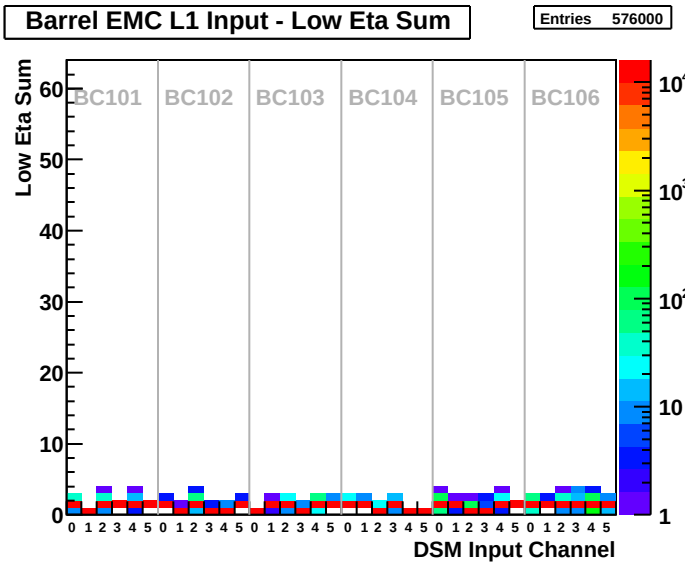
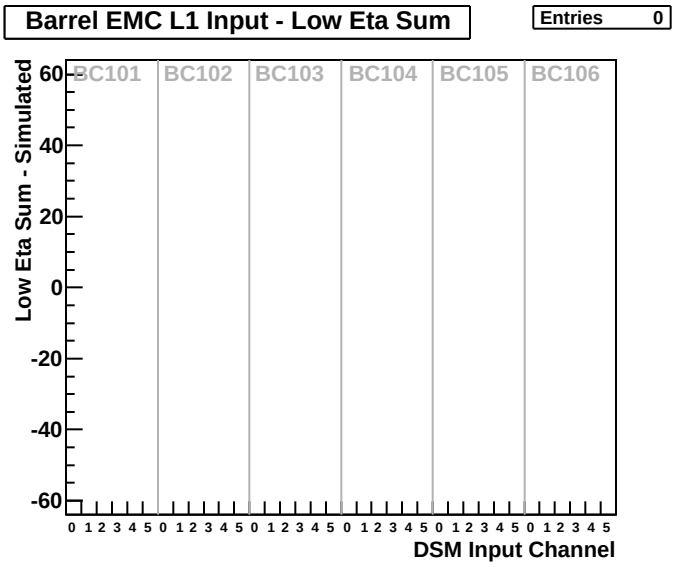
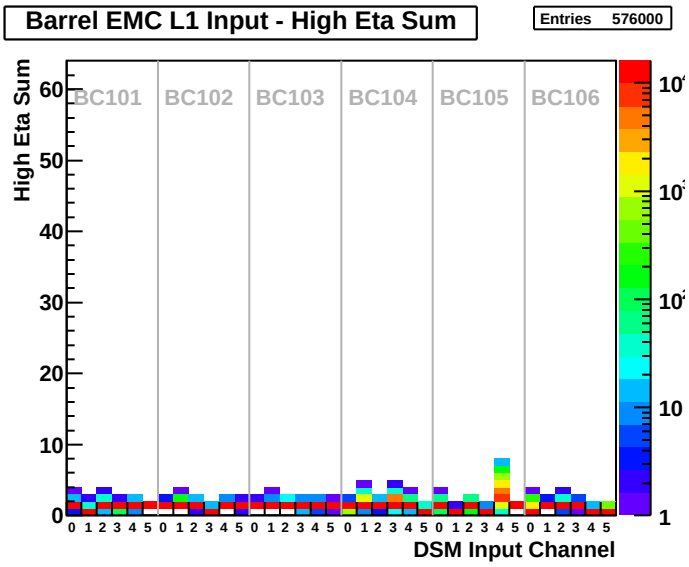
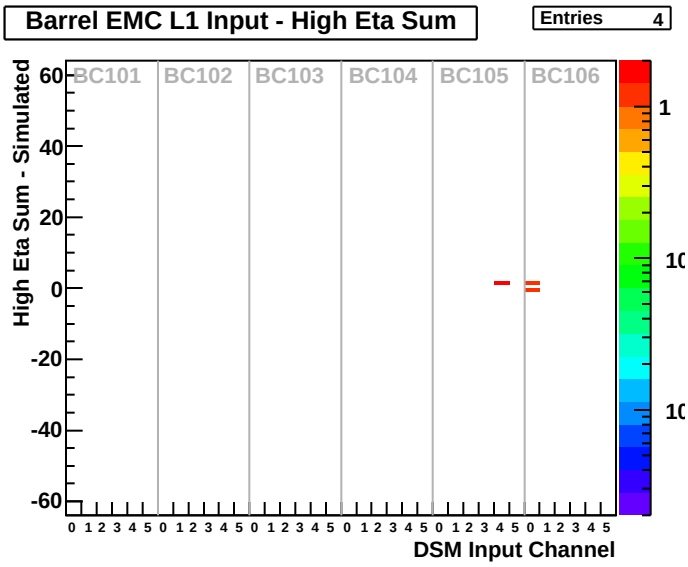
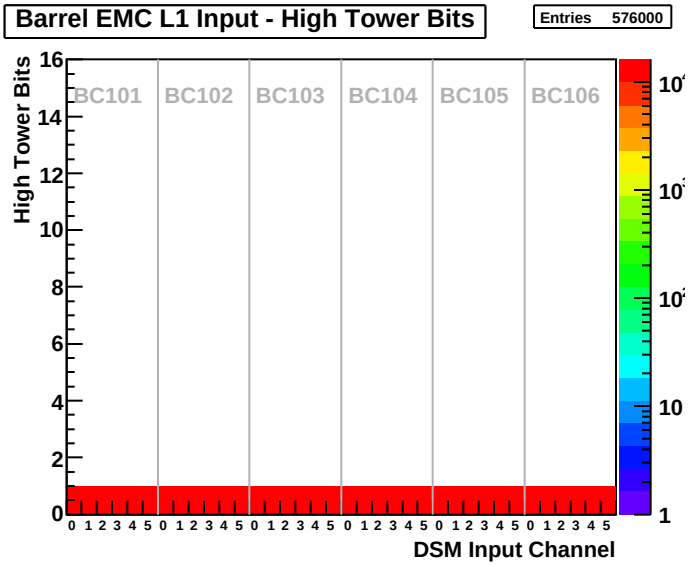
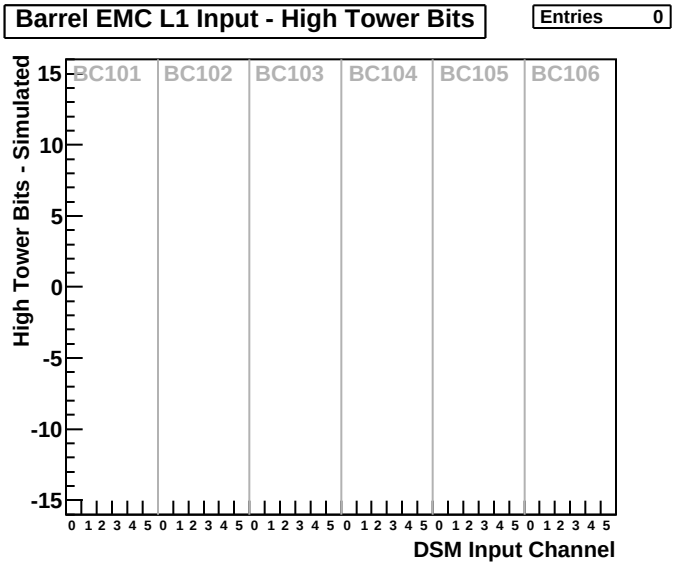

Barrel EMC L1 Input - Low Eta Sum
Entries 576000
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

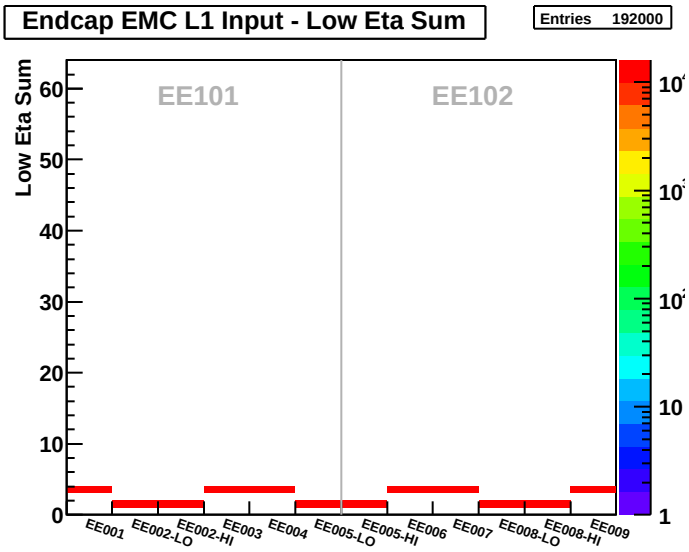

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

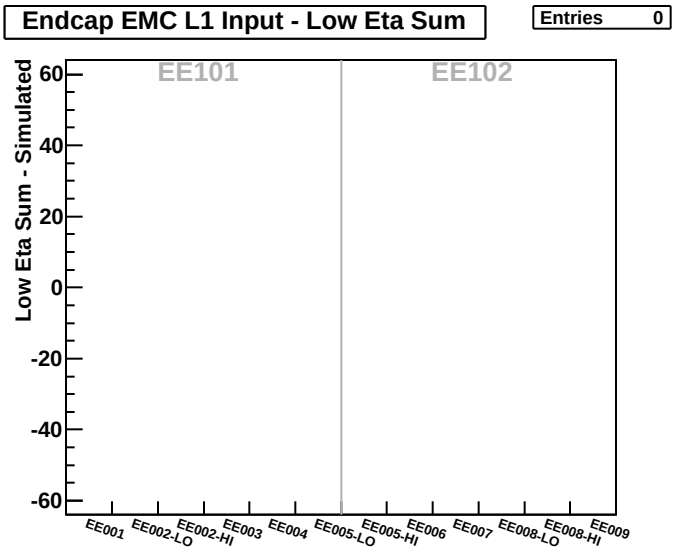

Barrel EMC L1 Input - High Eta Sum
Entries 576000
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

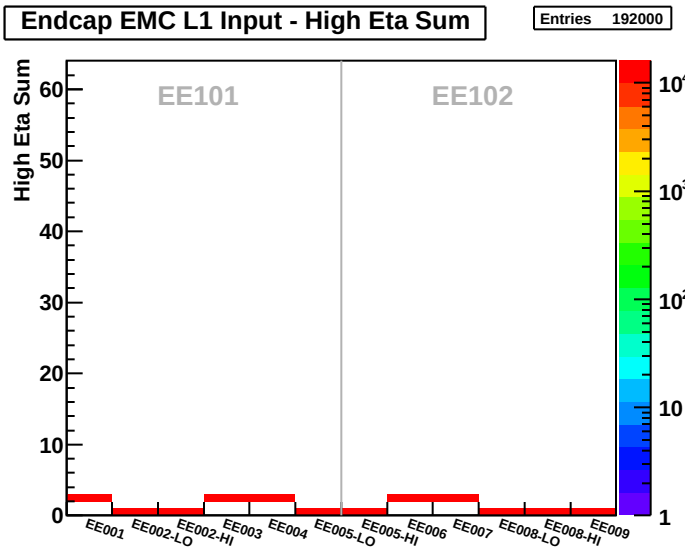

Barrel EMC L1 Input - High Eta Sum
Entries 4
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

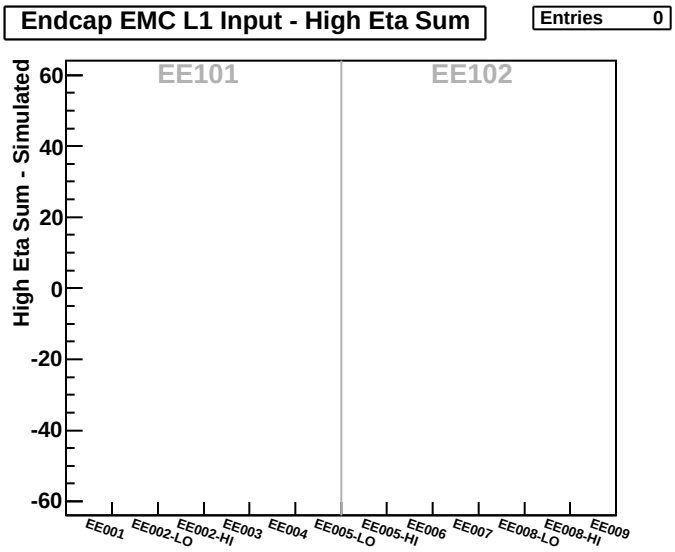

Barrel EMC L1 Input - High Tower Bits
Entries 576000
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

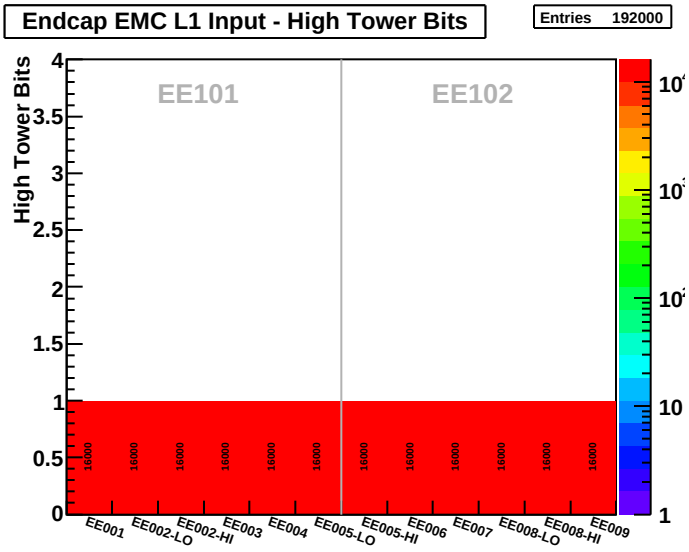

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

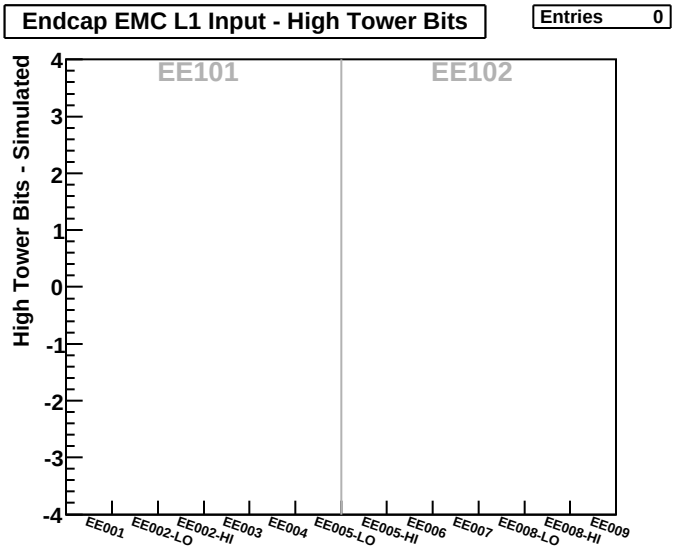

Endcap EMC L1 Input - Low Eta Sum
Entries 192000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

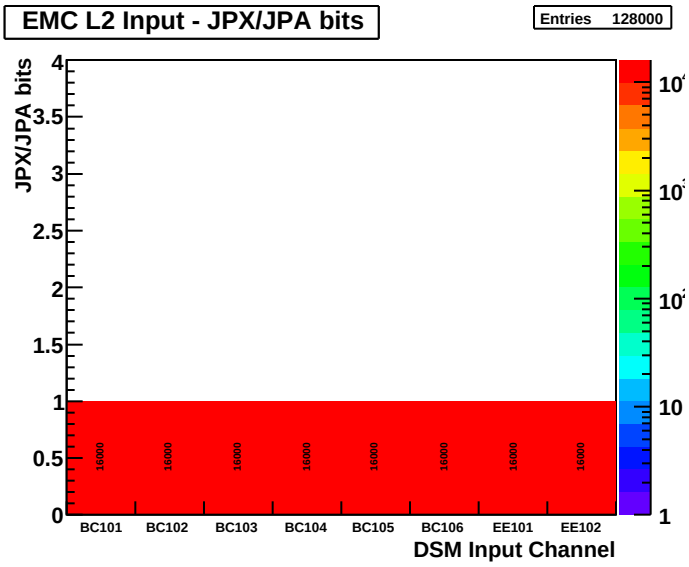

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

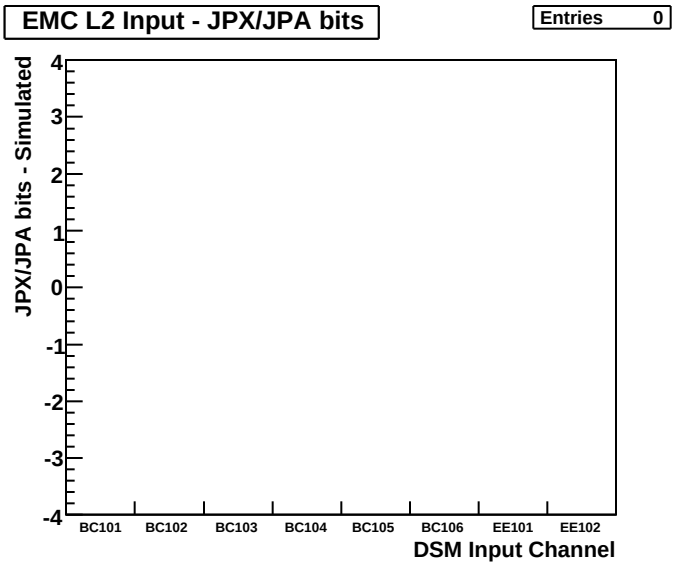

Endcap EMC L1 Input - High Eta Sum
Entries 192000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

