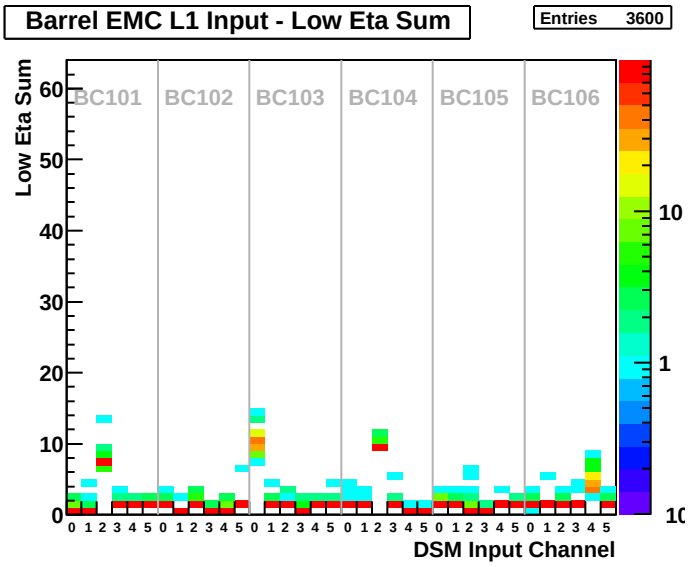
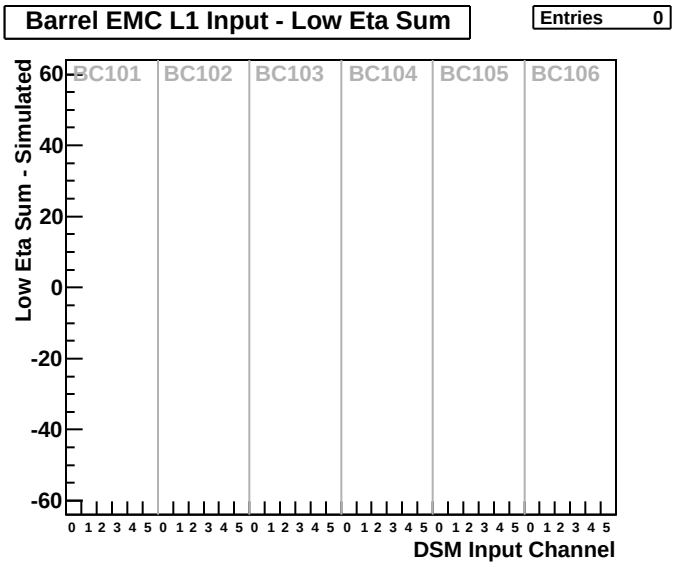
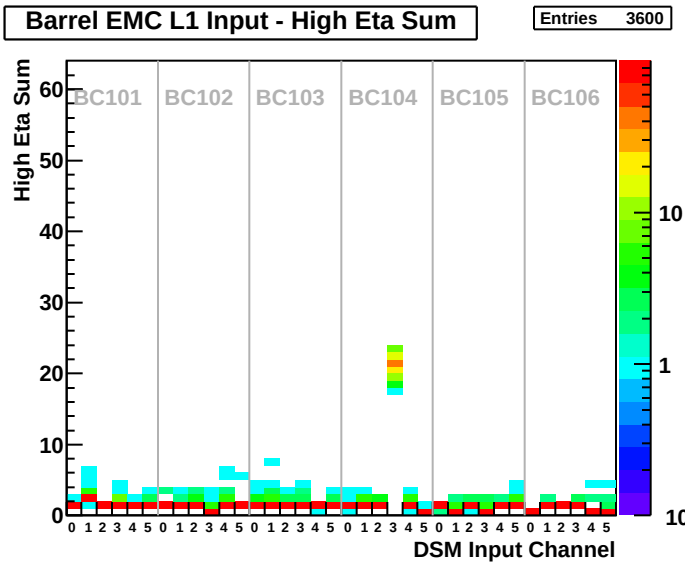
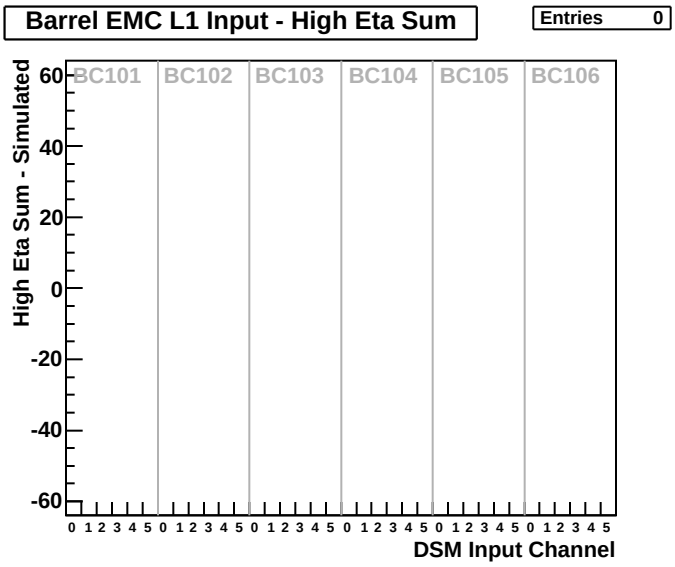
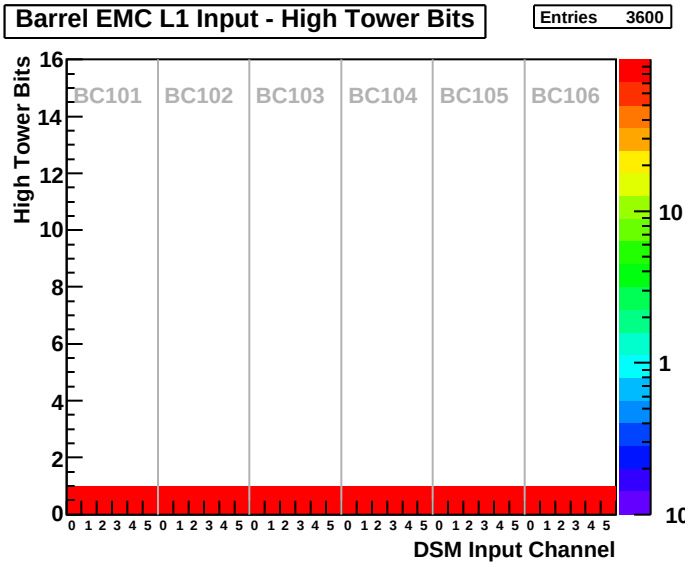
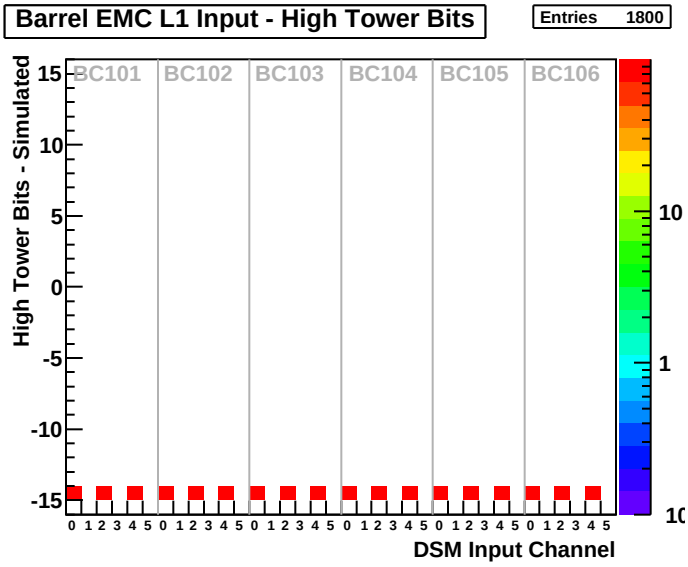

Barrel EMC L1 Input - Low Eta Sum
Entries 3600
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

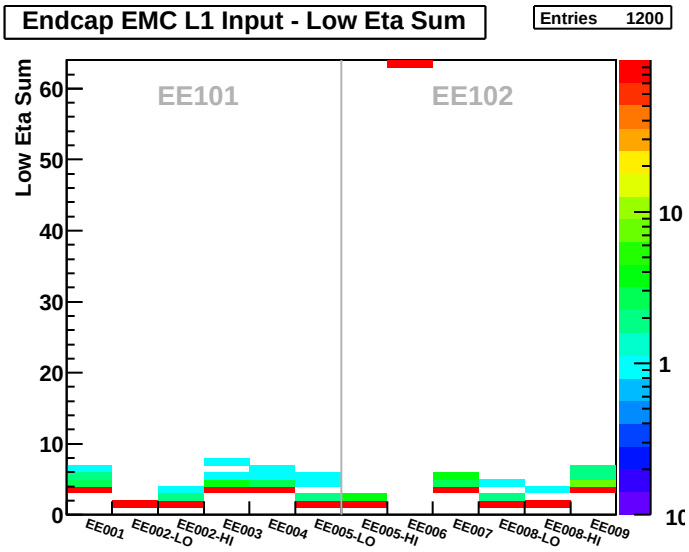

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

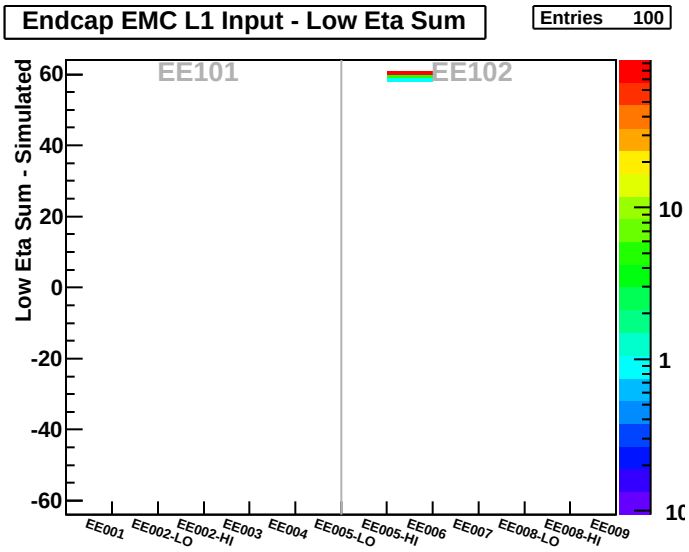

Barrel EMC L1 Input - High Eta Sum
Entries 3600
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

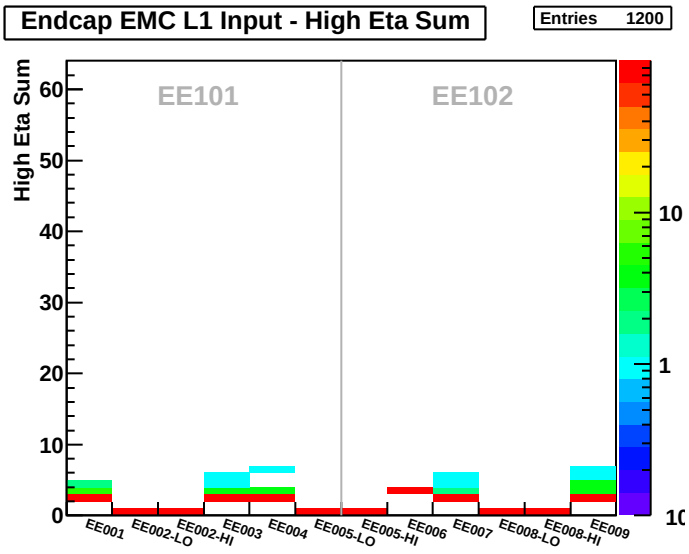

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

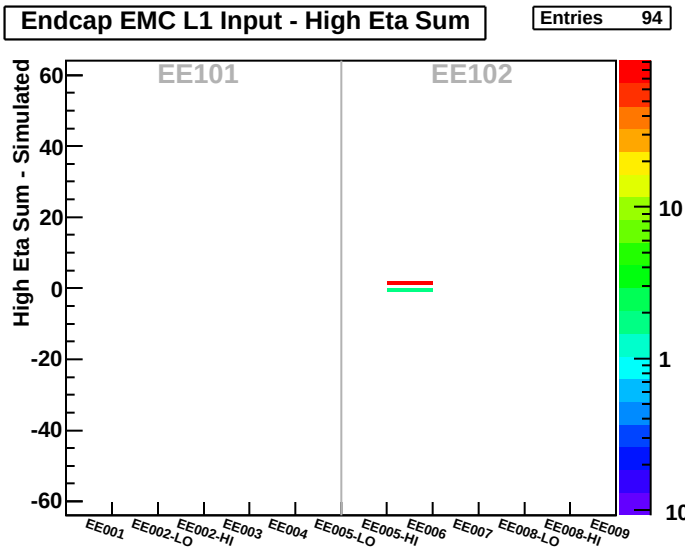

Barrel EMC L1 Input - High Tower Bits
Entries 3600
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

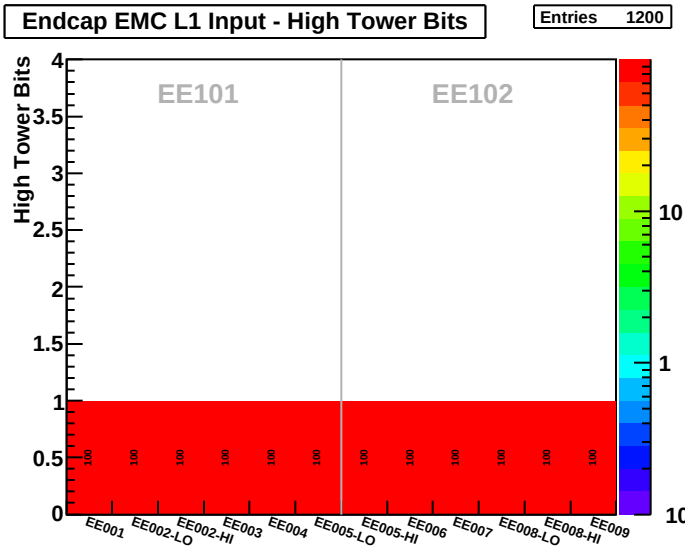

Barrel EMC L1 Input - High Tower Bits
Entries 1800
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

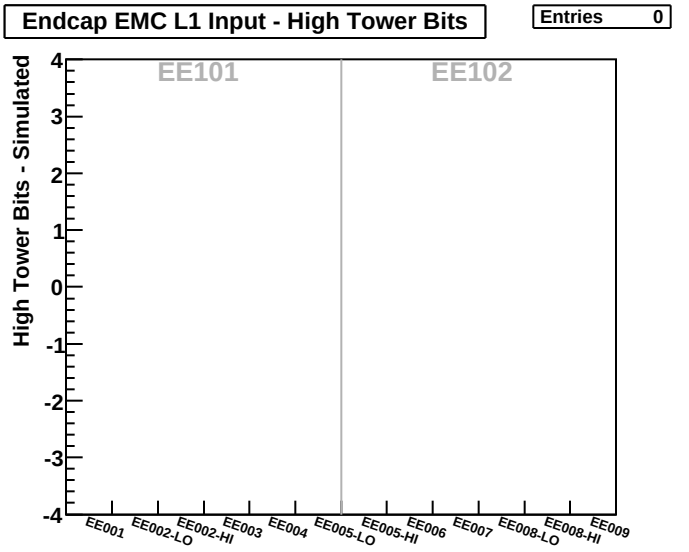

Endcap EMC L1 Input - Low Eta Sum
Entries 1200
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

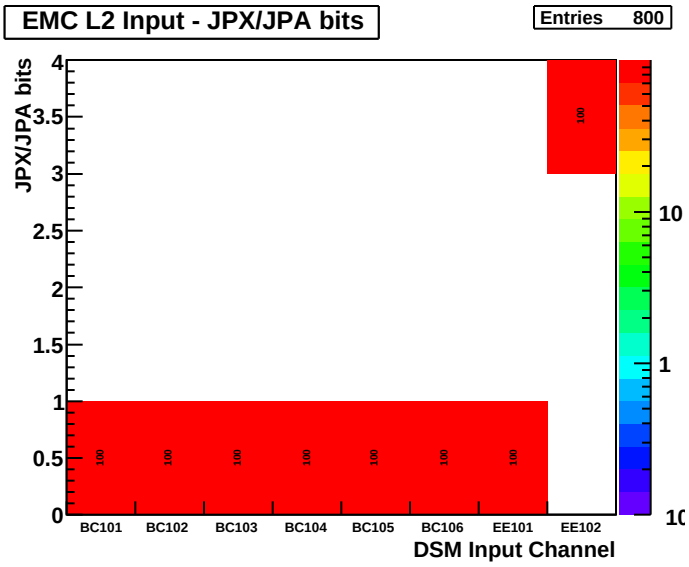

Endcap EMC L1 Input - Low Eta Sum
Entries 100
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

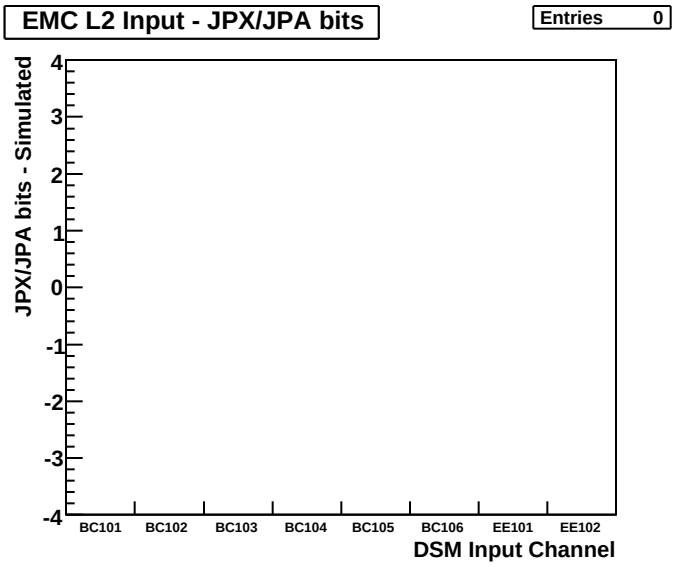

Endcap EMC L1 Input - High Eta Sum
Entries 1200
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

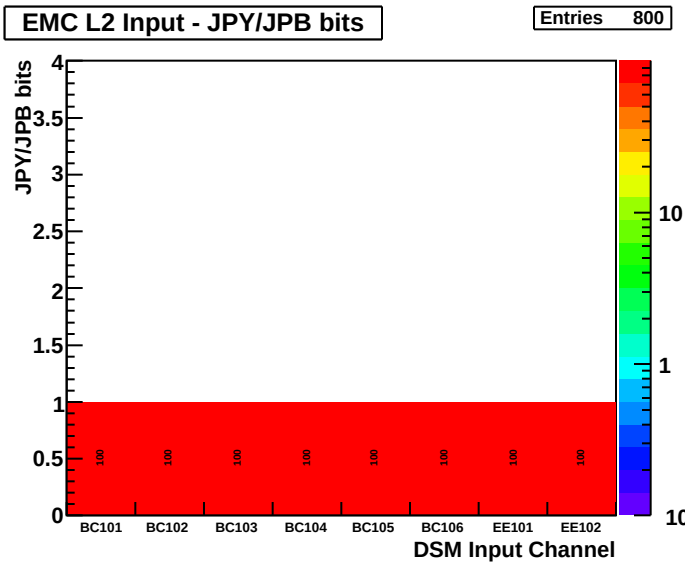

Endcap EMC L1 Input - High Eta Sum
Entries 94
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

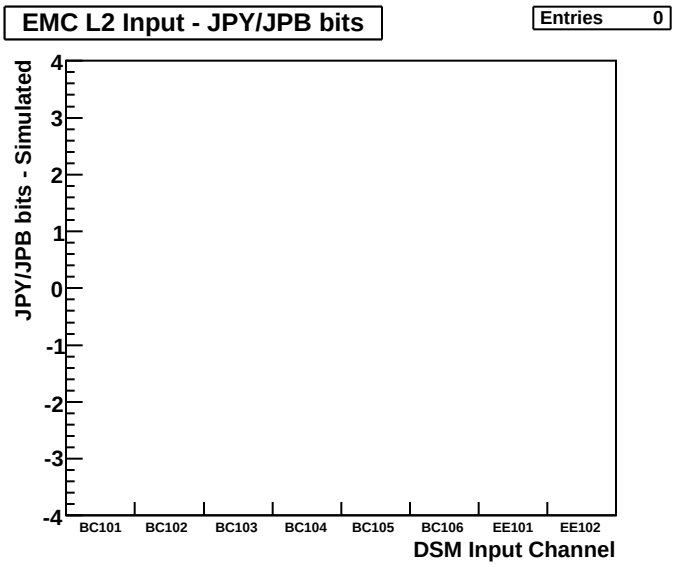

Endcap EMC L1 Input - High Tower Bits
Entries 1200
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

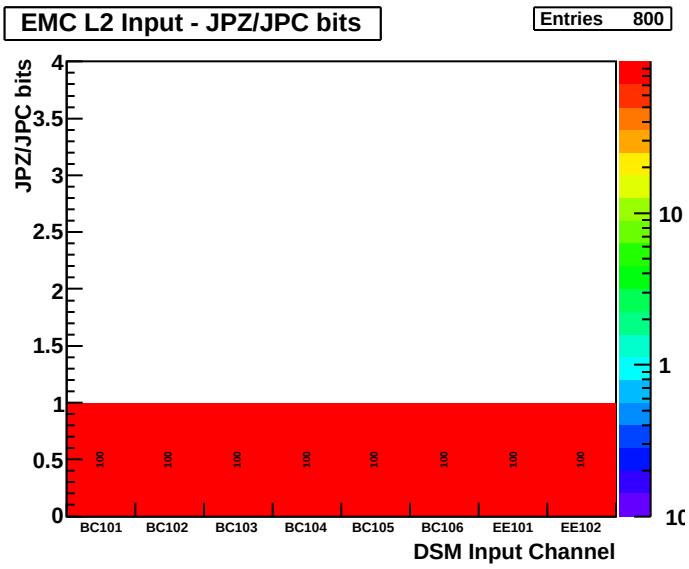

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

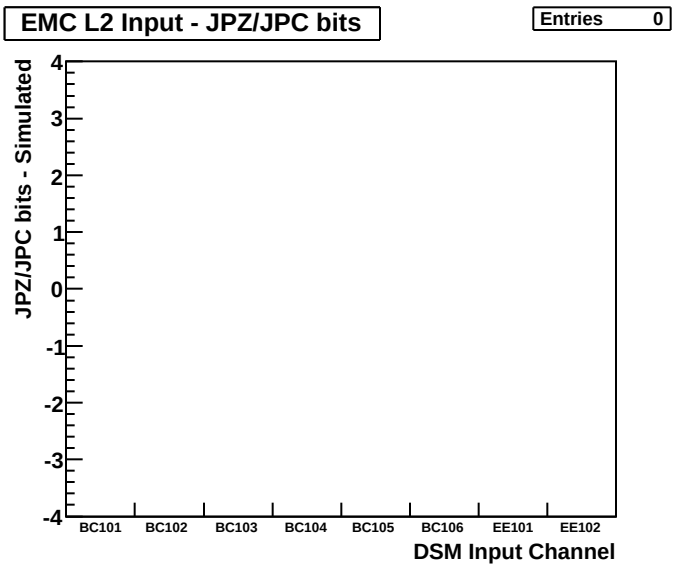

EMC L2 Input - JPX/JPA bits
Entries 800
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

