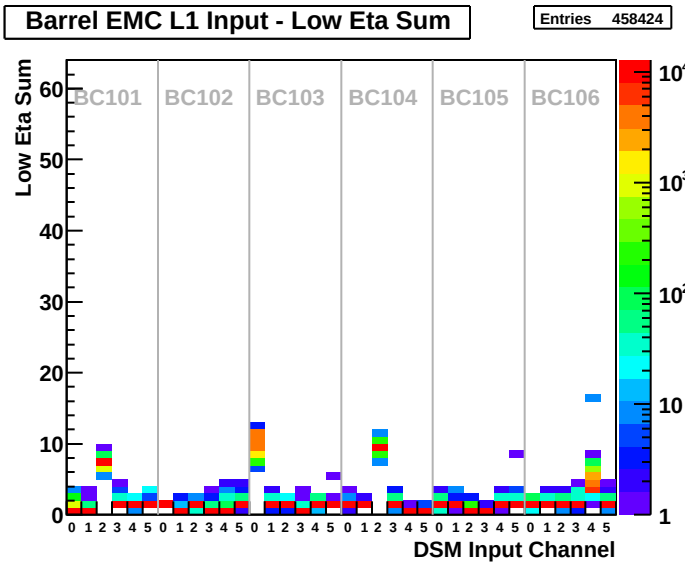
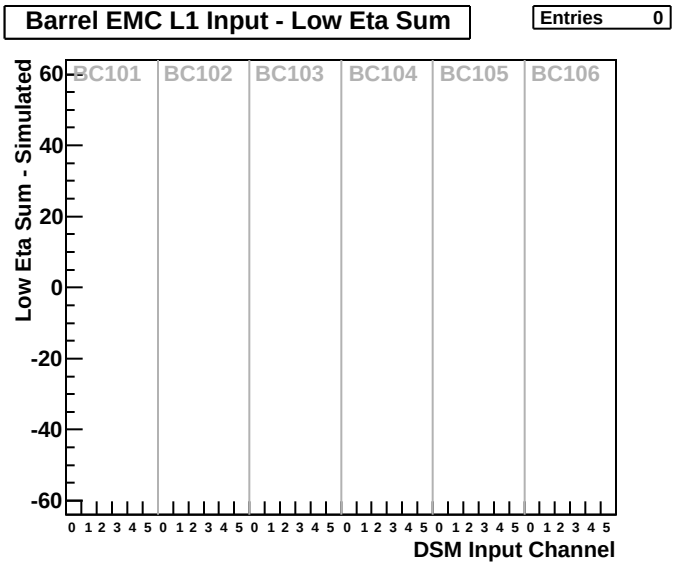
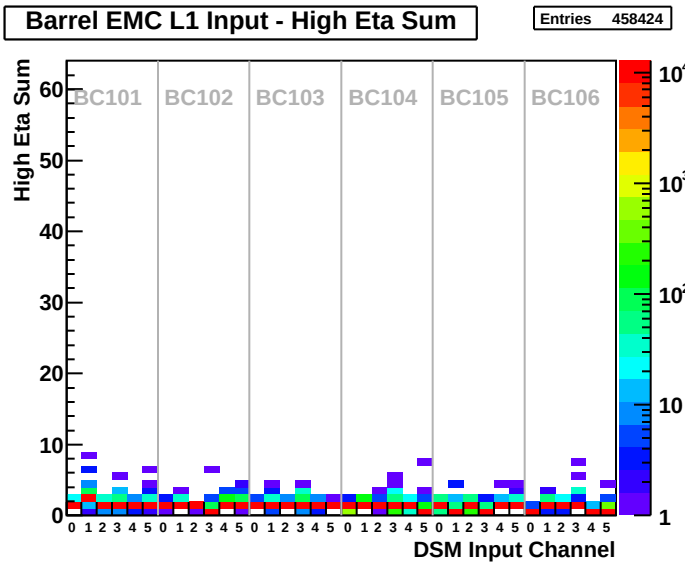
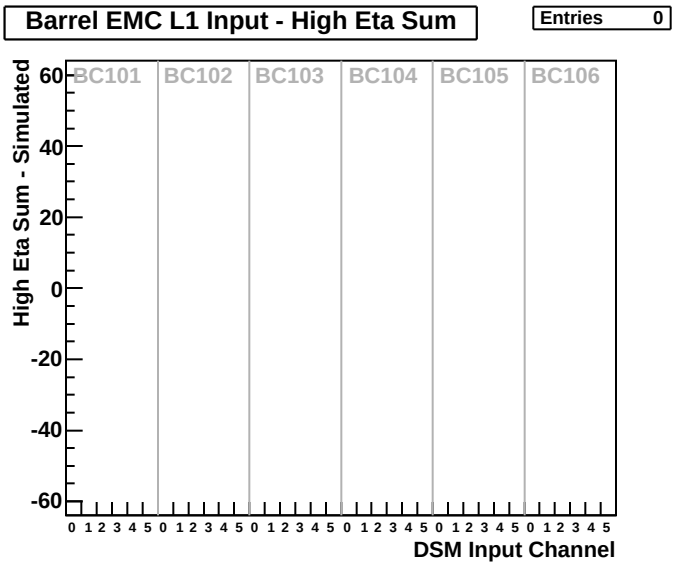
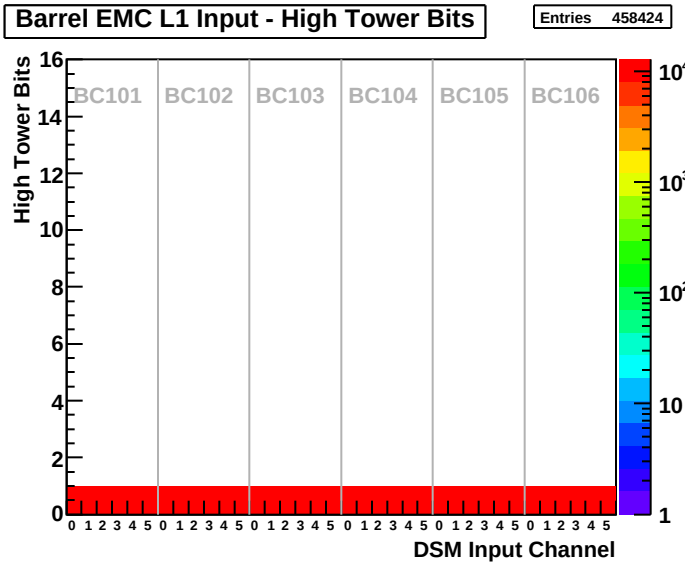
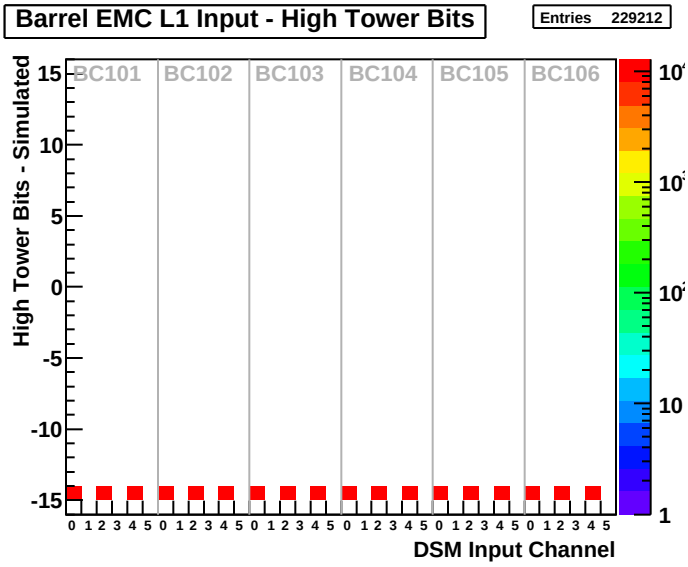

Barrel EMC L1 Input - Low Eta Sum
Entries 458424
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

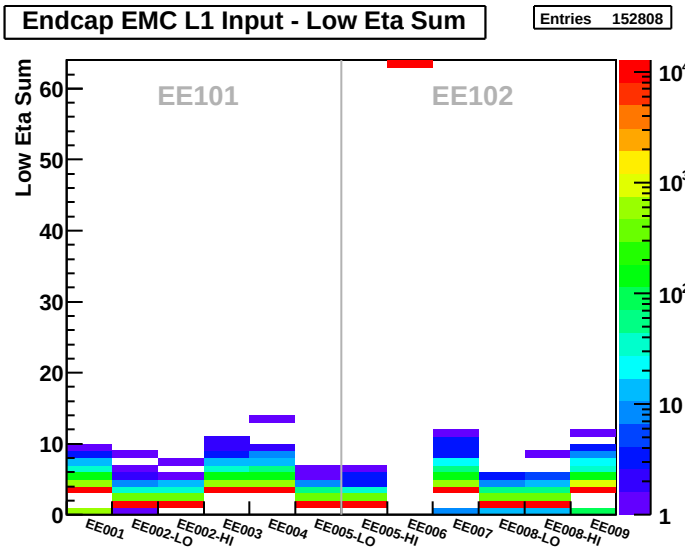

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

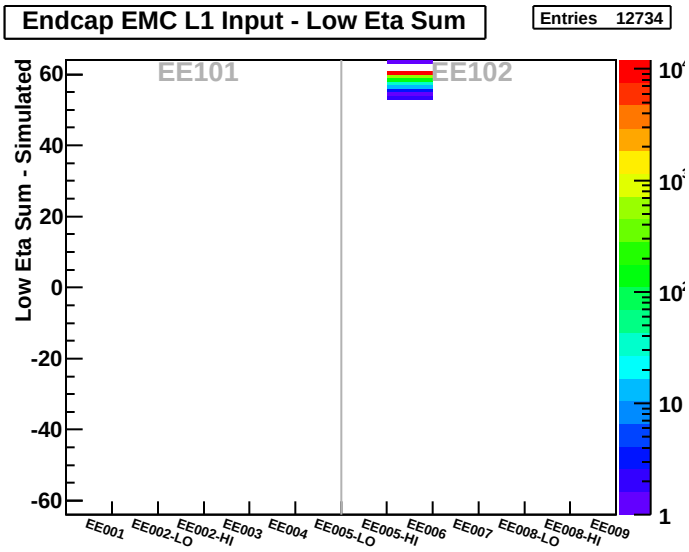

Barrel EMC L1 Input - High Eta Sum
Entries 458424
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

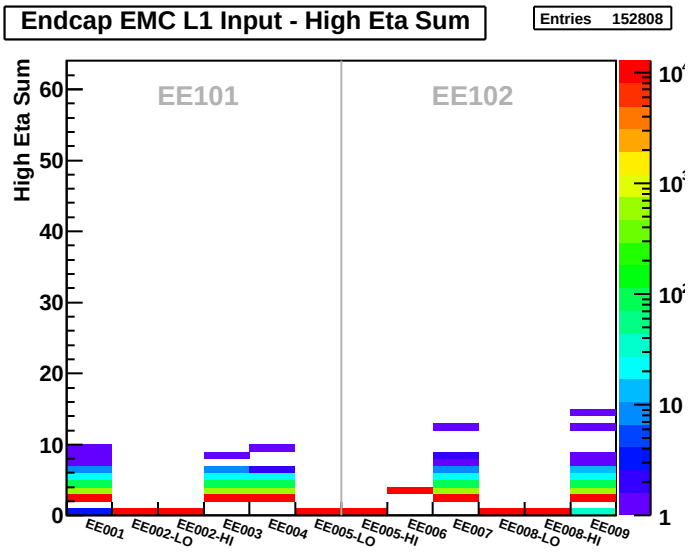

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

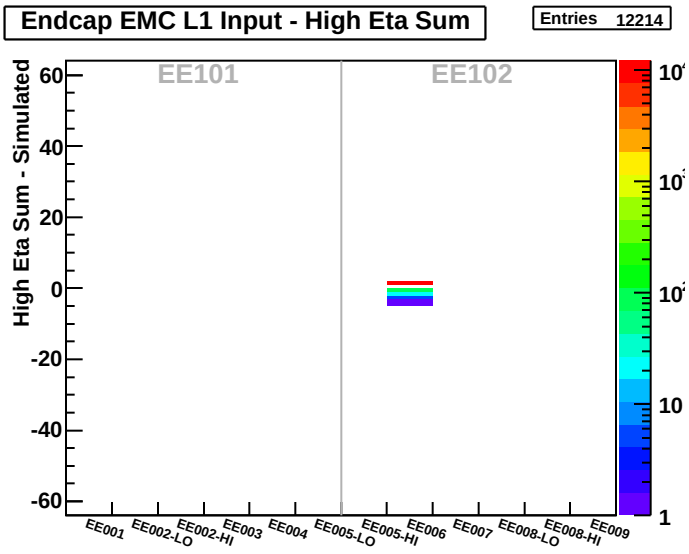

Barrel EMC L1 Input - High Tower Bits
Entries 458424
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

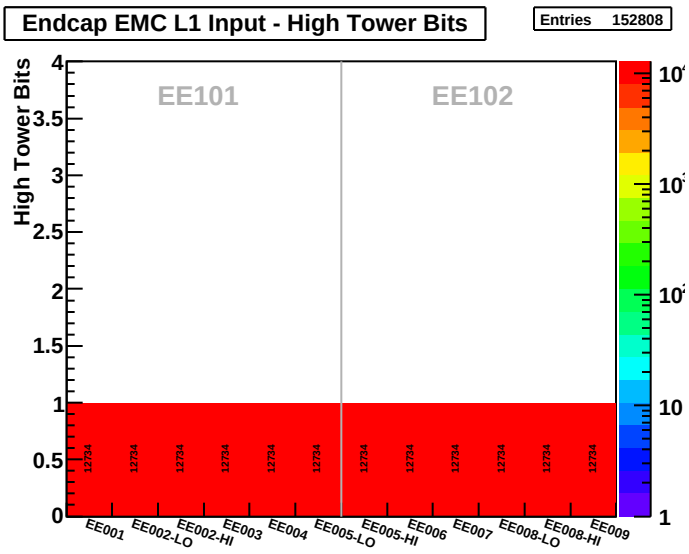

Barrel EMC L1 Input - High Tower Bits
Entries 229212
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

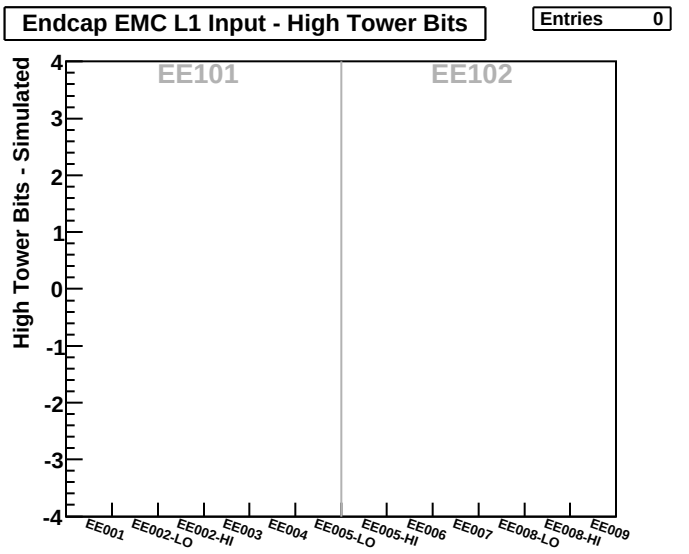

Endcap EMC L1 Input - Low Eta Sum
Entries 152808
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

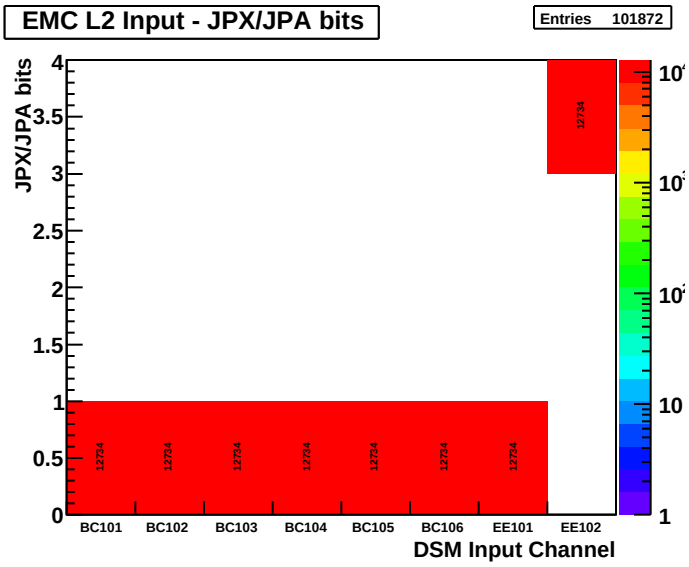

Endcap EMC L1 Input - Low Eta Sum
Entries 12734
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

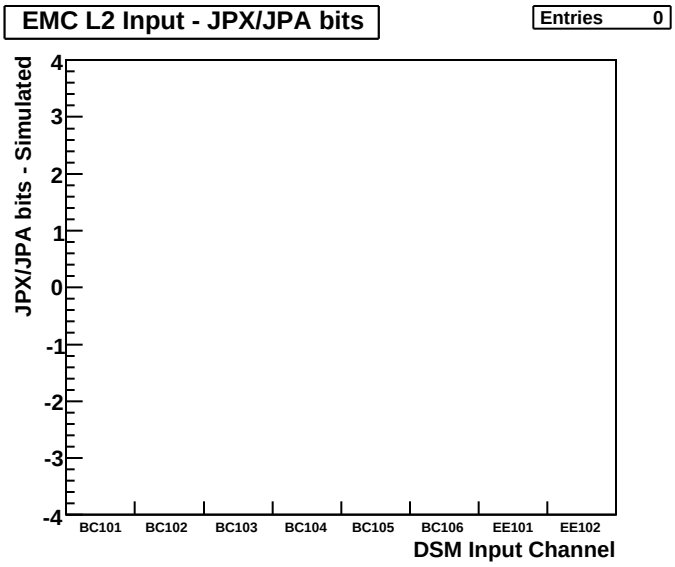

Endcap EMC L1 Input - High Eta Sum
Entries 152808
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

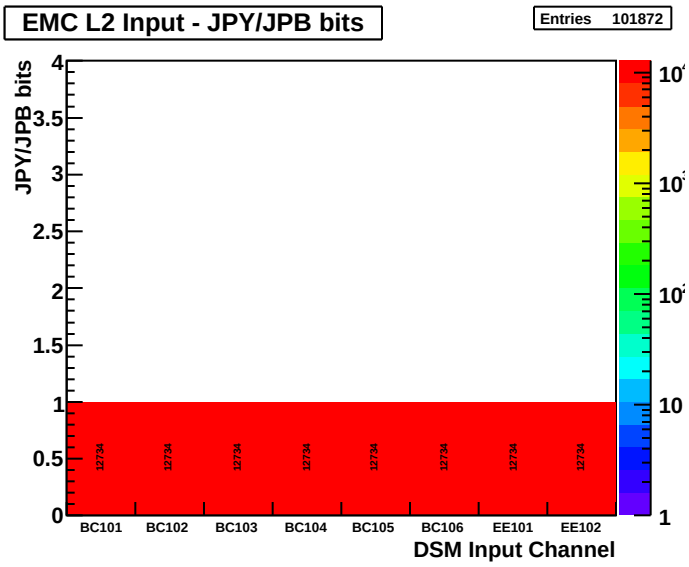

Endcap EMC L1 Input - High Eta Sum
Entries 12214
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

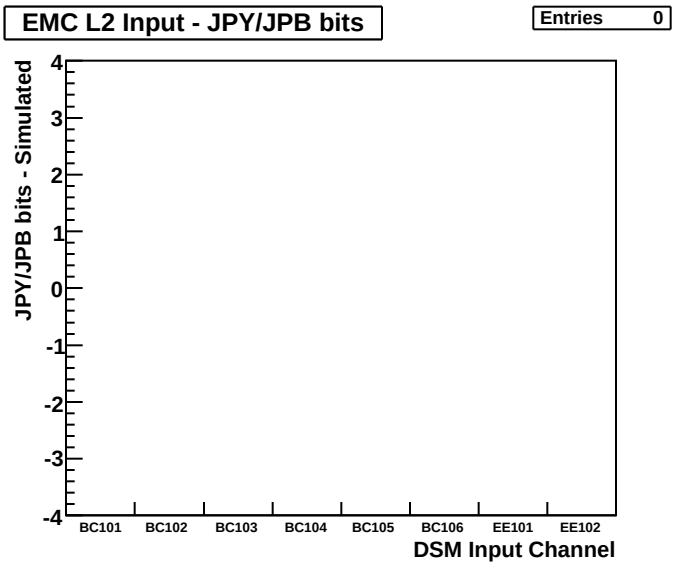

Endcap EMC L1 Input - High Tower Bits
Entries 152808
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

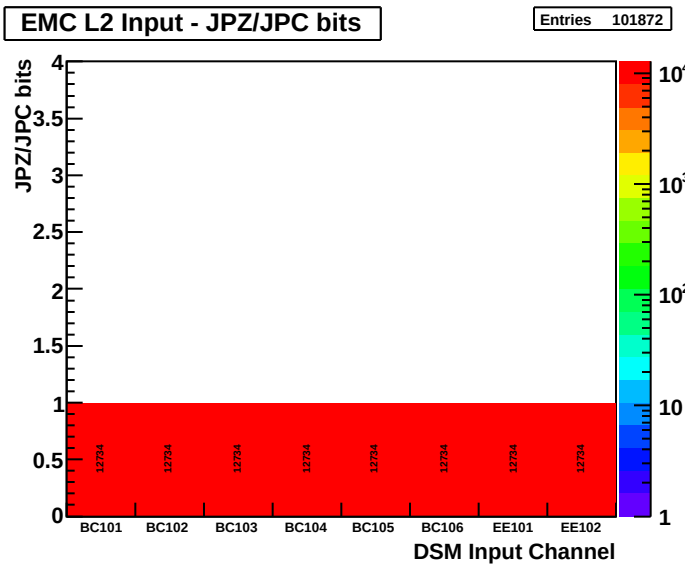

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

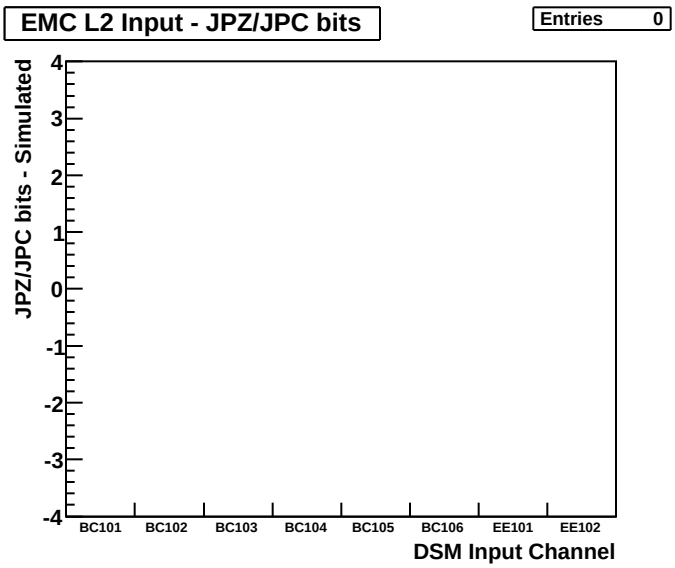

EMC L2 Input - JPX/JPA bits
Entries 101872
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
12734

