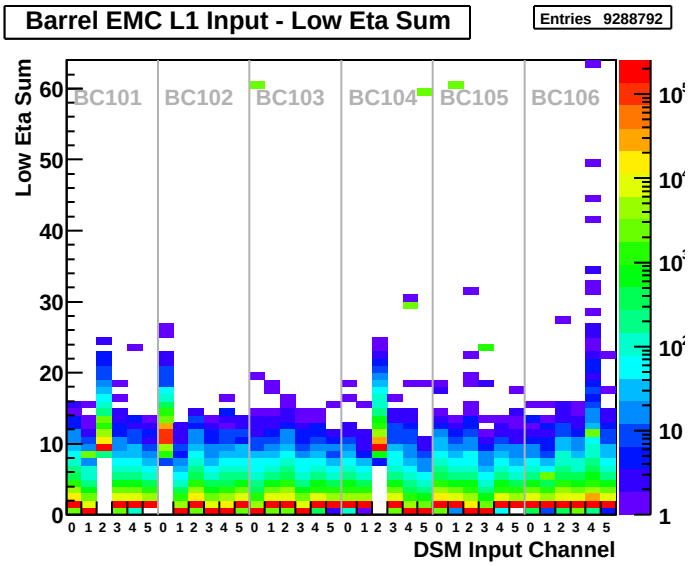
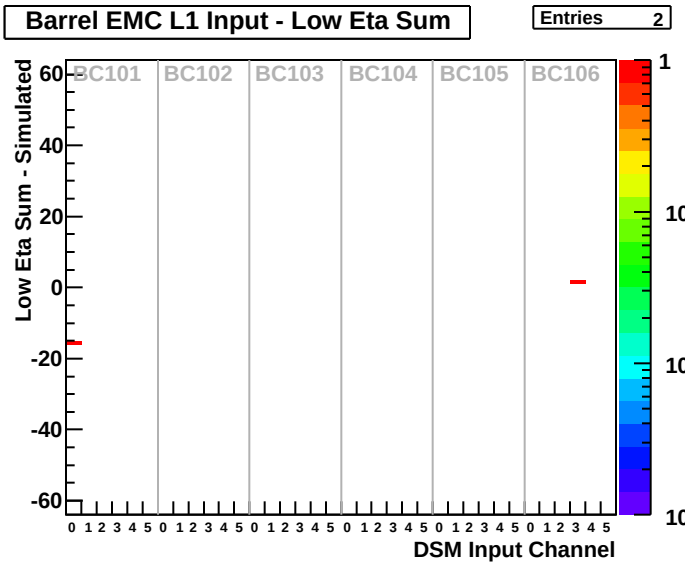
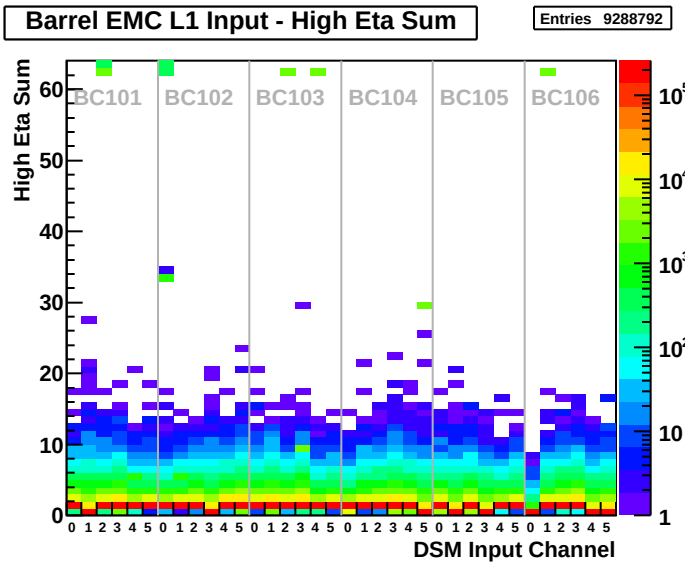
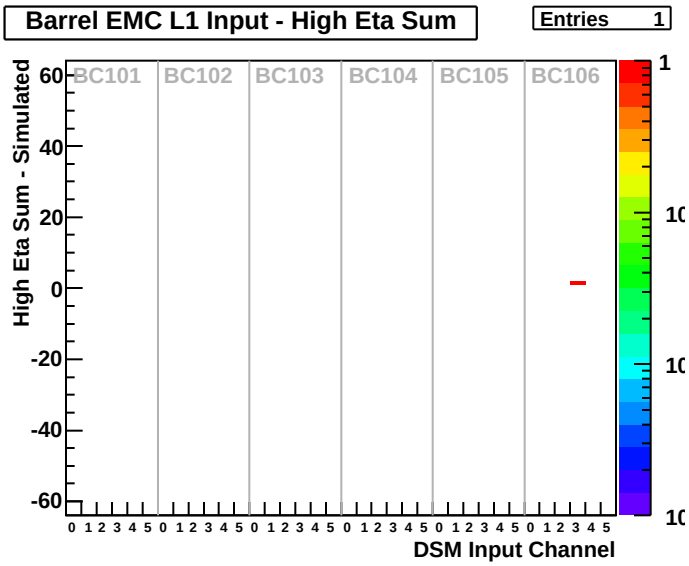
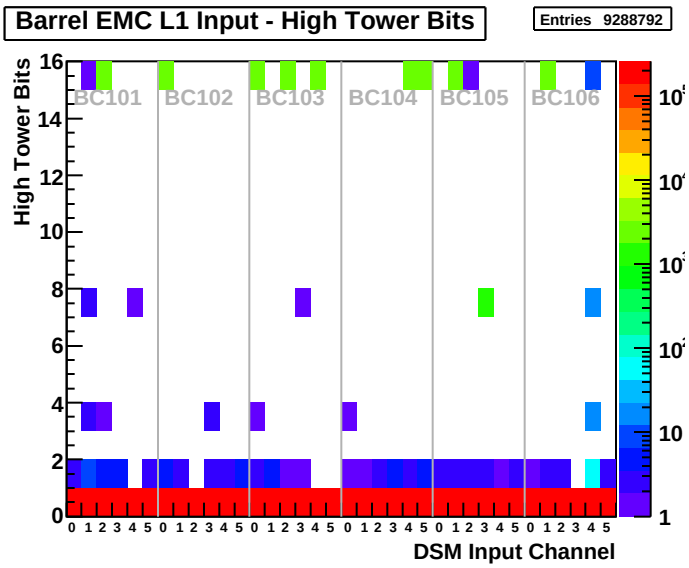
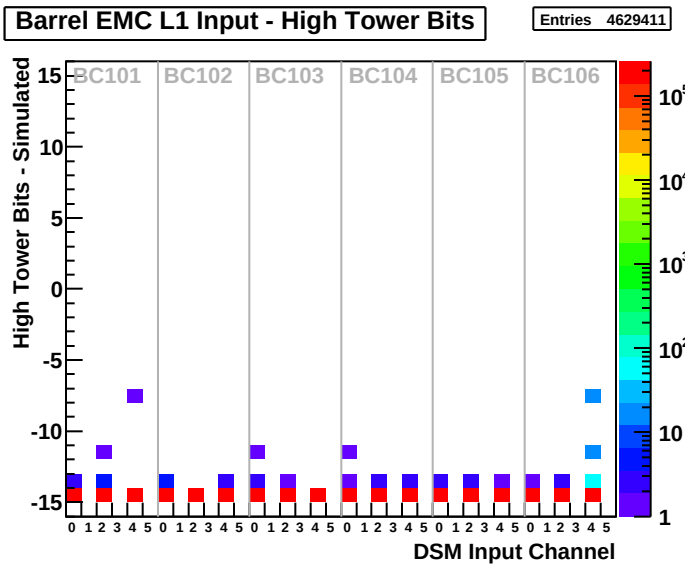

Barrel EMC L1 Input - Low Eta Sum
Entries 9288792
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

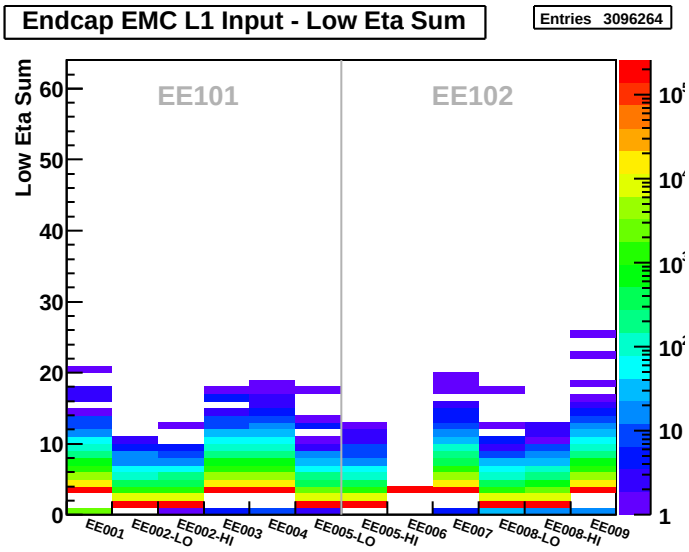

Barrel EMC L1 Input - Low Eta Sum
Entries 2
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

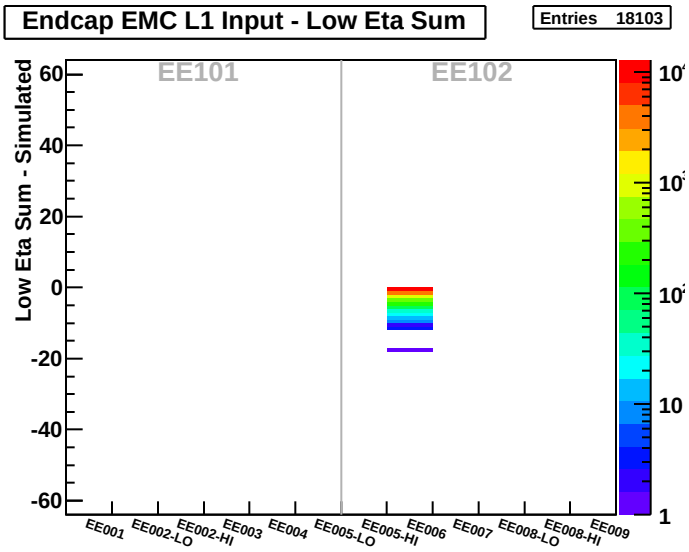

Barrel EMC L1 Input - High Eta Sum
Entries 9288792
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

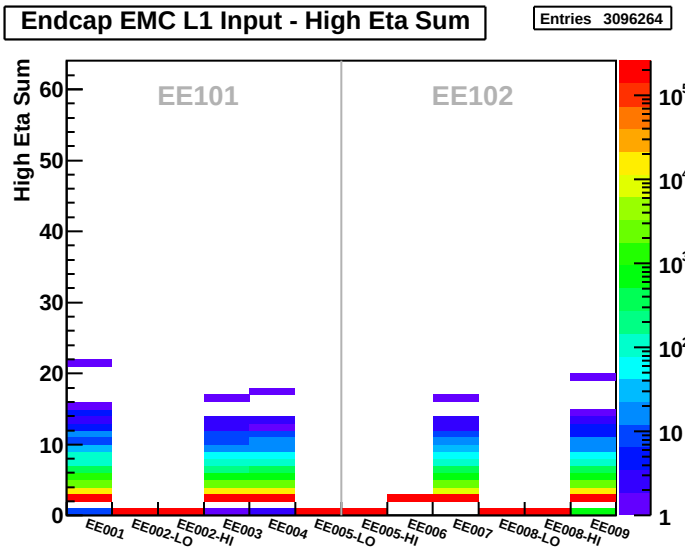

Barrel EMC L1 Input - High Eta Sum
Entries 1
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

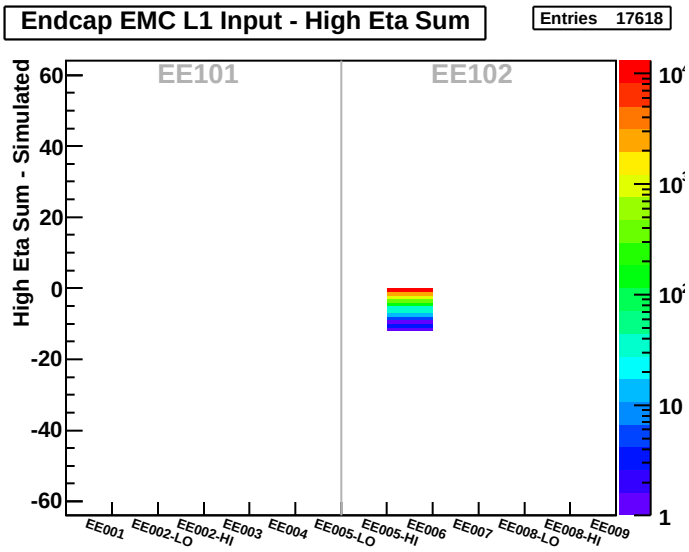

Barrel EMC L1 Input - High Tower Bits
Entries 9288792
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

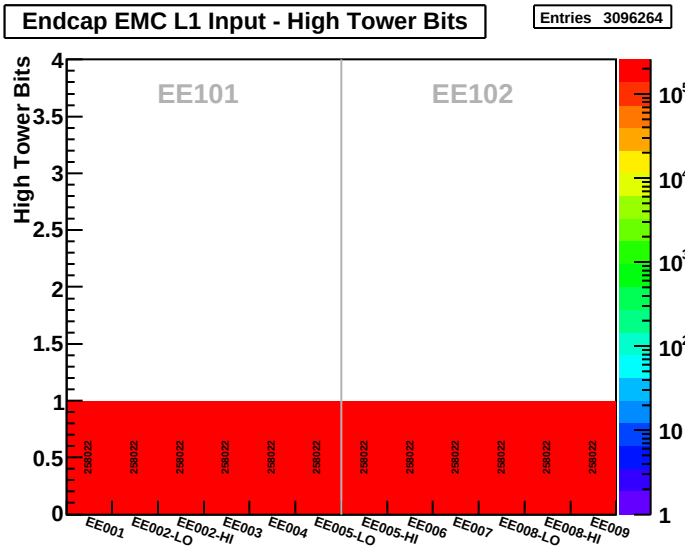

Barrel EMC L1 Input - High Tower Bits
Entries 4629411
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

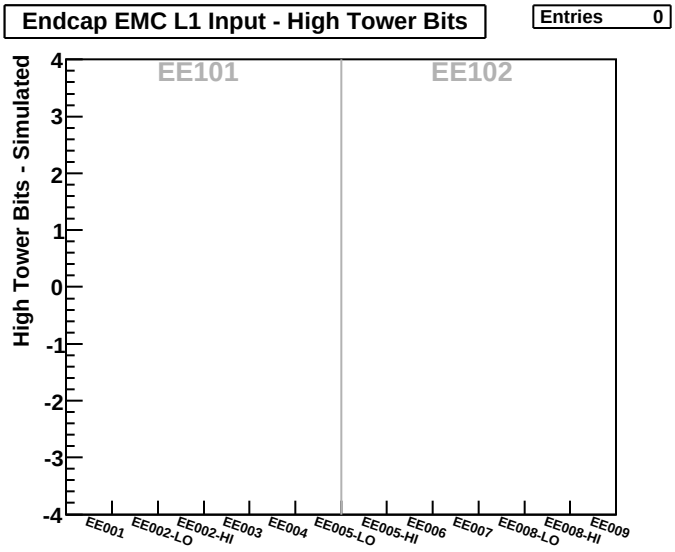

Endcap EMC L1 Input - Low Eta Sum
Entries 3096264
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

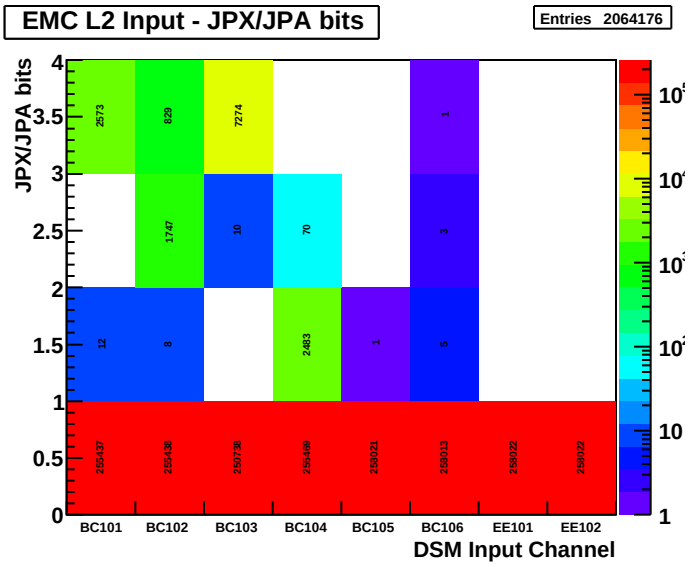

Endcap EMC L1 Input - Low Eta Sum
Entries 18103
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

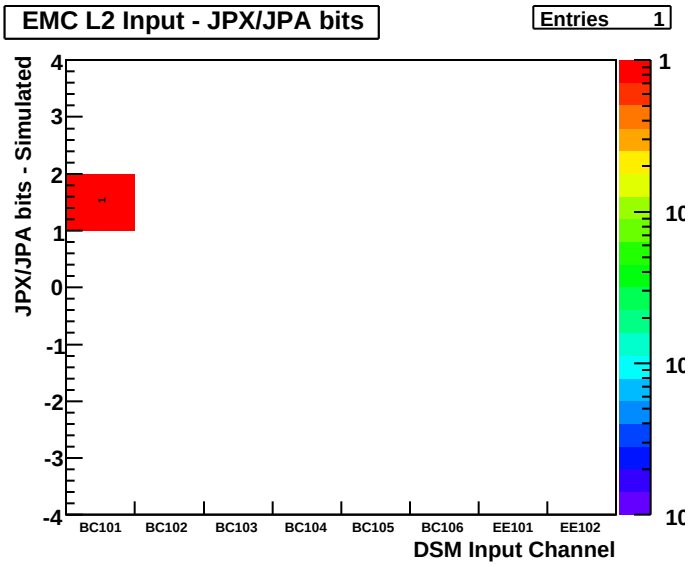

Endcap EMC L1 Input - High Eta Sum
Entries 3096264
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

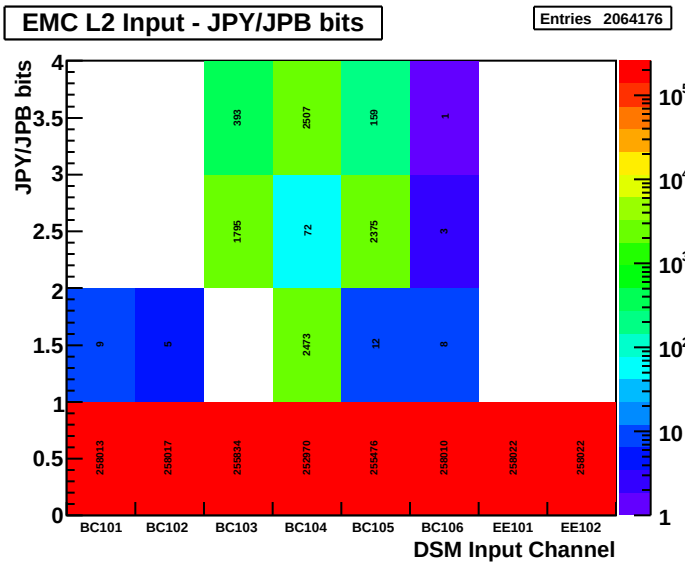

Endcap EMC L1 Input - High Eta Sum
Entries 17618
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

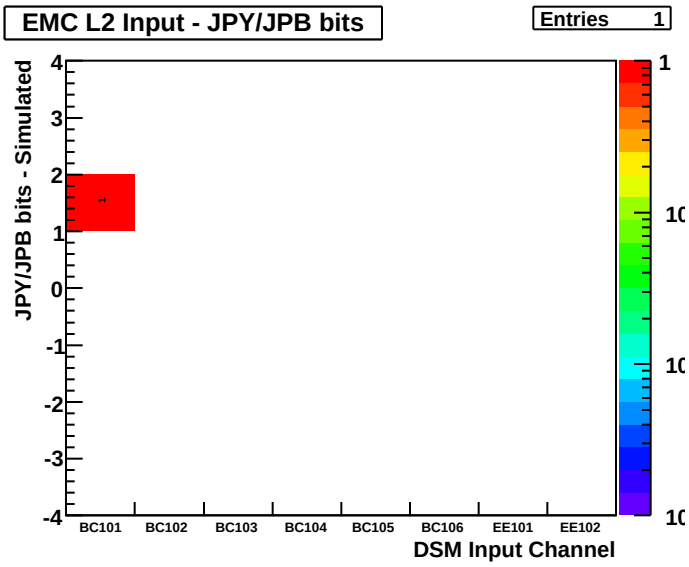

Endcap EMC L1 Input - High Tower Bits
Entries 3096264
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

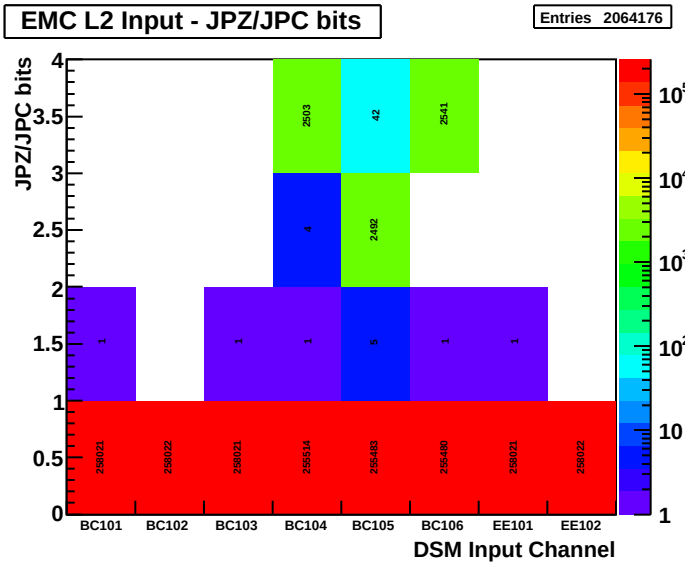

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

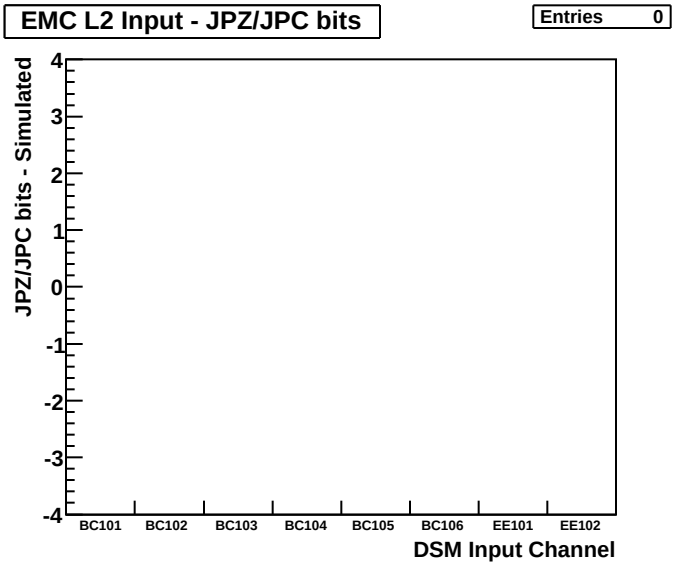

EMC L2 Input - JPX/JPA bits
Entries 2064176
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

