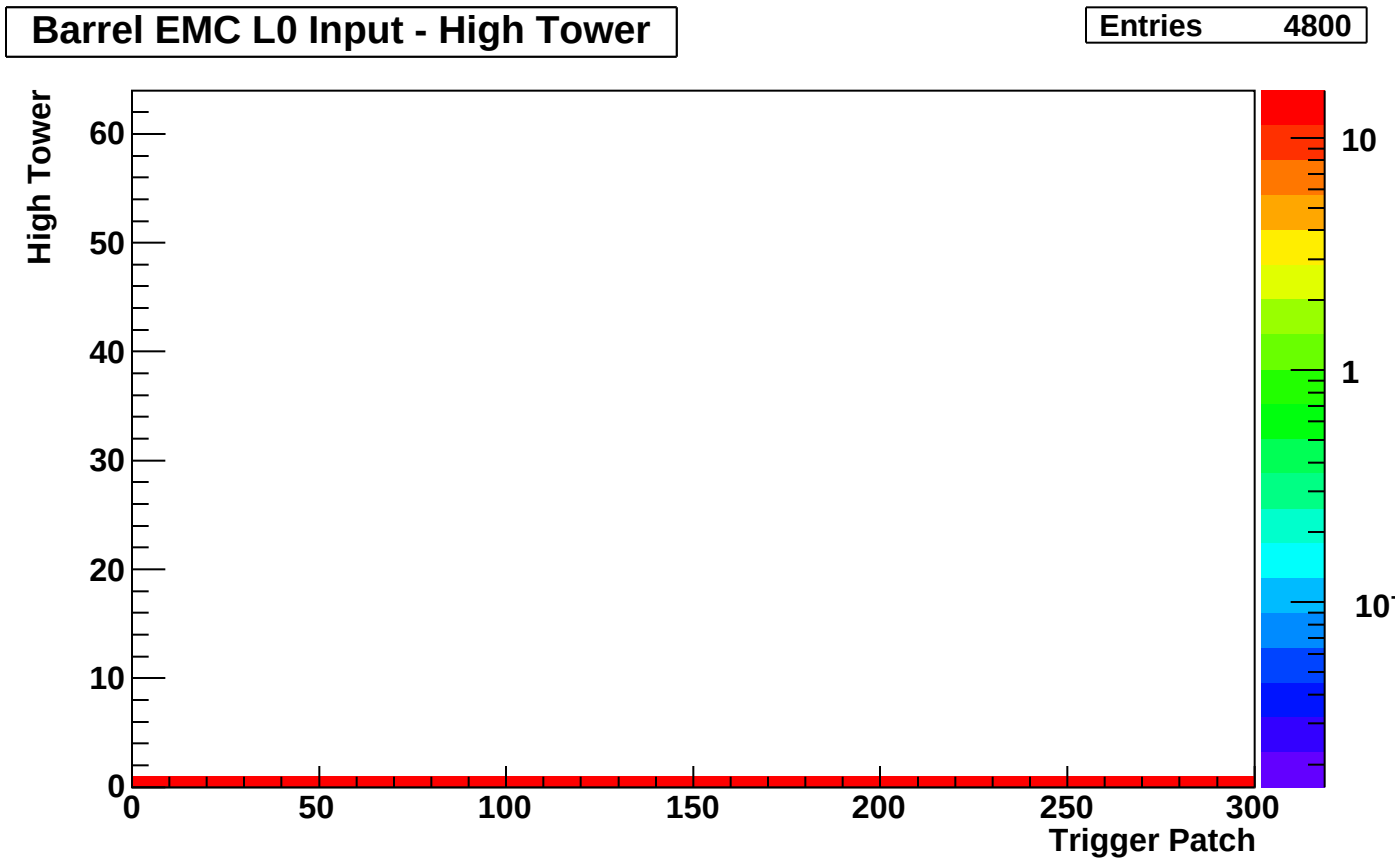
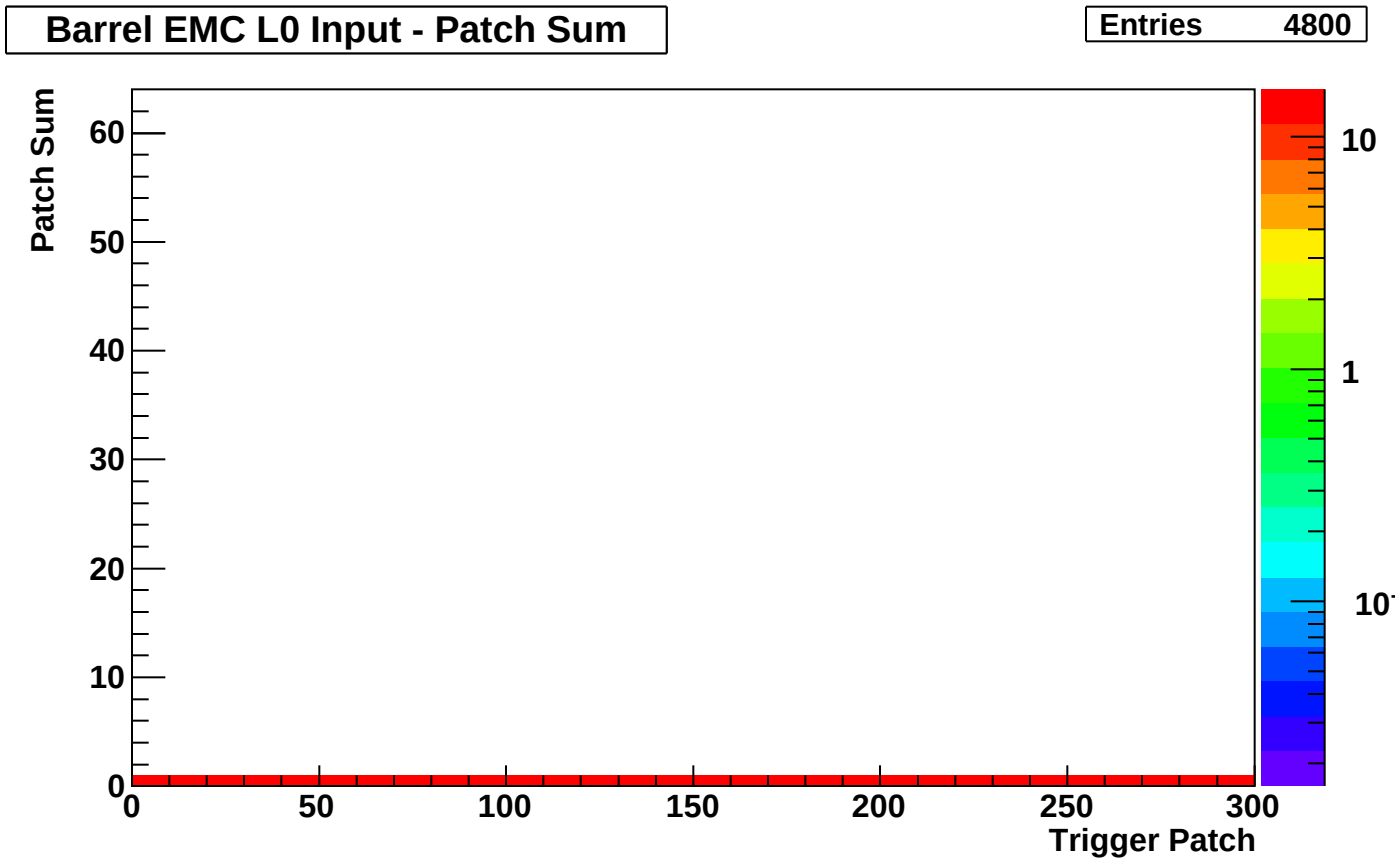
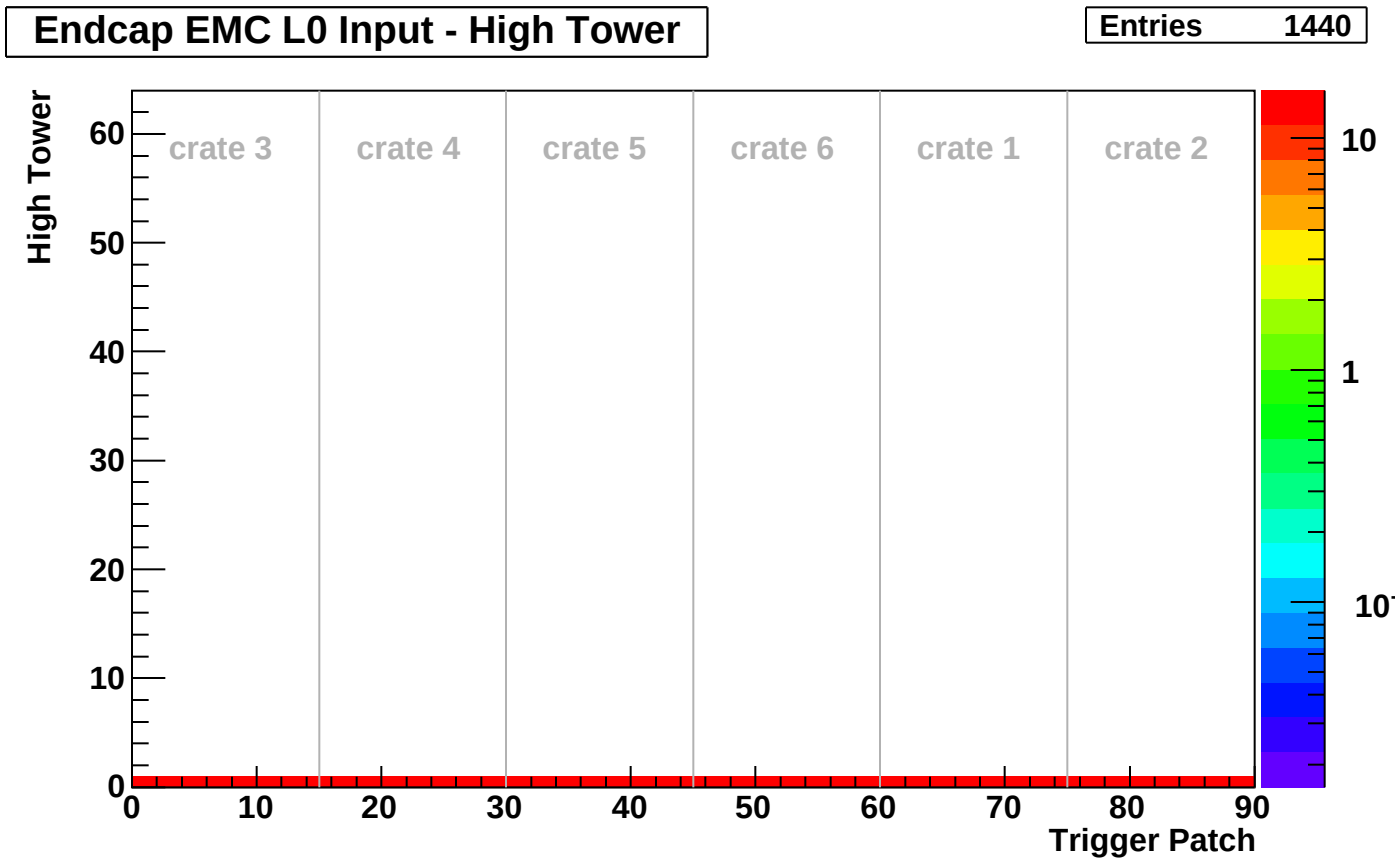
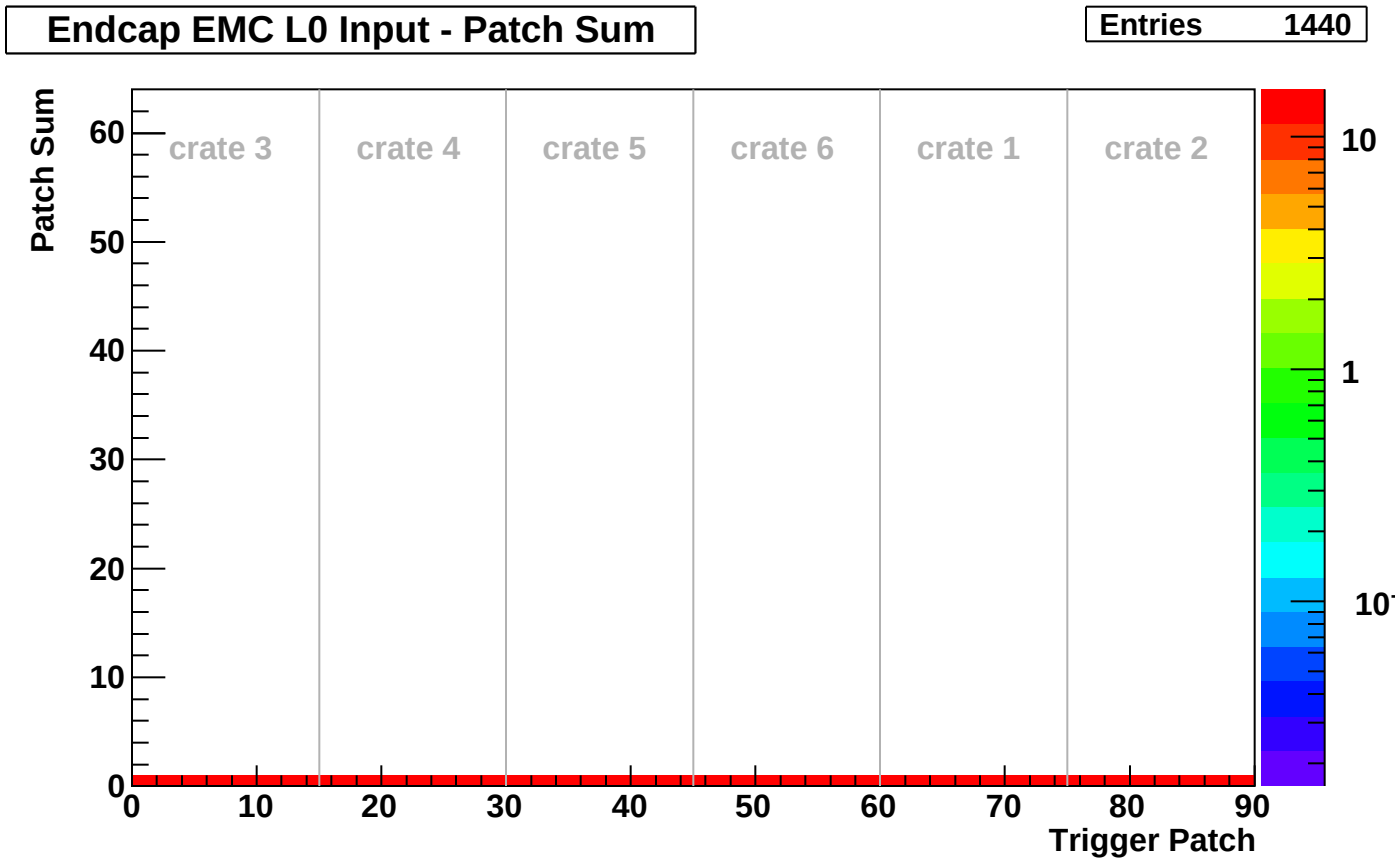
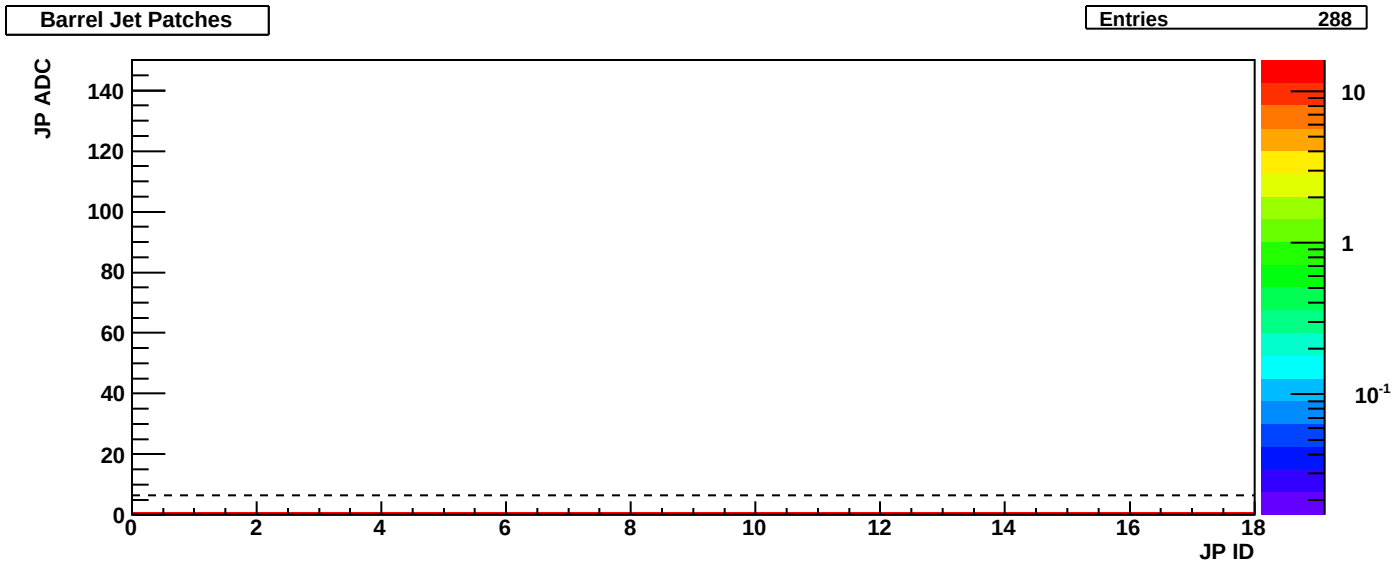
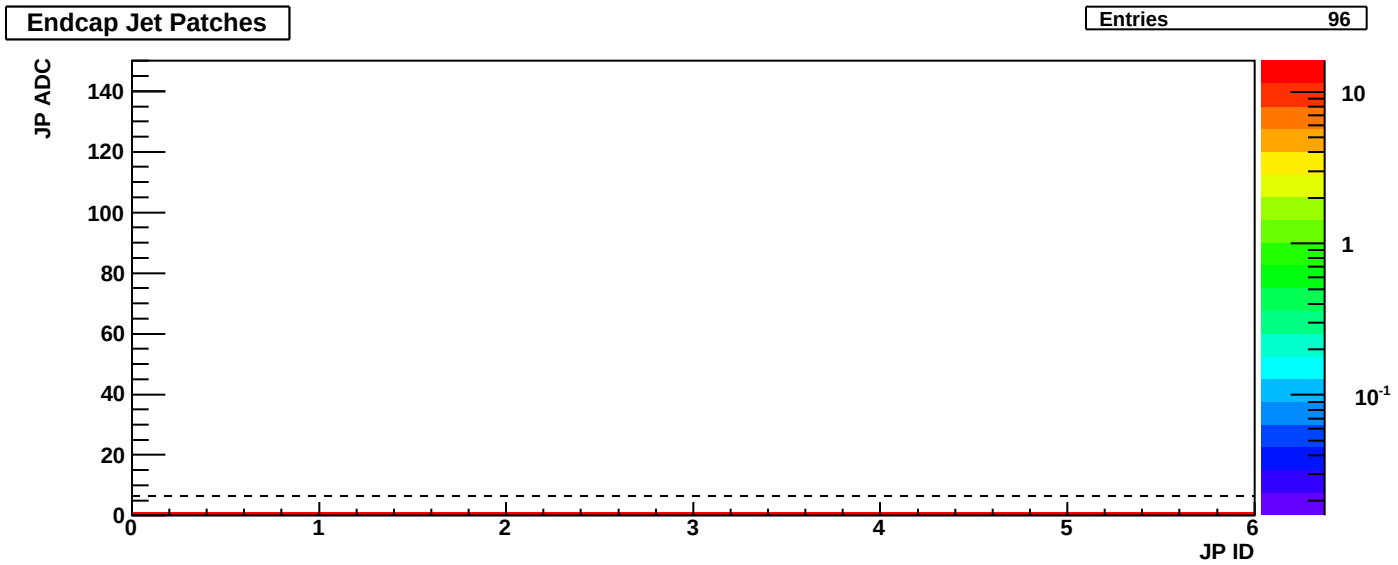

Barrel EMC L0 Input - High Tower
Entries 4800
High Tower
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch
10
1
10

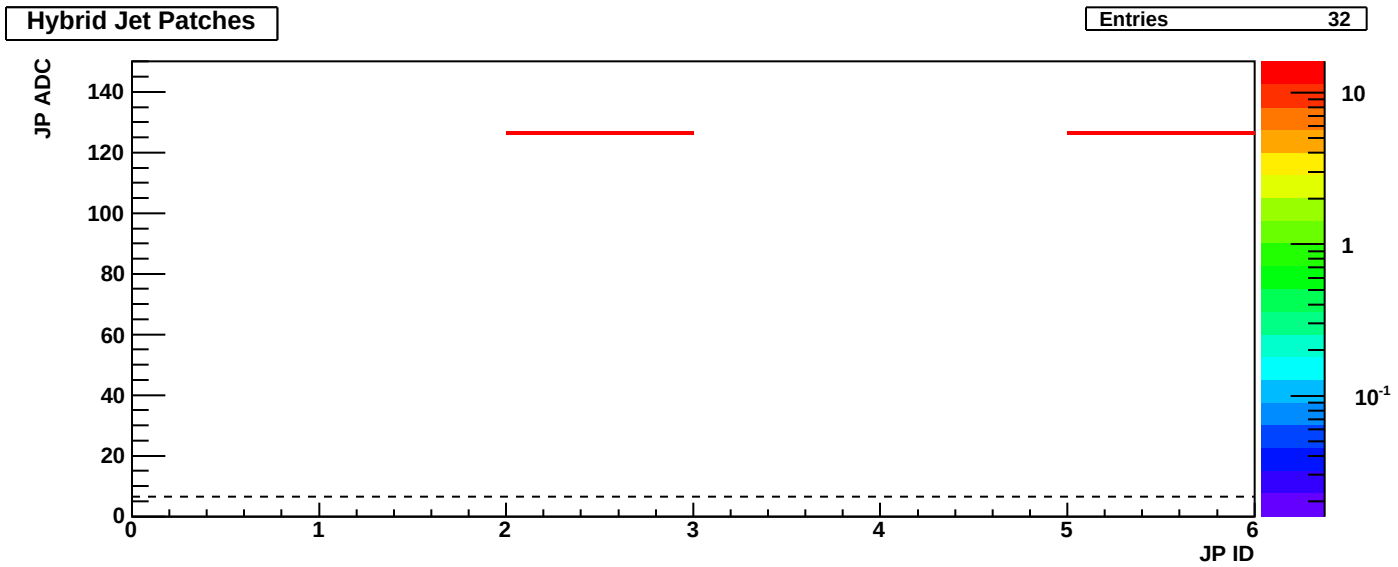

Barrel EMC L0 Input - Patch Sum
Entries 4800
Patch Sum
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch
10
1
10

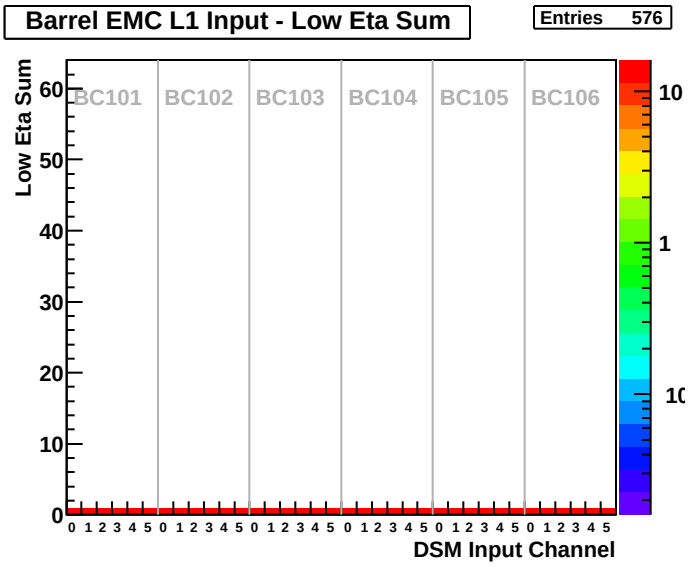

Endcap EMC L0 Input - High Tower
Entries 1440
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10

