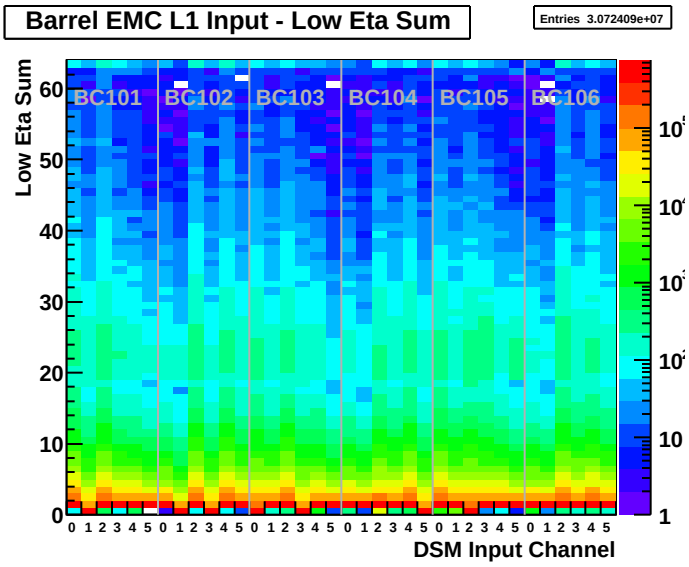
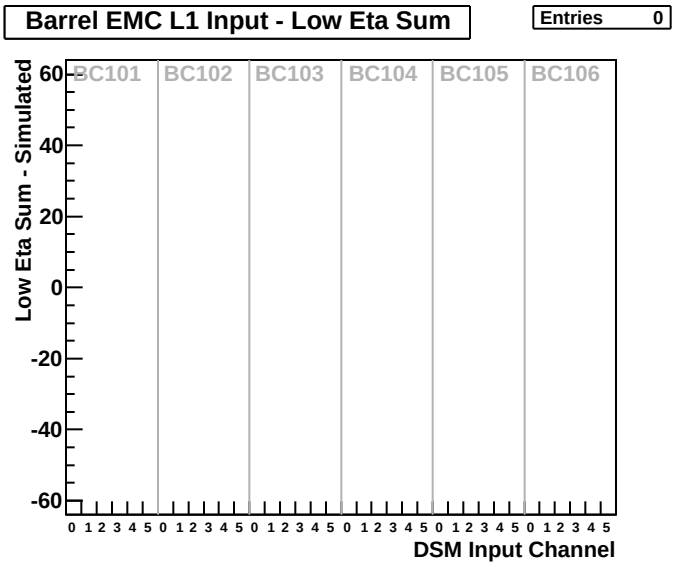
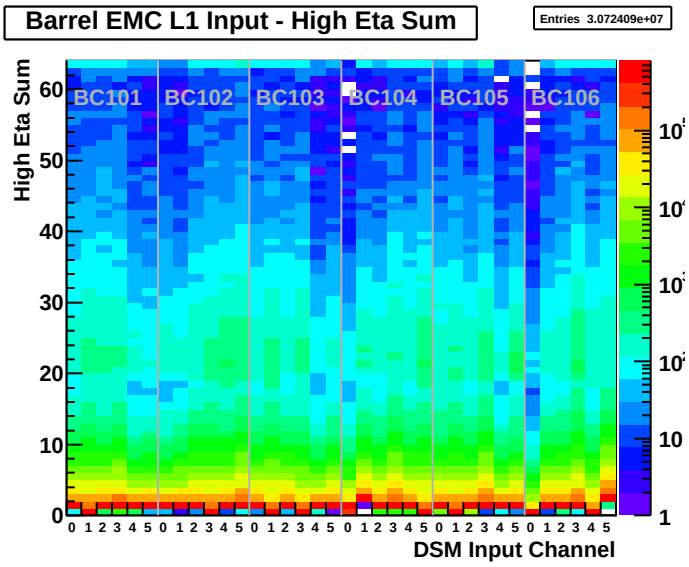
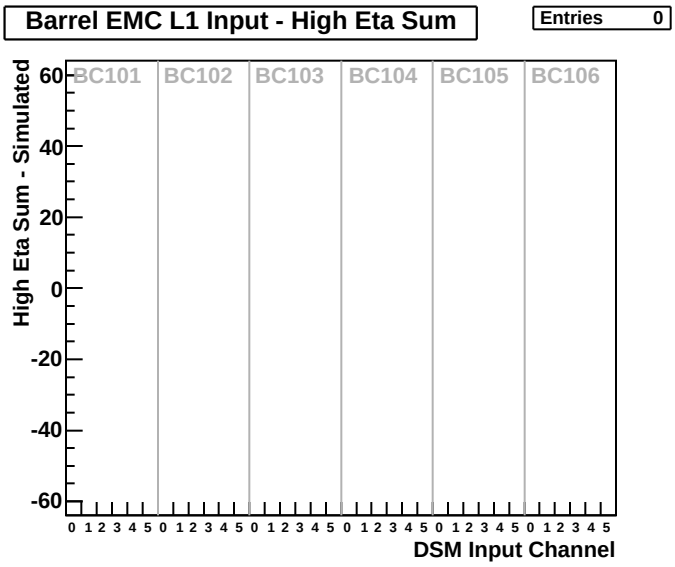
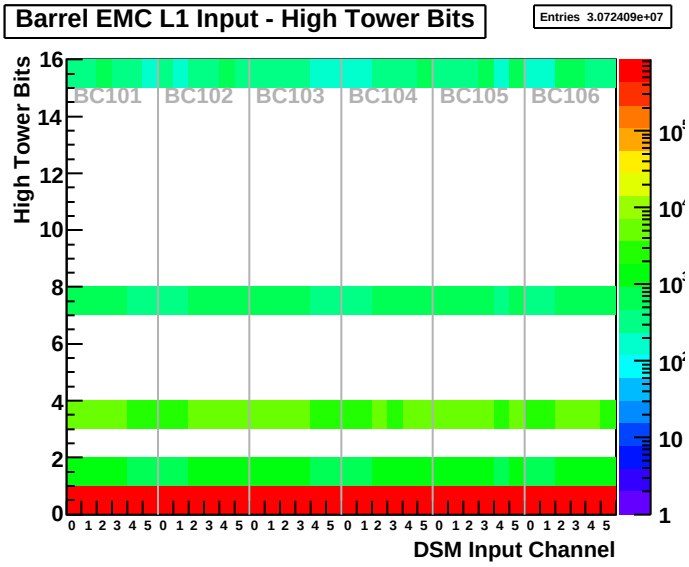
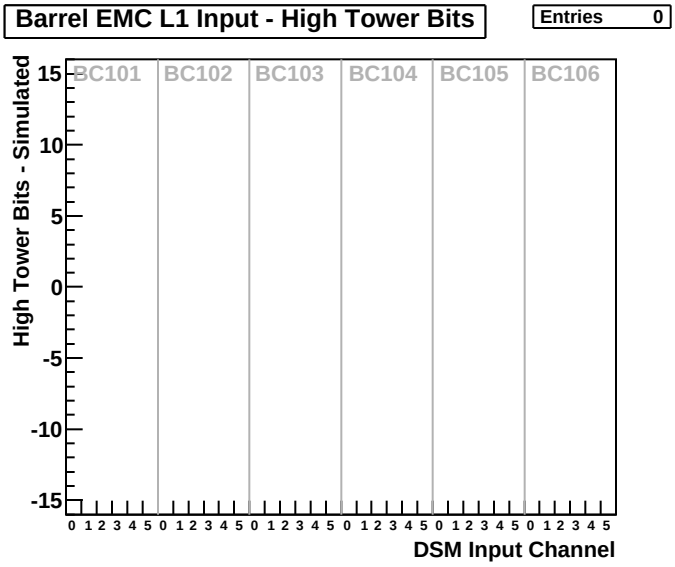

Barrel EMC L1 Input - Low Eta Sum
Entries 3.072409e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

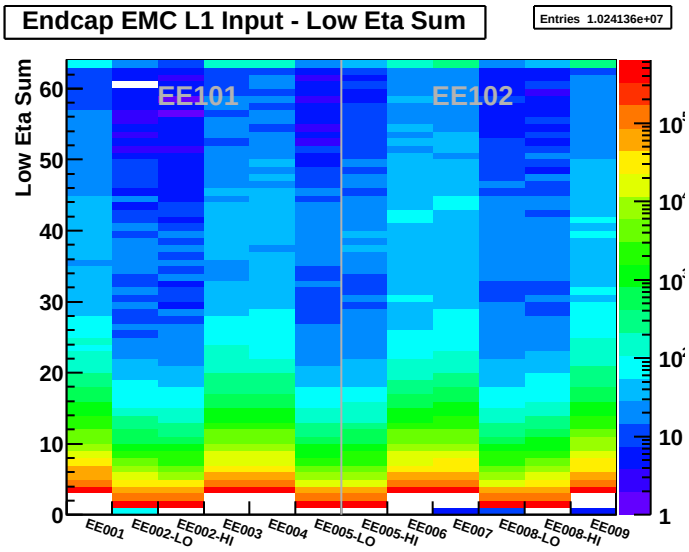

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

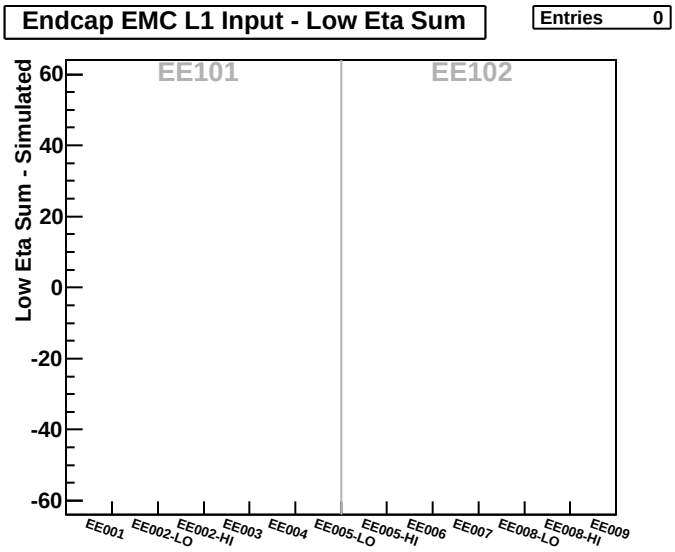

Barrel EMC L1 Input - High Eta Sum
Entries 3.072409e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

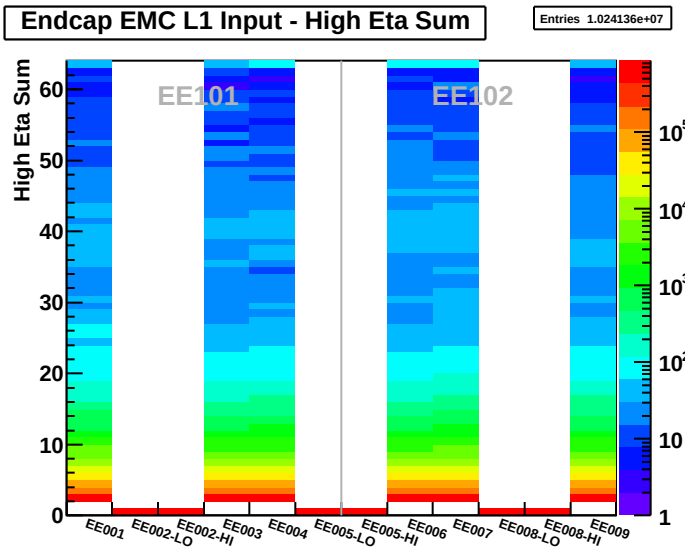

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

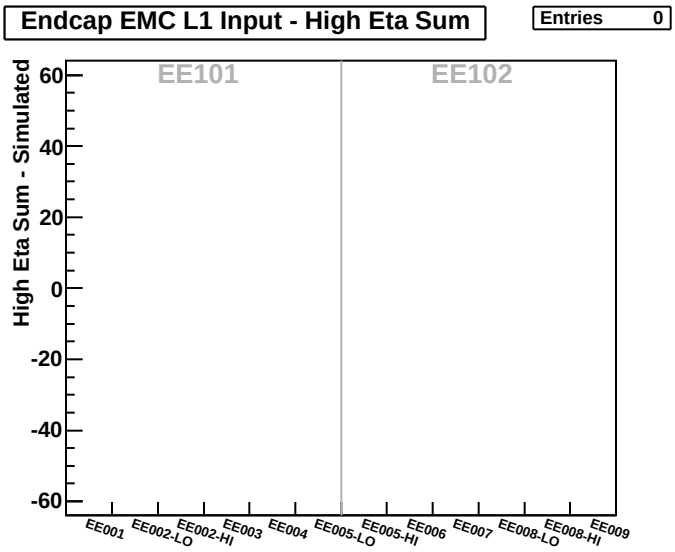

Barrel EMC L1 Input - High Tower Bits
Entries 3.072409e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

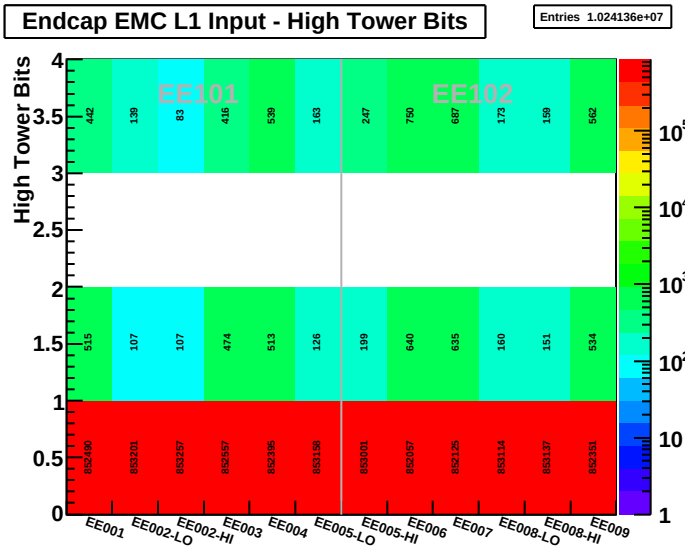

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

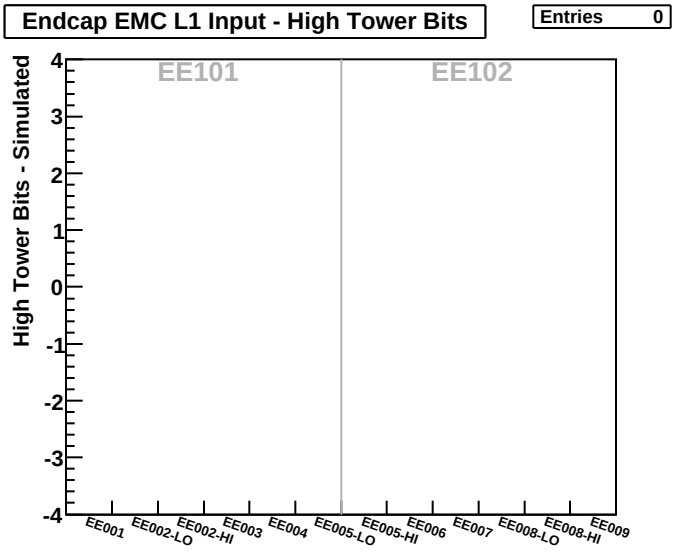

Endcap EMC L1 Input - Low Eta Sum
Entries 1.024136e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

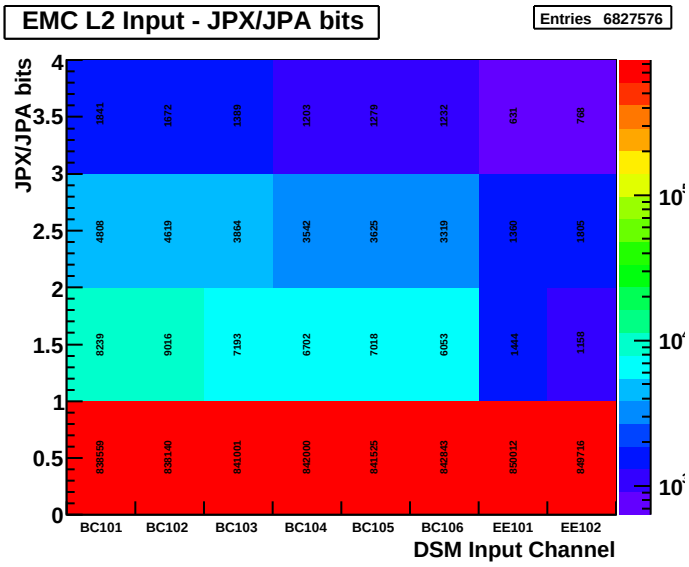

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

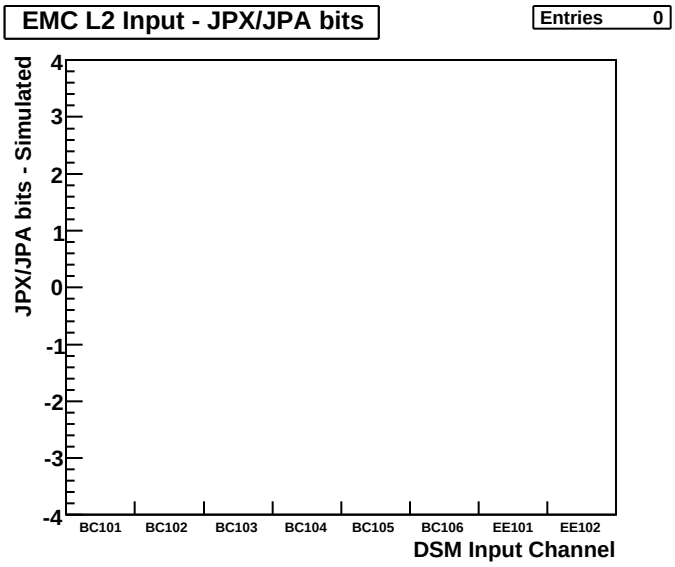

Endcap EMC L1 Input - High Eta Sum
Entries 1.024136e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

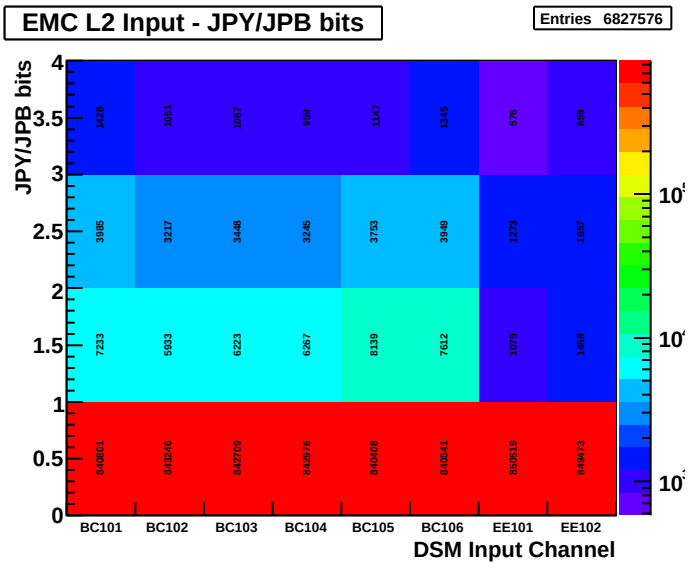

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

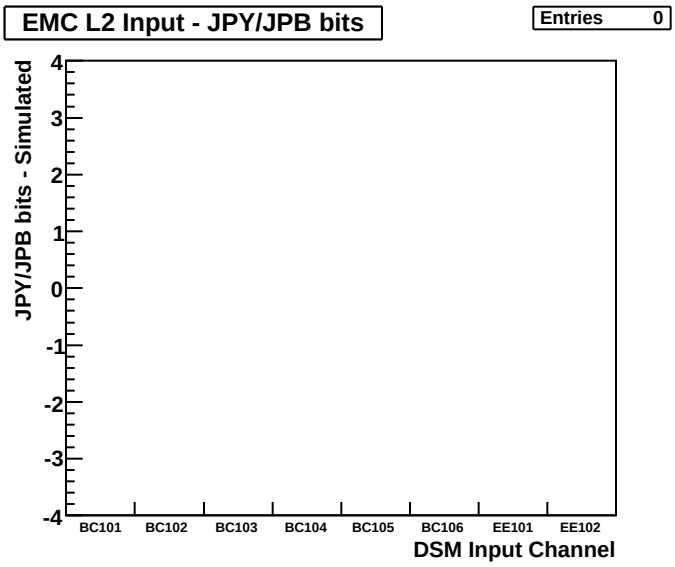

Endcap EMC L1 Input - High Tower Bits
Entries 1.024136e+07
High Tower Bits
EE101
EE102
442 139 83 416 539 163 247 750 687 173 159 562
515 107 107 474 513 126 199 640 635 160 151 534
852490 853201 853257 852557 852395 853158 853001 852057 852125 853114 853137 852351
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

