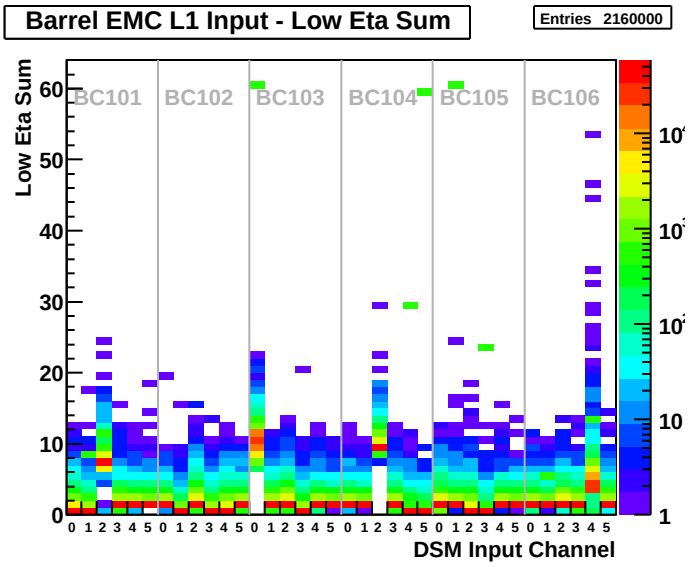
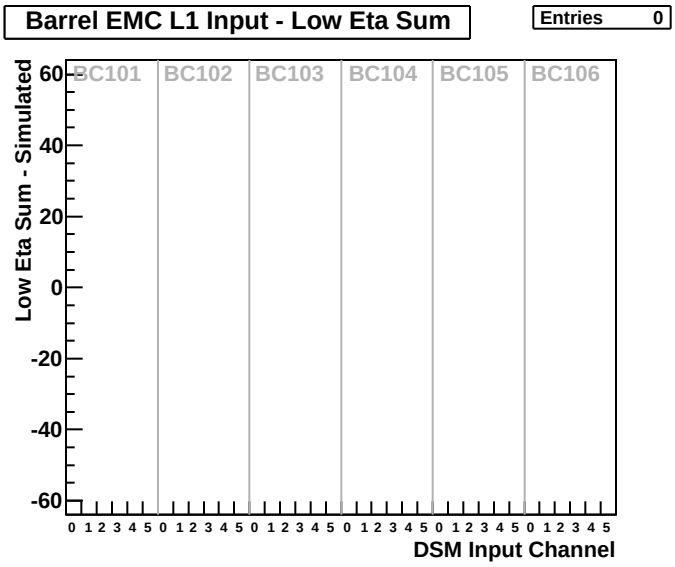
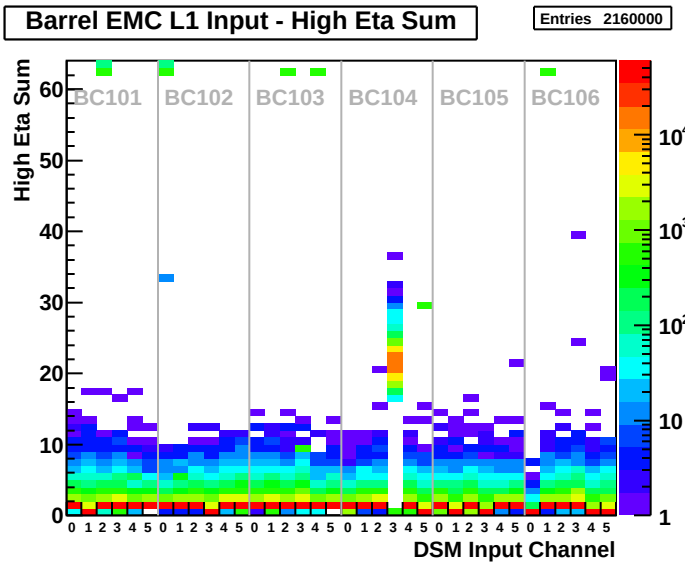
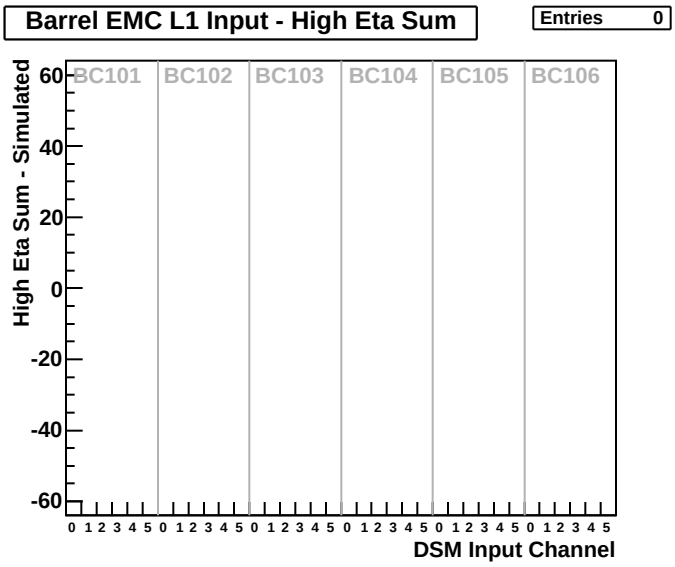
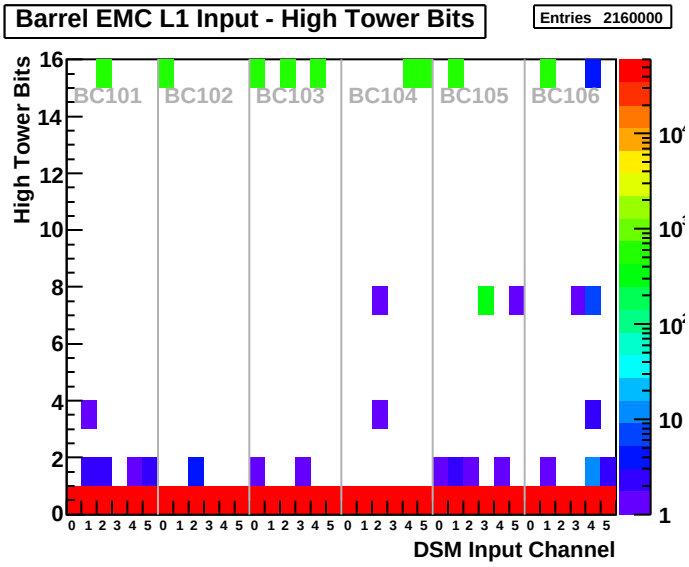
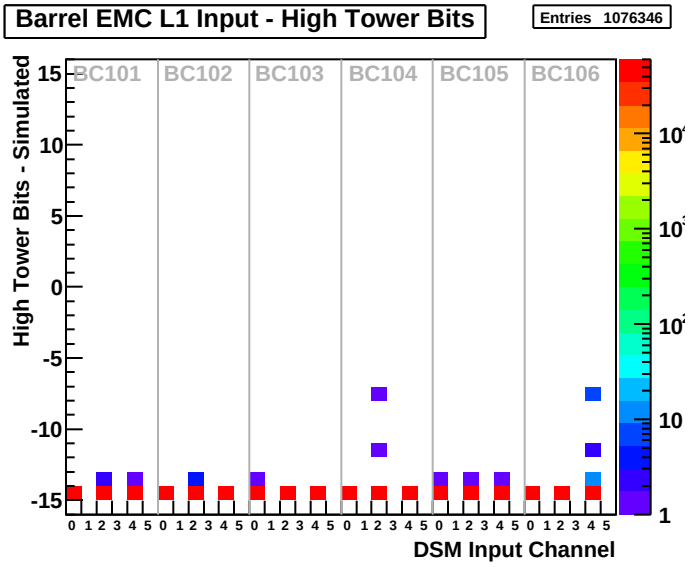

Barrel EMC L1 Input - Low Eta Sum
Entries 2160000
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

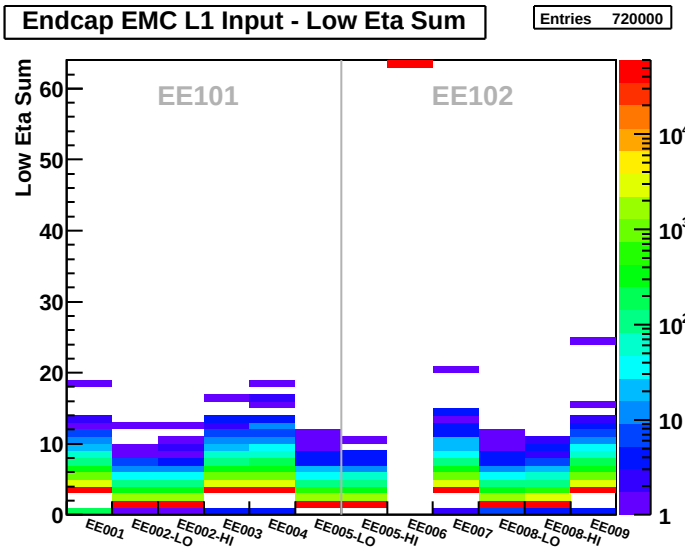

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

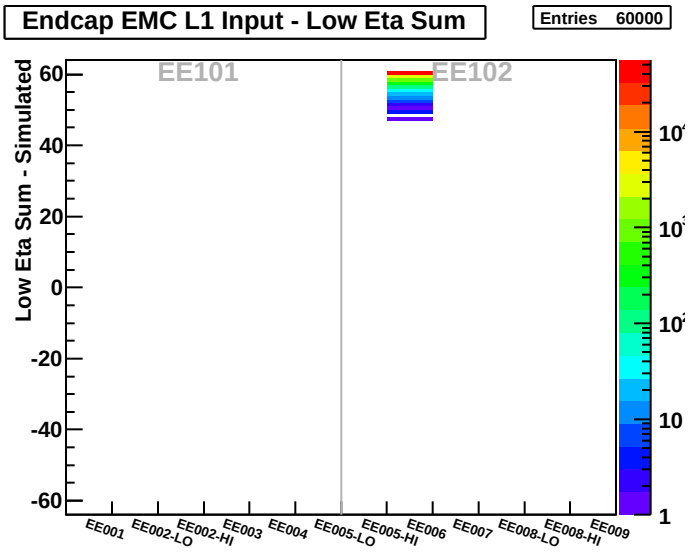

Barrel EMC L1 Input - High Eta Sum
Entries 2160000
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

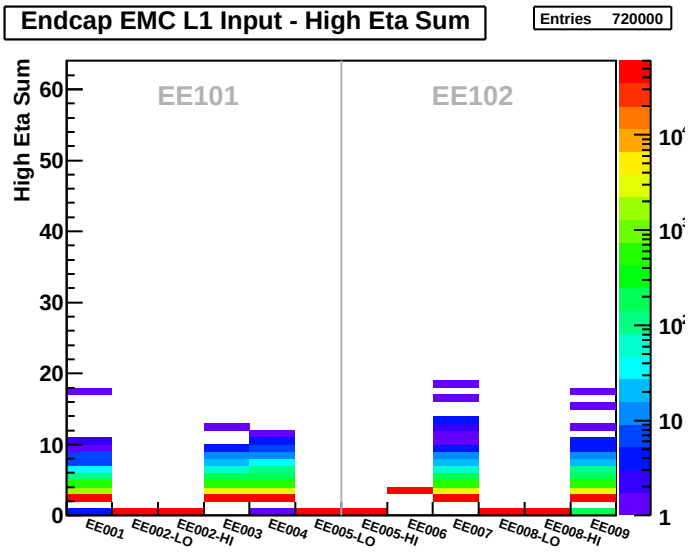

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

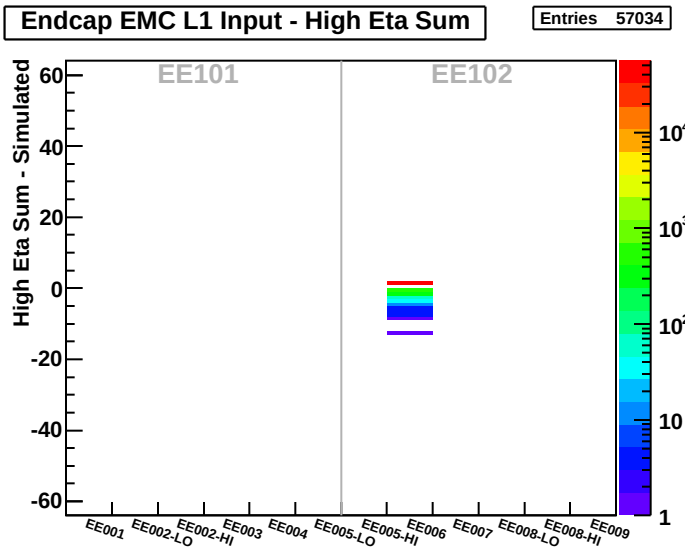

Barrel EMC L1 Input - High Tower Bits
Entries 2160000
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

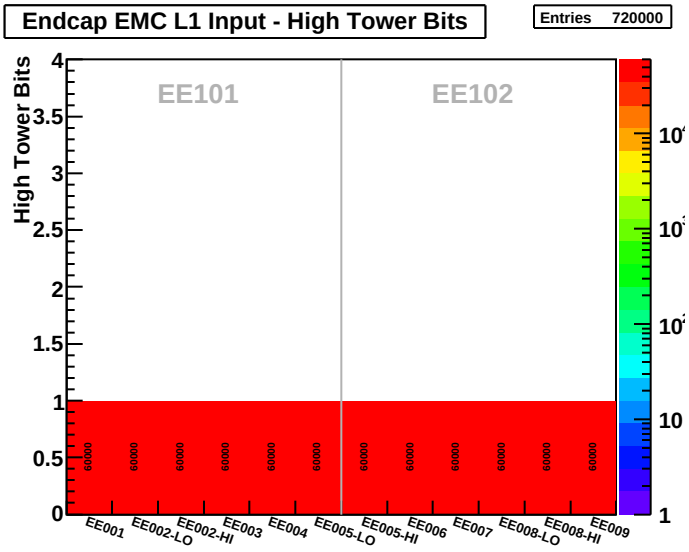

Barrel EMC L1 Input - High Tower Bits
Entries 1076346
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

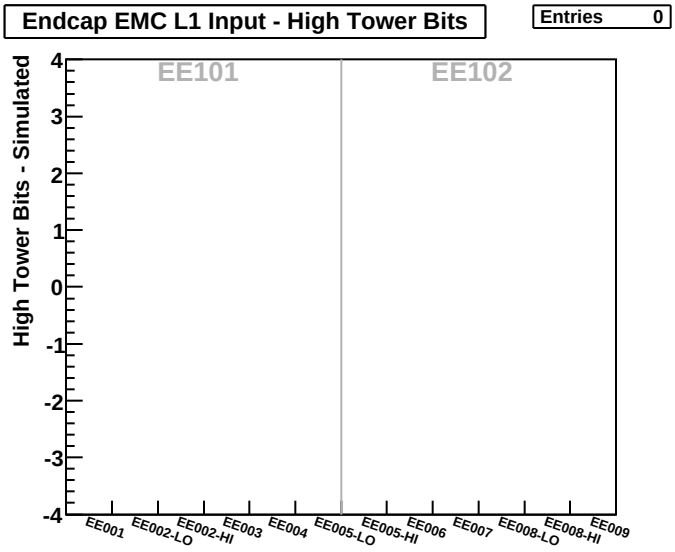

Endcap EMC L1 Input - Low Eta Sum
Entries 720000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

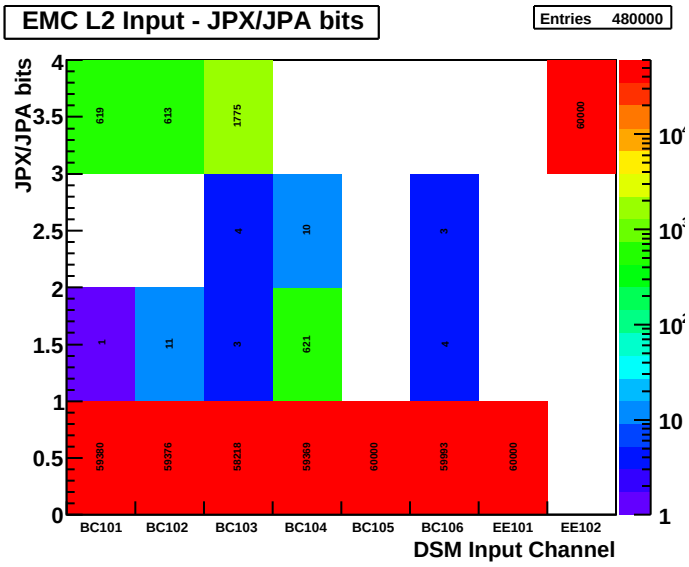

Endcap EMC L1 Input - Low Eta Sum
Entries 60000
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

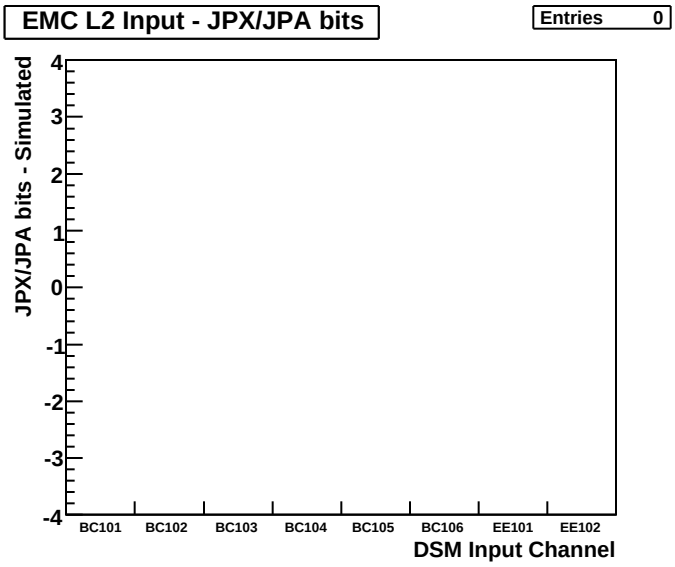

Endcap EMC L1 Input - High Eta Sum
Entries 720000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

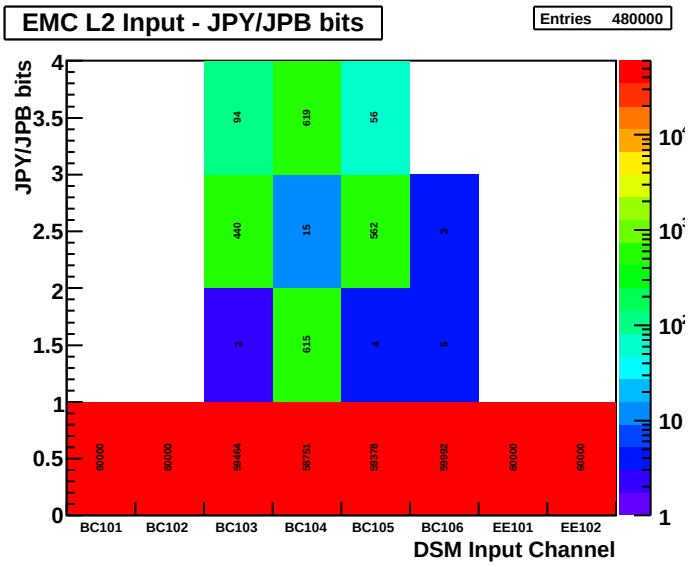

Endcap EMC L1 Input - High Eta Sum
Entries 57034
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

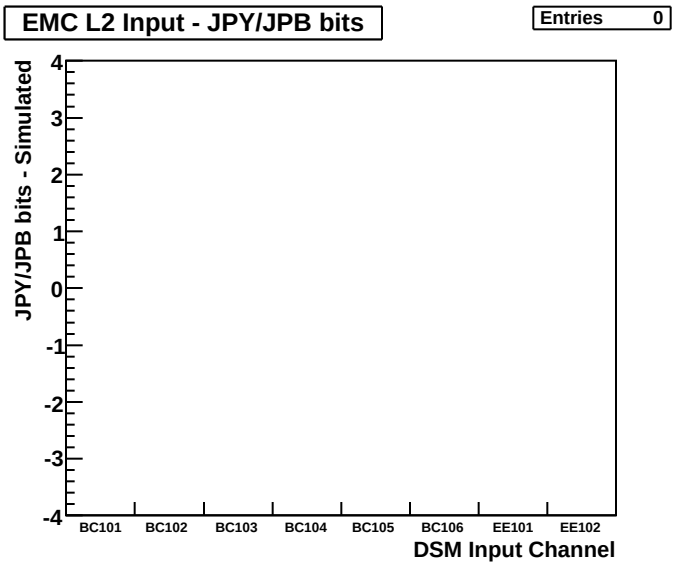

Endcap EMC L1 Input - High Tower Bits
Entries 720000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

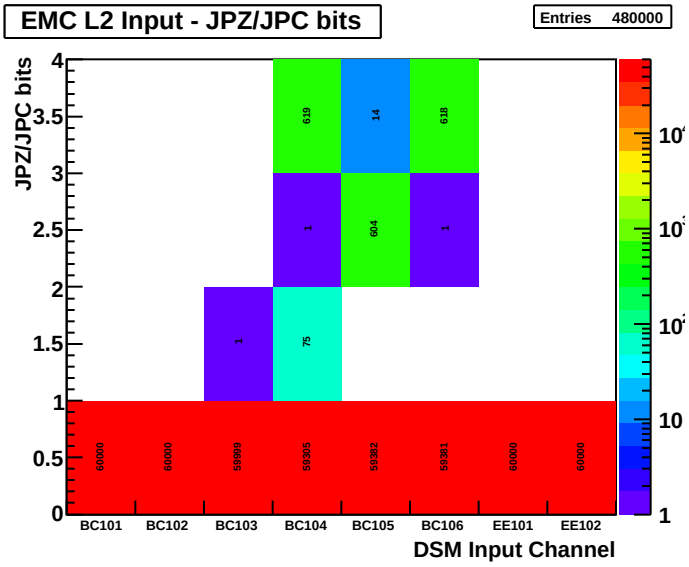

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

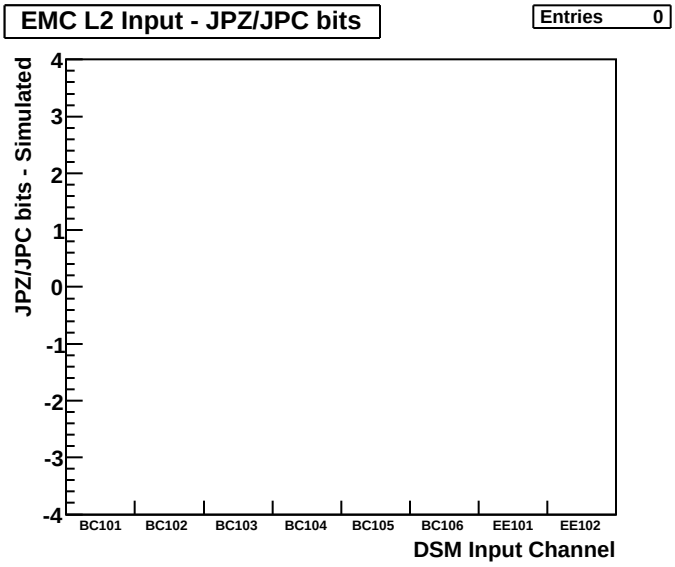

EMC L2 Input - JPX/JPA bits
Entries 480000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

