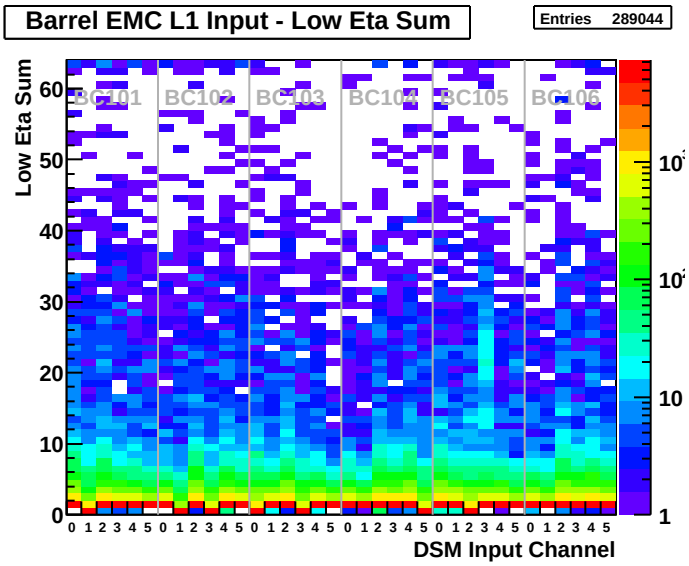
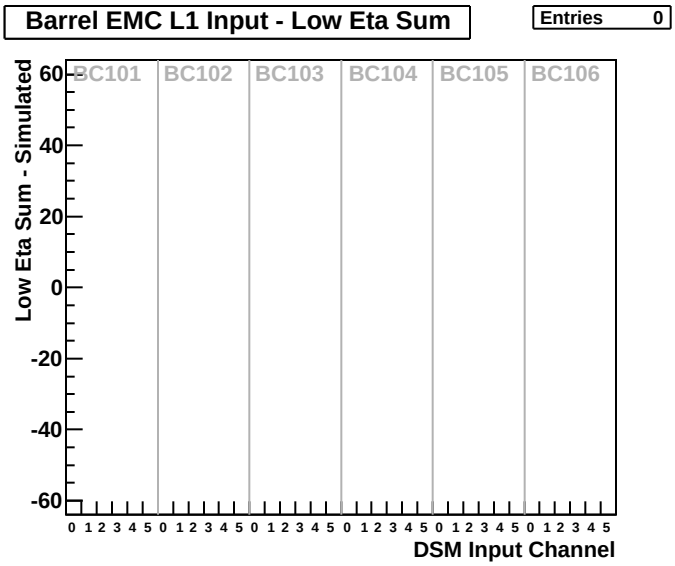
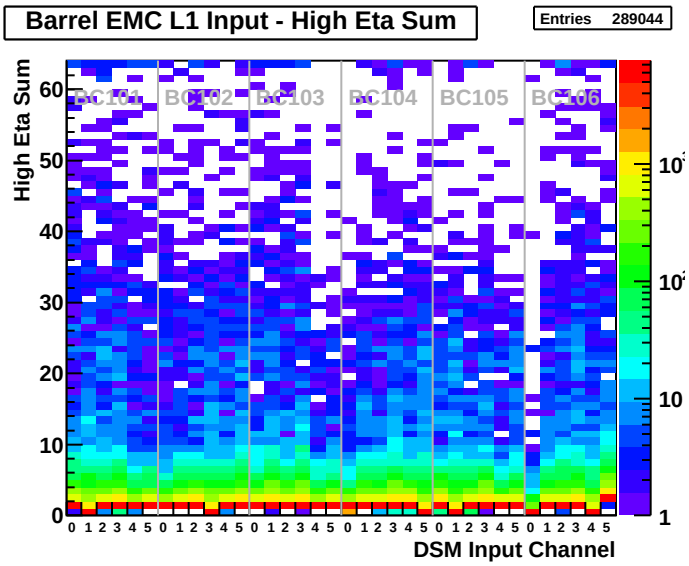
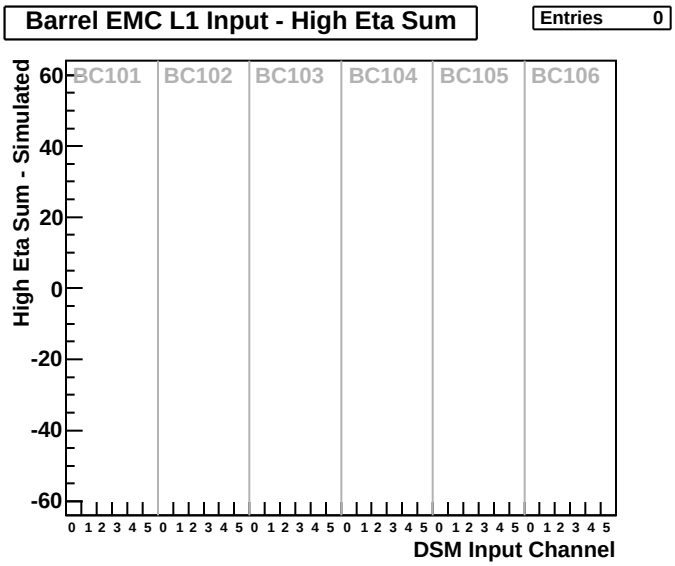
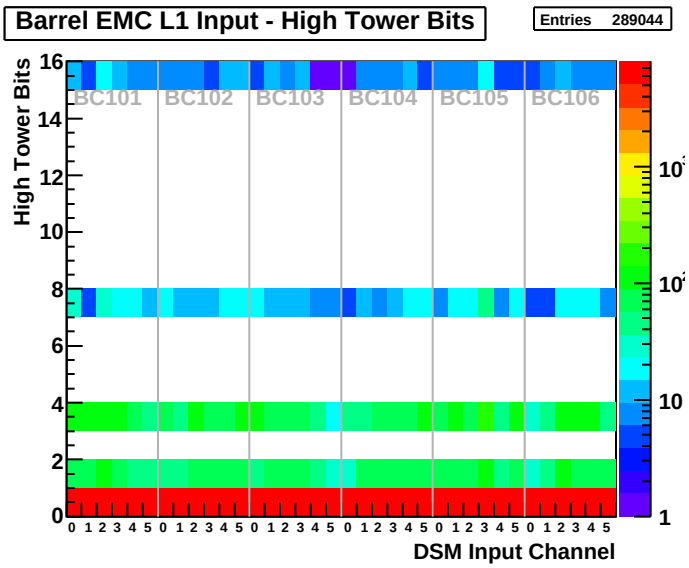
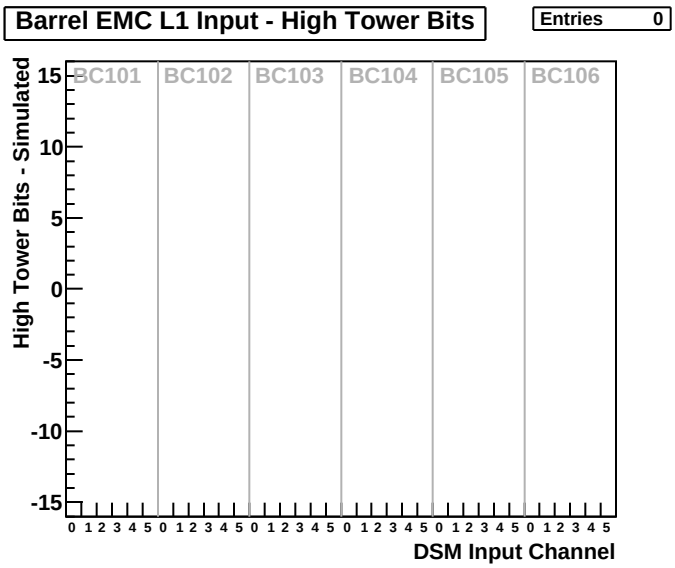

Barrel EMC L1 Input - Low Eta Sum
Entries 289044
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

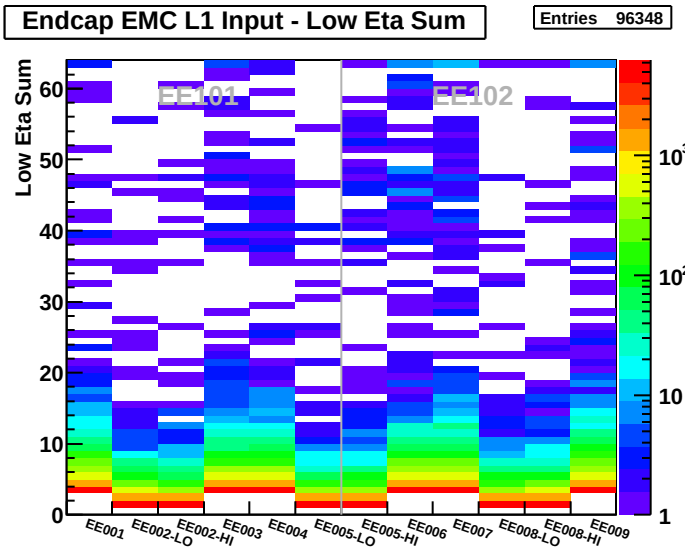

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

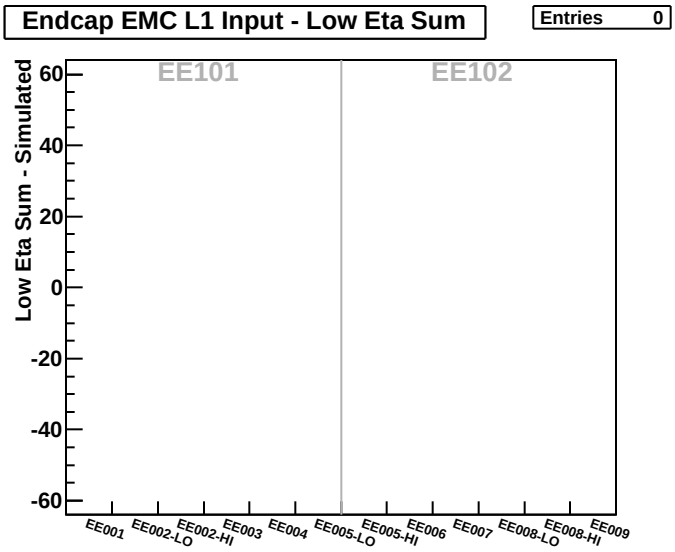

Barrel EMC L1 Input - High Eta Sum
Entries 289044
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

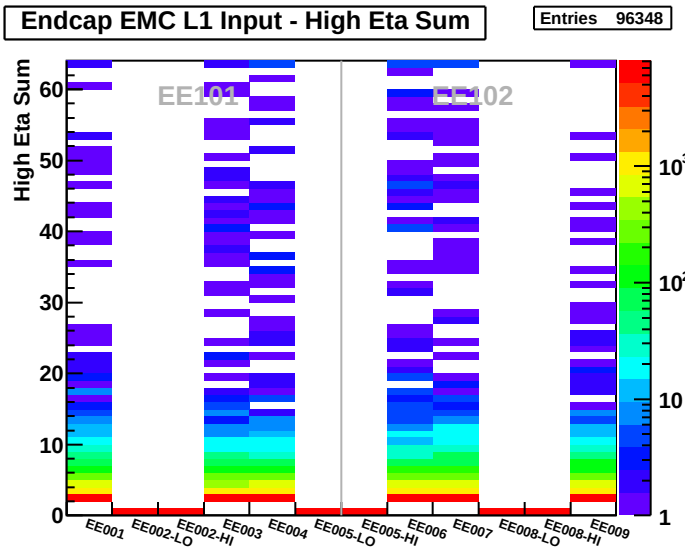

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

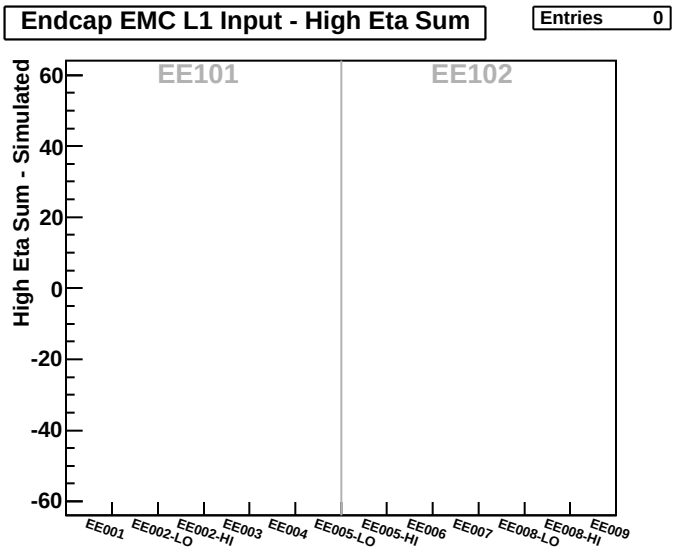

Barrel EMC L1 Input - High Tower Bits
Entries 289044
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

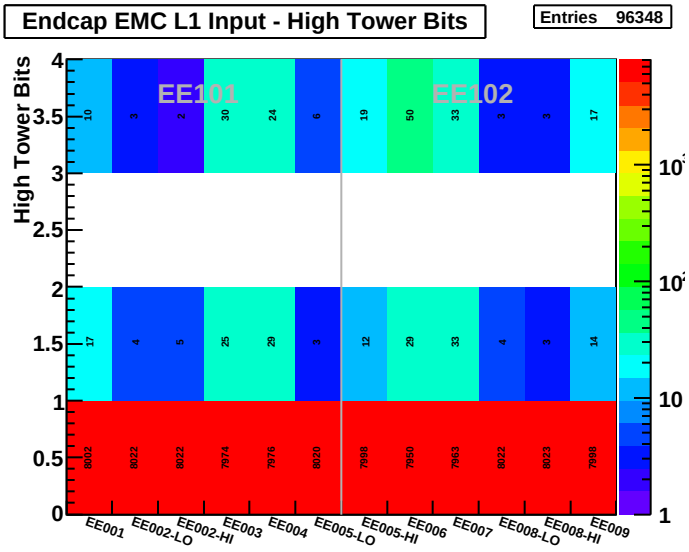

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

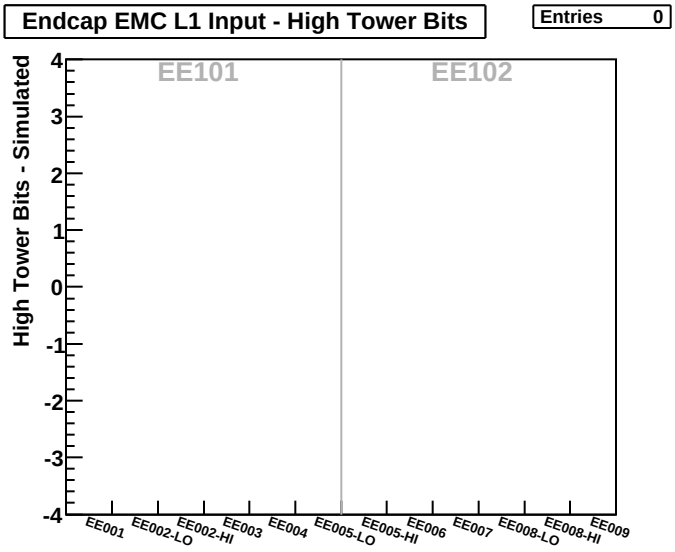

Endcap EMC L1 Input - Low Eta Sum
Entries 96348
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

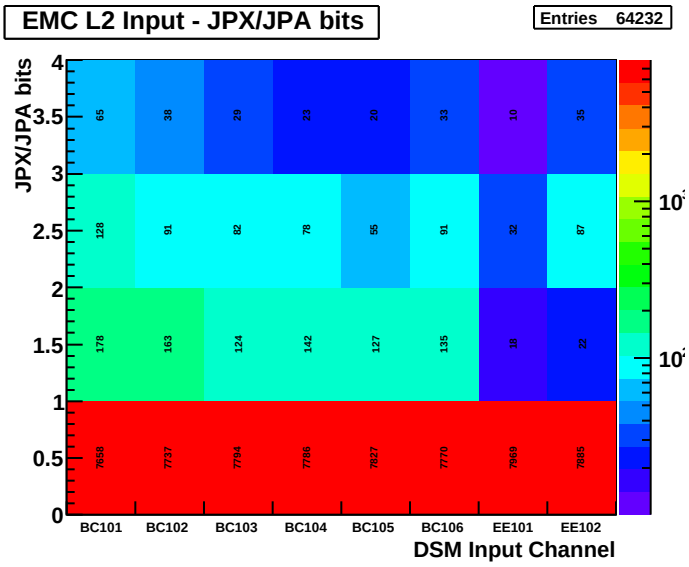

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

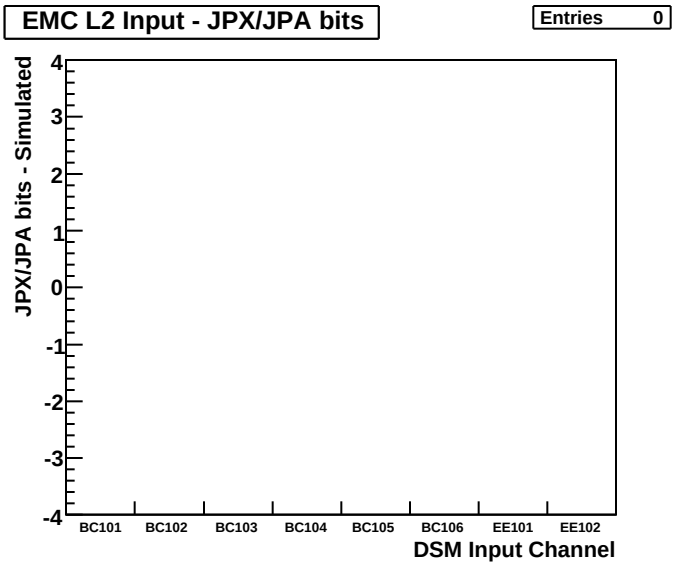

Endcap EMC L1 Input - High Eta Sum
Entries 96348
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

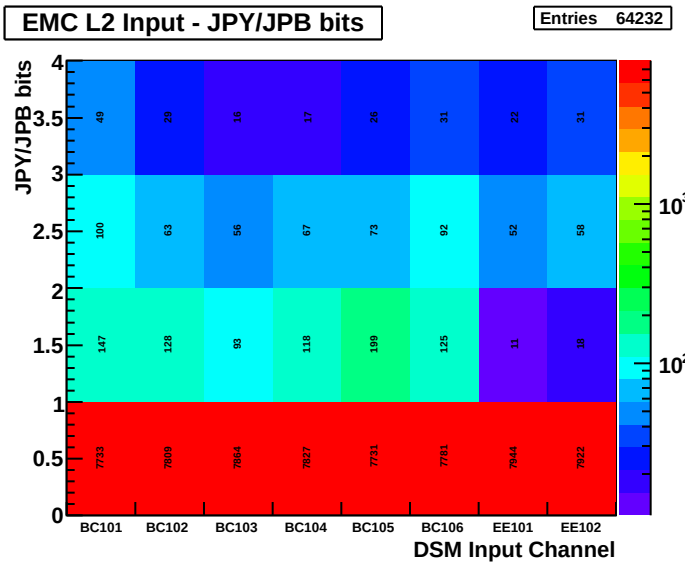

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

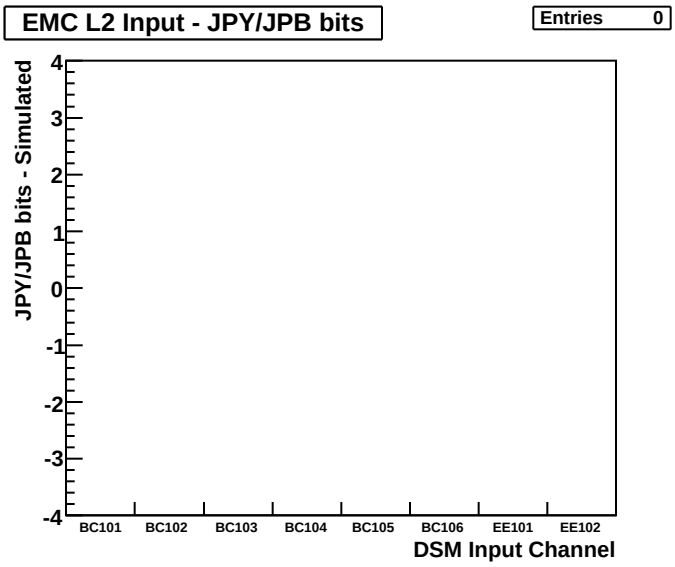

Endcap EMC L1 Input - High Tower Bits
Entries 96348
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

