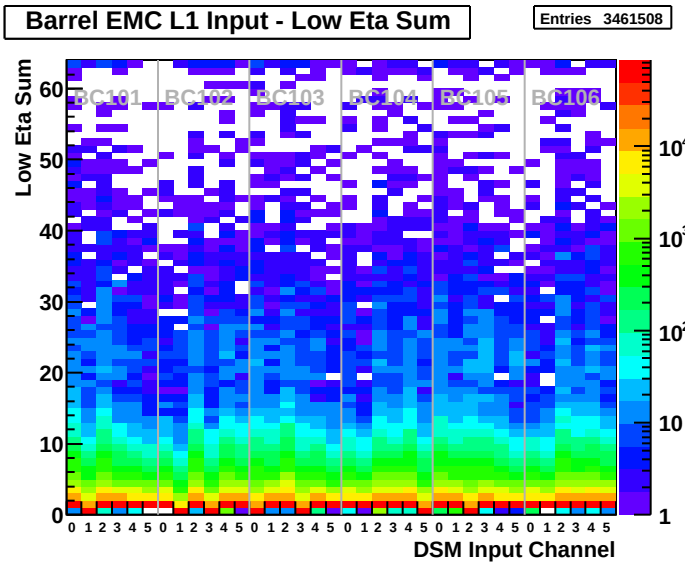
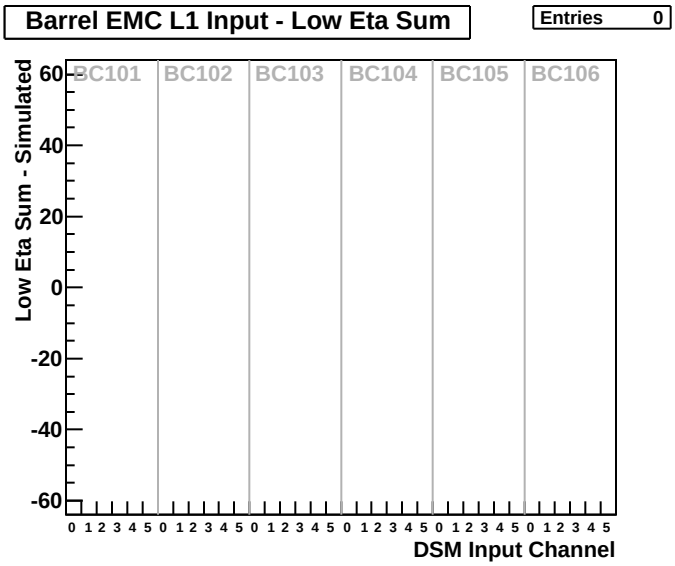
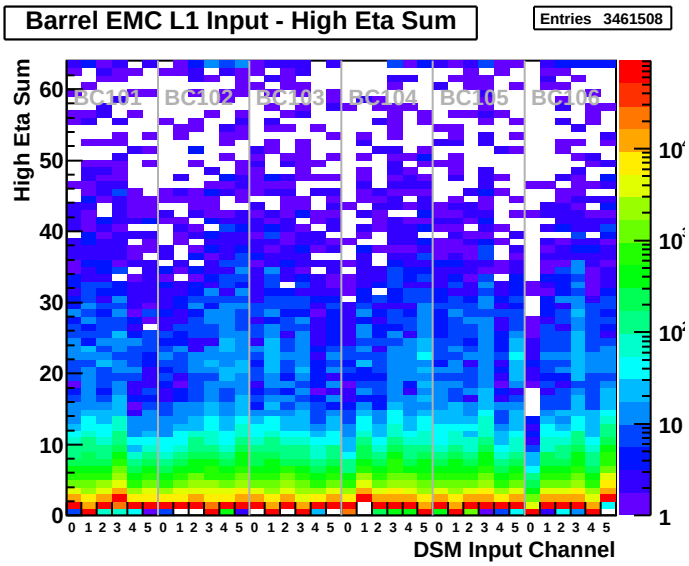
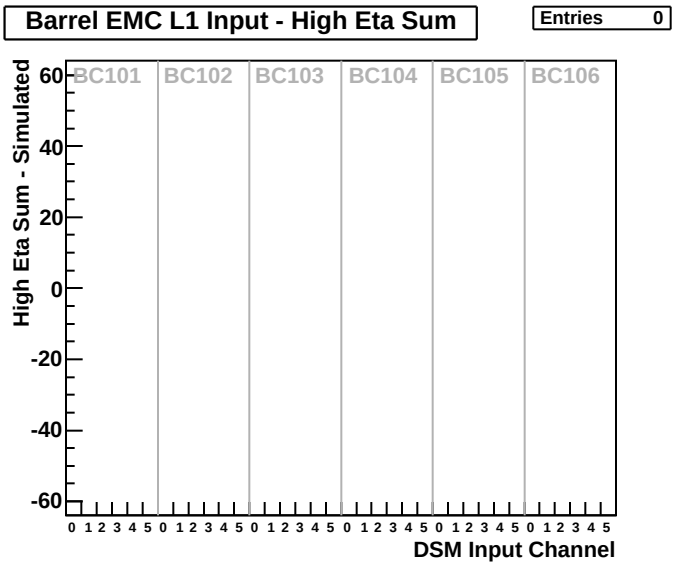
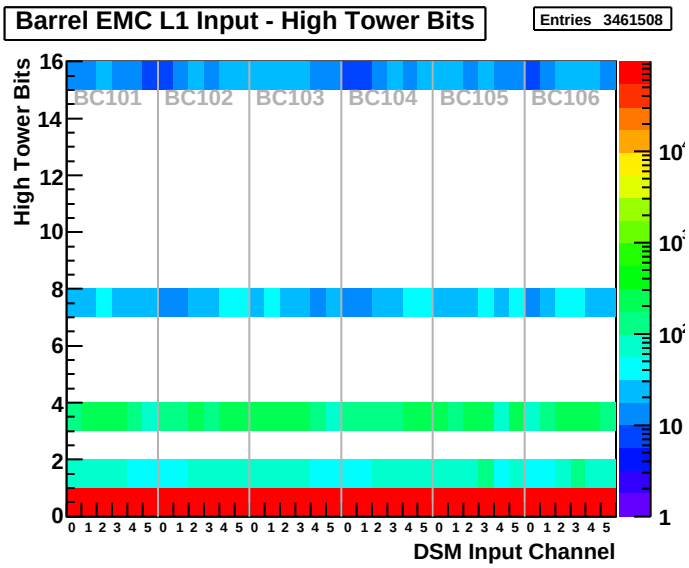
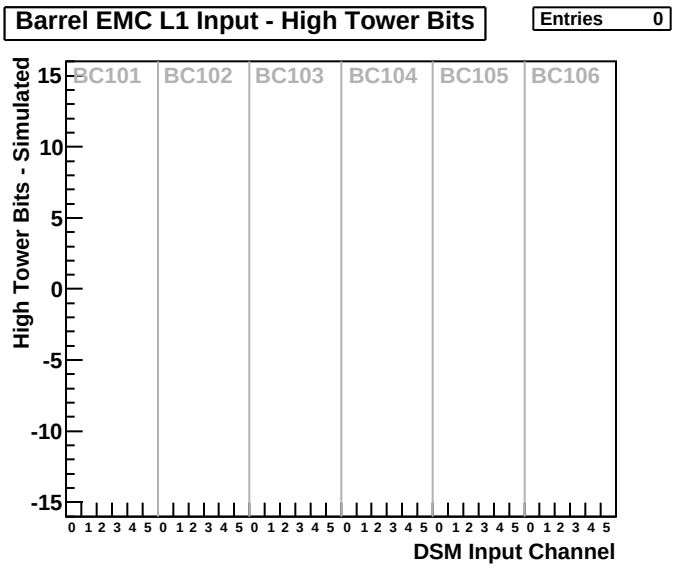

Barrel EMC L1 Input - Low Eta Sum
Entries 3461508
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

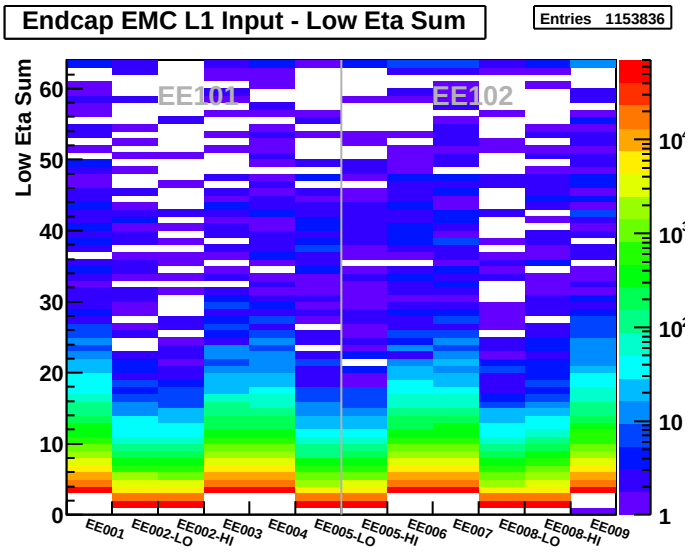

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

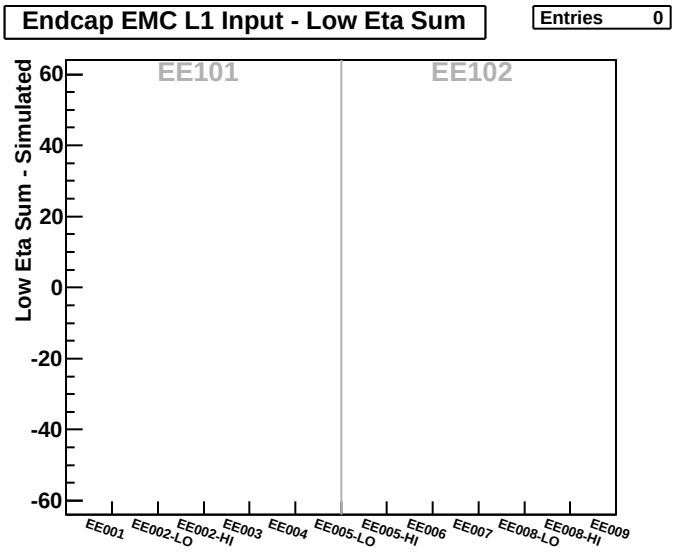

Barrel EMC L1 Input - High Eta Sum
Entries 3461508
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

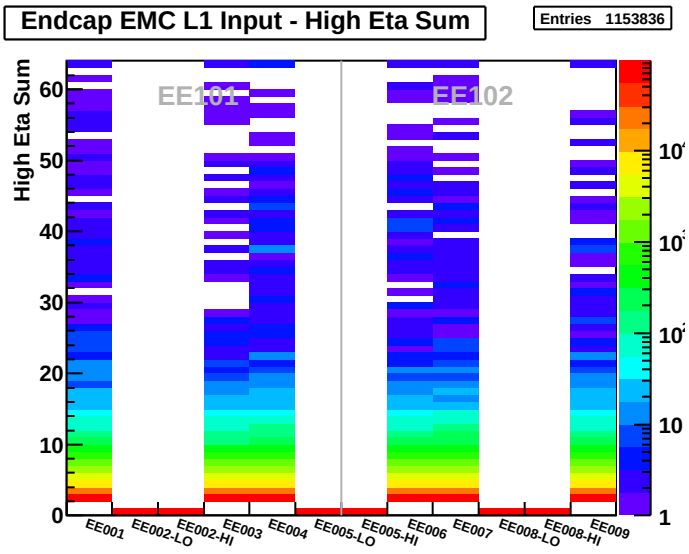

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

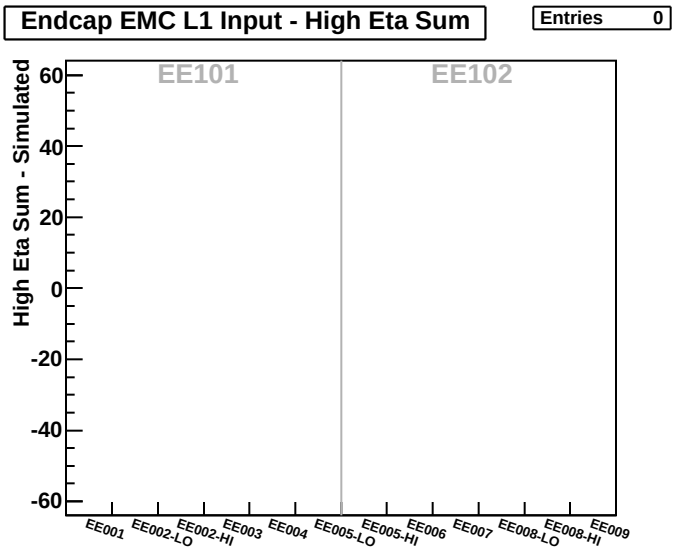

Barrel EMC L1 Input - High Tower Bits
Entries 3461508
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

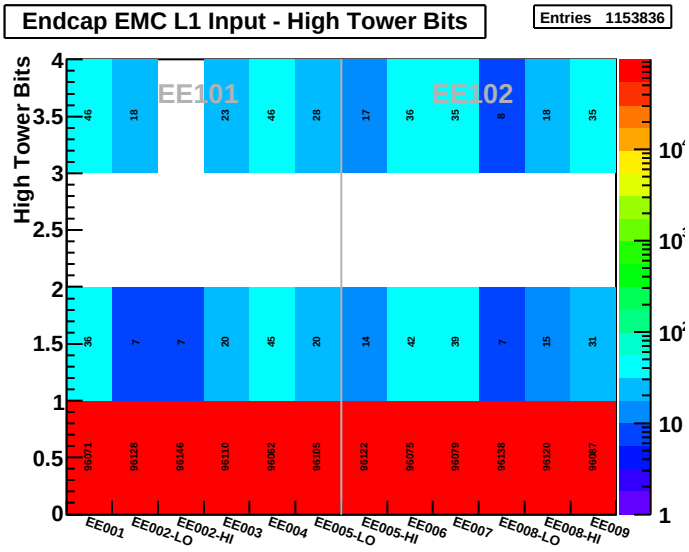

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

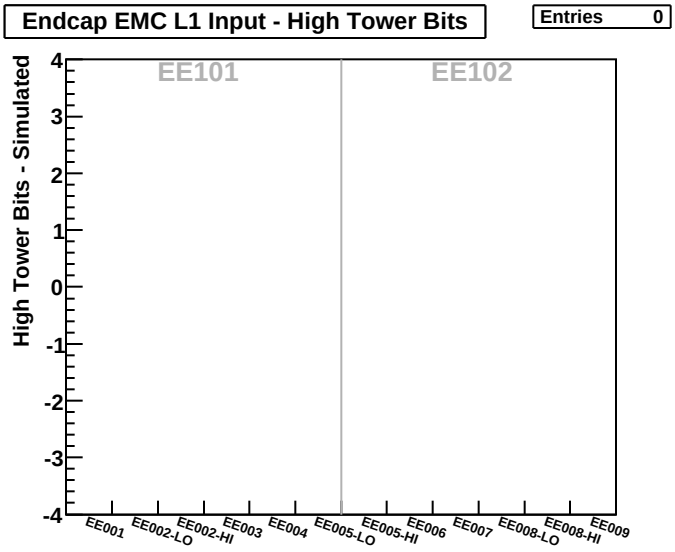

Endcap EMC L1 Input - Low Eta Sum
Entries 1153836
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

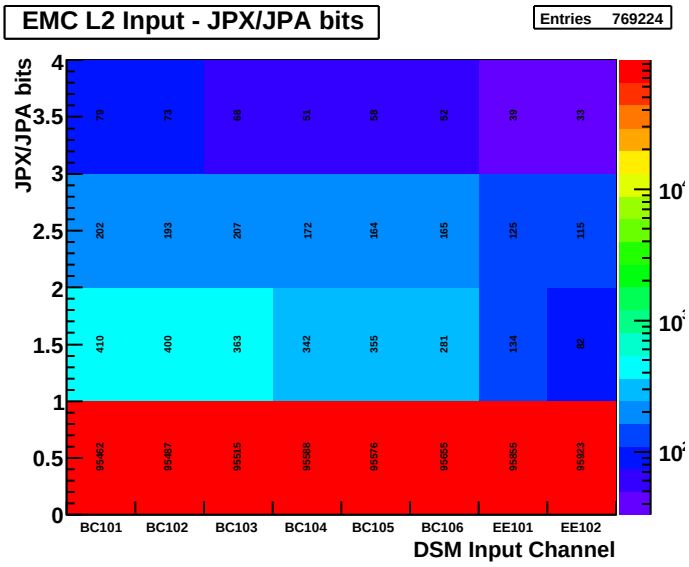

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

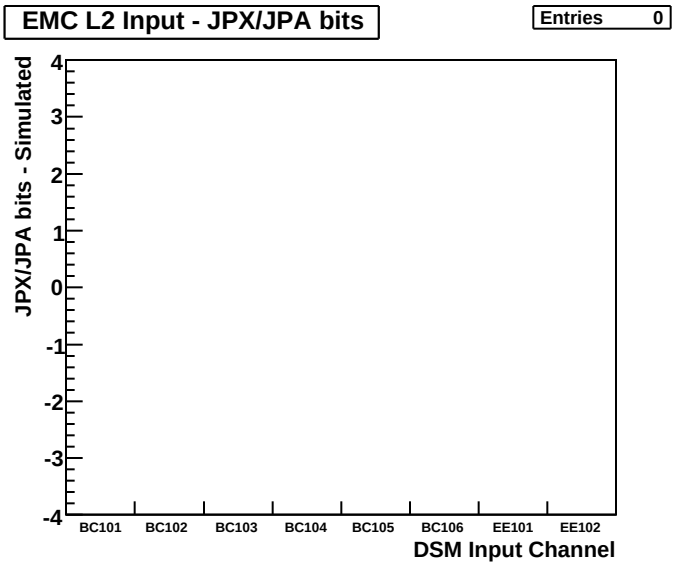

Endcap EMC L1 Input - High Eta Sum
Entries 1153836
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

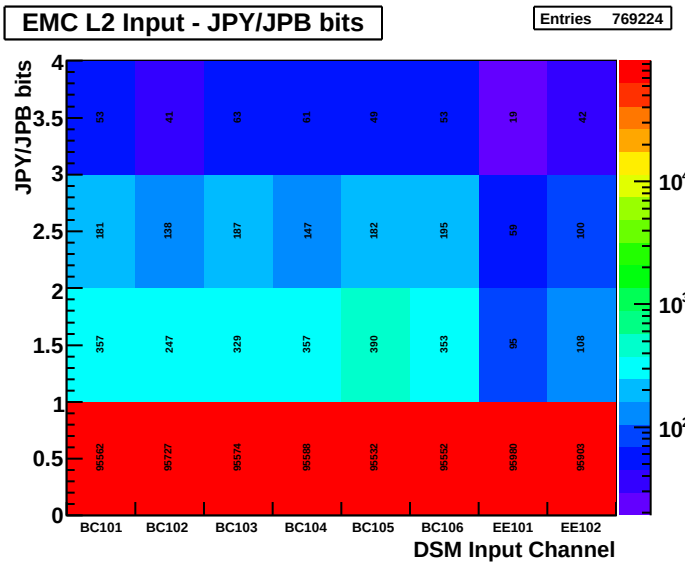

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

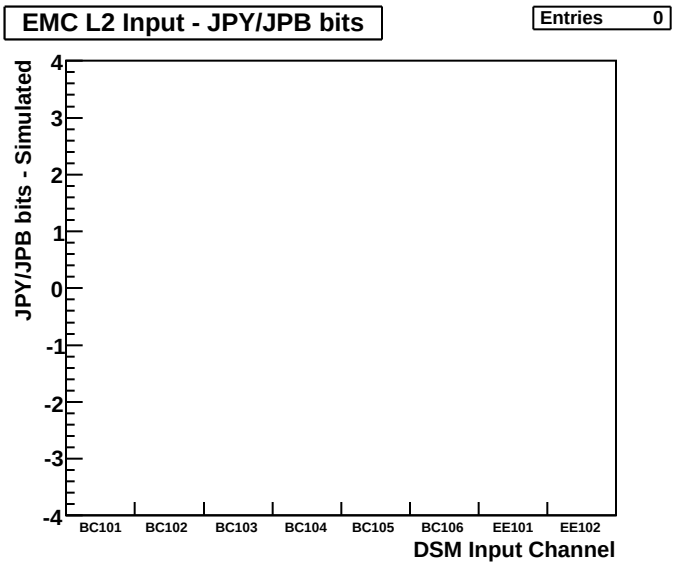

Endcap EMC L1 Input - High Tower Bits
Entries 1153836
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

