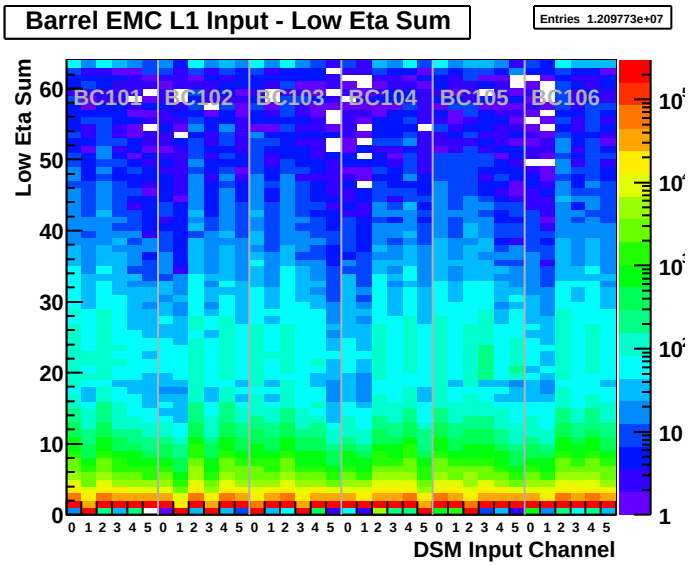
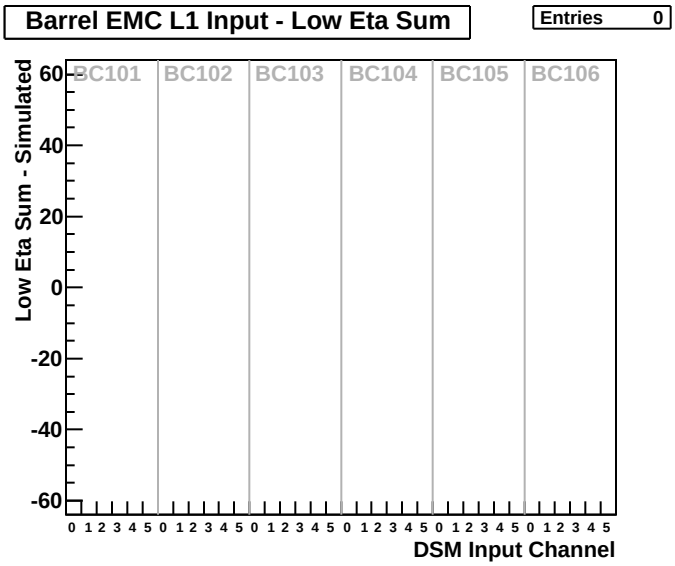
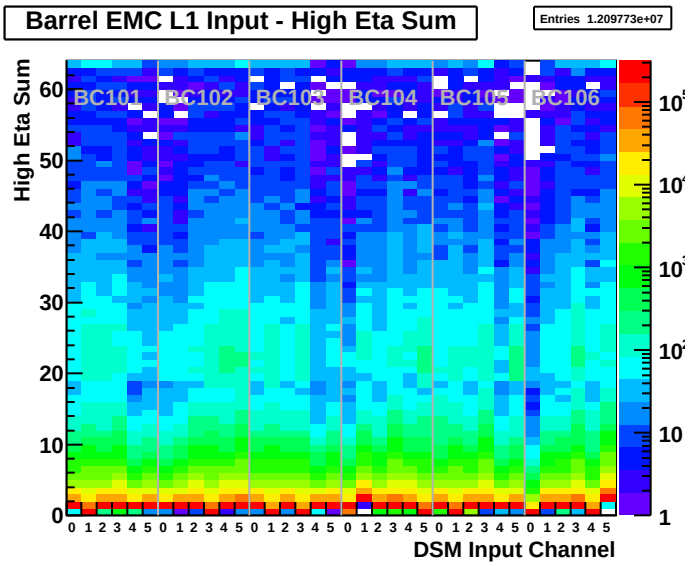
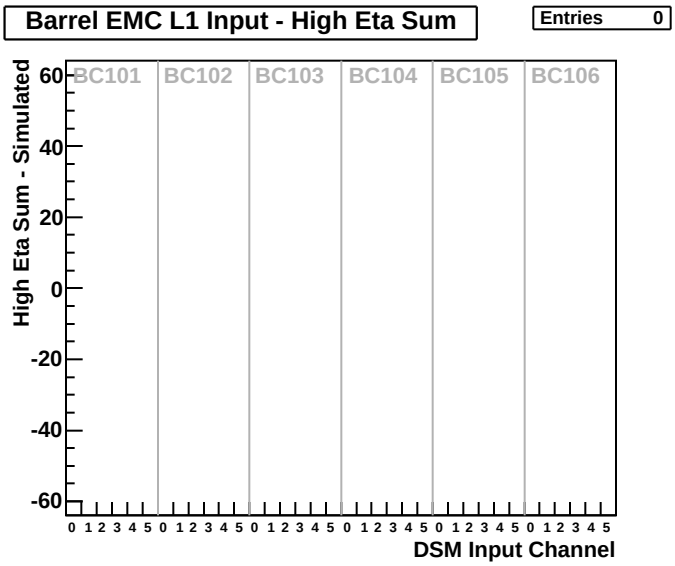
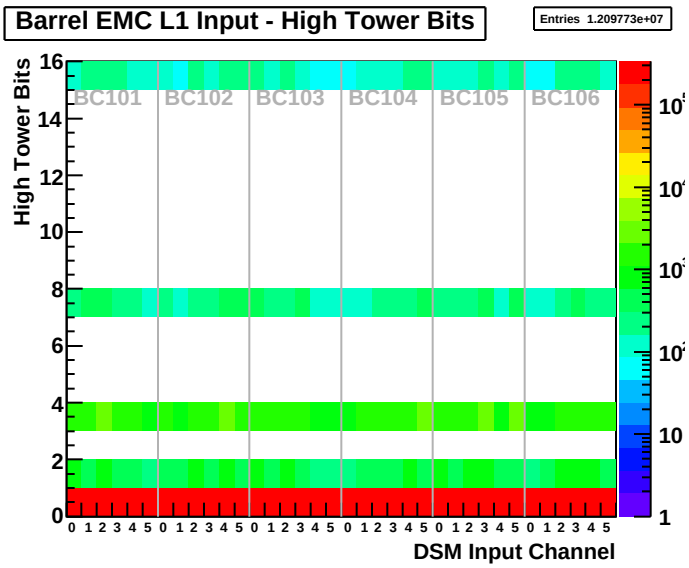
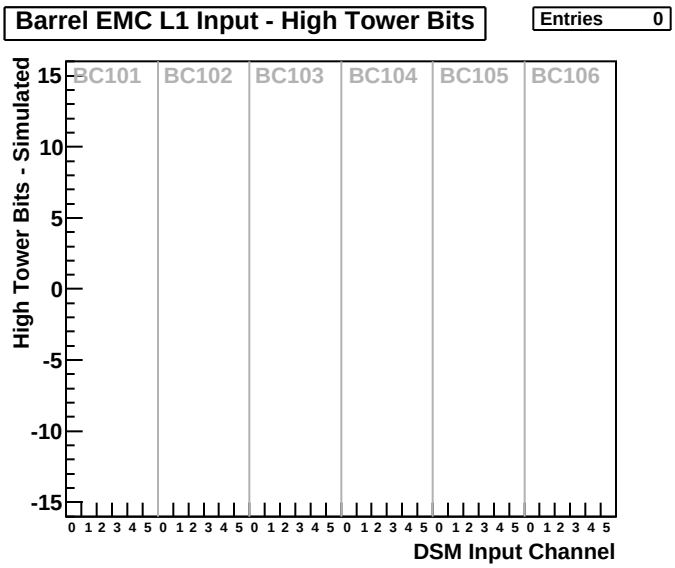

Barrel EMC L1 Input - Low Eta Sum
Entries 1.209773e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

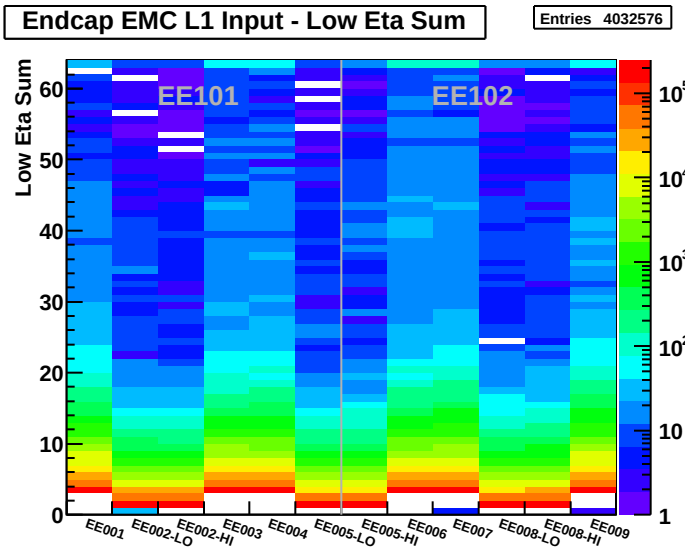

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

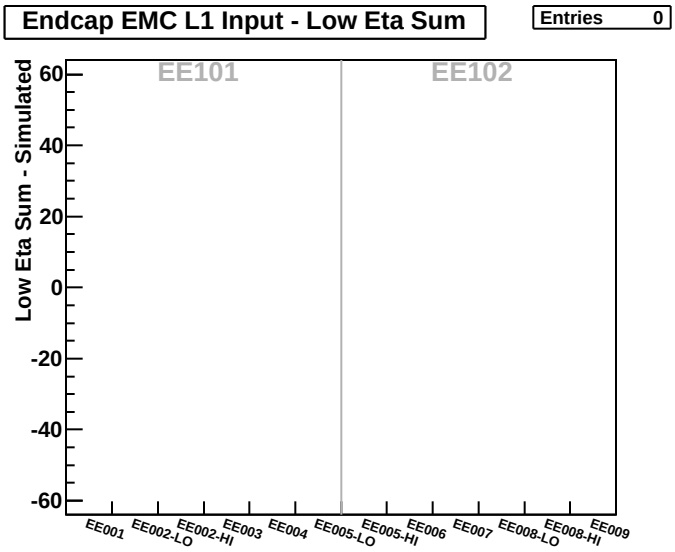

Barrel EMC L1 Input - High Eta Sum
Entries 1.209773e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

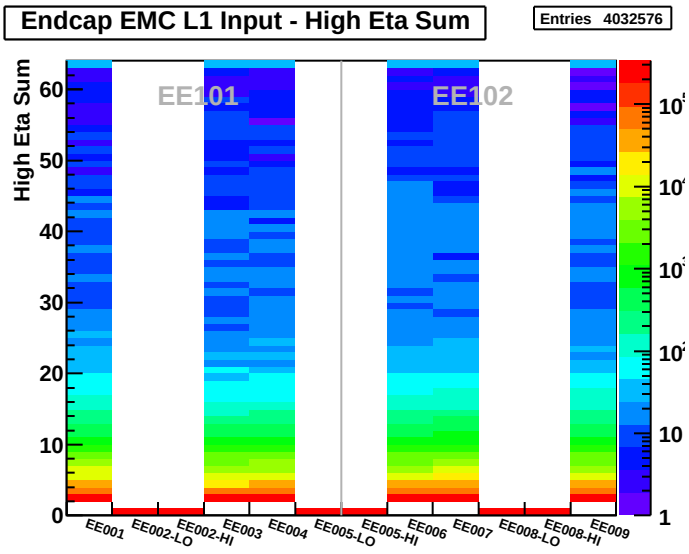

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

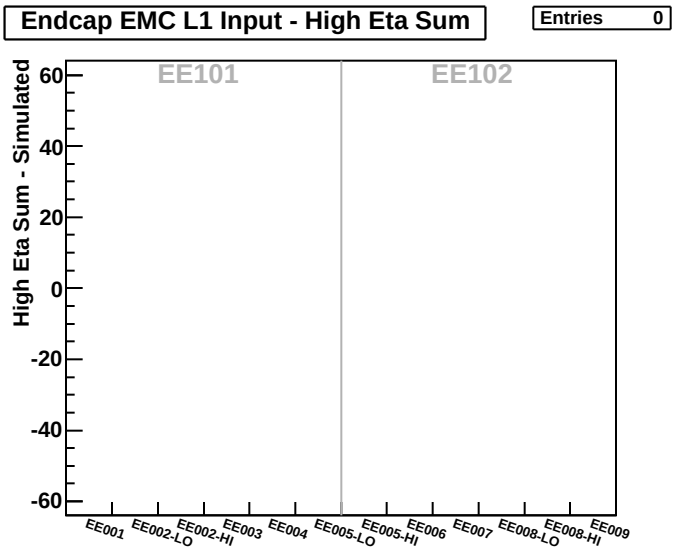

Barrel EMC L1 Input - High Tower Bits
Entries 1.209773e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

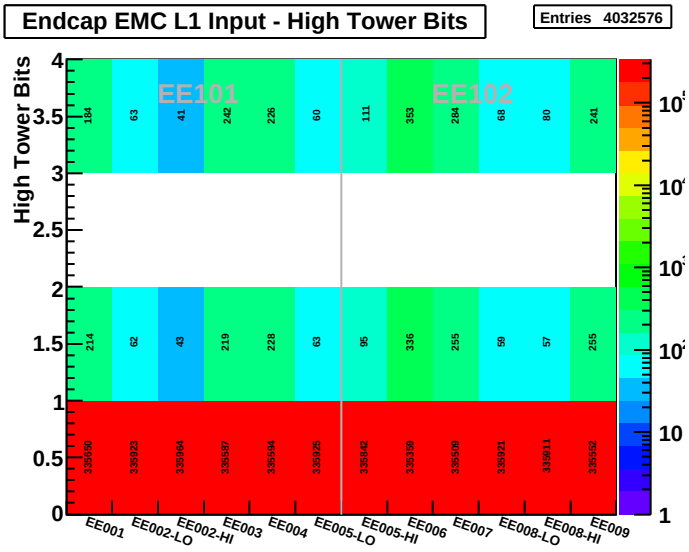

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

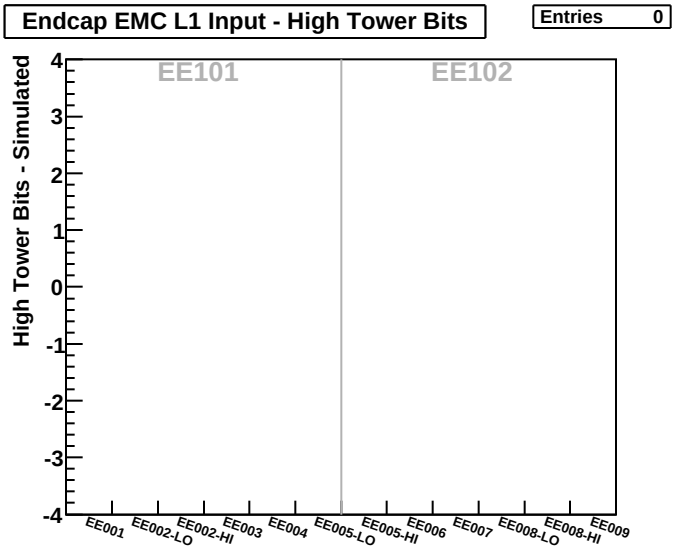

Endcap EMC L1 Input - Low Eta Sum
Entries 4032576
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

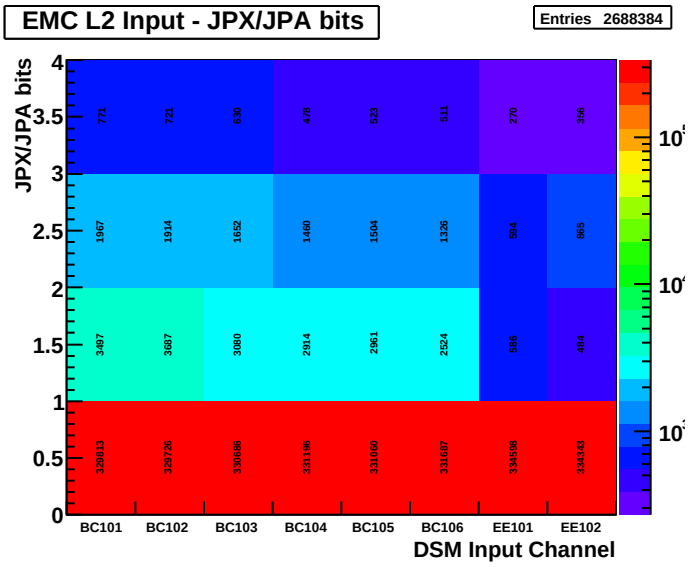

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

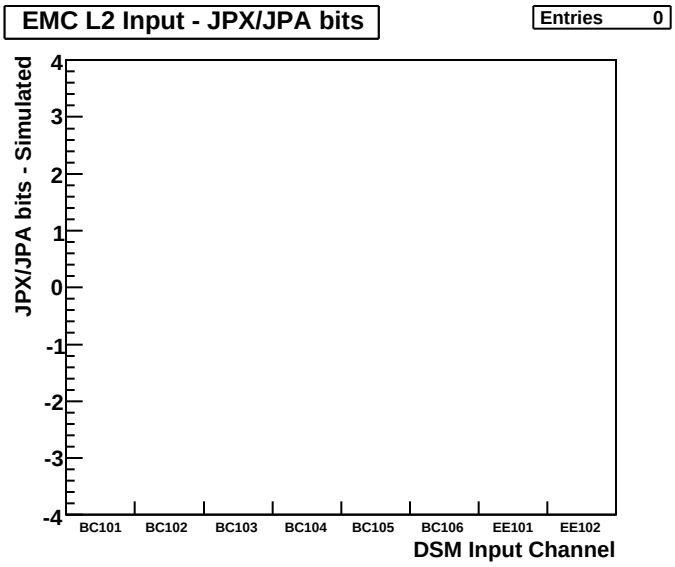

Endcap EMC L1 Input - High Eta Sum
Entries 4032576
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

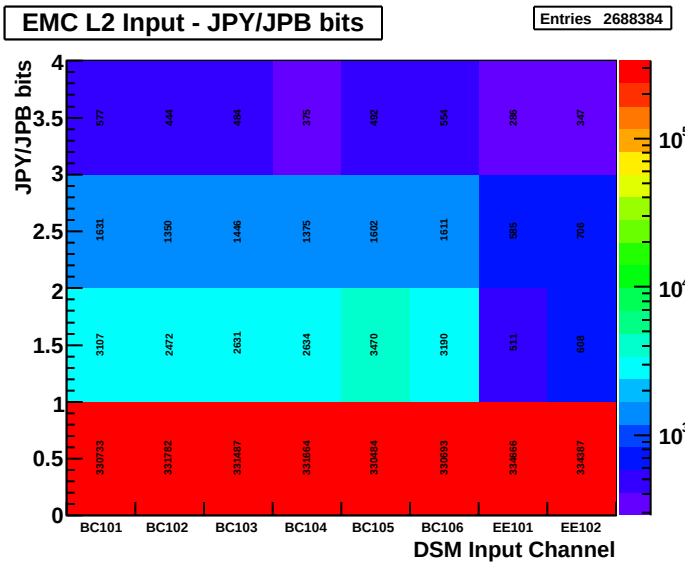

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

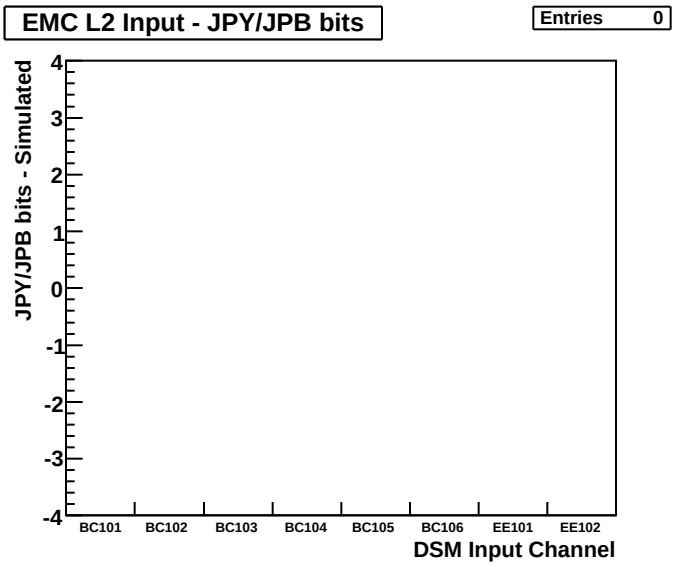

Endcap EMC L1 Input - High Tower Bits
Entries 4032576
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