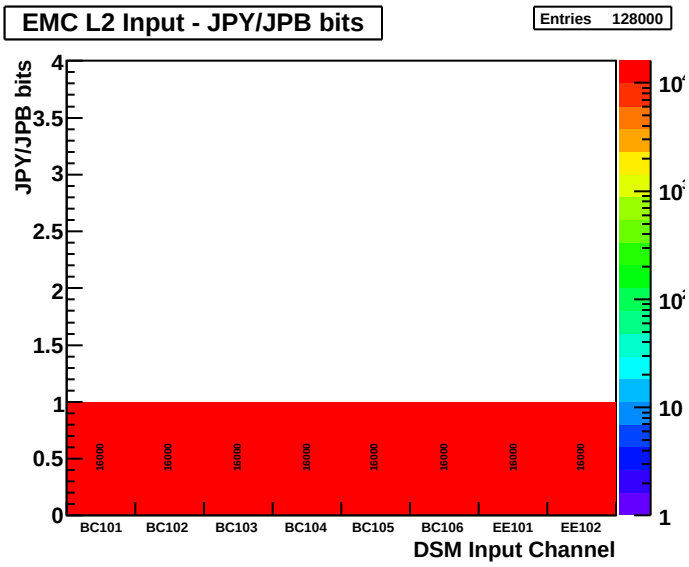

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

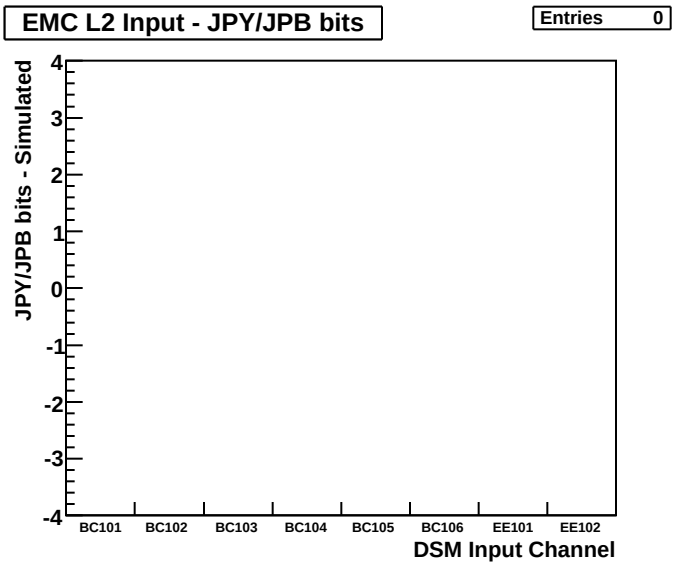

Endcap EMC L1 Input - High Tower Bits
Entries 192000
High Tower Bits
EE101
EE102
16000
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

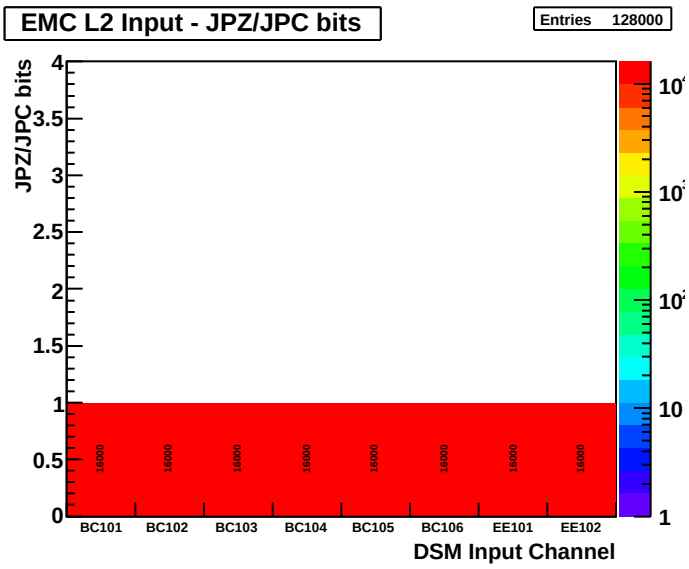

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

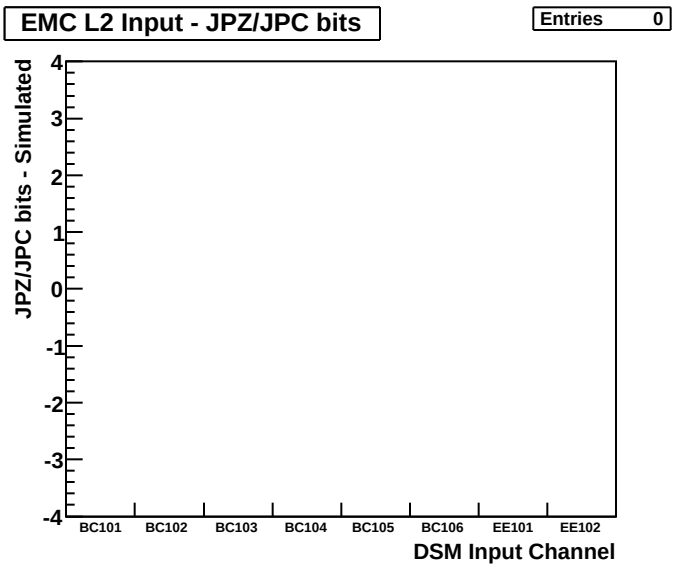

EMC L2 Input - JPX/JPA bits
Entries 128000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
16000

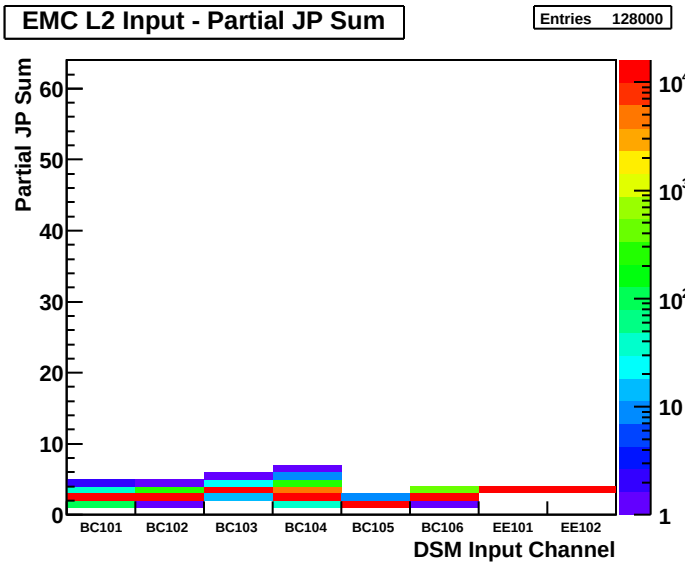

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

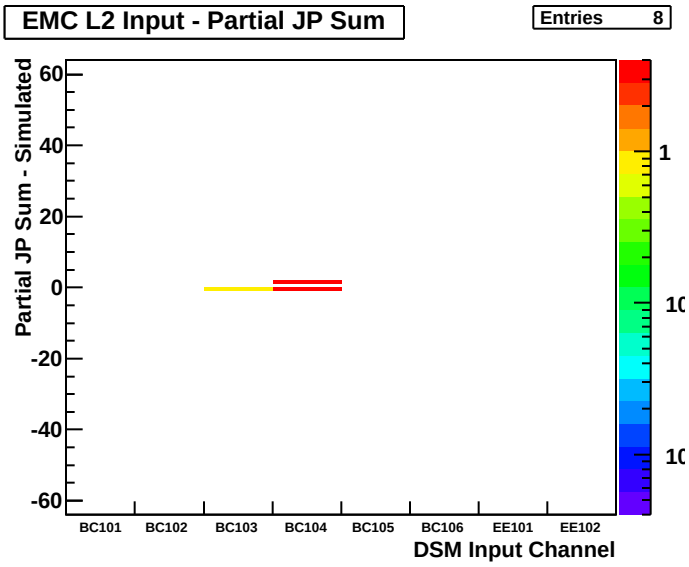

EMC L2 Input - JPY/JPB bits
Entries 128000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
16000

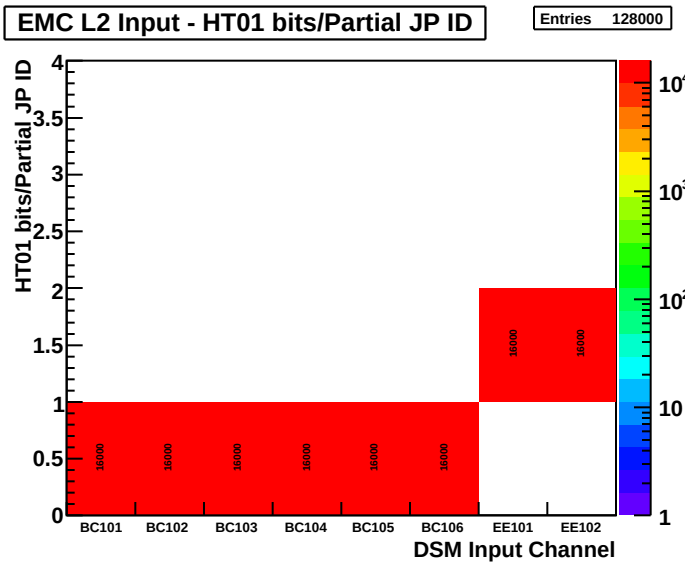

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

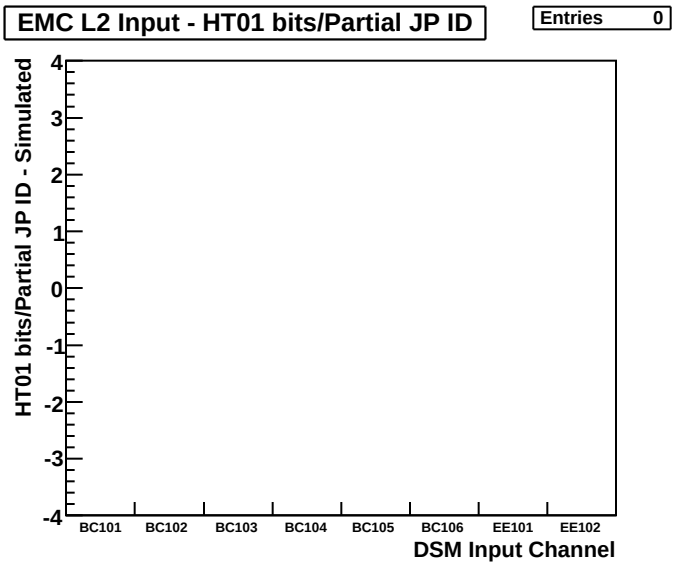

EMC L2 Input - JPZ/JPC bits
Entries 128000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
16000

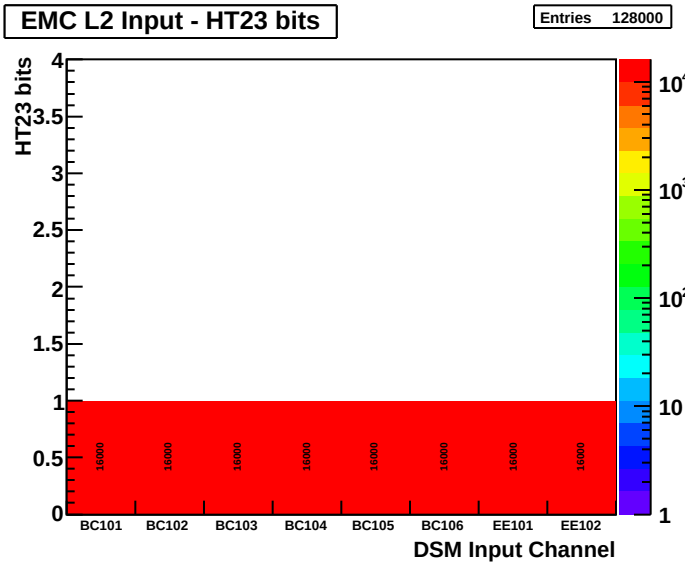

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

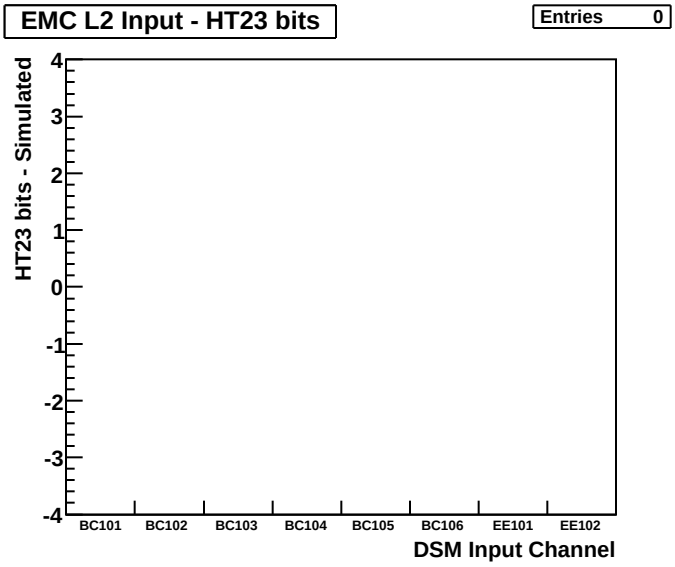

EMC L2 Input - Partial JP Sum
Entries 128000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

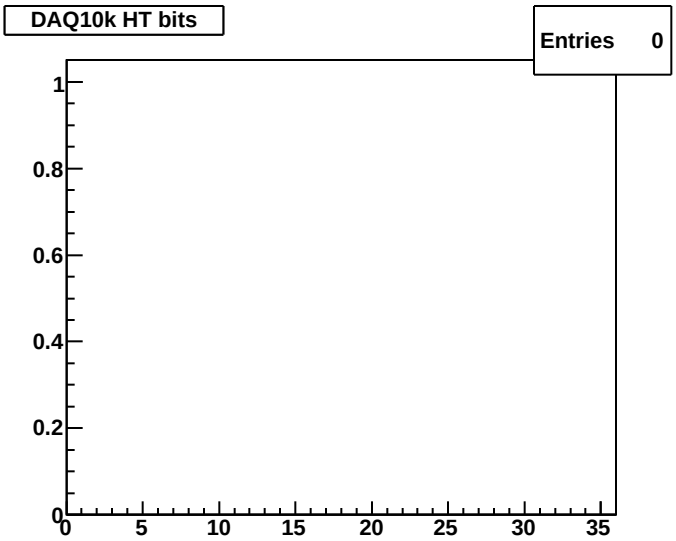

EMC L2 Input - Partial JP Sum
Entries 8
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

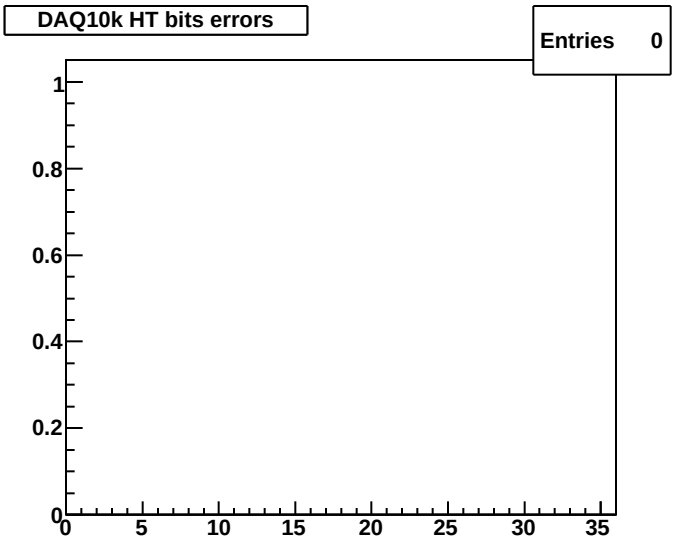

EMC L2 Input - HT01 bits/Partial JP ID
Entries 128000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

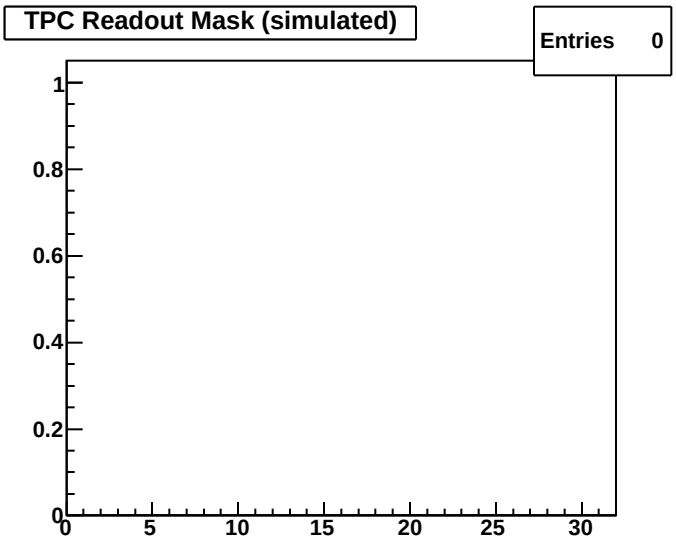

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

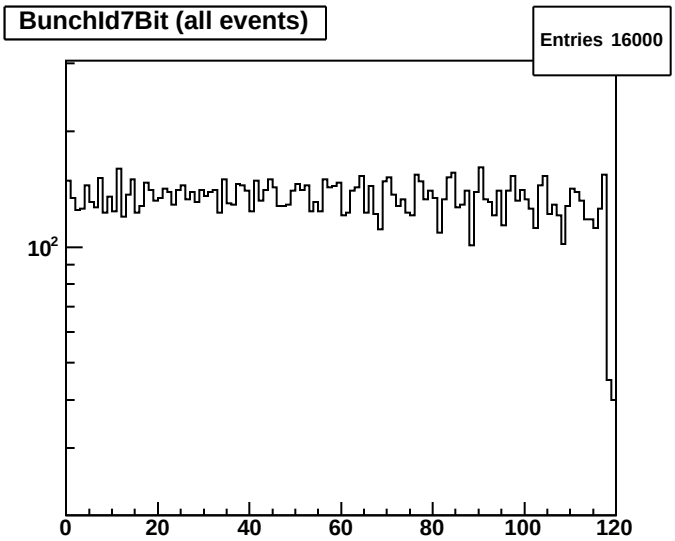

EMC L2 Input - HT23 bits
Entries 128000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

