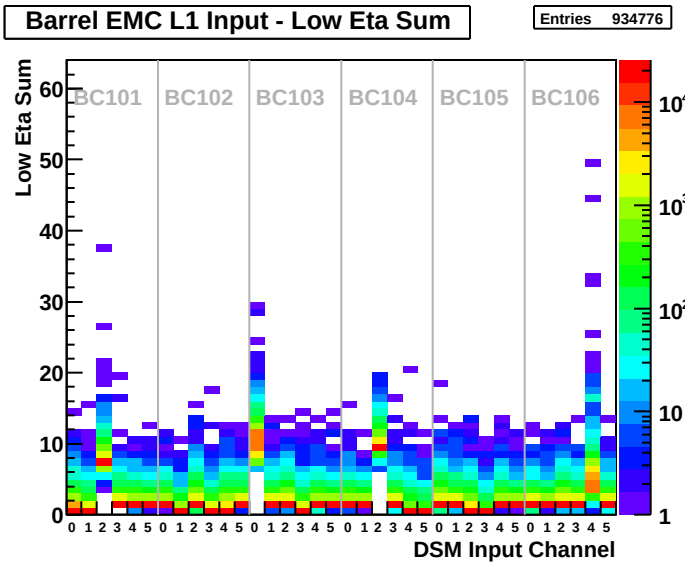
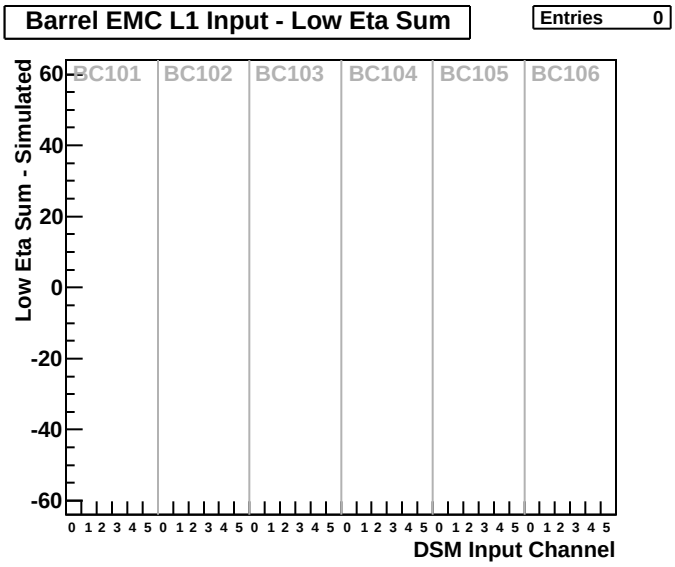
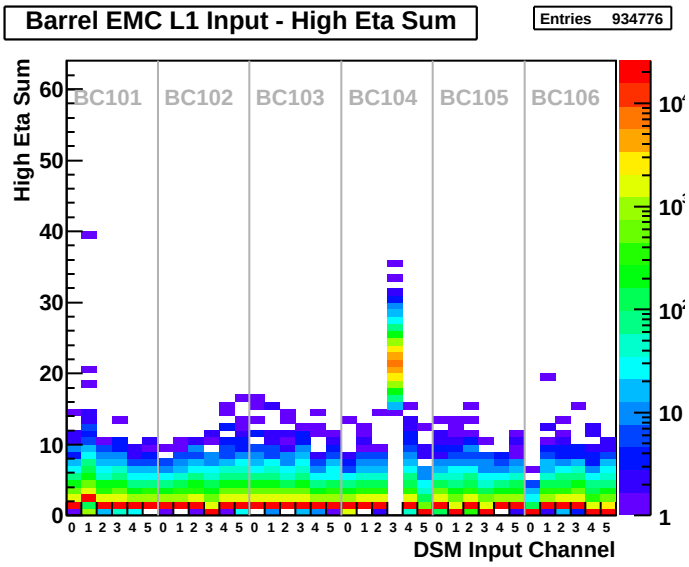
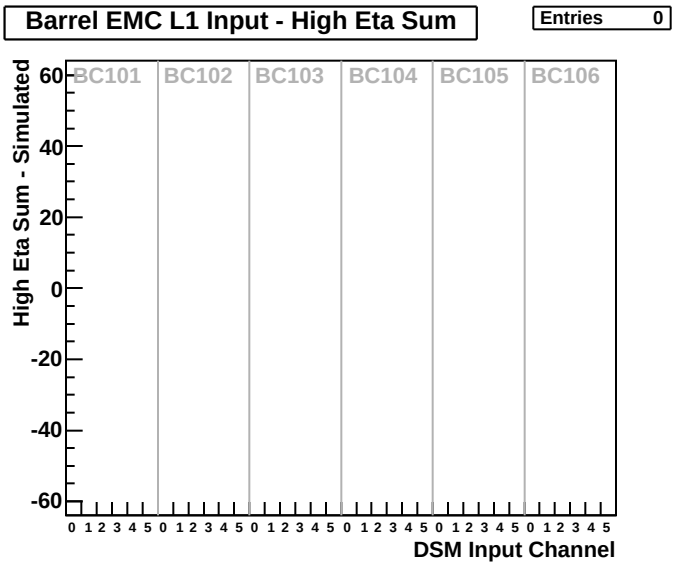
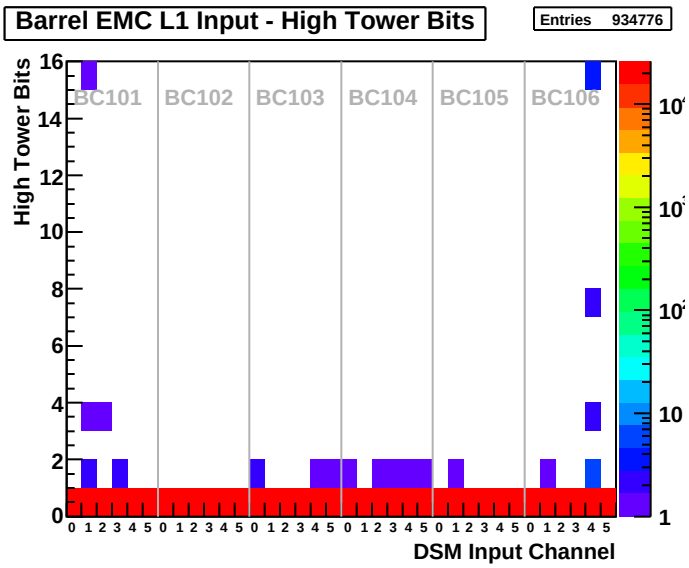
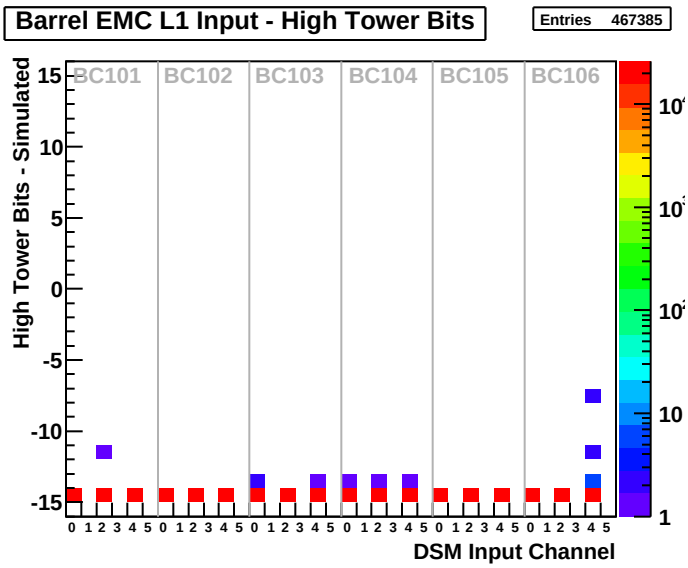

Barrel EMC L1 Input - Low Eta Sum
Entries 934776
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

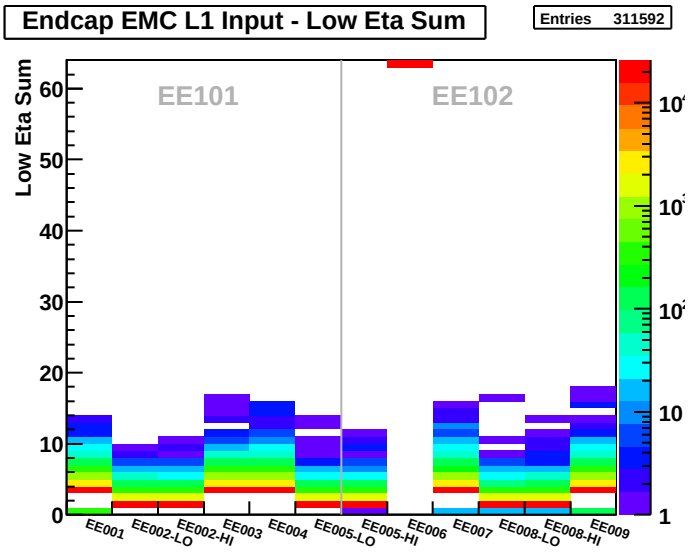

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

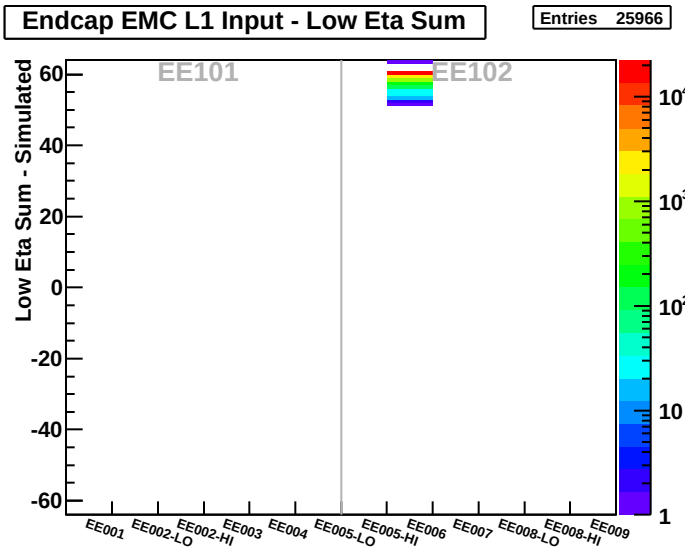

Barrel EMC L1 Input - High Eta Sum
Entries 934776
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

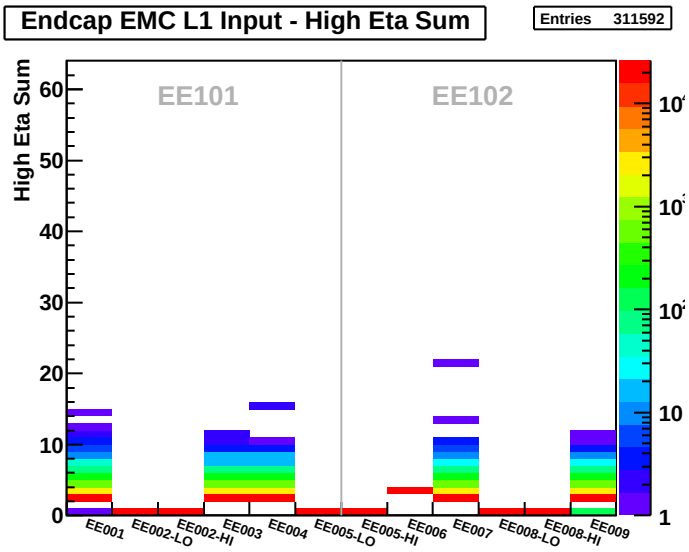

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

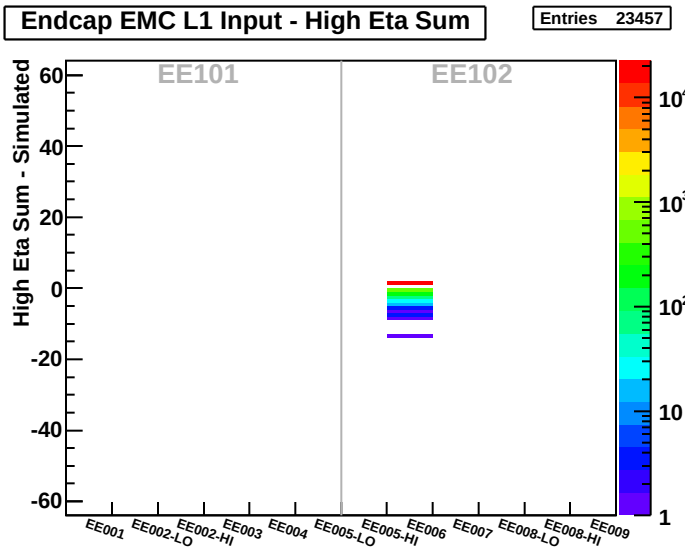

Barrel EMC L1 Input - High Tower Bits
Entries 934776
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

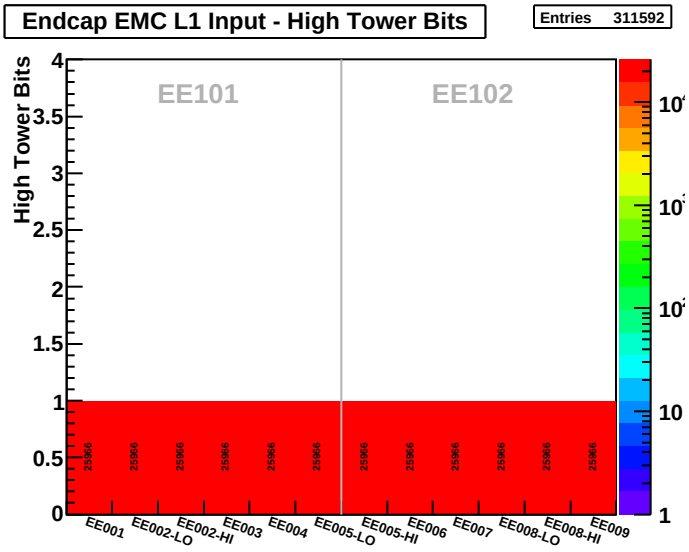

Barrel EMC L1 Input - High Tower Bits
Entries 467385
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

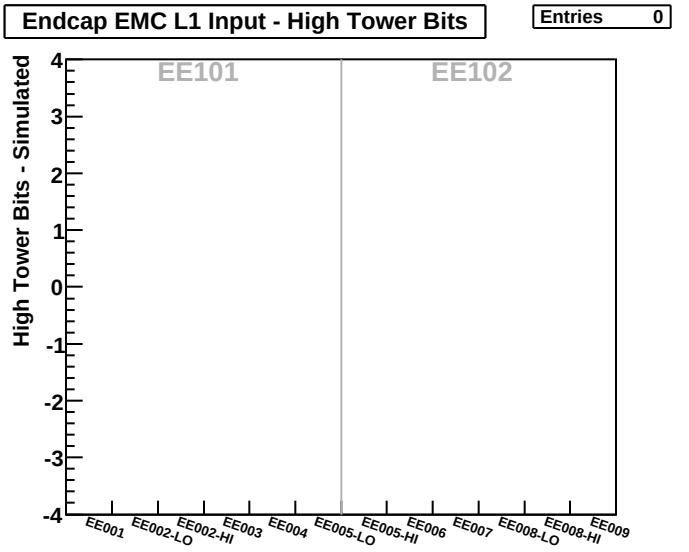

Endcap EMC L1 Input - Low Eta Sum
Entries 311592
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

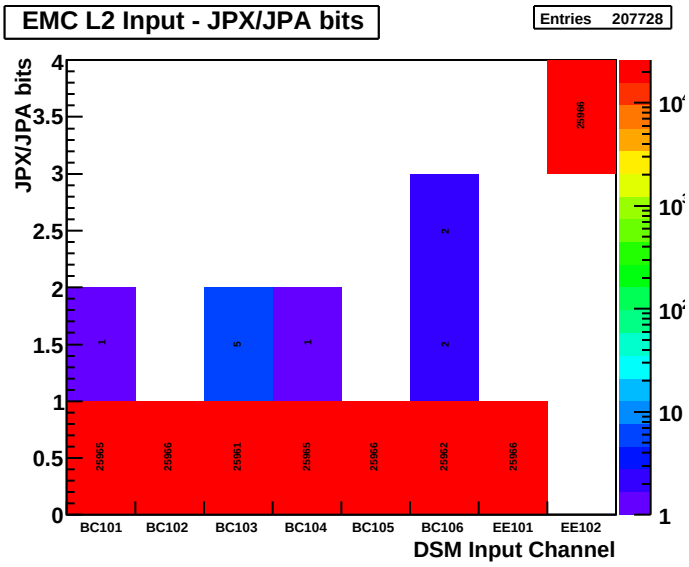

Endcap EMC L1 Input - Low Eta Sum
Entries 25966
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

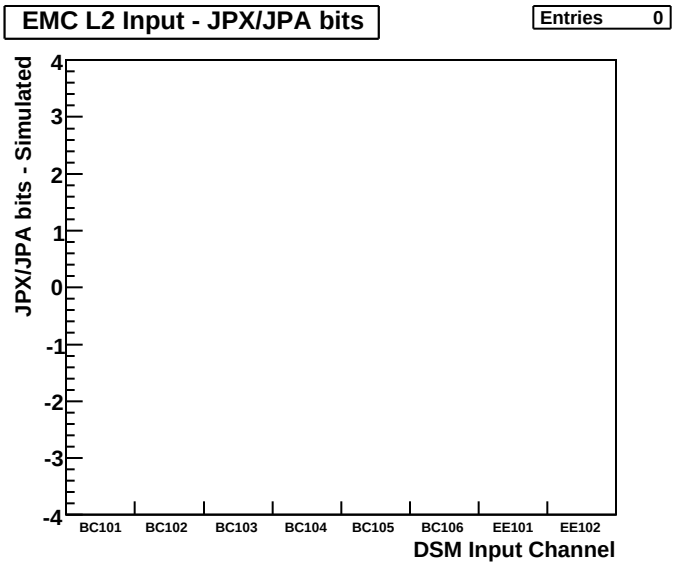

Endcap EMC L1 Input - High Eta Sum
Entries 311592
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

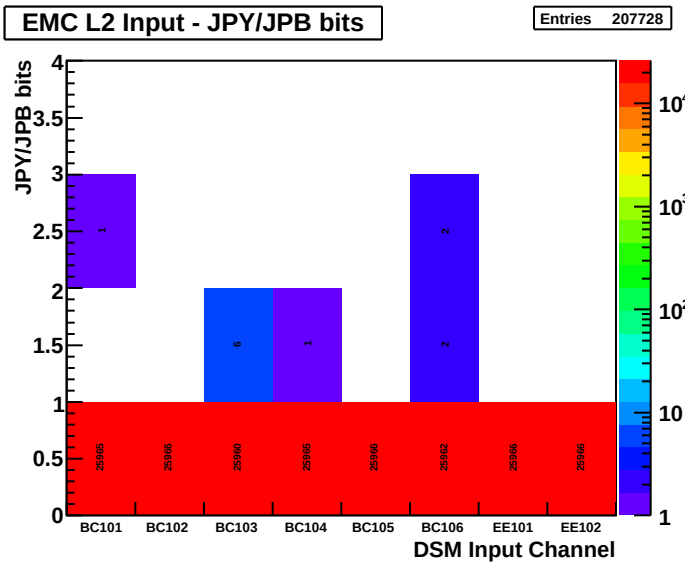

Endcap EMC L1 Input - High Eta Sum
Entries 23457
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

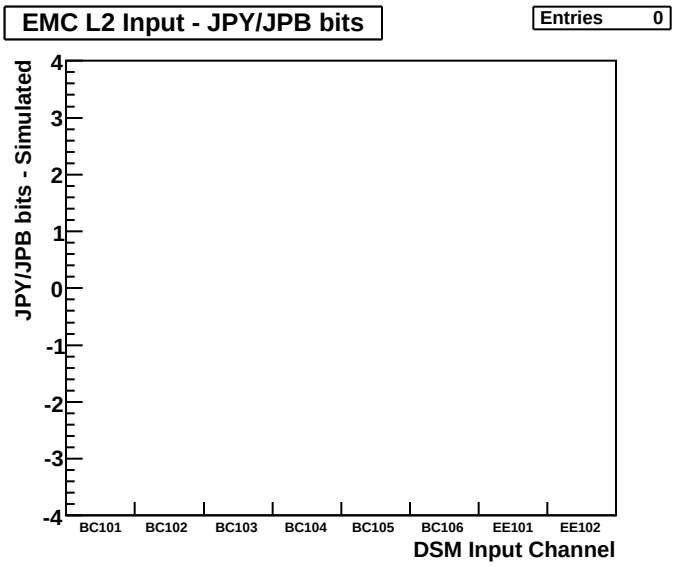

Endcap EMC L1 Input - High Tower Bits
Entries 311592
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

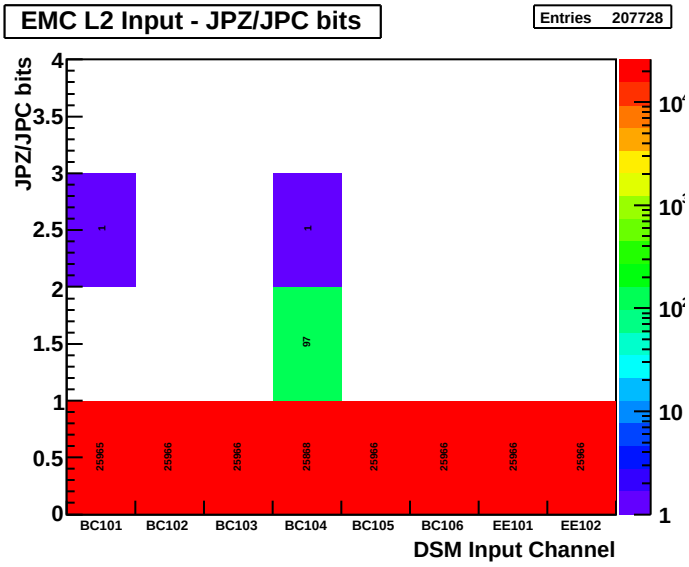

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

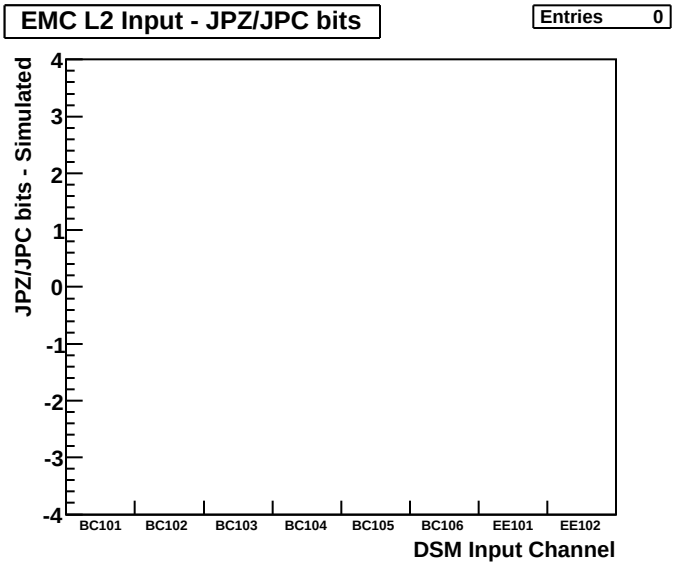

EMC L2 Input - JPX/JPA bits
Entries 207728
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

