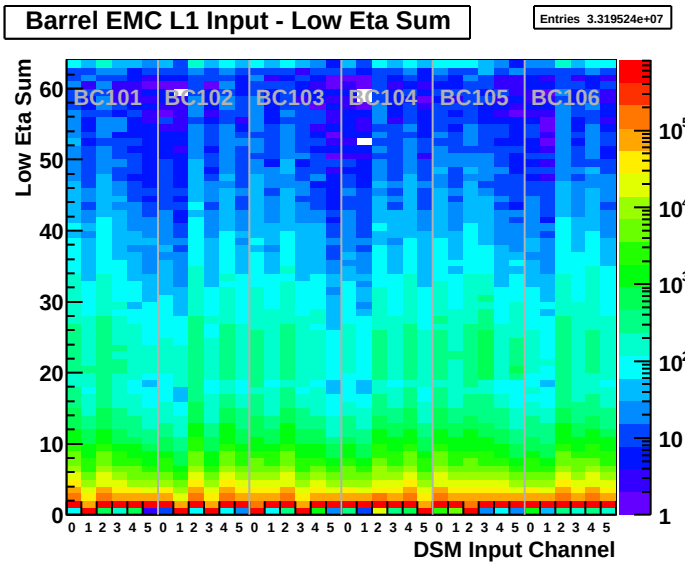
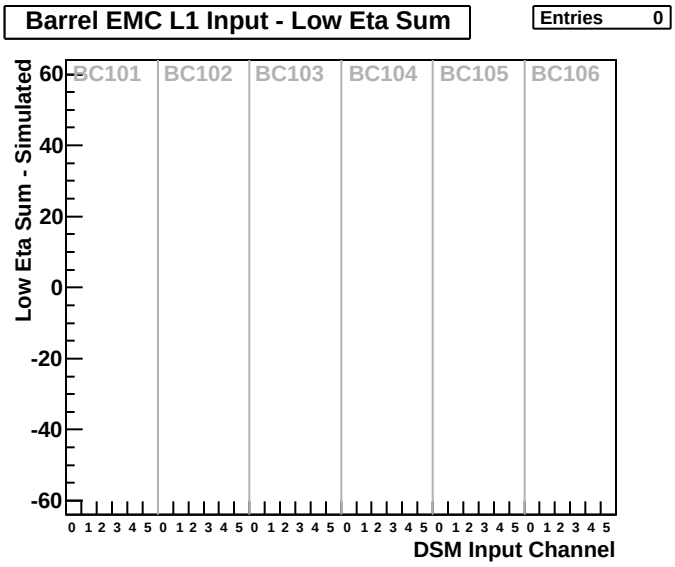
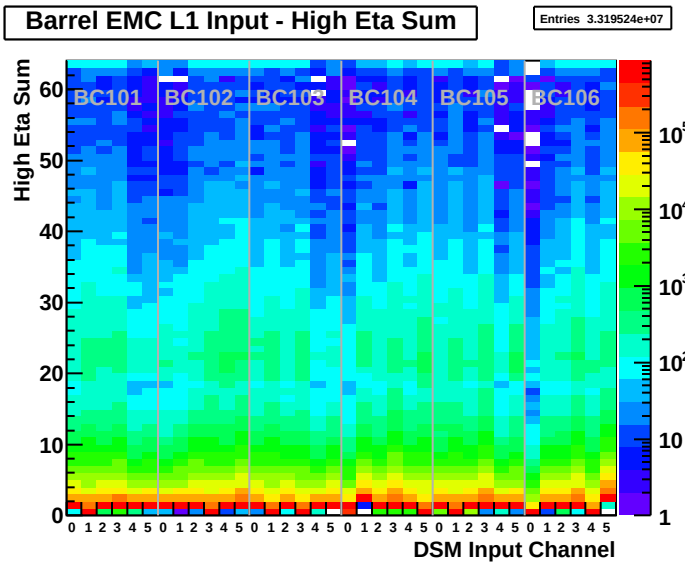
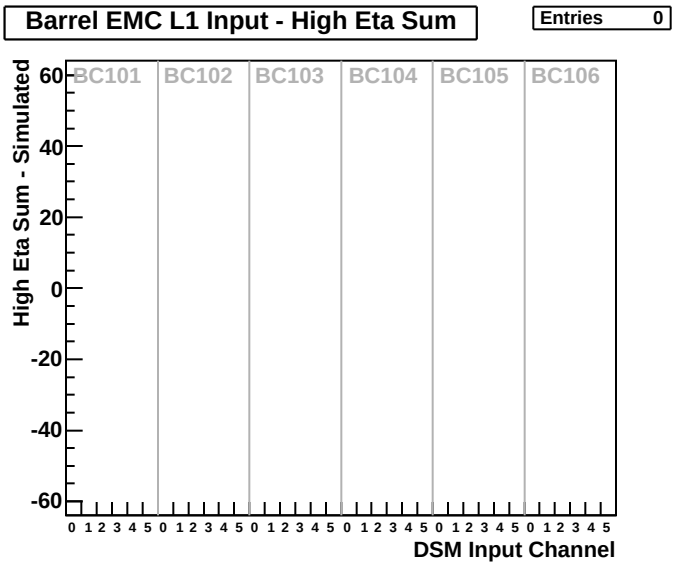
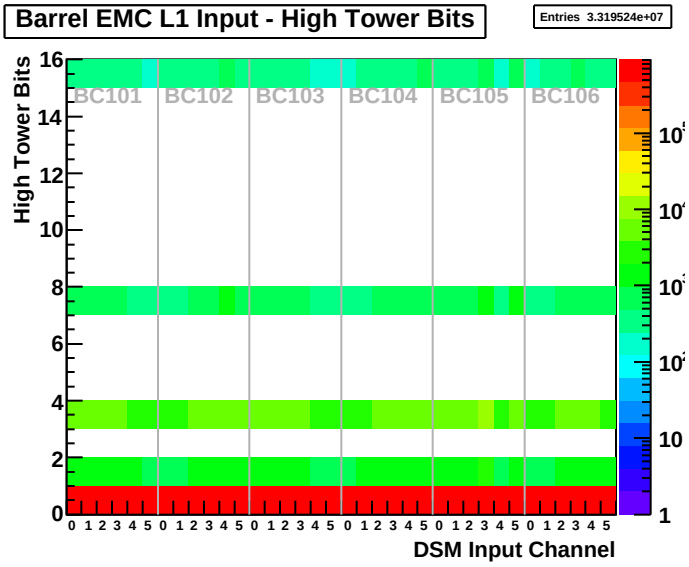
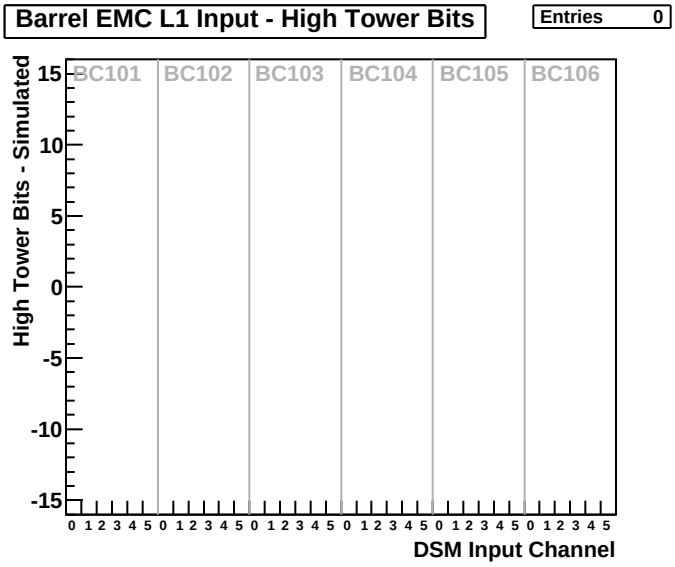

Barrel EMC L1 Input - Low Eta Sum
Entries 3.319524e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

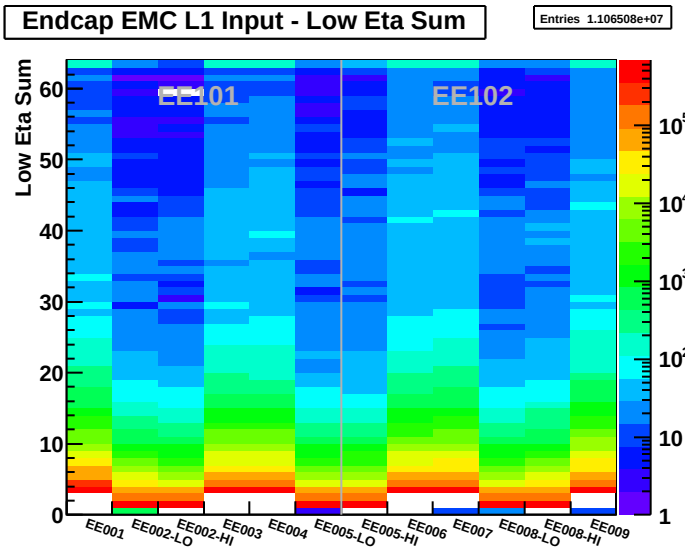

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

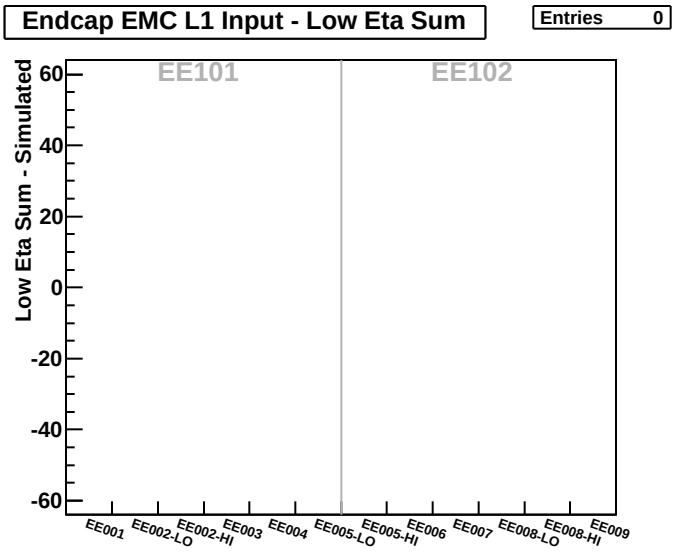

Barrel EMC L1 Input - High Eta Sum
Entries 3.319524e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

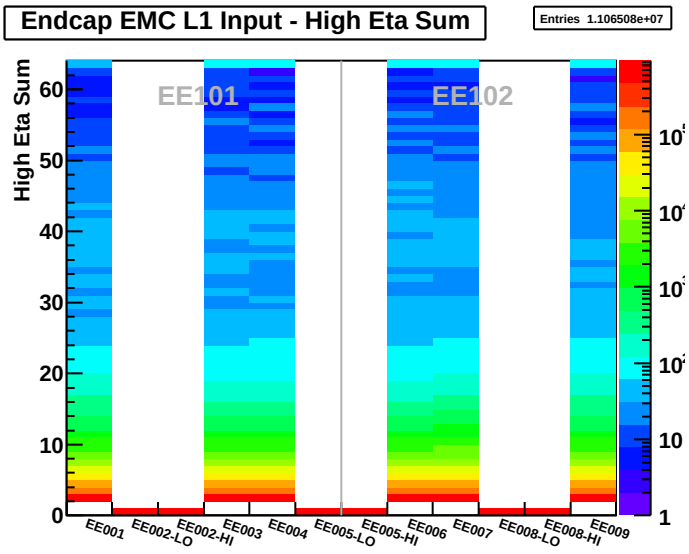

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

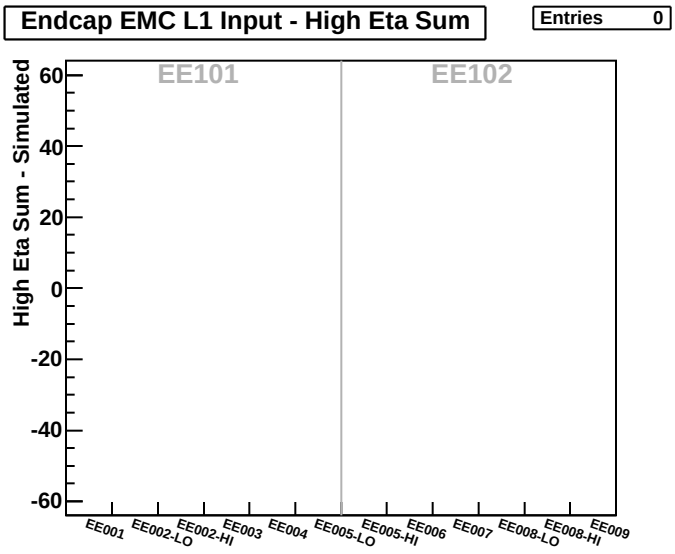

Barrel EMC L1 Input - High Tower Bits
Entries 3.319524e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

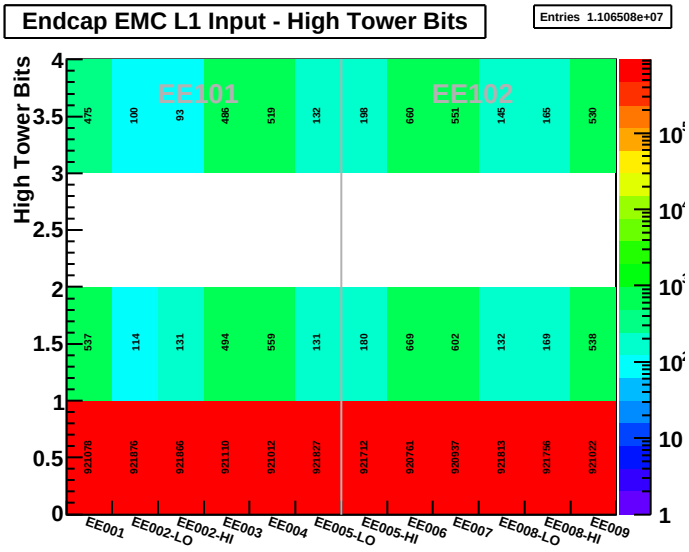

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

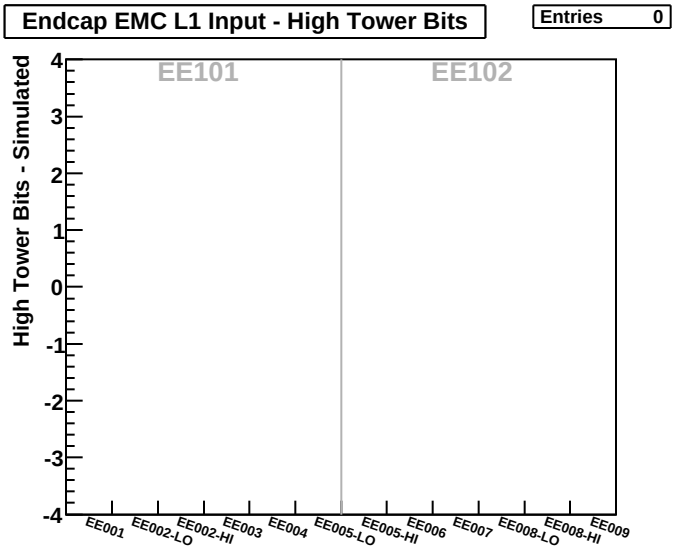

Endcap EMC L1 Input - Low Eta Sum
Entries 1.106508e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

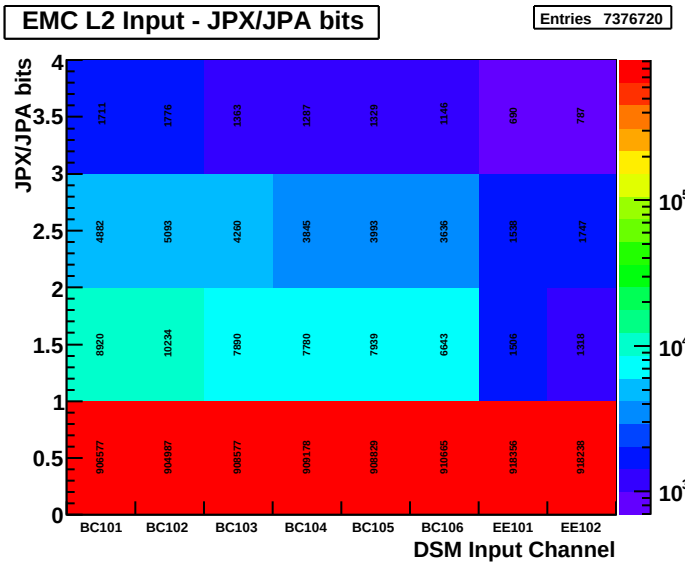

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

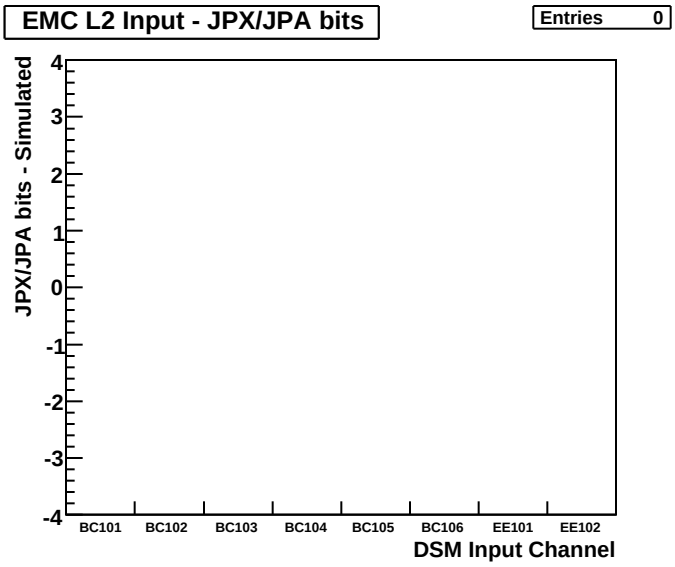

Endcap EMC L1 Input - High Eta Sum
Entries 1.106508e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

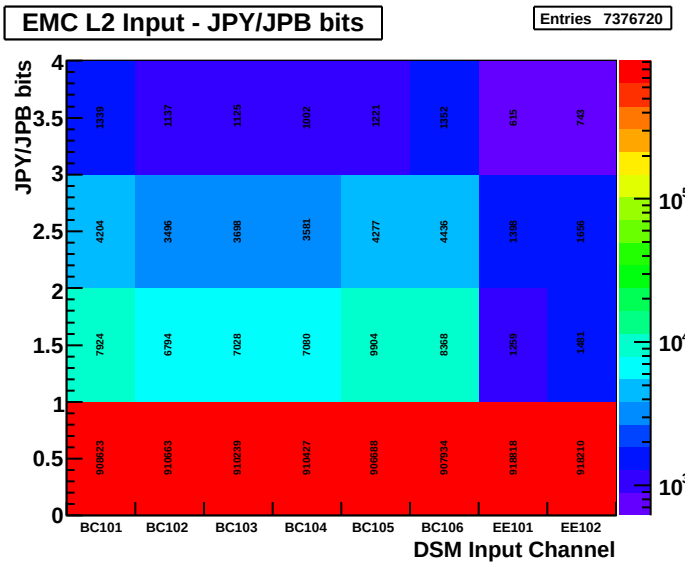

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

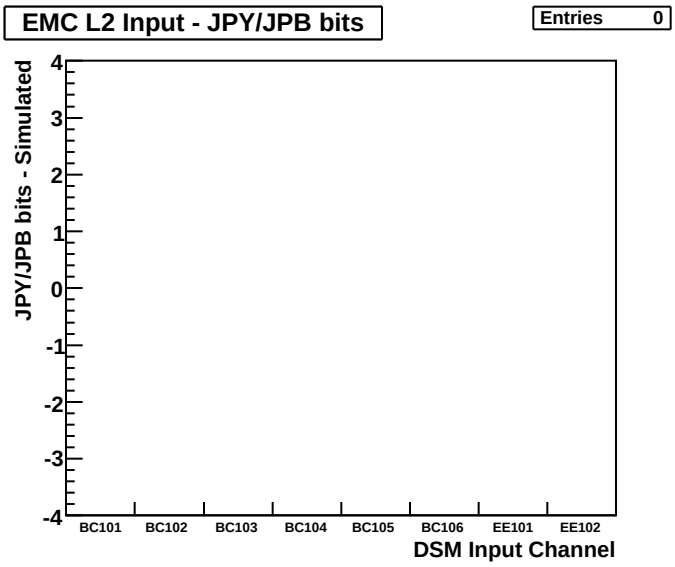

Endcap EMC L1 Input - High Tower Bits
Entries 1.106508e+07
High Tower Bits
EE101
EE102
475 100 93 486 519 132 198 660 551 145 165 530
537 114 131 494 559 131 180 669 602 132 169 538
921078 921876 921866 921110 921012 921837 921712 920761 920937 921813 921756 921022
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