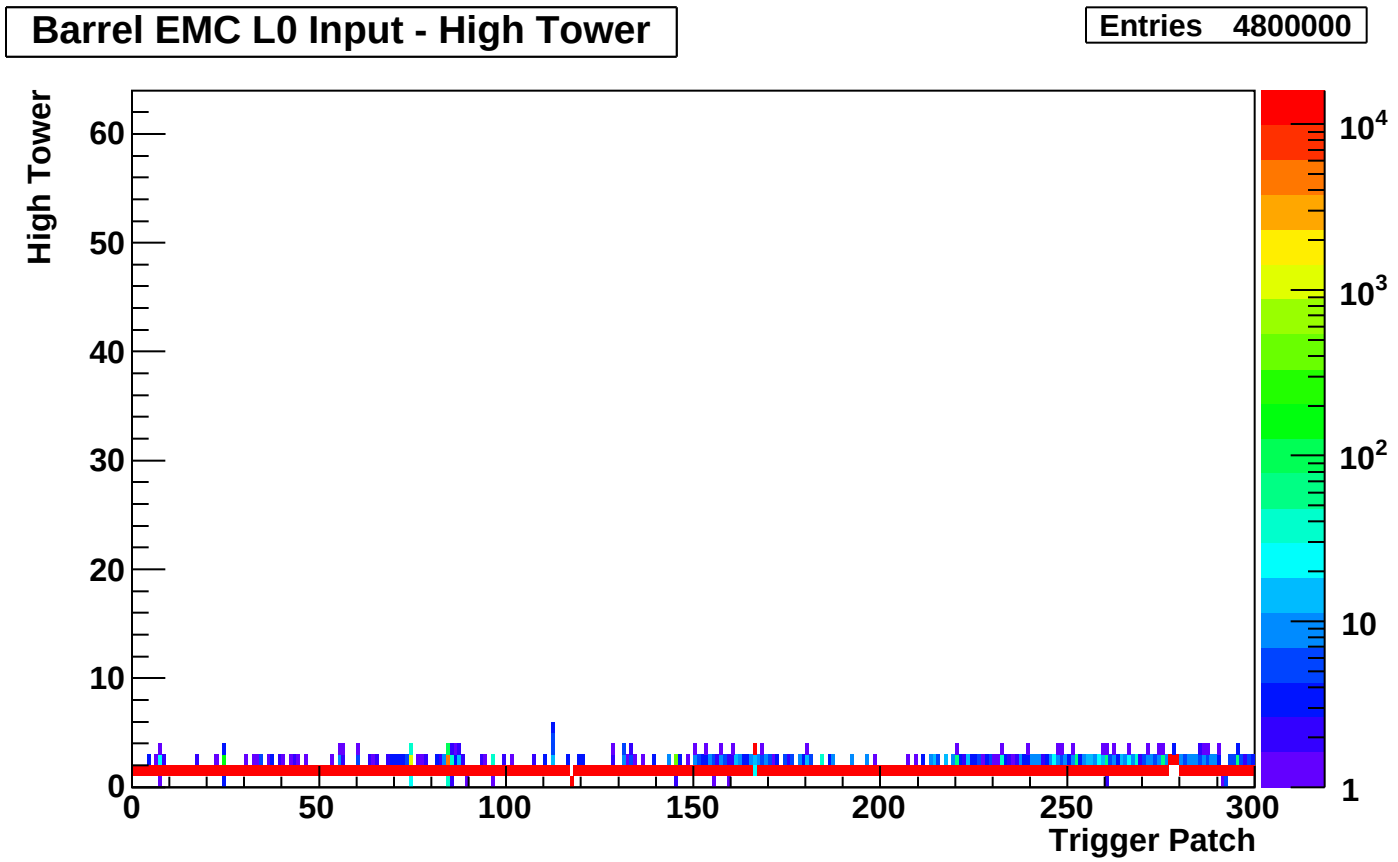

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

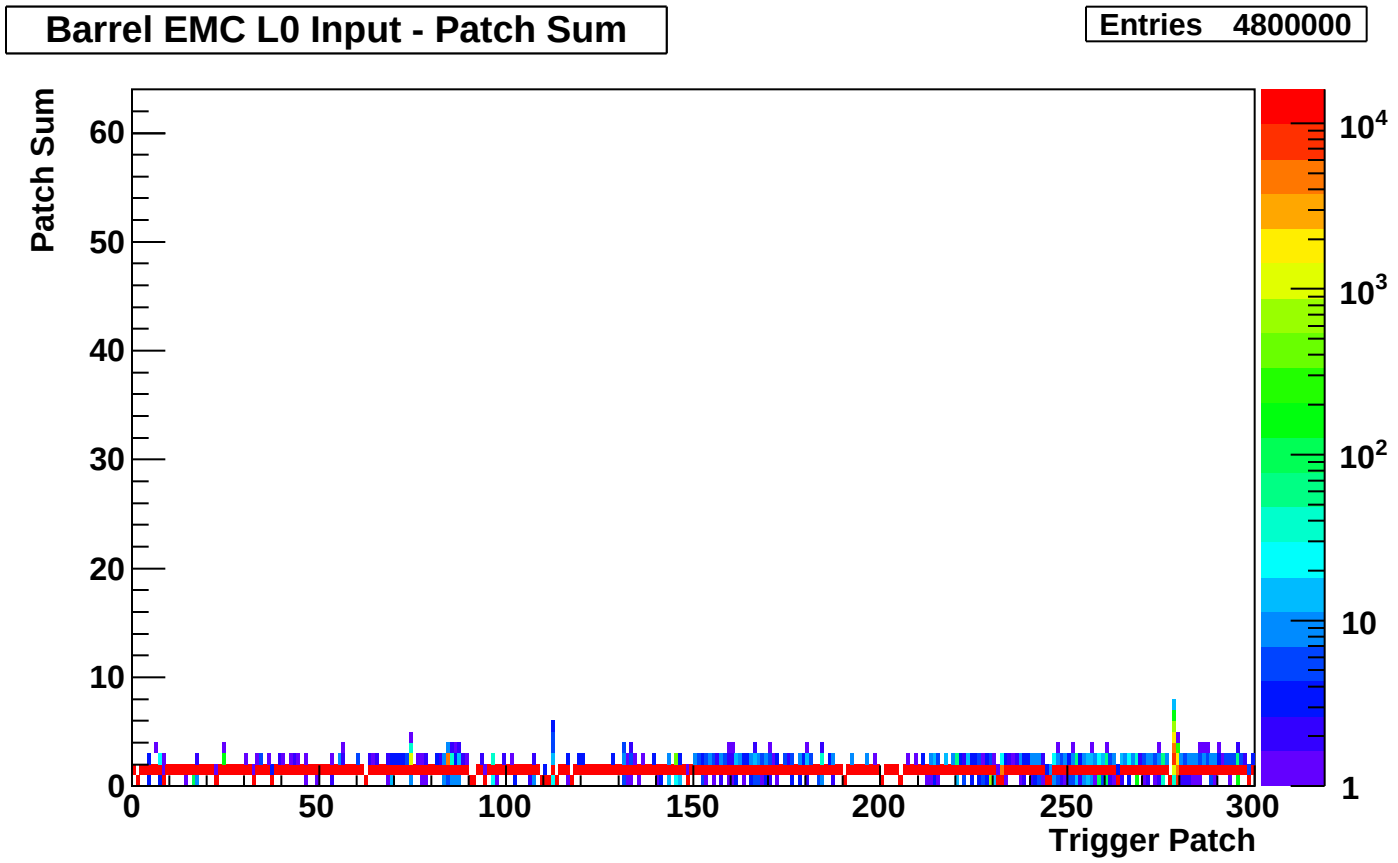

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

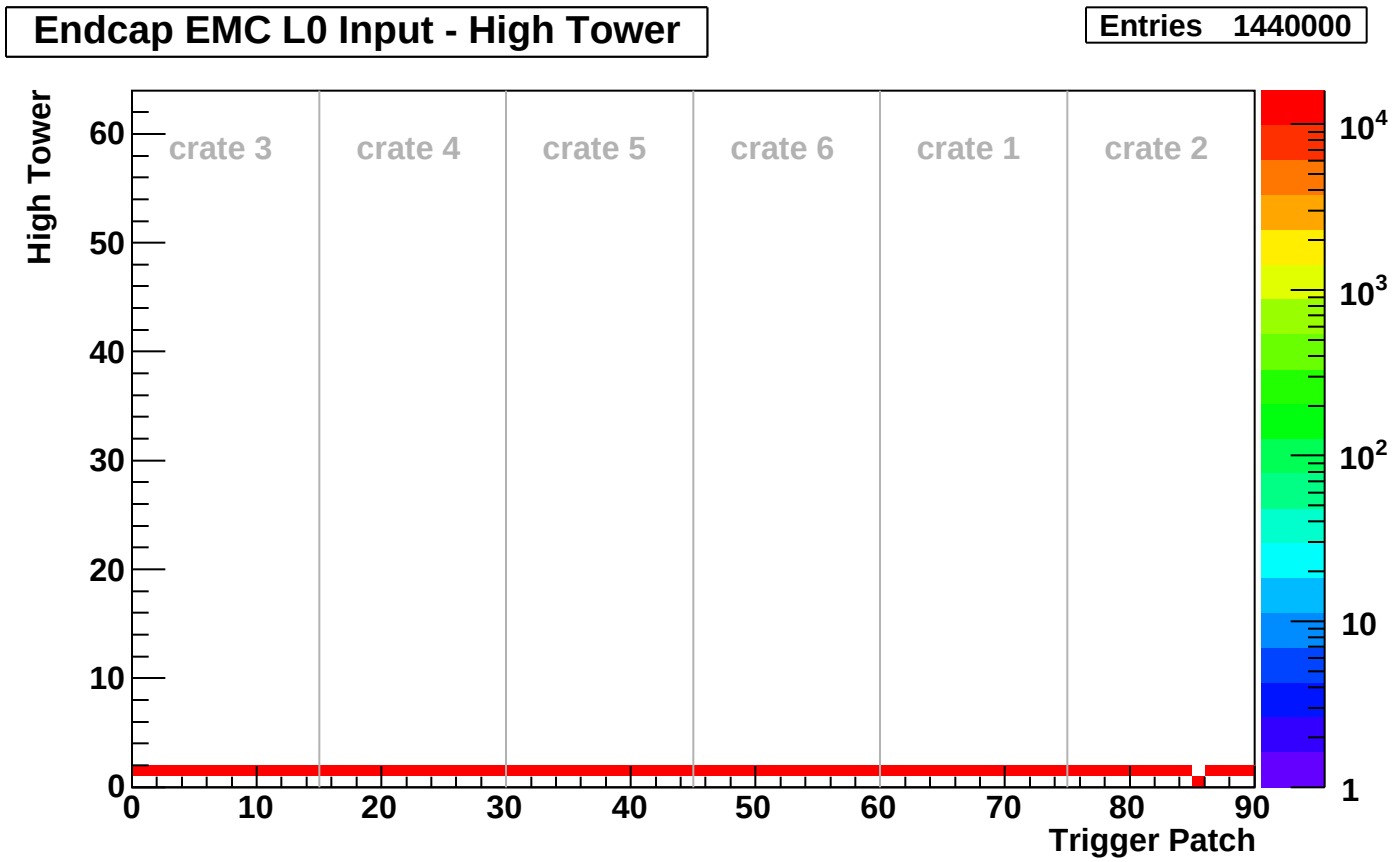

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

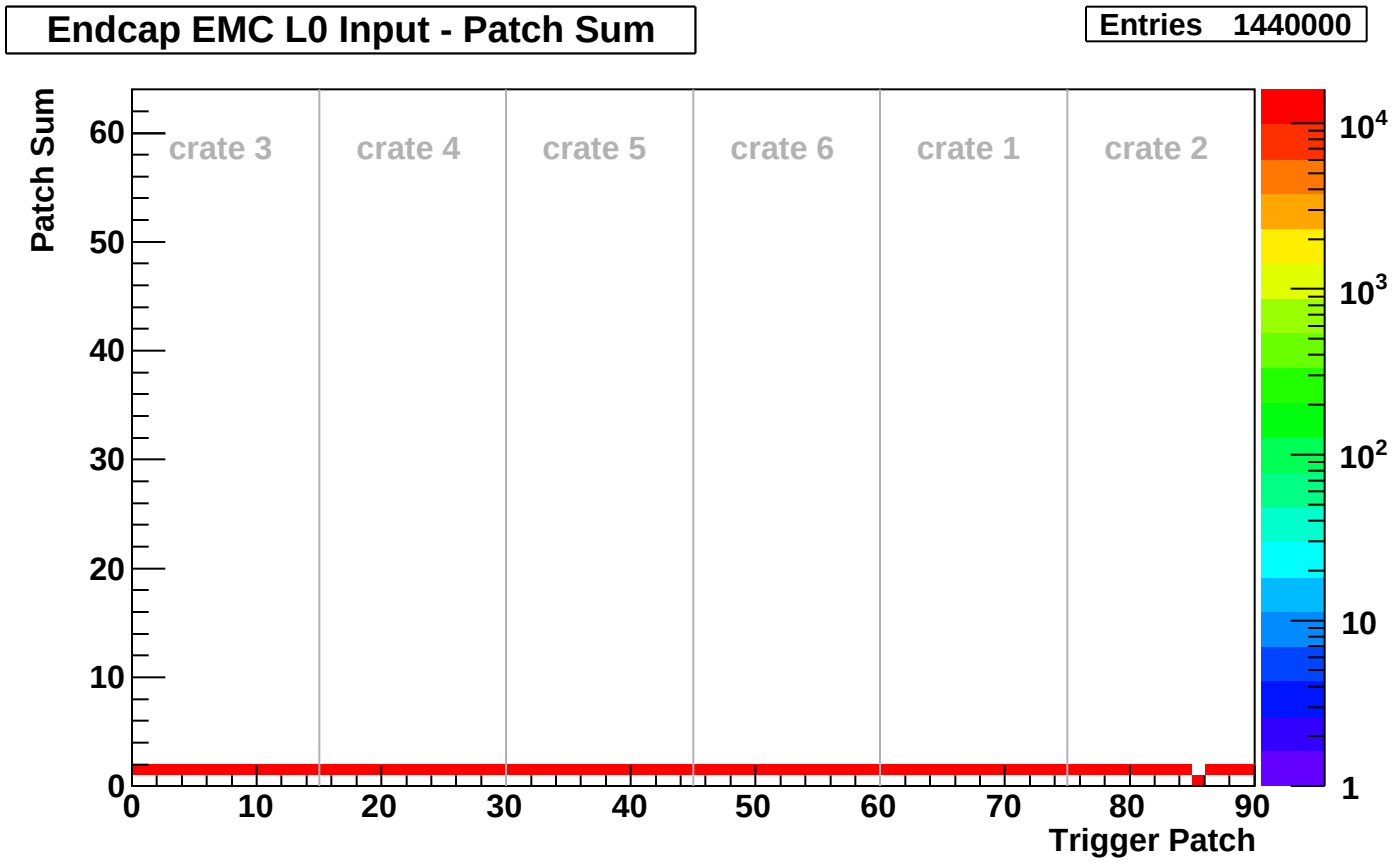

TPC Readout Mask (simulated)
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30

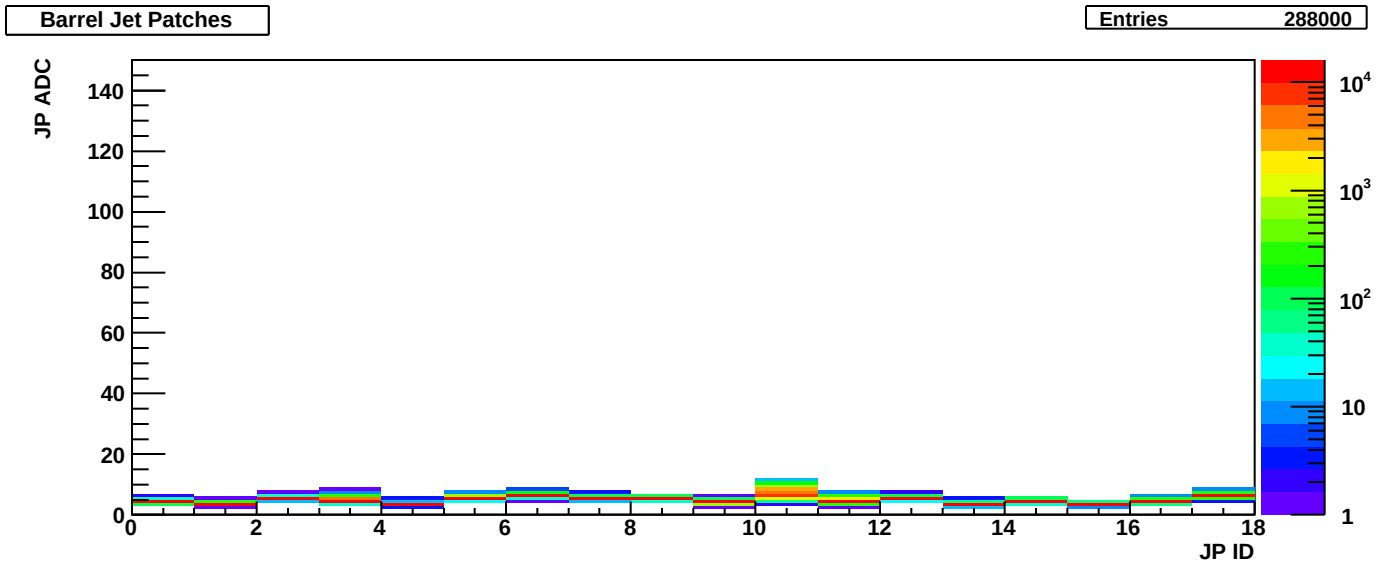

BunchId7Bit (all events)
Entries 16000
10^2
0 20 40 60 80 100 120

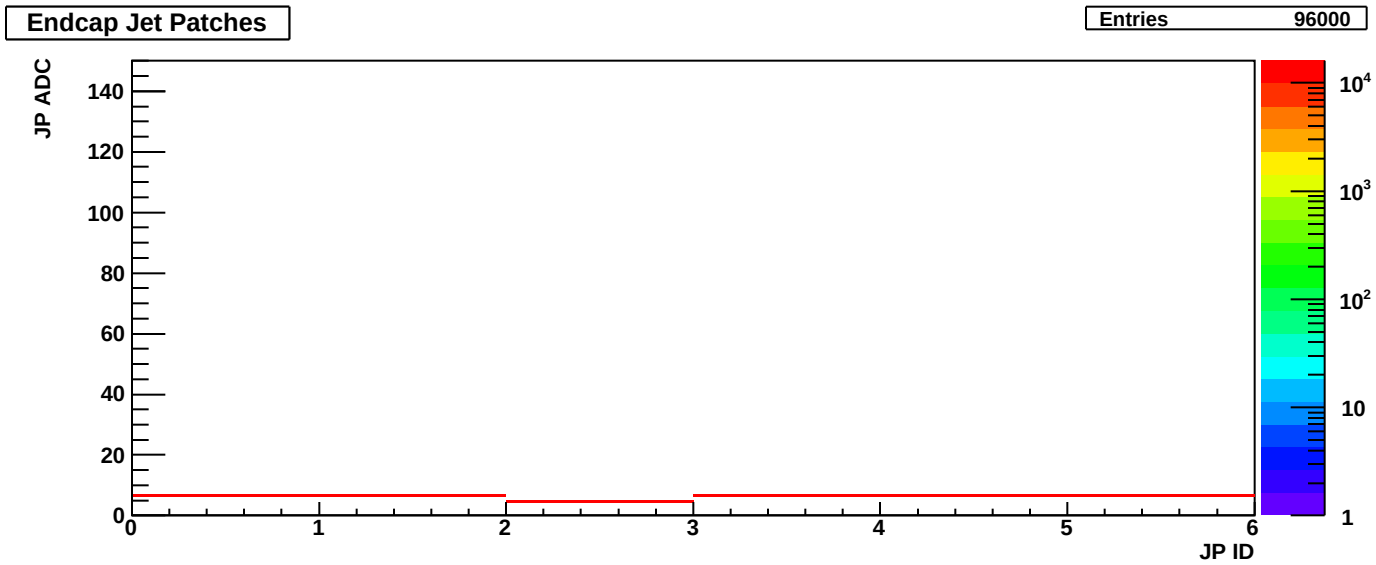

Barrel EMC L0 Input - High Tower
Entries 4800000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

