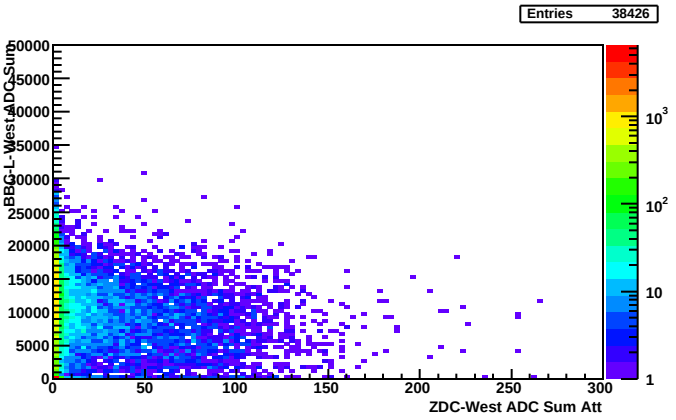

Entries 38426
TOF Mult
ZDC-East ADC Sum Att

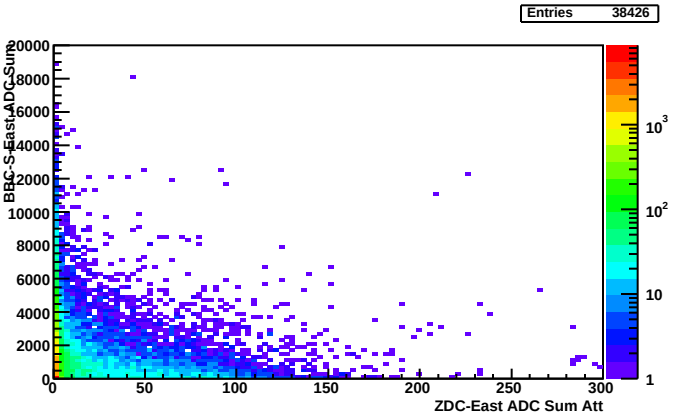

Entries 38426
TOF Mult
ZDC-West ADC Sum Att

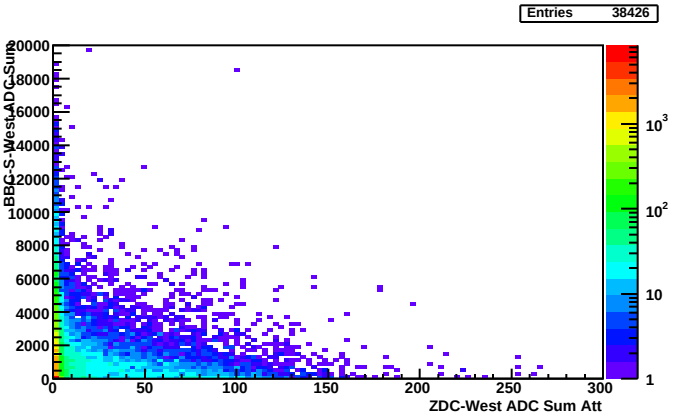

Entries 38426
BBC-L-East ADC Sum
BBC-S-East ADC Sum

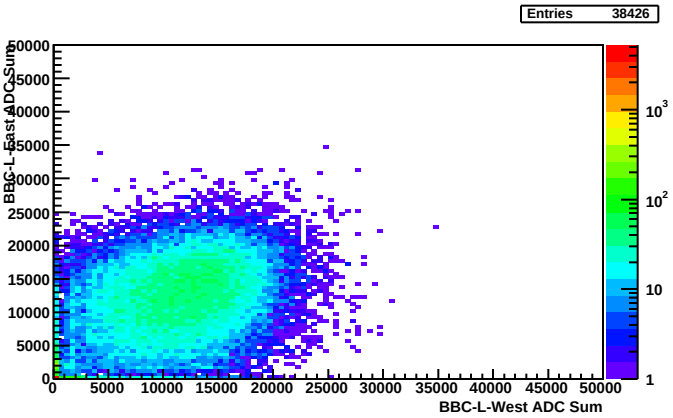

Entries 38426
BBC-L-West ADC Sum
BBC-S-West ADC Sum

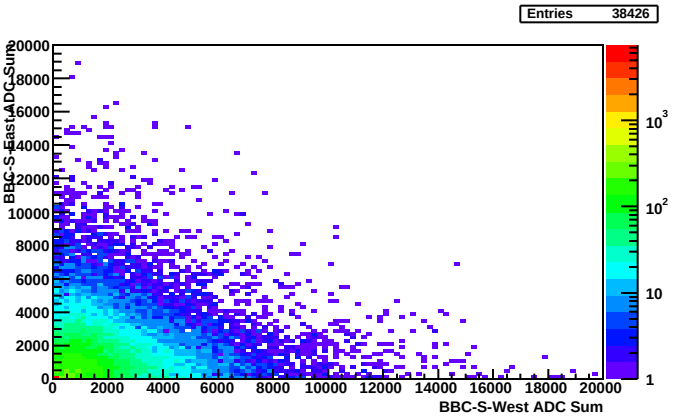

Entries 38426
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