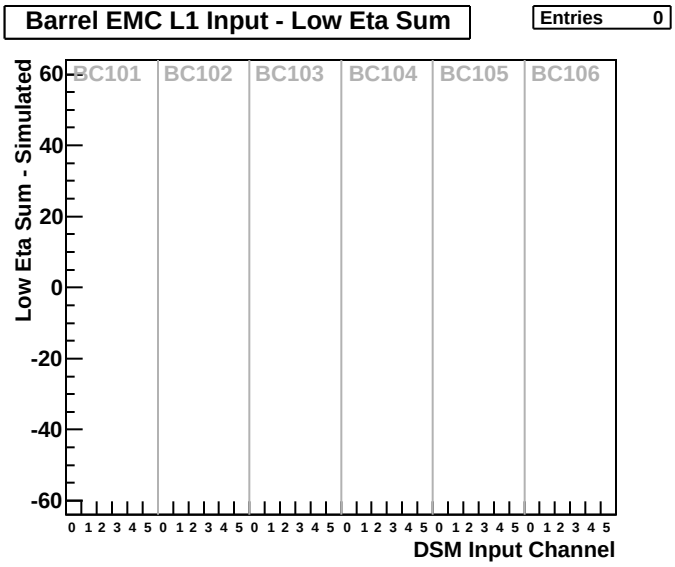

Endcap EMC L0 Input - Patch Sum
Entries 1440
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10

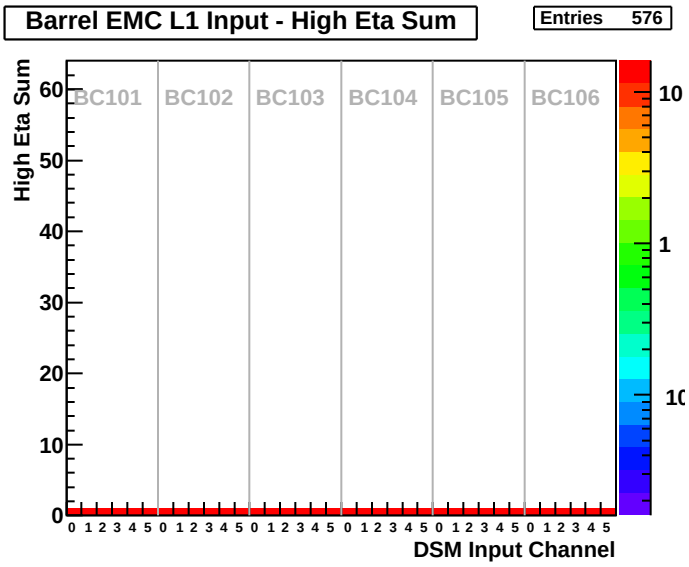

Barrel Jet Patches
Entries 288
JP ADC
JP ID

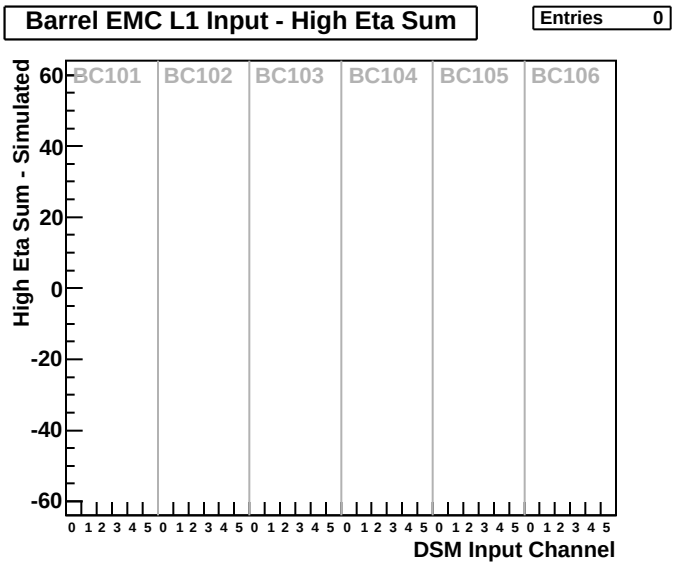

Endcap Jet Patches
Entries 96
JP ADC
JP ID

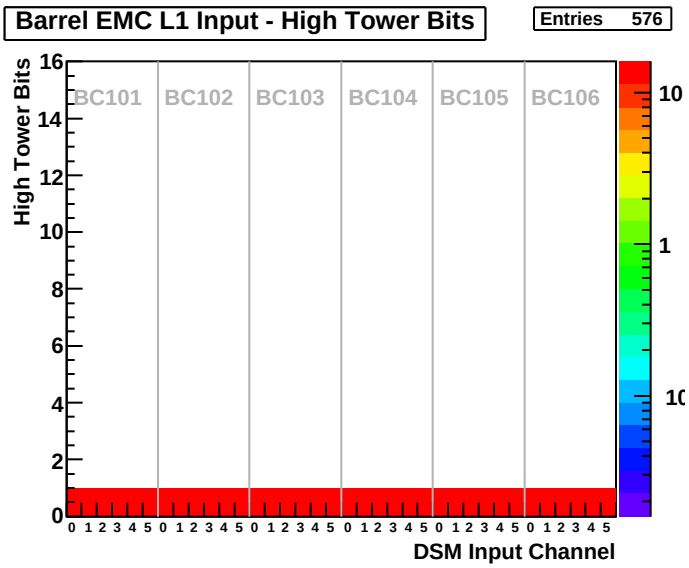

Hybrid Jet Patches
Entries 32
JP ADC
JP ID

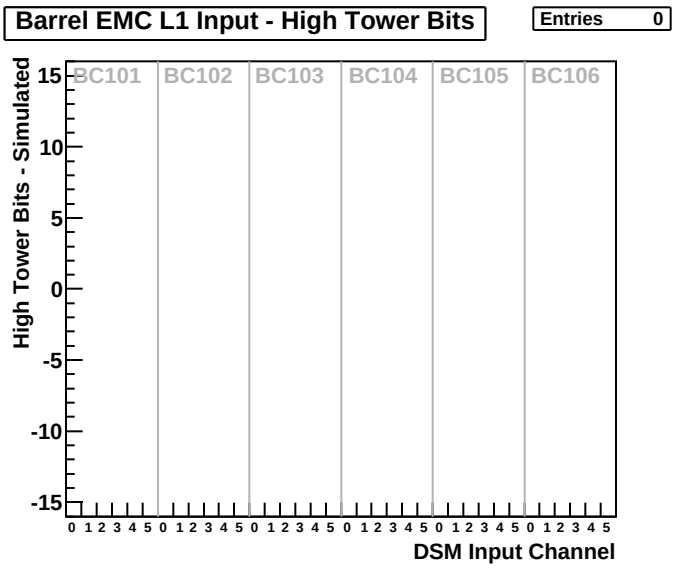

Barrel EMC L1 Input - Low Eta Sum
Entries 576
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

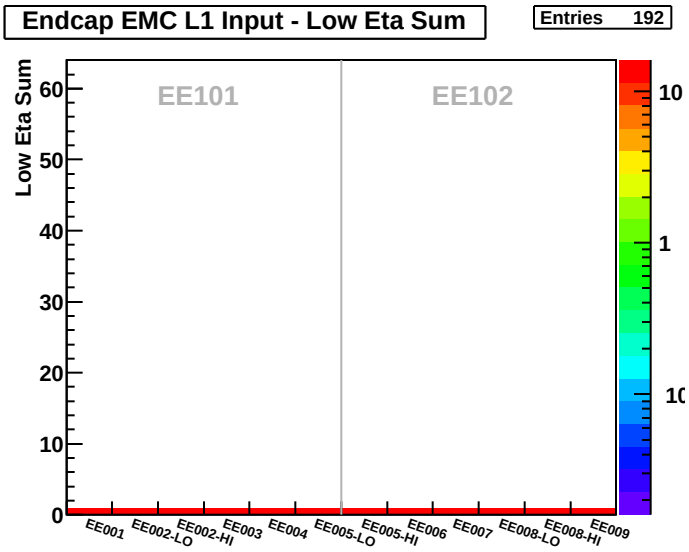

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

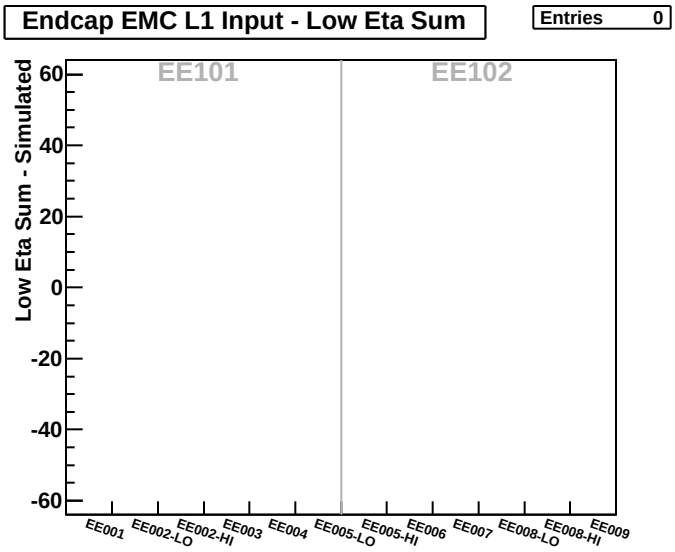

Barrel EMC L1 Input - High Eta Sum
Entries 576
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

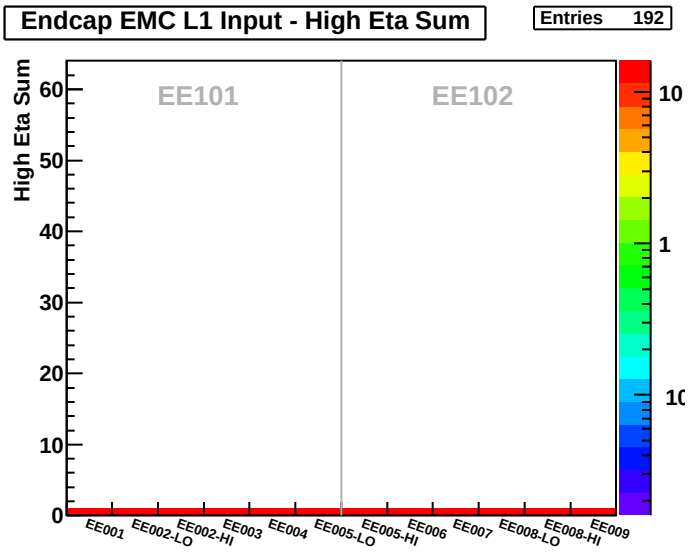

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

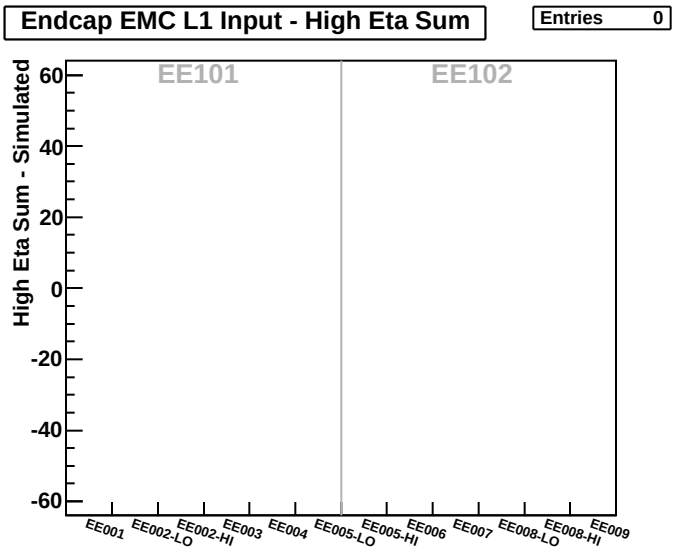

Barrel EMC L1 Input - High Tower Bits
Entries 576
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

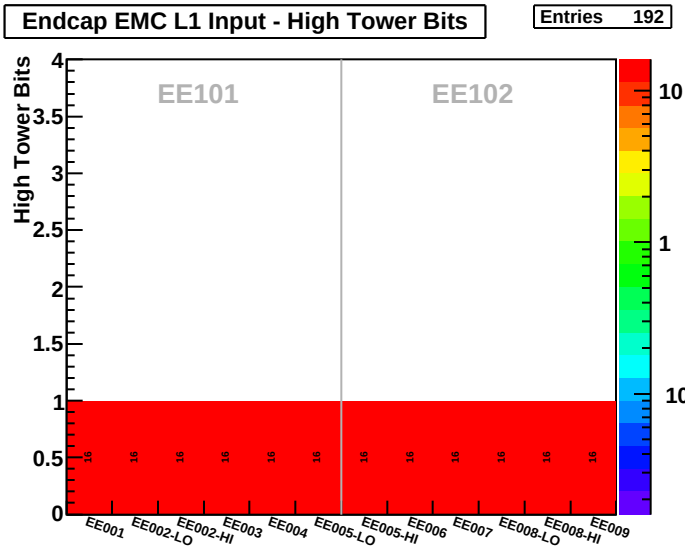

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

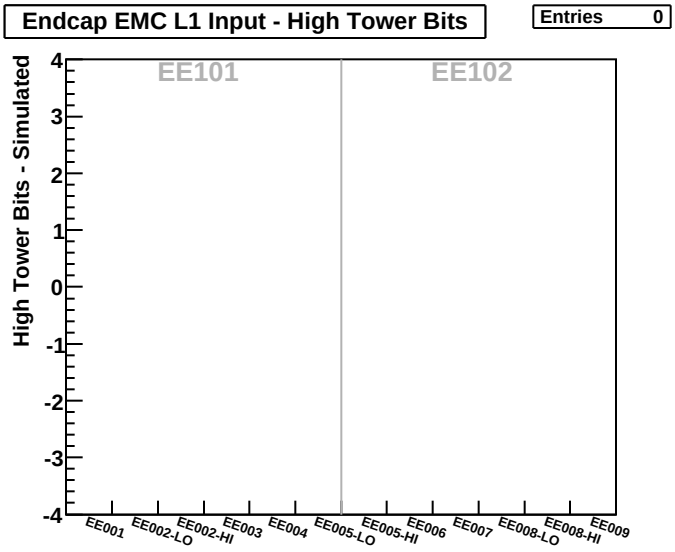

Endcap EMC L1 Input - Low Eta Sum
Entries 192
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

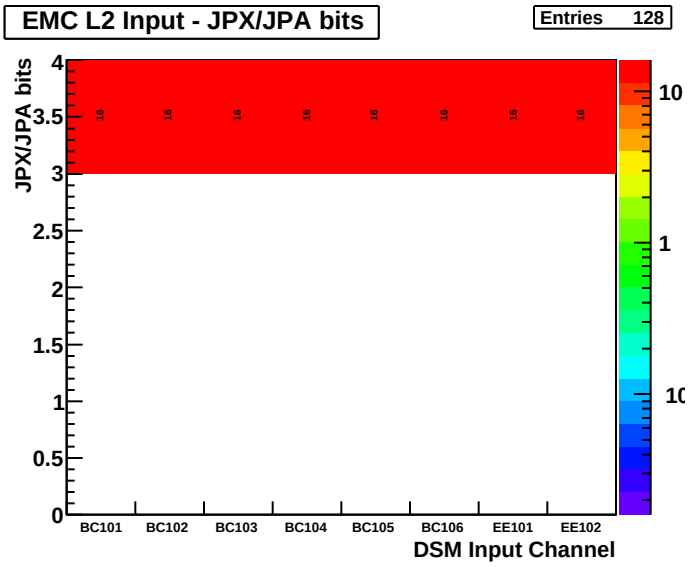

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

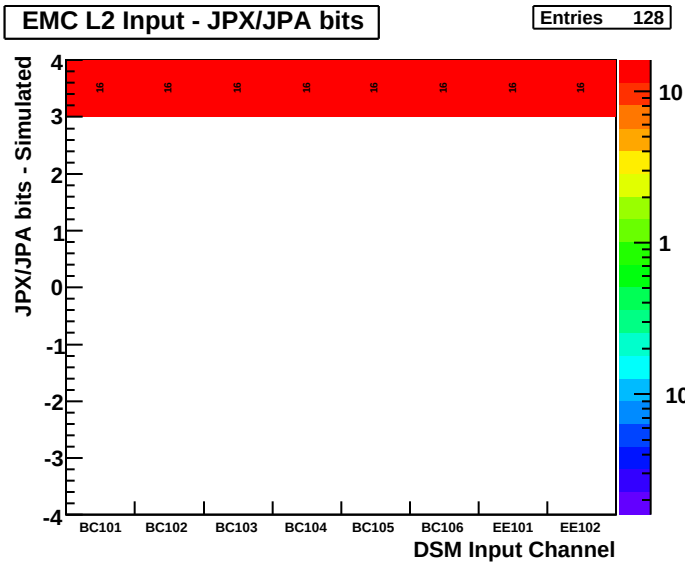

Endcap EMC L1 Input - High Eta Sum
Entries 192
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

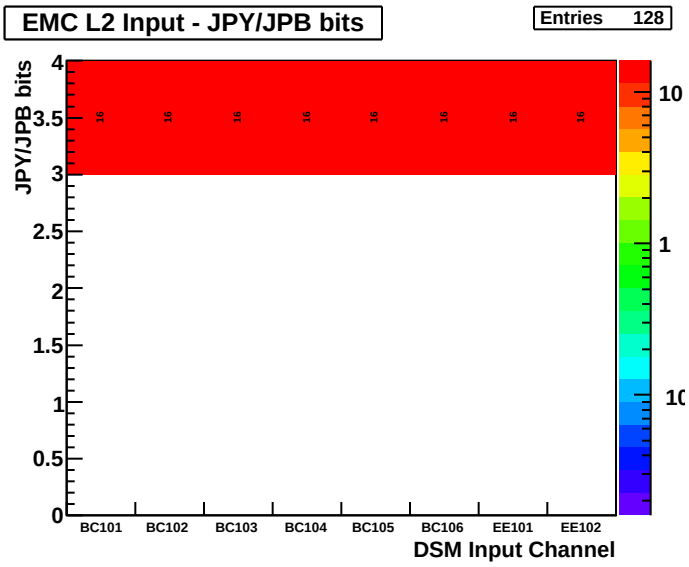

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

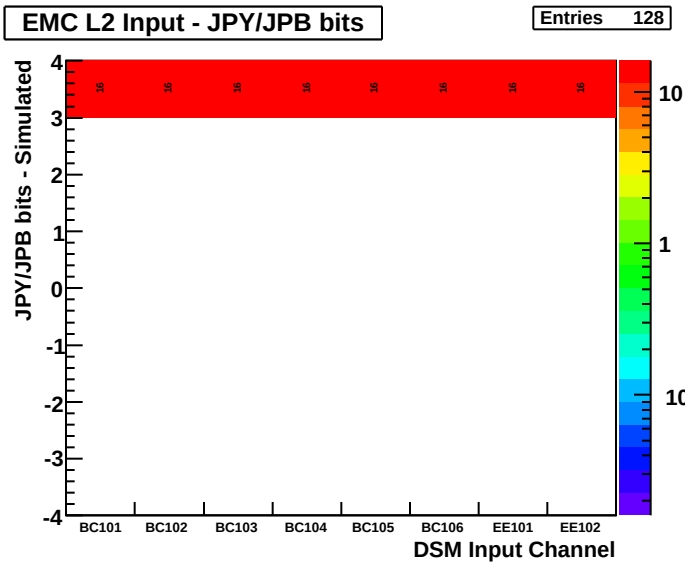

Endcap EMC L1 Input - High Tower Bits
Entries 192
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

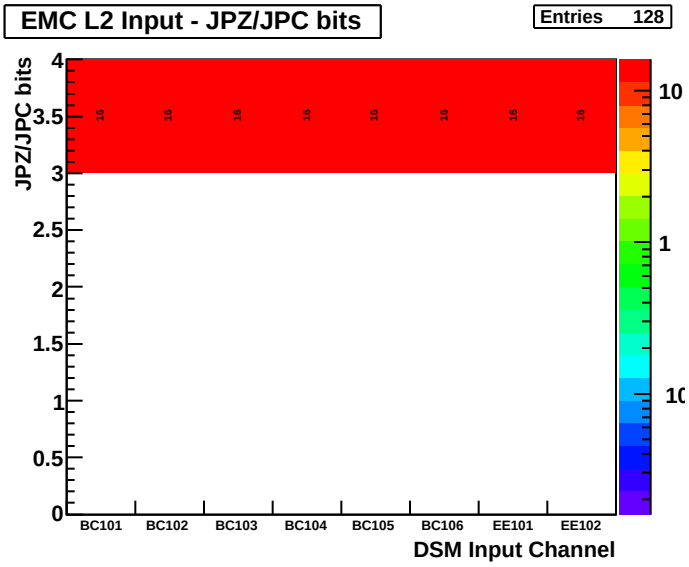

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

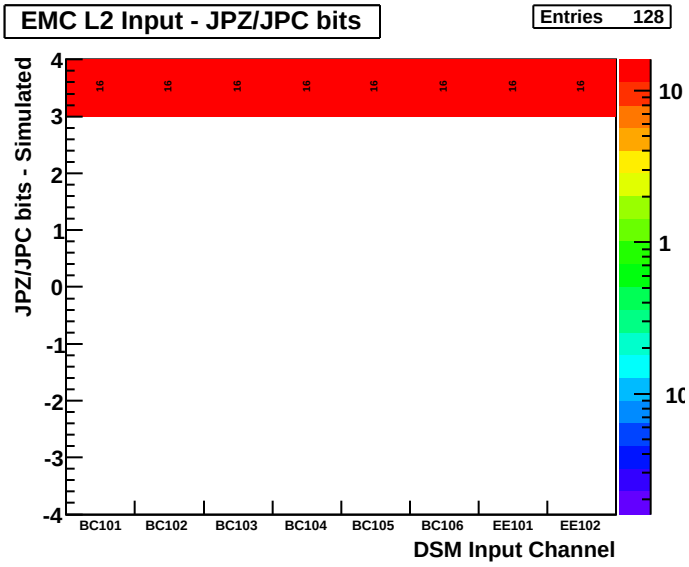

EMC L2 Input - JPX/JPA bits
Entries 128
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

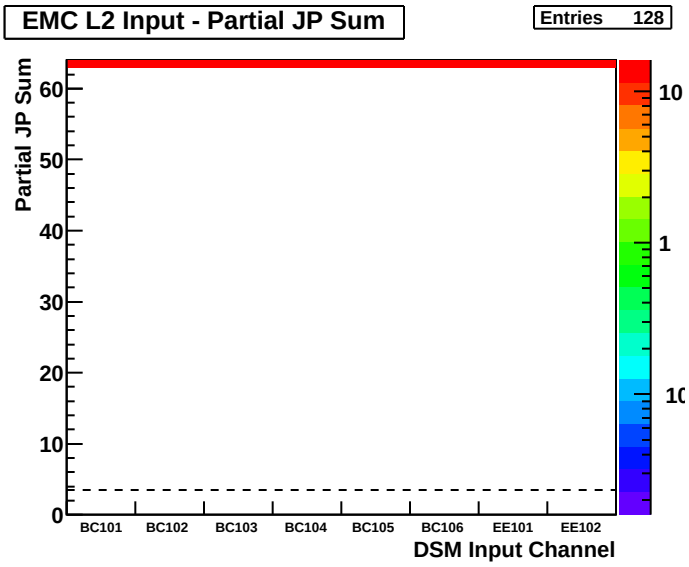

EMC L2 Input - JPX/JPA bits
Entries 128
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

