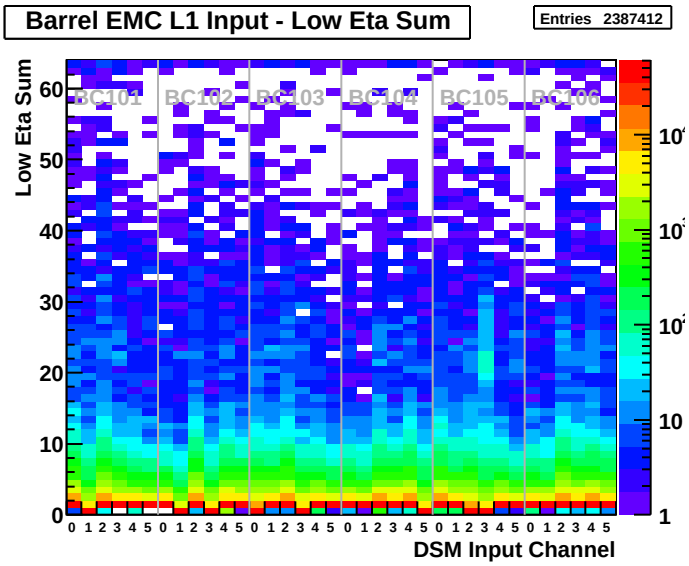
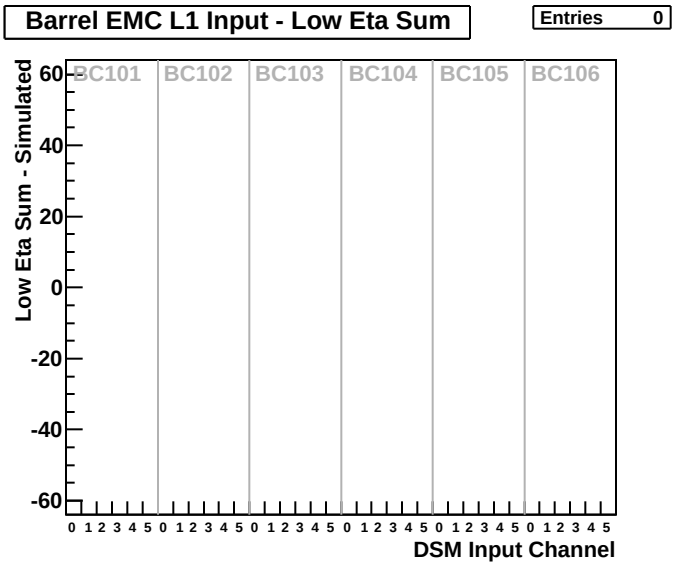
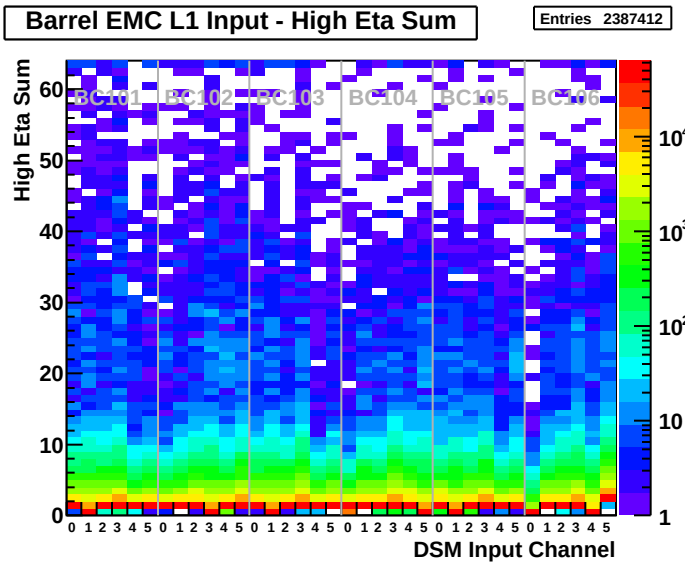
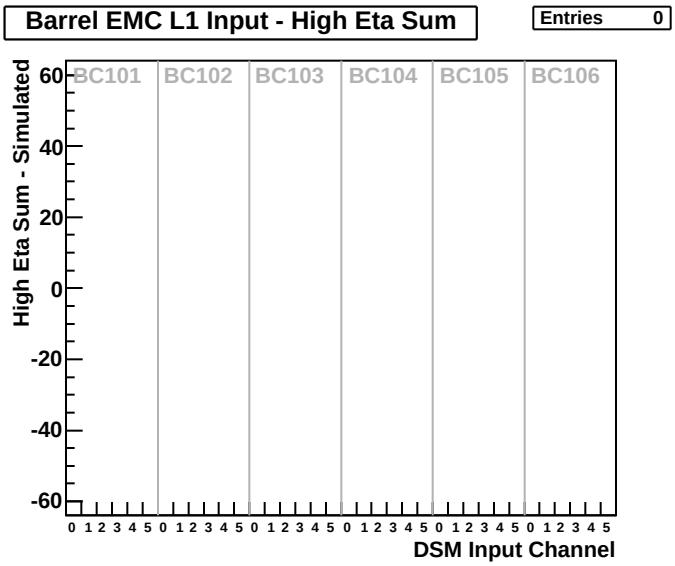
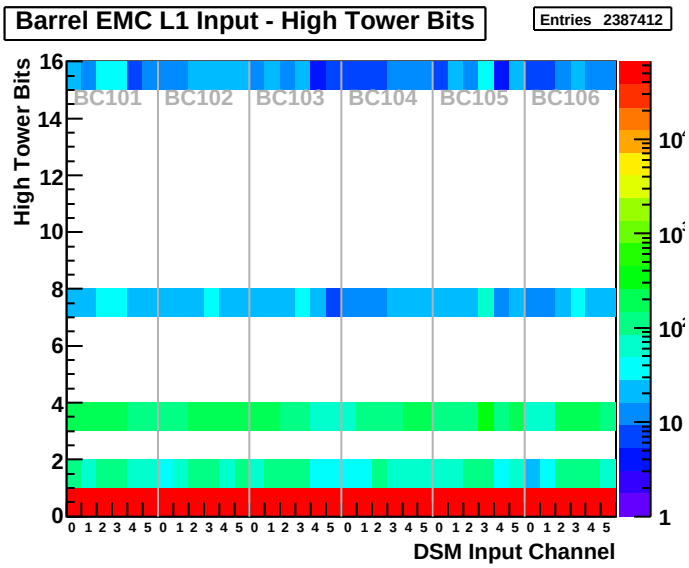
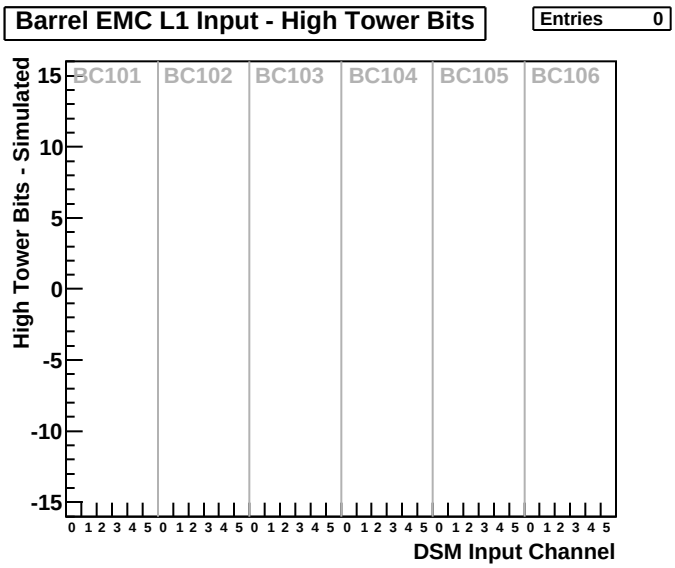

Barrel EMC L1 Input - Low Eta Sum
Entries 2387412
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

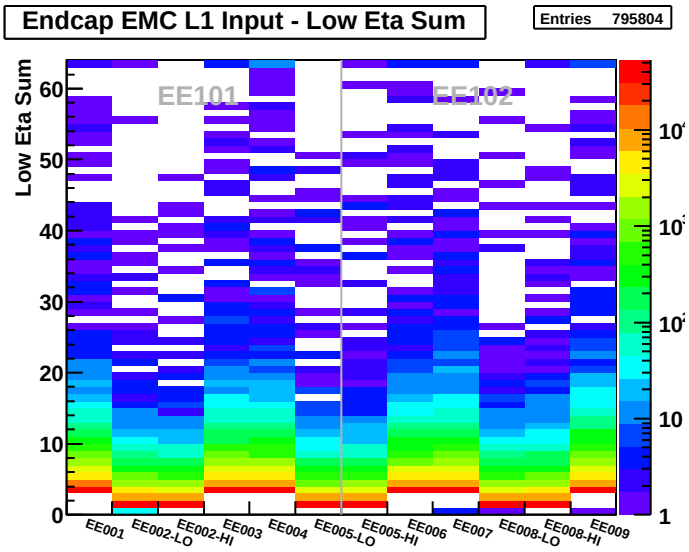

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

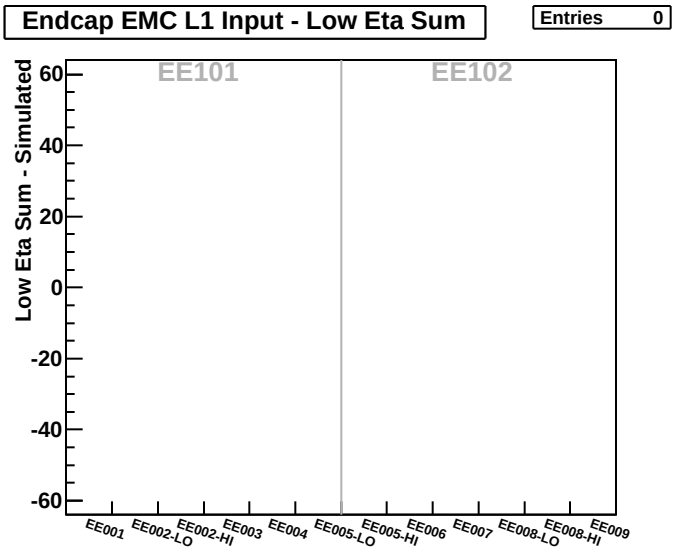

Barrel EMC L1 Input - High Eta Sum
Entries 2387412
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

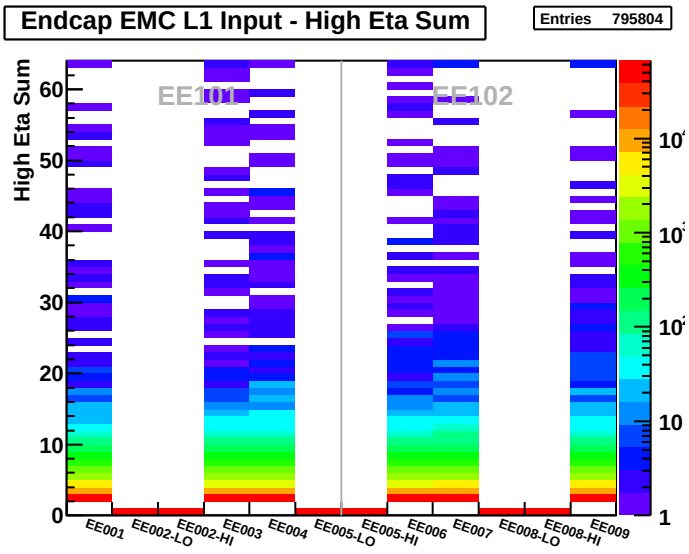

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

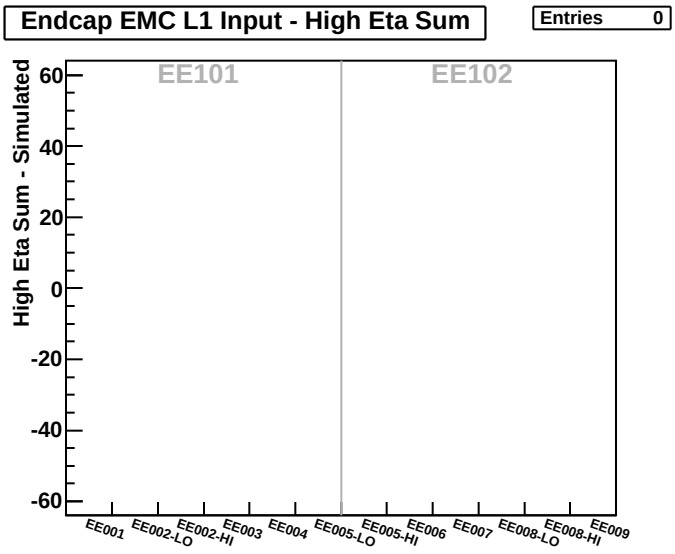

Barrel EMC L1 Input - High Tower Bits
Entries 2387412
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

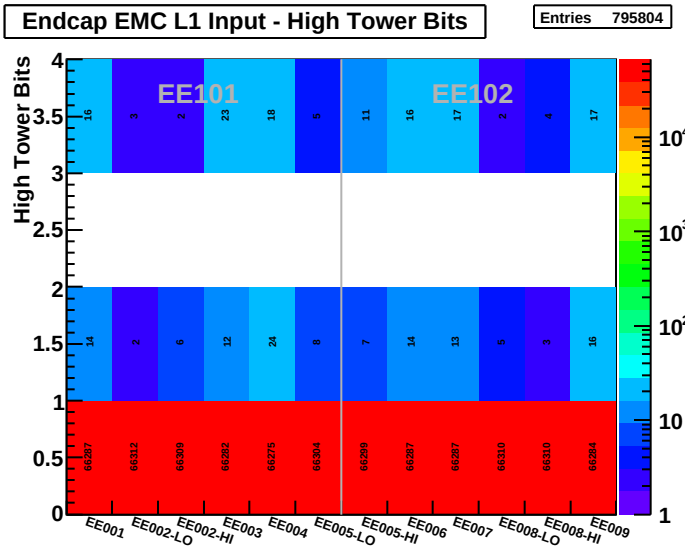

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

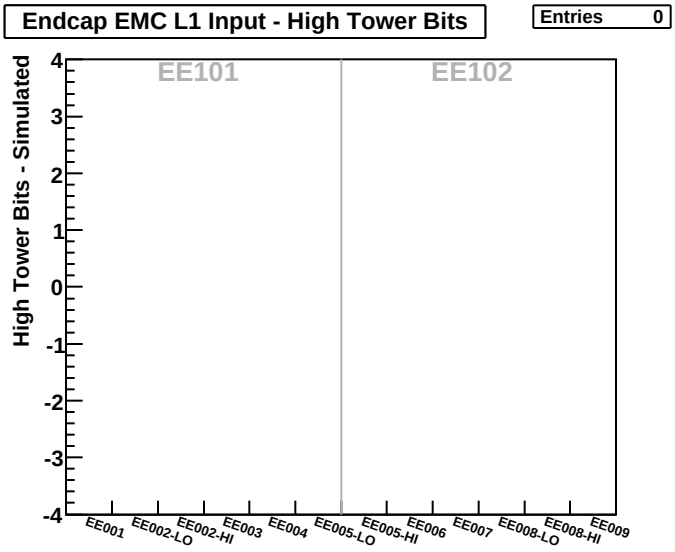

Endcap EMC L1 Input - Low Eta Sum
Entries 795804
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

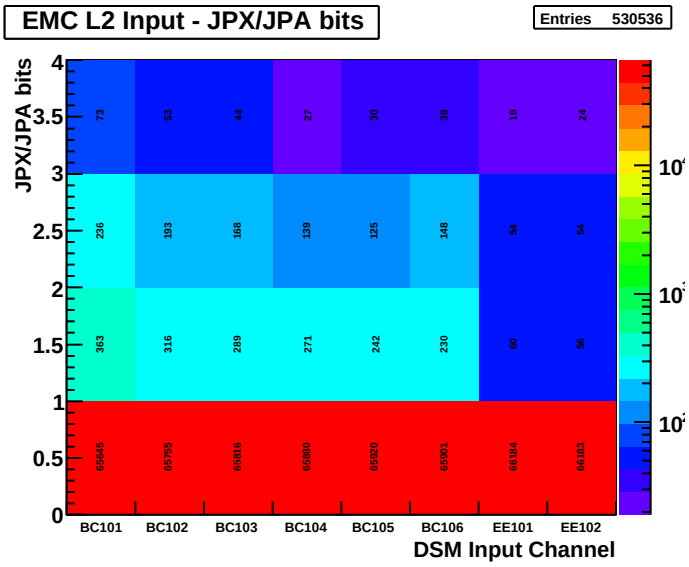

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

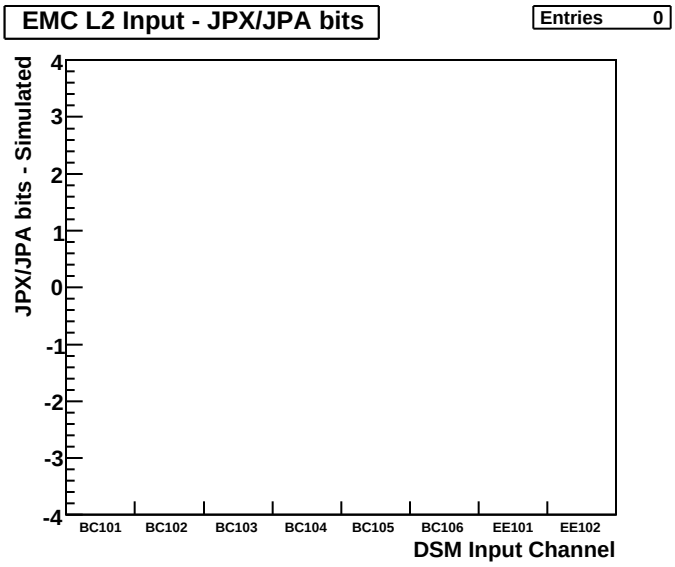

Endcap EMC L1 Input - High Eta Sum
Entries 795804
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

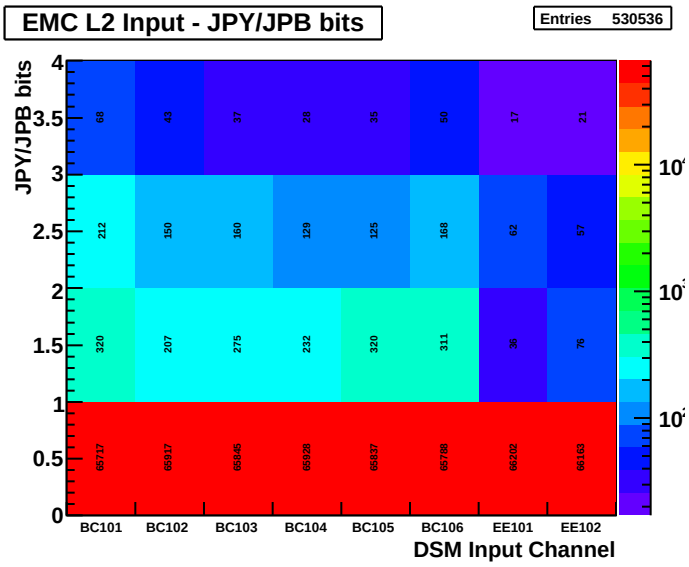

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

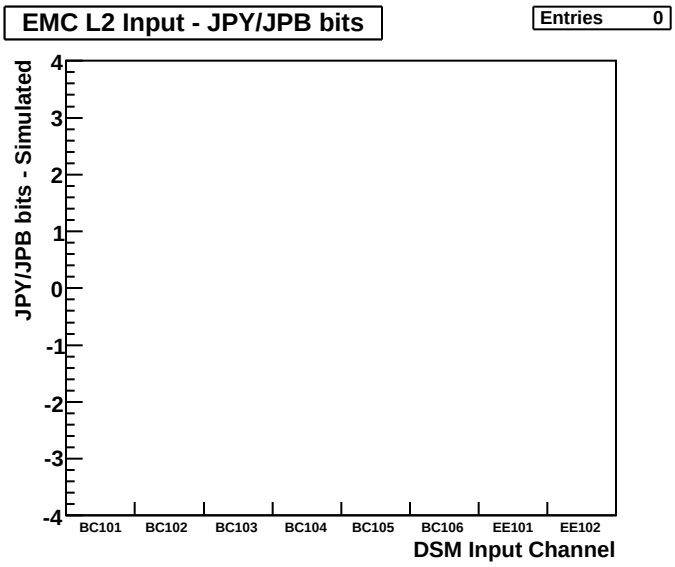

Endcap EMC L1 Input - High Tower Bits
Entries 795804
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

