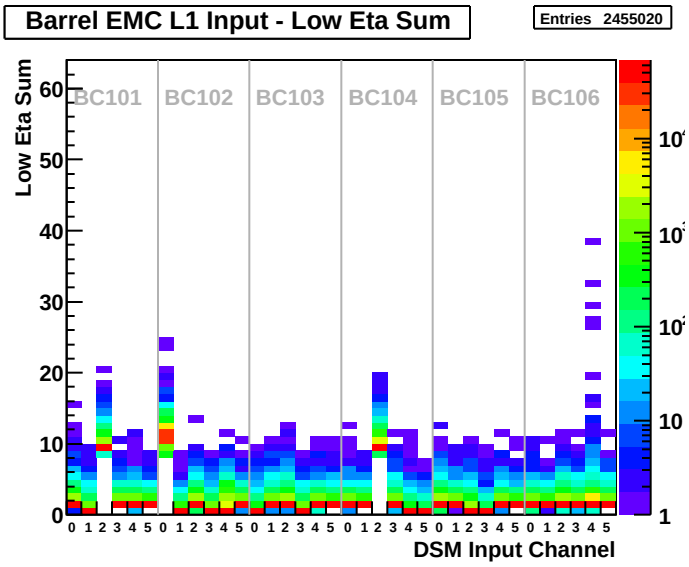
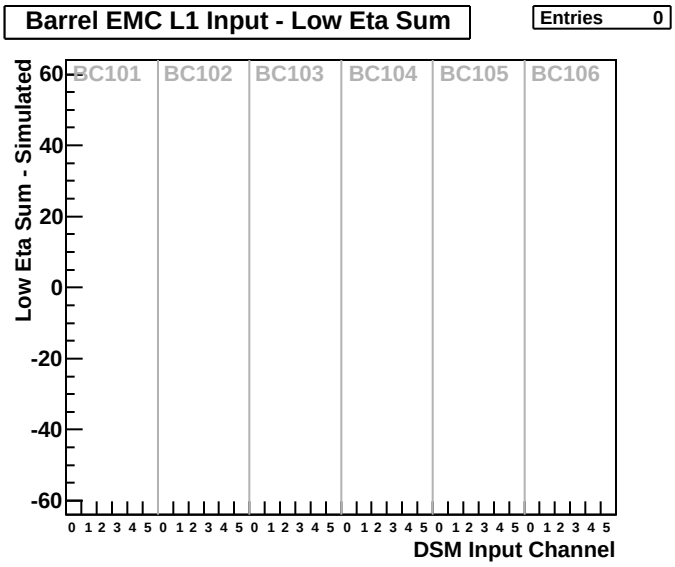
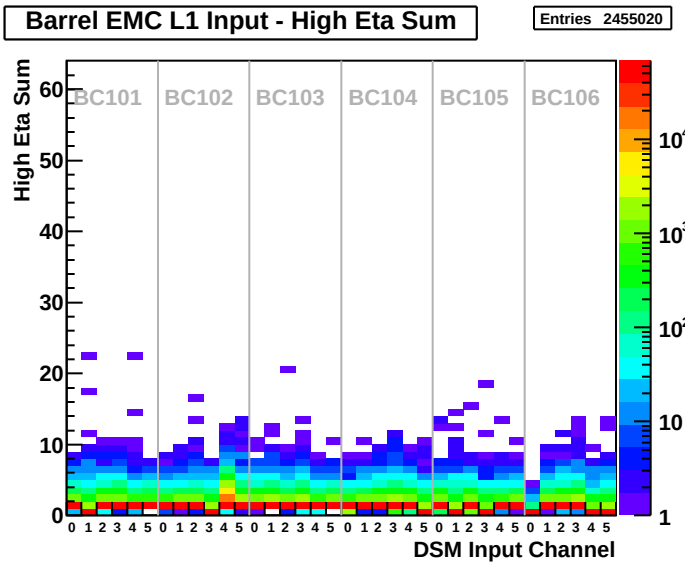
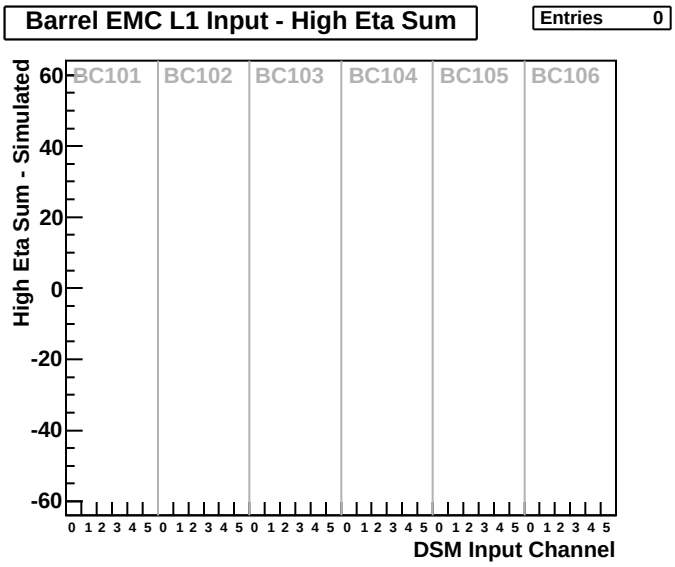
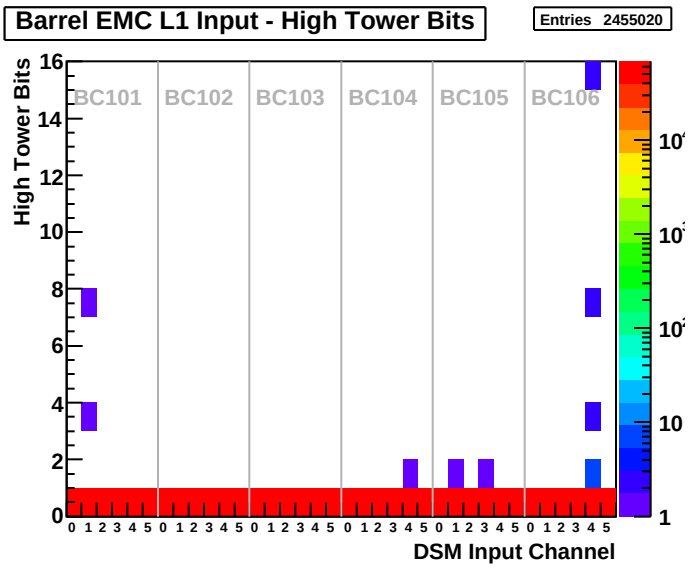
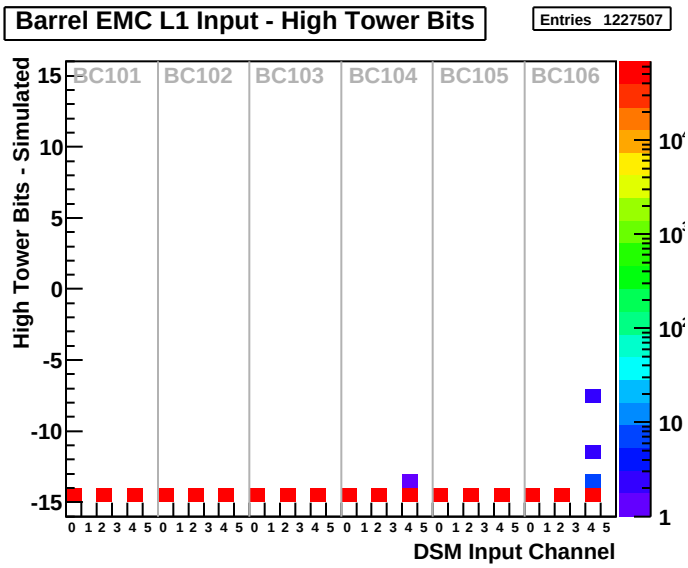

Barrel EMC L1 Input - Low Eta Sum
Entries 2455020
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

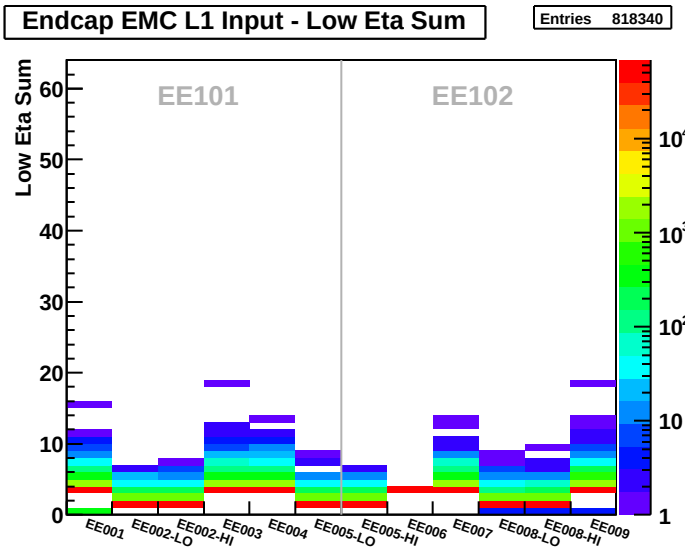

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

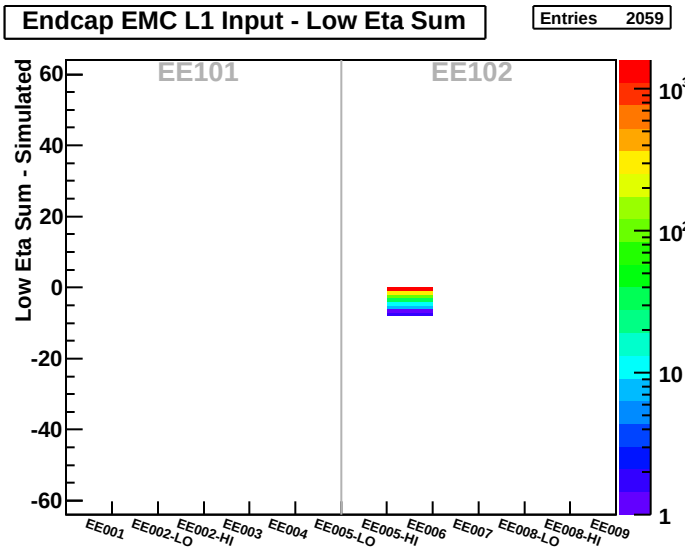

Barrel EMC L1 Input - High Eta Sum
Entries 2455020
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

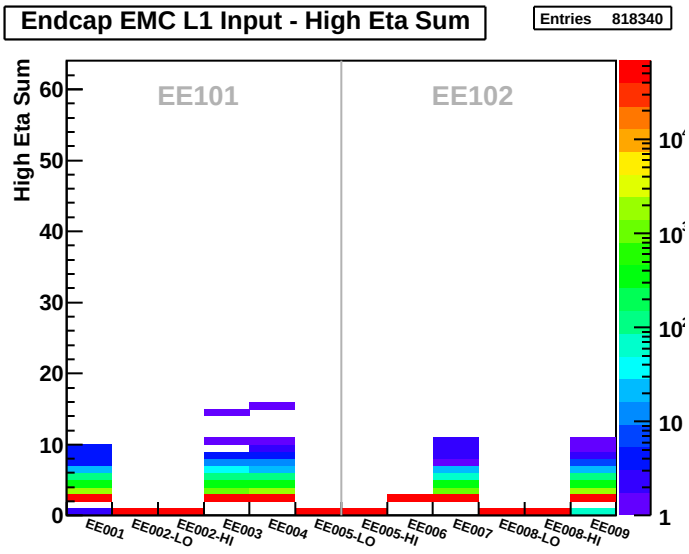

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

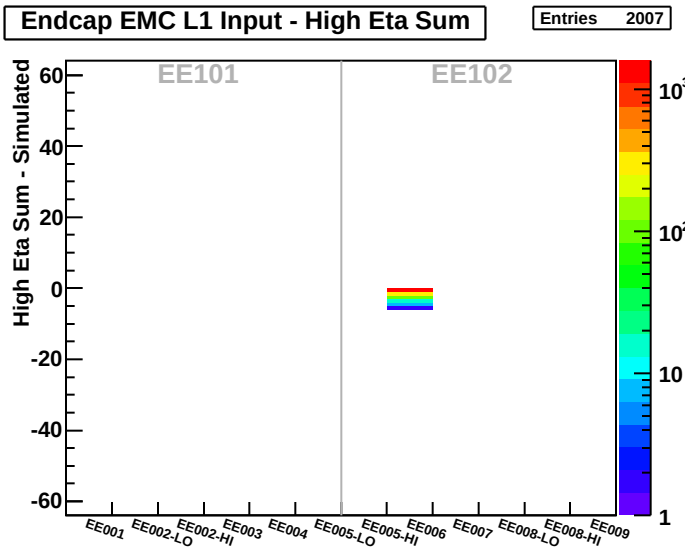

Barrel EMC L1 Input - High Tower Bits
Entries 2455020
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

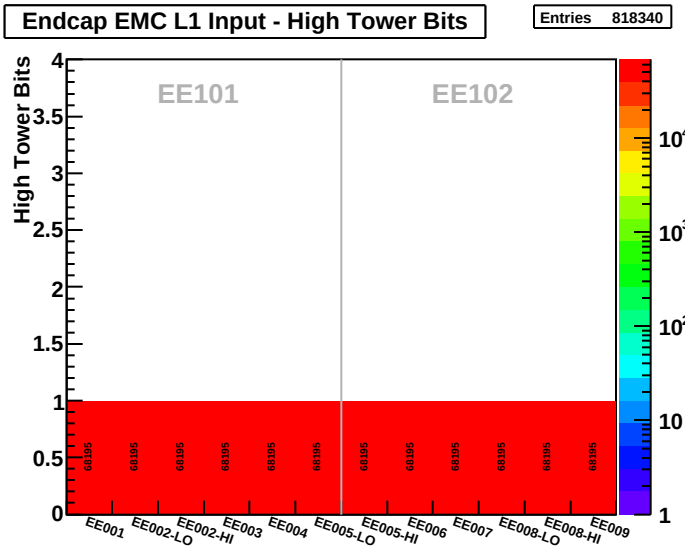

Barrel EMC L1 Input - High Tower Bits
Entries 1227507
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

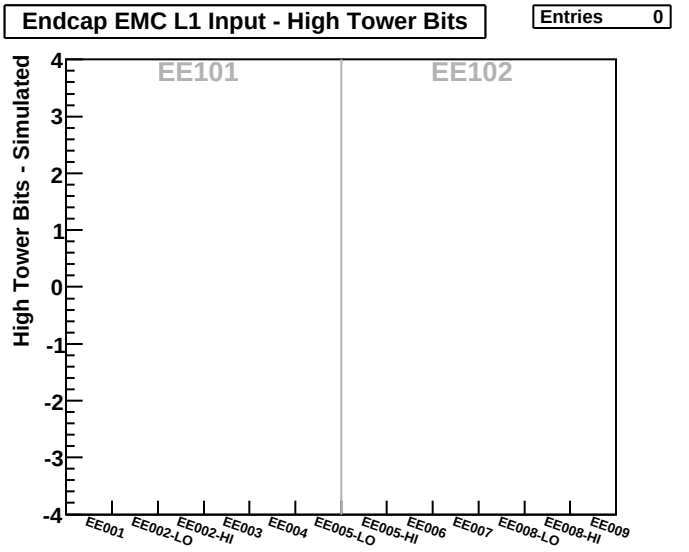

Endcap EMC L1 Input - Low Eta Sum
Entries 818340
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

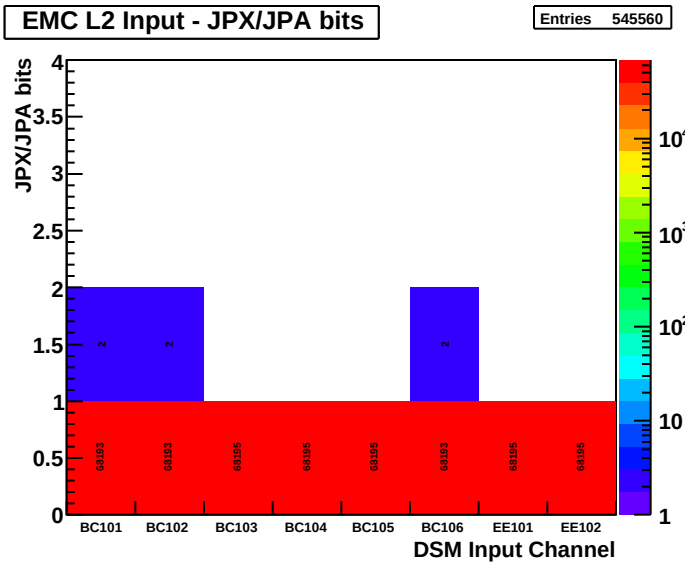

Endcap EMC L1 Input - Low Eta Sum
Entries 2059
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

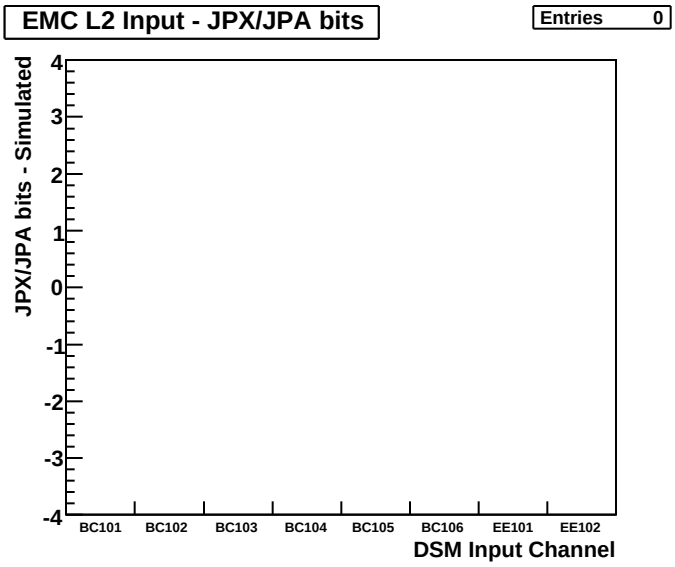

Endcap EMC L1 Input - High Eta Sum
Entries 818340
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

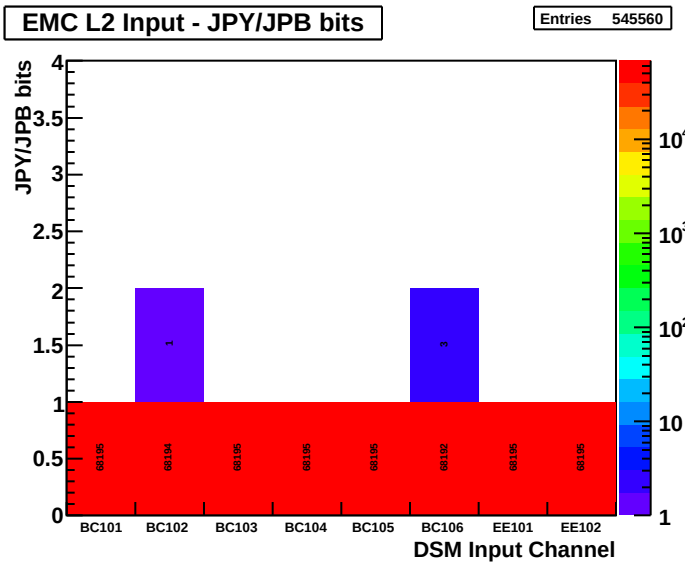

Endcap EMC L1 Input - High Eta Sum
Entries 2007
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

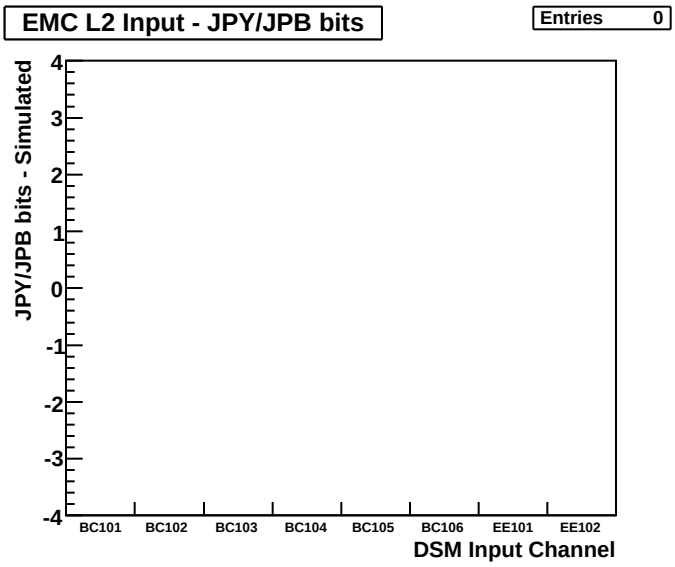

Endcap EMC L1 Input - High Tower Bits
Entries 818340
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

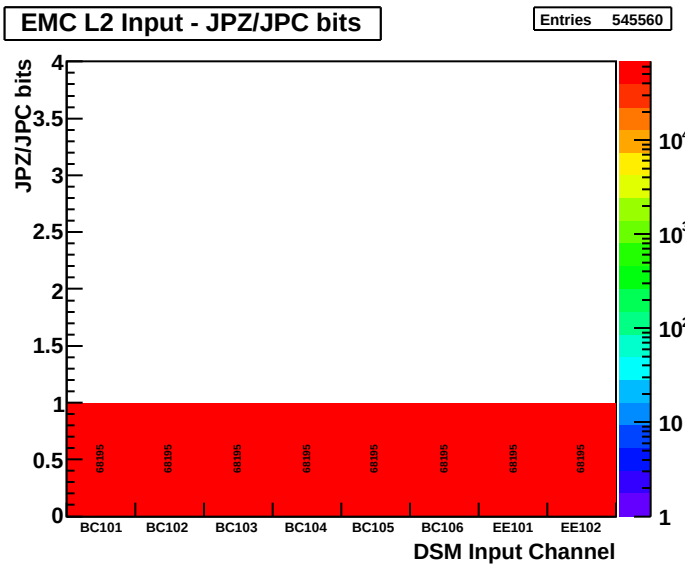

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

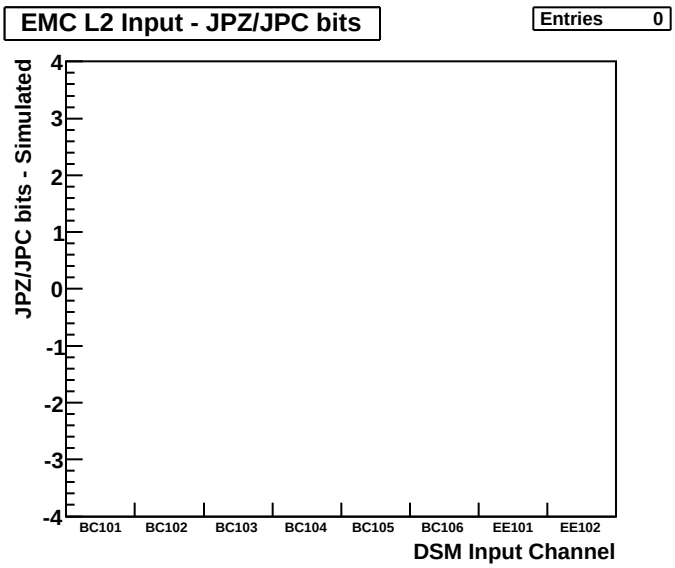

EMC L2 Input - JPX/JPA bits
Entries 545560
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