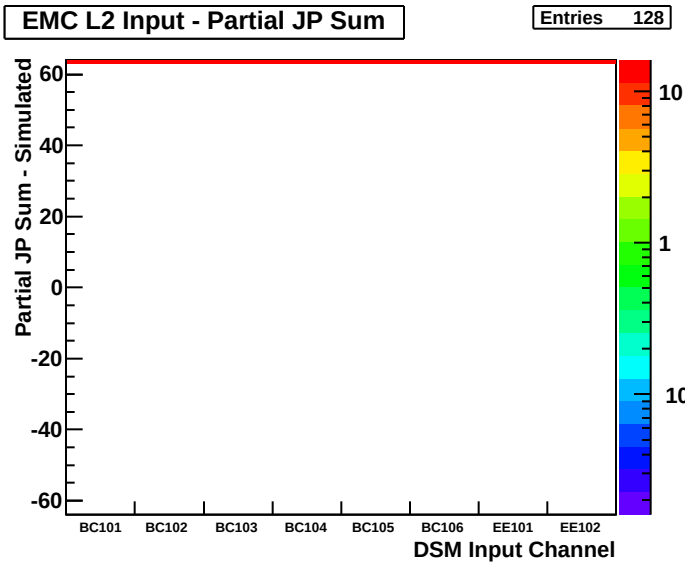

EMC L2 Input - JPY/JPB bits
Entries 128
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

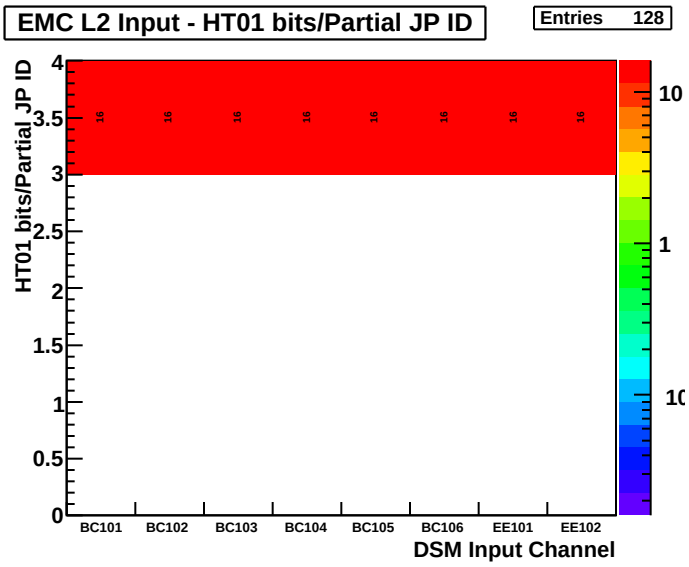

EMC L2 Input - JPY/JPB bits
Entries 128
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

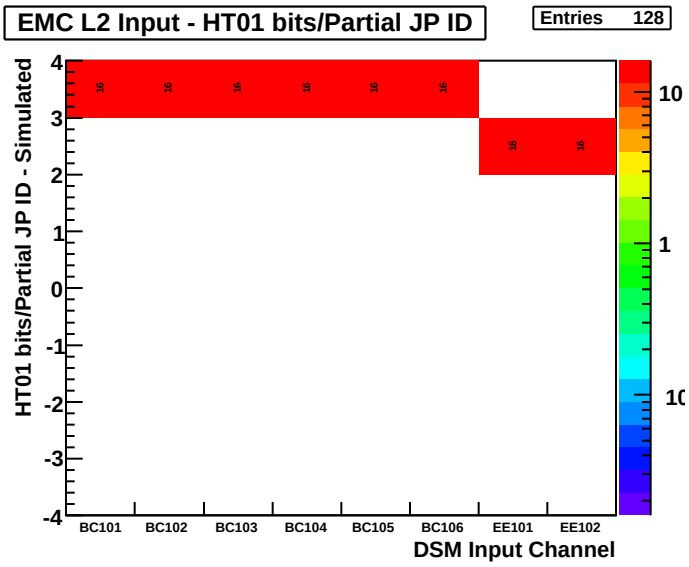

EMC L2 Input - JPZ/JPC bits
Entries 128
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

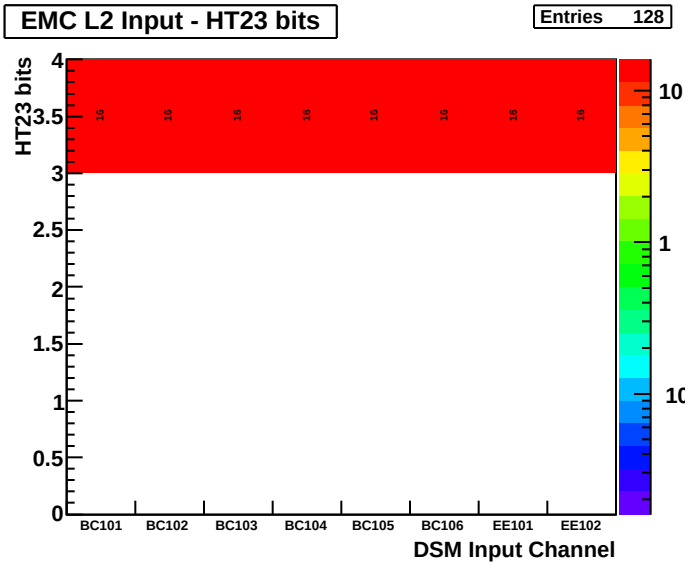

EMC L2 Input - JPZ/JPC bits
Entries 128
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

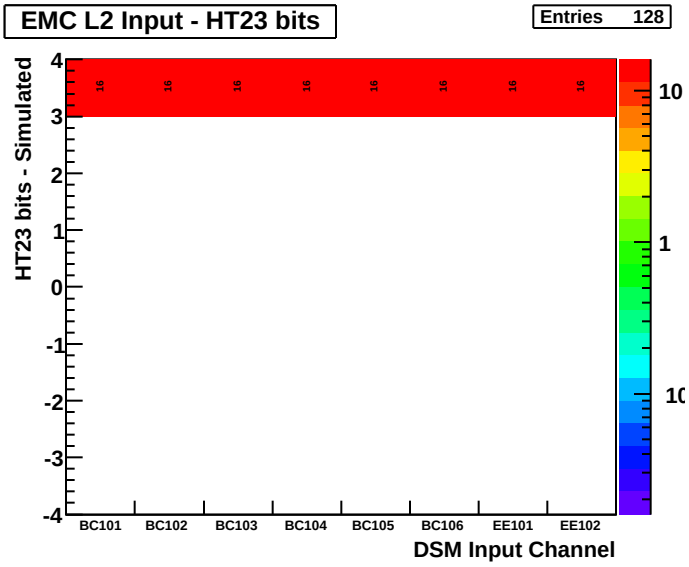

EMC L2 Input - Partial JP Sum
Entries 128
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

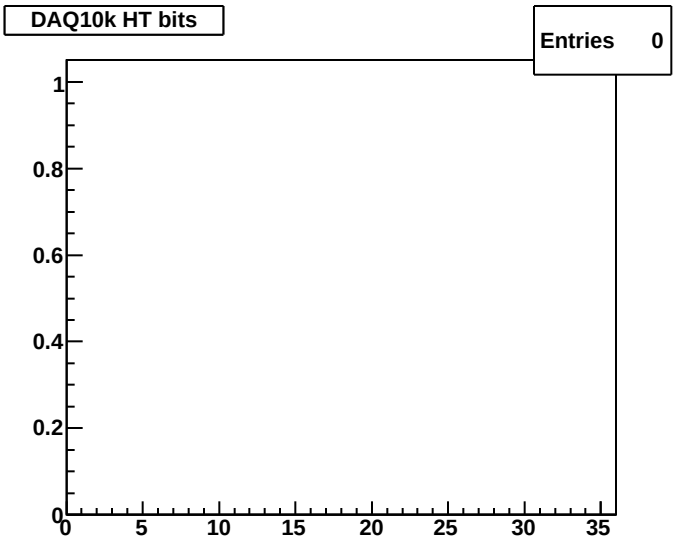

EMC L2 Input - Partial JP Sum
Entries 128
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

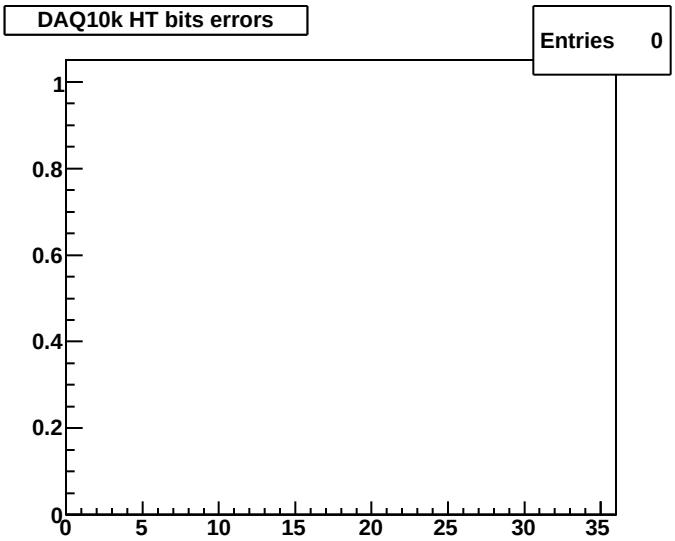

EMC L2 Input - HT01 bits/Partial JP ID
Entries 128
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

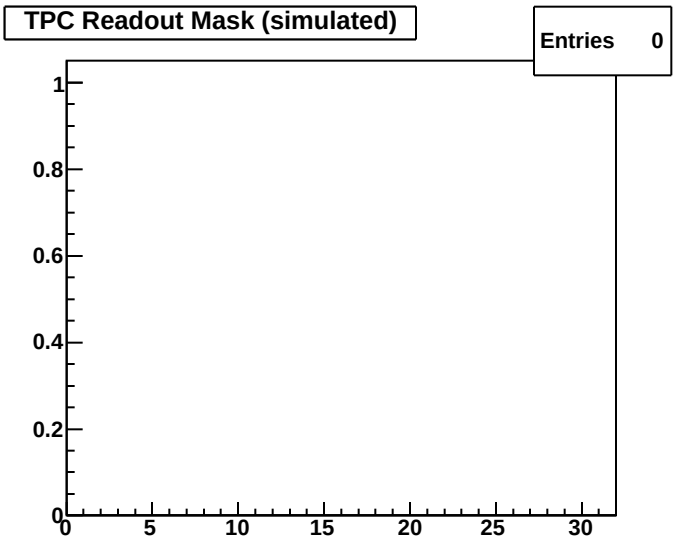

EMC L2 Input - HT01 bits/Partial JP ID
Entries 128
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

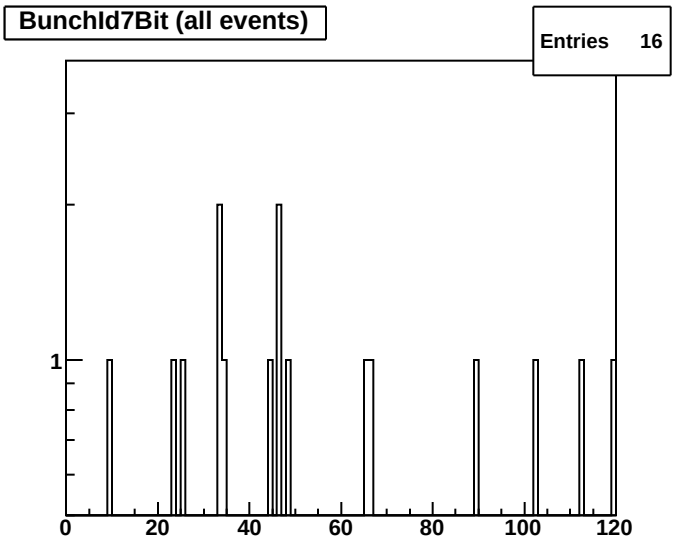

EMC L2 Input - HT23 bits
Entries 128
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

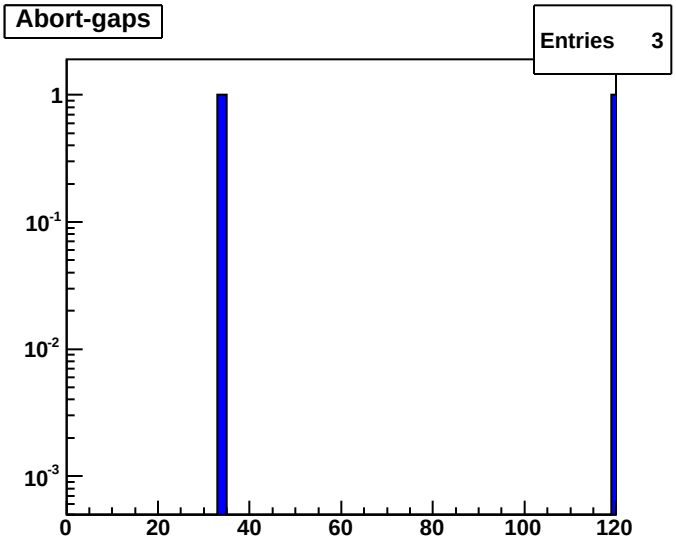

EMC L2 Input - HT23 bits
Entries 128
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

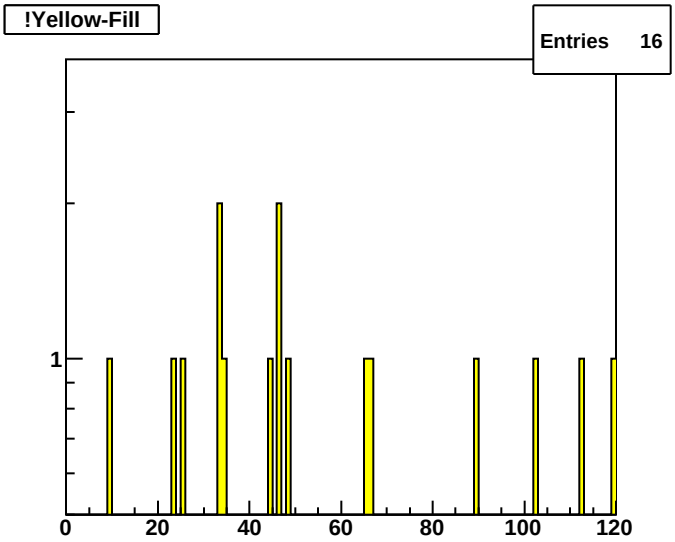

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

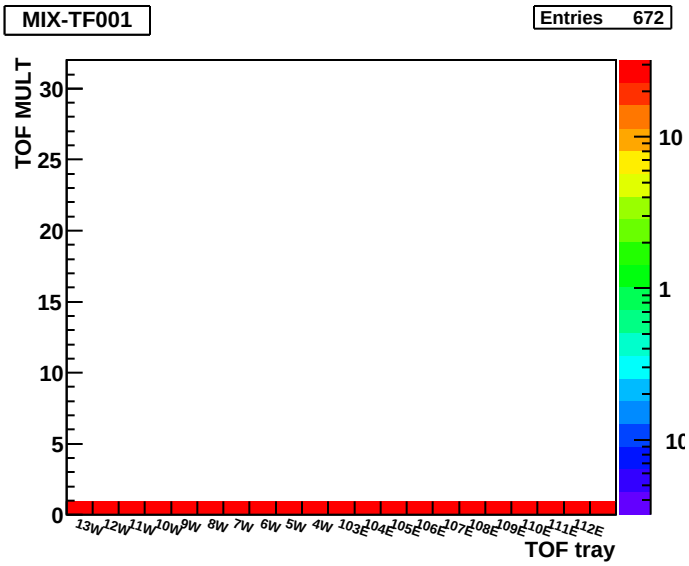

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

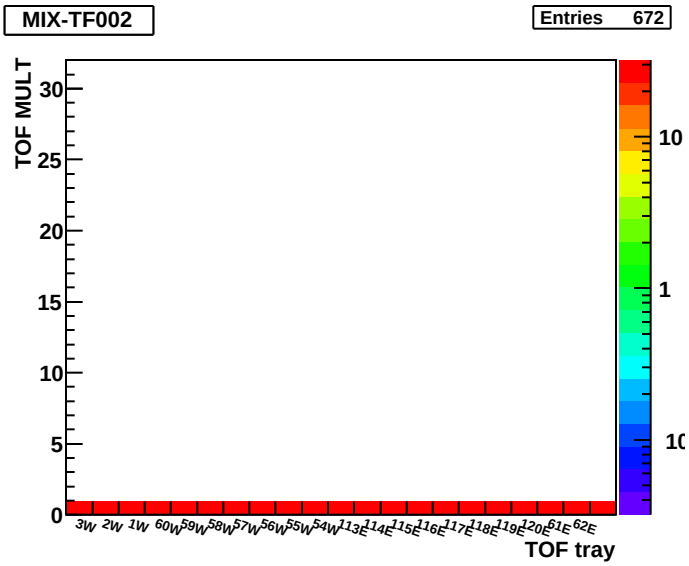

TPC Readout Mask (simulated)
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30