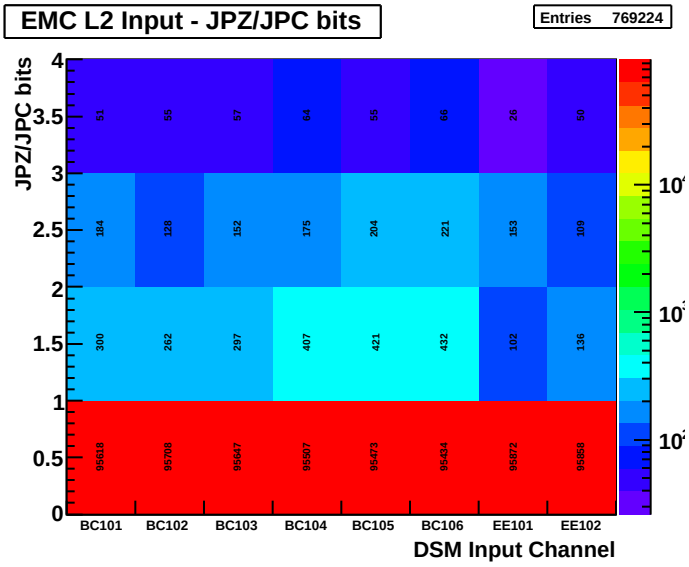

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

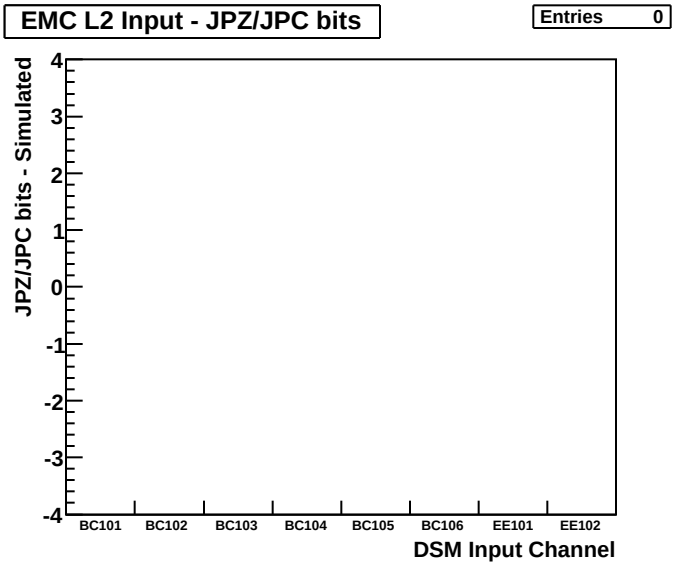

EMC L2 Input - JPX/JPA bits
Entries 769224
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
79 73 68 51 58 52 39 33
202 193 207 172 164 165 125 115
410 400 363 342 355 281 134 82
95462 95487 95515 95588 95576 95655 95855 95923

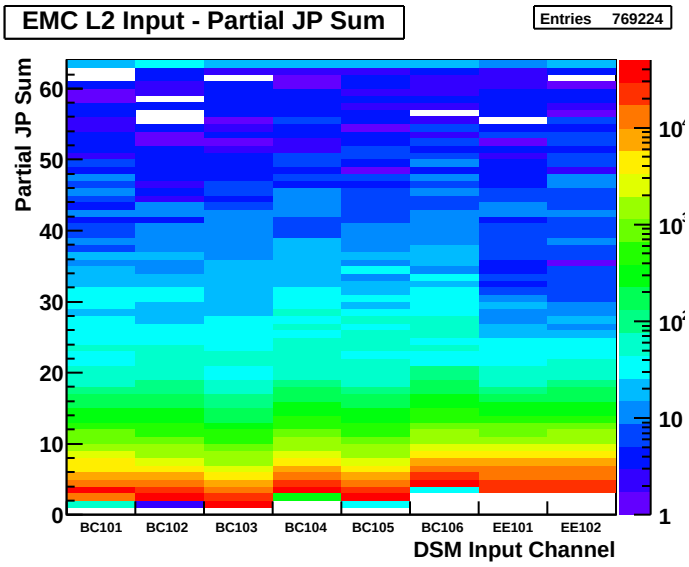

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

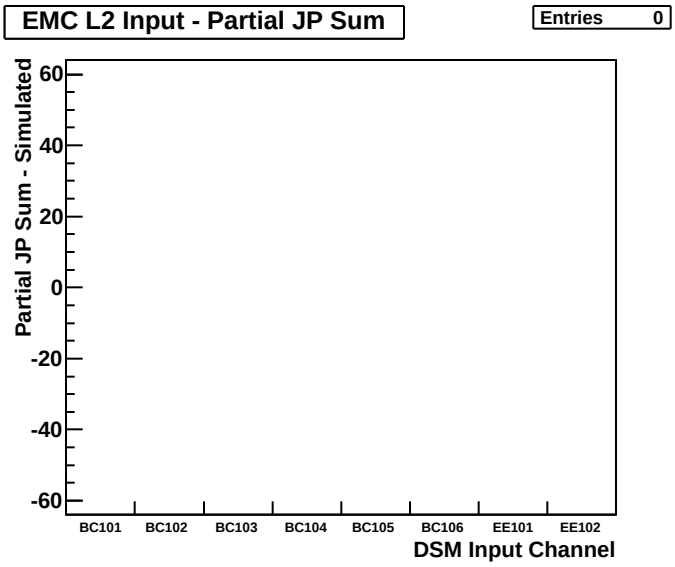

EMC L2 Input - JPY/JPB bits
Entries 769224
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
53 41 63 61 49 53 19 42
181 138 187 147 182 195 59 100
357 247 329 357 390 353 95 108
95562 95727 95574 95588 95532 95592 95980 95903

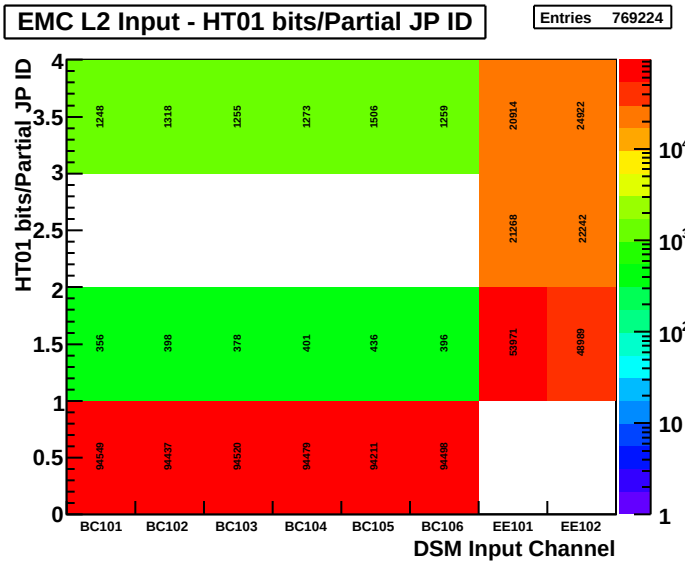

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

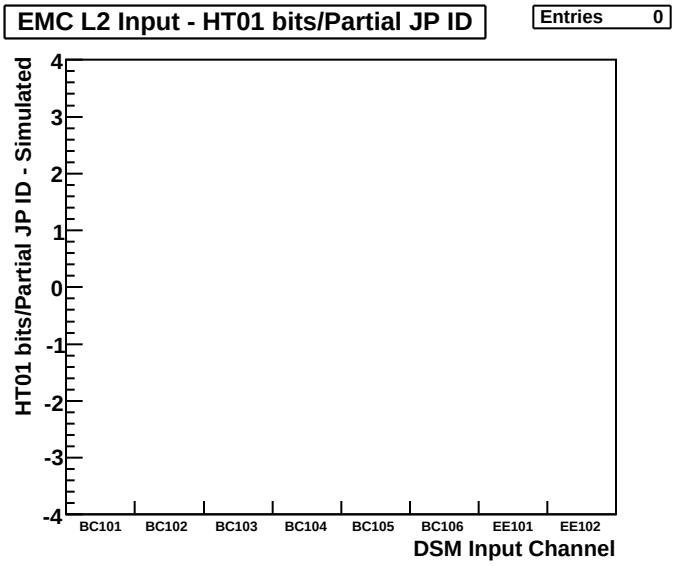

EMC L2 Input - JPZ/JPC bits
Entries 769224
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
51 56 57 64 55 66 26 50
184 128 152 175 204 221 153 109
300 262 297 407 421 432 102 136
95618 95708 95647 95597 95473 95434 95872 95858

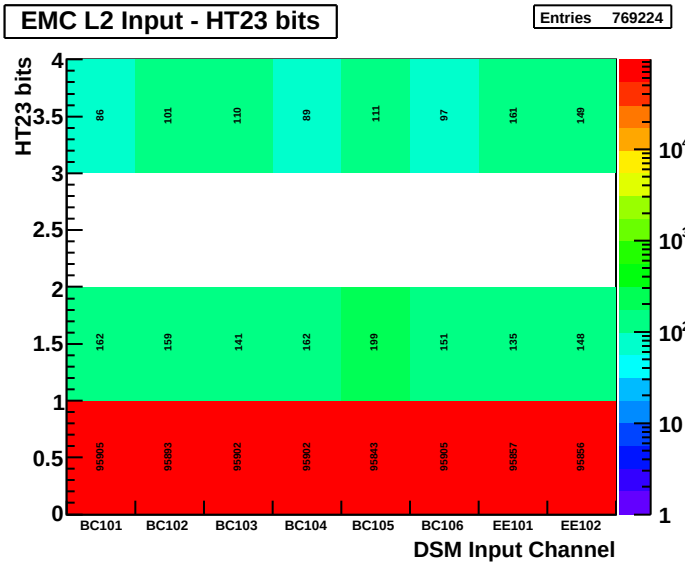

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

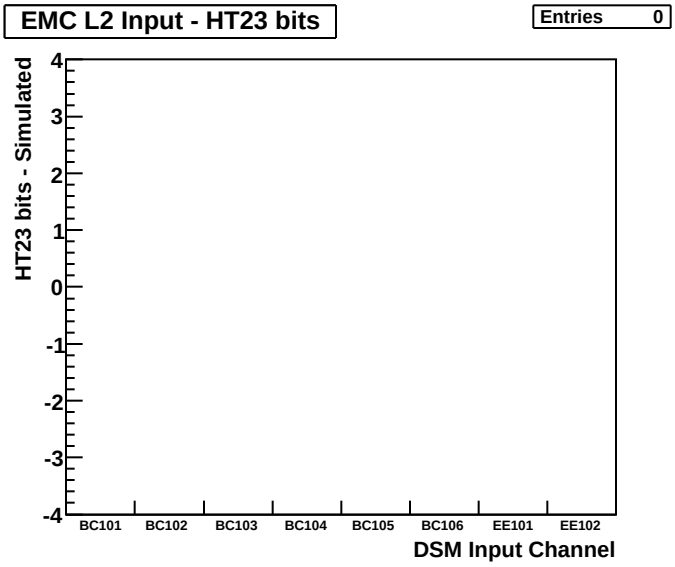

EMC L2 Input - Partial JP Sum
Entries 769224
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

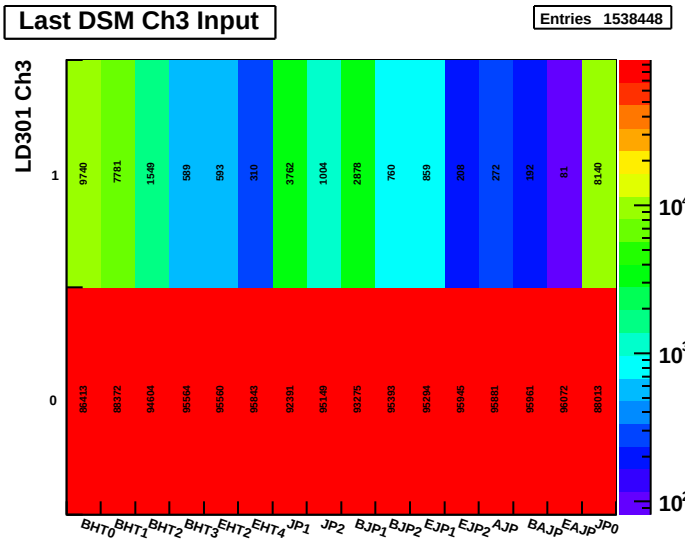

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

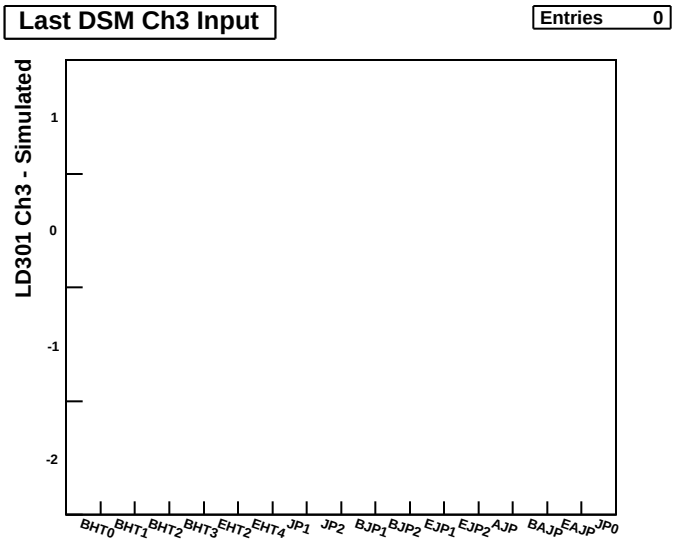

EMC L2 Input - HT01 bits/Partial JP ID
Entries 769224
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

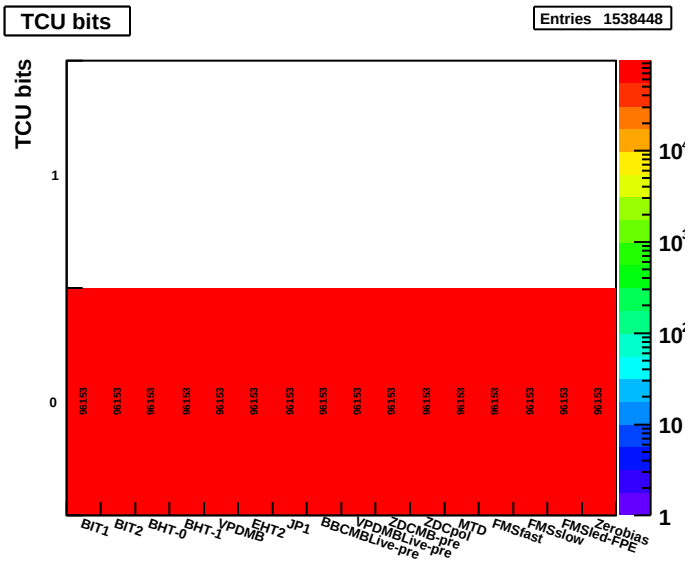

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

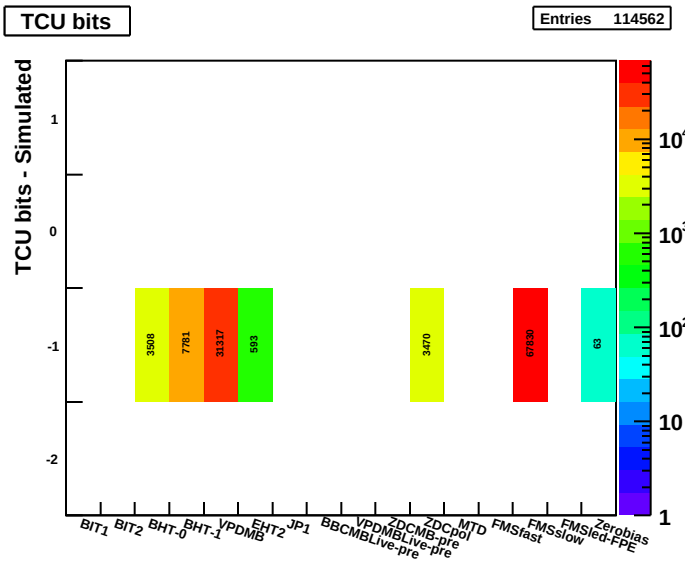

EMC L2 Input - HT23 bits
Entries 769224
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

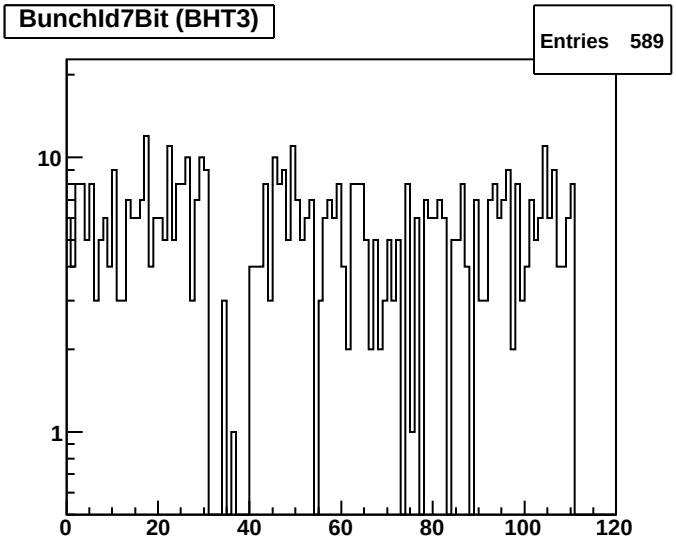

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

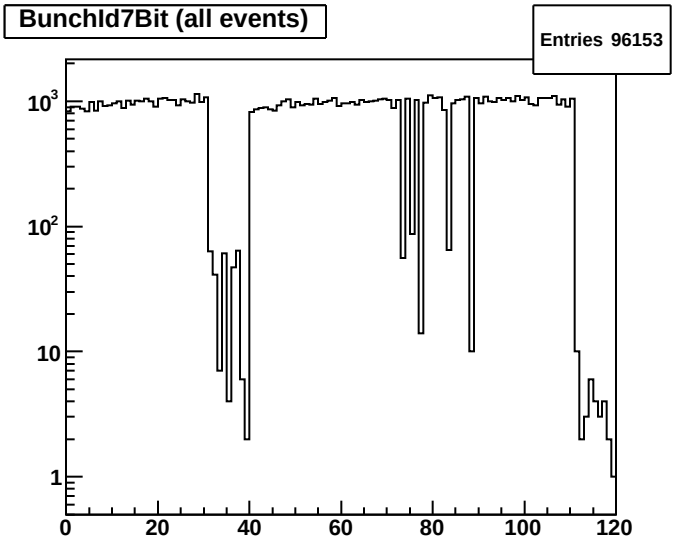

Last DSM Ch3 Input
Entries 1538448
LD301 Ch3
1
0
9740 7781 1549 589 593 310 3762 1004 2878 760 859 208 272 192 81 8140
86413 88372 94604 95564 95560 95843 92391 95149 93275 95393 95294 95945 95881 95961 96072 88013
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