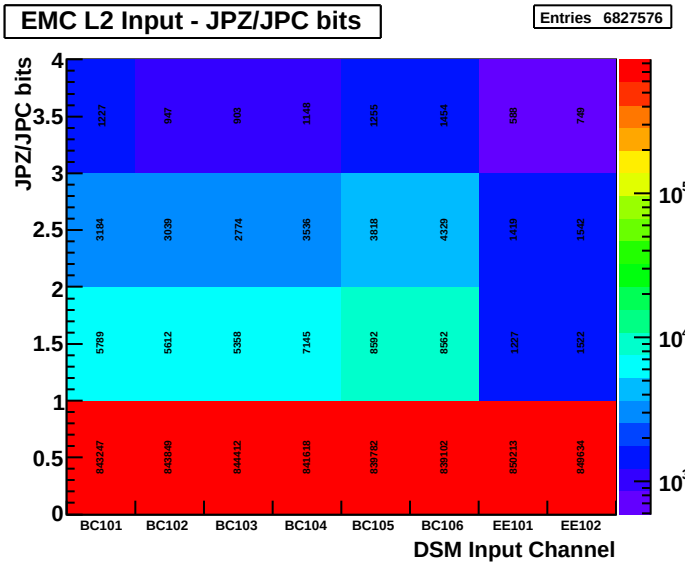

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

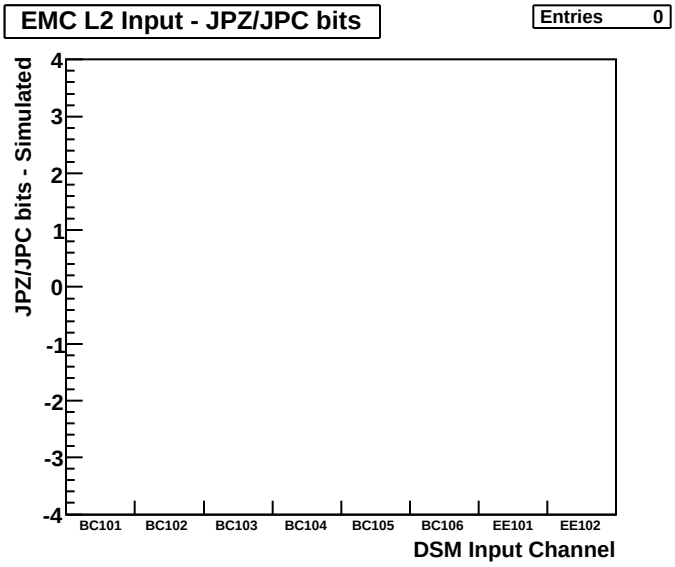

EMC L2 Input - JPX/JPA bits
Entries 6827576
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1841 1672 1389 1203 1279 1232 631 768
4808 4619 3864 3542 3625 3319 1380 1805
8239 9016 7193 6702 7018 6053 1444 1158
838559 838140 841001 842000 841525 842843 850012 848716

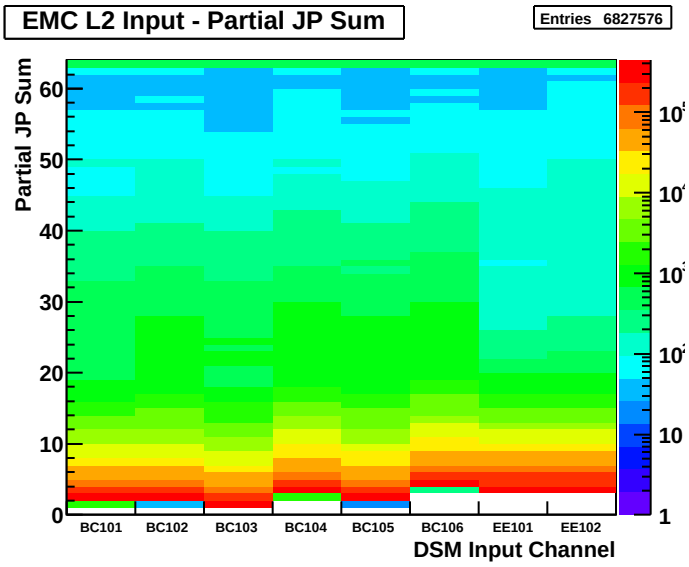

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

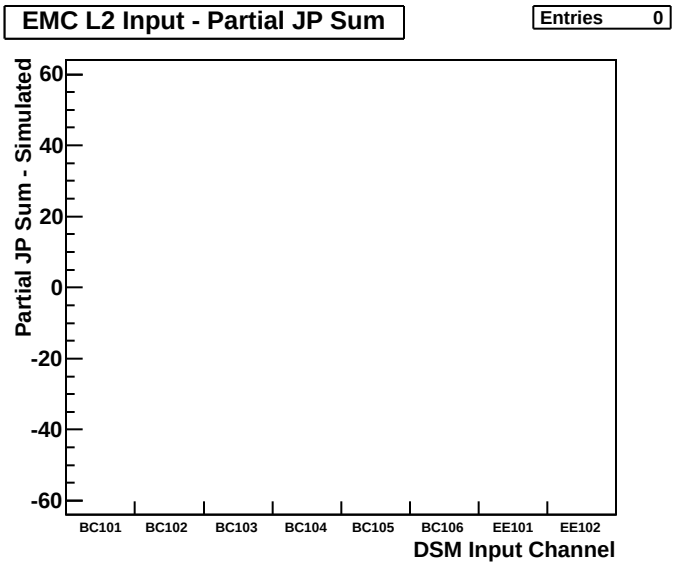

EMC L2 Input - JPY/JPB bits
Entries 6827576
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1426 1051 1067 959 1147 1345 576 839
3985 3217 3448 3245 3753 3949 1273 1657
7233 5933 6223 6267 8139 7612 1076 1436
840801 842246 842709 842976 840408 840541 850519 849473

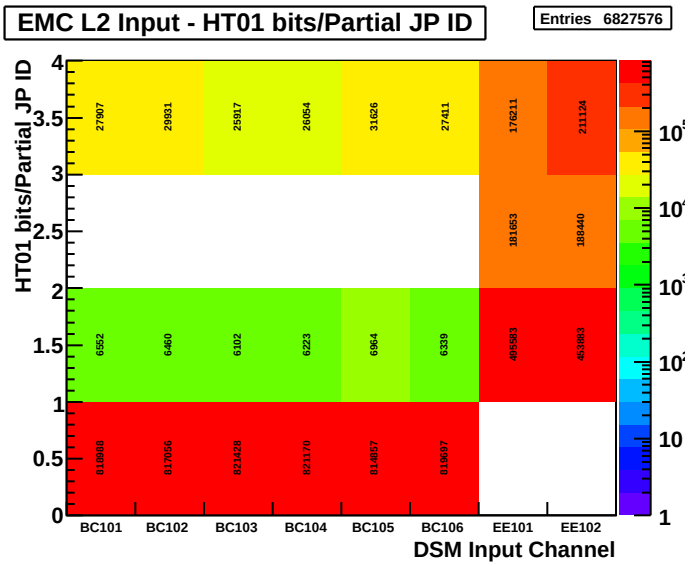

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

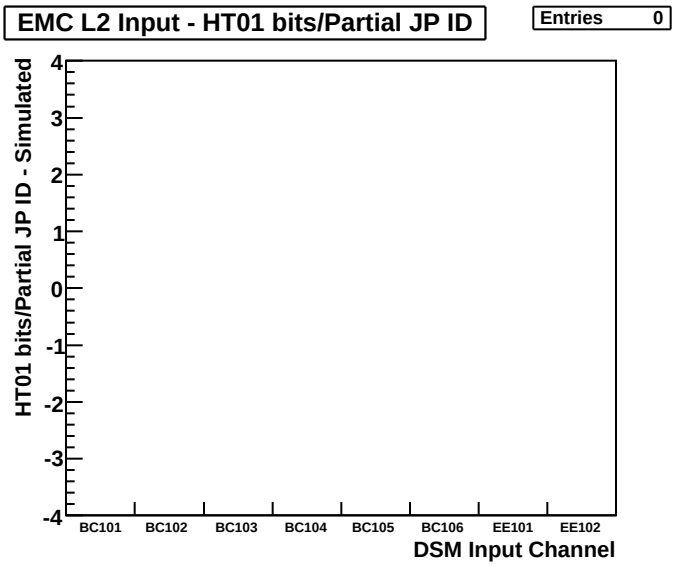

EMC L2 Input - JPZ/JPC bits
Entries 6827576
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1227 947 903 1148 1255 1454 588 749
3184 3039 2774 3536 3818 4329 1419 1542
5789 5612 5358 7145 8592 8562 1227 1522
843247 843849 844412 841618 839782 839102 850213 849634

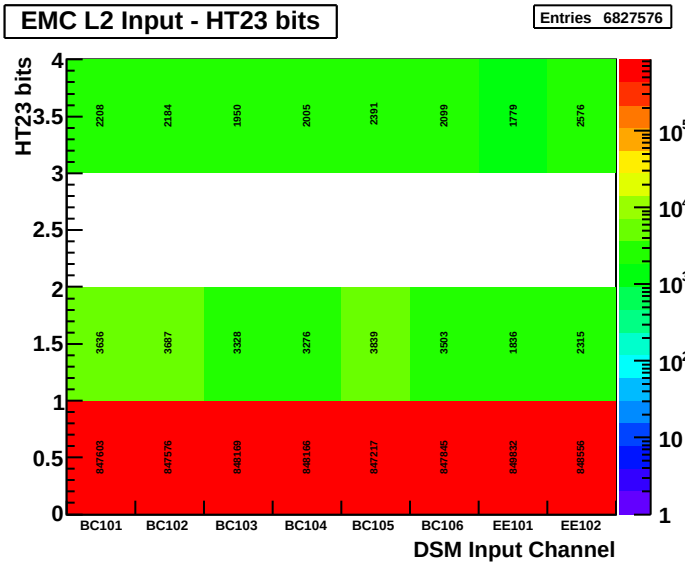

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

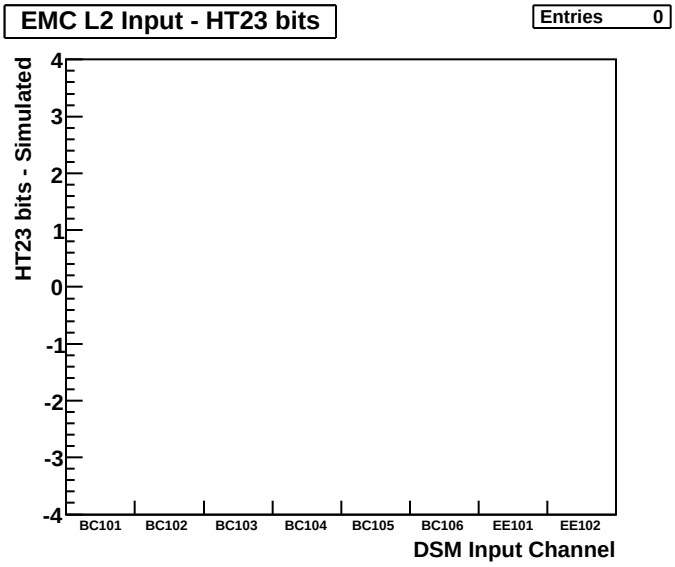

EMC L2 Input - Partial JP Sum
Entries 6827576
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

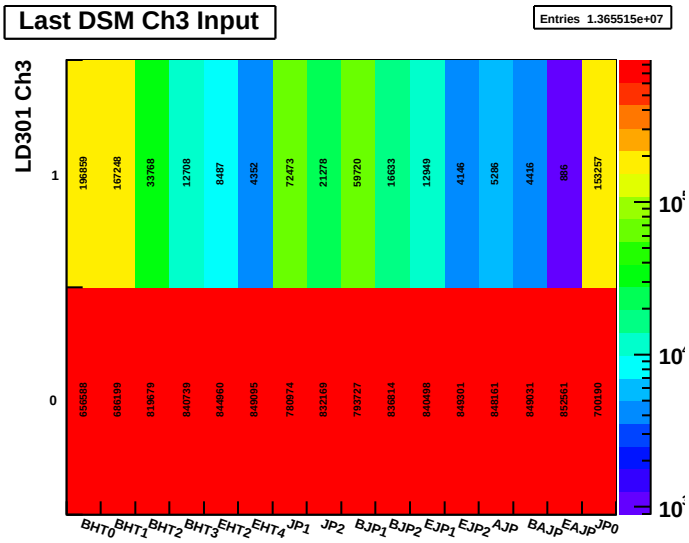

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

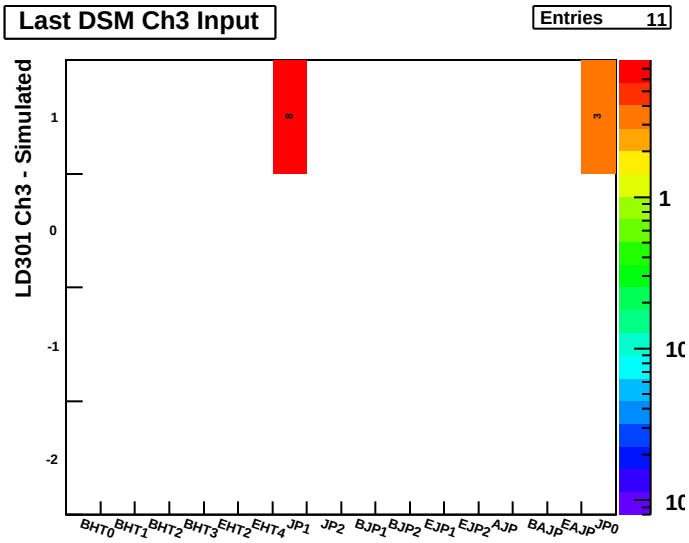

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6827576
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

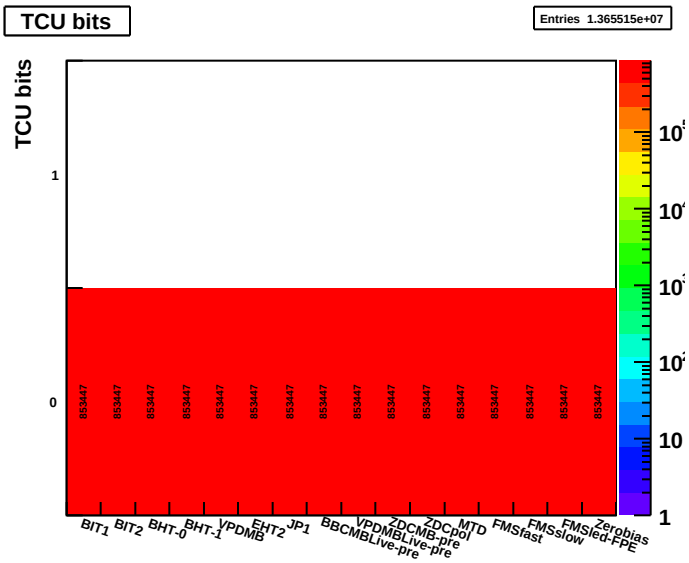

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

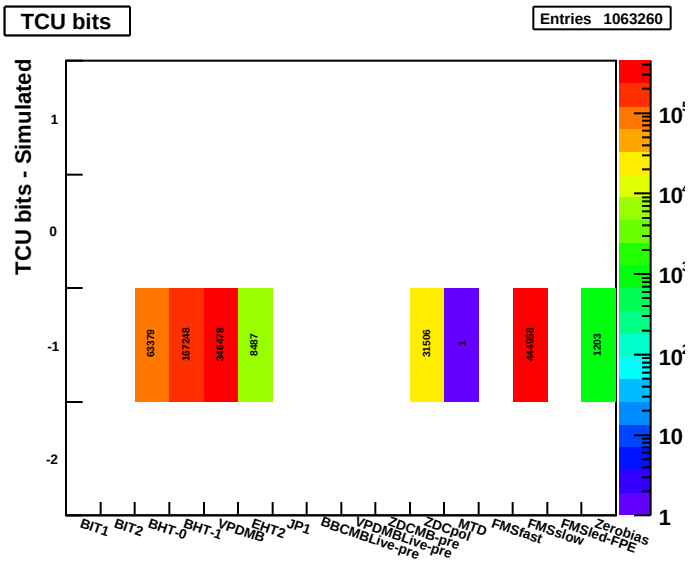

EMC L2 Input - HT23 bits
Entries 6827576
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

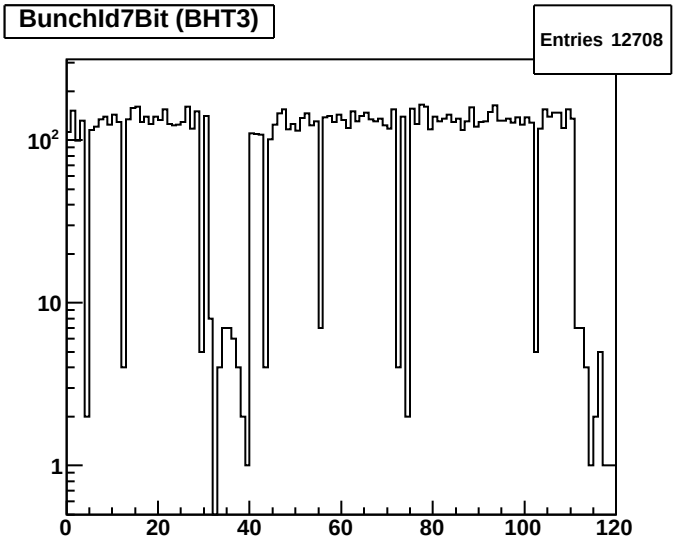

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

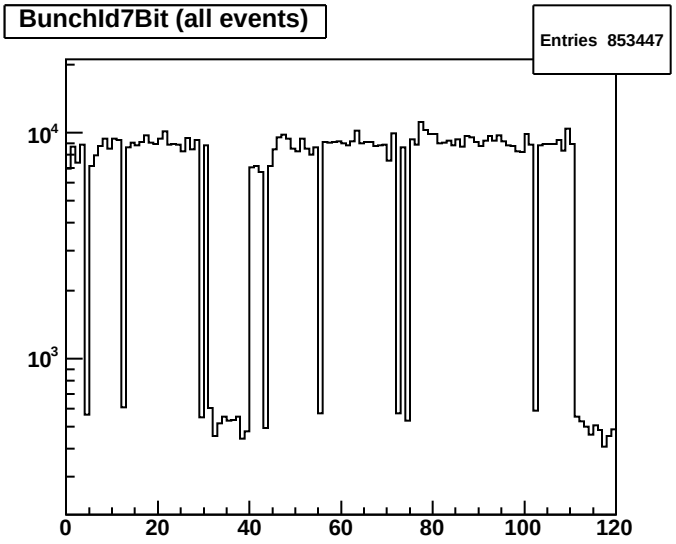

Last DSM Ch3 Input
Entries 1.365515e+07
LD301 Ch3
196859 167248 33768 12708 8487 4352 72473 21278 59720 16633 12949 4146 5286 4416 886 153257
656588 686199 819679 840739 844960 849095 780974 832169 793727 836814 840498 848301 848161 849031 852561 700190
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

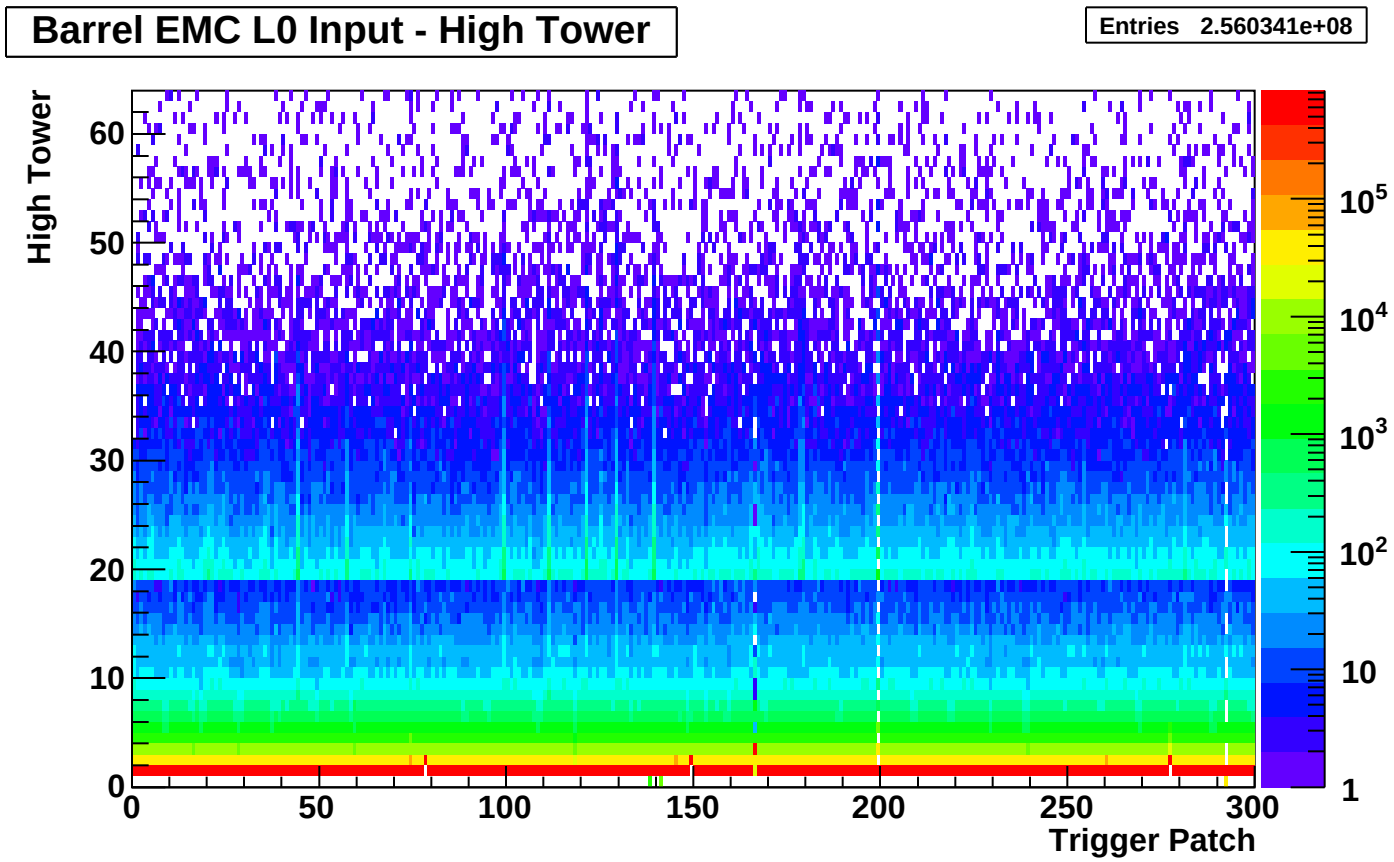

Last DSM Ch3 Input
Entries 11
LD301 Ch3 - Simulated
8
3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

