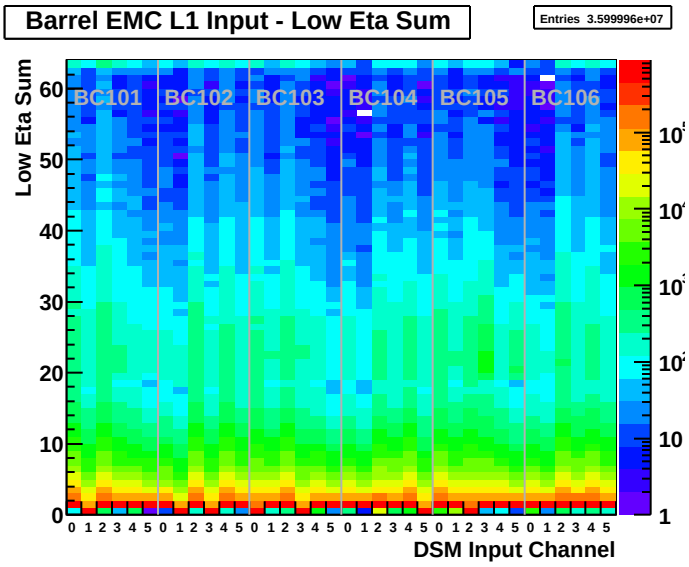
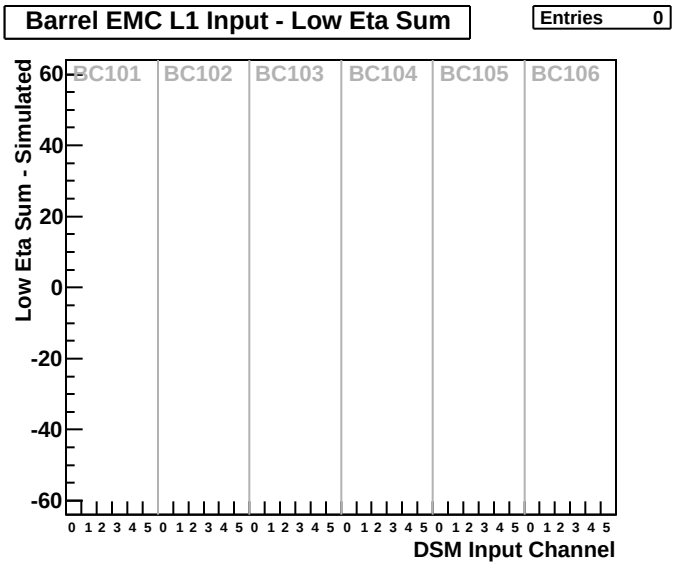
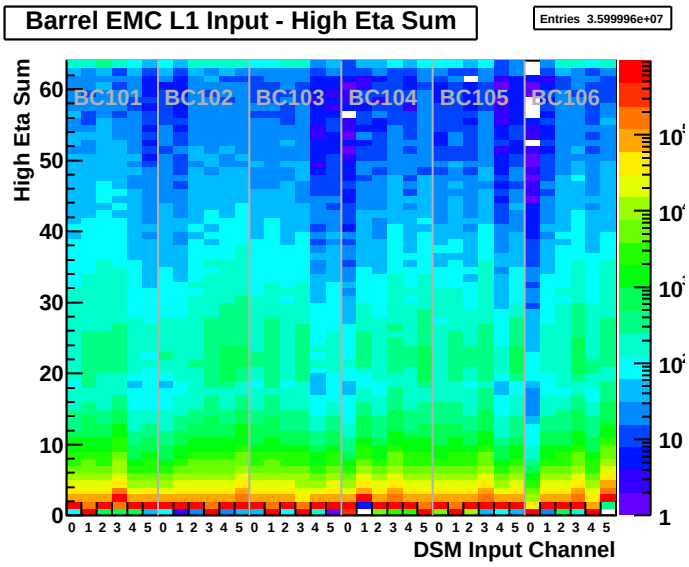
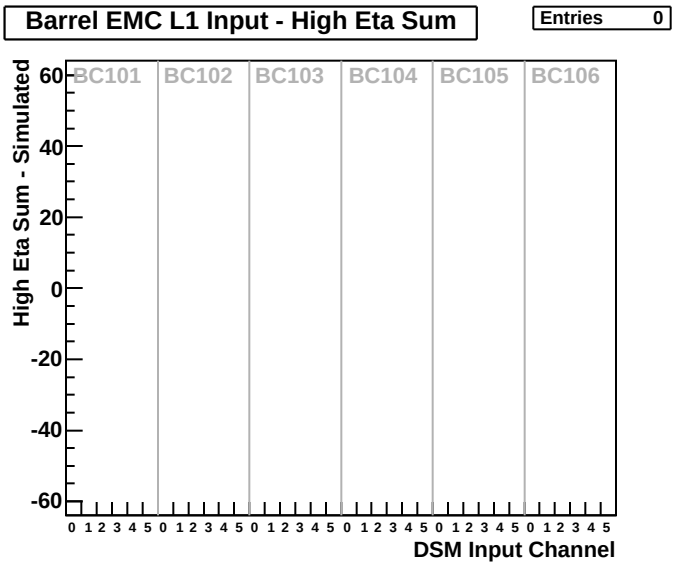
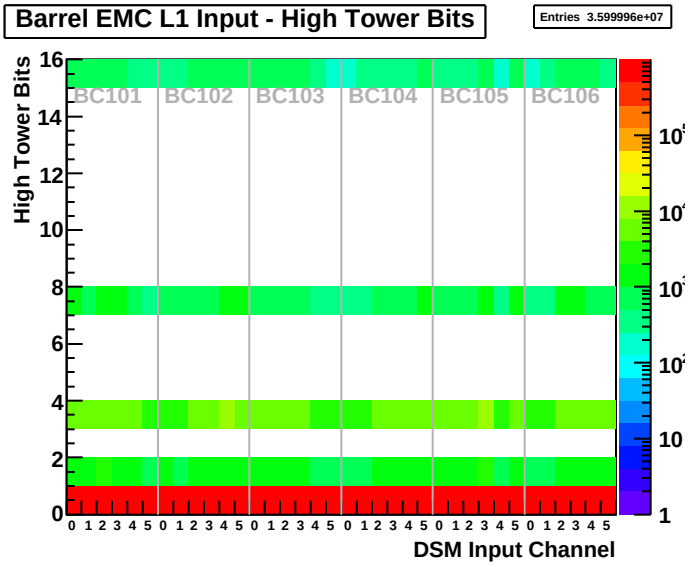
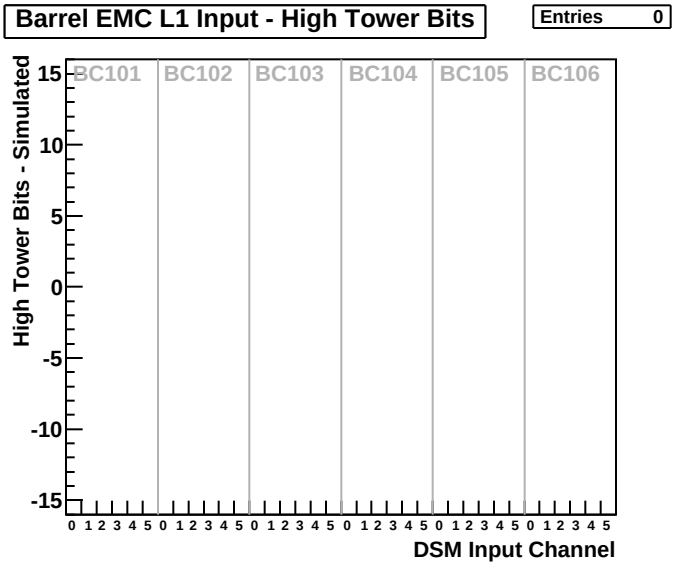

Barrel EMC L1 Input - Low Eta Sum
Entries 3.599996e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

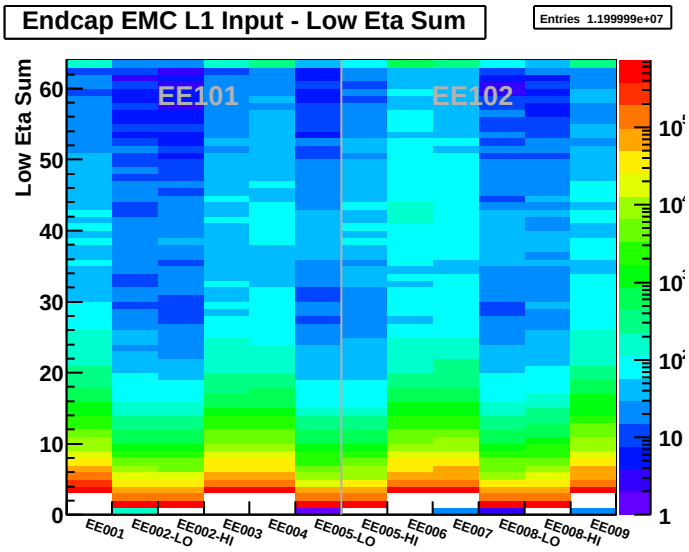

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

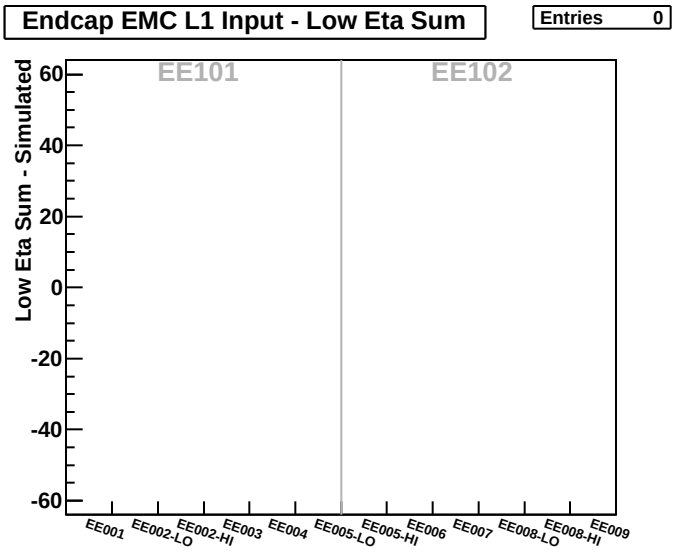

Barrel EMC L1 Input - High Eta Sum
Entries 3.599996e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

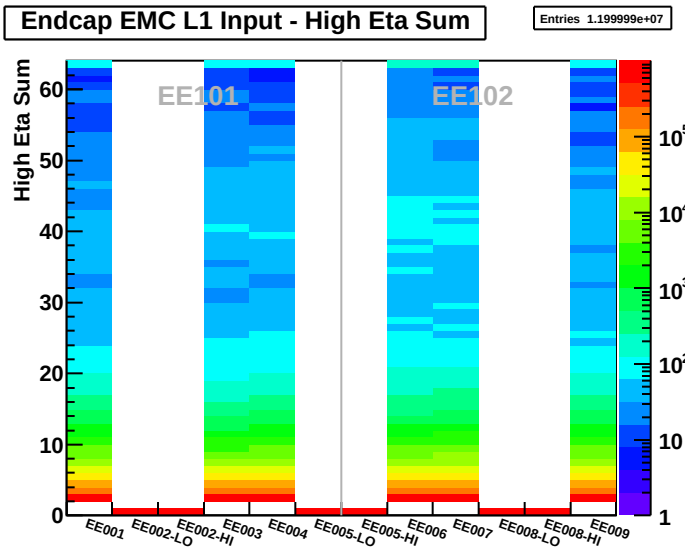

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

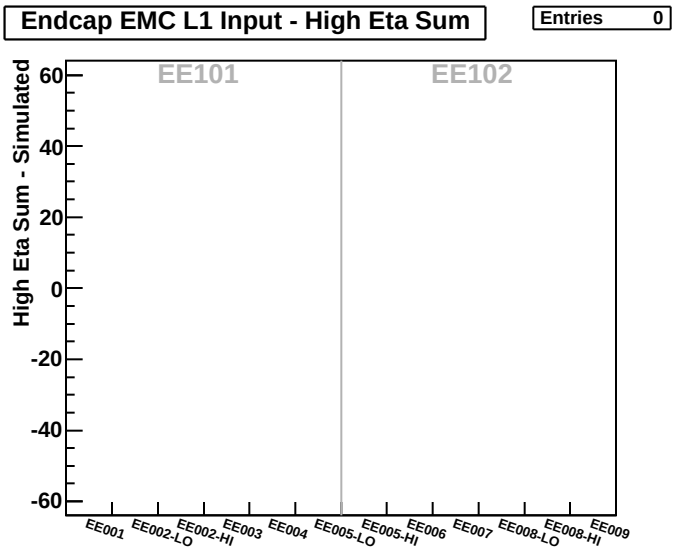

Barrel EMC L1 Input - High Tower Bits
Entries 3.599996e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

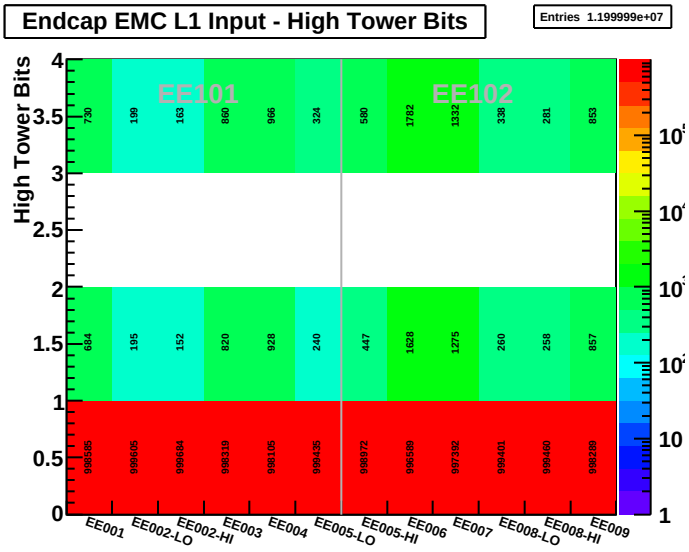

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

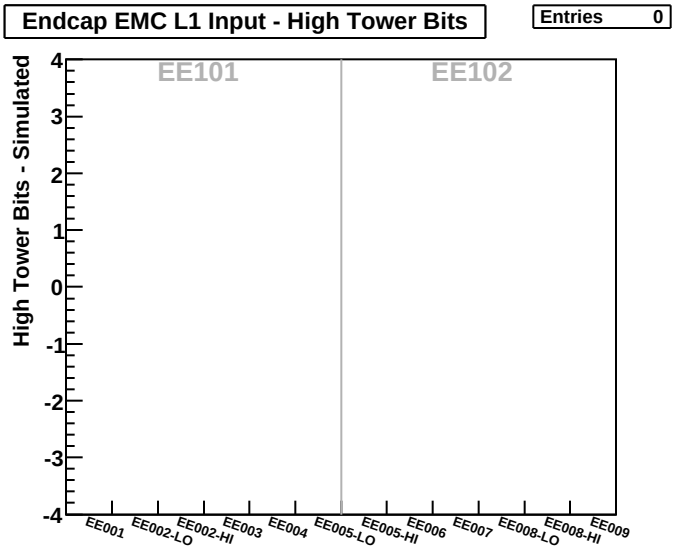

Endcap EMC L1 Input - Low Eta Sum
Entries 1.199999e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

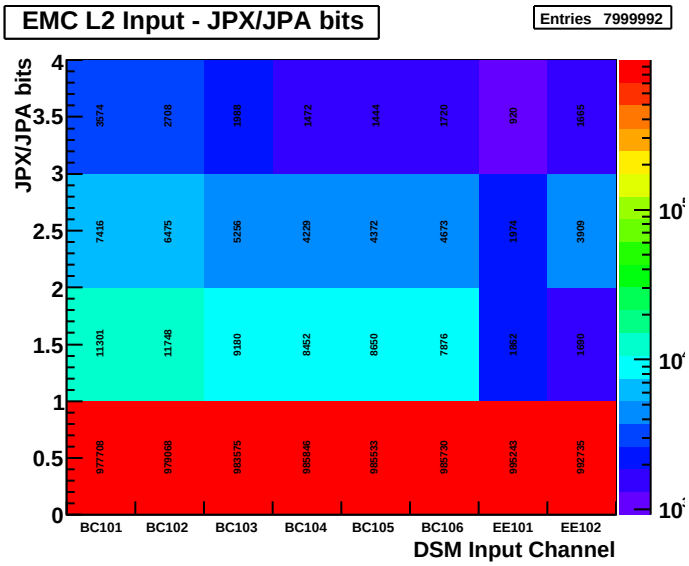

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

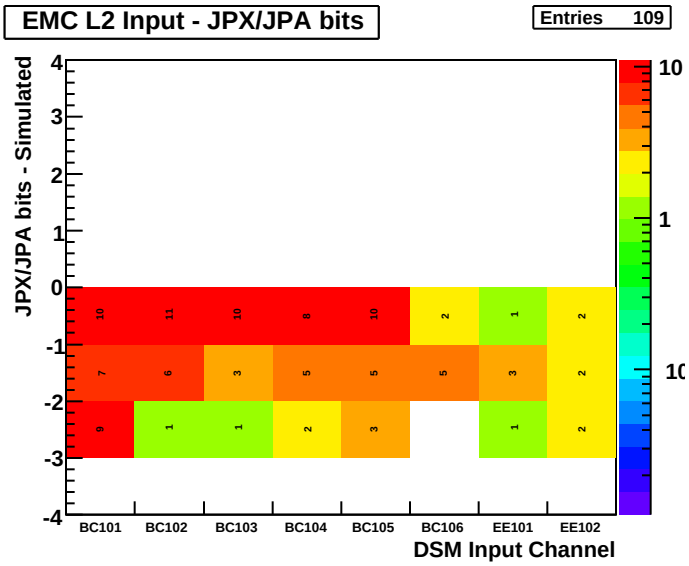

Endcap EMC L1 Input - High Eta Sum
Entries 1.199999e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

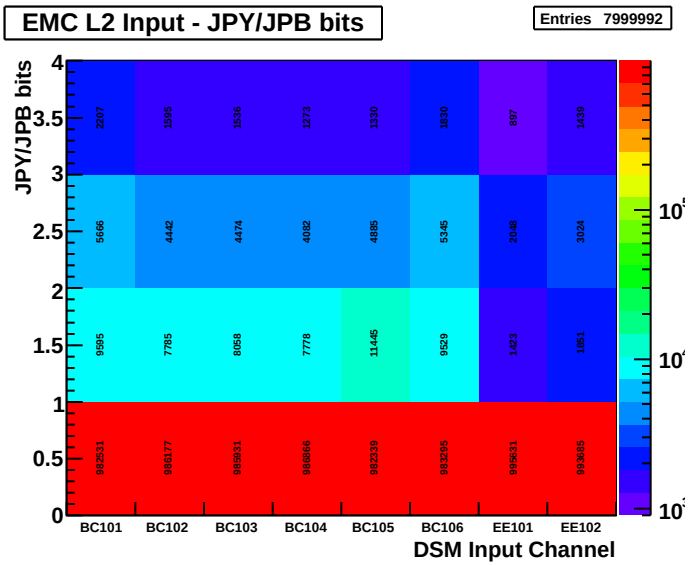

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

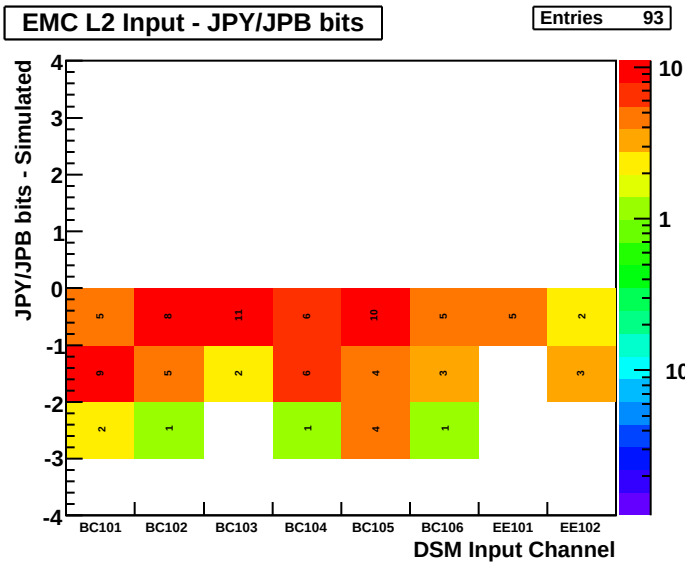

Endcap EMC L1 Input - High Tower Bits
Entries 1.199999e+07
High Tower Bits
EE101
EE102
730 199 163 860 966 324 580 1782 1332 338 281 853
684 195 152 820 928 240 447 1628 1275 260 258 857
998585 999605 999684 998319 998105 999435 998372 996589 997392 999401 999460 998289
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