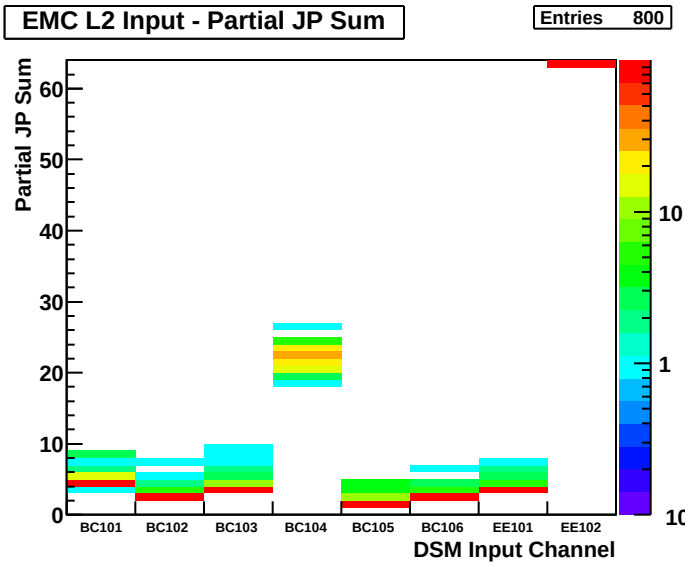

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

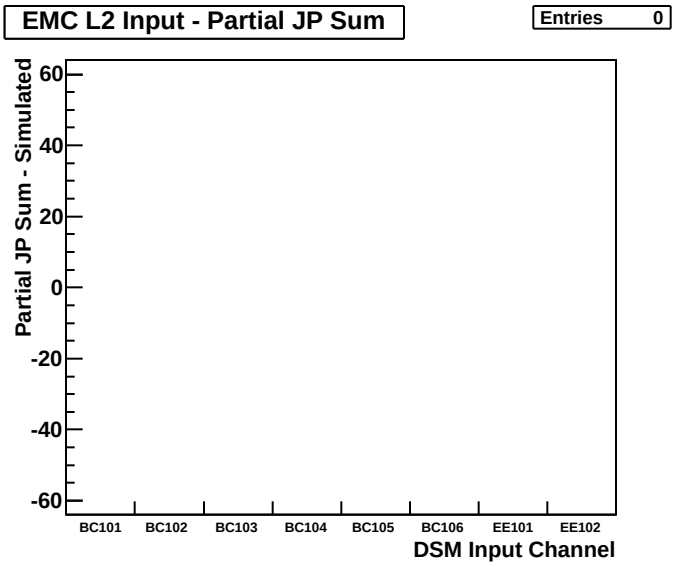

EMC L2 Input - JPY/JPB bits
Entries 800
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

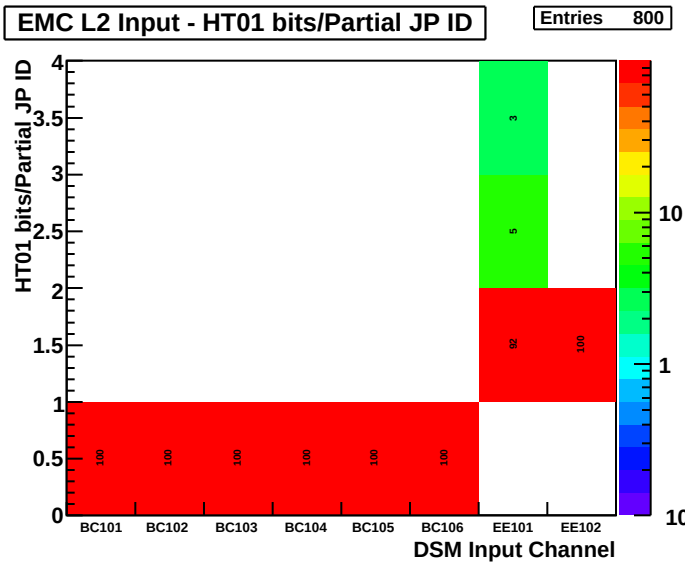

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

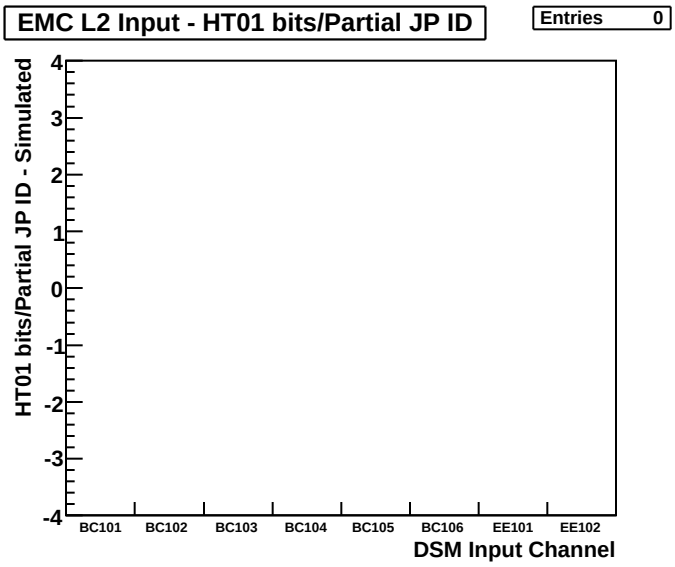

EMC L2 Input - JPZ/JPC bits
Entries 800
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

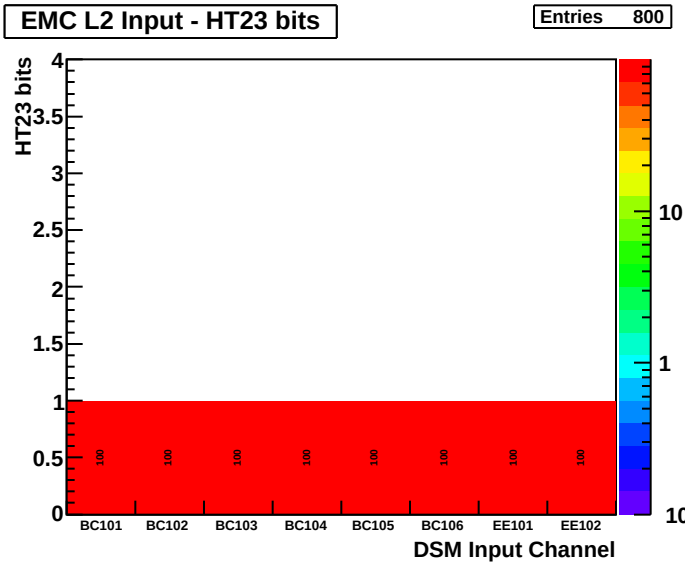

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

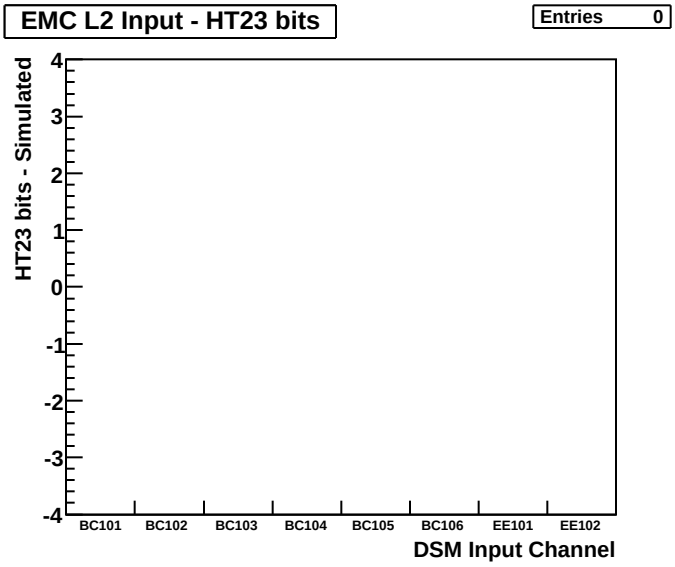

EMC L2 Input - Partial JP Sum
Entries 800
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

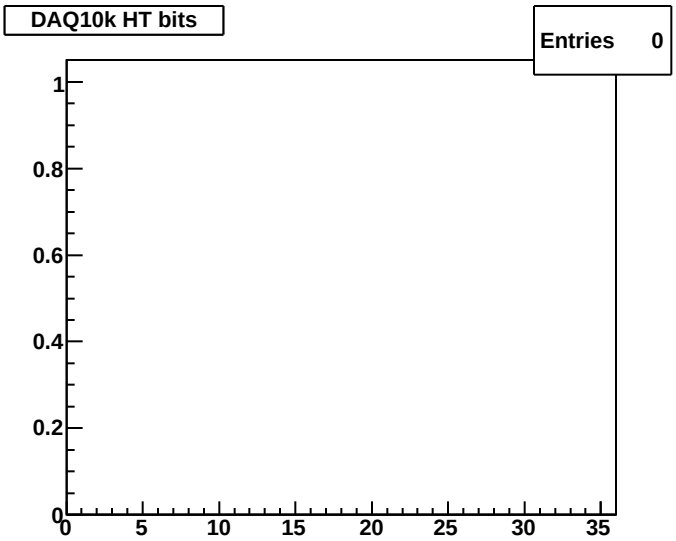

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

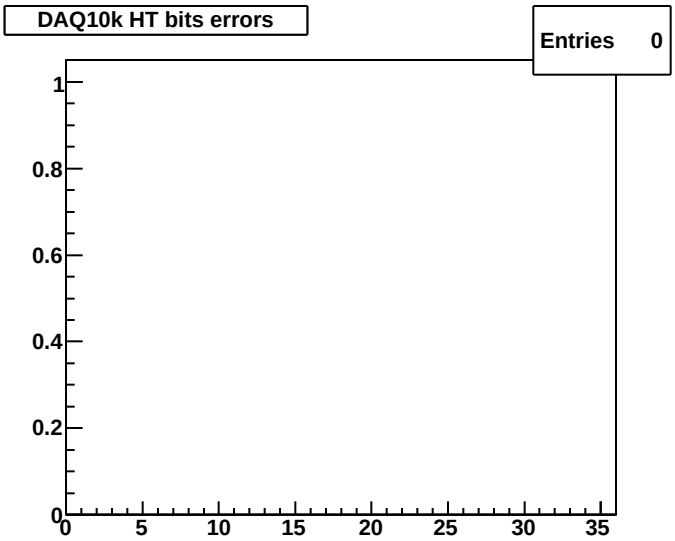

EMC L2 Input - HT01 bits/Partial JP ID
Entries 800
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

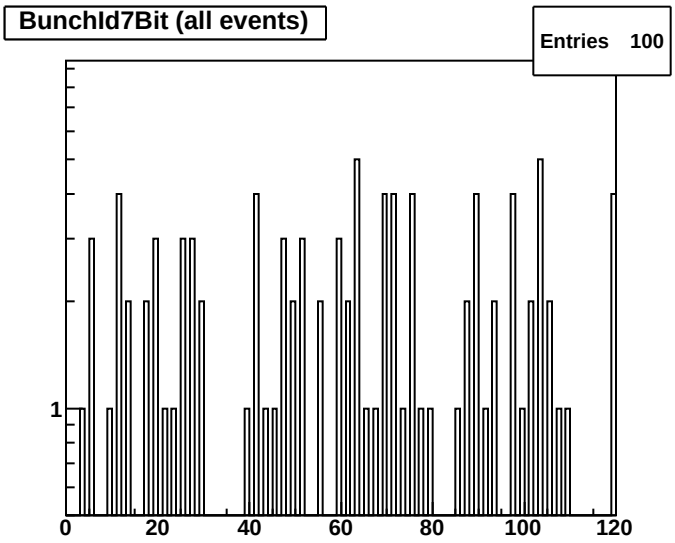

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

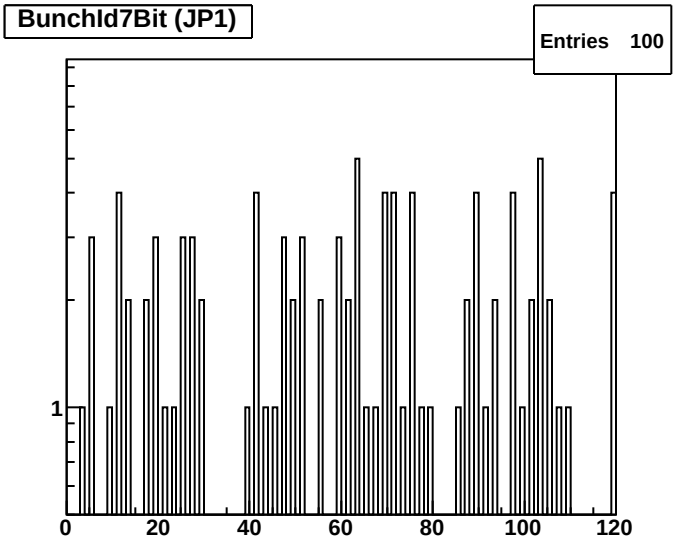

EMC L2 Input - HT23 bits
Entries 800
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