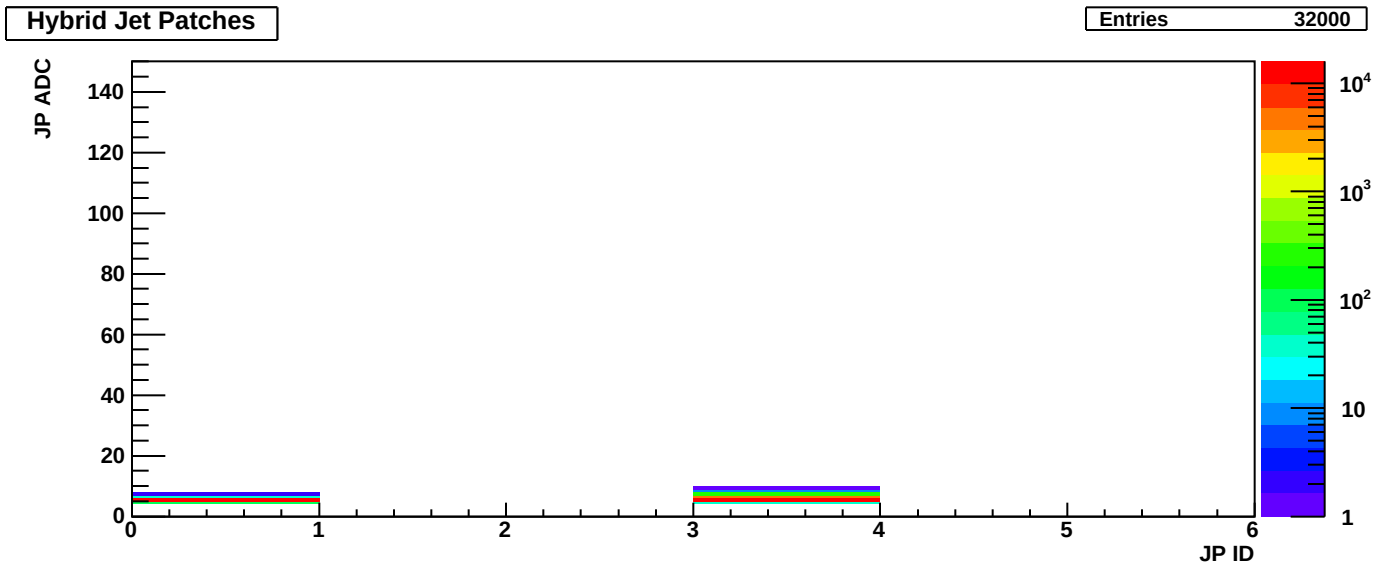

Barrel EMC L0 Input - Patch Sum
Entries 4800000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

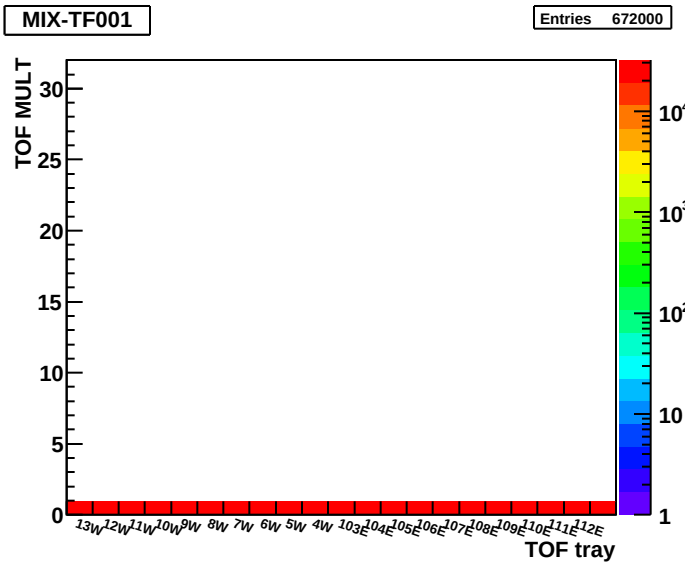

Endcap EMC L0 Input - High Tower
Entries 1440000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

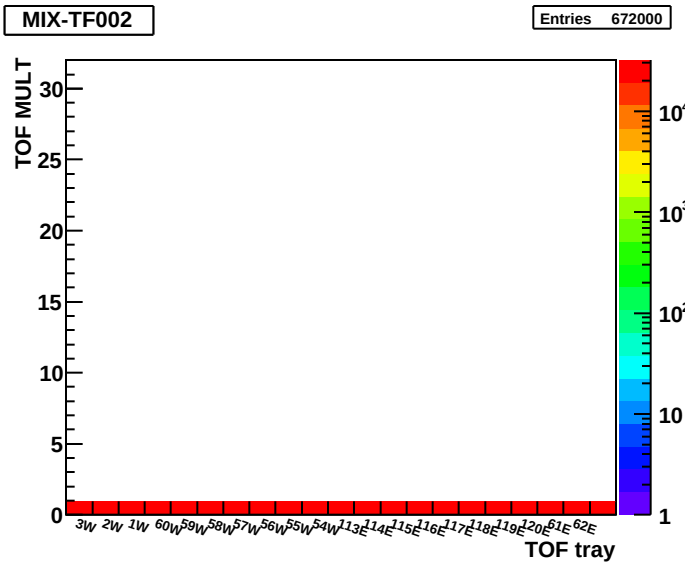

Endcap EMC L0 Input - Patch Sum
Entries 1440000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