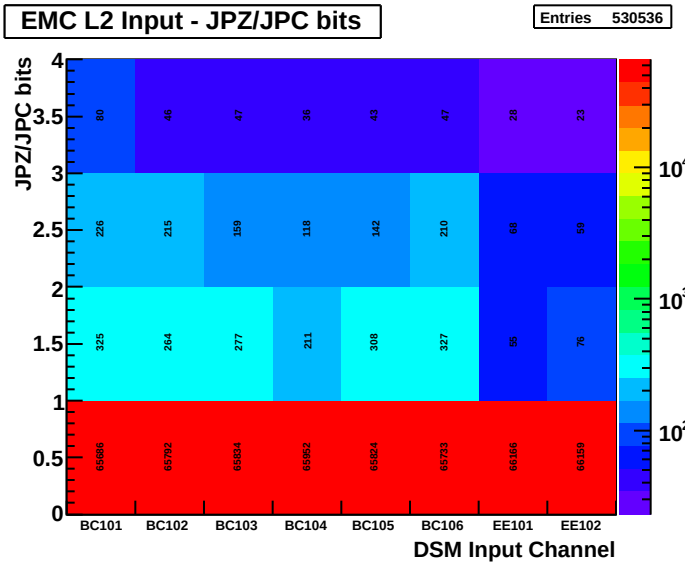

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

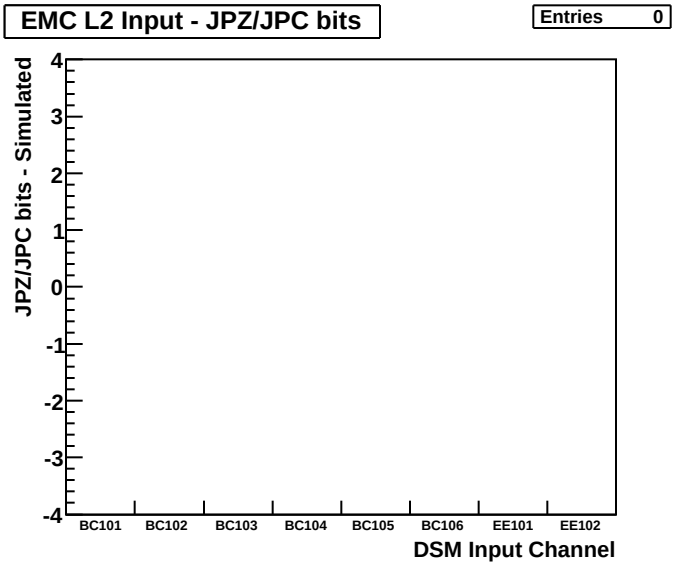

EMC L2 Input - JPX/JPA bits
Entries 530536
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
73 53 44 27 30 38 19 24
236 193 168 139 125 148 54 54
363 316 289 271 242 230 60 56
65645 65755 65816 65880 65920 65991 66184 66183

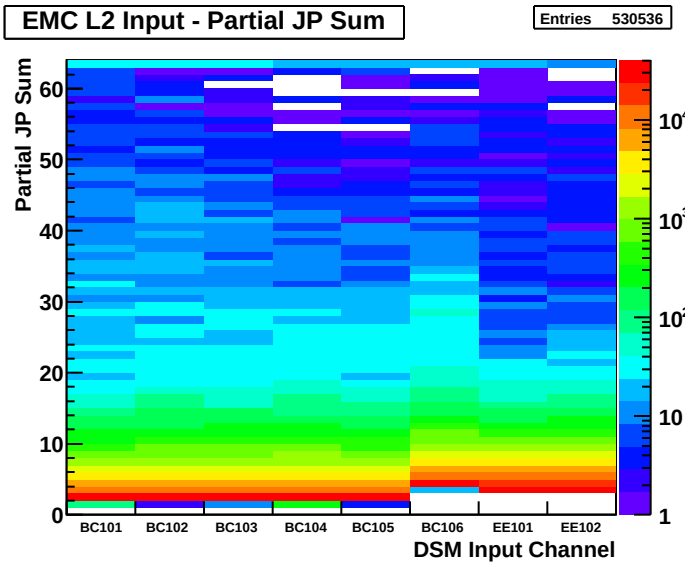

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

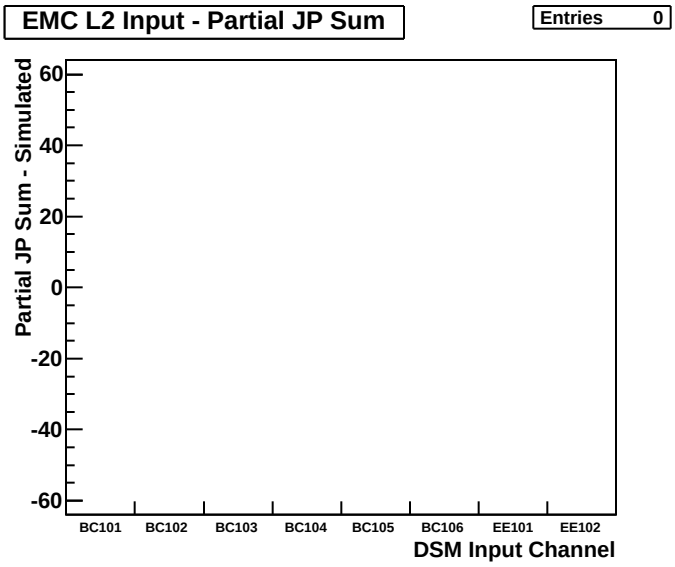

EMC L2 Input - JPY/JPB bits
Entries 530536
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
68 43 37 28 35 50 17 21
212 150 160 129 125 168 62 57
320 207 275 232 320 311 36 76
65717 65917 65845 65928 65837 65788 66202 66163

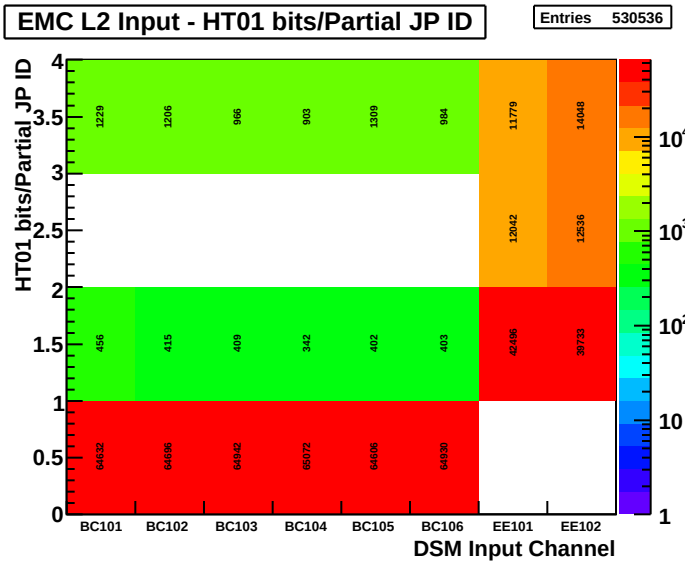

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

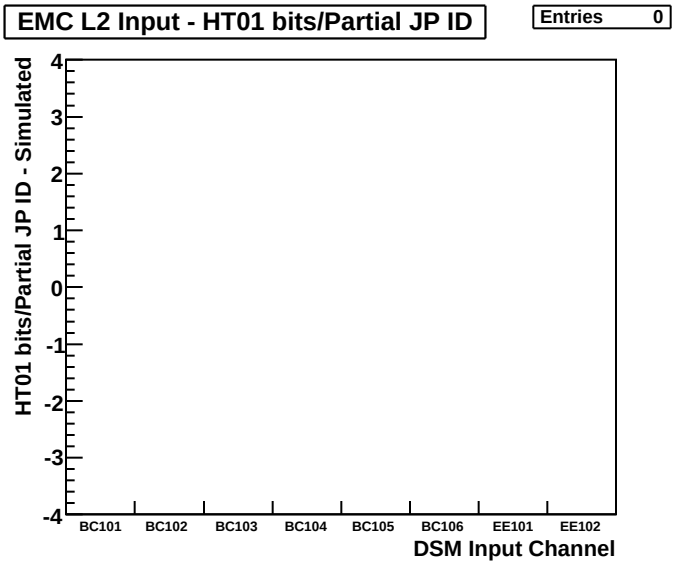

EMC L2 Input - JPZ/JPC bits
Entries 530536
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
80 46 47 36 43 47 28 23
226 215 159 118 142 210 68 59
325 264 277 211 308 327 55 76
65686 65792 65824 65952 65824 65733 66166 66159

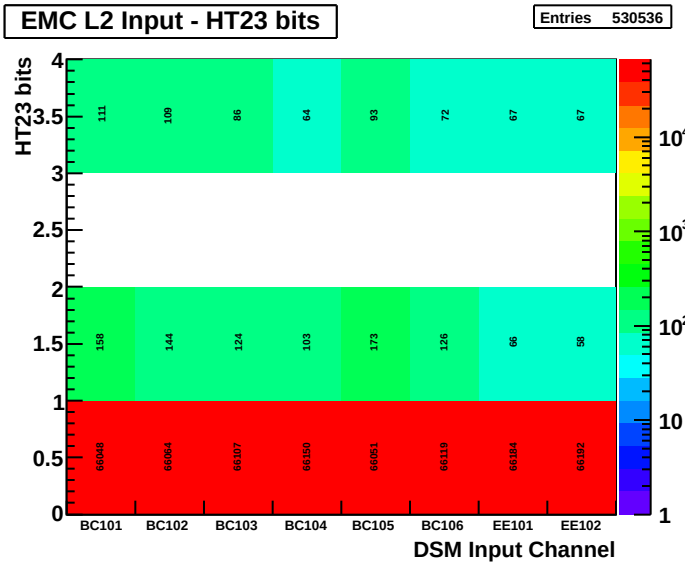

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

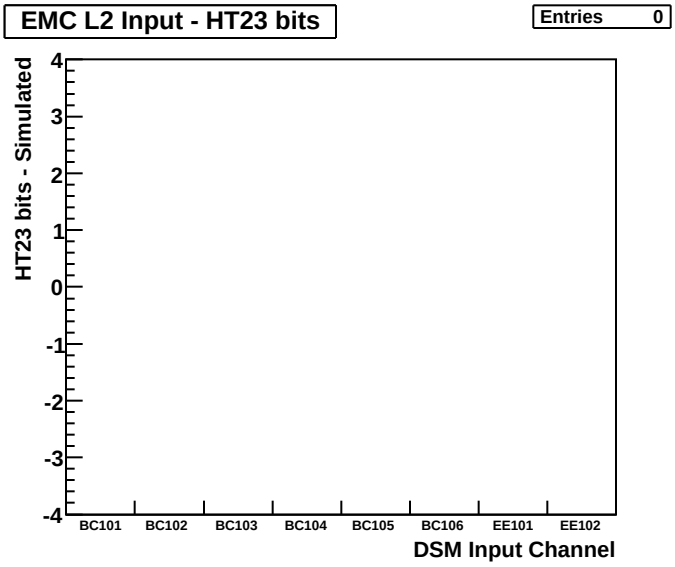

EMC L2 Input - Partial JP Sum
Entries 530536
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

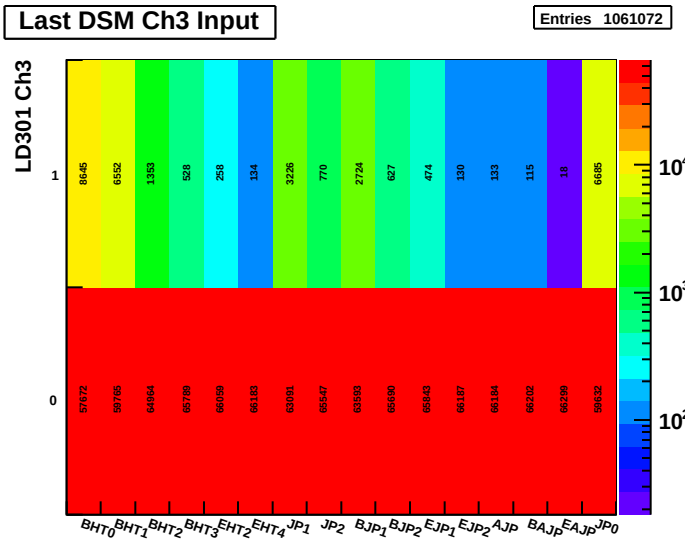

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

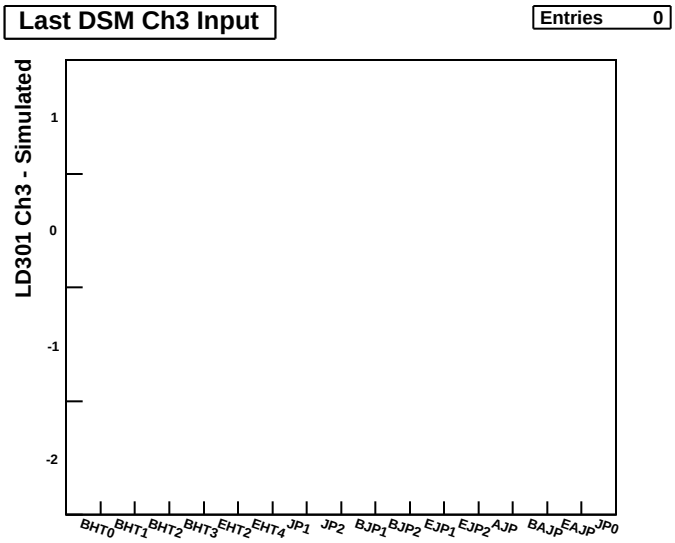

EMC L2 Input - HT01 bits/Partial JP ID
Entries 530536
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

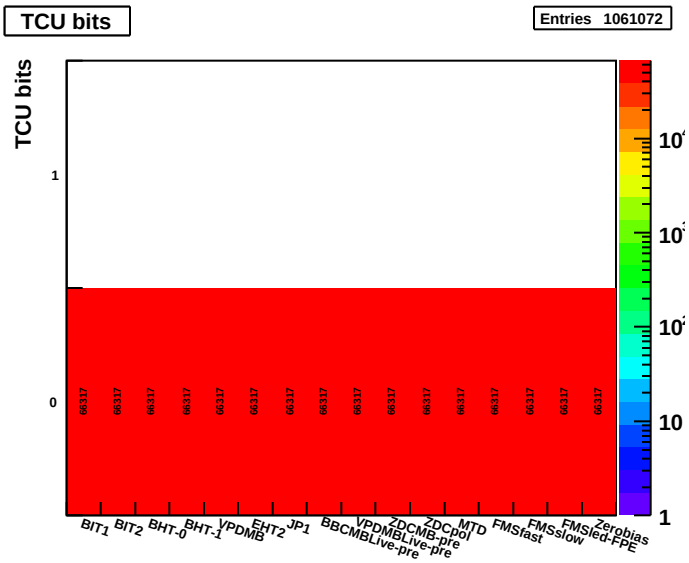

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

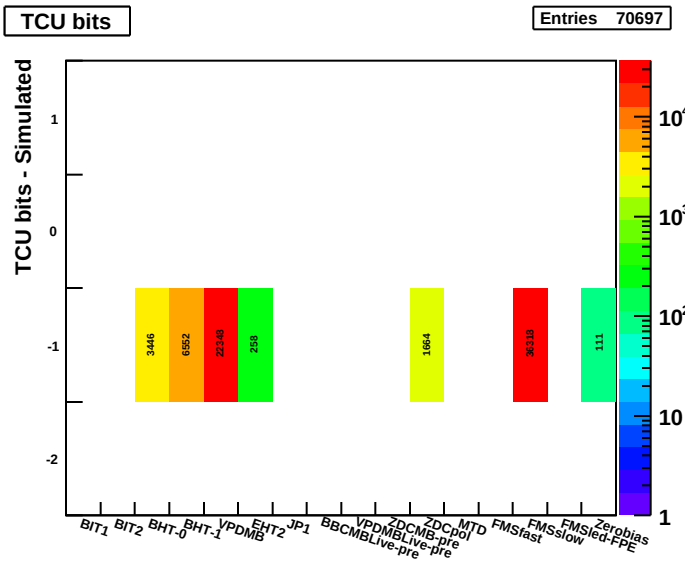

EMC L2 Input - HT23 bits
Entries 530536
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

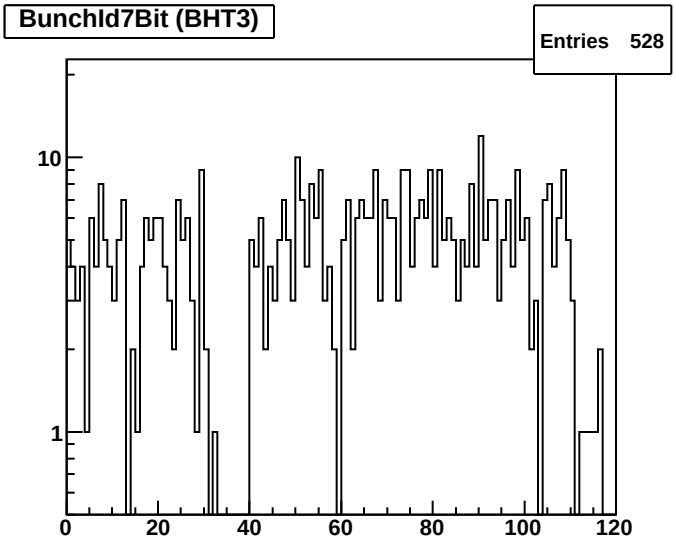

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

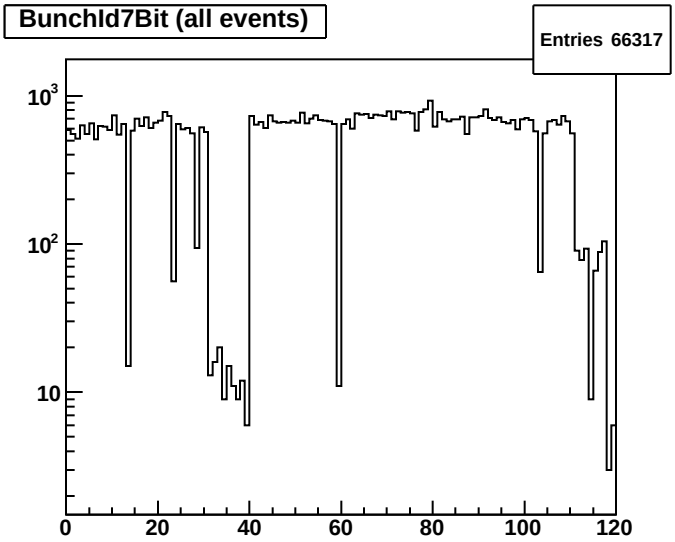

Last DSM Ch3 Input
Entries 1061072
LD301 Ch3
8645 6552 1353 528 258 134 3226 770 2724 627 474 130 133 115 18 6685
57672 59765 64964 65789 66059 66163 63091 65547 63593 65690 65843 66187 66194 66202 66299 59632
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

