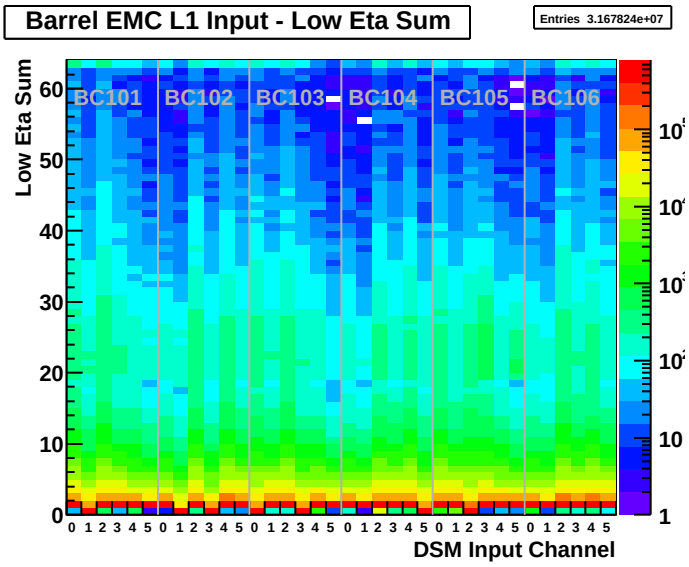
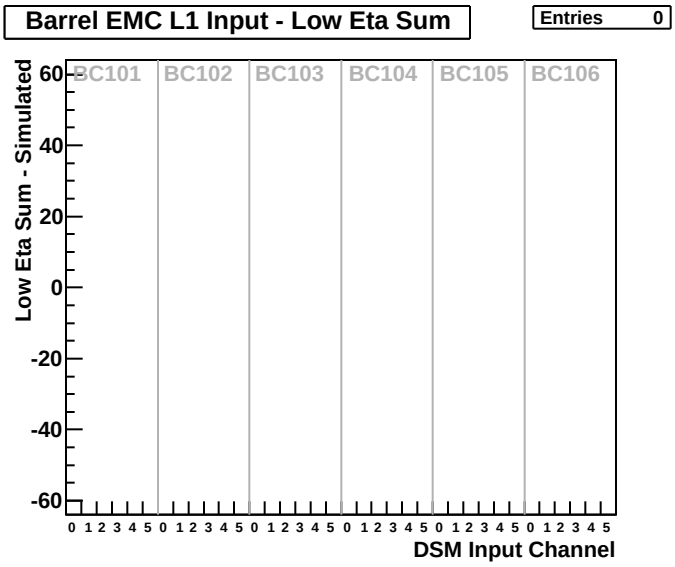
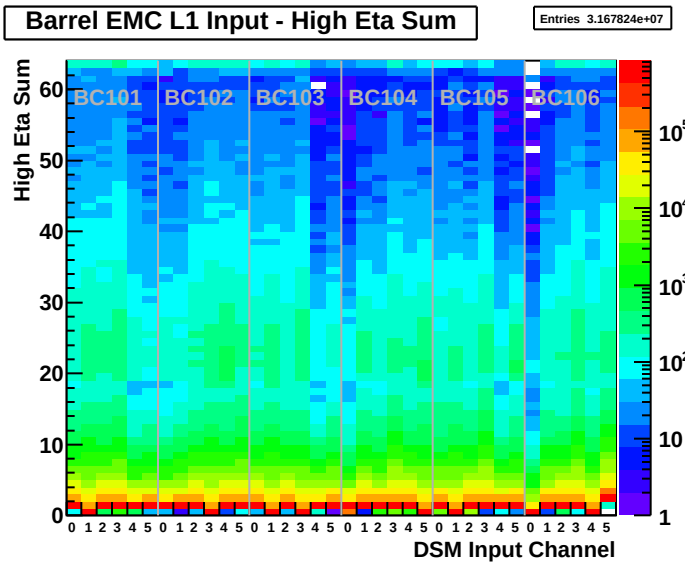
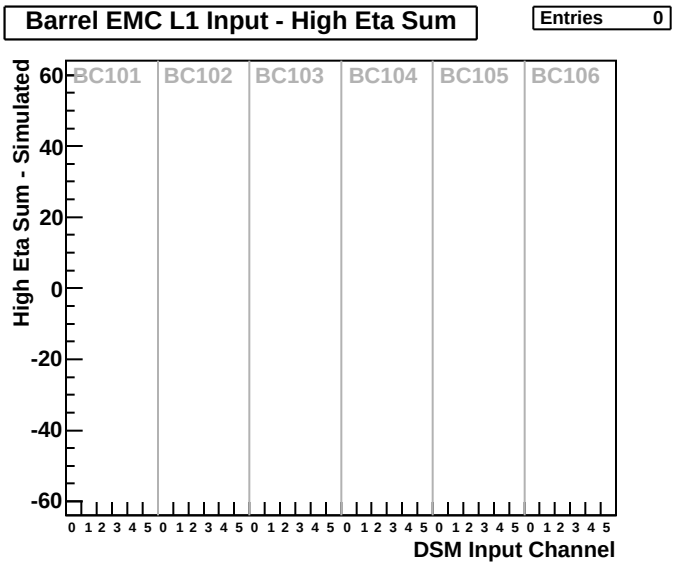
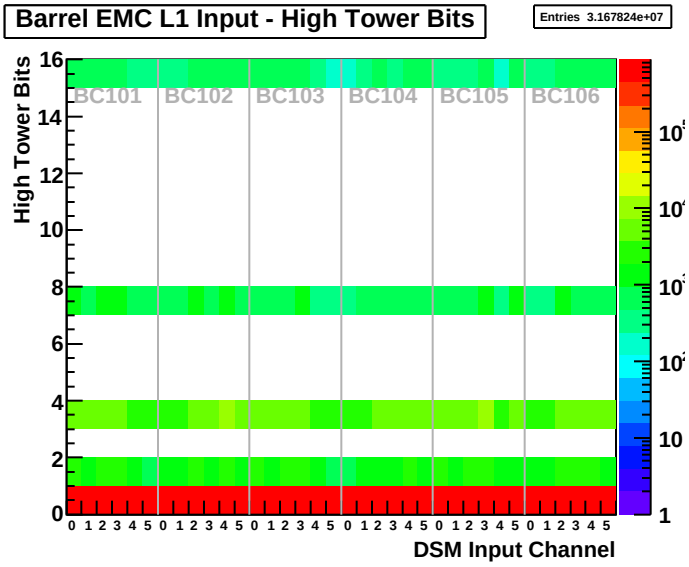
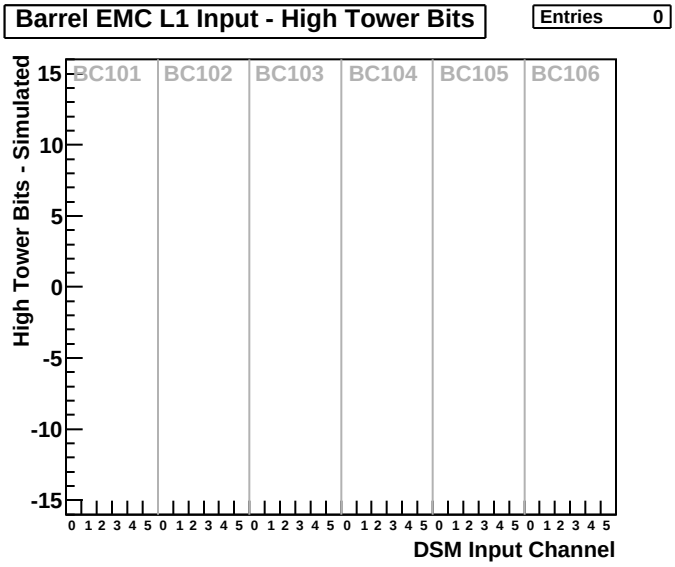

Barrel EMC L1 Input - Low Eta Sum
Entries 3.167824e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

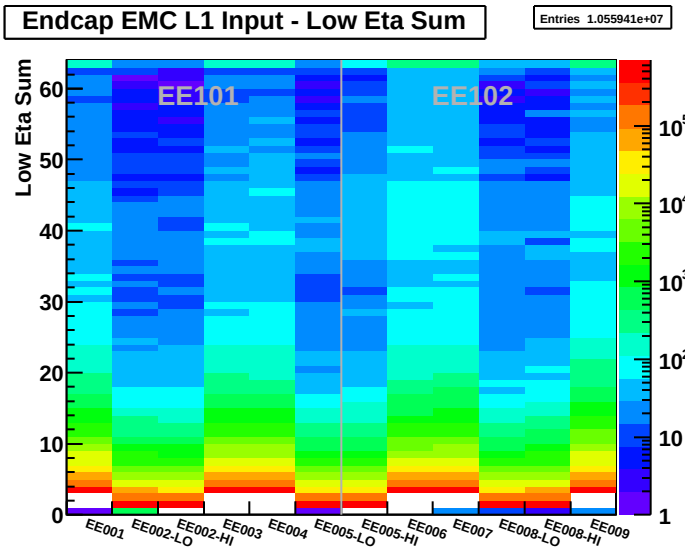

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

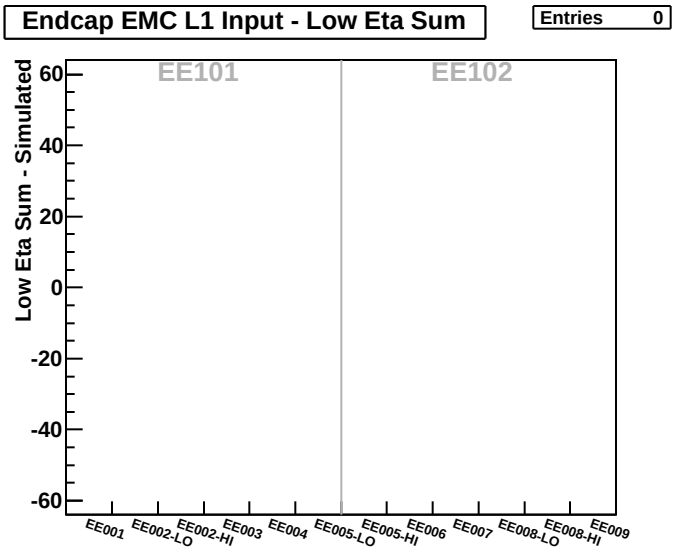

Barrel EMC L1 Input - High Eta Sum
Entries 3.167824e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

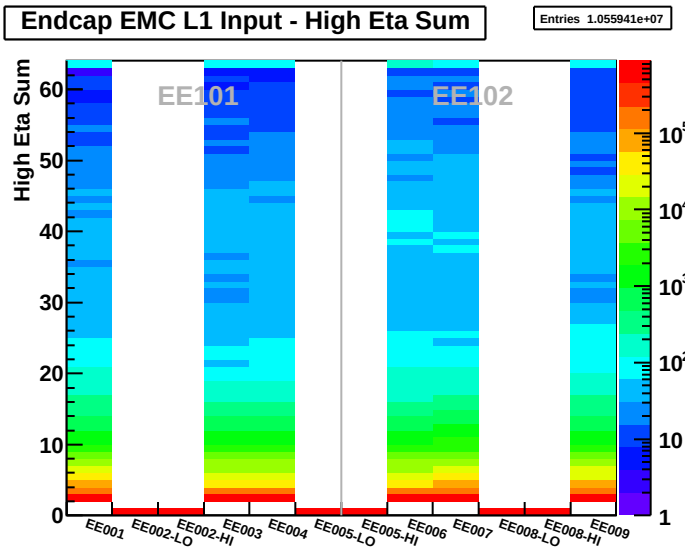

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

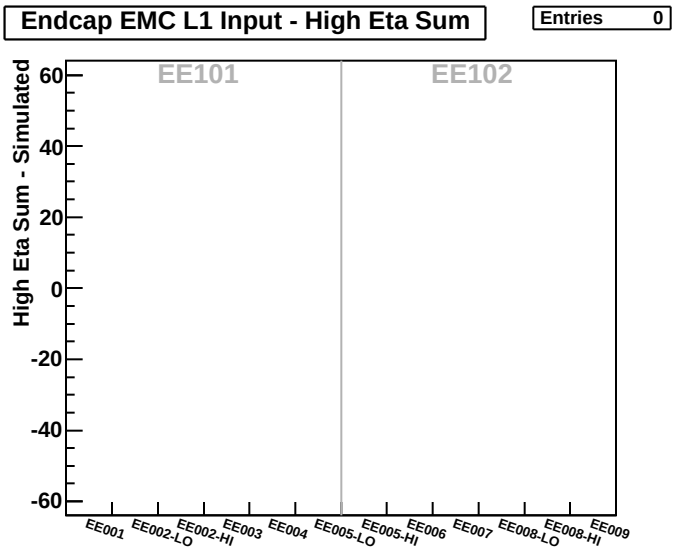

Barrel EMC L1 Input - High Tower Bits
Entries 3.167824e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

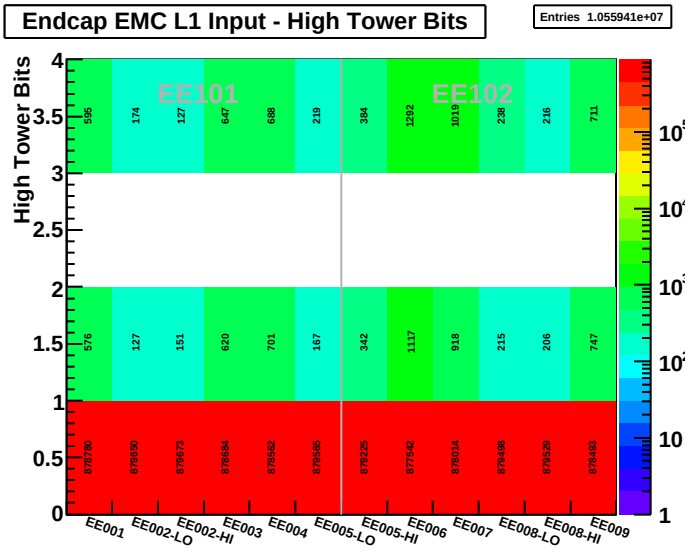

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

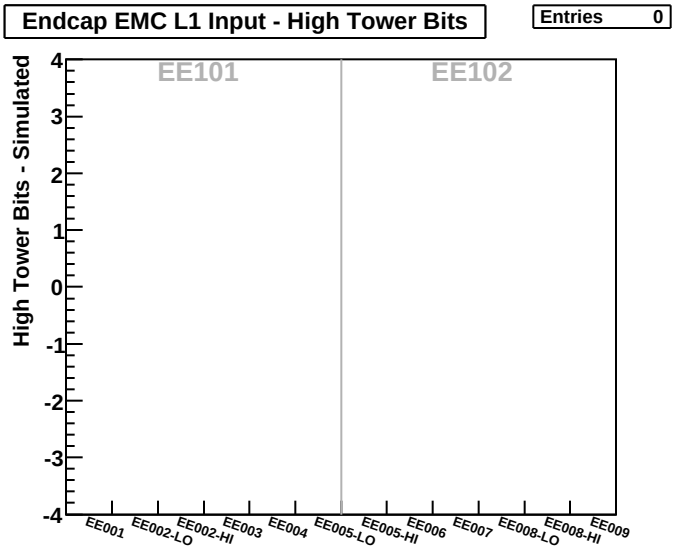

Endcap EMC L1 Input - Low Eta Sum
Entries 1.055941e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

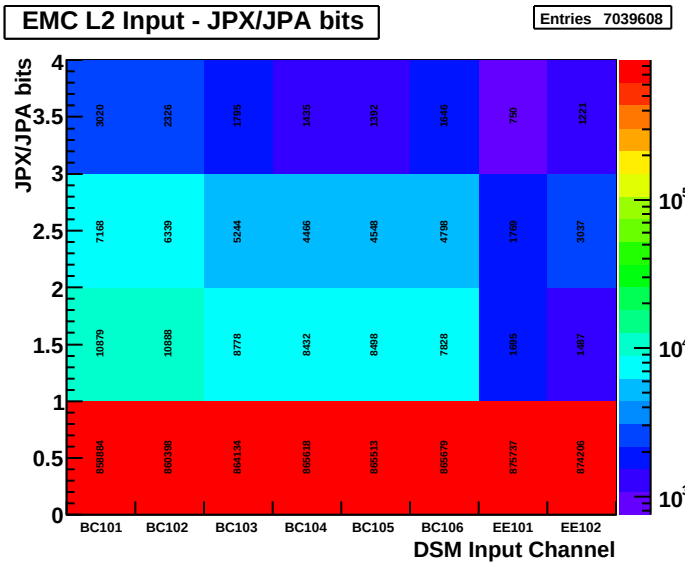

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

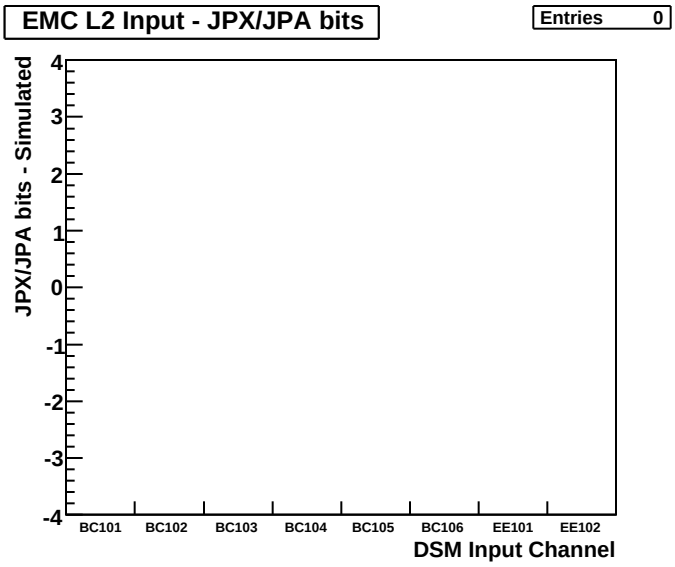

Endcap EMC L1 Input - High Eta Sum
Entries 1.055941e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

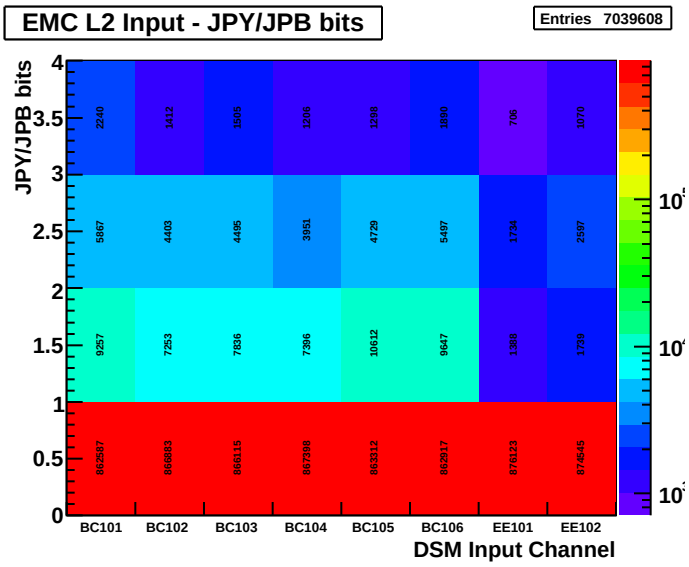

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

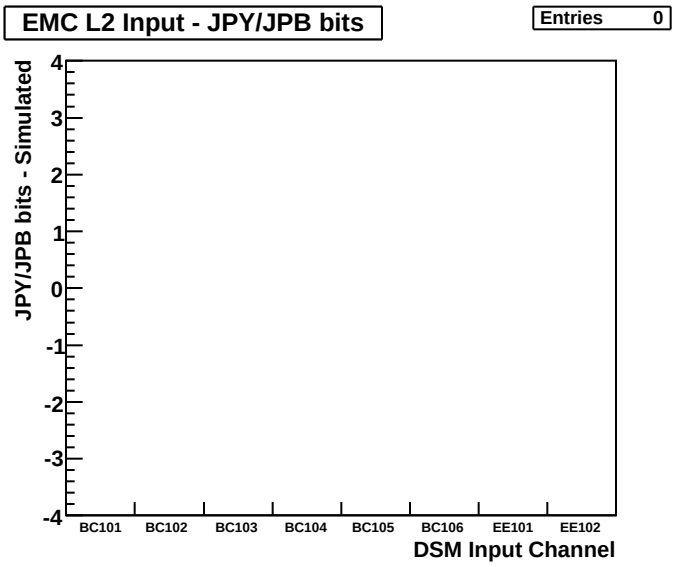

Endcap EMC L1 Input - High Tower Bits
Entries 1.055941e+07
High Tower Bits
EE101
EE102
595 174 127 647 688 219 384 1292 1019 238 216 711
576 127 151 620 701 167 342 1117 918 215 206 747
878780 879550 879573 878584 878562 879565 879225 877542 878014 879498 879529 878493
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