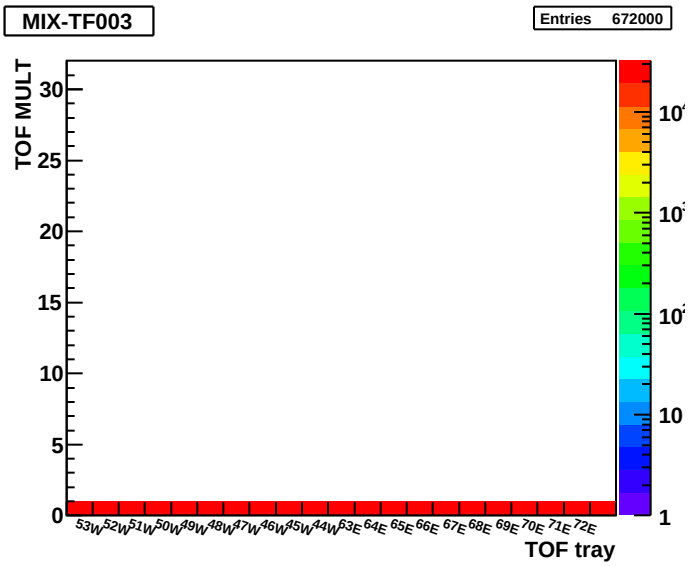

Barrel Jet Patches
Entries 288000
JP ADC
JP ID

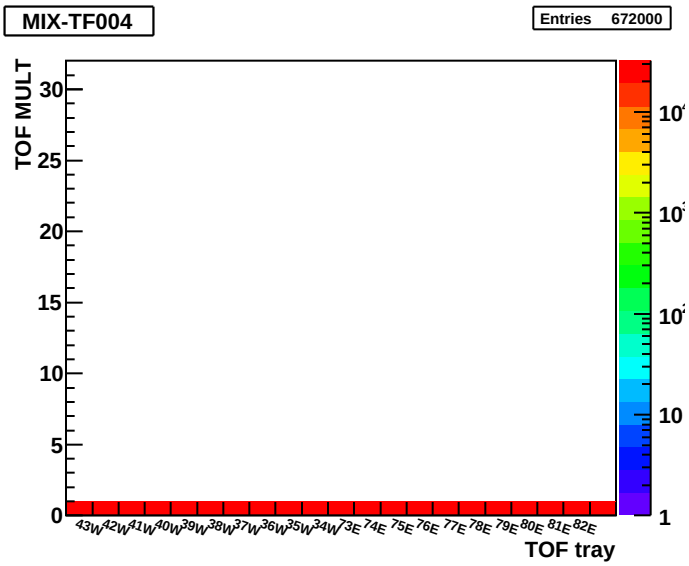

Endcap Jet Patches
Entries 96000
JP ADC
JP ID

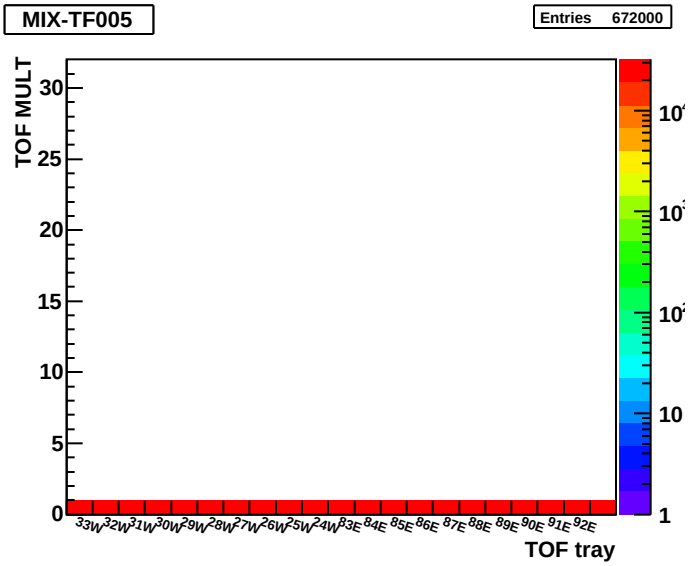

Hybrid Jet Patches
Entries 32000
JP ADC
JP ID

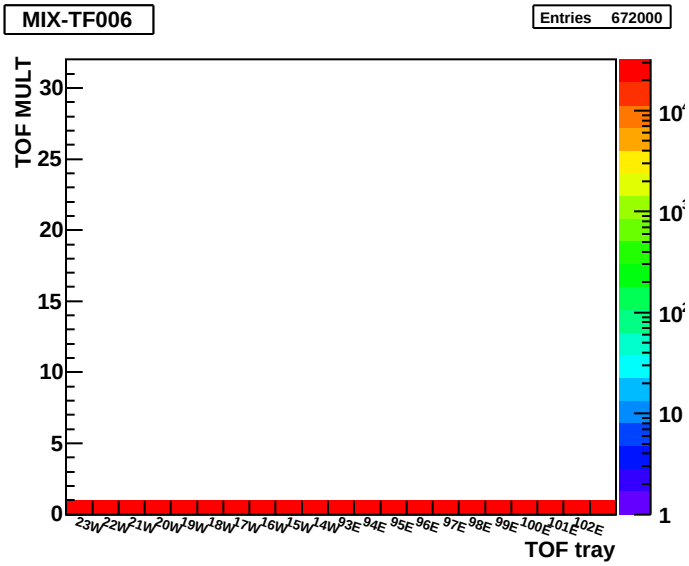

MIX-TF001
Entries 672000
TOF MULT
TOF tray

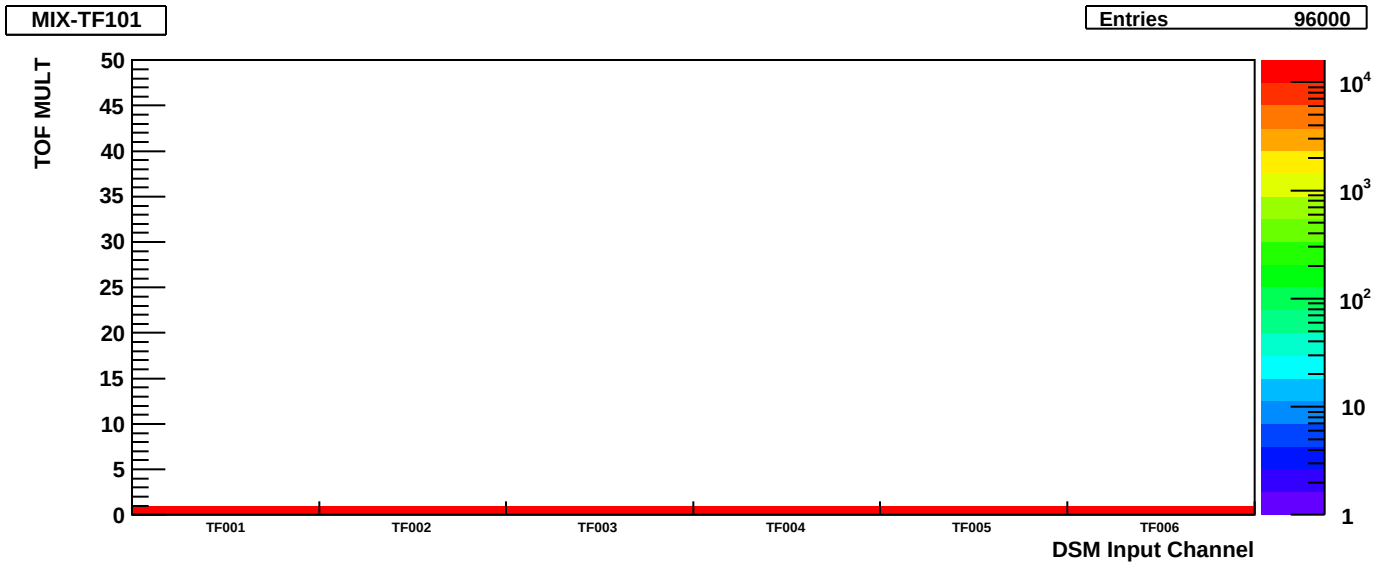

MIX-TF002
Entries 672000
TOF MULT
TOF tray

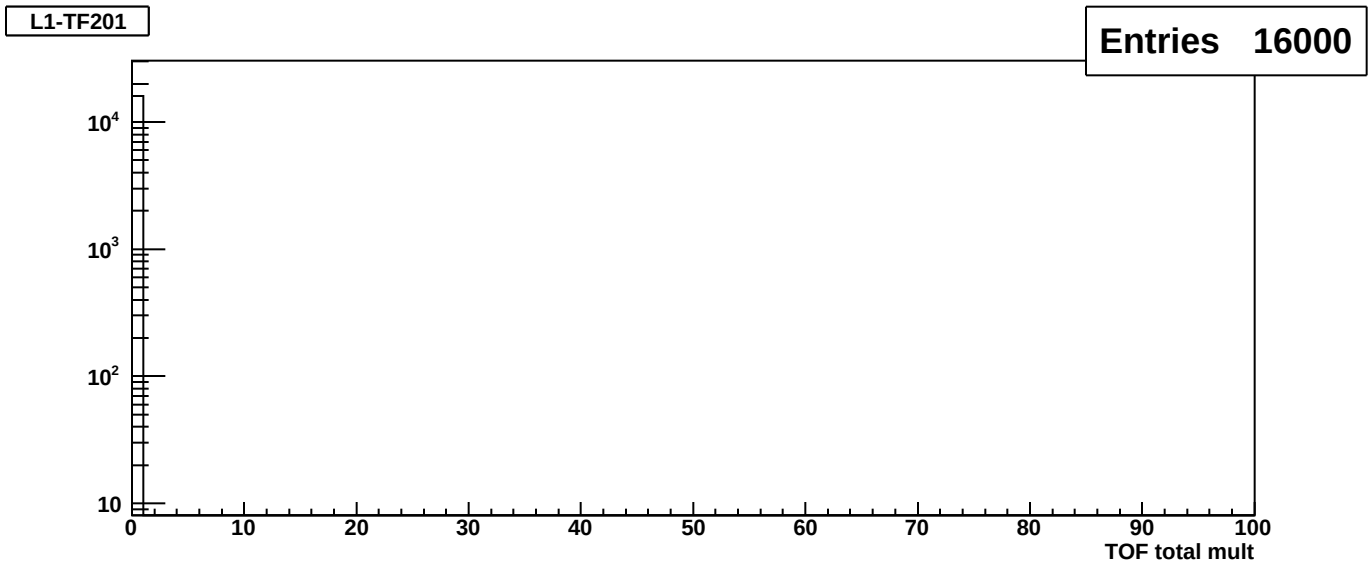

MIX-TF003
Entries 672000
TOF MULT
TOF tray

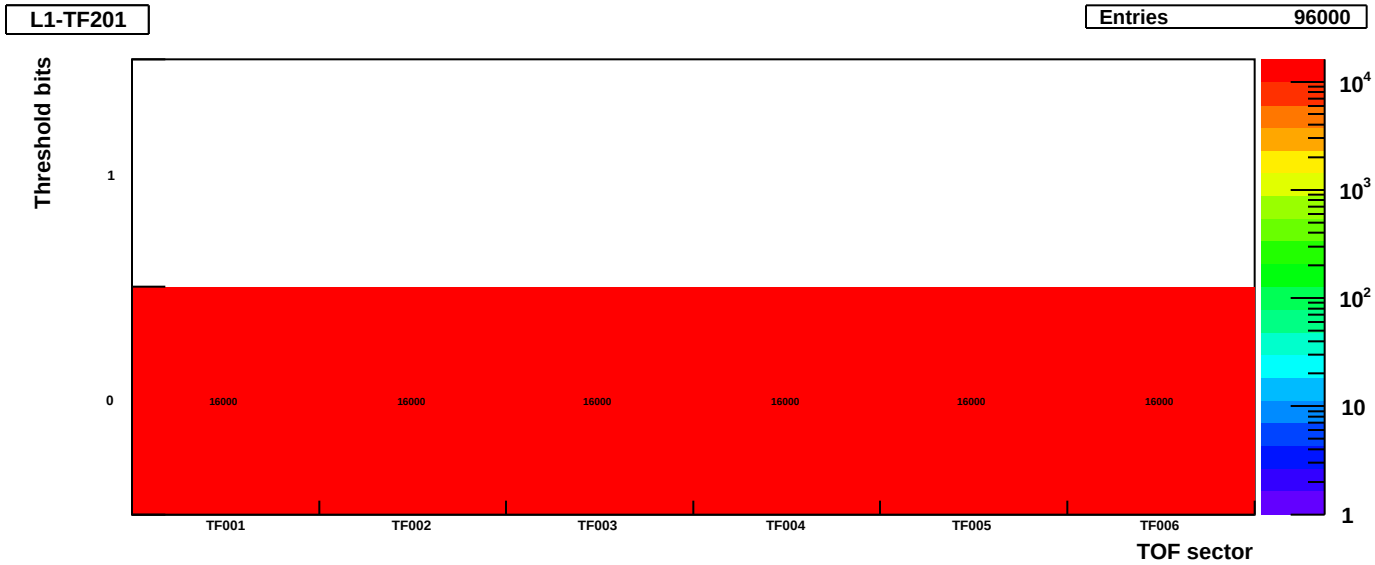

MIX-TF004
Entries 672000
TOF MULT
TOF tray

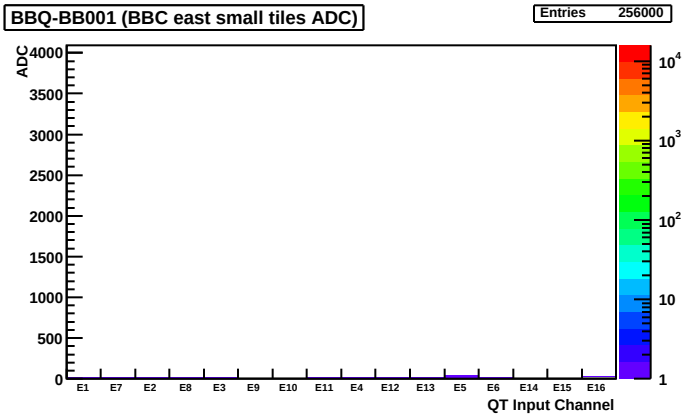

MIX-TF005
Entries 672000
TOF MULT
TOF tray

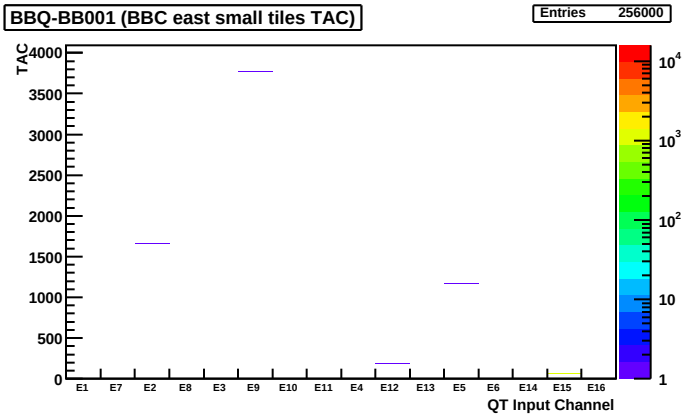

MIX-TF006
Entries 672000
TOF MULT
TOF tray

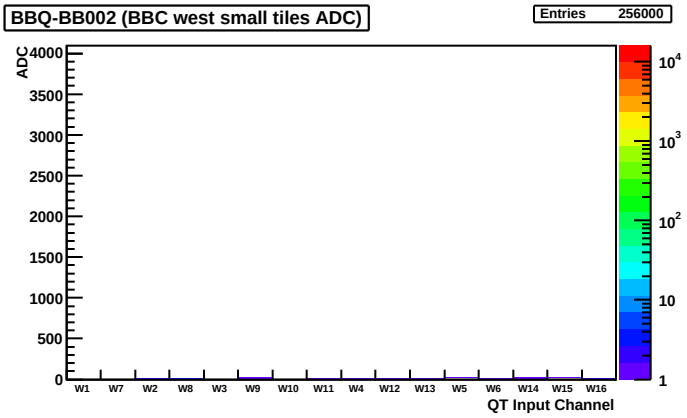

MIX-TF101
Entries 96000
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

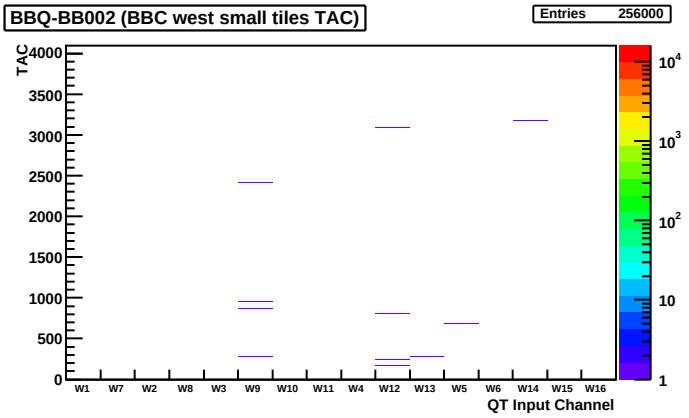

L1-TF201
Entries 16000
10^4
10^3
10^2
10
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

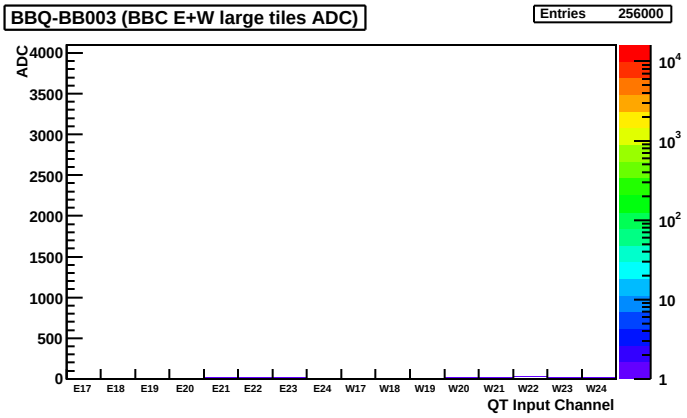

L1-TF201
Entries 96000
Threshold bits
1
0
16000
16000
16000
16000
16000
16000
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2
10
1

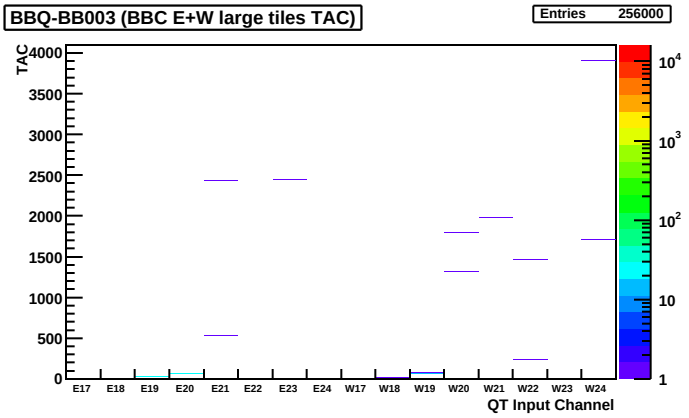

BBQ-BB001 (BBC east small tiles ADC)
Entries 256000
ADC
QT Input Channel

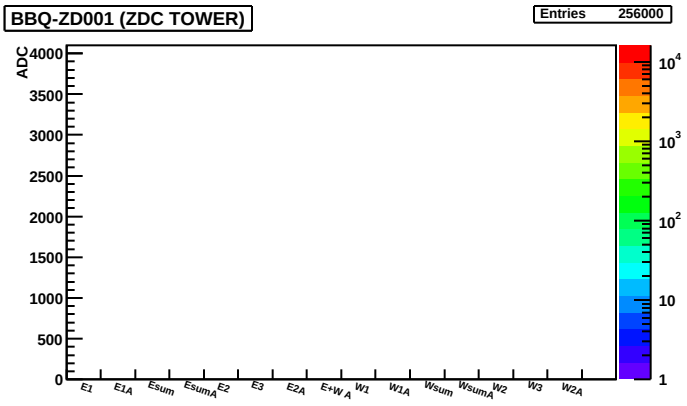

BBQ-BB001 (BBC east small tiles TAC)
Entries 256000
TAC
QT Input Channel

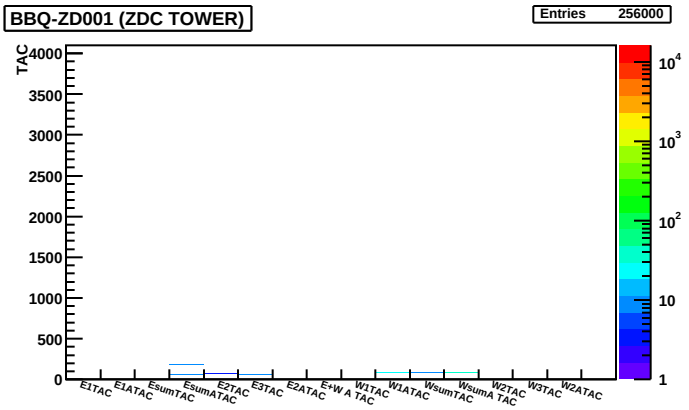

BBQ-BB002 (BBC west small tiles ADC)
Entries 256000
ADC
QT Input Channel

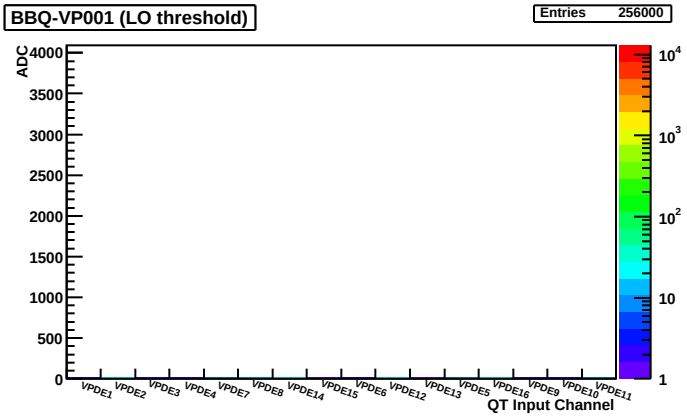

BBQ-BB002 (BBC west small tiles TAC)
Entries 256000
TAC
QT Input Channel

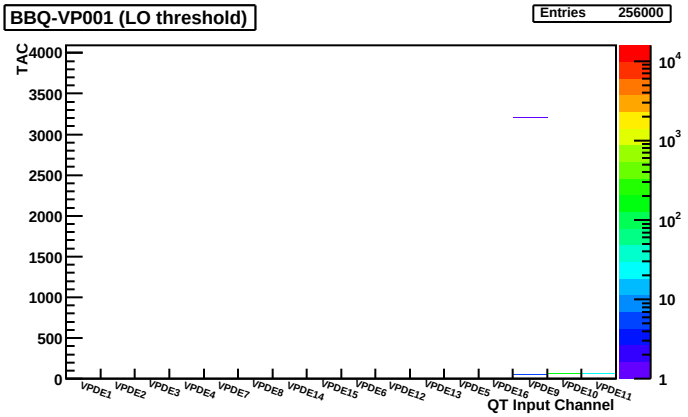

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 256000
ADC
QT Input Channel

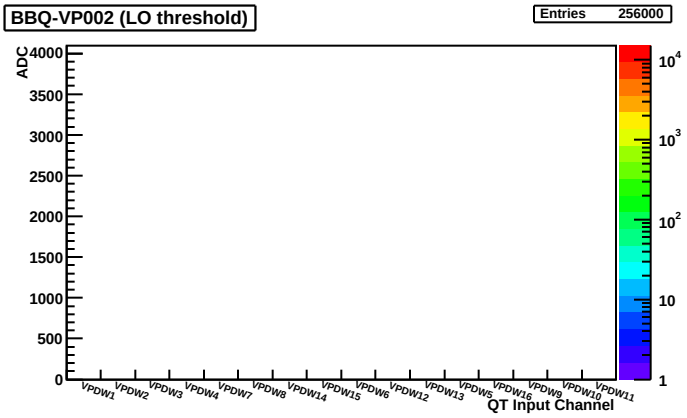

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 256000
TAC
QT Input Channel

