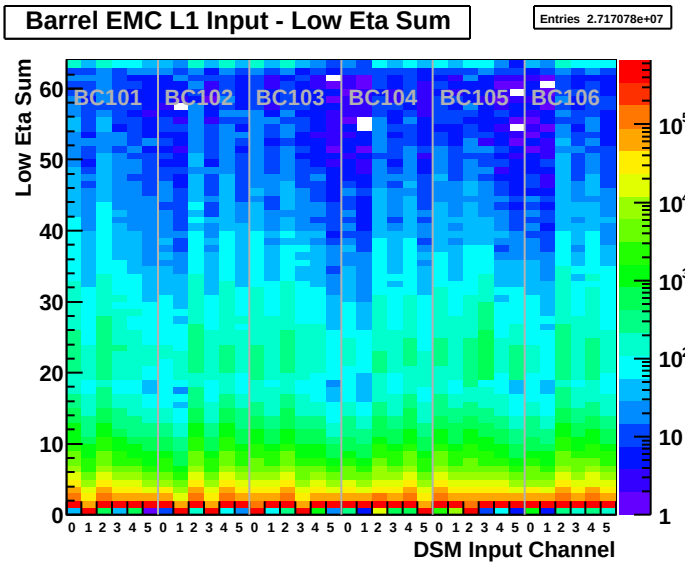
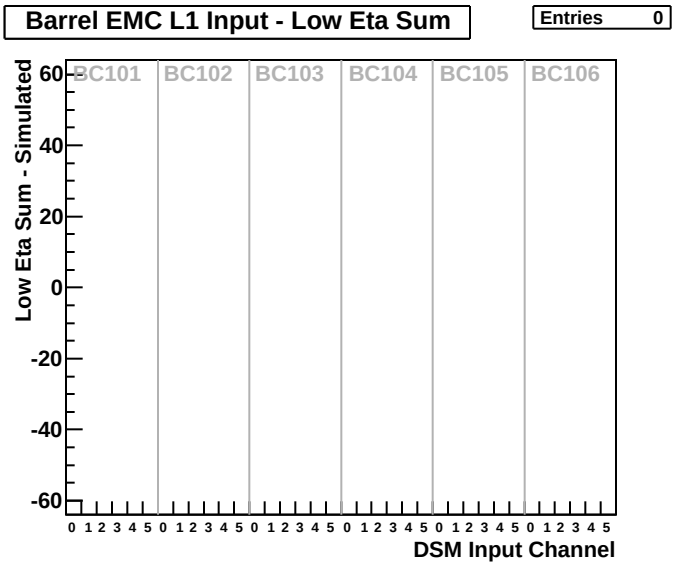
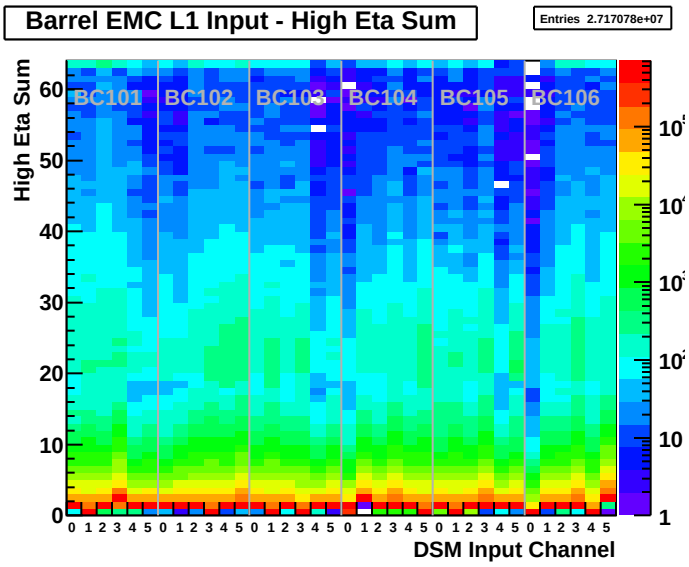
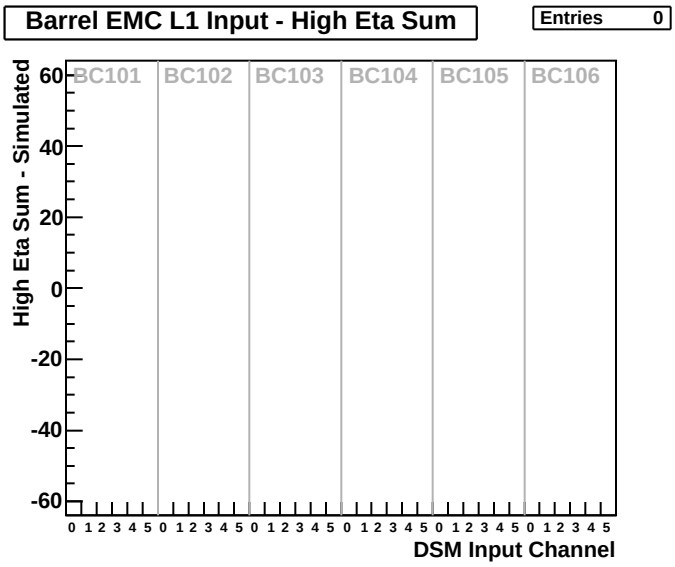
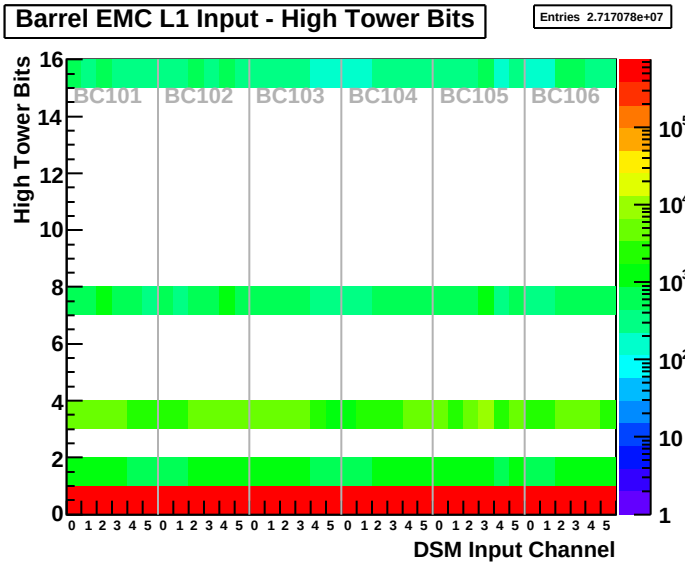
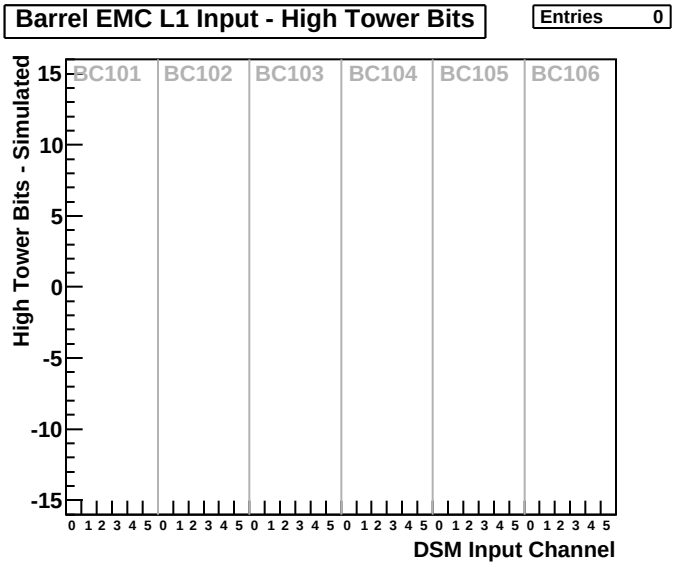

Barrel EMC L1 Input - Low Eta Sum
Entries 2.717078e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

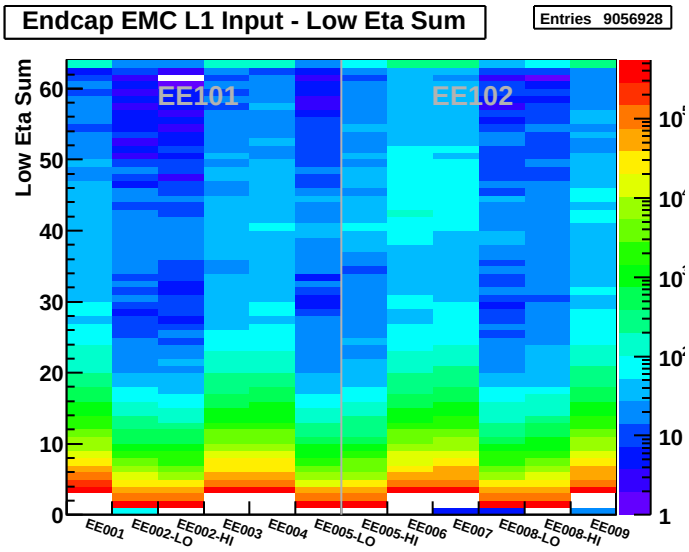

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

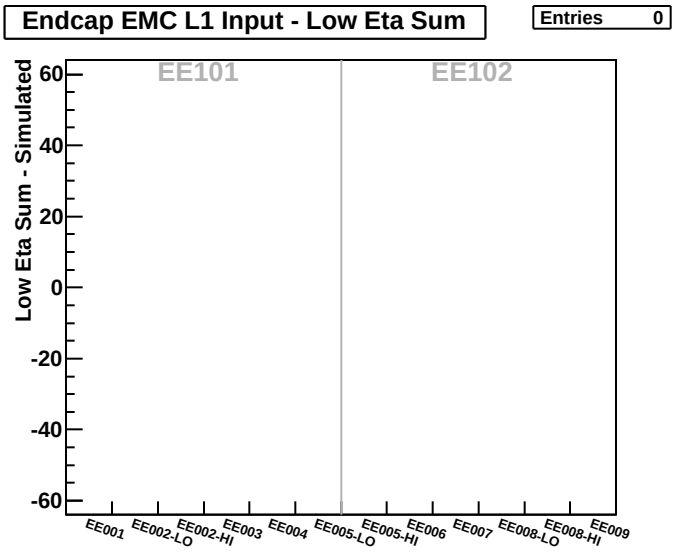

Barrel EMC L1 Input - High Eta Sum
Entries 2.717078e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

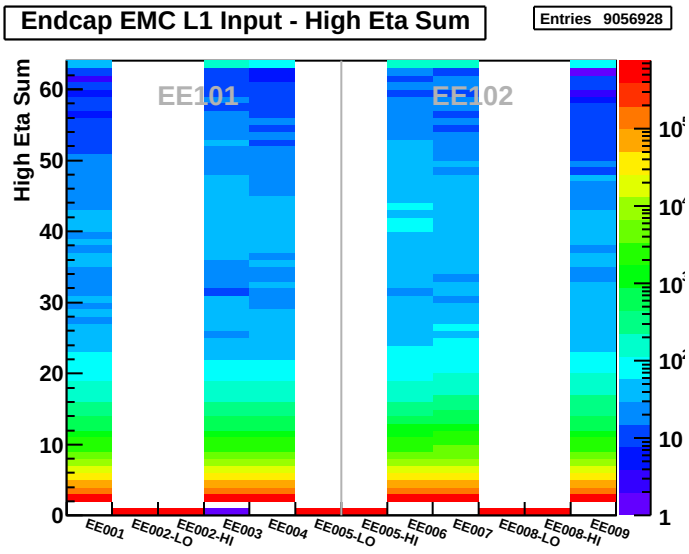

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

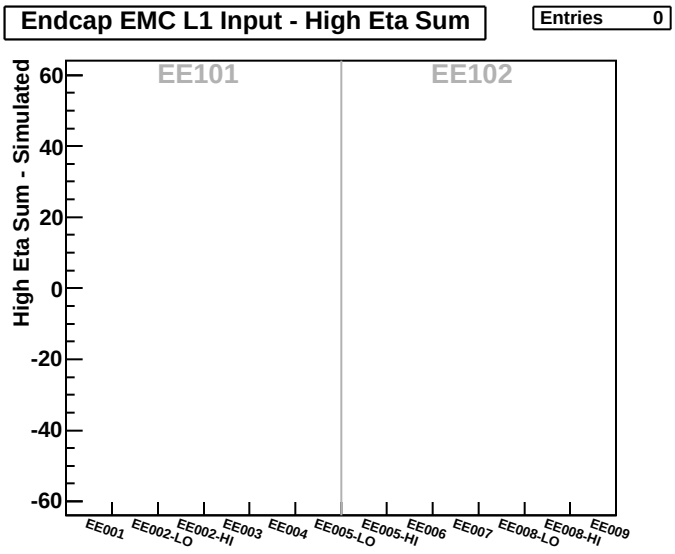

Barrel EMC L1 Input - High Tower Bits
Entries 2.717078e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

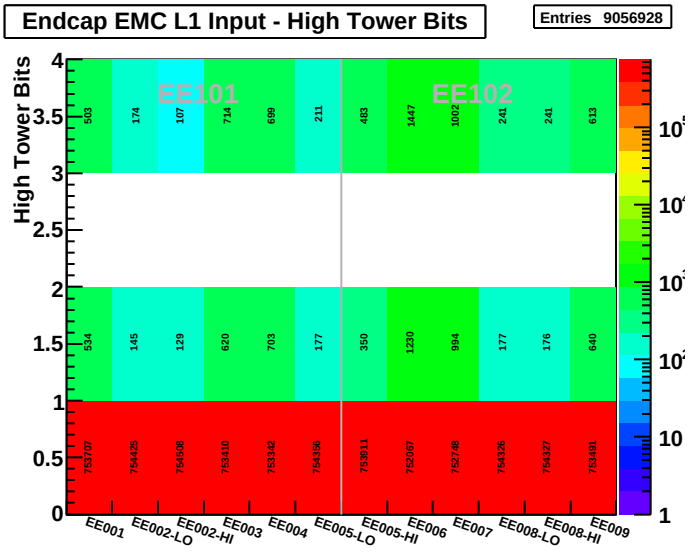

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

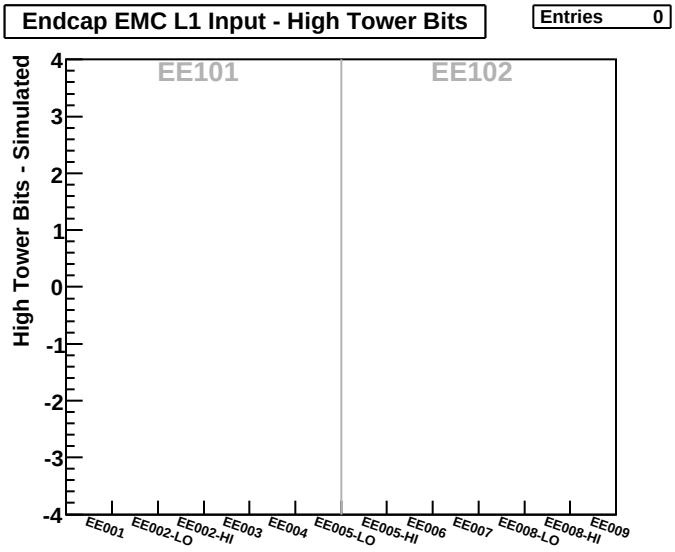

Endcap EMC L1 Input - Low Eta Sum
Entries 9056928
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

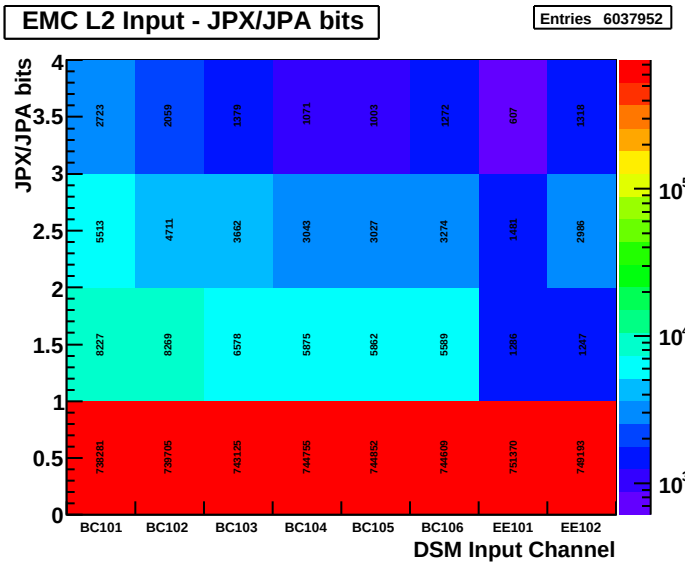

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

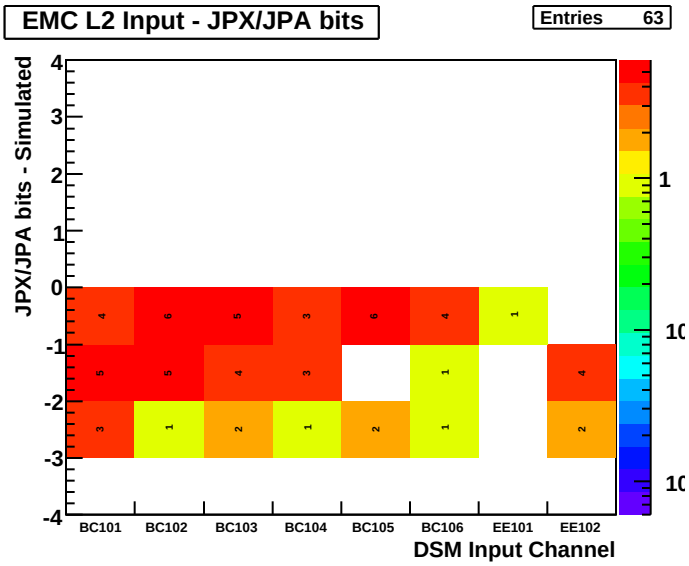

Endcap EMC L1 Input - High Eta Sum
Entries 9056928
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

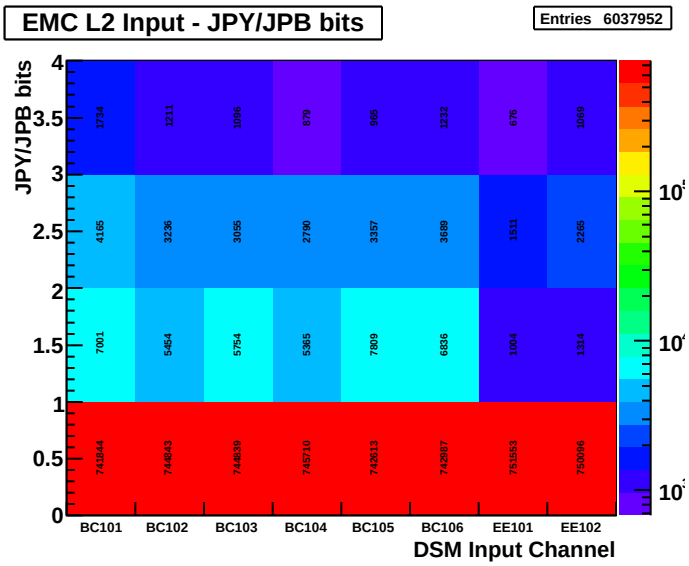

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

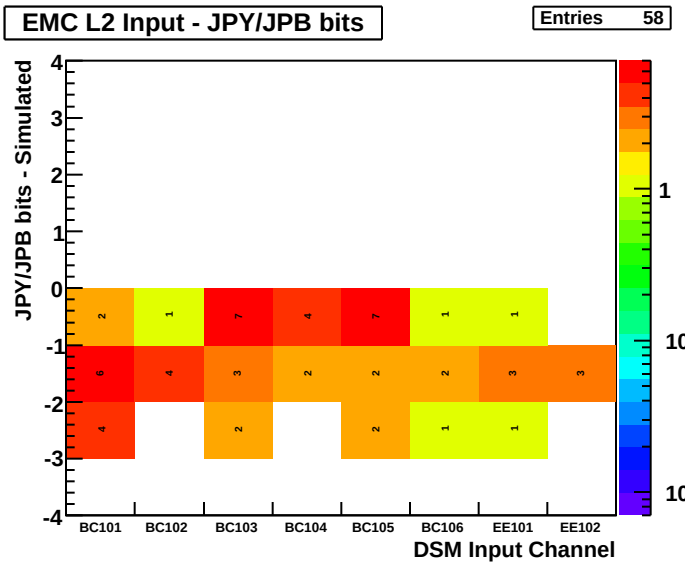

Endcap EMC L1 Input - High Tower Bits
Entries 9056928
High Tower Bits
EE101
EE102
503 174 107 714 699 211 483 1447 1002 241 241 613
534 145 129 620 703 177 350 1230 994 177 176 640
753707 754425 754508 753410 753342 754356 753811 752067 752748 754326 754327 753491
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