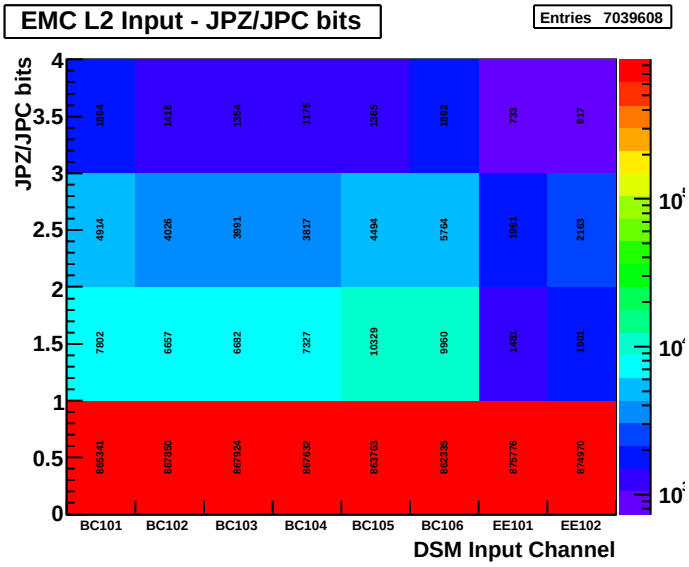

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

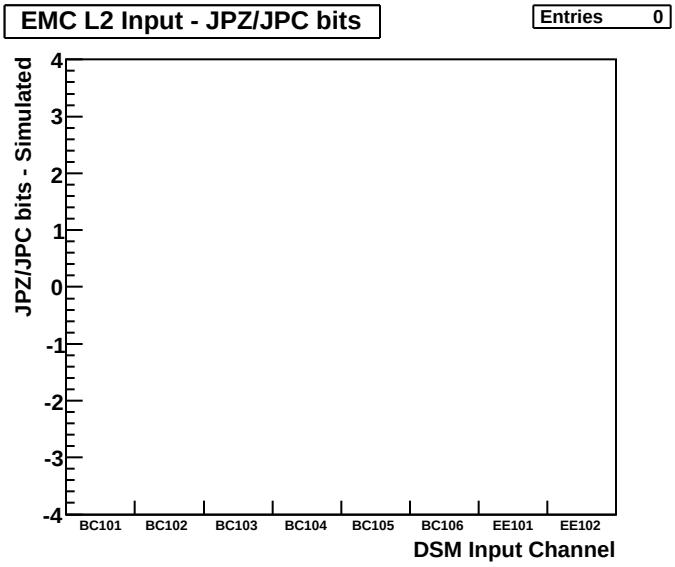

EMC L2 Input - JPX/JPA bits
Entries 7039608
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3020 2326 1795 1435 1392 1646 750 1221
7168 6339 5244 4466 4548 4798 1769 3037
10879 10888 8778 8432 8498 7828 1695 1487
858894 860398 864124 865618 865513 865679 875737 874206

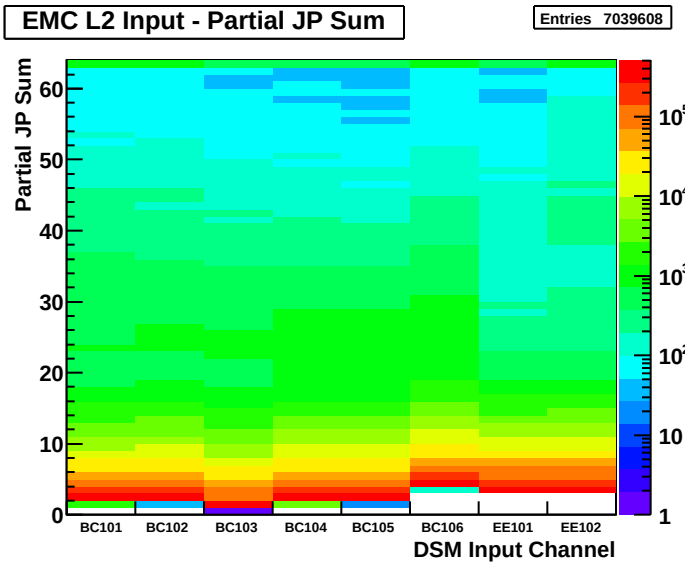

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

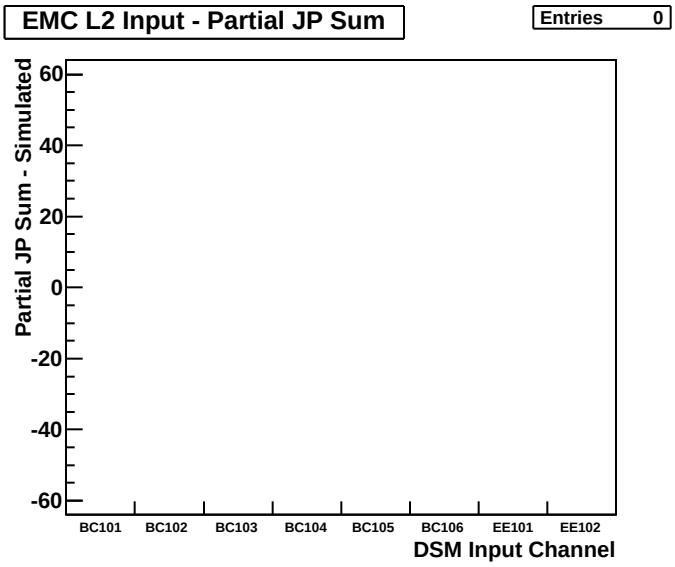

EMC L2 Input - JPY/JPB bits
Entries 7039608
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2240 1412 1505 1206 1298 1890 706 1070
5867 4403 4495 3951 4729 5497 1734 2597
9257 7253 7836 7396 10612 9647 1388 1739
862587 866883 866115 867398 863312 862917 876123 874545

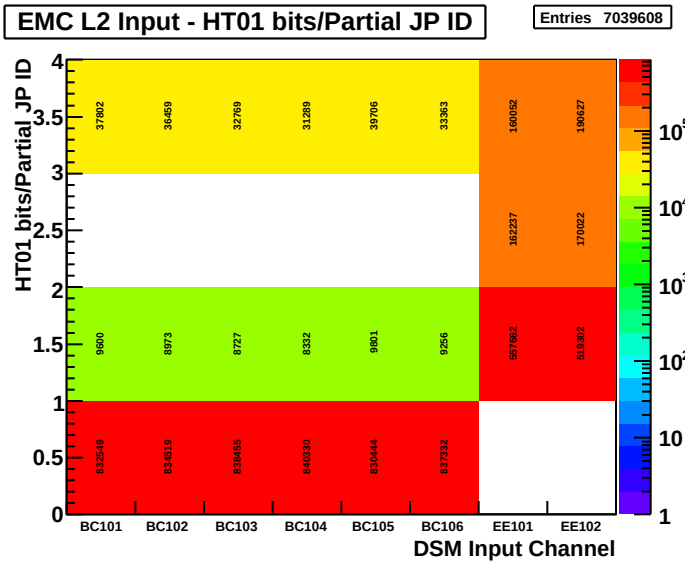

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

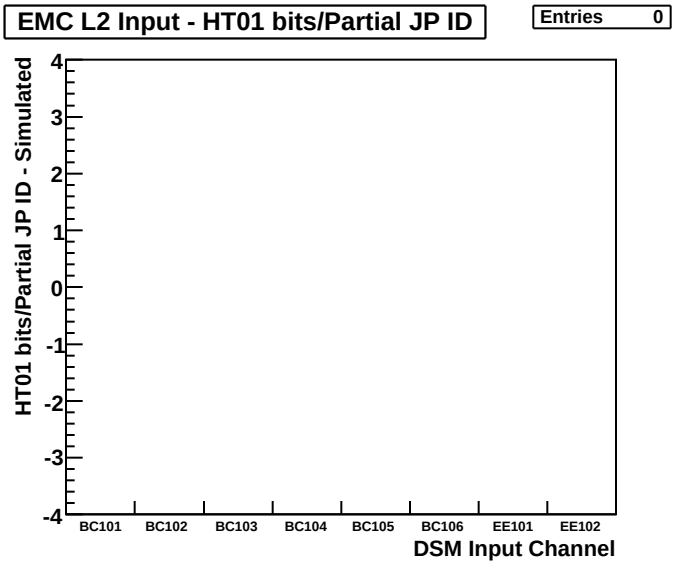

EMC L2 Input - JPZ/JPC bits
Entries 7039608
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1894 1418 1354 1176 1355 1692 733 917
4914 4026 3991 3817 4494 5764 1961 2163
7802 6657 6682 7327 10329 9960 1481 1901
865341 867850 867924 867632 863763 862335 875776 874970

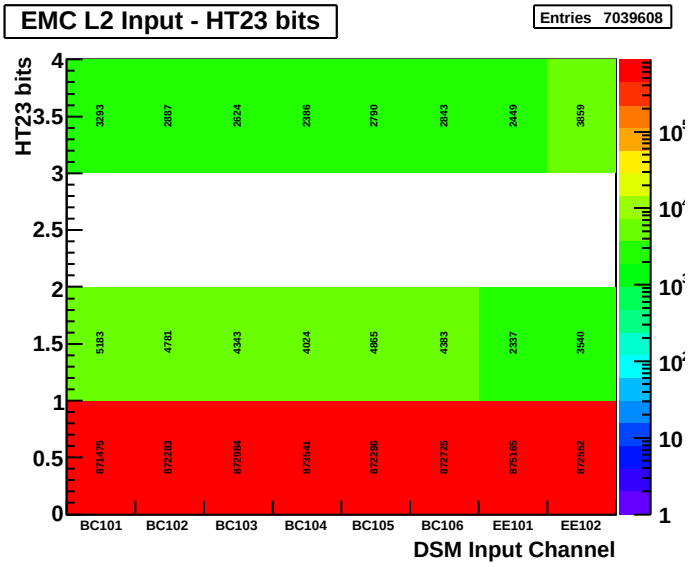

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

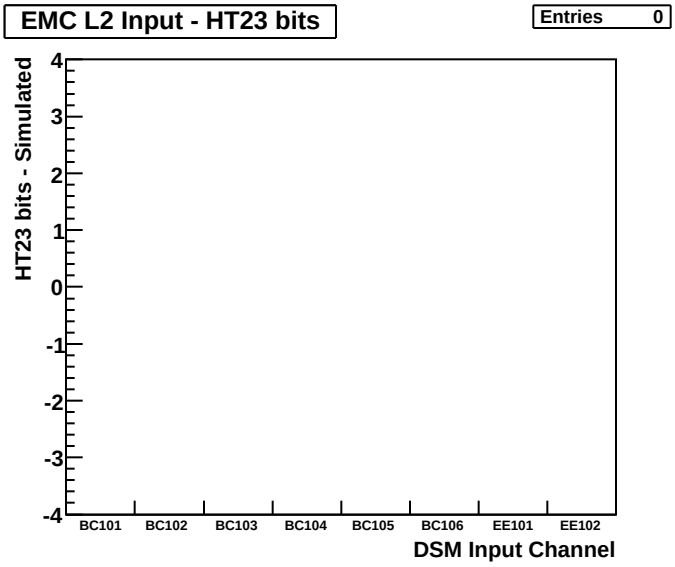

EMC L2 Input - Partial JP Sum
Entries 7039608
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

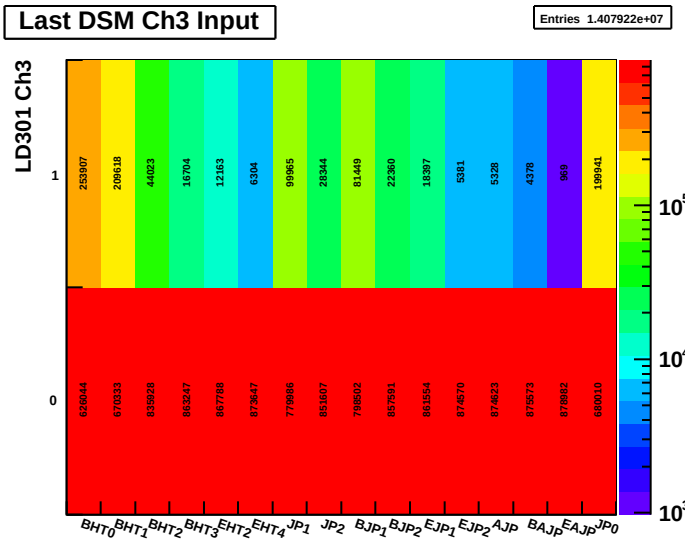

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

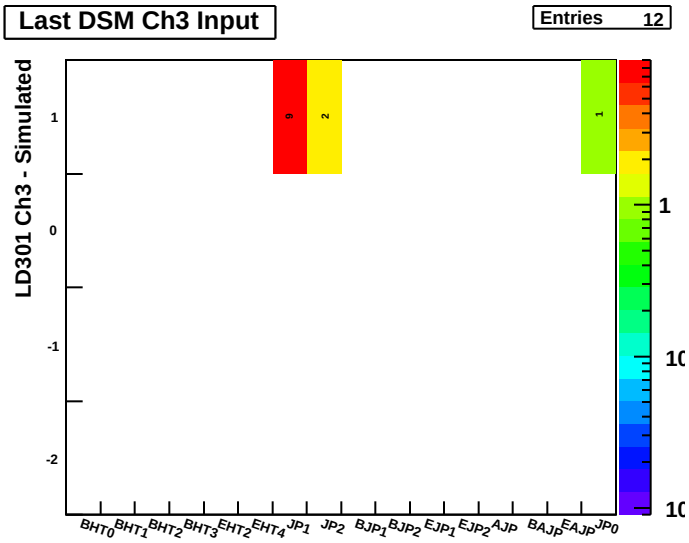

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7039608
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

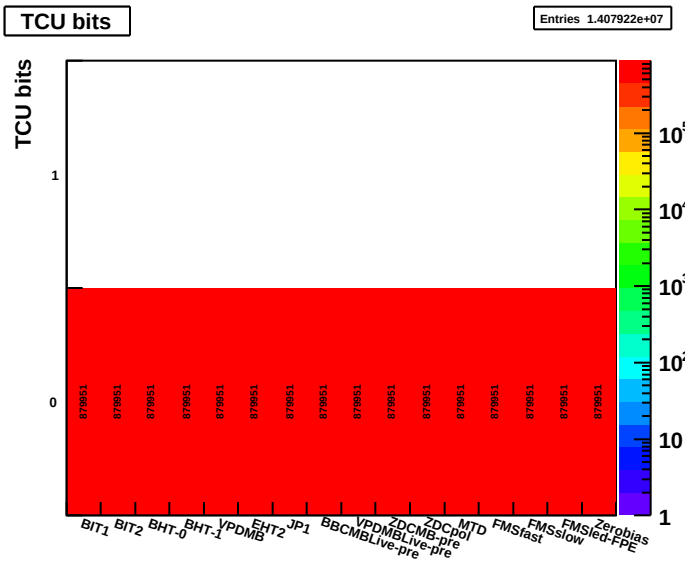

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

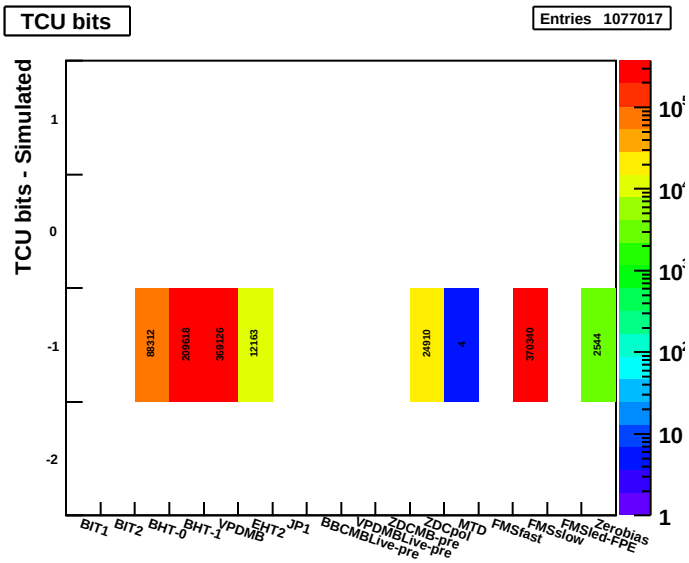

EMC L2 Input - HT23 bits
Entries 7039608
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

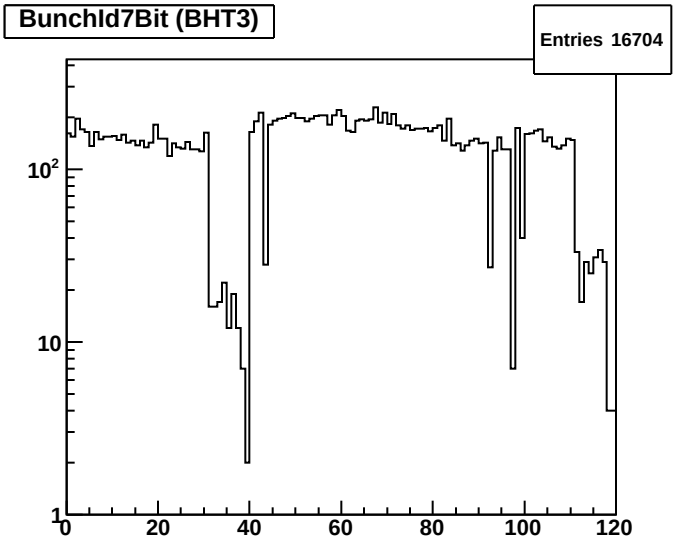

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

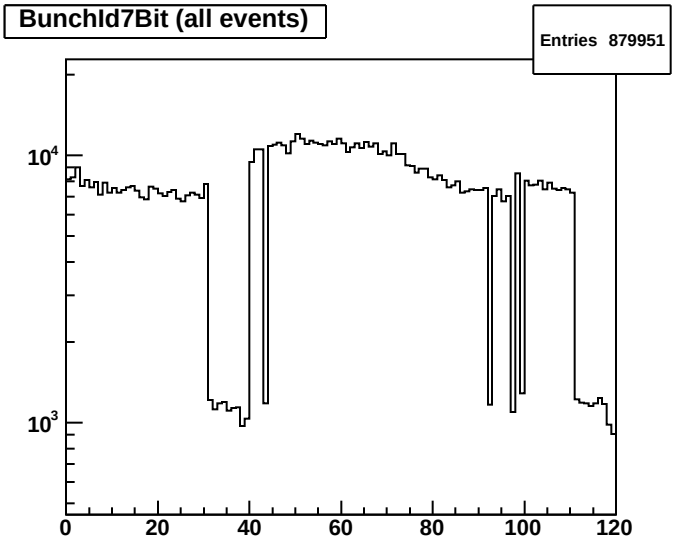

Last DSM Ch3 Input
Entries 1.407922e+07
LD301 Ch3
253907 209618 44023 16704 12163 6304 99965 28344 81449 22360 18397 5381 5328 4378 969 199941
626044 670333 835928 863247 867788 873647 779986 851607 798502 857591 861554 874570 874623 875573 878982 680010
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

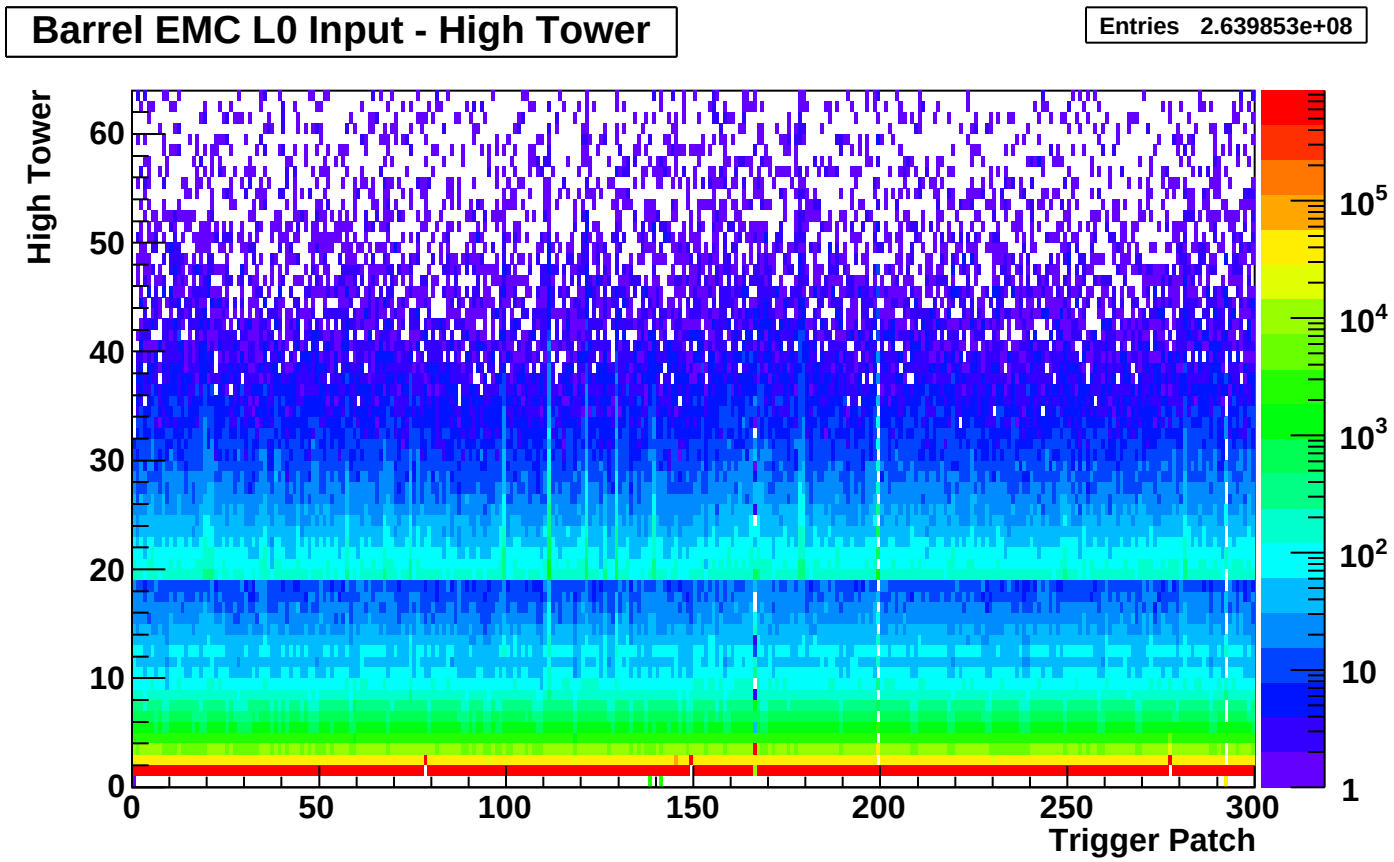

Last DSM Ch3 Input
Entries 12
LD301 Ch3 - Simulated
9 2 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