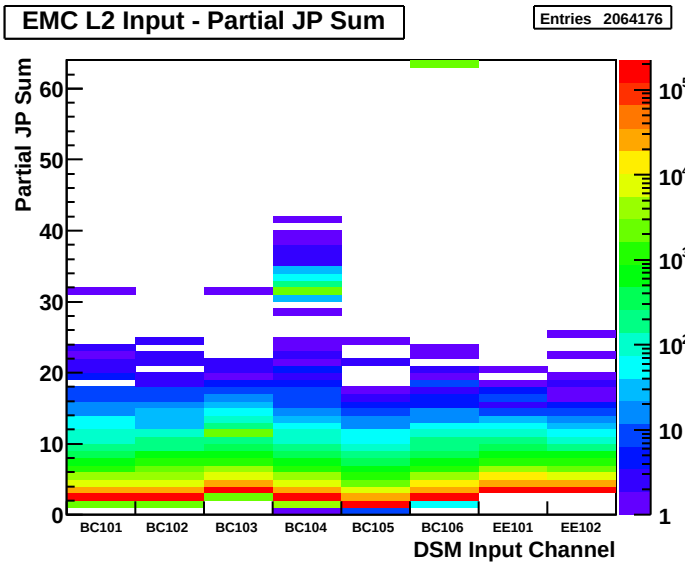

EMC L2 Input - JPX/JPA bits
Entries 1
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

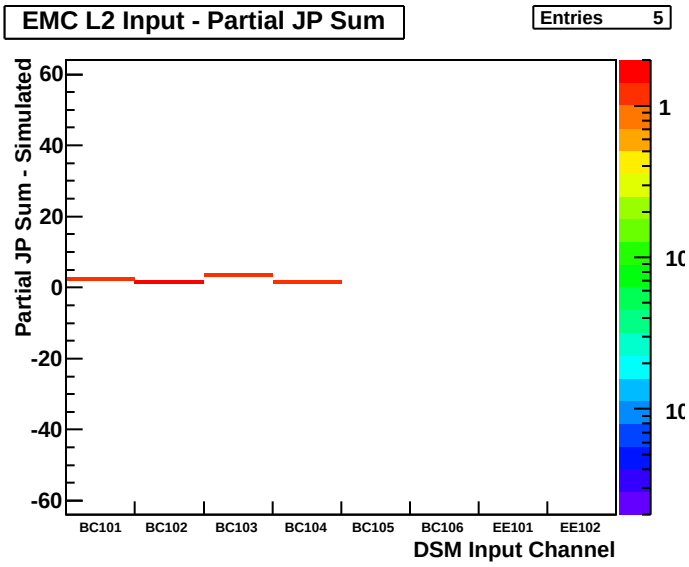

EMC L2 Input - JPY/JPB bits
Entries 2064176
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

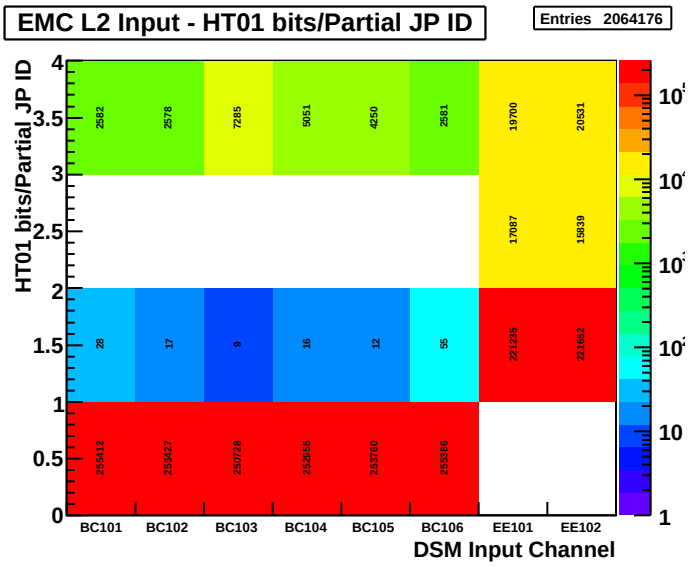

EMC L2 Input - JPY/JPB bits
Entries 1
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

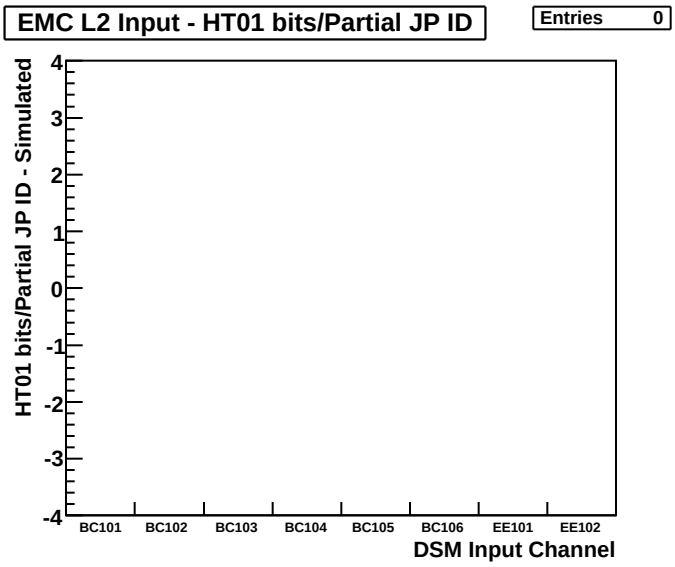

EMC L2 Input - JPZ/JPC bits
Entries 2064176
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

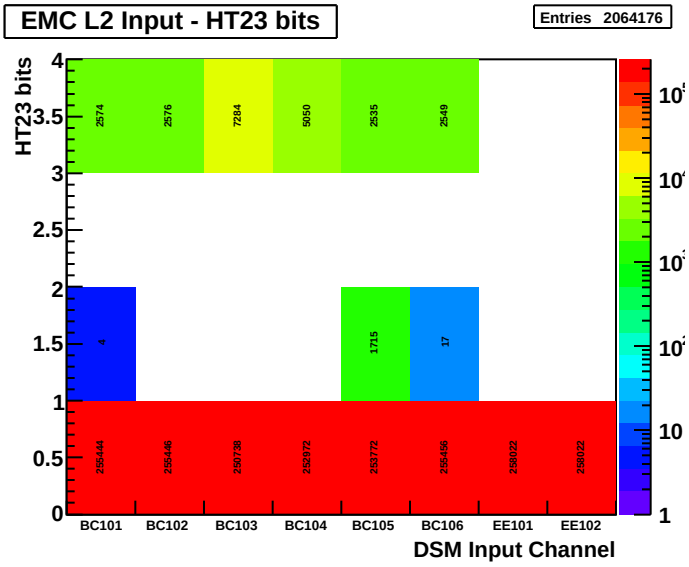

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

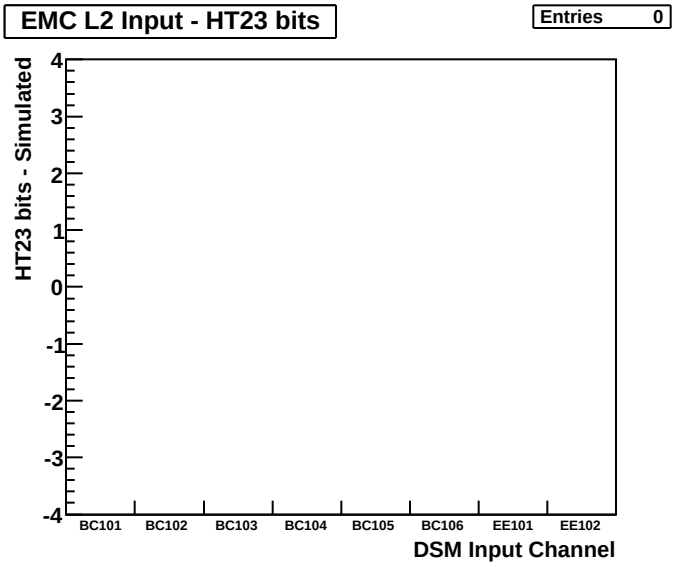

EMC L2 Input - Partial JP Sum
Entries 2064176
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

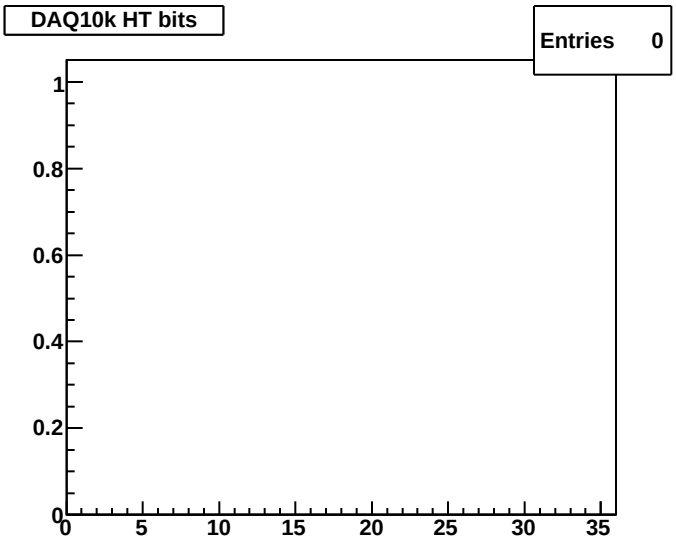

EMC L2 Input - Partial JP Sum
Entries 5
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

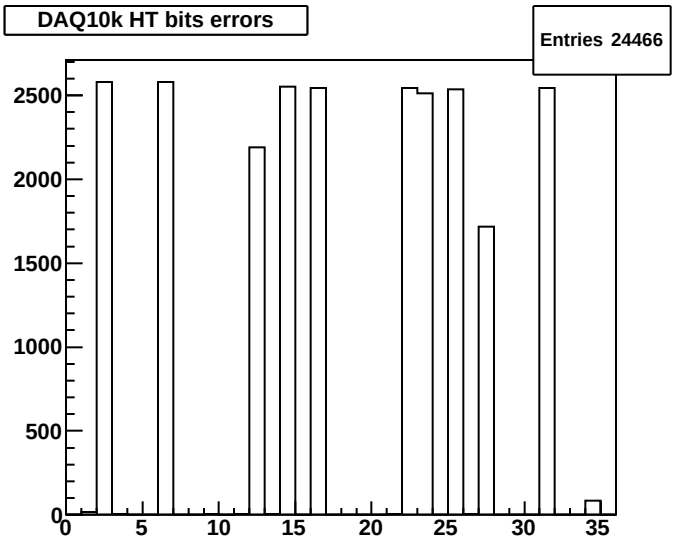

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2064176
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

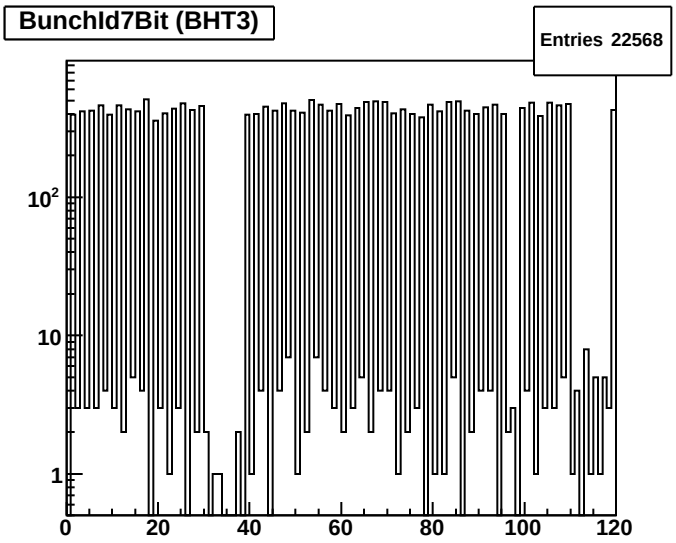

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

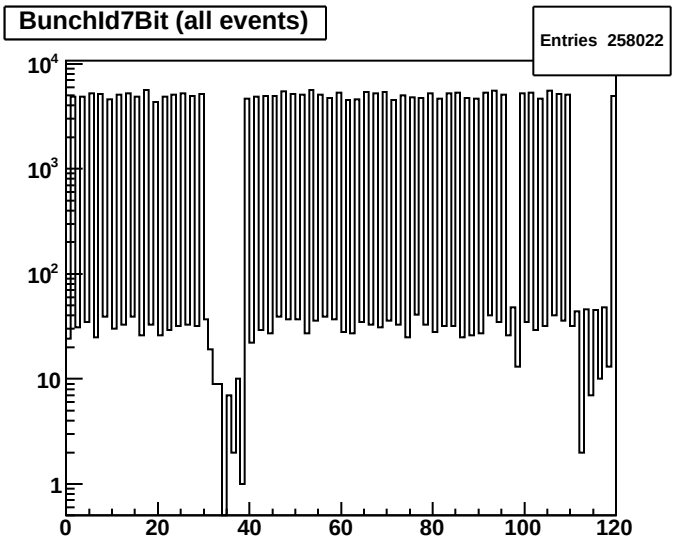

EMC L2 Input - HT23 bits
Entries 2064176
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