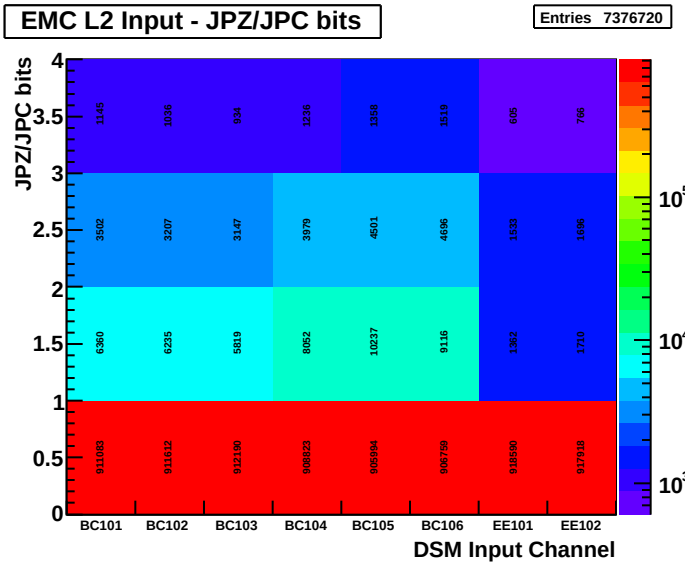

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

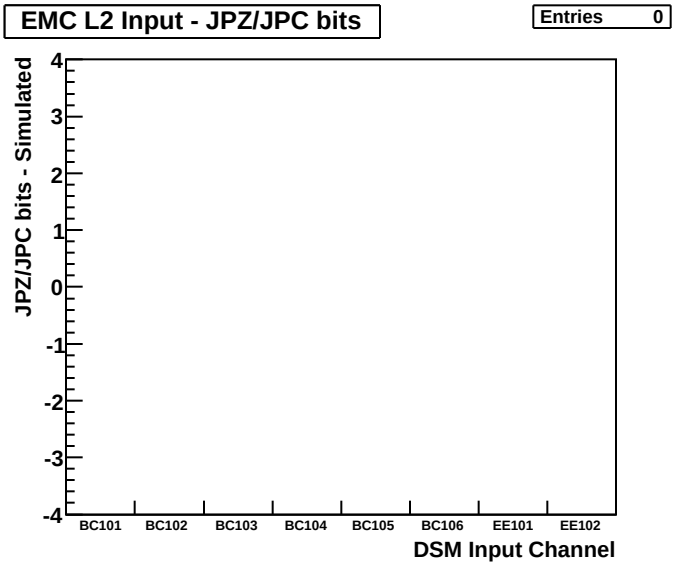

EMC L2 Input - JPX/JPA bits
Entries 7376720
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1711 1776 1263 1287 1329 1146 690 787
4882 5093 4260 3845 3993 3636 1538 1747
8920 10234 7890 7780 7939 6643 1506 1318
906577 904987 908577 909178 908829 910665 918356 918238

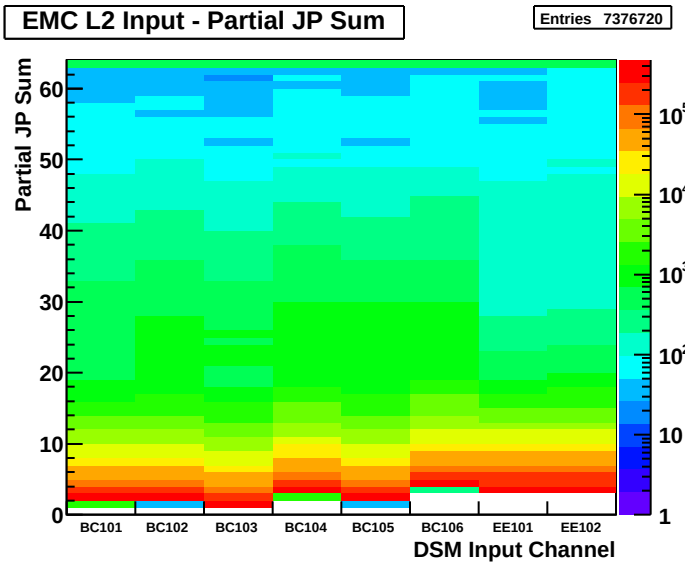

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

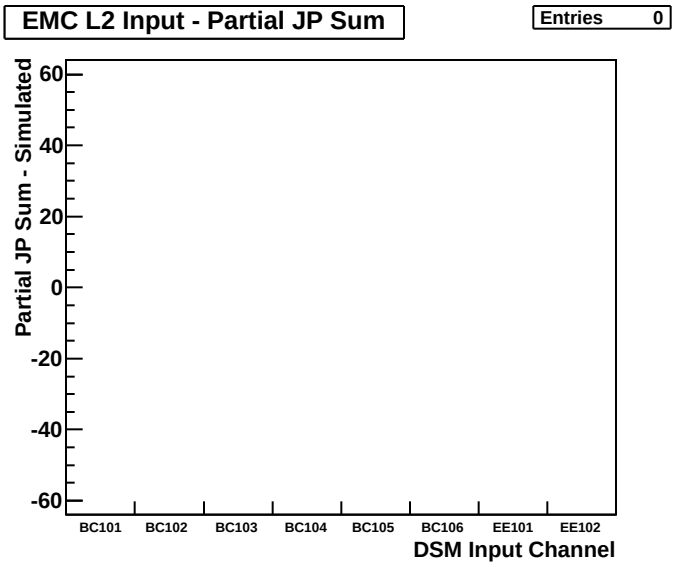

EMC L2 Input - JPY/JPB bits
Entries 7376720
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1339 1137 1125 1002 1221 1352 615 743
4204 3496 3698 3581 4277 4436 1398 1656
7824 6794 7028 7080 9904 8368 1259 1481
908823 910663 910239 910427 908688 907934 918818 918210

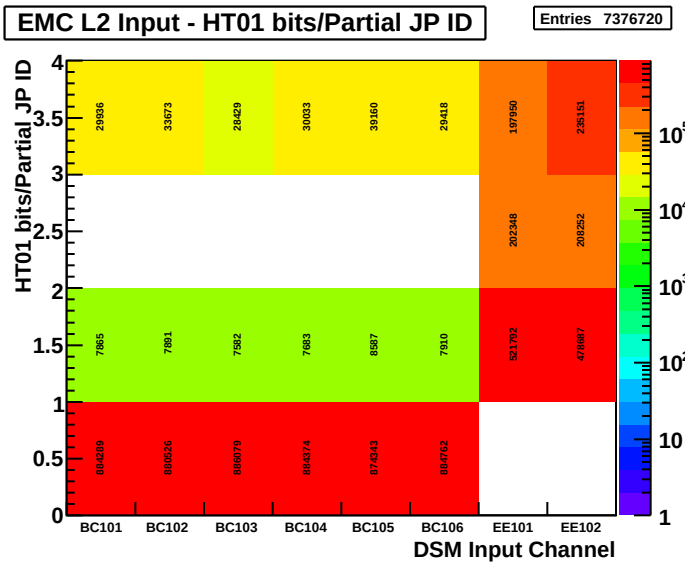

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

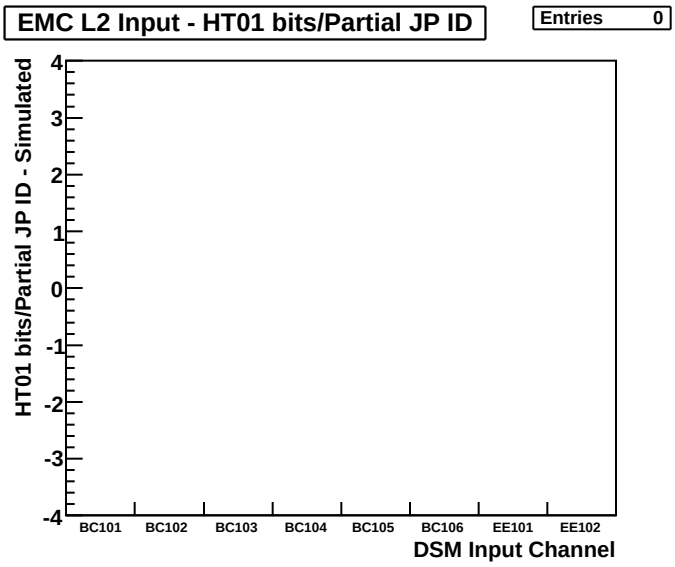

EMC L2 Input - JPZ/JPC bits
Entries 7376720
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1145 1036 924 1236 1358 1519 605 766
3502 3207 3147 3979 4501 4696 1533 1696
6360 6235 5819 8062 10237 9116 1382 1710
911083 911612 912190 908823 905994 906759 918590 917918

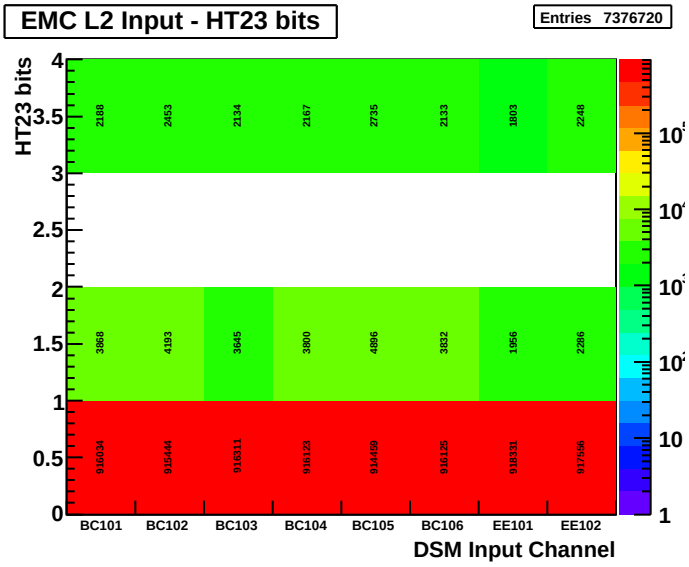

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

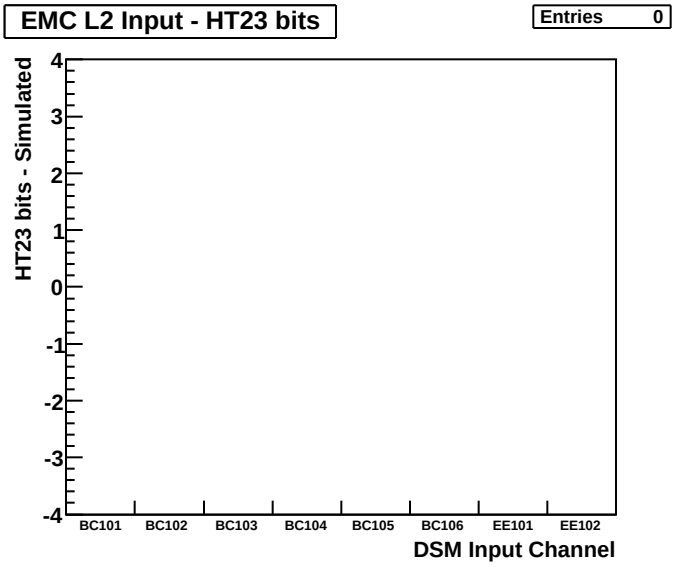

EMC L2 Input - Partial JP Sum
Entries 7376720
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

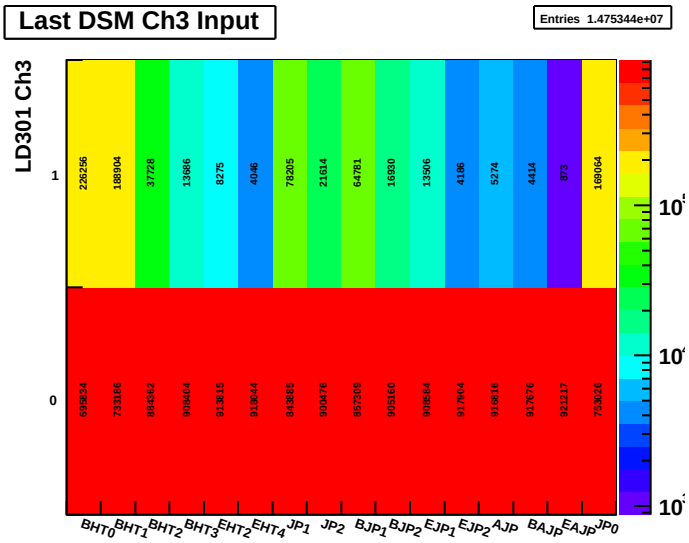

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

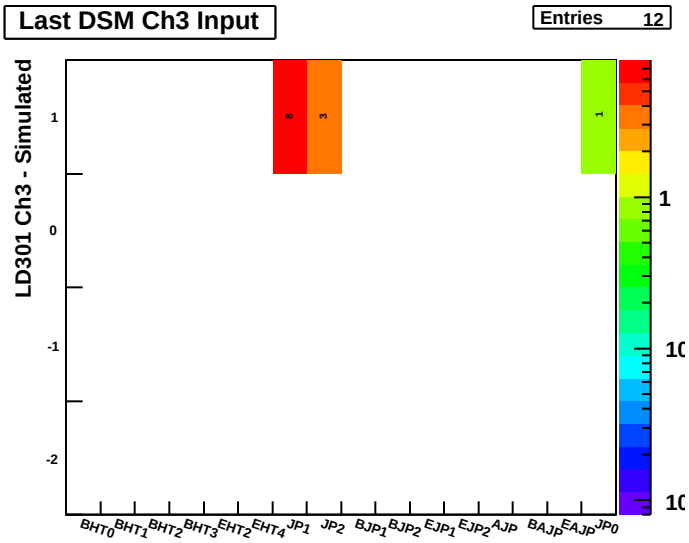

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7376720
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

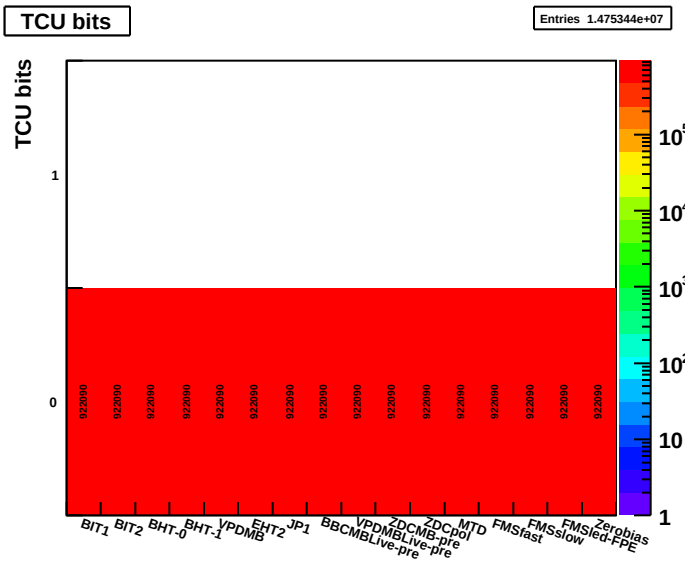

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

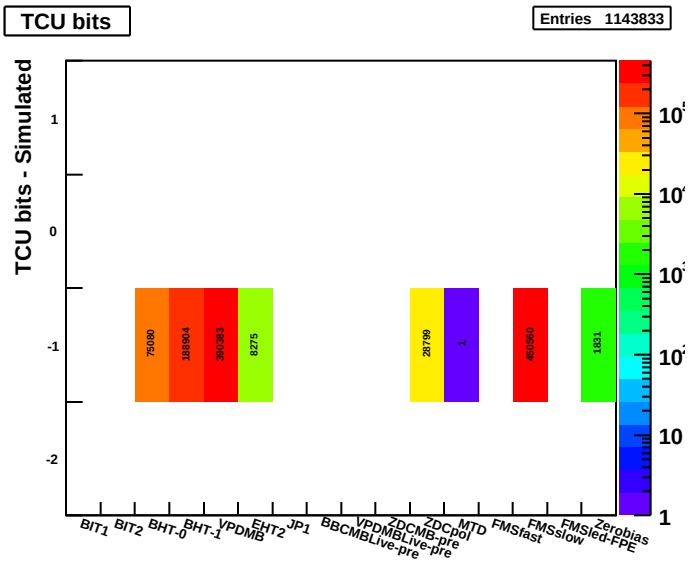

EMC L2 Input - HT23 bits
Entries 7376720
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

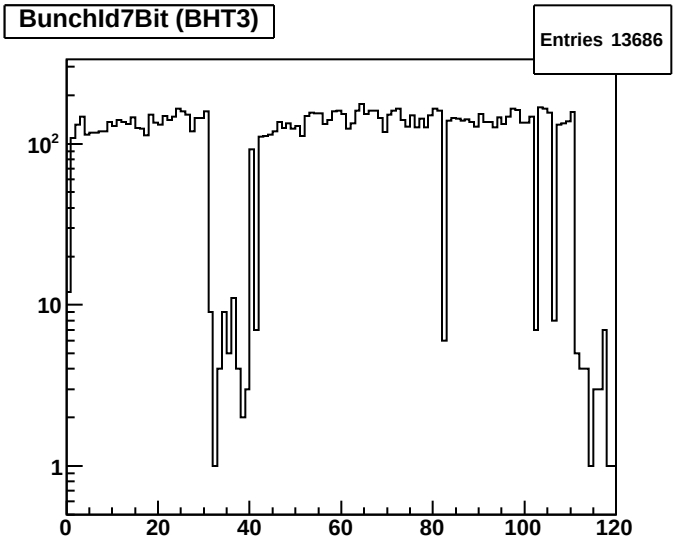

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

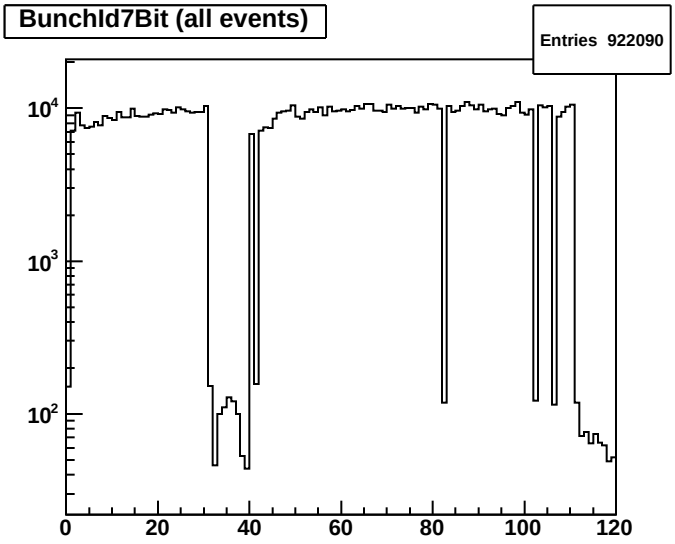

Last DSM Ch3 Input
Entries 1.475344e+07
LD301 Ch3
236256 188904 37728 13686 8275 4046 78205 21614 64791 16930 13506 4186 5274 4414 673 169064
695834 733186 884362 908404 913815 918044 843885 900476 857309 905160 908584 917904 918816 917676 921217 753026
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

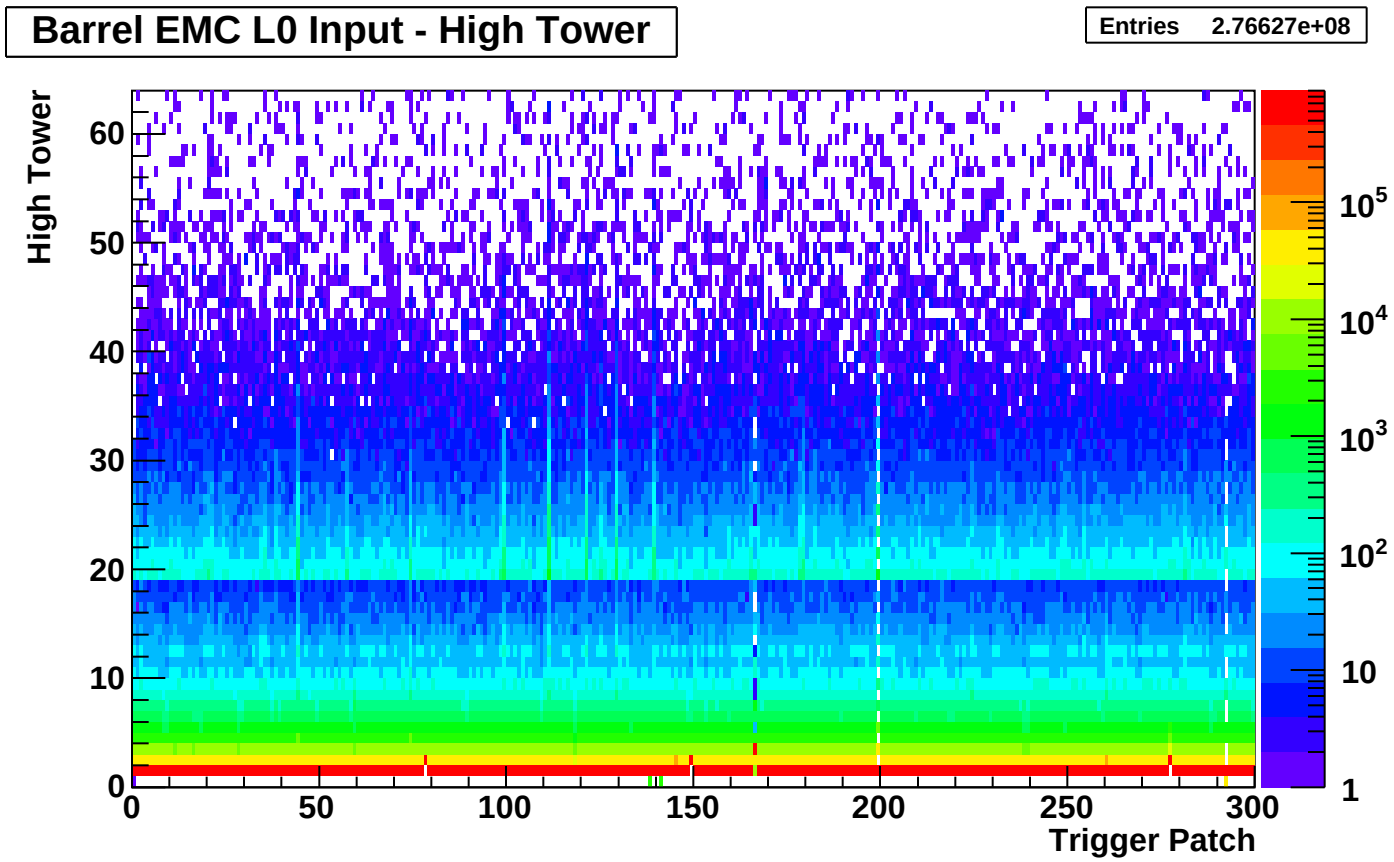

Last DSM Ch3 Input
Entries 12
LD301 Ch3 - Simulated
8 3 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

