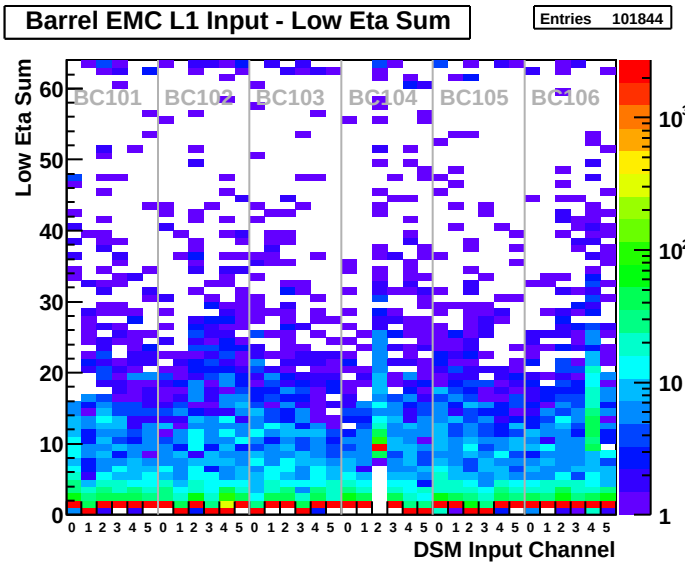
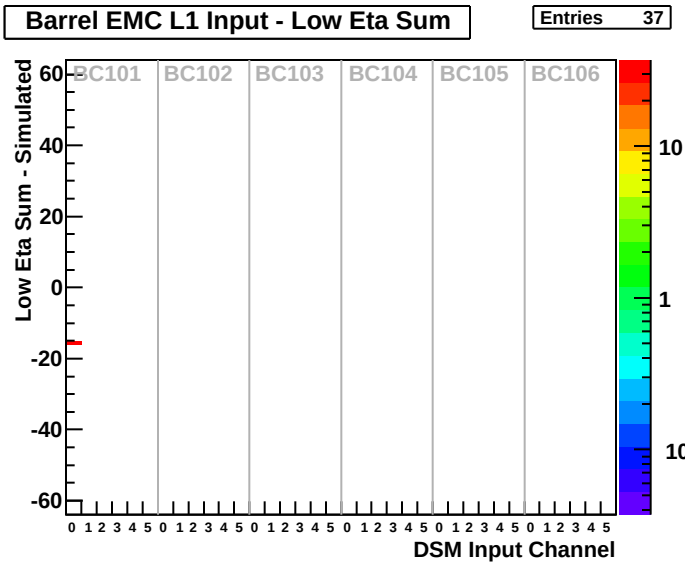
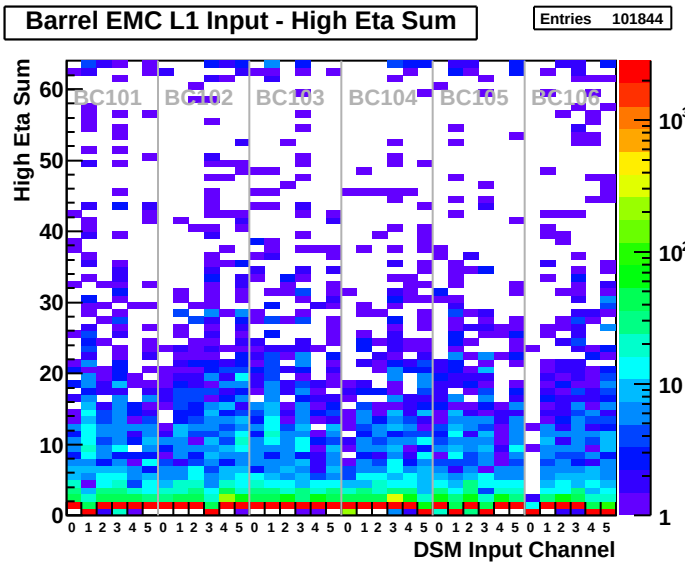
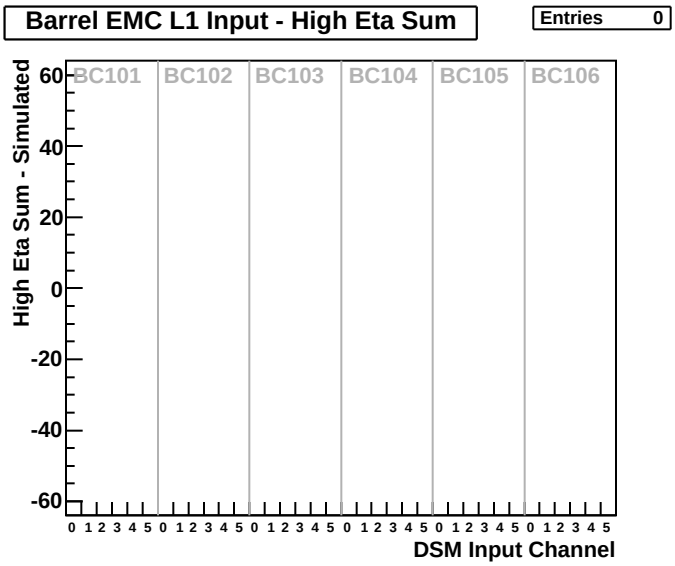
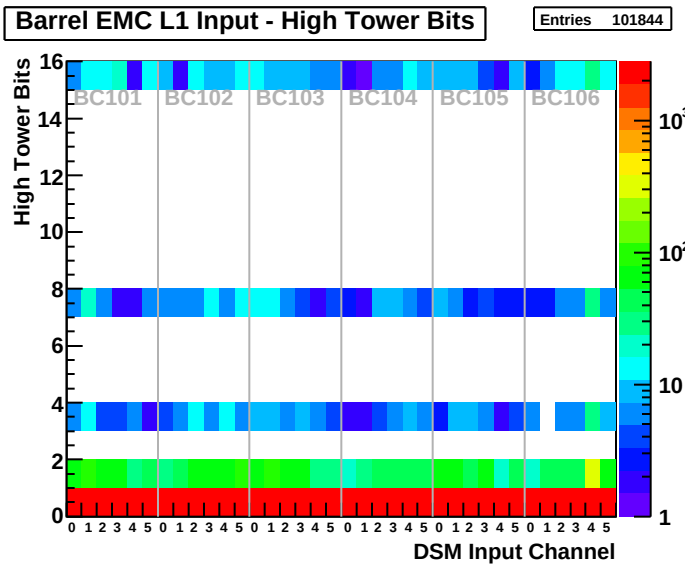
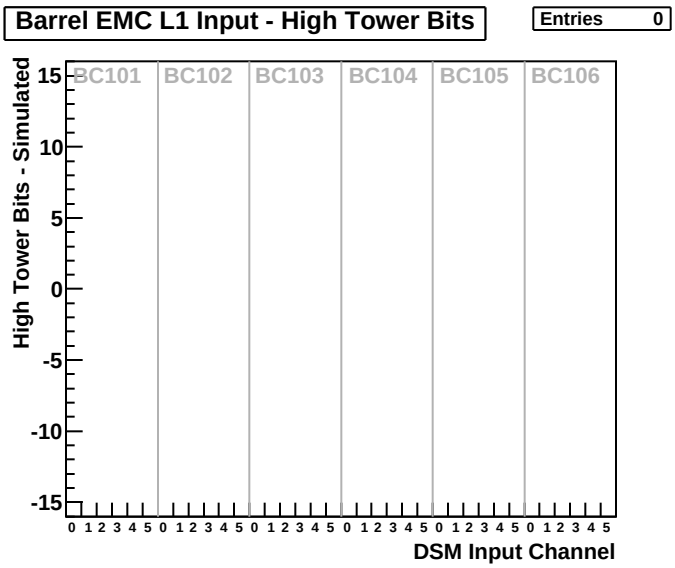

Barrel EMC L1 Input - Low Eta Sum
Entries 101844
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

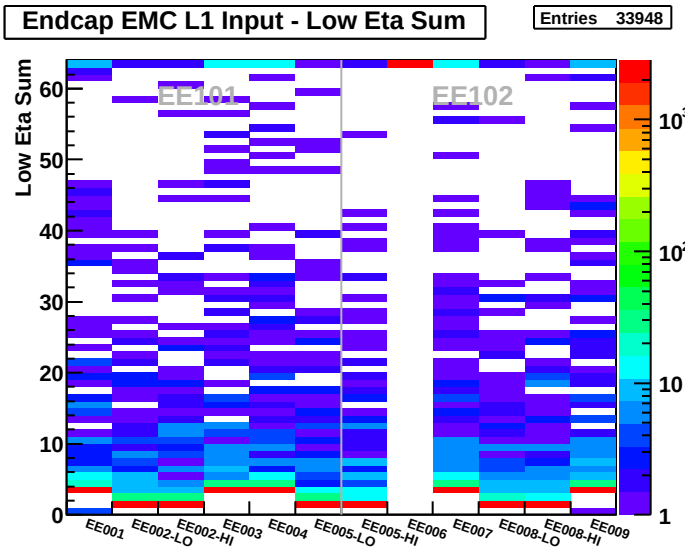

Barrel EMC L1 Input - Low Eta Sum
Entries 37
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

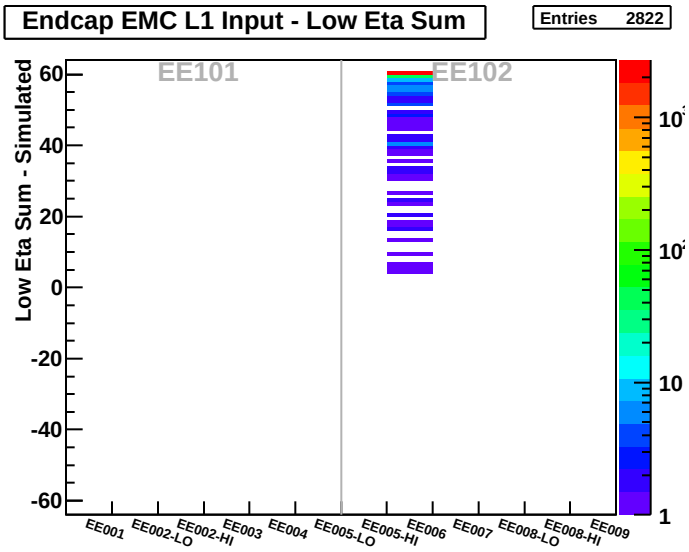

Barrel EMC L1 Input - High Eta Sum
Entries 101844
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

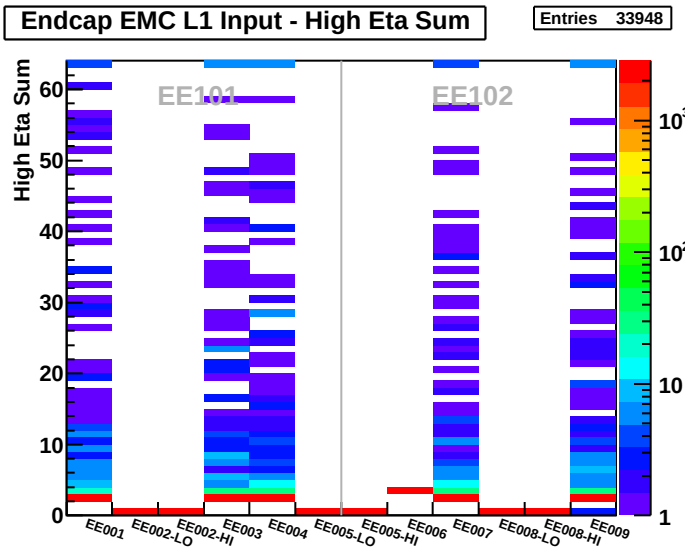

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

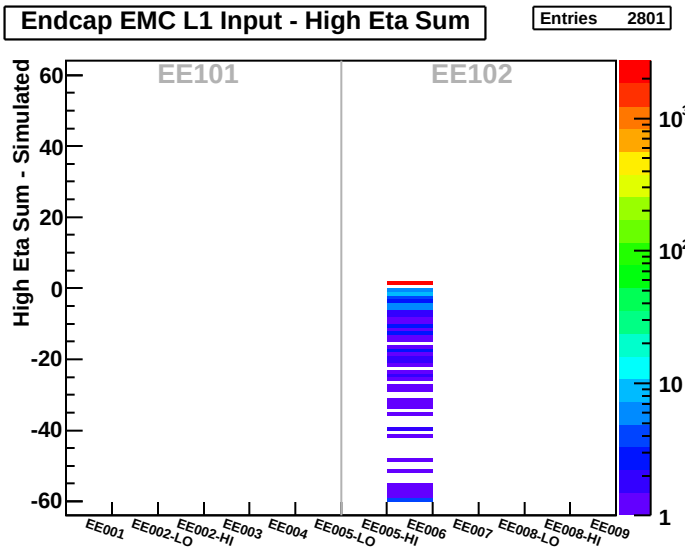

Barrel EMC L1 Input - High Tower Bits
Entries 101844
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

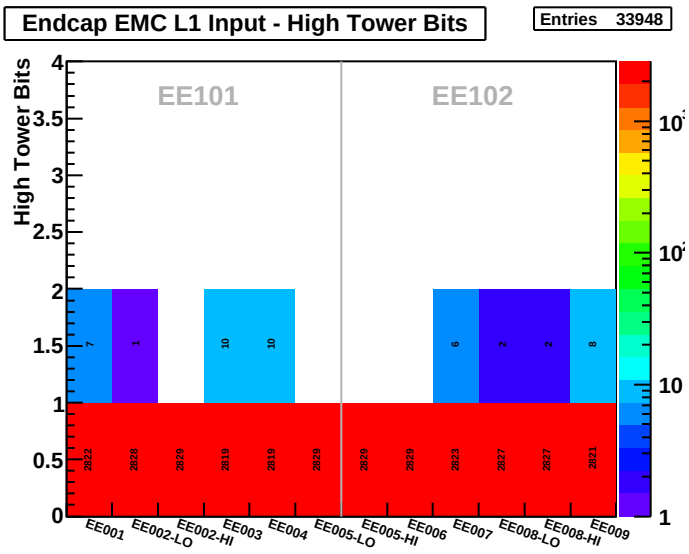

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

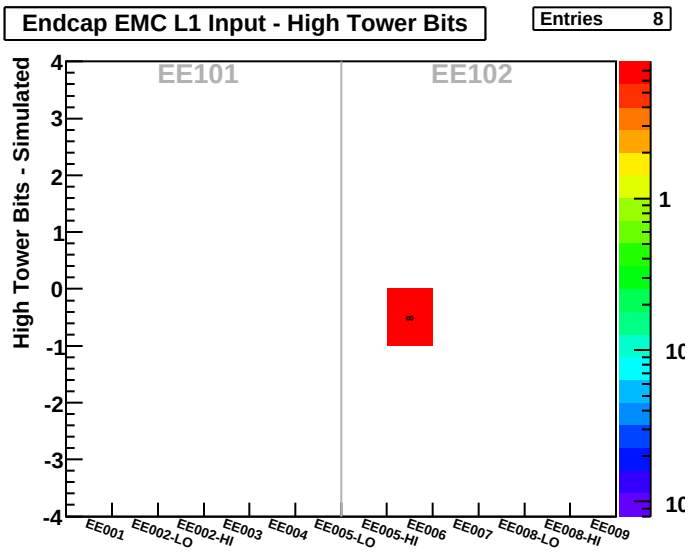

Endcap EMC L1 Input - Low Eta Sum
Entries 33948
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

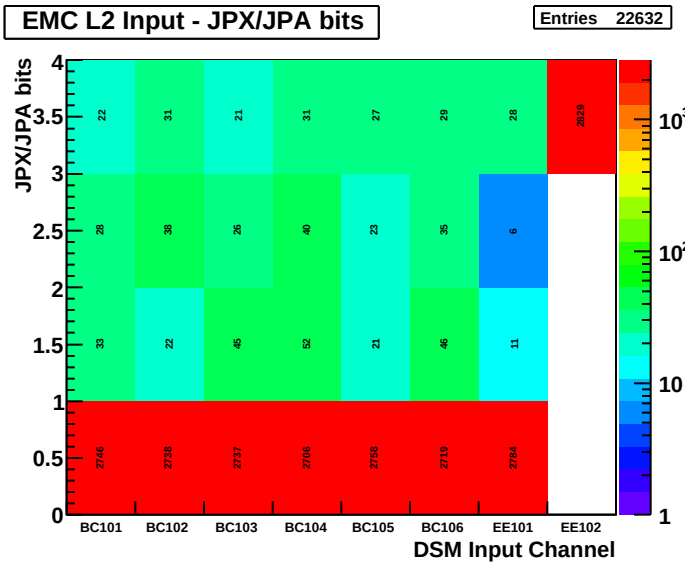

Endcap EMC L1 Input - Low Eta Sum
Entries 2822
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

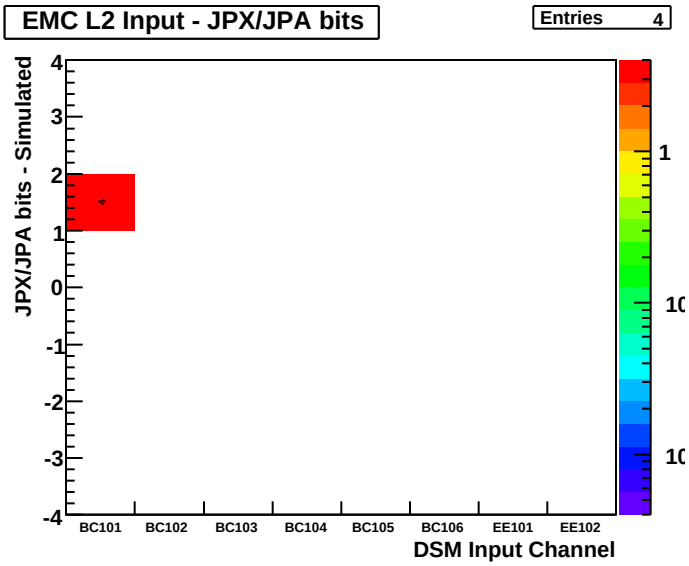

Endcap EMC L1 Input - High Eta Sum
Entries 33948
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

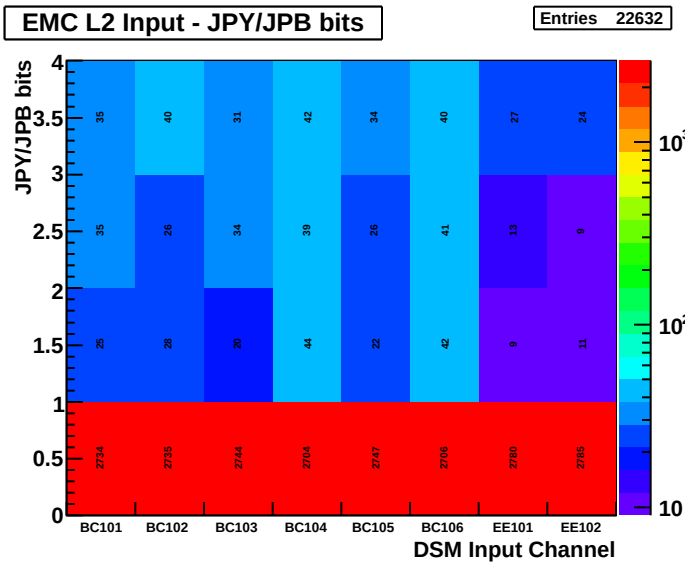

Endcap EMC L1 Input - High Eta Sum
Entries 2801
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

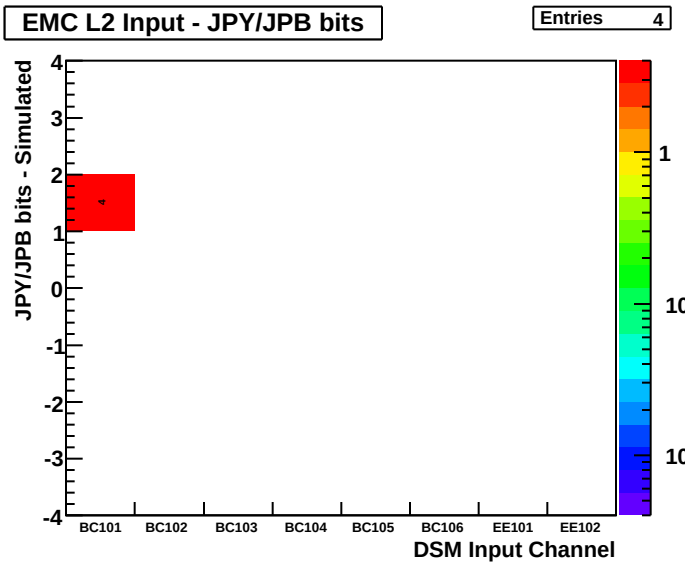

Endcap EMC L1 Input - High Tower Bits
Entries 33948
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

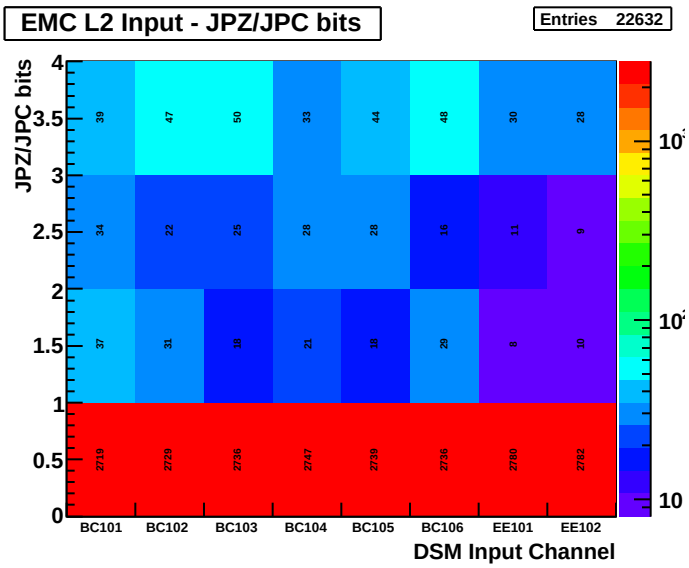

Endcap EMC L1 Input - High Tower Bits
Entries 8
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