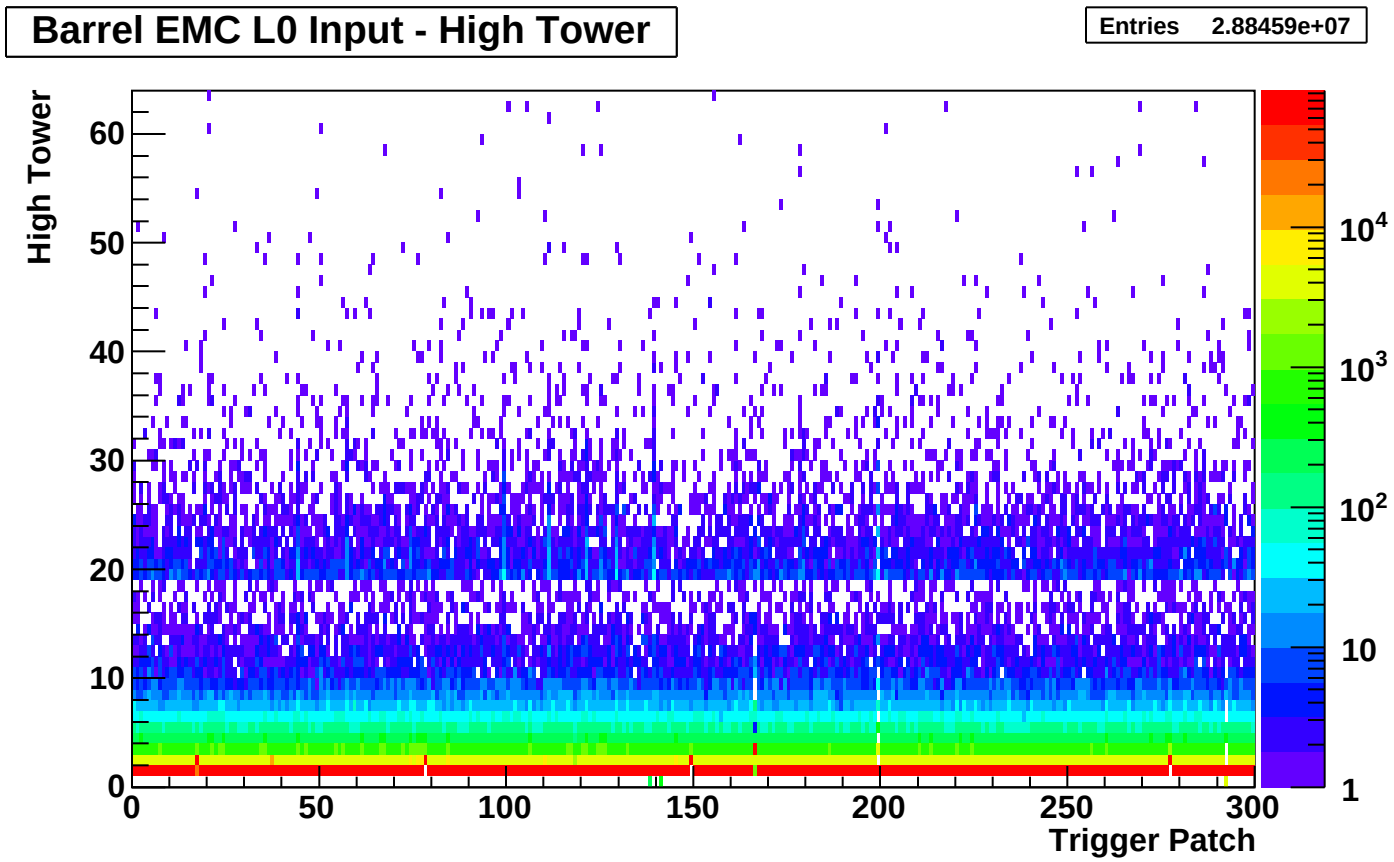

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

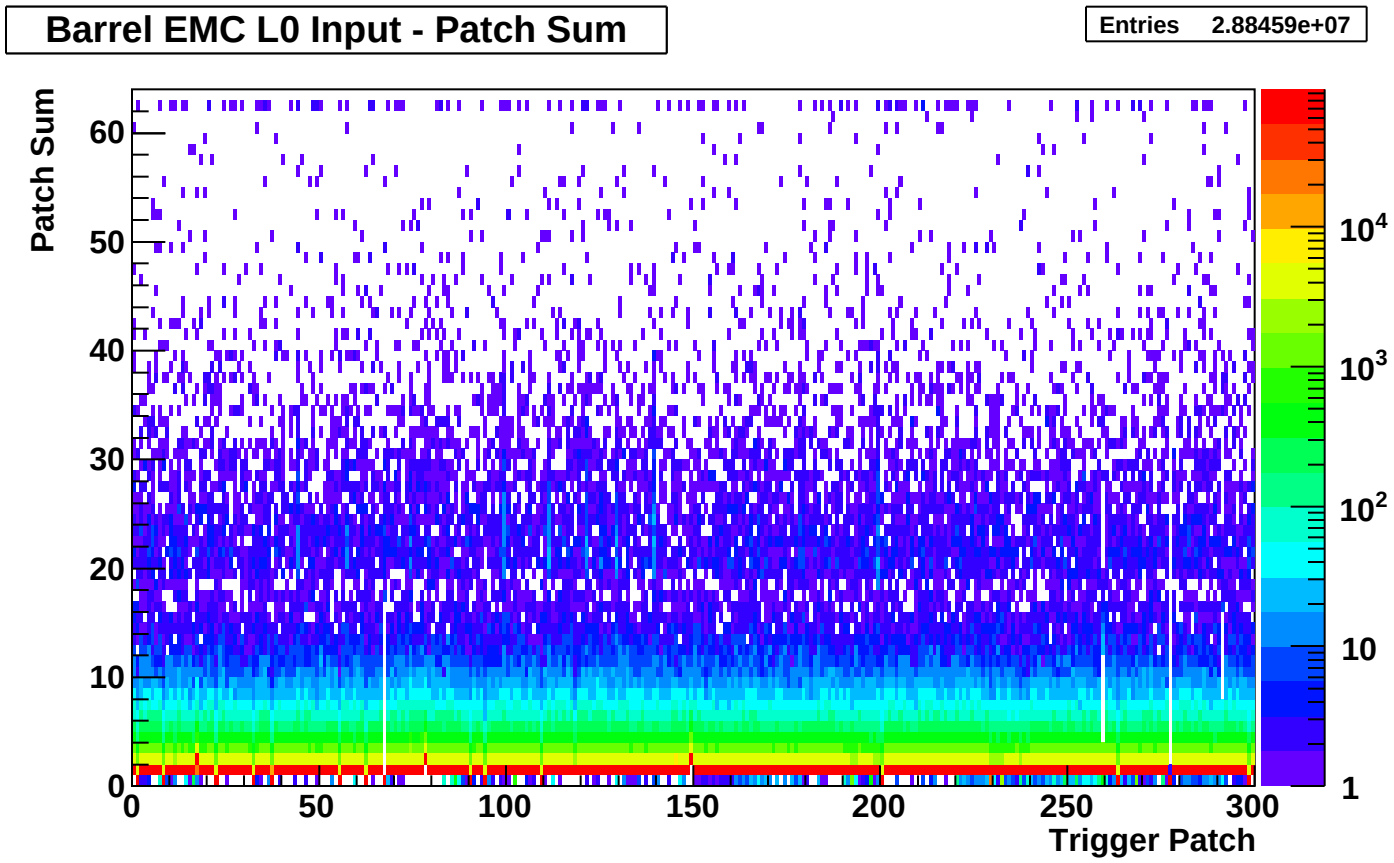

TCU bits
Entries 1538448
TCU bits
1
0
96153 96153 96153 96153 96153 96153 96153 96153 96153 96153 96153 96153 96153 96153 96153 96153
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

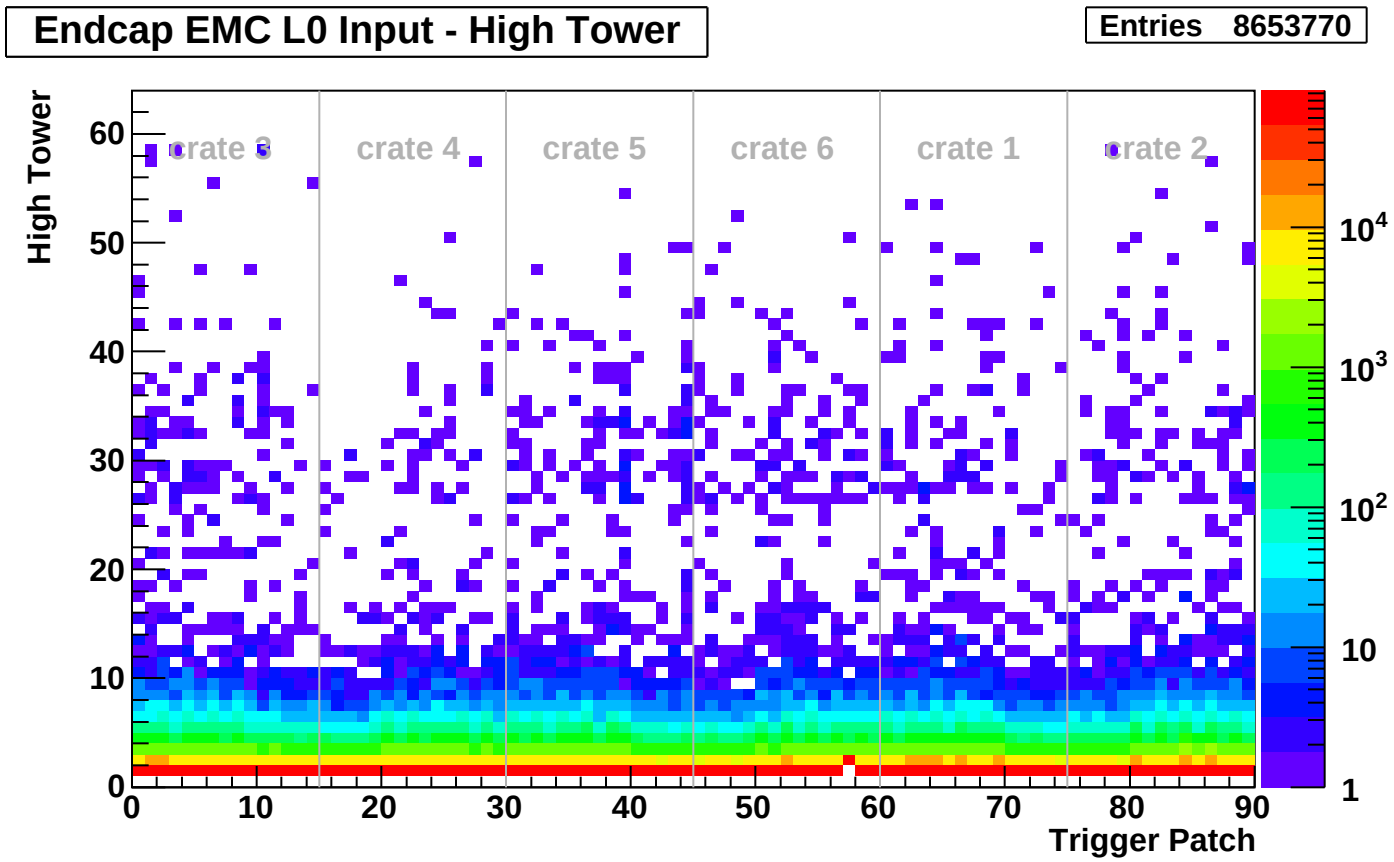

TCU bits
Entries 114562
TCU bits - Simulated
1
0
-1
-2
3508 7781 31317 593 3470 67830 63
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

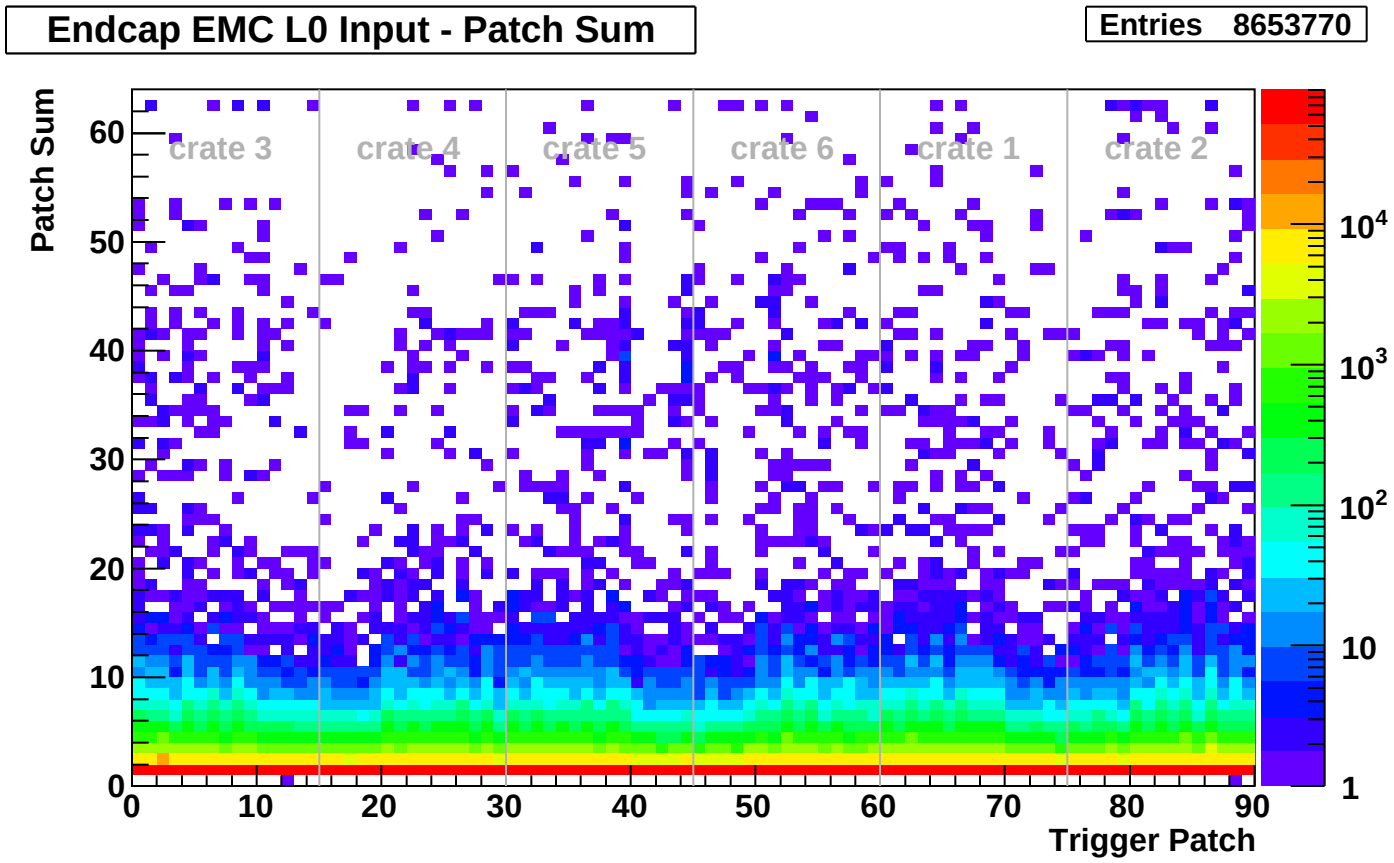

BunchId7Bit (BHT3)
Entries 589
10
1
0 20 40 60 80 100 120

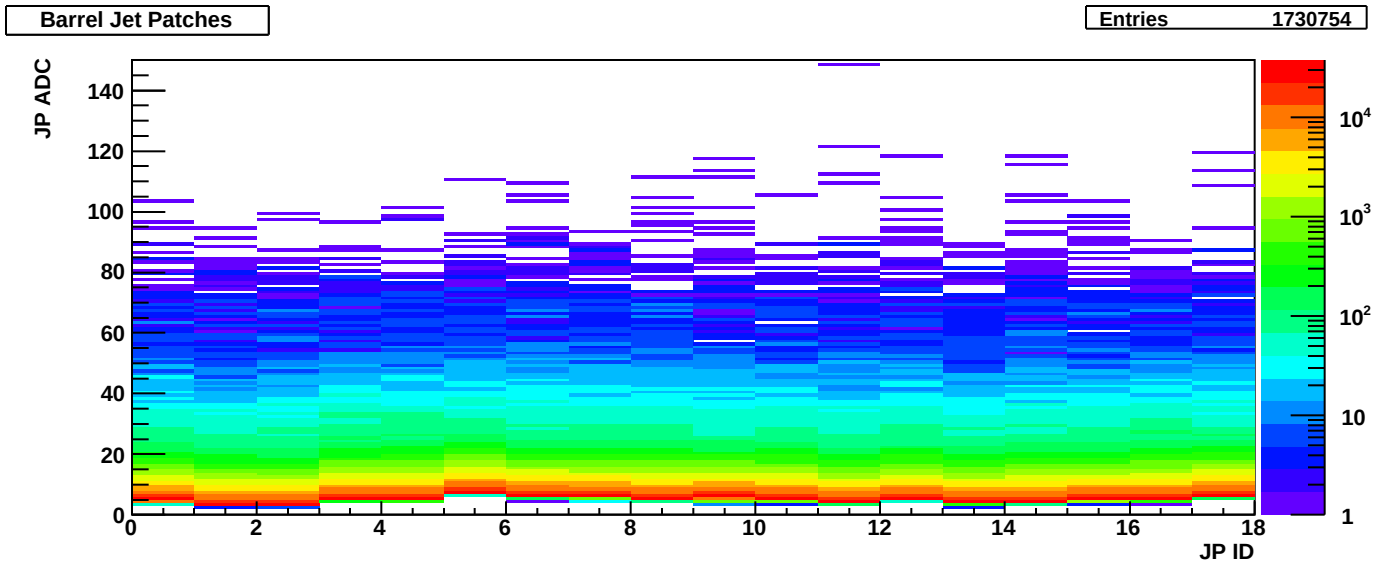

BunchId7Bit (all events)
Entries 96153
10^3
10^2
10
1
0 20 40 60 80 100 120

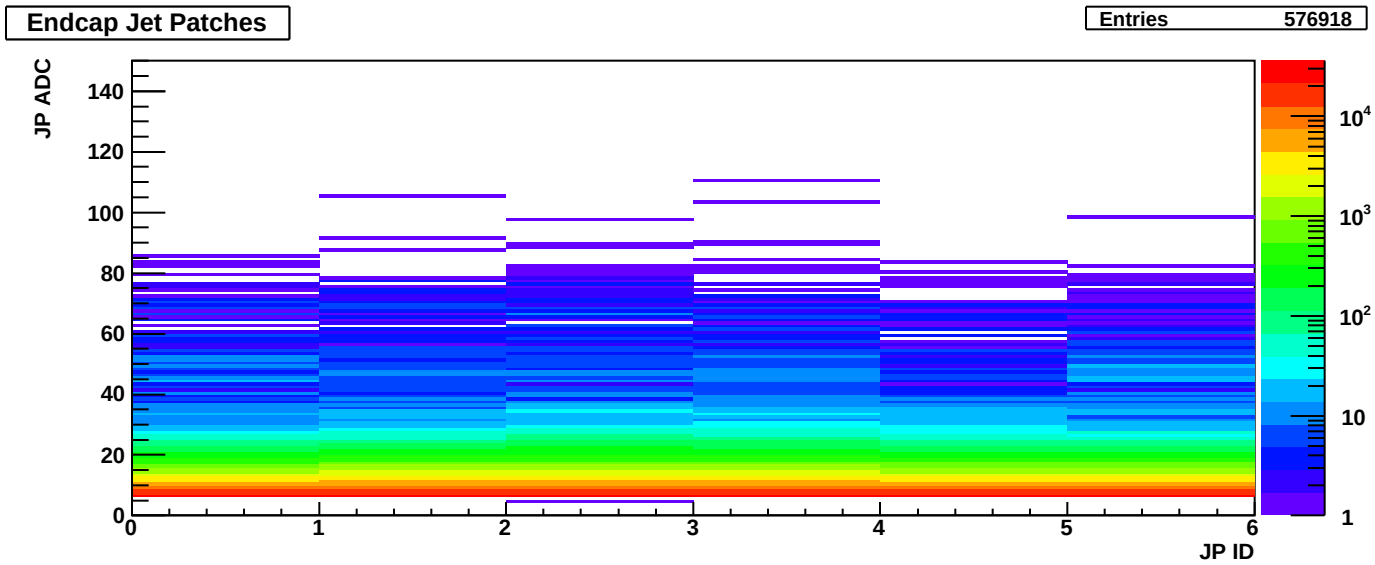

Barrel EMC L0 Input - High Tower
Entries 2.88459e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

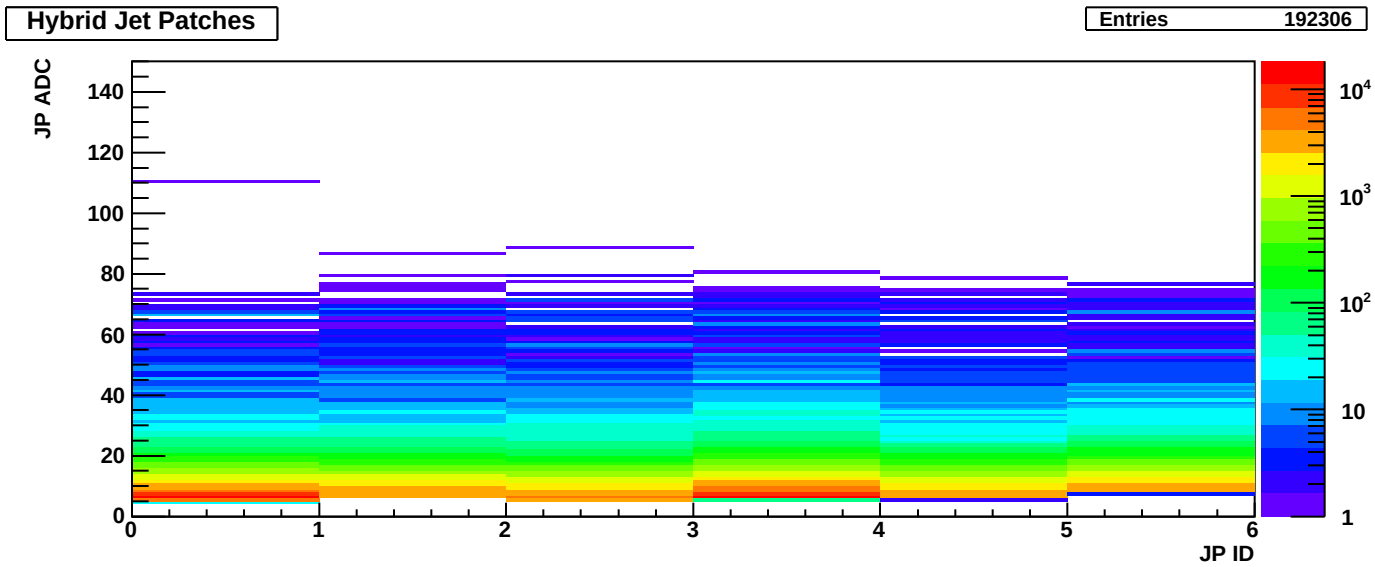

Barrel EMC L0 Input - Patch Sum
Entries 2.88459e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

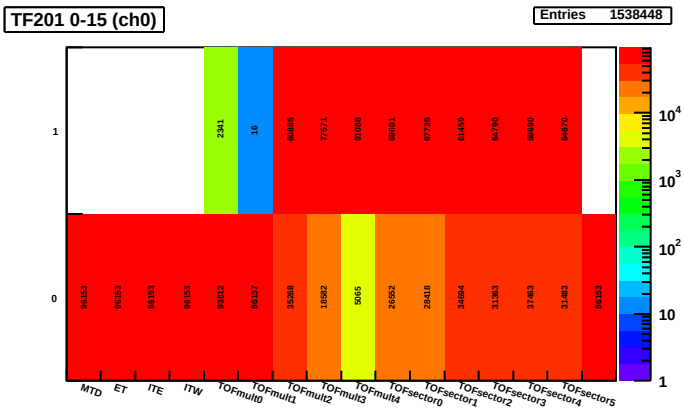

Endcap EMC L0 Input - High Tower
Entries 8653770
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

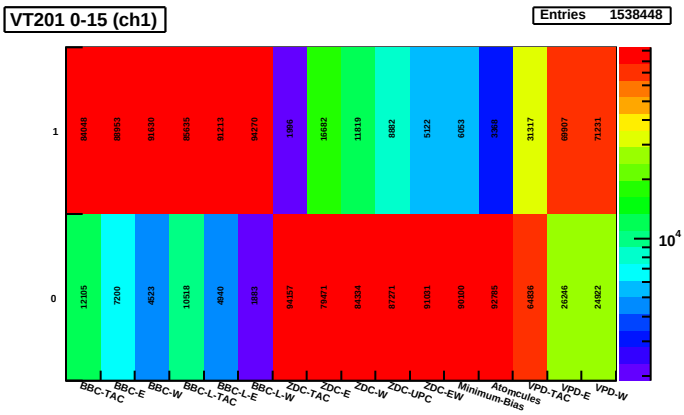

Endcap EMC L0 Input - Patch Sum
Entries 8653770
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