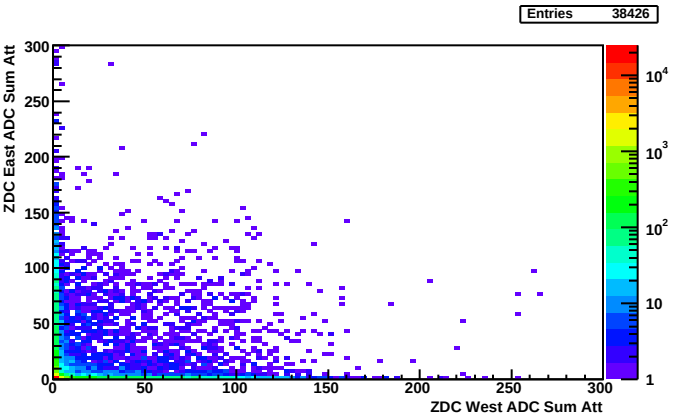

Entries 38426
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

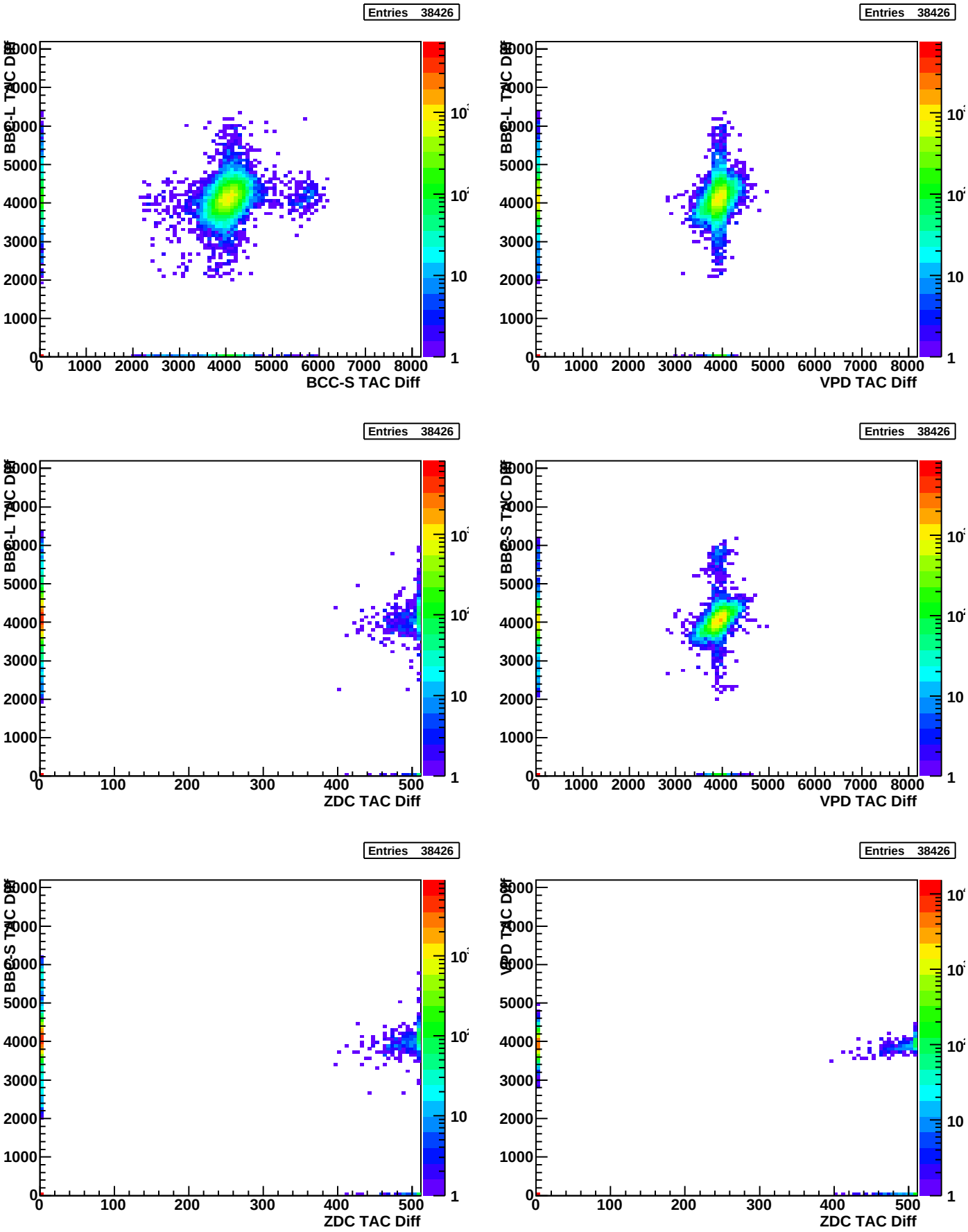

Entries 38426
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

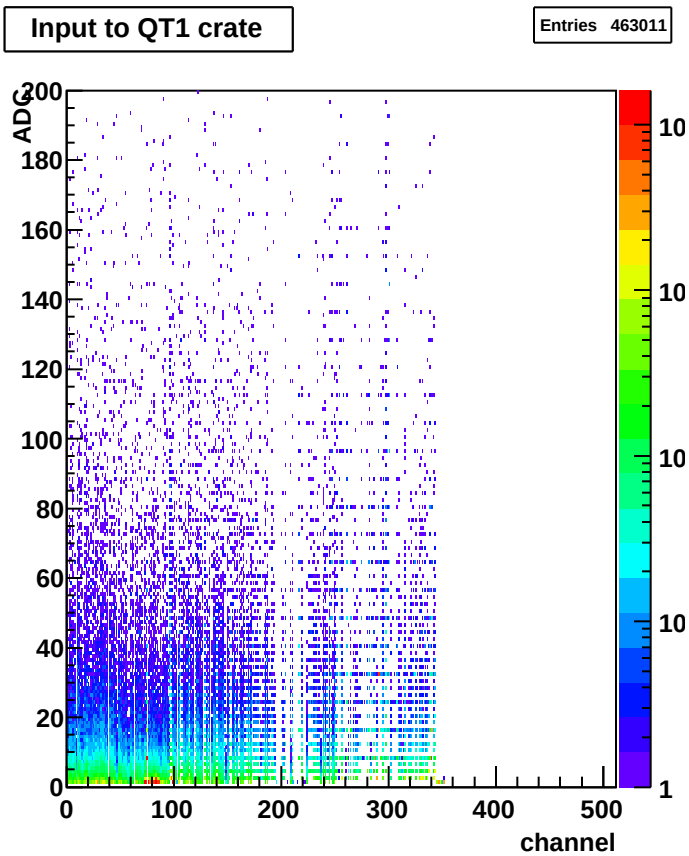

Entries 38426
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

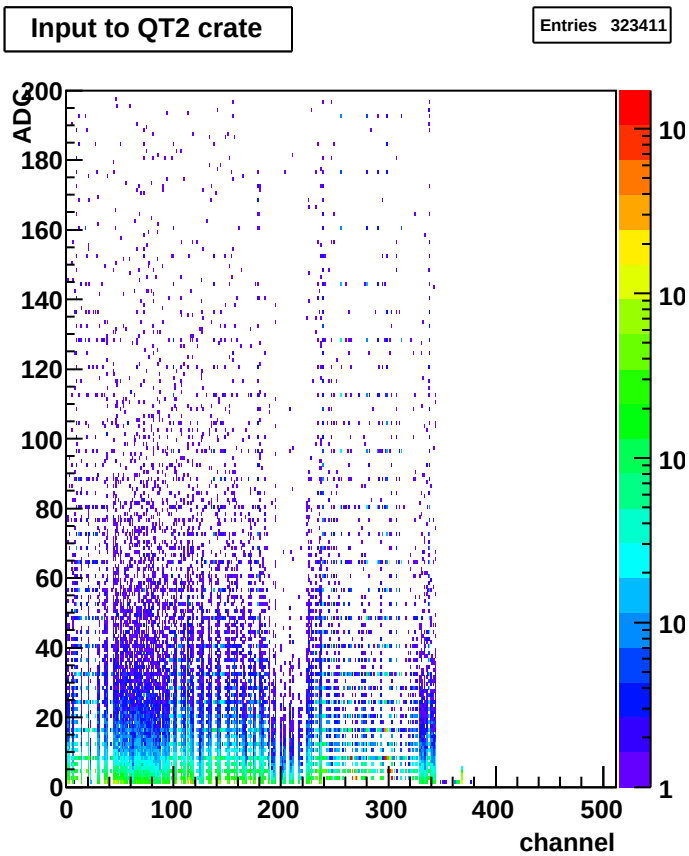

Entries 38426
BBC-L-East ADC Sum
BBC-L-West ADC Sum

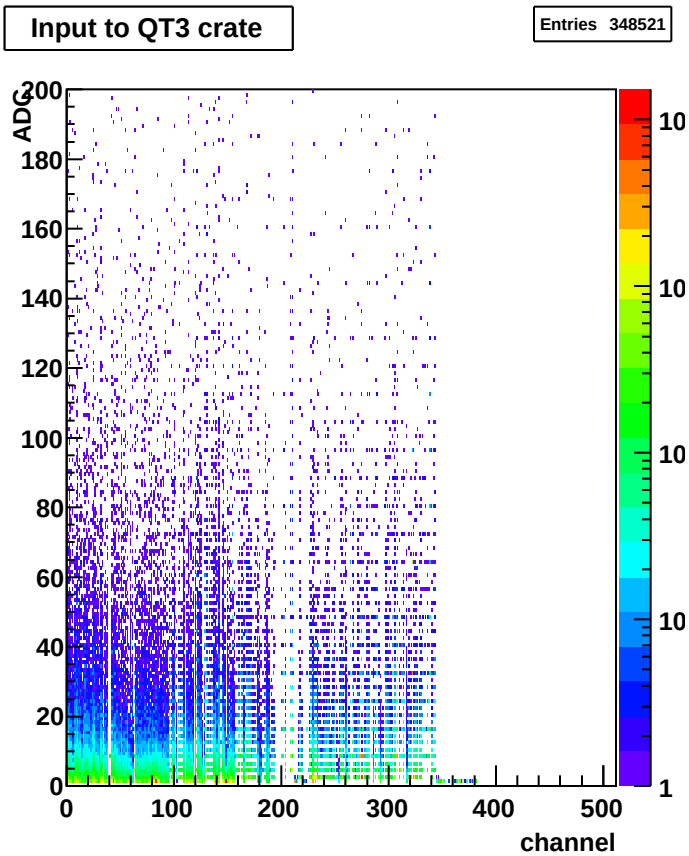