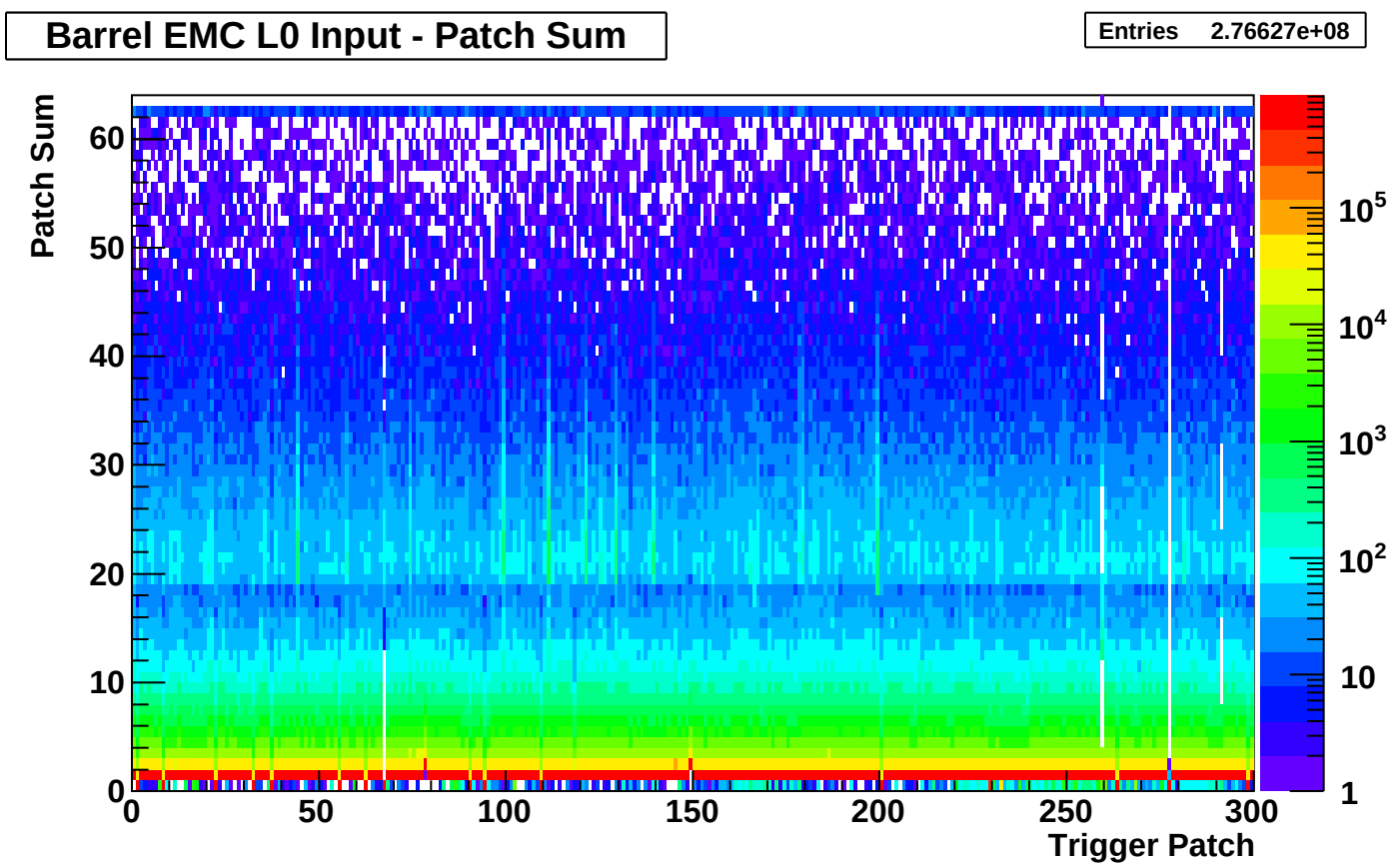

TCU bits
Entries 1.475344e+07
TCU bits
922090 922090 922090 922090 922090 922090 922090 922090 922090 922090 922090 922090 922090 922090 922090 922090
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

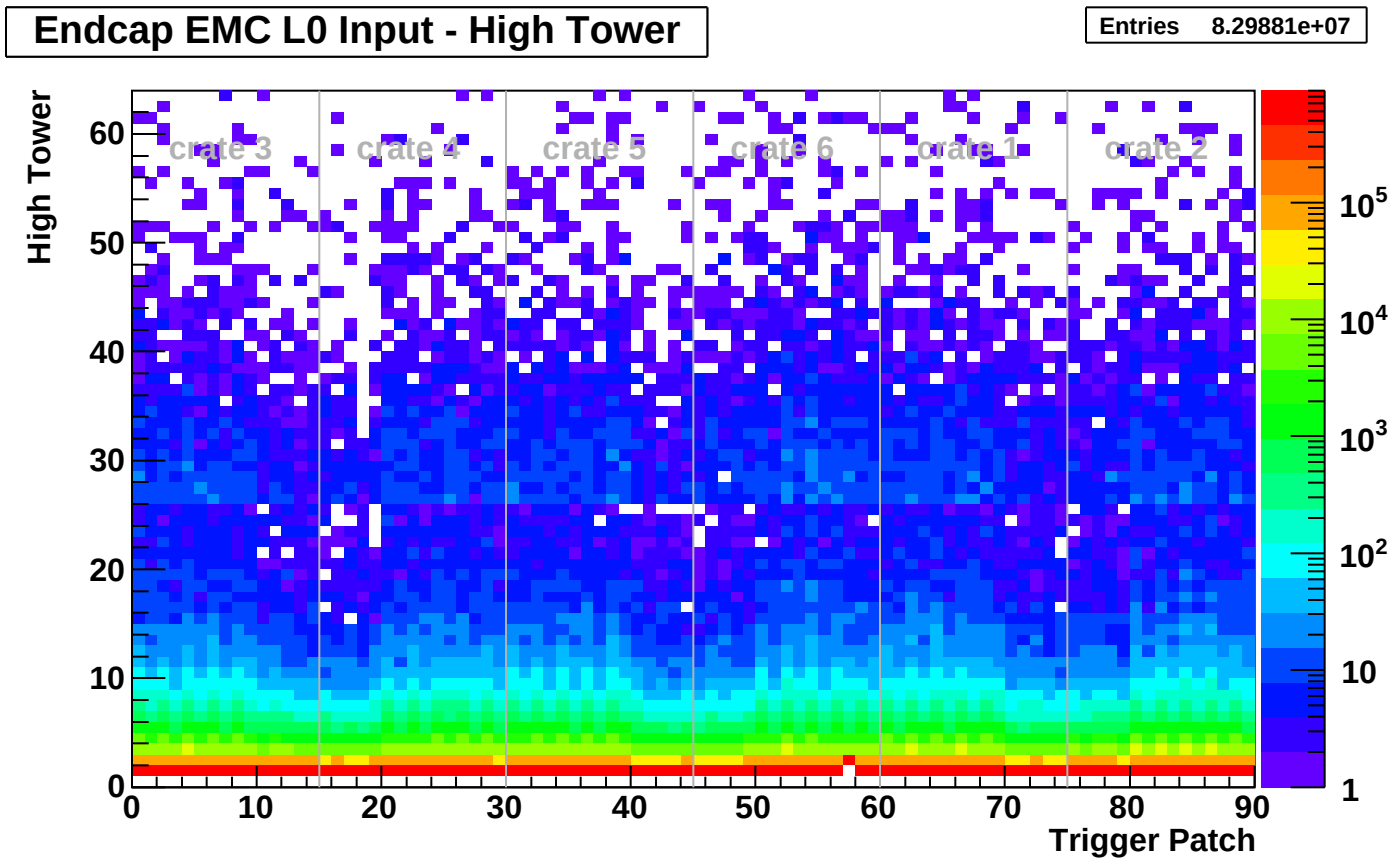

TCU bits
Entries 1143833
TCU bits - Simulated
75080 188904 390383 8275 28799 1 450560 1831
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

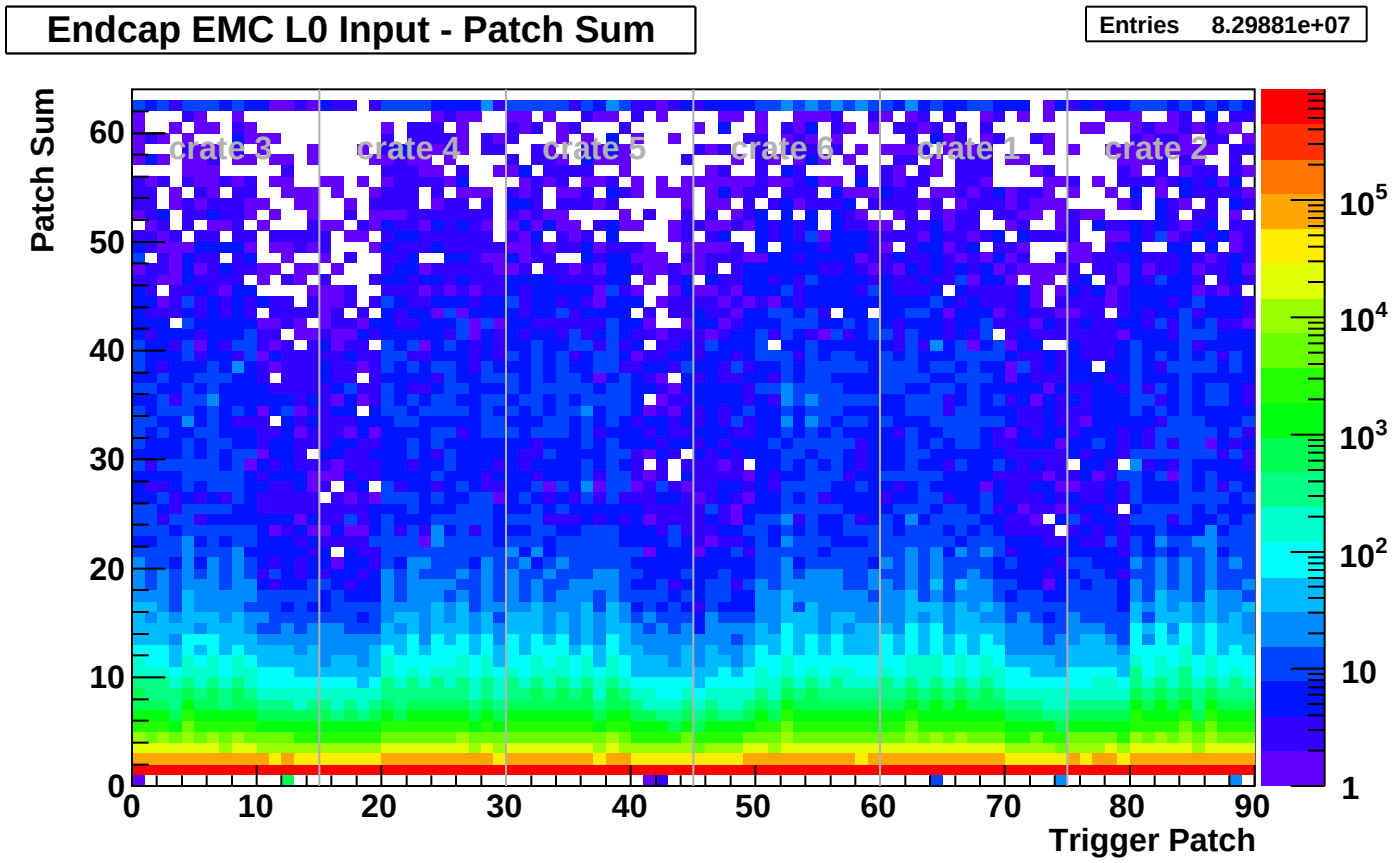

BunchId7Bit (BHT3)
Entries 13686

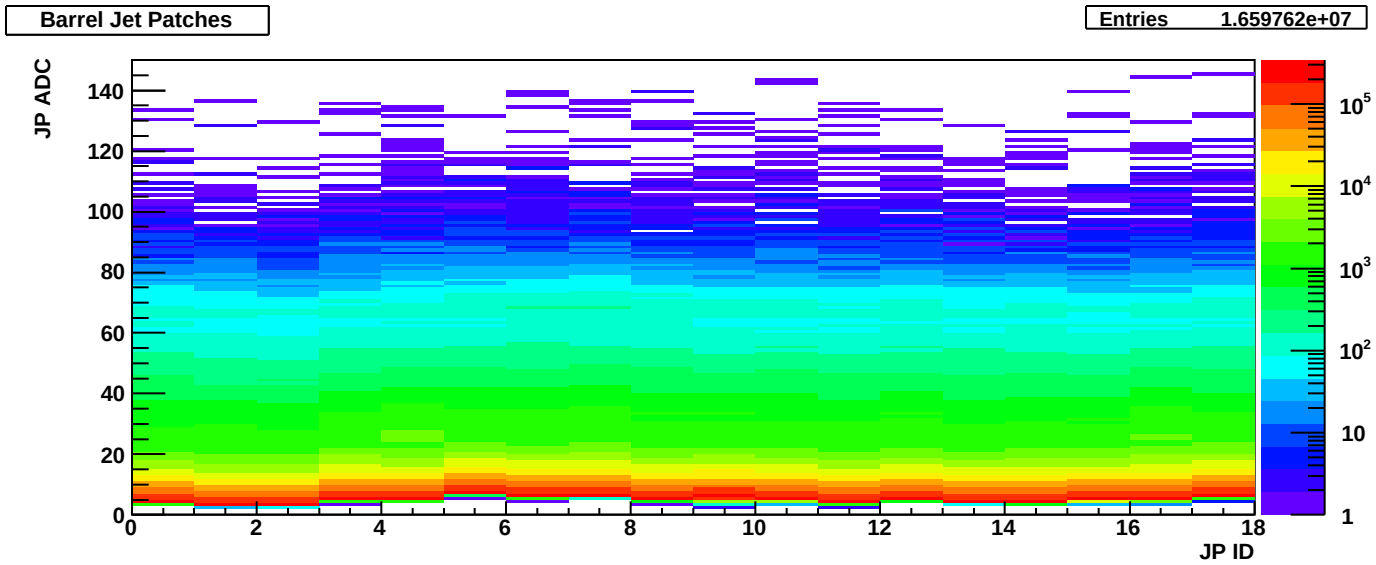

BunchId7Bit (all events)
Entries 922090

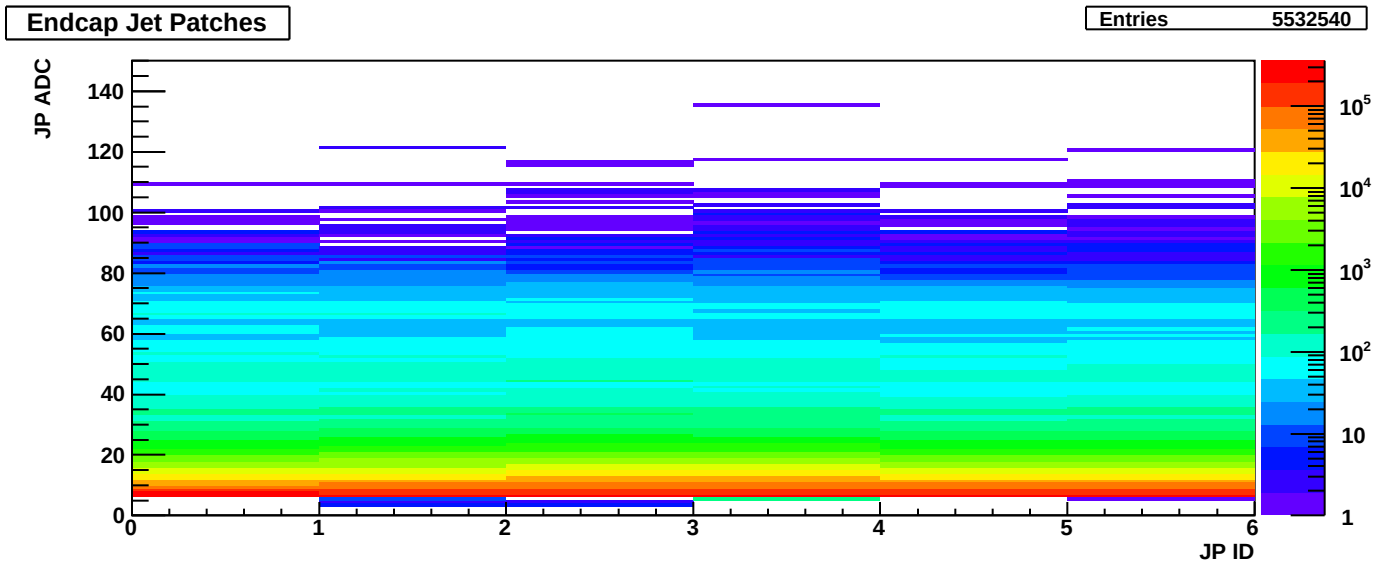

Barrel EMC L0 Input - High Tower
Entries 2.76627e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

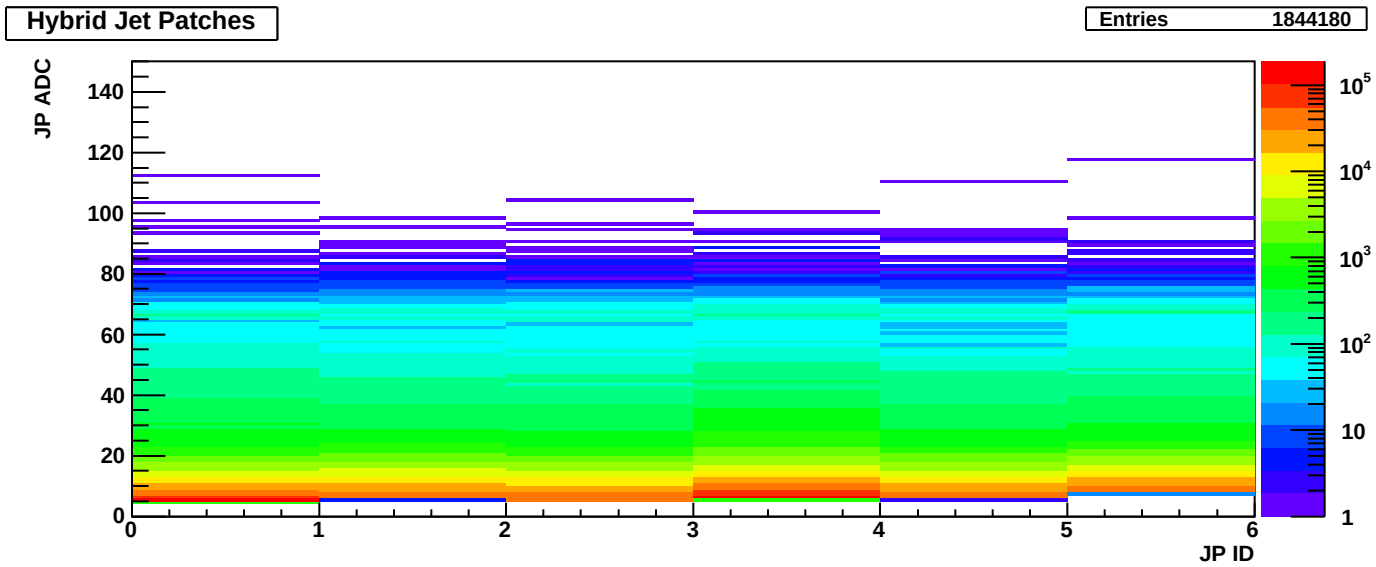

Barrel EMC L0 Input - Patch Sum
Entries 2.76627e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

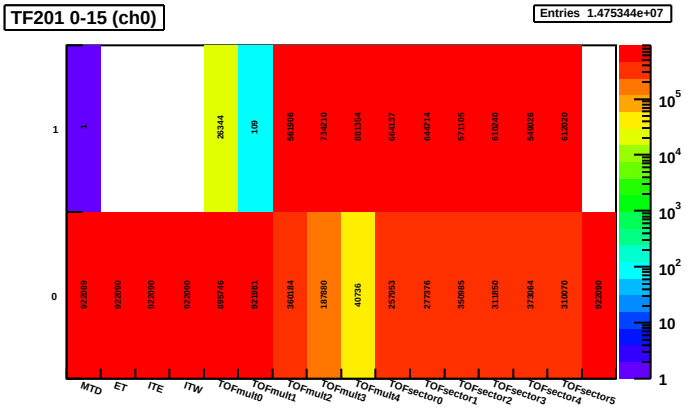

Endcap EMC L0 Input - High Tower
Entries 8.29881e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

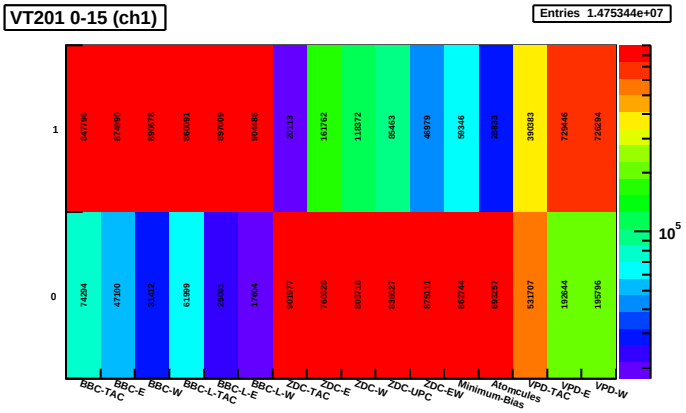

Endcap EMC L0 Input - Patch Sum
Entries 8.29881e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

