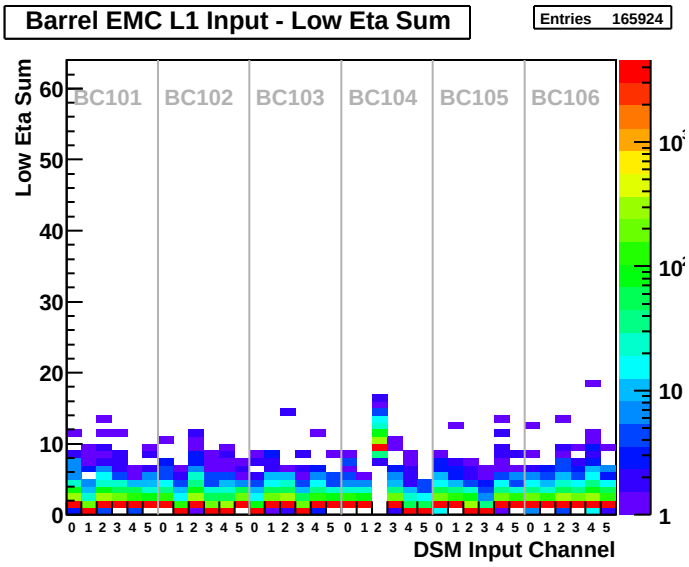
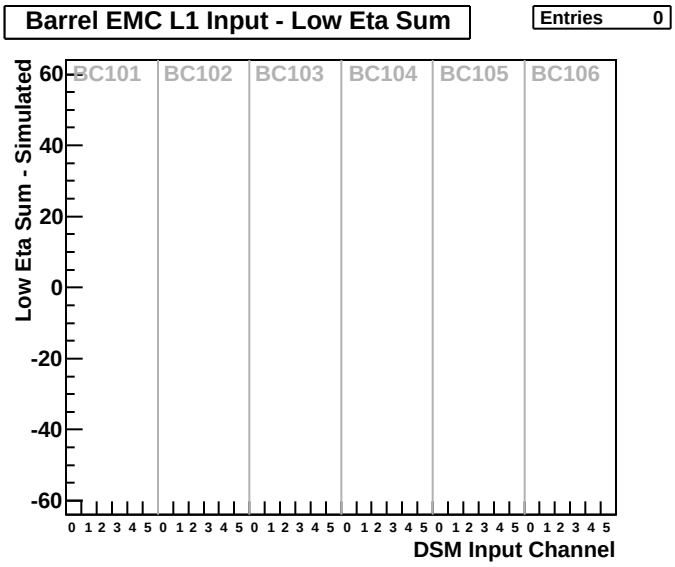
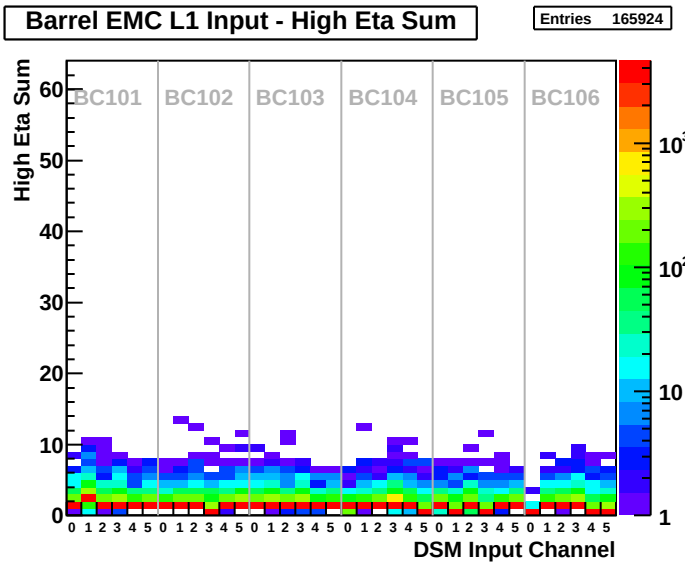
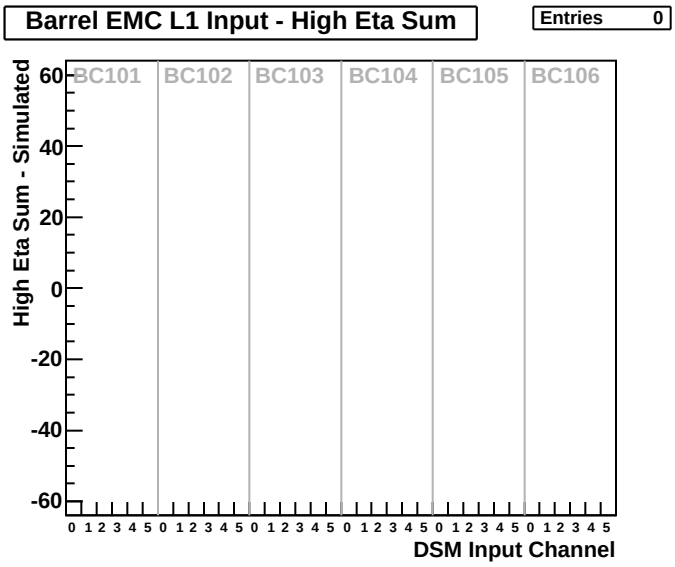
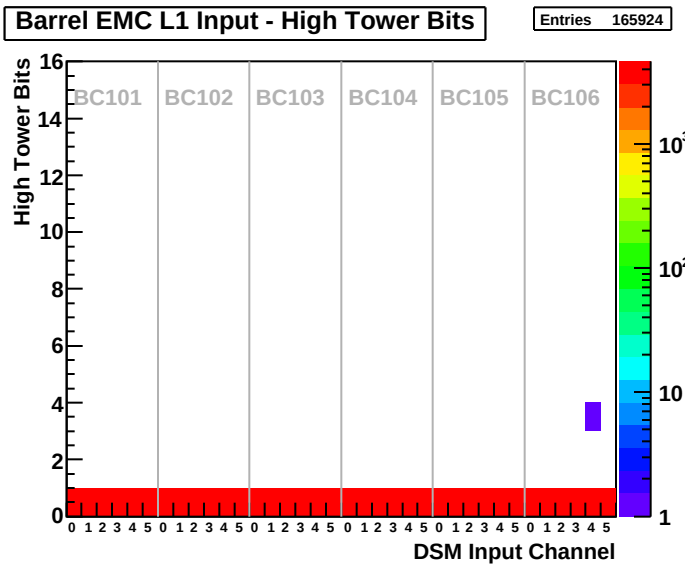
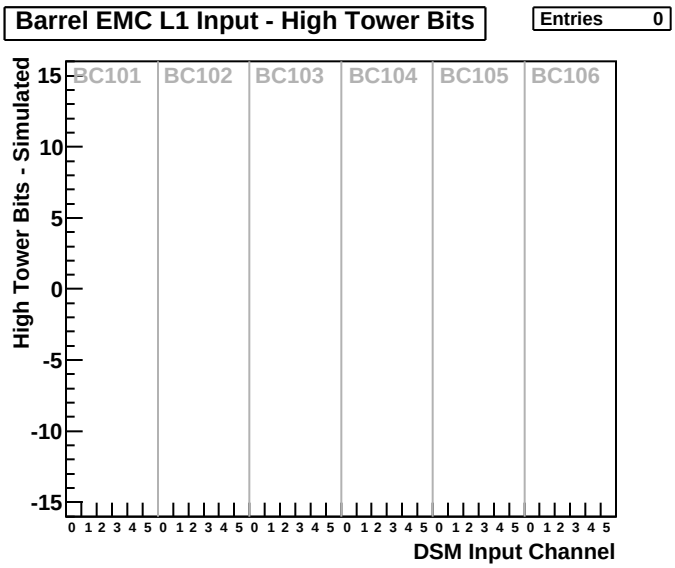

Barrel EMC L1 Input - Low Eta Sum
Entries 165924
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

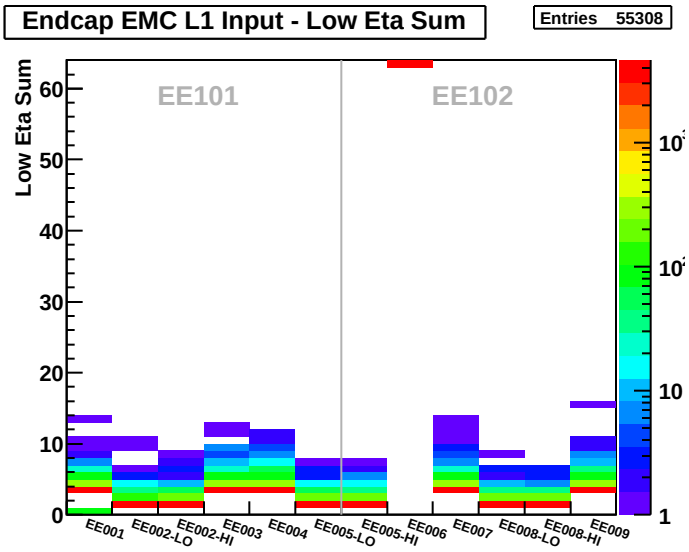

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

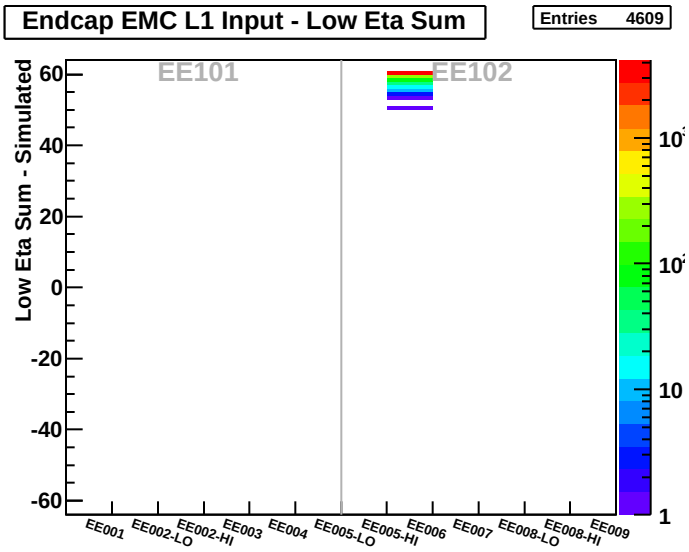

Barrel EMC L1 Input - High Eta Sum
Entries 165924
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

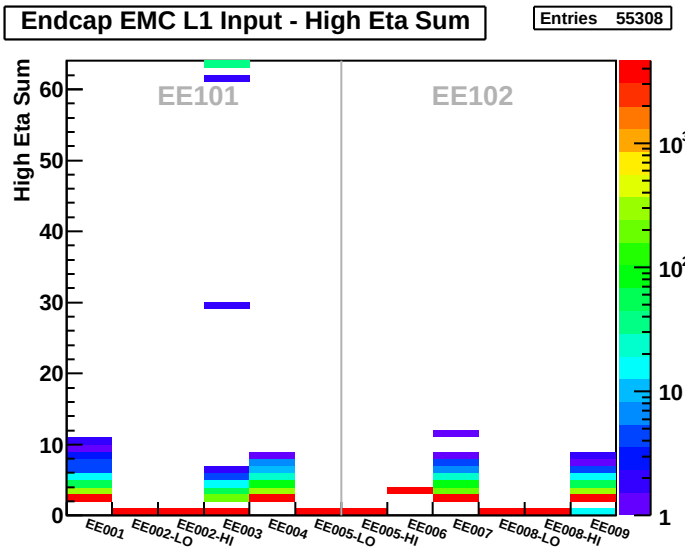

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

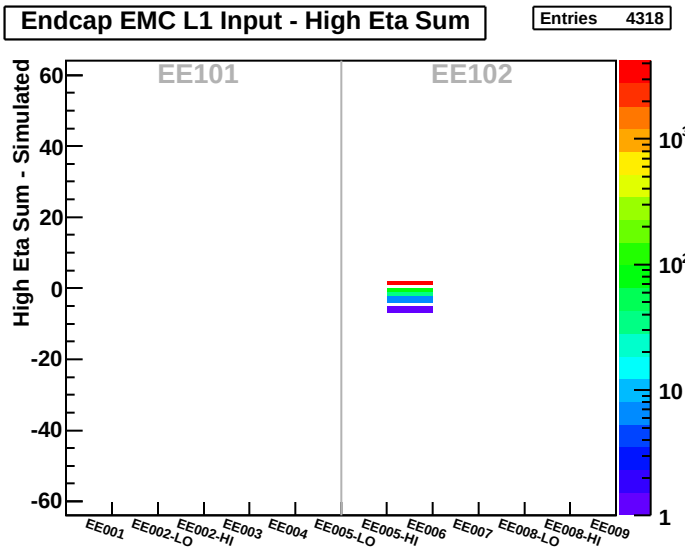

Barrel EMC L1 Input - High Tower Bits
Entries 165924
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

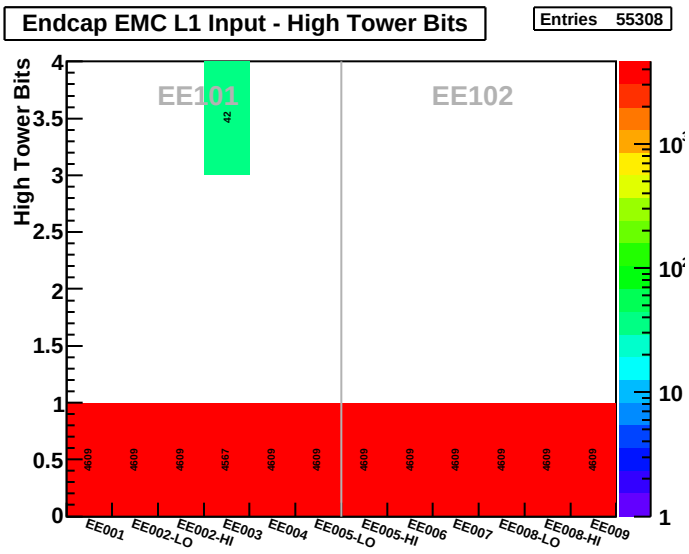

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

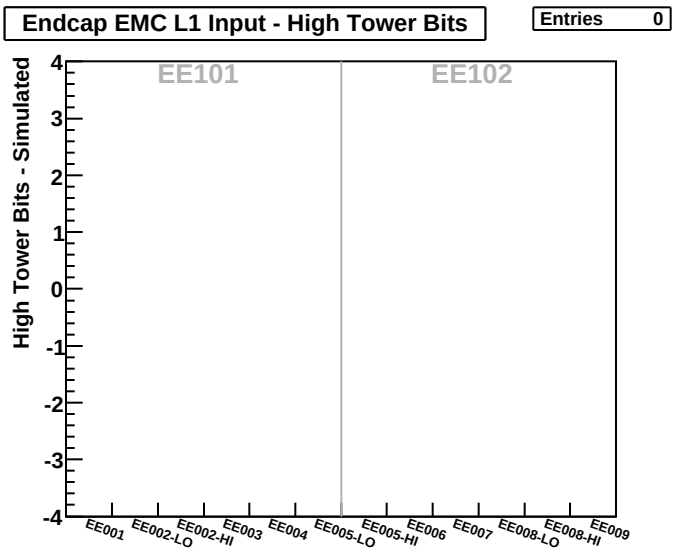

Endcap EMC L1 Input - Low Eta Sum
Entries 55308
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

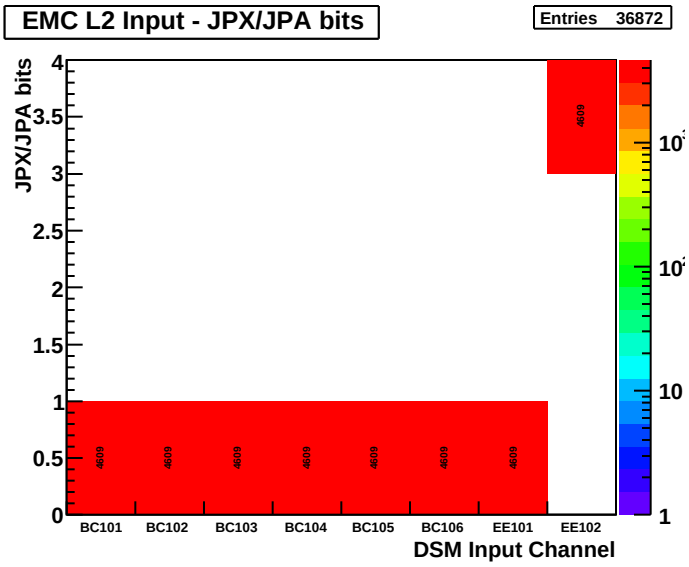

Endcap EMC L1 Input - Low Eta Sum
Entries 4609
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

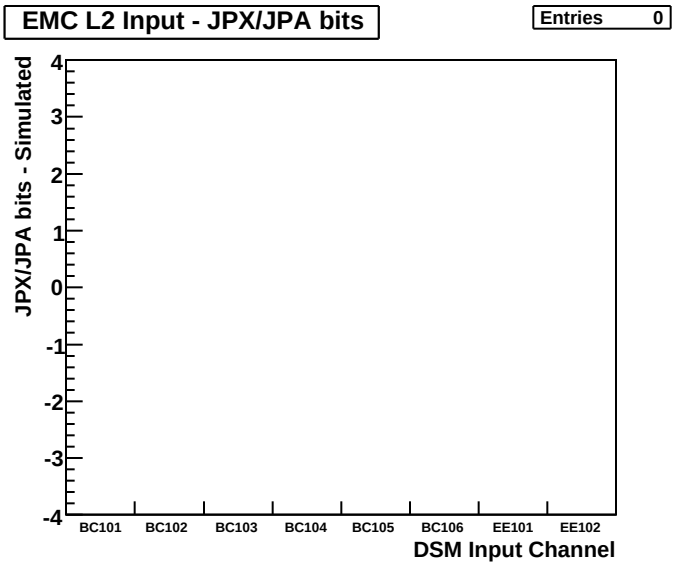

Endcap EMC L1 Input - High Eta Sum
Entries 55308
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

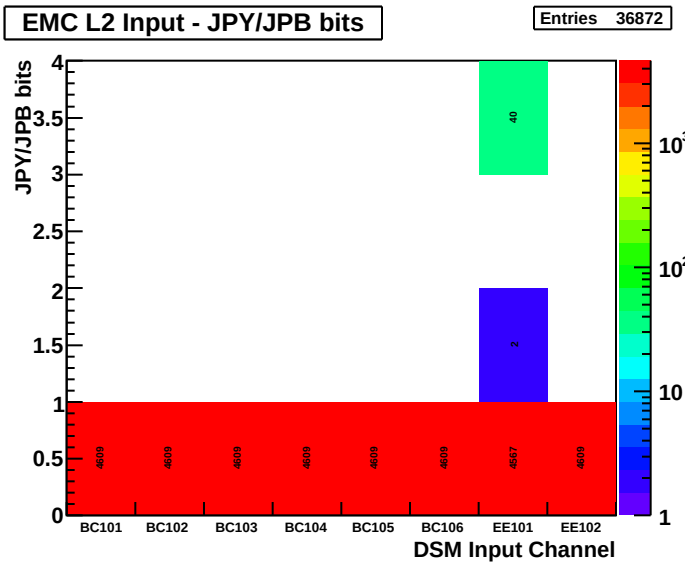

Endcap EMC L1 Input - High Eta Sum
Entries 4318
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

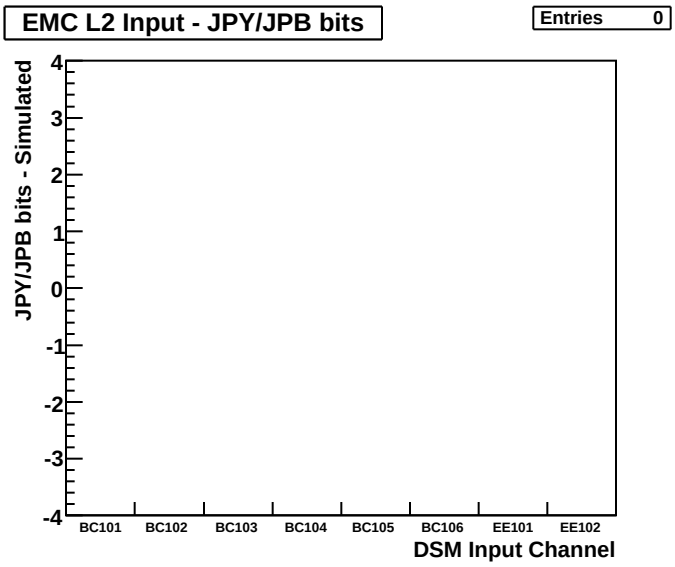

Endcap EMC L1 Input - High Tower Bits
Entries 55308
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

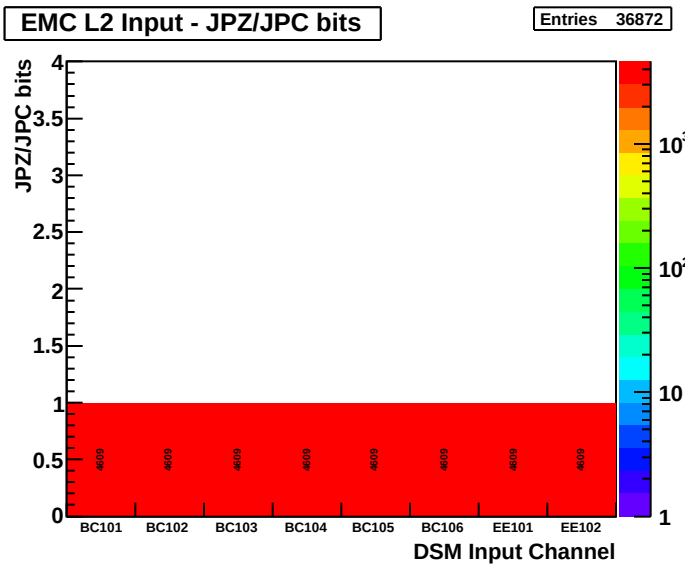

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

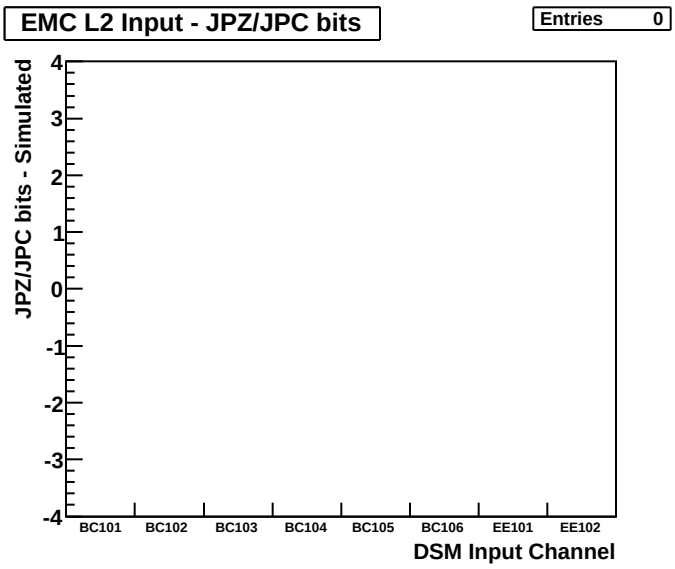

EMC L2 Input - JPX/JPA bits
Entries 36872
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