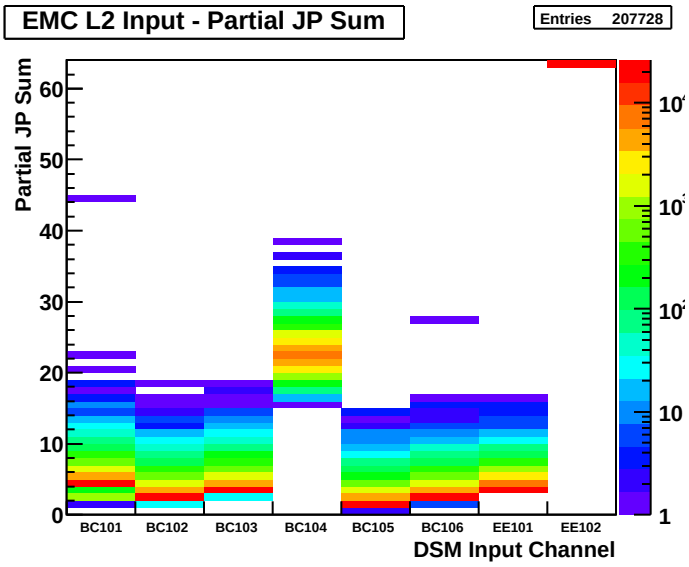

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

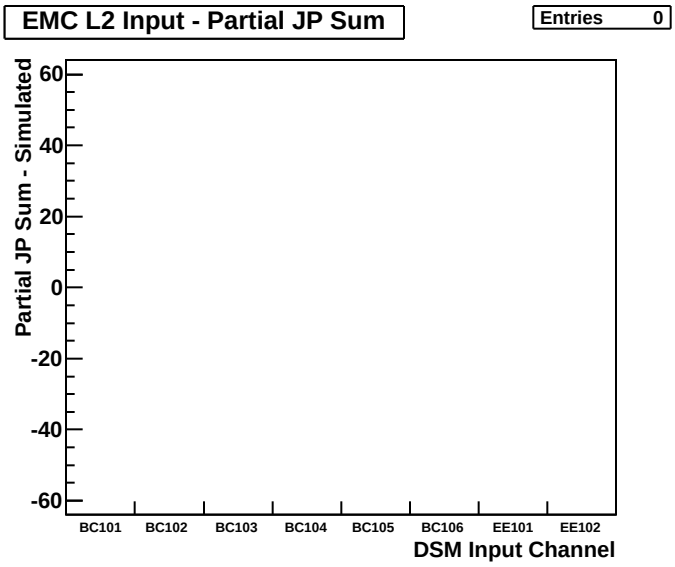

EMC L2 Input - JPY/JPB bits
Entries 207728
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

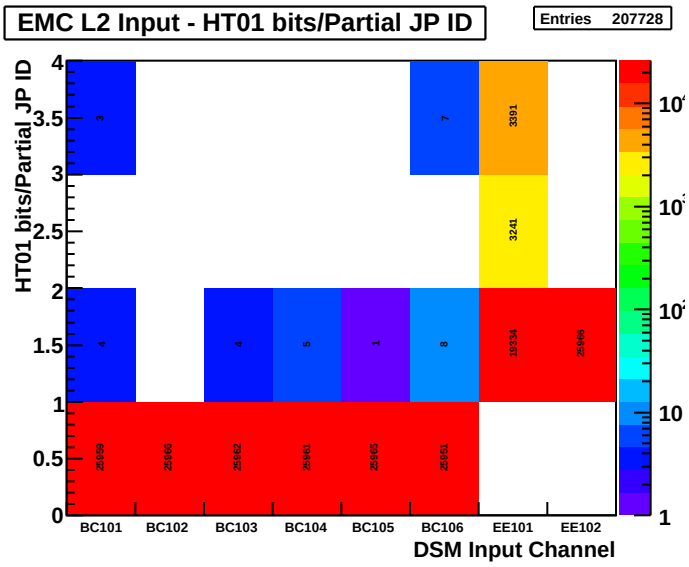

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

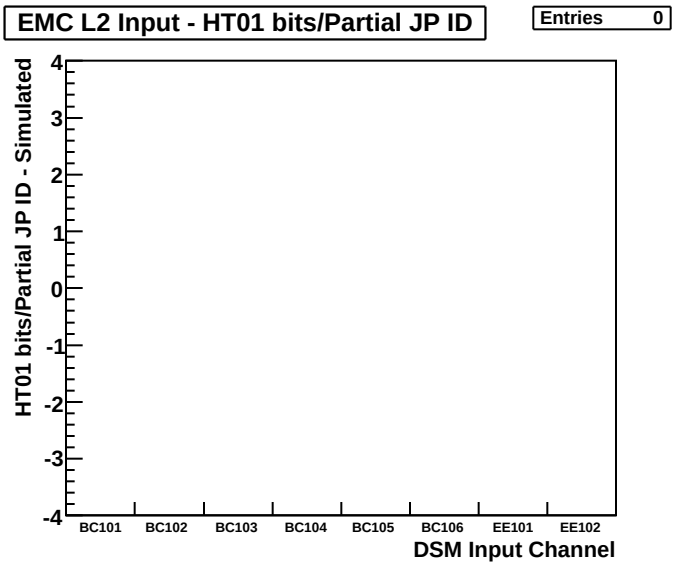

EMC L2 Input - JPZ/JPC bits
Entries 207728
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

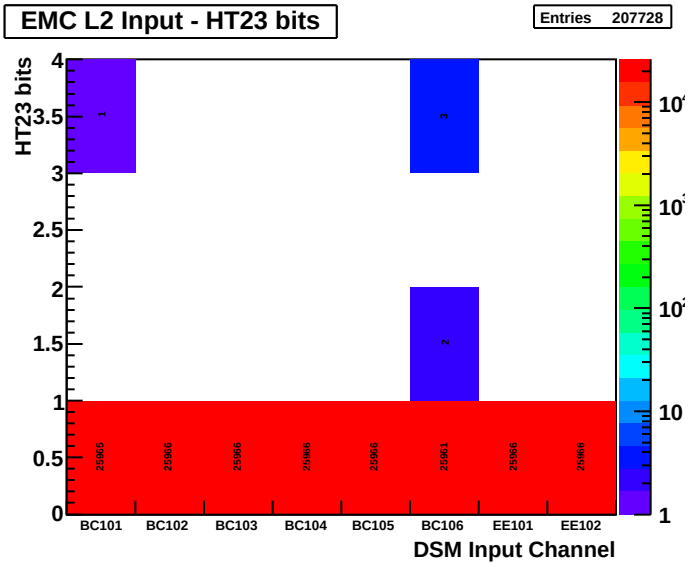

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

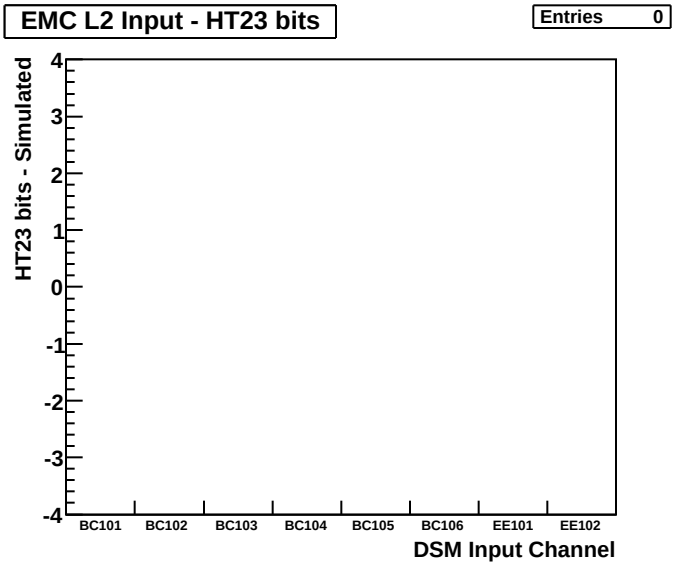

EMC L2 Input - Partial JP Sum
Entries 207728
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

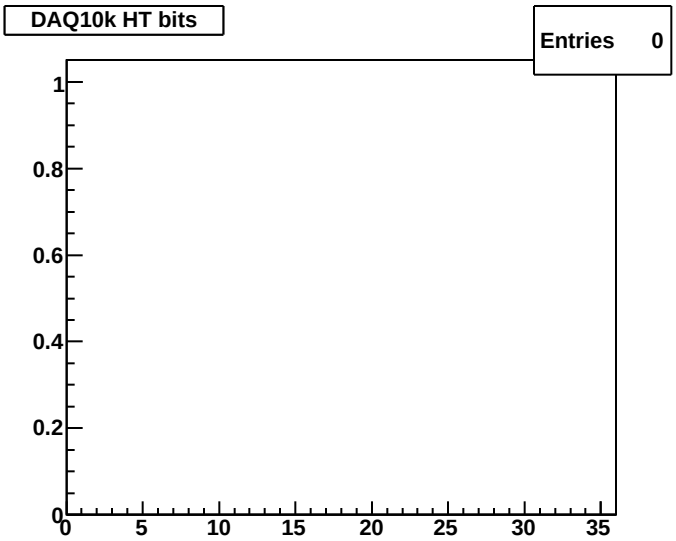

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

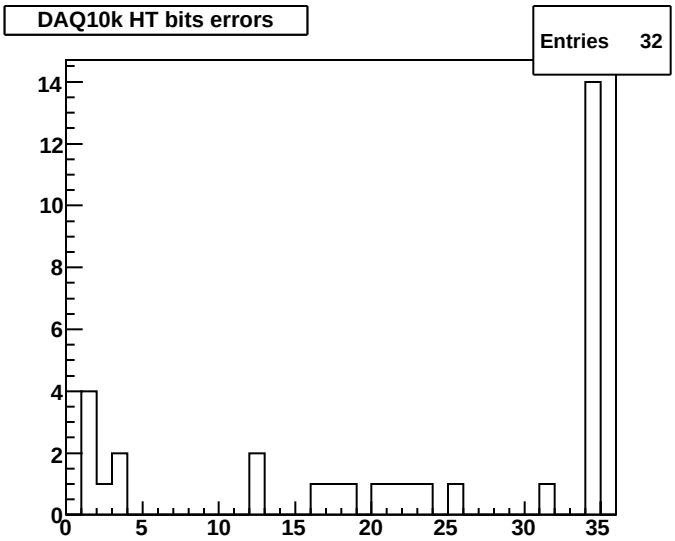

EMC L2 Input - HT01 bits/Partial JP ID
Entries 207728
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

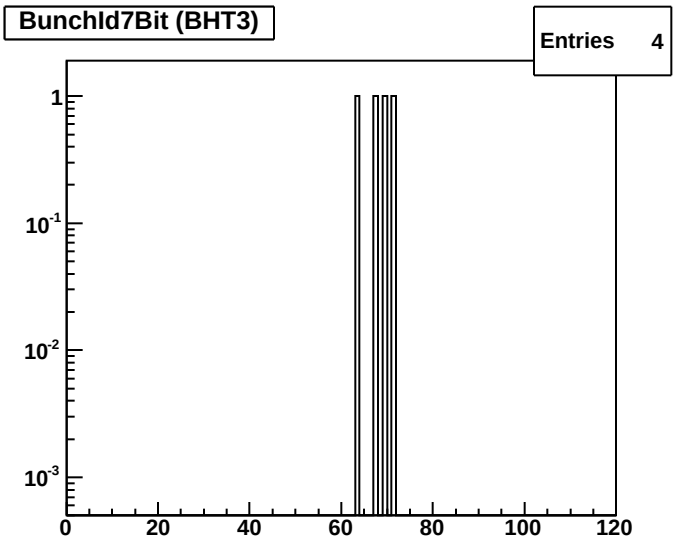

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

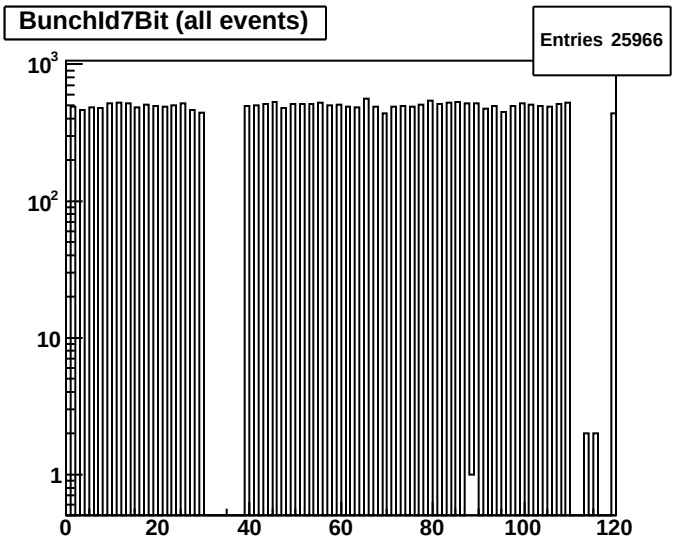

EMC L2 Input - HT23 bits
Entries 207728
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