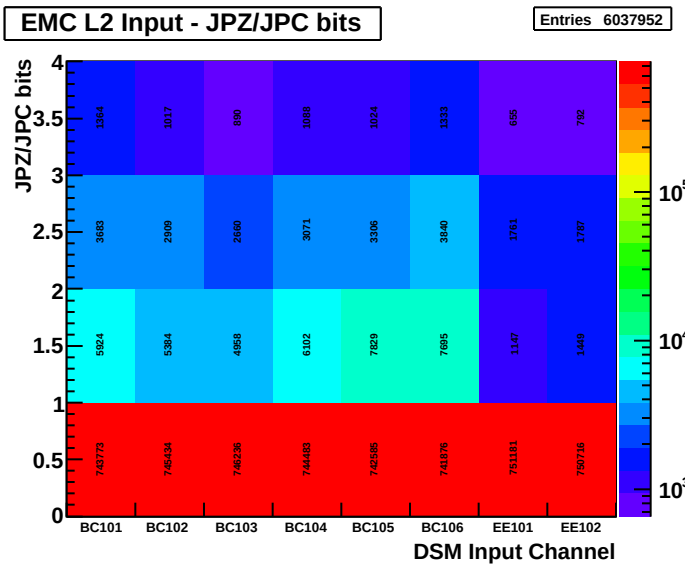

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

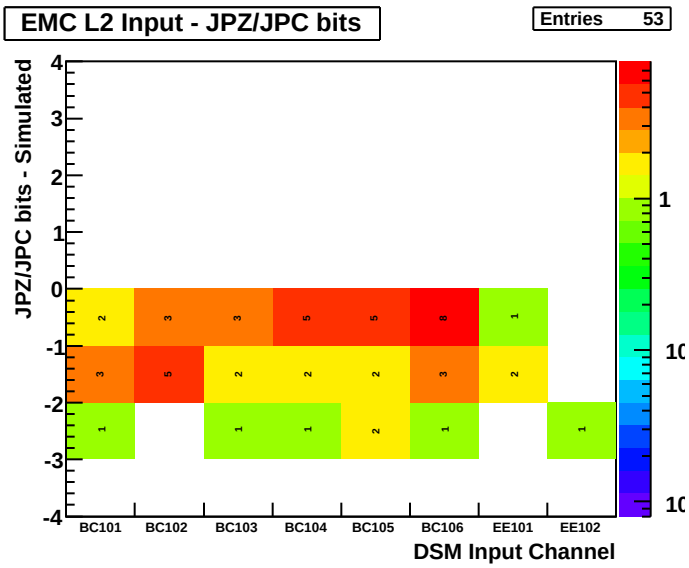

EMC L2 Input - JPX/JPA bits
Entries 6037952
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2723 2059 1379 1071 1013 1272 607 1318
5513 4711 3662 3043 3027 3274 1481 2986
8227 8269 6578 5875 5862 5589 1286 1247
738261 739705 742125 744755 744852 744609 751370 749103

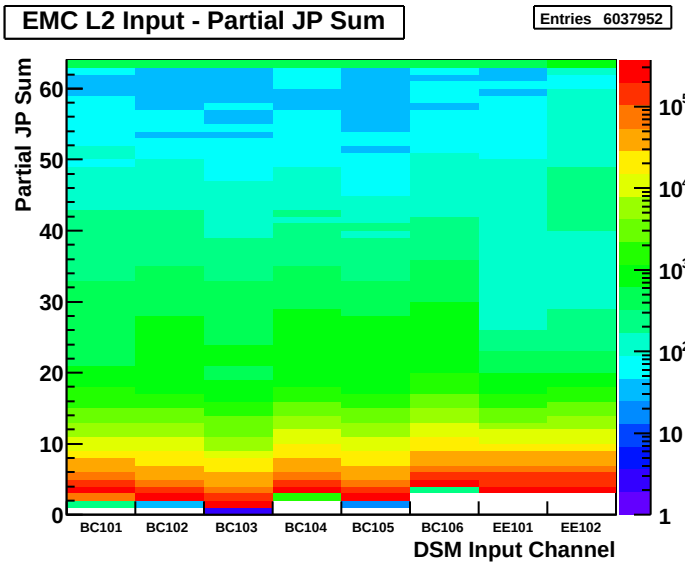

EMC L2 Input - JPX/JPA bits
Entries 63
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

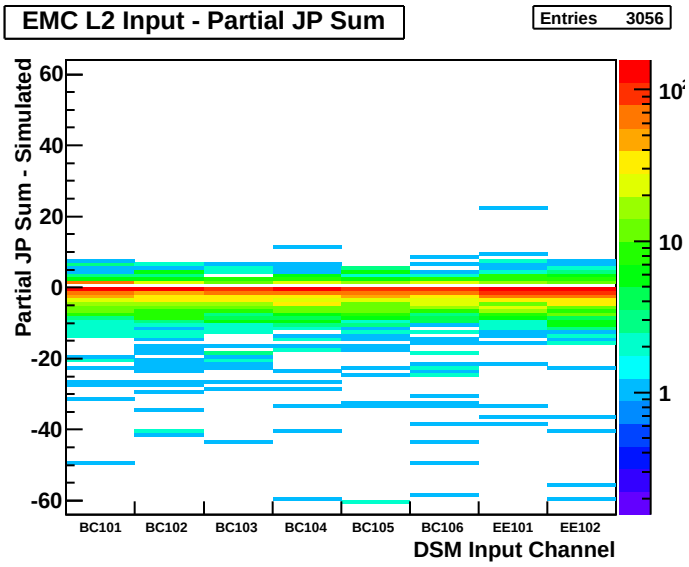

EMC L2 Input - JPY/JPB bits
Entries 6037952
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1734 1211 1096 870 965 1232 676 1069
4165 3236 3055 2790 3357 3689 1511 2265
7001 5454 5754 5365 7909 6836 1004 1314
743844 744843 744839 745710 742513 742987 751553 750096

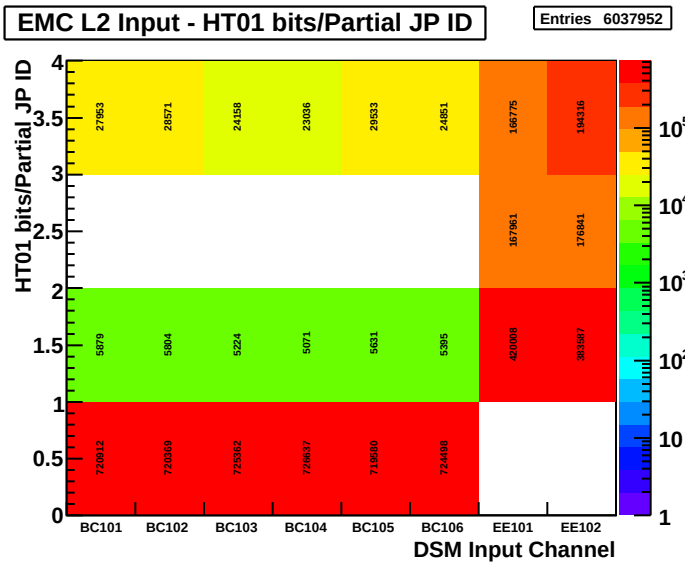

EMC L2 Input - JPY/JPB bits
Entries 58
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

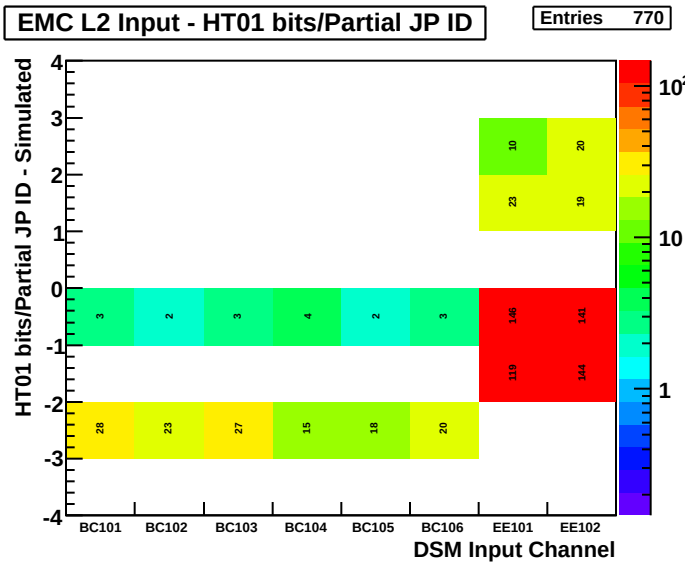

EMC L2 Input - JPZ/JPC bits
Entries 6037952
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1364 1017 800 1088 1024 1333 655 792
3683 2909 2660 3071 3306 3840 1761 1787
5924 5384 4958 6102 7829 7695 1147 1449
743773 745434 746236 744483 742585 741876 751181 750716

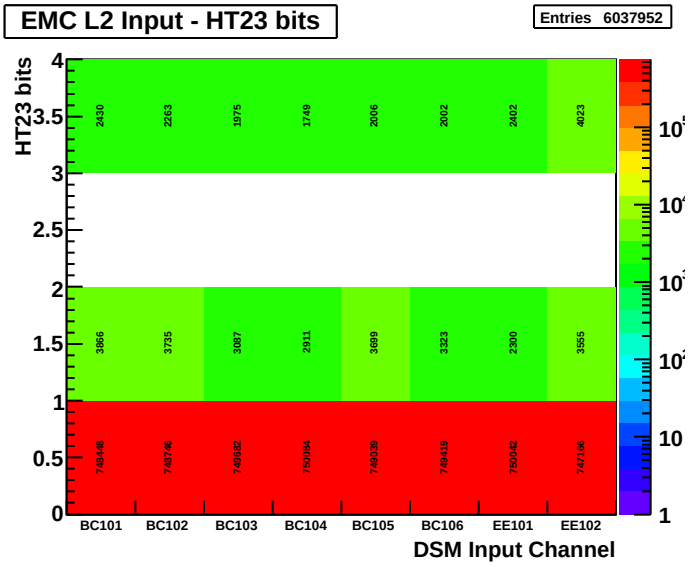

EMC L2 Input - JPZ/JPC bits
Entries 53
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

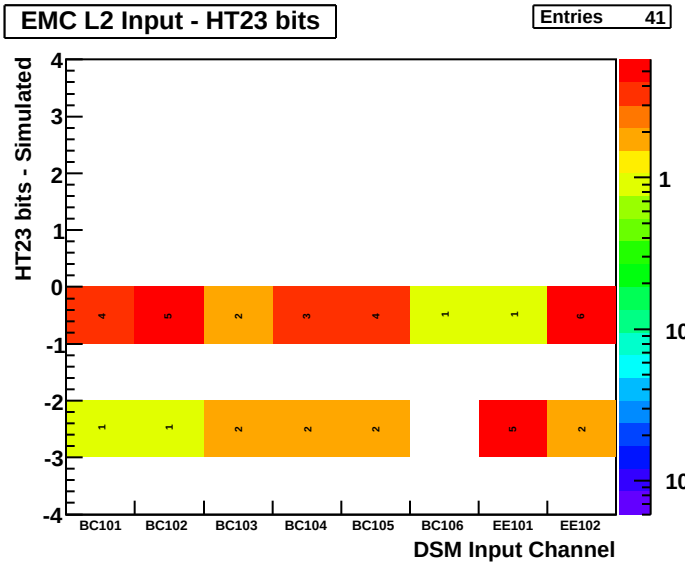

EMC L2 Input - Partial JP Sum
Entries 6037952
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

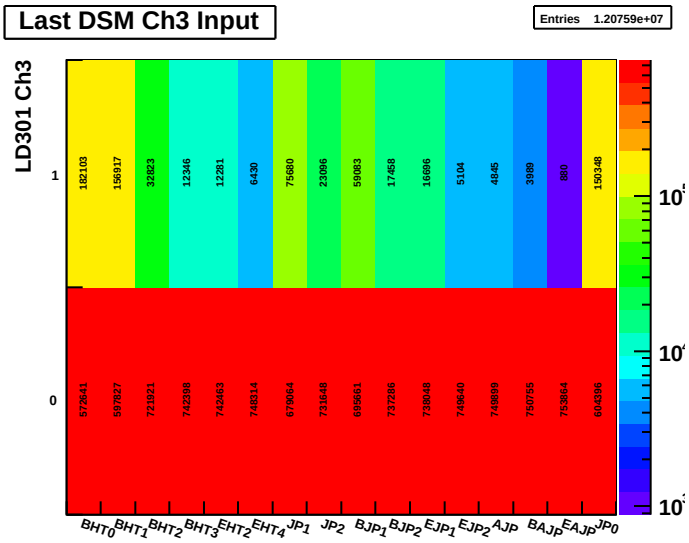

EMC L2 Input - Partial JP Sum
Entries 3056
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

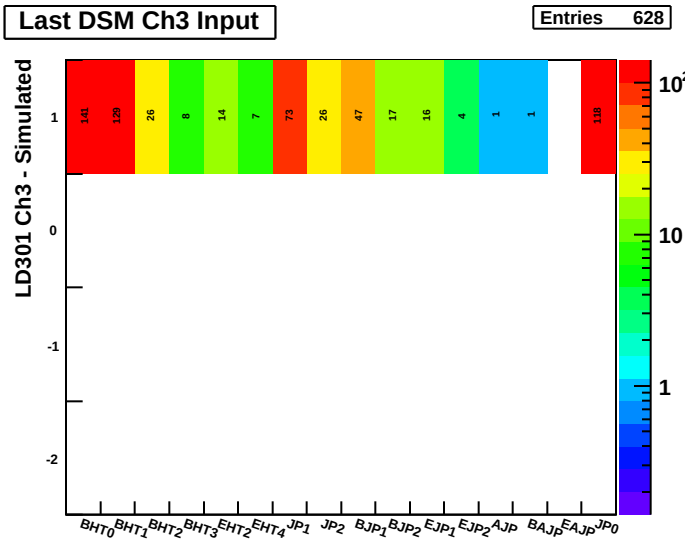

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6037952
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

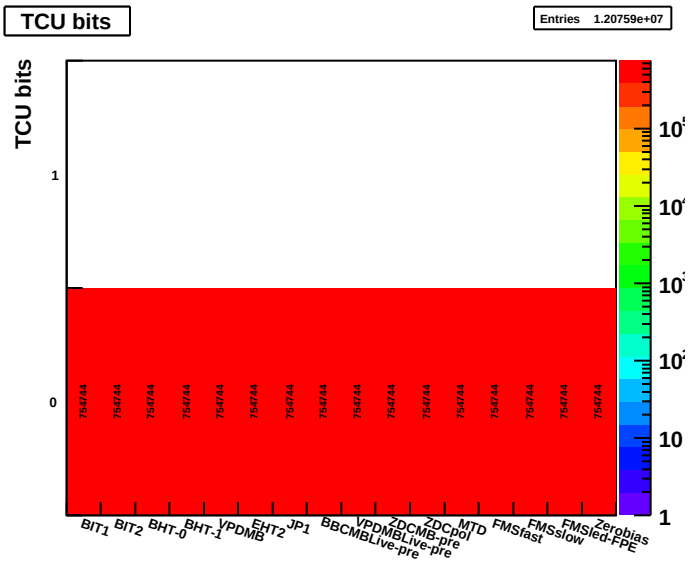

EMC L2 Input - HT01 bits/Partial JP ID
Entries 770
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

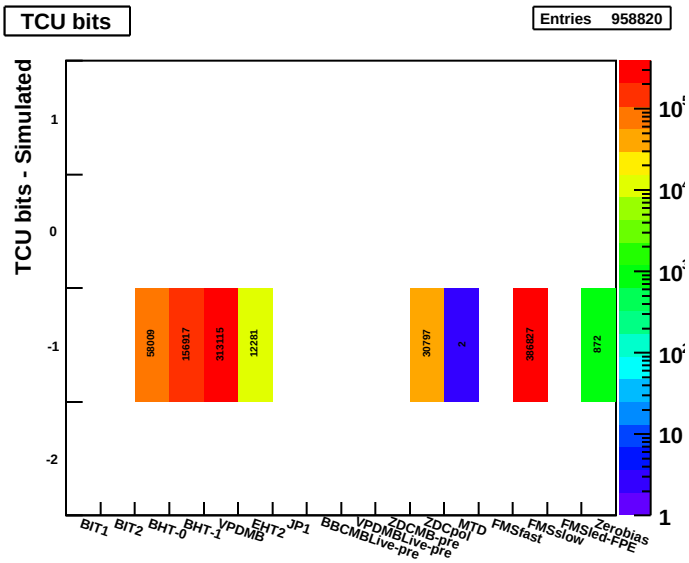

EMC L2 Input - HT23 bits
Entries 6037952
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

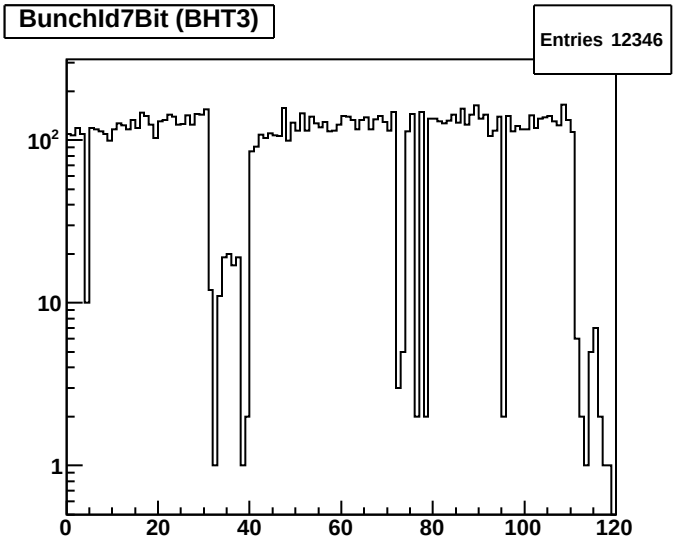

EMC L2 Input - HT23 bits
Entries 41
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

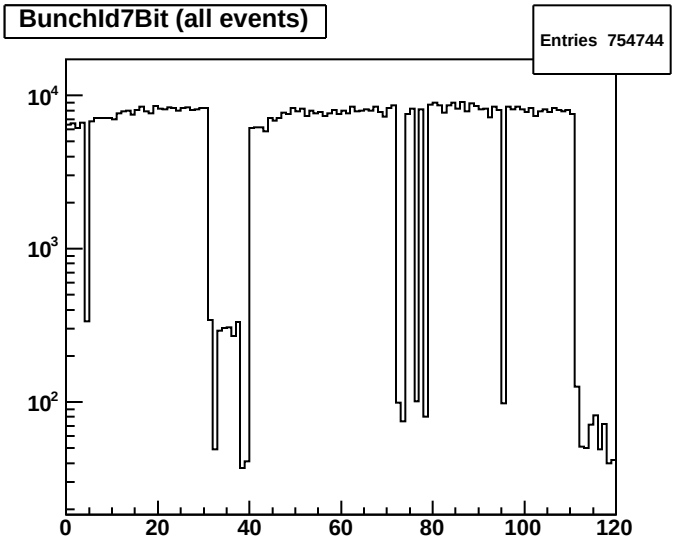

Last DSM Ch3 Input
Entries 1.20759e+07
LD301 Ch3
182103 156917 32823 12346 12281 6430 75680 23096 59083 17458 16696 5104 4845 3989 880 150348
572641 597827 721921 742398 742463 746314 679064 731648 695661 737286 738048 749640 749899 750755 753854 604396
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

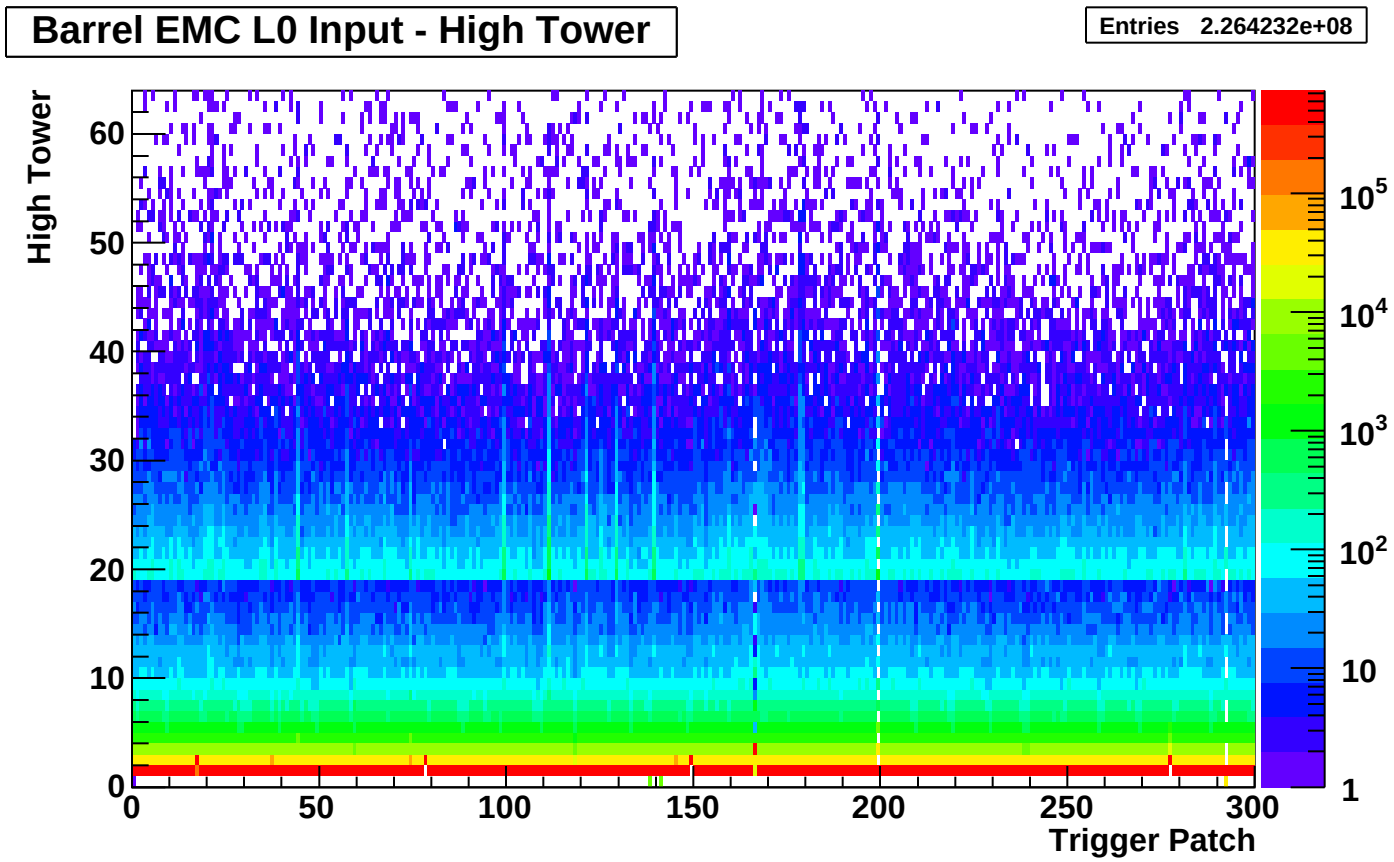

Last DSM Ch3 Input
Entries 628
LD301 Ch3 - Simulated
141 129 26 8 14 7 73 26 47 17 16 4 1 1 118
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

