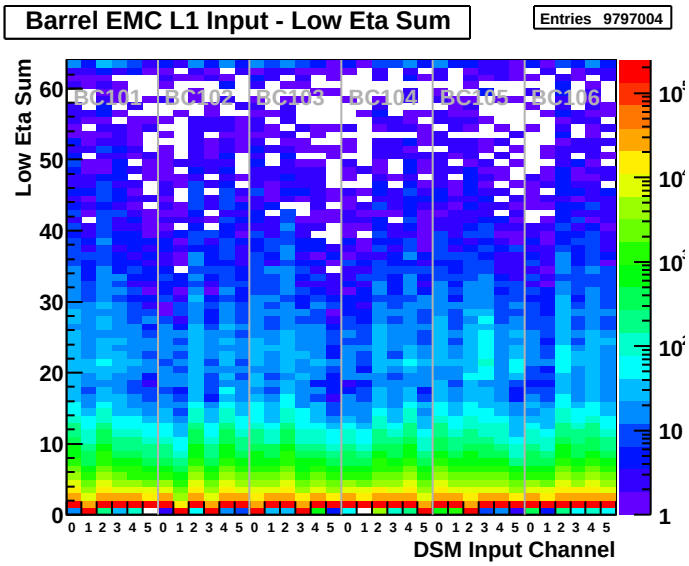
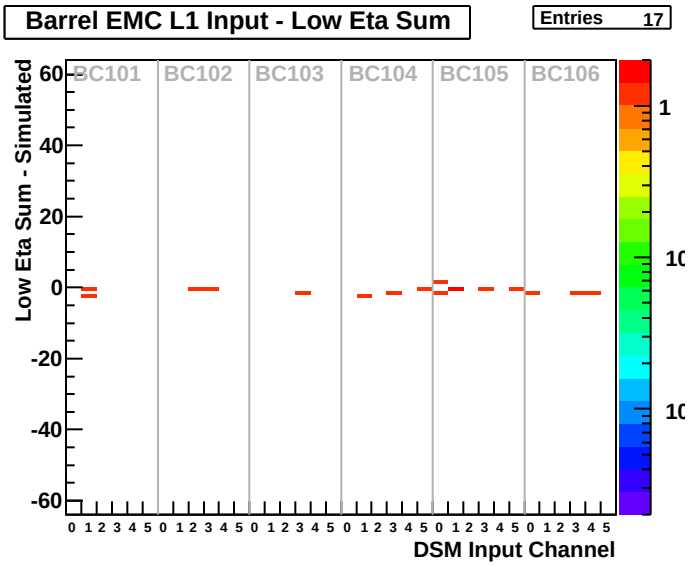
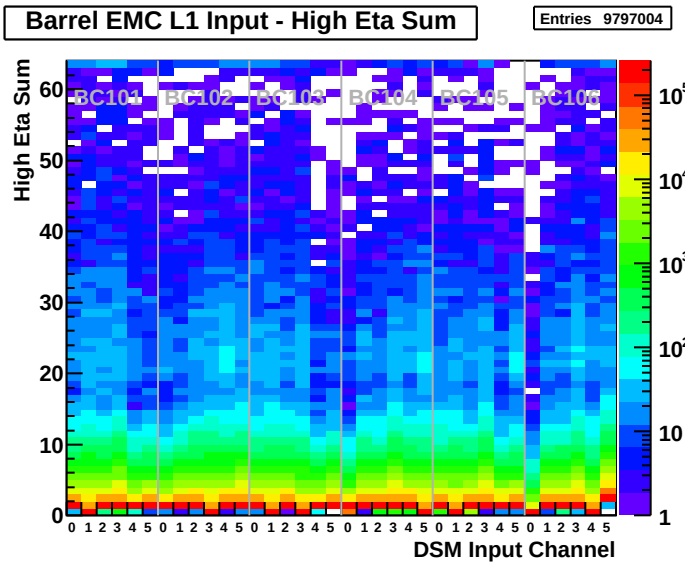
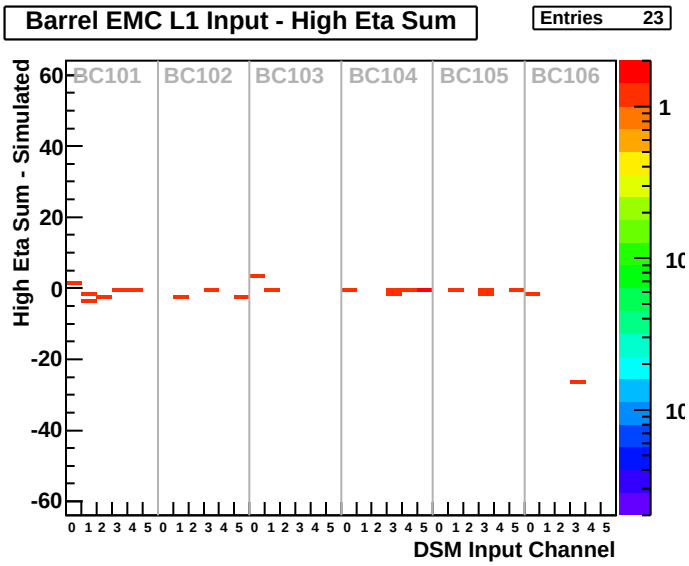
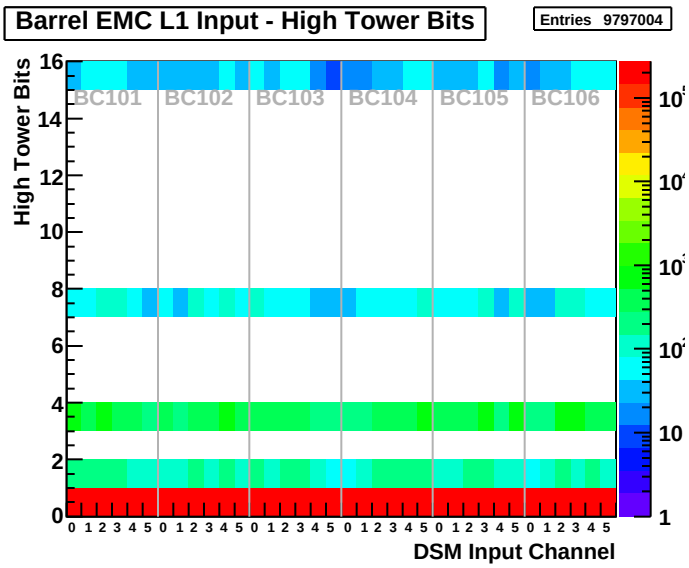
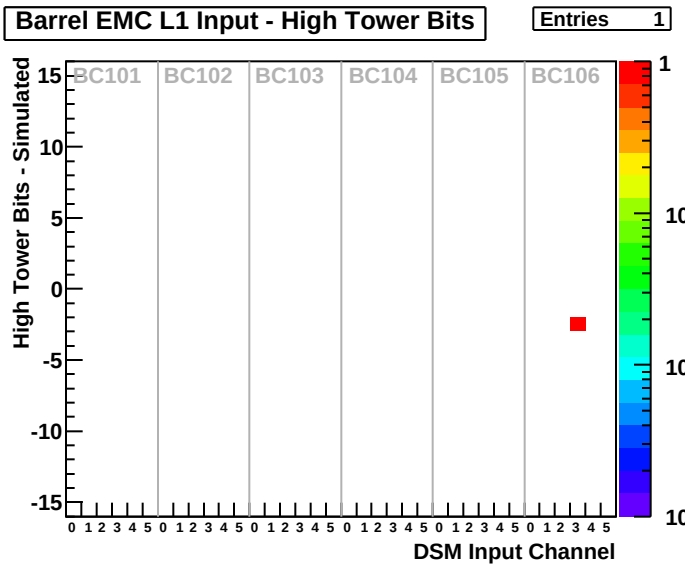

Barrel EMC L1 Input - Low Eta Sum
Entries 9797004
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

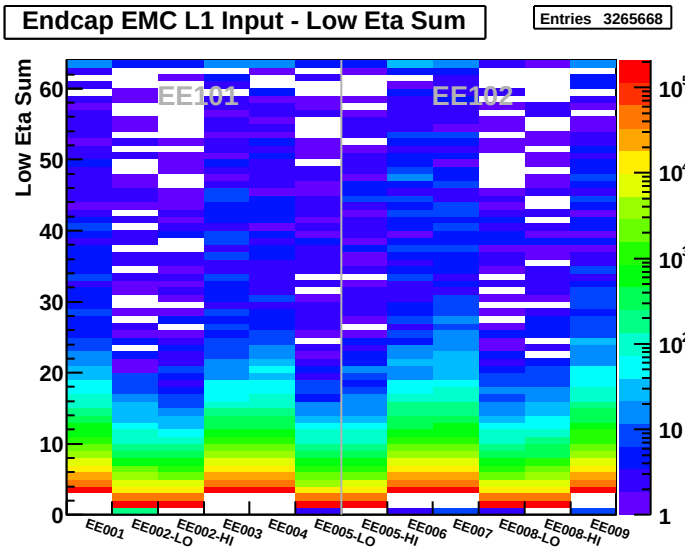

Barrel EMC L1 Input - Low Eta Sum
Entries 17
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

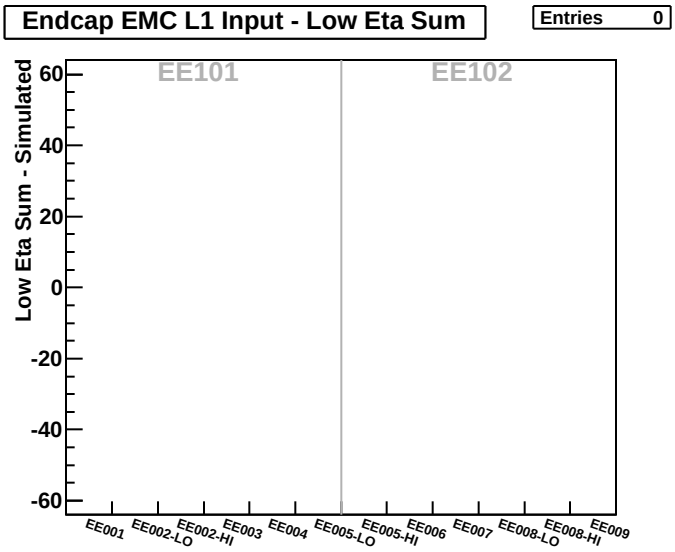

Barrel EMC L1 Input - High Eta Sum
Entries 9797004
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

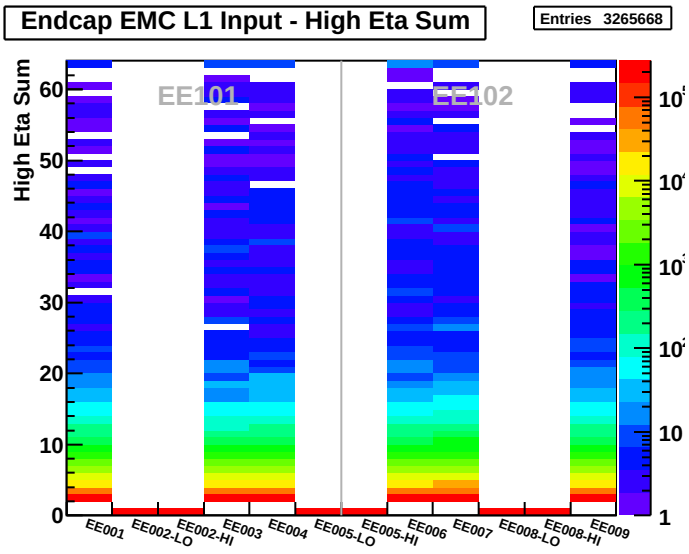

Barrel EMC L1 Input - High Eta Sum
Entries 23
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

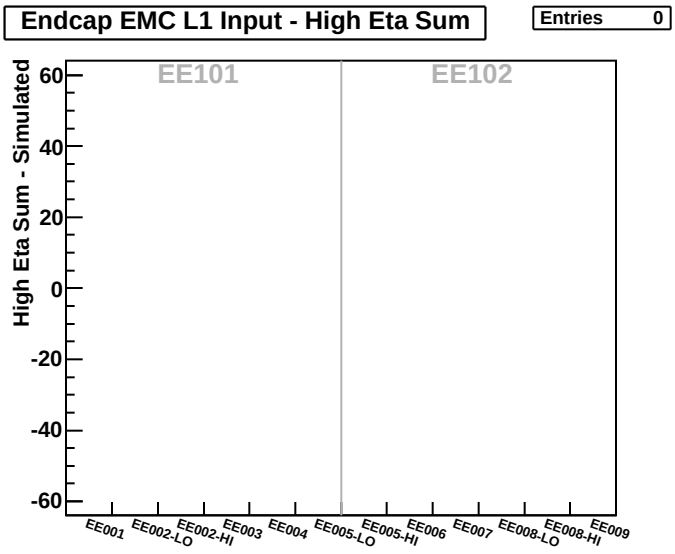

Barrel EMC L1 Input - High Tower Bits
Entries 9797004
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

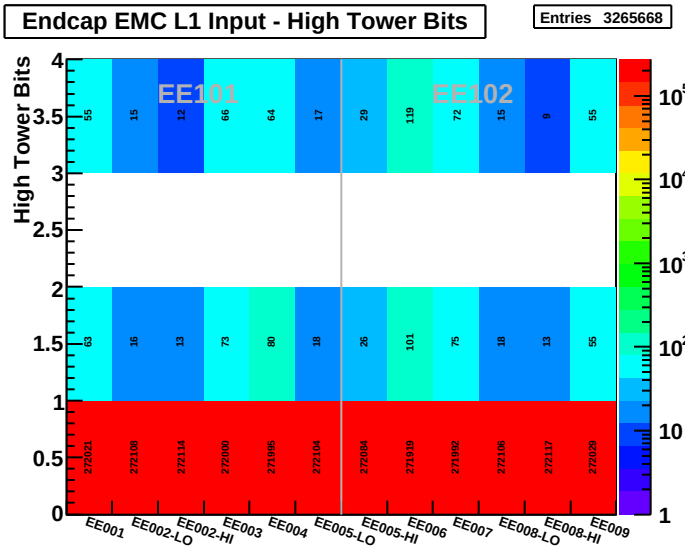

Barrel EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

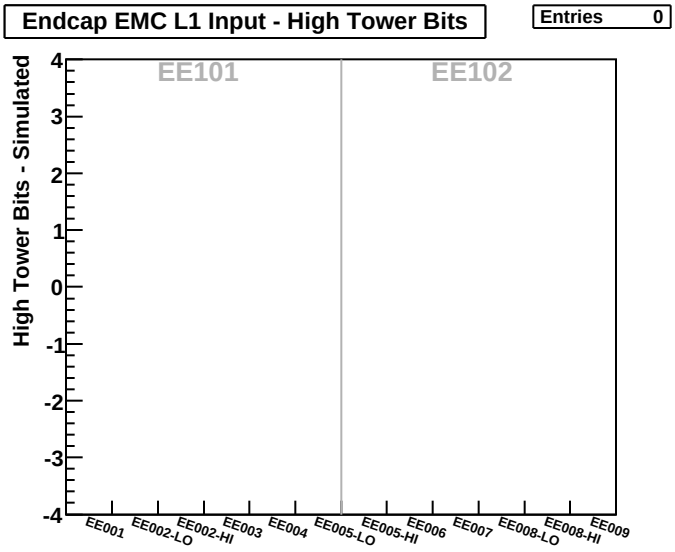

Endcap EMC L1 Input - Low Eta Sum
Entries 3265668
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

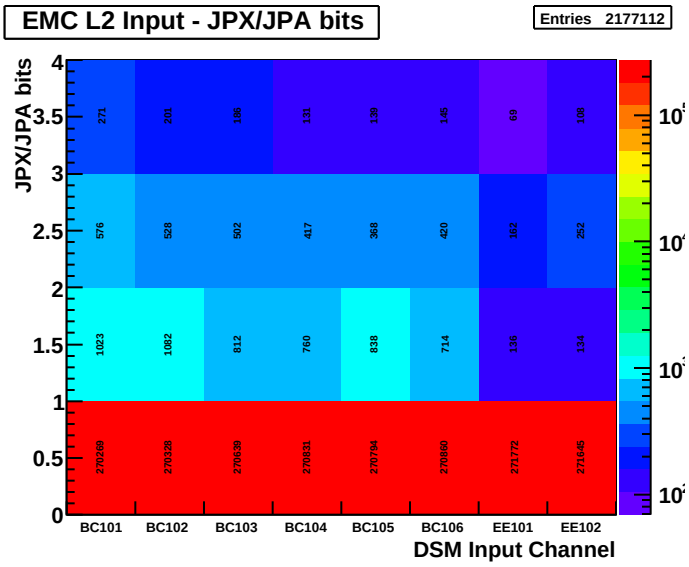

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

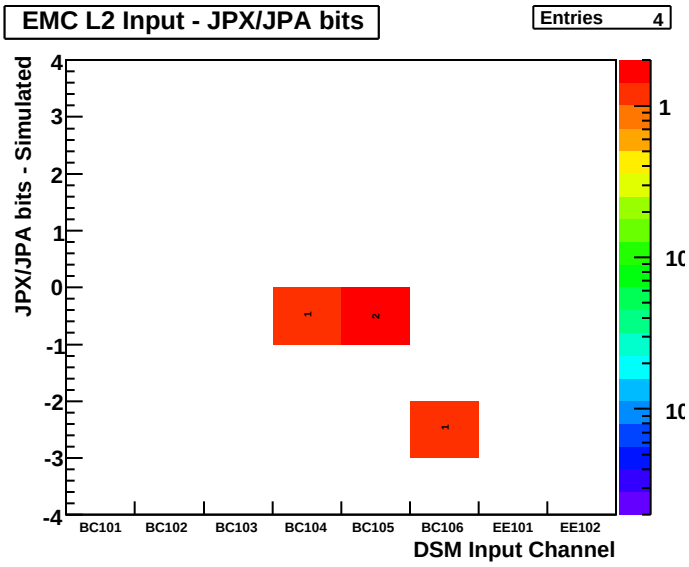

Endcap EMC L1 Input - High Eta Sum
Entries 3265668
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

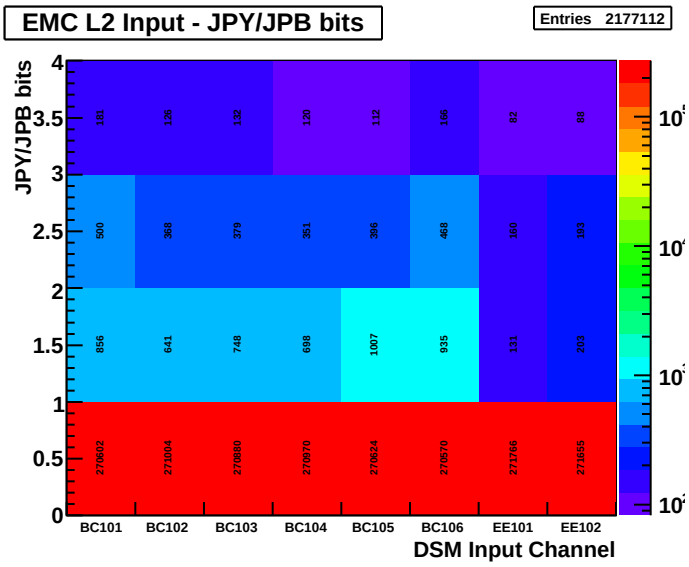

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

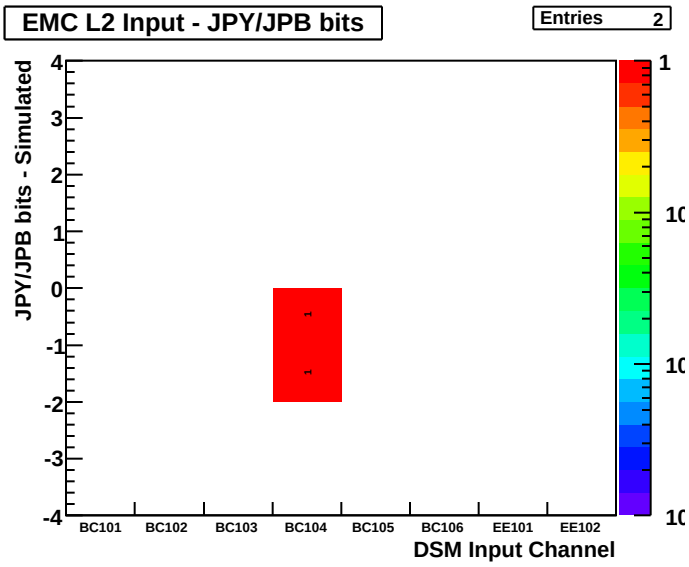

Endcap EMC L1 Input - High Tower Bits
Entries 3265668
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