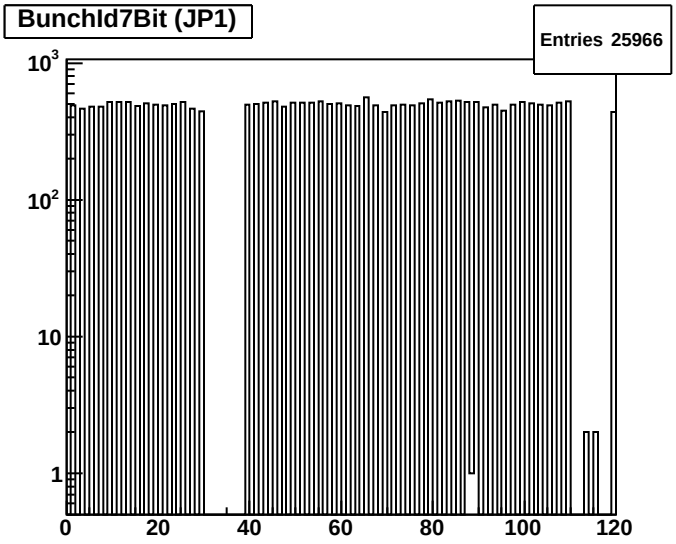

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

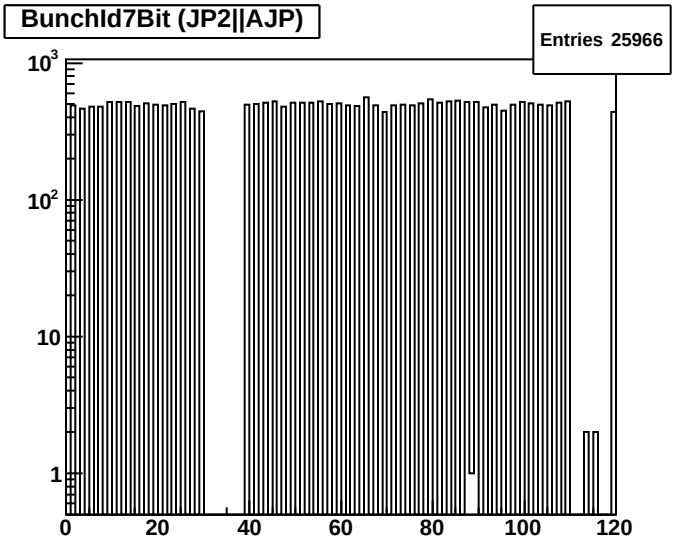

DAQ10k HT bits
Entries 0

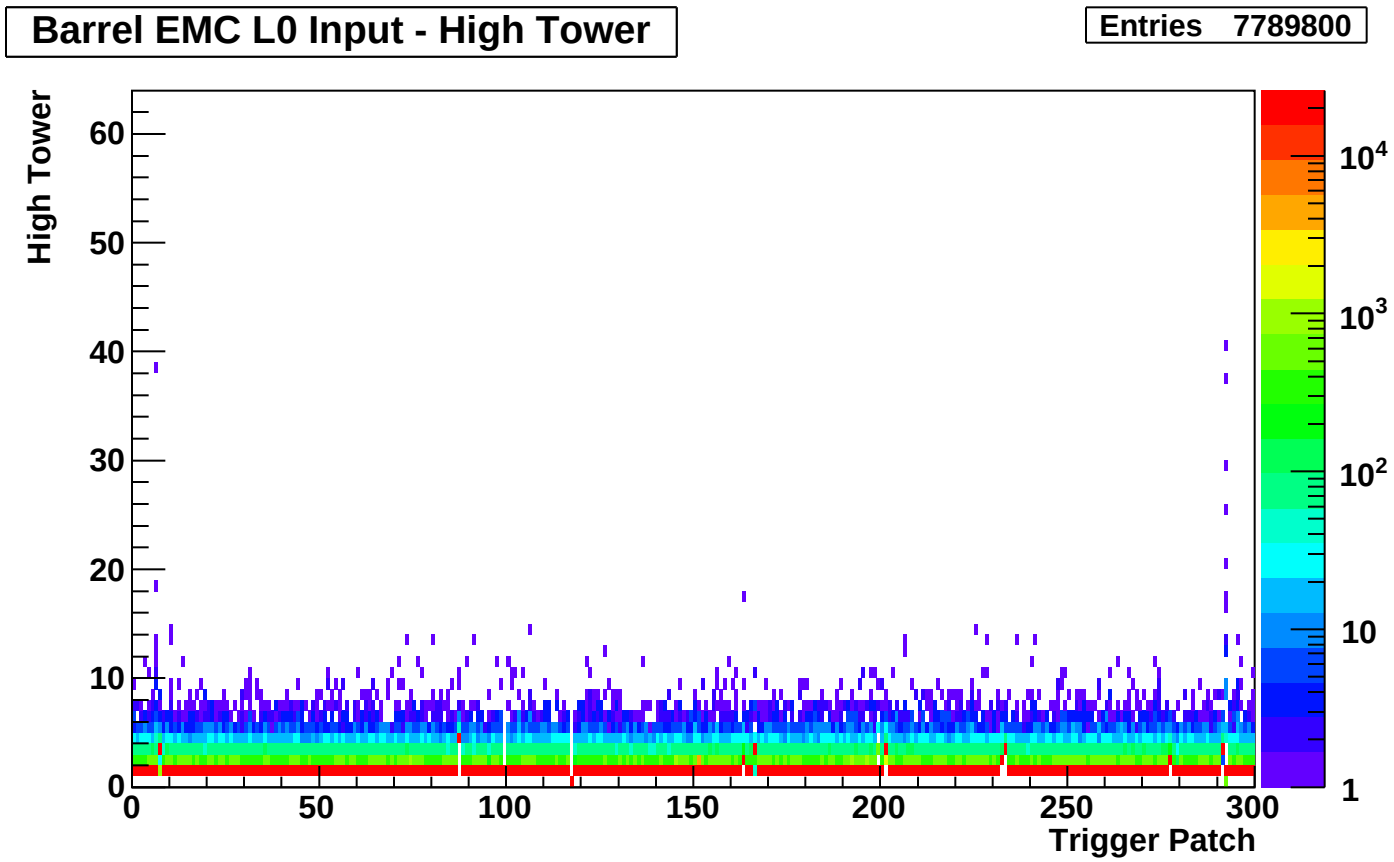

DAQ10k HT bits errors
Entries 32

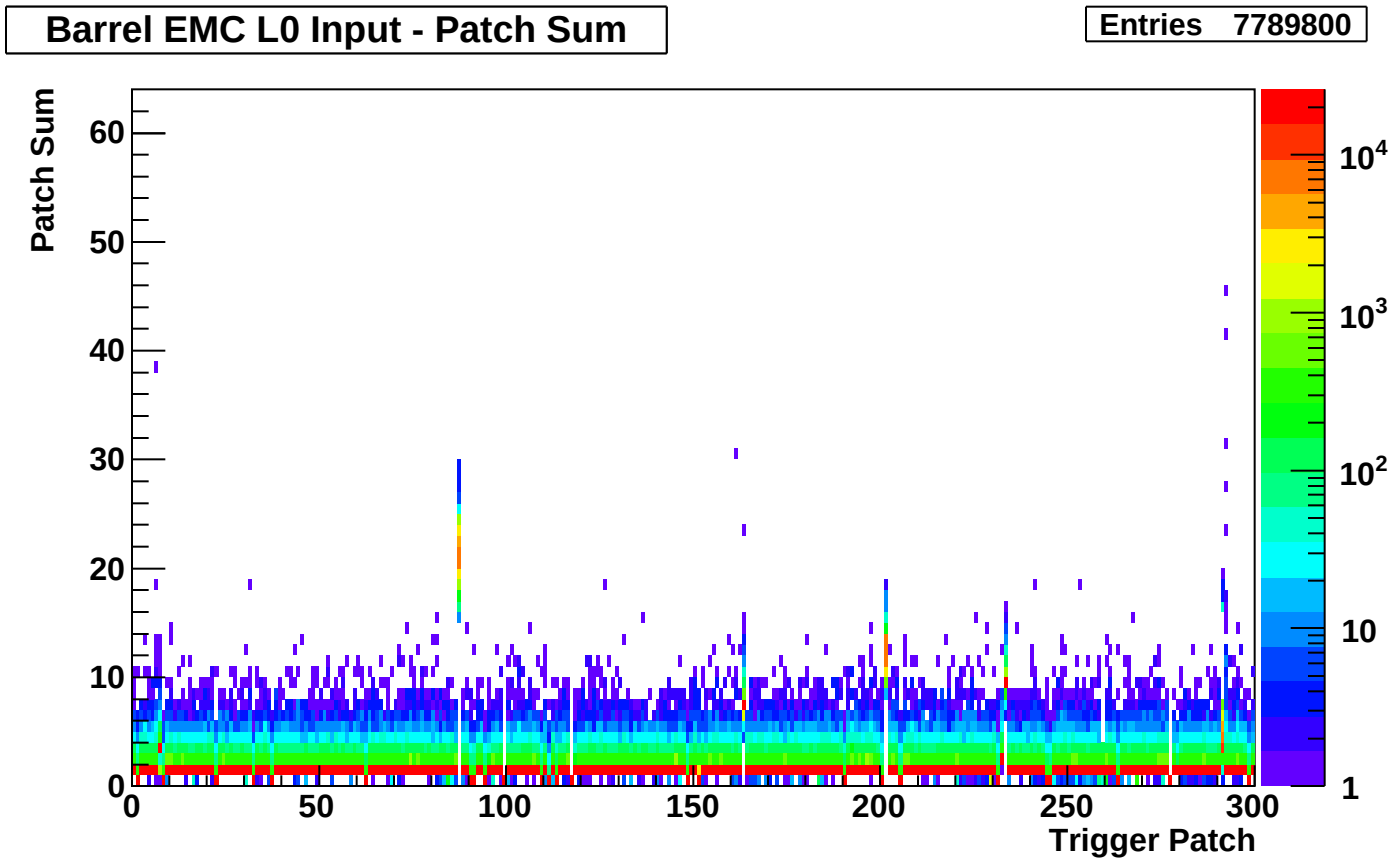

BunchId7Bit (BHT3)
Entries 4

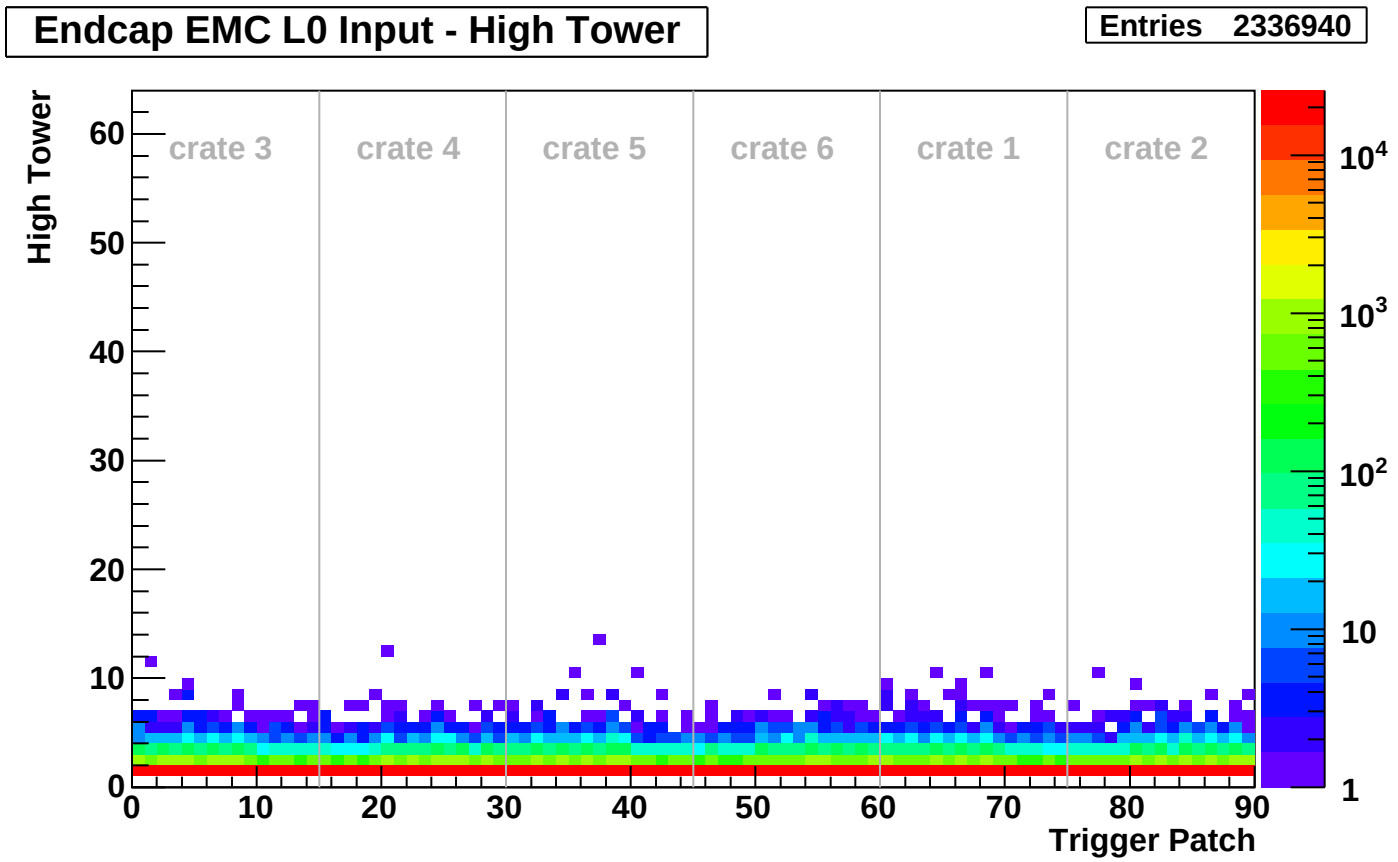

BunchId7Bit (all events)
Entries 25966

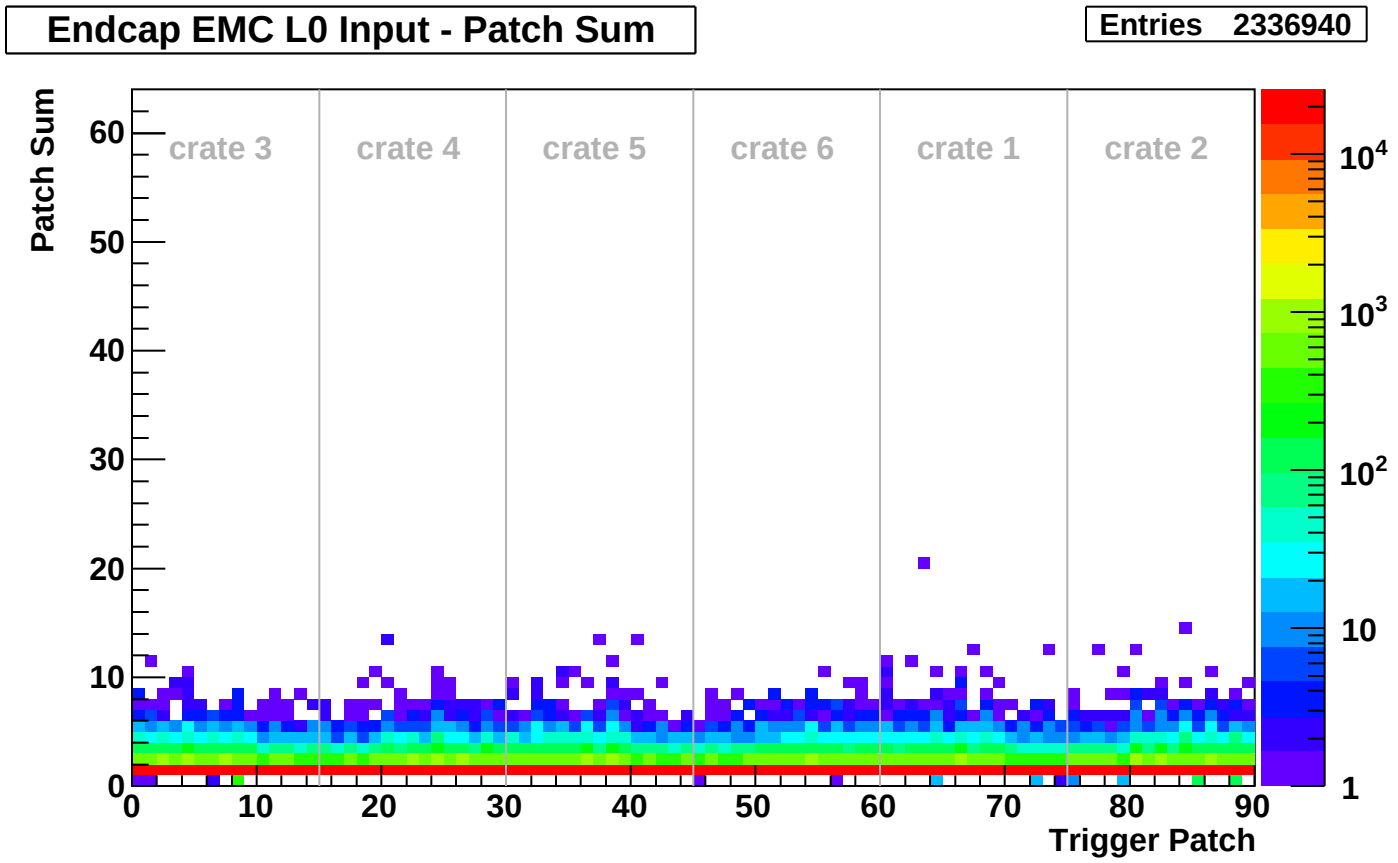

BunchId7Bit (JP1)
Entries 25966

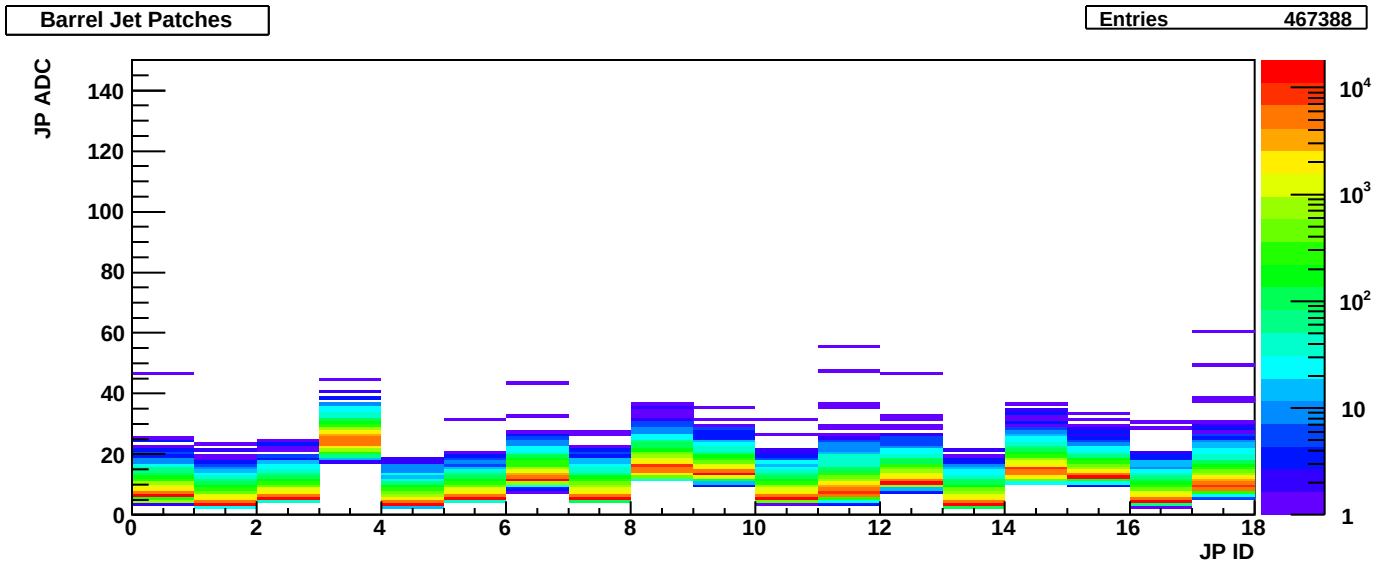

BunchId7Bit (JP2||AJP)
Entries 25966

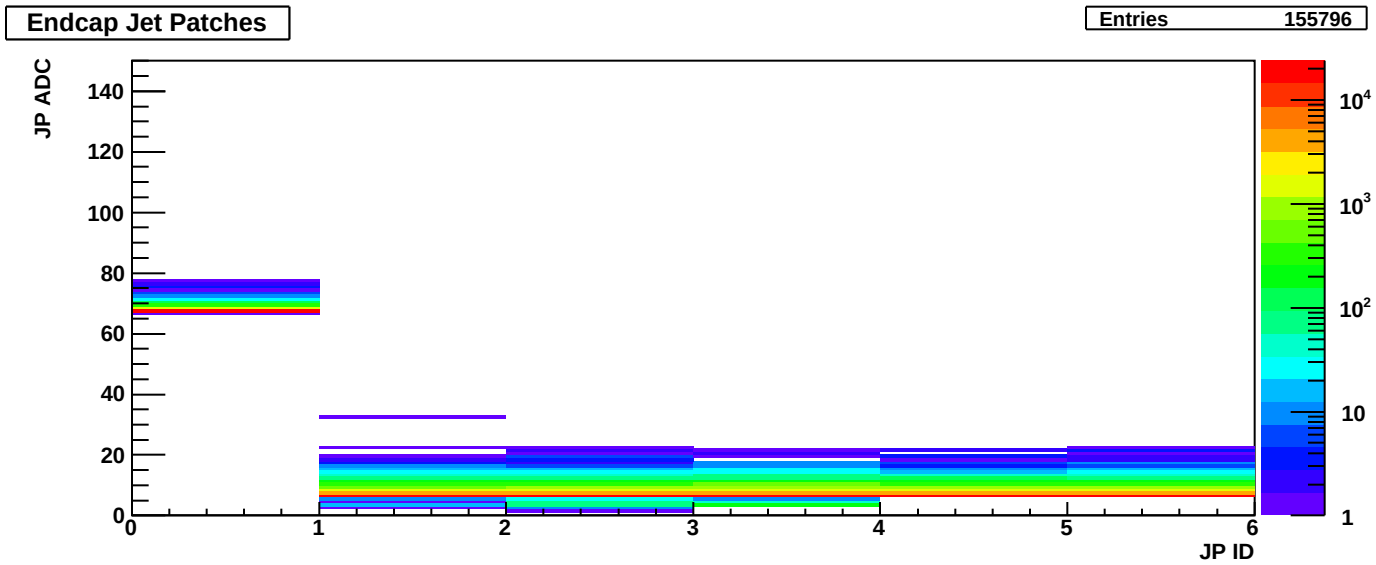

Barrel EMC L0 Input - High Tower
Entries 7789800
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

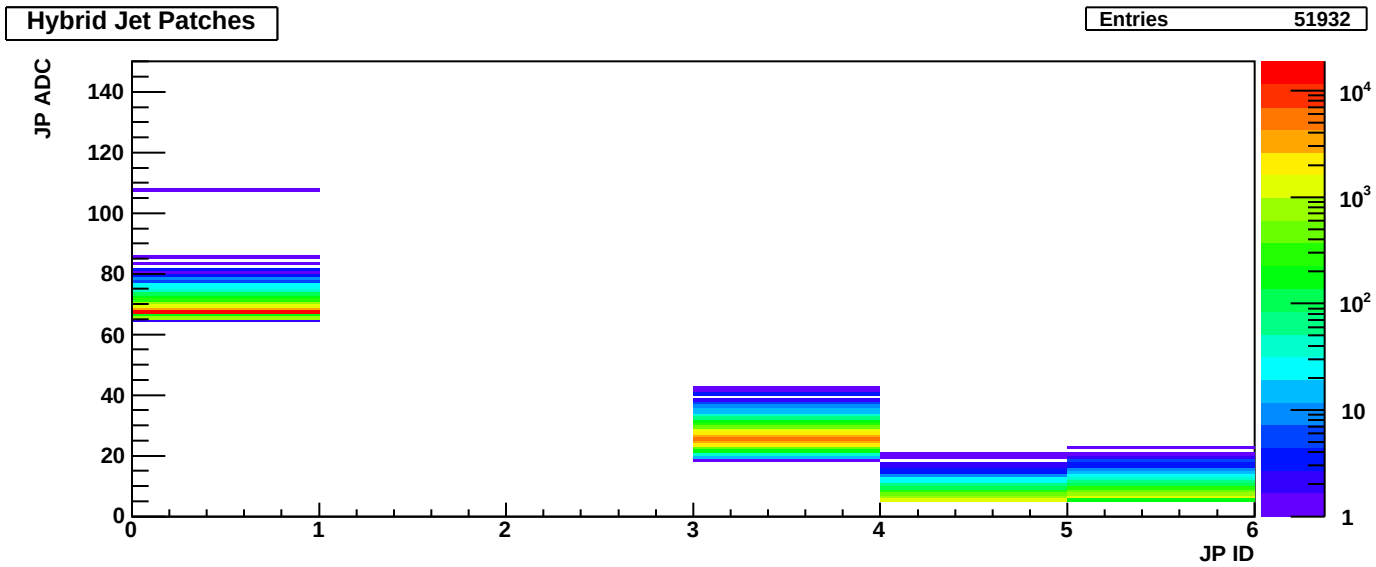

Barrel EMC L0 Input - Patch Sum
Entries 7789800
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

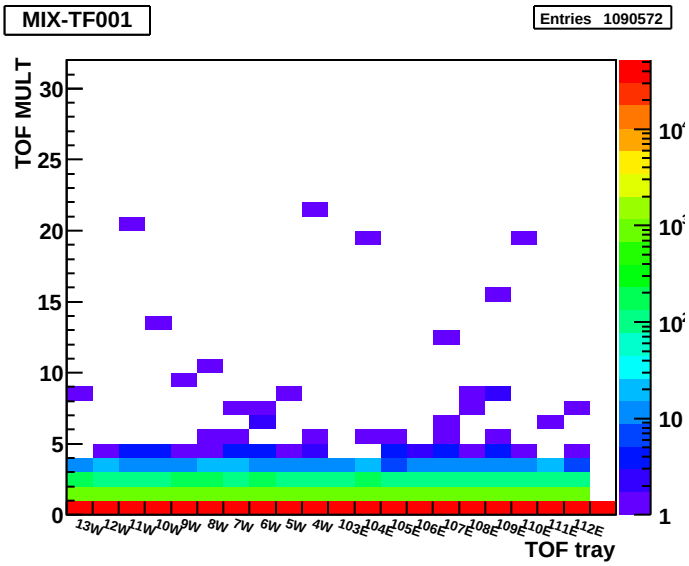

Endcap EMC L0 Input - High Tower
Entries 2336940
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

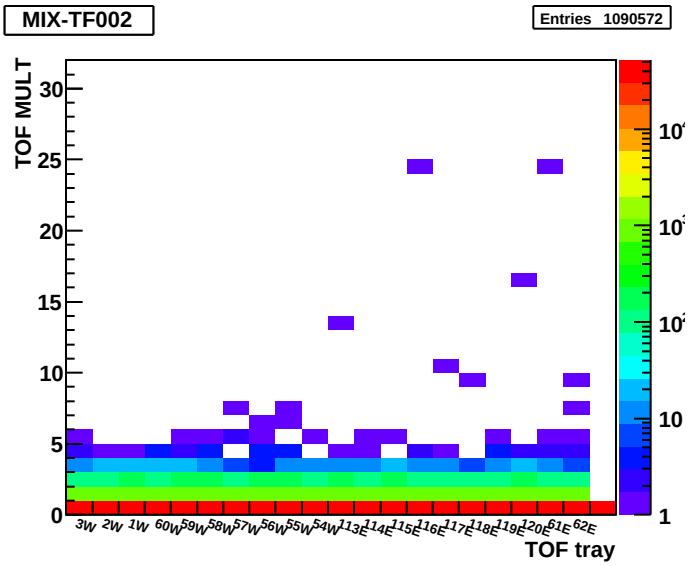

Endcap EMC L0 Input - Patch Sum
Entries 2336940
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