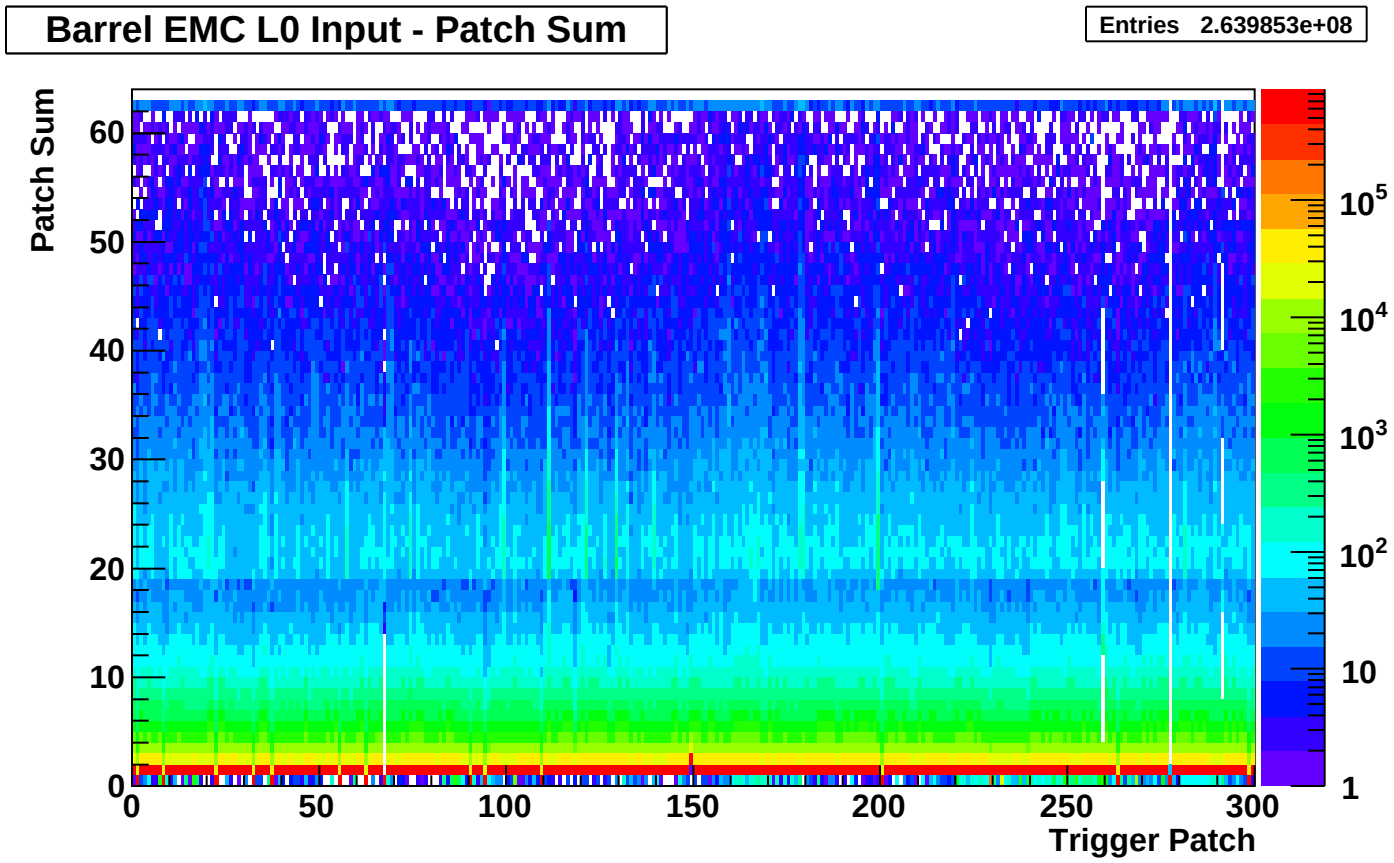

TCU bits
Entries 1.407922e+07
TCU bits
879951
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

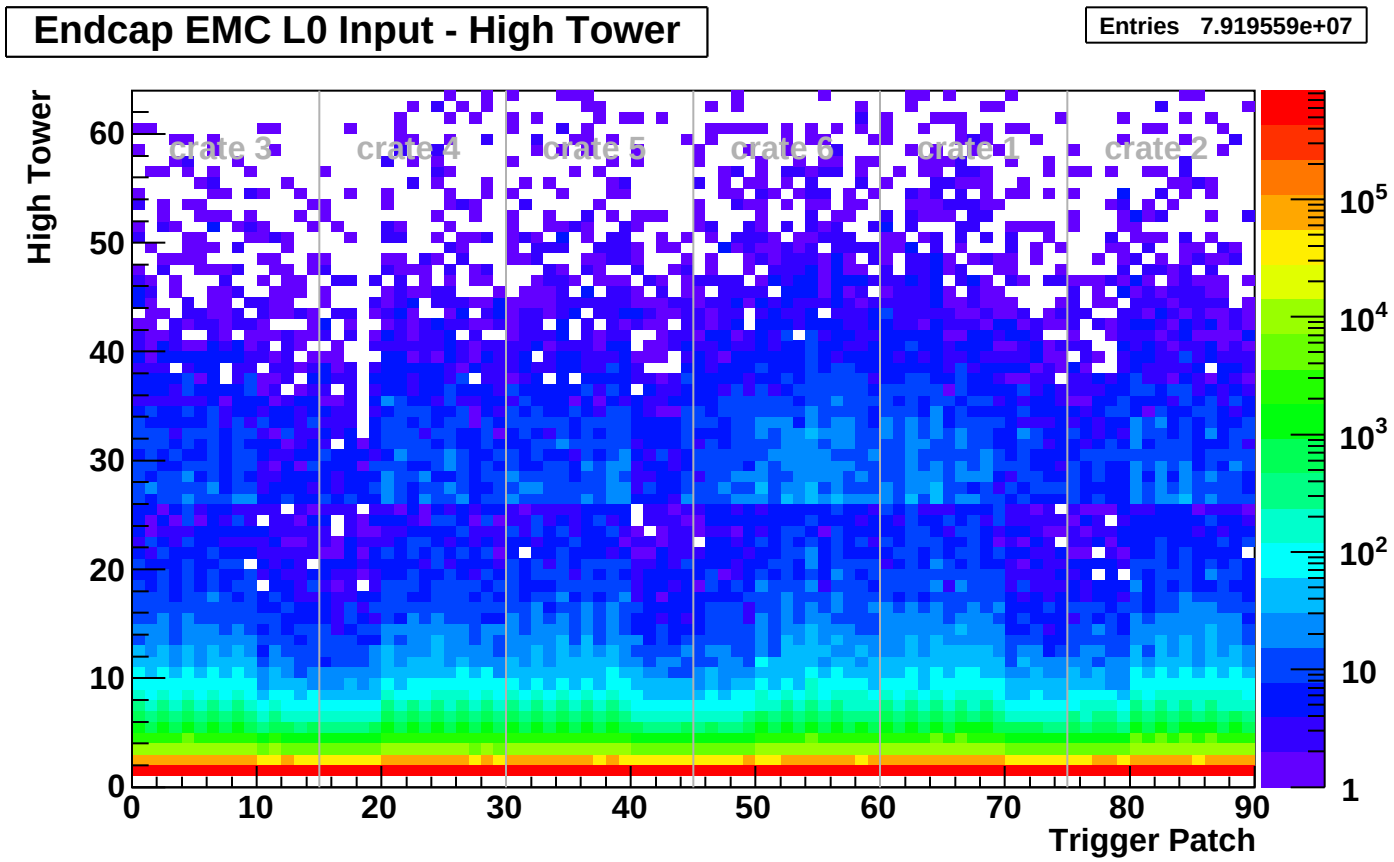

TCU bits
Entries 1077017
TCU bits - Simulated
88312 209618 369126 12163 24910 4 370340 2544
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

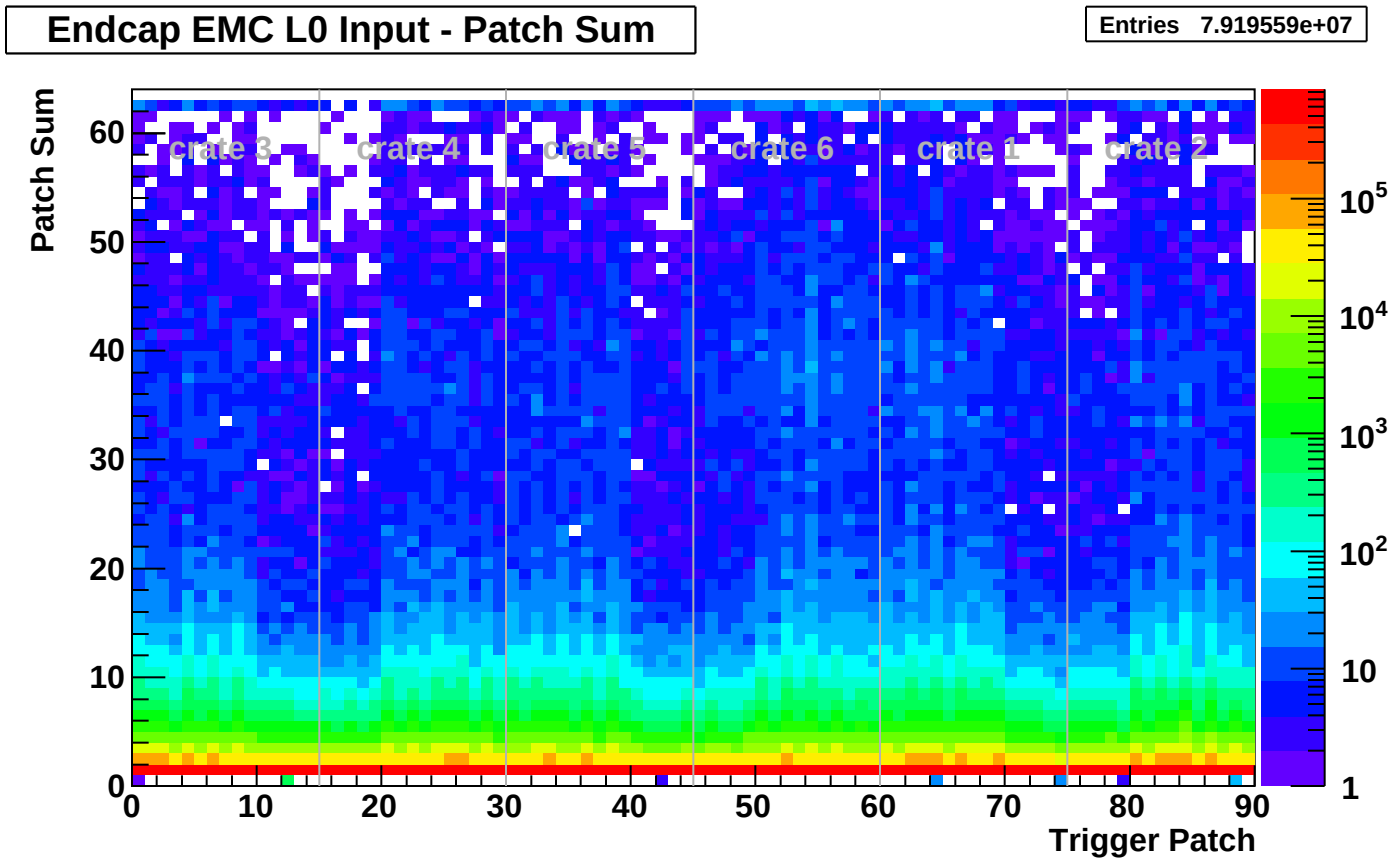

BunchId7Bit (BHT3)
Entries 16704

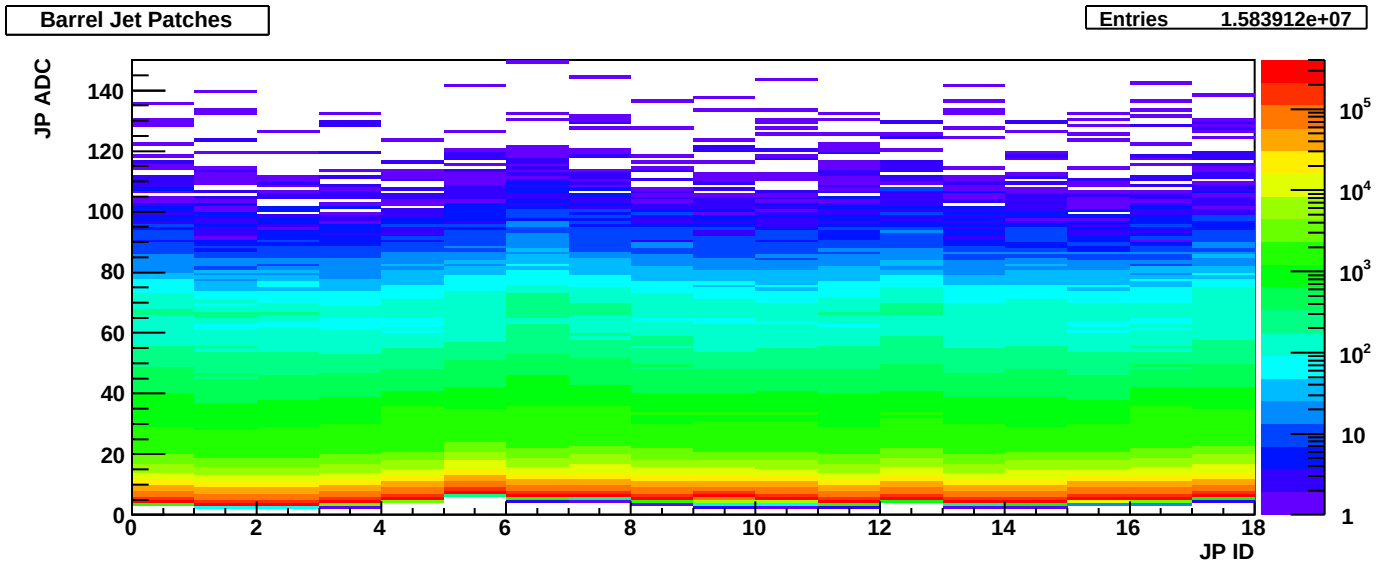

BunchId7Bit (all events)
Entries 879951

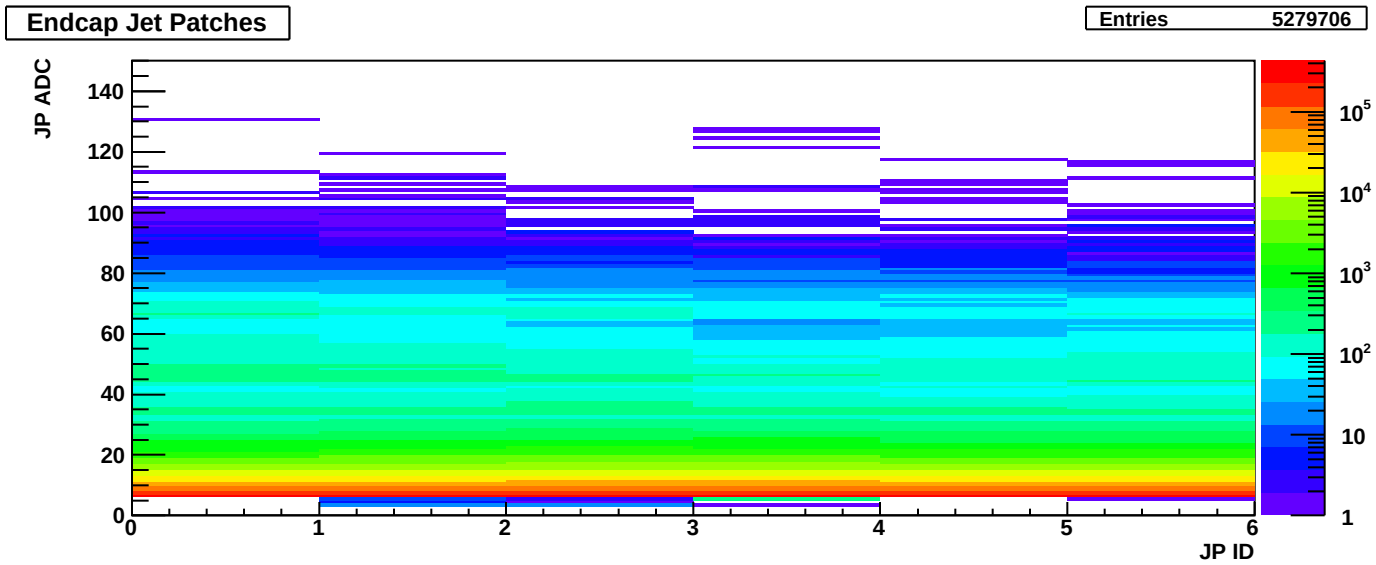

Barrel EMC L0 Input - High Tower
Entries 2.639853e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

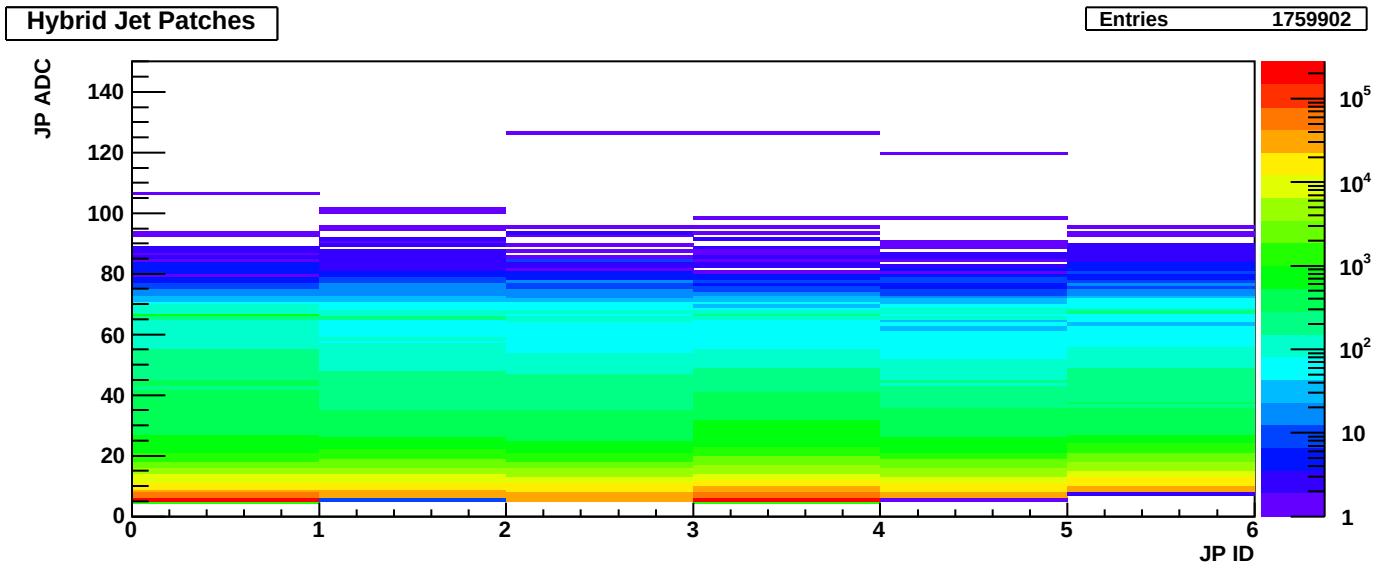

Barrel EMC L0 Input - Patch Sum
Entries 2.639853e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5


Endcap EMC L0 Input - High Tower
Entries 7.919559e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

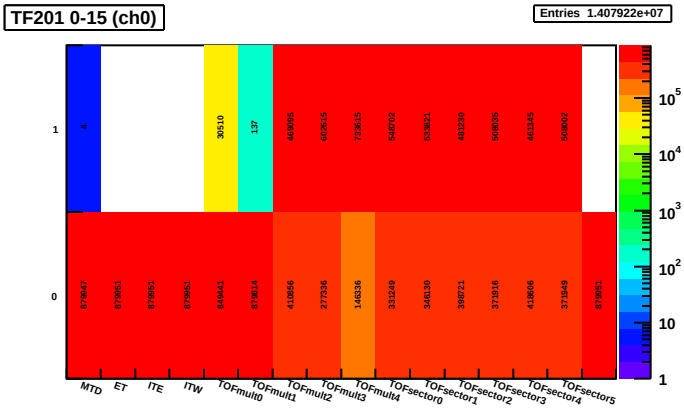

Endcap EMC L0 Input - Patch Sum
Entries 7.919559e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2


Barrel Jet Patches
Entries 1.583912e+07
JP ADC
JP ID

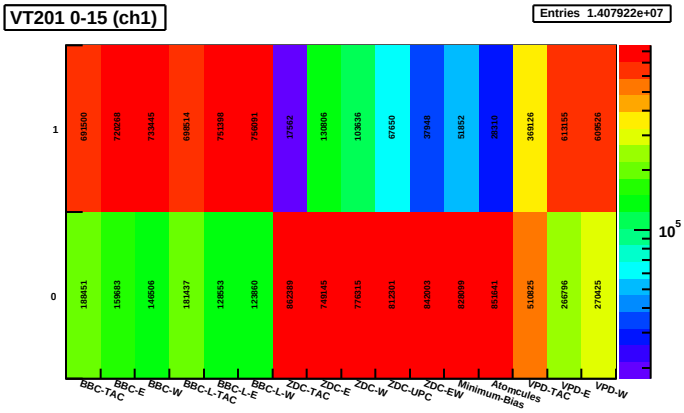

Endcap Jet Patches
Entries 5279706
JP ADC
JP ID


Hybrid Jet Patches
Entries 1759902
JP ADC
JP ID

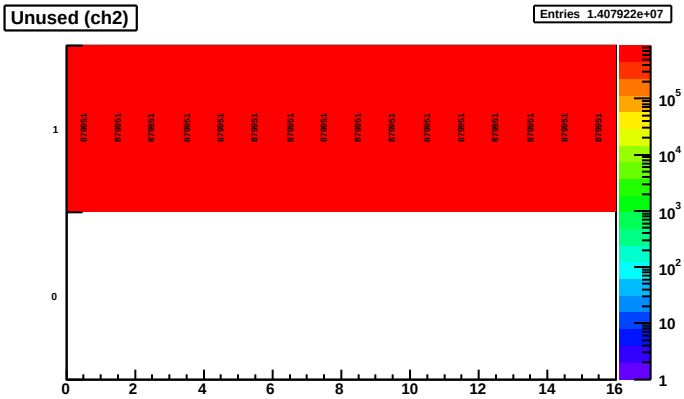
TF201 0-15 (ch0)