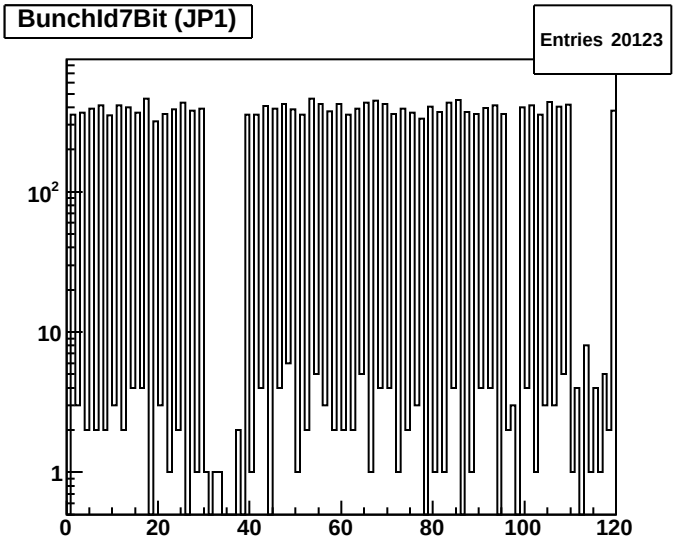

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

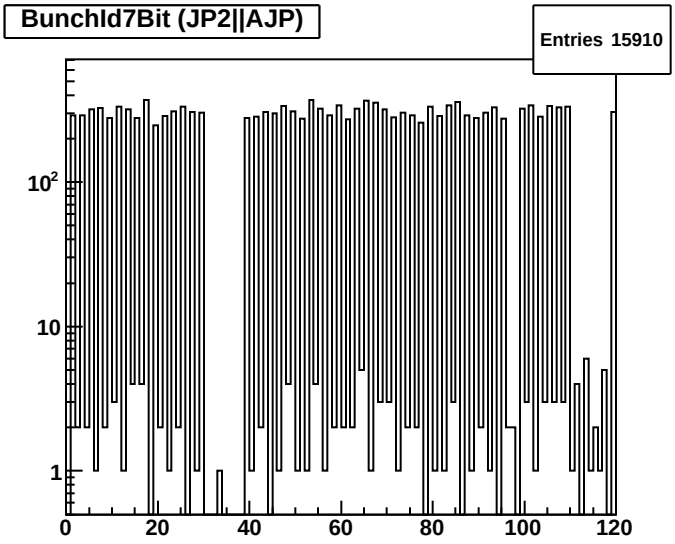

DAQ10k HT bits
Entries 0

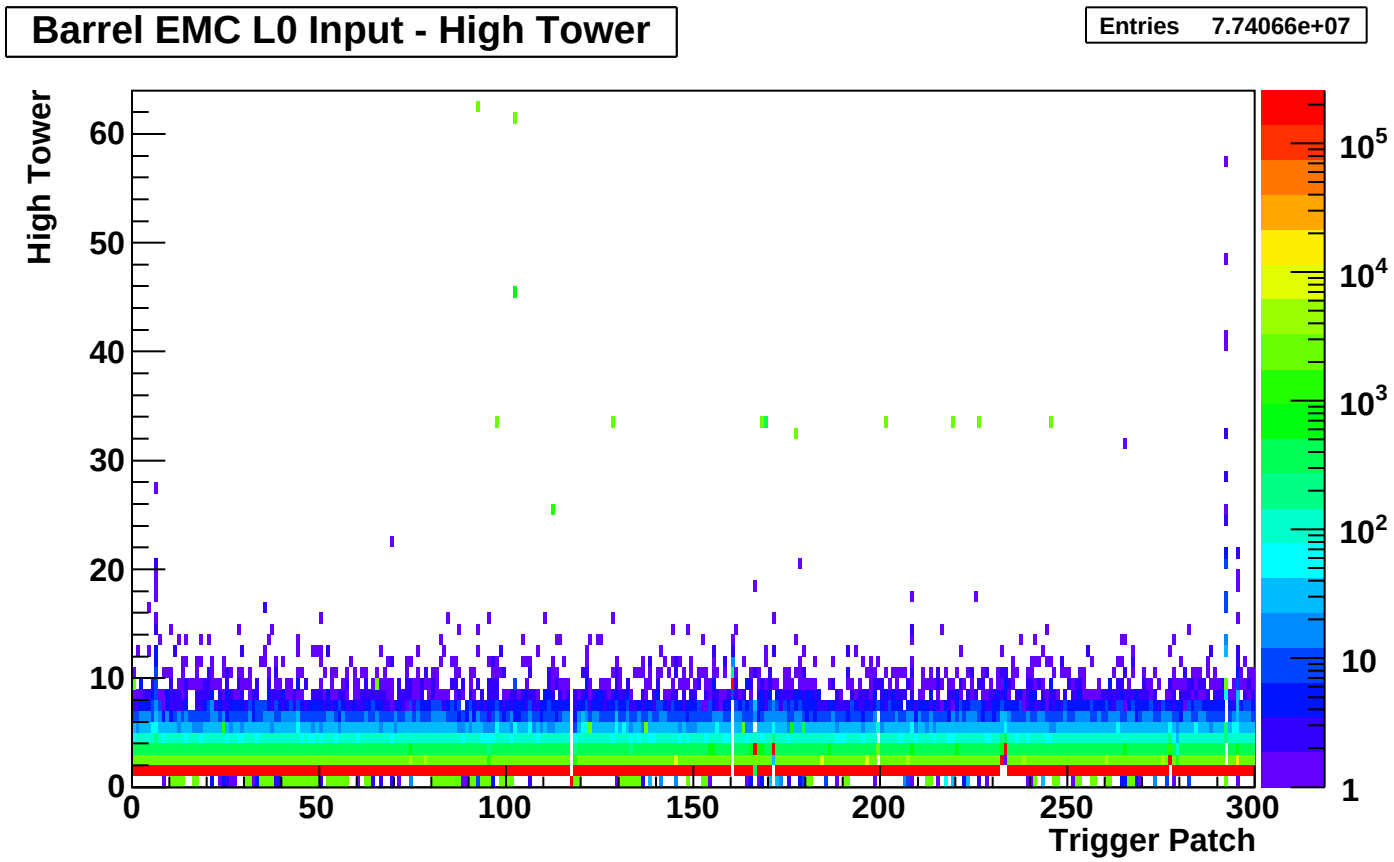

DAQ10k HT bits errors
Entries 24466

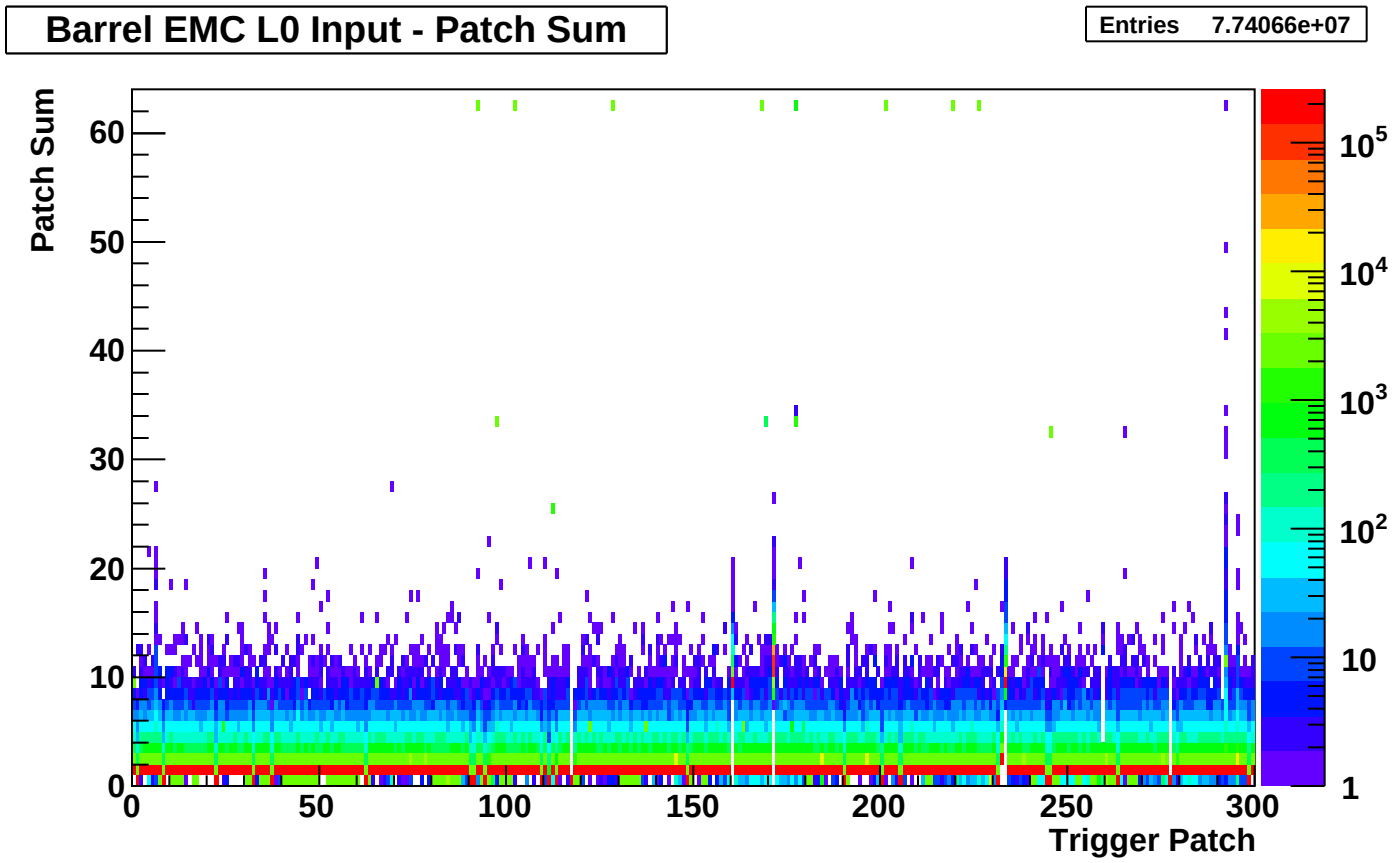

BunchId7Bit (BHT3)
Entries 22568

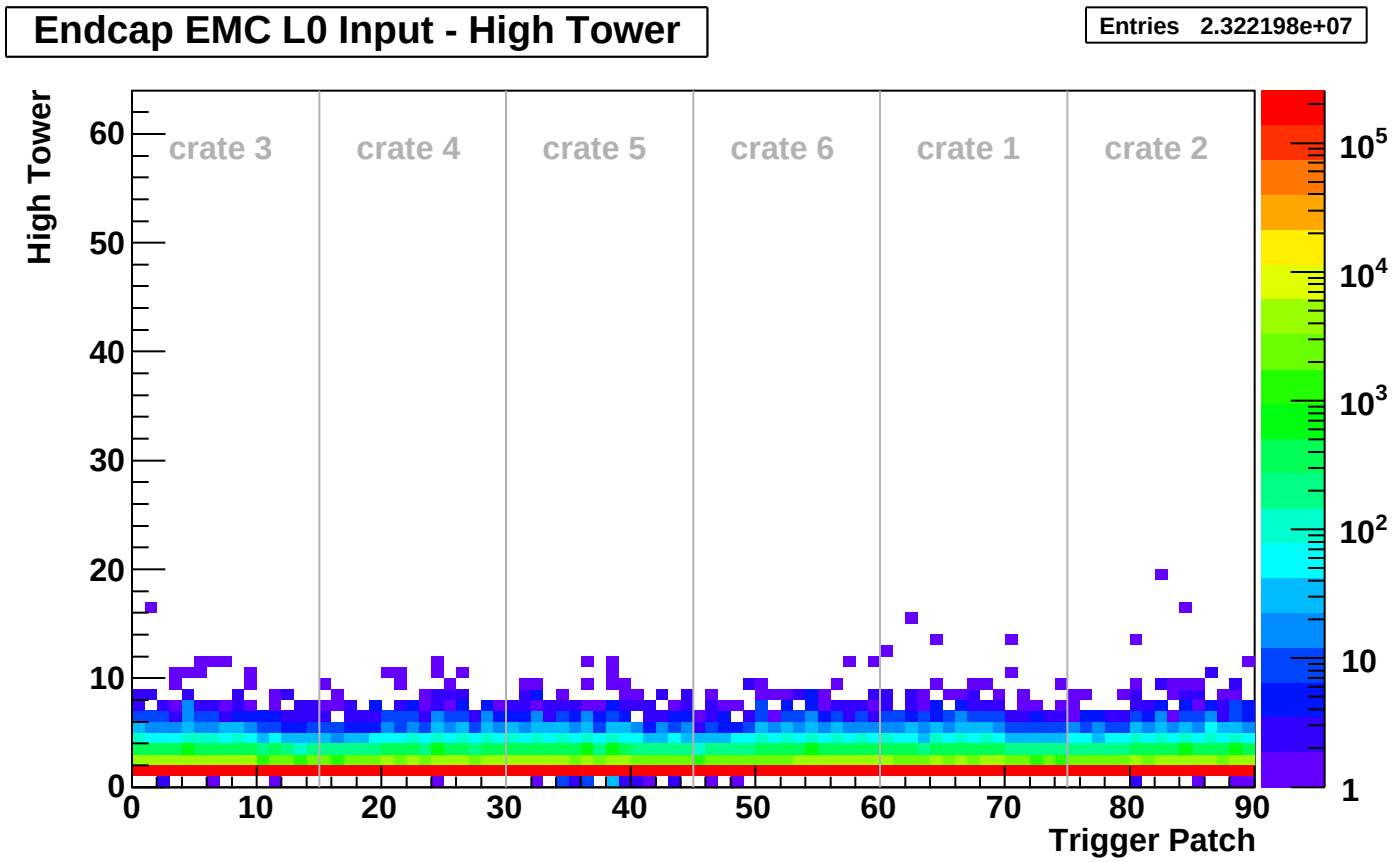

BunchId7Bit (all events)
Entries 258022

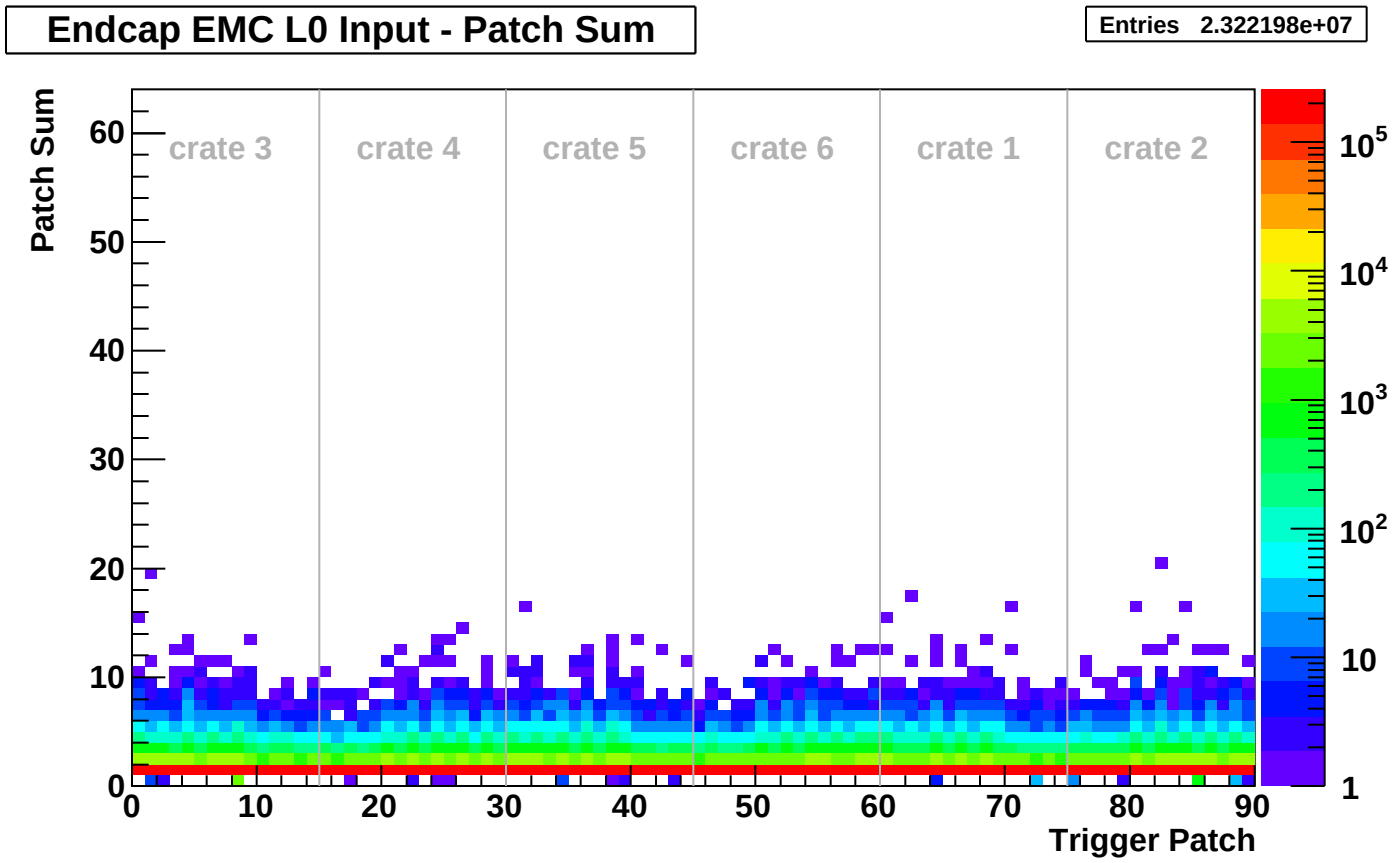

BunchId7Bit (JP1)
Entries 20123

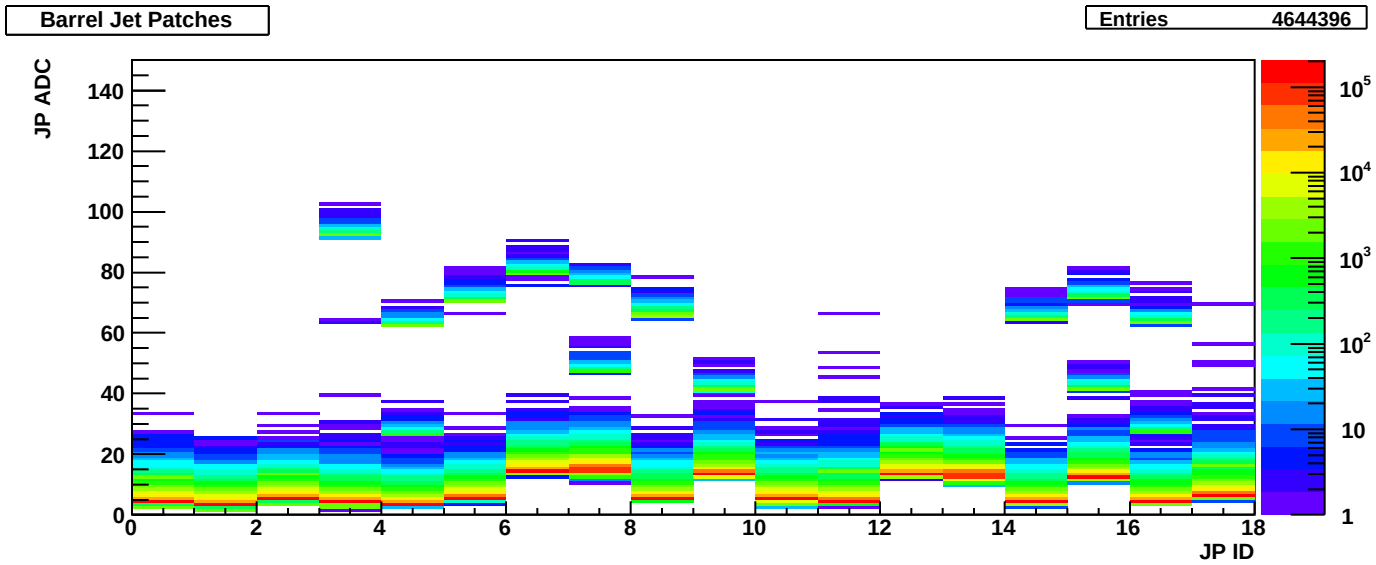

BunchId7Bit (JP2||AJP)
Entries 15910

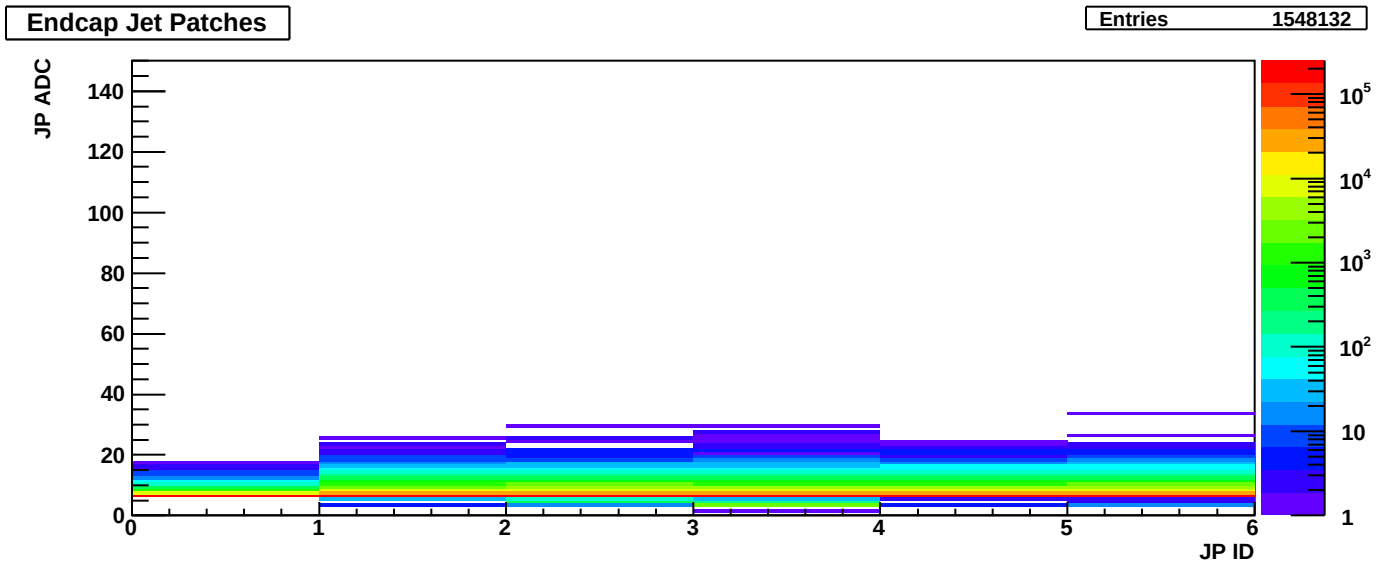

Barrel EMC L0 Input - High Tower
Entries 7.74066e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

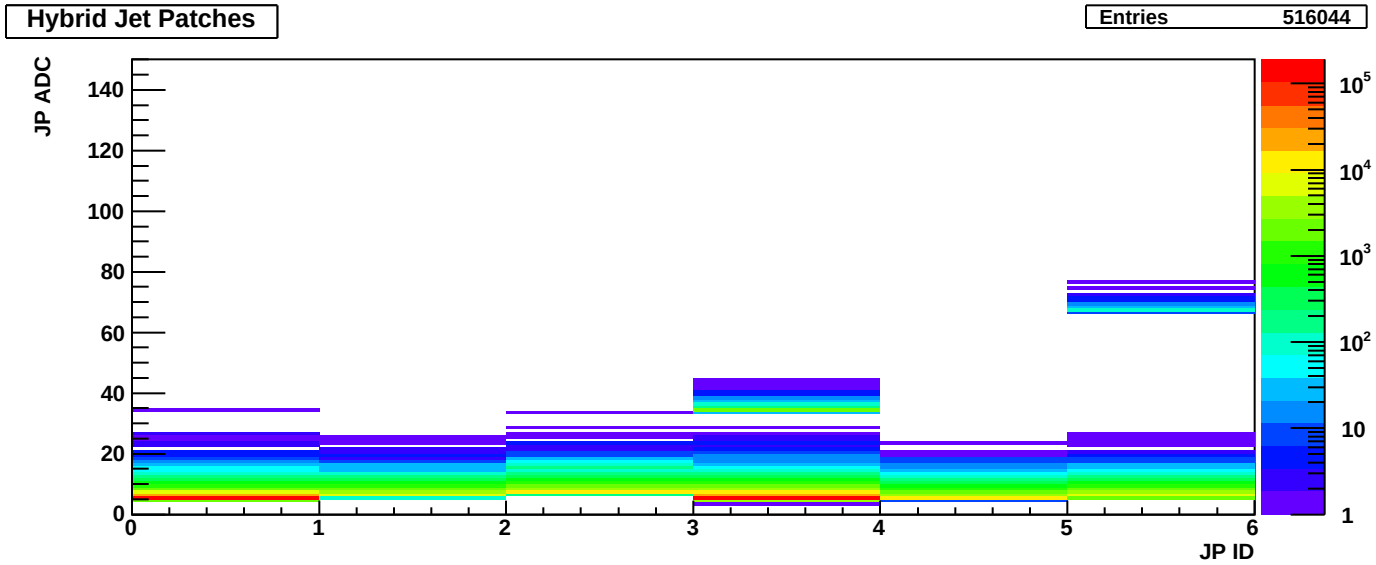

Barrel EMC L0 Input - Patch Sum
Entries 7.74066e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

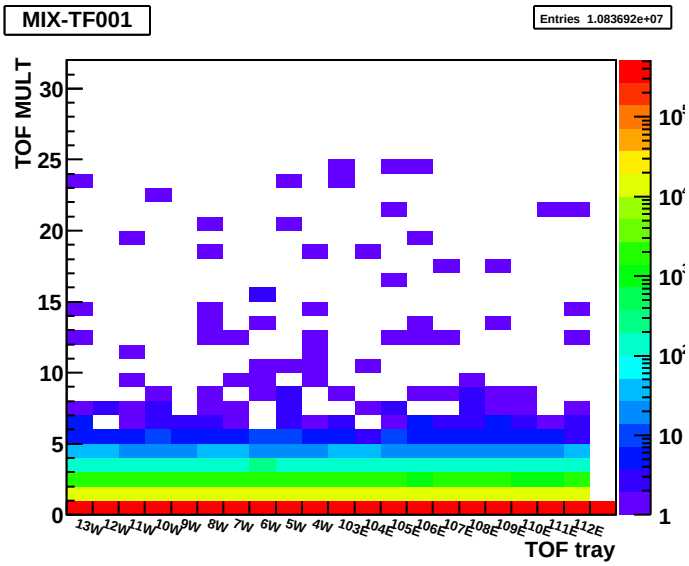

Endcap EMC L0 Input - High Tower
Entries 2.322198e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

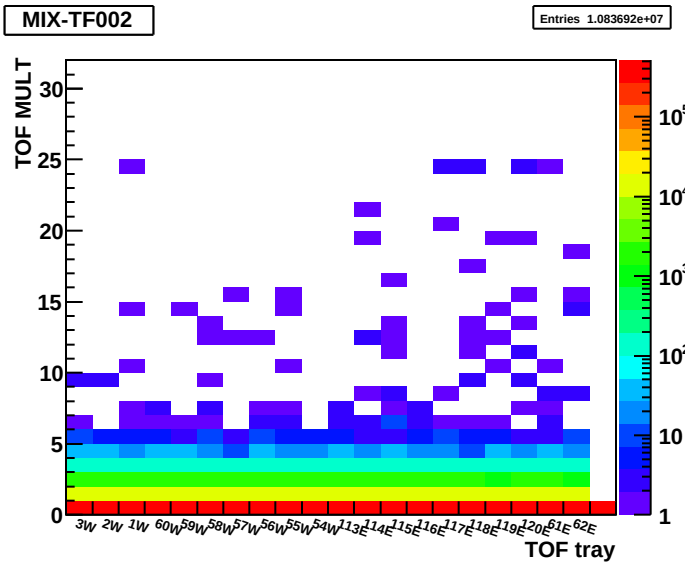

Endcap EMC L0 Input - Patch Sum
Entries 2.322198e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