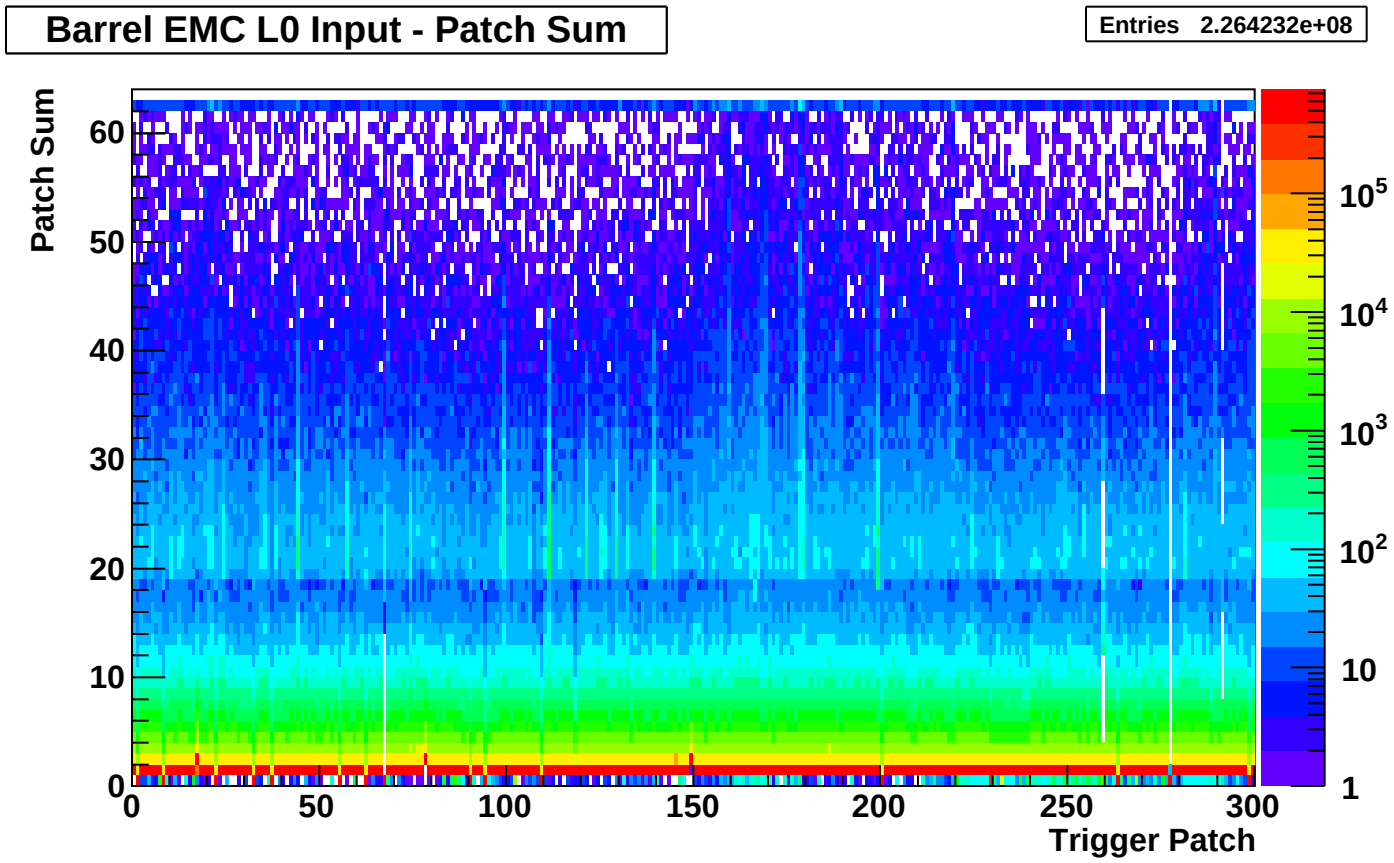

TCU bits
Entries 1.20759e+07
TCU bits
754744
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

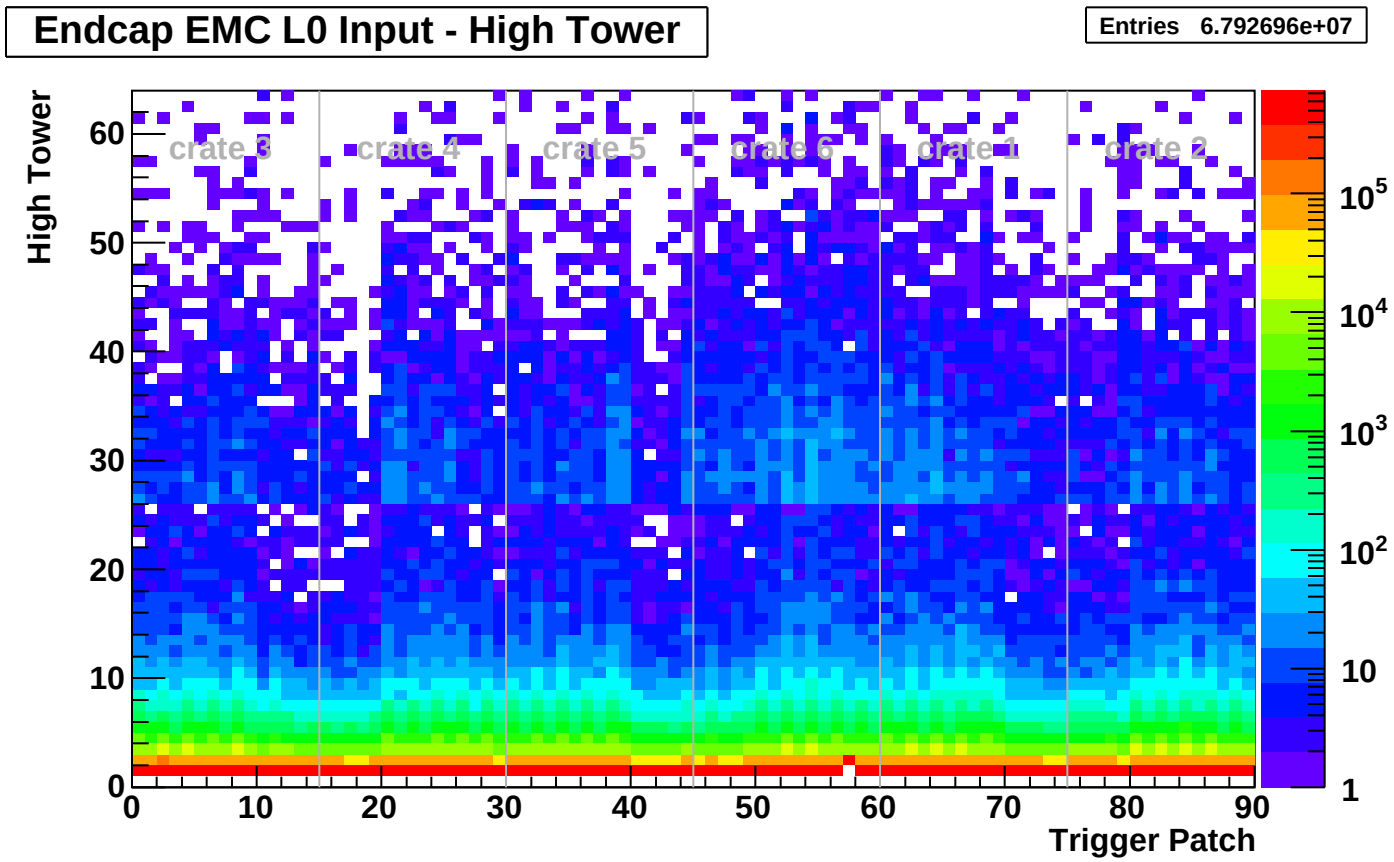

TCU bits
Entries 958820
TCU bits - Simulated
58009 156917 313115 12281 30797 2 306827 872
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

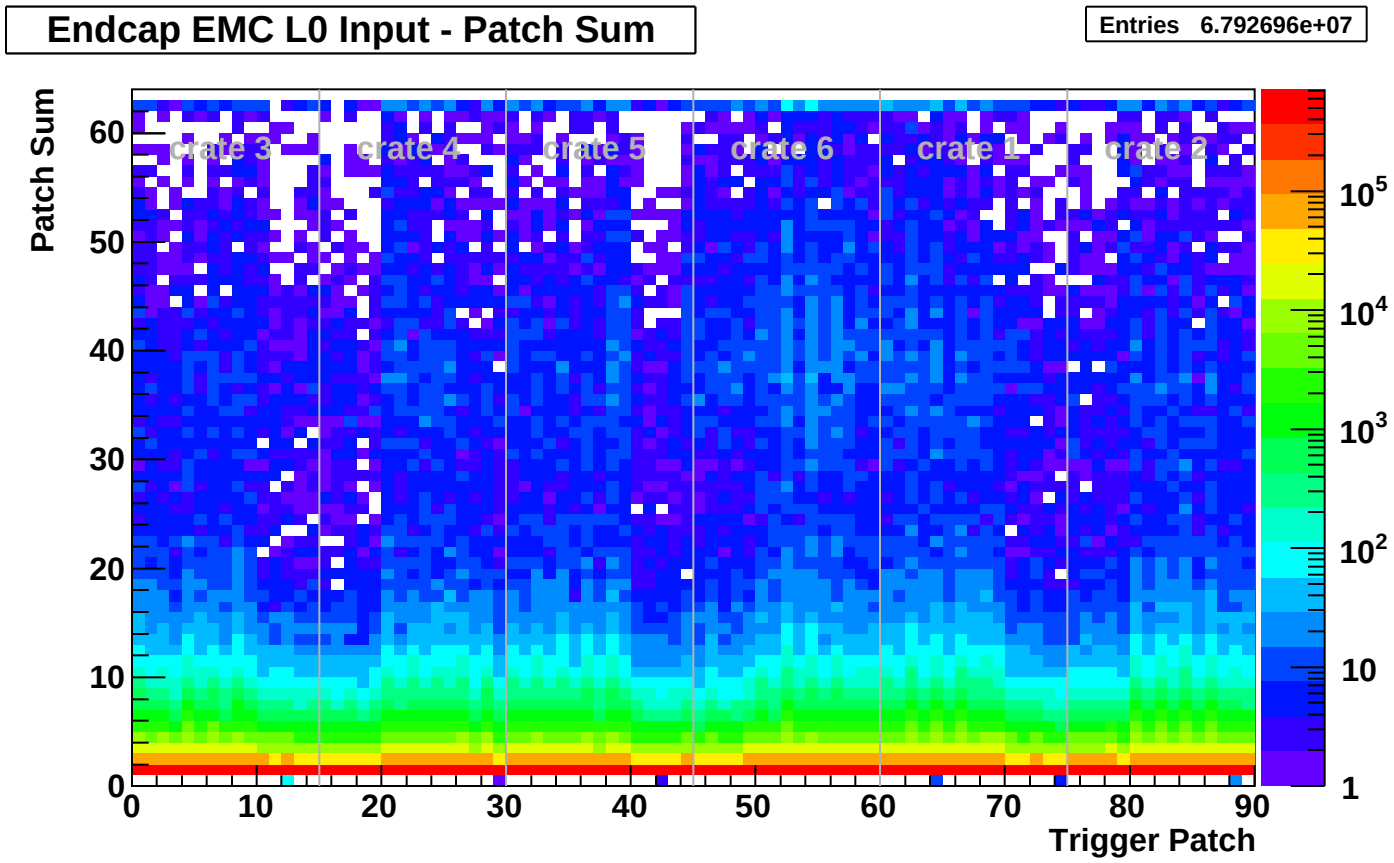

BunchId7Bit (BHT3)
Entries 12346

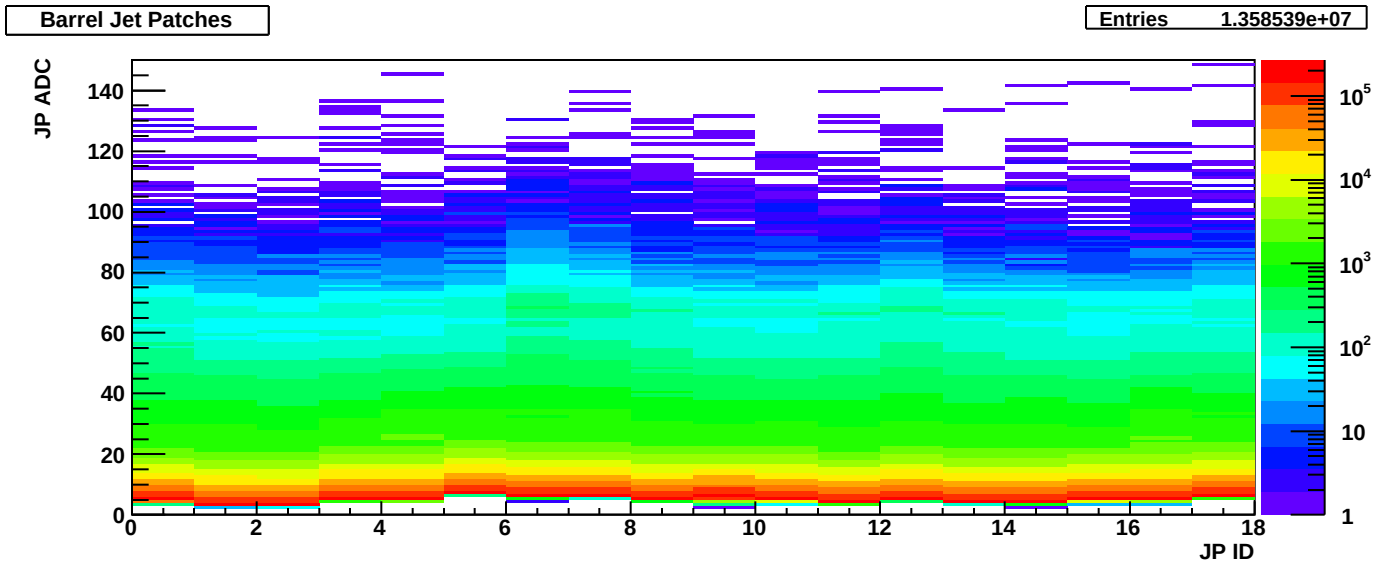

BunchId7Bit (all events)
Entries 754744

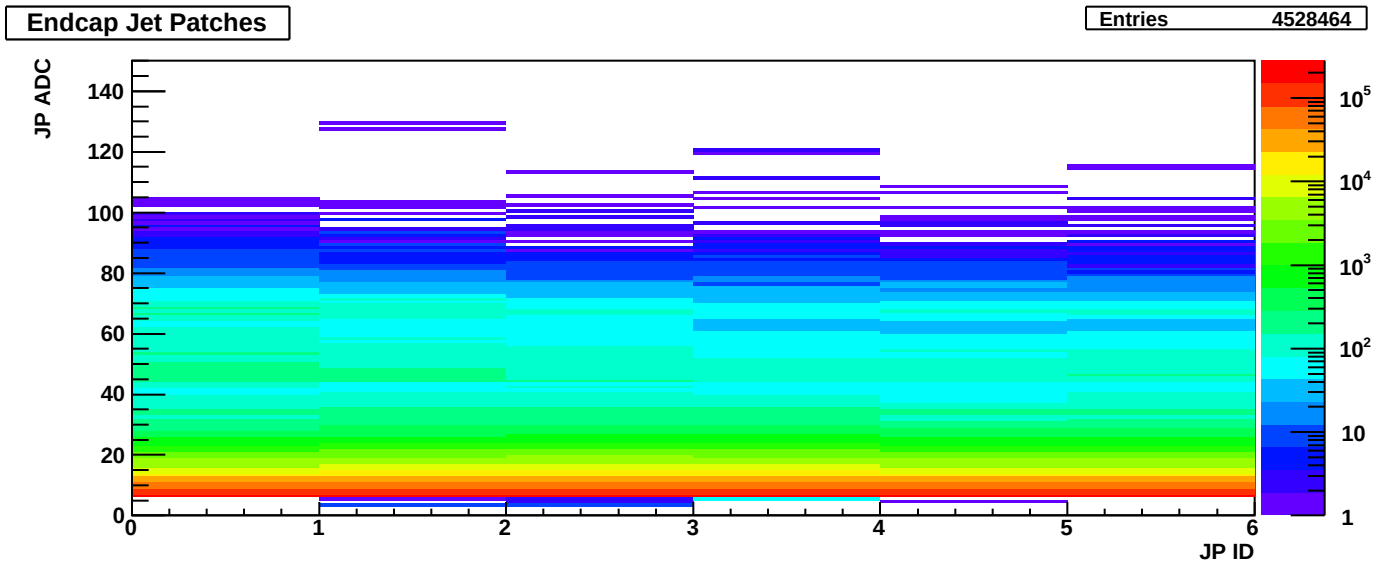

Barrel EMC L0 Input - High Tower
Entries 2.264232e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

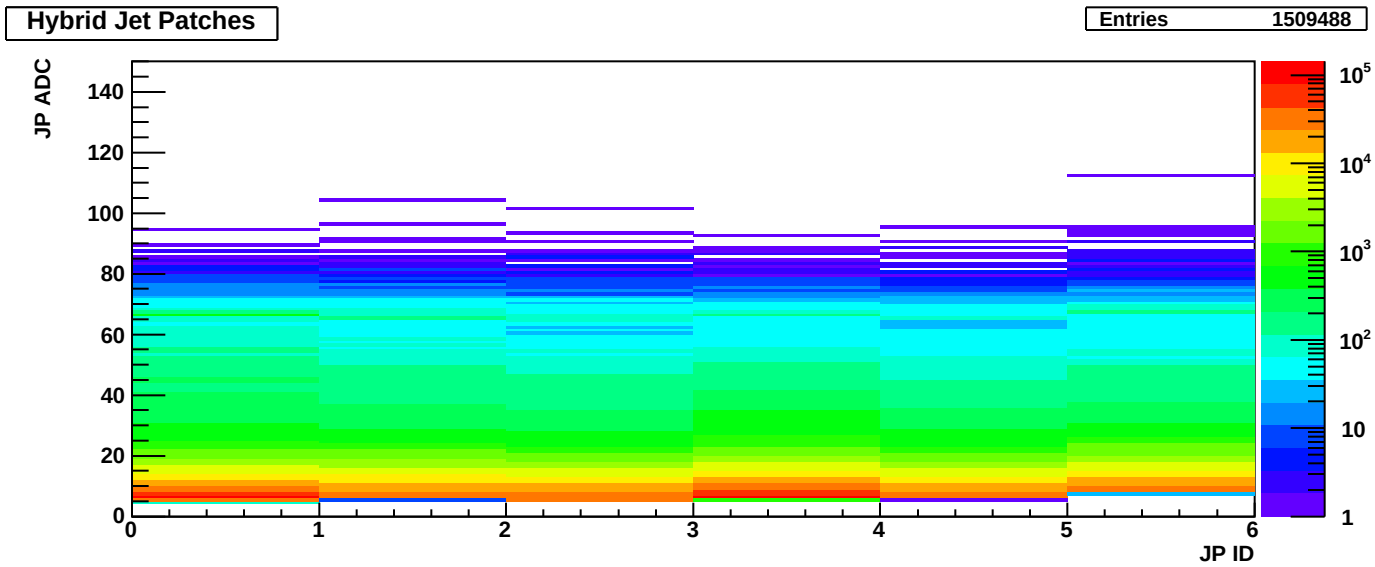

Barrel EMC L0 Input - Patch Sum
Entries 2.264232e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

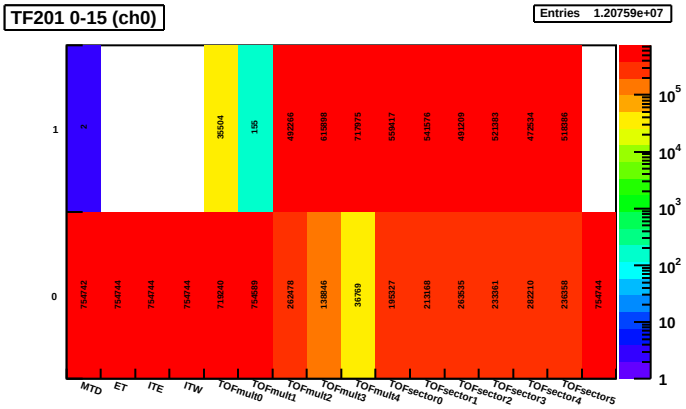

Endcap EMC L0 Input - High Tower
Entries 6.792696e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

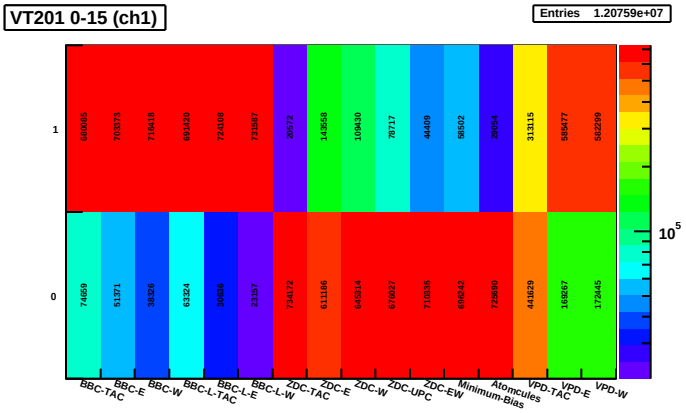

Endcap EMC L0 Input - Patch Sum
Entries 6.792696e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