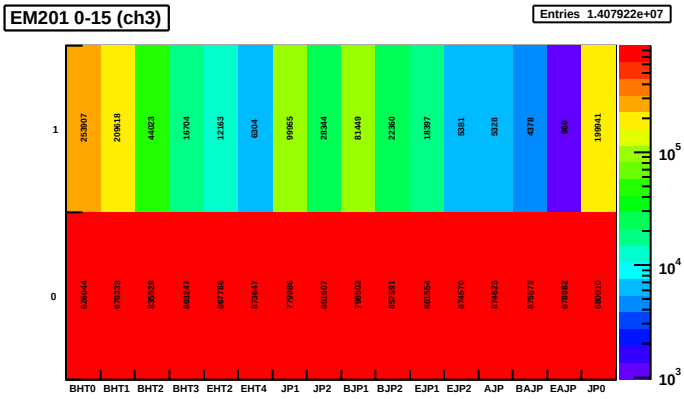
VT201 0-15 (ch1)



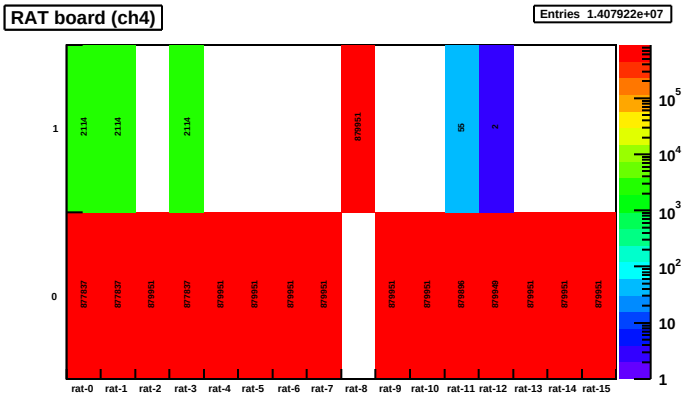
Unused (ch2)



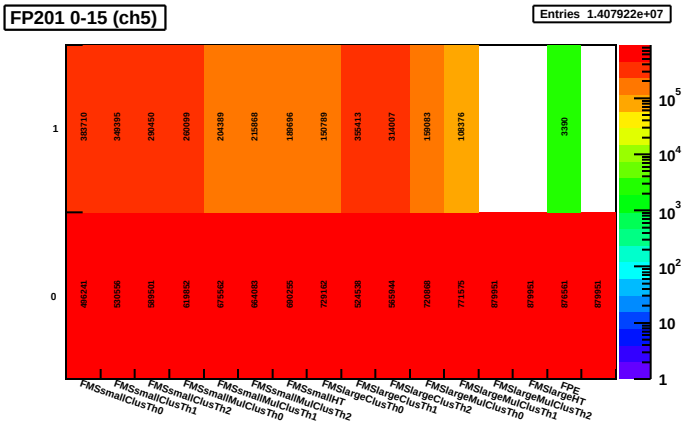
EM201 0-15 (ch3)



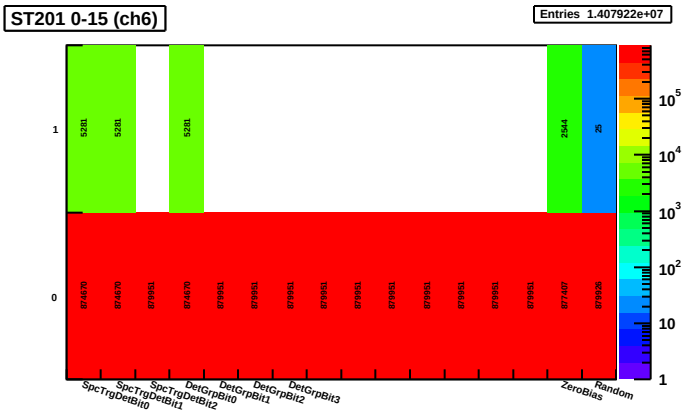
RAT board (ch4)



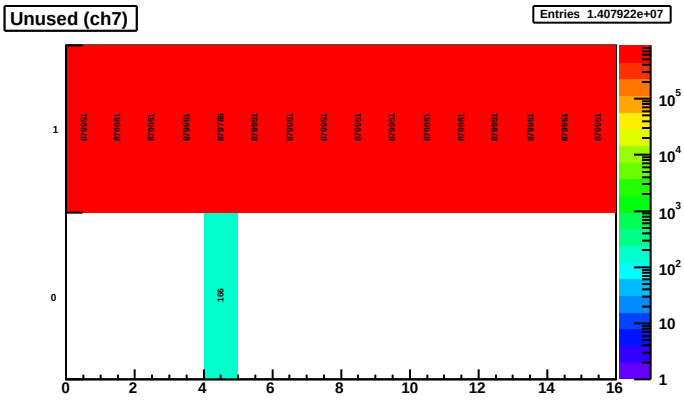
FP201 0-15 (ch5)

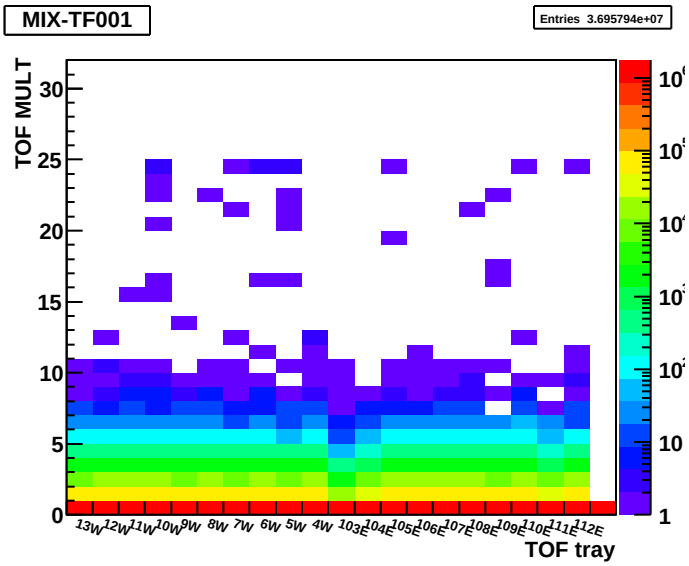


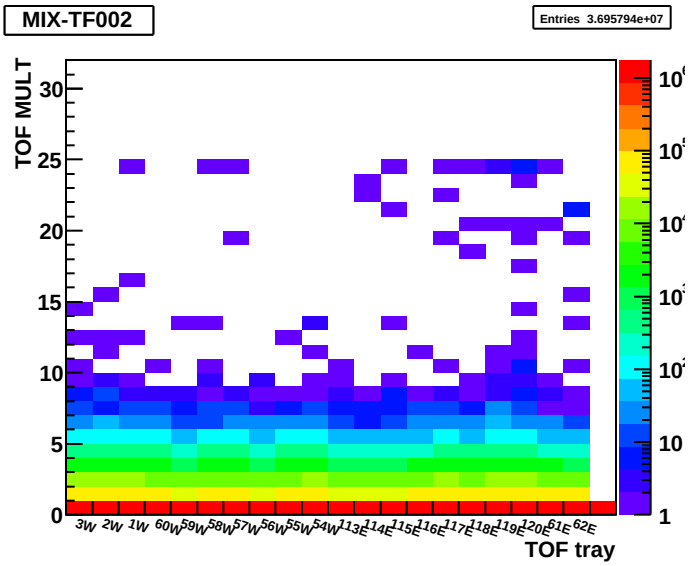
ST201 0-15 (ch6)

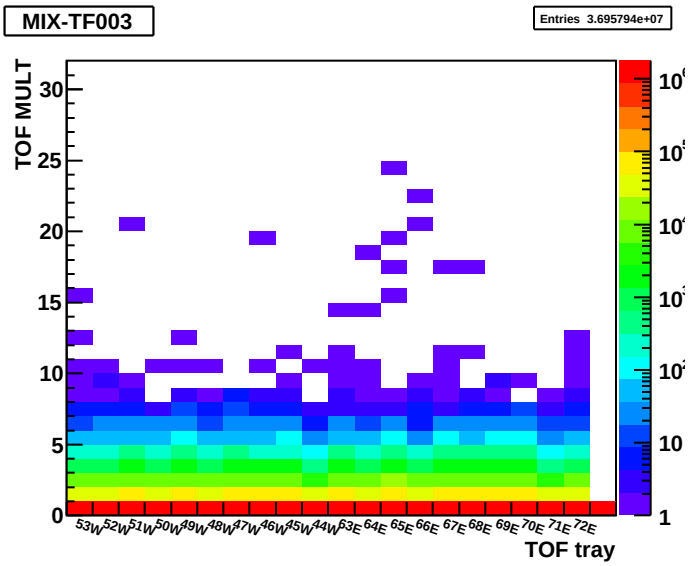


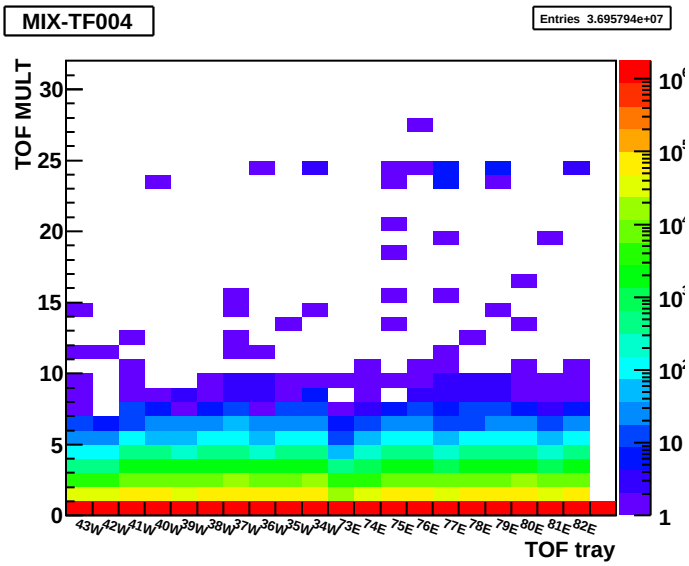
Unused (ch7)