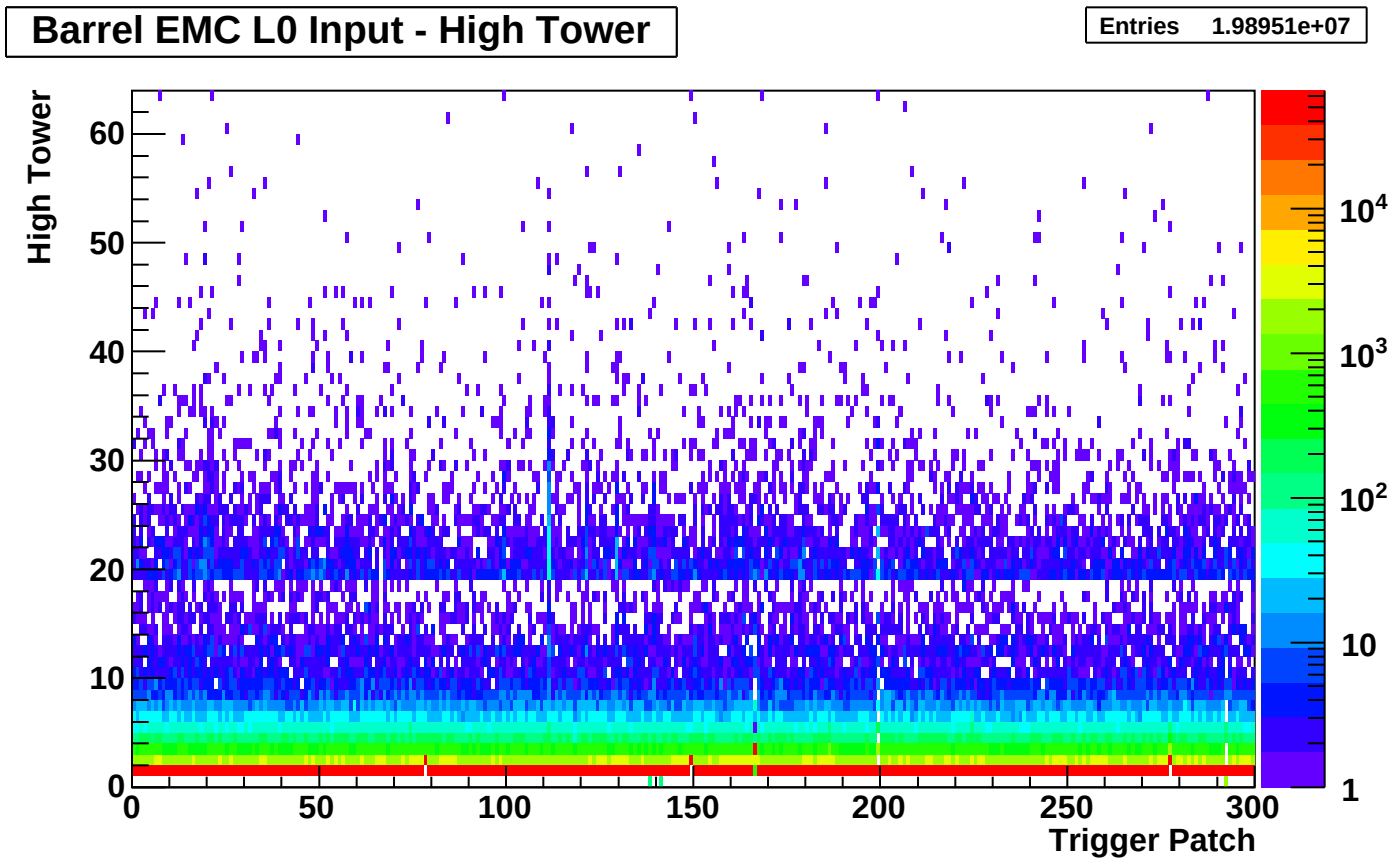

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

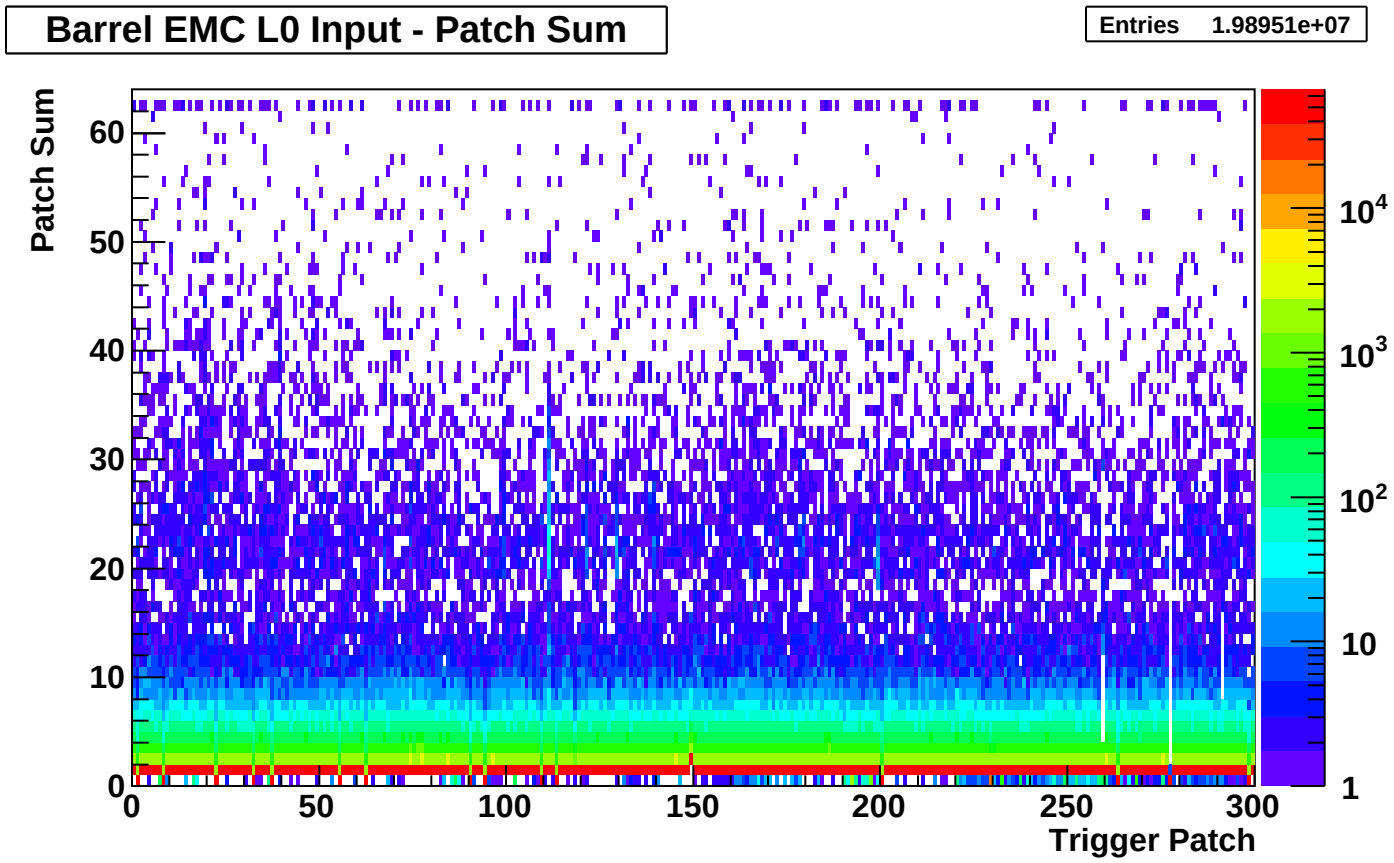

TCU bits
Entries 1061072
TCU bits
66317 66317 66317 66317 66317 66317 66317 66317 66317 66317 66317 66317 66317 66317 66317 66317
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

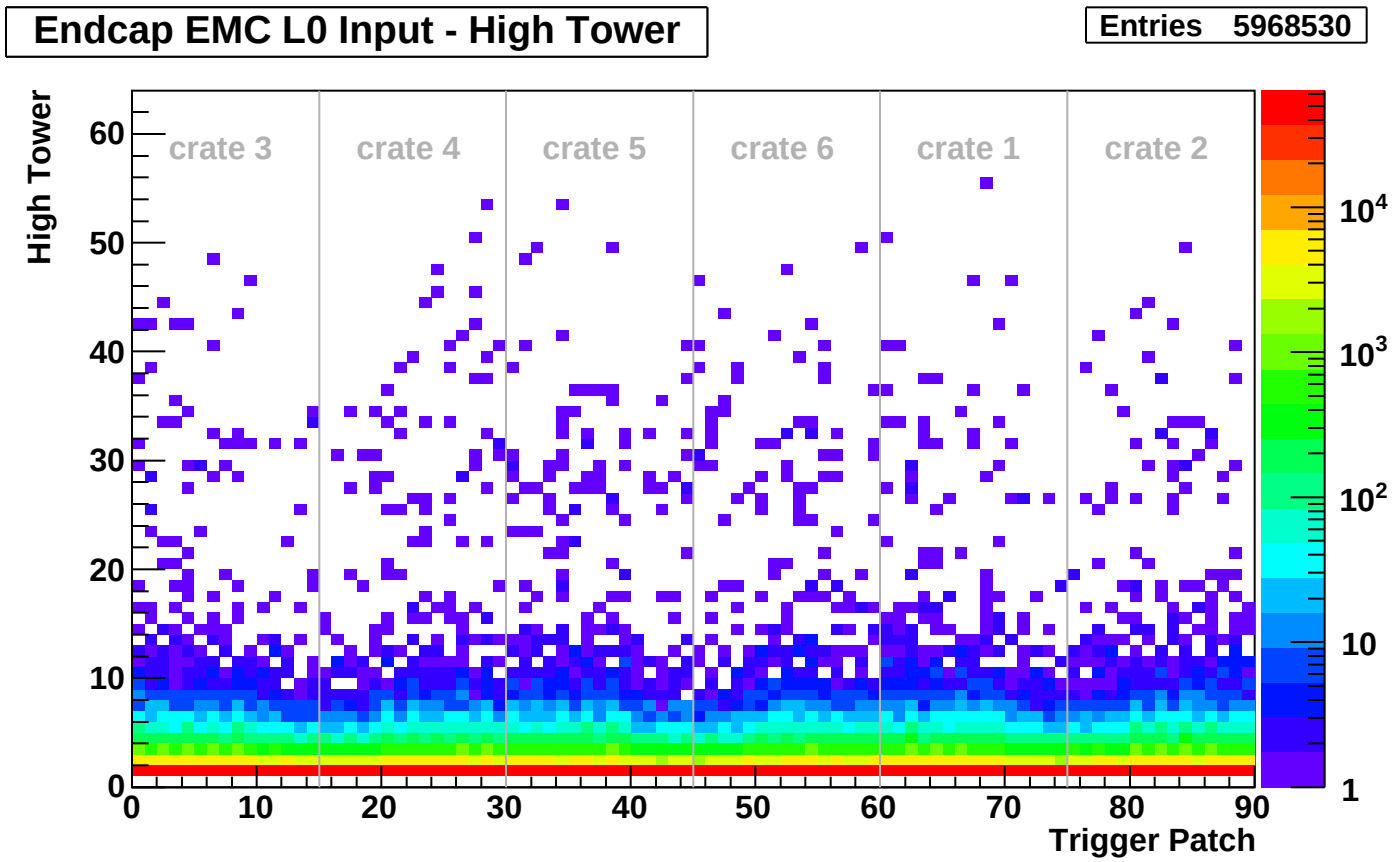

TCU bits
Entries 70697
TCU bits - Simulated
3446 6552 22348 258 1664 36318 111
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

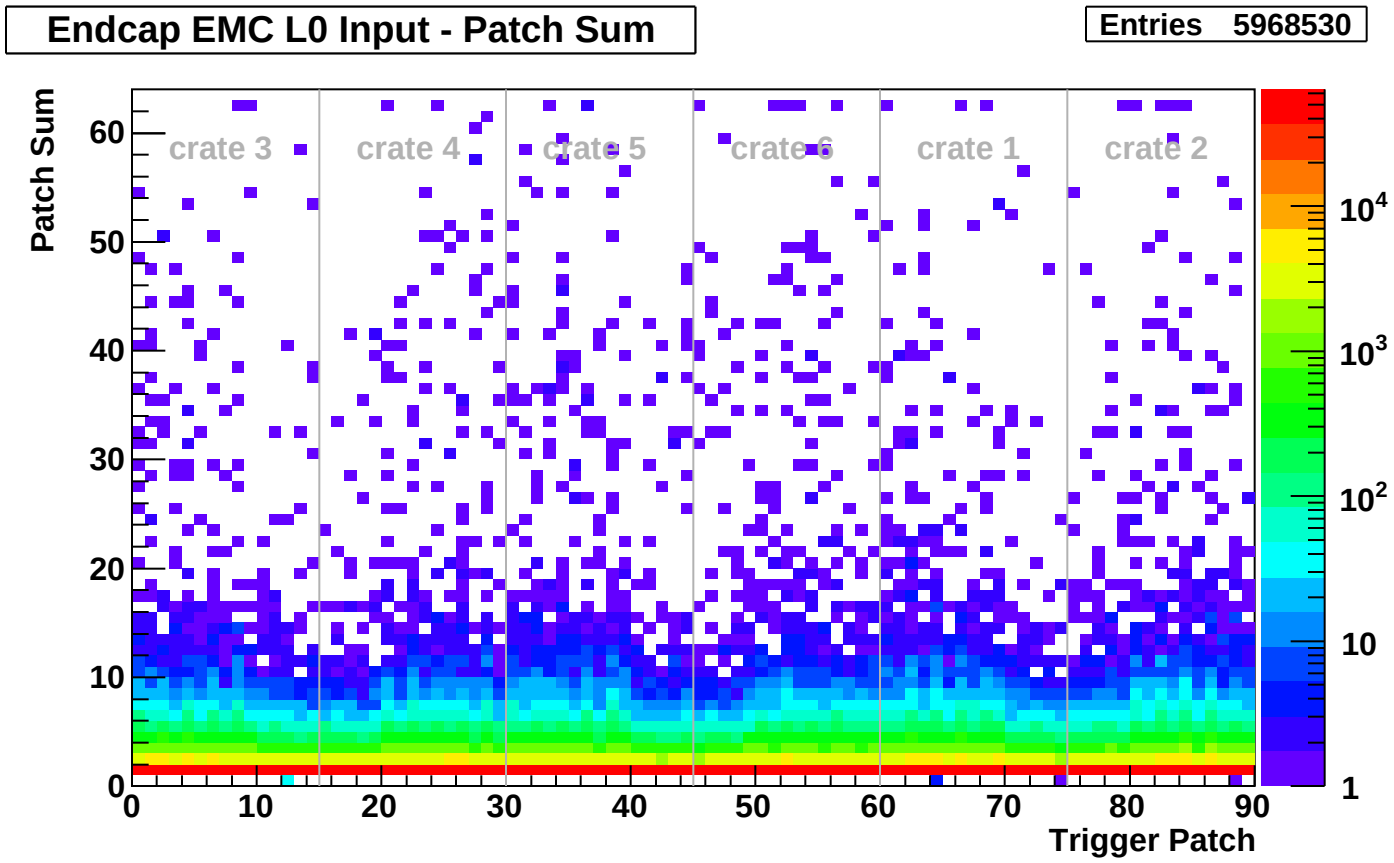

BunchId7Bit (BHT3)
Entries 528

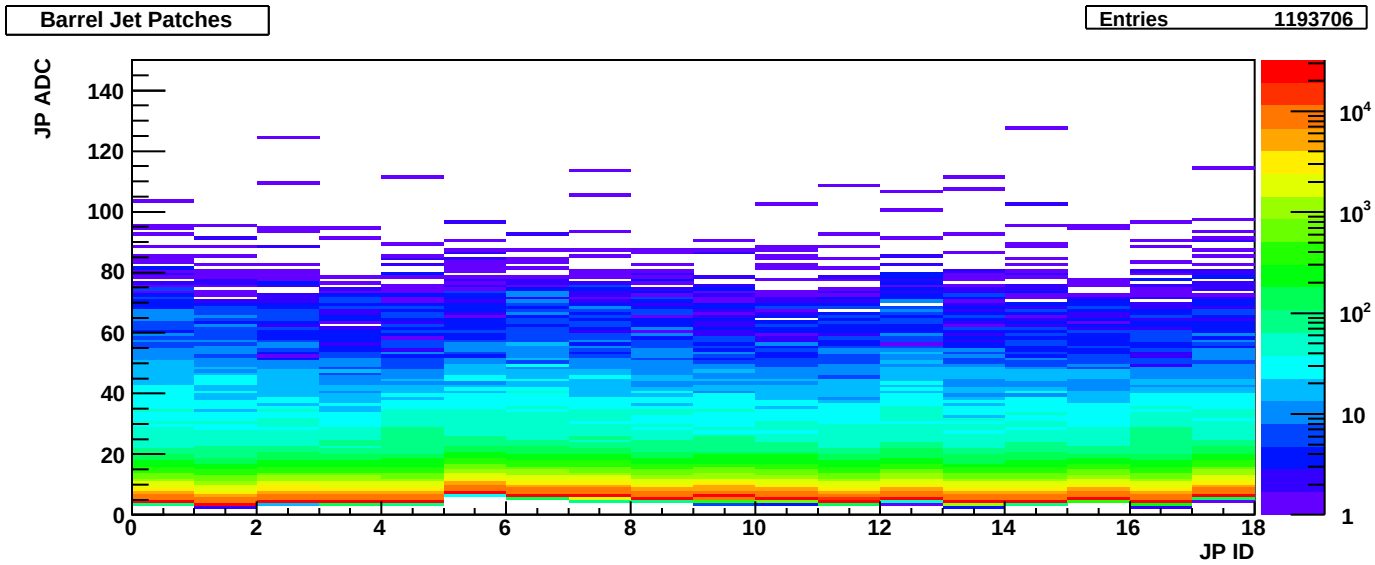

BunchId7Bit (all events)
Entries 66317

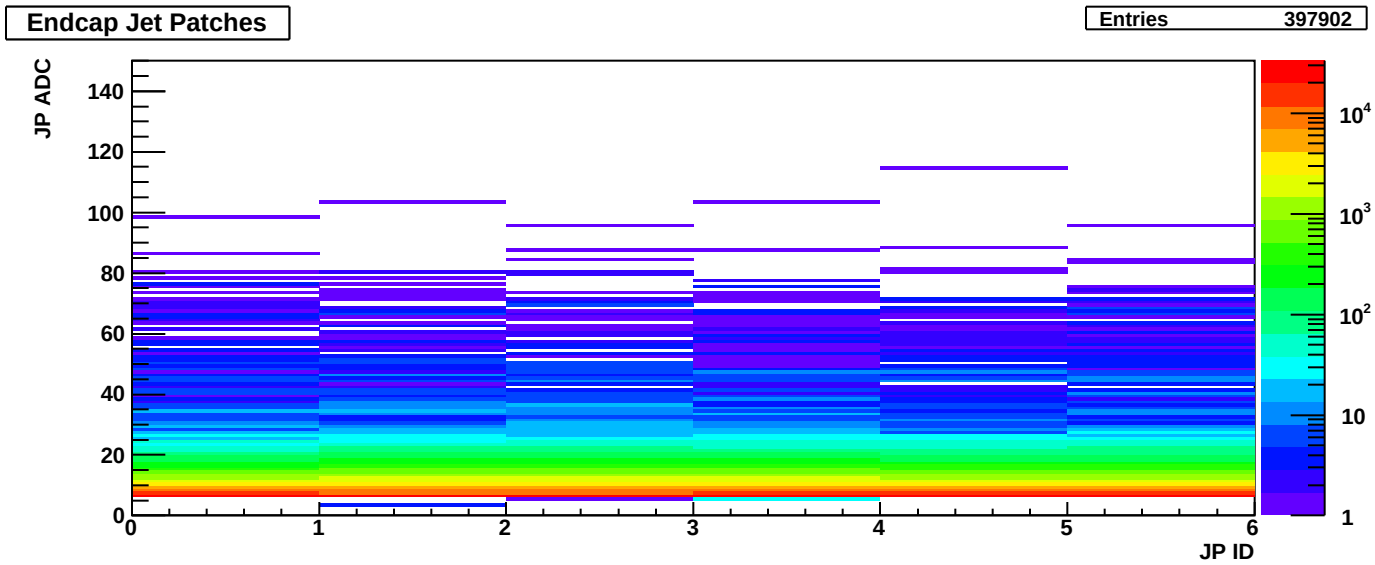

Barrel EMC L0 Input - High Tower
Entries 1.98951e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

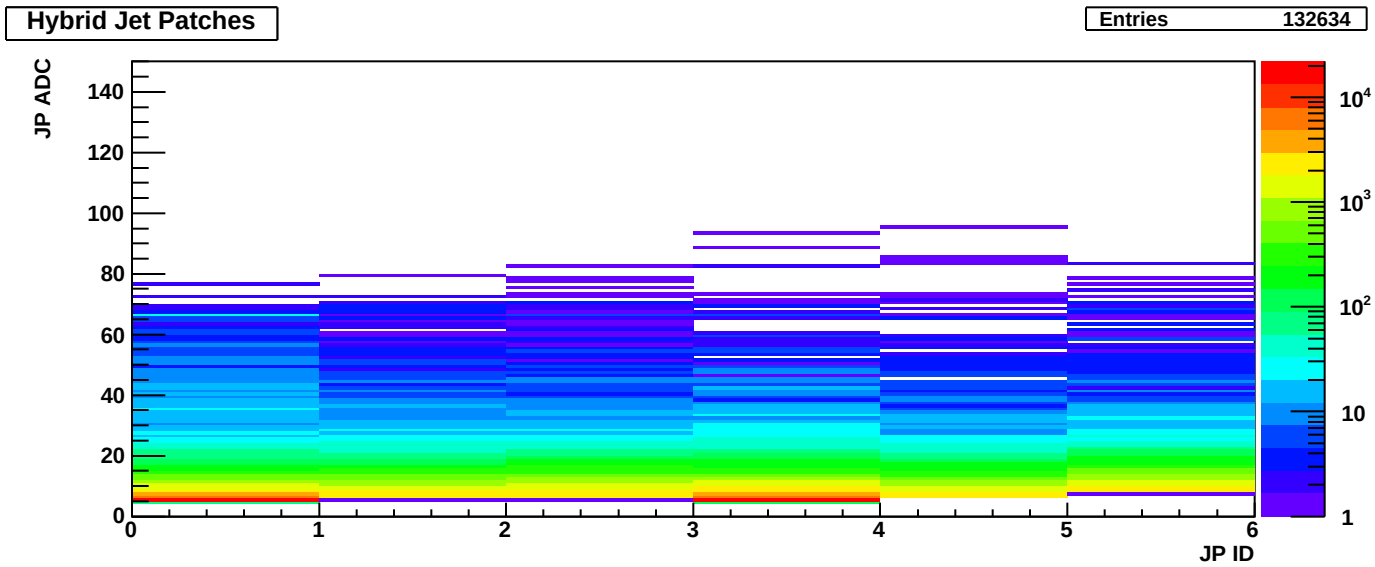

Barrel EMC L0 Input - Patch Sum
Entries 1.98951e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

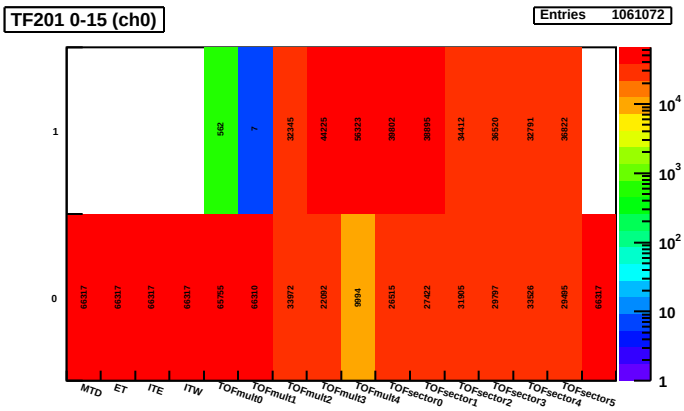

Endcap EMC L0 Input - High Tower
Entries 5968530
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

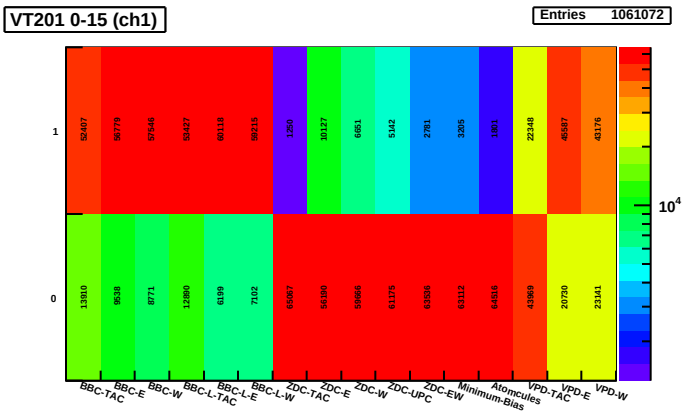

Endcap EMC L0 Input - Patch Sum
Entries 5968530
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