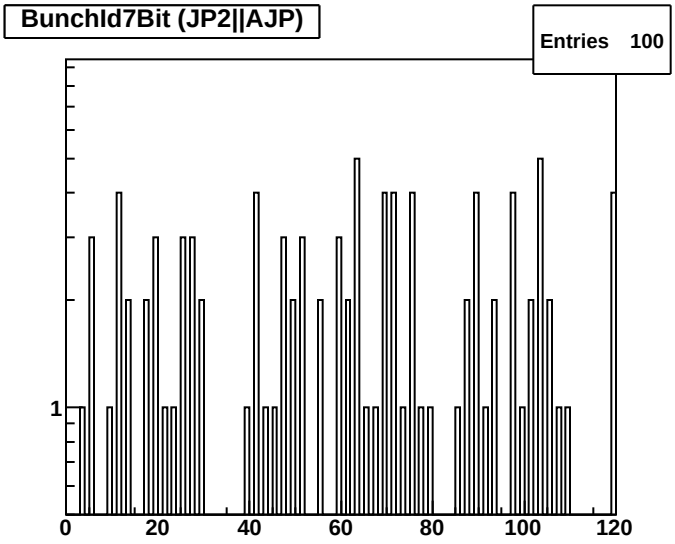

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

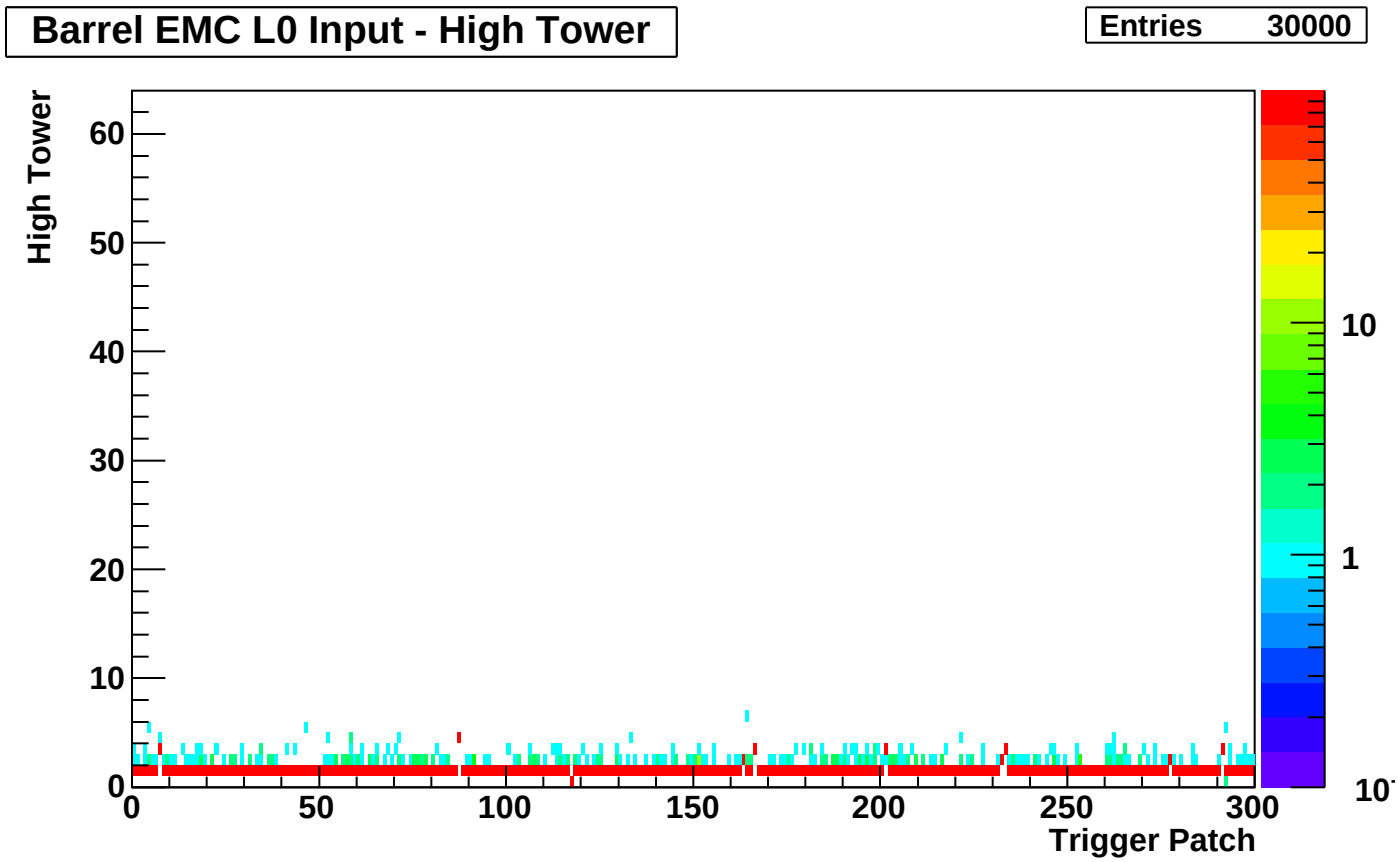

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

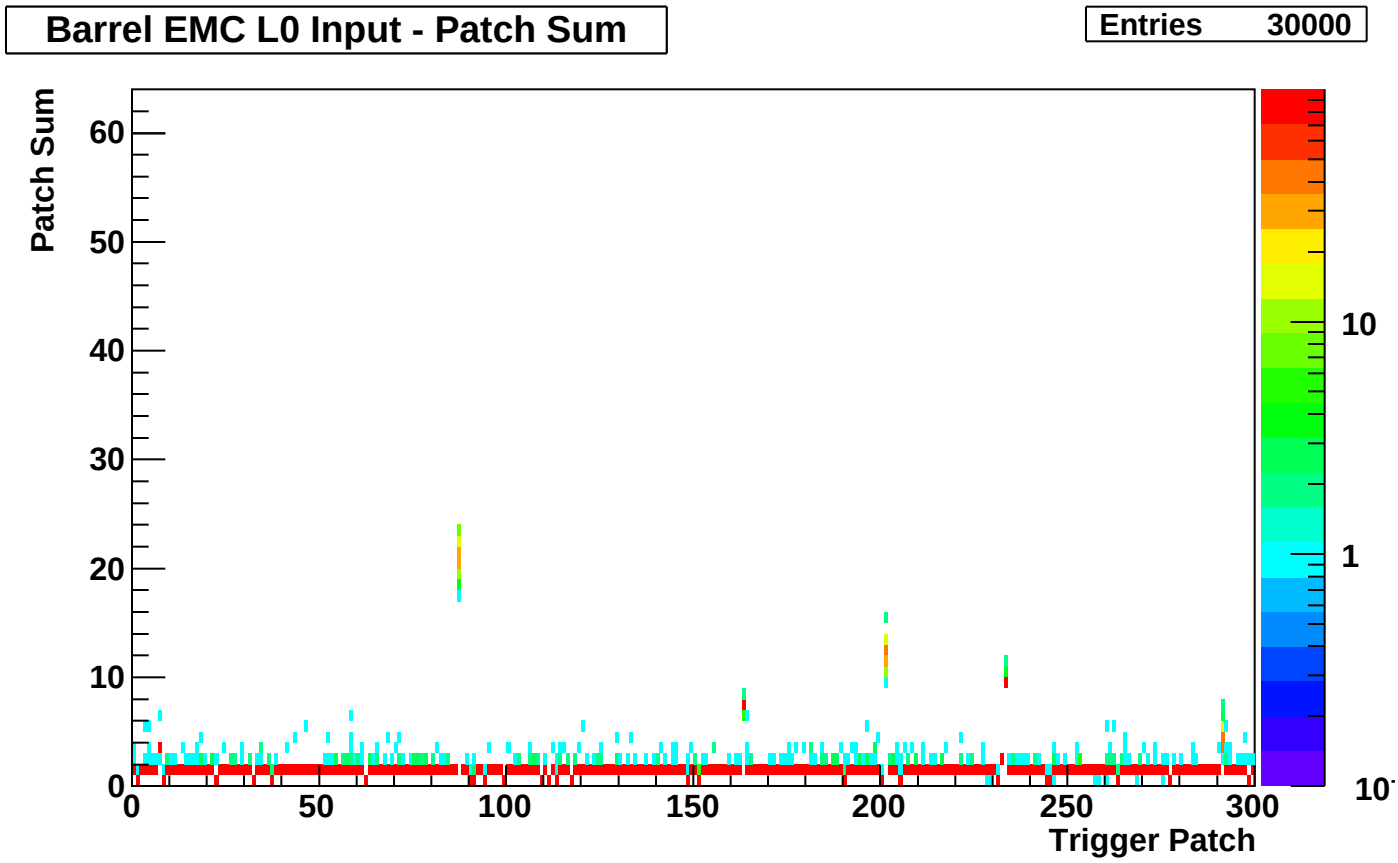

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

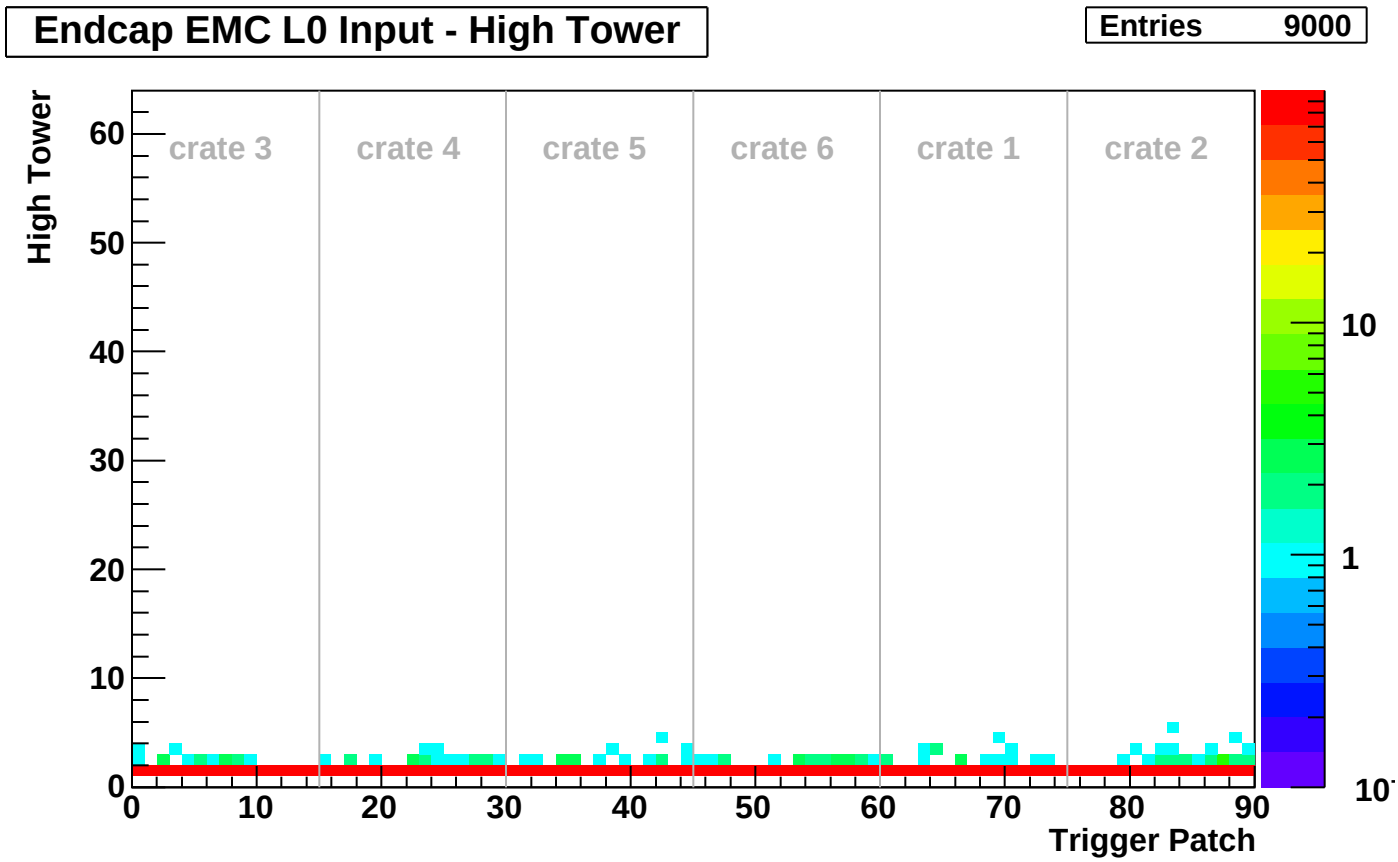

BunchId7Bit (all events)
Entries 100
1
0 20 40 60 80 100 120

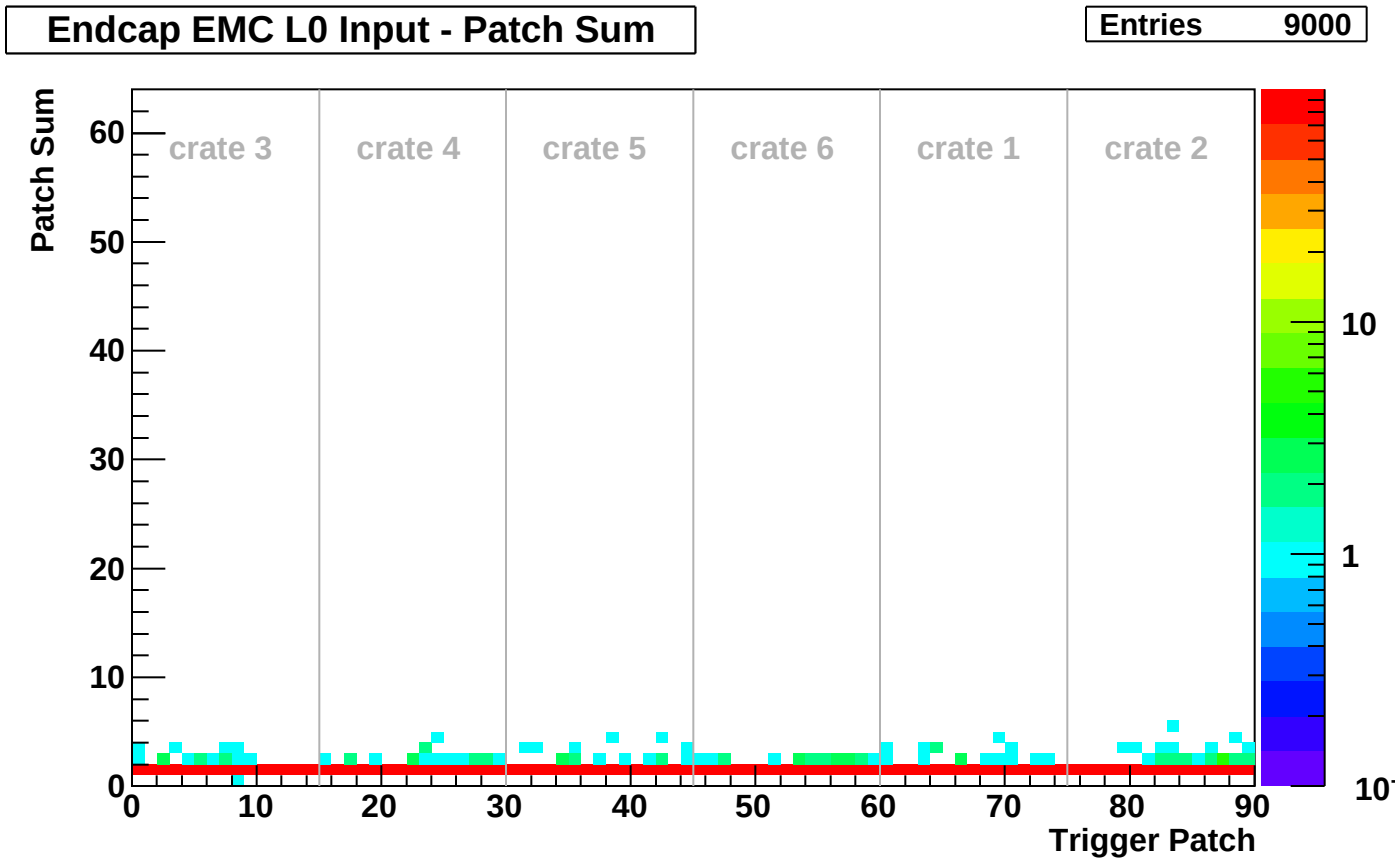

BunchId7Bit (JP1)
Entries 100
1
0 20 40 60 80 100 120

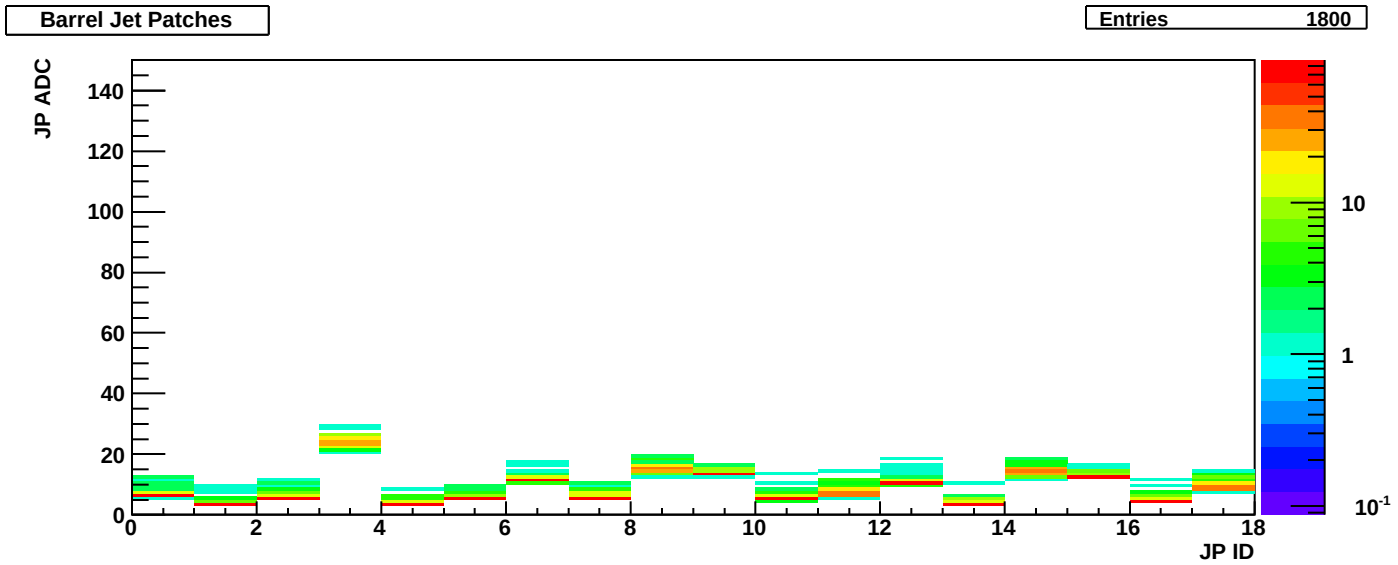

BunchId7Bit (JP2||AJP)
Entries 100
1
0 20 40 60 80 100 120

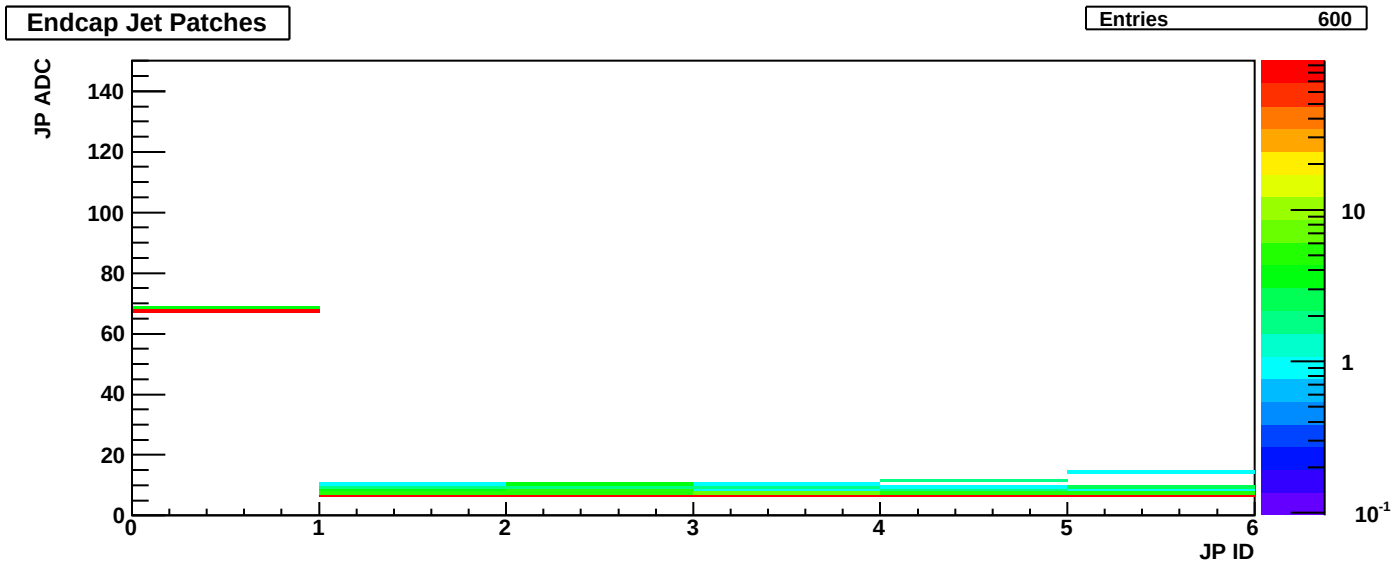

Barrel EMC L0 Input - High Tower
Entries 30000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10

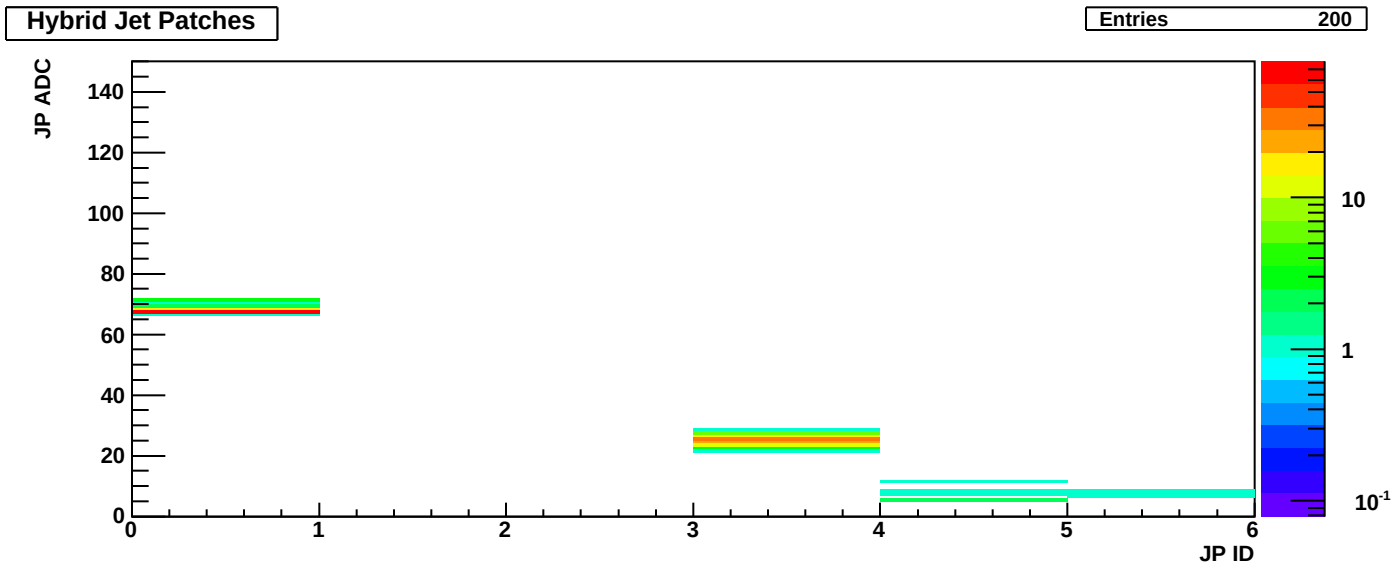

Barrel EMC L0 Input - Patch Sum
Entries 30000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10

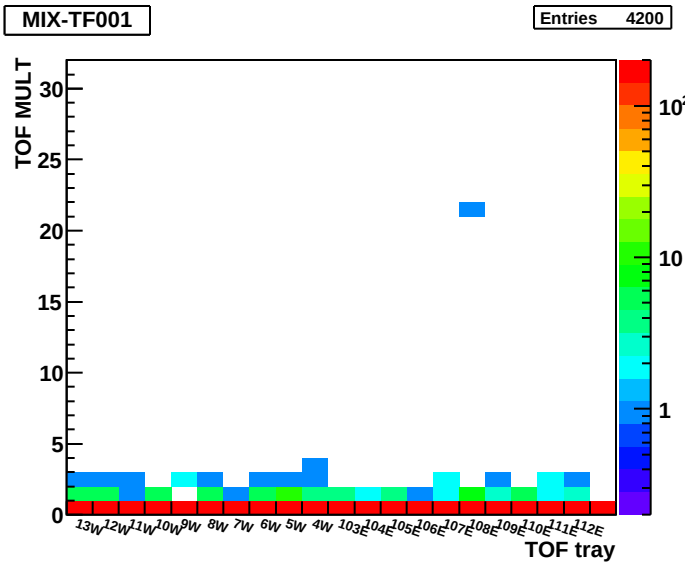

Endcap EMC L0 Input - High Tower
Entries 9000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

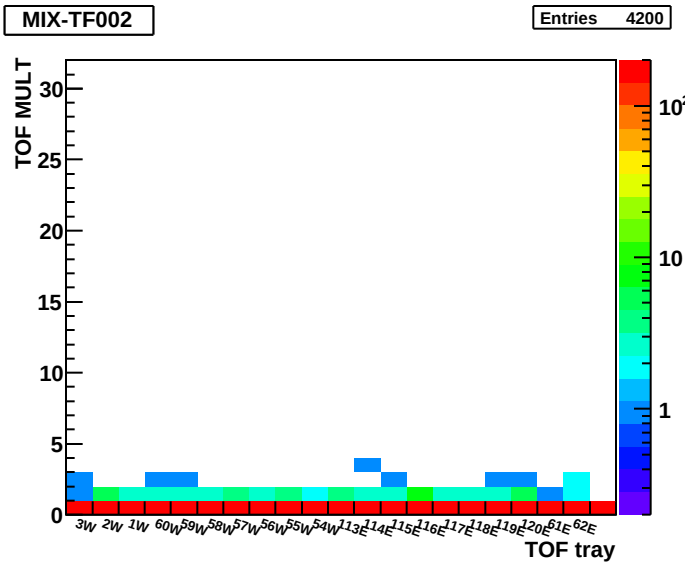

Endcap EMC L0 Input - Patch Sum
Entries 9000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