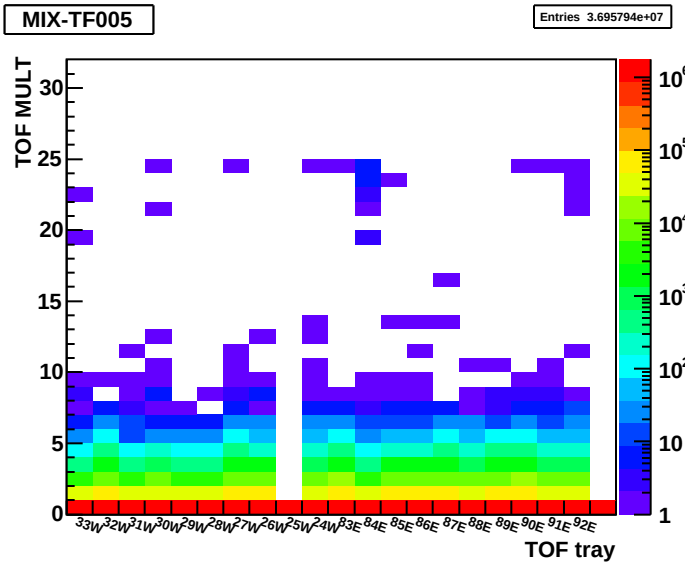


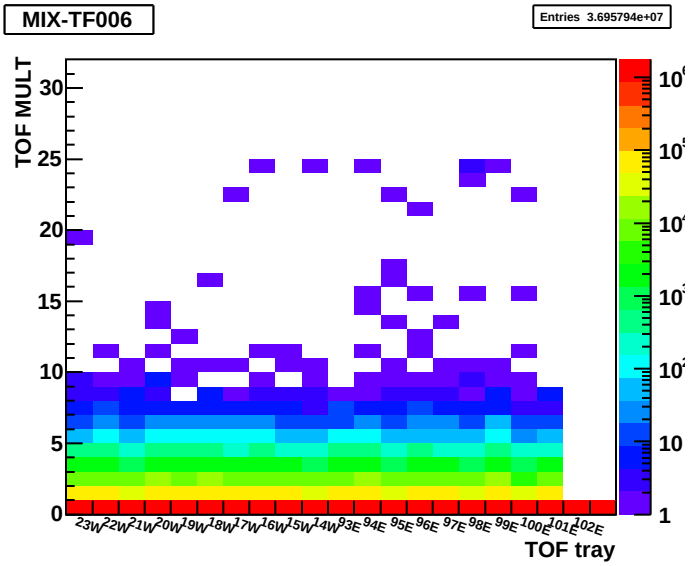

MIX-TF001
Entries 3.695794e+07
TOF MULT
TOF tray

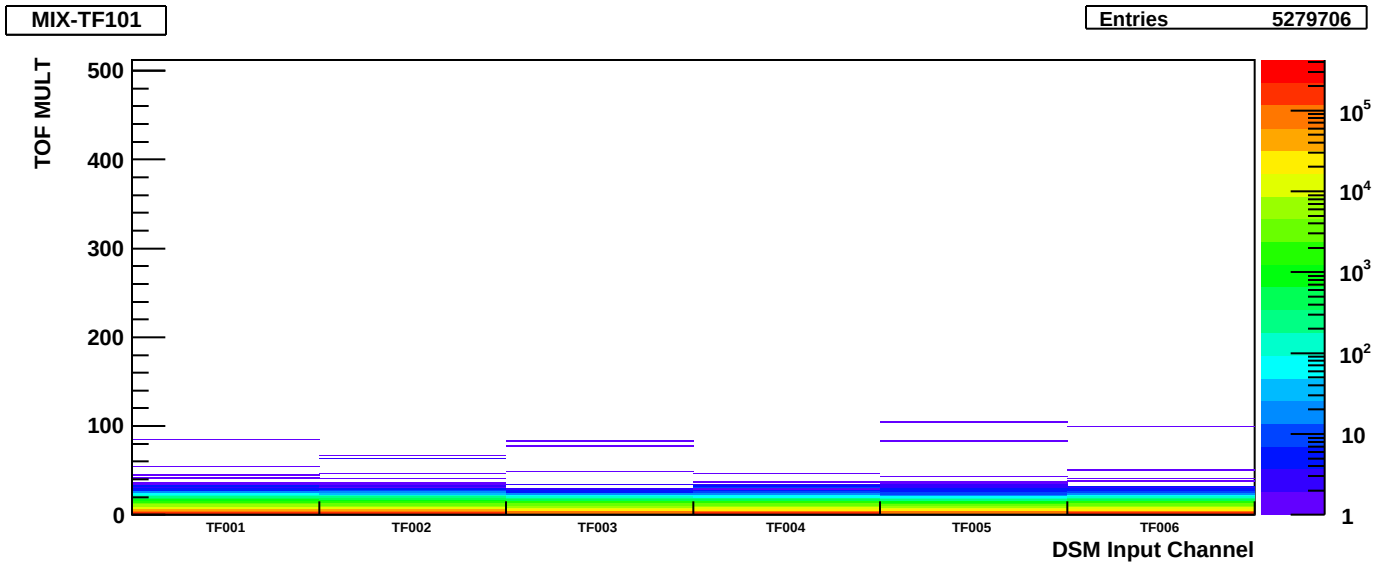

MIX-TF002
Entries 3.695794e+07
TOF MULT
TOF tray

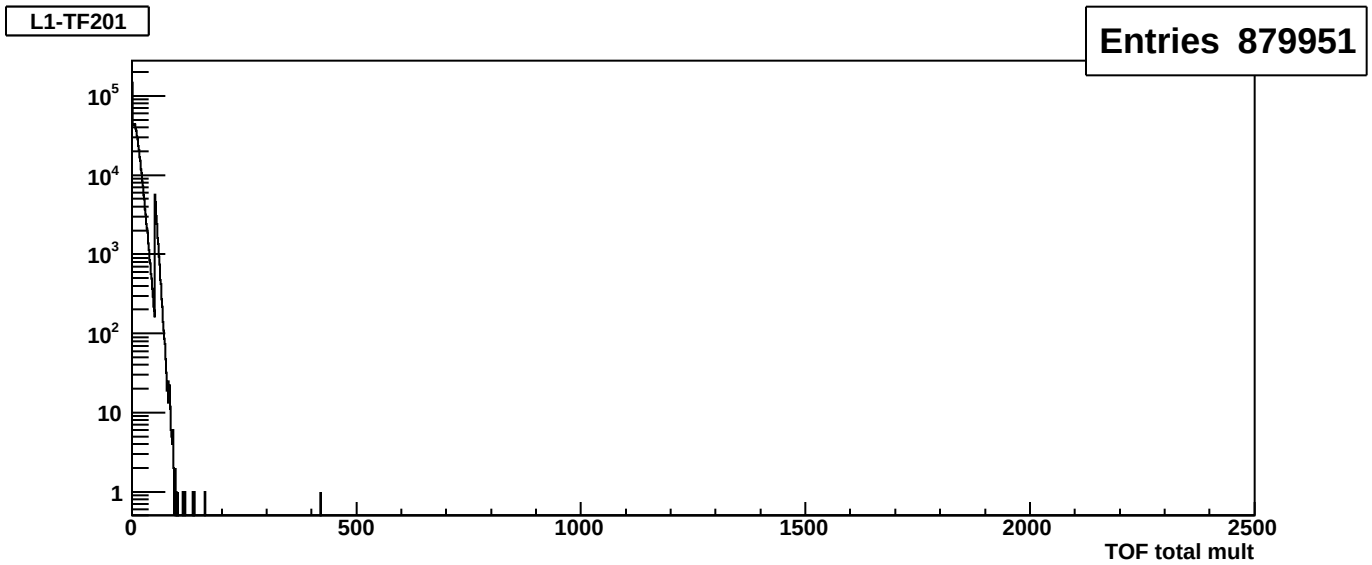

MIX-TF003
Entries 3.695794e+07
TOF MULT
TOF tray

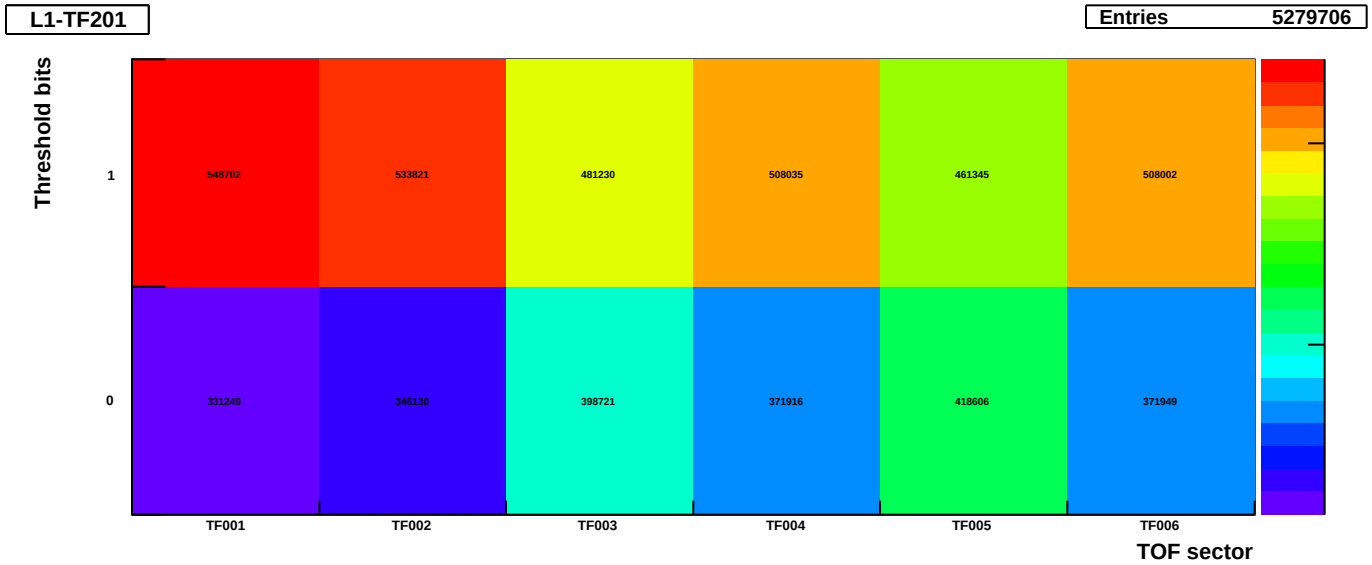

MIX-TF004
Entries 3.695794e+07
TOF MULT
TOF tray

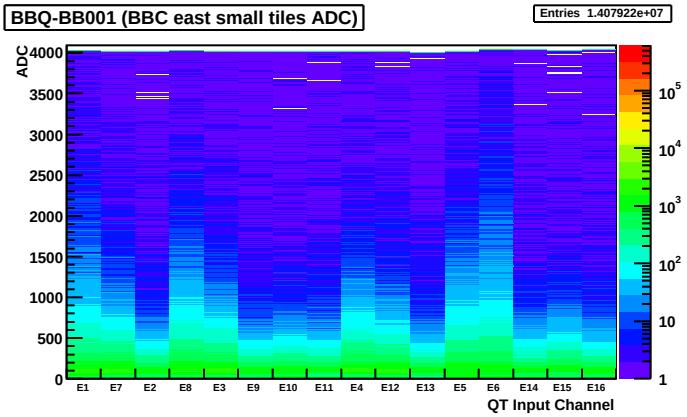

MIX-TF005
Entries 3.695794e+07
TOF MULT
TOF tray

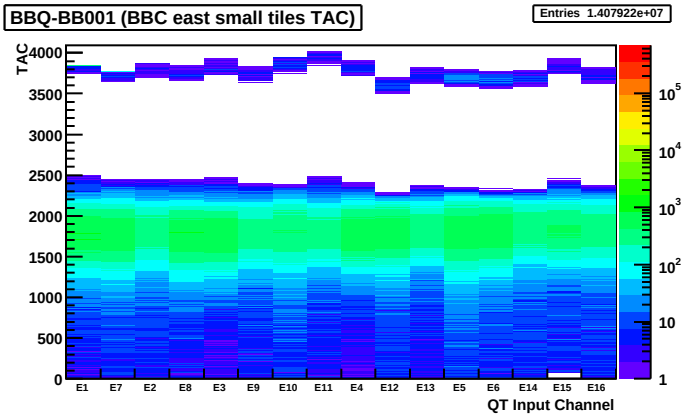

MIX-TF006
Entries 3.695794e+07
TOF MULT
TOF tray

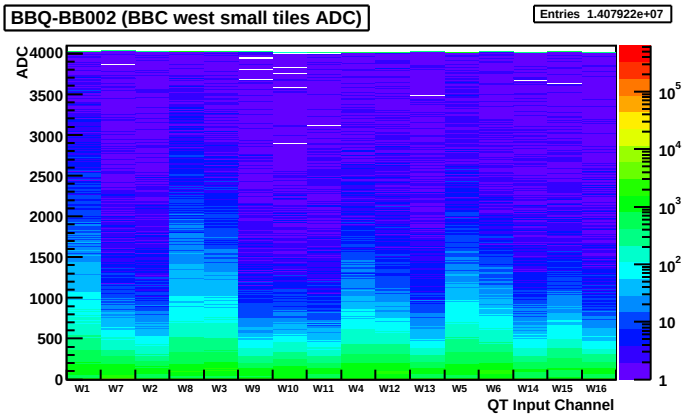

MIX-TF101
Entries 5279706
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

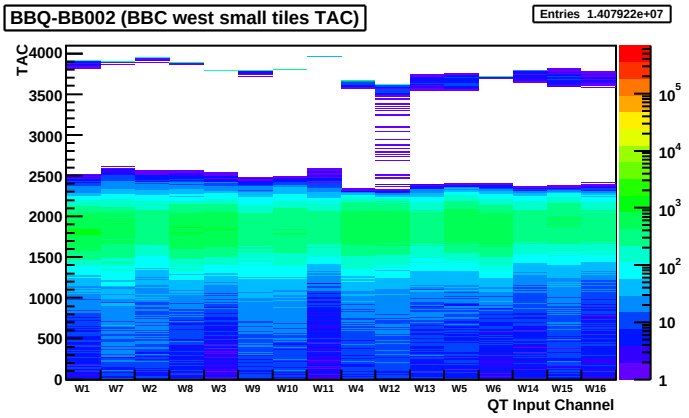

L1-TF201
Entries 879951
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

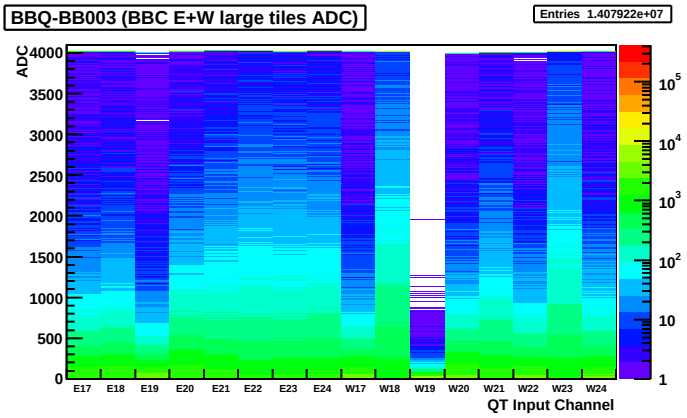

L1-TF201
Entries 5279706
Threshold bits
1
0
548702
533821
481230
508035
461345
508002
331249
346130
398721
371916
418606
371949
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

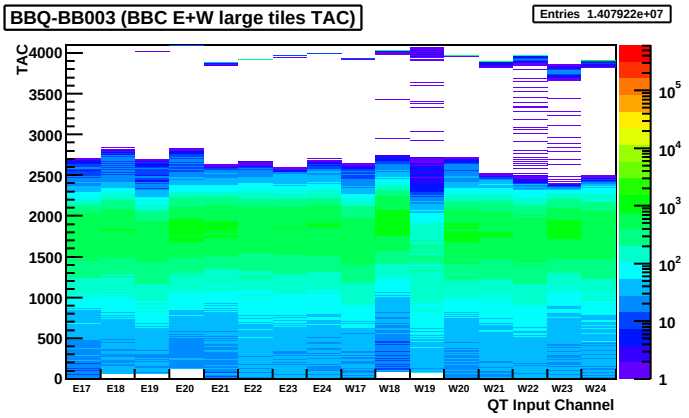

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.407922e+07
ADC
QT Input Channel

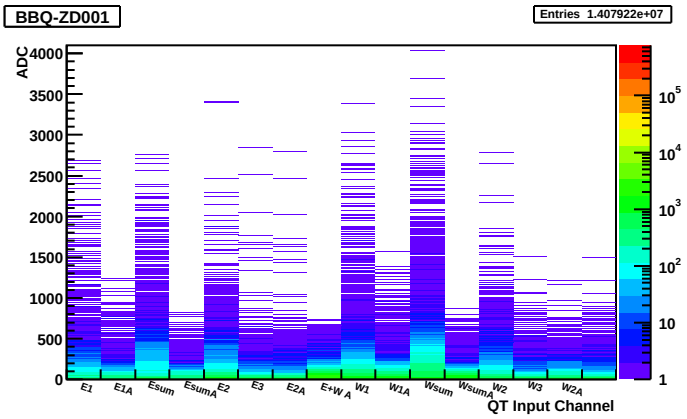

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.407922e+07
TAC
QT Input Channel

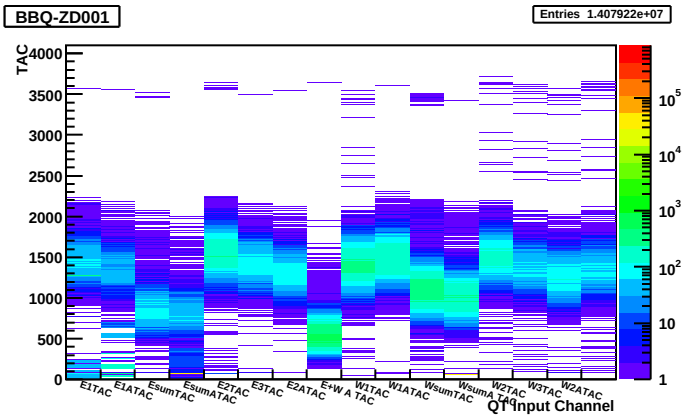

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.407922e+07
ADC
QT Input Channel

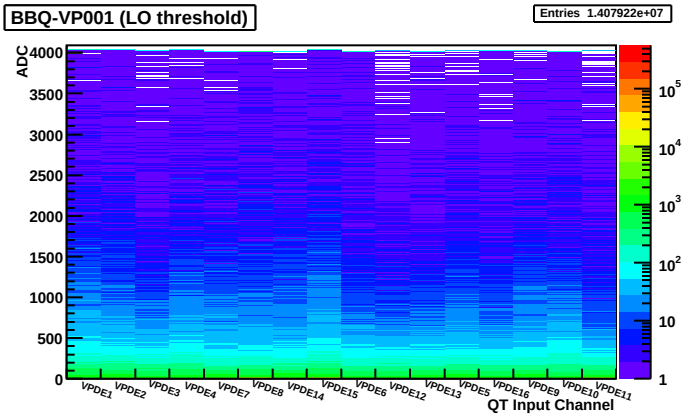

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.407922e+07
TAC
QT Input Channel

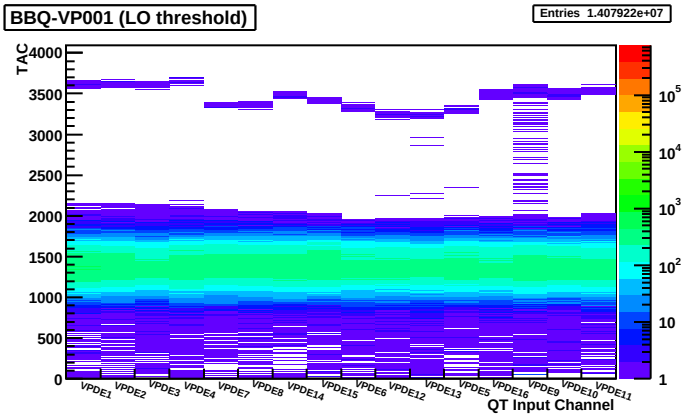

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.407922e+07
ADC
QT Input Channel

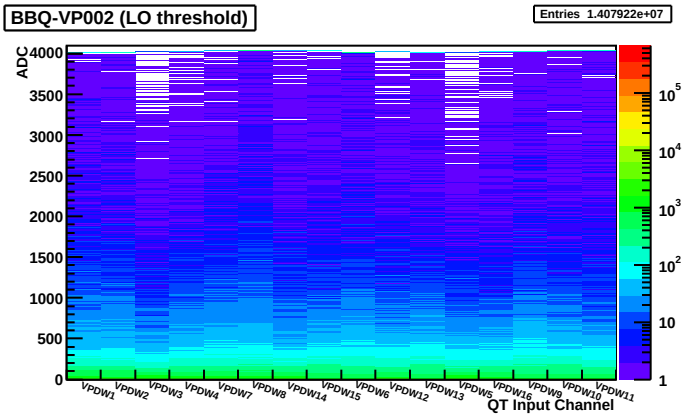

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.407922e+07
TAC
QT Input Channel