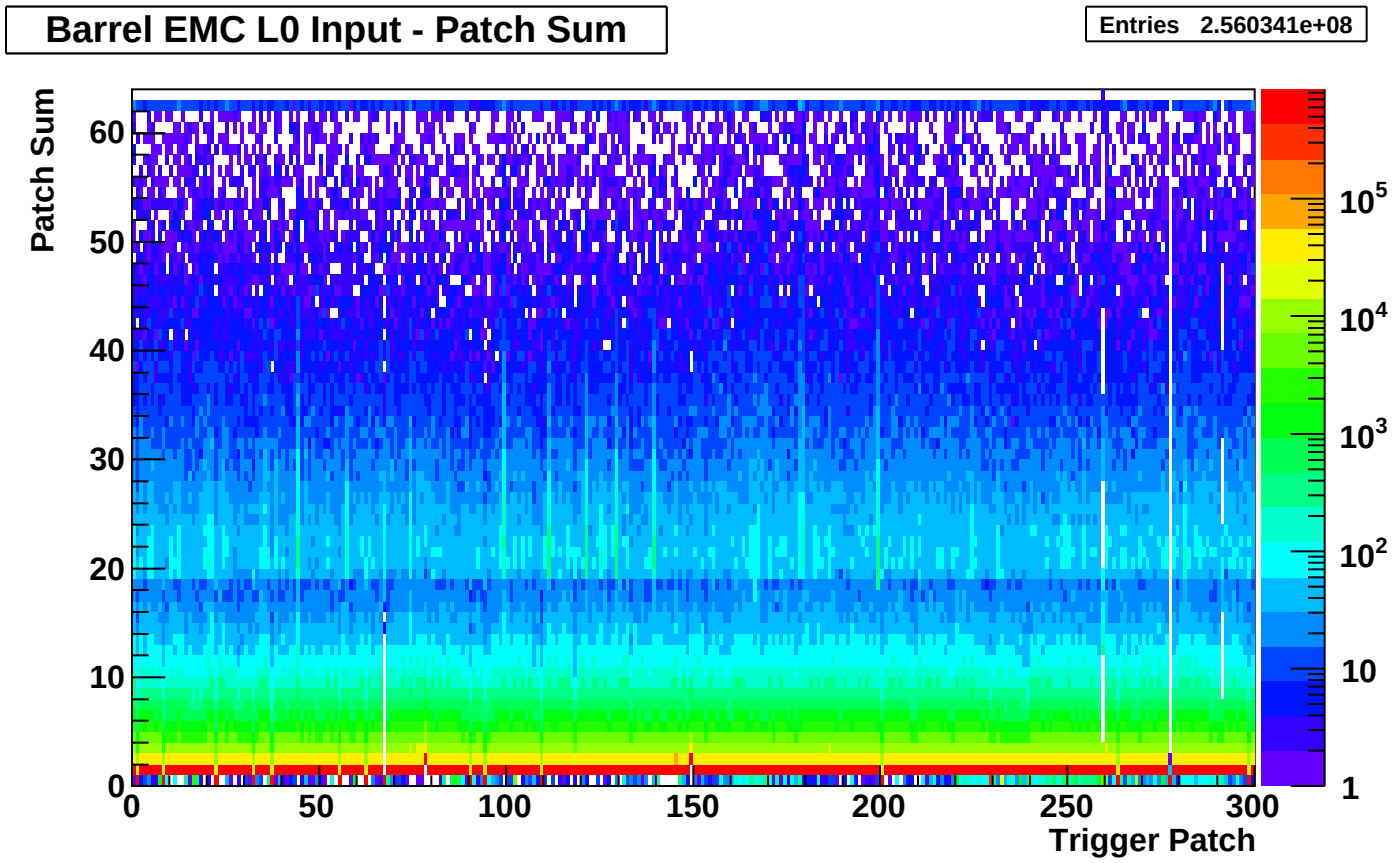

TCU bits
Entries 1.365515e+07
TCU bits
853447
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

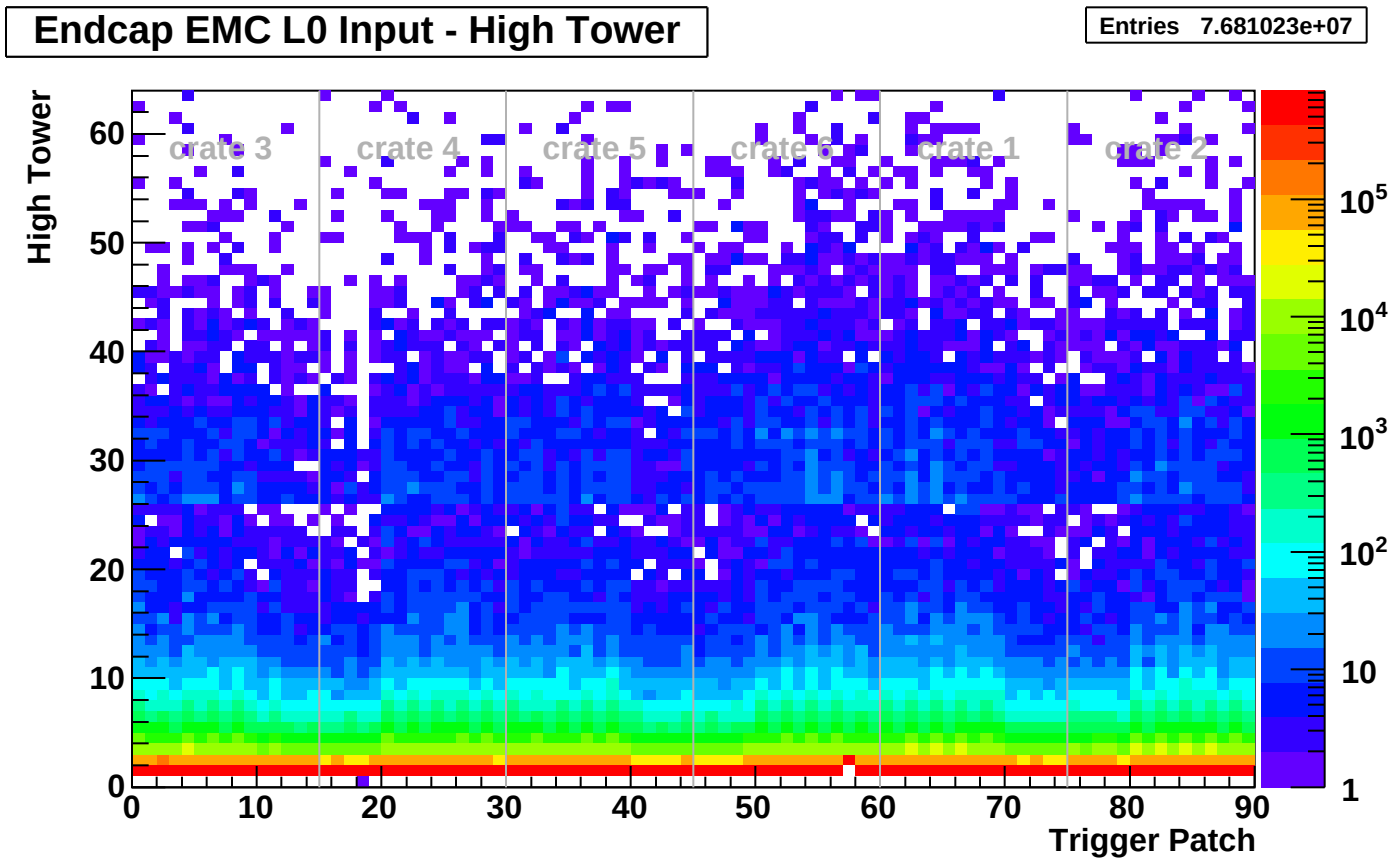

TCU bits
Entries 1063260
TCU bits - Simulated
63379 167248 346478 8487 31506 1 444958 1203
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

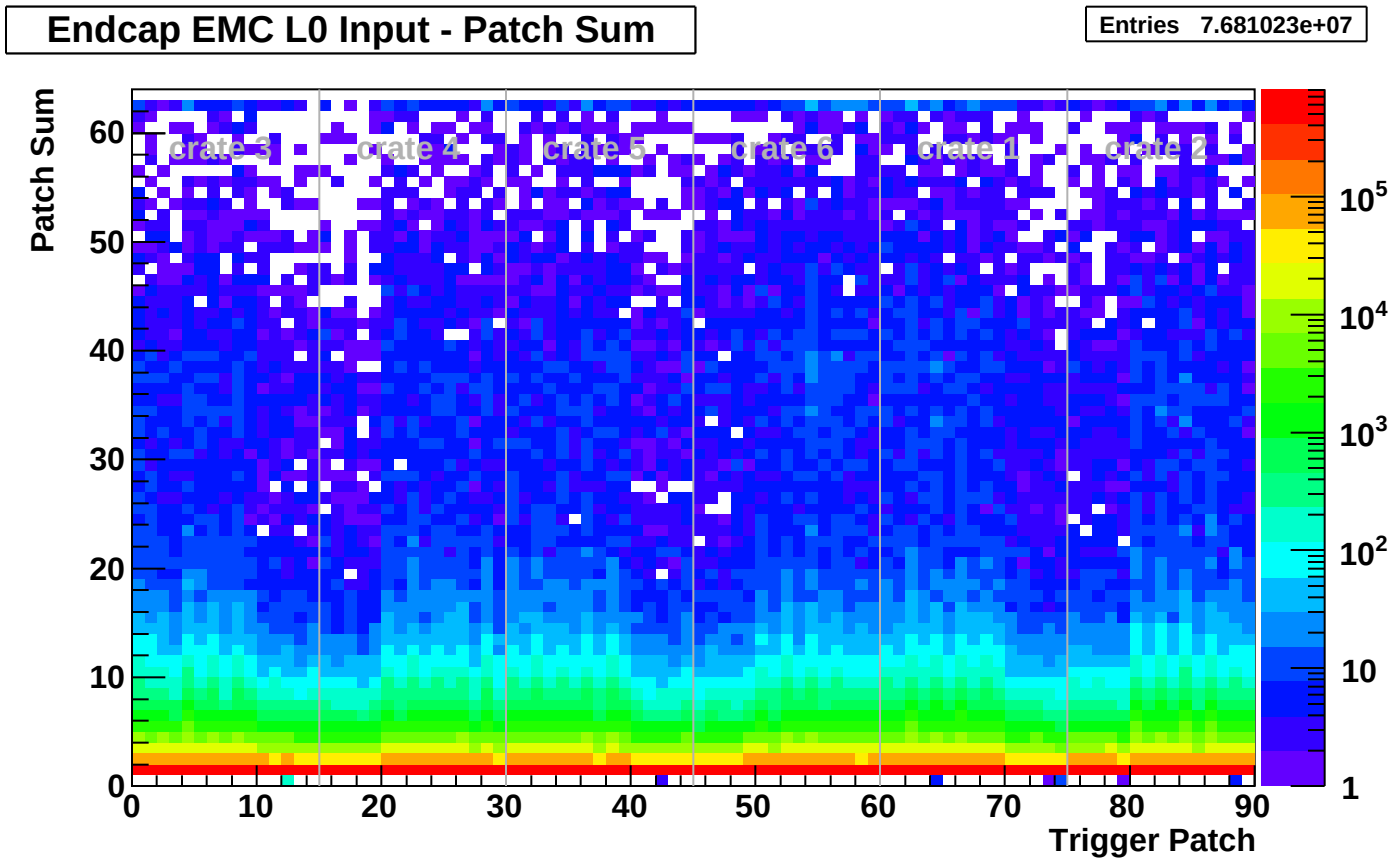

BunchId7Bit (BHT3)
Entries 12708

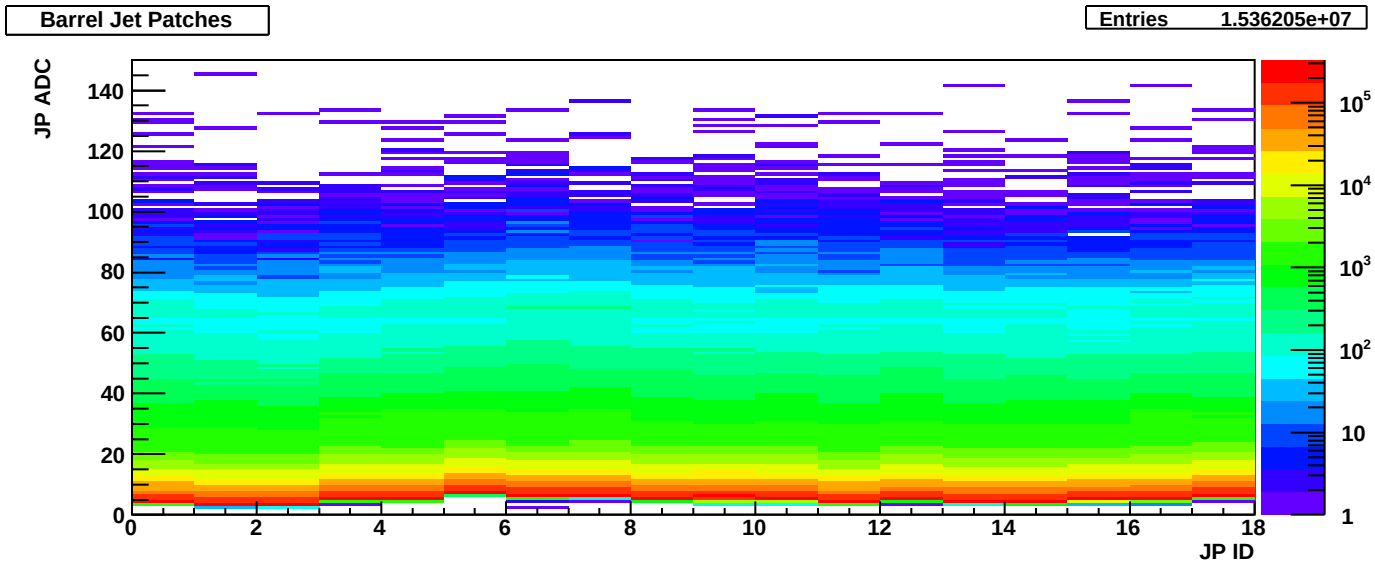

BunchId7Bit (all events)
Entries 853447

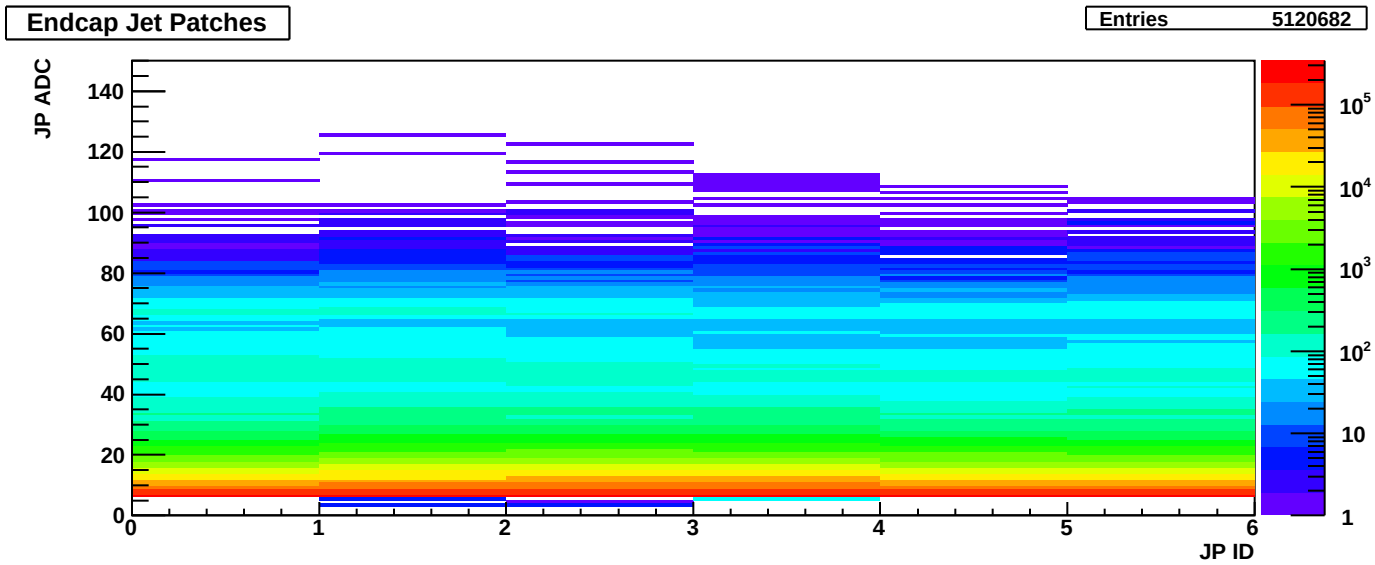

Barrel EMC L0 Input - High Tower
Entries 2.560341e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

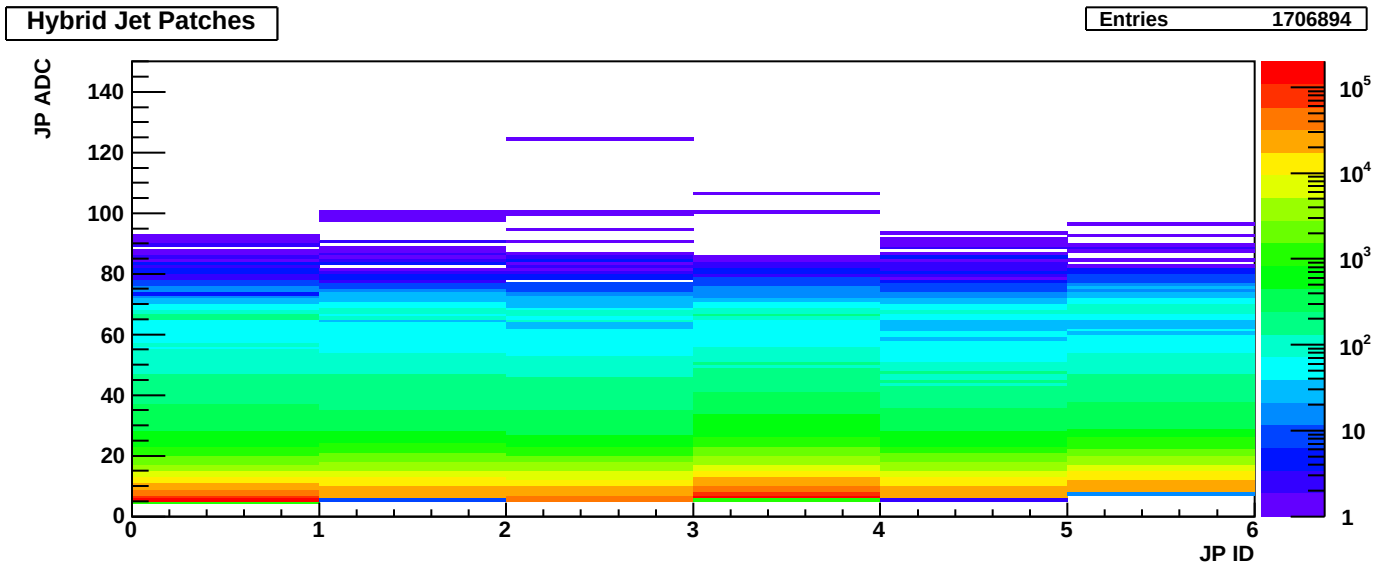

Barrel EMC L0 Input - Patch Sum
Entries 2.560341e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

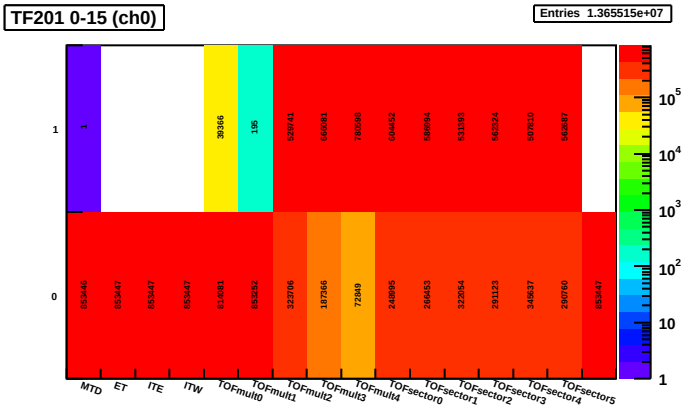

Endcap EMC L0 Input - High Tower
Entries 7.681023e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

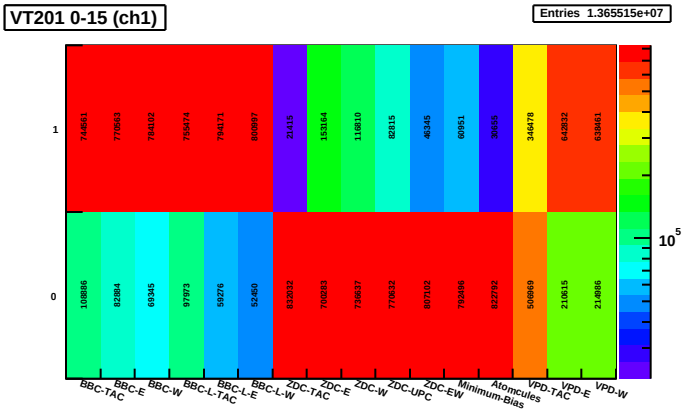

Endcap EMC L0 Input - Patch Sum
Entries 7.681023e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