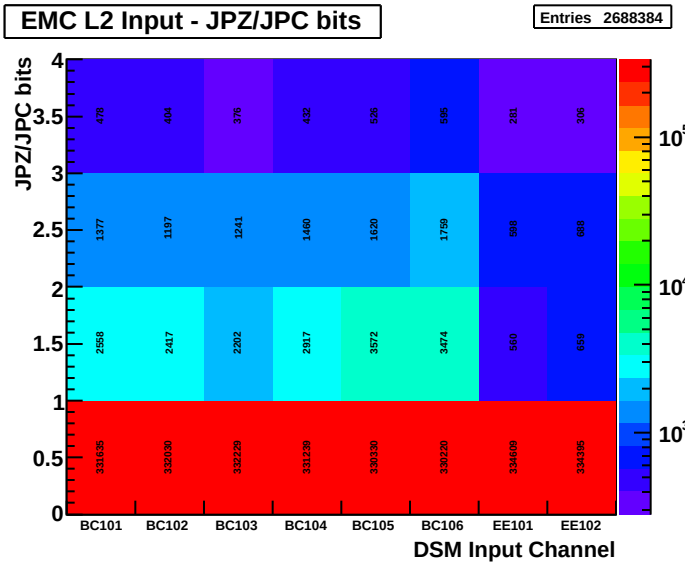

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

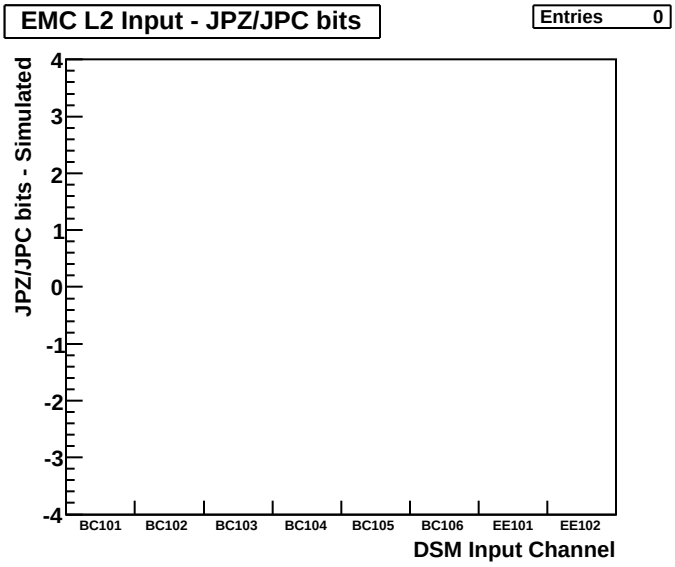

EMC L2 Input - JPX/JPA bits
Entries 2688384
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
771 721 630 478 523 511 270 356
1967 1914 1652 1460 1504 1326 594 865
3497 3687 3080 2914 2961 2524 586 484
328613 329726 330686 331196 331060 331687 334598 334343

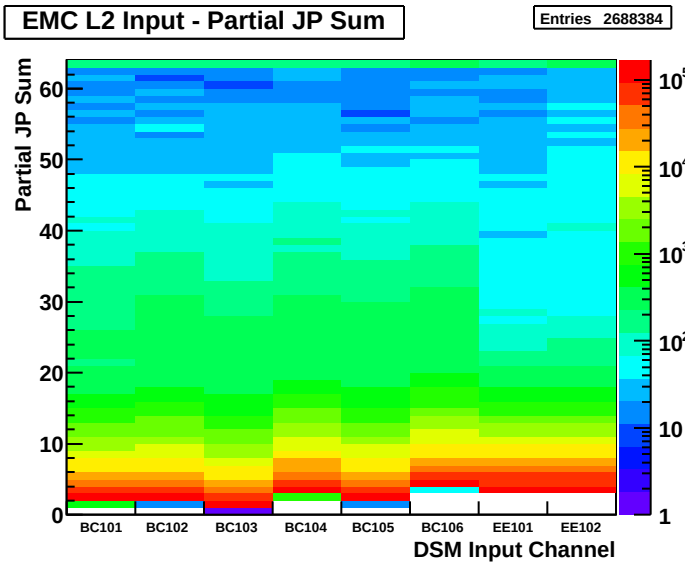

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

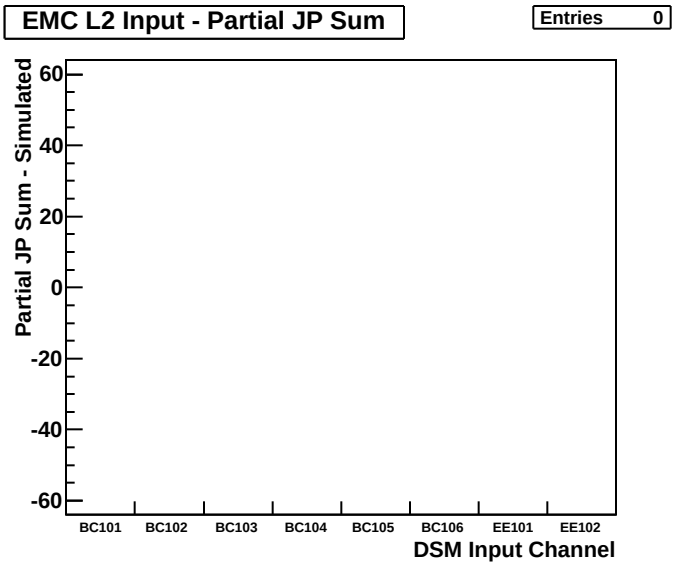

EMC L2 Input - JPY/JPB bits
Entries 2688384
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
577 444 494 375 492 554 286 347
1631 1350 1446 1375 1602 1611 585 706
3107 2472 2631 2634 3470 3190 511 608
330733 331782 331487 331664 330484 330693 334666 334387

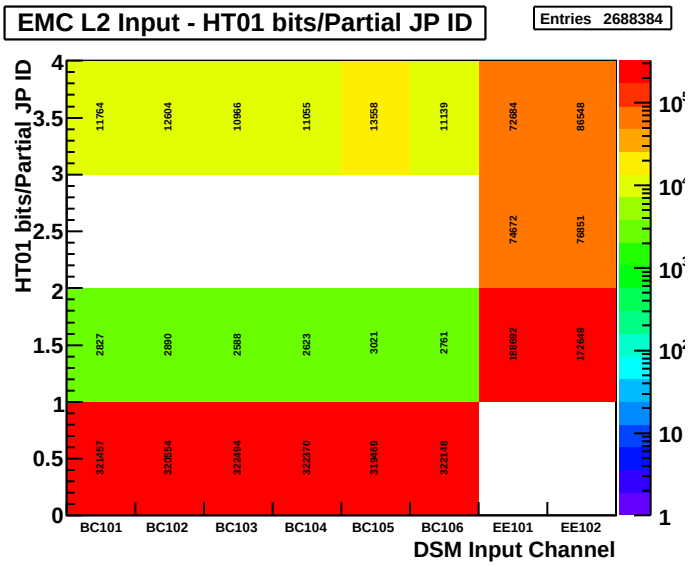

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

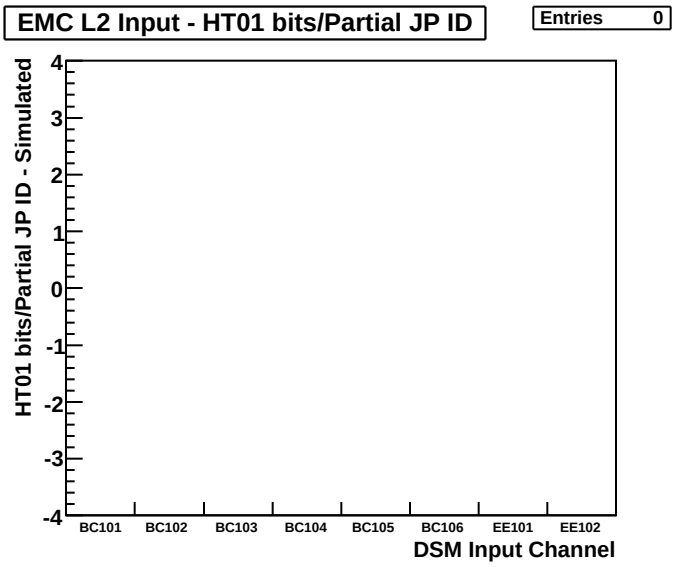

EMC L2 Input - JPZ/JPC bits
Entries 2688384
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
478 404 376 432 526 595 231 306
1377 1197 1241 1460 1620 1759 588 688
2958 2417 2202 2917 3572 3474 560 659
331535 332330 332229 331230 330330 330220 334609 334395

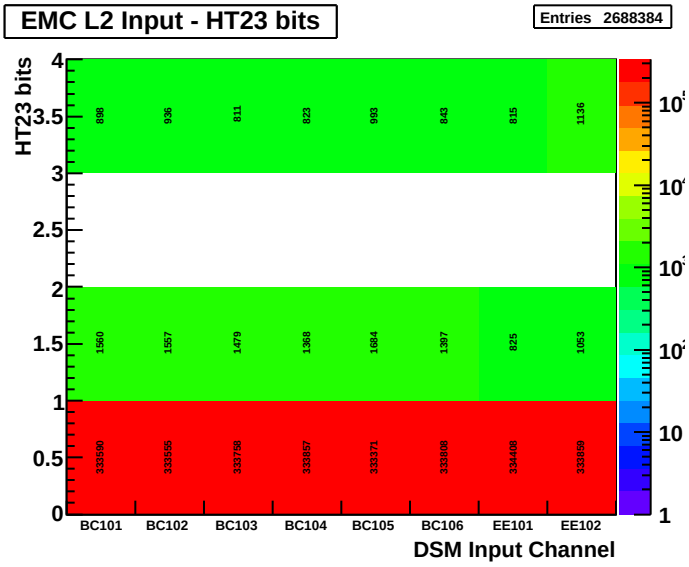

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

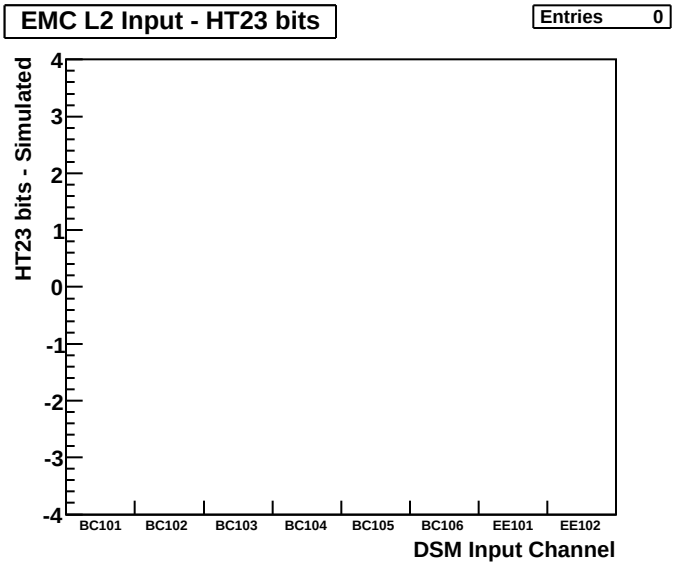

EMC L2 Input - Partial JP Sum
Entries 2688384
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

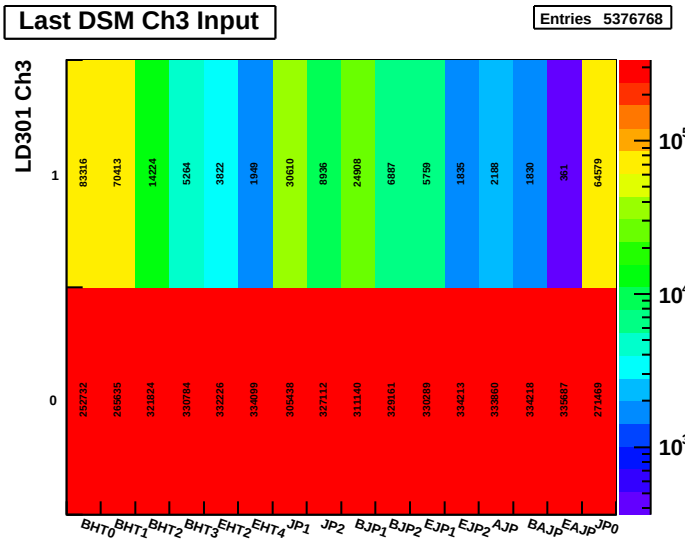

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

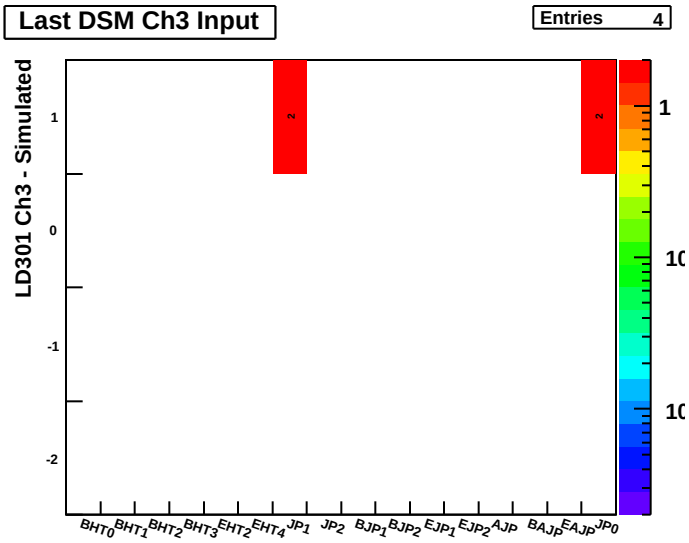

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2688384
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

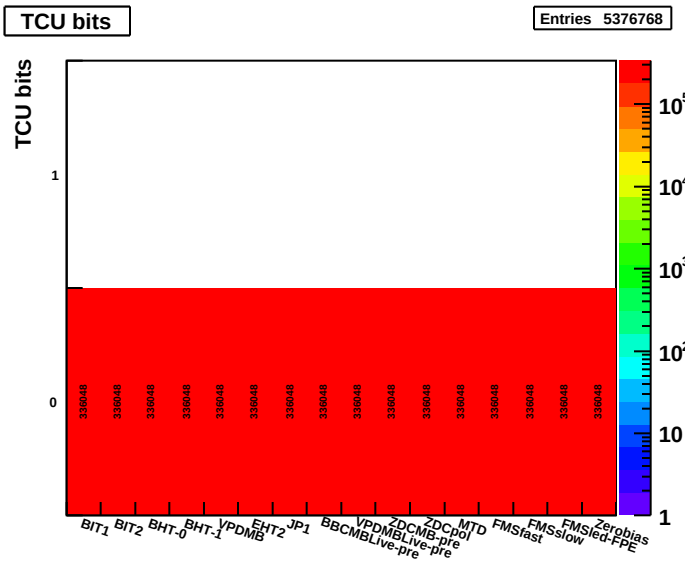

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

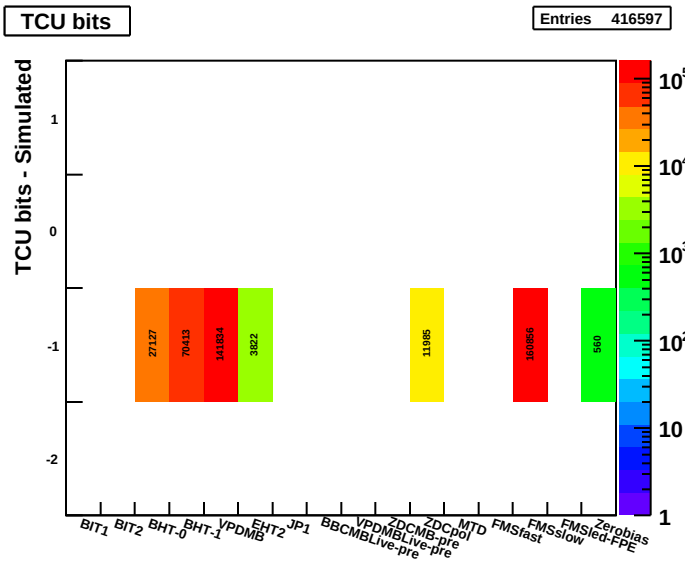

EMC L2 Input - HT23 bits
Entries 2688384
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

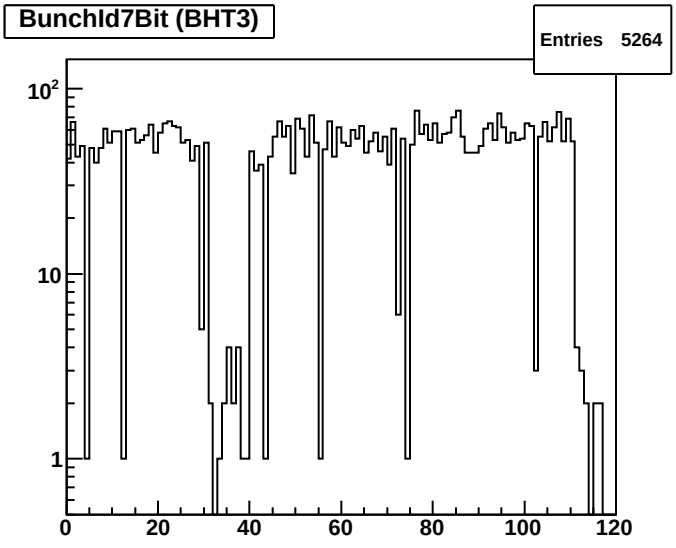

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

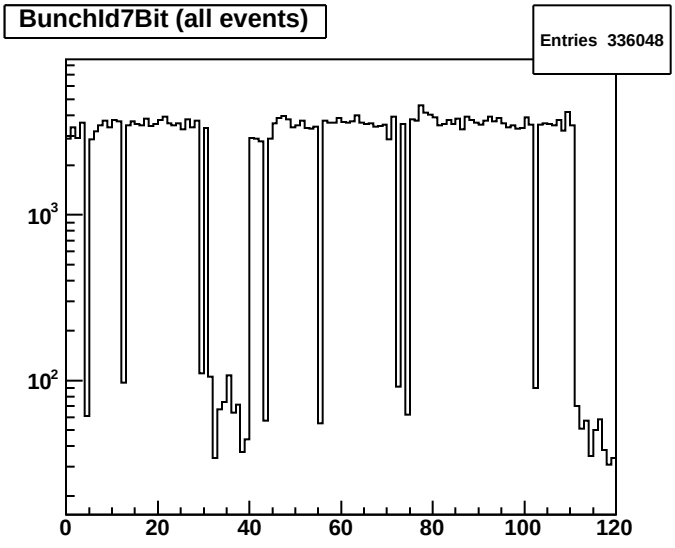

Last DSM Ch3 Input
Entries 5376768
LD301 Ch3
83316 70413 14224 5264 3822 1949 30610 8936 24908 6887 5759 1835 2188 1830 361 64579
252732 265635 321824 330784 332226 334099 305438 327112 311140 329161 330289 334213 333860 334218 335687 271469
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

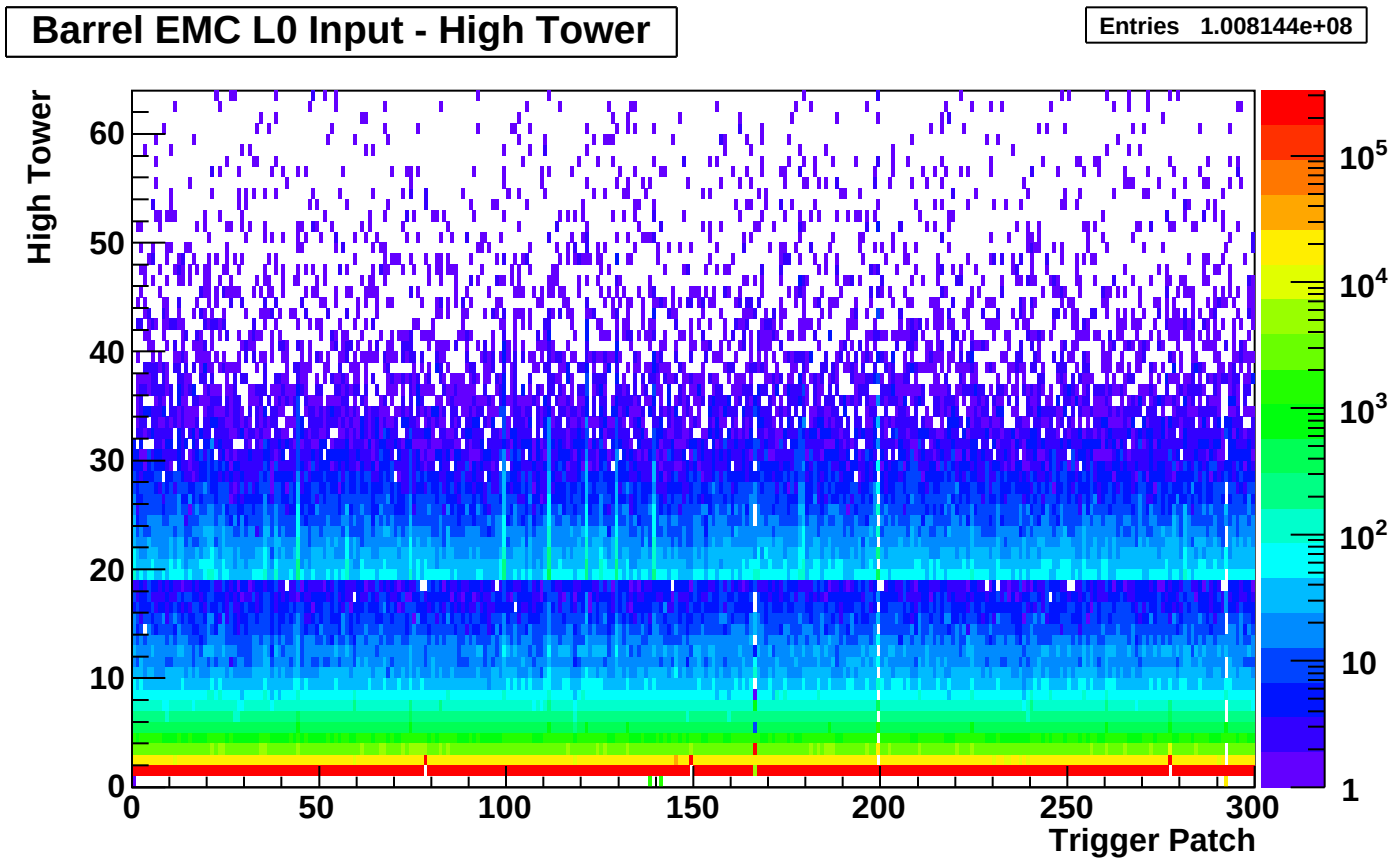

Last DSM Ch3 Input
Entries 4
LD301 Ch3 - Simulated
2 2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