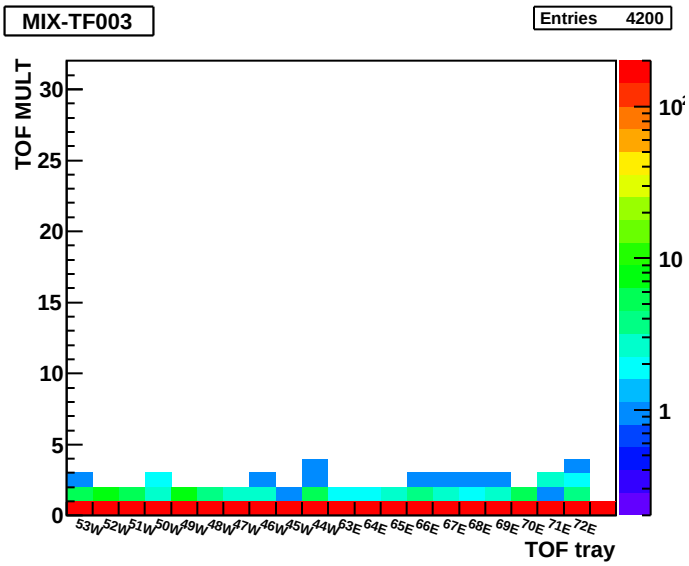

Barrel Jet Patches
Entries 1800
JP ADC
JP ID

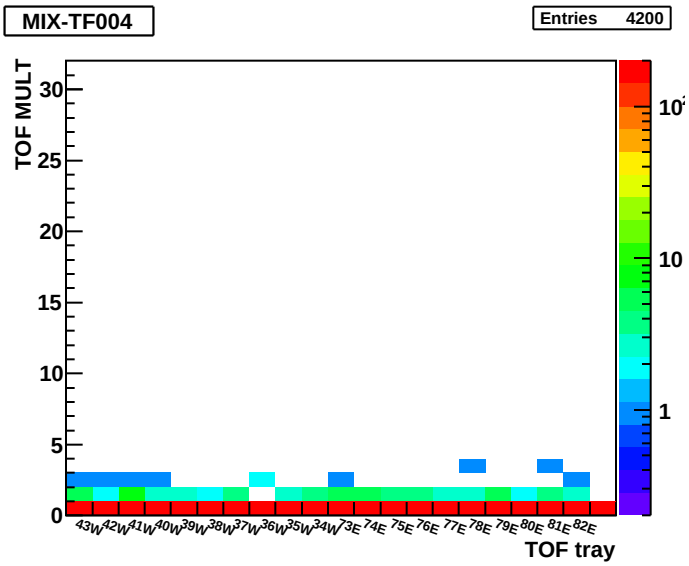

Endcap Jet Patches
Entries 600
JP ADC
JP ID

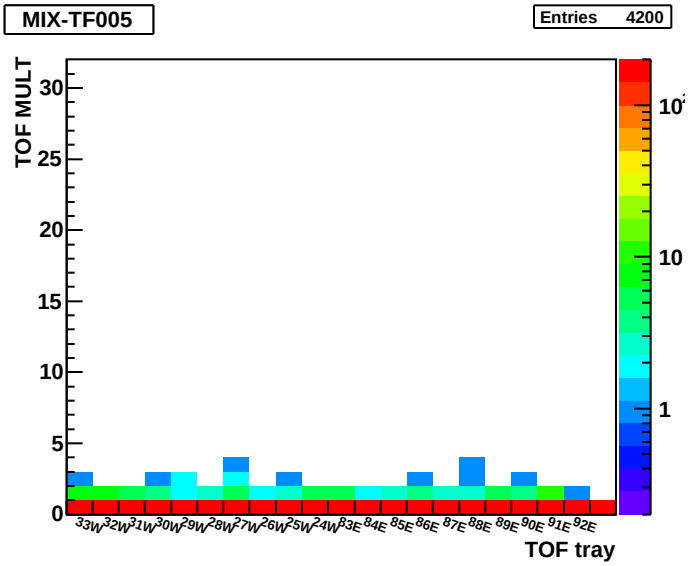

Hybrid Jet Patches
Entries 200
JP ADC
JP ID

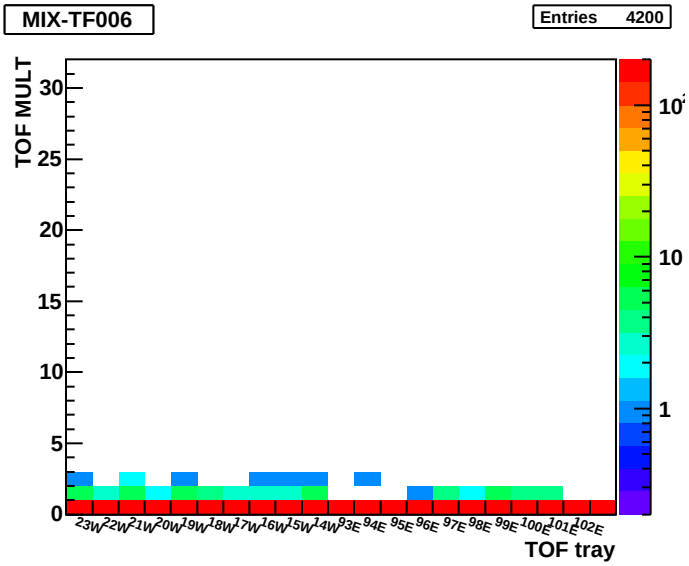

MIX-TF001
Entries 4200
TOF MULT
TOF tray

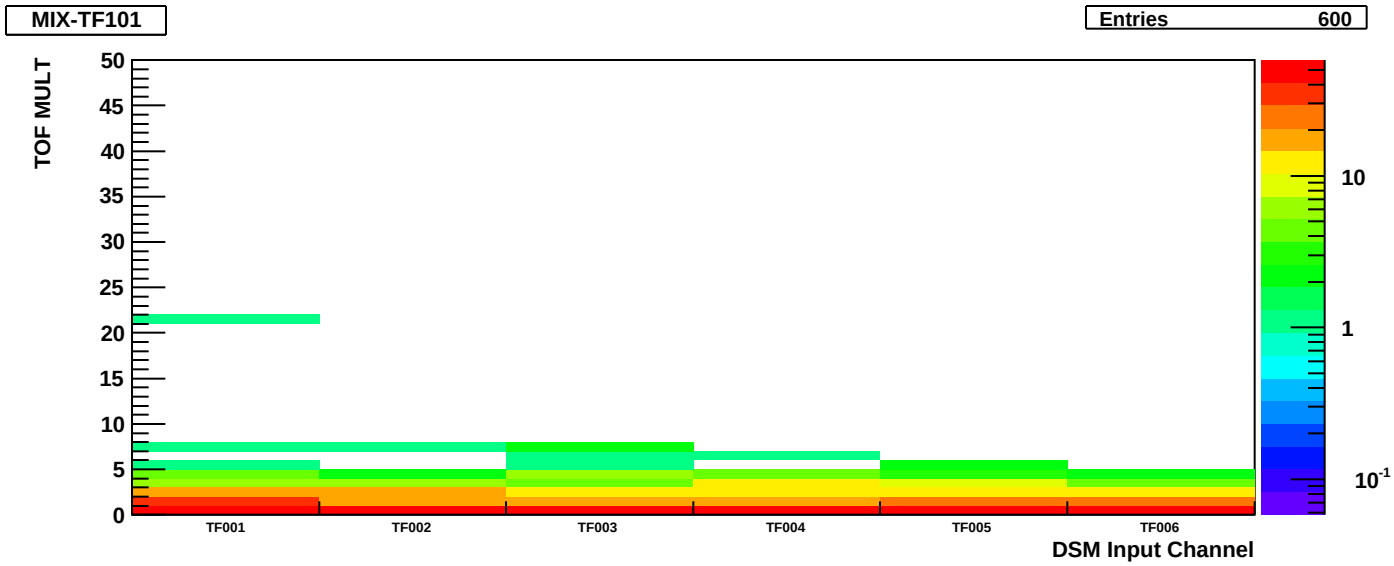

MIX-TF002
Entries 4200
TOF MULT
TOF tray

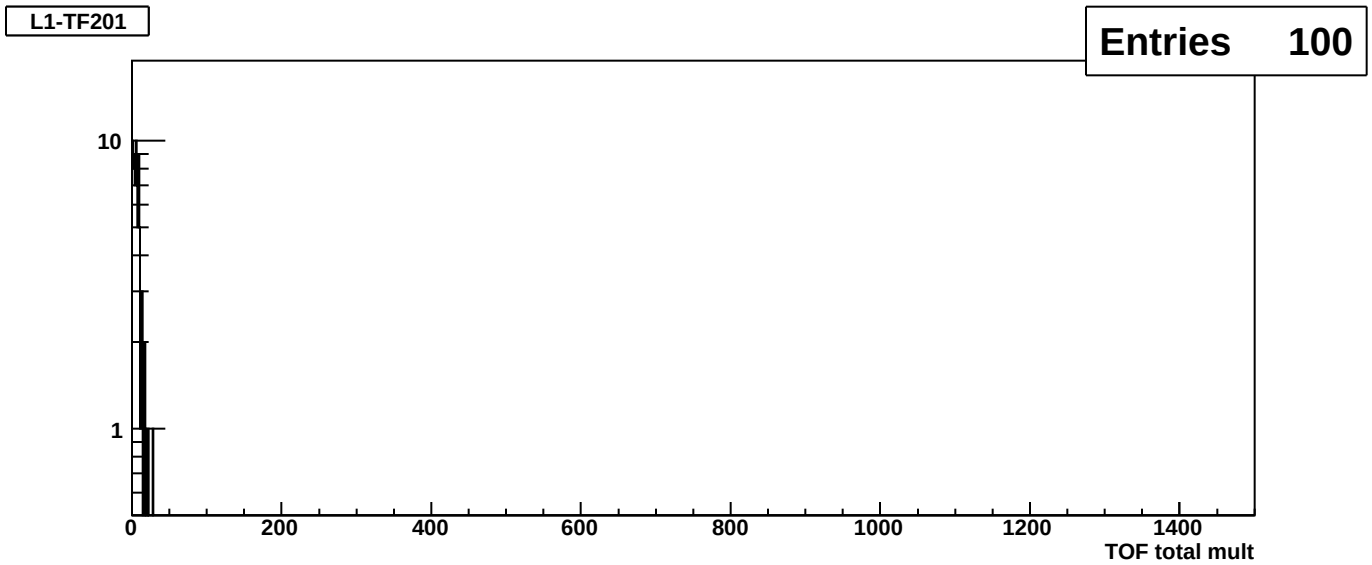

MIX-TF003
Entries 4200
TOF MULT
TOF tray

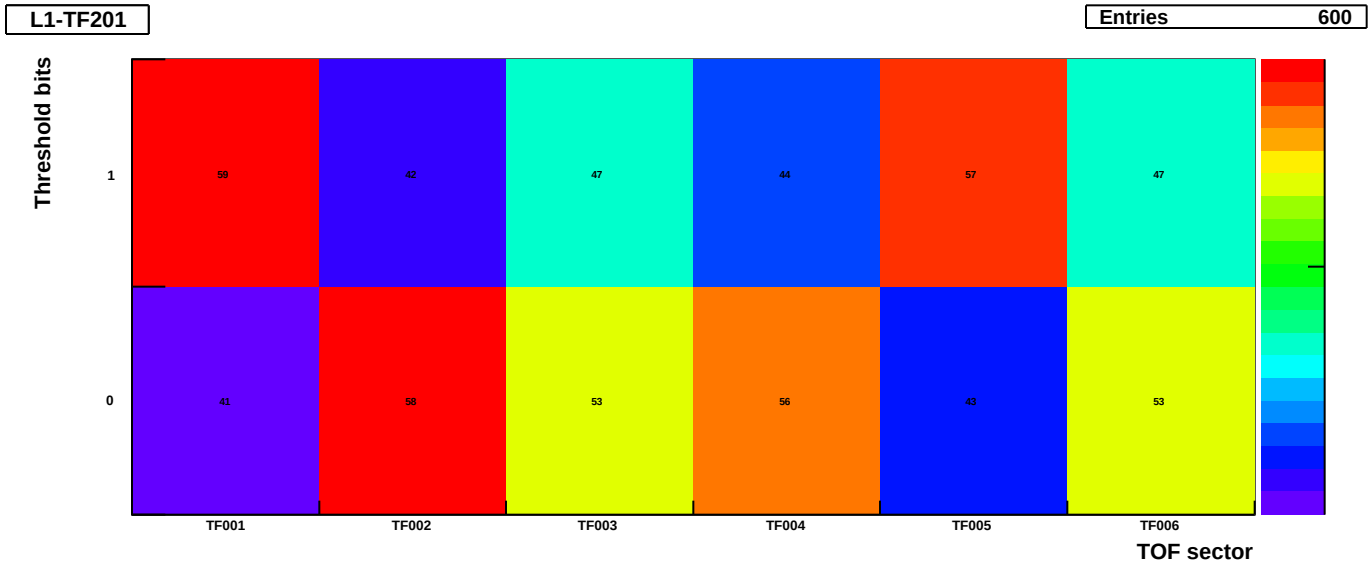

MIX-TF004
Entries 4200
TOF MULT
TOF tray

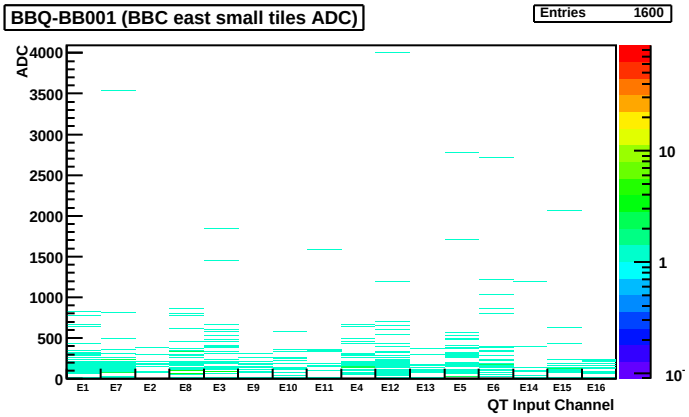

MIX-TF005
Entries 4200
TOF MULT
TOF tray

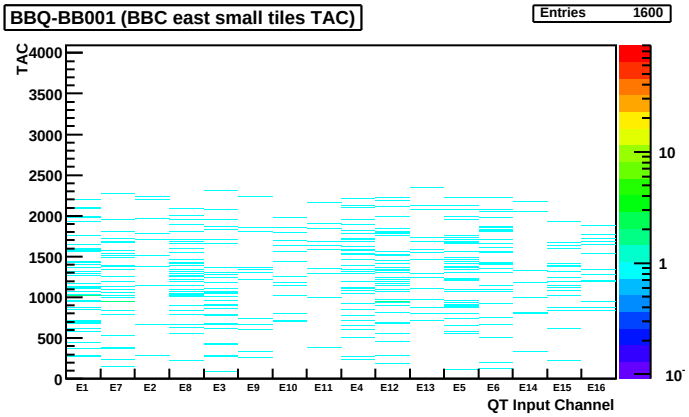

MIX-TF006
Entries 4200
TOF MULT
TOF tray

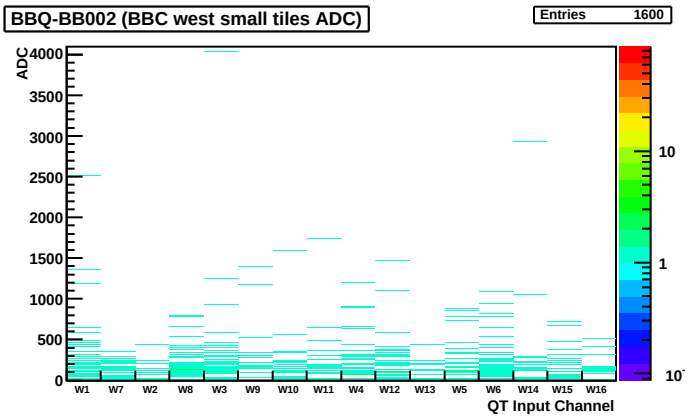

MIX-TF101
Entries 600
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10
1
10^{-1}

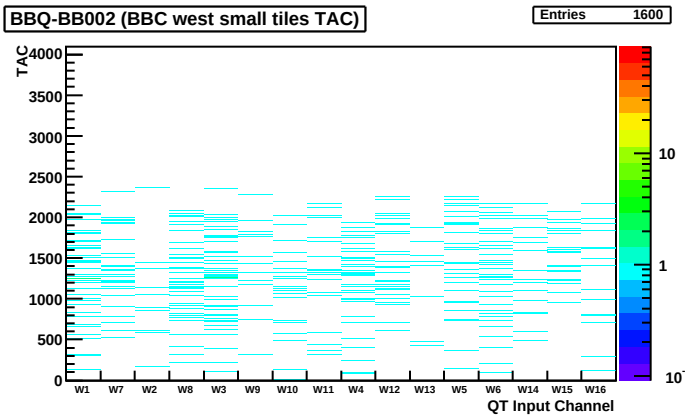

L1-TF201
Entries 100
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

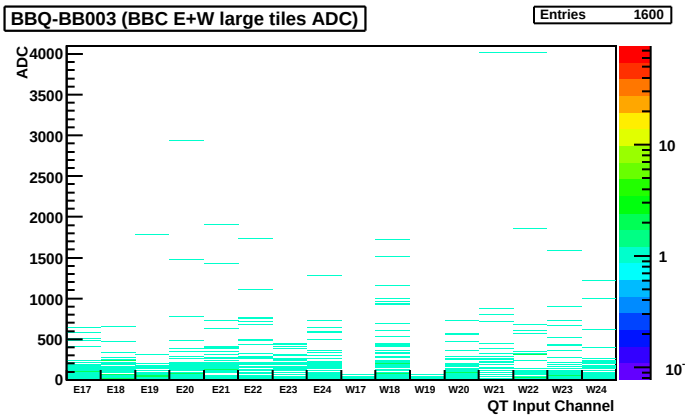

L1-TF201
Entries 600
Threshold bits
1
0
59
42
47
44
57
47
41
58
53
56
43
53
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