Entries 38426
BBC-S-East ADC Sum
BBC-S-West ADC Sum

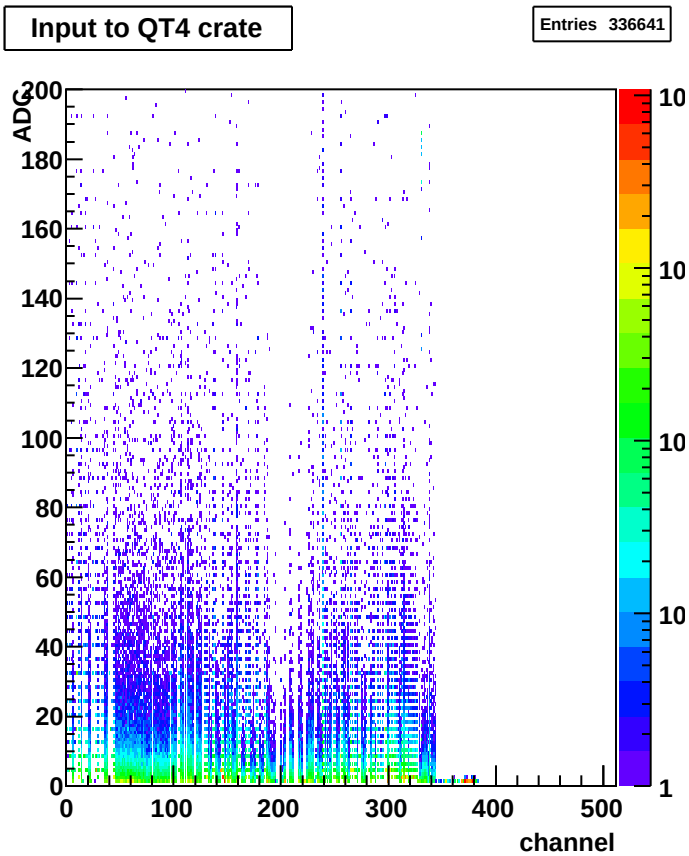

Entries 38426
ZDC East ADC Sum Att
ZDC West ADC Sum Att

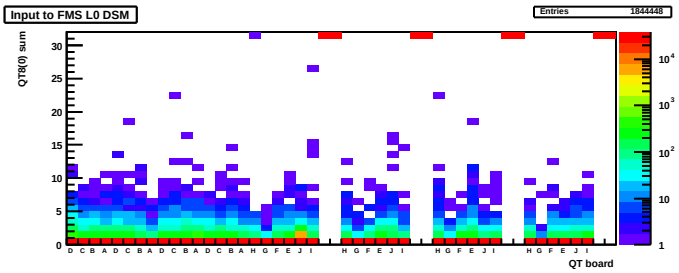

Entries 38426
BBC-L TAC Diff
BCC-S TAC Diff
Entries 38426
BBC-L TAC Diff
VPD TAC Diff
Entries 38426
BBC-L TAC Diff
ZDC TAC Diff
Entries 38426
BBC-S TAC Diff
VPD TAC Diff
Entries 38426
BBC-S TAC Diff
ZDC TAC Diff
Entries 38426
VPD TAC Diff
ZDC TAC Diff