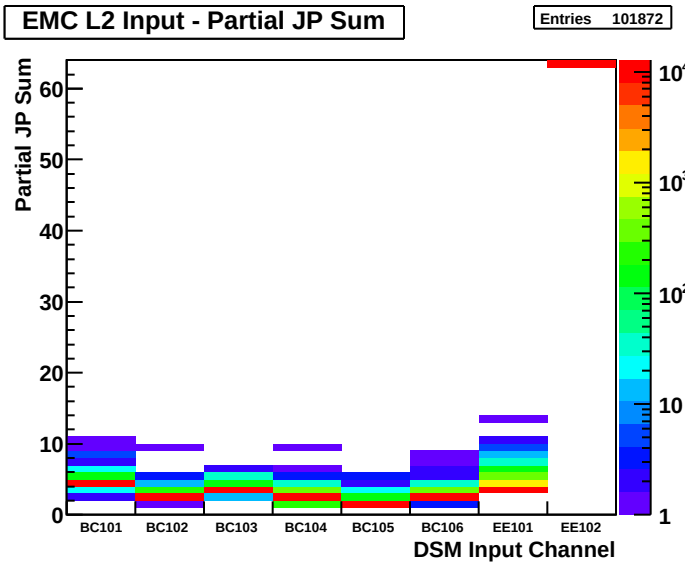

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

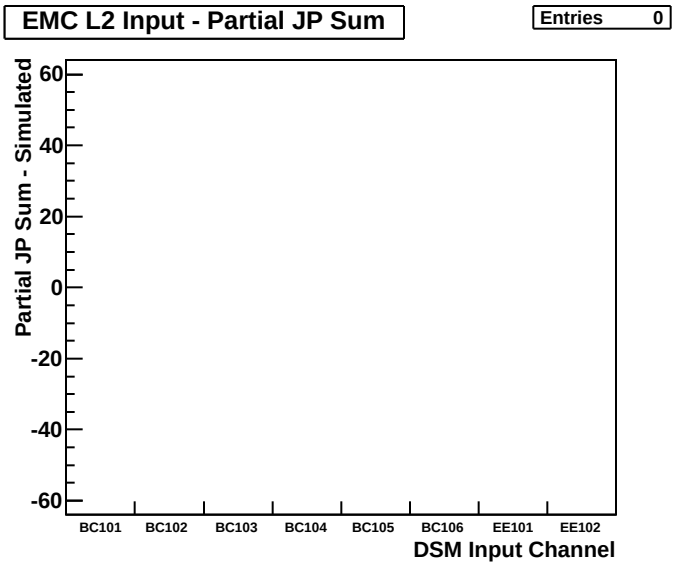

EMC L2 Input - JPY/JPB bits
Entries 101872
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
12734

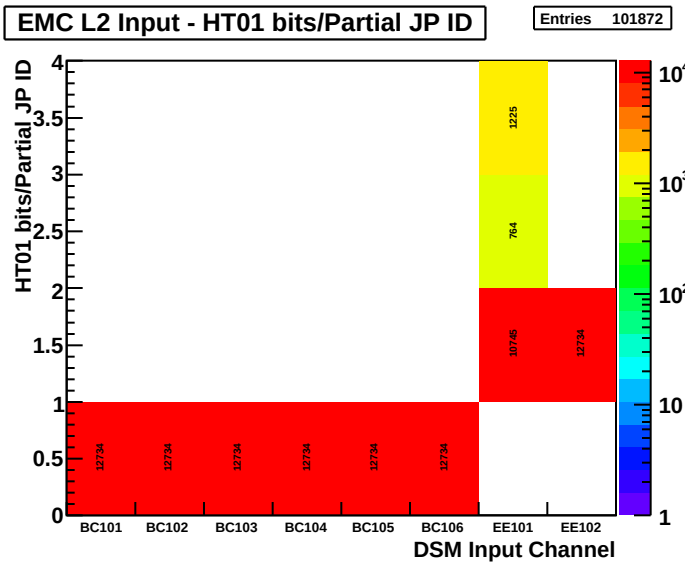

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

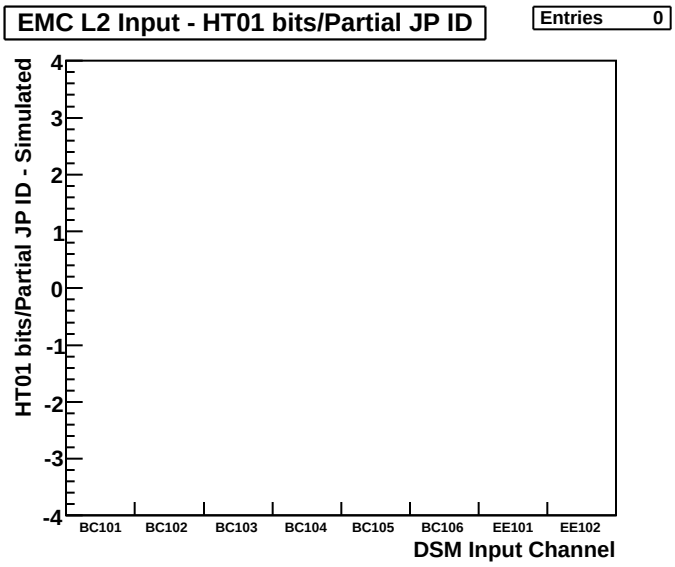

EMC L2 Input - JPZ/JPC bits
Entries 101872
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
12734

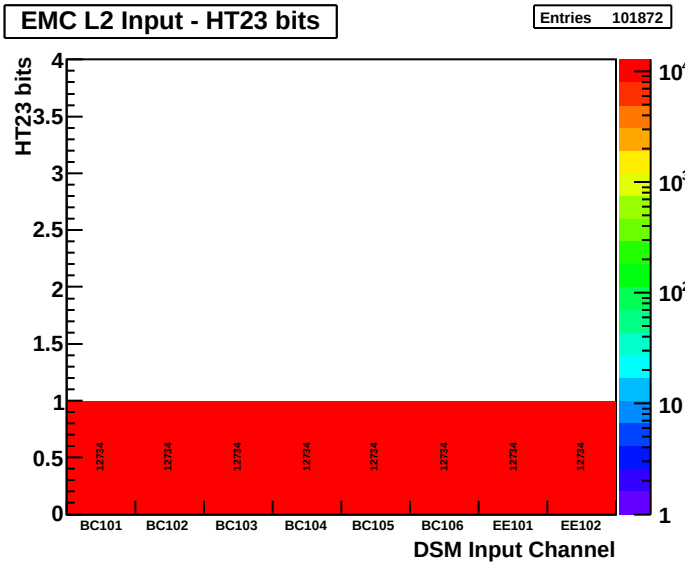

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

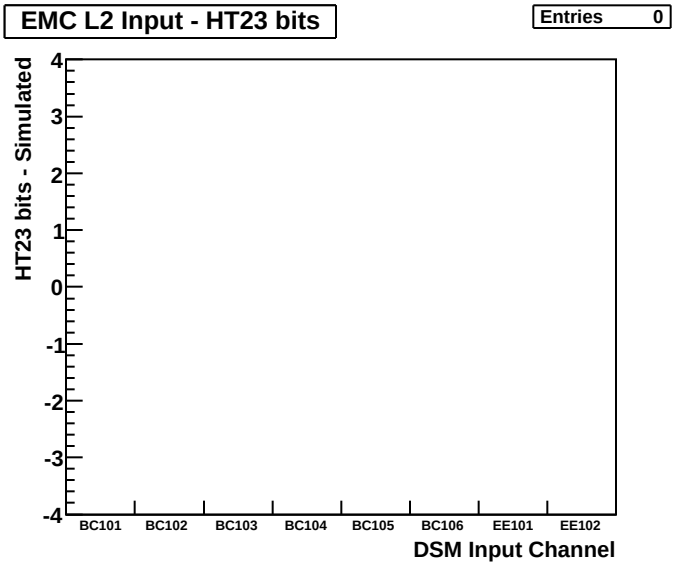

EMC L2 Input - Partial JP Sum
Entries 101872
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

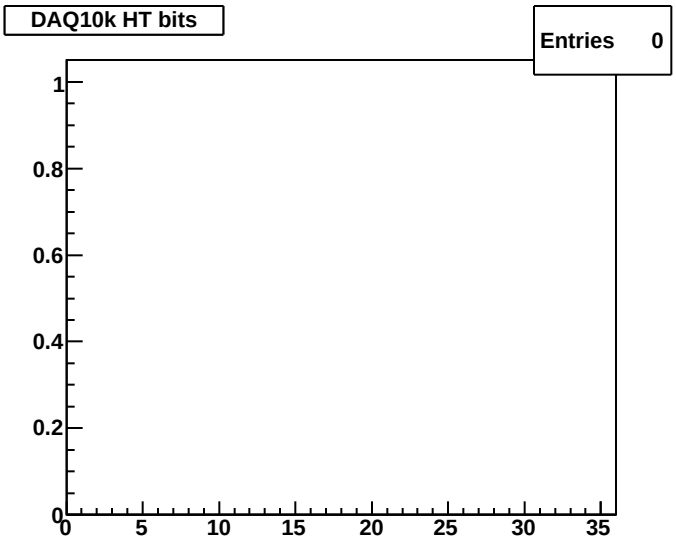

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

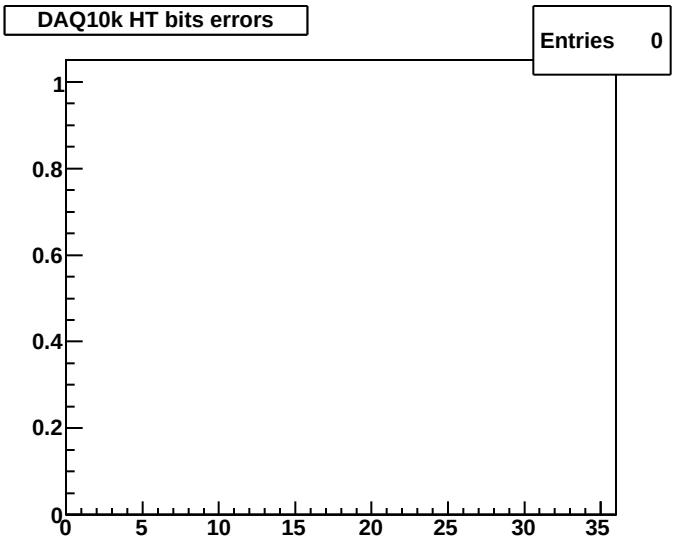

EMC L2 Input - HT01 bits/Partial JP ID
Entries 101872
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

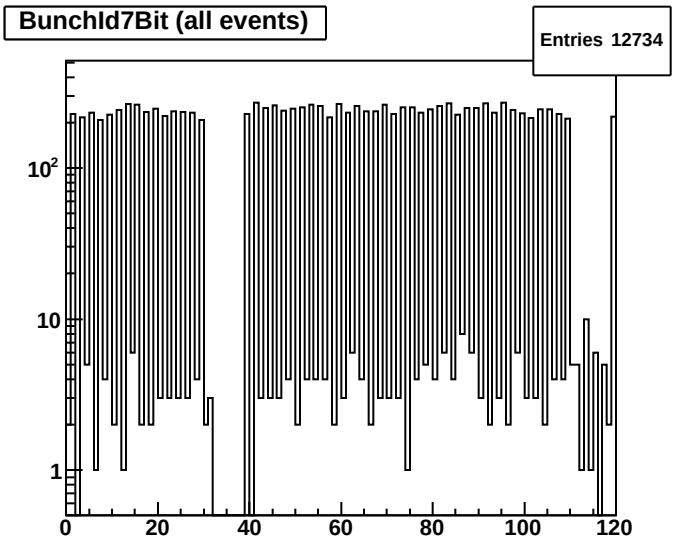

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

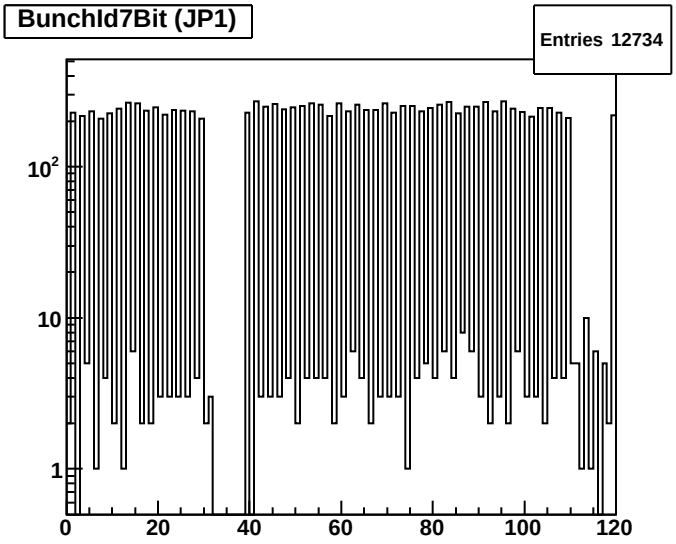

EMC L2 Input - HT23 bits
Entries 101872
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