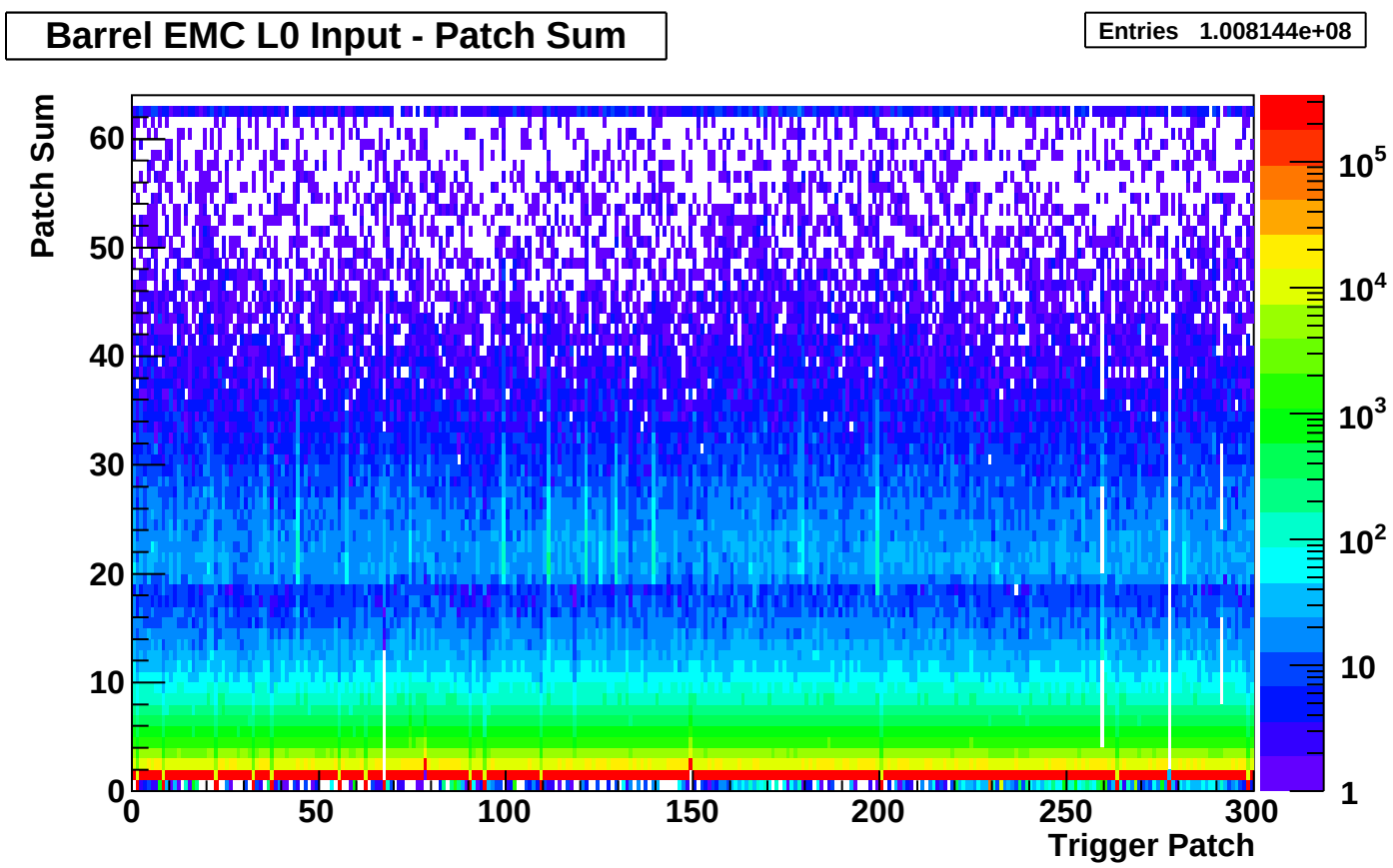

TCU bits
Entries 5376768
TCU bits
336048 336048 336048 336048 336048 336048 336048 336048 336048 336048 336048 336048 336048 336048 336048
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

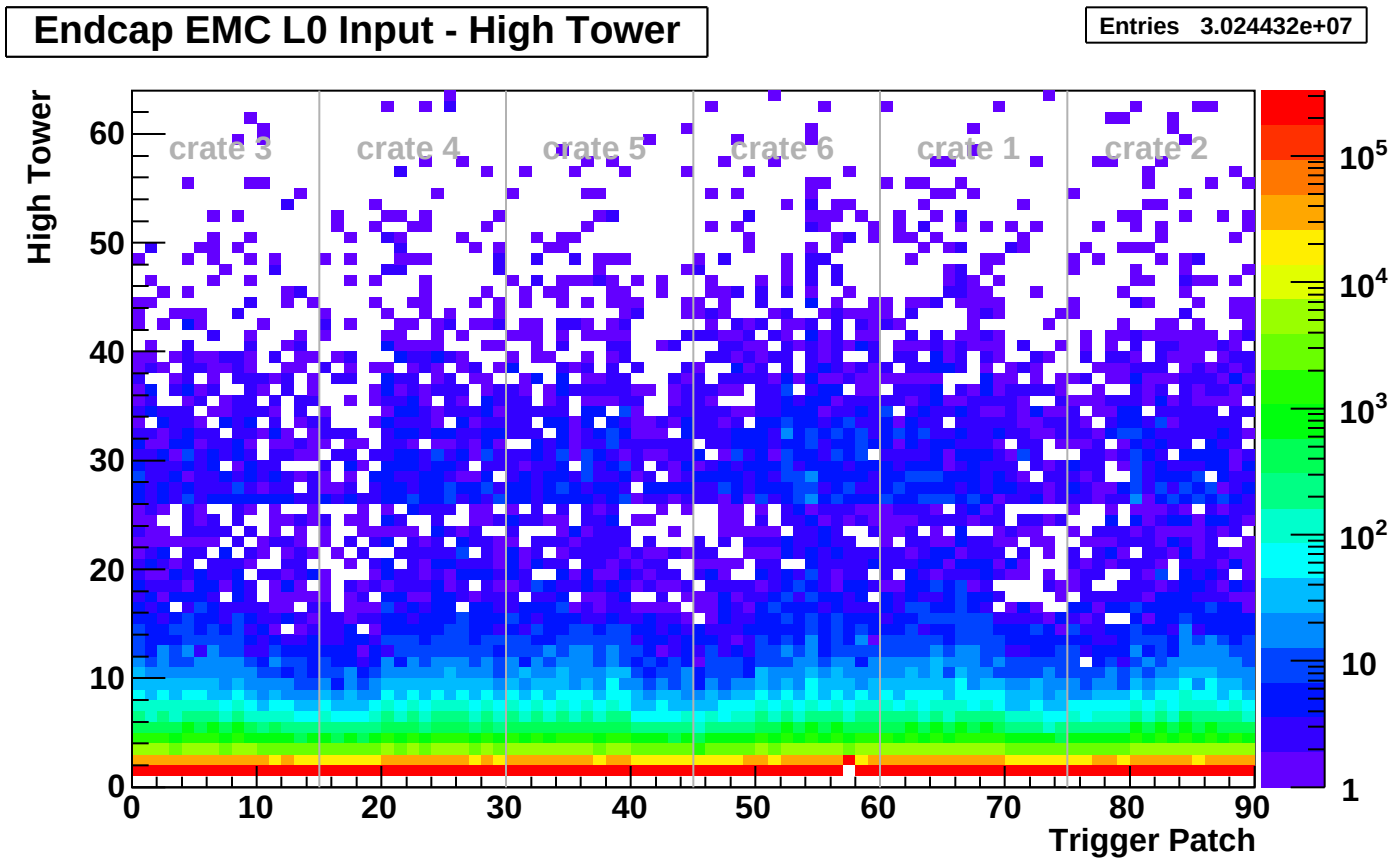

TCU bits
Entries 416597
TCU bits - Simulated
27127 70413 141834 3822 11985 160856 560
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

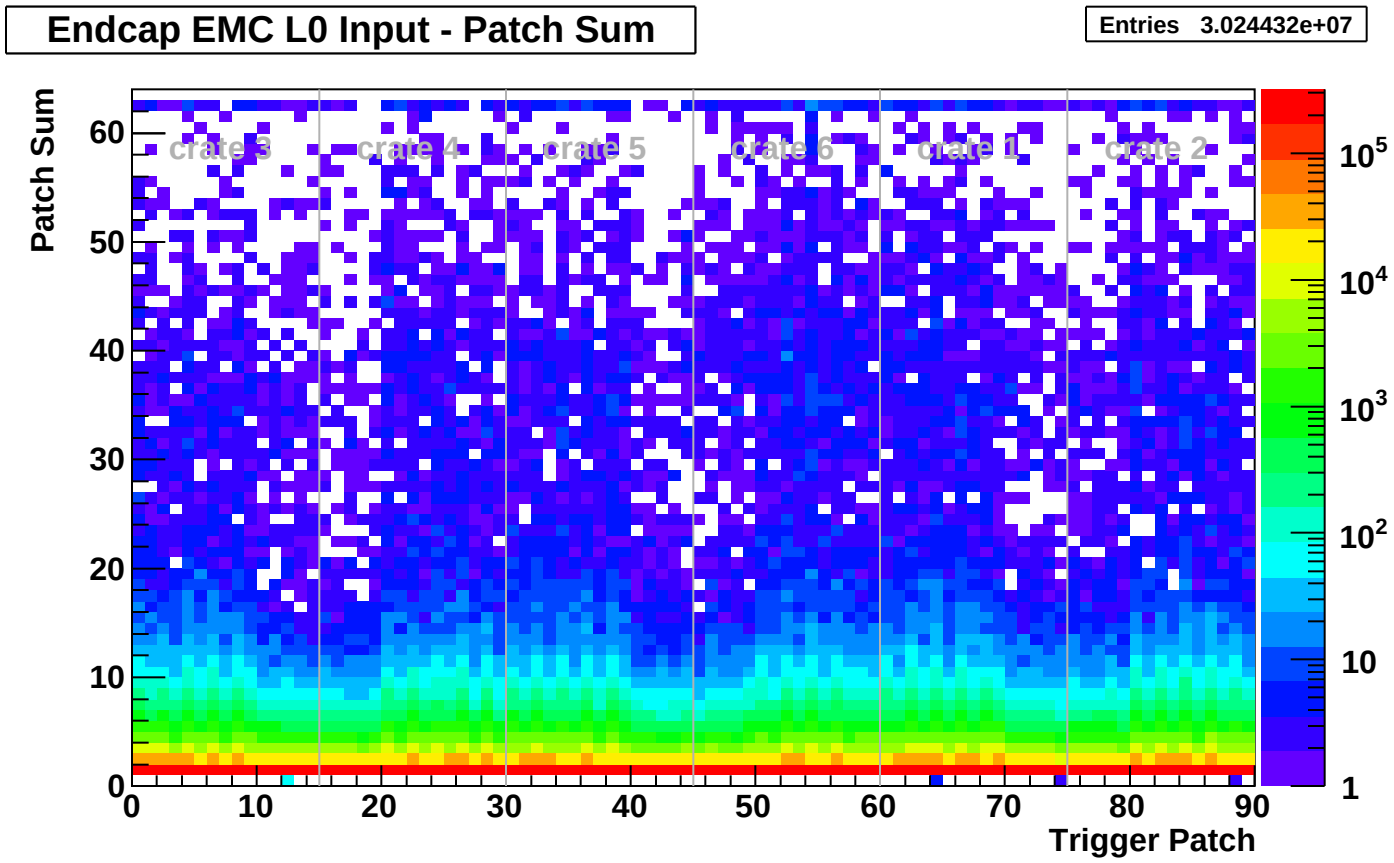

BunchId7Bit (BHT3)
Entries 5264

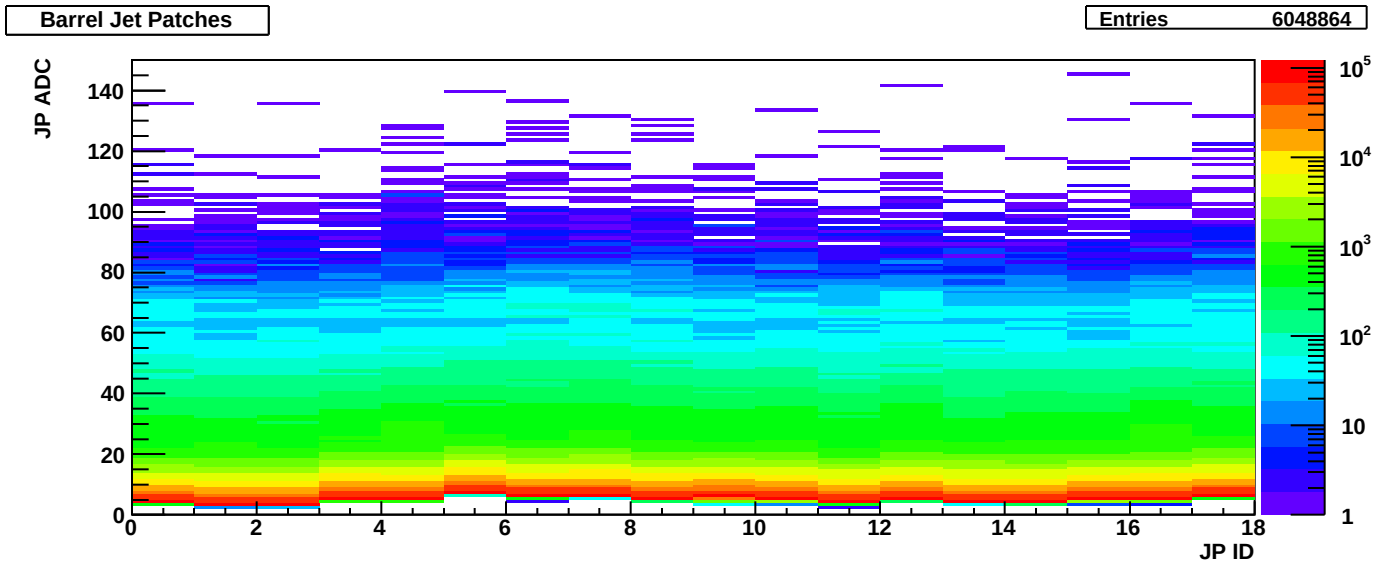

BunchId7Bit (all events)
Entries 336048

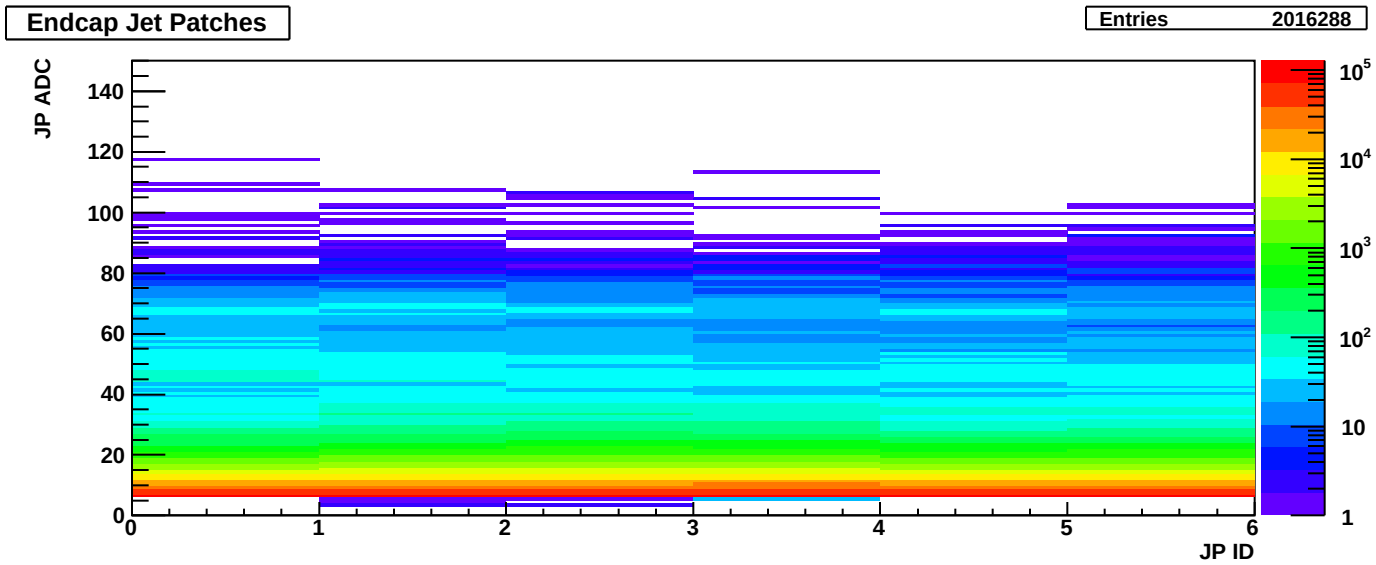

Barrel EMC L0 Input - High Tower
Entries 1.008144e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

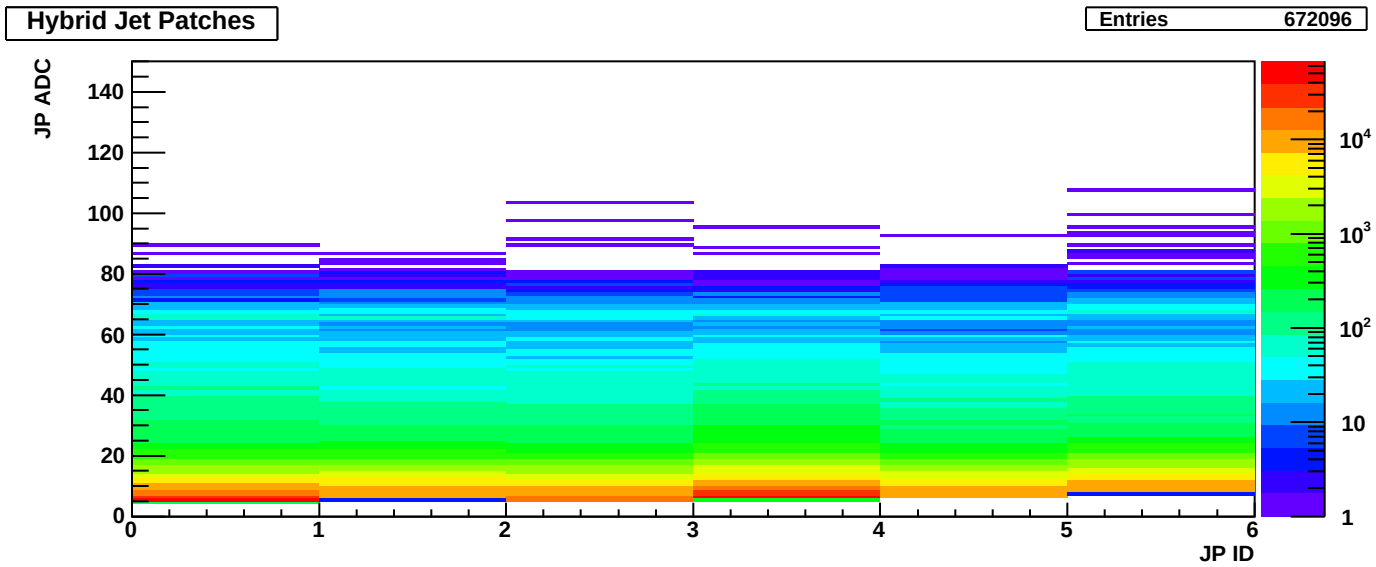

Barrel EMC L0 Input - Patch Sum
Entries 1.008144e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

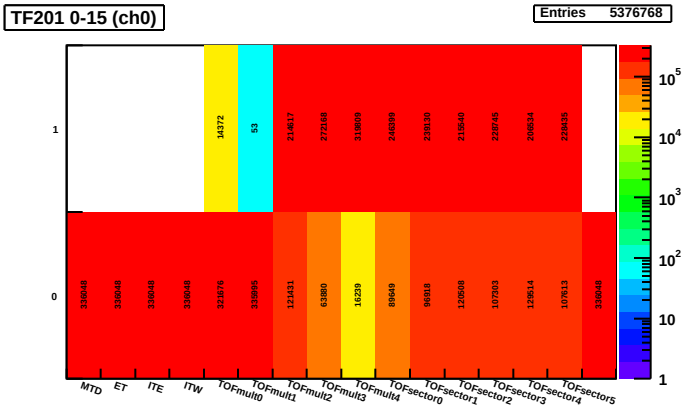

Endcap EMC L0 Input - High Tower
Entries 3.024432e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

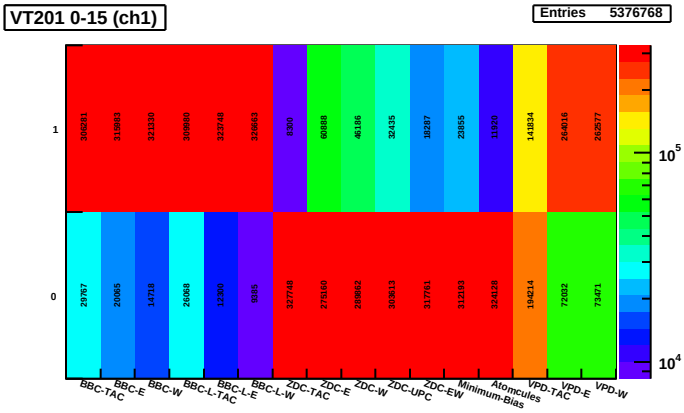

Endcap EMC L0 Input - Patch Sum
Entries 3.024432e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