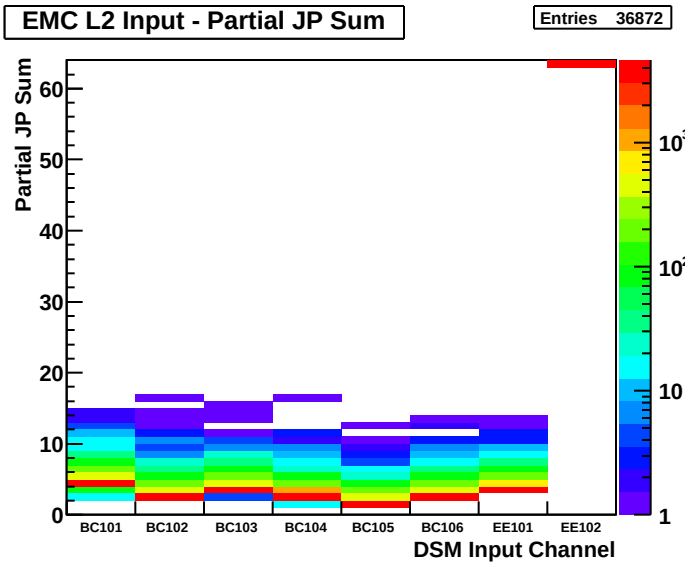

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

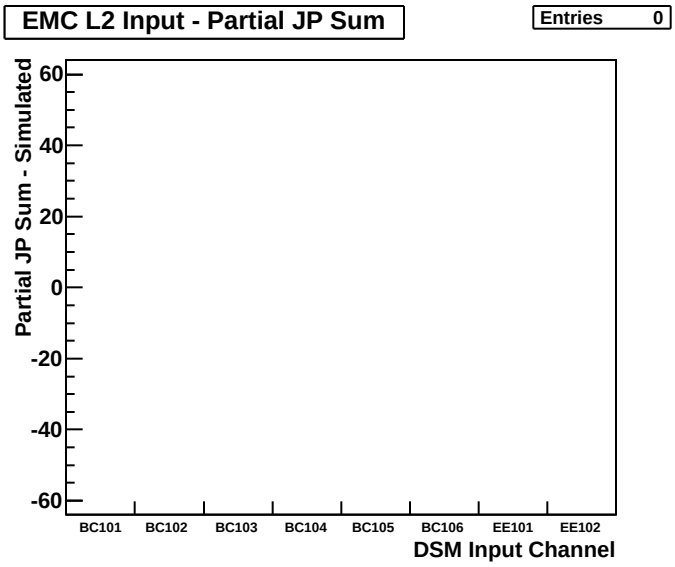

EMC L2 Input - JPY/JPB bits
Entries 36872
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

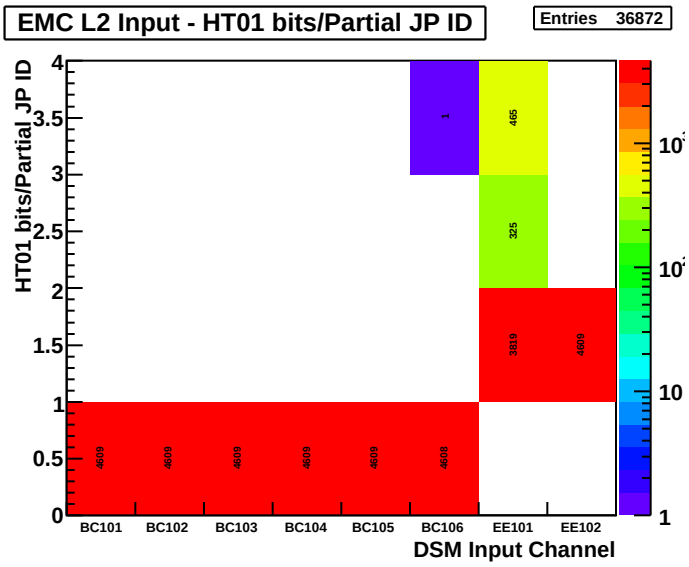

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

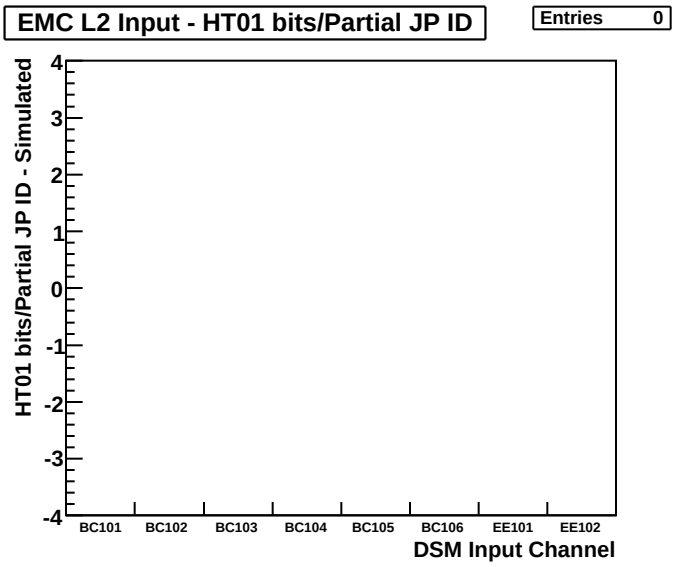

EMC L2 Input - JPZ/JPC bits
Entries 36872
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

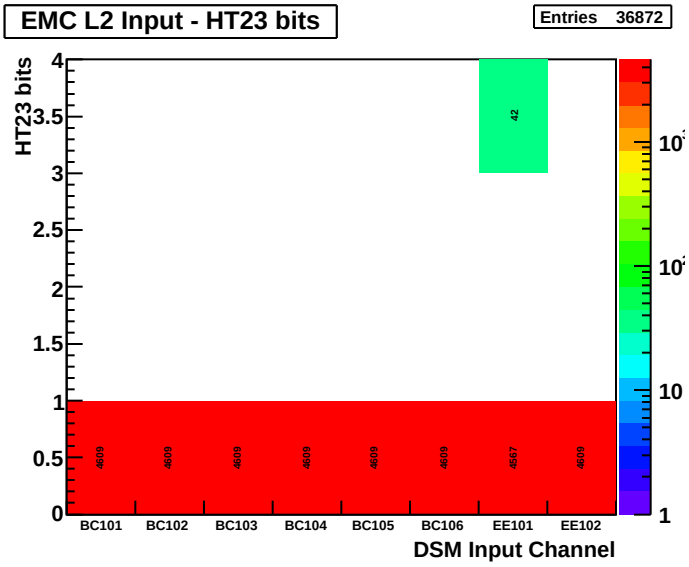

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

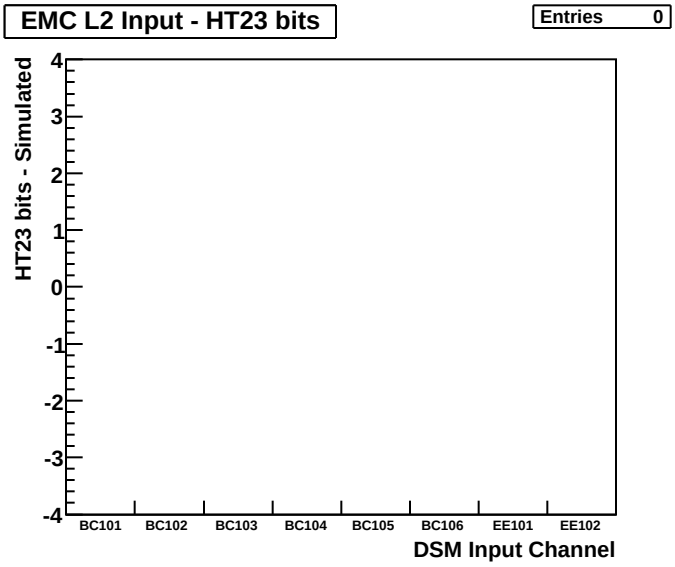

EMC L2 Input - Partial JP Sum
Entries 36872
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

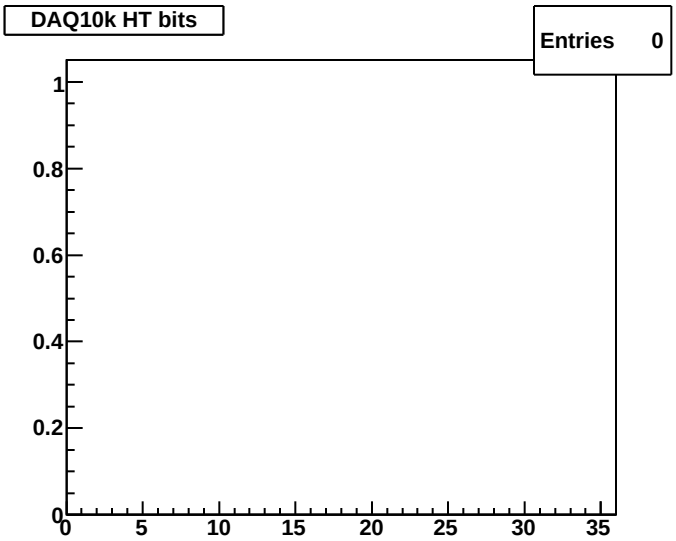

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

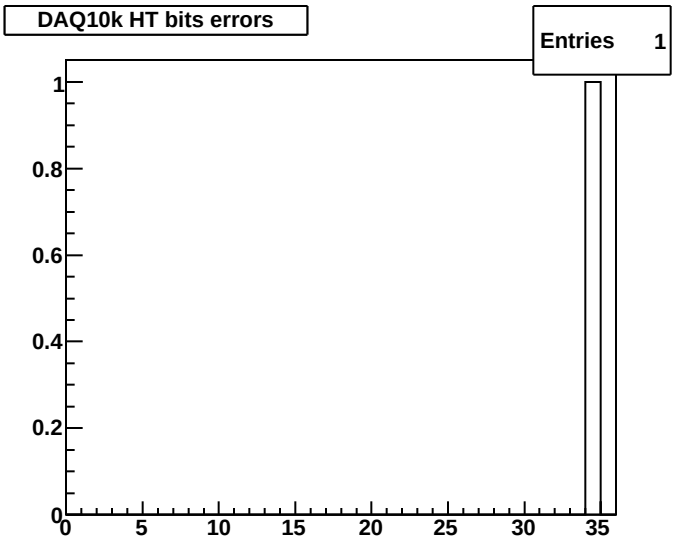

EMC L2 Input - HT01 bits/Partial JP ID
Entries 36872
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

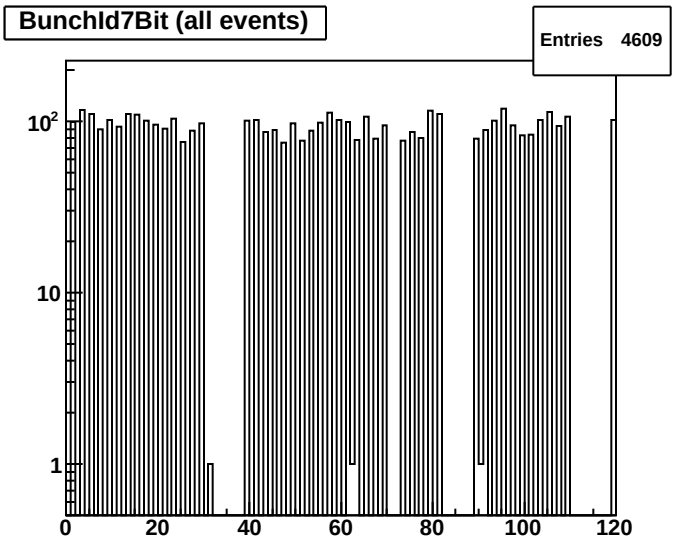

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

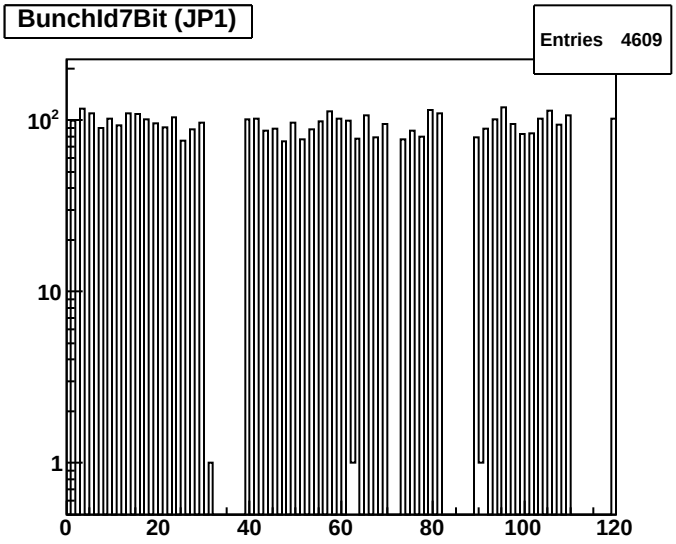

EMC L2 Input - HT23 bits
Entries 36872
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

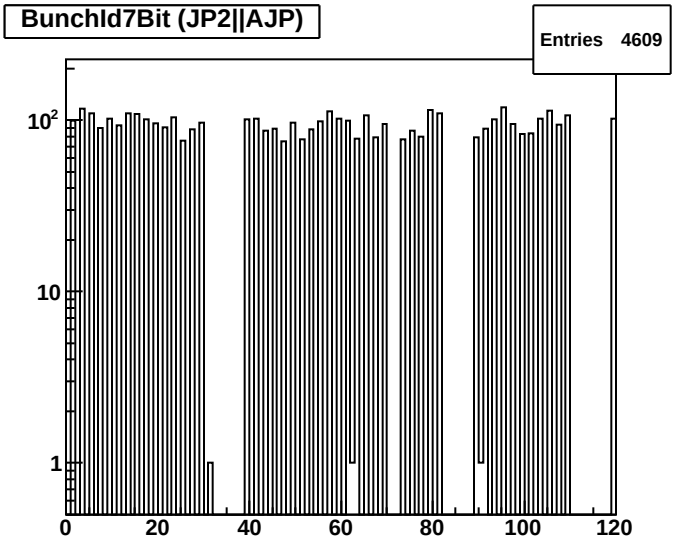

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

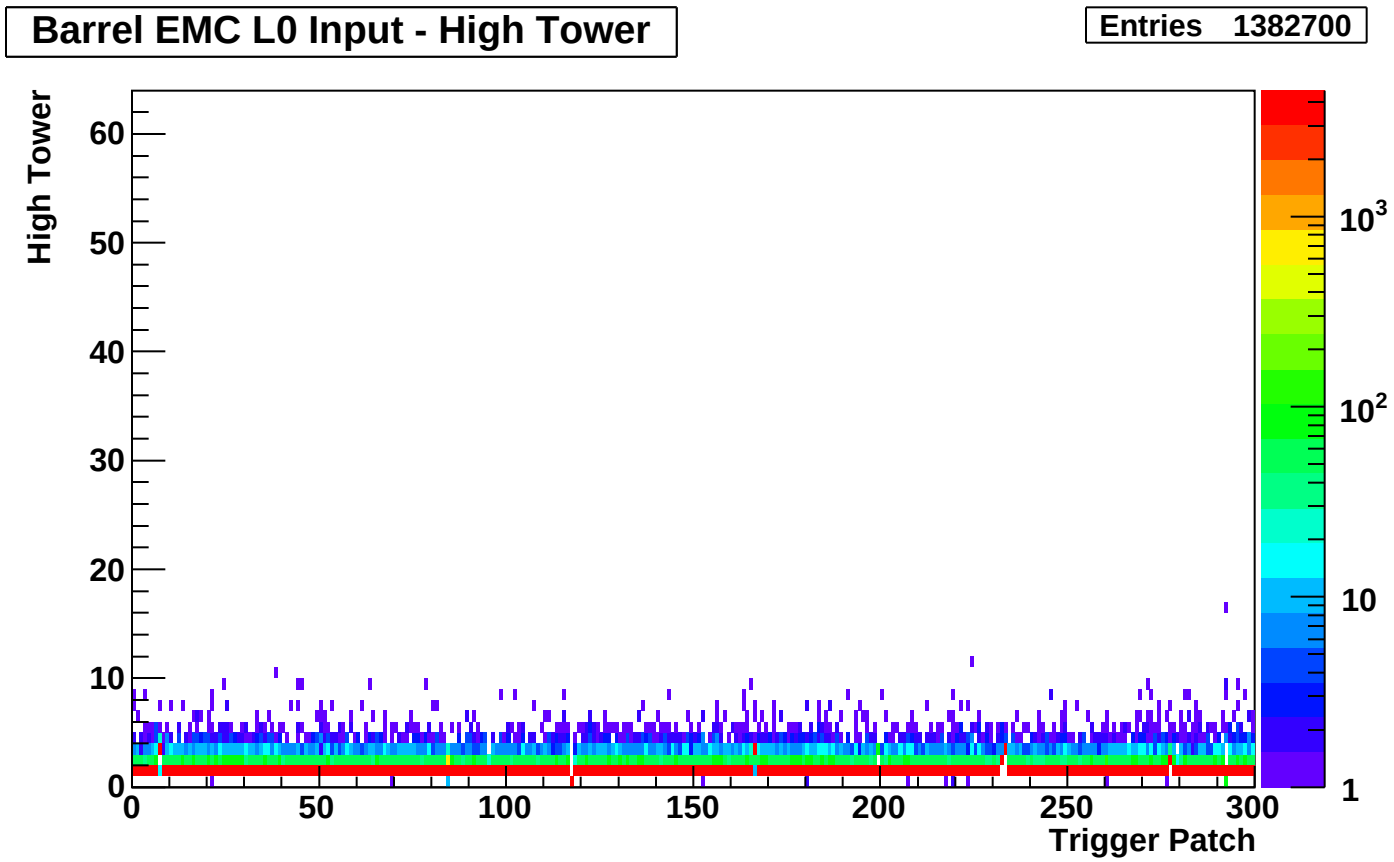

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

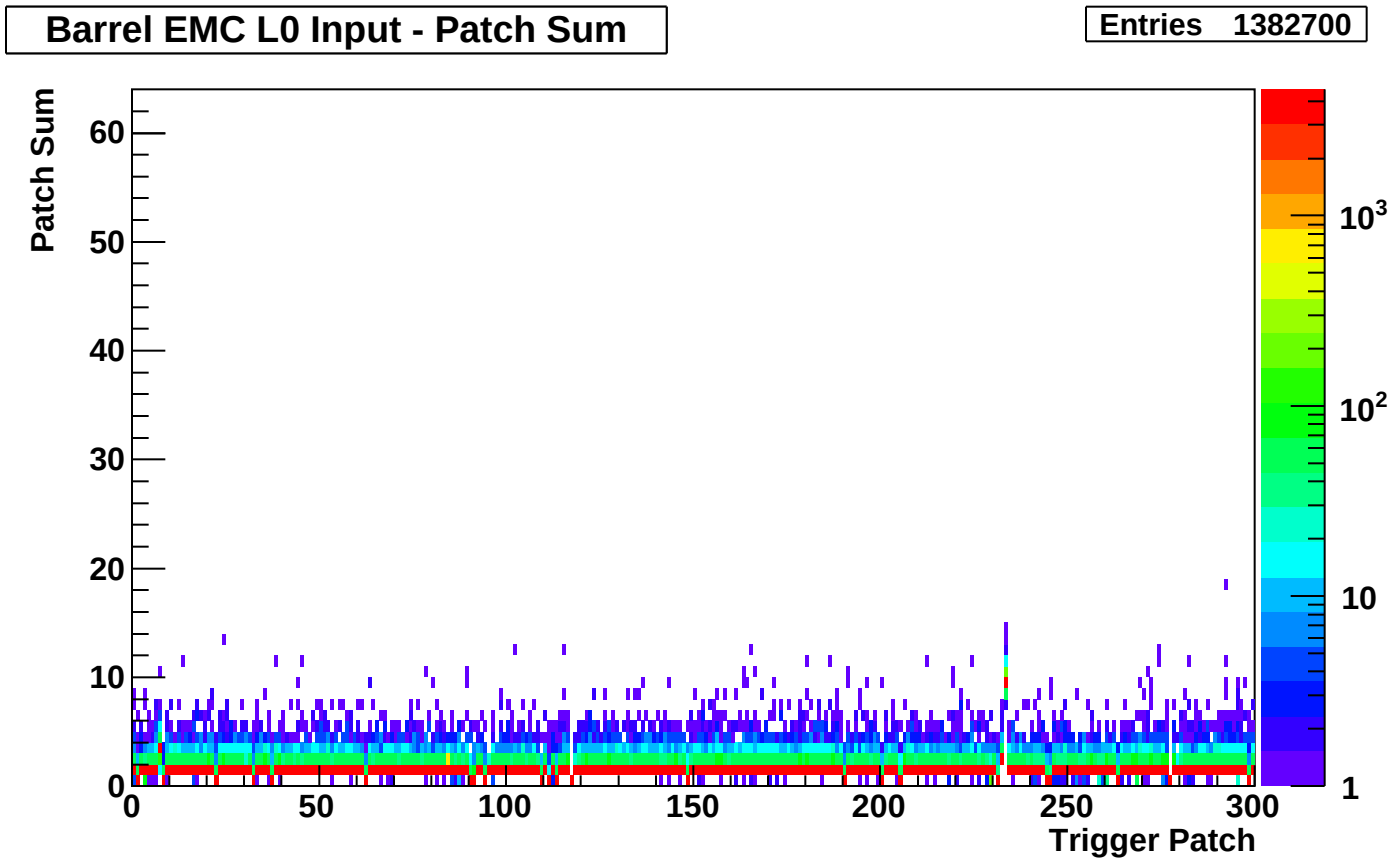

DAQ10k HT bits errors
Entries 1
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