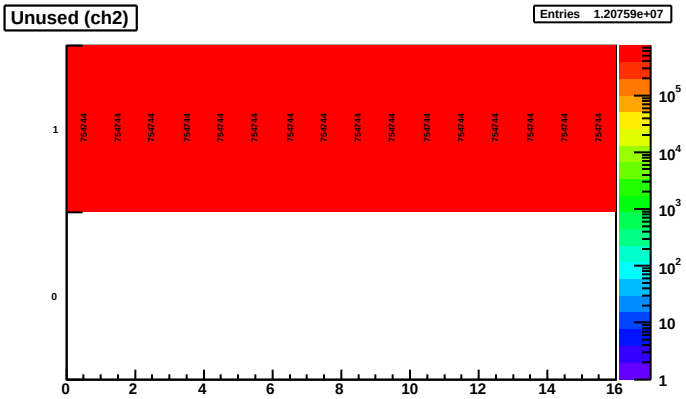

Barrel Jet Patches
Entries 1.358539e+07
JP ADC
JP ID

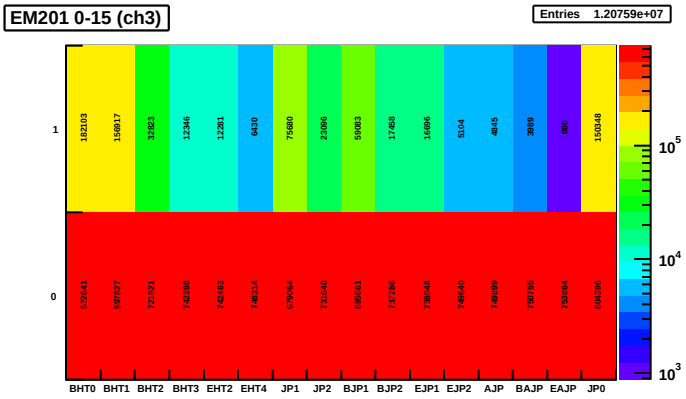

Endcap Jet Patches
Entries 4528464
JP ADC
JP ID

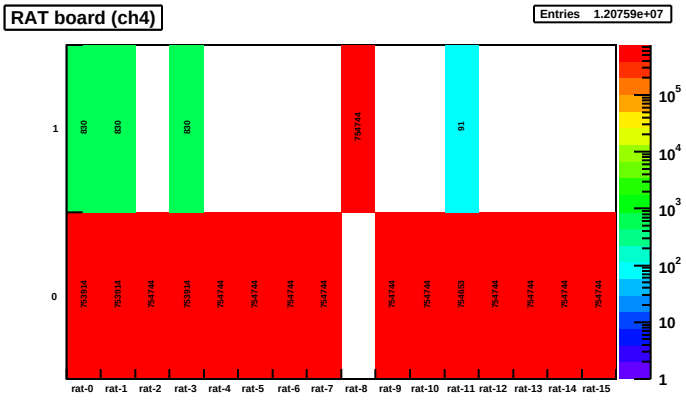

Hybrid Jet Patches
Entries 1509488
JP ADC
JP ID

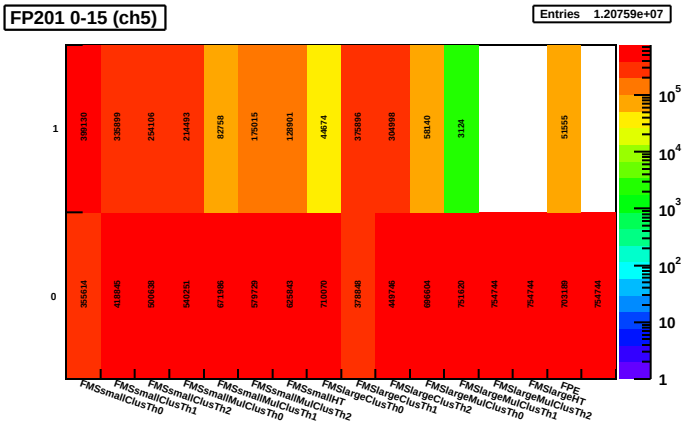

TF201 0-15 (ch0)
Entries 1.20759e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

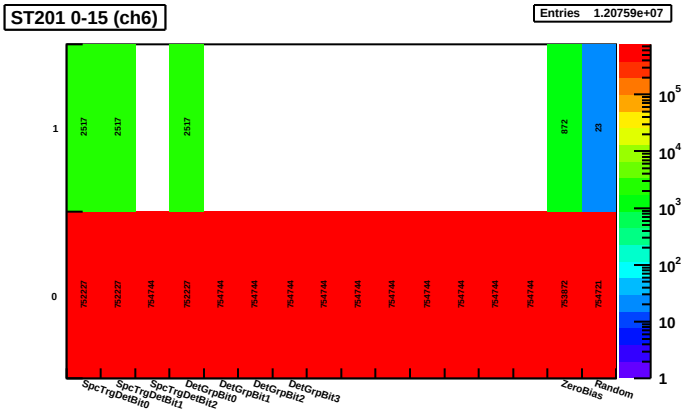

VT201 0-15 (ch1)
Entries 1.20759e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

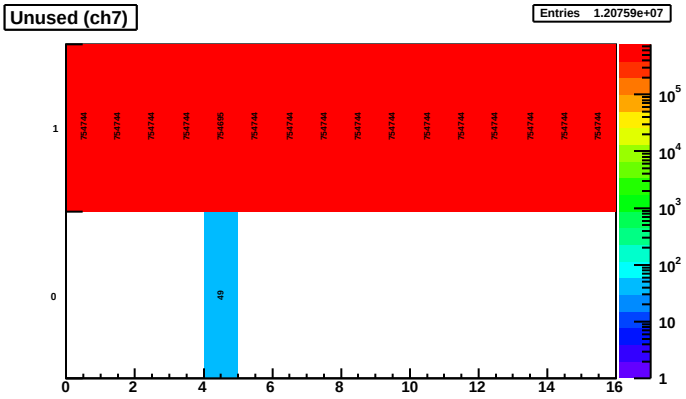

Unused (ch2)
Entries 1.20759e+07

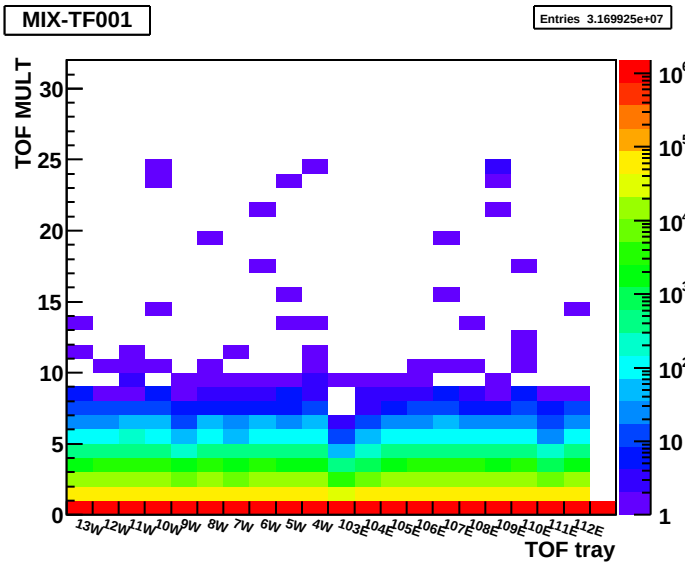

EM201 0-15 (ch3)
Entries 1.20759e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

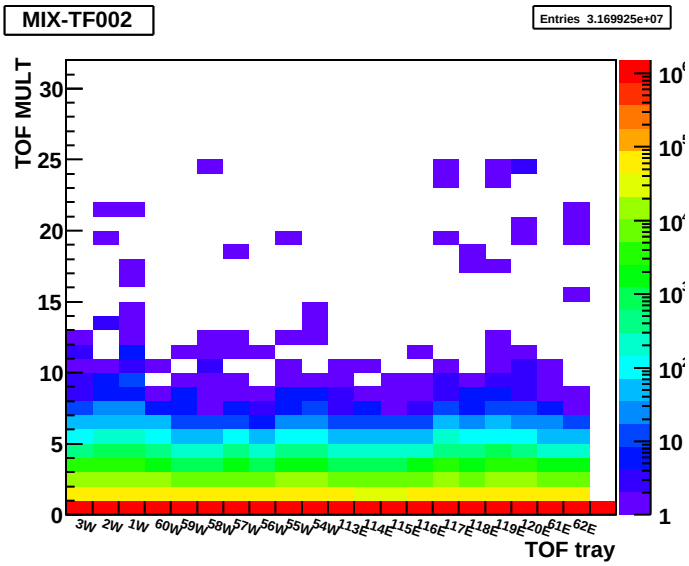

RAT board (ch4)
Entries 1.20759e+07
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

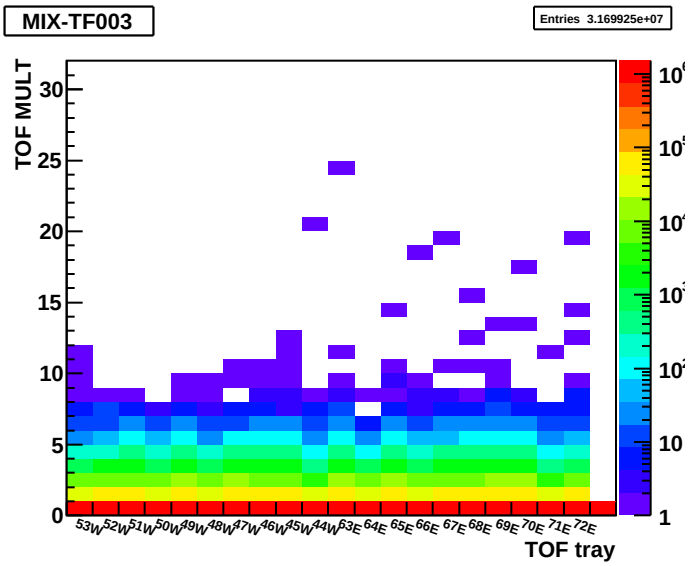

FP201 0-15 (ch5)
Entries 1.20759e+07
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

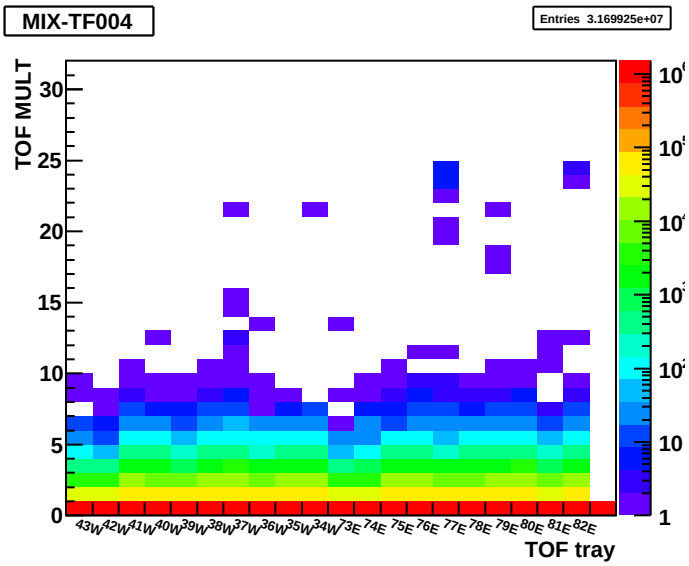

ST201 0-15 (ch6)
Entries 1.20759e+07
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