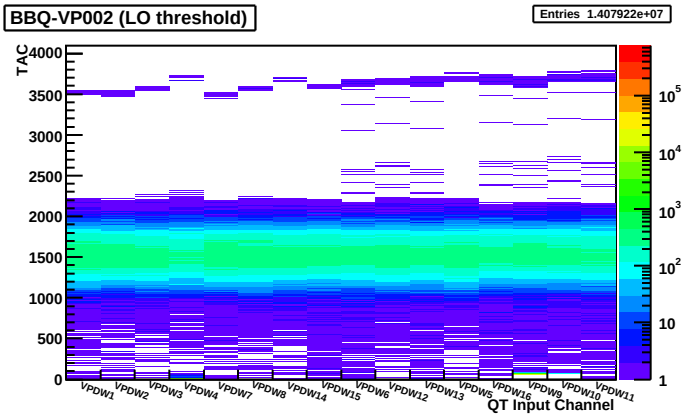

BBQ-ZD001
Entries 1.407922e+07
ADC
QT Input Channel

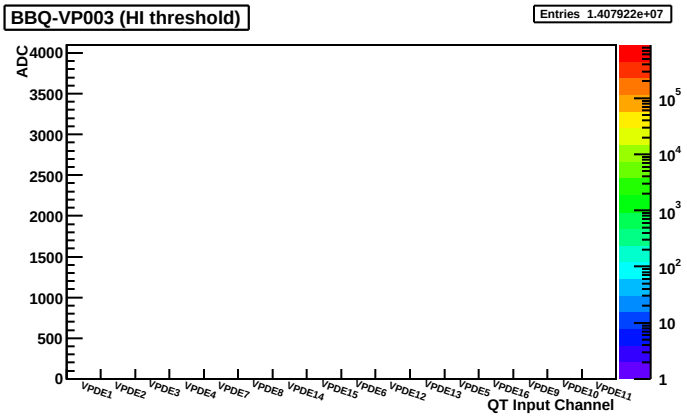

BBQ-ZD001
Entries 1.407922e+07
TAC
QT Input Channel

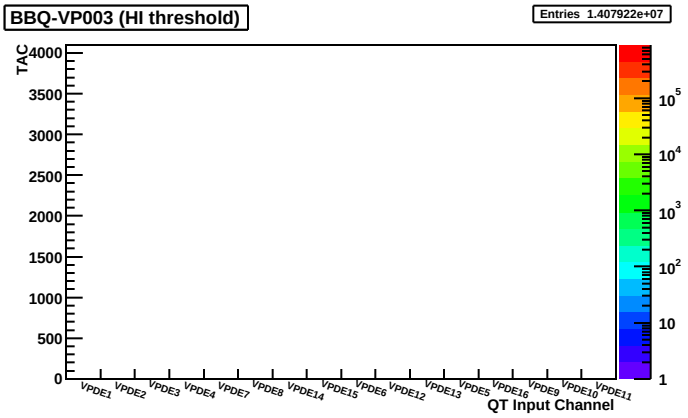

BBQ-VP001 (LO threshold)
Entries 1.407922e+07
ADC
QT Input Channel

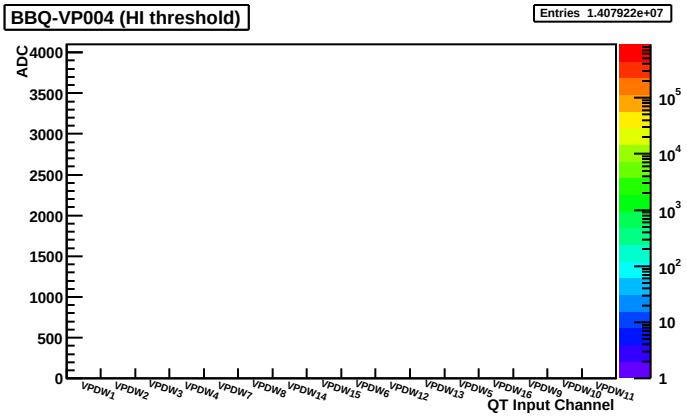

BBQ-VP001 (LO threshold)
Entries 1.407922e+07
TAC
QT Input Channel

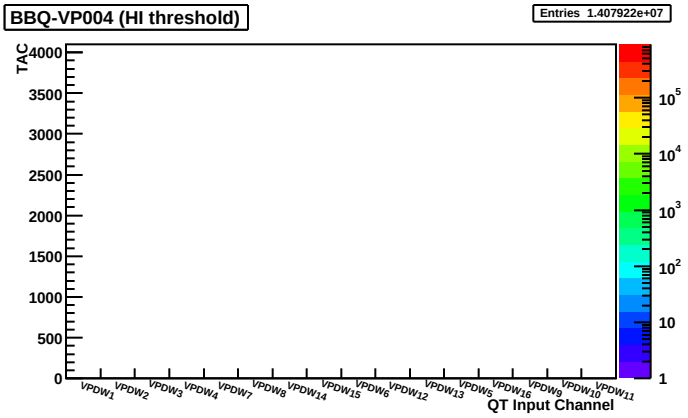

BBQ-VP002 (LO threshold)
Entries 1.407922e+07
ADC
QT Input Channel

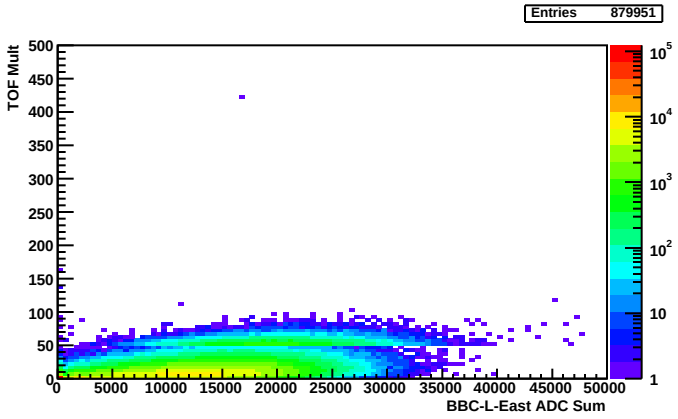

BBQ-VP002 (LO threshold)
Entries 1.407922e+07
TAC
QT Input Channel

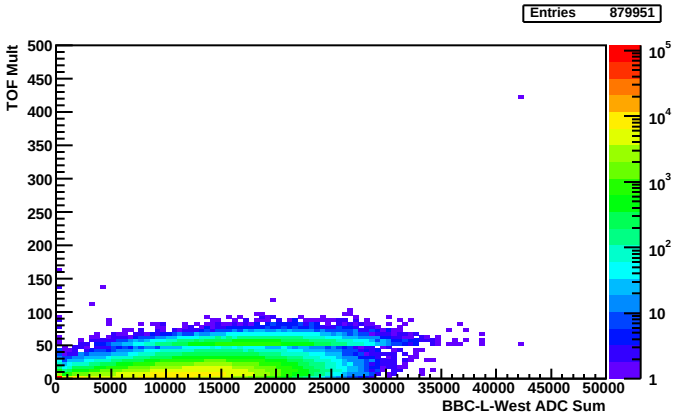

BBQ-VP003 (HI threshold)
Entries 1.407922e+07
ADC
QT Input Channel

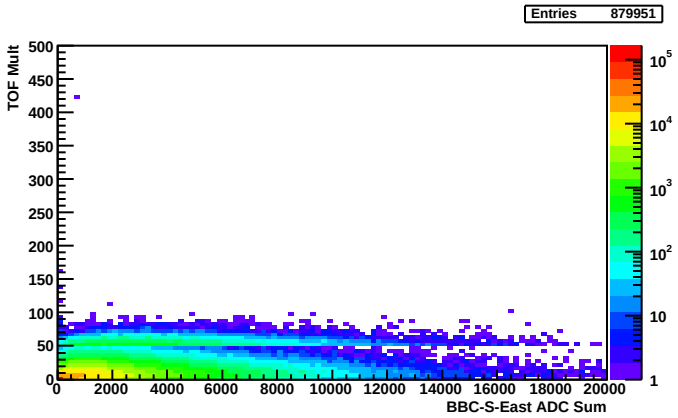

BBQ-VP003 (HI threshold)
Entries 1.407922e+07
TAC
QT Input Channel

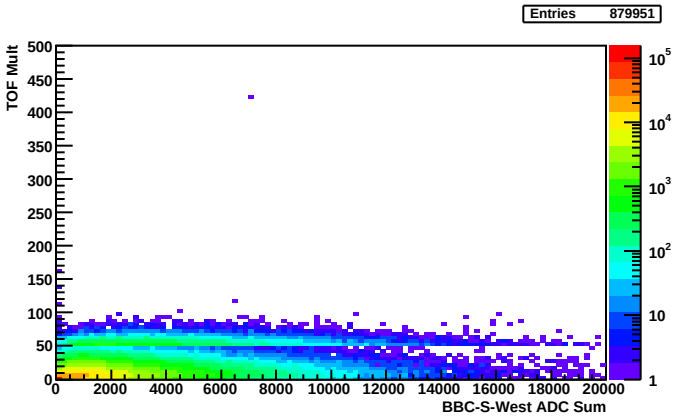

BBQ-VP004 (HI threshold)
Entries 1.407922e+07
ADC
QT Input Channel

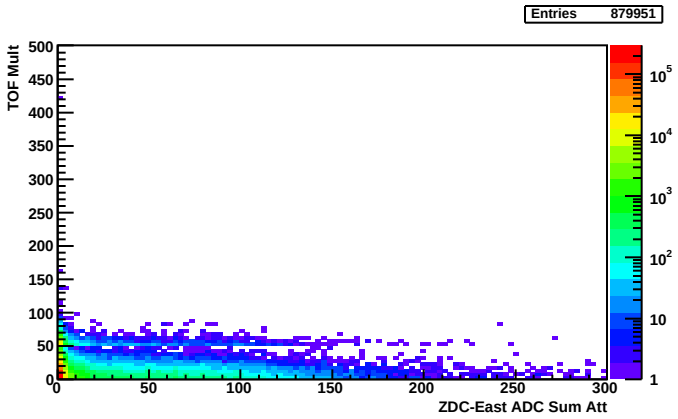

BBQ-VP004 (HI threshold)
Entries 1.407922e+07
TAC
QT Input Channel

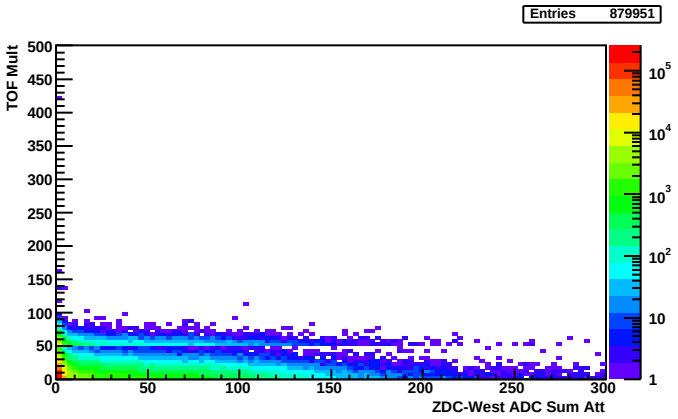

Entries 879951
TOF Mult
BBC-L-East ADC Sum

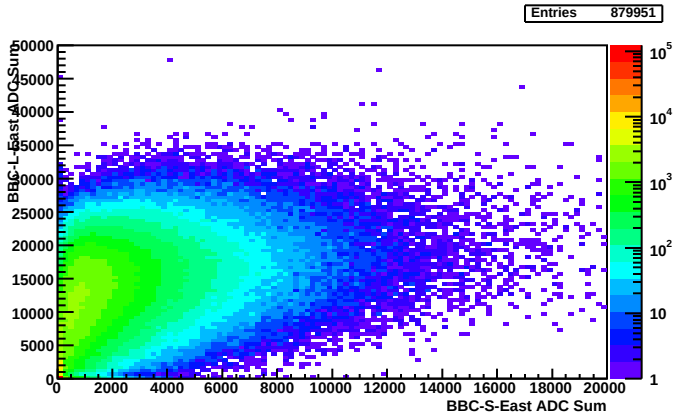

Entries 879951
TOF Mult
BBC-L-West ADC Sum

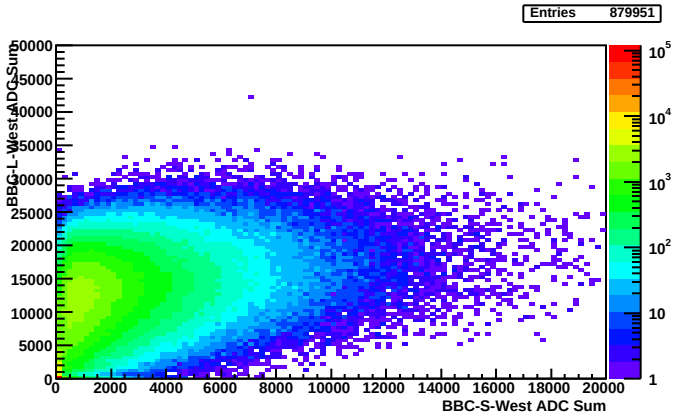

Entries 879951
TOF Mult
BBC-S-East ADC Sum

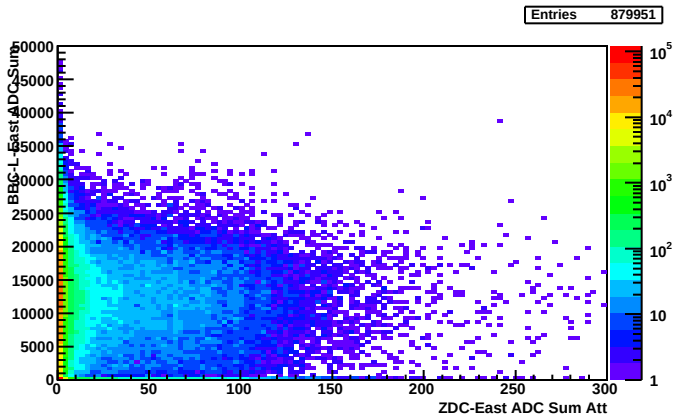

Entries 879951
TOF Mult
BBC-S-West ADC Sum

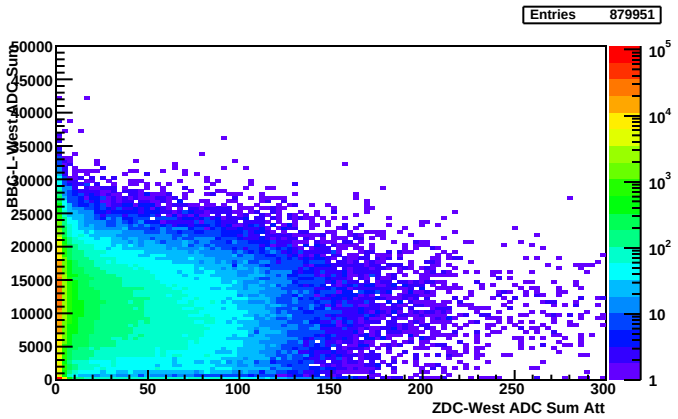

Entries 879951
TOF Mult
ZDC-East ADC Sum Att

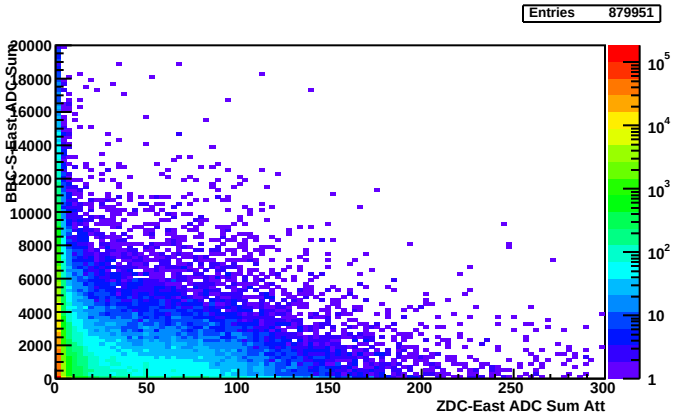

Entries 879951
TOF Mult
ZDC-West ADC Sum Att

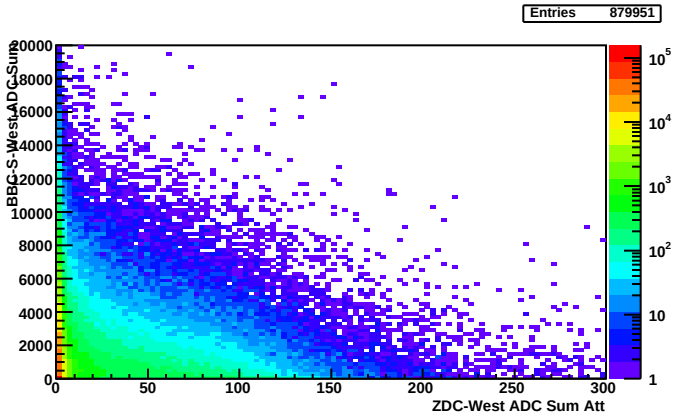

Entries 879951
BBC-L-East ADC Sum
BBC-S-East ADC Sum

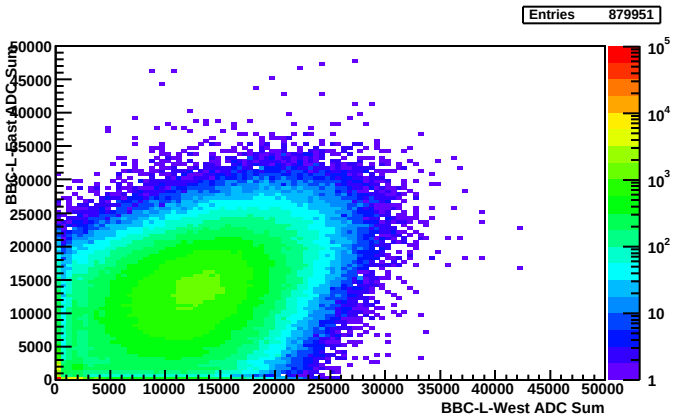

Entries 879951
BBC-L-West ADC Sum
BBC-S-West ADC Sum

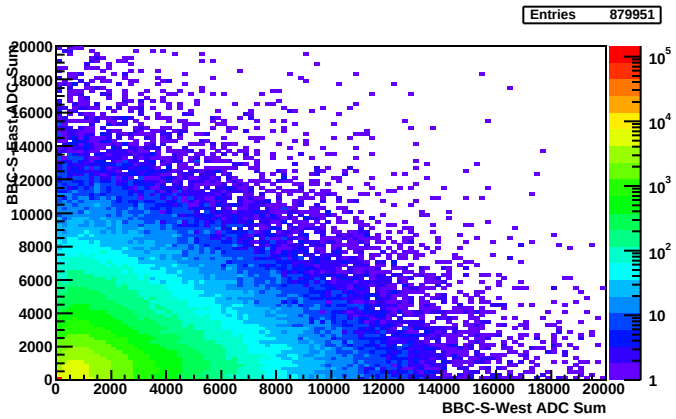

Entries 879951
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

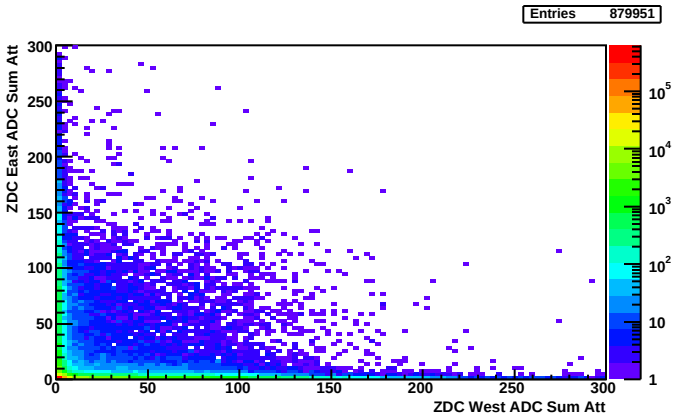

Entries 879951
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

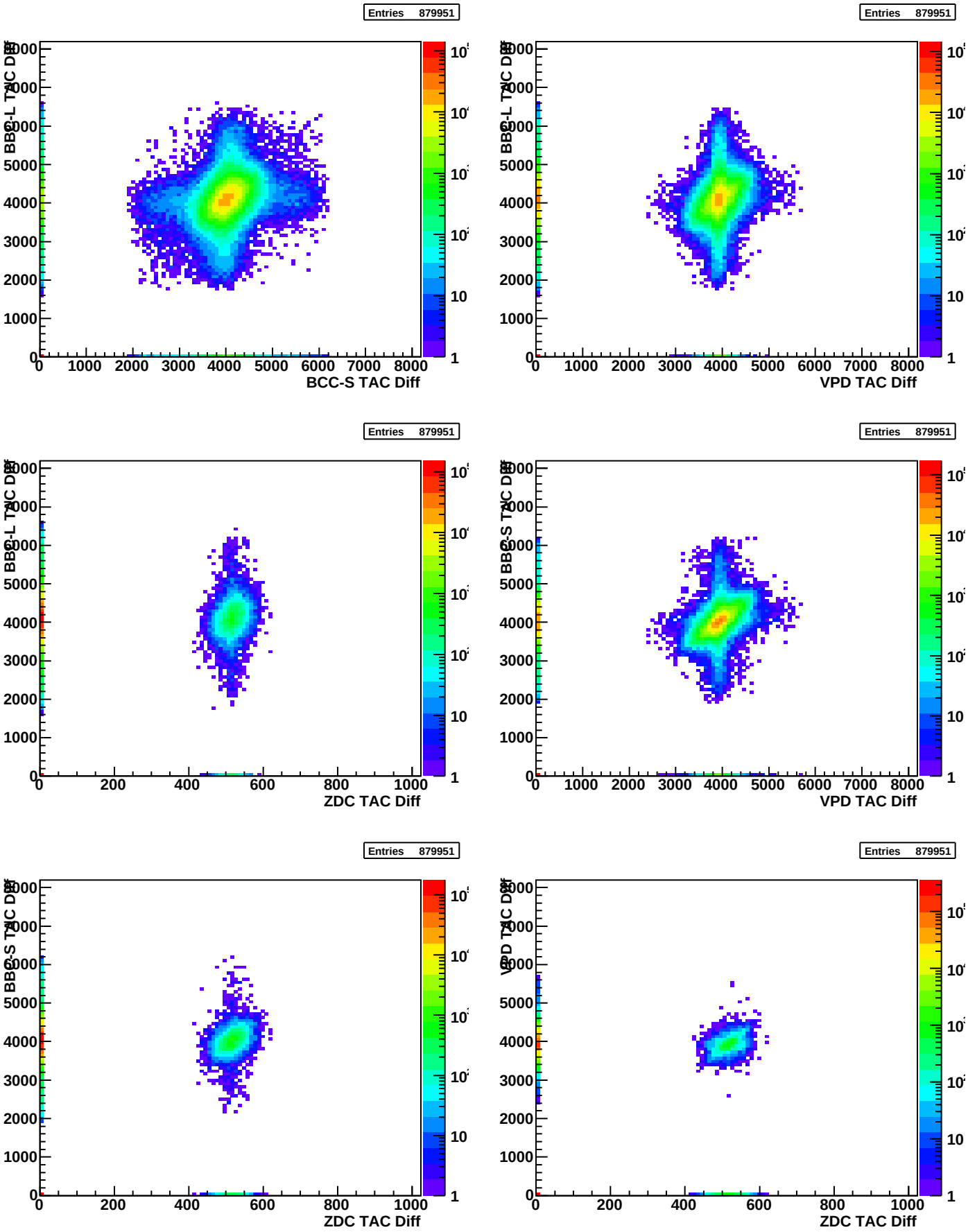

Entries 879951
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

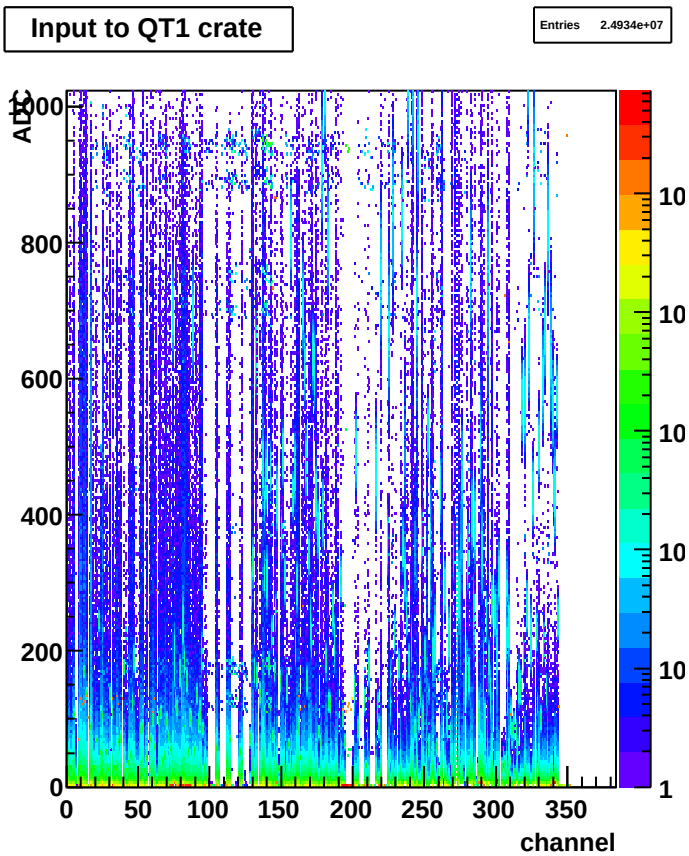

Entries 879951
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

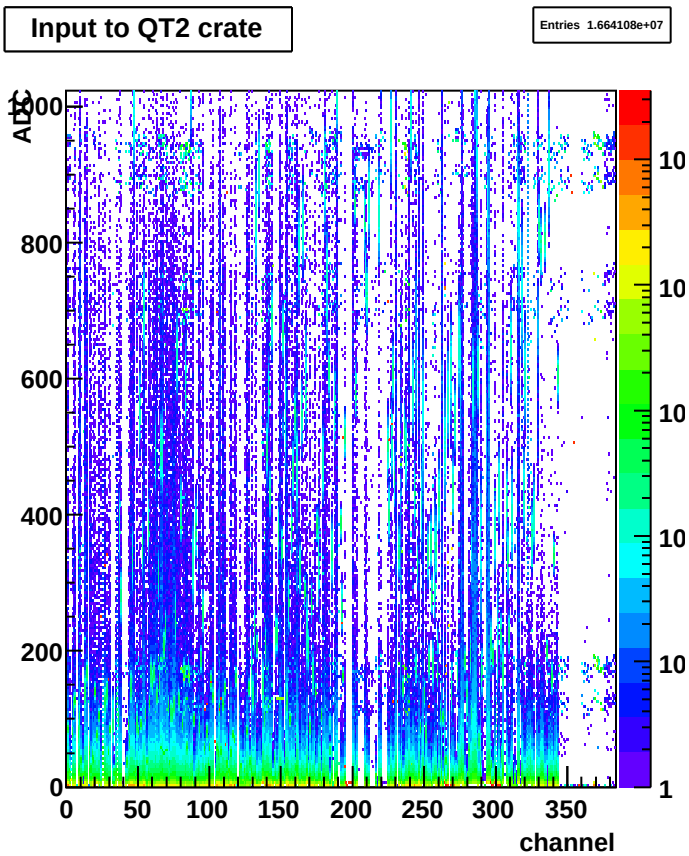

Entries 879951
BBC-L-East ADC Sum
BBC-L-West ADC Sum

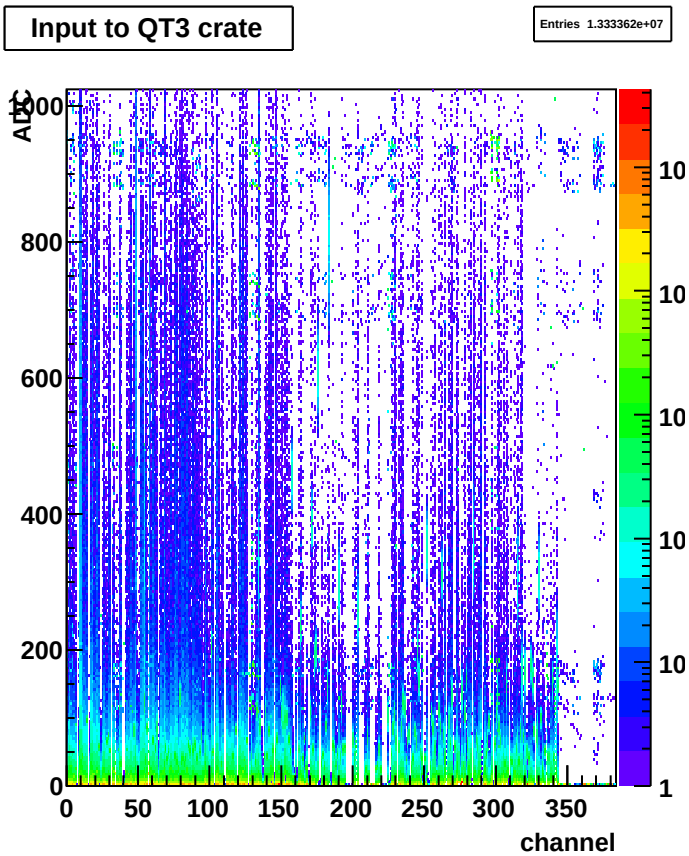

Entries 879951
BBC-S-East ADC Sum
BBC-S-West ADC Sum

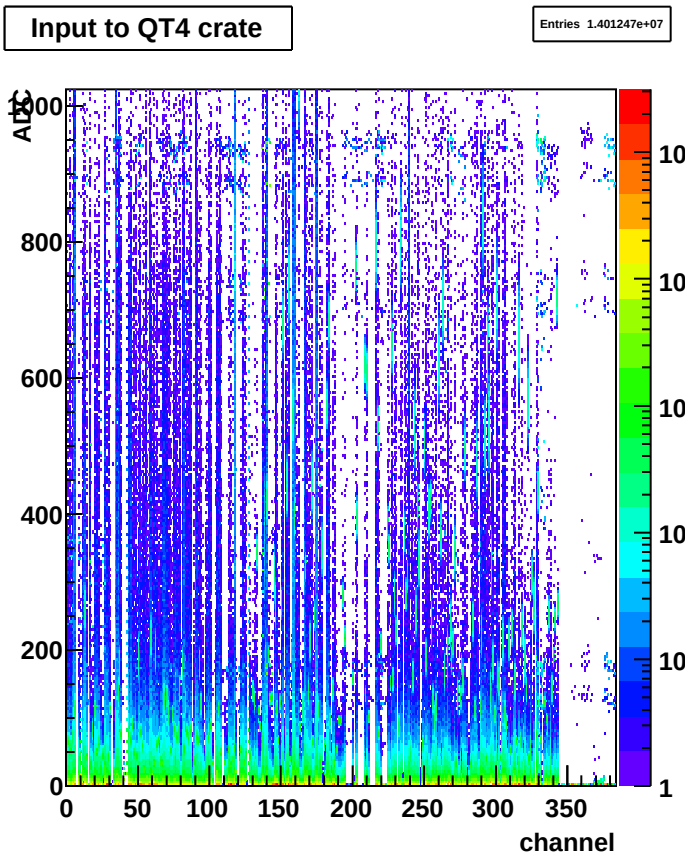

Entries 879951
ZDC East ADC Sum Att
ZDC West ADC Sum Att

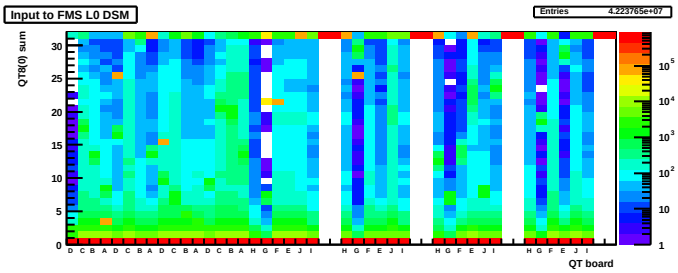

Entries 879951
BBC-L TAC Diff
BCC-S TAC Diff
Entries 879951
BBC-L TAC Diff
VPD TAC Diff
Entries 879951
BBC-L TAC Diff
ZDC TAC Diff
Entries 879951
BBC-S TAC Diff
VPD TAC Diff
Entries 879951
BBC-S TAC Diff
ZDC TAC Diff
Entries 879951
VPD TAC Diff
ZDC TAC Diff