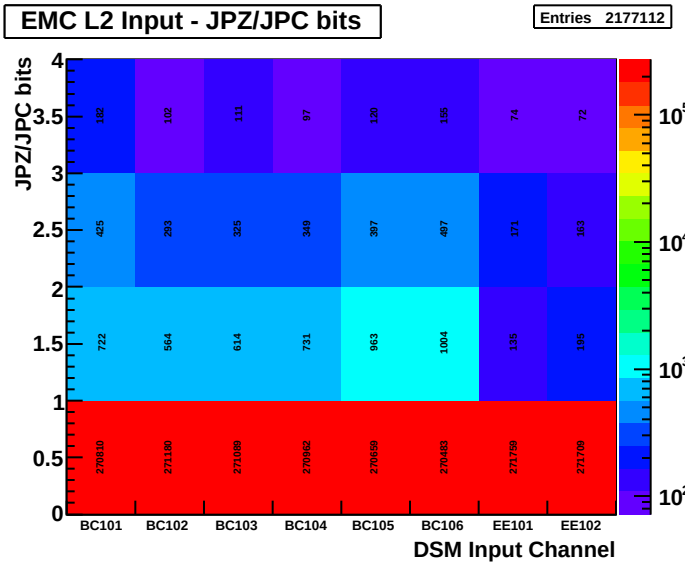

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

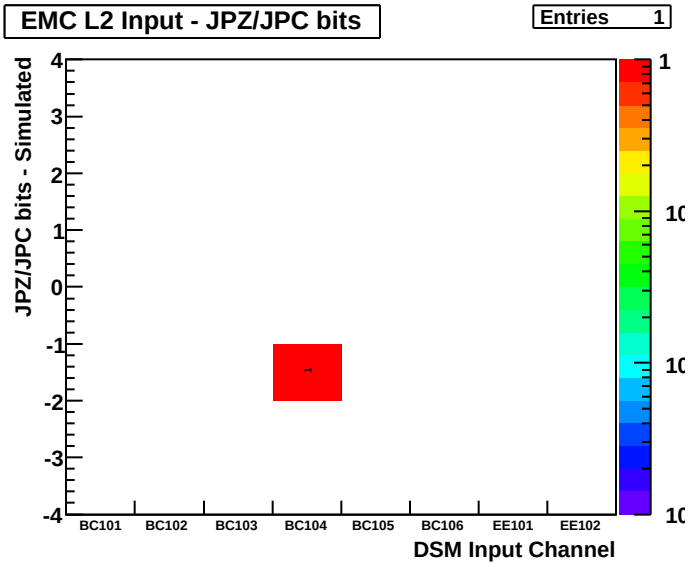

EMC L2 Input - JPX/JPA bits
Entries 2177112
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
271 201 186 131 139 145 69 108
576 528 502 417 368 420 182 252
1023 1082 812 760 838 714 136 134
270269 270328 270639 270831 270794 270860 271772 271645

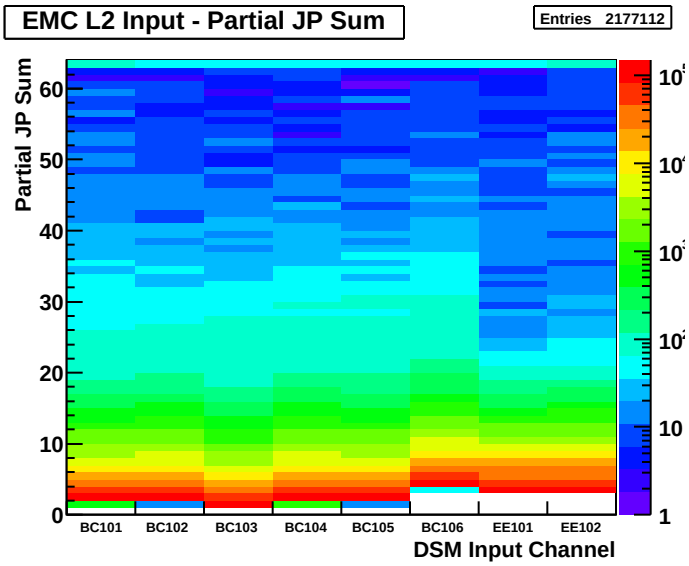

EMC L2 Input - JPX/JPA bits
Entries 4
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 2
1

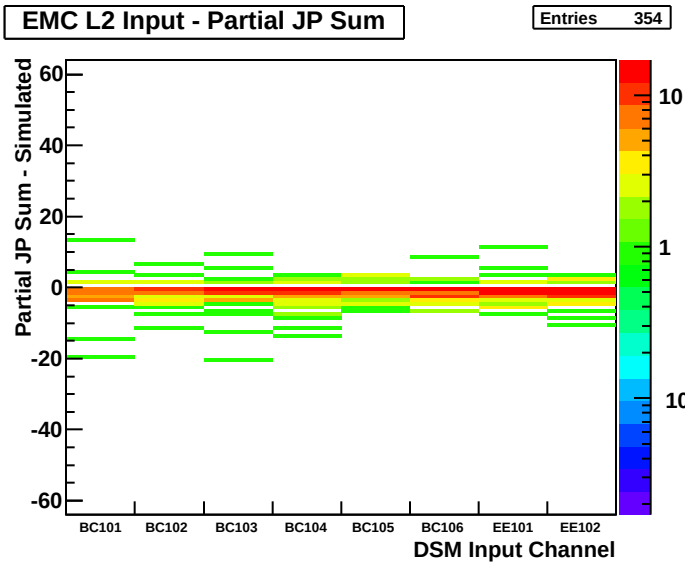

EMC L2 Input - JPY/JPB bits
Entries 2177112
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
181 126 122 120 112 166 82 88
500 368 379 351 386 468 160 193
856 641 748 698 1007 935 131 203
270602 271004 270880 270970 270624 270570 271766 271655

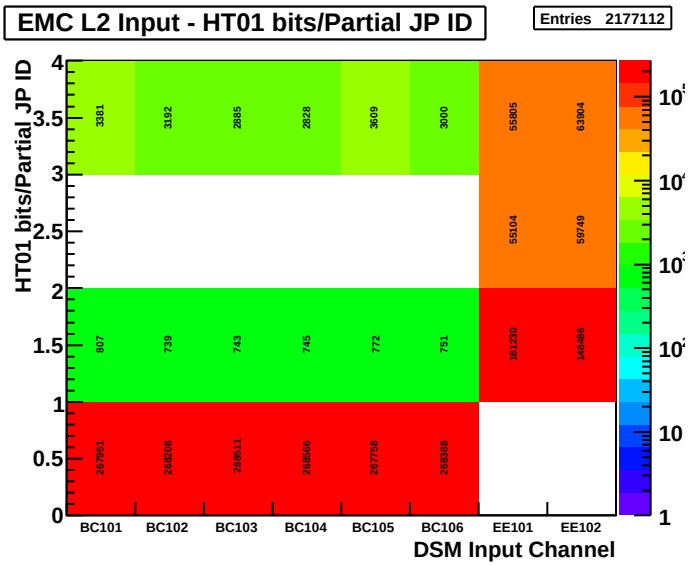

EMC L2 Input - JPY/JPB bits
Entries 2
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1

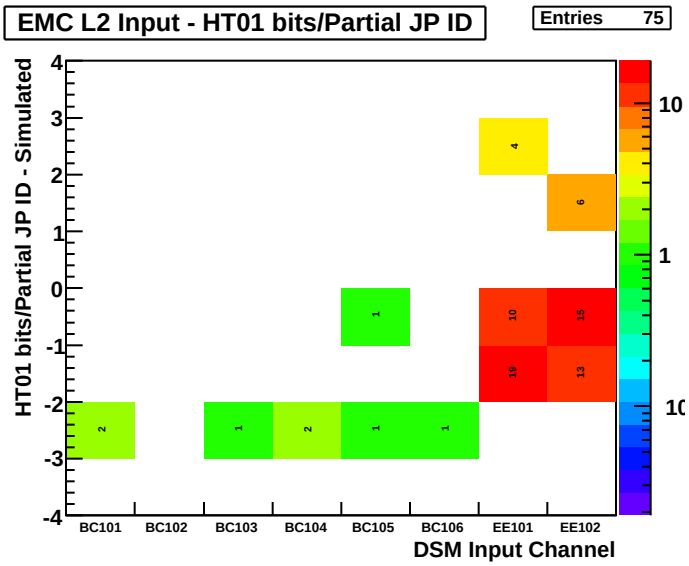

EMC L2 Input - JPZ/JPC bits
Entries 2177112
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
182 102 111 97 120 155 74 72
425 293 325 349 397 497 171 163
722 564 614 731 963 1004 135 195
270810 271180 271089 270962 270599 270483 271759 271709

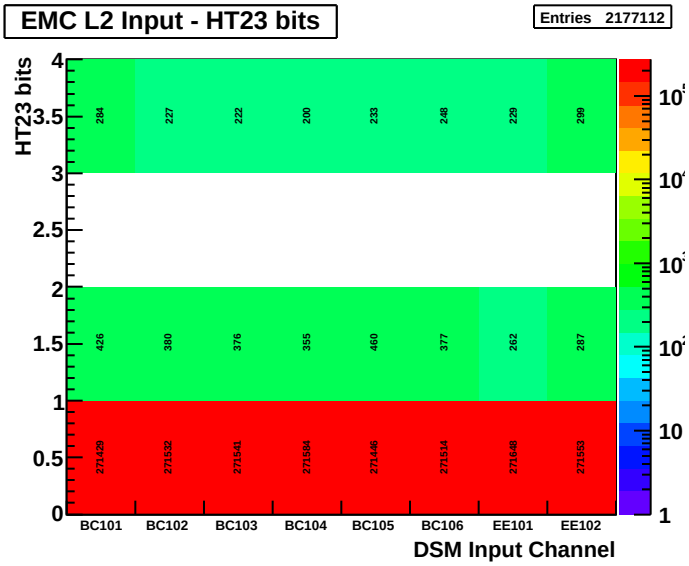

EMC L2 Input - JPZ/JPC bits
Entries 1
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

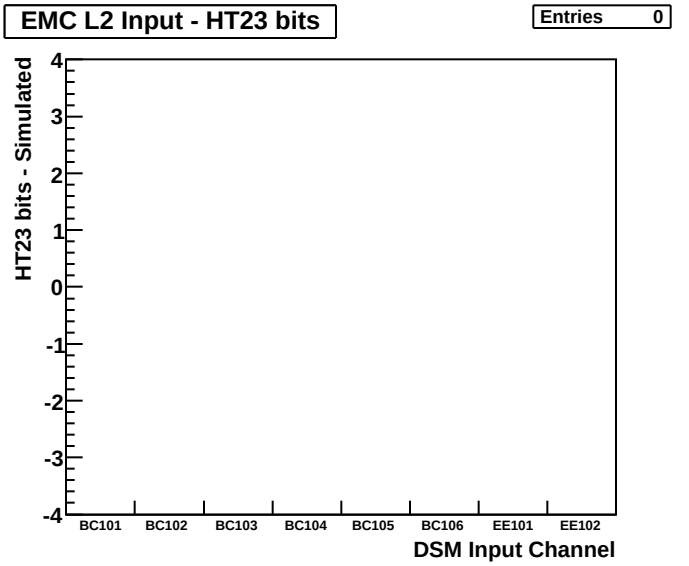

EMC L2 Input - Partial JP Sum
Entries 2177112
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

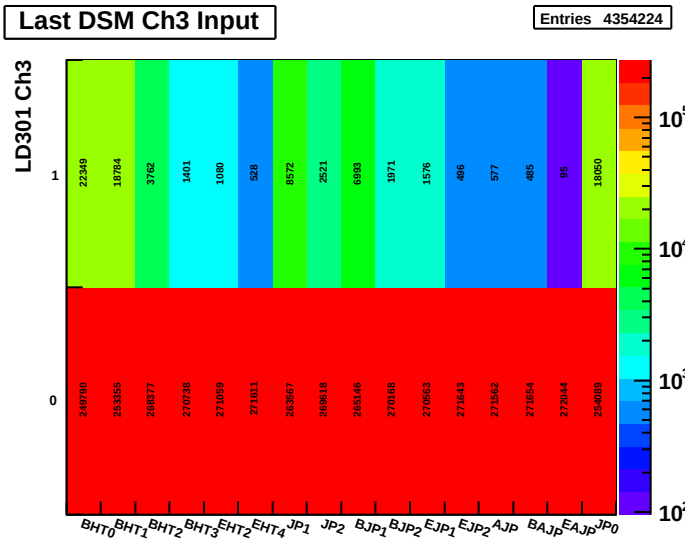

EMC L2 Input - Partial JP Sum
Entries 354
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

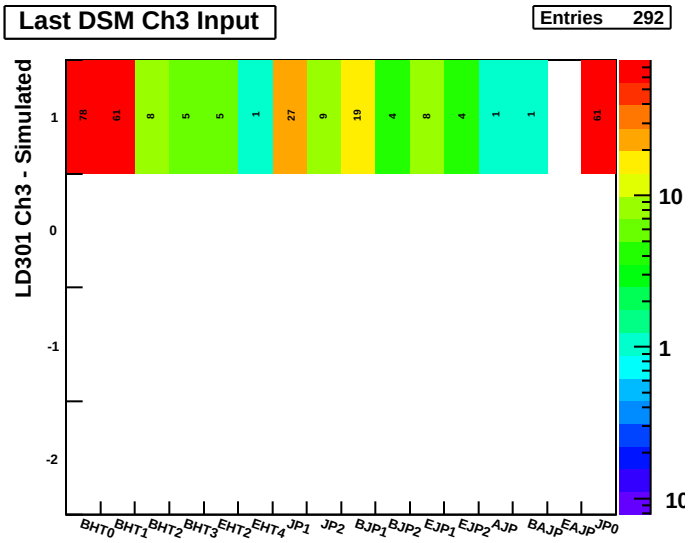

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2177112
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

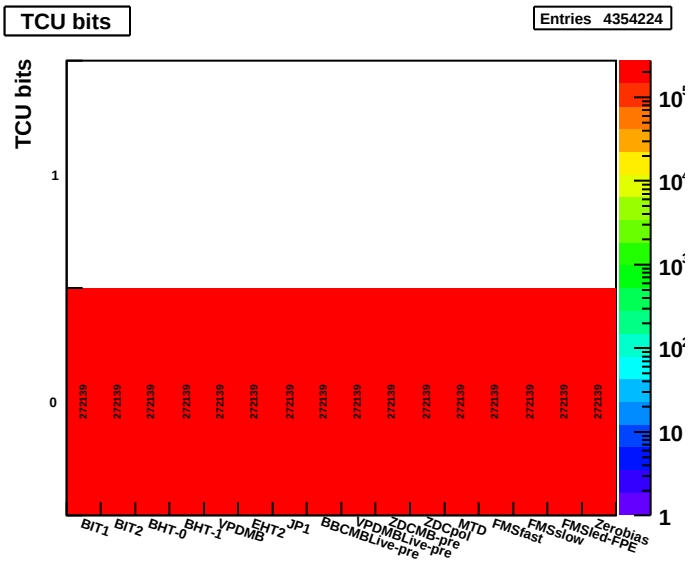

EMC L2 Input - HT01 bits/Partial JP ID
Entries 75
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

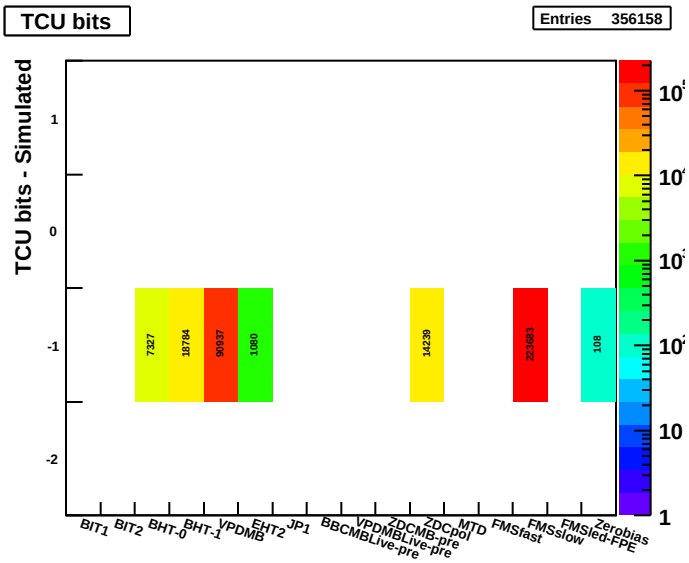

EMC L2 Input - HT23 bits
Entries 2177112
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

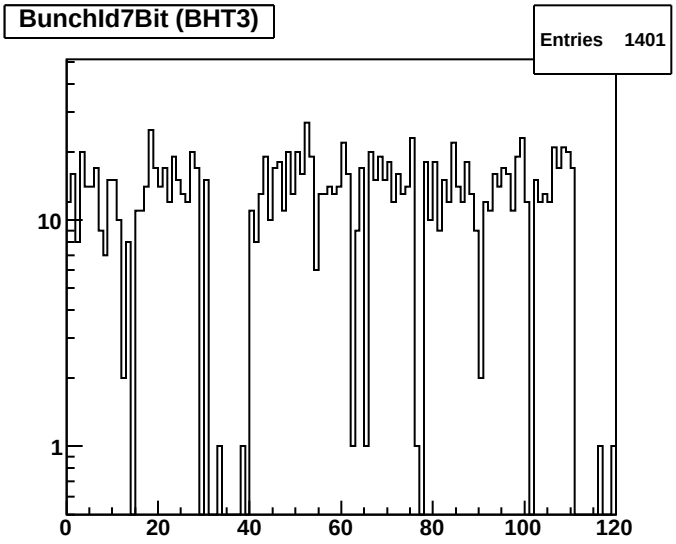

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

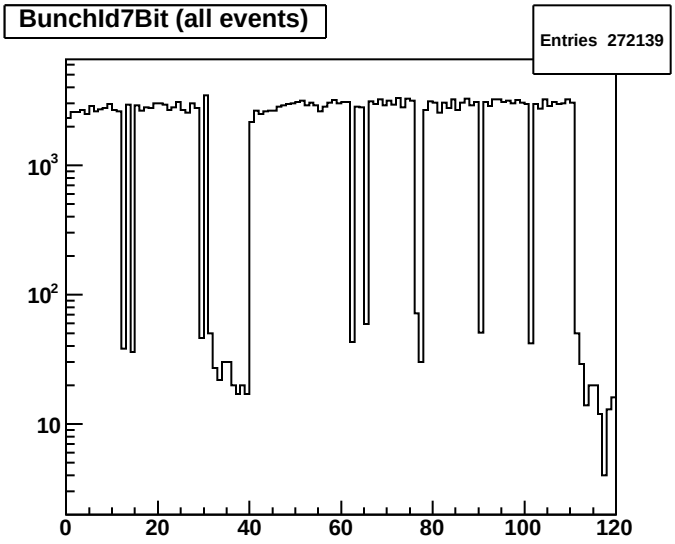

Last DSM Ch3 Input
Entries 4354224
LD301 Ch3
22349 18784 3762 1401 1080 528 8572 2521 6993 1971 1576 496 577 485 95 18050
249780 253355 268377 270738 271059 271611 263567 269618 265146 270168 270563 271643 271562 271654 272044 254089
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

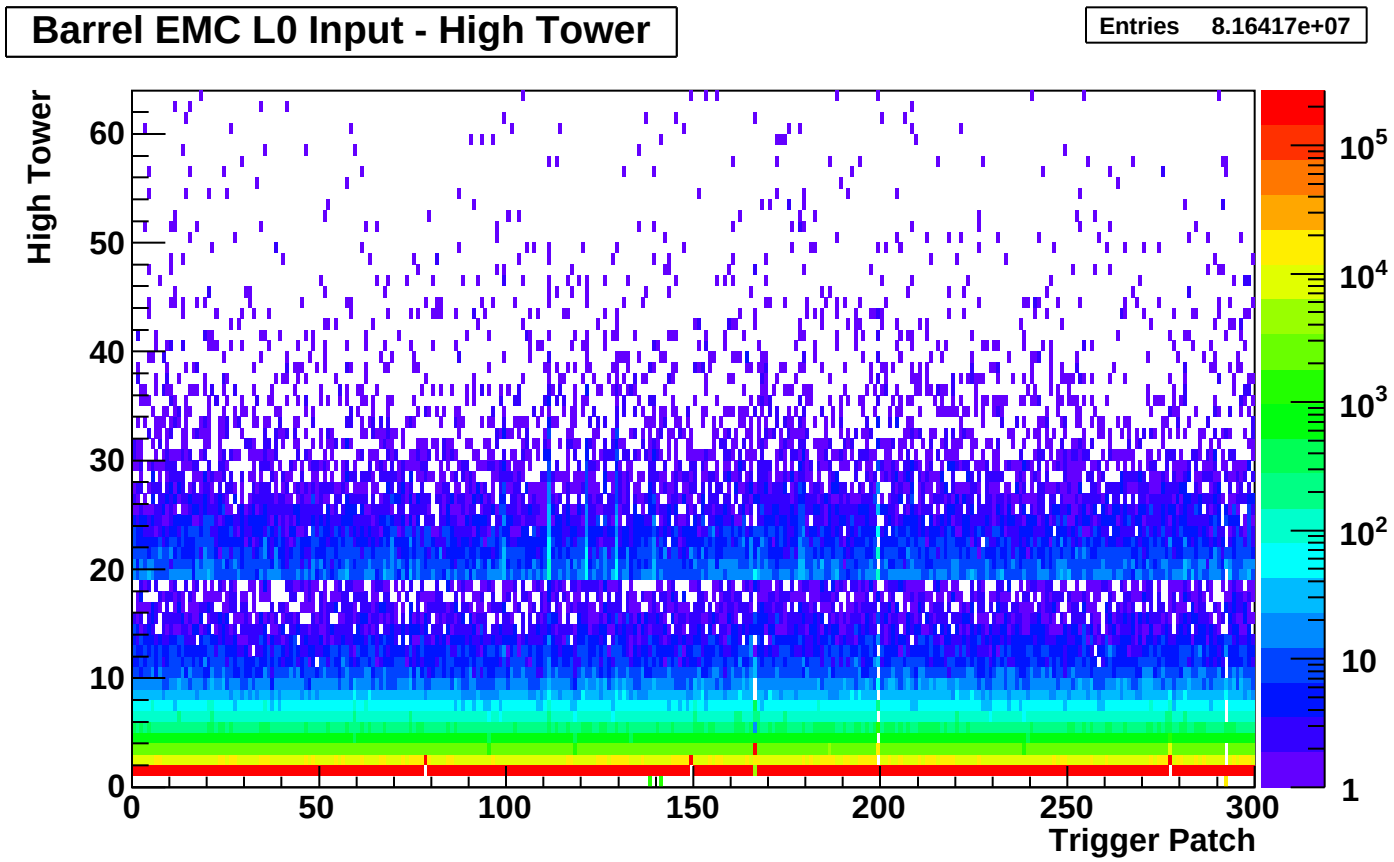

Last DSM Ch3 Input
Entries 292
LD301 Ch3 - Simulated
78 61 8 5 5 1 27 9 19 4 8 4 1 1 61
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