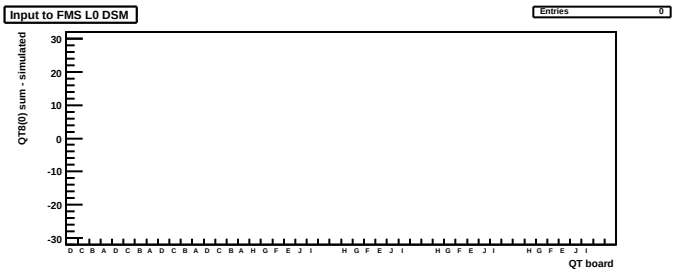

Input to QT1 crate
Entries 463011
ADC
channel

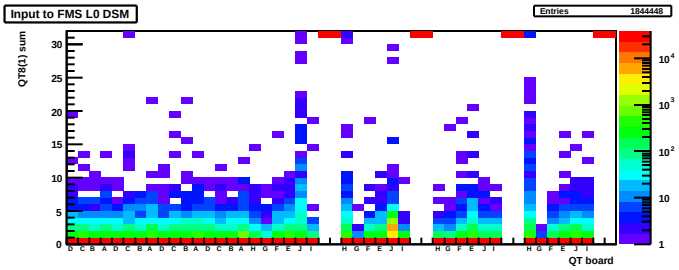

Input to QT2 crate
Entries 323411
ADC
channel

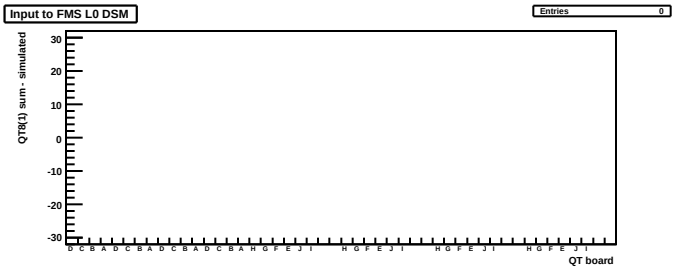

Input to QT3 crate
Entries 348521
ADC
channel

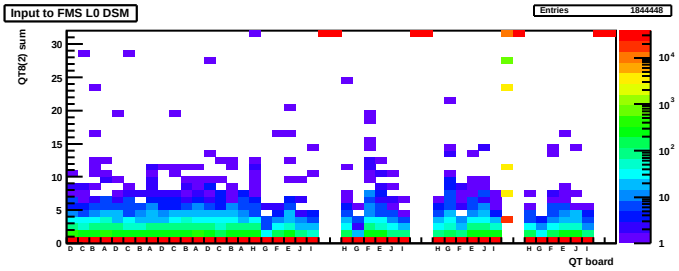

Input to QT4 crate
Entries 336641
ADC
channel

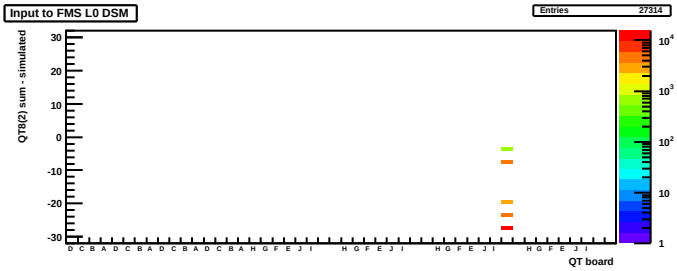

Input to FMS L0 DSM
Entries 1844448
QT8(0) sum
QT board

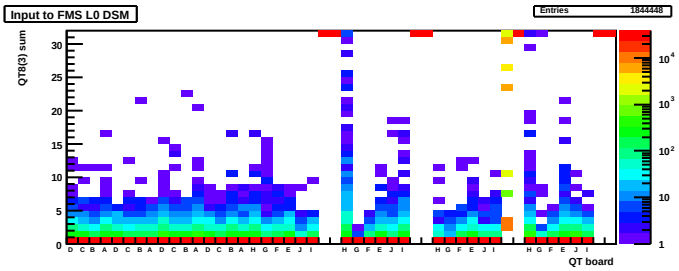

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

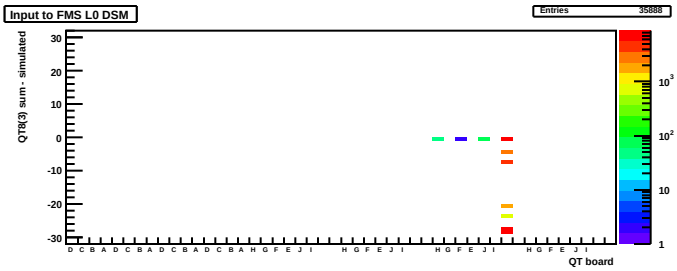

Input to FMS L0 DSM
Entries 1844448
QT8(1) sum
QT board

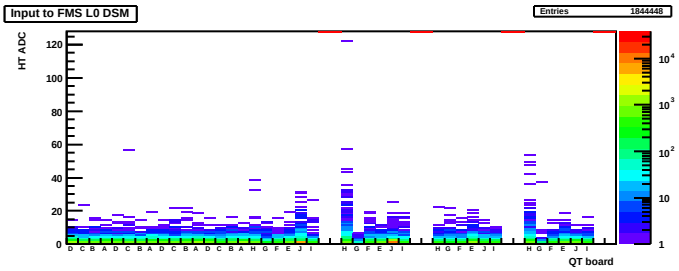

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

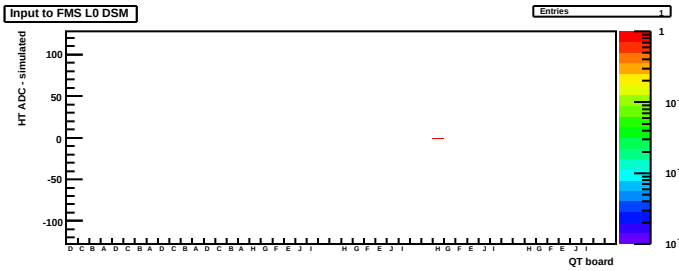

Input to FMS L0 DSM
Entries 1844448
QT8(2) sum
QT board

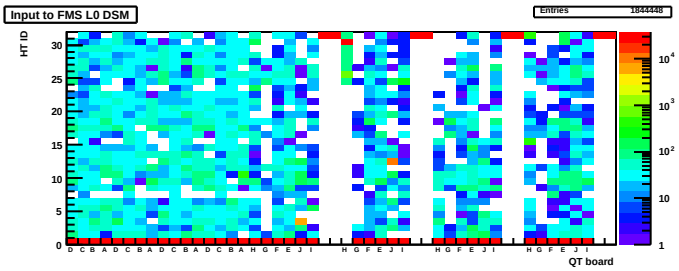

Input to FMS L0 DSM
Entries 27314
QT8(2) sum - simulated
QT board

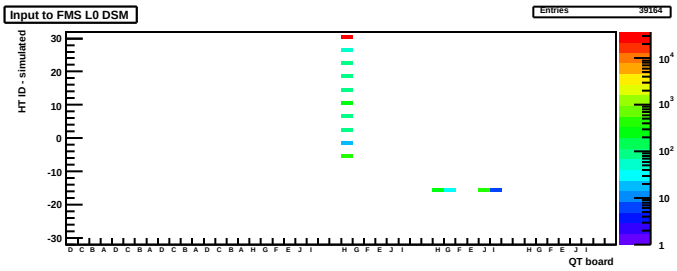

Input to FMS L0 DSM
Entries 1844448
QT8(3) sum
QT board

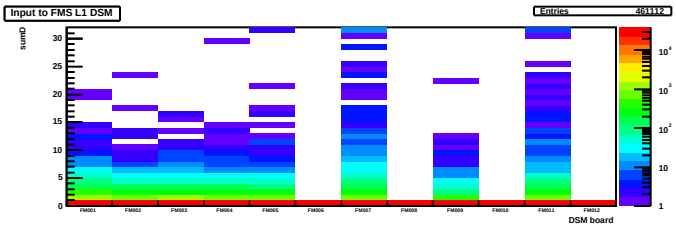

Input to FMS L0 DSM