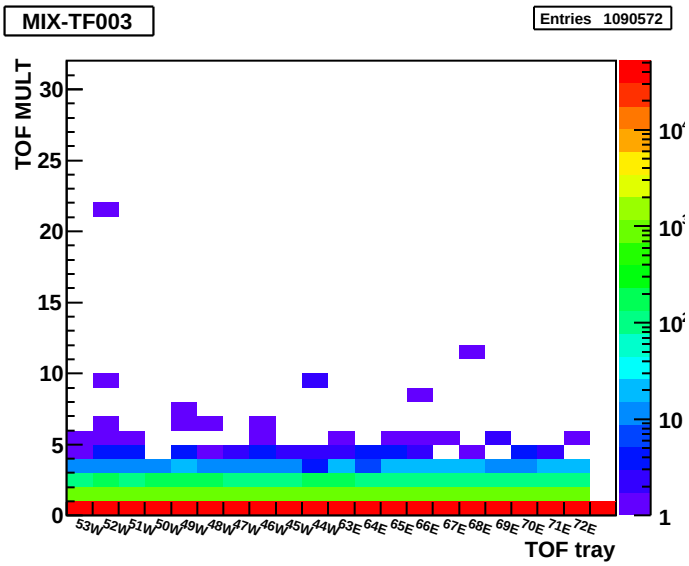

Barrel Jet Patches
Entries 467388
JP ADC
JP ID

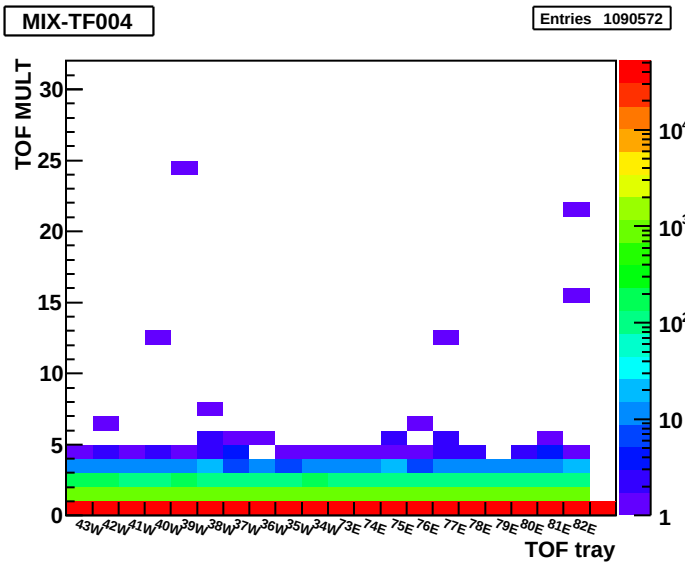

Endcap Jet Patches
Entries 155796
JP ADC
JP ID

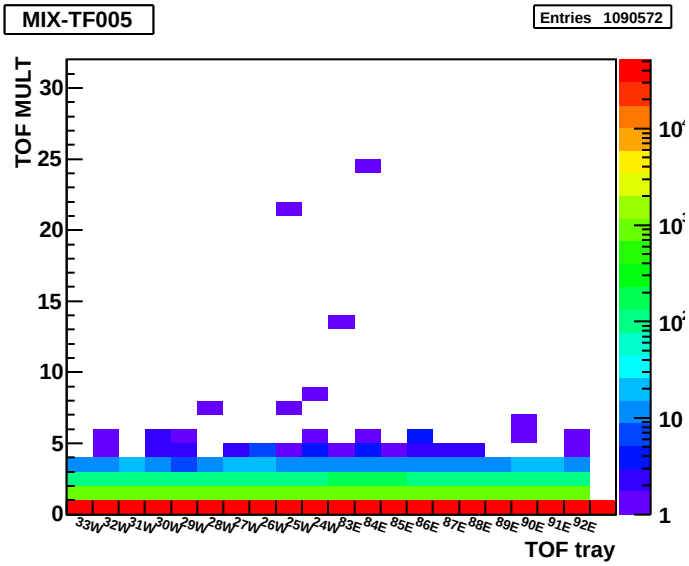

Hybrid Jet Patches
Entries 51932
JP ADC
JP ID

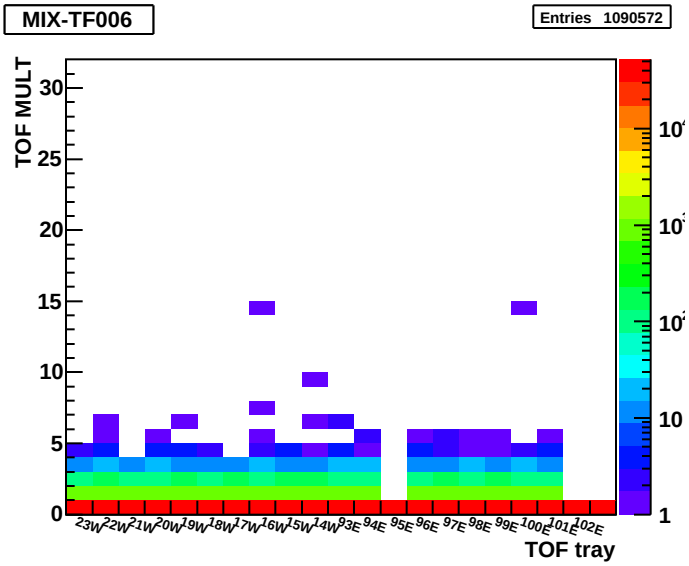

MIX-TF001
Entries 1090572
TOF MULT
TOF tray

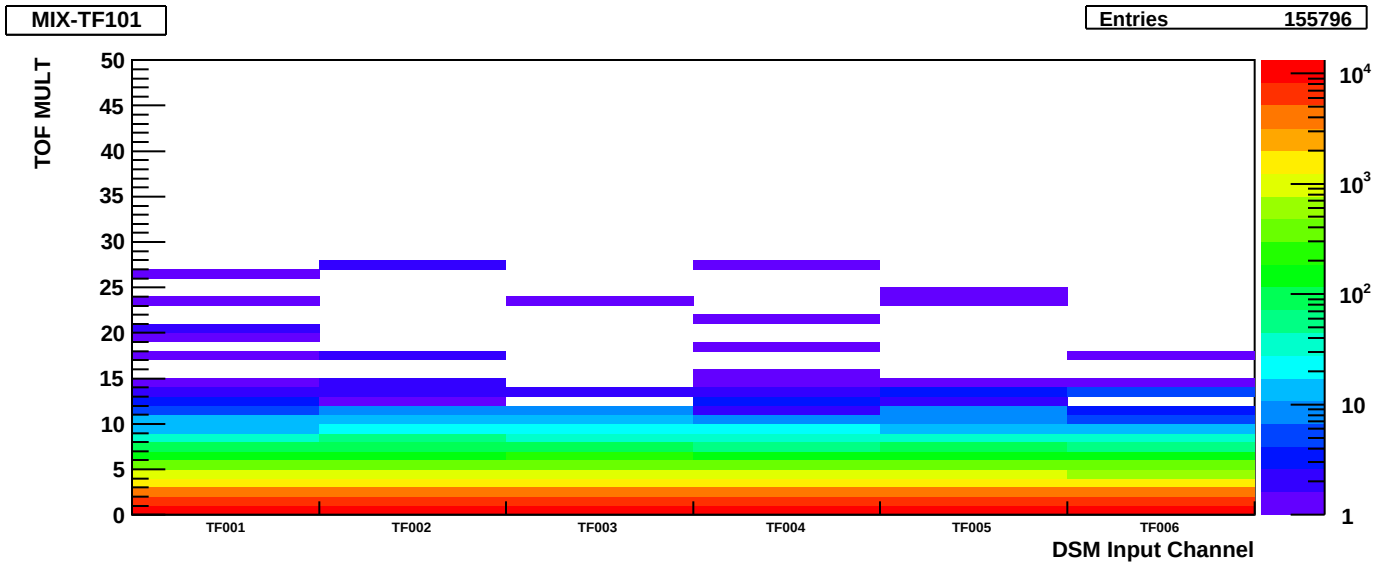

MIX-TF002
Entries 1090572
TOF MULT
TOF tray

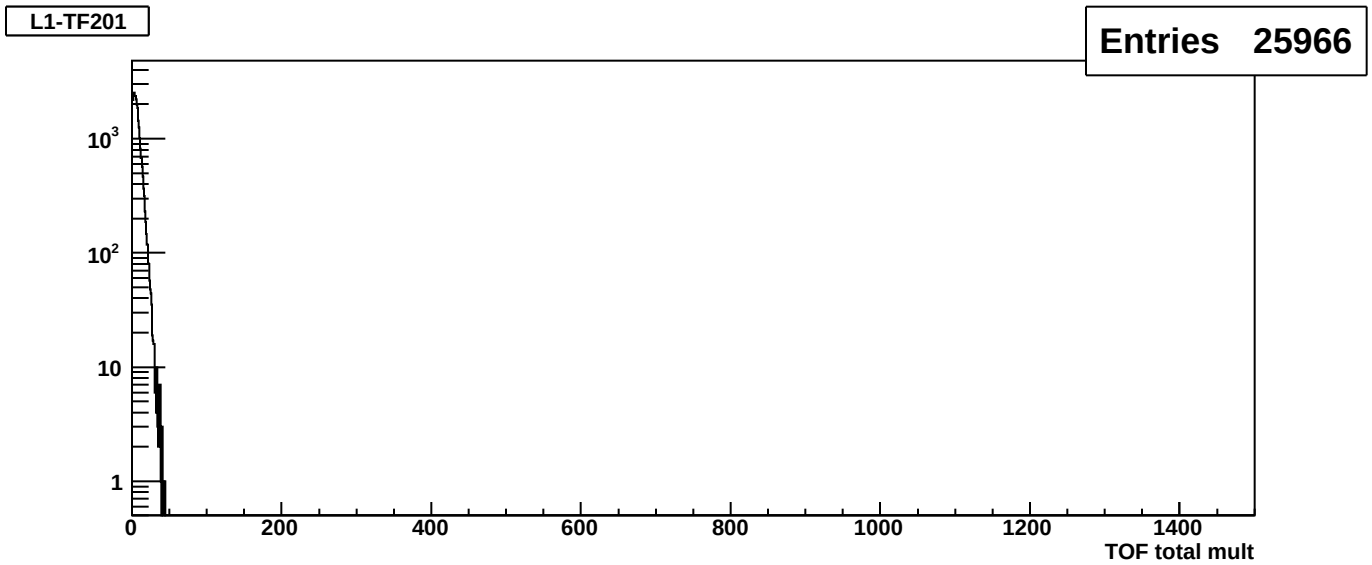

MIX-TF003
Entries 1090572
TOF MULT
TOF tray

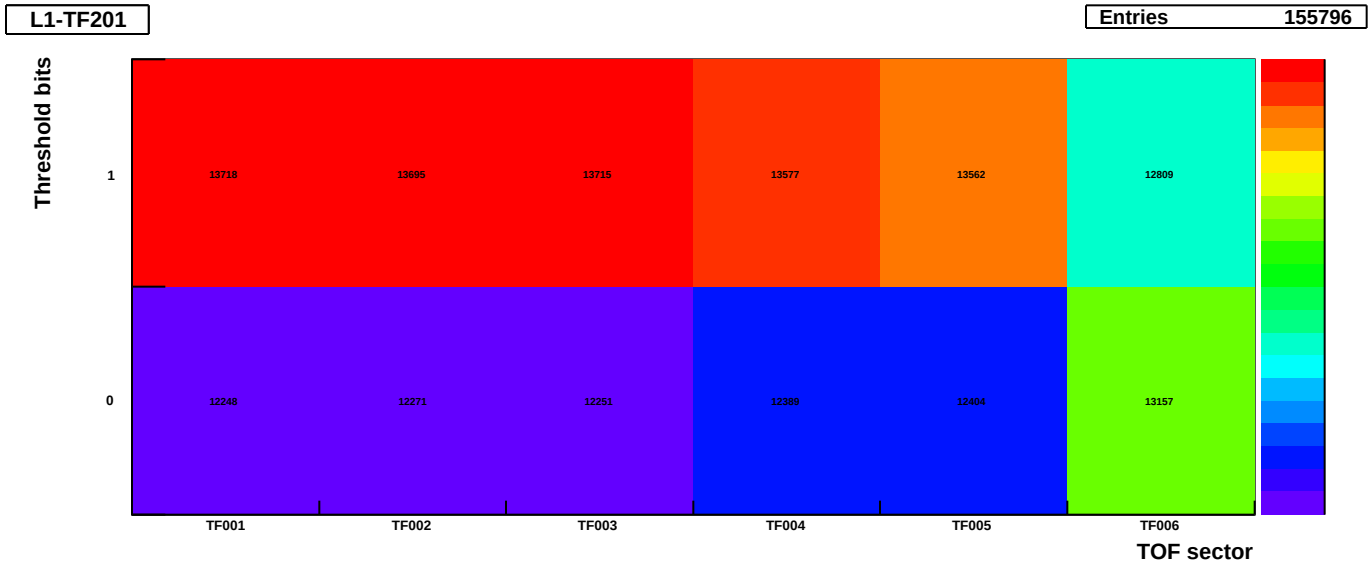

MIX-TF004
Entries 1090572
TOF MULT
TOF tray

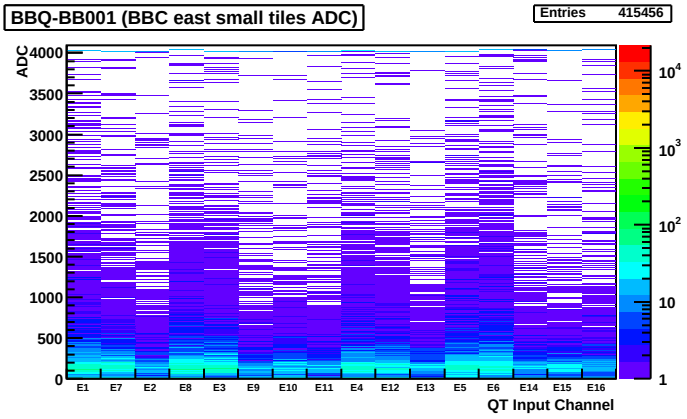

MIX-TF005
Entries 1090572
TOF MULT
TOF tray

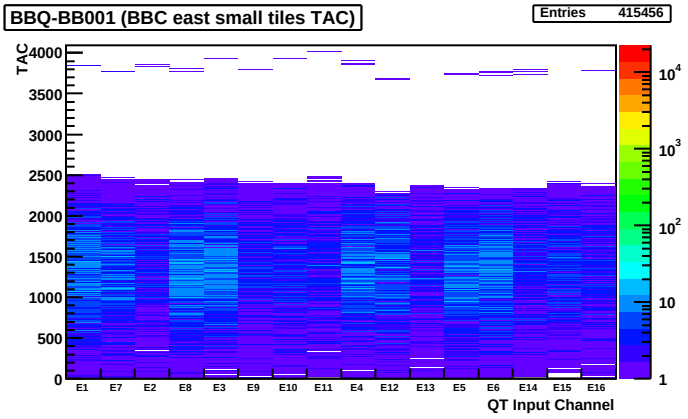

MIX-TF006
Entries 1090572
TOF MULT
TOF tray

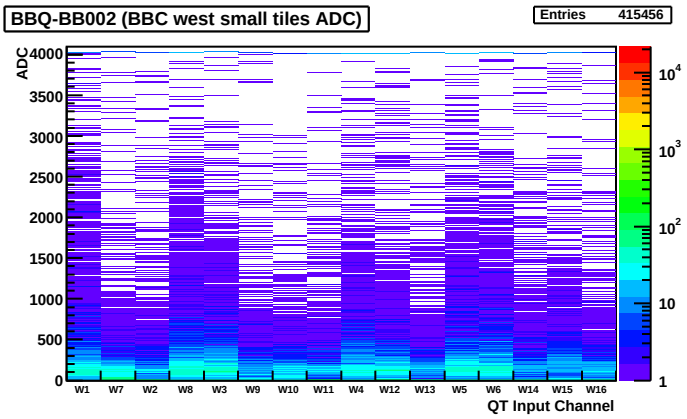

MIX-TF101
Entries 155796
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

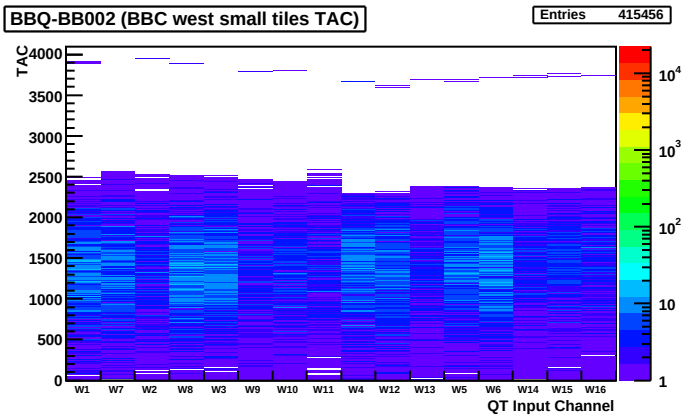

L1-TF201
Entries 25966
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

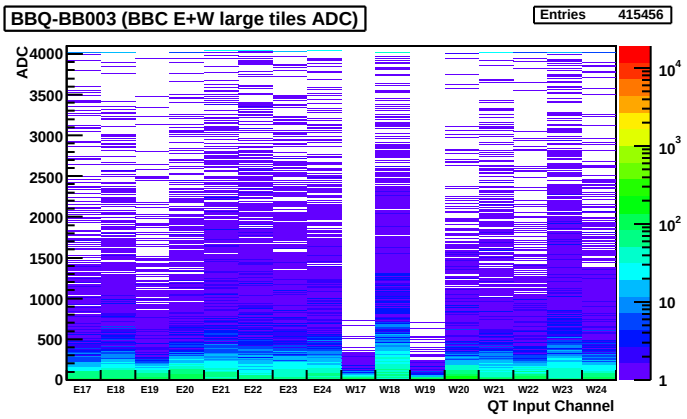

L1-TF201
Entries 155796
Threshold bits
1
0
13718
13695
13715
13577
13562
12809
12248
12271
12251
12389
12404
13157
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

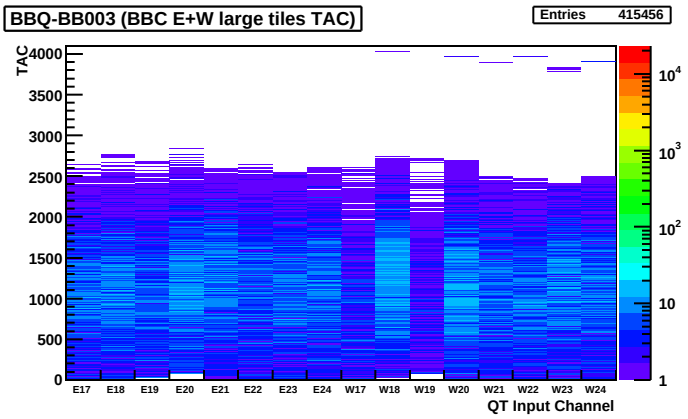

BBQ-BB001 (BBC east small tiles ADC)
Entries 415456
ADC
QT Input Channel

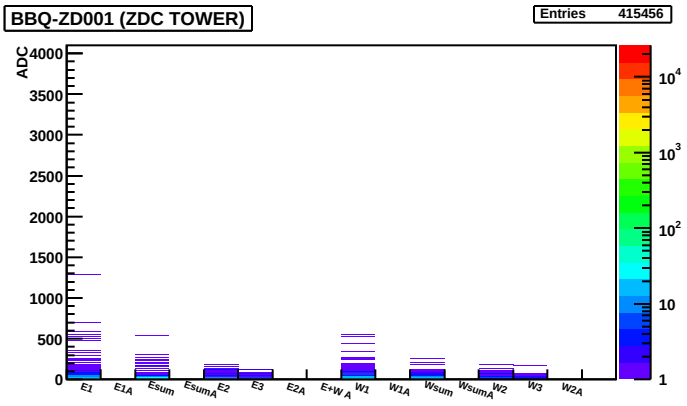

BBQ-BB001 (BBC east small tiles TAC)
Entries 415456
TAC
QT Input Channel

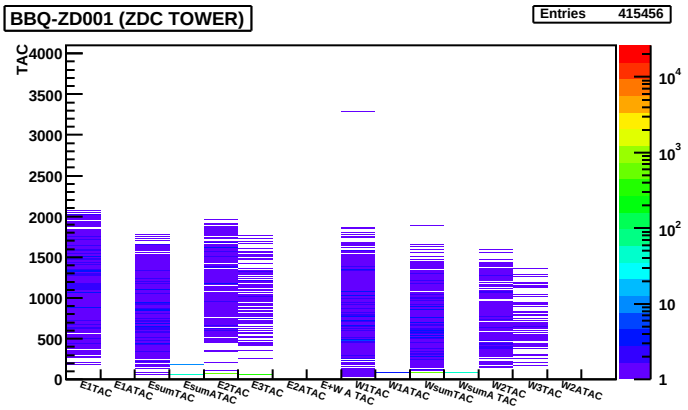

BBQ-BB002 (BBC west small tiles ADC)
Entries 415456
ADC
QT Input Channel

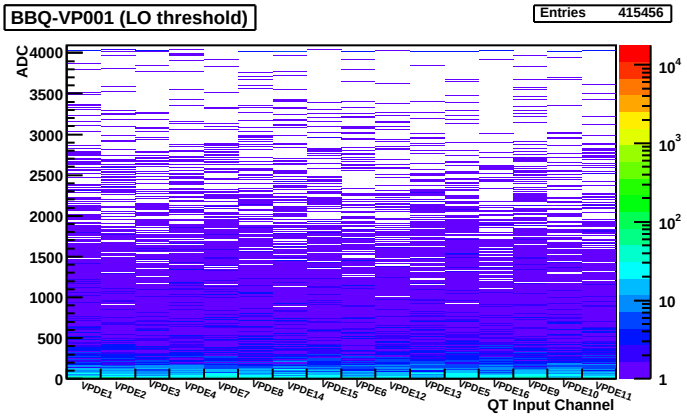

BBQ-BB002 (BBC west small tiles TAC)
Entries 415456
TAC
QT Input Channel

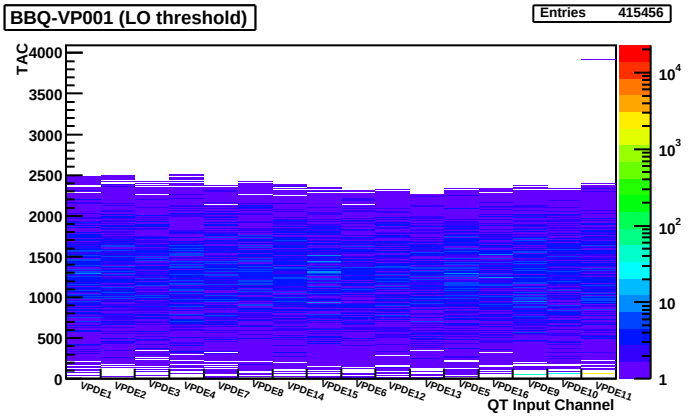

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 415456
ADC
QT Input Channel

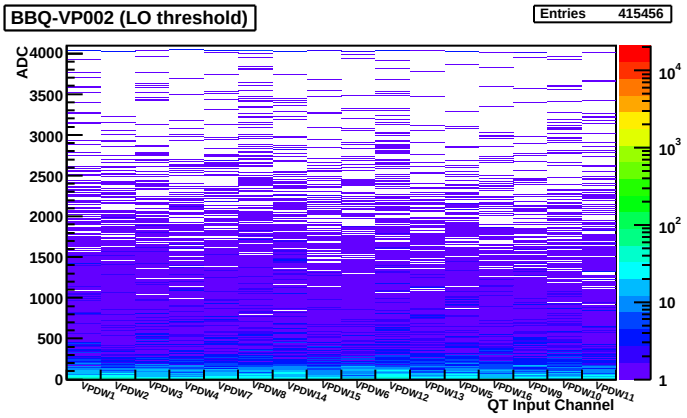

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 415456
TAC
QT Input Channel