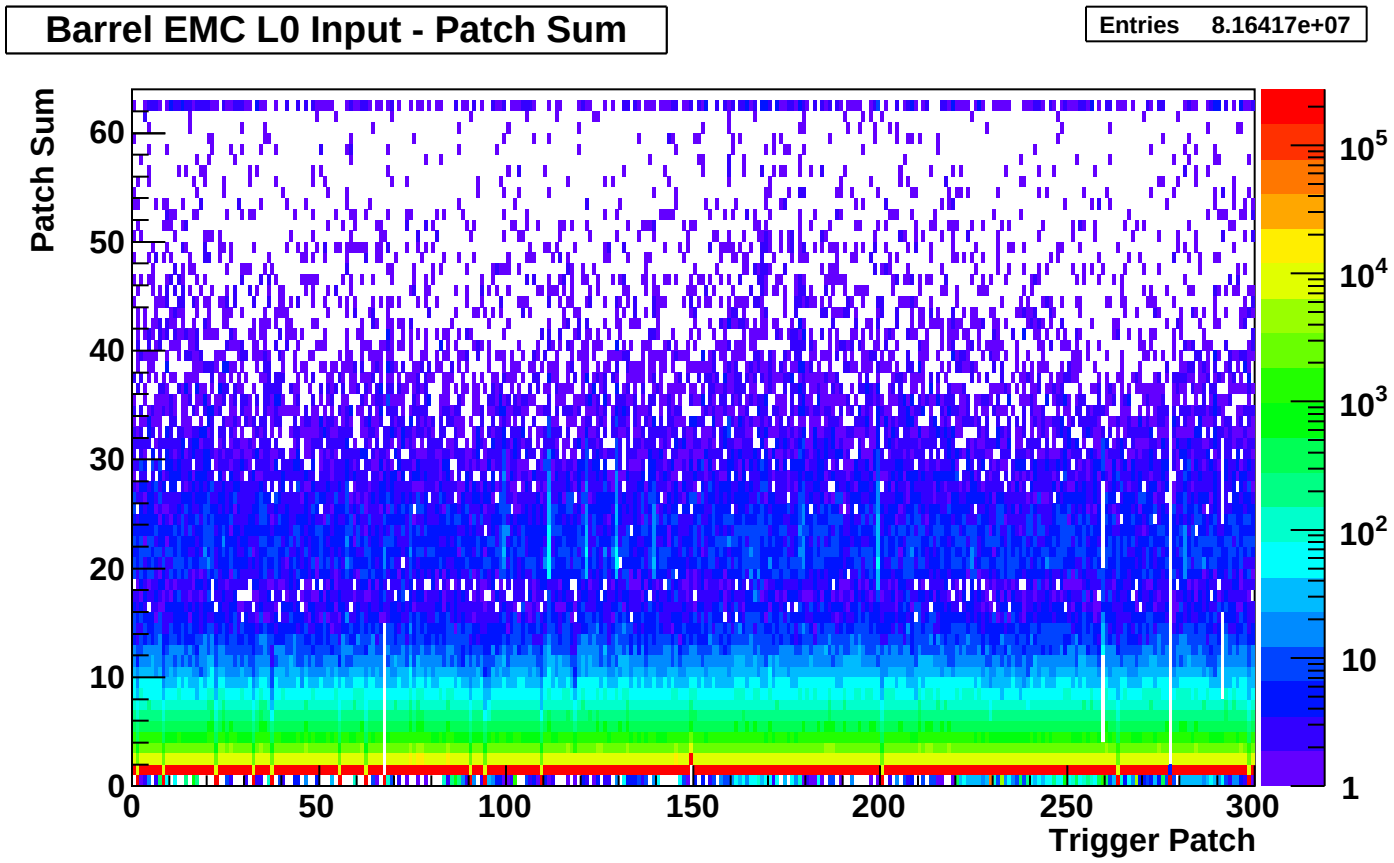

TCU bits
Entries 4354224
TCU bits
272139 272139 272139 272139 272139 272139 272139 272139 272139 272139 272139 272139 272139 272139 272139 272139
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

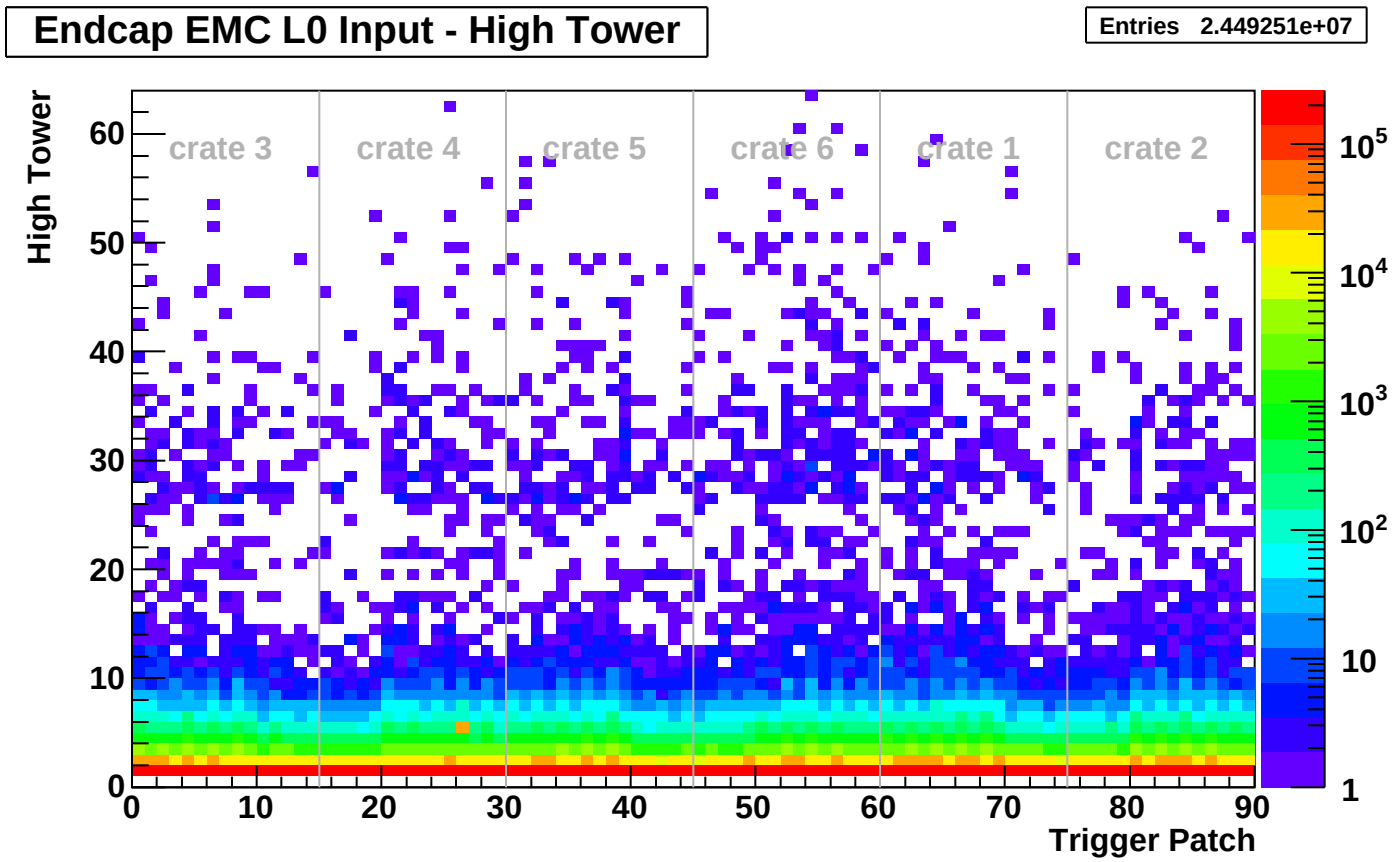

TCU bits
Entries 356158
TCU bits - Simulated
7327 18784 90937 1080 14239 223683 108
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

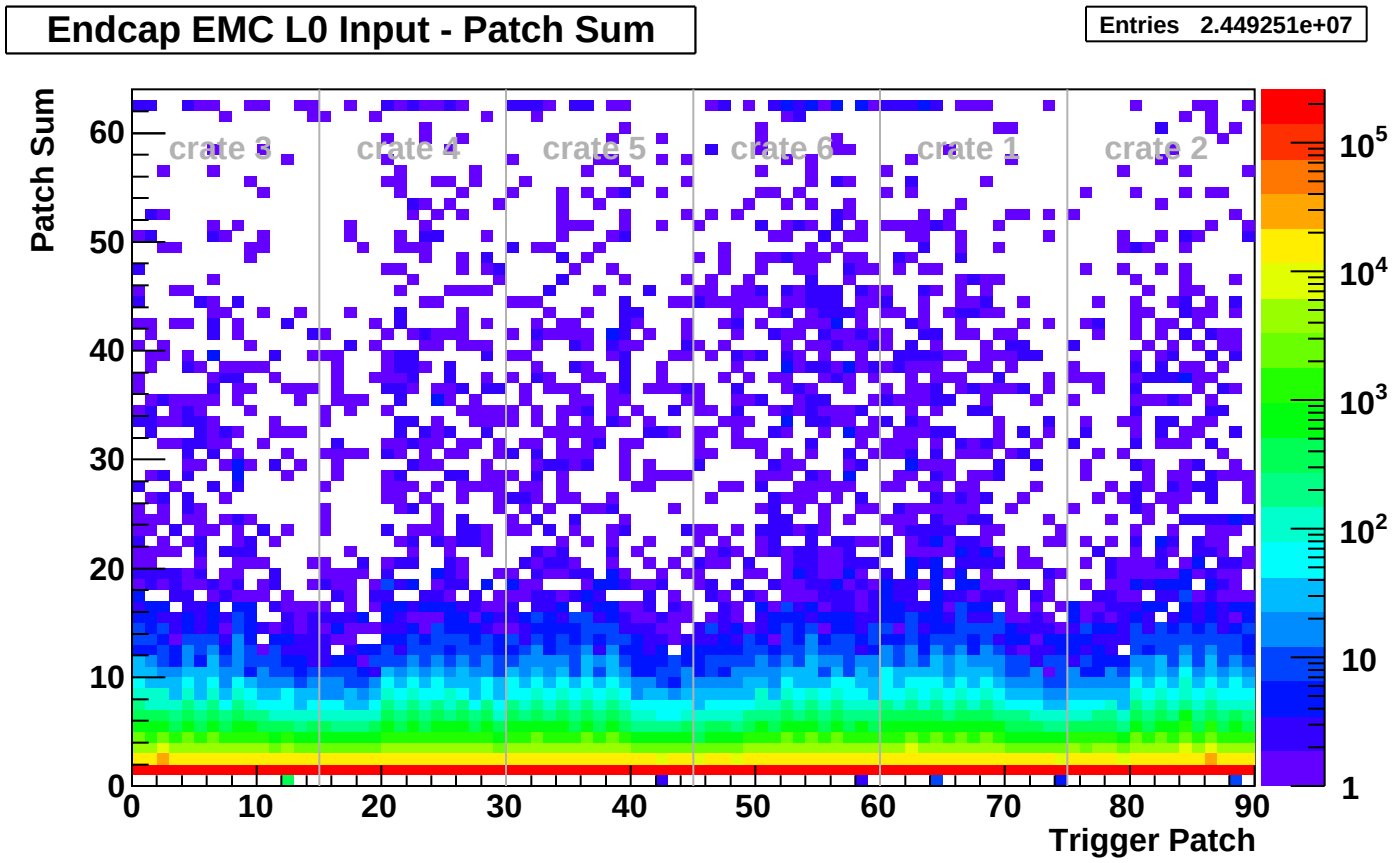

BunchId7Bit (BHT3)
Entries 1401

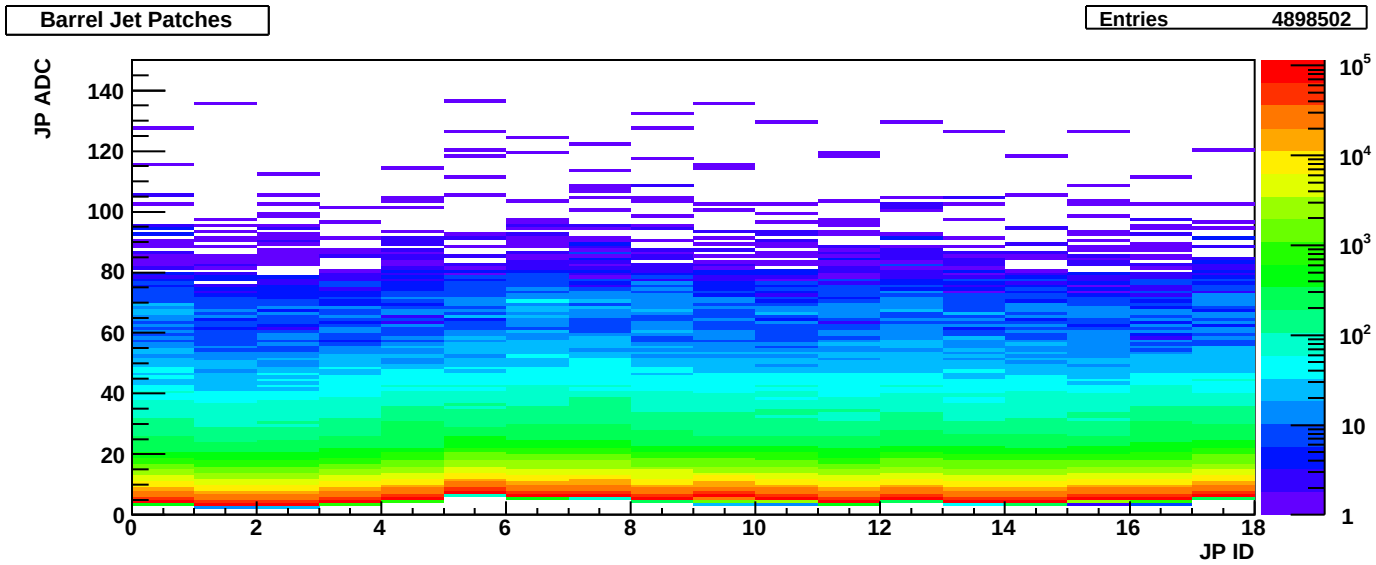

BunchId7Bit (all events)
Entries 272139

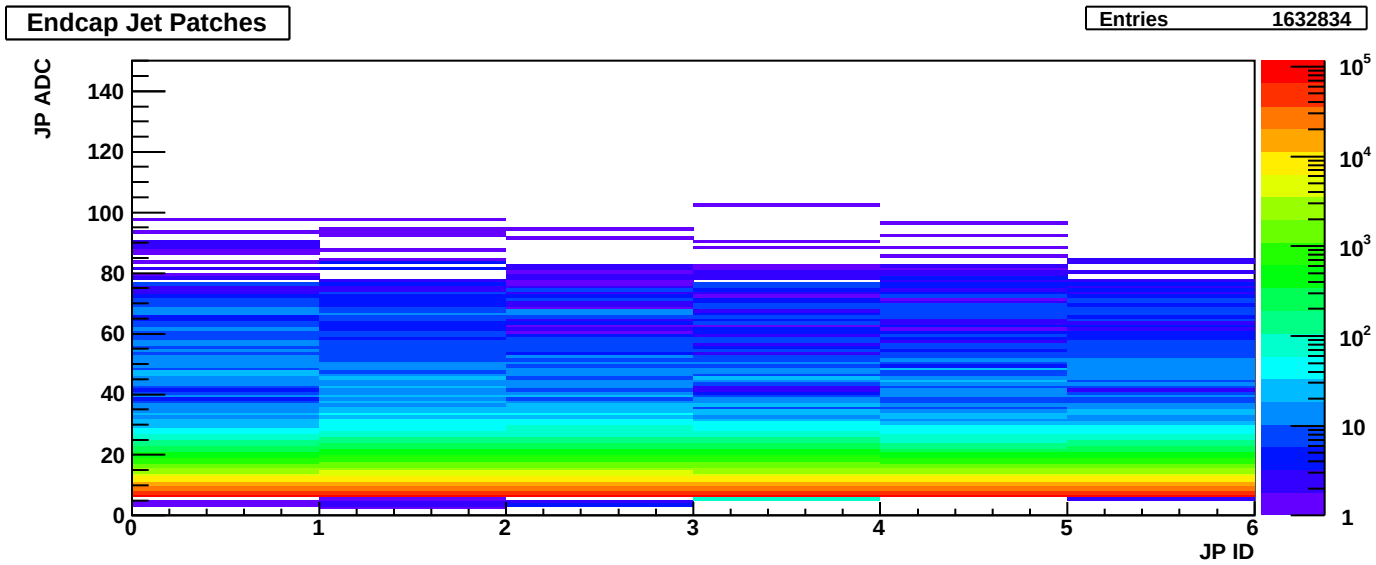

Barrel EMC L0 Input - High Tower
Entries 8.16417e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

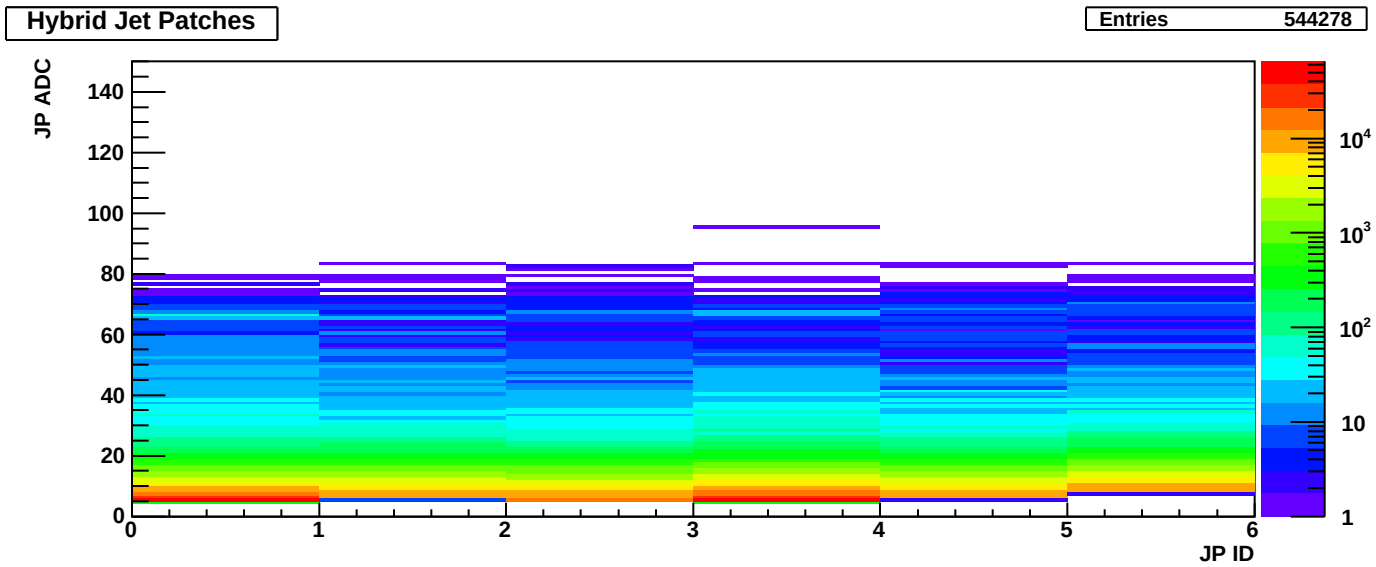

Barrel EMC L0 Input - Patch Sum
Entries 8.16417e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

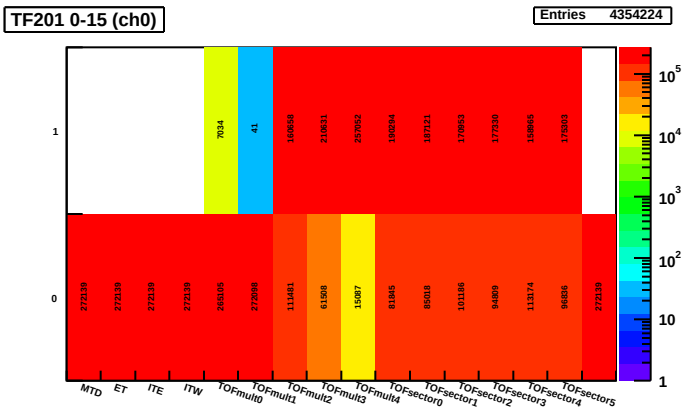

Endcap EMC L0 Input - High Tower
Entries 2.449251e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

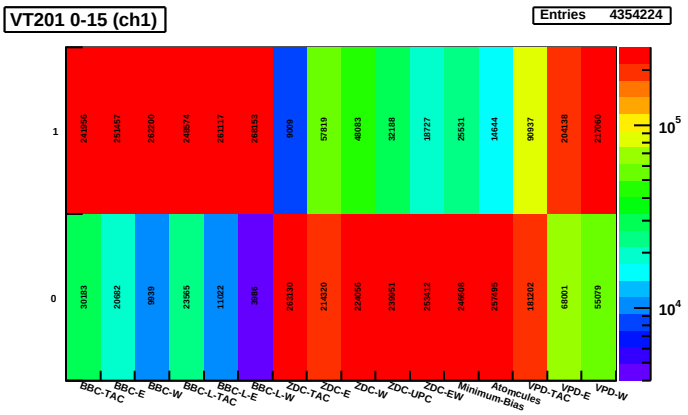

Endcap EMC L0 Input - Patch Sum
Entries 2.449251e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