Entries 35888
QT8(3) sum - simulated
QT board

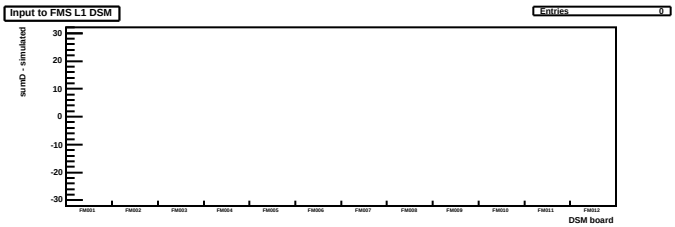

Input to FMS L0 DSM
Entries 1844448
HT ADC
QT board

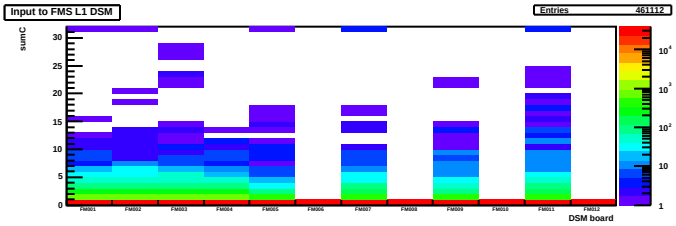

Input to FMS L0 DSM
Entries 1
HT ADC - simulated
QT board

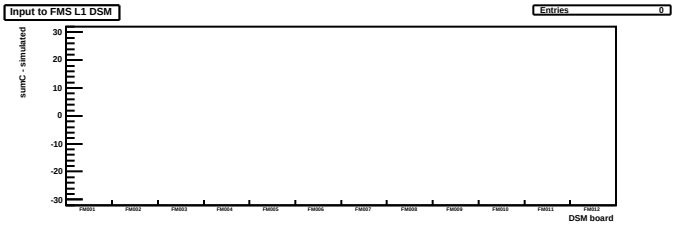

Input to FMS L0 DSM
Entries 1844448
HT ID
QT board

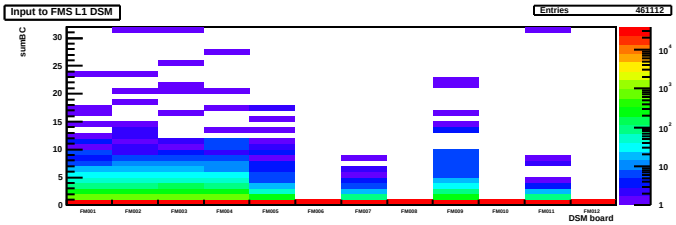

Input to FMS L0 DSM
Entries 39164
HT ID - simulated
QT board

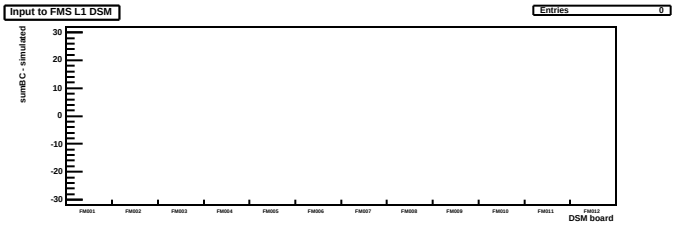

Input to FMS L1 DSM
Entries 461112
sumD
DSM board

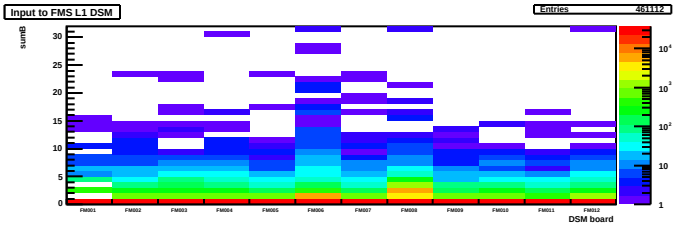

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

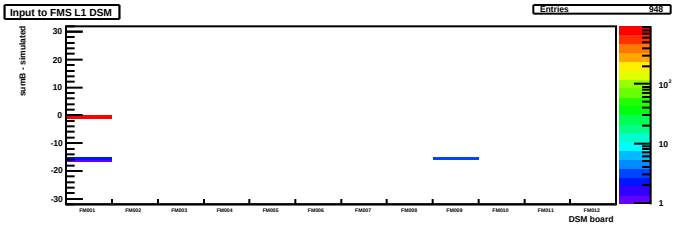

Input to FMS L1 DSM
Entries 461112
sumC
DSM board

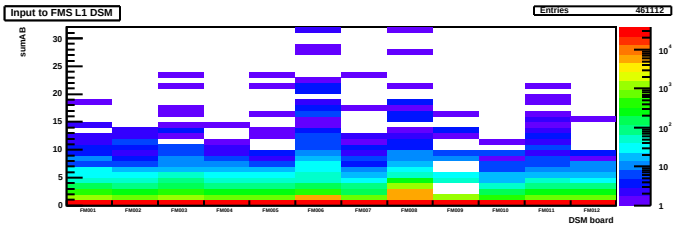

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

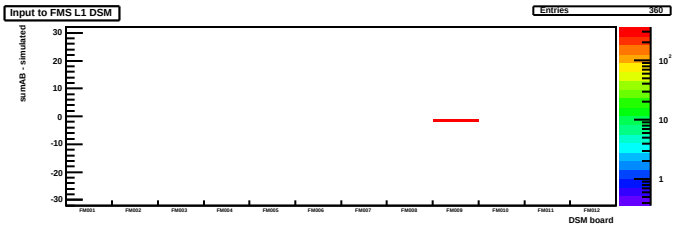

Input to FMS L1 DSM
Entries 461112
sumBC
DSM board

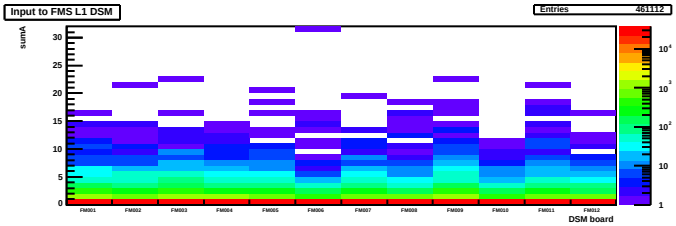

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

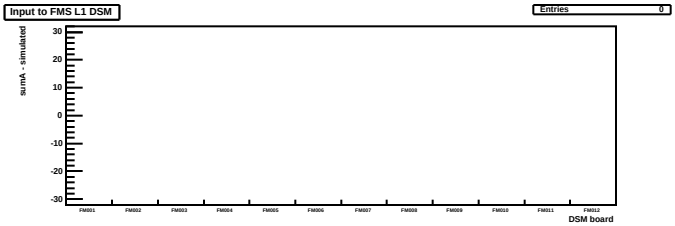

Input to FMS L1 DSM
Entries 461112
sumB
DSM board