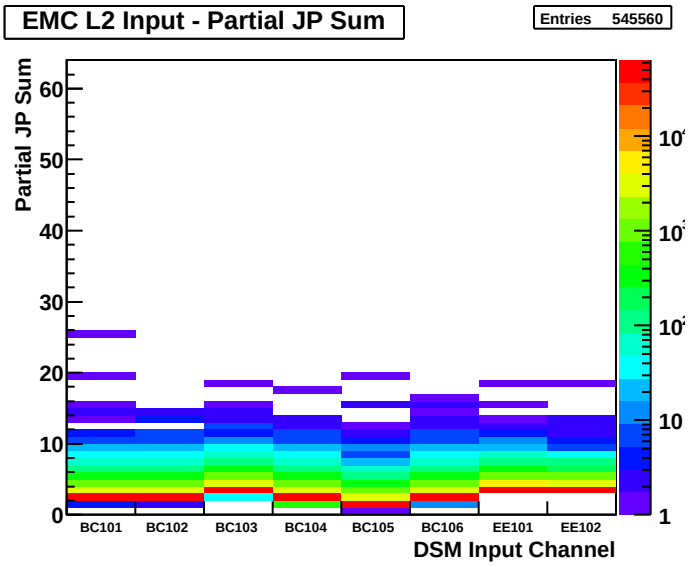

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

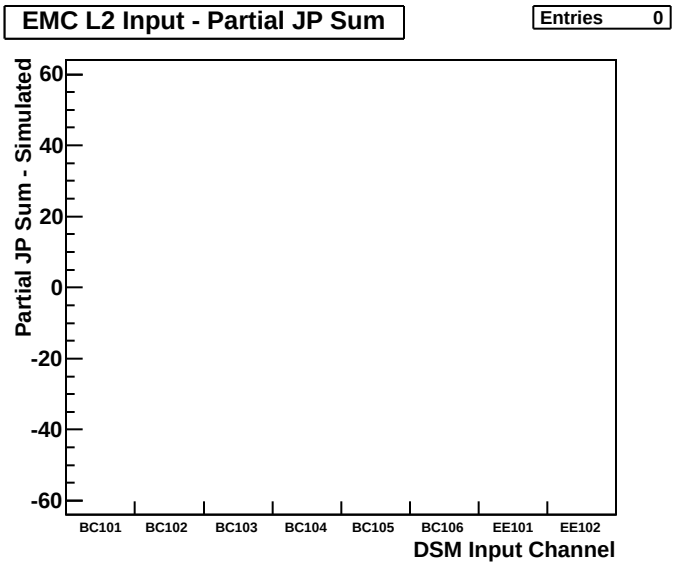

EMC L2 Input - JPY/JPB bits
Entries 545560
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

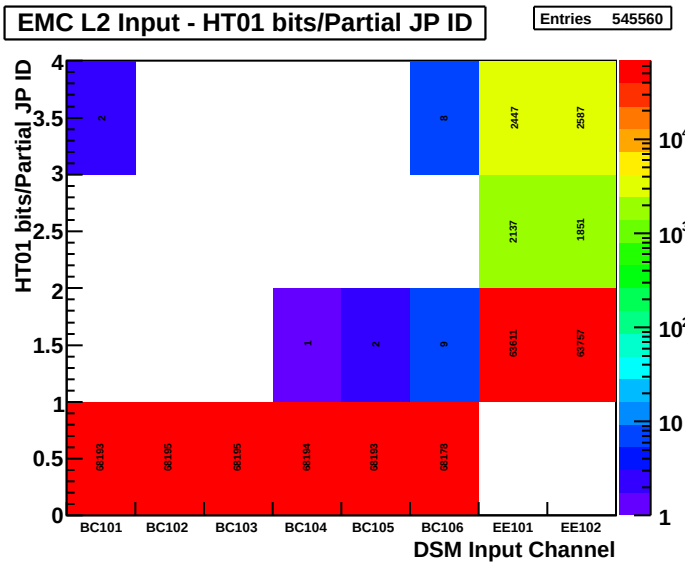

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

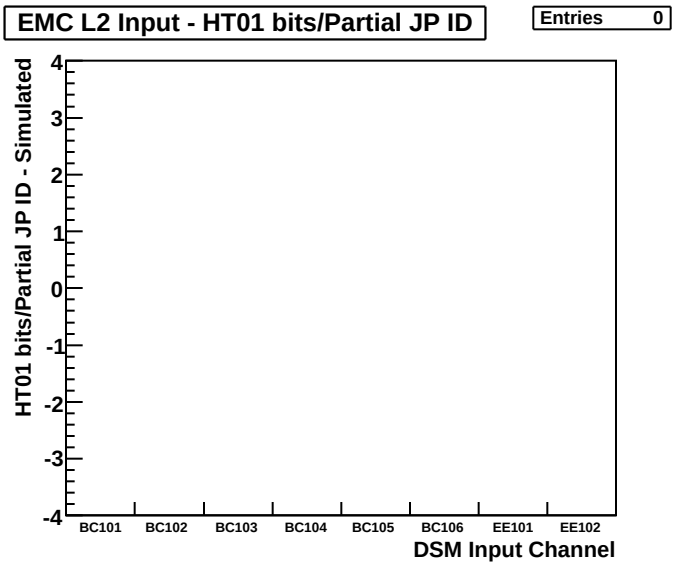

EMC L2 Input - JPZ/JPC bits
Entries 545560
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

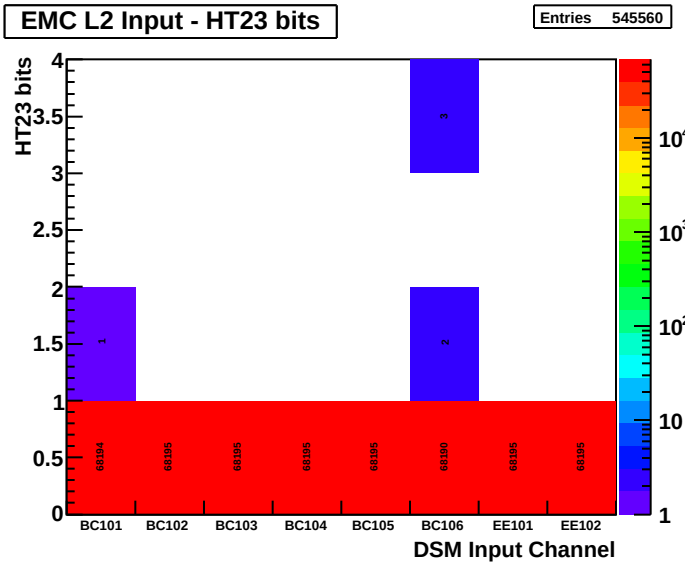

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

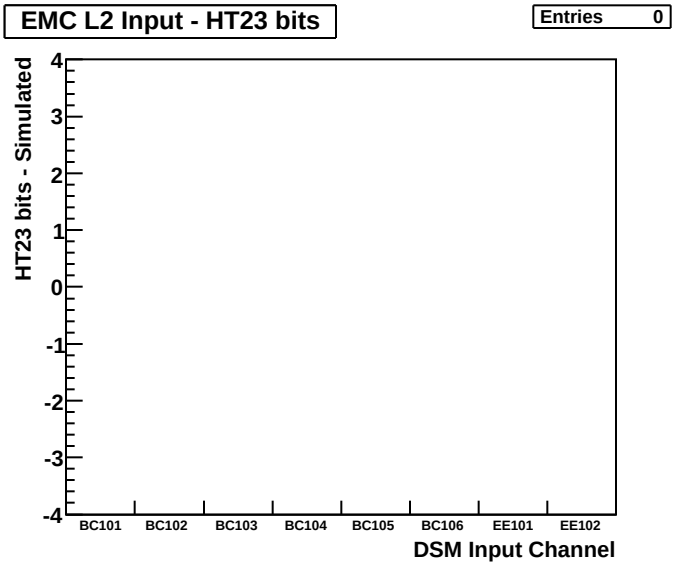

EMC L2 Input - Partial JP Sum
Entries 545560
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

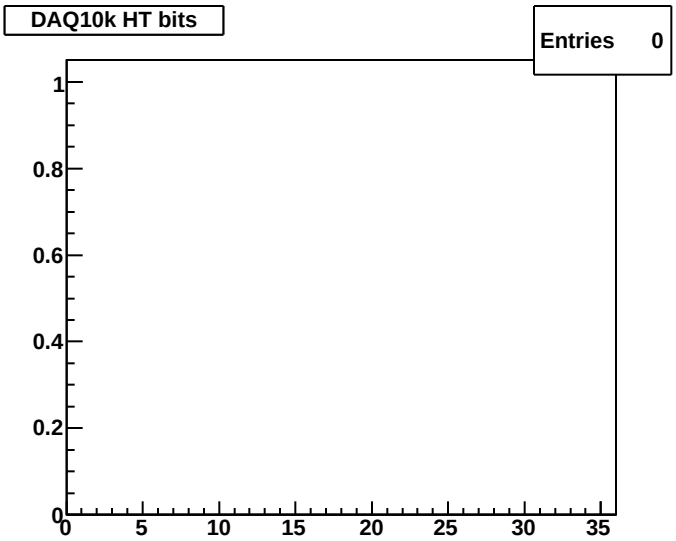

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

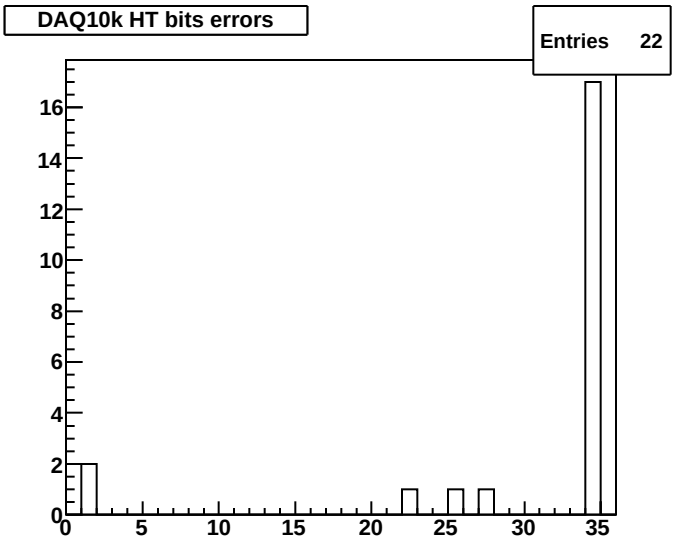

EMC L2 Input - HT01 bits/Partial JP ID
Entries 545560
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

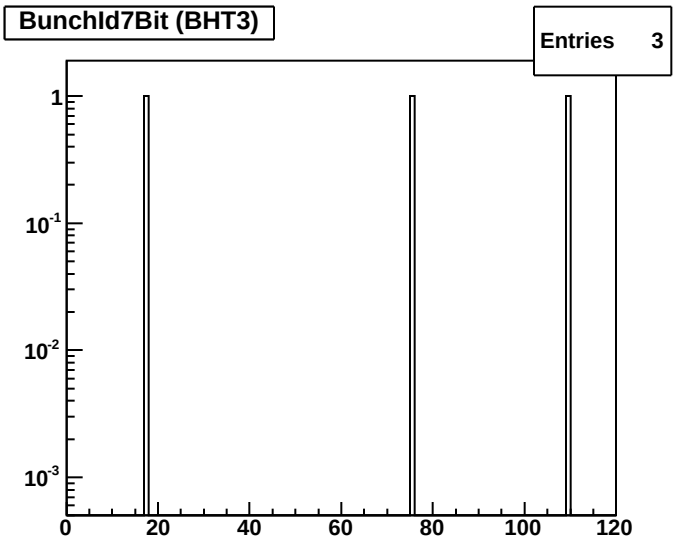

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

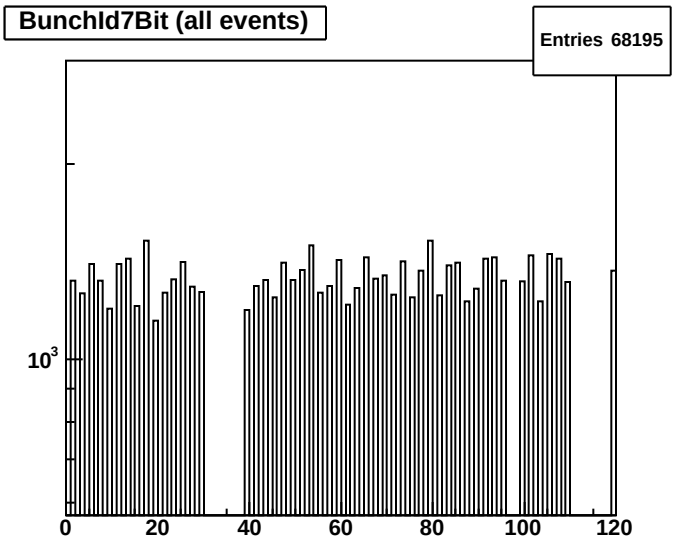

EMC L2 Input - HT23 bits
Entries 545560
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