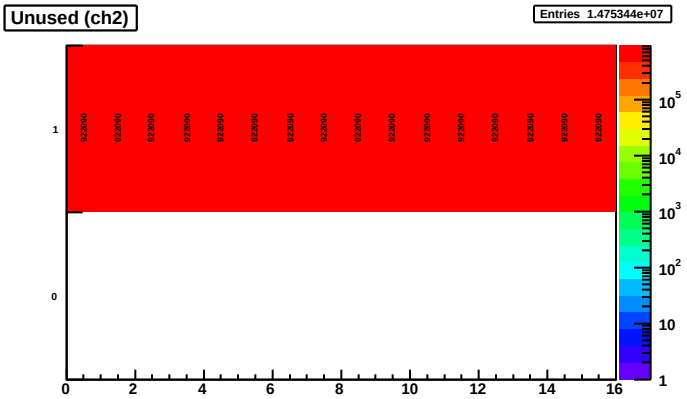

Barrel Jet Patches
Entries 1.659762e+07
JP ADC
JP ID

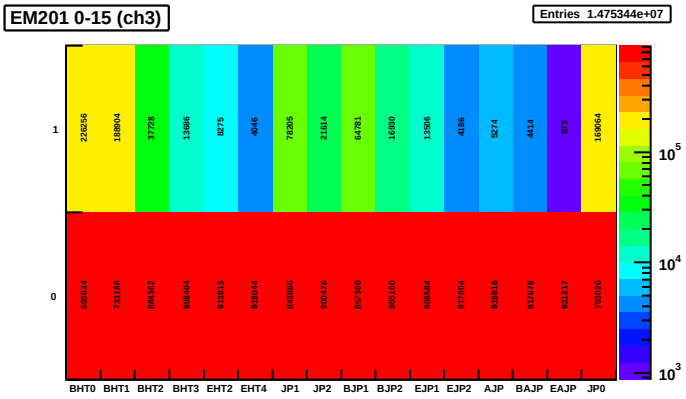

Endcap Jet Patches
Entries 5532540
JP ADC
JP ID

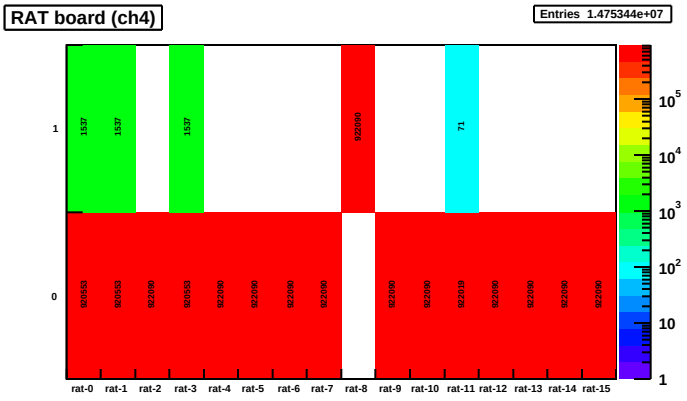

Hybrid Jet Patches
Entries 1844180
JP ADC
JP ID

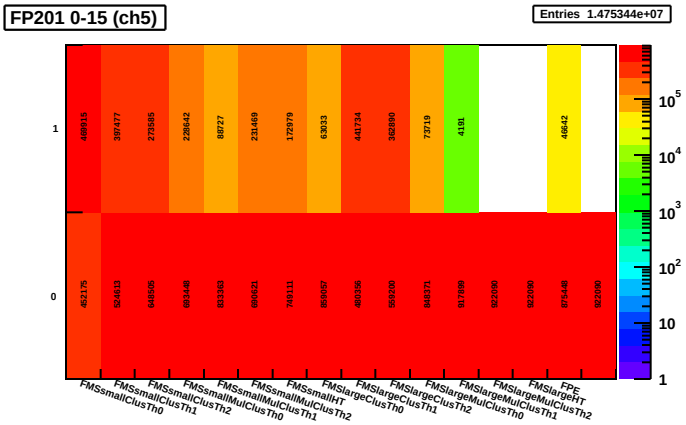

TF201 0-15 (ch0)
Entries 1.475344e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

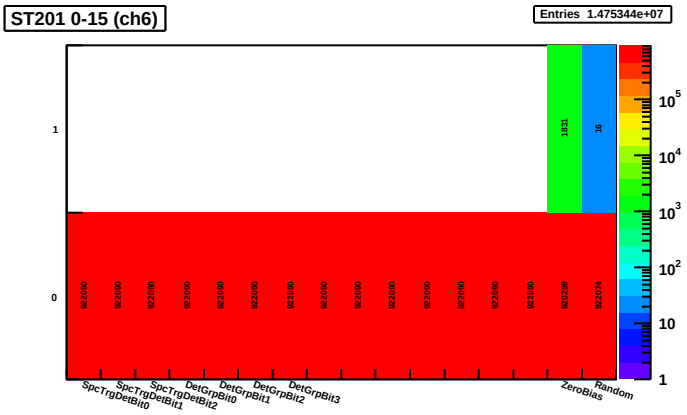

VT201 0-15 (ch1)
Entries 1.475344e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

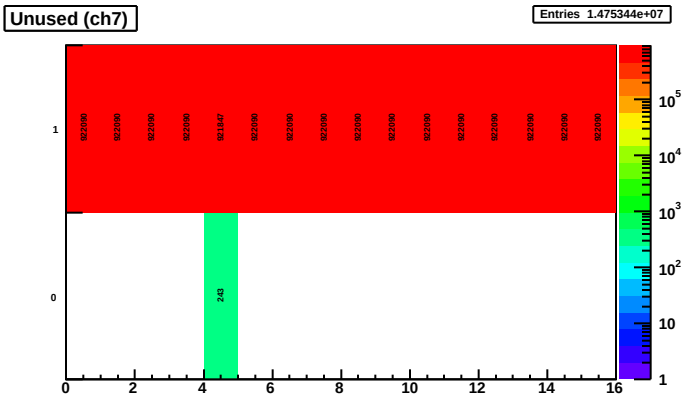

Unused (ch2)
Entries 1.475344e+07

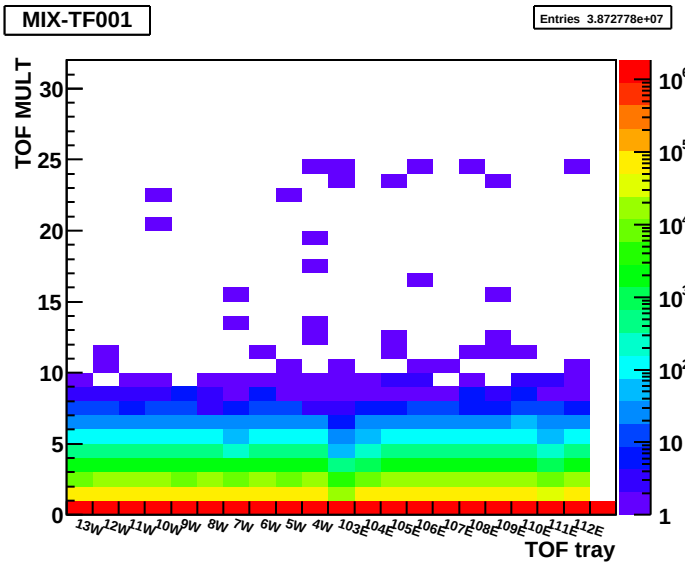

EM201 0-15 (ch3)
Entries 1.475344e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

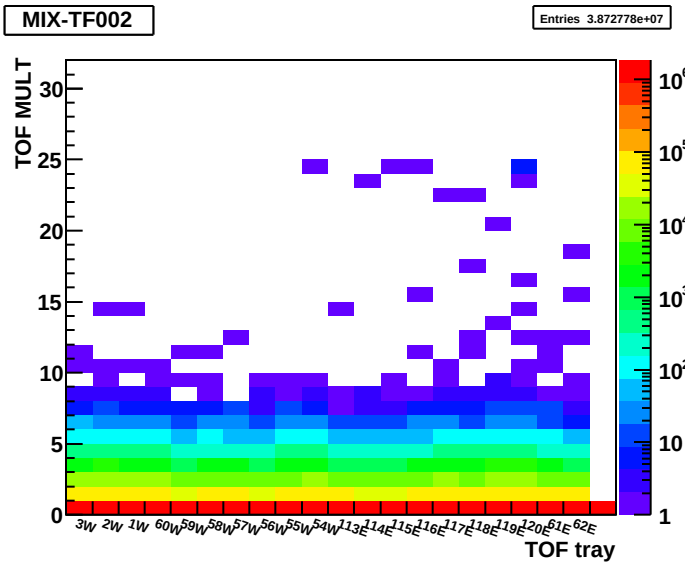

RAT board (ch4)
Entries 1.475344e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

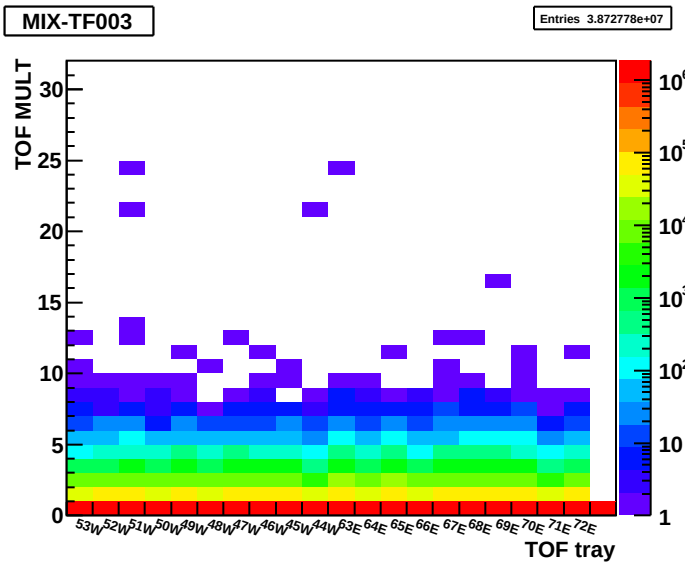

FP201 0-15 (ch5)
Entries 1.475344e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

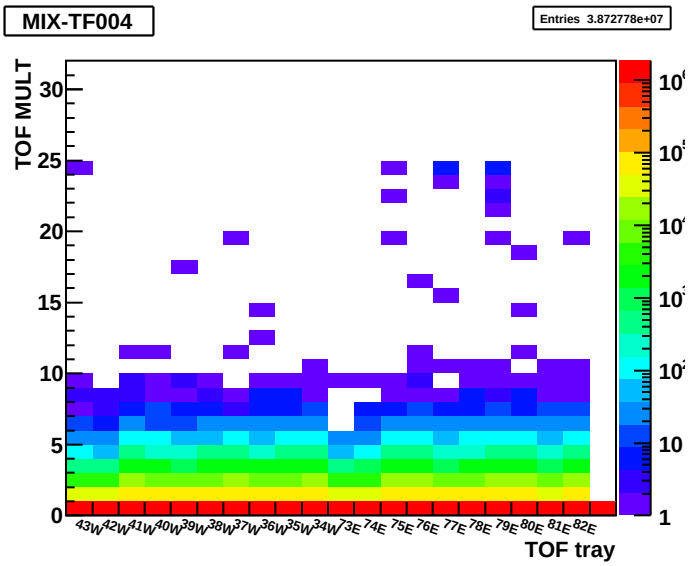

ST201 0-15 (ch6)
Entries 1.475344e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