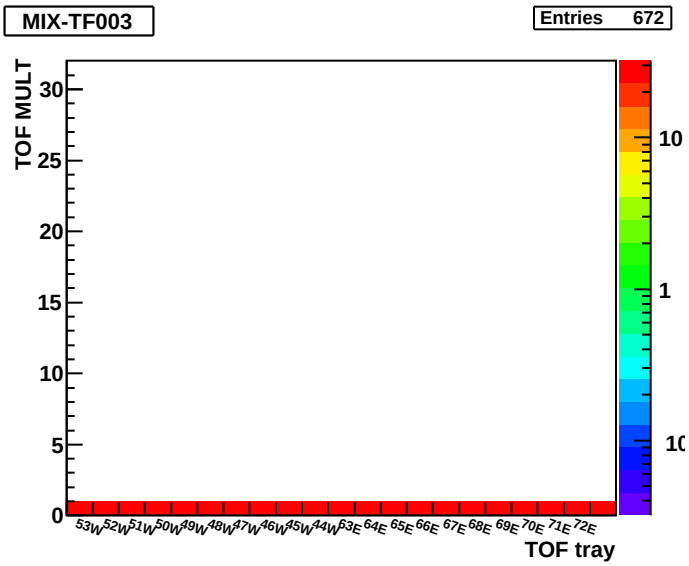

BunchId7Bit (all events)
Entries 16
1
0 20 40 60 80 100 120

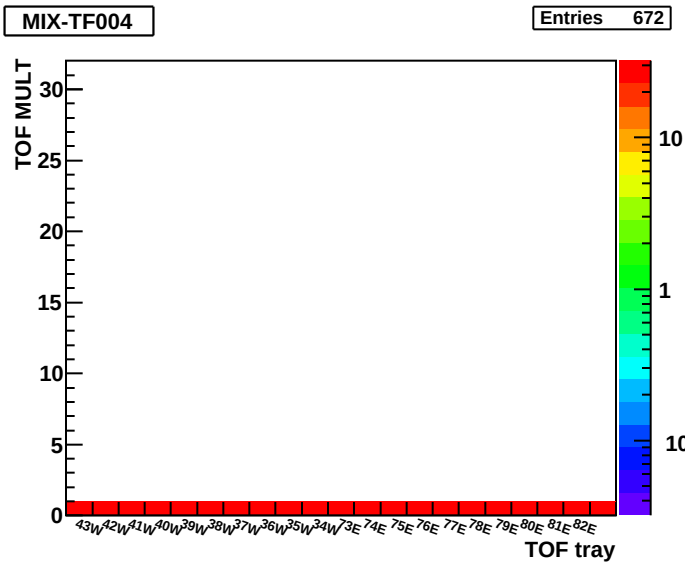

Abort-gaps
Entries 3
1
10-1
10-2
10-3
0 20 40 60 80 100 120

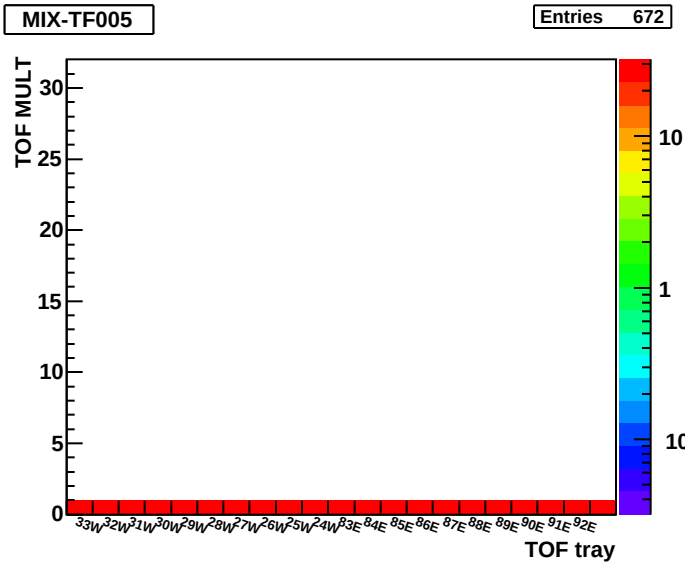

!Yellow-Fill
Entries 16
1
0 20 40 60 80 100 120

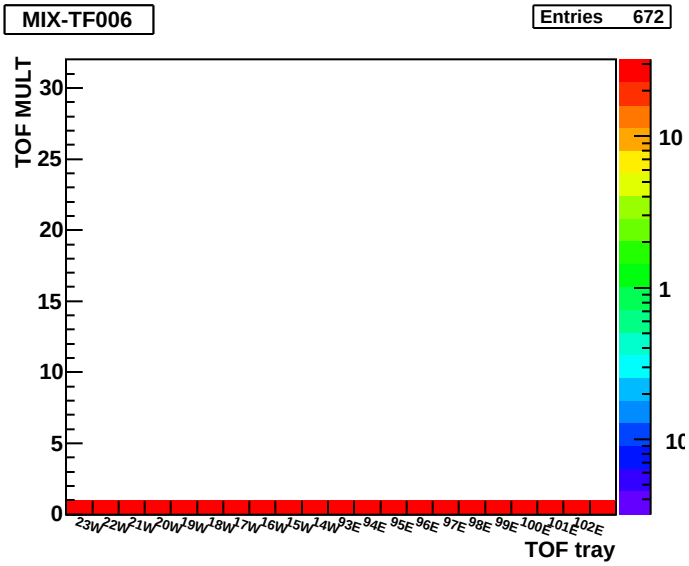

MIX-TF001
Entries 672
TOF MULT
TOF tray

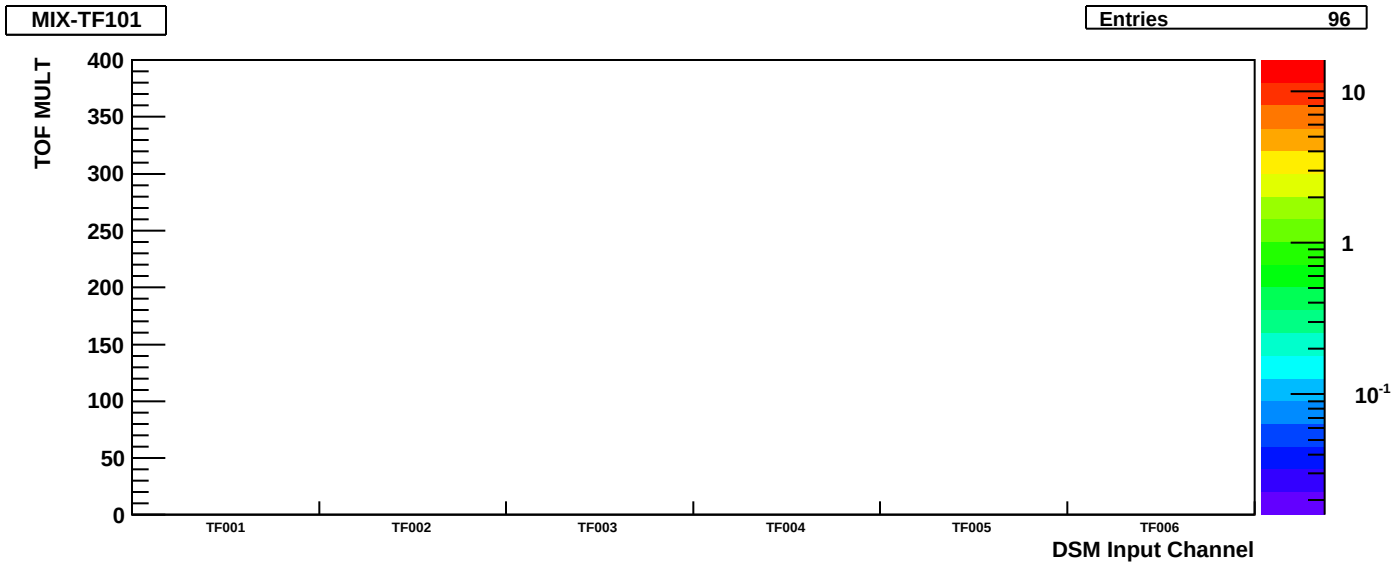

MIX-TF002
Entries 672
TOF MULT
TOF tray

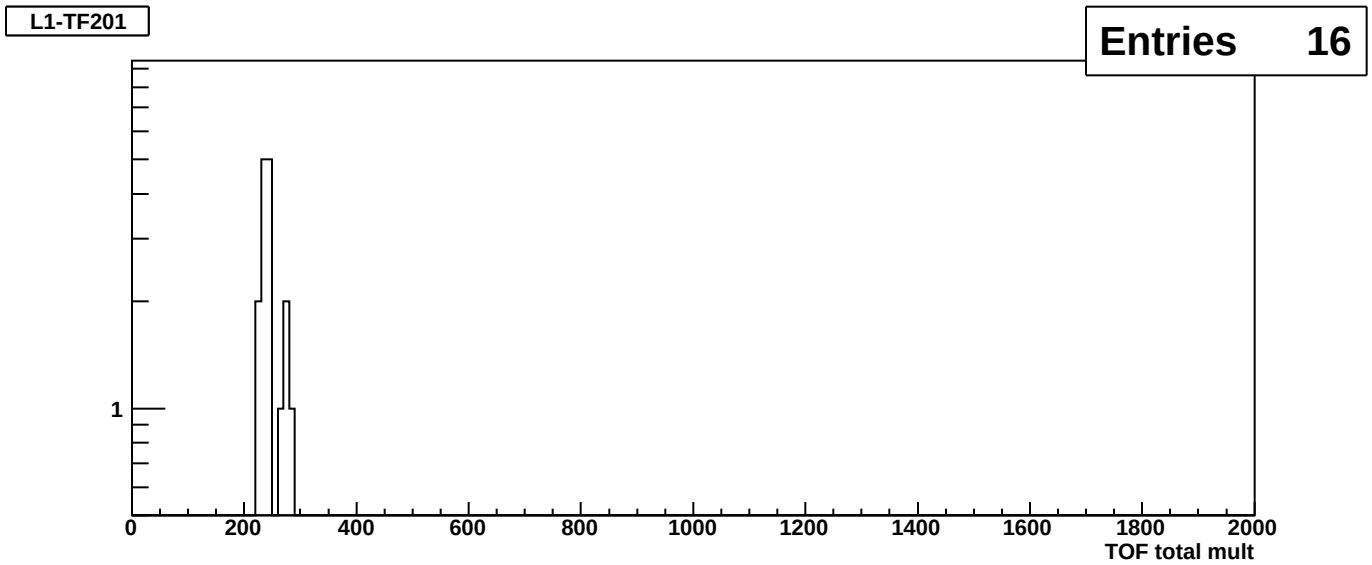

MIX-TF003
Entries 672
TOF MULT
TOF tray

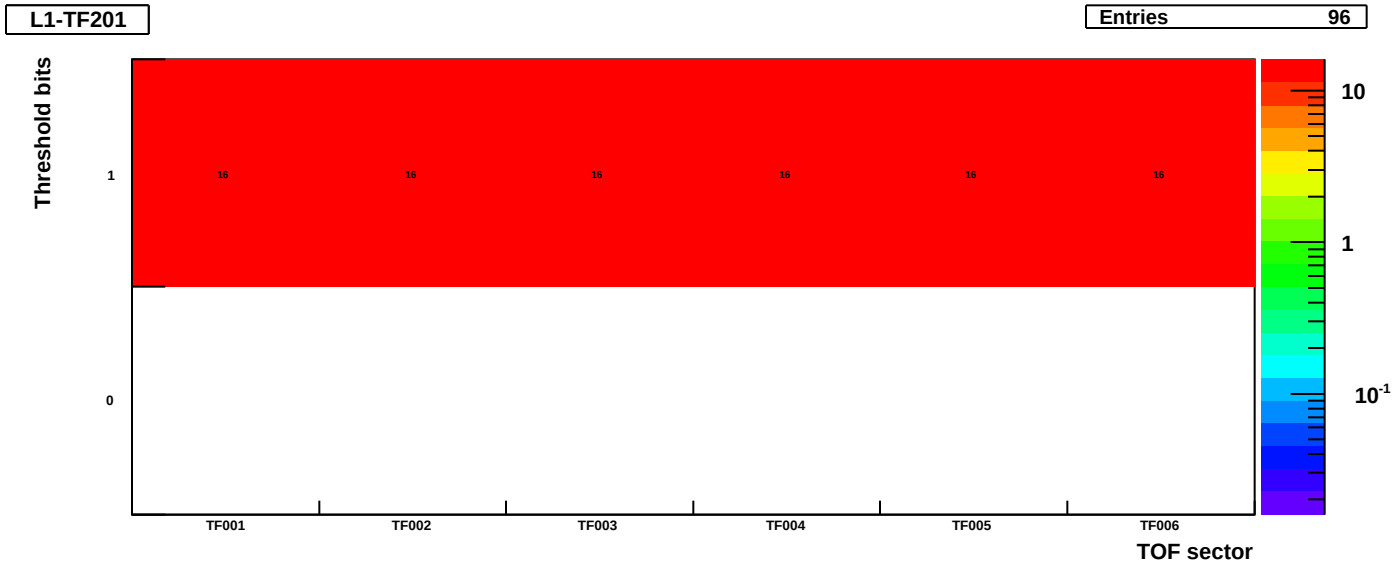

MIX-TF004
Entries 672
TOF MULT
TOF tray

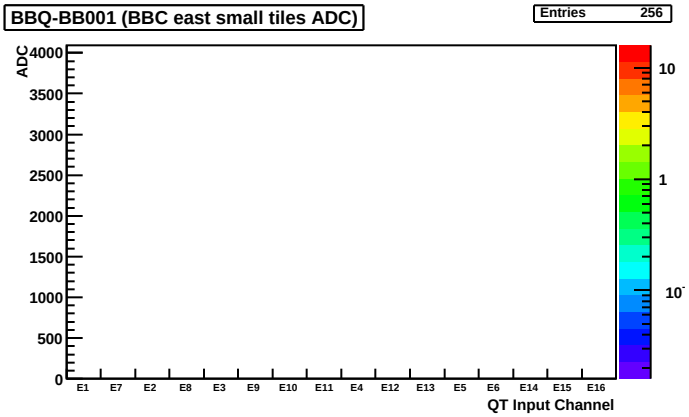

MIX-TF005
Entries 672
TOF MULT
TOF tray

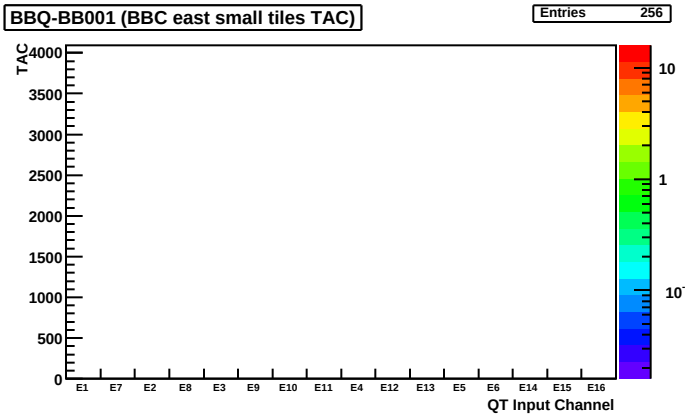

MIX-TF006
Entries 672
TOF MULT
TOF tray

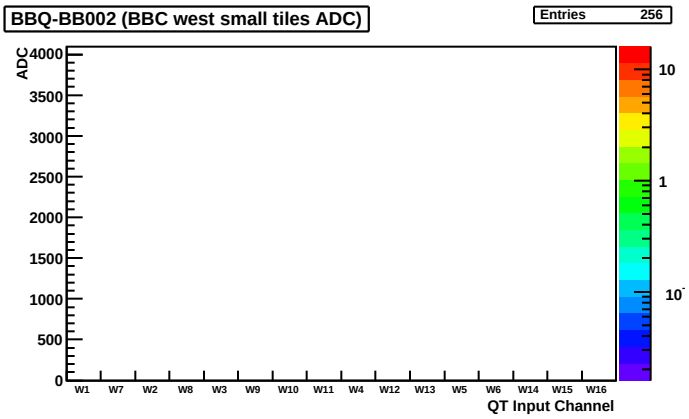

MIX-TF101
Entries 96
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10
1
10^{-1}

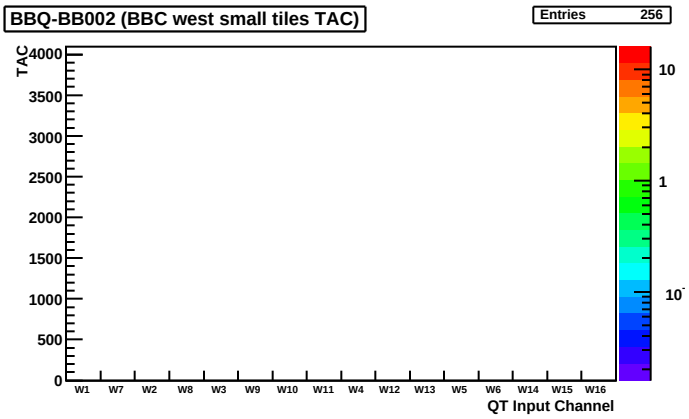

L1-TF201
Entries 16
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

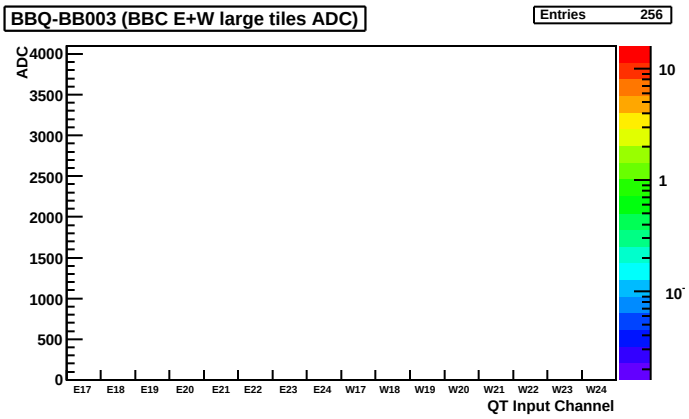

L1-TF201
Entries 96
Threshold bits
1
0
16
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10
1
10^{-1}