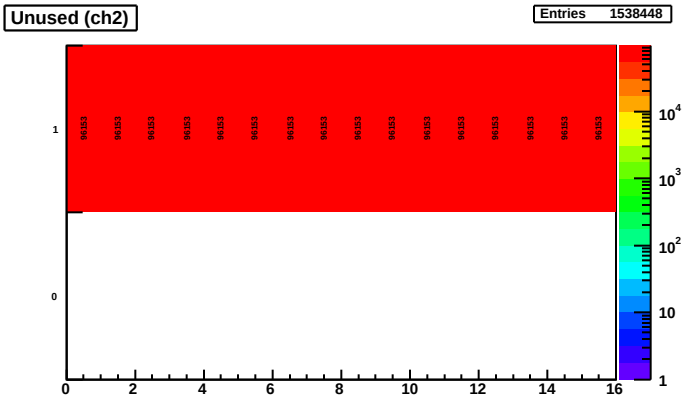

Barrel Jet Patches
Entries 1730754
JP ADC
JP ID

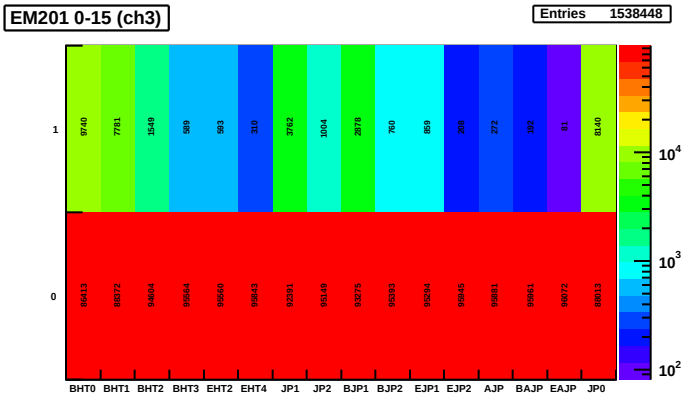

Endcap Jet Patches
Entries 576918
JP ADC
JP ID

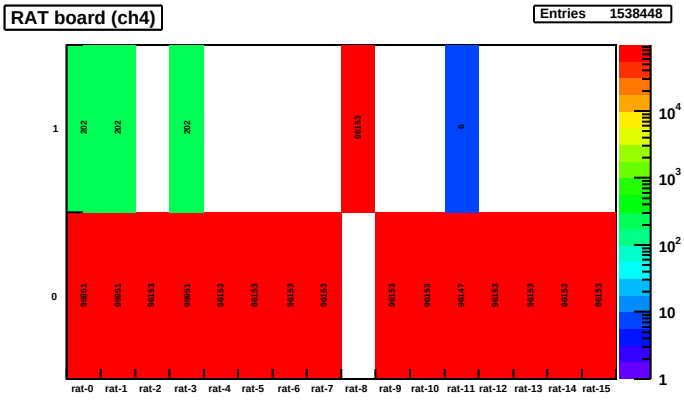

Hybrid Jet Patches
Entries 192306
JP ADC
JP ID

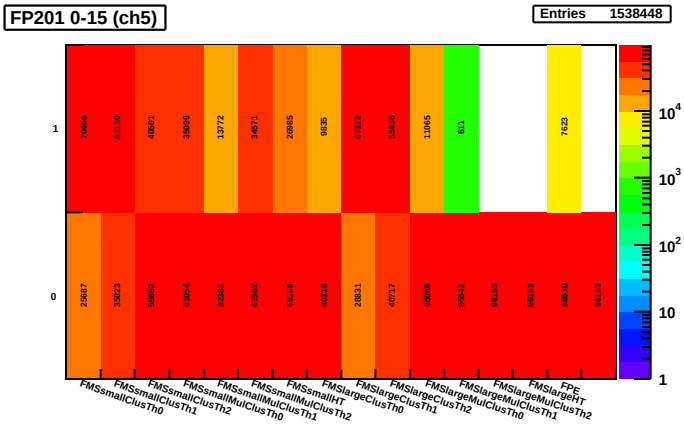

TF201 0-15 (ch0)
Entries 1538448
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

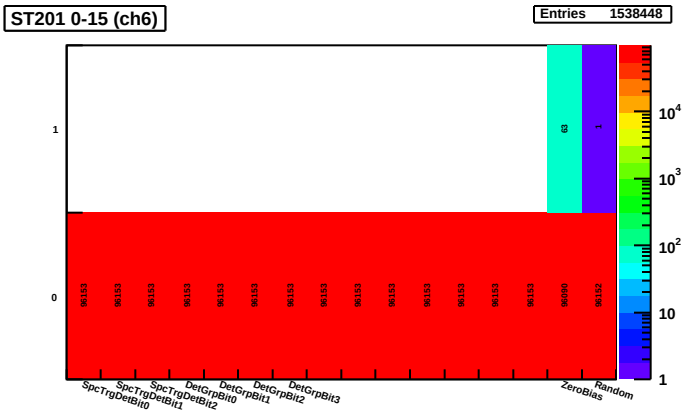

VT201 0-15 (ch1)
Entries 1538448
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

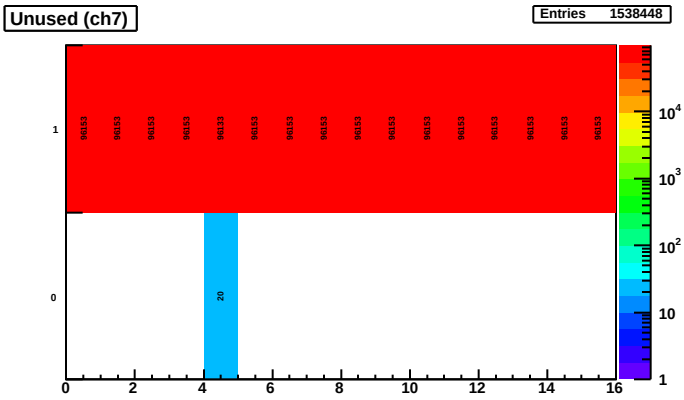

Unused (ch2)
Entries 1538448

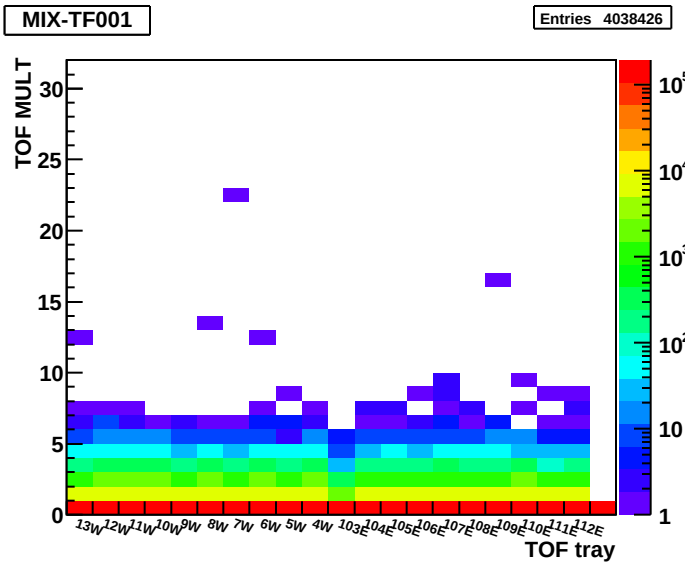

EM201 0-15 (ch3)
Entries 1538448
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

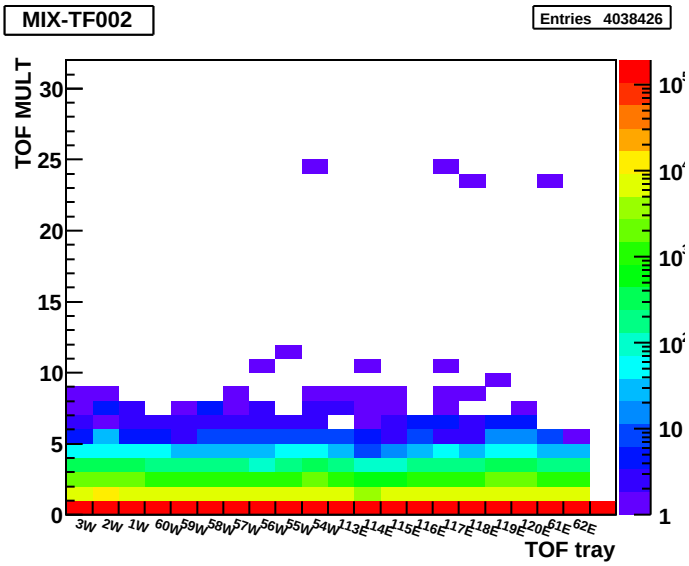

RAT board (ch4)
Entries 1538448
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

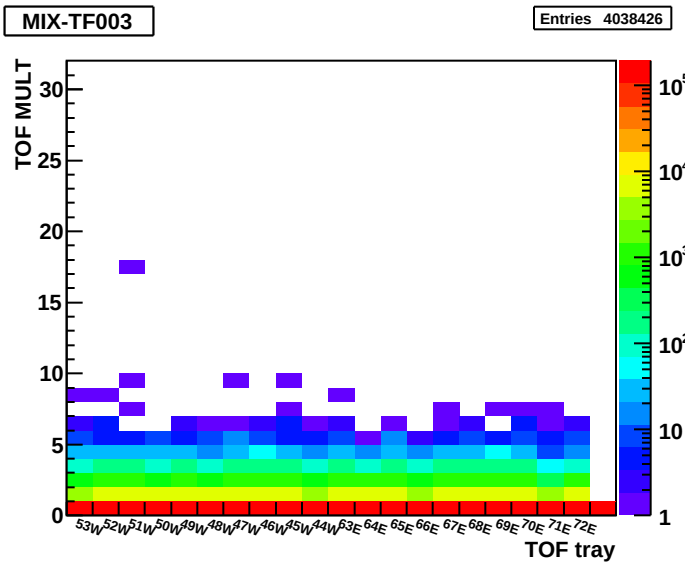

FP201 0-15 (ch5)
Entries 1538448
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

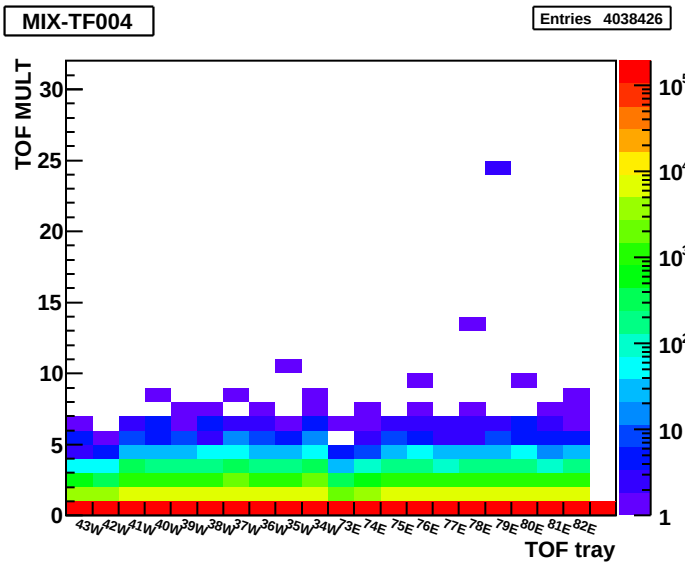

ST201 0-15 (ch6)
Entries 1538448
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