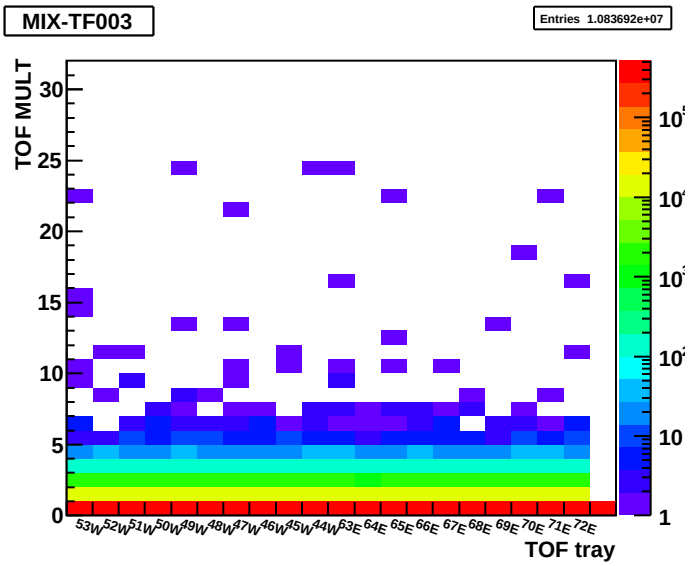

Barrel Jet Patches
Entries 4644396
JP ADC
JP ID

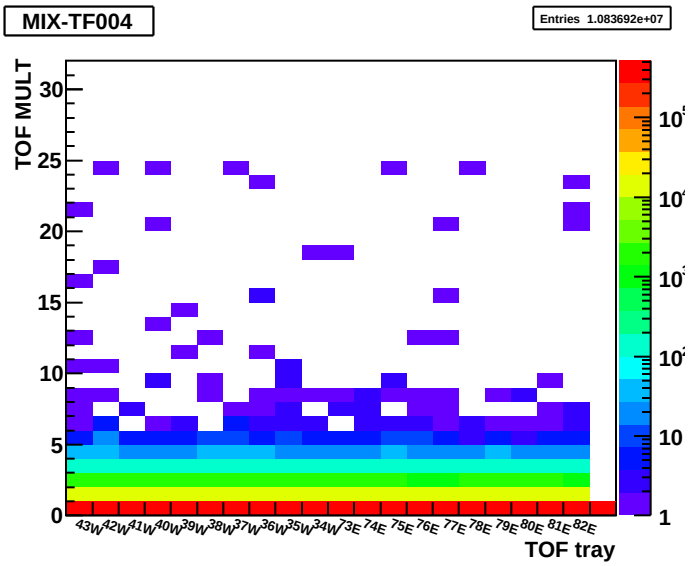

Endcap Jet Patches
Entries 1548132
JP ADC
JP ID

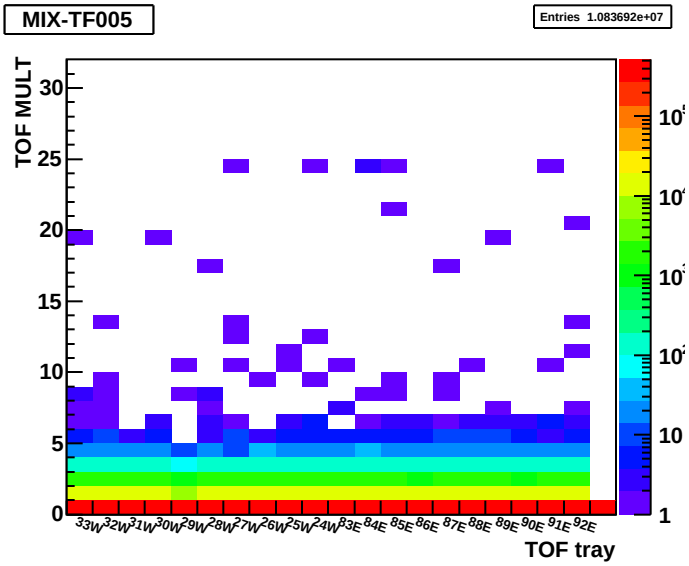

Hybrid Jet Patches
Entries 516044
JP ADC
JP ID

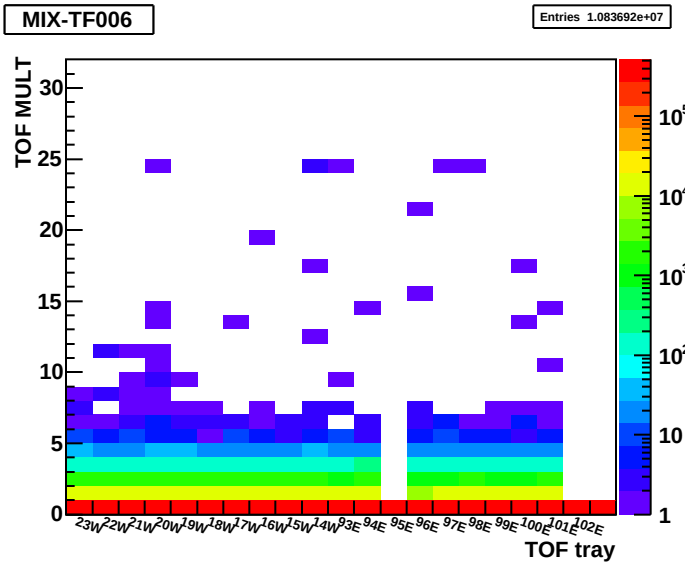

MIX-TF001
Entries 1.083692e+07
TOF MULT
TOF tray

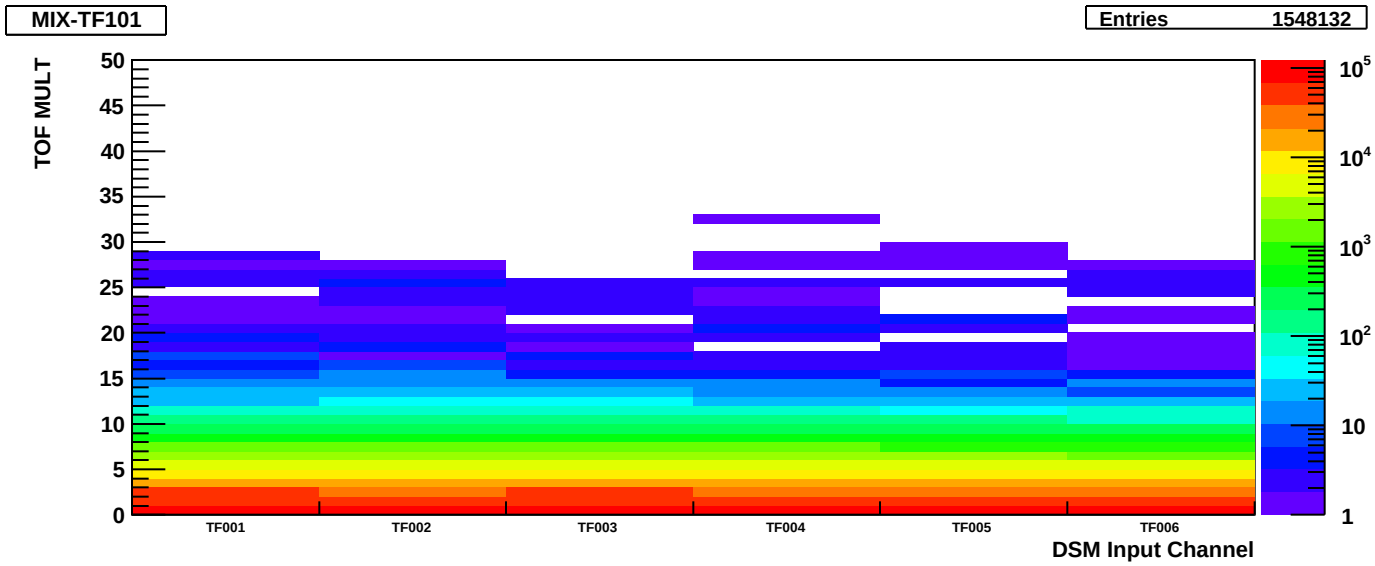

MIX-TF002
Entries 1.083692e+07
TOF MULT
TOF tray

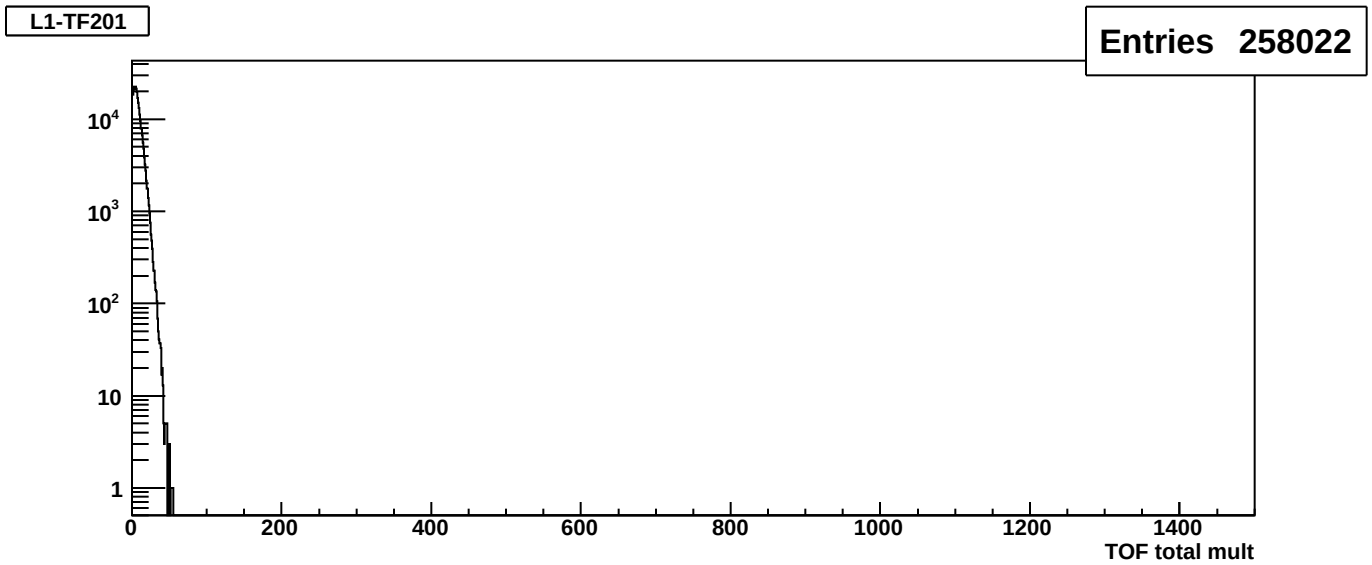

MIX-TF003
Entries 1.083692e+07
TOF MULT
TOF tray

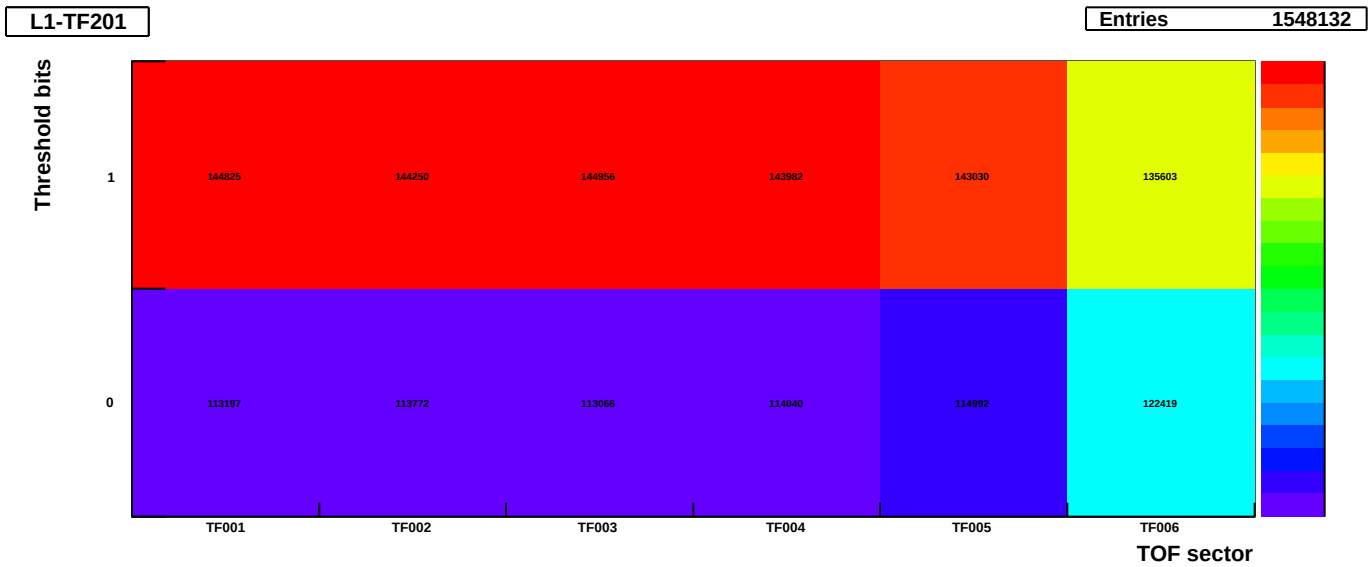

MIX-TF004
Entries 1.083692e+07
TOF MULT
TOF tray

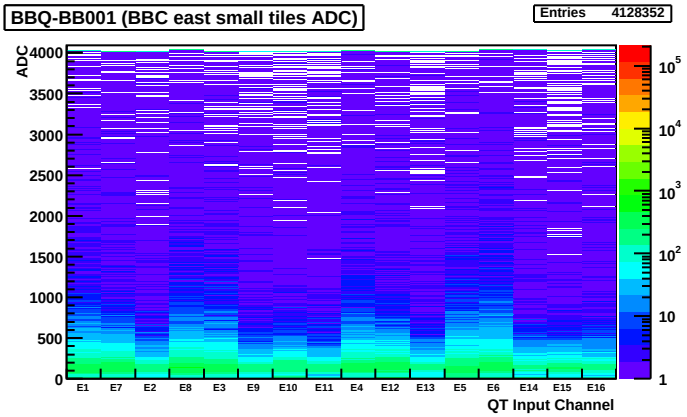

MIX-TF005
Entries 1.083692e+07
TOF MULT
TOF tray

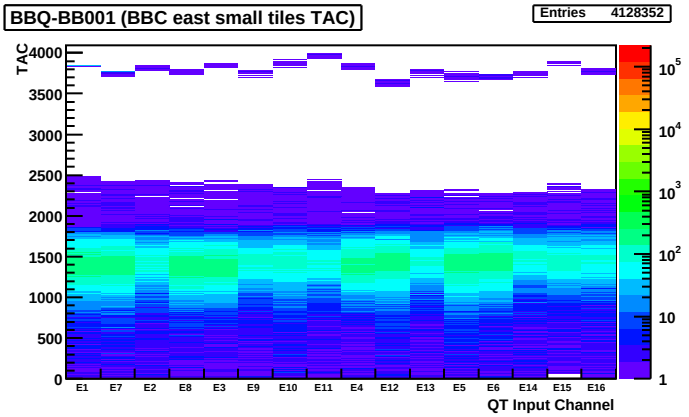

MIX-TF006
Entries 1.083692e+07
TOF MULT
TOF tray

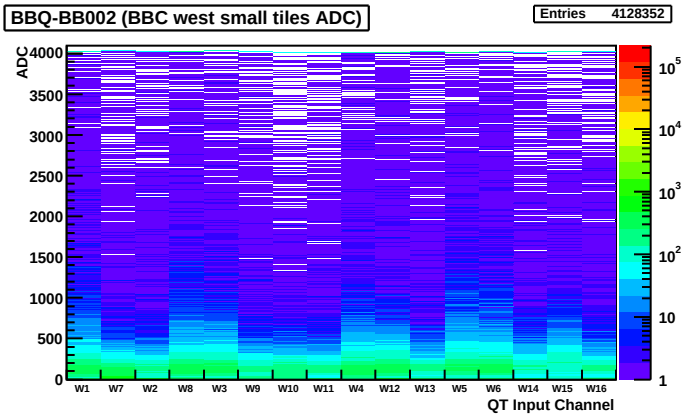

MIX-TF101
Entries 1548132
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

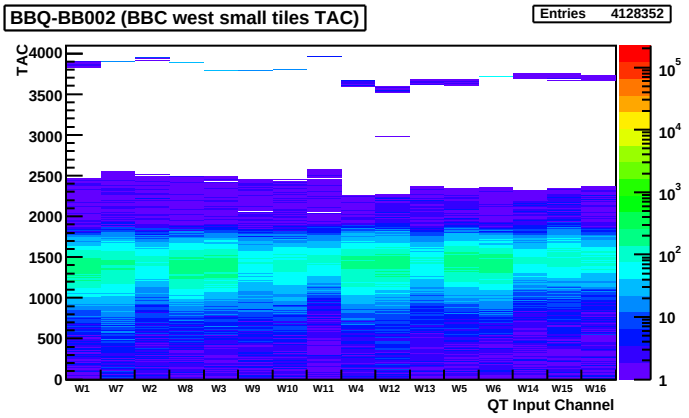

L1-TF201
Entries 258022
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

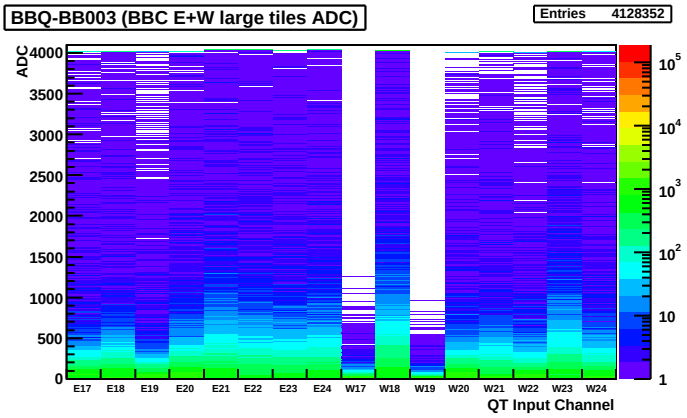

L1-TF201
Entries 1548132
Threshold bits
1
0
144825
144250
144956
143982
143030
135603
113197
113772
113066
114040
114992
122419
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

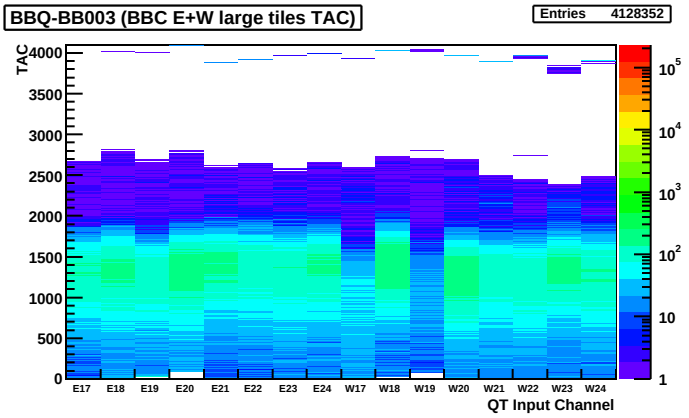

BBQ-BB001 (BBC east small tiles ADC)
Entries 4128352
ADC
QT Input Channel

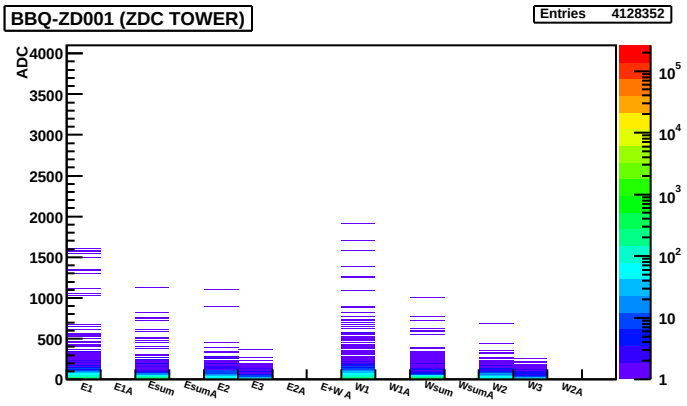

BBQ-BB001 (BBC east small tiles TAC)
Entries 4128352
TAC
QT Input Channel

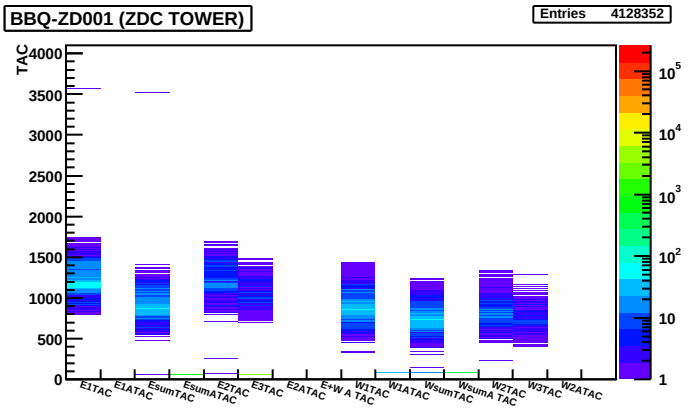

BBQ-BB002 (BBC west small tiles ADC)
Entries 4128352
ADC
QT Input Channel

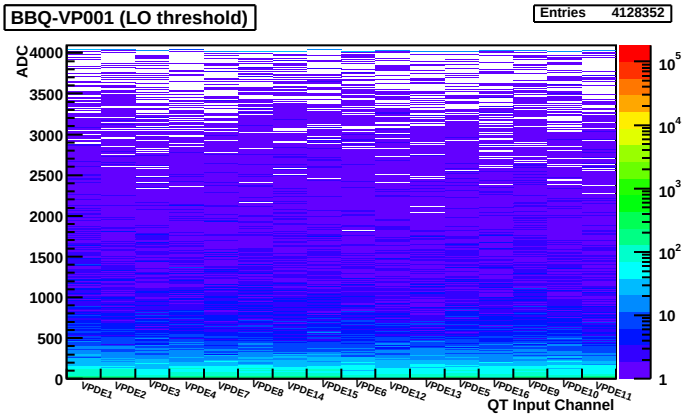

BBQ-BB002 (BBC west small tiles TAC)
Entries 4128352
TAC
QT Input Channel

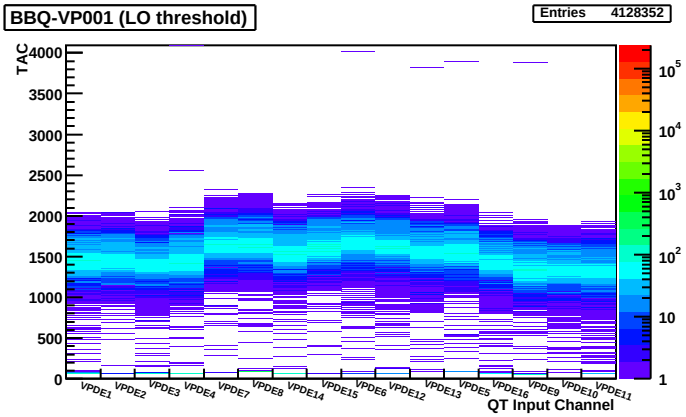

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4128352
ADC
QT Input Channel

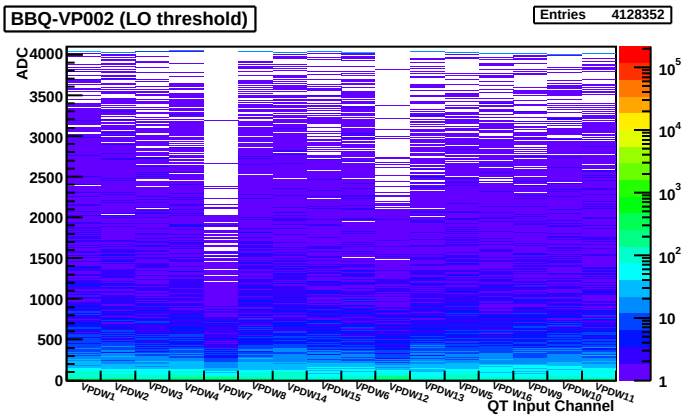

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4128352
TAC
QT Input Channel