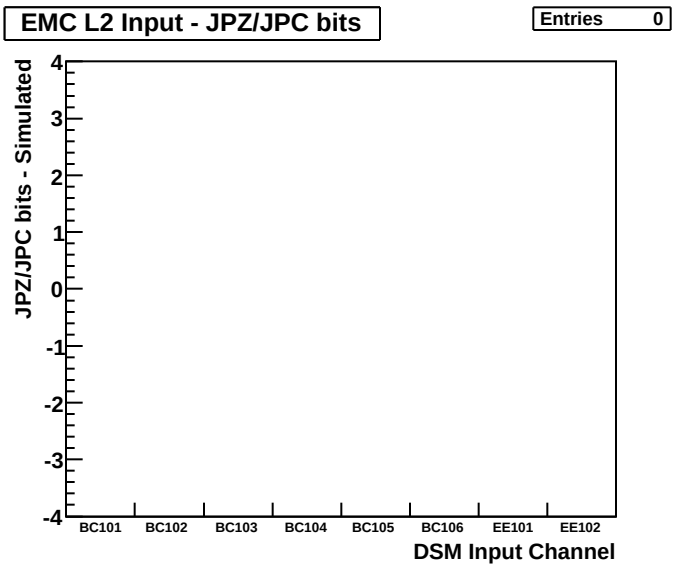

EMC L2 Input - JPX/JPA bits
Entries 22632
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

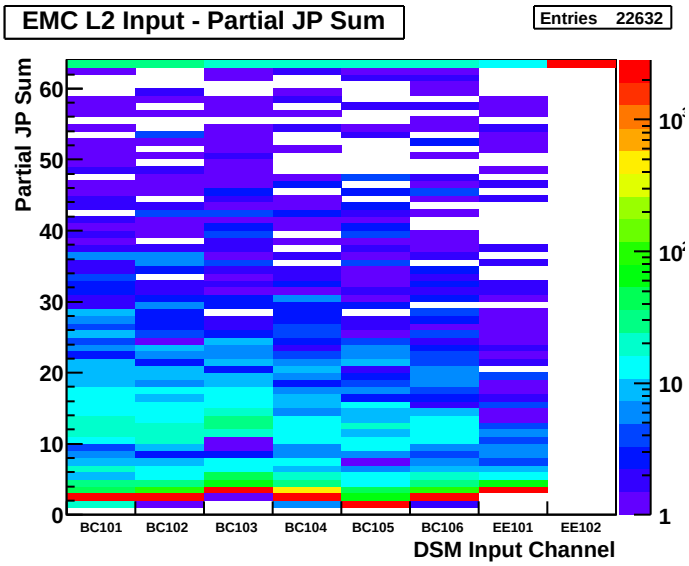

EMC L2 Input - JPX/JPA bits
Entries 4
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

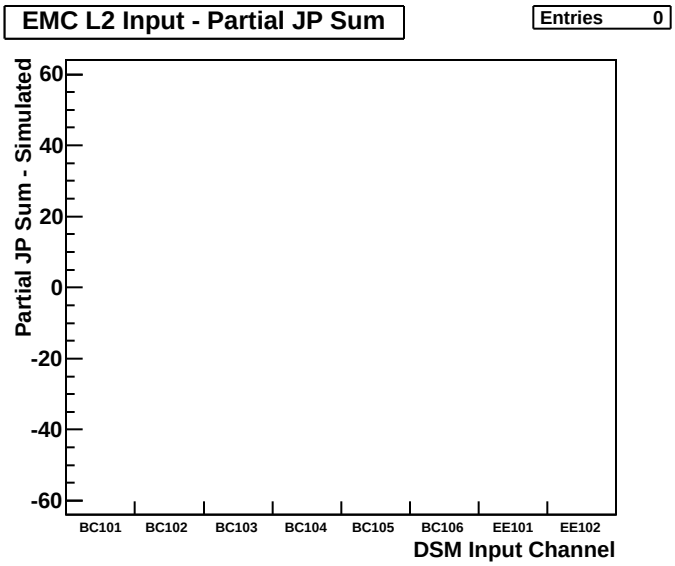

EMC L2 Input - JPY/JPB bits
Entries 22632
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

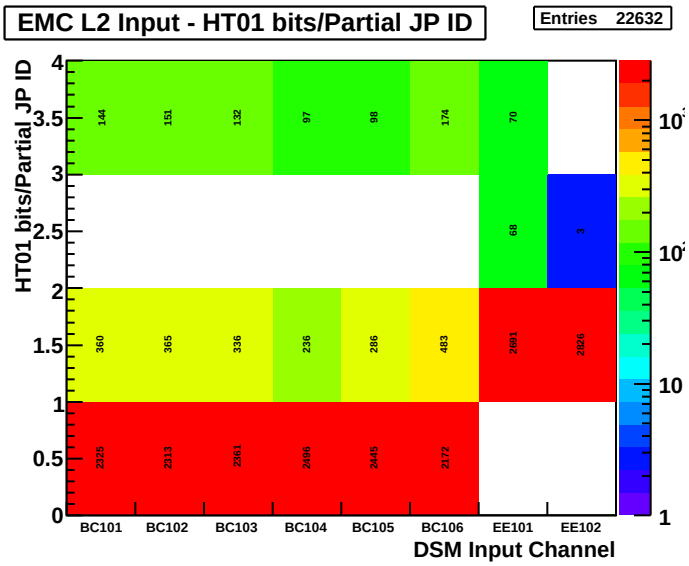

EMC L2 Input - JPY/JPB bits
Entries 4
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

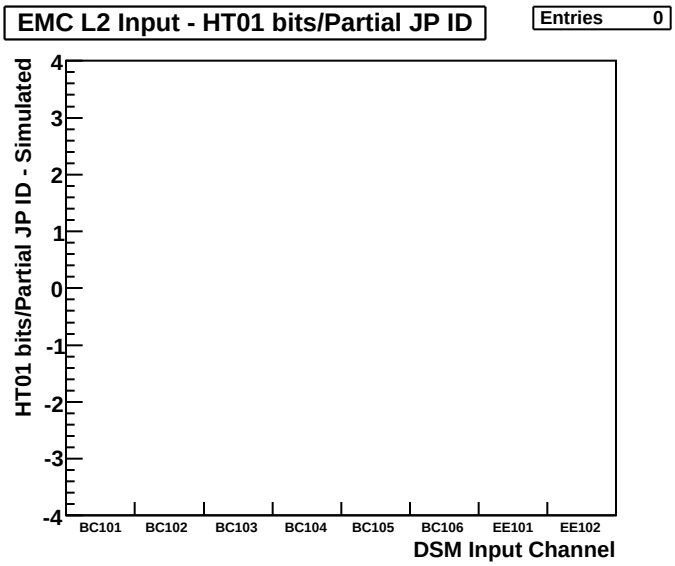

EMC L2 Input - JPZ/JPC bits
Entries 22632
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

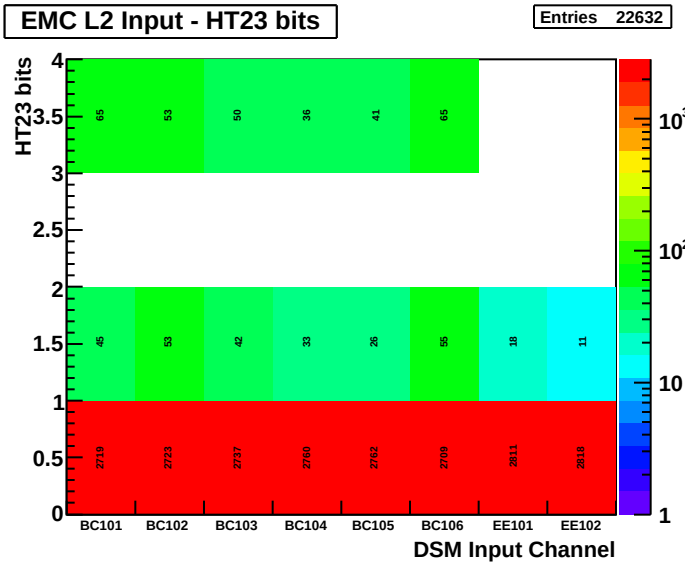

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

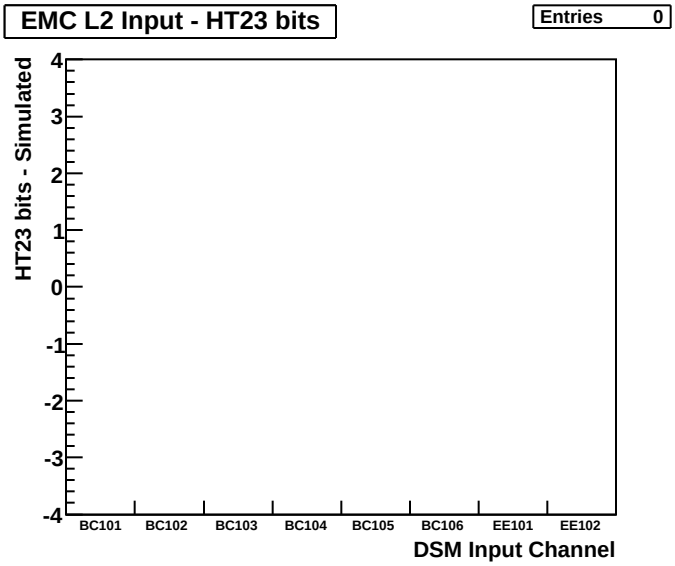

EMC L2 Input - Partial JP Sum
Entries 22632
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

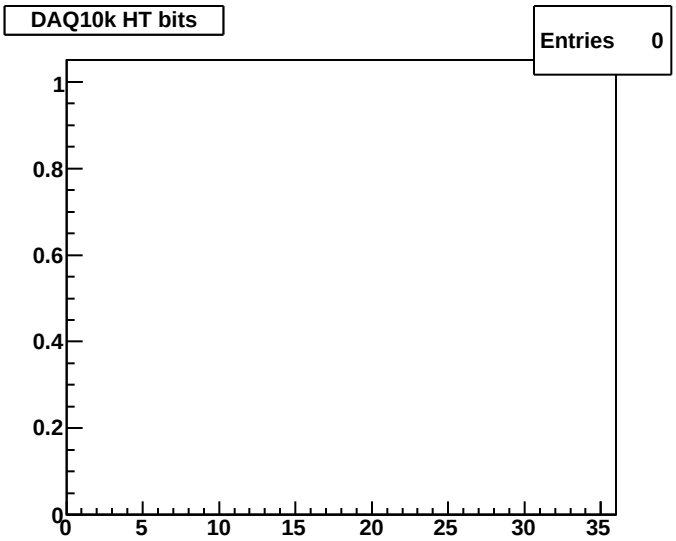

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

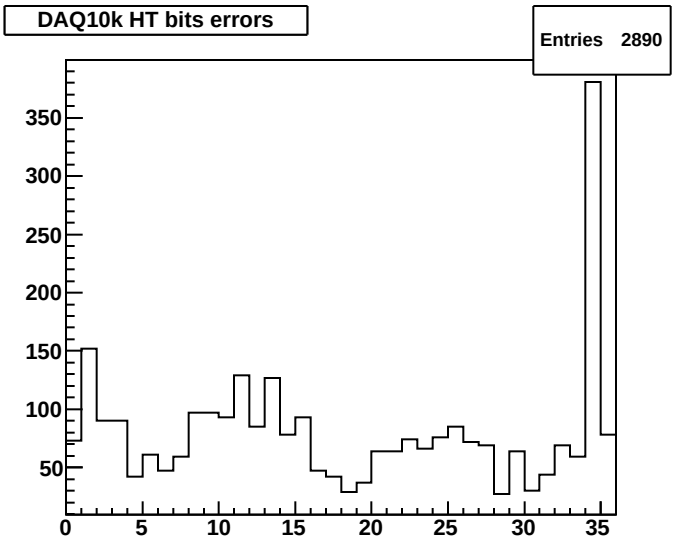

EMC L2 Input - HT01 bits/Partial JP ID
Entries 22632
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

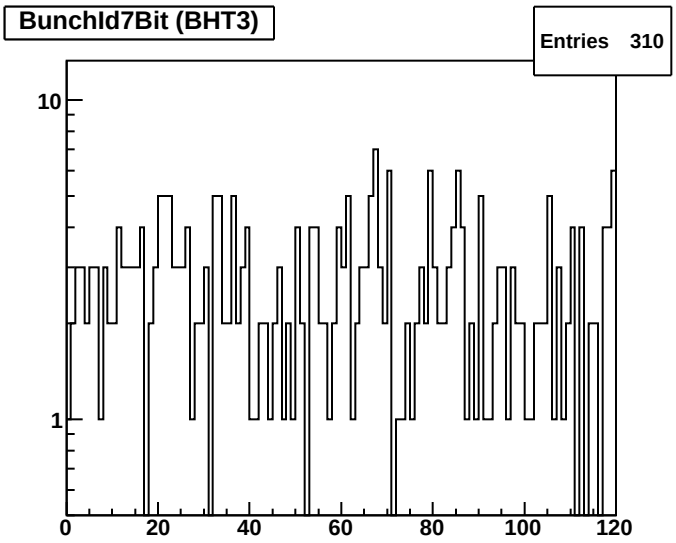

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

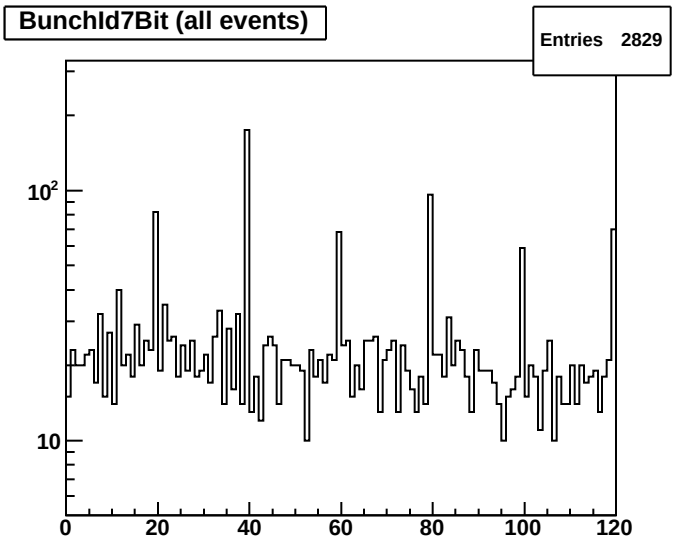

EMC L2 Input - HT23 bits
Entries 22632
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

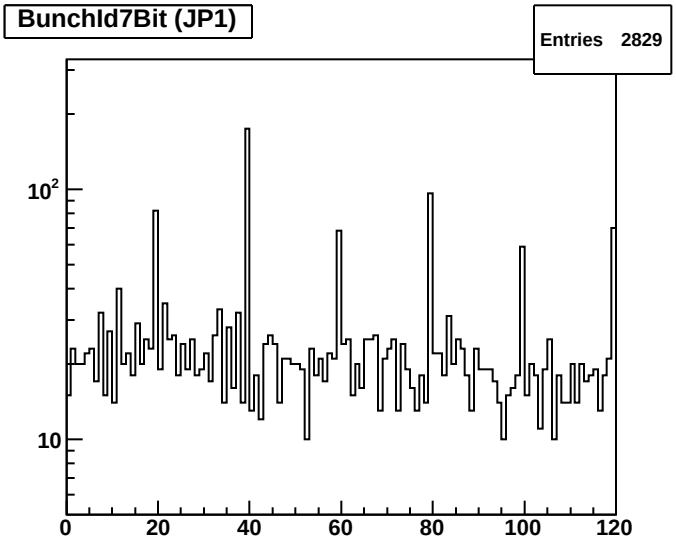

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

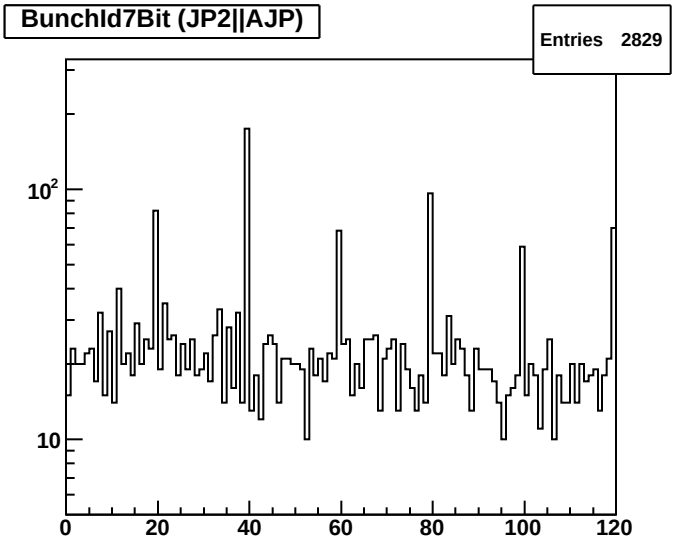

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

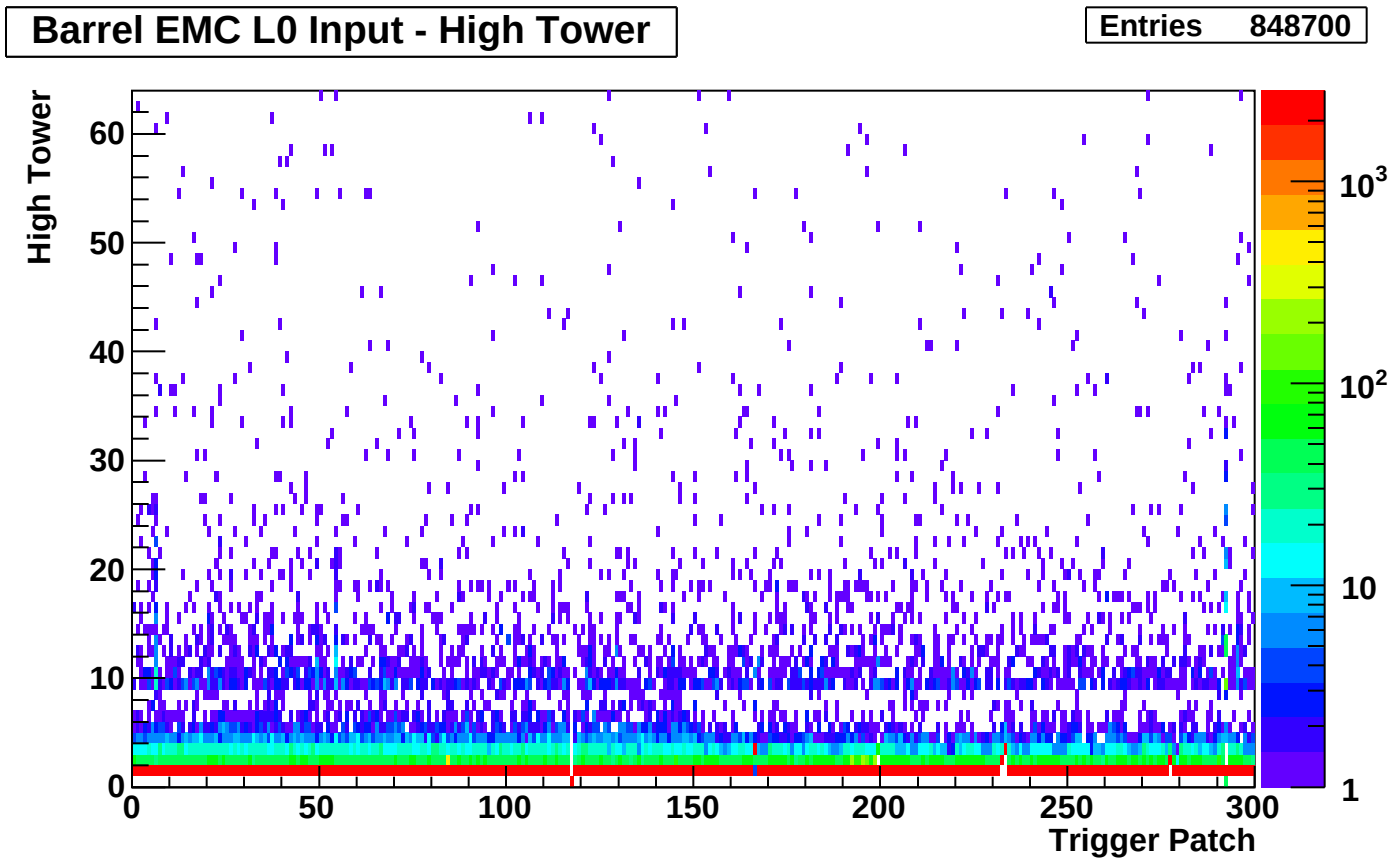

DAQ10k HT bits errors
Entries 2890
350
300
250
200
150
100
50
0 5 10 15 20 25 30 35