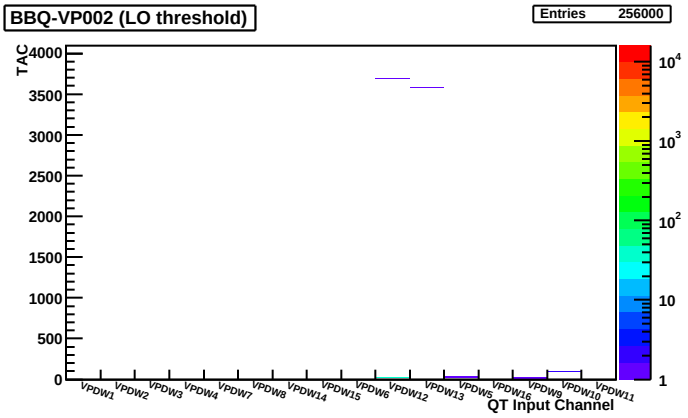

BBQ-ZD001 (ZDC TOWER)
Entries 256000
ADC

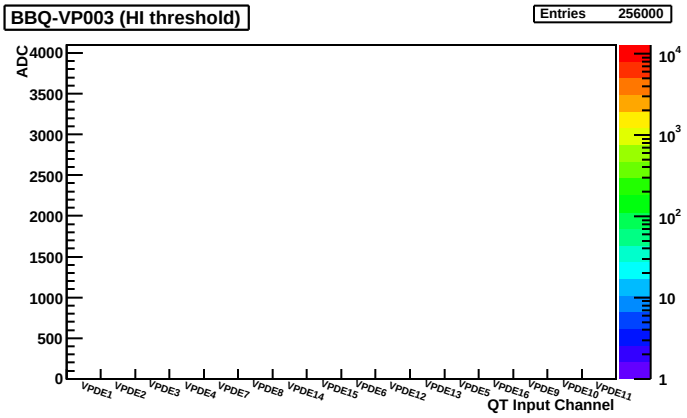

BBQ-ZD001 (ZDC TOWER)
Entries 256000
TAC

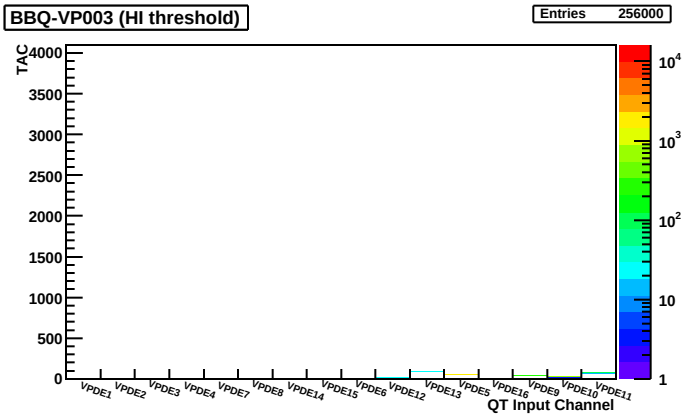

BBQ-VP001 (LO threshold)
Entries 256000
ADC
QT Input Channel

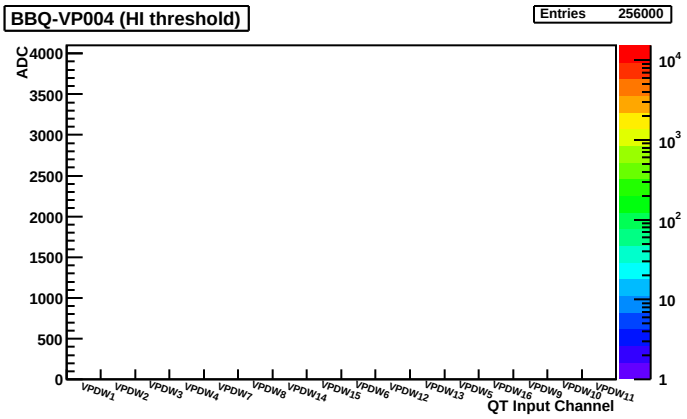

BBQ-VP001 (LO threshold)
Entries 256000
TAC
QT Input Channel

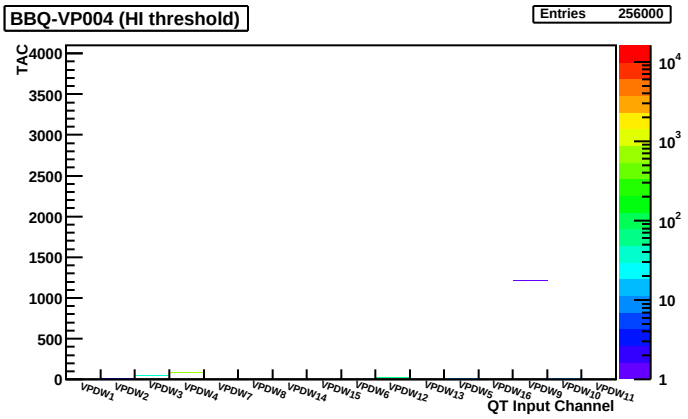

BBQ-VP002 (LO threshold)
Entries 256000
ADC
QT Input Channel

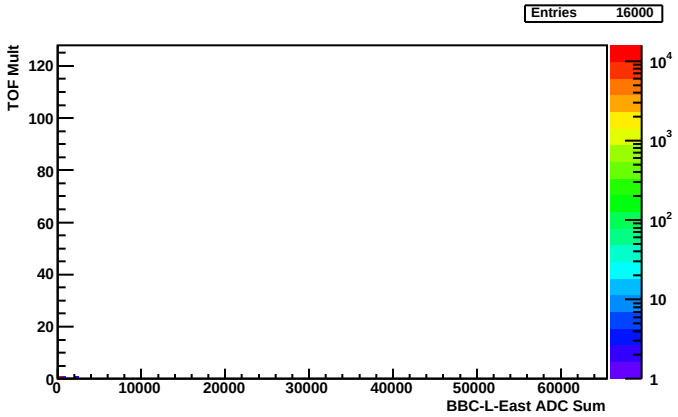

BBQ-VP002 (LO threshold)
Entries 256000
TAC
QT Input Channel

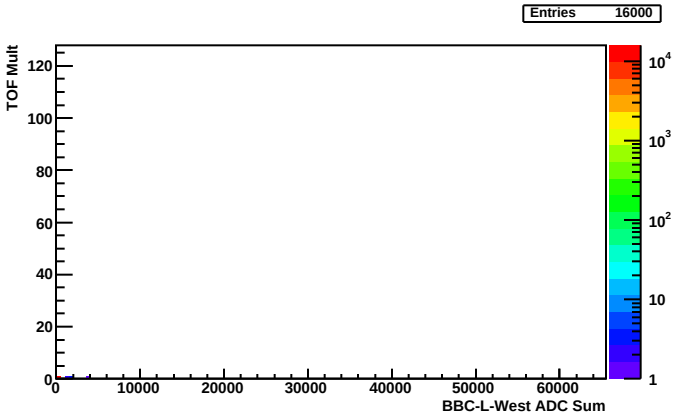

BBQ-VP003 (HI threshold)
Entries 256000
ADC
QT Input Channel

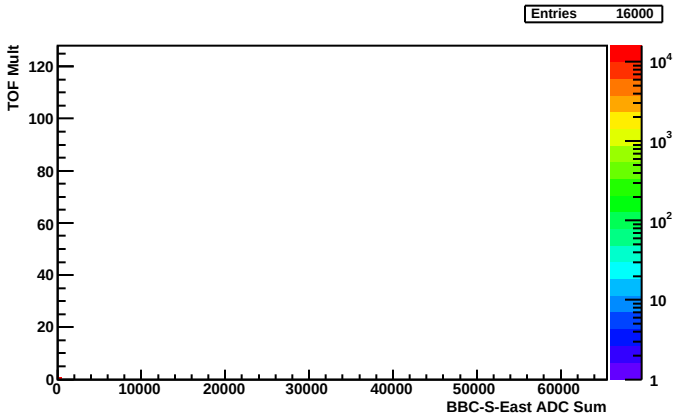

BBQ-VP003 (HI threshold)
Entries 256000
TAC
QT Input Channel

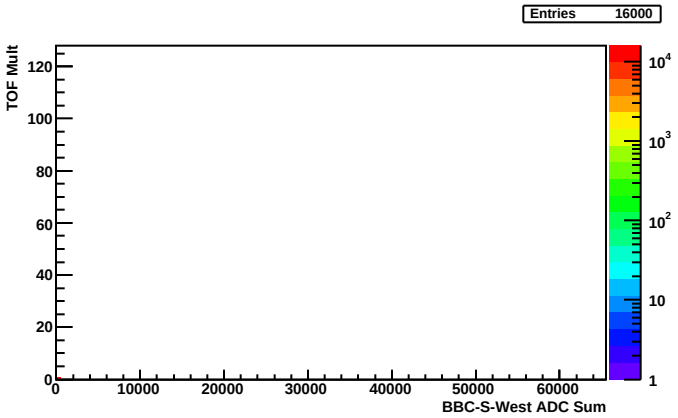

BBQ-VP004 (HI threshold)
Entries 256000
ADC
QT Input Channel

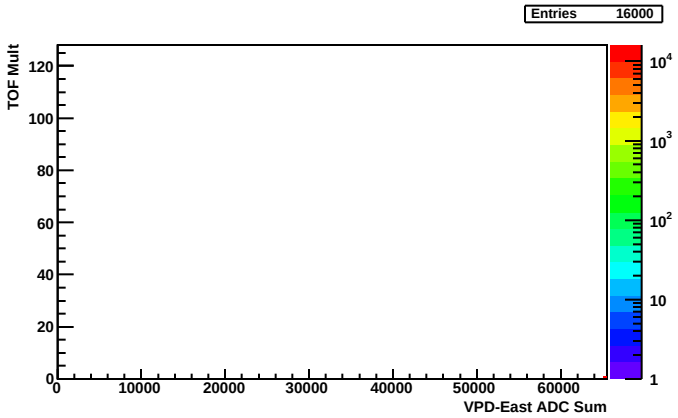

BBQ-VP004 (HI threshold)
Entries 256000
TAC
QT Input Channel

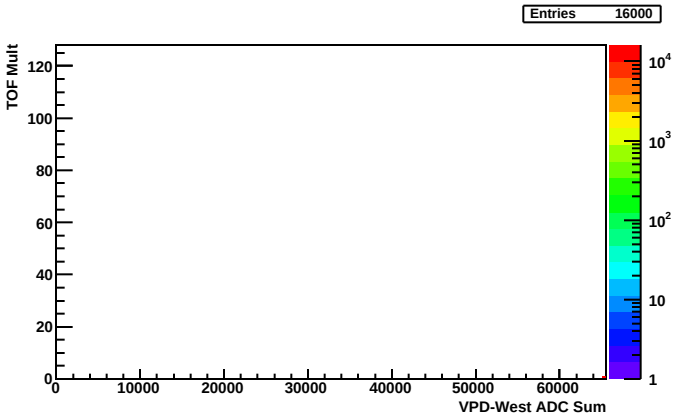

Entries 16000
TOF Mult
BBC-L-East ADC Sum

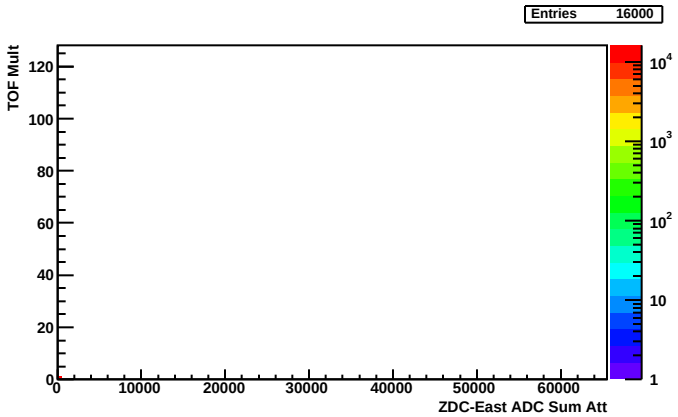

Entries 16000
TOF Mult
BBC-L-West ADC Sum

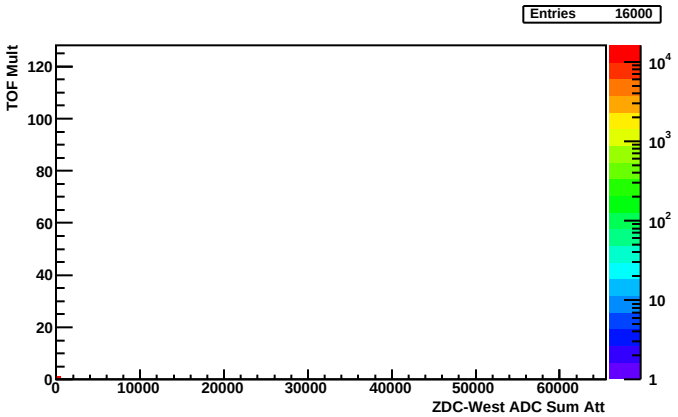

Entries 16000
TOF Mult
BBC-S-East ADC Sum

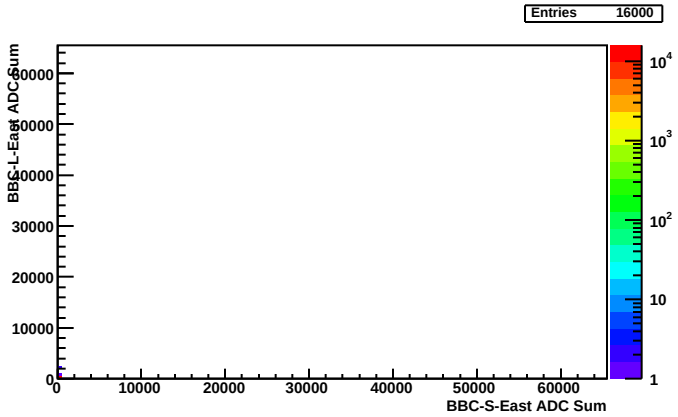

Entries 16000
TOF Mult
BBC-S-West ADC Sum

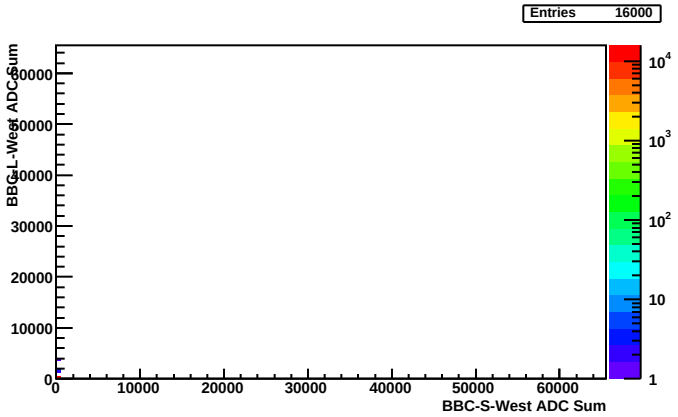

Entries 16000
TOF Mult
VPD-East ADC Sum

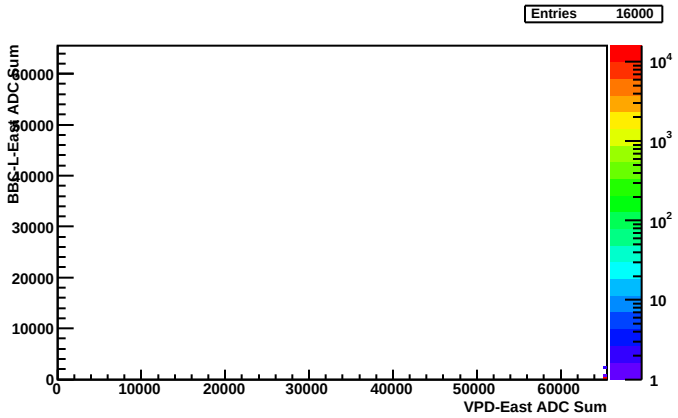

Entries 16000
TOF Mult
VPD-West ADC Sum

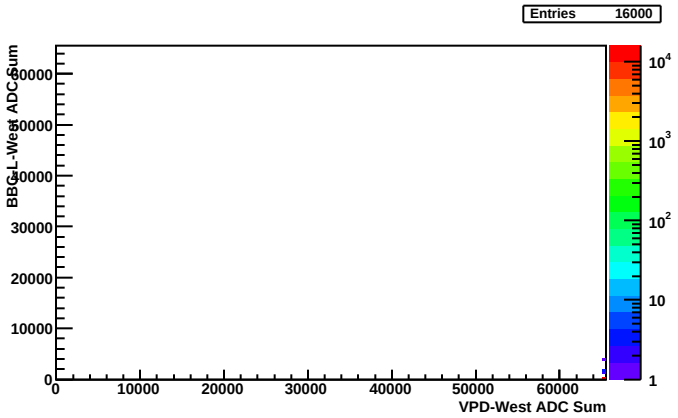

Entries 16000
TOF Mult
ZDC-East ADC Sum Att

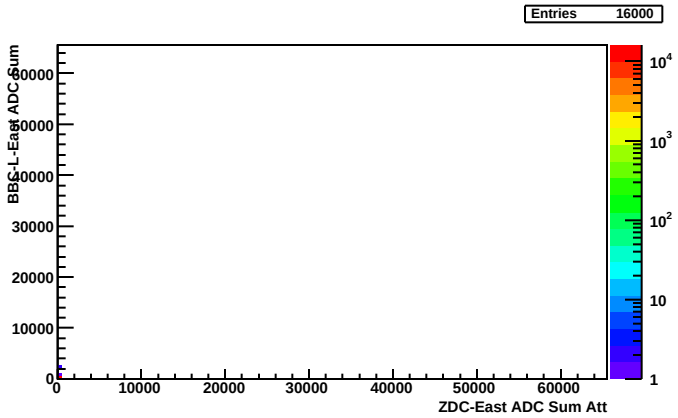

Entries 16000
TOF Mult
ZDC-West ADC Sum Att

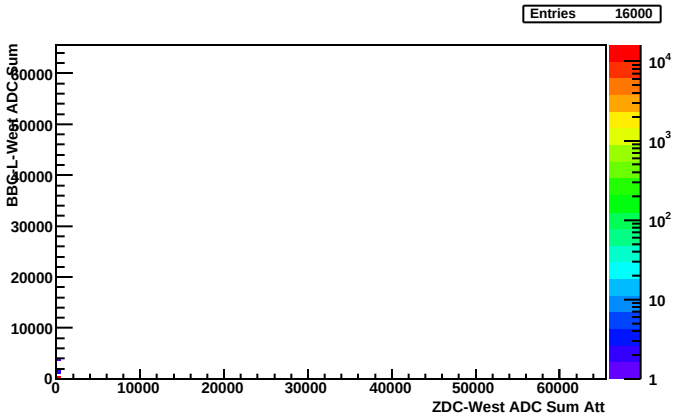

Entries 16000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

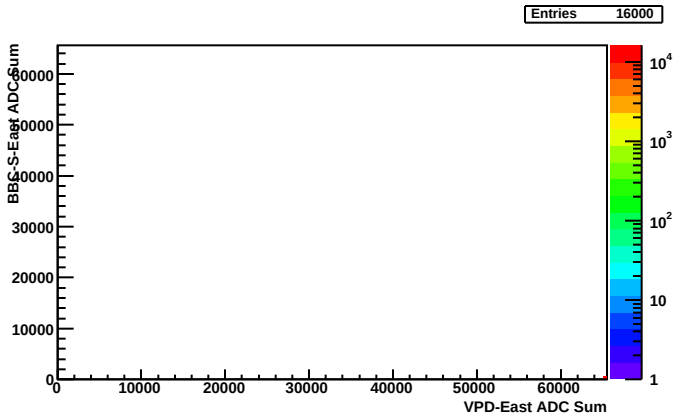