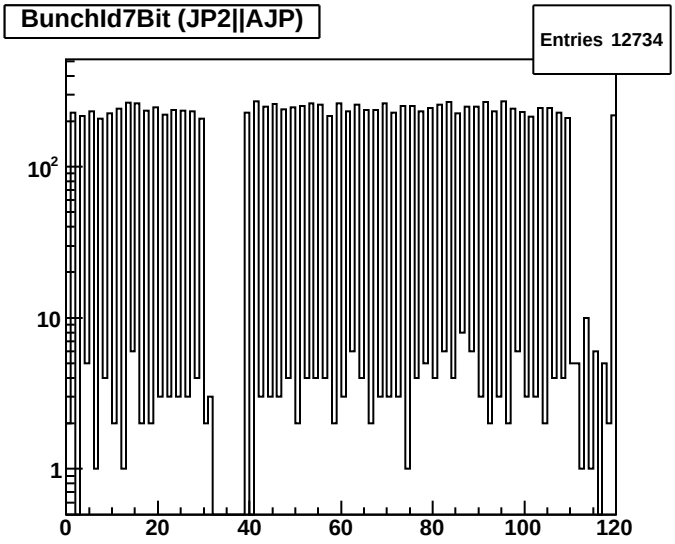

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

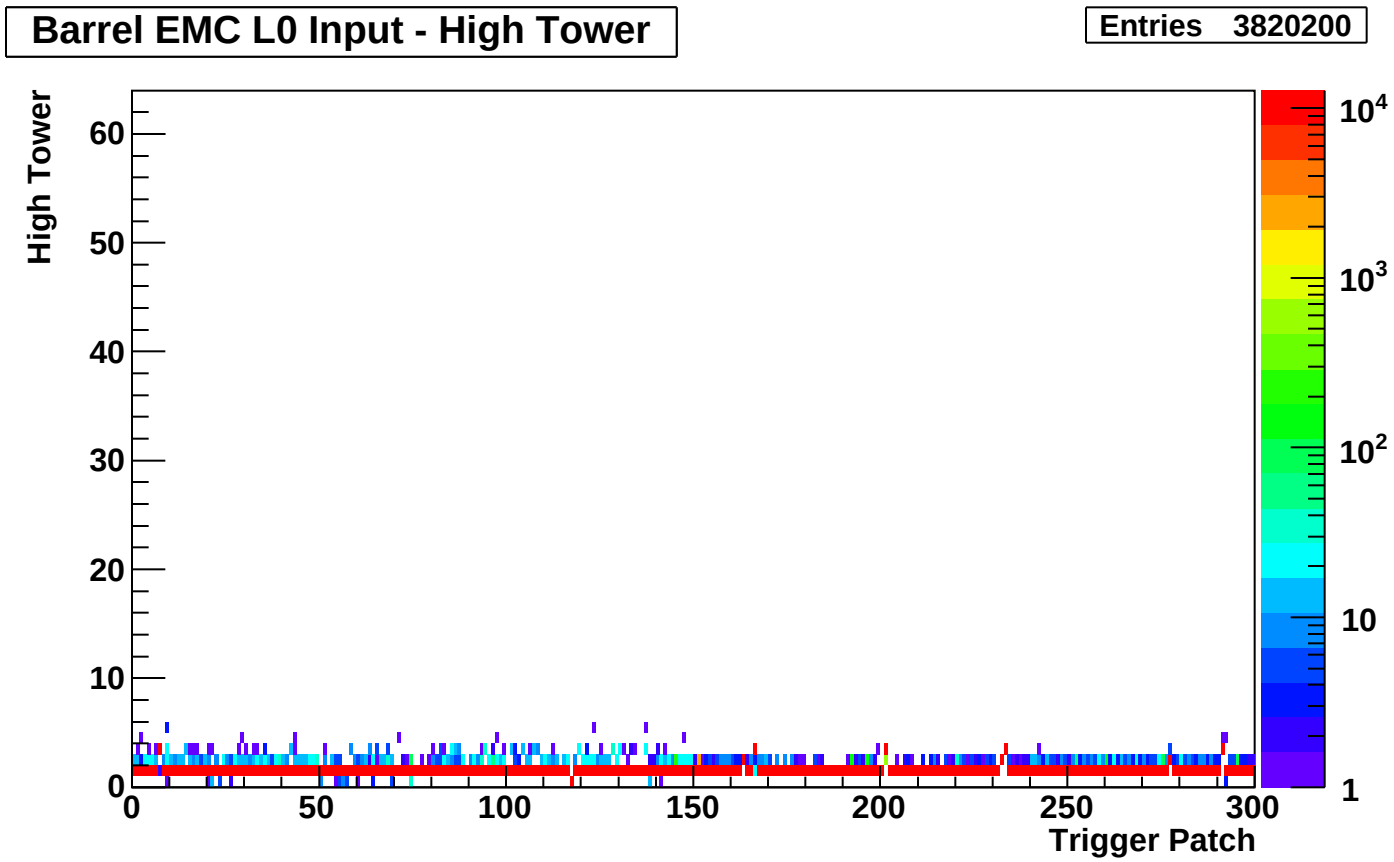

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

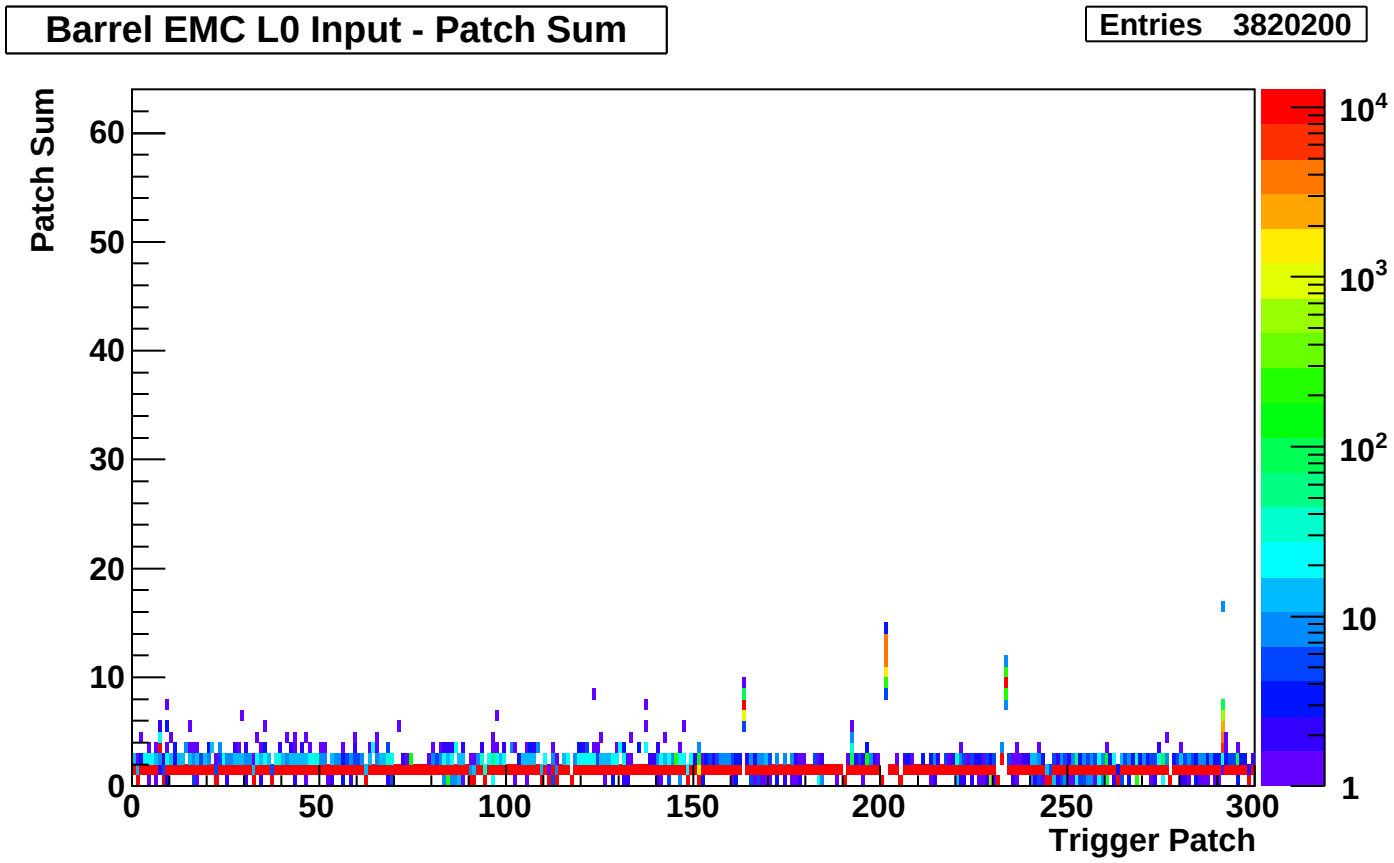

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

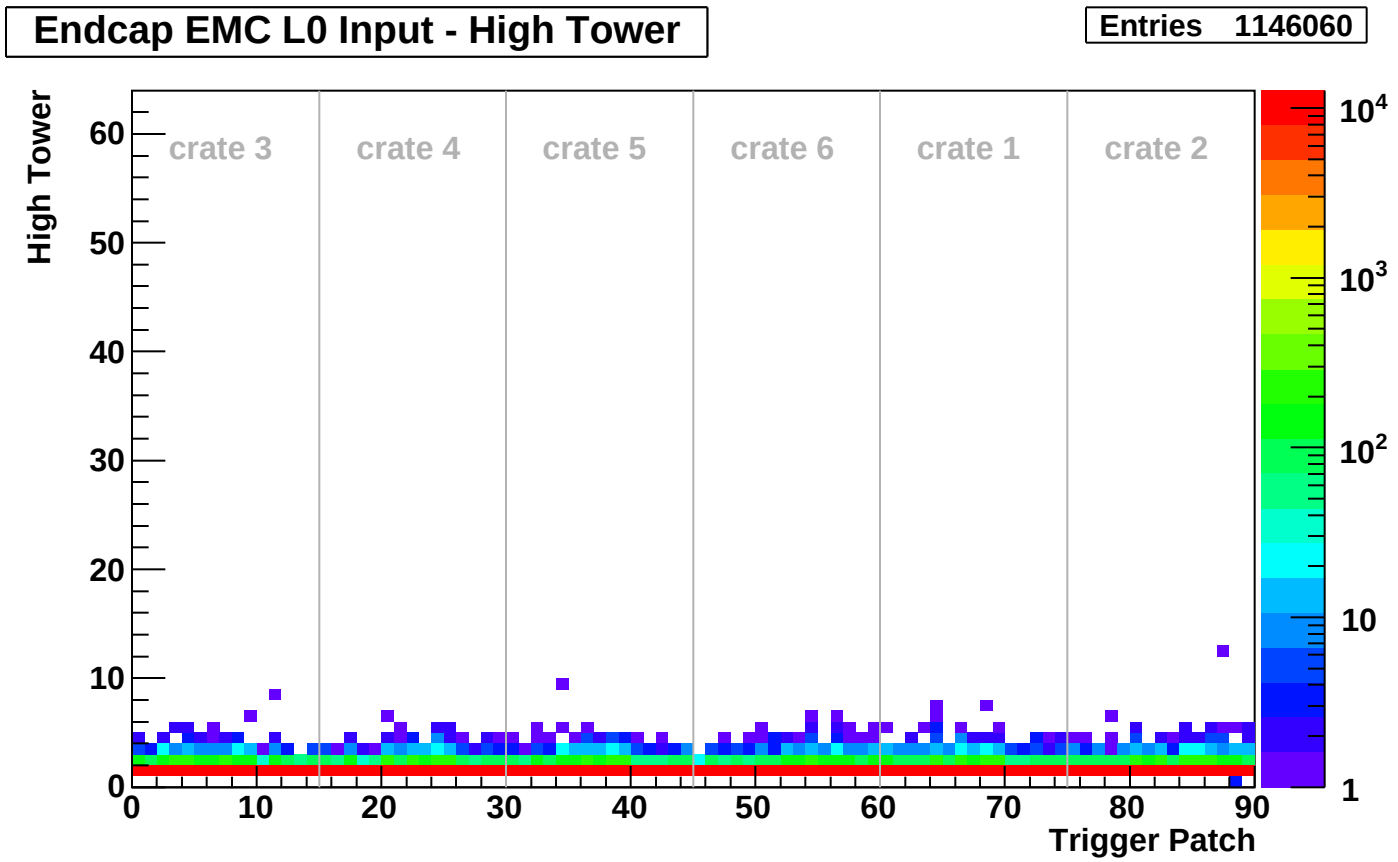

BunchId7Bit (all events)
Entries 12734
10^2
10
1
0 20 40 60 80 100 120

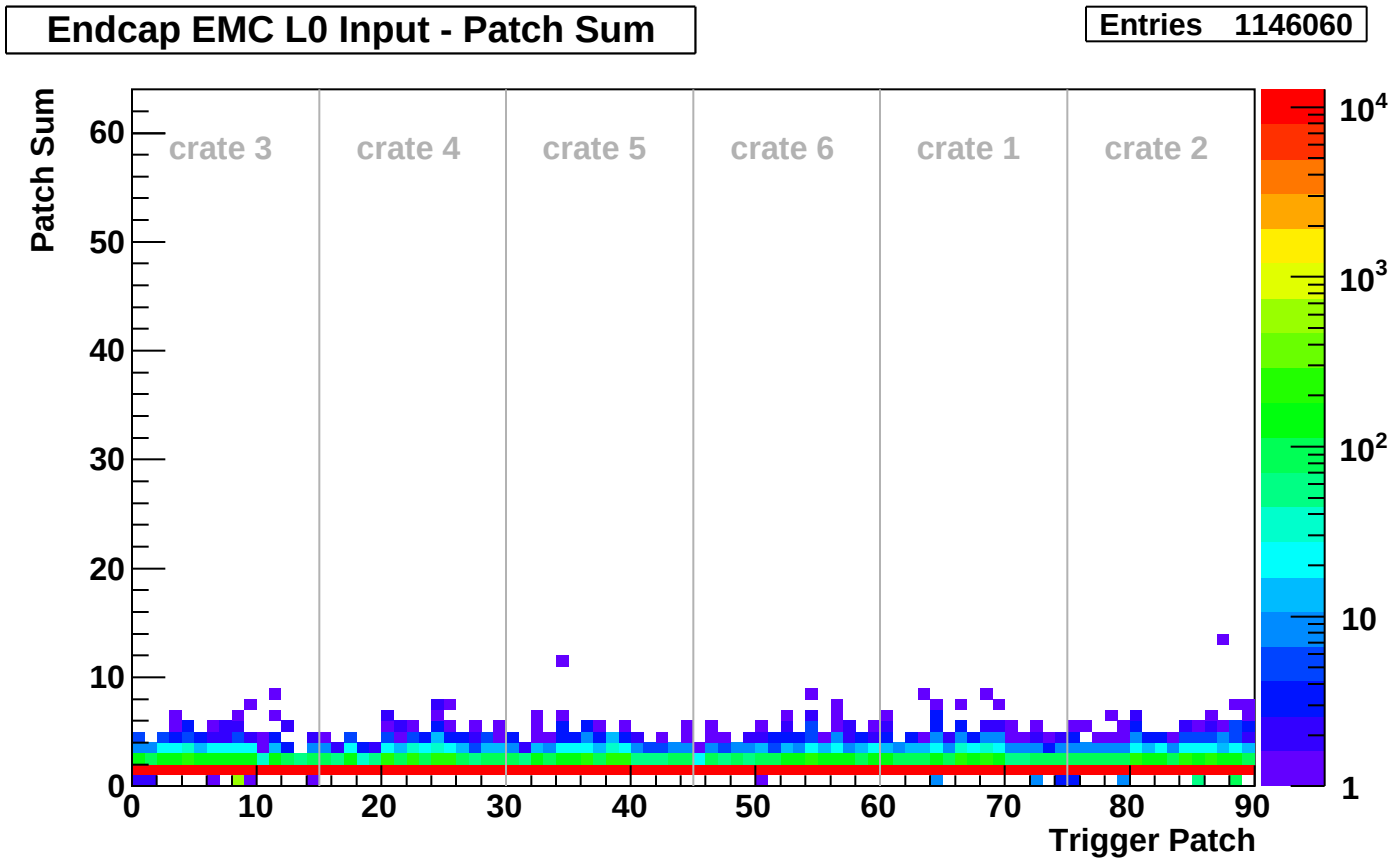

BunchId7Bit (JP1)
Entries 12734
10^2
10
1
0 20 40 60 80 100 120

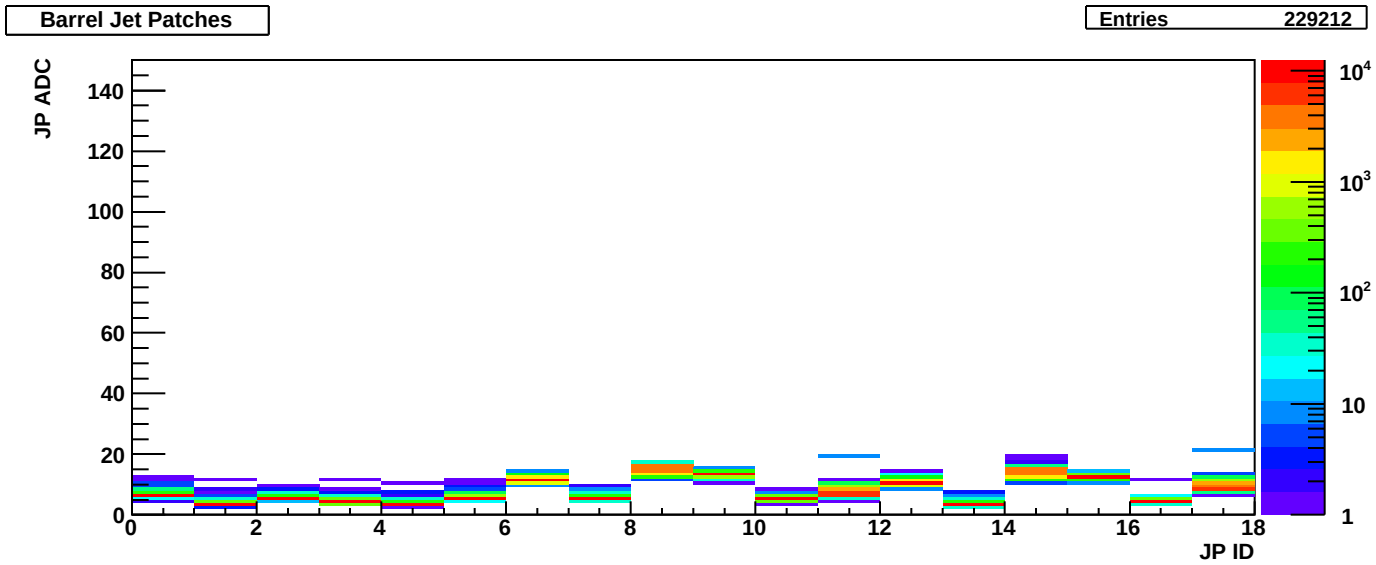

BunchId7Bit (JP2||AJP)
Entries 12734
10^2
10
1
0 20 40 60 80 100 120

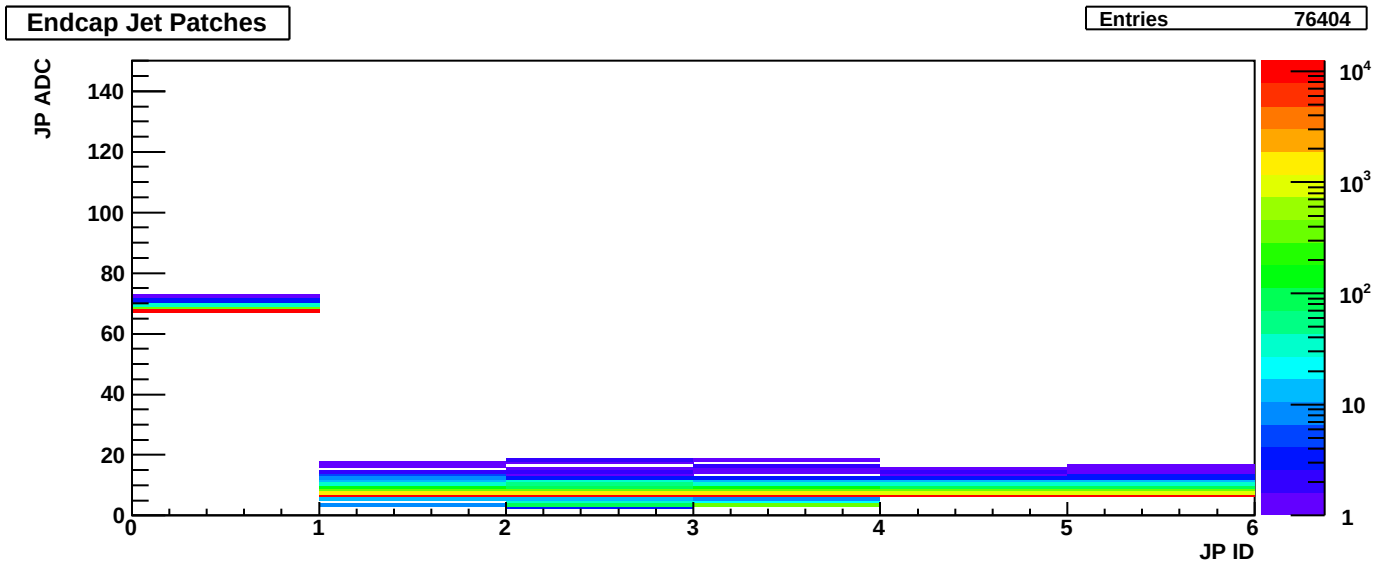

Barrel EMC L0 Input - High Tower
Entries 3820200
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

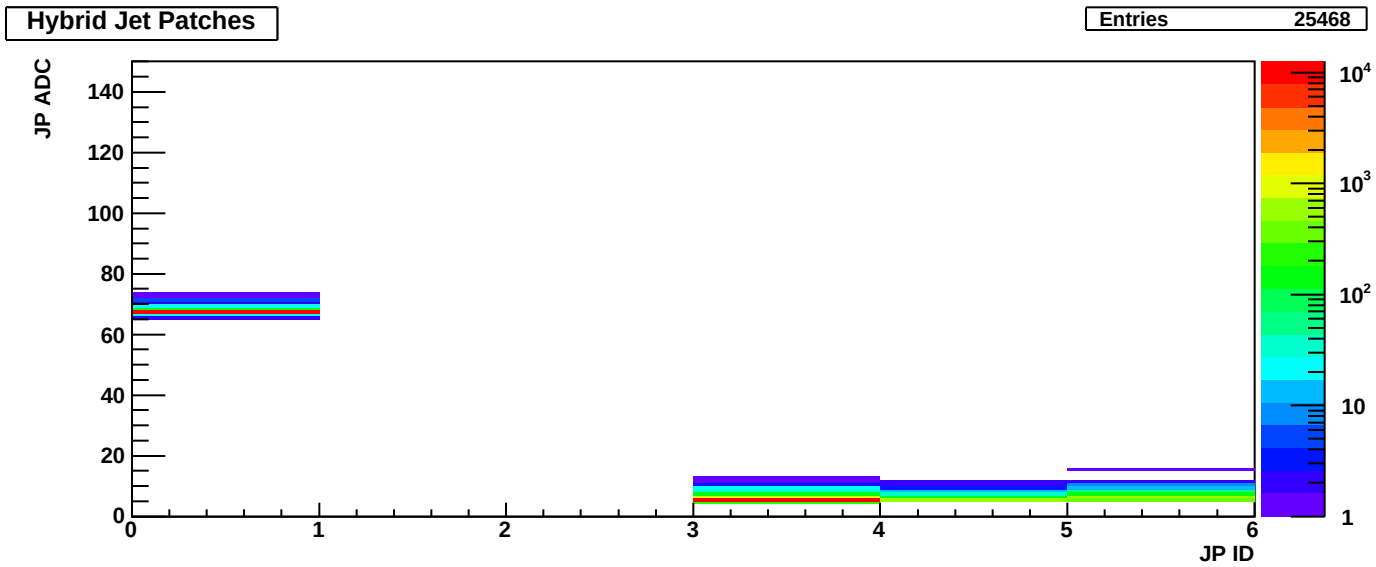

Barrel EMC L0 Input - Patch Sum
Entries 3820200
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

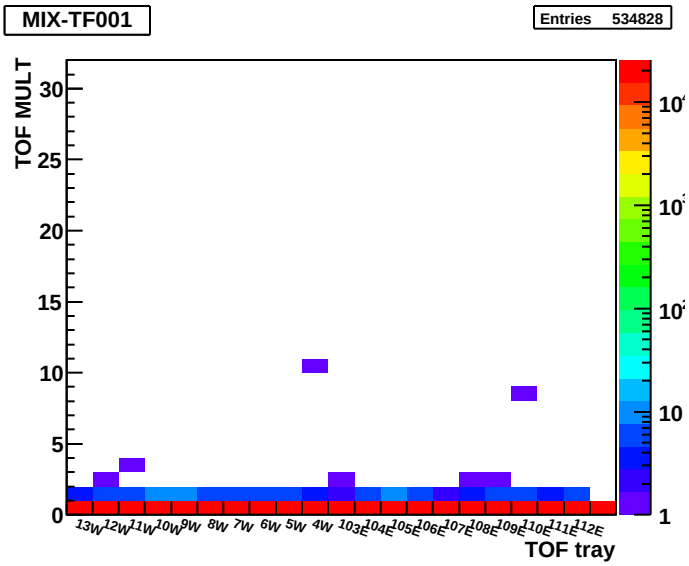

Endcap EMC L0 Input - High Tower
Entries 1146060
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

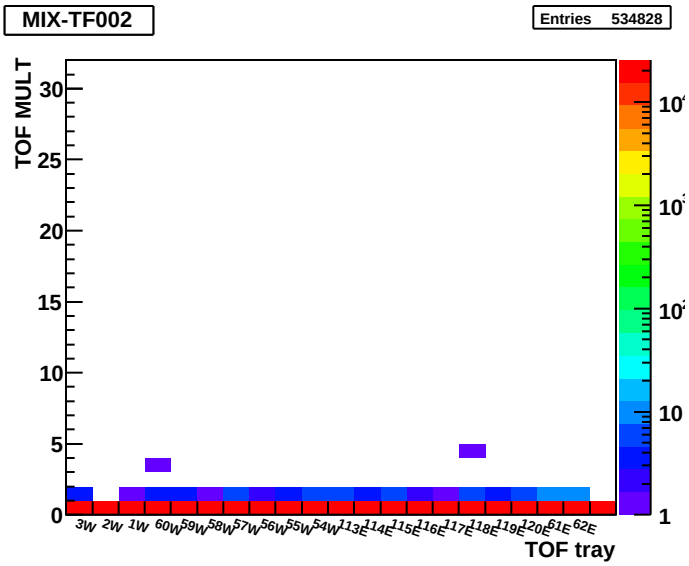

Endcap EMC L0 Input - Patch Sum
Entries 1146060
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