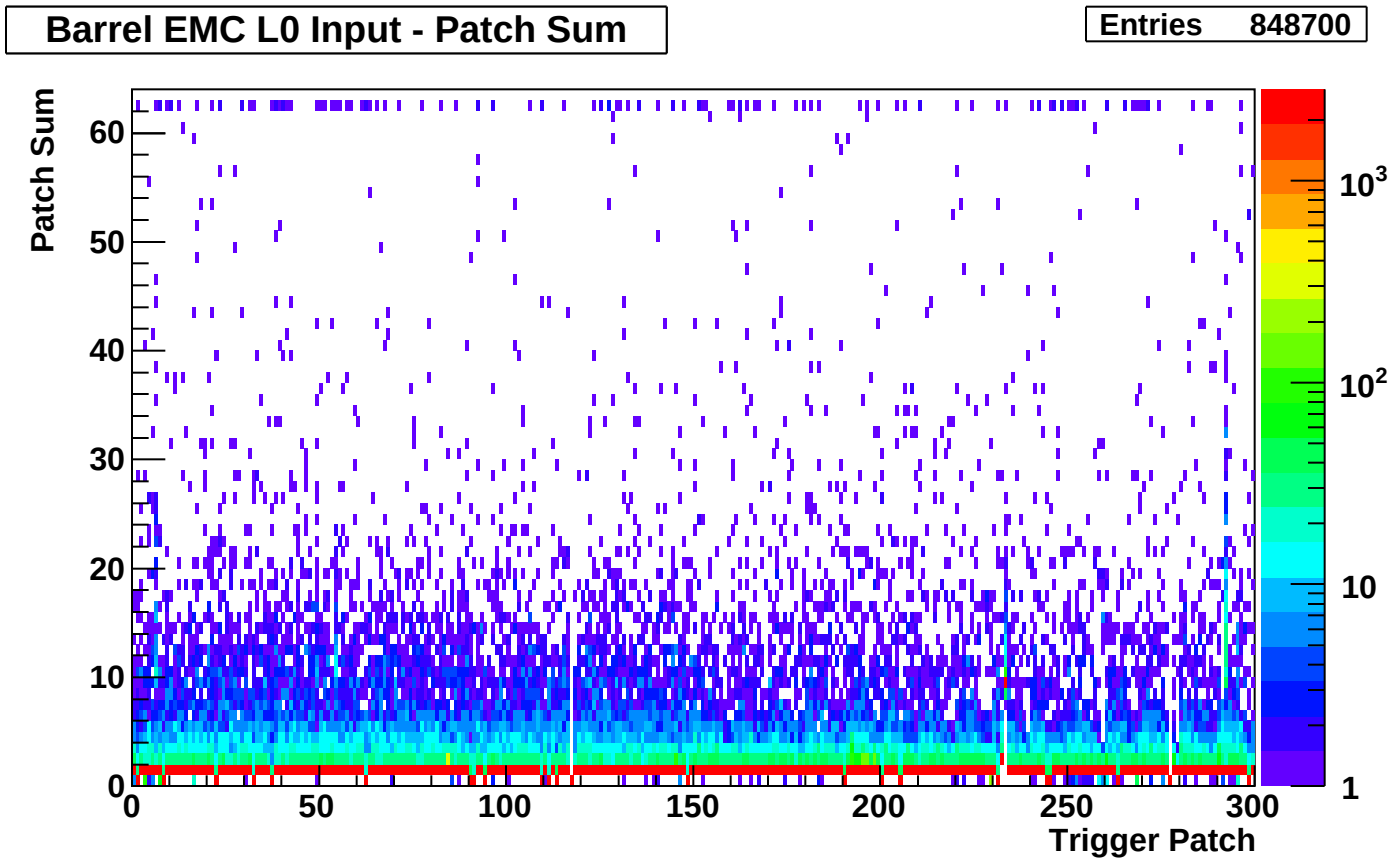

BunchId7Bit (BHT3)
Entries 310
10
1
0 20 40 60 80 100 120

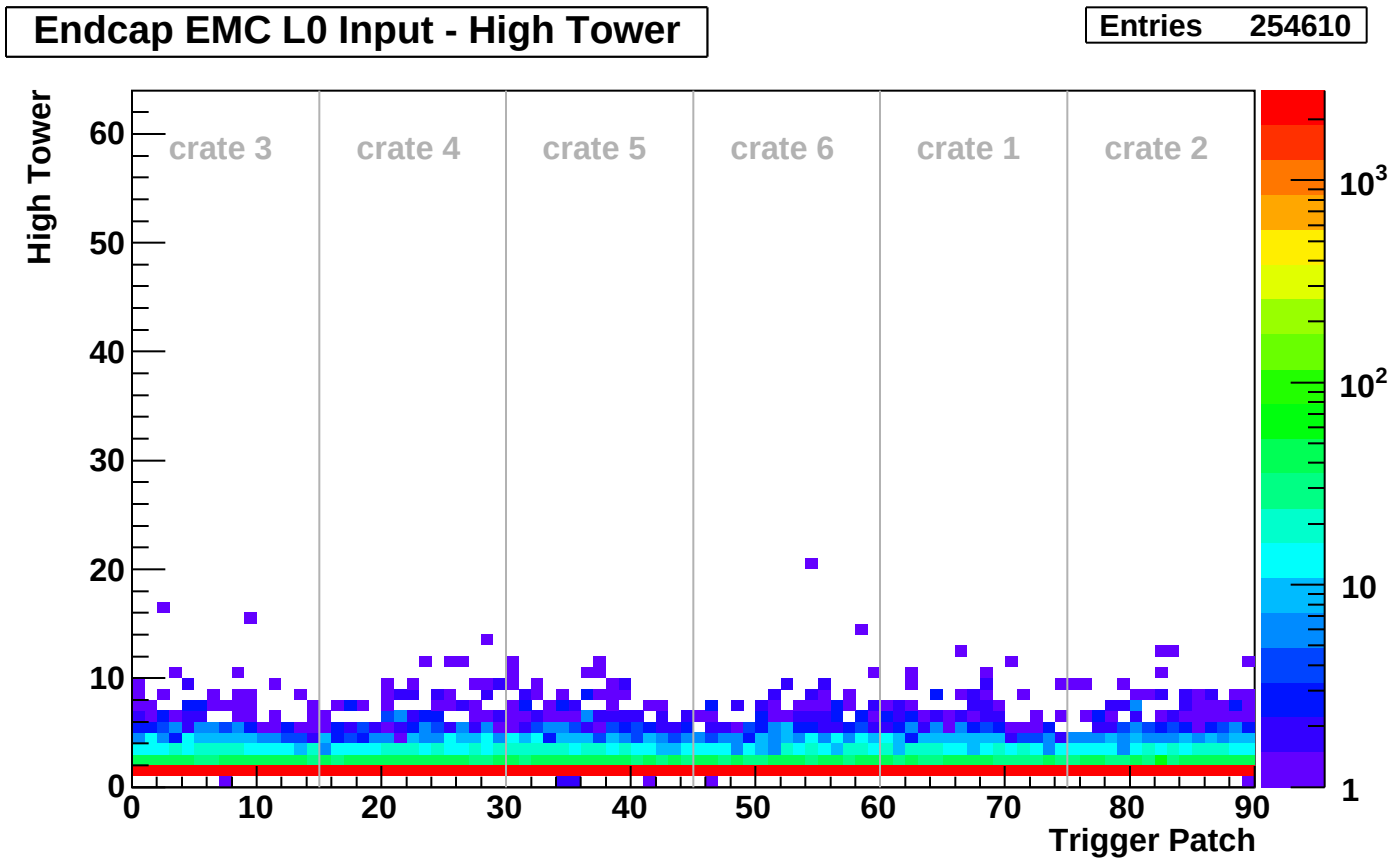

BunchId7Bit (all events)
Entries 2829
10^2
10
0 20 40 60 80 100 120

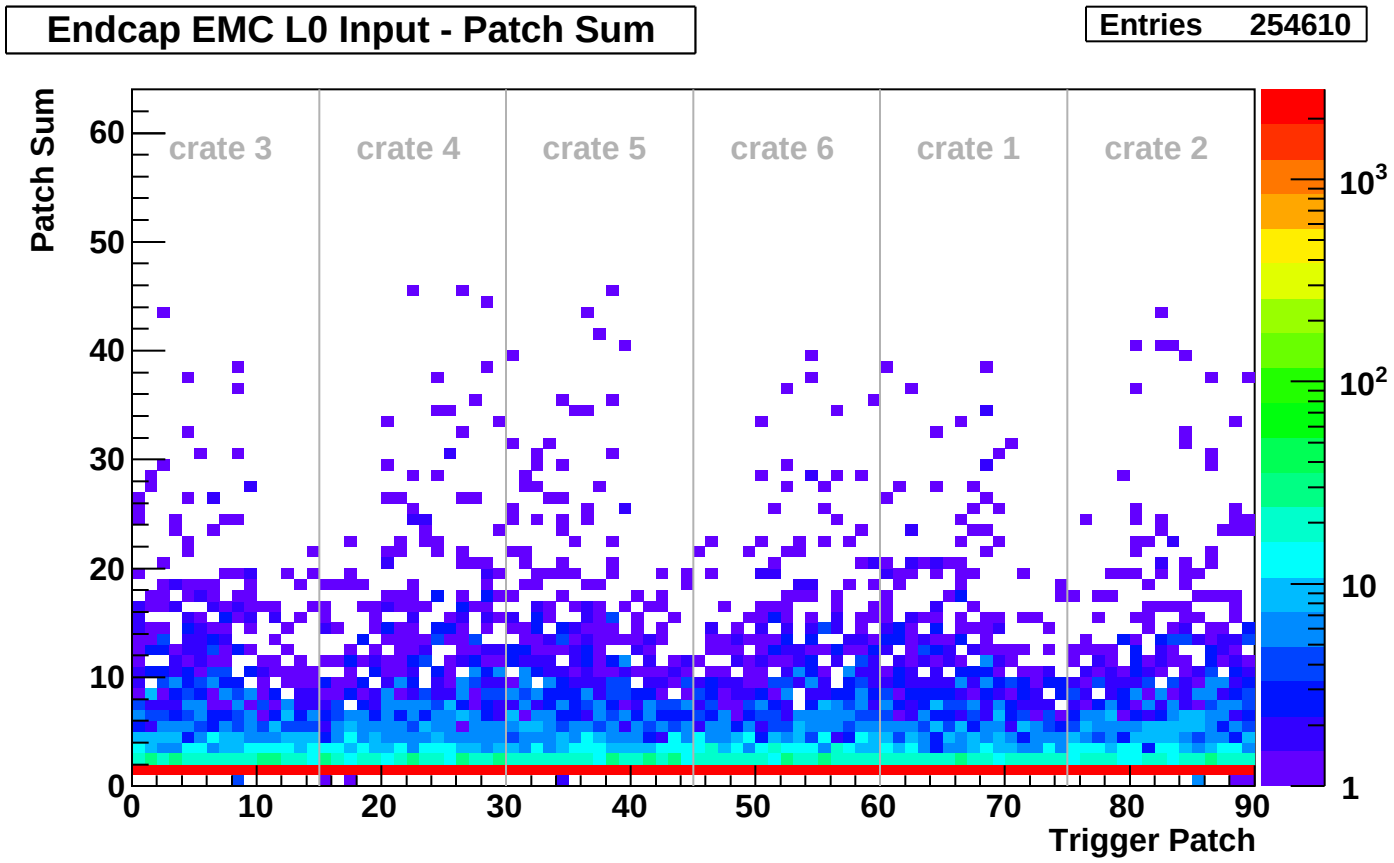

BunchId7Bit (JP1)
Entries 2829
10^2
10
0 20 40 60 80 100 120

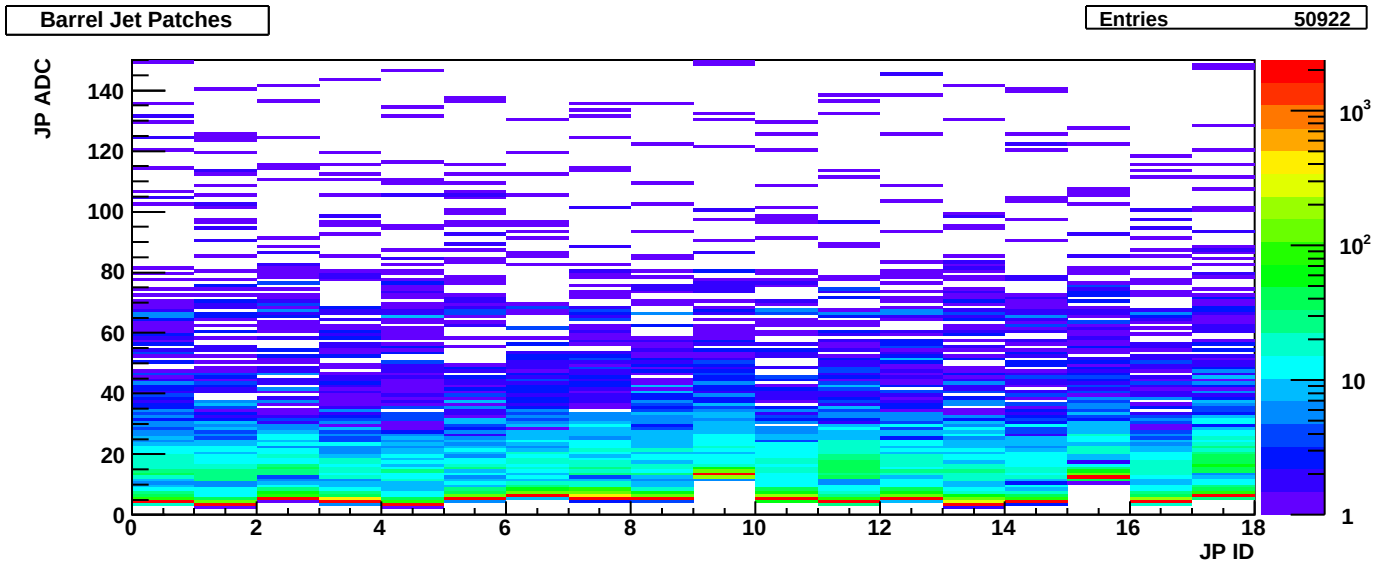

BunchId7Bit (JP2||AJP)
Entries 2829
10^2
10
0 20 40 60 80 100 120

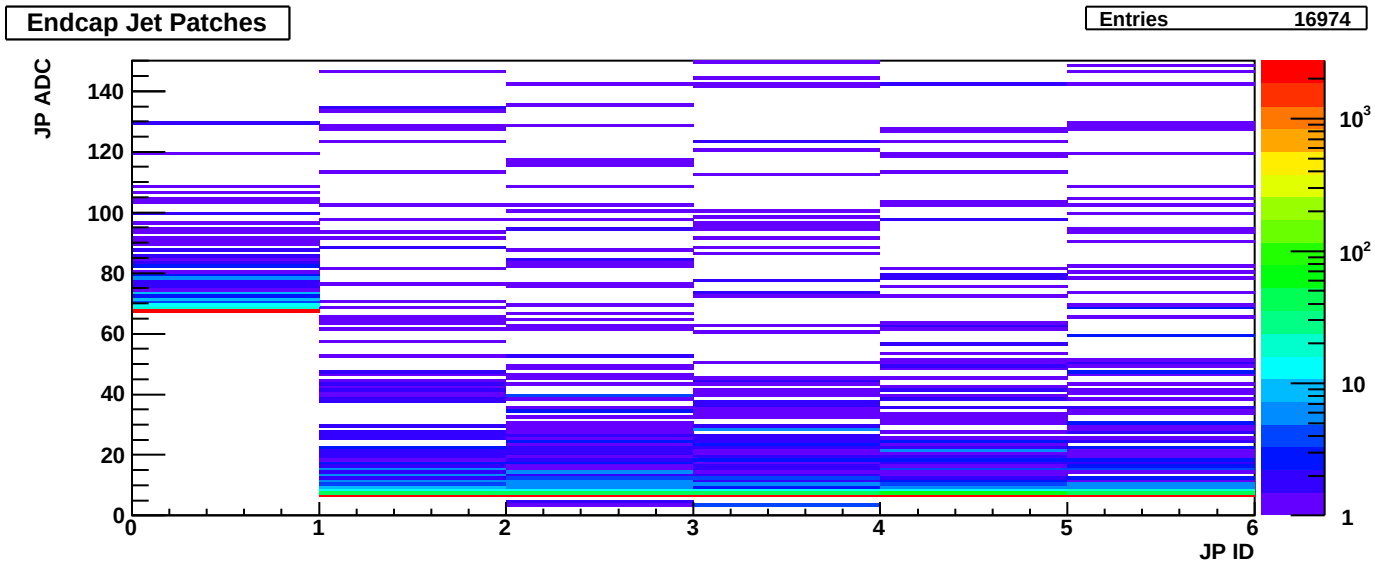

Barrel EMC L0 Input - High Tower
Entries 848700
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

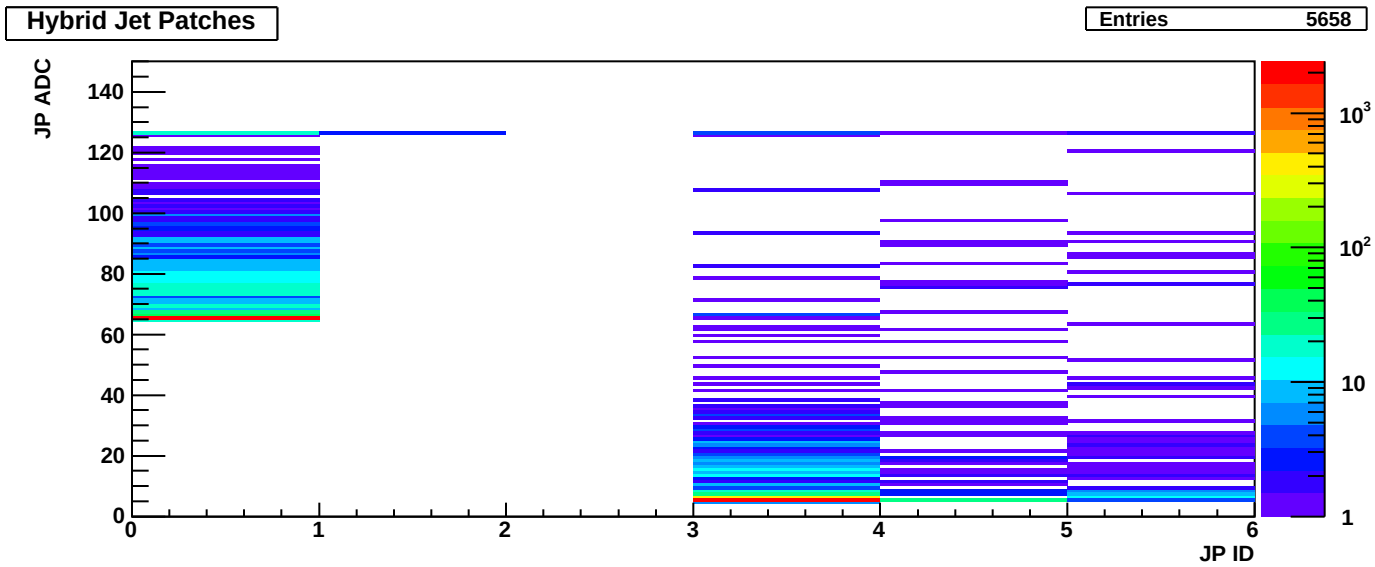

Barrel EMC L0 Input - Patch Sum
Entries 848700
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

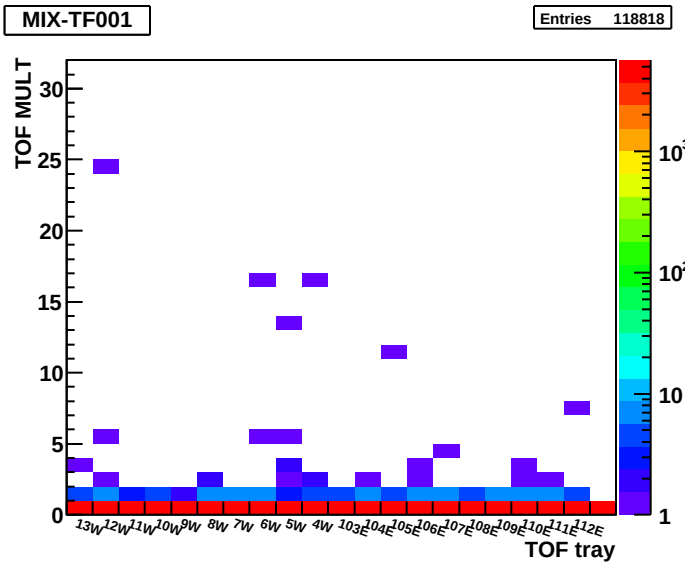

Endcap EMC L0 Input - High Tower
Entries 254610
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

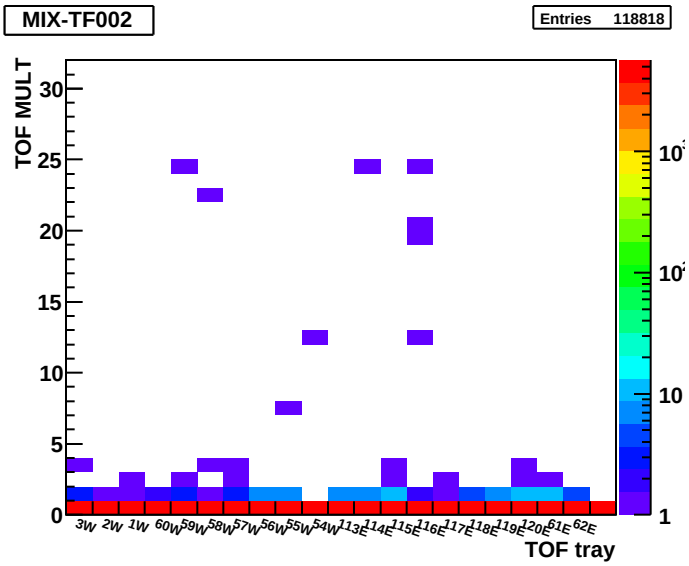

Endcap EMC L0 Input - Patch Sum
Entries 254610
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