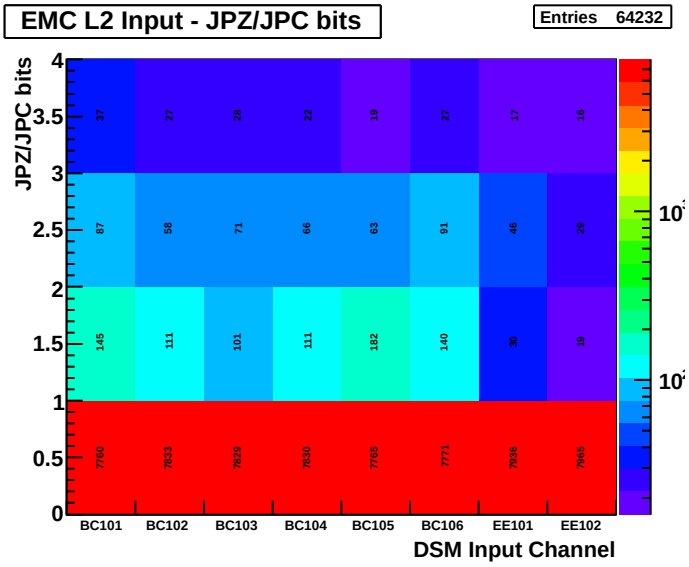

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

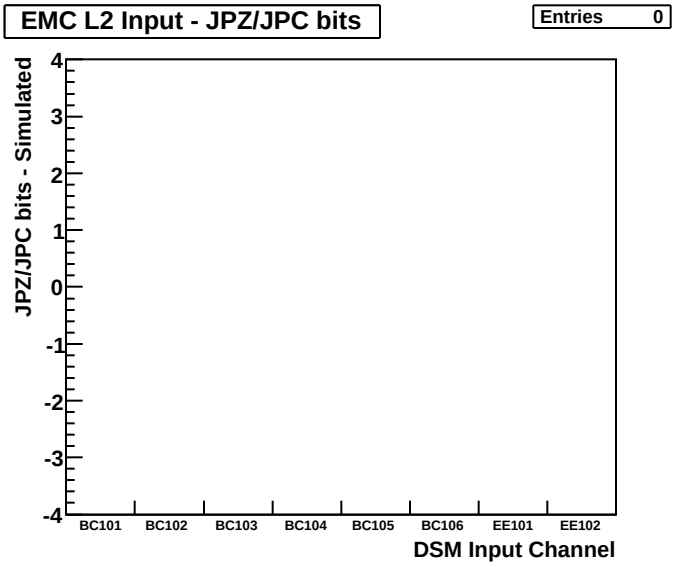

EMC L2 Input - JPX/JPA bits
Entries 64232
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
65 38 29 23 20 33 10 35
128 91 82 78 55 91 32 87
178 163 124 142 127 135 18 22
7658 7737 7794 7786 7827 7770 7969 7885

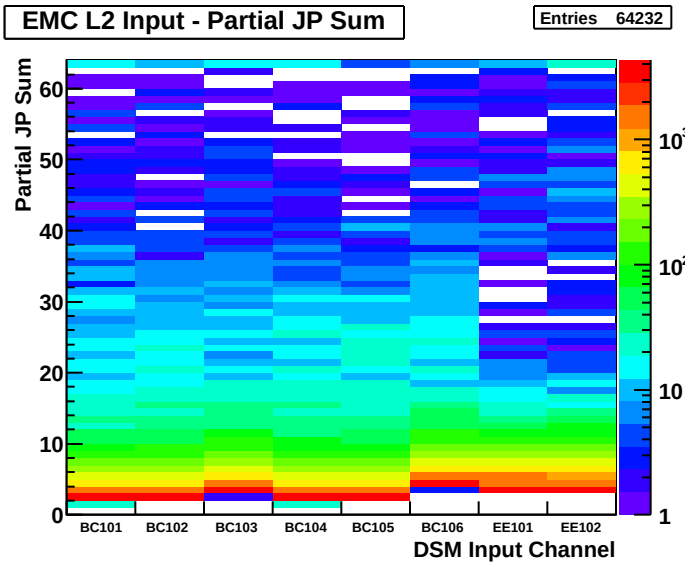

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

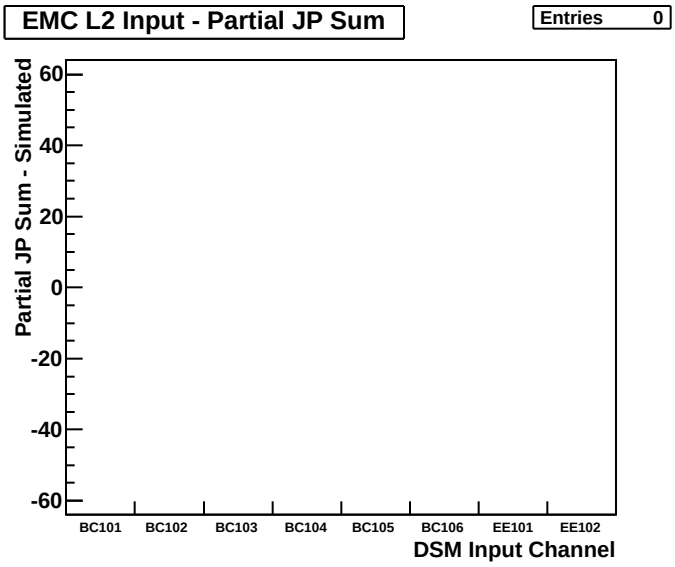

EMC L2 Input - JPY/JPB bits
Entries 64232
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
49 29 16 17 26 31 22 31
100 63 56 67 73 92 52 58
147 128 93 118 199 125 11 18
7733 7809 7864 7827 7731 7781 7944 7922

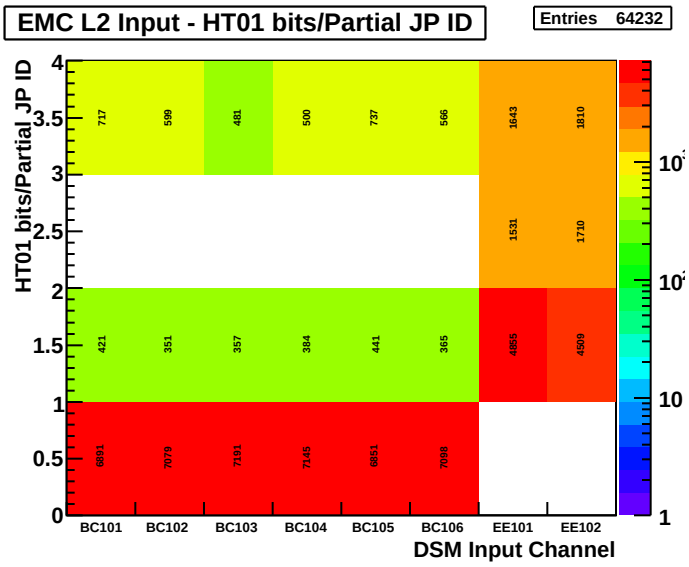

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

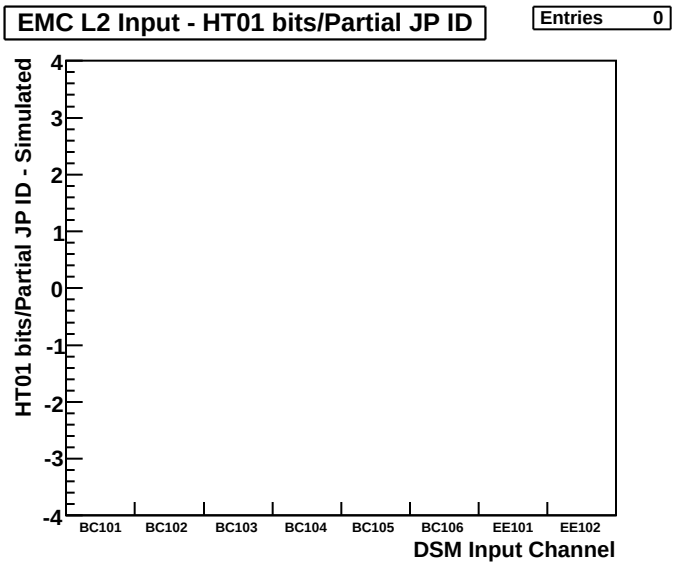

EMC L2 Input - JPZ/JPC bits
Entries 64232
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
37 27 28 22 19 27 17 16
87 58 71 66 63 91 46 29
145 111 101 111 182 140 30 19
7760 7833 7829 7830 7765 7771 7936 7965

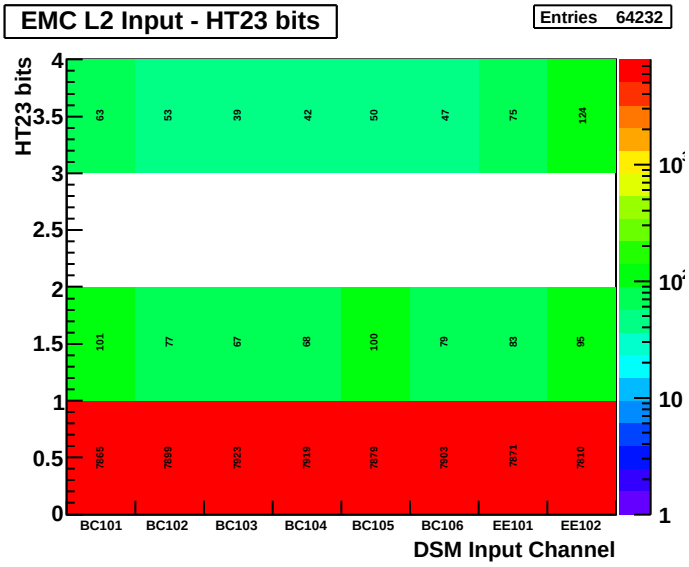

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

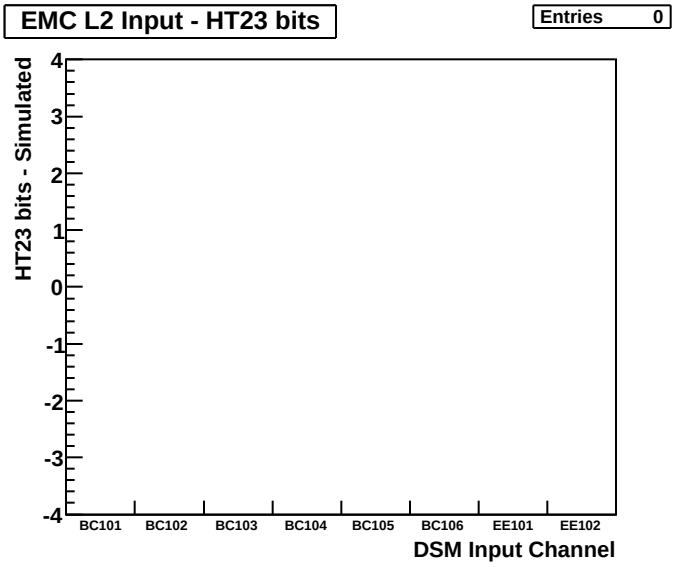

EMC L2 Input - Partial JP Sum
Entries 64232
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

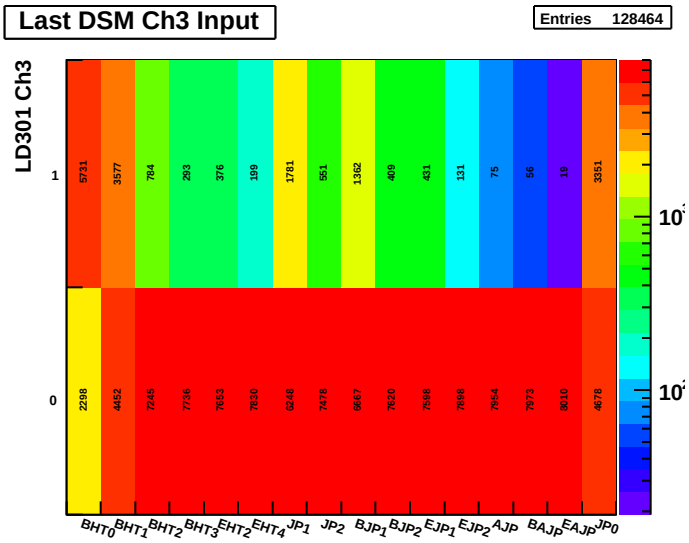

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

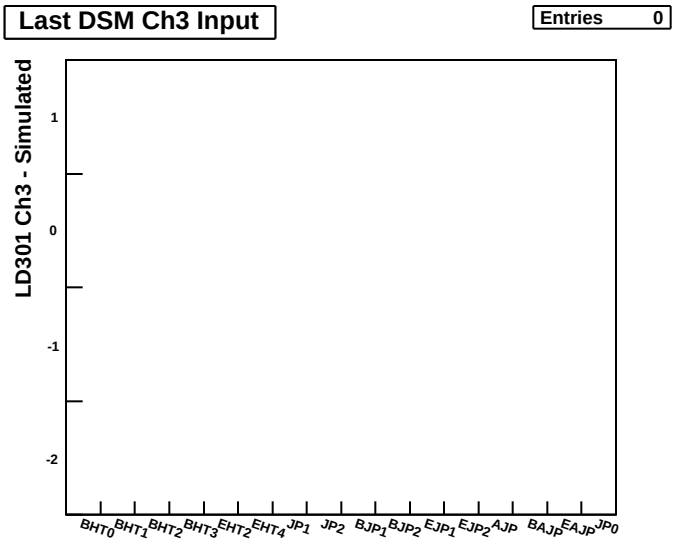

EMC L2 Input - HT01 bits/Partial JP ID
Entries 64232
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

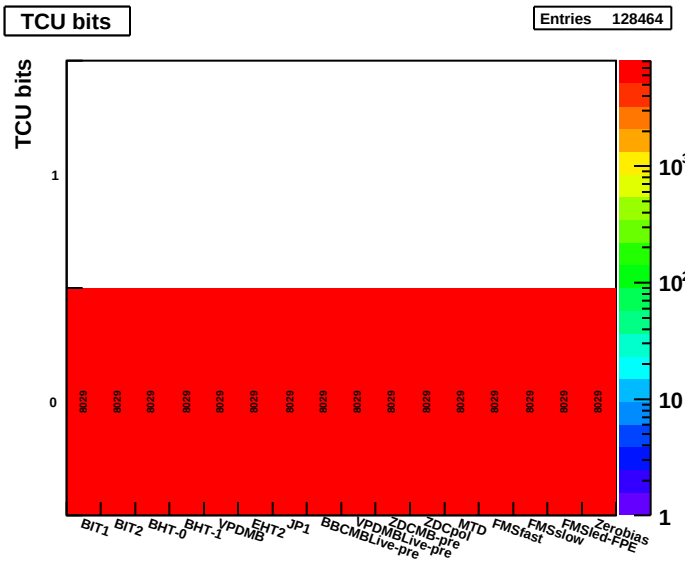

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

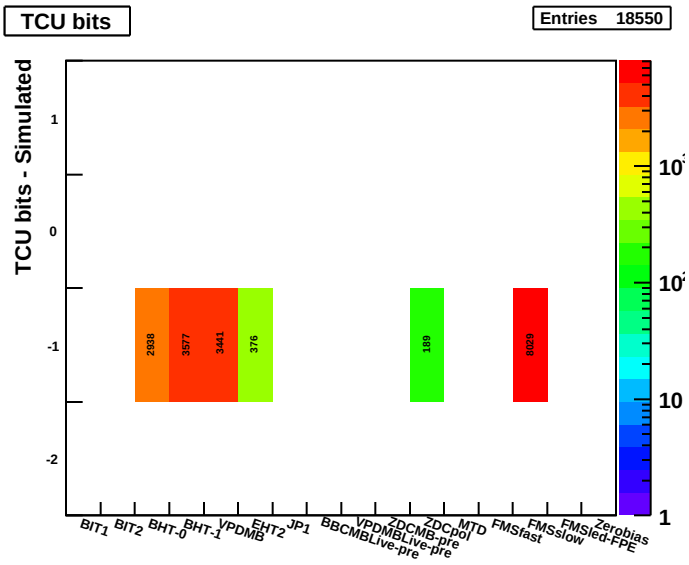

EMC L2 Input - HT23 bits
Entries 64232
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

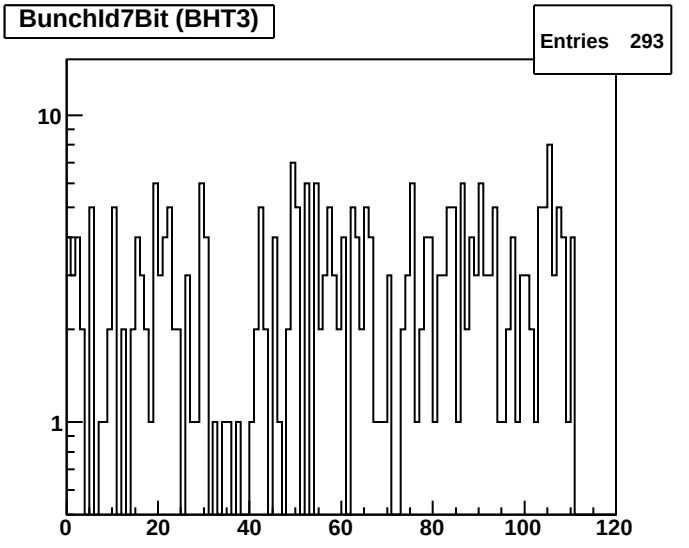

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

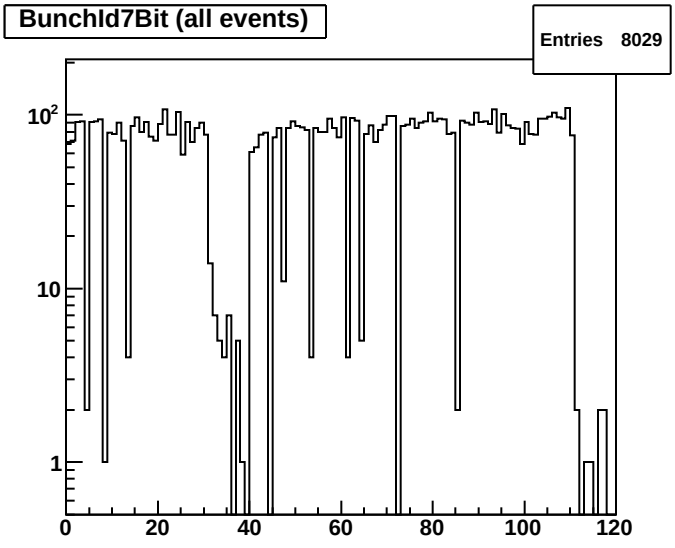

Last DSM Ch3 Input
Entries 128464
LD301 Ch3
1
0
5731 3577 784 293 376 199 1781 551 1362 409 431 131 75 56 19 3351
2298 4452 7245 7736 7653 7830 6248 7478 6667 7620 7598 7898 7954 7973 8010 4678
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