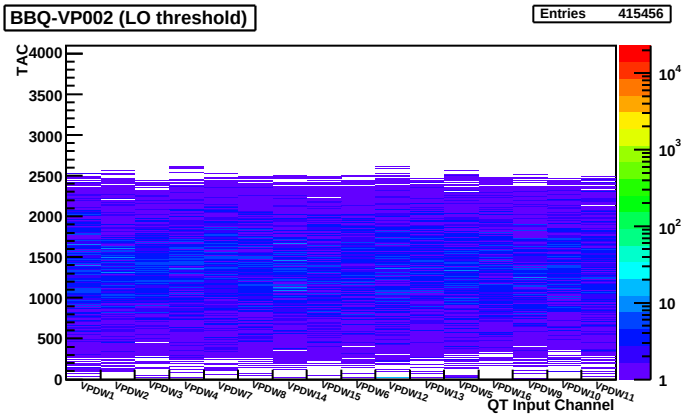

BBQ-ZD001 (ZDC TOWER)
Entries 415456
ADC

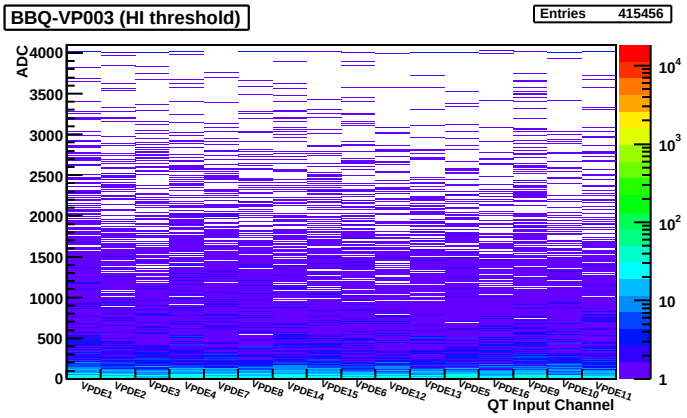

BBQ-ZD001 (ZDC TOWER)
Entries 415456
TAC

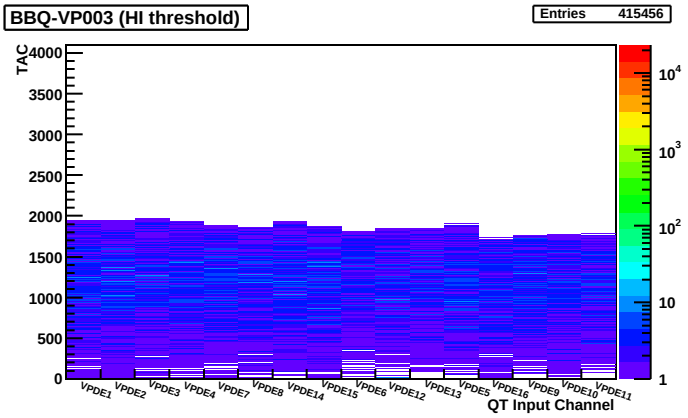

BBQ-VP001 (LO threshold)
Entries 415456
ADC
QT Input Channel

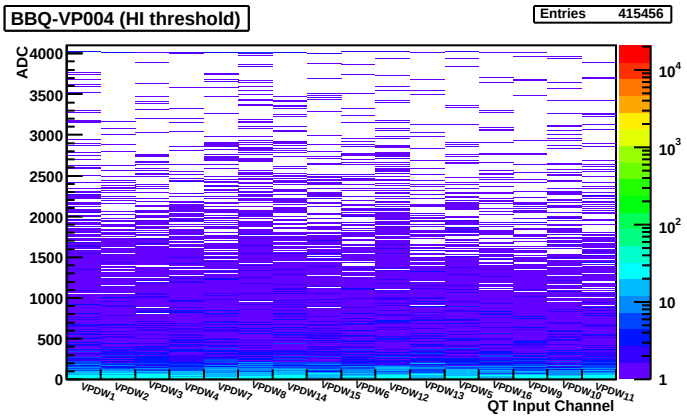

BBQ-VP001 (LO threshold)
Entries 415456
TAC
QT Input Channel

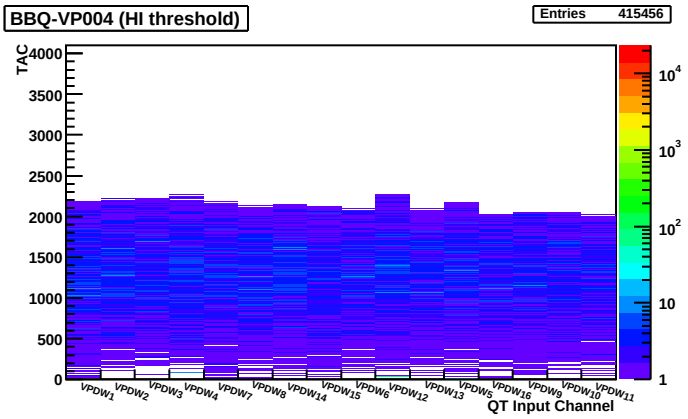

BBQ-VP002 (LO threshold)
Entries 415456
ADC
QT Input Channel

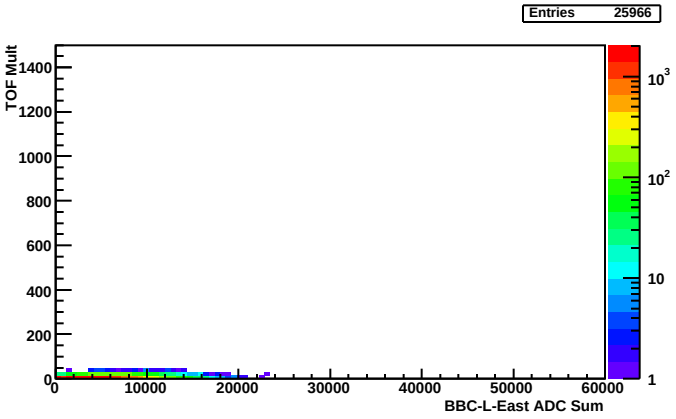

BBQ-VP002 (LO threshold)
Entries 415456
TAC
QT Input Channel

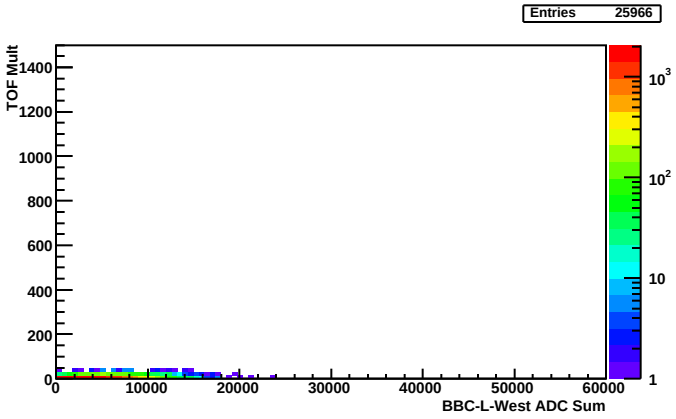

BBQ-VP003 (HI threshold)
Entries 415456
ADC
QT Input Channel

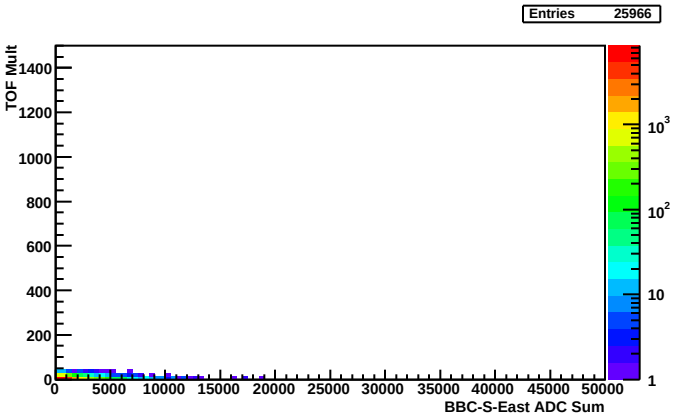

BBQ-VP003 (HI threshold)
Entries 415456
TAC
QT Input Channel

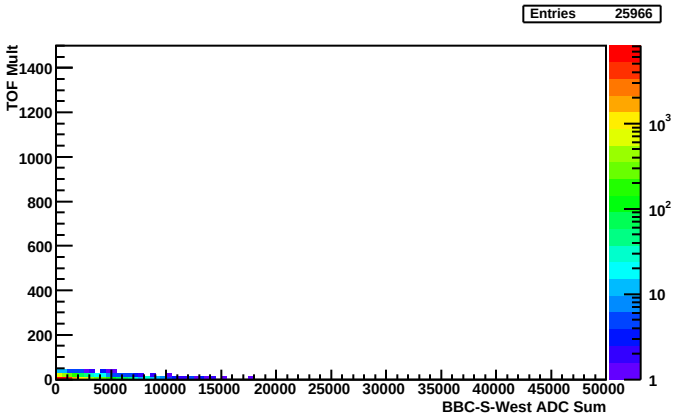

BBQ-VP004 (HI threshold)
Entries 415456
ADC
QT Input Channel

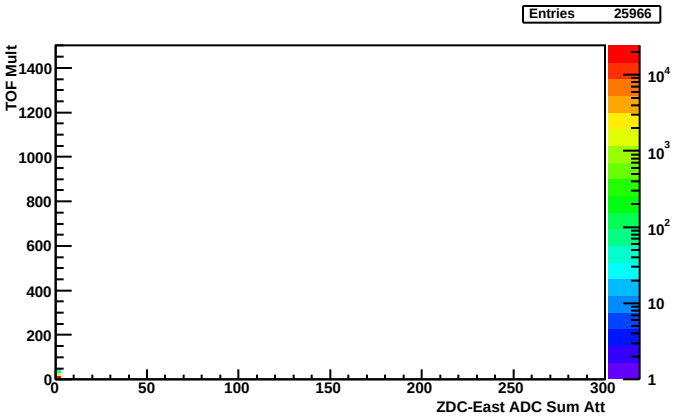

BBQ-VP004 (HI threshold)
Entries 415456
TAC
QT Input Channel

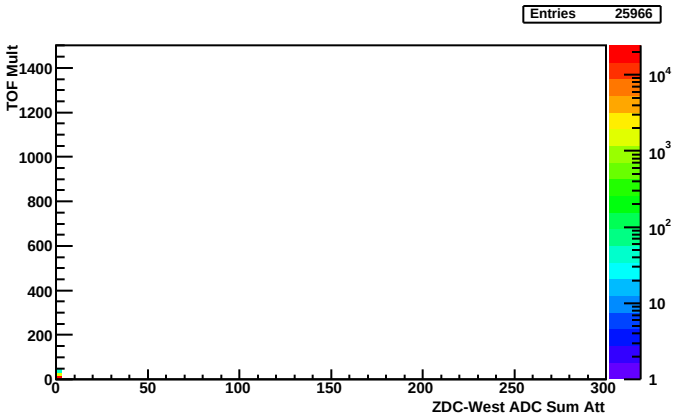

Entries 25966
TOF Mult
BBC-L-East ADC Sum

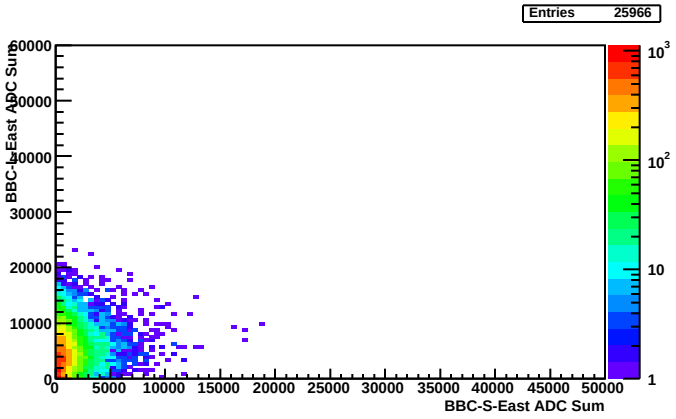

Entries 25966
TOF Mult
BBC-L-West ADC Sum

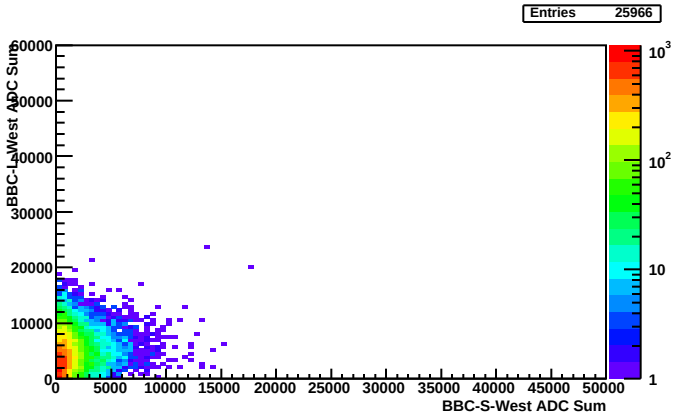

Entries 25966
TOF Mult
BBC-S-East ADC Sum

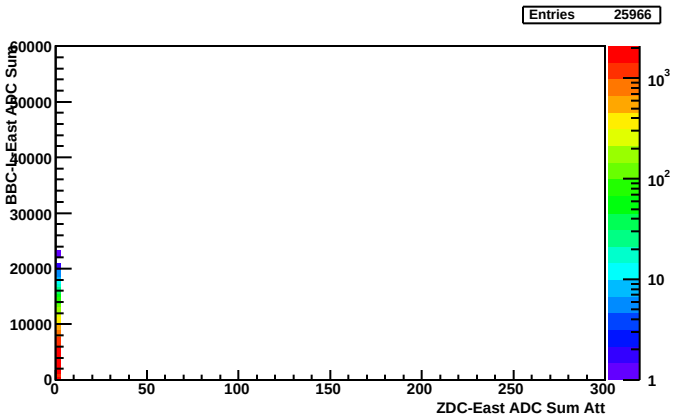

Entries 25966
TOF Mult
BBC-S-West ADC Sum

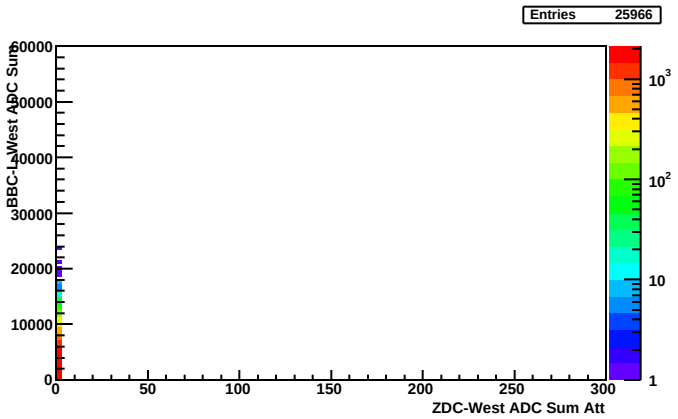

Entries 25966
TOF Mult
ZDC-East ADC Sum Att

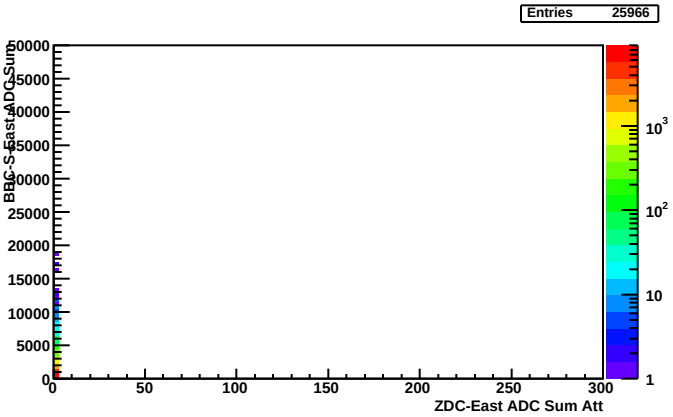

Entries 25966
TOF Mult
ZDC-West ADC Sum Att

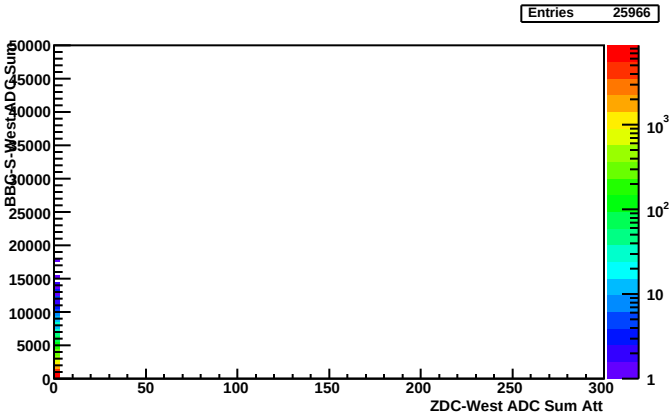

Entries 25966
BBC-L-East ADC Sum
BBC-S-East ADC Sum

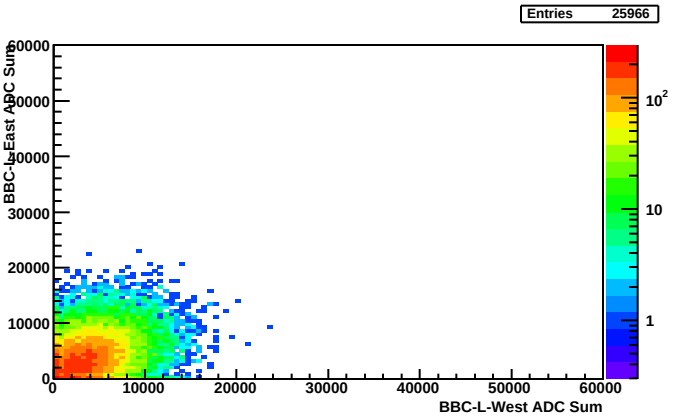

Entries 25966
BBC-L-West ADC Sum
BBC-S-West ADC Sum

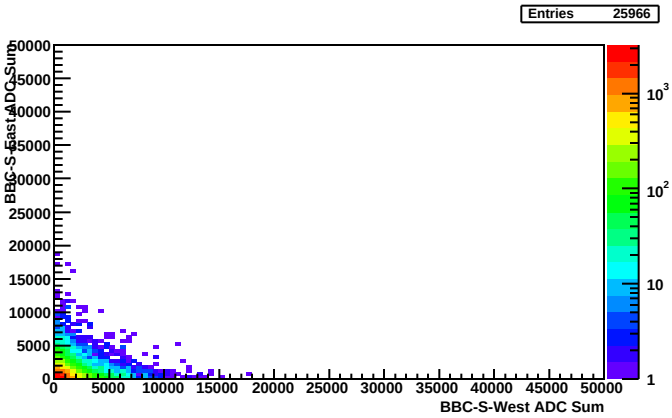

Entries 25966
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

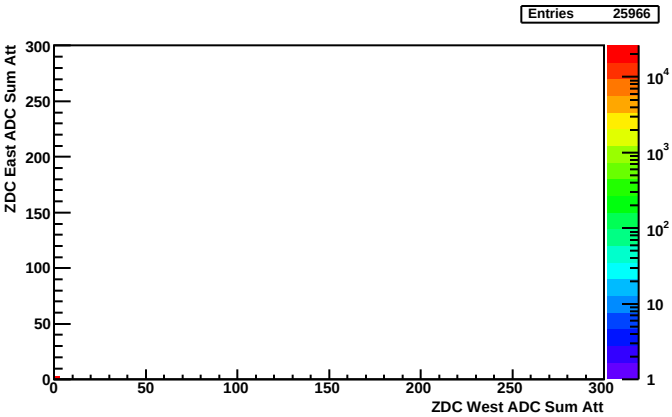

Entries 25966
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

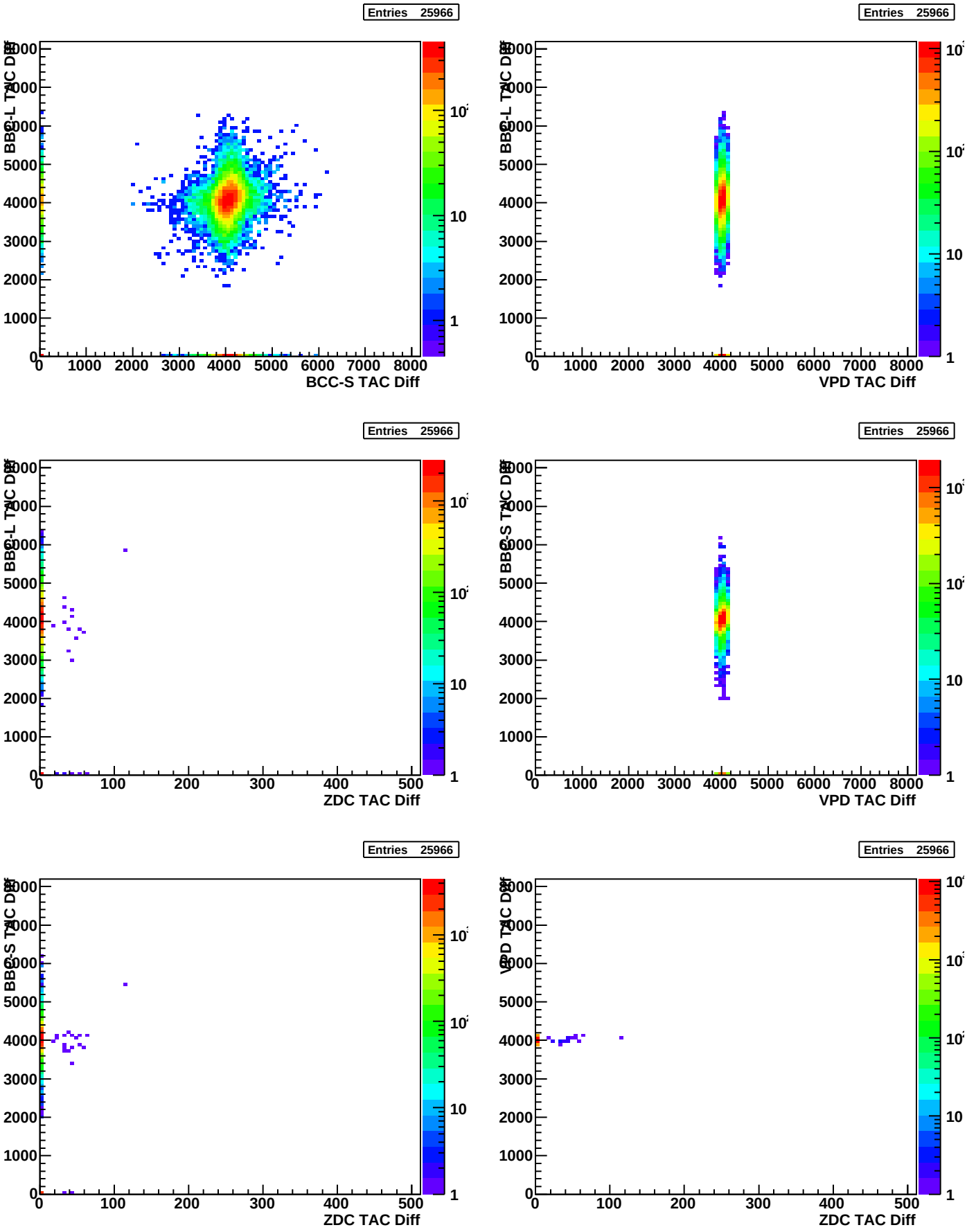

Entries 25966
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

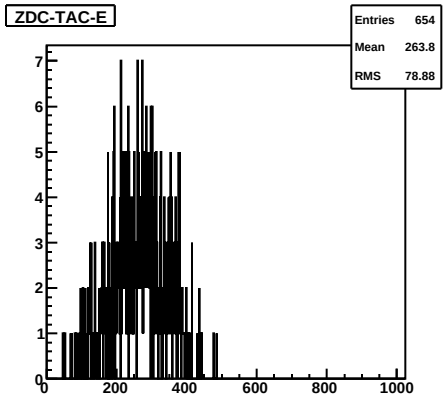

Entries 25966
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

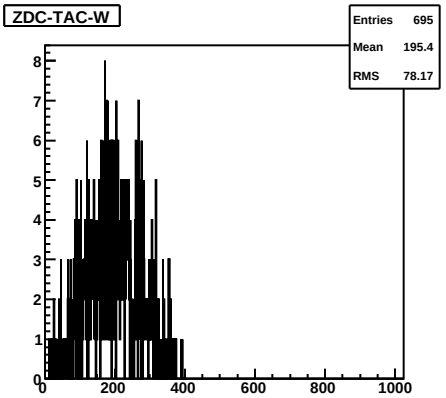

Entries 25966
BBC-L-East ADC Sum
BBC-L-West ADC Sum

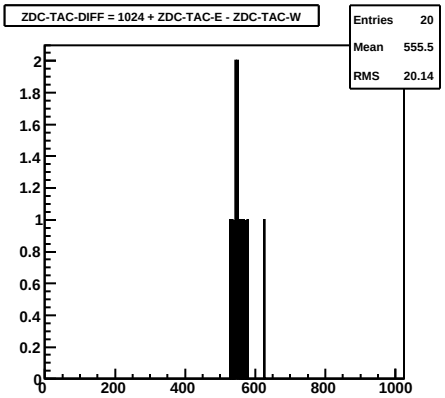

Entries 25966
BBC-S-East ADC Sum
BBC-S-West ADC Sum

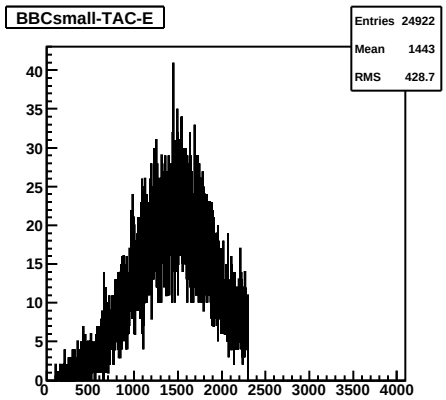

Entries 25966
ZDC East ADC Sum Att
ZDC West ADC Sum Att

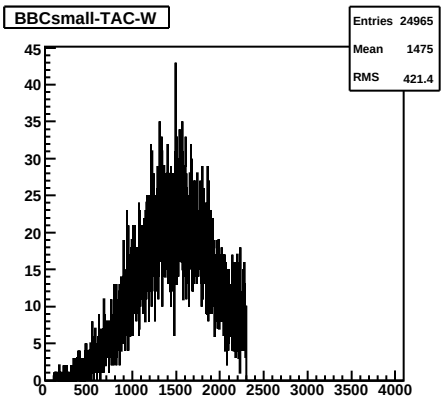

Entries 25966
BBC-L TAC Diff
BCC-S TAC Diff
VPD TAC Diff
ZDC TAC Diff
BBC-S TAC Diff