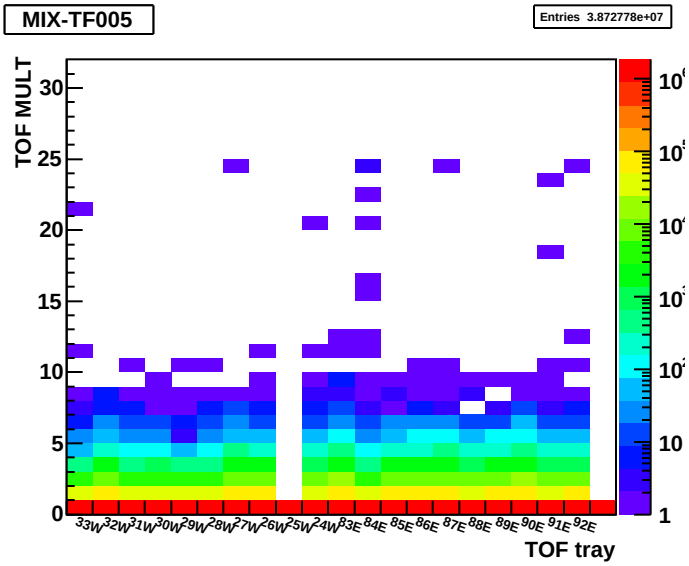

Unused (ch7)
Entries 1.475344e+07

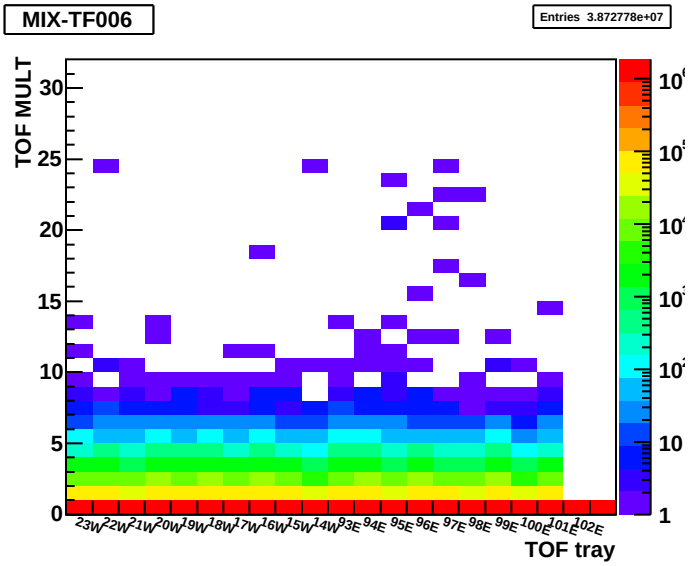

MIX-TF001
Entries 3.872778e+07
TOF MULT
TOF tray

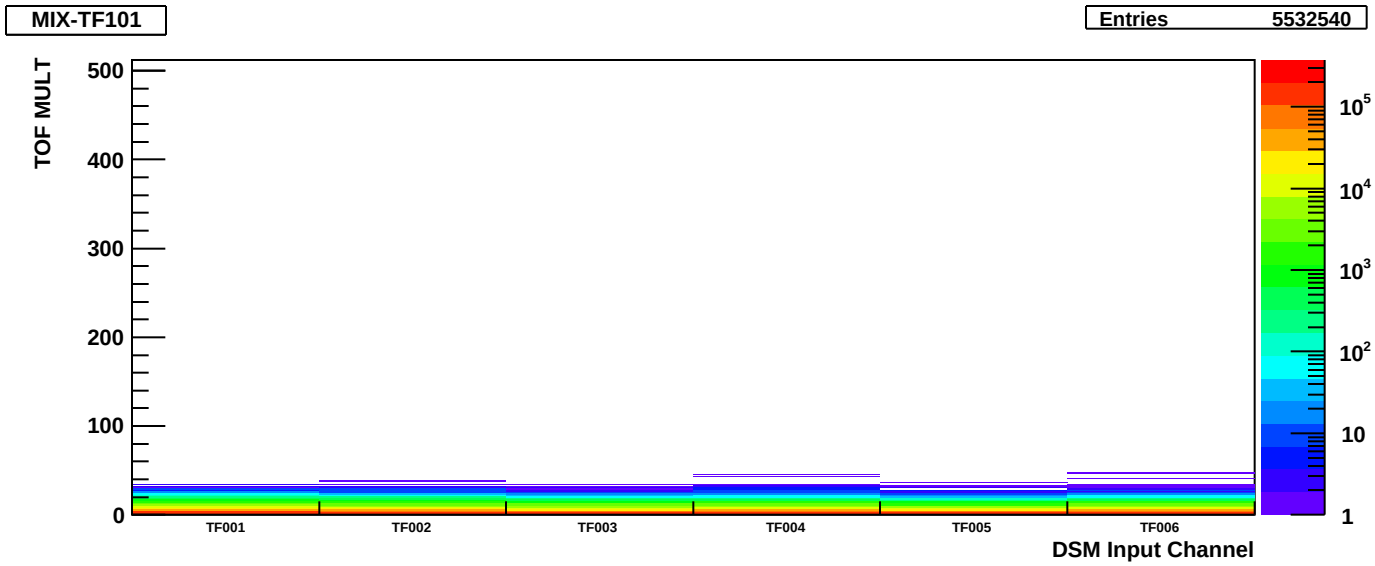

MIX-TF002
Entries 3.872778e+07
TOF MULT
TOF tray

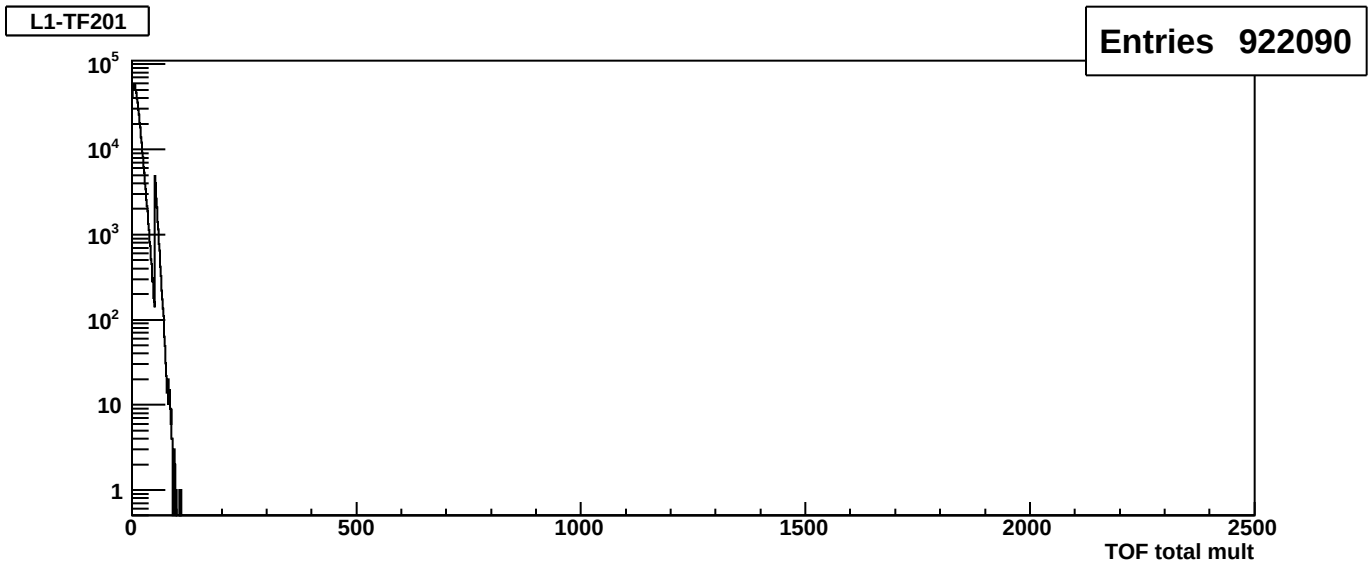

MIX-TF003
Entries 3.872778e+07
TOF MULT
TOF tray

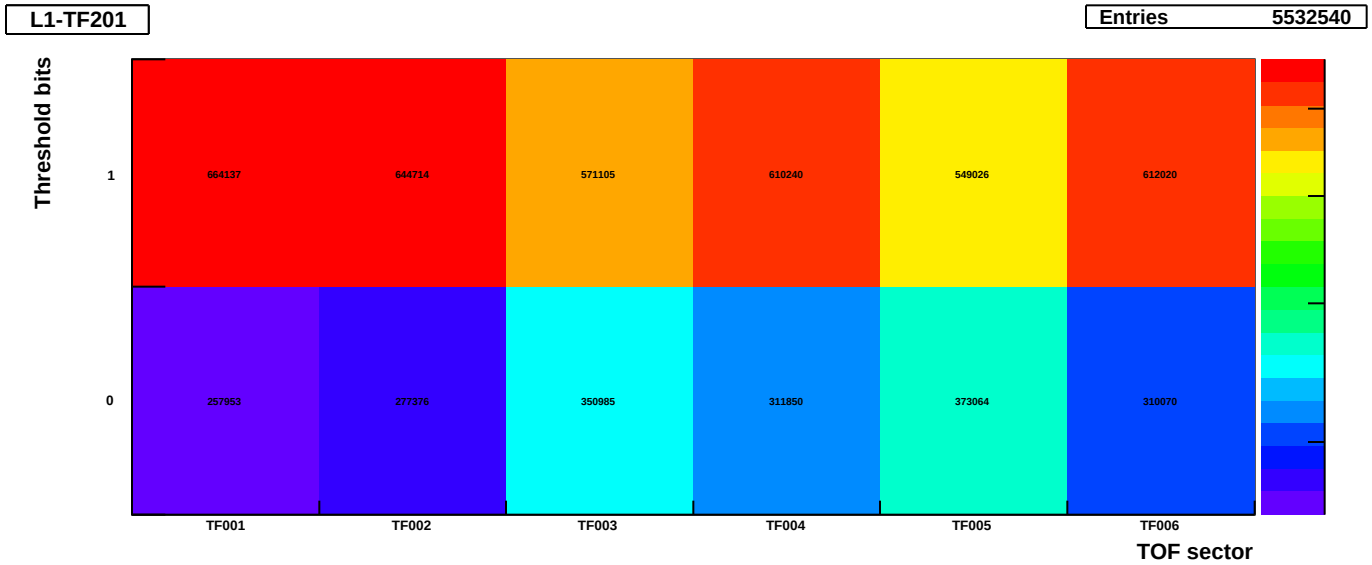

MIX-TF004
Entries 3.872778e+07
TOF MULT
TOF tray

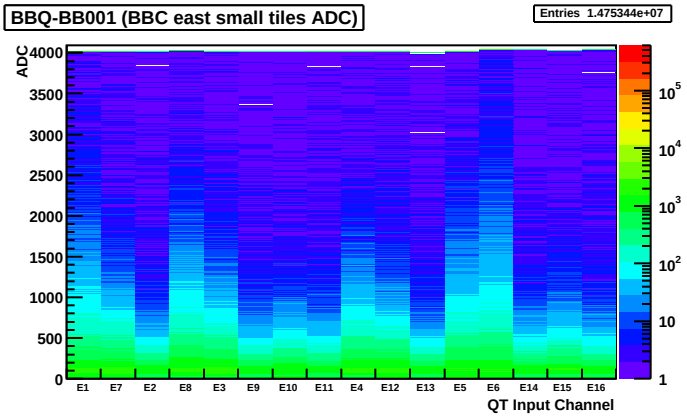

MIX-TF005
Entries 3.872778e+07
TOF MULT
TOF tray

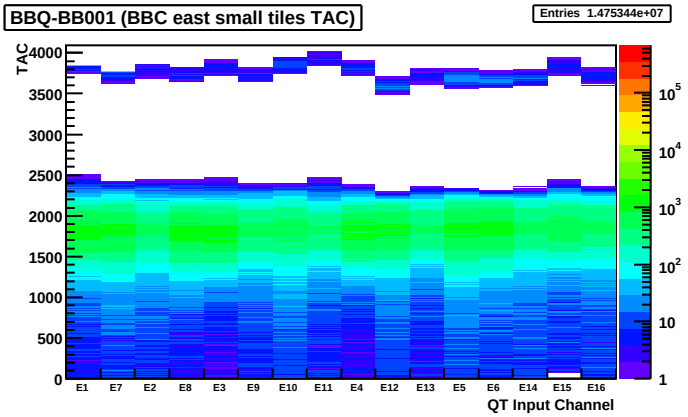

MIX-TF006
Entries 3.872778e+07
TOF MULT
TOF tray

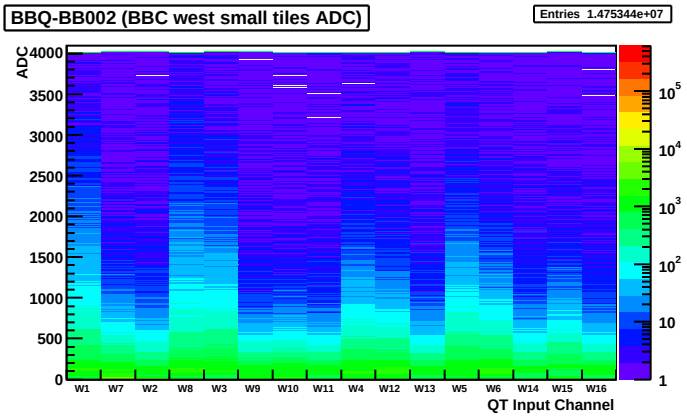

MIX-TF101
Entries 5532540
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

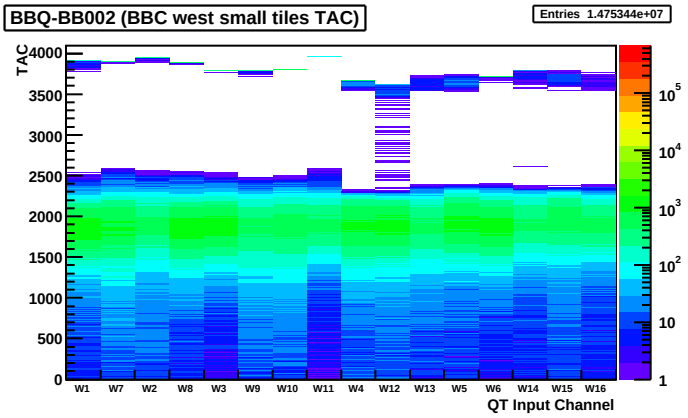

L1-TF201
Entries 922090
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

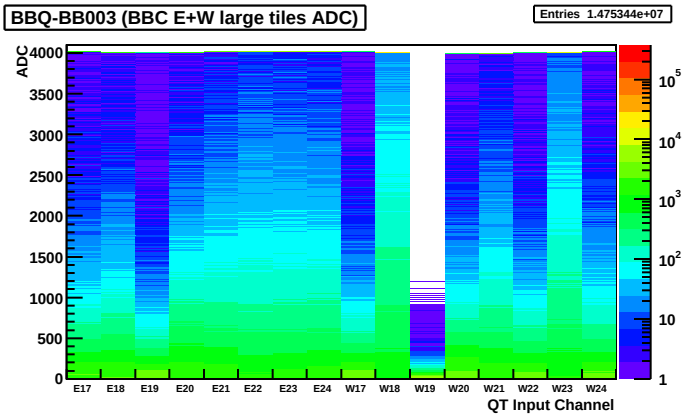

L1-TF201
Entries 5532540
Threshold bits
1
0
664137
644714
571105
610240
549026
612020
257953
277376
350985
311850
373064
310070
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

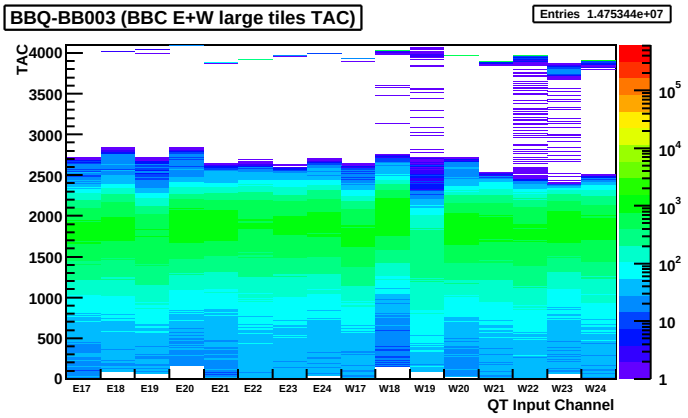

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.475344e+07
ADC
QT Input Channel

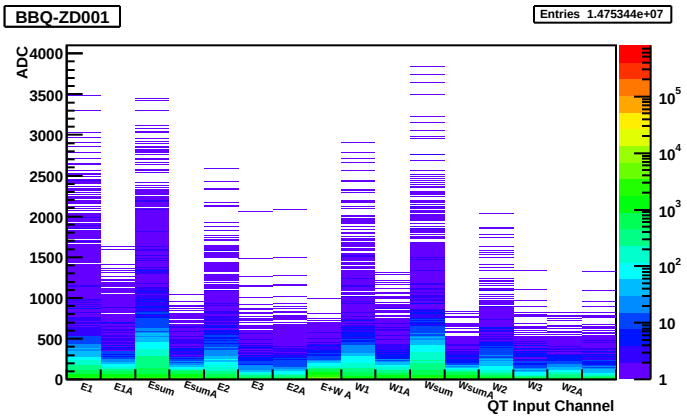

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.475344e+07
TAC
QT Input Channel

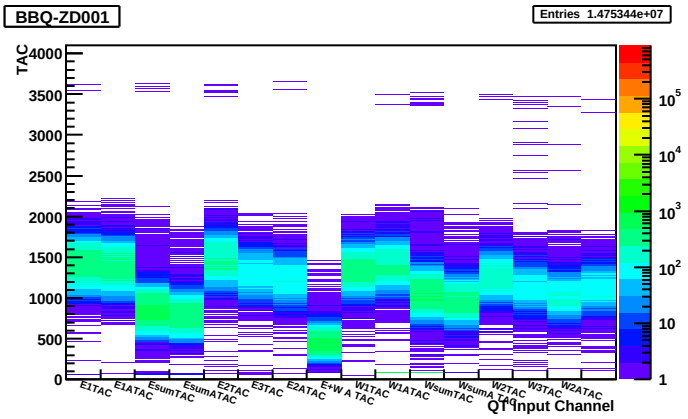

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.475344e+07
ADC
QT Input Channel

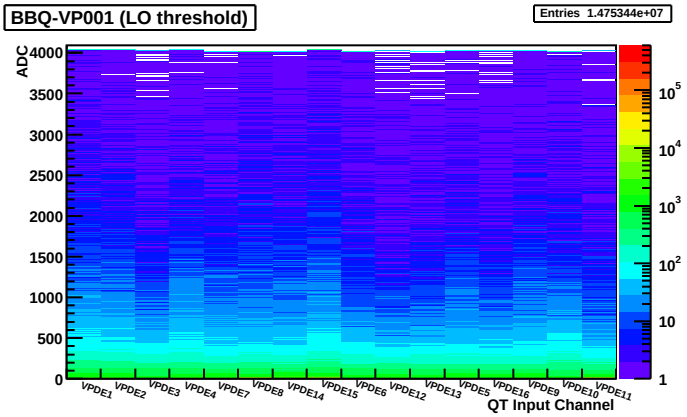

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.475344e+07
TAC
QT Input Channel

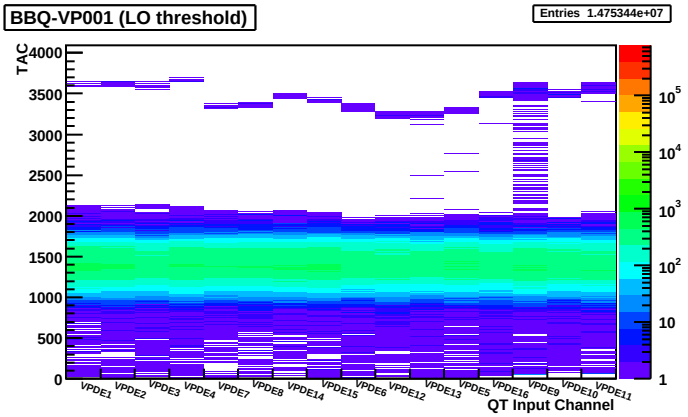

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.475344e+07
ADC
QT Input Channel

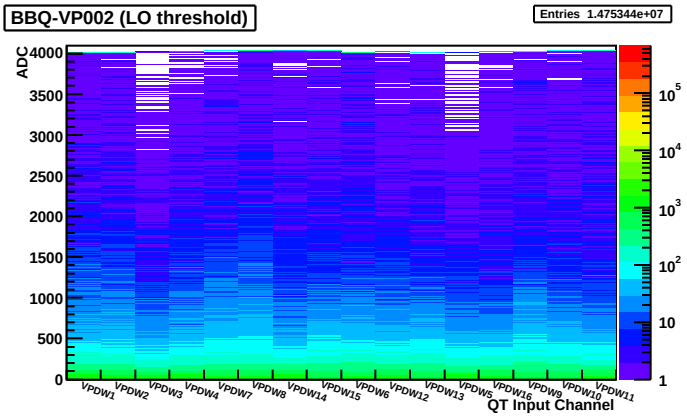

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.475344e+07
TAC
QT Input Channel