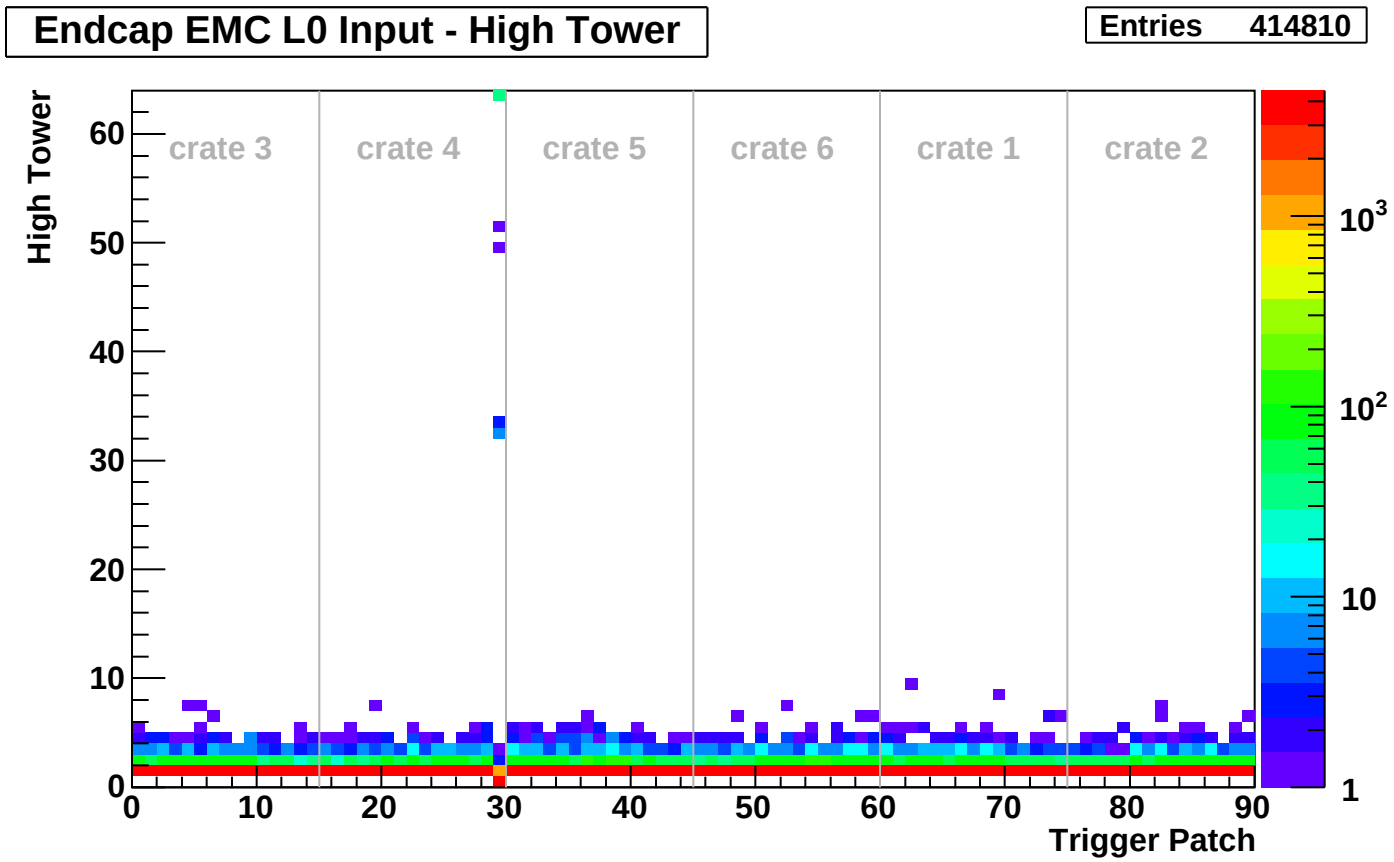

BunchId7Bit (all events)
Entries 4609
10^2
10
1
0 20 40 60 80 100 120

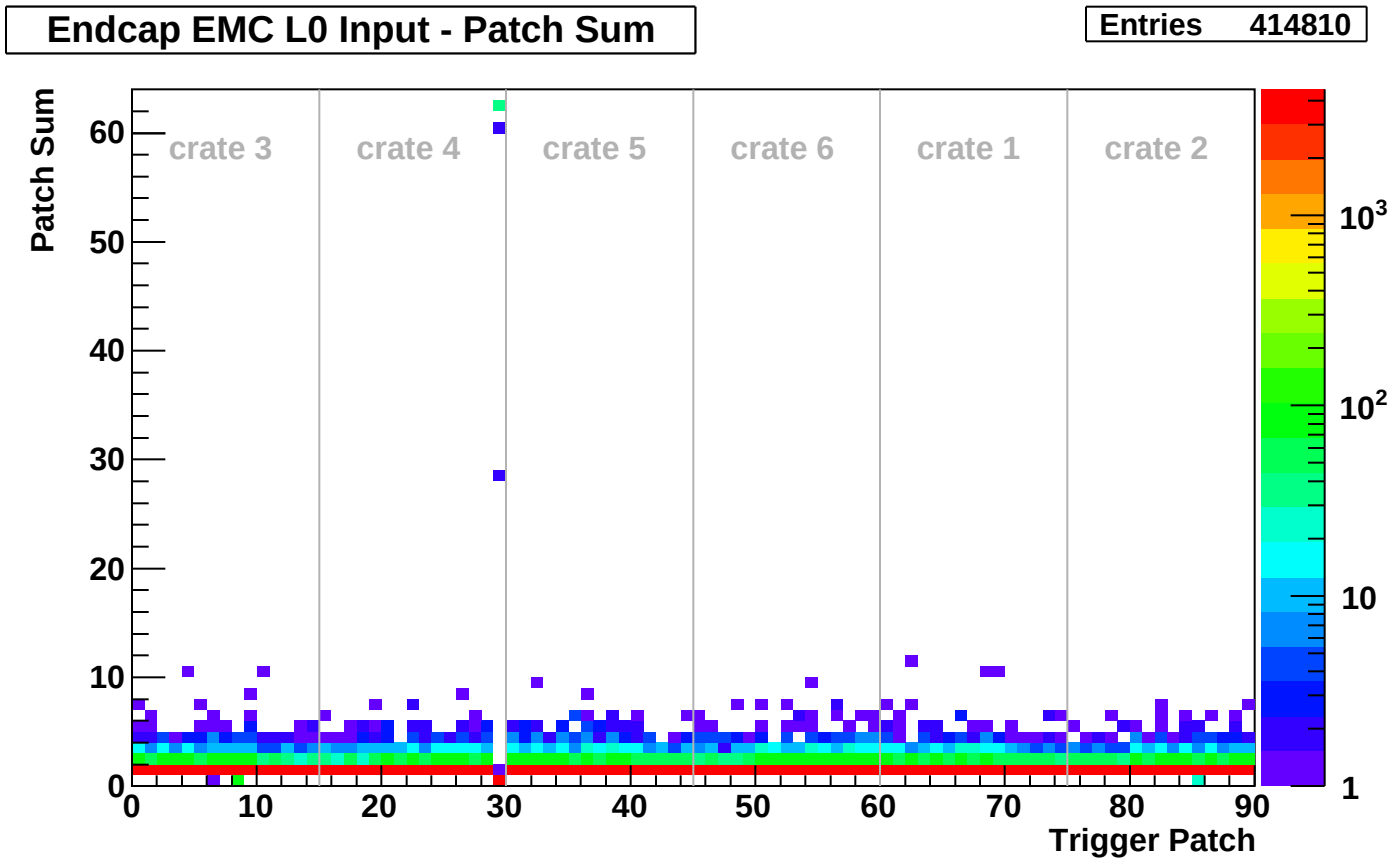

BunchId7Bit (JP1)
Entries 4609
10^2
10
1
0 20 40 60 80 100 120

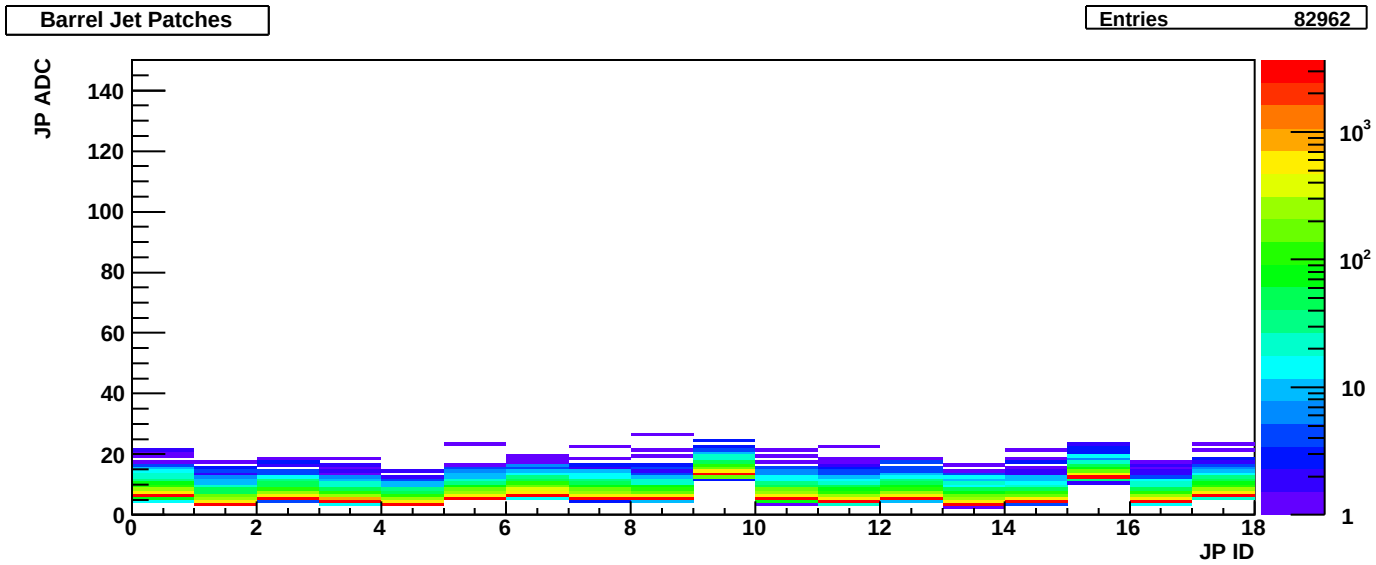

BunchId7Bit (JP2||AJP)
Entries 4609
10^2
10
1
0 20 40 60 80 100 120

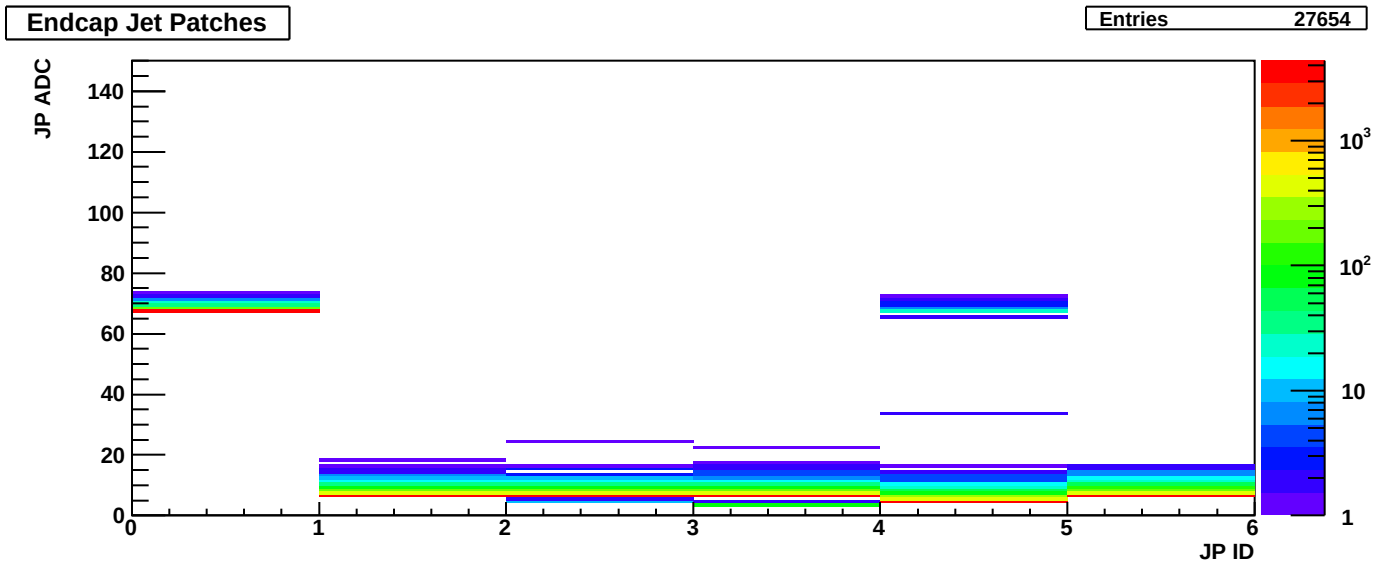

Barrel EMC L0 Input - High Tower
Entries 1382700
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

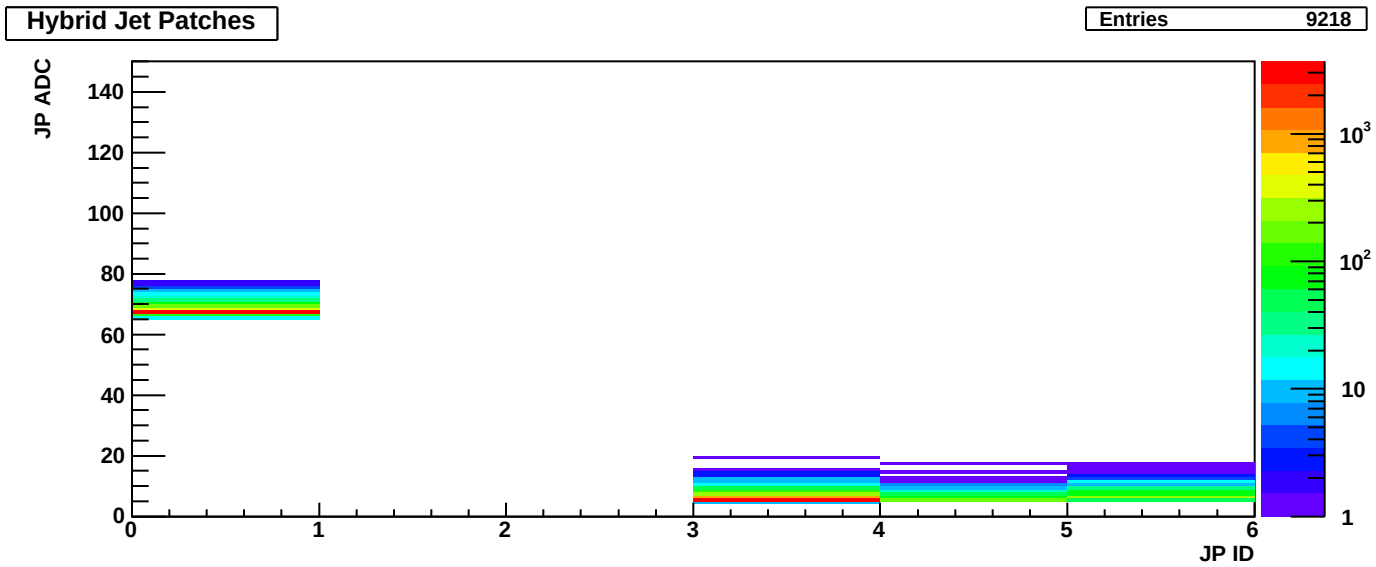

Barrel EMC L0 Input - Patch Sum
Entries 1382700
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

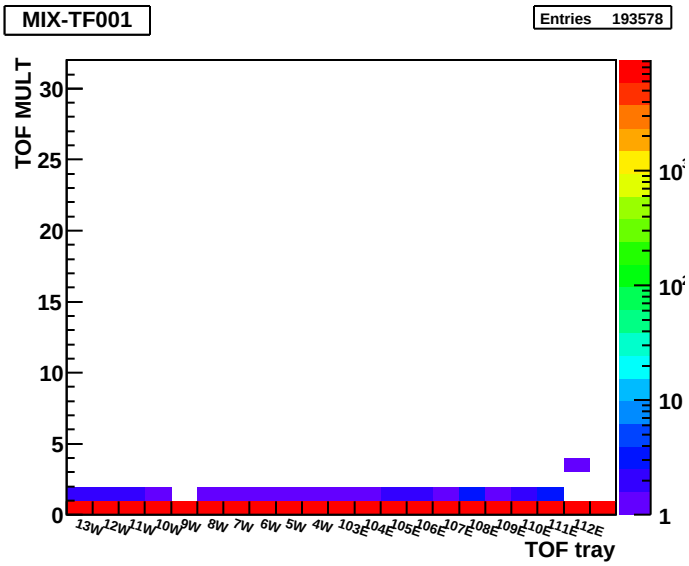

Endcap EMC L0 Input - High Tower
Entries 414810
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

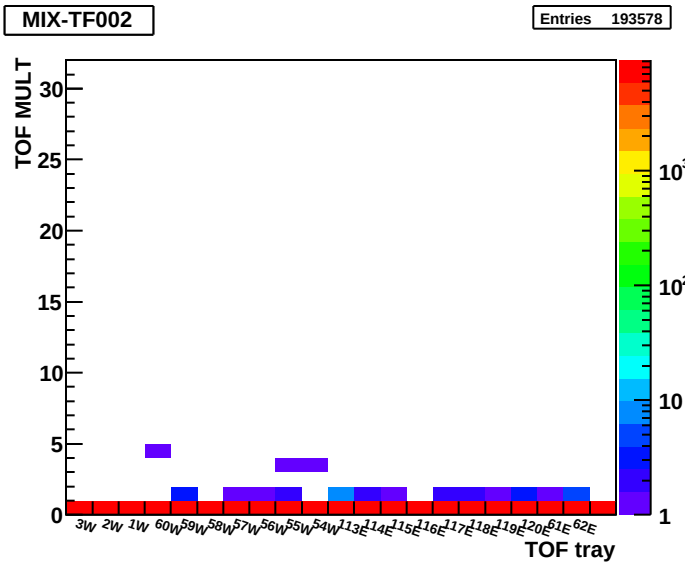

Endcap EMC L0 Input - Patch Sum
Entries 414810
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