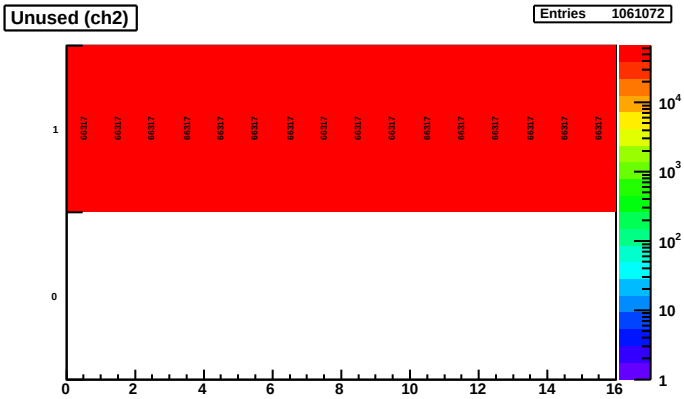

Barrel Jet Patches
Entries 1193706
JP ADC
JP ID

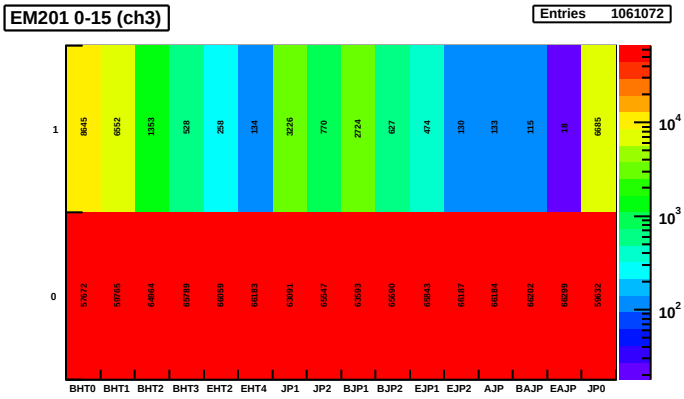

Endcap Jet Patches
Entries 397902
JP ADC
JP ID

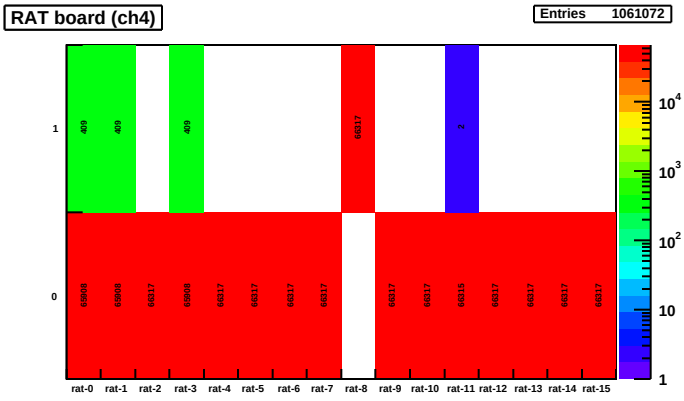

Hybrid Jet Patches
Entries 132634
JP ADC
JP ID

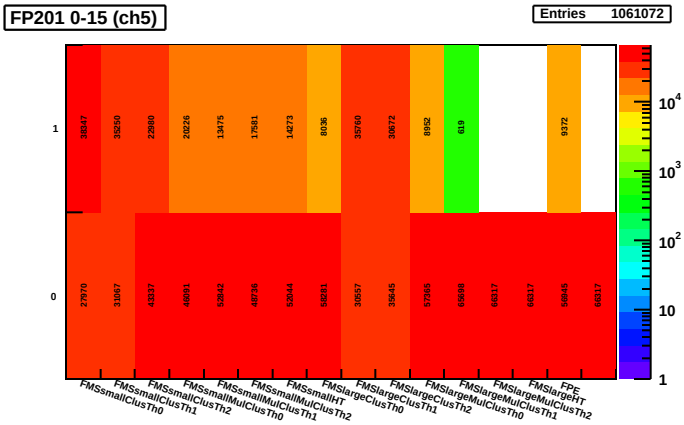

TF201 0-15 (ch0)
Entries 1061072
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

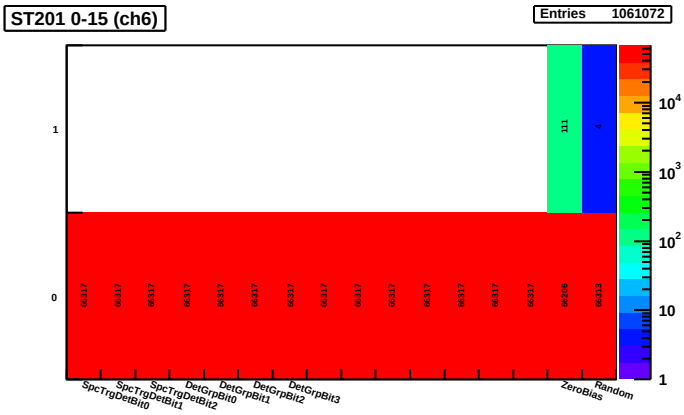

VT201 0-15 (ch1)
Entries 1061072
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Atomcules Minimum-Bias VPD-TAC VPD-E VPD-W

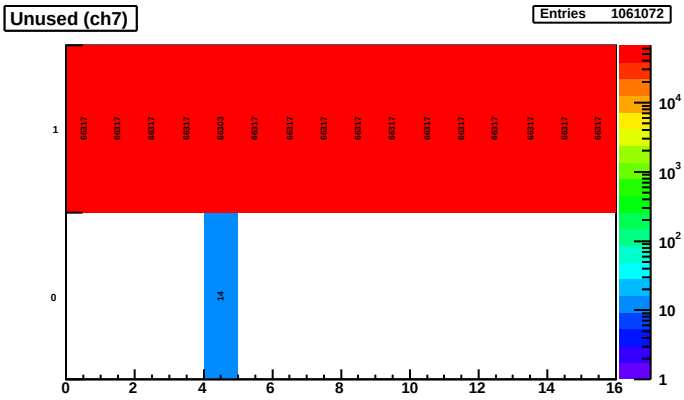

Unused (ch2)
Entries 1061072

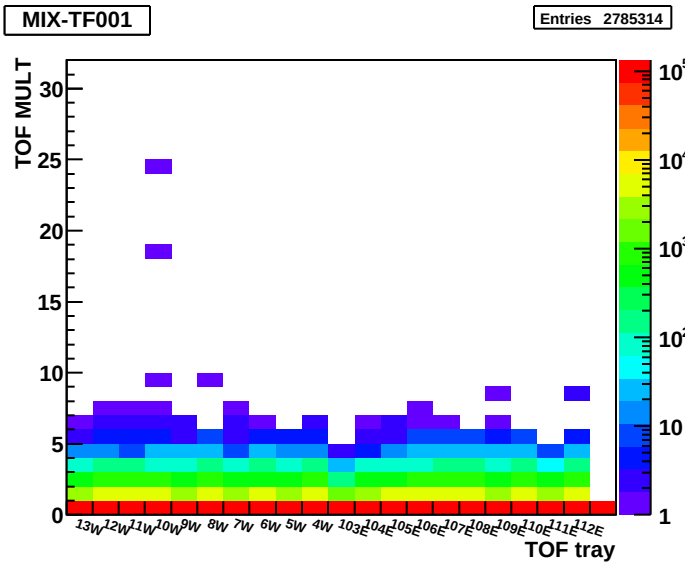

EM201 0-15 (ch3)
Entries 1061072
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

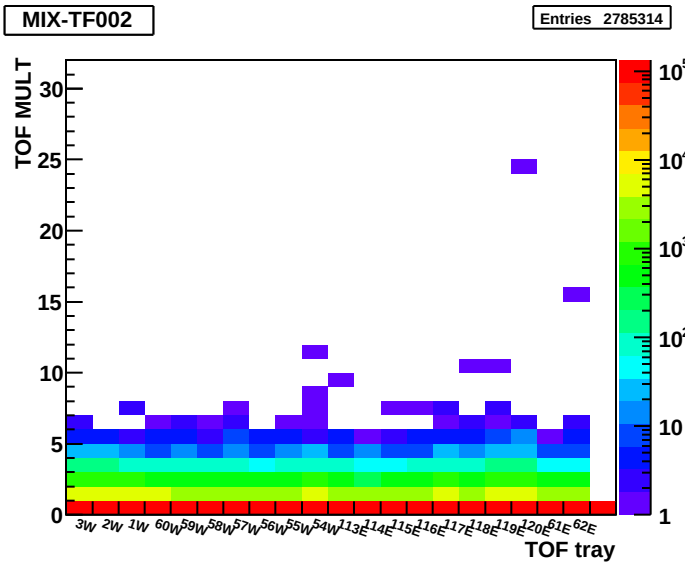

RAT board (ch4)
Entries 1061072
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

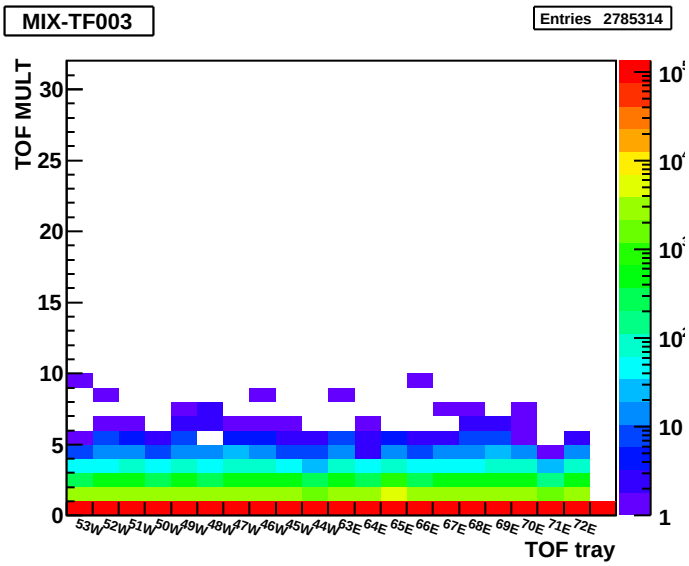

FP201 0-15 (ch5)
Entries 1061072
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

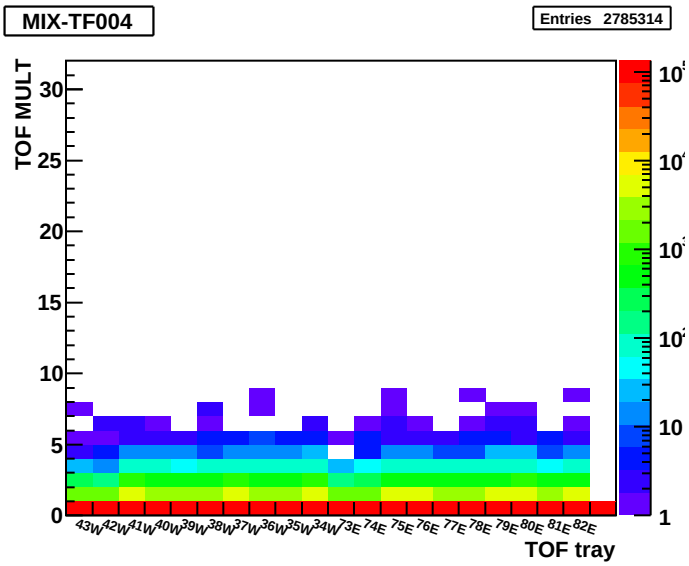

ST201 0-15 (ch6)
Entries 1061072
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

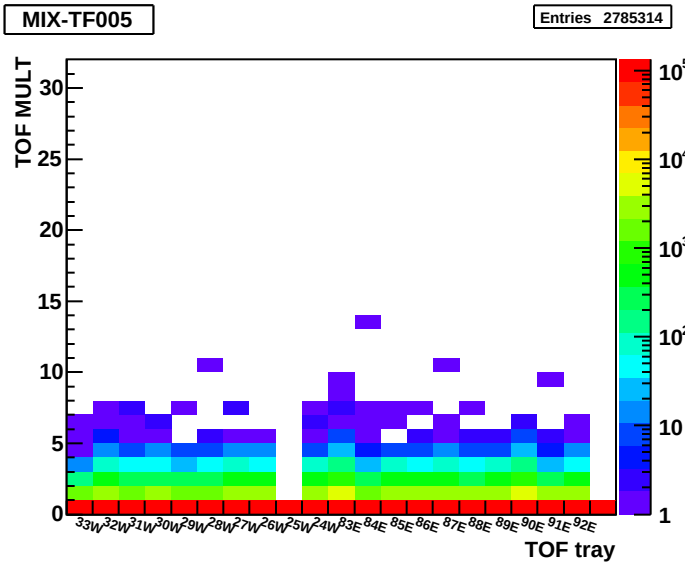

Unused (ch7)
Entries 1061072

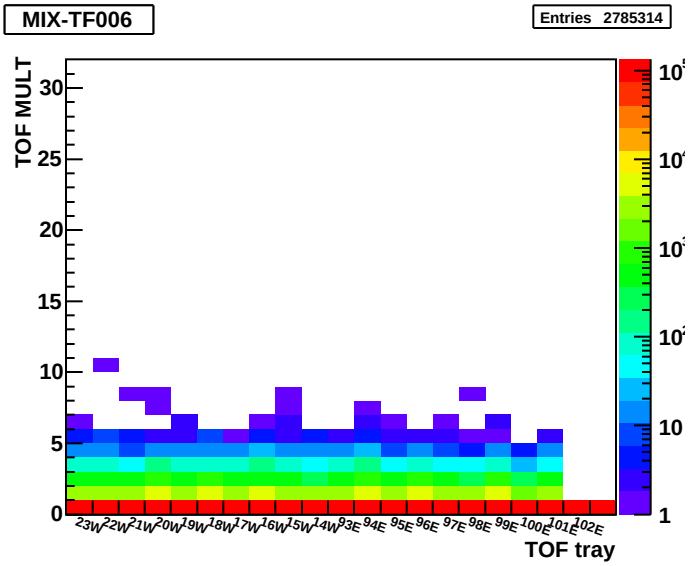

MIX-TF001
Entries 2785314
TOF MULT
TOF tray

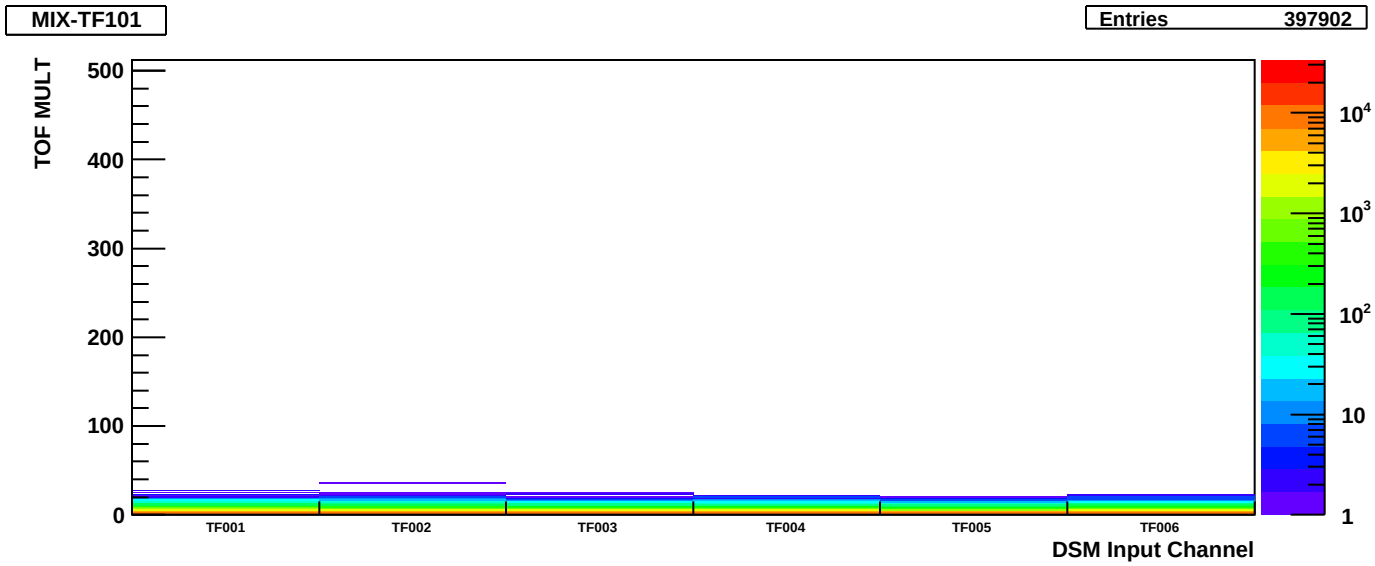

MIX-TF002
Entries 2785314
TOF MULT
TOF tray

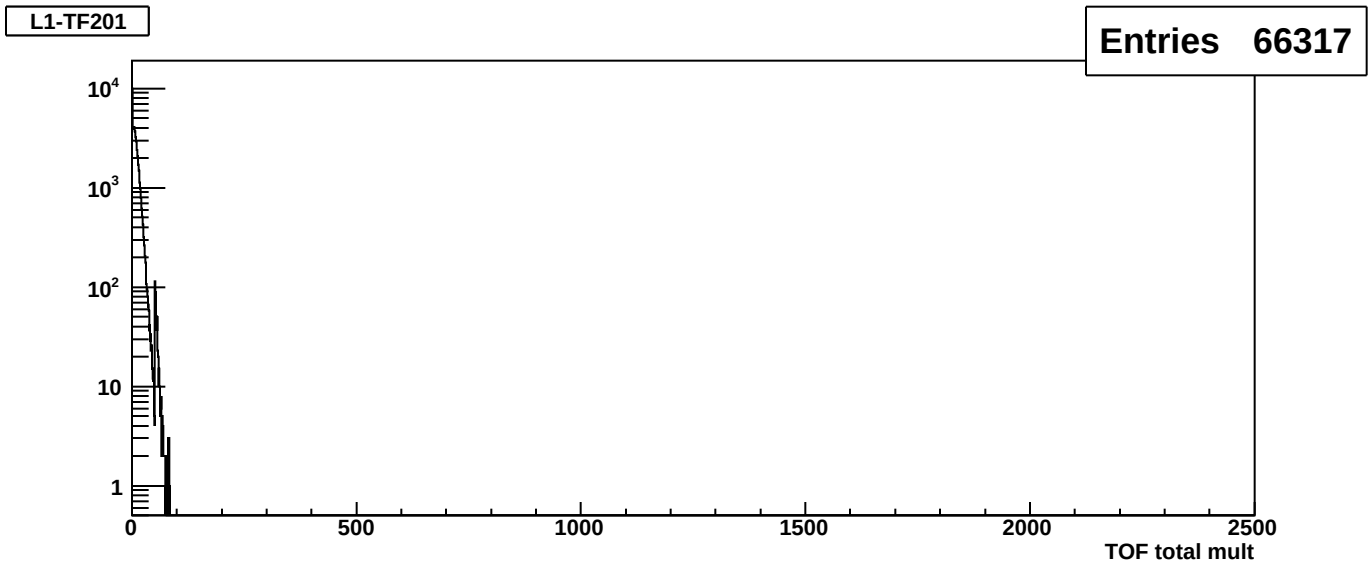

MIX-TF003
Entries 2785314
TOF MULT
TOF tray

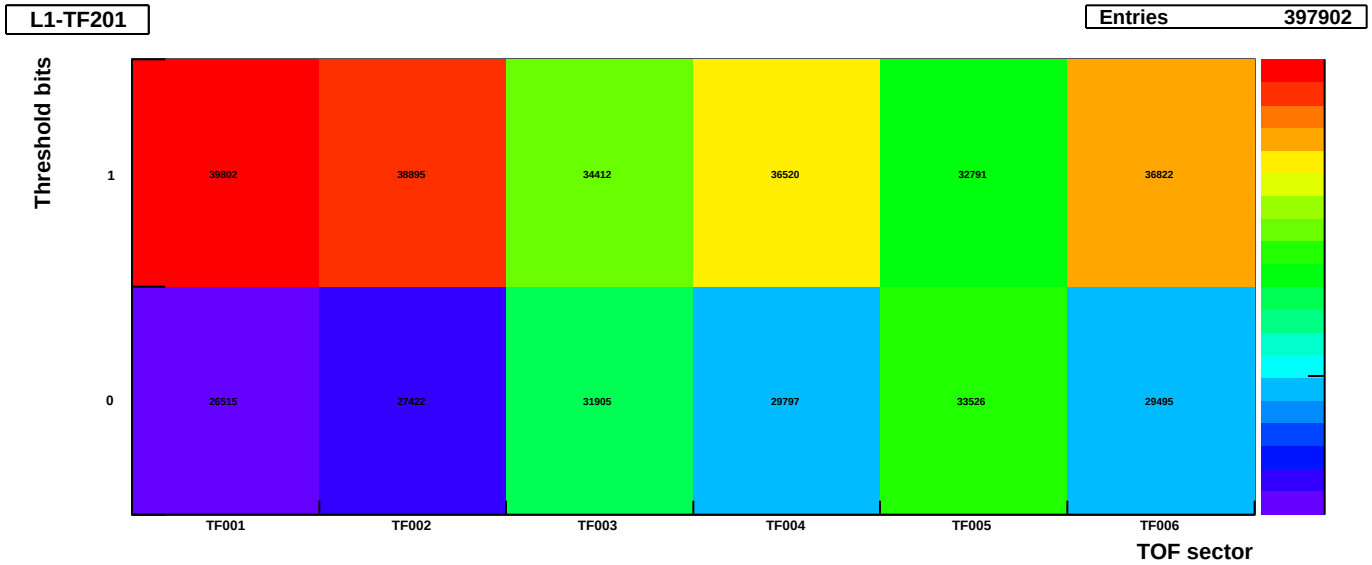

MIX-TF004
Entries 2785314
TOF MULT
TOF tray

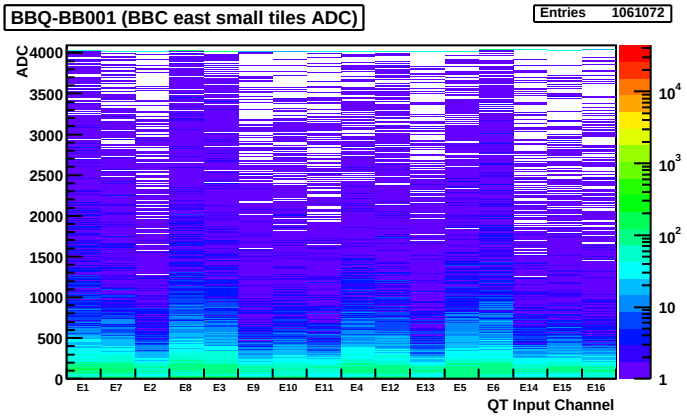

MIX-TF005
Entries 2785314
TOF MULT
TOF tray

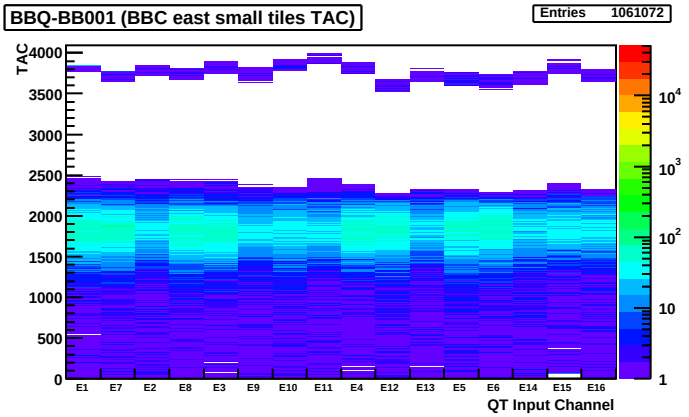

MIX-TF006
Entries 2785314
TOF MULT
TOF tray

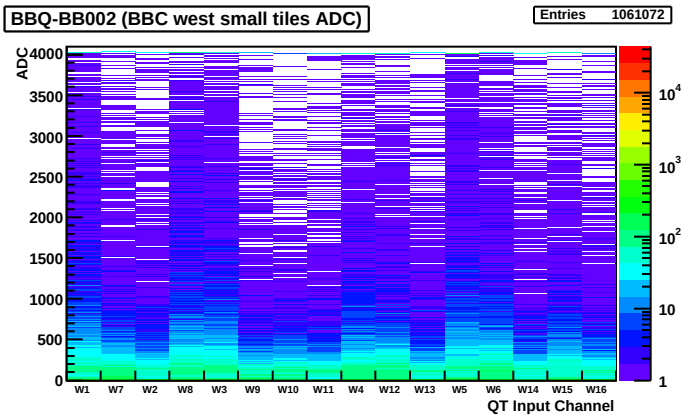

MIX-TF101
Entries 397902
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^4$
$10^3$
$10^2$
10
1