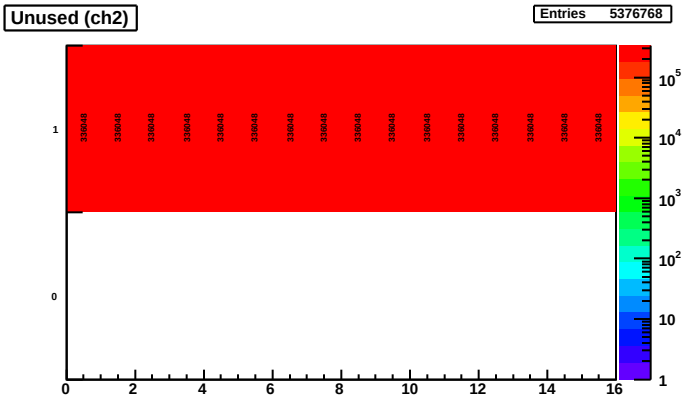

Barrel Jet Patches
Entries 6048864
JP ADC
JP ID

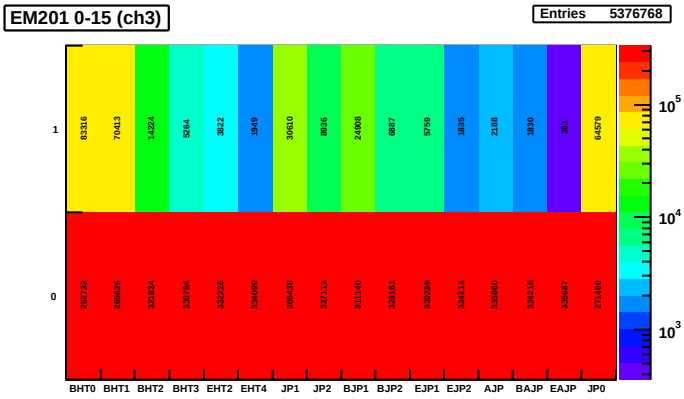

Endcap Jet Patches
Entries 2016288
JP ADC
JP ID

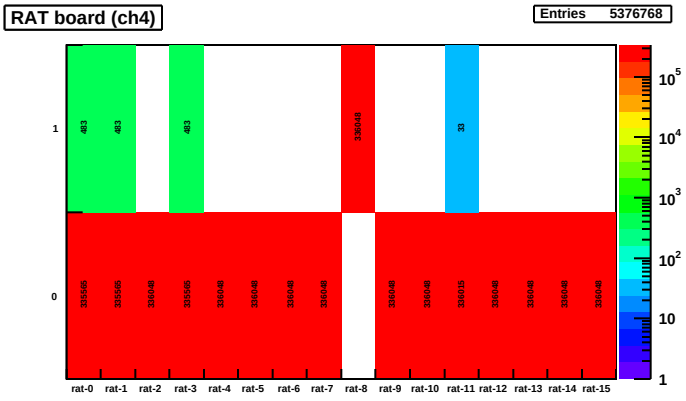

Hybrid Jet Patches
Entries 672096
JP ADC
JP ID

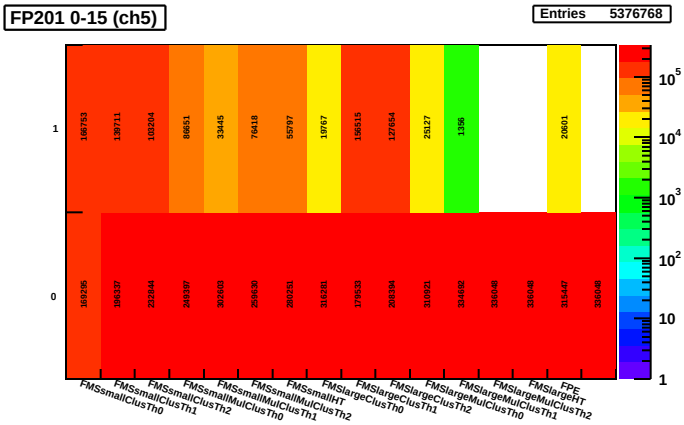

TF201 0-15 (ch0)
Entries 5376768
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

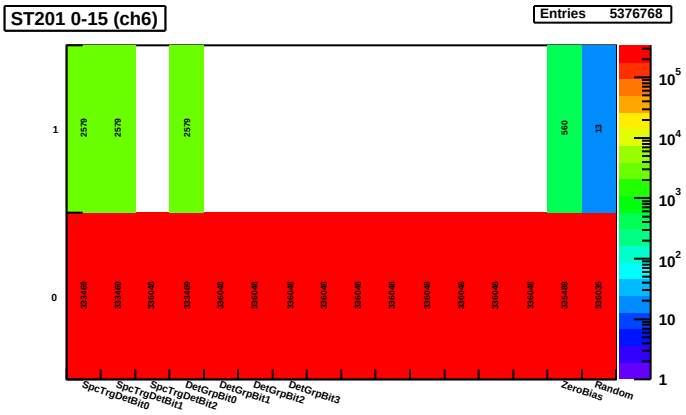

VT201 0-15 (ch1)
Entries 5376768
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

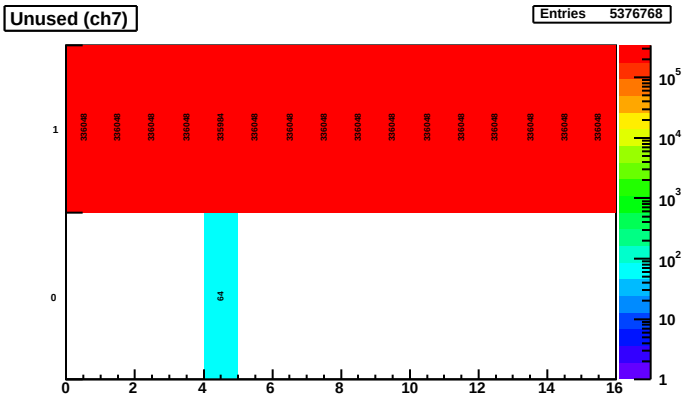

Unused (ch2)
Entries 5376768

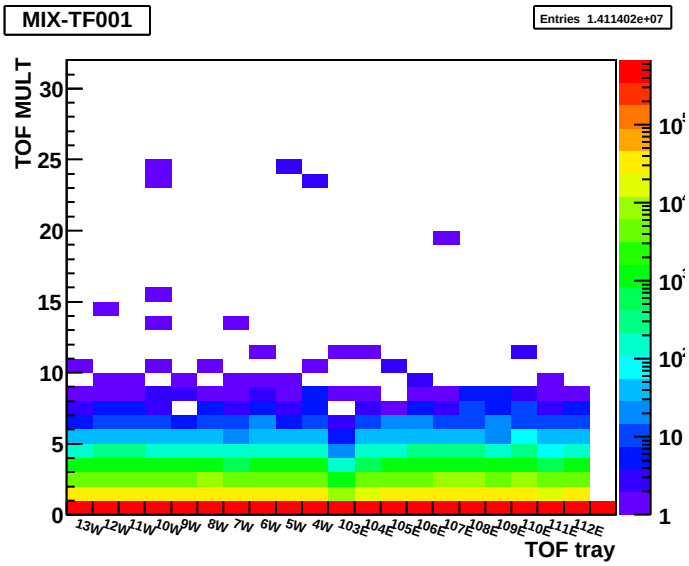

EM201 0-15 (ch3)
Entries 5376768
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

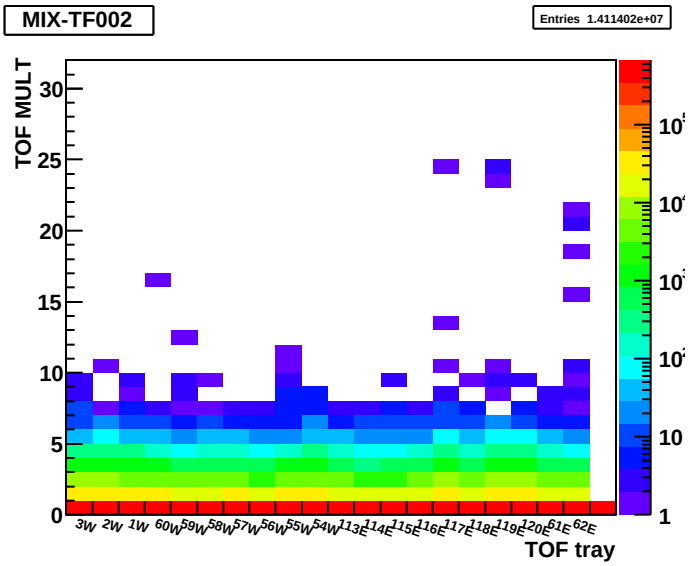

RAT board (ch4)
Entries 5376768
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

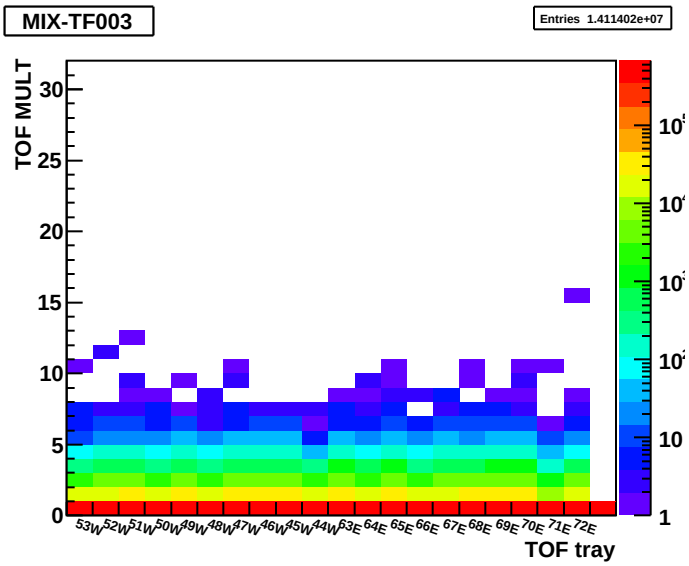

FP201 0-15 (ch5)
Entries 5376768
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

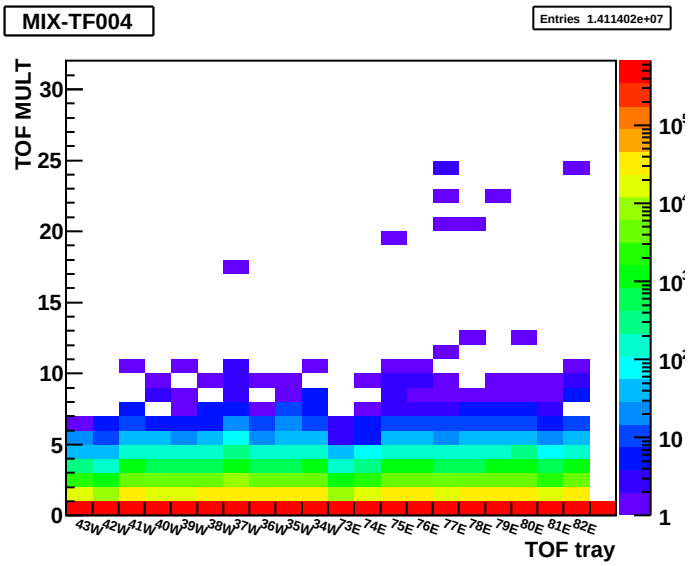

ST201 0-15 (ch6)
Entries 5376768
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