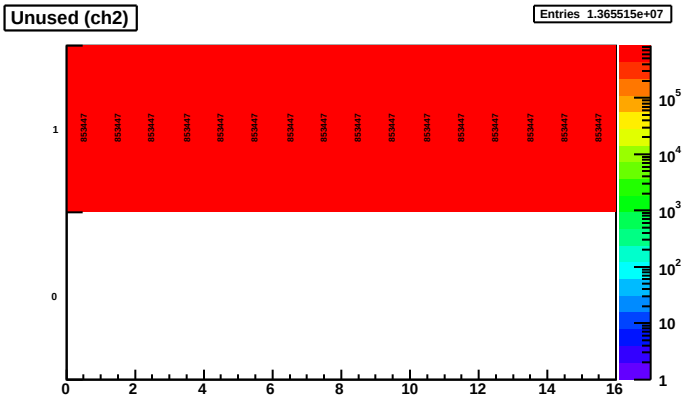

Barrel Jet Patches
Entries 1.536205e+07
JP ADC
JP ID

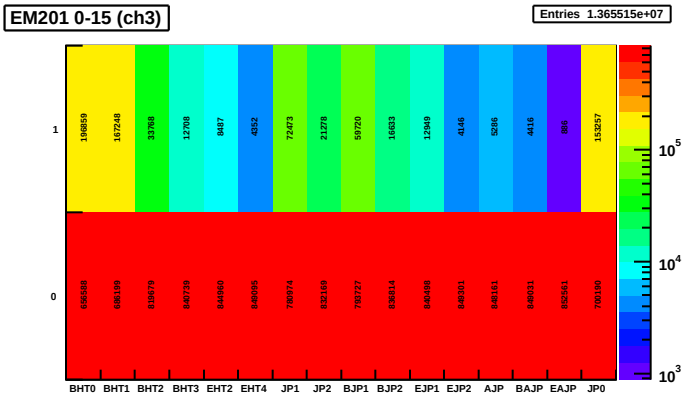

Endcap Jet Patches
Entries 5120682
JP ADC
JP ID

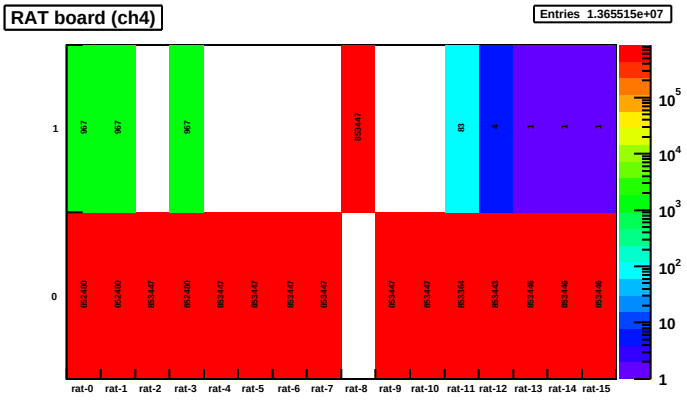

Hybrid Jet Patches
Entries 1706894
JP ADC
JP ID

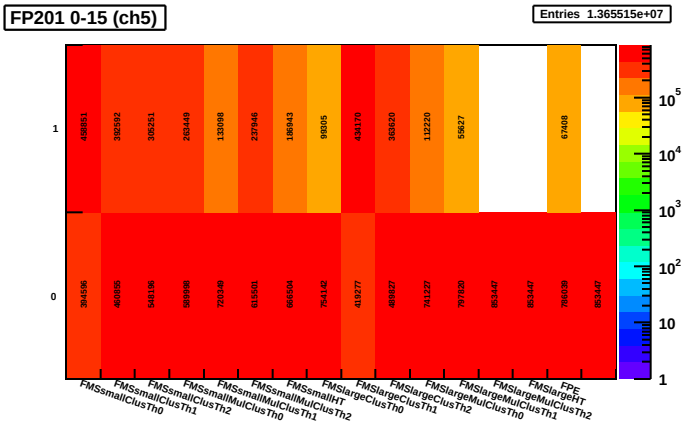

TF201 0-15 (ch0)
Entries 1.365515e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

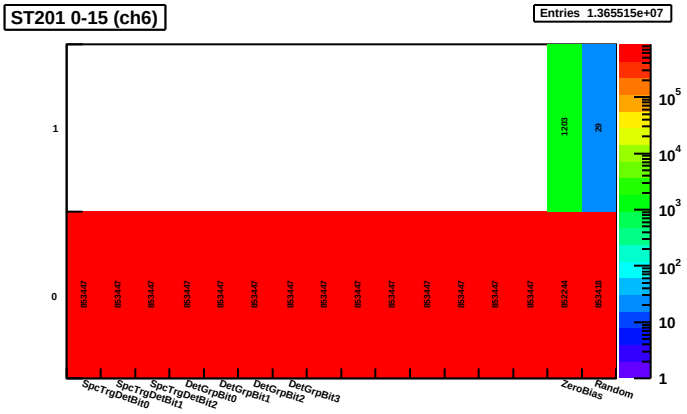

VT201 0-15 (ch1)
Entries 1.365515e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

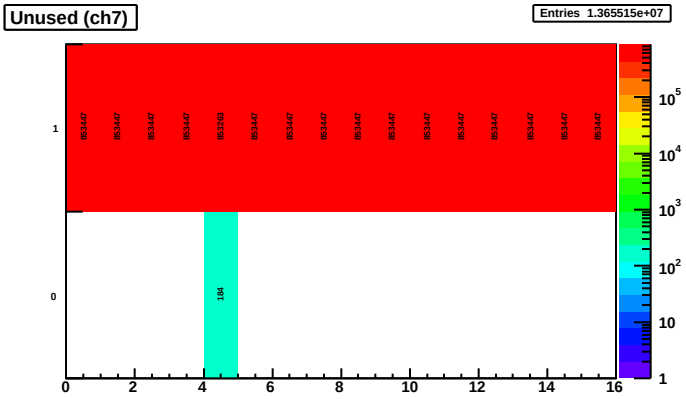

Unused (ch2)
Entries 1.365515e+07

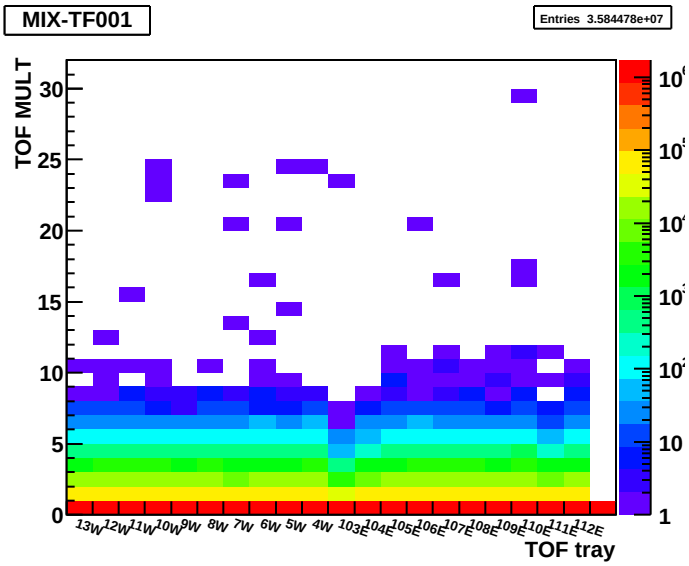

EM201 0-15 (ch3)
Entries 1.365515e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

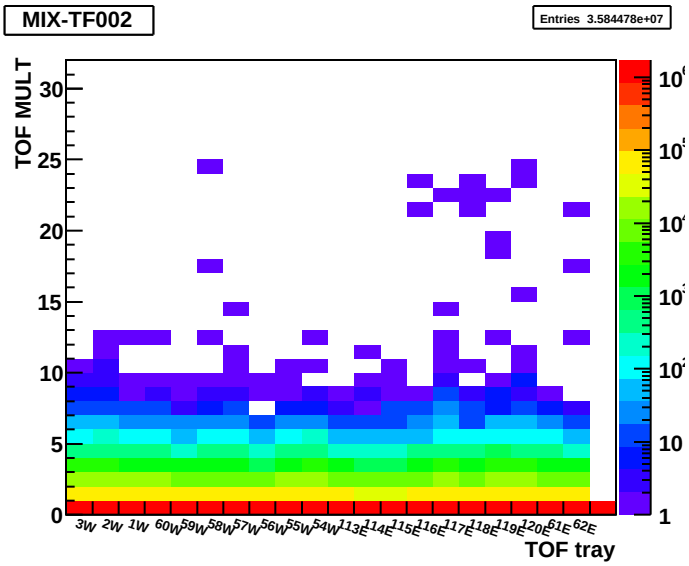

RAT board (ch4)
Entries 1.365515e+07
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

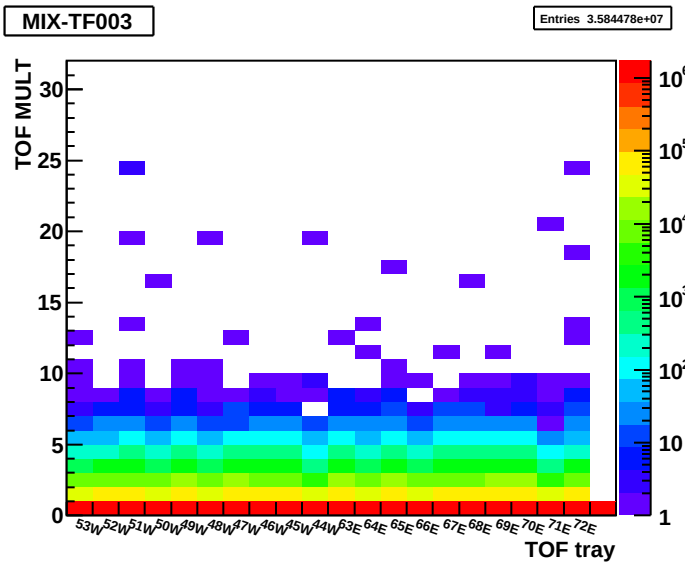

FP201 0-15 (ch5)
Entries 1.365515e+07
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

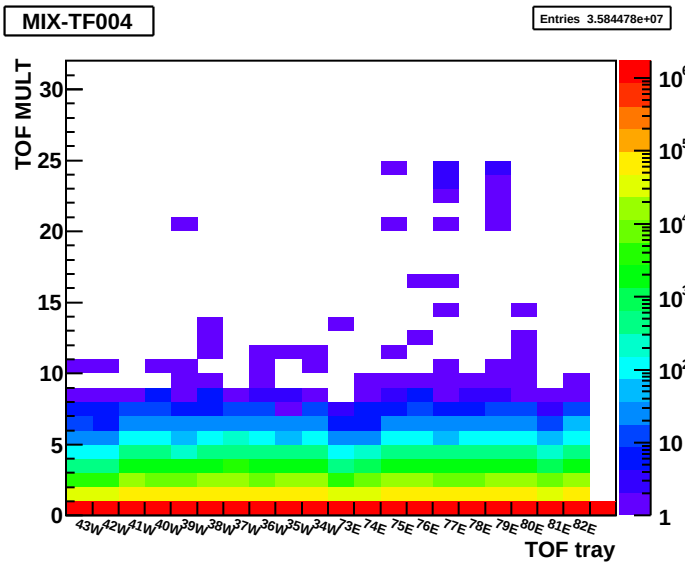

ST201 0-15 (ch6)
Entries 1.365515e+07
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