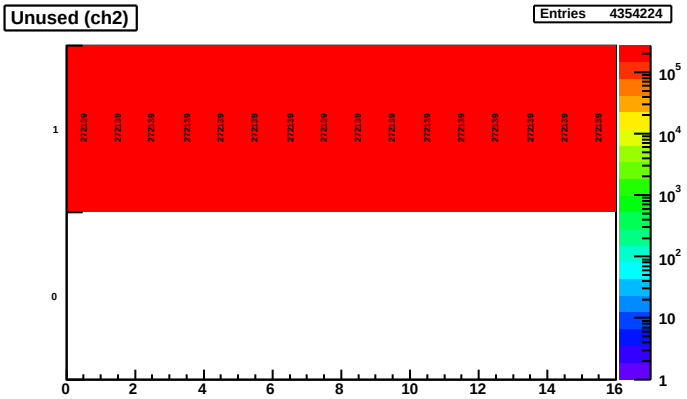

Barrel Jet Patches
Entries 4898502
JP ADC
JP ID

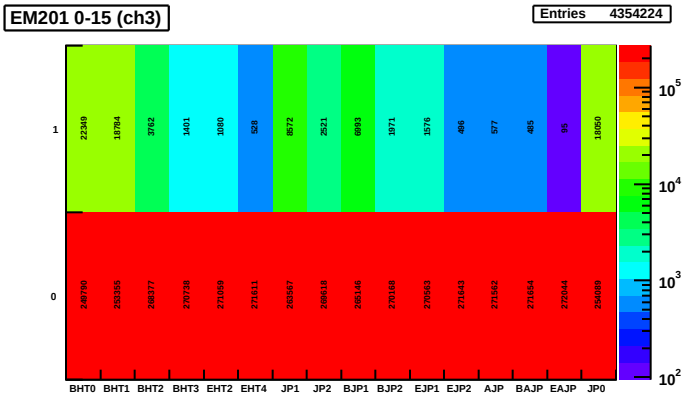

Endcap Jet Patches
Entries 1632834
JP ADC
JP ID

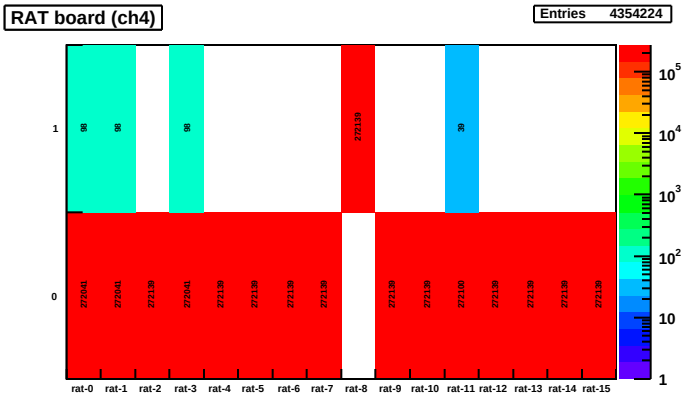

Hybrid Jet Patches
Entries 544278
JP ADC
JP ID

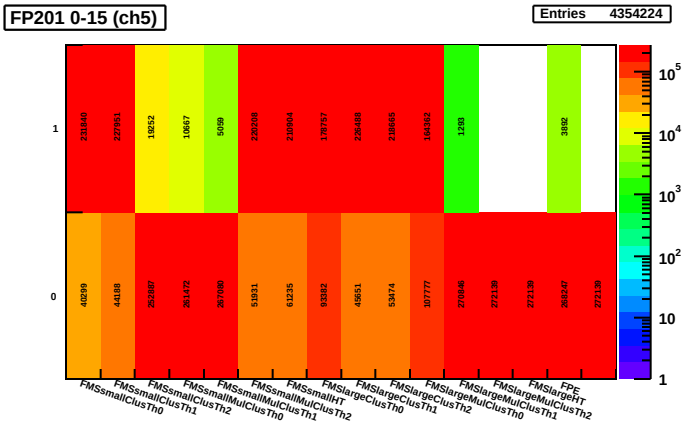

TF201 0-15 (ch0)
Entries 4354224
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

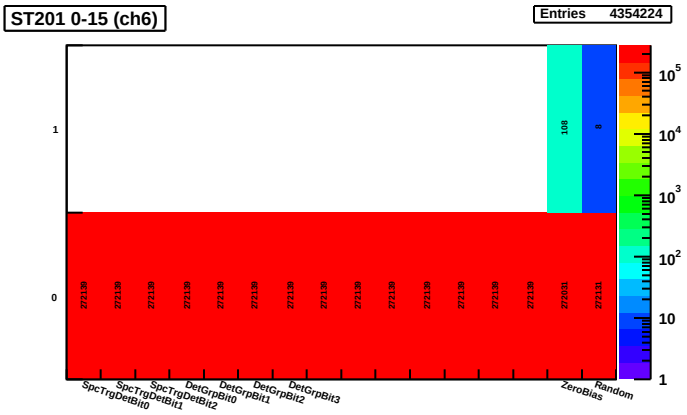

VT201 0-15 (ch1)
Entries 4354224
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

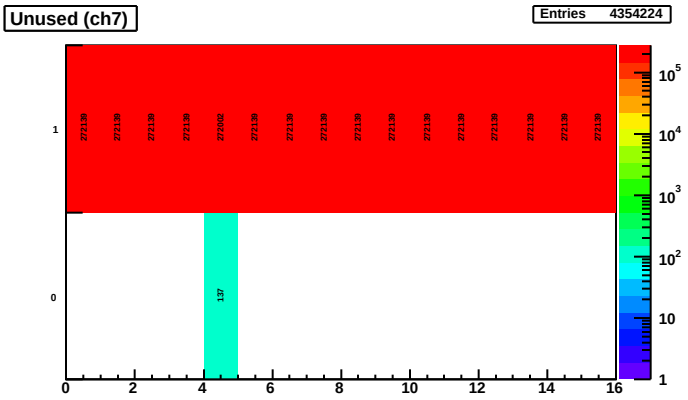

Unused (ch2)
Entries 4354224

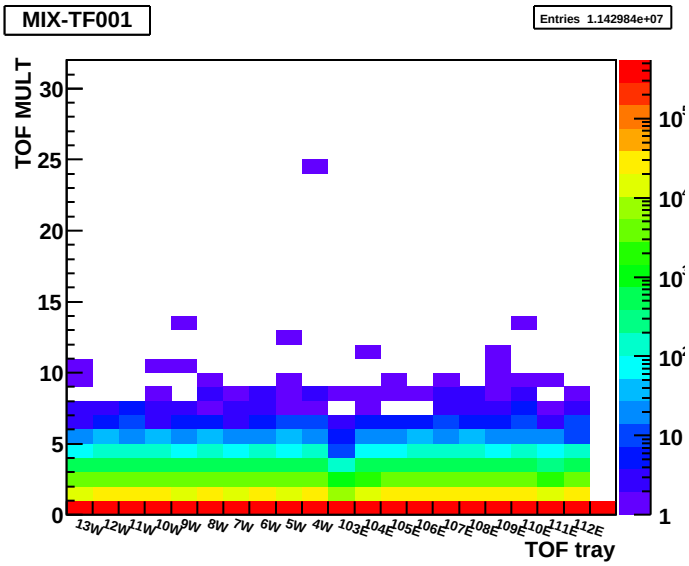

EM201 0-15 (ch3)
Entries 4354224
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

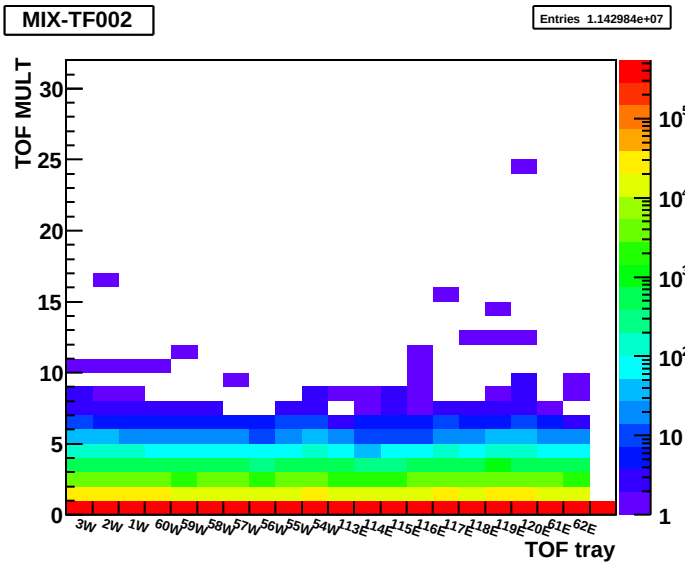

RAT board (ch4)
Entries 4354224
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

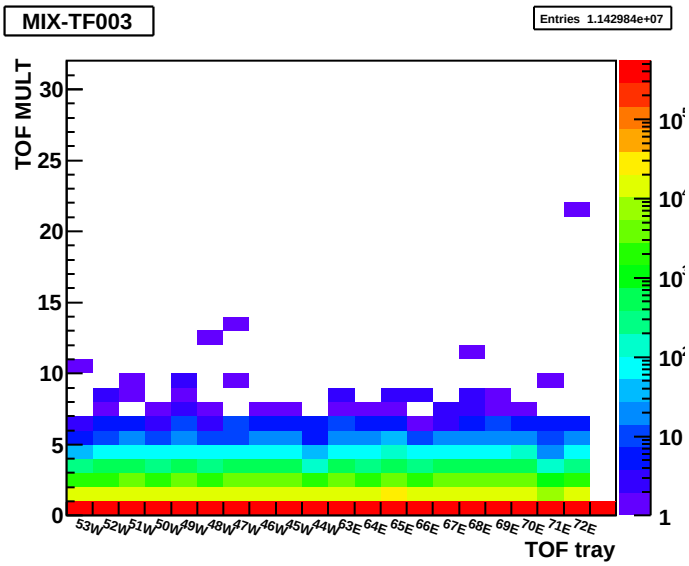

FP201 0-15 (ch5)
Entries 4354224
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

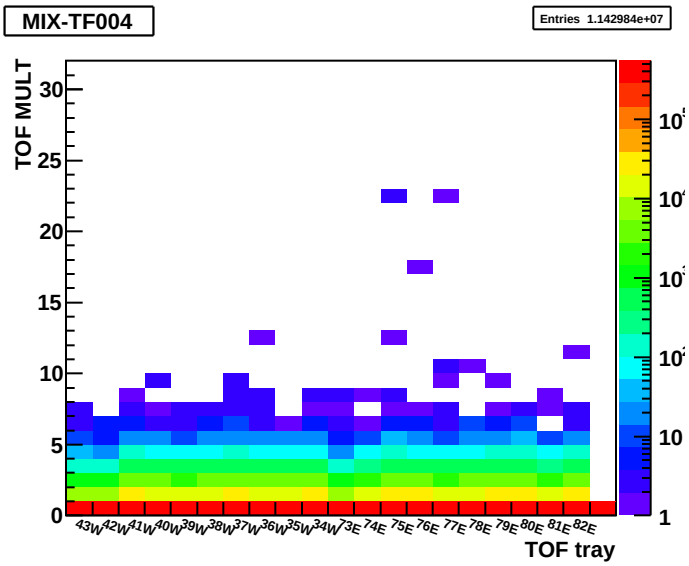

ST201 0-15 (ch6)
Entries 4354224
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