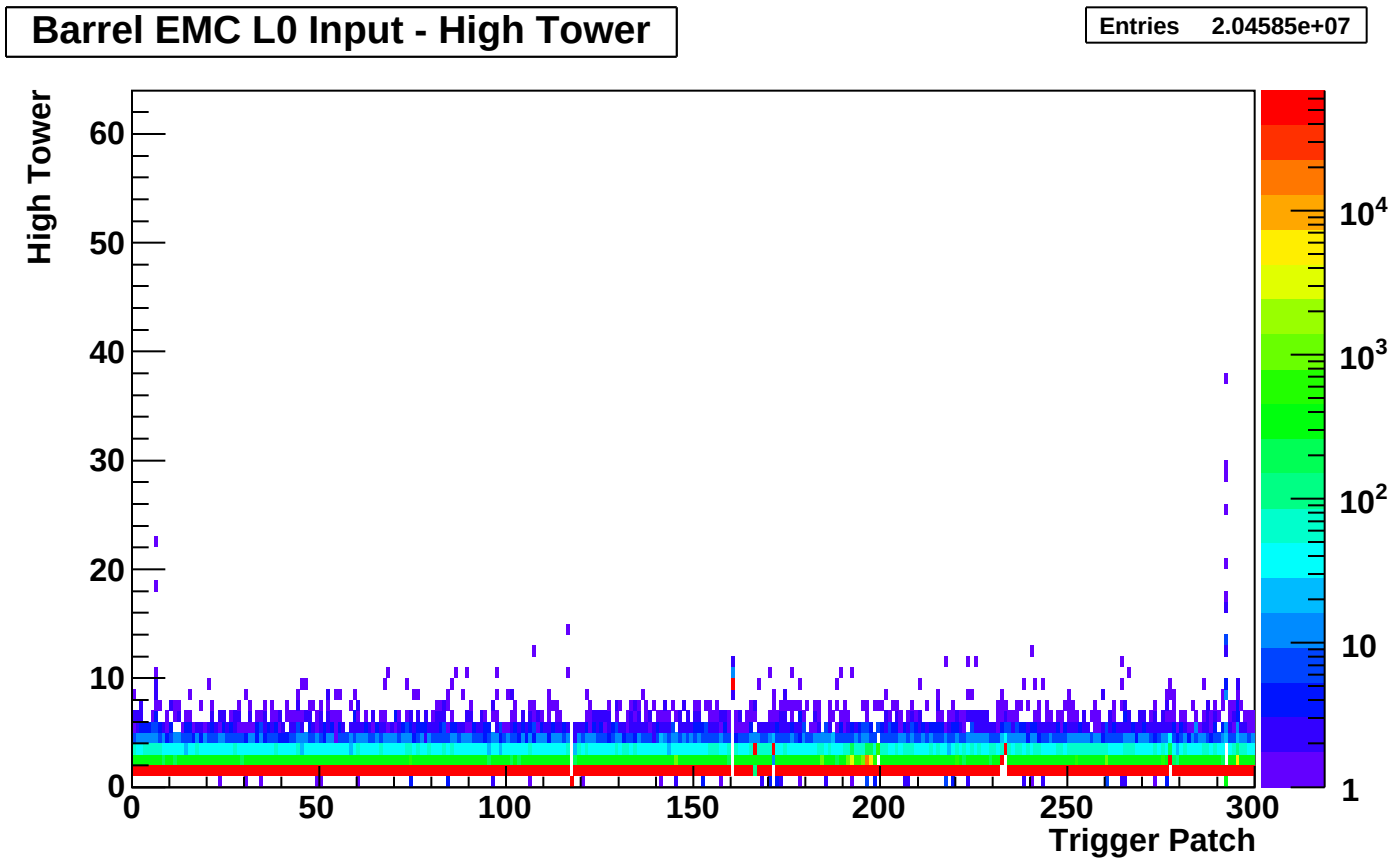

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

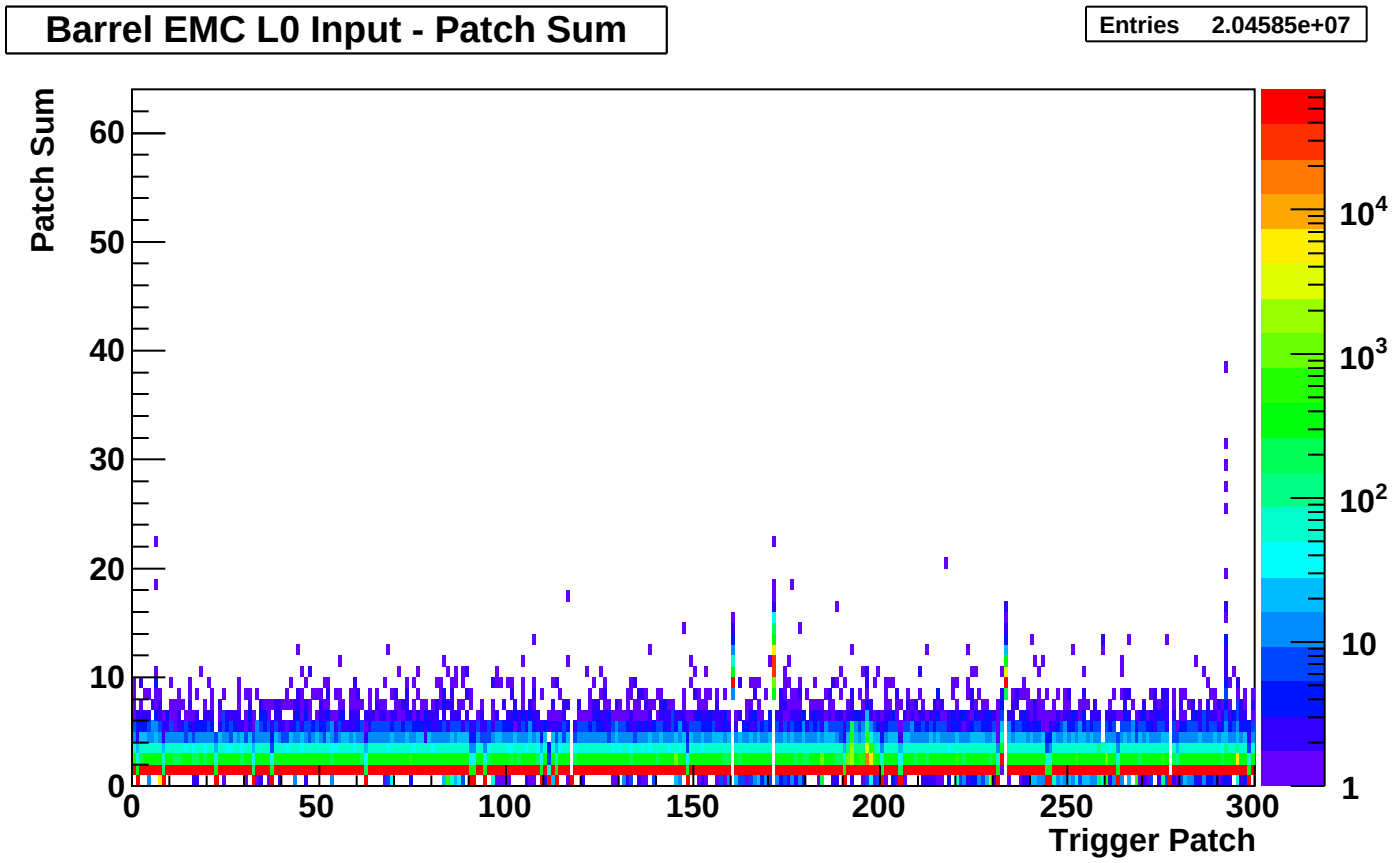

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

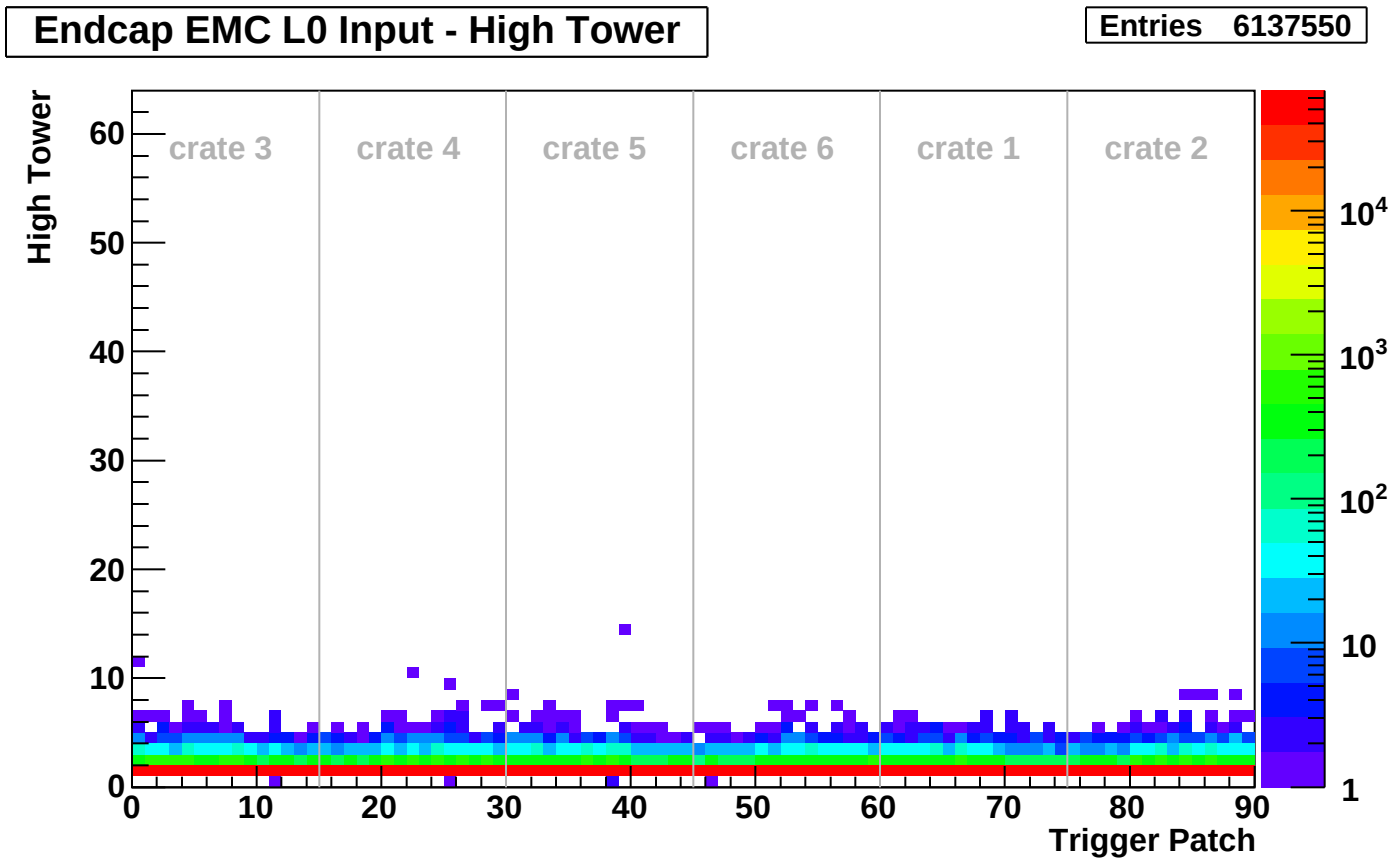

DAQ10k HT bits errors
Entries 22
16
14
12
10
8
6
4
2
0
0 5 10 15 20 25 30 35

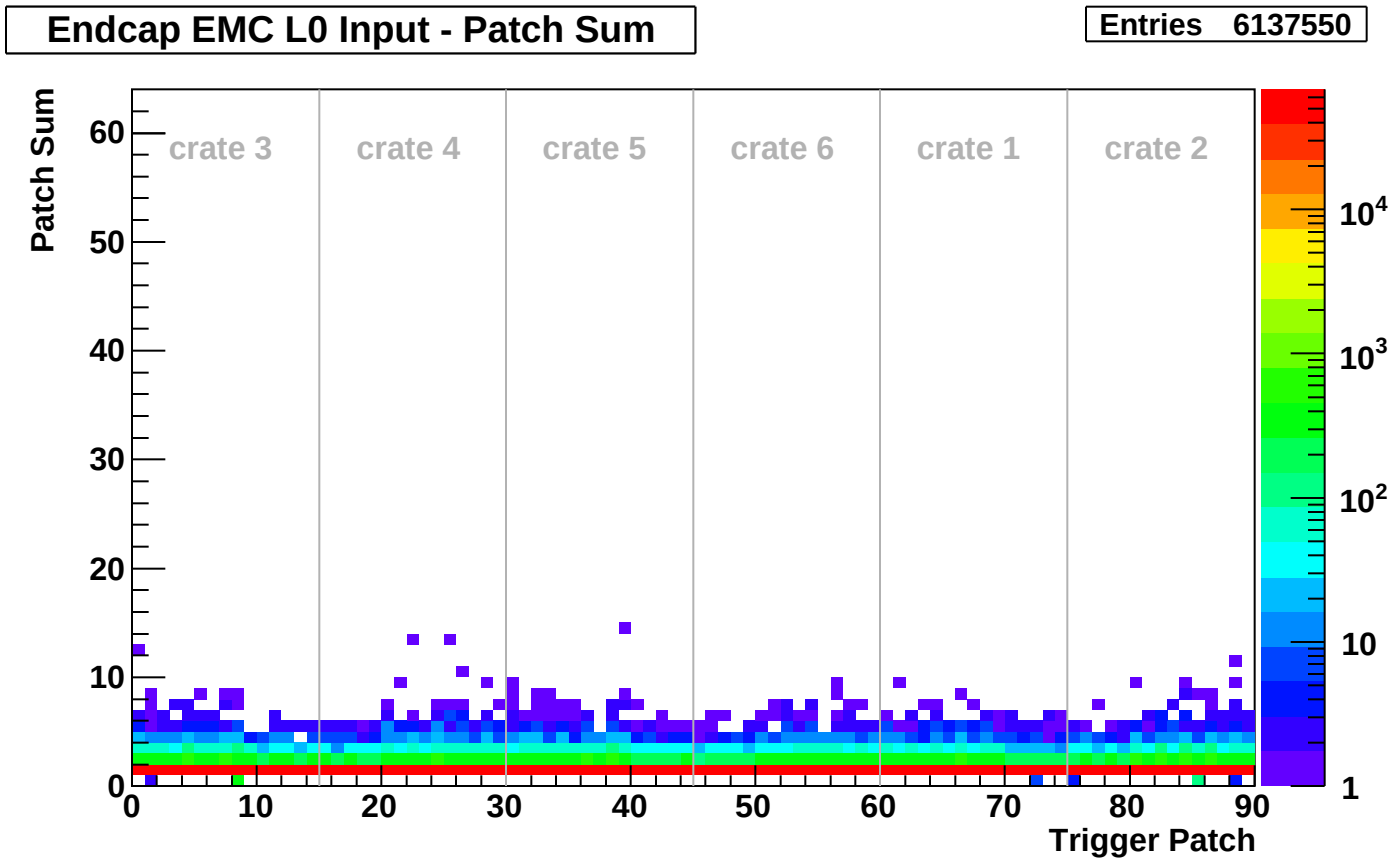

BunchId7Bit (BHT3)
Entries 3
1
10^-1
10^-2
10^-3
0 20 40 60 80 100 120

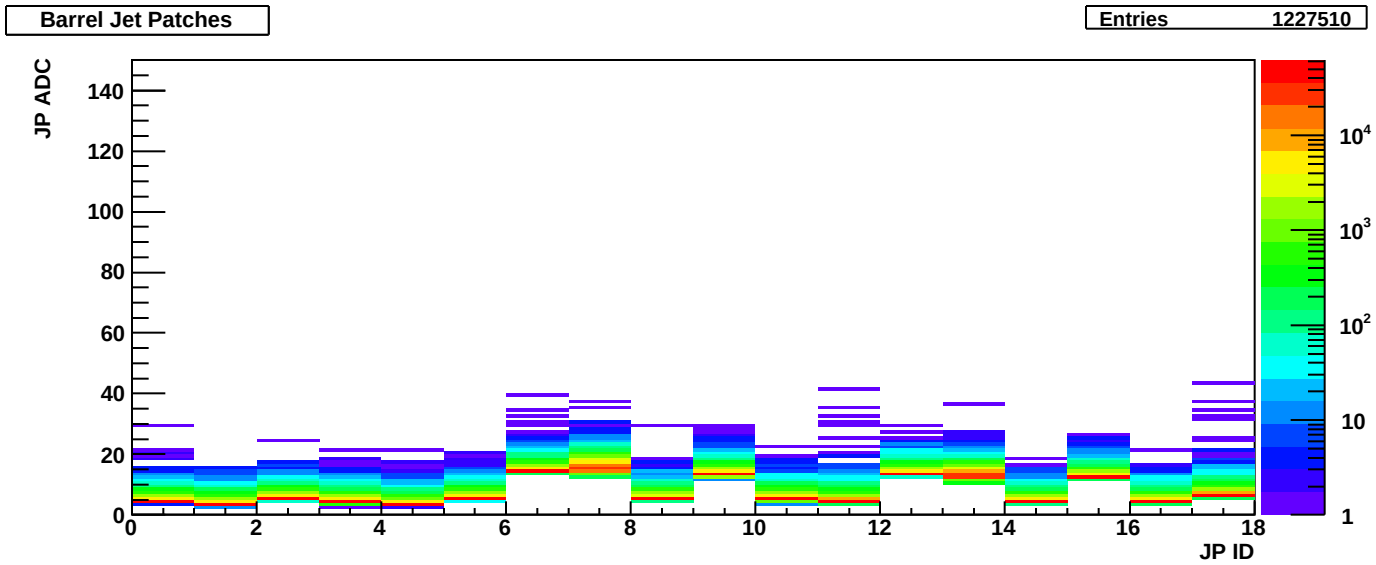

BunchId7Bit (all events)
Entries 68195
10^3
0 20 40 60 80 100 120

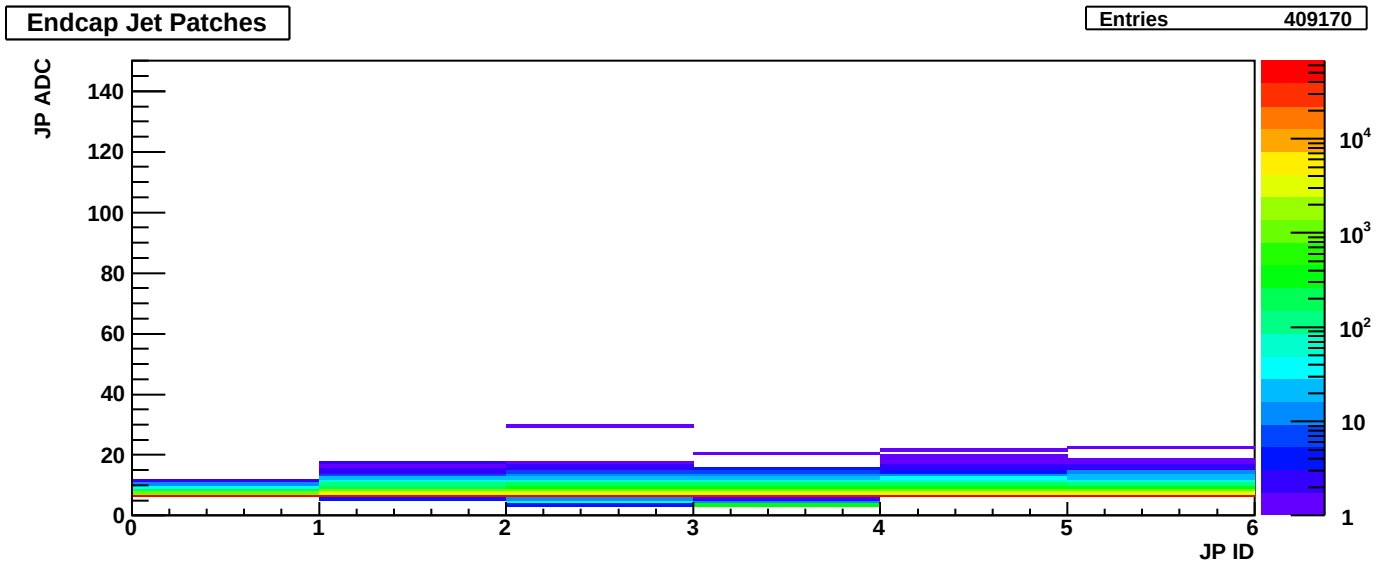

Barrel EMC L0 Input - High Tower
Entries 2.04585e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

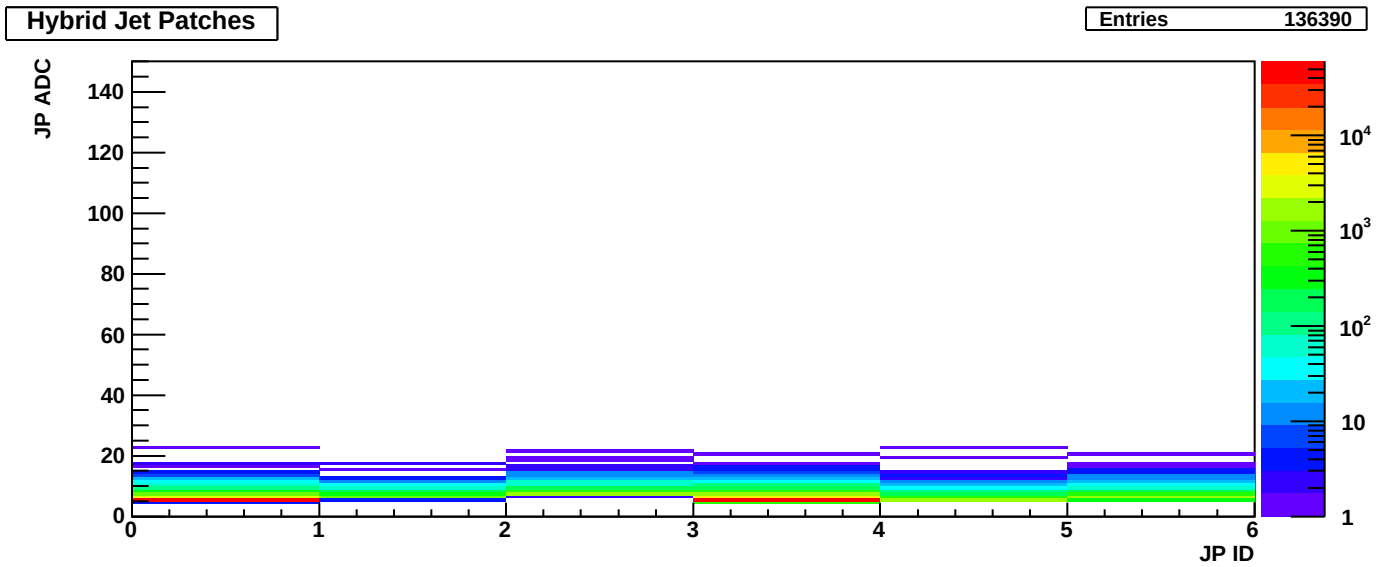

Barrel EMC L0 Input - Patch Sum
Entries 2.04585e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

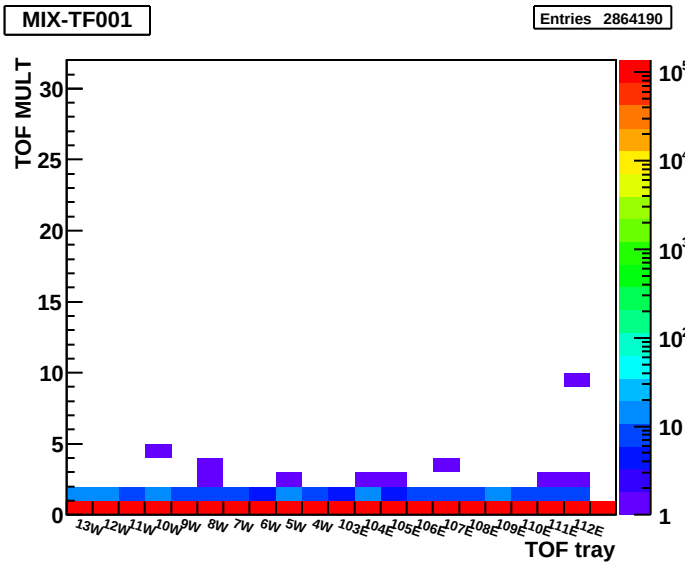

Endcap EMC L0 Input - High Tower
Entries 6137550
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

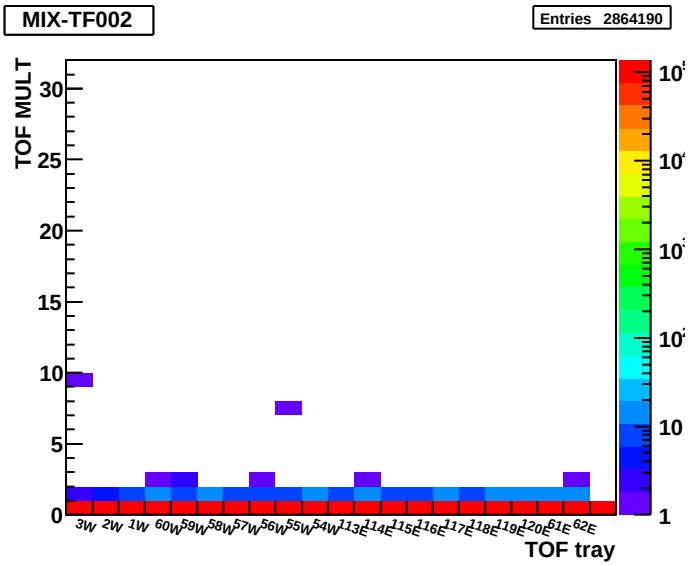

Endcap EMC L0 Input - Patch Sum
Entries 6137550
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