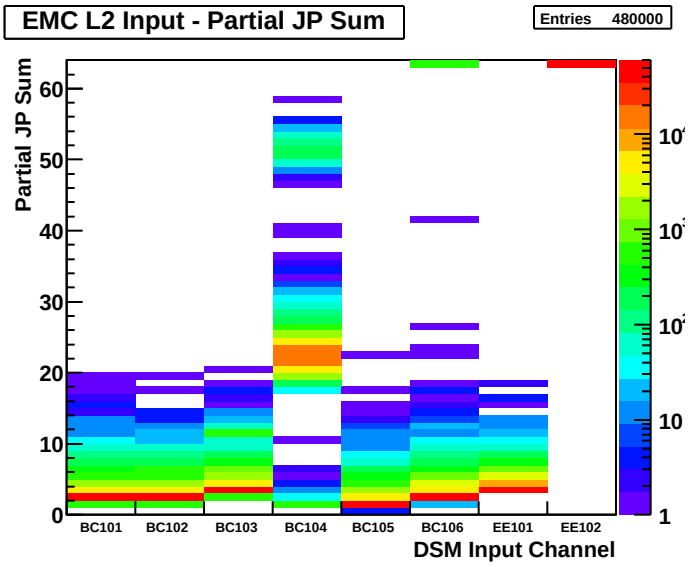

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

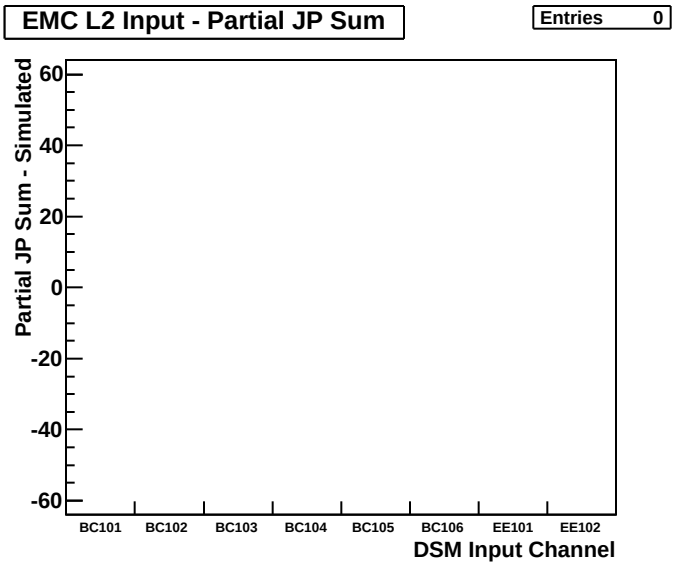

EMC L2 Input - JPY/JPB bits
Entries 480000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

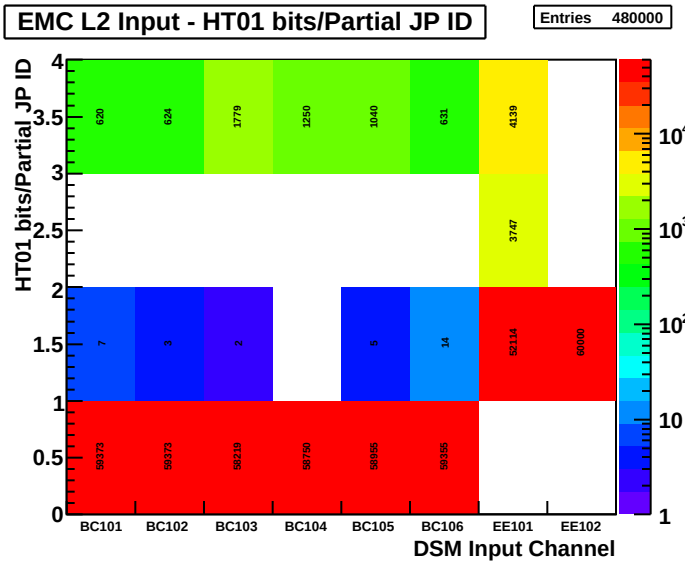

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

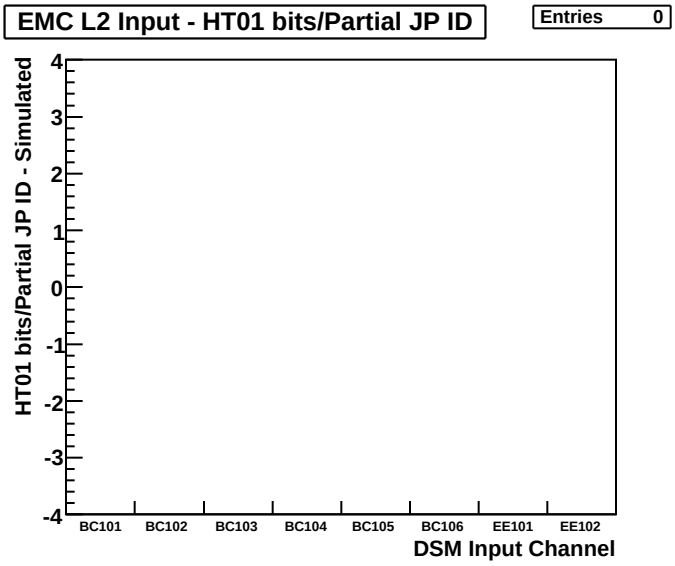

EMC L2 Input - JPZ/JPC bits
Entries 480000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

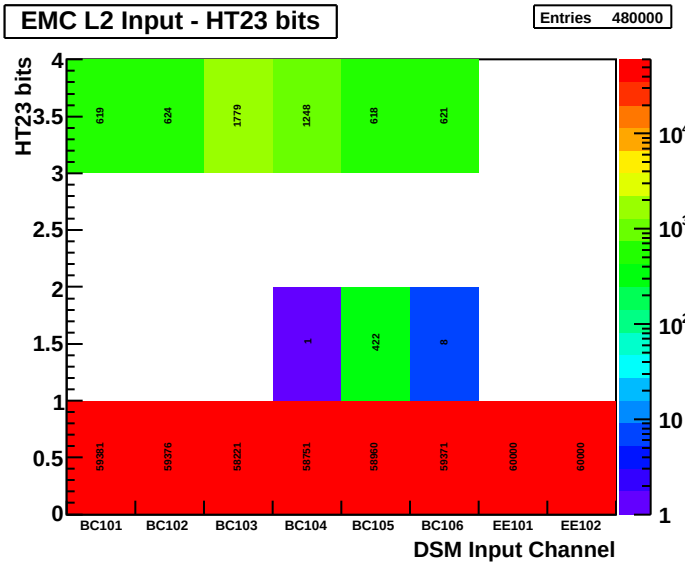

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

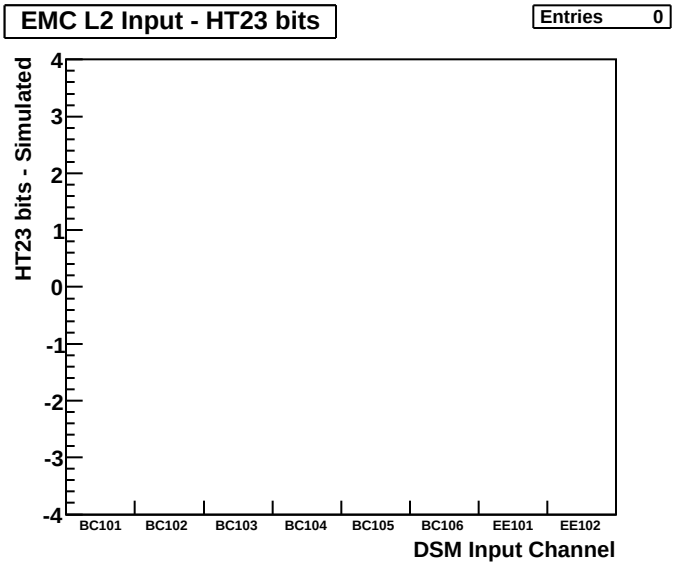

EMC L2 Input - Partial JP Sum
Entries 480000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

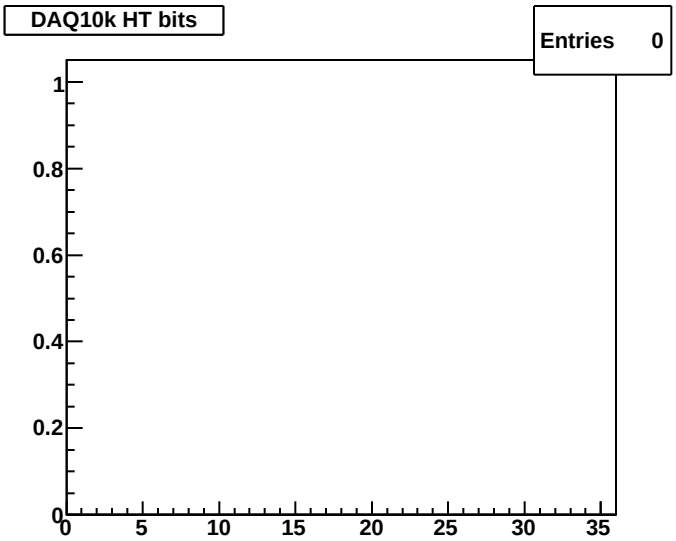

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

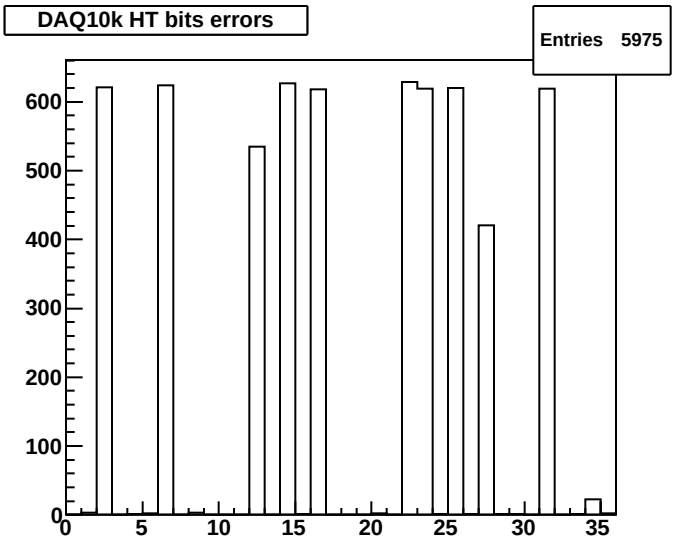

EMC L2 Input - HT01 bits/Partial JP ID
Entries 480000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

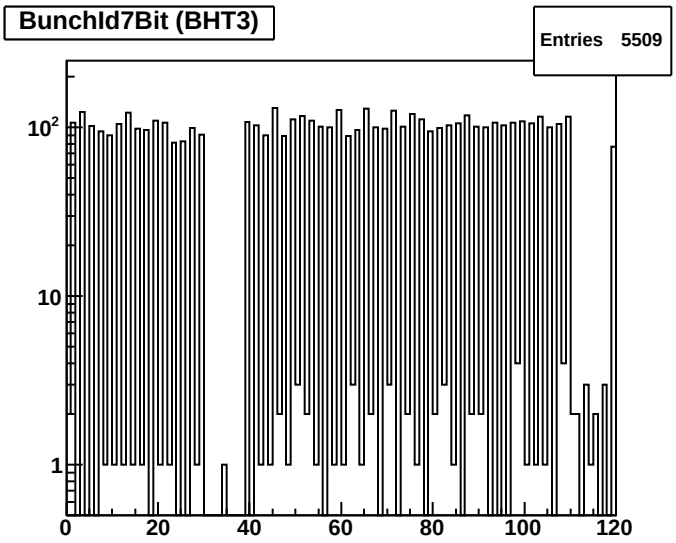

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

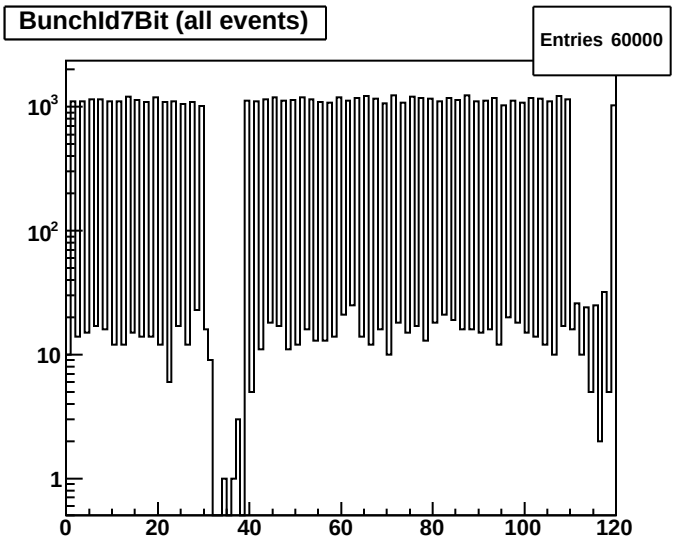

EMC L2 Input - HT23 bits
Entries 480000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