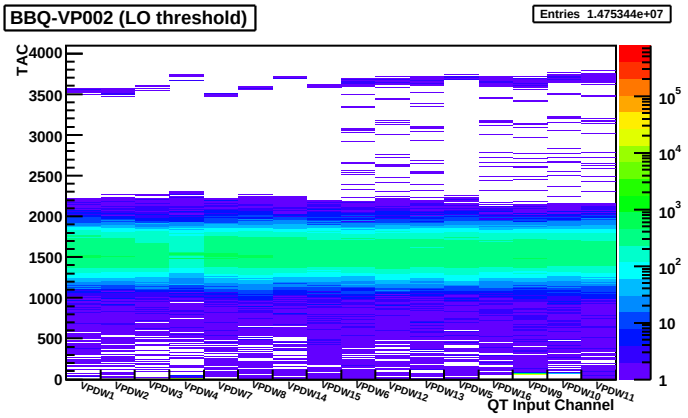

BBQ-ZD001
Entries 1.475344e+07
ADC
QT Input Channel

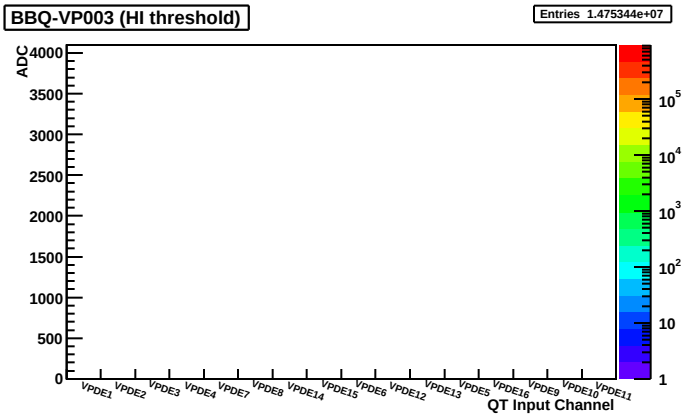

BBQ-ZD001
Entries 1.475344e+07
TAC
QT Input Channel

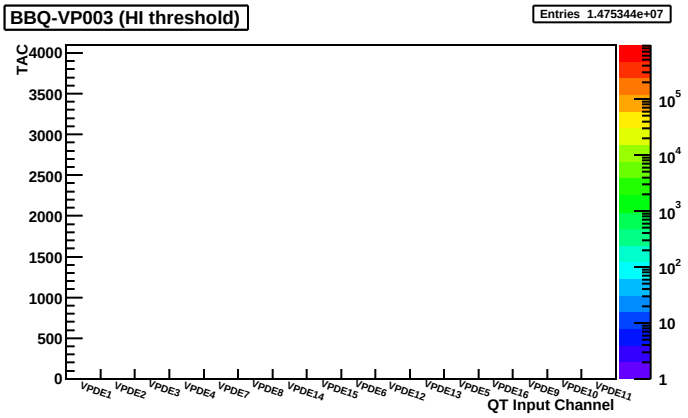

BBQ-VP001 (LO threshold)
Entries 1.475344e+07
ADC
QT Input Channel

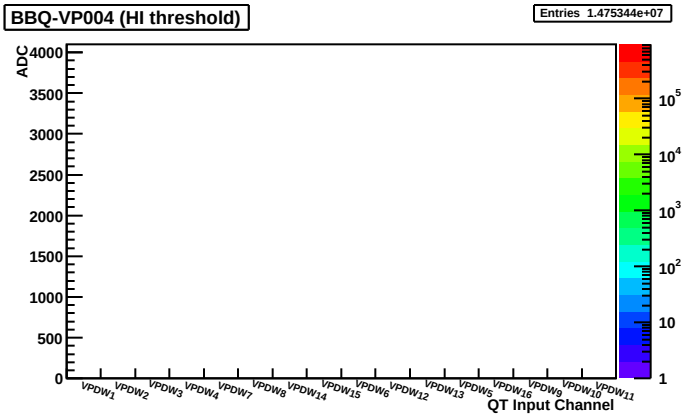

BBQ-VP001 (LO threshold)
Entries 1.475344e+07
TAC
QT Input Channel

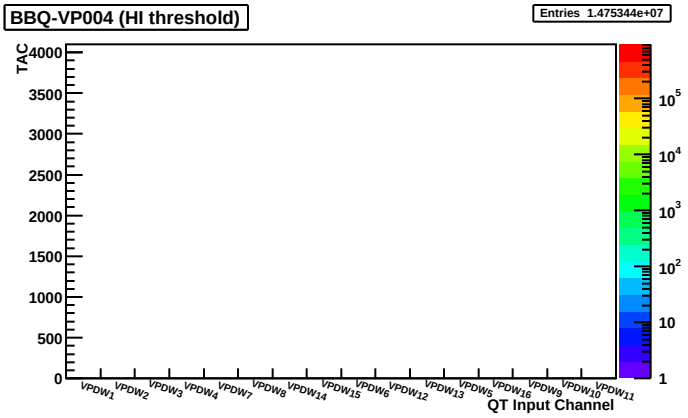

BBQ-VP002 (LO threshold)
Entries 1.475344e+07
ADC
QT Input Channel

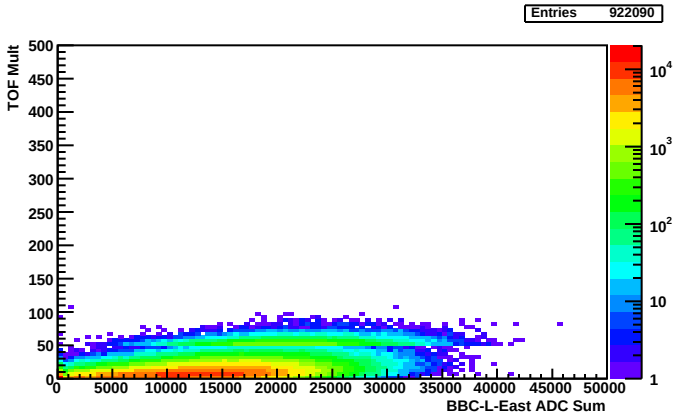

BBQ-VP002 (LO threshold)
Entries 1.475344e+07
TAC
QT Input Channel

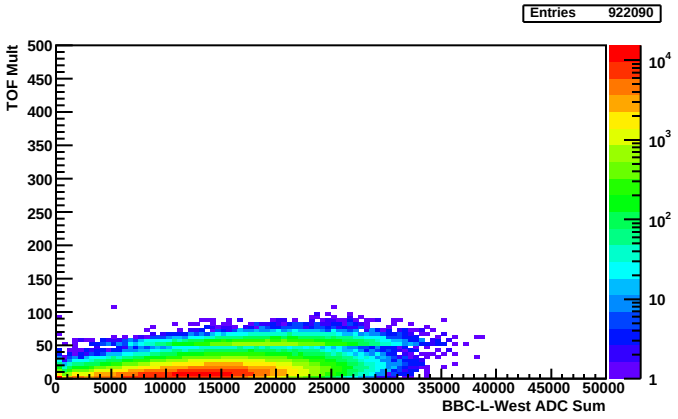

BBQ-VP003 (HI threshold)
Entries 1.475344e+07
ADC
QT Input Channel

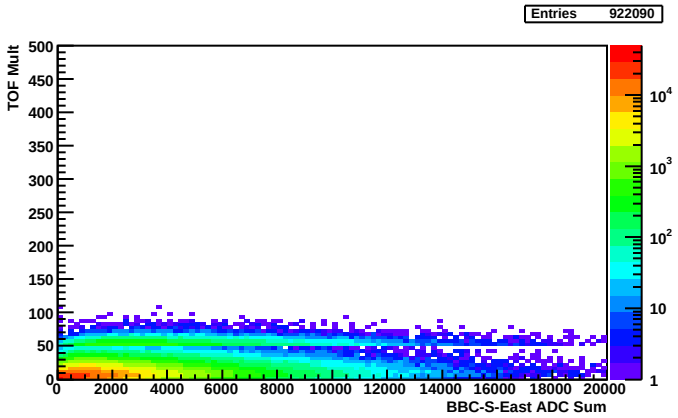

BBQ-VP003 (HI threshold)
Entries 1.475344e+07
TAC
QT Input Channel

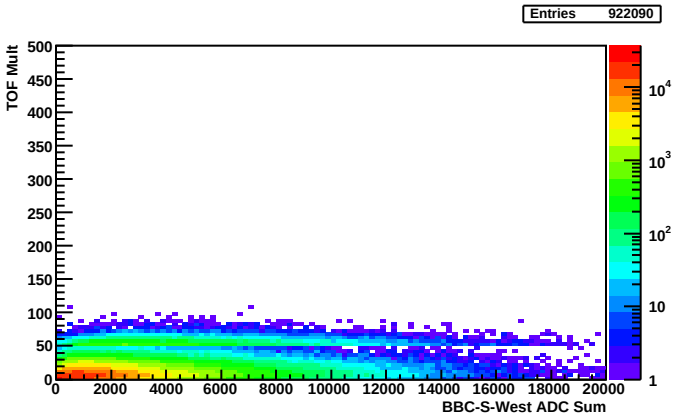

BBQ-VP004 (HI threshold)
Entries 1.475344e+07
ADC
QT Input Channel

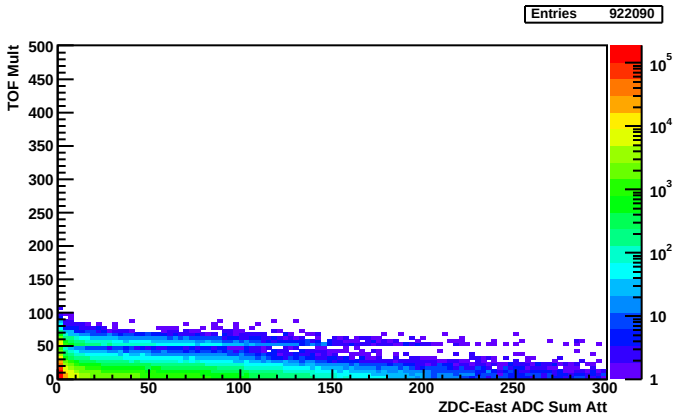

BBQ-VP004 (HI threshold)
Entries 1.475344e+07
TAC
QT Input Channel

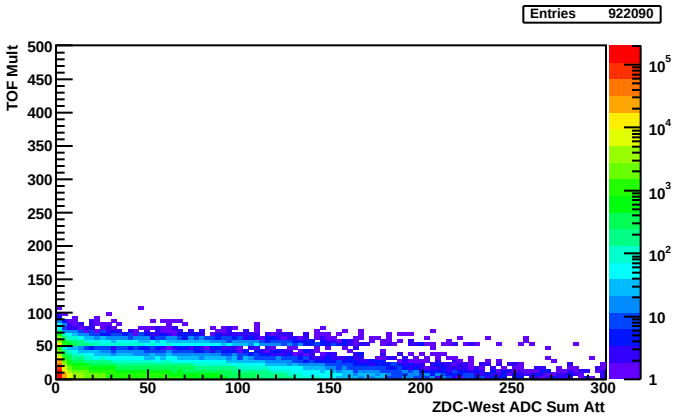

Entries 922090
TOF Mult
BBC-L-East ADC Sum

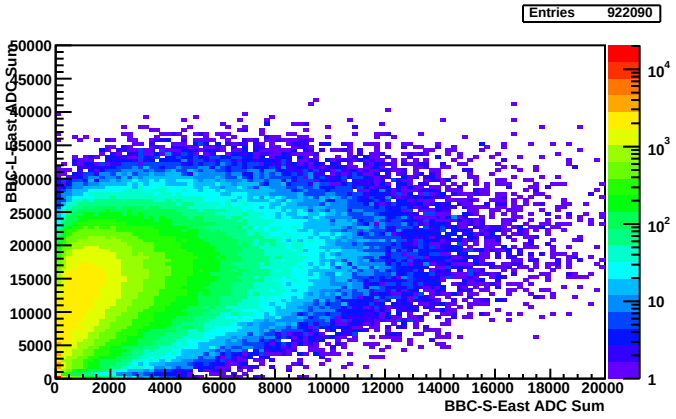

Entries 922090
TOF Mult
BBC-L-West ADC Sum

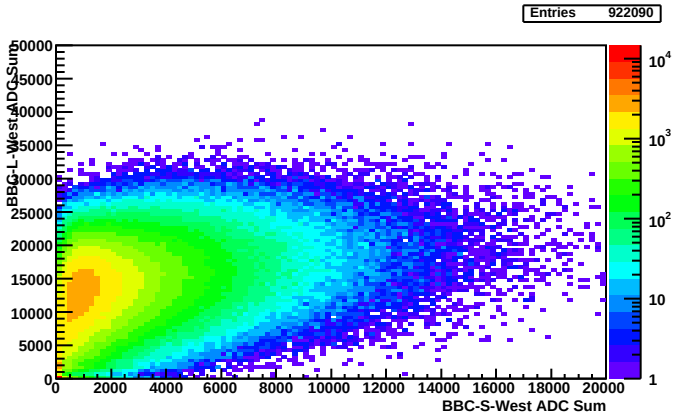

Entries 922090
TOF Mult
BBC-S-East ADC Sum

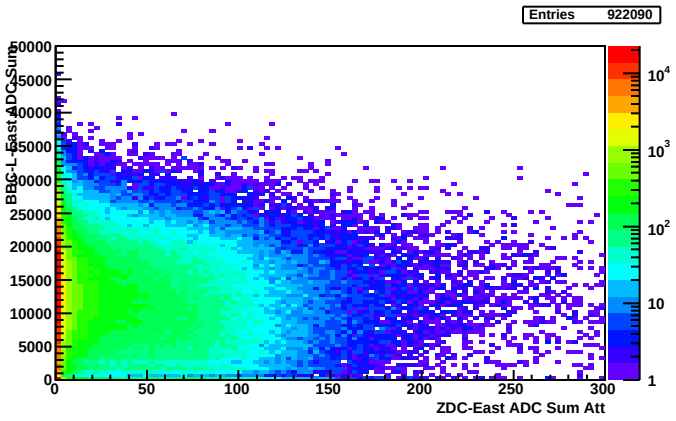

Entries 922090
TOF Mult
BBC-S-West ADC Sum

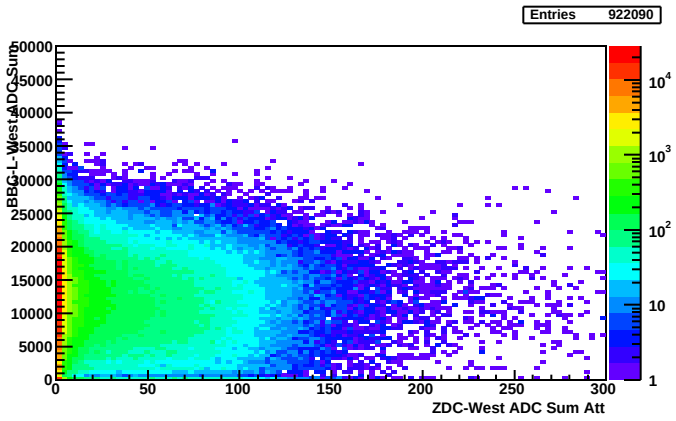

Entries 922090
TOF Mult
ZDC-East ADC Sum Att

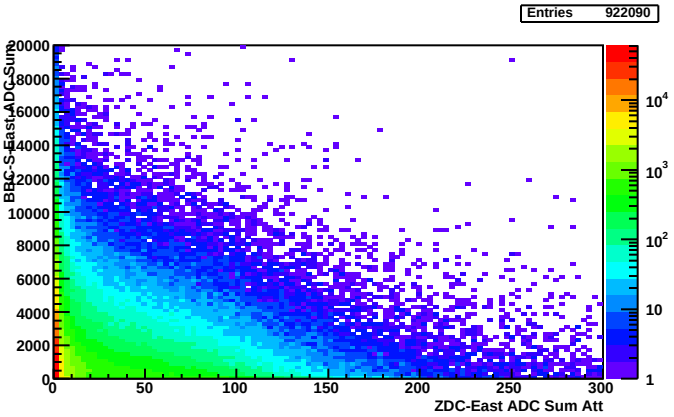

Entries 922090
TOF Mult
ZDC-West ADC Sum Att

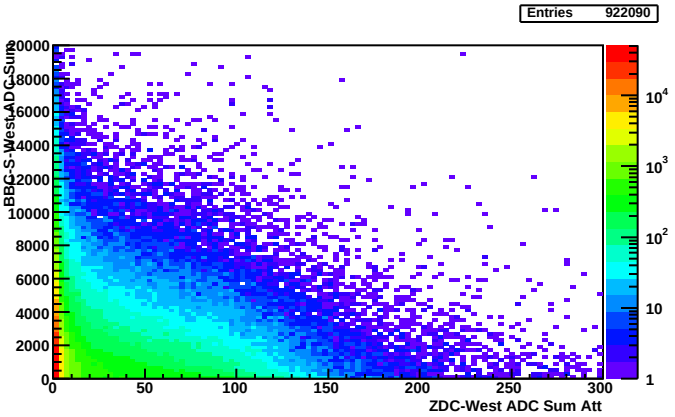

Entries 922090
BBC-L-East ADC Sum
BBC-S-East ADC Sum

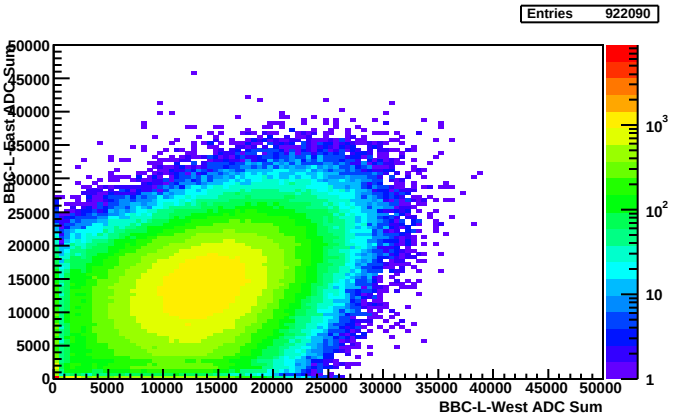

Entries 922090
BBC-L-West ADC Sum
BBC-S-West ADC Sum

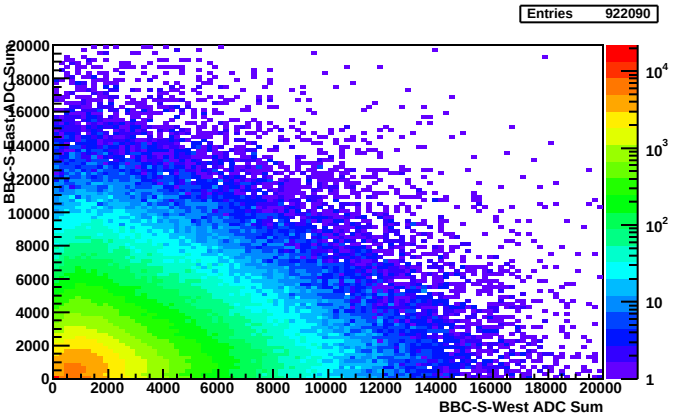

Entries 922090
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

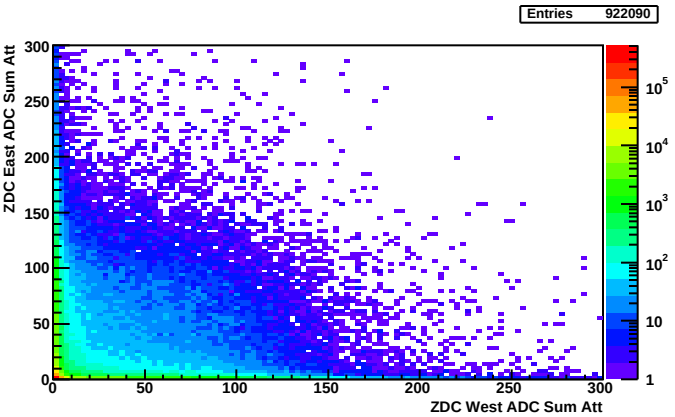

Entries 922090
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

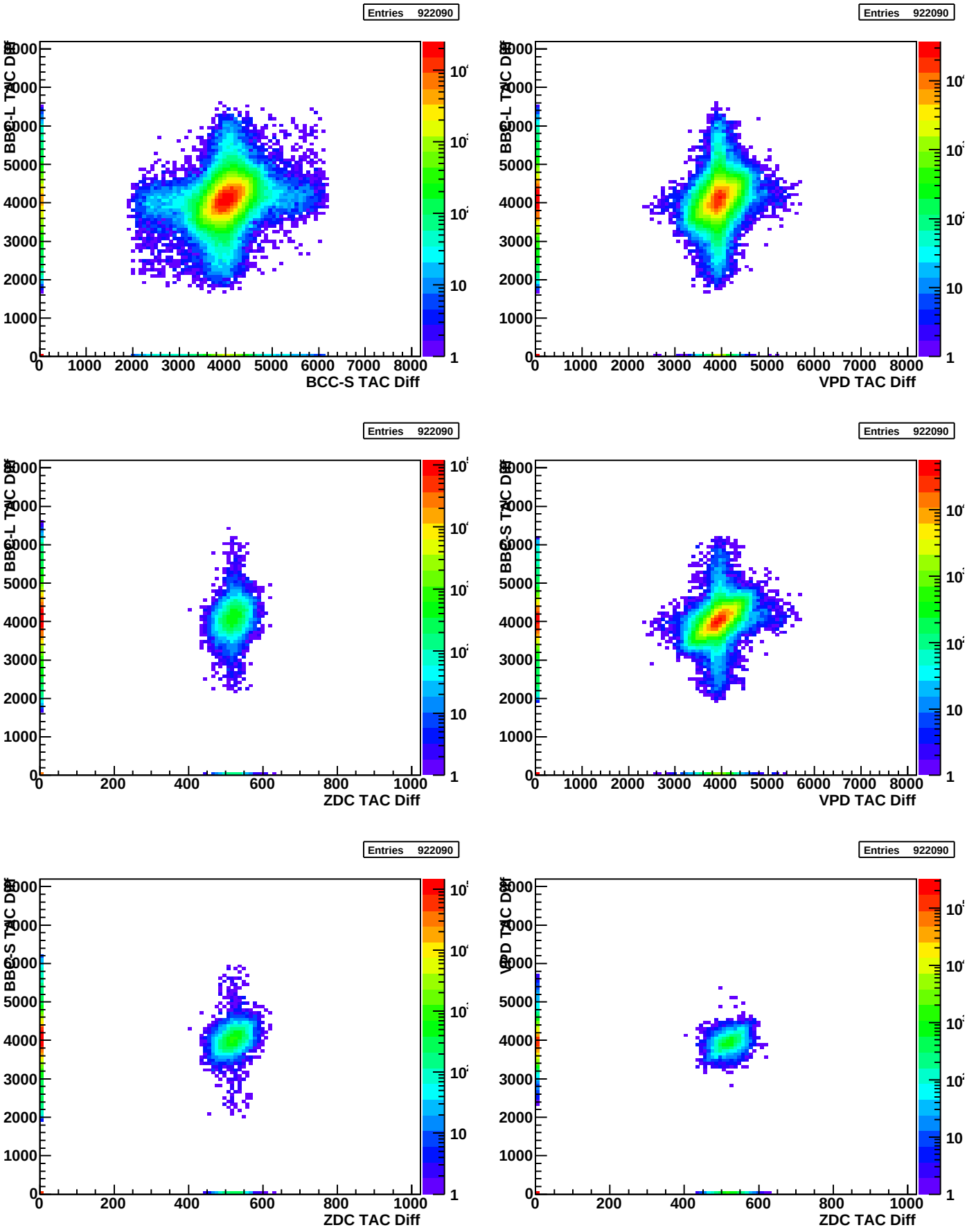

Entries 922090
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

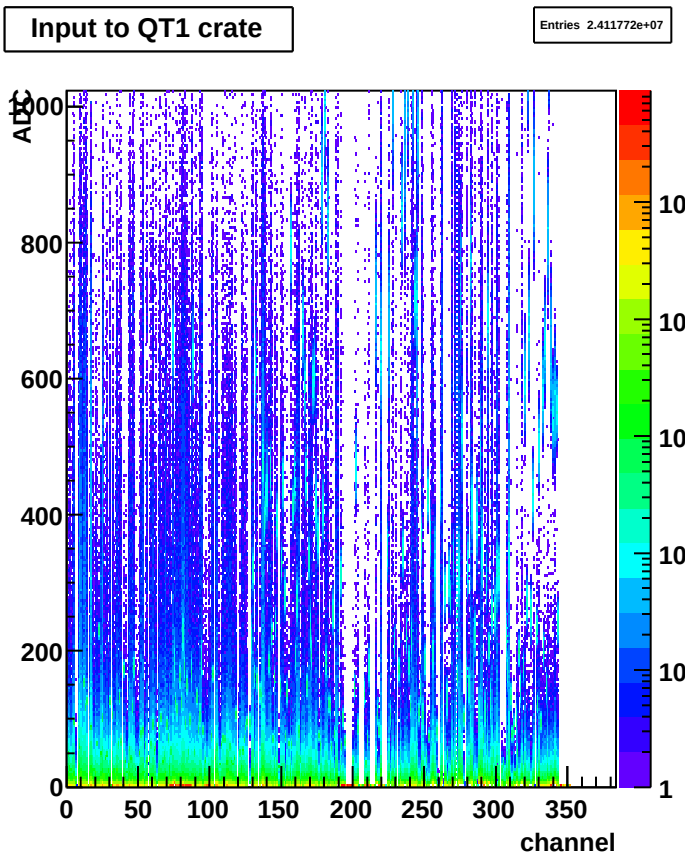

Entries 922090
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

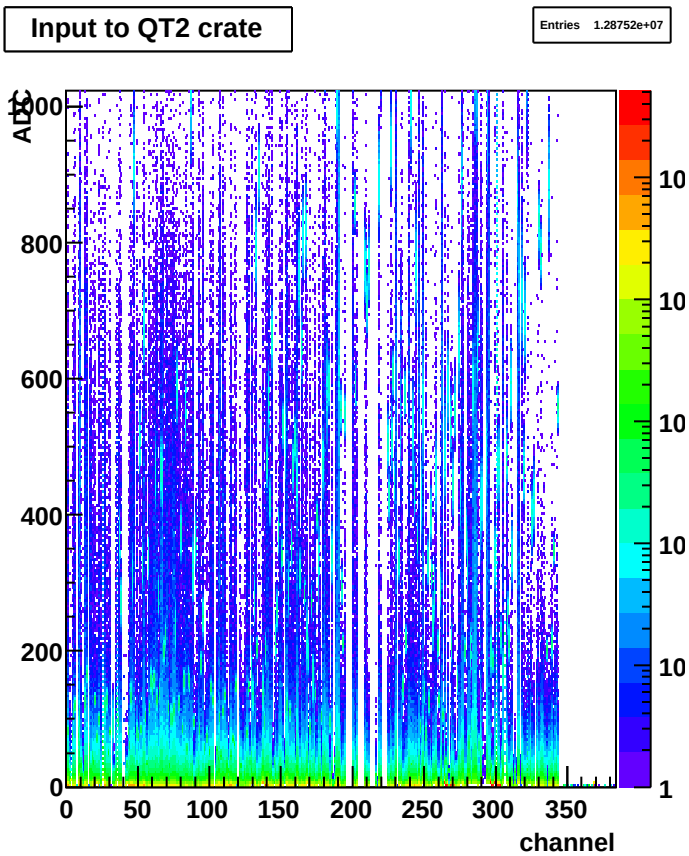

Entries 922090
BBC-L-East ADC Sum
BBC-L-West ADC Sum

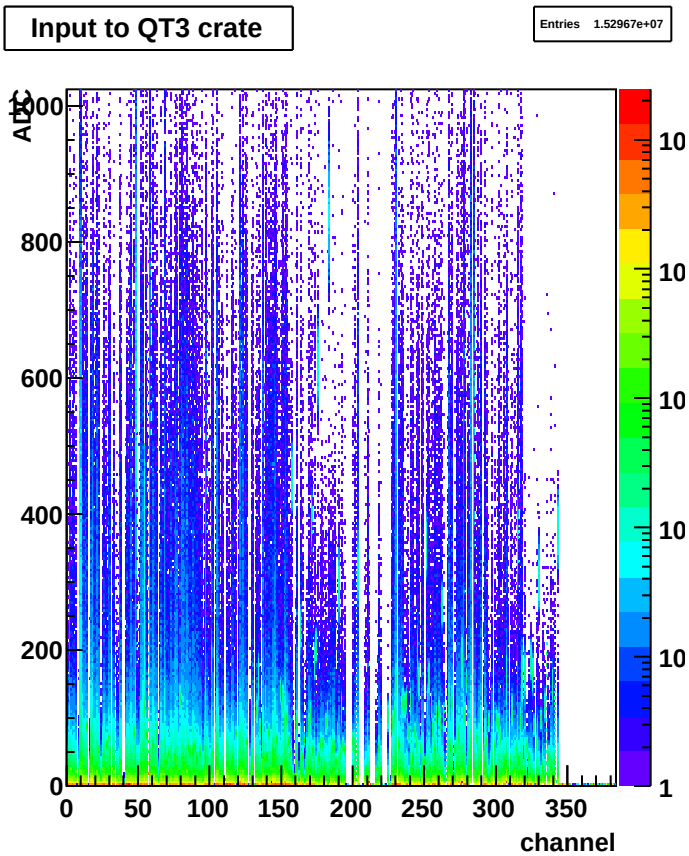

Entries 922090
BBC-S-East ADC Sum
BBC-S-West ADC Sum

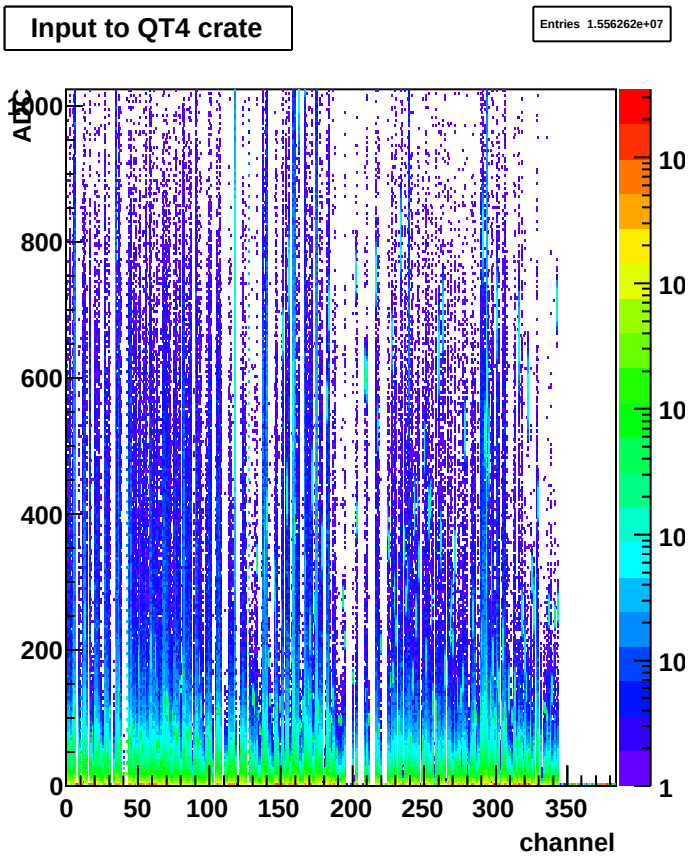

Entries 922090
ZDC East ADC Sum Att
ZDC West ADC Sum Att

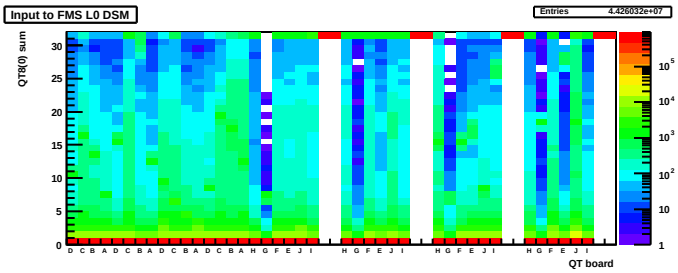

Entries 922090
BBC-L TAC Diff
BCC-S TAC Diff
Entries 922090
BBC-L TAC Diff
VPD TAC Diff
Entries 922090
BBC-L TAC Diff
ZDC TAC Diff
Entries 922090
BBC-S TAC Diff
VPD TAC Diff
Entries 922090
BBC-S TAC Diff
ZDC TAC Diff
Entries 922090
VPD TAC Diff
ZDC TAC Diff