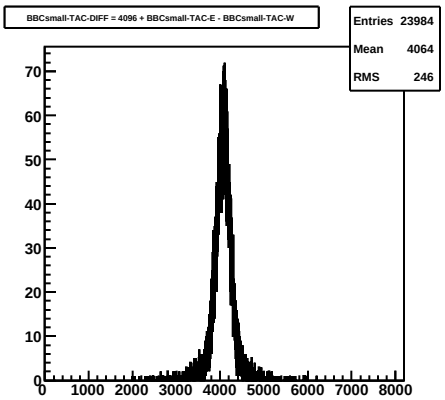

ZDC-TAC-E
Entries 654
Mean 263.8
RMS 78.88

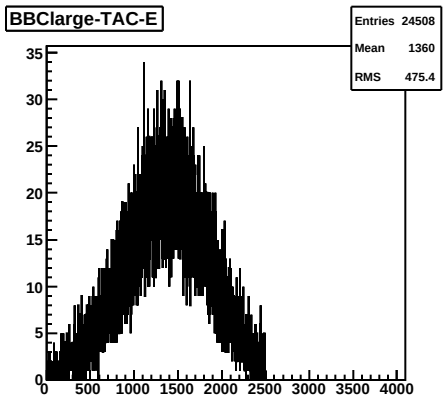

ZDC-TAC-W
Entries 695
Mean 195.4
RMS 78.17

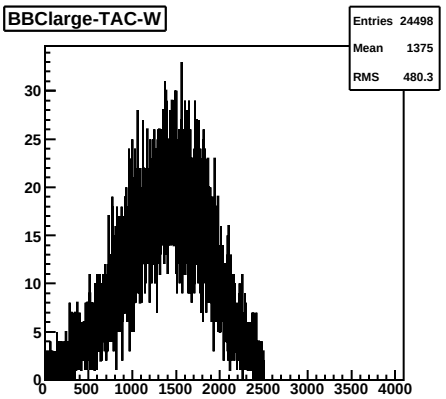

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 20
Mean 555.5
RMS 20.14

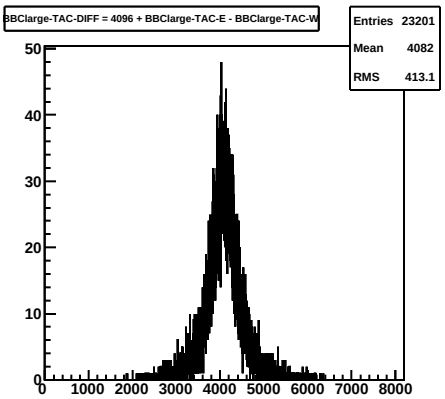

BBCsmall-TAC-E
Entries 24922
Mean 1443
RMS 428.7

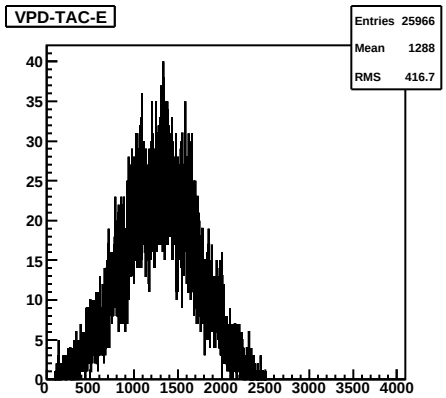

BBCsmall-TAC-W
Entries 24965
Mean 1475
RMS 421.4

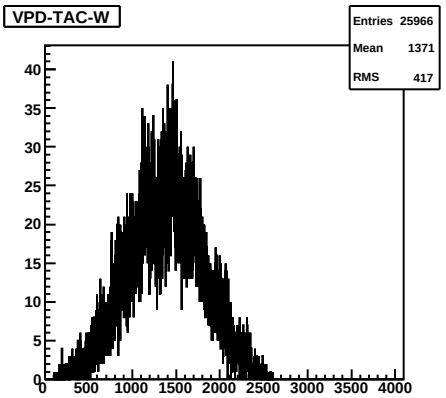

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 23984
Mean 4064
RMS 246

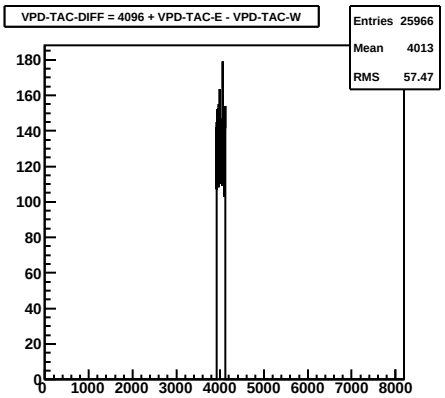

BBClarge-TAC-E
Entries 24508
Mean 1360
RMS 475.4

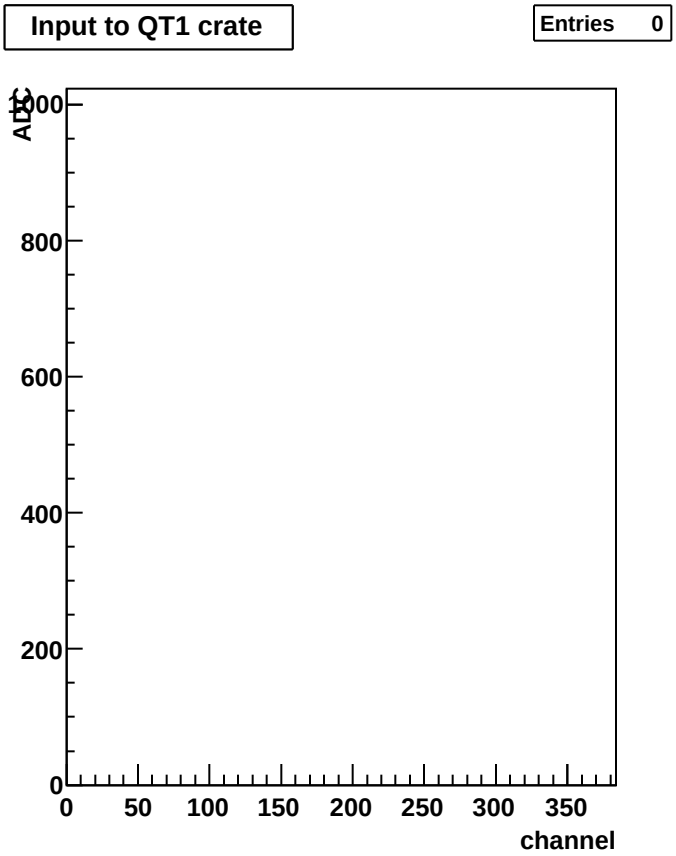

BBClarge-TAC-W
Entries 24498
Mean 1375
RMS 480.3

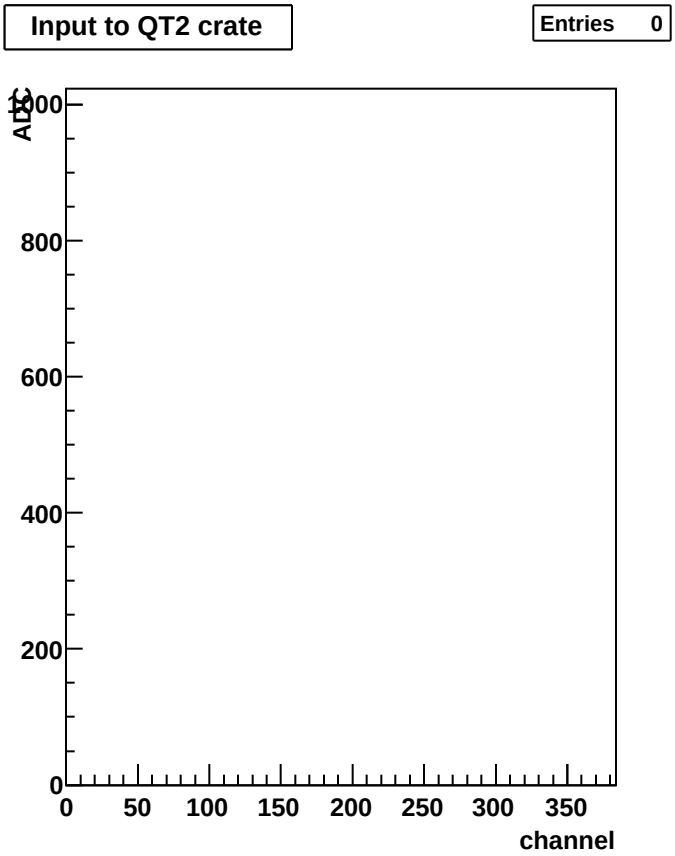

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 23201
Mean 4082
RMS 413.1

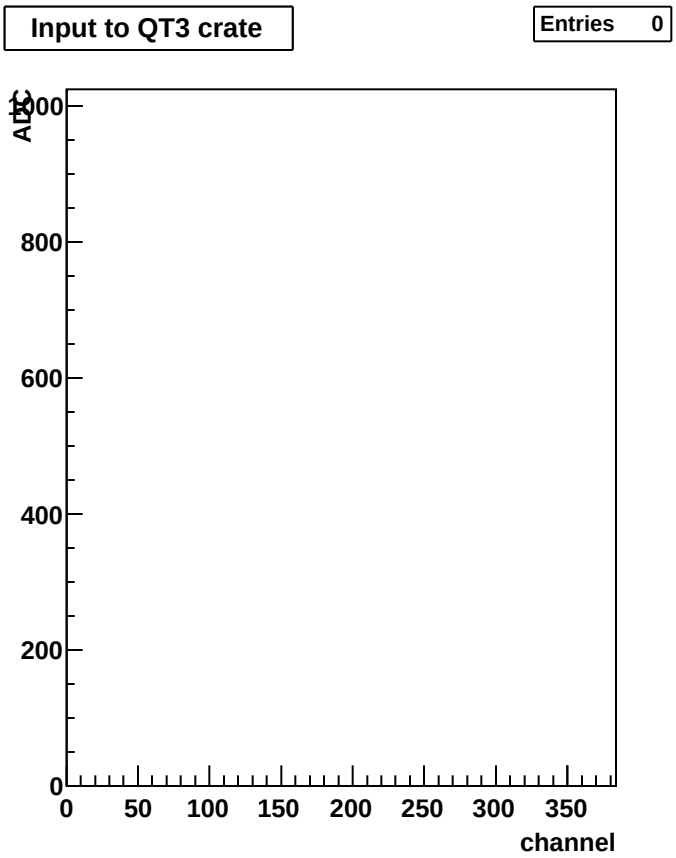

VPD-TAC-E
Entries 25966
Mean 1288
RMS 416.7

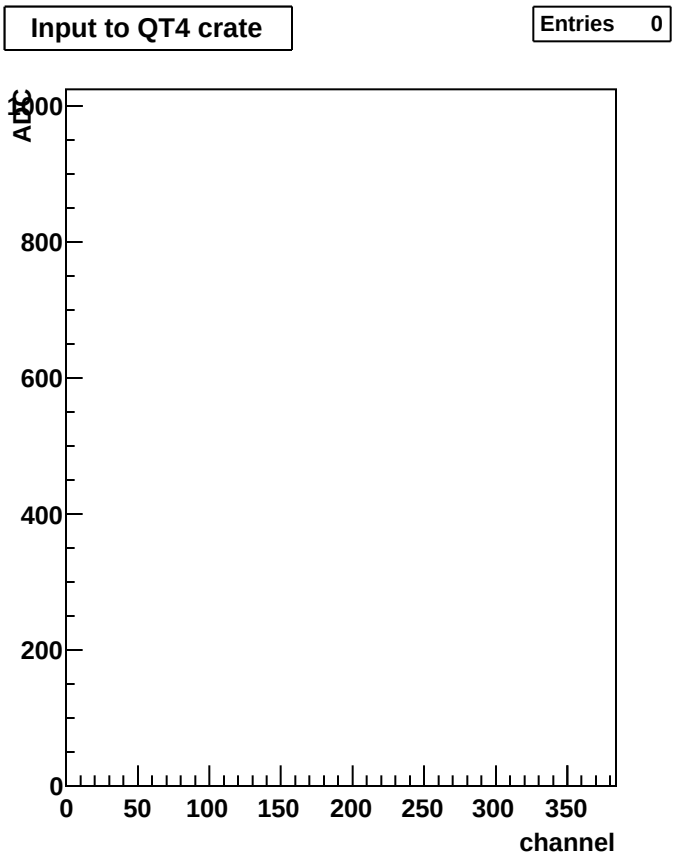

VPD-TAC-W
Entries 25966
Mean 1371
RMS 417

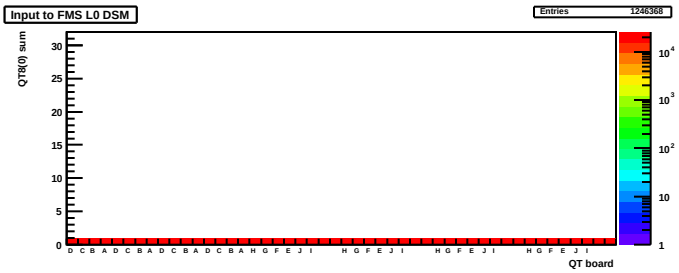

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 25966
Mean 4013
RMS 57.47

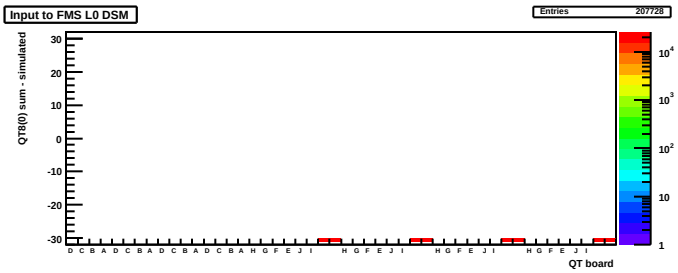

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

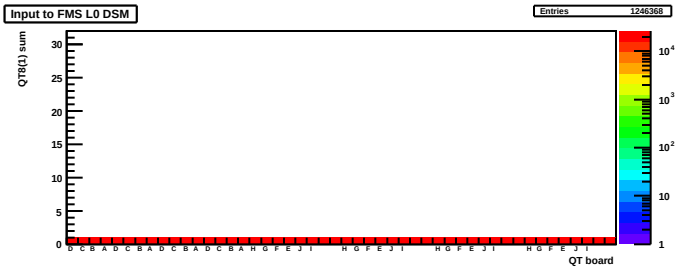

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

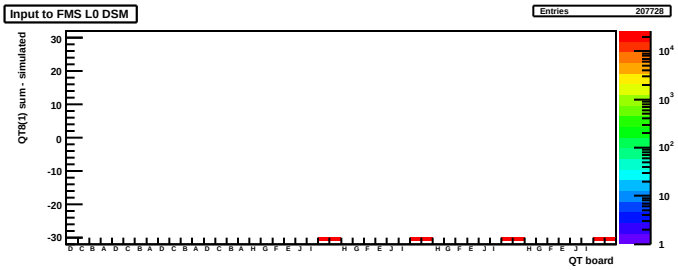

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

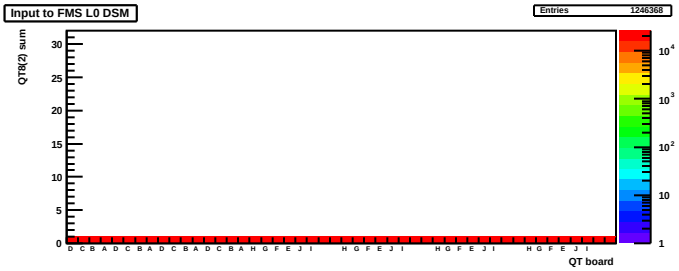

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

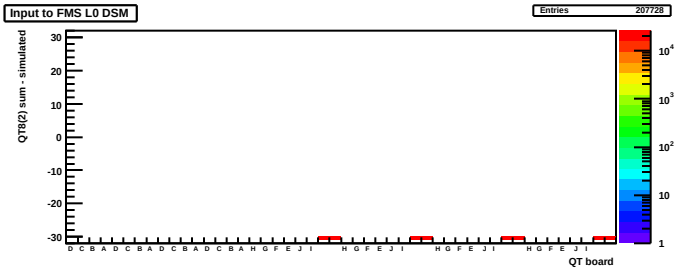

Input to FMS L0 DSM
Entries 1246368
QT8(0) sum
QT board

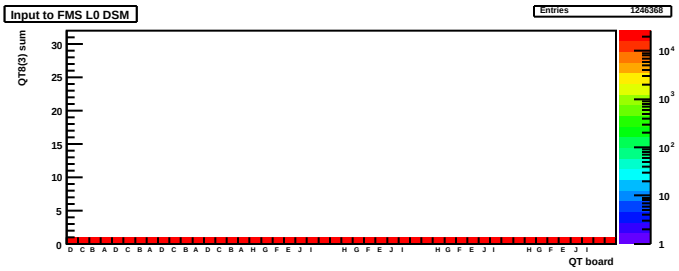

Input to FMS L0 DSM
Entries 207728
QT8(0) sum - simulated
QT board

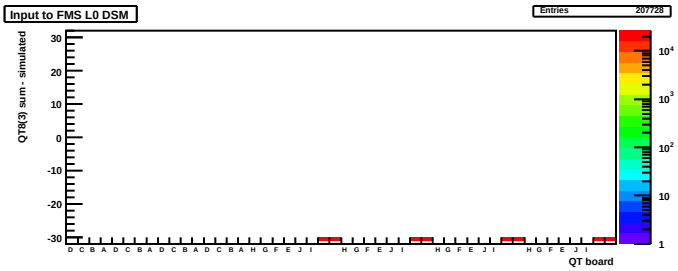

Input to FMS L0 DSM
Entries 1246368
QT8(1) sum
QT board

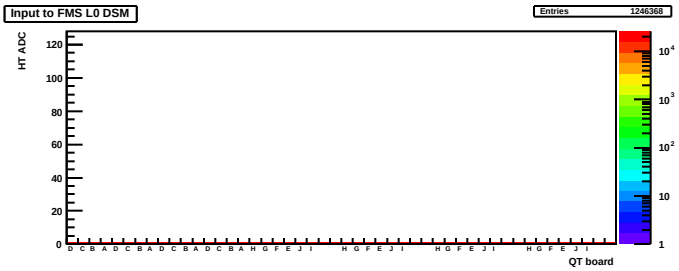

Input to FMS L0 DSM
Entries 207728
QT8(1) sum - simulated
QT board

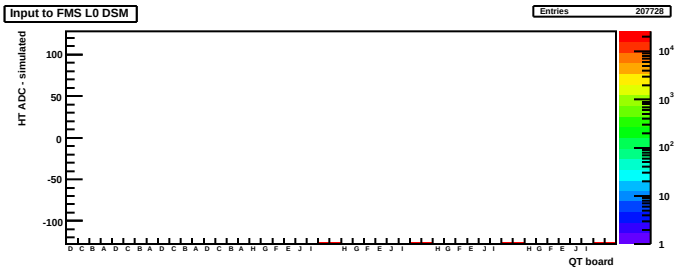

Input to FMS L0 DSM
Entries 1246368
QT8(2) sum
QT board

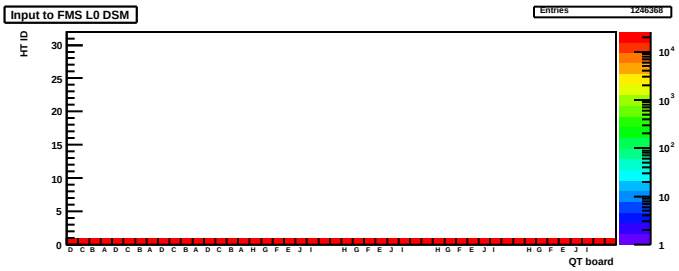

Input to FMS L0 DSM
Entries 207728
QT8(2) sum - simulated
QT board

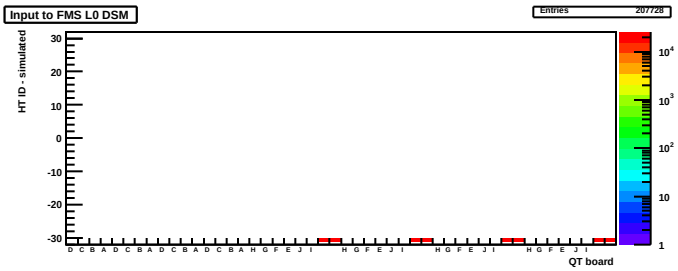

Input to FMS L0 DSM