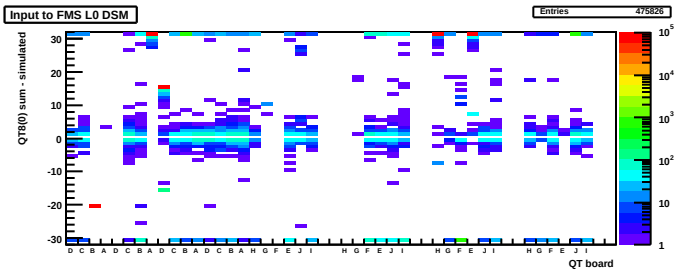

Input to QT1 crate
Entries 2.4934e+07
ADC
channel

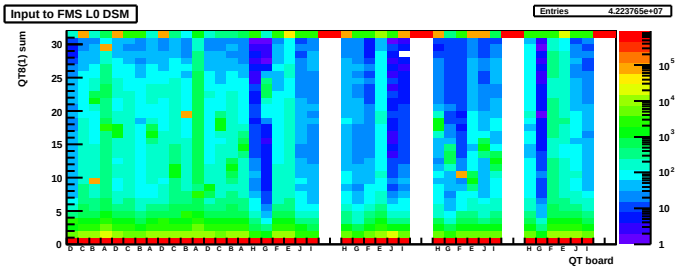

Input to QT2 crate
Entries 1.664108e+07
ADC
channel

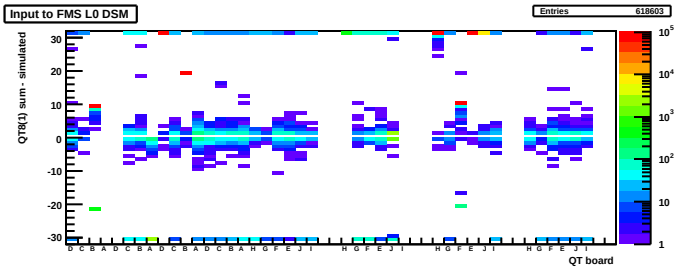

Input to QT3 crate
Entries 1.333362e+07
ADC
channel

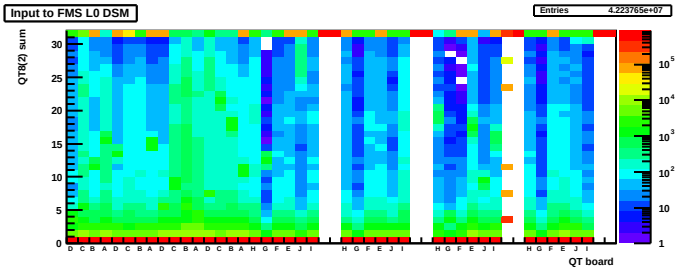

Input to QT4 crate
Entries 1.401247e+07
ADC
channel

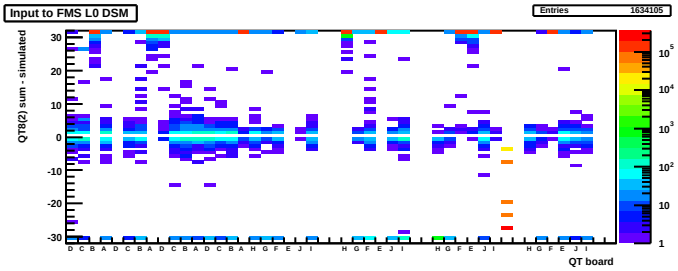

Input to FMS L0 DSM
Entries 4.223765e+07
QT8(0) sum
QT board

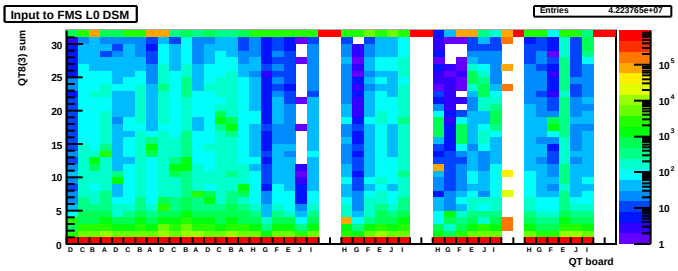

Input to FMS L0 DSM
Entries 475826
QT8(0) sum - simulated
QT board

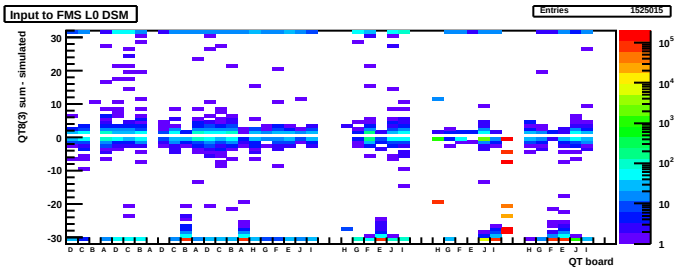

Input to FMS L0 DSM
Entries 4.223765e+07
QT8(1) sum
QT board

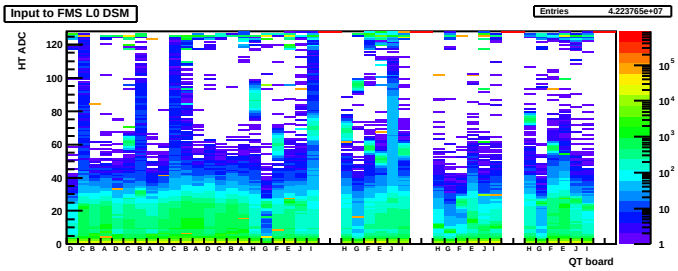

Input to FMS L0 DSM
Entries 618603
QT8(1) sum - simulated
QT board

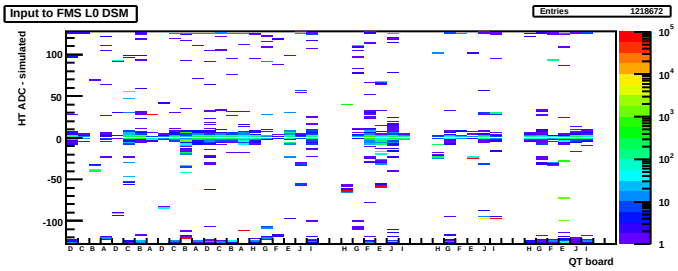

Input to FMS L0 DSM
Entries 4.223765e+07
QT8(2) sum
QT board

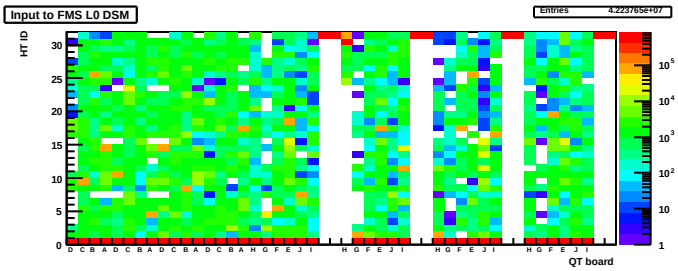

Input to FMS L0 DSM
Entries 1634105
QT8(2) sum - simulated
QT board

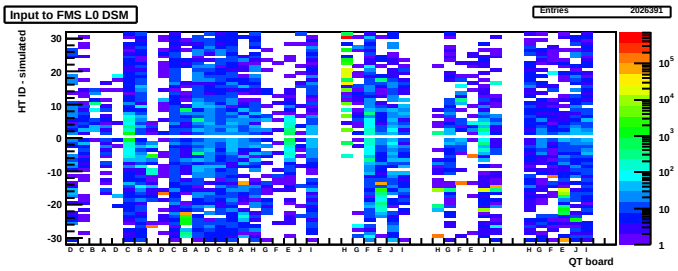

Input to FMS L0 DSM
Entries 4.223765e+07
QT8(3) sum
QT board

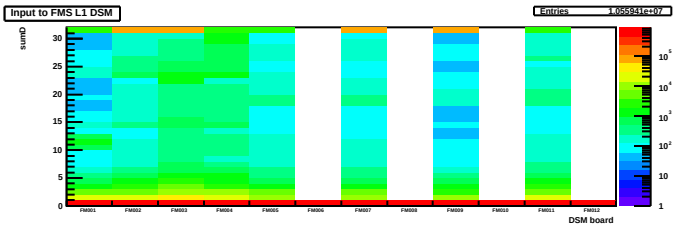

Input to FMS L0 DSM
Entries 1525015
QT8(3) sum - simulated
QT board

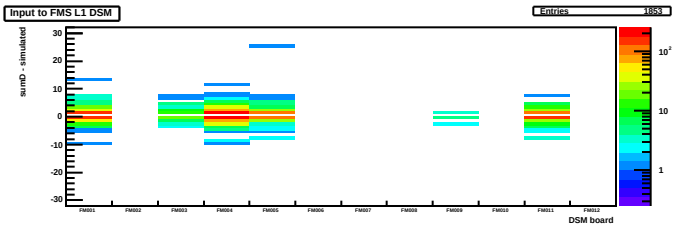

Input to FMS L0 DSM
Entries 4.223765e+07
HT ADC
QT board

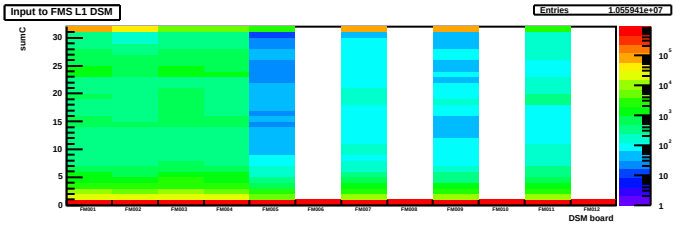

Input to FMS L0 DSM
Entries 1218672
HT ADC - simulated
QT board

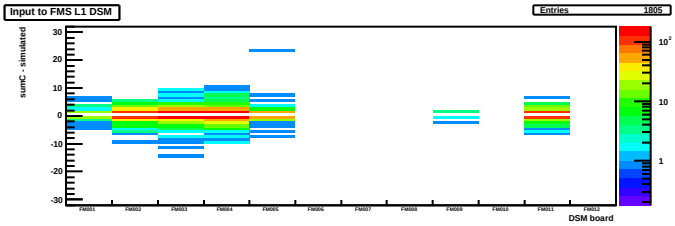

Input to FMS L0 DSM
Entries 4.223765e+07
HT ID
QT board

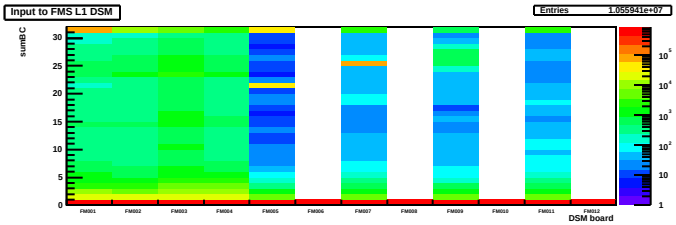

Input to FMS L0 DSM
Entries 2026391
HT ID - simulated
QT board

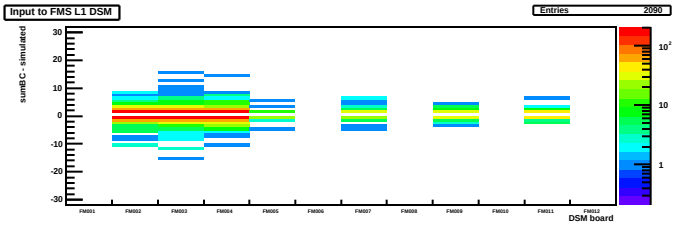

Input to FMS L1 DSM
Entries 1.055941e+07
sumD
DSM board

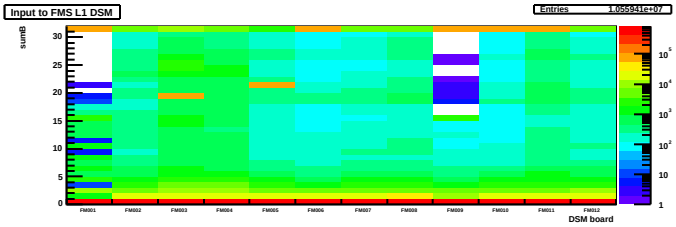

Input to FMS L1 DSM
Entries 1853
sumD - simulated
DSM board

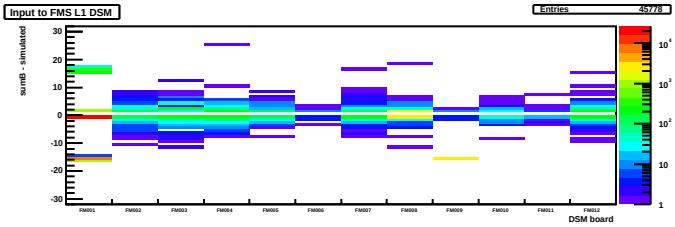

Input to FMS L1 DSM
Entries 1.055941e+07
sumC
DSM board

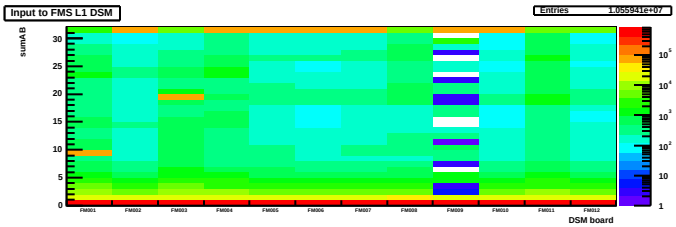

Input to FMS L1 DSM
Entries 1805
sumC - simulated
DSM board

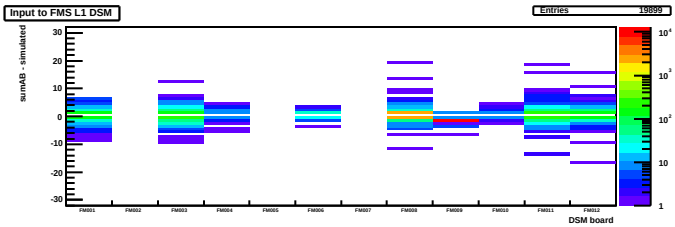

Input to FMS L1 DSM
Entries 1.055941e+07
sumBC
DSM board

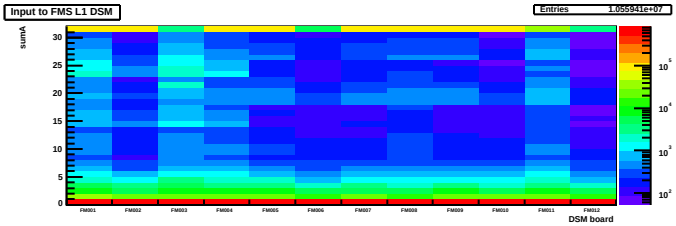

Input to FMS L1 DSM
Entries 2090
sumBC - simulated
DSM board

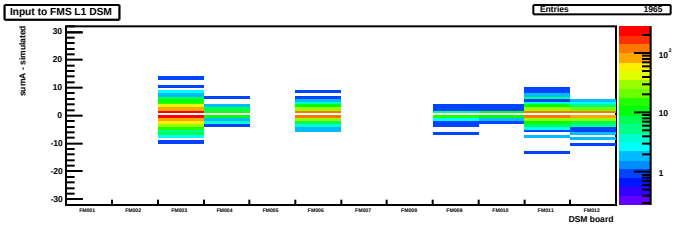

Input to FMS L1 DSM
Entries 1.055941e+07
sumB
DSM board

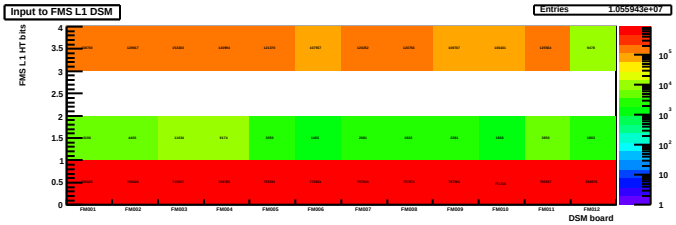

Input to FMS L1 DSM
Entries 45778
sumB - simulated
DSM board

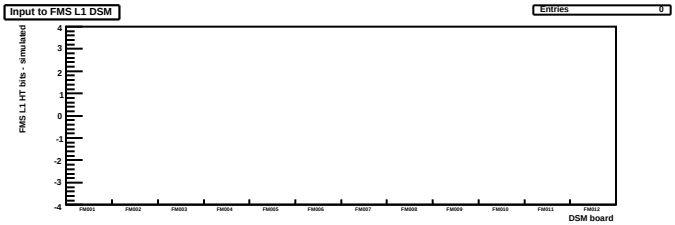

Input to FMS L1 DSM
Entries 1.055941e+07
sumAB
DSM board

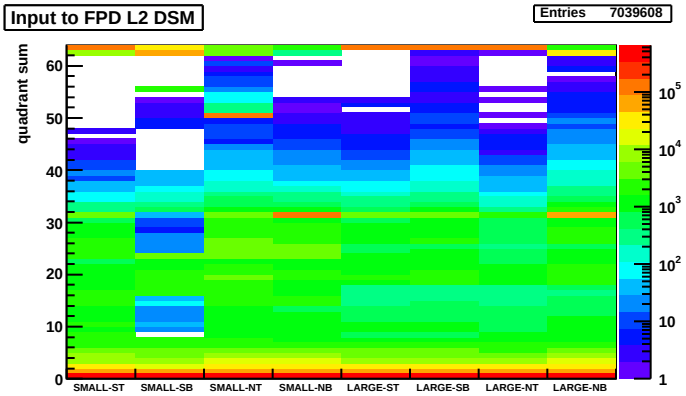

Input to FMS L1 DSM
Entries 19899
sumAB - simulated
DSM board

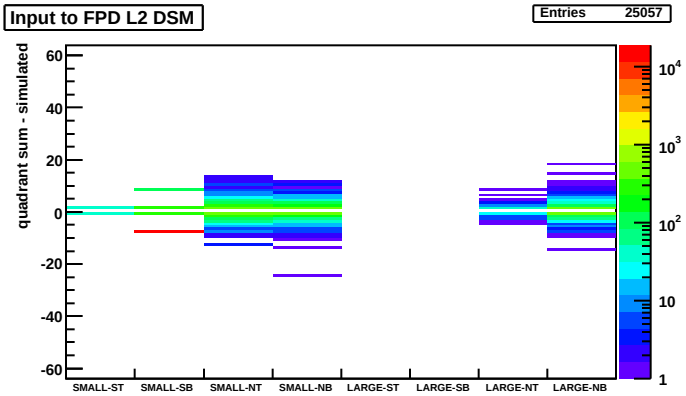

Input to FMS L1 DSM
Entries 1.055941e+07
sumA
DSM board

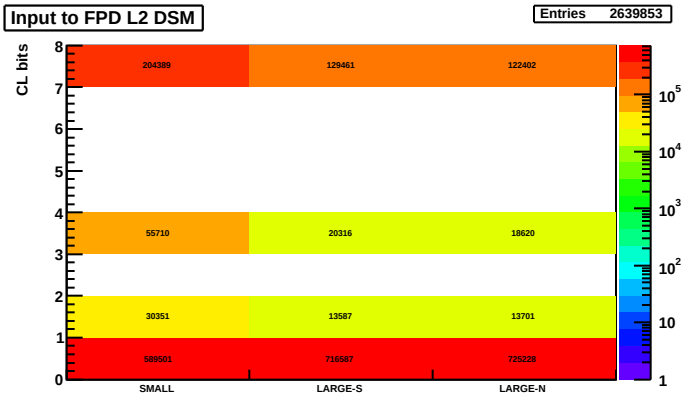

Input to FMS L1 DSM
Entries 1965
sumA - simulated
DSM board

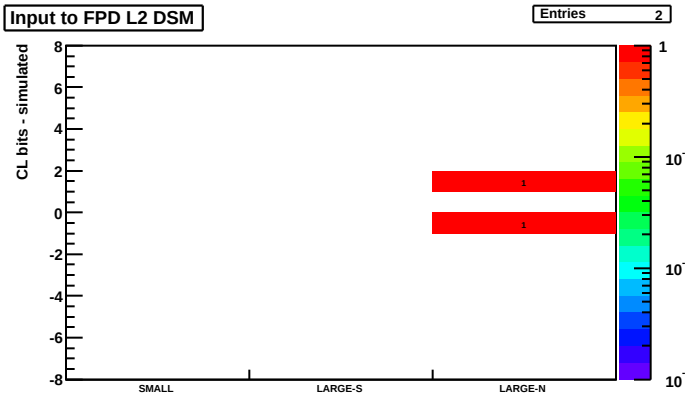

Input to FMS L1 DSM
Entries 1.055943e+07
FMS L1 HT bits
DSM board

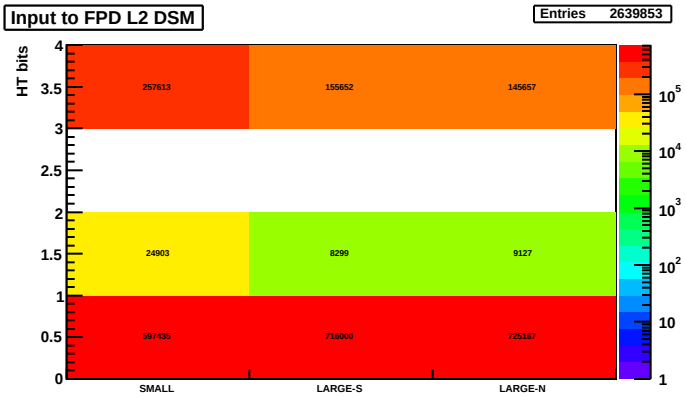

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

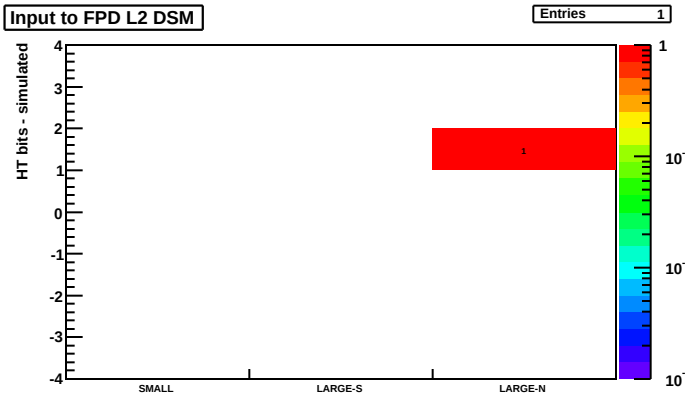

Input to FPD L2 DSM
Entries 7039608
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