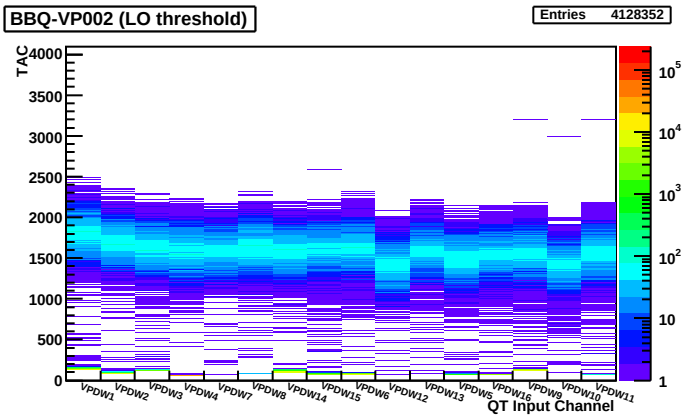

BBQ-ZD001 (ZDC TOWER)
Entries 4128352
ADC

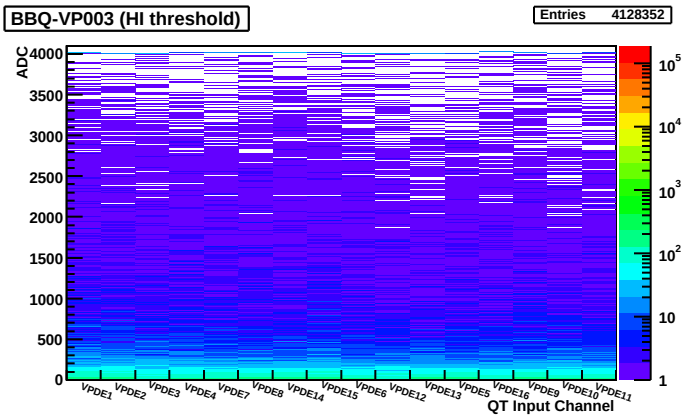

BBQ-ZD001 (ZDC TOWER)
Entries 4128352
TAC

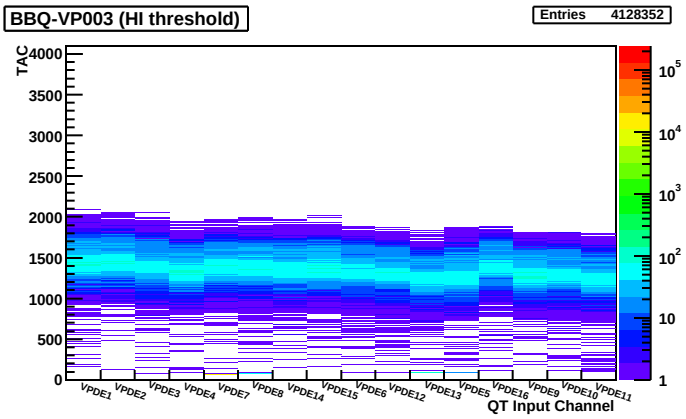

BBQ-VP001 (LO threshold)
Entries 4128352
ADC
QT Input Channel

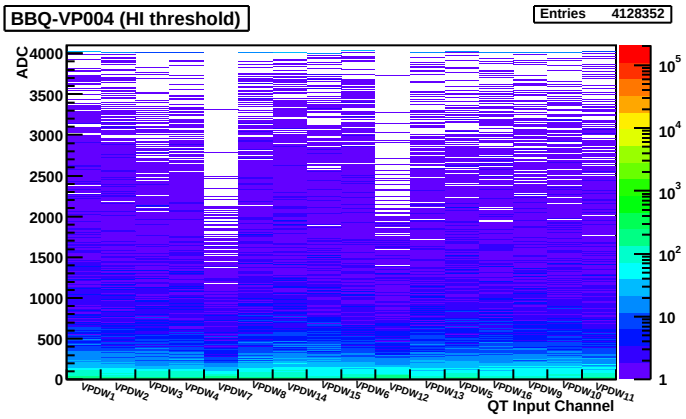

BBQ-VP001 (LO threshold)
Entries 4128352
TAC
QT Input Channel

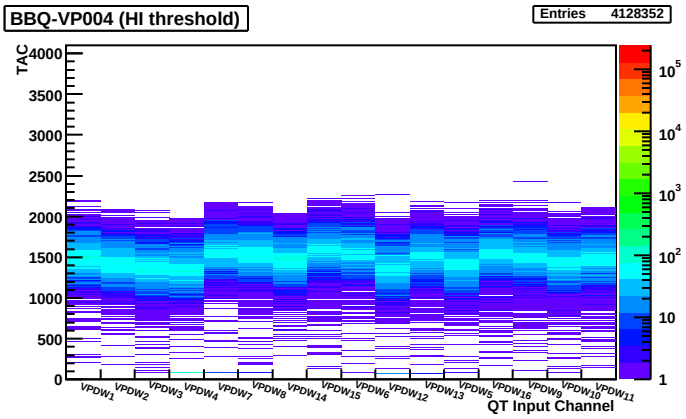

BBQ-VP002 (LO threshold)
Entries 4128352
ADC
QT Input Channel

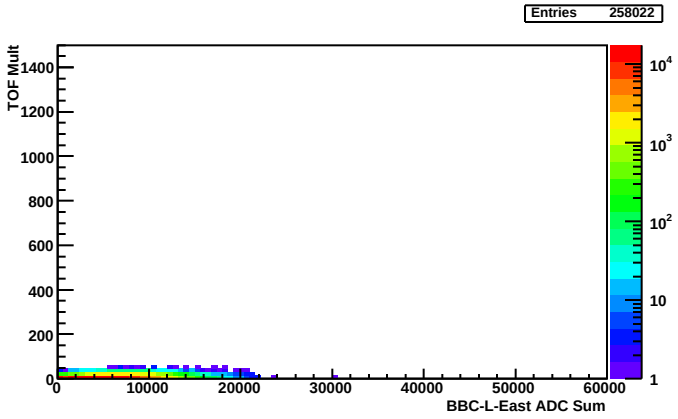

BBQ-VP002 (LO threshold)
Entries 4128352
TAC
QT Input Channel

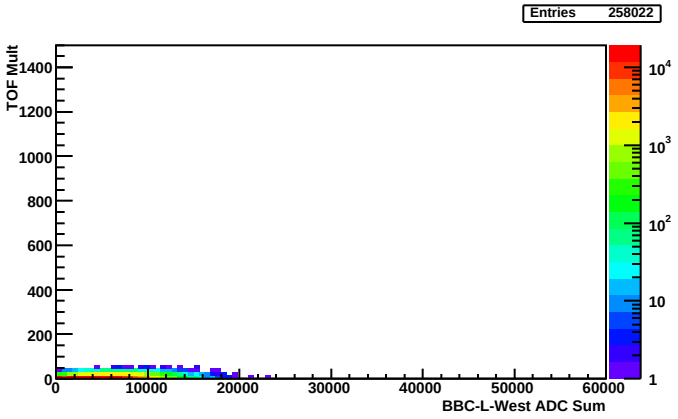

BBQ-VP003 (HI threshold)
Entries 4128352
ADC
QT Input Channel

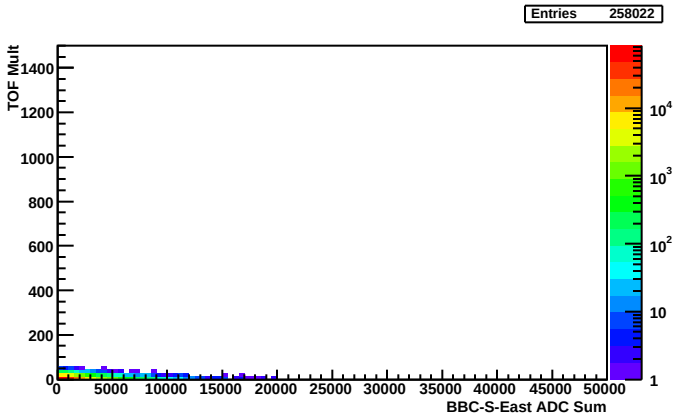

BBQ-VP003 (HI threshold)
Entries 4128352
TAC
QT Input Channel

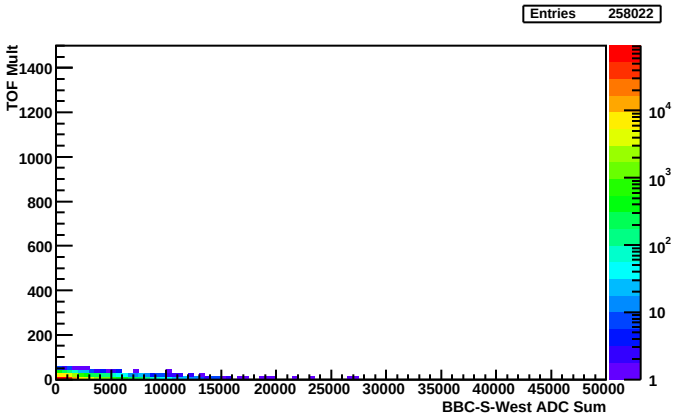

BBQ-VP004 (HI threshold)
Entries 4128352
ADC
QT Input Channel

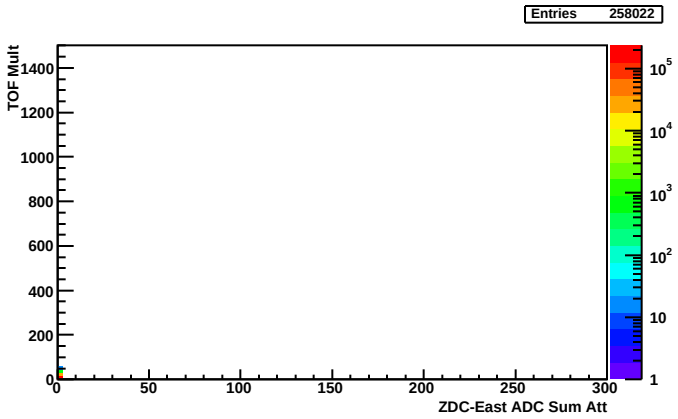

BBQ-VP004 (HI threshold)
Entries 4128352
TAC
QT Input Channel

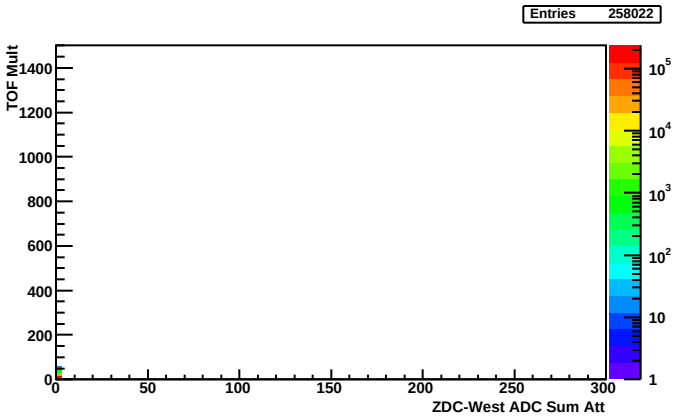

Entries 258022
TOF Mult
BBC-L-East ADC Sum

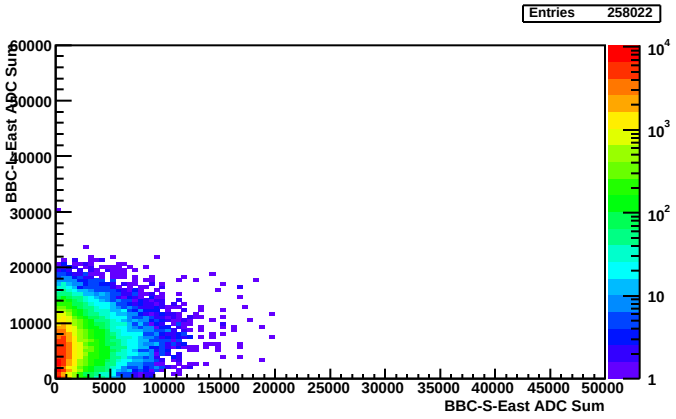

Entries 258022
TOF Mult
BBC-L-West ADC Sum

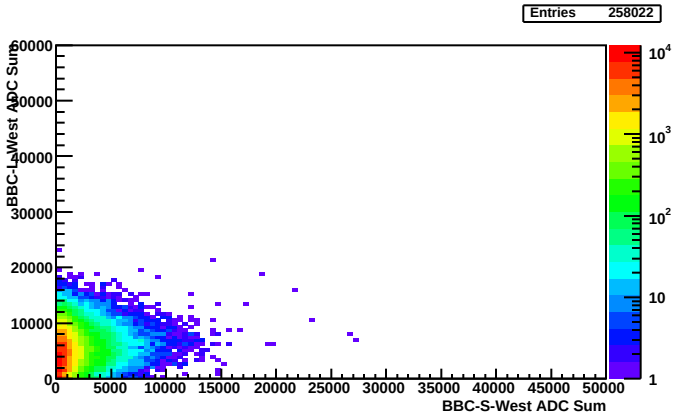

Entries 258022
TOF Mult
BBC-S-East ADC Sum

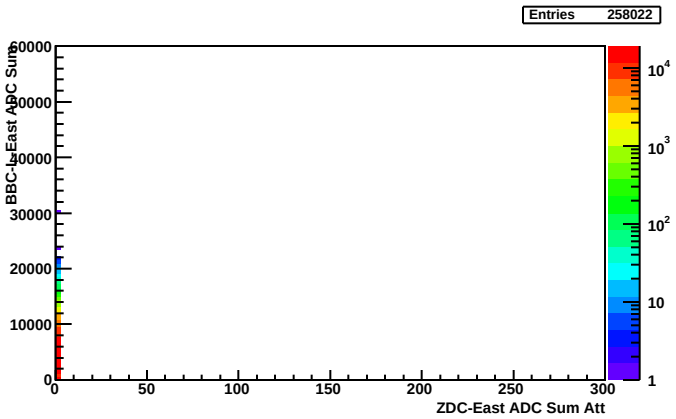

Entries 258022
TOF Mult
BBC-S-West ADC Sum

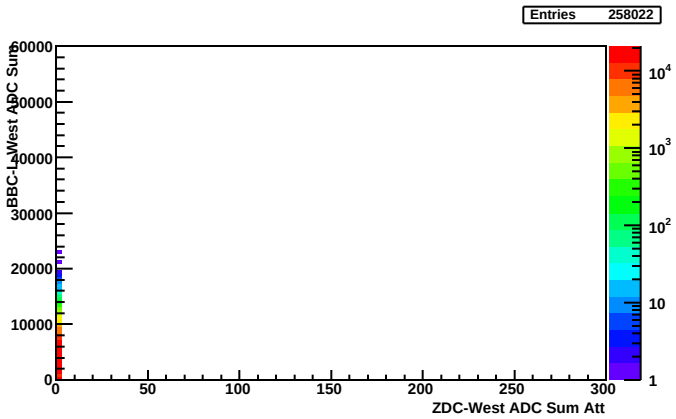

Entries 258022
TOF Mult
ZDC-East ADC Sum Att

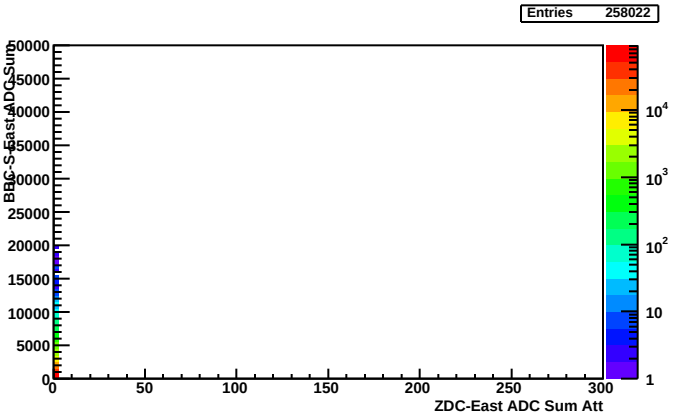

Entries 258022
TOF Mult
ZDC-West ADC Sum Att

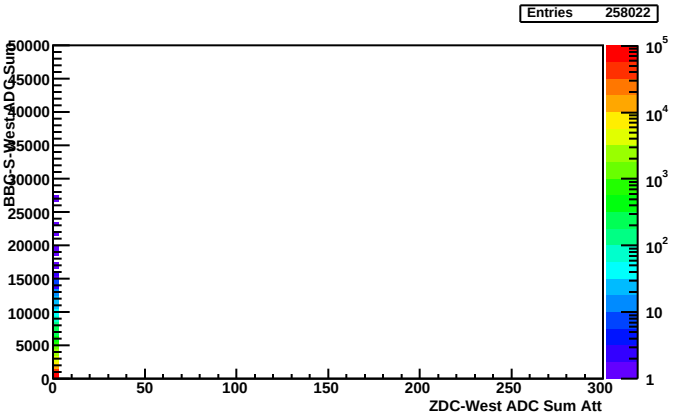

Entries 258022
BBC-L-East ADC Sum
BBC-S-East ADC Sum

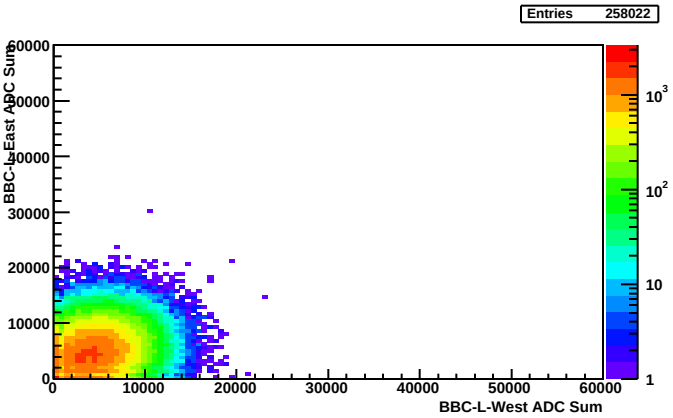

Entries 258022
BBC-L-West ADC Sum
BBC-S-West ADC Sum

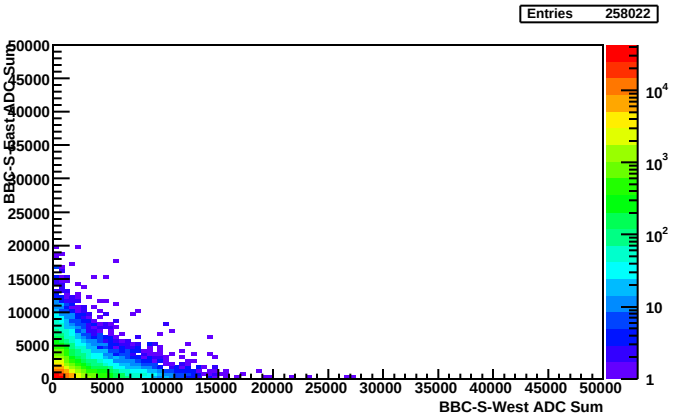

Entries 258022
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

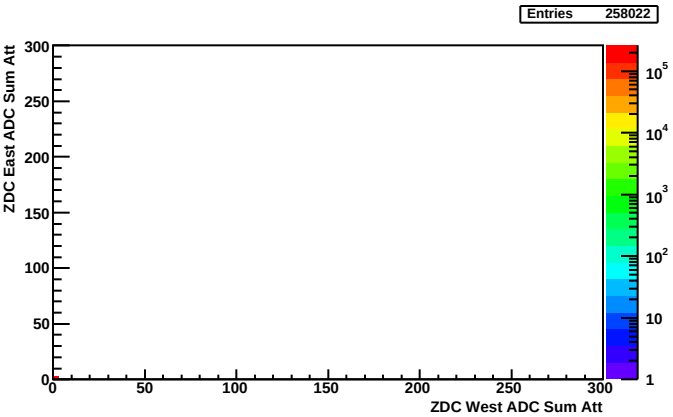

Entries 258022
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

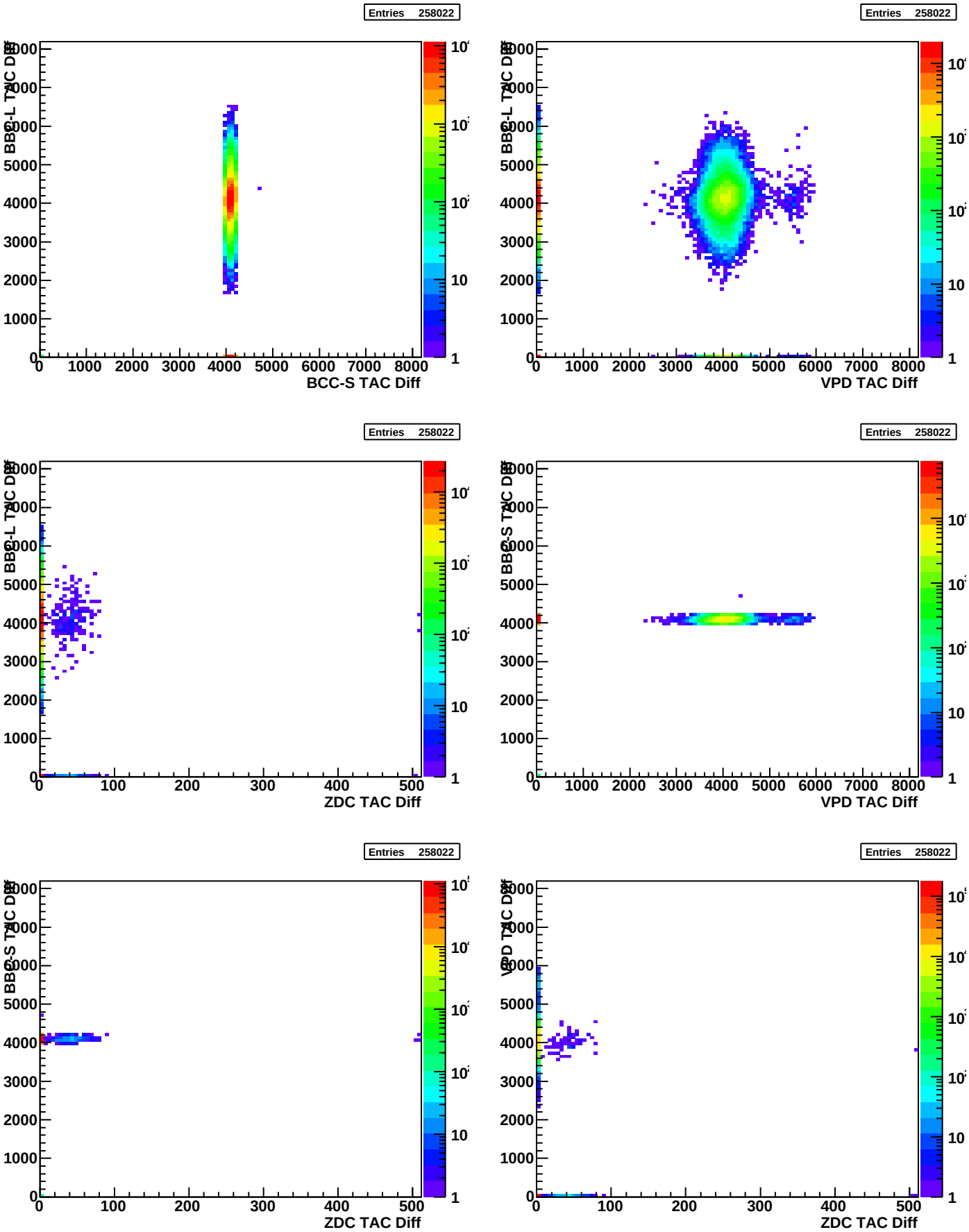

Entries 258022
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

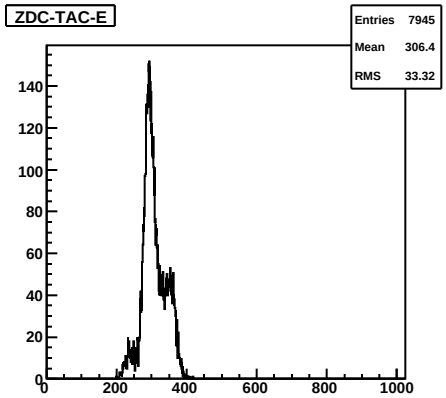

Entries 258022
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

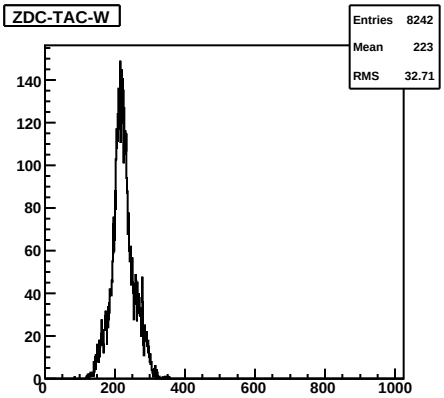

Entries 258022
BBC-L-East ADC Sum
BBC-L-West ADC Sum

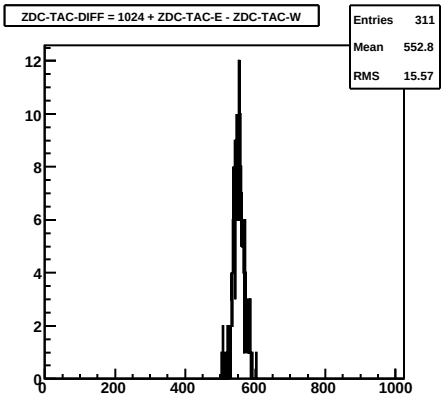

Entries 258022
BBC-S-East ADC Sum
BBC-S-West ADC Sum

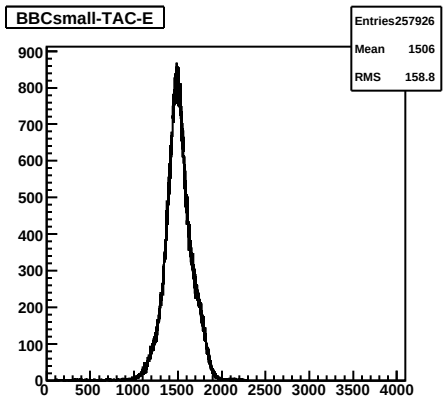

Entries 258022
ZDC East ADC Sum Att
ZDC West ADC Sum Att

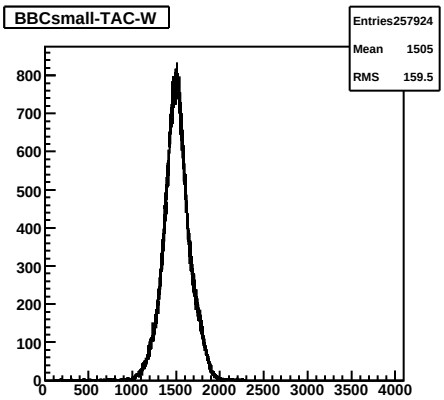

Entries 258022
BBC-L TAC Diff
BCC-S TAC Diff
Entries 258022
BBC-L TAC Diff
VPD TAC Diff
Entries 258022
BBC-L TAC Diff
ZDC TAC Diff
Entries 258022
BBC-S TAC Diff
VPD TAC Diff
Entries 258022
BBC-S TAC Diff
ZDC TAC Diff
Entries 258022
VPD TAC Diff
ZDC TAC Diff

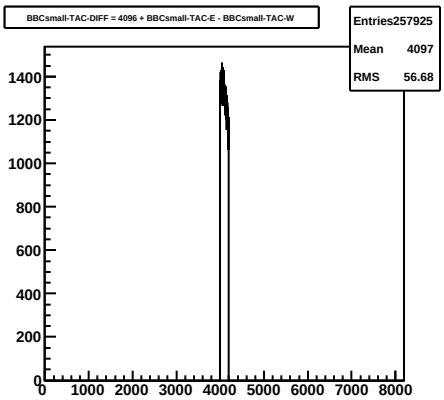

ZDC-TAC-E
Entries 7945
Mean 306.4
RMS 33.32

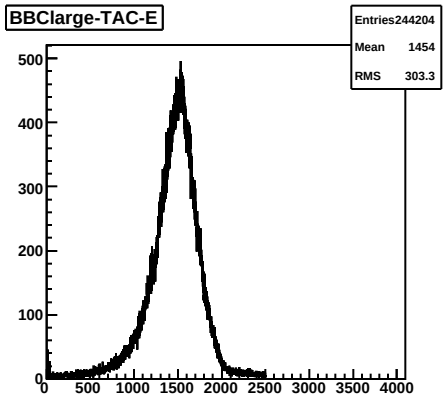

ZDC-TAC-W
Entries 8242
Mean 223
RMS 32.71

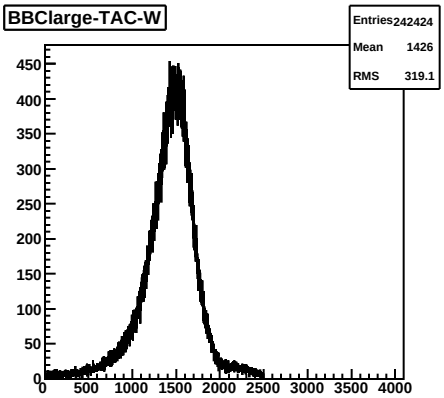

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 311
Mean 552.8
RMS 15.57

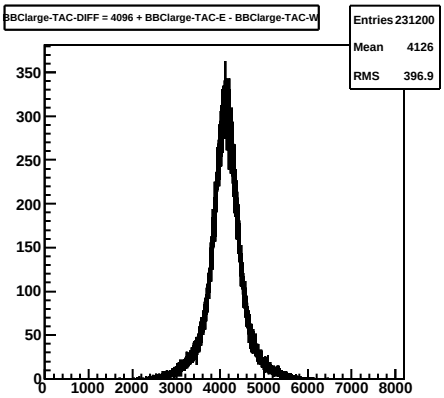

BBCsmall-TAC-E
Entries257926
Mean 1506
RMS 158.8

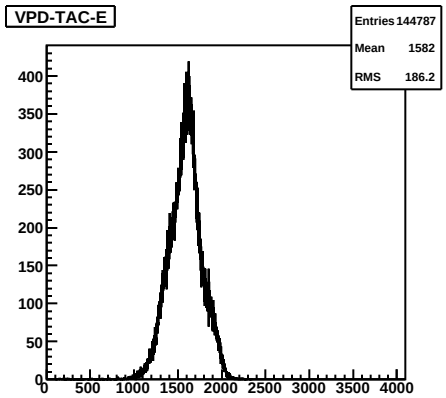

BBCsmall-TAC-W
Entries257924
Mean 1505
RMS 159.5

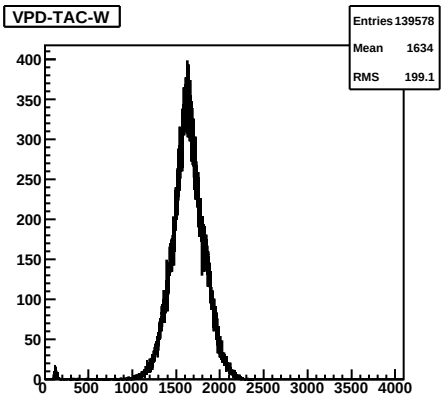

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries257925
Mean 4097
RMS 56.68