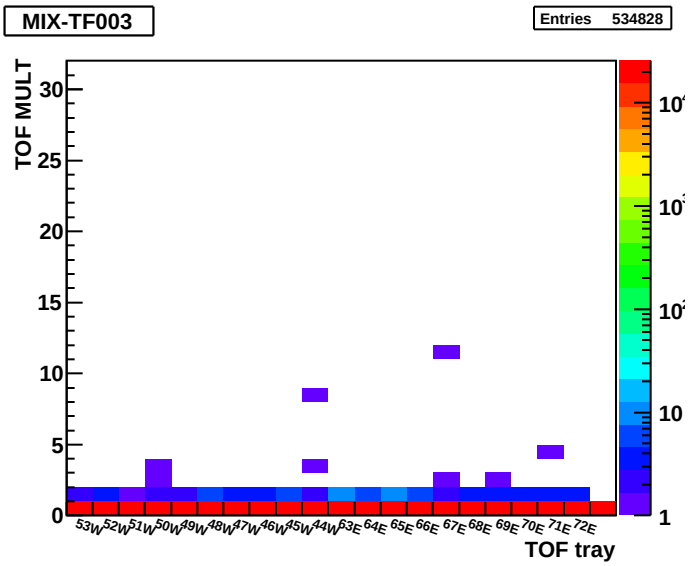

Barrel Jet Patches
Entries 229212
JP ADC
JP ID

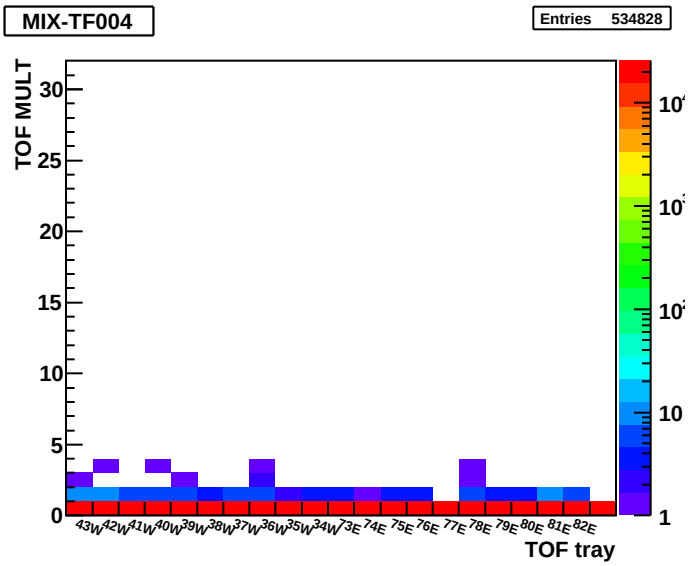

Endcap Jet Patches
Entries 76404
JP ADC
JP ID

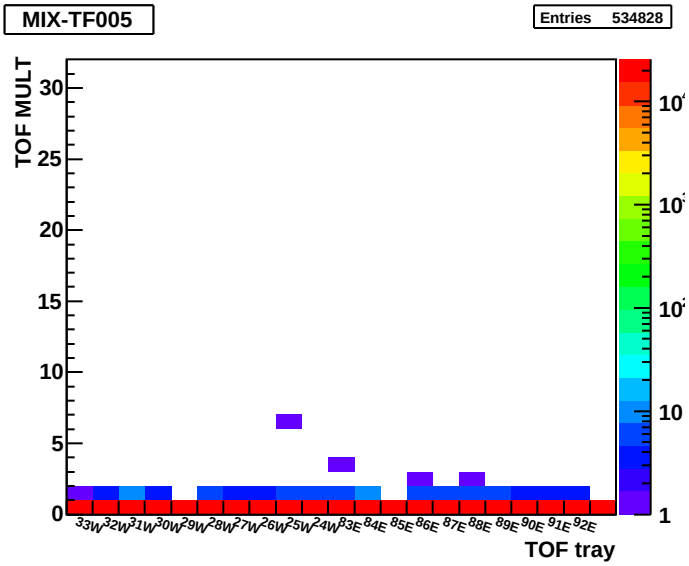

Hybrid Jet Patches
Entries 25468
JP ADC
JP ID

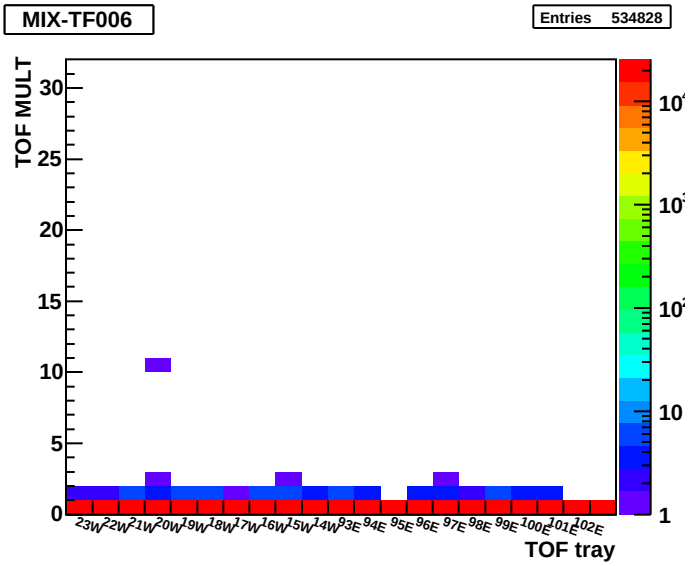

MIX-TF001
Entries 534828
TOF MULT
TOF tray

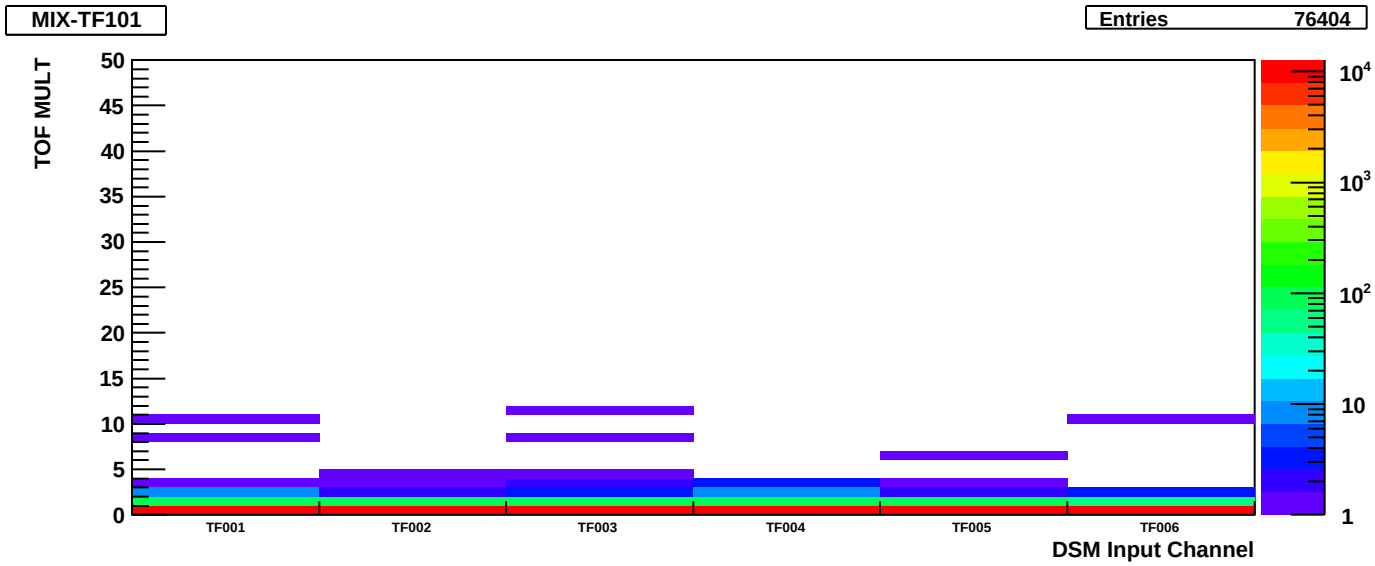

MIX-TF002
Entries 534828
TOF MULT
TOF tray

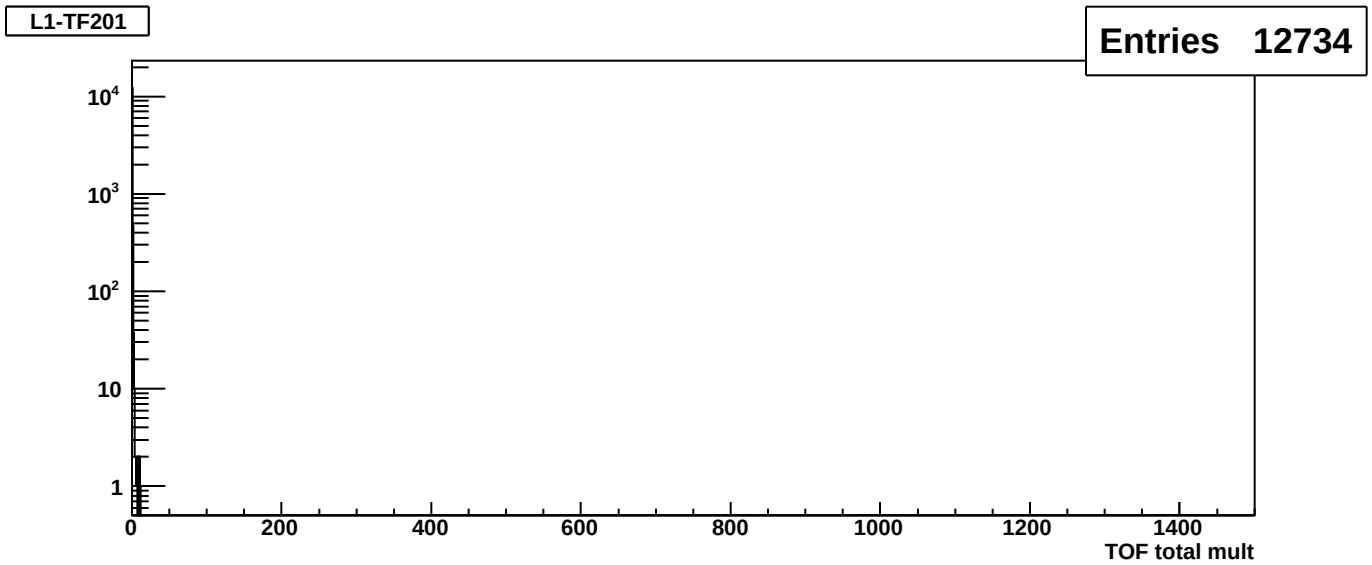

MIX-TF003
Entries 534828
TOF MULT
TOF tray

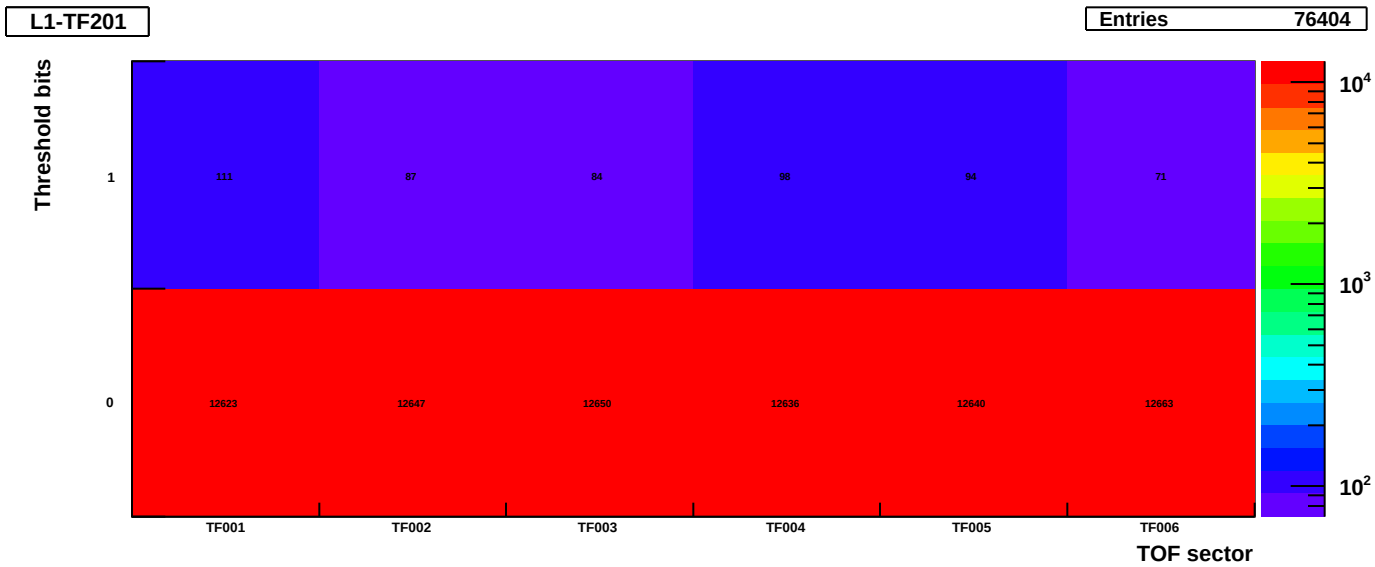

MIX-TF004
Entries 534828
TOF MULT
TOF tray

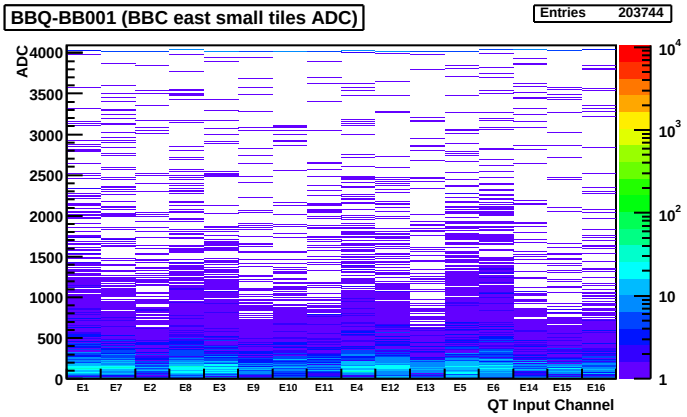

MIX-TF005
Entries 534828
TOF MULT
TOF tray

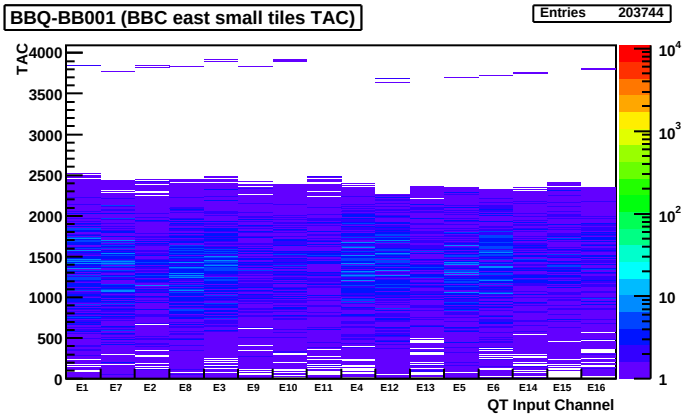

MIX-TF006
Entries 534828
TOF MULT
TOF tray

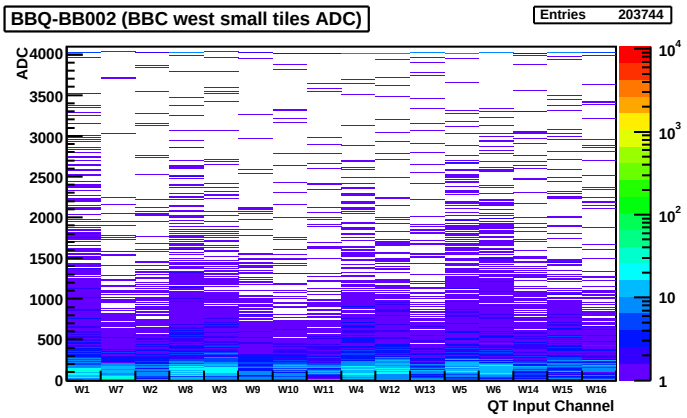

MIX-TF101
Entries 76404
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

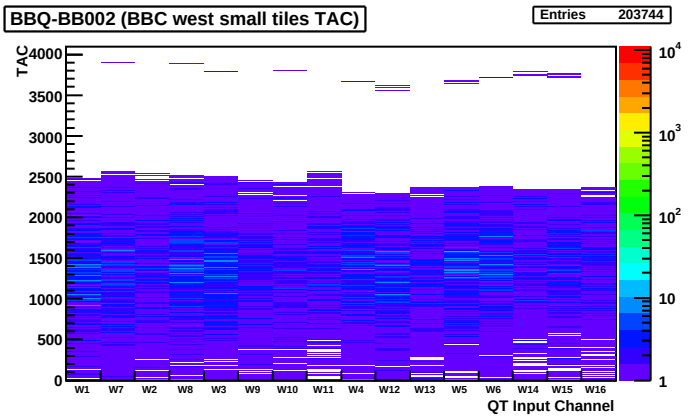

L1-TF201
Entries 12734
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

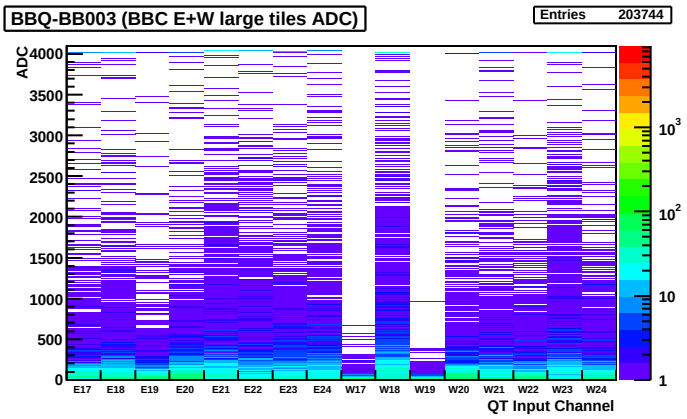

L1-TF201
Entries 76404
Threshold bits
1
0
111
87
84
98
94
71
12623
12647
12650
12636
12640
12663
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2

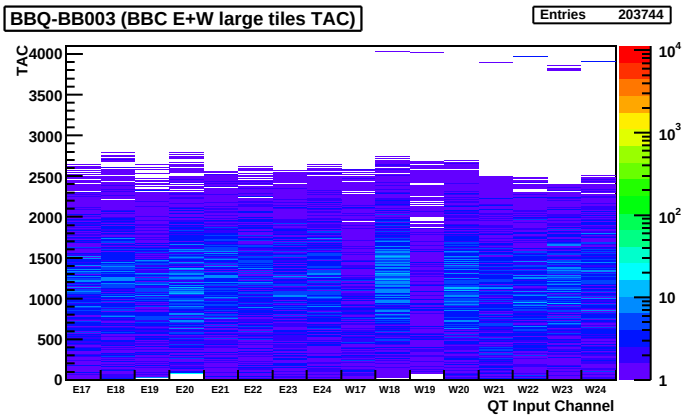

BBQ-BB001 (BBC east small tiles ADC)
Entries 203744
ADC
QT Input Channel

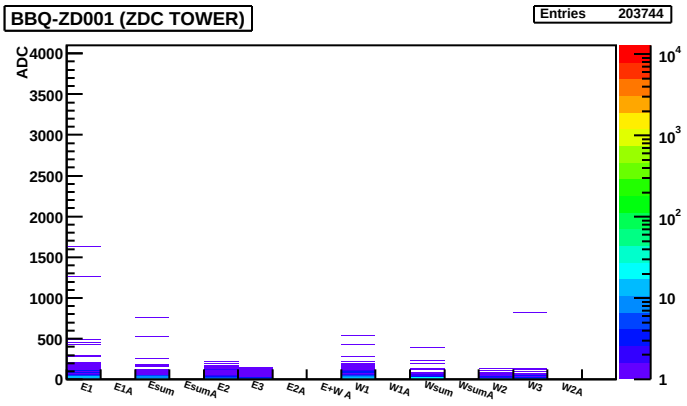

BBQ-BB001 (BBC east small tiles TAC)
Entries 203744
TAC
QT Input Channel

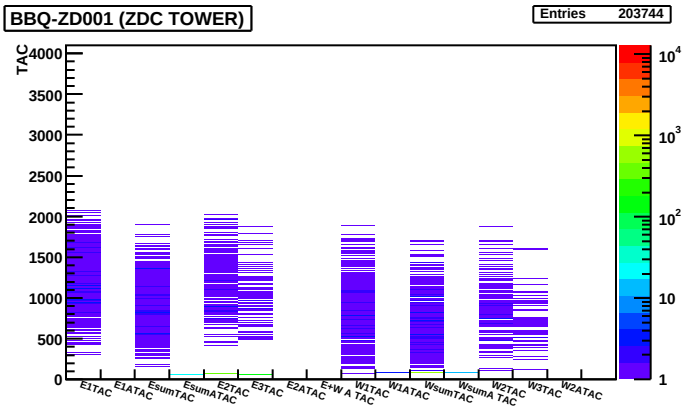

BBQ-BB002 (BBC west small tiles ADC)
Entries 203744
ADC
QT Input Channel

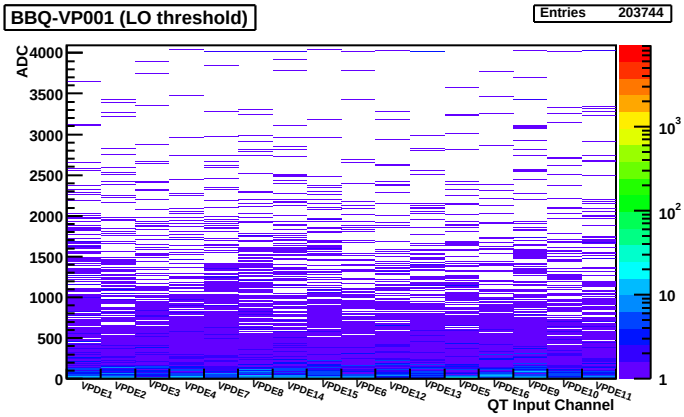

BBQ-BB002 (BBC west small tiles TAC)
Entries 203744
TAC
QT Input Channel

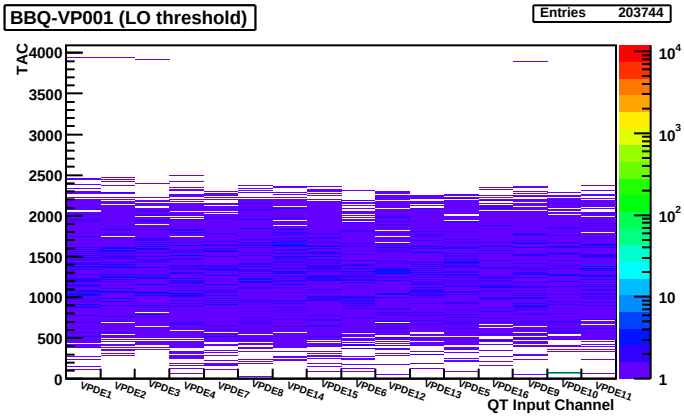

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 203744
ADC
QT Input Channel

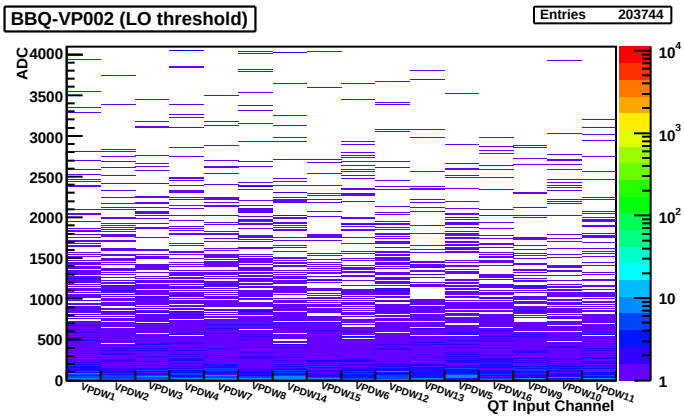

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 203744
TAC
QT Input Channel