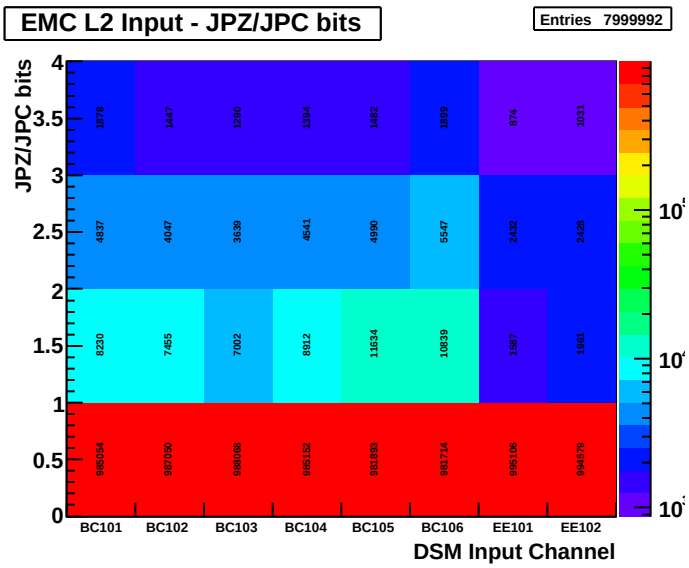

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

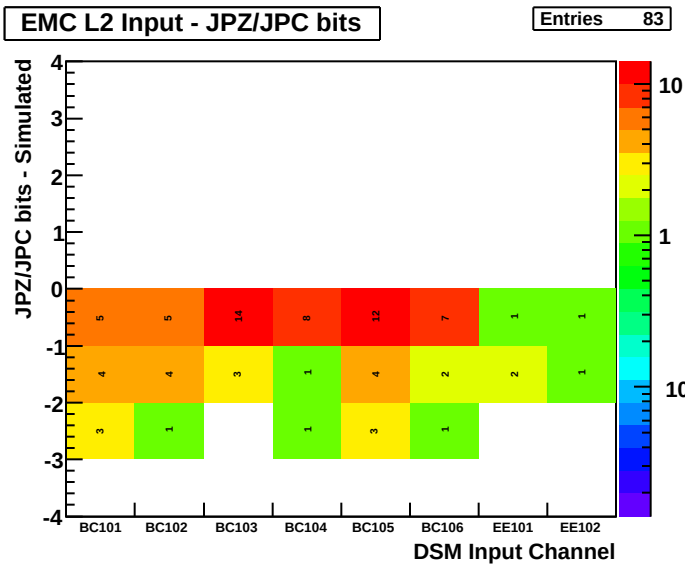

EMC L2 Input - JPX/JPA bits
Entries 7999992
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3574 2708 1988 1472 1444 1720 920 1665
7416 6475 5256 4229 4372 4673 1974 3900
11301 11748 9180 8452 8650 7876 1862 1690
977708 973068 982575 985846 985533 985730 995243 992735

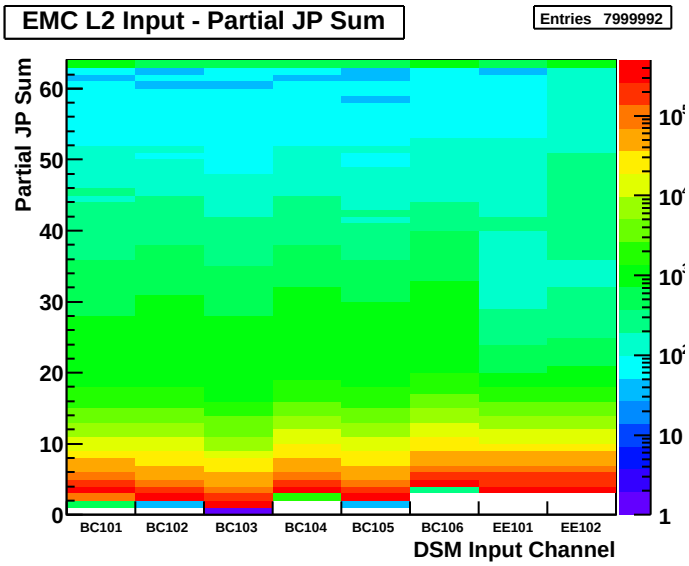

EMC L2 Input - JPX/JPA bits
Entries 109
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
10 11 10 8 10 2 1 2
7 6 3 5 5 5 3 2
9 1 1 2 3 1 2

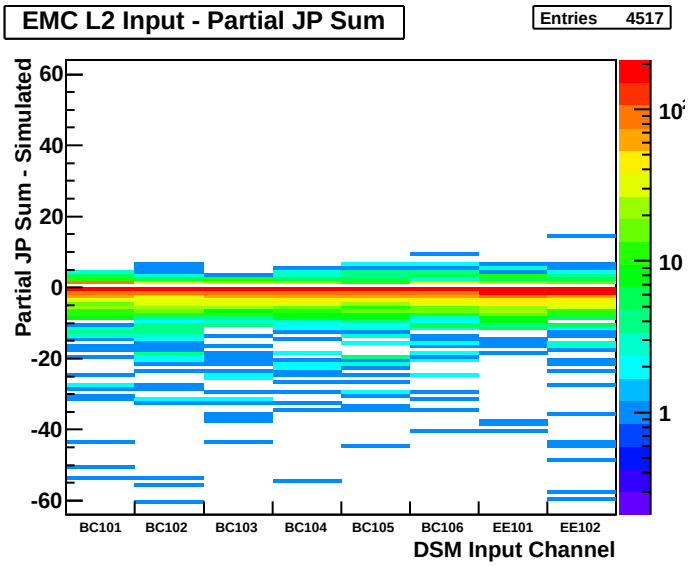

EMC L2 Input - JPY/JPB bits
Entries 7999992
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2207 1595 1536 1273 1330 1830 897 1439
5666 4442 4474 4082 4885 5345 2048 3024
9995 7785 8058 7778 11445 9529 1423 1651
982531 986177 983931 986866 982339 983295 995631 993685

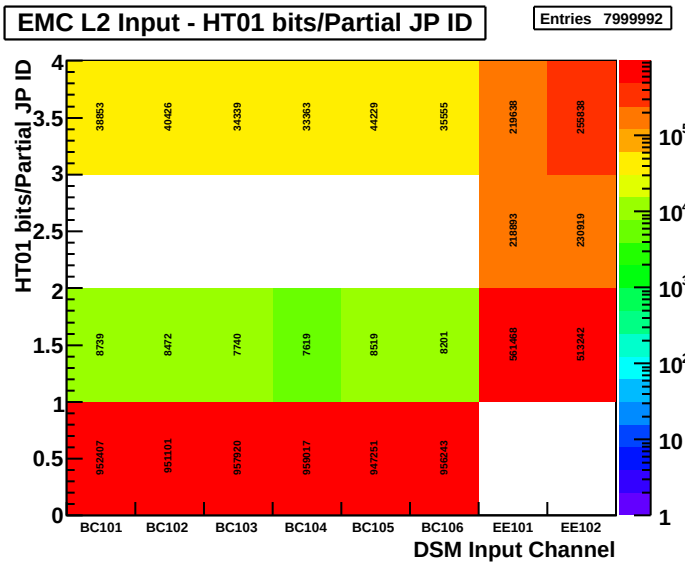

EMC L2 Input - JPY/JPB bits
Entries 93
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5 8 11 6 10 5 5 2
9 5 2 6 4 3 3
2 1 1 4 1

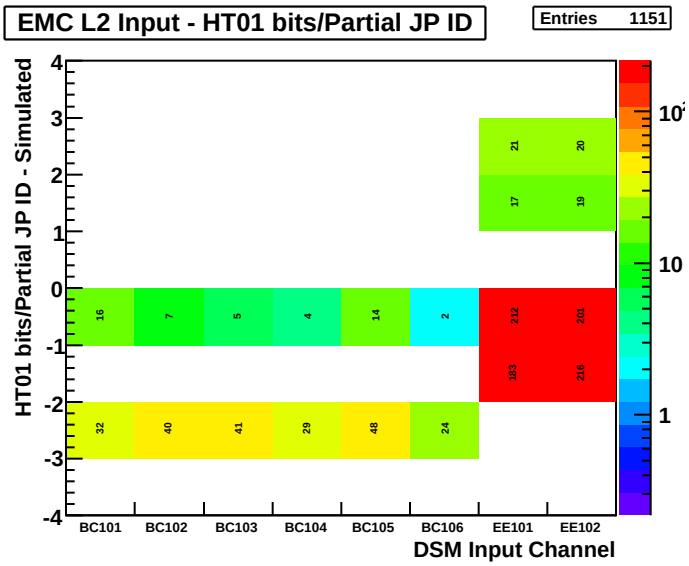

EMC L2 Input - JPZ/JPC bits
Entries 7999992
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1878 1447 1200 1394 1482 1899 874 1031
4837 4047 3639 4541 4990 5547 2432 2428
8230 7465 7002 8912 11634 10839 1587 1961
985054 987050 988068 985152 981893 981714 995106 994579

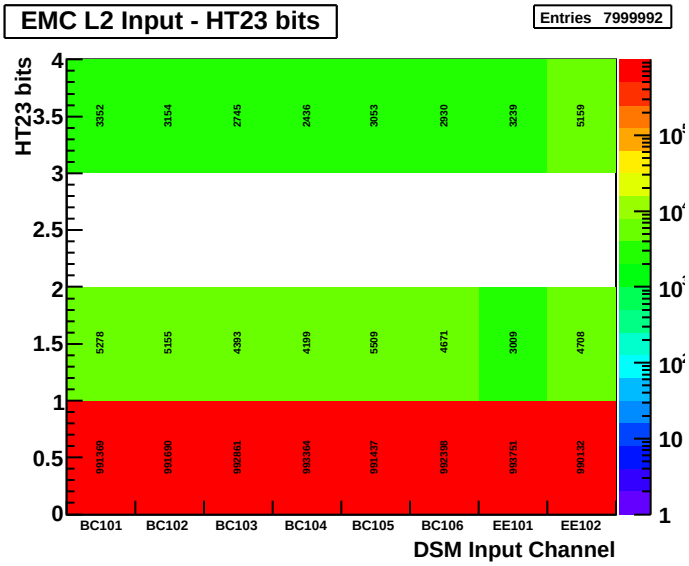

EMC L2 Input - JPZ/JPC bits
Entries 83
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5 5 14 8 12 7 1 1
4 4 3 1 4 2 2 1
3 1 1 3 1

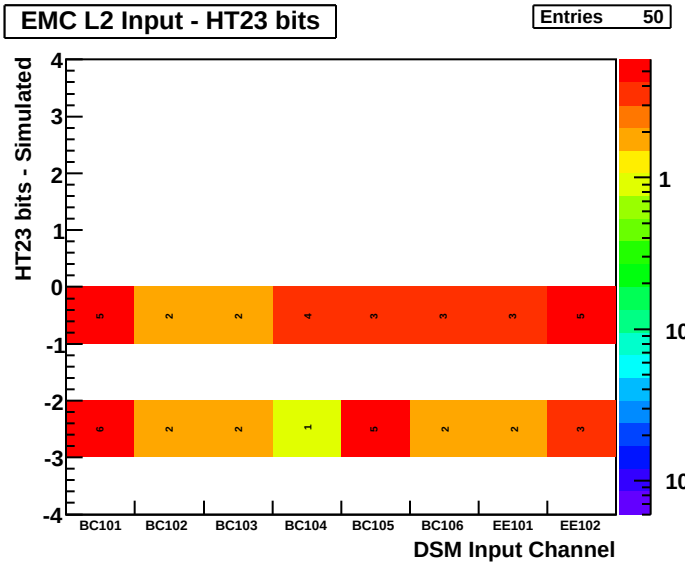

EMC L2 Input - Partial JP Sum
Entries 7999992
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

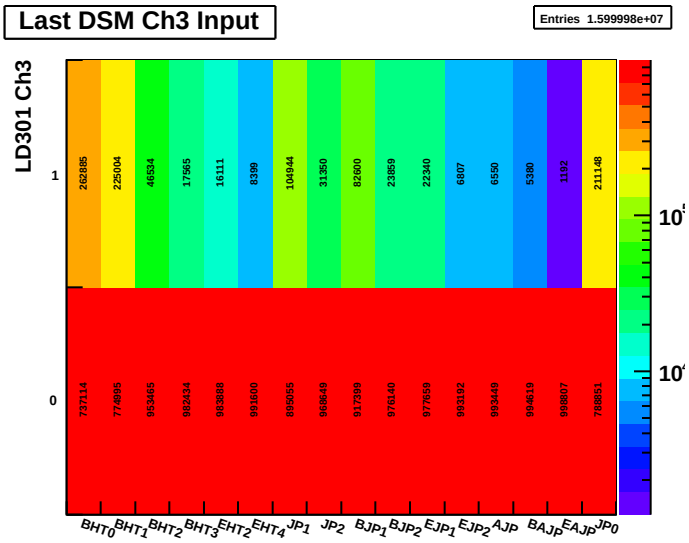

EMC L2 Input - Partial JP Sum
Entries 4517
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

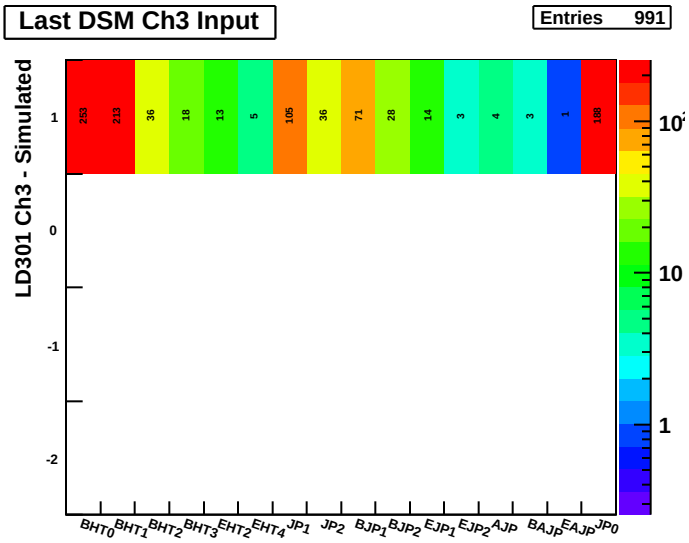

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7999992
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

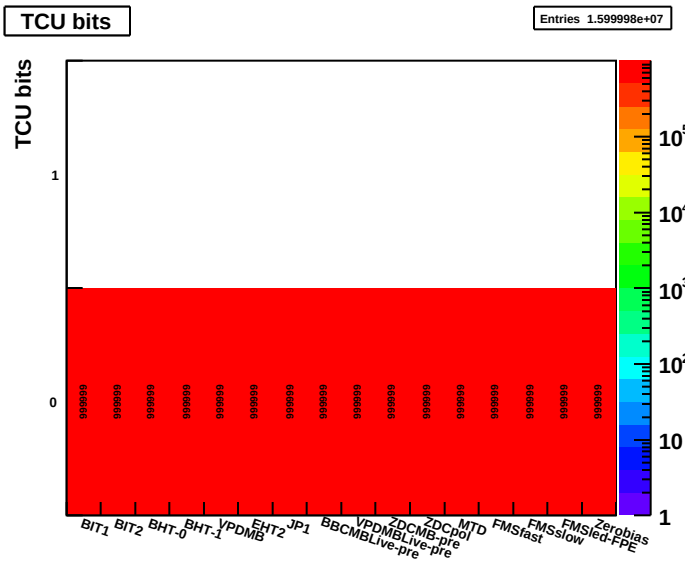

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1151
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

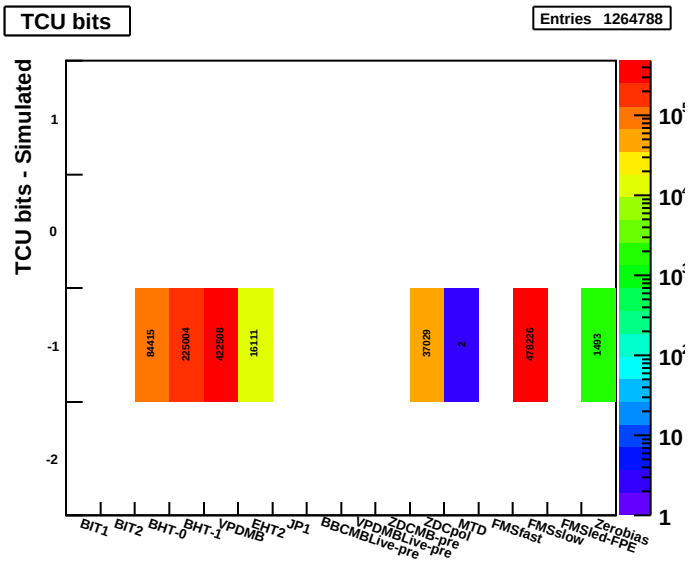

EMC L2 Input - HT23 bits
Entries 7999992
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

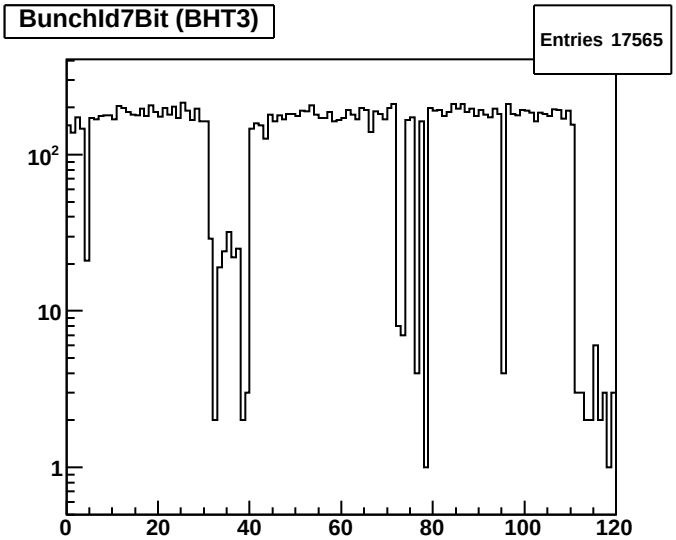

EMC L2 Input - HT23 bits
Entries 50
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

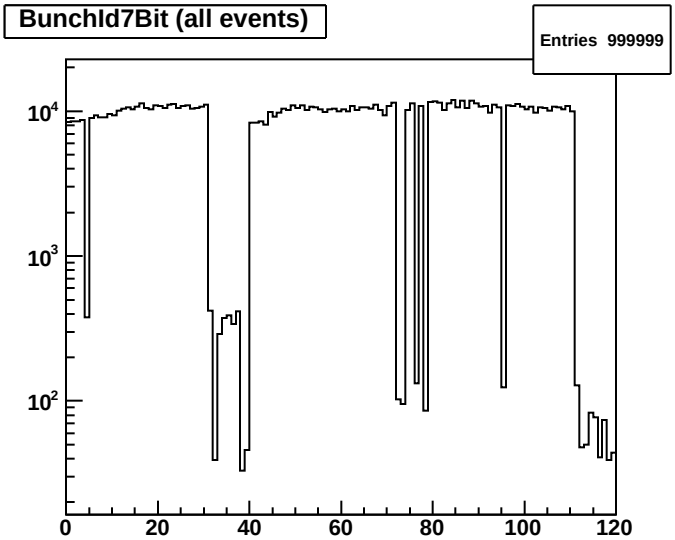

Last DSM Ch3 Input
Entries 1.599998e+07
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

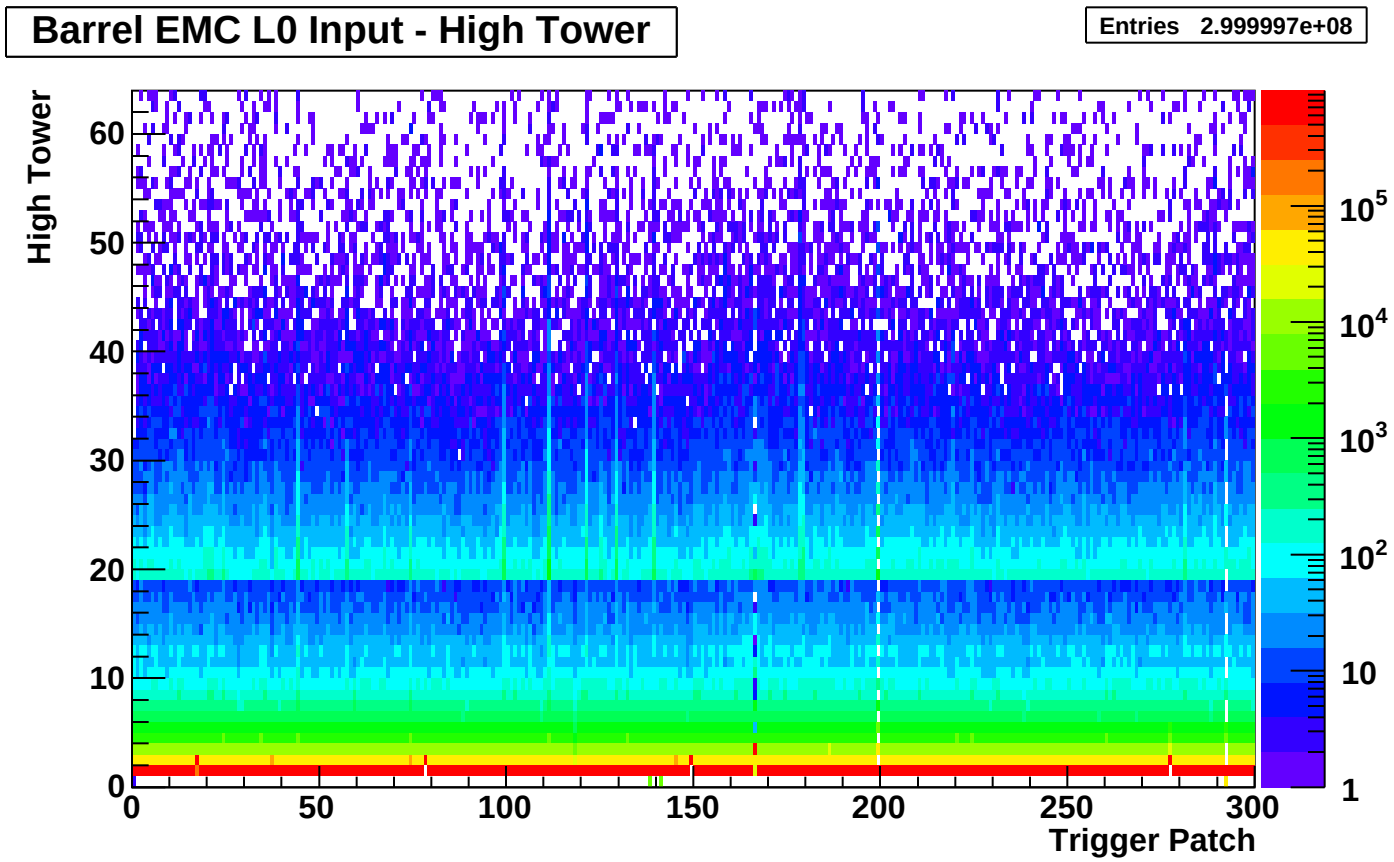

Last DSM Ch3 Input
Entries 991
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