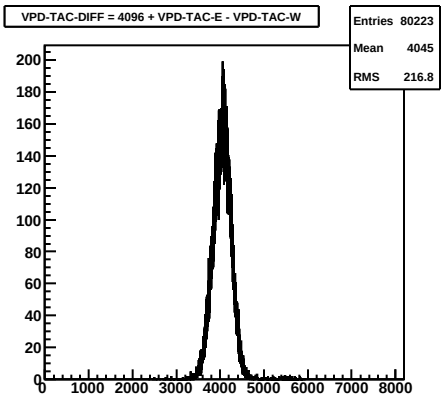

BBClarge-TAC-E
Entries244204
Mean 1454
RMS 303.3

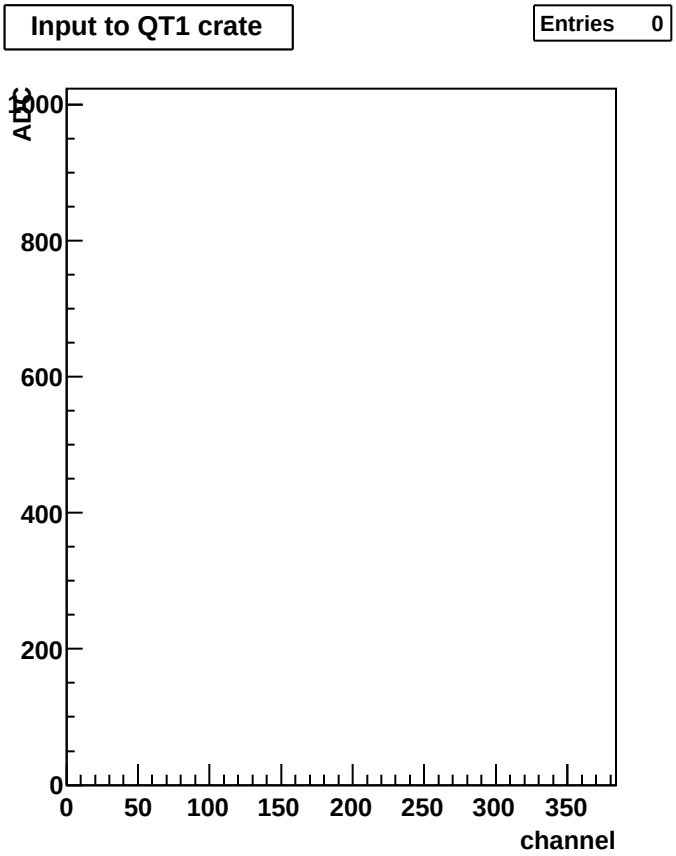

BBClarge-TAC-W
Entries242424
Mean 1426
RMS 319.1

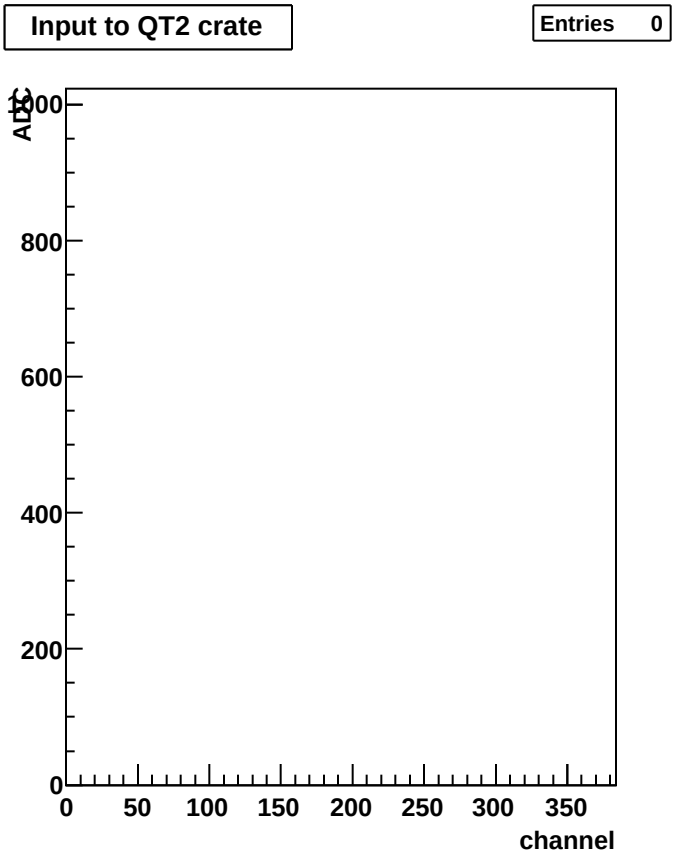

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 231200
Mean 4126
RMS 396.9

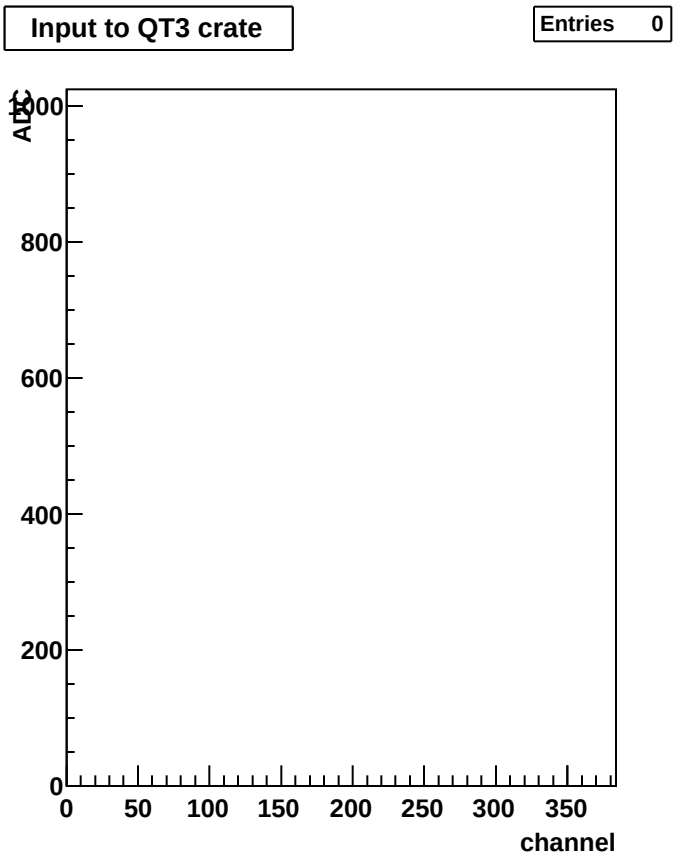

VPD-TAC-E
Entries 144787
Mean 1582
RMS 186.2

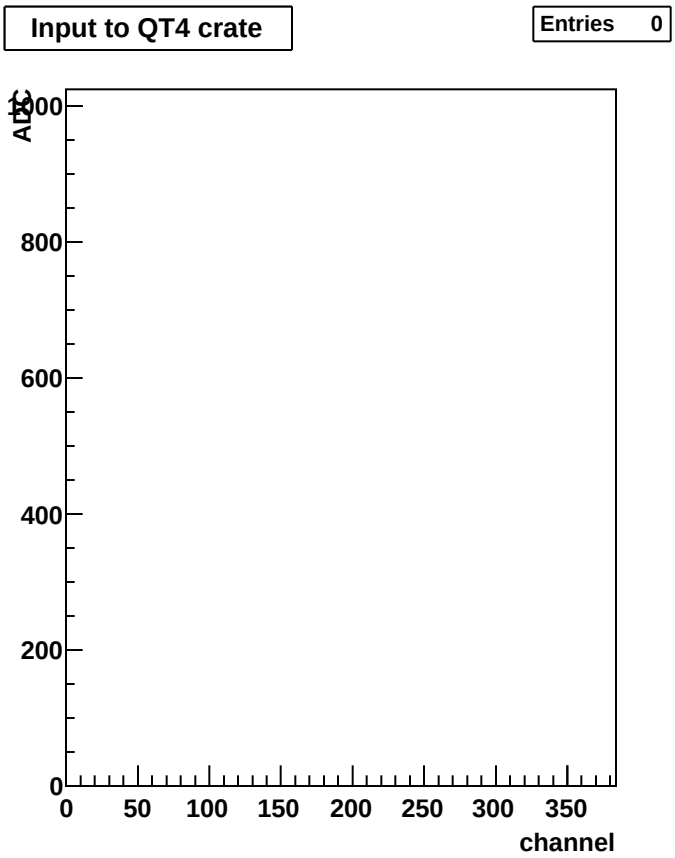

VPD-TAC-W
Entries 139578
Mean 1634
RMS 199.1

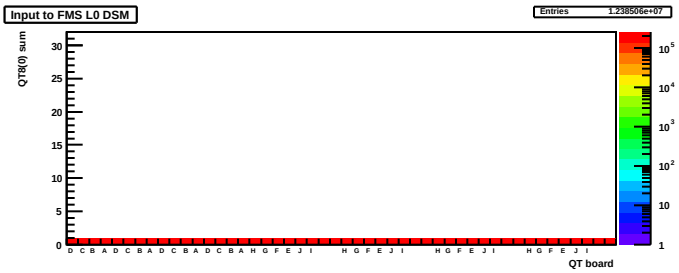

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 80223
Mean 4045
RMS 216.8

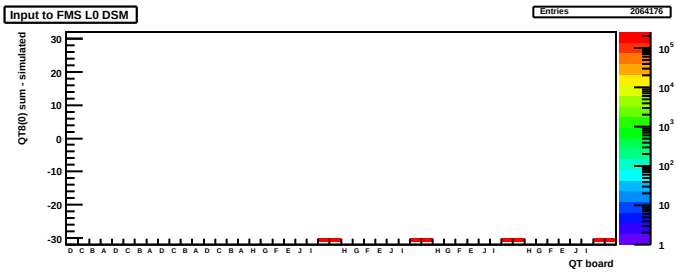

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

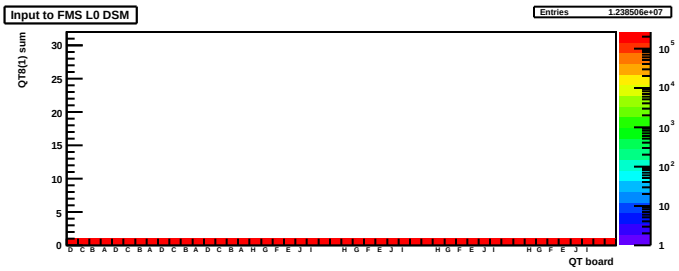

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

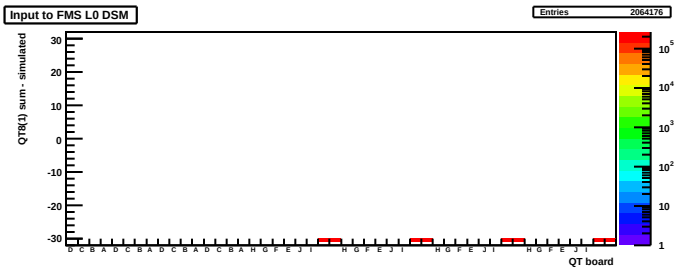

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

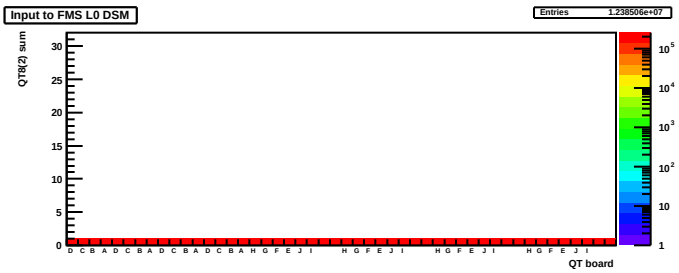

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

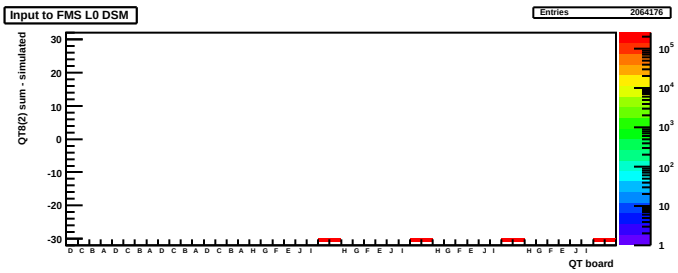

Input to FMS L0 DSM
Entries 1.238506e+07
QT8(0) sum
QT board

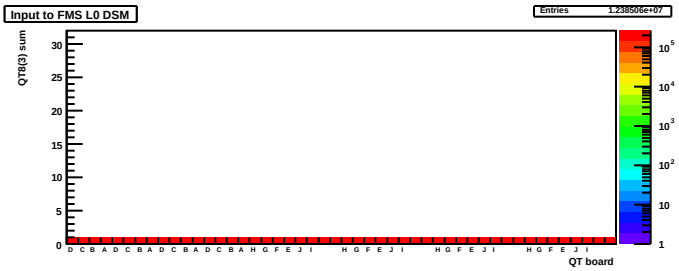

Input to FMS L0 DSM
Entries 2064176
QT8(0) sum - simulated
QT board

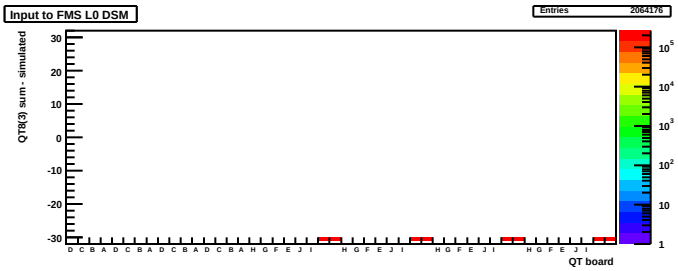

Input to FMS L0 DSM
Entries 1.238506e+07
QT8(1) sum
QT board

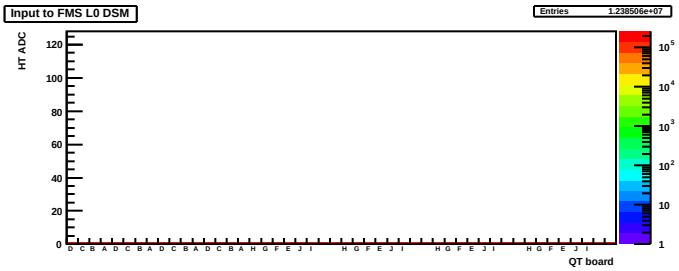

Input to FMS L0 DSM
Entries 2064176
QT8(1) sum - simulated
QT board

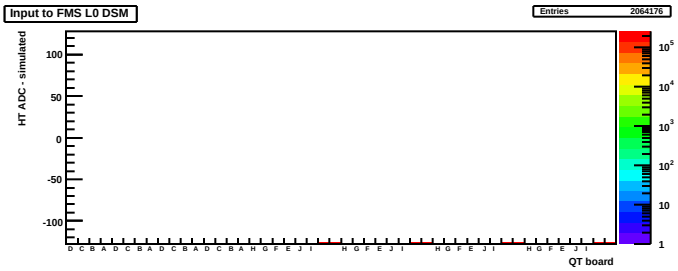

Input to FMS L0 DSM
Entries 1.238506e+07
QT8(2) sum
QT board

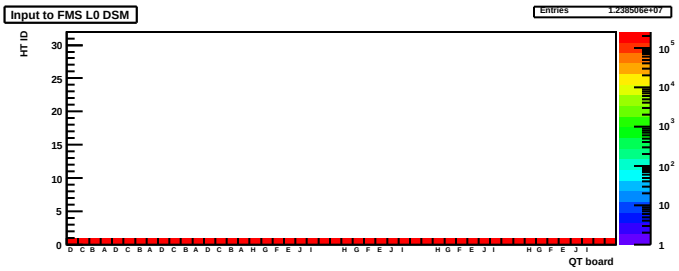

Input to FMS L0 DSM
Entries 2064176
QT8(2) sum - simulated
QT board

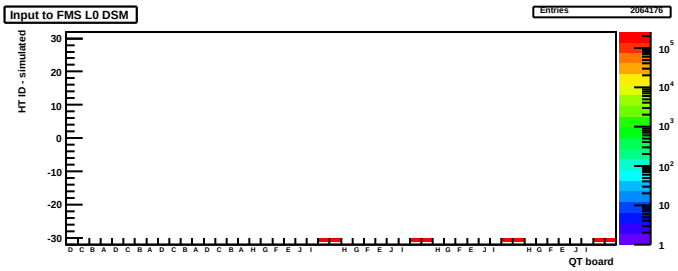

Input to FMS L0 DSM
Entries 1.238506e+07
QT8(3) sum
QT board

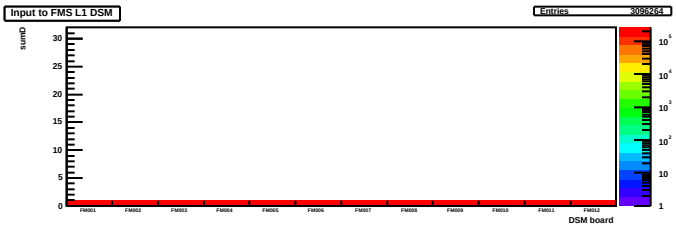

Input to FMS L0 DSM
Entries 2064176
QT8(3) sum - simulated
QT board

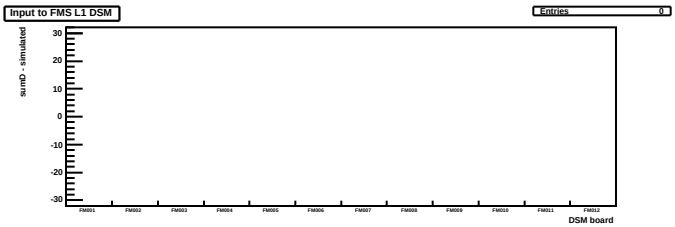

Input to FMS L0 DSM
Entries 1.238506e+07
HT ADC
QT board

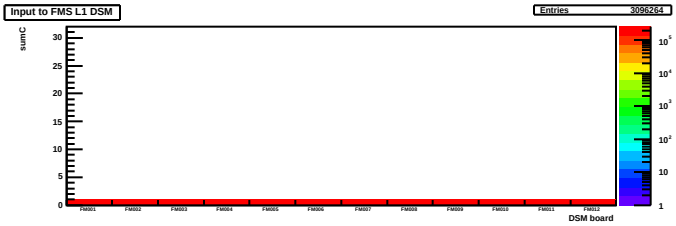