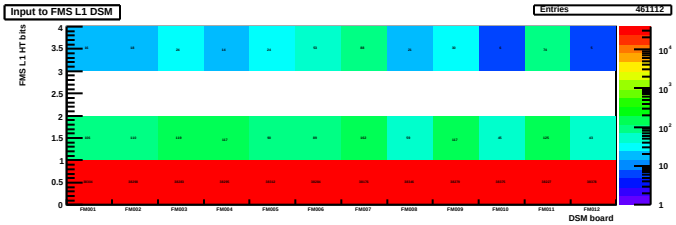

Input to FMS L1 DSM
Entries 948
sumB - simulated
DSM board

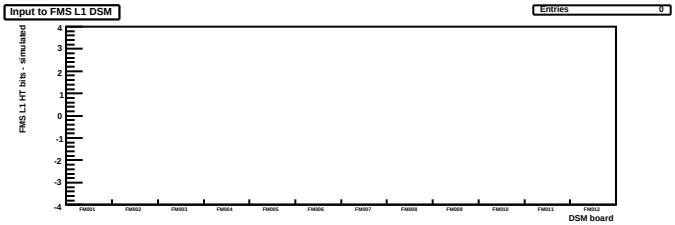

Input to FMS L1 DSM
Entries 461112
sumAB
DSM board

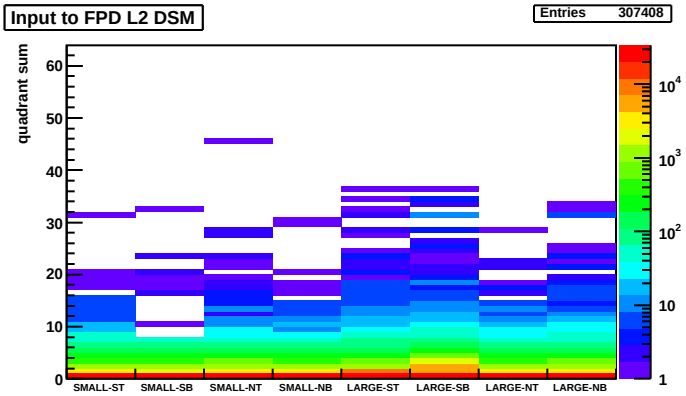

Input to FMS L1 DSM
Entries 360
sumAB - simulated
DSM board

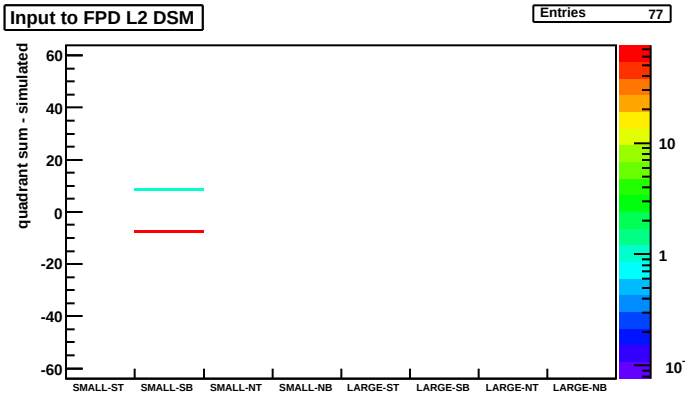

Input to FMS L1 DSM
Entries 461112
sumA
DSM board

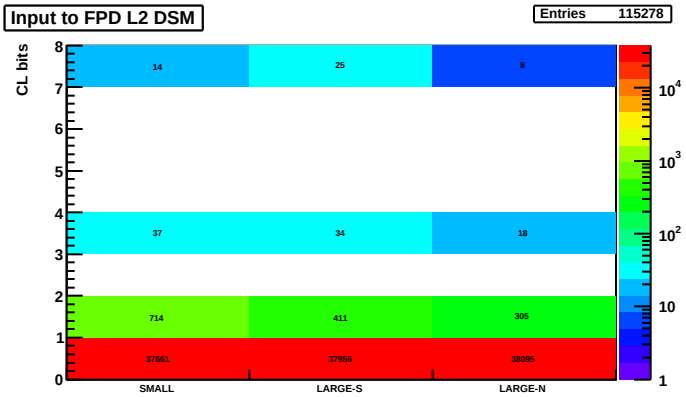

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

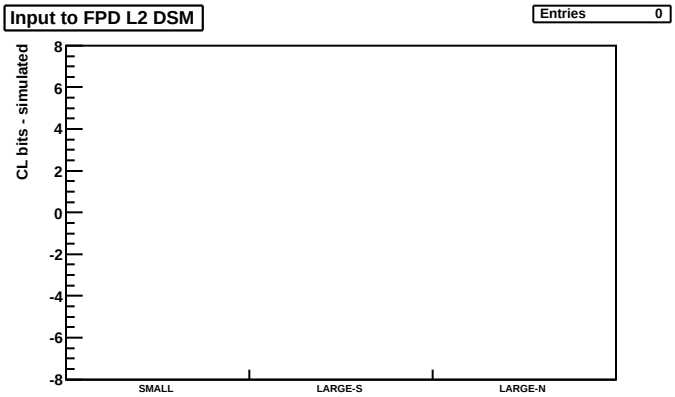

Input to FMS L1 DSM
Entries 461112
FMS L1 HT bits
DSM board

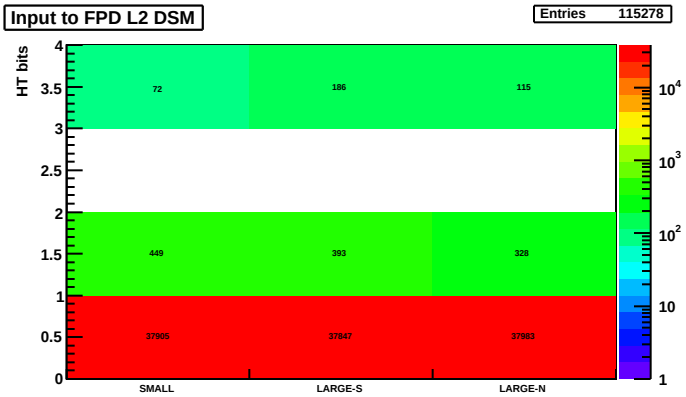

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

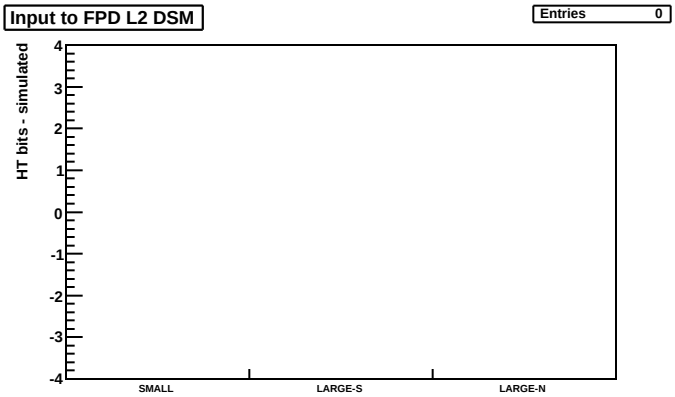

Input to FPD L2 DSM
Entries 307408
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

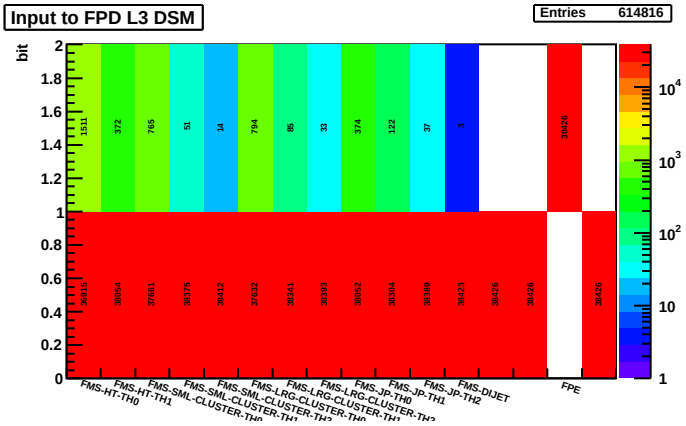

Input to FPD L2 DSM
Entries 77
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

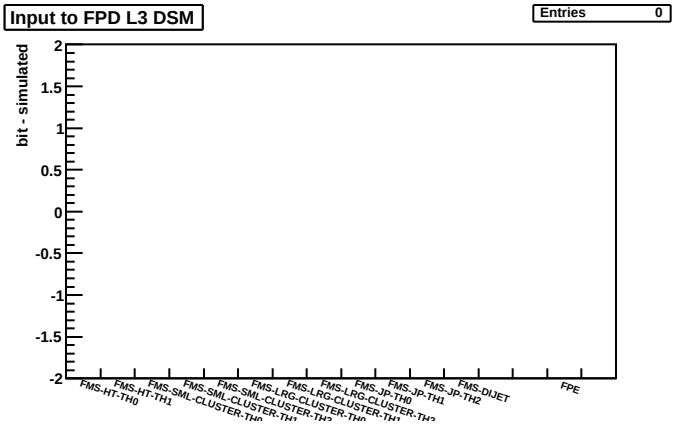

Input to FPD L2 DSM
Entries 115278
CL bits
14
25
8
37
34
18
714
411
305
37661
37956
38095
SMALL
LARGE-S
LARGE-N