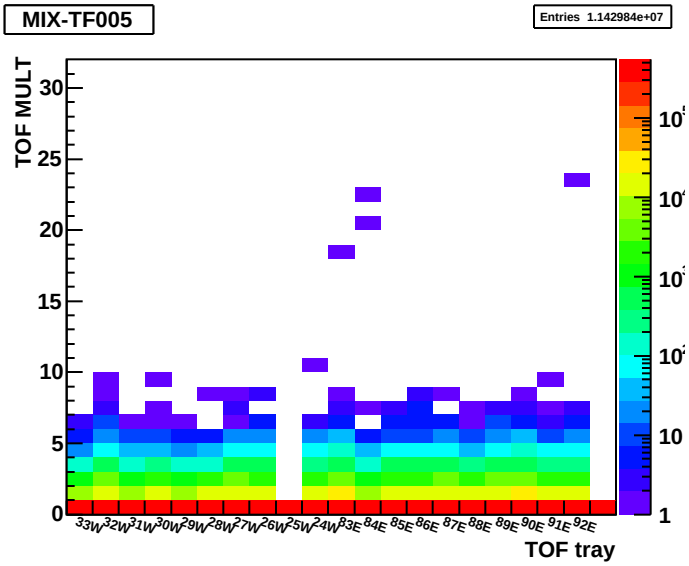

Unused (ch7)
Entries 4354224

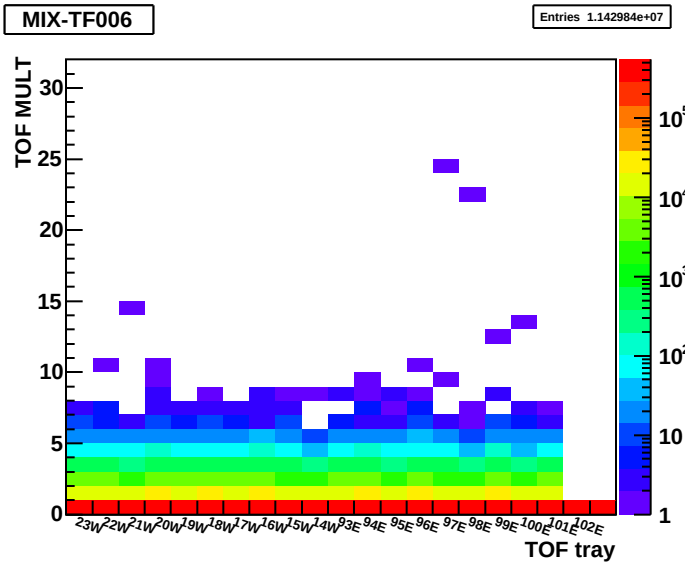

MIX-TF001
Entries 1.142984e+07
TOF MULT
TOF tray

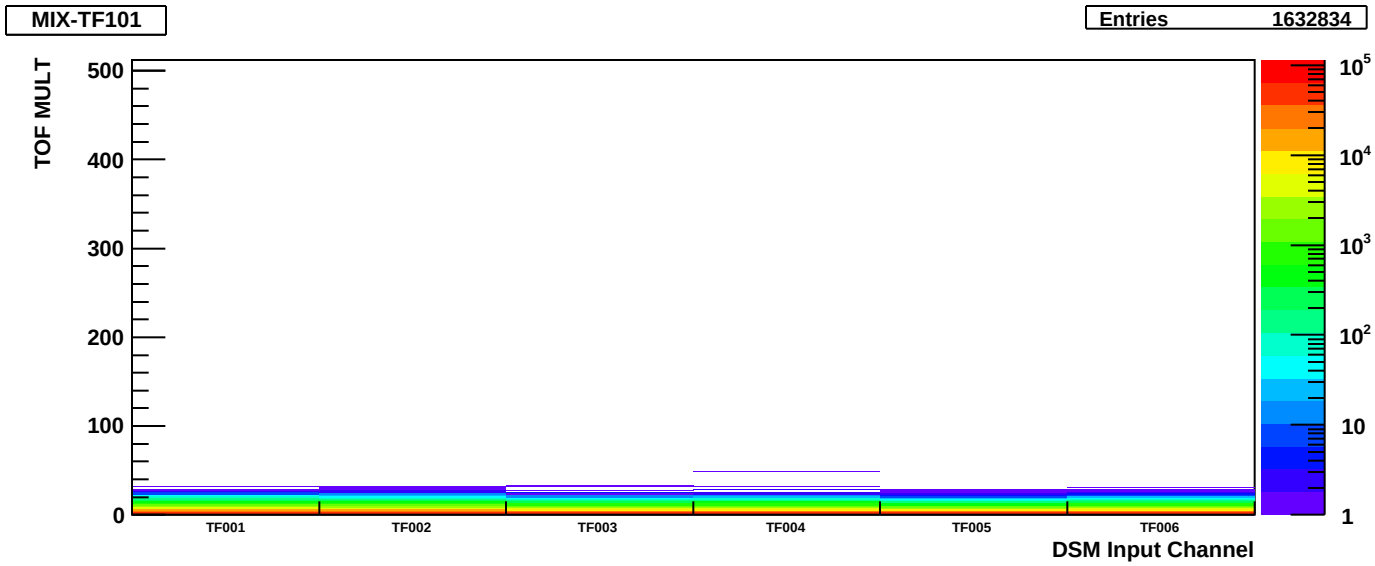

MIX-TF002
Entries 1.142984e+07
TOF MULT
TOF tray

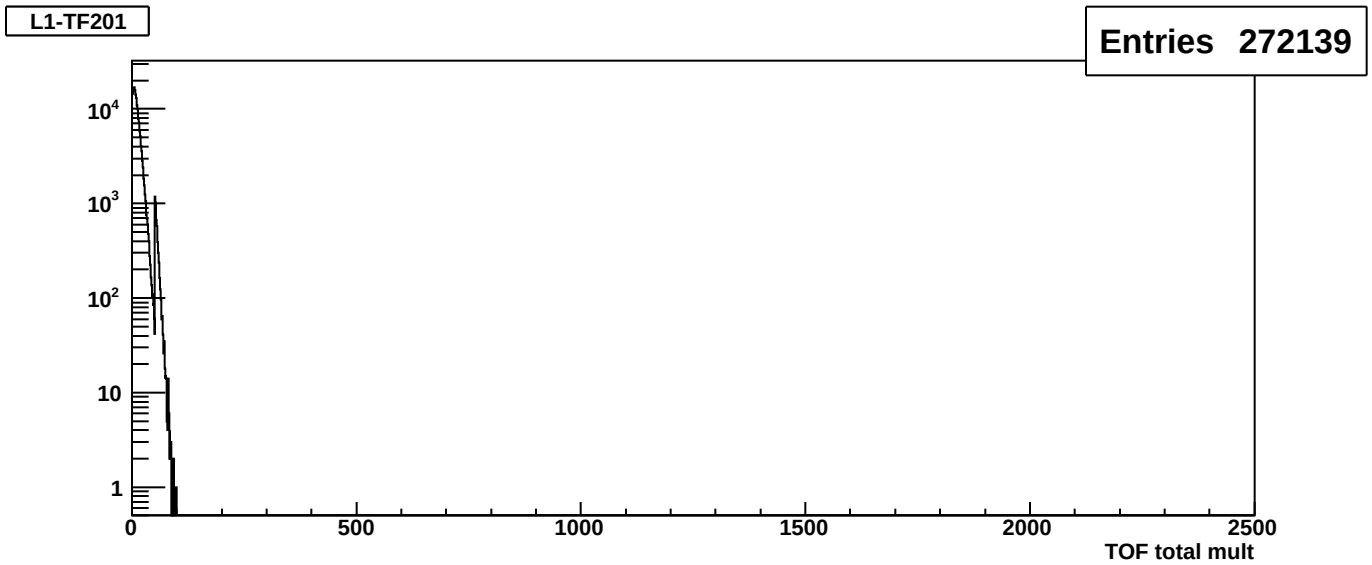

MIX-TF003
Entries 1.142984e+07
TOF MULT
TOF tray

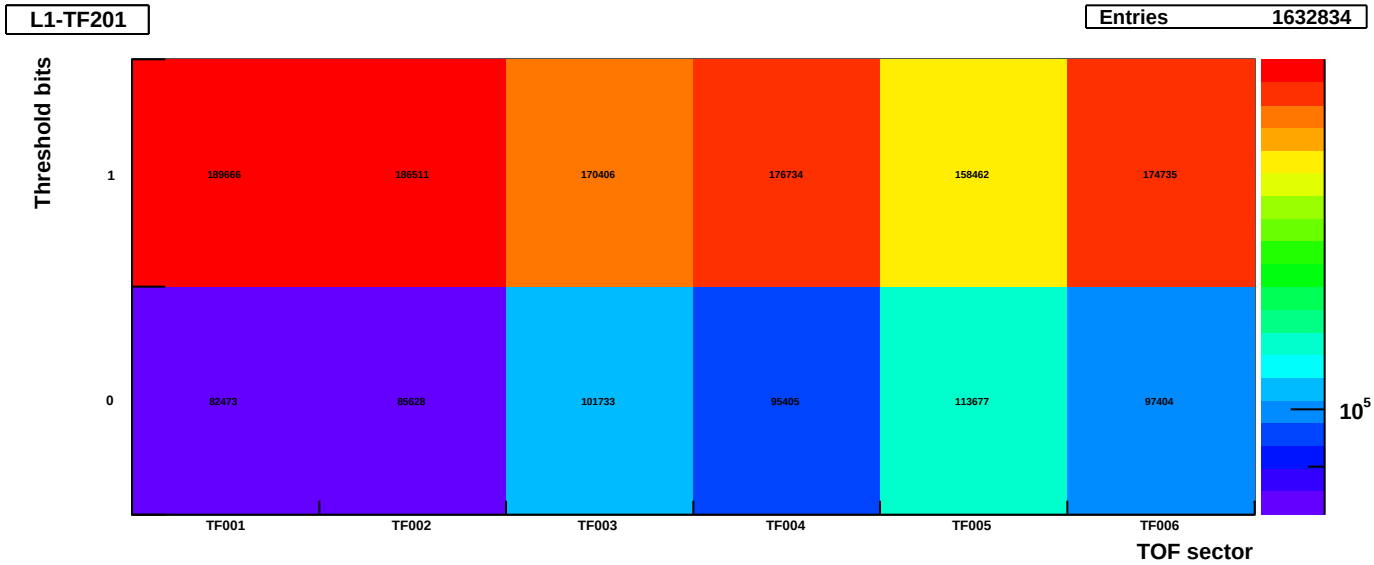

MIX-TF004
Entries 1.142984e+07
TOF MULT
TOF tray

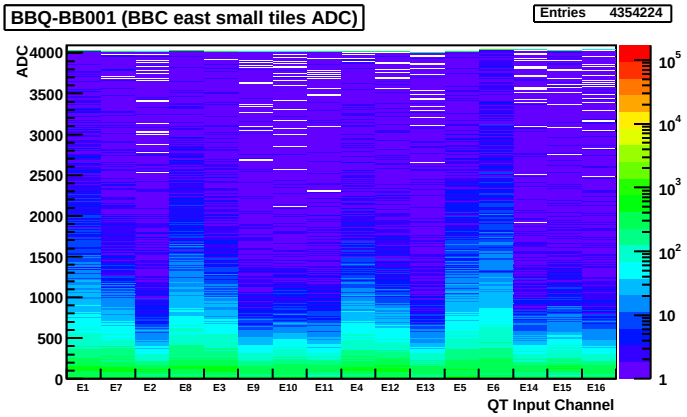

MIX-TF005
Entries 1.142984e+07
TOF MULT
TOF tray

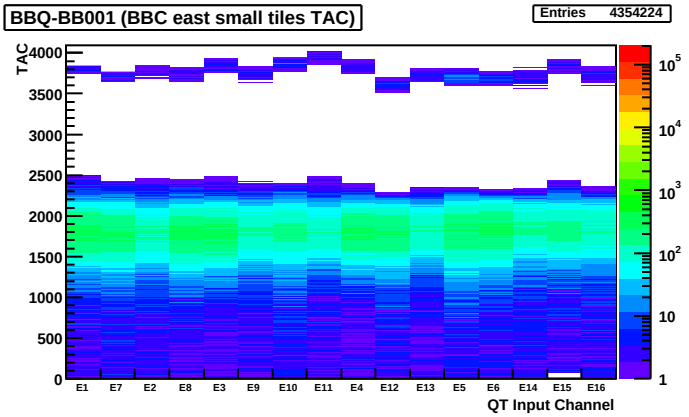

MIX-TF006
Entries 1.142984e+07
TOF MULT
TOF tray

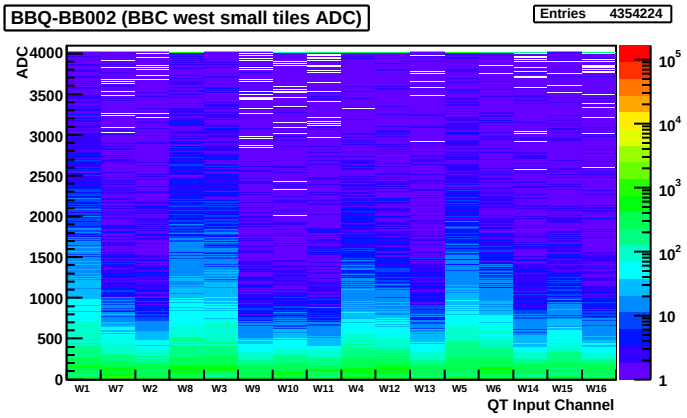

MIX-TF101
Entries 1632834
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

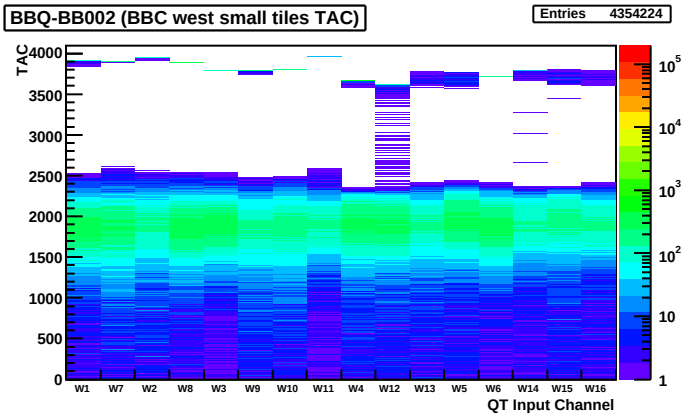

L1-TF201
Entries 272139
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

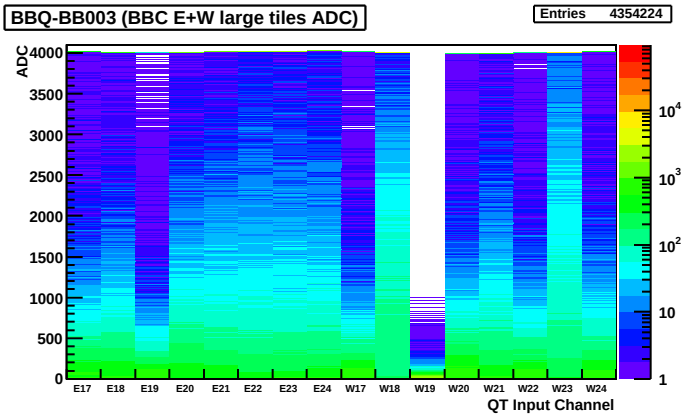

L1-TF201
Entries 1632834
Threshold bits
1
0
189666
186511
170406
176734
158462
174735
82473
85628
101733
95405
113677
97404
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

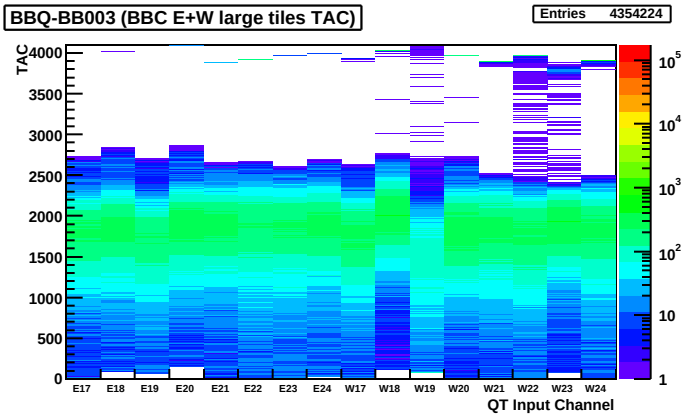

BBQ-BB001 (BBC east small tiles ADC)
Entries 4354224
ADC
QT Input Channel

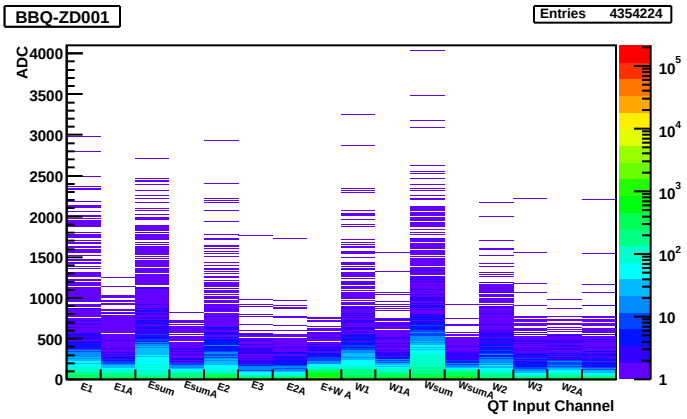

BBQ-BB001 (BBC east small tiles TAC)
Entries 4354224
TAC
QT Input Channel

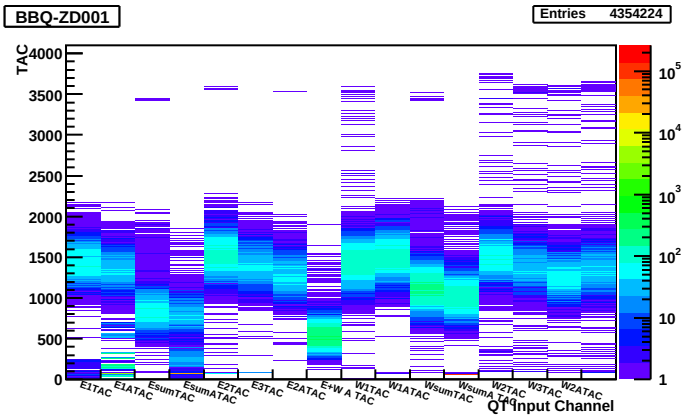

BBQ-BB002 (BBC west small tiles ADC)
Entries 4354224
ADC
QT Input Channel

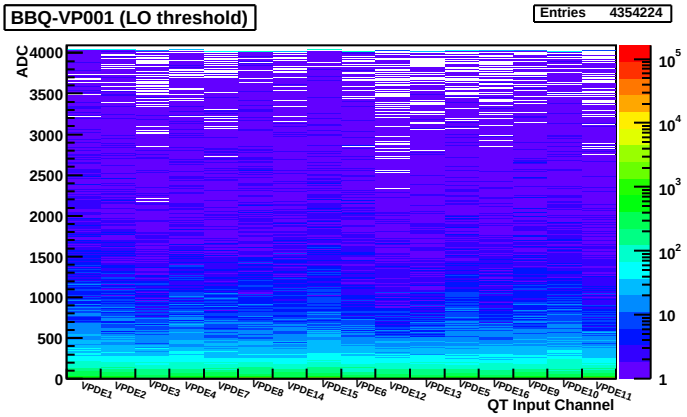

BBQ-BB002 (BBC west small tiles TAC)
Entries 4354224
TAC
QT Input Channel

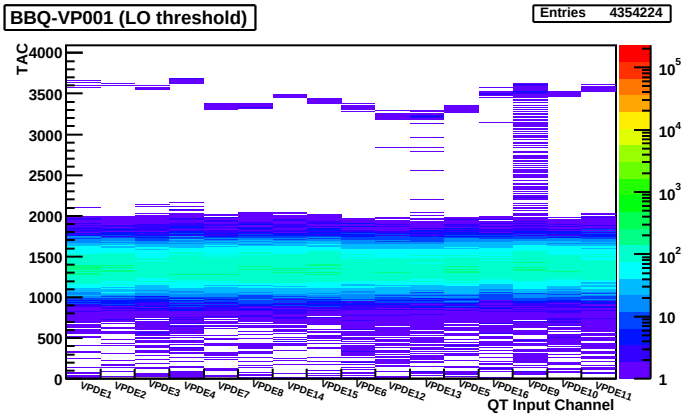

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4354224
ADC
QT Input Channel

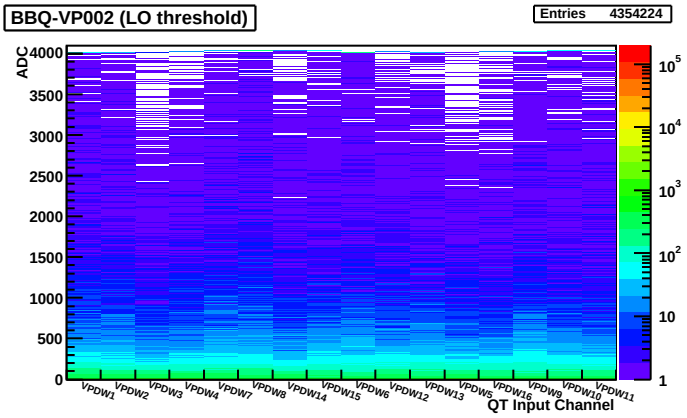

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4354224
TAC
QT Input Channel