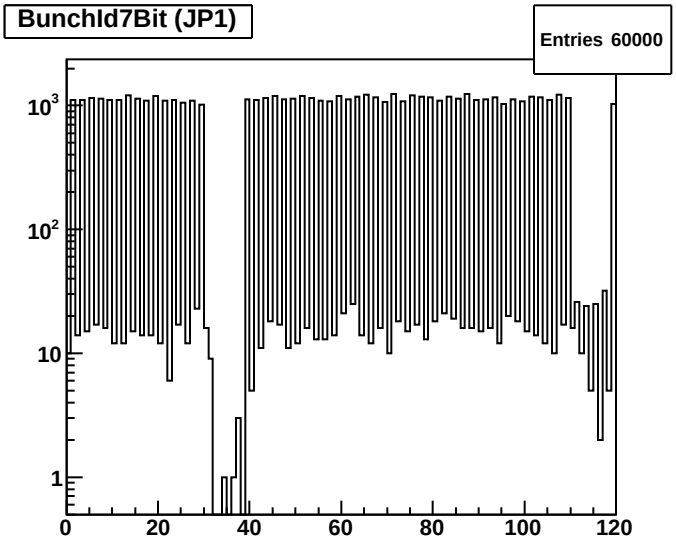

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

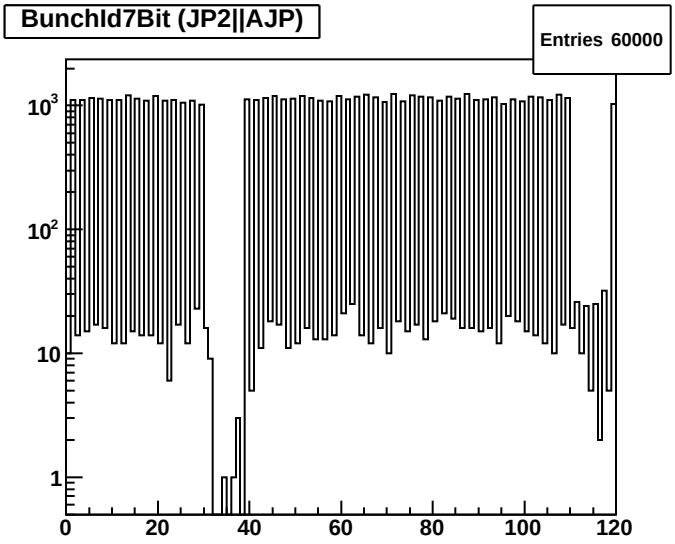

DAQ10k HT bits
Entries 0

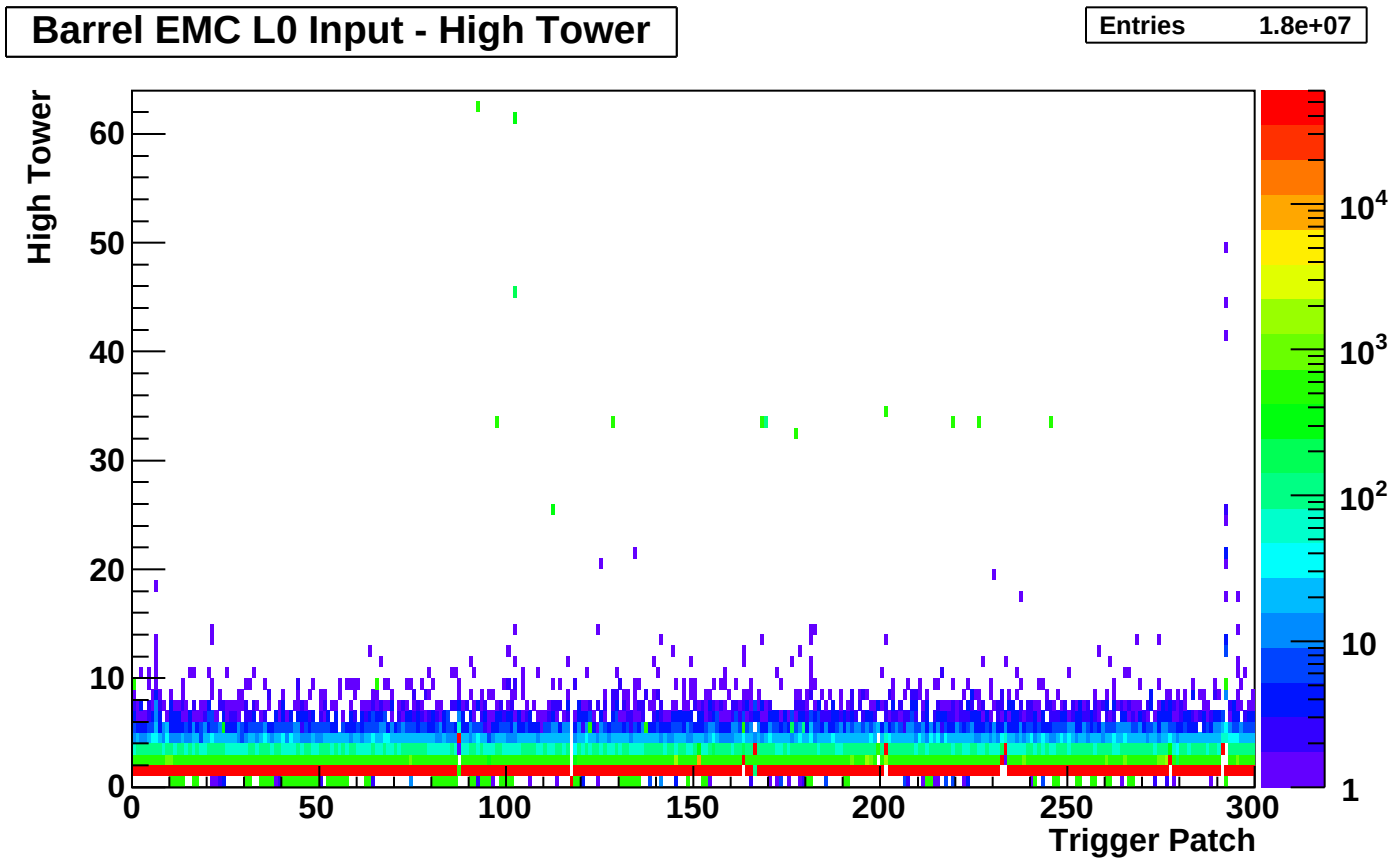

DAQ10k HT bits errors
Entries 5975

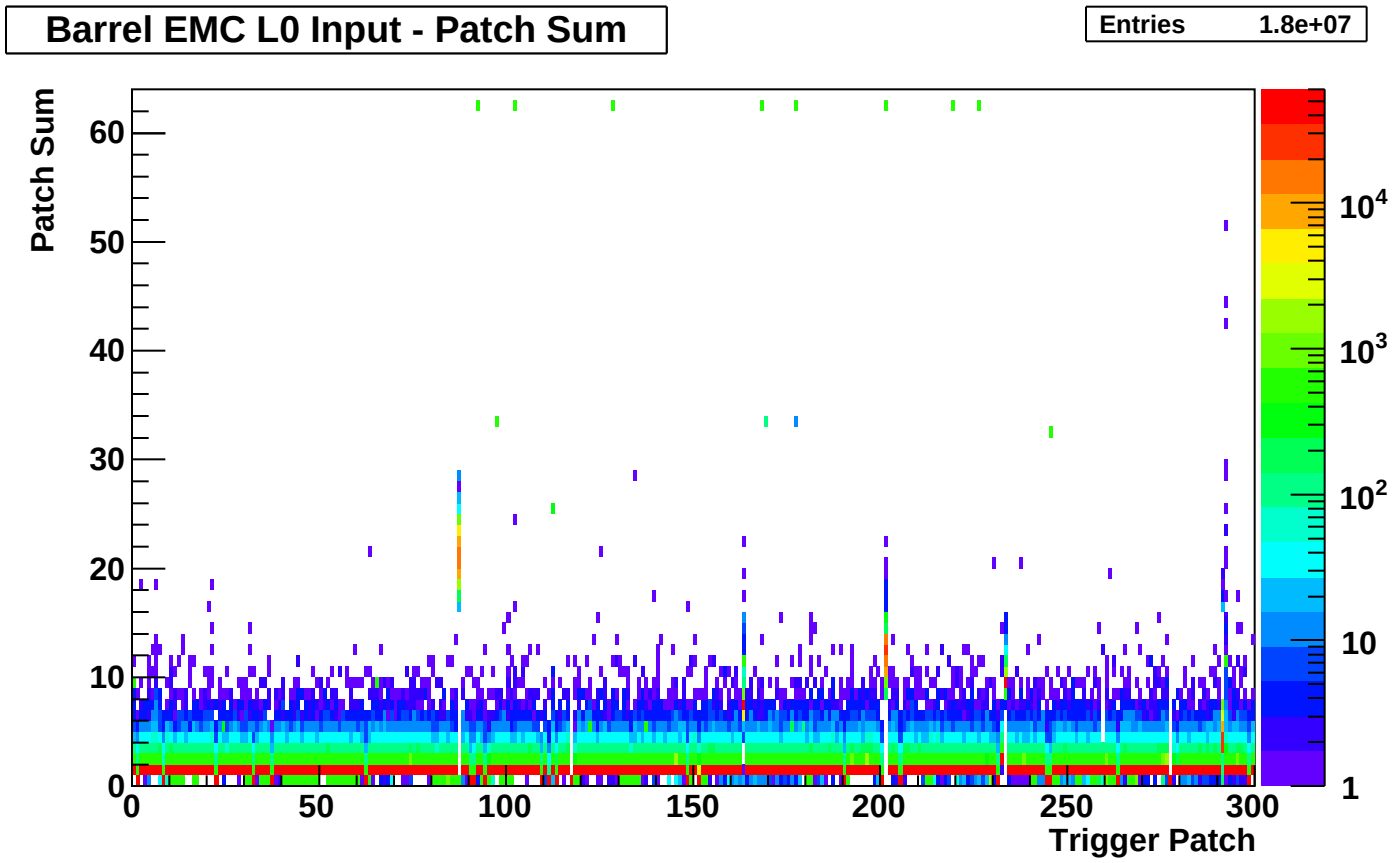

BunchId7Bit (BHT3)
Entries 5509

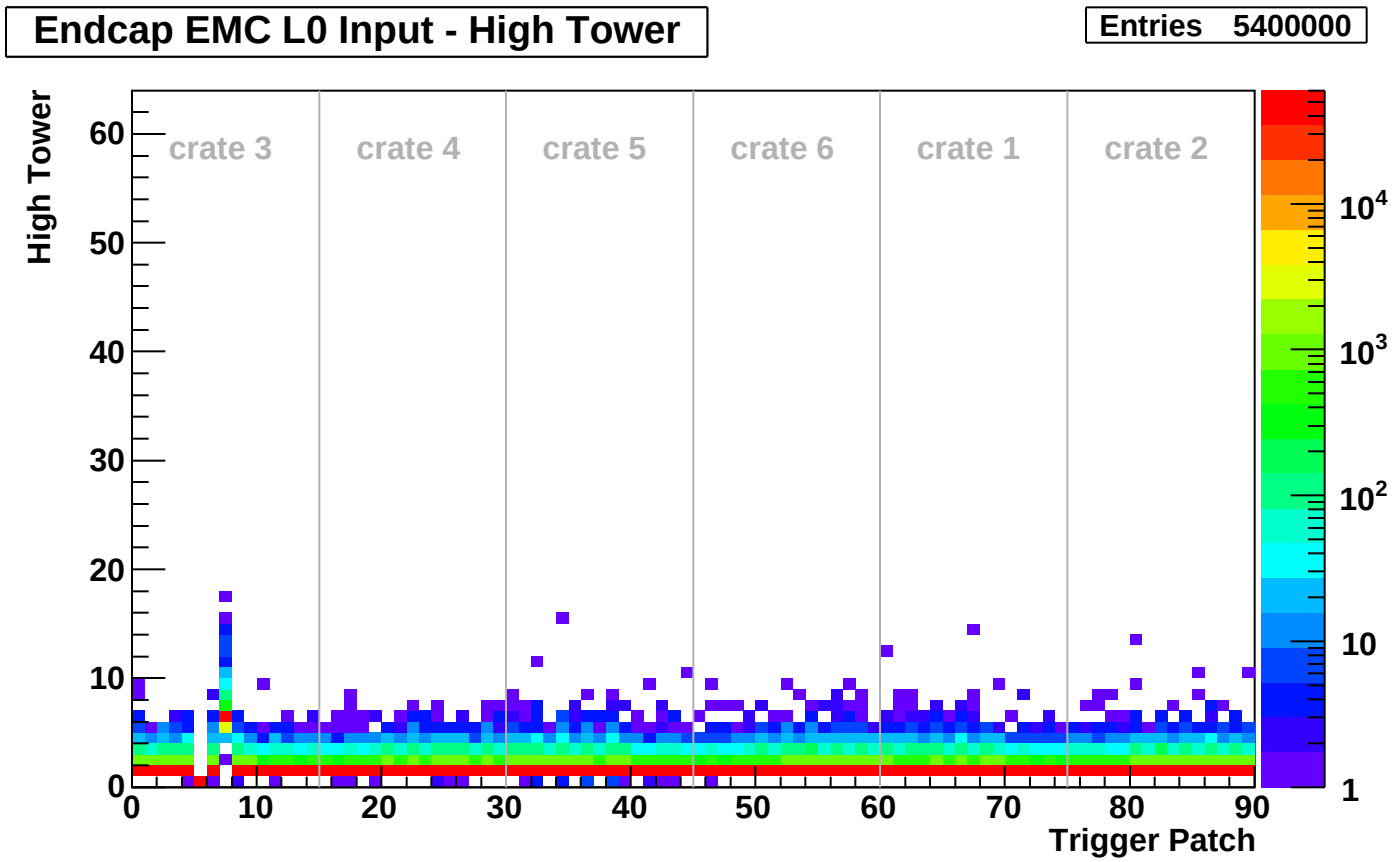

BunchId7Bit (all events)
Entries 60000

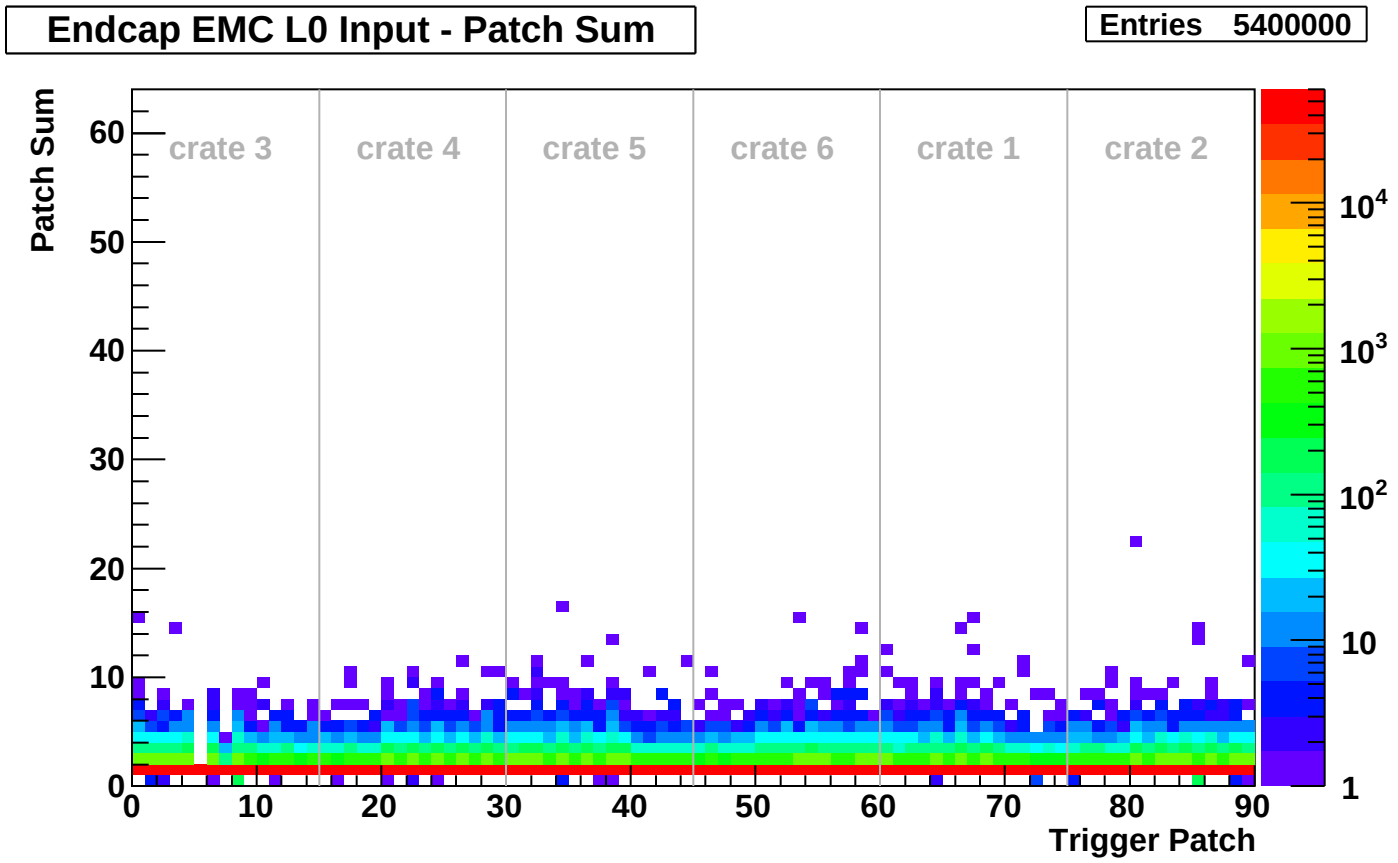

BunchId7Bit (JP1)
Entries 60000

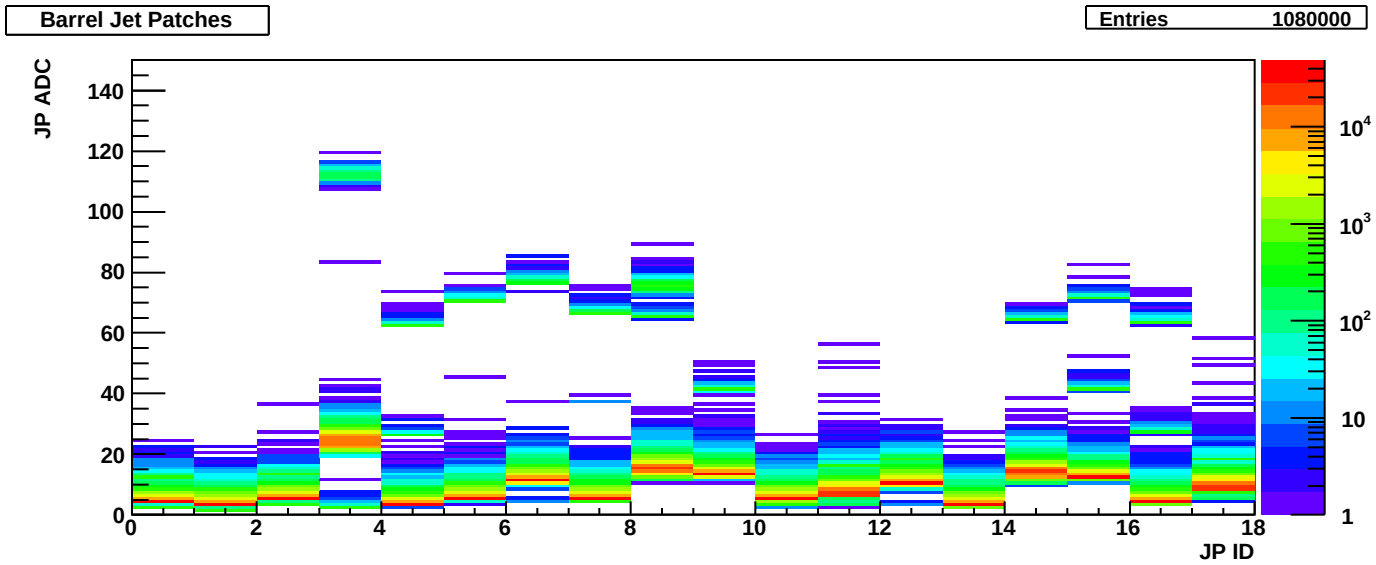

BunchId7Bit (JP2||AJP)
Entries 60000

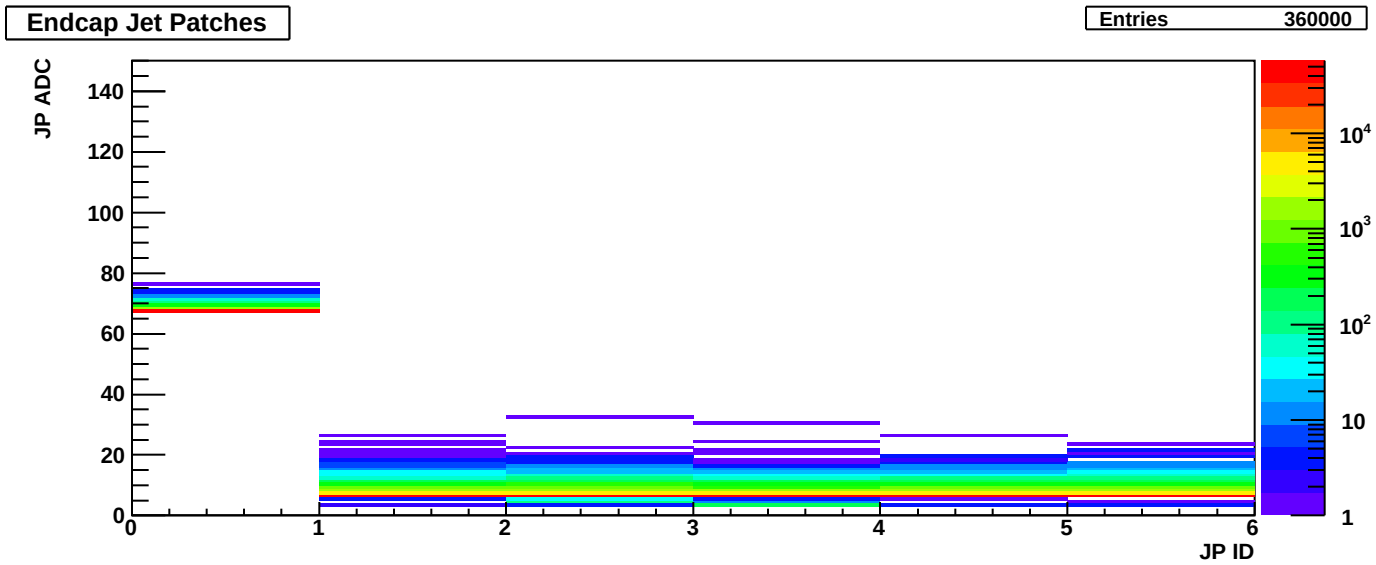

Barrel EMC L0 Input - High Tower
Entries 1.8e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

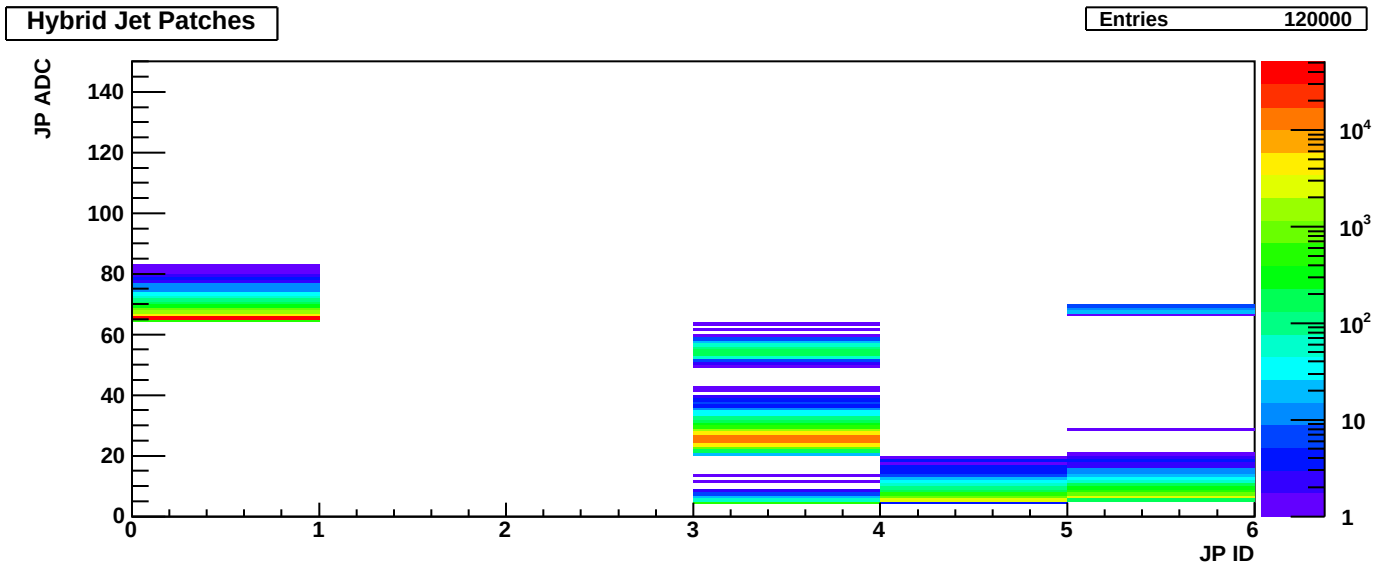

Barrel EMC L0 Input - Patch Sum
Entries 1.8e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

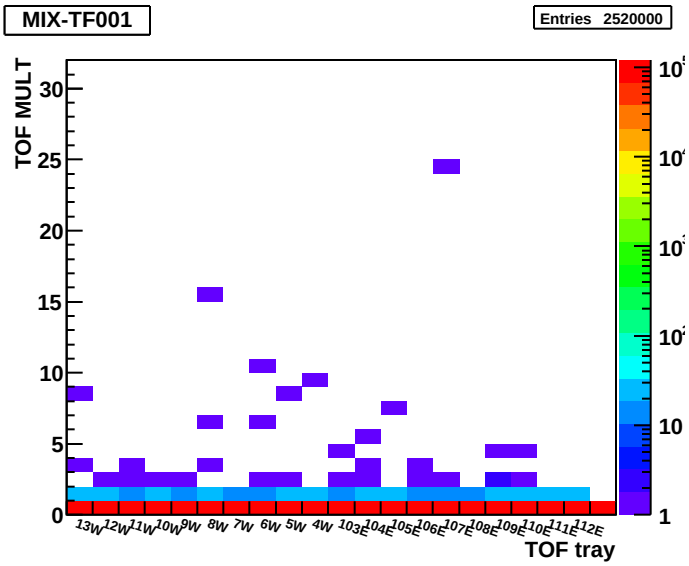

Endcap EMC L0 Input - High Tower
Entries 5400000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

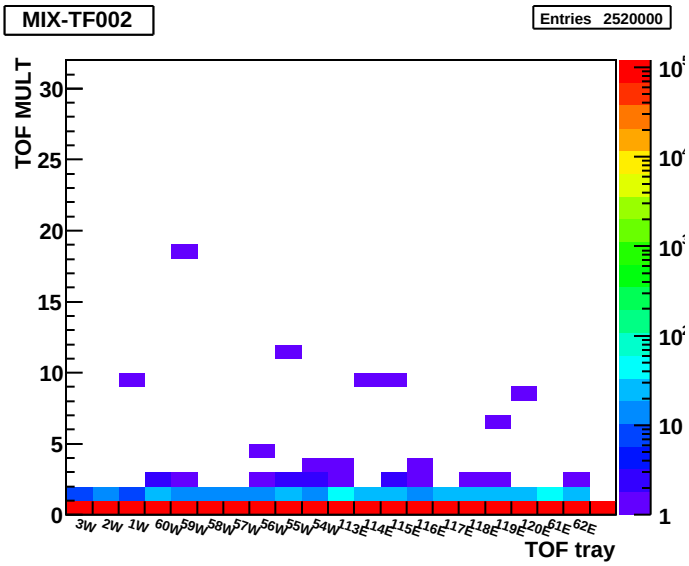

Endcap EMC L0 Input - Patch Sum
Entries 5400000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