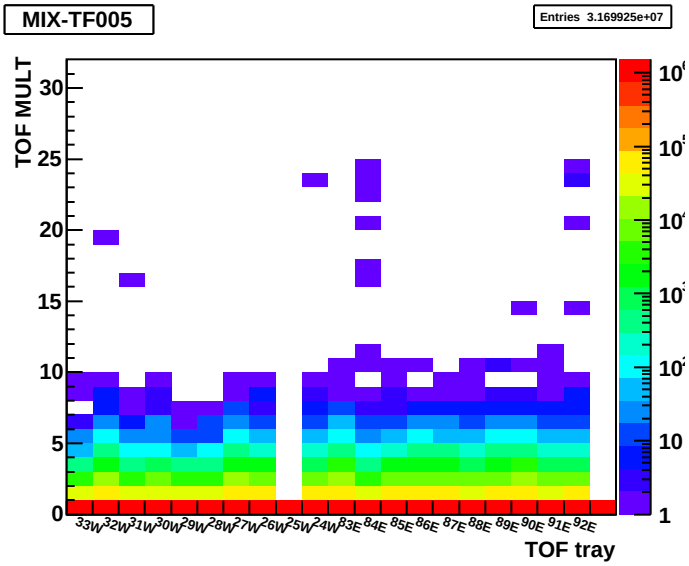

Unused (ch7)
Entries 1.20759e+07

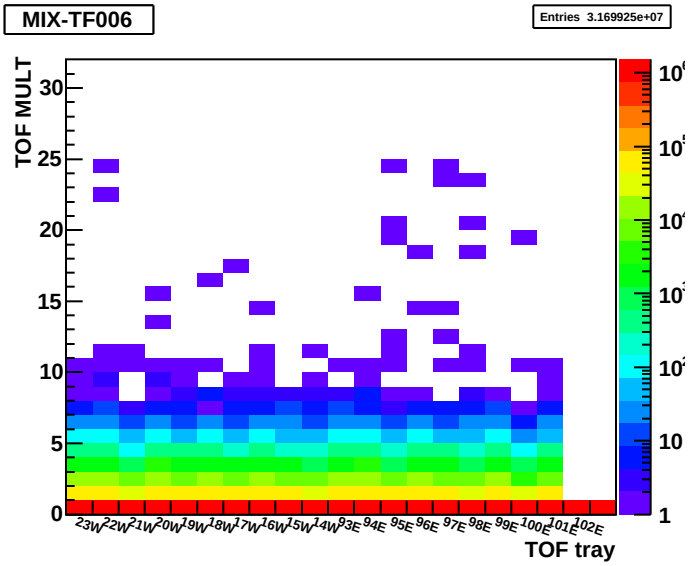

MIX-TF001
Entries 3.169925e+07
TOF MULT
TOF tray

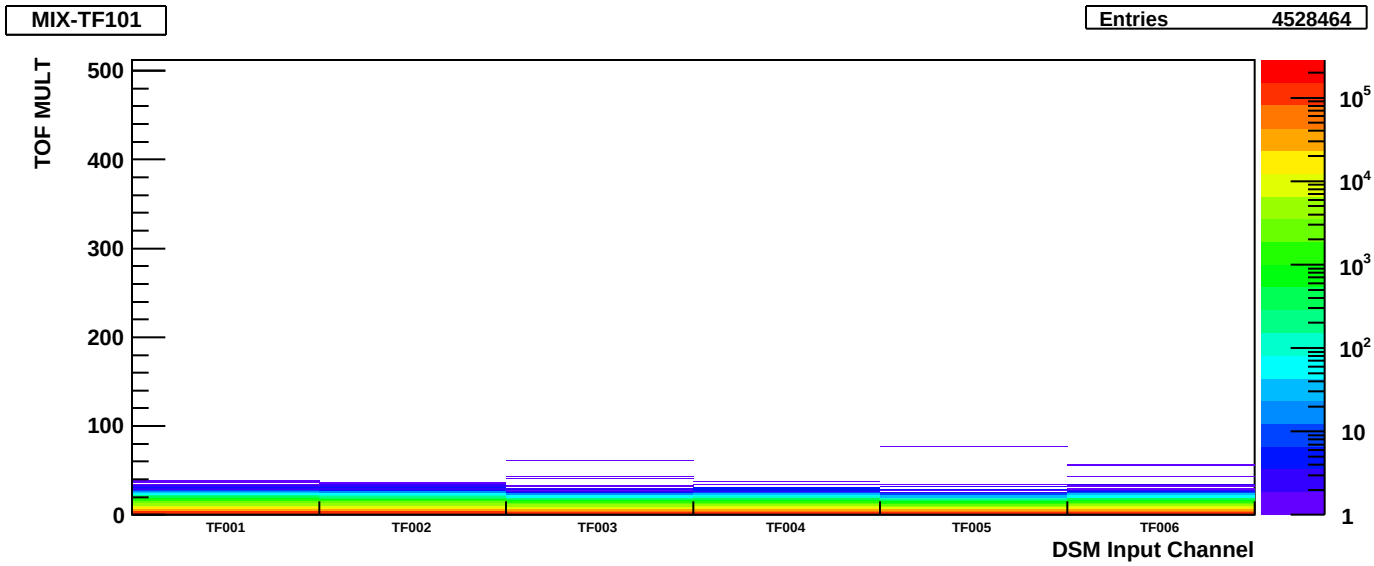

MIX-TF002
Entries 3.169925e+07
TOF MULT
TOF tray

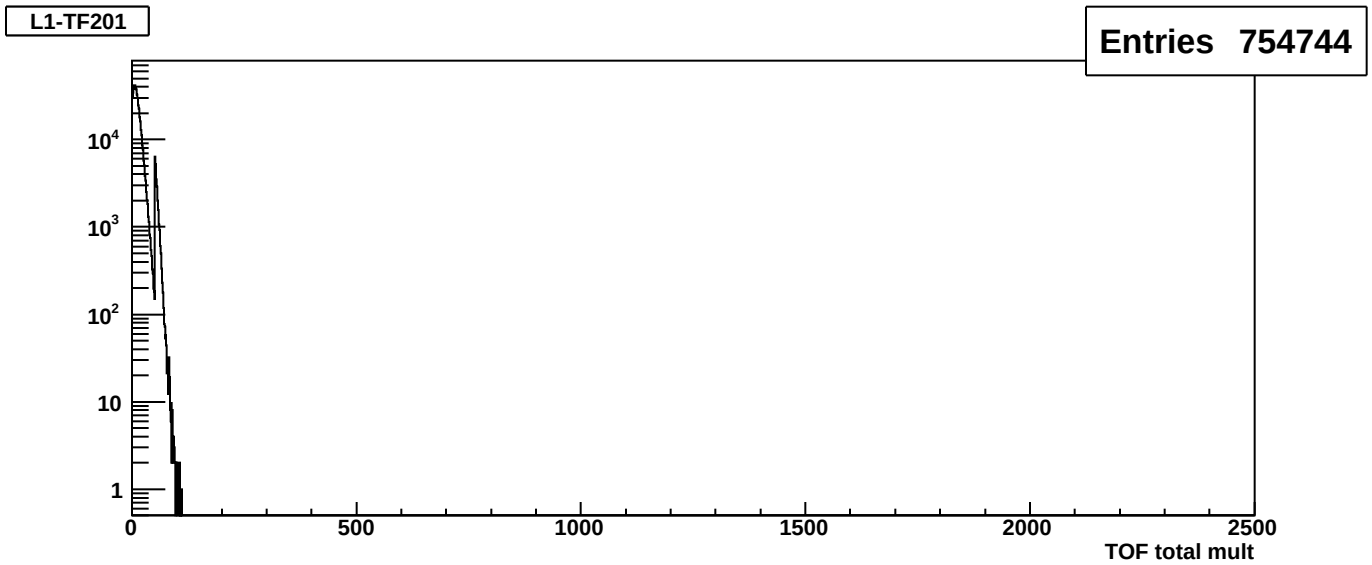

MIX-TF003
Entries 3.169925e+07
TOF MULT
TOF tray

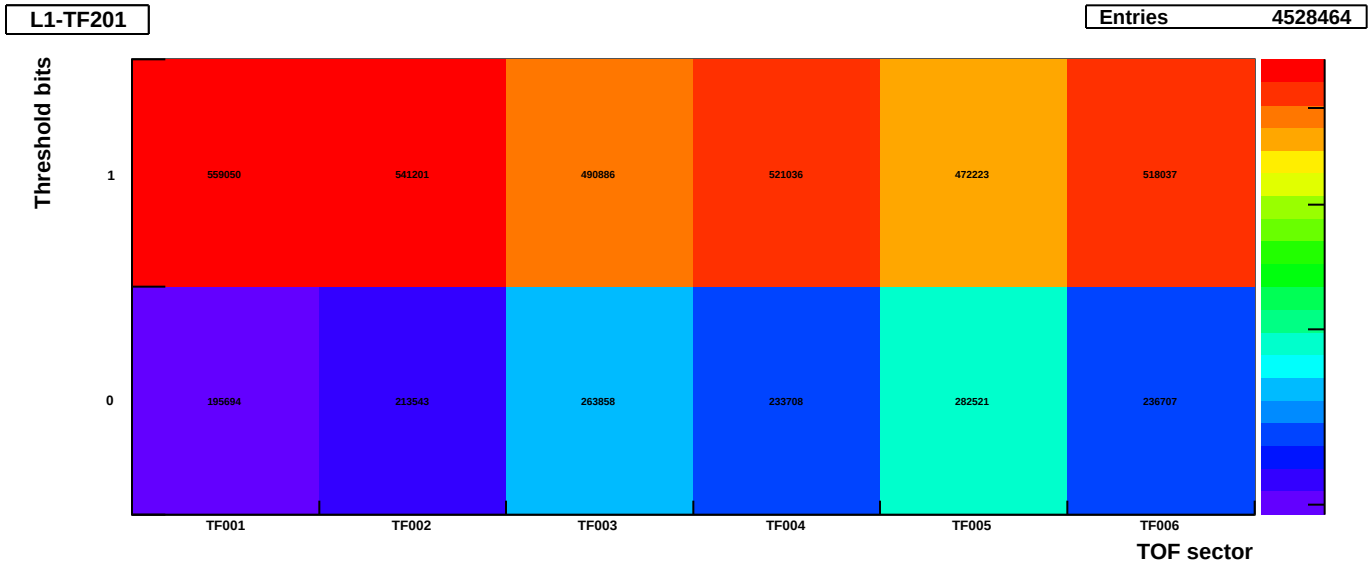

MIX-TF004
Entries 3.169925e+07
TOF MULT
TOF tray

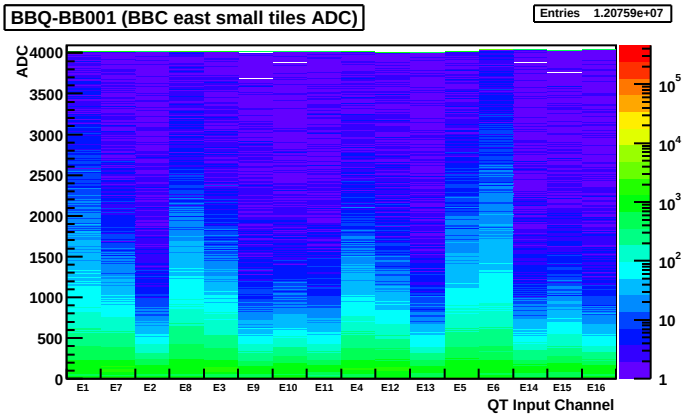

MIX-TF005
Entries 3.169925e+07
TOF MULT
TOF tray

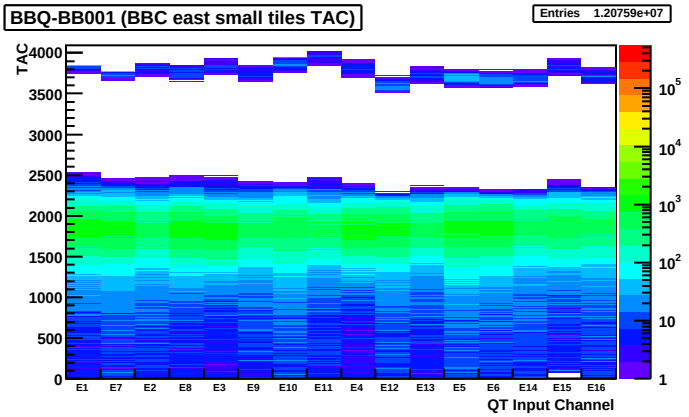

MIX-TF006
Entries 3.169925e+07
TOF MULT
TOF tray

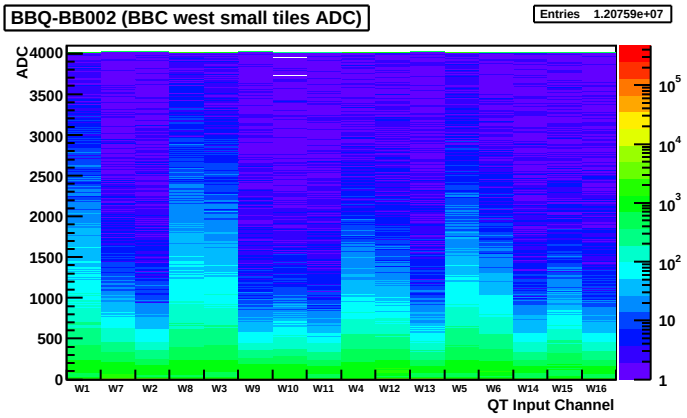

MIX-TF101
Entries 4528464
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

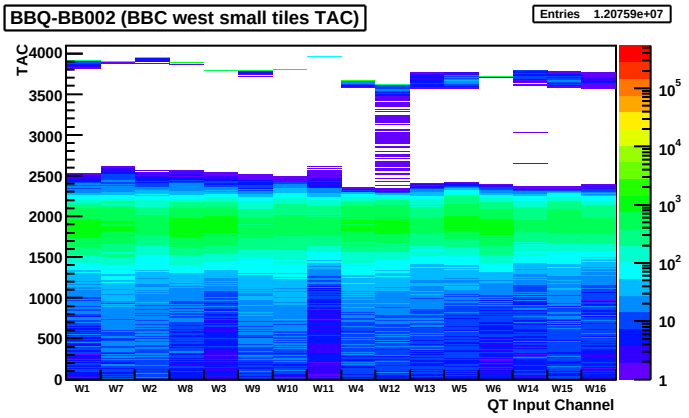

L1-TF201
Entries 754744
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

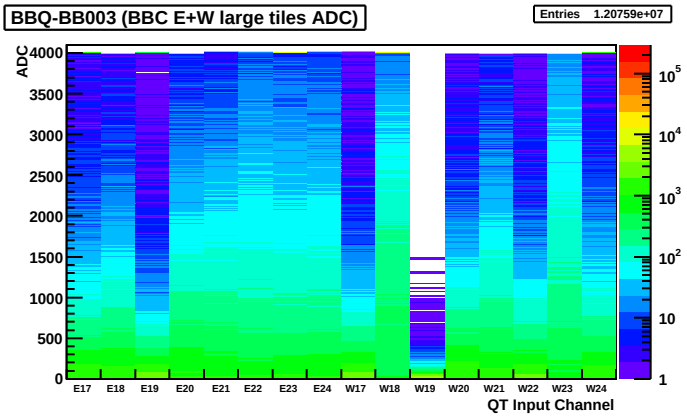

L1-TF201
Entries 4528464
Threshold bits
1
0
559050
541201
490886
521036
472223
518037
195694
213543
263858
233708
282521
236707
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

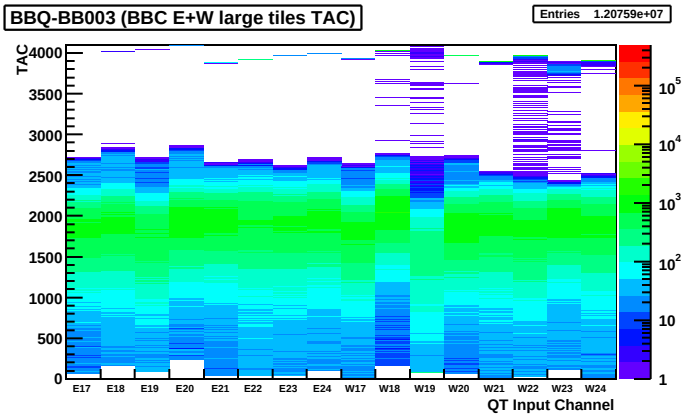

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.20759e+07
ADC
QT Input Channel

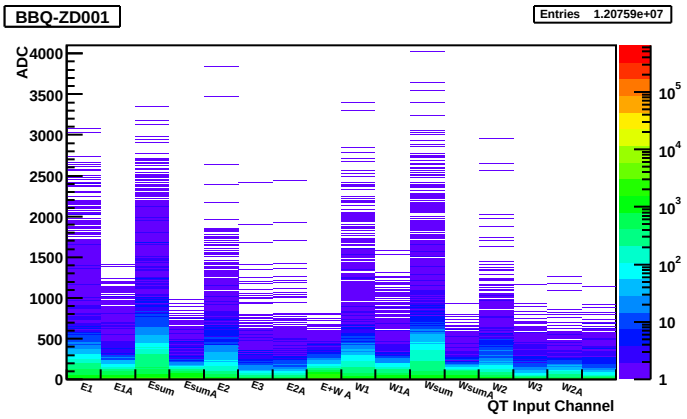

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.20759e+07
TAC
QT Input Channel

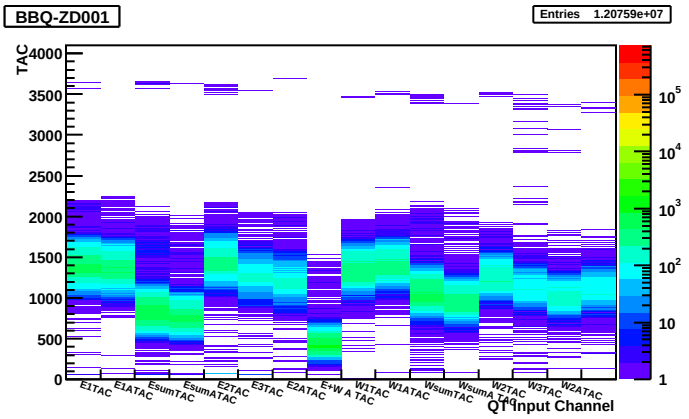

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.20759e+07
ADC
QT Input Channel

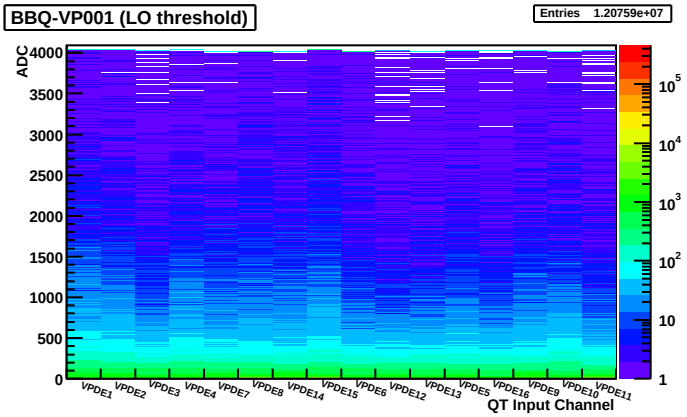

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.20759e+07
TAC
QT Input Channel

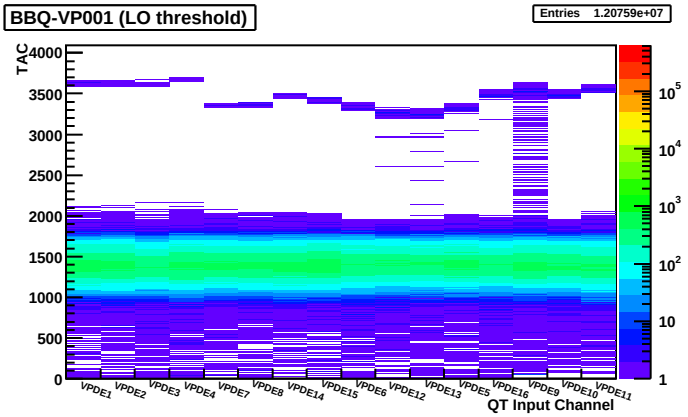

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.20759e+07
ADC
QT Input Channel

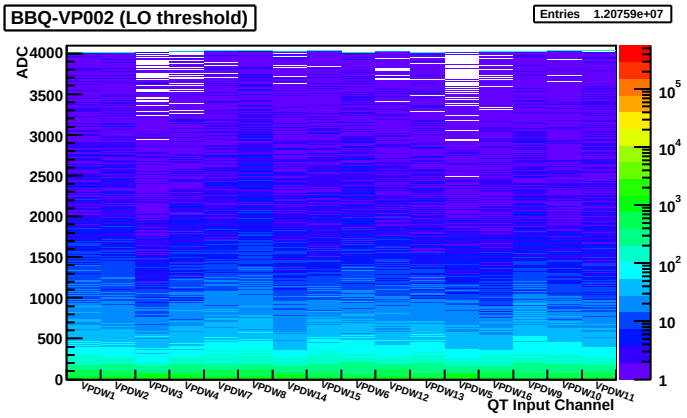

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.20759e+07
TAC
QT Input Channel