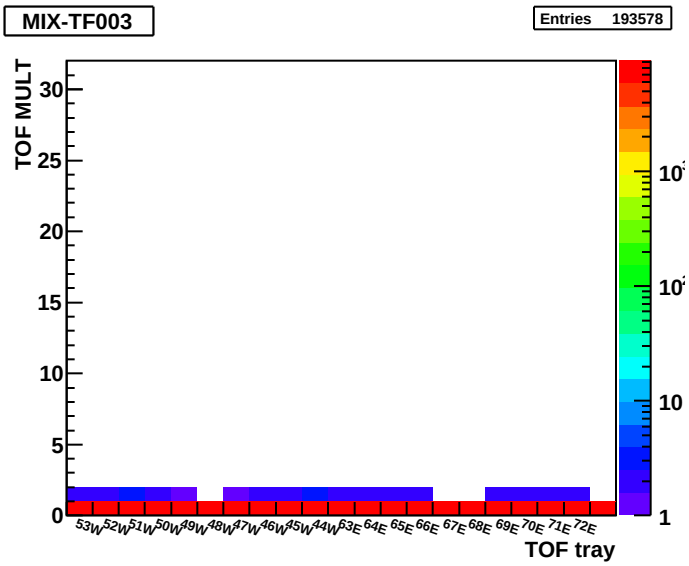

Barrel Jet Patches
Entries 82962
JP ADC
JP ID

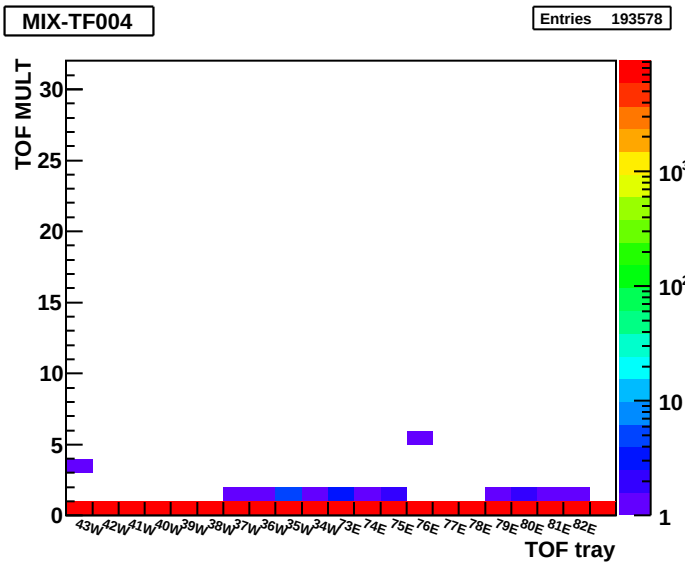

Endcap Jet Patches
Entries 27654
JP ADC
JP ID

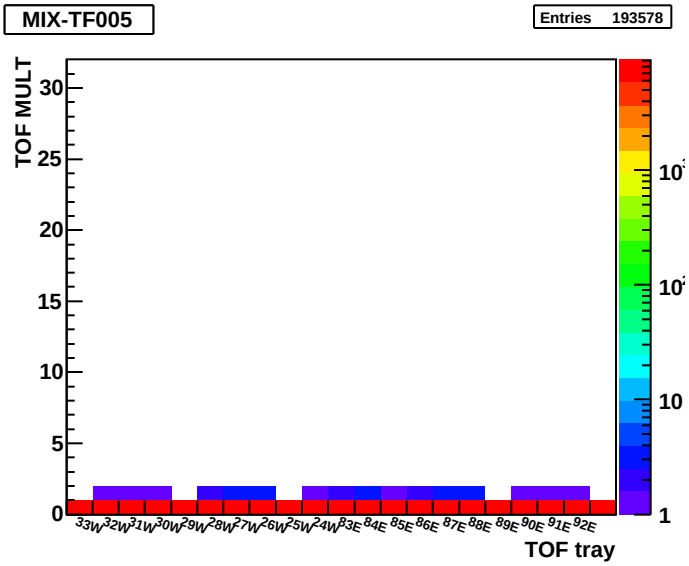

Hybrid Jet Patches
Entries 9218
JP ADC
JP ID

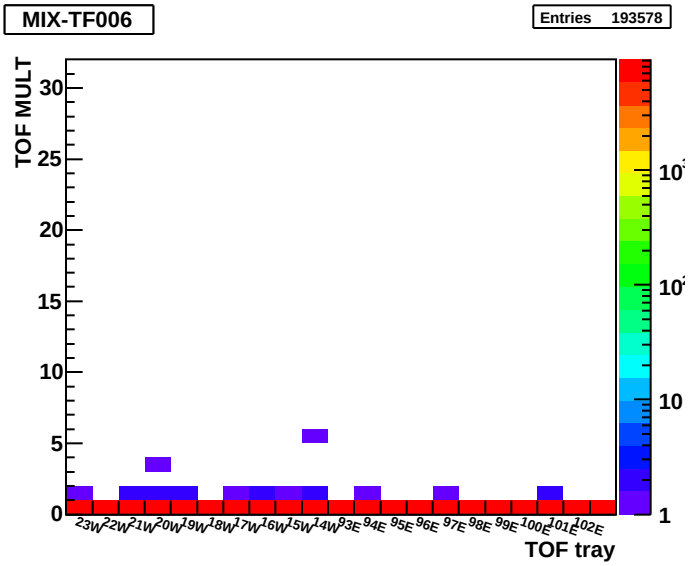

MIX-TF001
Entries 193578
TOF MULT
TOF tray

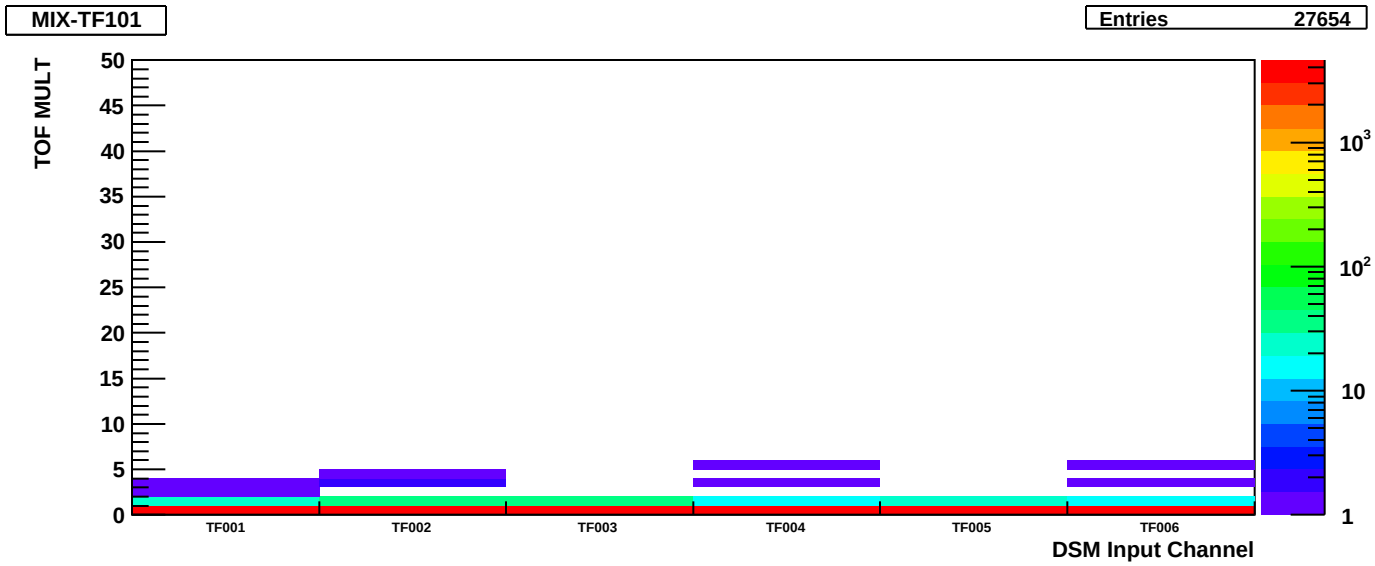

MIX-TF002
Entries 193578
TOF MULT
TOF tray

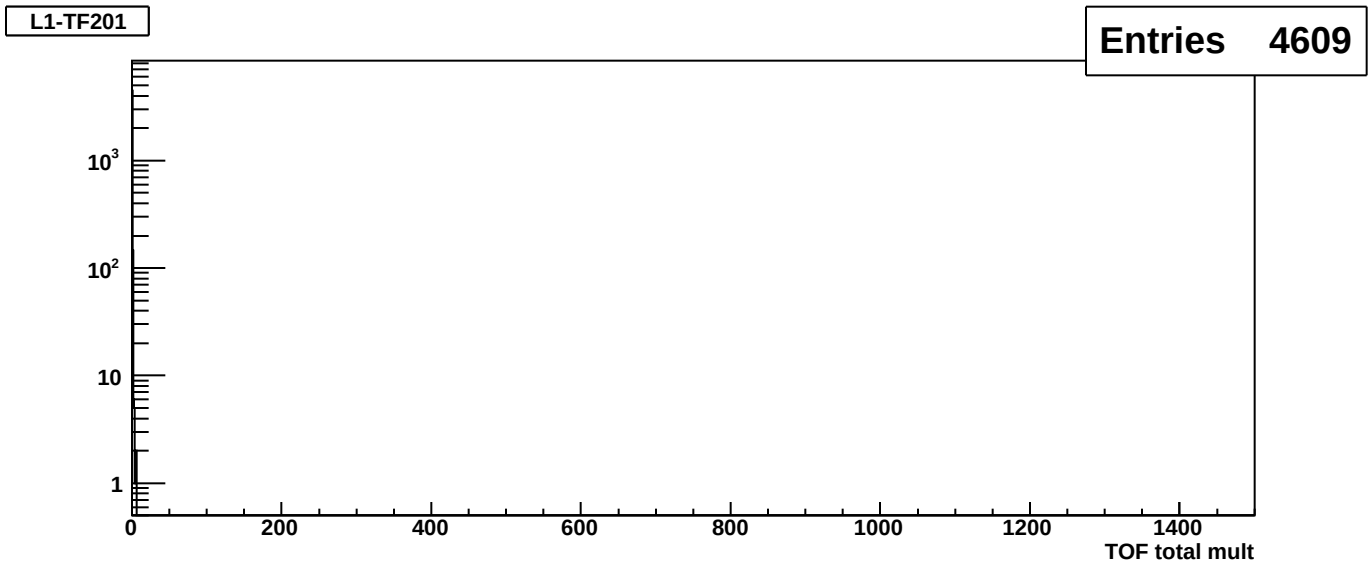

MIX-TF003
Entries 193578
TOF MULT
TOF tray

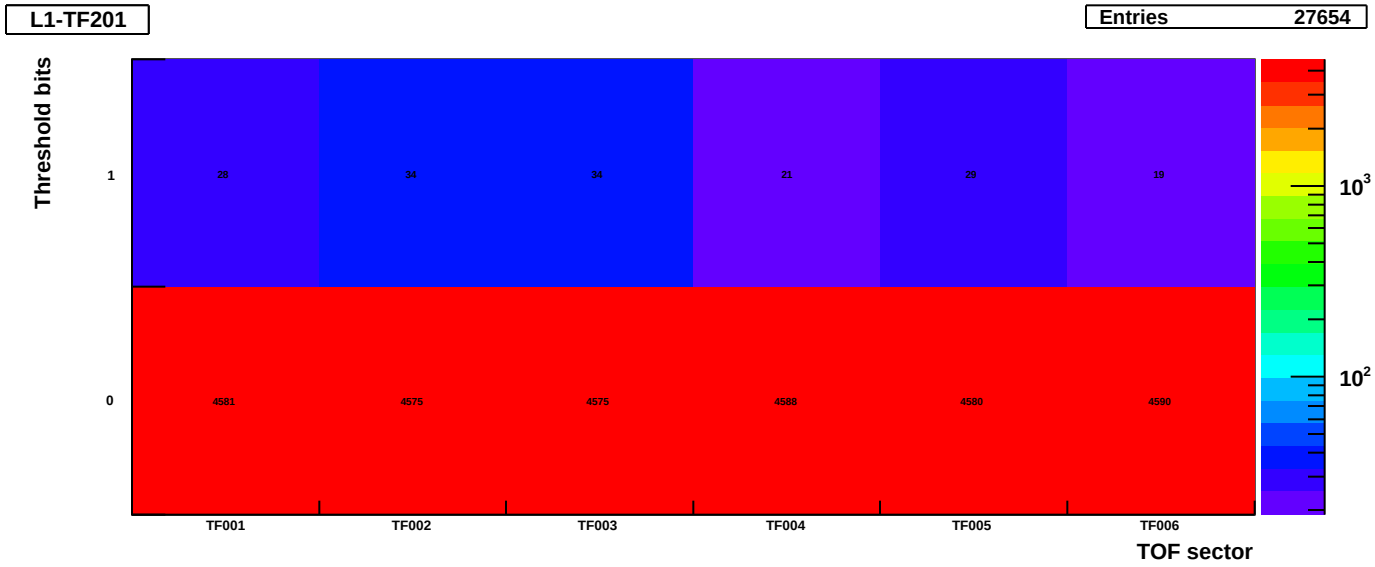

MIX-TF004
Entries 193578
TOF MULT
TOF tray

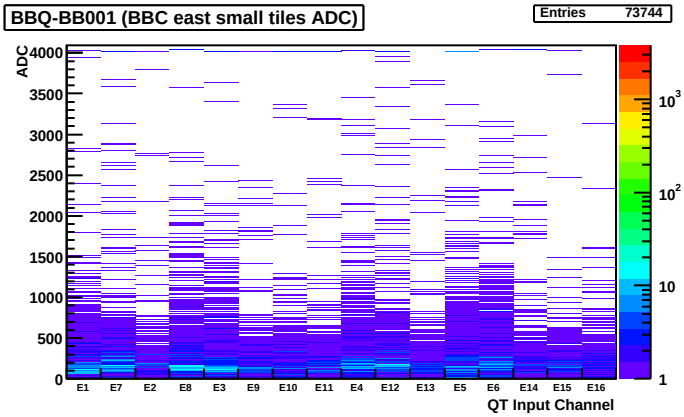

MIX-TF005
Entries 193578
TOF MULT
TOF tray

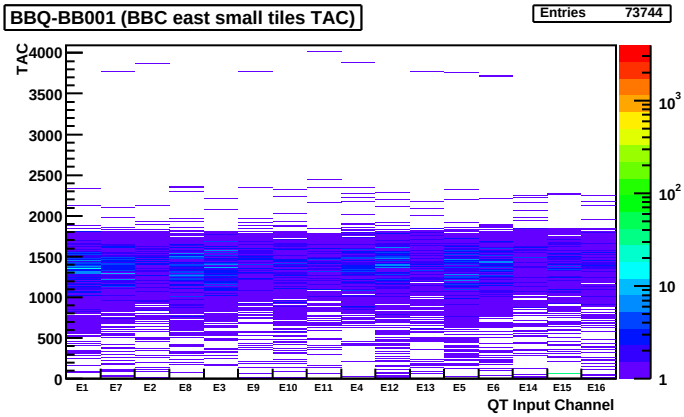

MIX-TF006
Entries 193578
TOF MULT
TOF tray

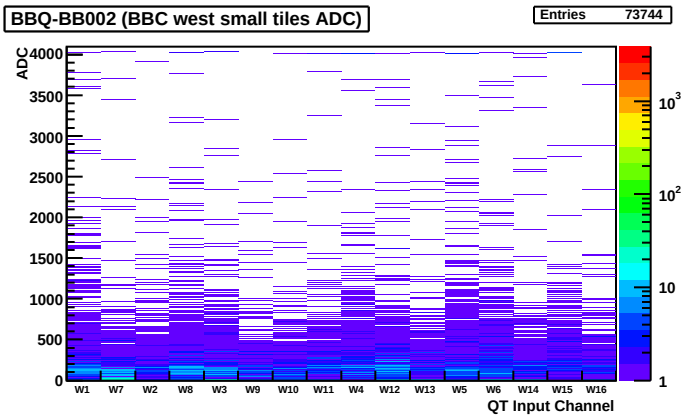

MIX-TF101
Entries 27654
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

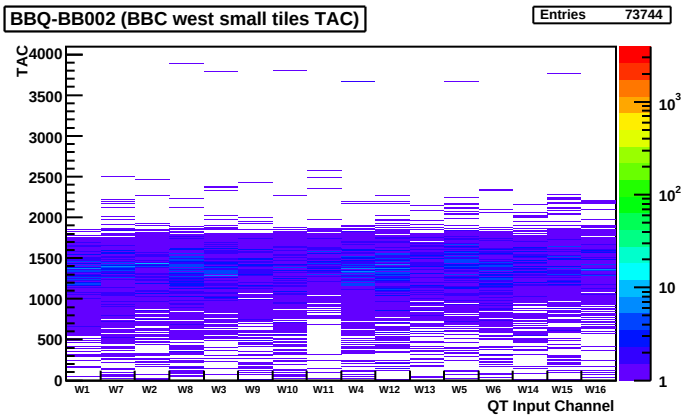

L1-TF201
Entries 4609
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

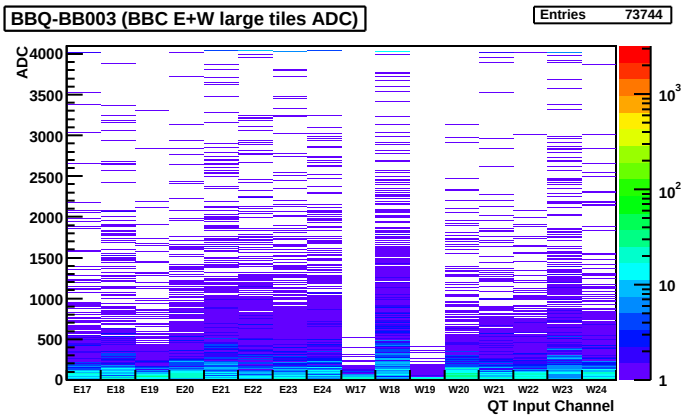

L1-TF201
Entries 27654
Threshold bits
1
0
28
34
34
21
29
19
4581
4575
4575
4588
4580
4590
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2