Entries 16000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

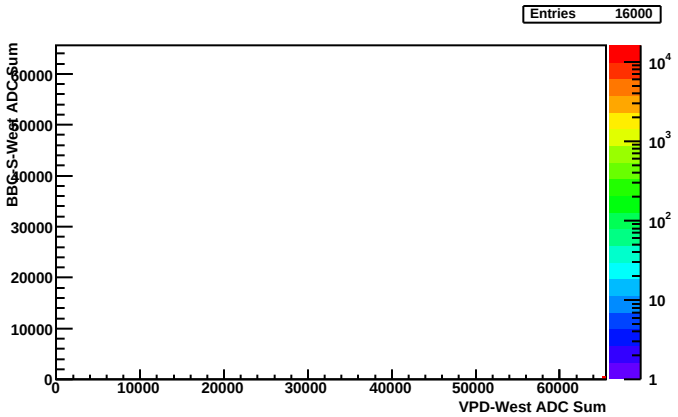

Entries 16000
BBC-L-East ADC Sum
VPD-East ADC Sum

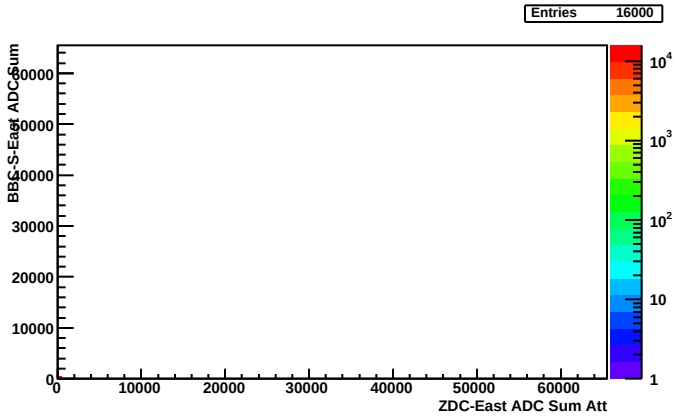

Entries 16000
BBC-L-West ADC Sum
VPD-West ADC Sum

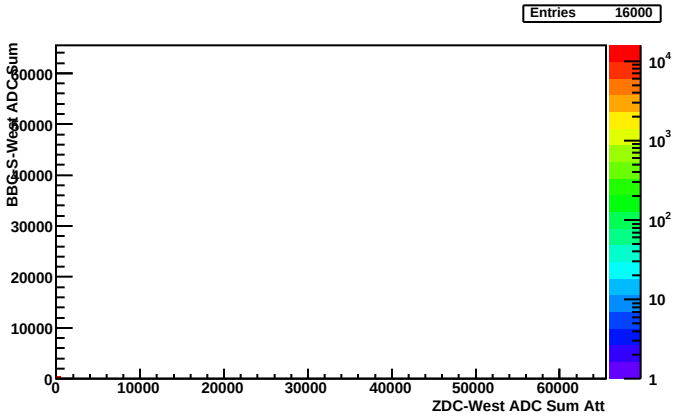

Entries 16000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

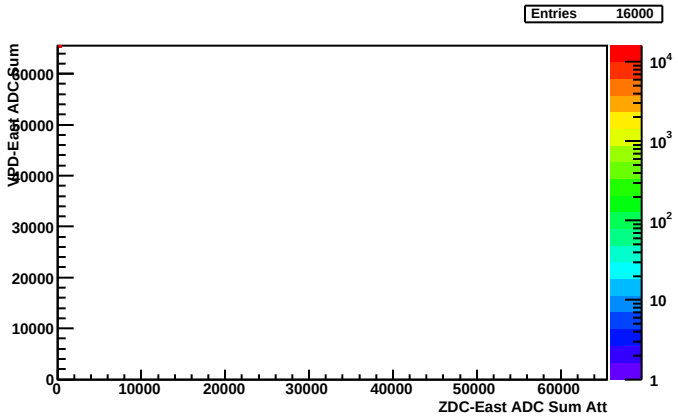

Entries 16000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

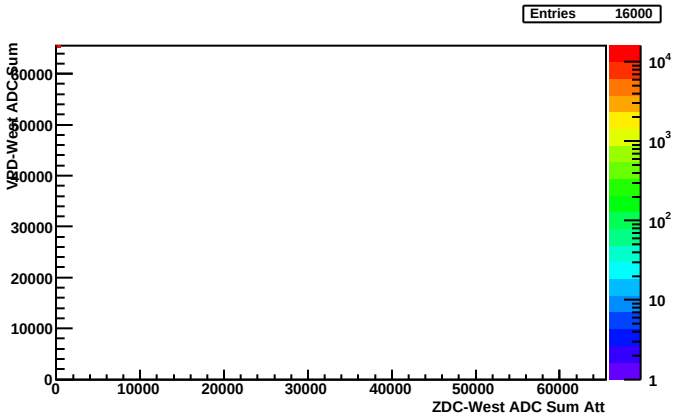

Entries 16000
BBC-S-East ADC Sum
VPD-East ADC Sum

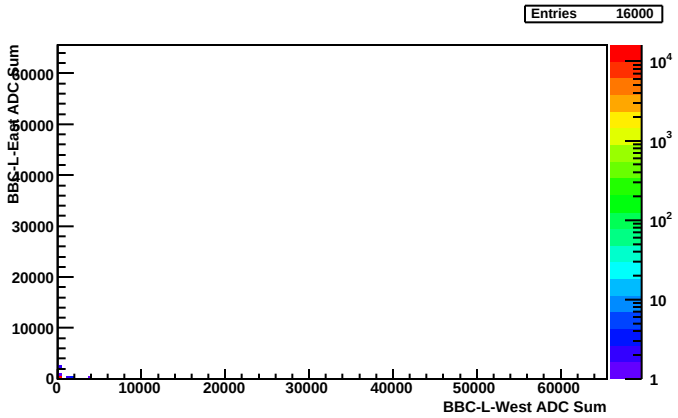

Entries 16000
BBC-S-West ADC Sum
VPD-West ADC Sum

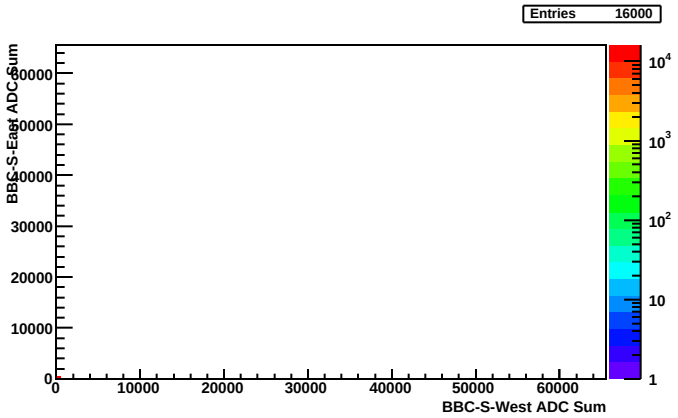

Entries 16000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

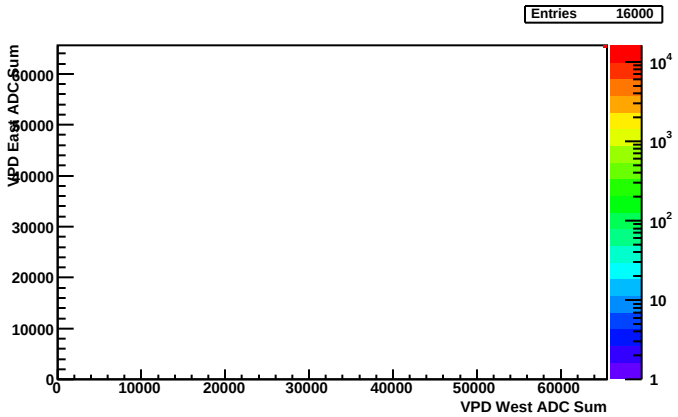

Entries 16000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

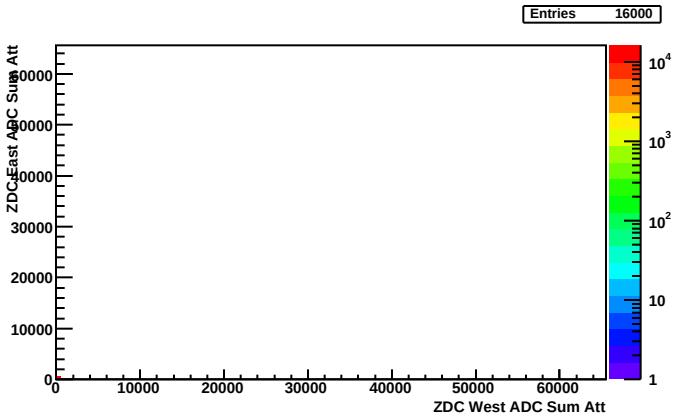

Entries 16000
VPD-East ADC Sum
ZDC-East ADC Sum Att

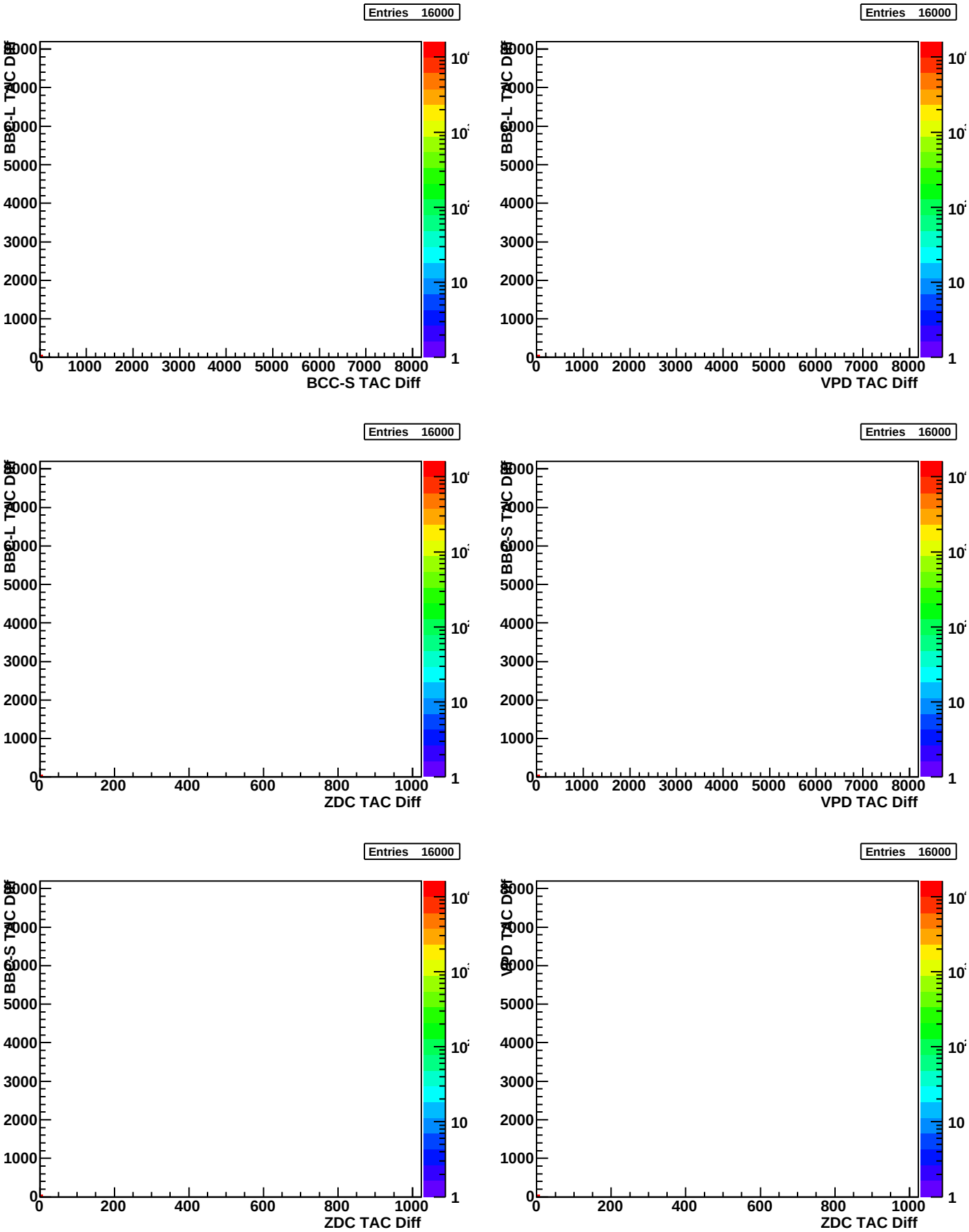

Entries 16000
VPD-West ADC Sum
ZDC-West ADC Sum Att

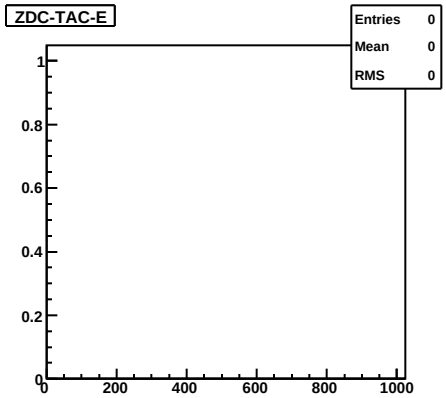

Entries 16000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

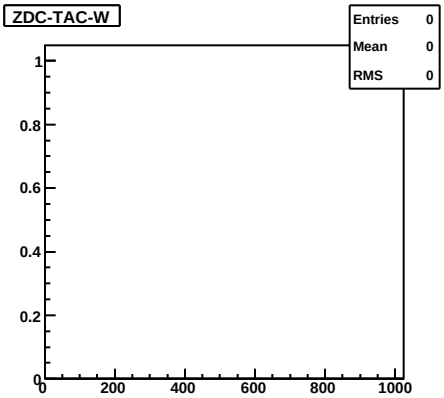

Entries 16000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

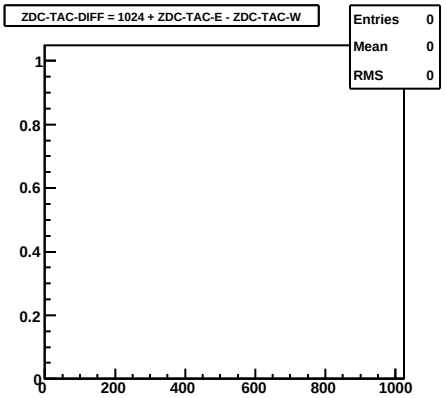

Entries 16000
VPD East ADC Sum
VPD West ADC Sum

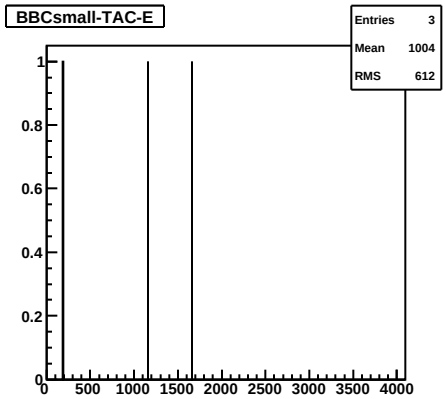

Entries 16000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

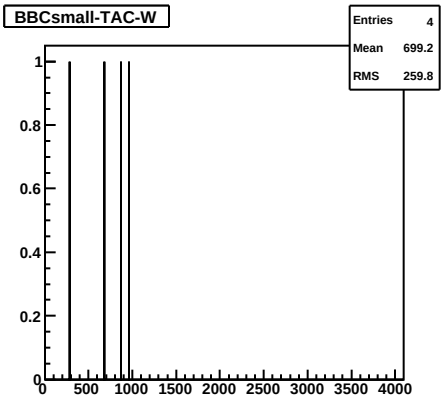

Entries 16000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 16000
BBC-L TAC Diff
VPD TAC Diff
Entries 16000
BBC-L TAC Diff
ZDC TAC Diff
Entries 16000
BBC-S TAC Diff
VPD TAC Diff
Entries 16000
BBC-S TAC Diff
ZDC TAC Diff
Entries 16000
VPD TAC Diff
ZDC TAC Diff