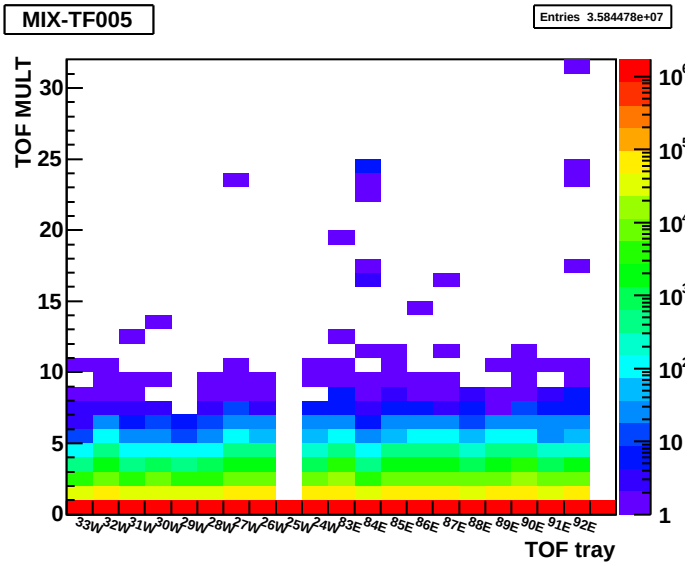

Unused (ch7)
Entries 1.365515e+07

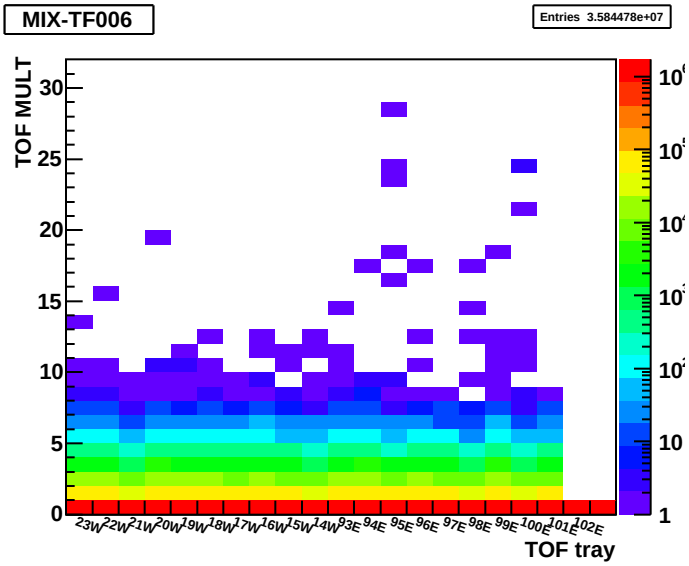

MIX-TF001
Entries 3.584478e+07
TOF MULT
TOF tray

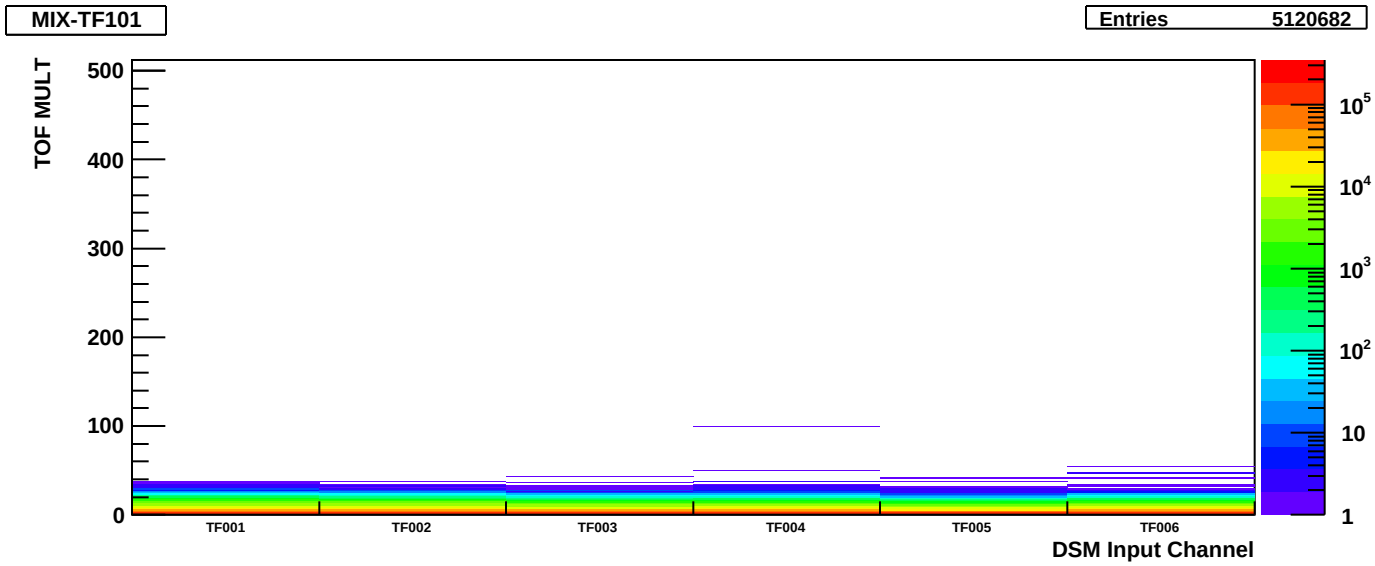

MIX-TF002
Entries 3.584478e+07
TOF MULT
TOF tray

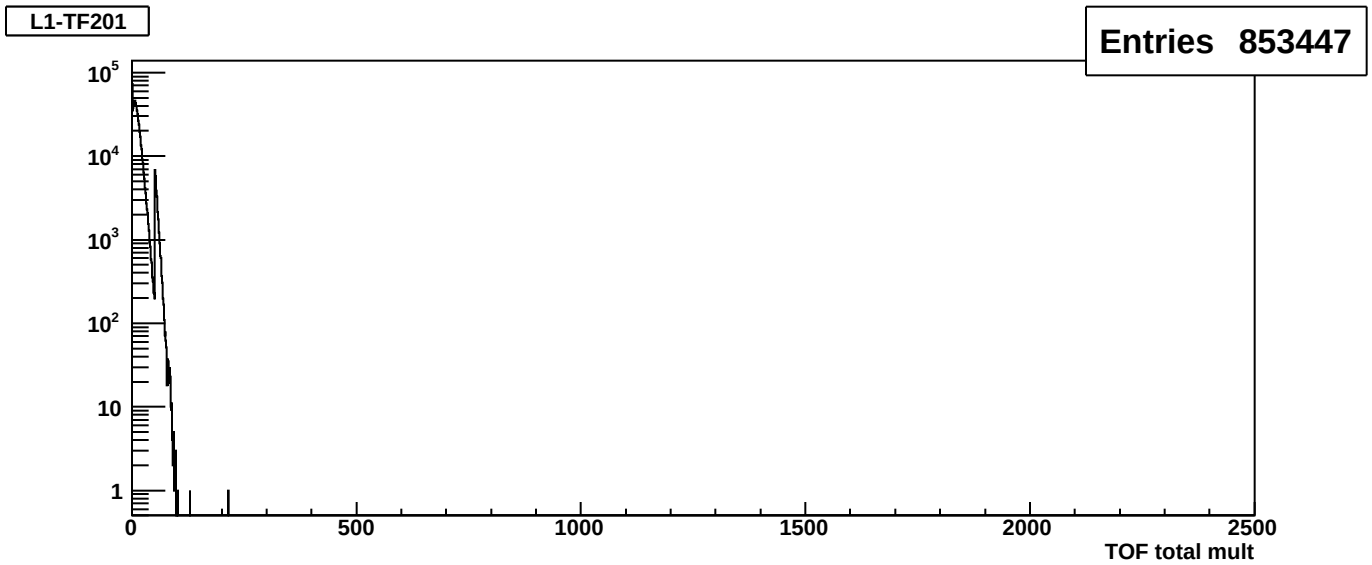

MIX-TF003
Entries 3.584478e+07
TOF MULT
TOF tray

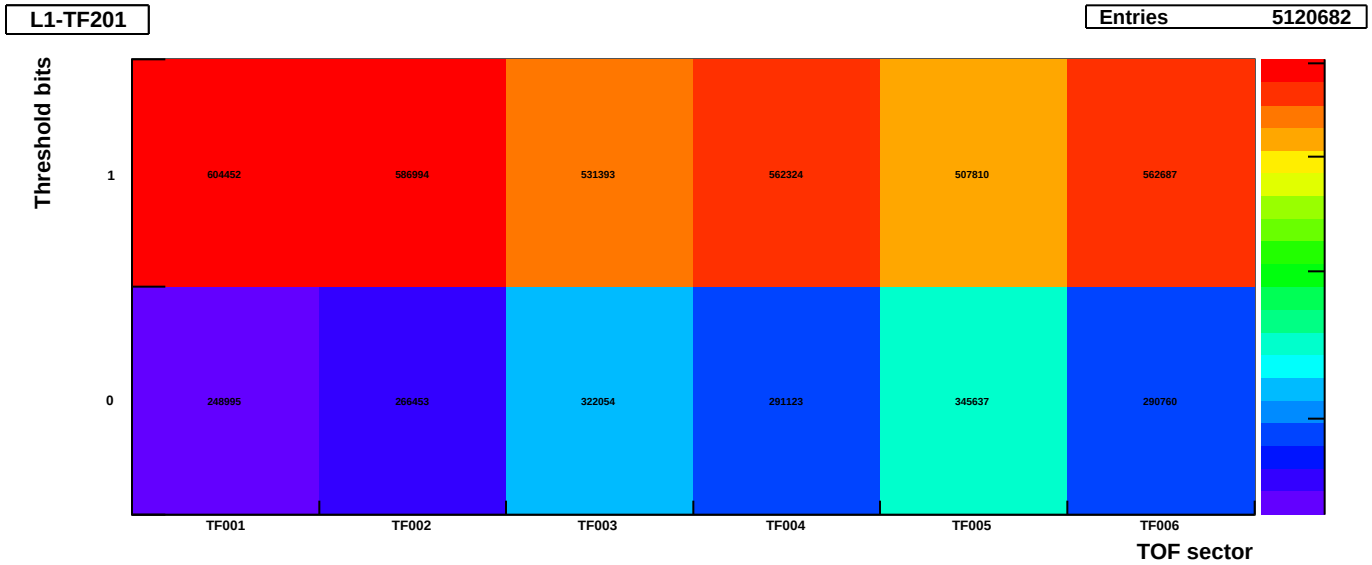

MIX-TF004
Entries 3.584478e+07
TOF MULT
TOF tray

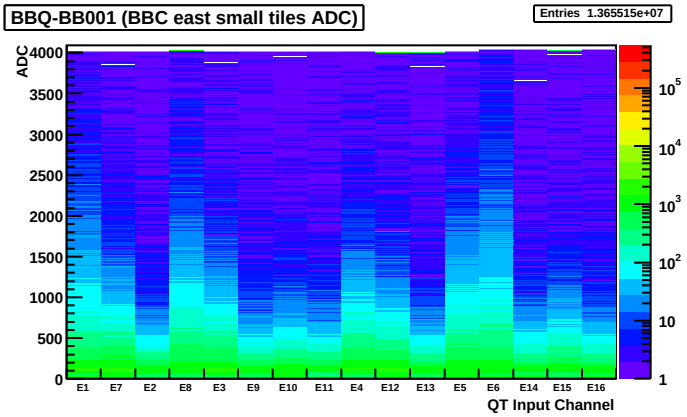

MIX-TF005
Entries 3.584478e+07
TOF MULT
TOF tray

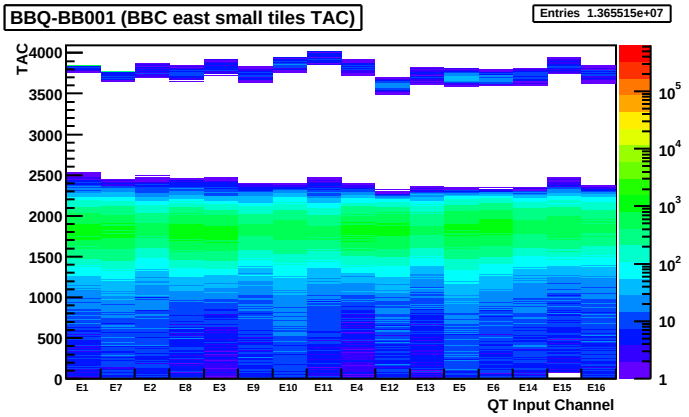

MIX-TF006
Entries 3.584478e+07
TOF MULT
TOF tray

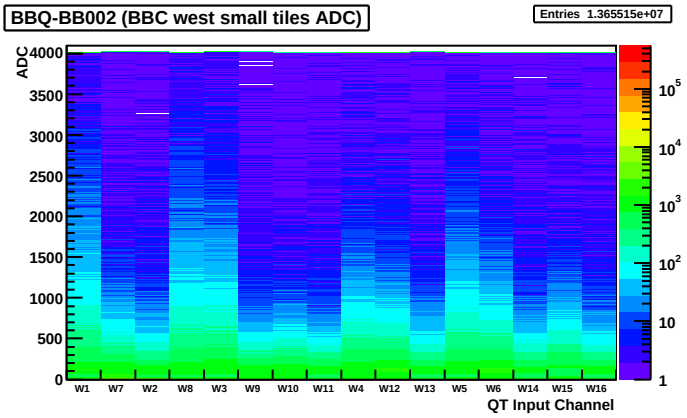

MIX-TF101
Entries 5120682
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

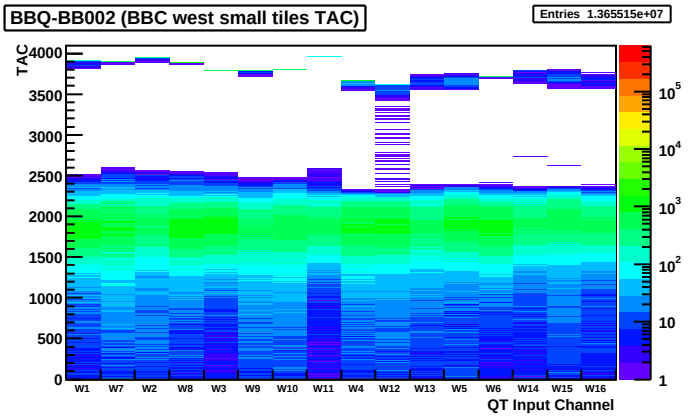

L1-TF201
Entries 853447
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

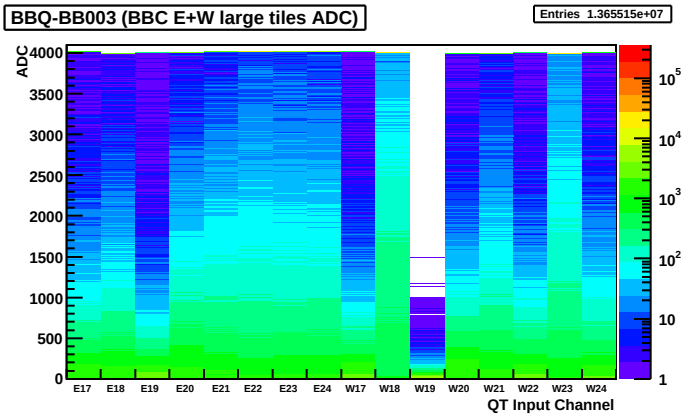

L1-TF201
Entries 5120682
Threshold bits
1
0
604452
586994
531393
562324
507810
562687
248995
266453
322054
291123
345637
290760
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

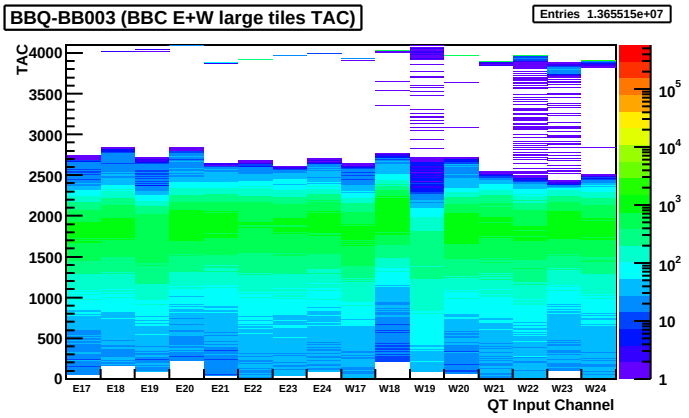

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.365515e+07
ADC
QT Input Channel

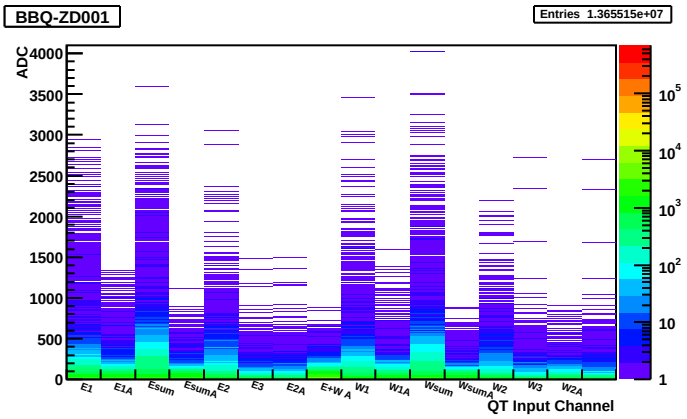

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.365515e+07
TAC
QT Input Channel

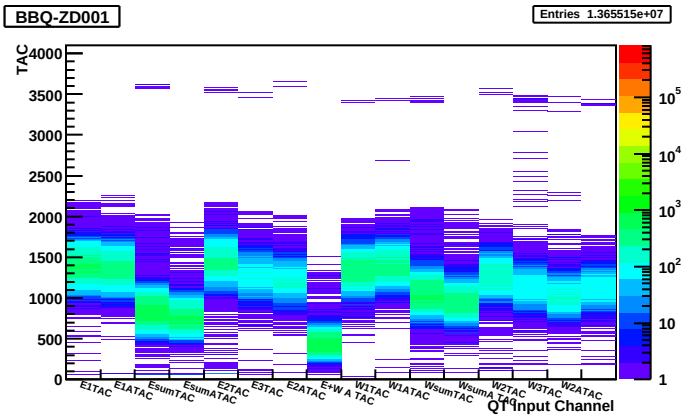

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.365515e+07
ADC
QT Input Channel

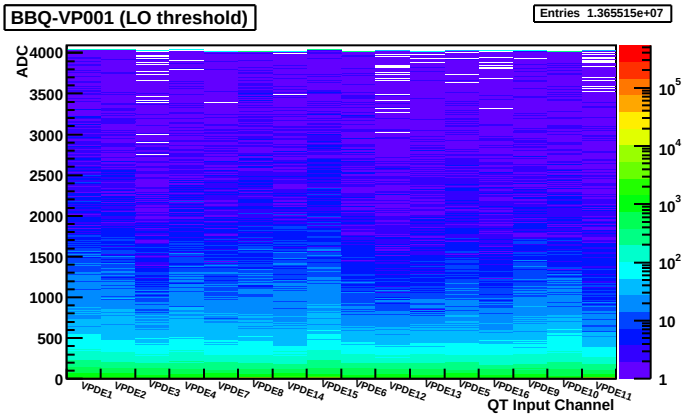

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.365515e+07
TAC
QT Input Channel

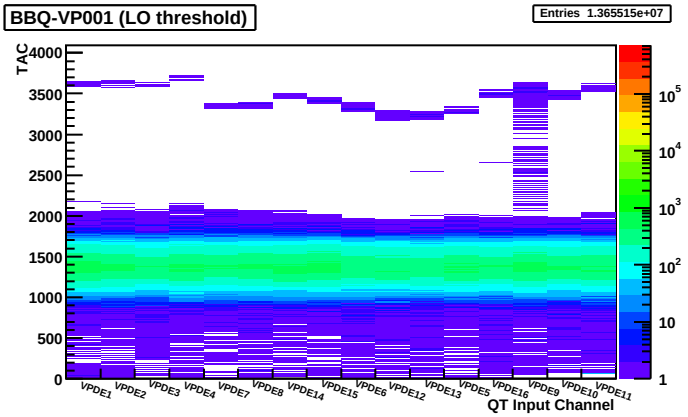

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.365515e+07
ADC
QT Input Channel

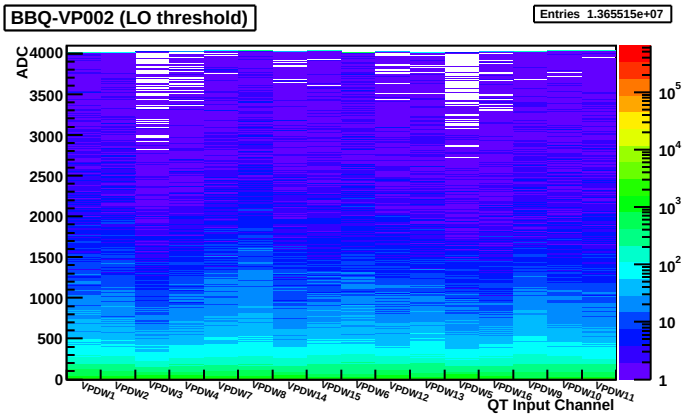

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.365515e+07
TAC
QT Input Channel