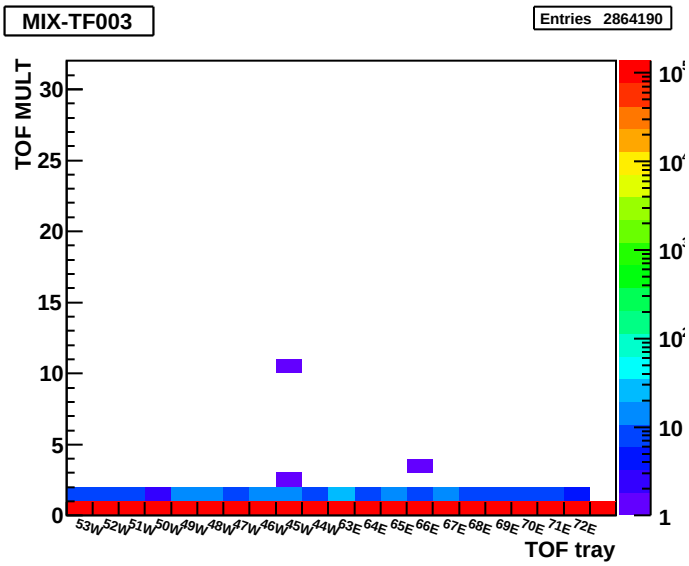

Barrel Jet Patches
Entries 1227510
JP ADC
JP ID

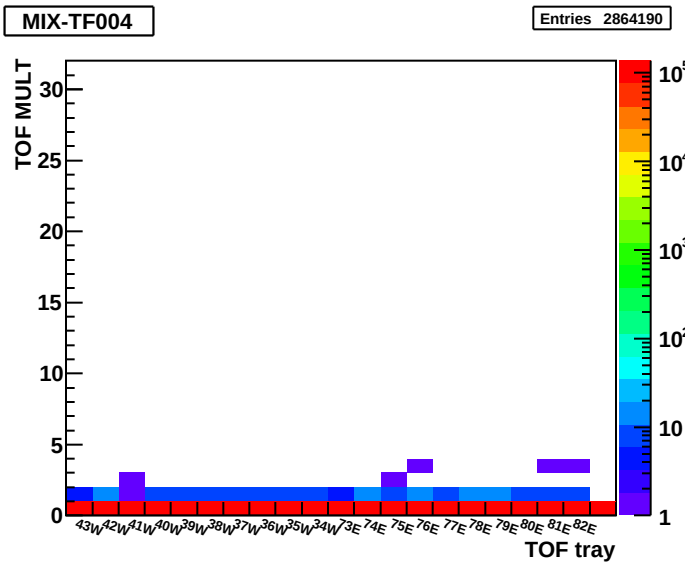

Endcap Jet Patches
Entries 409170
JP ADC
JP ID

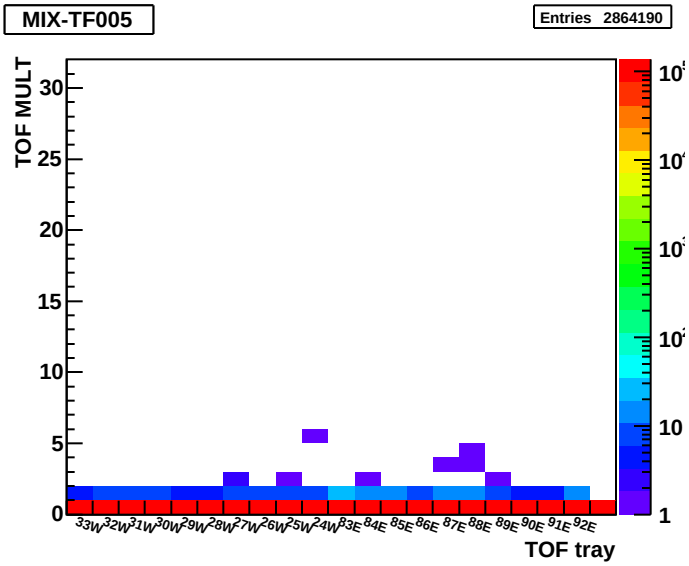

Hybrid Jet Patches
Entries 136390
JP ADC
JP ID

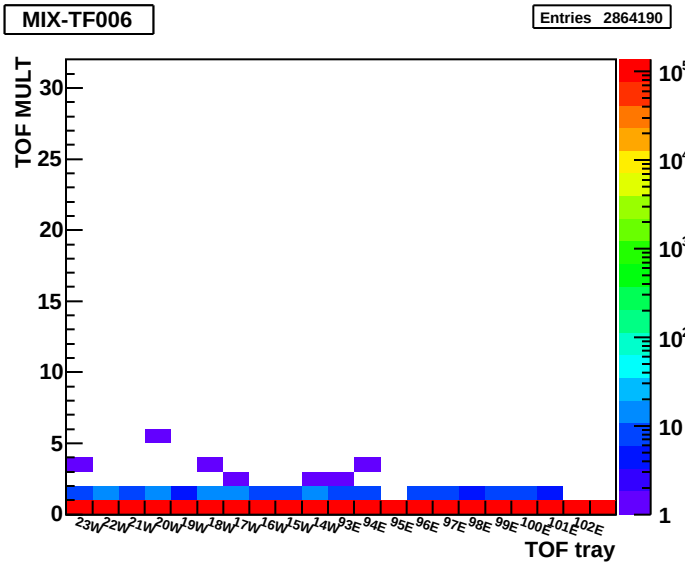

MIX-TF001
Entries 2864190
TOF MULT
TOF tray

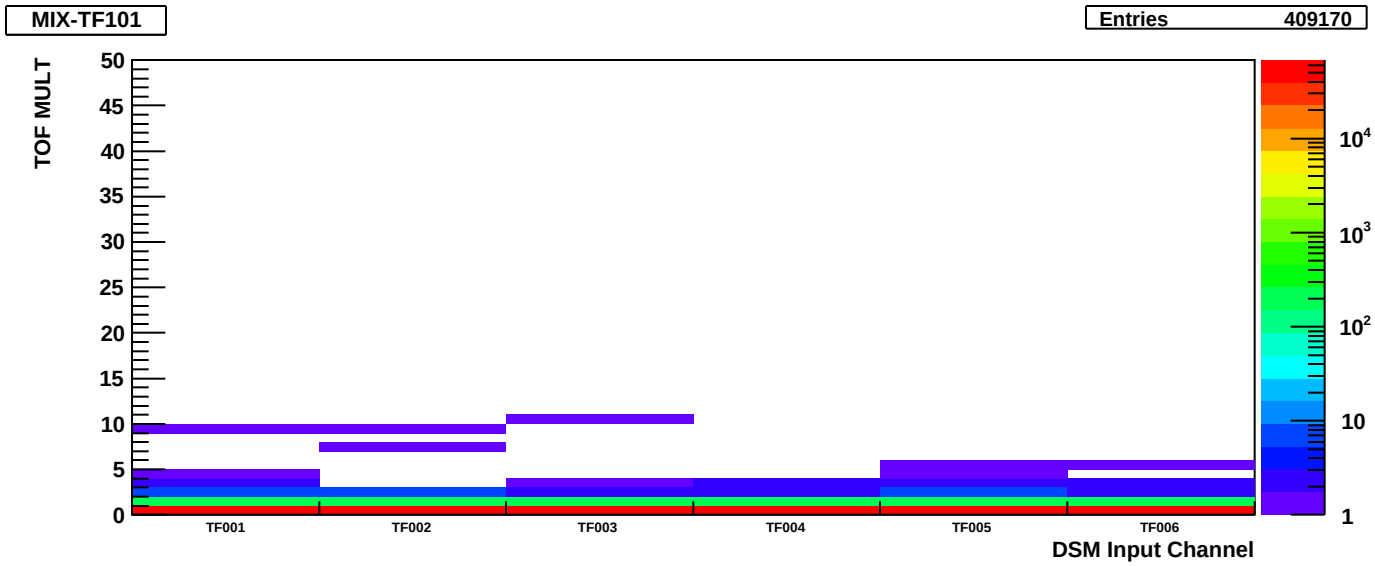

MIX-TF002
Entries 2864190
TOF MULT
TOF tray

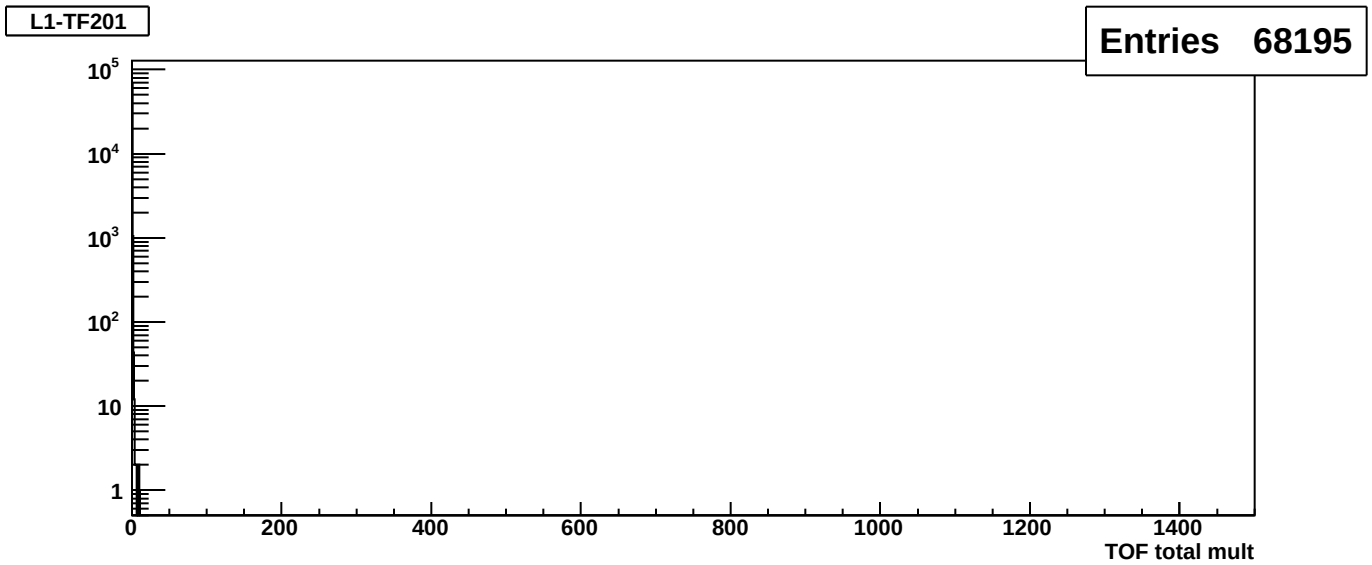

MIX-TF003
Entries 2864190
TOF MULT
TOF tray

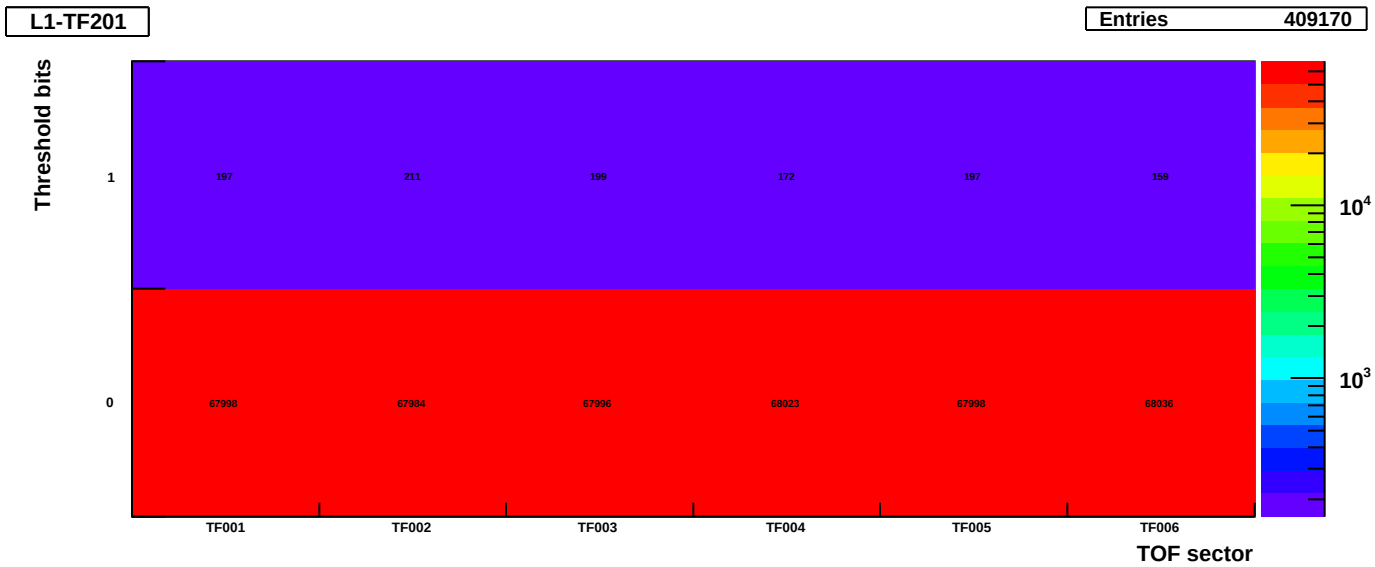

MIX-TF004
Entries 2864190
TOF MULT
TOF tray

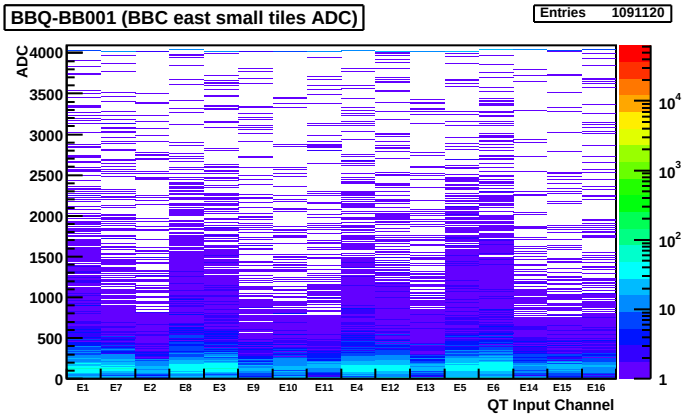

MIX-TF005
Entries 2864190
TOF MULT
TOF tray

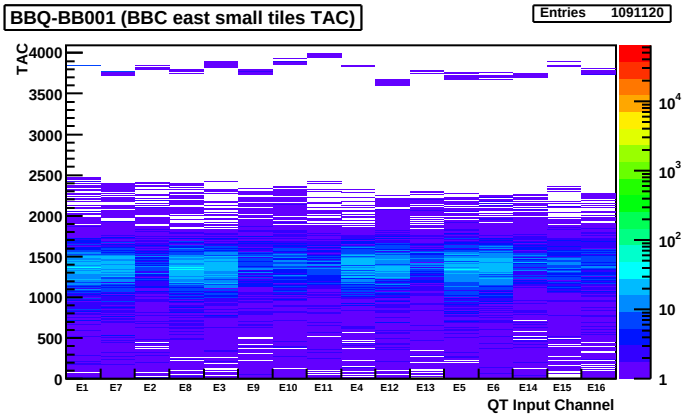

MIX-TF006
Entries 2864190
TOF MULT
TOF tray

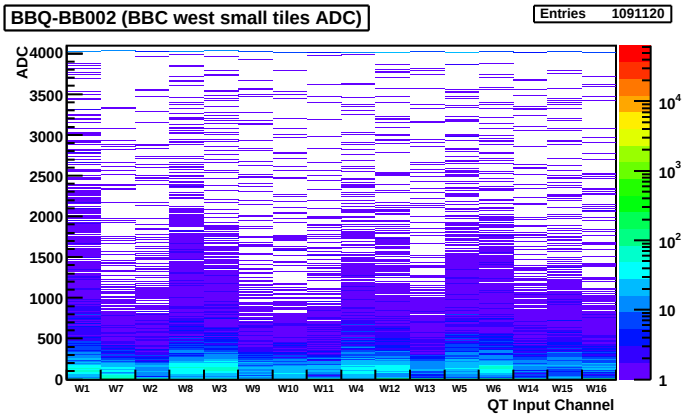

MIX-TF101
Entries 409170
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

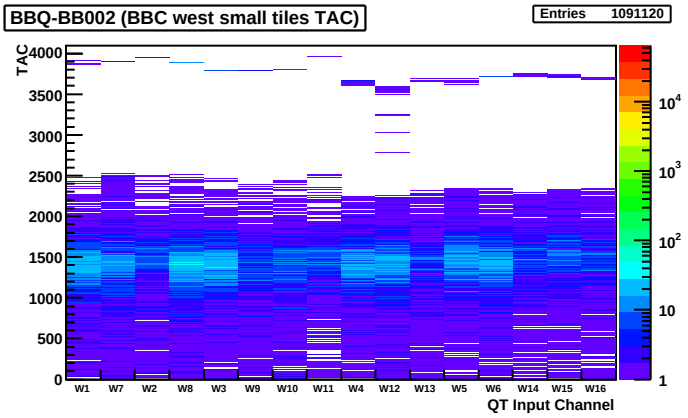

L1-TF201
Entries 68195
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

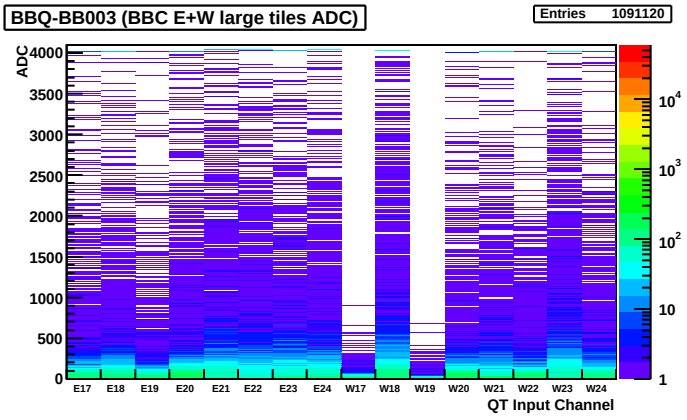

L1-TF201
Entries 409170
Threshold bits
1
0
197
211
199
172
197
159
67998
67984
67996
68023
67998
68036
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3

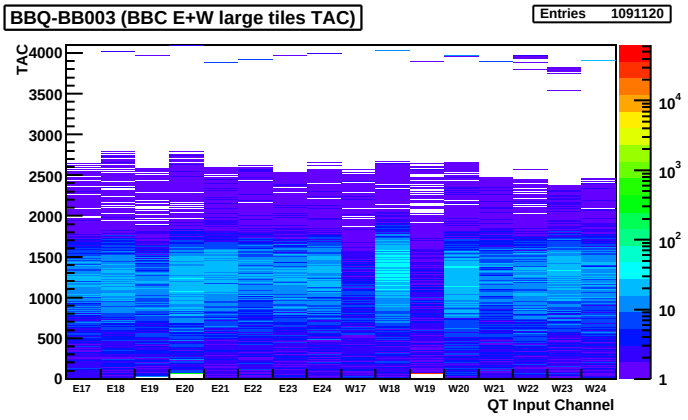

BBQ-BB001 (BBC east small tiles ADC)
Entries 1091120
ADC
QT Input Channel

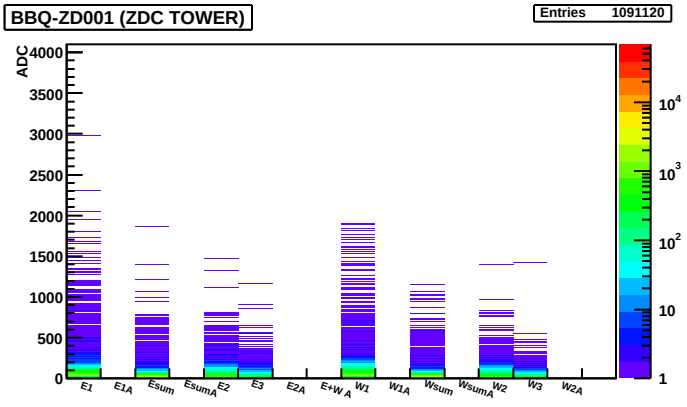

BBQ-BB001 (BBC east small tiles TAC)
Entries 1091120
TAC
QT Input Channel

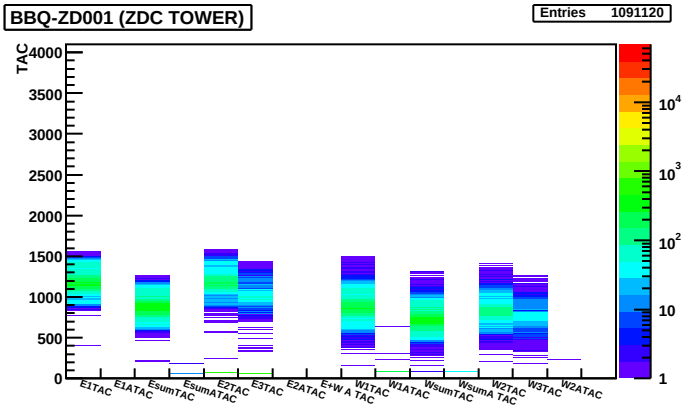

BBQ-BB002 (BBC west small tiles ADC)
Entries 1091120
ADC
QT Input Channel

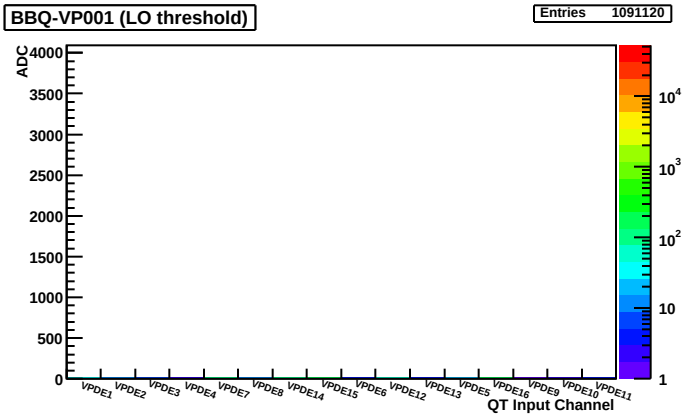

BBQ-BB002 (BBC west small tiles TAC)
Entries 1091120
TAC
QT Input Channel

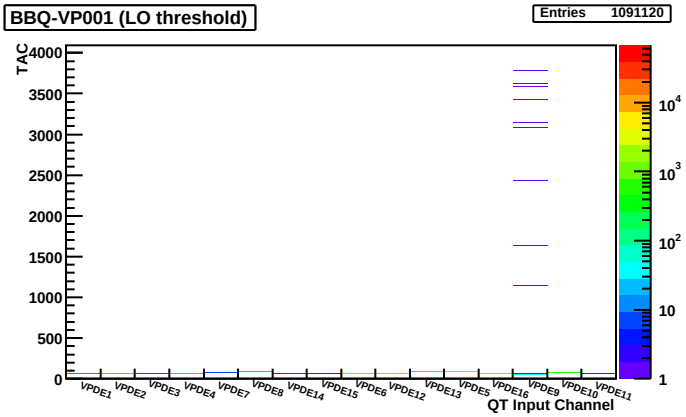

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1091120
ADC
QT Input Channel

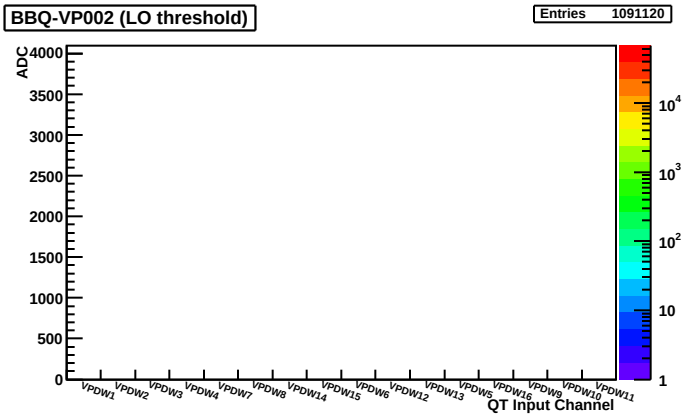

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1091120
TAC
QT Input Channel