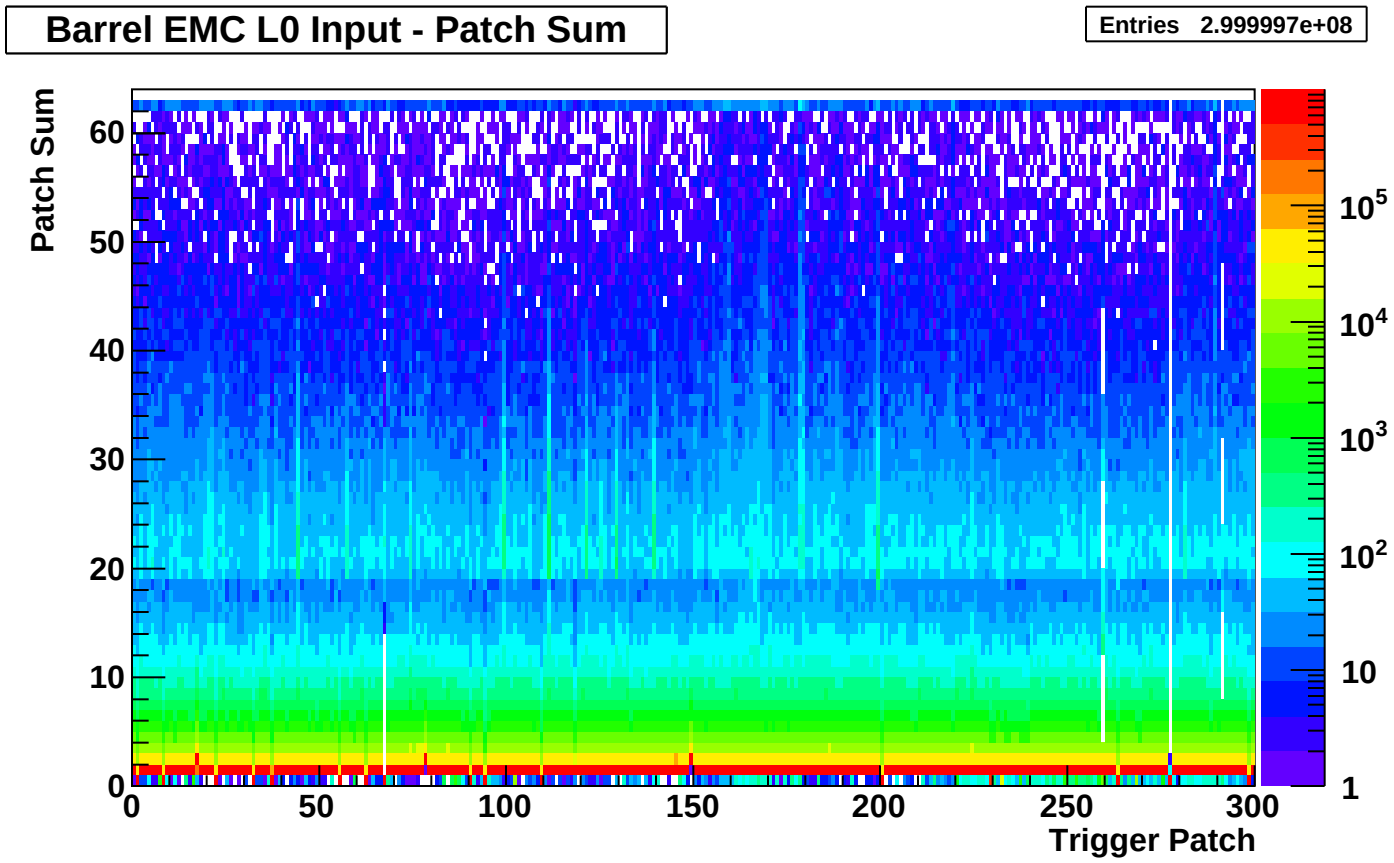

TCU bits
Entries 1.599998e+07
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

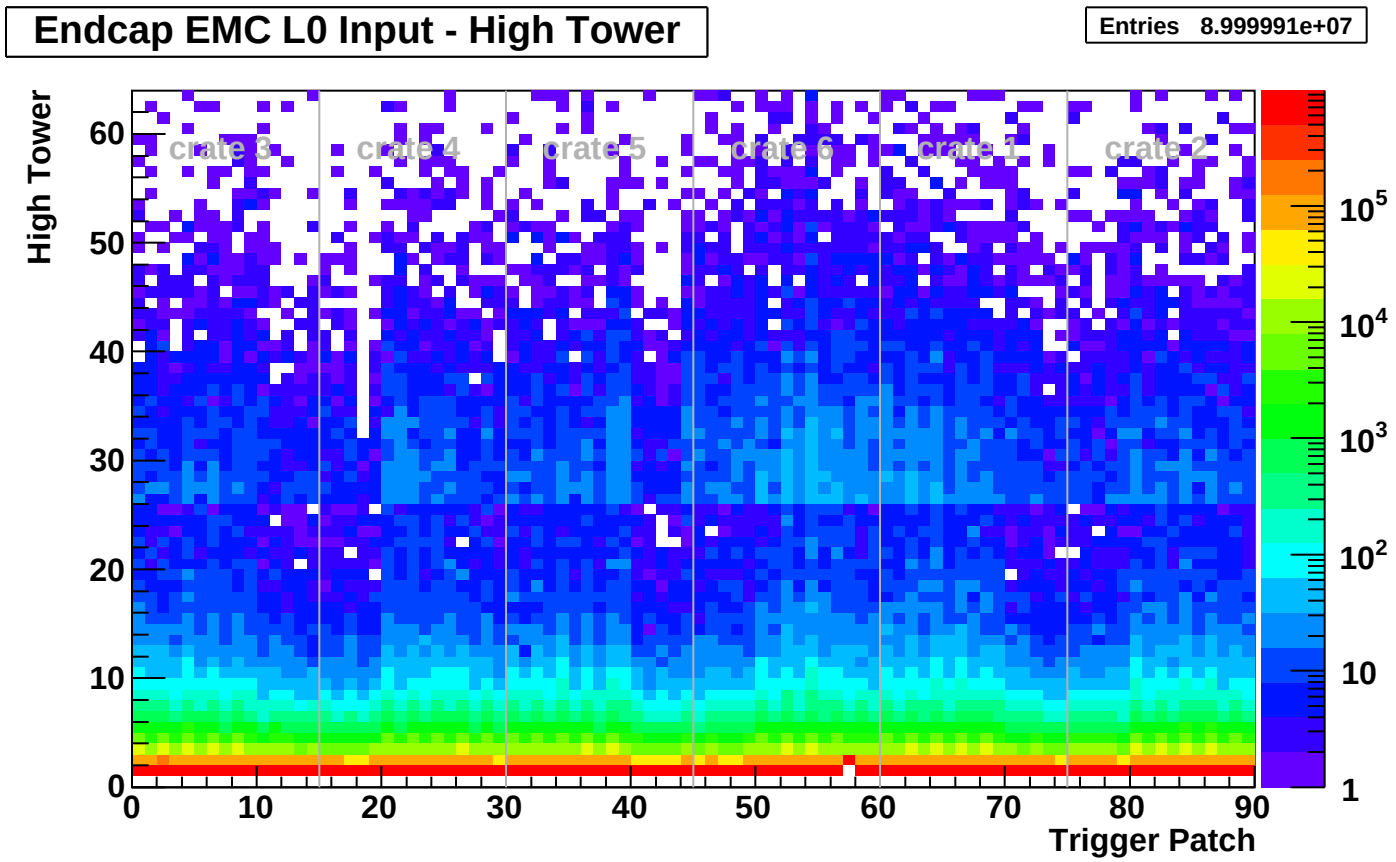

TCU bits
Entries 1264788
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

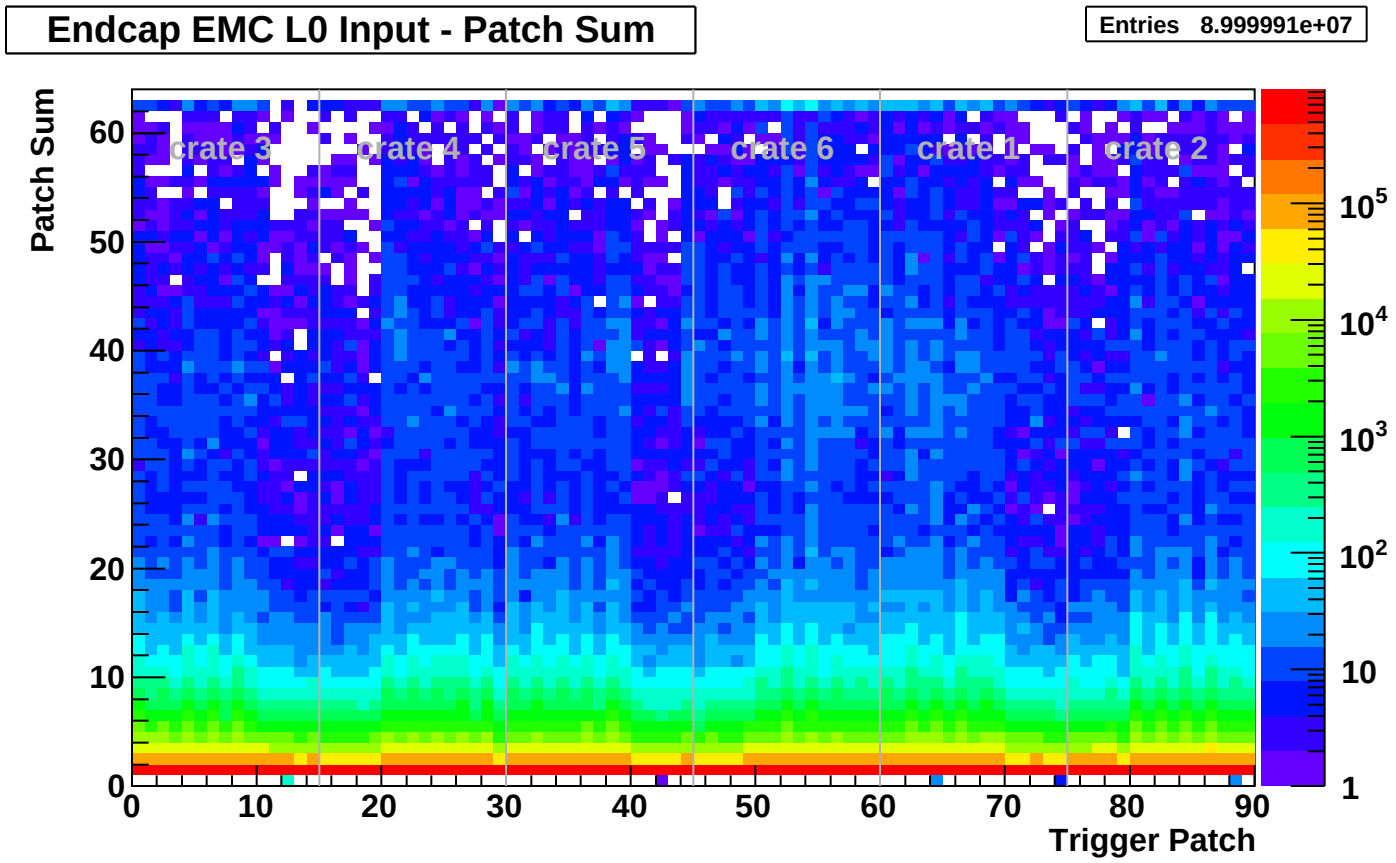

BunchId7Bit (BHT3)
Entries 17565

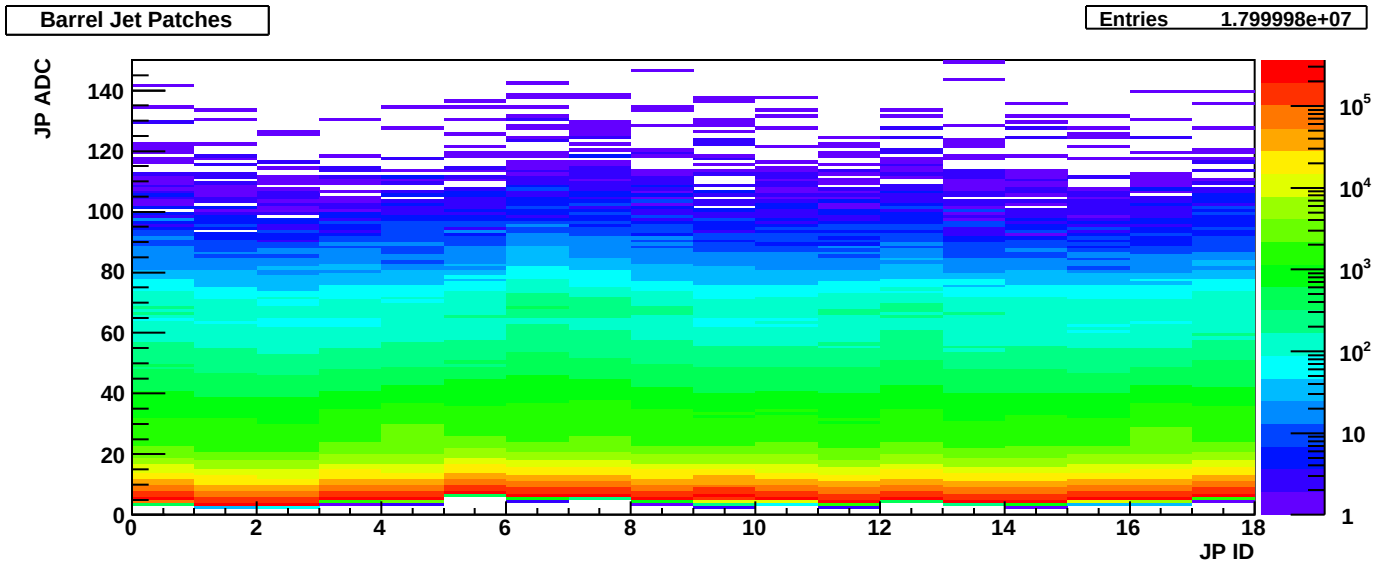

BunchId7Bit (all events)
Entries 999999

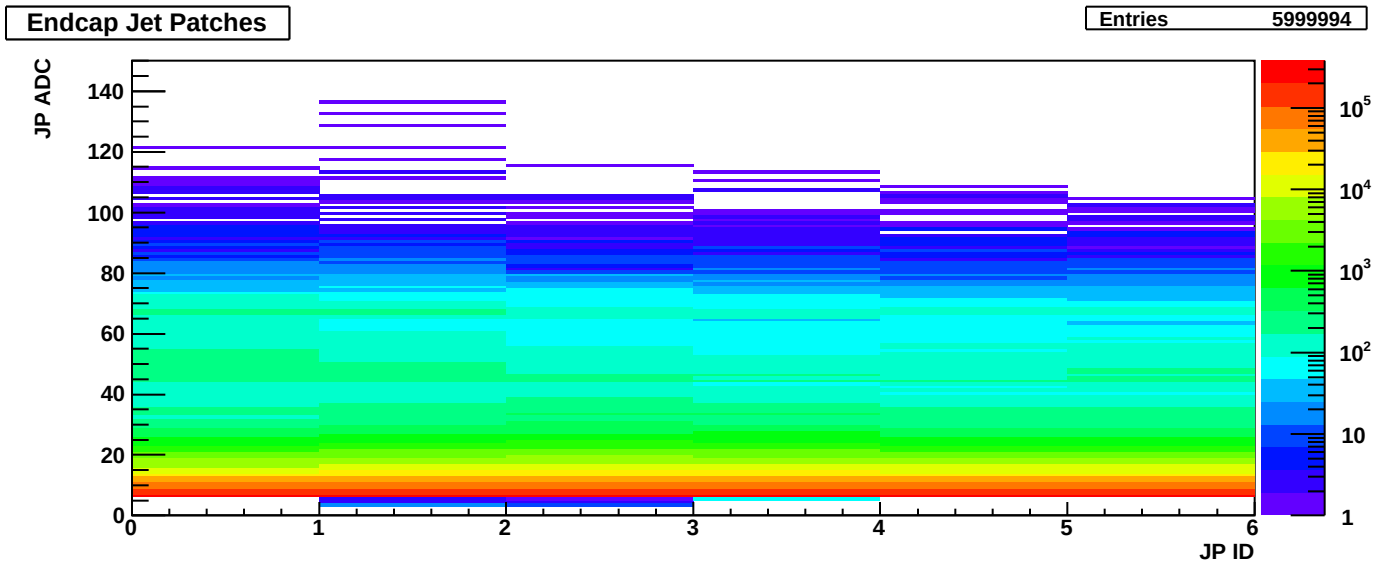

Barrel EMC L0 Input - High Tower
Entries 2.999997e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

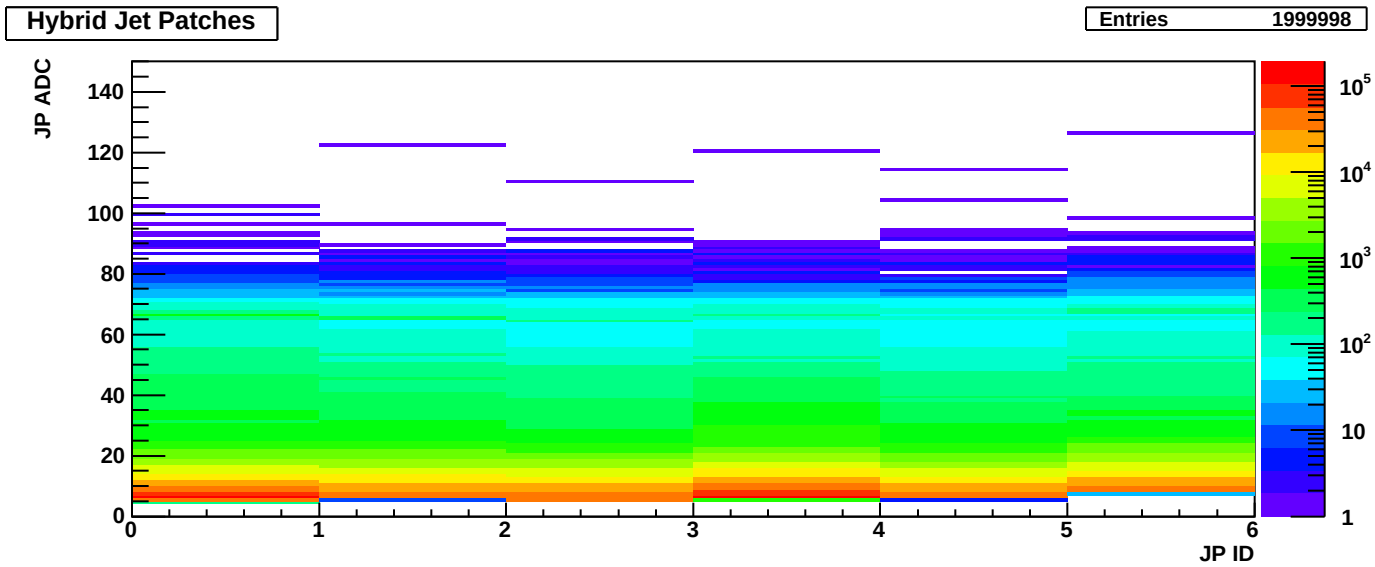

Barrel EMC L0 Input - Patch Sum
Entries 2.999997e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5


Endcap EMC L0 Input - High Tower
Entries 8.999991e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

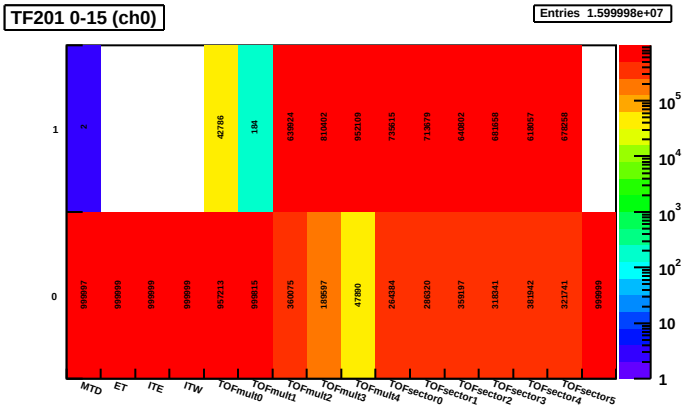

Endcap EMC L0 Input - Patch Sum
Entries 8.999991e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2