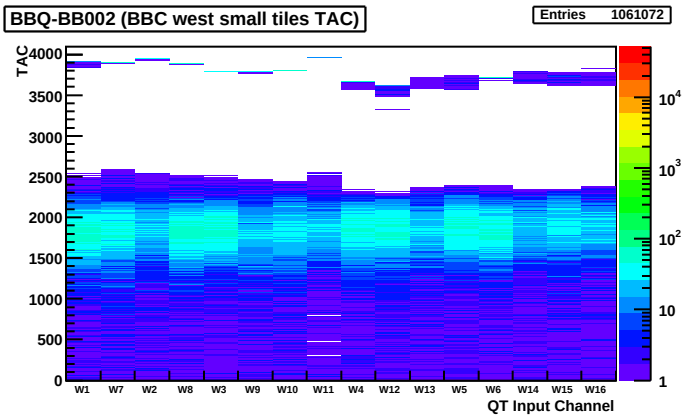

L1-TF201
Entries 66317
$10^4$
$10^3$
$10^2$
10
1
0
500
1000
1500
2000
2500
TOF total mult

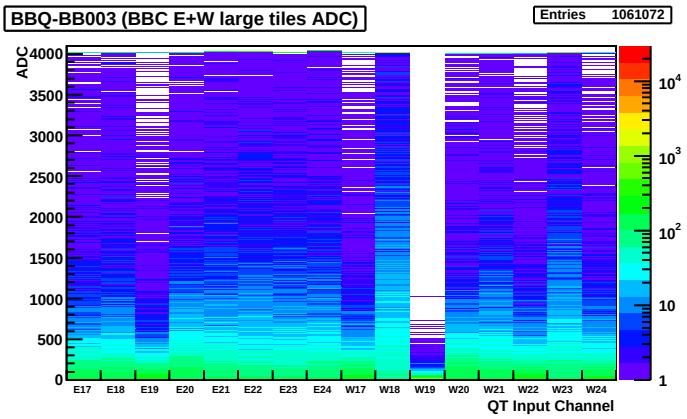

L1-TF201
Entries 397902
Threshold bits
1
0
39802
38895
34412
36520
32791
36822
26515
27422
31905
29797
33526
29495
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

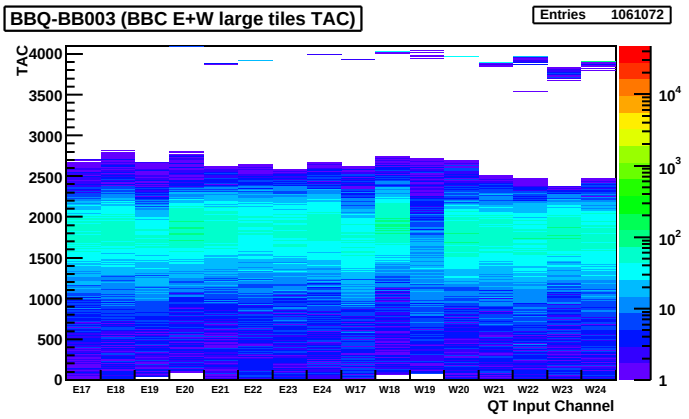

BBQ-BB001 (BBC east small tiles ADC)
Entries 1061072
ADC
QT Input Channel

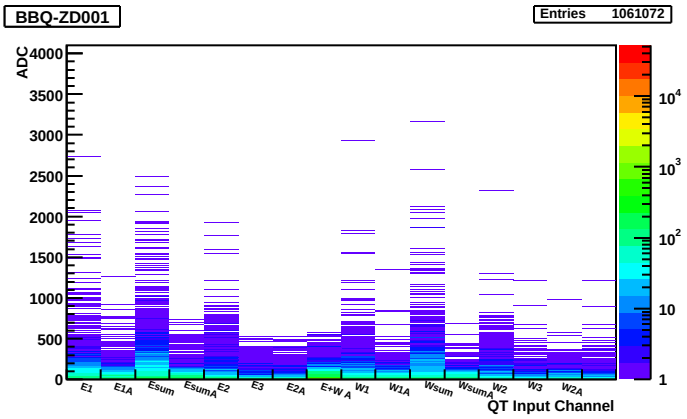

BBQ-BB001 (BBC east small tiles TAC)
Entries 1061072
TAC
QT Input Channel

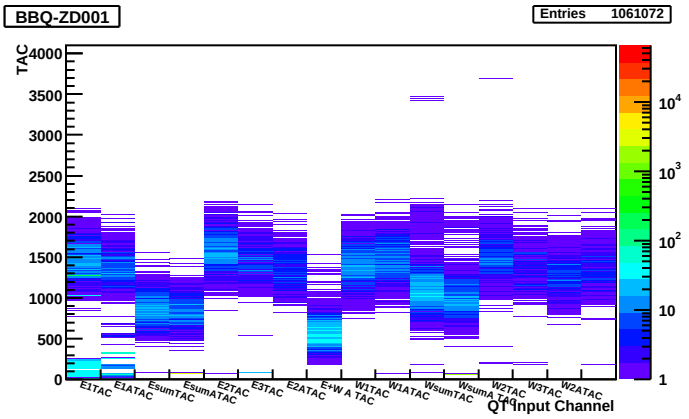

BBQ-BB002 (BBC west small tiles ADC)
Entries 1061072
ADC
QT Input Channel

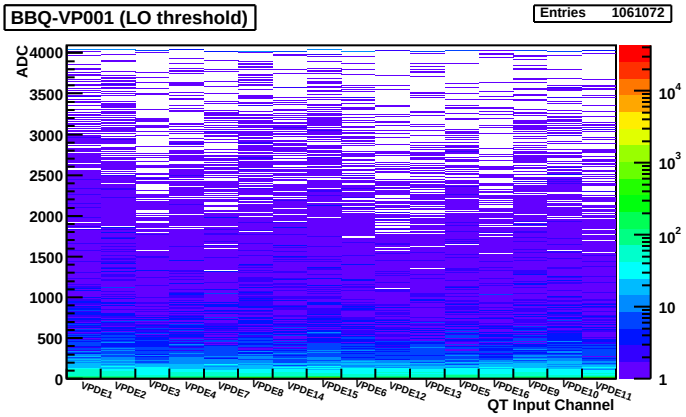

BBQ-BB002 (BBC west small tiles TAC)
Entries 1061072
TAC
QT Input Channel

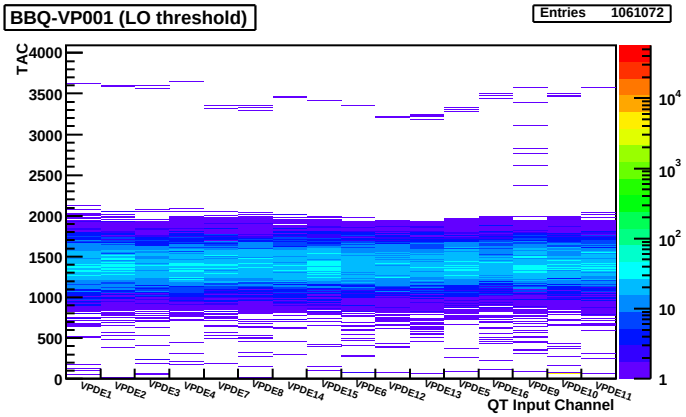

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1061072
ADC
QT Input Channel

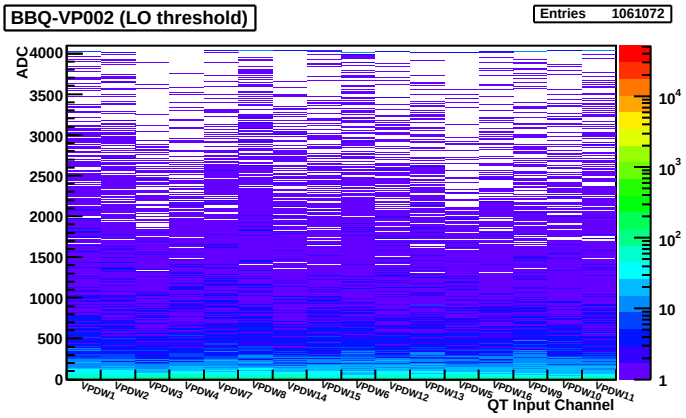

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1061072
TAC
QT Input Channel