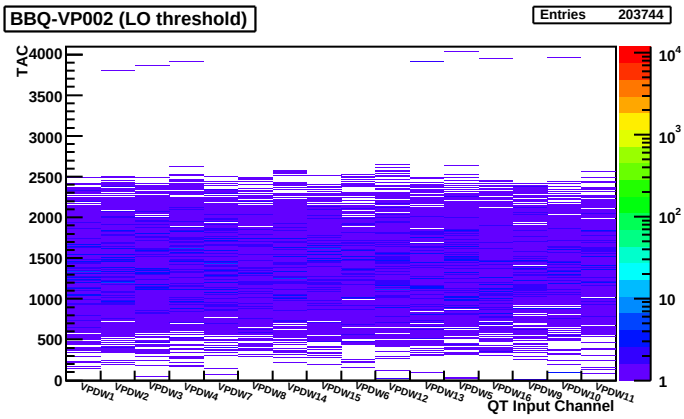

BBQ-ZD001 (ZDC TOWER)
Entries 203744
ADC

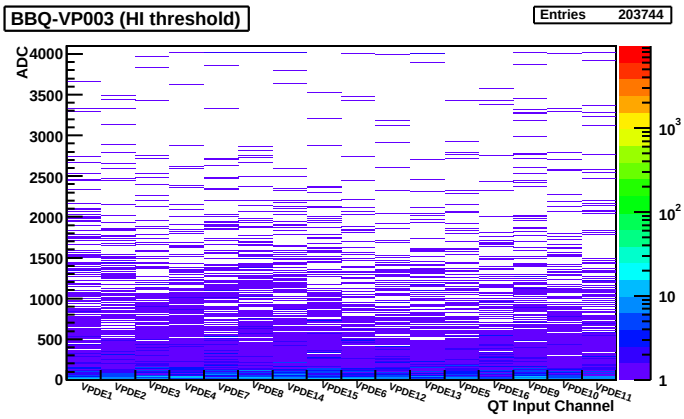

BBQ-ZD001 (ZDC TOWER)
Entries 203744
TAC

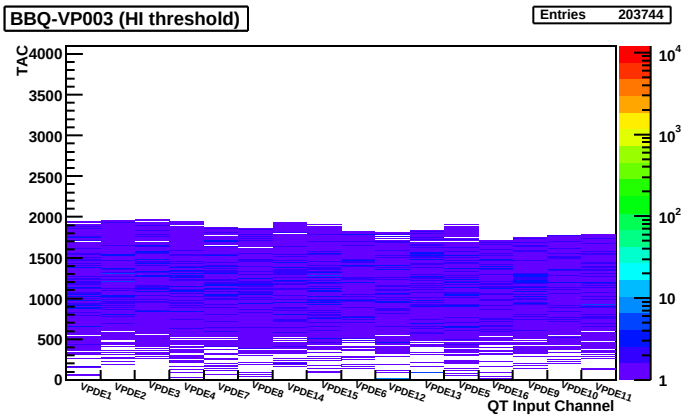

BBQ-VP001 (LO threshold)
Entries 203744
ADC
QT Input Channel

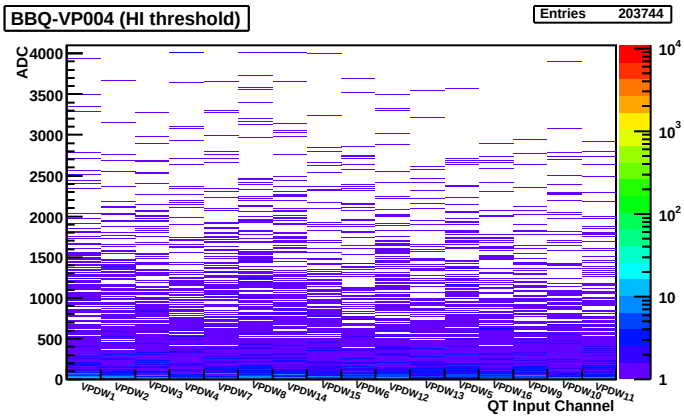

BBQ-VP001 (LO threshold)
Entries 203744
TAC
QT Input Channel

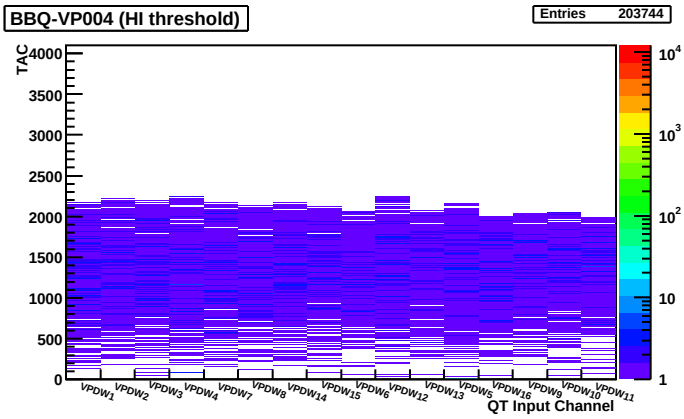

BBQ-VP002 (LO threshold)
Entries 203744
ADC
QT Input Channel

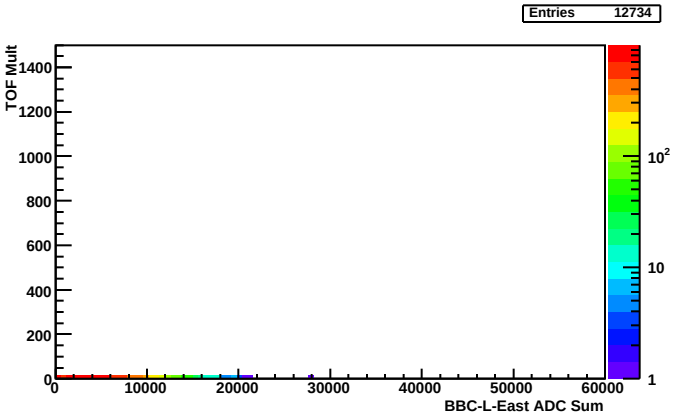

BBQ-VP002 (LO threshold)
Entries 203744
TAC
QT Input Channel

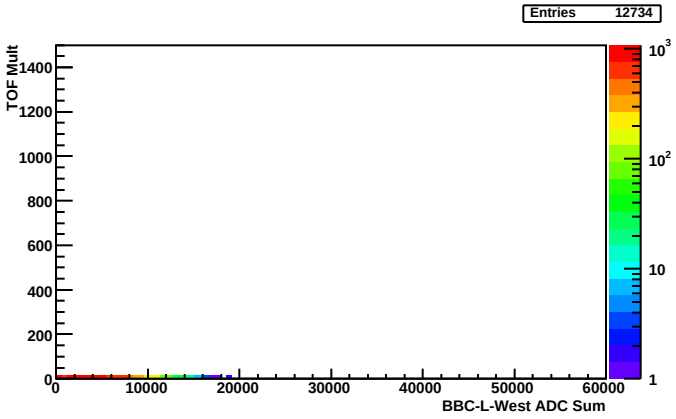

BBQ-VP003 (HI threshold)
Entries 203744
ADC
QT Input Channel

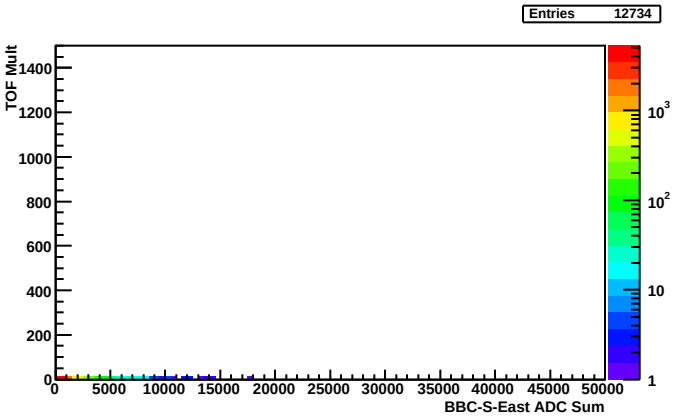

BBQ-VP003 (HI threshold)
Entries 203744
TAC
QT Input Channel

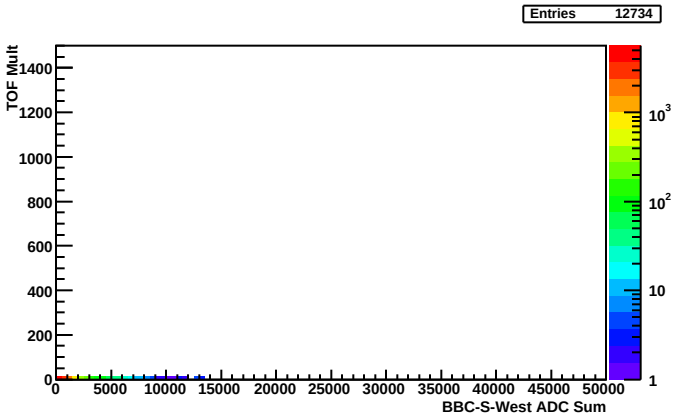

BBQ-VP004 (HI threshold)
Entries 203744
ADC
QT Input Channel

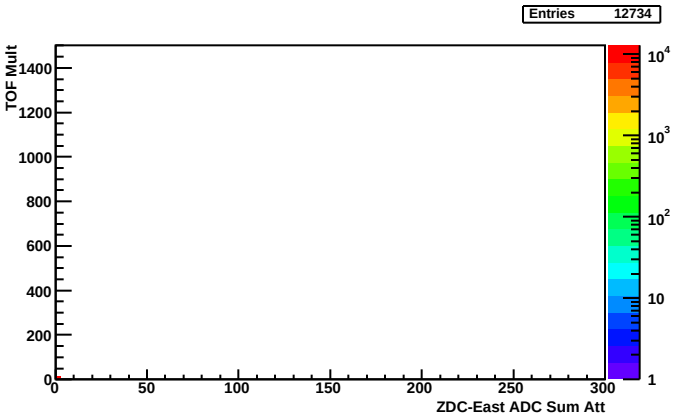

BBQ-VP004 (HI threshold)
Entries 203744
TAC
QT Input Channel

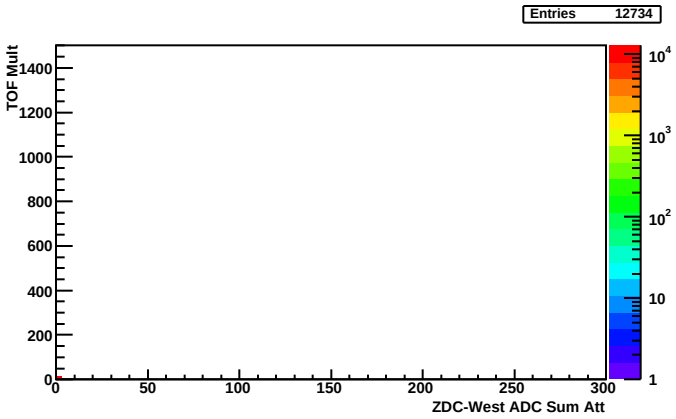

Entries 12734
TOF Mult
BBC-L-East ADC Sum

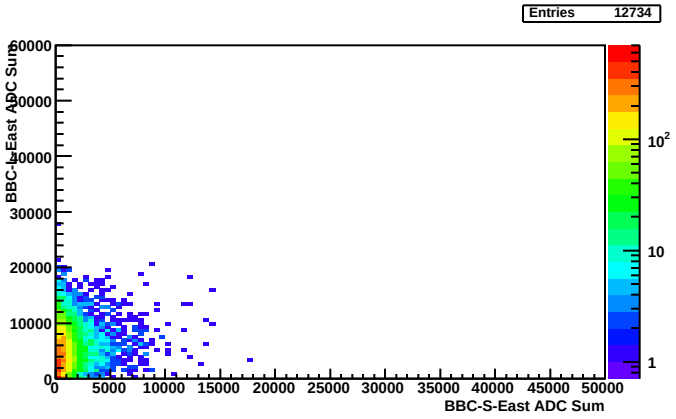

Entries 12734
TOF Mult
BBC-L-West ADC Sum

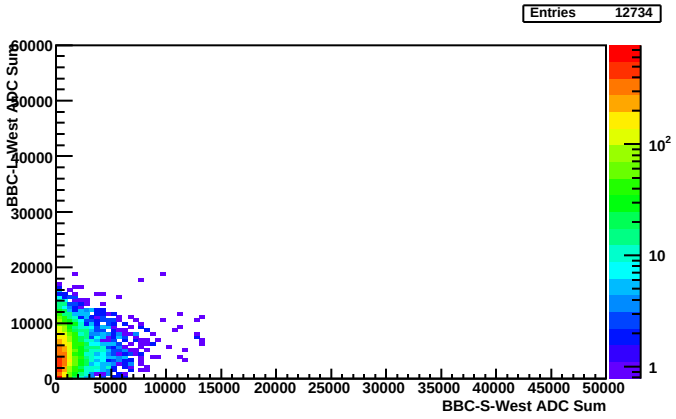

Entries 12734
TOF Mult
BBC-S-East ADC Sum

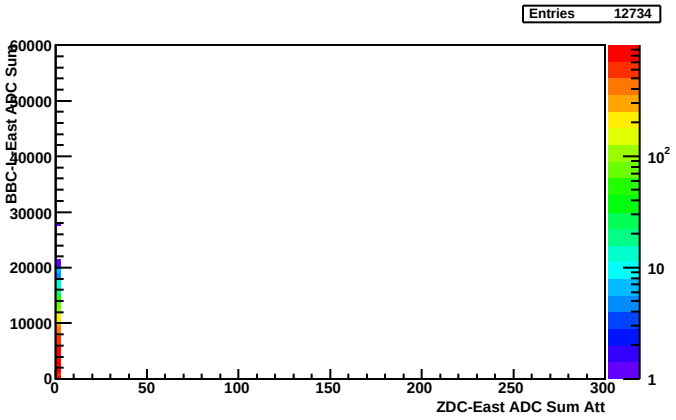

Entries 12734
TOF Mult
BBC-S-West ADC Sum

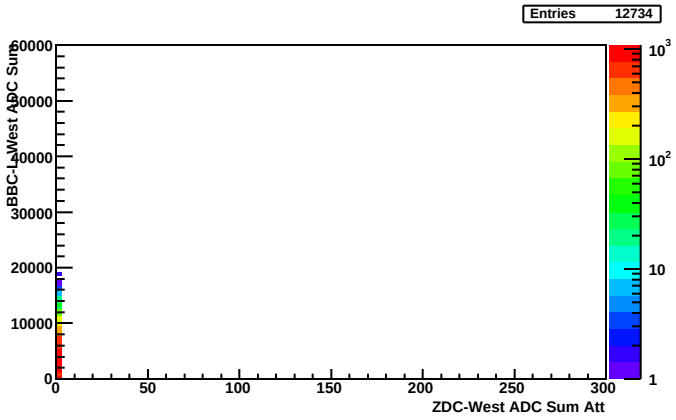

Entries 12734
TOF Mult
ZDC-East ADC Sum Att

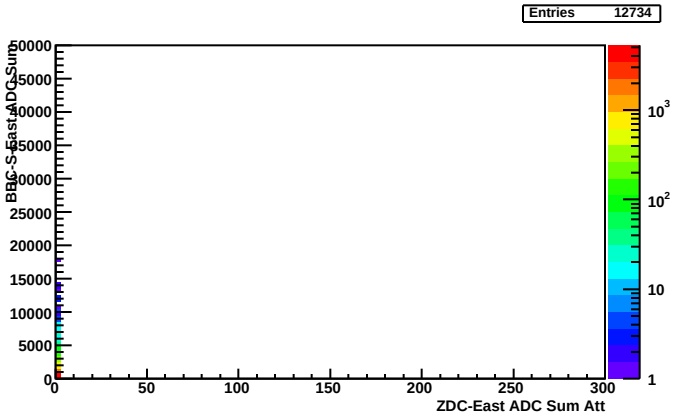

Entries 12734
TOF Mult
ZDC-West ADC Sum Att

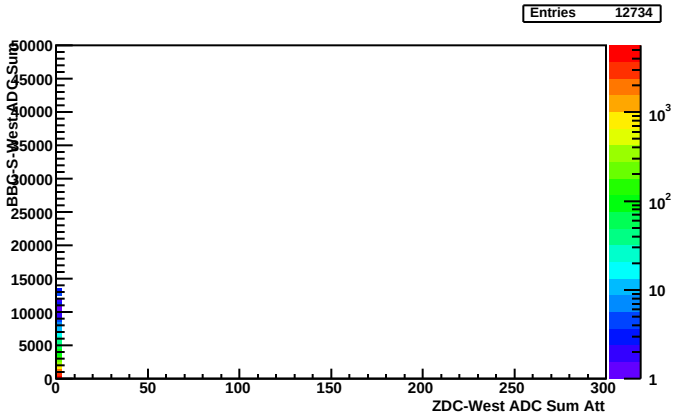

Entries 12734
BBC-L-East ADC Sum
BBC-S-East ADC Sum

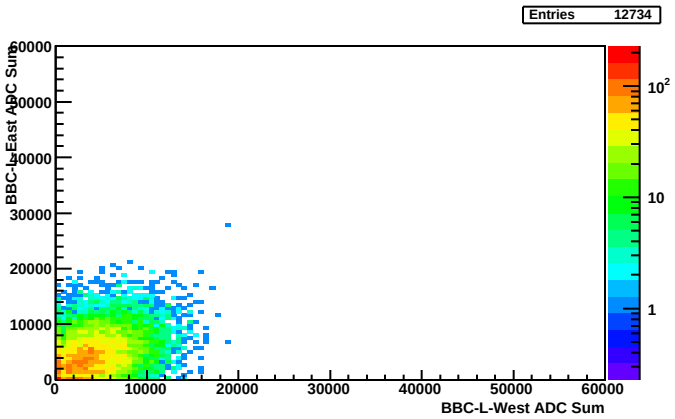

Entries 12734
BBC-L-West ADC Sum
BBC-S-West ADC Sum

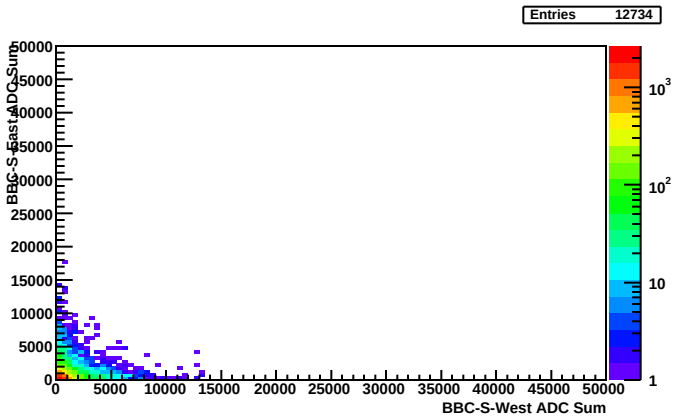

Entries 12734
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

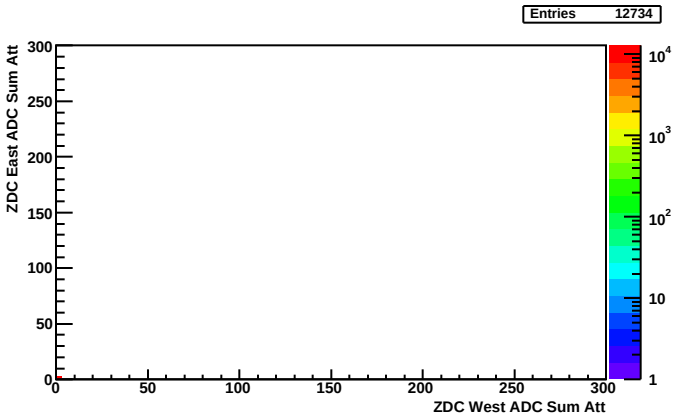

Entries 12734
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

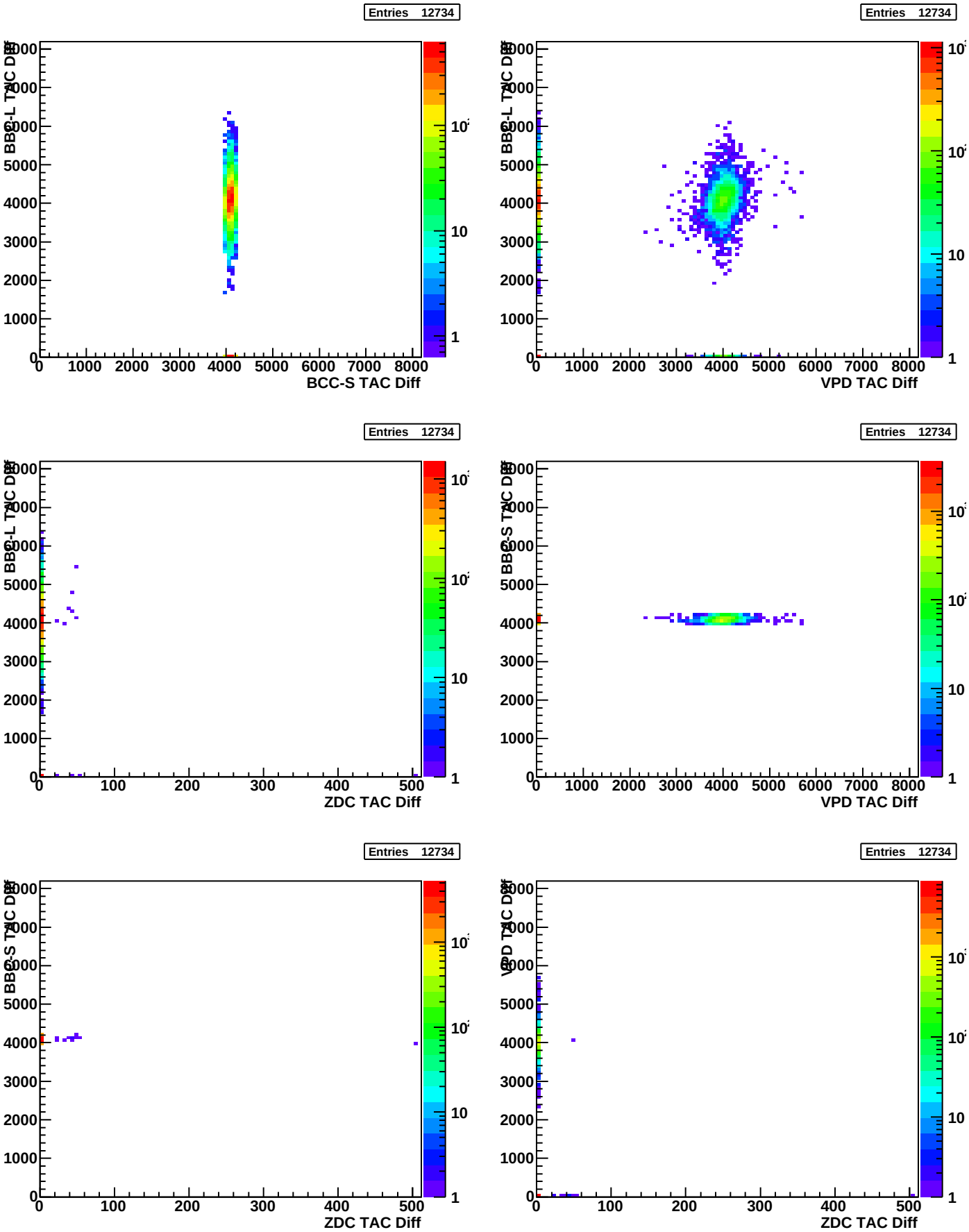

Entries 12734
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

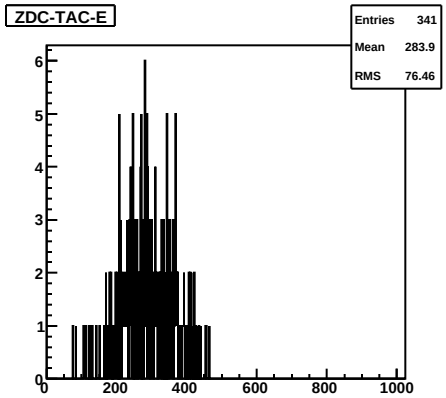

Entries 12734
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

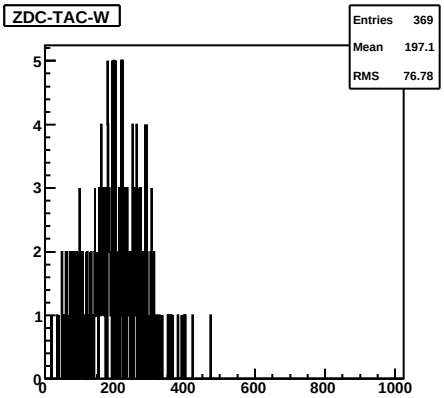

Entries 12734
BBC-L-East ADC Sum
BBC-L-West ADC Sum

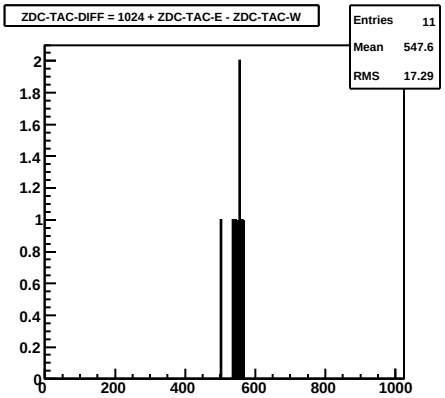

Entries 12734
BBC-S-East ADC Sum
BBC-S-West ADC Sum

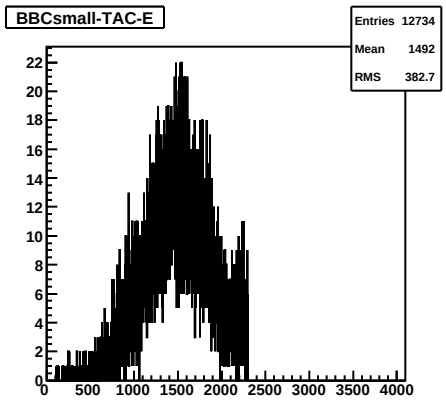

Entries 12734
ZDC East ADC Sum Att
ZDC West ADC Sum Att

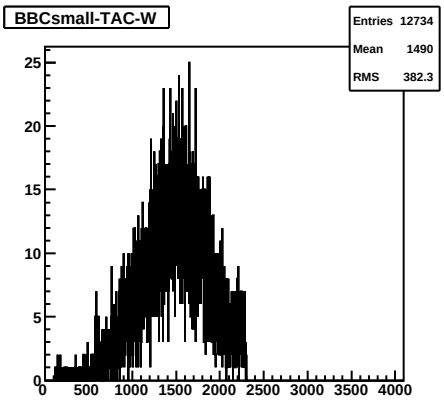

Entries 12734
BBC-L TAC Diff
BCC-S TAC Diff
Entries 12734
BBC-L TAC Diff
VPD TAC Diff
Entries 12734
BBC-L TAC Diff
ZDC TAC Diff
Entries 12734
BBC-S TAC Diff
VPD TAC Diff
Entries 12734
BBC-S TAC Diff
ZDC TAC Diff
Entries 12734
VPD TAC Diff
ZDC TAC Diff