Barrel Jet Patches
Entries 1.799998e+07
JP ADC
JP ID

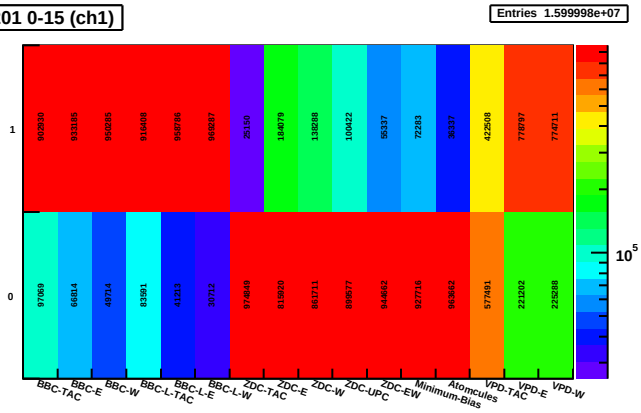

Endcap Jet Patches
Entries 5999994
JP ADC
JP ID


Hybrid Jet Patches
Entries 1999998
JP ADC
JP ID

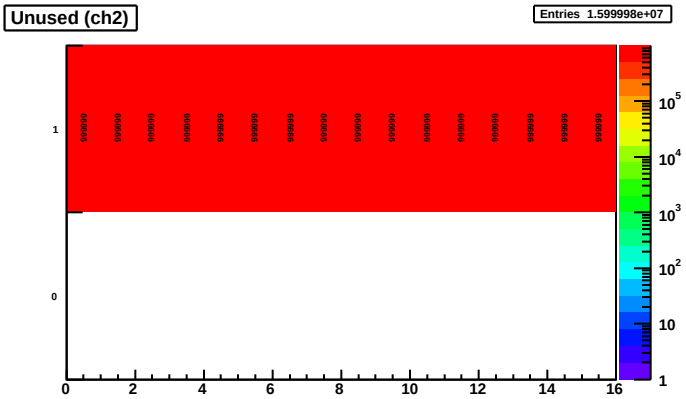
TF201 0-15 (ch0)



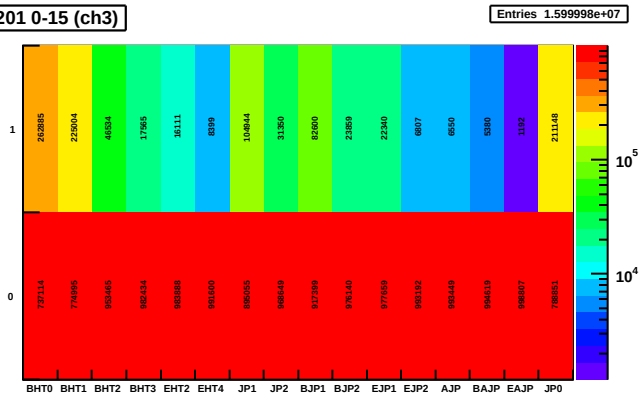
VT201 0-15 (ch1)



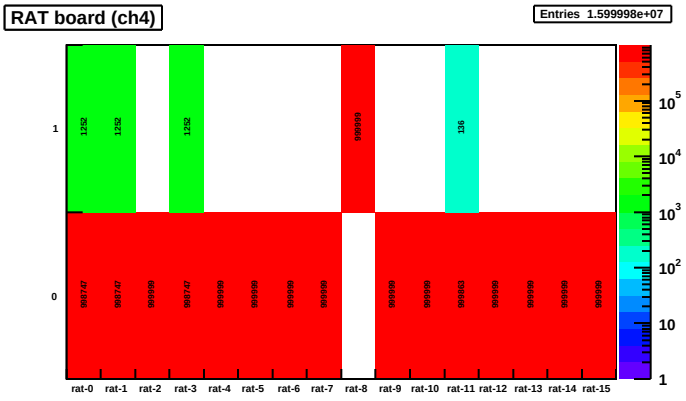
Unused (ch2)



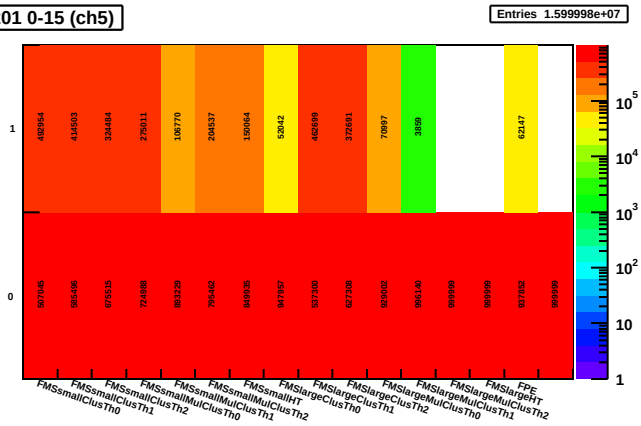
EM201 0-15 (ch3)



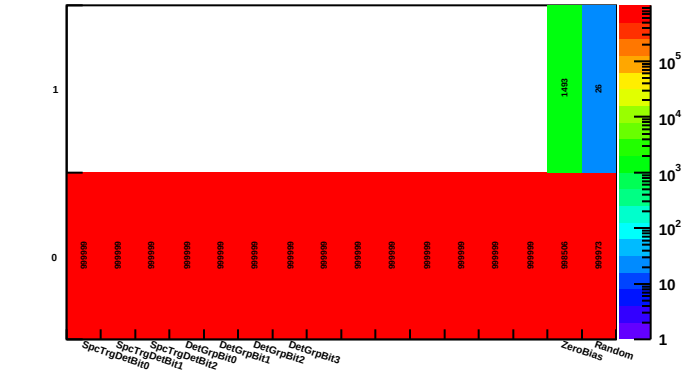
RAT board (ch4)



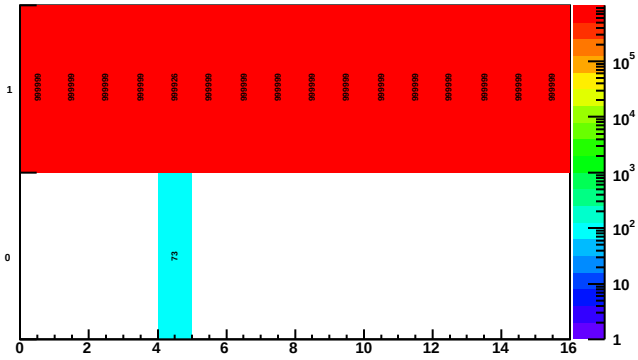
FP201 0-15 (ch5)

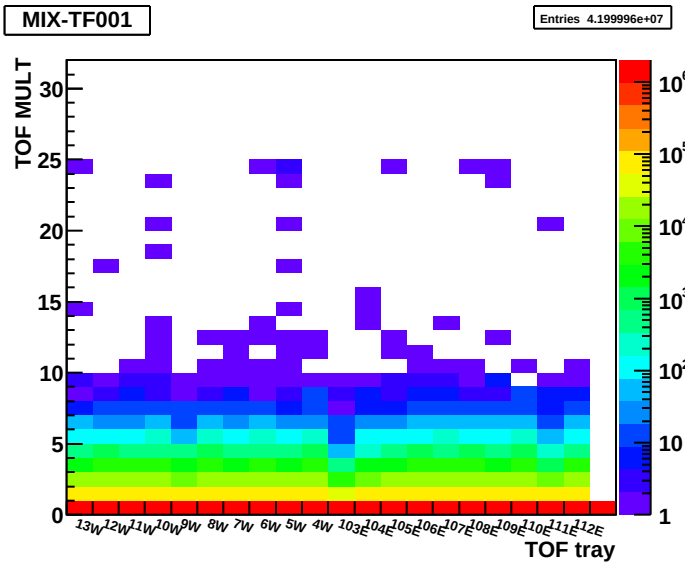


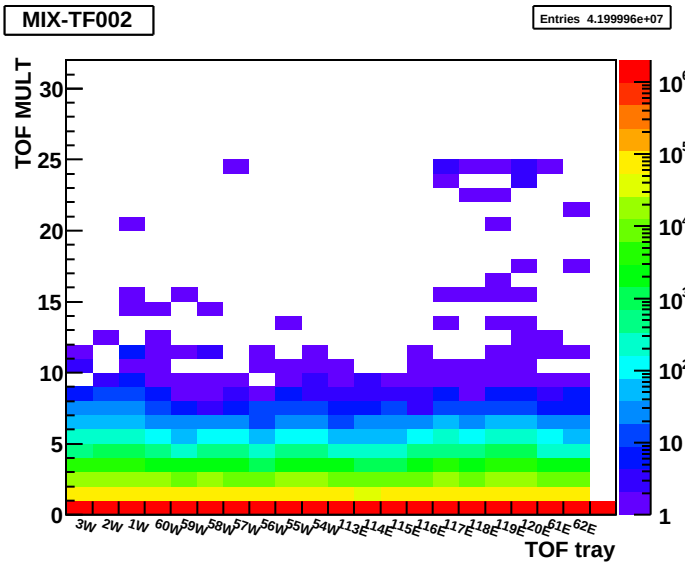
ST201 0-15 (ch6)

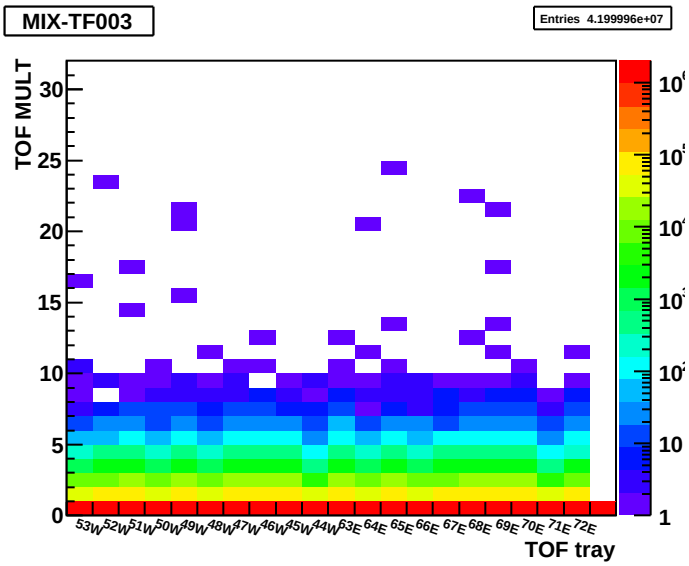


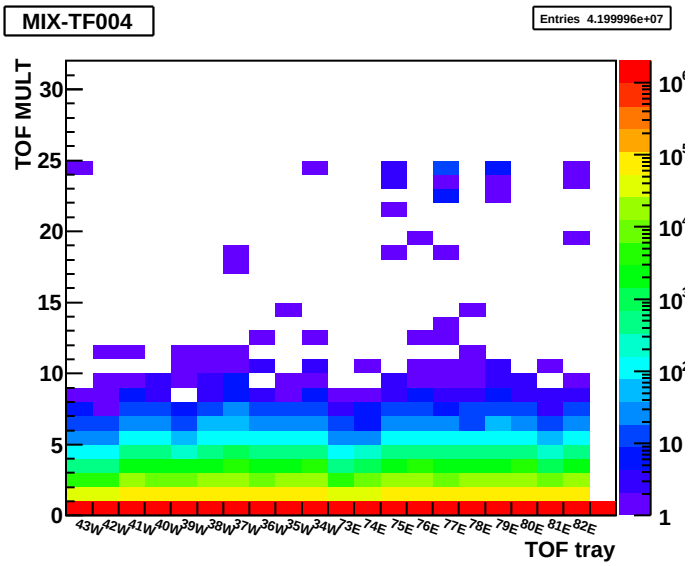
Unused (ch7)