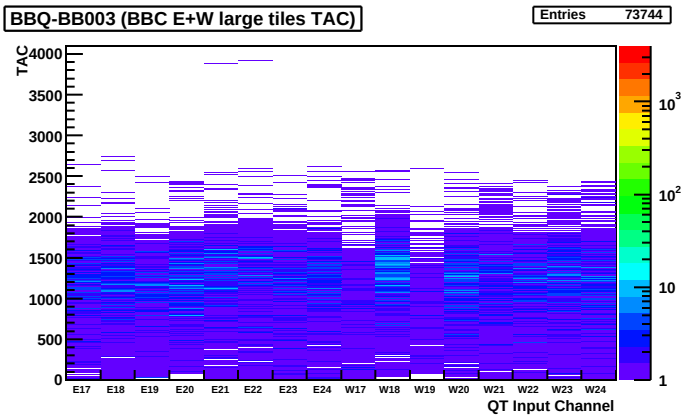

BBQ-BB001 (BBC east small tiles ADC)
Entries 73744
ADC
QT Input Channel

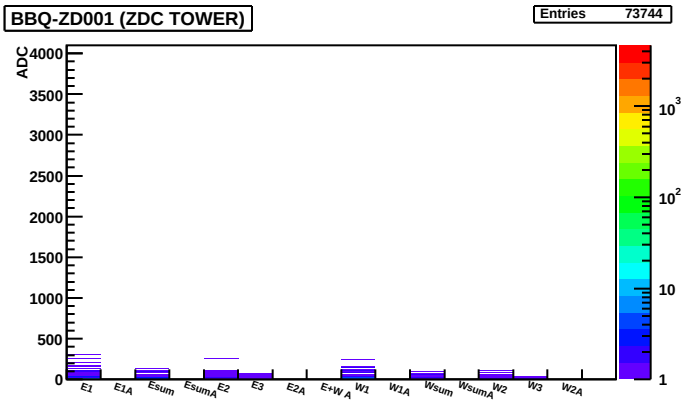

BBQ-BB001 (BBC east small tiles TAC)
Entries 73744
TAC
QT Input Channel

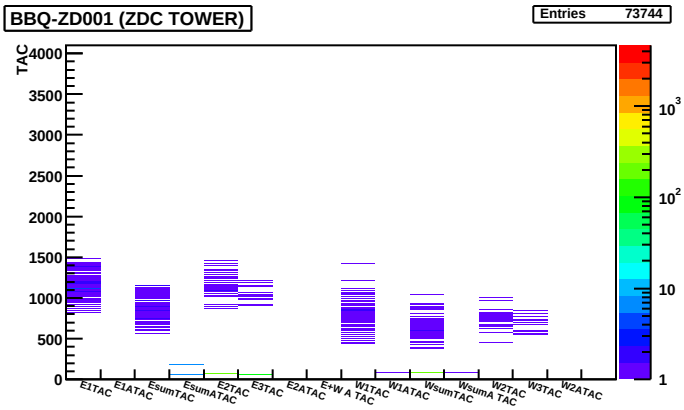

BBQ-BB002 (BBC west small tiles ADC)
Entries 73744
ADC
QT Input Channel

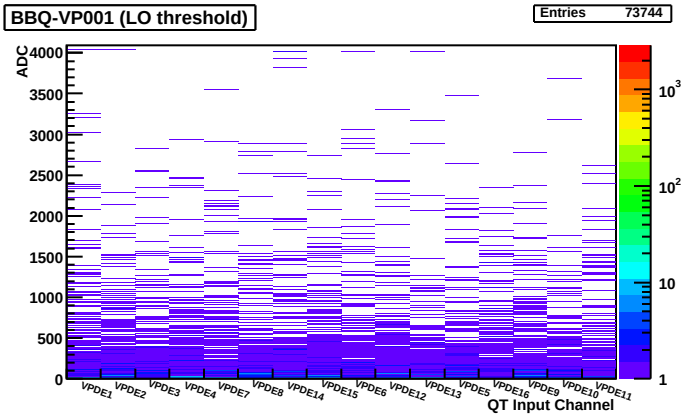

BBQ-BB002 (BBC west small tiles TAC)
Entries 73744
TAC
QT Input Channel

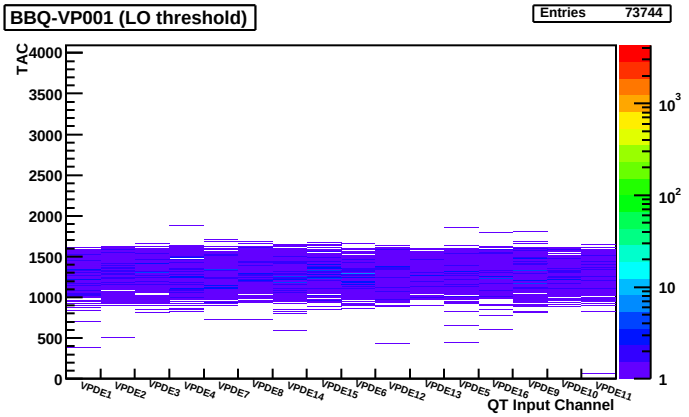

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 73744
ADC
QT Input Channel

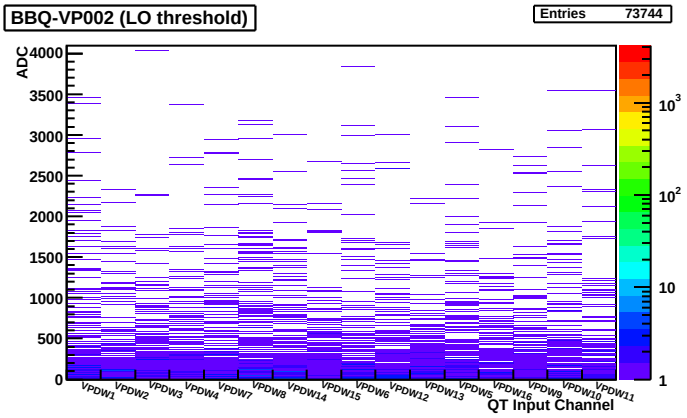

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 73744
TAC
QT Input Channel

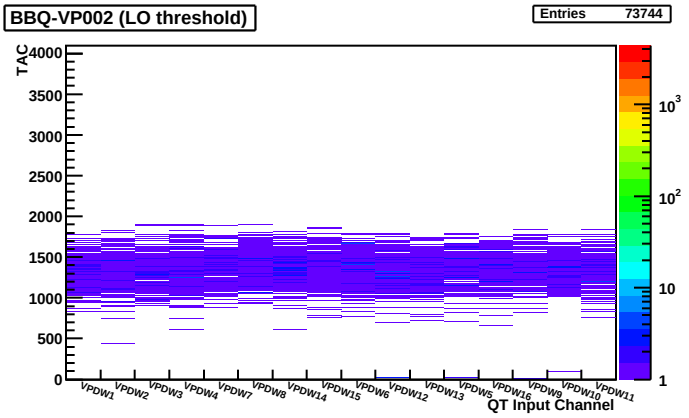

BBQ-ZD001 (ZDC TOWER)
Entries 73744
ADC

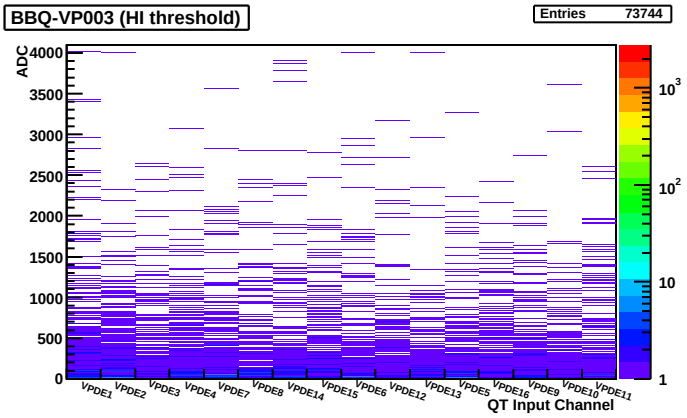

BBQ-ZD001 (ZDC TOWER)
Entries 73744
TAC

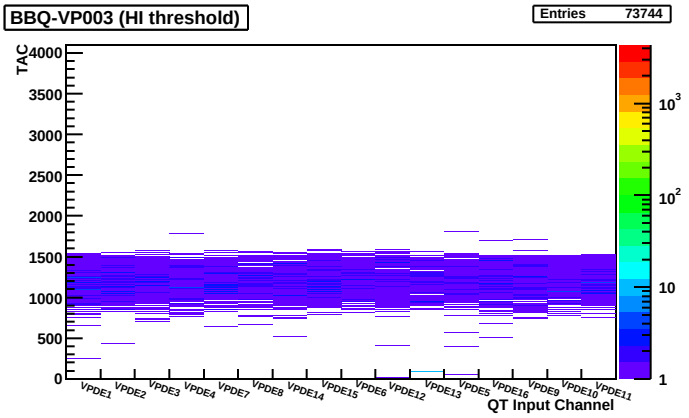

BBQ-VP001 (LO threshold)
Entries 73744
ADC
QT Input Channel

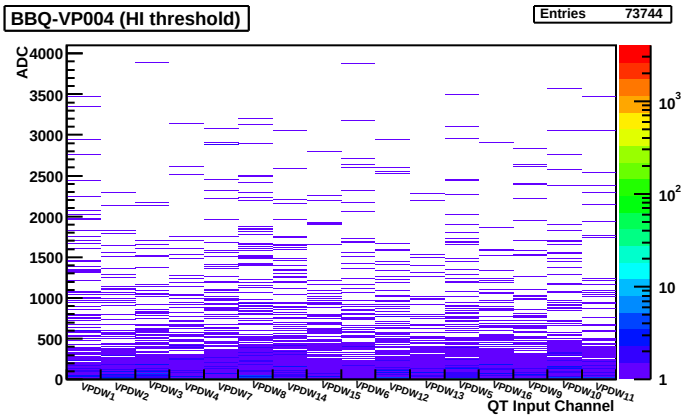

BBQ-VP001 (LO threshold)
Entries 73744
TAC
QT Input Channel

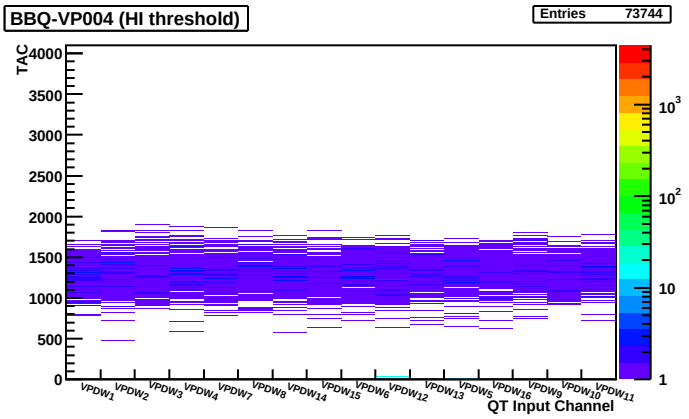

BBQ-VP002 (LO threshold)
Entries 73744
ADC
QT Input Channel

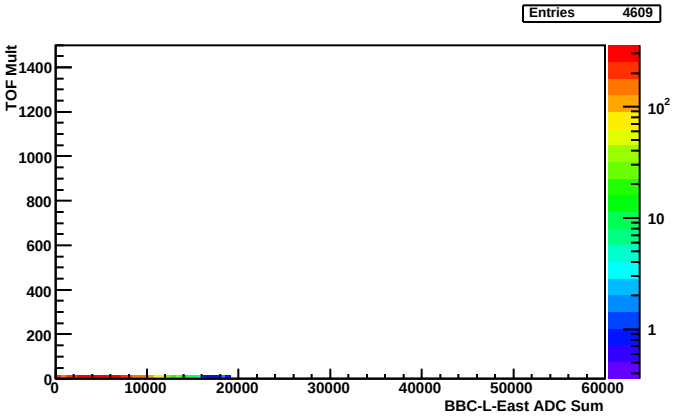

BBQ-VP002 (LO threshold)
Entries 73744
TAC
QT Input Channel

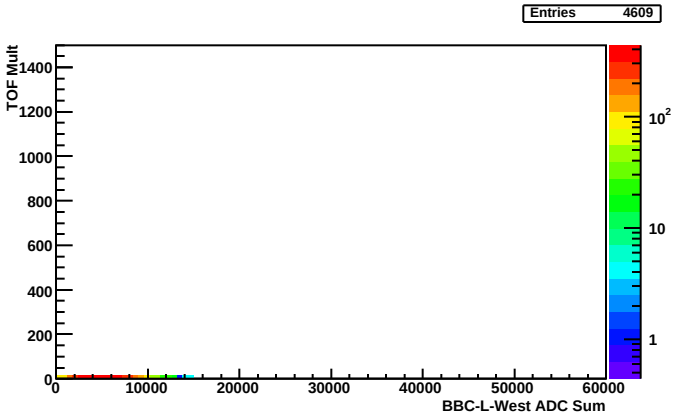

BBQ-VP003 (HI threshold)
Entries 73744
ADC
QT Input Channel

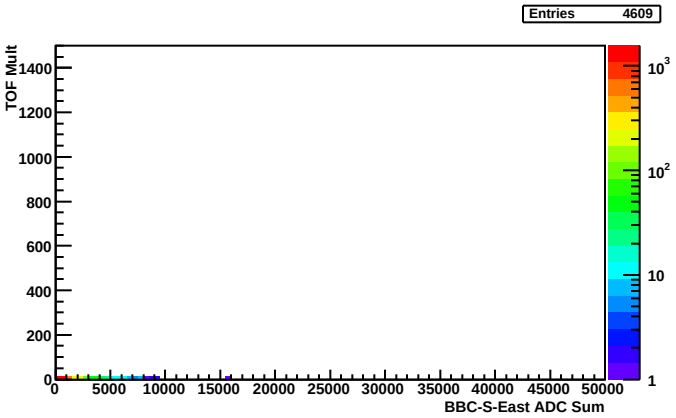

BBQ-VP003 (HI threshold)
Entries 73744
TAC
QT Input Channel

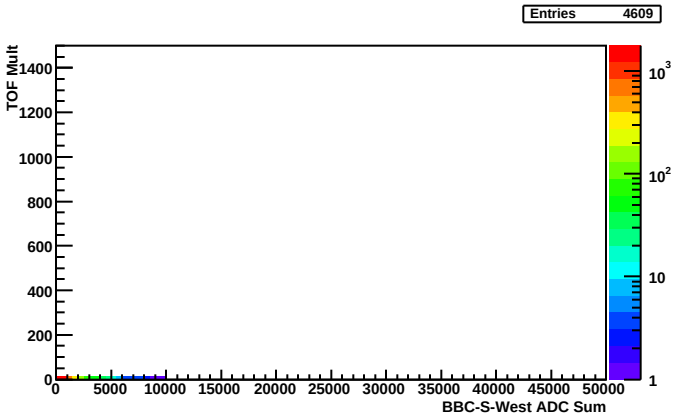

BBQ-VP004 (HI threshold)
Entries 73744
ADC
QT Input Channel

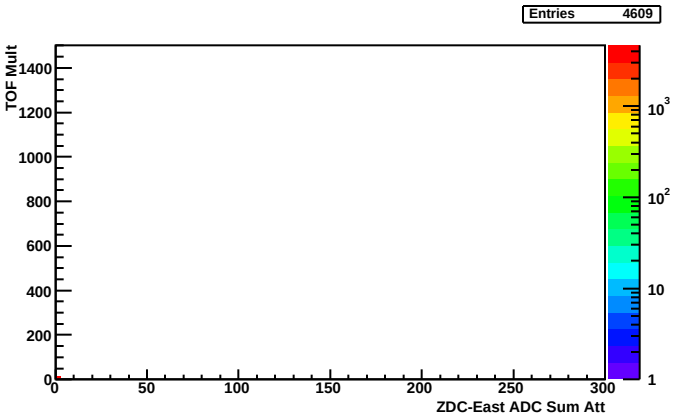

BBQ-VP004 (HI threshold)
Entries 73744
TAC
QT Input Channel

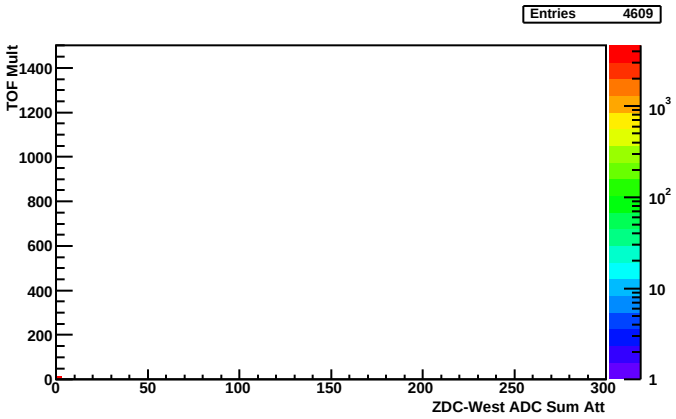

Entries 4609
TOF Mult
BBC-L-East ADC Sum

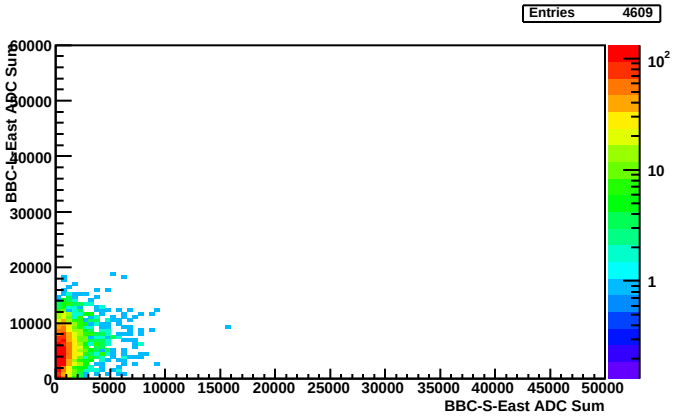

Entries 4609
TOF Mult
BBC-L-West ADC Sum

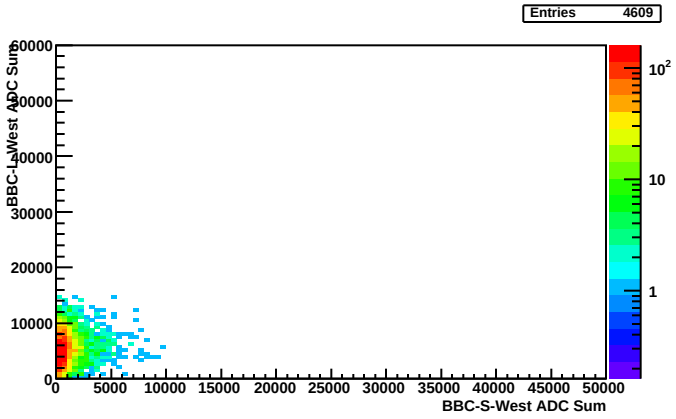

Entries 4609
TOF Mult
BBC-S-East ADC Sum

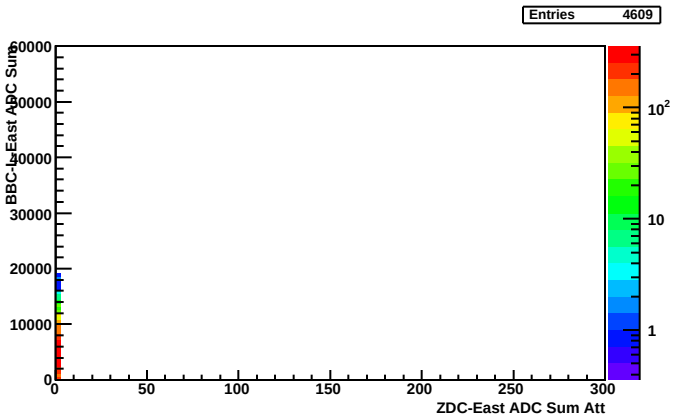

Entries 4609
TOF Mult
BBC-S-West ADC Sum

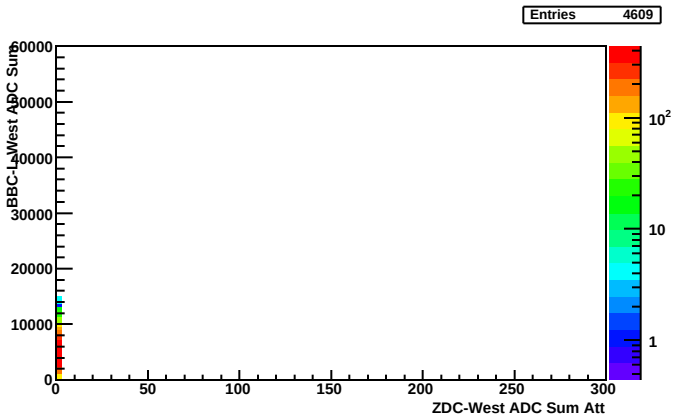

Entries 4609
TOF Mult
ZDC-East ADC Sum Att

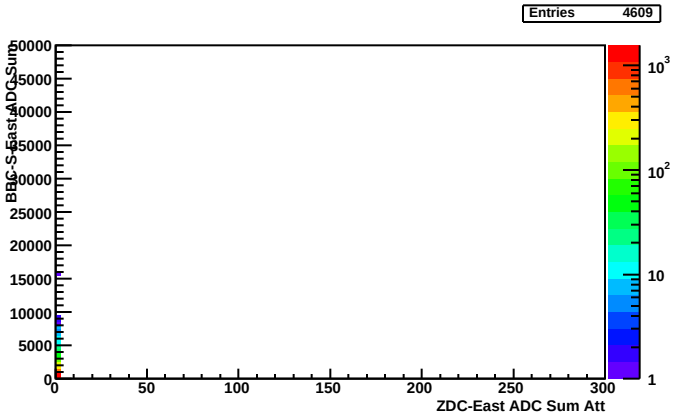

Entries 4609
TOF Mult
ZDC-West ADC Sum Att

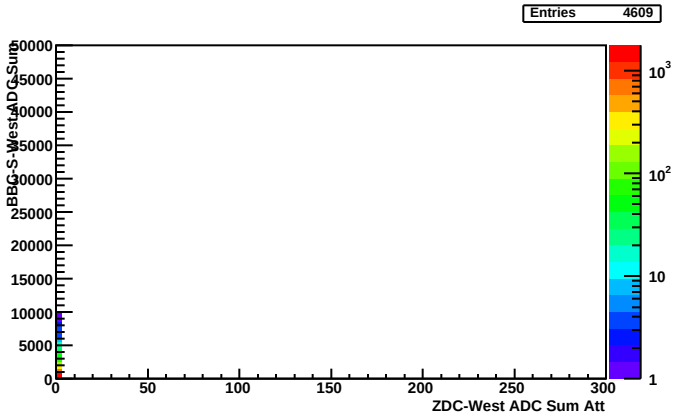

Entries 4609
BBC-L-East ADC Sum
BBC-S-East ADC Sum

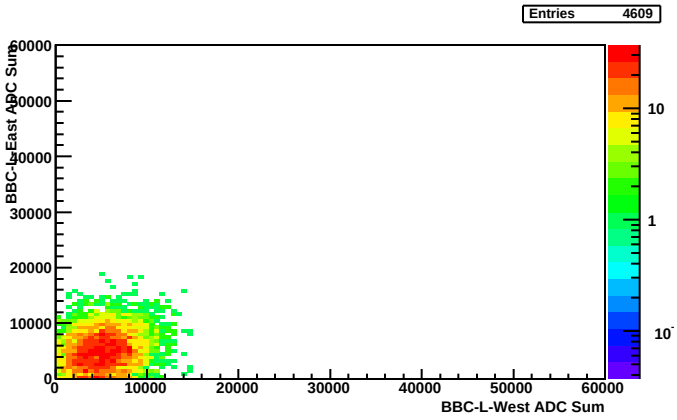

Entries 4609
BBC-L-West ADC Sum
BBC-S-West ADC Sum

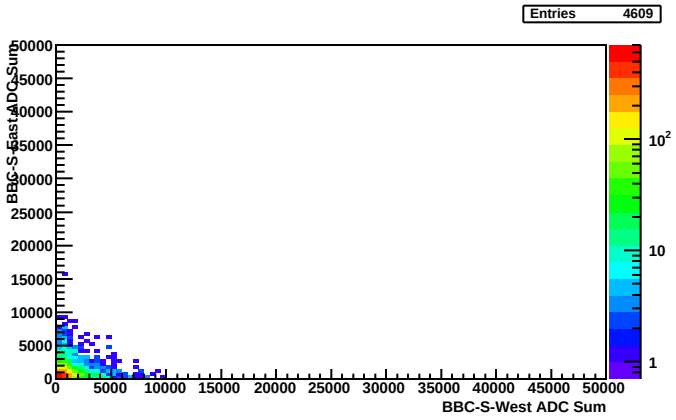

Entries 4609
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

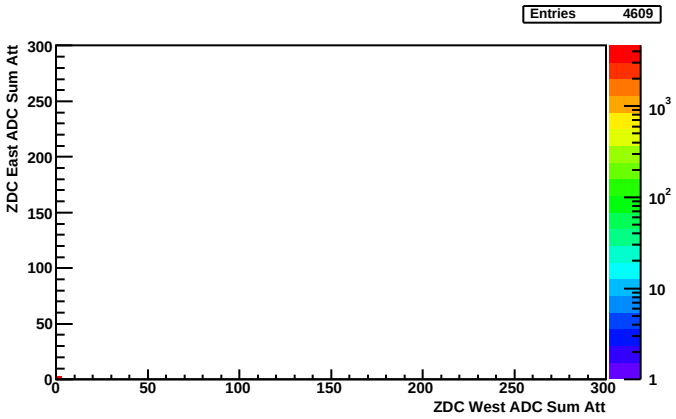

Entries 4609
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

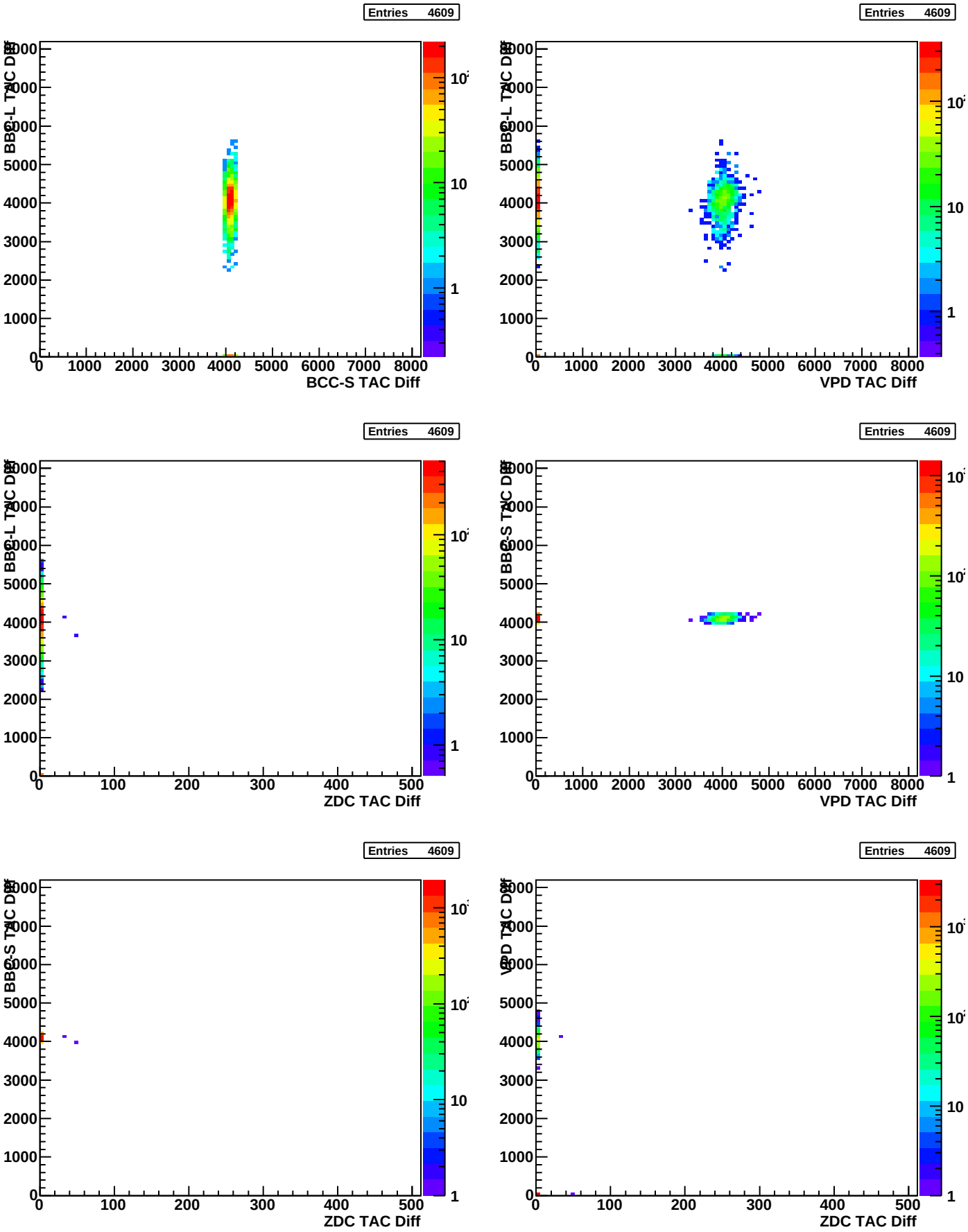

Entries 4609
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

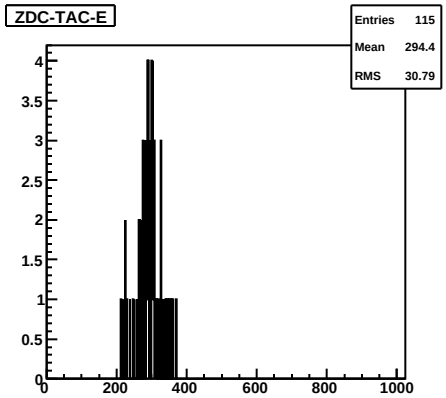

Entries 4609
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

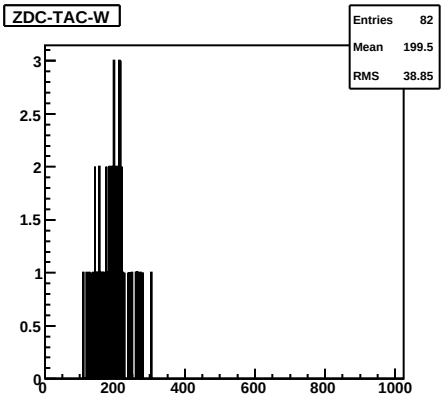

Entries 4609
BBC-L-East ADC Sum
BBC-L-West ADC Sum

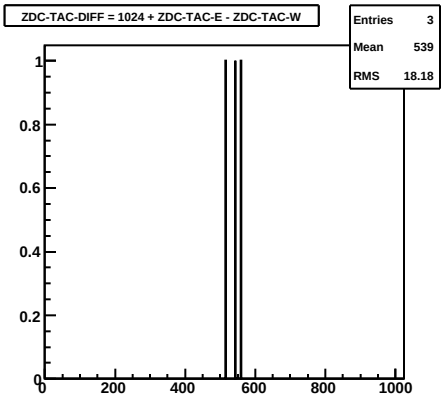

Entries 4609
BBC-S-East ADC Sum
BBC-S-West ADC Sum

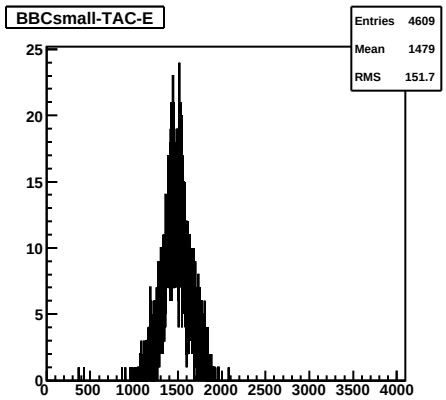

Entries 4609
ZDC East ADC Sum Att
ZDC West ADC Sum Att

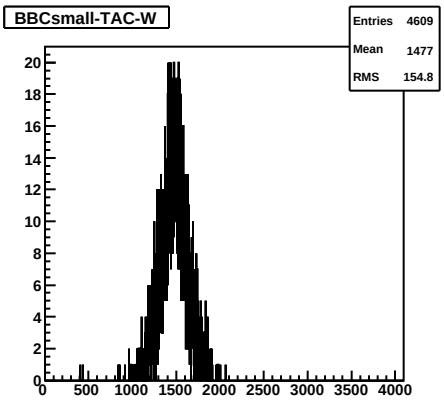

Entries 4609
BBC-L TAC Diff
BCC-S TAC Diff
Entries 4609
BBC-L TAC Diff
VPD TAC Diff
Entries 4609
BBC-L TAC Diff
ZDC TAC Diff
Entries 4609
BBC-S TAC Diff
VPD TAC Diff
Entries 4609
BBC-S TAC Diff
ZDC TAC Diff
Entries 4609
VPD TAC Diff
ZDC TAC Diff