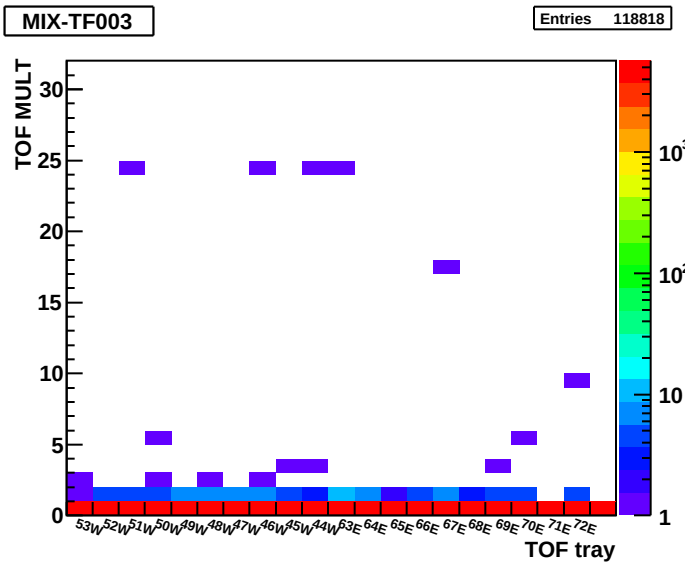

Barrel Jet Patches
Entries 50922
JP ADC
JP ID

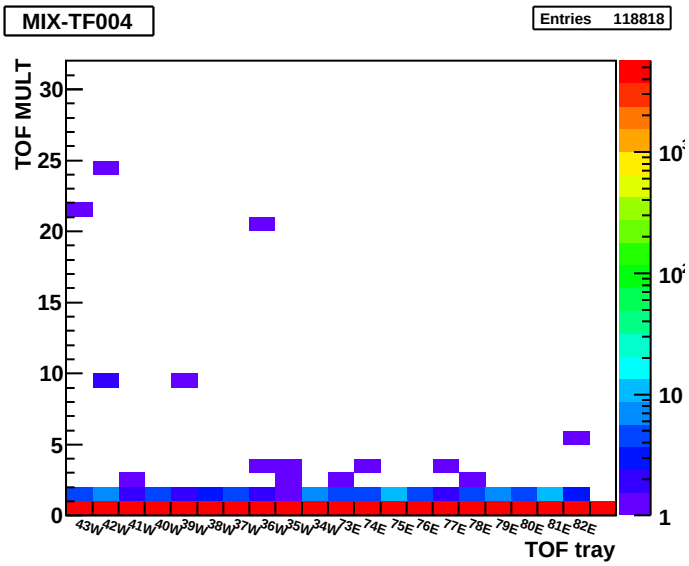

Endcap Jet Patches
Entries 16974
JP ADC
JP ID

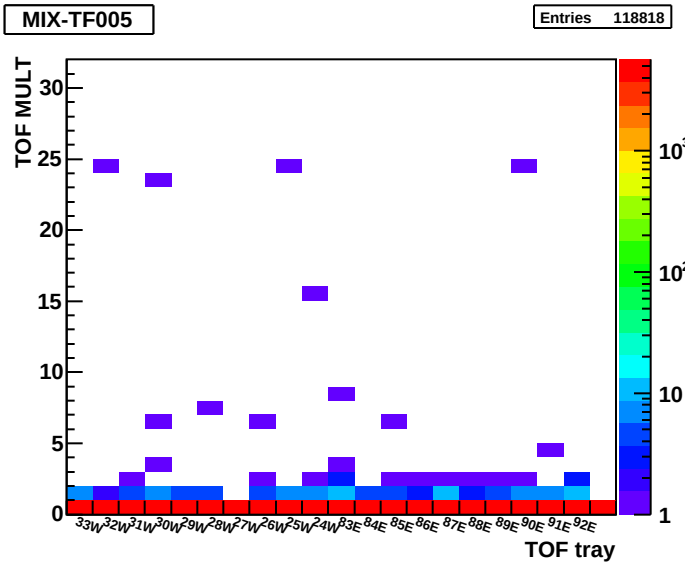

Hybrid Jet Patches
Entries 5658
JP ADC
JP ID

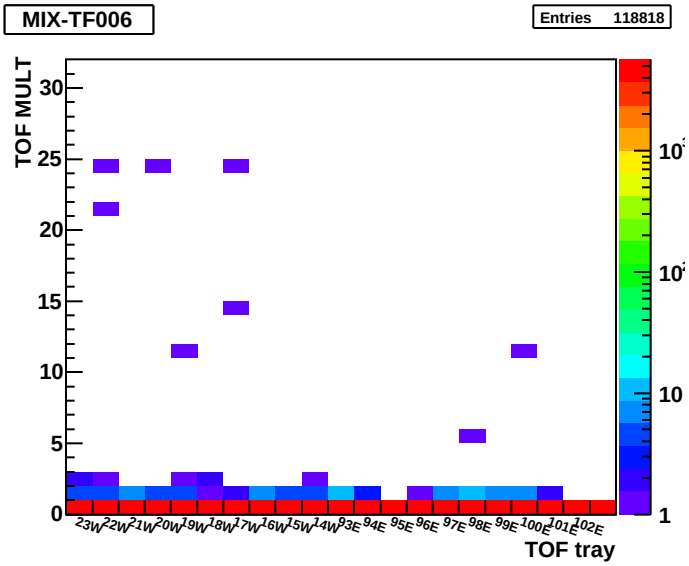

MIX-TF001
Entries 118818
TOF MULT
TOF tray

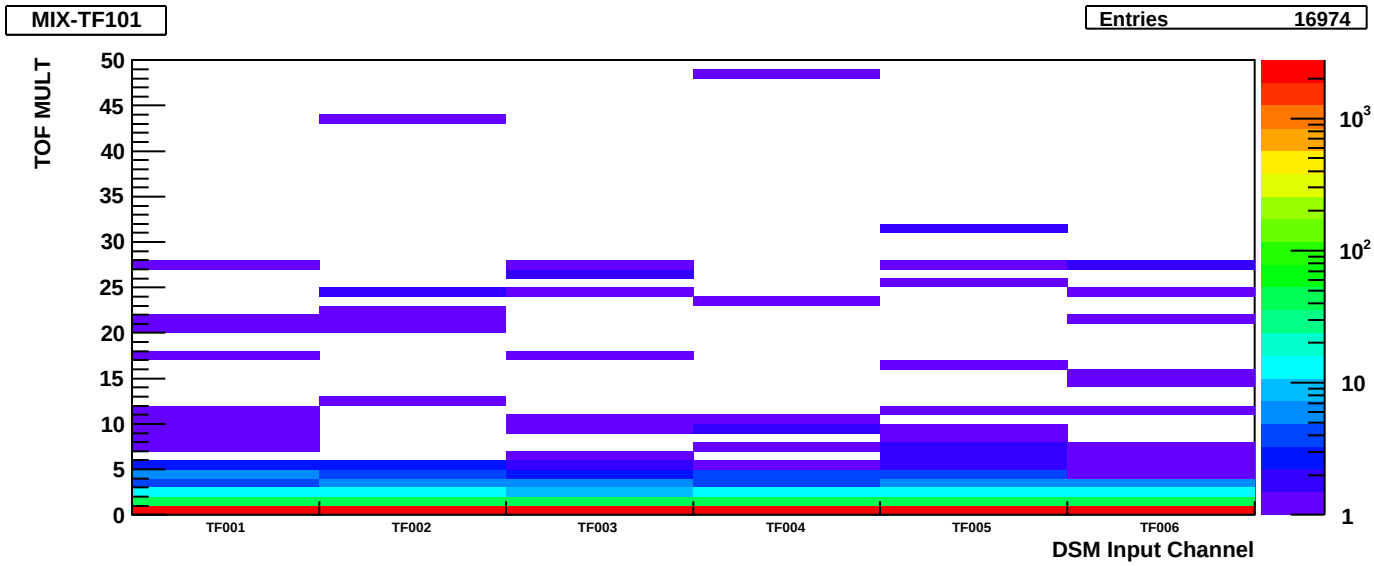

MIX-TF002
Entries 118818
TOF MULT
TOF tray

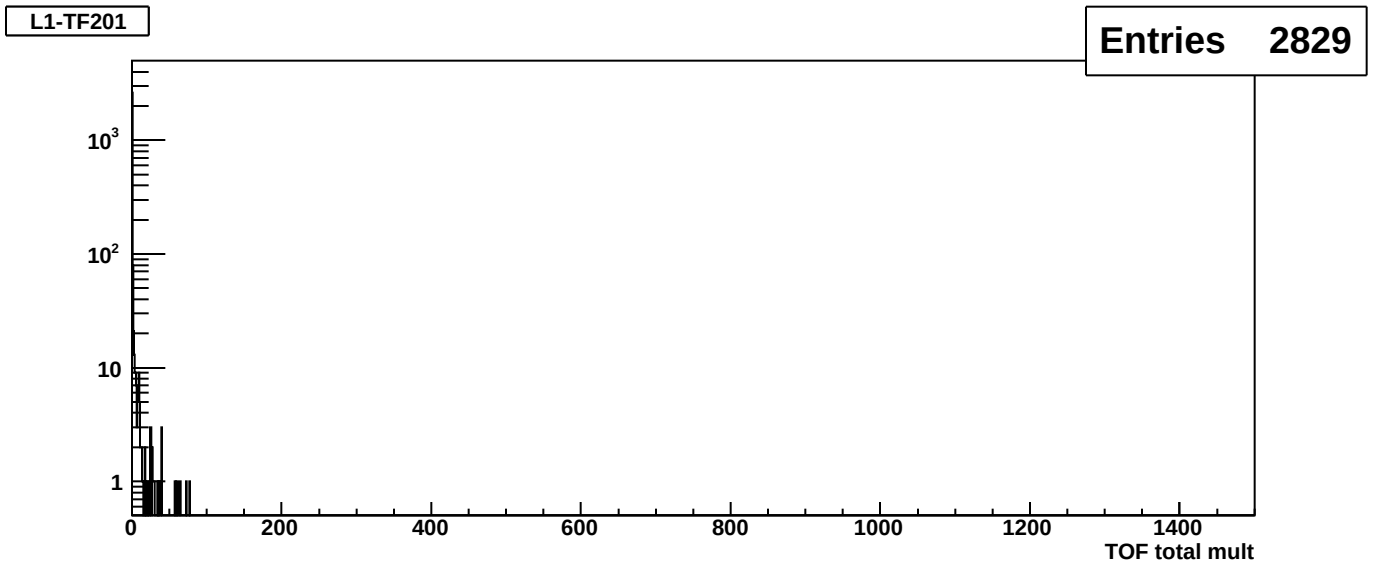

MIX-TF003
Entries 118818
TOF MULT
TOF tray

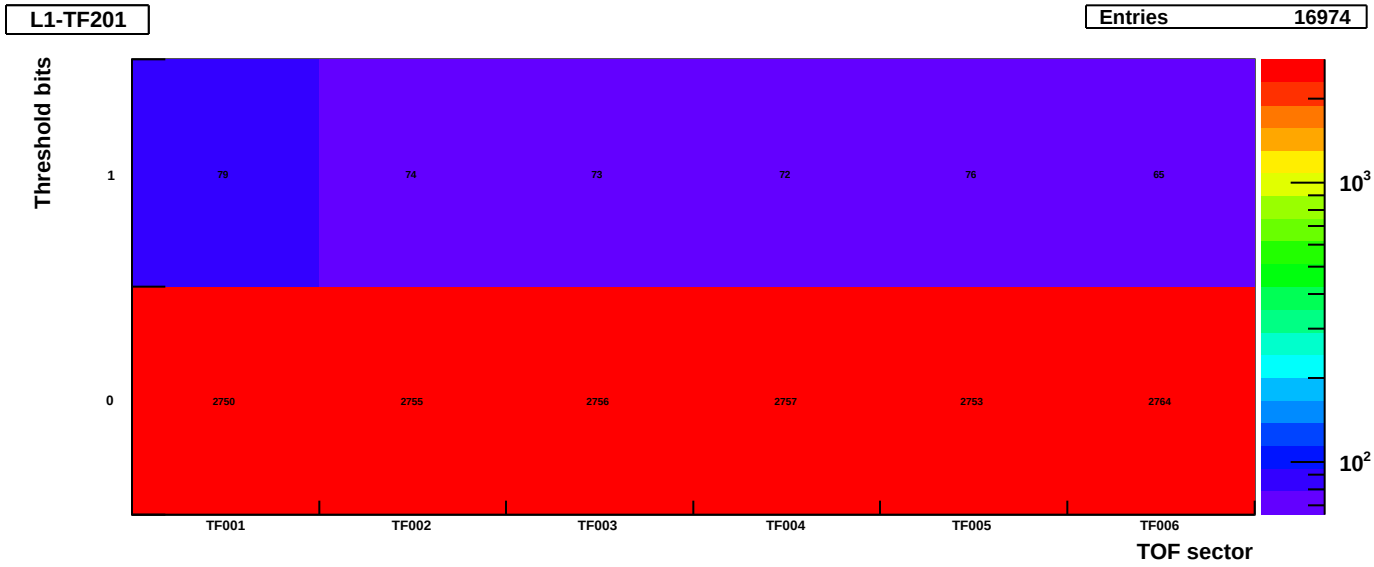

MIX-TF004
Entries 118818
TOF MULT
TOF tray

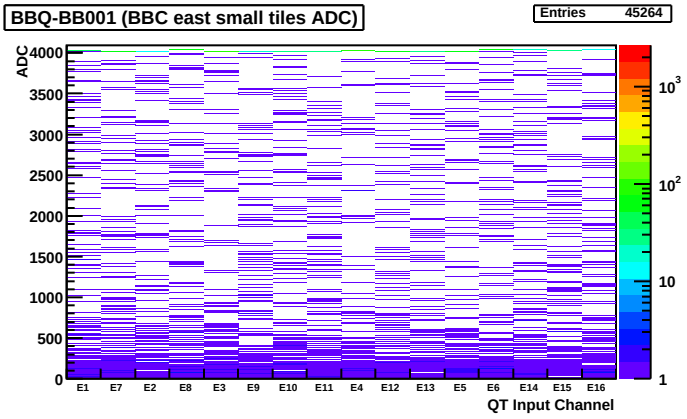

MIX-TF005
Entries 118818
TOF MULT
TOF tray

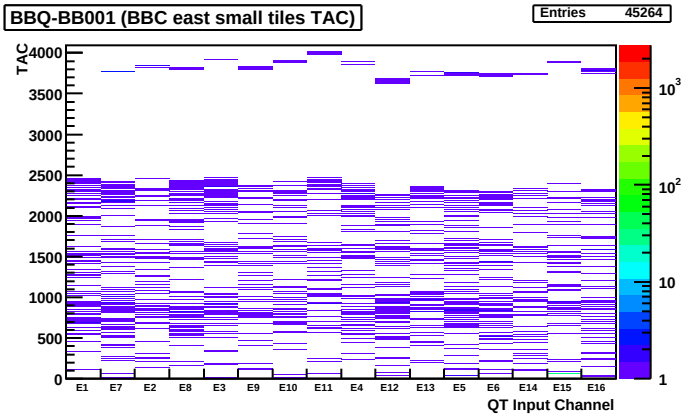

MIX-TF006
Entries 118818
TOF MULT
TOF tray

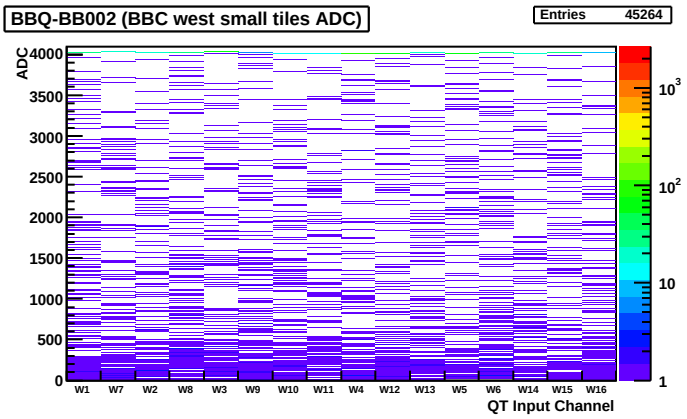

MIX-TF101
Entries 16974
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

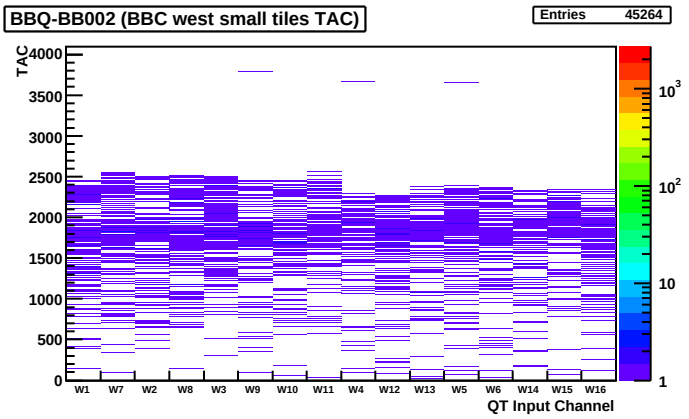

L1-TF201
Entries 2829
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

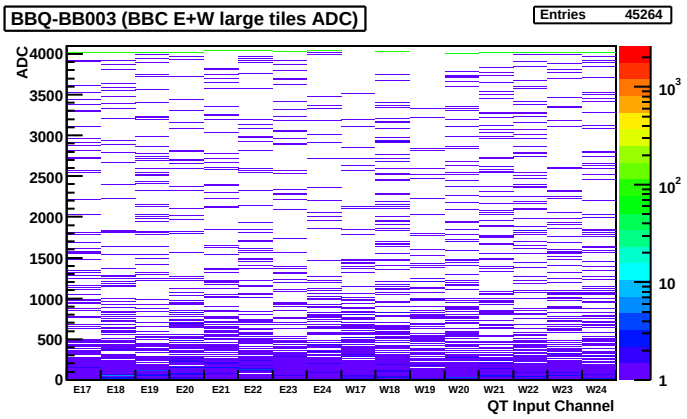

L1-TF201
Entries 16974
Threshold bits
1
0
79
74
73
72
76
65
2750
2755
2756
2757
2753
2764
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2