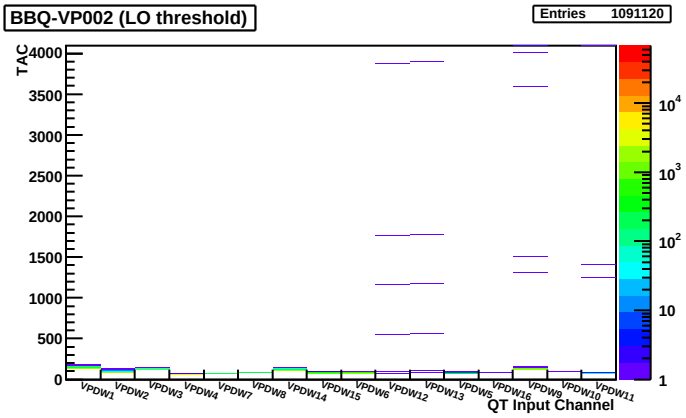

BBQ-ZD001 (ZDC TOWER)
Entries 1091120
ADC

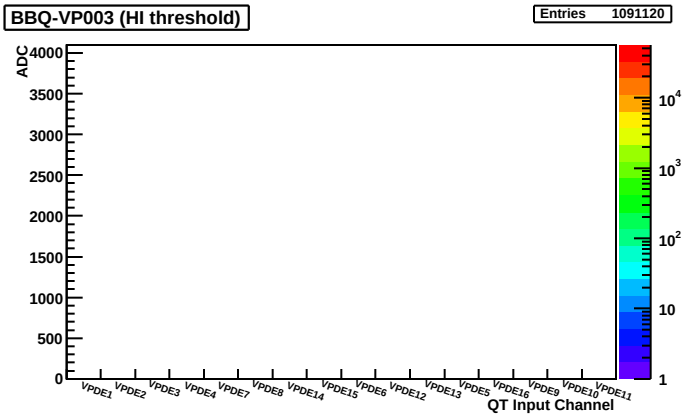

BBQ-ZD001 (ZDC TOWER)
Entries 1091120
TAC

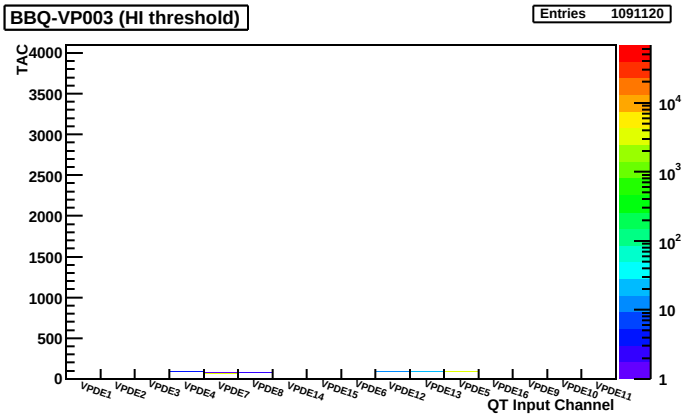

BBQ-VP001 (LO threshold)
Entries 1091120
ADC
QT Input Channel

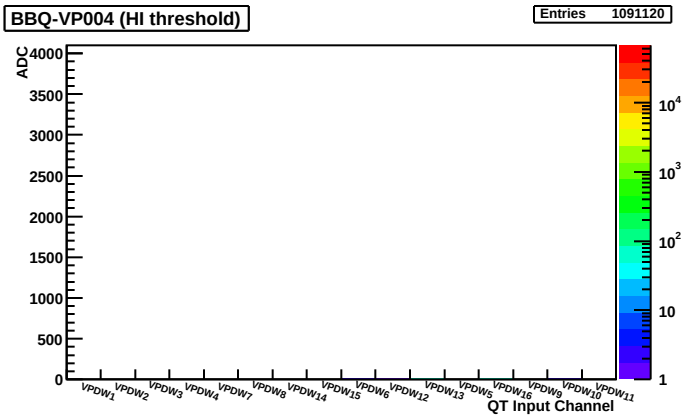

BBQ-VP001 (LO threshold)
Entries 1091120
TAC
QT Input Channel

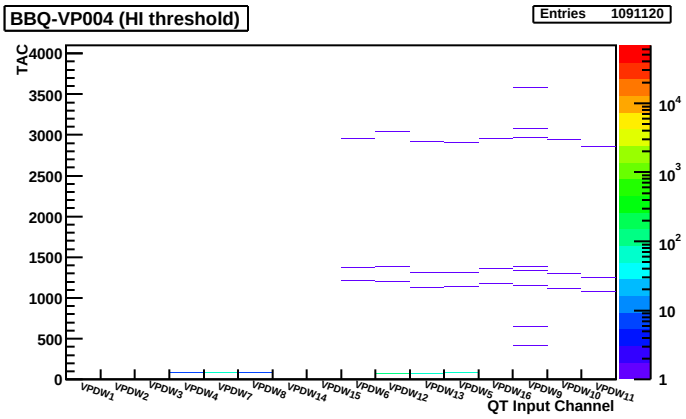

BBQ-VP002 (LO threshold)
Entries 1091120
ADC
QT Input Channel

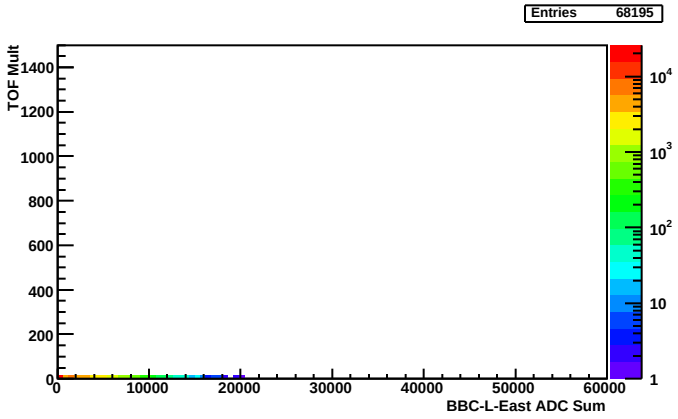

BBQ-VP002 (LO threshold)
Entries 1091120
TAC
QT Input Channel

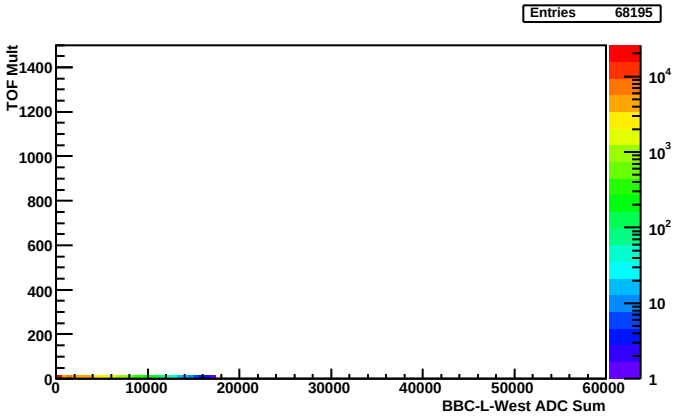

BBQ-VP003 (HI threshold)
Entries 1091120
ADC
QT Input Channel

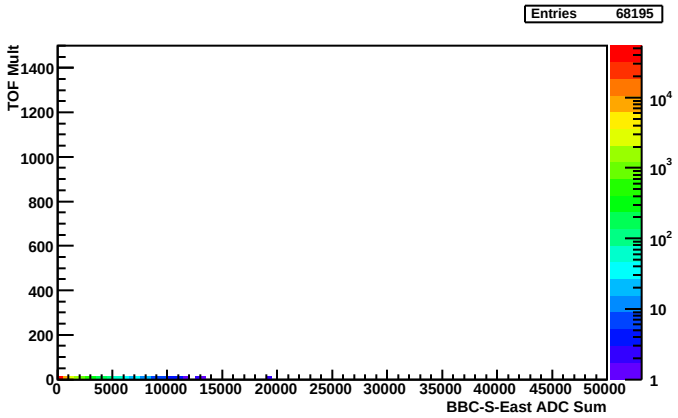

BBQ-VP003 (HI threshold)
Entries 1091120
TAC
QT Input Channel

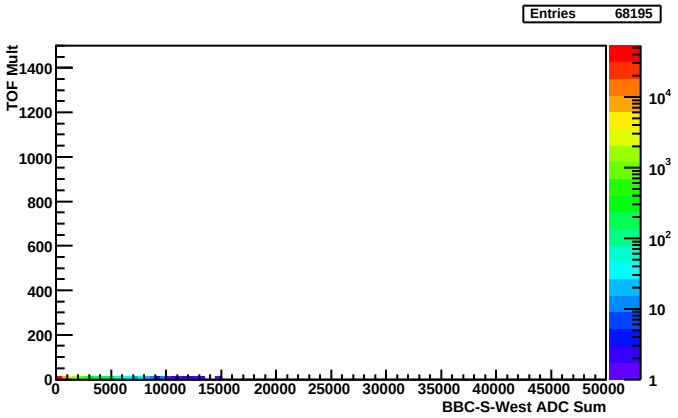

BBQ-VP004 (HI threshold)
Entries 1091120
ADC
QT Input Channel

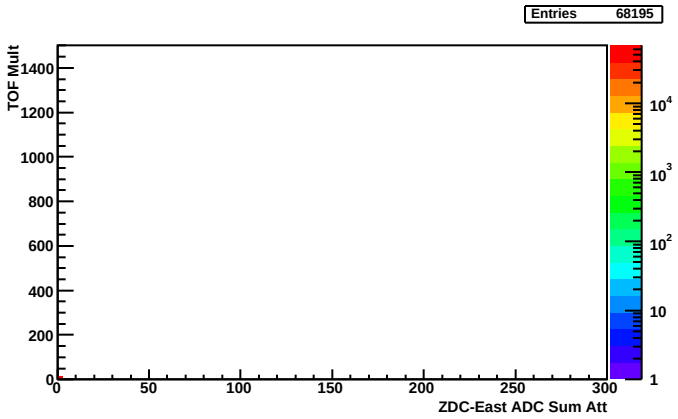

BBQ-VP004 (HI threshold)
Entries 1091120
TAC
QT Input Channel

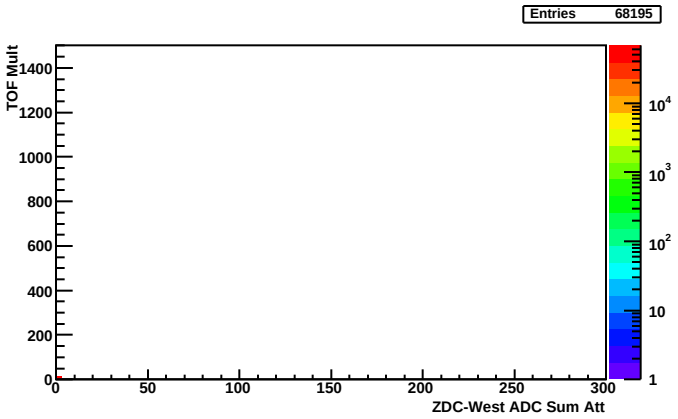

Entries 68195
TOF Mult
BBC-L-East ADC Sum

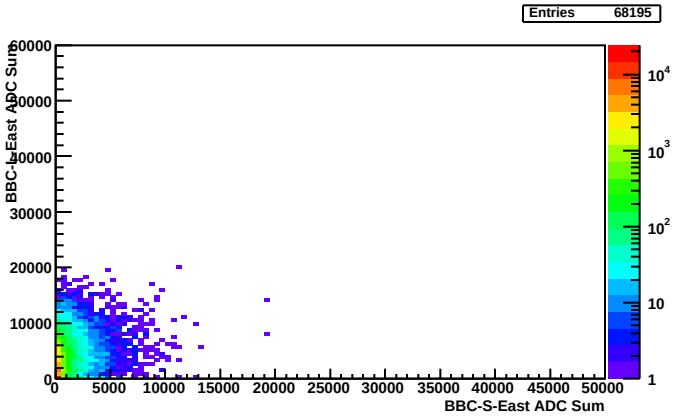

Entries 68195
TOF Mult
BBC-L-West ADC Sum

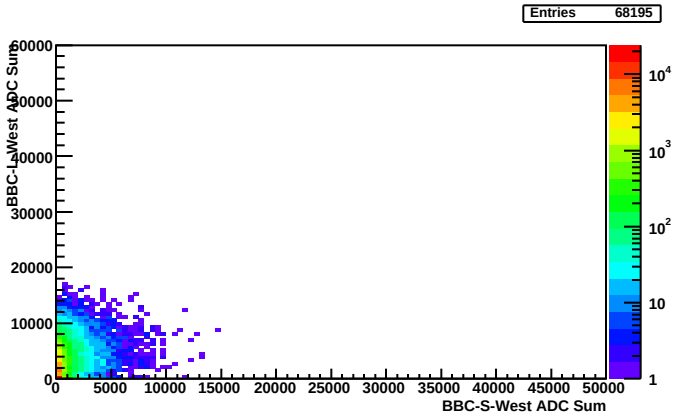

Entries 68195
TOF Mult
BBC-S-East ADC Sum

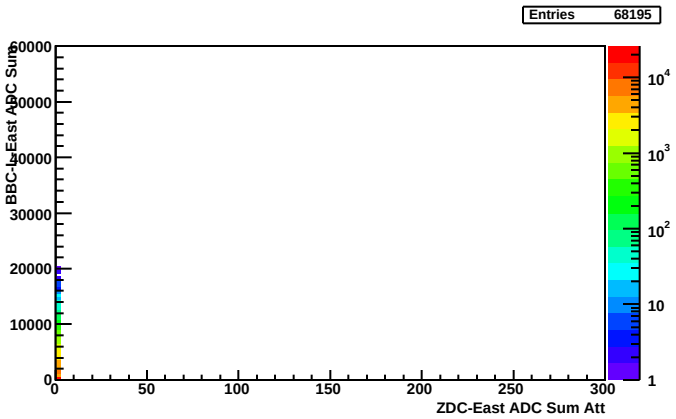

Entries 68195
TOF Mult
BBC-S-West ADC Sum

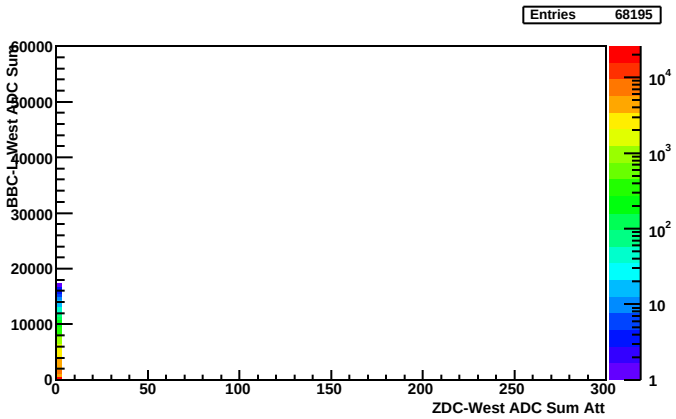

Entries 68195
TOF Mult
ZDC-East ADC Sum Att

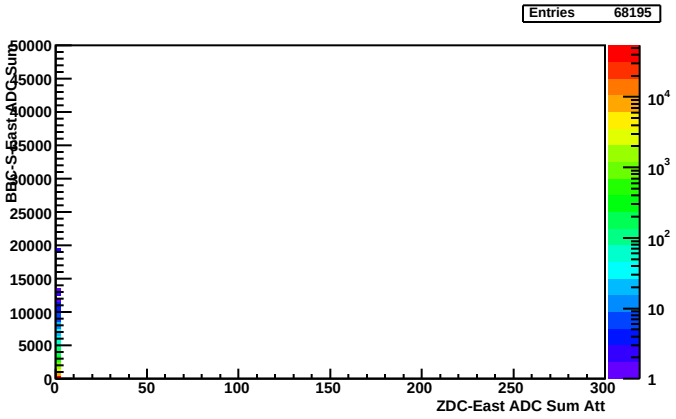

Entries 68195
TOF Mult
ZDC-West ADC Sum Att

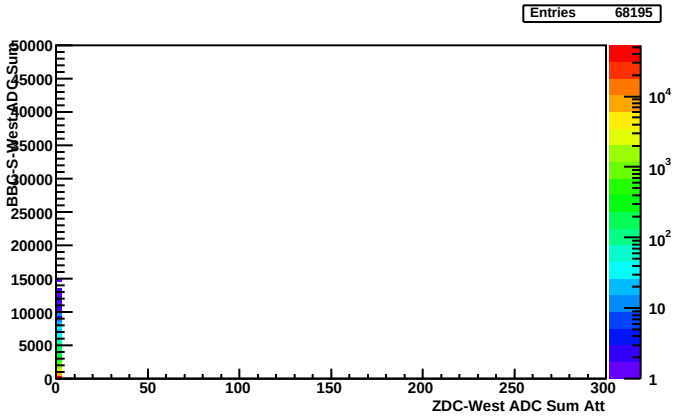

Entries 68195
BBC-L-East ADC Sum
BBC-S-East ADC Sum

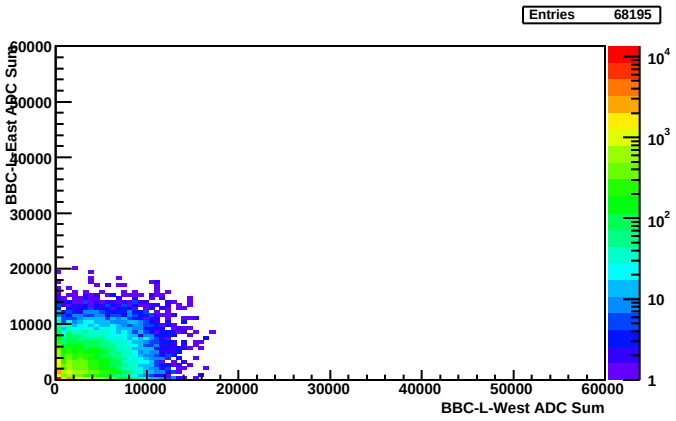

Entries 68195
BBC-L-West ADC Sum
BBC-S-West ADC Sum

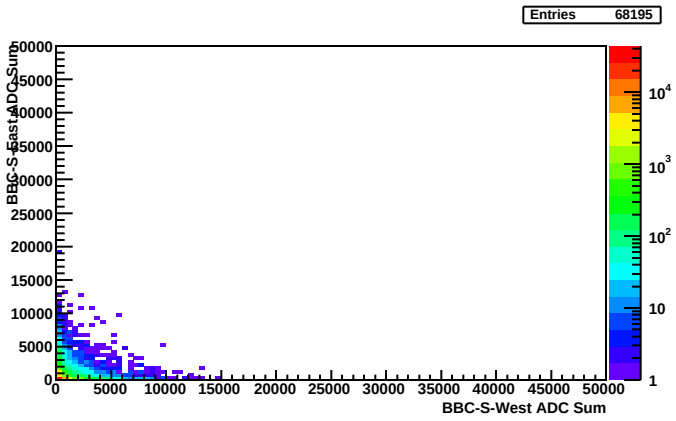

Entries 68195
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

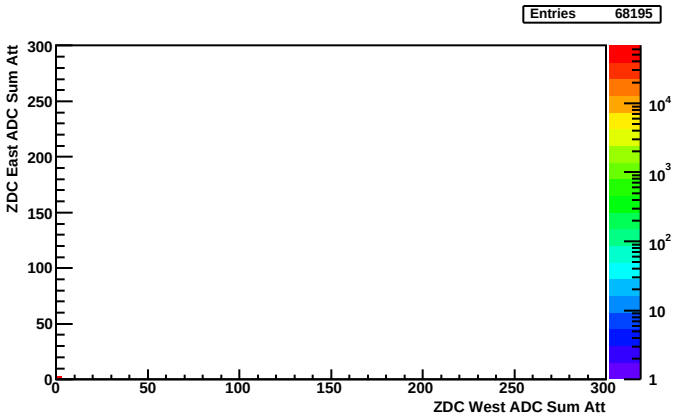

Entries 68195
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

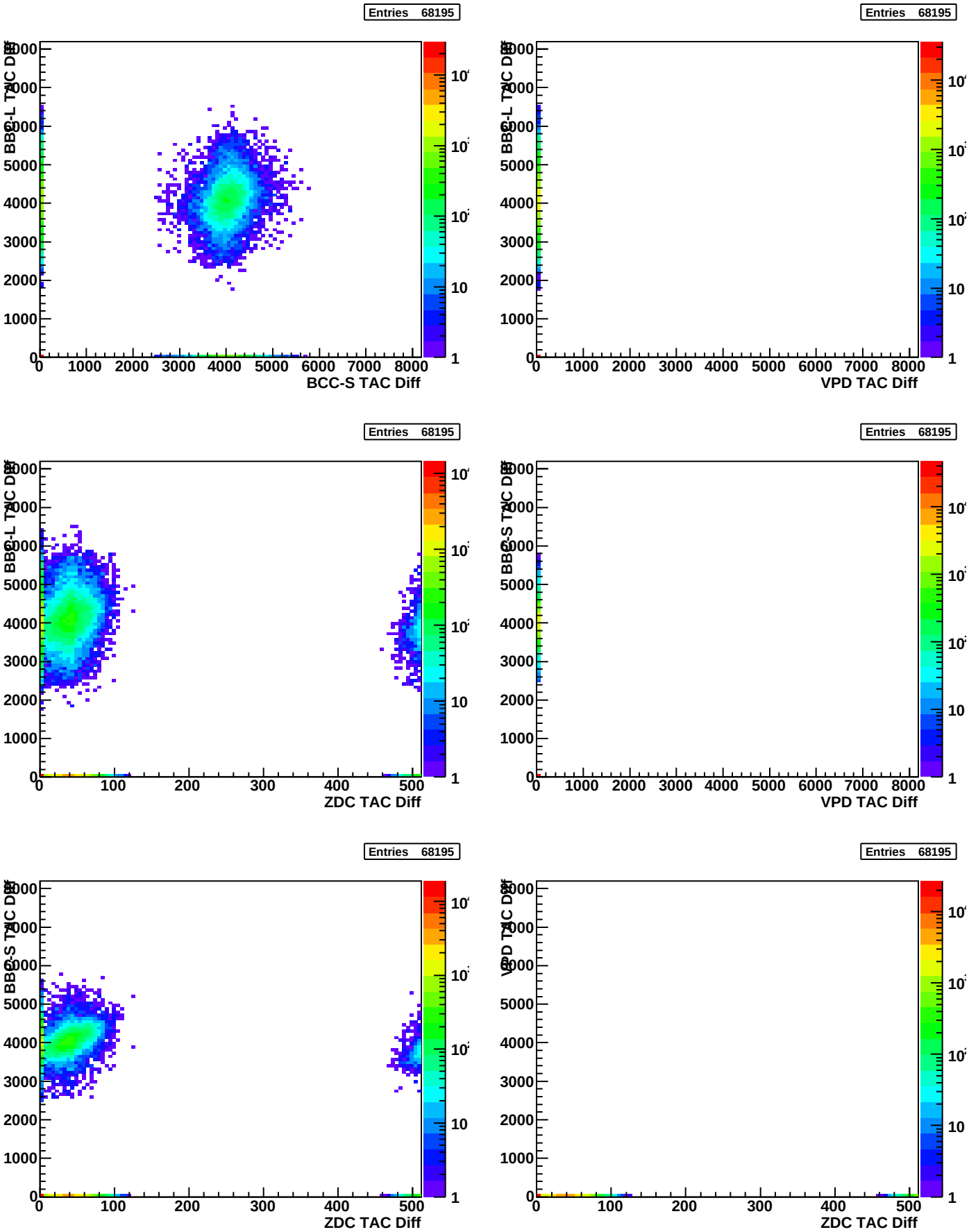

Entries 68195
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

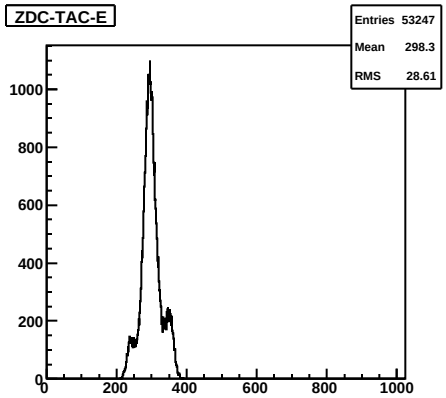

Entries 68195
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

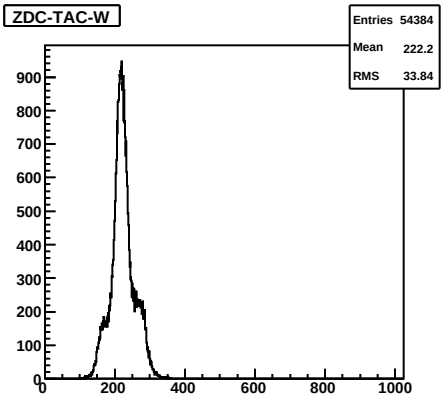

Entries 68195
BBC-L-East ADC Sum
BBC-L-West ADC Sum

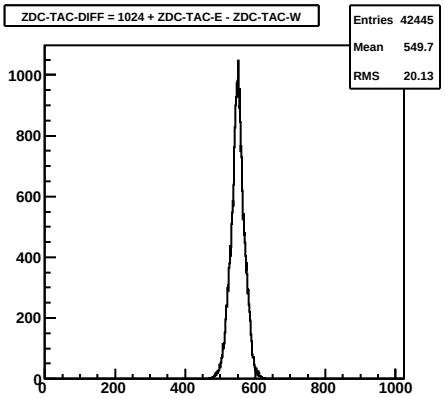

Entries 68195
BBC-S-East ADC Sum
BBC-S-West ADC Sum

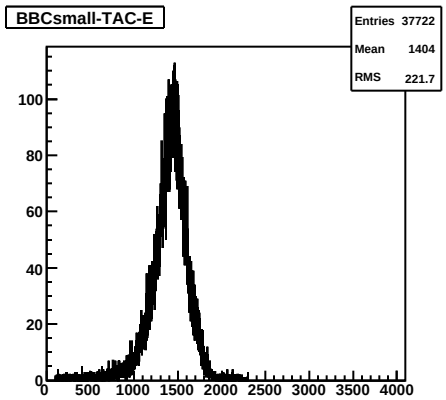

Entries 68195
ZDC East ADC Sum Att
ZDC West ADC Sum Att

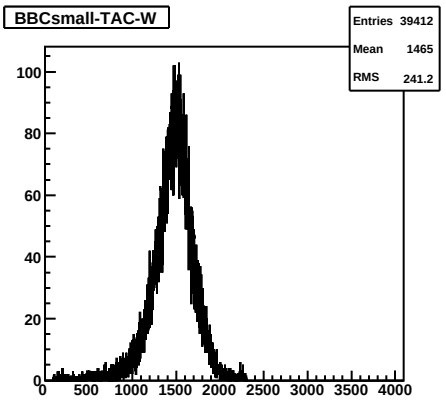

Entries 68195
BBC-L TAC Diff
BCC-S TAC Diff
Entries 68195
BBC-L TAC Diff
VPD TAC Diff
Entries 68195
BBC-L TAC Diff
ZDC TAC Diff
Entries 68195
BBC-S TAC Diff
VPD TAC Diff
Entries 68195
BBC-S TAC Diff
ZDC TAC Diff
Entries 68195
VPD TAC Diff
ZDC TAC Diff