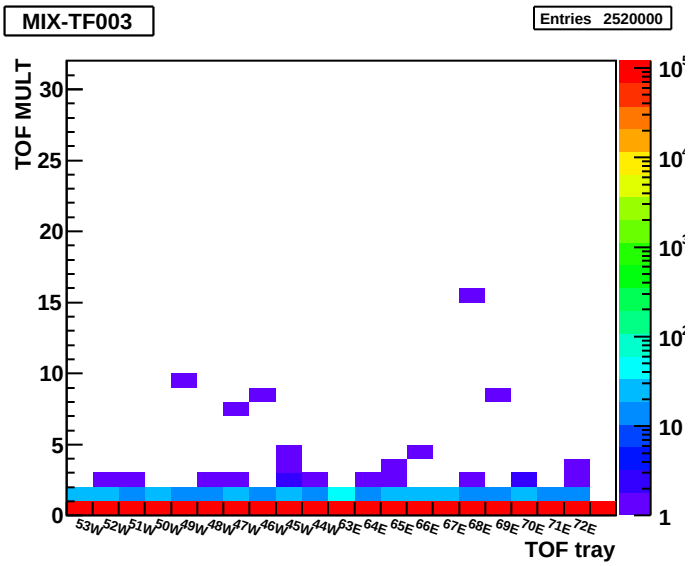

Barrel Jet Patches
Entries 1080000
JP ADC
JP ID

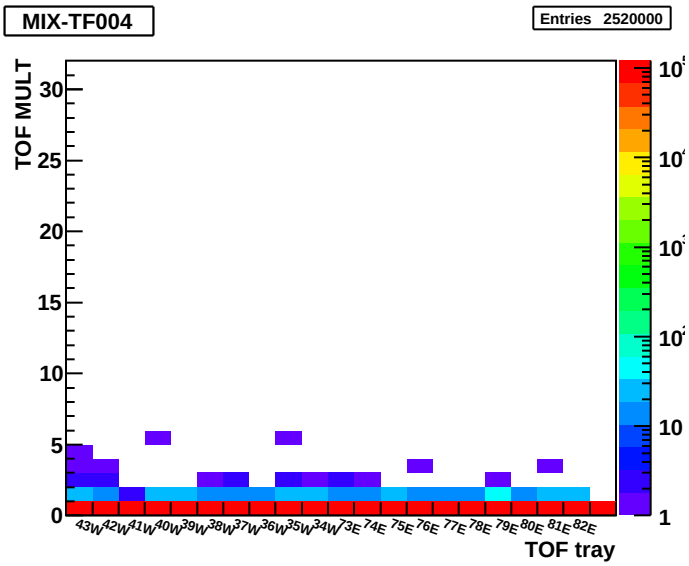

Endcap Jet Patches
Entries 360000
JP ADC
JP ID

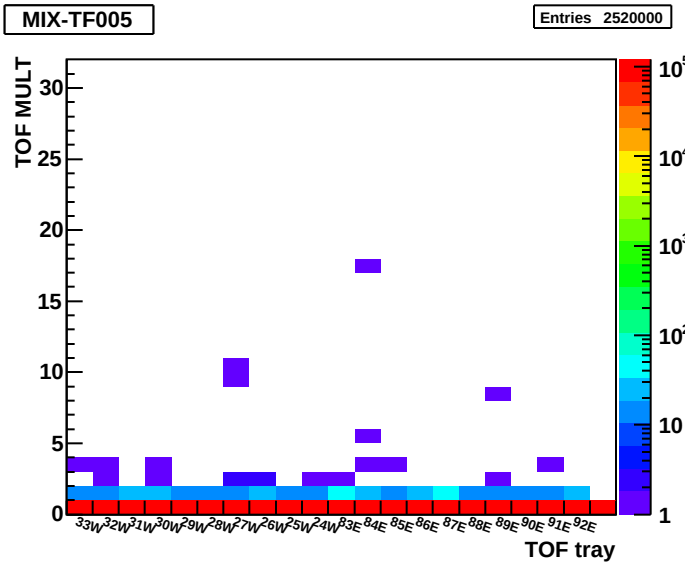

Hybrid Jet Patches
Entries 120000
JP ADC
JP ID

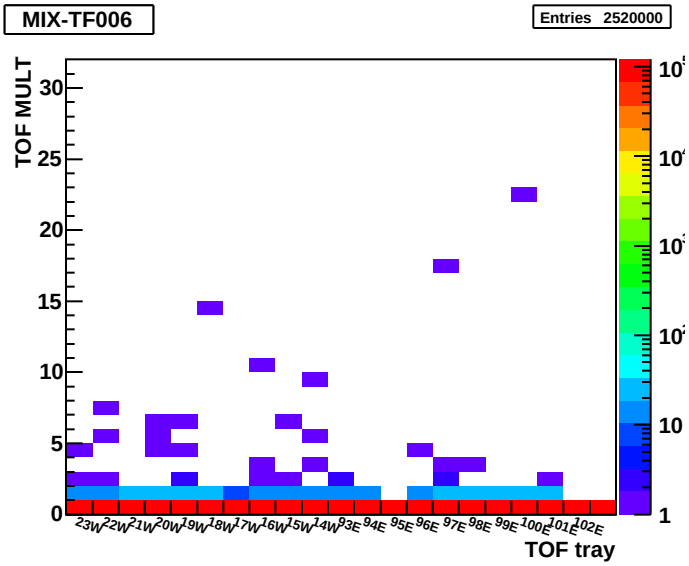

MIX-TF001
Entries 2520000
TOF MULT
TOF tray

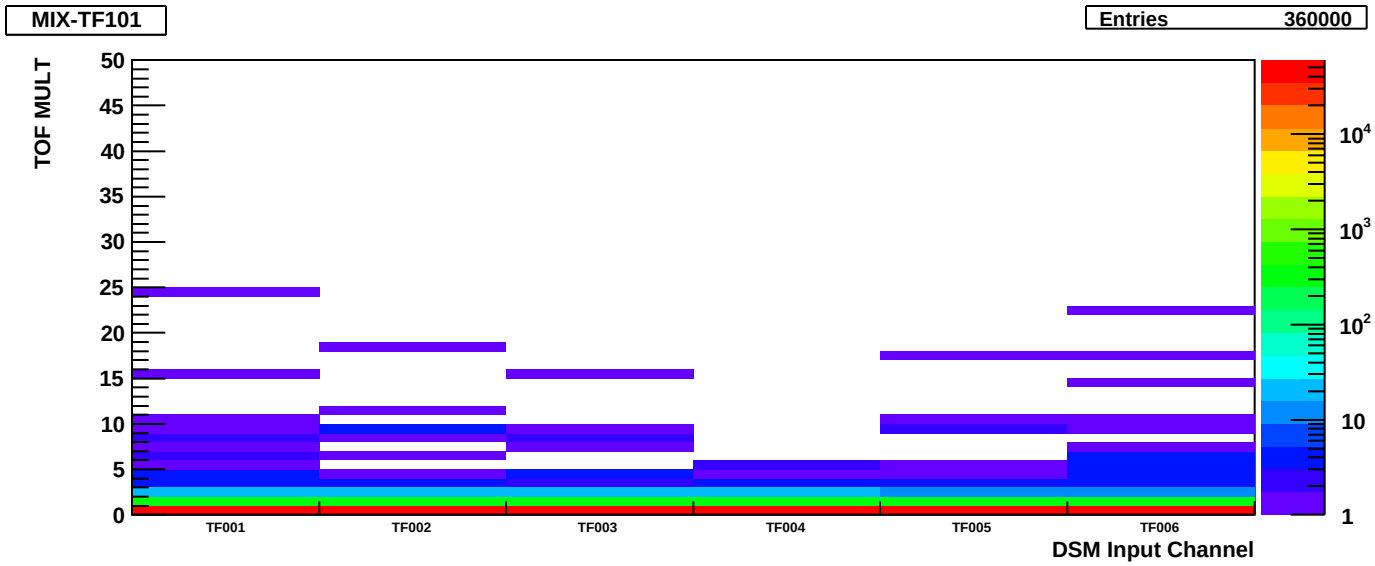

MIX-TF002
Entries 2520000
TOF MULT
TOF tray

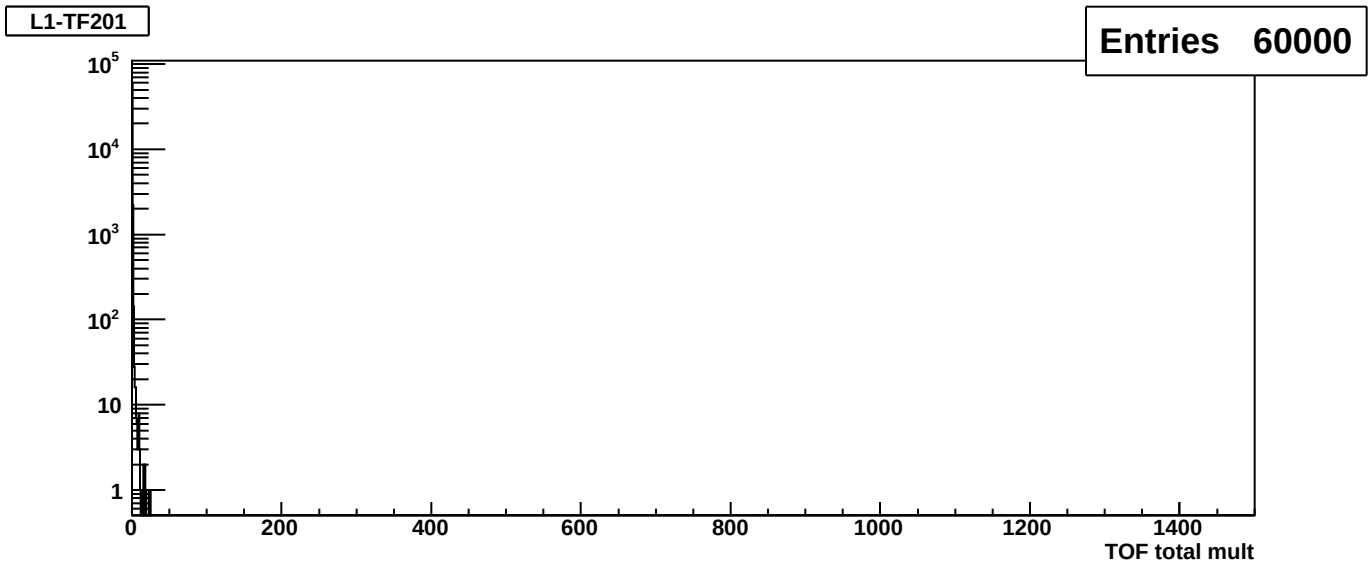

MIX-TF003
Entries 2520000
TOF MULT
TOF tray

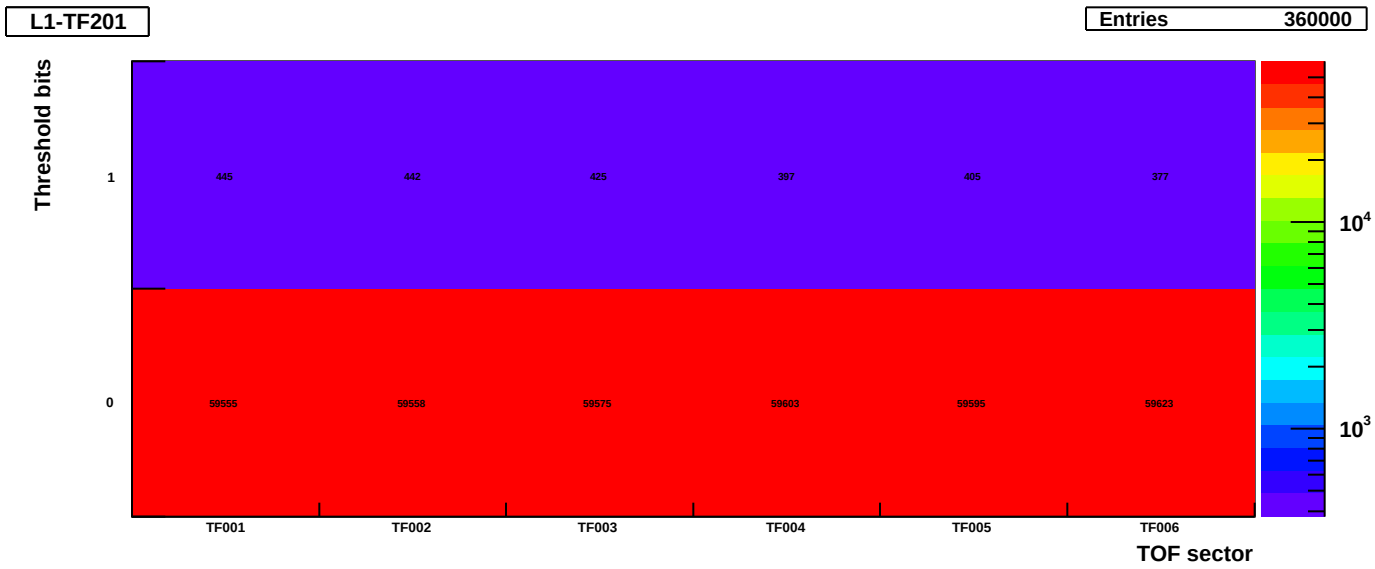

MIX-TF004
Entries 2520000
TOF MULT
TOF tray

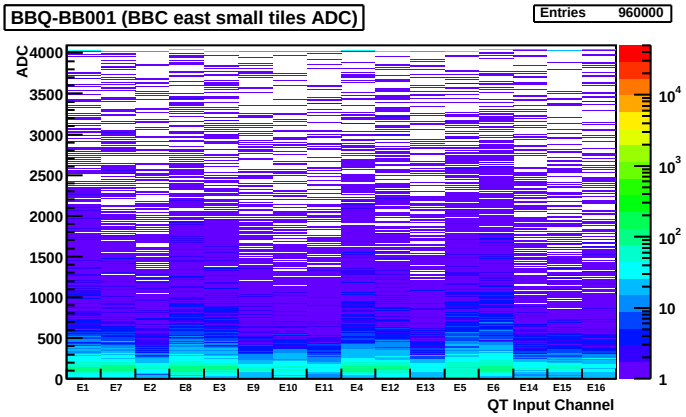

MIX-TF005
Entries 2520000
TOF MULT
TOF tray

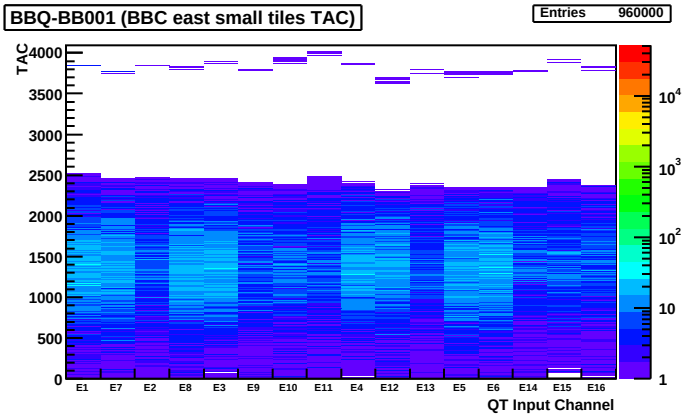

MIX-TF006
Entries 2520000
TOF MULT
TOF tray

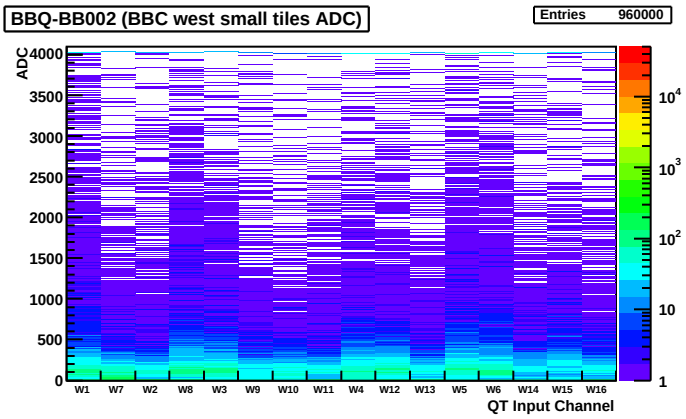

MIX-TF101
Entries 360000
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

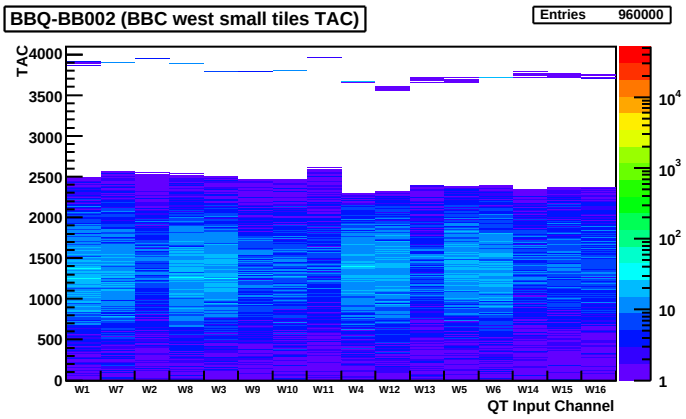

L1-TF201
Entries 60000
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

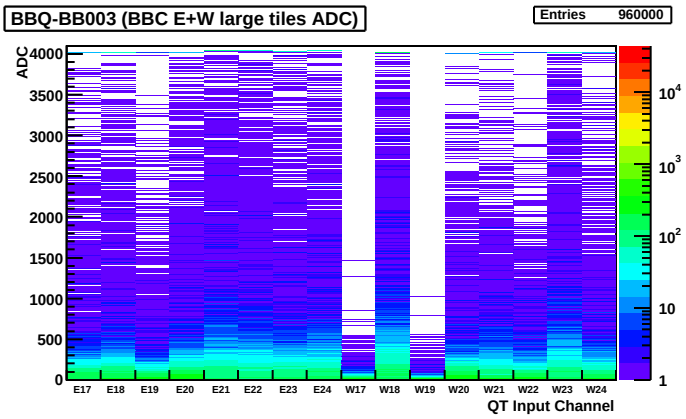

L1-TF201
Entries 360000
Threshold bits
1
0
445
442
425
397
405
377
59555
59558
59575
59603
59595
59623
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3

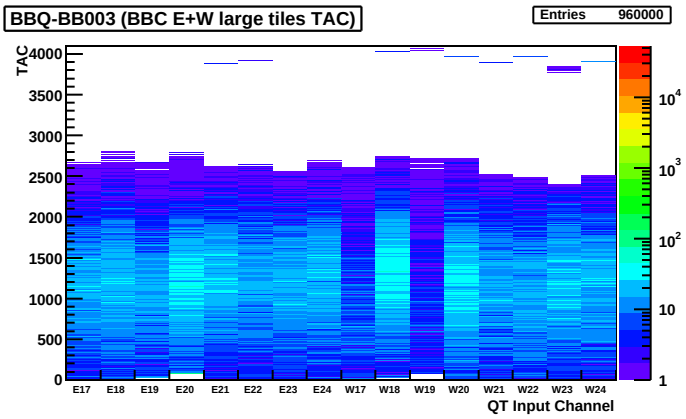

BBQ-BB001 (BBC east small tiles ADC)
Entries 960000
ADC
QT Input Channel

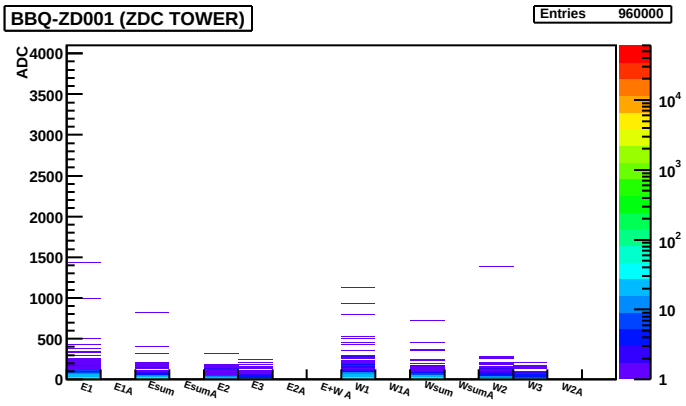

BBQ-BB001 (BBC east small tiles TAC)
Entries 960000
TAC
QT Input Channel

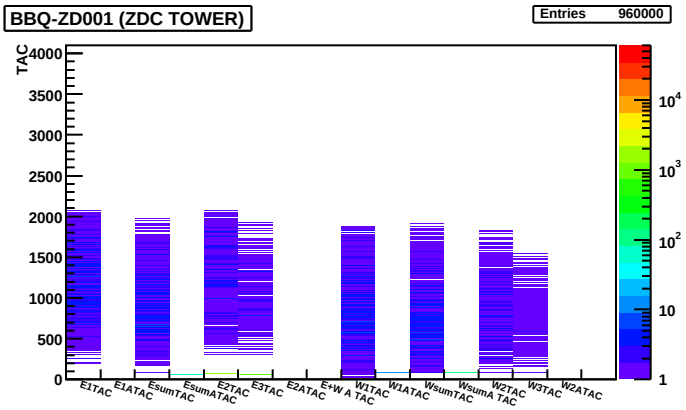

BBQ-BB002 (BBC west small tiles ADC)
Entries 960000
ADC
QT Input Channel

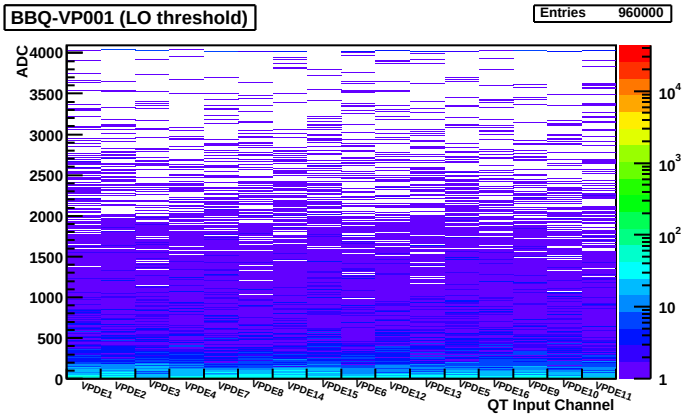

BBQ-BB002 (BBC west small tiles TAC)
Entries 960000
TAC
QT Input Channel

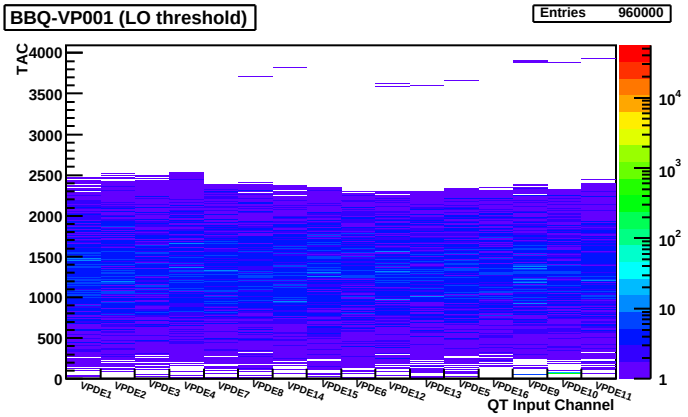

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 960000
ADC
QT Input Channel

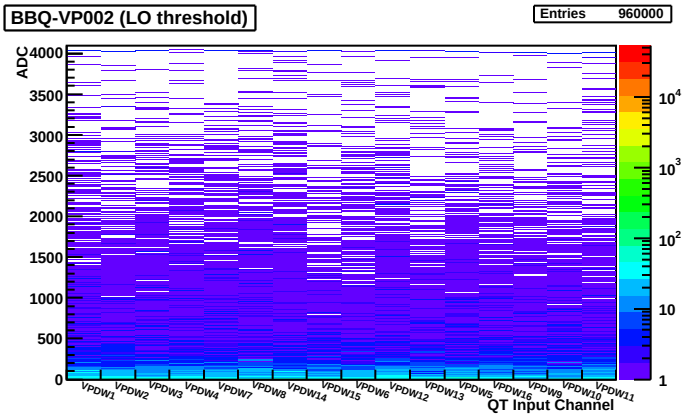

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 960000
TAC
QT Input Channel