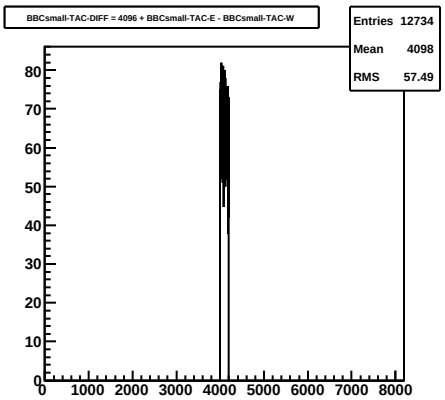

ZDC-TAC-E
Entries 341
Mean 283.9
RMS 76.46

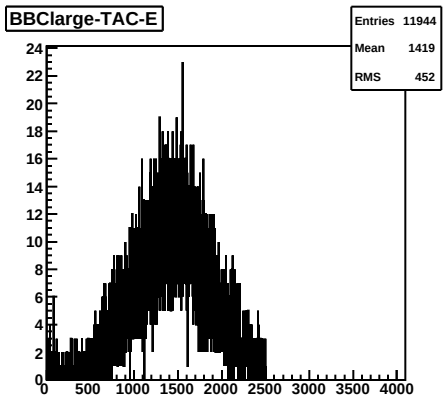

ZDC-TAC-W
Entries 369
Mean 197.1
RMS 76.78

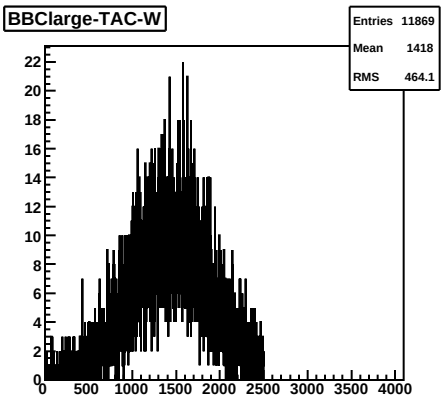

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 11
Mean 547.6
RMS 17.29

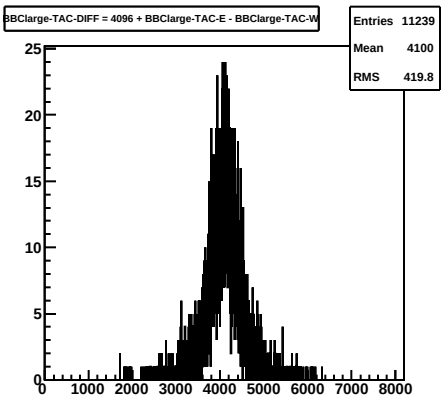

BBCsmall-TAC-E
Entries 12734
Mean 1492
RMS 382.7

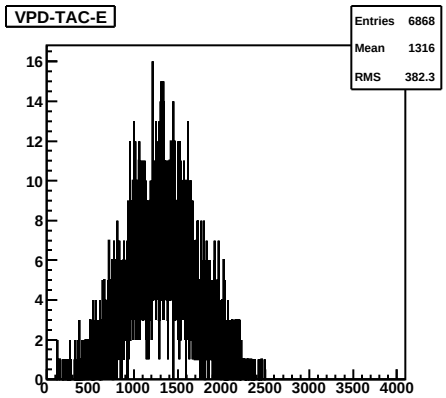

BBCsmall-TAC-W
Entries 12734
Mean 1490
RMS 382.3

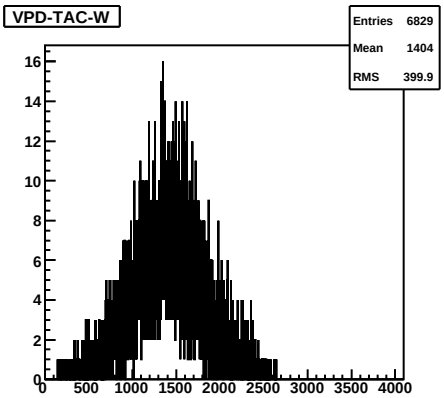

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 12734
Mean 4098
RMS 57.49

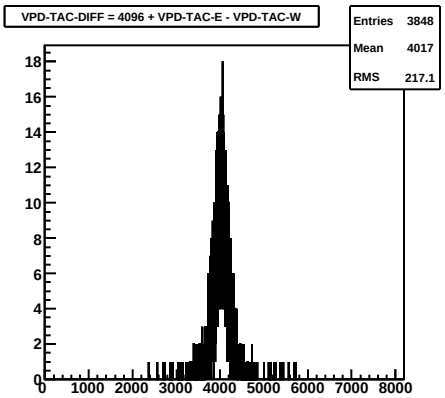

BBClarge-TAC-E
Entries 11944
Mean 1419
RMS 452

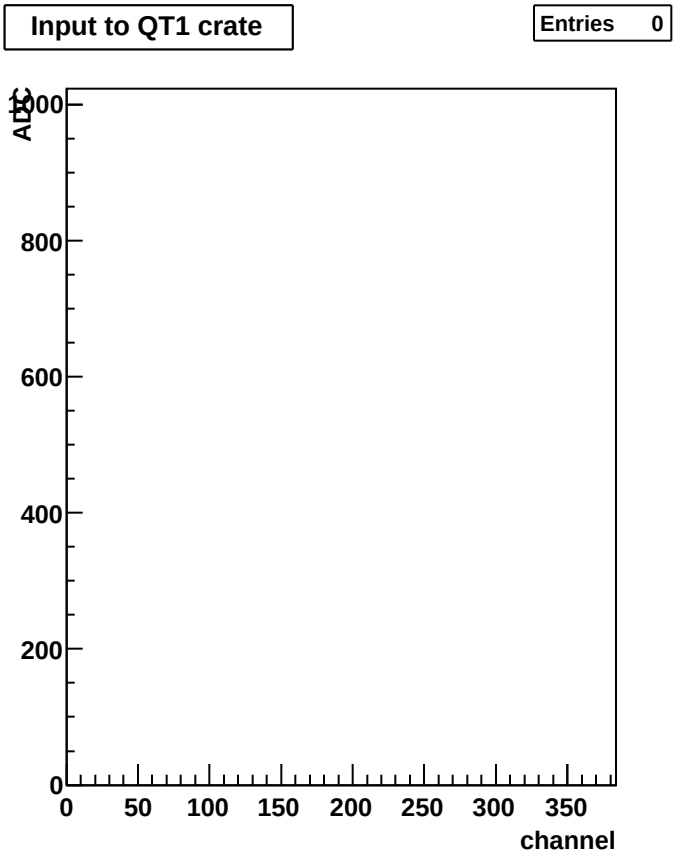

BBClarge-TAC-W
Entries 11869
Mean 1418
RMS 464.1

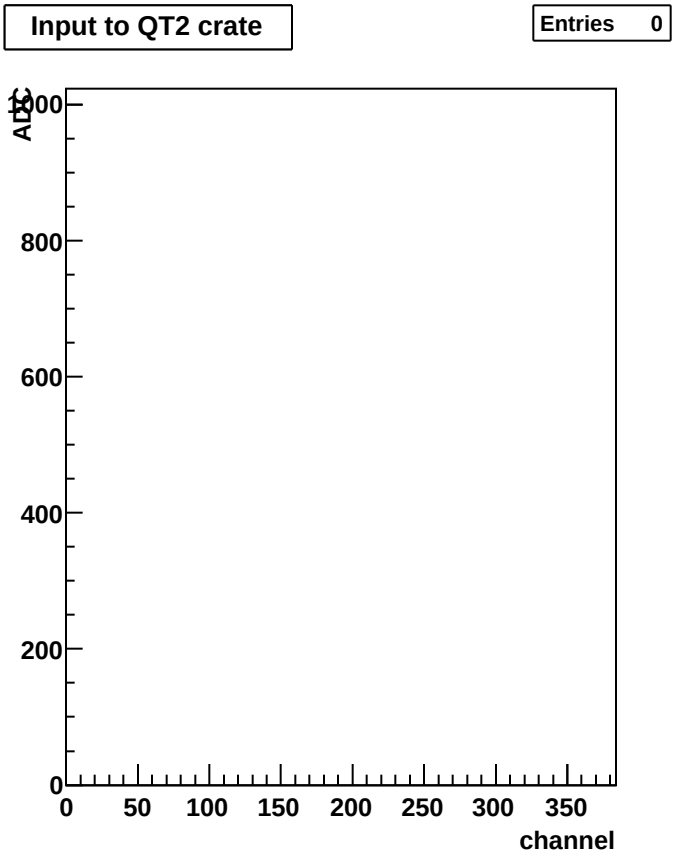

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 11239
Mean 4100
RMS 419.8

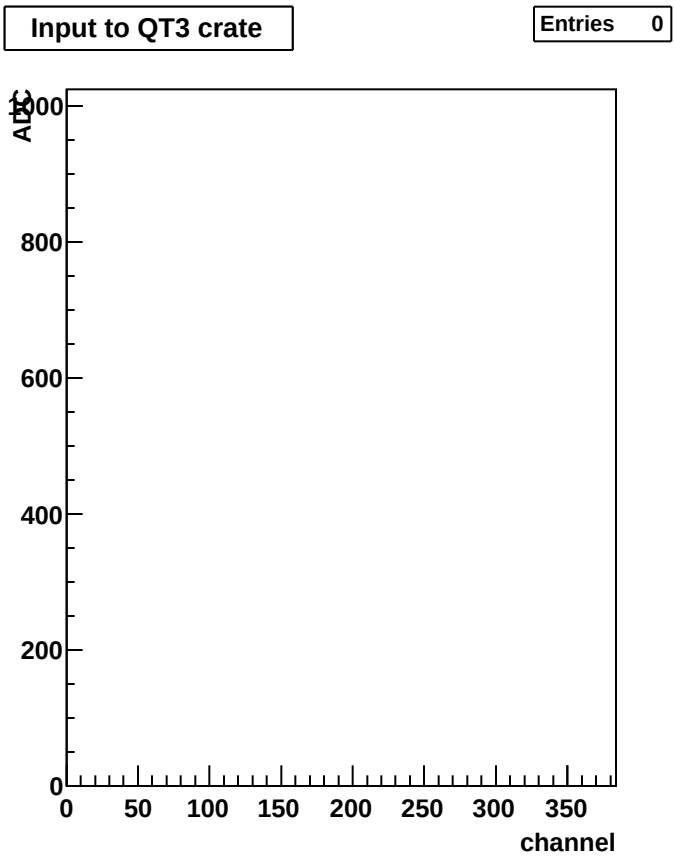

VPD-TAC-E
Entries 6868
Mean 1316
RMS 382.3

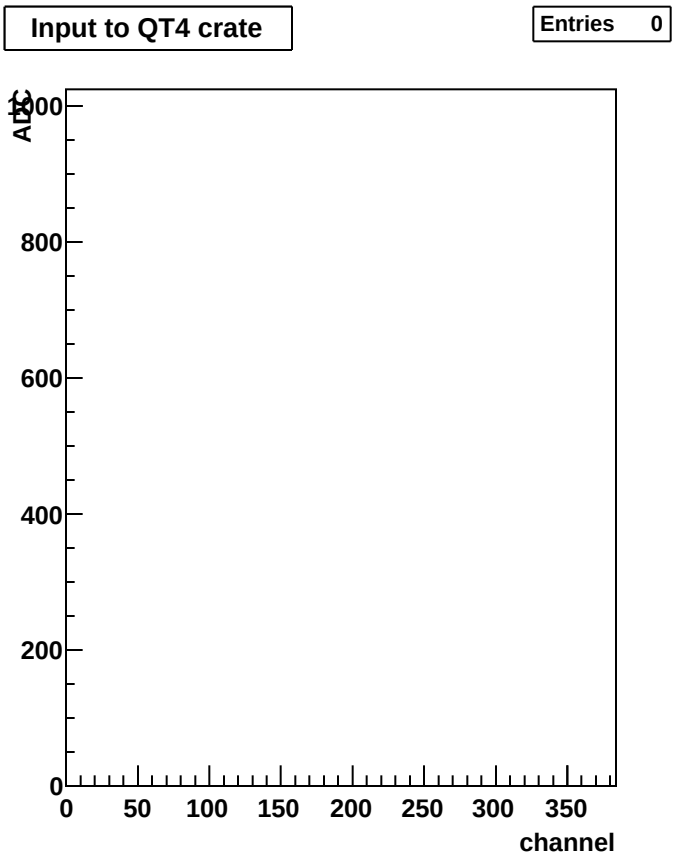

VPD-TAC-W
Entries 6829
Mean 1404
RMS 399.9

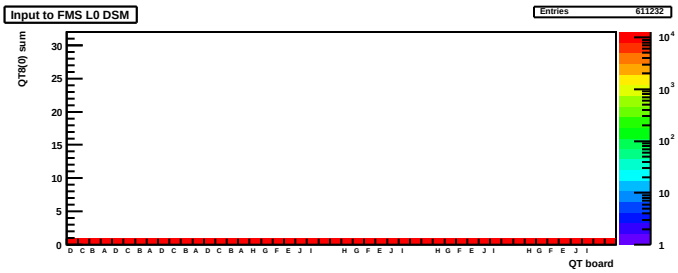

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 3848
Mean 4017
RMS 217.1

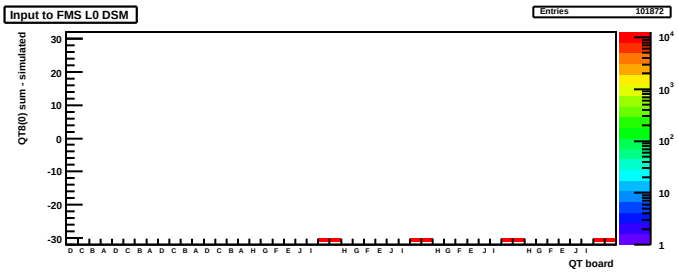

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

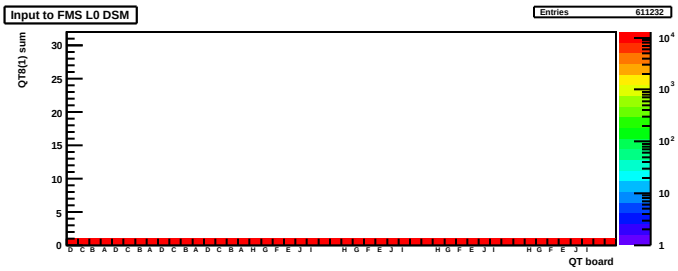

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

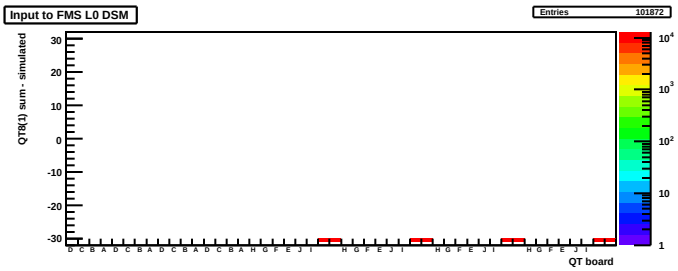

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

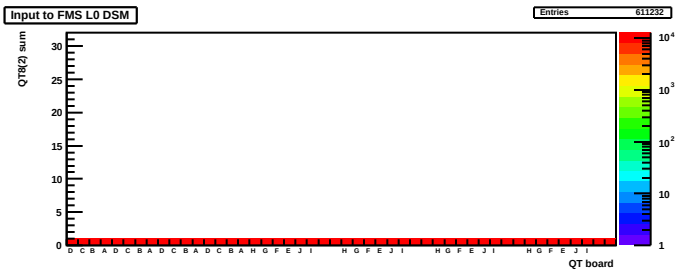

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

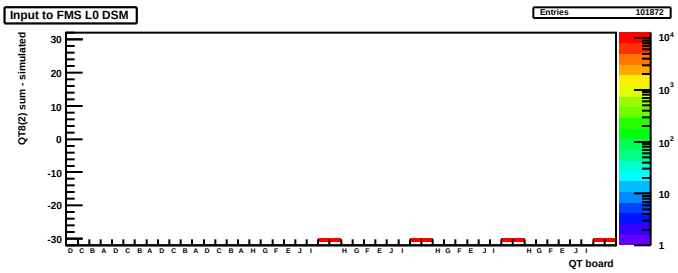

Input to FMS L0 DSM
Entries 611232
QT8(0) sum
QT board

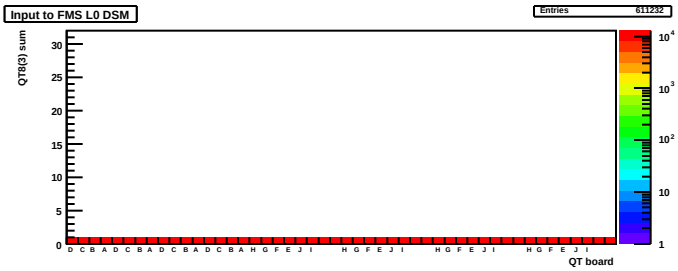

Input to FMS L0 DSM
Entries 101872
QT8(0) sum - simulated
QT board

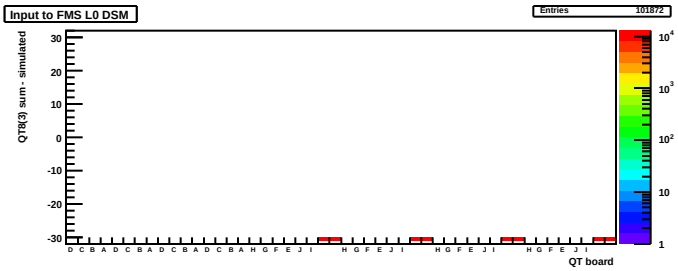

Input to FMS L0 DSM
Entries 611232
QT8(1) sum
QT board

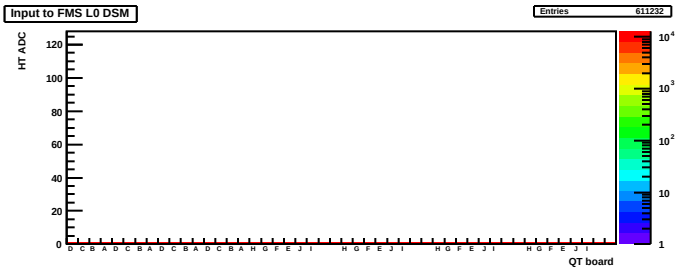

Input to FMS L0 DSM
Entries 101872
QT8(1) sum - simulated
QT board

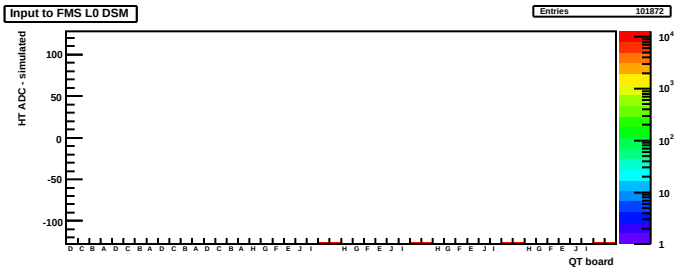

Input to FMS L0 DSM
Entries 611232
QT8(2) sum
QT board

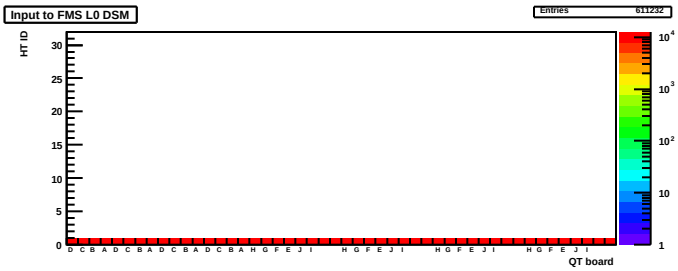

Input to FMS L0 DSM
Entries 101872
QT8(2) sum - simulated
QT board

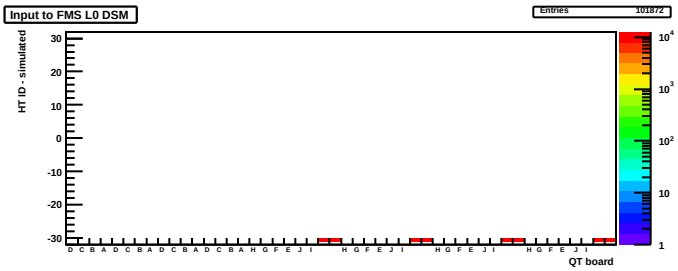

Input to FMS L0 DSM