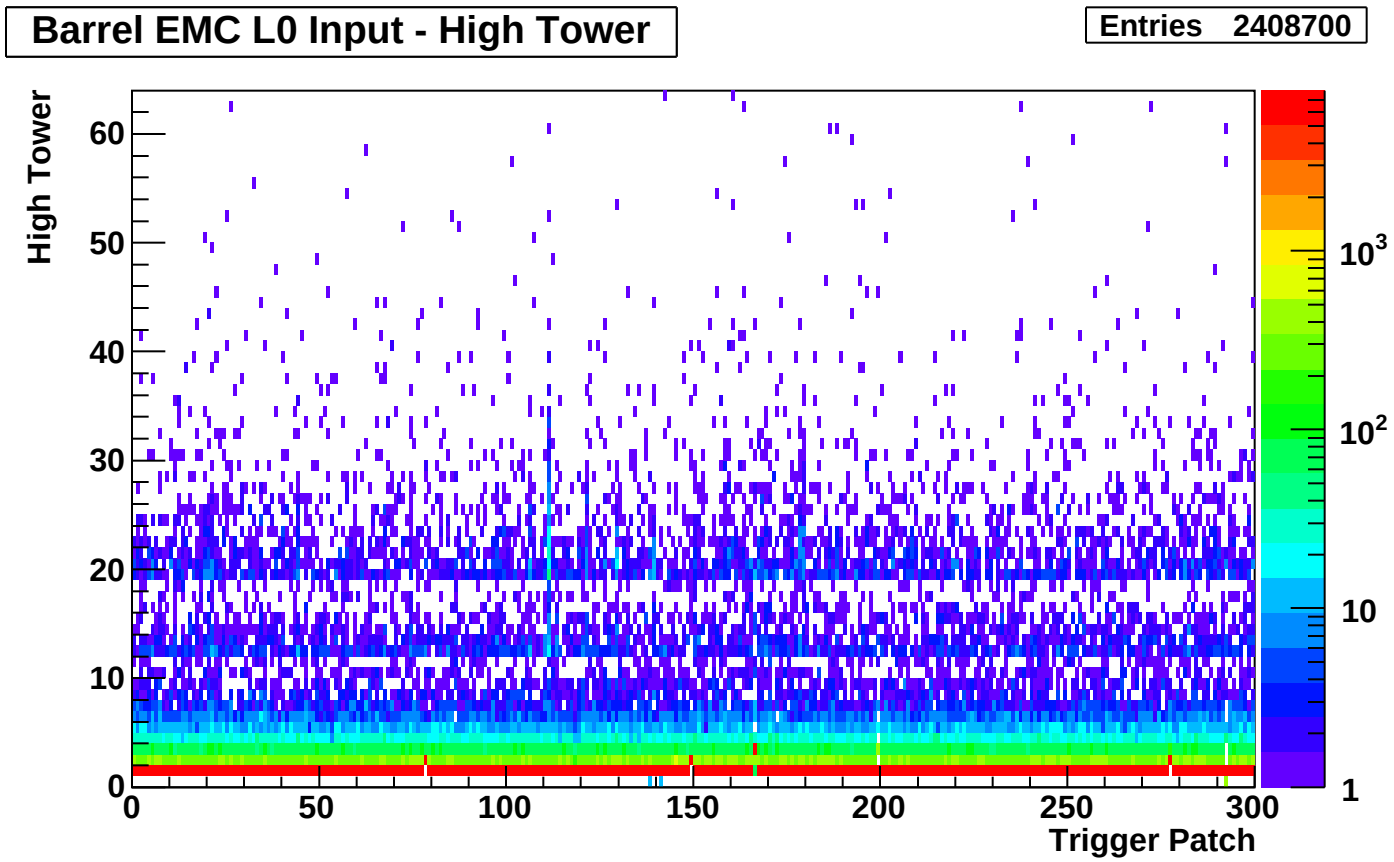

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

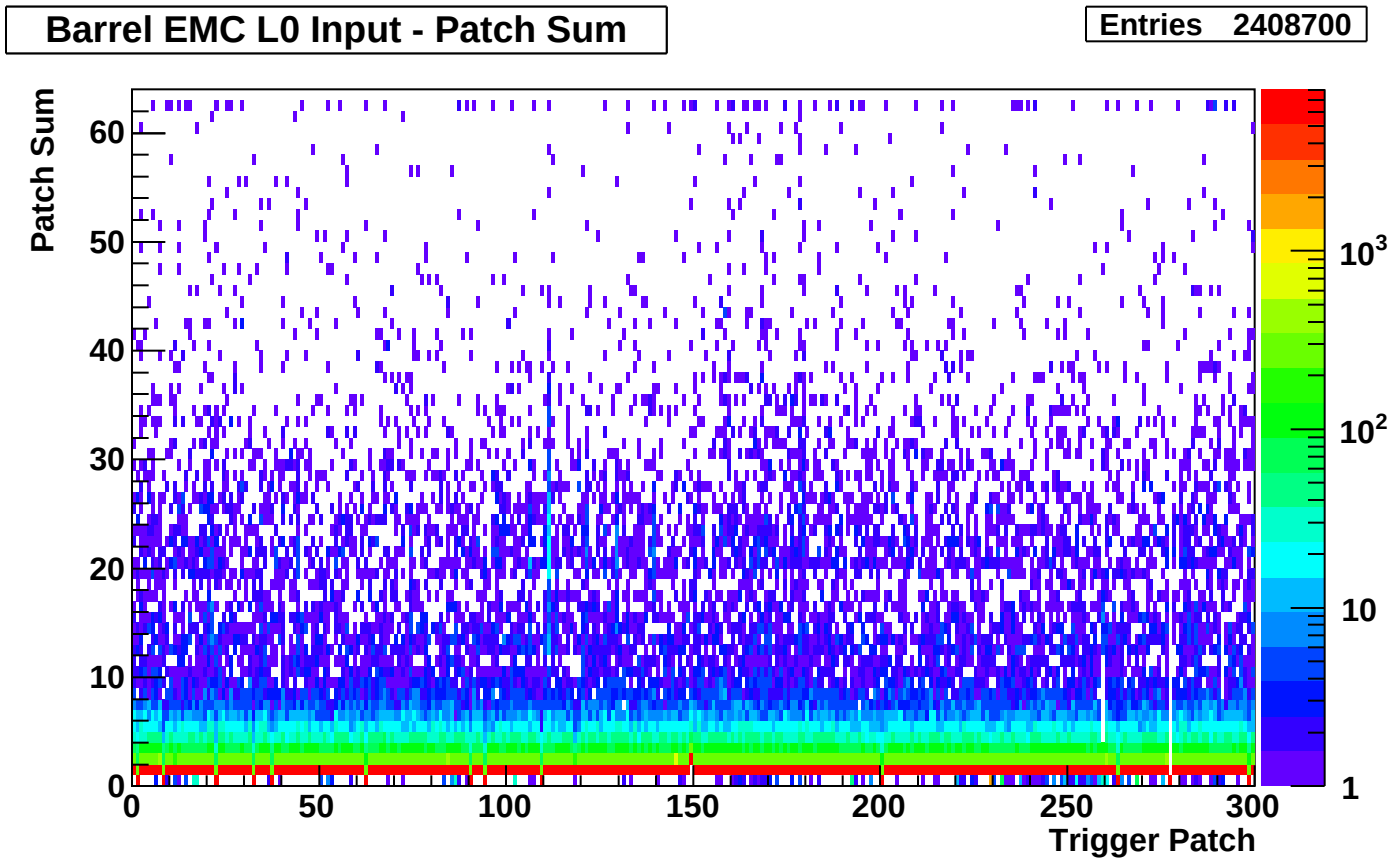

TCU bits
Entries 128464
TCU bits
1
0
8029 8029 8029 8029 8029 8029 8029 8029 8029 8029 8029 8029 8029 8029 8029 8029
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

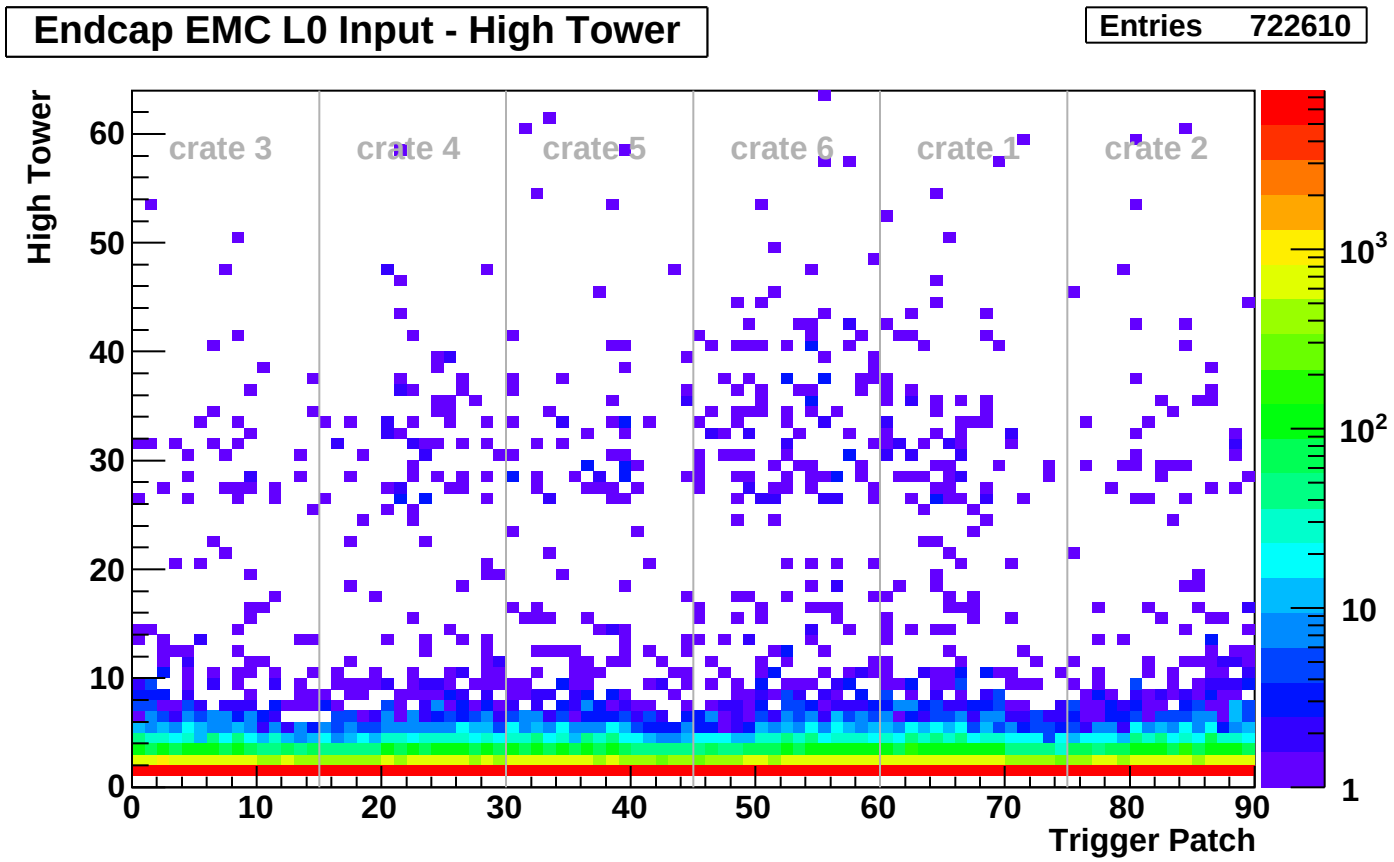

TCU bits
Entries 18550
TCU bits - Simulated
1
0
-1
-2
2938 3577 3441 376 189 8029
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

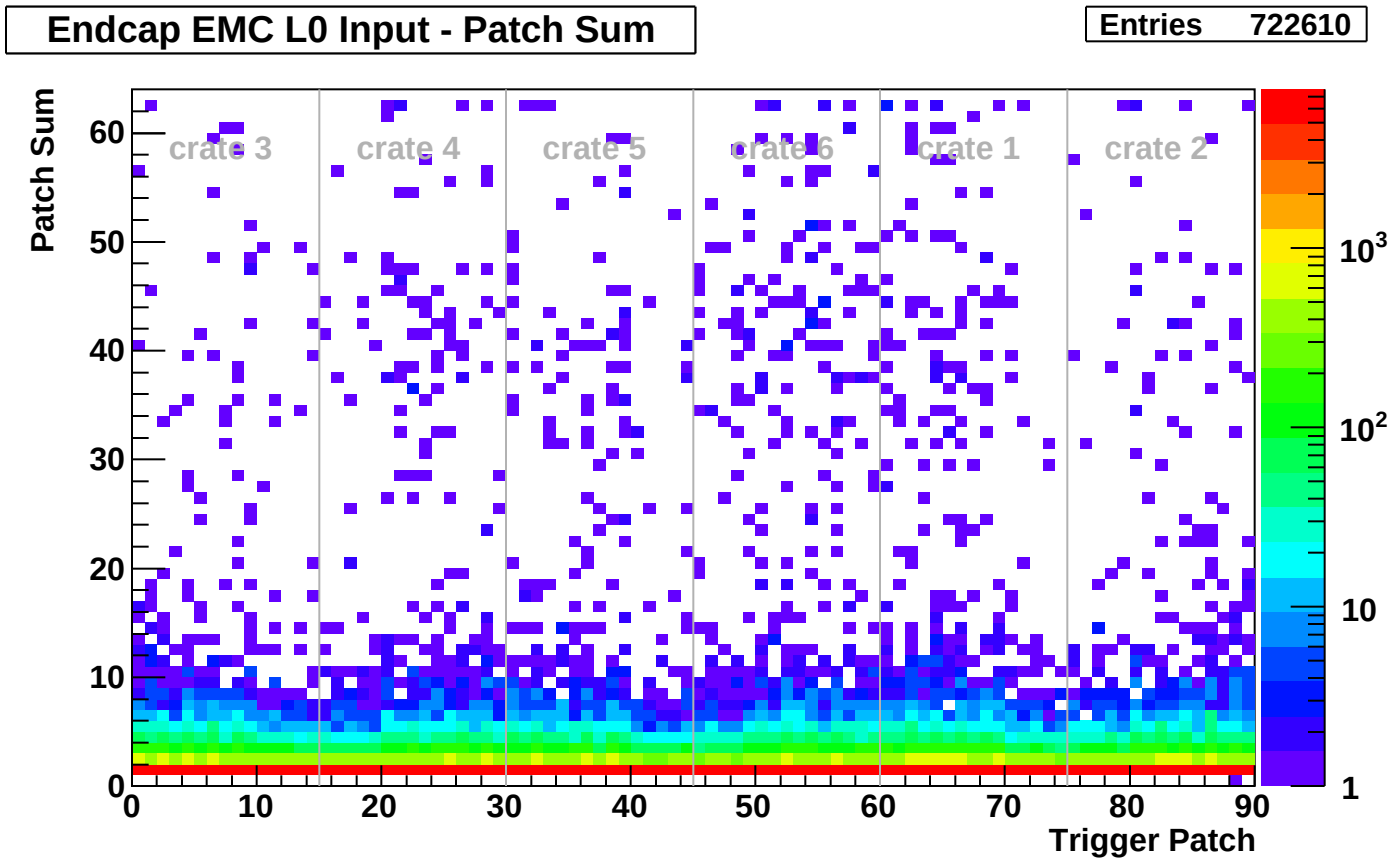

BunchId7Bit (BHT3)
Entries 293
10
1
0 20 40 60 80 100 120

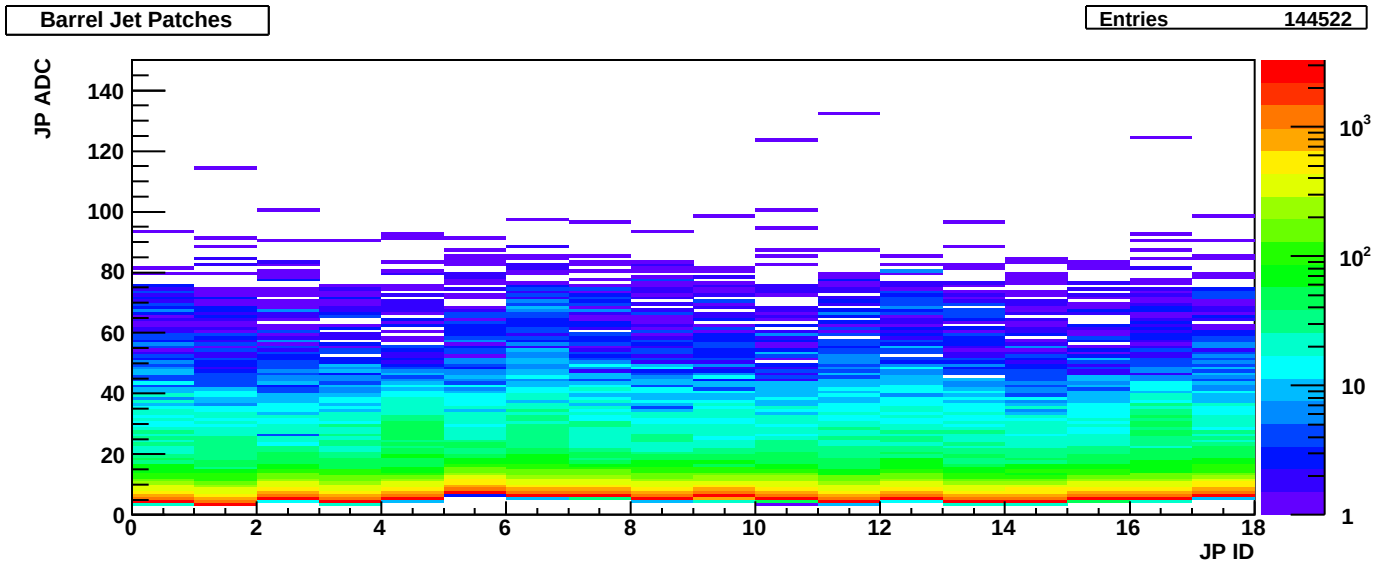

BunchId7Bit (all events)
Entries 8029
10²
10
1
0 20 40 60 80 100 120

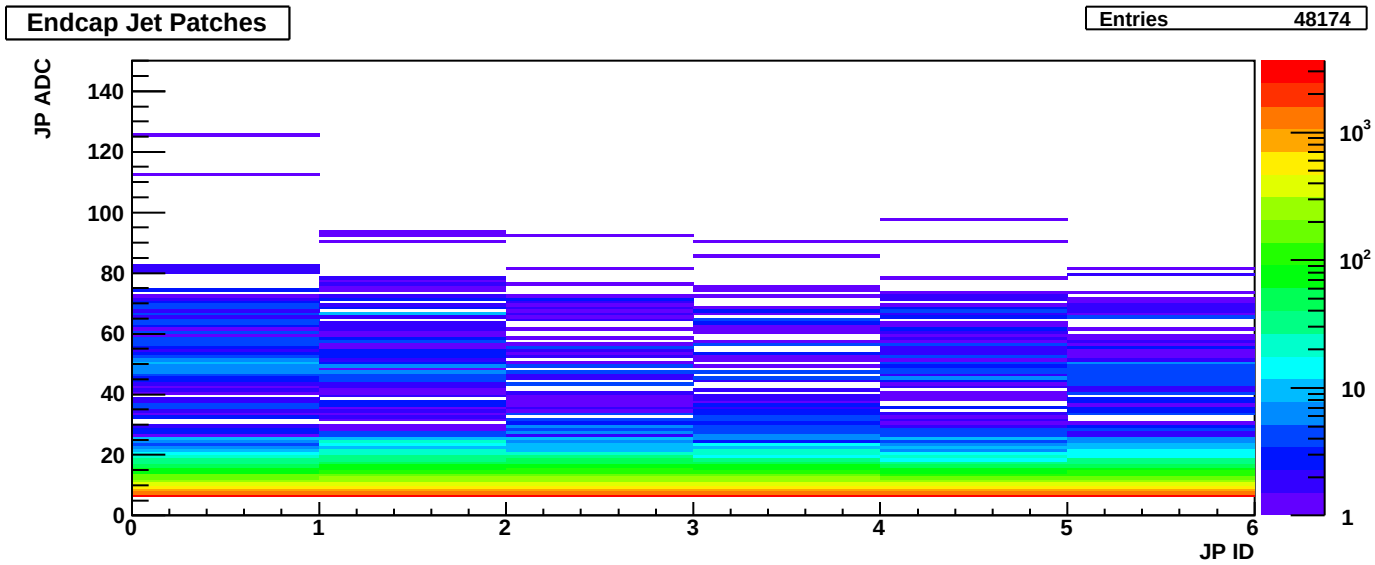

Barrel EMC L0 Input - High Tower
Entries 2408700
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

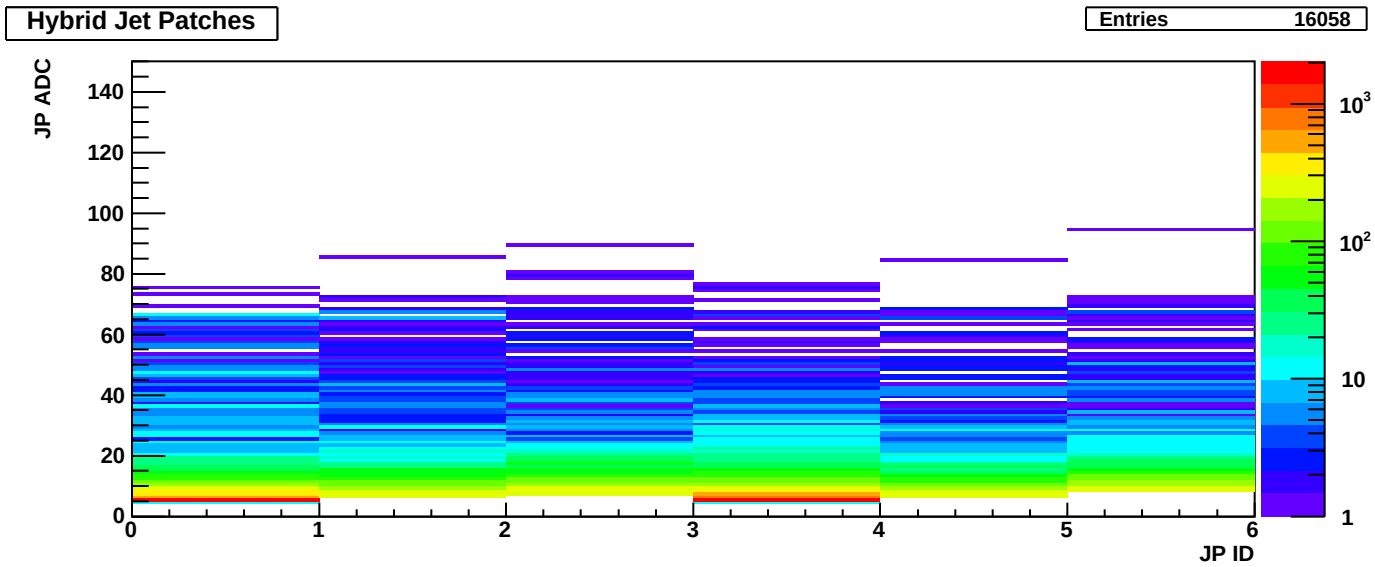

Barrel EMC L0 Input - Patch Sum
Entries 2408700
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

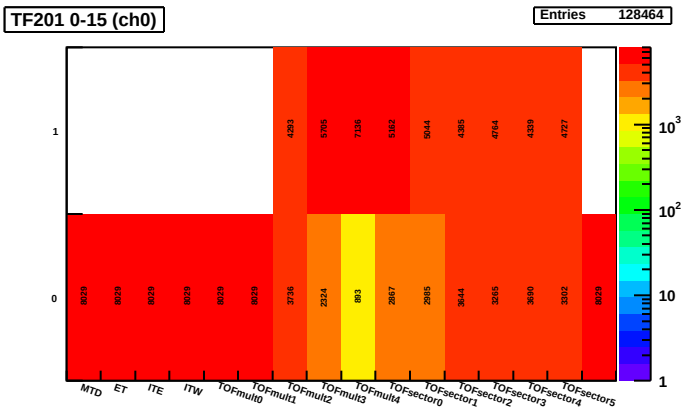

Endcap EMC L0 Input - High Tower
Entries 722610
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

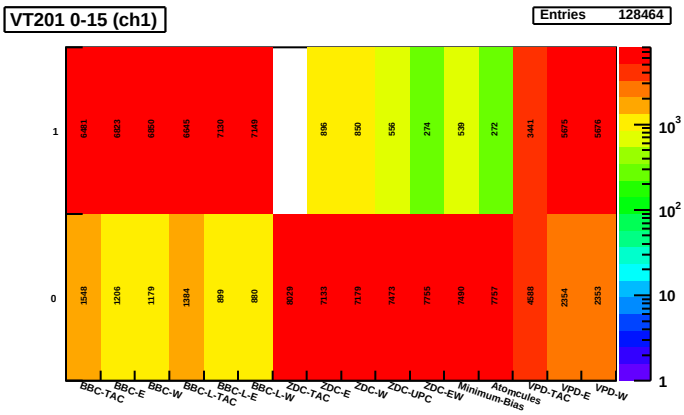

Endcap EMC L0 Input - Patch Sum
Entries 722610
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