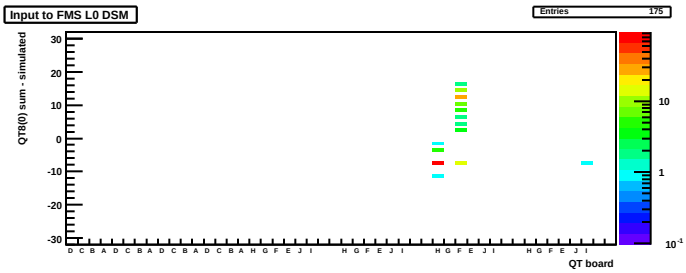

Input to QT1 crate
Entries 2.411772e+07
ADC
channel

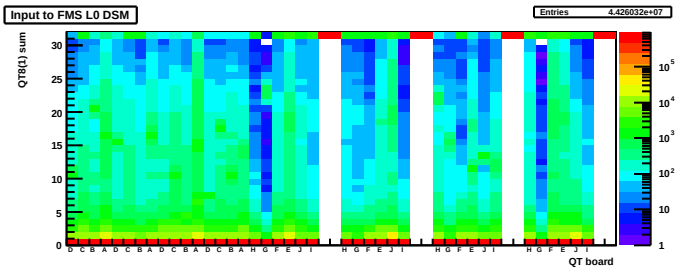

Input to QT2 crate
Entries 1.28752e+07
ADC
channel

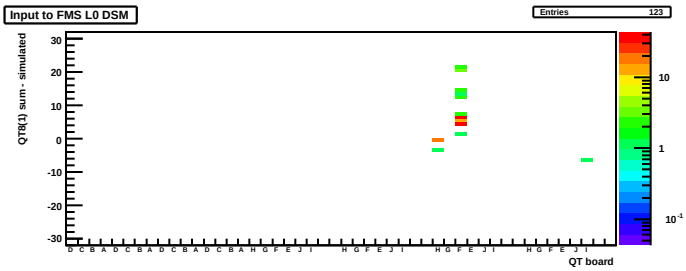

Input to QT3 crate
Entries 1.52967e+07
ADC
channel

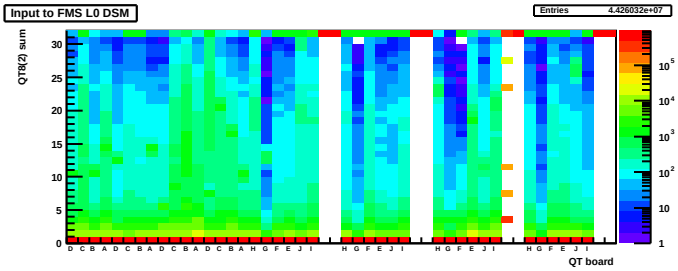

Input to QT4 crate
Entries 1.556262e+07
ADC
channel

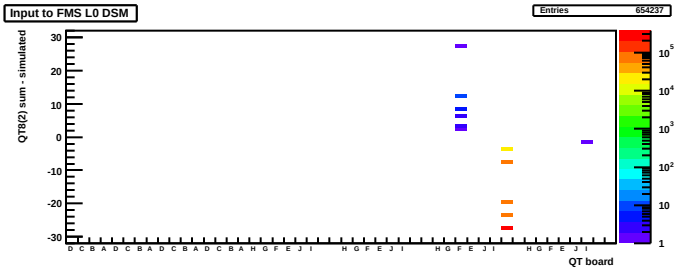

Input to FMS L0 DSM
Entries 4.426032e+07
QT8(0) sum
QT board

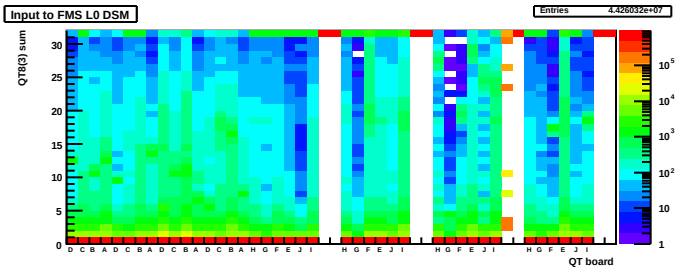

Input to FMS L0 DSM
Entries 175
QT8(0) sum - simulated
QT board

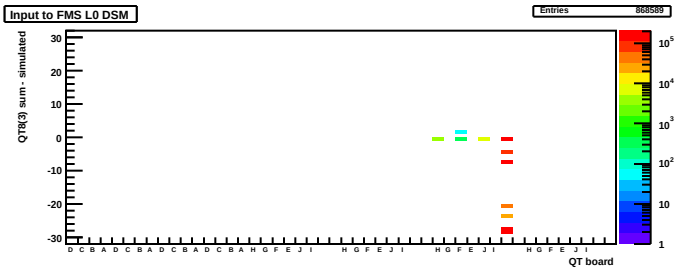

Input to FMS L0 DSM
Entries 4.426032e+07
QT8(1) sum
QT board

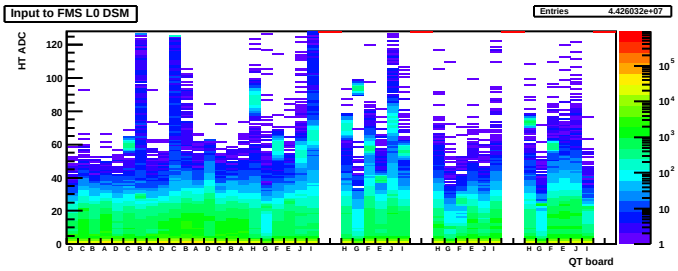

Input to FMS L0 DSM
Entries 123
QT8(1) sum - simulated
QT board

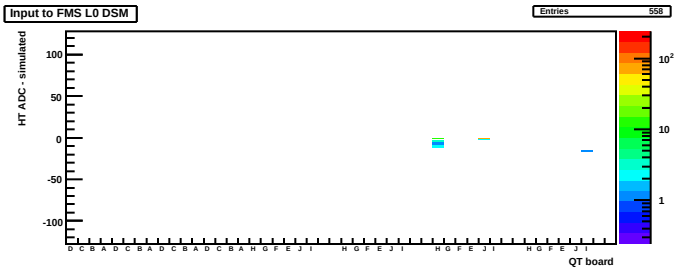

Input to FMS L0 DSM
Entries 4.426032e+07
QT8(2) sum
QT board

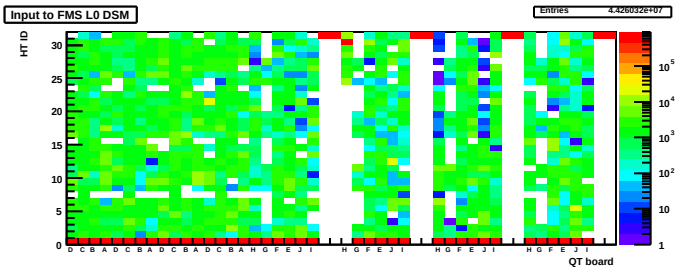

Input to FMS L0 DSM
Entries 654237
QT8(2) sum - simulated
QT board

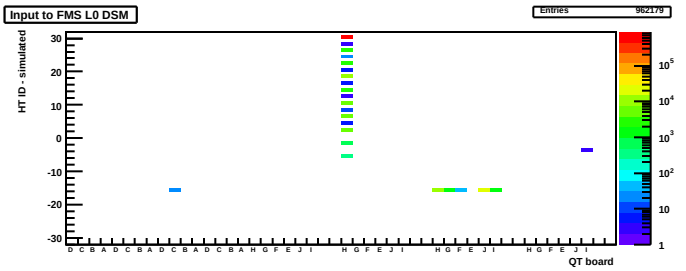

Input to FMS L0 DSM
Entries 4.426032e+07
QT8(3) sum
QT board

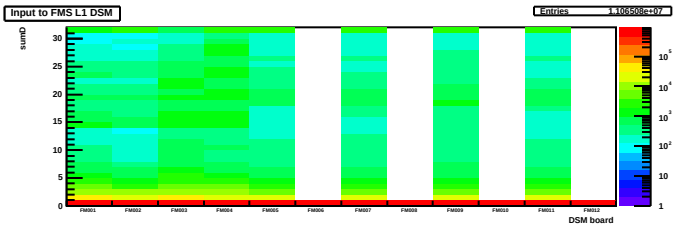

Input to FMS L0 DSM
Entries 868589
QT8(3) sum - simulated
QT board

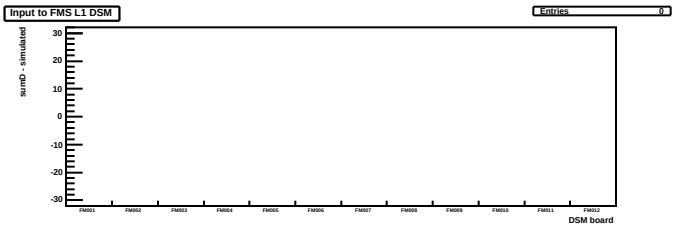

Input to FMS L0 DSM
Entries 4.426032e+07
HT ADC
QT board

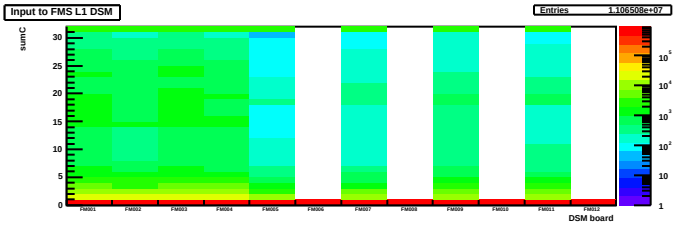

Input to FMS L0 DSM
Entries 558
HT ADC - simulated
QT board

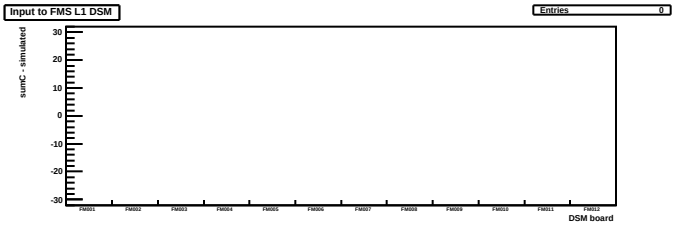

Input to FMS L0 DSM
Entries 4.426032e+07
HT ID
QT board

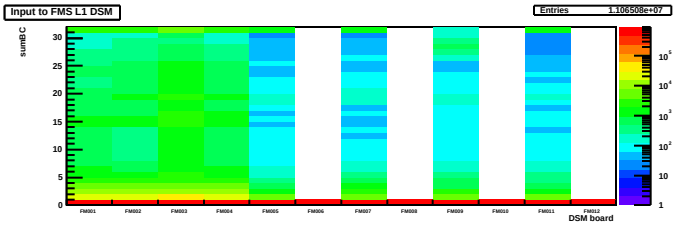

Input to FMS L0 DSM
Entries 962179
HT ID - simulated
QT board

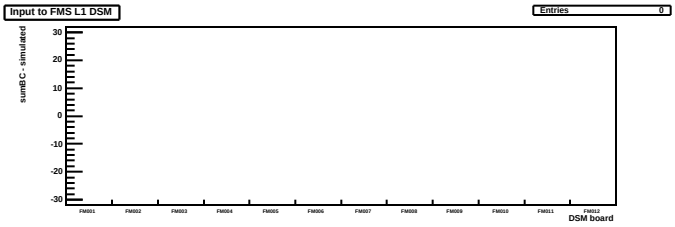

Input to FMS L1 DSM
Entries 1.106508e+07
sumD
DSM board

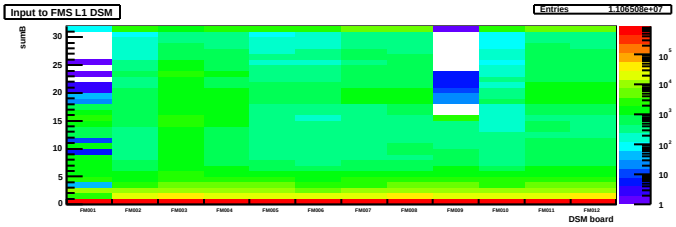

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

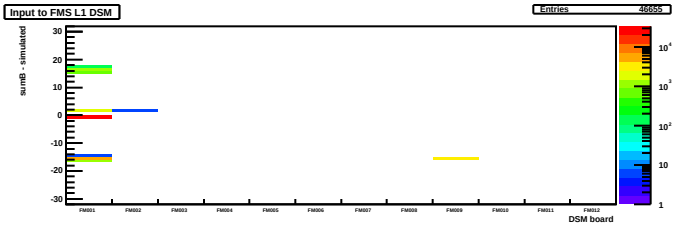

Input to FMS L1 DSM
Entries 1.106508e+07
sumC
DSM board

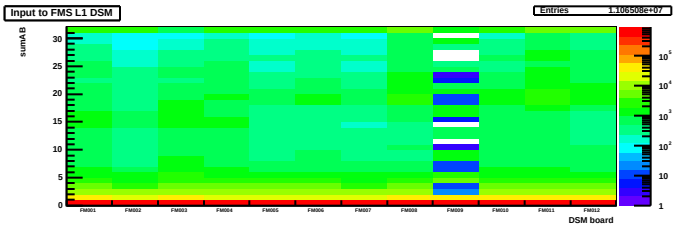

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

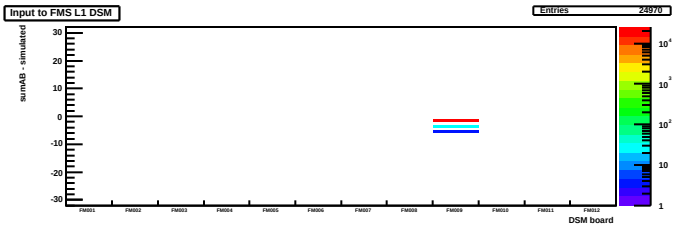

Input to FMS L1 DSM
Entries 1.106508e+07
sumBC
DSM board

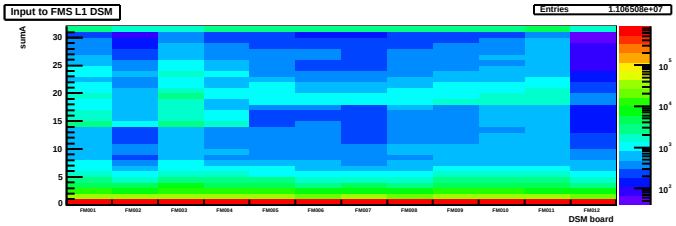

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

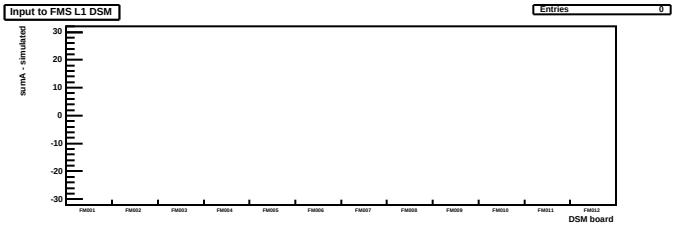

Input to FMS L1 DSM
Entries 1.106508e+07
sumB
DSM board

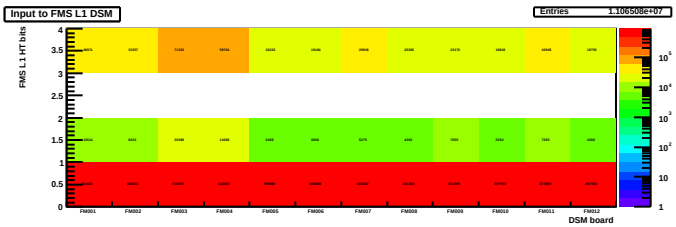

Input to FMS L1 DSM
Entries 46655
sumB - simulated
DSM board

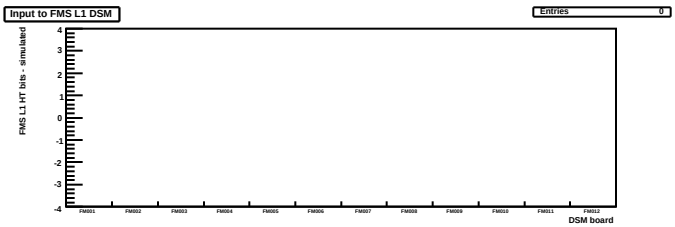

Input to FMS L1 DSM
Entries 1.106508e+07
sumAB
DSM board

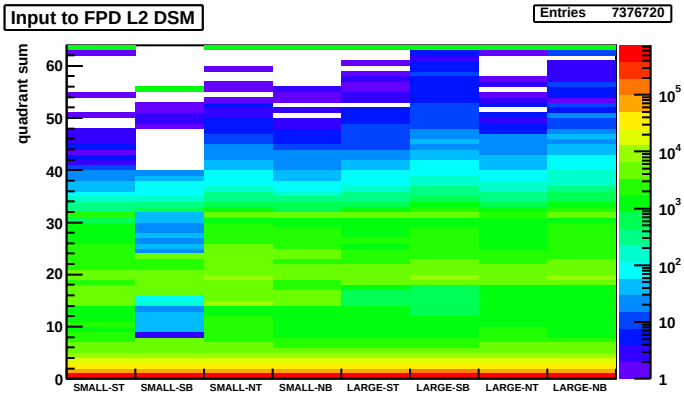

Input to FMS L1 DSM
Entries 24970
sumAB - simulated
DSM board

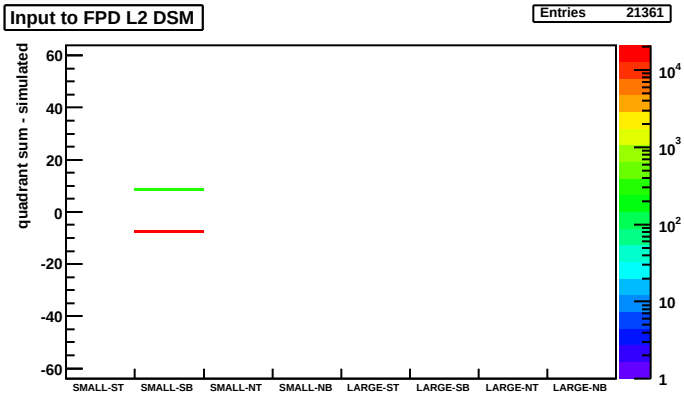

Input to FMS L1 DSM
Entries 1.106508e+07
sumA
DSM board

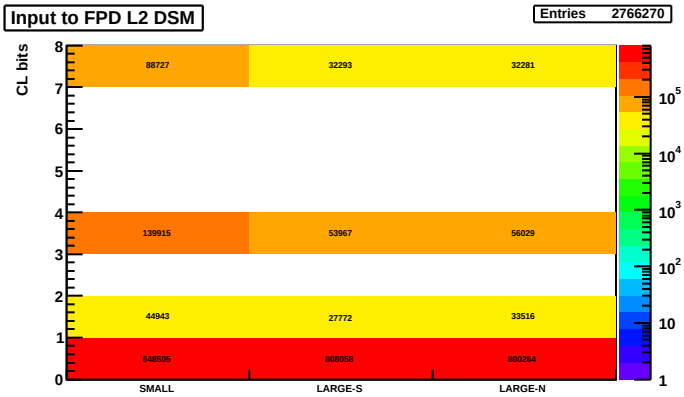

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

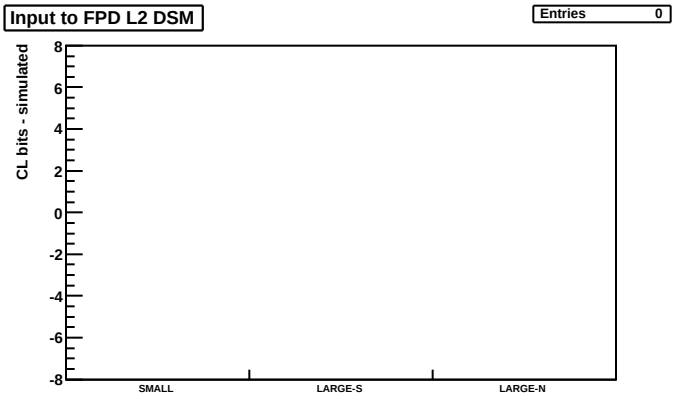

Input to FMS L1 DSM
Entries 1.106508e+07
FMS L1 HT bits
DSM board

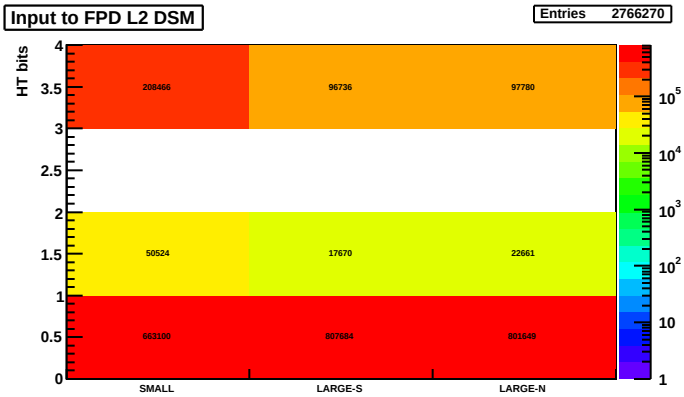

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

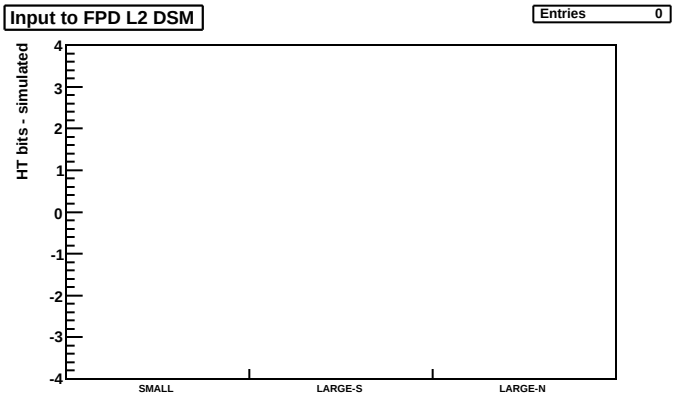

Input to FPD L2 DSM
Entries 7376720
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