Entries 611232
QT8(3) sum
QT board

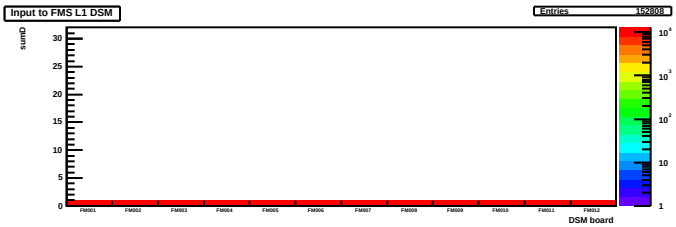

Input to FMS L0 DSM
Entries 101872
QT8(3) sum - simulated
QT board

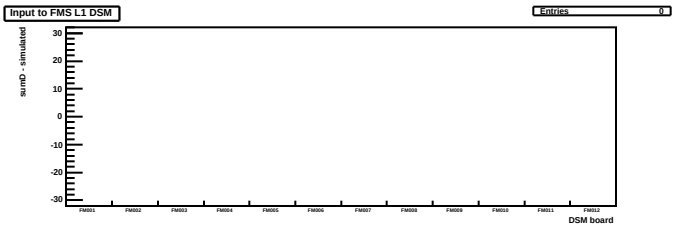

Input to FMS L0 DSM
Entries 611232
HT ADC
QT board

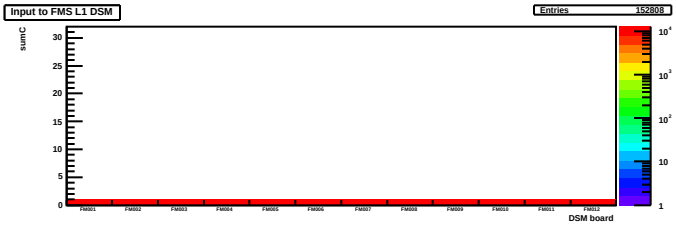

Input to FMS L0 DSM
Entries 101872
HT ADC - simulated
QT board

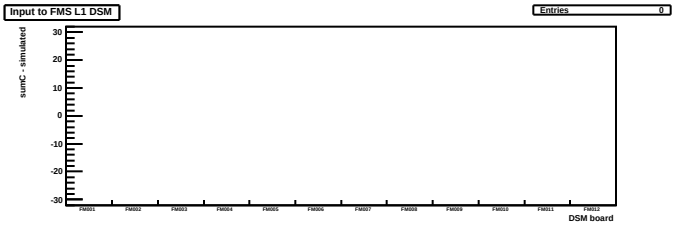

Input to FMS L0 DSM
Entries 611232
HT ID
QT board

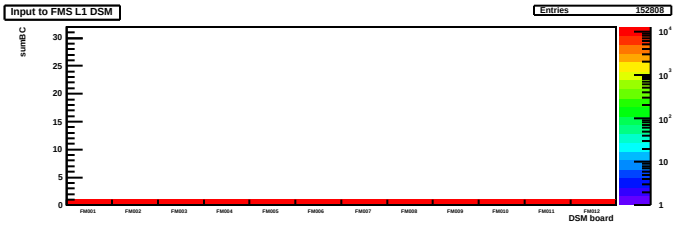

Input to FMS L0 DSM
Entries 101872
HT ID - simulated
QT board

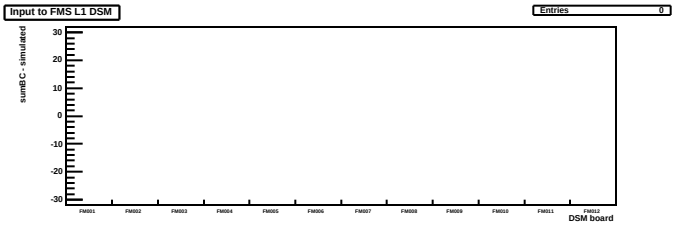

Input to FMS L1 DSM
Entries 152808
sumD
DSM board

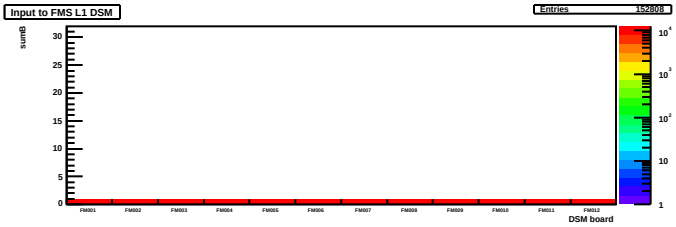

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

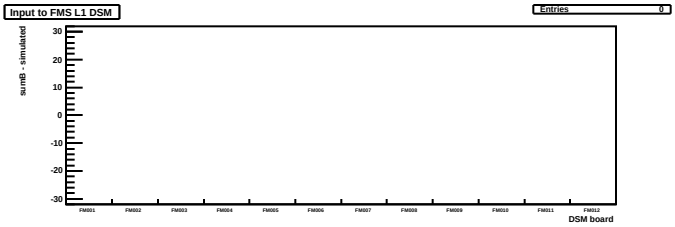

Input to FMS L1 DSM
Entries 152808
sumC
DSM board

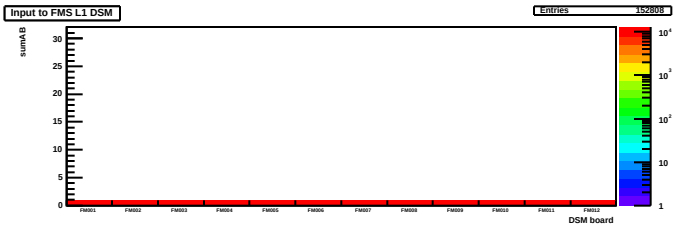

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

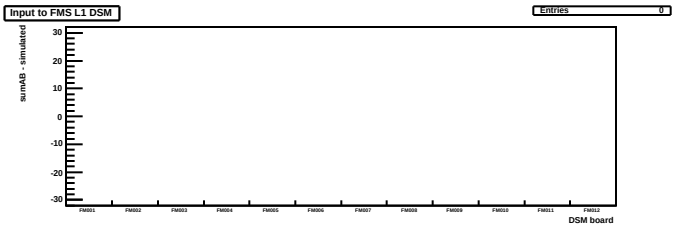

Input to FMS L1 DSM
Entries 152808
sumBC
DSM board

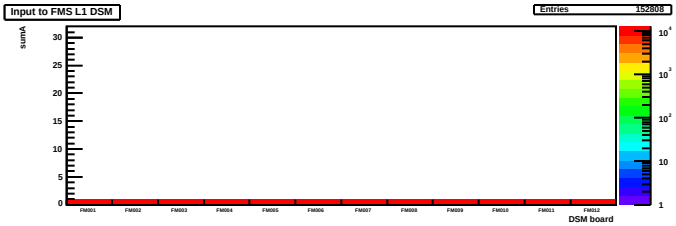

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

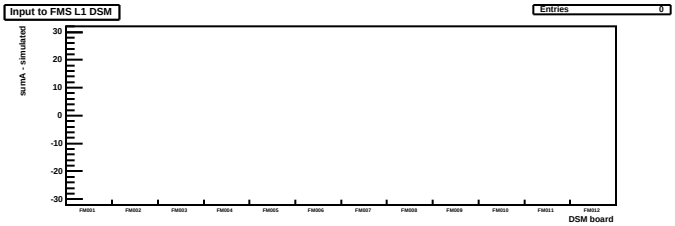

Input to FMS L1 DSM
Entries 152808
sumB
DSM board

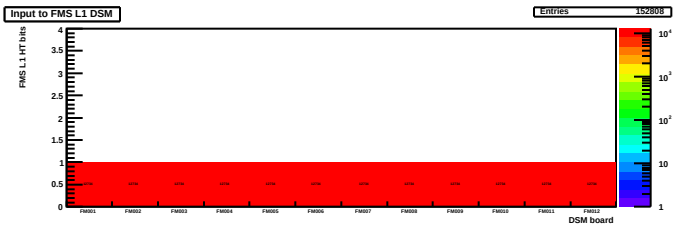

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

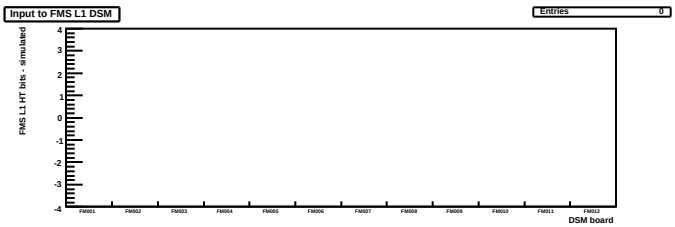

Input to FMS L1 DSM
Entries 152808
sumAB
DSM board

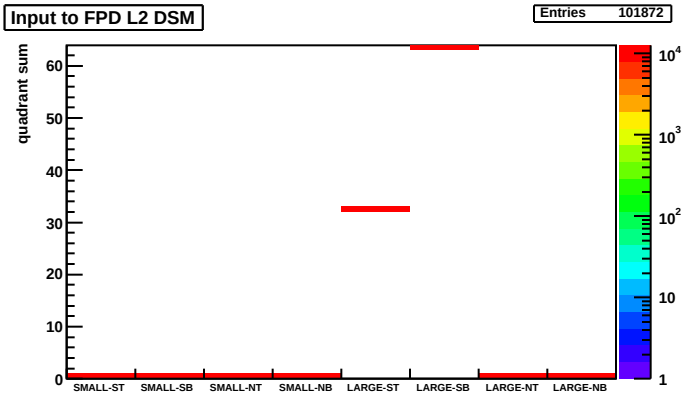

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

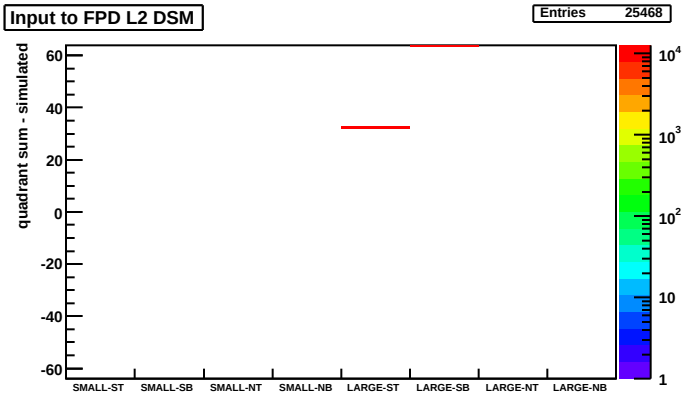

Input to FMS L1 DSM
Entries 152808
sumA
DSM board

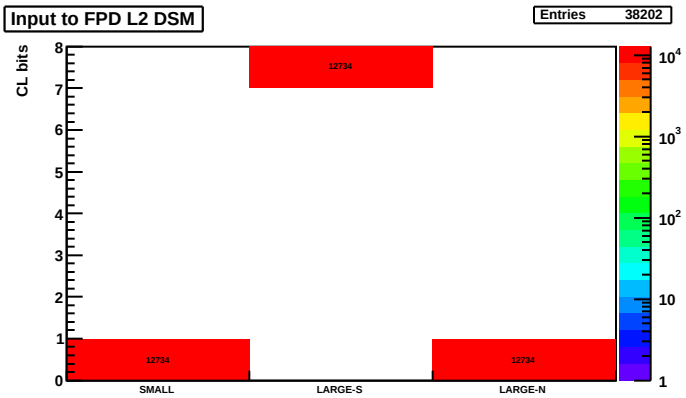

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

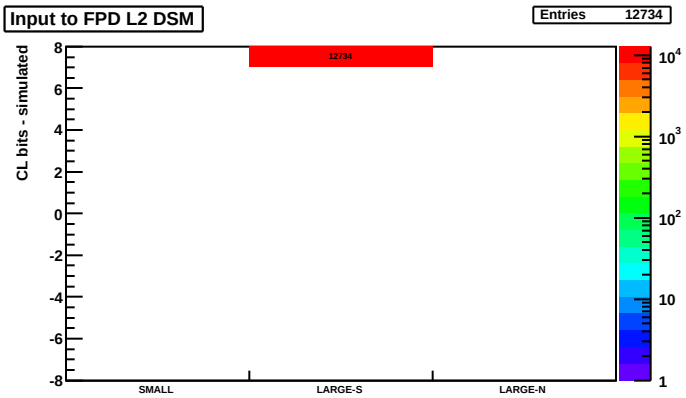

Input to FMS L1 DSM
Entries 152808
FMS L1 HT bits
DSM board

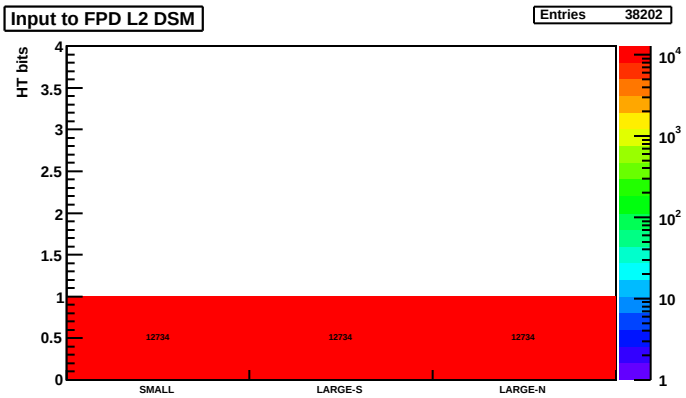

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

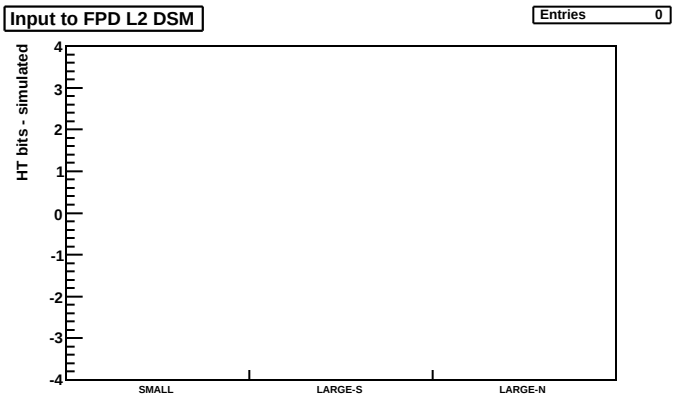

Input to FPD L2 DSM
Entries 101872
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

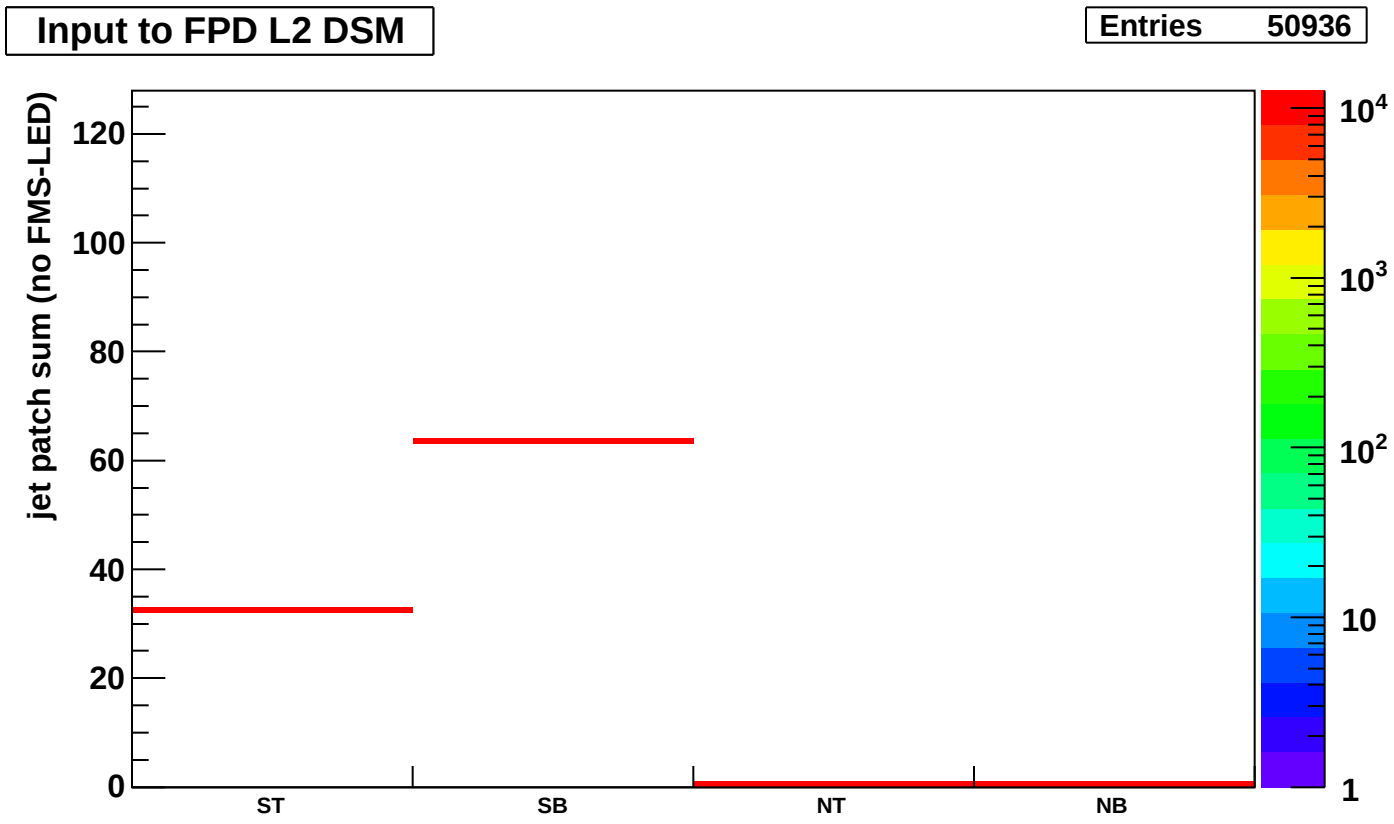

Input to FPD L2 DSM
Entries 25468
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

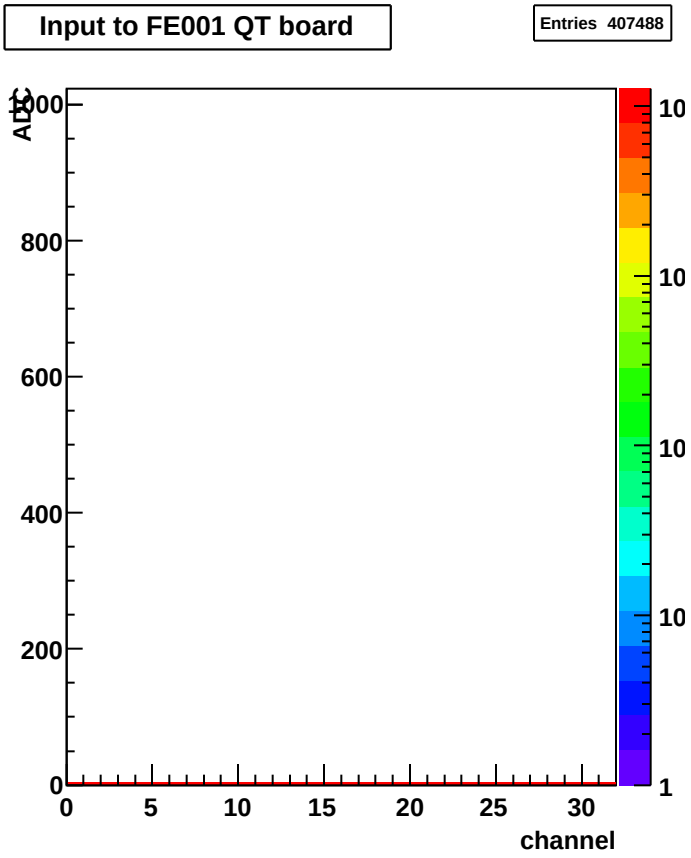

Input to FPD L2 DSM
Entries 38202
CL bits
12734
12734
12734
SMALL
LARGE-S
LARGE-N