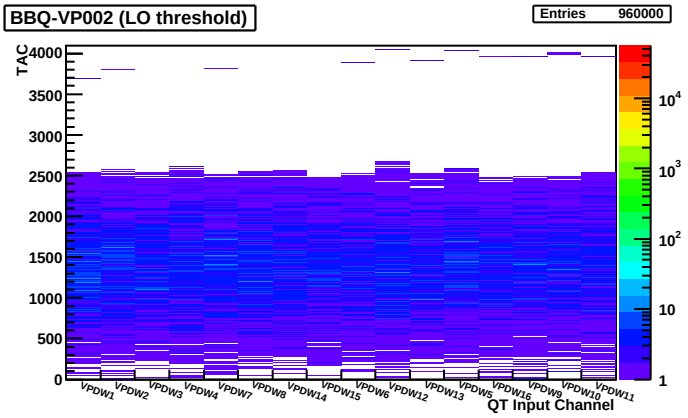

BBQ-ZD001 (ZDC TOWER)
Entries 960000
ADC

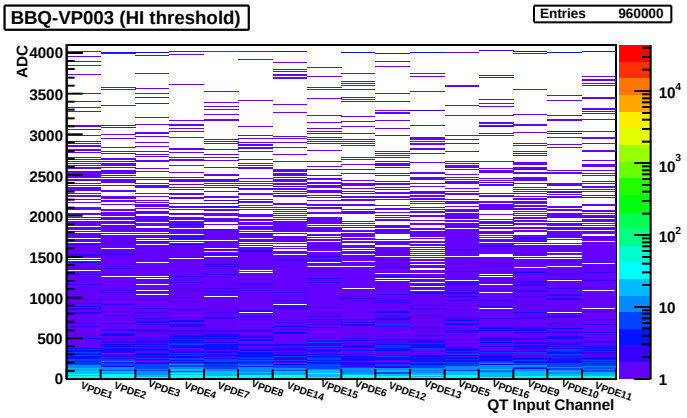

BBQ-ZD001 (ZDC TOWER)
Entries 960000
TAC

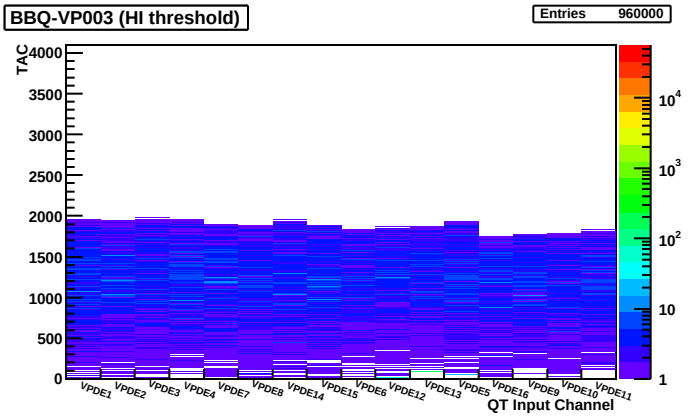

BBQ-VP001 (LO threshold)
Entries 960000
ADC
QT Input Channel

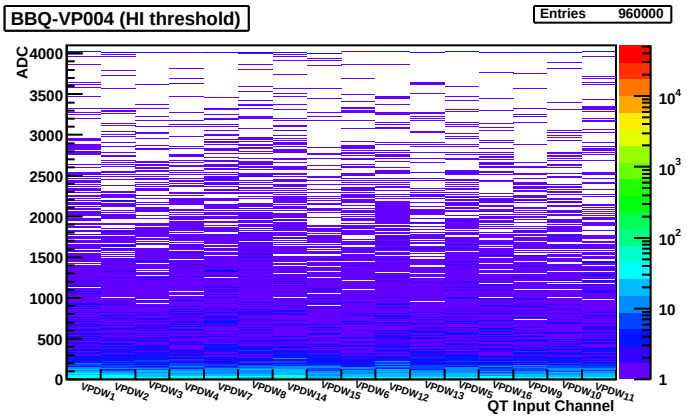

BBQ-VP001 (LO threshold)
Entries 960000
TAC
QT Input Channel

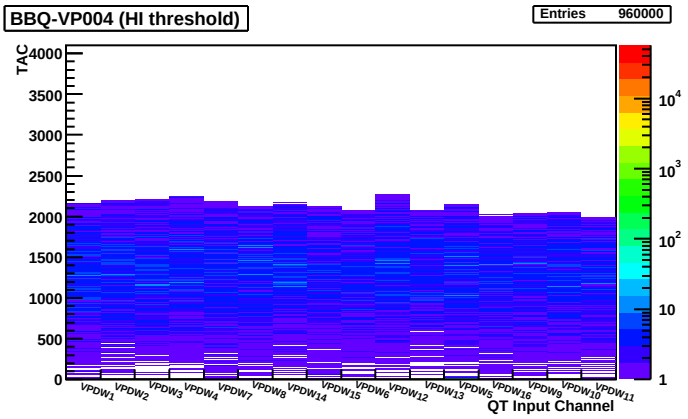

BBQ-VP002 (LO threshold)
Entries 960000
ADC
QT Input Channel

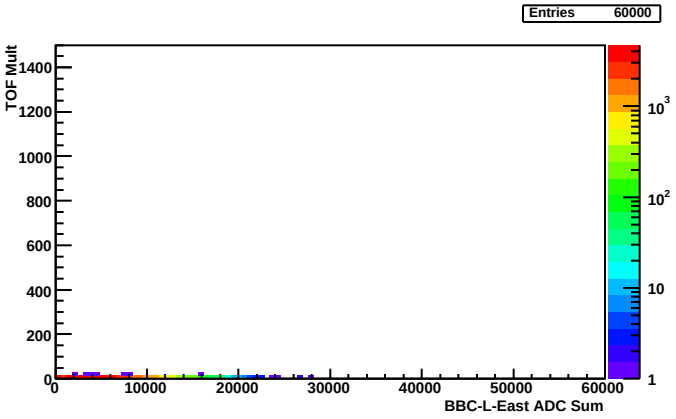

BBQ-VP002 (LO threshold)
Entries 960000
TAC
QT Input Channel

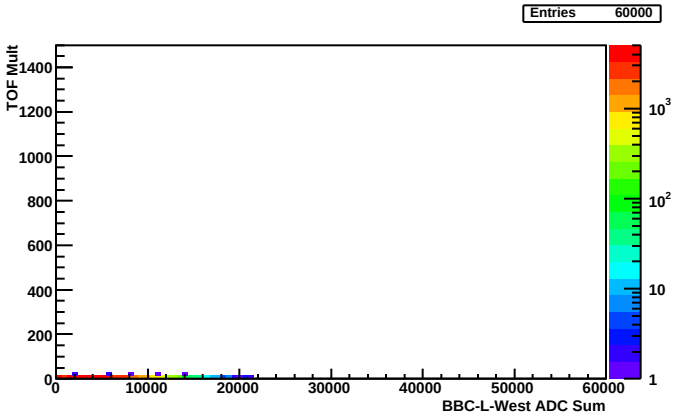

BBQ-VP003 (HI threshold)
Entries 960000
ADC
QT Input Channel

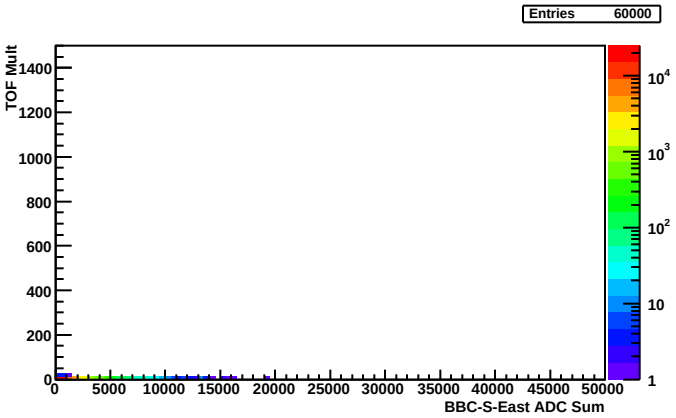

BBQ-VP003 (HI threshold)
Entries 960000
TAC
QT Input Channel

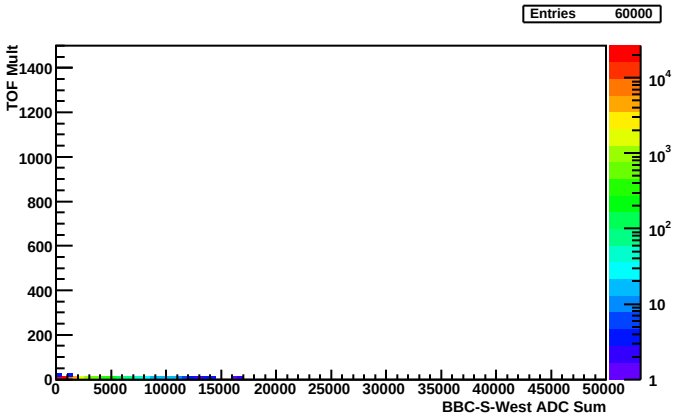

BBQ-VP004 (HI threshold)
Entries 960000
ADC
QT Input Channel

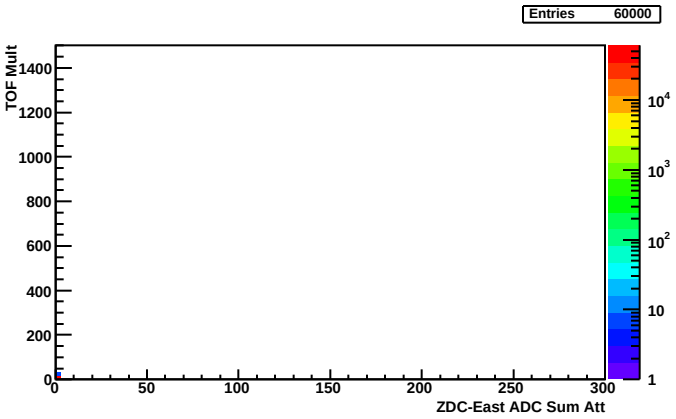

BBQ-VP004 (HI threshold)
Entries 960000
TAC
QT Input Channel

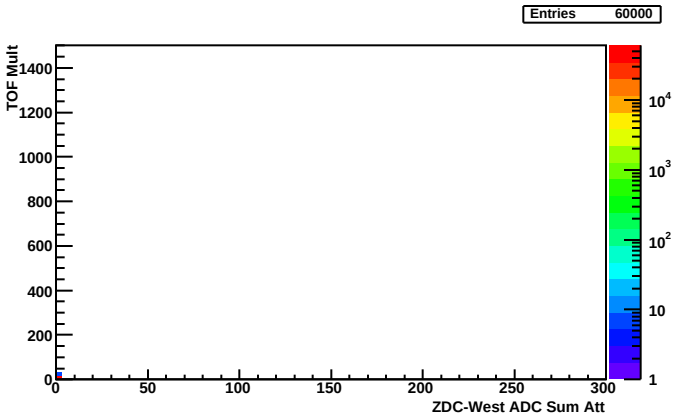

Entries 60000
TOF Mult
BBC-L-East ADC Sum

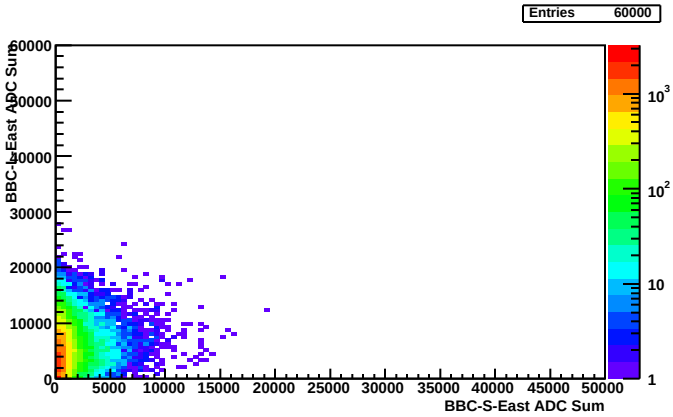

Entries 60000
TOF Mult
BBC-L-West ADC Sum

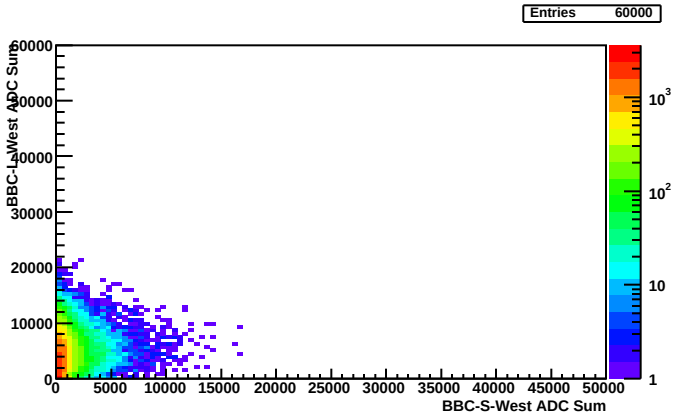

Entries 60000
TOF Mult
BBC-S-East ADC Sum

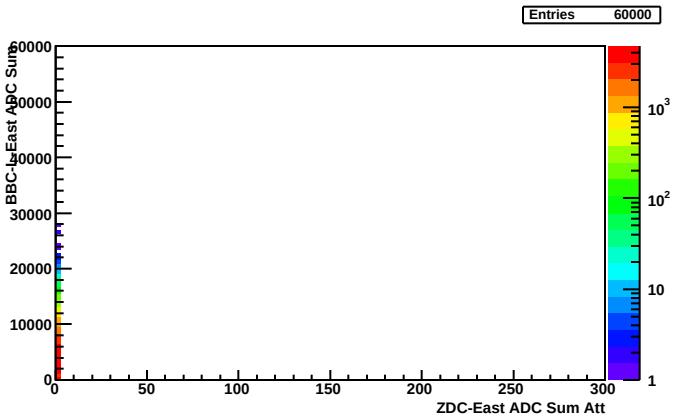

Entries 60000
TOF Mult
BBC-S-West ADC Sum

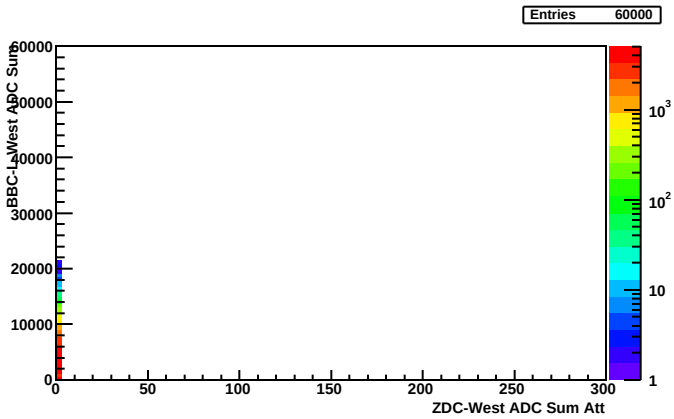

Entries 60000
TOF Mult
ZDC-East ADC Sum Att

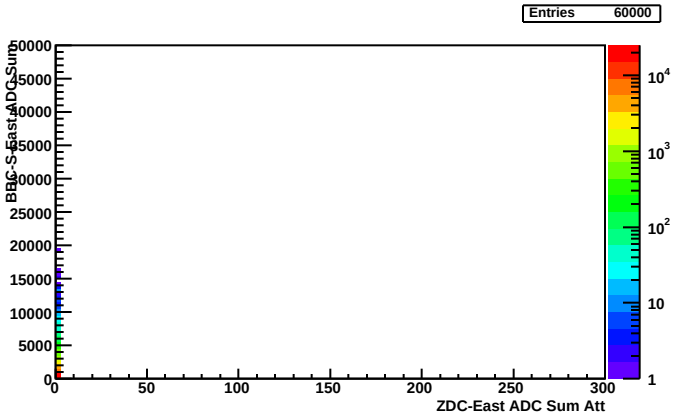

Entries 60000
TOF Mult
ZDC-West ADC Sum Att

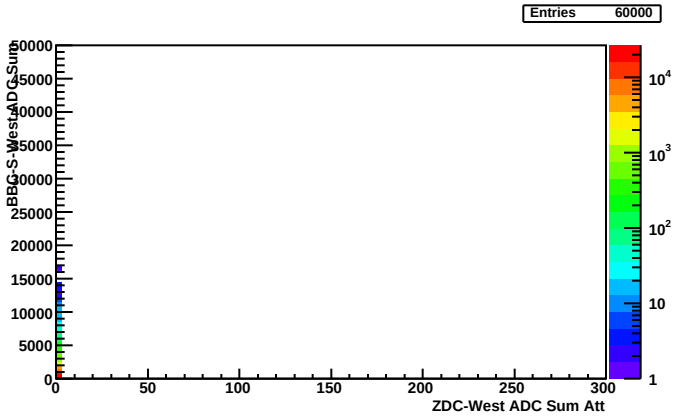

Entries 60000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

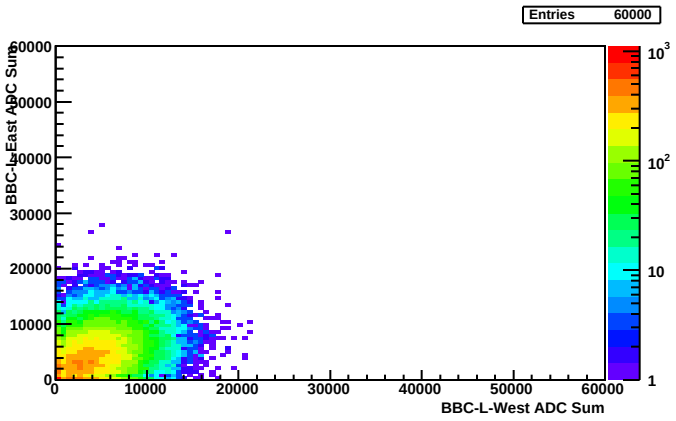

Entries 60000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

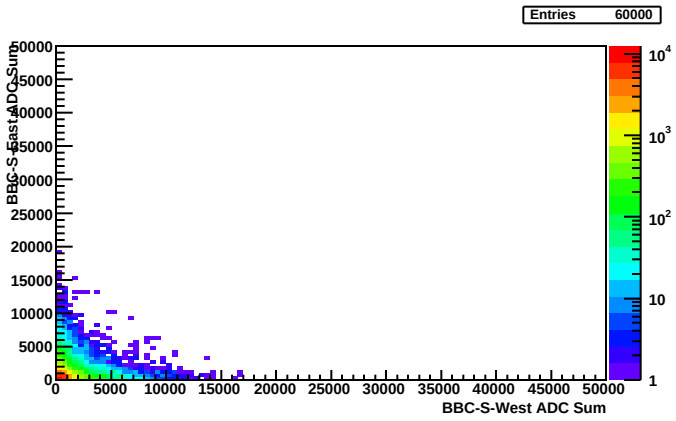

Entries 60000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

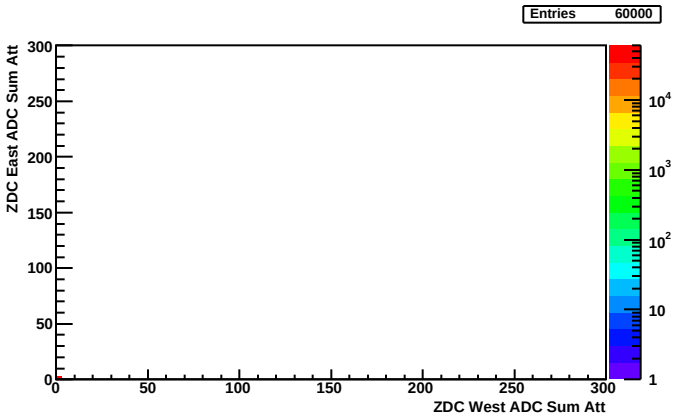

Entries 60000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

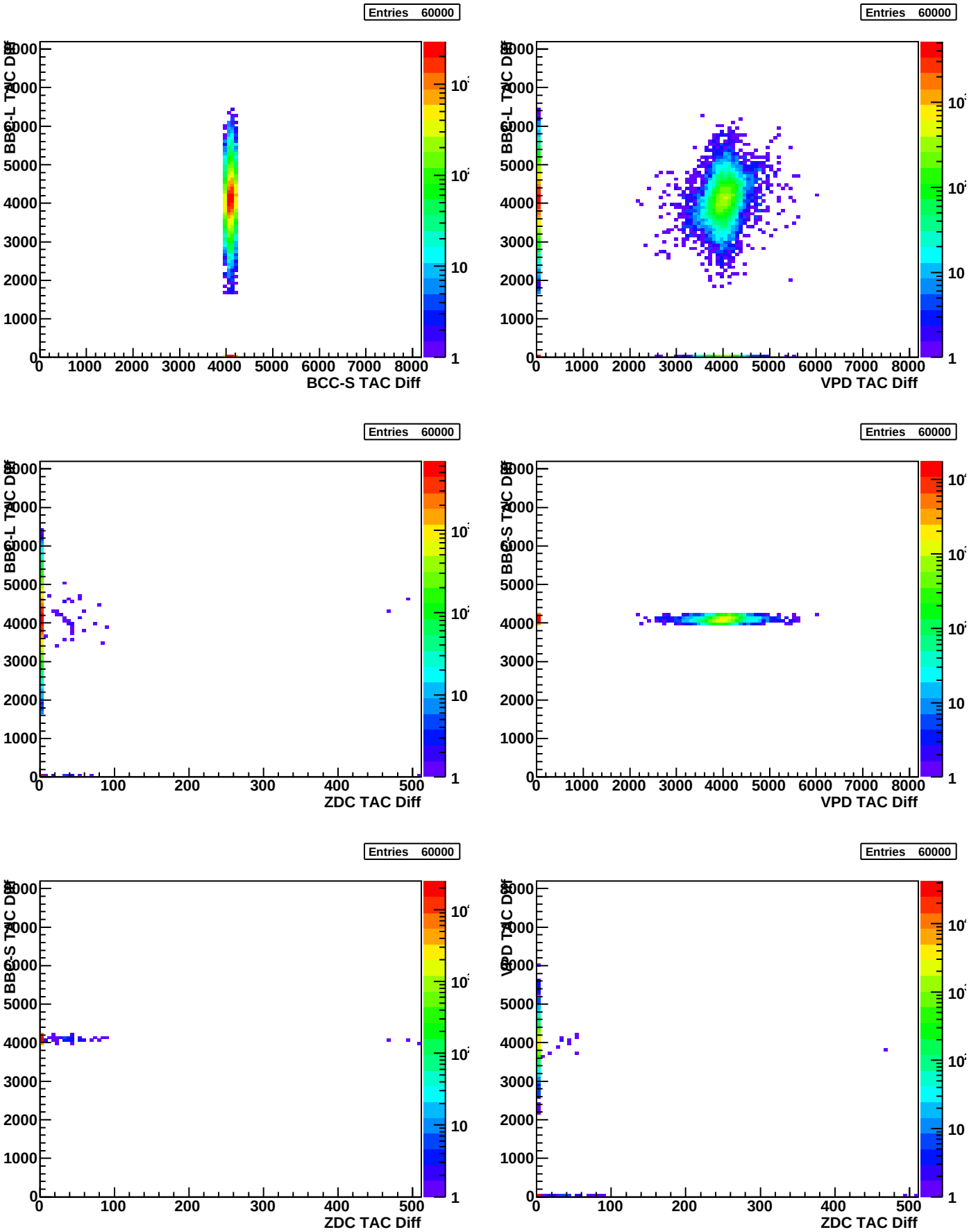

Entries 60000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

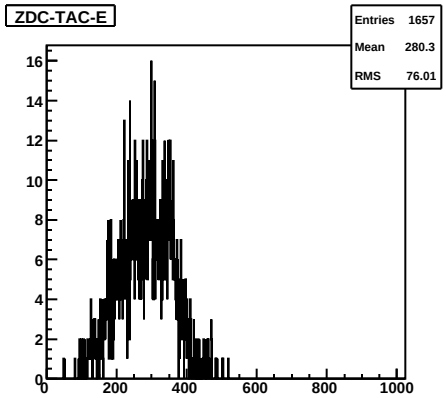

Entries 60000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

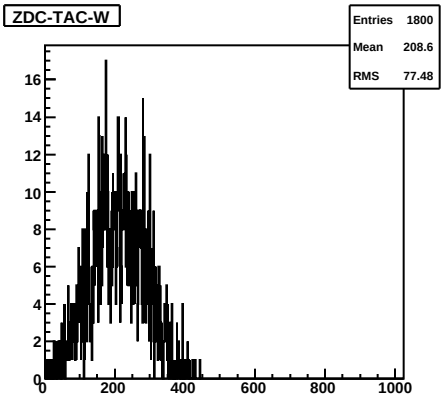

Entries 60000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

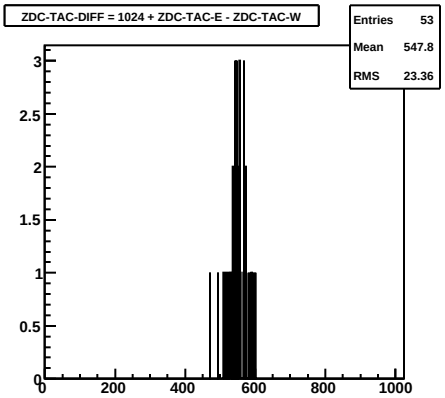

Entries 60000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

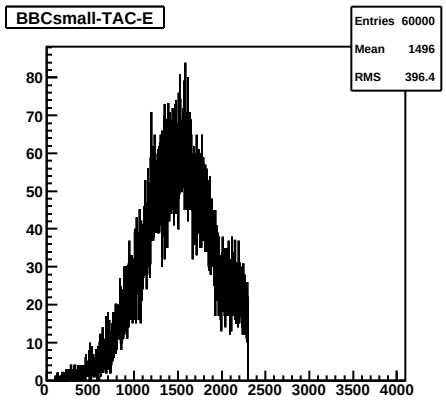

Entries 60000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

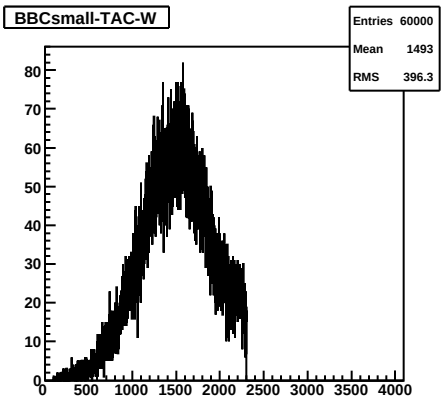

Entries 60000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 60000
BBC-L TAC Diff
VPD TAC Diff
Entries 60000
BBC-L TAC Diff
ZDC TAC Diff
Entries 60000
BBC-S TAC Diff
VPD TAC Diff
Entries 60000
BBC-S TAC Diff
ZDC TAC Diff
Entries 60000
VPD TAC Diff
ZDC TAC Diff