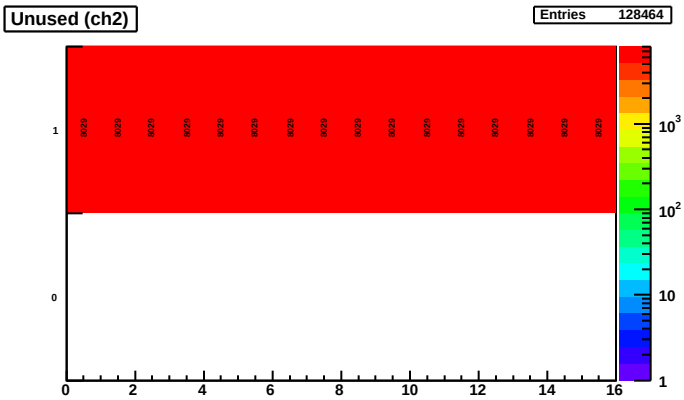

Barrel Jet Patches
Entries 144522
JP ADC
JP ID

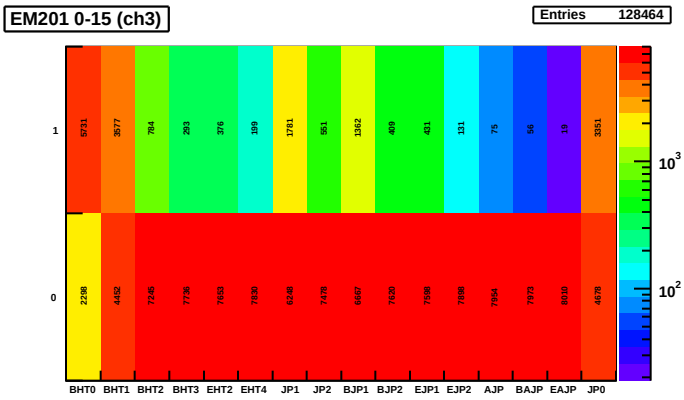

Endcap Jet Patches
Entries 48174
JP ADC
JP ID

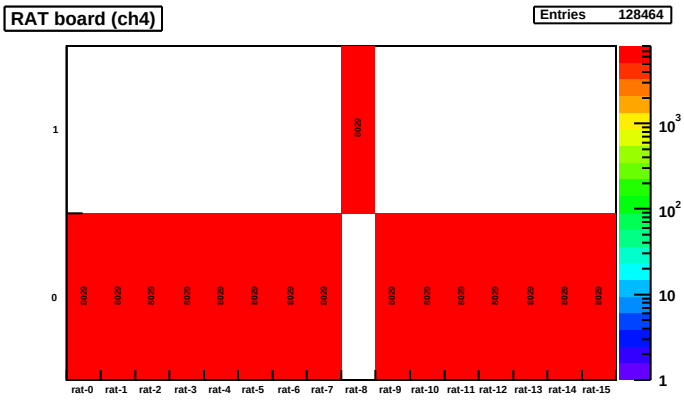

Hybrid Jet Patches
Entries 16058
JP ADC
JP ID

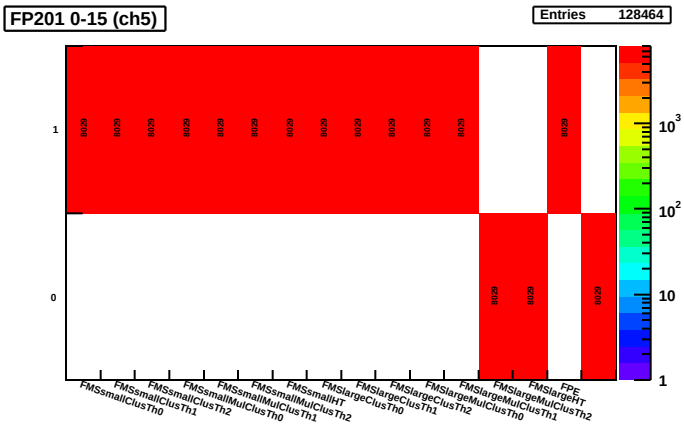

TF201 0-15 (ch0)
Entries 128464
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

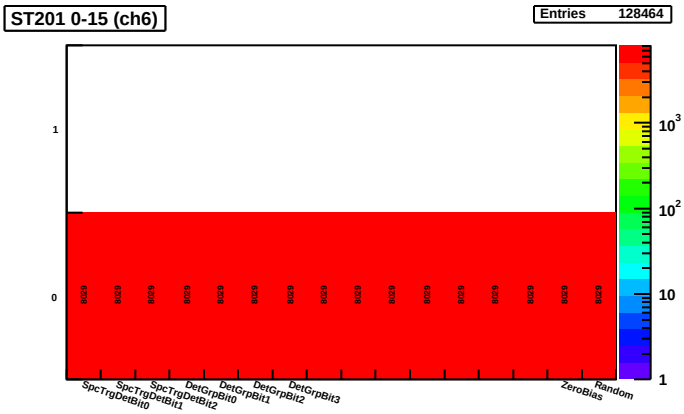

VT201 0-15 (ch1)
Entries 128464
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

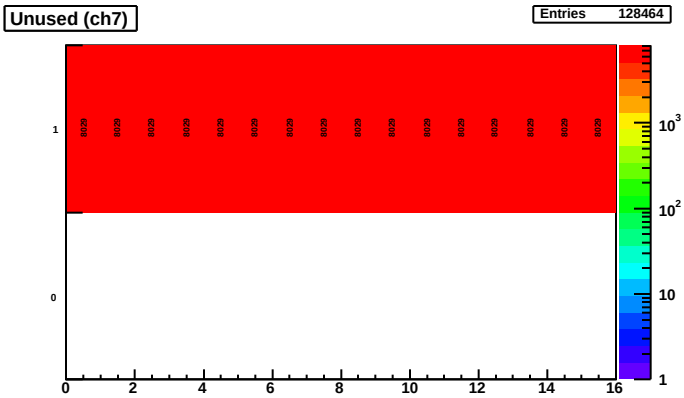

Unused (ch2)
Entries 128464

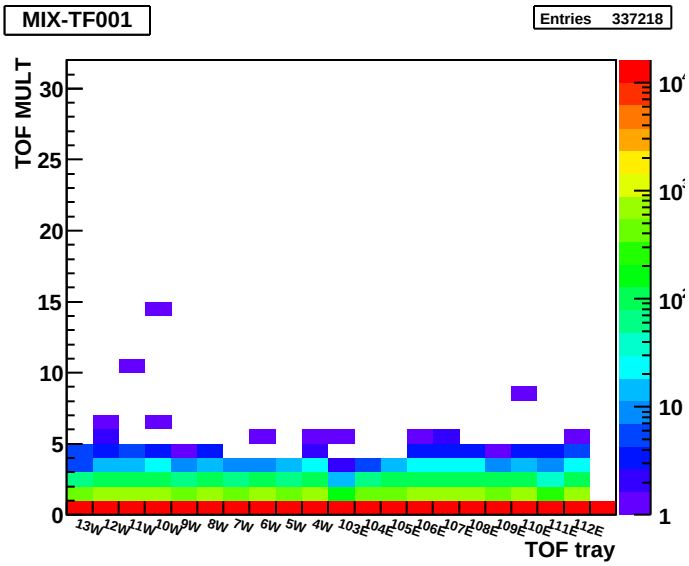

EM201 0-15 (ch3)
Entries 128464
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

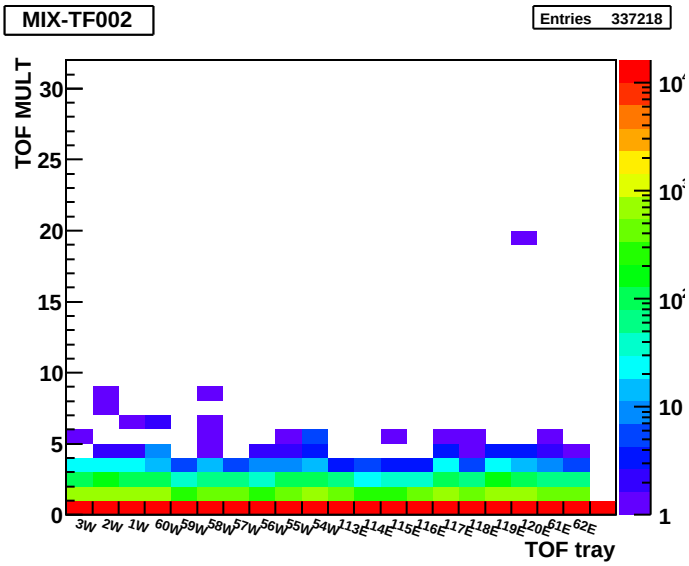

RAT board (ch4)
Entries 128464
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

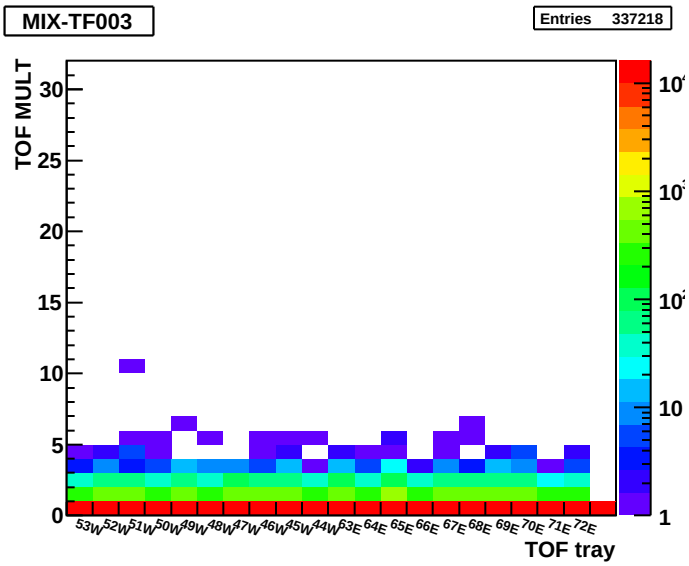

FP201 0-15 (ch5)
Entries 128464
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

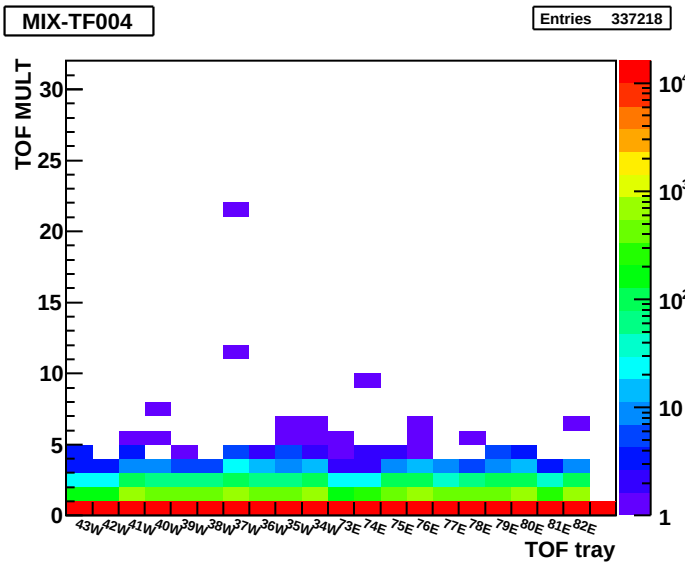

ST201 0-15 (ch6)
Entries 128464
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