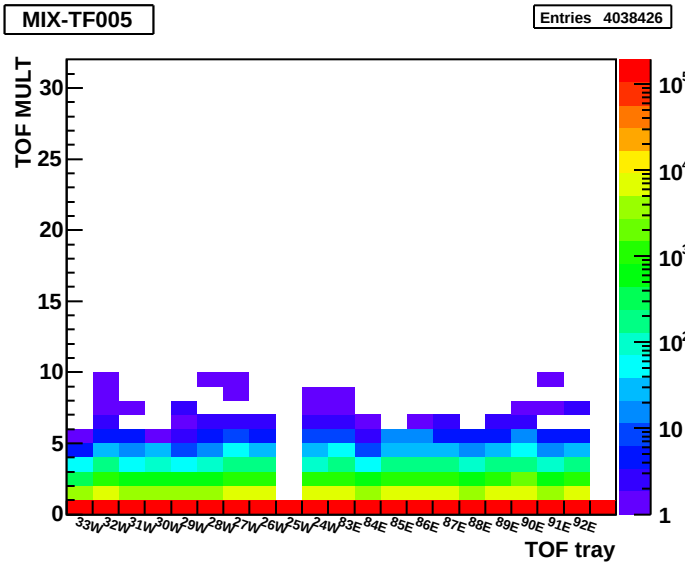

Unused (ch7)
Entries 1538448

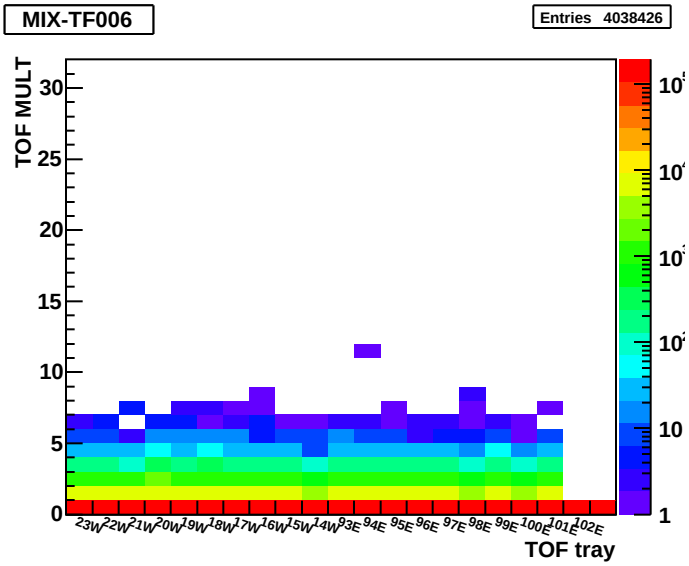

MIX-TF001
Entries 4038426
TOF MULT
TOF tray

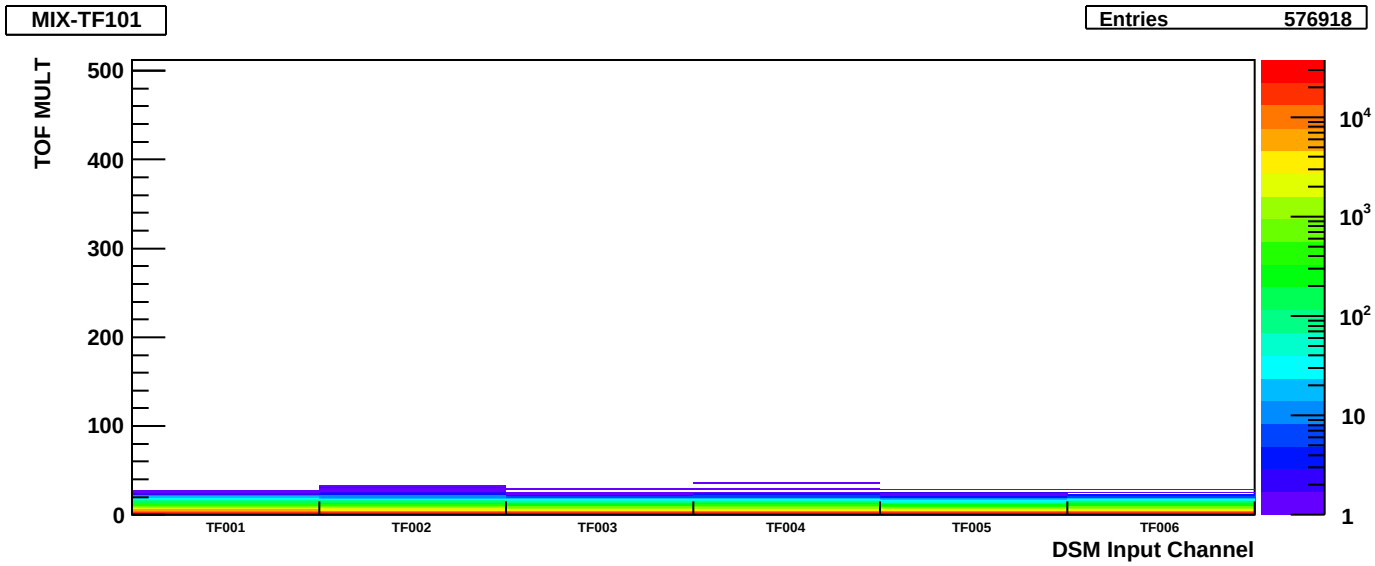

MIX-TF002
Entries 4038426
TOF MULT
TOF tray

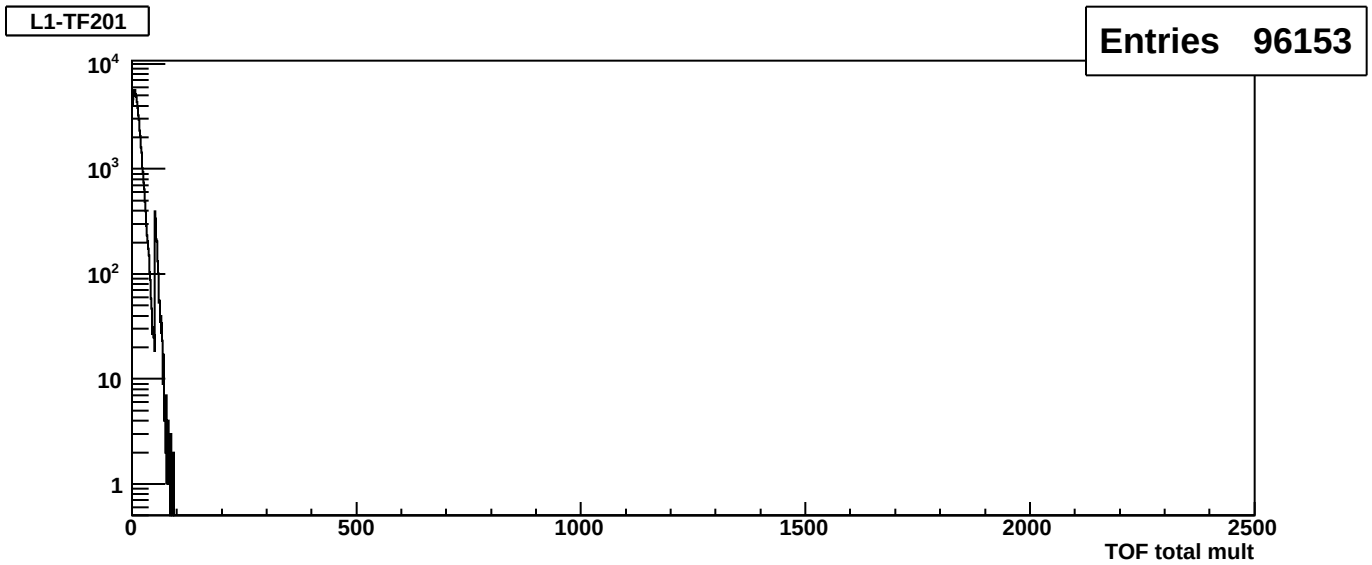

MIX-TF003
Entries 4038426
TOF MULT
TOF tray

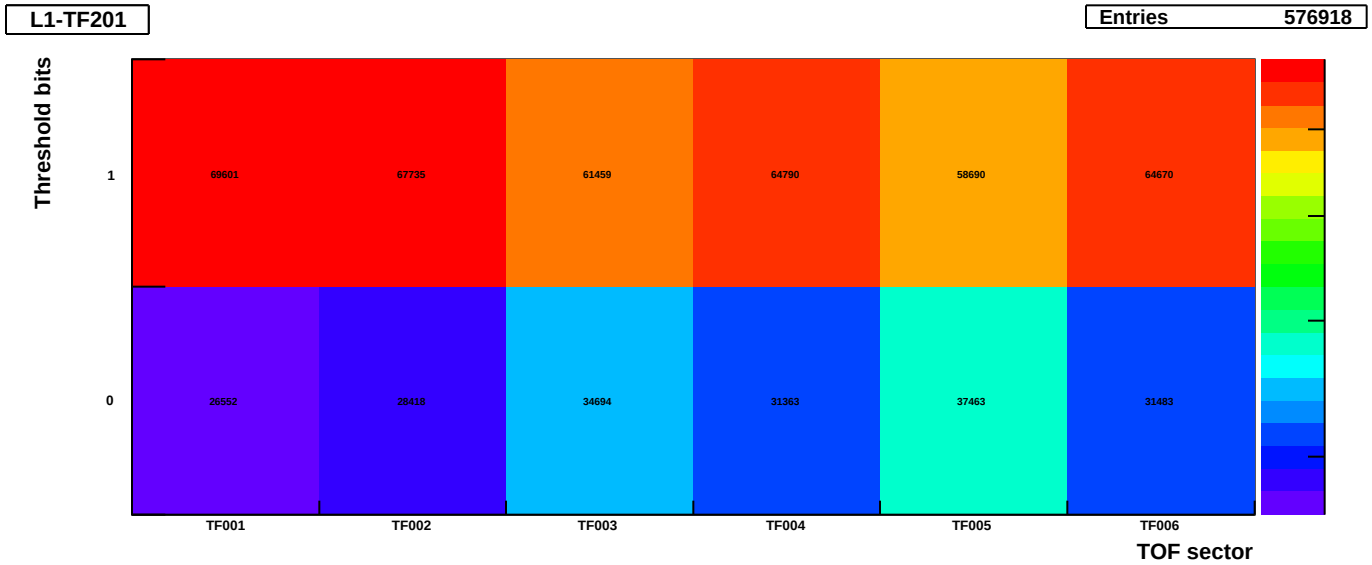

MIX-TF004
Entries 4038426
TOF MULT
TOF tray

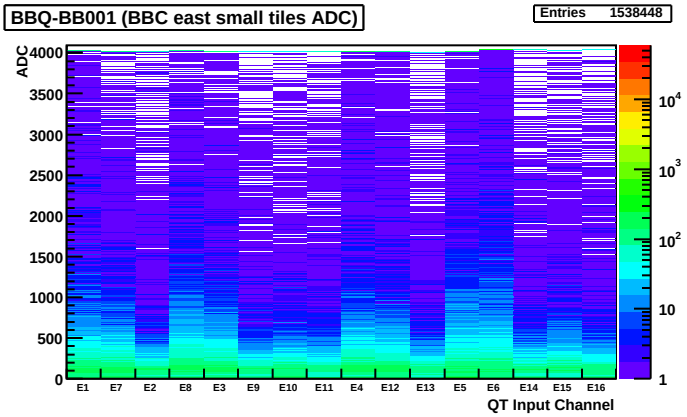

MIX-TF005
Entries 4038426
TOF MULT
TOF tray

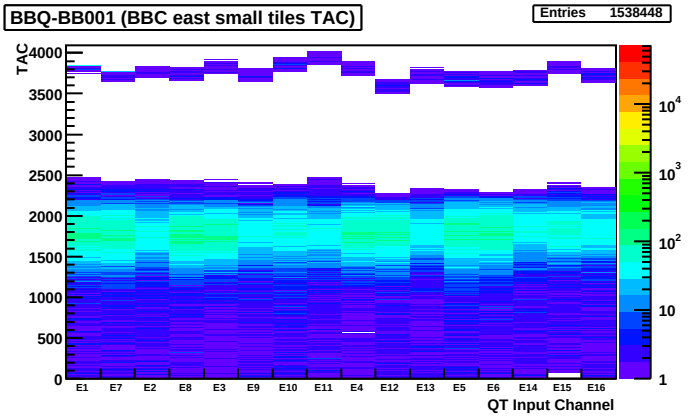

MIX-TF006
Entries 4038426
TOF MULT
TOF tray

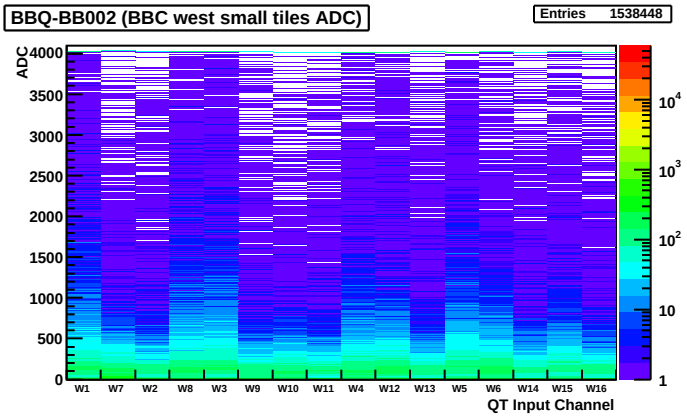

MIX-TF101
Entries 576918
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

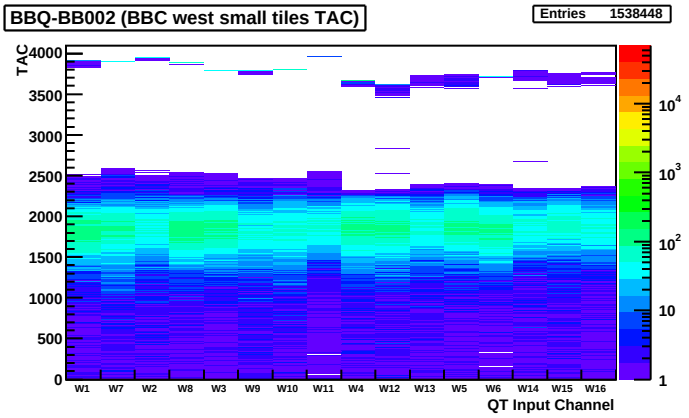

L1-TF201
Entries 96153
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

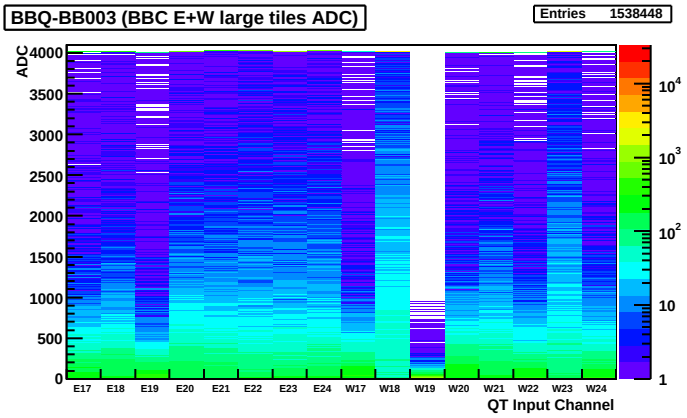

L1-TF201
Entries 576918
Threshold bits
1
0
69601
67735
61459
64790
58690
64670
26552
28418
34694
31363
37463
31483
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

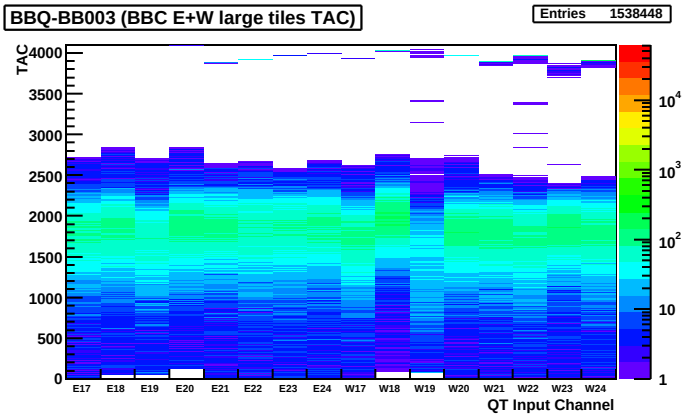

BBQ-BB001 (BBC east small tiles ADC)
Entries 1538448
ADC
QT Input Channel

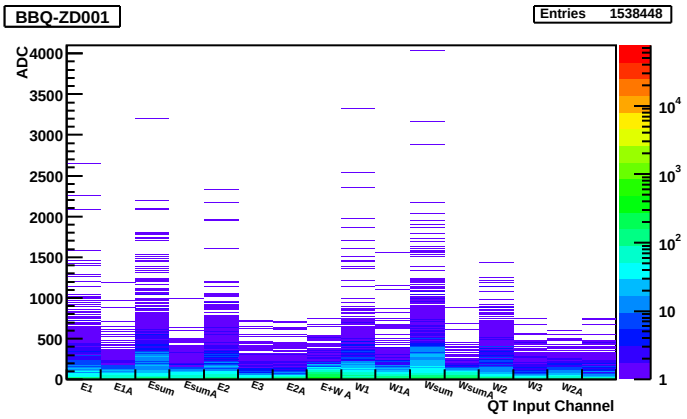

BBQ-BB001 (BBC east small tiles TAC)
Entries 1538448
TAC
QT Input Channel

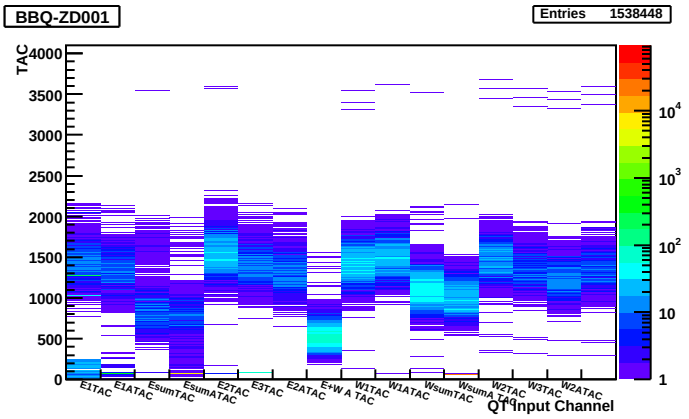

BBQ-BB002 (BBC west small tiles ADC)
Entries 1538448
ADC
QT Input Channel

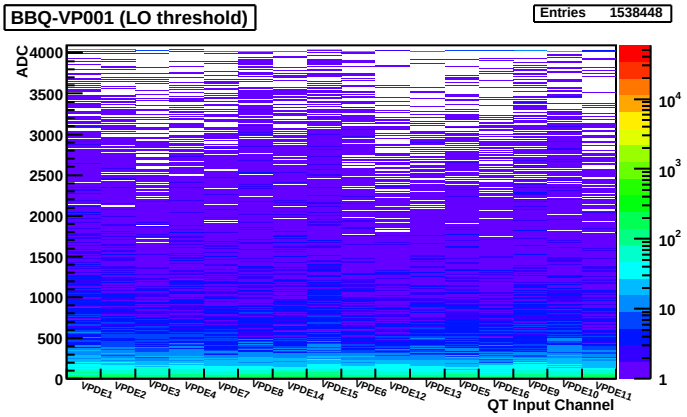

BBQ-BB002 (BBC west small tiles TAC)
Entries 1538448
TAC
QT Input Channel

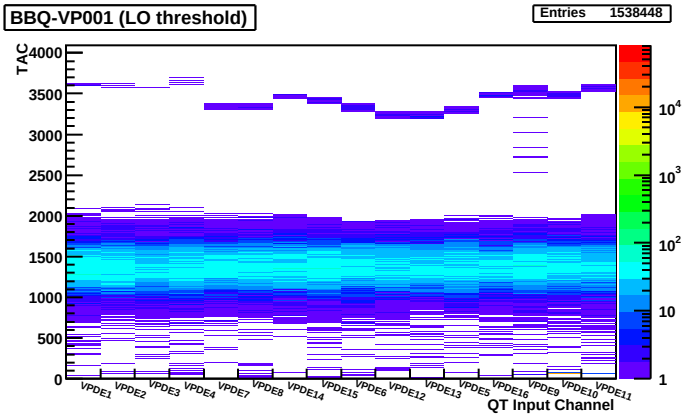

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1538448
ADC
QT Input Channel

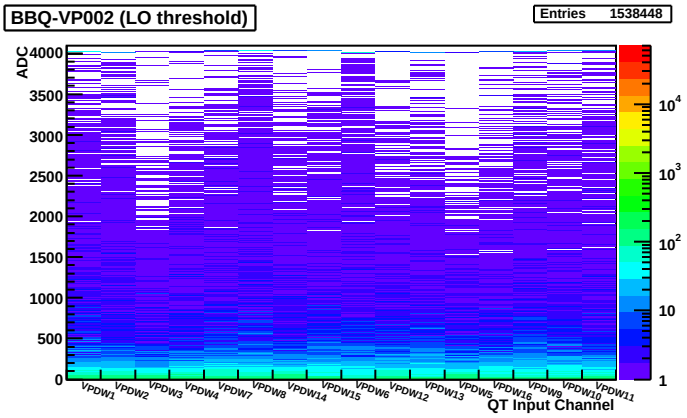

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1538448
TAC
QT Input Channel