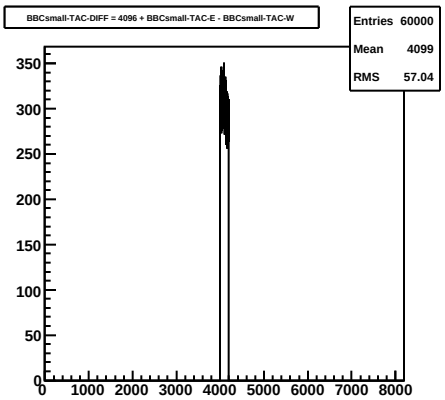

ZDC-TAC-E
Entries 1657
Mean 280.3
RMS 76.01

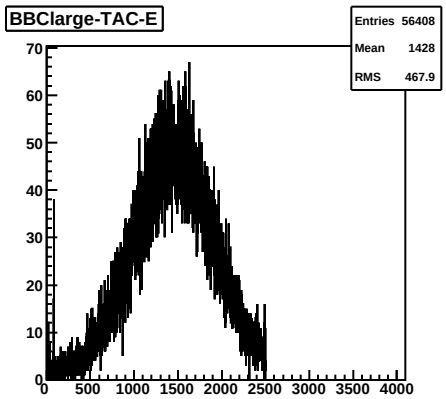

ZDC-TAC-W
Entries 1800
Mean 208.6
RMS 77.48

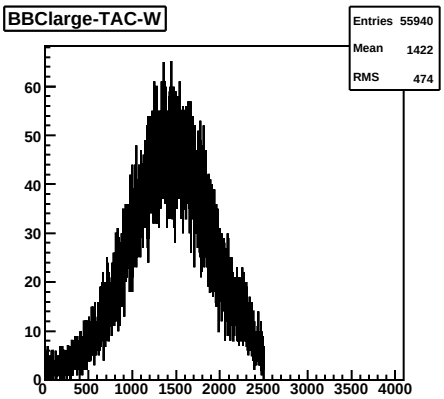

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 53
Mean 547.8
RMS 23.36

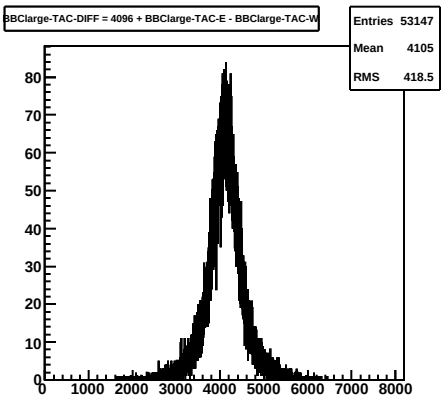

BBCsmall-TAC-E
Entries 60000
Mean 1496
RMS 396.4

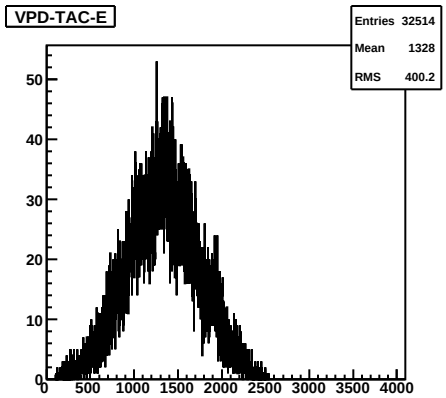

BBCsmall-TAC-W
Entries 60000
Mean 1493
RMS 396.3

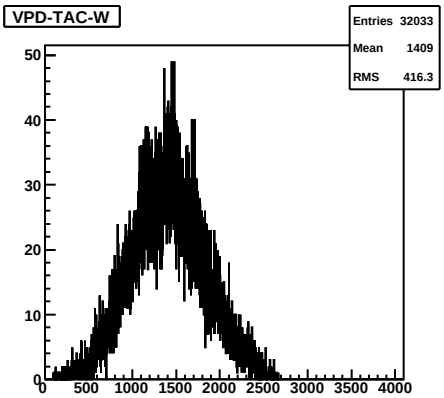

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 60000
Mean 4099
RMS 57.04

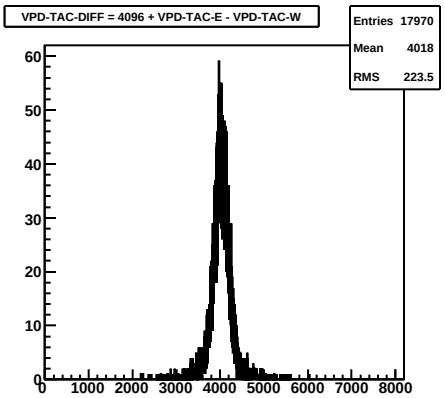

BBClarge-TAC-E
Entries 56408
Mean 1428
RMS 467.9

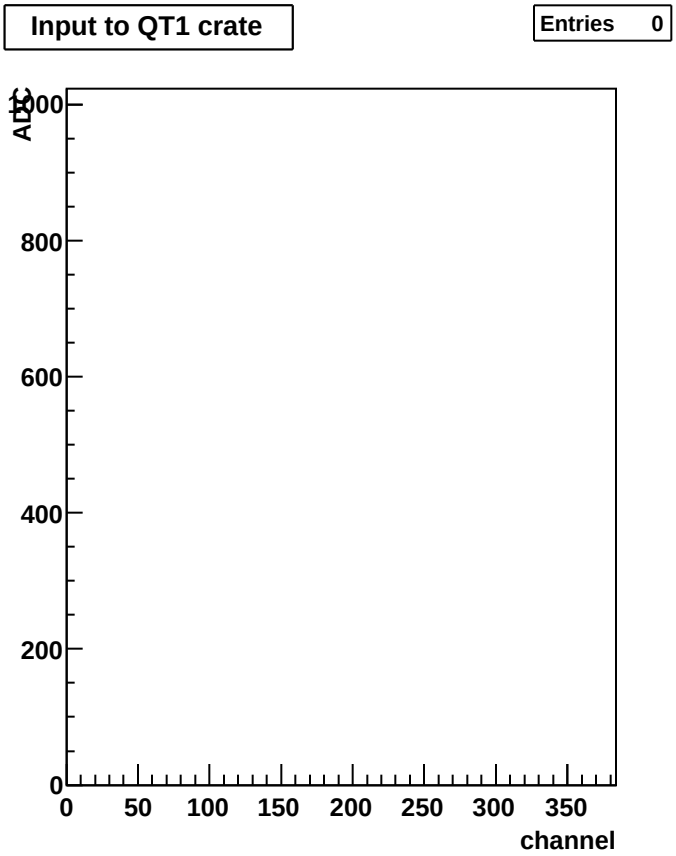

BBClarge-TAC-W
Entries 55940
Mean 1422
RMS 474

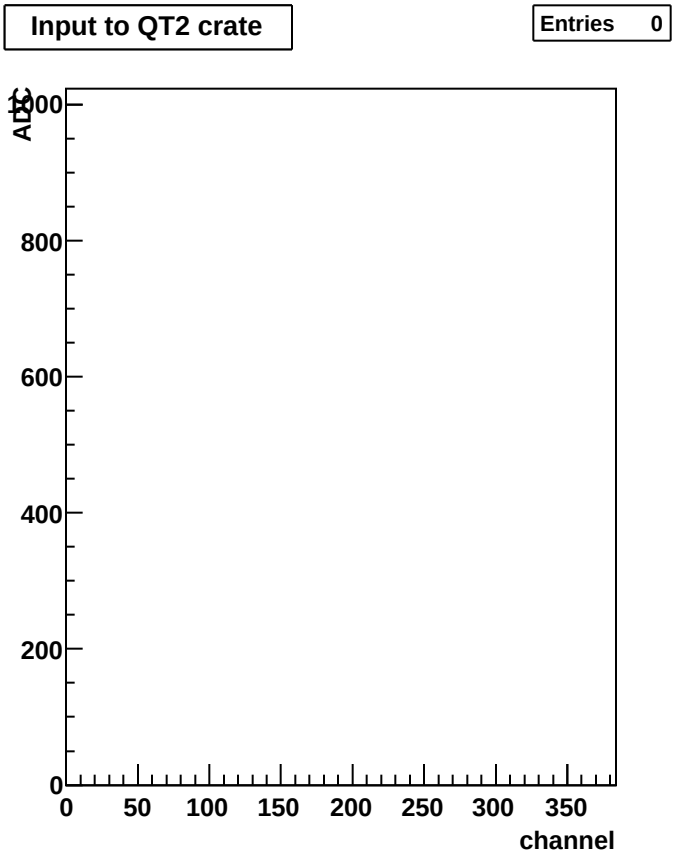

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 53147
Mean 4105
RMS 418.5

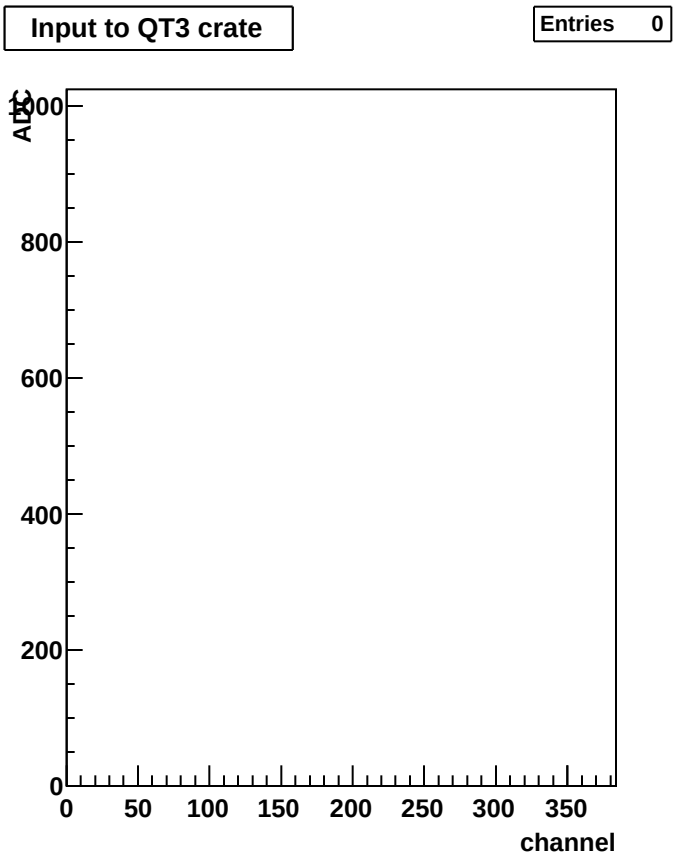

VPD-TAC-E
Entries 32514
Mean 1328
RMS 400.2

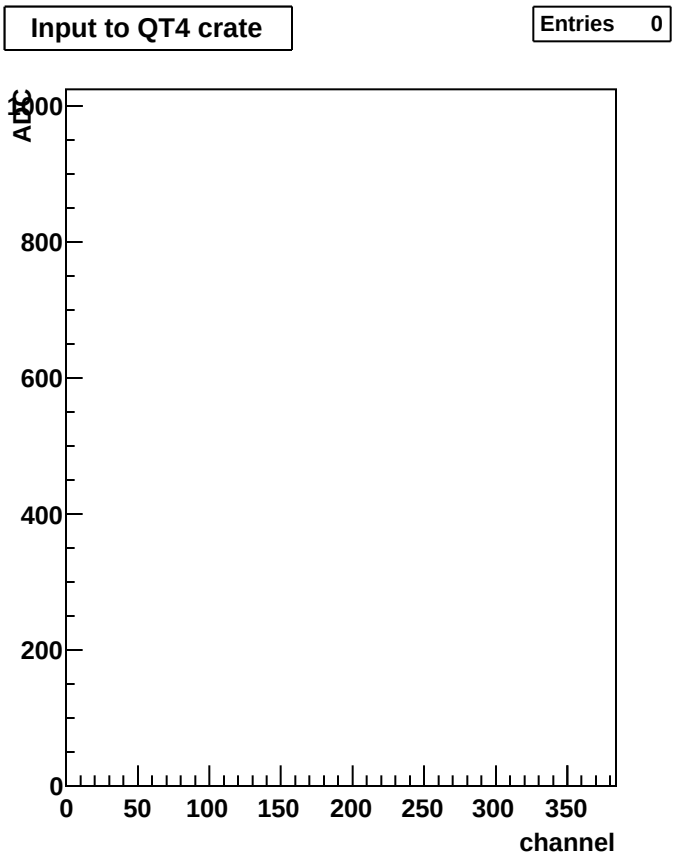

VPD-TAC-W
Entries 32033
Mean 1409
RMS 416.3

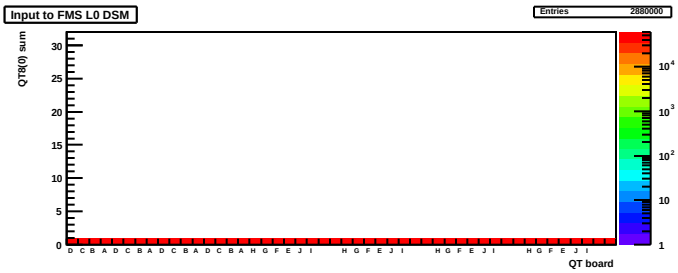

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 17970
Mean 4018
RMS 223.5

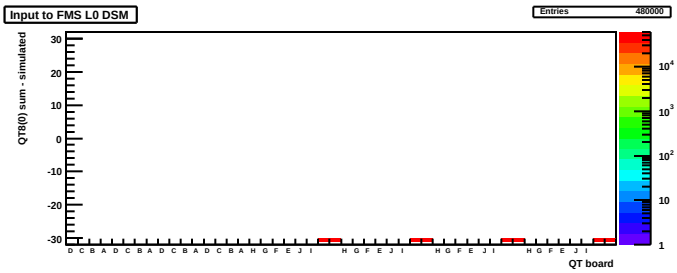

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

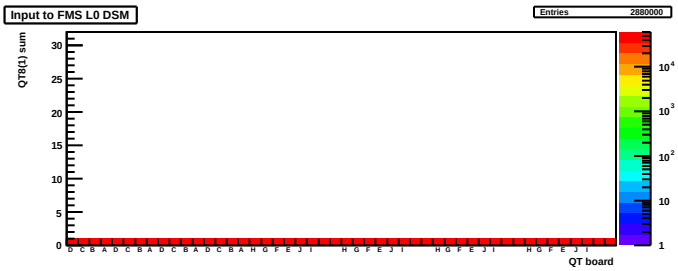

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

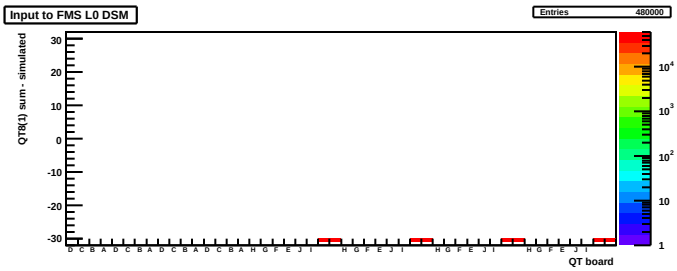

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

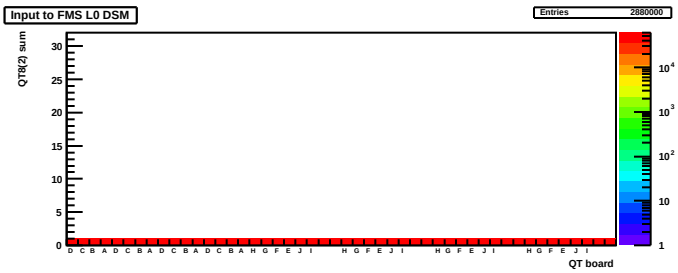

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

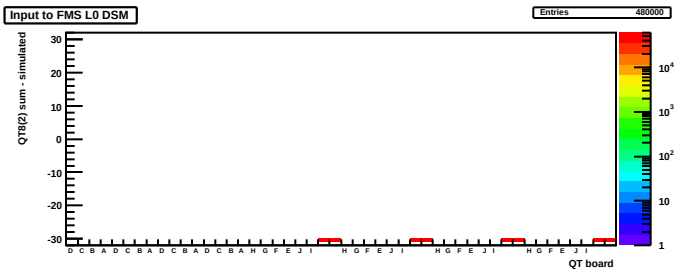

Input to FMS L0 DSM
Entries 2880000
QT8(0) sum
QT board

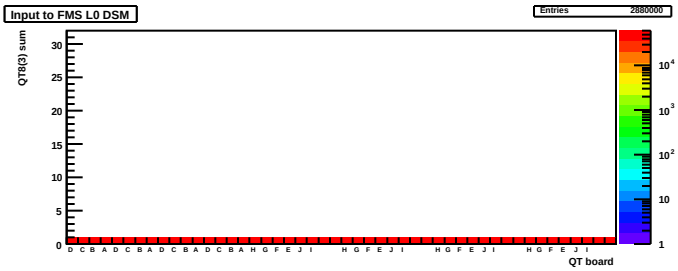

Input to FMS L0 DSM
Entries 480000
QT8(0) sum - simulated
QT board

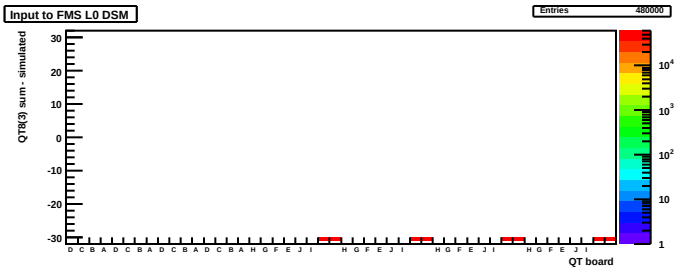

Input to FMS L0 DSM
Entries 2880000
QT8(1) sum
QT board

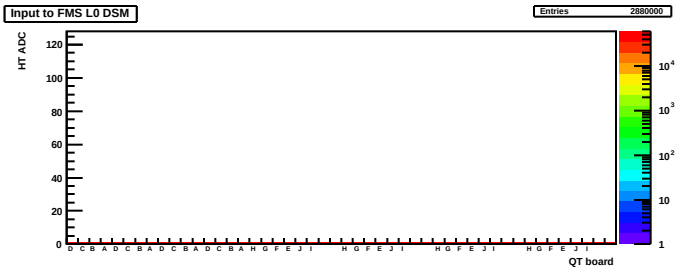

Input to FMS L0 DSM
Entries 480000
QT8(1) sum - simulated
QT board

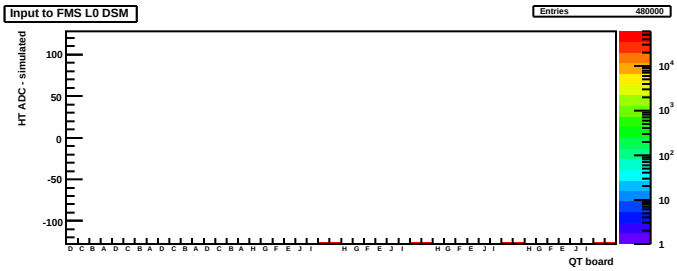

Input to FMS L0 DSM
Entries 2880000
QT8(2) sum
QT board

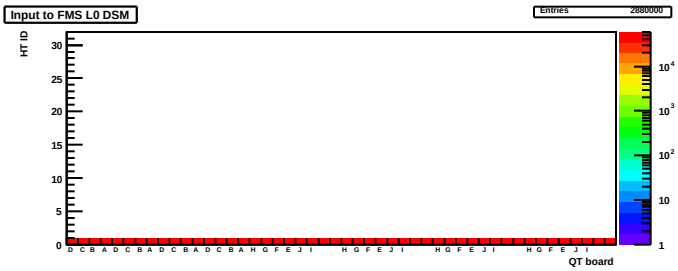

Input to FMS L0 DSM
Entries 480000
QT8(2) sum - simulated
QT board

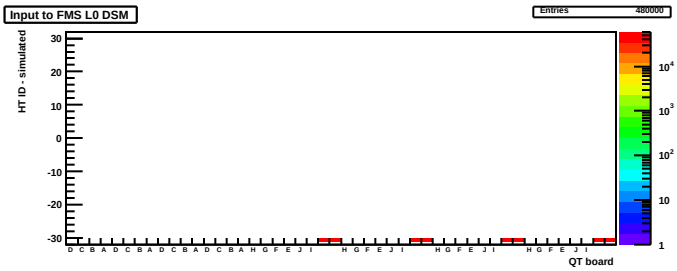

Input to FMS L0 DSM