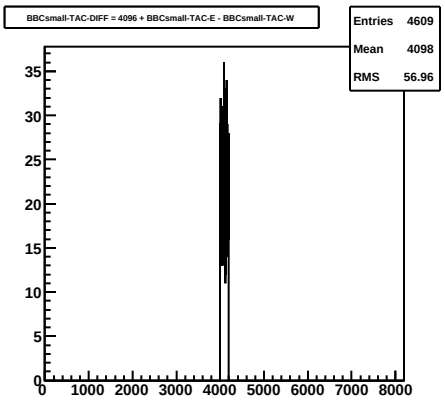

ZDC-TAC-E
Entries 115
Mean 294.4
RMS 30.79

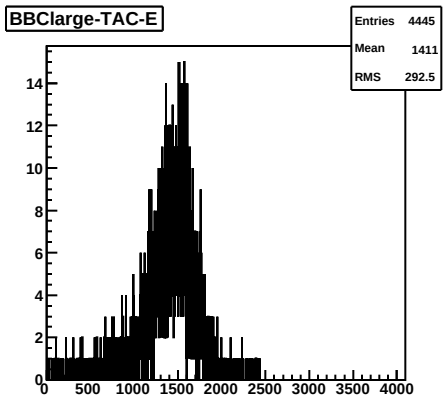

ZDC-TAC-W
Entries 82
Mean 199.5
RMS 38.85

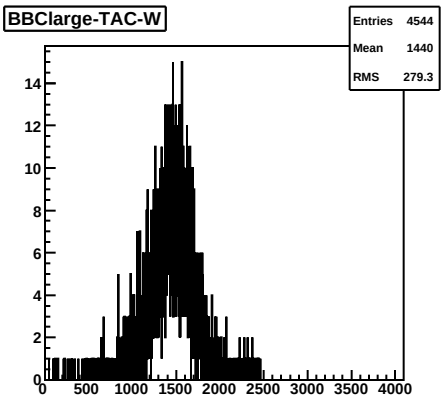

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 3
Mean 539
RMS 18.18

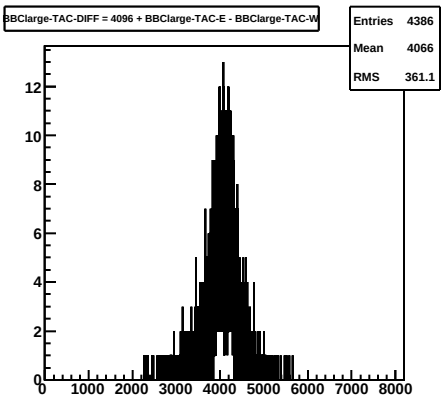

BBCsmall-TAC-E
Entries 4609
Mean 1479
RMS 151.7

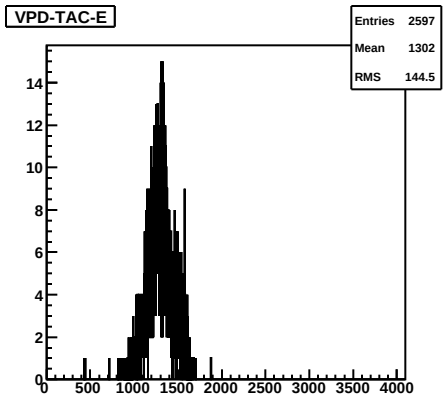

BBCsmall-TAC-W
Entries 4609
Mean 1477
RMS 154.8

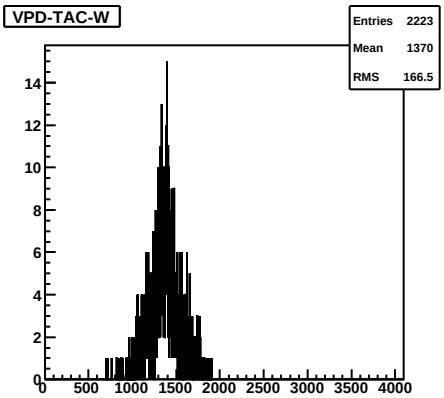

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 4609
Mean 4098
RMS 56.96

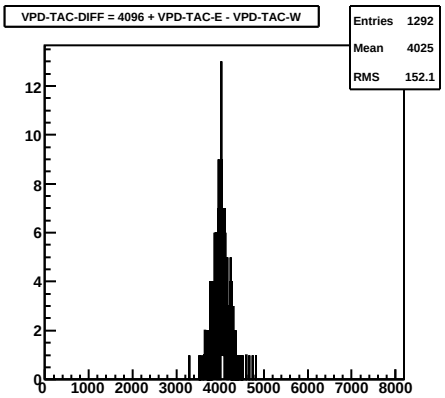

BBClarge-TAC-E
Entries 4445
Mean 1411
RMS 292.5

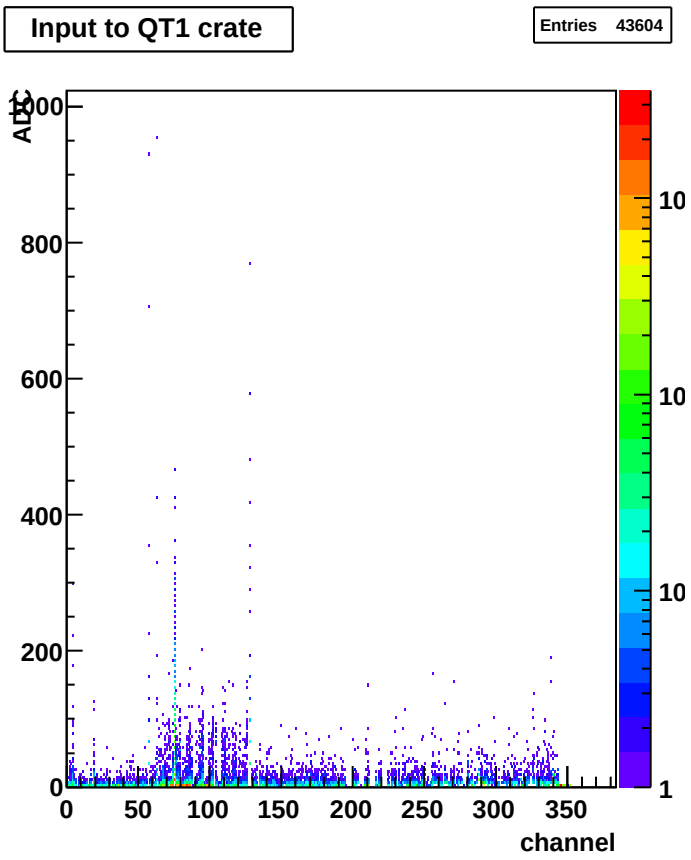

BBClarge-TAC-W
Entries 4544
Mean 1440
RMS 279.3

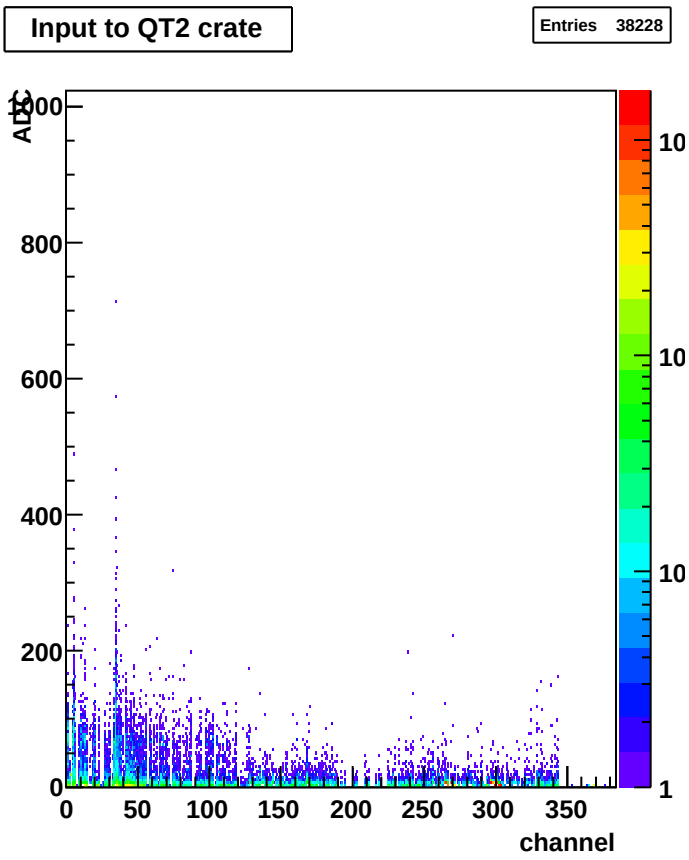

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 4386
Mean 4066
RMS 361.1

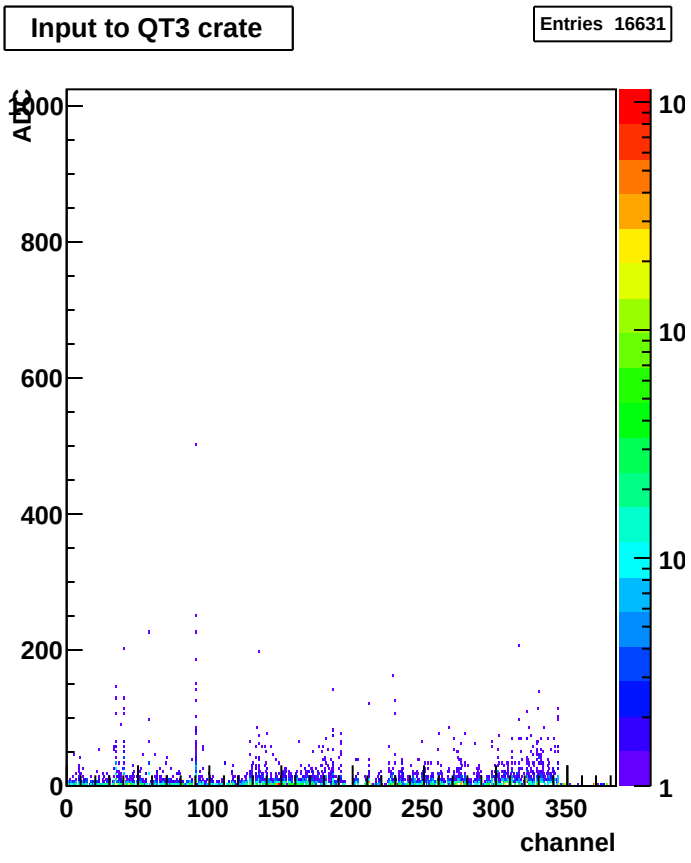

VPD-TAC-E
Entries 2597
Mean 1302
RMS 144.5

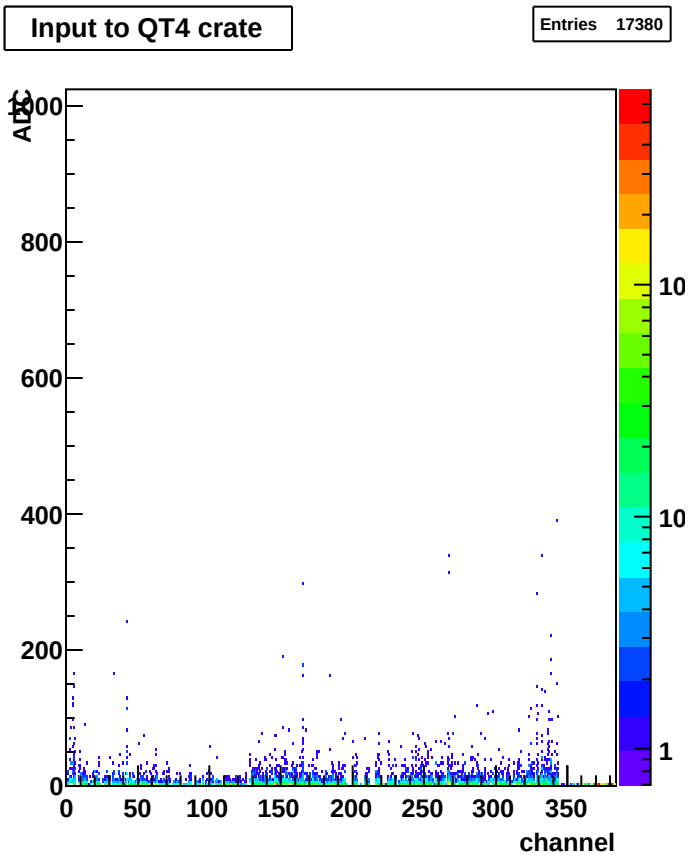

VPD-TAC-W
Entries 2223
Mean 1370
RMS 166.5

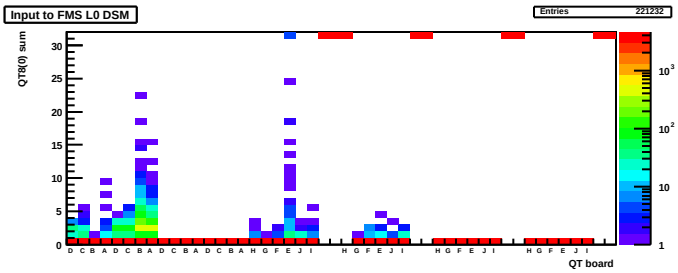

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1292
Mean 4025
RMS 152.1

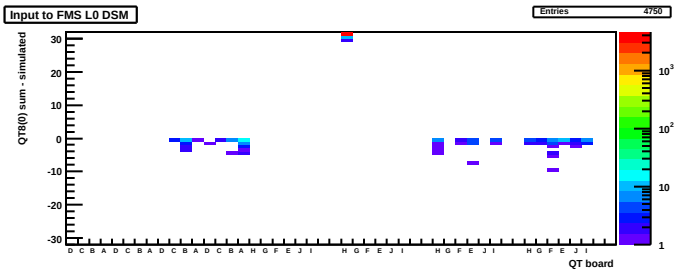

Input to QT1 crate
Entries 43604
ADC
channel

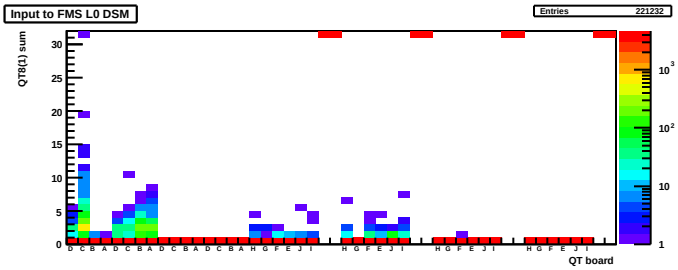

Input to QT2 crate
Entries 38228
ADC
channel

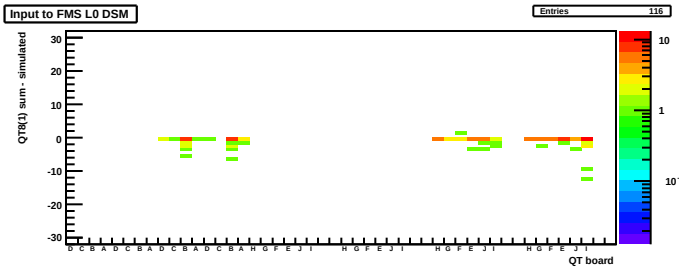

Input to QT3 crate
Entries 16631
ADC
channel

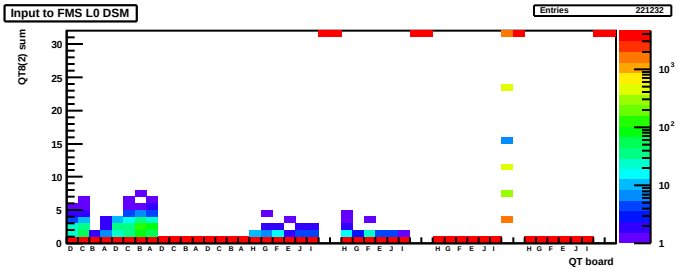

Input to QT4 crate
Entries 17380
ADC
channel

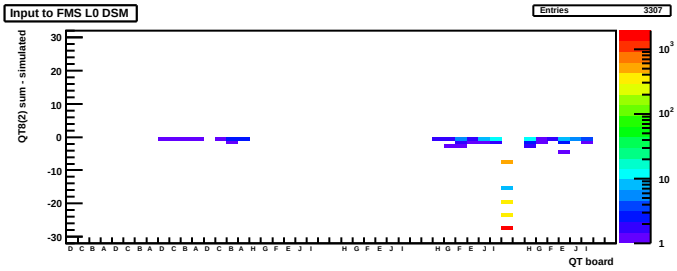

Input to FMS L0 DSM
Entries 221232
QT8(0) sum
QT board

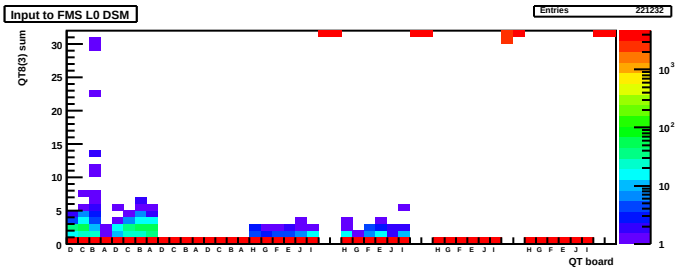

Input to FMS L0 DSM
Entries 4750
QT8(0) sum - simulated
QT board

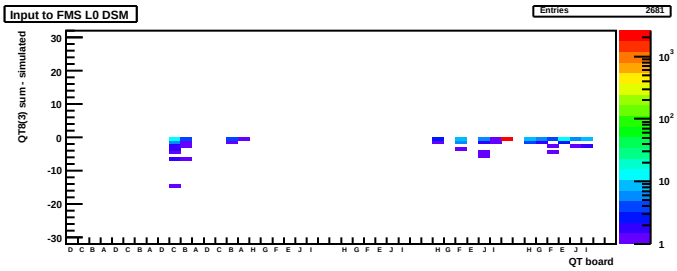

Input to FMS L0 DSM
Entries 221232
QT8(1) sum
QT board

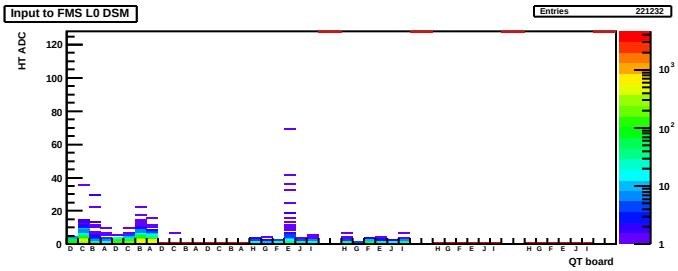

Input to FMS L0 DSM
Entries 116
QT8(1) sum - simulated
QT board

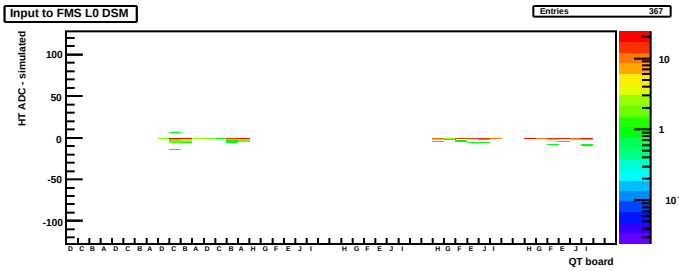

Input to FMS L0 DSM
Entries 221232
QT8(2) sum
QT board

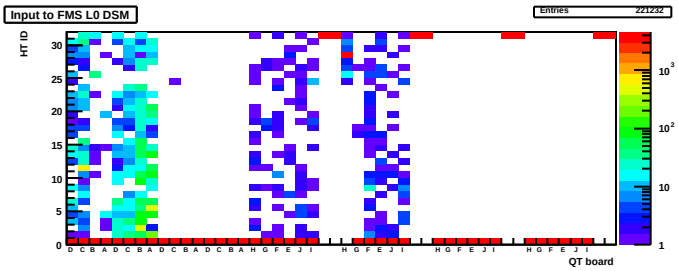

Input to FMS L0 DSM
Entries 3307
QT8(2) sum - simulated
QT board

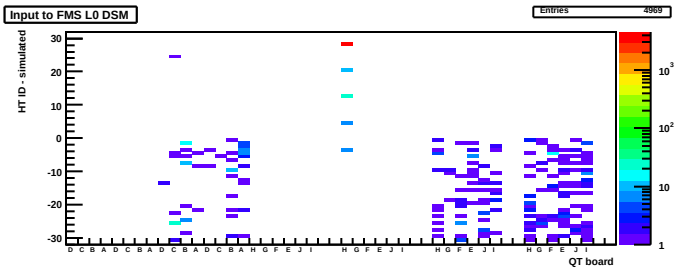

Input to FMS L0 DSM
Entries 221232
QT8(3) sum
QT board

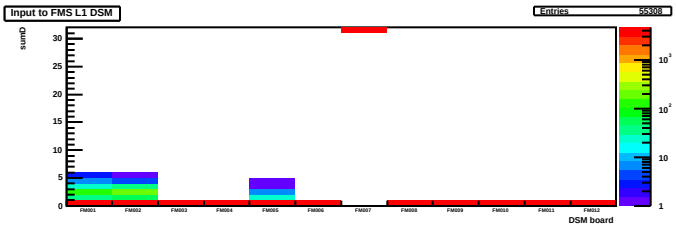

Input to FMS L0 DSM