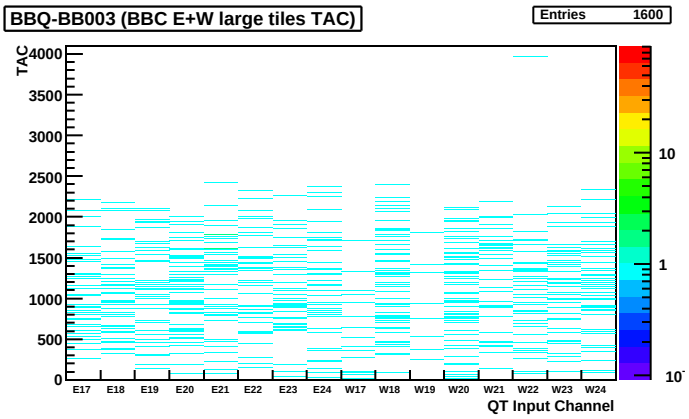

BBQ-BB001 (BBC east small tiles ADC)
Entries 1600
ADC
QT Input Channel

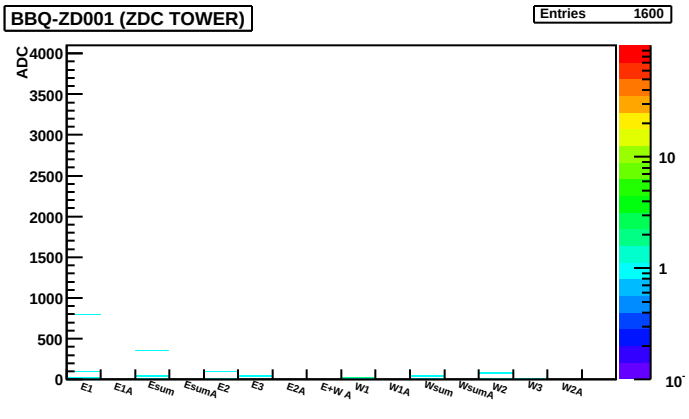

BBQ-BB001 (BBC east small tiles TAC)
Entries 1600
TAC
QT Input Channel

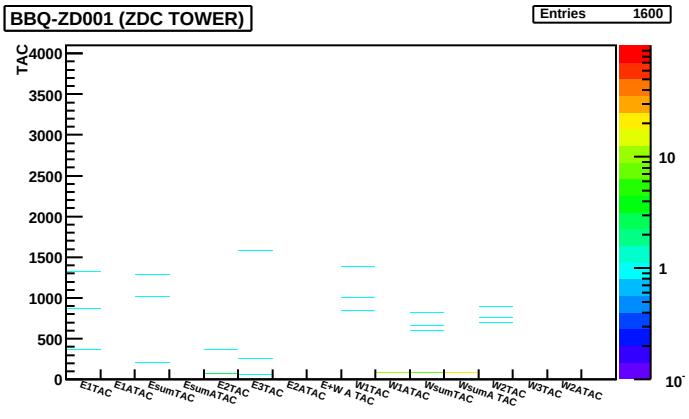

BBQ-BB002 (BBC west small tiles ADC)
Entries 1600
ADC
QT Input Channel

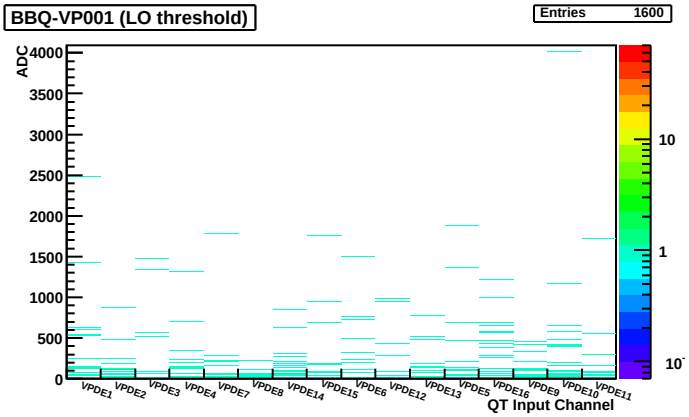

BBQ-BB002 (BBC west small tiles TAC)
Entries 1600
TAC
QT Input Channel

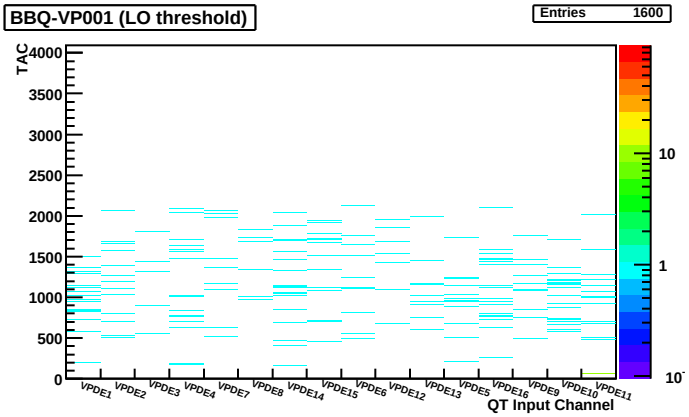

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1600
ADC
QT Input Channel

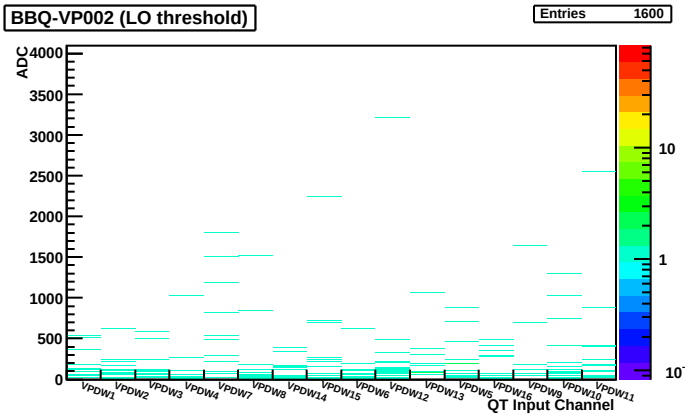

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1600
TAC
QT Input Channel

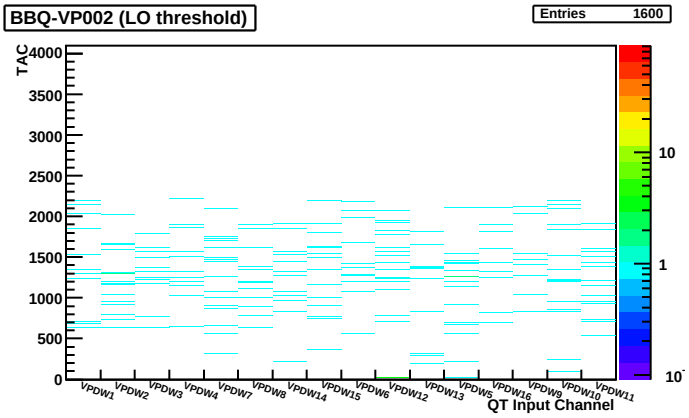

BBQ-ZD001 (ZDC TOWER)
Entries 1600
ADC

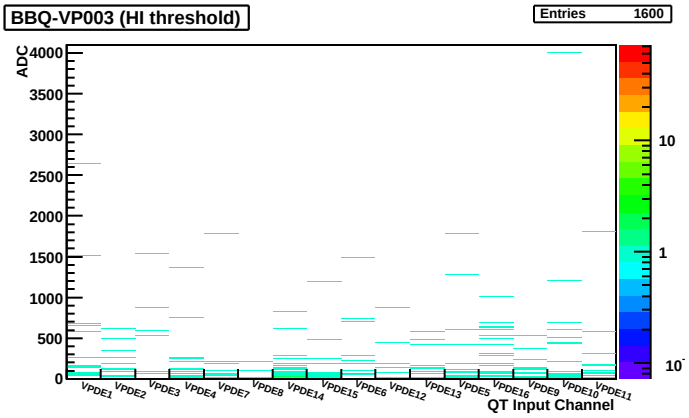

BBQ-ZD001 (ZDC TOWER)
Entries 1600
TAC

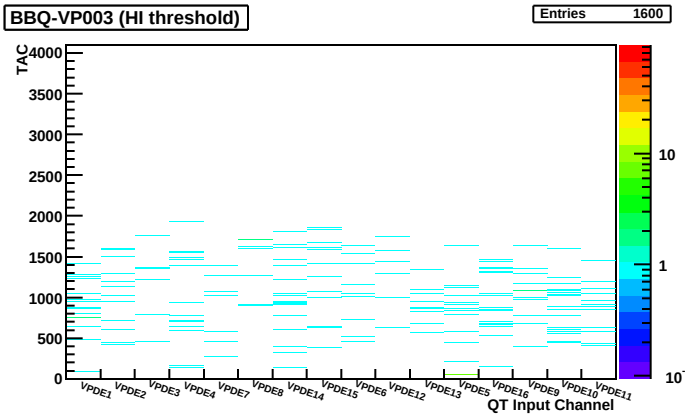

BBQ-VP001 (LO threshold)
Entries 1600
ADC
QT Input Channel

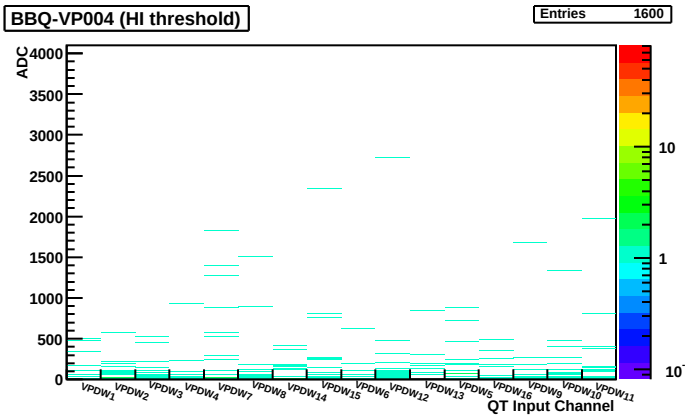

BBQ-VP001 (LO threshold)
Entries 1600
TAC
QT Input Channel

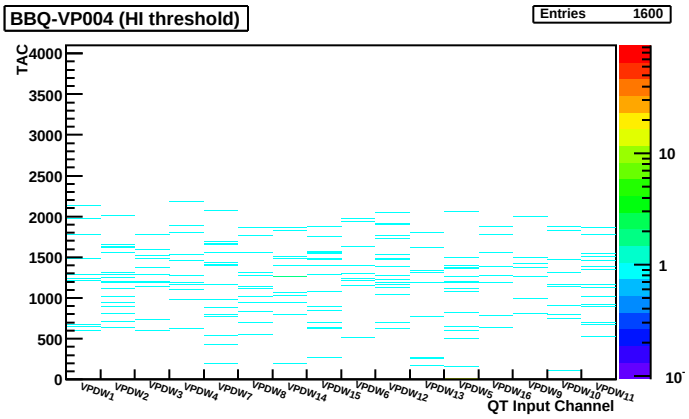

BBQ-VP002 (LO threshold)
Entries 1600
ADC
QT Input Channel

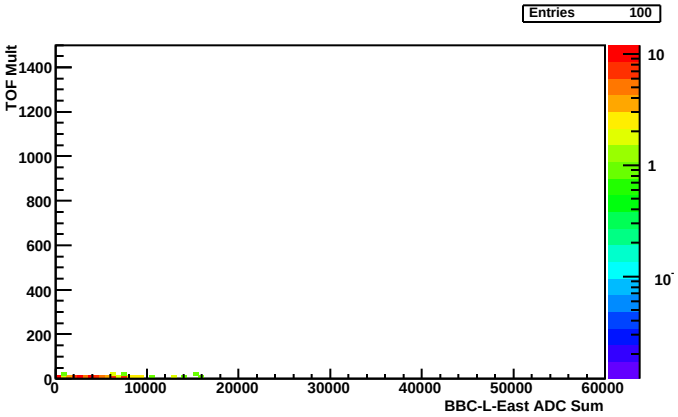

BBQ-VP002 (LO threshold)
Entries 1600
TAC
QT Input Channel

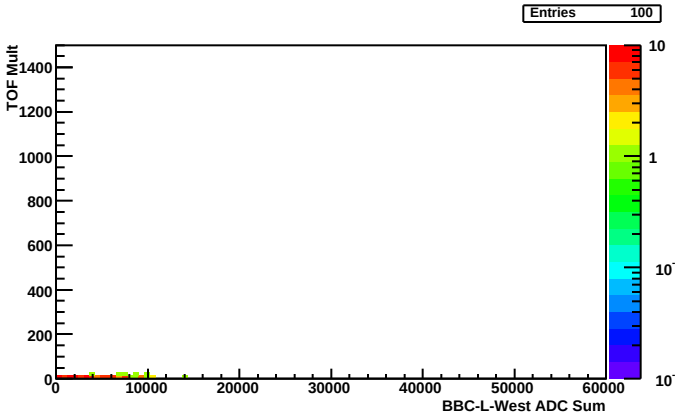

BBQ-VP003 (HI threshold)
Entries 1600
ADC
QT Input Channel

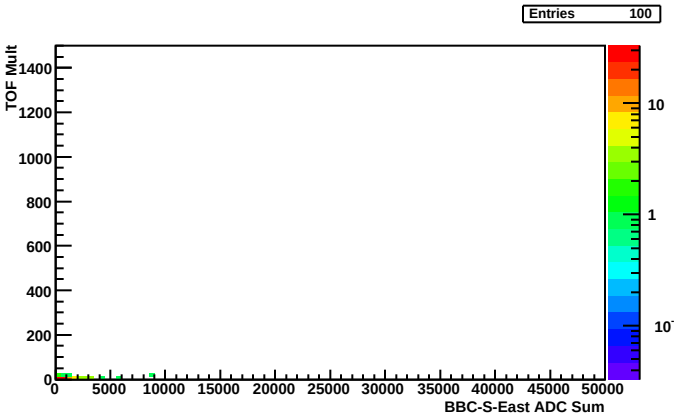

BBQ-VP003 (HI threshold)
Entries 1600
TAC
QT Input Channel

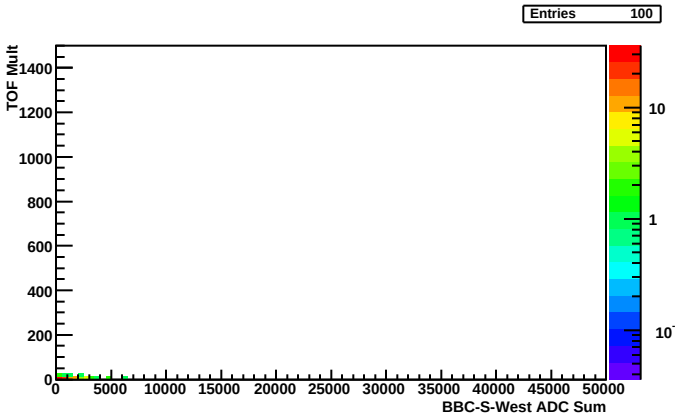

BBQ-VP004 (HI threshold)
Entries 1600
ADC
QT Input Channel

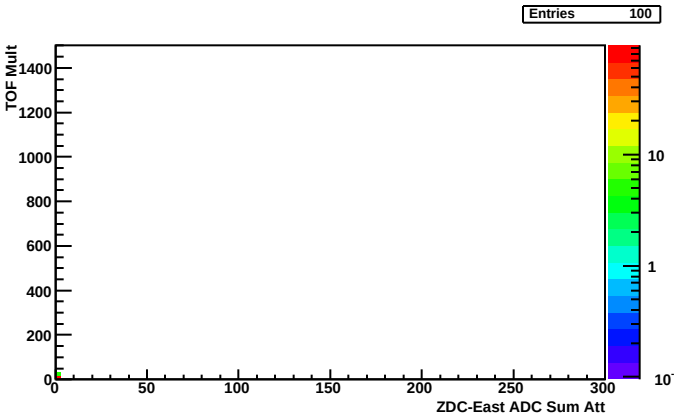

BBQ-VP004 (HI threshold)
Entries 1600
TAC
QT Input Channel

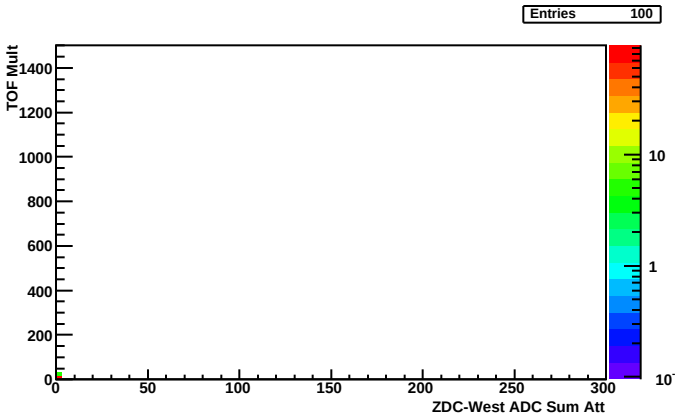

Entries 100
TOF Mult
BBC-L-East ADC Sum

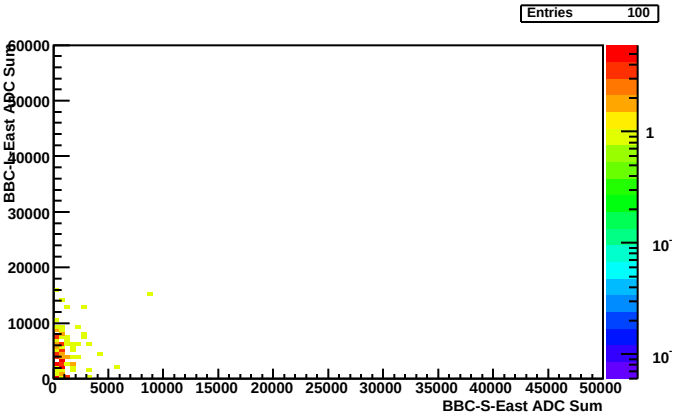

Entries 100
TOF Mult
BBC-L-West ADC Sum

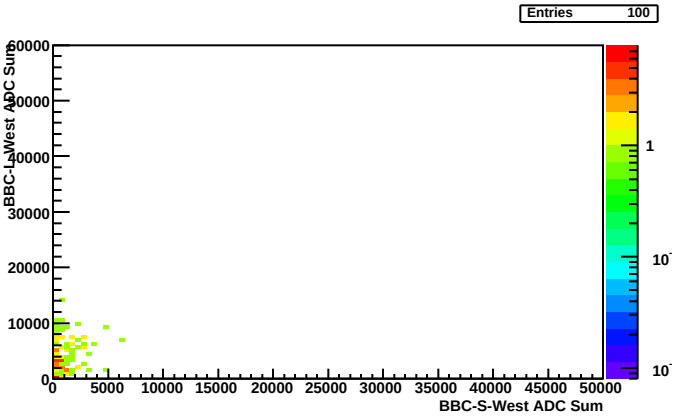

Entries 100
TOF Mult
BBC-S-East ADC Sum

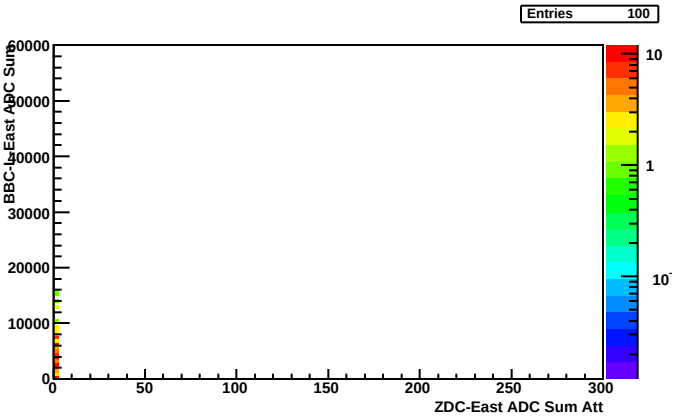

Entries 100
TOF Mult
BBC-S-West ADC Sum

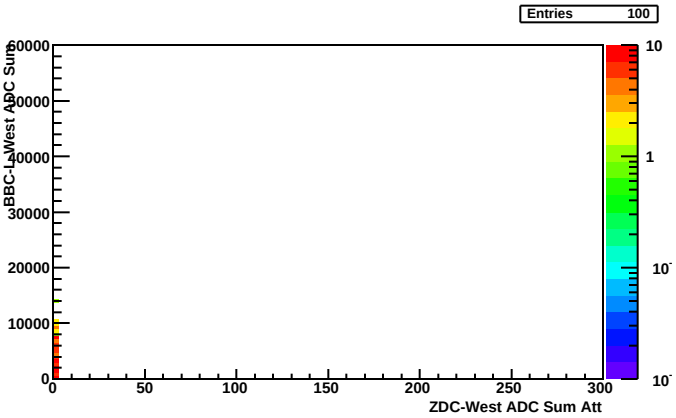

Entries 100
TOF Mult
ZDC-East ADC Sum Att

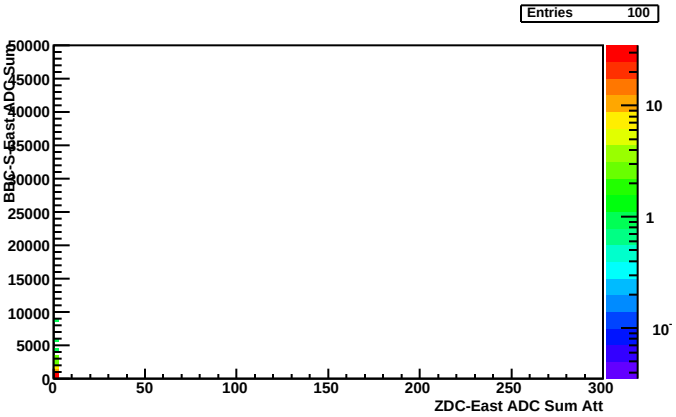

Entries 100
TOF Mult
ZDC-West ADC Sum Att

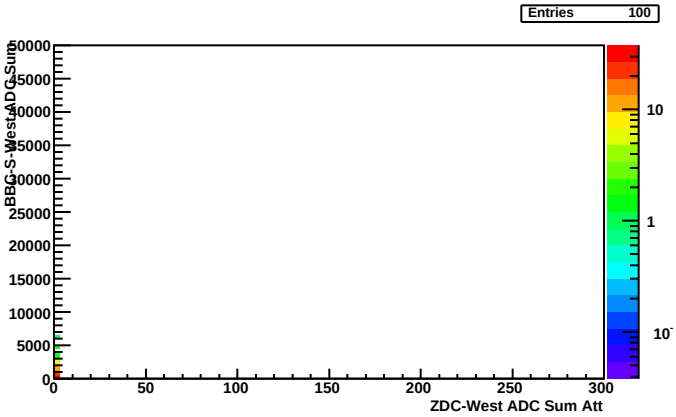

Entries 100
BBC-L-East ADC Sum
BBC-S-East ADC Sum

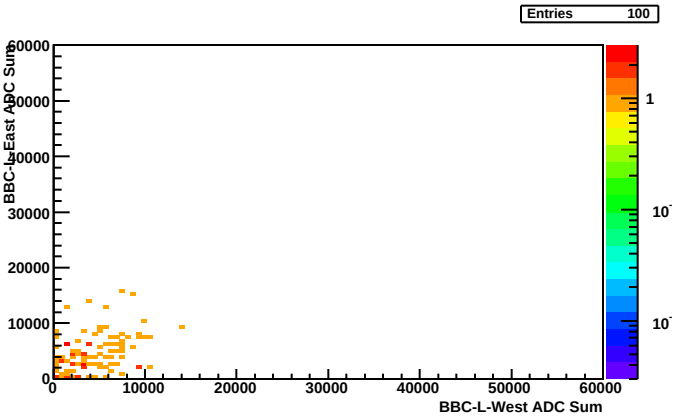

Entries 100
BBC-L-West ADC Sum
BBC-S-West ADC Sum

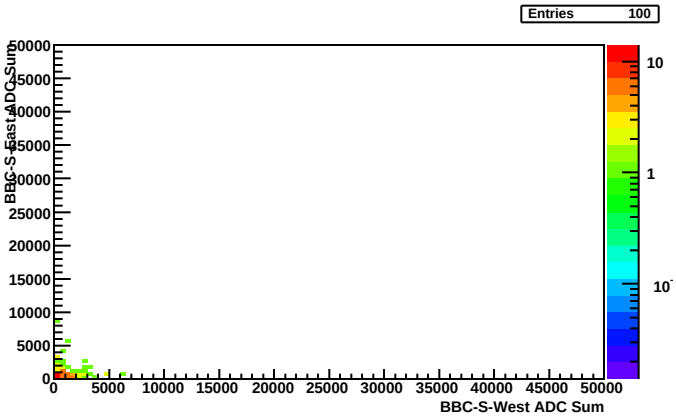

Entries 100
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

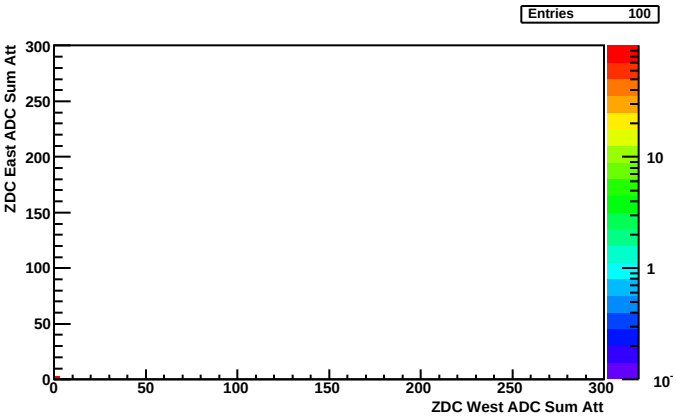

Entries 100
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

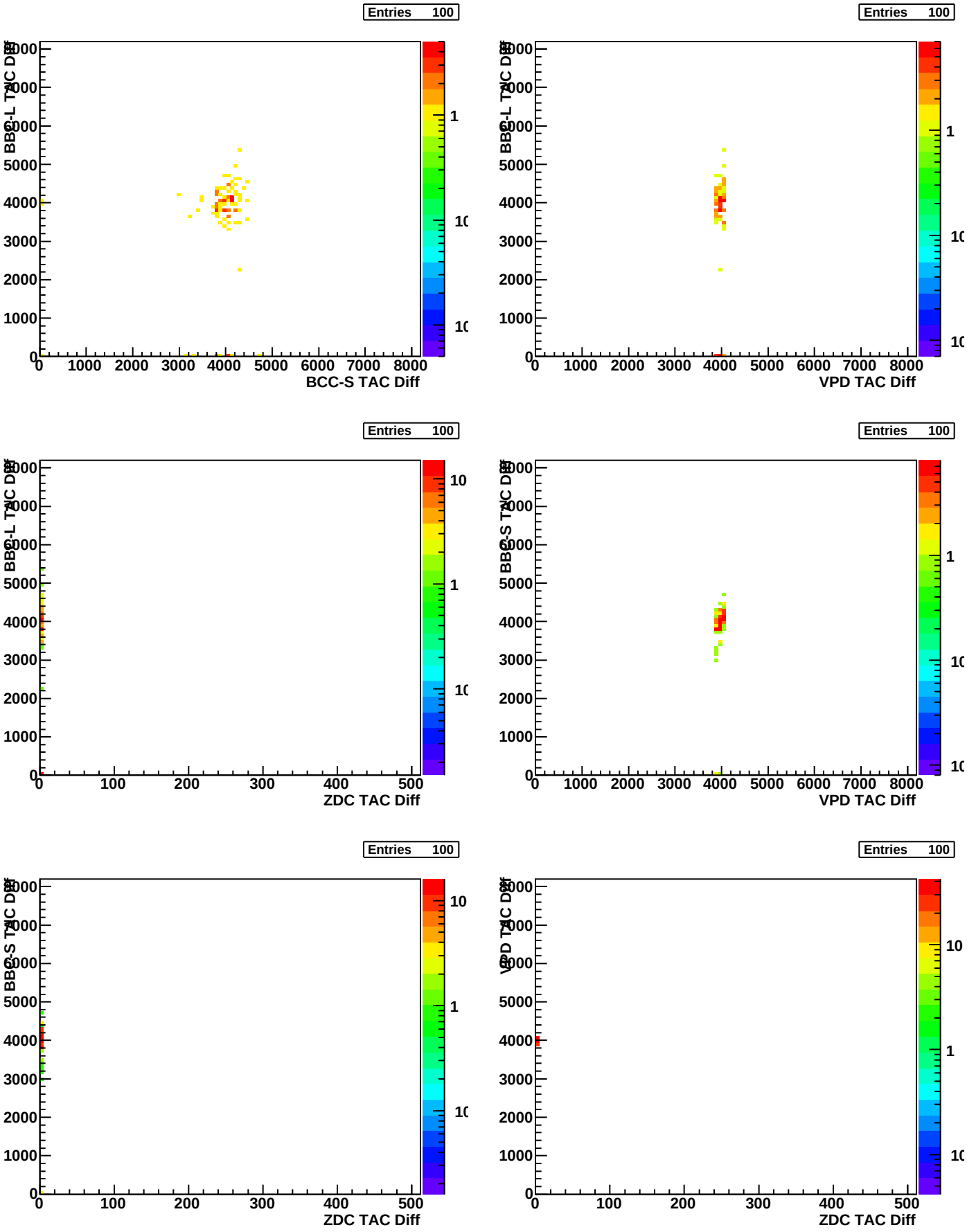

Entries 100
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

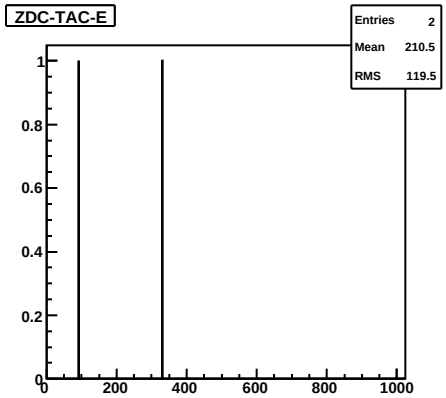

Entries 100
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

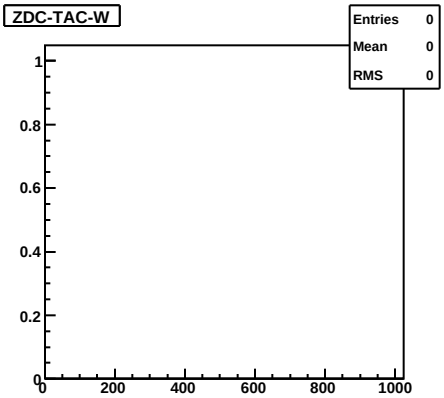

Entries 100
BBC-L-East ADC Sum
BBC-L-West ADC Sum

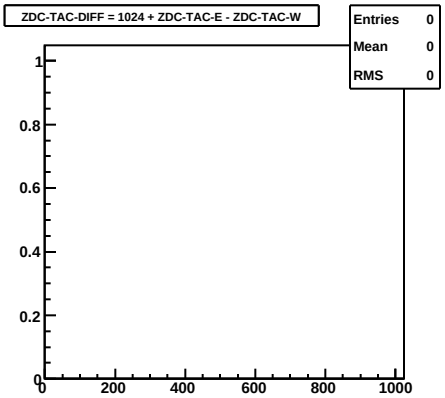

Entries 100
BBC-S-East ADC Sum
BBC-S-West ADC Sum

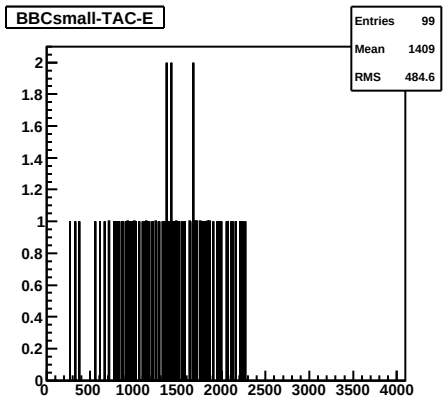

Entries 100
ZDC East ADC Sum Att
ZDC West ADC Sum Att

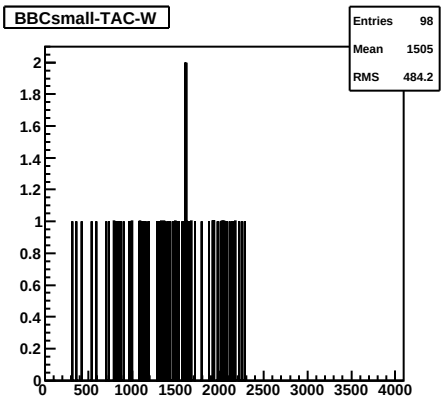

Entries 100
BBC-L TAC Diff
BCC-S TAC Diff
Entries 100
BBC-L TAC Diff
VPD TAC Diff
Entries 100
BBC-L TAC Diff
ZDC TAC Diff
Entries 100
BBC-S TAC Diff
VPD TAC Diff
Entries 100
BBC-S TAC Diff
ZDC TAC Diff
Entries 100
VPD TAC Diff
ZDC TAC Diff