Entries 2880000
QT8(3) sum
QT board

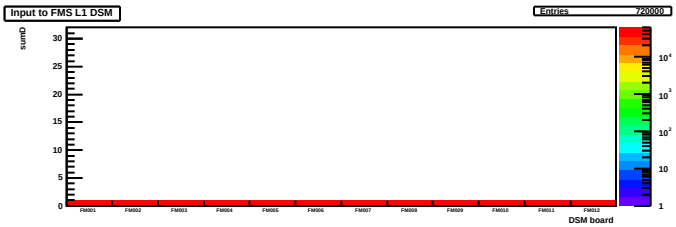

Input to FMS L0 DSM
Entries 480000
QT8(3) sum - simulated
QT board

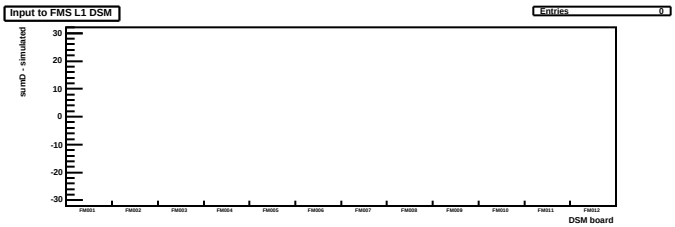

Input to FMS L0 DSM
Entries 2880000
HT ADC
QT board

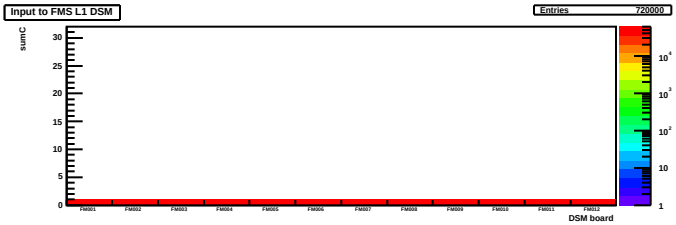

Input to FMS L0 DSM
Entries 480000
HT ADC - simulated
QT board

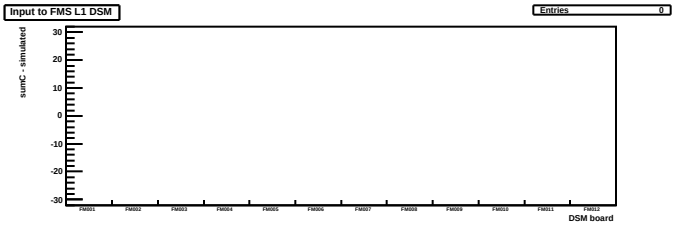

Input to FMS L0 DSM
Entries 2880000
HT ID
QT board

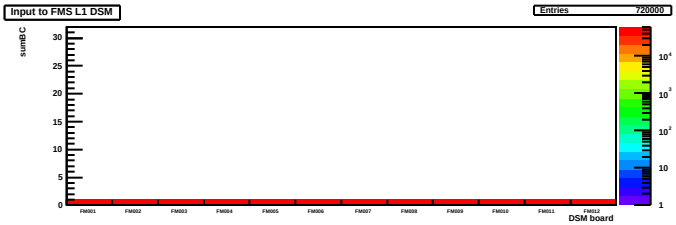

Input to FMS L0 DSM
Entries 480000
HT ID - simulated
QT board

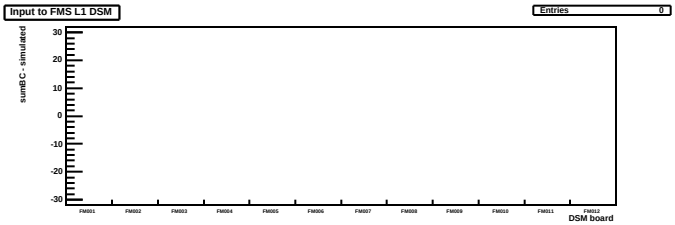

Input to FMS L1 DSM
Entries 720000
sumD
DSM board

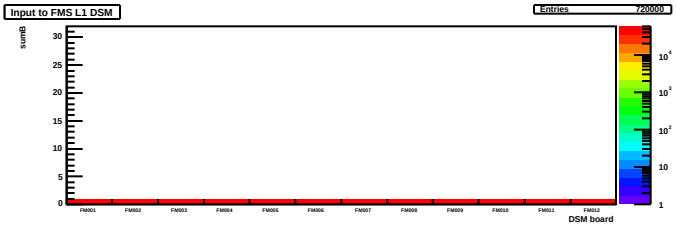

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

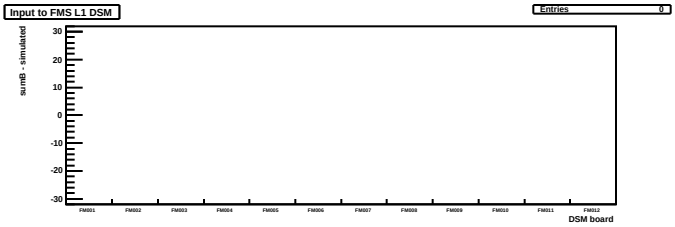

Input to FMS L1 DSM
Entries 720000
sumC
DSM board

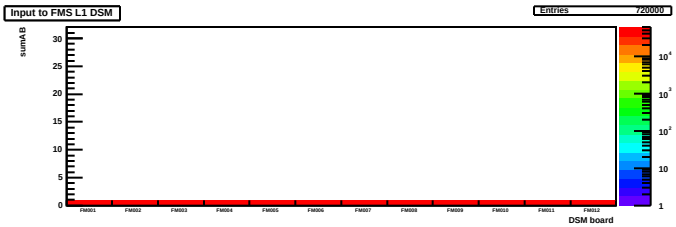

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

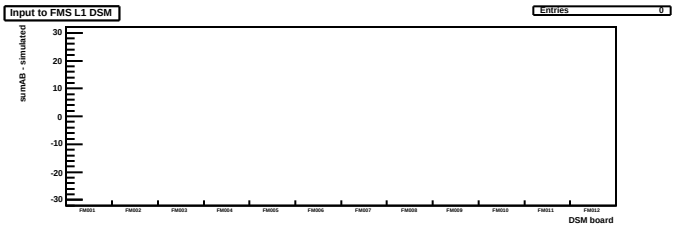

Input to FMS L1 DSM
Entries 720000
sumBC
DSM board

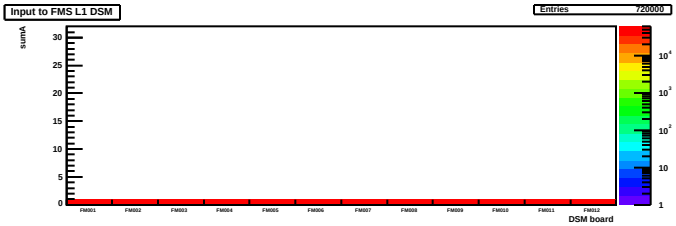

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

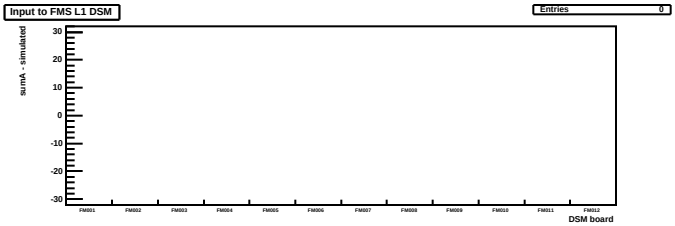

Input to FMS L1 DSM
Entries 720000
sumB
DSM board

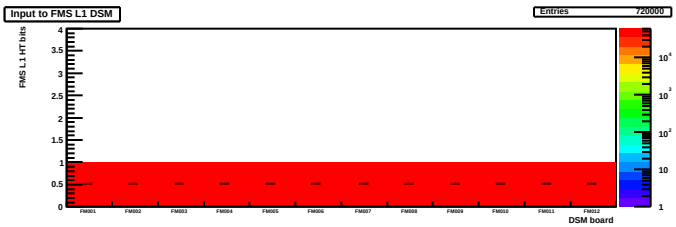

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

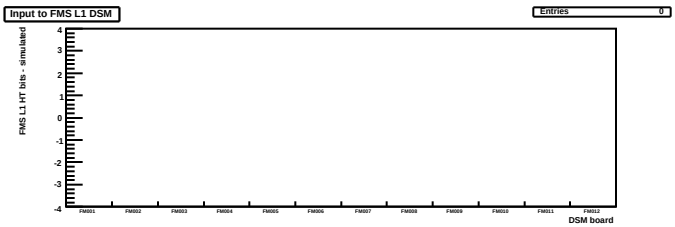

Input to FMS L1 DSM
Entries 720000
sumAB
DSM board

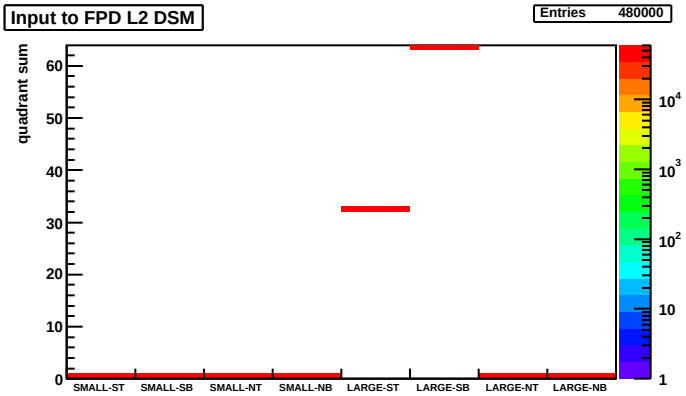

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

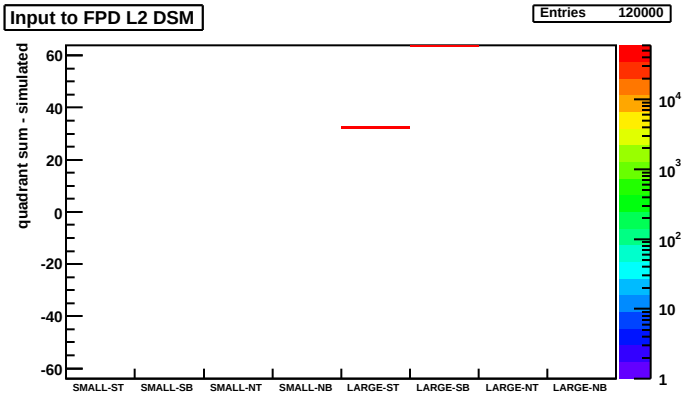

Input to FMS L1 DSM
Entries 720000
sumA
DSM board

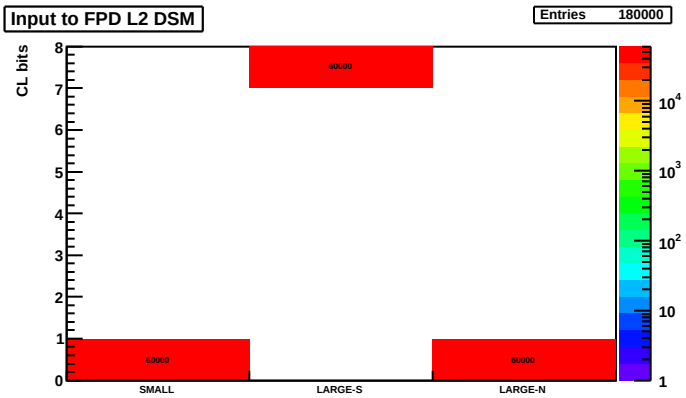

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

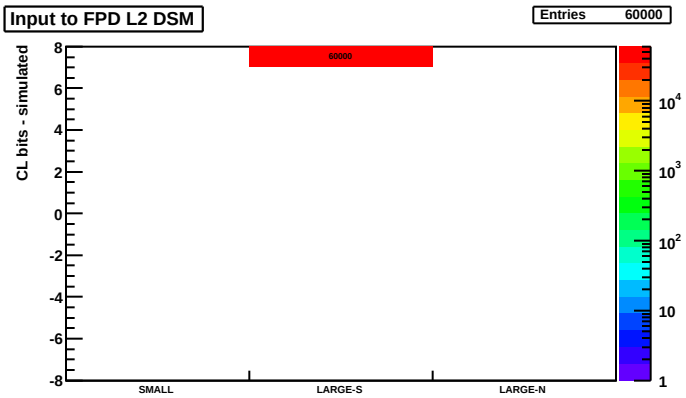

Input to FMS L1 DSM
Entries 720000
FMS L1 HT bits
DSM board

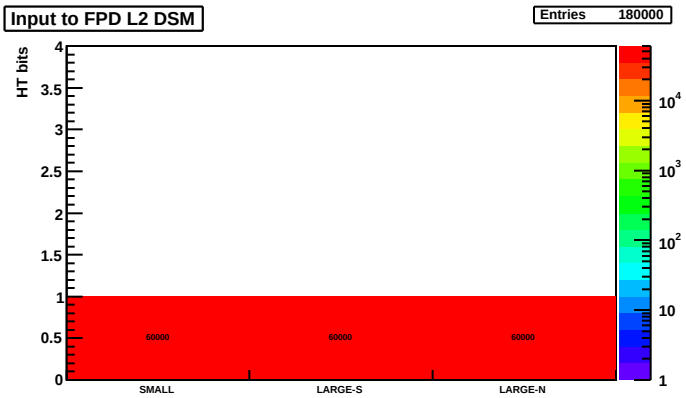

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

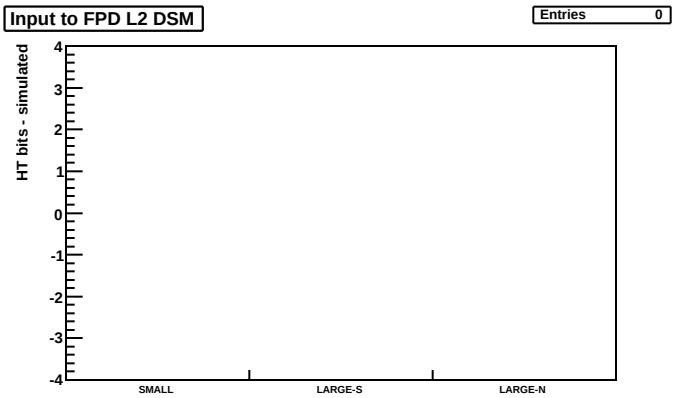

Input to FPD L2 DSM
Entries 480000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

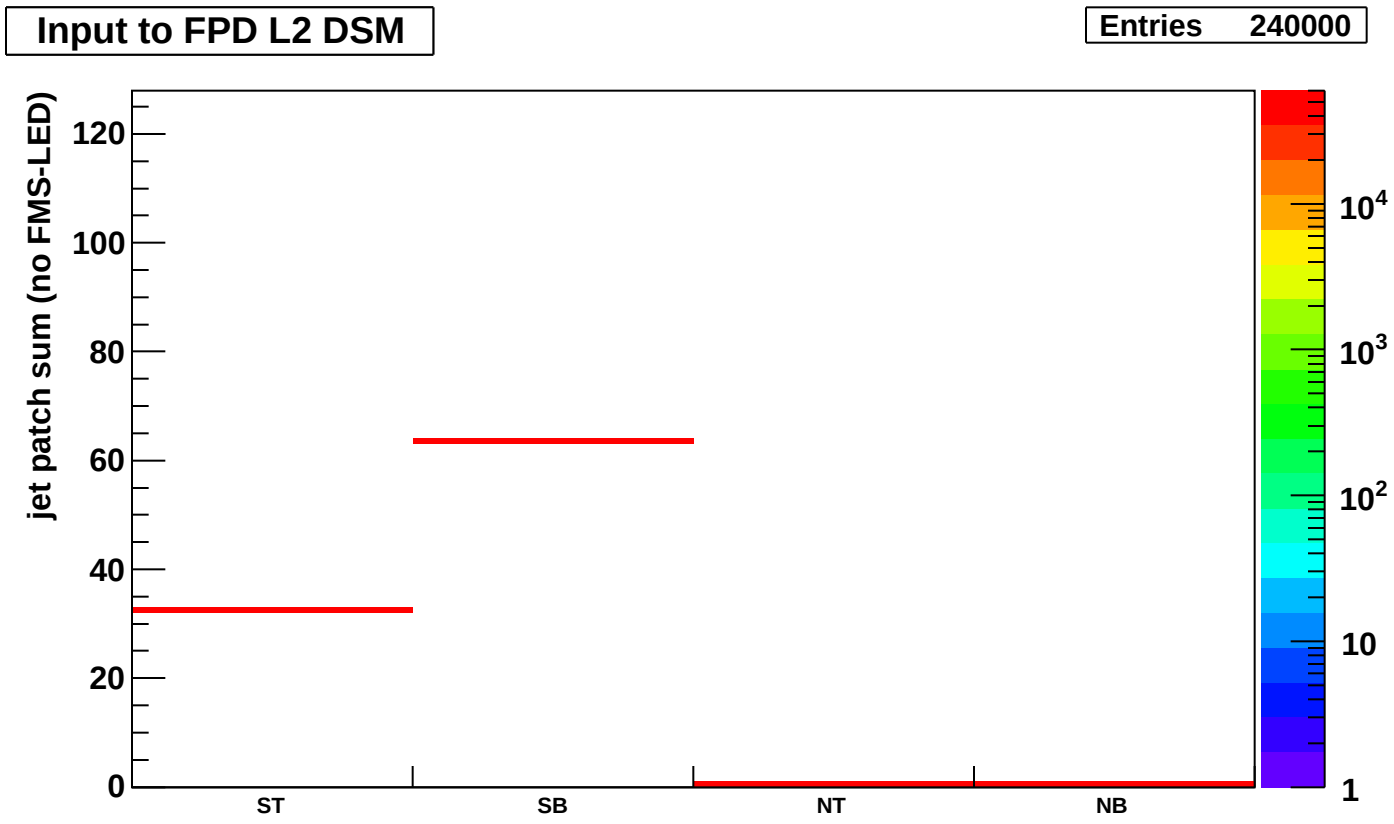

Input to FPD L2 DSM
Entries 120000
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

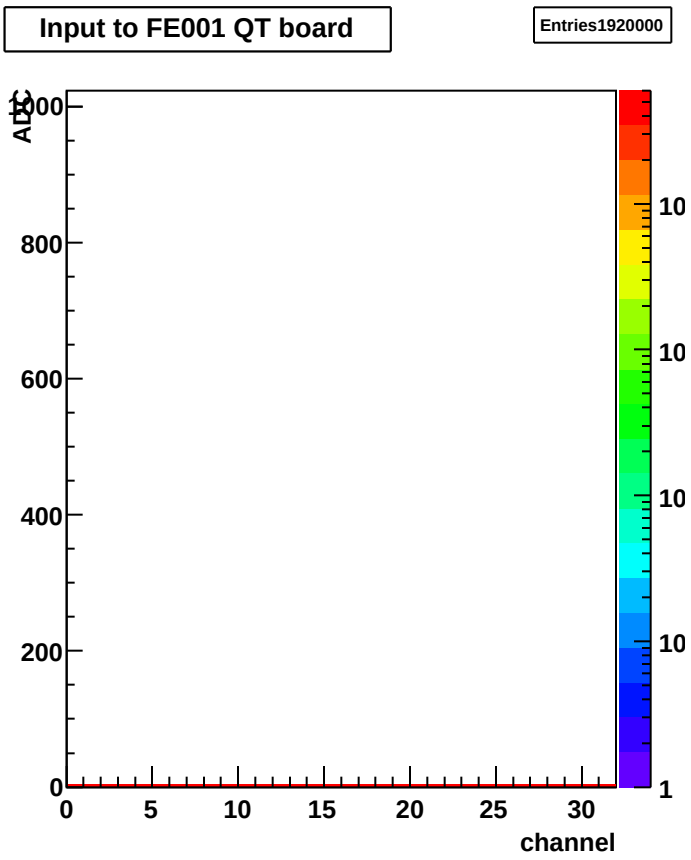

Input to FPD L2 DSM
Entries 180000
CL bits
60000
60000
60000
SMALL
LARGE-S
LARGE-N