Entries 2681
QT8(3) sum - simulated
QT board

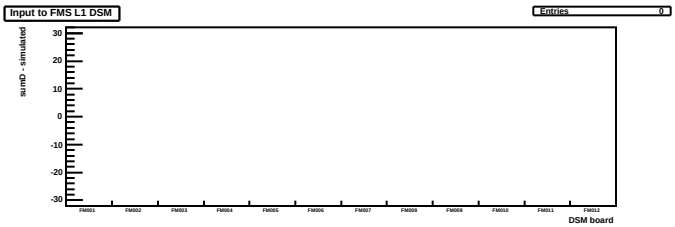

Input to FMS L0 DSM
Entries 221232
HT ADC
QT board

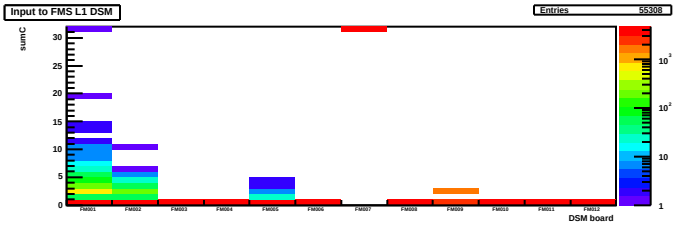

Input to FMS L0 DSM
Entries 367
HT ADC - simulated
QT board

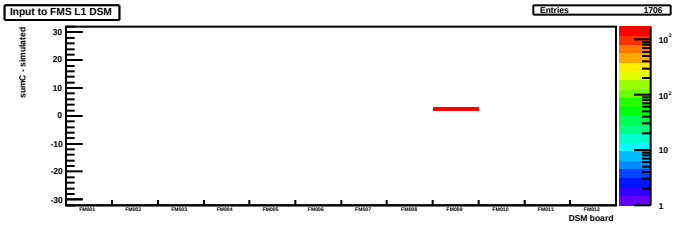

Input to FMS L0 DSM
Entries 221232
HT ID
QT board

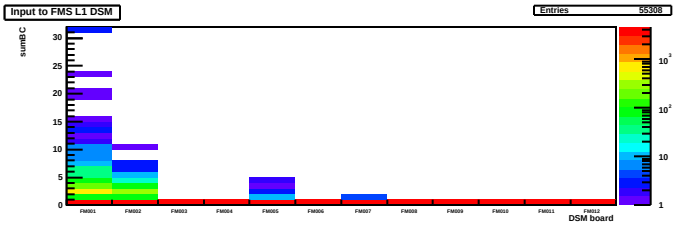

Input to FMS L0 DSM
Entries 4969
HT ID - simulated
QT board

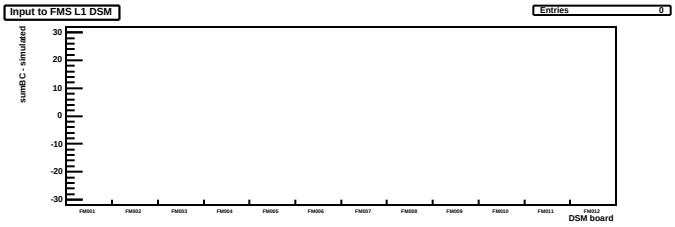

Input to FMS L1 DSM
Entries 55308
sumD
DSM board

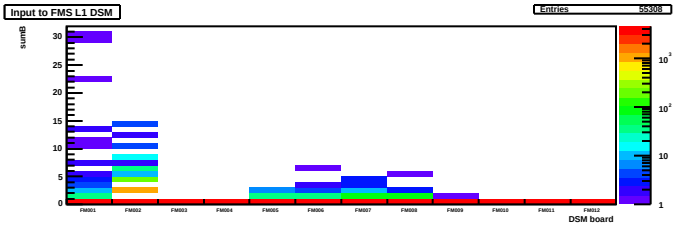

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

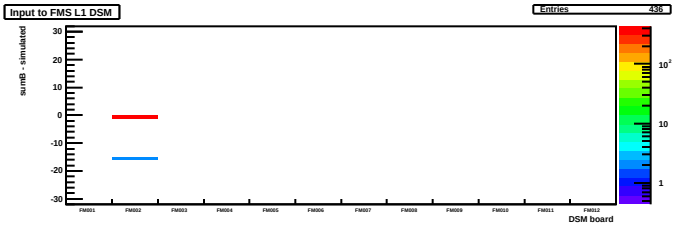

Input to FMS L1 DSM
Entries 55308
sumC
DSM board

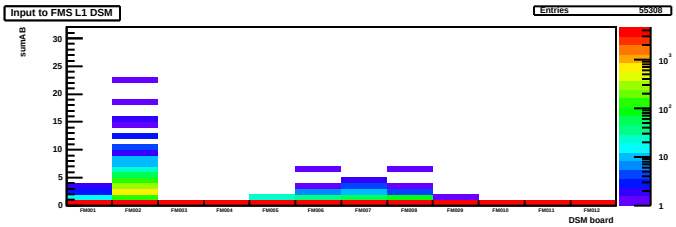

Input to FMS L1 DSM
Entries 1706
sumC - simulated
DSM board

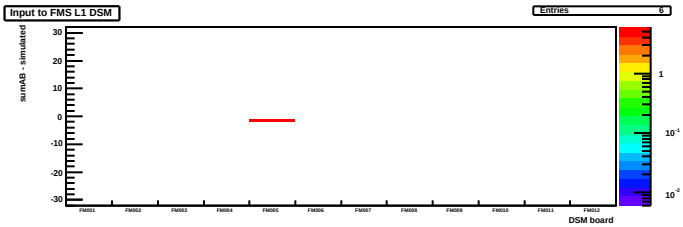

Input to FMS L1 DSM
Entries 55308
sumBC
DSM board

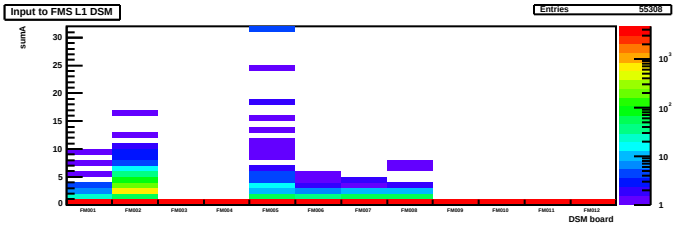

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

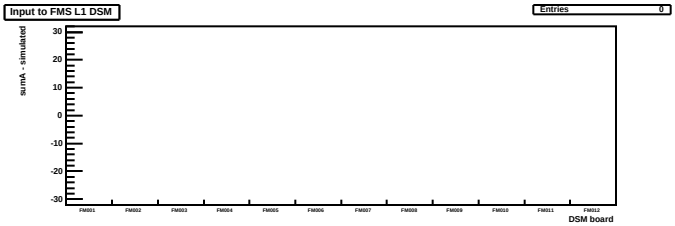

Input to FMS L1 DSM
Entries 55308
sumB
DSM board

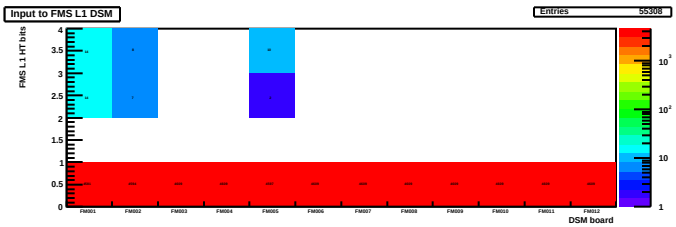

Input to FMS L1 DSM
Entries 436
sumB - simulated
DSM board

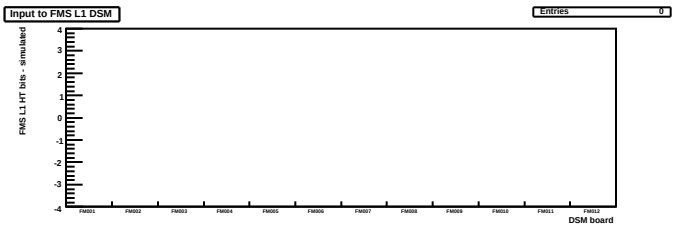

Input to FMS L1 DSM
Entries 55308
sumAB
DSM board

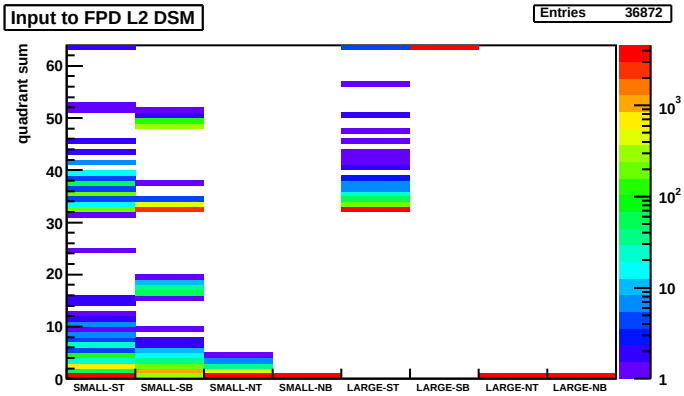

Input to FMS L1 DSM
Entries 6
sumAB - simulated
DSM board

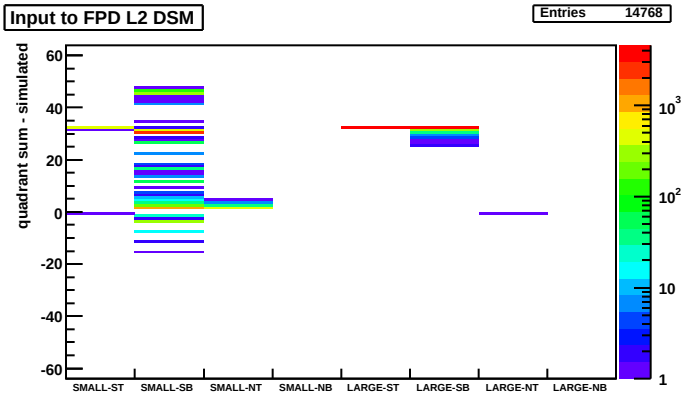

Input to FMS L1 DSM
Entries 55308
sumA
DSM board

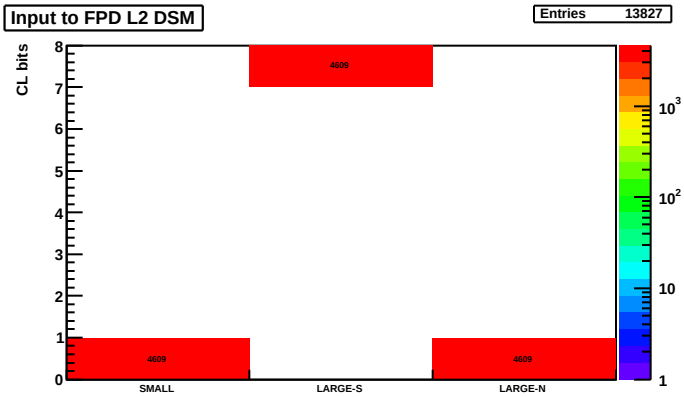

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

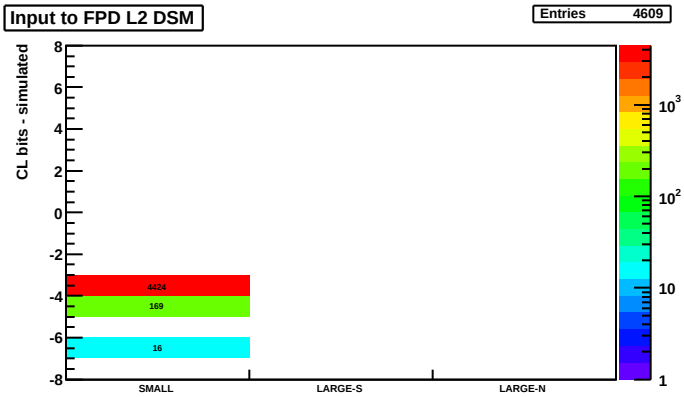

Input to FMS L1 DSM
Entries 55308
FMS L1 HT bits
DSM board

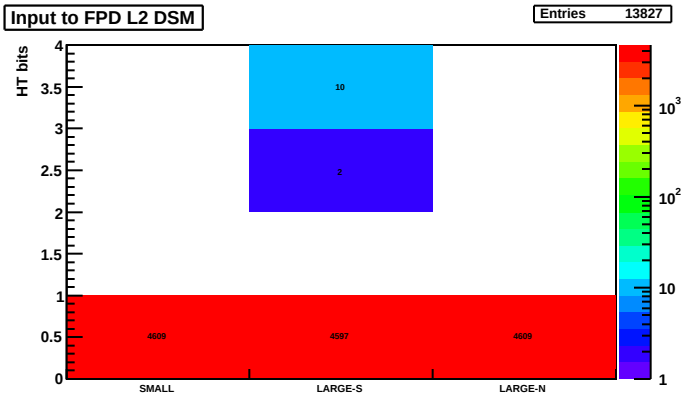

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

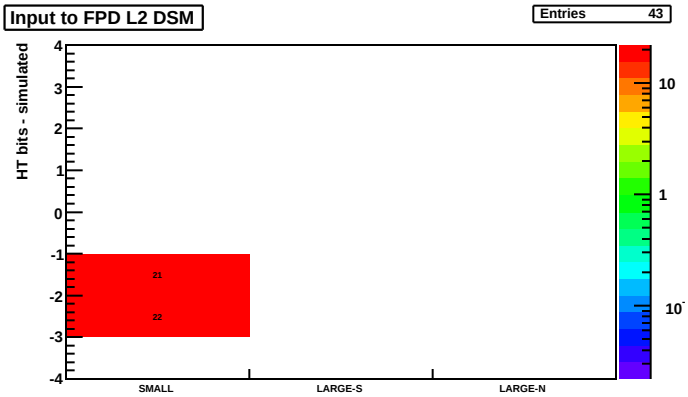

Input to FPD L2 DSM
Entries 36872
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

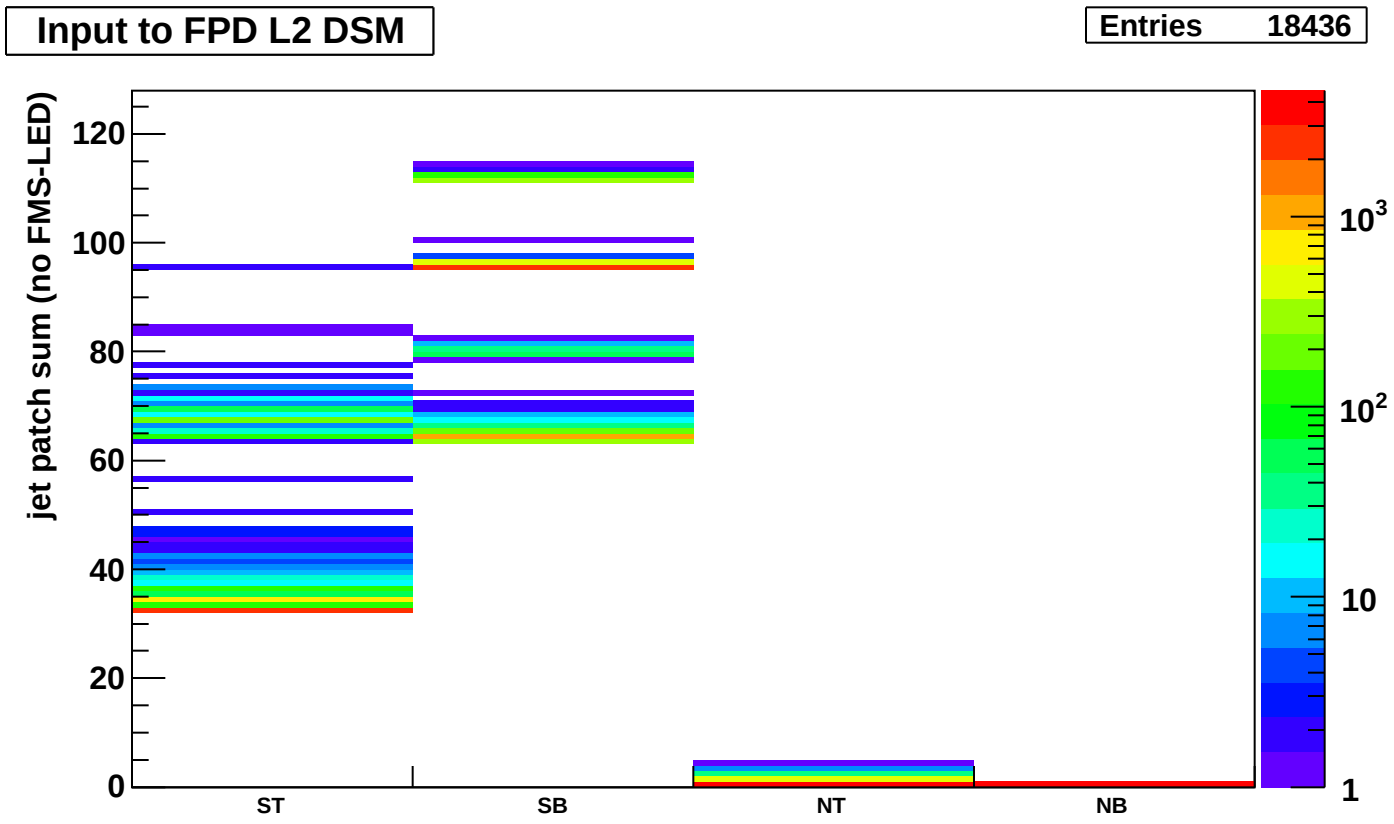

Input to FPD L2 DSM
Entries 14768
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

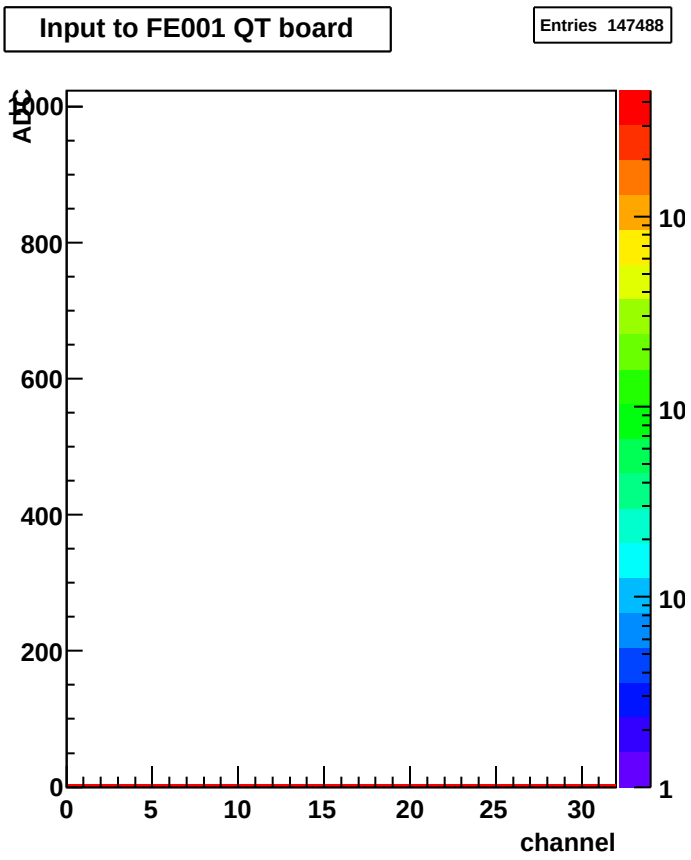

Input to FPD L2 DSM
Entries 13827
CL bits
4609
4609
4609
SMALL
LARGE-S
LARGE-N

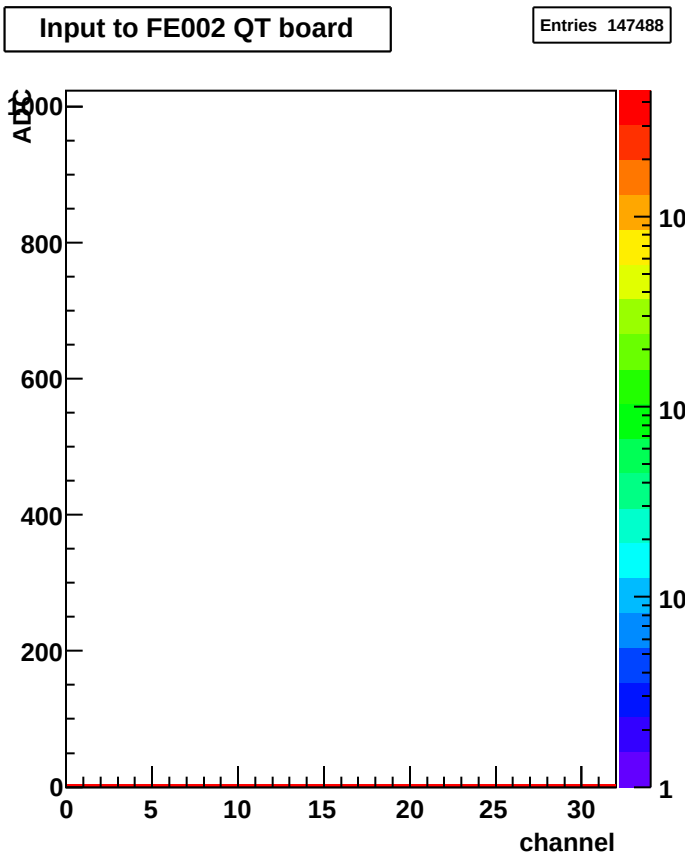

Input to FPD L2 DSM
Entries 4609
CL bits - simulated
4424
169
16
SMALL
LARGE-S
LARGE-N