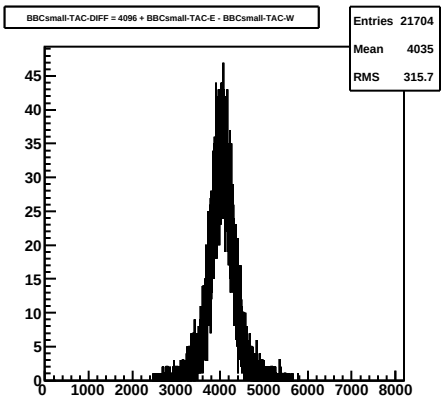

ZDC-TAC-E
Entries 53247
Mean 298.3
RMS 28.61

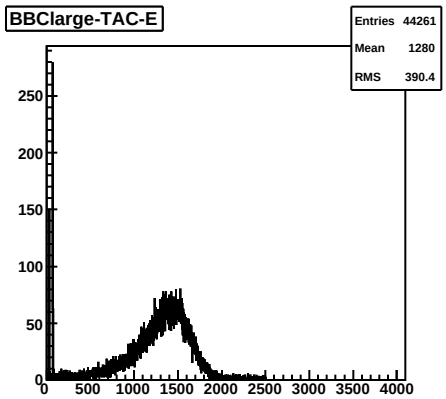

ZDC-TAC-W
Entries 54384
Mean 222.2
RMS 33.84

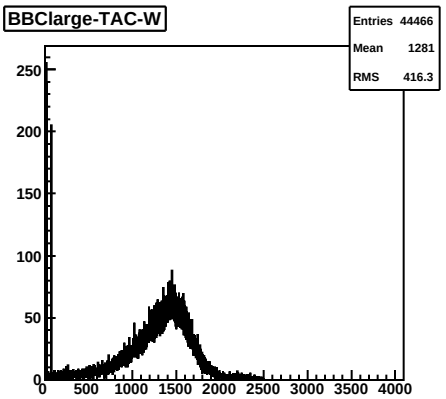

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 42445
Mean 549.7
RMS 20.13

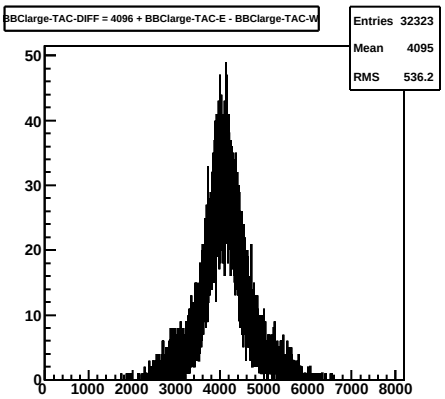

BBCsmall-TAC-E
Entries 37722
Mean 1404
RMS 221.7

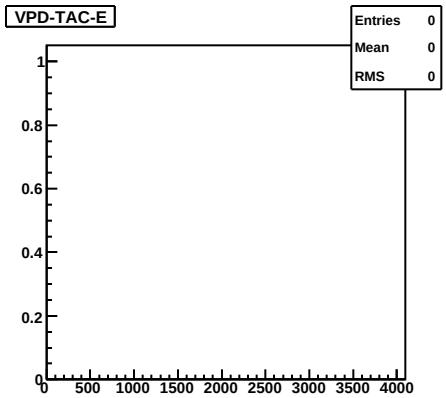

BBCsmall-TAC-W
Entries 39412
Mean 1465
RMS 241.2

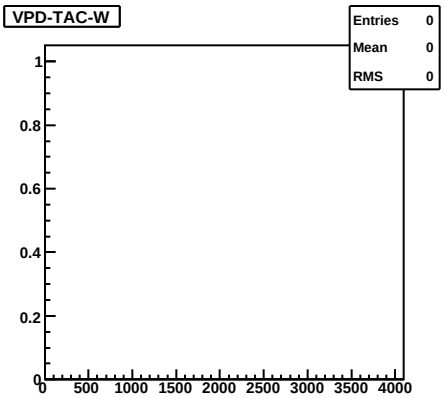

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 21704
Mean 4035
RMS 315.7

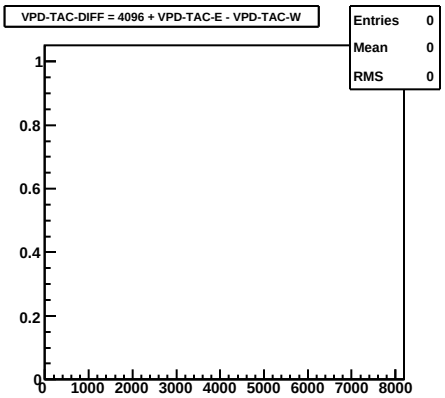

BBClarge-TAC-E
Entries 44261
Mean 1280
RMS 390.4

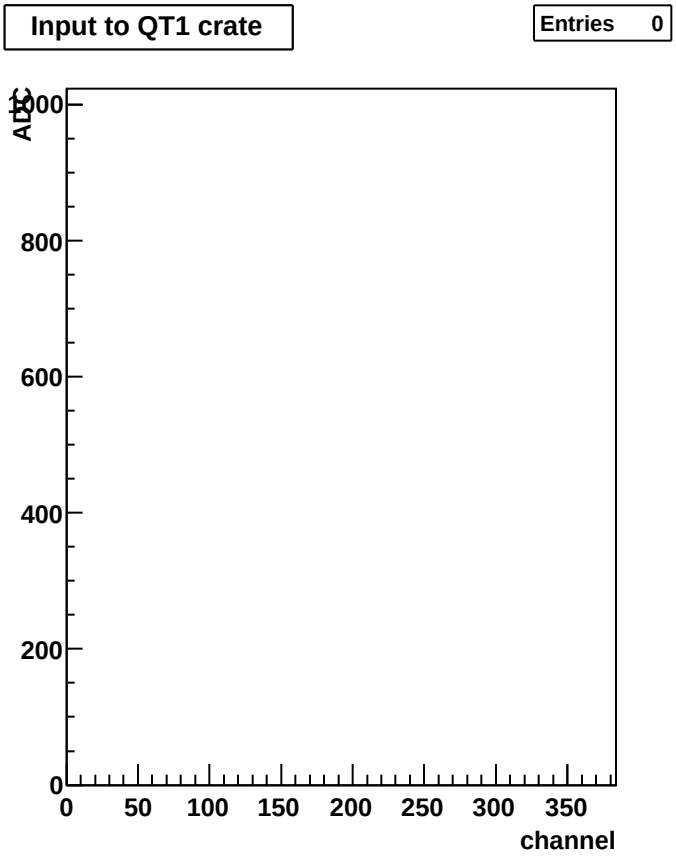

BBClarge-TAC-W
Entries 44466
Mean 1281
RMS 416.3

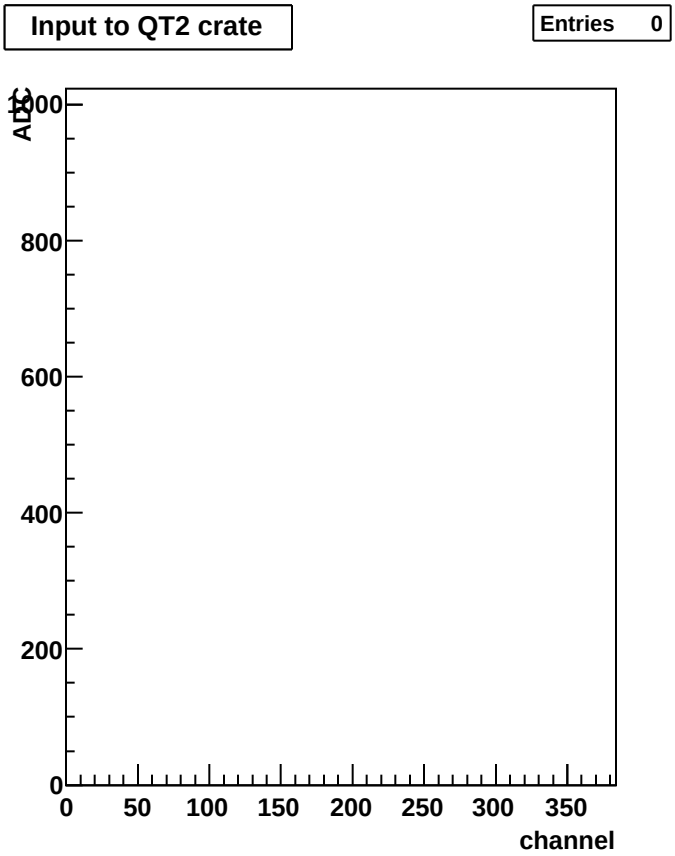

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 32323
Mean 4095
RMS 536.2

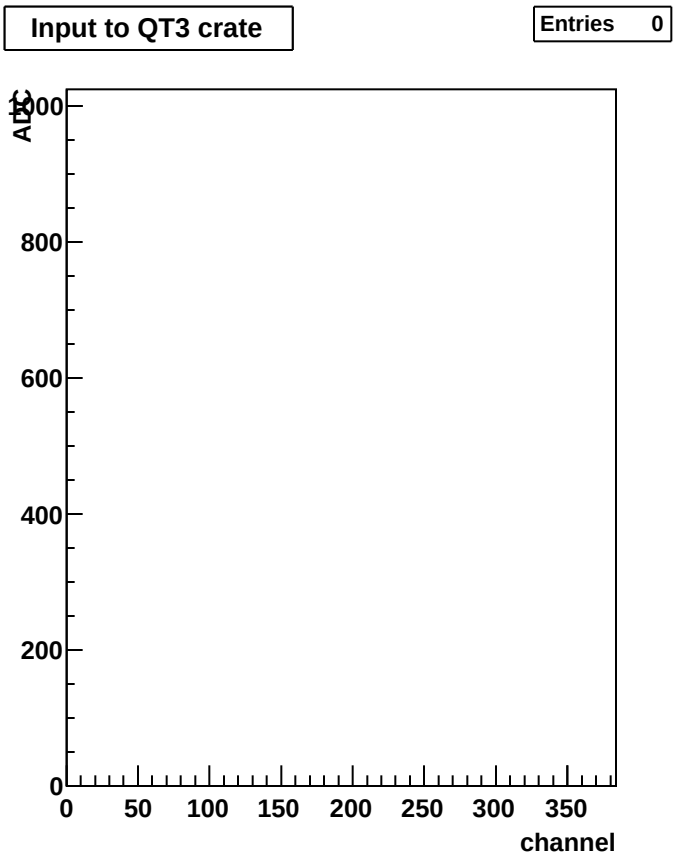

VPD-TAC-E
Entries 0
Mean 0
RMS 0

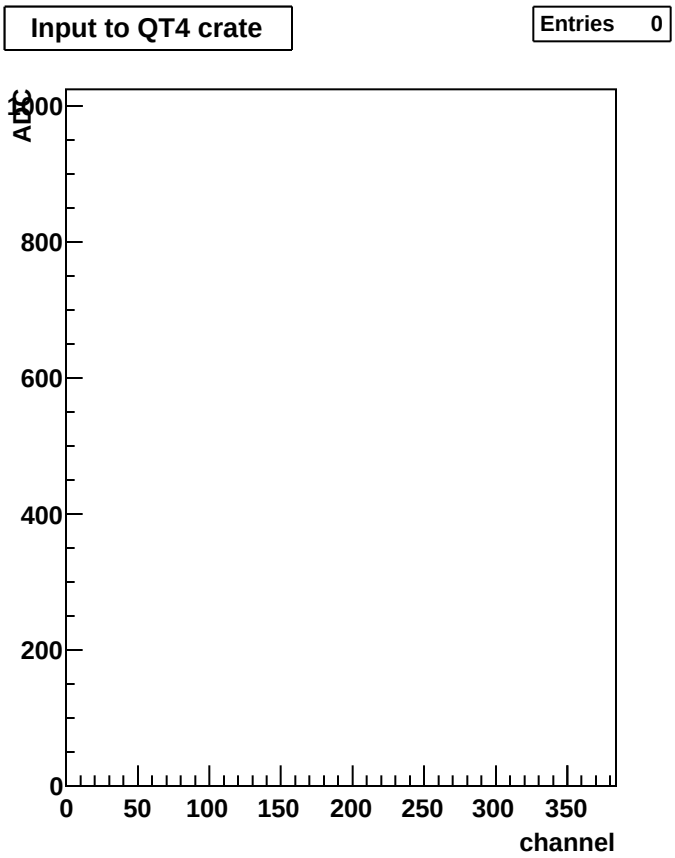

VPD-TAC-W
Entries 0
Mean 0
RMS 0

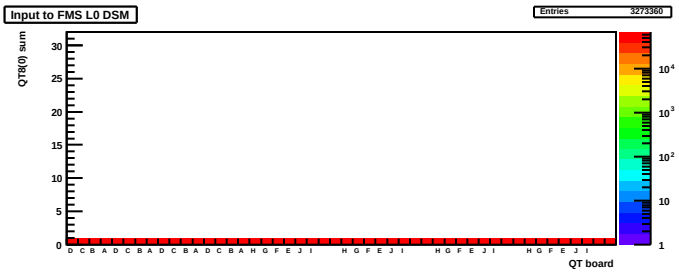

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

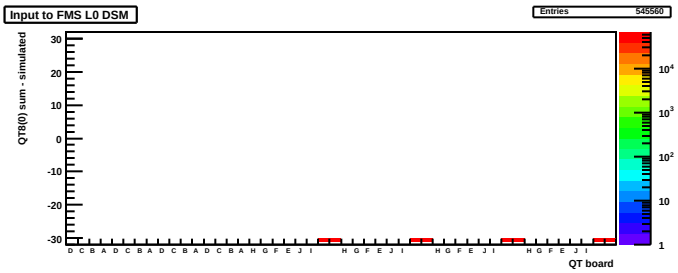

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

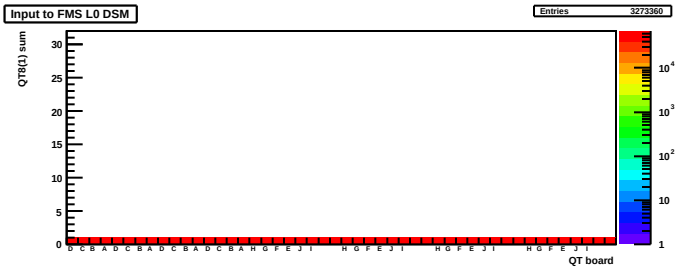

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

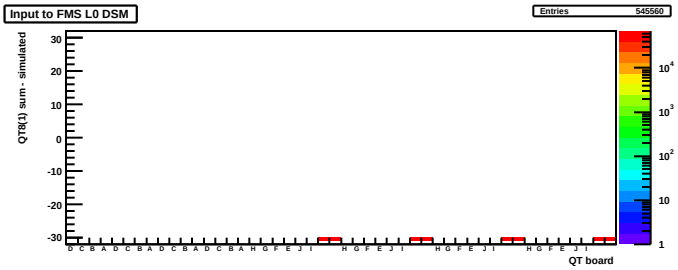

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

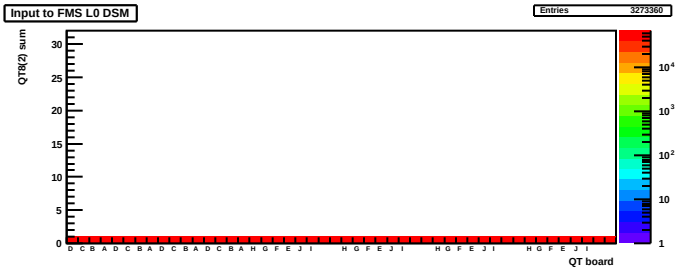

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

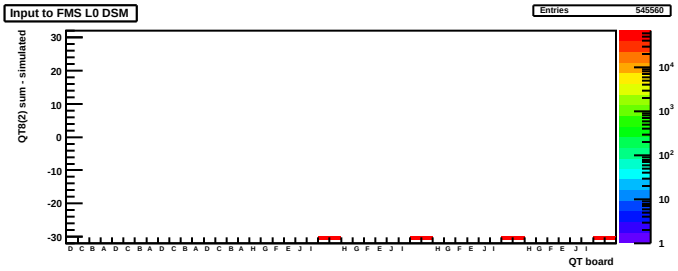

Input to FMS L0 DSM
Entries 3273360
QT8(0) sum
QT board

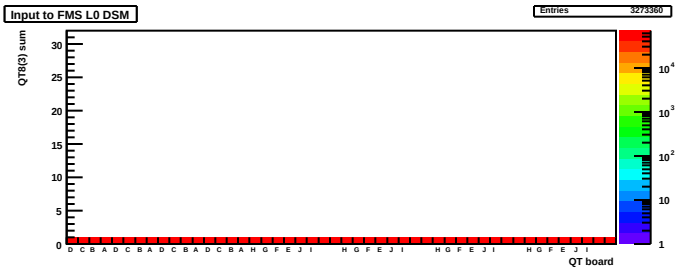

Input to FMS L0 DSM
Entries 545560
QT8(0) sum - simulated
QT board

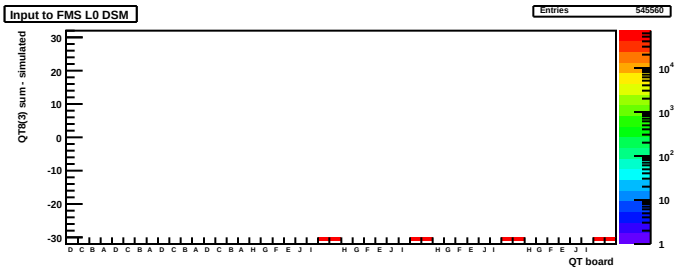

Input to FMS L0 DSM
Entries 3273360
QT8(1) sum
QT board

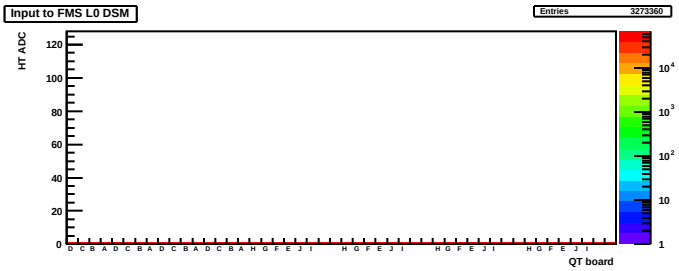

Input to FMS L0 DSM
Entries 545560
QT8(1) sum - simulated
QT board

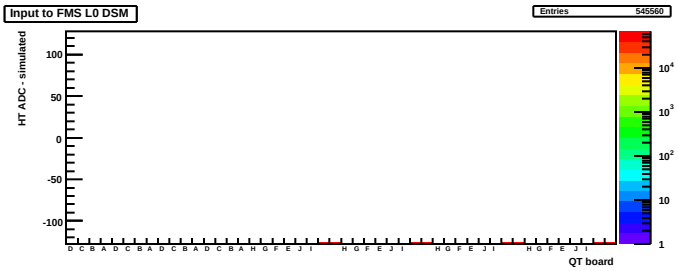

Input to FMS L0 DSM
Entries 3273360
QT8(2) sum
QT board

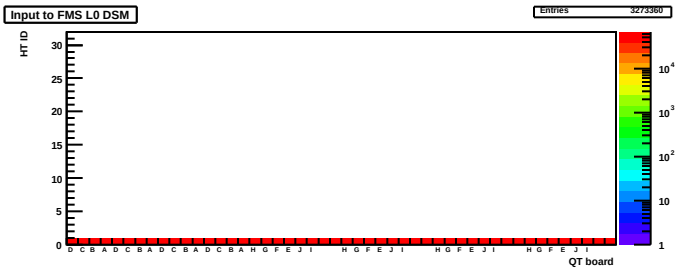

Input to FMS L0 DSM
Entries 545560
QT8(2) sum - simulated
QT board

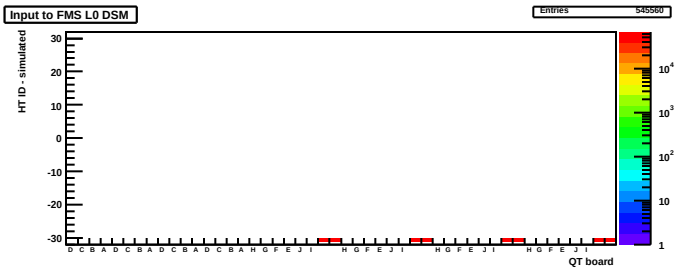

Input to FMS L0 DSM
Entries 3273360