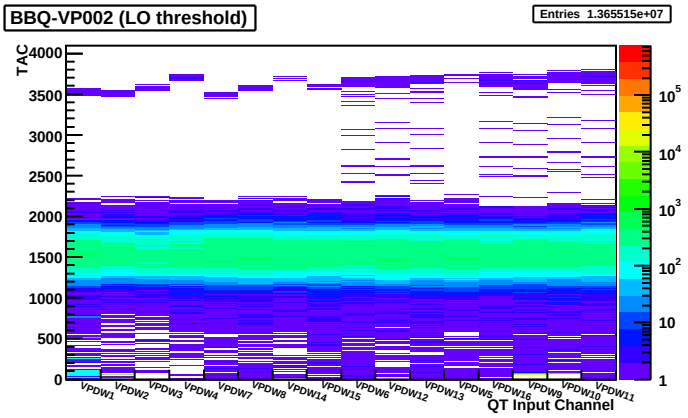

BBQ-ZD001
Entries 1.365515e+07
ADC
QT Input Channel

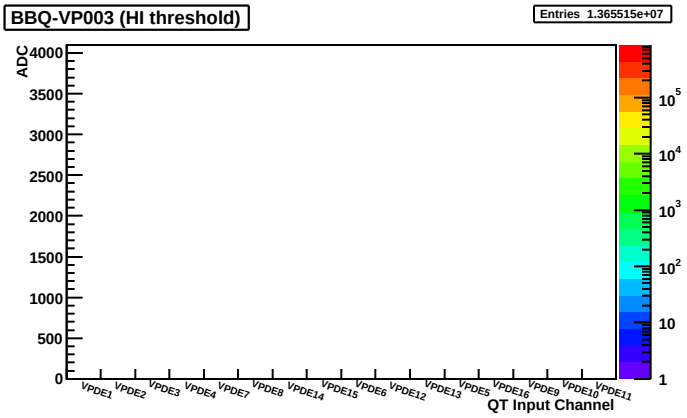

BBQ-ZD001
Entries 1.365515e+07
TAC
QT Input Channel

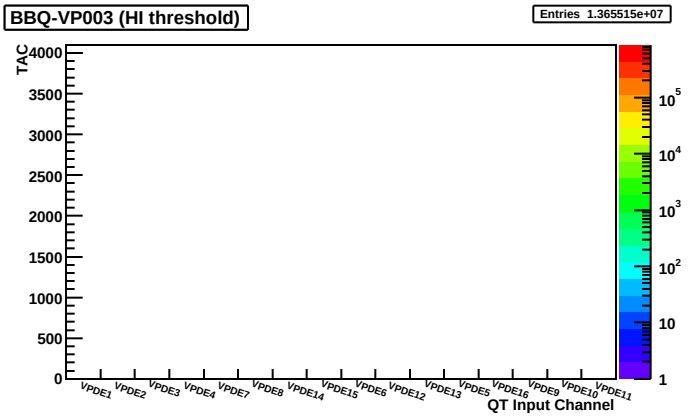

BBQ-VP001 (LO threshold)
Entries 1.365515e+07
ADC
QT Input Channel

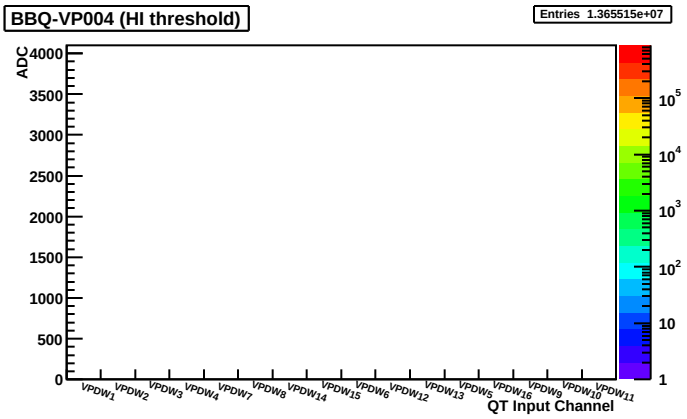

BBQ-VP001 (LO threshold)
Entries 1.365515e+07
TAC
QT Input Channel

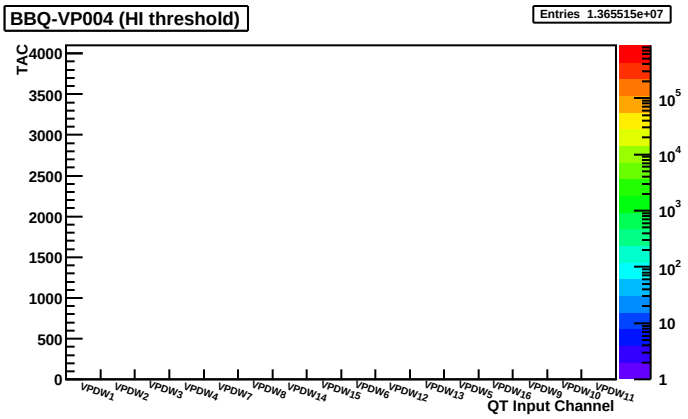

BBQ-VP002 (LO threshold)
Entries 1.365515e+07
ADC
QT Input Channel

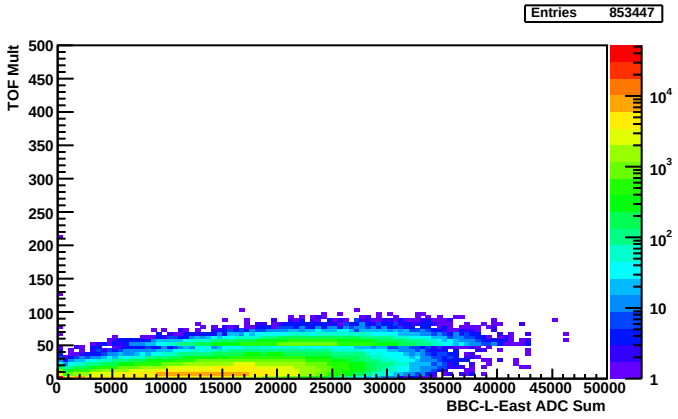

BBQ-VP002 (LO threshold)
Entries 1.365515e+07
TAC
QT Input Channel

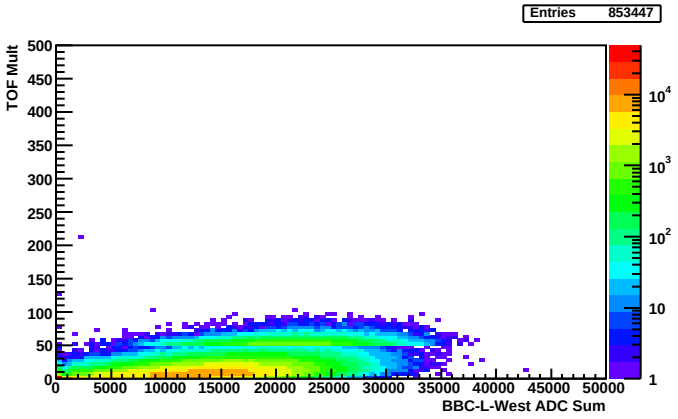

BBQ-VP003 (HI threshold)
Entries 1.365515e+07
ADC
QT Input Channel

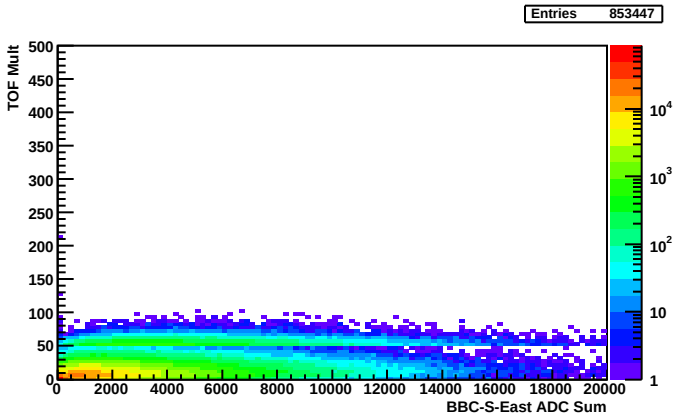

BBQ-VP003 (HI threshold)
Entries 1.365515e+07
TAC
QT Input Channel

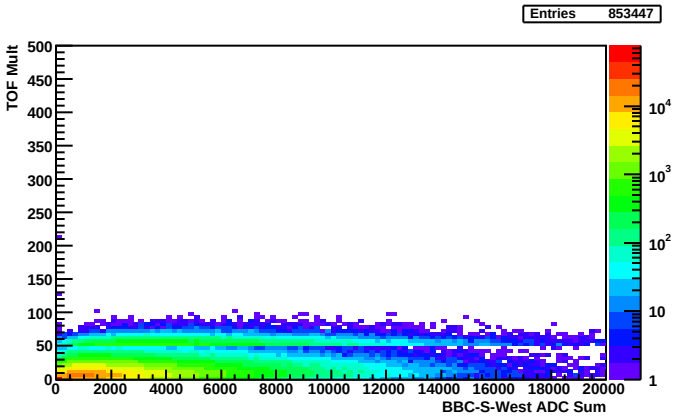

BBQ-VP004 (HI threshold)
Entries 1.365515e+07
ADC
QT Input Channel

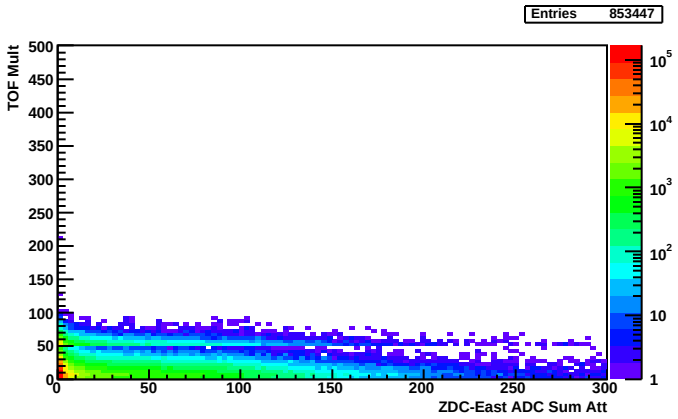

BBQ-VP004 (HI threshold)
Entries 1.365515e+07
TAC
QT Input Channel

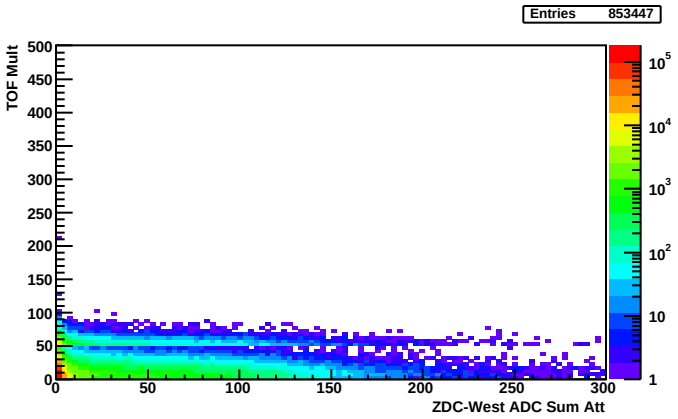

Entries 853447
TOF Mult
BBC-L-East ADC Sum

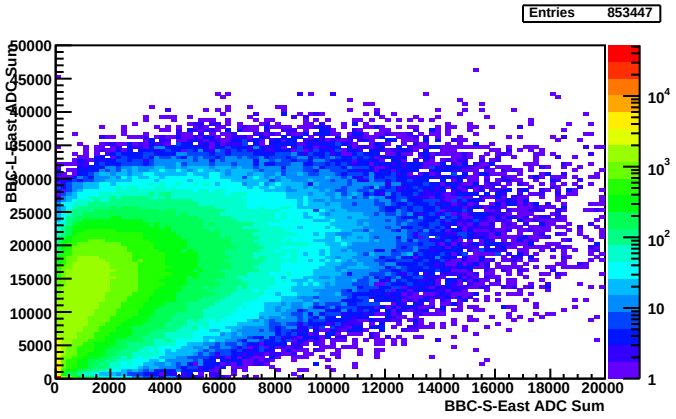

Entries 853447
TOF Mult
BBC-L-West ADC Sum

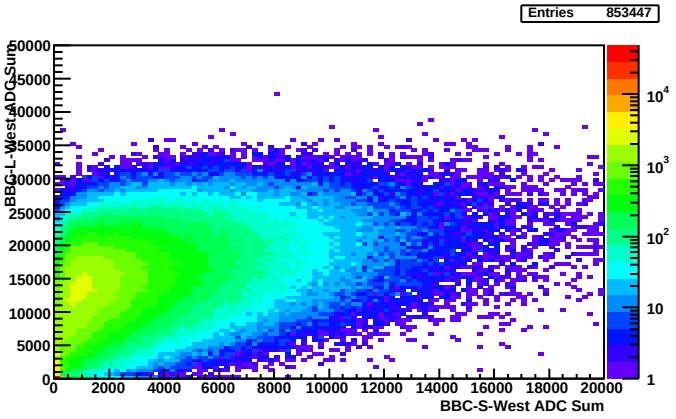

Entries 853447
TOF Mult
BBC-S-East ADC Sum

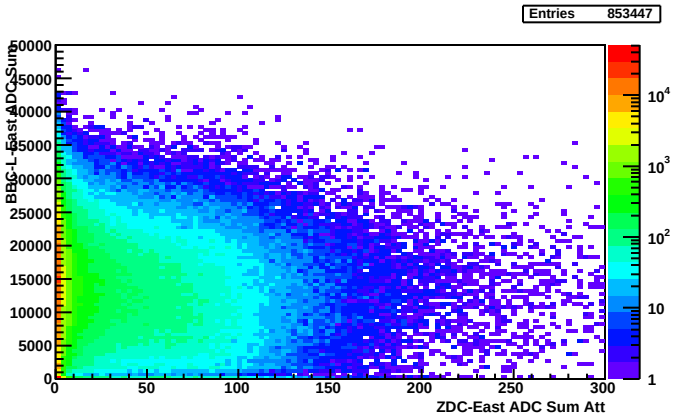

Entries 853447
TOF Mult
BBC-S-West ADC Sum

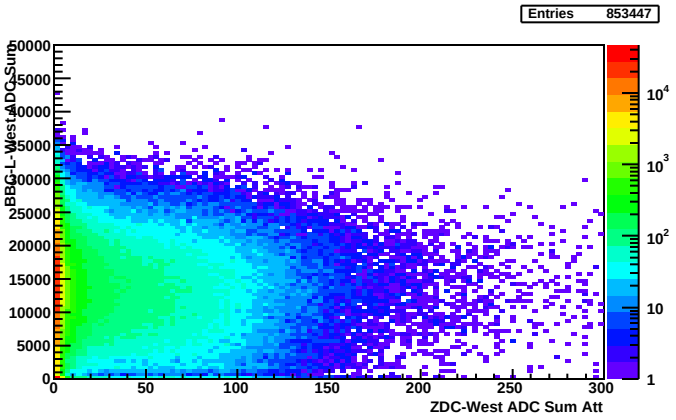

Entries 853447
TOF Mult
ZDC-East ADC Sum Att

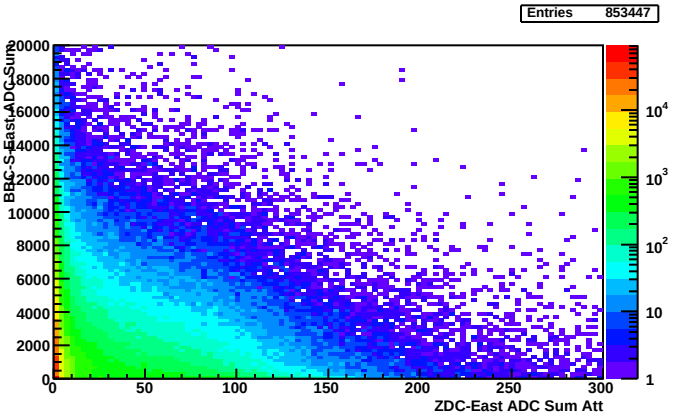

Entries 853447
TOF Mult
ZDC-West ADC Sum Att

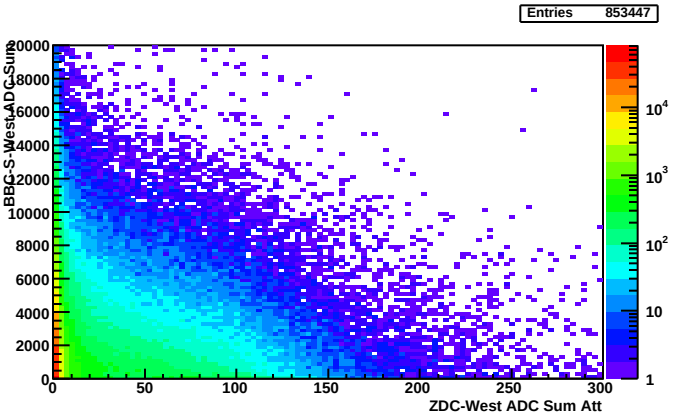

Entries 853447
BBC-L-East ADC Sum
BBC-S-East ADC Sum

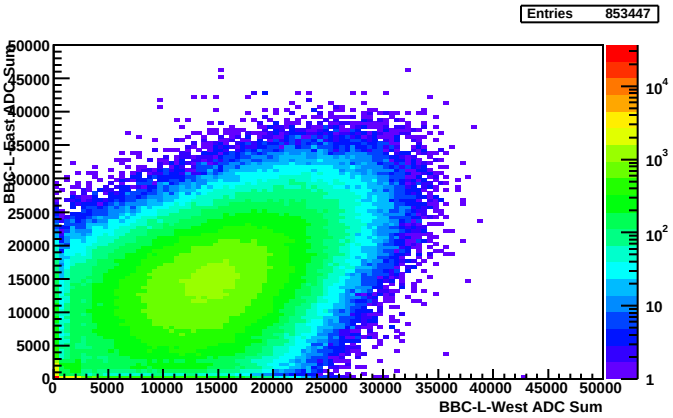

Entries 853447
BBC-L-West ADC Sum
BBC-S-West ADC Sum

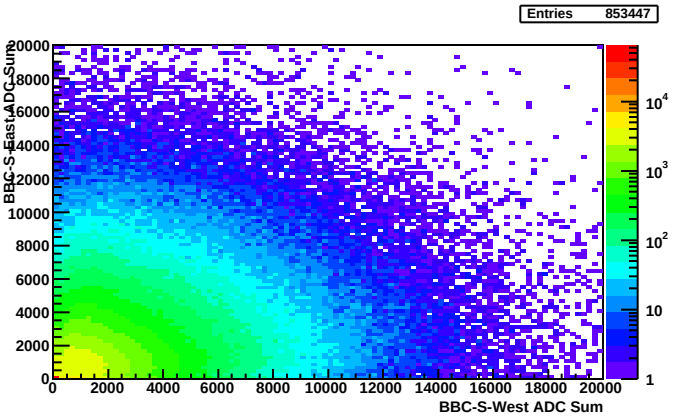

Entries 853447
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

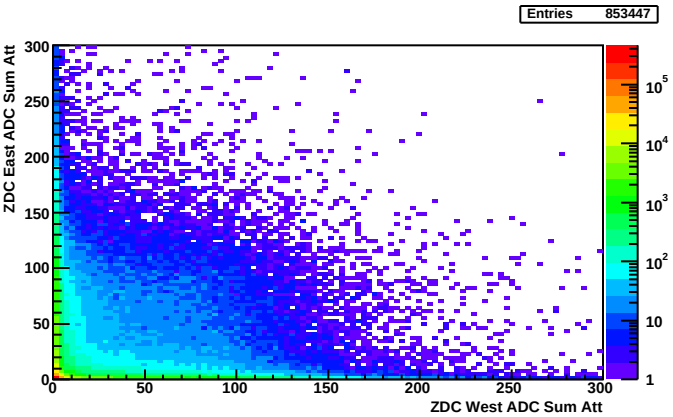

Entries 853447
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

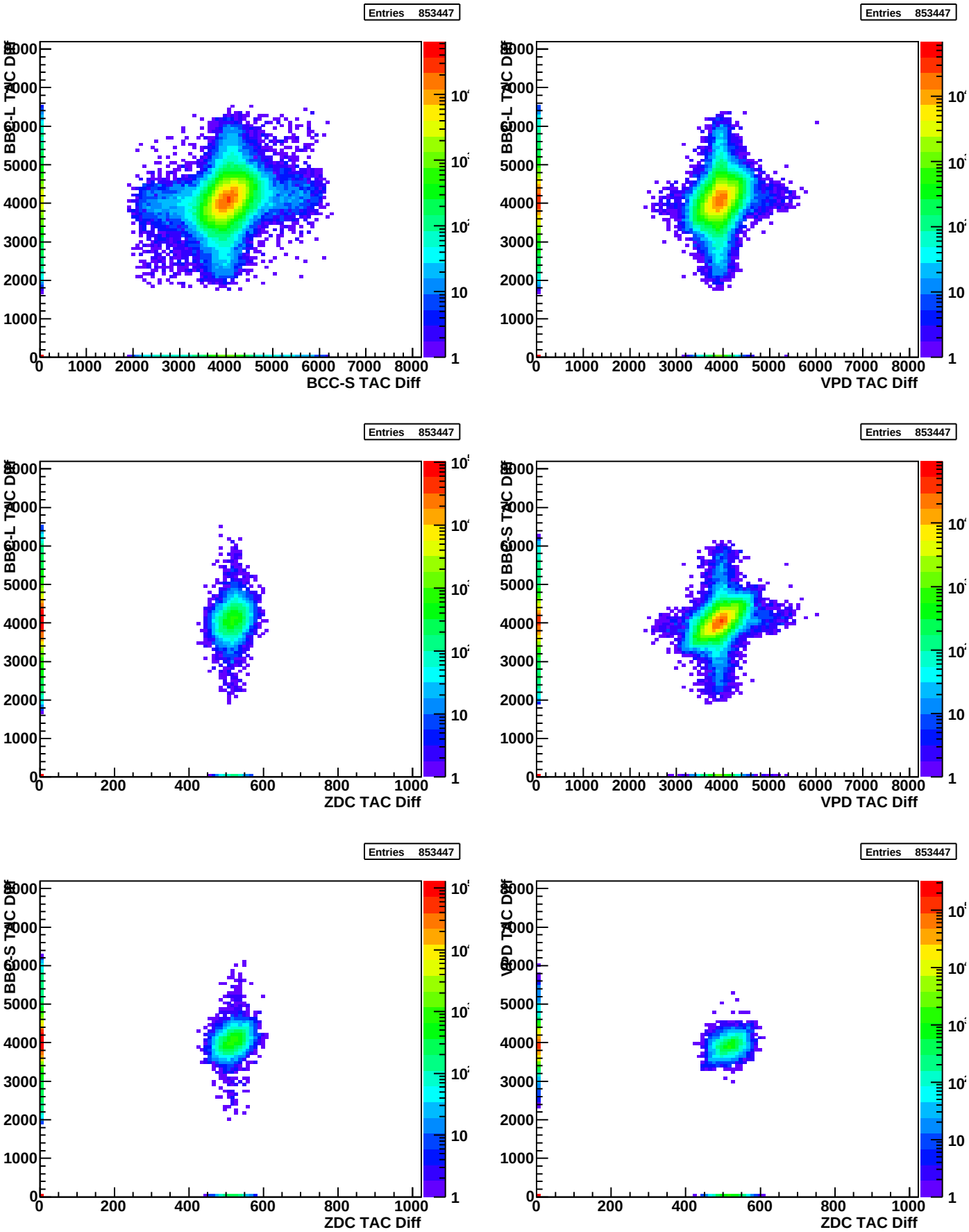

Entries 853447
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

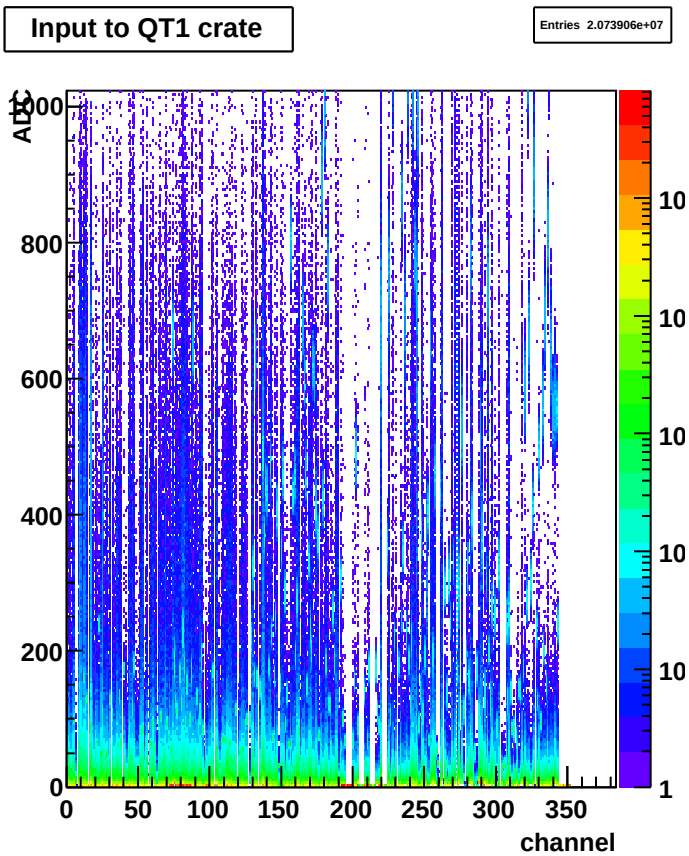

Entries 853447
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

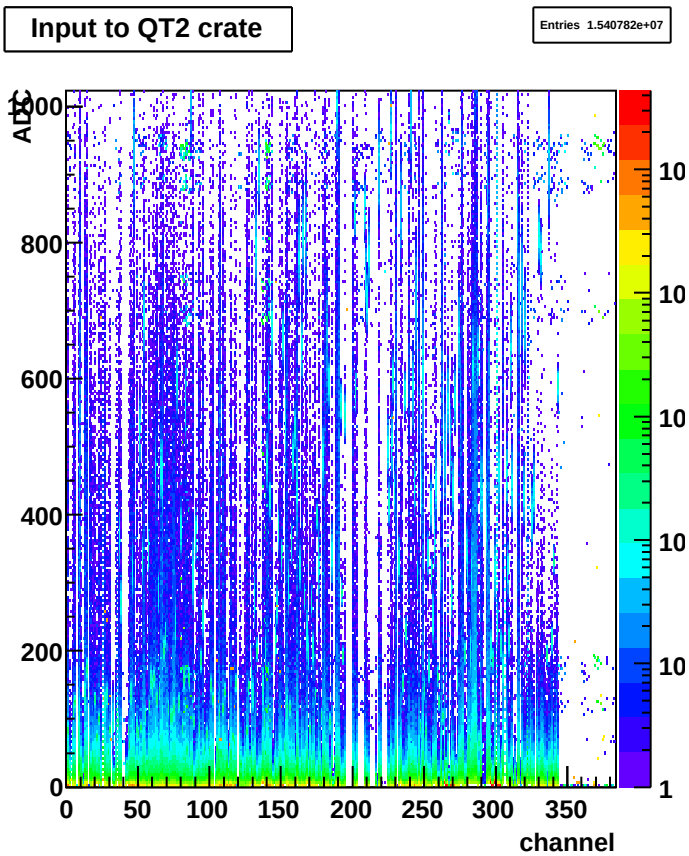

Entries 853447
BBC-L-East ADC Sum
BBC-L-West ADC Sum

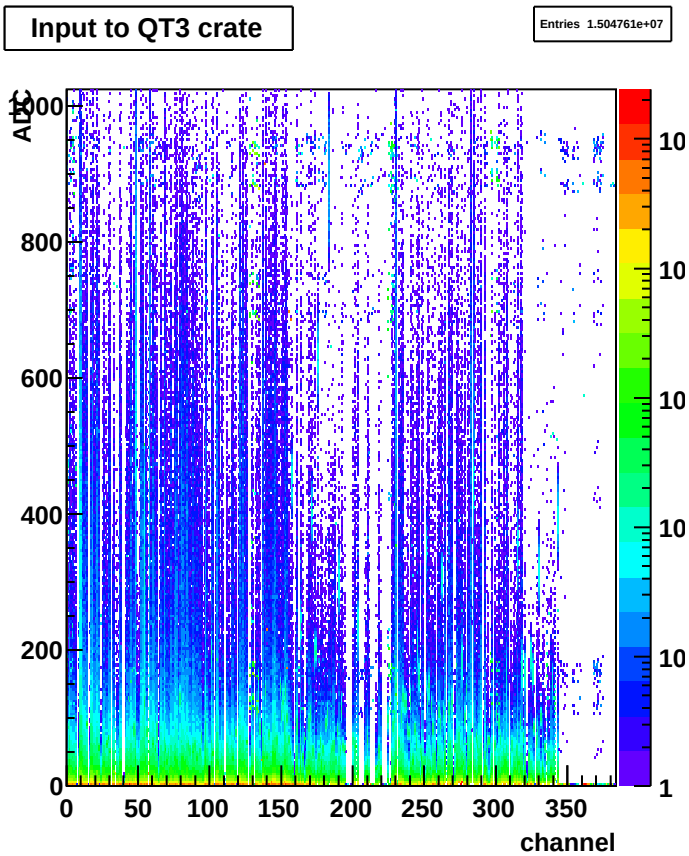

Entries 853447
BBC-S-East ADC Sum
BBC-S-West ADC Sum

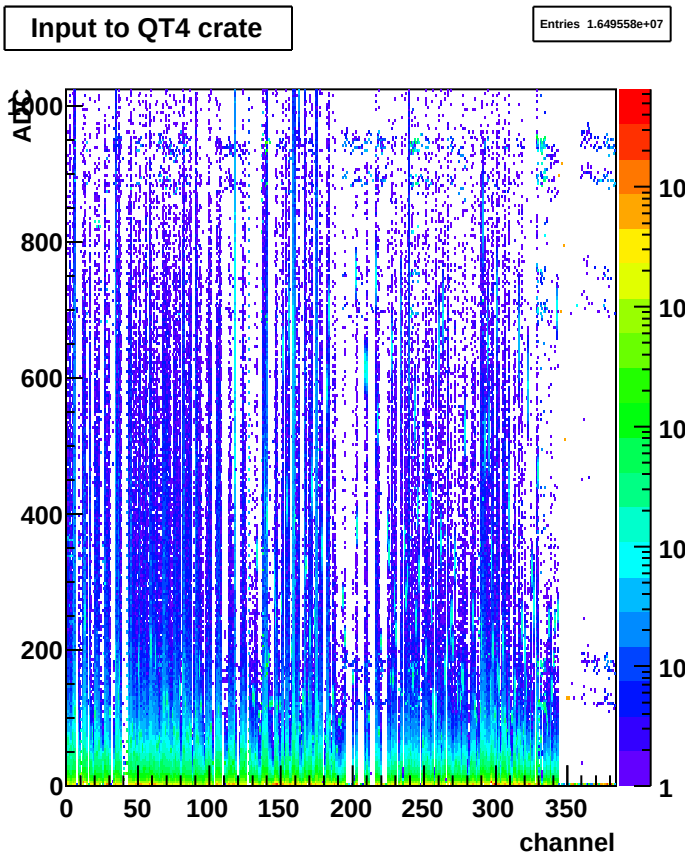

Entries 853447
ZDC East ADC Sum Att
ZDC West ADC Sum Att

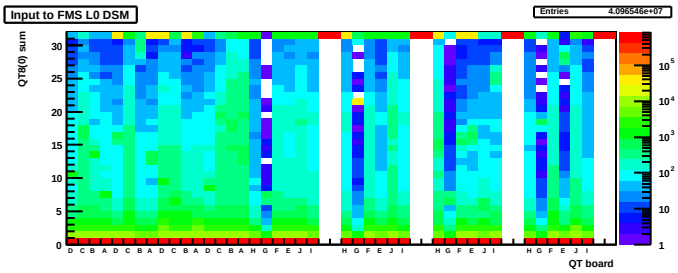

Entries 853447
BBC-L TAC Diff
BCC-S TAC Diff
Entries 853447
BBC-L TAC Diff
VPD TAC Diff
Entries 853447
BBC-L TAC Diff
ZDC TAC Diff
Entries 853447
BBC-S TAC Diff
VPD TAC Diff
Entries 853447
BBC-S TAC Diff
ZDC TAC Diff
Entries 853447
VPD TAC Diff
ZDC TAC Diff