Entries 1246368
QT8(3) sum
QT board

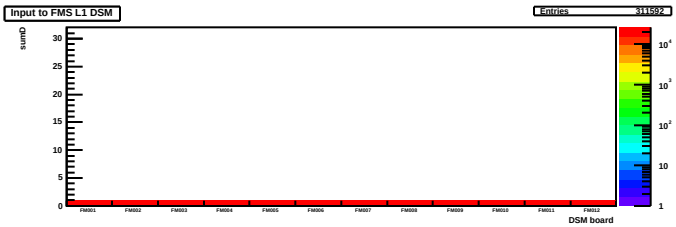

Input to FMS L0 DSM
Entries 207728
QT8(3) sum - simulated
QT board

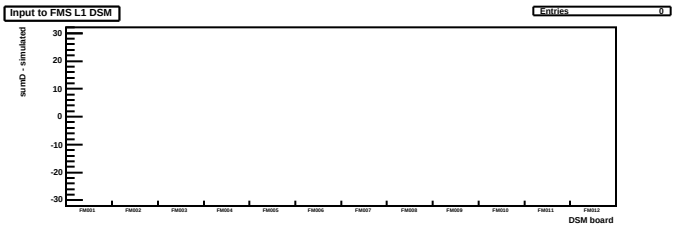

Input to FMS L0 DSM
Entries 1246368
HT ADC
QT board

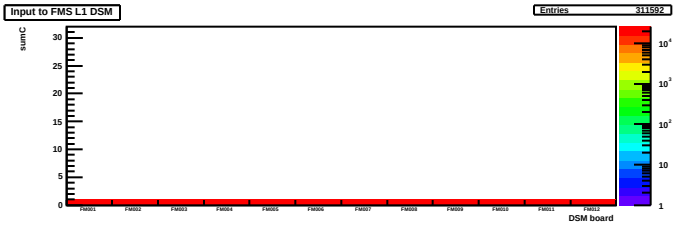

Input to FMS L0 DSM
Entries 207728
HT ADC - simulated
QT board

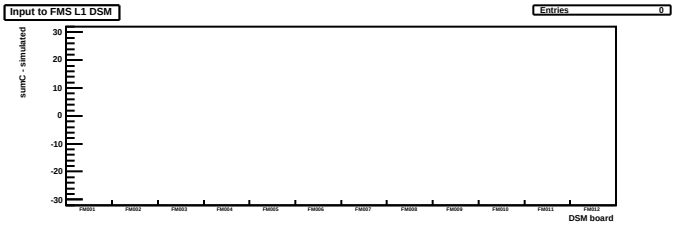

Input to FMS L0 DSM
Entries 1246368
HT ID
QT board

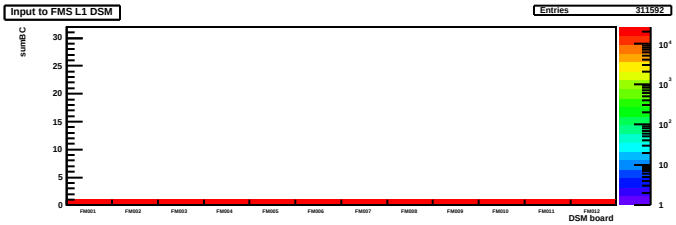

Input to FMS L0 DSM
Entries 207728
HT ID - simulated
QT board

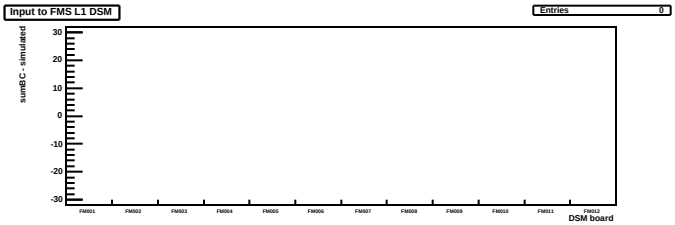

Input to FMS L1 DSM
Entries 311592
sumD
DSM board

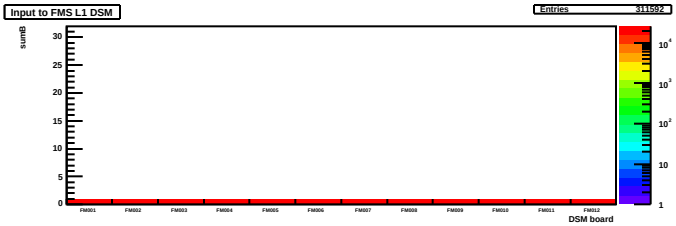

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

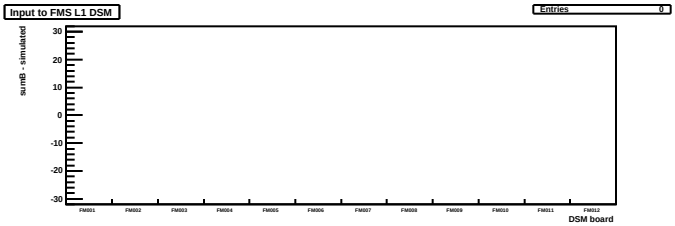

Input to FMS L1 DSM
Entries 311592
sumC
DSM board

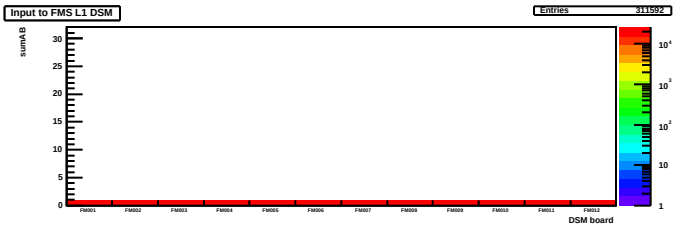

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

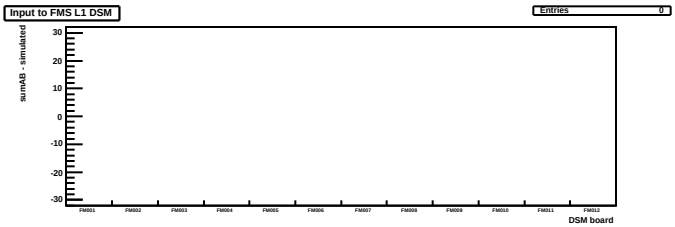

Input to FMS L1 DSM
Entries 311592
sumBC
DSM board

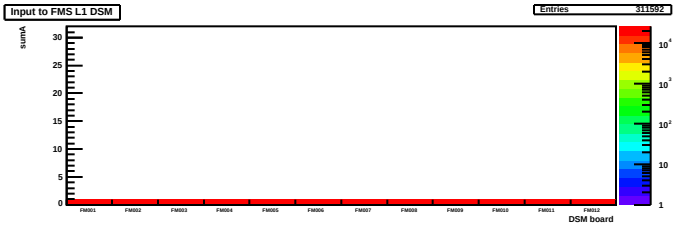

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

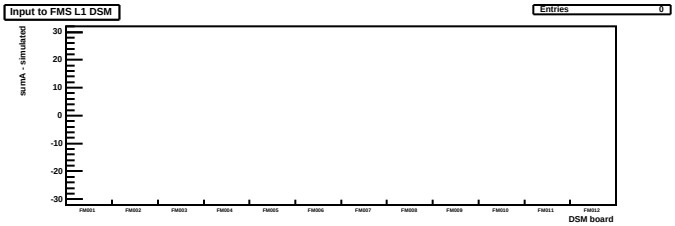

Input to FMS L1 DSM
Entries 311592
sumB
DSM board

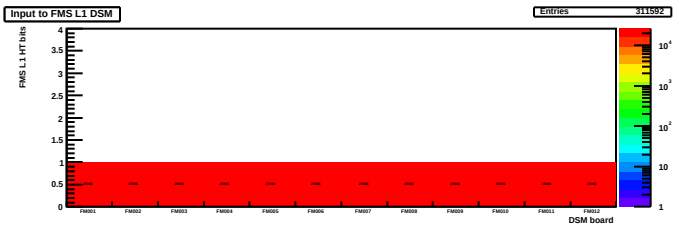

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

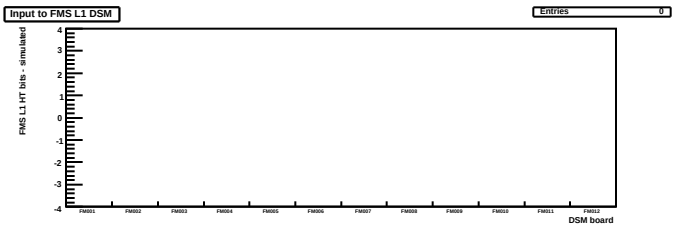

Input to FMS L1 DSM
Entries 311592
sumAB
DSM board

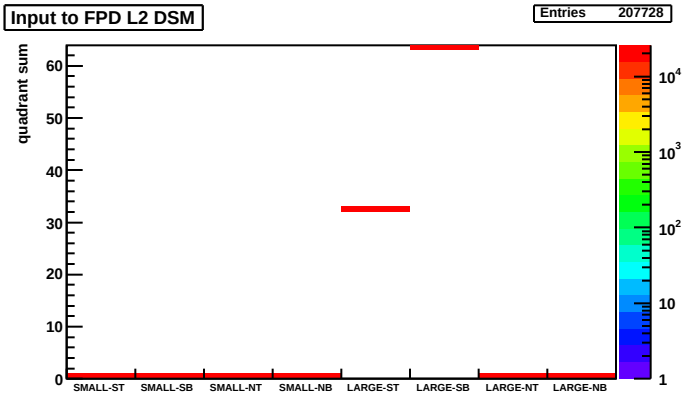

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

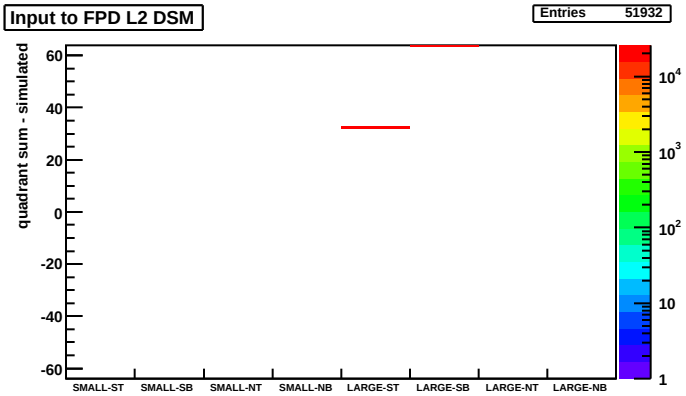

Input to FMS L1 DSM
Entries 311592
sumA
DSM board

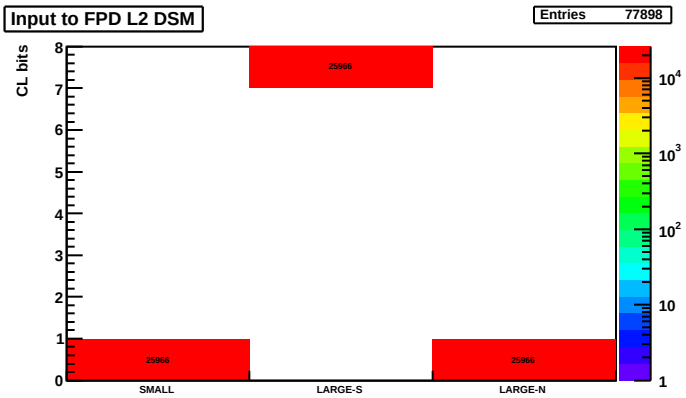

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

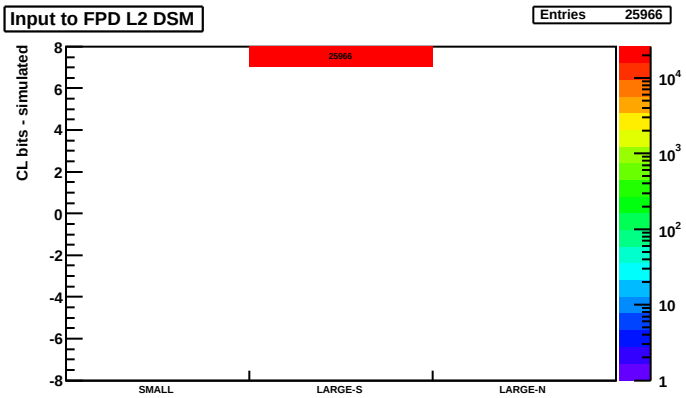

Input to FMS L1 DSM
Entries 311592
FMS L1 HT bits
DSM board

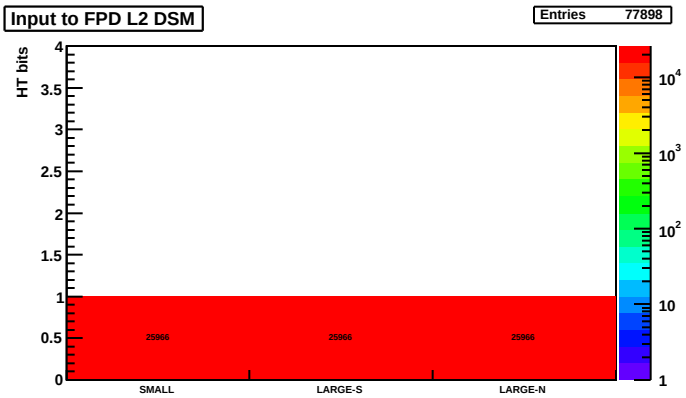

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

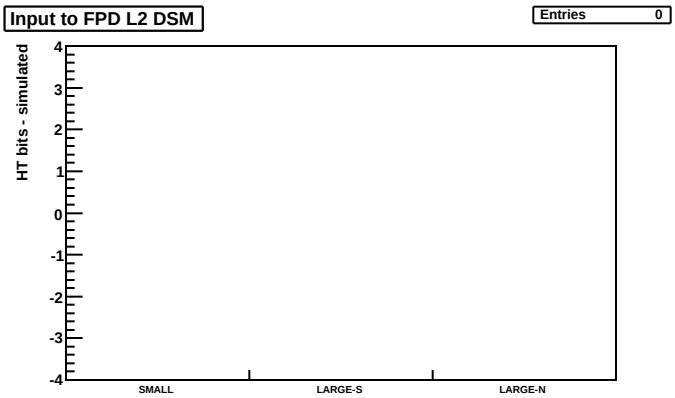

Input to FPD L2 DSM
Entries 207728
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

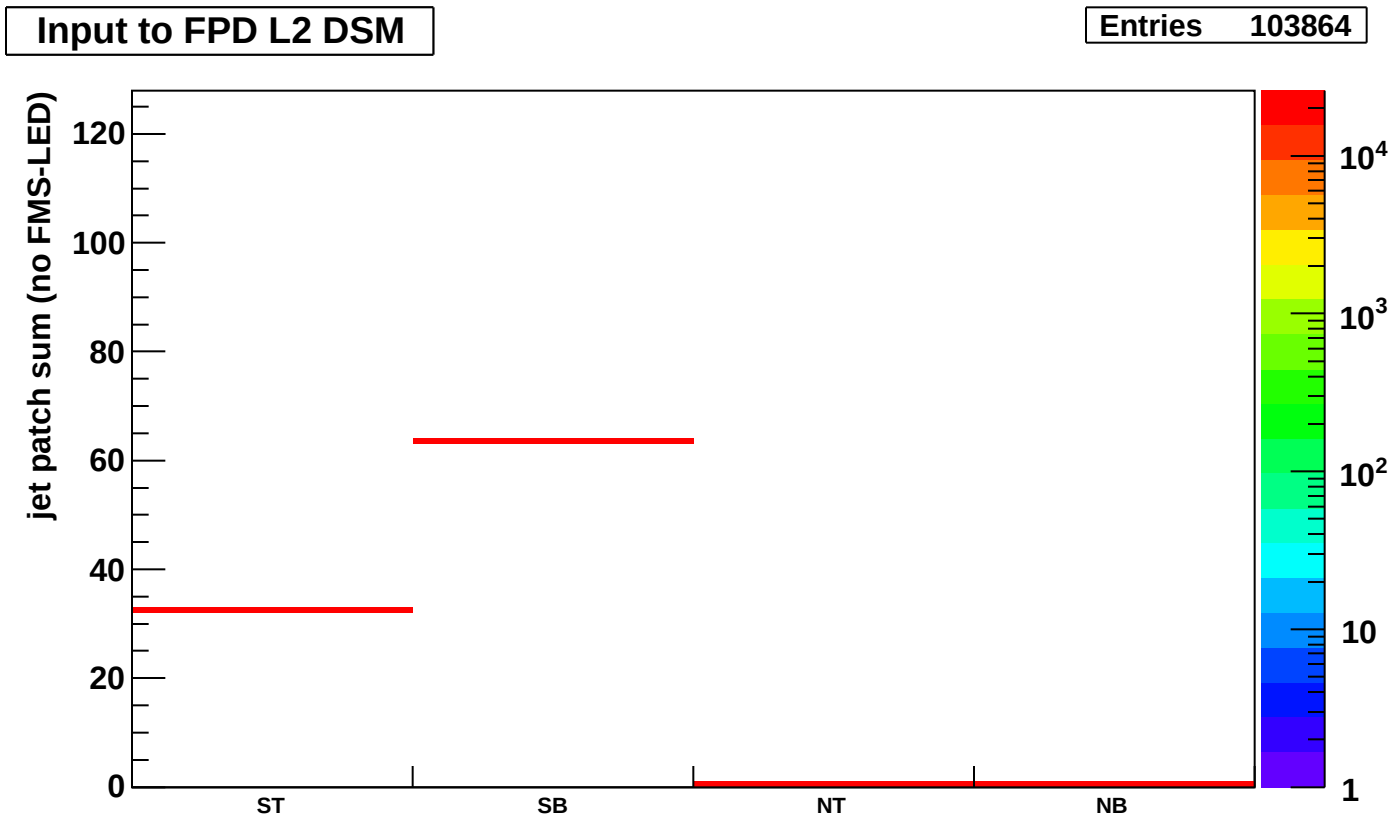

Input to FPD L2 DSM
Entries 51932
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

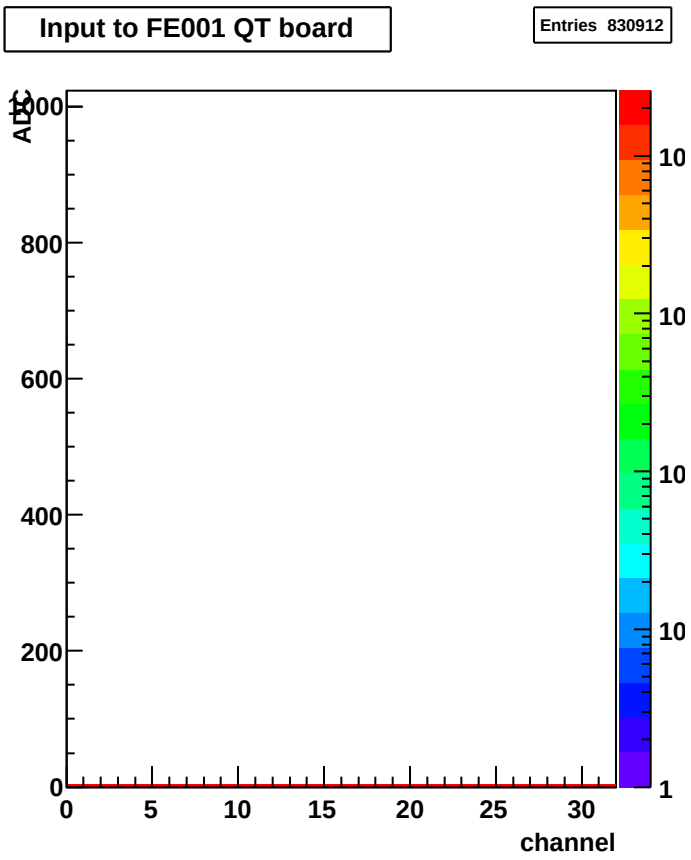

Input to FPD L2 DSM
Entries 77898
CL bits
25966
25966
25966
SMALL
LARGE-S
LARGE-N