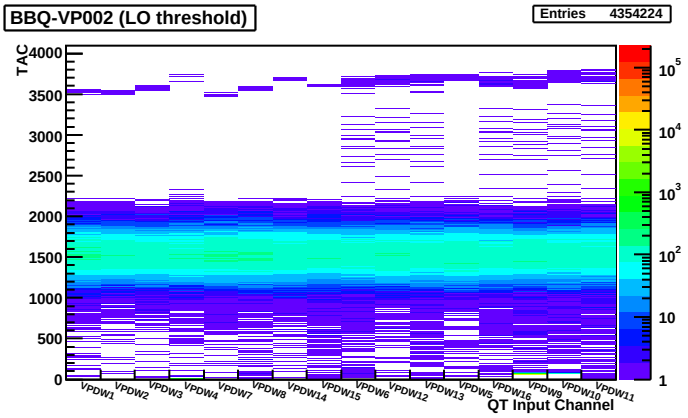

BBQ-ZD001
Entries 4354224
ADC
QT Input Channel

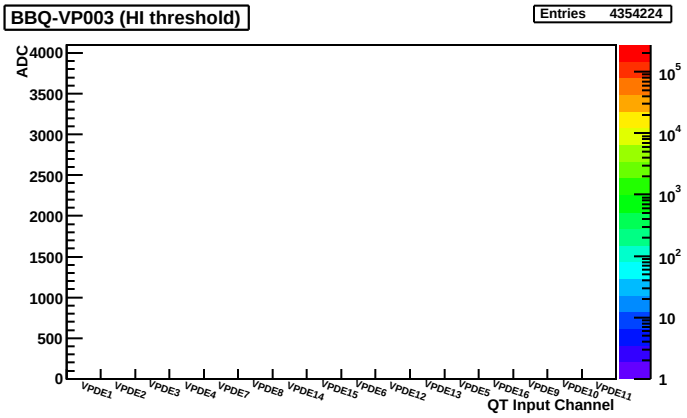

BBQ-ZD001
Entries 4354224
TAC
QT Input Channel

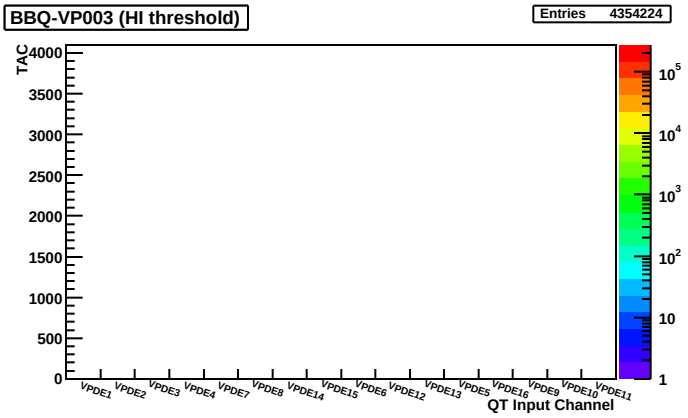

BBQ-VP001 (LO threshold)
Entries 4354224
ADC
QT Input Channel

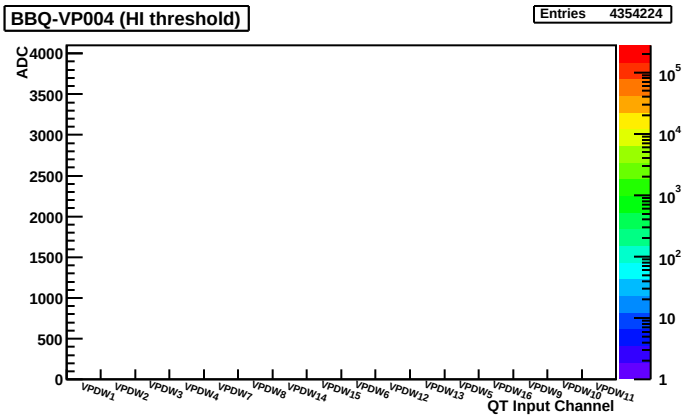

BBQ-VP001 (LO threshold)
Entries 4354224
TAC
QT Input Channel

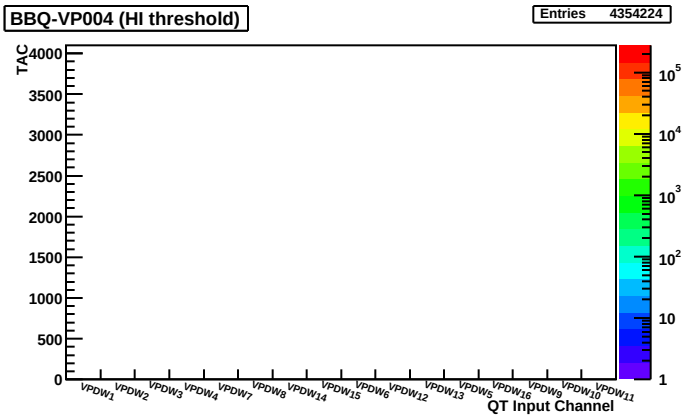

BBQ-VP002 (LO threshold)
Entries 4354224
ADC
QT Input Channel

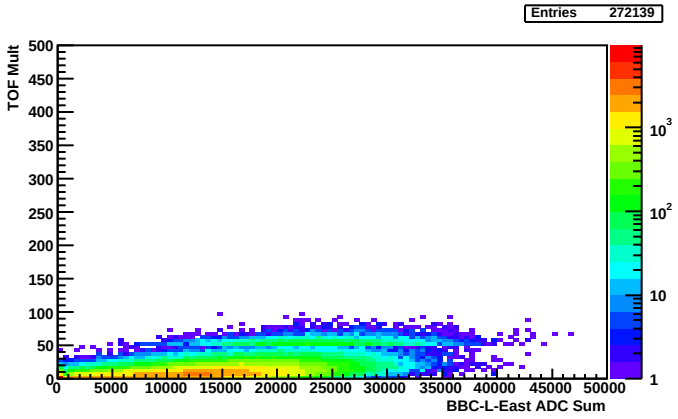

BBQ-VP002 (LO threshold)
Entries 4354224
TAC
QT Input Channel

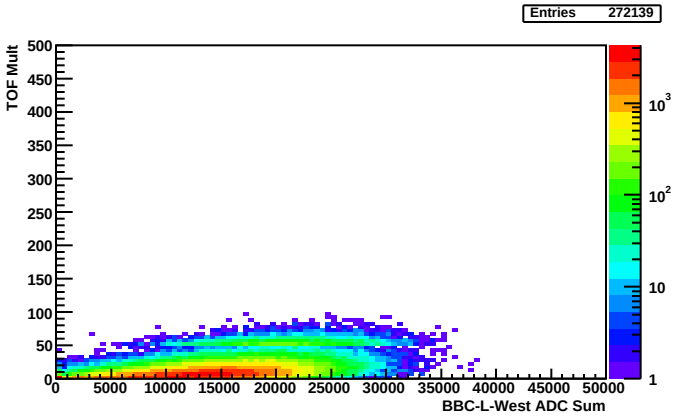

BBQ-VP003 (HI threshold)
Entries 4354224
ADC
QT Input Channel

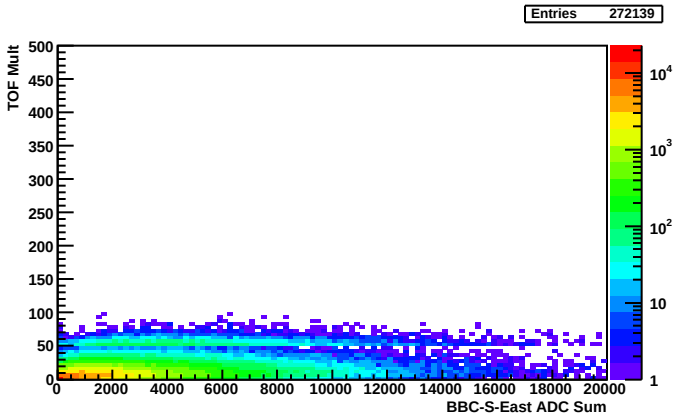

BBQ-VP003 (HI threshold)
Entries 4354224
TAC
QT Input Channel

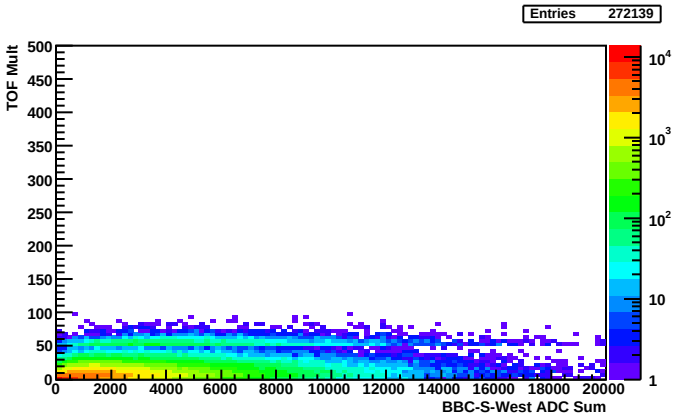

BBQ-VP004 (HI threshold)
Entries 4354224
ADC
QT Input Channel

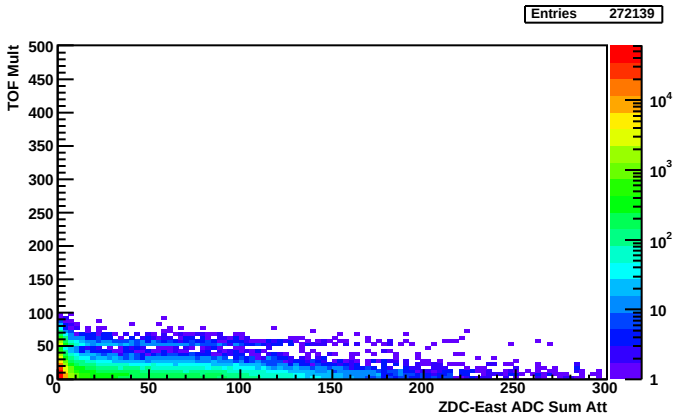

BBQ-VP004 (HI threshold)
Entries 4354224
TAC
QT Input Channel

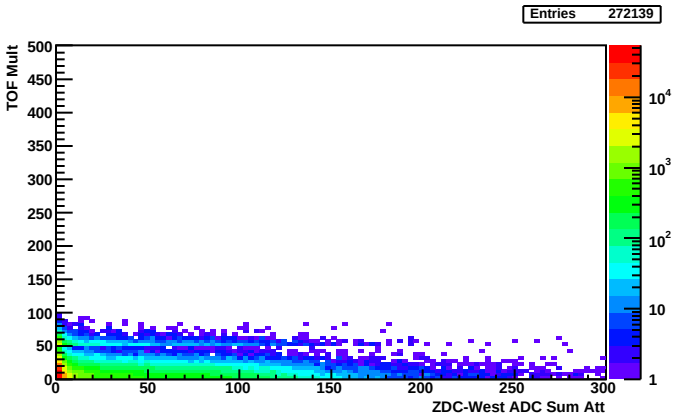

Entries 272139
TOF Mult
BBC-L-East ADC Sum

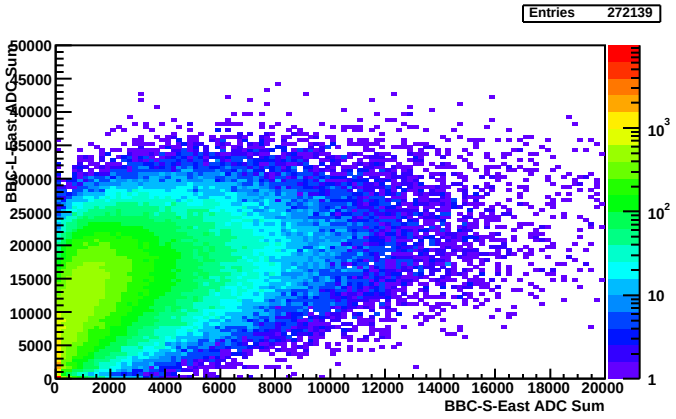

Entries 272139
TOF Mult
BBC-L-West ADC Sum

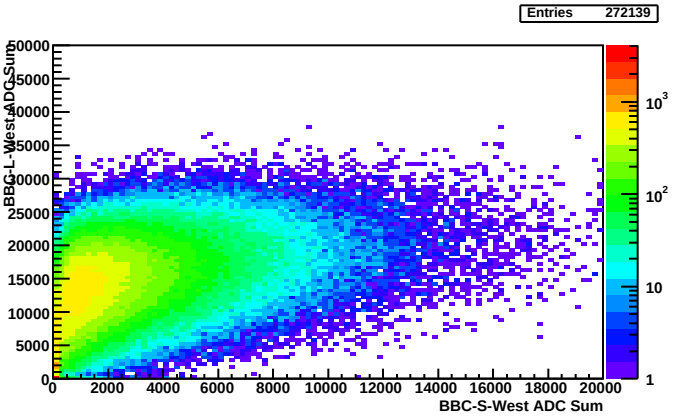

Entries 272139
TOF Mult
BBC-S-East ADC Sum

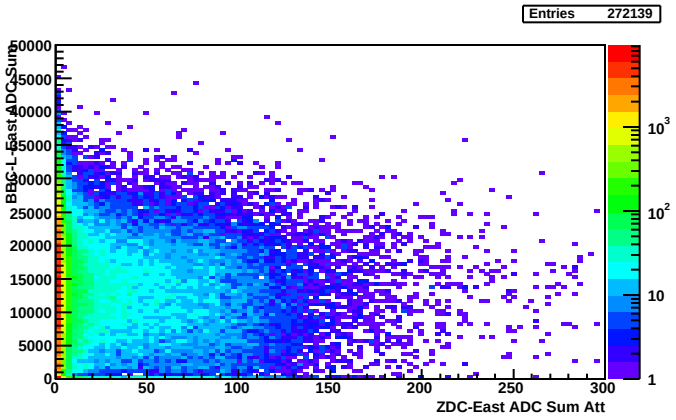

Entries 272139
TOF Mult
BBC-S-West ADC Sum

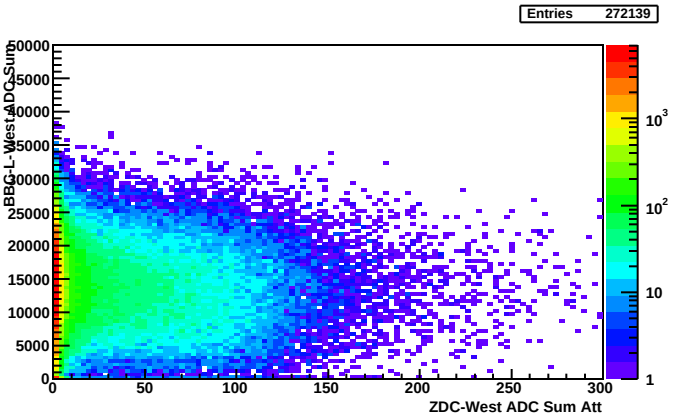

Entries 272139
TOF Mult
ZDC-East ADC Sum Att

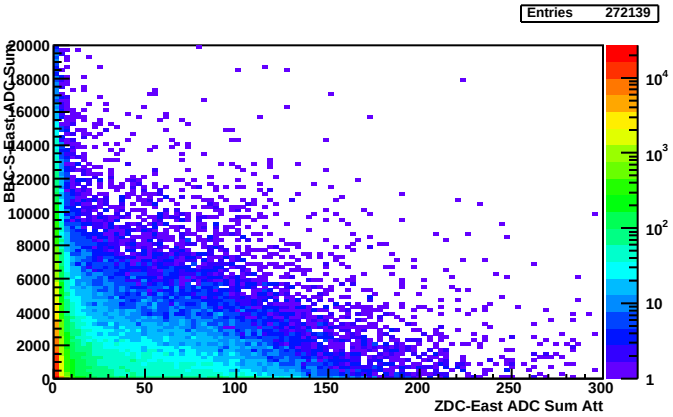

Entries 272139
TOF Mult
ZDC-West ADC Sum Att

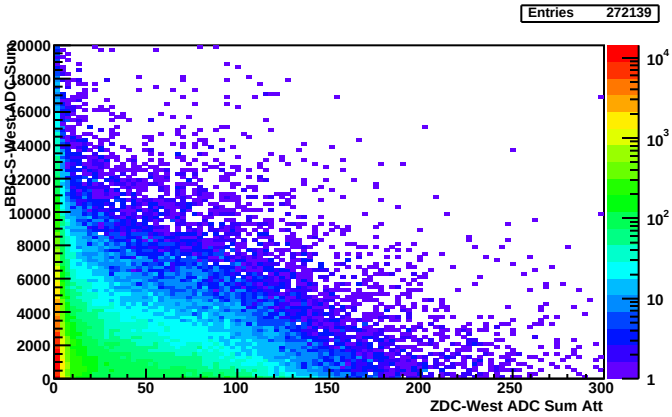

Entries 272139
BBC-L-East ADC Sum
BBC-S-East ADC Sum

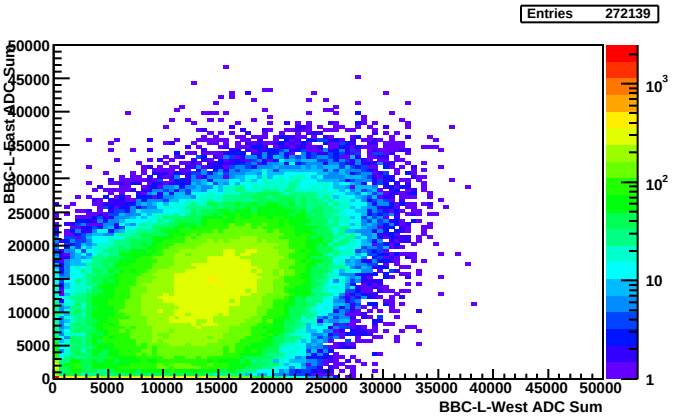

Entries 272139
BBC-L-West ADC Sum
BBC-S-West ADC Sum

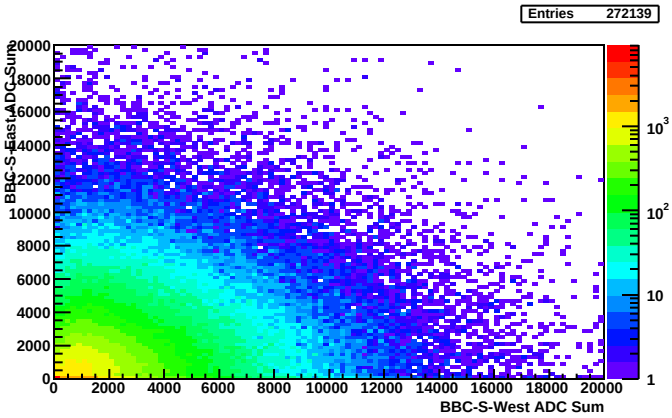

Entries 272139
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

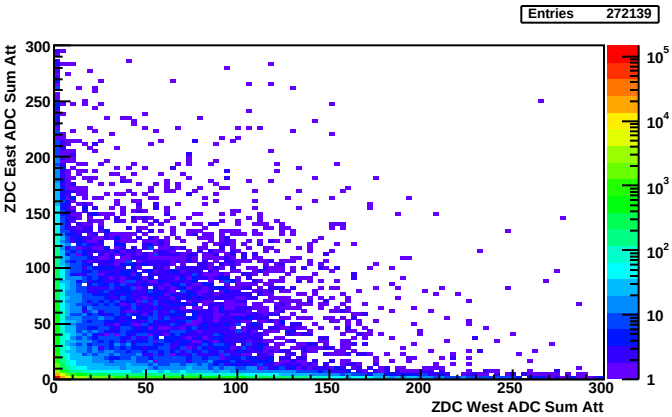

Entries 272139
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

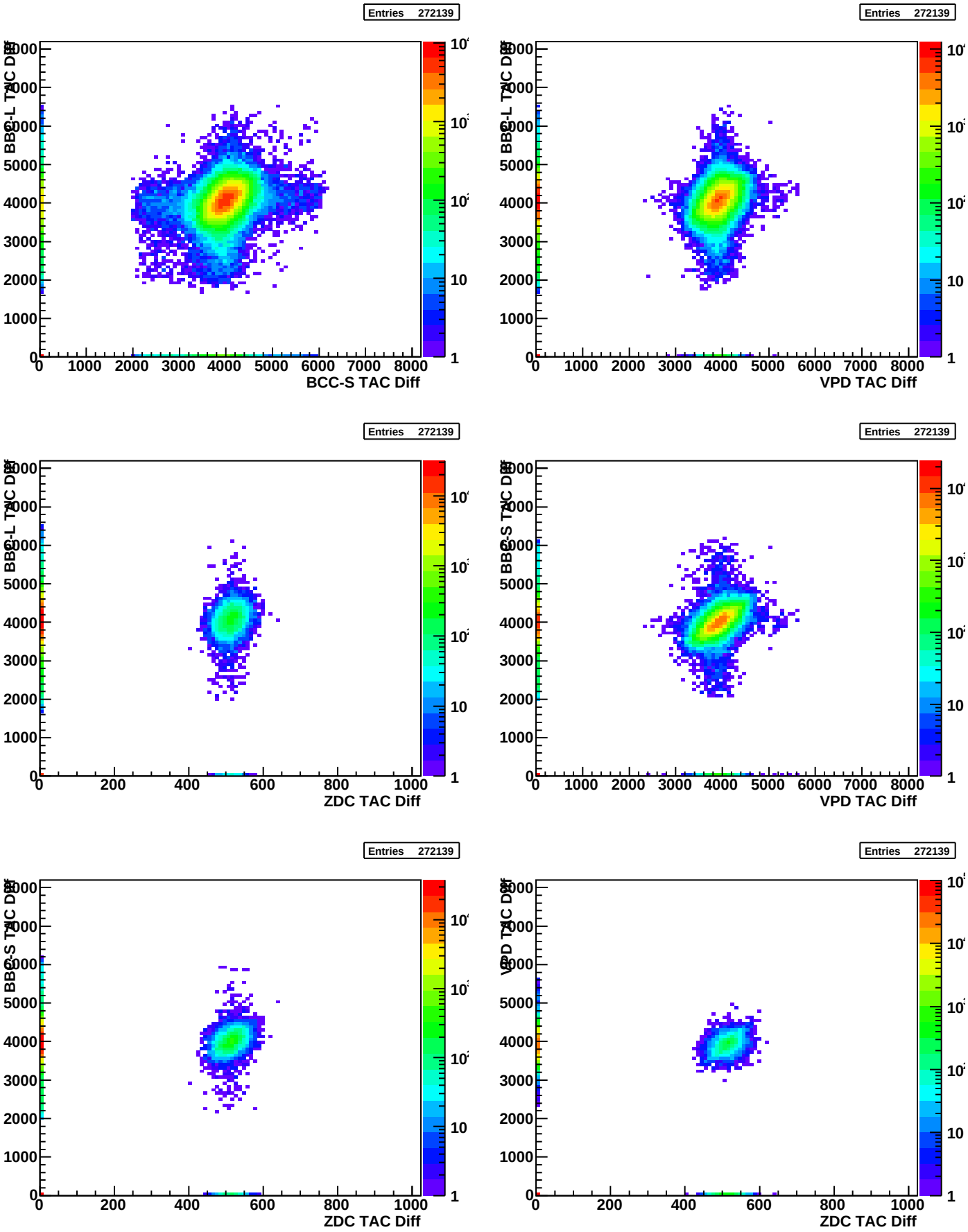

Entries 272139
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 272139
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 272139
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 272139
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 272139
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 272139
BBC-L TAC Diff
BCC-S TAC Diff
Entries 272139
BBC-L TAC Diff
VPD TAC Diff
Entries 272139
BBC-L TAC Diff
ZDC TAC Diff
Entries 272139
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VPD TAC Diff
Entries 272139
BBC-S TAC Diff
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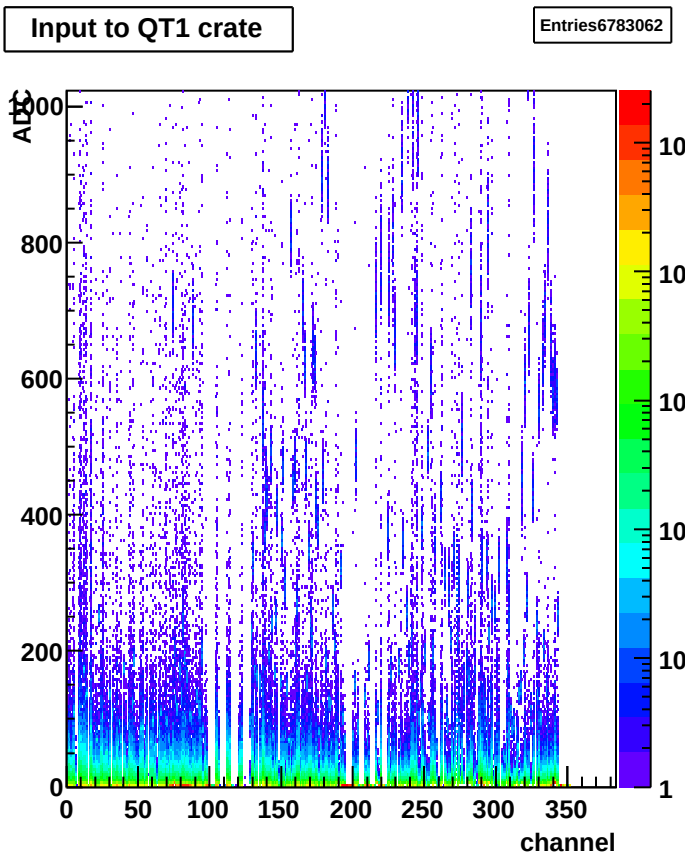
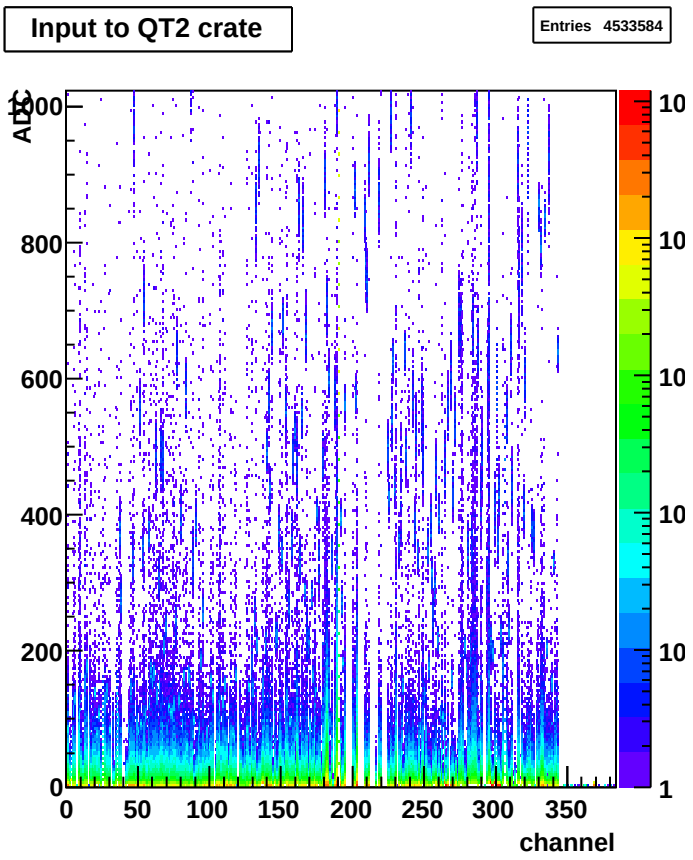
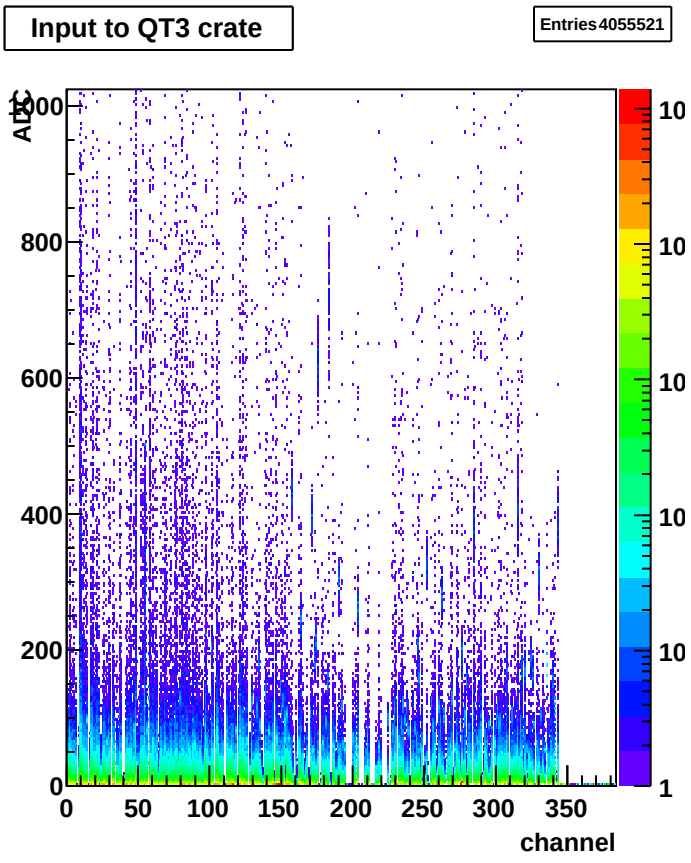
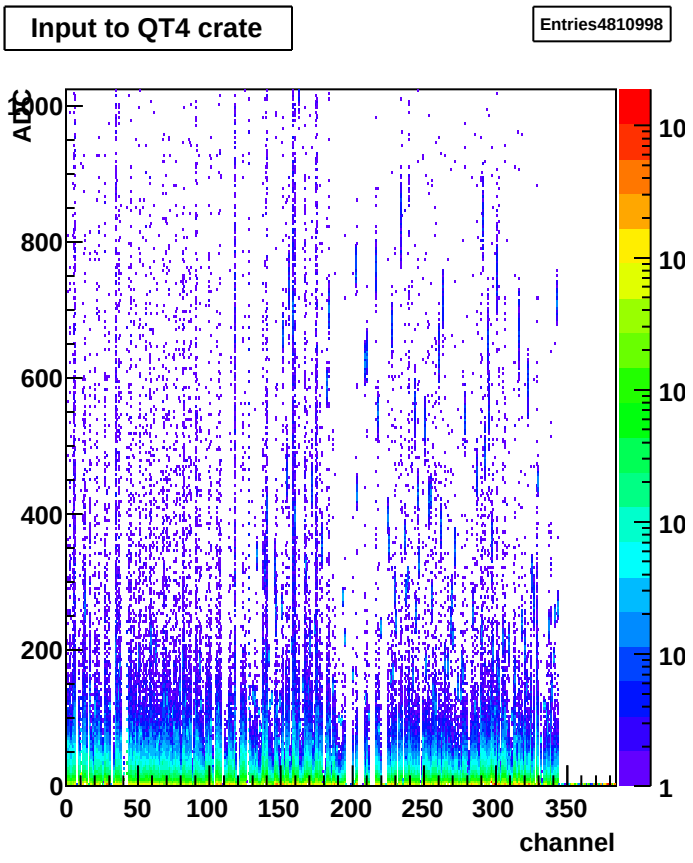
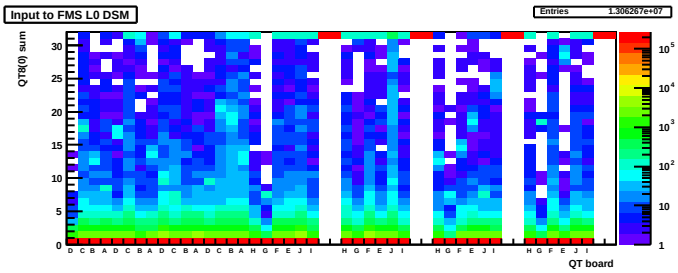
Entries 272139
VPD TAC Diff
ZDC TAC Diff