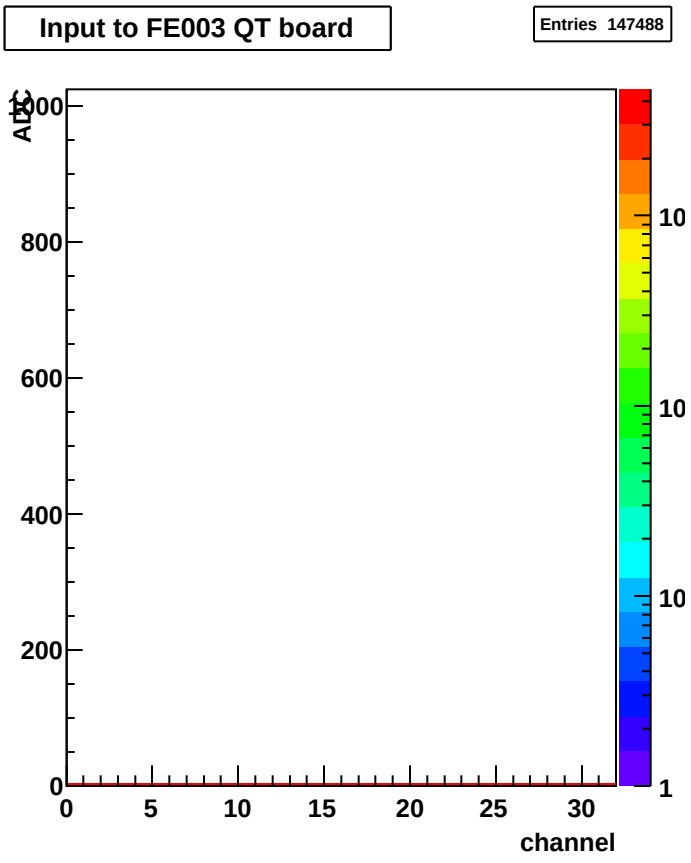

Input to FPD L2 DSM
Entries 13827
HT bits
10
2
4609
4597
4609
SMALL
LARGE-S
LARGE-N

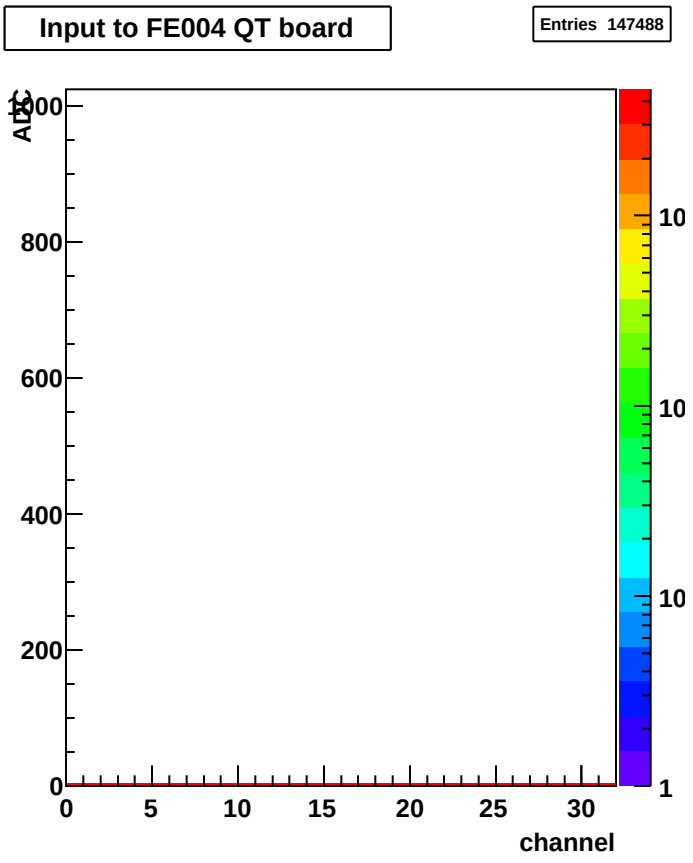

Input to FPD L2 DSM
Entries 43
HT bits - simulated
21
22
SMALL
LARGE-S
LARGE-N

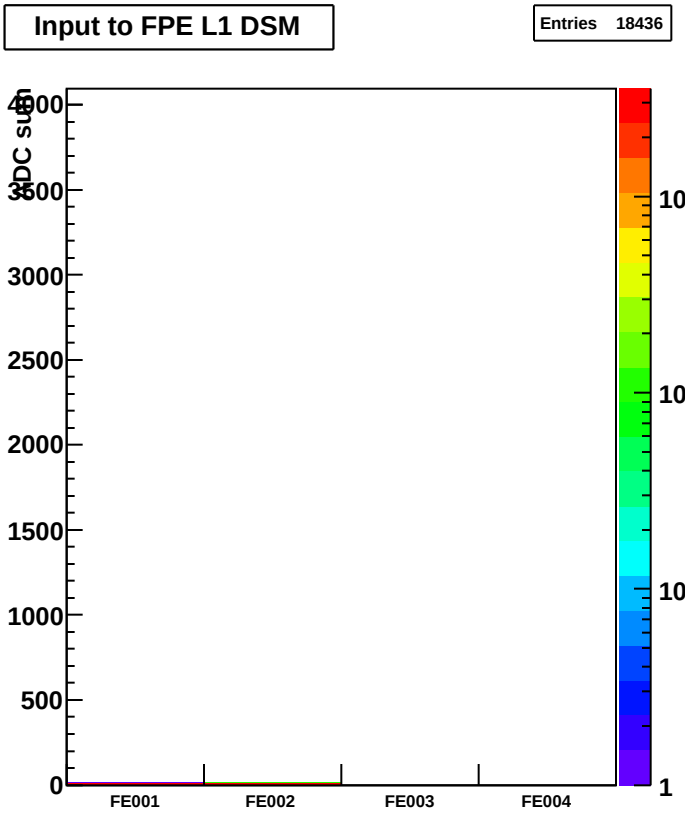

Input to FPD L2 DSM
Entries 18436
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3

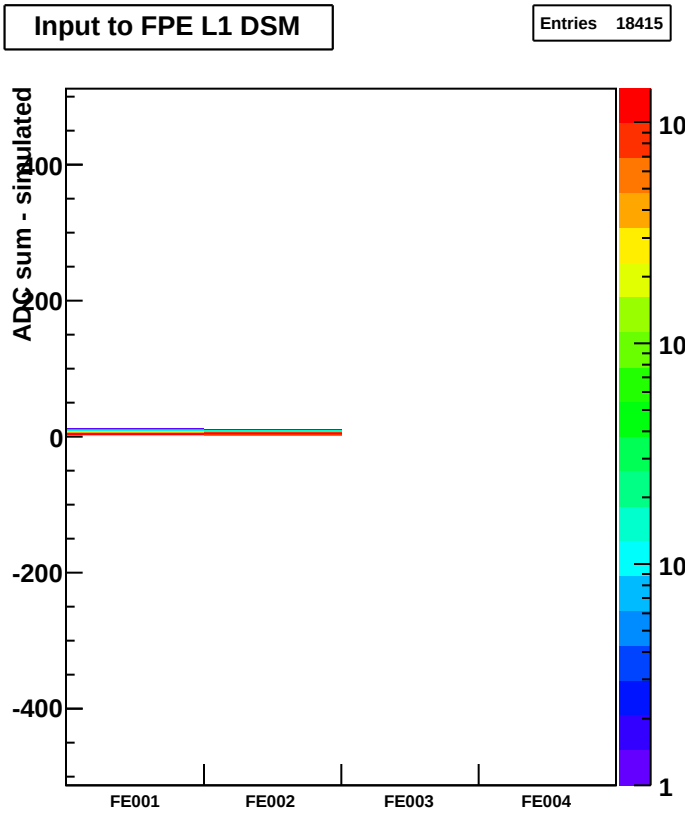

Input to FE001 QT board
Entries 147488
ADC
channel

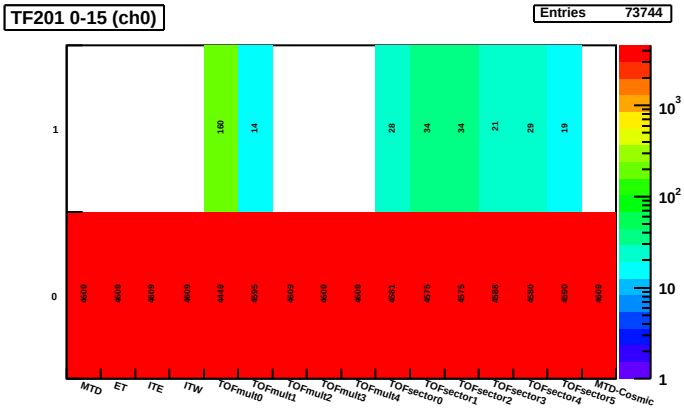

Input to FE002 QT board
Entries 147488
ADC
channel

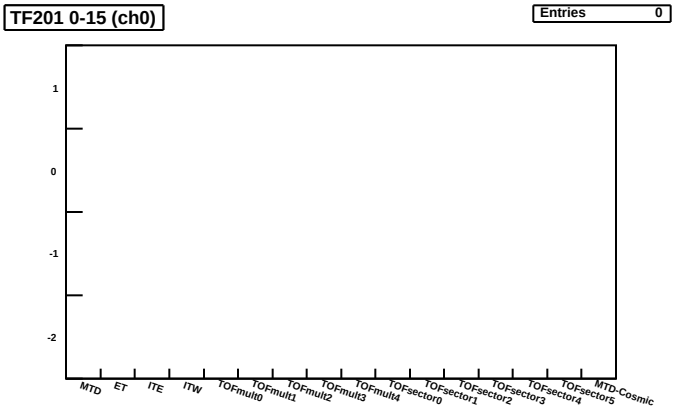

Input to FE003 QT board
Entries 147488
ADC
channel

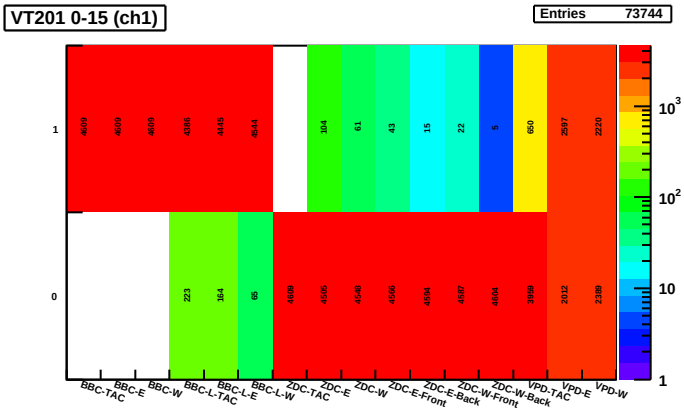

Input to FE004 QT board
Entries 147488
ADC
channel

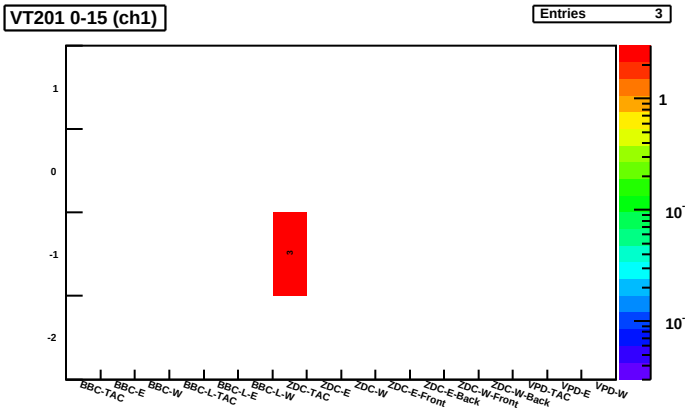

Input to FPE L1 DSM
Entries 18436
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

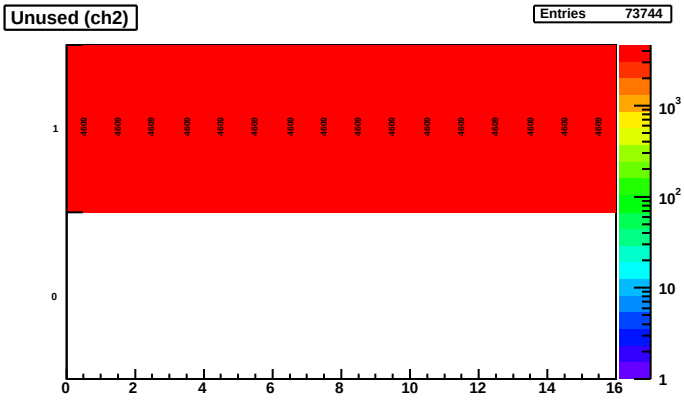

Input to FPE L1 DSM
Entries 18415
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1

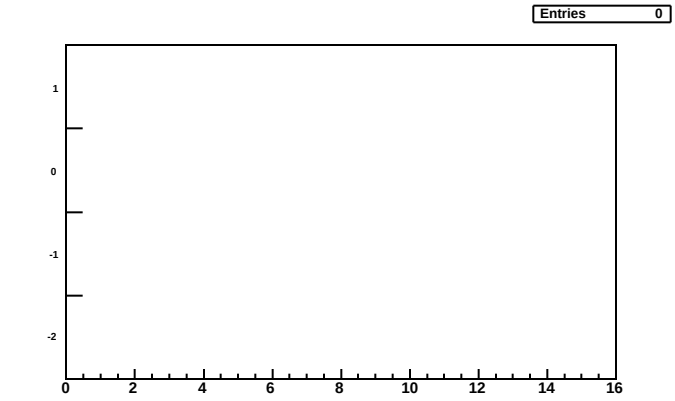

TF201 0-15 (ch0)
Entries 73744
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

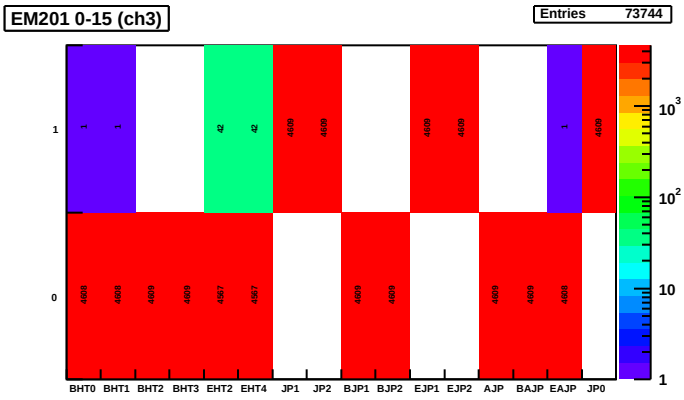

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

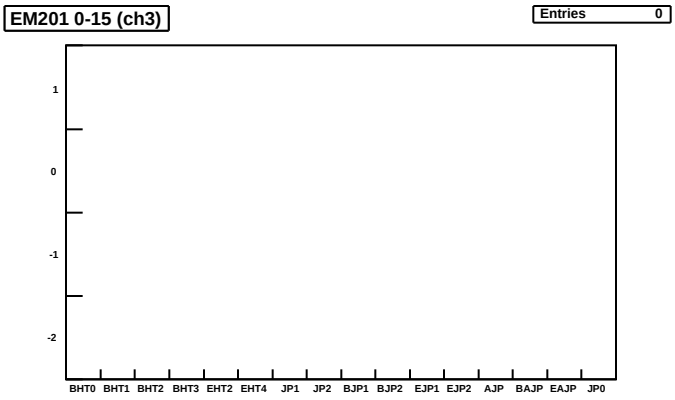

VT201 0-15 (ch1)
Entries 73744
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 3
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

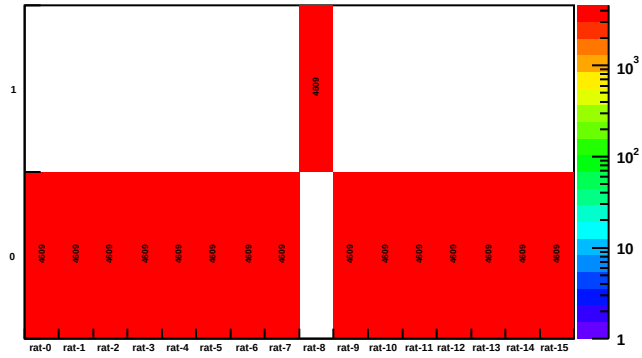

Unused (ch2)
Entries 73744

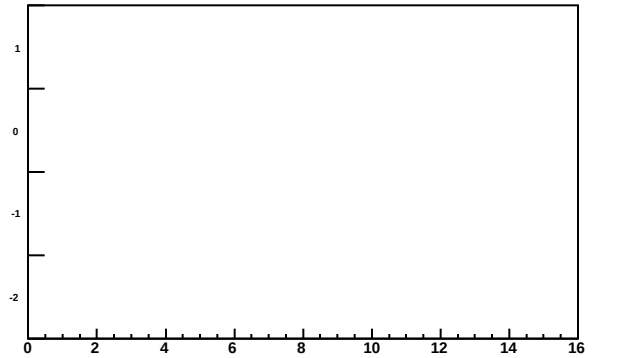

Entries 0


EM201 0-15 (ch3)
Entries 73744
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

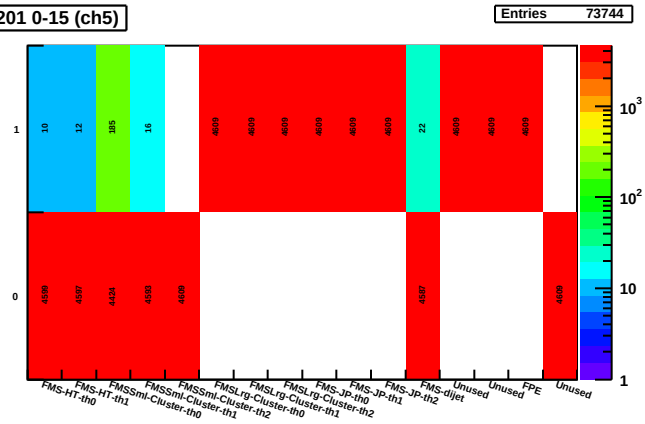

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

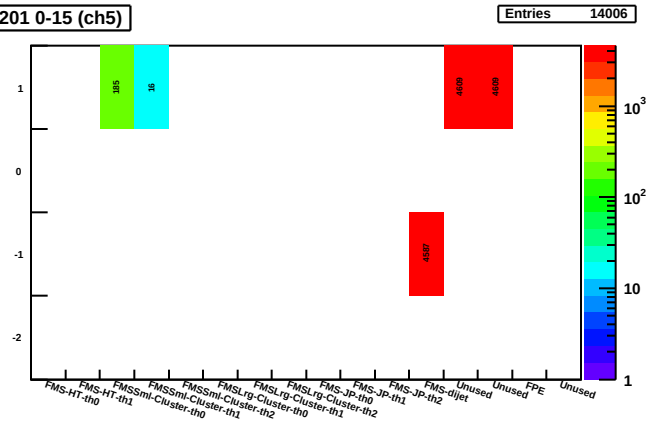




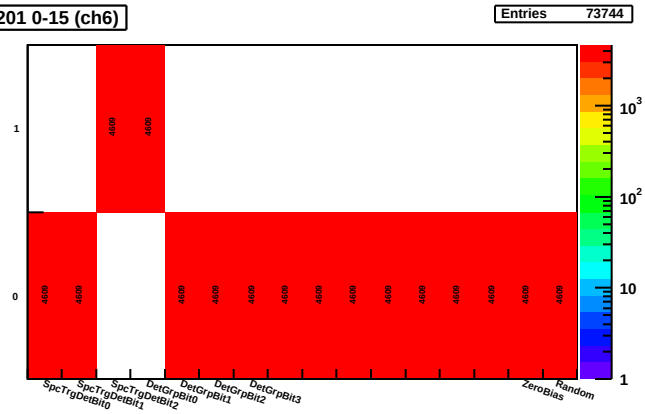
FP201 0-15 (ch5)

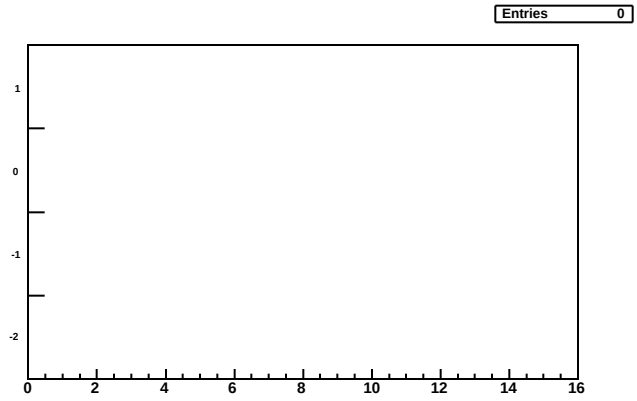
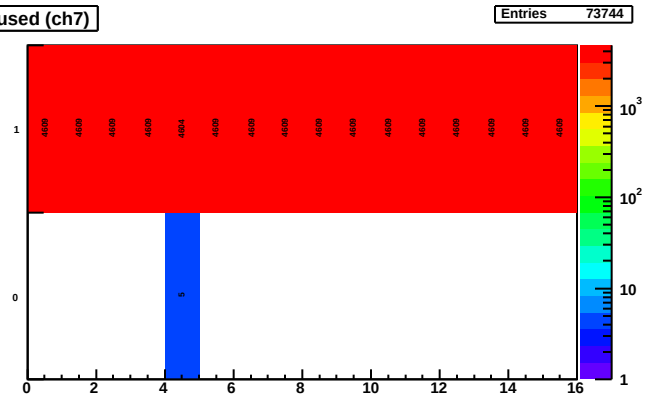
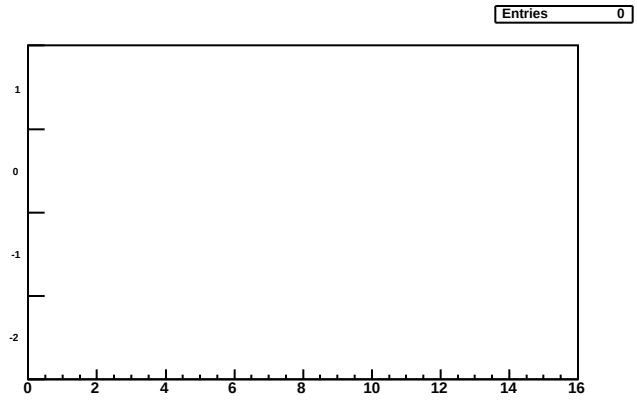


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)