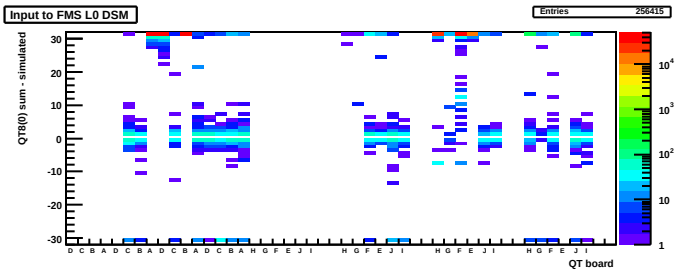

Input to QT1 crate
Entries 2.073906e+07
ADC
channel

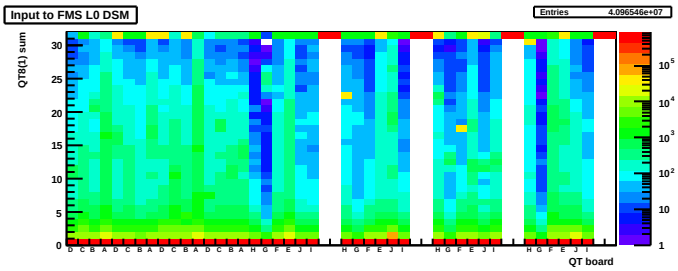

Input to QT2 crate
Entries 1.540782e+07
ADC
channel

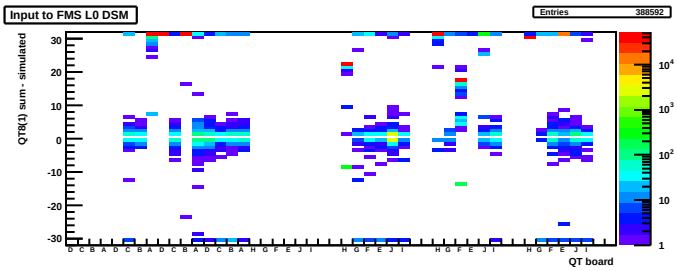

Input to QT3 crate
Entries 1.504761e+07
ADC
channel

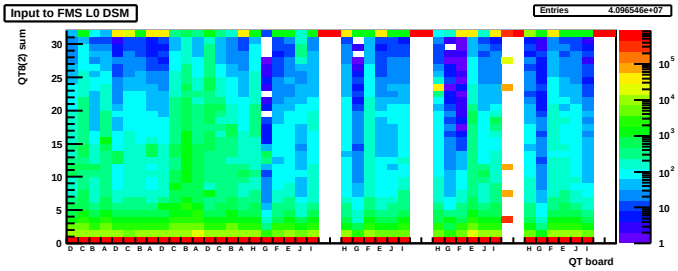

Input to QT4 crate
Entries 1.649558e+07
ADC
channel

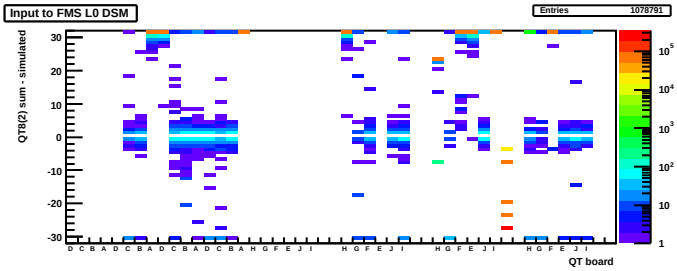

Input to FMS L0 DSM
Entries 4.096546e+07
QT8(0) sum
QT board

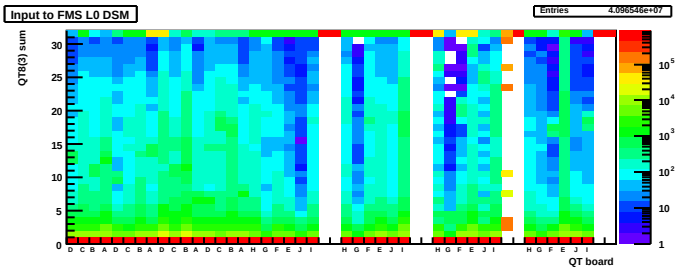

Input to FMS L0 DSM
Entries 256415
QT8(0) sum - simulated
QT board

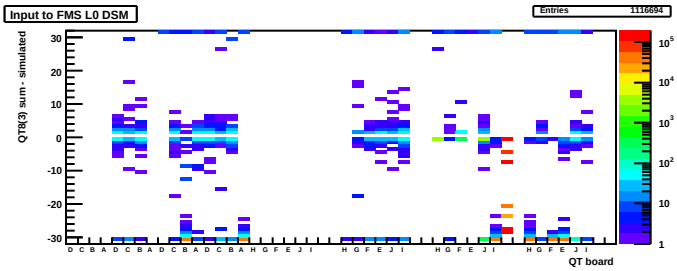

Input to FMS L0 DSM
Entries 4.096546e+07
QT8(1) sum
QT board

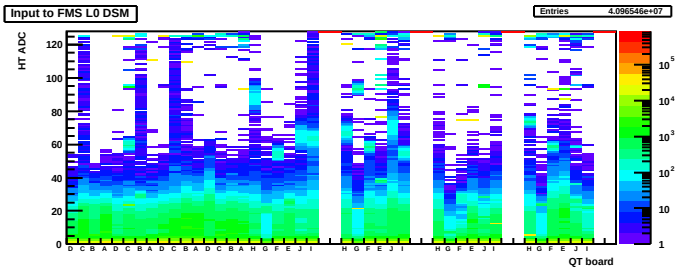

Input to FMS L0 DSM
Entries 388592
QT8(1) sum - simulated
QT board

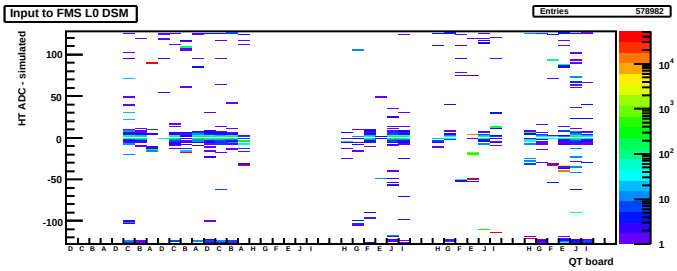

Input to FMS L0 DSM
Entries 4.096546e+07
QT8(2) sum
QT board

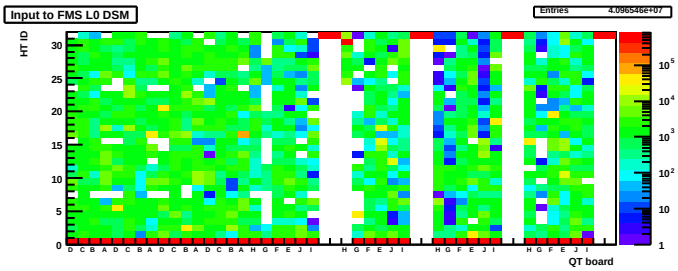

Input to FMS L0 DSM
Entries 1078791
QT8(2) sum - simulated
QT board

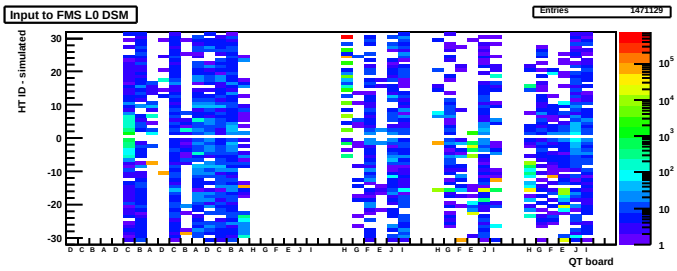

Input to FMS L0 DSM
Entries 4.096546e+07
QT8(3) sum
QT board

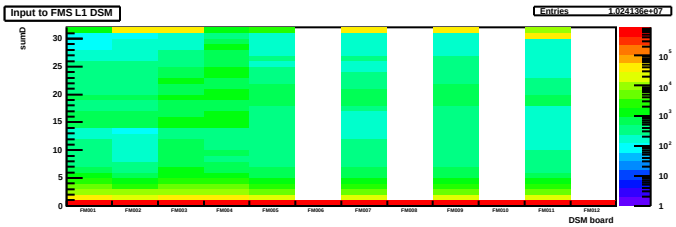

Input to FMS L0 DSM
Entries 1116694
QT8(3) sum - simulated
QT board

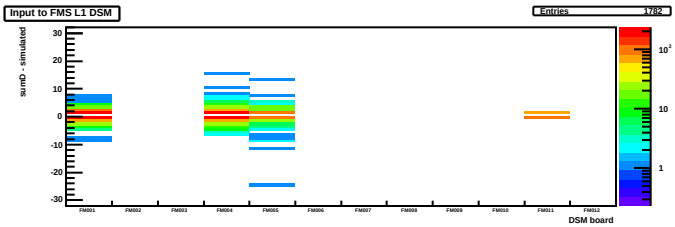

Input to FMS L0 DSM
Entries 4.096546e+07
HT ADC
QT board

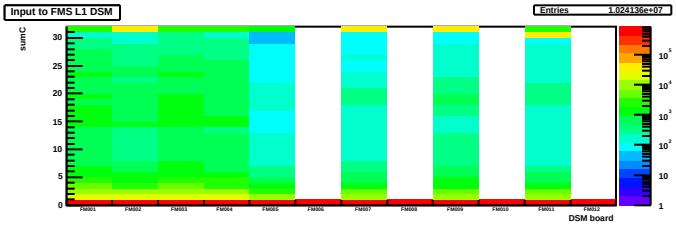

Input to FMS L0 DSM
Entries 578982
HT ADC - simulated
QT board

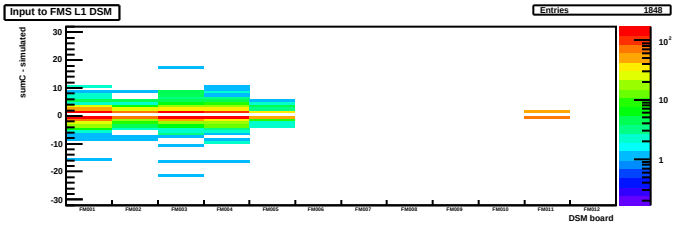

Input to FMS L0 DSM
Entries 4.096546e+07
HT ID
QT board

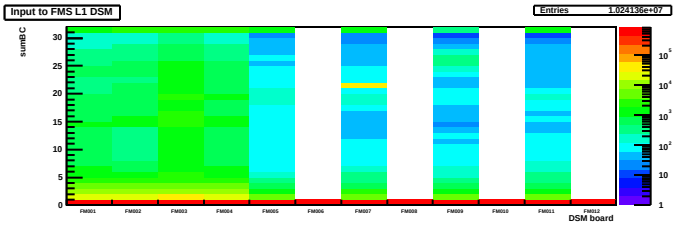

Input to FMS L0 DSM
Entries 1471129
HT ID - simulated
QT board

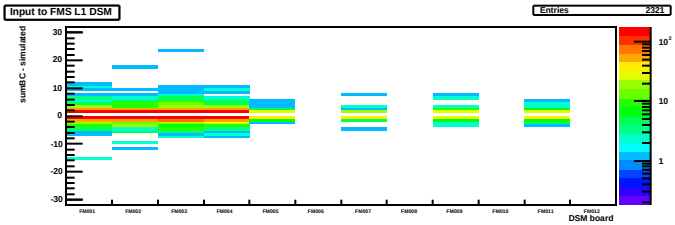

Input to FMS L1 DSM
Entries 1.024136e+07
sumD
DSM board

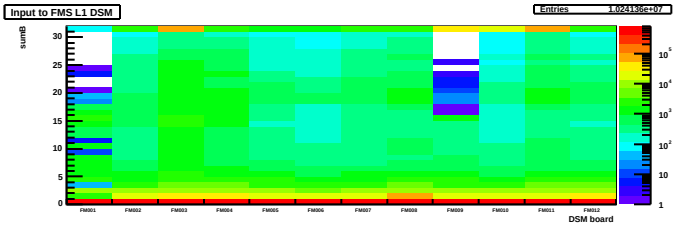

Input to FMS L1 DSM
Entries 1782
sumD - simulated
DSM board

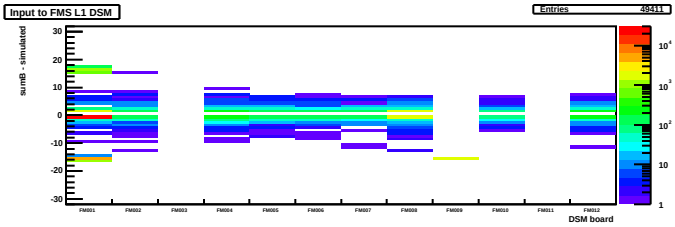

Input to FMS L1 DSM
Entries 1.024136e+07
sumC
DSM board

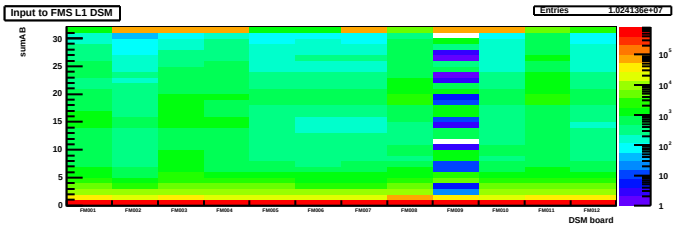

Input to FMS L1 DSM
Entries 1848
sumC - simulated
DSM board

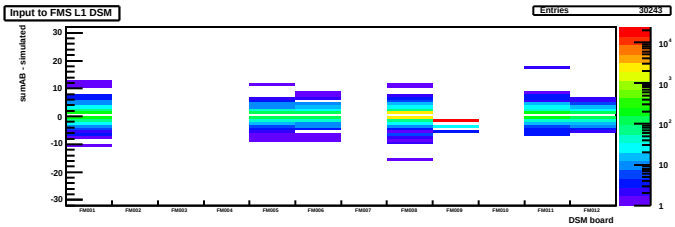

Input to FMS L1 DSM
Entries 1.024136e+07
sumBC
DSM board

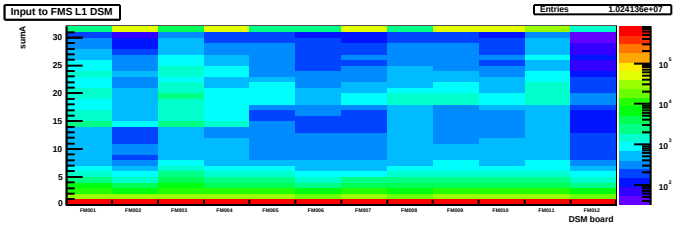

Input to FMS L1 DSM
Entries 2321
sumBC - simulated
DSM board

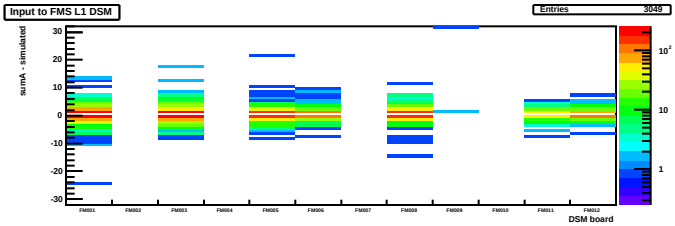

Input to FMS L1 DSM
Entries 1.024136e+07
sumB
DSM board

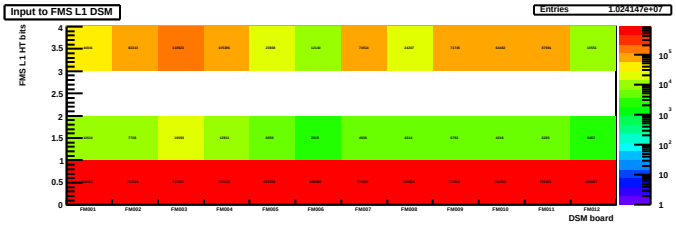

Input to FMS L1 DSM
Entries 49411
sumB - simulated
DSM board

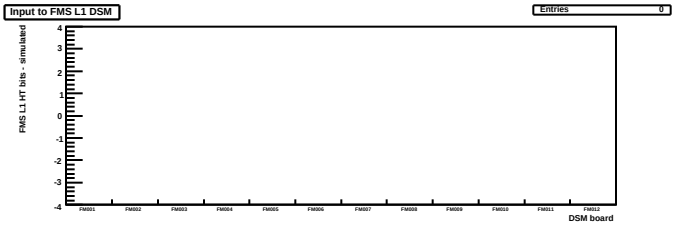

Input to FMS L1 DSM
Entries 1.024136e+07
sumAB
DSM board

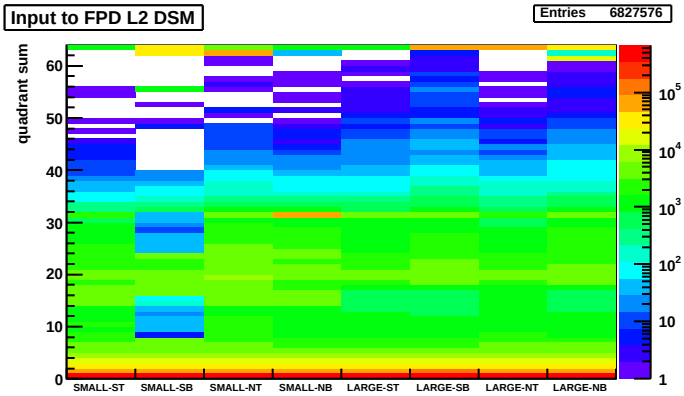

Input to FMS L1 DSM
Entries 30243
sumAB - simulated
DSM board

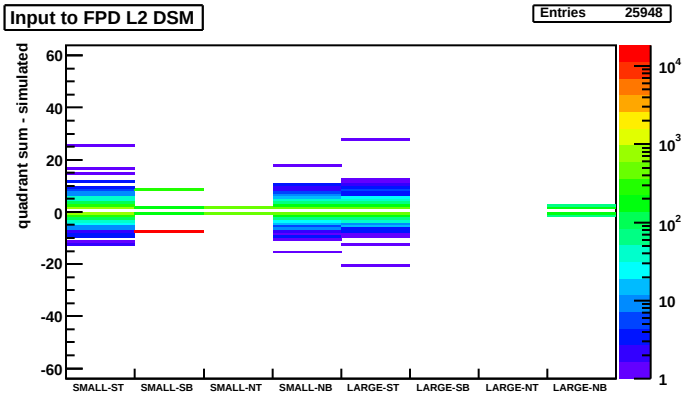

Input to FMS L1 DSM
Entries 1.024136e+07
sumA
DSM board

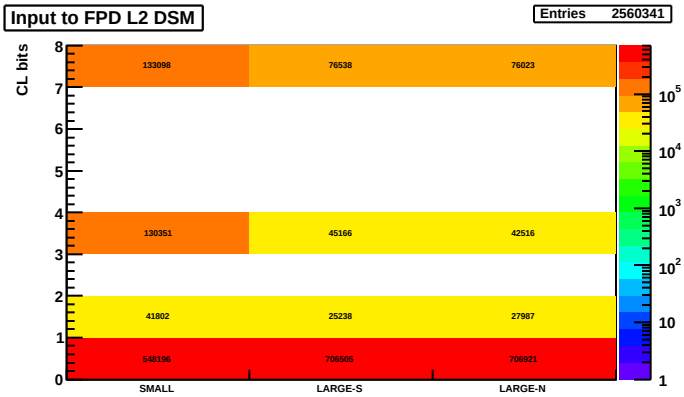

Input to FMS L1 DSM
Entries 3049
sumA - simulated
DSM board

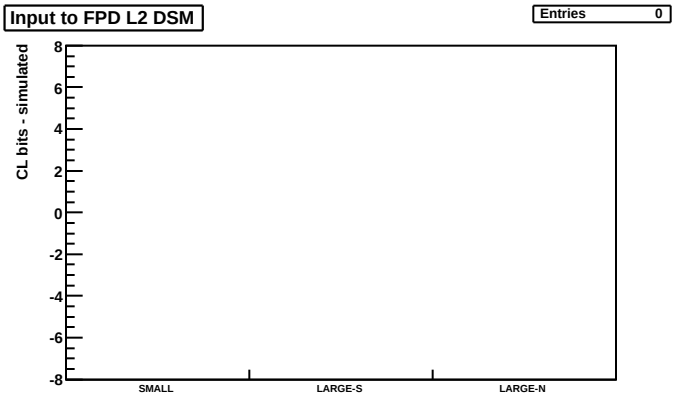

Input to FMS L1 DSM
Entries 1.024147e+07
FMS L1 HT bits
DSM board

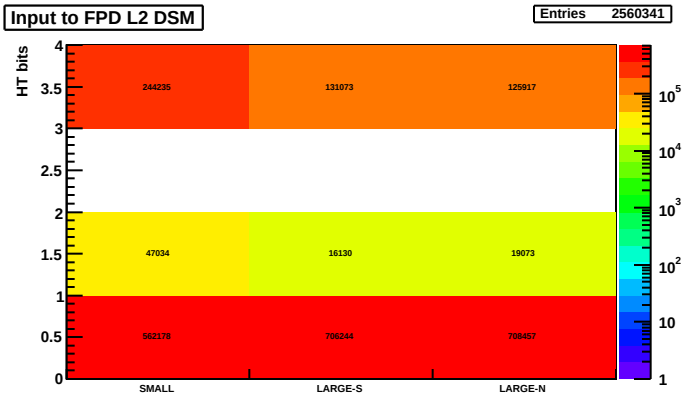

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

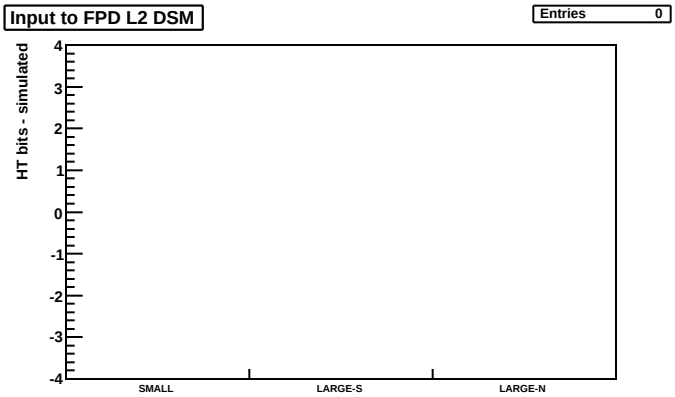

Input to FPD L2 DSM
Entries 6827576
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