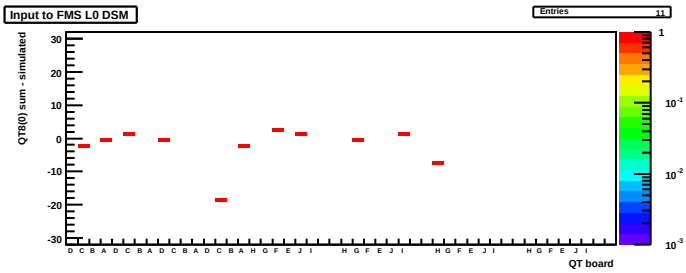

Input to QT1 crate
Entries6783062
ADC
channel

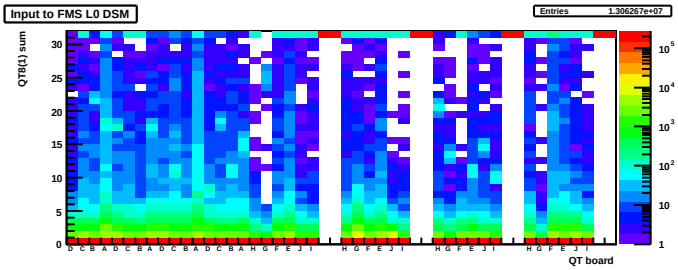

Input to QT2 crate
Entries 4533584
ADC
channel

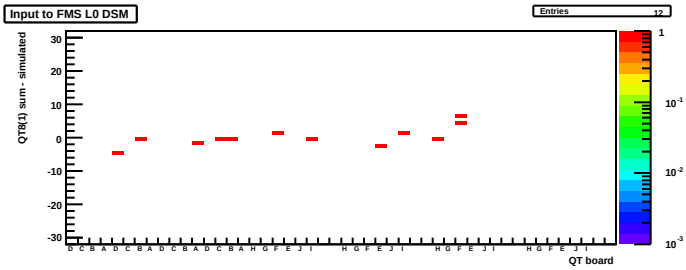

Input to QT3 crate
Entries4055521
ADC
channel

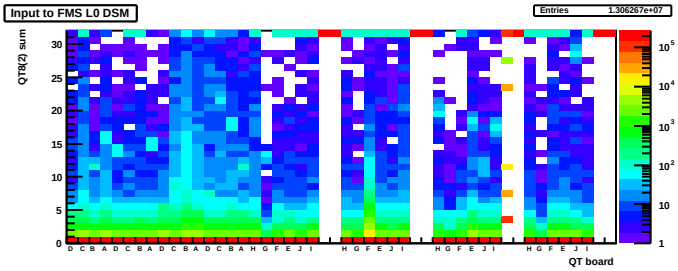

Input to QT4 crate
Entries4810998
ADC
channel

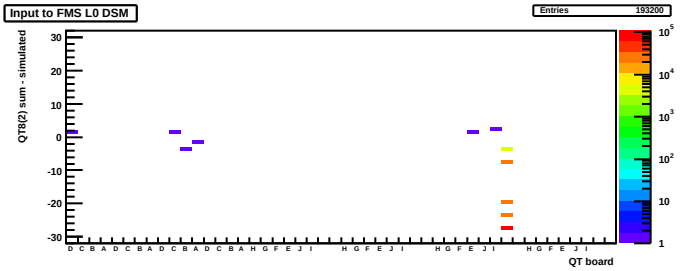

Input to FMS L0 DSM
Entries 1.306267e+07
QT8(0) sum
QT board

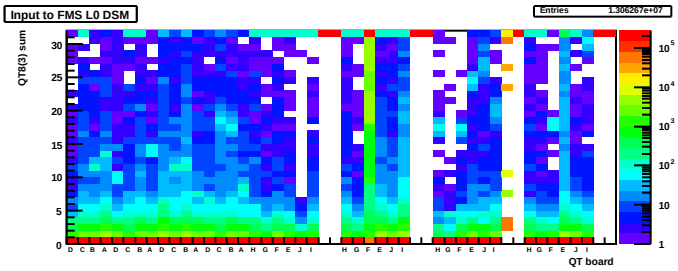

Input to FMS L0 DSM
Entries 11
QT8(0) sum - simulated
QT board

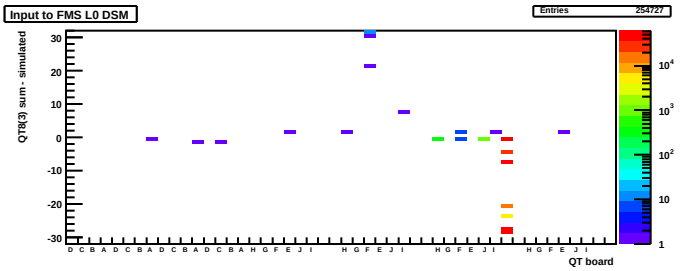

Input to FMS L0 DSM
Entries 1.306267e+07
QT8(1) sum
QT board

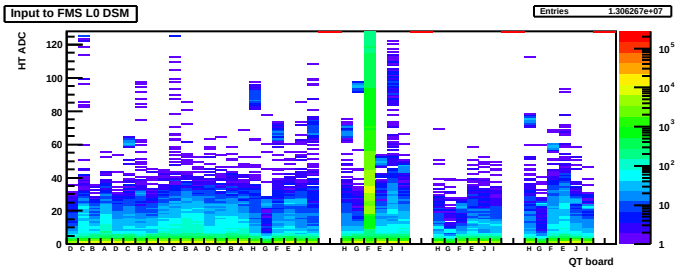

Input to FMS L0 DSM
Entries 12
QT8(1) sum - simulated
QT board

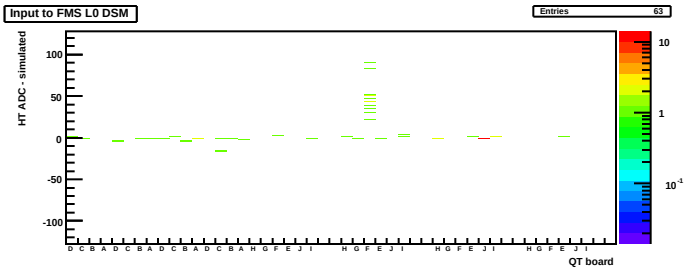

Input to FMS L0 DSM
Entries 1.306267e+07
QT8(2) sum
QT board

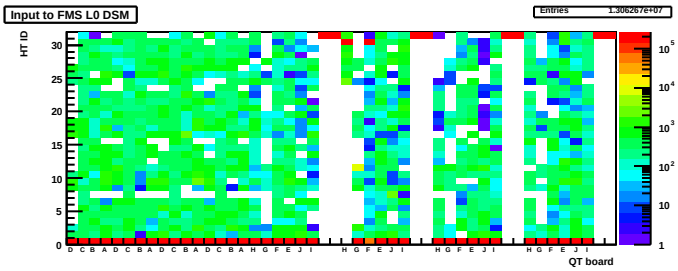

Input to FMS L0 DSM
Entries 193200
QT8(2) sum - simulated
QT board

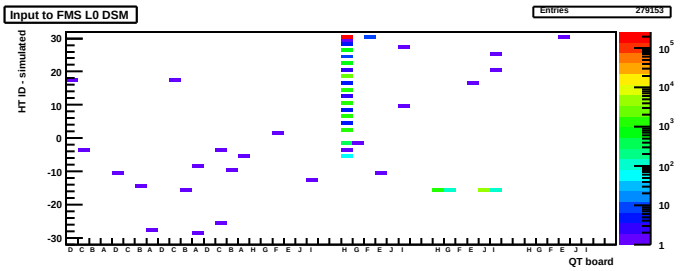

Input to FMS L0 DSM
Entries 1.306267e+07
QT8(3) sum
QT board

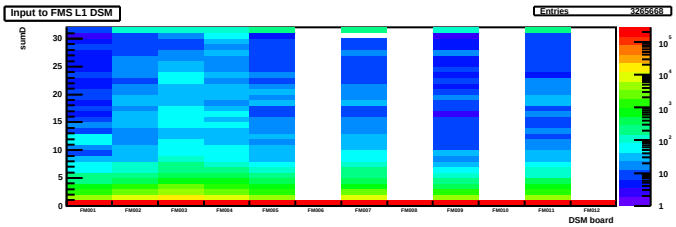

Input to FMS L0 DSM
Entries 254727
QT8(3) sum - simulated
QT board

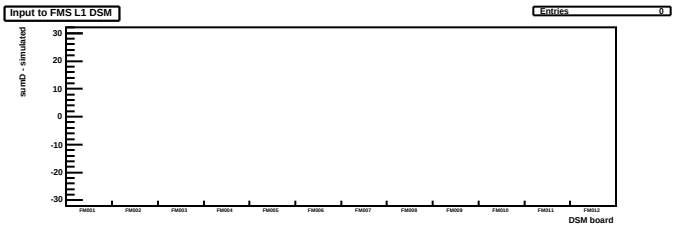

Input to FMS L0 DSM
Entries 1.306267e+07
HT ADC
QT board

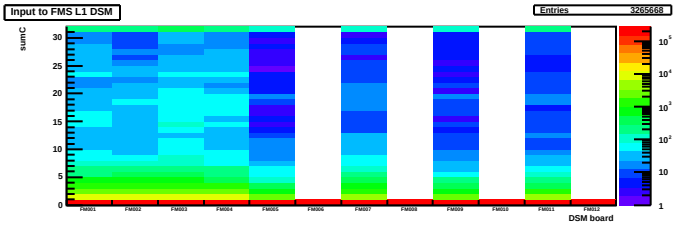

Input to FMS L0 DSM
Entries 63
HT ADC - simulated
QT board

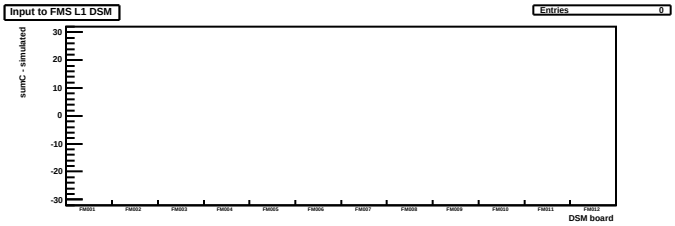

Input to FMS L0 DSM
Entries 1.306267e+07
HT ID
QT board

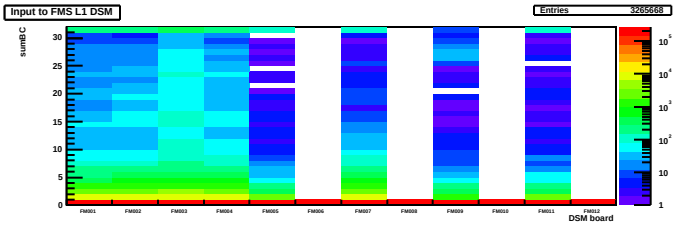

Input to FMS L0 DSM
Entries 279153
HT ID - simulated
QT board

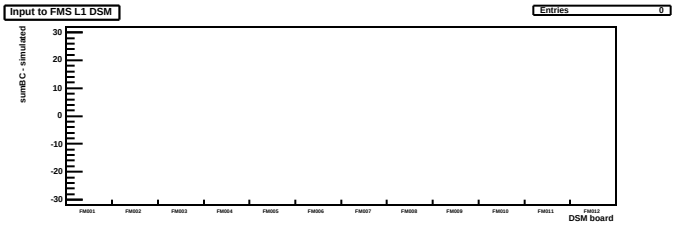

Input to FMS L1 DSM
Entries 3265668
sumD
DSM board

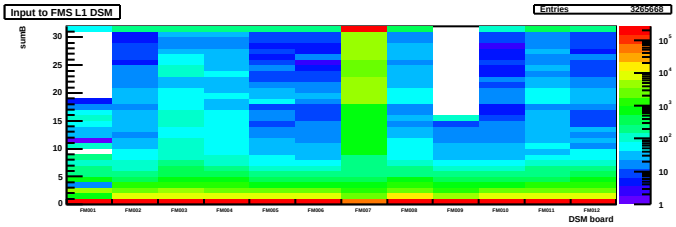

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

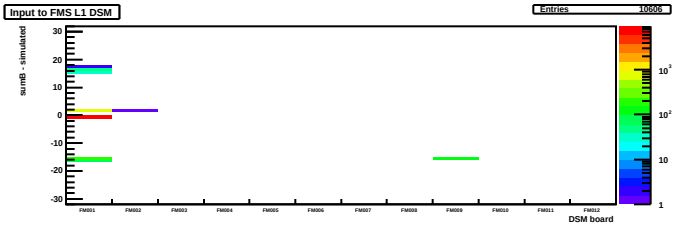

Input to FMS L1 DSM
Entries 3265668
sumC
DSM board

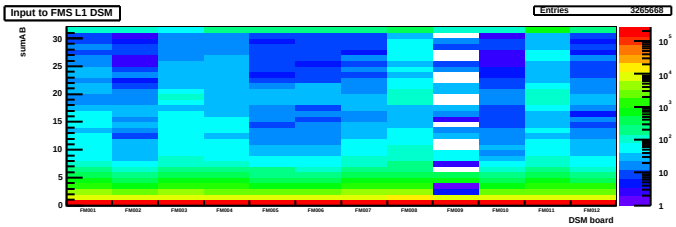

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

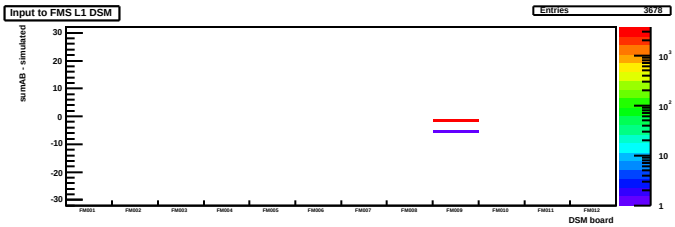

Input to FMS L1 DSM
Entries 3265668
sumBC
DSM board

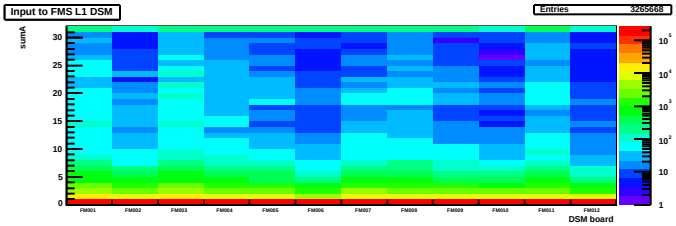

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

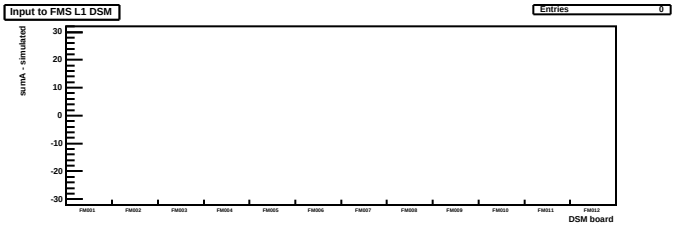

Input to FMS L1 DSM
Entries 3265668
sumB
DSM board

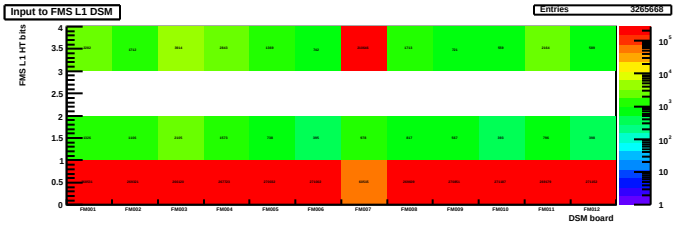

Input to FMS L1 DSM
Entries 10606
sumB - simulated
DSM board

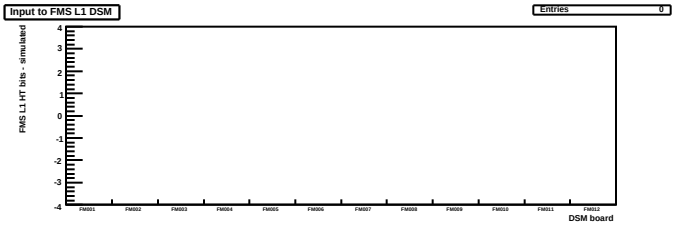

Input to FMS L1 DSM
Entries 3265668
sumAB
DSM board

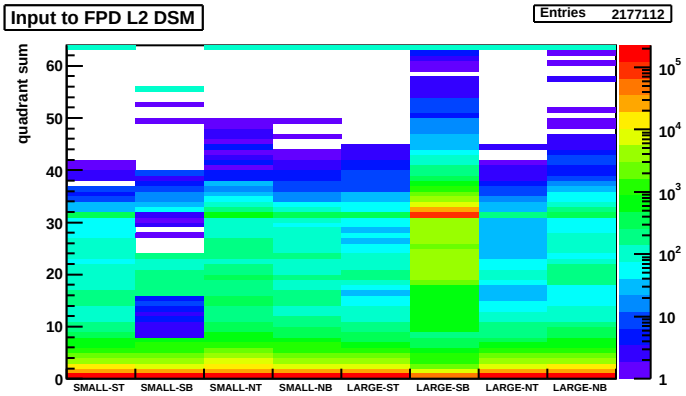

Input to FMS L1 DSM
Entries 3678
sumAB - simulated
DSM board

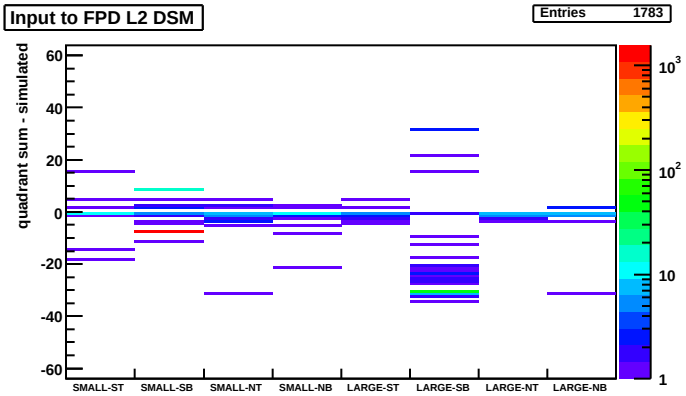

Input to FMS L1 DSM
Entries 3265668
sumA
DSM board

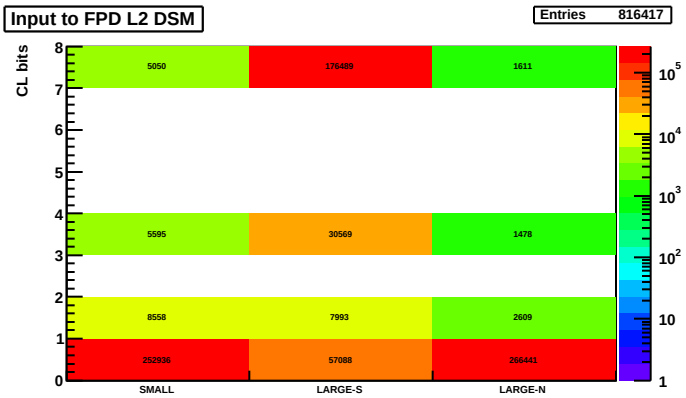

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

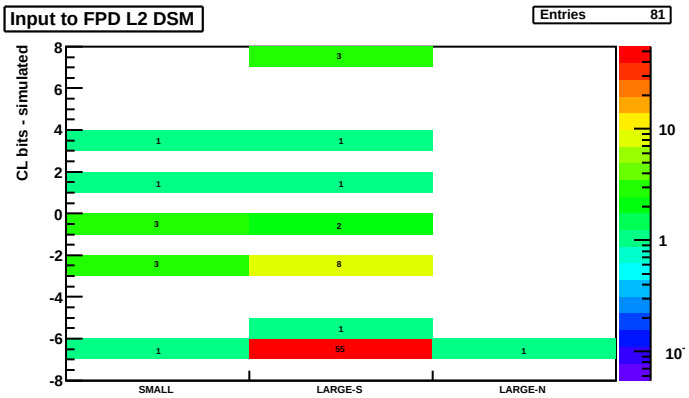

Input to FMS L1 DSM
Entries 3265668
FMS L1 HT bits
DSM board

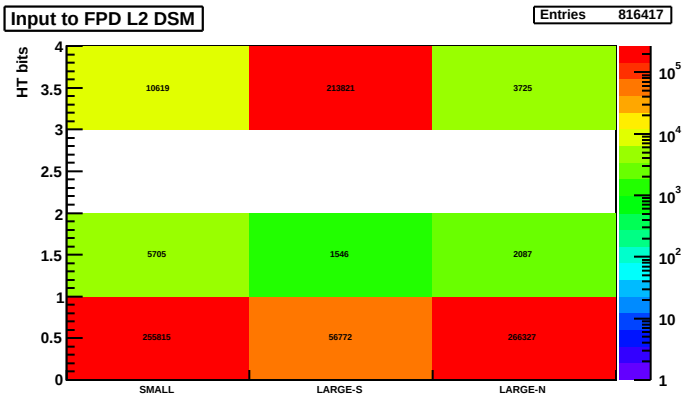

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

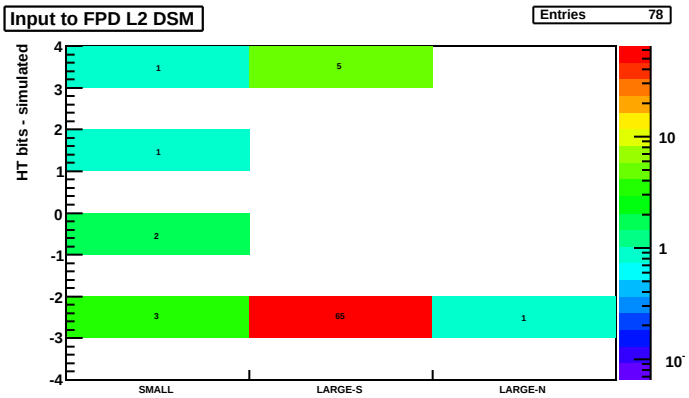

Input to FPD L2 DSM
Entries 2177112
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