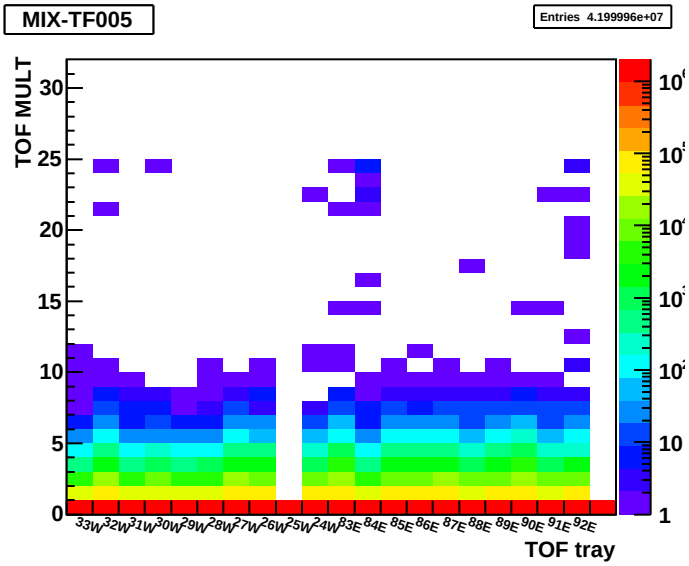


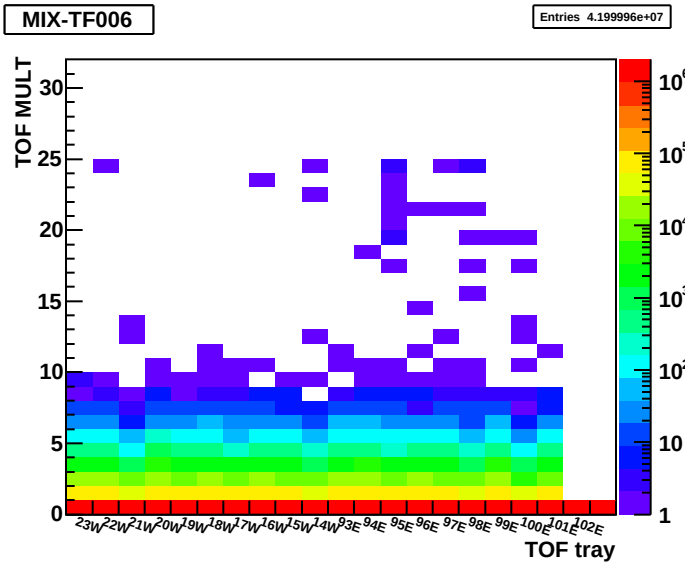

MIX-TF001
Entries 4.199996e+07
TOF MULT
TOF tray

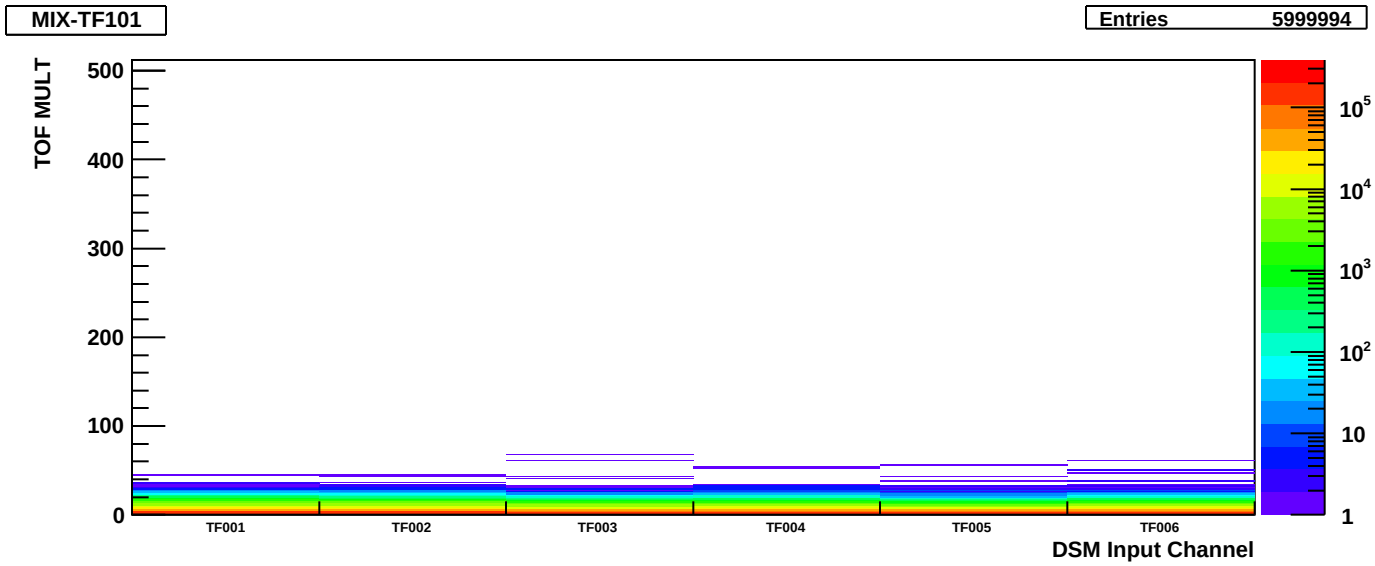

MIX-TF002
Entries 4.199996e+07
TOF MULT
TOF tray

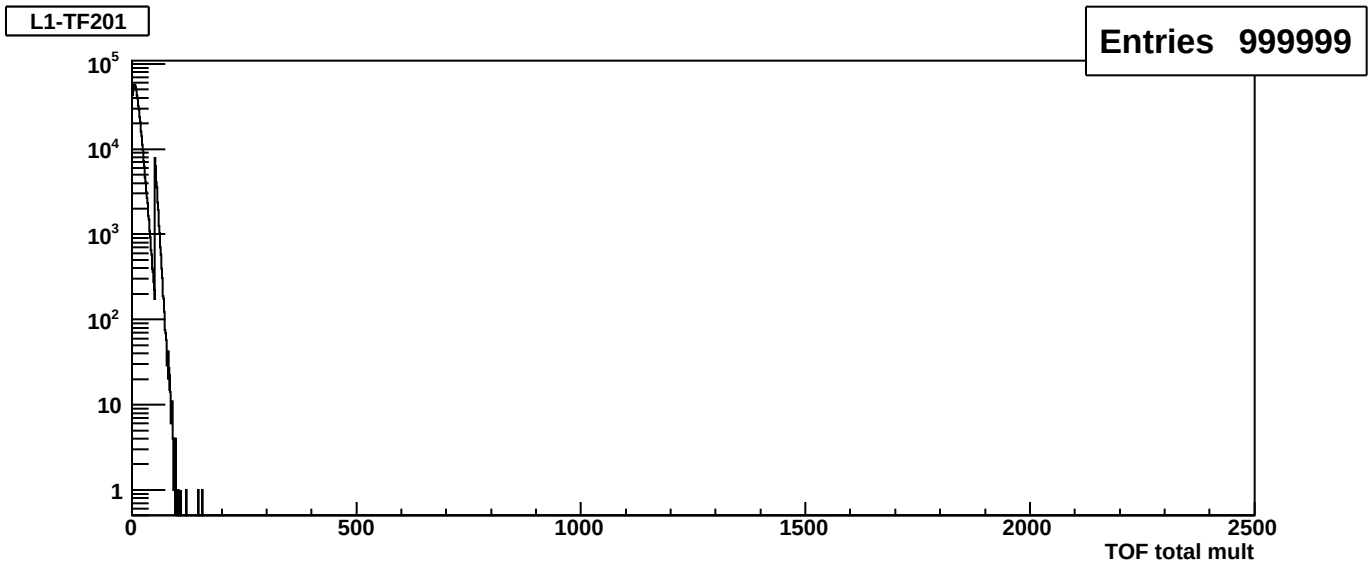

MIX-TF003
Entries 4.199996e+07
TOF MULT
TOF tray

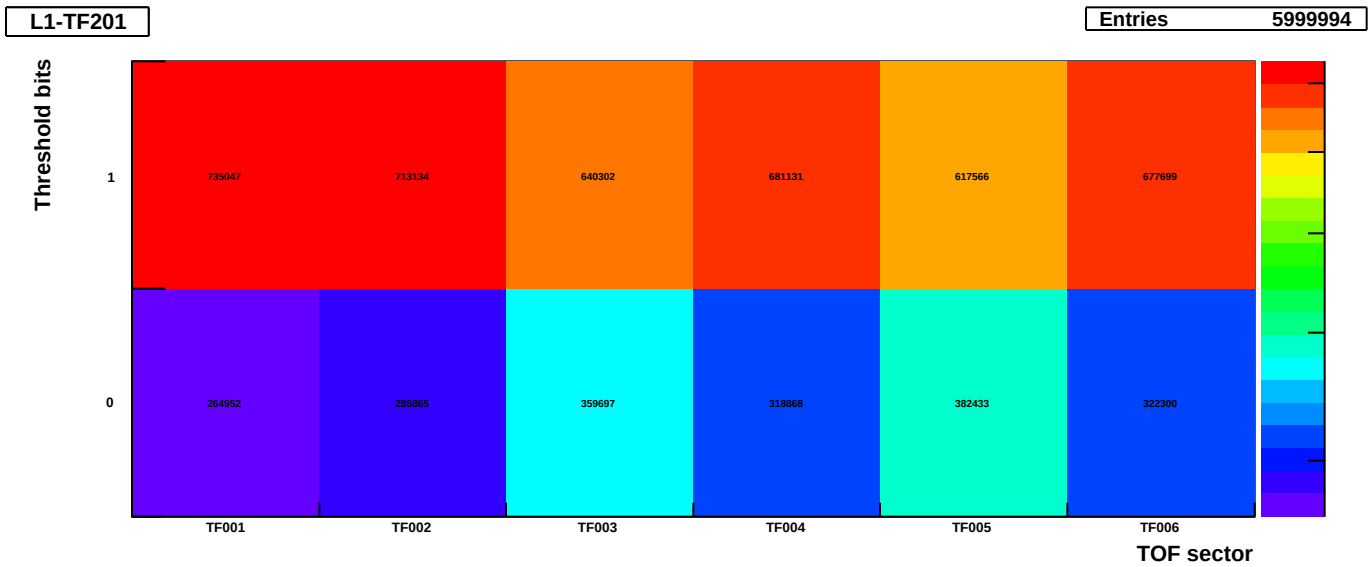

MIX-TF004
Entries 4.199996e+07
TOF MULT
TOF tray

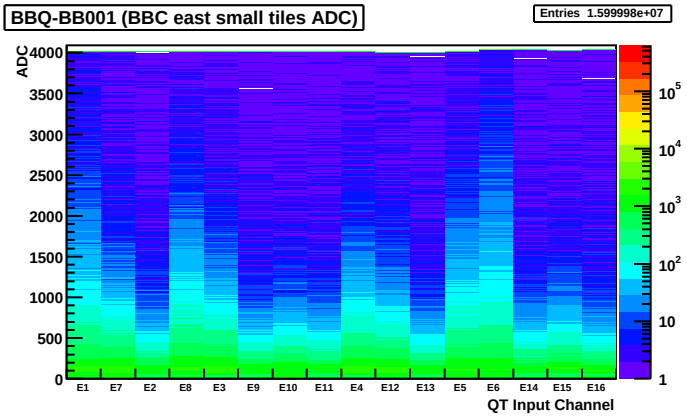

MIX-TF005
Entries 4.199996e+07
TOF MULT
TOF tray

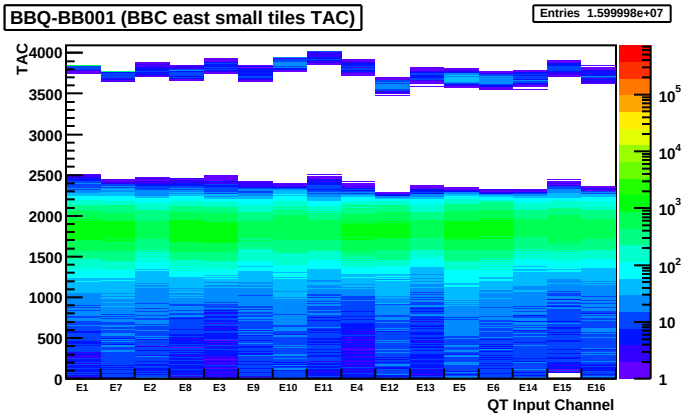

MIX-TF006
Entries 4.199996e+07
TOF MULT
TOF tray

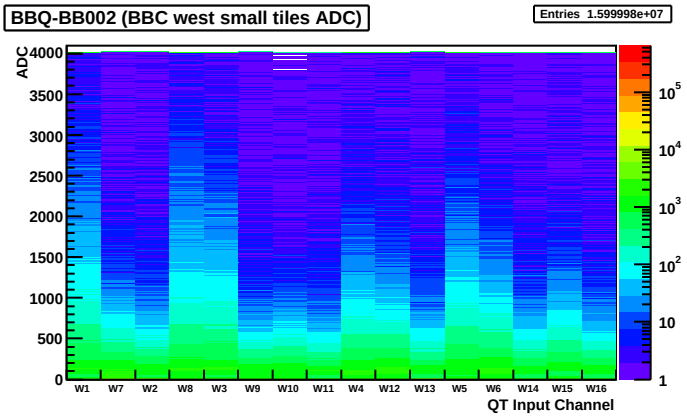

MIX-TF101
Entries 5999994
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

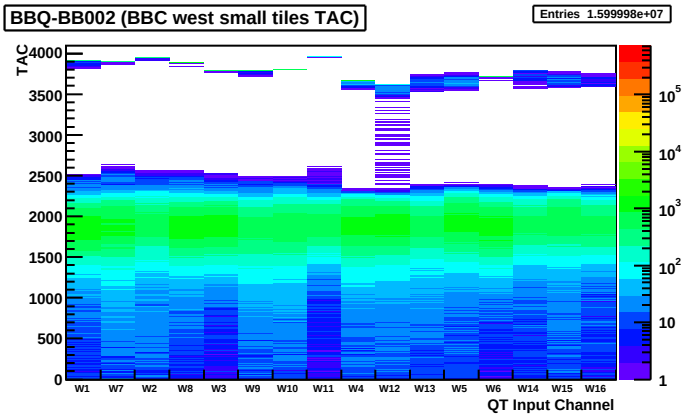

L1-TF201
Entries 999999
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

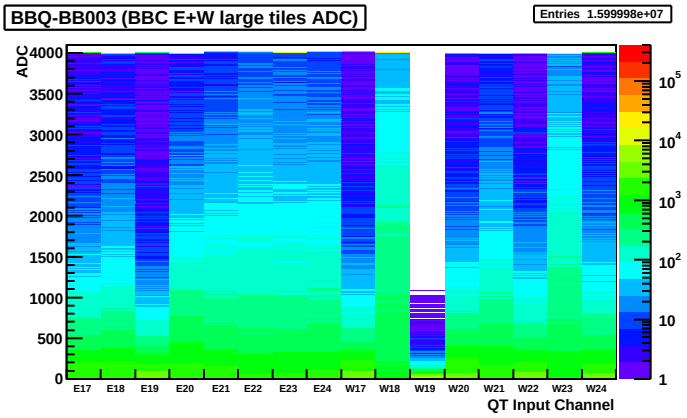

L1-TF201
Entries 5999994
Threshold bits
1
0
735047
713134
640302
681131
617566
677699
264952
286865
359697
318868
382433
322300
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

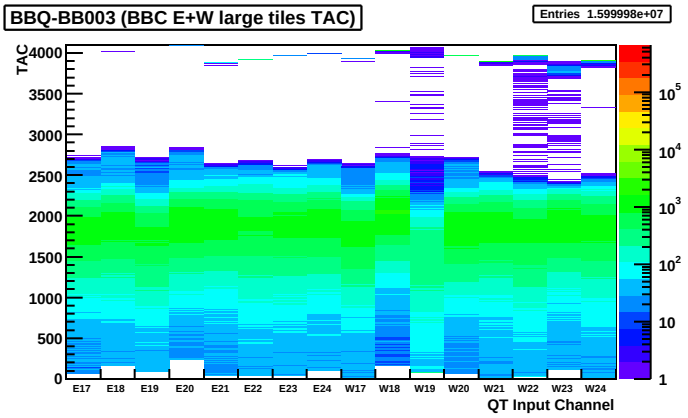

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.599998e+07
ADC
QT Input Channel

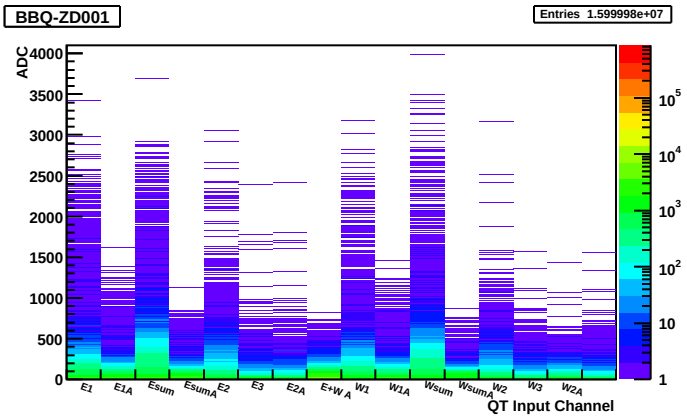

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.599998e+07
TAC
QT Input Channel

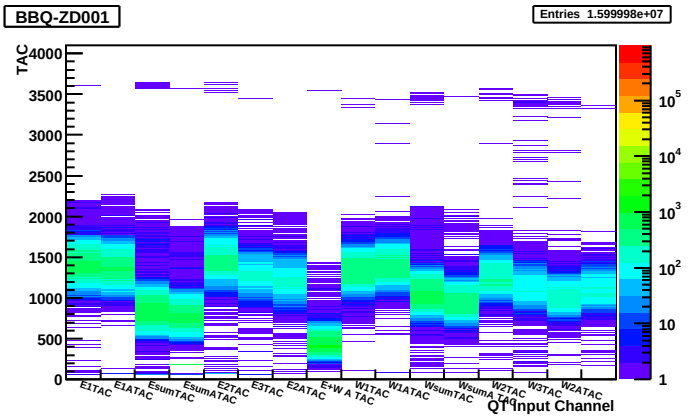

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.599998e+07
ADC
QT Input Channel

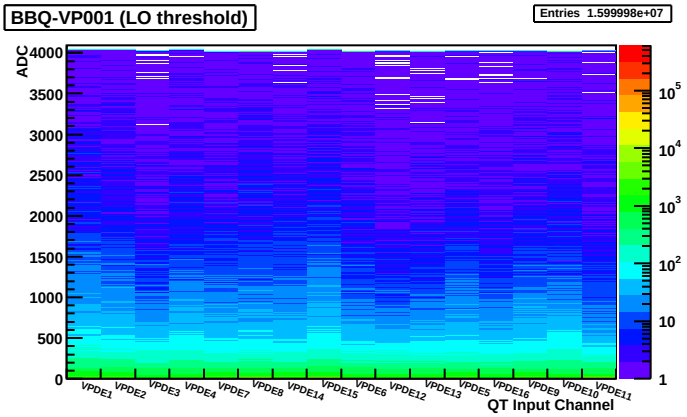

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.599998e+07
TAC
QT Input Channel

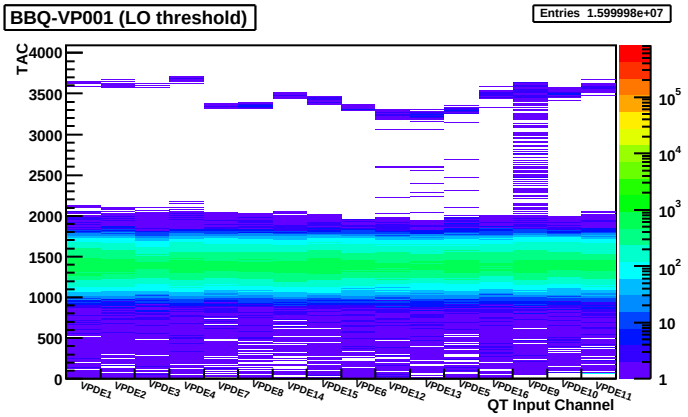

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.599998e+07
ADC
QT Input Channel

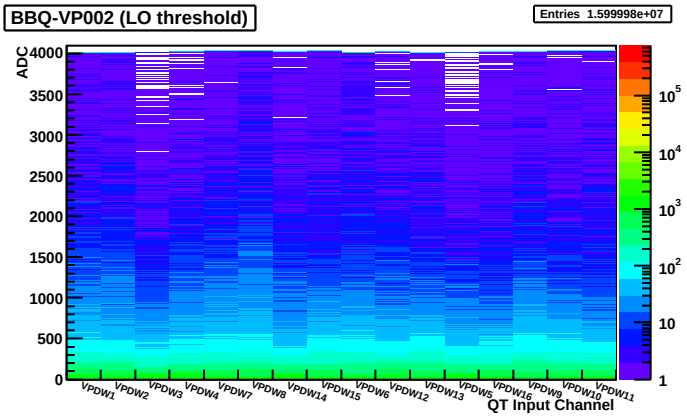

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.599998e+07
TAC
QT Input Channel