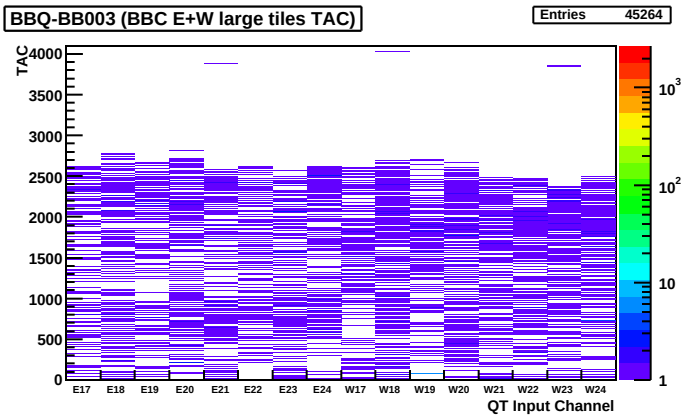

BBQ-BB001 (BBC east small tiles ADC)
Entries 45264
ADC
QT Input Channel

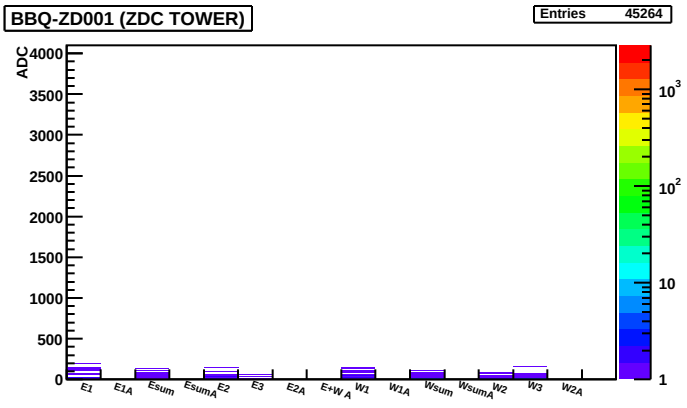

BBQ-BB001 (BBC east small tiles TAC)
Entries 45264
TAC
QT Input Channel

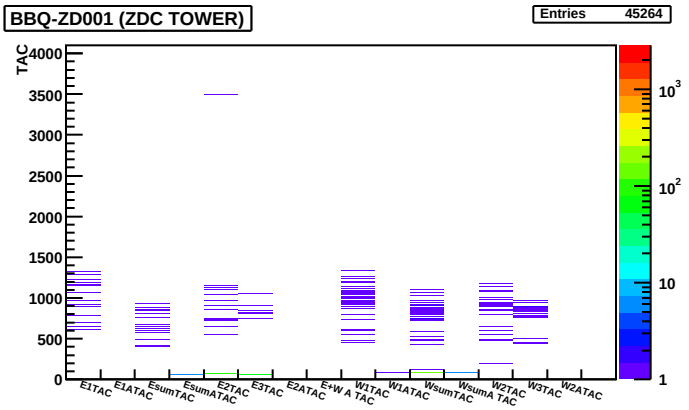

BBQ-BB002 (BBC west small tiles ADC)
Entries 45264
ADC
QT Input Channel

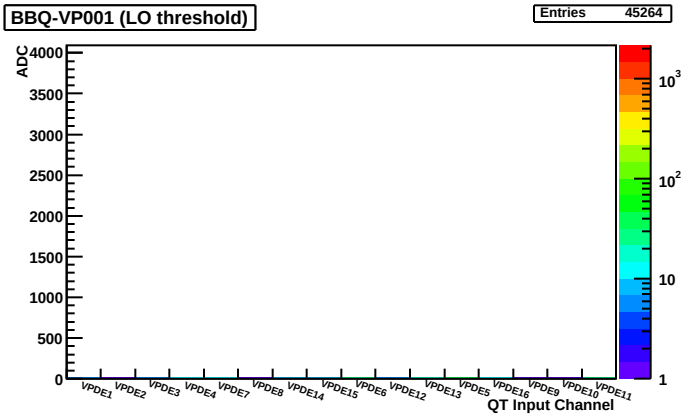

BBQ-BB002 (BBC west small tiles TAC)
Entries 45264
TAC
QT Input Channel

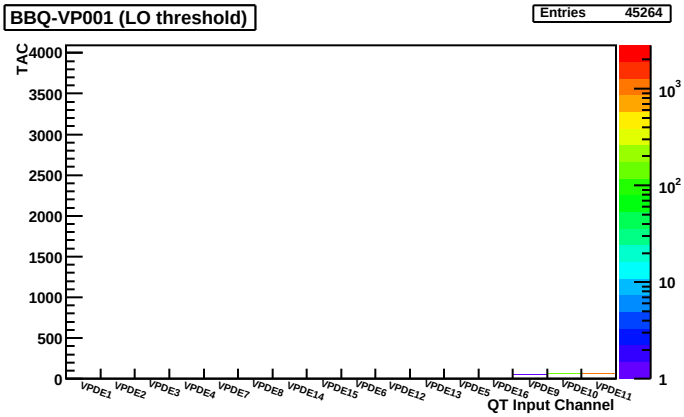

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 45264
ADC
QT Input Channel

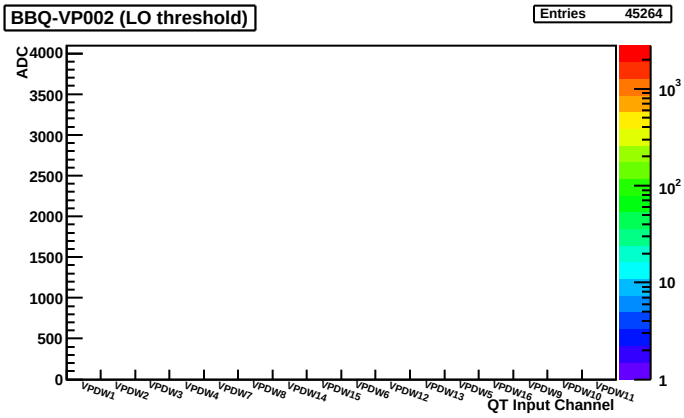

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 45264
TAC
QT Input Channel

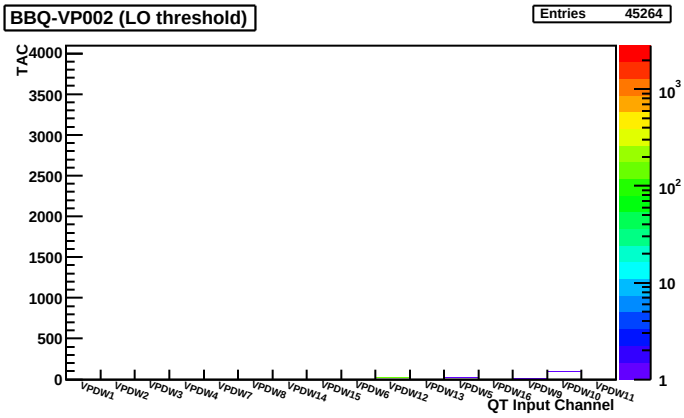

BBQ-ZD001 (ZDC TOWER)
Entries 45264
ADC

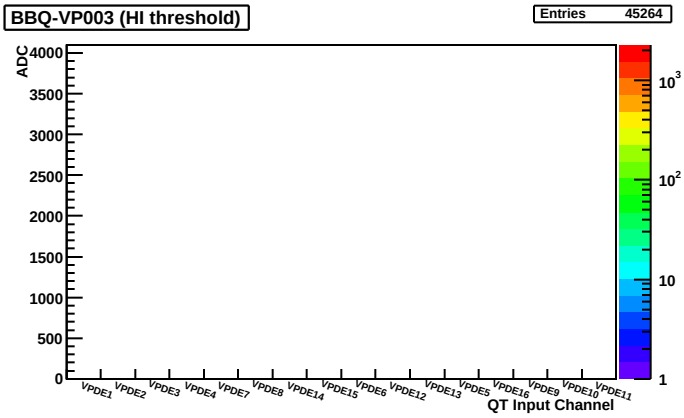

BBQ-ZD001 (ZDC TOWER)
Entries 45264
TAC

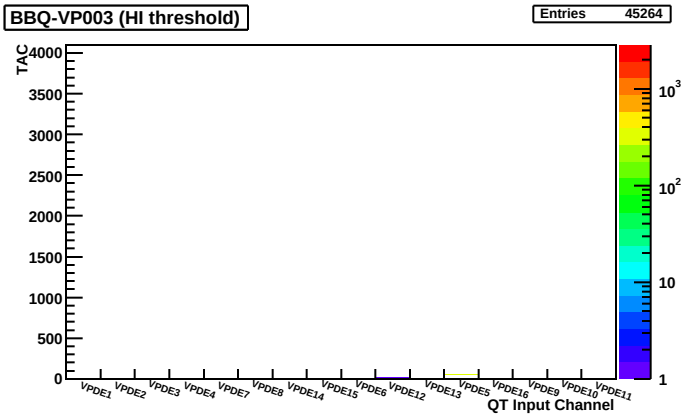

BBQ-VP001 (LO threshold)
Entries 45264
ADC
QT Input Channel

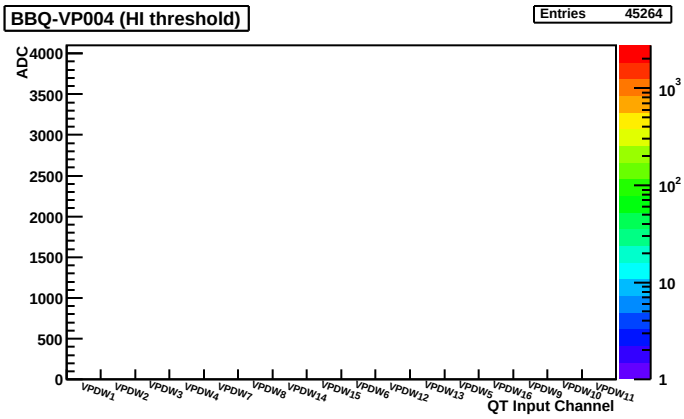

BBQ-VP001 (LO threshold)
Entries 45264
TAC
QT Input Channel

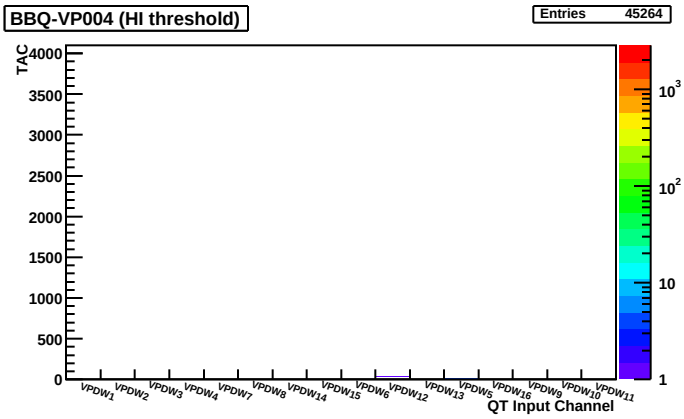

BBQ-VP002 (LO threshold)
Entries 45264
ADC
QT Input Channel

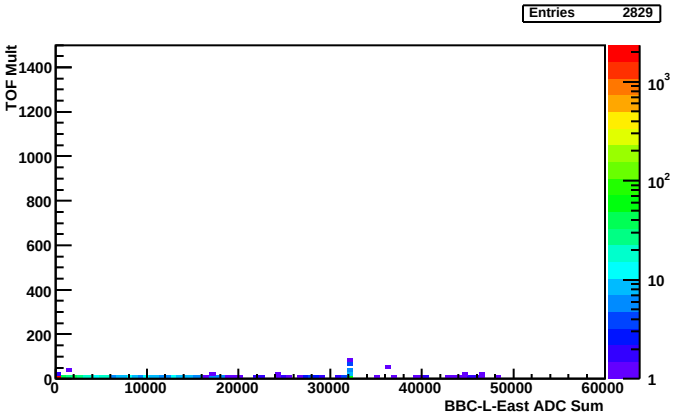

BBQ-VP002 (LO threshold)
Entries 45264
TAC
QT Input Channel

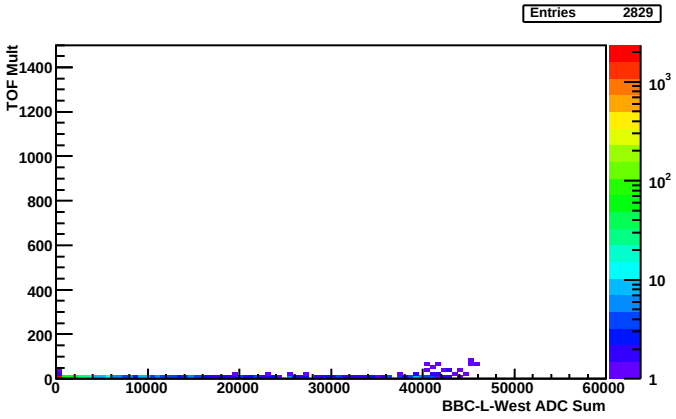

BBQ-VP003 (HI threshold)
Entries 45264
ADC
QT Input Channel

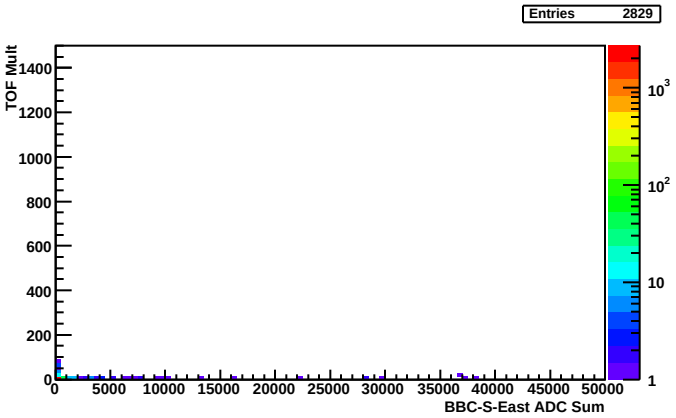

BBQ-VP003 (HI threshold)
Entries 45264
TAC
QT Input Channel

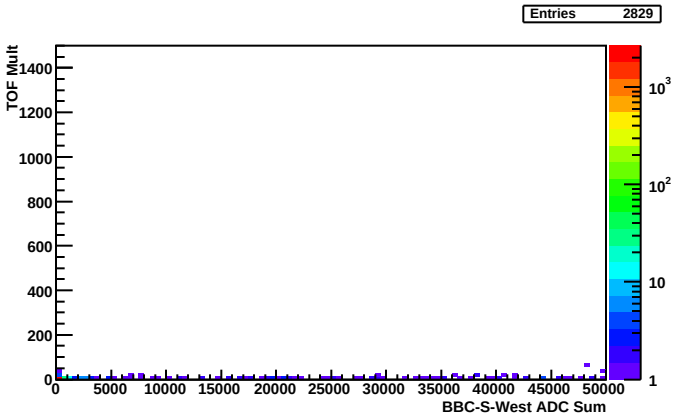

BBQ-VP004 (HI threshold)
Entries 45264
ADC
QT Input Channel

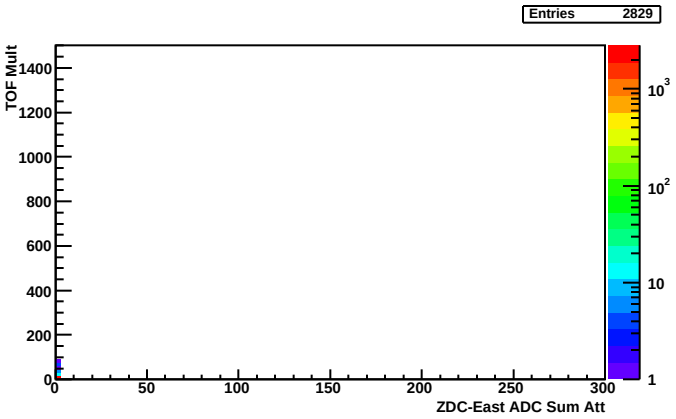

BBQ-VP004 (HI threshold)
Entries 45264
TAC
QT Input Channel

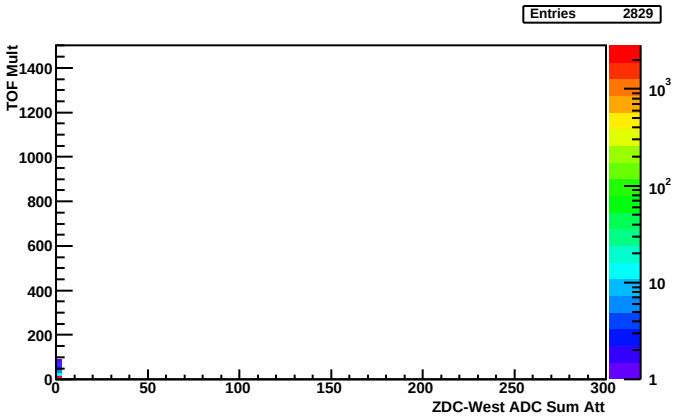

Entries 2829
TOF Mult
BBC-L-East ADC Sum

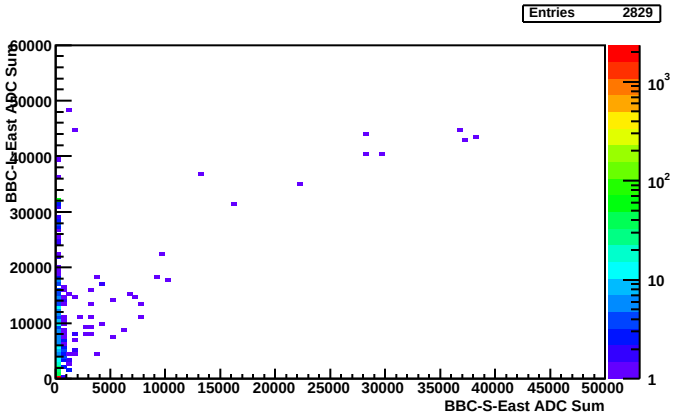

Entries 2829
TOF Mult
BBC-L-West ADC Sum

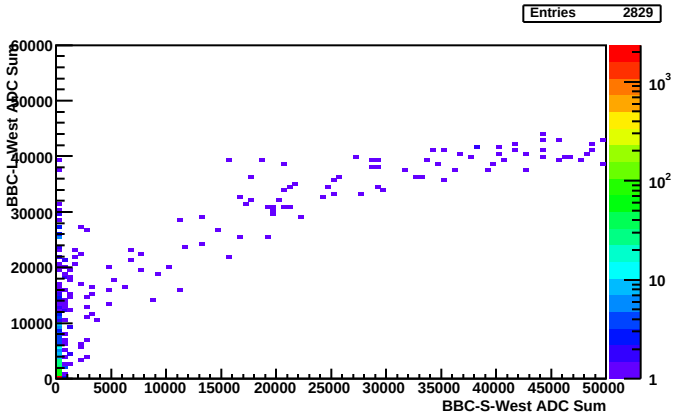

Entries 2829
TOF Mult
BBC-S-East ADC Sum

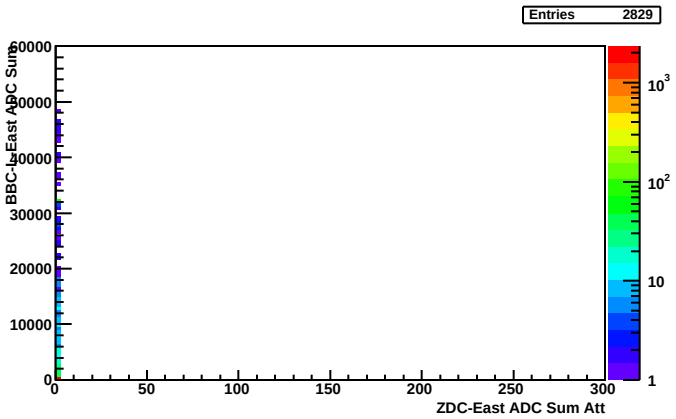

Entries 2829
TOF Mult
BBC-S-West ADC Sum

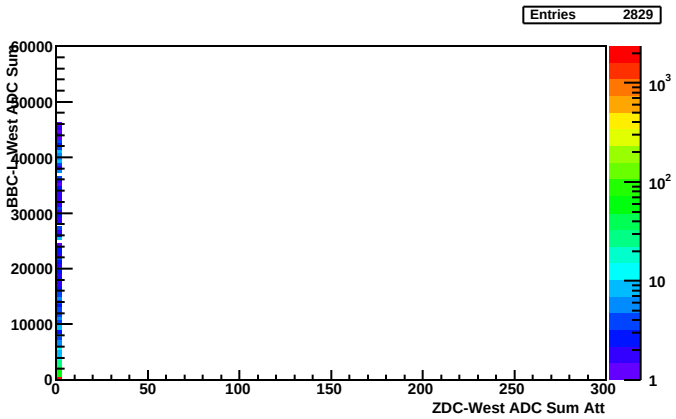

Entries 2829
TOF Mult
ZDC-East ADC Sum Att

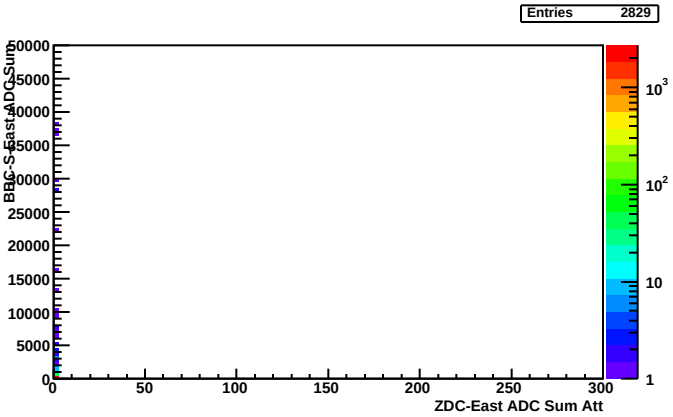

Entries 2829
TOF Mult
ZDC-West ADC Sum Att

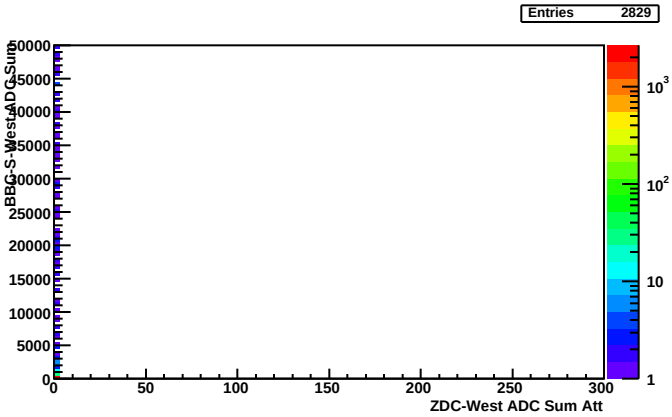

Entries 2829
BBC-L-East ADC Sum
BBC-S-East ADC Sum

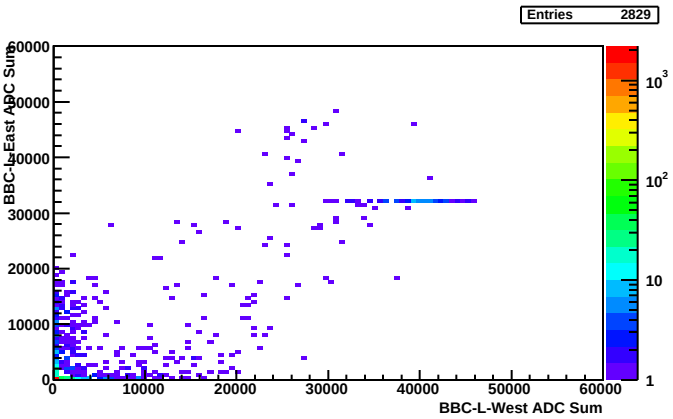

Entries 2829
BBC-L-West ADC Sum
BBC-S-West ADC Sum

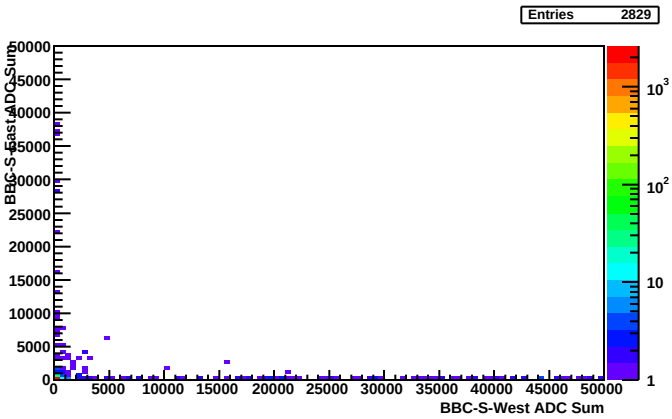

Entries 2829
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

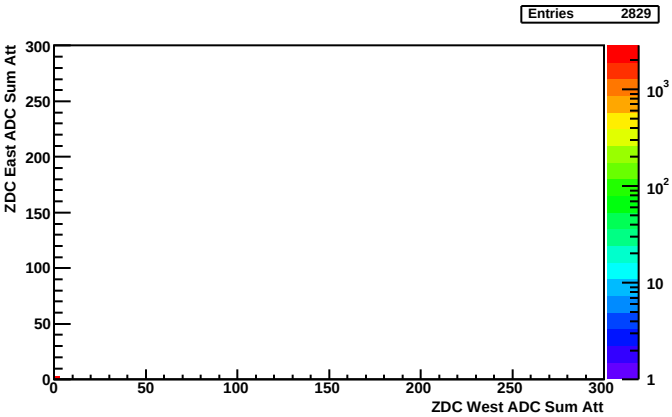

Entries 2829
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

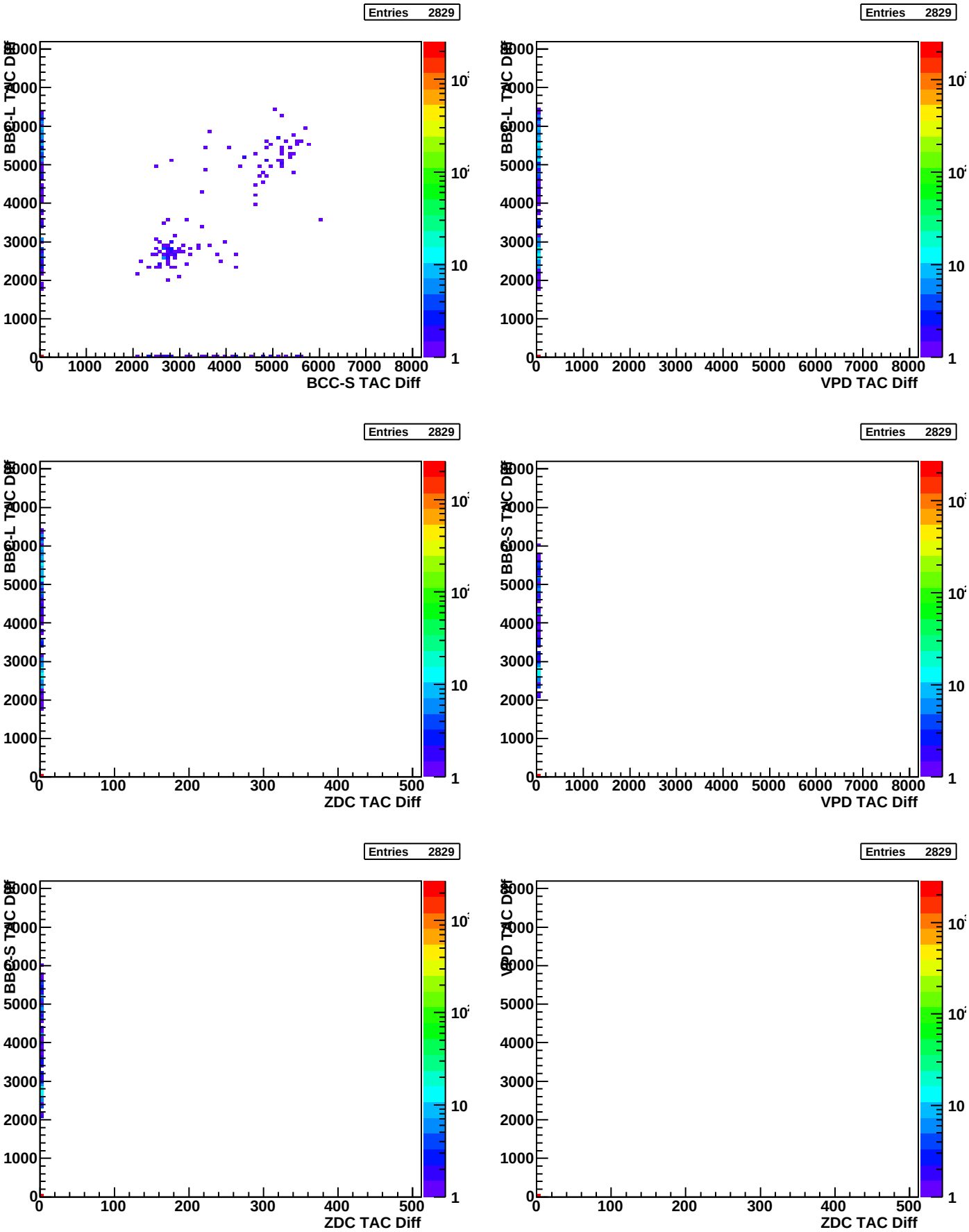

Entries 2829
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

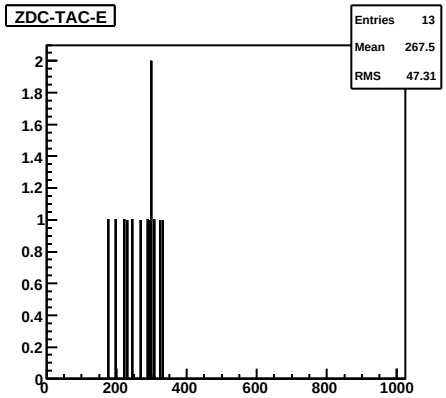

Entries 2829
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

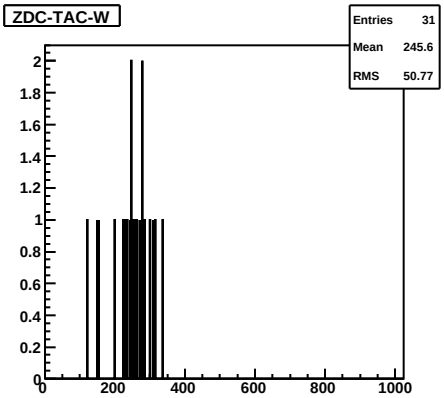

Entries 2829
BBC-L-East ADC Sum
BBC-L-West ADC Sum

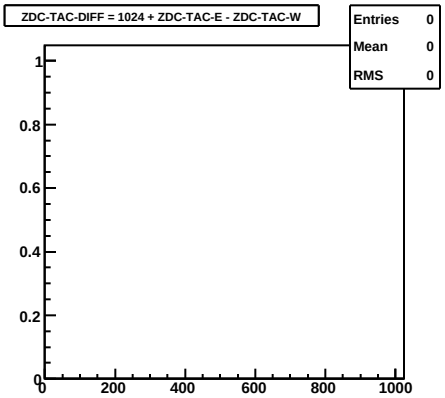

Entries 2829
BBC-S-East ADC Sum
BBC-S-West ADC Sum

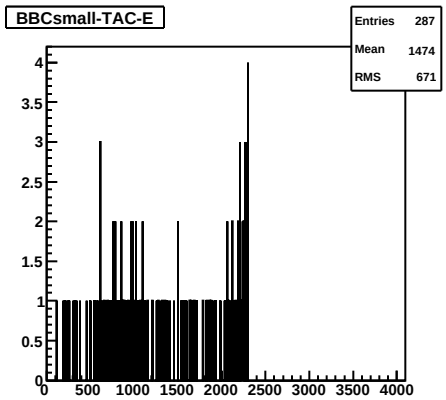

Entries 2829
ZDC East ADC Sum Att
ZDC West ADC Sum Att

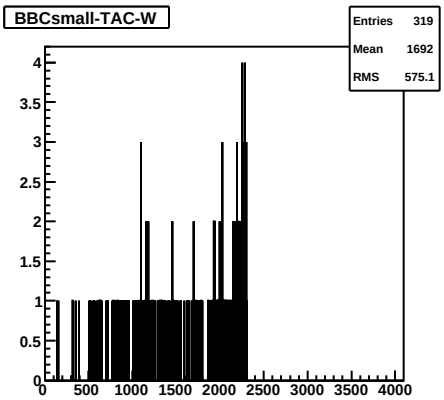

Entries 2829
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2829
BBC-L TAC Diff
VPD TAC Diff
Entries 2829
BBC-L TAC Diff
ZDC TAC Diff
Entries 2829
BBC-S TAC Diff
VPD TAC Diff
Entries 2829
BBC-S TAC Diff
ZDC TAC Diff
Entries 2829
VPD TAC Diff
ZDC TAC Diff