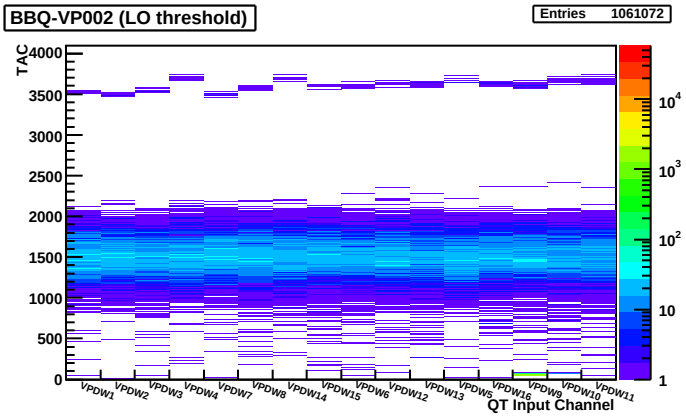

BBQ-ZD001
Entries 1061072
ADC
QT Input Channel

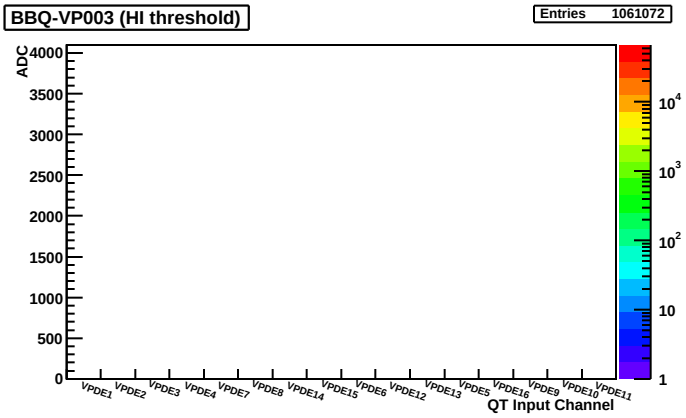

BBQ-ZD001
Entries 1061072
TAC
QT Input Channel

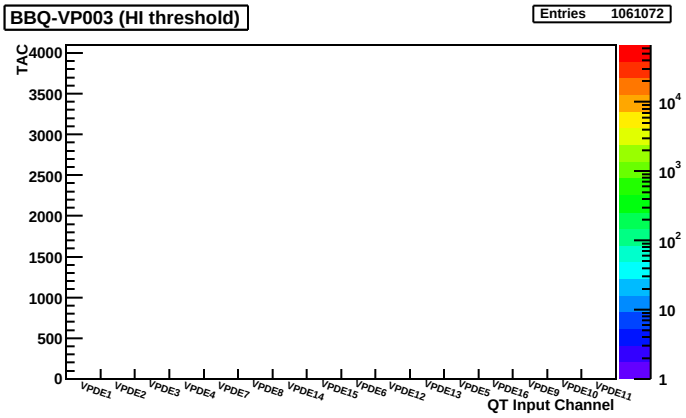

BBQ-VP001 (LO threshold)
Entries 1061072
ADC
QT Input Channel

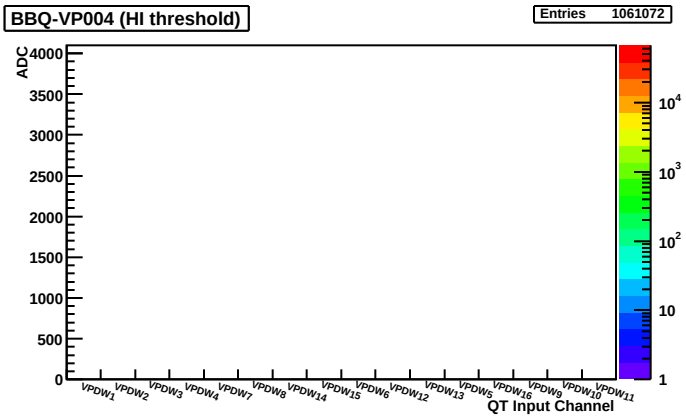

BBQ-VP001 (LO threshold)
Entries 1061072
TAC
QT Input Channel

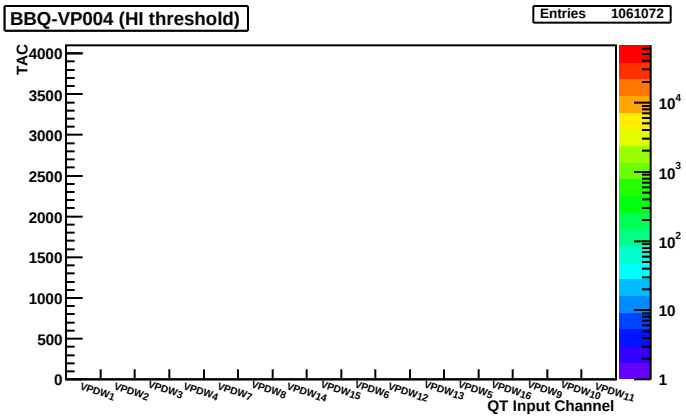

BBQ-VP002 (LO threshold)
Entries 1061072
ADC
QT Input Channel

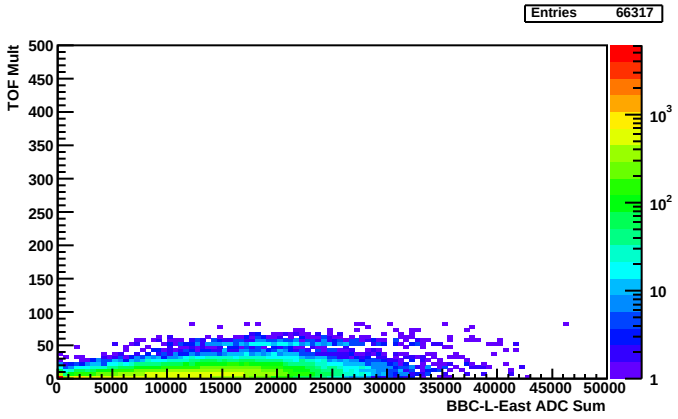

BBQ-VP002 (LO threshold)
Entries 1061072
TAC
QT Input Channel

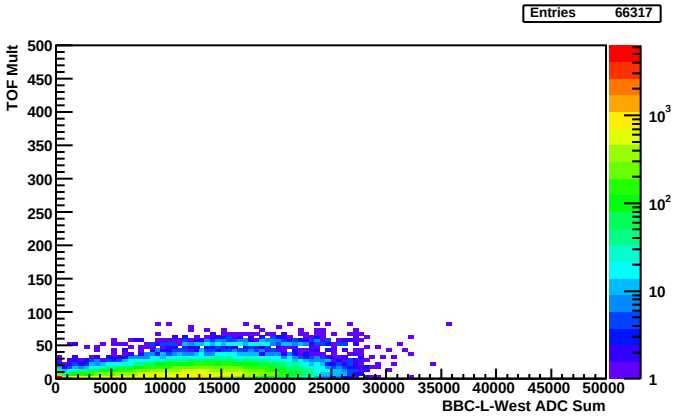

BBQ-VP003 (HI threshold)
Entries 1061072
ADC
QT Input Channel

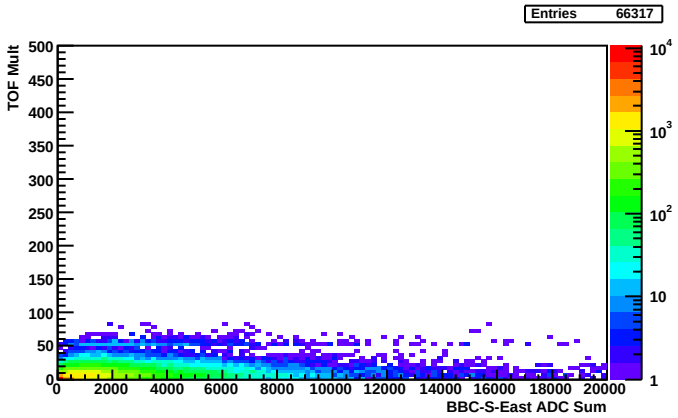

BBQ-VP003 (HI threshold)
Entries 1061072
TAC
QT Input Channel

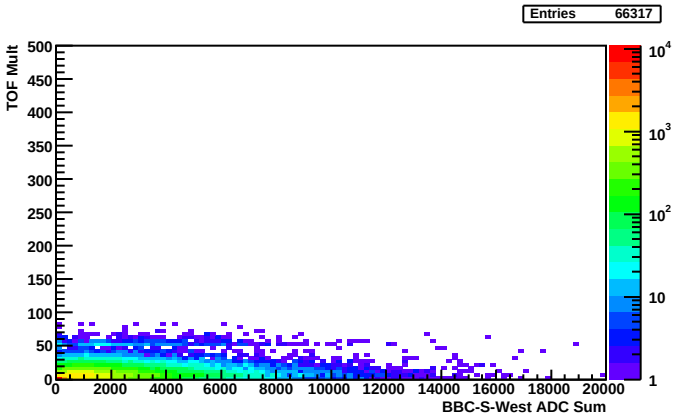

BBQ-VP004 (HI threshold)
Entries 1061072
ADC
QT Input Channel

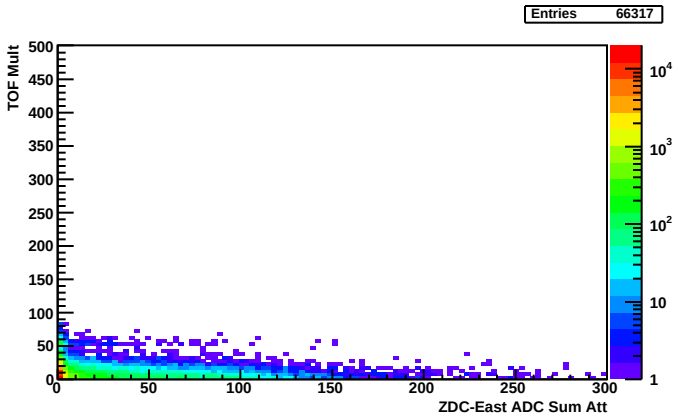

BBQ-VP004 (HI threshold)
Entries 1061072
TAC
QT Input Channel

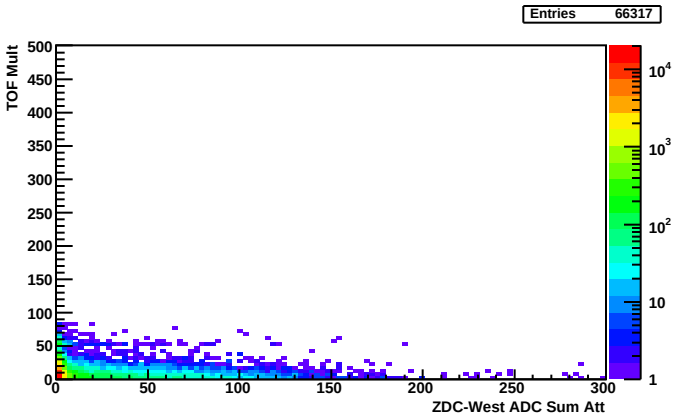

Entries 66317
TOF Mult
BBC-L-East ADC Sum

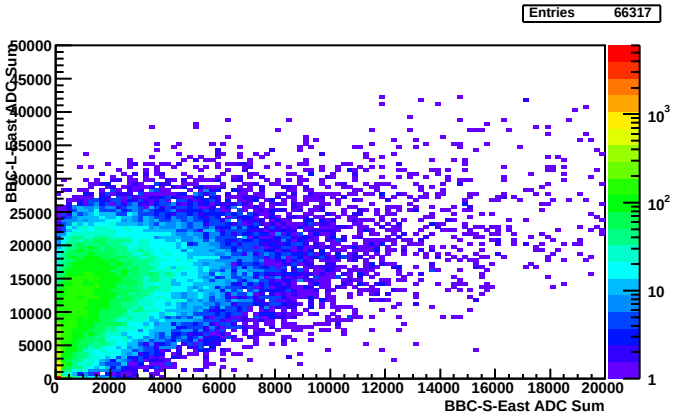

Entries 66317
TOF Mult
BBC-L-West ADC Sum

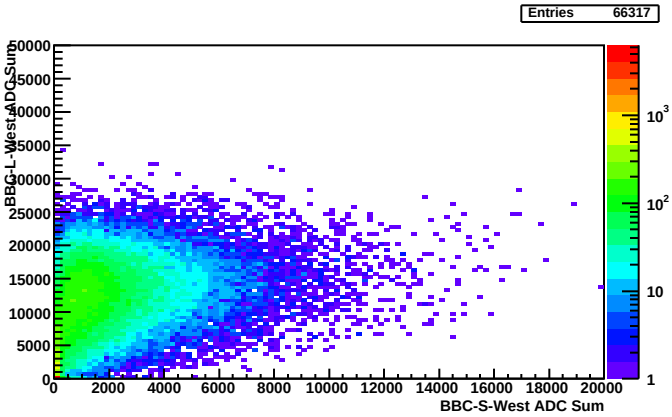

Entries 66317
TOF Mult
BBC-S-East ADC Sum

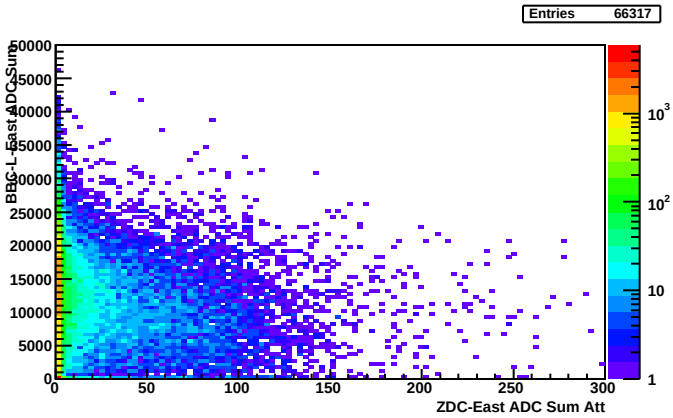

Entries 66317
TOF Mult
BBC-S-West ADC Sum

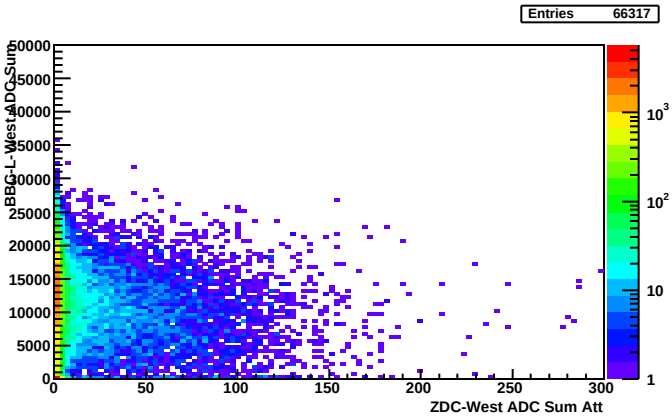

Entries 66317
TOF Mult
ZDC-East ADC Sum Att

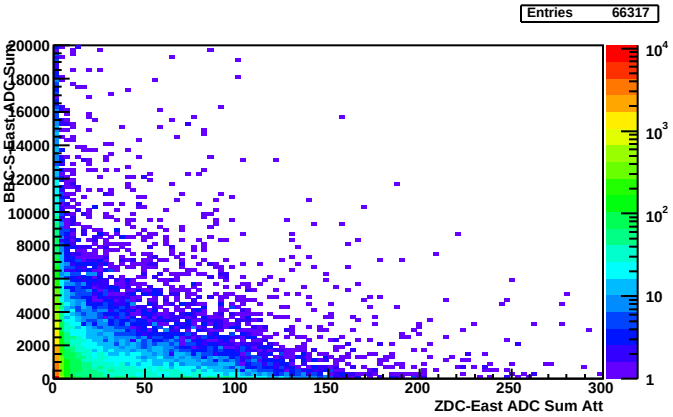

Entries 66317
TOF Mult
ZDC-West ADC Sum Att

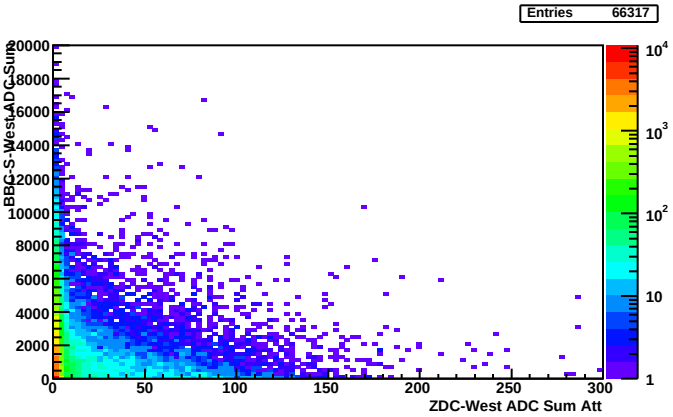

Entries 66317
BBC-L-East ADC Sum
BBC-S-East ADC Sum

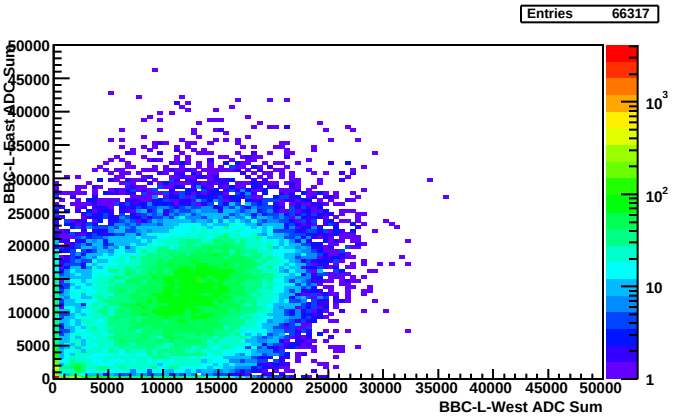

Entries 66317
BBC-L-West ADC Sum
BBC-S-West ADC Sum

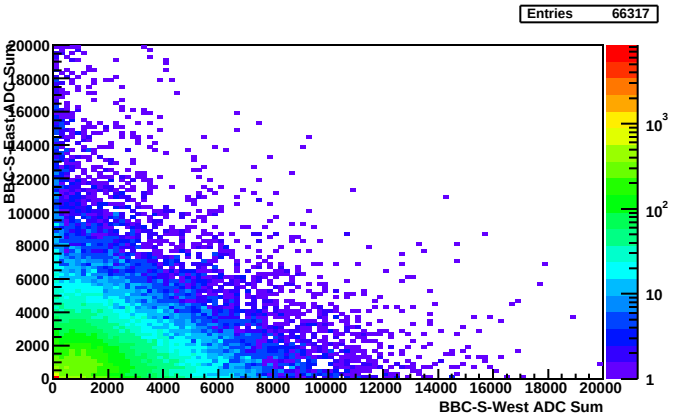

Entries 66317
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

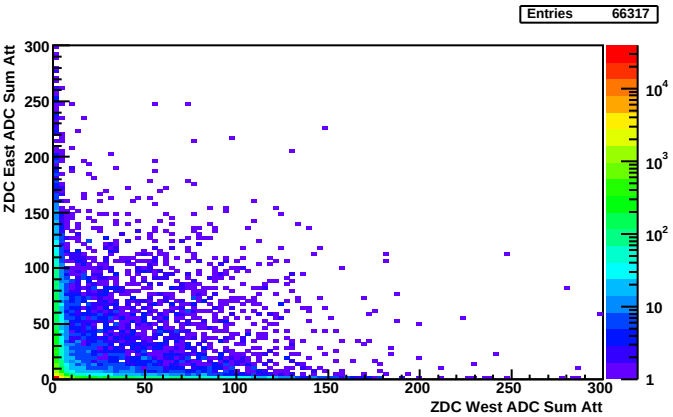

Entries 66317
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

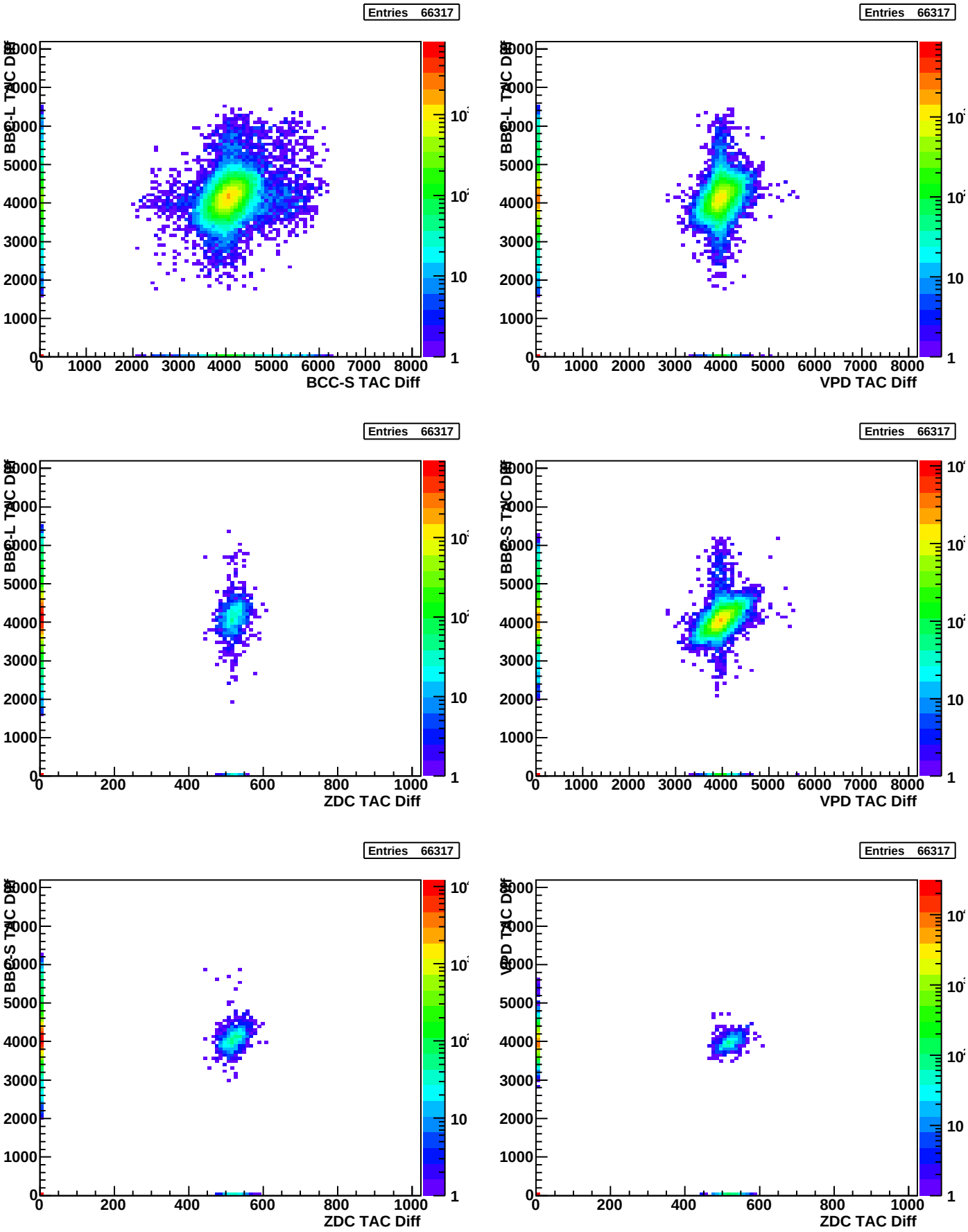

Entries 66317
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

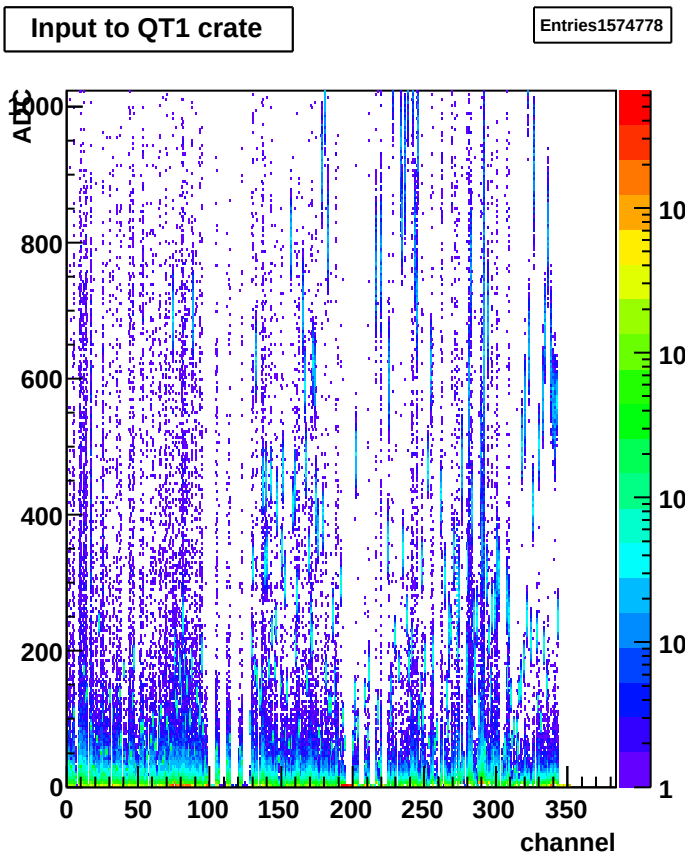

Entries 66317
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

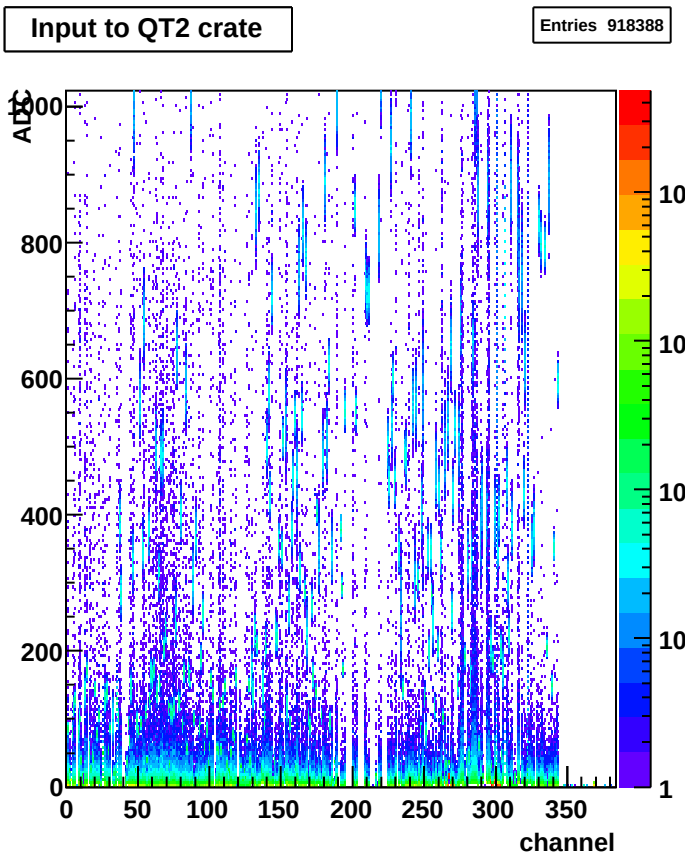

Entries 66317
BBC-L-East ADC Sum
BBC-L-West ADC Sum

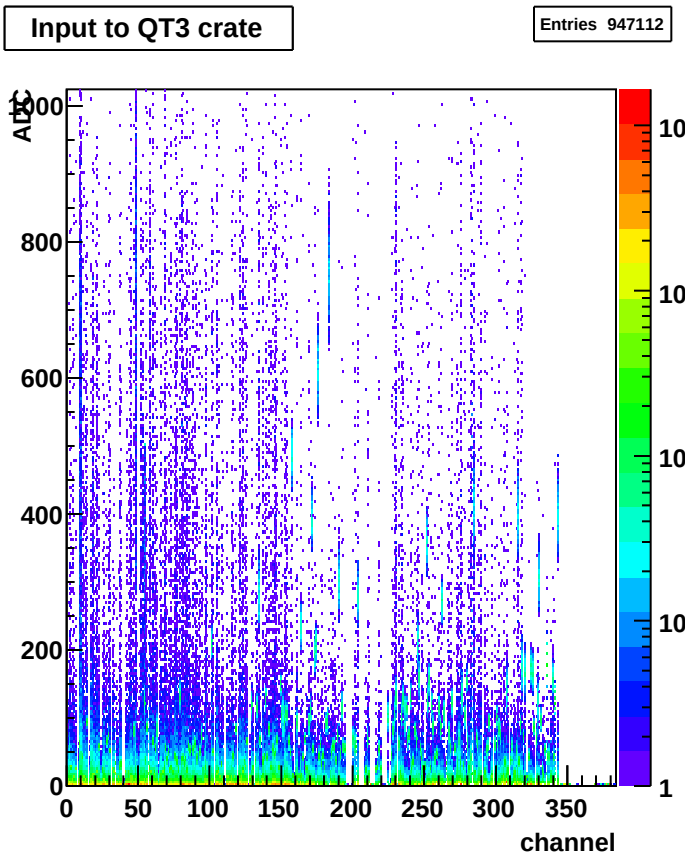

Entries 66317
BBC-S-East ADC Sum
BBC-S-West ADC Sum

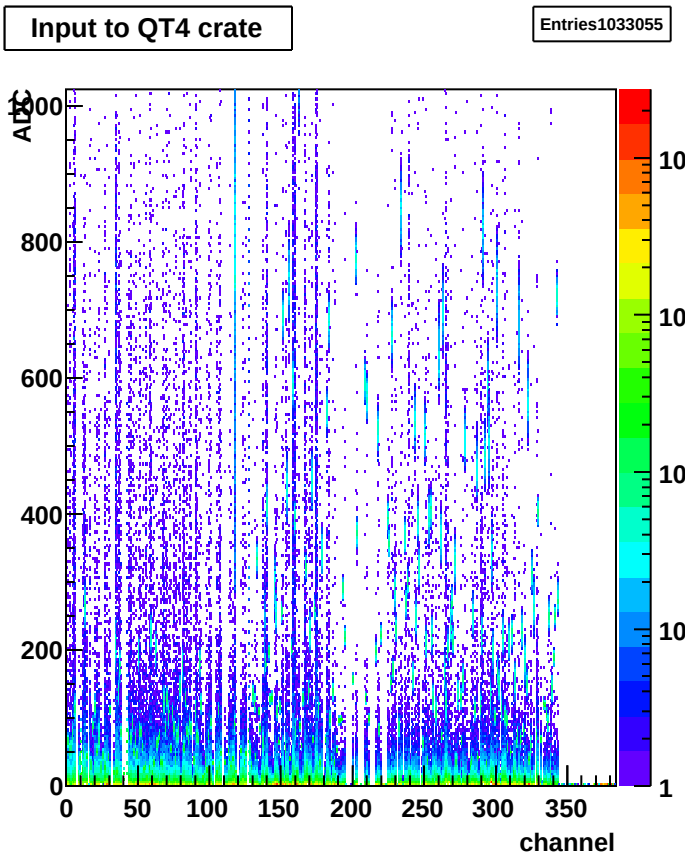

Entries 66317
ZDC East ADC Sum Att
ZDC West ADC Sum Att

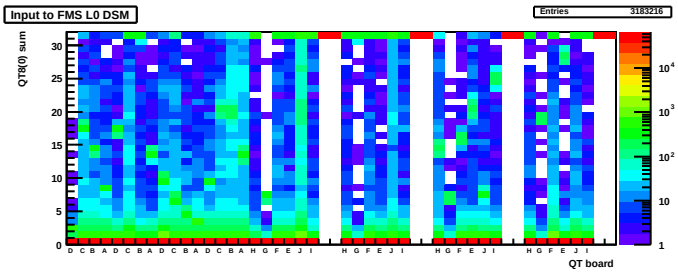

Entries 66317
BBC-L TAC Diff
BCC-S TAC Diff
Entries 66317
BBC-L TAC Diff
VPD TAC Diff
Entries 66317
BBC-L TAC Diff
ZDC TAC Diff
Entries 66317
BBC-S TAC Diff
VPD TAC Diff
Entries 66317
BBC-S TAC Diff
ZDC TAC Diff
Entries 66317
VPD TAC Diff
ZDC TAC Diff