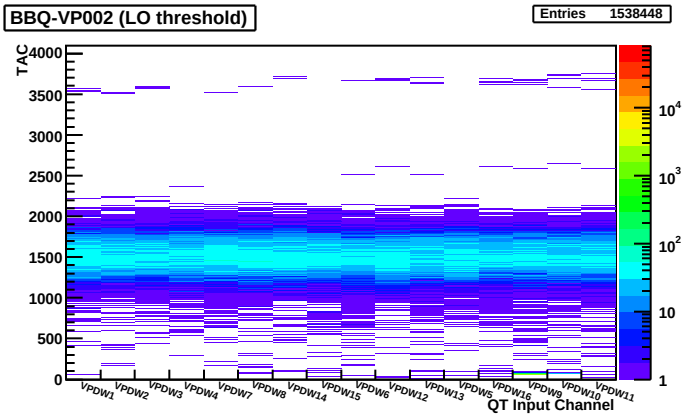

BBQ-ZD001
Entries 1538448
ADC
QT Input Channel

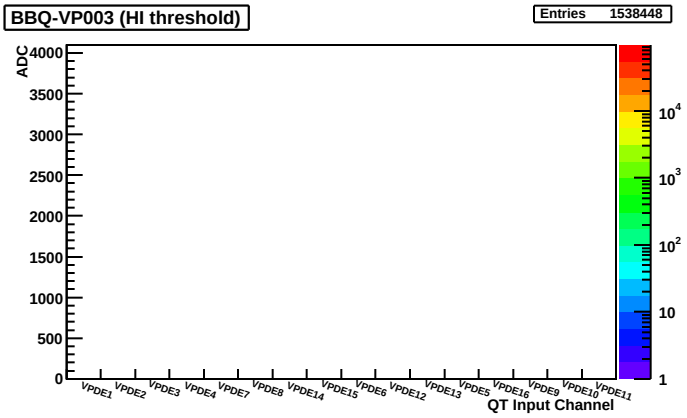

BBQ-ZD001
Entries 1538448
TAC
QT Input Channel

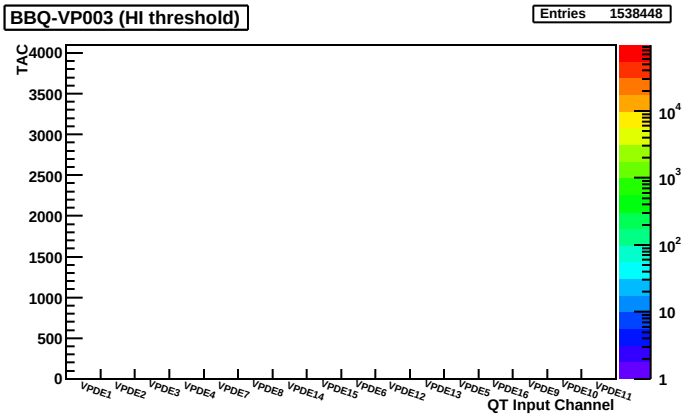

BBQ-VP001 (LO threshold)
Entries 1538448
ADC
QT Input Channel

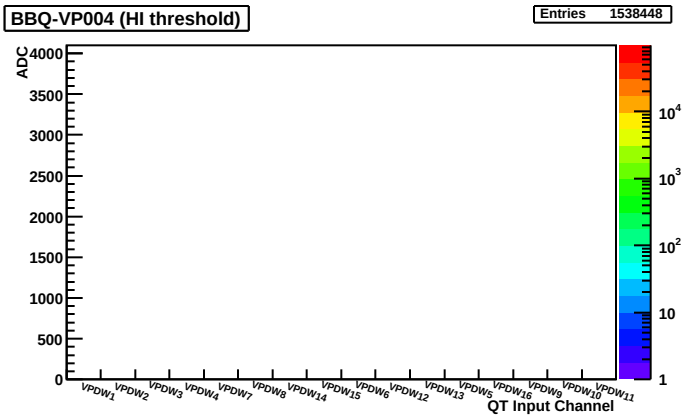

BBQ-VP001 (LO threshold)
Entries 1538448
TAC
QT Input Channel

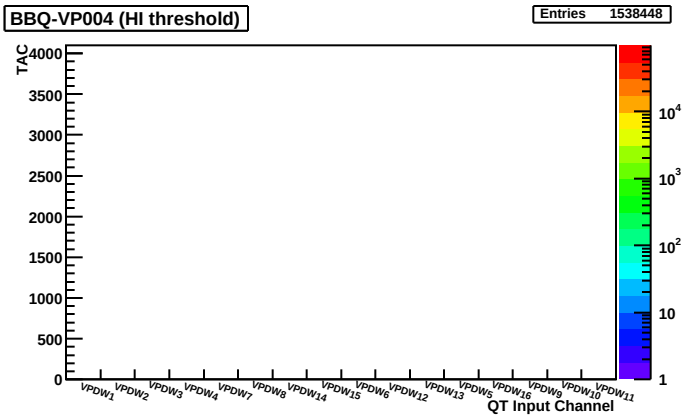

BBQ-VP002 (LO threshold)
Entries 1538448
ADC
QT Input Channel

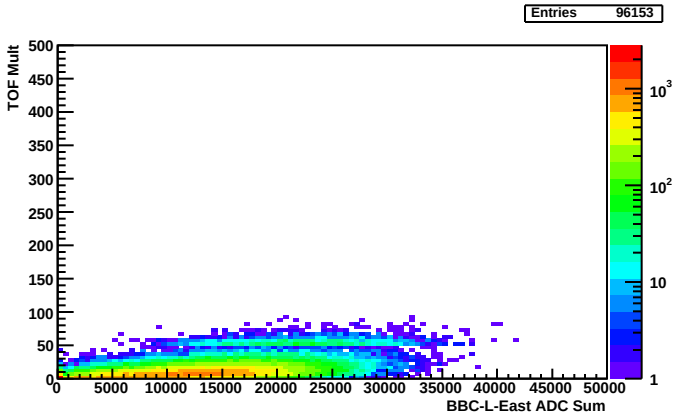

BBQ-VP002 (LO threshold)
Entries 1538448
TAC
QT Input Channel

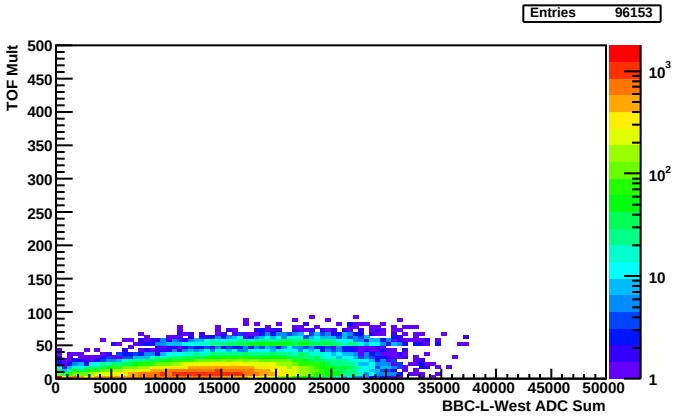

BBQ-VP003 (HI threshold)
Entries 1538448
ADC
QT Input Channel

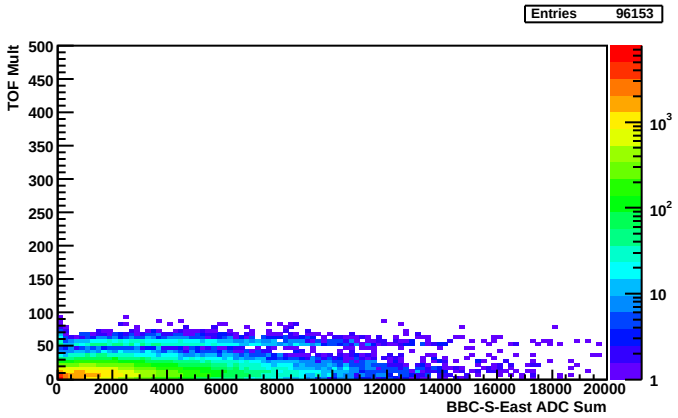

BBQ-VP003 (HI threshold)
Entries 1538448
TAC
QT Input Channel

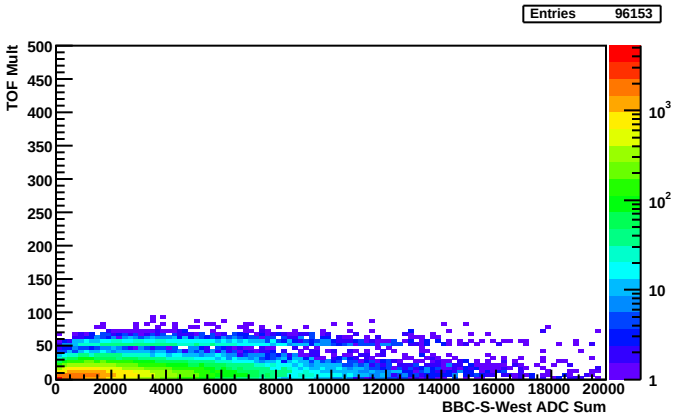

BBQ-VP004 (HI threshold)
Entries 1538448
ADC
QT Input Channel

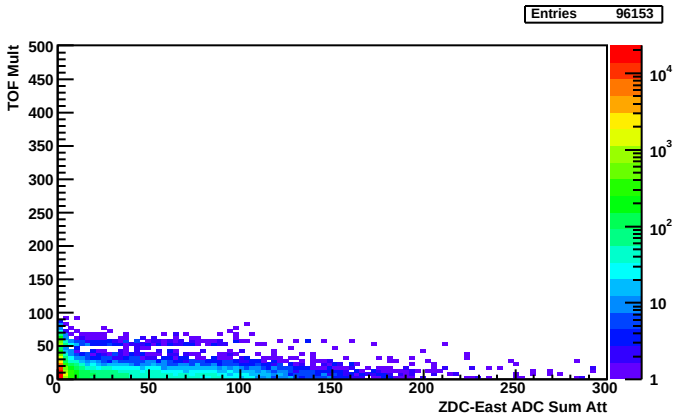

BBQ-VP004 (HI threshold)
Entries 1538448
TAC
QT Input Channel

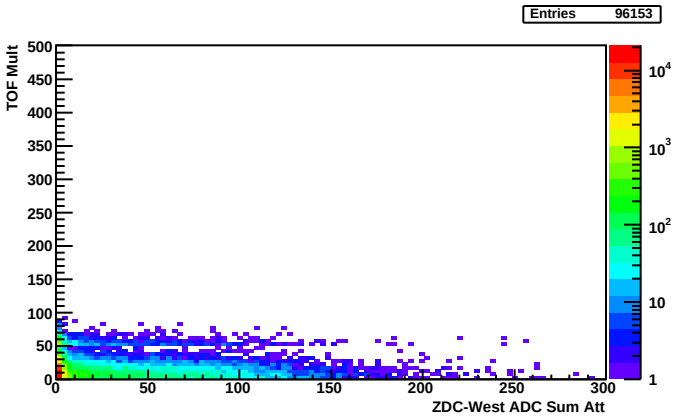

Entries 96153
TOF Mult
BBC-L-East ADC Sum

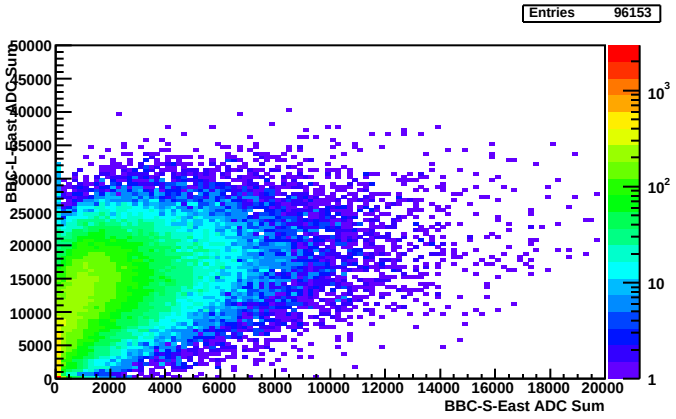

Entries 96153
TOF Mult
BBC-L-West ADC Sum

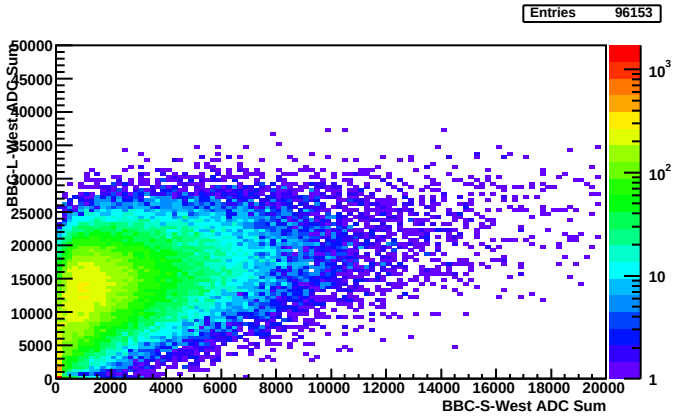

Entries 96153
TOF Mult
BBC-S-East ADC Sum

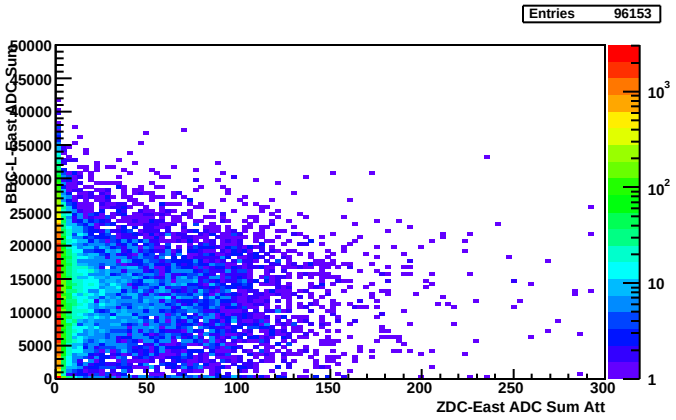

Entries 96153
TOF Mult
BBC-S-West ADC Sum

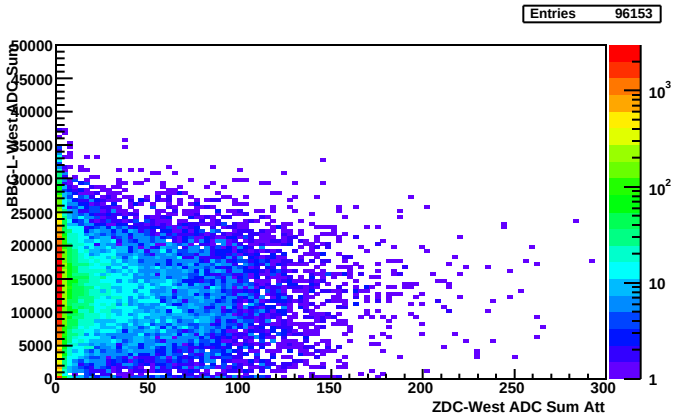

Entries 96153
TOF Mult
ZDC-East ADC Sum Att

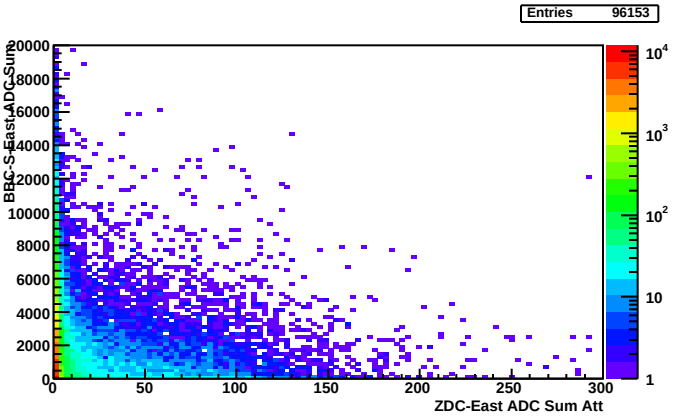

Entries 96153
TOF Mult
ZDC-West ADC Sum Att

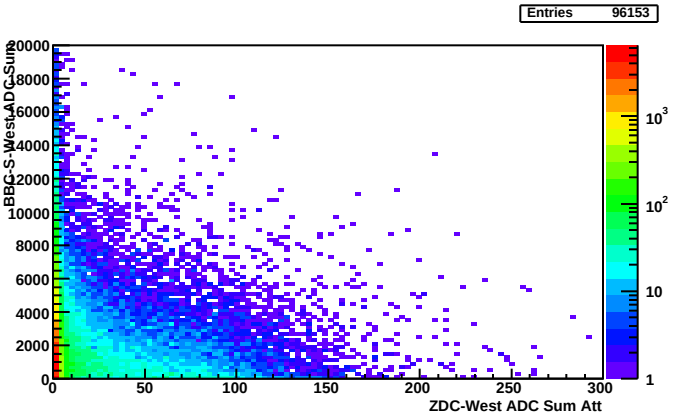

Entries 96153
BBC-L-East ADC Sum
BBC-S-East ADC Sum

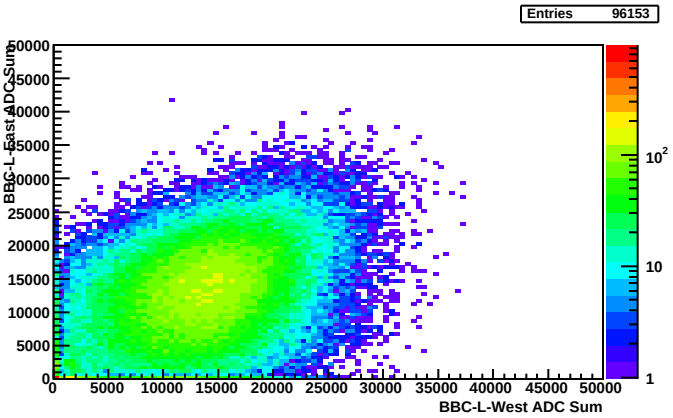

Entries 96153
BBC-L-West ADC Sum
BBC-S-West ADC Sum

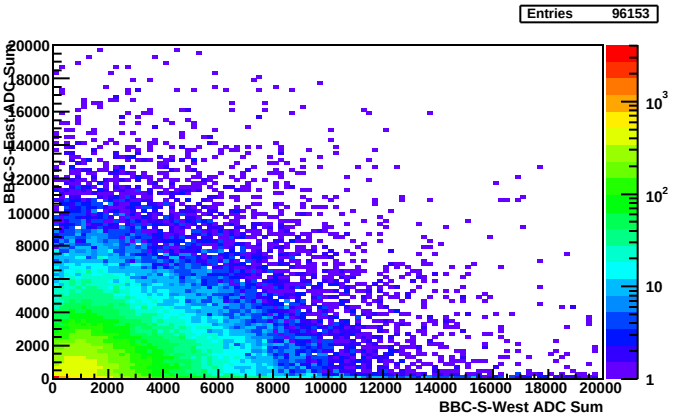

Entries 96153
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

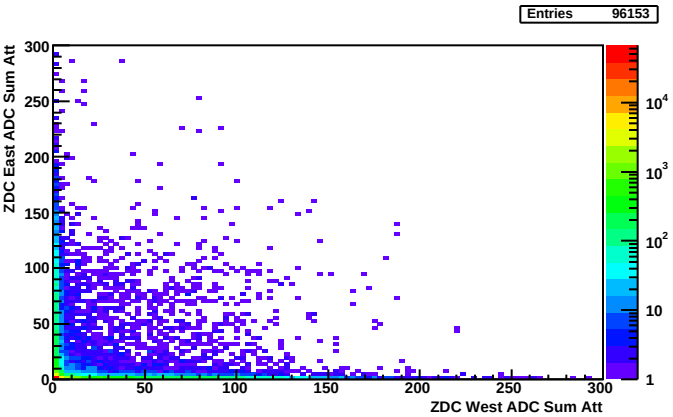

Entries 96153
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

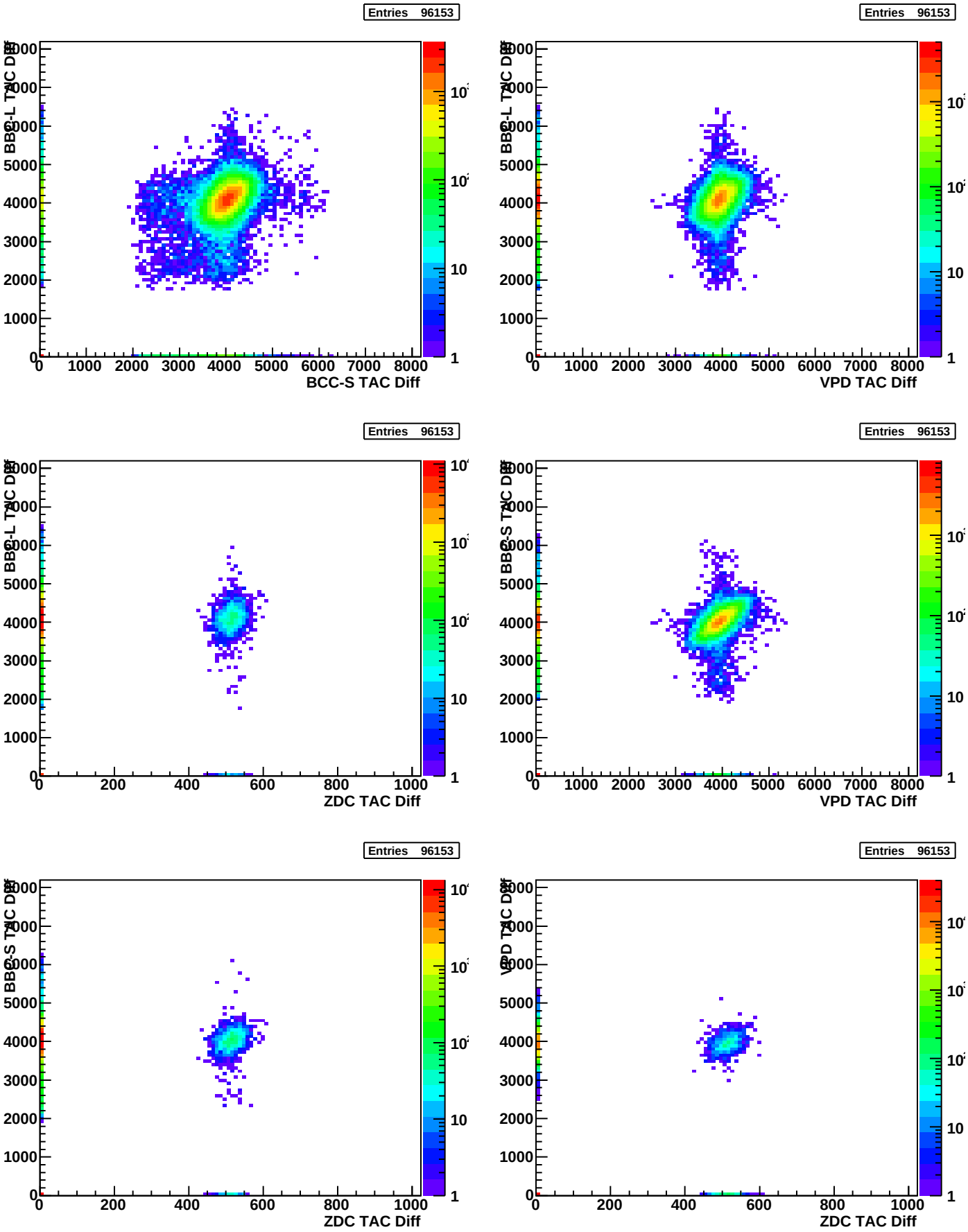

Entries 96153
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

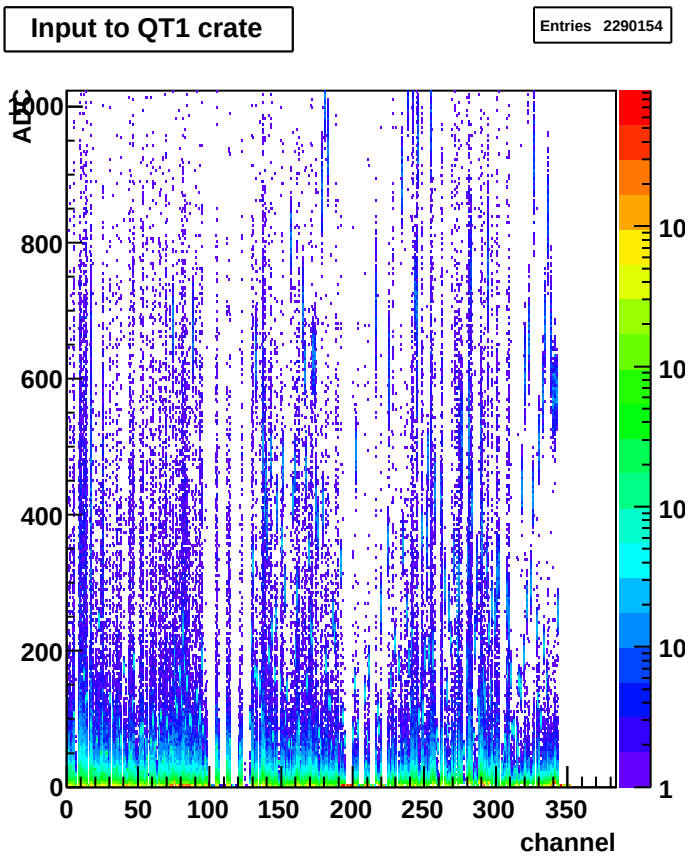

Entries 96153
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

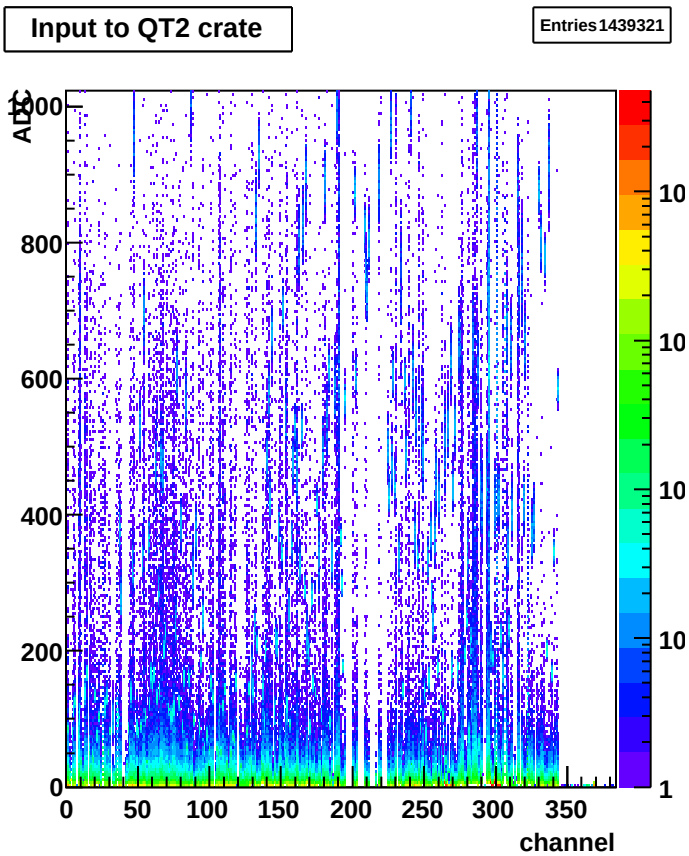

Entries 96153
BBC-L-East ADC Sum
BBC-L-West ADC Sum

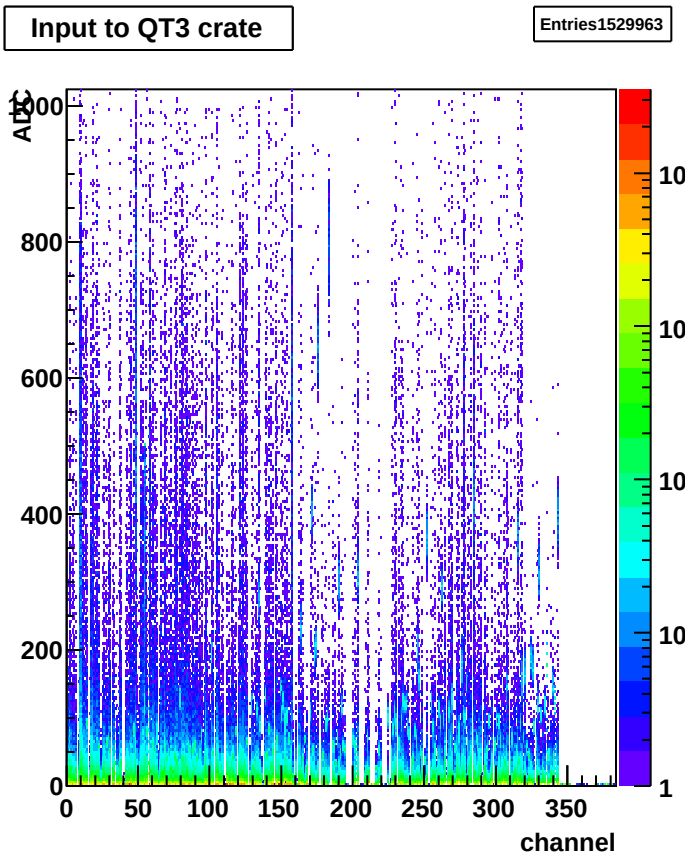

Entries 96153
BBC-S-East ADC Sum
BBC-S-West ADC Sum

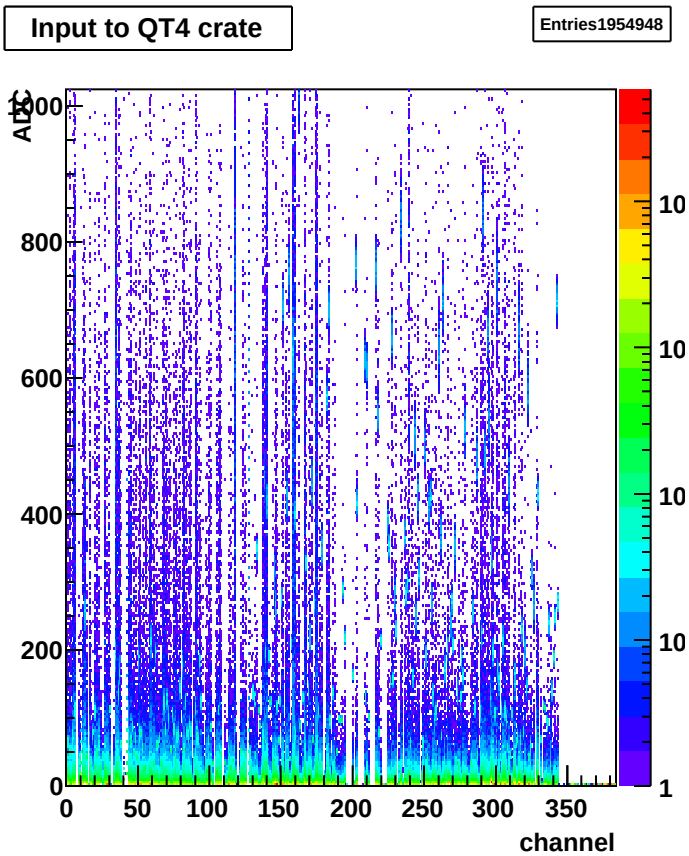

Entries 96153
ZDC East ADC Sum Att
ZDC West ADC Sum Att

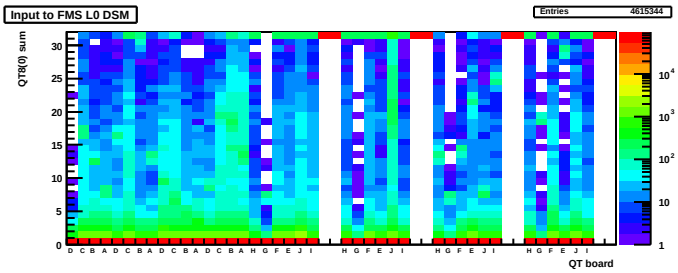

Entries 96153
BBC-L TAC Diff
BCC-S TAC Diff
Entries 96153
BBC-L TAC Diff
VPD TAC Diff
Entries 96153
BBC-L TAC Diff
ZDC TAC Diff
Entries 96153
BBC-S TAC Diff
VPD TAC Diff
Entries 96153
BBC-S TAC Diff
ZDC TAC Diff
Entries 96153
VPD TAC Diff
ZDC TAC Diff