QT8(3) sum
QT board

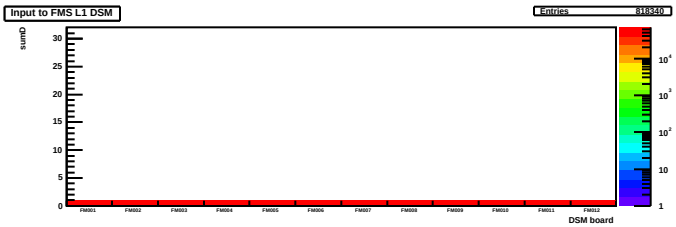

Input to FMS L0 DSM
Entries 545560
QT8(3) sum - simulated
QT board

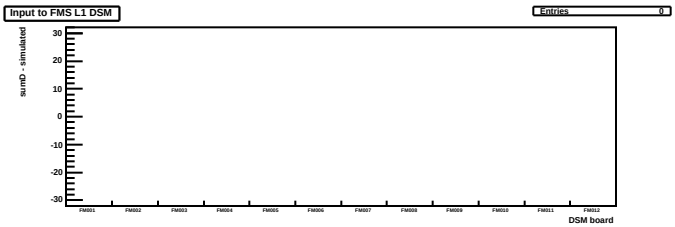

Input to FMS L0 DSM
Entries 3273360
HT ADC
QT board

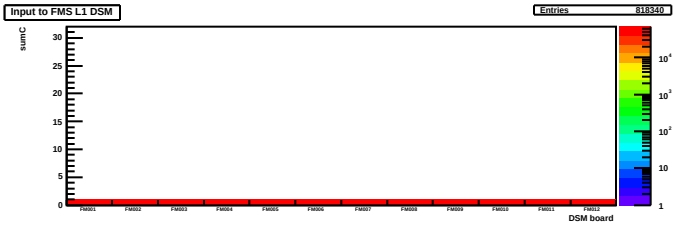

Input to FMS L0 DSM
Entries 545560
HT ADC - simulated
QT board

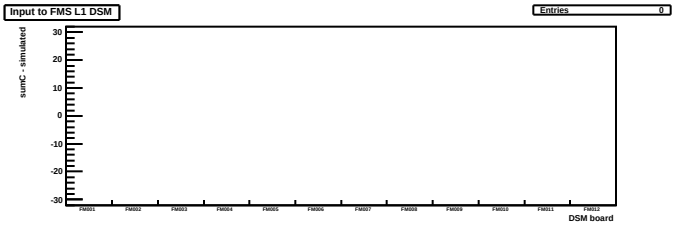

Input to FMS L0 DSM
Entries 3273360
HT ID
QT board

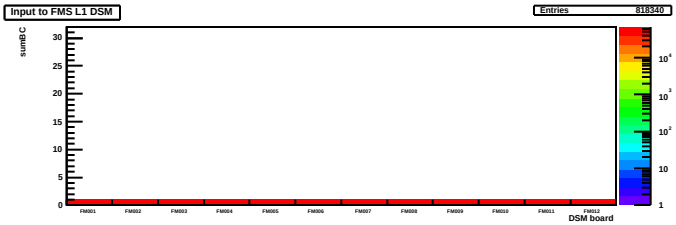

Input to FMS L0 DSM
Entries 545560
HT ID - simulated
QT board

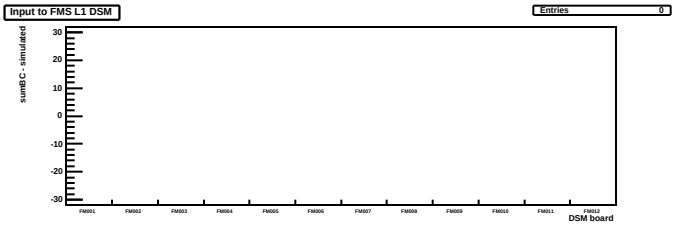

Input to FMS L1 DSM
Entries 818340
sumD
DSM board

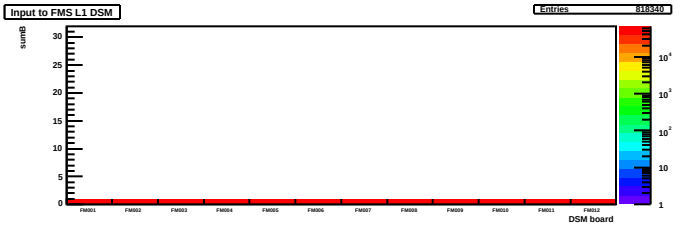

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

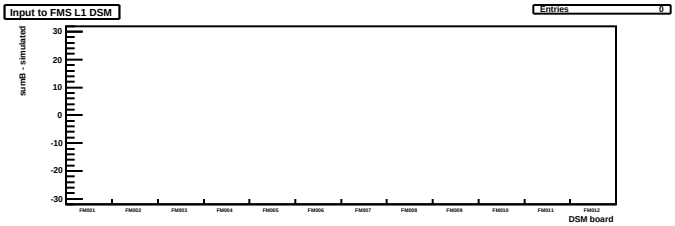

Input to FMS L1 DSM
Entries 818340
sumC
DSM board

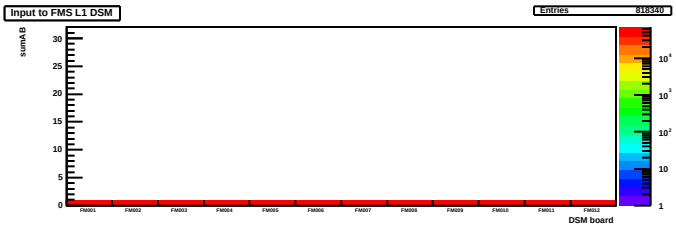

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

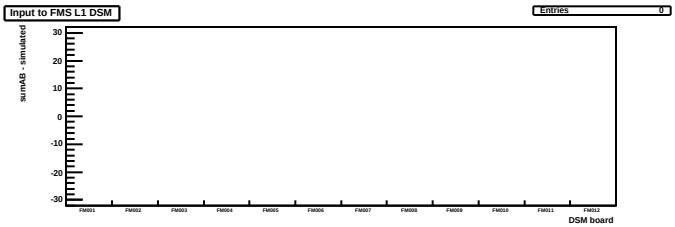

Input to FMS L1 DSM
Entries 818340
sumBC
DSM board

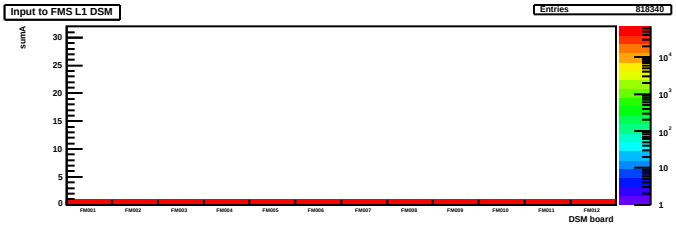

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

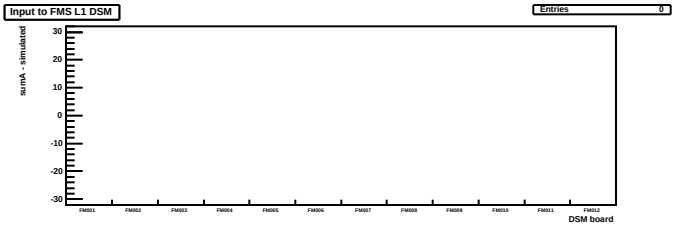

Input to FMS L1 DSM
Entries 818340
sumB
DSM board

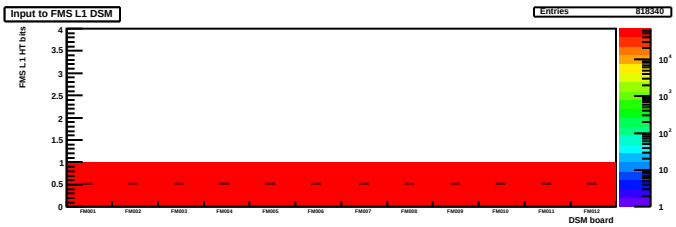

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

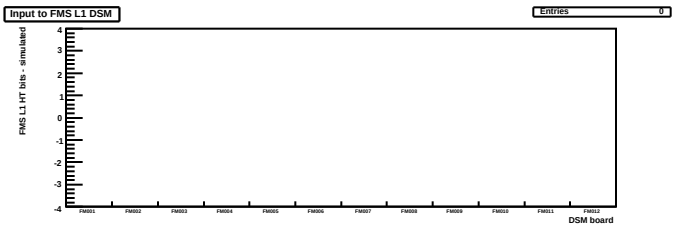

Input to FMS L1 DSM
Entries 818340
sumAB
DSM board

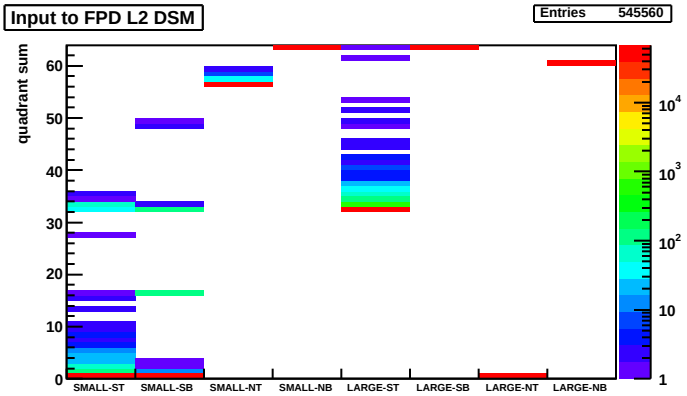

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

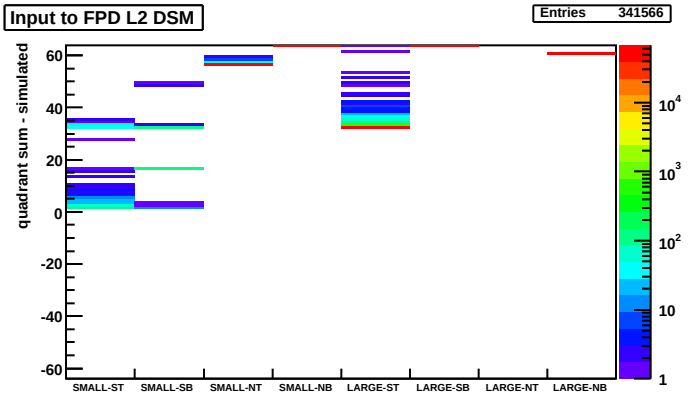

Input to FMS L1 DSM
Entries 818340
sumA
DSM board

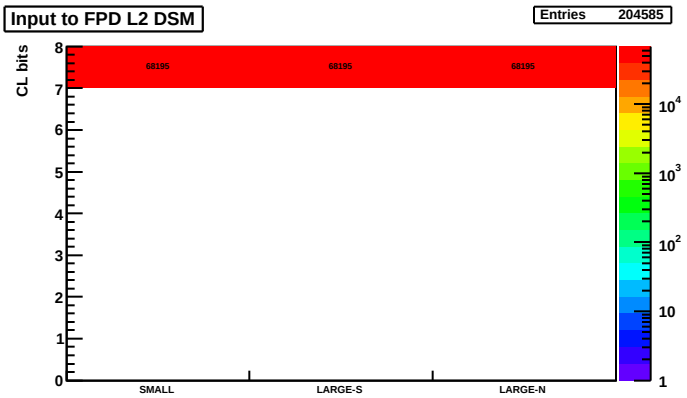

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

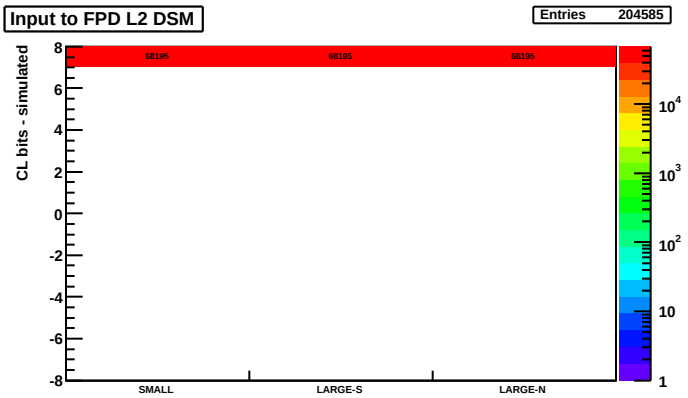

Input to FMS L1 DSM
Entries 818340
FMS L1 HT bits
DSM board

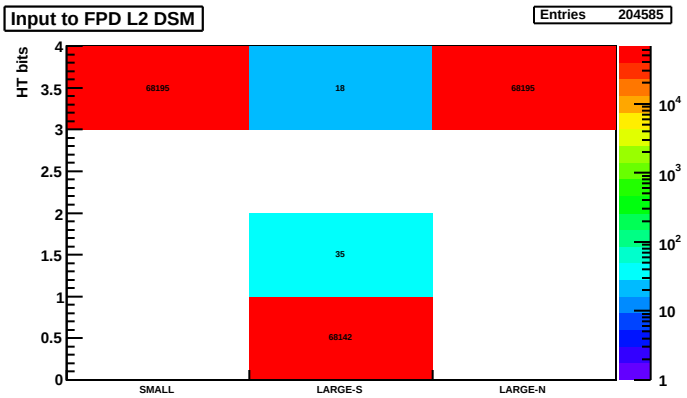

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

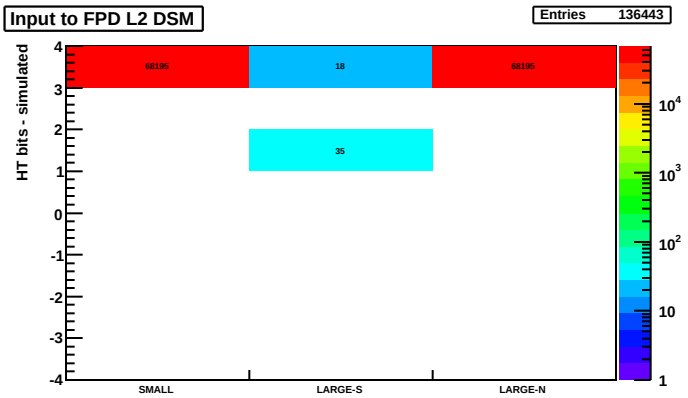

Input to FPD L2 DSM
Entries 545560
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

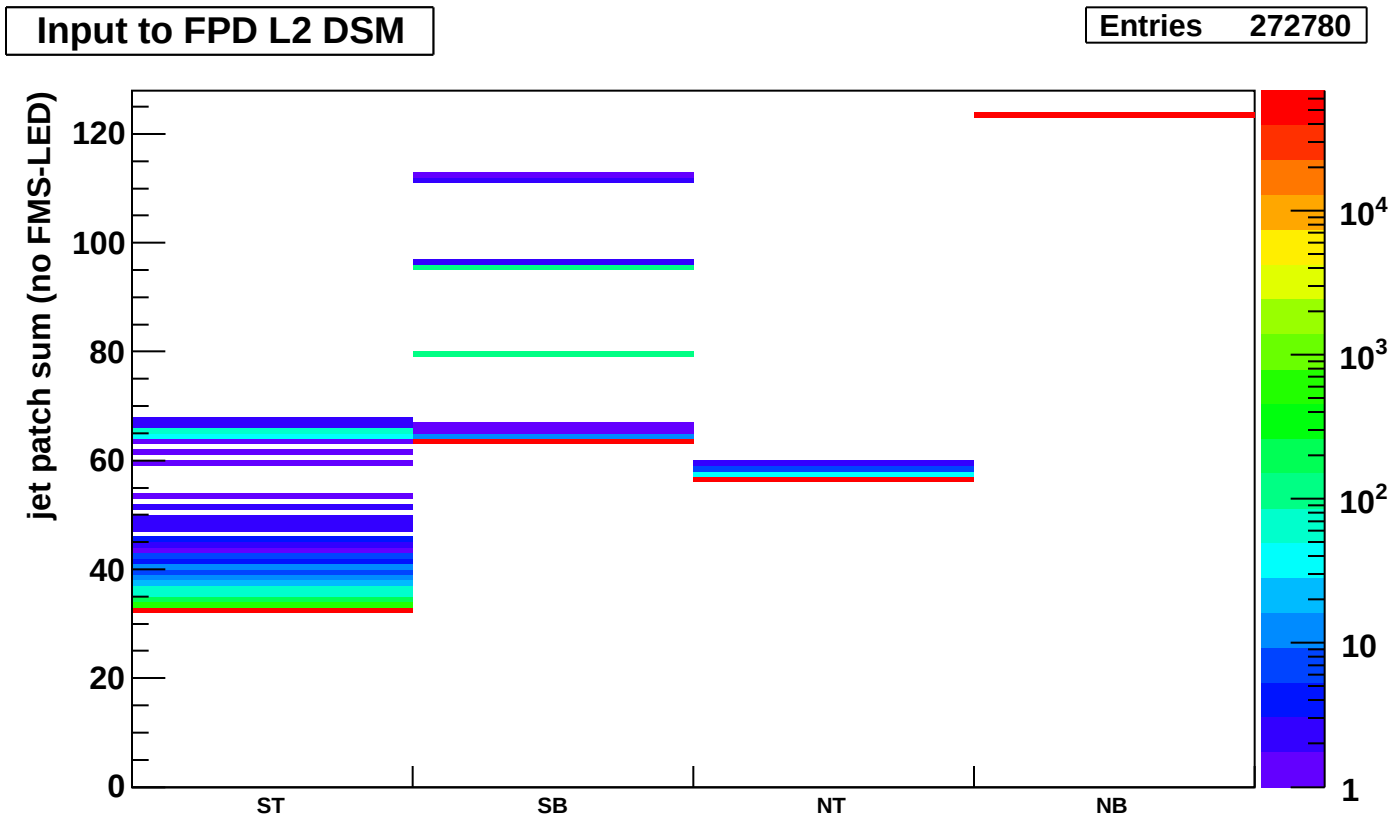

Input to FPD L2 DSM
Entries 341566
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

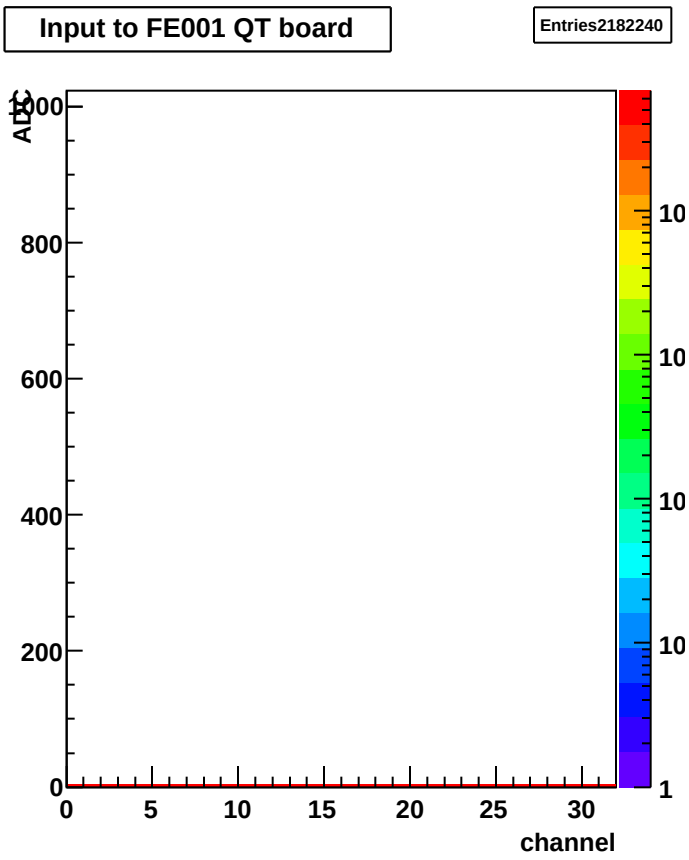

Input to FPD L2 DSM
Entries 204585
CL bits
68195
68195
68195
SMALL
LARGE-S
LARGE-N