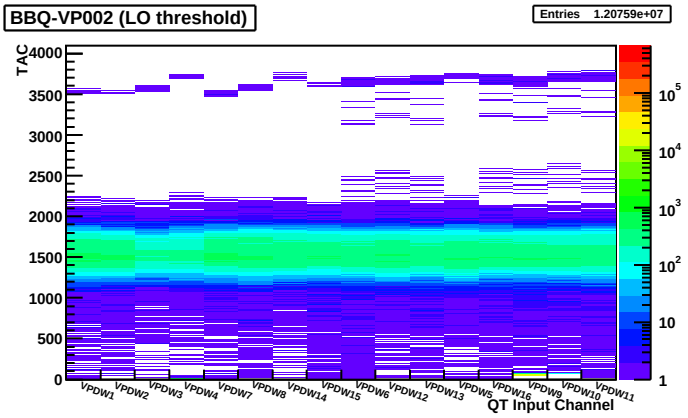

BBQ-ZD001
Entries 1.20759e+07
ADC
QT Input Channel

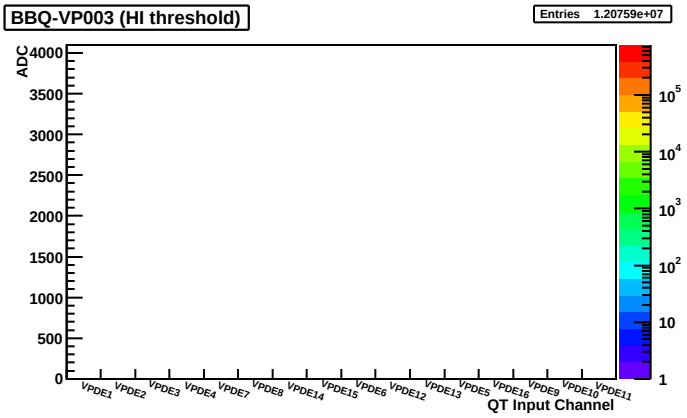

BBQ-ZD001
Entries 1.20759e+07
TAC
QT Input Channel

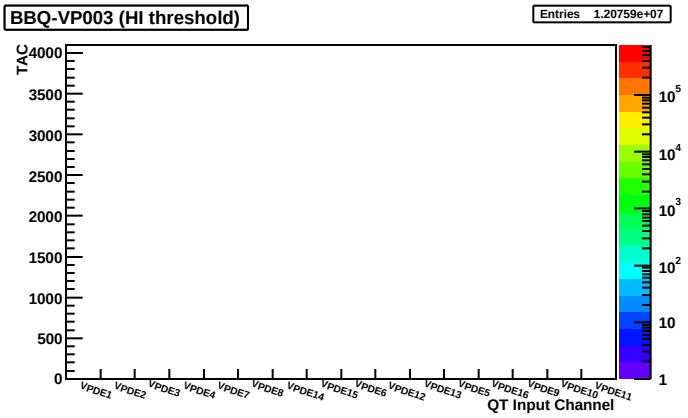

BBQ-VP001 (LO threshold)
Entries 1.20759e+07
ADC
QT Input Channel

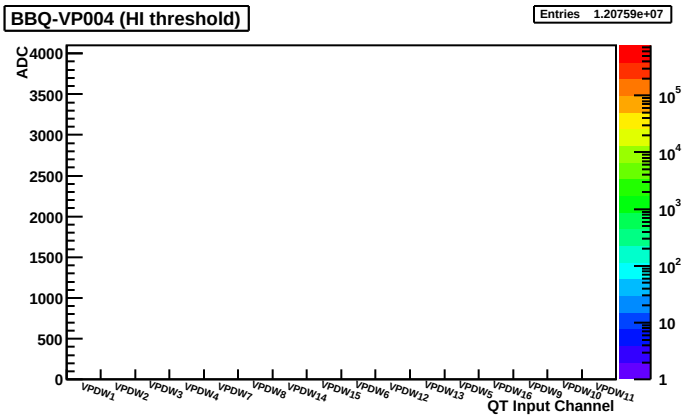

BBQ-VP001 (LO threshold)
Entries 1.20759e+07
TAC
QT Input Channel

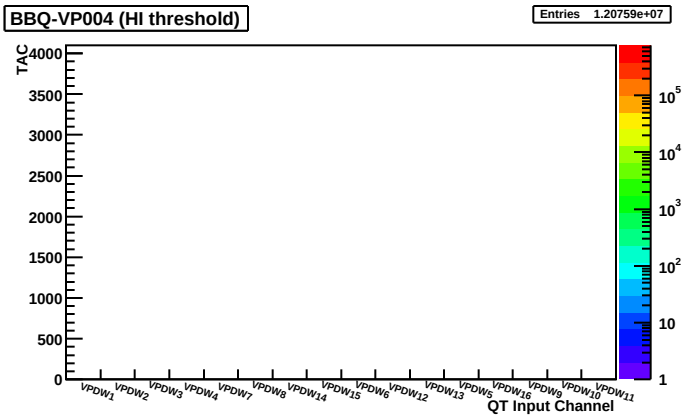

BBQ-VP002 (LO threshold)
Entries 1.20759e+07
ADC
QT Input Channel

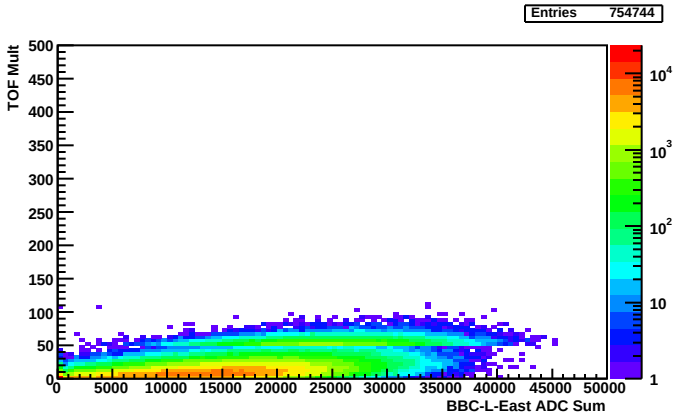

BBQ-VP002 (LO threshold)
Entries 1.20759e+07
TAC
QT Input Channel

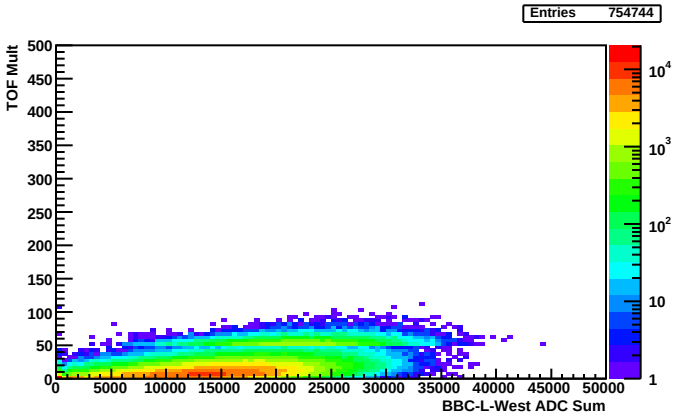

BBQ-VP003 (HI threshold)
Entries 1.20759e+07
ADC
QT Input Channel

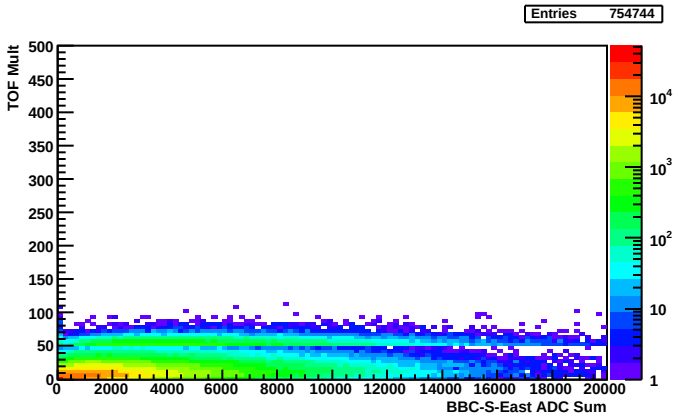

BBQ-VP003 (HI threshold)
Entries 1.20759e+07
TAC
QT Input Channel

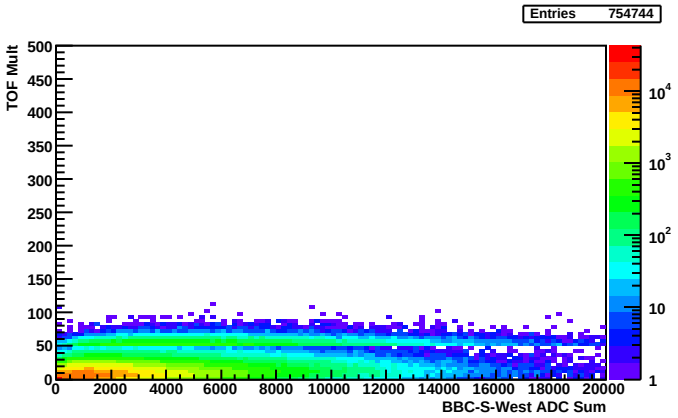

BBQ-VP004 (HI threshold)
Entries 1.20759e+07
ADC
QT Input Channel

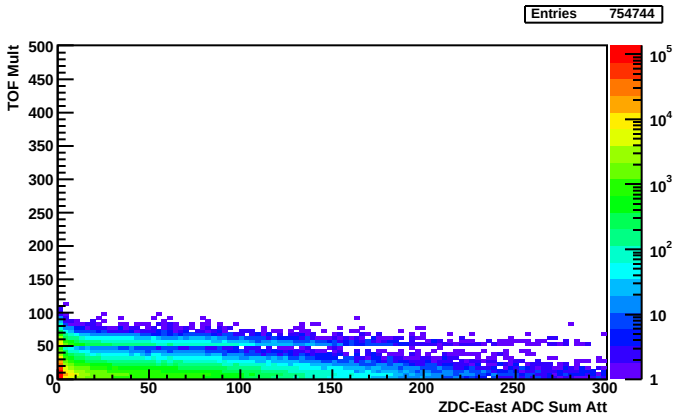

BBQ-VP004 (HI threshold)
Entries 1.20759e+07
TAC
QT Input Channel

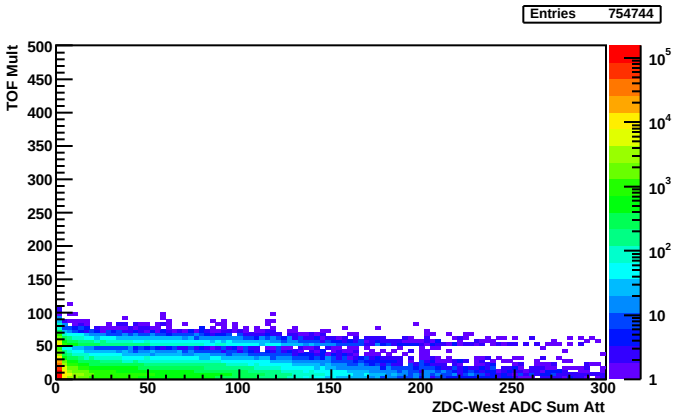

Entries 754744
TOF Mult
BBC-L-East ADC Sum

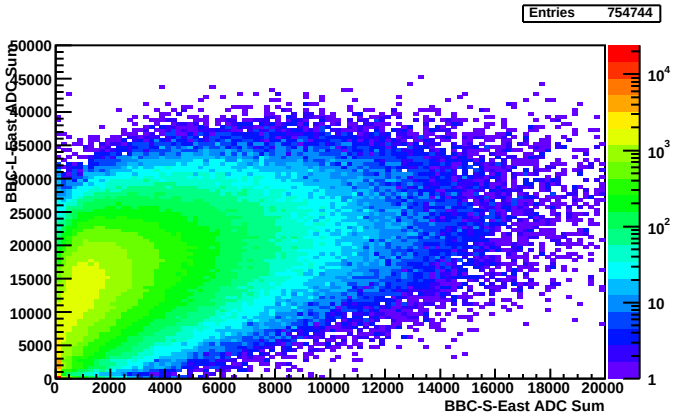

Entries 754744
TOF Mult
BBC-L-West ADC Sum

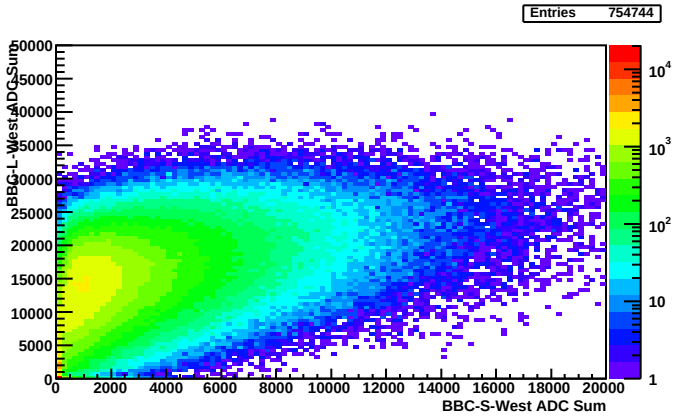

Entries 754744
TOF Mult
BBC-S-East ADC Sum

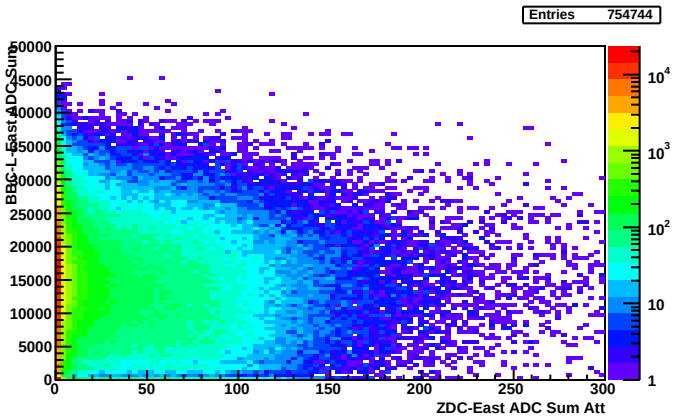

Entries 754744
TOF Mult
BBC-S-West ADC Sum

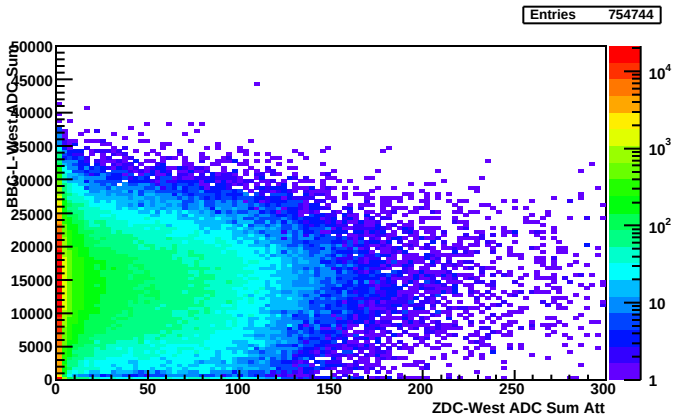

Entries 754744
TOF Mult
ZDC-East ADC Sum Att

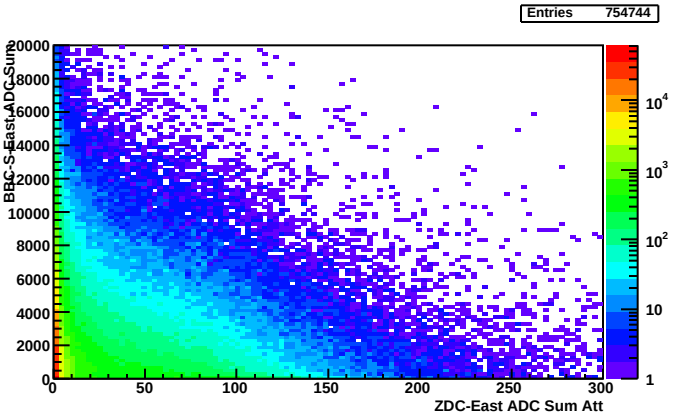

Entries 754744
TOF Mult
ZDC-West ADC Sum Att

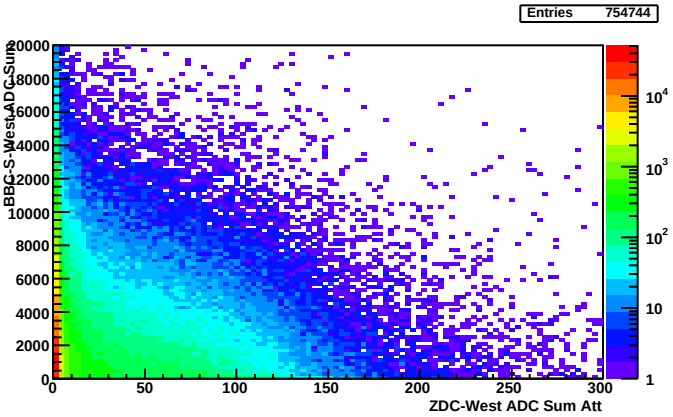

Entries 754744
BBC-L-East ADC Sum
BBC-S-East ADC Sum

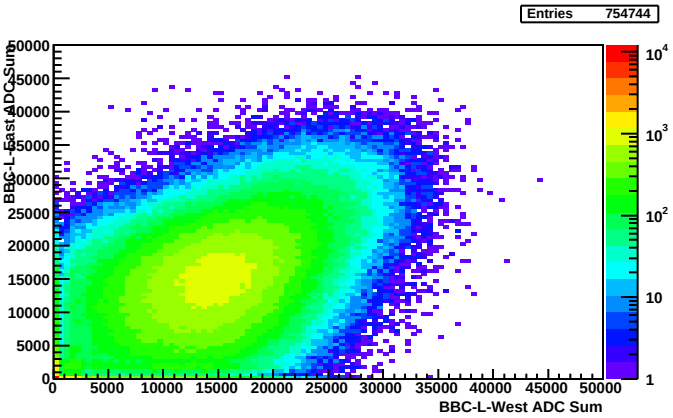

Entries 754744
BBC-L-West ADC Sum
BBC-S-West ADC Sum

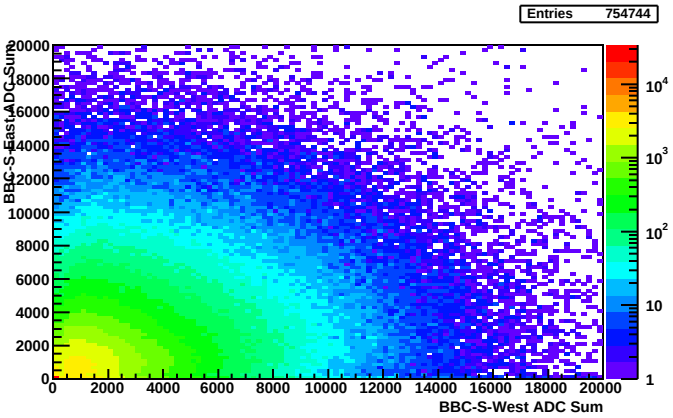

Entries 754744
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

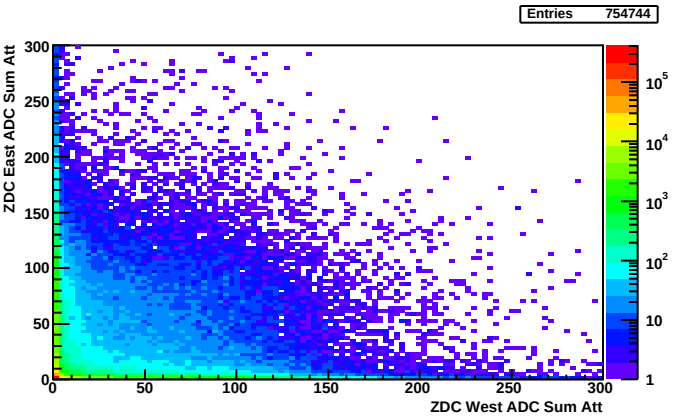

Entries 754744
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

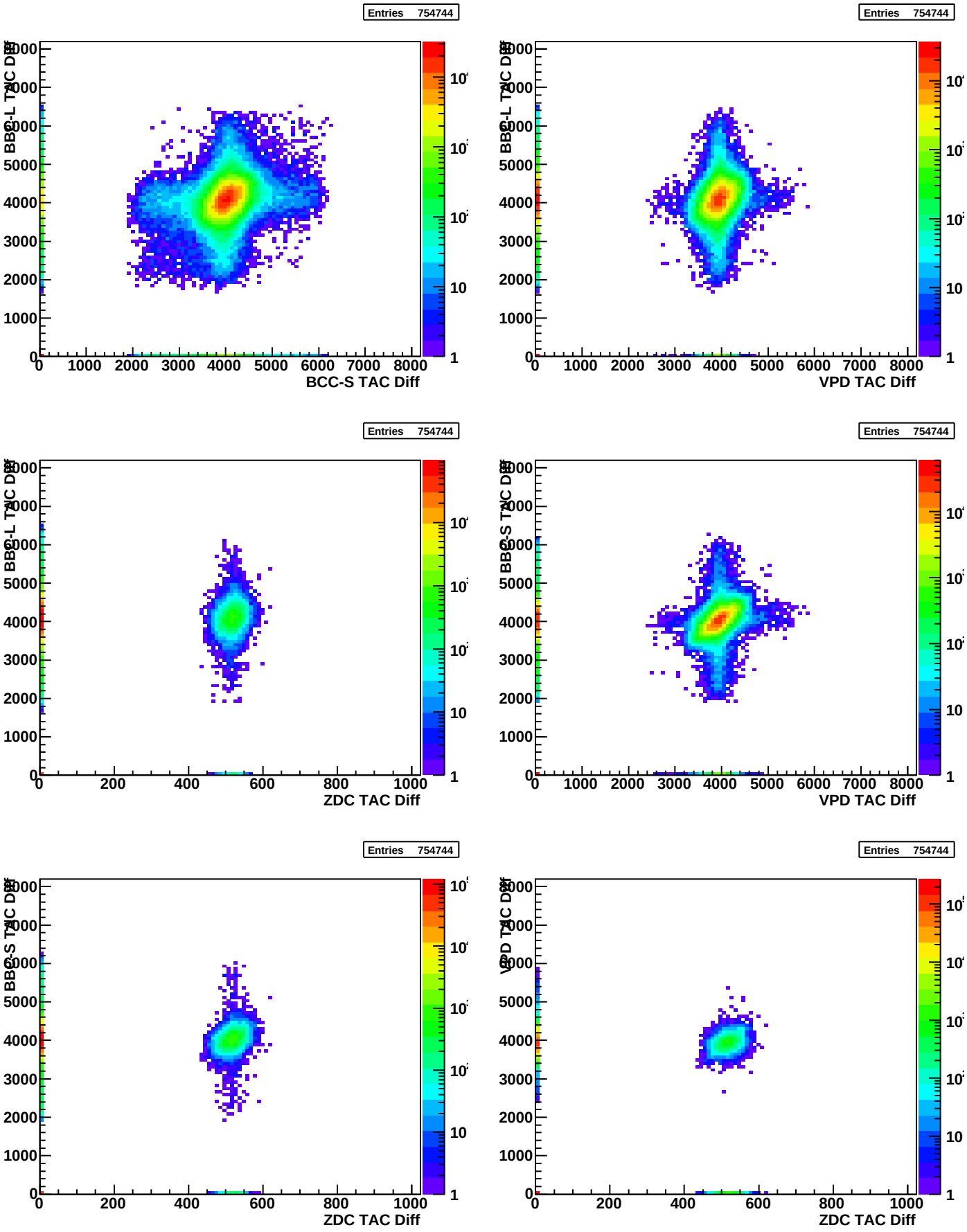

Entries 754744
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

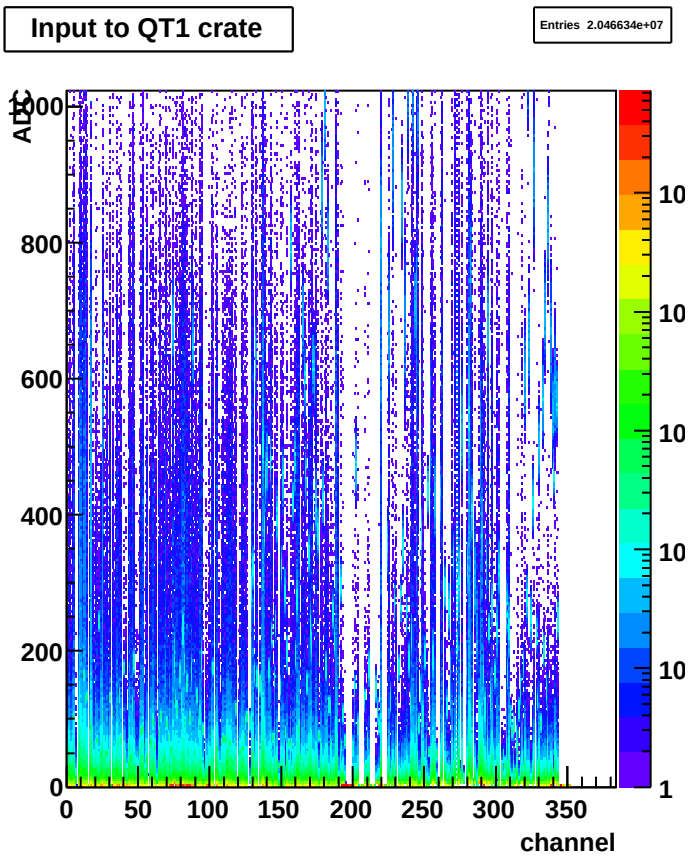

Entries 754744
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

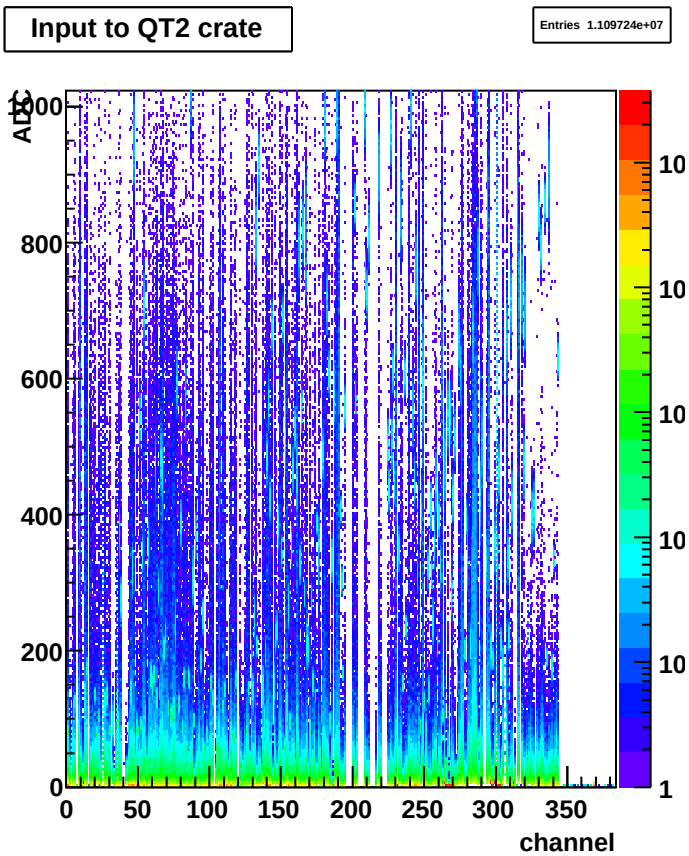

Entries 754744
BBC-L-East ADC Sum
BBC-L-West ADC Sum

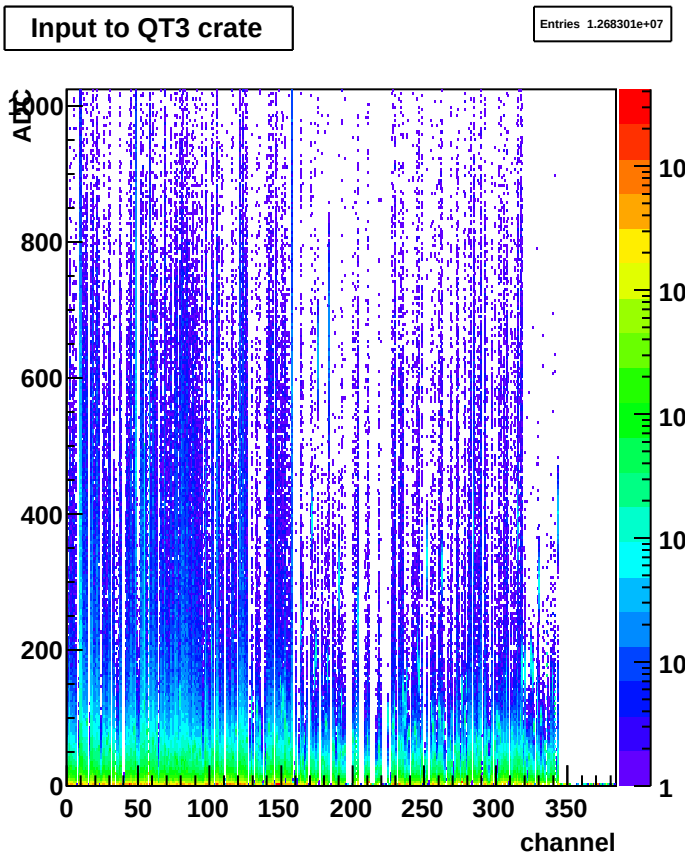

Entries 754744
BBC-S-East ADC Sum
BBC-S-West ADC Sum

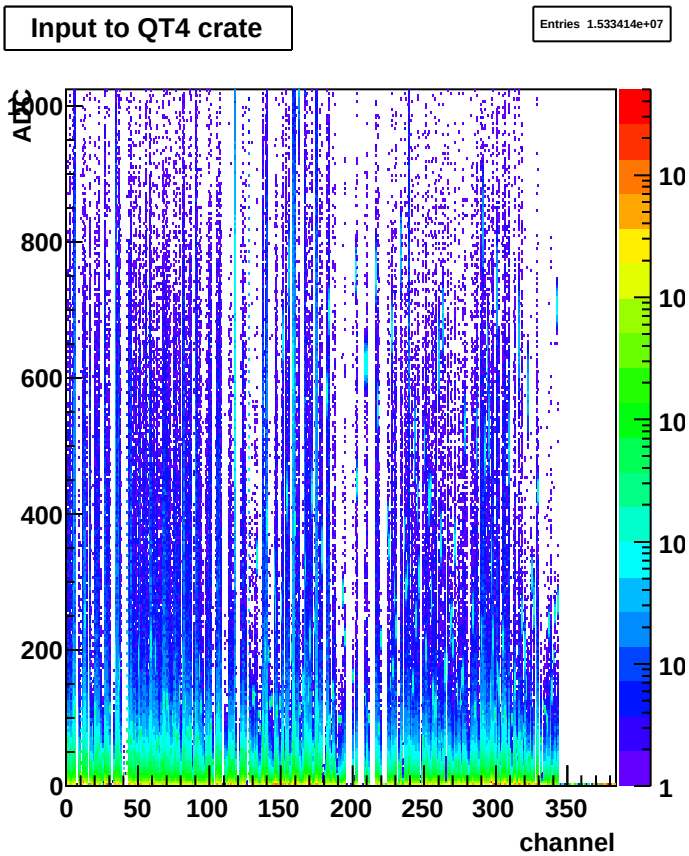

Entries 754744
ZDC East ADC Sum Att
ZDC West ADC Sum Att

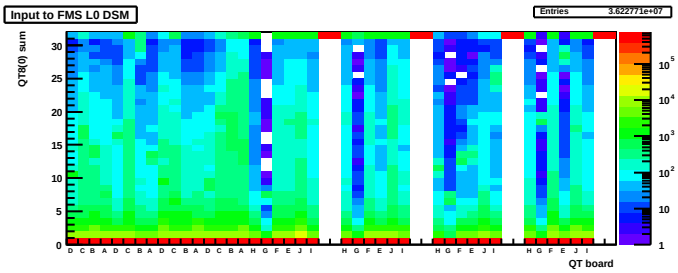

Entries 754744
BBC-L TAC Diff
BCC-S TAC Diff
Entries 754744
BBC-L TAC Diff
VPD TAC Diff
Entries 754744
BBC-L TAC Diff
ZDC TAC Diff
Entries 754744
BBC-S TAC Diff
VPD TAC Diff
Entries 754744
BBC-S TAC Diff
ZDC TAC Diff
Entries 754744
VPD TAC Diff
ZDC TAC Diff