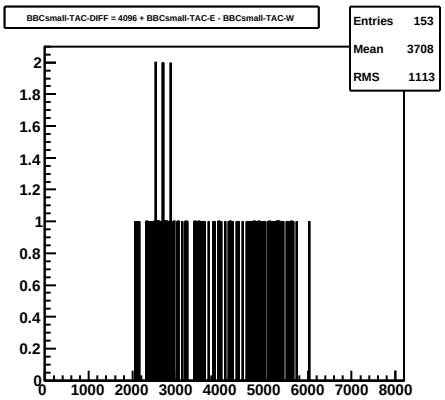

ZDC-TAC-E
Entries 13
Mean 267.5
RMS 47.31

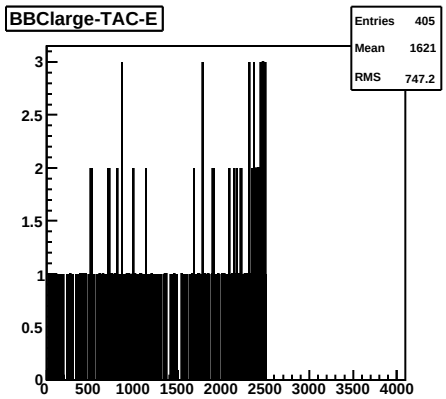

ZDC-TAC-W
Entries 31
Mean 245.6
RMS 50.77

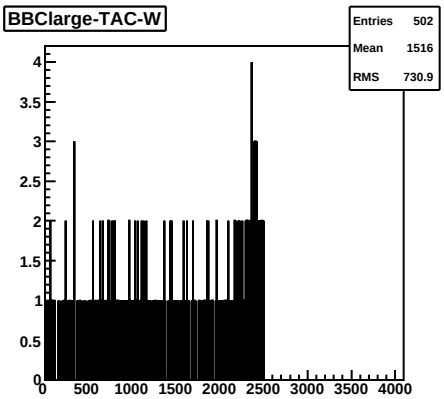

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

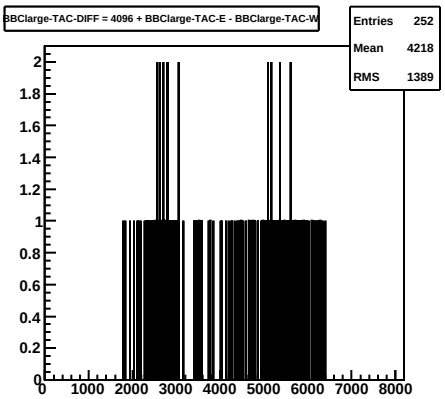

BBCsmall-TAC-E
Entries 287
Mean 1474
RMS 671

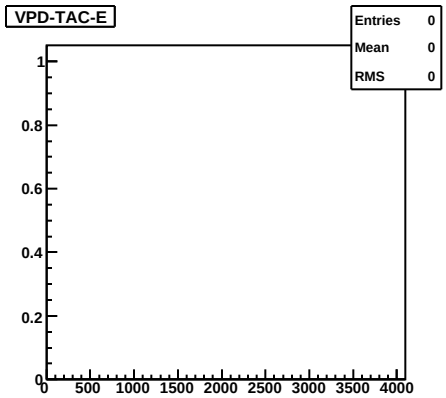

BBCsmall-TAC-W
Entries 319
Mean 1692
RMS 575.1

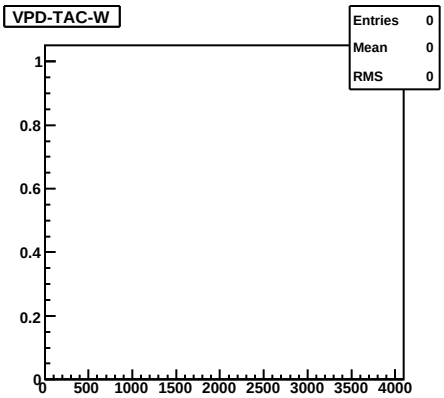

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 153
Mean 3708
RMS 1113

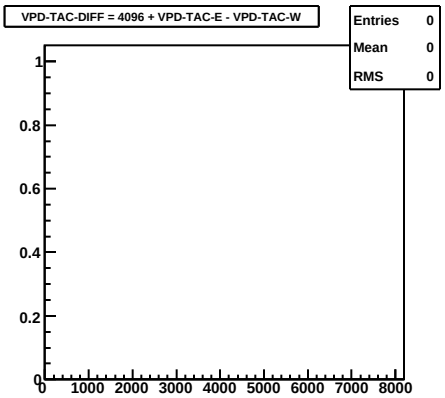

BBClarge-TAC-E
Entries 405
Mean 1621
RMS 747.2

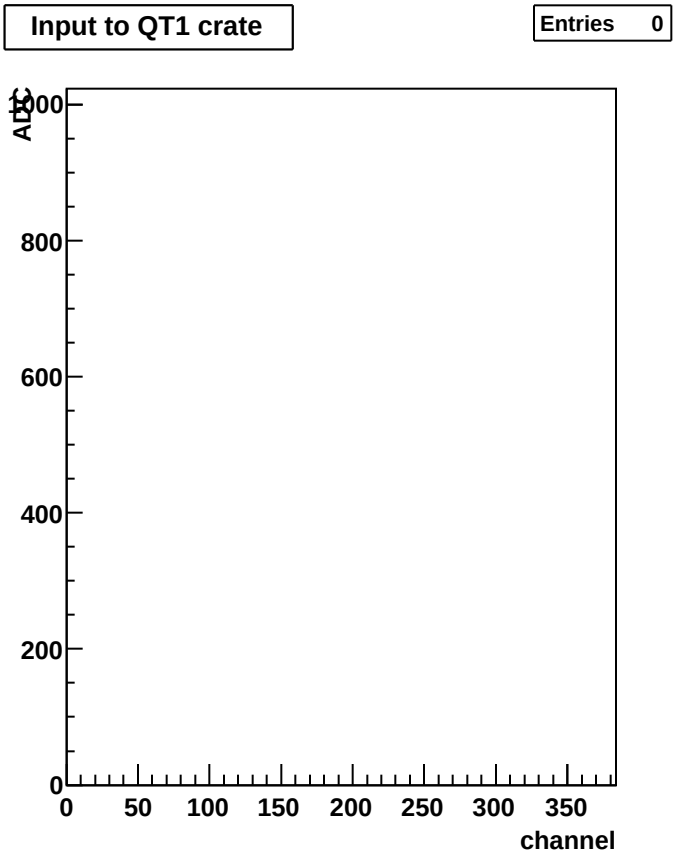

BBClarge-TAC-W
Entries 502
Mean 1516
RMS 730.9

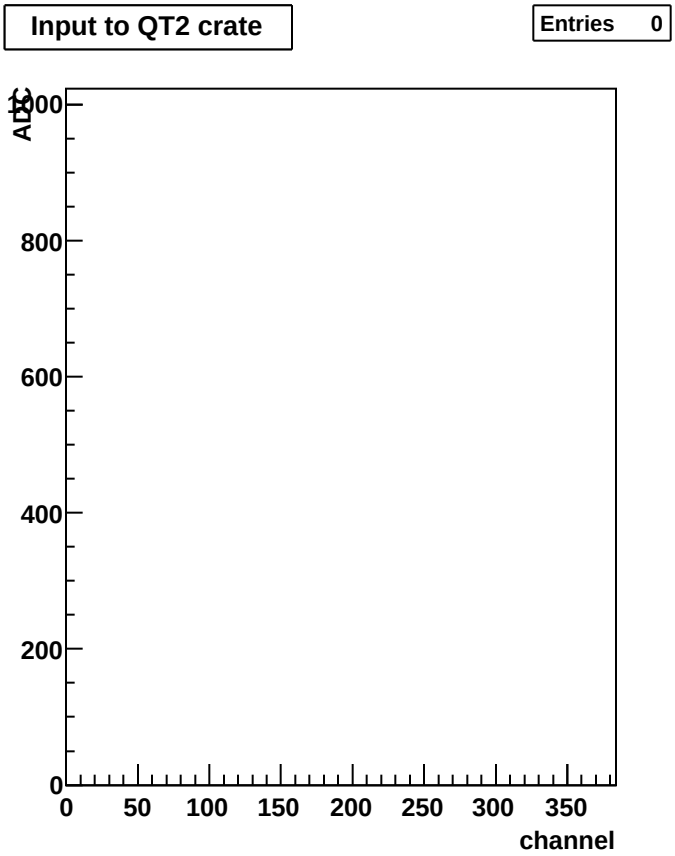

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 252
Mean 4218
RMS 1389

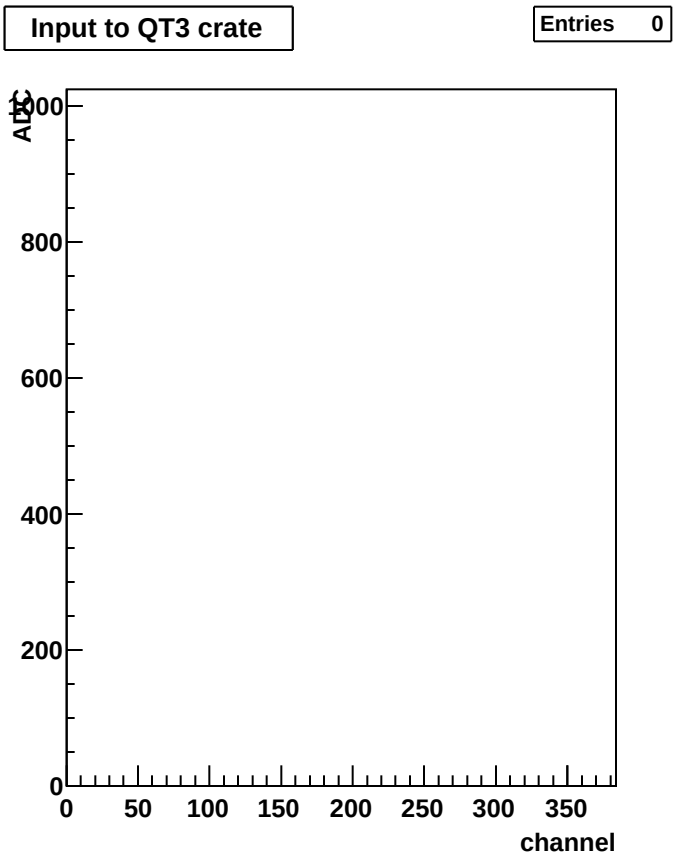

VPD-TAC-E
Entries 0
Mean 0
RMS 0

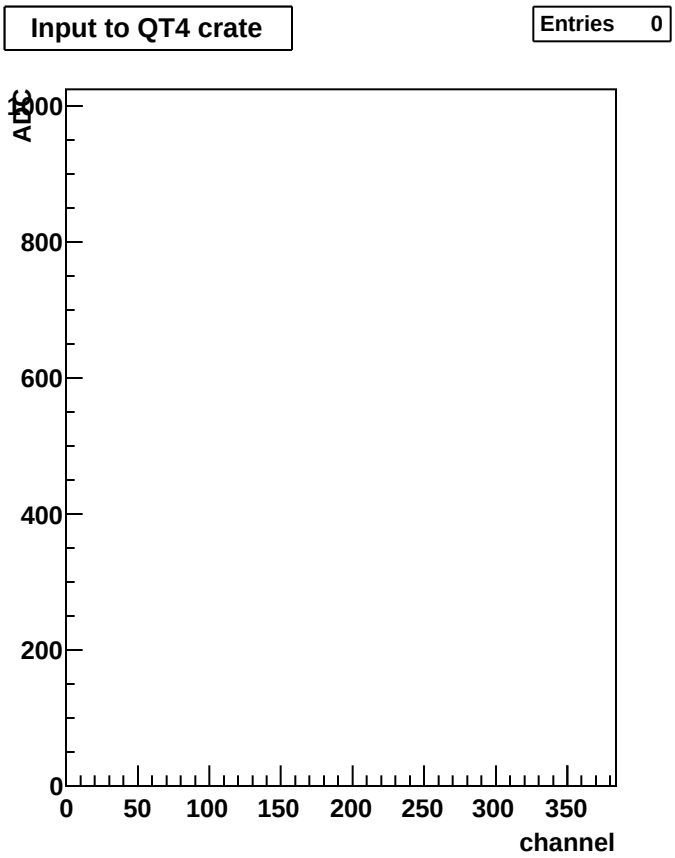

VPD-TAC-W
Entries 0
Mean 0
RMS 0

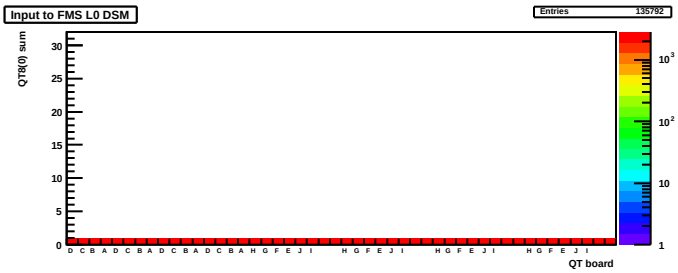

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

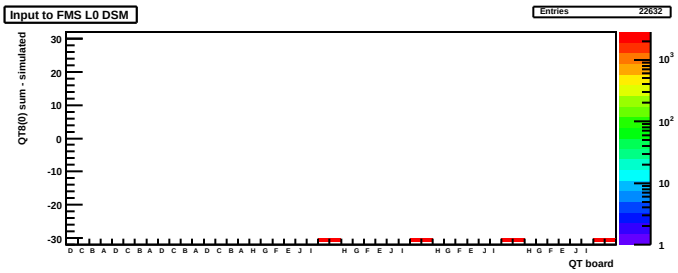

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

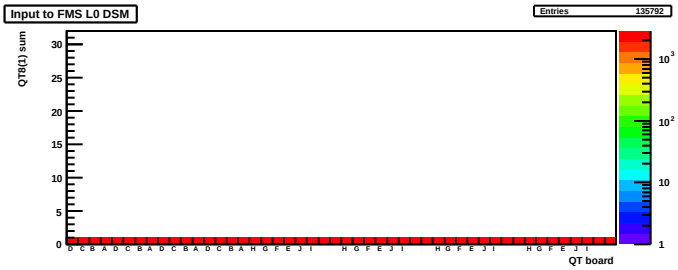

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

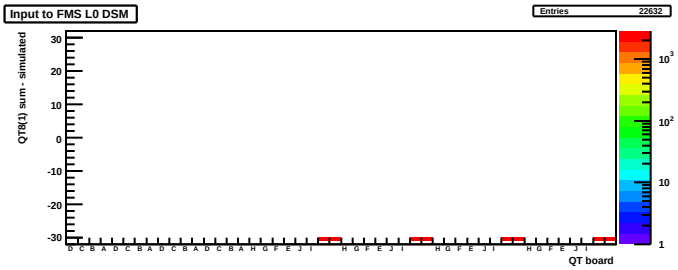

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

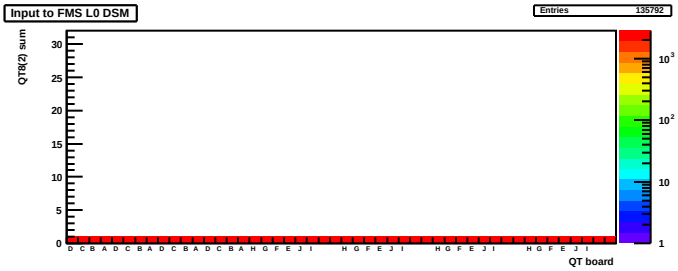

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

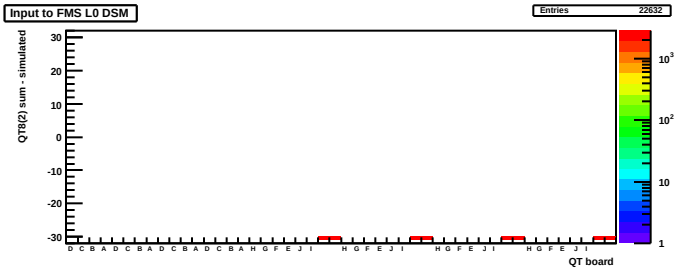

Input to FMS L0 DSM
Entries 135792
QT8(0) sum
QT board

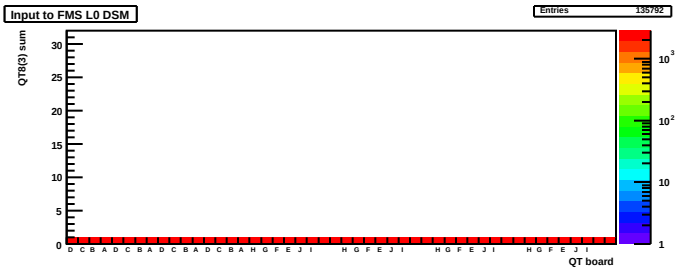

Input to FMS L0 DSM
Entries 22632
QT8(0) sum - simulated
QT board

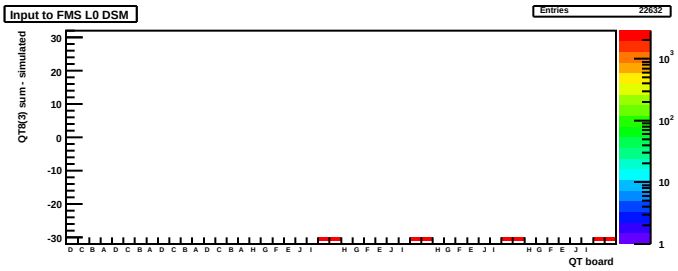

Input to FMS L0 DSM
Entries 135792
QT8(1) sum
QT board

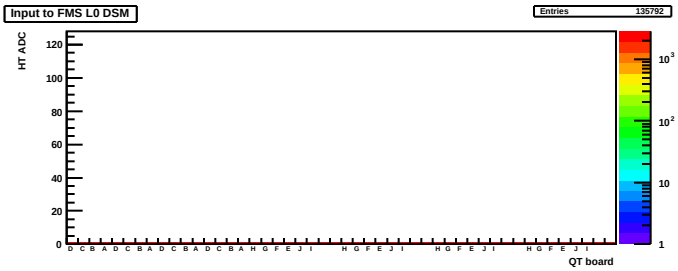

Input to FMS L0 DSM
Entries 22632
QT8(1) sum - simulated
QT board

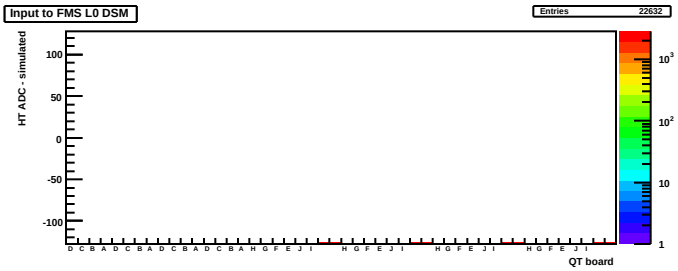

Input to FMS L0 DSM
Entries 135792
QT8(2) sum
QT board

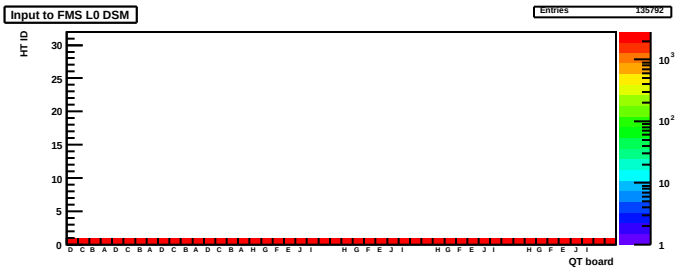

Input to FMS L0 DSM
Entries 22632
QT8(2) sum - simulated
QT board

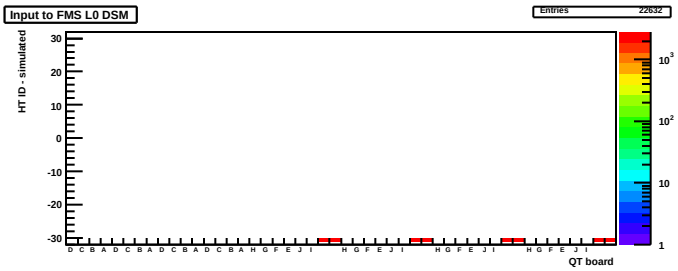