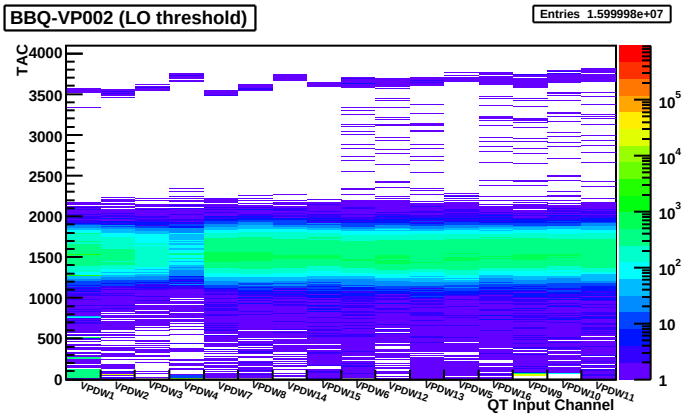

BBQ-ZD001
Entries 1.599998e+07
ADC
QT Input Channel

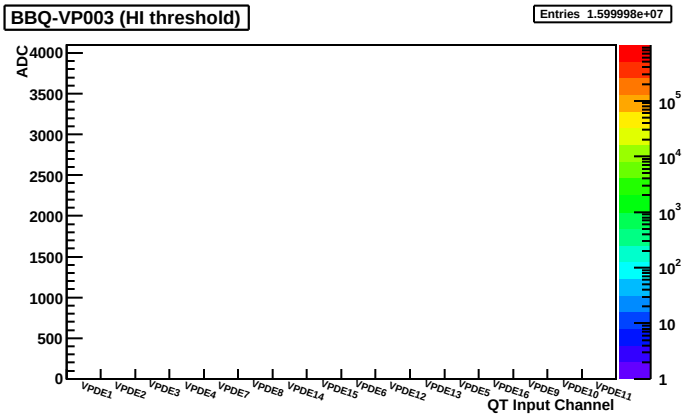

BBQ-ZD001
Entries 1.599998e+07
TAC
QT Input Channel

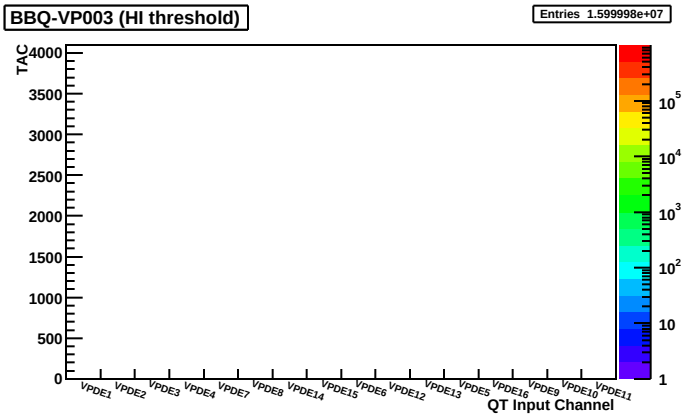

BBQ-VP001 (LO threshold)
Entries 1.599998e+07
ADC
QT Input Channel

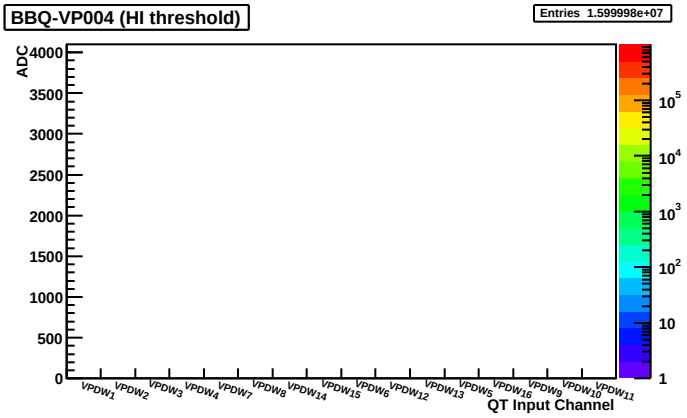

BBQ-VP001 (LO threshold)
Entries 1.599998e+07
TAC
QT Input Channel

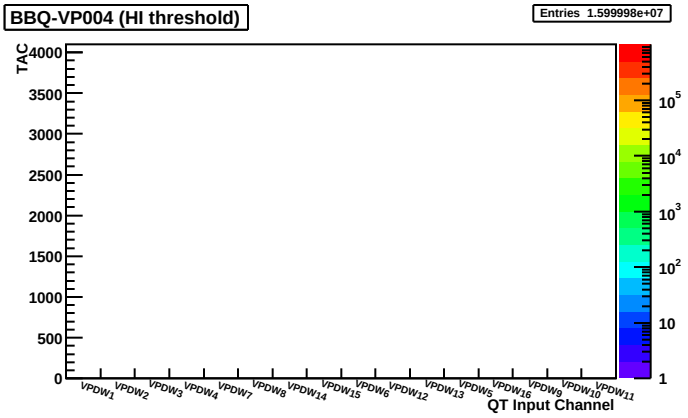

BBQ-VP002 (LO threshold)
Entries 1.599998e+07
ADC
QT Input Channel

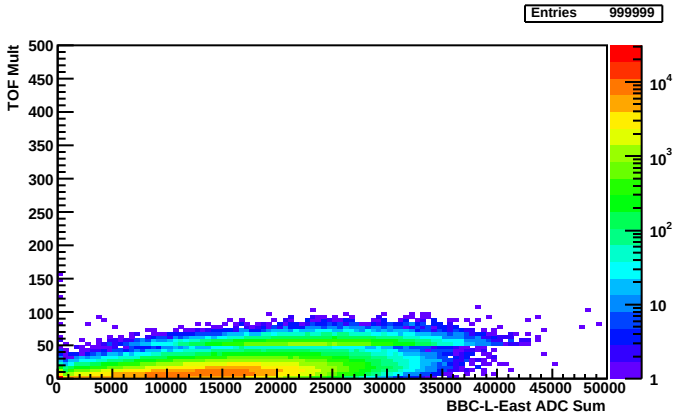

BBQ-VP002 (LO threshold)
Entries 1.599998e+07
TAC
QT Input Channel

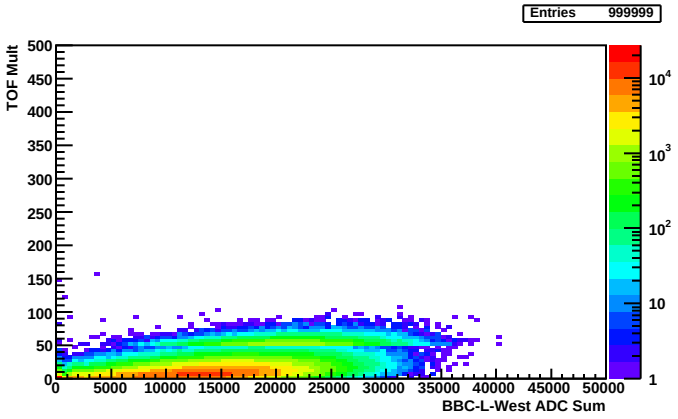

BBQ-VP003 (HI threshold)
Entries 1.599998e+07
ADC
QT Input Channel

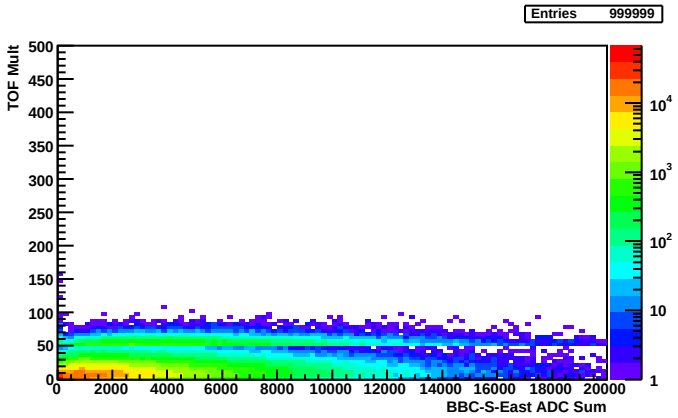

BBQ-VP003 (HI threshold)
Entries 1.599998e+07
TAC
QT Input Channel

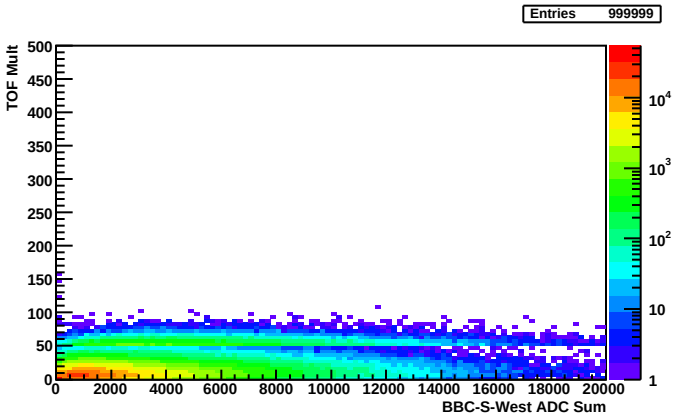

BBQ-VP004 (HI threshold)
Entries 1.599998e+07
ADC
QT Input Channel

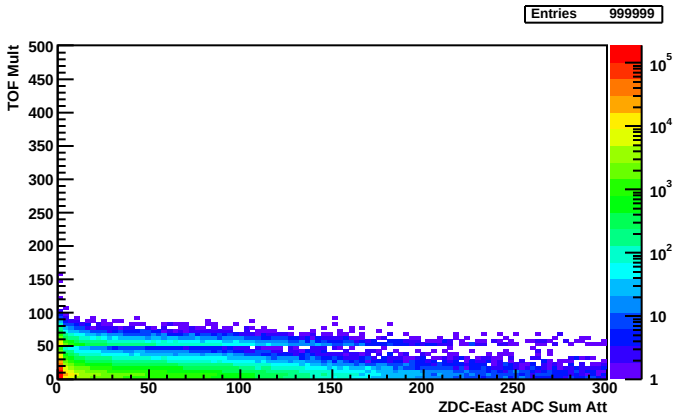

BBQ-VP004 (HI threshold)
Entries 1.599998e+07
TAC
QT Input Channel

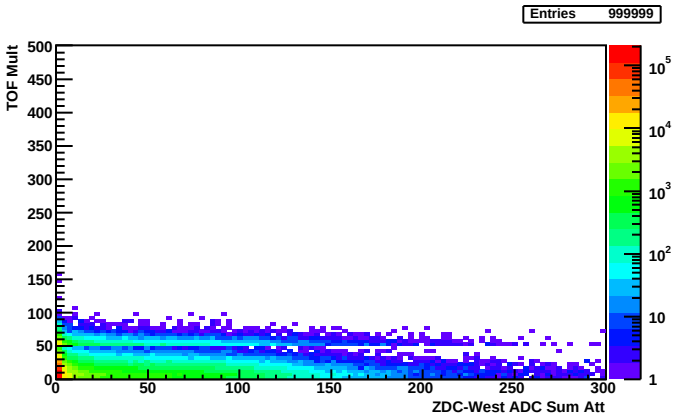

Entries 999999
TOF Mult
BBC-L-East ADC Sum

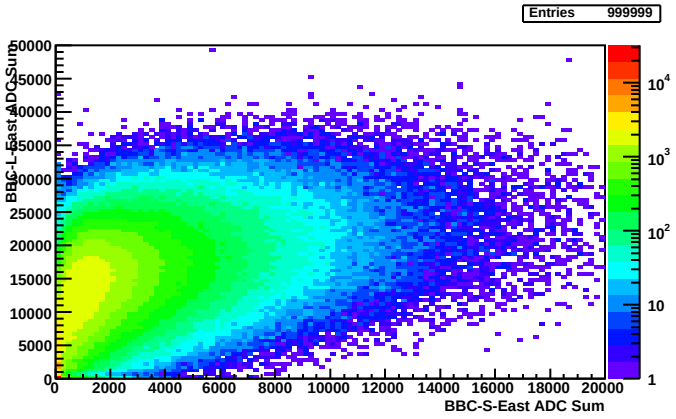

Entries 999999
TOF Mult
BBC-L-West ADC Sum

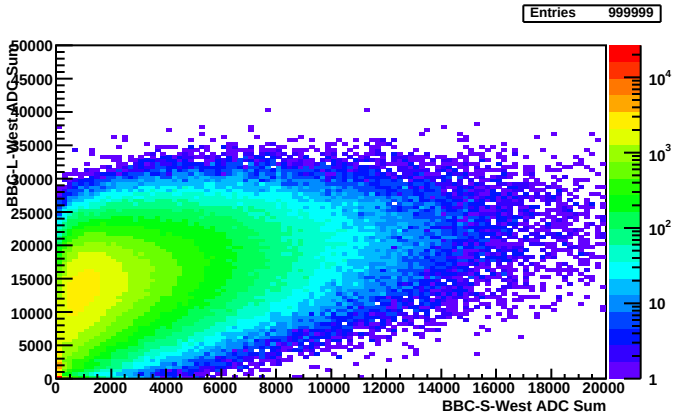

Entries 999999
TOF Mult
BBC-S-East ADC Sum

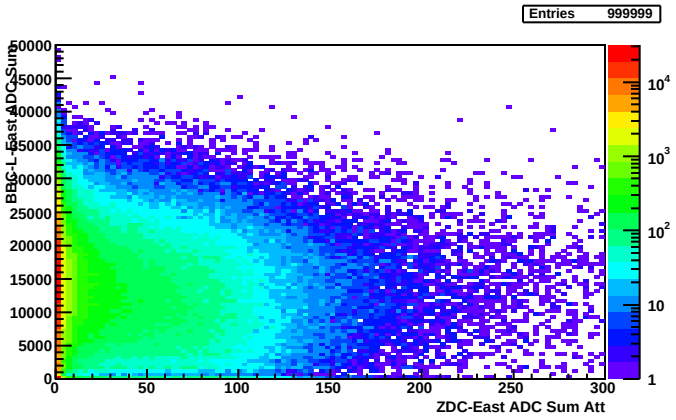

Entries 999999
TOF Mult
BBC-S-West ADC Sum

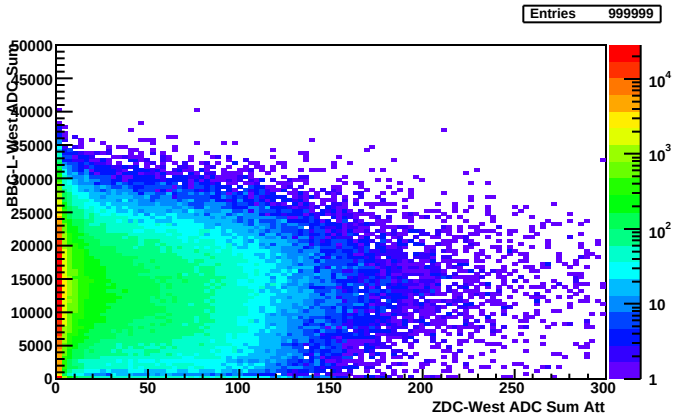

Entries 999999
TOF Mult
ZDC-East ADC Sum Att

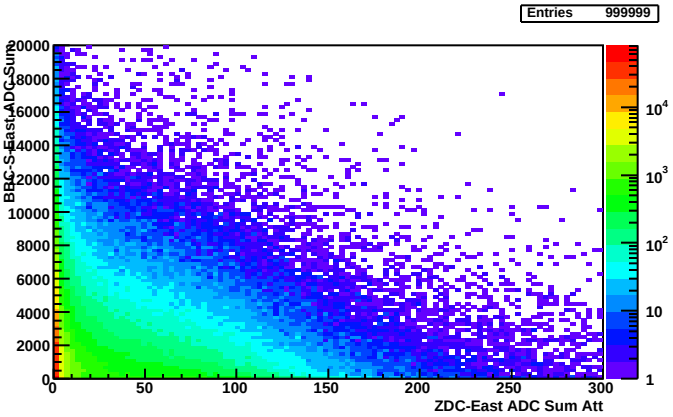

Entries 999999
TOF Mult
ZDC-West ADC Sum Att

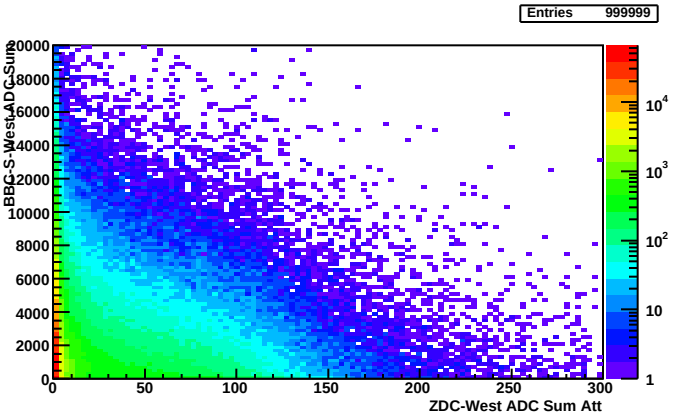

Entries 999999
BBC-L-East ADC Sum
BBC-S-East ADC Sum

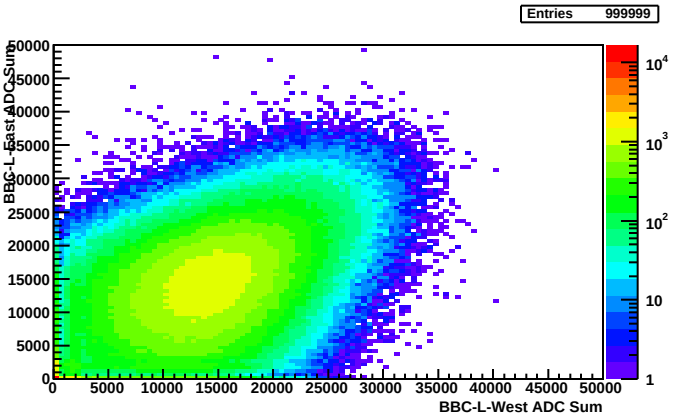

Entries 999999
BBC-L-West ADC Sum
BBC-S-West ADC Sum

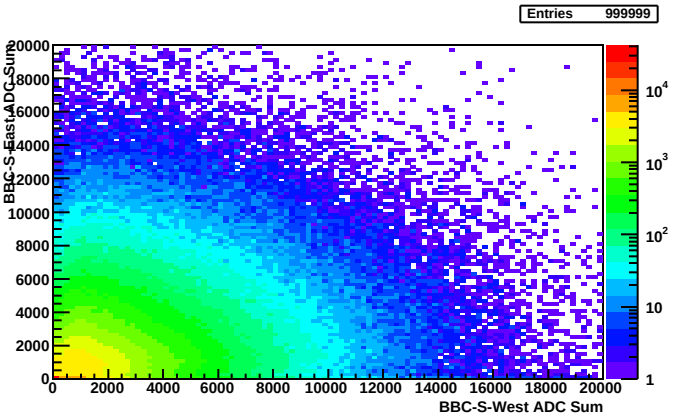

Entries 999999
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

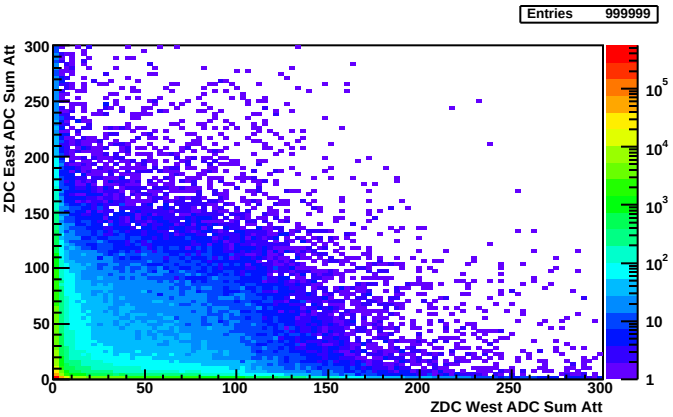

Entries 999999
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

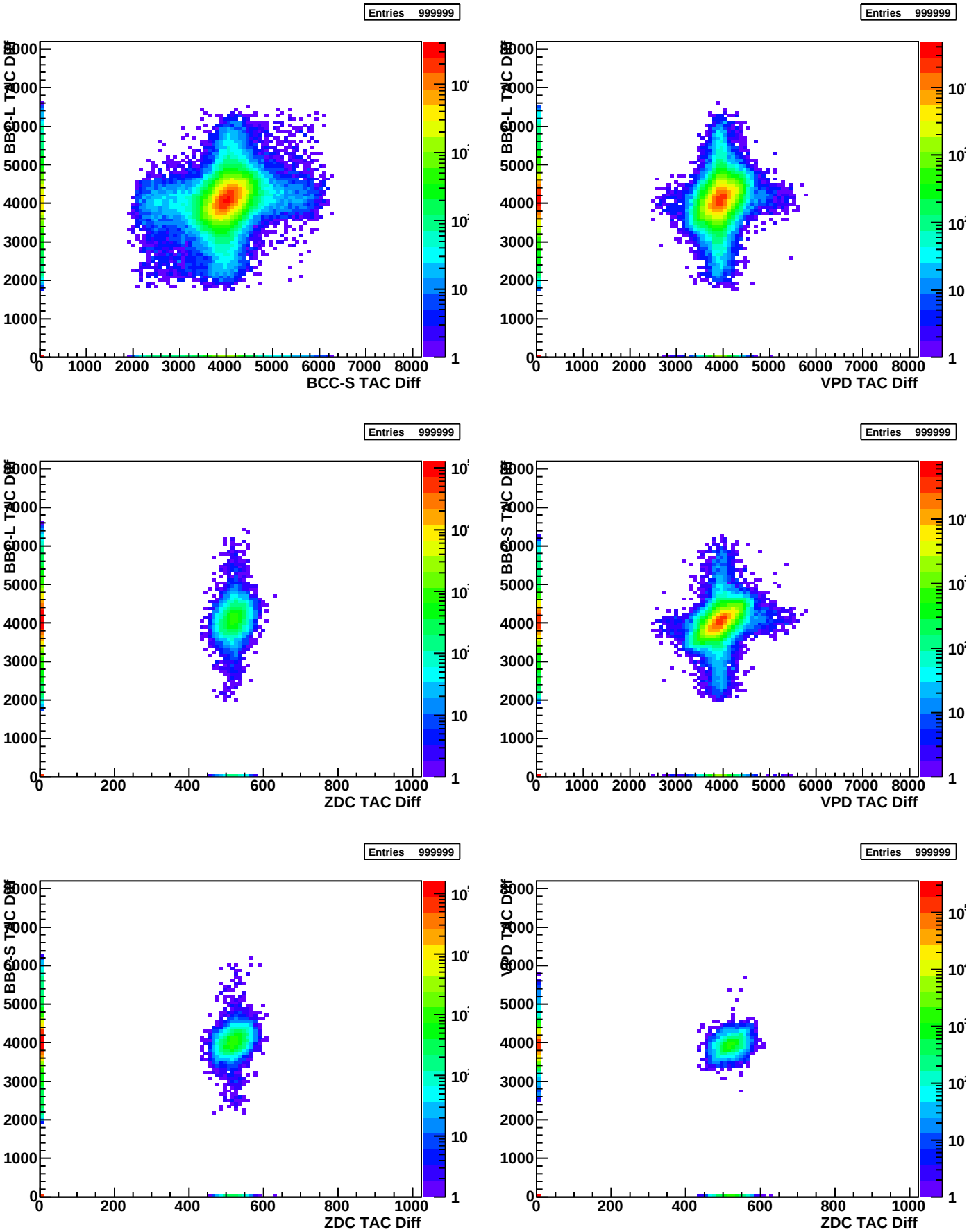

Entries 999999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

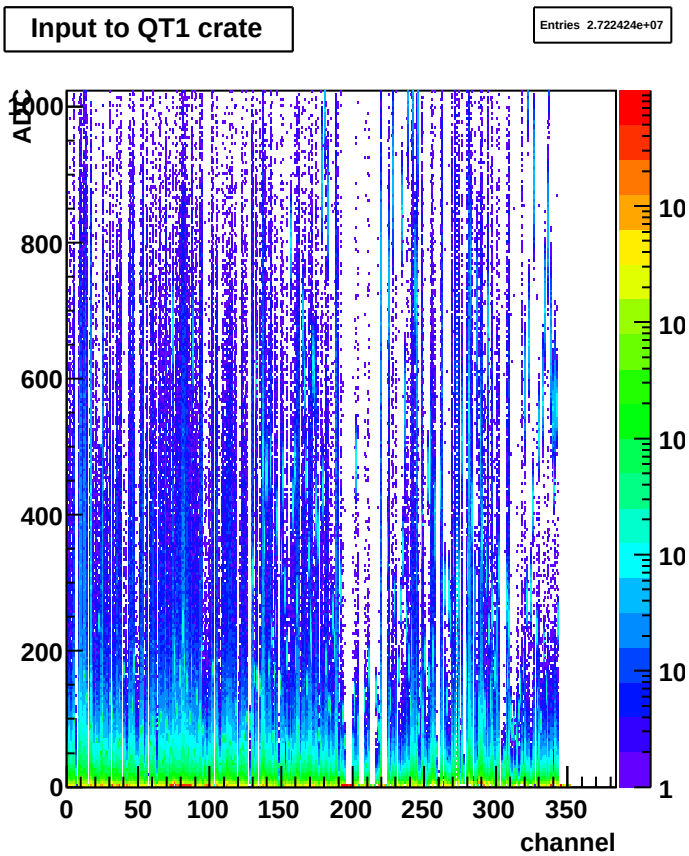

Entries 999999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

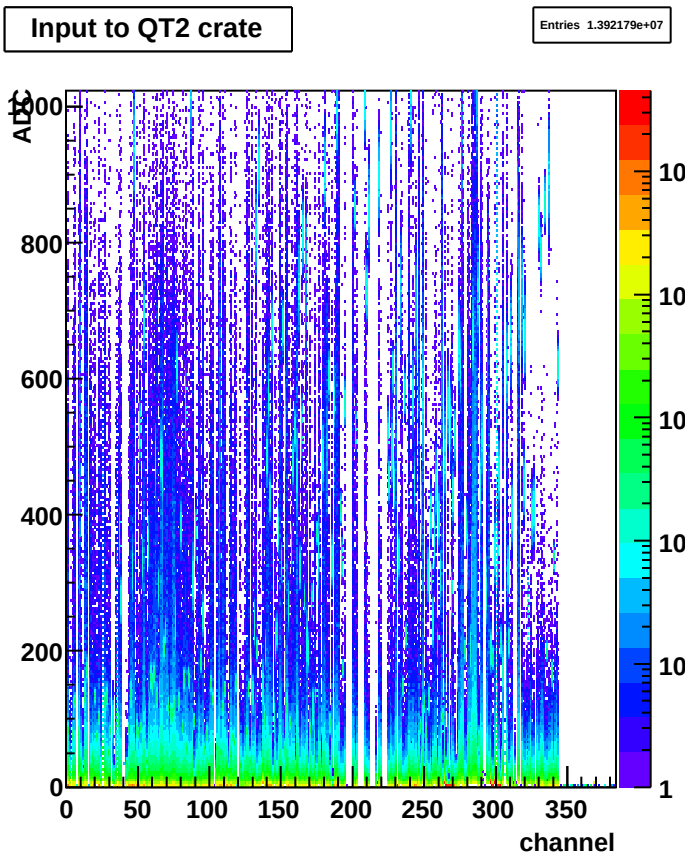

Entries 999999
BBC-L-East ADC Sum
BBC-L-West ADC Sum

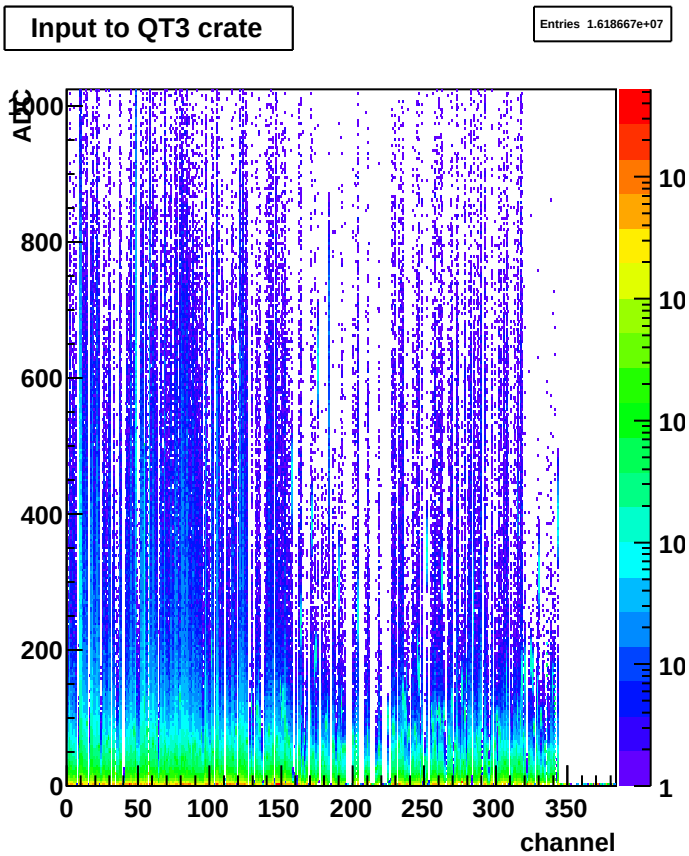

Entries 999999
BBC-S-East ADC Sum
BBC-S-West ADC Sum

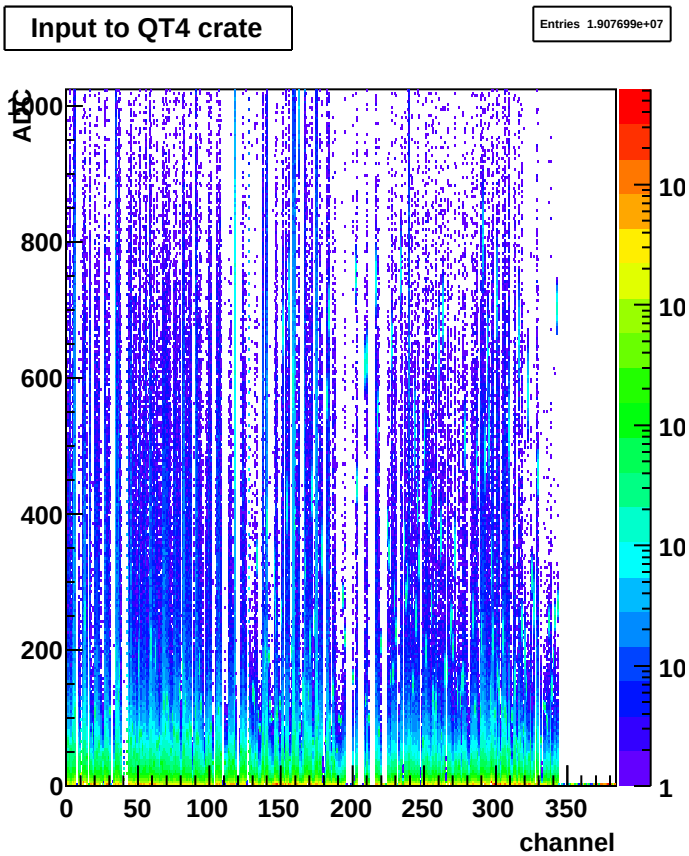

Entries 999999
ZDC East ADC Sum Att
ZDC West ADC Sum Att

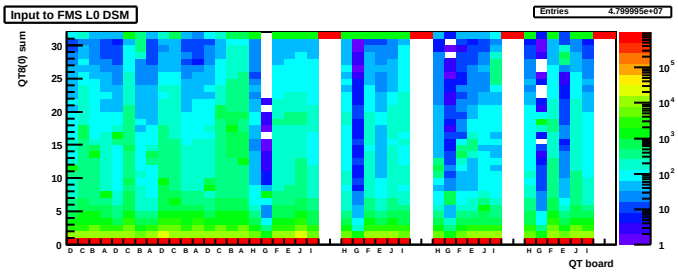

Entries 999999
BBC-L TAC Diff
BCC-S TAC Diff
Entries 999999
BBC-L TAC Diff
VPD TAC Diff
Entries 999999
BBC-L TAC Diff
ZDC TAC Diff
Entries 999999
BBC-S TAC Diff
VPD TAC Diff
Entries 999999
BBC-S TAC Diff
ZDC TAC Diff
Entries 999999
VPD TAC Diff
ZDC TAC Diff