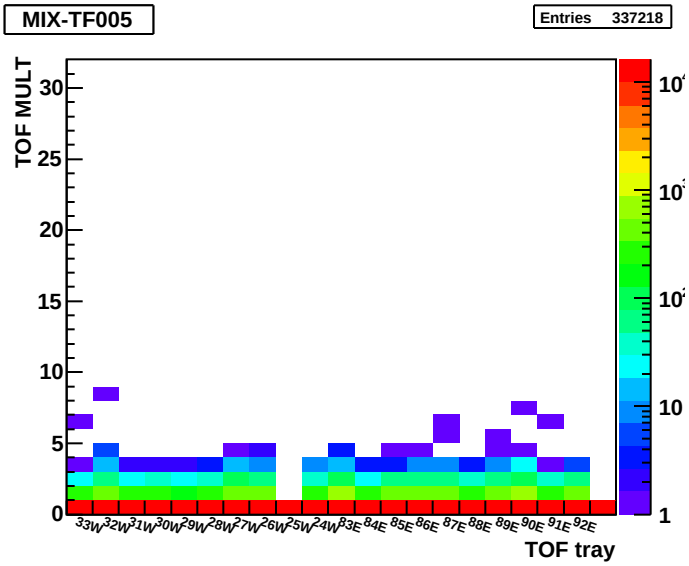

Unused (ch7)
Entries 128464

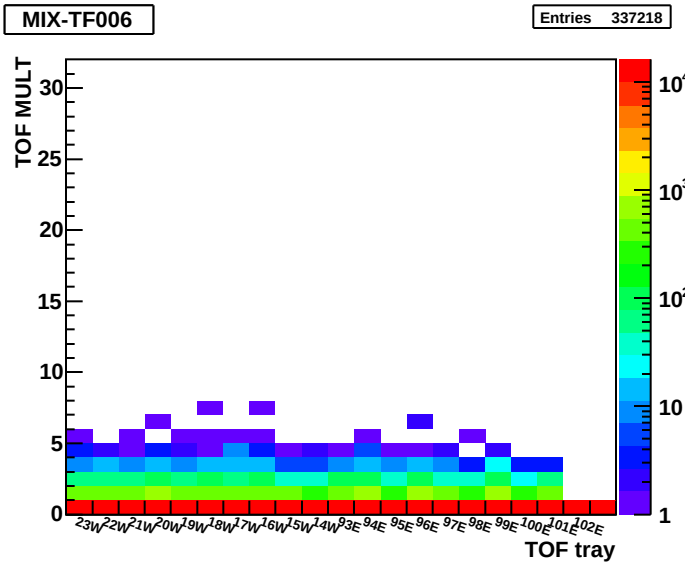

MIX-TF001
Entries 337218
TOF MULT
TOF tray

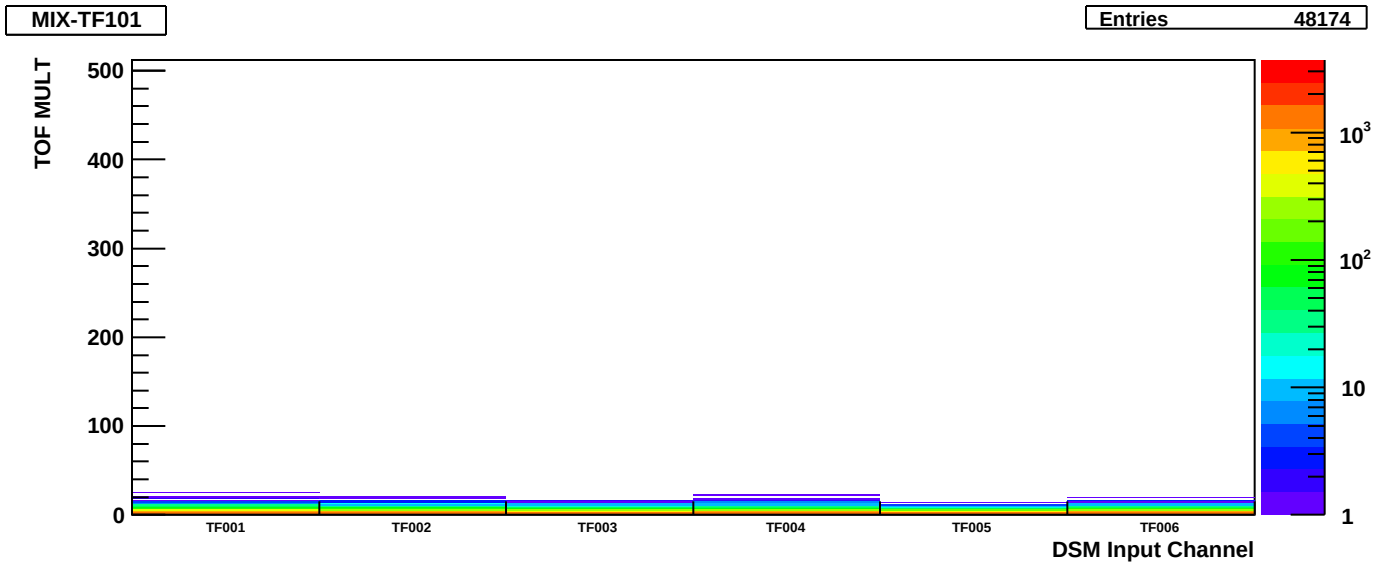

MIX-TF002
Entries 337218
TOF MULT
TOF tray

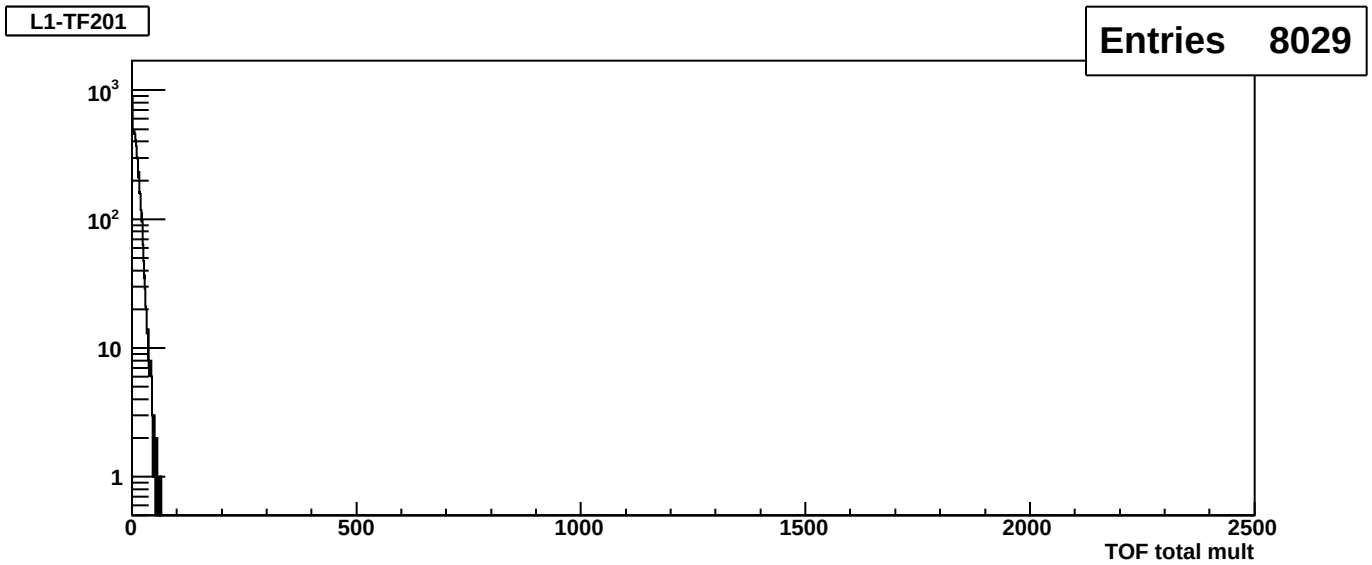

MIX-TF003
Entries 337218
TOF MULT
TOF tray

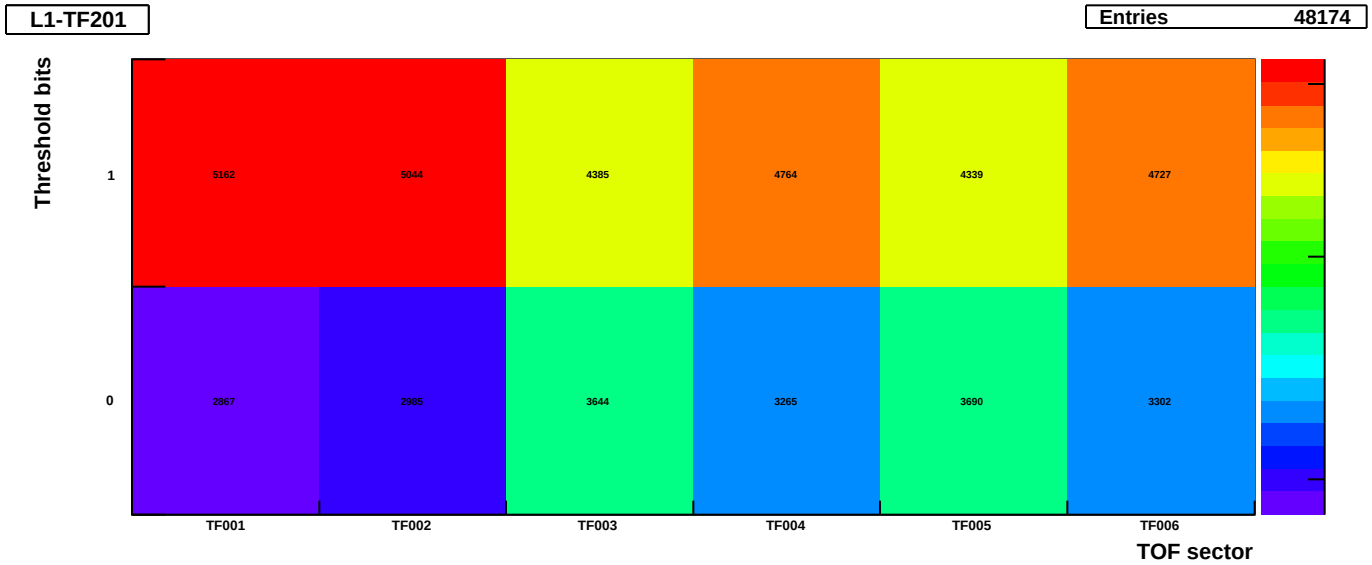

MIX-TF004
Entries 337218
TOF MULT
TOF tray

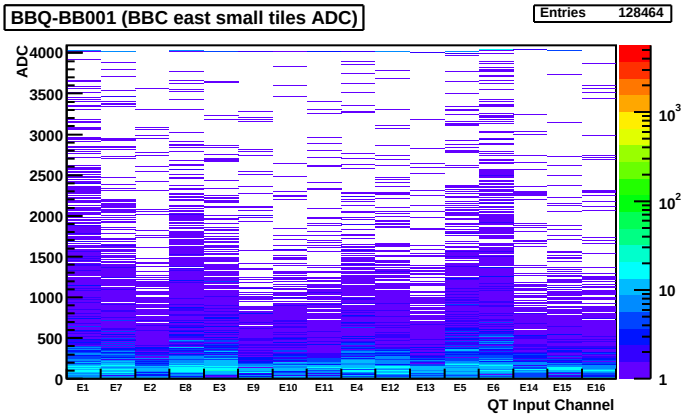

MIX-TF005
Entries 337218
TOF MULT
TOF tray

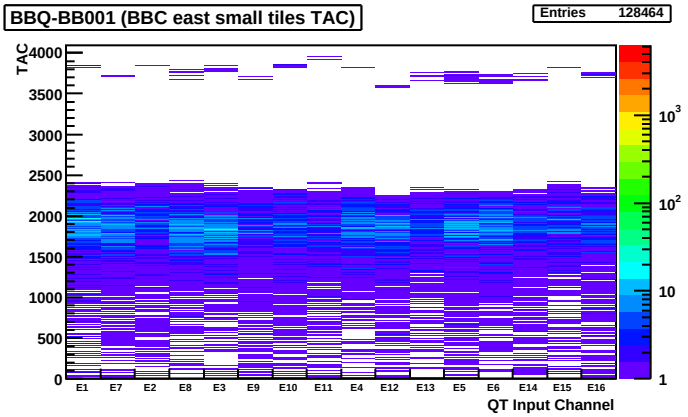

MIX-TF006
Entries 337218
TOF MULT
TOF tray

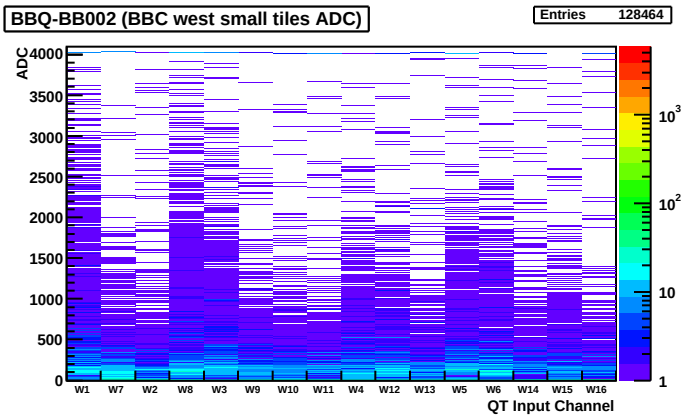

MIX-TF101
Entries 48174
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

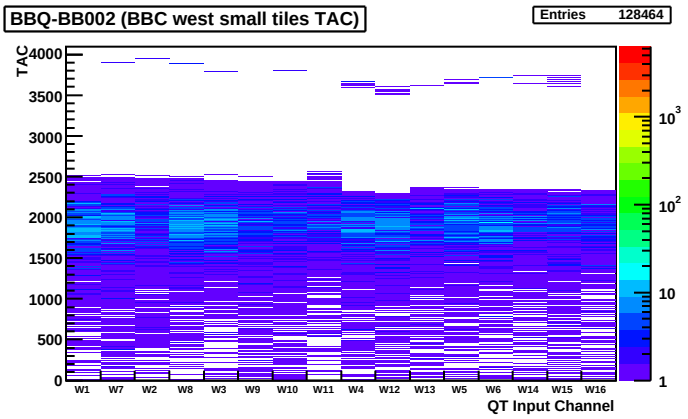

L1-TF201
Entries 8029
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

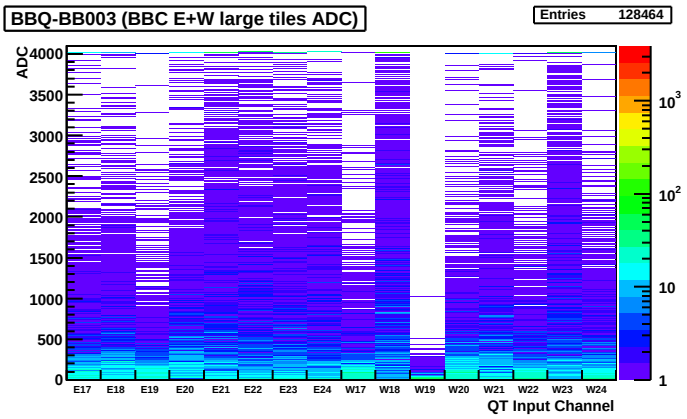

L1-TF201
Entries 48174
Threshold bits
1
0
5162
5044
4385
4764
4339
4727
2867
2985
3644
3265
3690
3302
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

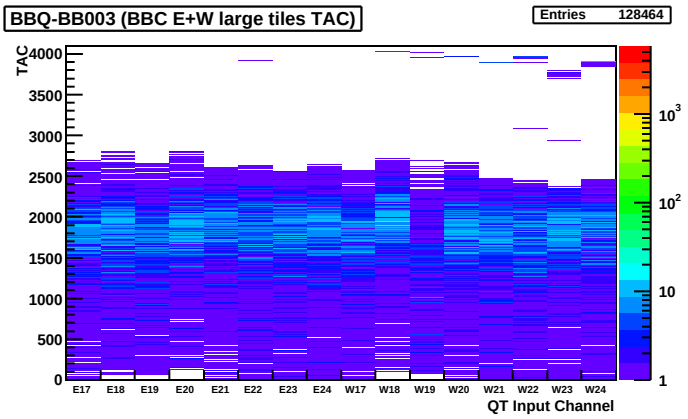

BBQ-BB001 (BBC east small tiles ADC)
Entries 128464
ADC
QT Input Channel

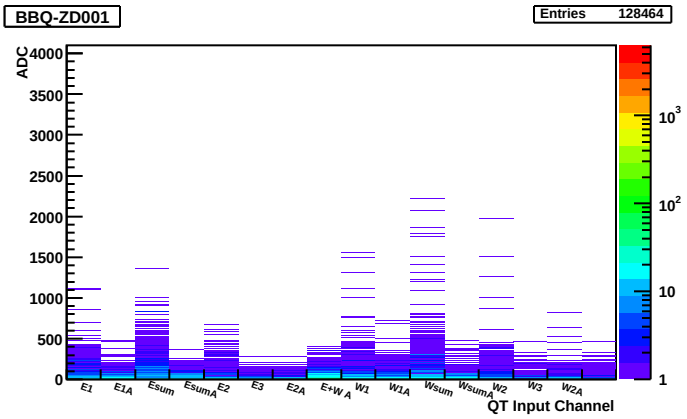

BBQ-BB001 (BBC east small tiles TAC)
Entries 128464
TAC
QT Input Channel

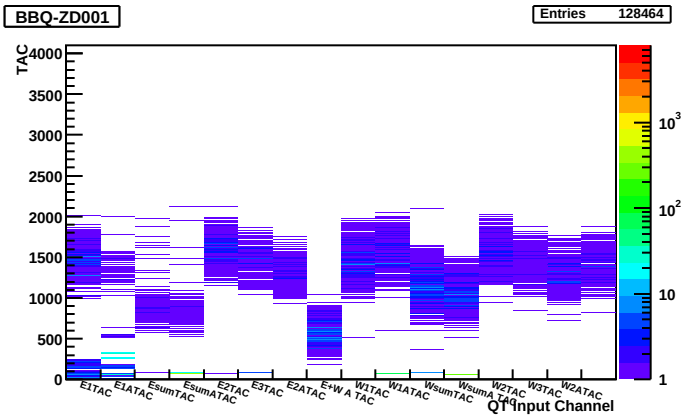

BBQ-BB002 (BBC west small tiles ADC)
Entries 128464
ADC
QT Input Channel

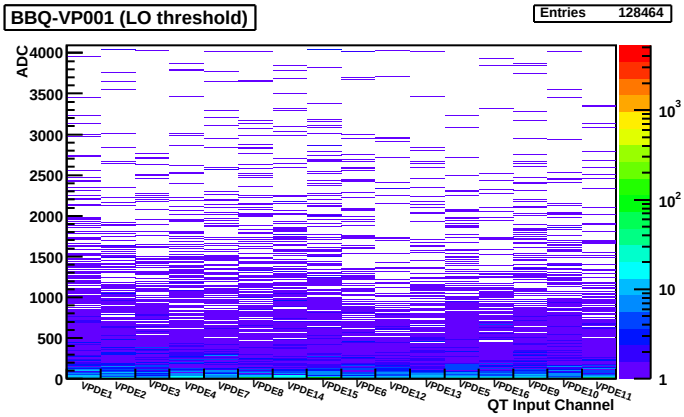

BBQ-BB002 (BBC west small tiles TAC)
Entries 128464
TAC
QT Input Channel

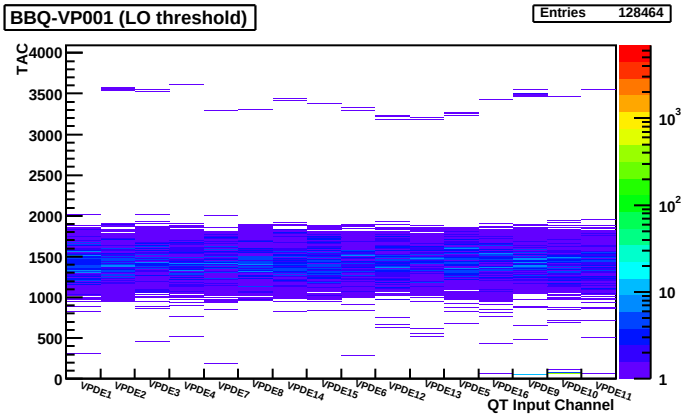

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 128464
ADC
QT Input Channel

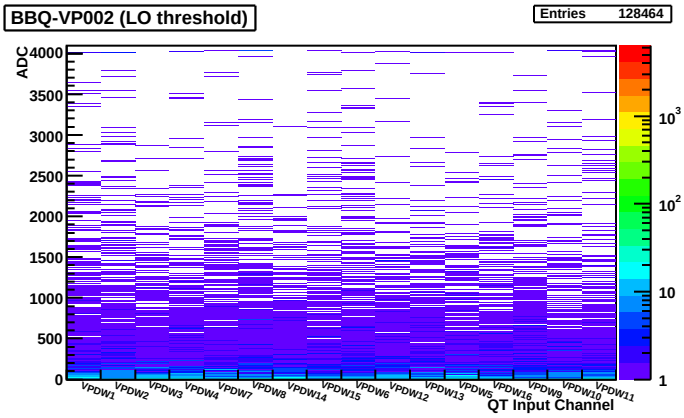

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 128464
TAC
QT Input Channel