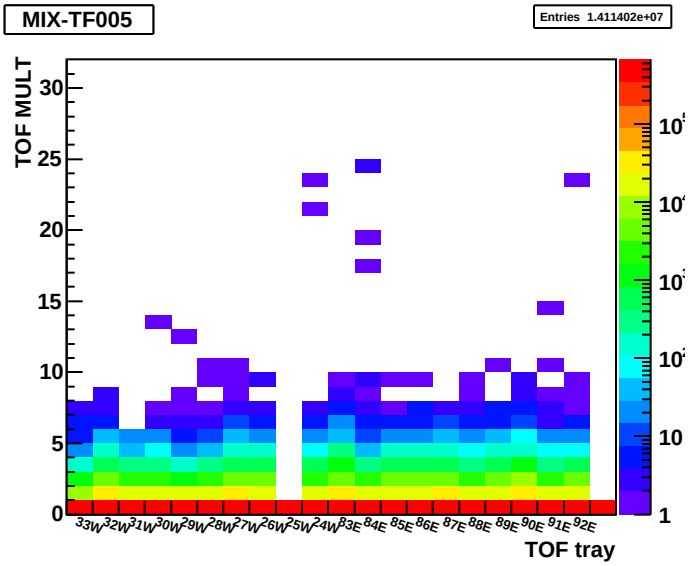

Unused (ch7)
Entries 5376768

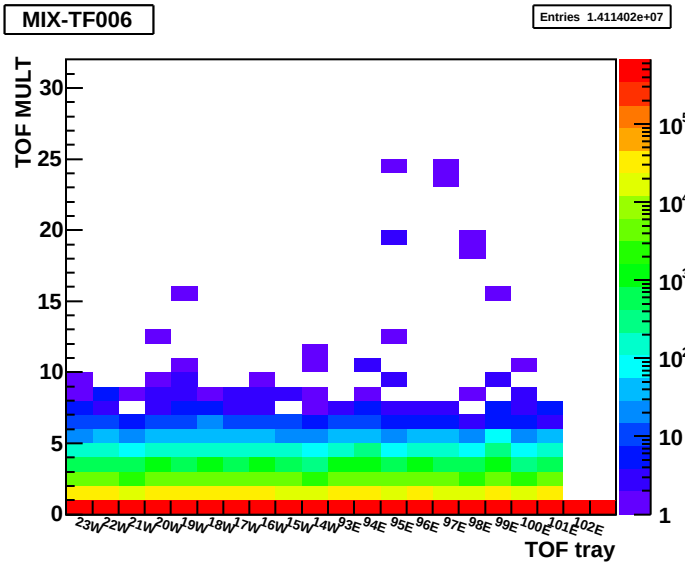

MIX-TF001
Entries 1.411402e+07
TOF MULT
TOF tray

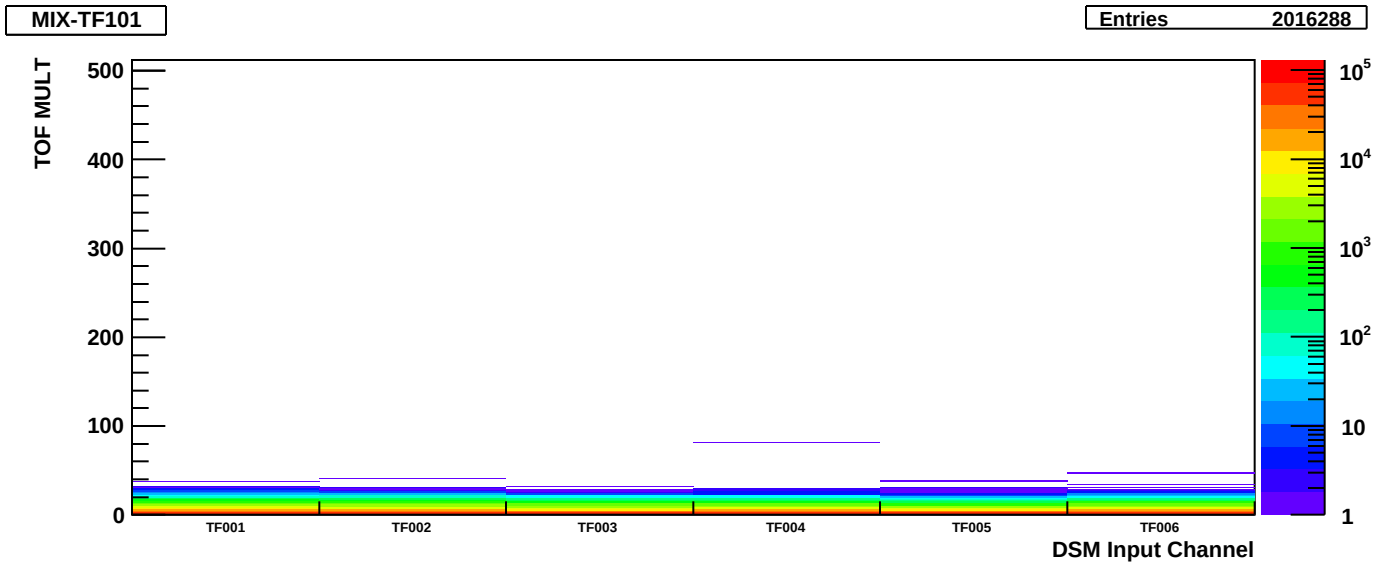

MIX-TF002
Entries 1.411402e+07
TOF MULT
TOF tray

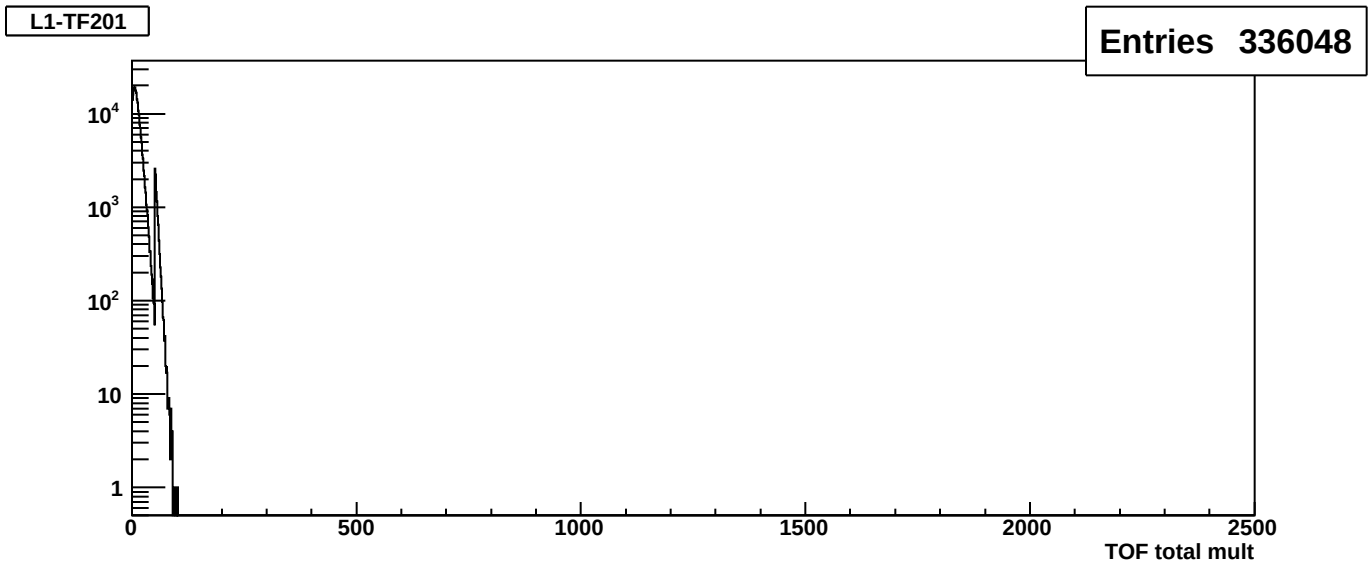

MIX-TF003
Entries 1.411402e+07
TOF MULT
TOF tray

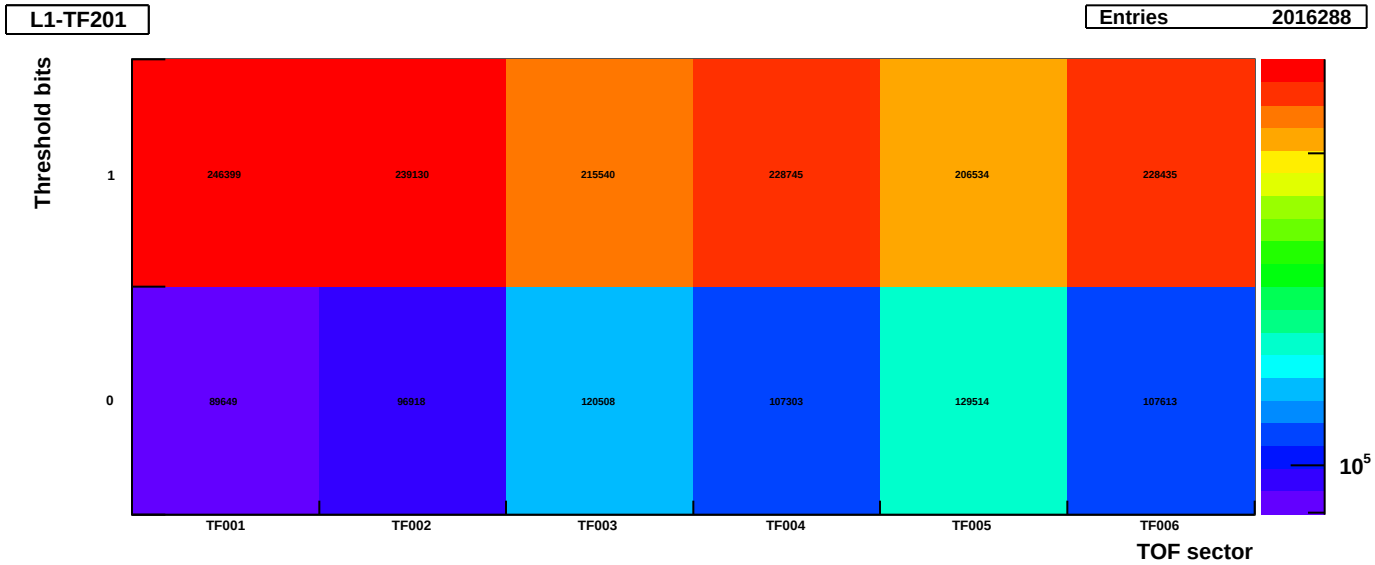

MIX-TF004
Entries 1.411402e+07
TOF MULT
TOF tray

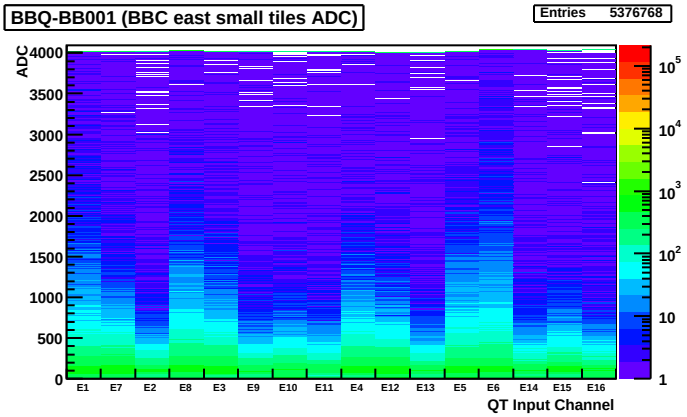

MIX-TF005
Entries 1.411402e+07
TOF MULT
TOF tray

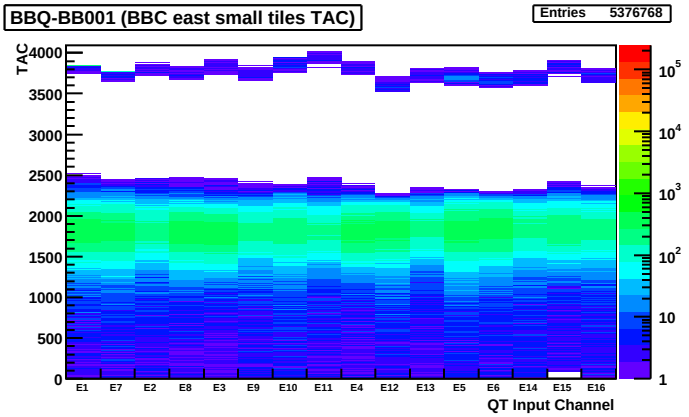

MIX-TF006
Entries 1.411402e+07
TOF MULT
TOF tray

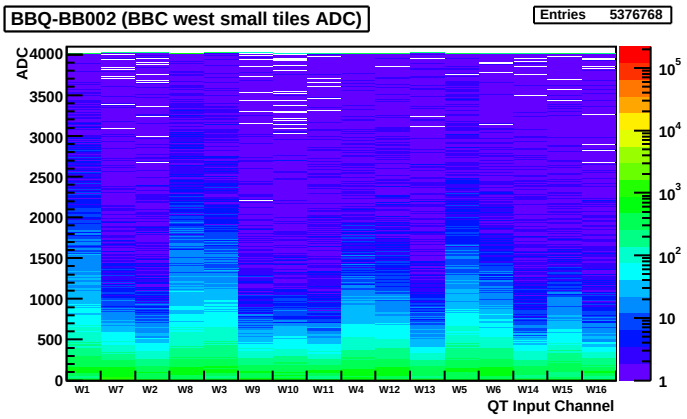

MIX-TF101
Entries 2016288
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

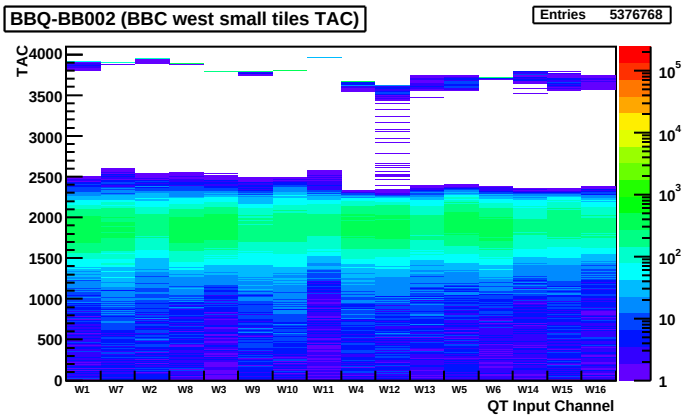

L1-TF201
Entries 336048
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

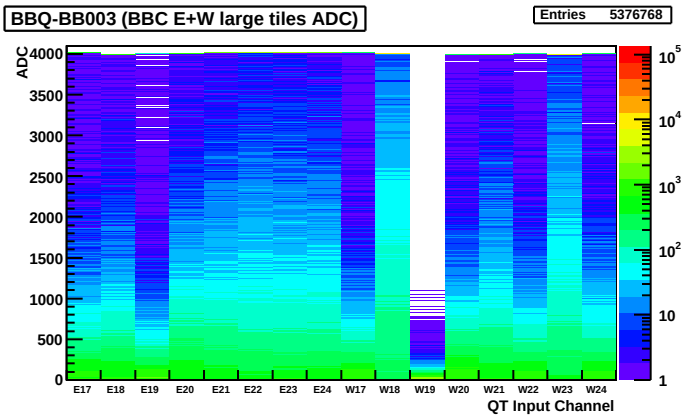

L1-TF201
Entries 2016288
Threshold bits
1
0
246399
239130
215540
228745
206534
228435
89649
96918
120508
107303
129514
107613
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

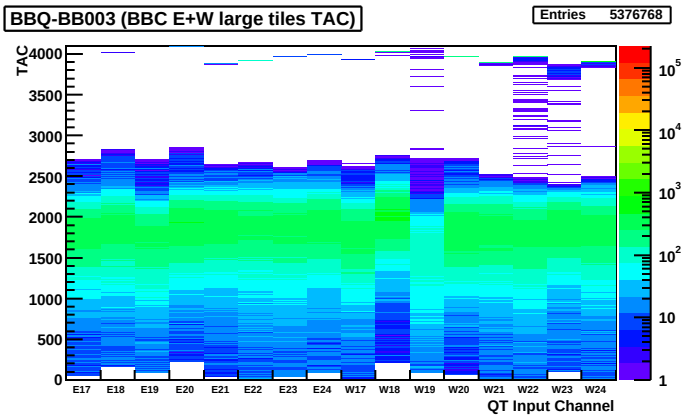

BBQ-BB001 (BBC east small tiles ADC)
Entries 5376768
ADC
QT Input Channel

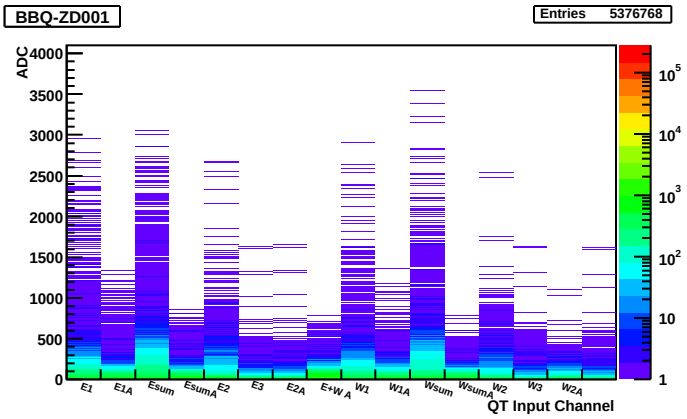

BBQ-BB001 (BBC east small tiles TAC)
Entries 5376768
TAC
QT Input Channel

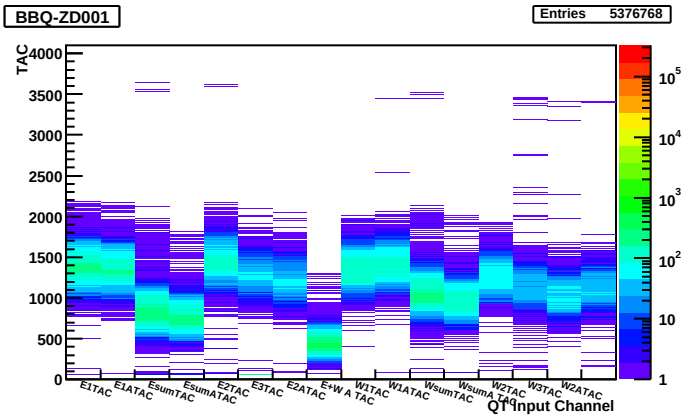

BBQ-BB002 (BBC west small tiles ADC)
Entries 5376768
ADC
QT Input Channel

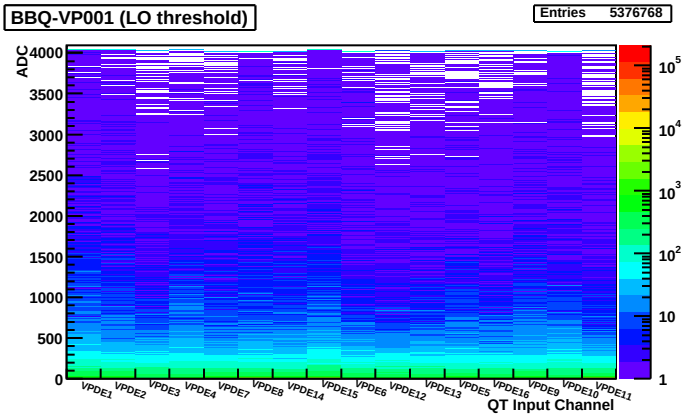

BBQ-BB002 (BBC west small tiles TAC)
Entries 5376768
TAC
QT Input Channel

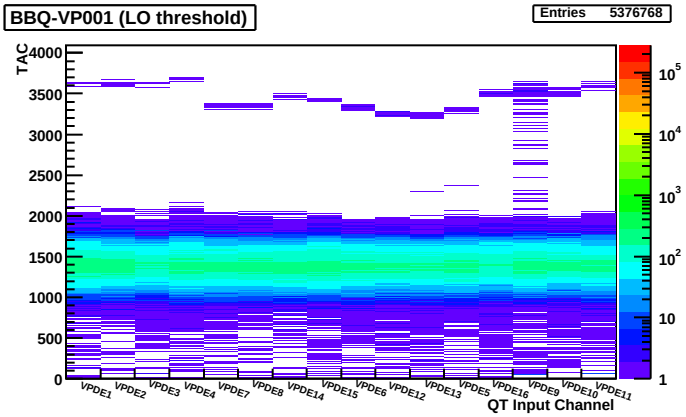

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5376768
ADC
QT Input Channel

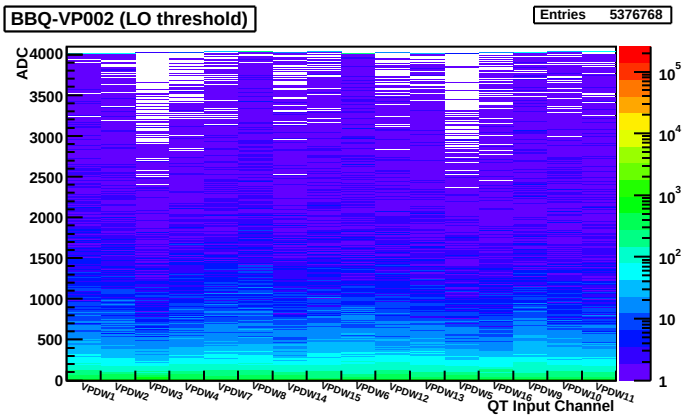

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5376768
TAC
QT Input Channel