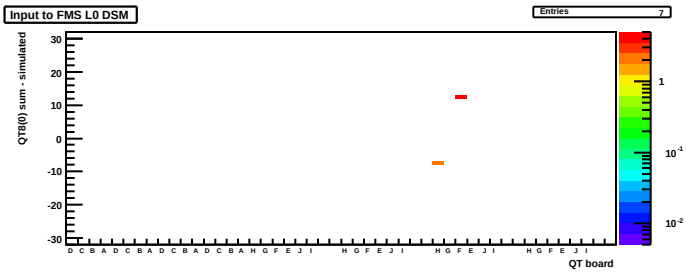

Input to QT1 crate
Entries 2290154
ADC
channel

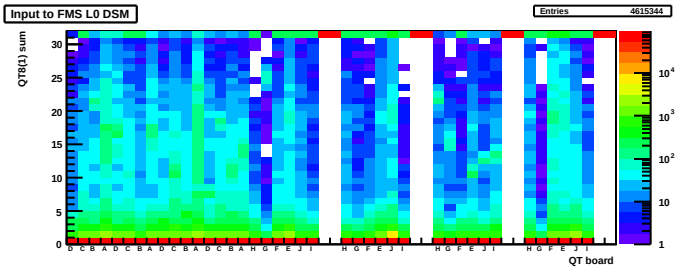

Input to QT2 crate
Entries 1439321
ADC
channel

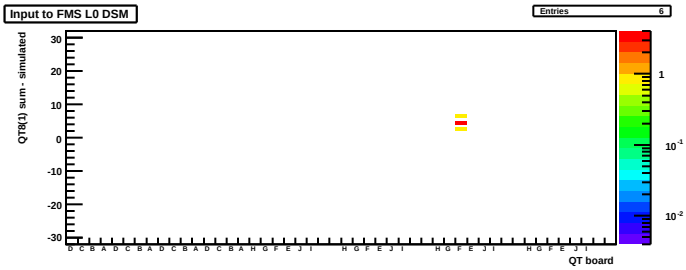

Input to QT3 crate
Entries 1529963
ADC
channel

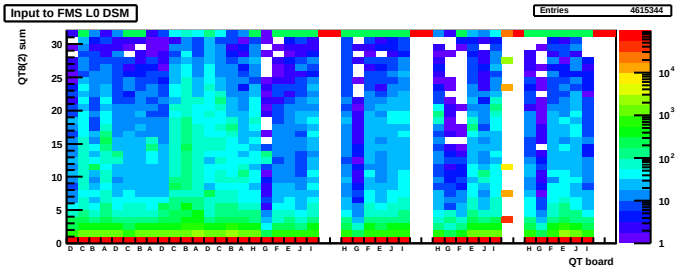

Input to QT4 crate
Entries 1954948
ADC
channel

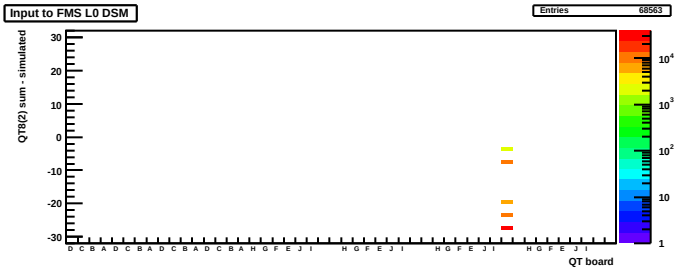

Input to FMS L0 DSM
Entries 4615344
QT8(0) sum
QT board

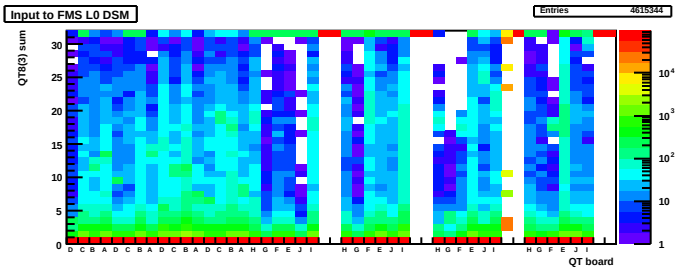

Input to FMS L0 DSM
Entries 7
QT8(0) sum - simulated
QT board

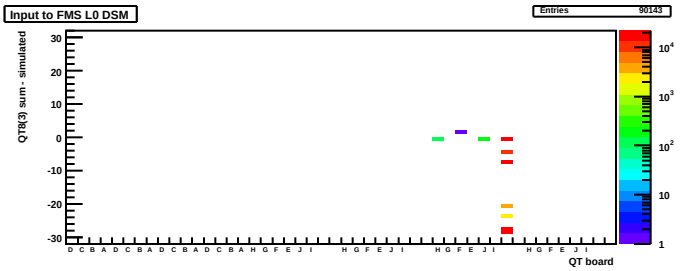

Input to FMS L0 DSM
Entries 4615344
QT8(1) sum
QT board

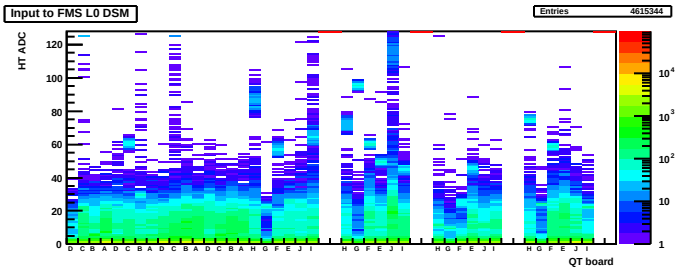

Input to FMS L0 DSM
Entries 6
QT8(1) sum - simulated
QT board

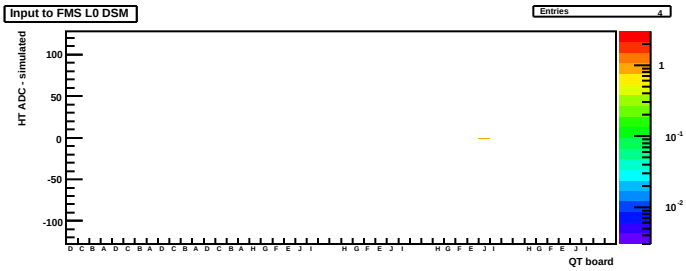

Input to FMS L0 DSM
Entries 4615344
QT8(2) sum
QT board

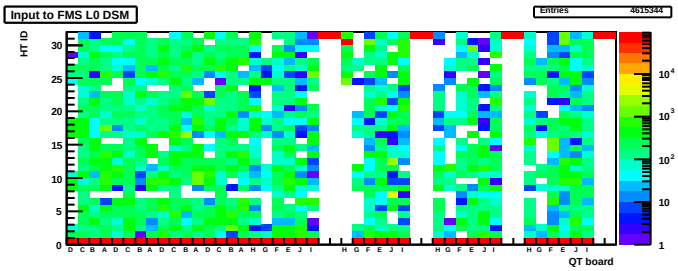

Input to FMS L0 DSM
Entries 68563
QT8(2) sum - simulated
QT board

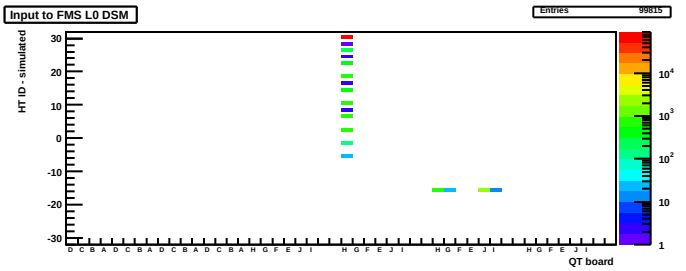

Input to FMS L0 DSM
Entries 4615344
QT8(3) sum
QT board

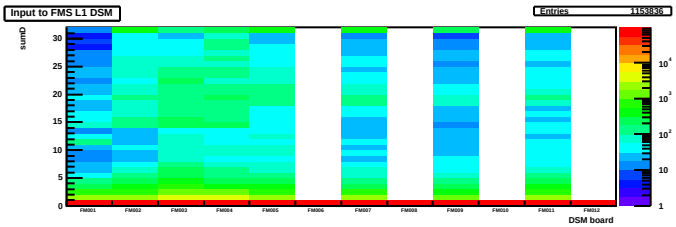

Input to FMS L0 DSM
Entries 90143
QT8(3) sum - simulated
QT board

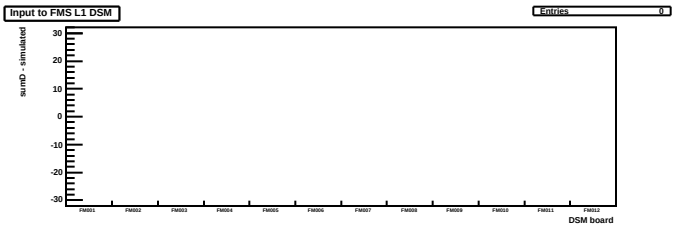

Input to FMS L0 DSM
Entries 4615344
HT ADC
QT board

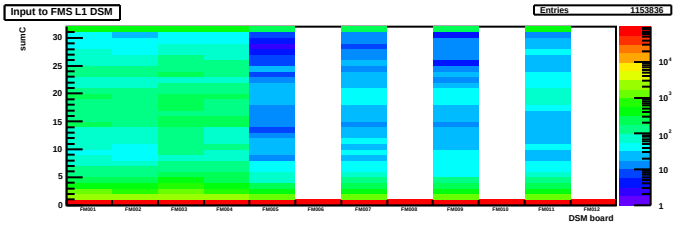

Input to FMS L0 DSM
Entries 4
HT ADC - simulated
QT board

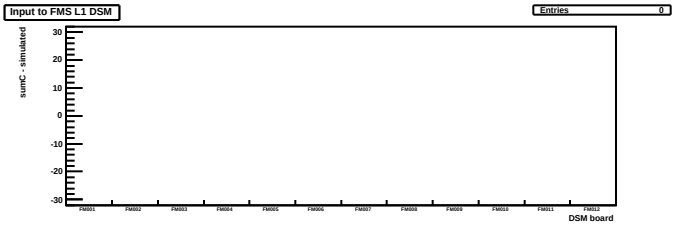

Input to FMS L0 DSM
Entries 4615344
HT ID
QT board

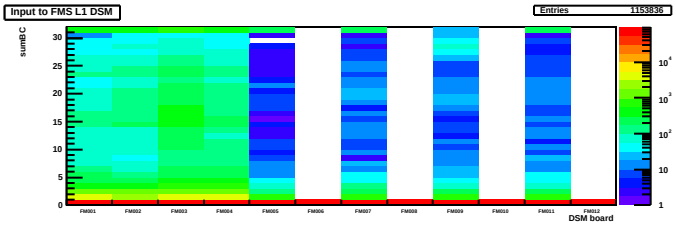

Input to FMS L0 DSM
Entries 99815
HT ID - simulated
QT board

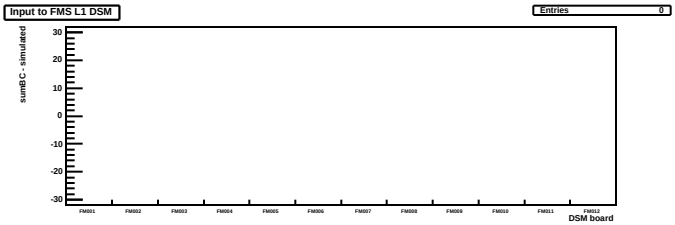

Input to FMS L1 DSM
Entries 1153836
sumD
DSM board

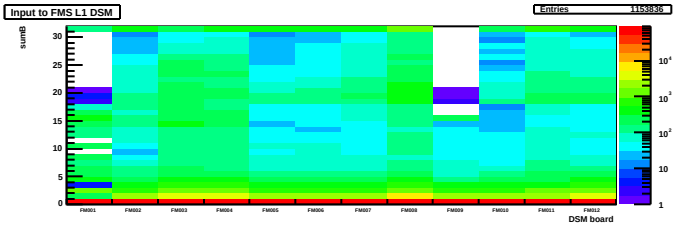

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

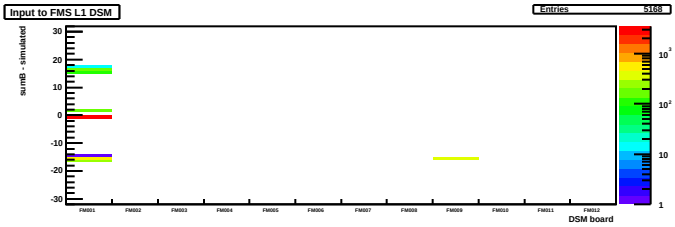

Input to FMS L1 DSM
Entries 1153836
sumC
DSM board

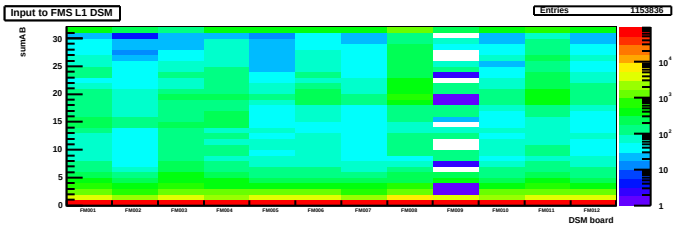

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

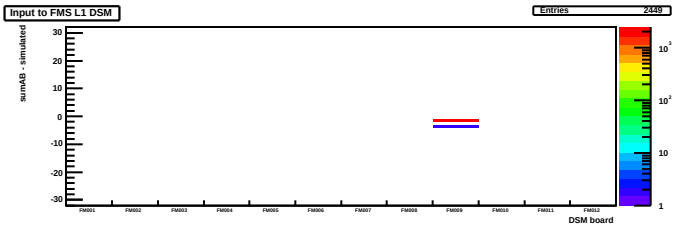

Input to FMS L1 DSM
Entries 1153836
sumBC
DSM board

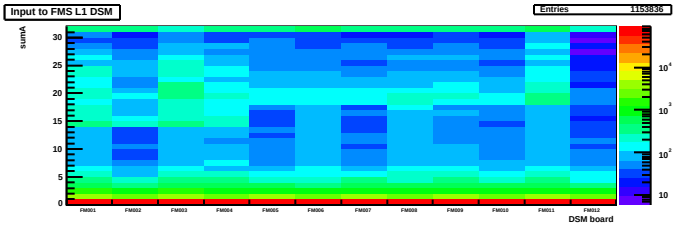

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

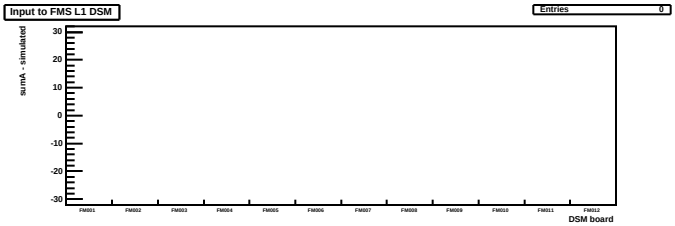

Input to FMS L1 DSM
Entries 1153836
sumB
DSM board

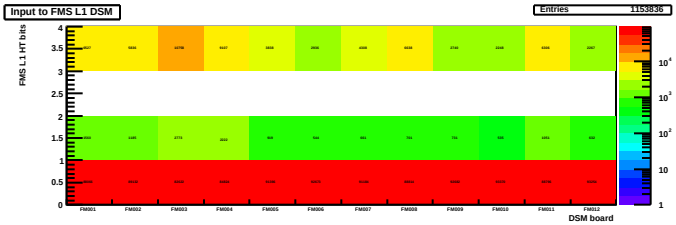

Input to FMS L1 DSM
Entries 5168
sumB - simulated
DSM board

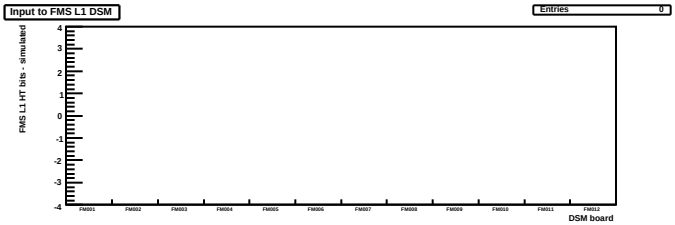

Input to FMS L1 DSM
Entries 1153836
sumAB
DSM board

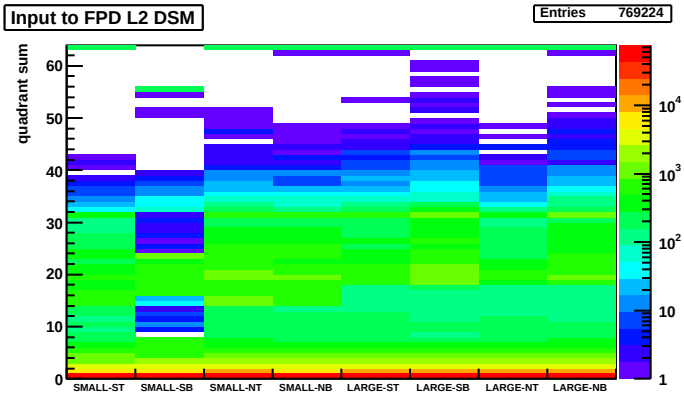

Input to FMS L1 DSM
Entries 2449
sumAB - simulated
DSM board

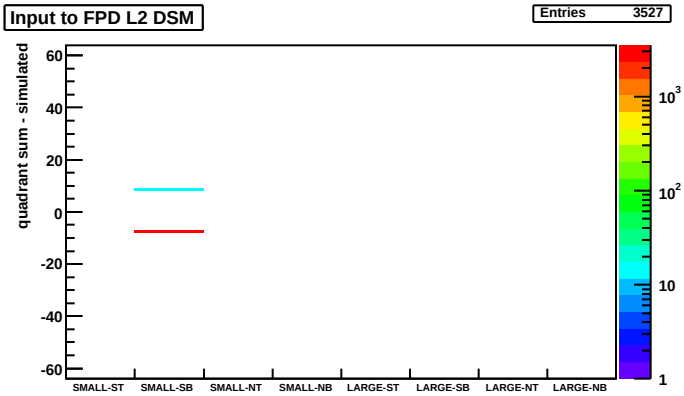

Input to FMS L1 DSM
Entries 1153836
sumA
DSM board

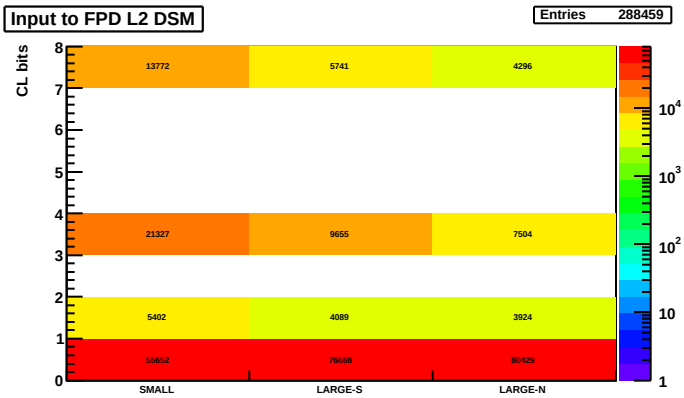

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

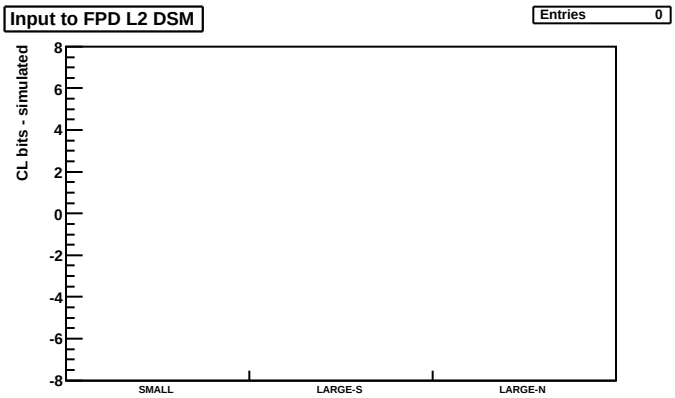

Input to FMS L1 DSM
Entries 1153836
FMS L1 HT bits
DSM board

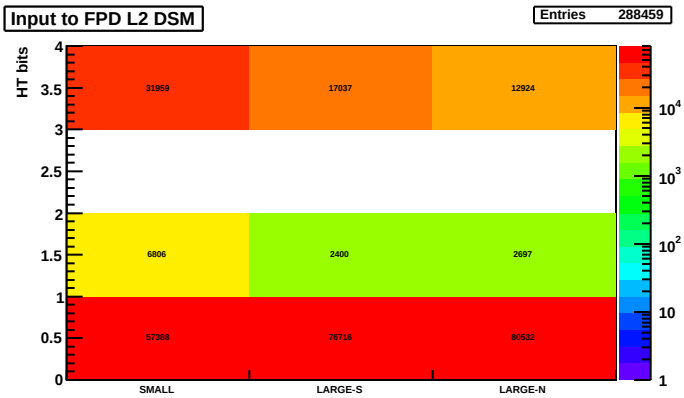

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

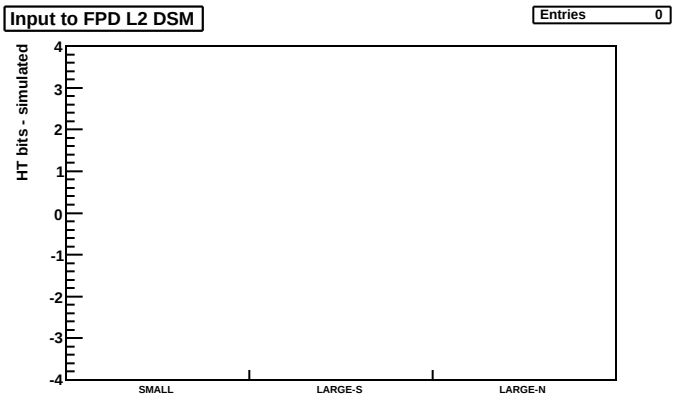

Input to FPD L2 DSM
Entries 769224
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