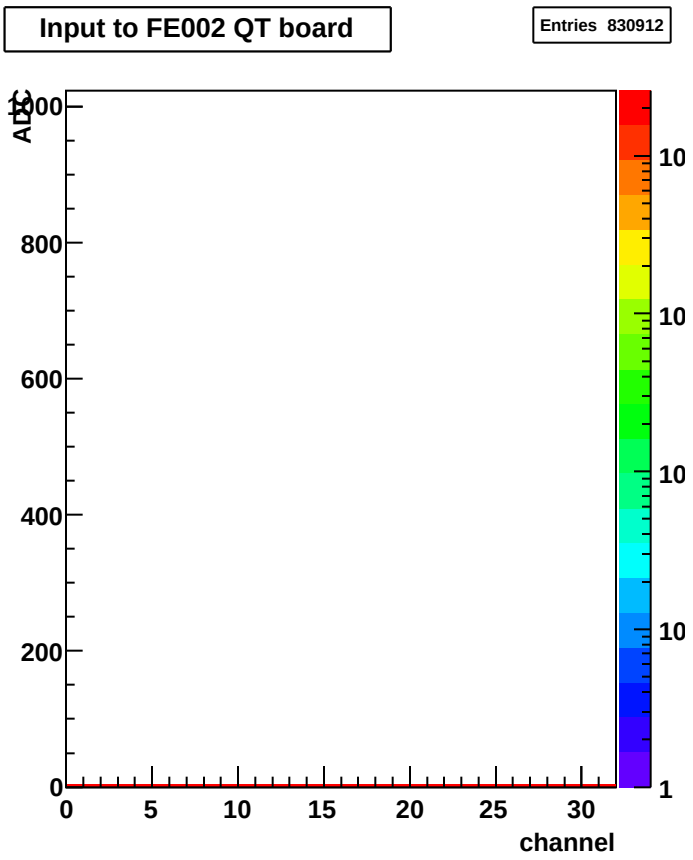

Input to FPD L2 DSM
Entries 25966
CL bits - simulated
25966
SMALL
LARGE-S
LARGE-N

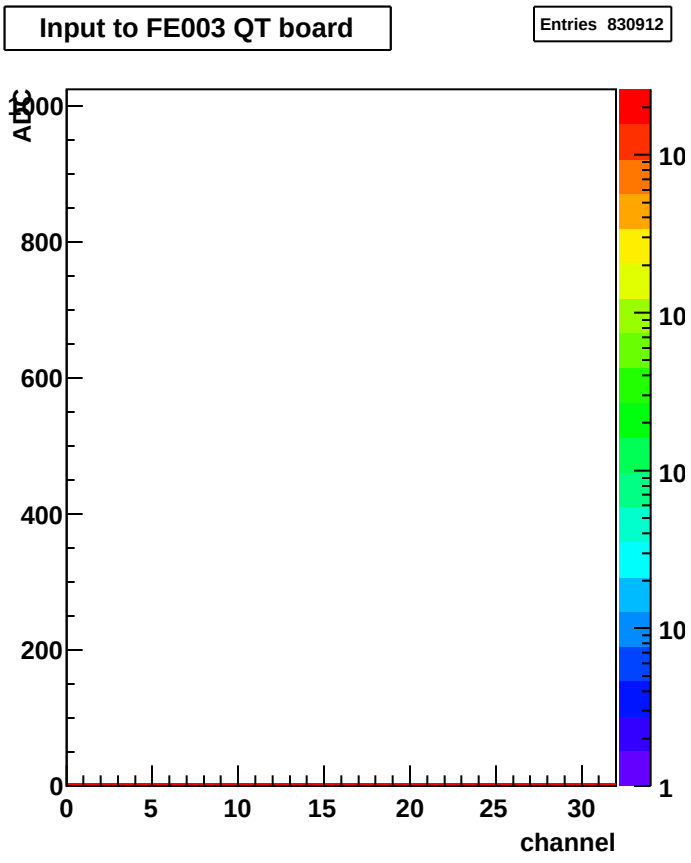

Input to FPD L2 DSM
Entries 77898
HT bits
25966
25966
25966
SMALL
LARGE-S
LARGE-N

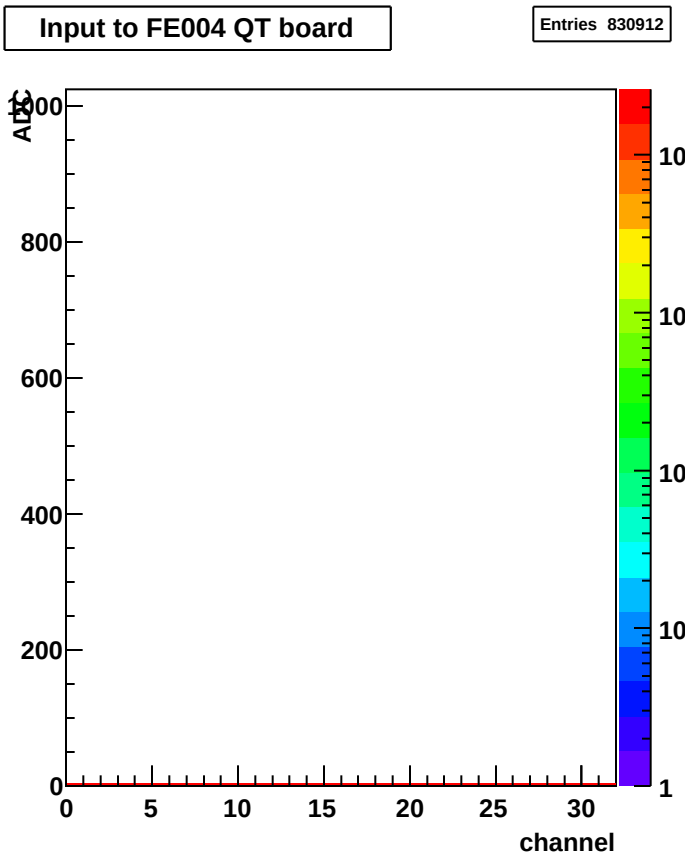

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

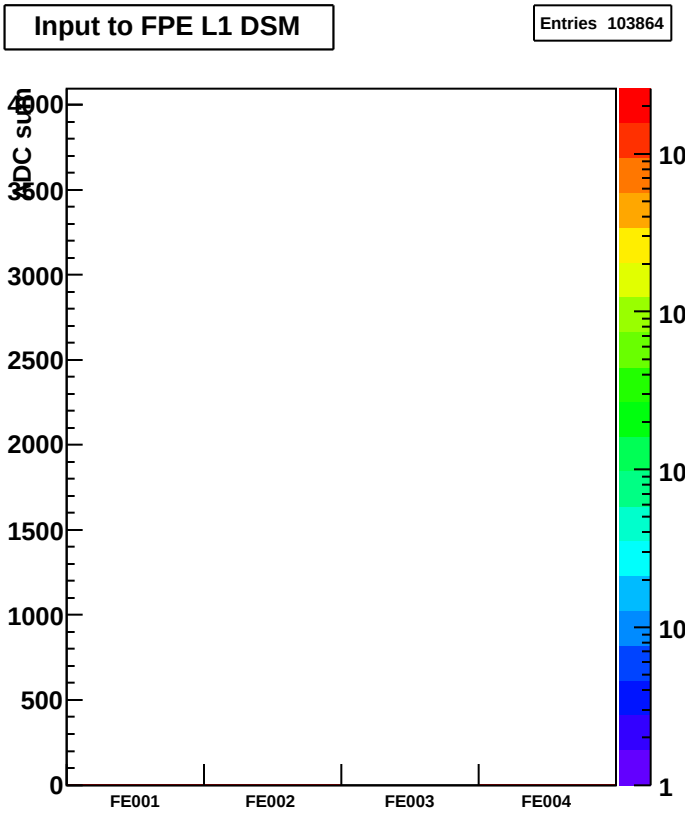

Input to FPD L2 DSM
Entries 103864
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

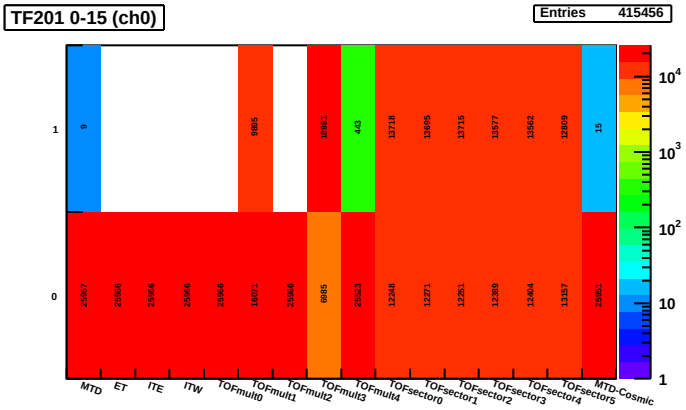

Input to FE001 QT board
Entries 830912
ADC
channel

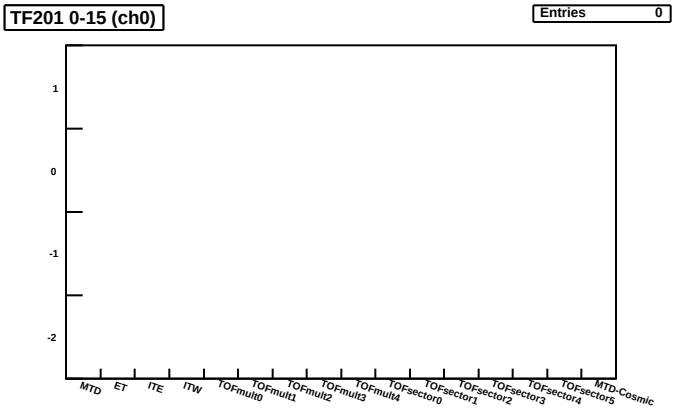

Input to FE002 QT board
Entries 830912
ADC
channel

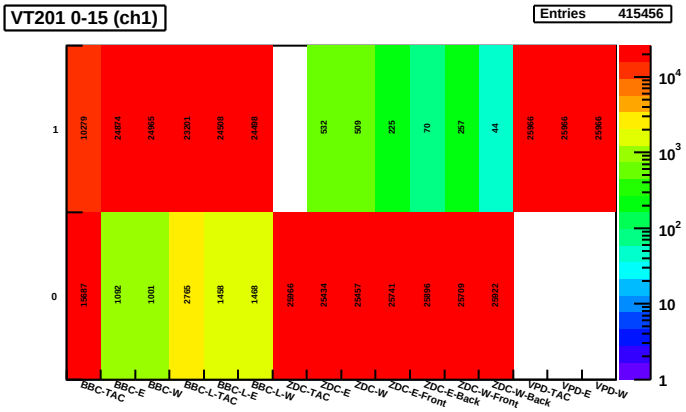

Input to FE003 QT board
Entries 830912
ADC
channel

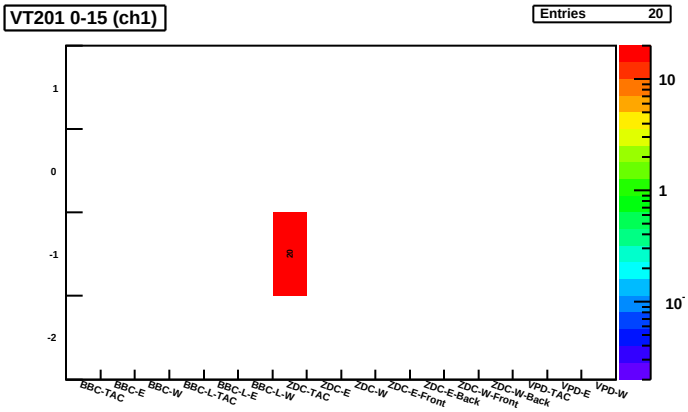

Input to FE004 QT board
Entries 830912
ADC
channel

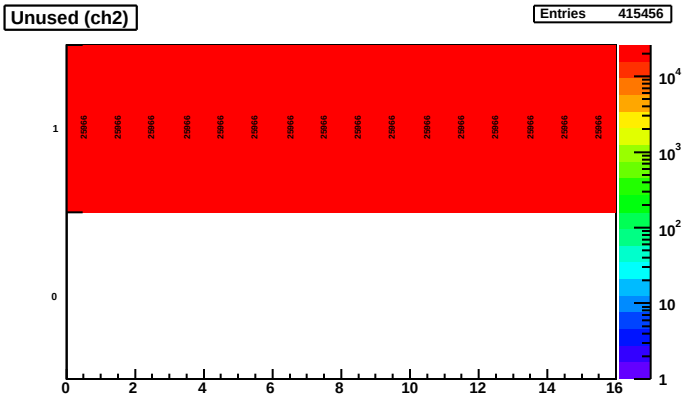

Input to FPE L1 DSM
Entries 103864
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

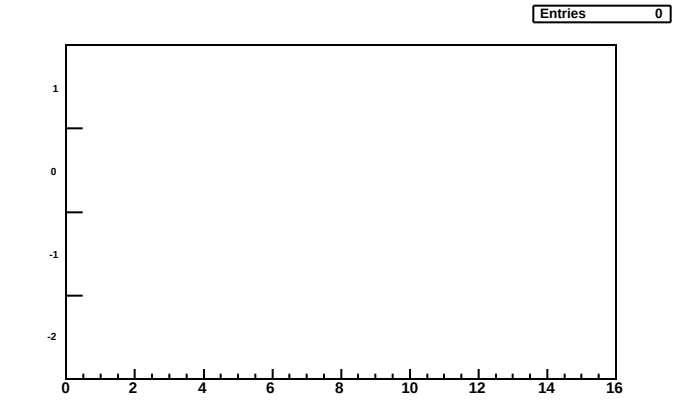

TF201 0-15 (ch0)
Entries 415456
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

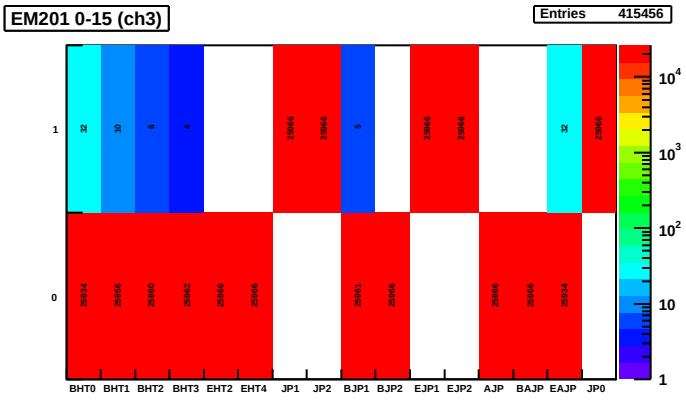

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

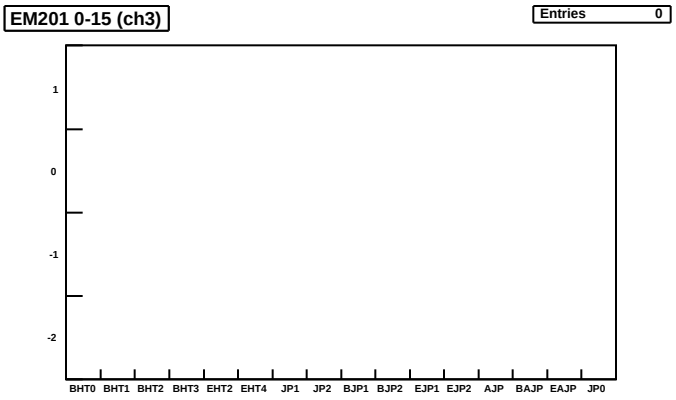

VT201 0-15 (ch1)
Entries 415456
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 20
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

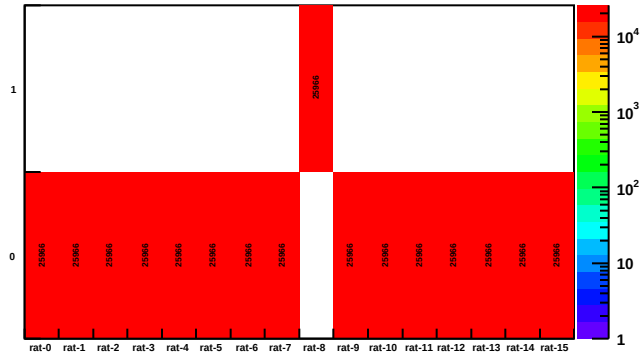

Unused (ch2)
Entries 415456

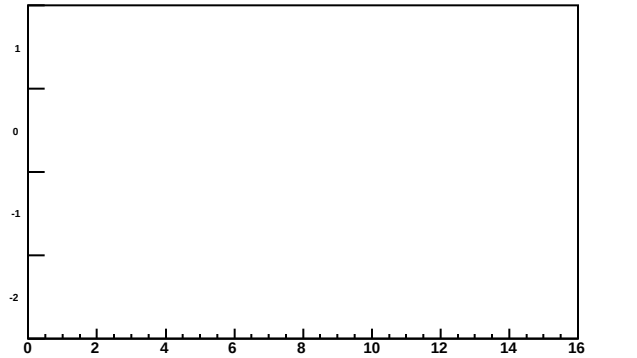

Entries 0


EM201 0-15 (ch3)
Entries 415456
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

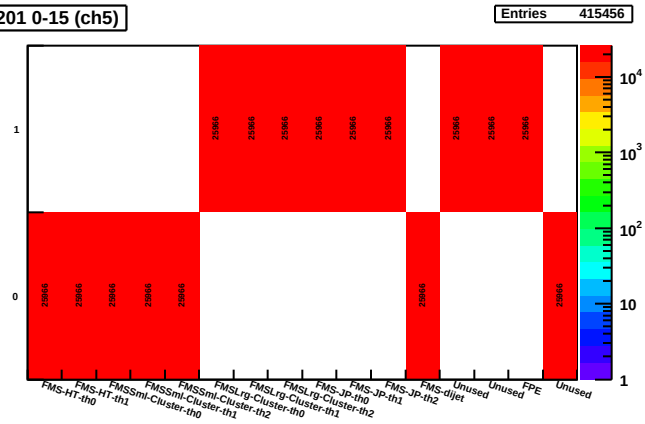

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

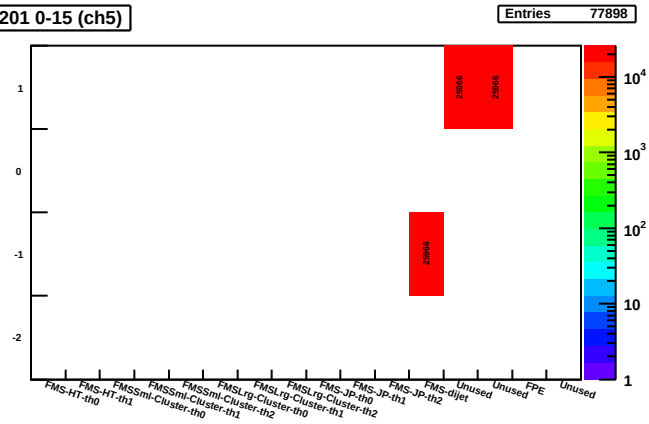




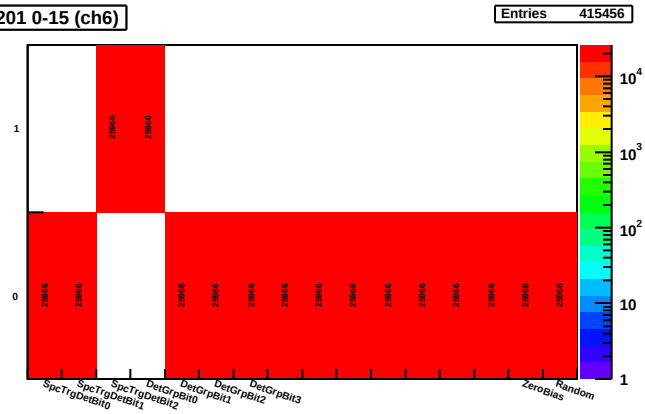
FP201 0-15 (ch5)

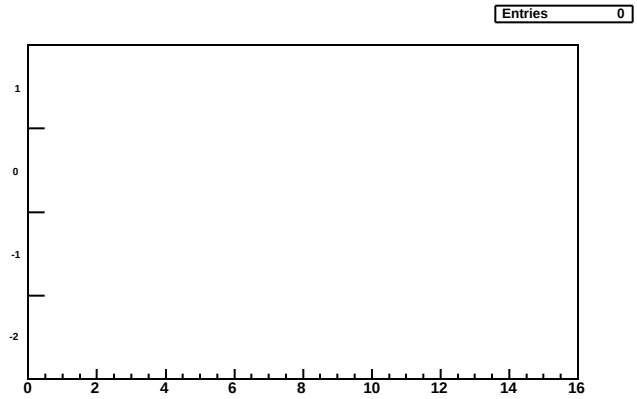
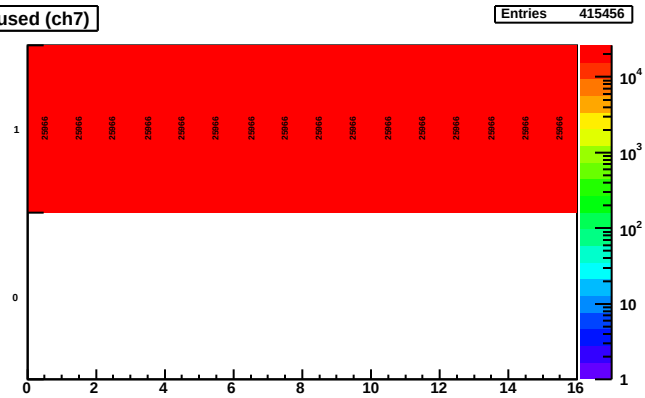
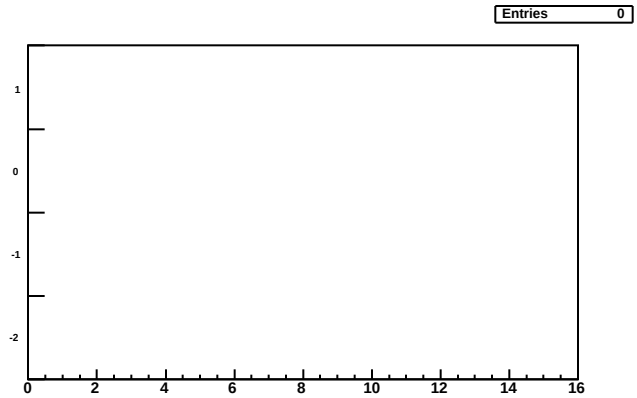


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)