Input to FMS L0 DSM
Entries 2064176
HT ADC - simulated
QT board

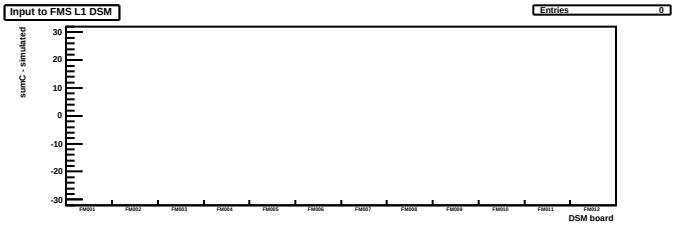

Input to FMS L0 DSM
Entries 1.238506e+07
HT ID
QT board

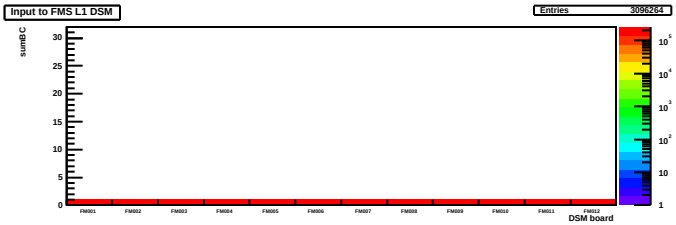

Input to FMS L0 DSM
Entries 2064176
HT ID - simulated
QT board

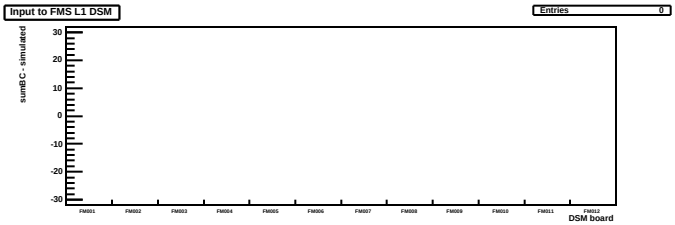

Input to FMS L1 DSM
Entries 3096264
sumD
DSM board

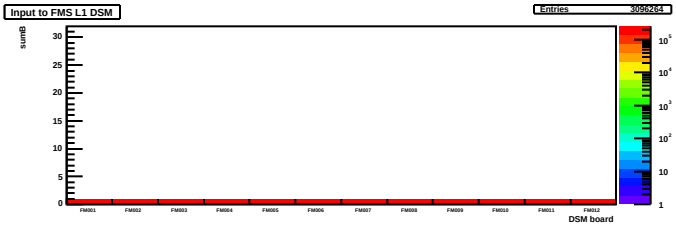

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

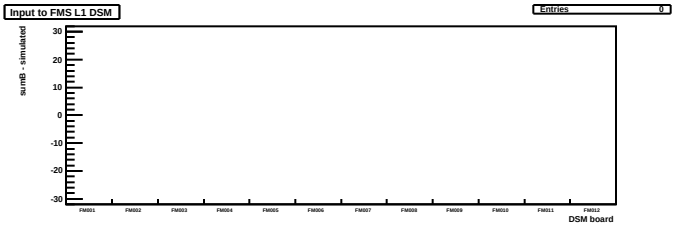

Input to FMS L1 DSM
Entries 3096264
sumC
DSM board

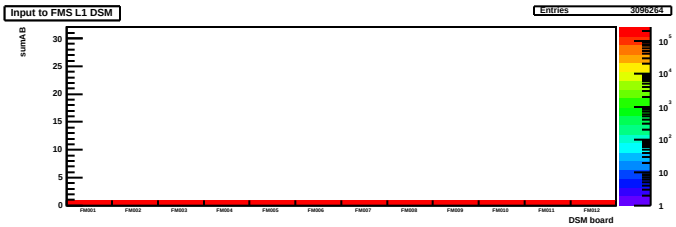

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

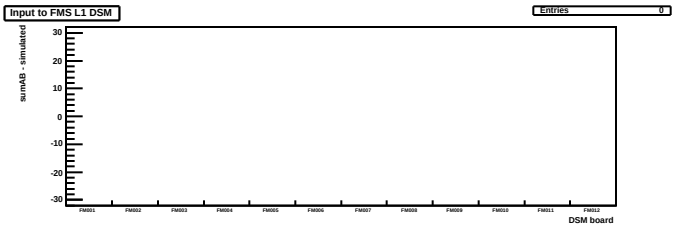

Input to FMS L1 DSM
Entries 3096264
sumBC
DSM board

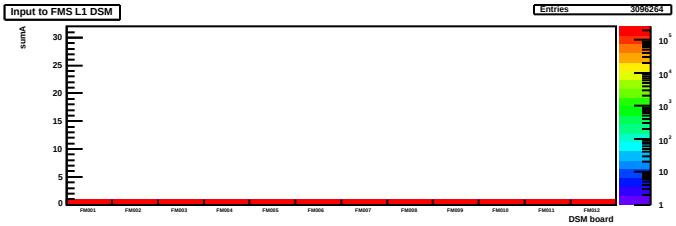

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

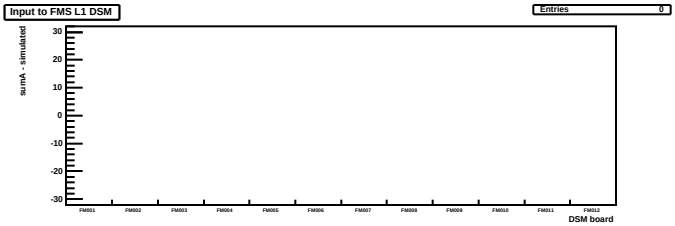

Input to FMS L1 DSM
Entries 3096264
sumB
DSM board

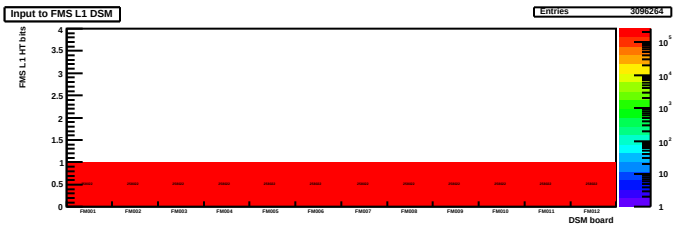

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

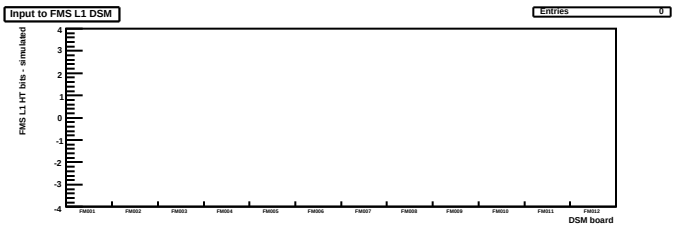

Input to FMS L1 DSM
Entries 3096264
sumAB
DSM board

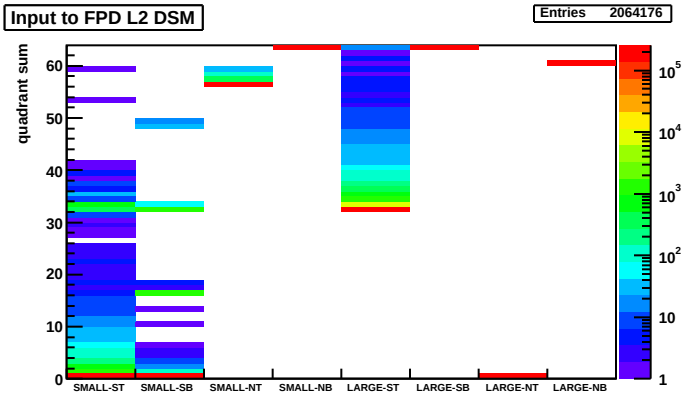

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

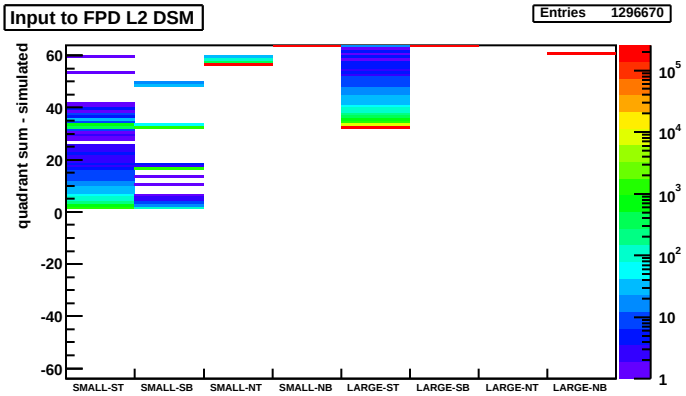

Input to FMS L1 DSM
Entries 3096264
sumA
DSM board

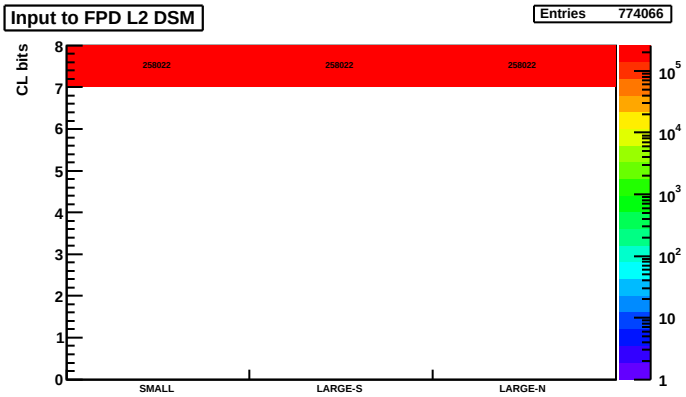

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

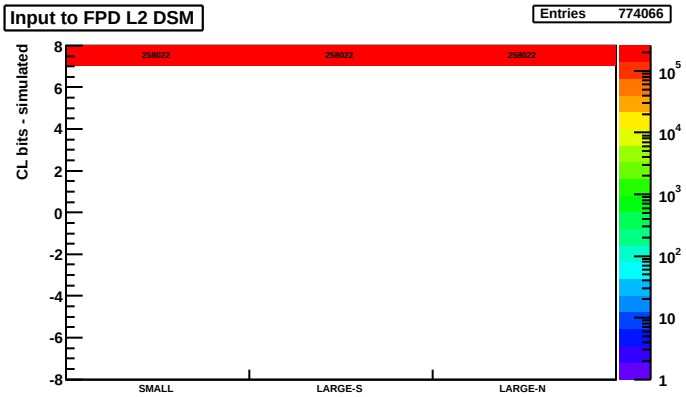

Input to FMS L1 DSM
Entries 3096264
FMS L1 HT bits
DSM board

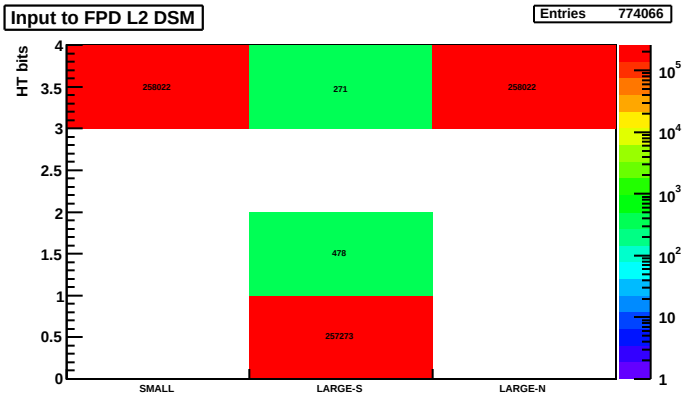

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

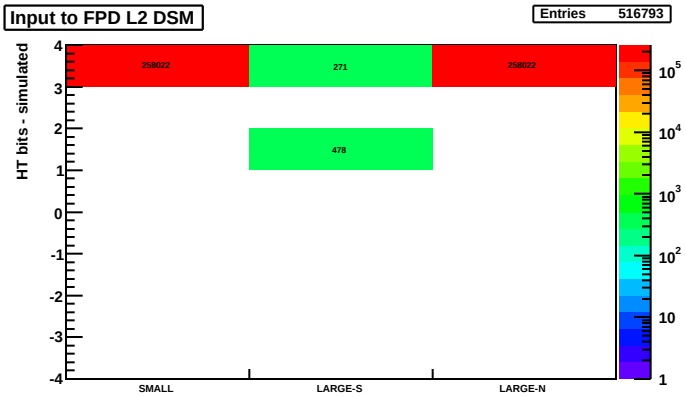

Input to FPD L2 DSM
Entries 2064176
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

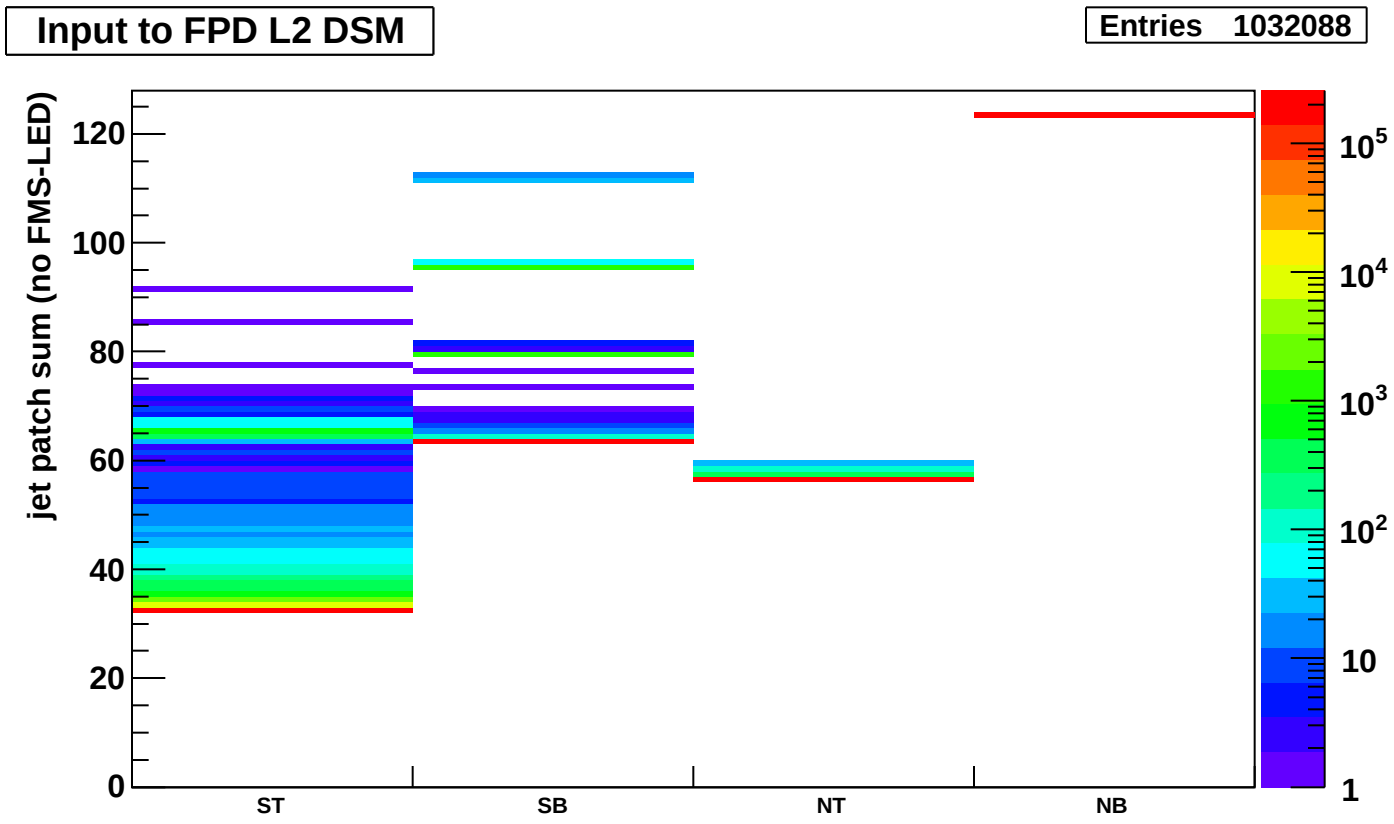

Input to FPD L2 DSM
Entries 1296670
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

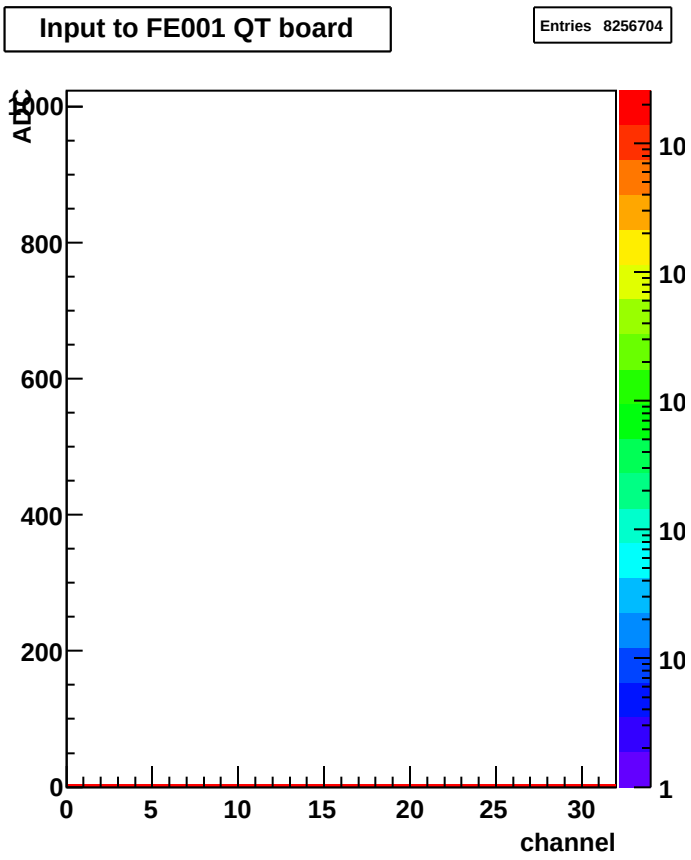

Input to FPD L2 DSM
Entries 774066
CL bits
258022
258022
258022
SMALL
LARGE-S
LARGE-N