Input to FMS L0 DSM
Entries 135792
QT8(3) sum
QT board

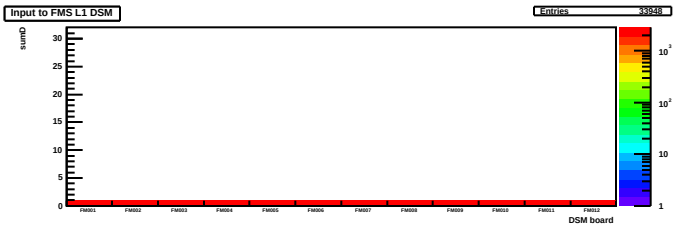

Input to FMS L0 DSM
Entries 22632
QT8(3) sum - simulated
QT board

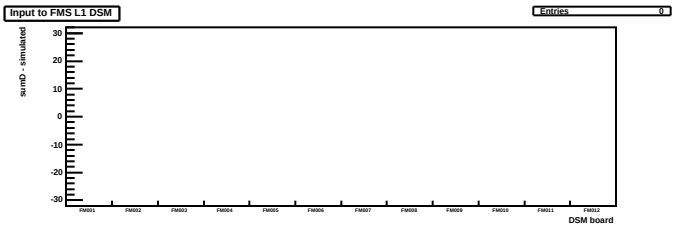

Input to FMS L0 DSM
Entries 135792
HT ADC
QT board

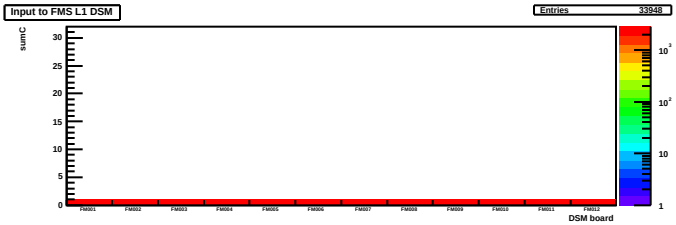

Input to FMS L0 DSM
Entries 22632
HT ADC - simulated
QT board

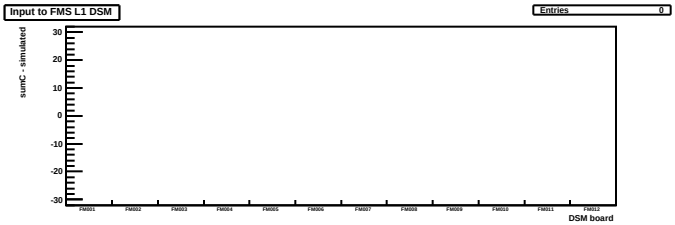

Input to FMS L0 DSM
Entries 135792
HT ID
QT board

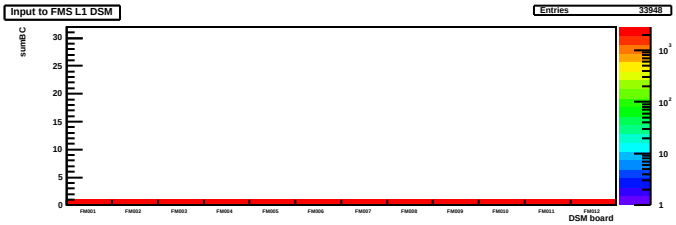

Input to FMS L0 DSM
Entries 22632
HT ID - simulated
QT board

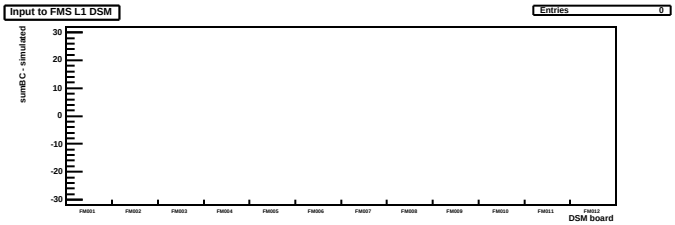

Input to FMS L1 DSM
Entries 33948
sumD
DSM board

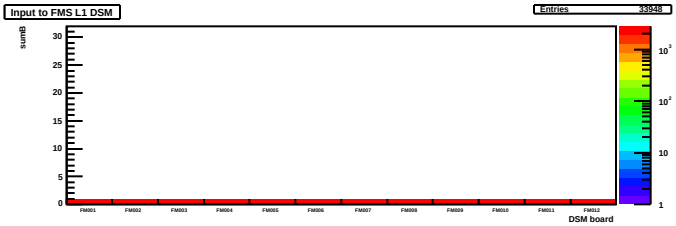

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

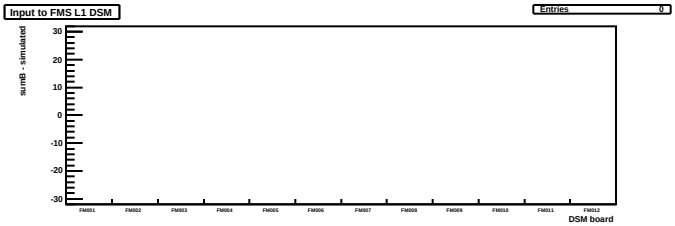

Input to FMS L1 DSM
Entries 33948
sumC
DSM board

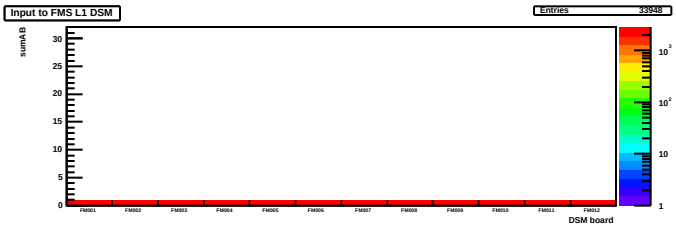

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

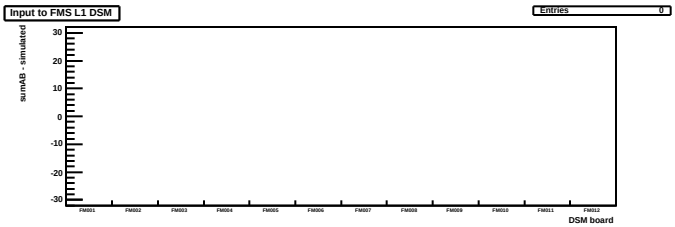

Input to FMS L1 DSM
Entries 33948
sumBC
DSM board

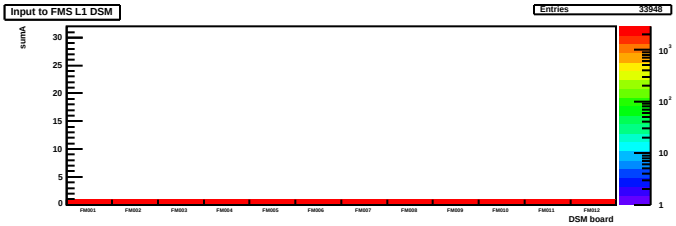

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

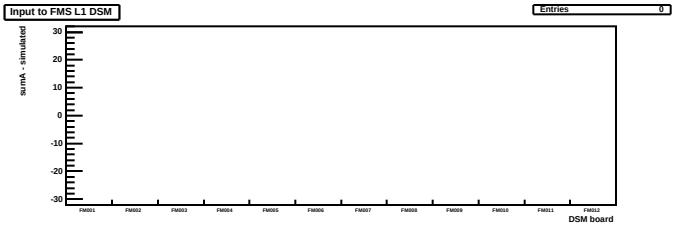

Input to FMS L1 DSM
Entries 33948
sumB
DSM board

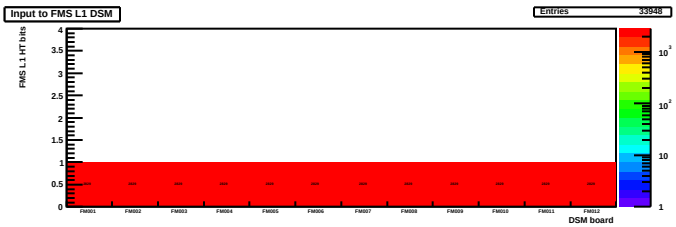

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

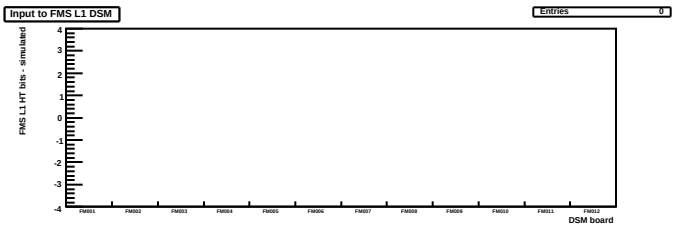

Input to FMS L1 DSM
Entries 33948
sumAB
DSM board

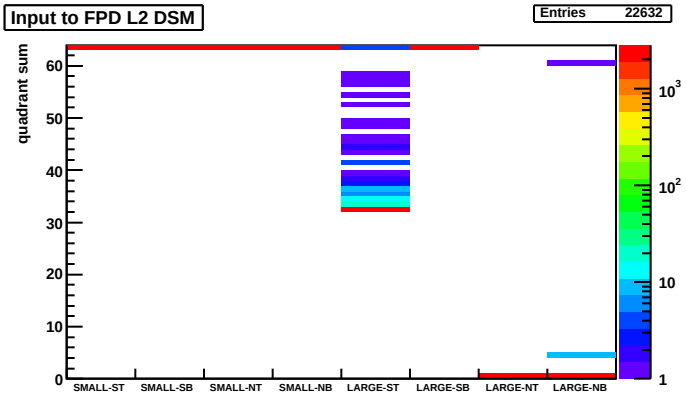

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

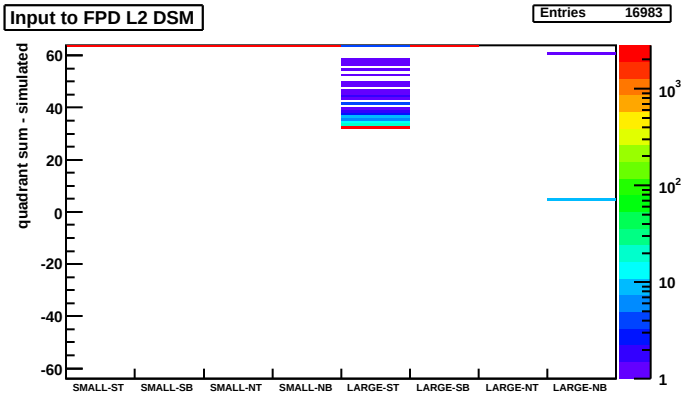

Input to FMS L1 DSM
Entries 33948
sumA
DSM board

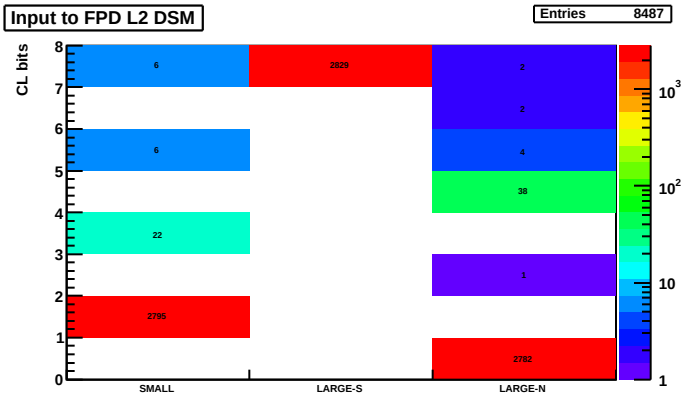

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

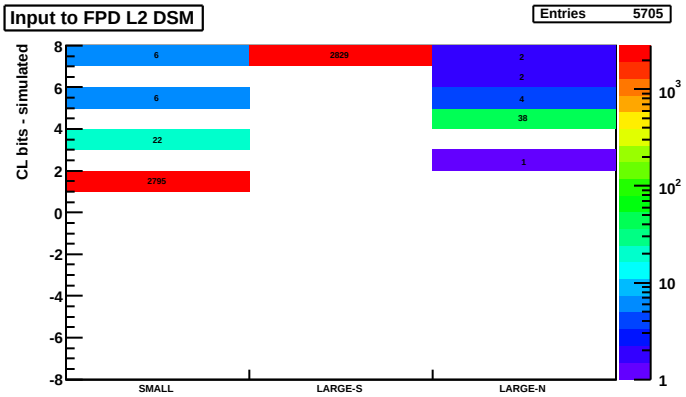

Input to FMS L1 DSM
Entries 33948
FMS L1 HT bits
DSM board

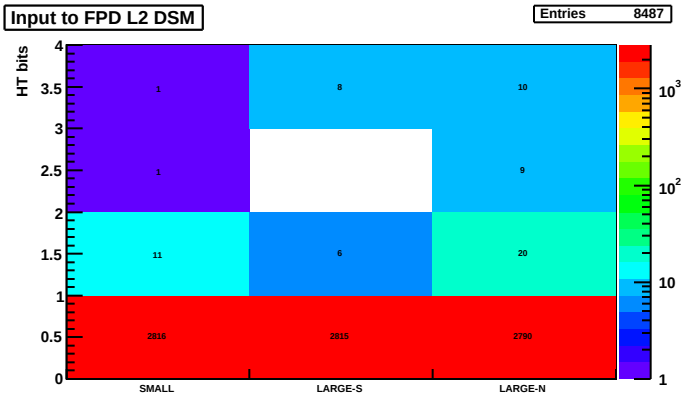

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

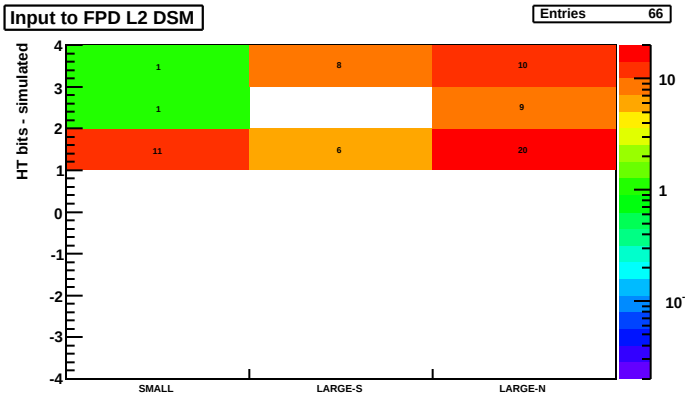

Input to FPD L2 DSM
Entries 22632
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

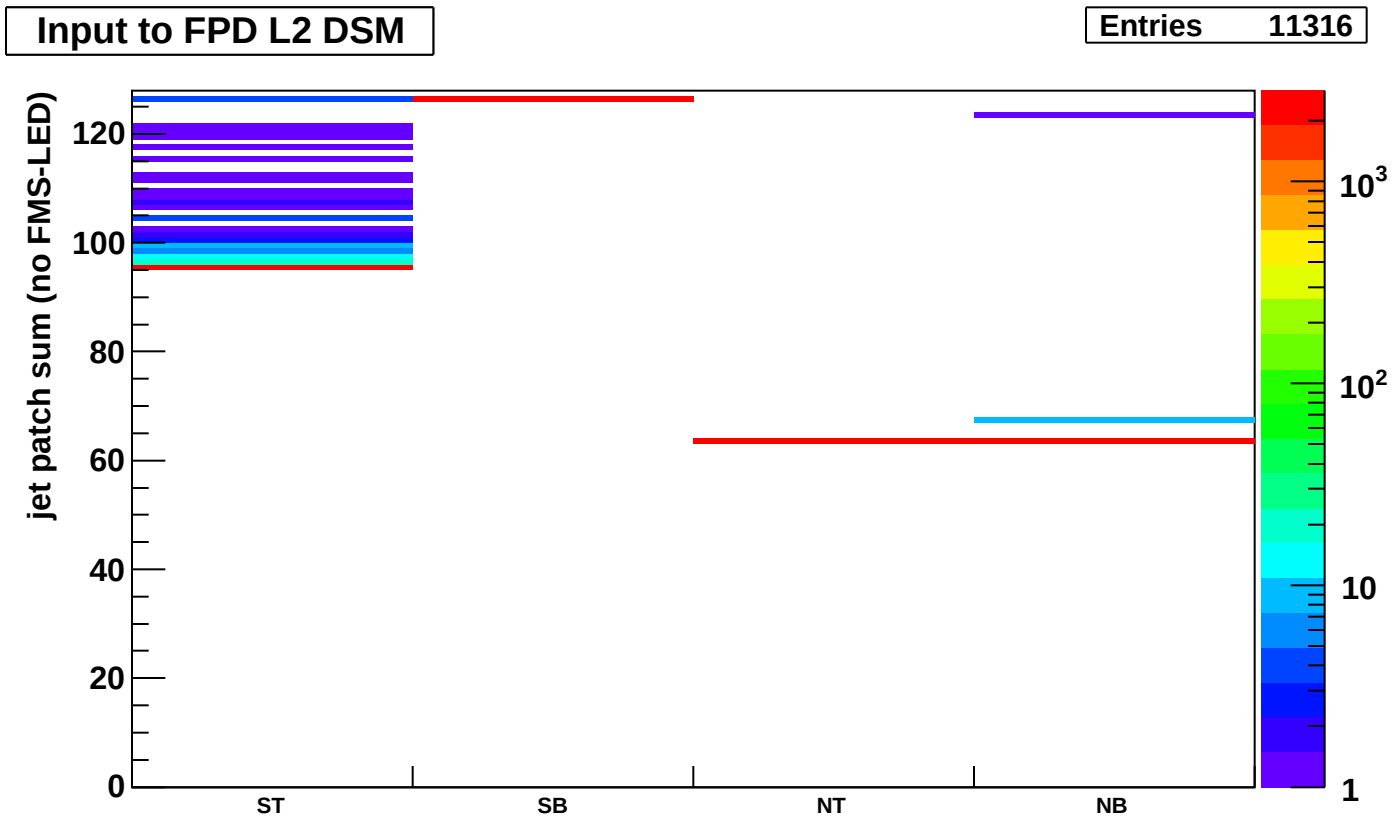

Input to FPD L2 DSM
Entries 16983
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