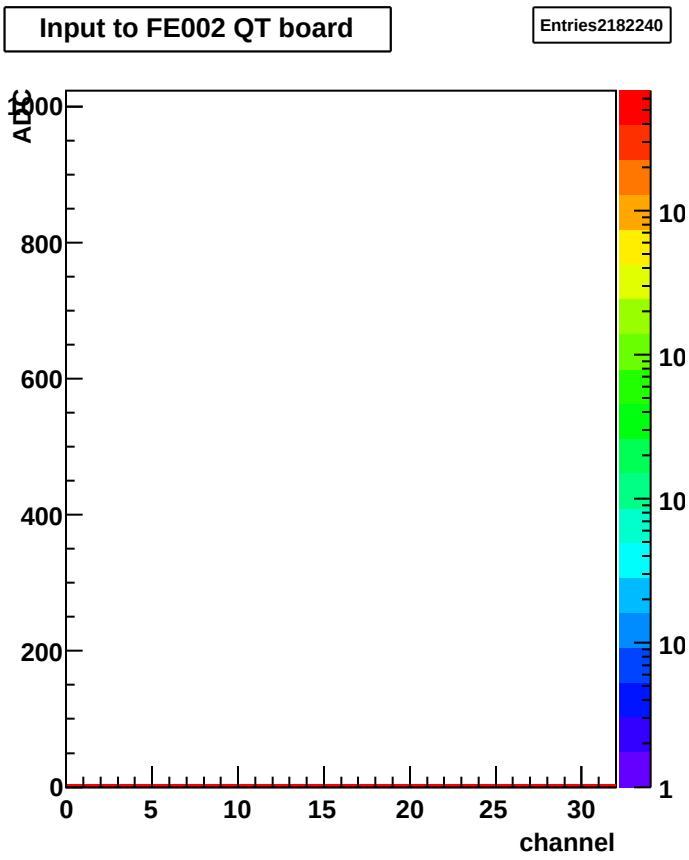

Input to FPD L2 DSM
Entries 204585
CL bits - simulated
68195
68195
68195
SMALL
LARGE-S
LARGE-N

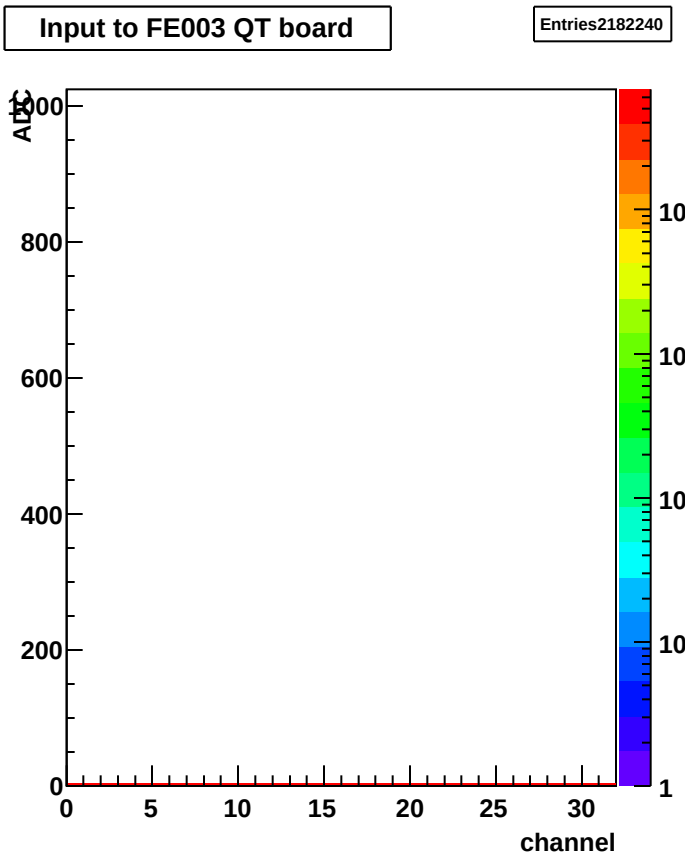

Input to FPD L2 DSM
Entries 204585
HT bits
68195
18
68195
35
68142
SMALL
LARGE-S
LARGE-N

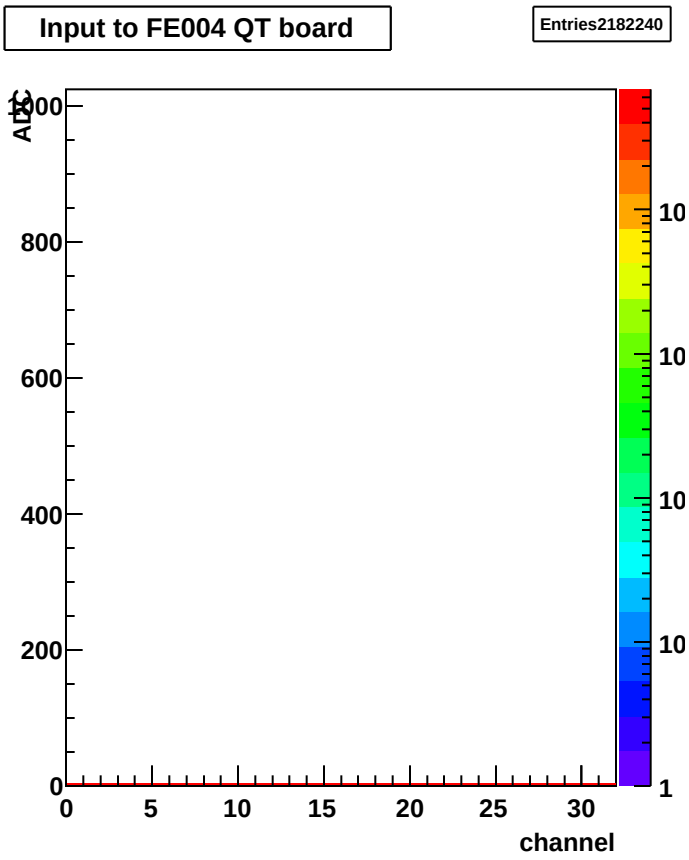

Input to FPD L2 DSM
Entries 136443
HT bits - simulated
68195
18
68195
35
SMALL
LARGE-S
LARGE-N

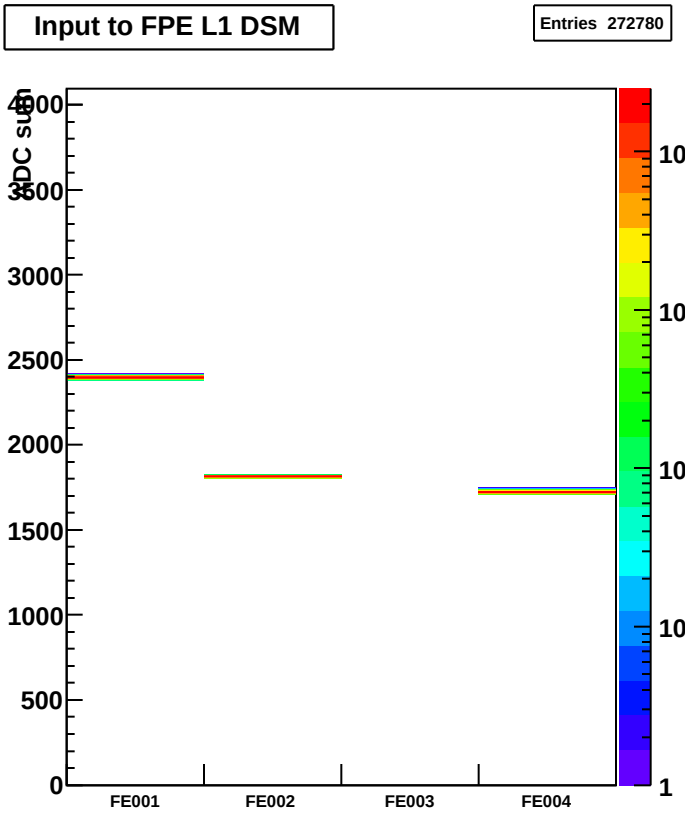

Input to FPD L2 DSM
Entries 272780
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

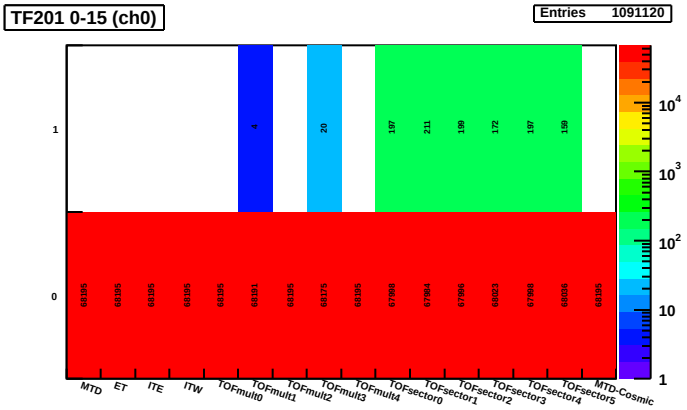

Input to FE001 QT board
Entries2182240
ADC
channel

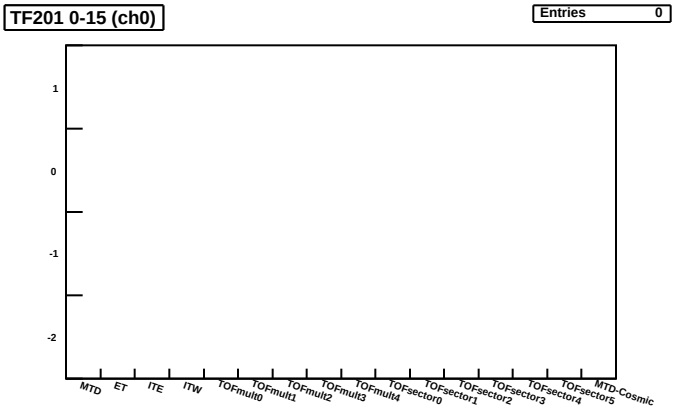

Input to FE002 QT board
Entries2182240
ADC
channel

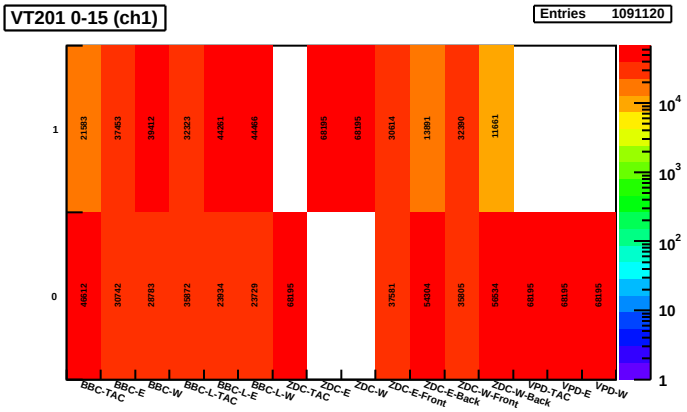

Input to FE003 QT board
Entries2182240
ADC
channel

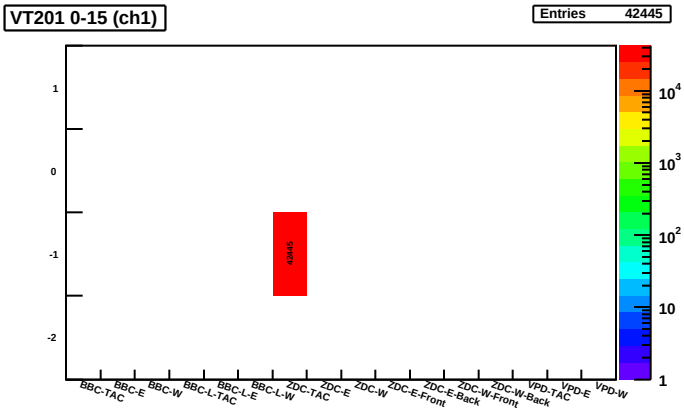

Input to FE004 QT board
Entries2182240
ADC
channel

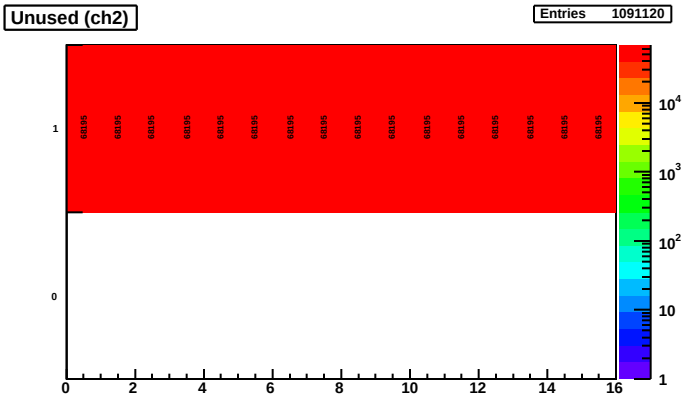

Input to FPE L1 DSM
Entries 272780
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

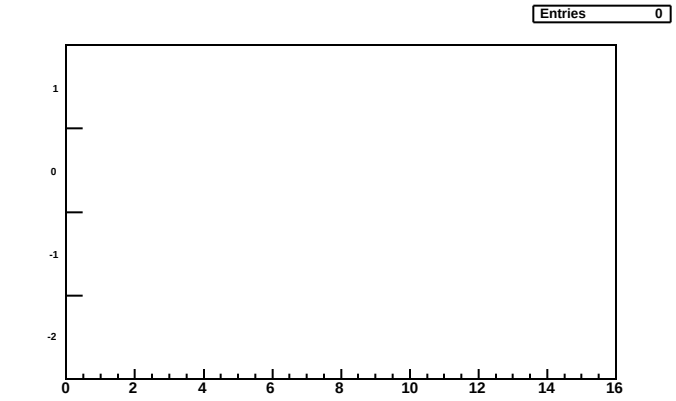

TF201 0-15 (ch0)
Entries 1091120
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

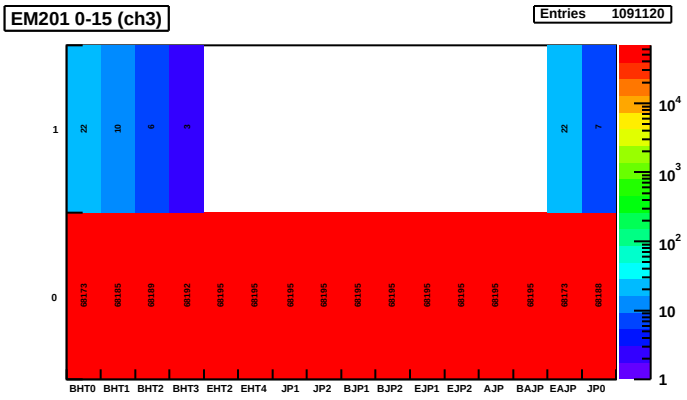

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

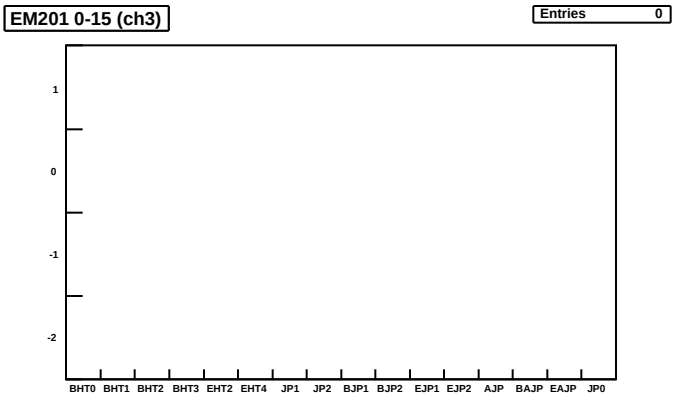

VT201 0-15 (ch1)
Entries 1091120
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 42445
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

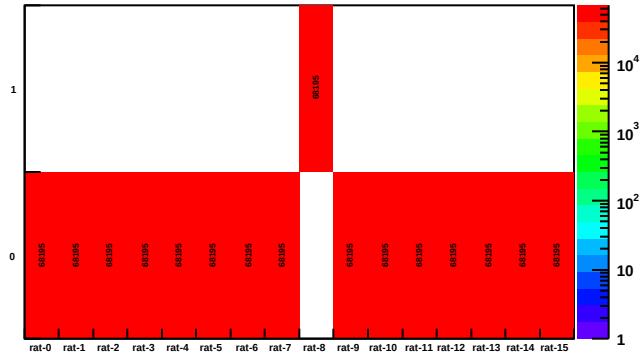

Unused (ch2)
Entries 1091120

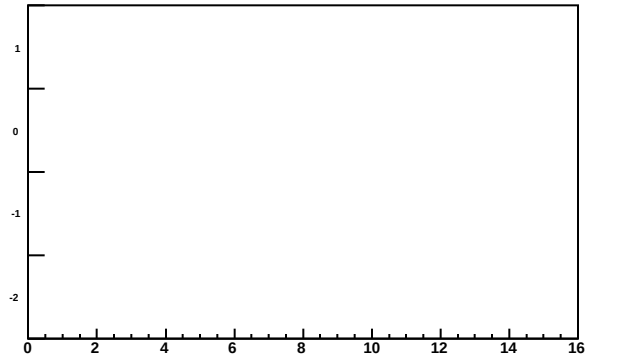

Entries 0


EM201 0-15 (ch3)
Entries 1091120
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

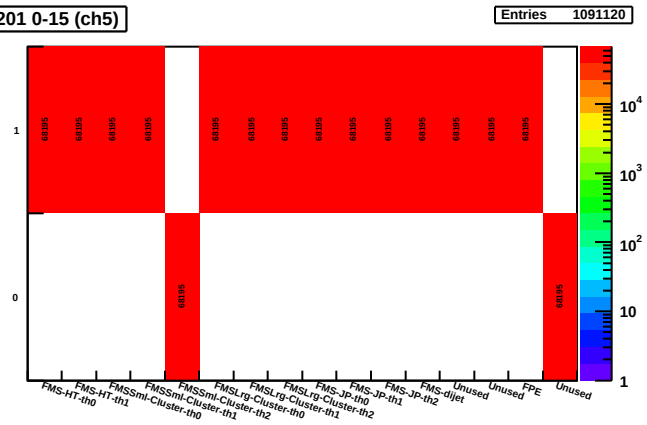

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

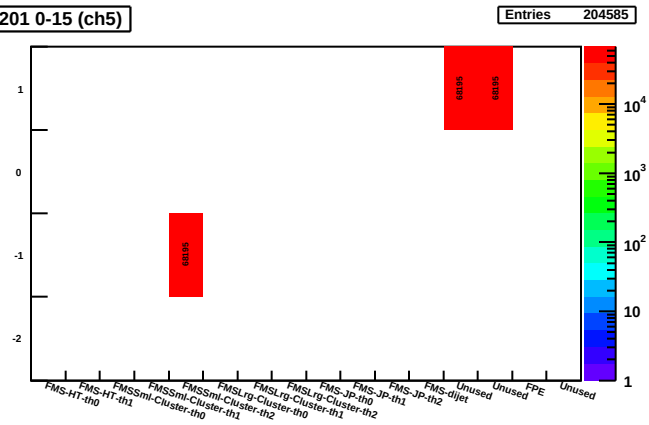




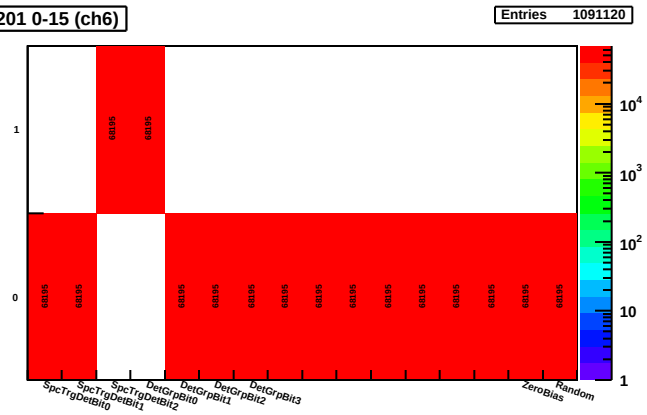
FP201 0-15 (ch5)

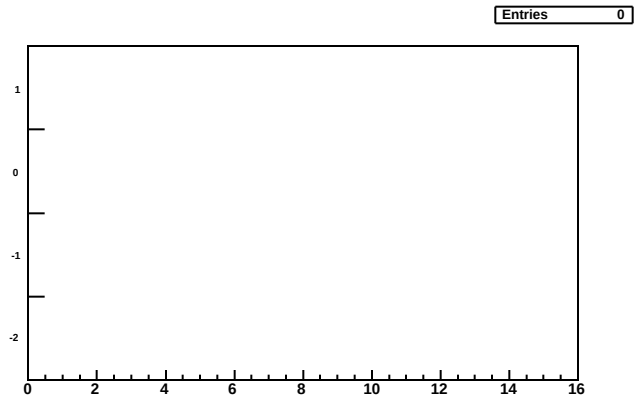
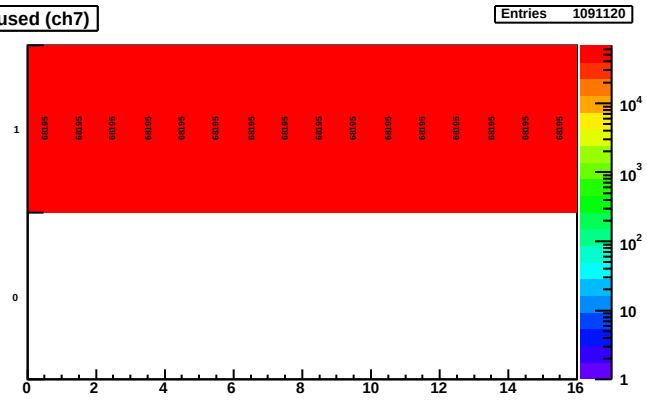
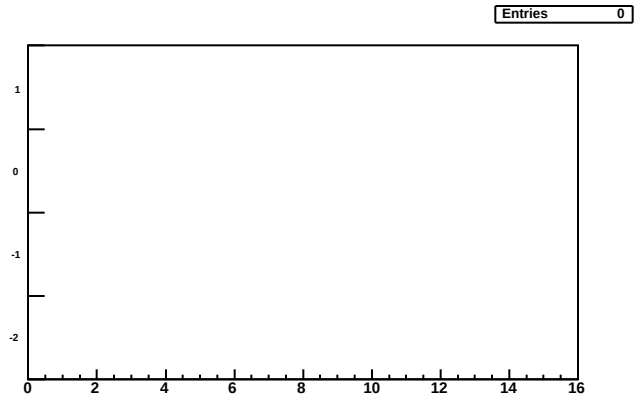


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)