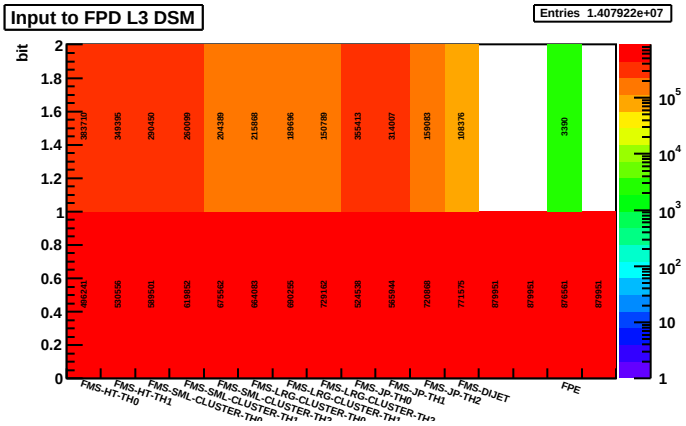

Input to FPD L2 DSM
Entries 25057
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

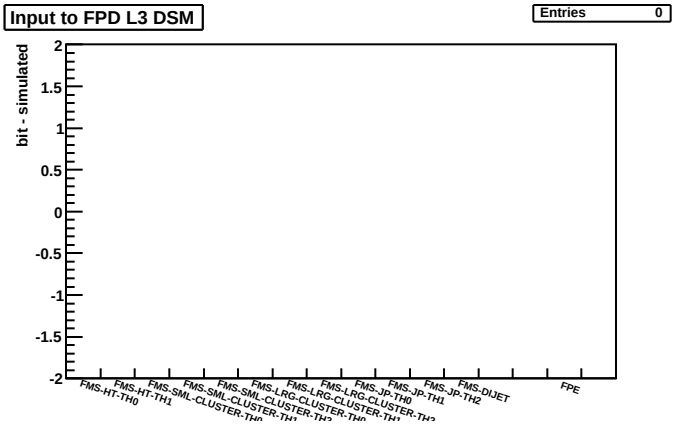

Input to FPD L2 DSM
Entries 2639853
CL bits
204389
129461
122402
55710
20316
18620
30351
13587
13701
589501
716587
725228
SMALL
LARGE-S
LARGE-N

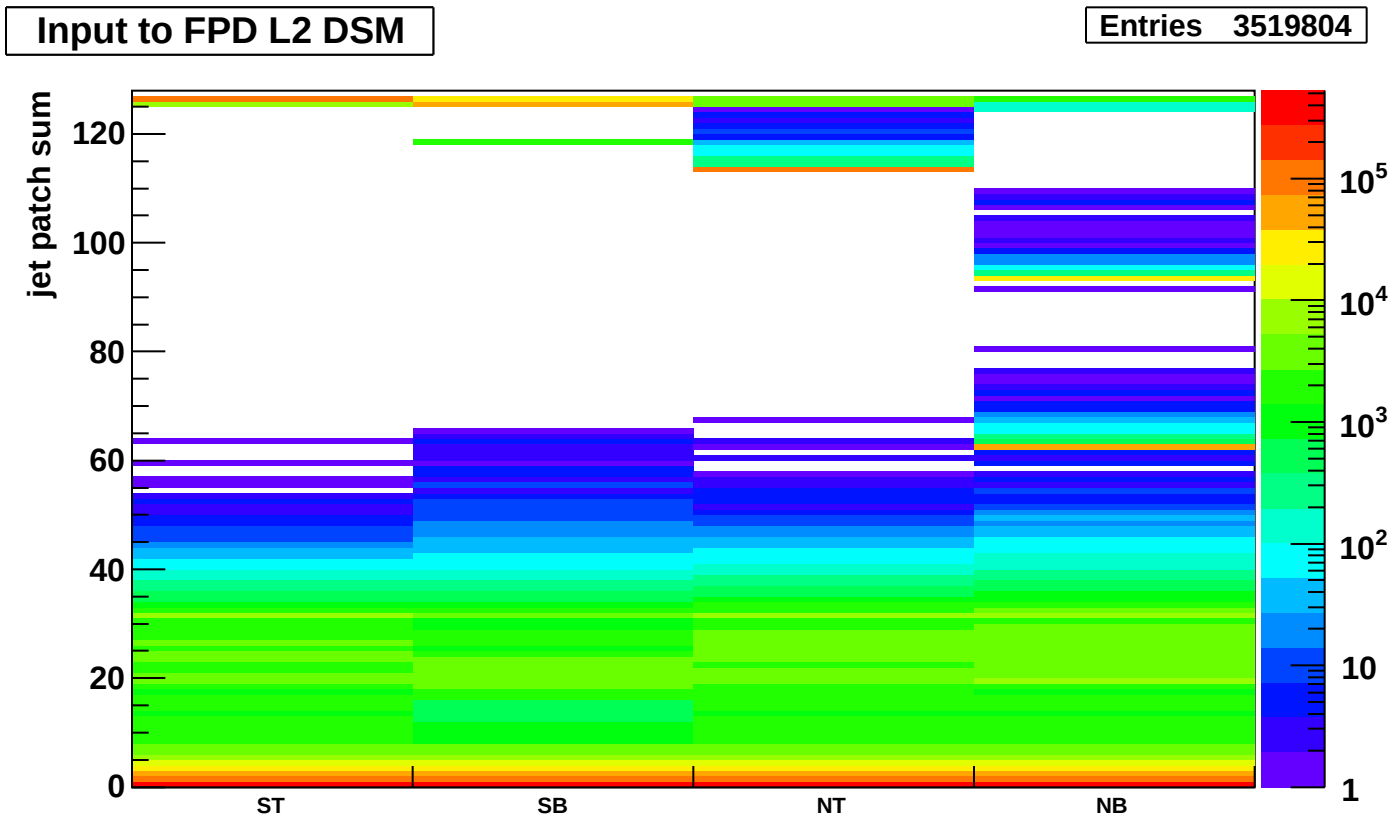

Input to FPD L2 DSM
Entries 2
CL bits - simulated
1
1
SMALL
LARGE-S
LARGE-N

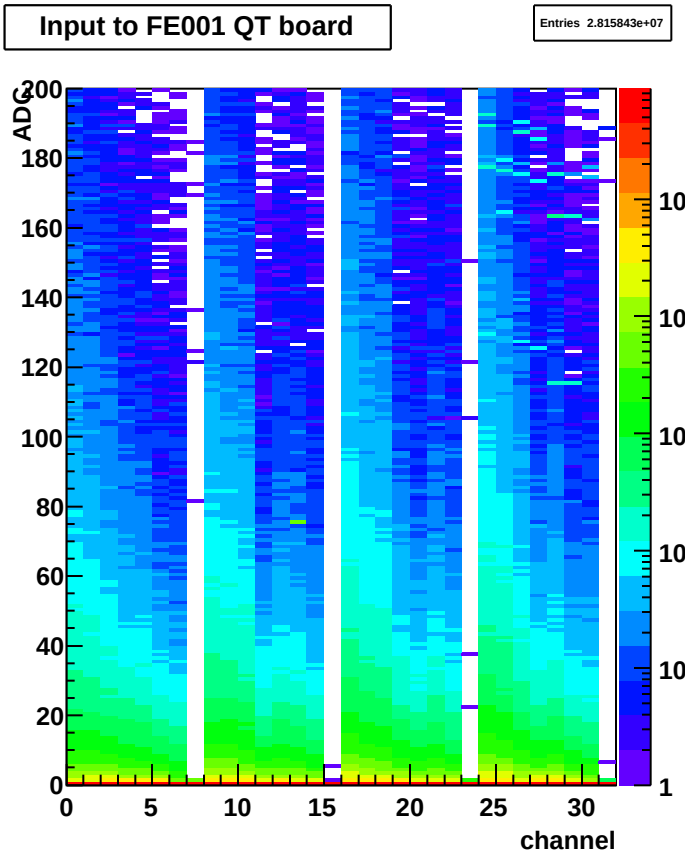

Input to FPD L2 DSM
Entries 2639853
HT bits
257613
155652
145657
24903
8299
9127
597435
716000
725167
SMALL
LARGE-S
LARGE-N

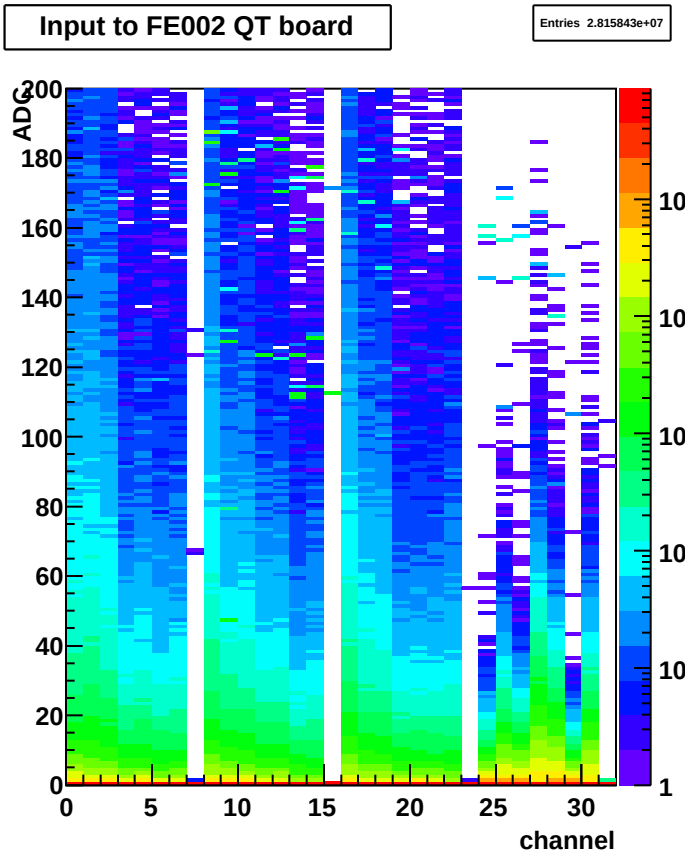

Input to FPD L2 DSM
Entries 1
HT bits - simulated
1
SMALL
LARGE-S
LARGE-N

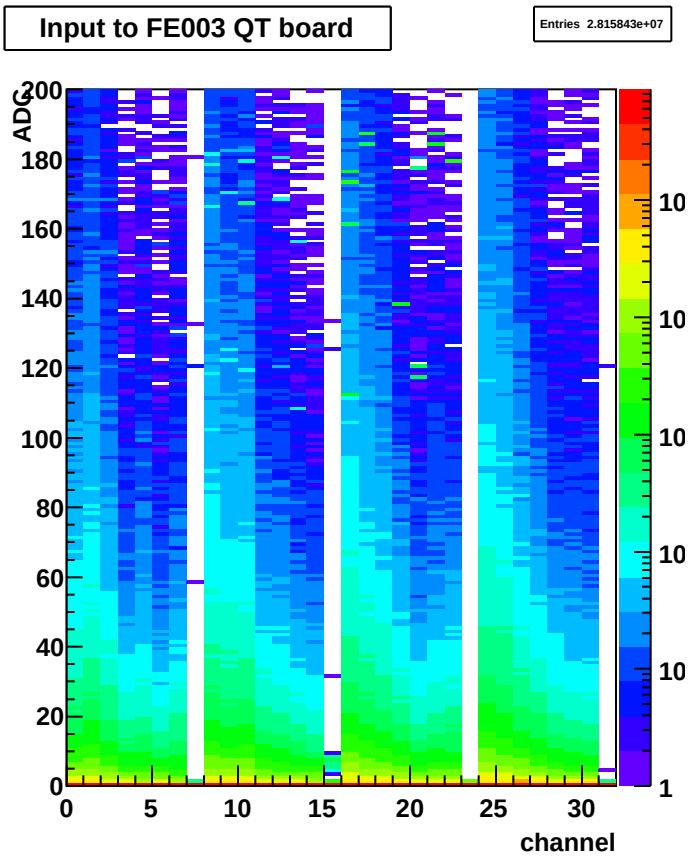

Input to FPD L3 DSM
Entries 1.407922e+07
bit
353707
349395
290450
260099
204389
215868
189696
150789
305413
314007
159083
108376
3390
466441
530556
589501
619852
675562
684083
690255
729152
724538
565944
720668
771575
879951
879951
876561
879951
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
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

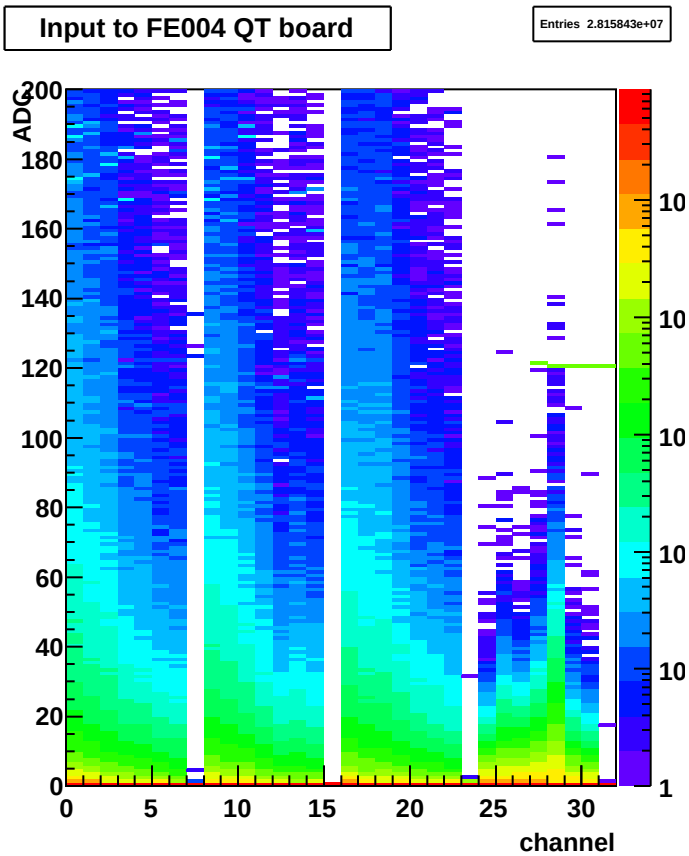

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

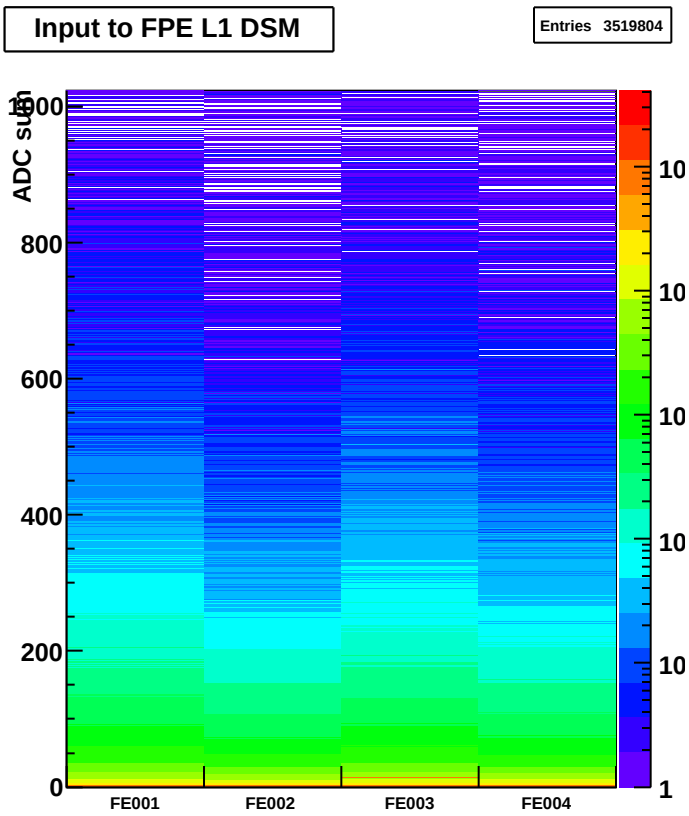

Input to FPD L2 DSM
Entries 3519804
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

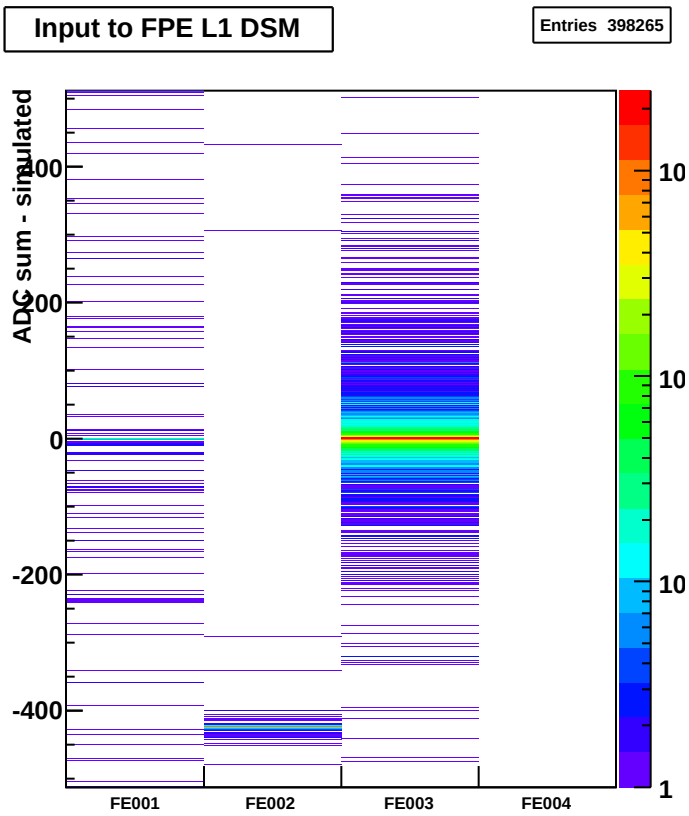

Input to FE001 QT board
Entries 2.815843e+07
ADC
channel

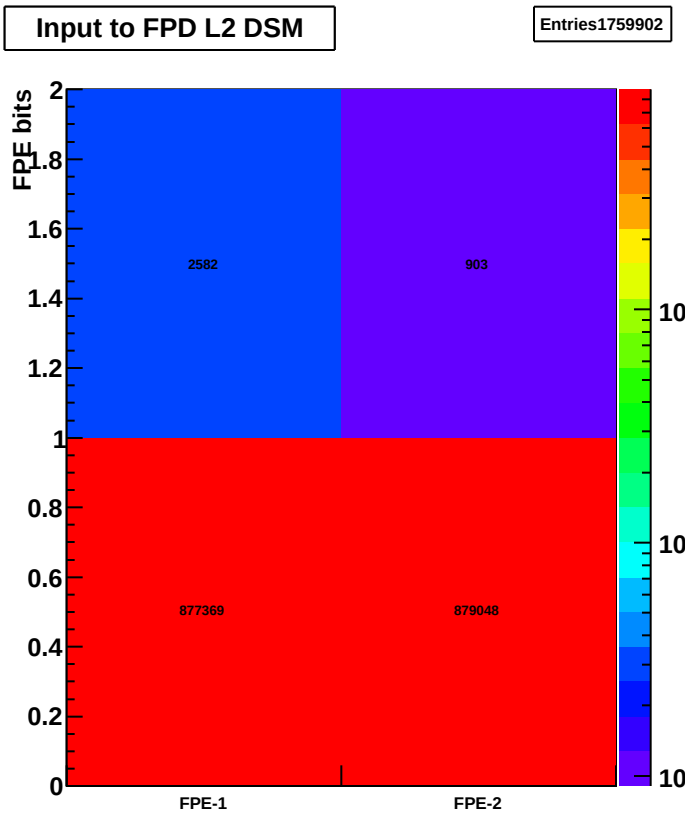

Input to FE002 QT board
Entries 2.815843e+07
ADC
channel

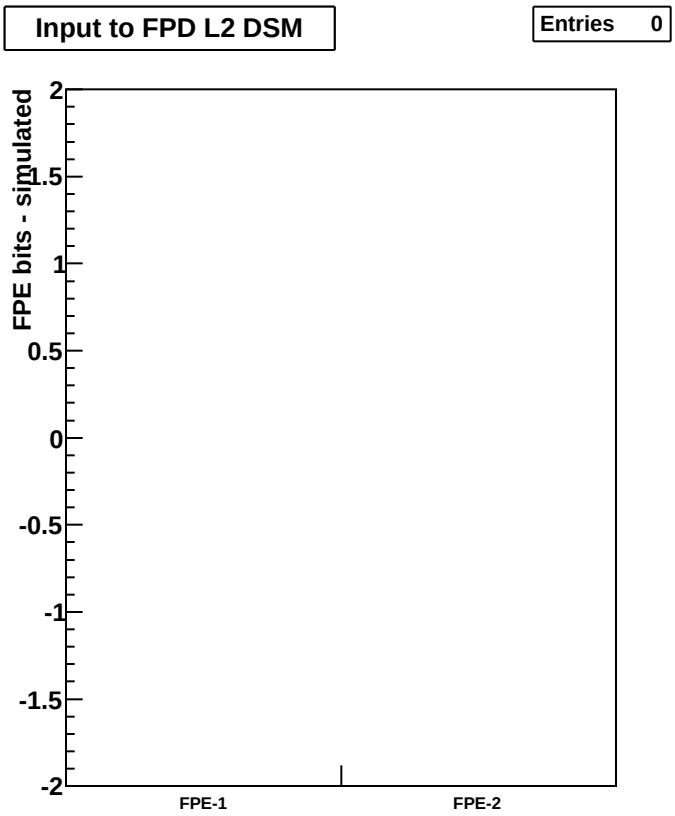

Input to FE003 QT board
Entries 2.815843e+07
ADC
channel


Input to FE004 QT board
Entries 2.815843e+07
ADC
channel


Input to FPE L1 DSM
Entries 3519804
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 398265
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries1759902
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2582
903
877369
879048
FPE-1
FPE-2
10
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