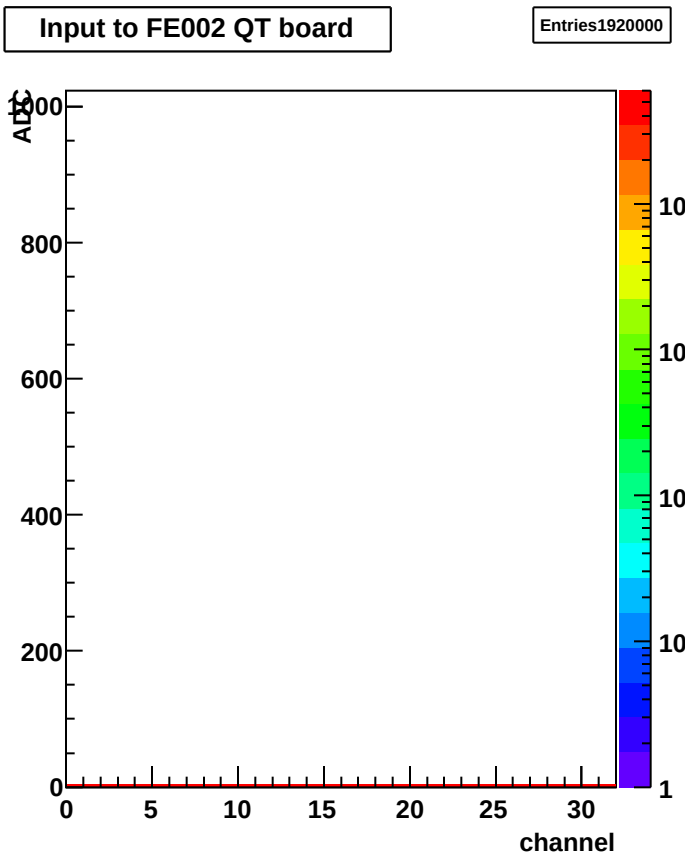

Input to FPD L2 DSM
Entries 60000
CL bits - simulated
60000
SMALL
LARGE-S
LARGE-N

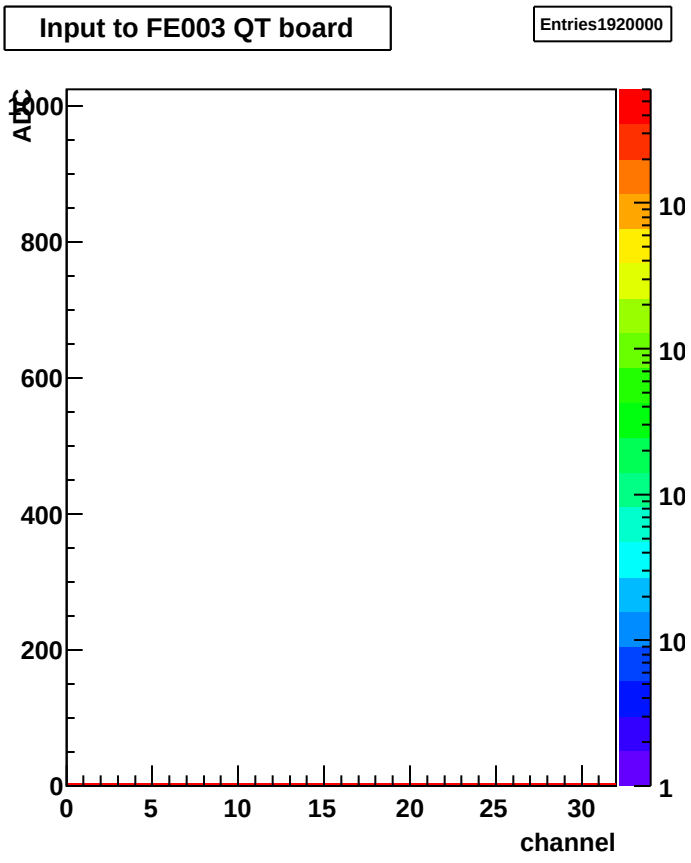

Input to FPD L2 DSM
Entries 180000
HT bits
60000
60000
60000
SMALL
LARGE-S
LARGE-N

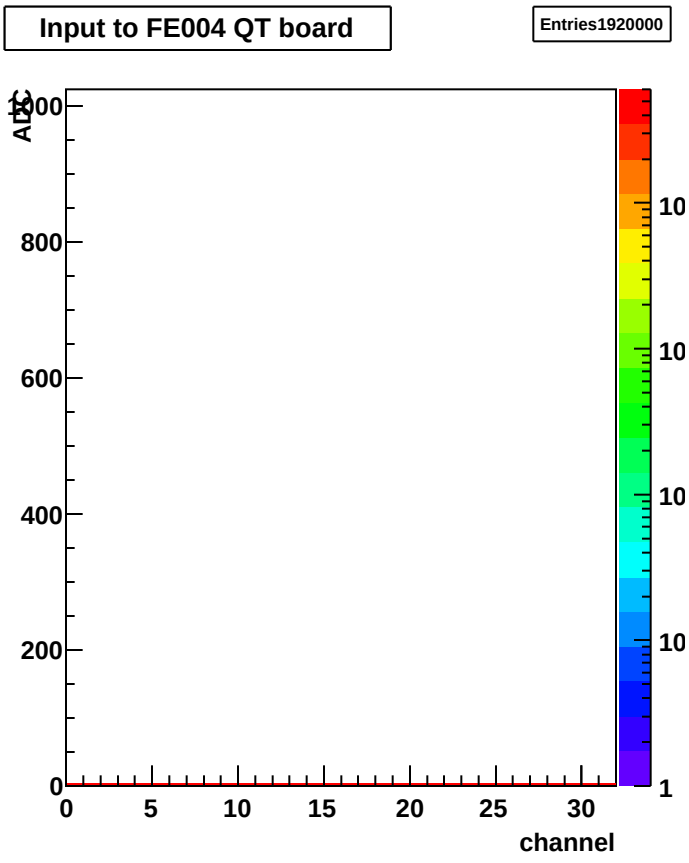

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

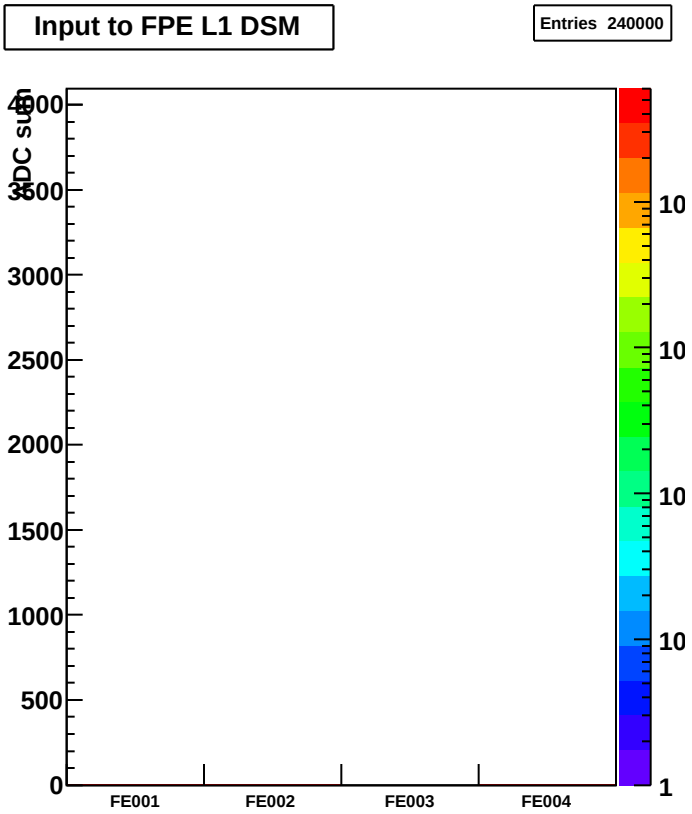

Input to FPD L2 DSM
Entries 240000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

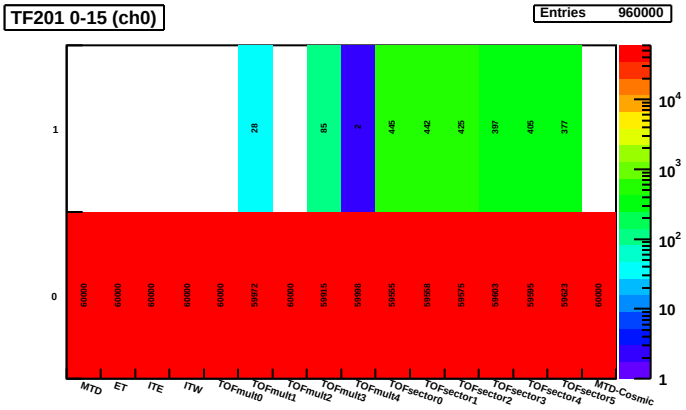

Input to FE001 QT board
Entries1920000
ADC
channel

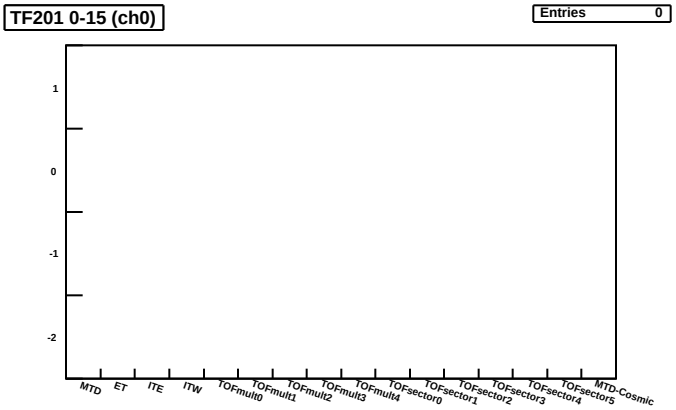

Input to FE002 QT board
Entries1920000
ADC
channel

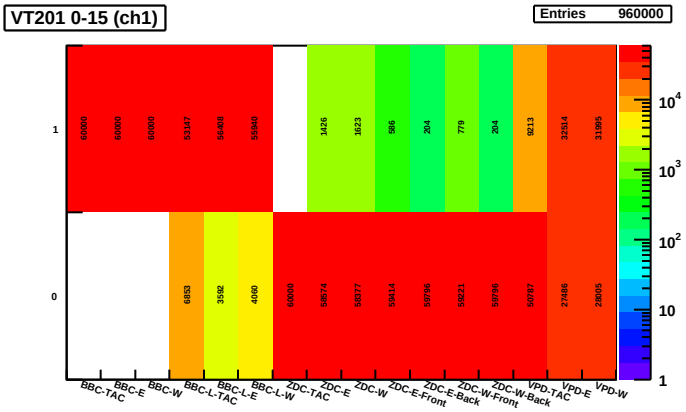

Input to FE003 QT board
Entries1920000
ADC
channel

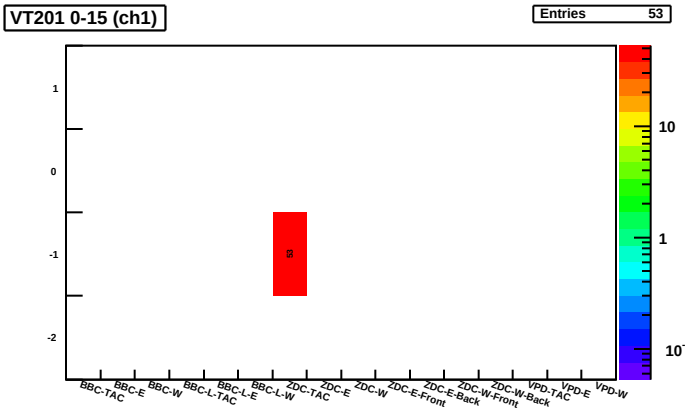

Input to FE004 QT board
Entries1920000
ADC
channel

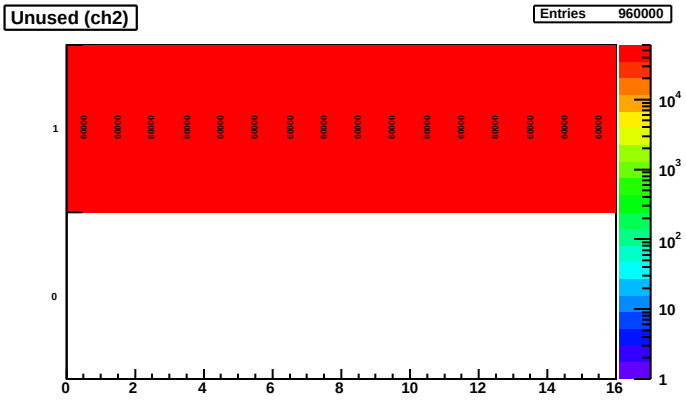

Input to FPE L1 DSM
Entries 240000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

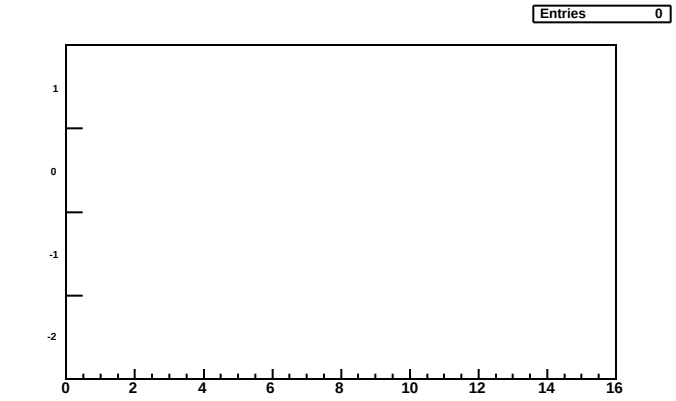

TF201 0-15 (ch0)
Entries 960000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

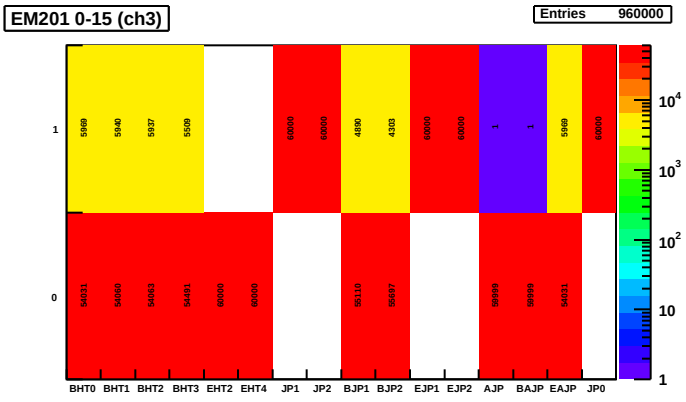

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

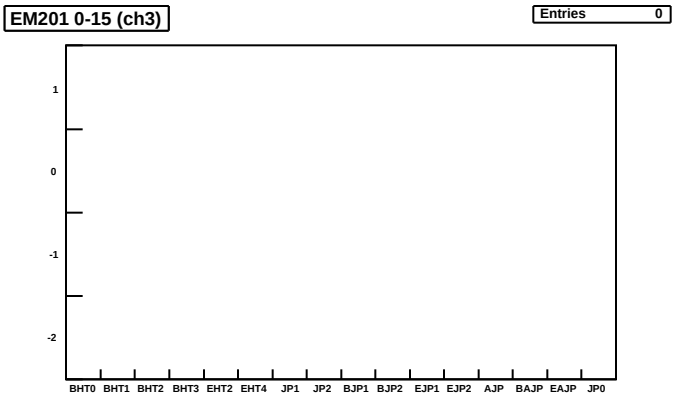

VT201 0-15 (ch1)
Entries 960000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 53
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

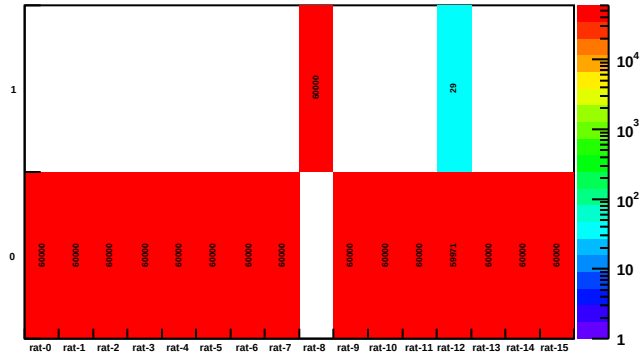

Unused (ch2)
Entries 960000

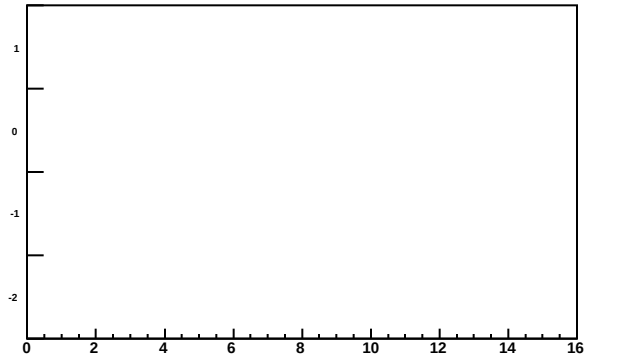

Entries 0


EM201 0-15 (ch3)
Entries 960000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

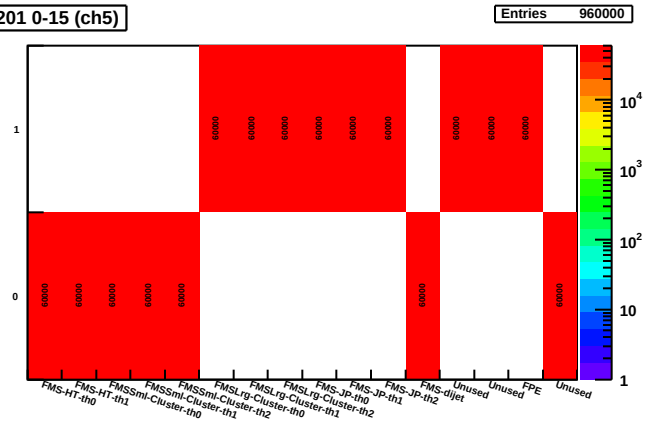

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

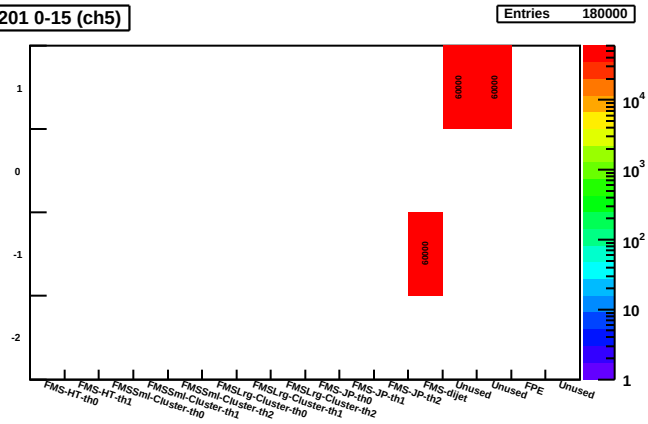




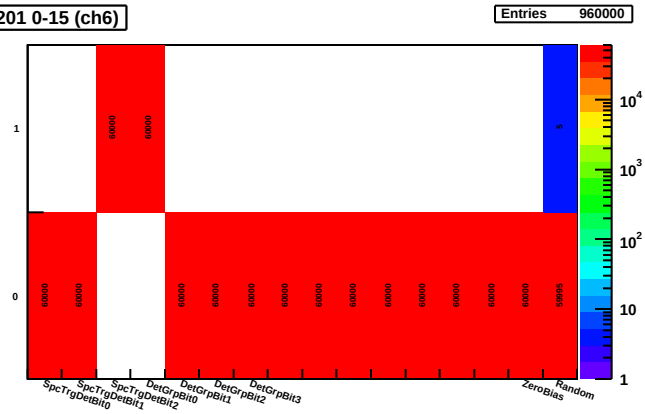
FP201 0-15 (ch5)

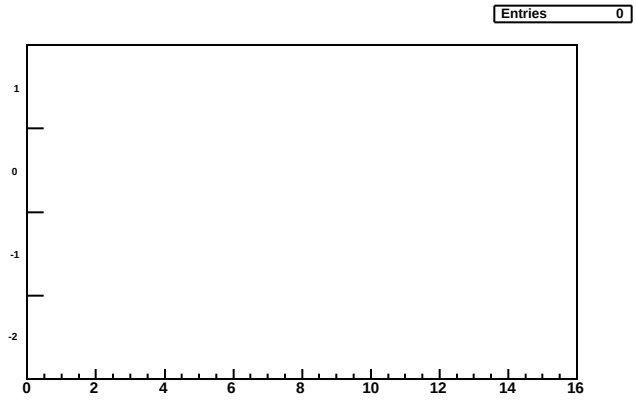
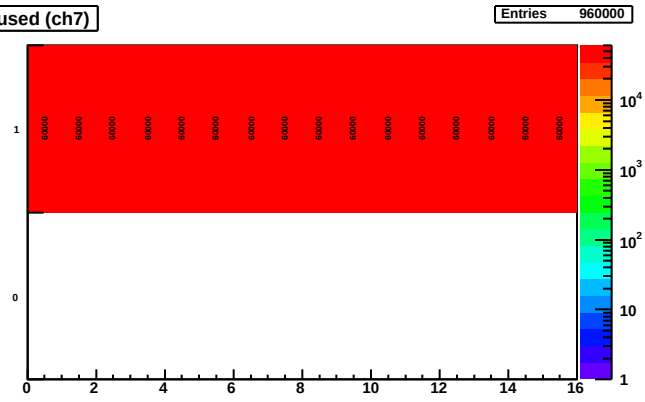
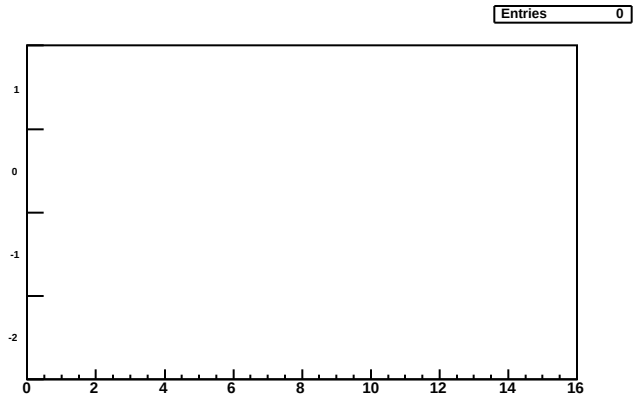


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)