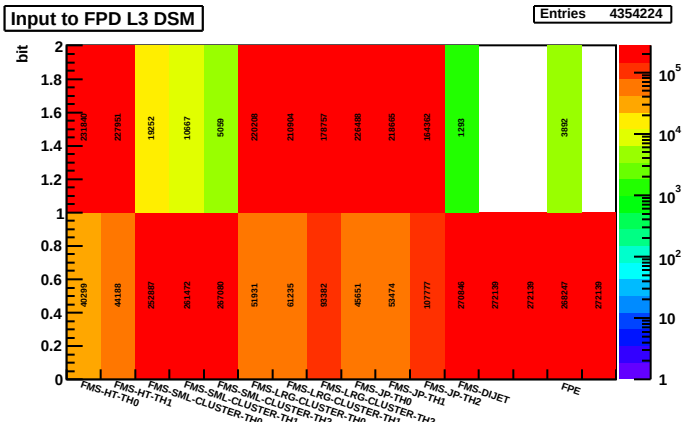

Input to FPD L2 DSM
Entries 1783
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

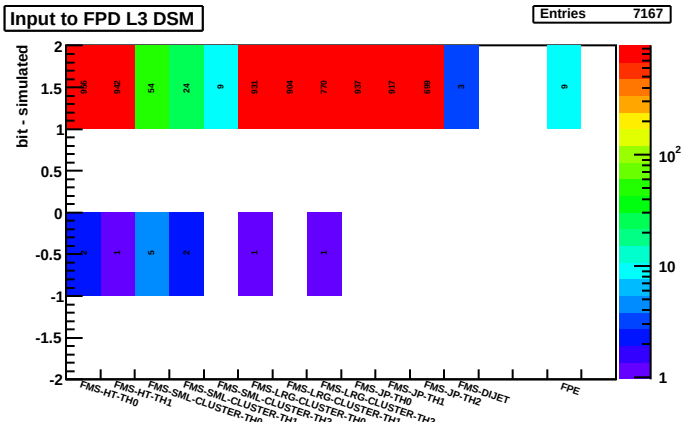

Input to FPD L2 DSM
Entries 816417
CL bits
5050
176489
1611
5595
30569
1478
8558
7993
2609
252936
57088
266441
SMALL
LARGE-S
LARGE-N

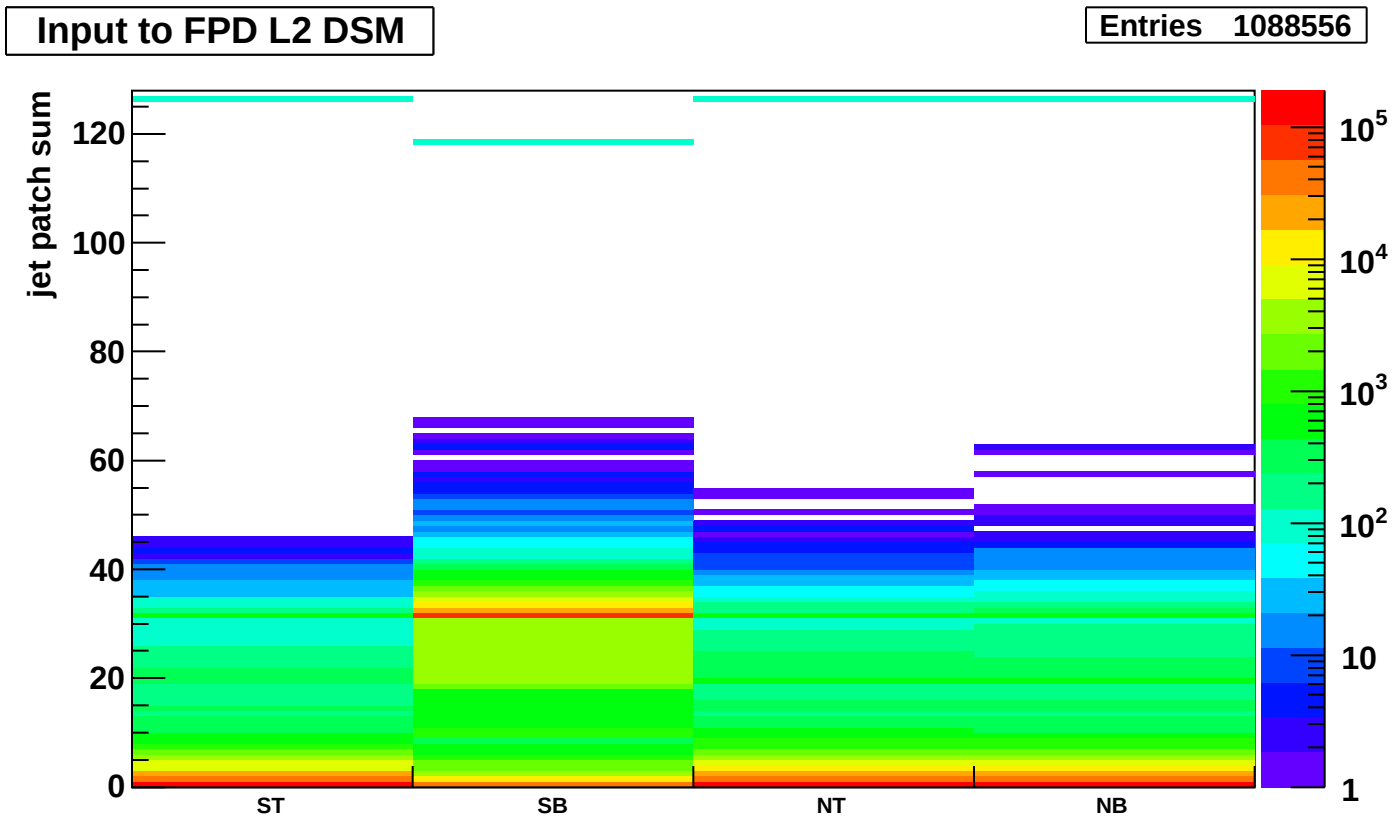

Input to FPD L2 DSM
Entries 81
CL bits - simulated
SMALL
LARGE-S
LARGE-N

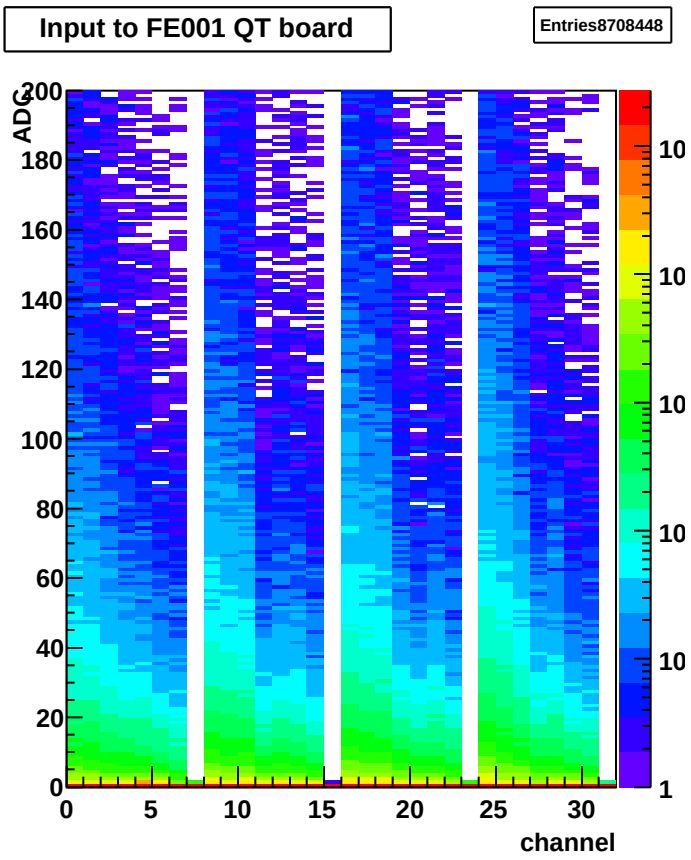

Input to FPD L2 DSM
Entries 816417
HT bits
10619
213821
3725
5705
1546
2087
255815
56772
266327
SMALL
LARGE-S
LARGE-N

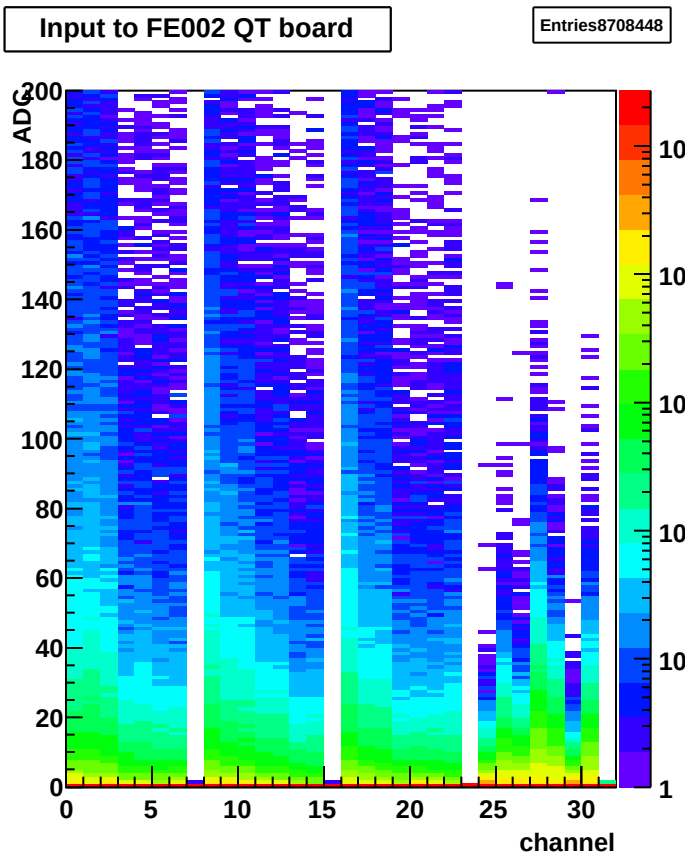

Input to FPD L2 DSM
Entries 78
HT bits - simulated
SMALL
LARGE-S
LARGE-N

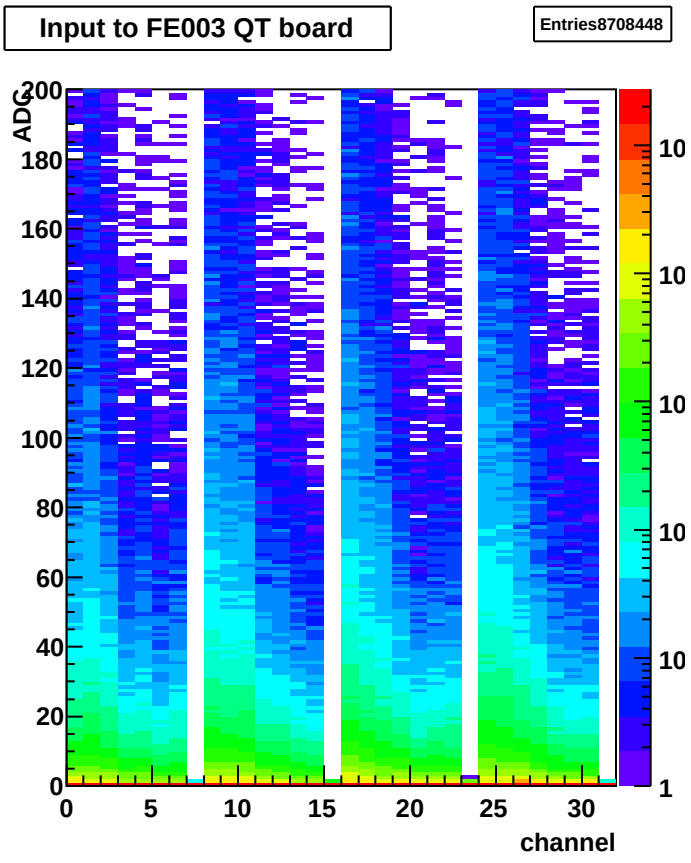

Input to FPD L3 DSM
Entries 4354224
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

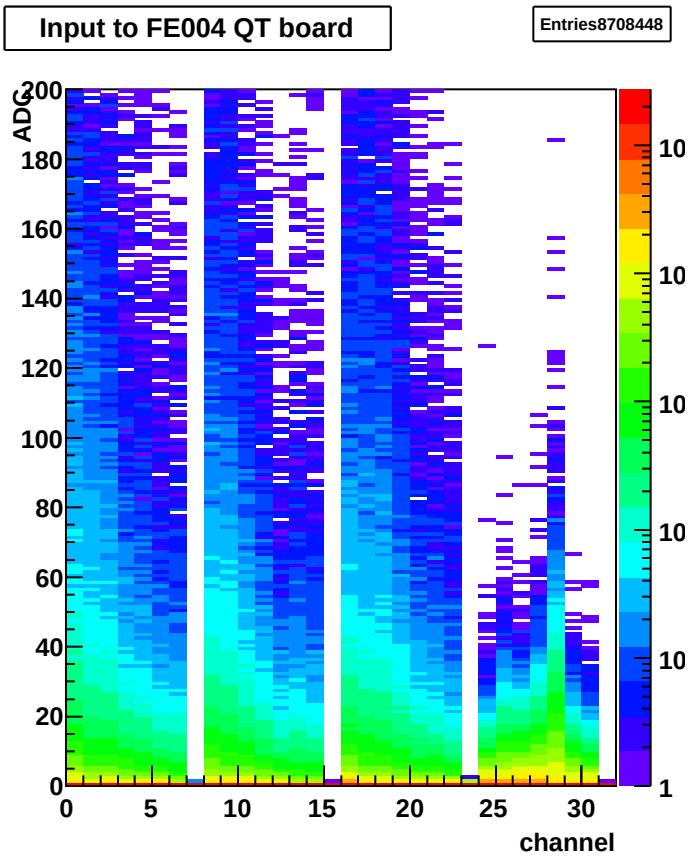

Input to FPD L3 DSM
Entries 7167
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

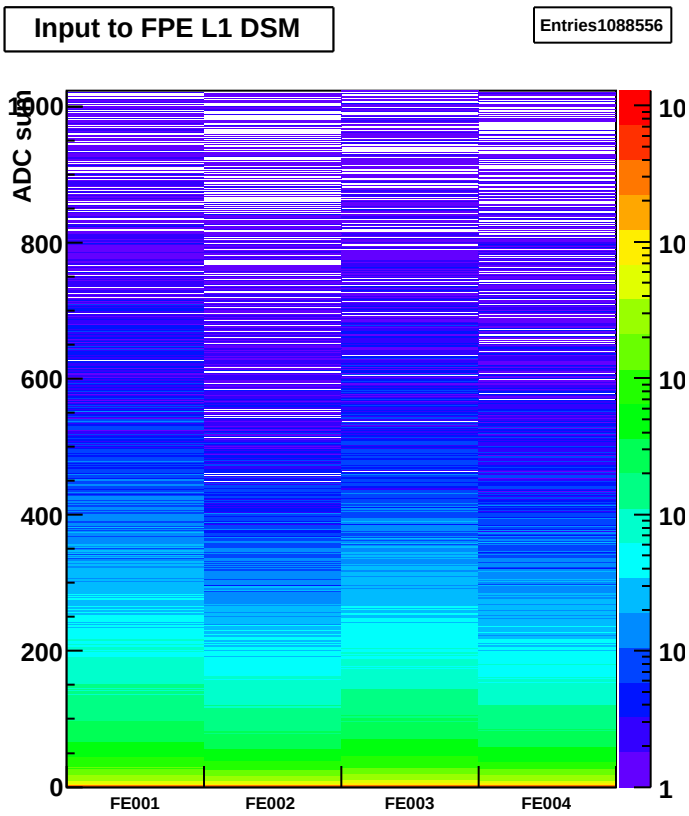

Input to FPD L2 DSM
Entries 1088556
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

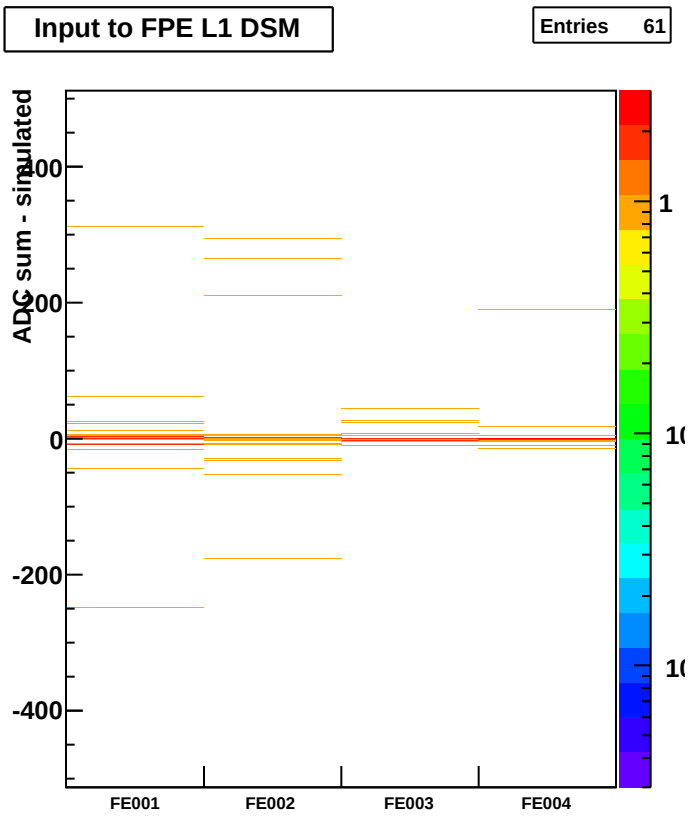

Input to FE001 QT board
Entries8708448
ADC
channel

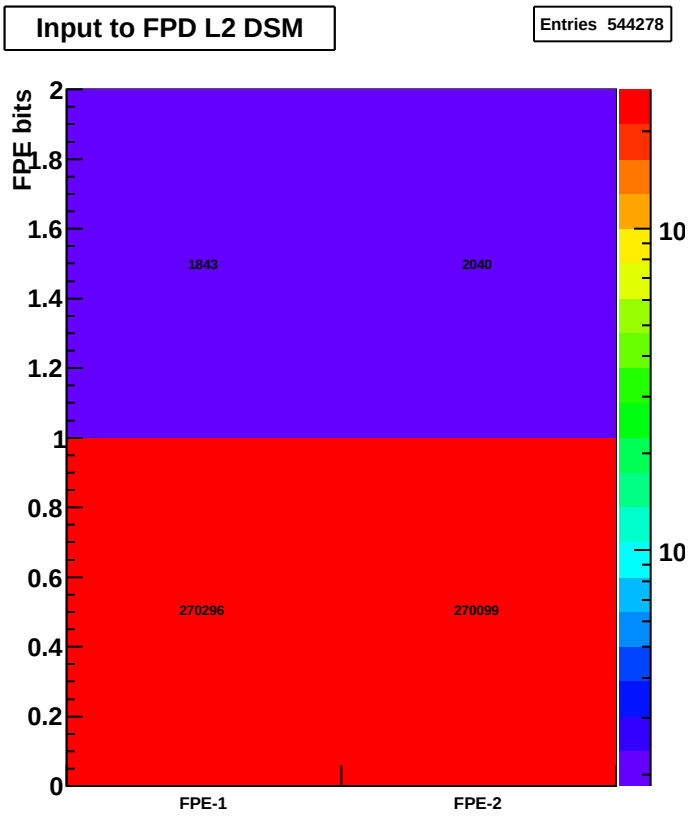

Input to FE002 QT board
Entries8708448
ADC
channel

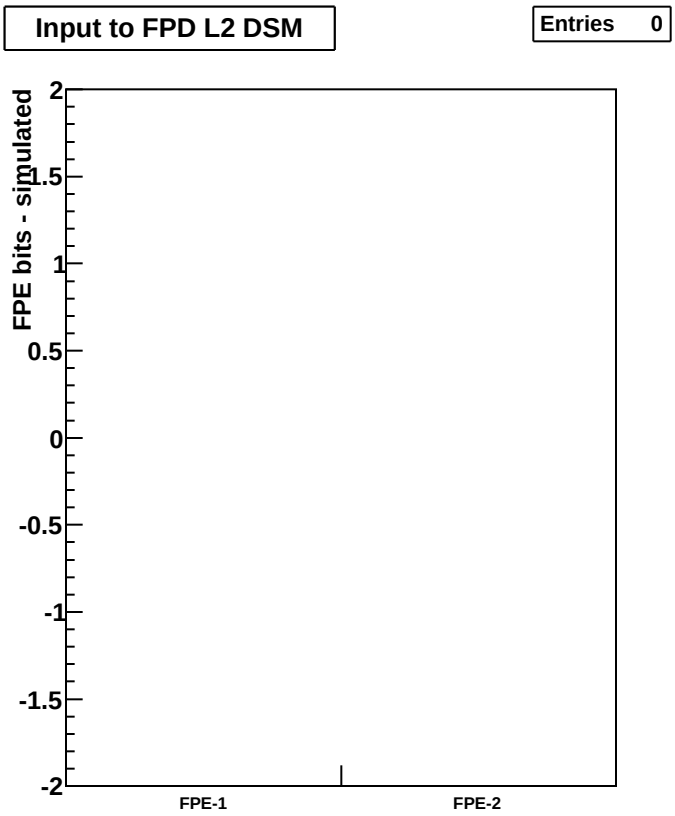

Input to FE003 QT board
Entries8708448
ADC
channel


Input to FE004 QT board
Entries8708448
ADC
channel


Input to FPE L1 DSM
Entries1088556
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 61
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
1
10
10


Input to FPD L2 DSM
Entries 544278
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1843
2040
270296
270099
FPE-1
FPE-2
10
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