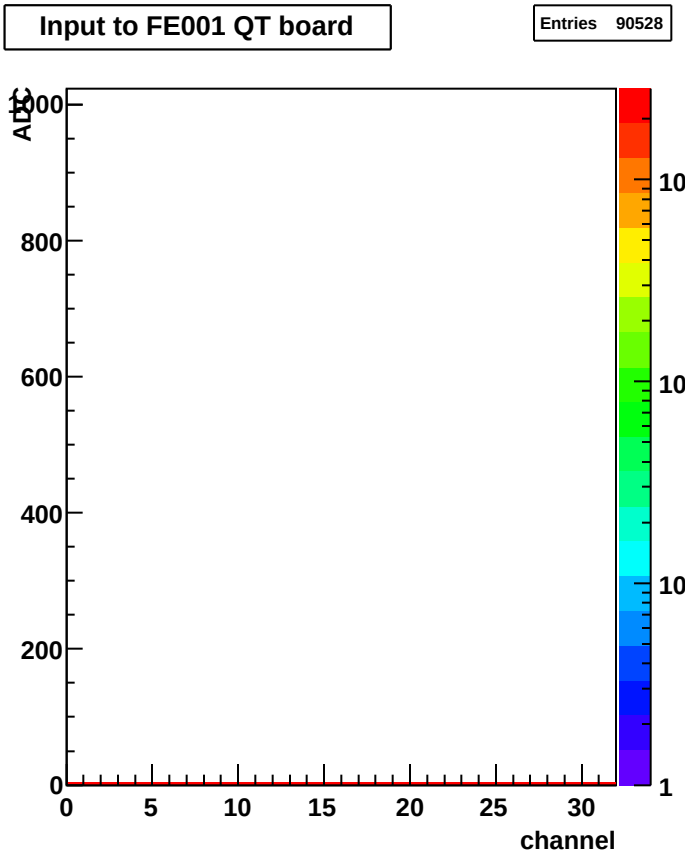

Input to FPD L2 DSM
Entries 8487
CL bits
SMALL
LARGE-S
LARGE-N

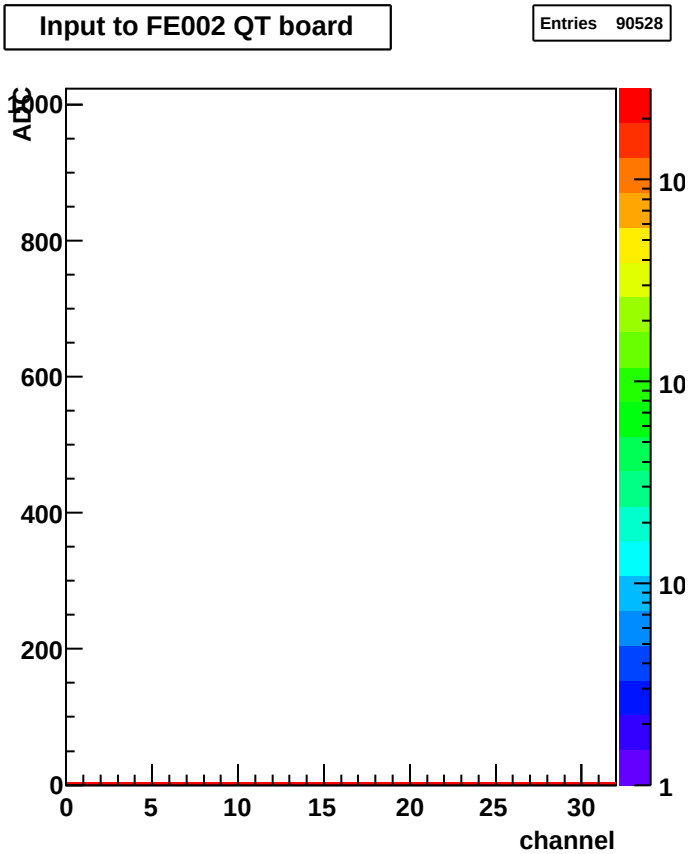

Input to FPD L2 DSM
Entries 5705
CL bits - simulated
SMALL
LARGE-S
LARGE-N

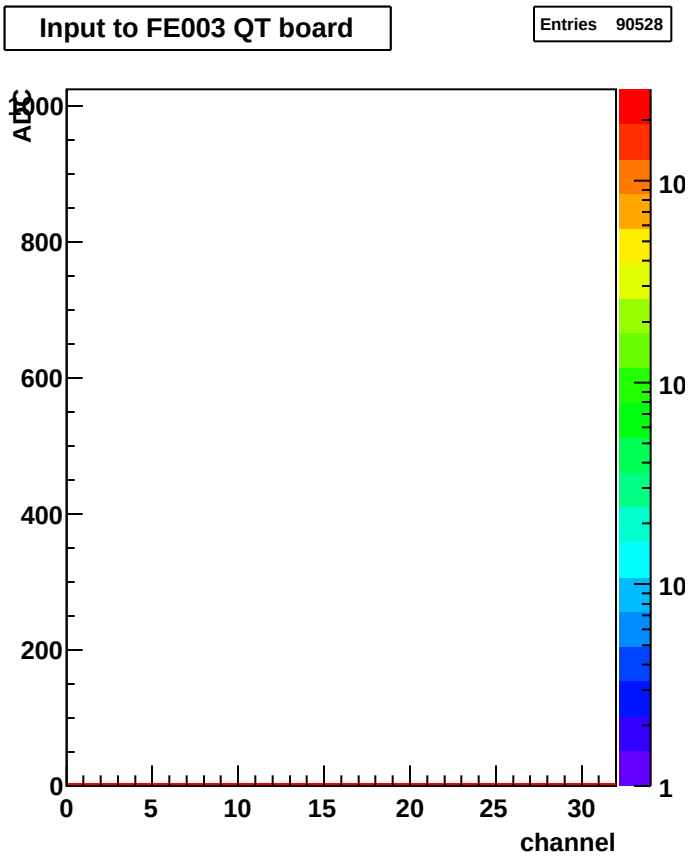

Input to FPD L2 DSM
Entries 8487
HT bits
SMALL
LARGE-S
LARGE-N

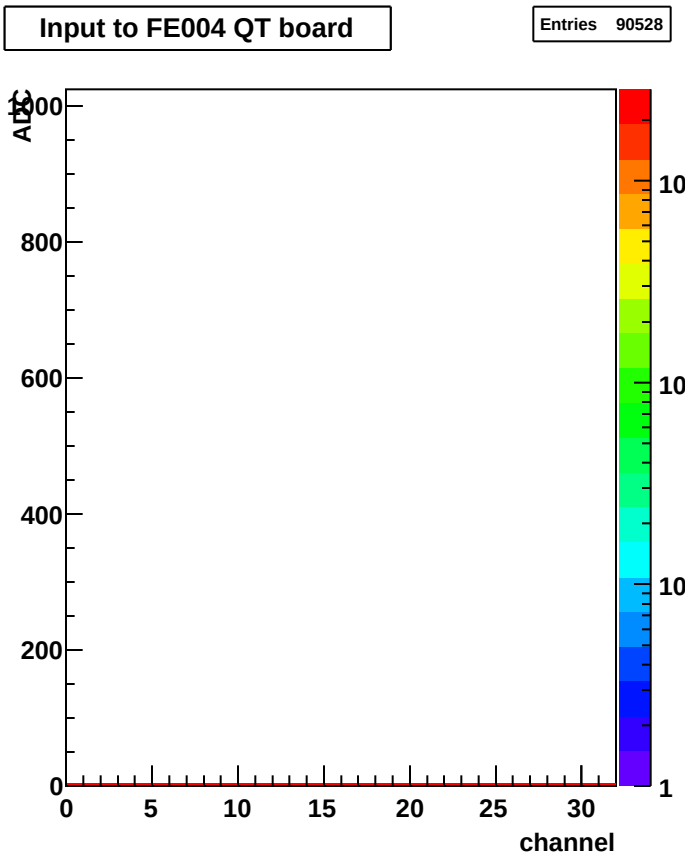

Input to FPD L2 DSM
Entries 66
HT bits - simulated
SMALL
LARGE-S
LARGE-N

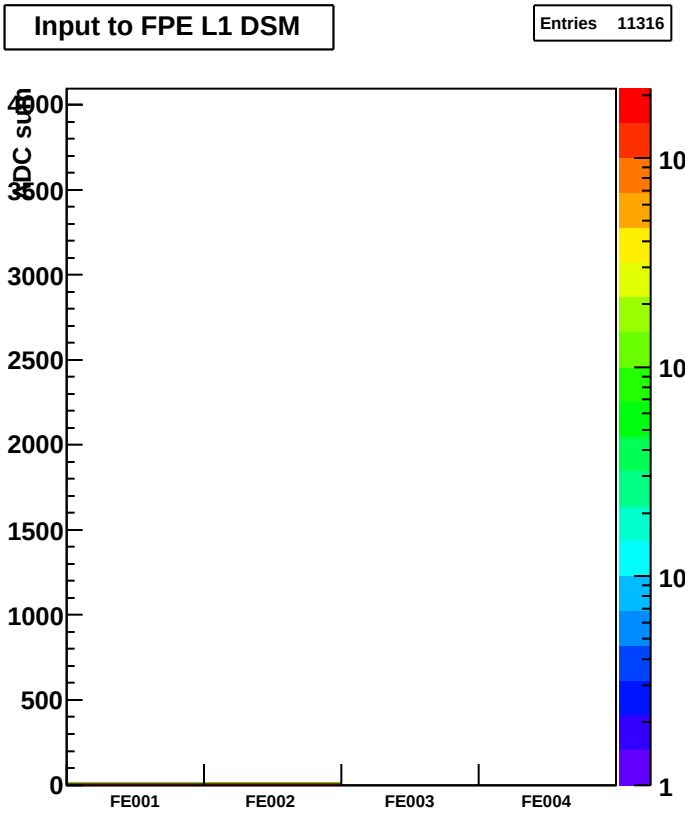

Input to FPD L2 DSM
Entries 11316
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3

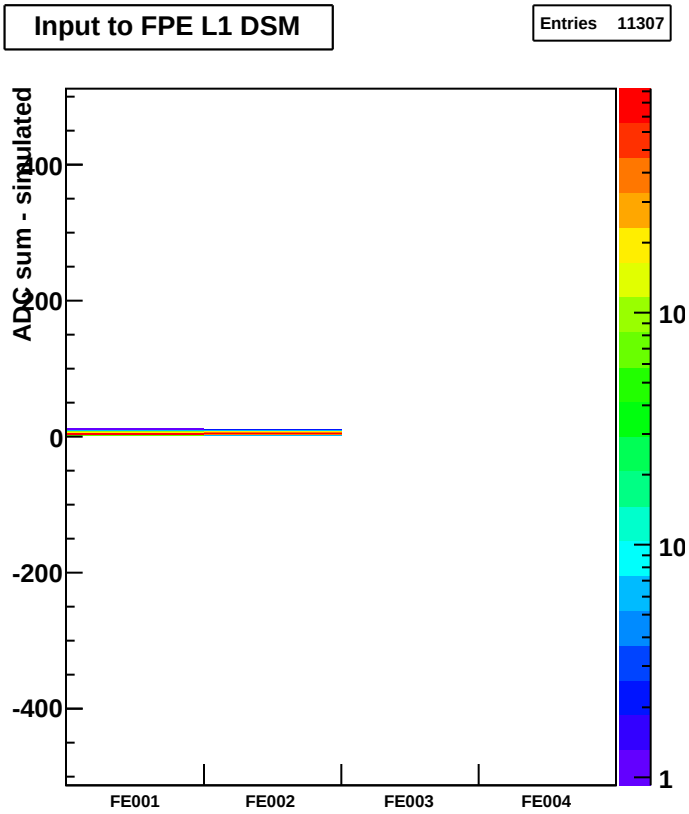

Input to FE001 QT board
Entries 90528
ADC
channel

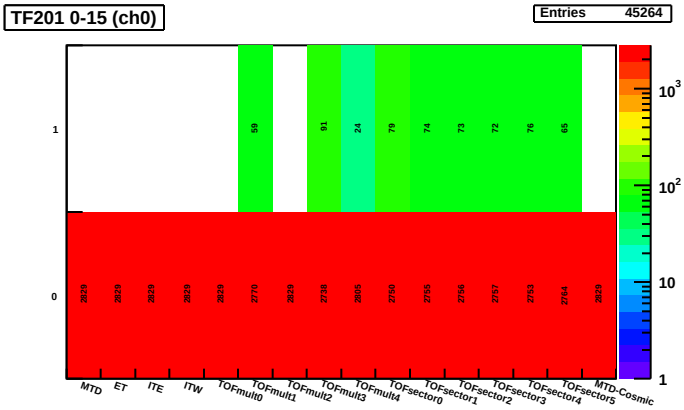

Input to FE002 QT board
Entries 90528
ADC
channel

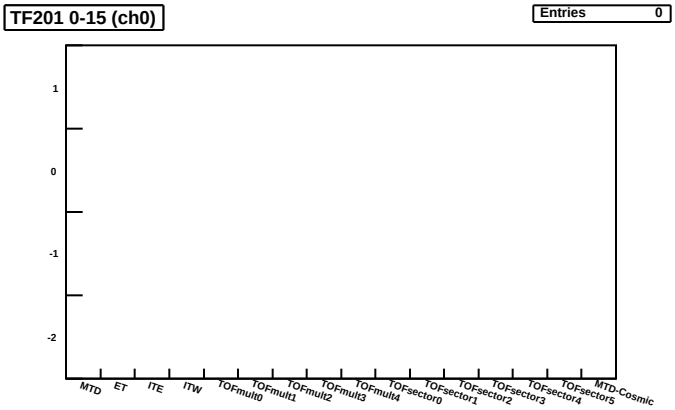

Input to FE003 QT board
Entries 90528
ADC
channel

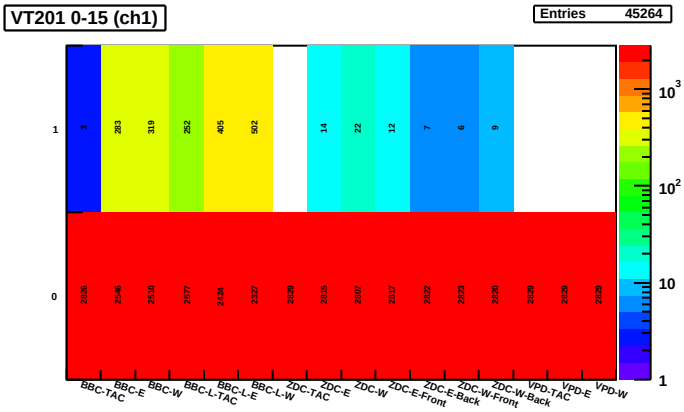

Input to FE004 QT board
Entries 90528
ADC
channel

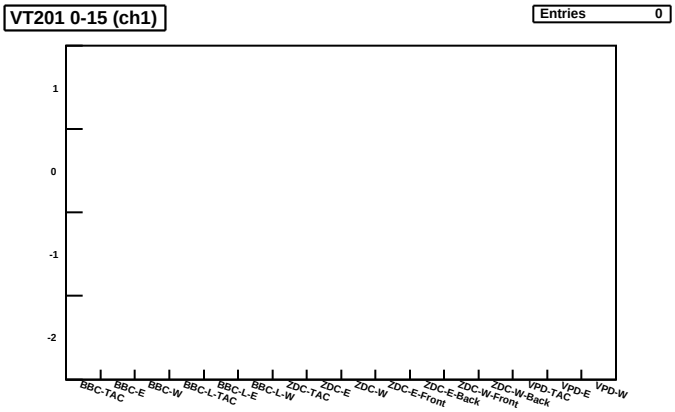

Input to FPE L1 DSM
Entries 11316
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

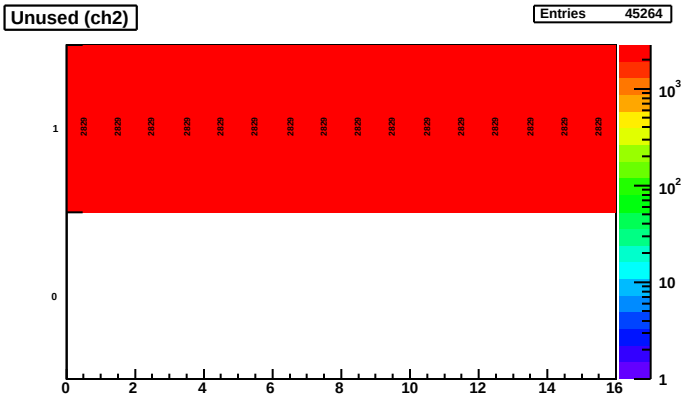

Input to FPE L1 DSM
Entries 11307
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
1

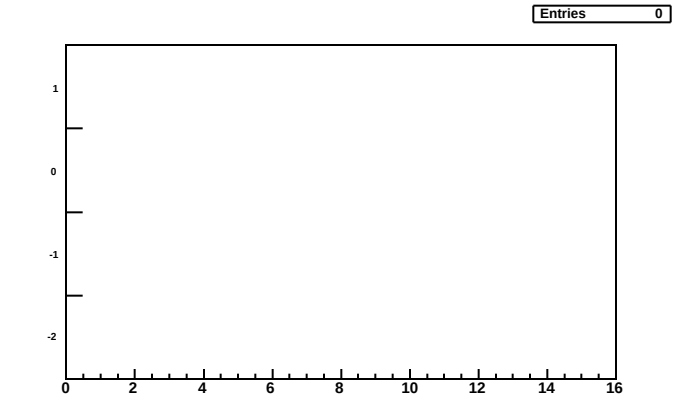

TF201 0-15 (ch0)
Entries 45264
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

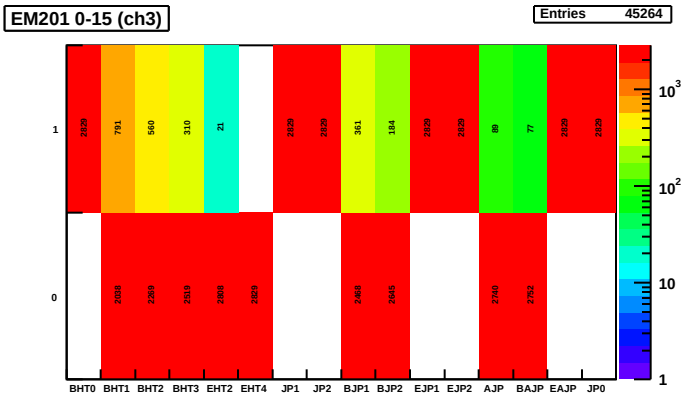

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

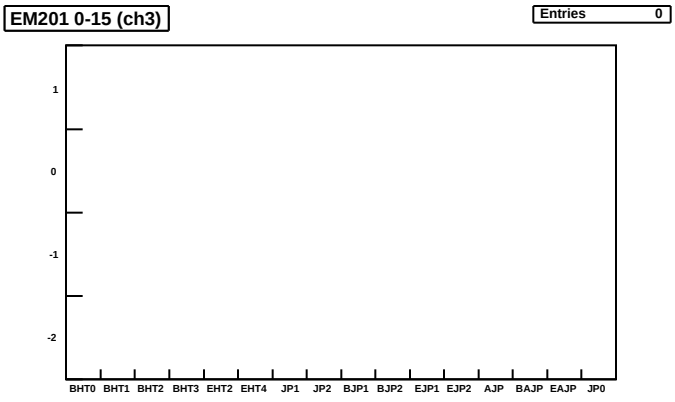

VT201 0-15 (ch1)
Entries 45264
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 0
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

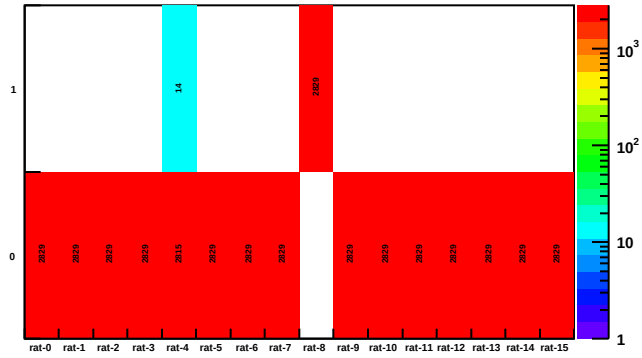

Unused (ch2)
Entries 45264

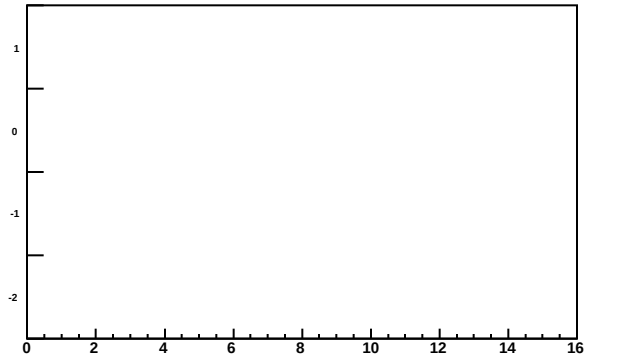

Entries 0


EM201 0-15 (ch3)
Entries 45264
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

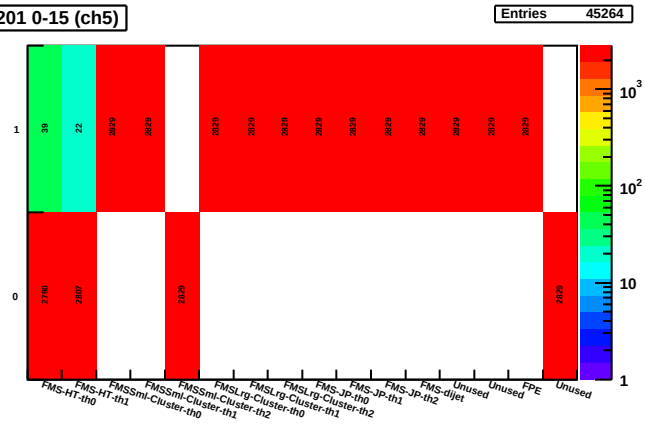

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

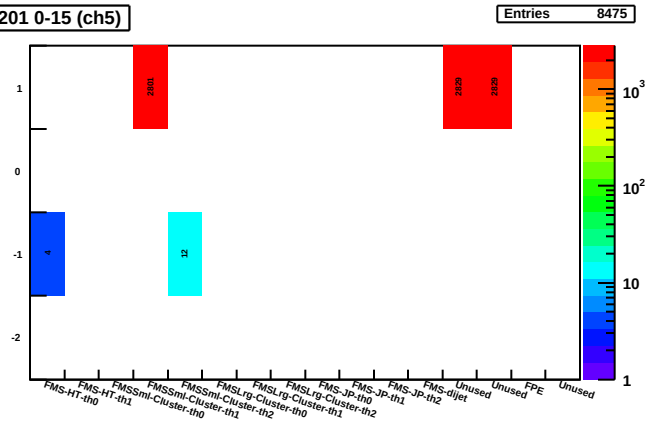




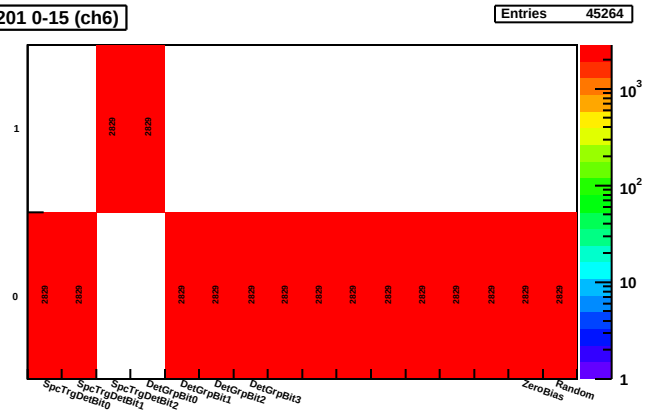
FP201 0-15 (ch5)

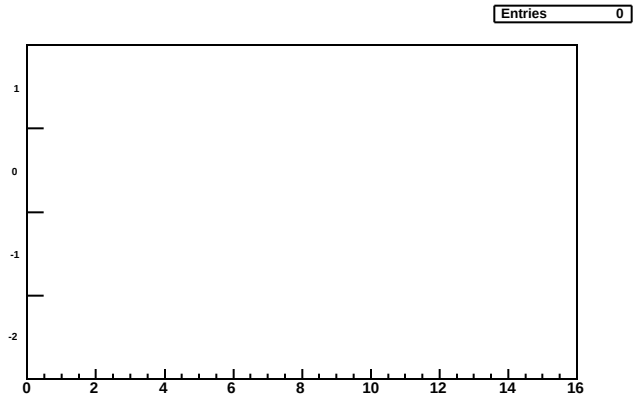
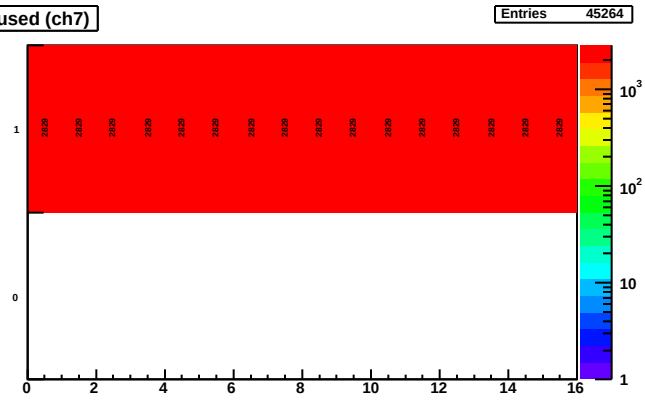
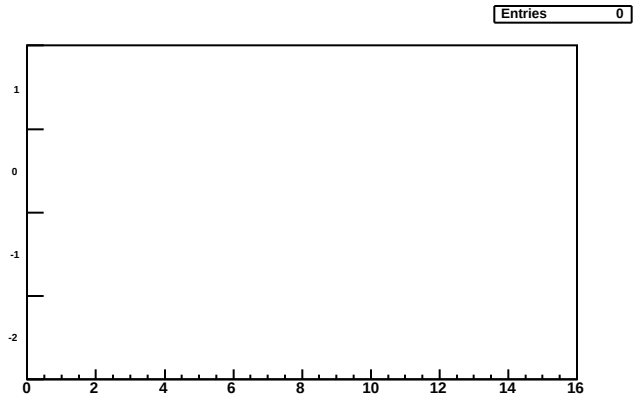


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)