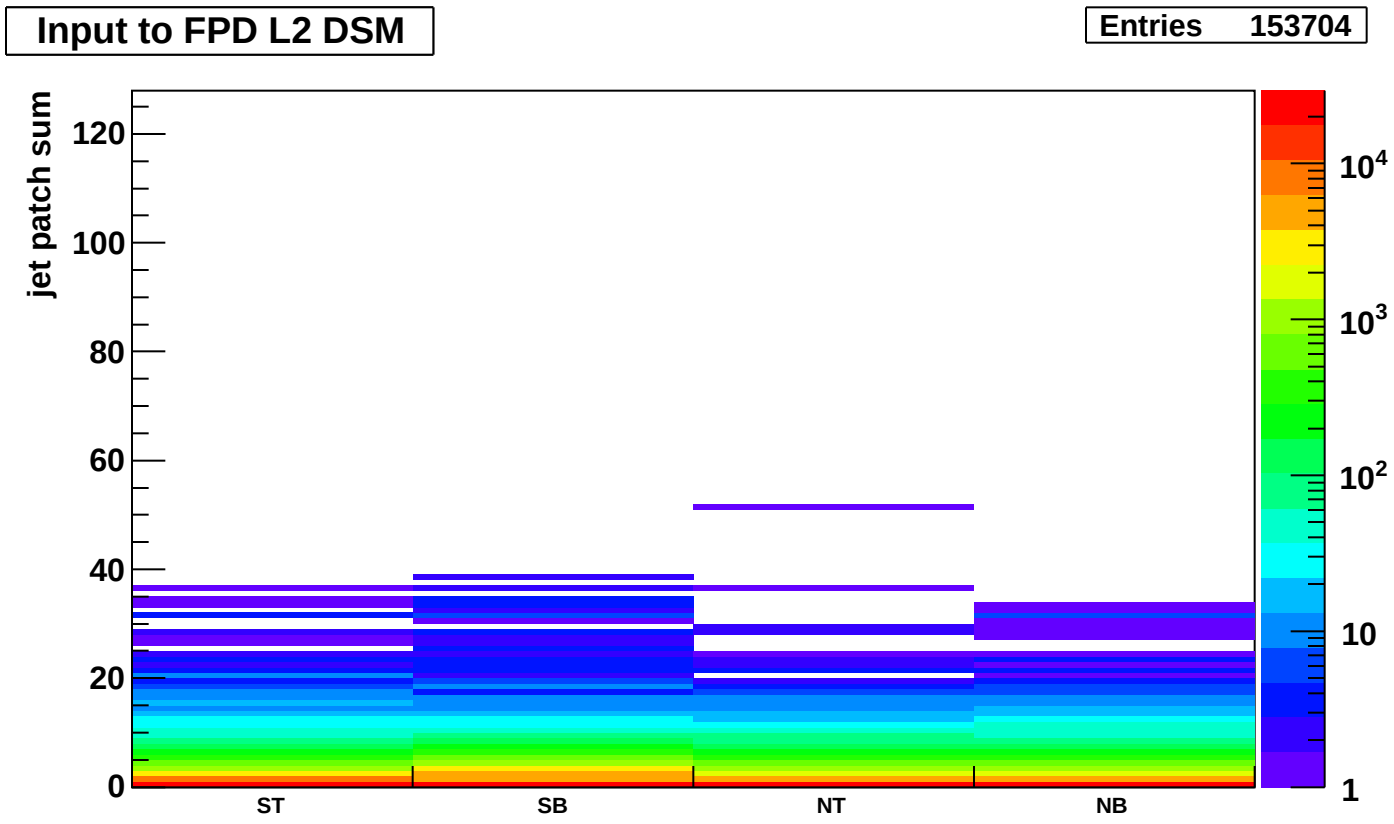

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

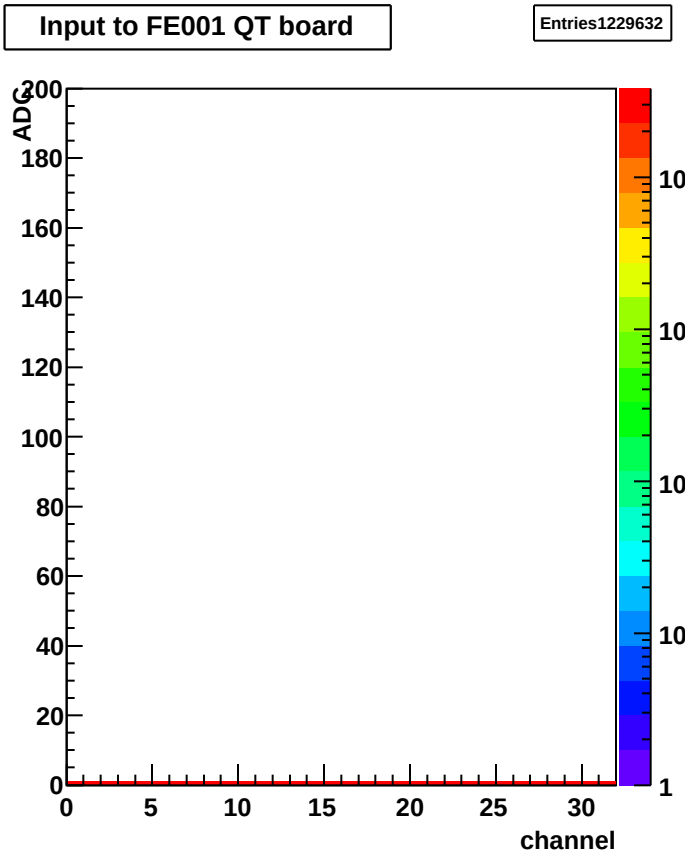

Input to FPD L2 DSM
Entries 115278
HT bits
72
186
115
449
393
328
37905
37847
37983
SMALL
LARGE-S
LARGE-N

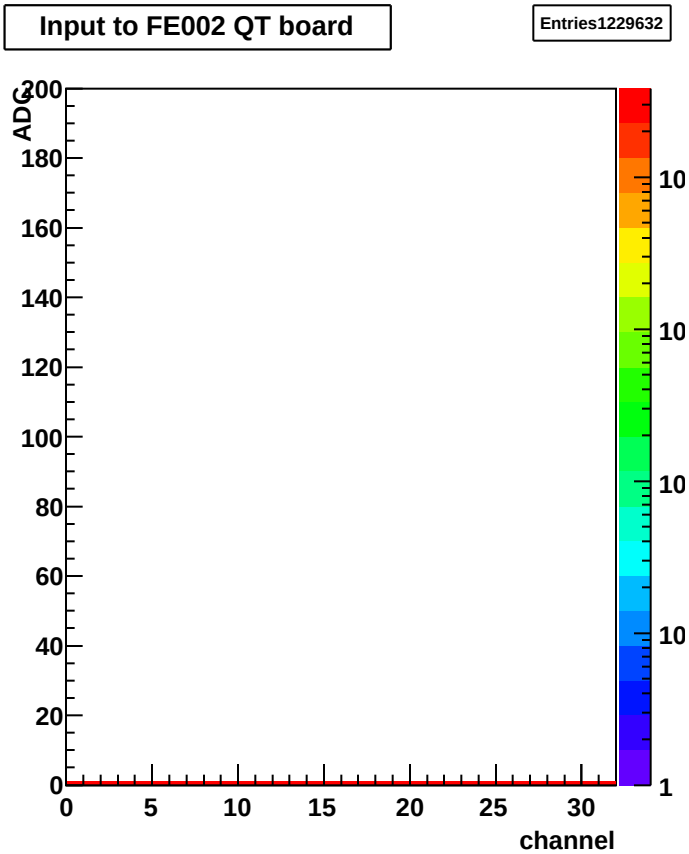

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

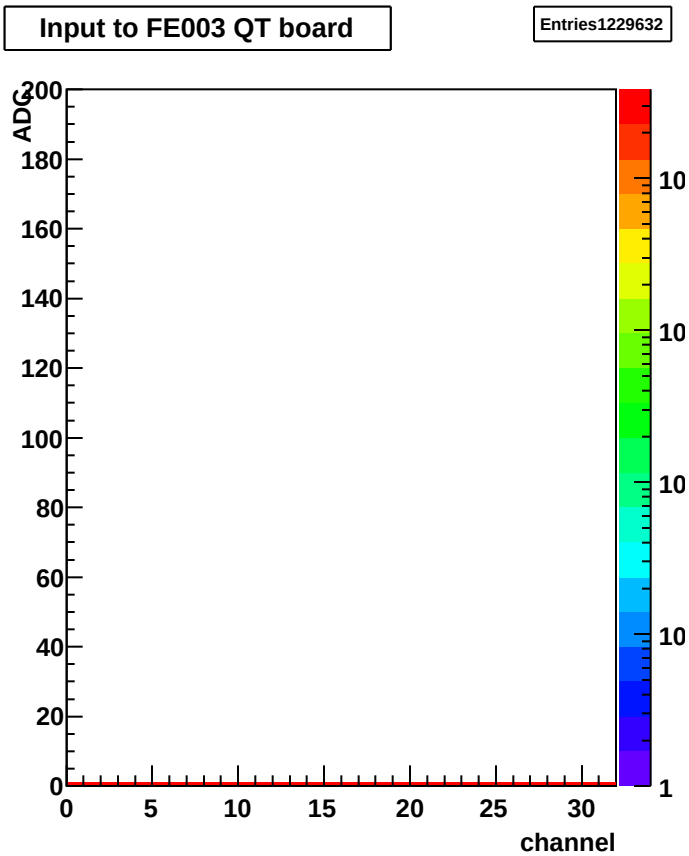

Input to FPD L3 DSM
Entries 614816
bit
1511
372
765
51
14
794
85
33
374
122
37
3
38426
38915
38054
37661
38375
38412
37632
38341
38393
38052
38304
38389
38423
38426
38426
38426
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