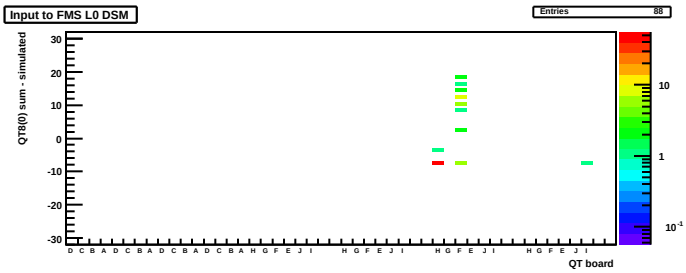

Input to QT1 crate
Entries 2.046634e+07
ADC
channel

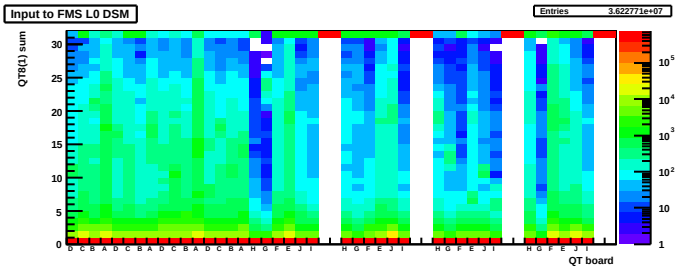

Input to QT2 crate
Entries 1.109724e+07
ADC
channel

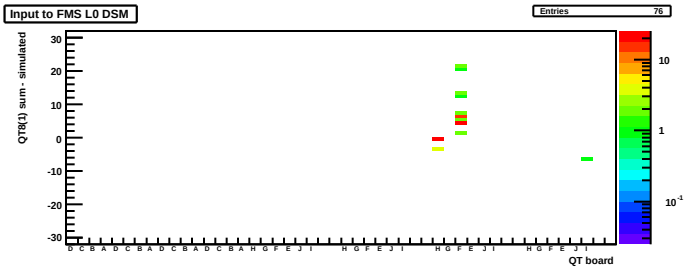

Input to QT3 crate
Entries 1.268301e+07
ADC
channel

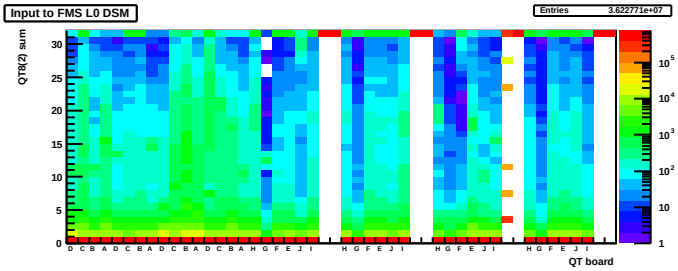

Input to QT4 crate
Entries 1.533414e+07
ADC
channel

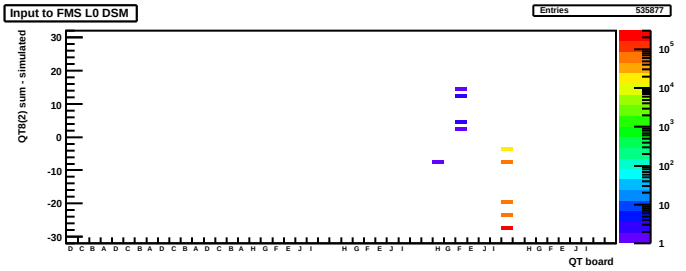

Input to FMS L0 DSM
Entries 3.622771e+07
QT8(0) sum
QT board

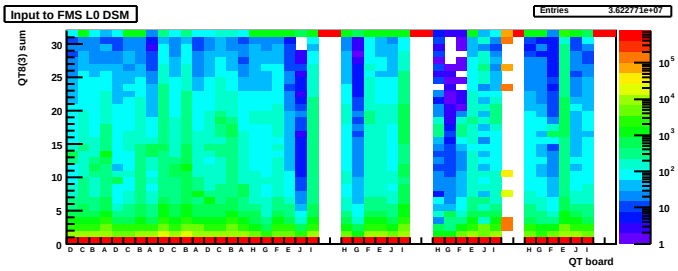

Input to FMS L0 DSM
Entries 88
QT8(0) sum - simulated
QT board

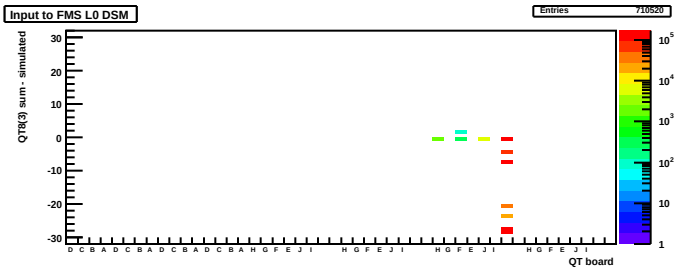

Input to FMS L0 DSM
Entries 3.622771e+07
QT8(1) sum
QT board

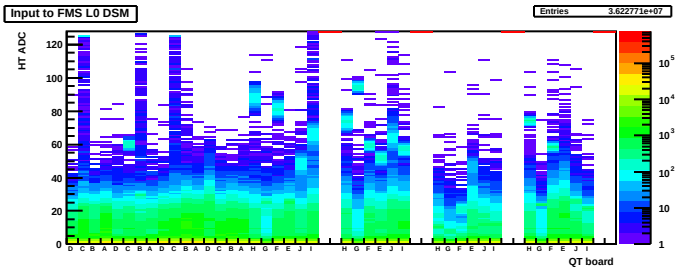

Input to FMS L0 DSM
Entries 76
QT8(1) sum - simulated
QT board

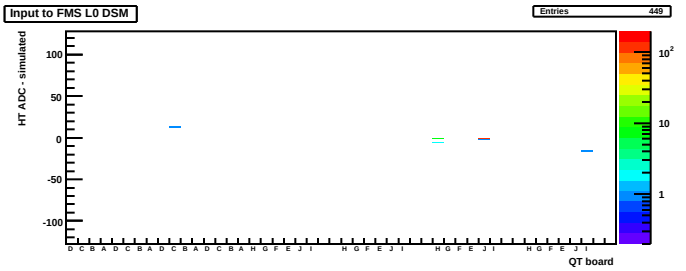

Input to FMS L0 DSM
Entries 3.622771e+07
QT8(2) sum
QT board

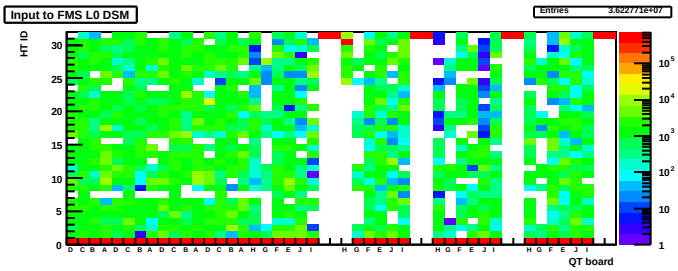

Input to FMS L0 DSM
Entries 535877
QT8(2) sum - simulated
QT board

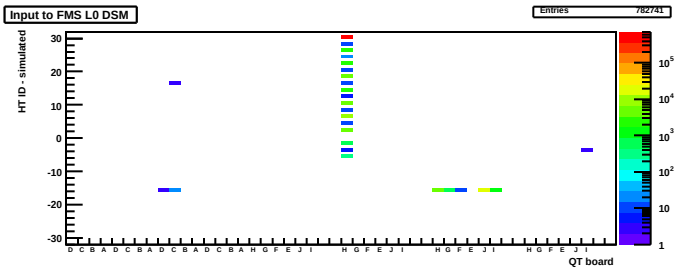

Input to FMS L0 DSM
Entries 3.622771e+07
QT8(3) sum
QT board

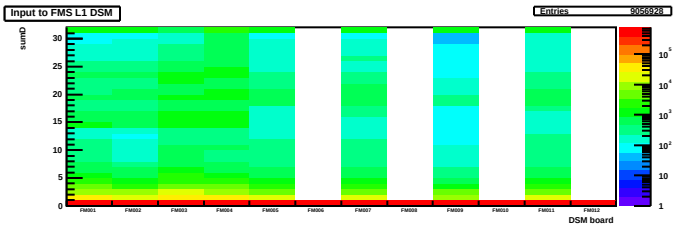

Input to FMS L0 DSM
Entries 710520
QT8(3) sum - simulated
QT board

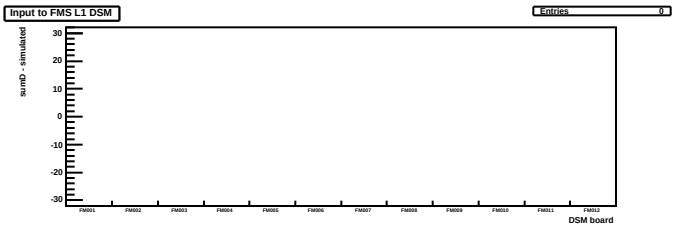

Input to FMS L0 DSM
Entries 3.622771e+07
HT ADC
QT board

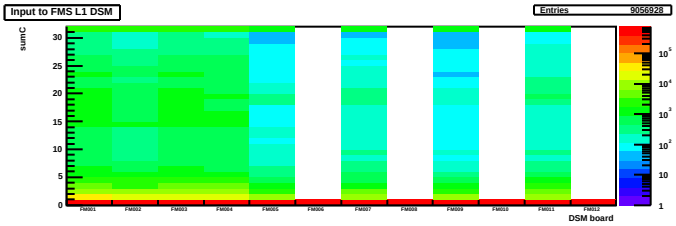

Input to FMS L0 DSM
Entries 449
HT ADC - simulated
QT board

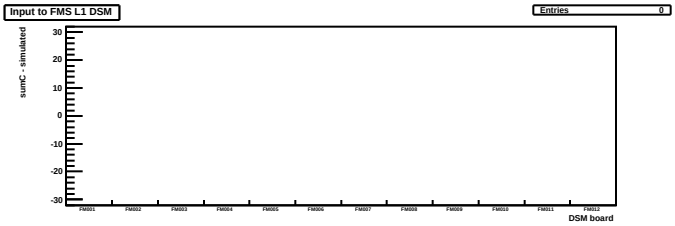

Input to FMS L0 DSM
Entries 3.622771e+07
HT ID
QT board

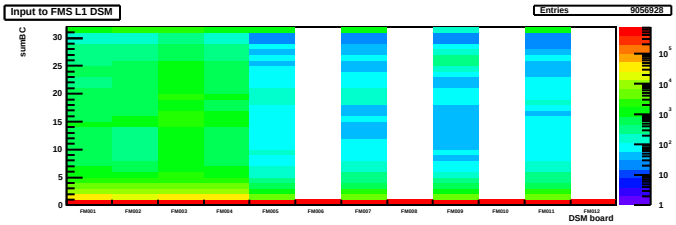

Input to FMS L0 DSM
Entries 782741
HT ID - simulated
QT board

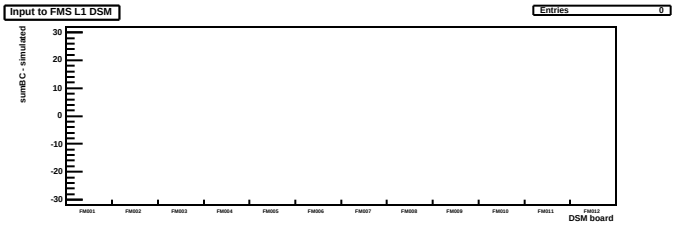

Input to FMS L1 DSM
Entries 9056928
sumD
DSM board

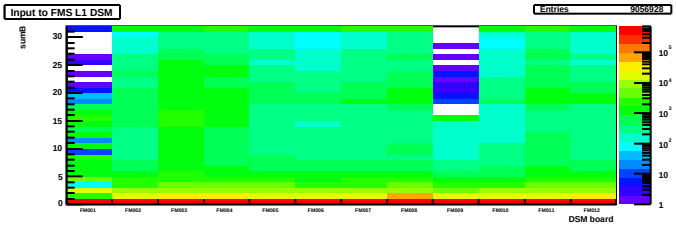

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

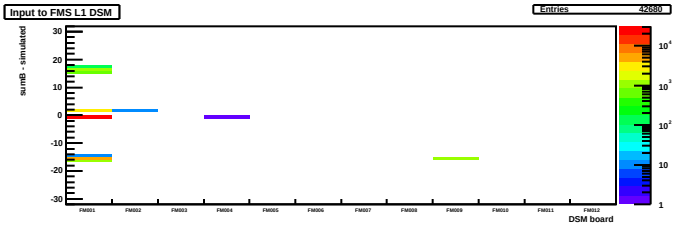

Input to FMS L1 DSM
Entries 9056928
sumC
DSM board

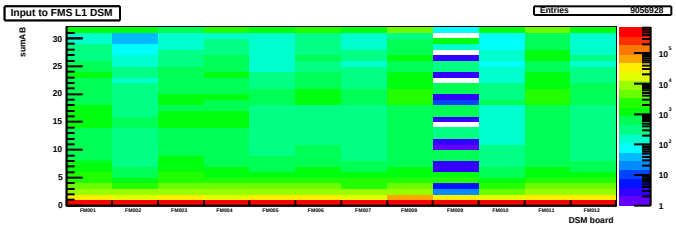

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

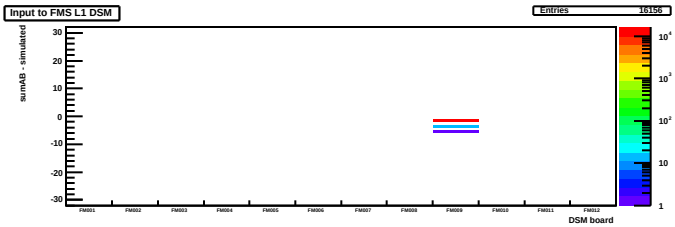

Input to FMS L1 DSM
Entries 9056928
sumBC
DSM board

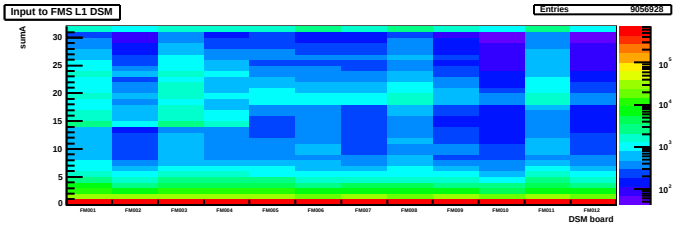

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

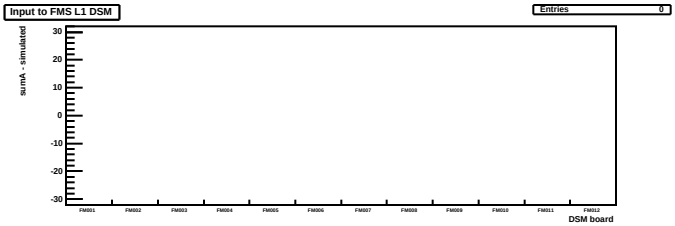

Input to FMS L1 DSM
Entries 9056928
sumB
DSM board

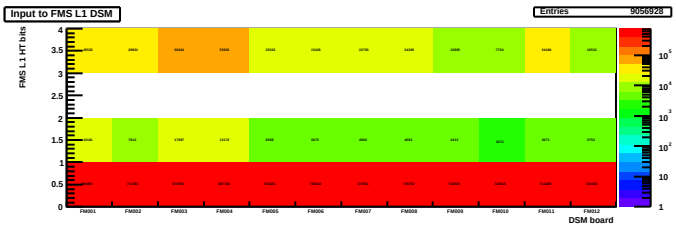

Input to FMS L1 DSM
Entries 42680
sumB - simulated
DSM board

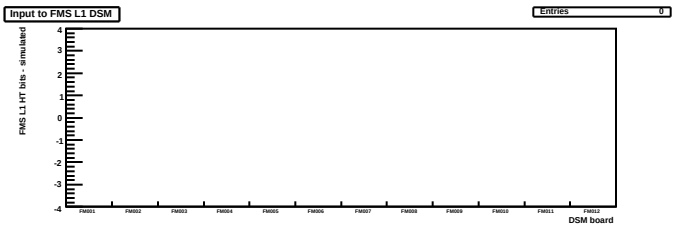

Input to FMS L1 DSM
Entries 9056928
sumAB
DSM board

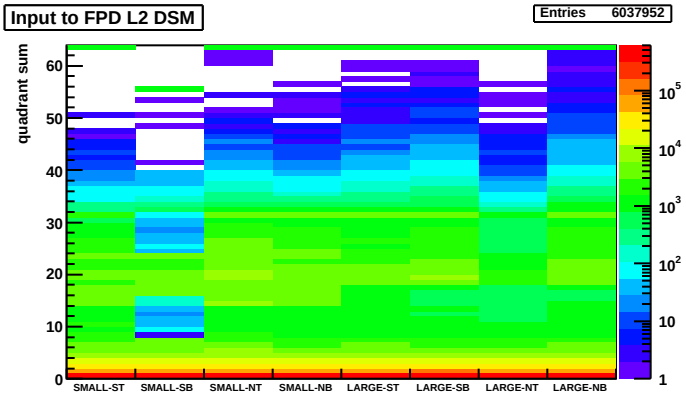

Input to FMS L1 DSM
Entries 16156
sumAB - simulated
DSM board

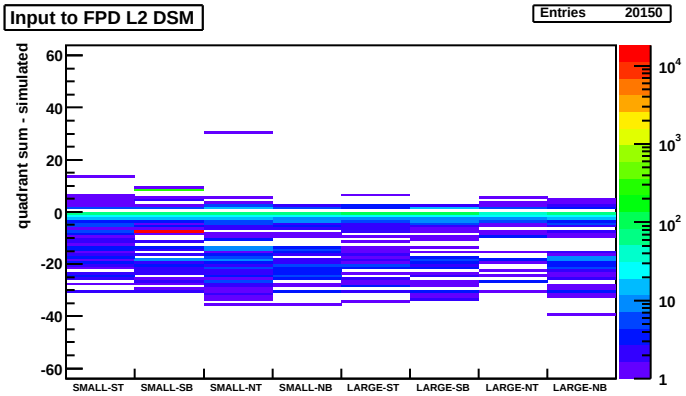

Input to FMS L1 DSM
Entries 9056928
sumA
DSM board

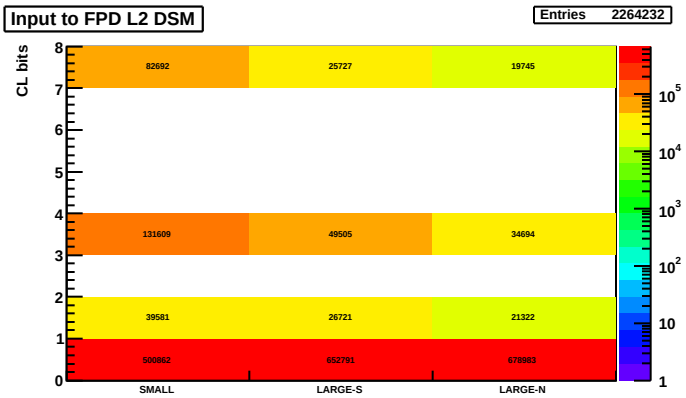

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

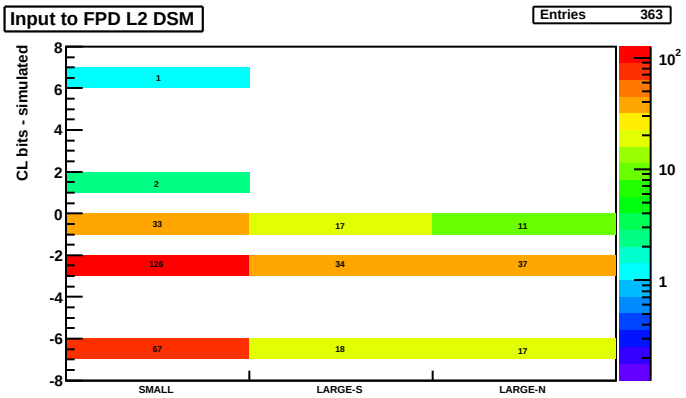

Input to FMS L1 DSM
Entries 9056928
FMS L1 HT bits
DSM board

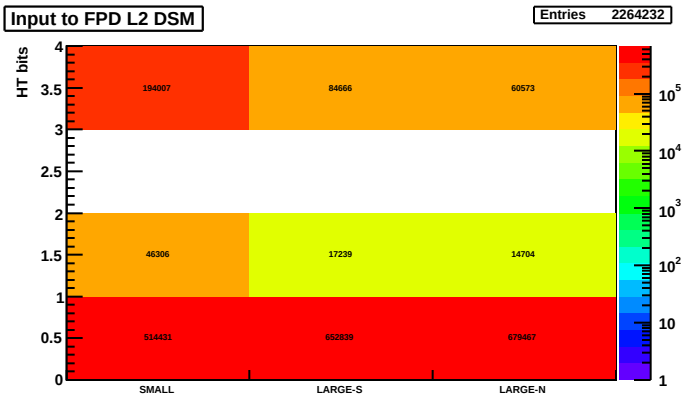

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

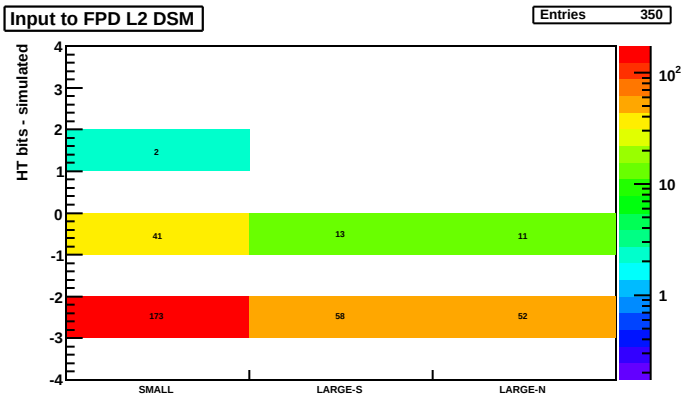

Input to FPD L2 DSM
Entries 6037952
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