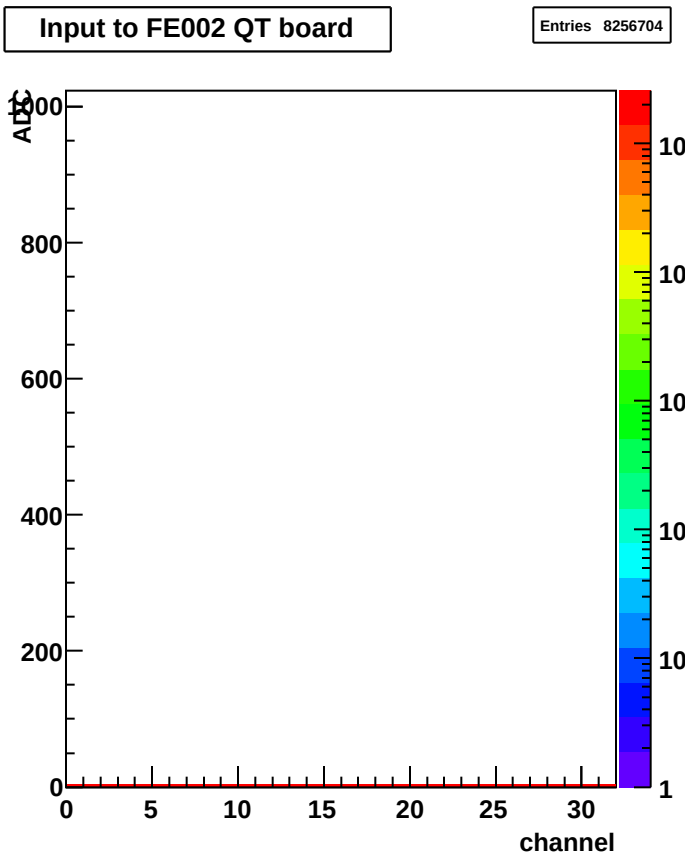

Input to FPD L2 DSM
Entries 774066
CL bits - simulated
258022
258022
258022
SMALL
LARGE-S
LARGE-N

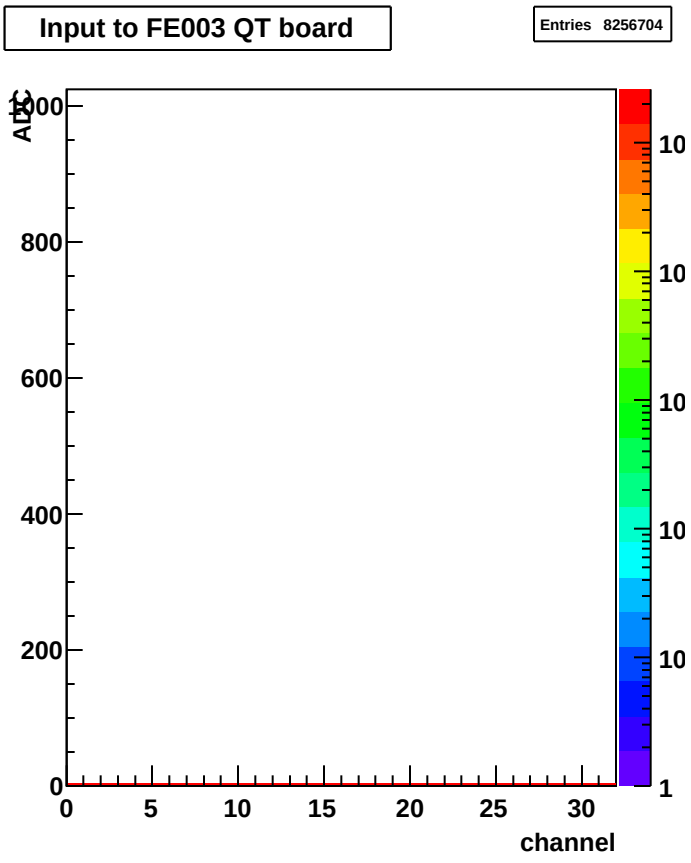

Input to FPD L2 DSM
Entries 774066
HT bits
258022
271
258022
478
257273
SMALL
LARGE-S
LARGE-N

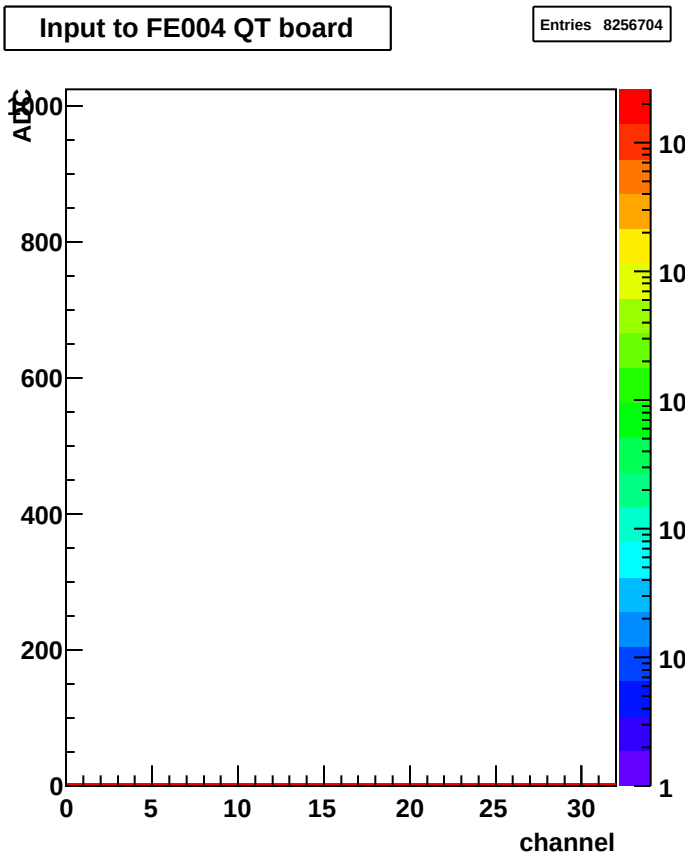

Input to FPD L2 DSM
Entries 516793
HT bits - simulated
258022
271
258022
478
SMALL
LARGE-S
LARGE-N

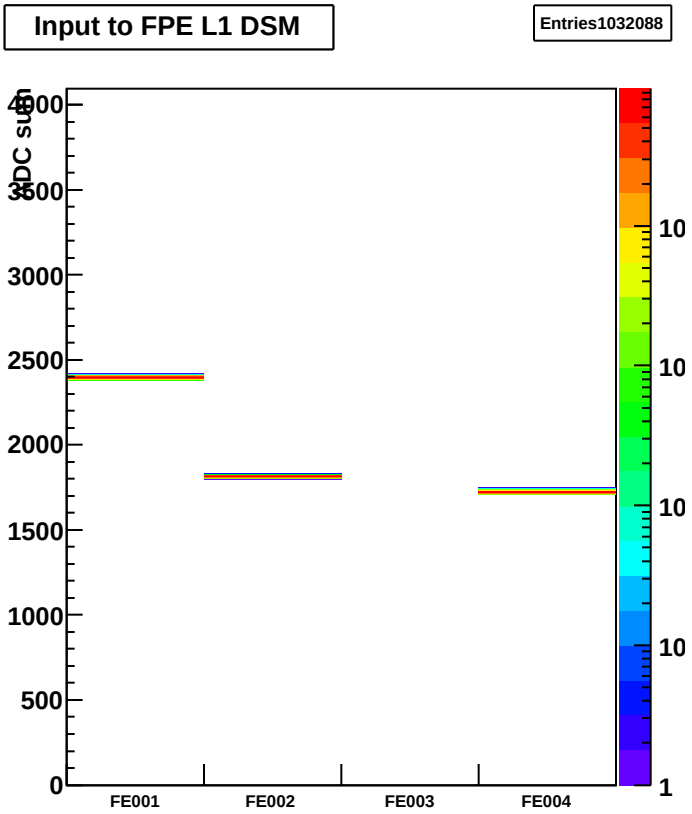

Input to FPD L2 DSM
Entries 1032088
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

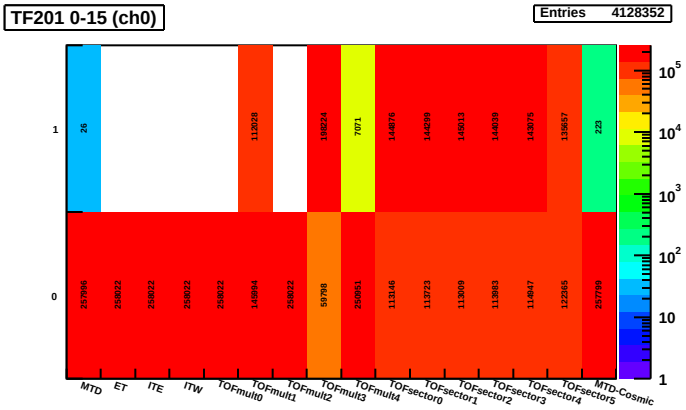

Input to FE001 QT board
Entries 8256704
ADC
channel

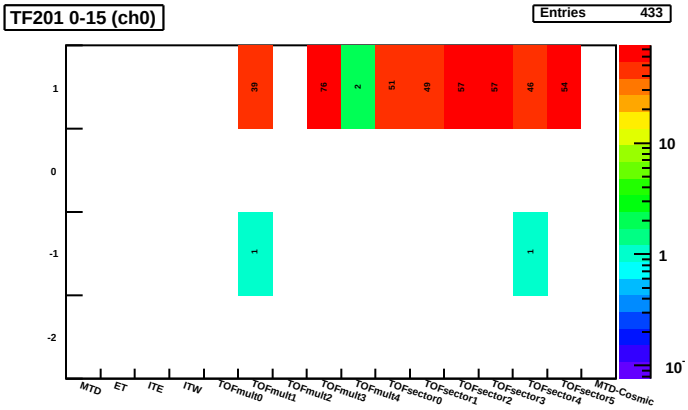

Input to FE002 QT board
Entries 8256704
ADC
channel

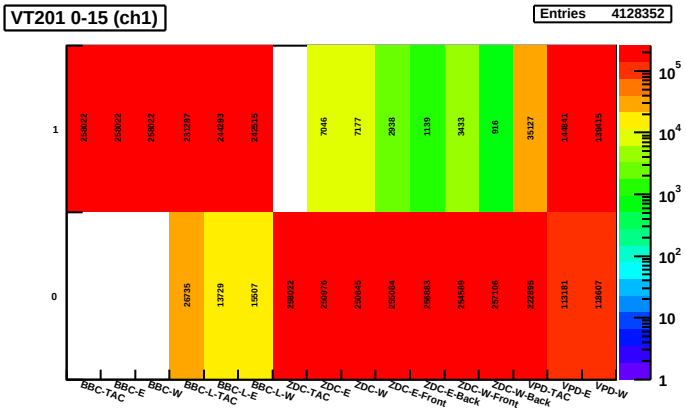

Input to FE003 QT board
Entries 8256704
ADC
channel

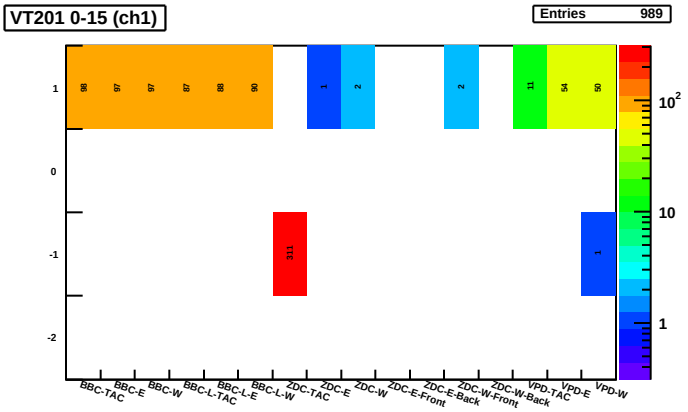

Input to FE004 QT board
Entries 8256704
ADC
channel

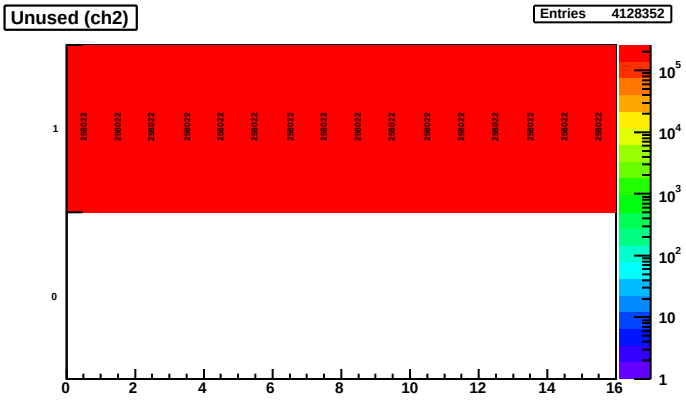

Input to FPE L1 DSM
Entries1032088
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

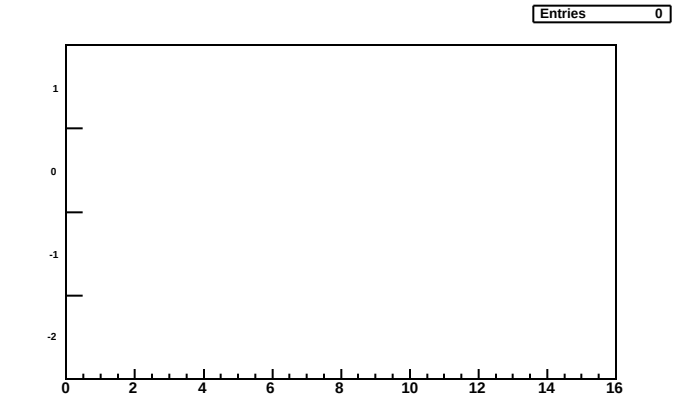

TF201 0-15 (ch0)
Entries 4128352
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

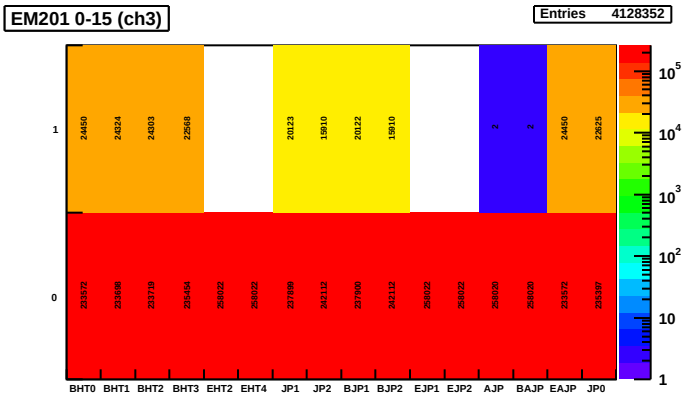

TF201 0-15 (ch0)
Entries 433
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

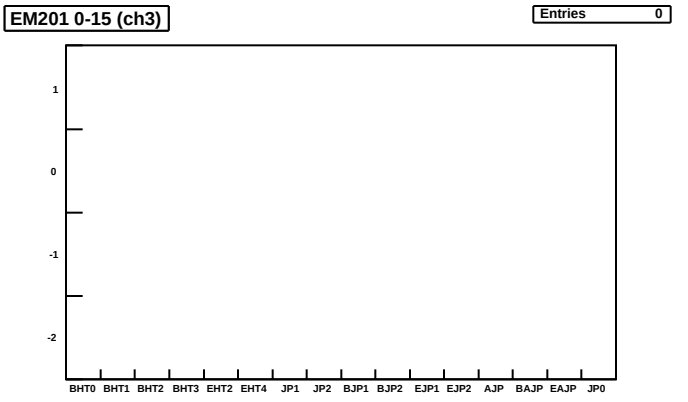

VT201 0-15 (ch1)
Entries 4128352
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 989
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

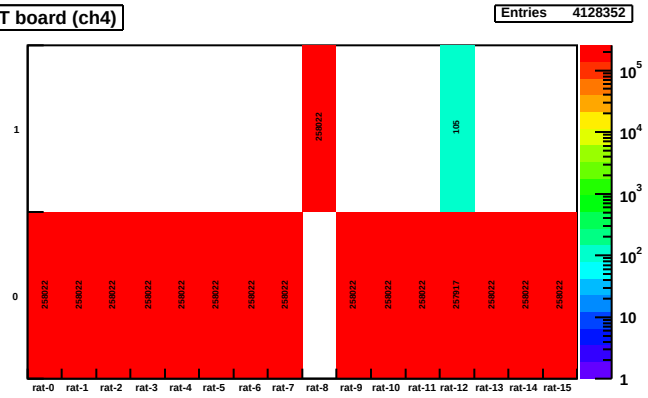

Unused (ch2)
Entries 4128352

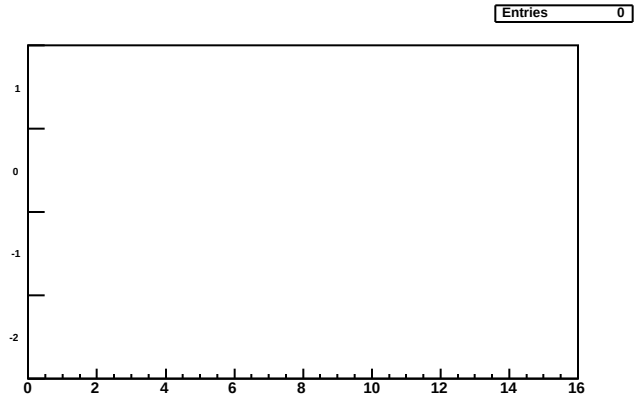

Entries 0


EM201 0-15 (ch3)
Entries 4128352
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

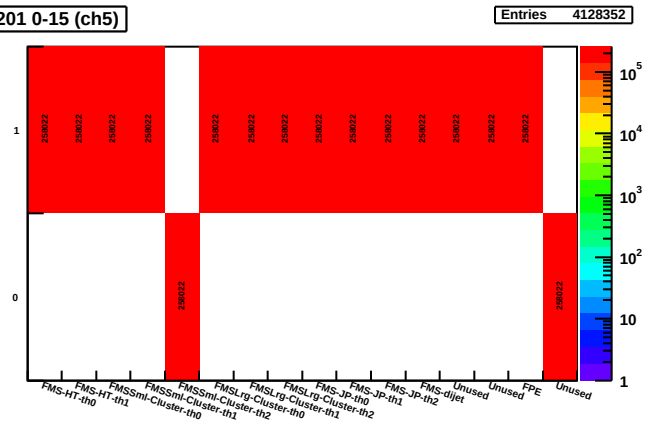

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

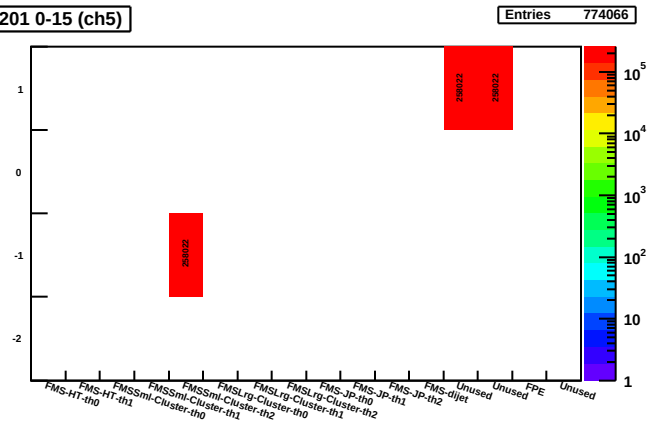




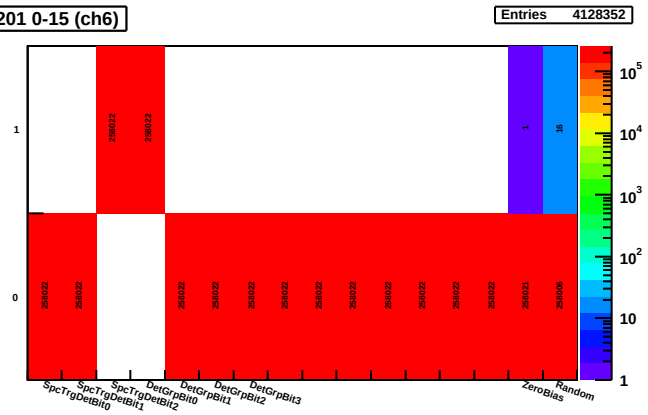
FP201 0-15 (ch5)

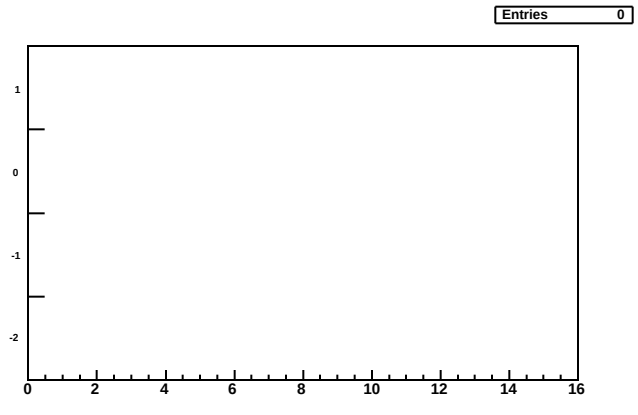
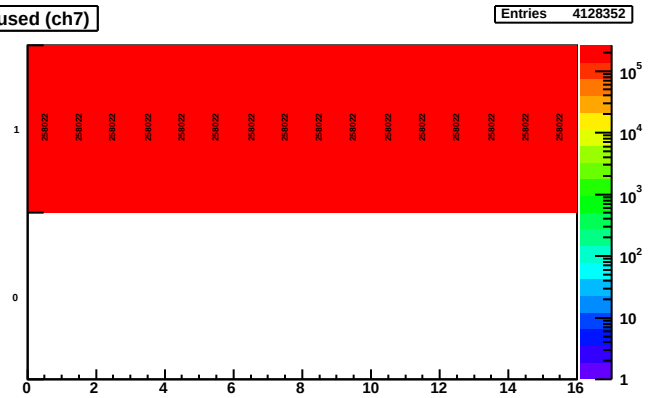
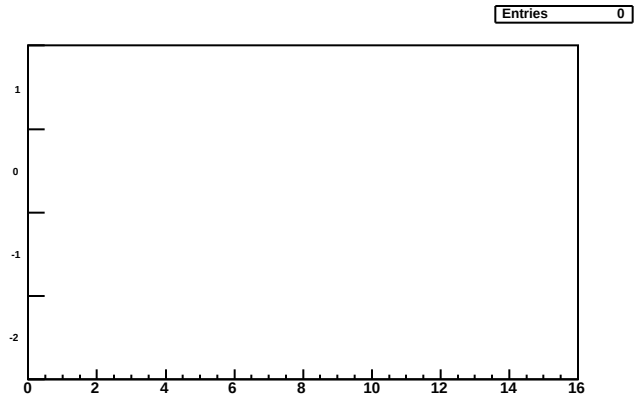


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)