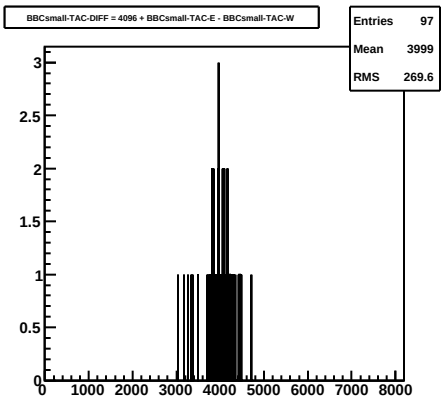

ZDC-TAC-E
Entries 2
Mean 210.5
RMS 119.5

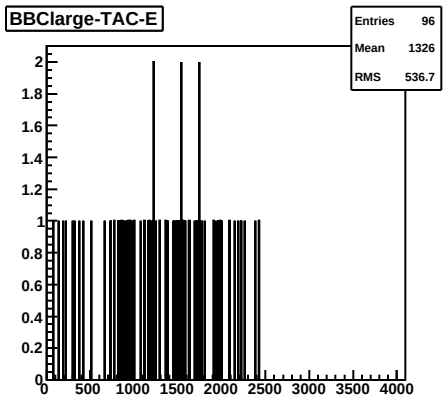

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

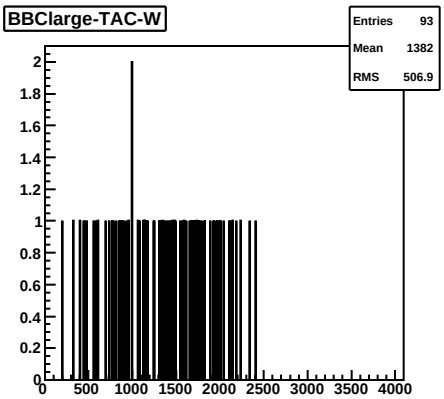

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

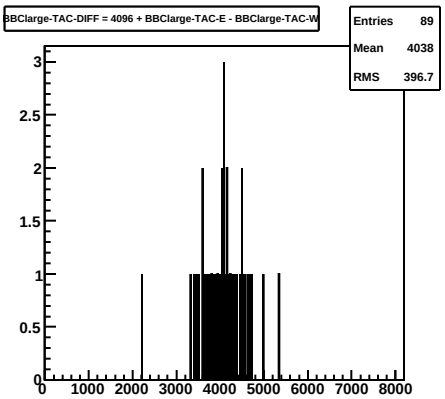

BBCsmall-TAC-E
Entries 99
Mean 1409
RMS 484.6

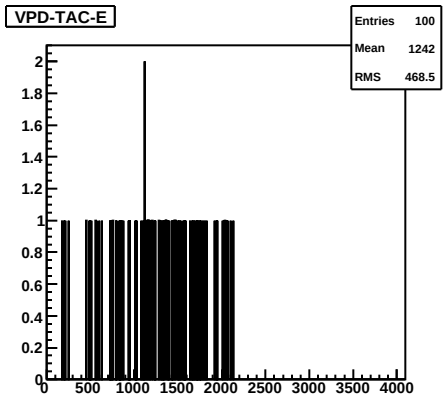

BBCsmall-TAC-W
Entries 98
Mean 1505
RMS 484.2

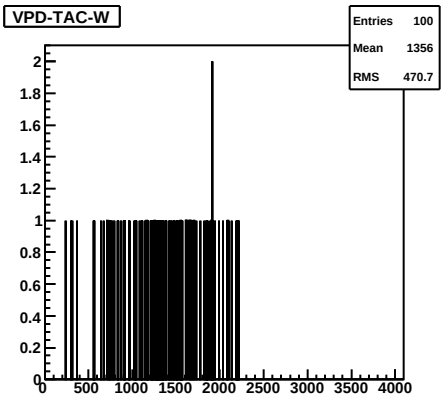

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 97
Mean 3999
RMS 269.6

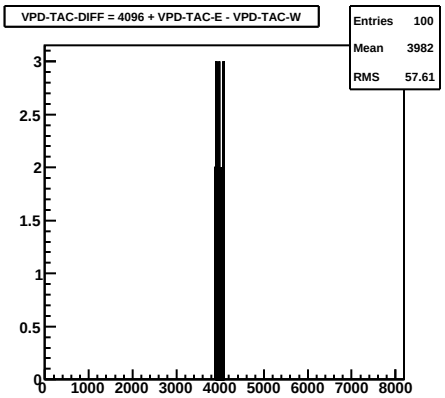

BBClarge-TAC-E
Entries 96
Mean 1326
RMS 536.7

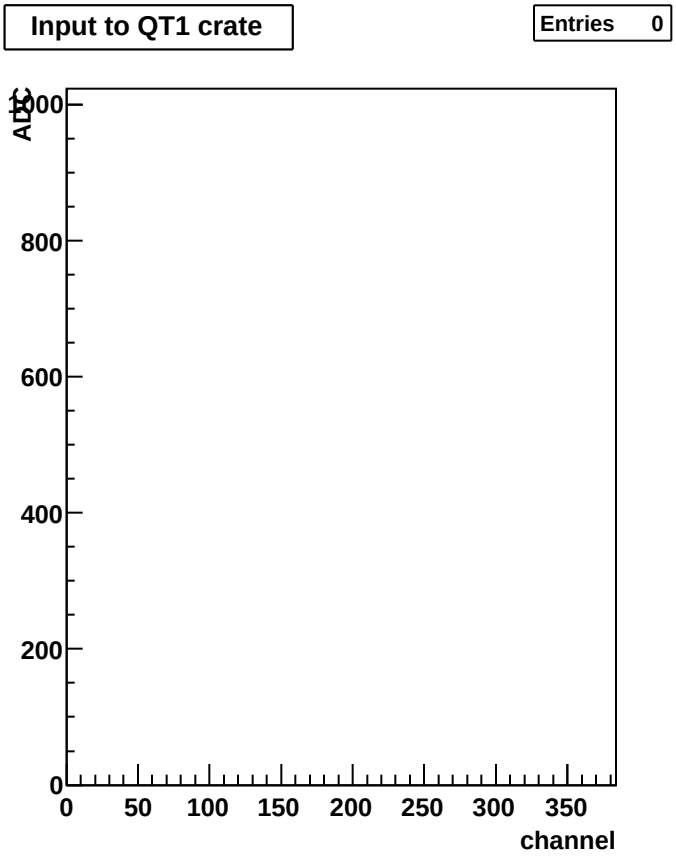

BBClarge-TAC-W
Entries 93
Mean 1382
RMS 506.9

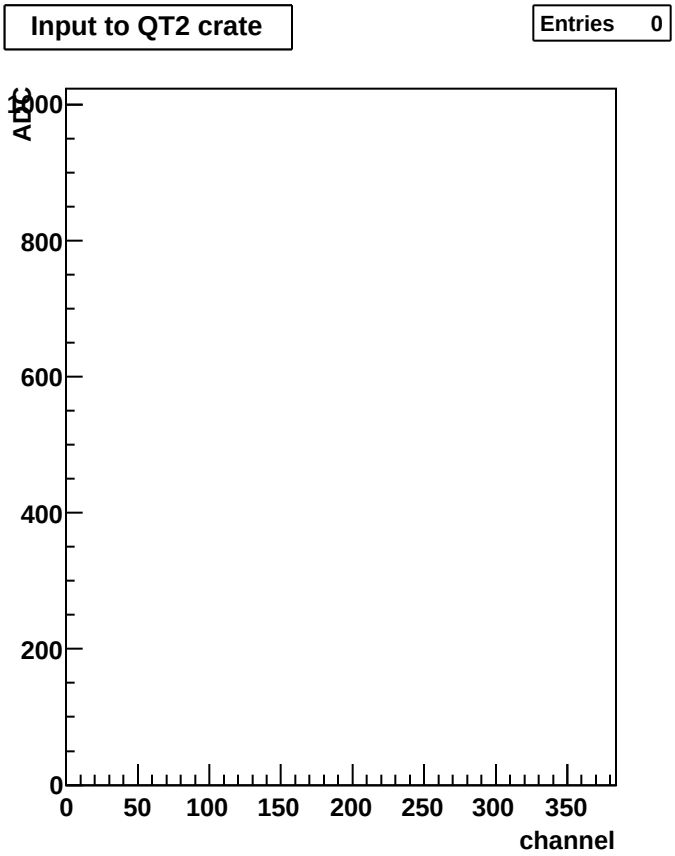

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 89
Mean 4038
RMS 396.7

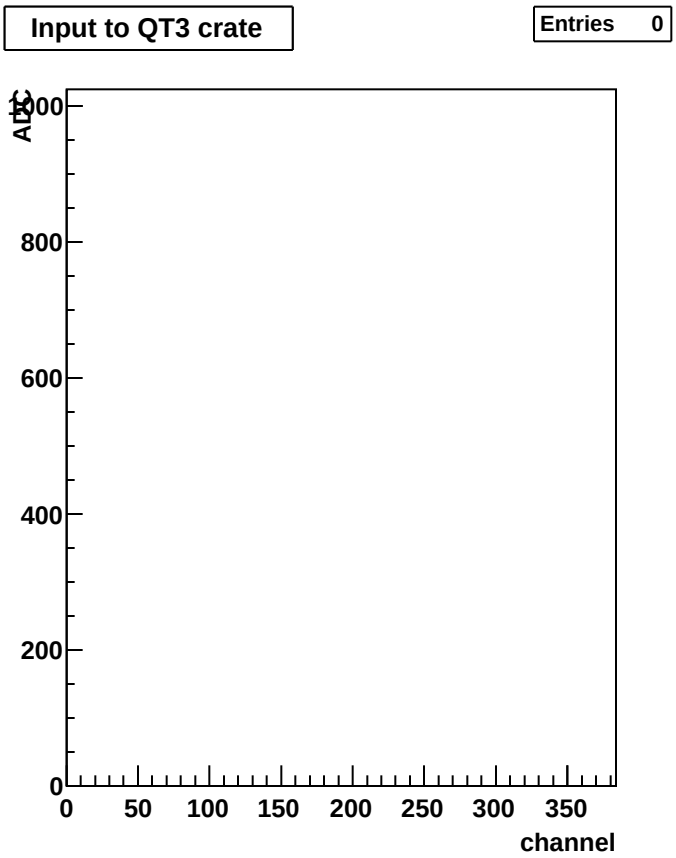

VPD-TAC-E
Entries 100
Mean 1242
RMS 468.5

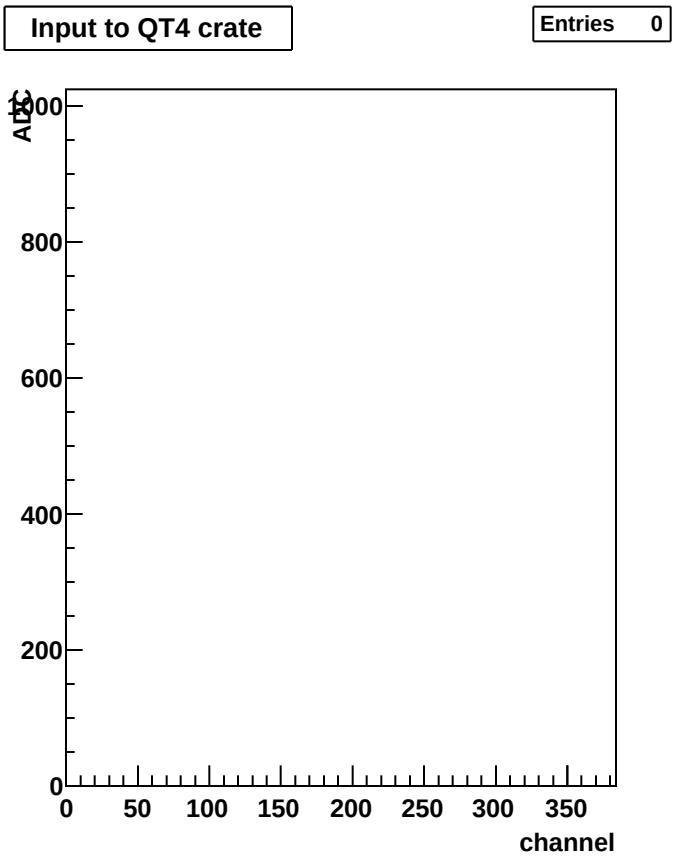

VPD-TAC-W
Entries 100
Mean 1356
RMS 470.7

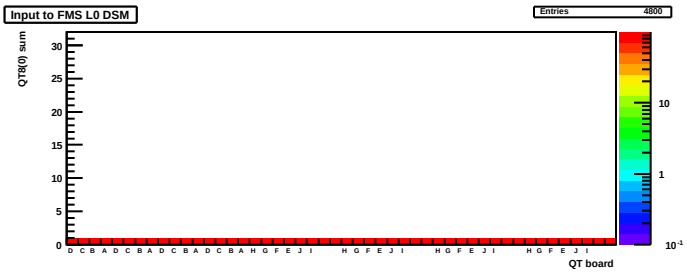

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 100
Mean 3982
RMS 57.61

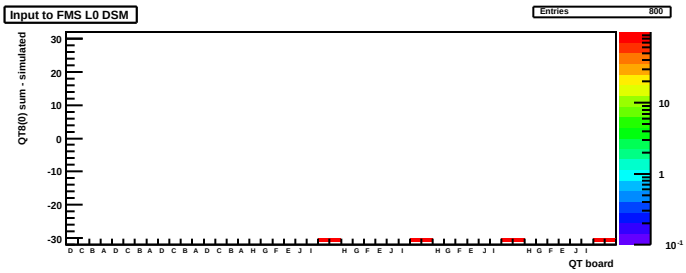

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

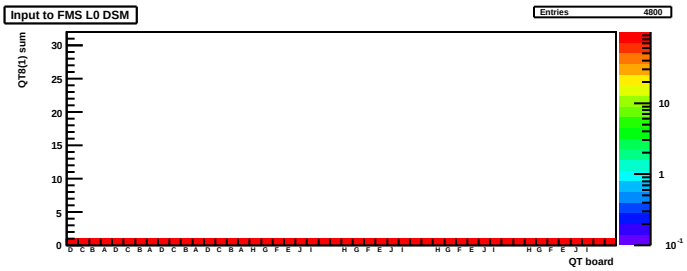

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

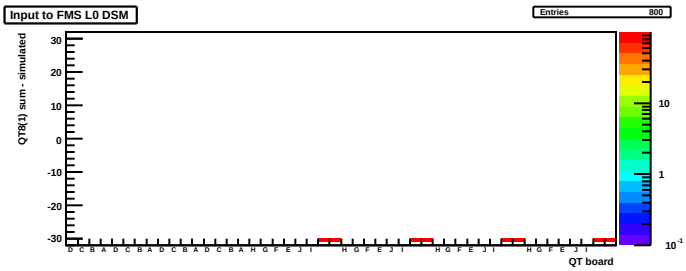

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

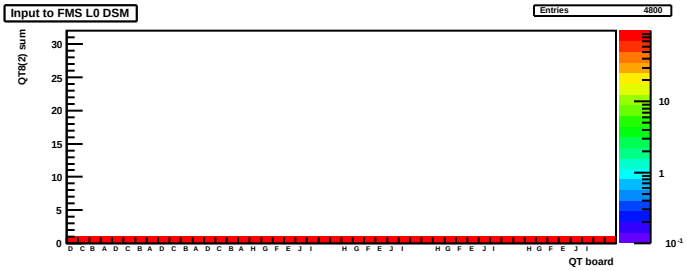

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

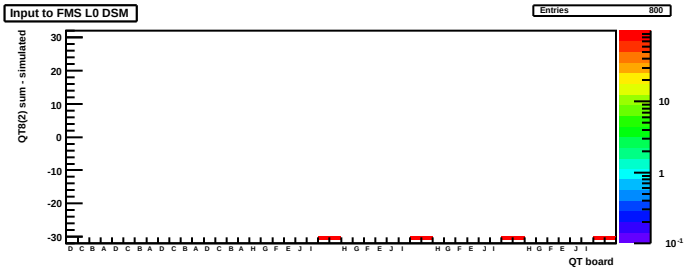

Input to FMS L0 DSM
Entries 4800
QT8(0) sum
QT board

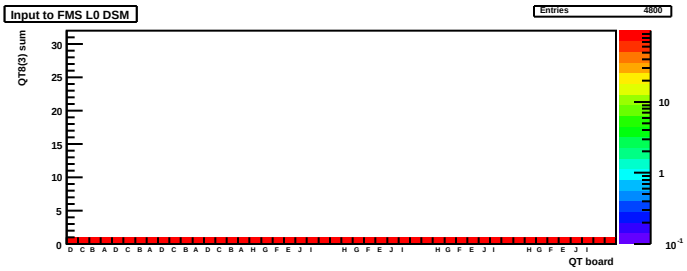

Input to FMS L0 DSM
Entries 800
QT8(0) sum - simulated
QT board

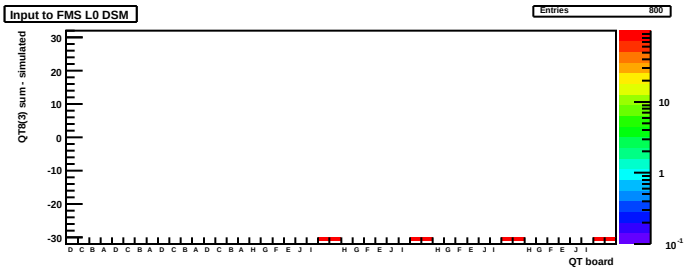

Input to FMS L0 DSM
Entries 4800
QT8(1) sum
QT board

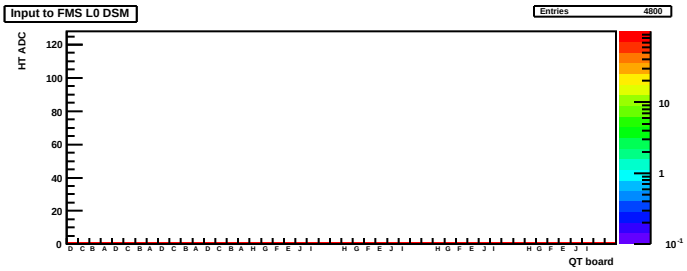

Input to FMS L0 DSM
Entries 800
QT8(1) sum - simulated
QT board

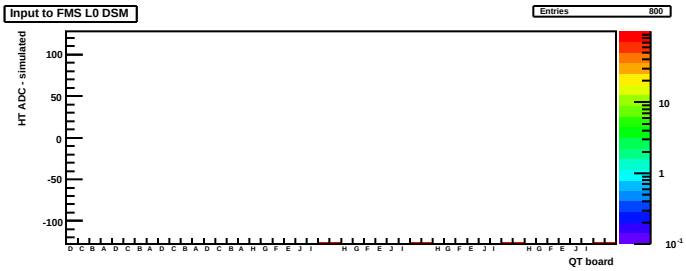

Input to FMS L0 DSM
Entries 4800
QT8(2) sum
QT board

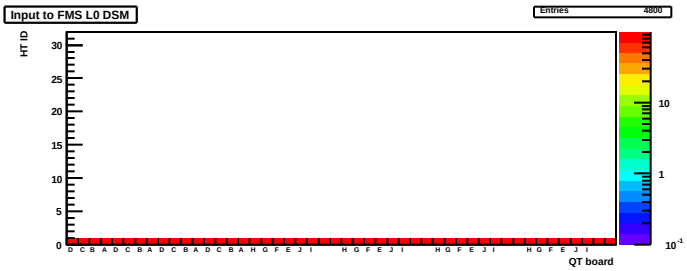

Input to FMS L0 DSM
Entries 800
QT8(2) sum - simulated
QT board