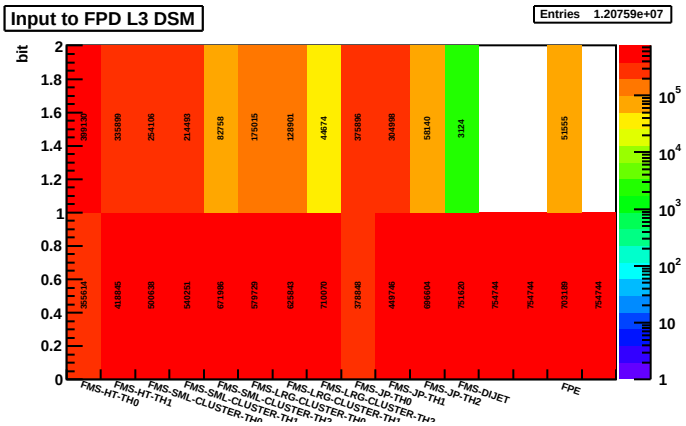

Input to FPD L2 DSM
Entries 20150
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

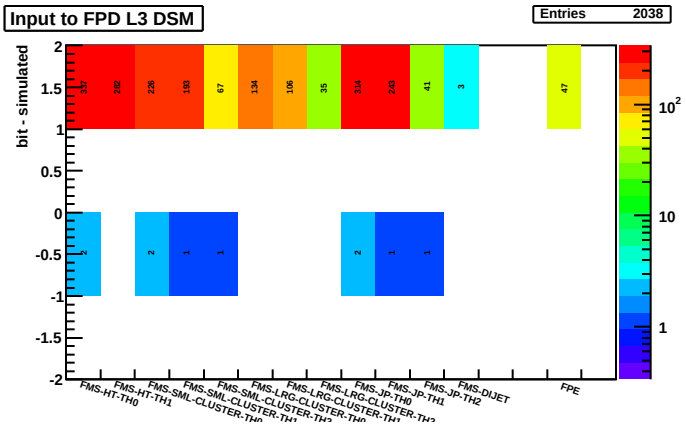

Input to FPD L2 DSM
Entries 2264232
CL bits
82692
25727
19745
131609
49505
34694
39581
26721
21322
500862
652791
678983
SMALL
LARGE-S
LARGE-N

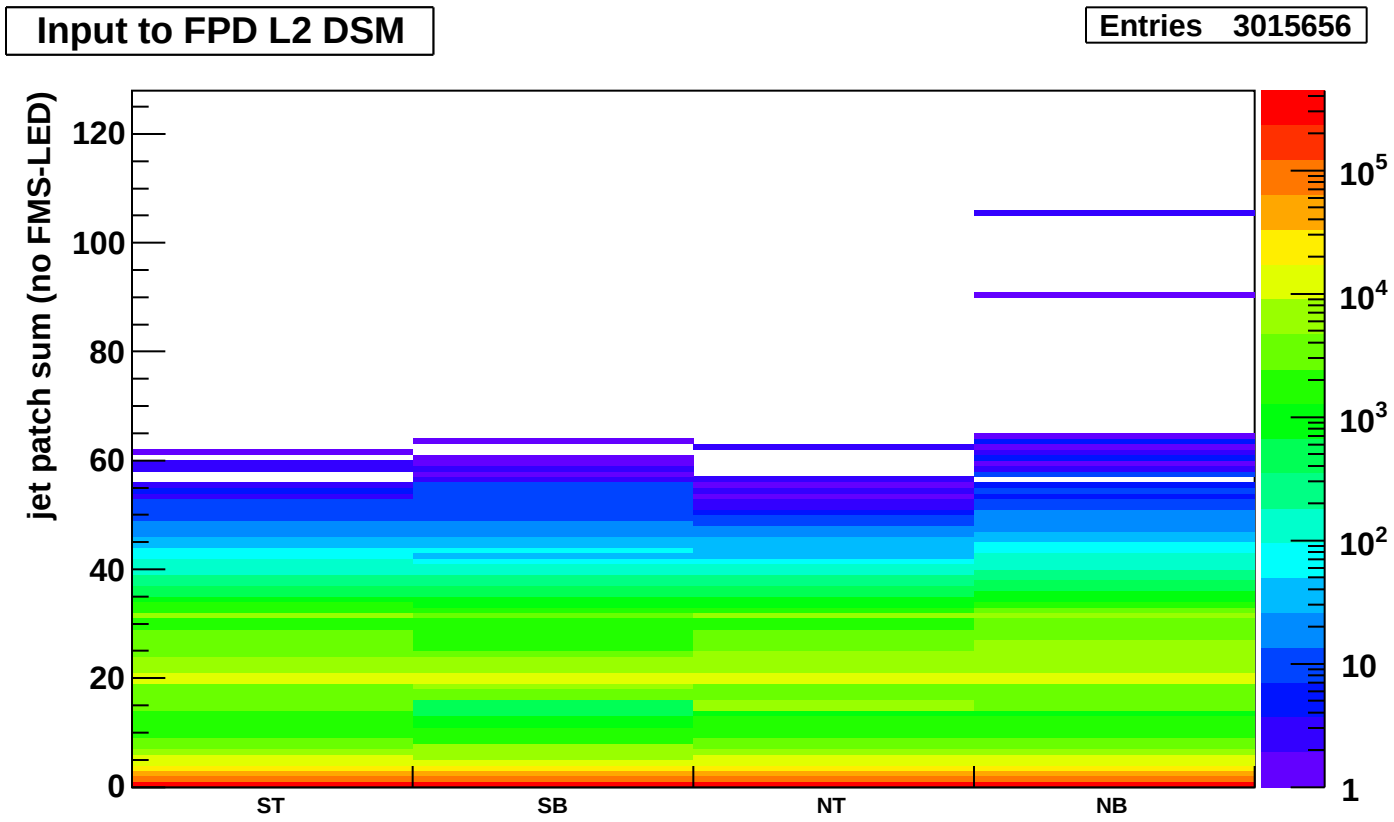

Input to FPD L2 DSM
Entries 363
CL bits - simulated
1
2
33
17
11
126
34
37
67
18
17
SMALL
LARGE-S
LARGE-N

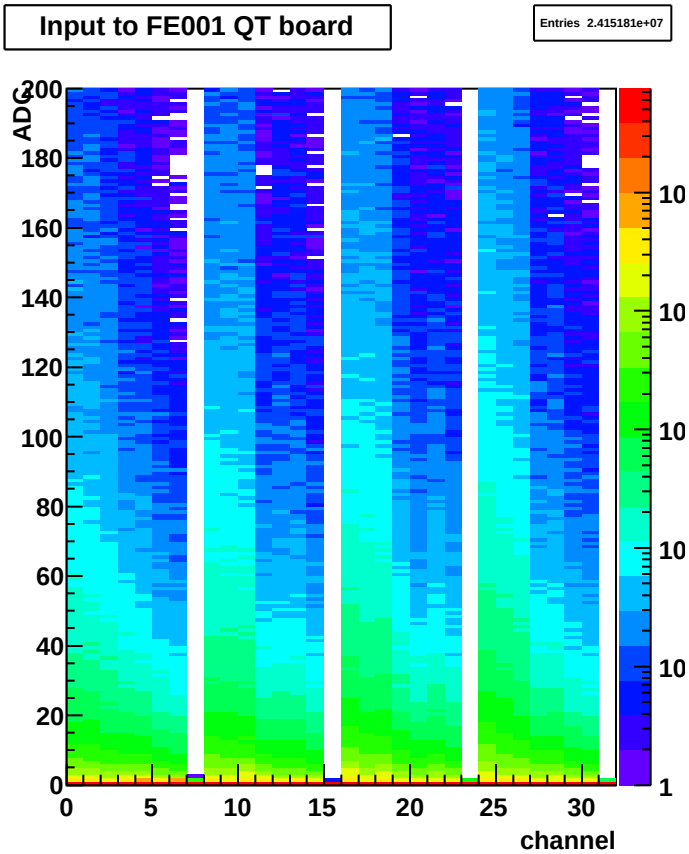

Input to FPD L2 DSM
Entries 2264232
HT bits
194007
84666
60573
46306
17239
14704
514431
652839
679467
SMALL
LARGE-S
LARGE-N

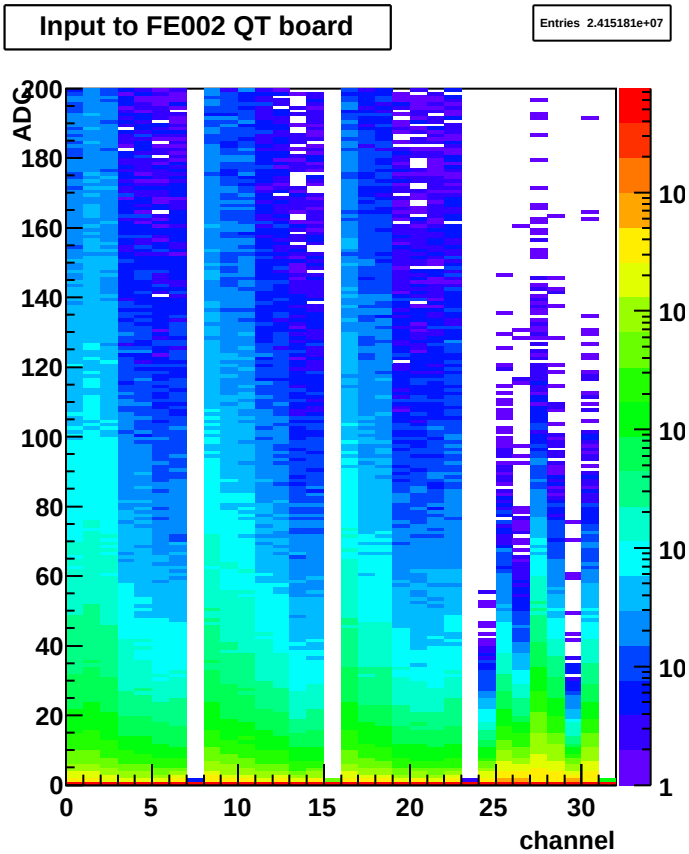

Input to FPD L2 DSM
Entries 350
HT bits - simulated
2
41
13
11
173
58
52
SMALL
LARGE-S
LARGE-N

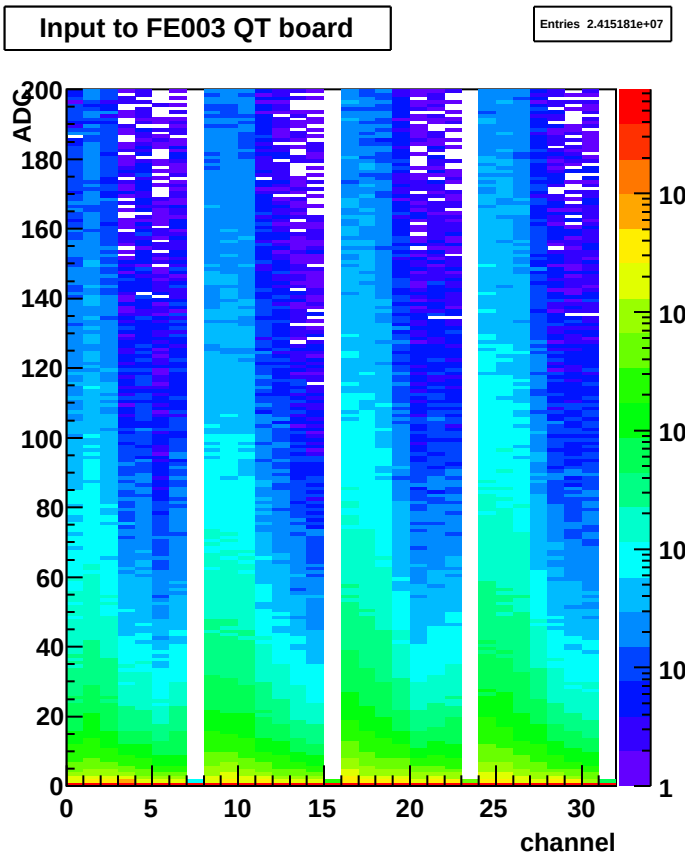

Input to FPD L3 DSM
Entries 1.20759e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

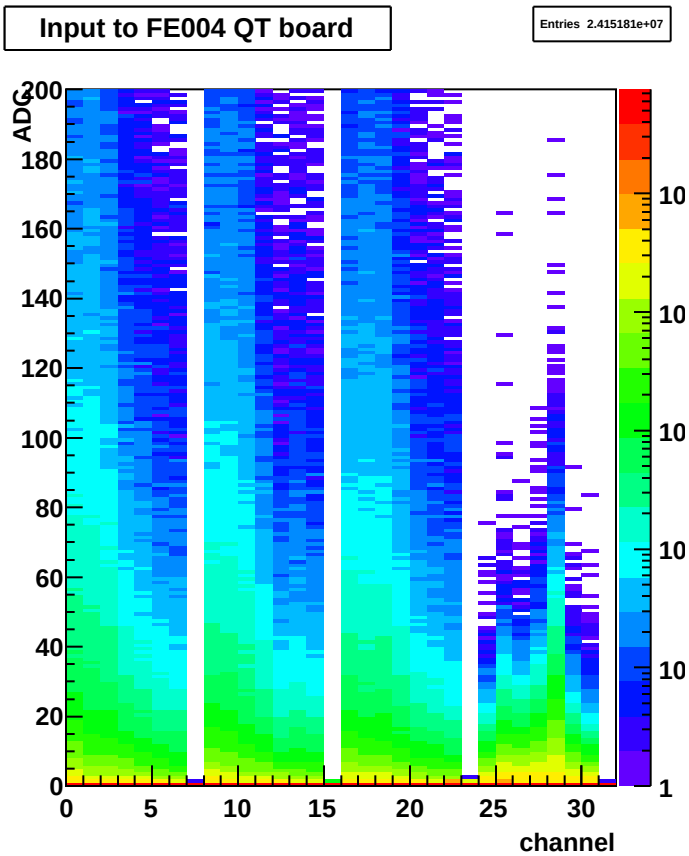

Input to FPD L3 DSM
Entries 2038
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

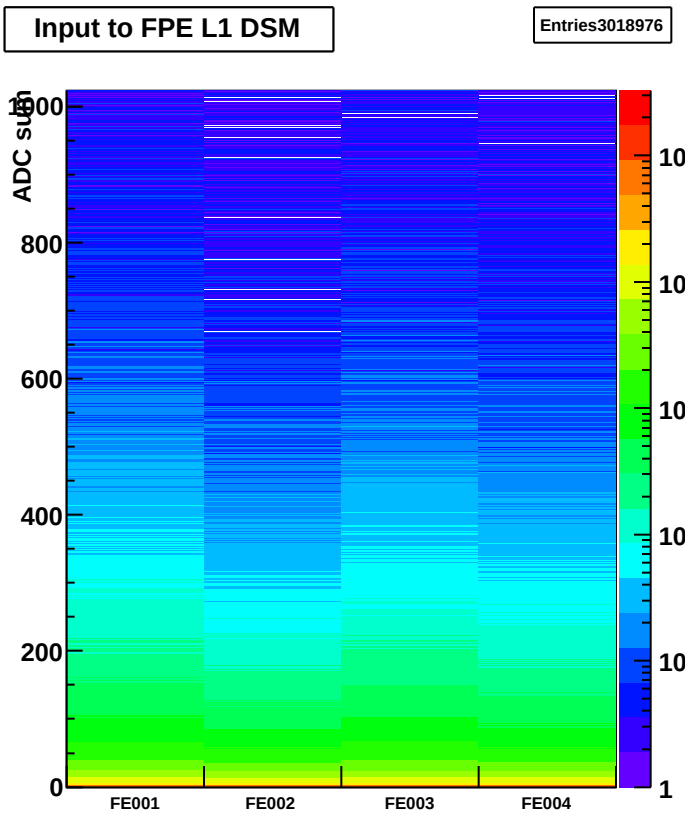

Input to FPD L2 DSM
Entries 3015656
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

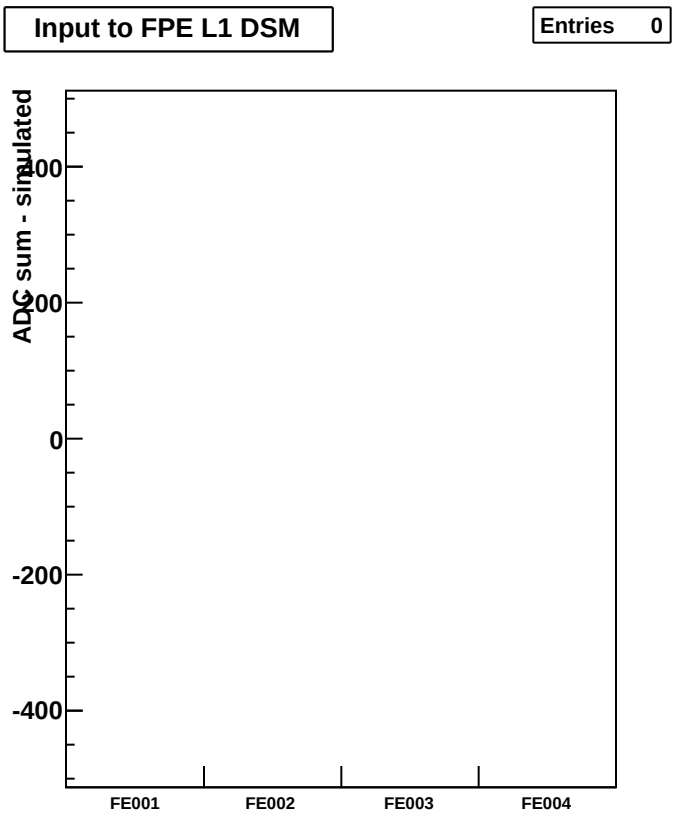

Input to FE001 QT board
Entries 2.415181e+07
ADC
channel

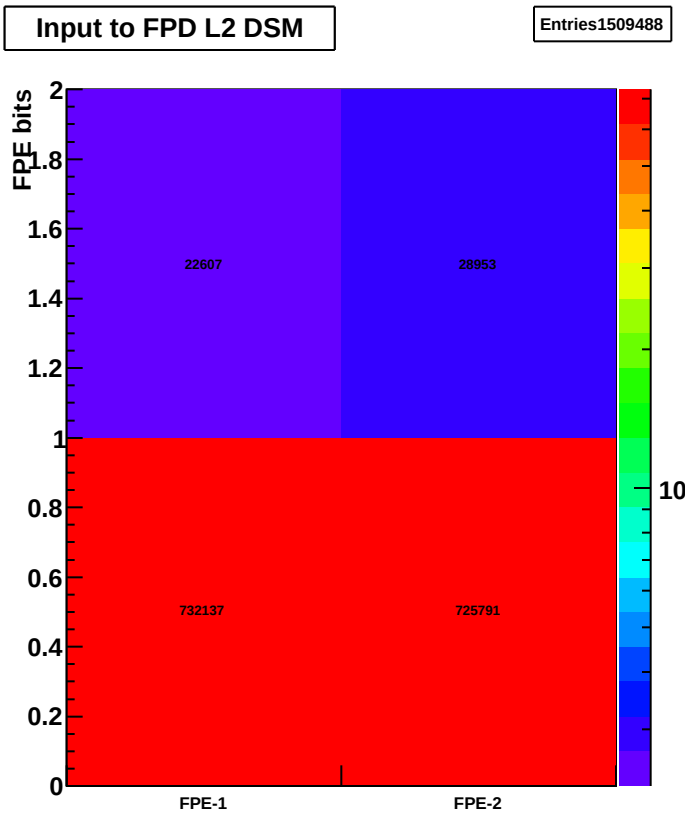

Input to FE002 QT board
Entries 2.415181e+07
ADC
channel

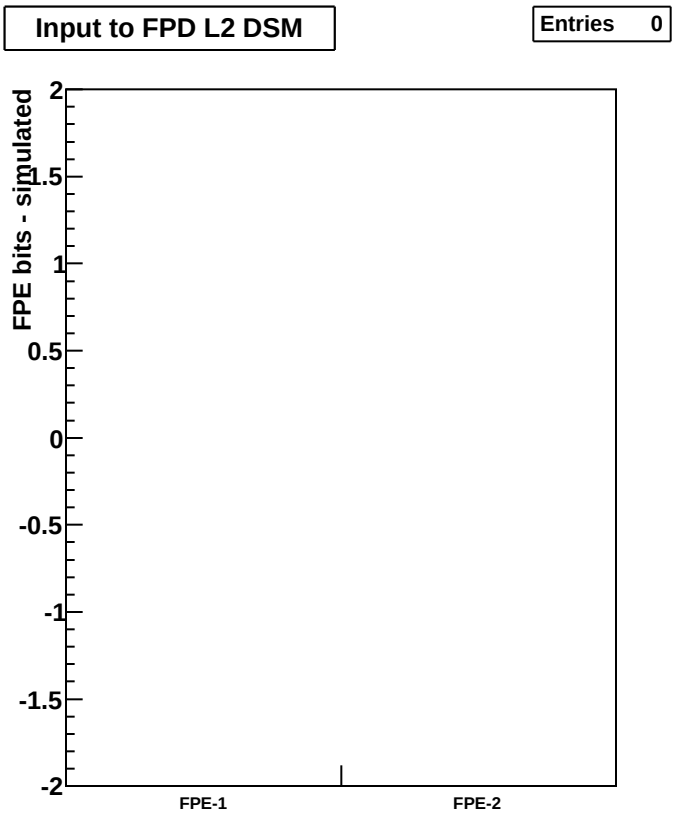

Input to FE003 QT board
Entries 2.415181e+07
ADC
channel


Input to FE004 QT board
Entries 2.415181e+07
ADC
channel


Input to FPE L1 DSM
Entries3018976
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
Entries1509488
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
22607
28953
732137
725791
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