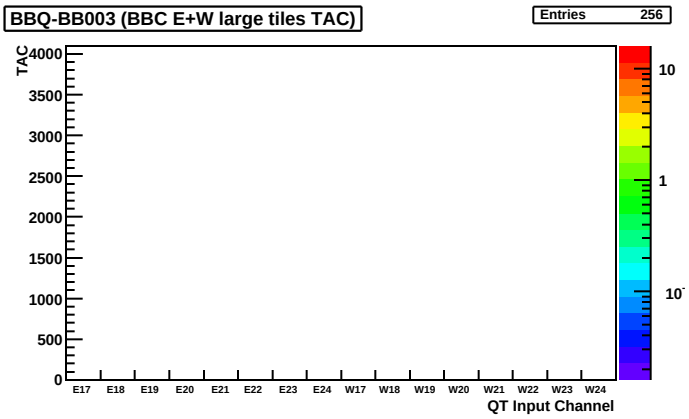

BBQ-BB001 (BBC east small tiles ADC)
Entries 256
ADC
QT Input Channel

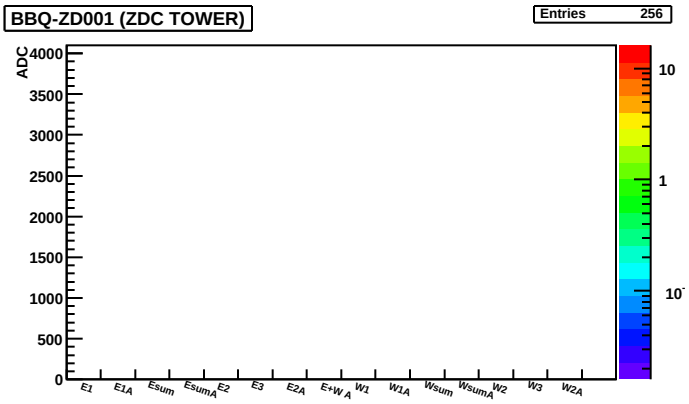

BBQ-BB001 (BBC east small tiles TAC)
Entries 256
TAC
QT Input Channel

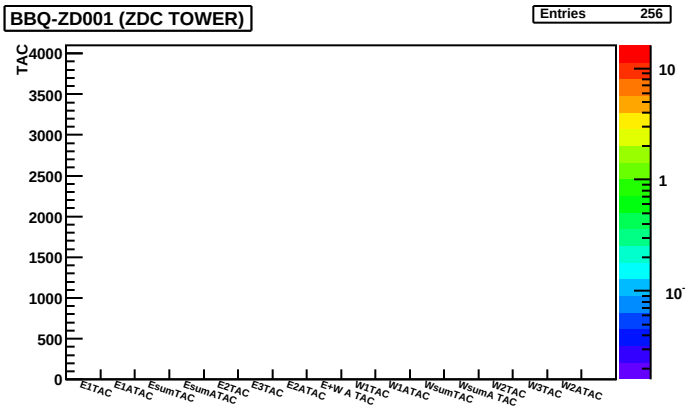

BBQ-BB002 (BBC west small tiles ADC)
Entries 256
ADC
QT Input Channel

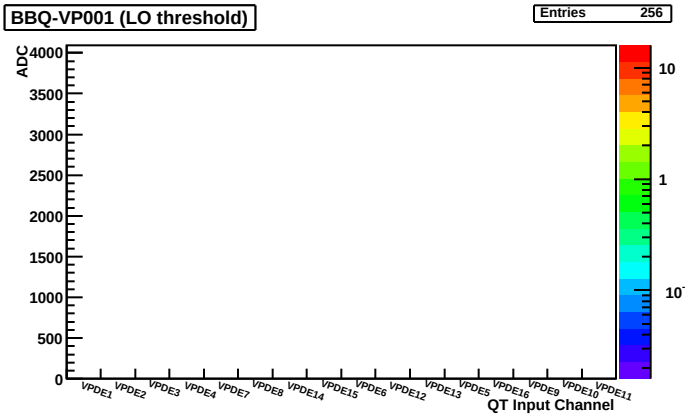

BBQ-BB002 (BBC west small tiles TAC)
Entries 256
TAC
QT Input Channel

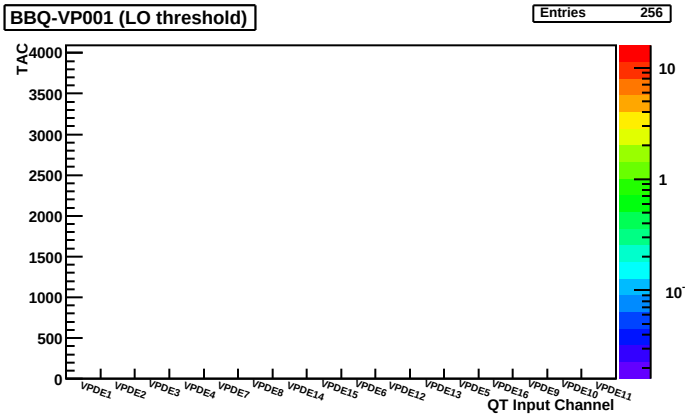

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 256
ADC
QT Input Channel

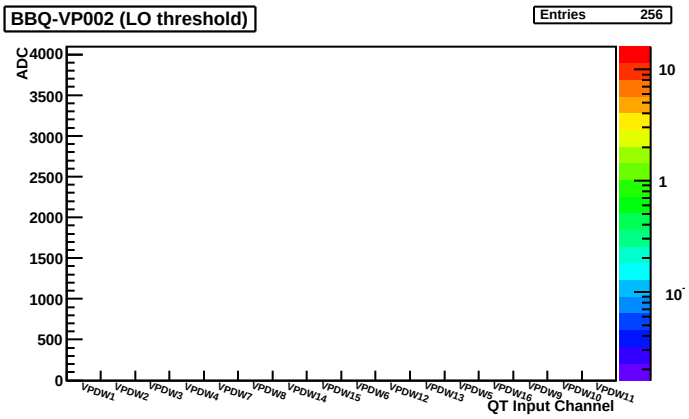

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 256
TAC
QT Input Channel

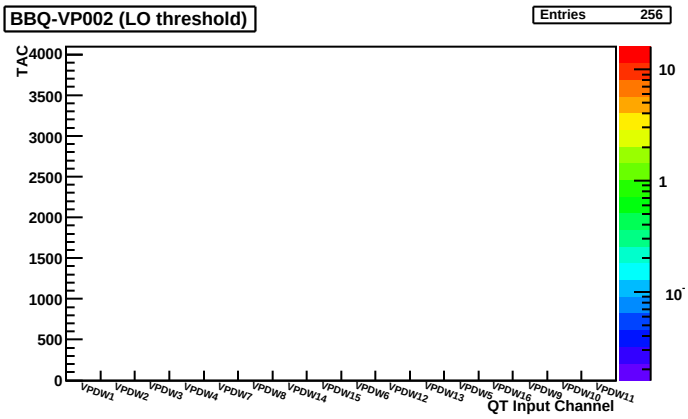

BBQ-ZD001 (ZDC TOWER)
Entries 256
ADC

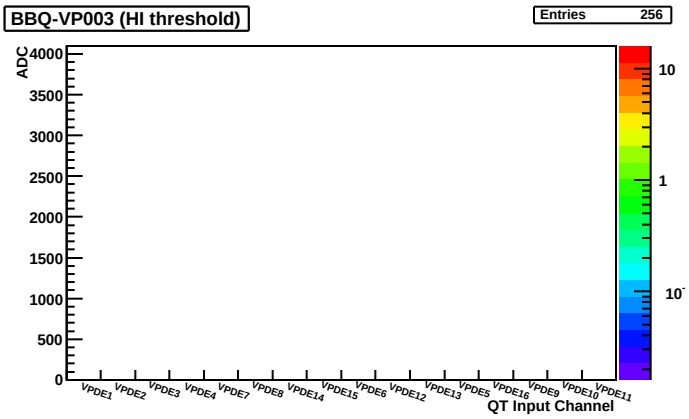

BBQ-ZD001 (ZDC TOWER)
Entries 256
TAC

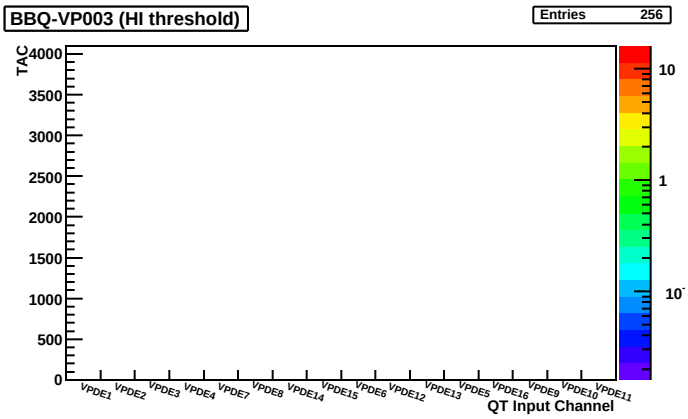

BBQ-VP001 (LO threshold)
Entries 256
ADC
QT Input Channel

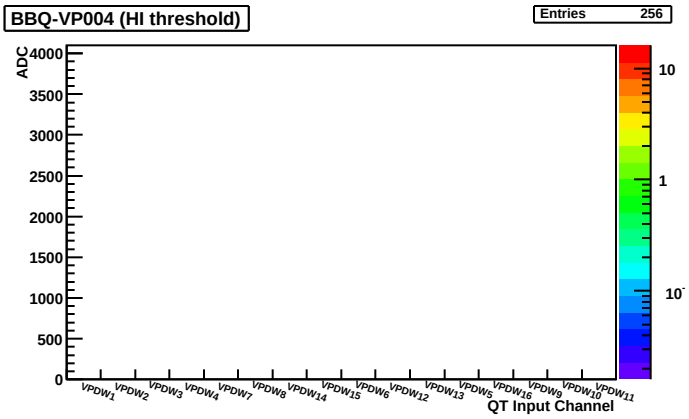

BBQ-VP001 (LO threshold)
Entries 256
TAC
QT Input Channel

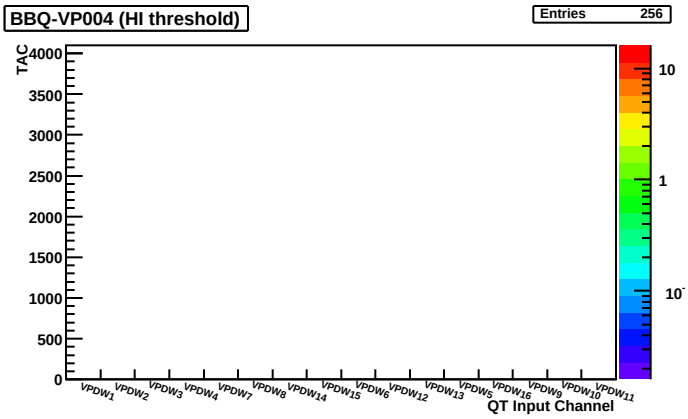

BBQ-VP002 (LO threshold)
Entries 256
ADC
QT Input Channel

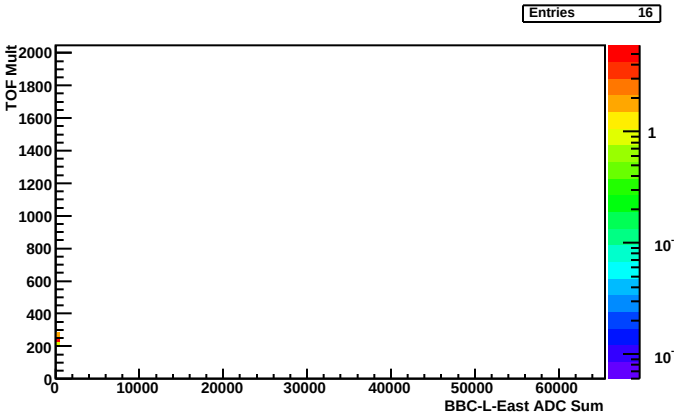

BBQ-VP002 (LO threshold)
Entries 256
TAC
QT Input Channel

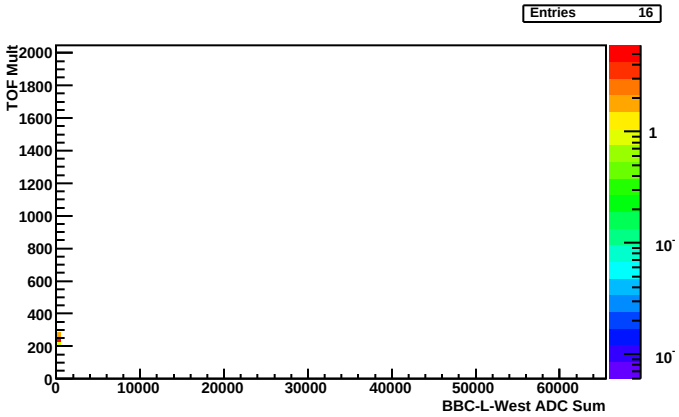

BBQ-VP003 (HI threshold)
Entries 256
ADC
QT Input Channel

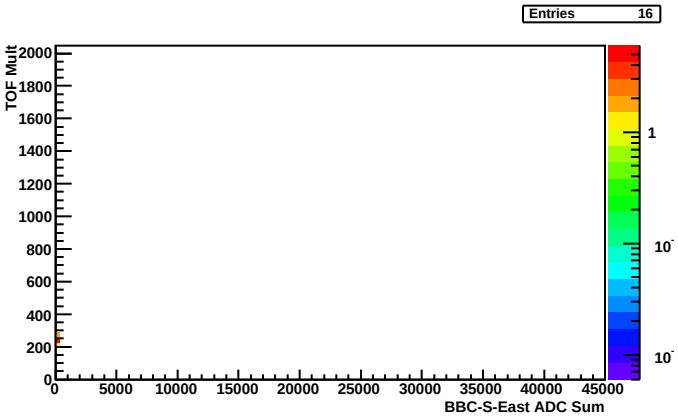

BBQ-VP003 (HI threshold)
Entries 256
TAC
QT Input Channel

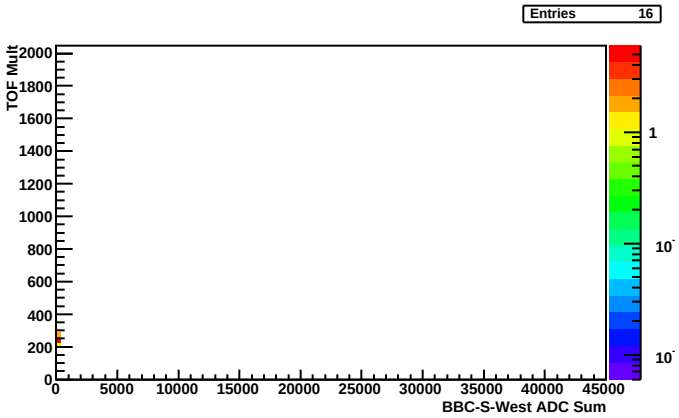

BBQ-VP004 (HI threshold)
Entries 256
ADC
QT Input Channel

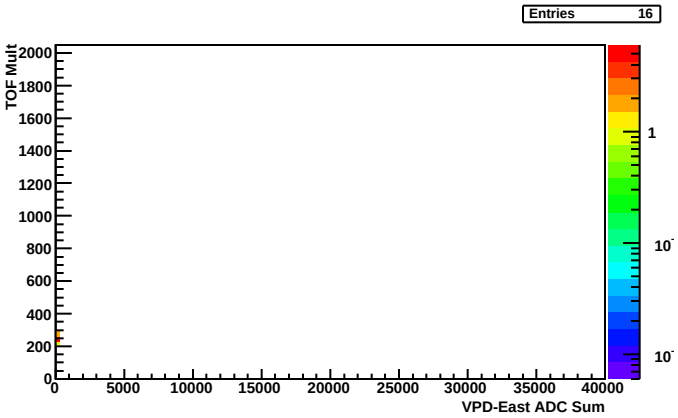

BBQ-VP004 (HI threshold)
Entries 256
TAC
QT Input Channel

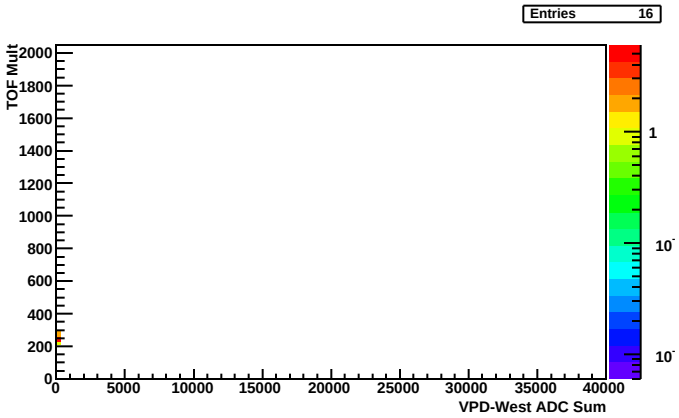

Entries 16
TOF Mult
BBC-L-East ADC Sum

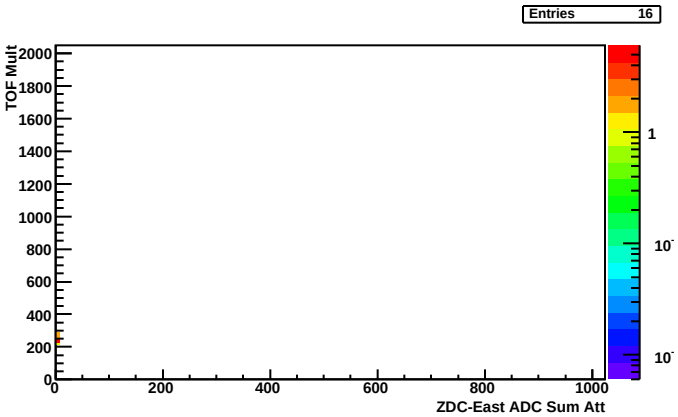

Entries 16
TOF Mult
BBC-L-West ADC Sum

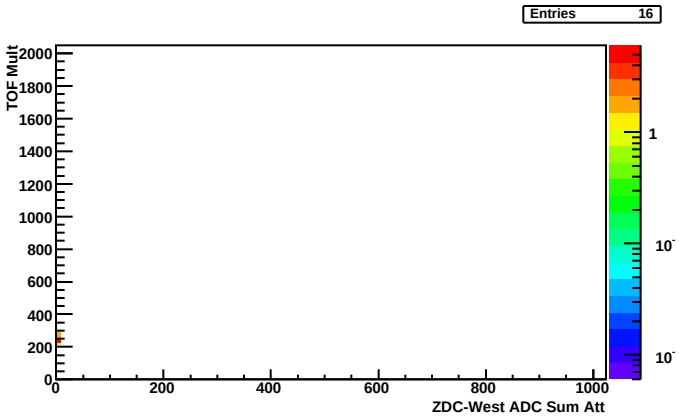

Entries 16
TOF Mult
BBC-S-East ADC Sum

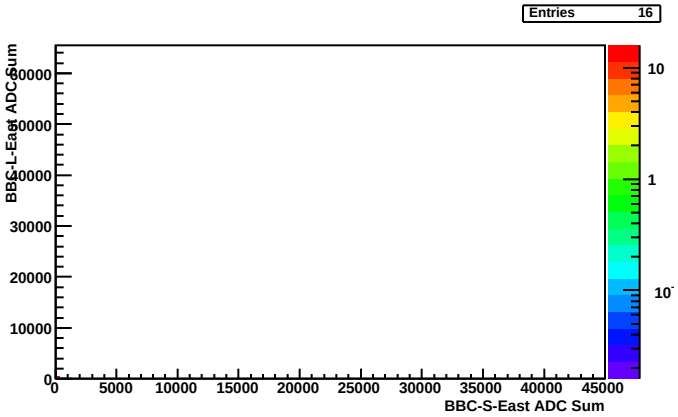

Entries 16
TOF Mult
BBC-S-West ADC Sum

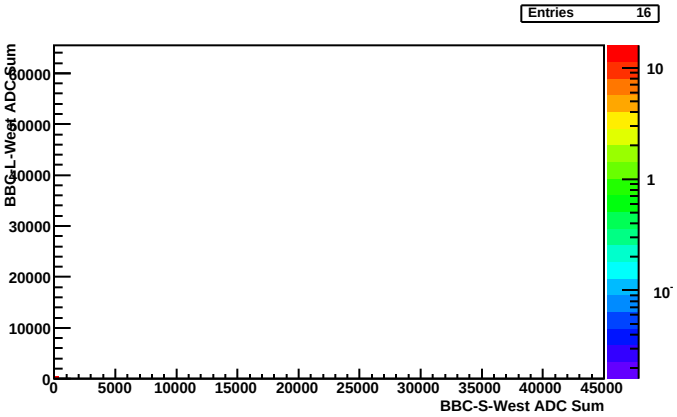

Entries 16
TOF Mult
VPD-East ADC Sum

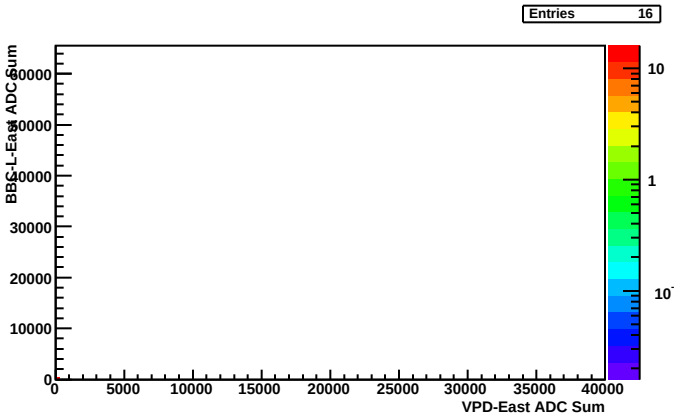

Entries 16
TOF Mult
VPD-West ADC Sum

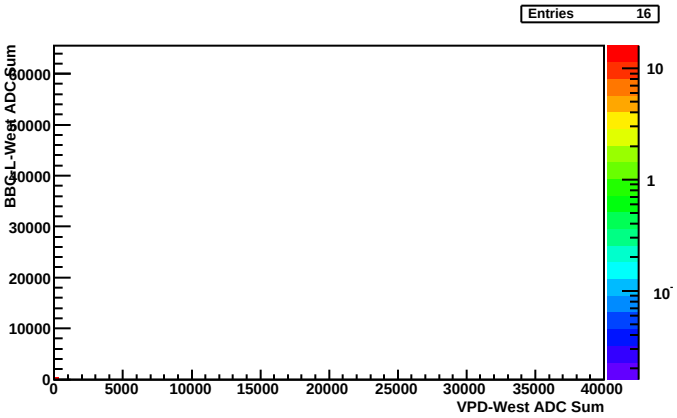

Entries 16
TOF Mult
ZDC-East ADC Sum Att

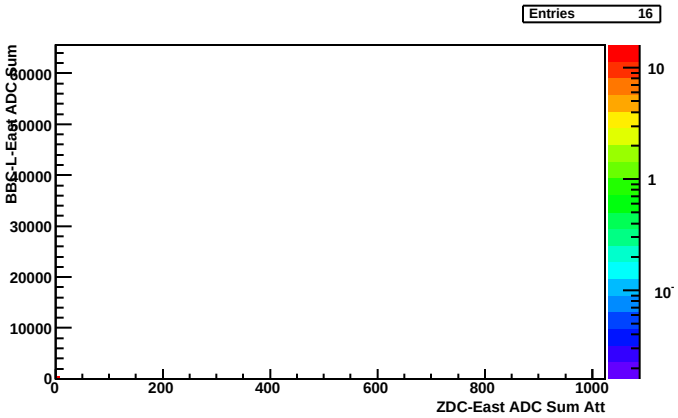

Entries 16
TOF Mult
ZDC-West ADC Sum Att

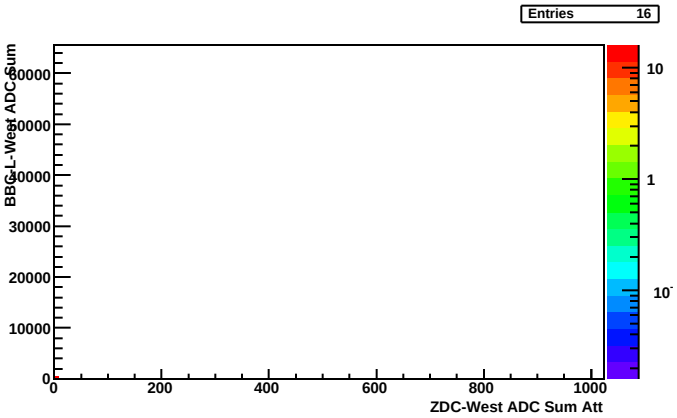

Entries 16
BBC-L-East ADC Sum
BBC-S-East ADC Sum

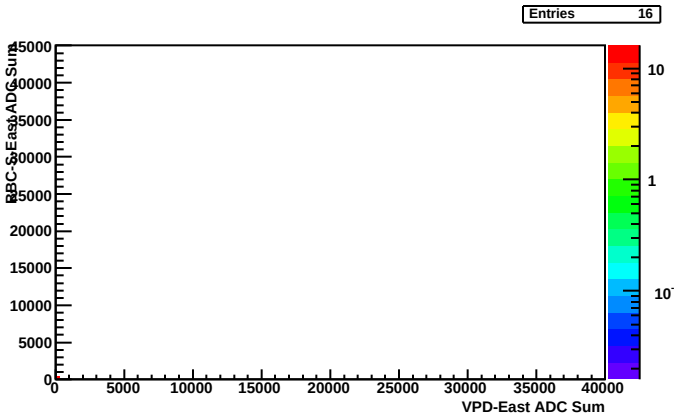

Entries 16
BBC-L-West ADC Sum
BBC-S-West ADC Sum

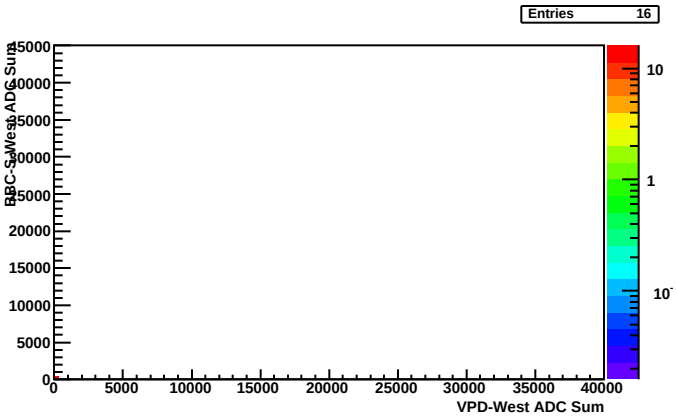

Entries 16
BBC-L-East ADC Sum
VPD-East ADC Sum

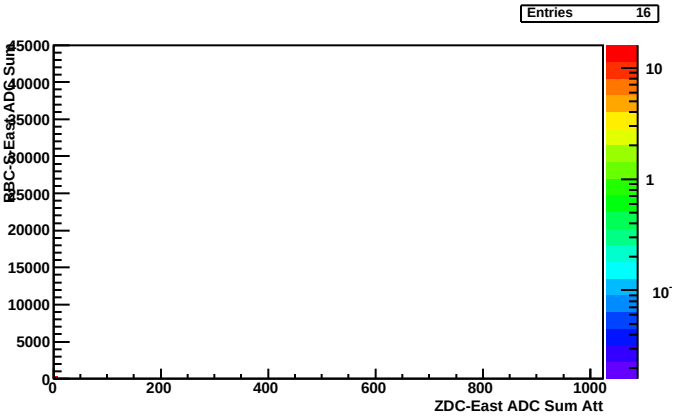

Entries 16
BBC-L-West ADC Sum
VPD-West ADC Sum

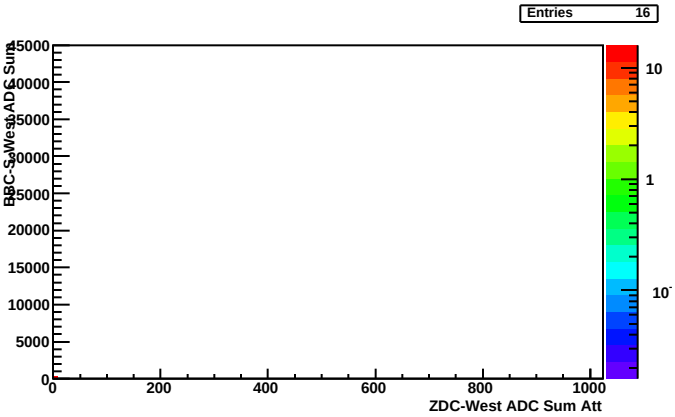

Entries 16
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

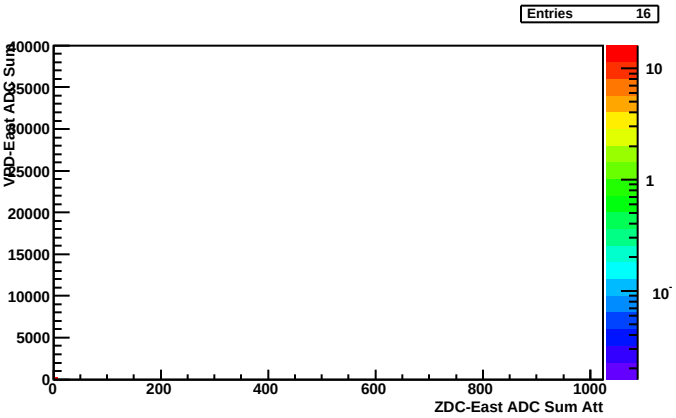

Entries 16