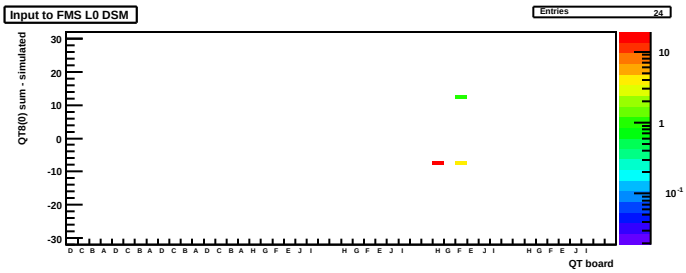

Input to QT1 crate
Entries1574778
ADC
channel

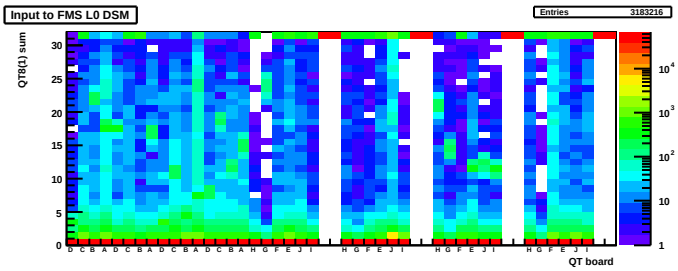

Input to QT2 crate
Entries 918388
ADC
channel

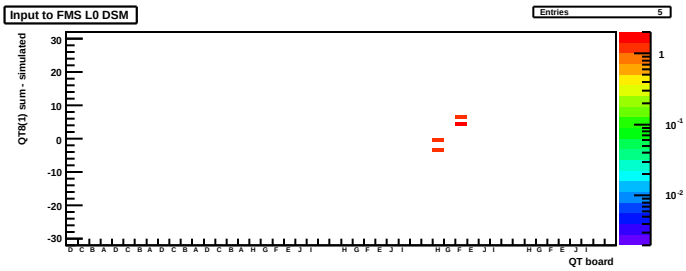

Input to QT3 crate
Entries 947112
ADC
channel

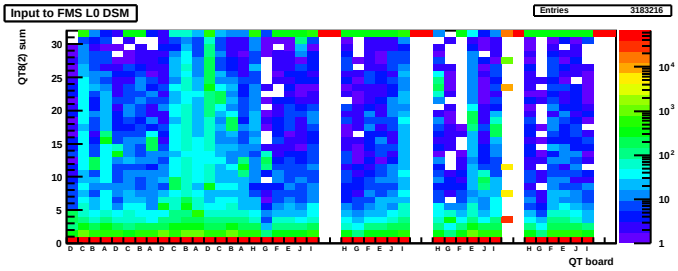

Input to QT4 crate
Entries1033055
ADC
channel

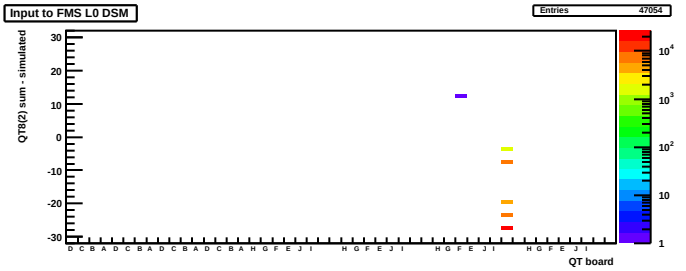

Input to FMS L0 DSM
Entries 3183216
QT8(0) sum
QT board

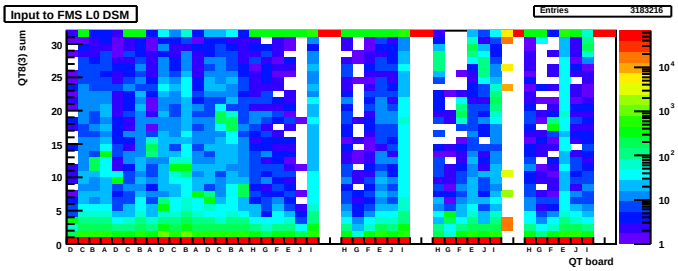

Input to FMS L0 DSM
Entries 24
QT8(0) sum - simulated
QT board

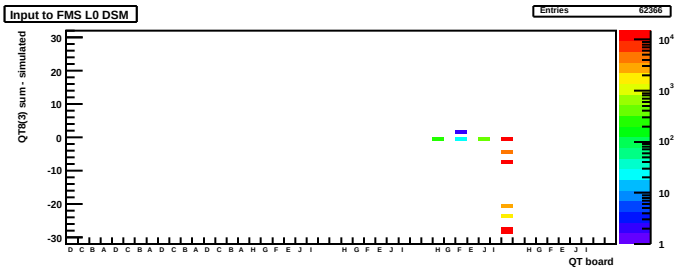

Input to FMS L0 DSM
Entries 3183216
QT8(1) sum
QT board

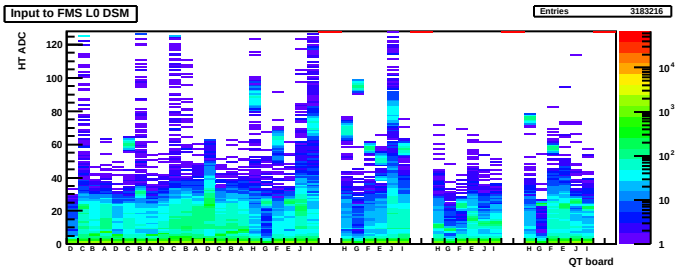

Input to FMS L0 DSM
Entries 5
QT8(1) sum - simulated
QT board

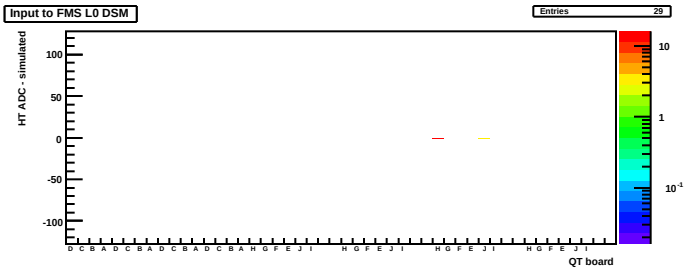

Input to FMS L0 DSM
Entries 3183216
QT8(2) sum
QT board

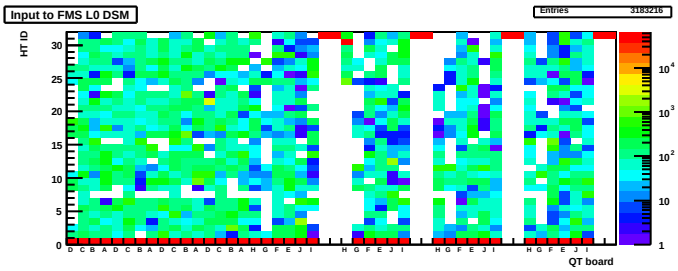

Input to FMS L0 DSM
Entries 47054
QT8(2) sum - simulated
QT board

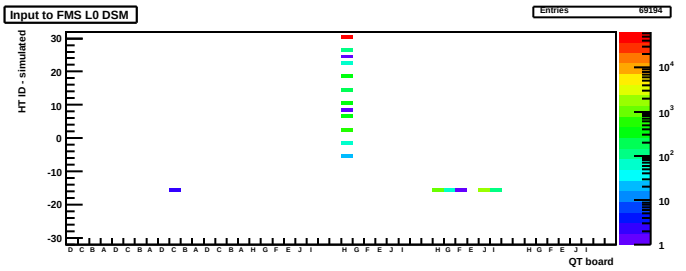

Input to FMS L0 DSM
Entries 3183216
QT8(3) sum
QT board

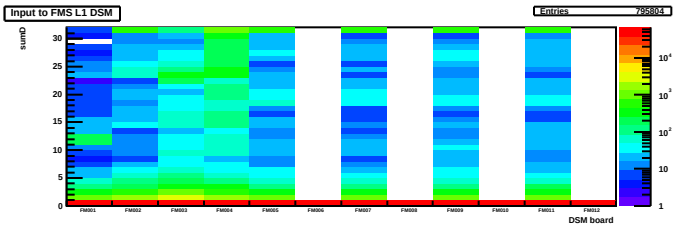

Input to FMS L0 DSM
Entries 62366
QT8(3) sum - simulated
QT board

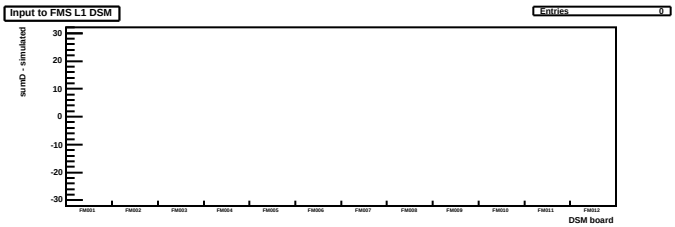

Input to FMS L0 DSM
Entries 3183216
HT ADC
QT board

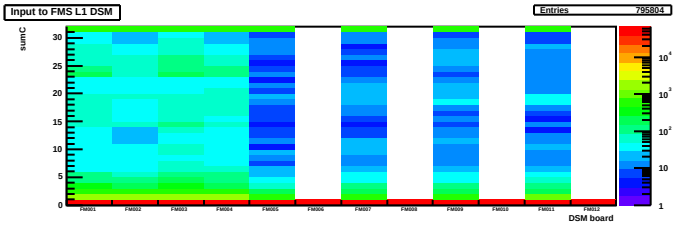

Input to FMS L0 DSM
Entries 29
HT ADC - simulated
QT board

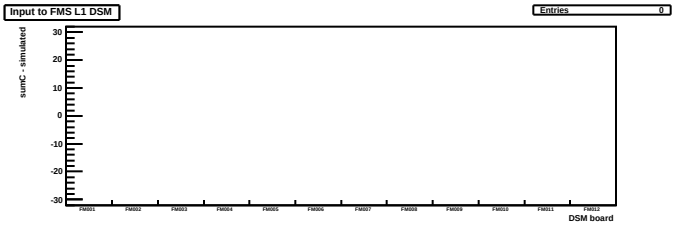

Input to FMS L0 DSM
Entries 3183216
HT ID
QT board

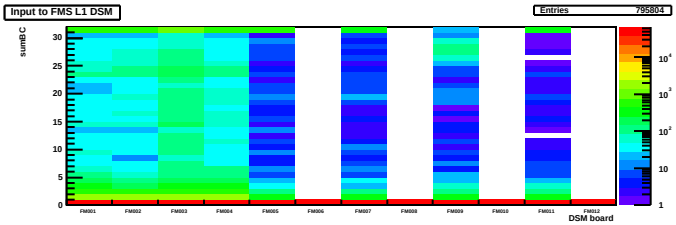

Input to FMS L0 DSM
Entries 69194
HT ID - simulated
QT board

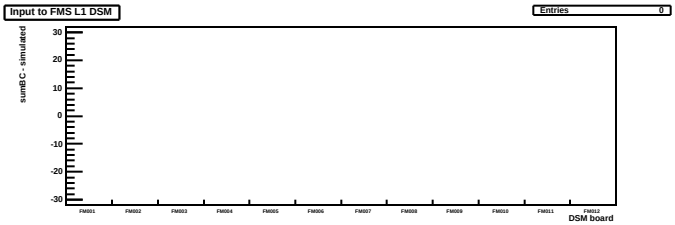

Input to FMS L1 DSM
Entries 795804
sumD
DSM board

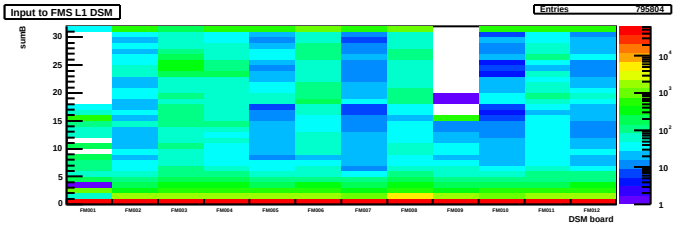

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

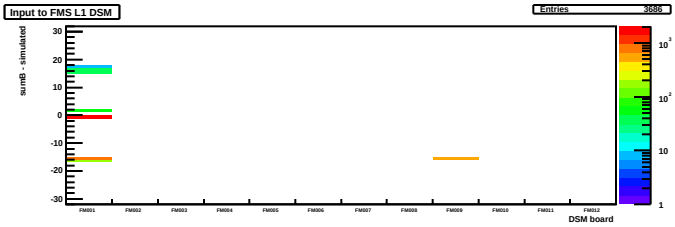

Input to FMS L1 DSM
Entries 795804
sumC
DSM board

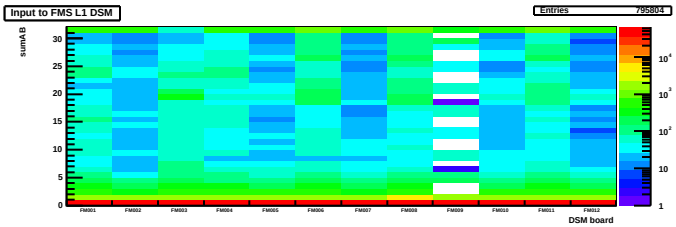

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

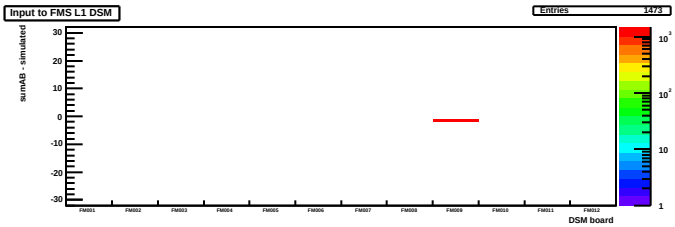

Input to FMS L1 DSM
Entries 795804
sumBC
DSM board

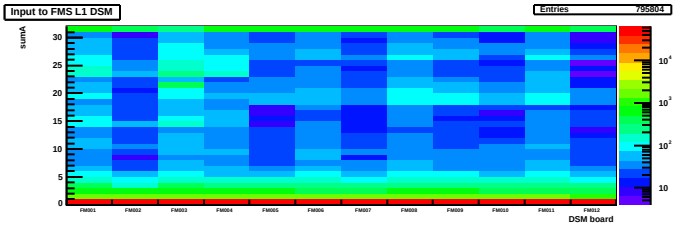

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

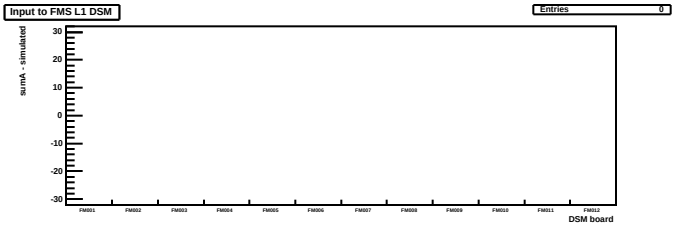

Input to FMS L1 DSM
Entries 795804
sumB
DSM board

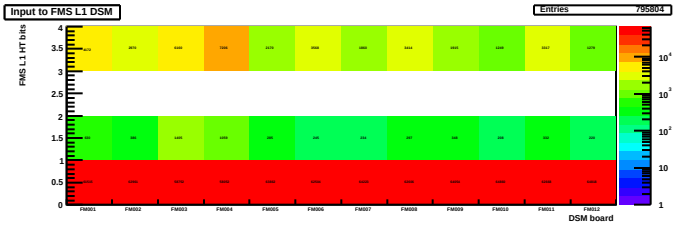

Input to FMS L1 DSM
Entries 3686
sumB - simulated
DSM board

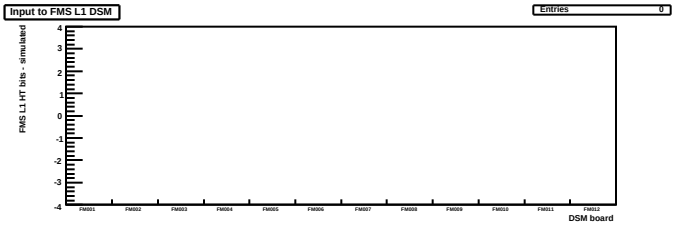

Input to FMS L1 DSM
Entries 795804
sumAB
DSM board

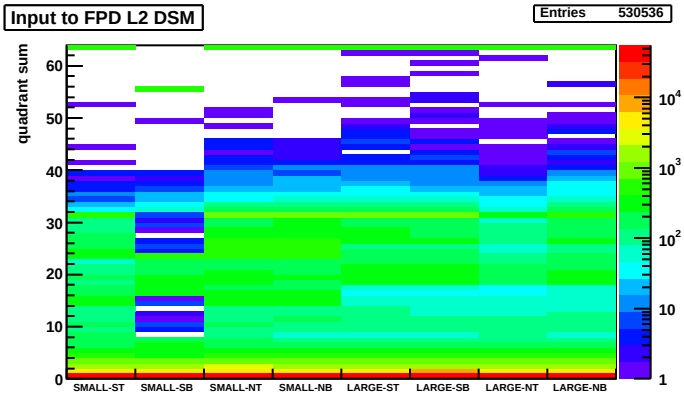

Input to FMS L1 DSM
Entries 1473
sumAB - simulated
DSM board

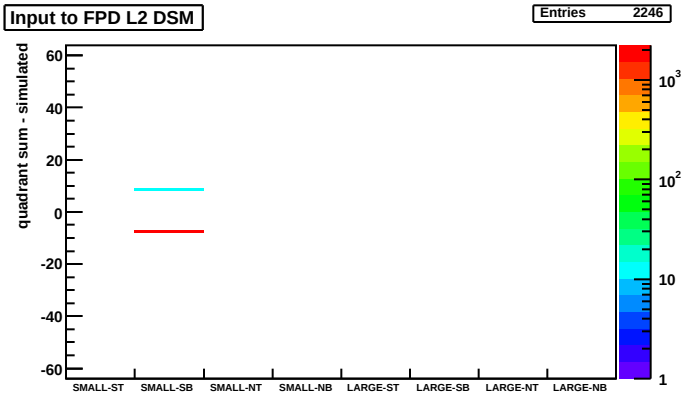

Input to FMS L1 DSM
Entries 795804
sumA
DSM board

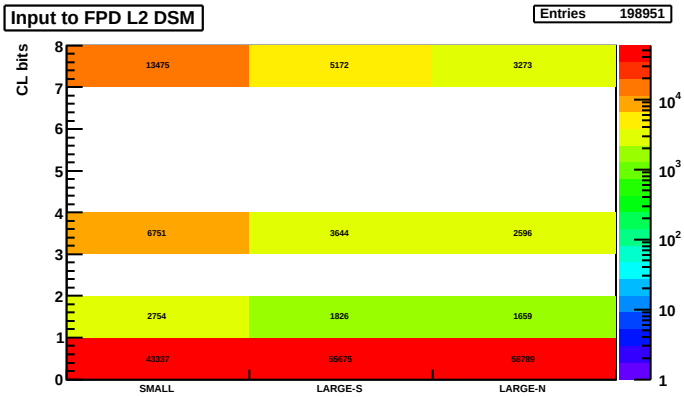

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

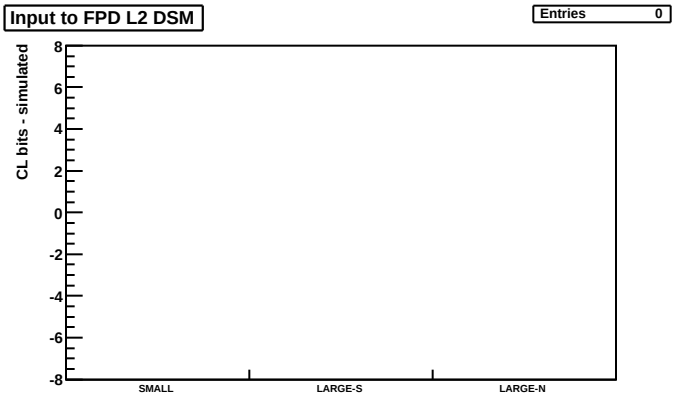

Input to FMS L1 DSM
Entries 795804
FMS L1 HT bits
DSM board

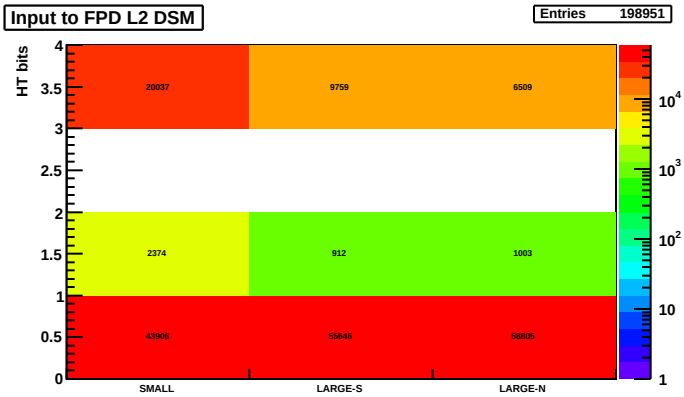

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

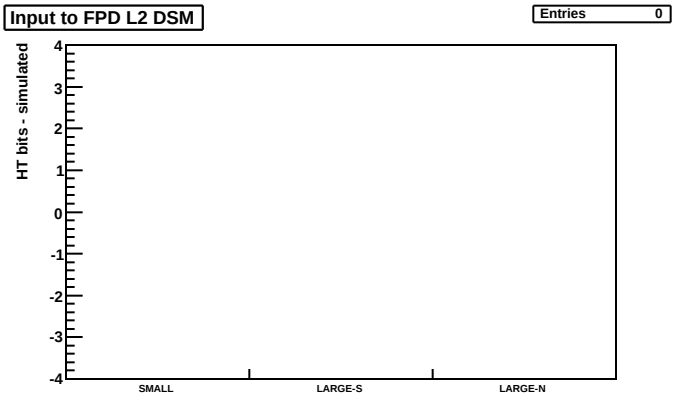

Input to FPD L2 DSM
Entries 530536
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