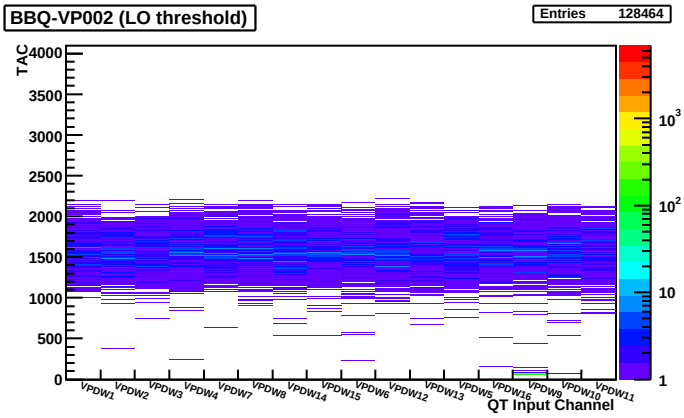

BBQ-ZD001
Entries 128464
ADC
QT Input Channel

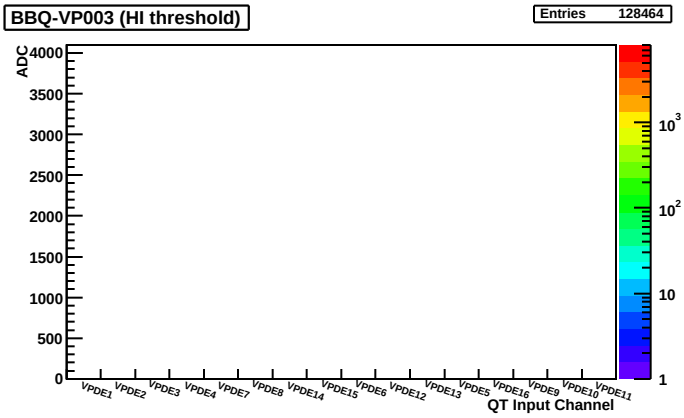

BBQ-ZD001
Entries 128464
TAC
QT Input Channel

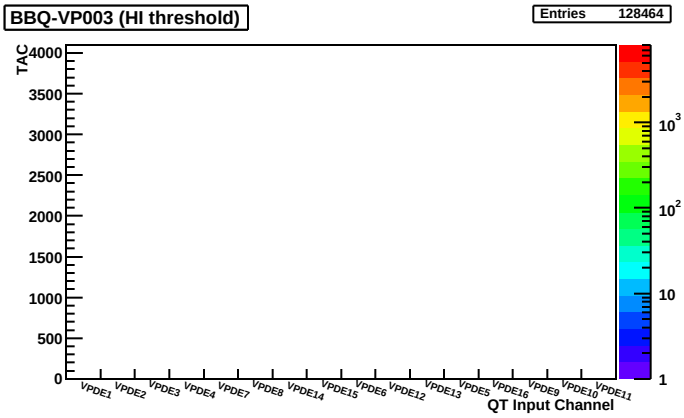

BBQ-VP001 (LO threshold)
Entries 128464
ADC
QT Input Channel

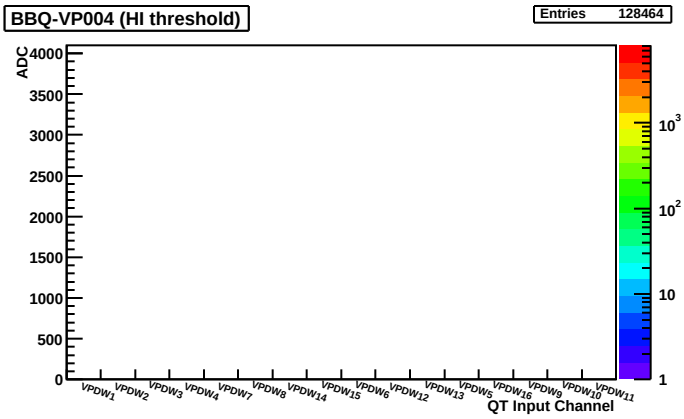

BBQ-VP001 (LO threshold)
Entries 128464
TAC
QT Input Channel

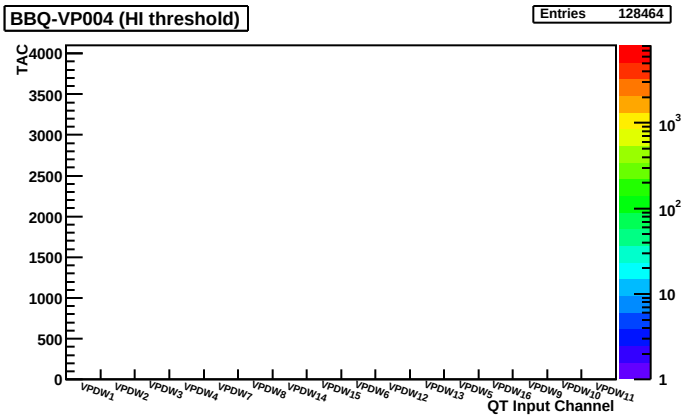

BBQ-VP002 (LO threshold)
Entries 128464
ADC
QT Input Channel

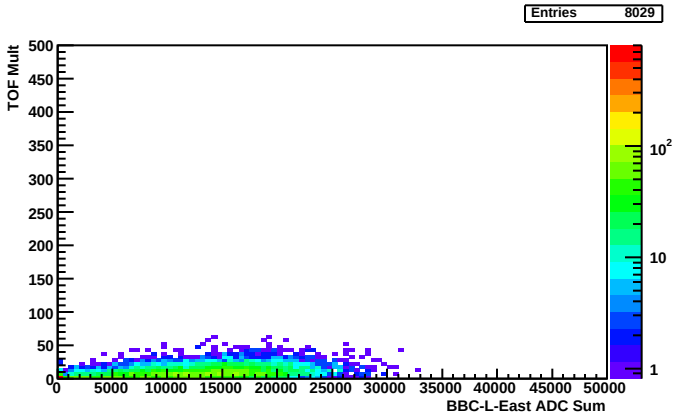

BBQ-VP002 (LO threshold)
Entries 128464
TAC
QT Input Channel

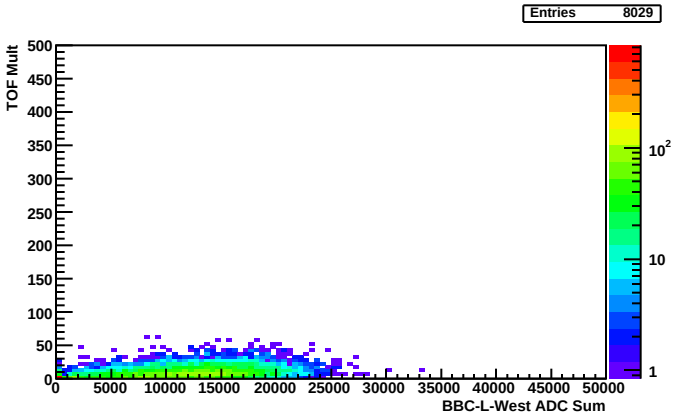

BBQ-VP003 (HI threshold)
Entries 128464
ADC
QT Input Channel

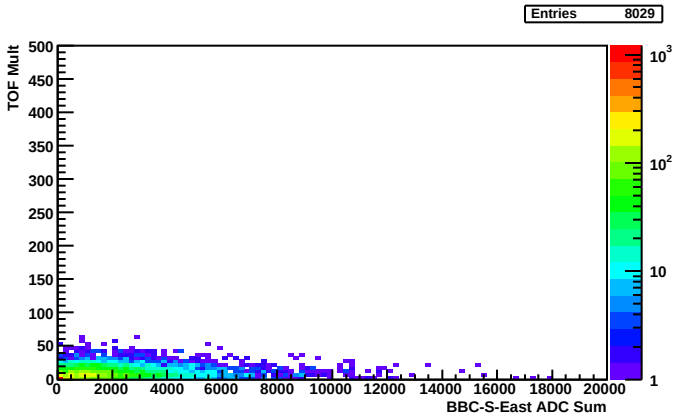

BBQ-VP003 (HI threshold)
Entries 128464
TAC
QT Input Channel

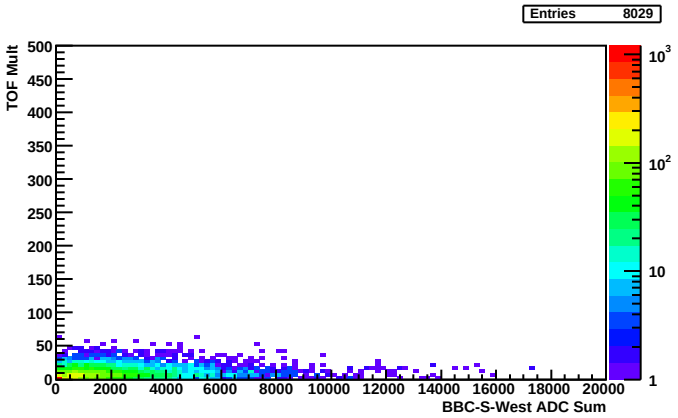

BBQ-VP004 (HI threshold)
Entries 128464
ADC
QT Input Channel

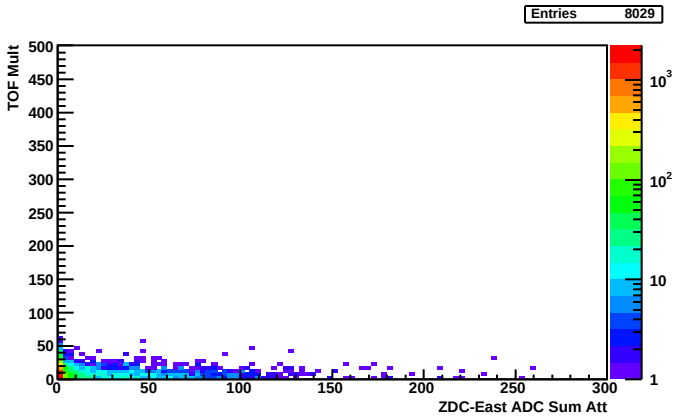

BBQ-VP004 (HI threshold)
Entries 128464
TAC
QT Input Channel

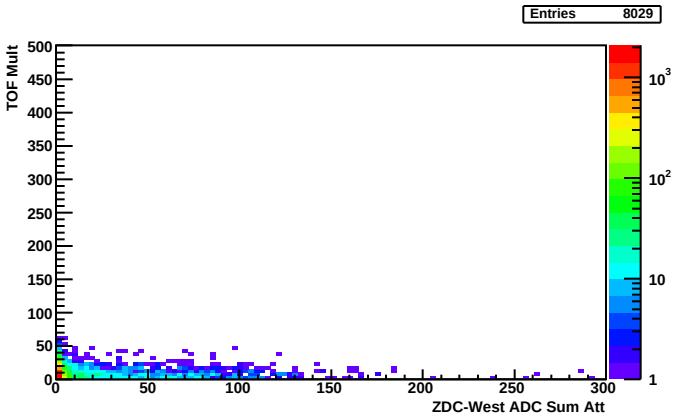

Entries 8029
TOF Mult
BBC-L-East ADC Sum

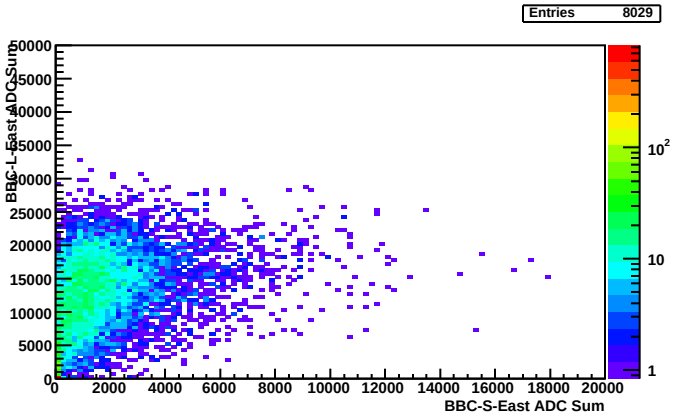

Entries 8029
TOF Mult
BBC-L-West ADC Sum

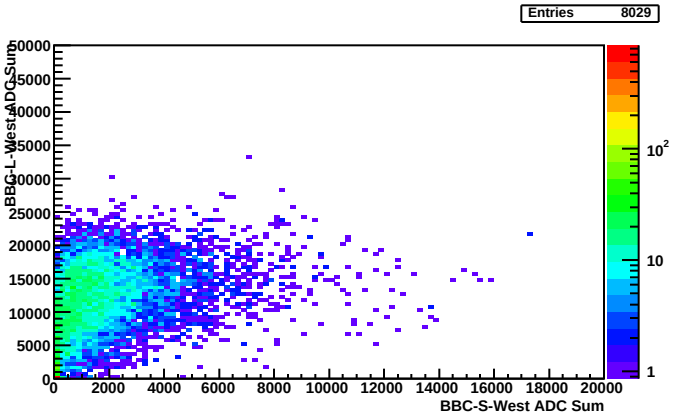

Entries 8029
TOF Mult
BBC-S-East ADC Sum

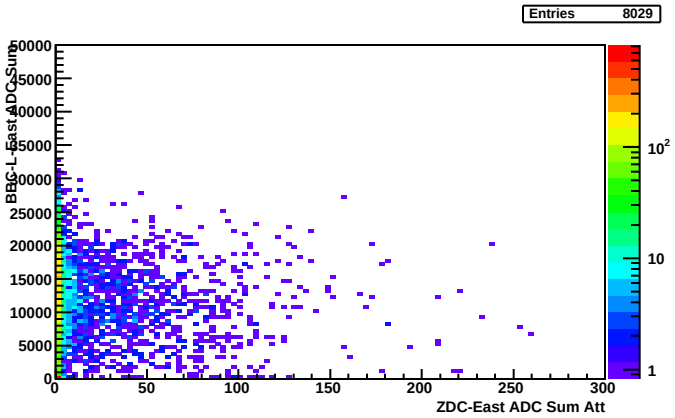

Entries 8029
TOF Mult
BBC-S-West ADC Sum

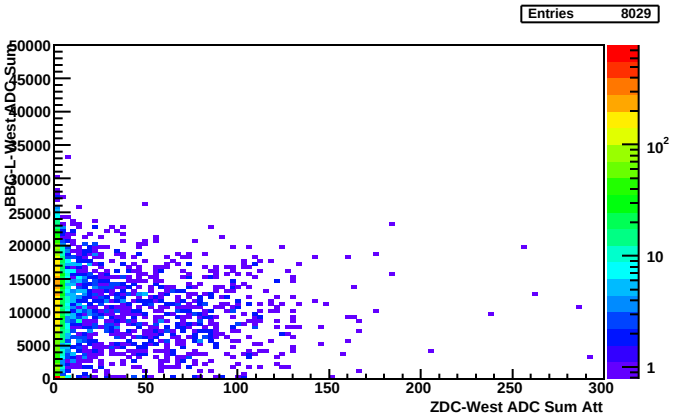

Entries 8029
TOF Mult
ZDC-East ADC Sum Att

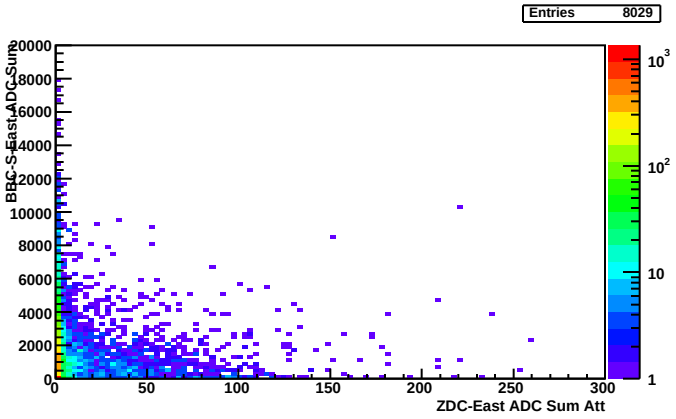

Entries 8029
TOF Mult
ZDC-West ADC Sum Att

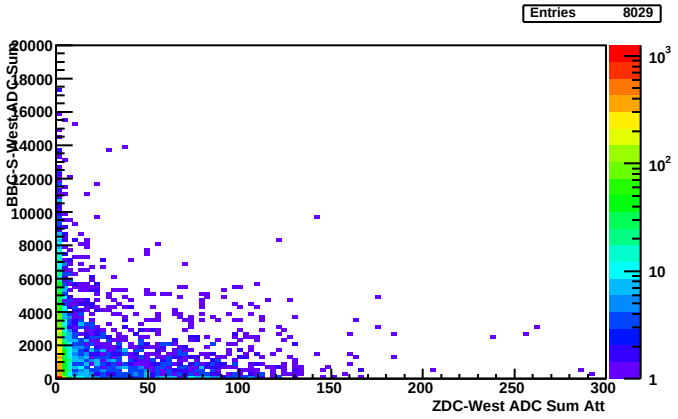

Entries 8029
BBC-L-East ADC Sum
BBC-S-East ADC Sum

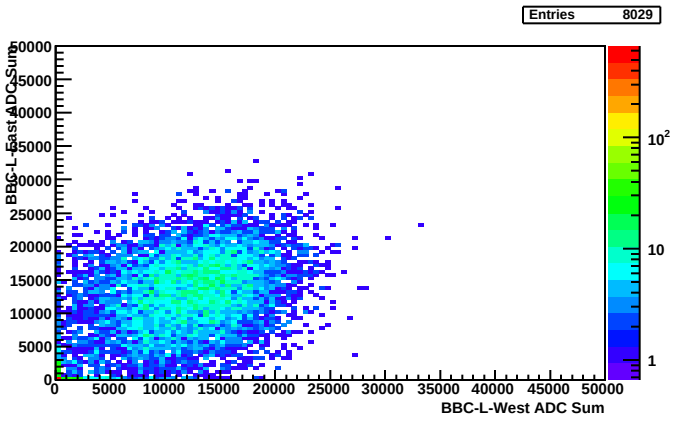

Entries 8029
BBC-L-West ADC Sum
BBC-S-West ADC Sum

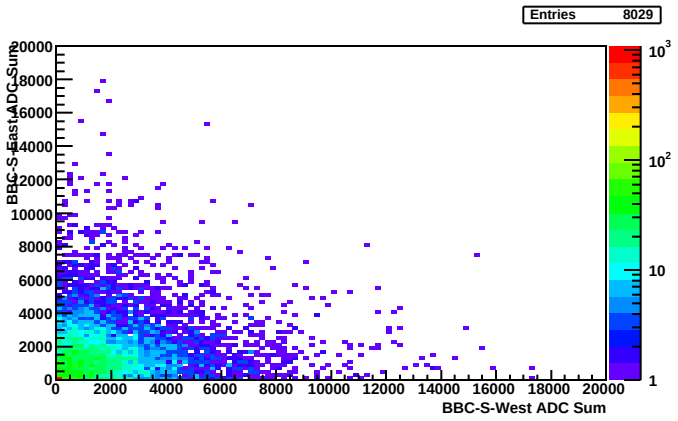

Entries 8029
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

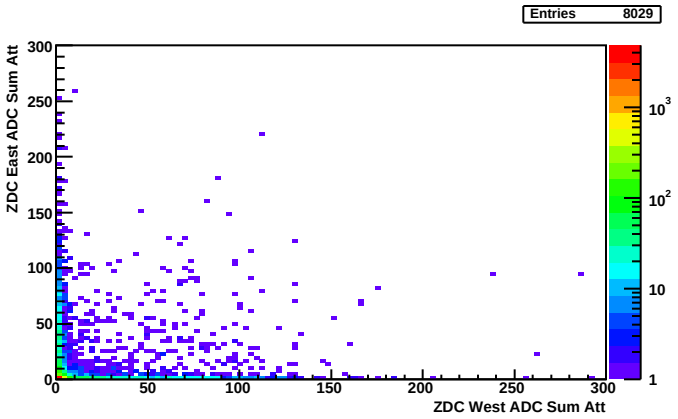

Entries 8029
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

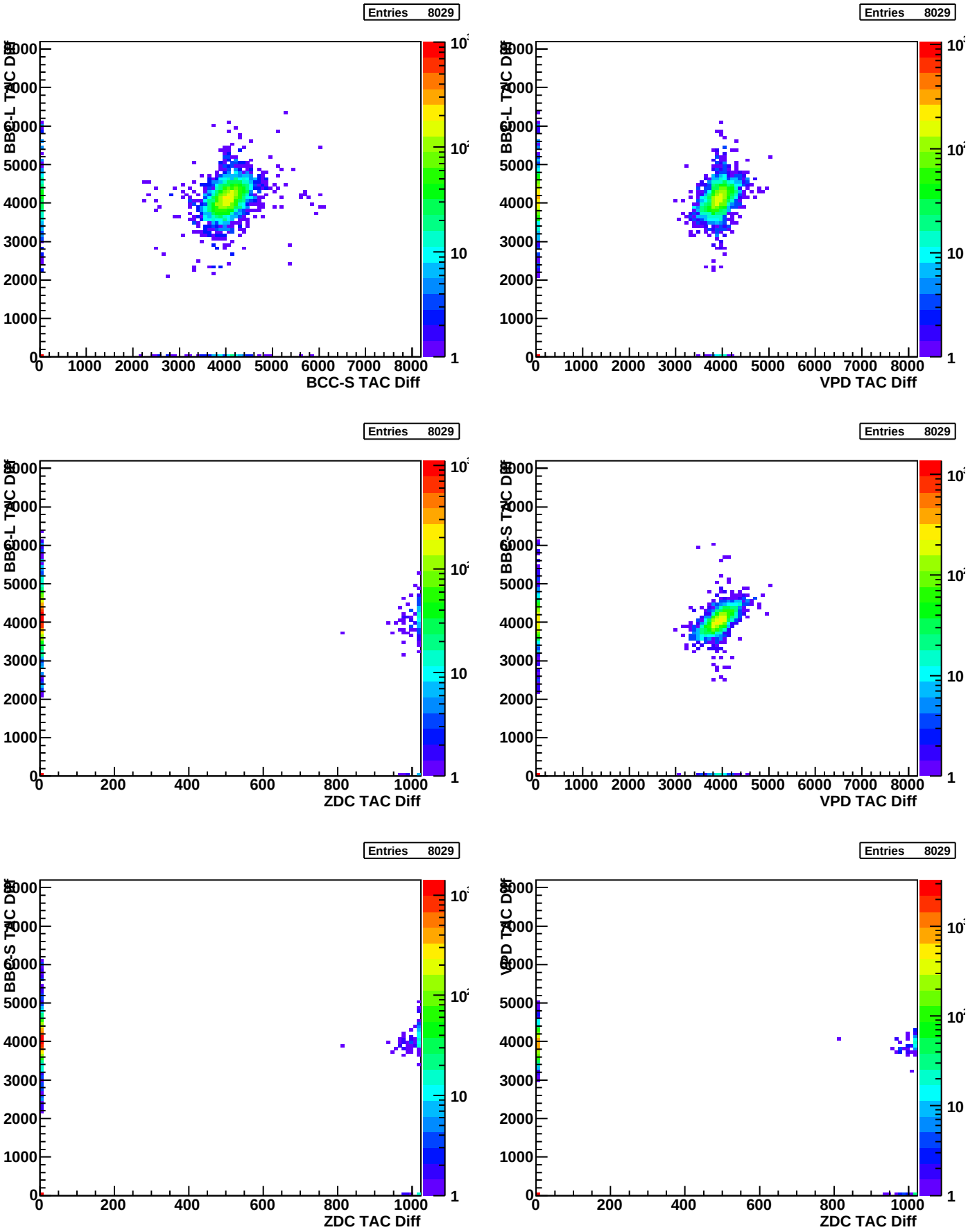

Entries 8029
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

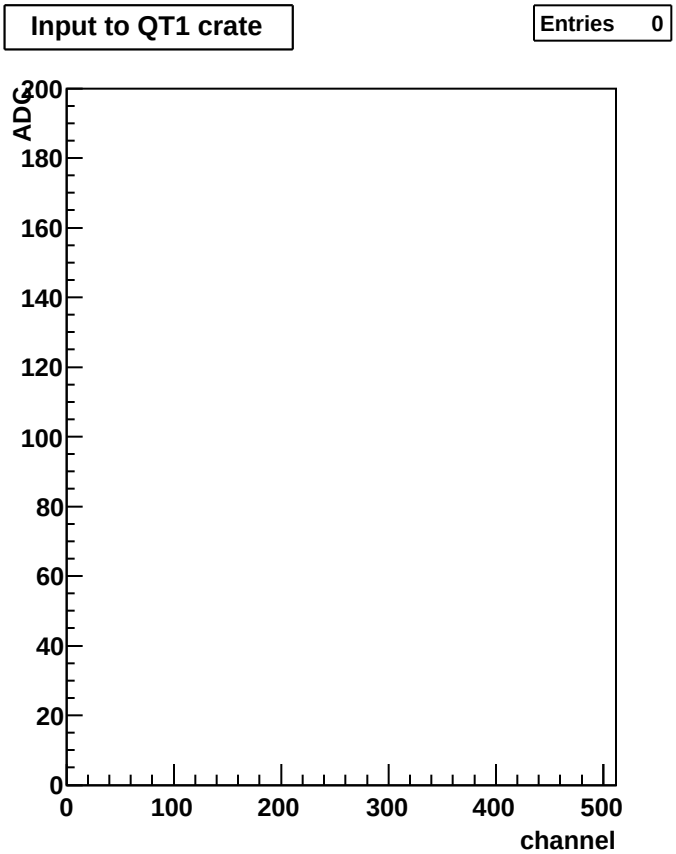

Entries 8029
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

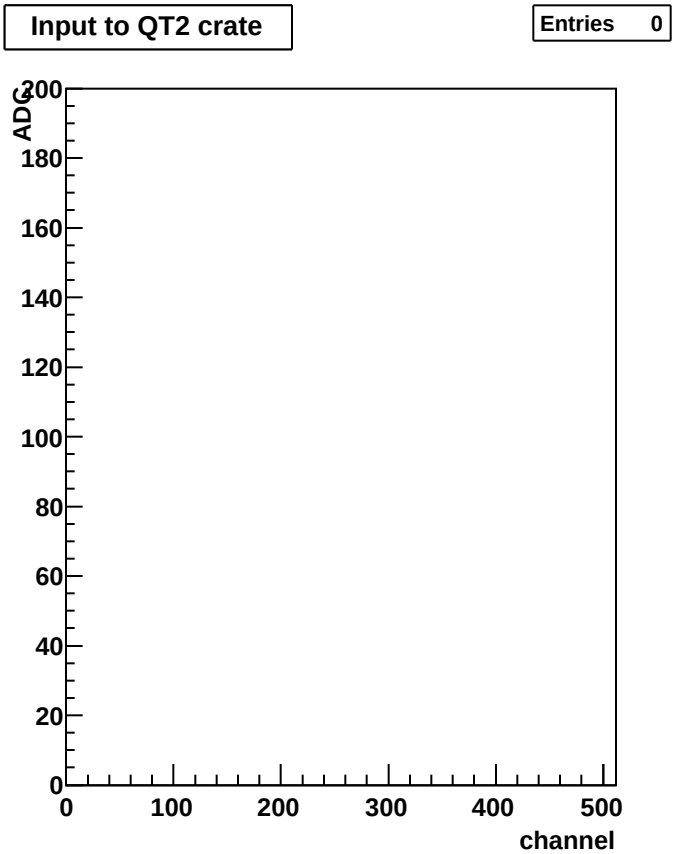

Entries 8029
BBC-L-East ADC Sum
BBC-L-West ADC Sum

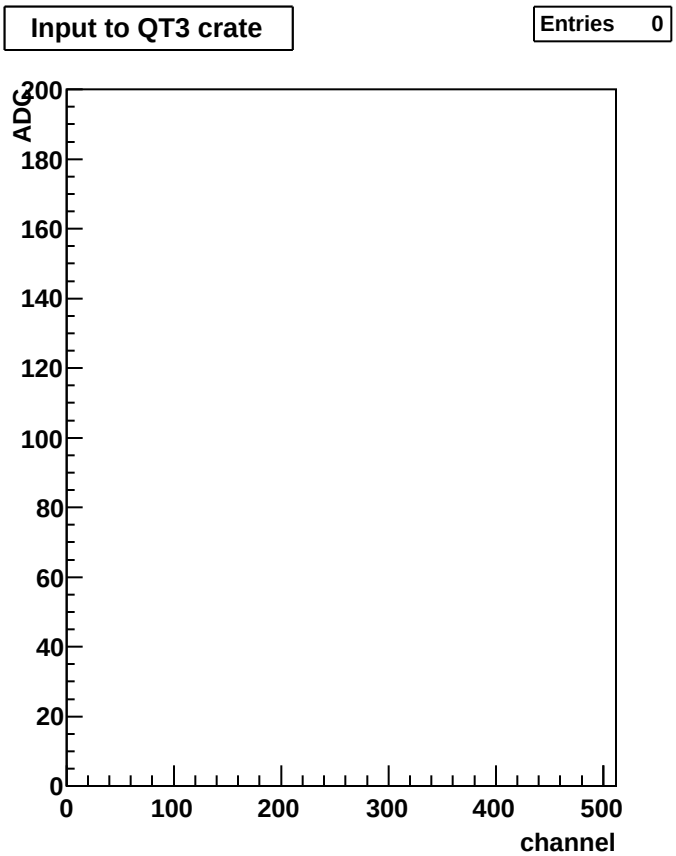

Entries 8029
BBC-S-East ADC Sum
BBC-S-West ADC Sum

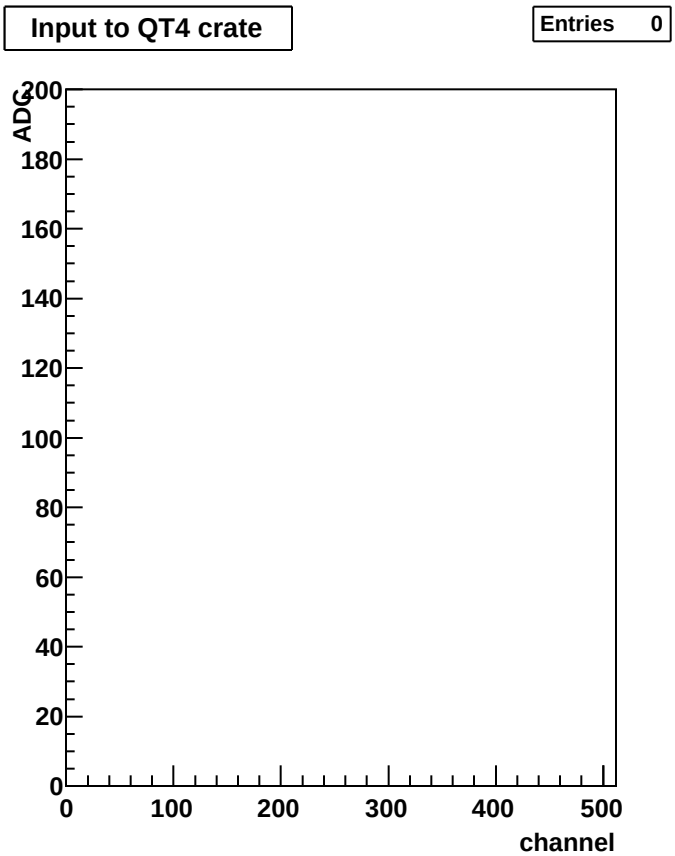

Entries 8029
ZDC East ADC Sum Att
ZDC West ADC Sum Att

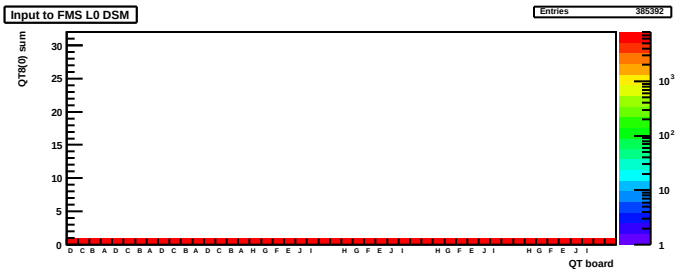

Entries 8029
BBC-L TAC Diff
BCC-S TAC Diff
Entries 8029
BBC-L TAC Diff
VPD TAC Diff
Entries 8029
BBC-L TAC Diff
ZDC TAC Diff
Entries 8029
BBC-S TAC Diff
VPD TAC Diff
Entries 8029
BBC-S TAC Diff
ZDC TAC Diff
Entries 8029
VPD TAC Diff
ZDC TAC Diff