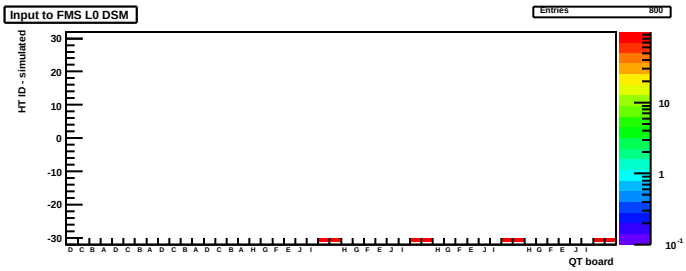

Input to FMS L0 DSM
Entries 4800
QT8(3) sum
QT board

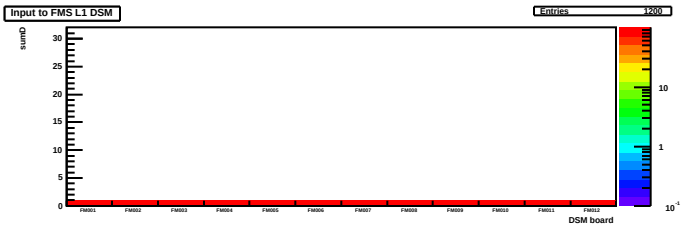

Input to FMS L0 DSM
Entries 800
QT8(3) sum - simulated
QT board

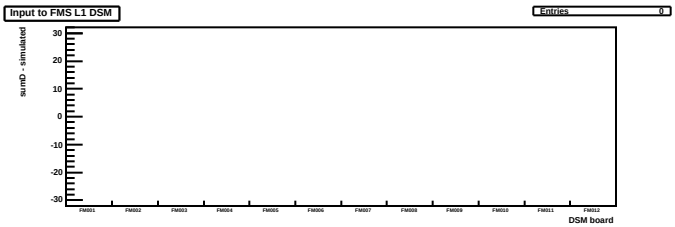

Input to FMS L0 DSM
Entries 4800
HT ADC
QT board

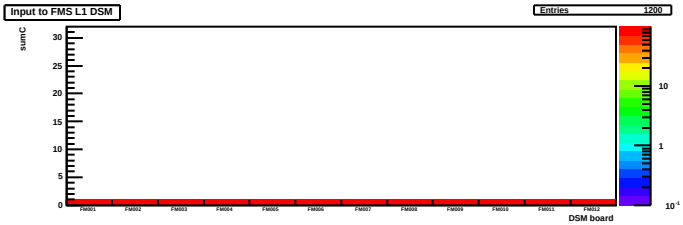

Input to FMS L0 DSM
Entries 800
HT ADC - simulated
QT board

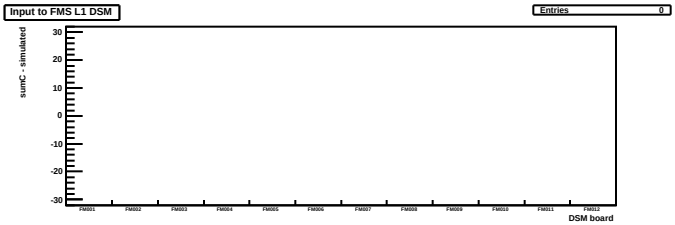

Input to FMS L0 DSM
Entries 4800
HT ID
QT board

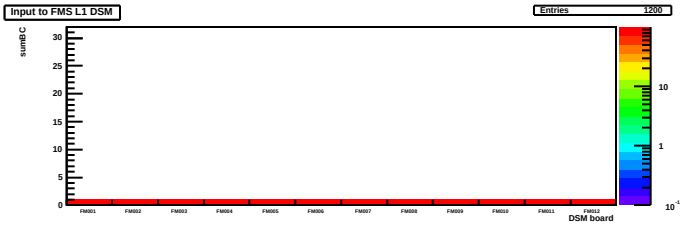

Input to FMS L0 DSM
Entries 800
HT ID - simulated
QT board

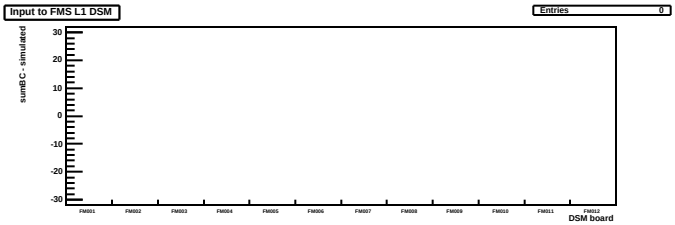

Input to FMS L1 DSM
Entries 1200
sumD
DSM board

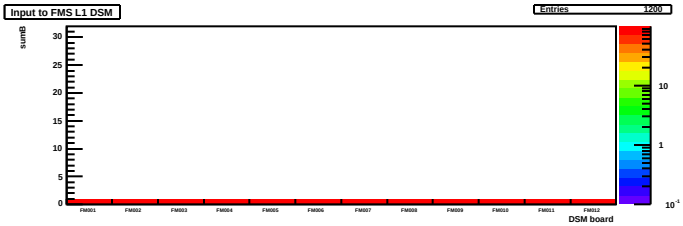

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

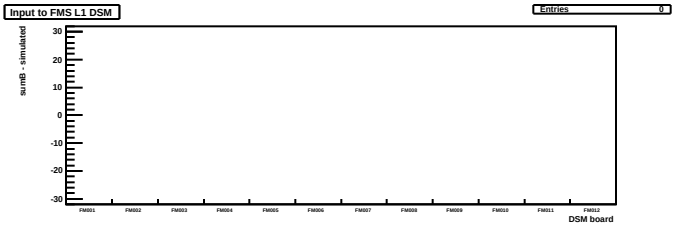

Input to FMS L1 DSM
Entries 1200
sumC
DSM board

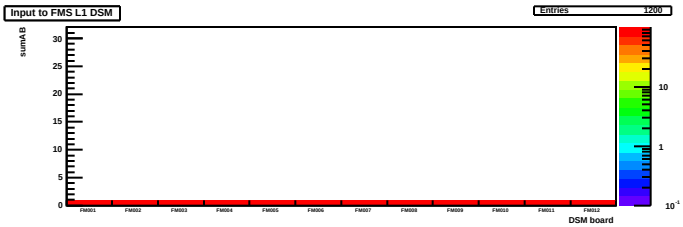

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

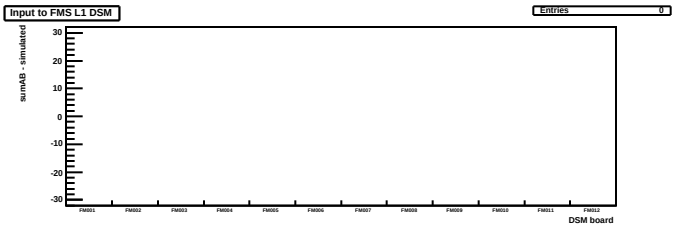

Input to FMS L1 DSM
Entries 1200
sumBC
DSM board

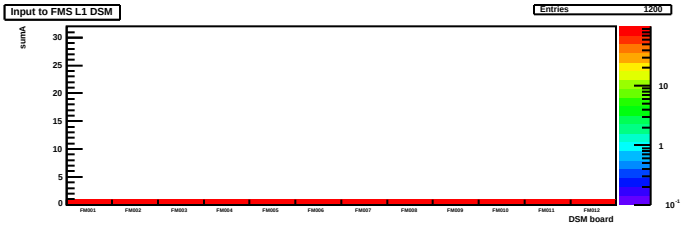

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

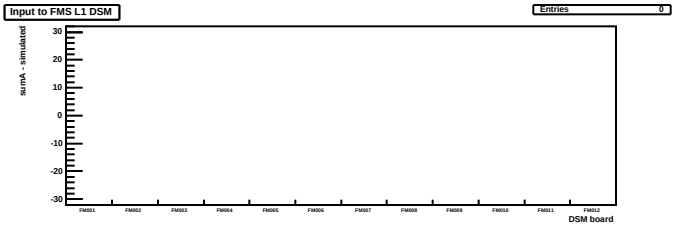

Input to FMS L1 DSM
Entries 1200
sumB
DSM board

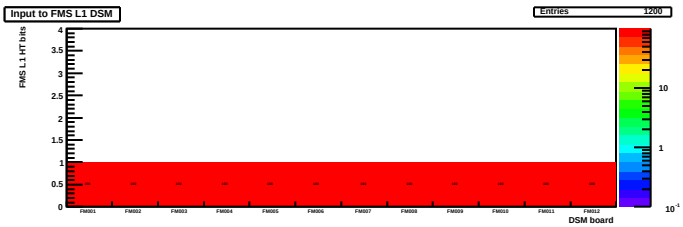

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

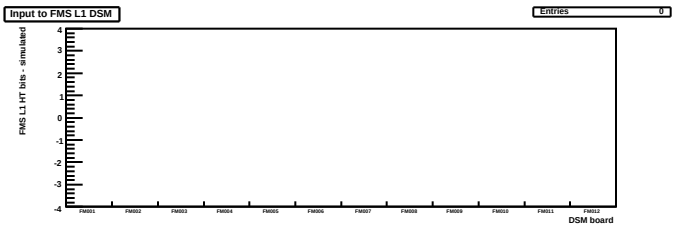

Input to FMS L1 DSM
Entries 1200
sumAB
DSM board

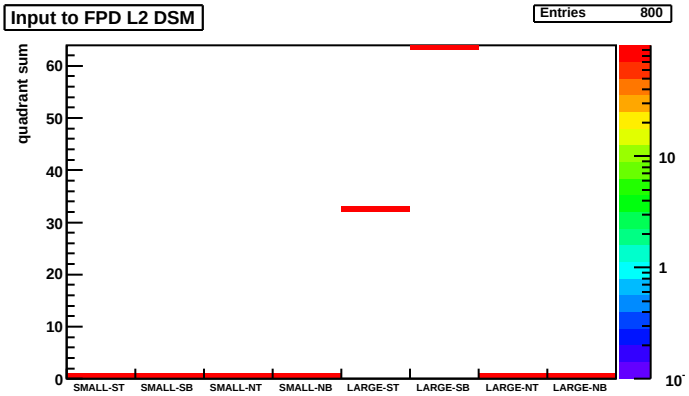

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

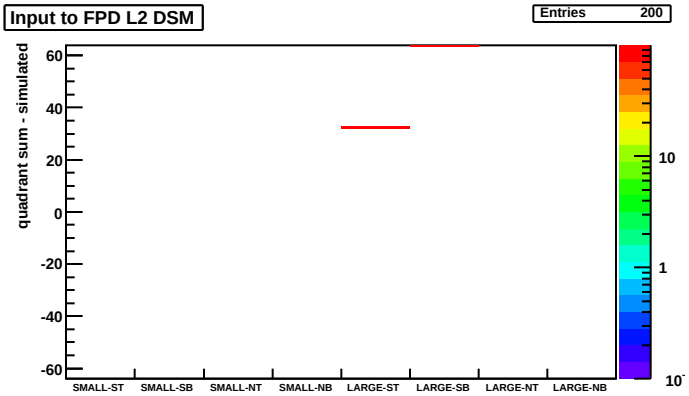

Input to FMS L1 DSM
Entries 1200
sumA
DSM board

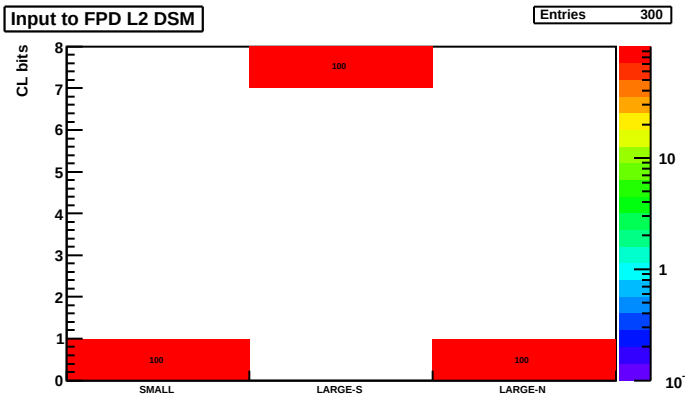

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

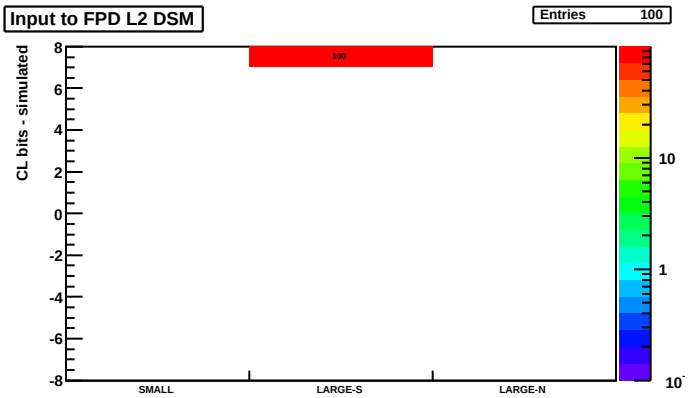

Input to FMS L1 DSM
Entries 1200
FMS L1 HT bits
DSM board

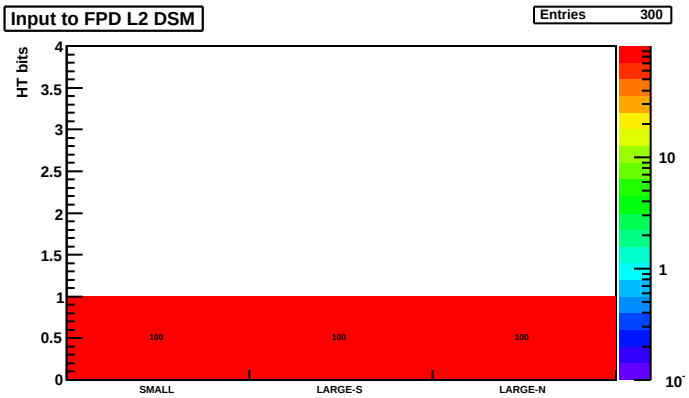

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

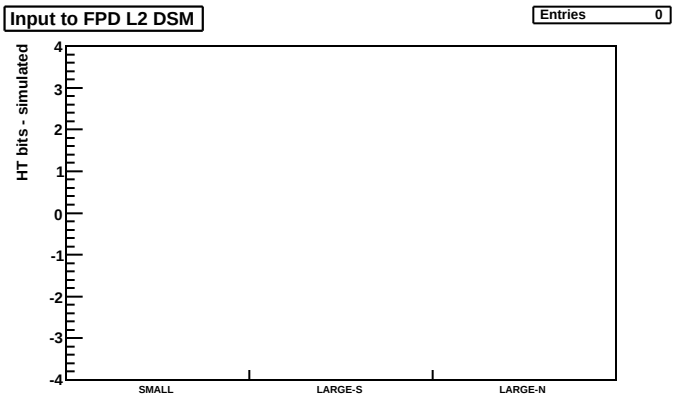

Input to FPD L2 DSM
Entries 800
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

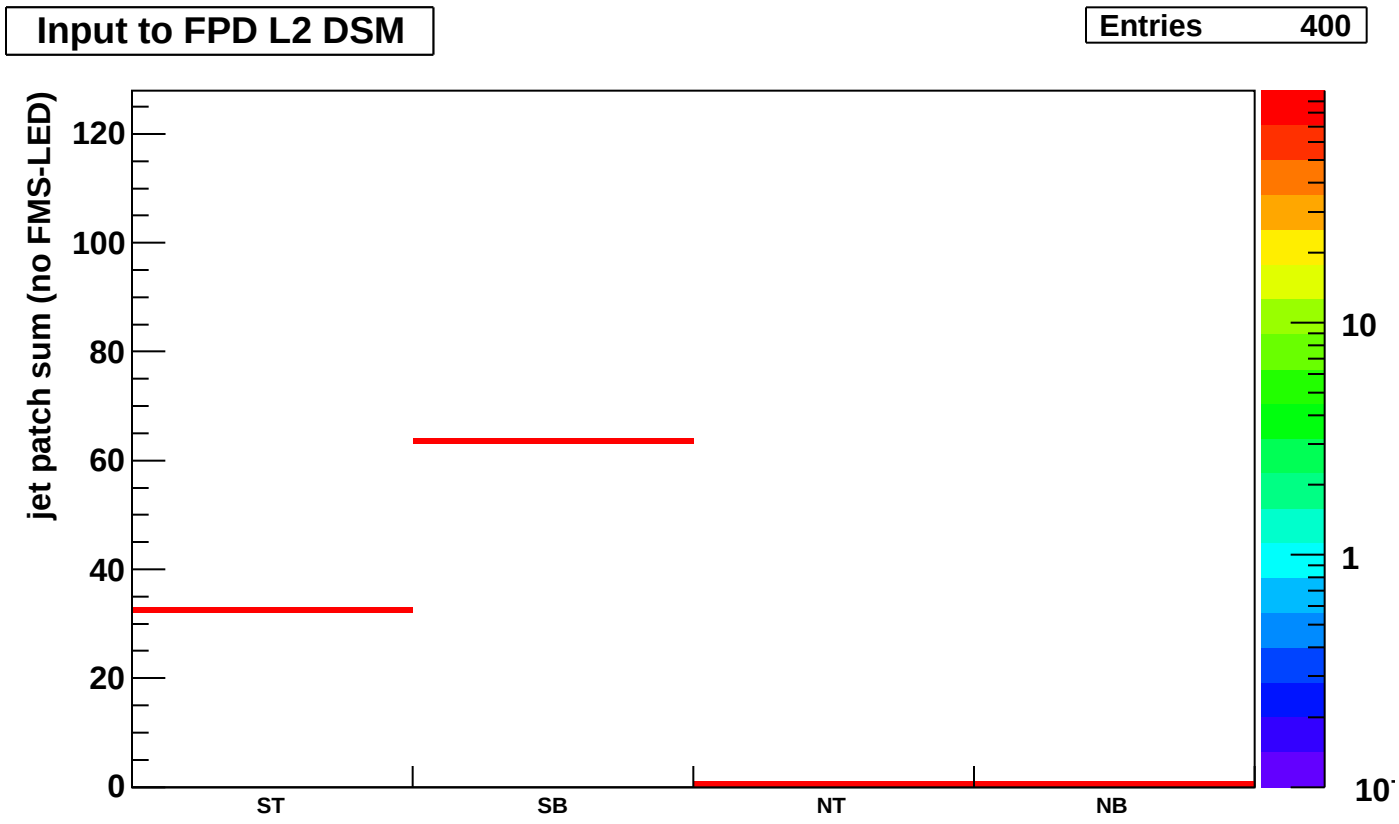

Input to FPD L2 DSM
Entries 200
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