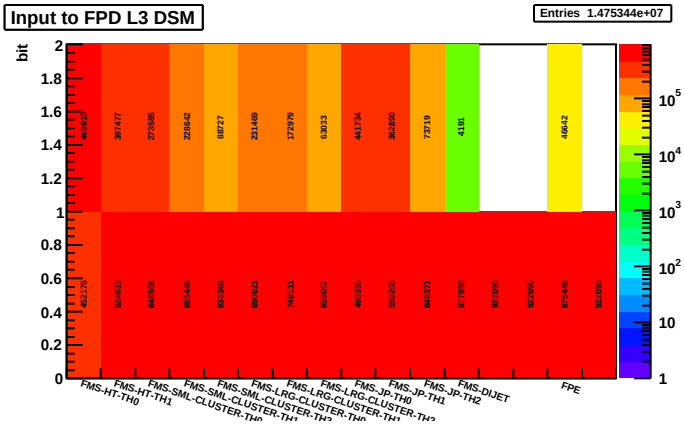

Input to FPD L2 DSM
Entries 21361
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

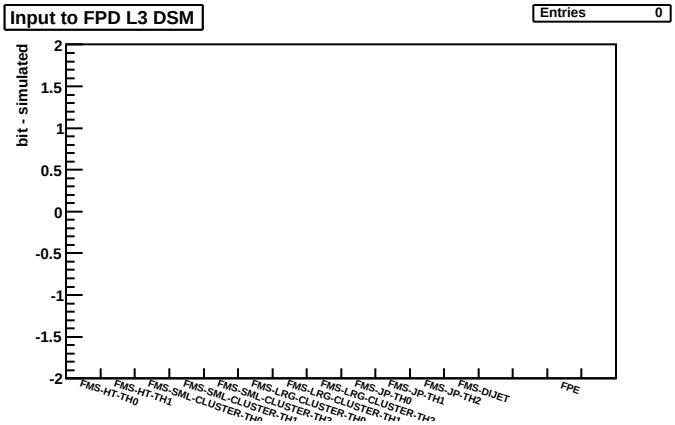

Input to FPD L2 DSM
Entries 2766270
CL bits
88727
32293
32281
139915
53967
56029
44943
27772
33516
648505
808058
800264
SMALL
LARGE-S
LARGE-N

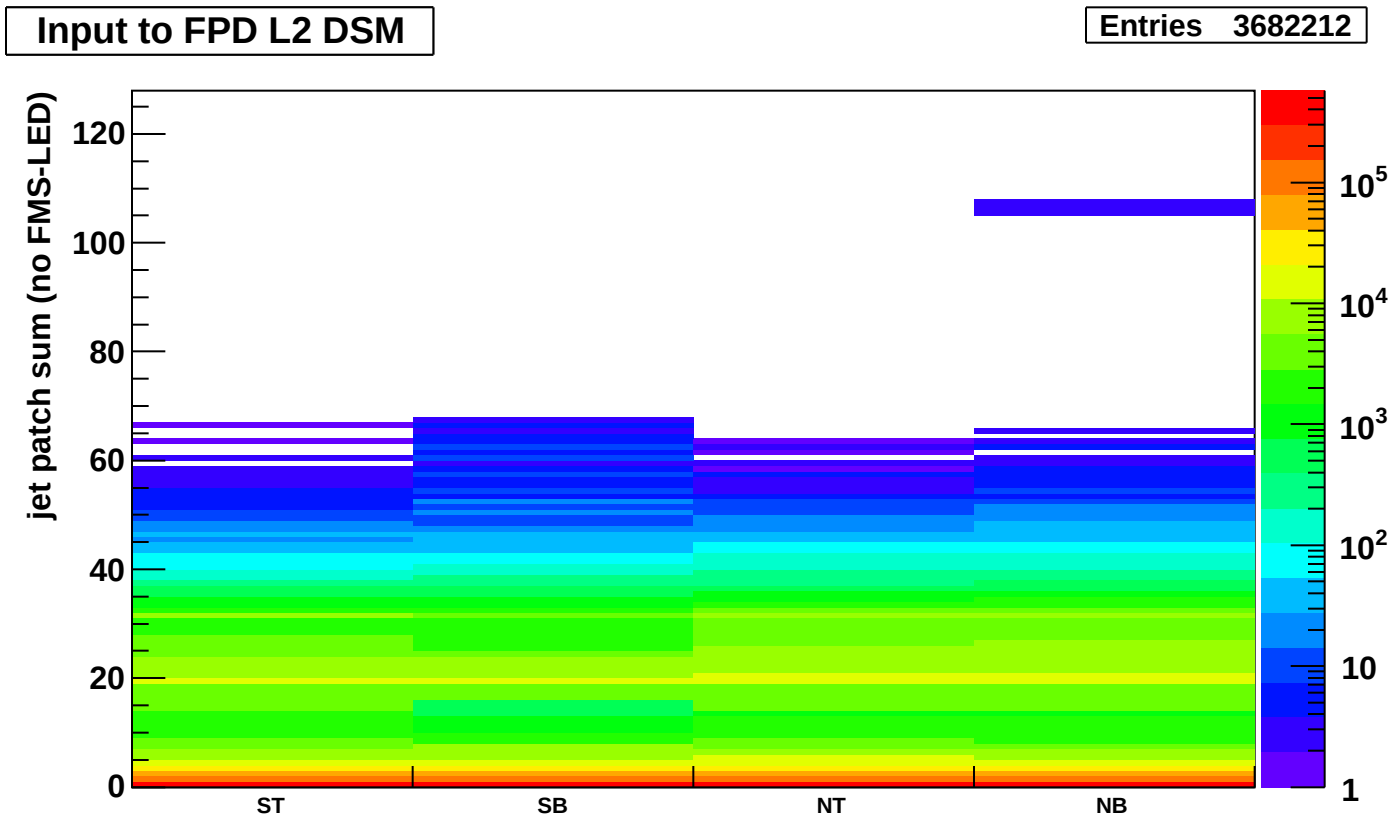

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

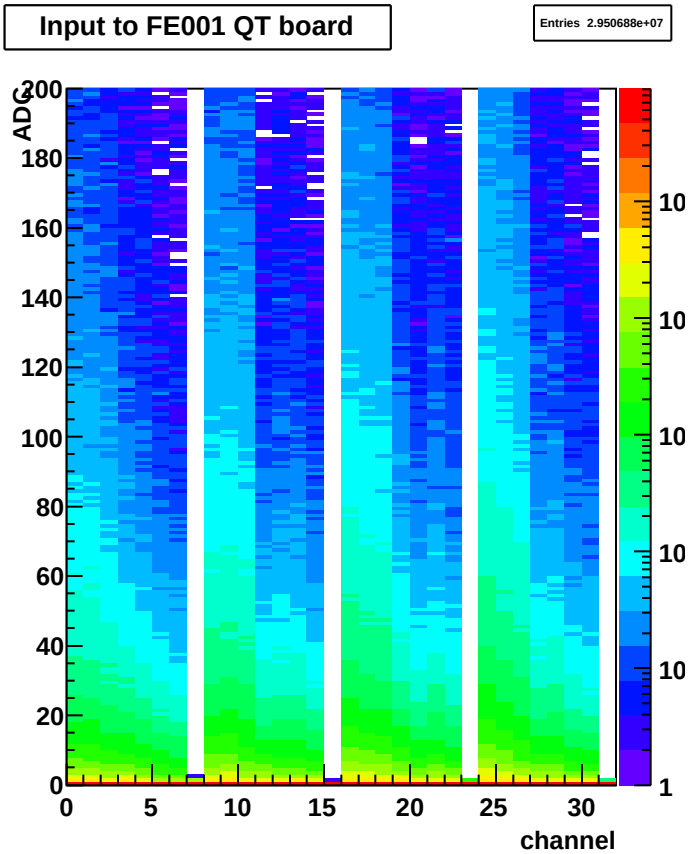

Input to FPD L2 DSM
Entries 2766270
HT bits
208466
96736
97780
50524
17670
22661
663100
807684
801649
SMALL
LARGE-S
LARGE-N

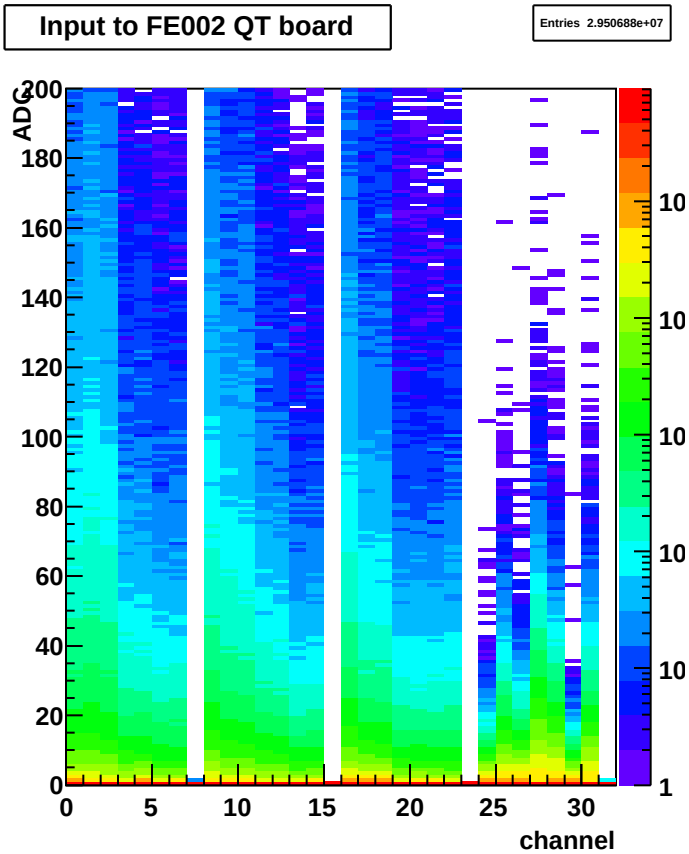

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

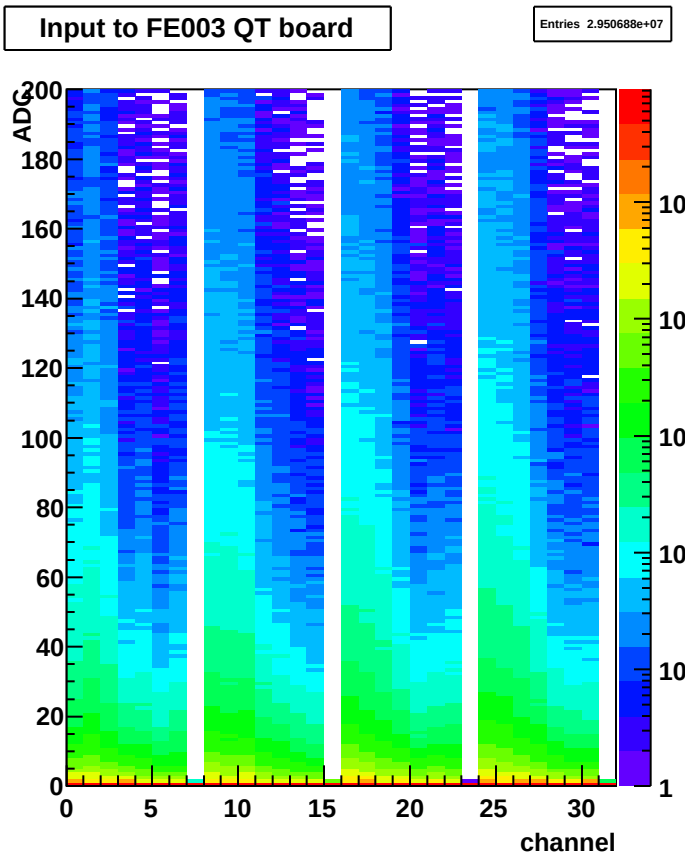

Input to FPD L3 DSM
Entries 1.475344e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

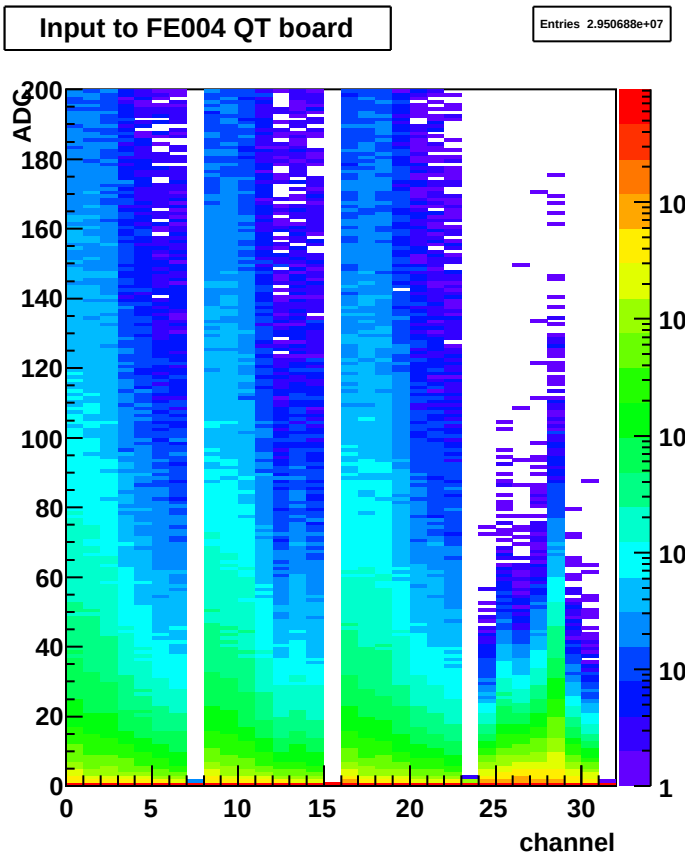

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

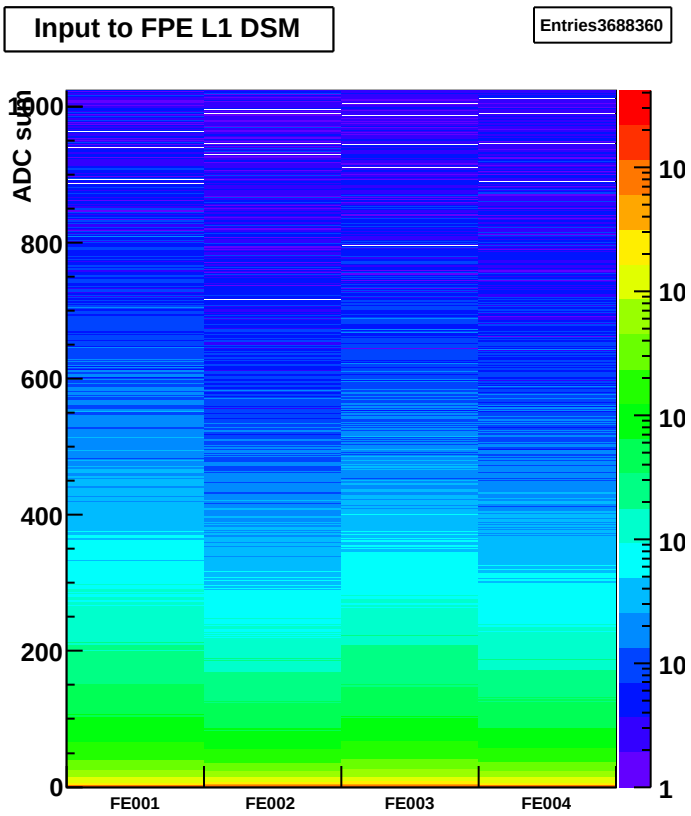

Input to FPD L2 DSM
Entries 3682212
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

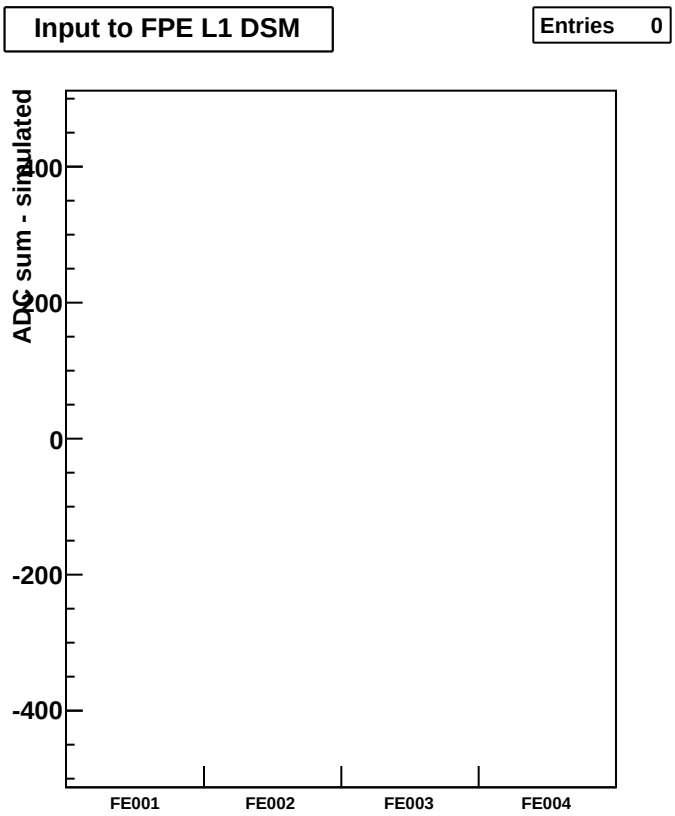

Input to FE001 QT board
Entries 2.950688e+07
ADC
channel

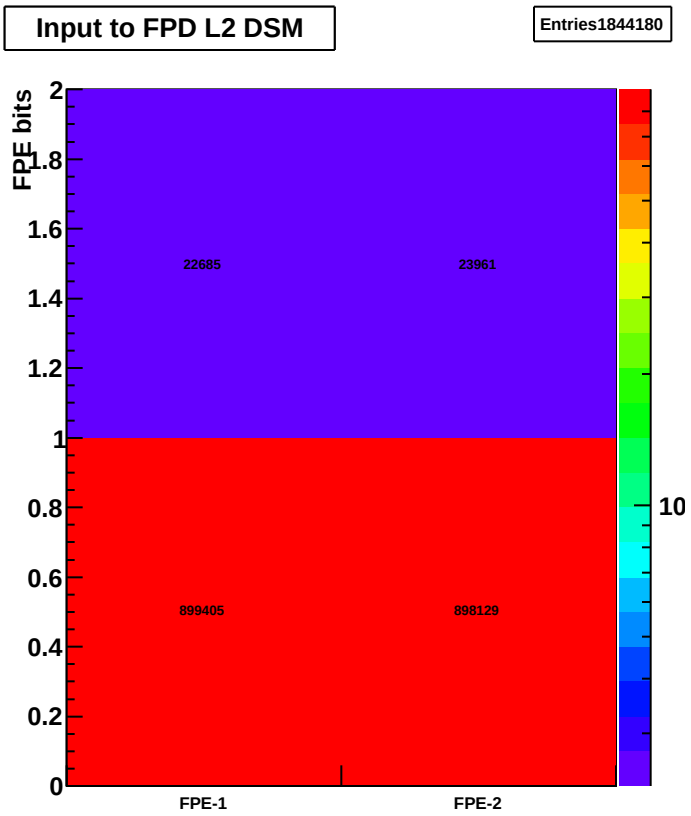

Input to FE002 QT board
Entries 2.950688e+07
ADC
channel

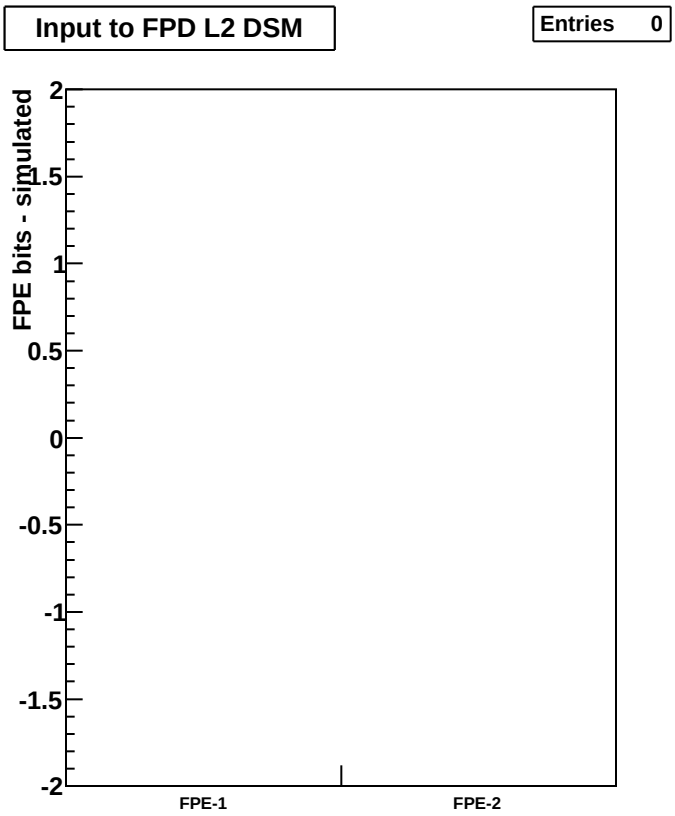

Input to FE003 QT board
Entries 2.950688e+07
ADC
channel


Input to FE004 QT board
Entries 2.950688e+07
ADC
channel


Input to FPE L1 DSM
Entries3688360
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
Entries1844180
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
22685
23961
899405
898129
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