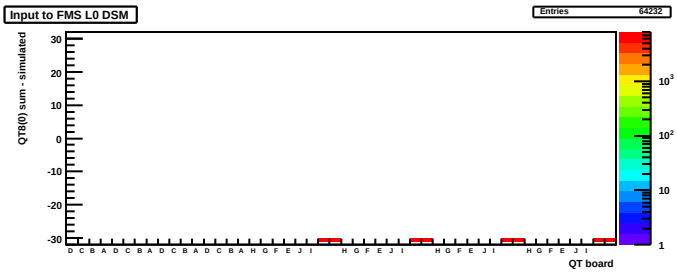

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

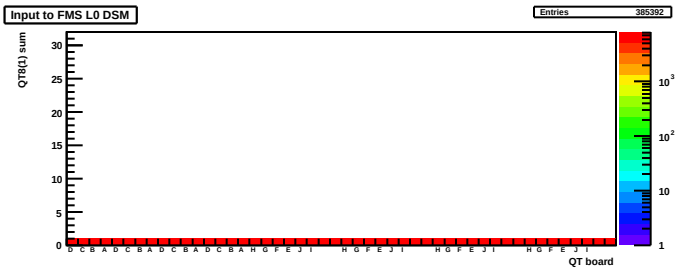

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

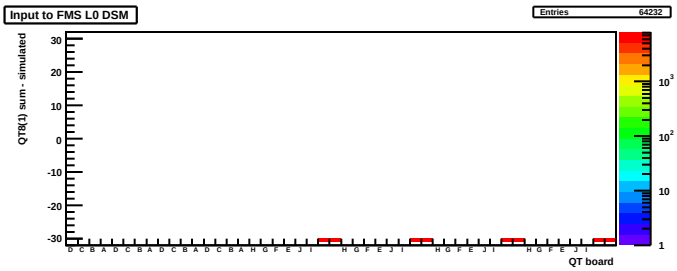

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

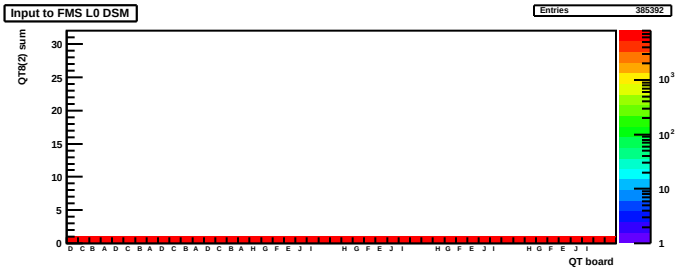

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

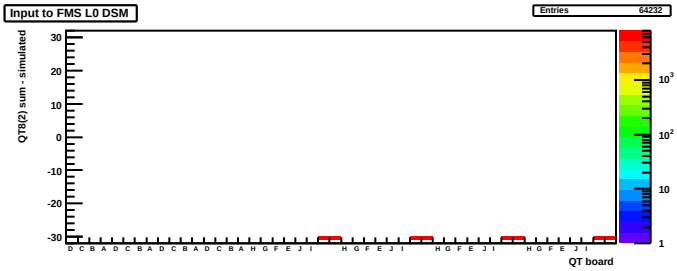

Input to FMS L0 DSM
Entries 385392
QT8(0) sum
QT board

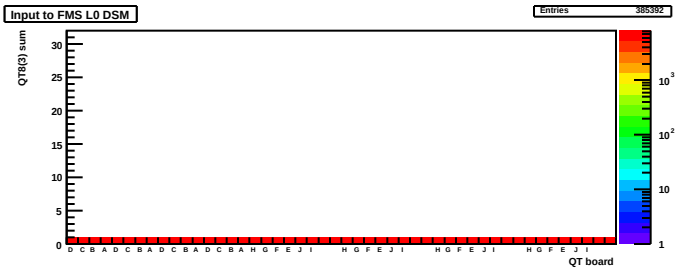

Input to FMS L0 DSM
Entries 64232
QT8(0) sum - simulated
QT board

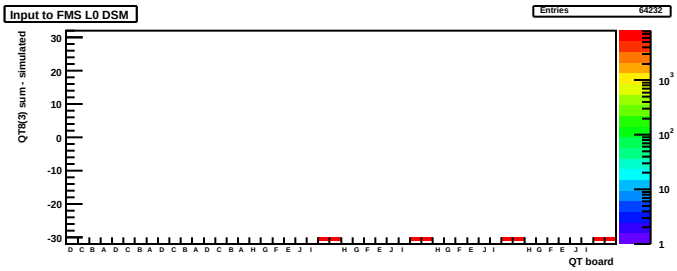

Input to FMS L0 DSM
Entries 385392
QT8(1) sum
QT board

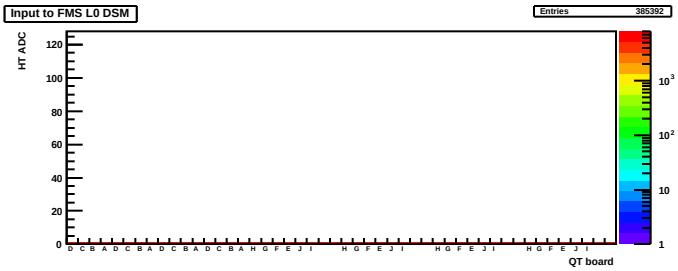

Input to FMS L0 DSM
Entries 64232
QT8(1) sum - simulated
QT board

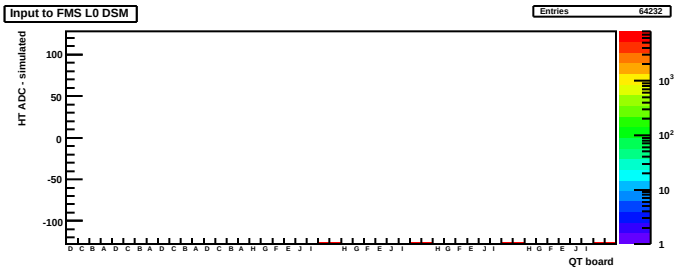

Input to FMS L0 DSM
Entries 385392
QT8(2) sum
QT board

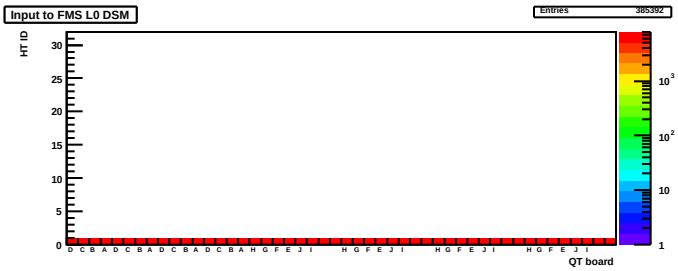

Input to FMS L0 DSM
Entries 64232
QT8(2) sum - simulated
QT board

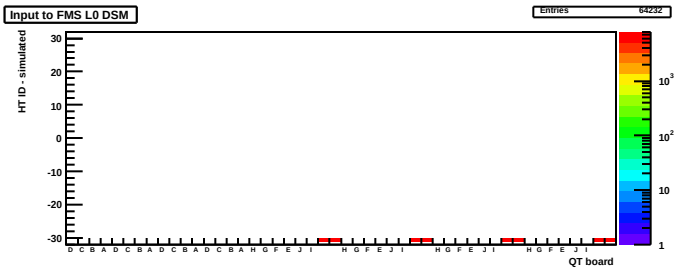

Input to FMS L0 DSM
Entries 385392
QT8(3) sum
QT board

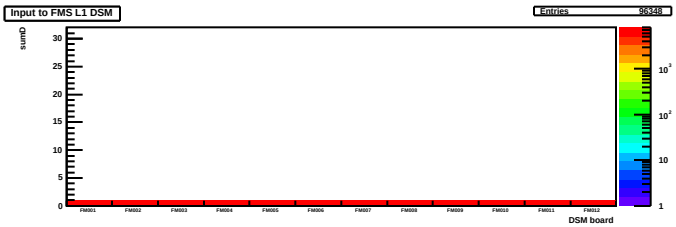

Input to FMS L0 DSM
Entries 64232
QT8(3) sum - simulated
QT board

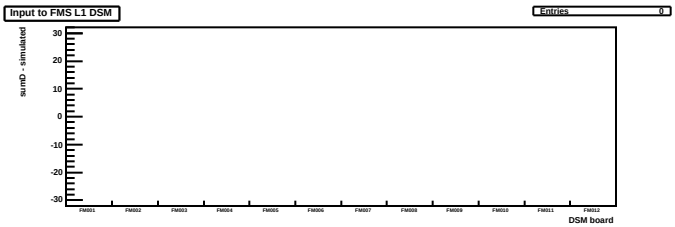

Input to FMS L0 DSM
Entries 385392
HT ADC
QT board

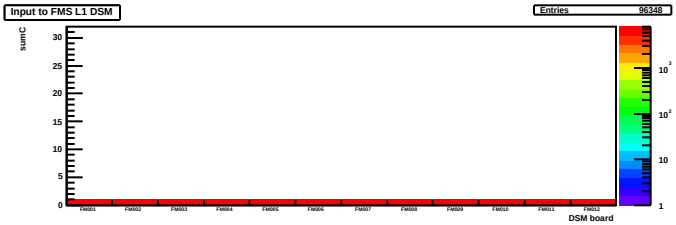

Input to FMS L0 DSM
Entries 64232
HT ADC - simulated
QT board

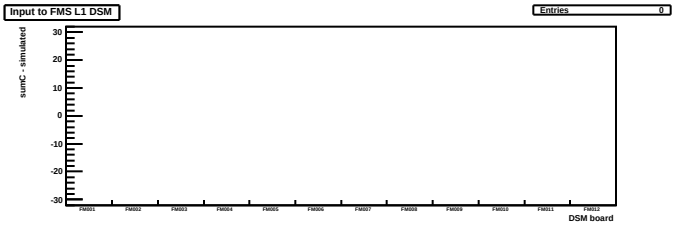

Input to FMS L0 DSM
Entries 385392
HT ID
QT board

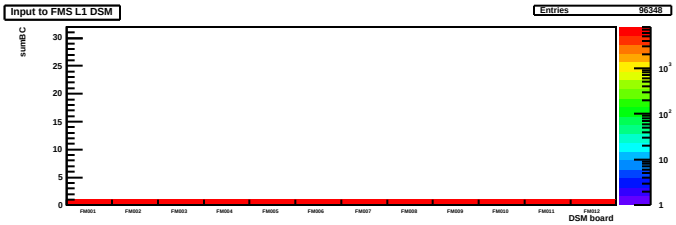

Input to FMS L0 DSM
Entries 64232
HT ID - simulated
QT board

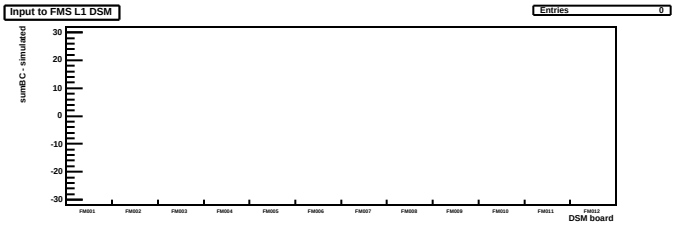

Input to FMS L1 DSM
Entries 96348
sumD
DSM board

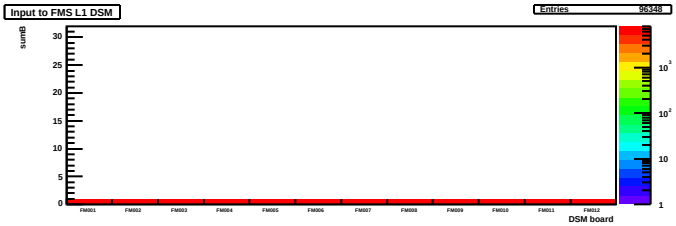

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

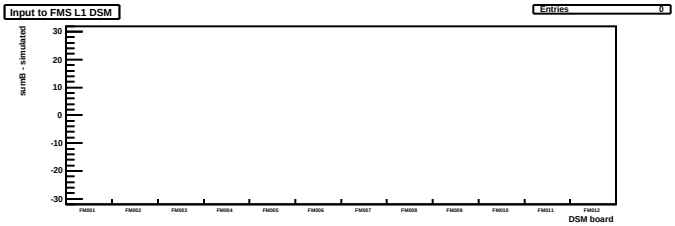

Input to FMS L1 DSM
Entries 96348
sumC
DSM board

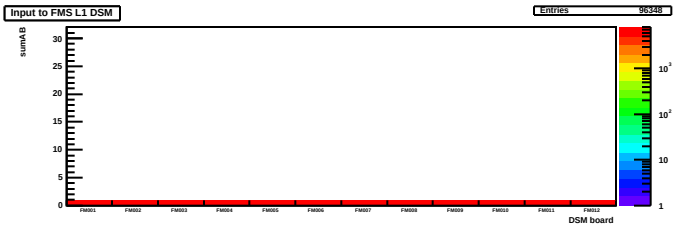

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

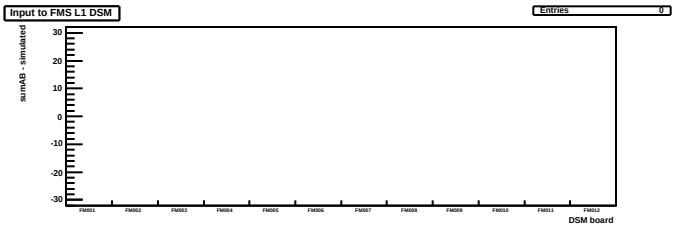

Input to FMS L1 DSM
Entries 96348
sumBC
DSM board

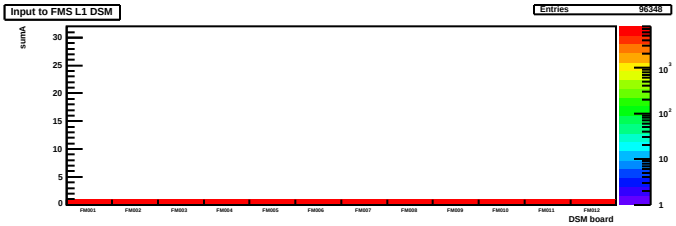

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

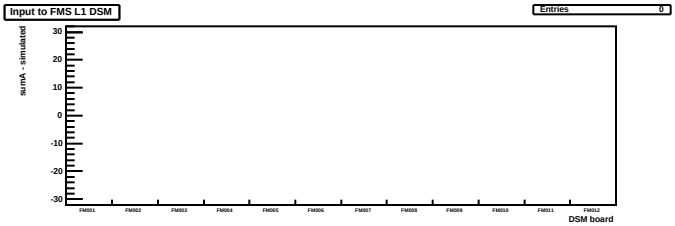

Input to FMS L1 DSM
Entries 96348
sumB
DSM board

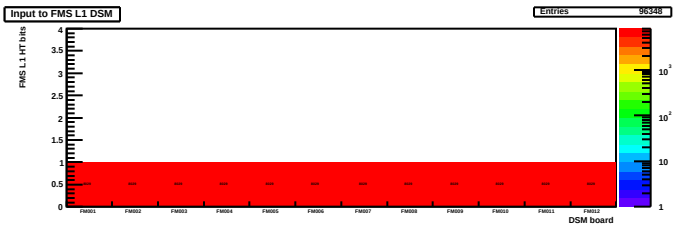

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

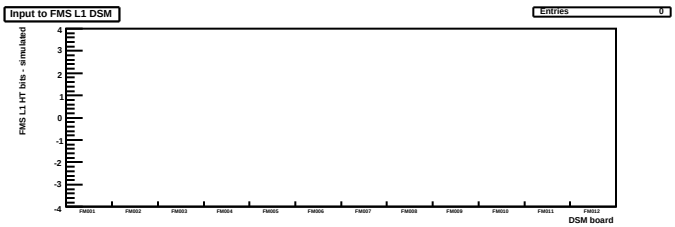

Input to FMS L1 DSM
Entries 96348
sumAB
DSM board

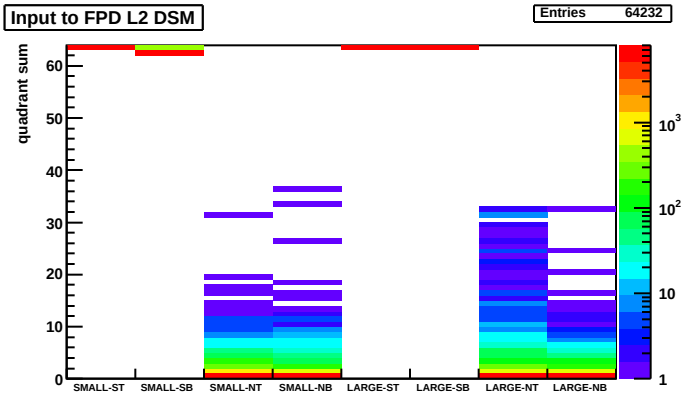

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

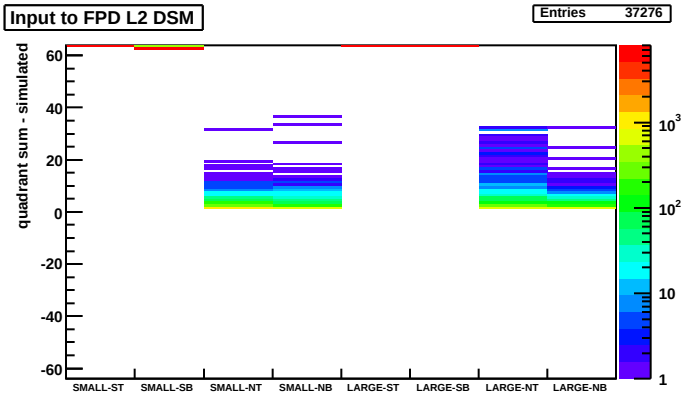

Input to FMS L1 DSM
Entries 96348
sumA
DSM board

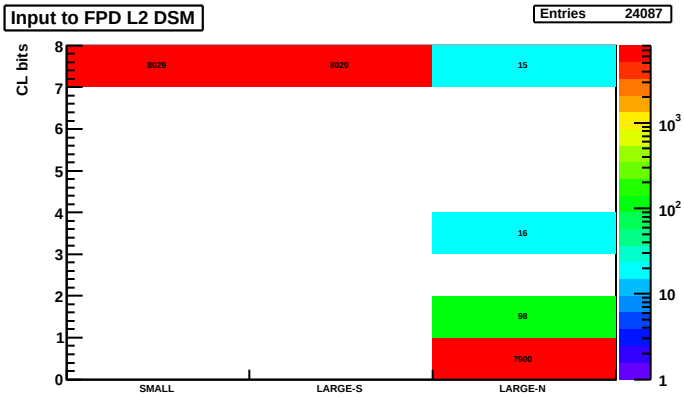

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

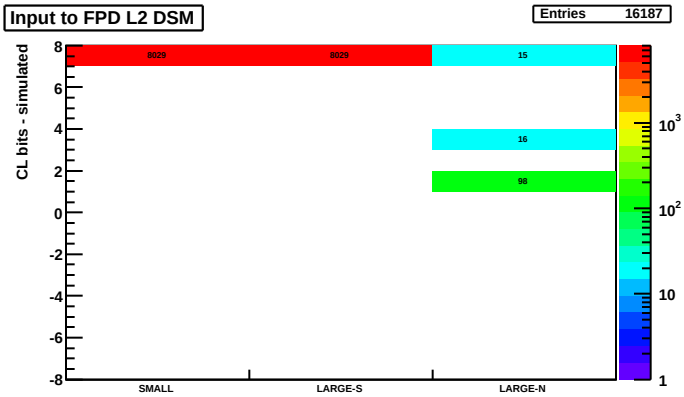

Input to FMS L1 DSM
Entries 96348
FMS L1 HT bits
DSM board

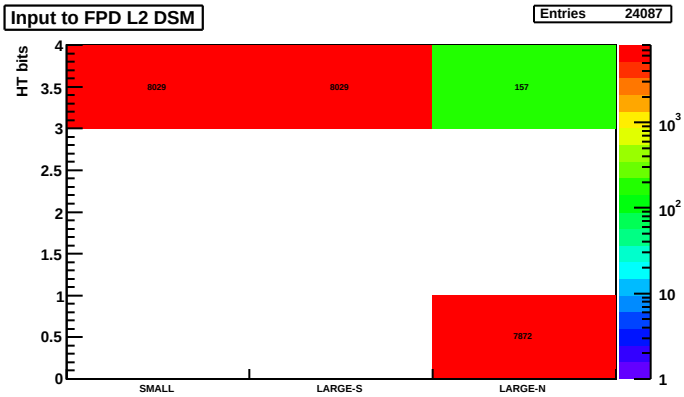

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

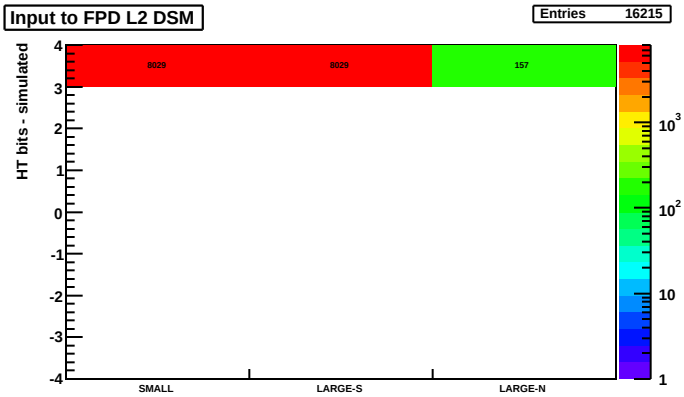

Input to FPD L2 DSM
Entries 64232
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