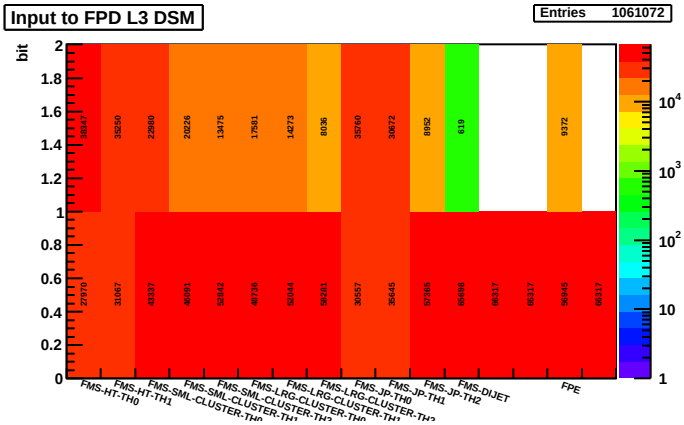

Input to FPD L2 DSM
Entries 2246
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

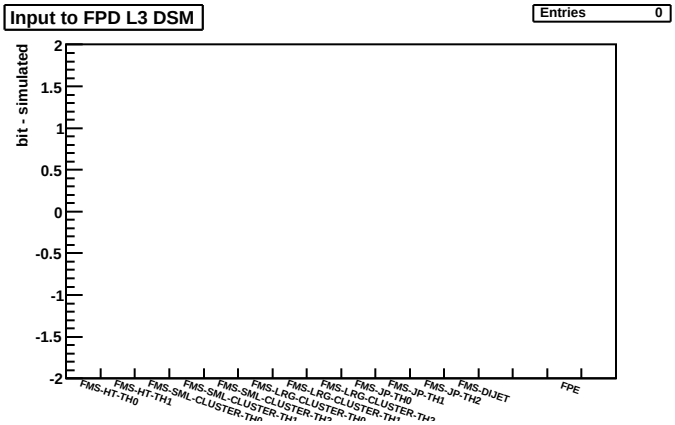

Input to FPD L2 DSM
Entries 198951
CL bits
13475
5172
3273
6751
3644
2596
2754
1826
1659
43337
55675
58789
SMALL
LARGE-S
LARGE-N

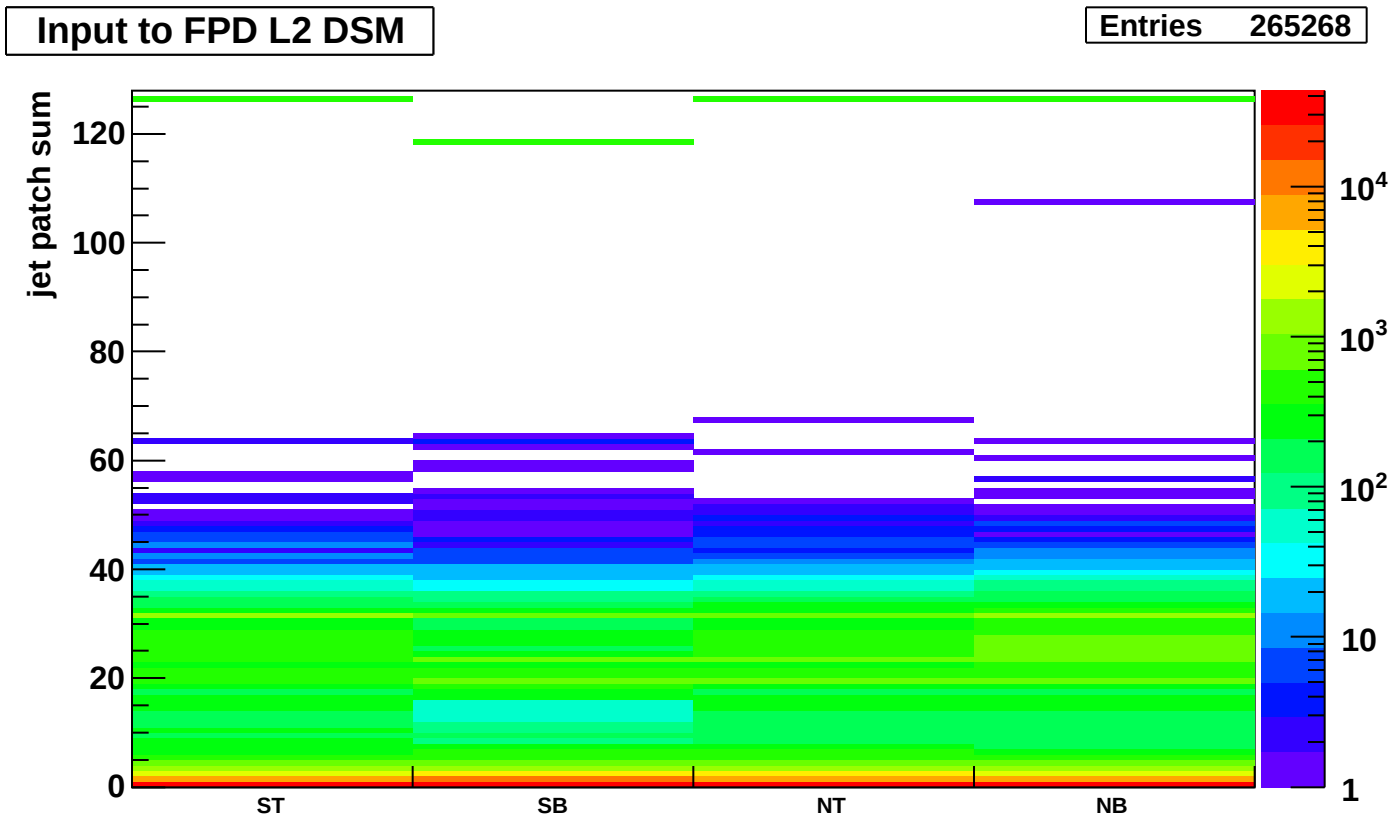

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

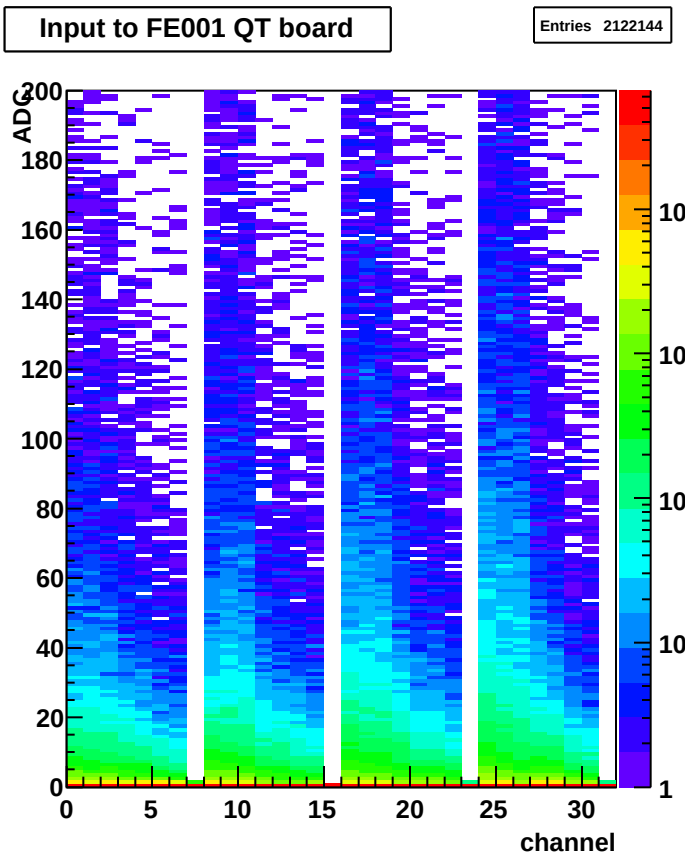

Input to FPD L2 DSM
Entries 198951
HT bits
20037
9759
6509
2374
912
1003
43906
55646
58805
SMALL
LARGE-S
LARGE-N

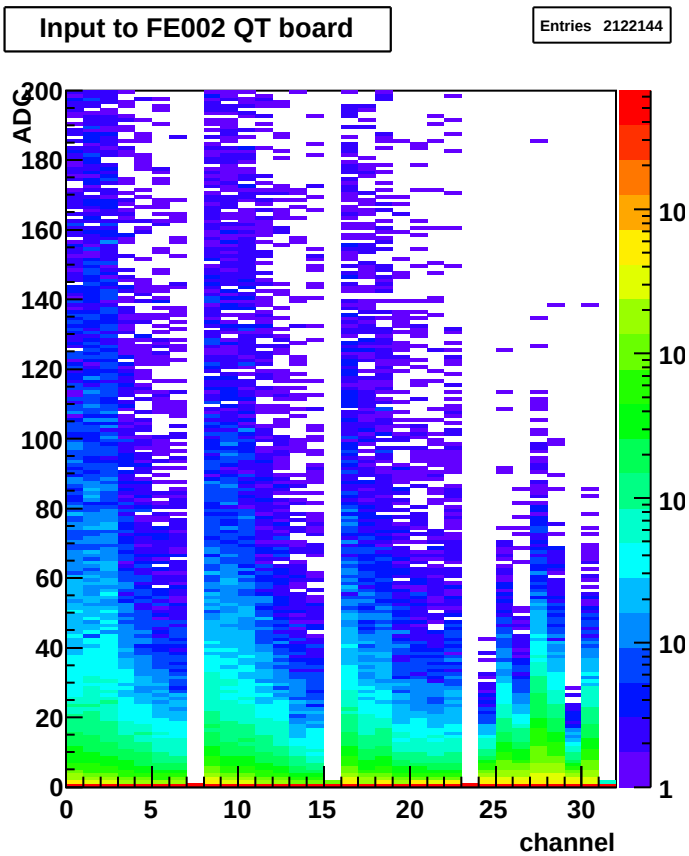

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

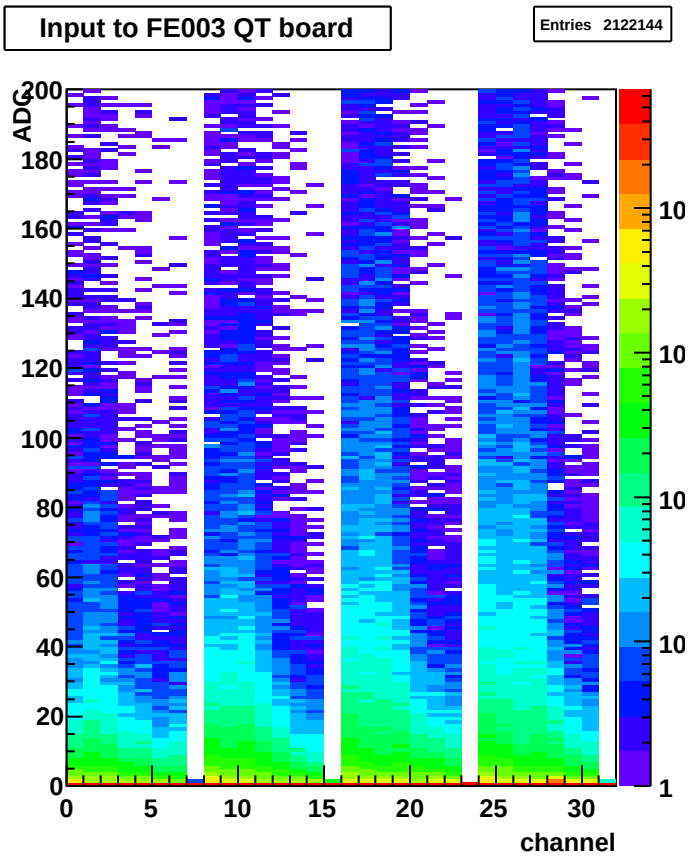

Input to FPD L3 DSM
Entries 1061072
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

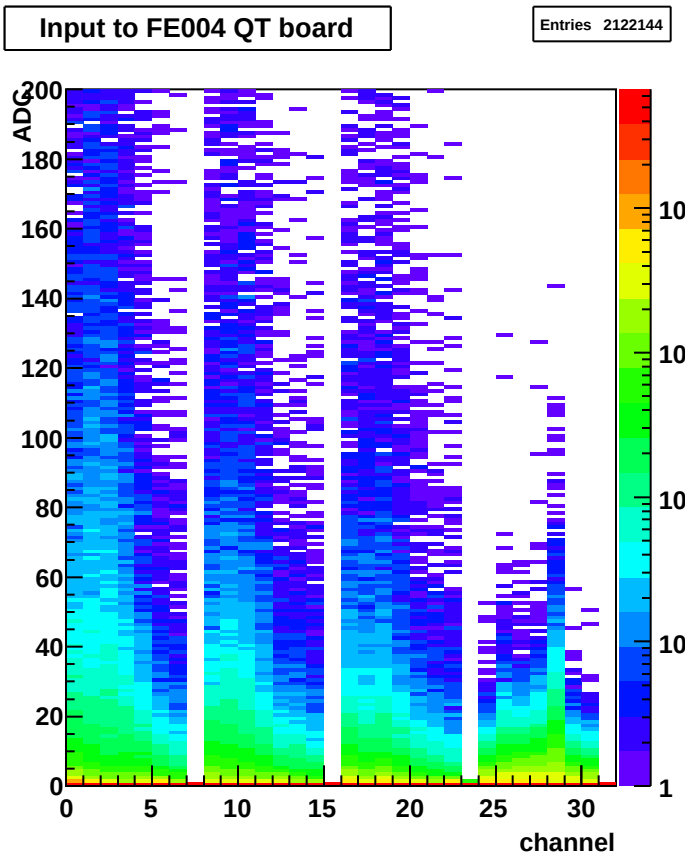

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

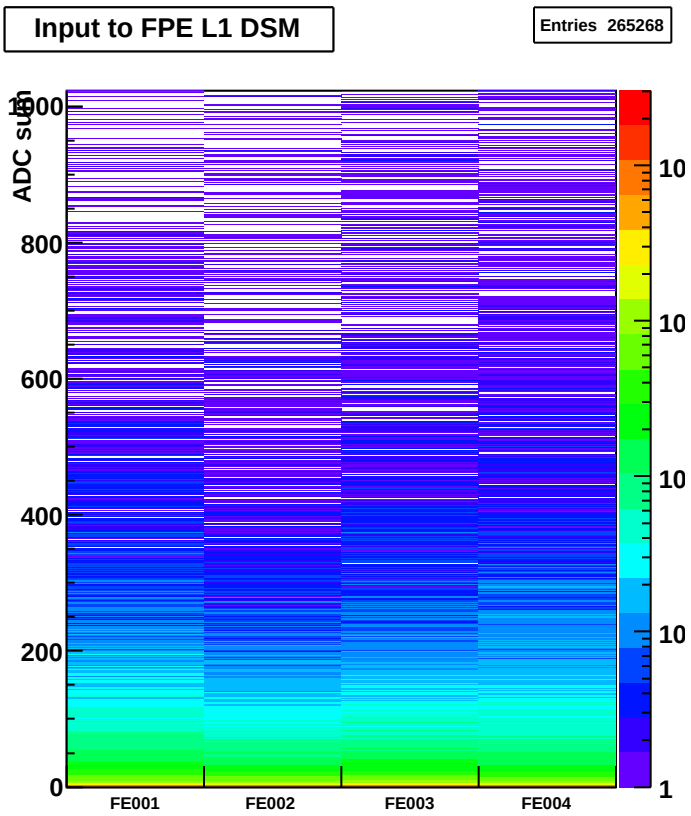

Input to FPD L2 DSM
Entries 265268
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
$10^2$
$10^3$
$10^4$

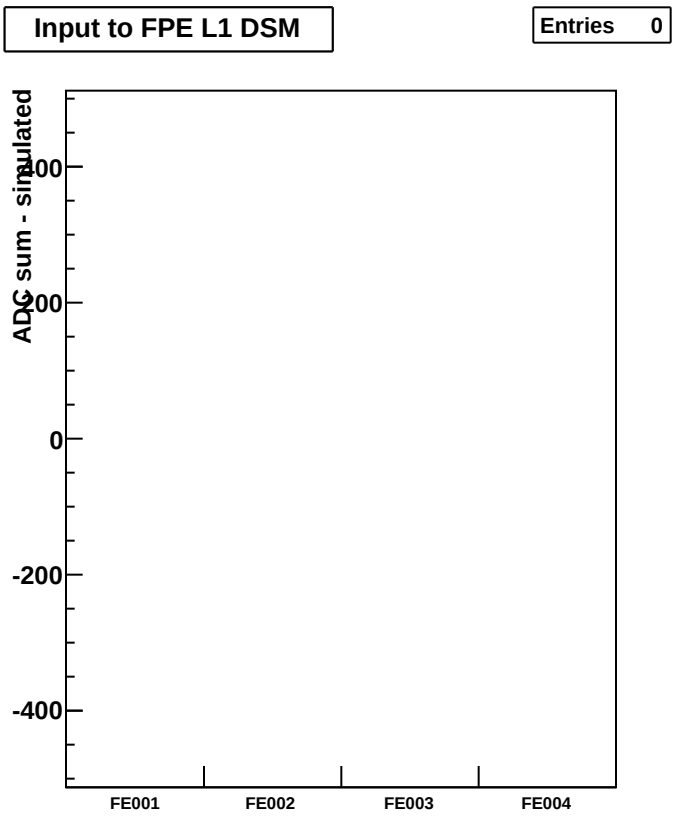

Input to FE001 QT board
Entries 2122144
ADC
channel

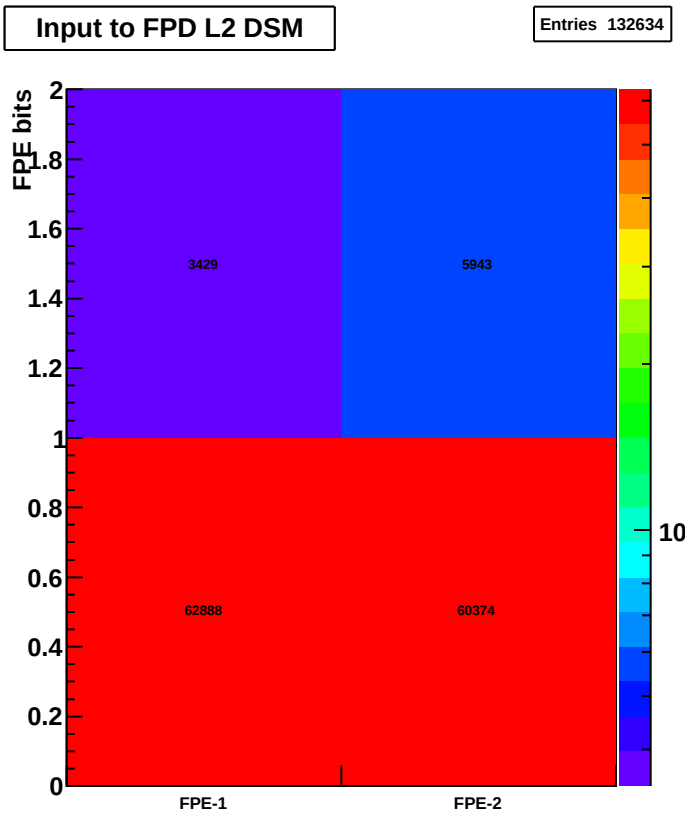

Input to FE002 QT board
Entries 2122144
ADC
channel

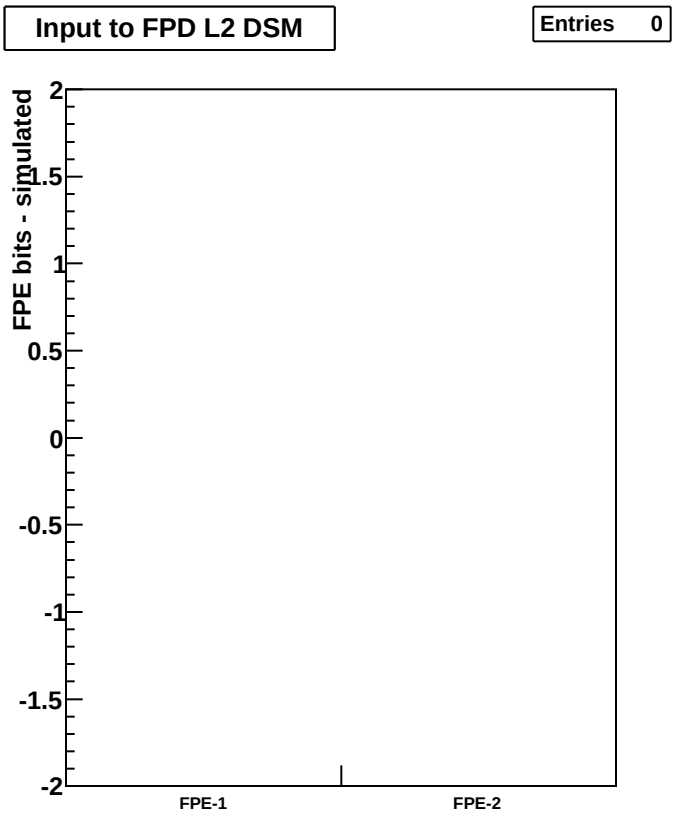

Input to FE003 QT board
Entries 2122144
ADC
channel


Input to FE004 QT board
Entries 2122144
ADC
channel


Input to FPE L1 DSM
Entries 265268
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 132634
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
3429
5943
62888
60374
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