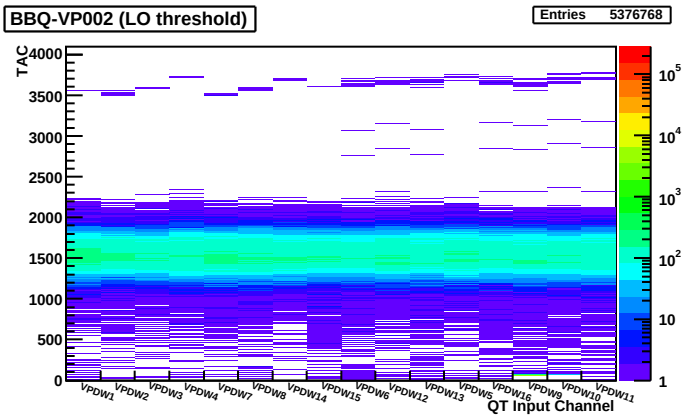

BBQ-ZD001
Entries 5376768
ADC
QT Input Channel

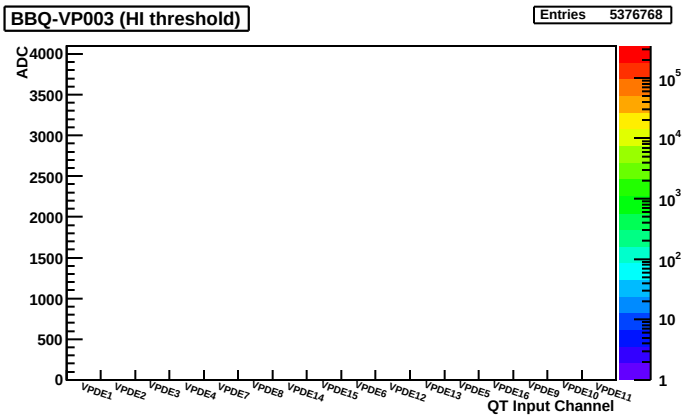

BBQ-ZD001
Entries 5376768
TAC
QT Input Channel

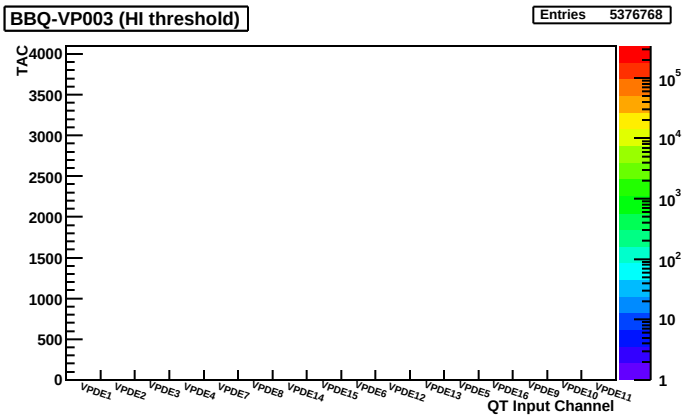

BBQ-VP001 (LO threshold)
Entries 5376768
ADC
QT Input Channel

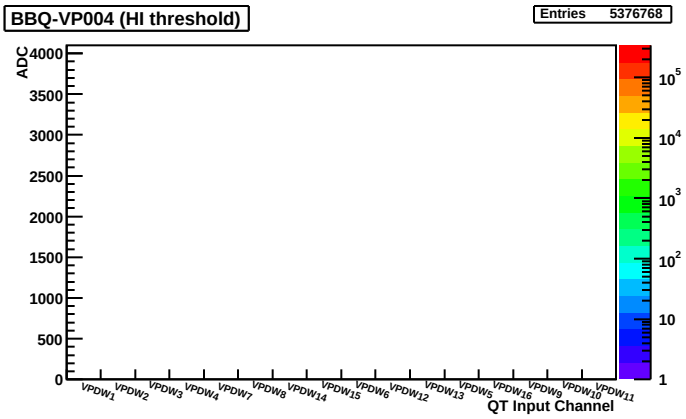

BBQ-VP001 (LO threshold)
Entries 5376768
TAC
QT Input Channel

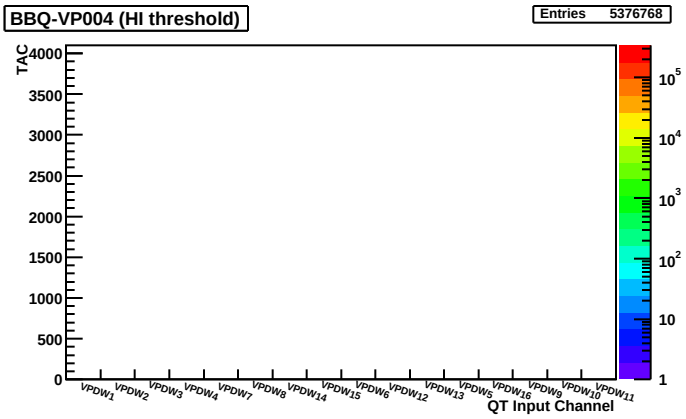

BBQ-VP002 (LO threshold)
Entries 5376768
ADC
QT Input Channel

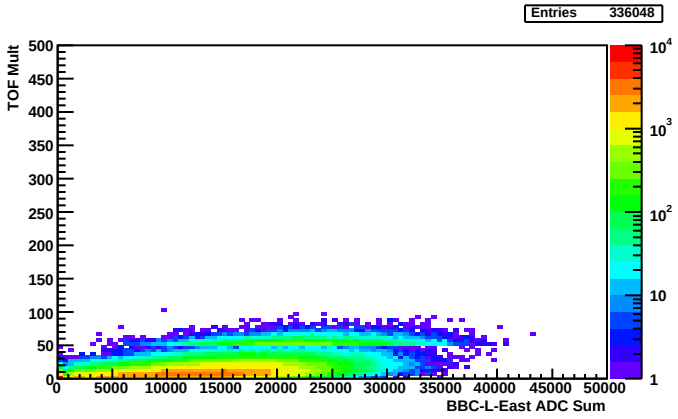

BBQ-VP002 (LO threshold)
Entries 5376768
TAC
QT Input Channel

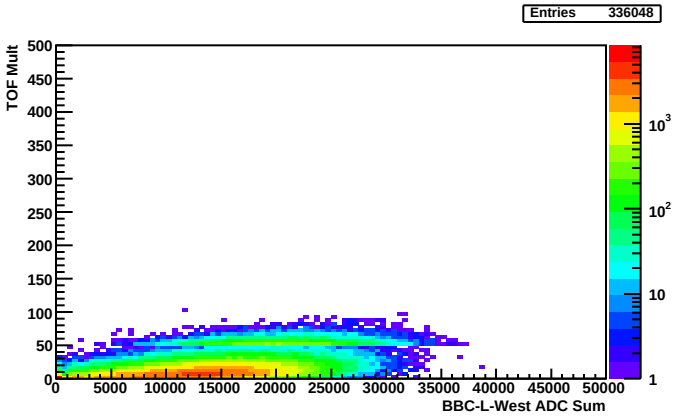

BBQ-VP003 (HI threshold)
Entries 5376768
ADC
QT Input Channel

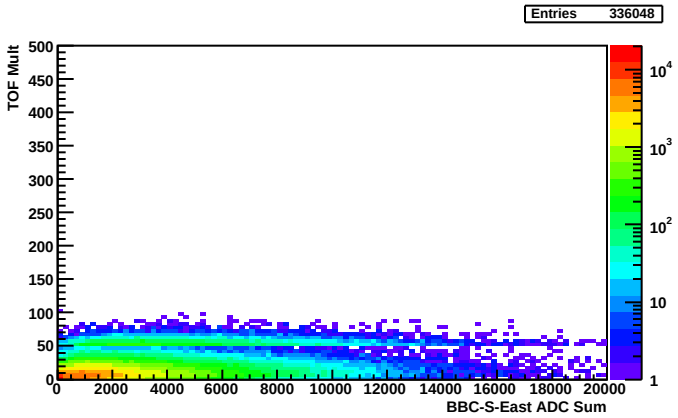

BBQ-VP003 (HI threshold)
Entries 5376768
TAC
QT Input Channel

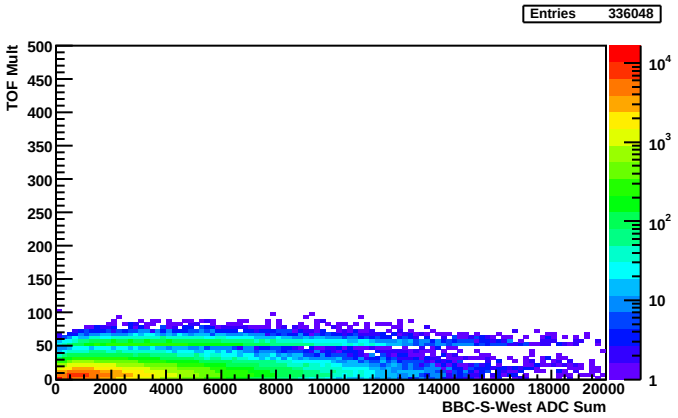

BBQ-VP004 (HI threshold)
Entries 5376768
ADC
QT Input Channel

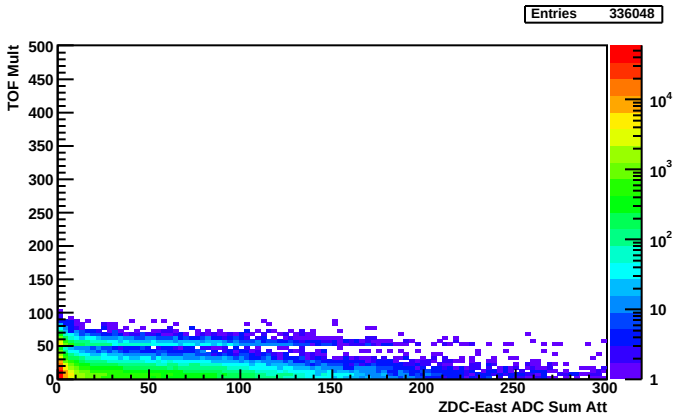

BBQ-VP004 (HI threshold)
Entries 5376768
TAC
QT Input Channel

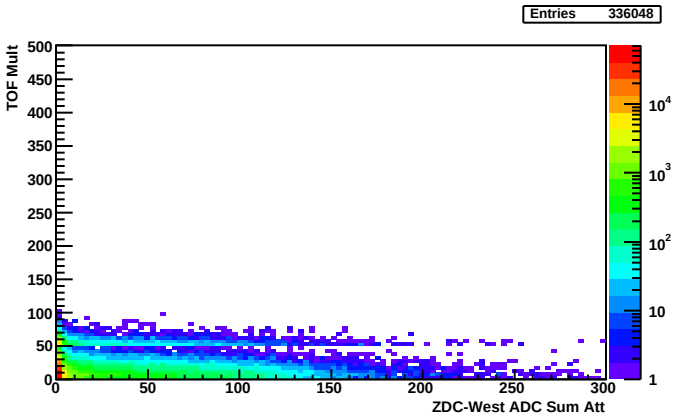

Entries 336048
TOF Mult
BBC-L-East ADC Sum

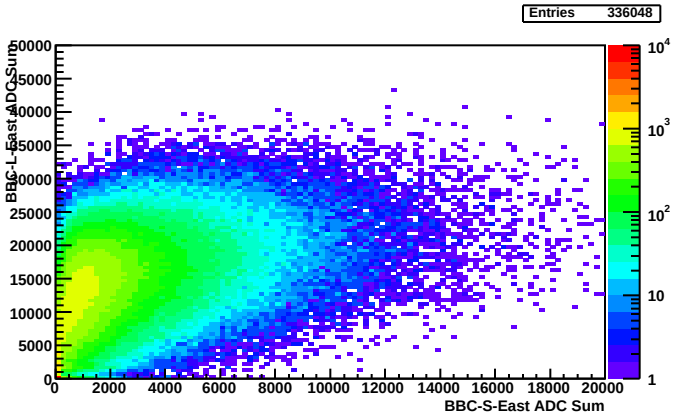

Entries 336048
TOF Mult
BBC-L-West ADC Sum

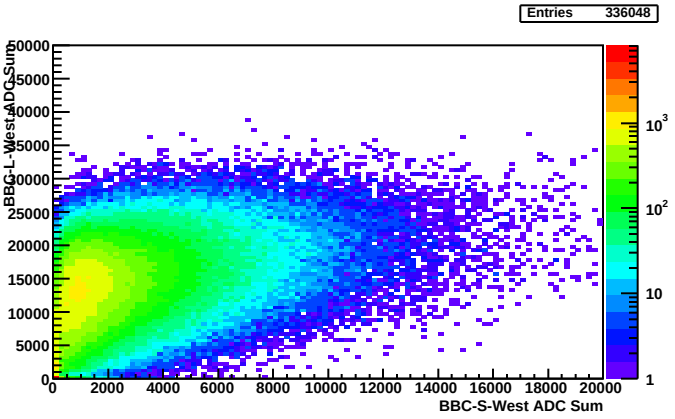

Entries 336048
TOF Mult
BBC-S-East ADC Sum

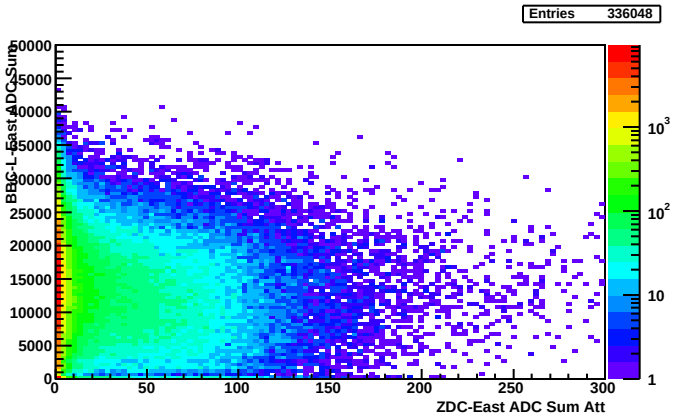

Entries 336048
TOF Mult
BBC-S-West ADC Sum

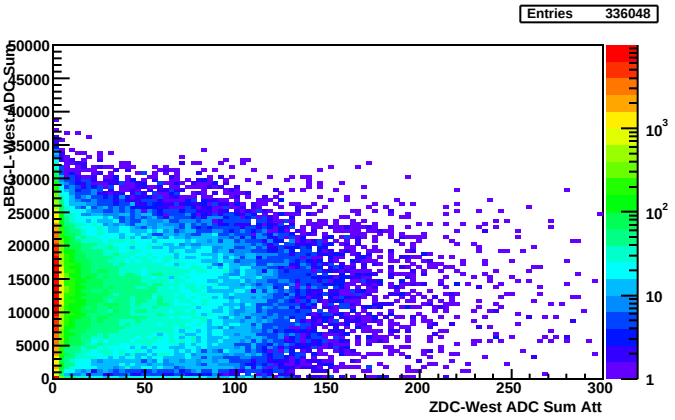

Entries 336048
TOF Mult
ZDC-East ADC Sum Att

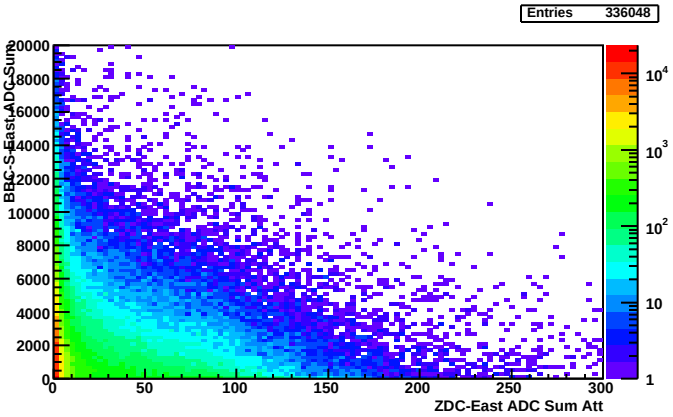

Entries 336048
TOF Mult
ZDC-West ADC Sum Att

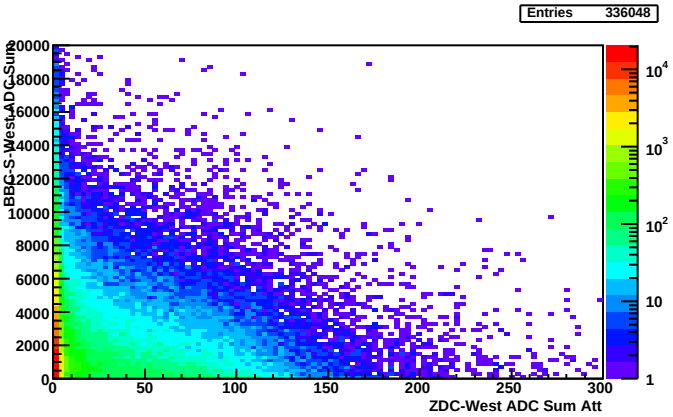

Entries 336048
BBC-L-East ADC Sum
BBC-S-East ADC Sum

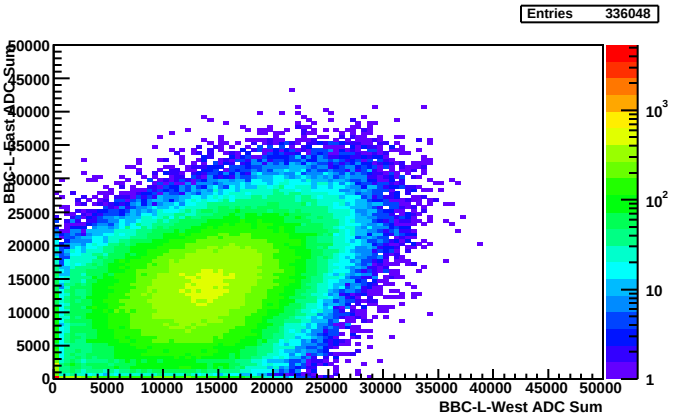

Entries 336048
BBC-L-West ADC Sum
BBC-S-West ADC Sum

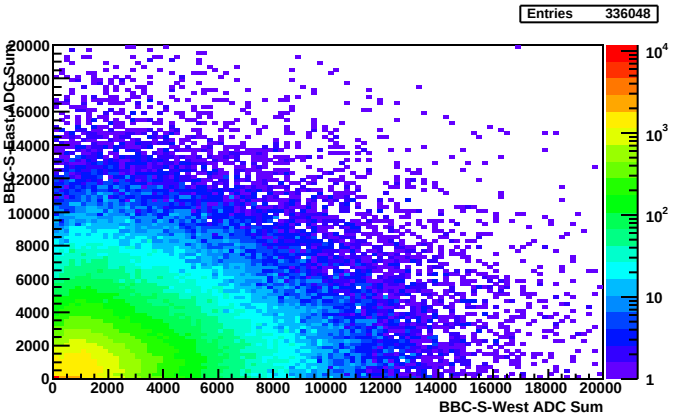

Entries 336048
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

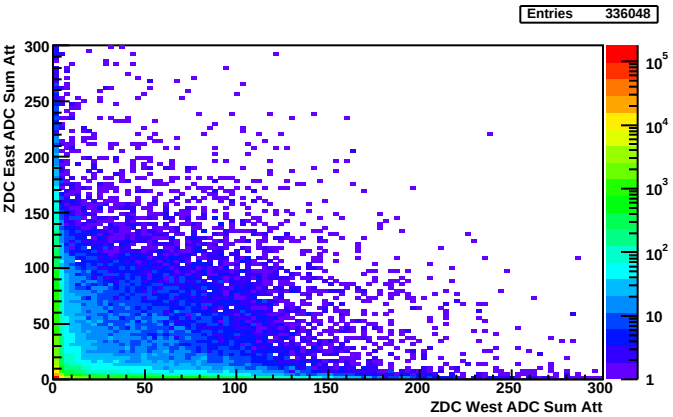

Entries 336048
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

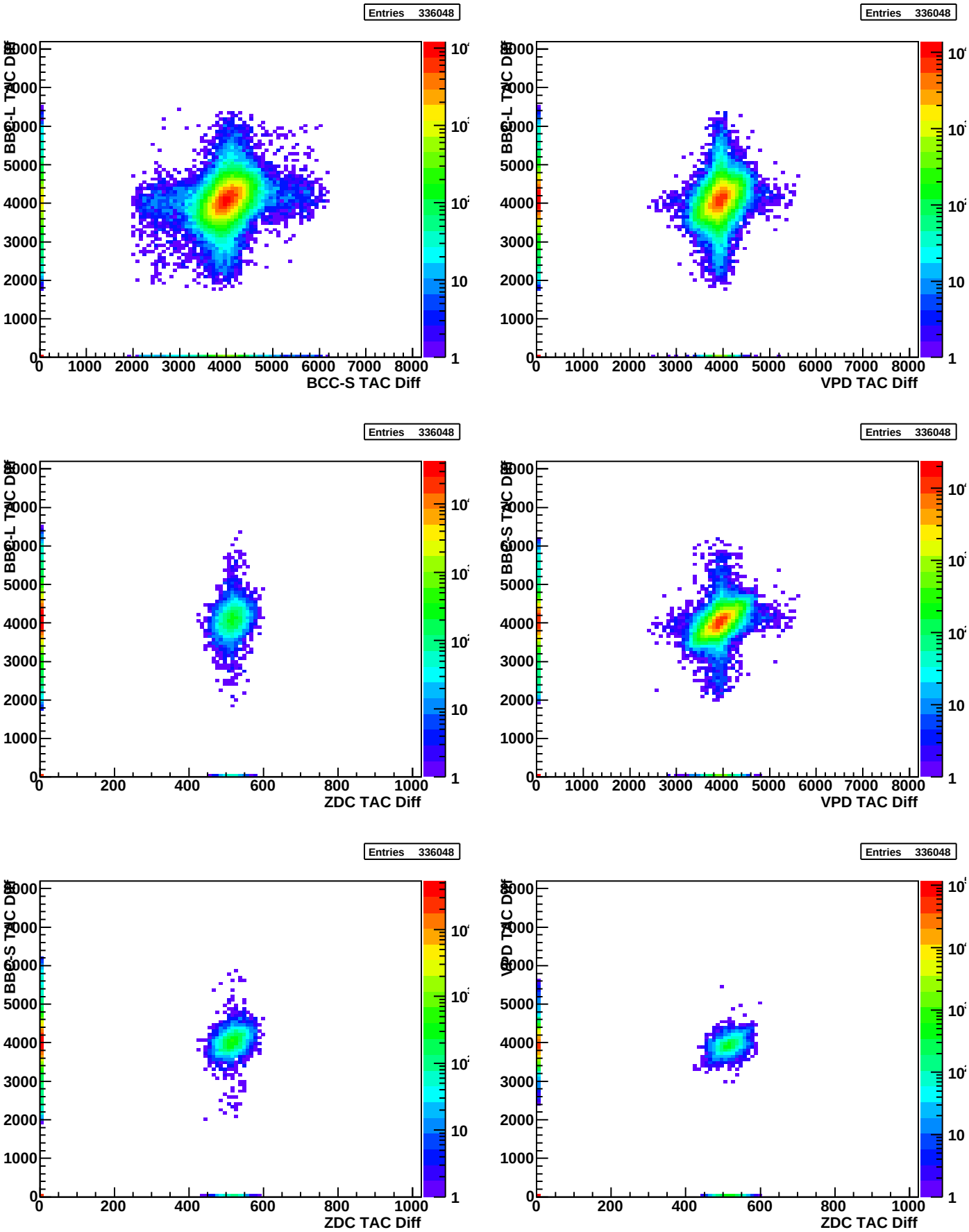

Entries 336048
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

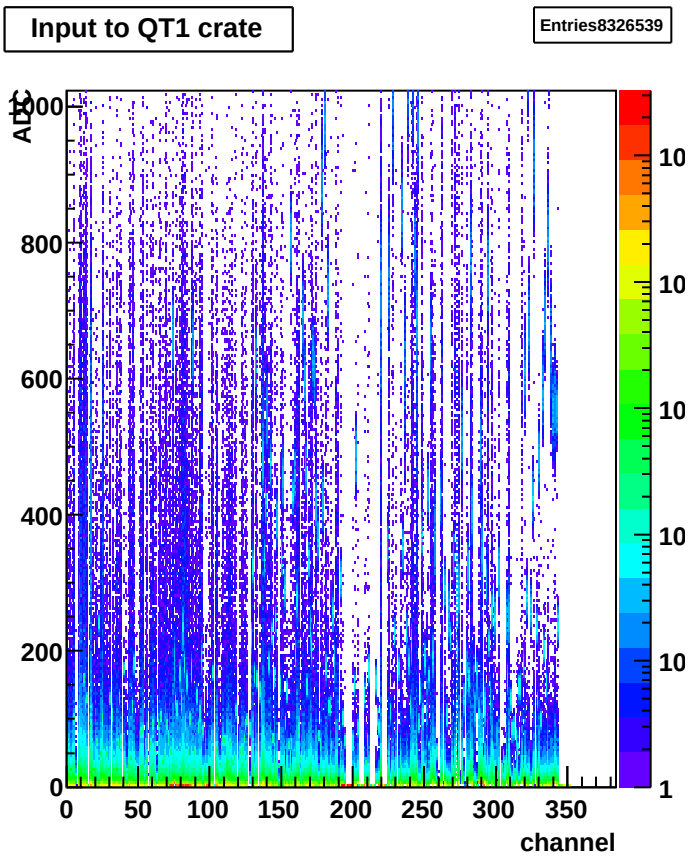

Entries 336048
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

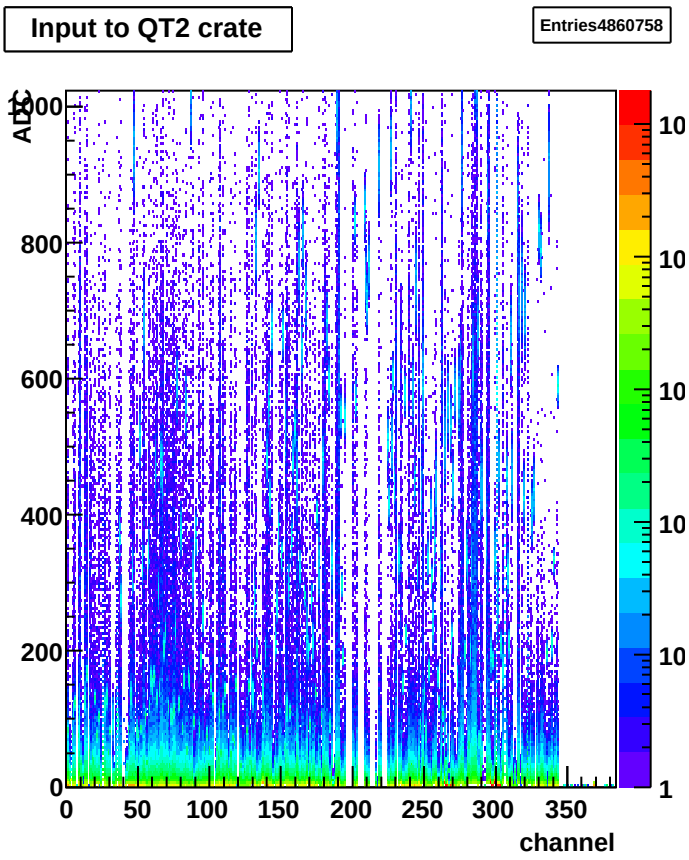

Entries 336048
BBC-L-East ADC Sum
BBC-L-West ADC Sum

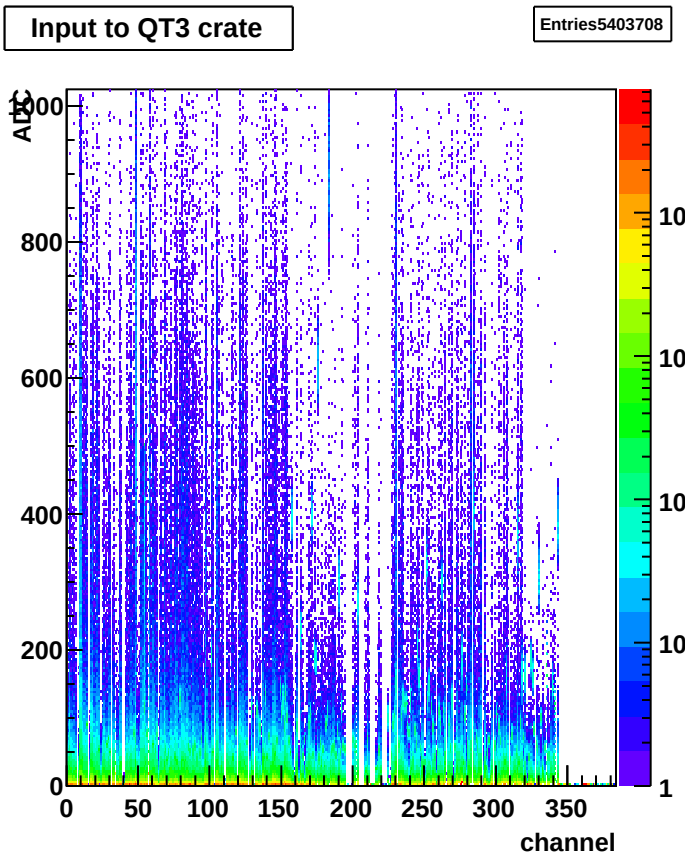

Entries 336048
BBC-S-East ADC Sum
BBC-S-West ADC Sum

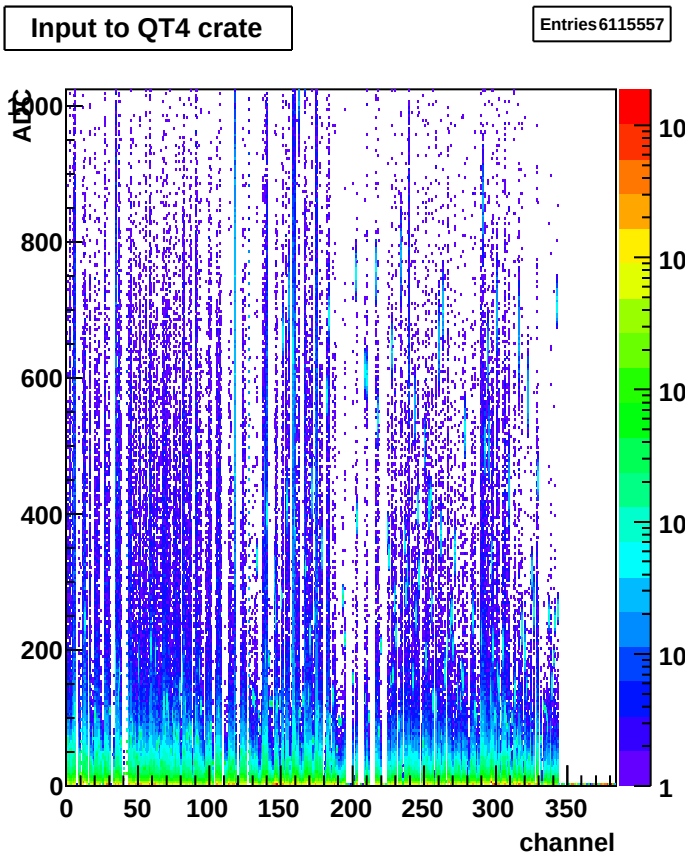

Entries 336048
ZDC East ADC Sum Att
ZDC West ADC Sum Att

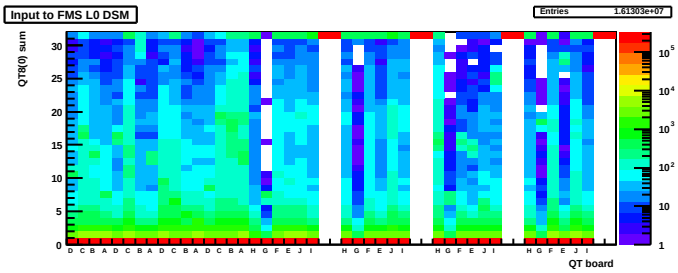

Entries 336048
BBC-L TAC Diff
BCC-S TAC Diff
Entries 336048
BBC-L TAC Diff
VPD TAC Diff
Entries 336048
BBC-L TAC Diff
ZDC TAC Diff
Entries 336048
BBC-S TAC Diff
VPD TAC Diff
Entries 336048
BBC-S TAC Diff
ZDC TAC Diff
Entries 336048
VPD TAC Diff
ZDC TAC Diff