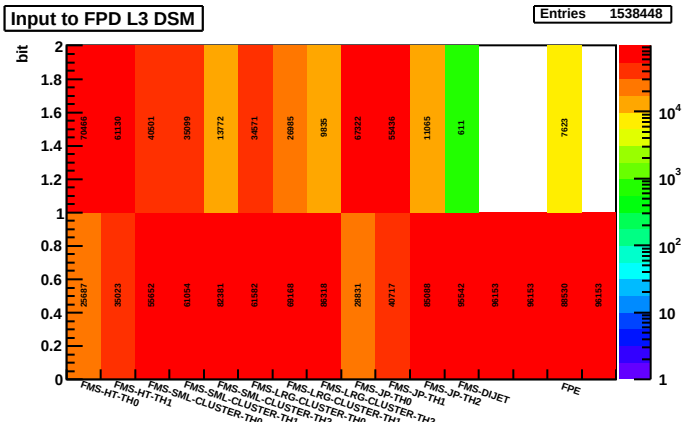

Input to FPD L2 DSM
Entries 3527
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

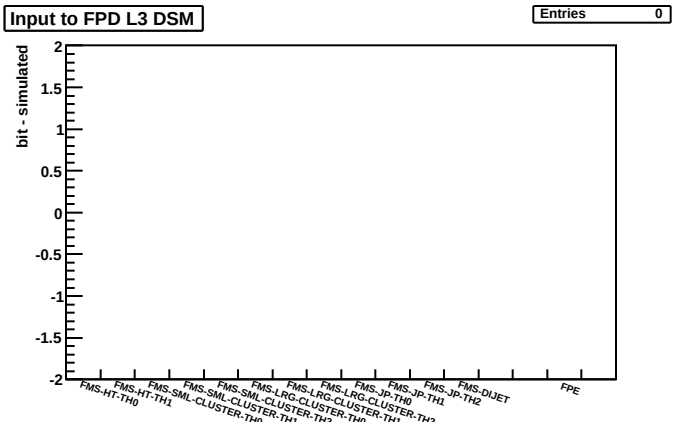

Input to FPD L2 DSM
Entries 288459
CL bits
13772 5741 4296
21327 9655 7504
5402 4089 3924
55652 76668 80429
SMALL LARGE-S LARGE-N

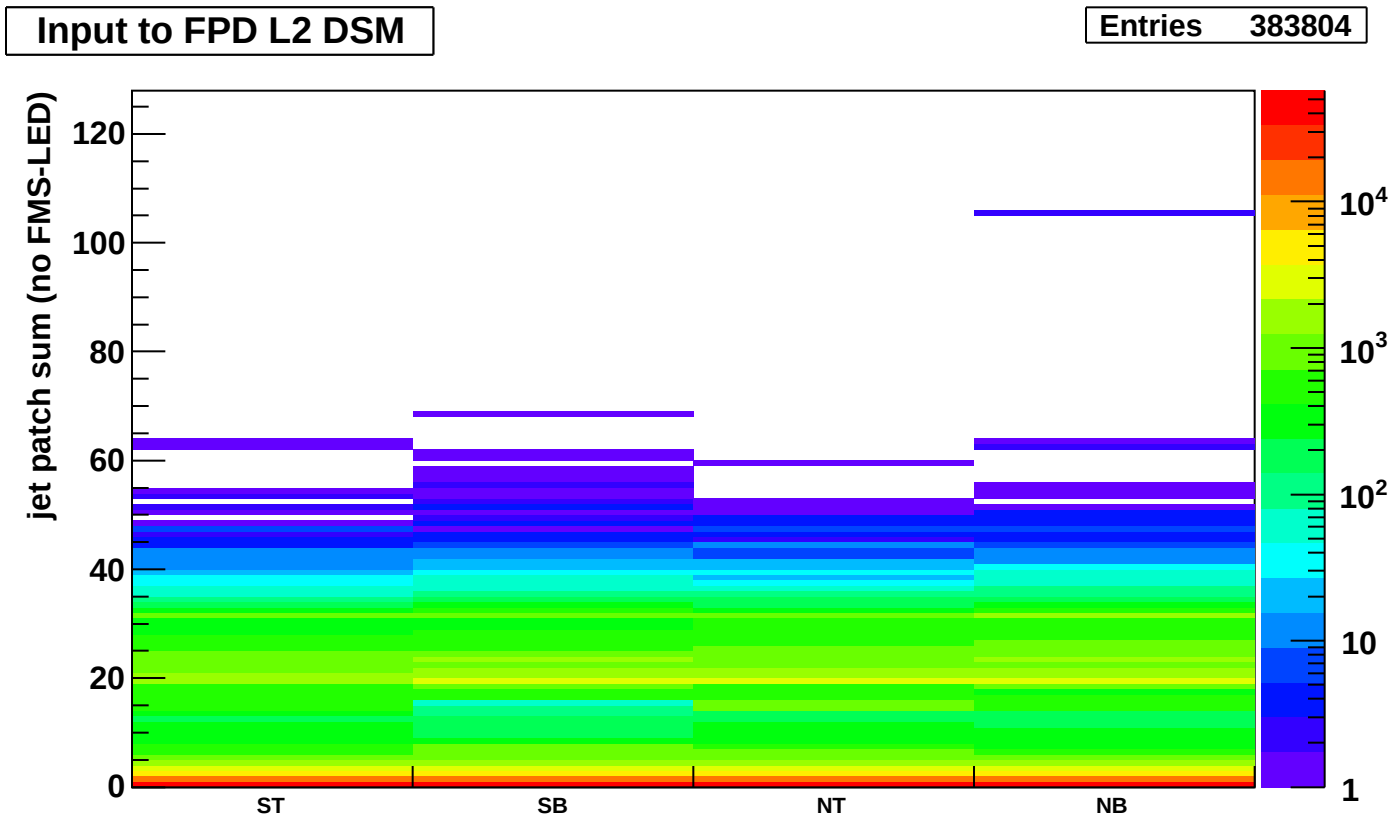

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL LARGE-S LARGE-N

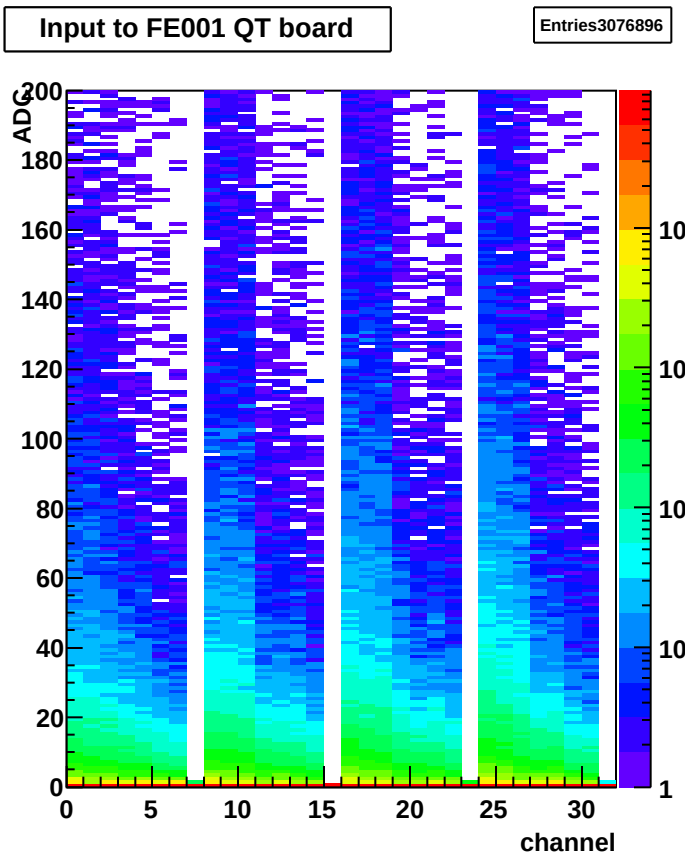

Input to FPD L2 DSM
Entries 288459
HT bits
31959 17037 12924
6806 2400 2697
57388 76716 80532
SMALL LARGE-S LARGE-N

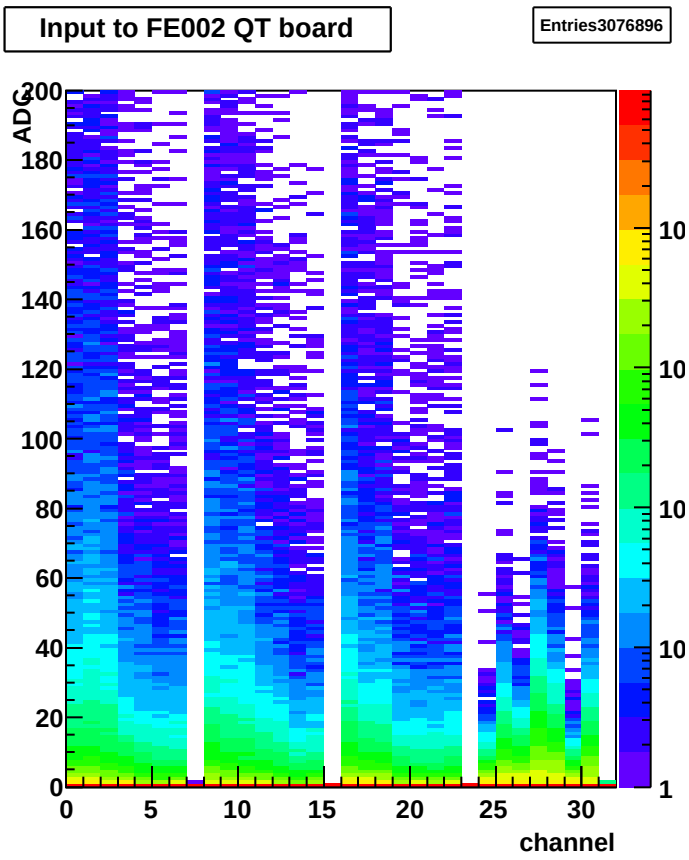

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL LARGE-S LARGE-N

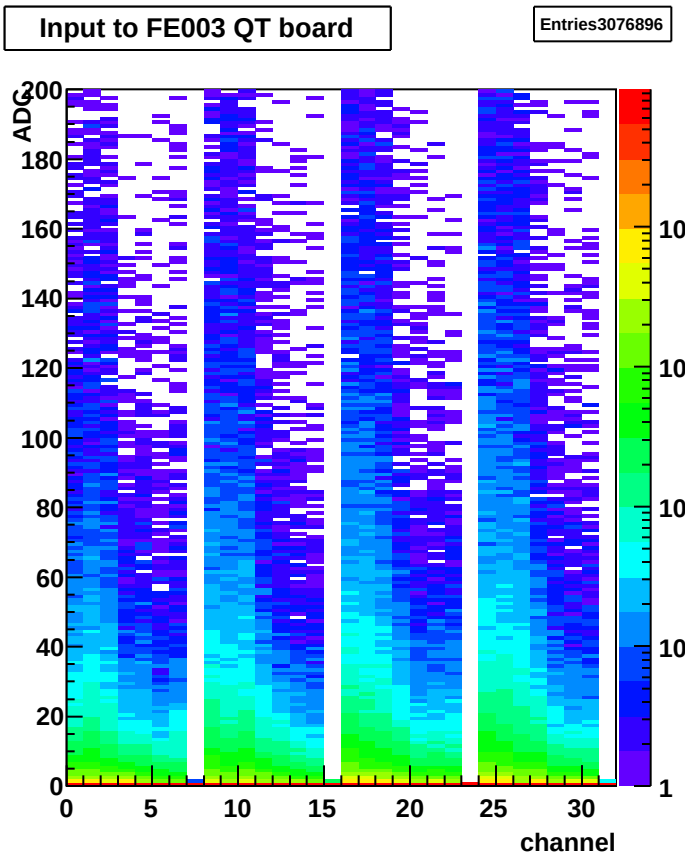

Input to FPD L3 DSM
Entries 1538448
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

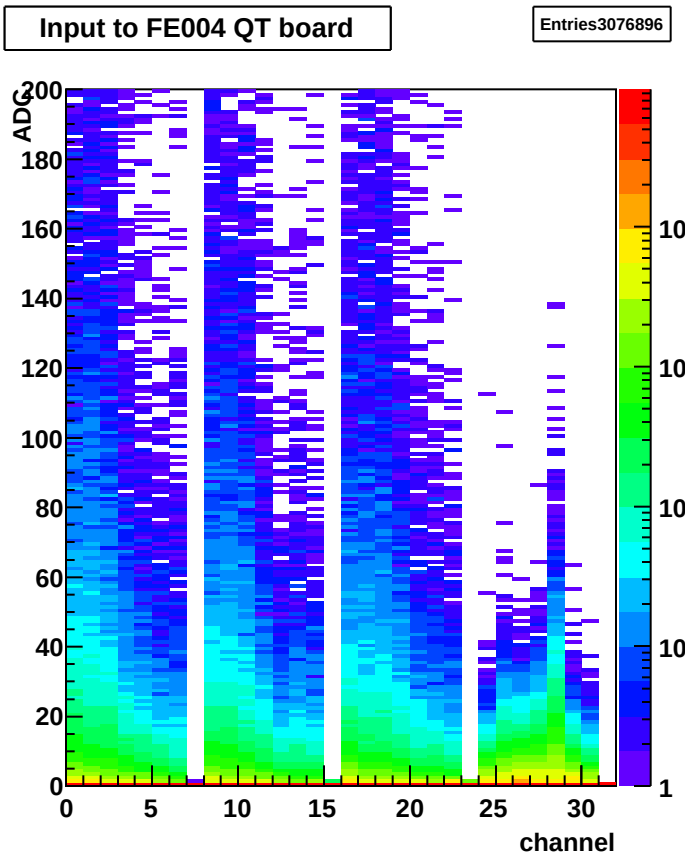

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

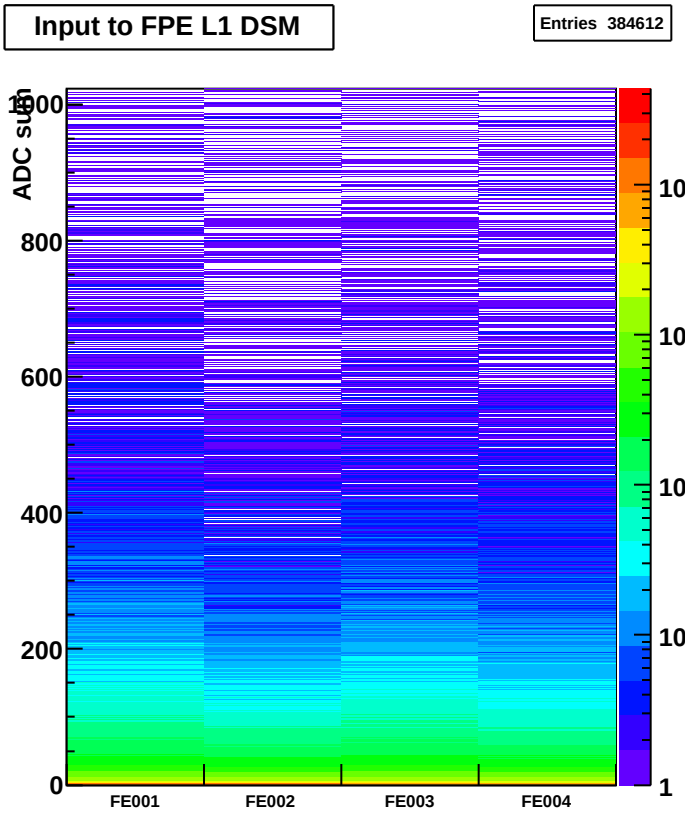

Input to FPD L2 DSM
Entries 383804
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

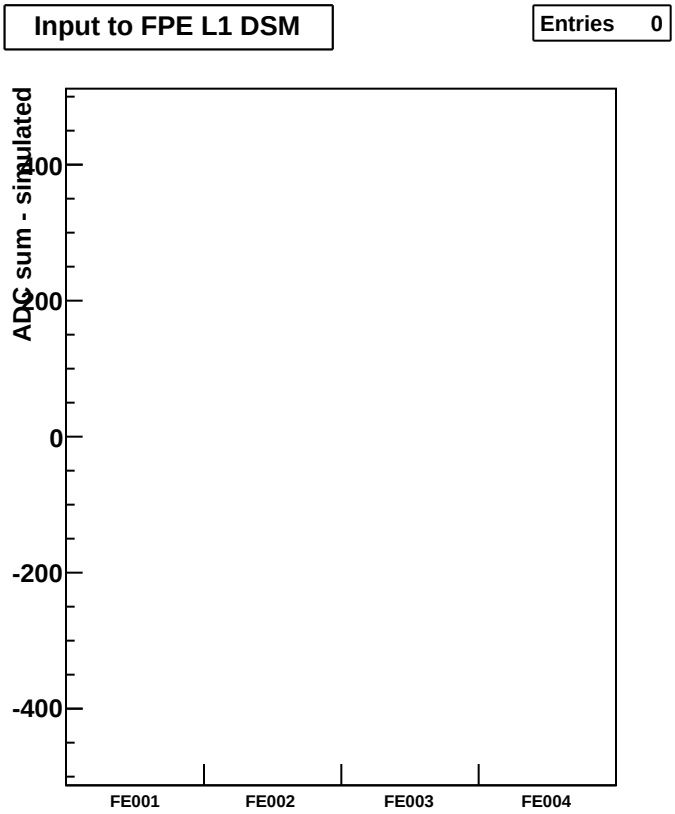

Input to FE001 QT board
Entries3076896
ADC
channel

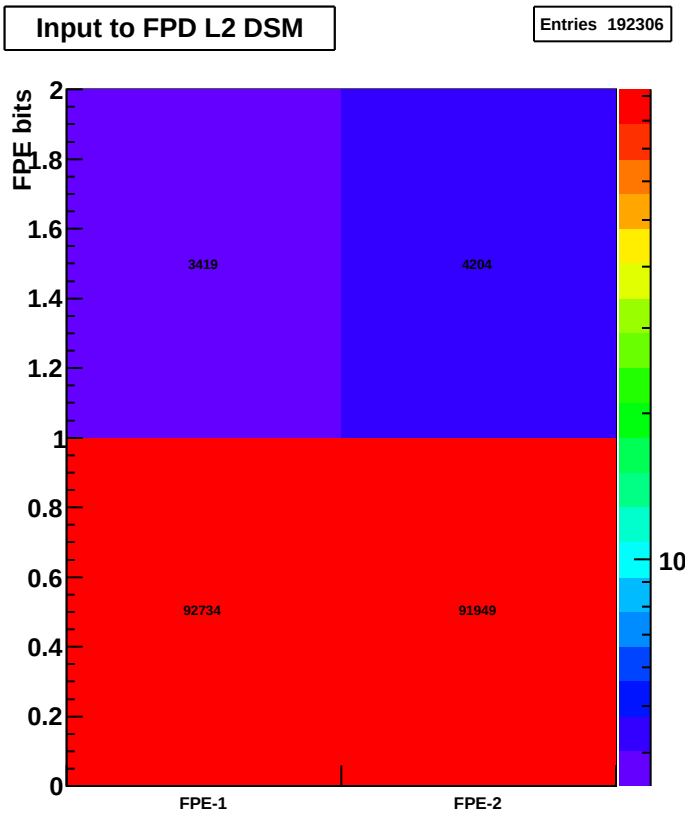

Input to FE002 QT board
Entries3076896
ADC
channel

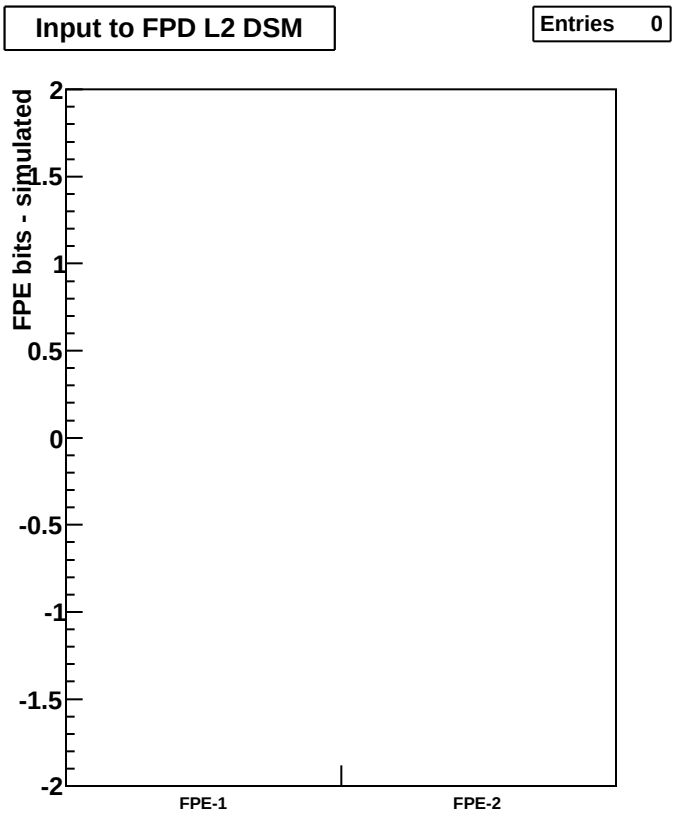

Input to FE003 QT board
Entries3076896
ADC
channel


Input to FE004 QT board
Entries3076896
ADC
channel


Input to FPE L1 DSM
Entries 384612
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
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
Entries 192306
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
3419
4204
92734
91949
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