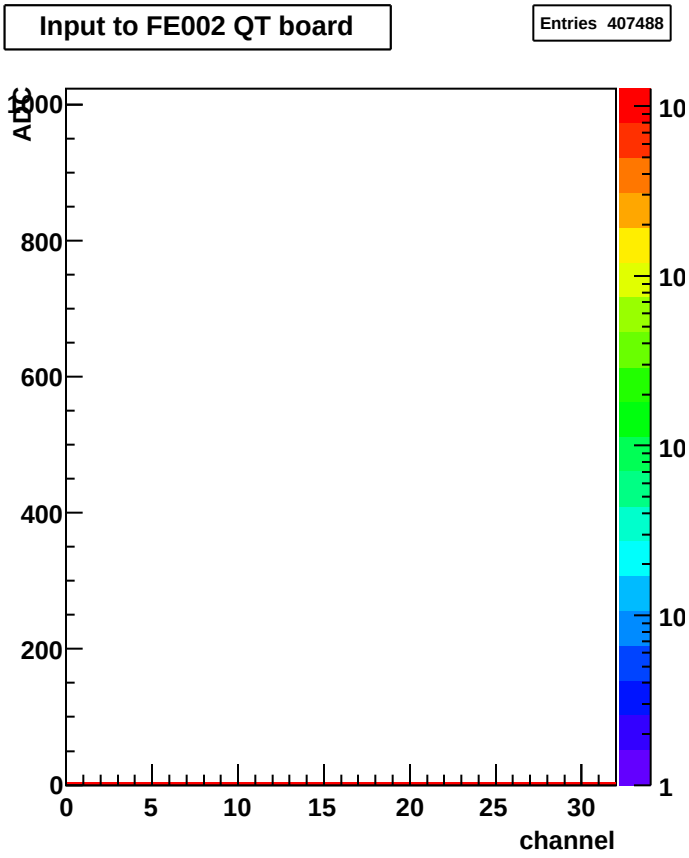

Input to FPD L2 DSM
Entries 12734
CL bits - simulated
12734
SMALL
LARGE-S
LARGE-N

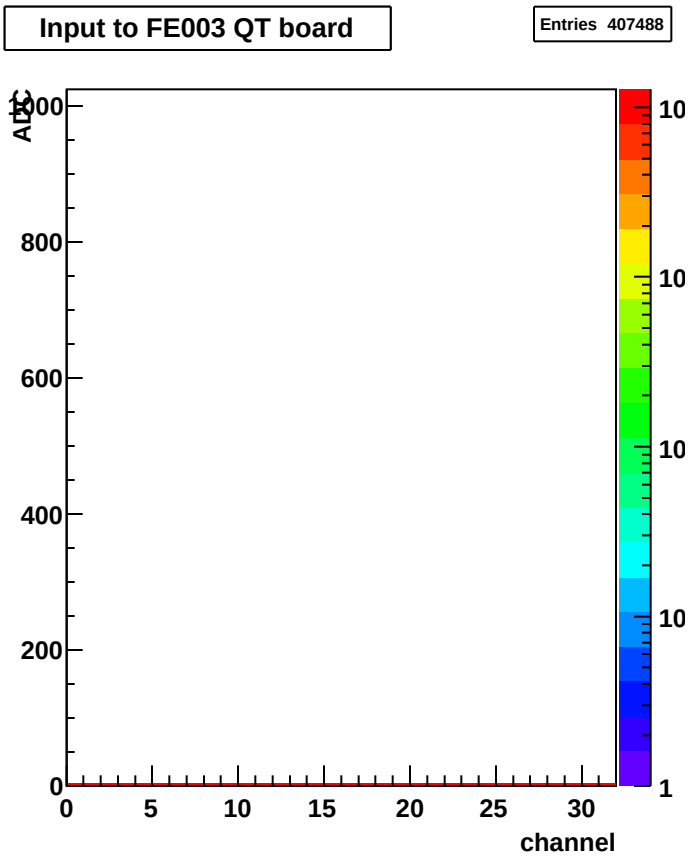

Input to FPD L2 DSM
Entries 38202
HT bits
12734
12734
12734
SMALL
LARGE-S
LARGE-N

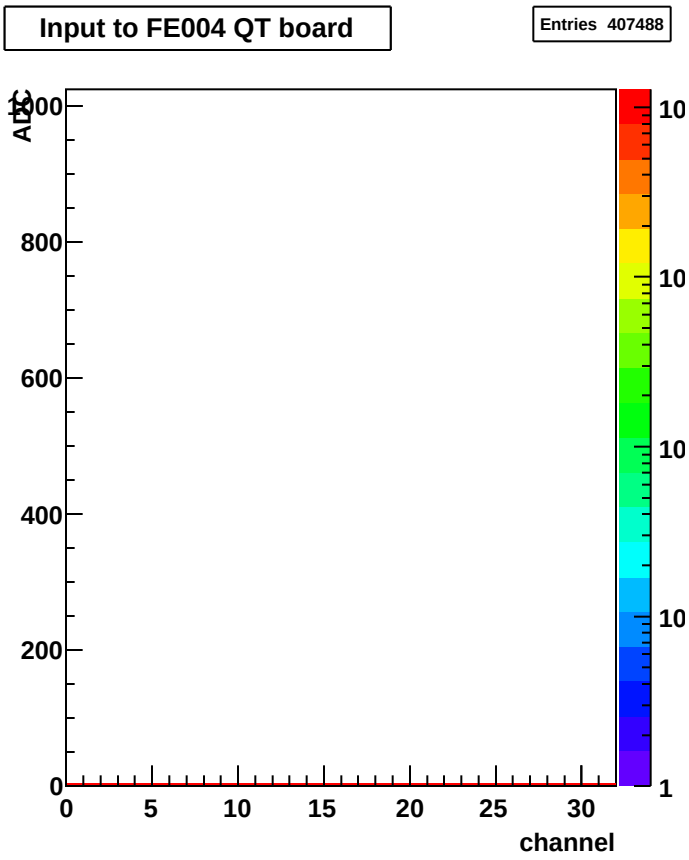

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

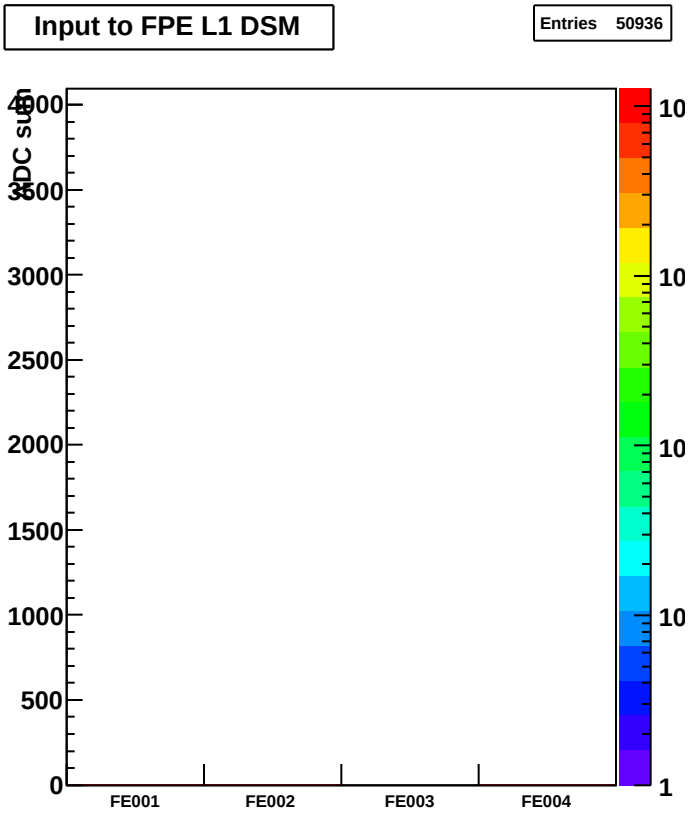

Input to FPD L2 DSM
Entries 50936
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

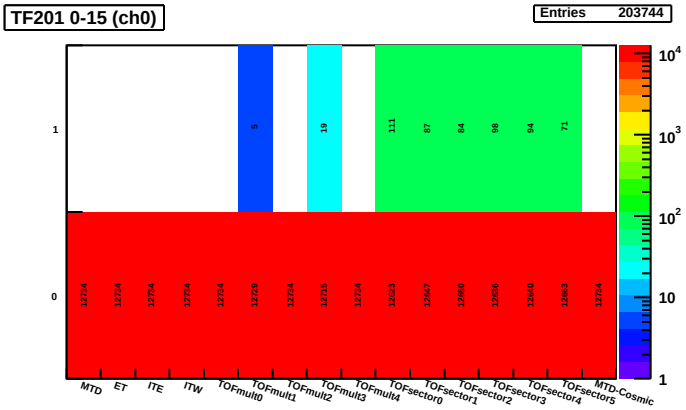

Input to FE001 QT board
Entries 407488
ADC
channel

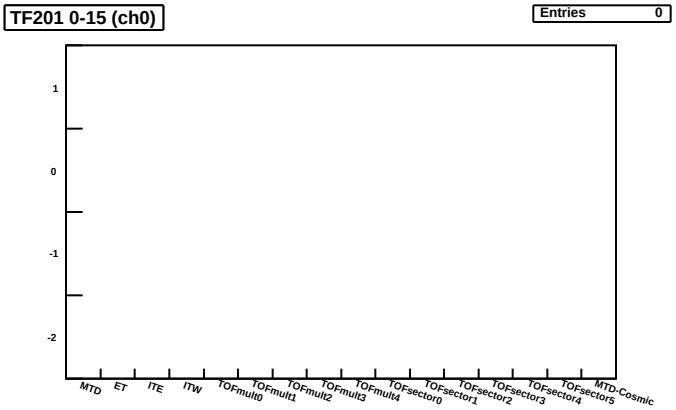

Input to FE002 QT board
Entries 407488
ADC
channel

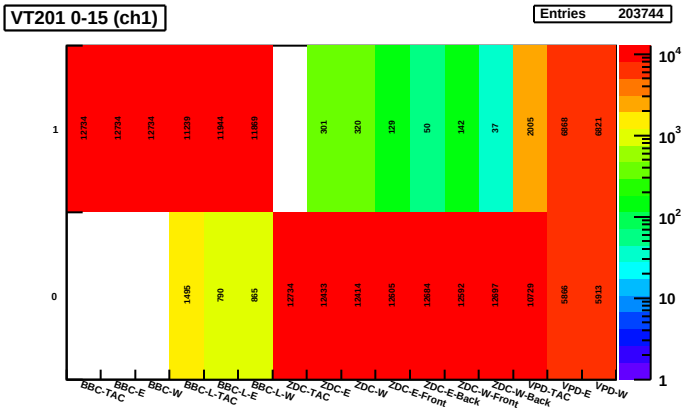

Input to FE003 QT board
Entries 407488
ADC
channel

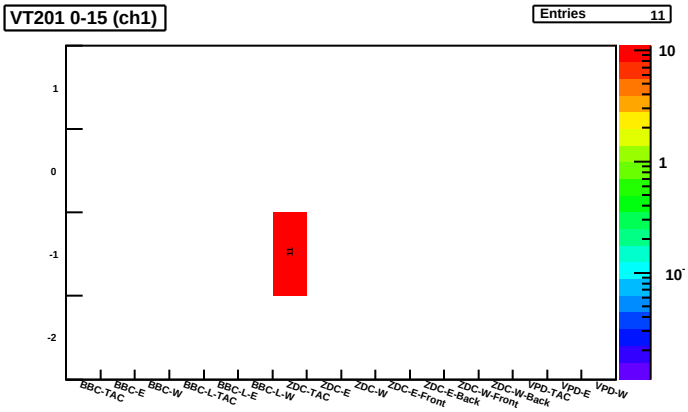

Input to FE004 QT board
Entries 407488
ADC
channel

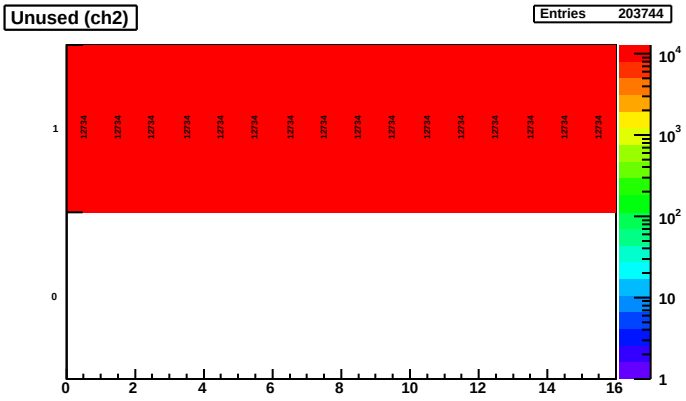

Input to FPE L1 DSM
Entries 50936
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

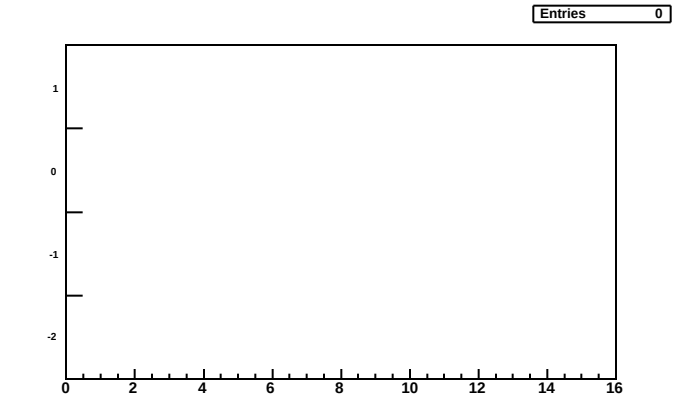

TF201 0-15 (ch0)
Entries 203744
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

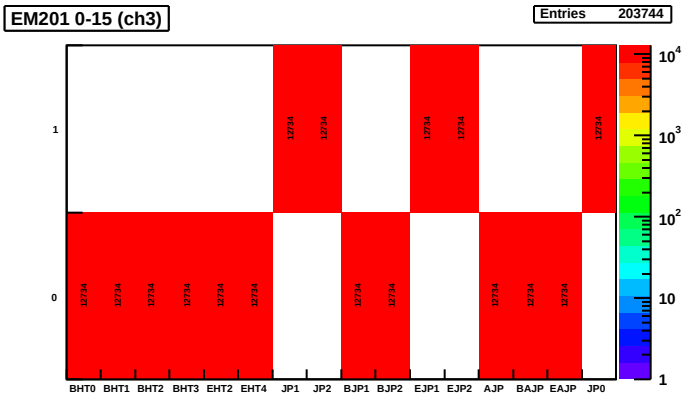

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

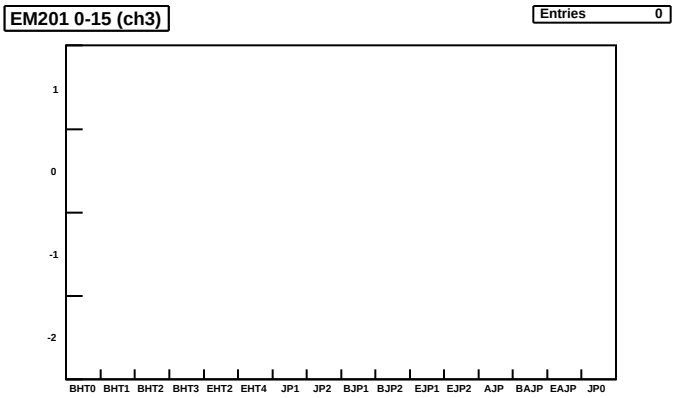

VT201 0-15 (ch1)
Entries 203744
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 11
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

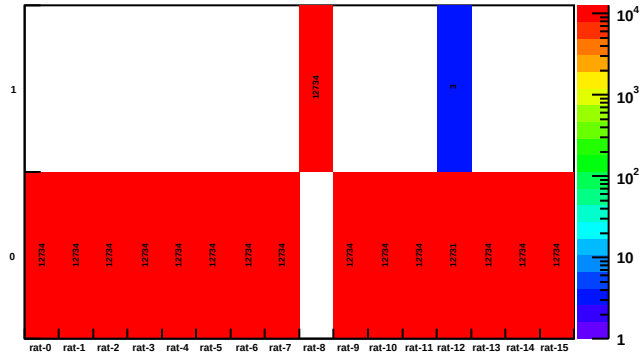

Unused (ch2)
Entries 203744

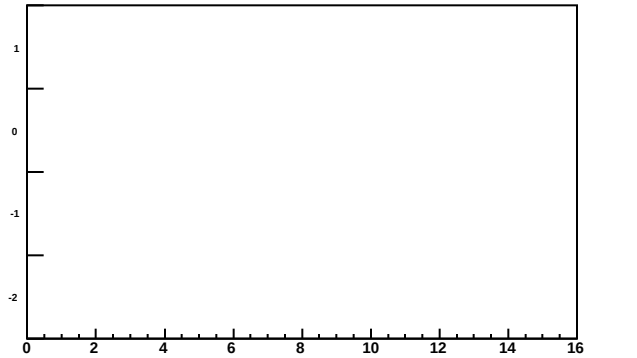

Entries 0


EM201 0-15 (ch3)
Entries 203744
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

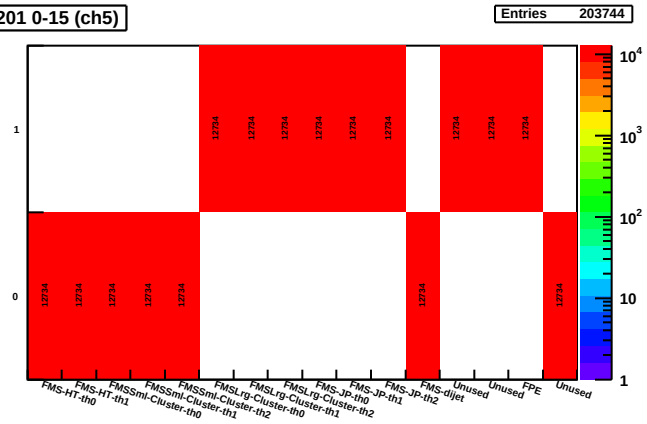

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

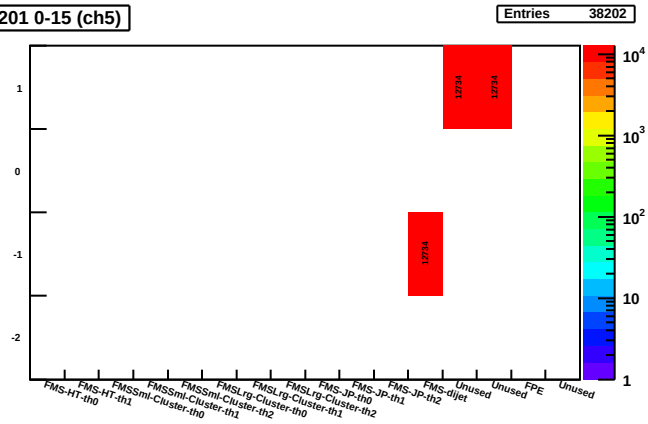




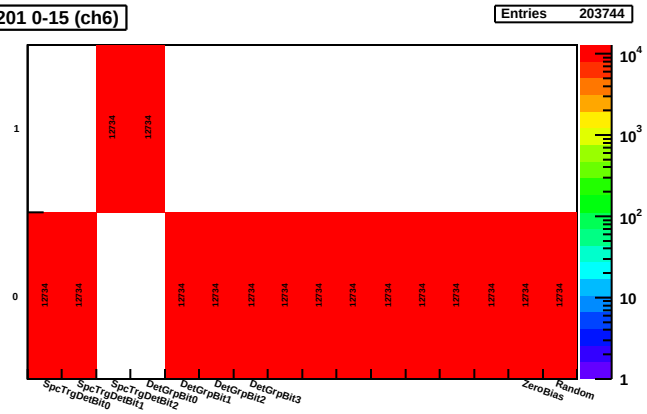
FP201 0-15 (ch5)

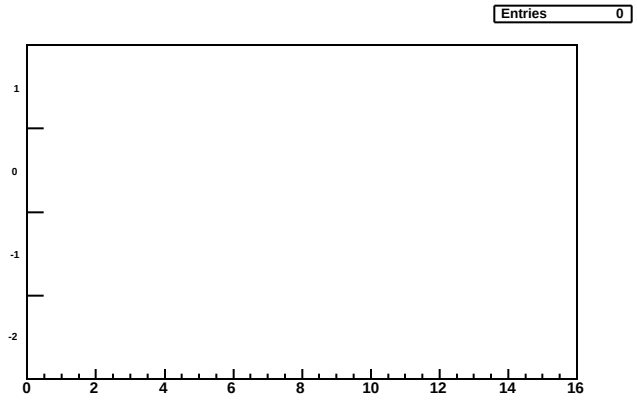
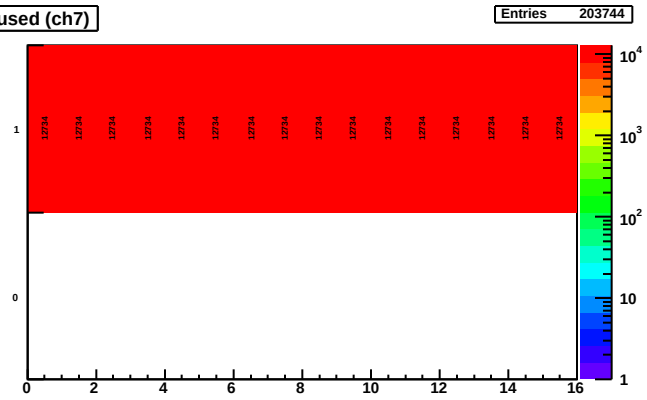
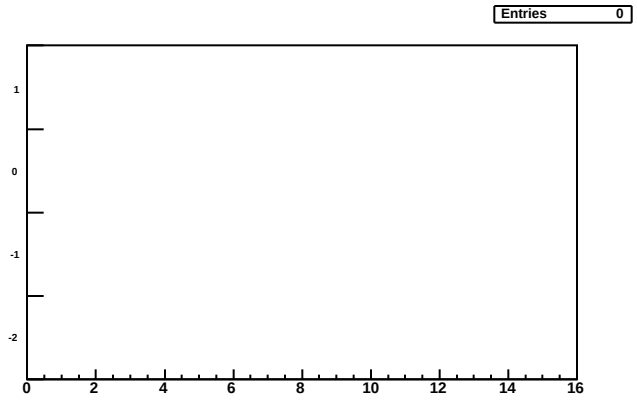


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)