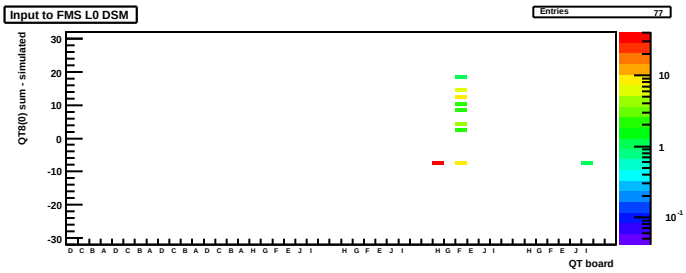

Input to QT1 crate
Entries8326539
ADC
channel

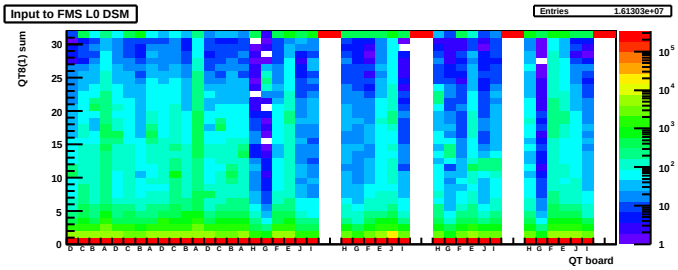

Input to QT2 crate
Entries4860758
ADC
channel

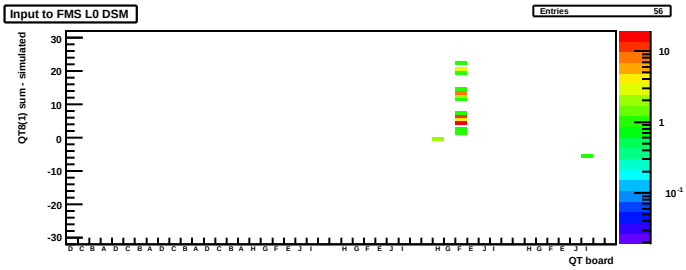

Input to QT3 crate
Entries5403708
ADC
channel

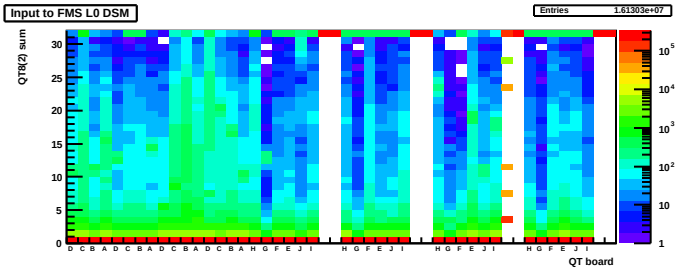

Input to QT4 crate
Entries6115557
ADC
channel

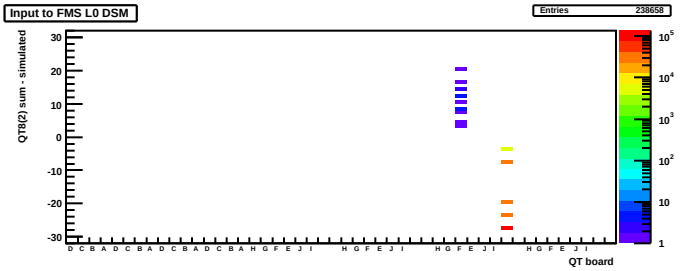

Input to FMS L0 DSM
Entries 1.61303e+07
QT8(0) sum
QT board

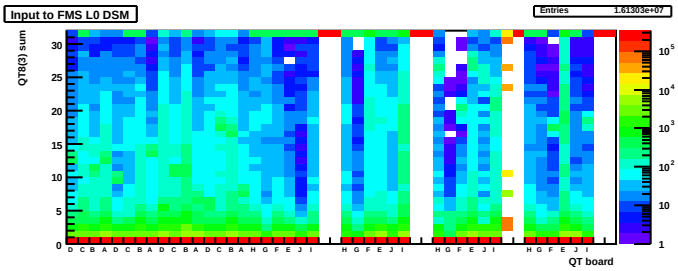

Input to FMS L0 DSM
Entries 77
QT8(0) sum - simulated
QT board

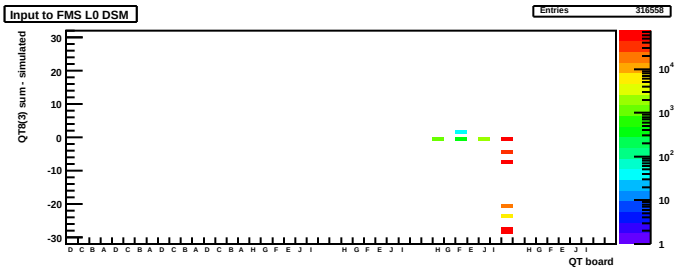

Input to FMS L0 DSM
Entries 1.61303e+07
QT8(1) sum
QT board

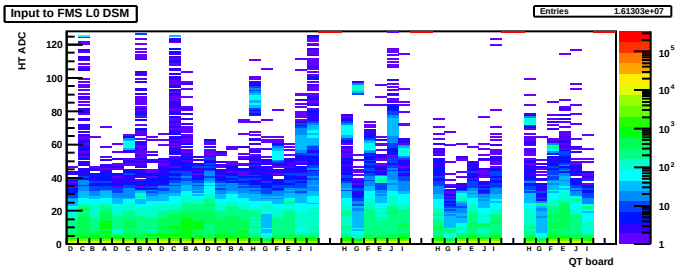

Input to FMS L0 DSM
Entries 56
QT8(1) sum - simulated
QT board

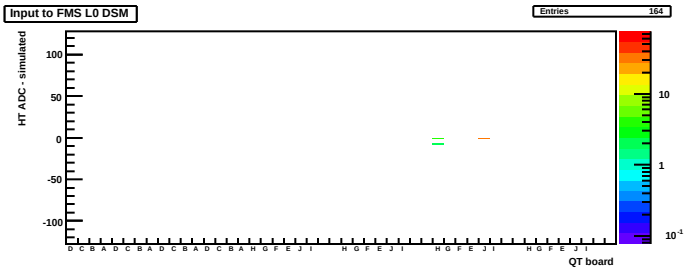

Input to FMS L0 DSM
Entries 1.61303e+07
QT8(2) sum
QT board

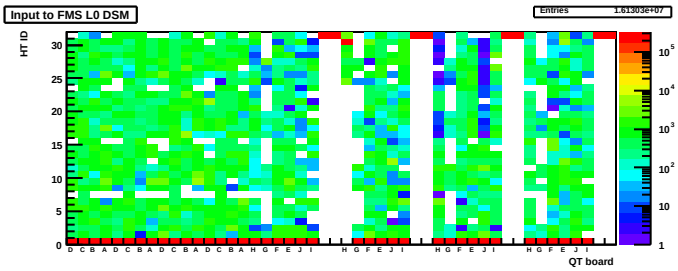

Input to FMS L0 DSM
Entries 238658
QT8(2) sum - simulated
QT board

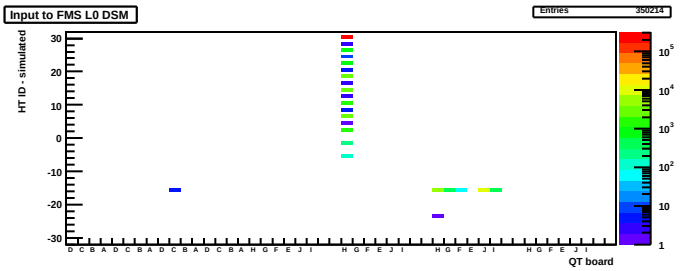

Input to FMS L0 DSM
Entries 1.61303e+07
QT8(3) sum
QT board

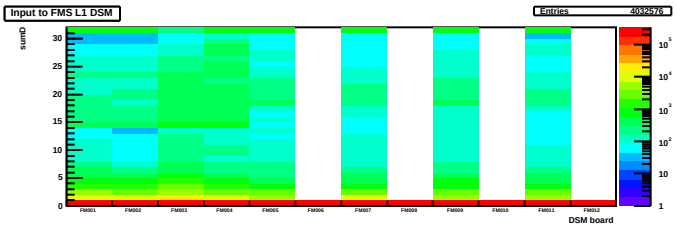

Input to FMS L0 DSM
Entries 316558
QT8(3) sum - simulated
QT board

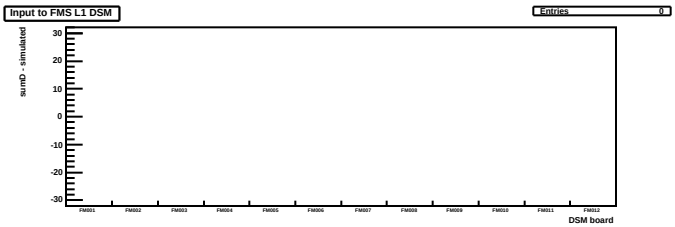

Input to FMS L0 DSM
Entries 1.61303e+07
HT ADC
QT board

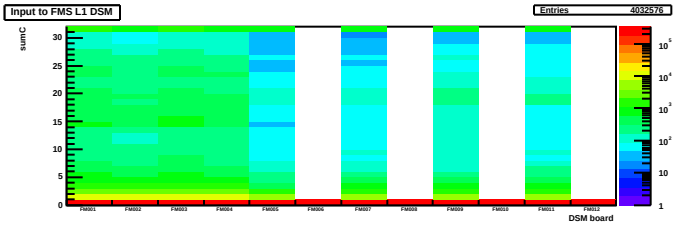

Input to FMS L0 DSM
Entries 164
HT ADC - simulated
QT board

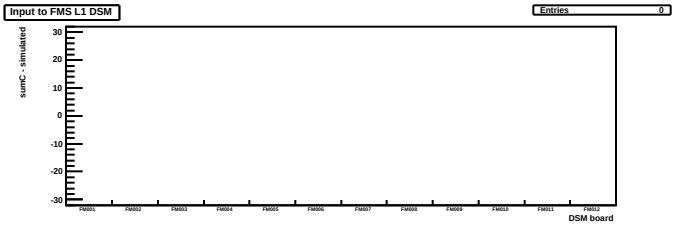

Input to FMS L0 DSM
Entries 1.61303e+07
HT ID
QT board

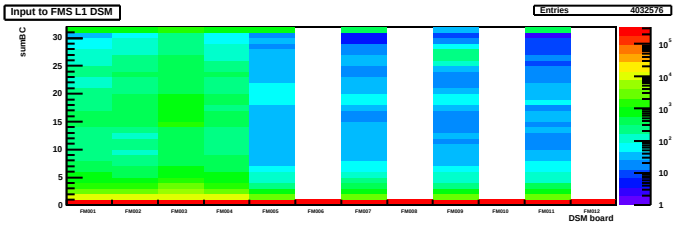

Input to FMS L0 DSM
Entries 350214
HT ID - simulated
QT board

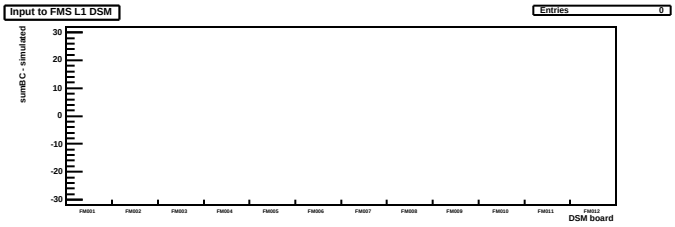

Input to FMS L1 DSM
Entries 4032576
sumD
DSM board

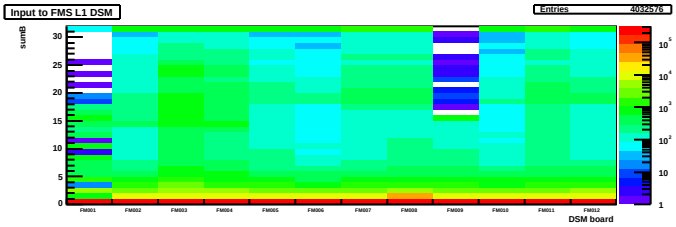

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

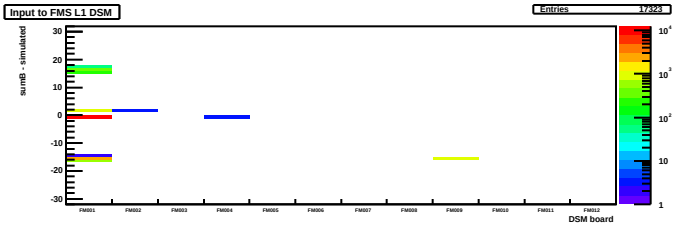

Input to FMS L1 DSM
Entries 4032576
sumC
DSM board

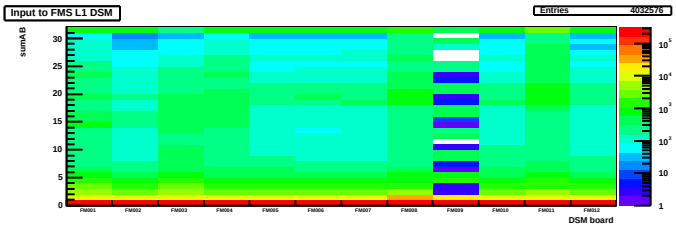

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

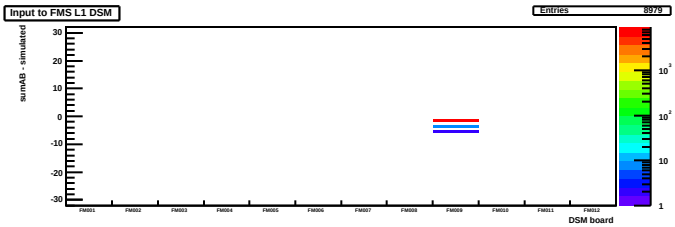

Input to FMS L1 DSM
Entries 4032576
sumBC
DSM board

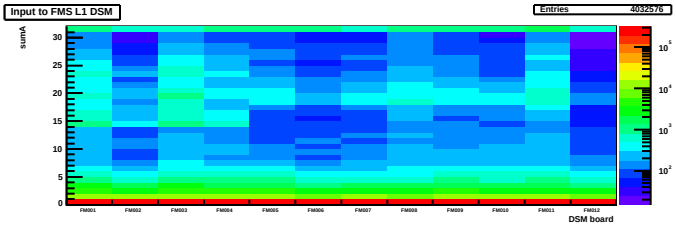

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

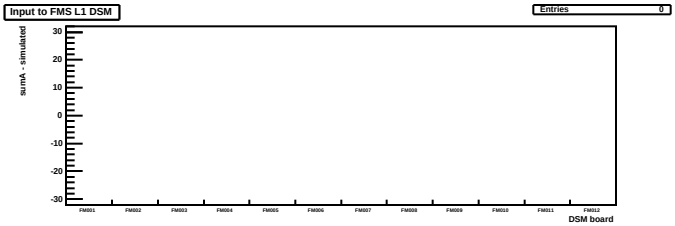

Input to FMS L1 DSM
Entries 4032576
sumB
DSM board

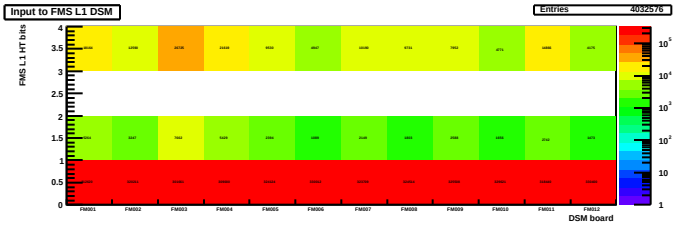

Input to FMS L1 DSM
Entries 17323
sumB - simulated
DSM board

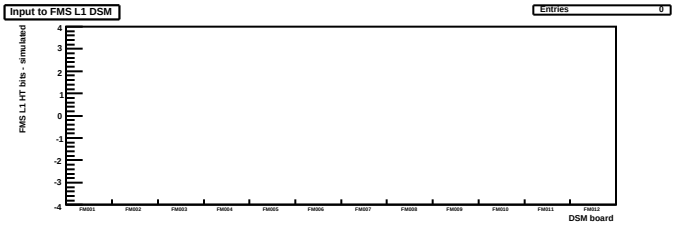

Input to FMS L1 DSM
Entries 4032576
sumAB
DSM board

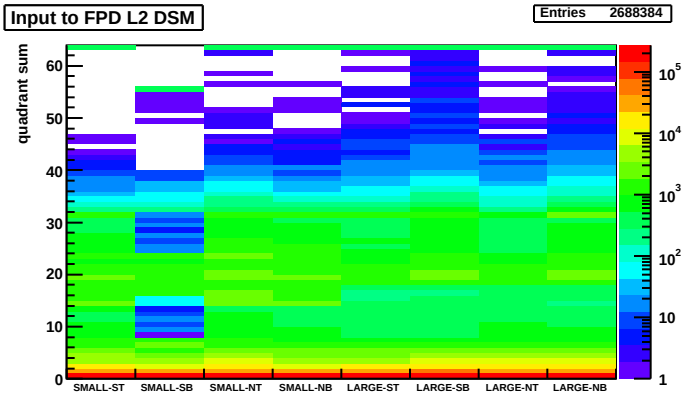

Input to FMS L1 DSM
Entries 8979
sumAB - simulated
DSM board

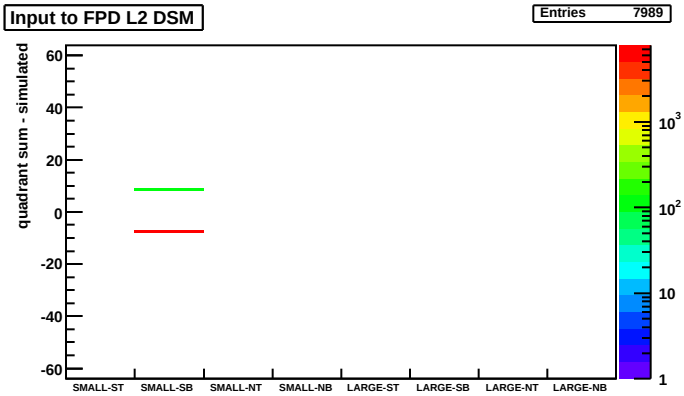

Input to FMS L1 DSM
Entries 4032576
sumA
DSM board

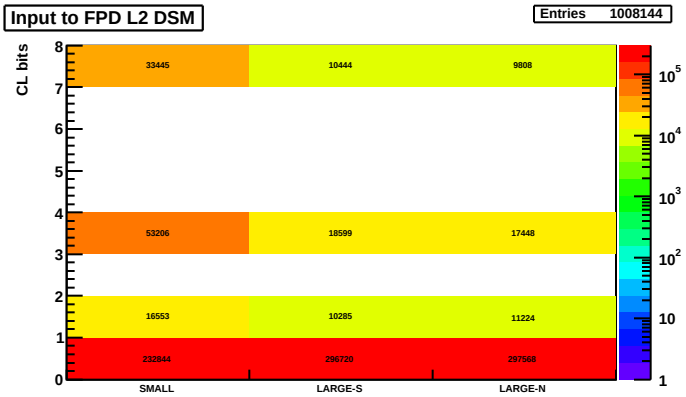

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

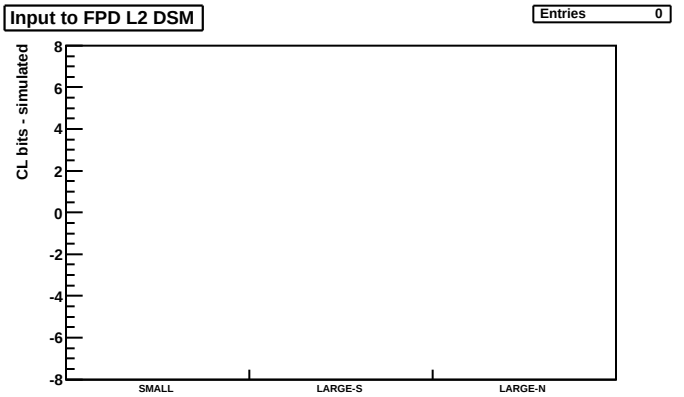

Input to FMS L1 DSM
Entries 4032576
FMS L1 HT bits
DSM board

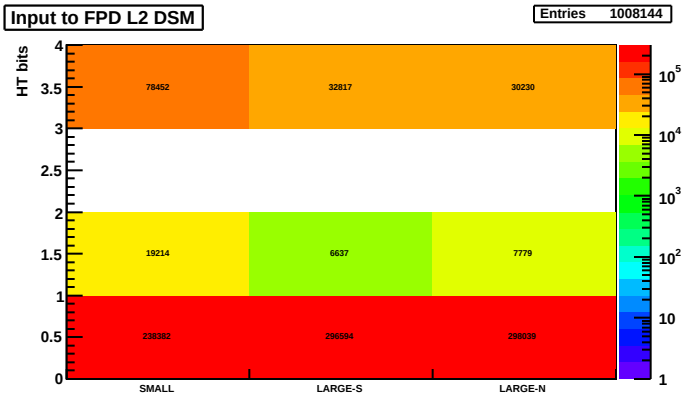

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

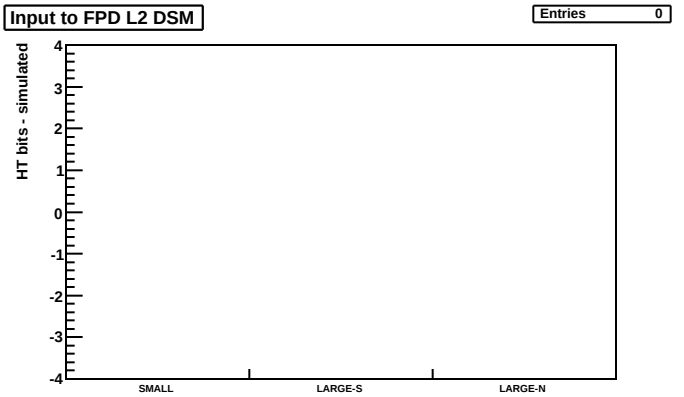

Input to FPD L2 DSM
Entries 2688384
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