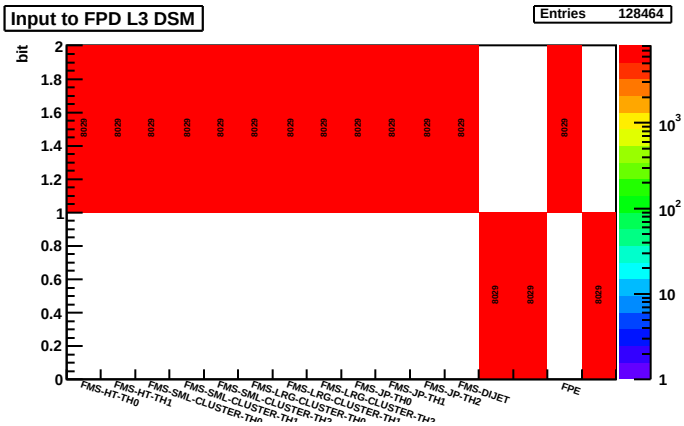

Input to FPD L2 DSM
Entries 37276
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

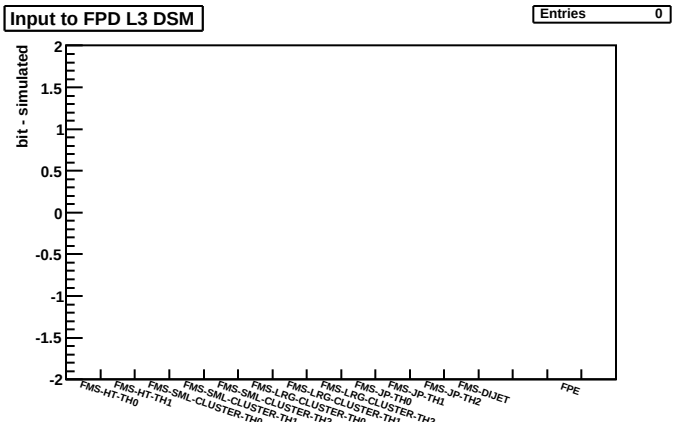

Input to FPD L2 DSM
Entries 24087
CL bits
8029
8029
15
16
98
7900
SMALL
LARGE-S
LARGE-N

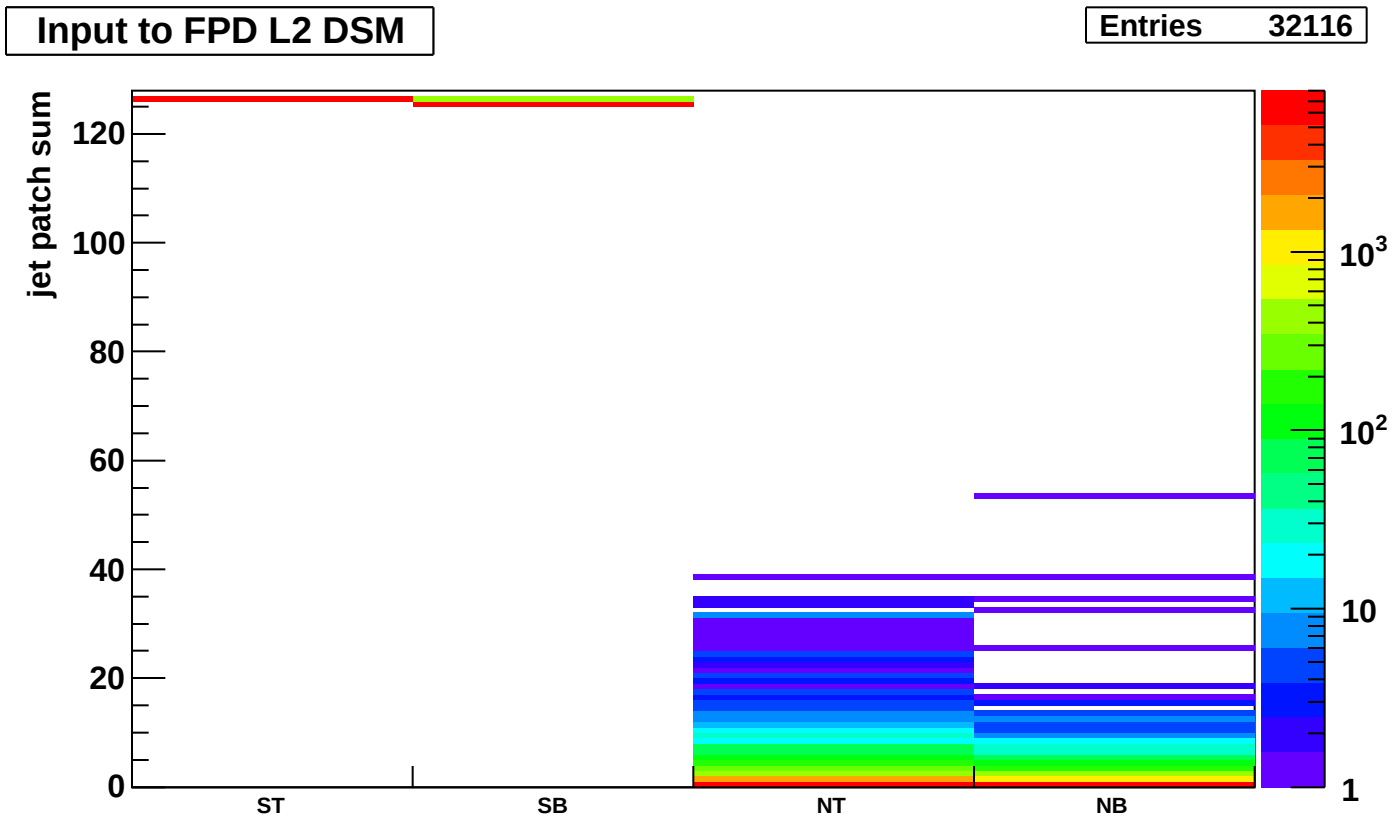

Input to FPD L2 DSM
Entries 16187
CL bits - simulated
8029
8029
15
16
98
SMALL
LARGE-S
LARGE-N

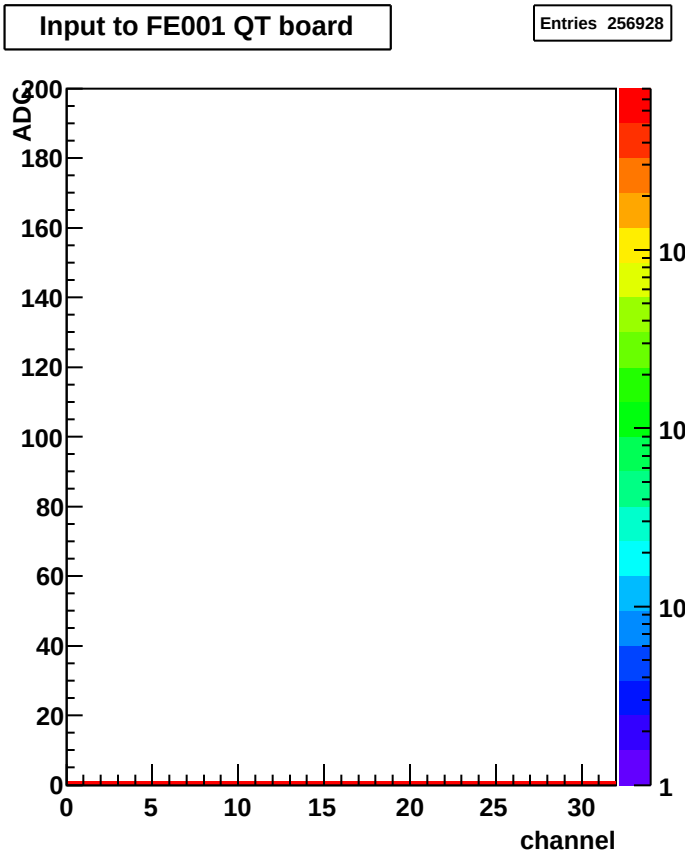

Input to FPD L2 DSM
Entries 24087
HT bits
8029
8029
157
7872
SMALL
LARGE-S
LARGE-N

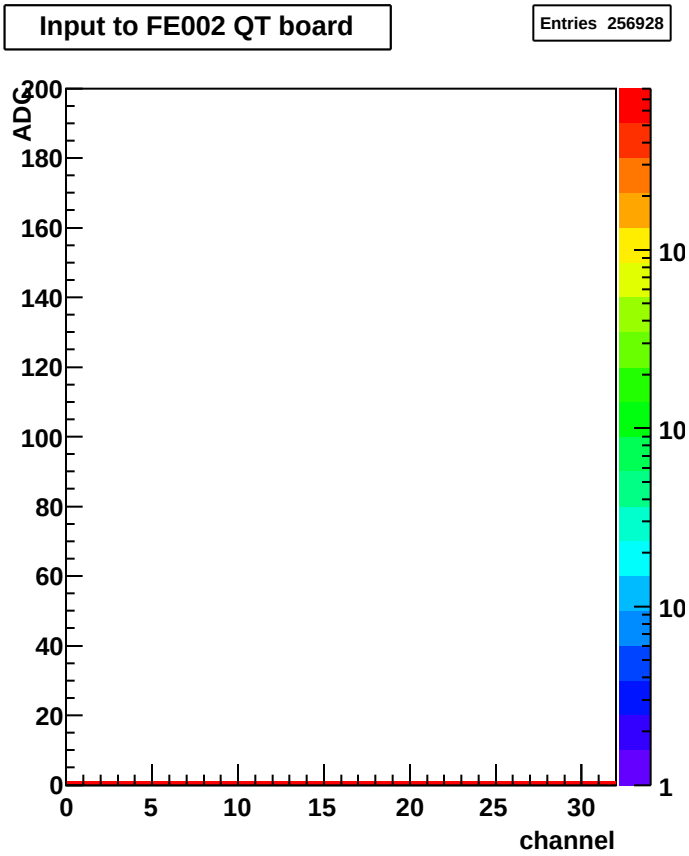

Input to FPD L2 DSM
Entries 16215
HT bits - simulated
8029
8029
157
SMALL
LARGE-S
LARGE-N

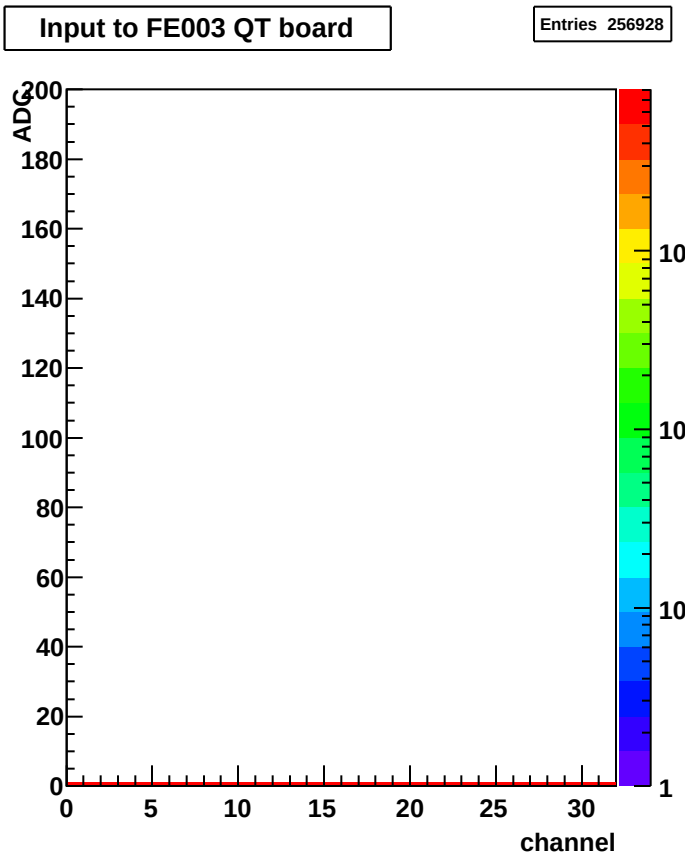

Input to FPD L3 DSM
Entries 128464
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

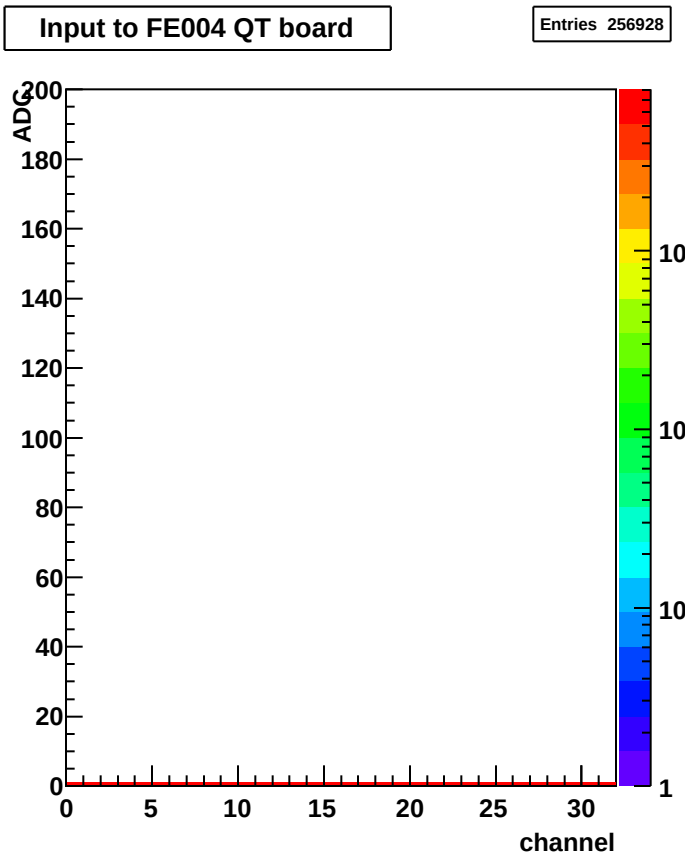

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

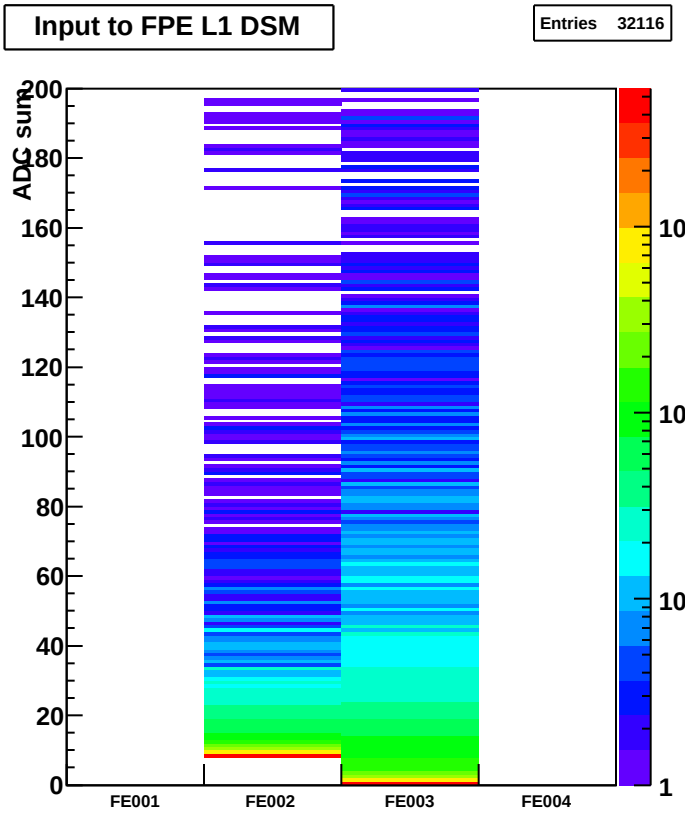

Input to FPD L2 DSM
Entries 32116
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^3
10^2
10
1

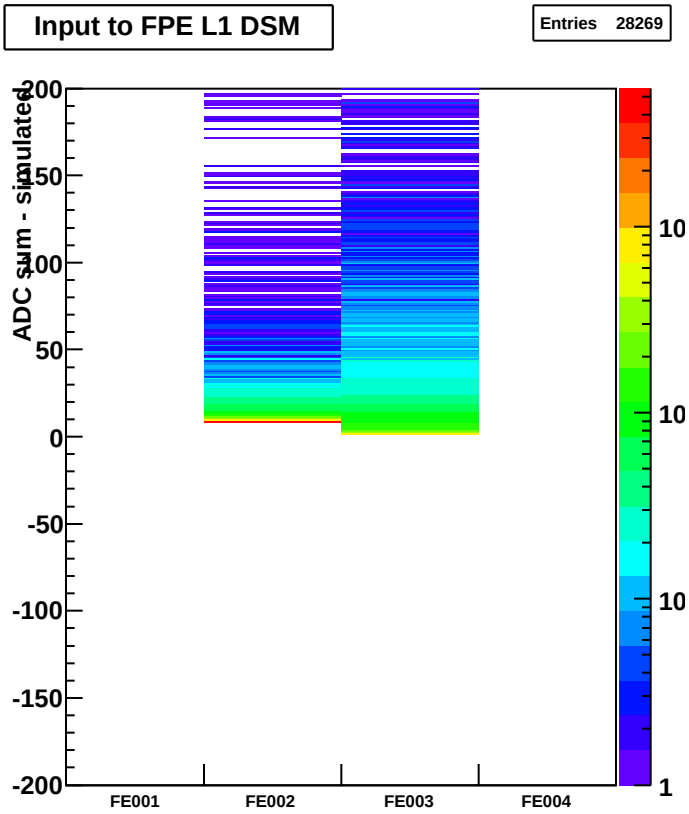

Input to FE001 QT board
Entries 256928
ADC
channel

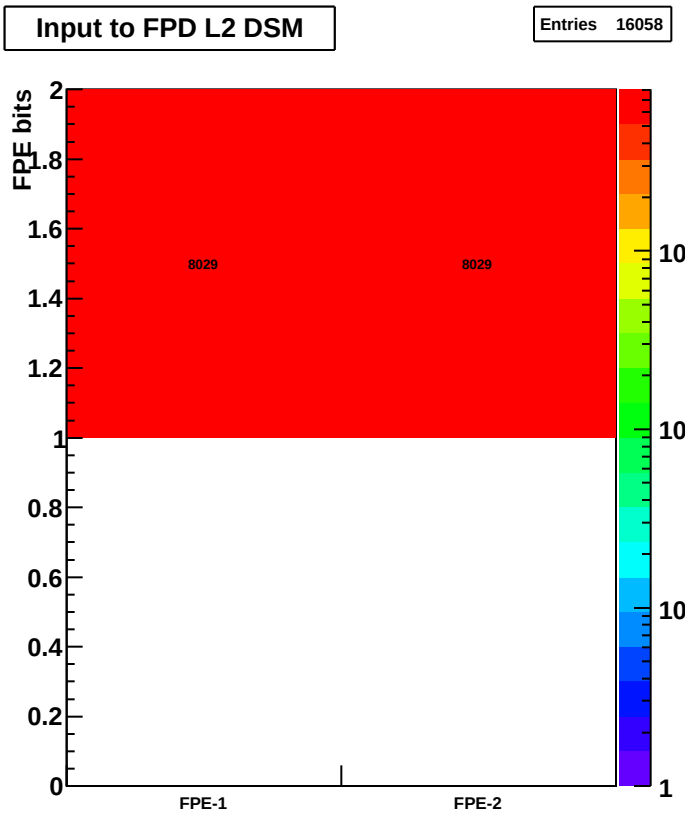

Input to FE002 QT board
Entries 256928
ADC
channel

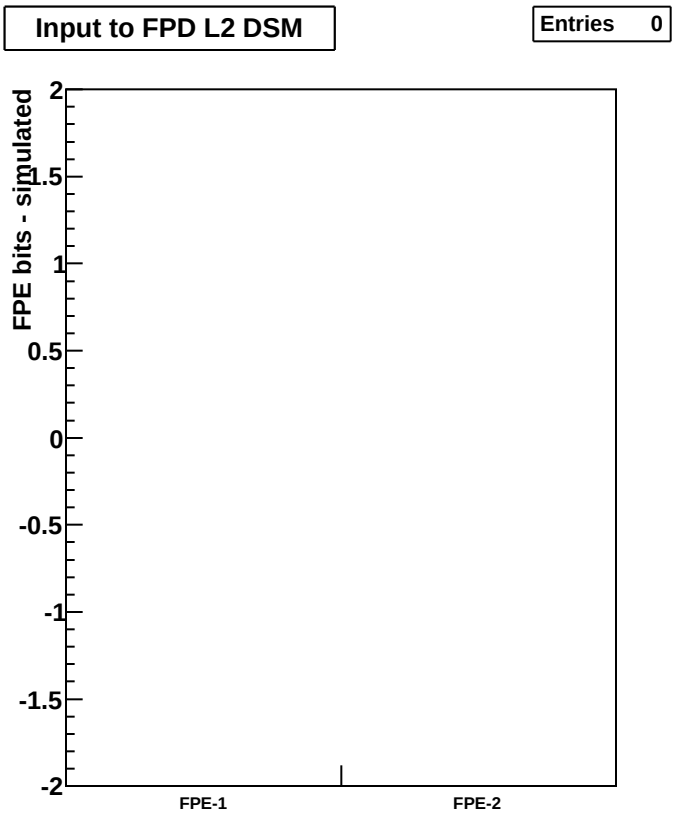

Input to FE003 QT board
Entries 256928
ADC
channel


Input to FE004 QT board
Entries 256928
ADC
channel


Input to FPE L1 DSM
Entries 32116
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 28269
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 16058
FPE bits
8029
8029
FPE-1
FPE-2


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
FPE-1
FPE-2