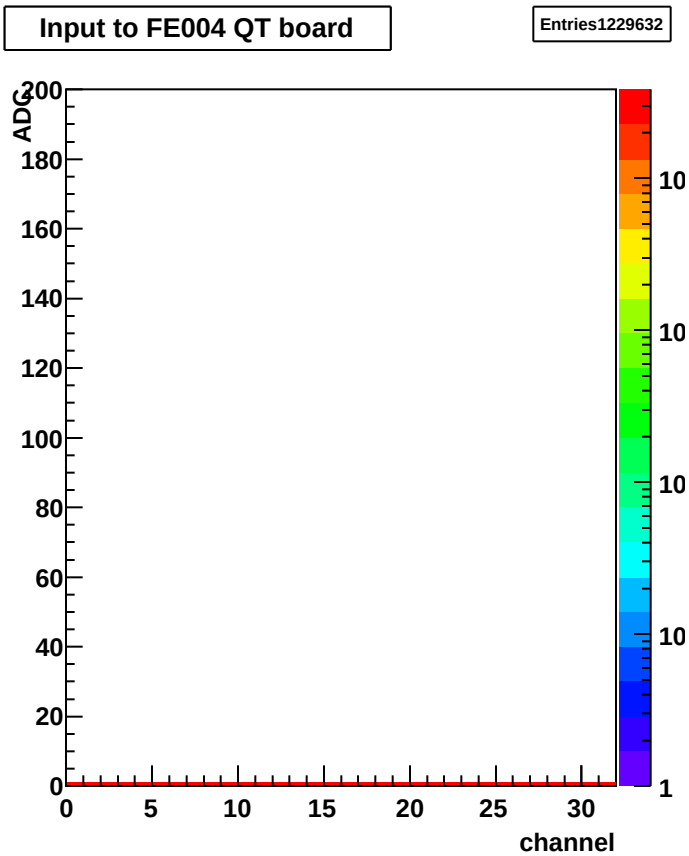

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

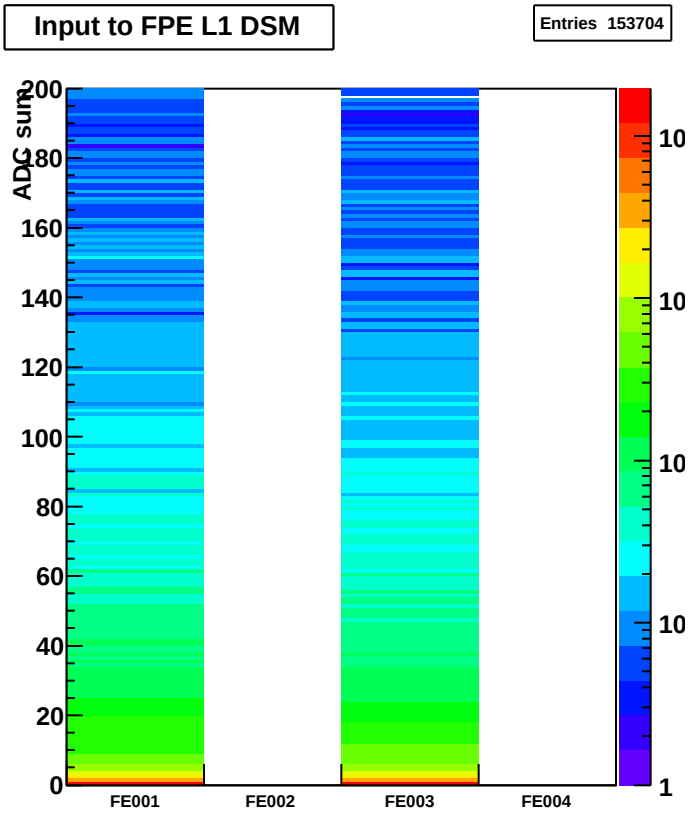

Input to FPD L2 DSM
Entries 153704
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
$10^4$
$10^3$
$10^2$
10
1

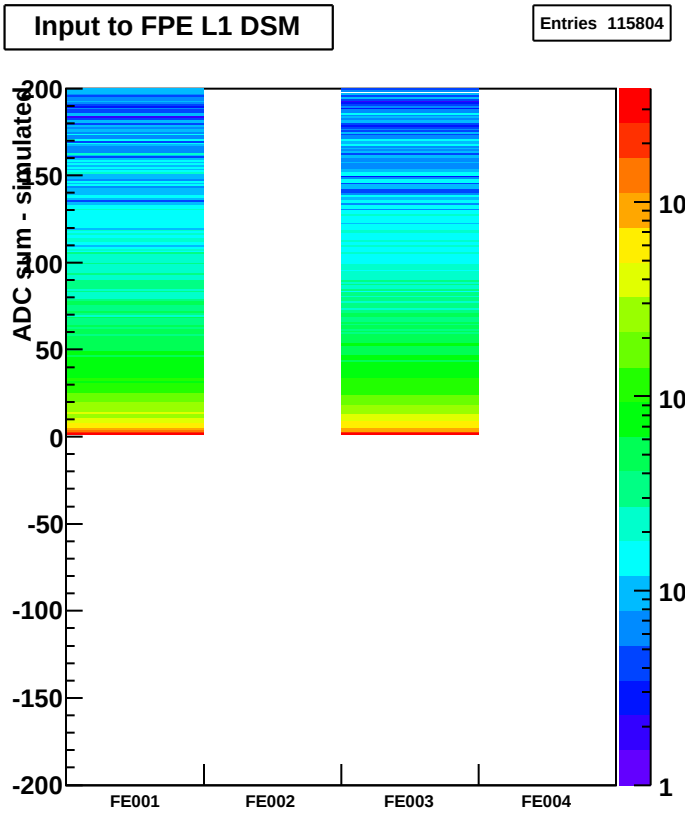

Input to FE001 QT board
Entries1229632
ADC
channel

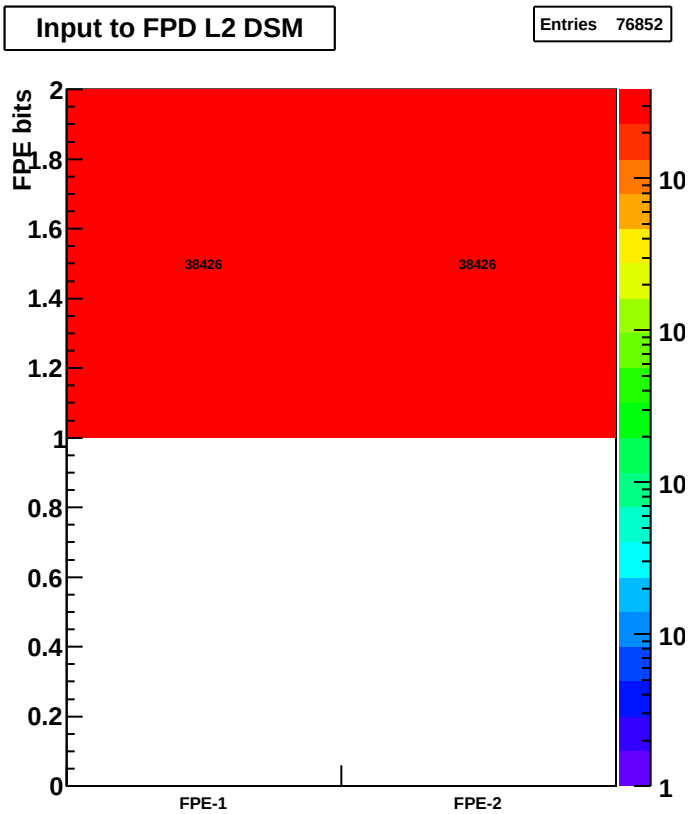

Input to FE002 QT board
Entries1229632
ADC
channel

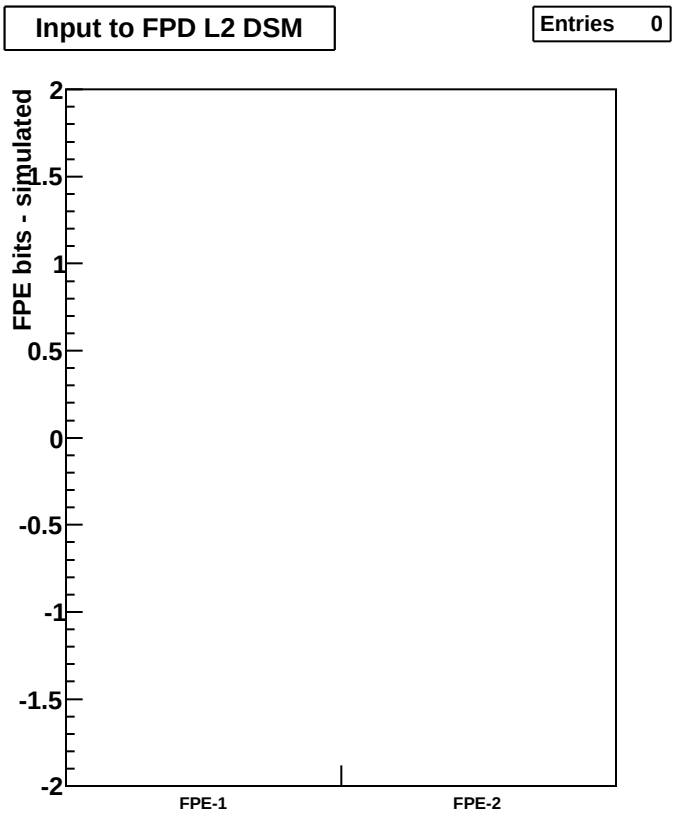

Input to FE003 QT board
Entries1229632
ADC
channel


Input to FE004 QT board
Entries1229632
ADC
channel


Input to FPE L1 DSM
Entries 153704
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 115804
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 76852
FPE bits
38426
38426
FPE-1
FPE-2


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