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

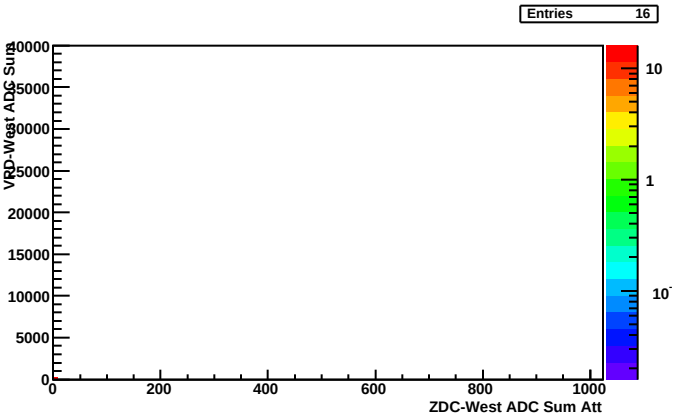

Entries 16
BBC-S-East ADC Sum
VPD-East ADC Sum

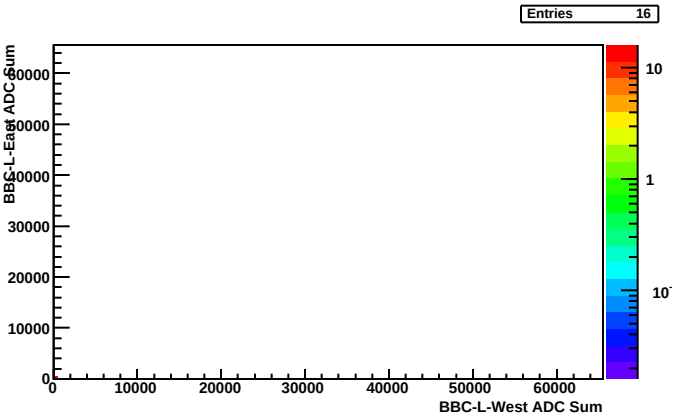

Entries 16
BBC-S-West ADC Sum
VPD-West ADC Sum

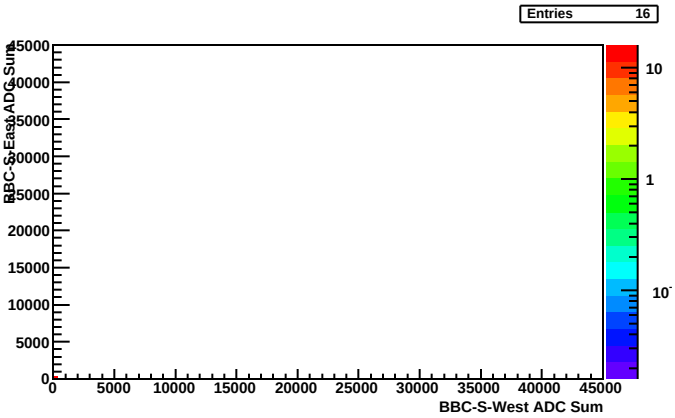

Entries 16
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

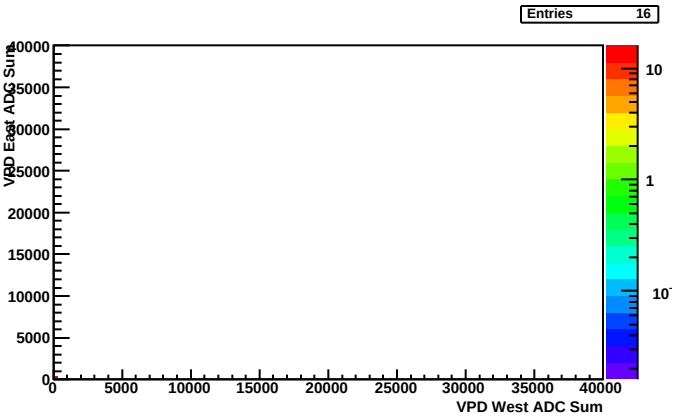

Entries 16
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

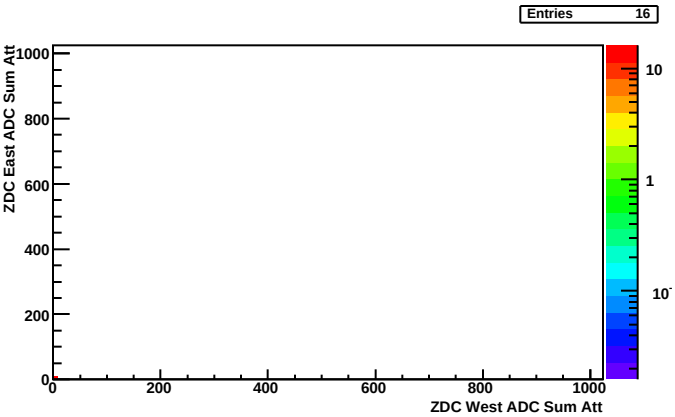

Entries 16
VPD-East ADC Sum
ZDC-East ADC Sum Att

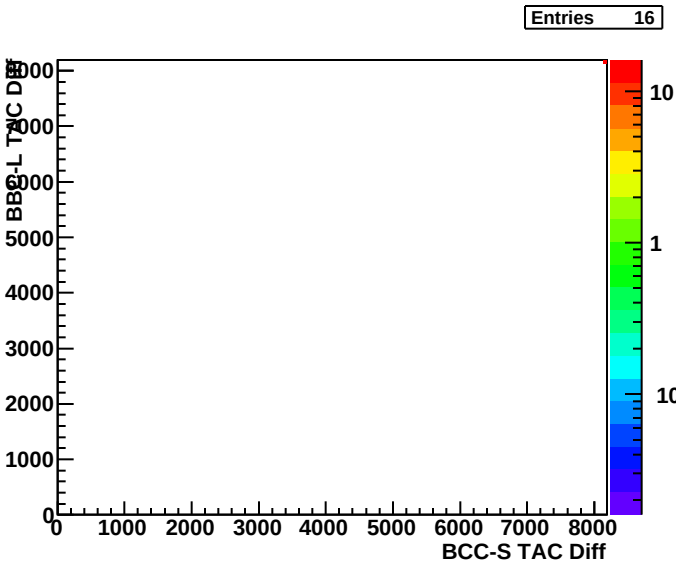

Entries 16
VPD-West ADC Sum
ZDC-West ADC Sum Att

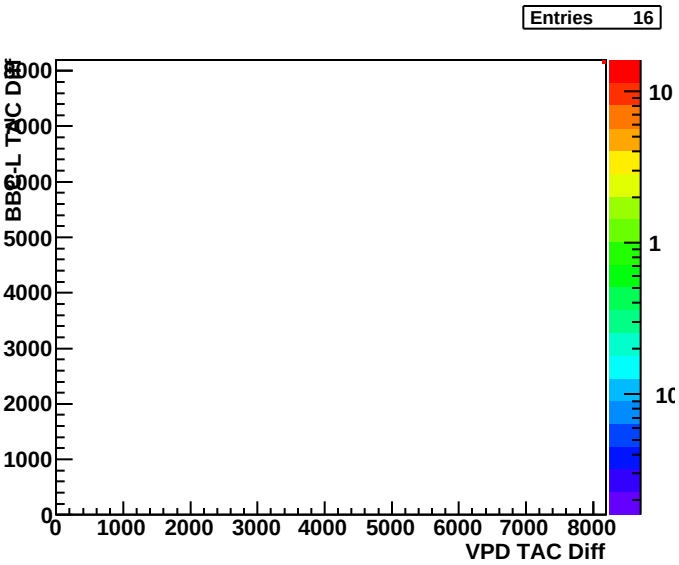

Entries 16
BBC-L-East ADC Sum
BBC-L-West ADC Sum

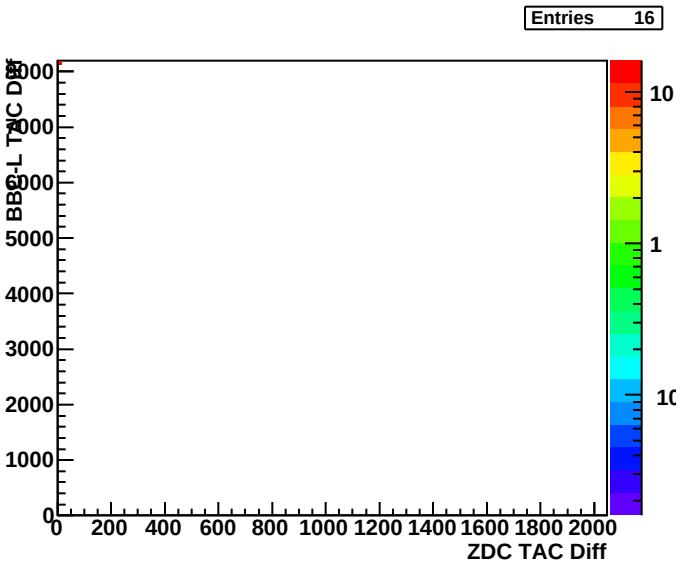

Entries 16
BBC-S-East ADC Sum
BBC-S-West ADC Sum

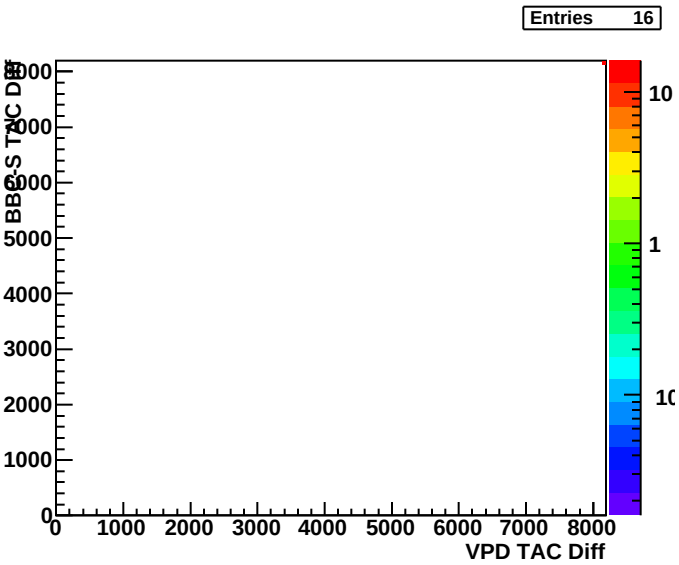

Entries 16
VPD East ADC Sum
VPD West ADC Sum

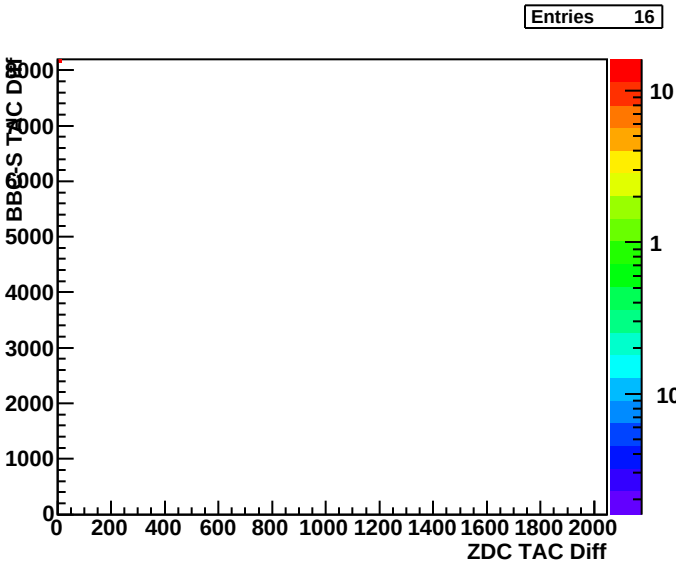

Entries 16
ZDC East ADC Sum Att
ZDC West ADC Sum Att

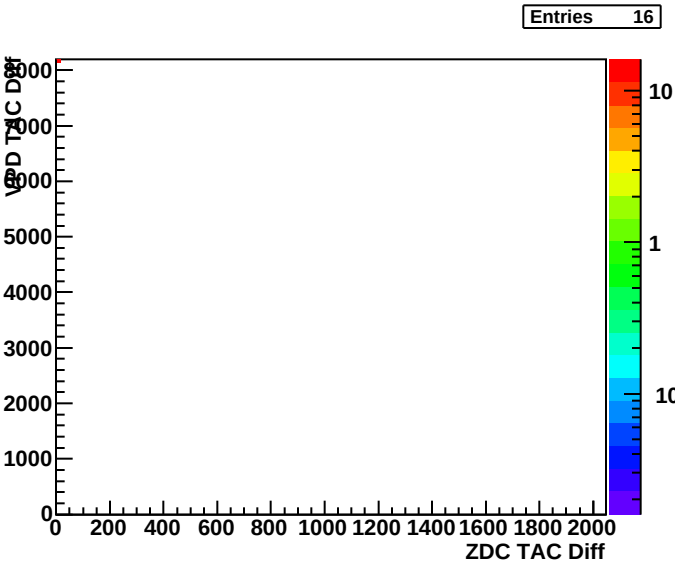

Entries 16
BBC-L TAC Diff
BCC-S TAC Diff

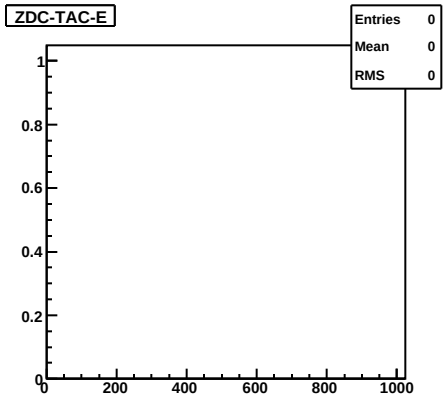

Entries 16
BBC-L TAC Diff
VPD TAC Diff

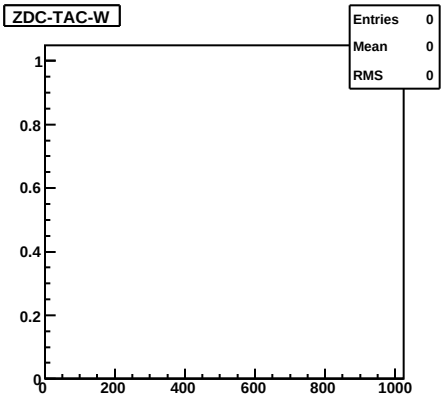

Entries 16
BBC-L TAC Diff
ZDC TAC Diff

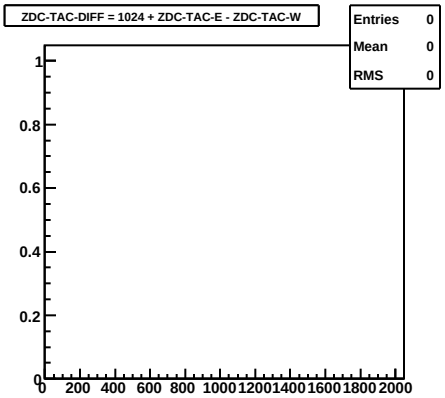

Entries 16
BBC-S TAC Diff
VPD TAC Diff

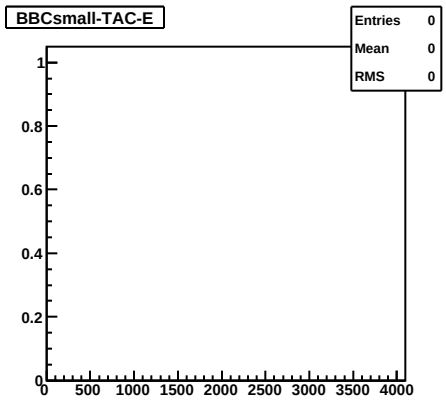

Entries 16
BBC-S TAC Diff
ZDC TAC Diff

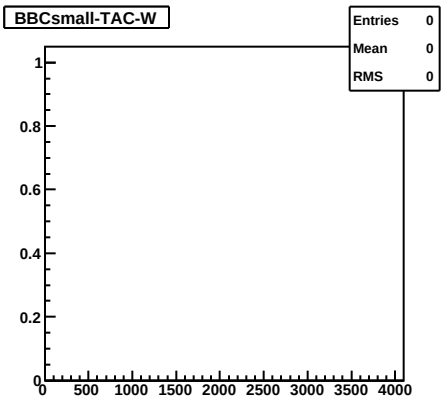

Entries 16
VPD TAC Diff
ZDC TAC Diff

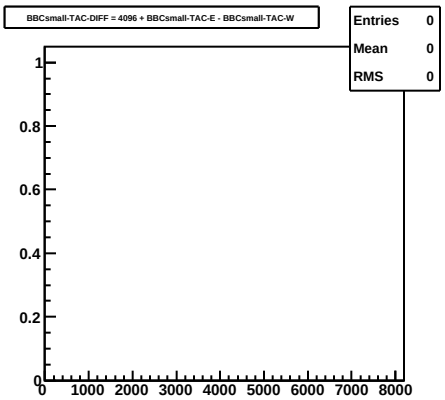

ZDC-TAC-E
Entries 0
Mean 0
RMS 0

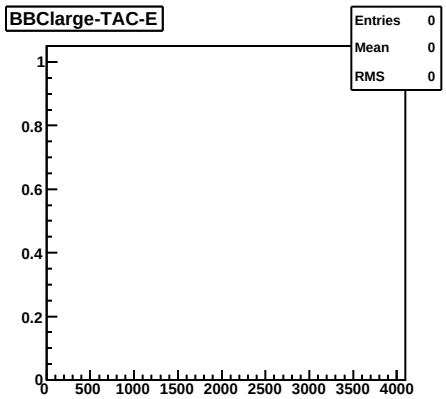

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

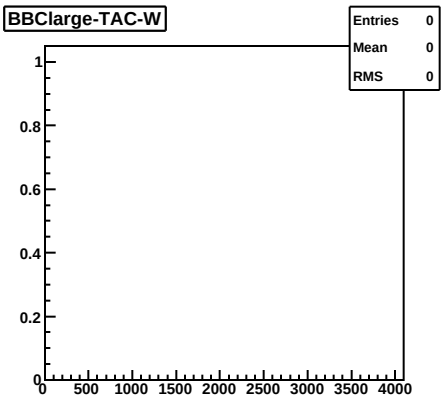

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

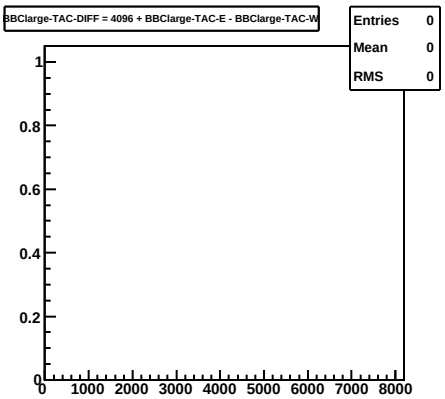

BBCsmall-TAC-E
Entries 0
Mean 0
RMS 0

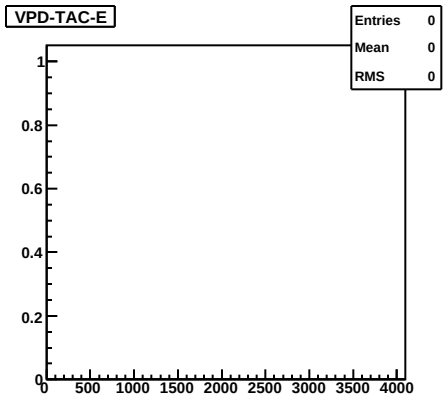

BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

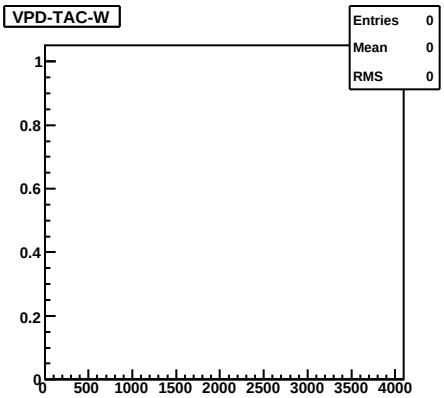

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

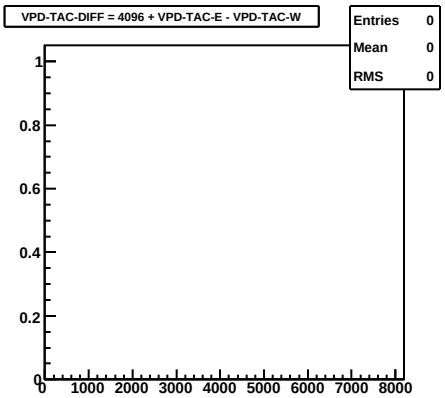

BBClarge-TAC-E
Entries 0
Mean 0
RMS 0

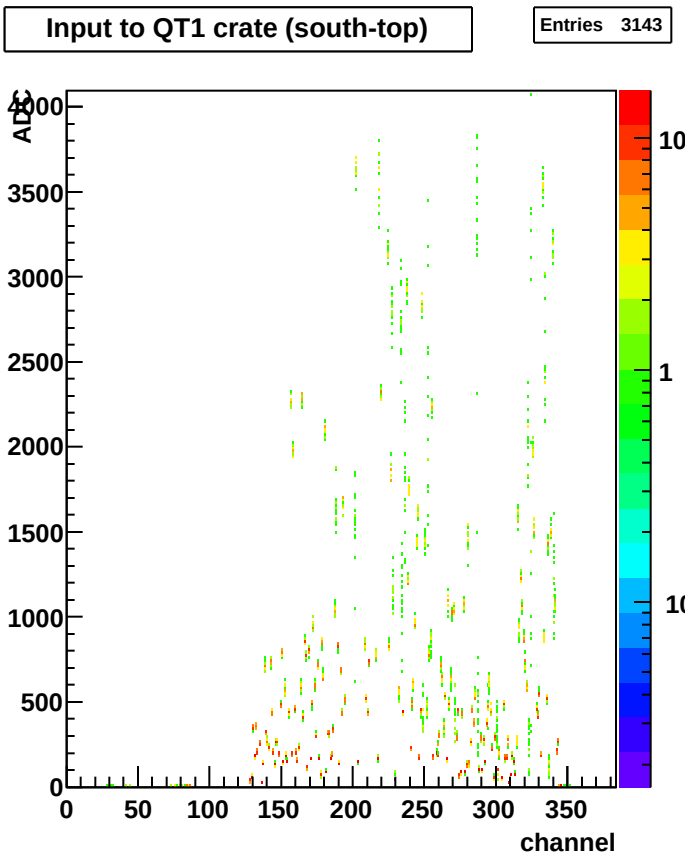

BBClarge-TAC-W
Entries 0
Mean 0
RMS 0

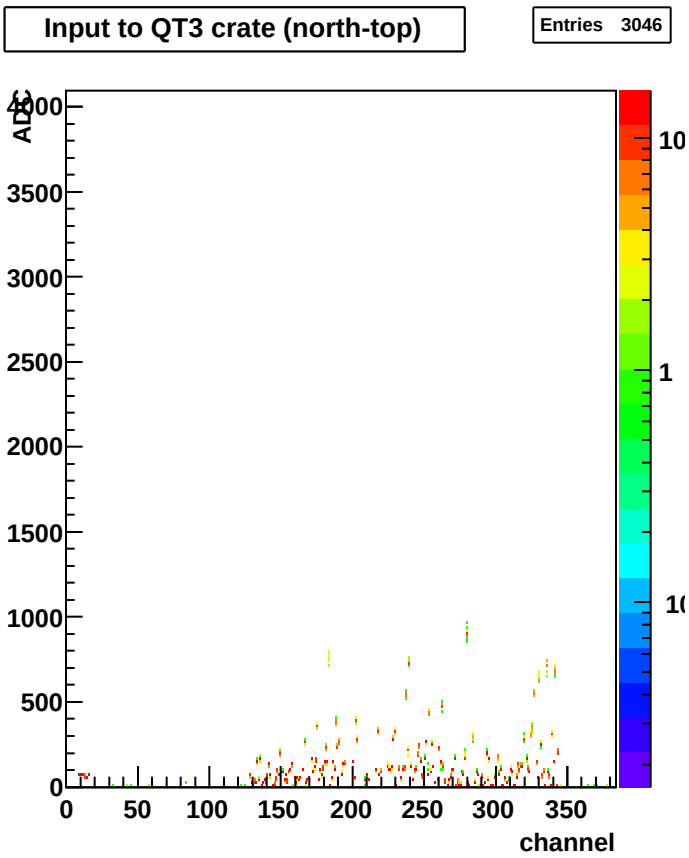

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 0
Mean 0
RMS 0

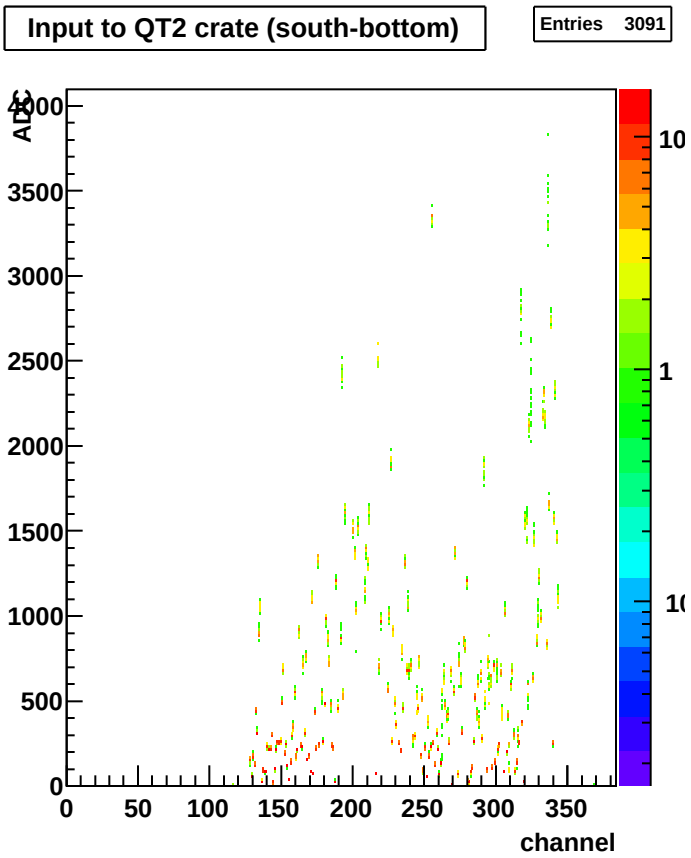

VPD-TAC-E
Entries 0
Mean 0
RMS 0

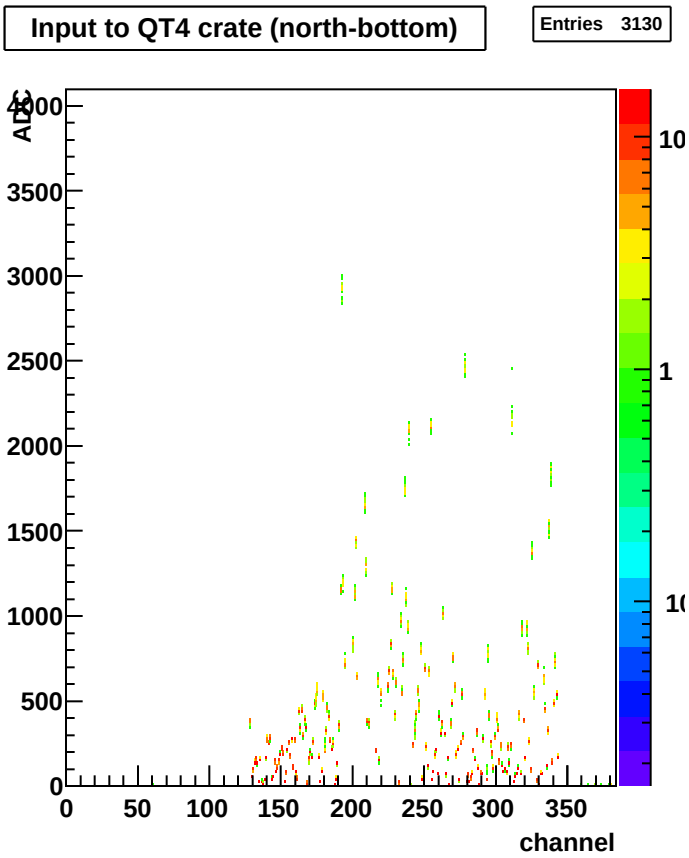

VPD-TAC-W
Entries 0
Mean 0
RMS 0

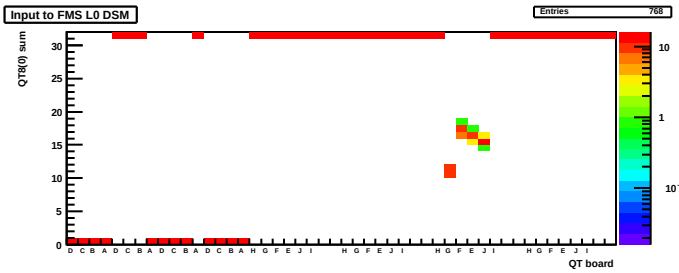

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

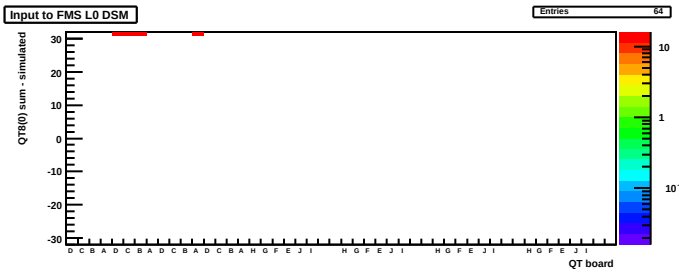

Input to QT1 crate (south-top)
Entries 3143
ADC
channel

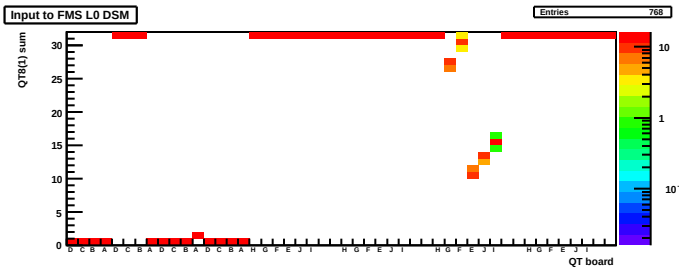

Input to QT3 crate (north-top)
Entries 3046
ADC
channel

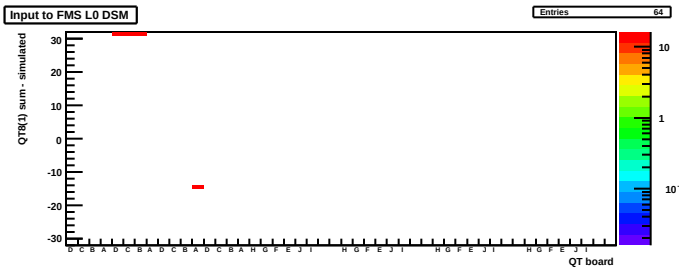

Input to QT2 crate (south-bottom)
Entries 3091
ADC
channel