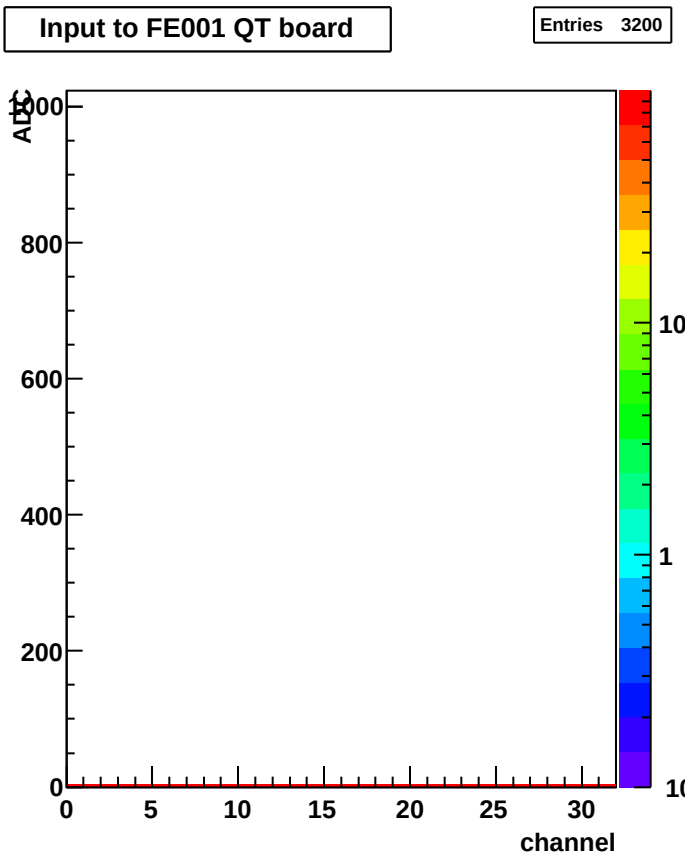

Input to FPD L2 DSM
Entries 300
CL bits
SMALL
LARGE-S
LARGE-N

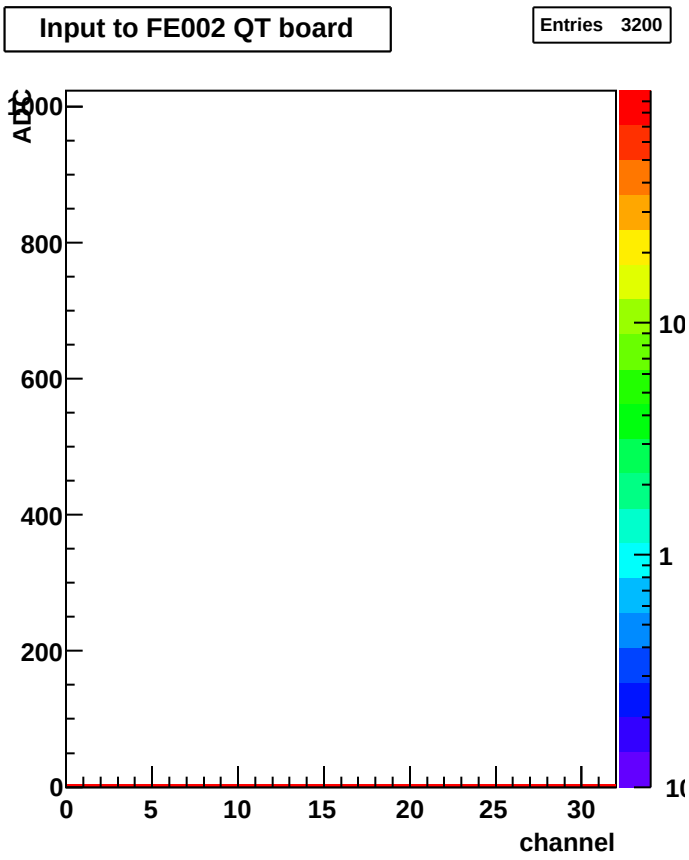

Input to FPD L2 DSM
Entries 100
CL bits - simulated
SMALL
LARGE-S
LARGE-N

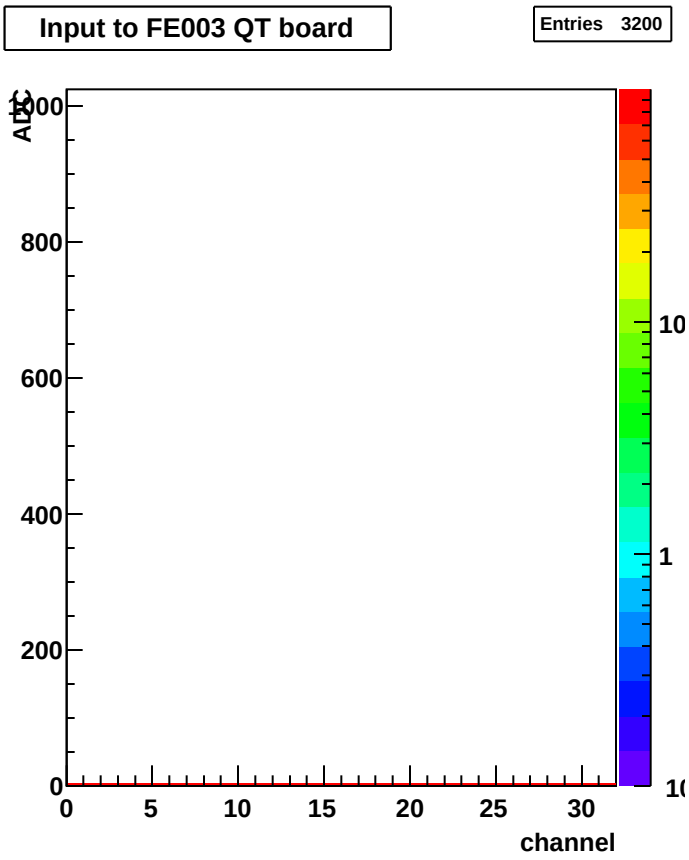

Input to FPD L2 DSM
Entries 300
HT bits
SMALL
LARGE-S
LARGE-N

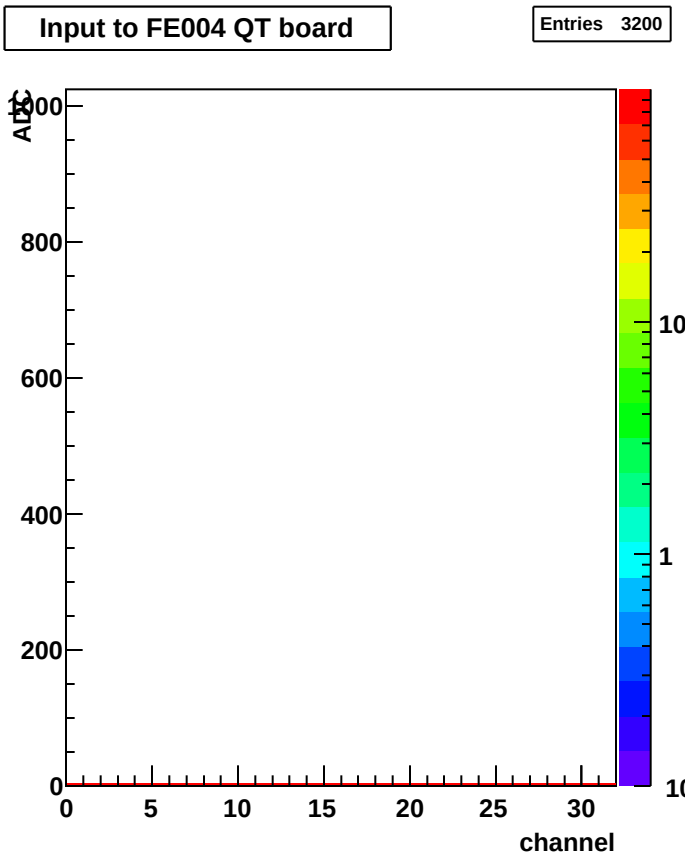

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

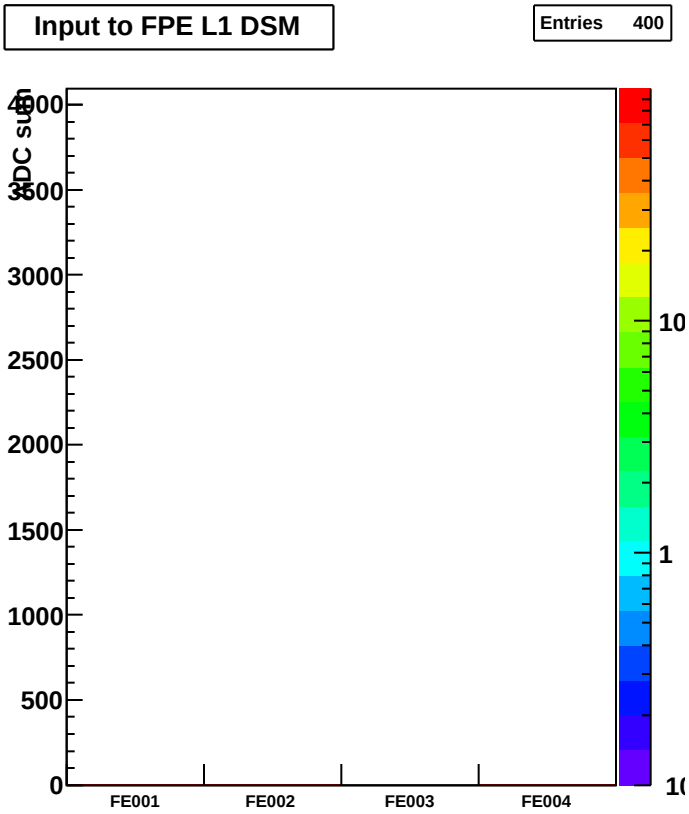

Input to FPD L2 DSM
Entries 400
jet patch sum (no FMS-LED)
120
100
80
60
40
20
0
ST
SB
NT
NB
10
1

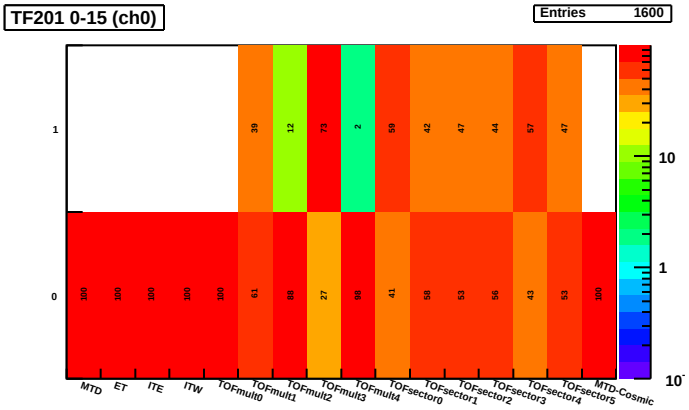

Input to FE001 QT board
Entries 3200
ADC
channel

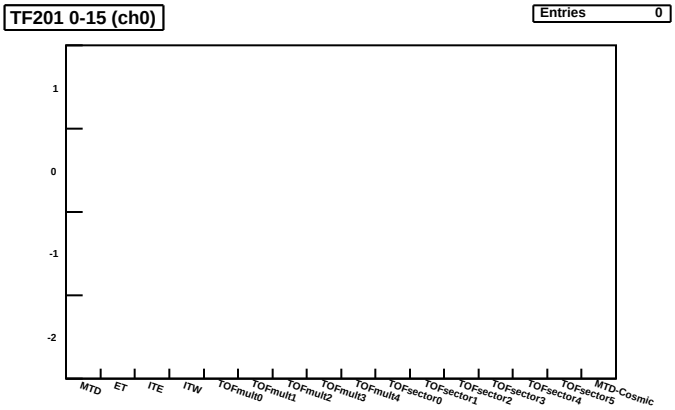

Input to FE002 QT board
Entries 3200
ADC
channel

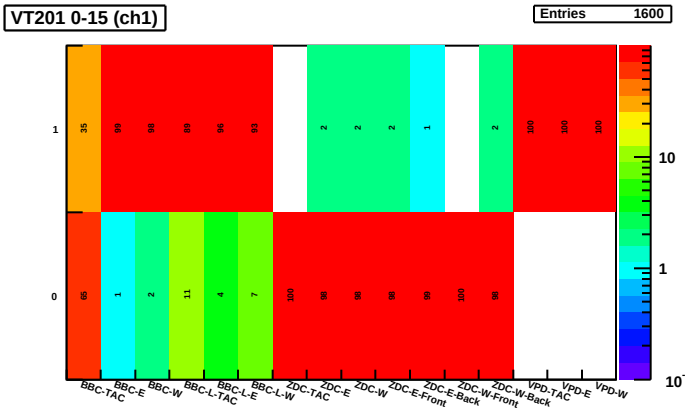

Input to FE003 QT board
Entries 3200
ADC
channel

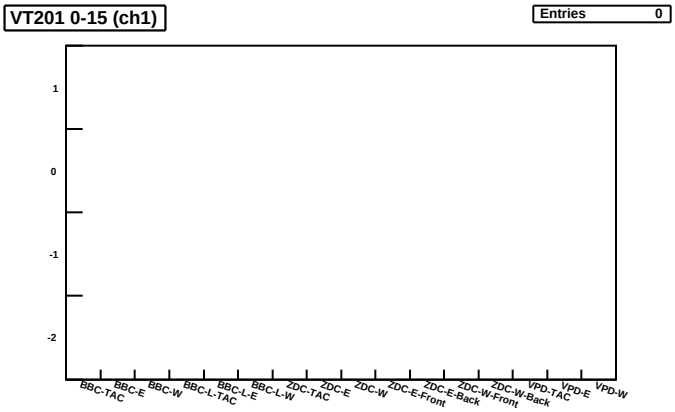

Input to FE004 QT board
Entries 3200
ADC
channel

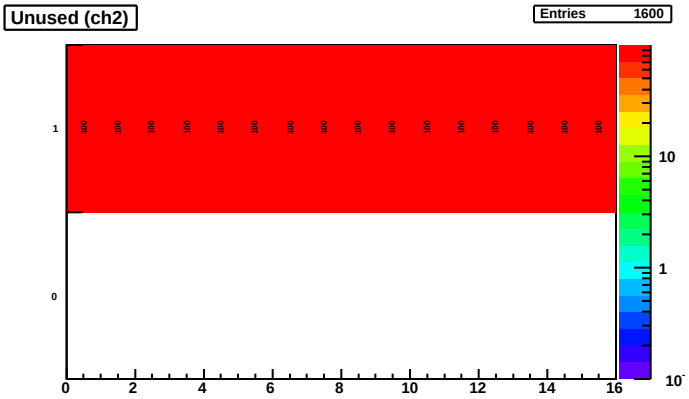

Input to FPE L1 DSM
Entries 400
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
1

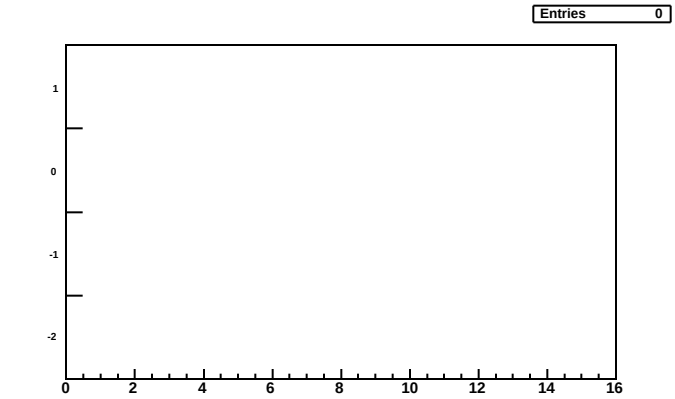

TF201 0-15 (ch0)
Entries 1600
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

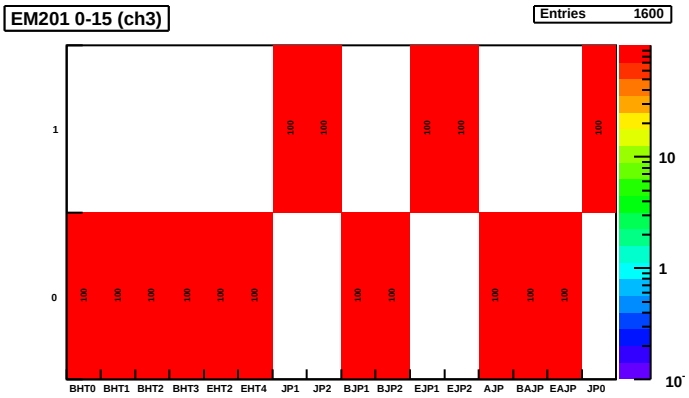

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

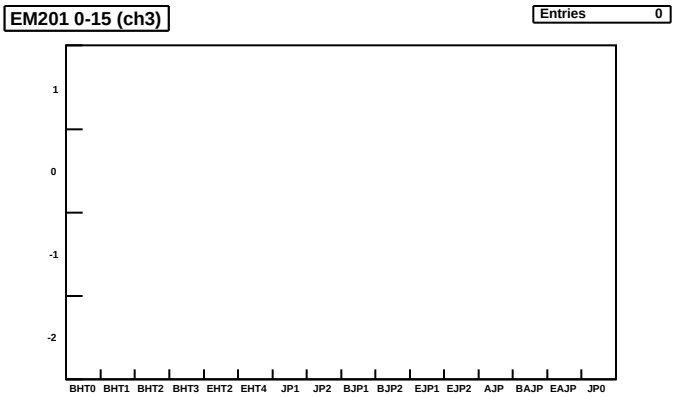

VT201 0-15 (ch1)
Entries 1600
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


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

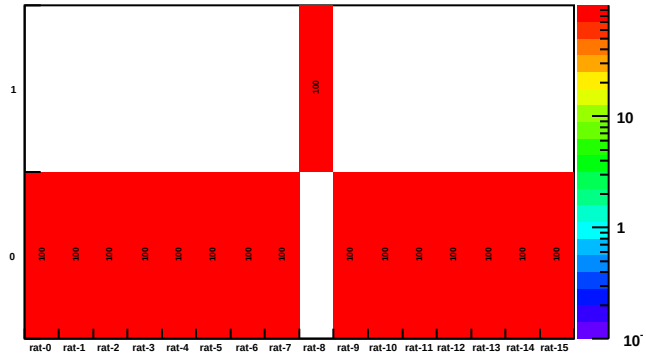

Unused (ch2)
Entries 1600

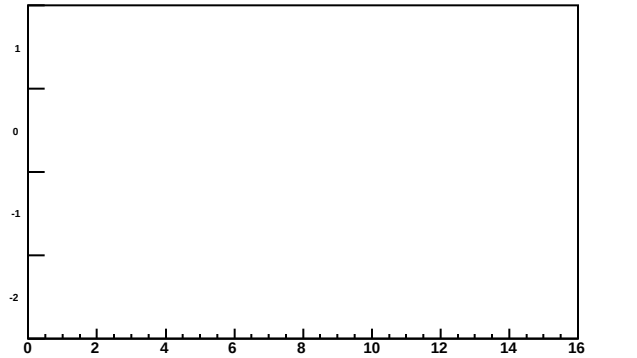

Entries 0


EM201 0-15 (ch3)
Entries 1600
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

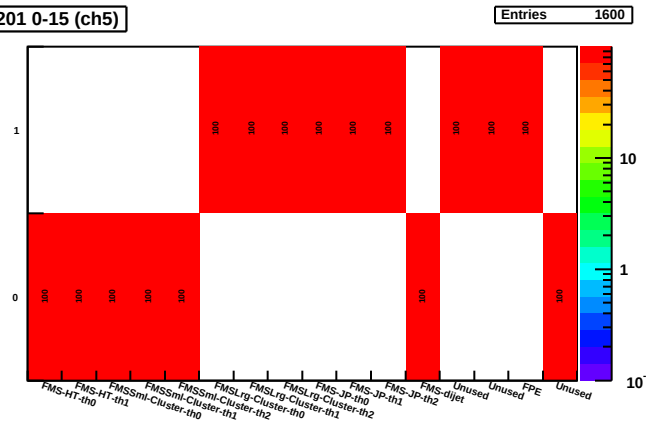

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

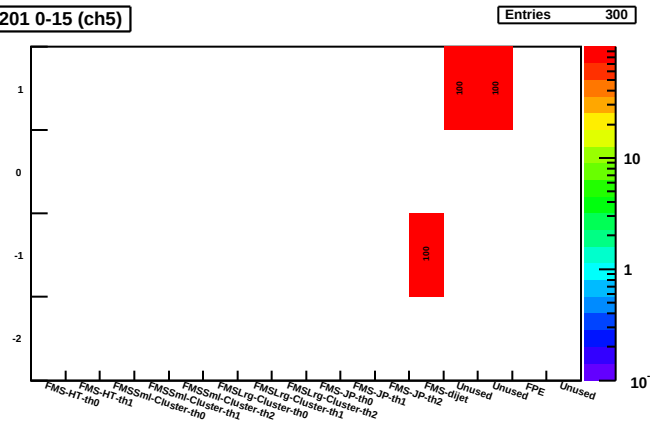




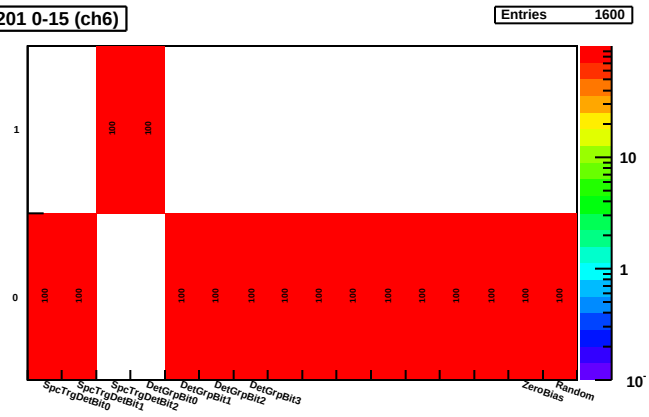
FP201 0-15 (ch5)

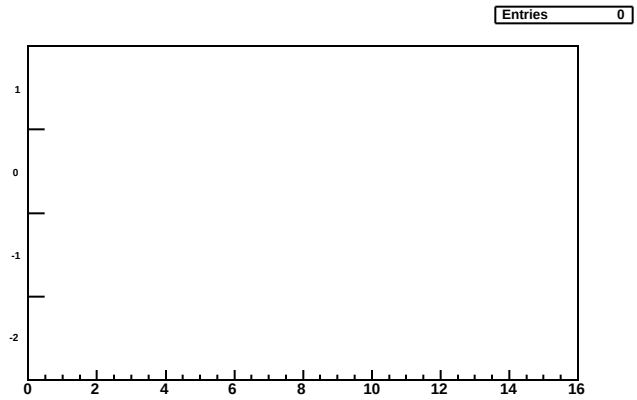
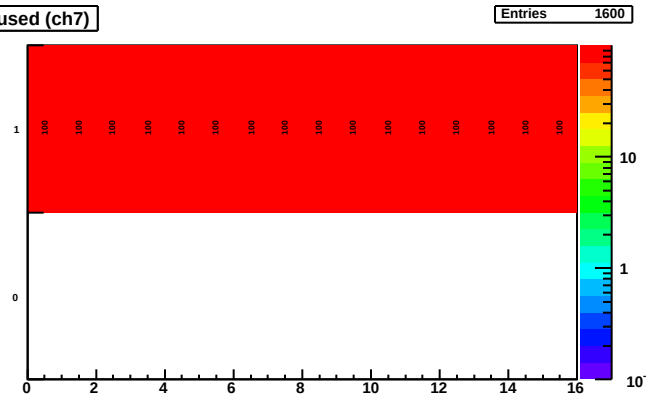
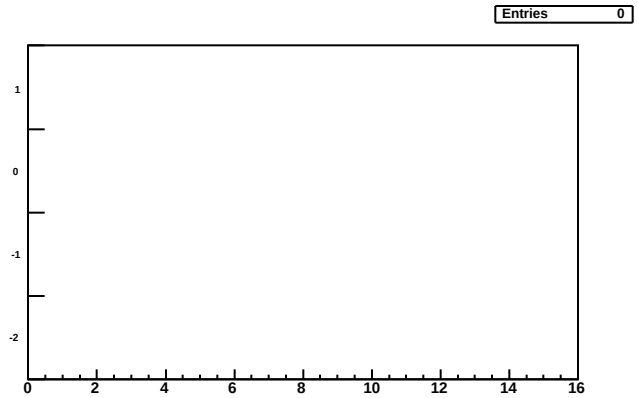


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)