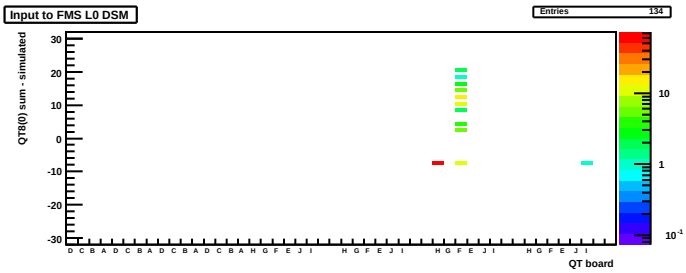

Input to QT1 crate
Entries 2.722424e+07
ADC
channel

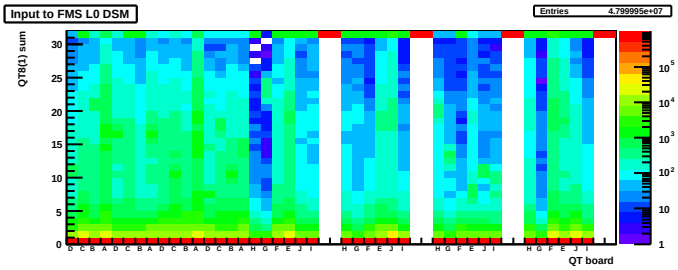

Input to QT2 crate
Entries 1.392179e+07
ADC
channel

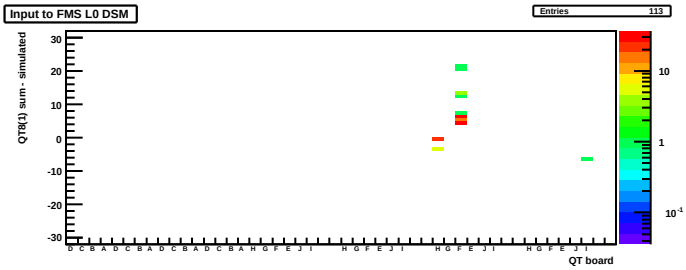

Input to QT3 crate
Entries 1.618667e+07
ADC
channel

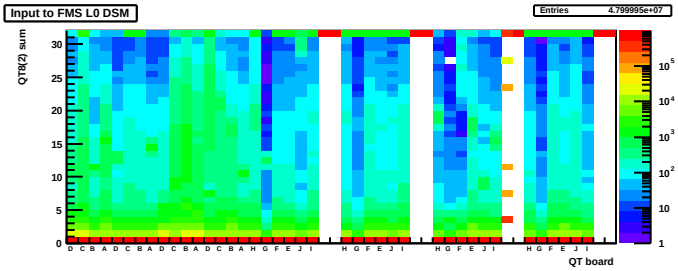

Input to QT4 crate
Entries 1.907699e+07
ADC
channel

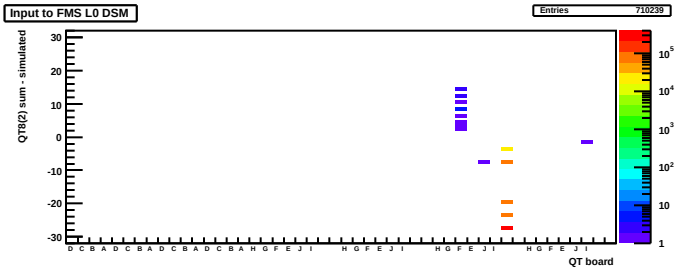

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(0) sum
QT board

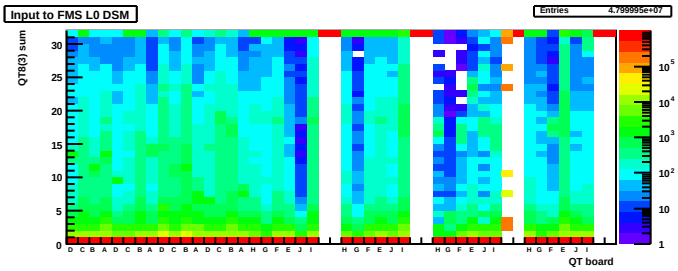

Input to FMS L0 DSM
Entries 134
QT8(0) sum - simulated
QT board

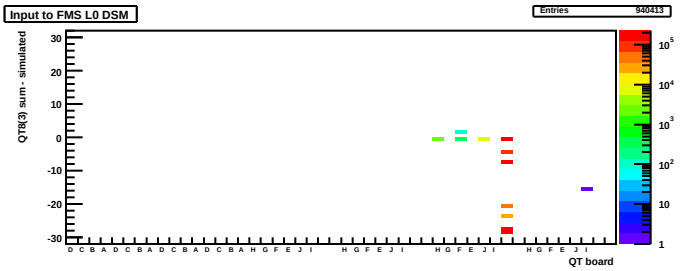

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(1) sum
QT board

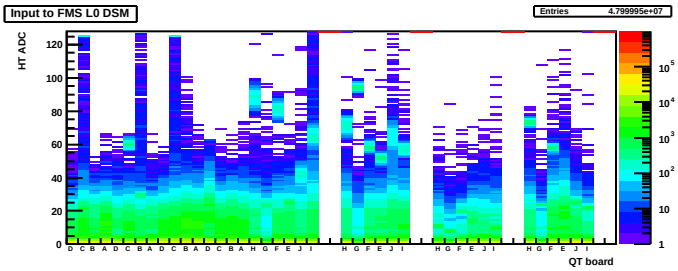

Input to FMS L0 DSM
Entries 113
QT8(1) sum - simulated
QT board

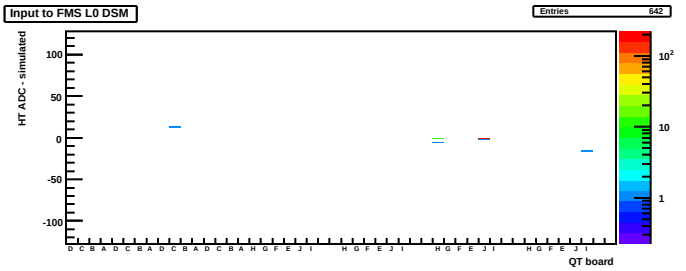

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(2) sum
QT board

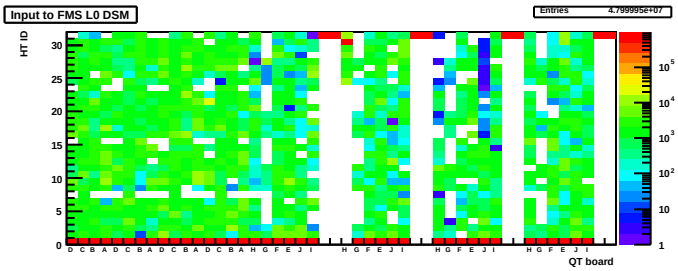

Input to FMS L0 DSM
Entries 710239
QT8(2) sum - simulated
QT board

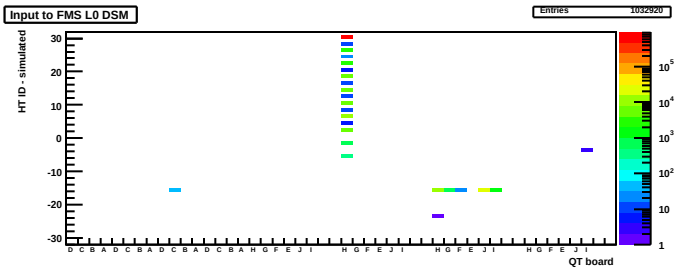

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(3) sum
QT board

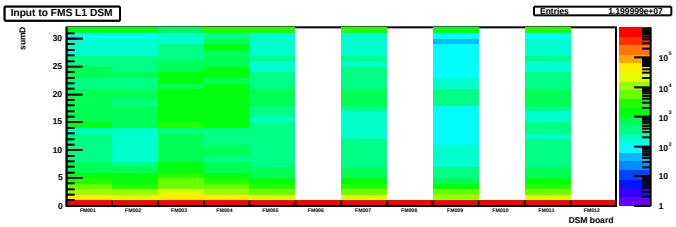

Input to FMS L0 DSM
Entries 940413
QT8(3) sum - simulated
QT board

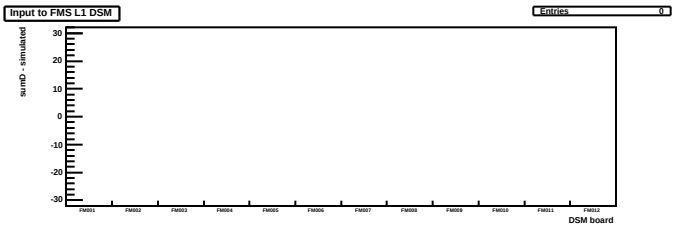

Input to FMS L0 DSM
Entries 4.799995e+07
HT ADC
QT board

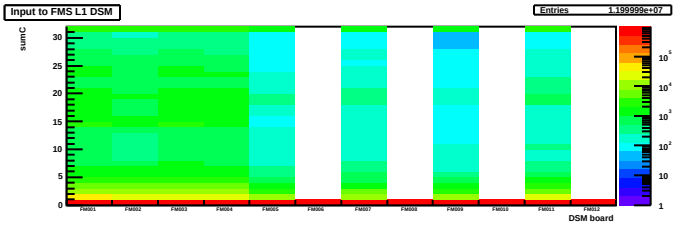

Input to FMS L0 DSM
Entries 642
HT ADC - simulated
QT board

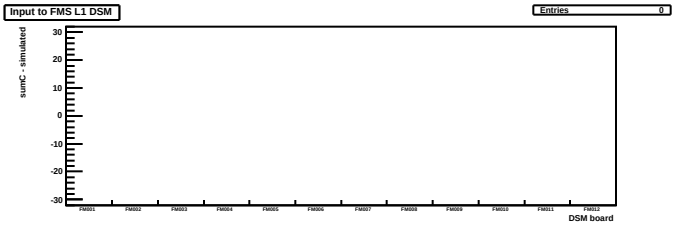

Input to FMS L0 DSM
Entries 4.799995e+07
HT ID
QT board

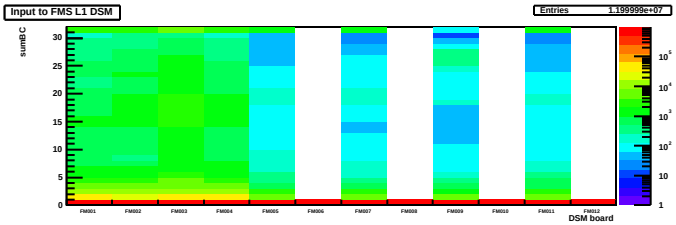

Input to FMS L0 DSM
Entries 1032920
HT ID - simulated
QT board

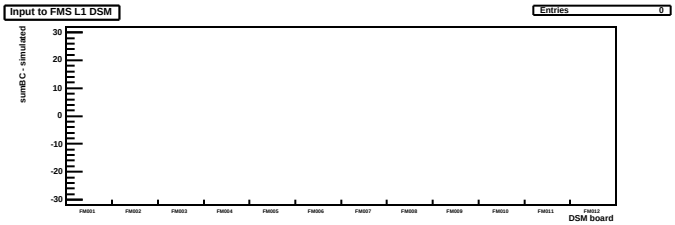

Input to FMS L1 DSM
Entries 1.199999e+07
sumD
DSM board

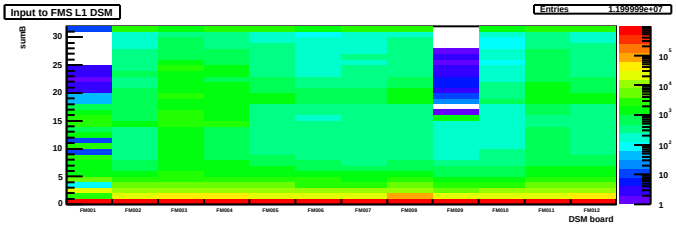

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

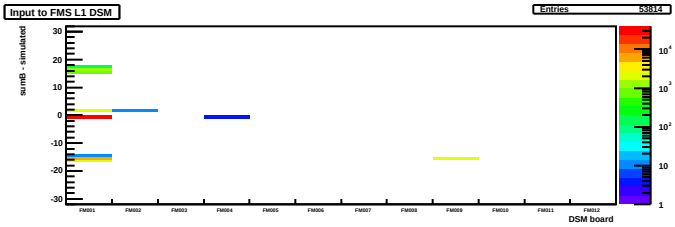

Input to FMS L1 DSM
Entries 1.199999e+07
sumC
DSM board

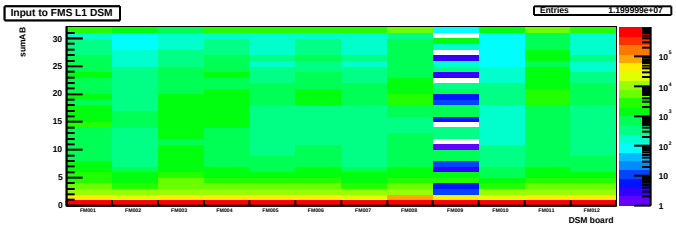

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

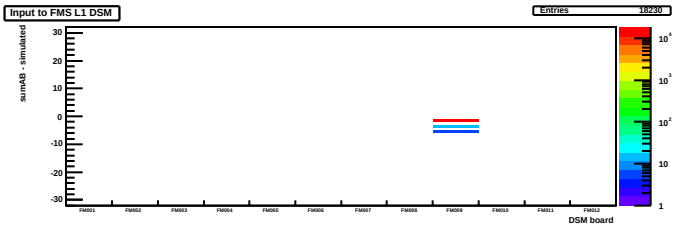

Input to FMS L1 DSM
Entries 1.199999e+07
sumBC
DSM board

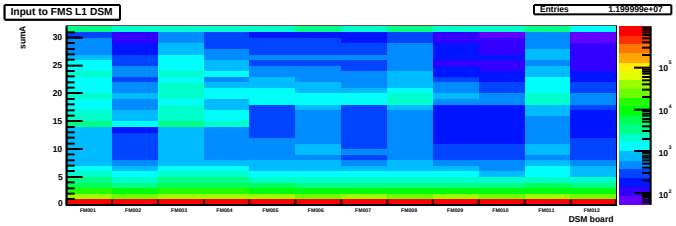

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

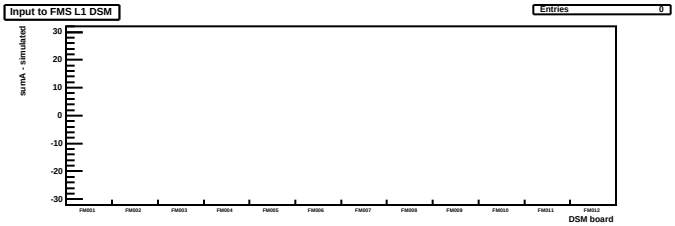

Input to FMS L1 DSM
Entries 1.199999e+07
sumB
DSM board

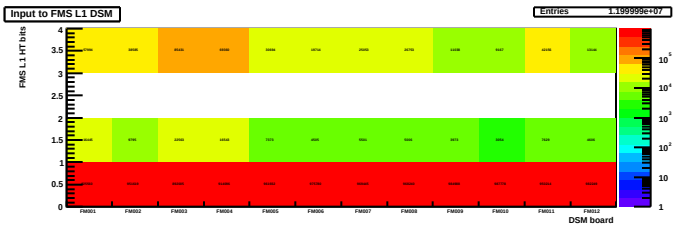

Input to FMS L1 DSM
Entries 53814
sumB - simulated
DSM board

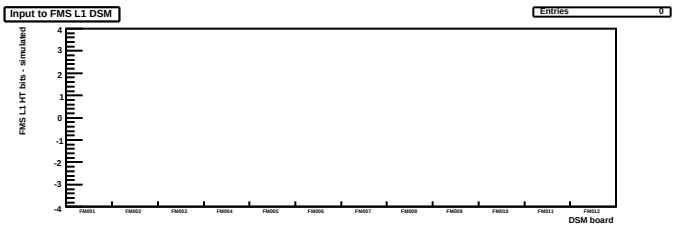

Input to FMS L1 DSM
Entries 1.199999e+07
sumAB
DSM board

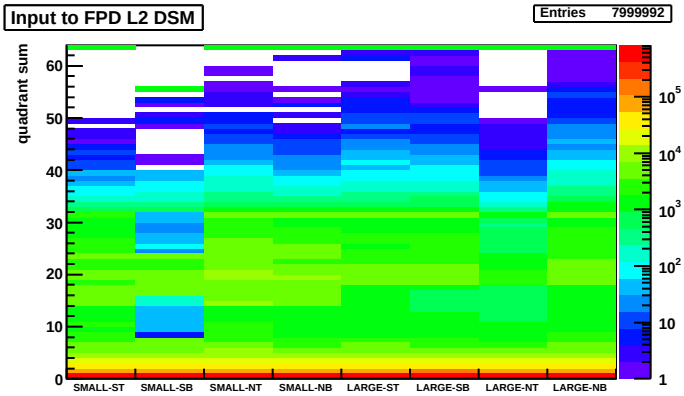

Input to FMS L1 DSM
Entries 18230
sumAB - simulated
DSM board

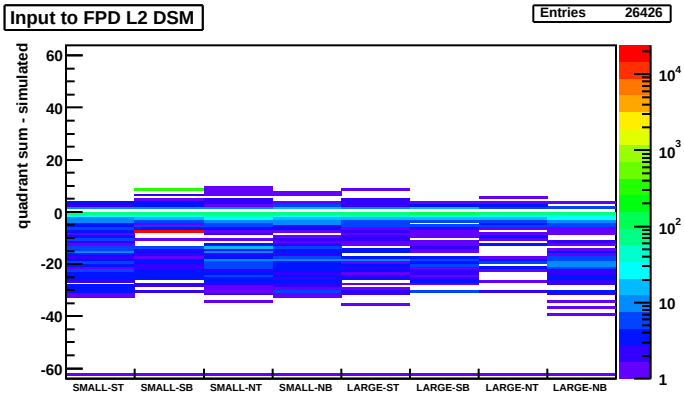

Input to FMS L1 DSM
Entries 1.199999e+07
sumA
DSM board

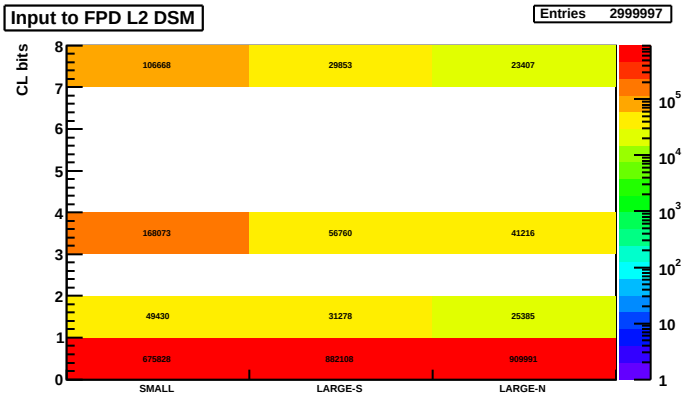

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

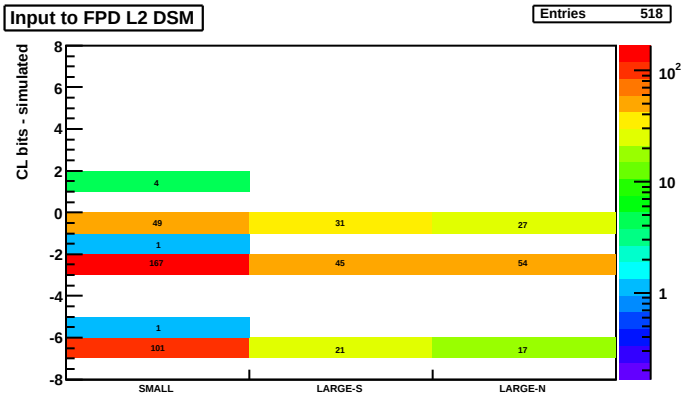

Input to FMS L1 DSM
Entries 1.199999e+07
FMS L1 HT bits
DSM board

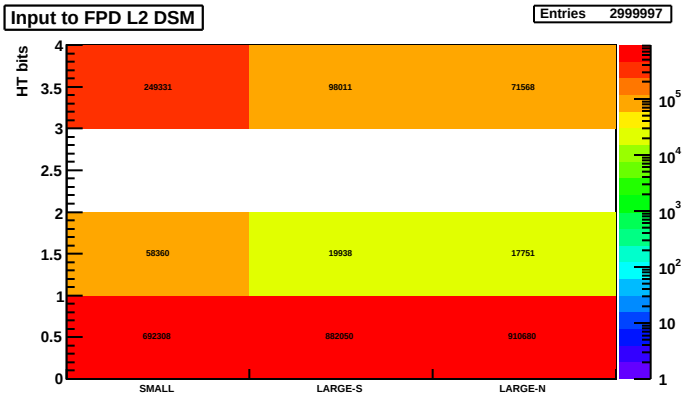

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

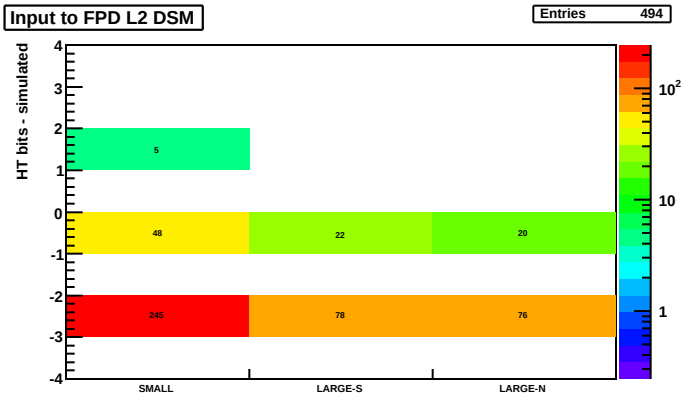

Input to FPD L2 DSM
Entries 7999992
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