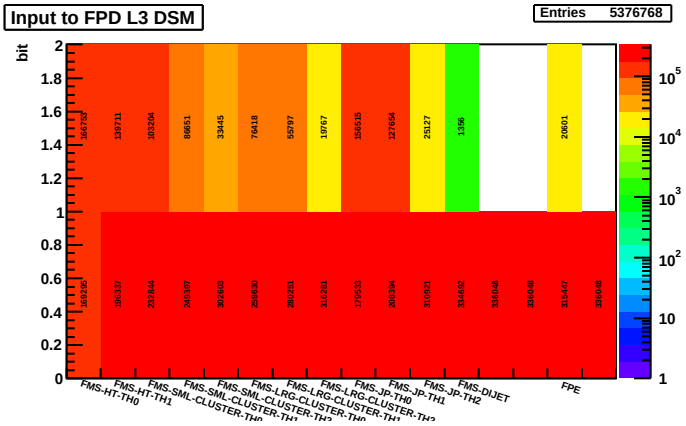

Input to FPD L2 DSM
Entries 7989
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

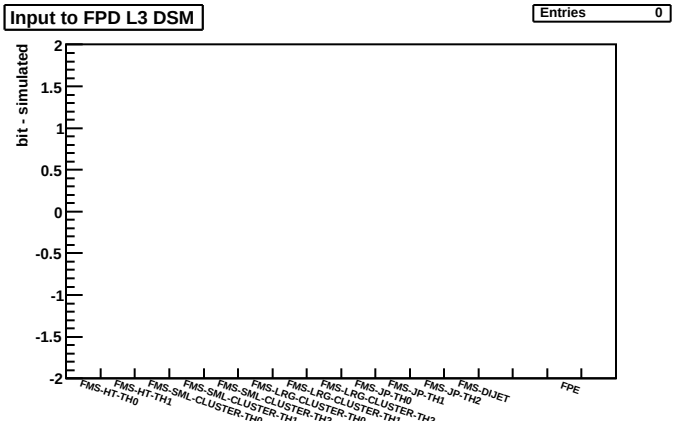

Input to FPD L2 DSM
Entries 1008144
CL bits
33445 10444 9808
53206 18599 17448
16553 10285 11224
232844 296720 297568
SMALL LARGE-S LARGE-N

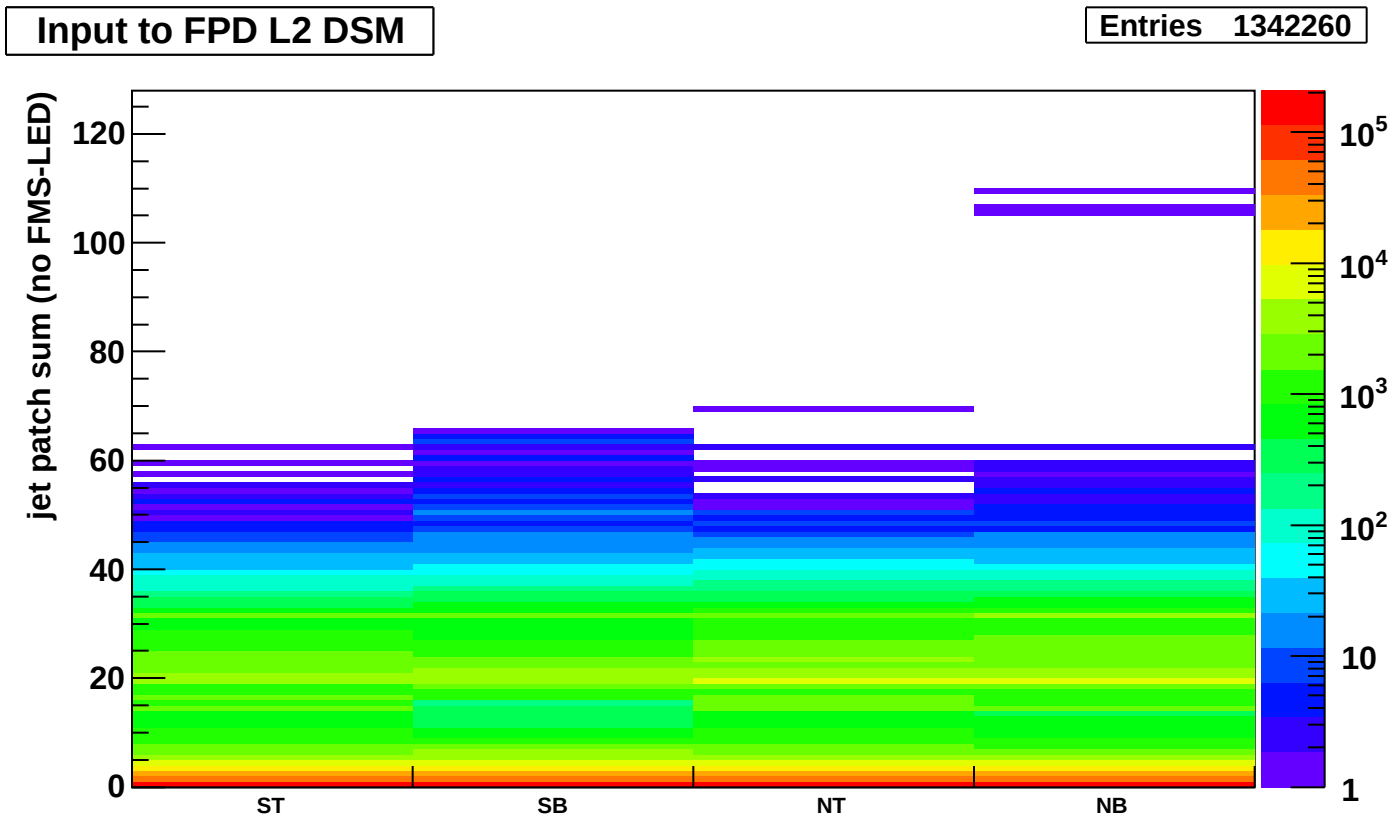

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL LARGE-S LARGE-N

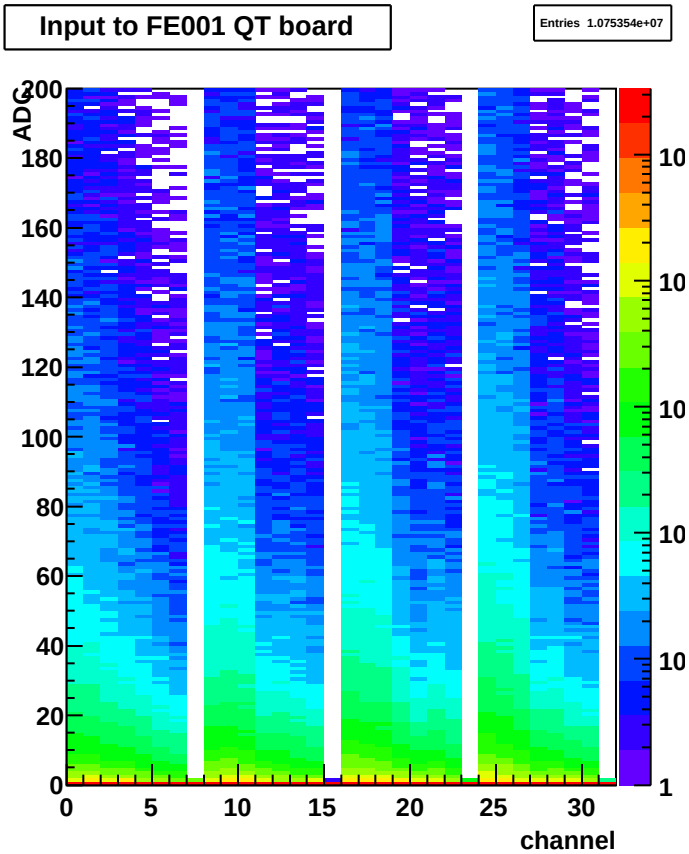

Input to FPD L2 DSM
Entries 1008144
HT bits
78452 32817 30230
19214 6637 7779
238382 296594 298039
SMALL LARGE-S LARGE-N

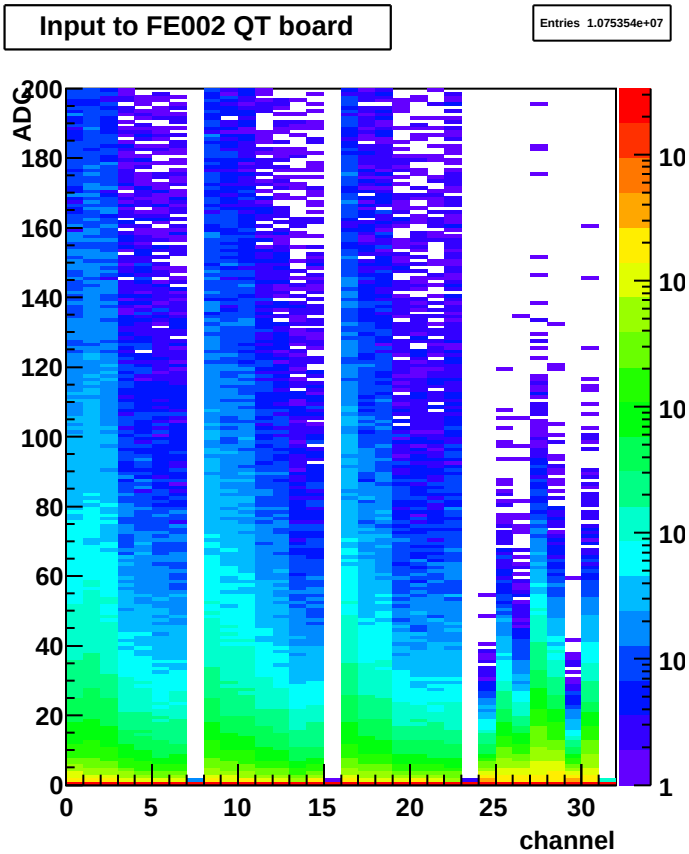

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL LARGE-S LARGE-N

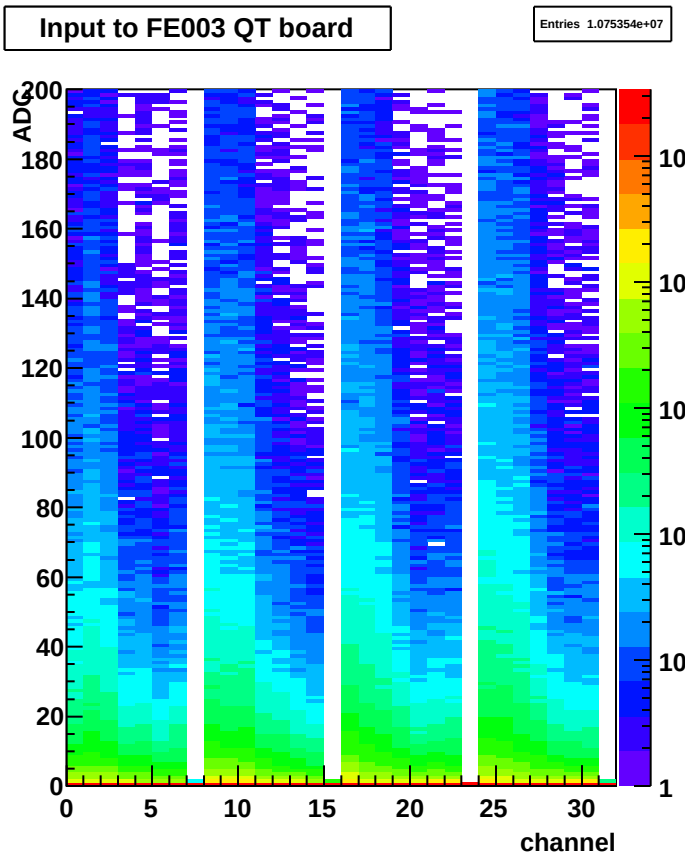

Input to FPD L3 DSM
Entries 5376768
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

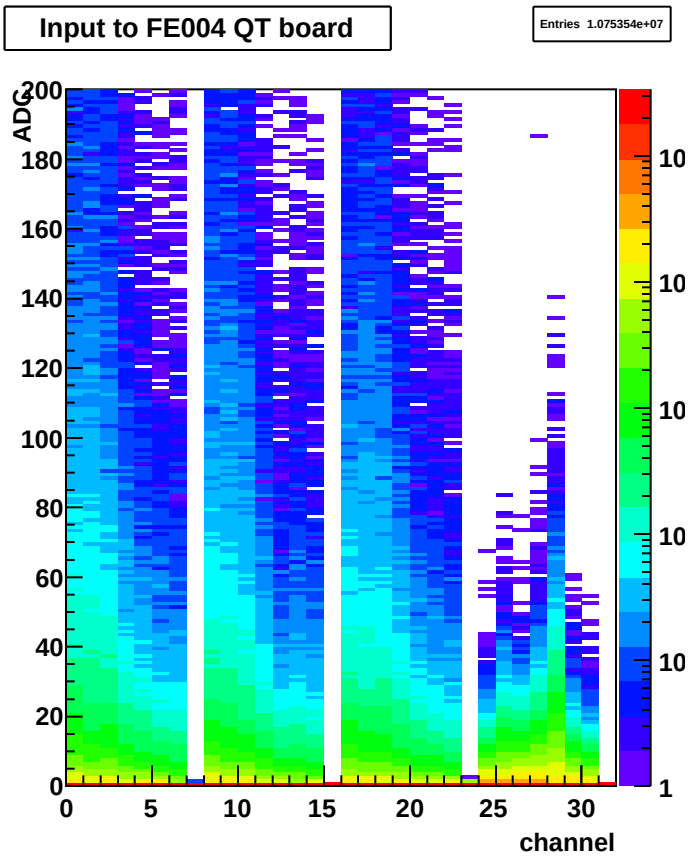

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

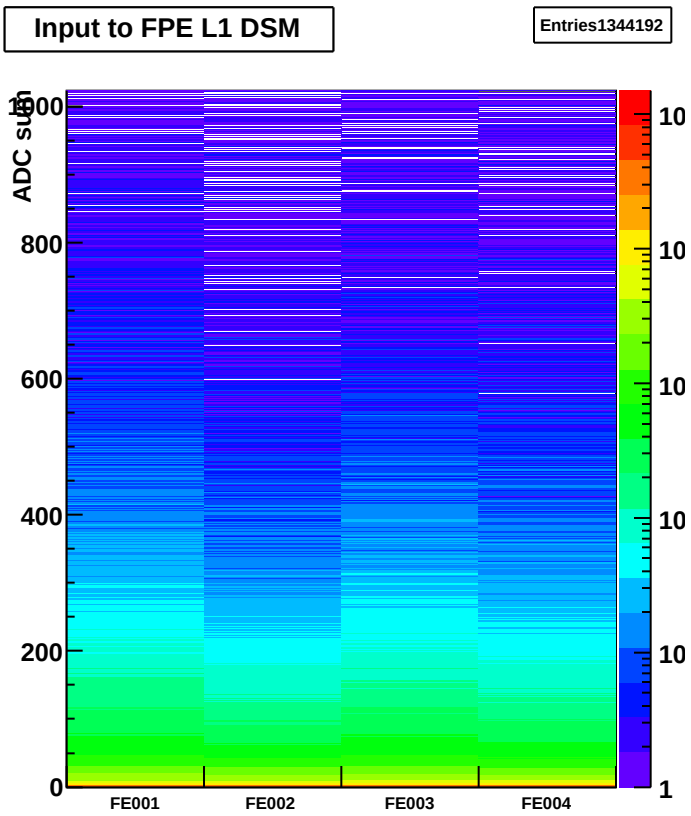

Input to FPD L2 DSM
Entries 1342260
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

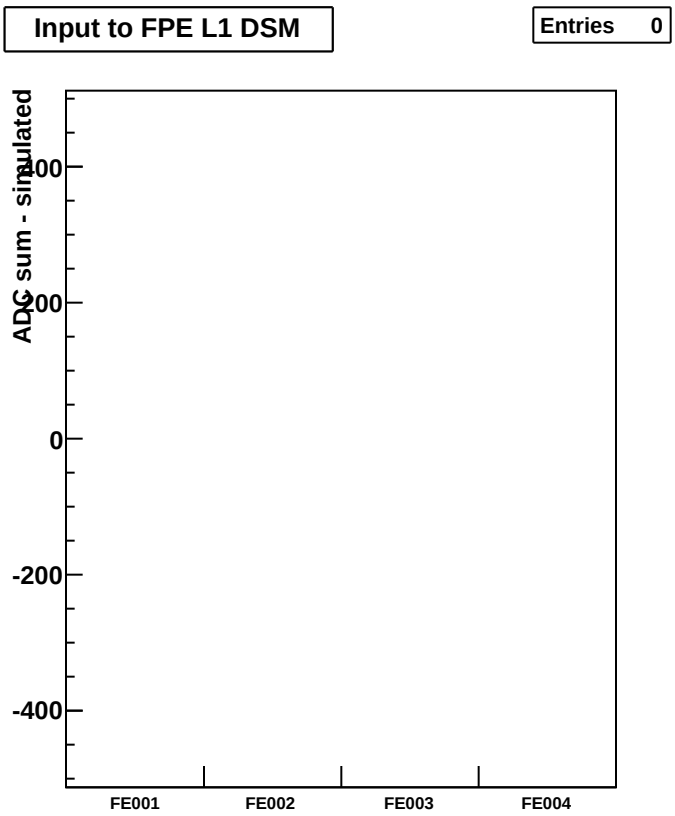

Input to FE001 QT board
Entries 1.075354e+07
ADC
channel

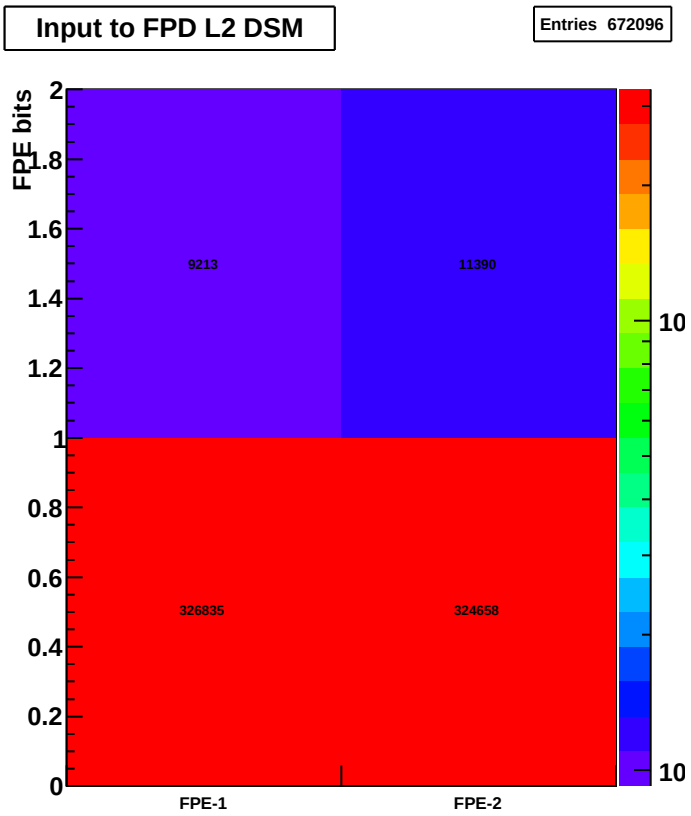

Input to FE002 QT board
Entries 1.075354e+07
ADC
channel

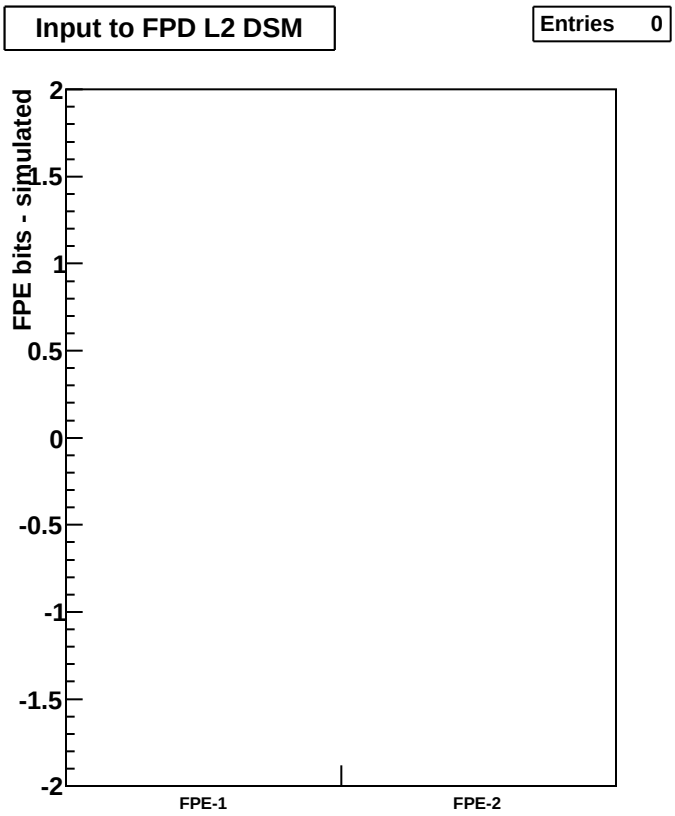

Input to FE003 QT board
Entries 1.075354e+07
ADC
channel


Input to FE004 QT board
Entries 1.075354e+07
ADC
channel


Input to FPE L1 DSM
Entries1344192
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 672096
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
9213
11390
326835
324658
FPE-1
FPE-2
10
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