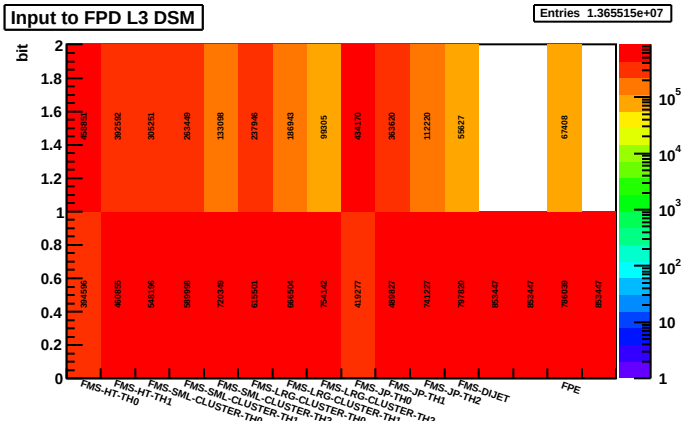

Input to FPD L2 DSM
Entries 25948
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

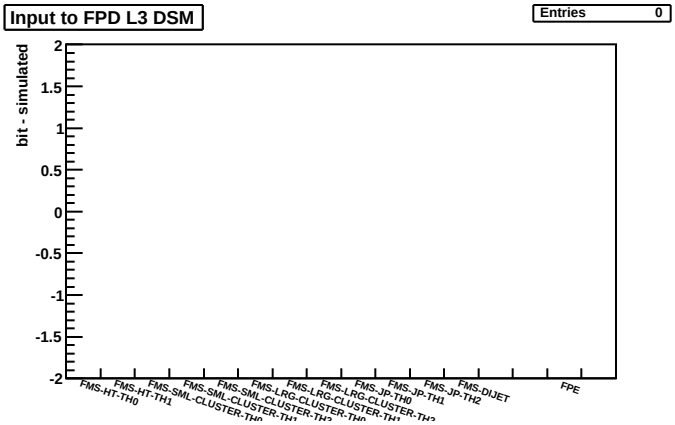

Input to FPD L2 DSM
Entries 2560341
CL bits
133098
76538
76023
130351
45166
42516
41802
25238
27987
548196
706505
706921
SMALL
LARGE-S
LARGE-N

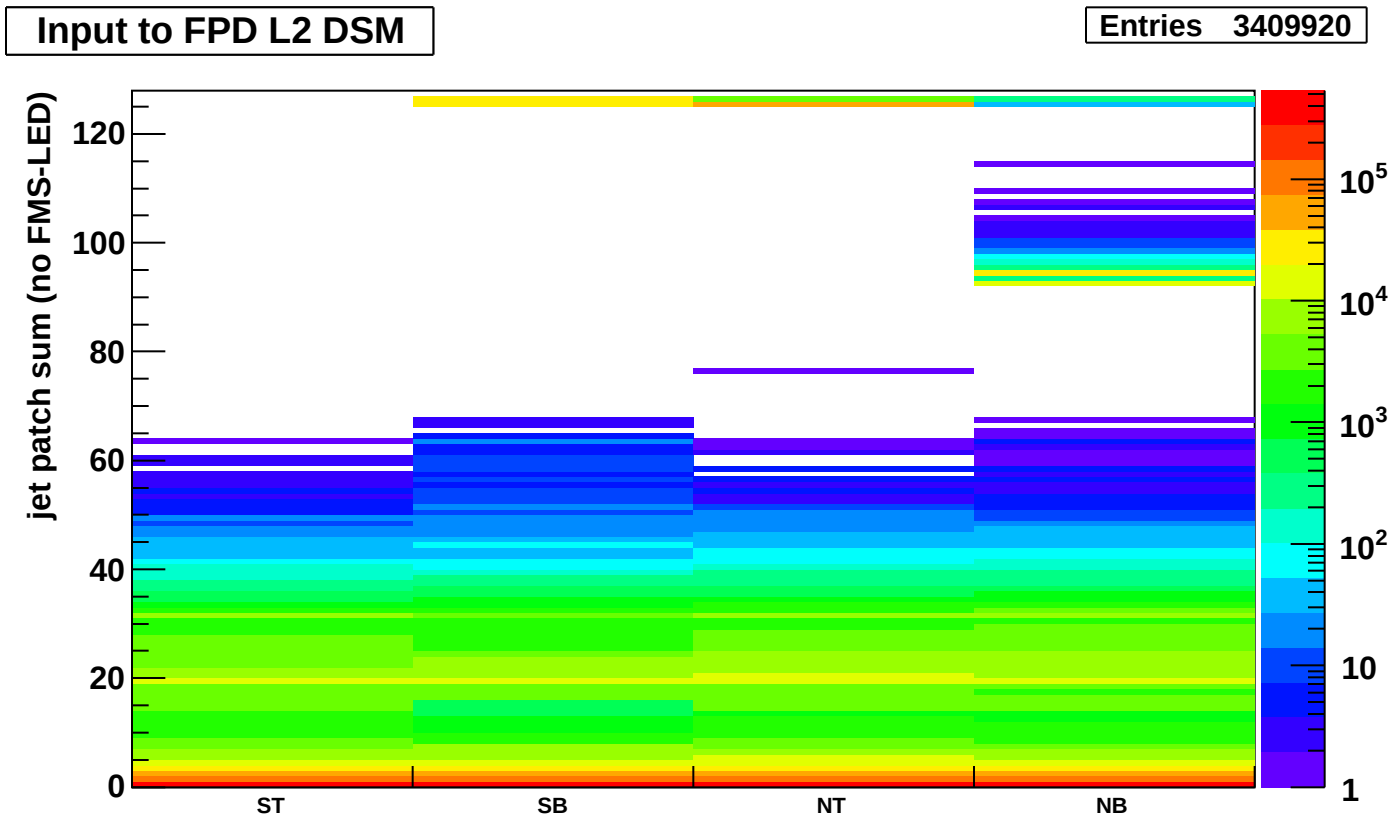

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

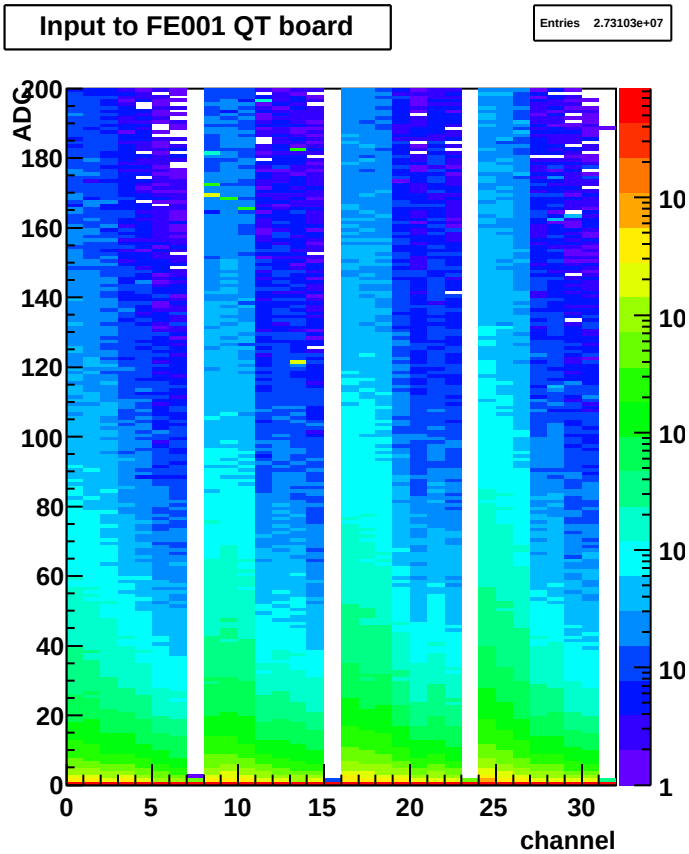

Input to FPD L2 DSM
Entries 2560341
HT bits
244235
131073
125917
47034
16130
19073
562178
706244
708457
SMALL
LARGE-S
LARGE-N

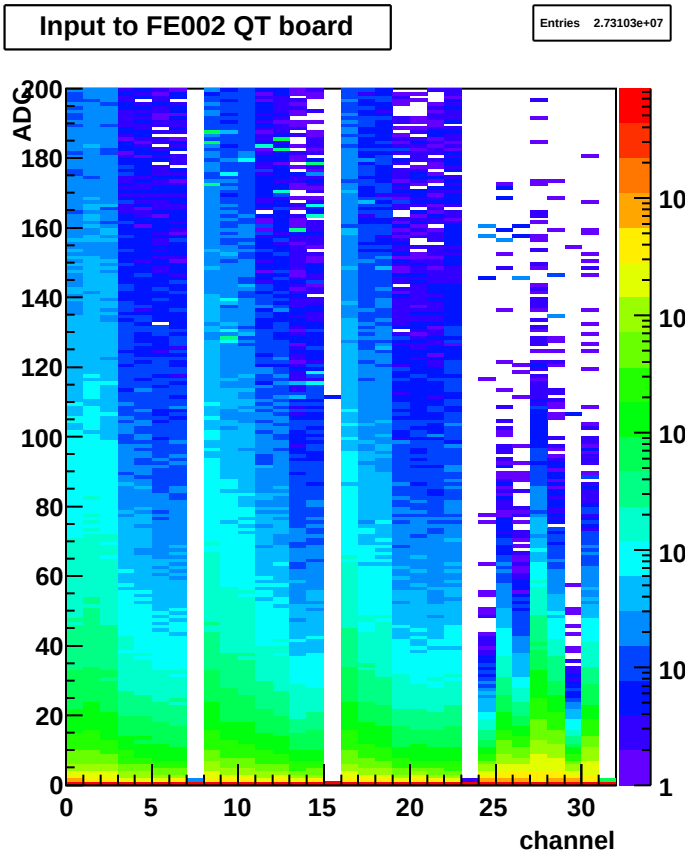

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

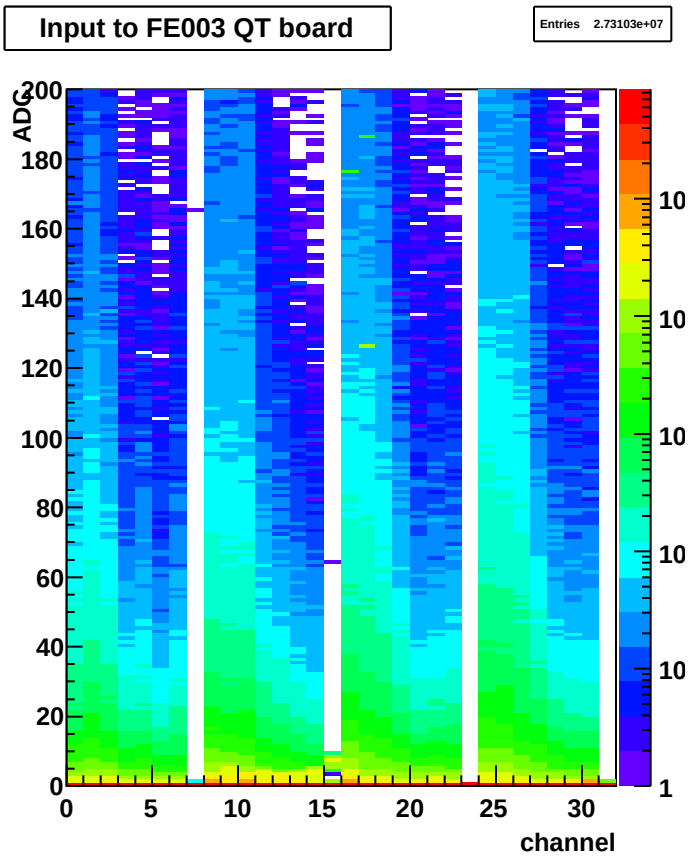

Input to FPD L3 DSM
Entries 1.365515e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

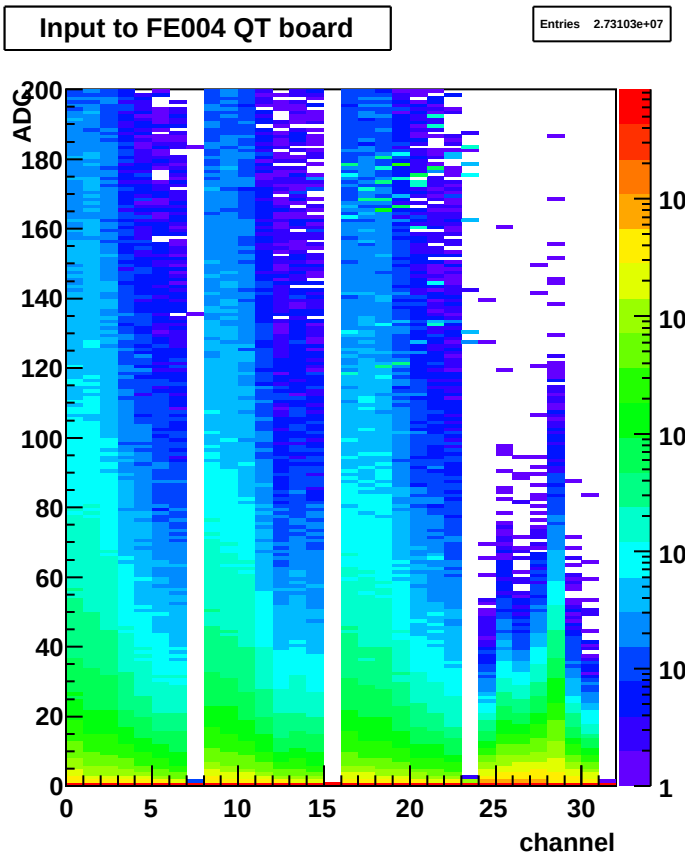

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

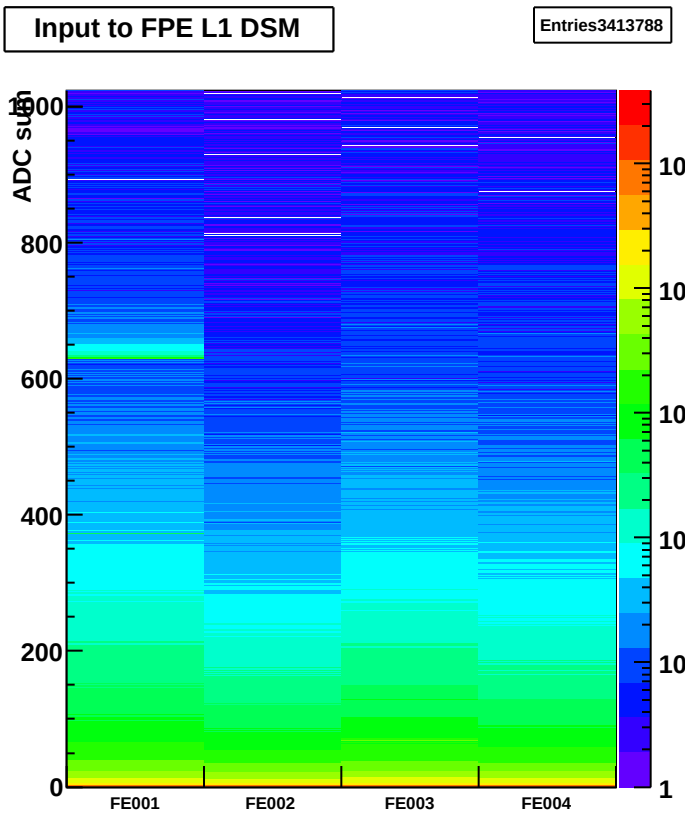

Input to FPD L2 DSM
Entries 3409920
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

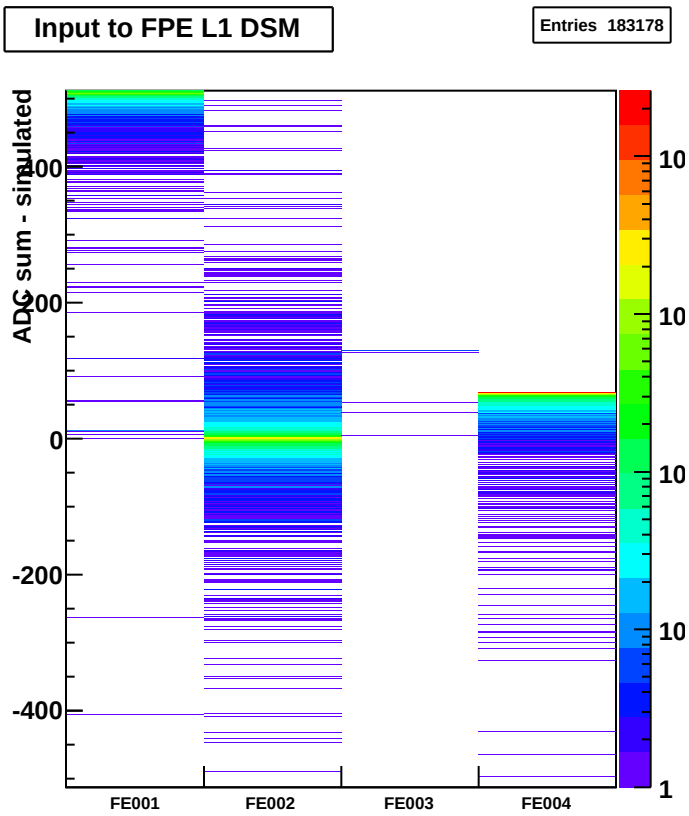

Input to FE001 QT board
Entries 2.73103e+07
ADC
channel

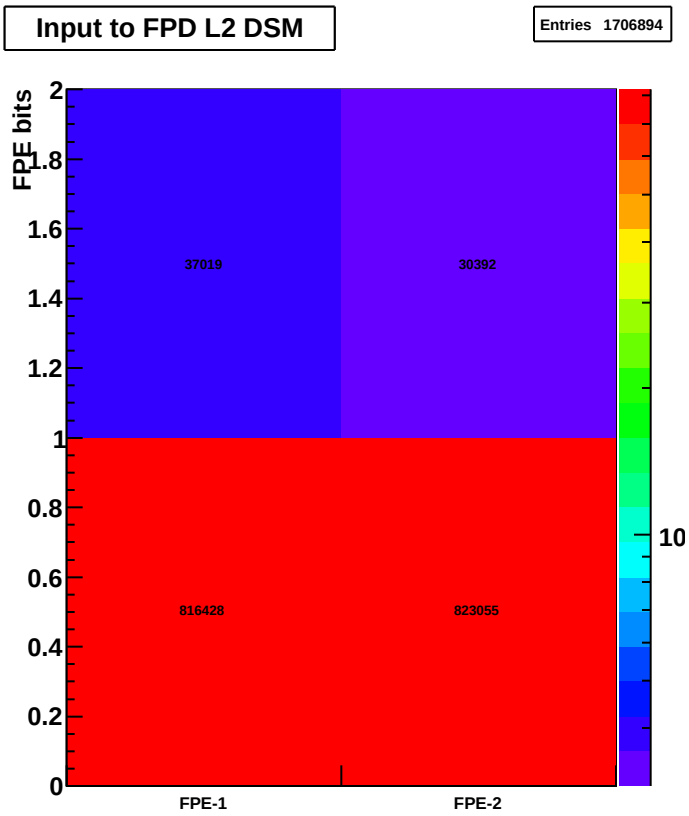

Input to FE002 QT board
Entries 2.73103e+07
ADC
channel

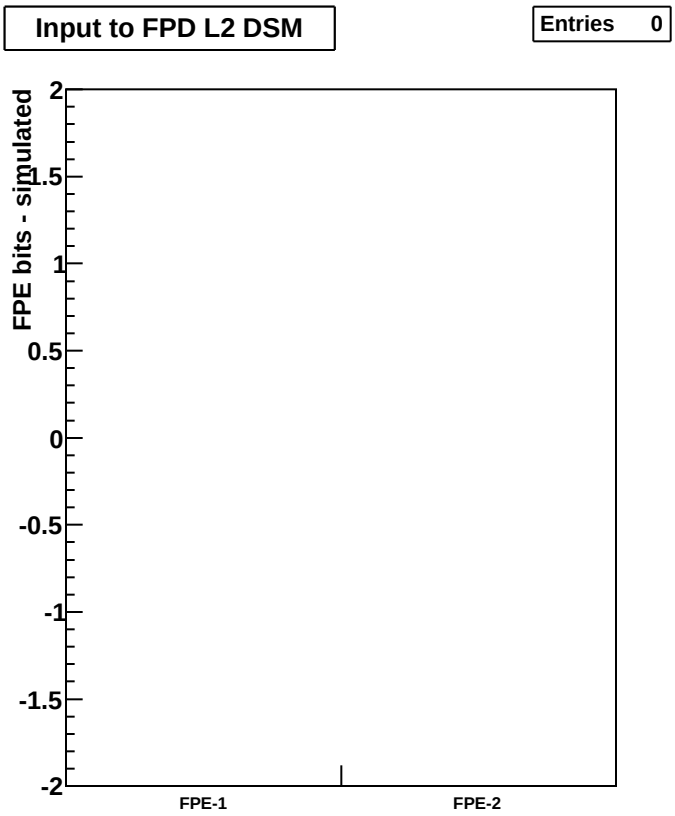

Input to FE003 QT board
Entries 2.73103e+07
ADC
channel


Input to FE004 QT board
Entries 2.73103e+07
ADC
channel


Input to FPE L1 DSM
Entries3413788
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 183178
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 1706894
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
37019
30392
816428
823055
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