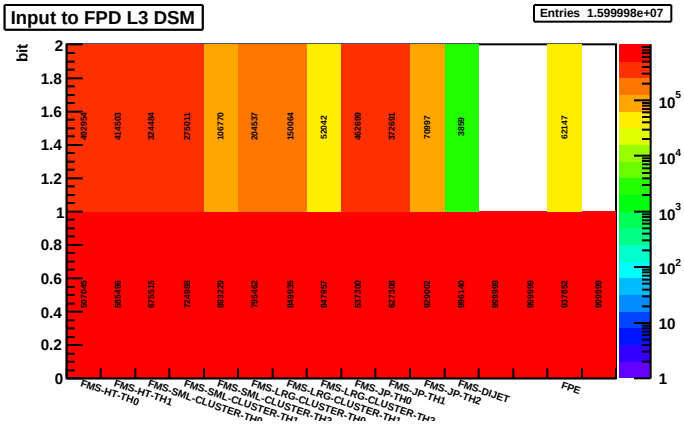

Input to FPD L2 DSM
Entries 26426
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

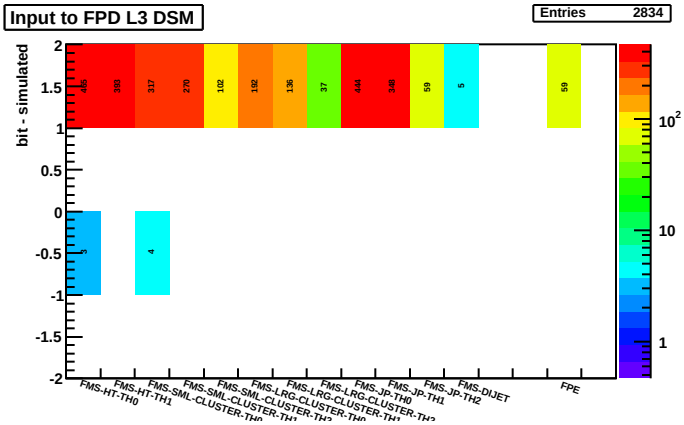

Input to FPD L2 DSM
Entries 2999997
CL bits
106668
29853
23407
168073
56760
41216
49430
31278
25385
675828
882108
909991
SMALL
LARGE-S
LARGE-N

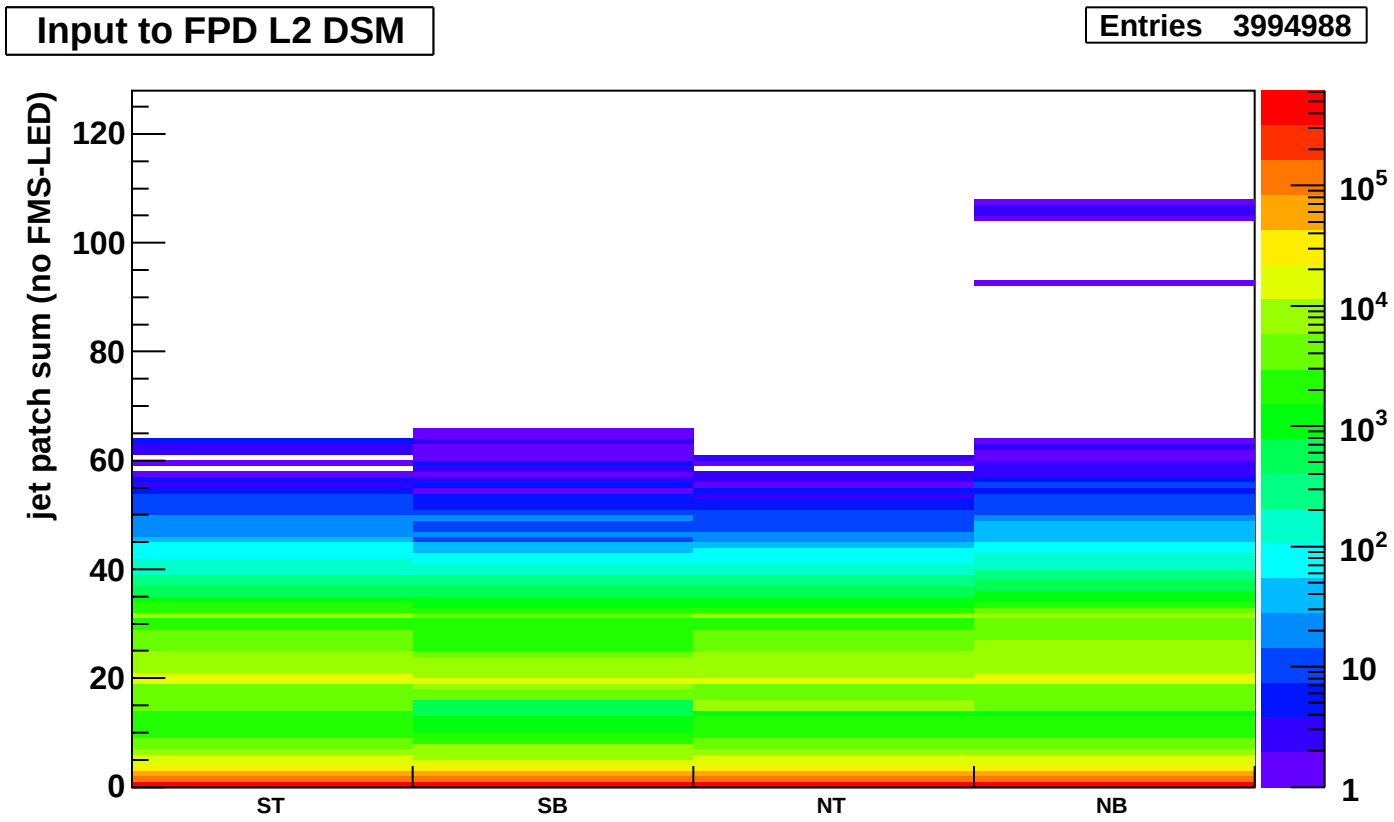

Input to FPD L2 DSM
Entries 518
CL bits - simulated
4
49
31
27
1
167
45
54
1
101
21
17
SMALL
LARGE-S
LARGE-N

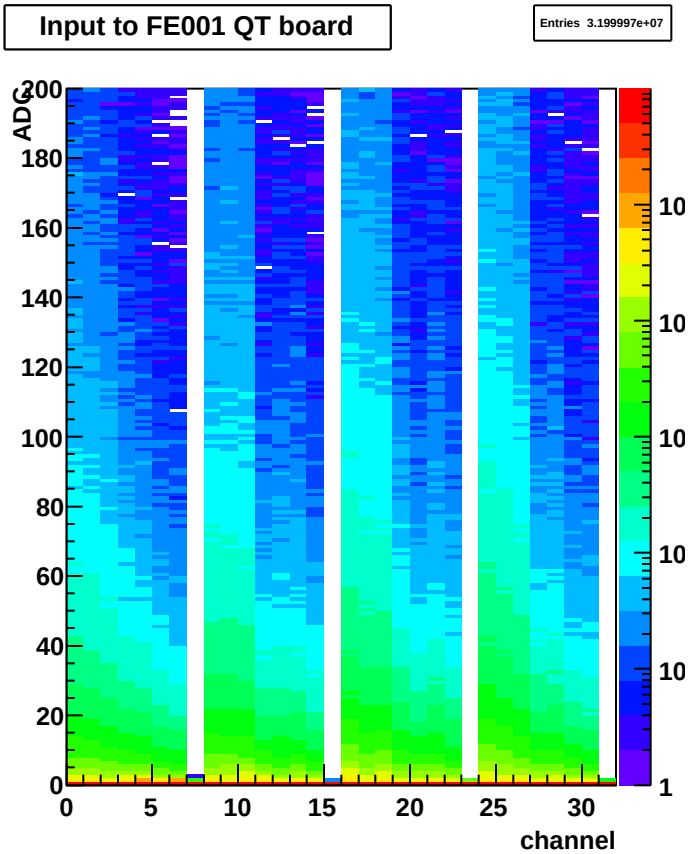

Input to FPD L2 DSM
Entries 2999997
HT bits
249331
98011
71568
58360
19938
17751
692308
882050
910680
SMALL
LARGE-S
LARGE-N

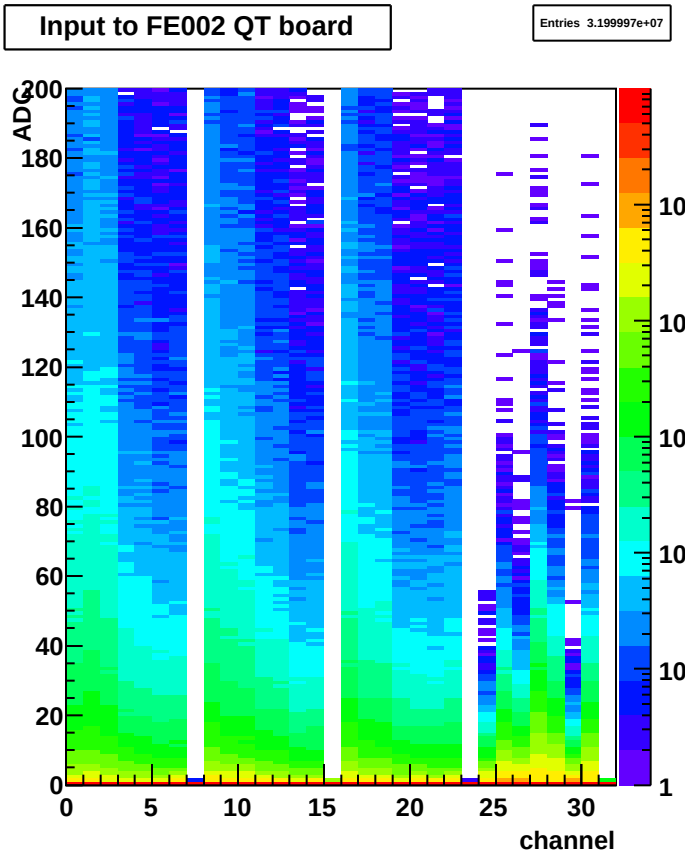

Input to FPD L2 DSM
Entries 494
HT bits - simulated
5
48
22
20
245
78
76
SMALL
LARGE-S
LARGE-N

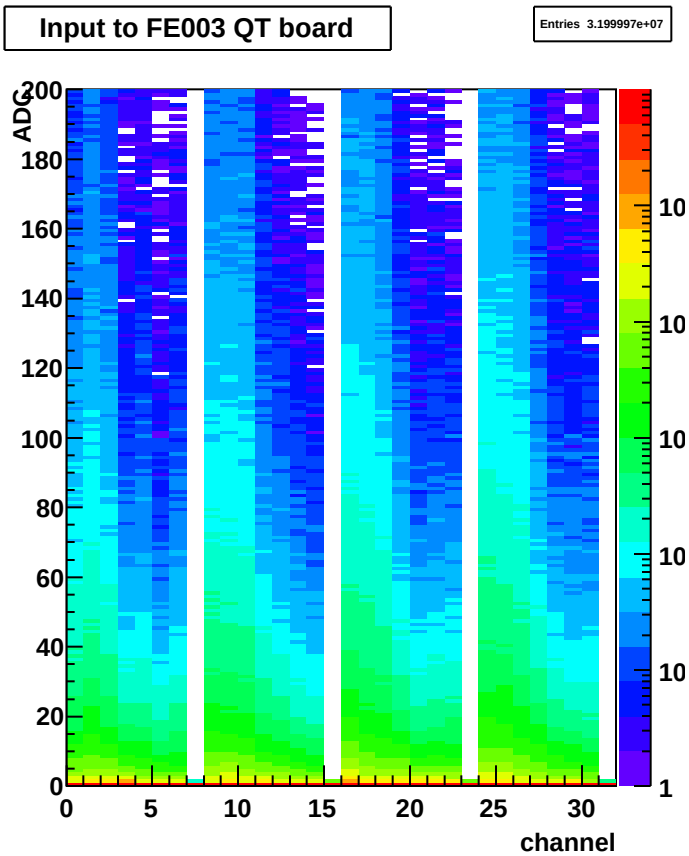

Input to FPD L3 DSM
Entries 1.599998e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

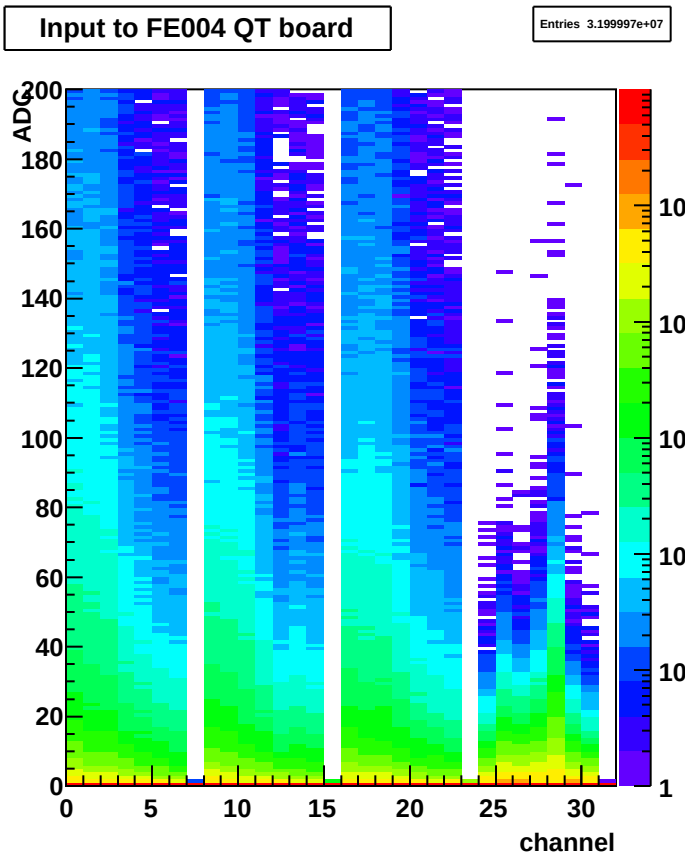

Input to FPD L3 DSM
Entries 2834
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

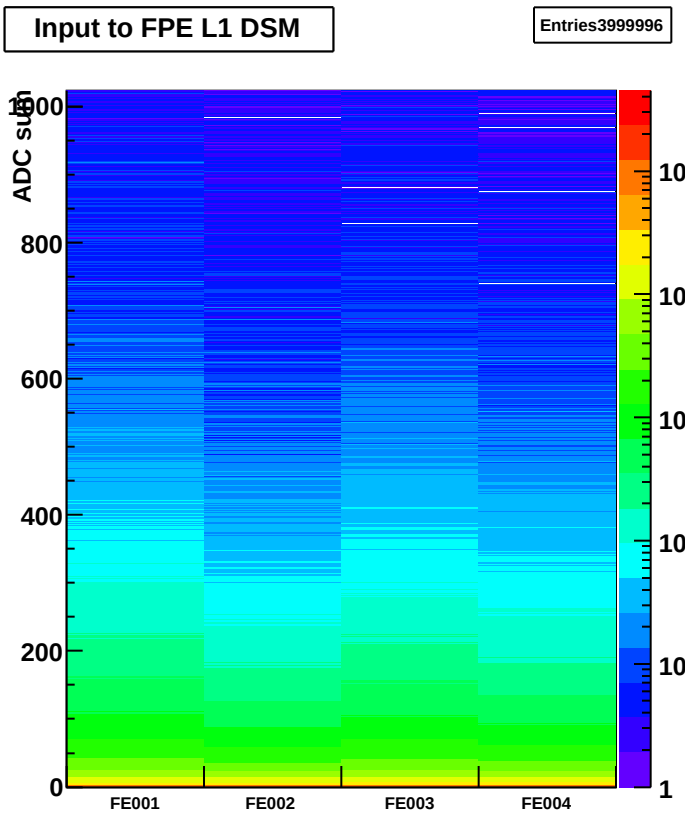

Input to FPD L2 DSM
Entries 3994988
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

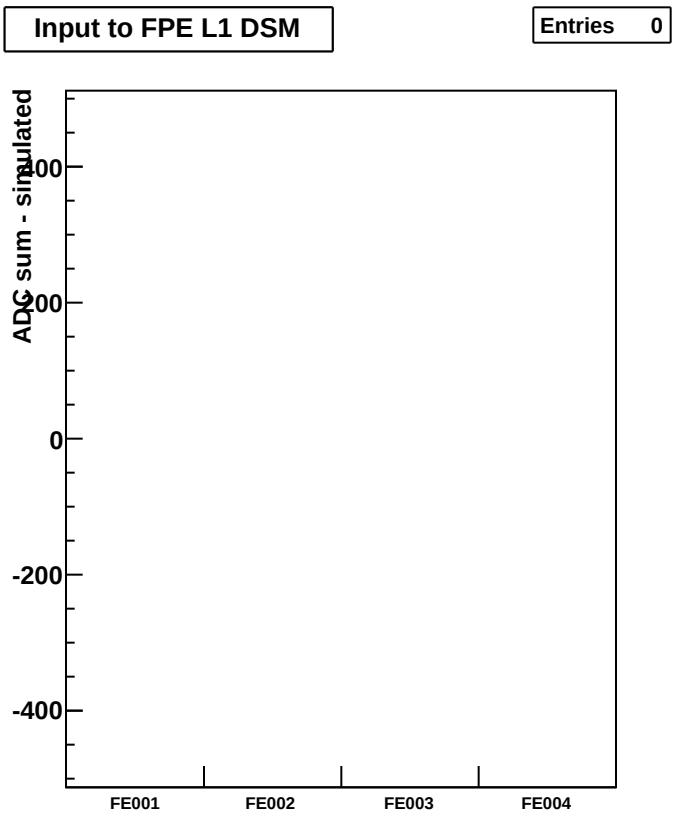

Input to FE001 QT board
Entries 3.199997e+07
ADC
channel

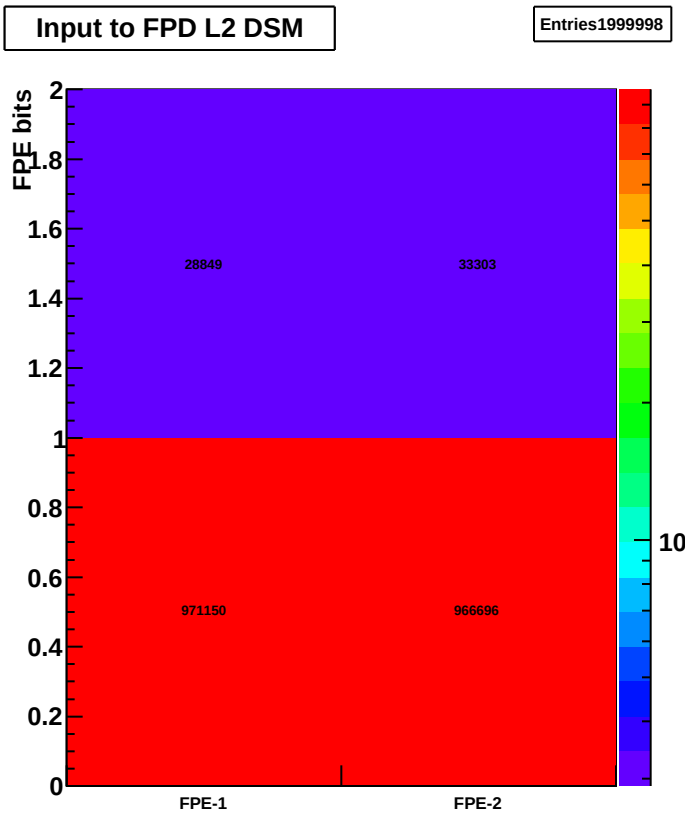

Input to FE002 QT board
Entries 3.199997e+07
ADC
channel

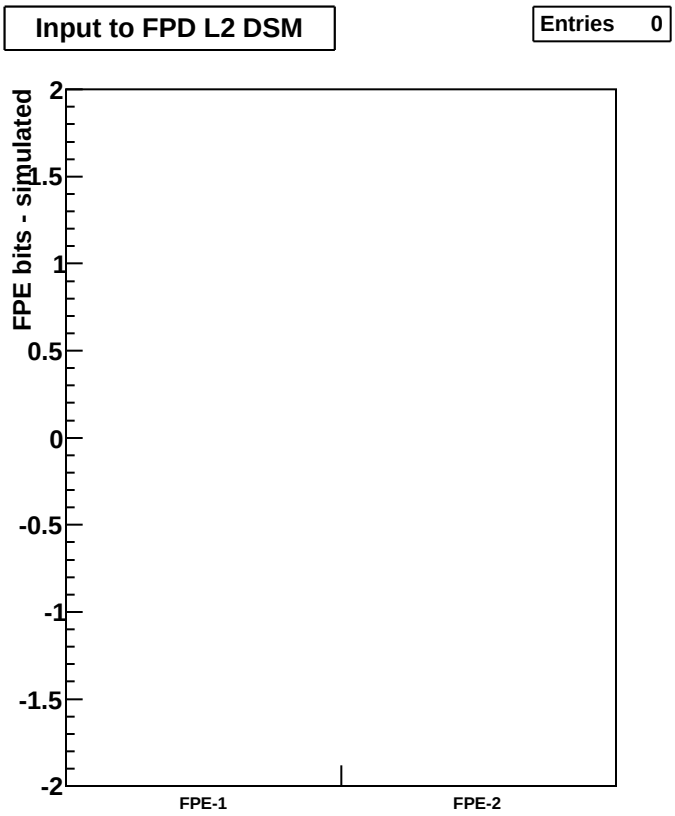

Input to FE003 QT board
Entries 3.199997e+07
ADC
channel


Input to FE004 QT board
Entries 3.199997e+07
ADC
channel


Input to FPE L1 DSM
Entries3999996
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
Entries1999998
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
28849
33303
971150
966696
FPE-1
FPE-2
10


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