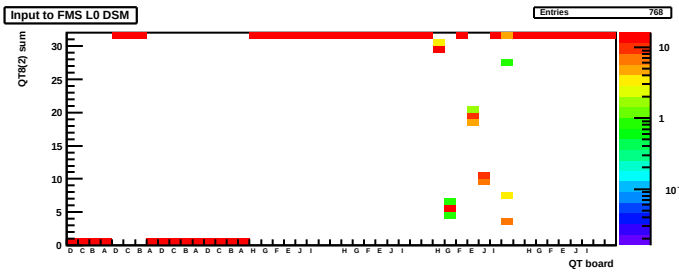

Input to QT4 crate (north-bottom)
Entries 3130
ADC
channel

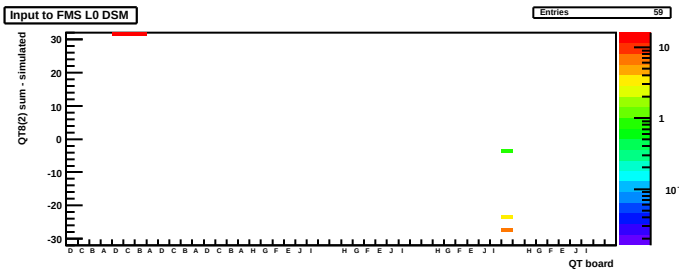

Input to FMS L0 DSM
Entries 768
QT8(0) sum
QT board

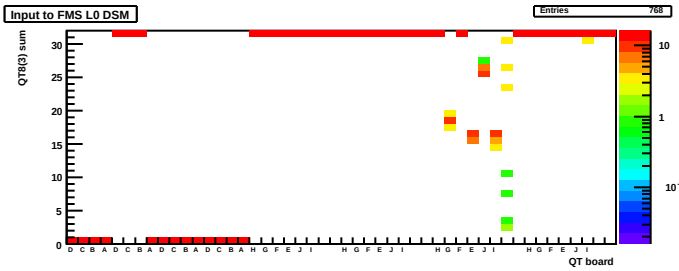

Input to FMS L0 DSM
Entries 64
QT8(0) sum - simulated
QT board

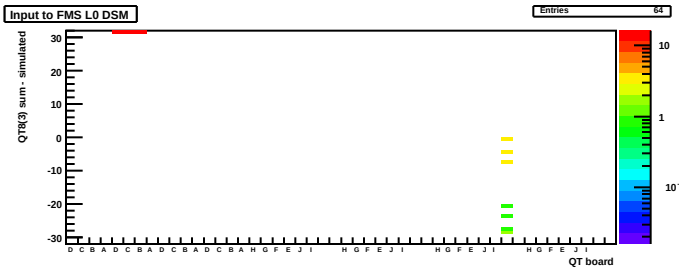

Input to FMS L0 DSM
Entries 768
QT8(1) sum
QT board

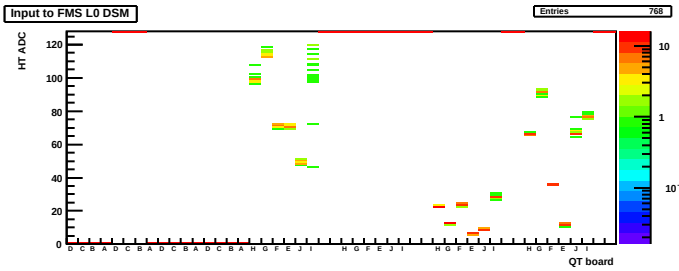

Input to FMS L0 DSM
Entries 64
QT8(1) sum - simulated
QT board

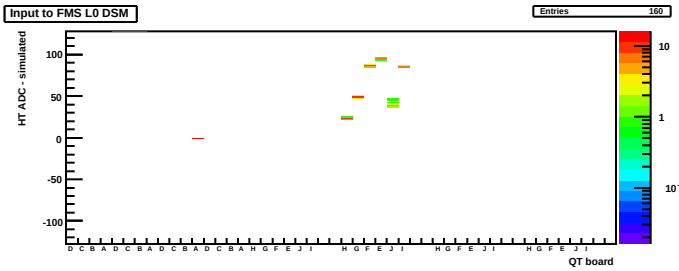

Input to FMS L0 DSM
Entries 768
QT8(2) sum
QT board

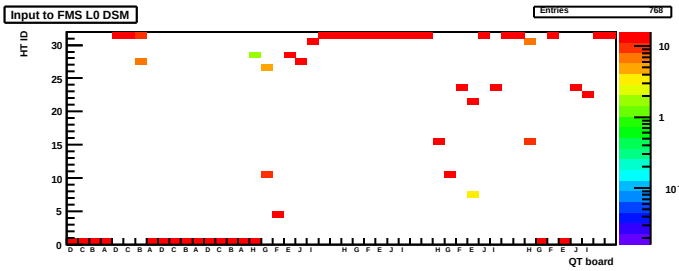

Input to FMS L0 DSM
Entries 59
QT8(2) sum - simulated
QT board

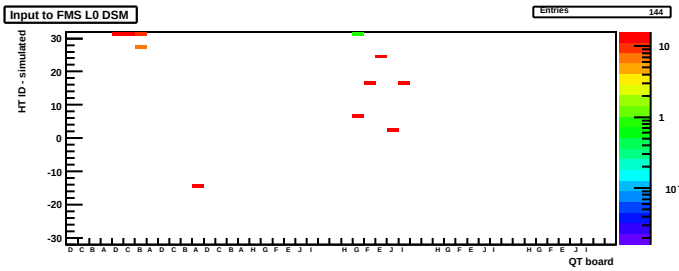

Input to FMS L0 DSM
Entries 768
QT8(3) sum
QT board

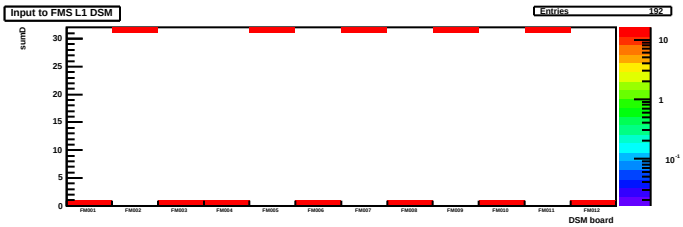

Input to FMS L0 DSM
Entries 64
QT8(3) sum - simulated
QT board

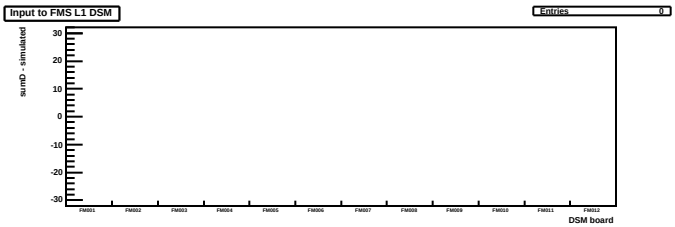

Input to FMS L0 DSM
Entries 768
HT ADC
QT board

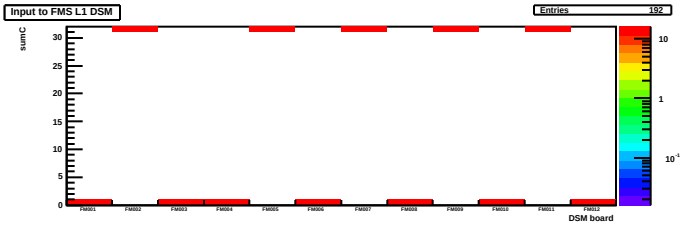

Input to FMS L0 DSM
Entries 160
HT ADC - simulated
QT board

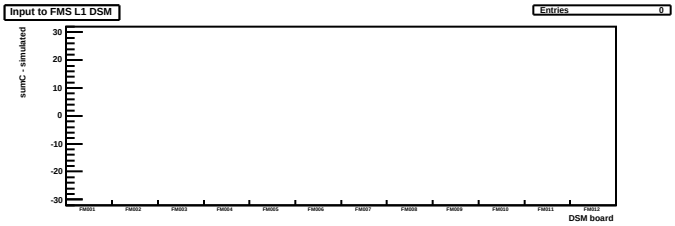

Input to FMS L0 DSM
Entries 768
HT ID
QT board

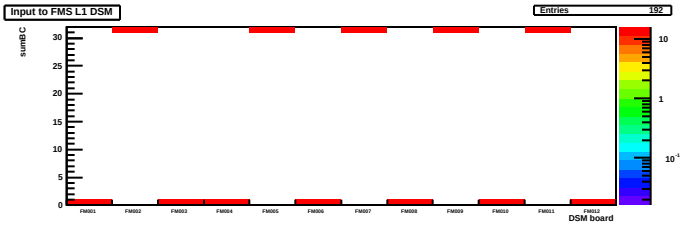

Input to FMS L0 DSM
Entries 144
HT ID - simulated
QT board

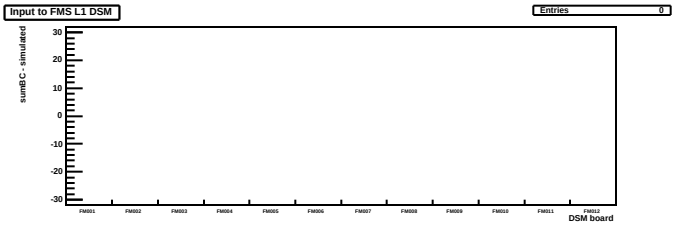

Input to FMS L1 DSM
Entries 192
sumD
DSM board

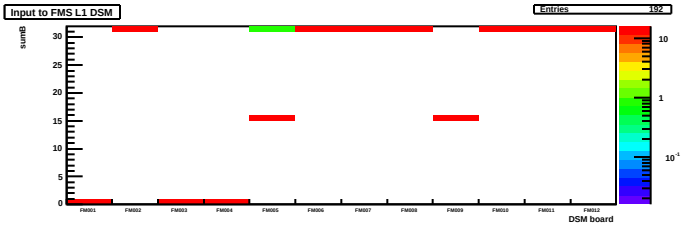

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

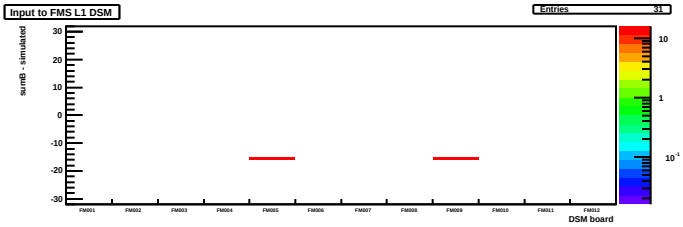

Input to FMS L1 DSM
Entries 192
sumC
DSM board

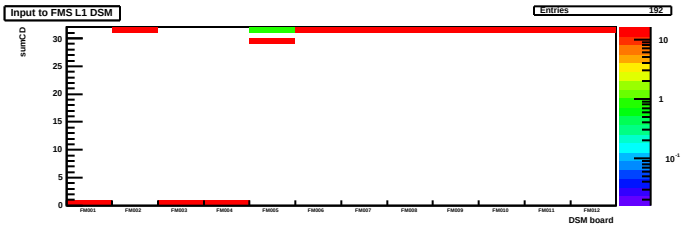

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

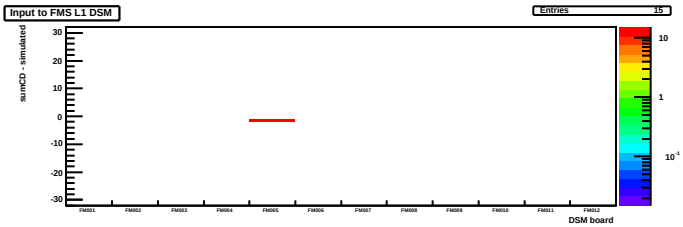

Input to FMS L1 DSM
Entries 192
sumBC
DSM board

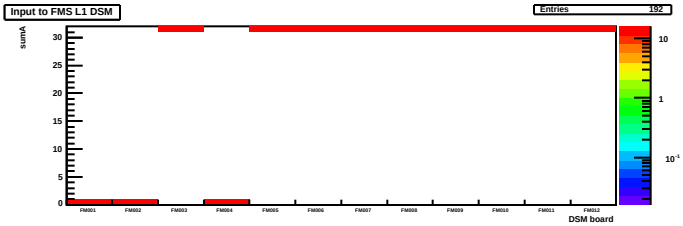

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

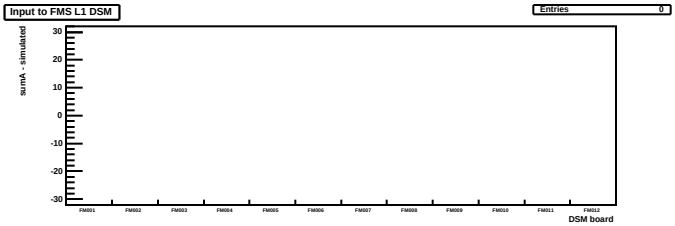

Input to FMS L1 DSM
Entries 192
sumB
DSM board

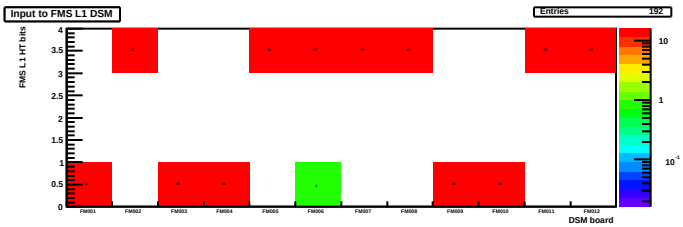

Input to FMS L1 DSM
Entries 31
sumB - simulated
DSM board

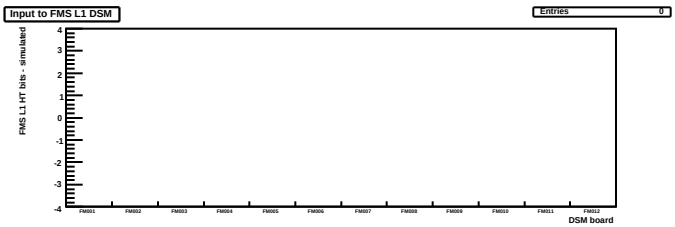

Input to FMS L1 DSM
Entries 192
sumCD
DSM board

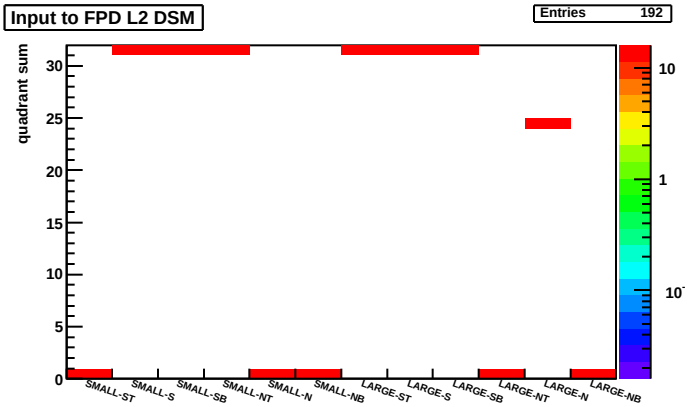

Input to FMS L1 DSM
Entries 15
sumCD - simulated
DSM board

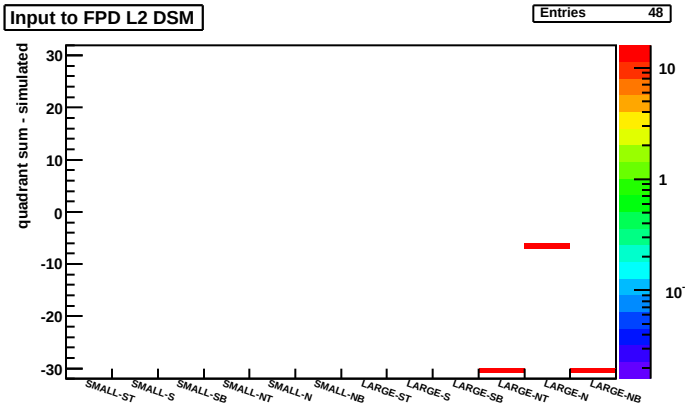

Input to FMS L1 DSM
Entries 192
sumA
DSM board

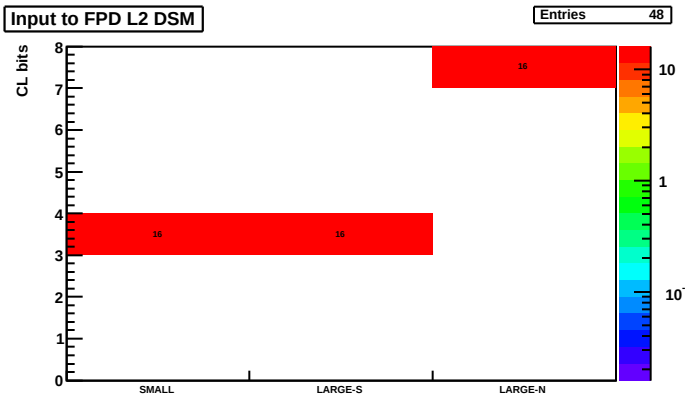

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

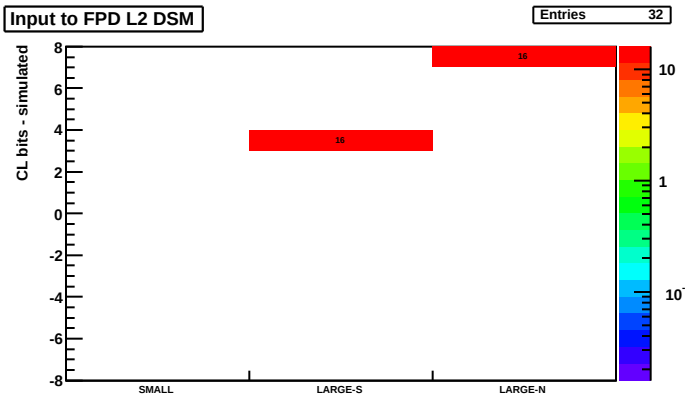

Input to FMS L1 DSM
Entries 192
FMS L1 HT bits
DSM board

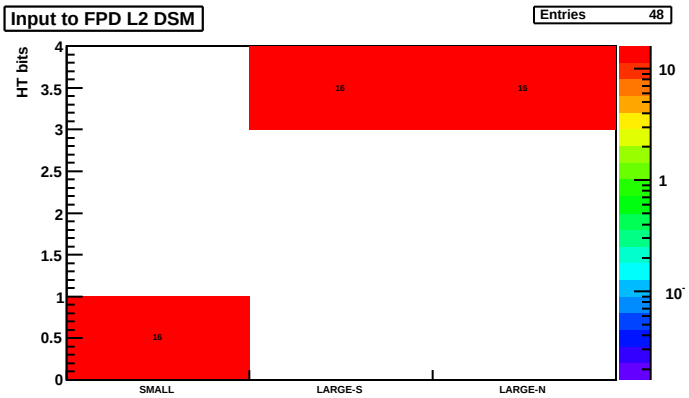

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

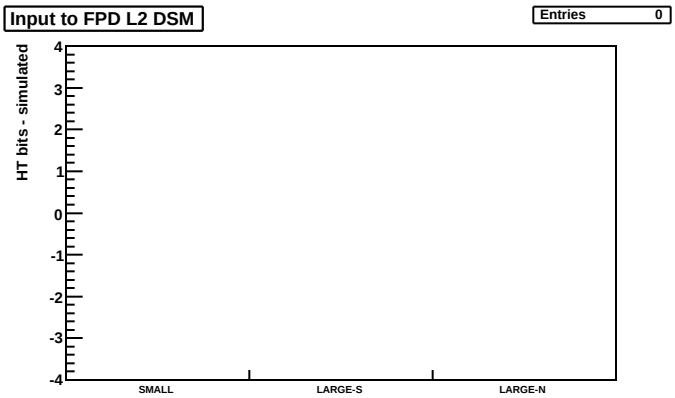

Input to FPD L2 DSM
Entries 192
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

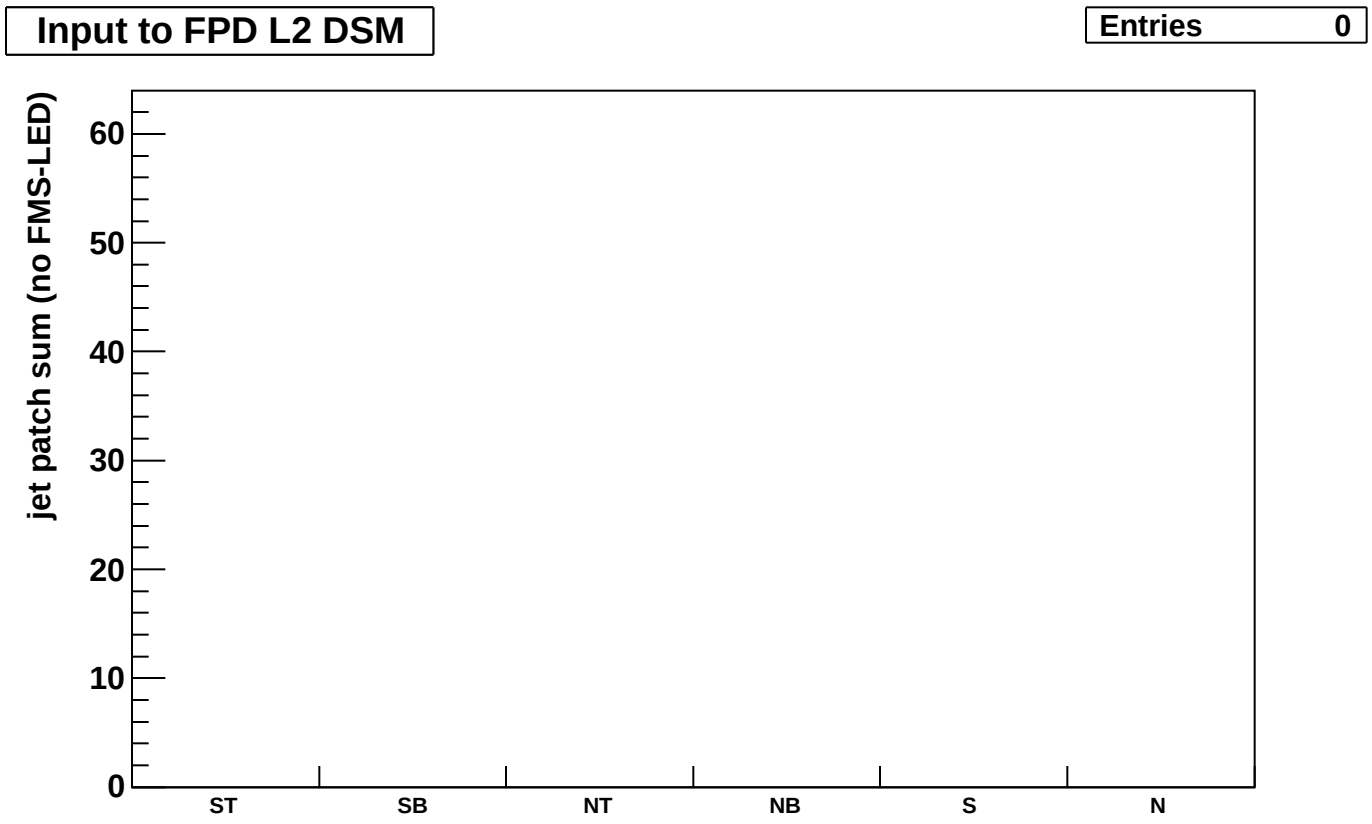

Input to FPD L2 DSM
Entries 48
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

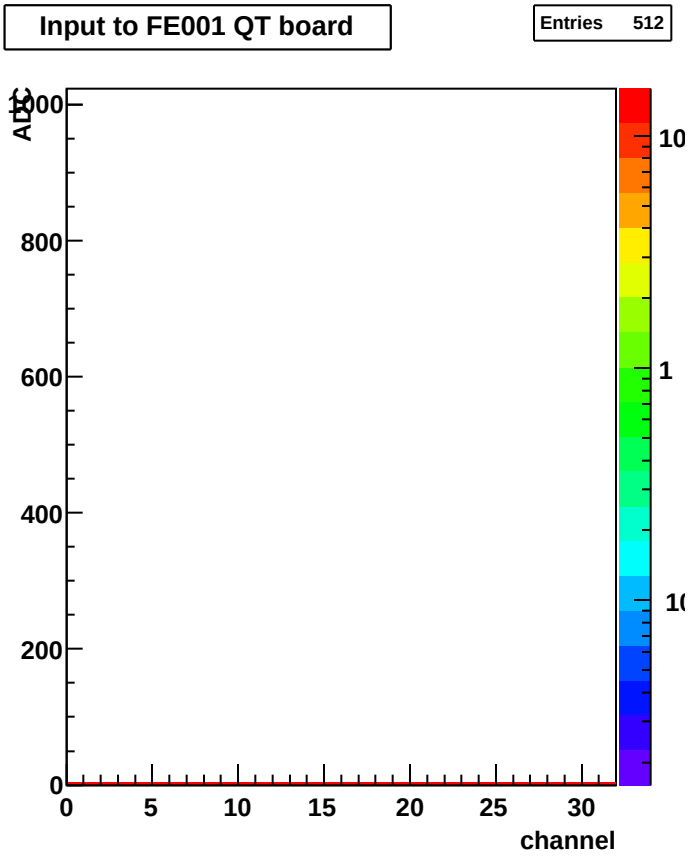

Input to FPD L2 DSM
Entries 48
CL bits
16
16
16
SMALL
LARGE-S
LARGE-N

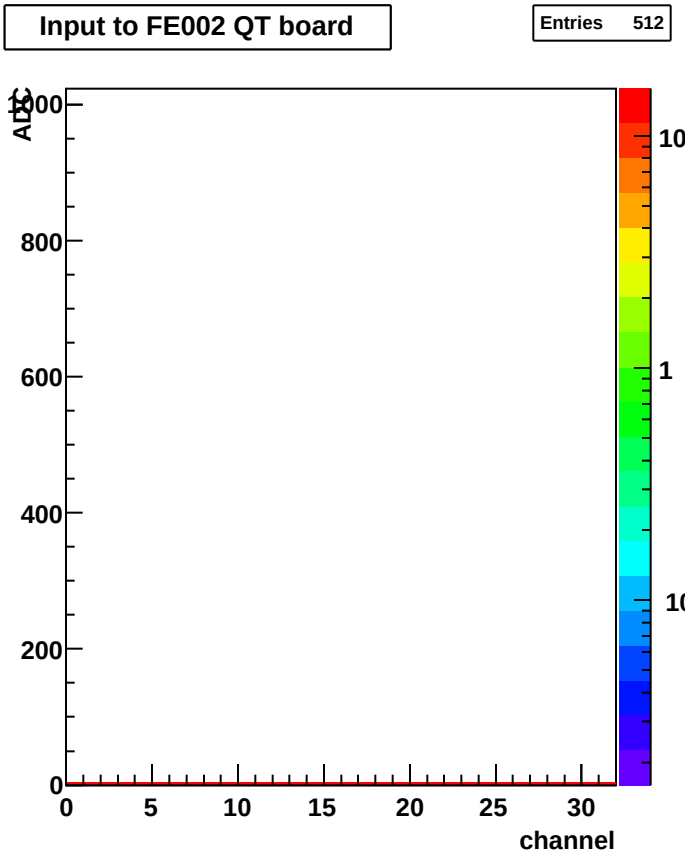

Input to FPD L2 DSM
Entries 32
CL bits - simulated
16
16
SMALL
LARGE-S
LARGE-N

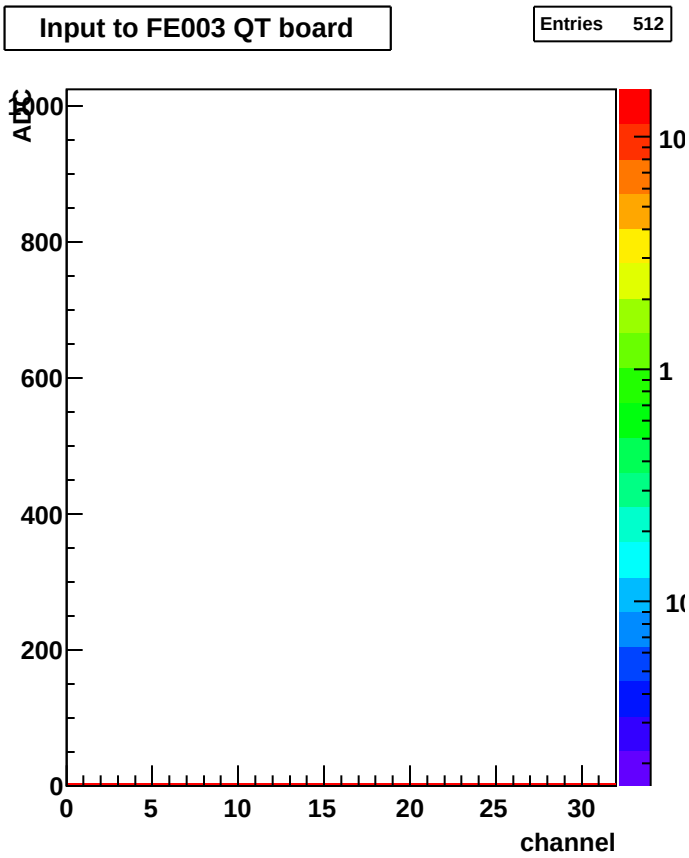

Input to FPD L2 DSM
Entries 48
HT bits
16
16
16
SMALL
LARGE-S
LARGE-N

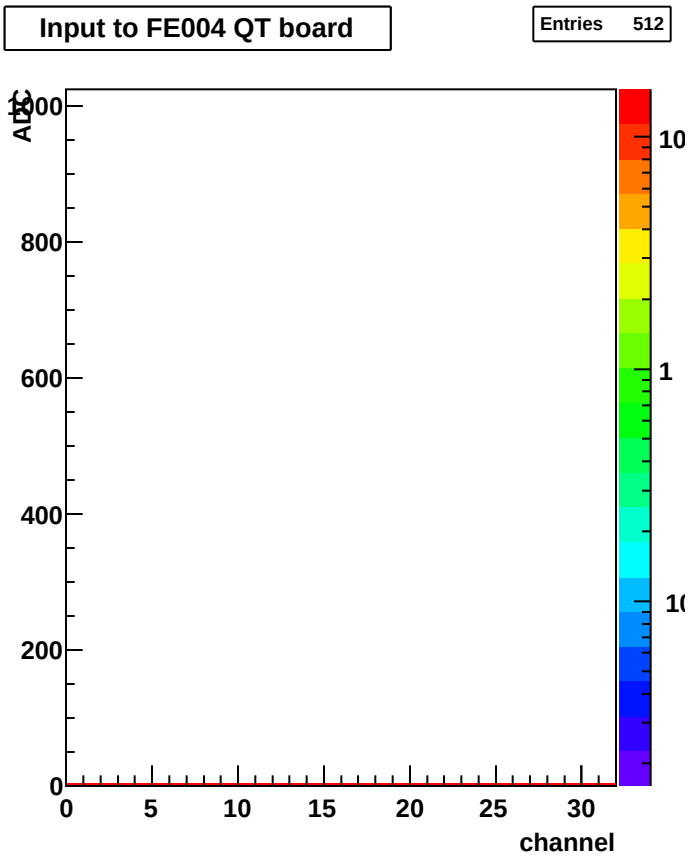

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

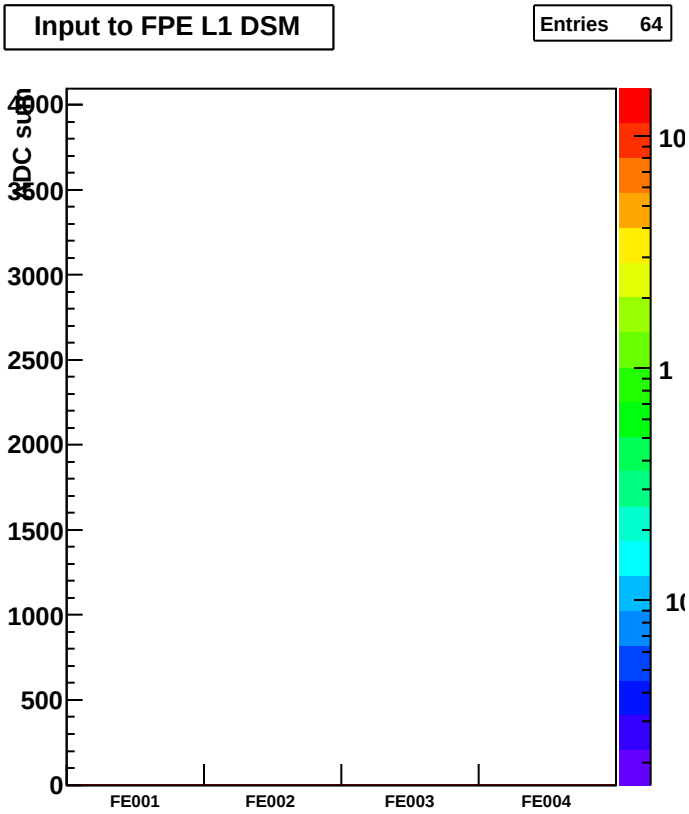

Input to FPD L2 DSM
Entries 0
jet patch sum (no FMS-LED)
60
50
40
30
20
10
0
ST
SB
NT
NB
S
N

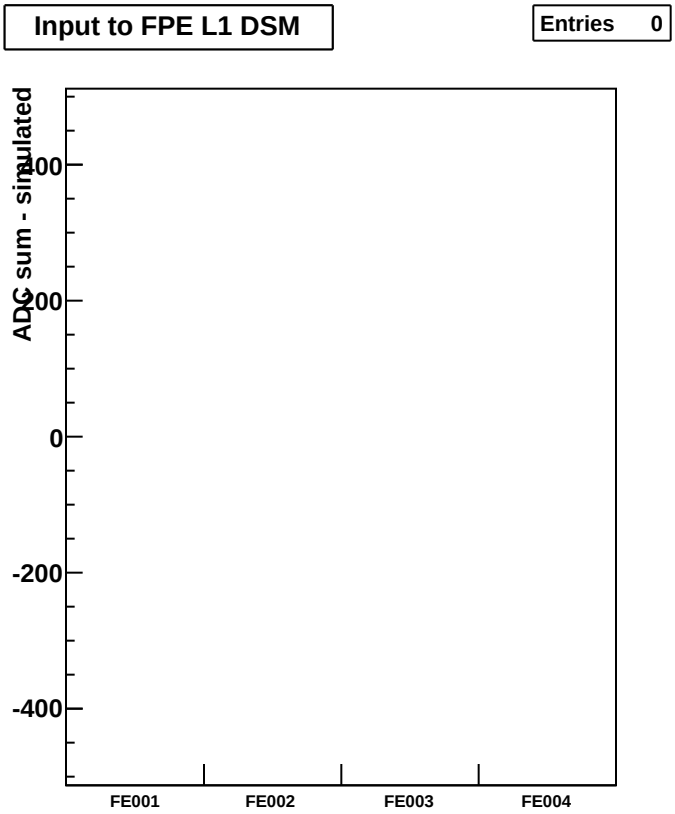

Input to FE001 QT board
Entries 512
ADC
channel

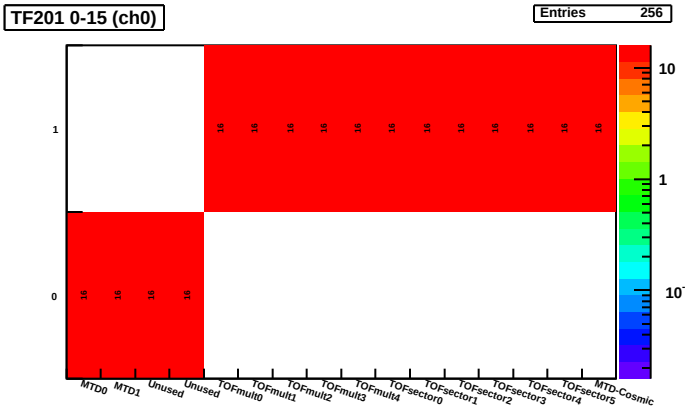

Input to FE002 QT board
Entries 512
ADC
channel

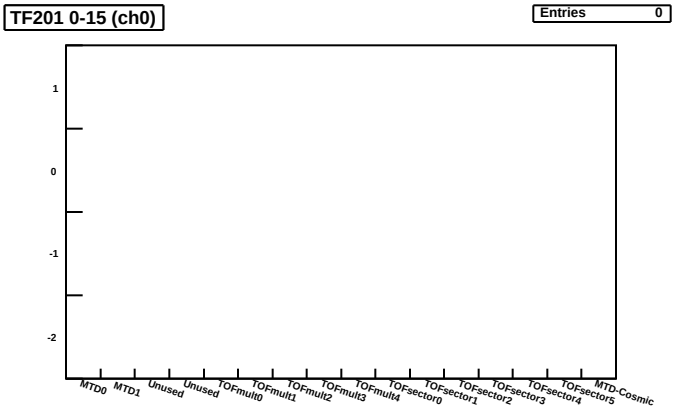

Input to FE003 QT board
Entries 512
ADC
channel

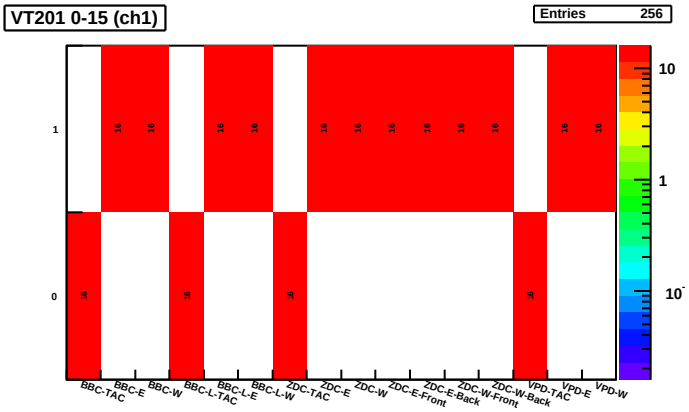

Input to FE004 QT board
Entries 512
ADC
channel

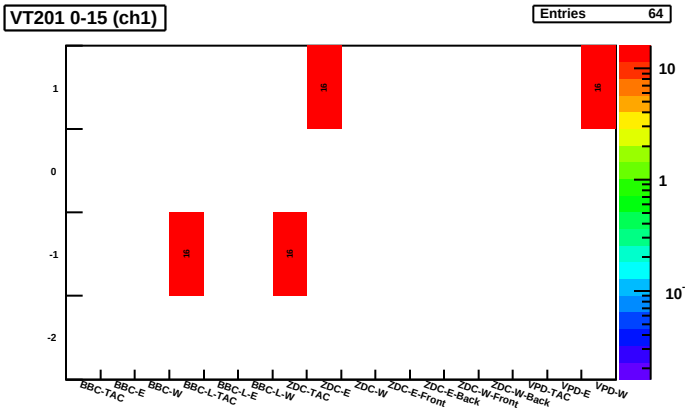

Input to FPE L1 DSM
Entries 64
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
1
10

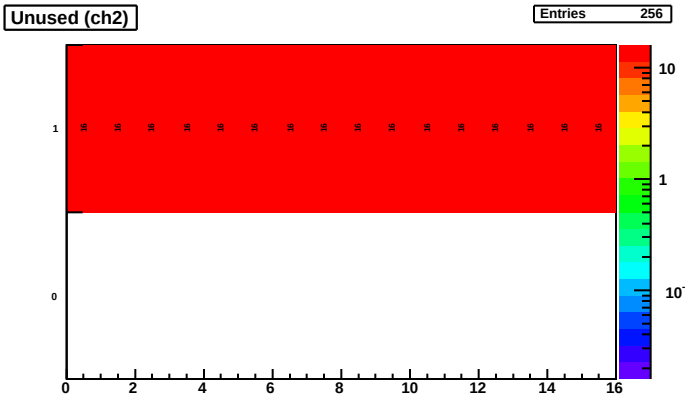

Input to FPE L1 DSM
Entries 0
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004

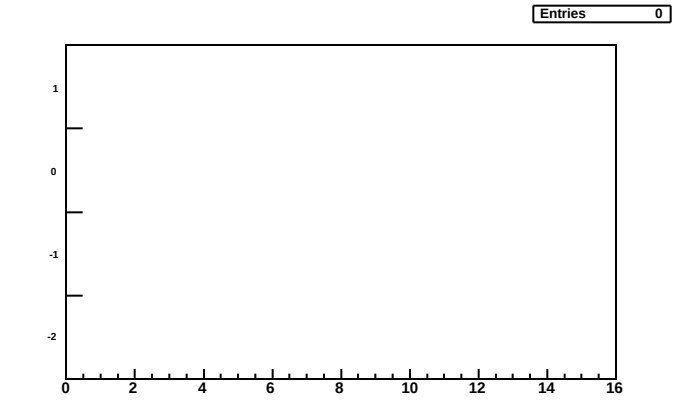

TF201 0-15 (ch0)
Entries 256
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

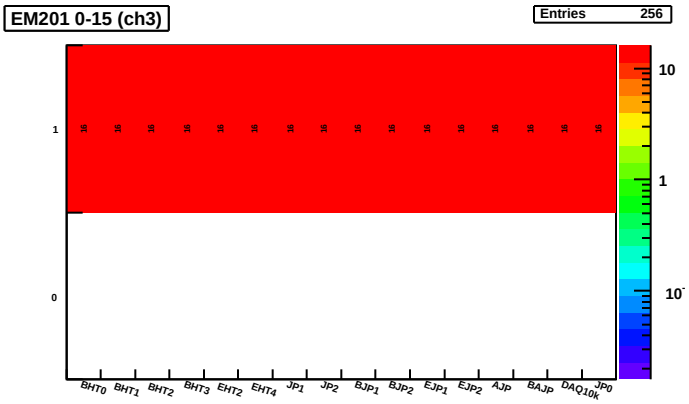

TF201 0-15 (ch0)
Entries 0
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

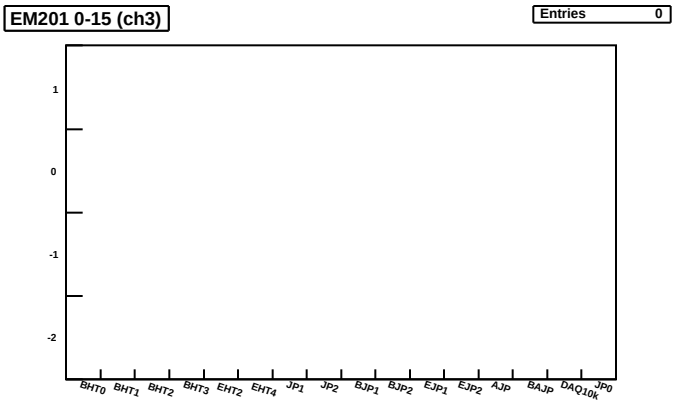

VT201 0-15 (ch1)
Entries 256
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 64
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

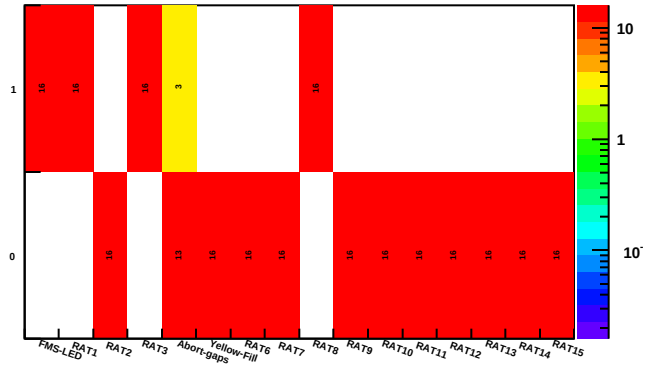

Unused (ch2)
Entries 256

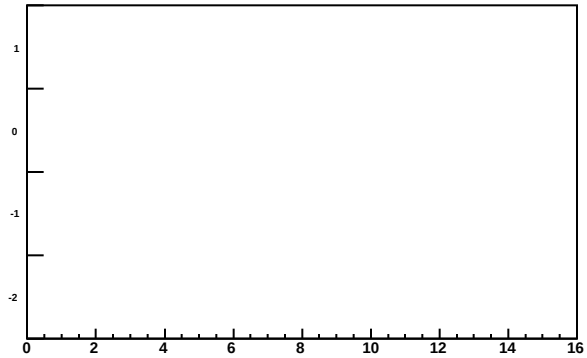

Entries 0


EM201 0-15 (ch3)
Entries 256
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

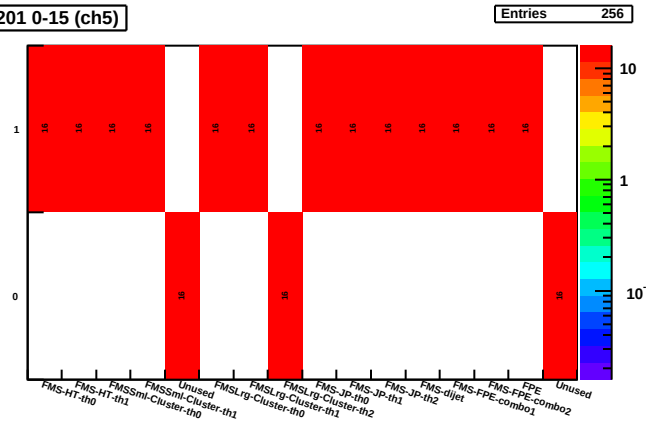

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

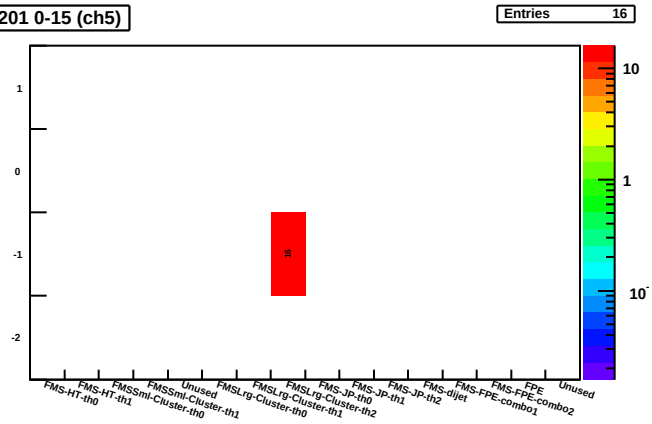




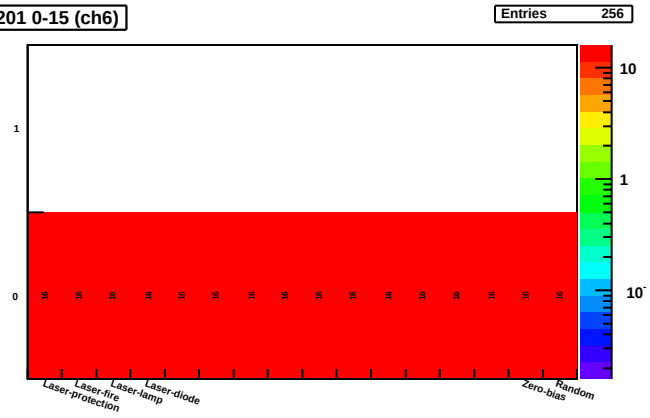
FP201 0-15 (ch5)

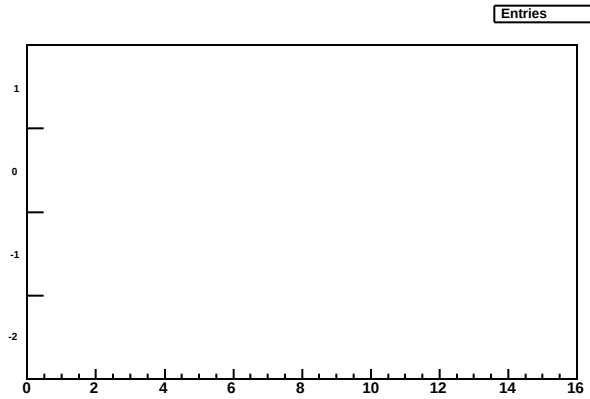
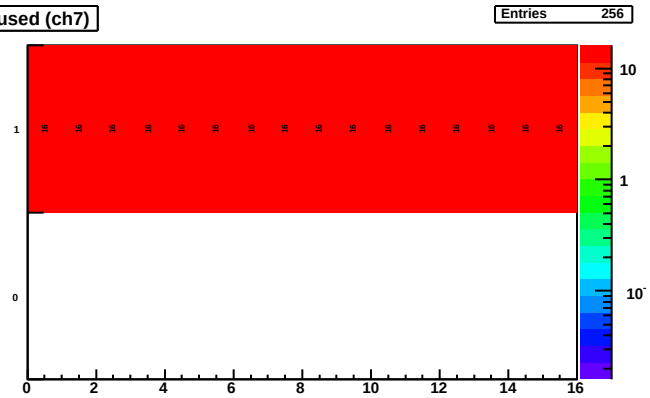
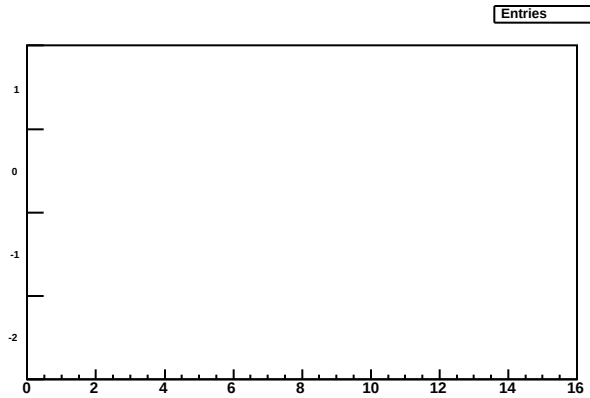


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)