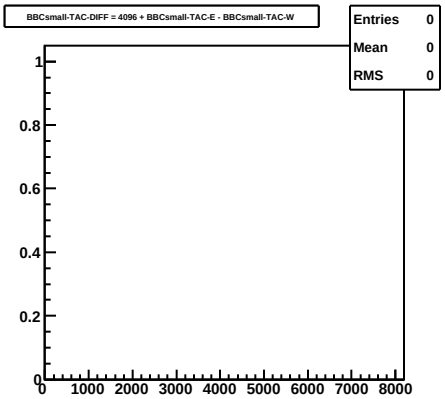

ZDC-TAC-E
Entries 0
Mean 0
RMS 0

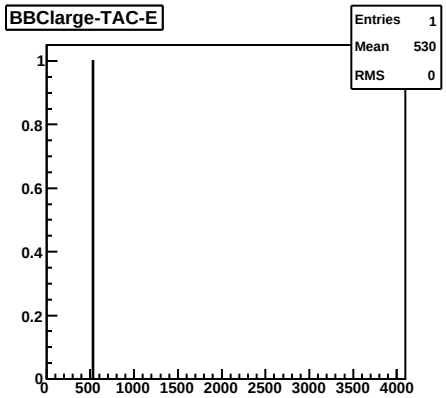

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

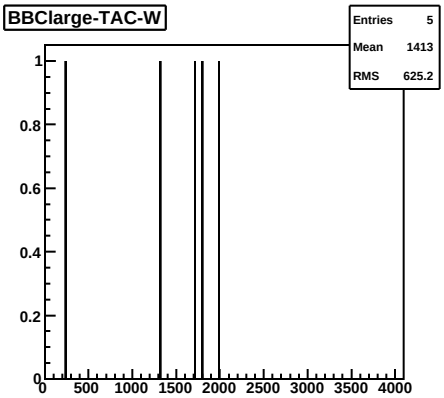

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

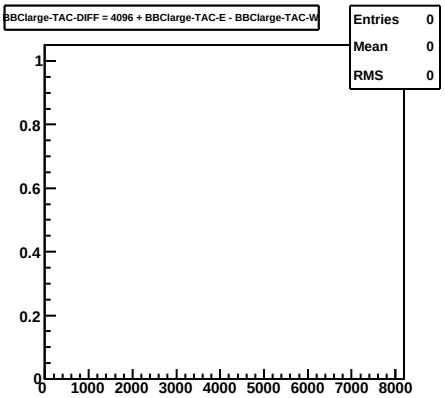

BBCsmall-TAC-E
Entries 3
Mean 1004
RMS 612

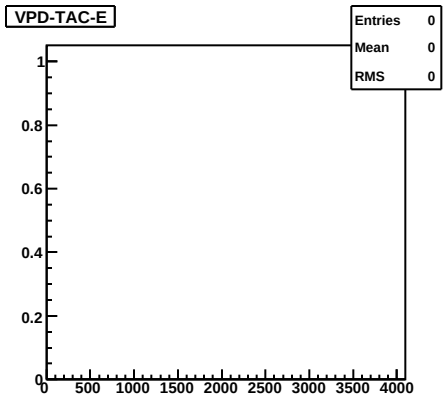

BBCsmall-TAC-W
Entries 4
Mean 699.2
RMS 259.8

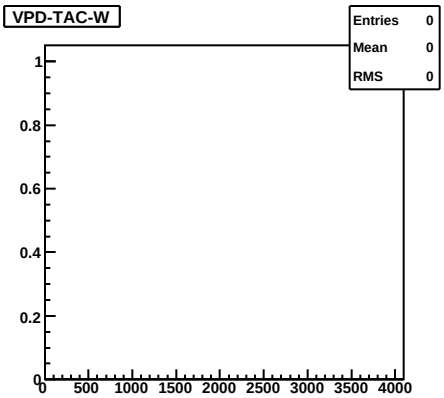

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

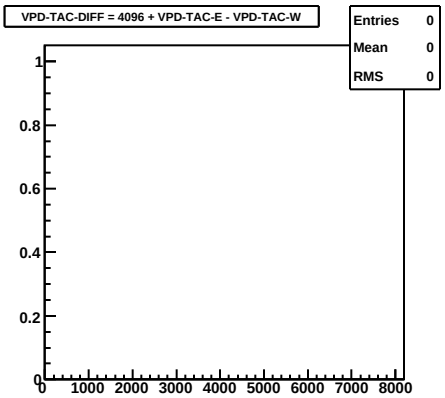

BBClarge-TAC-E
Entries 1
Mean 530
RMS 0

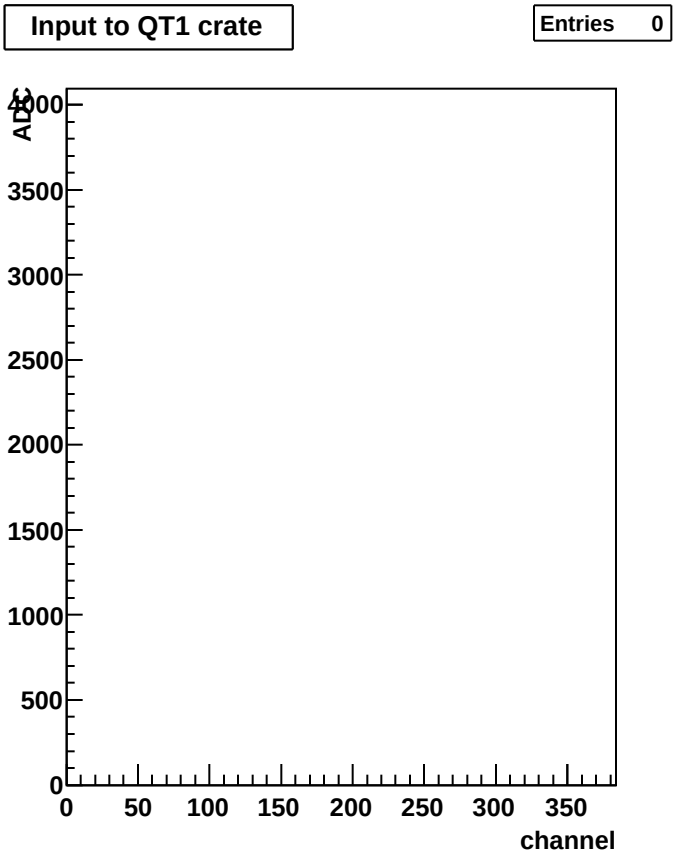

BBClarge-TAC-W
Entries 5
Mean 1413
RMS 625.2

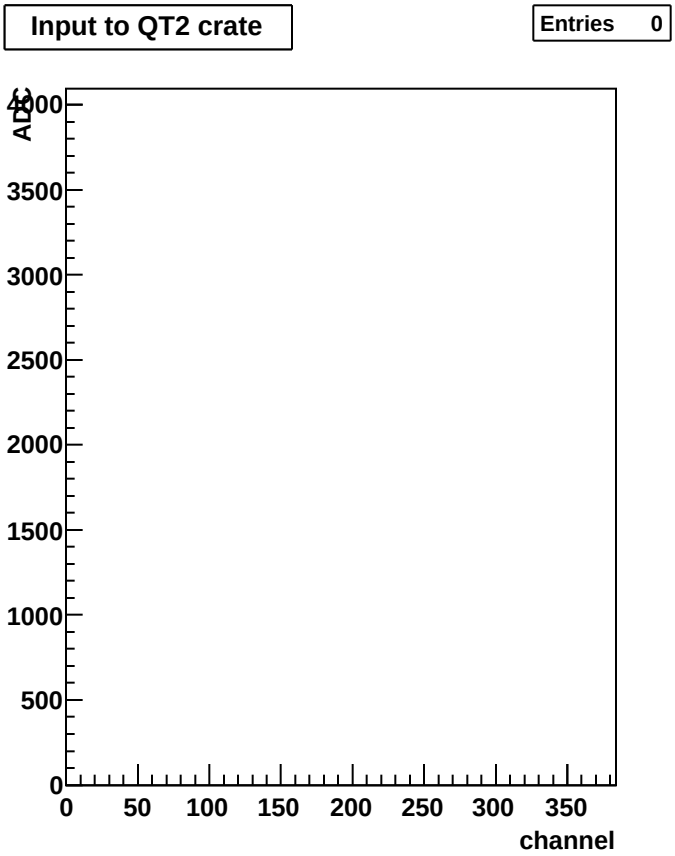

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 0
Mean 0
RMS 0

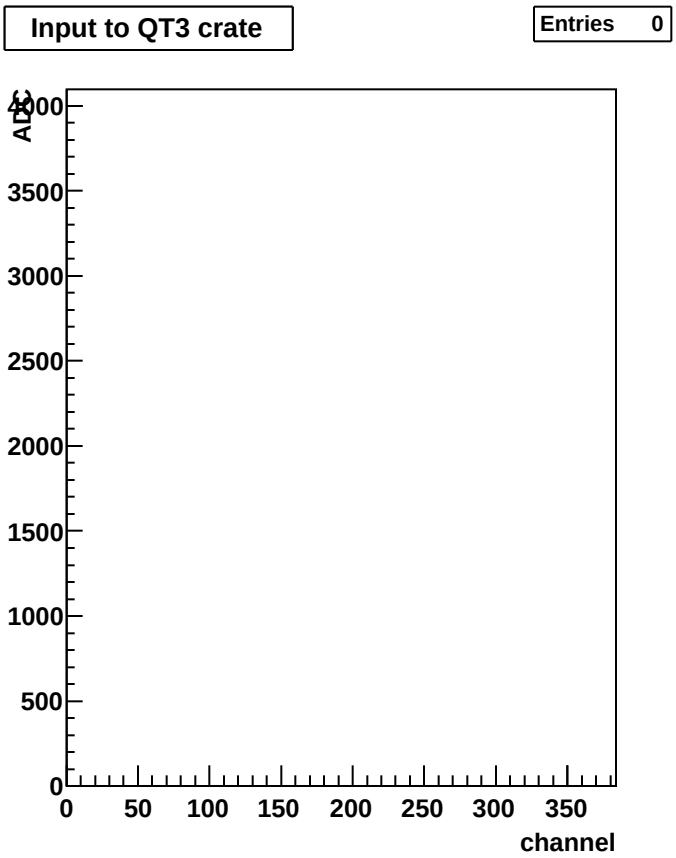

VPD-TAC-E
Entries 0
Mean 0
RMS 0

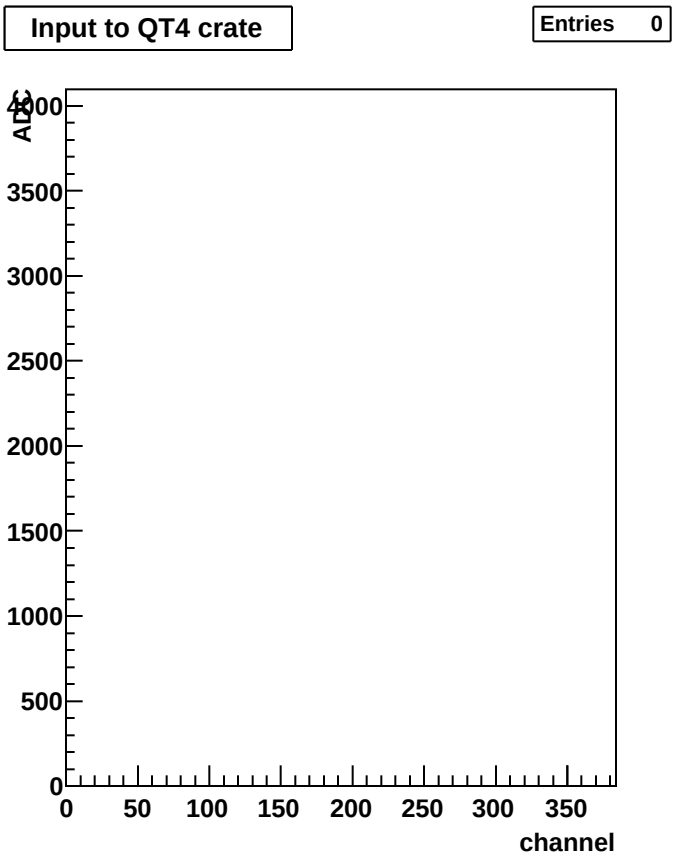

VPD-TAC-W
Entries 0
Mean 0
RMS 0

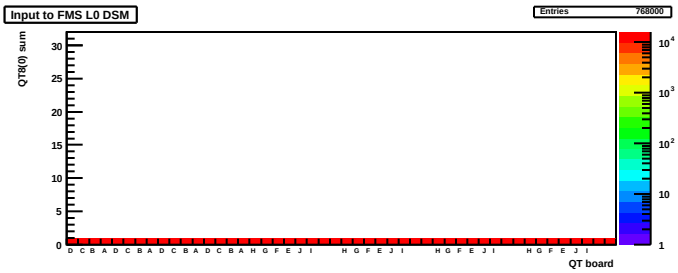

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

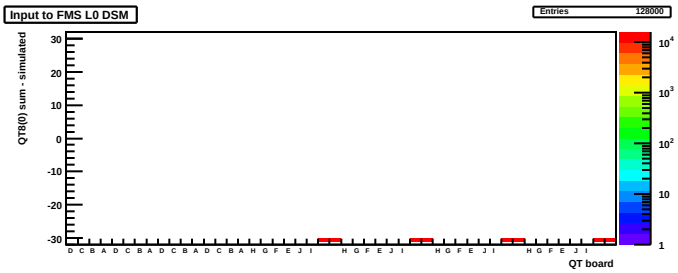

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

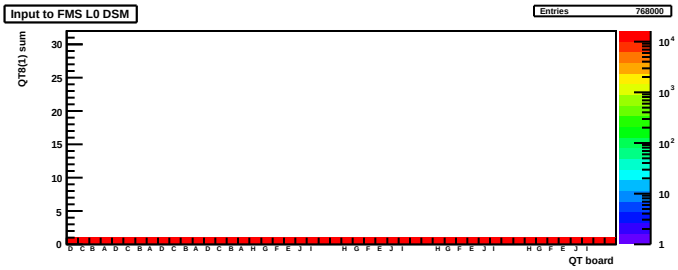

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

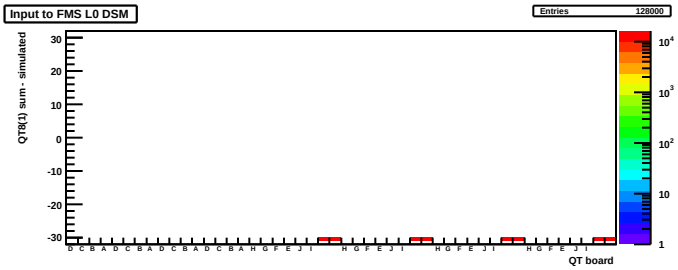

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

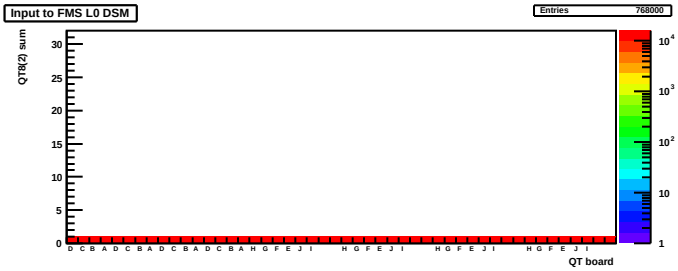

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

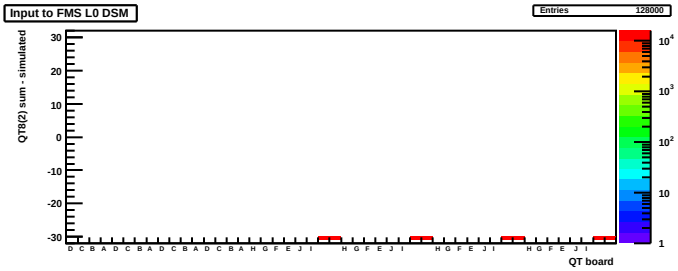

Input to FMS L0 DSM
Entries 768000
QT8(0) sum
QT board

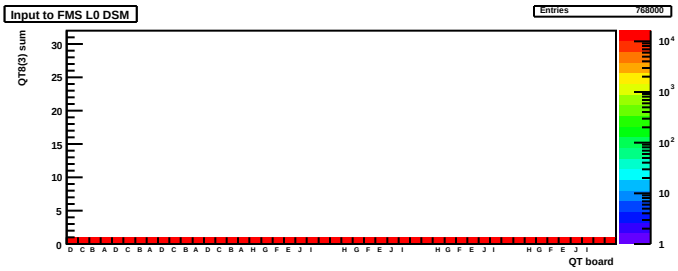

Input to FMS L0 DSM
Entries 128000
QT8(0) sum - simulated
QT board

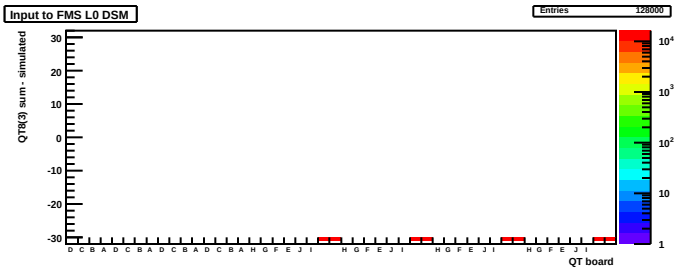

Input to FMS L0 DSM
Entries 768000
QT8(1) sum
QT board

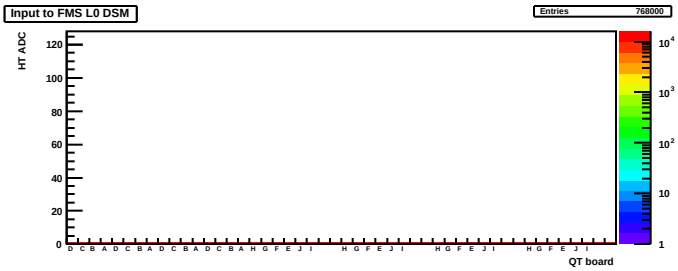

Input to FMS L0 DSM
Entries 128000
QT8(1) sum - simulated
QT board

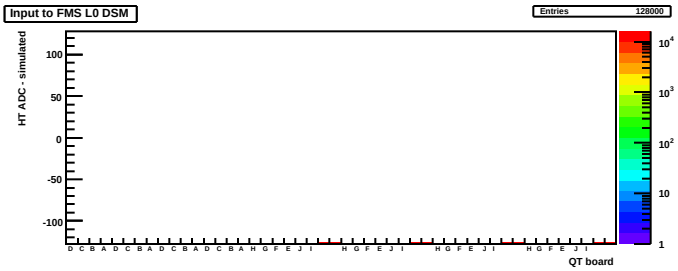

Input to FMS L0 DSM
Entries 768000
QT8(2) sum
QT board

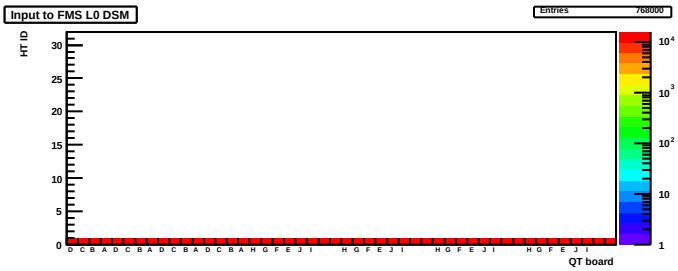

Input to FMS L0 DSM
Entries 128000
QT8(2) sum - simulated
QT board

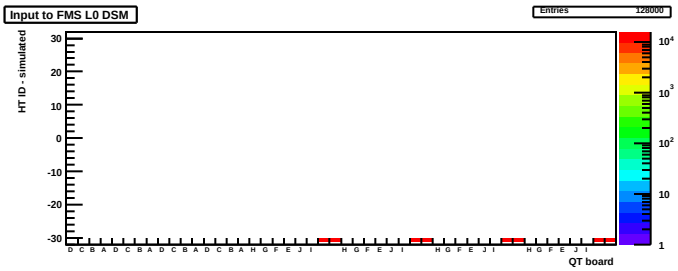

Input to FMS L0 DSM
Entries 768000
QT8(3) sum
QT board

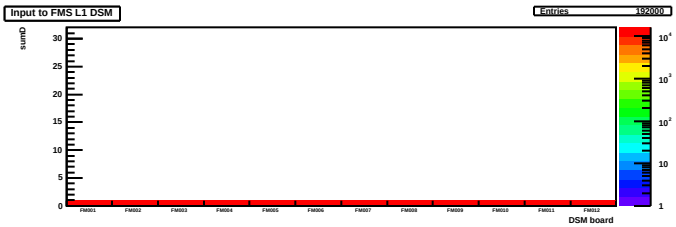

Input to FMS L0 DSM
Entries 128000
QT8(3) sum - simulated
QT board

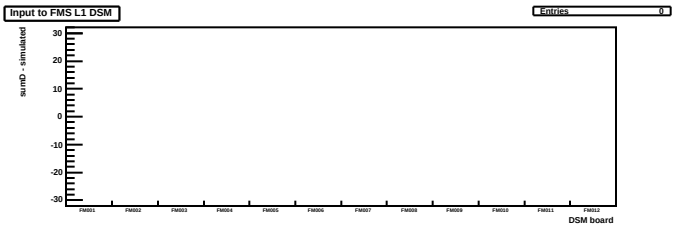

Input to FMS L0 DSM
Entries 768000
HT ADC
QT board

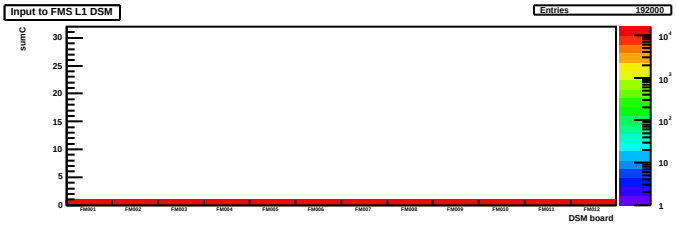

Input to FMS L0 DSM
Entries 128000
HT ADC - simulated
QT board

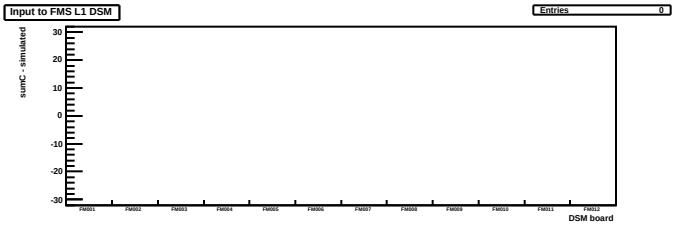

Input to FMS L0 DSM
Entries 768000
HT ID
QT board

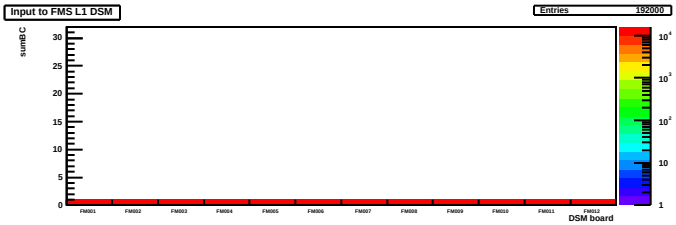

Input to FMS L0 DSM
Entries 128000
HT ID - simulated
QT board

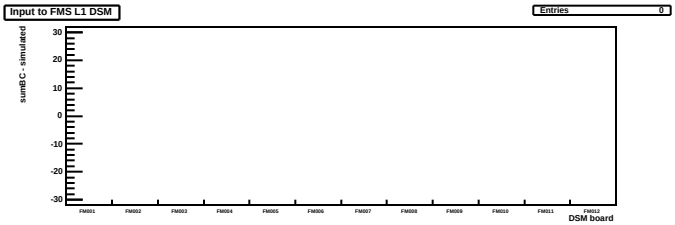

Input to FMS L1 DSM
Entries 192000
sumD
DSM board

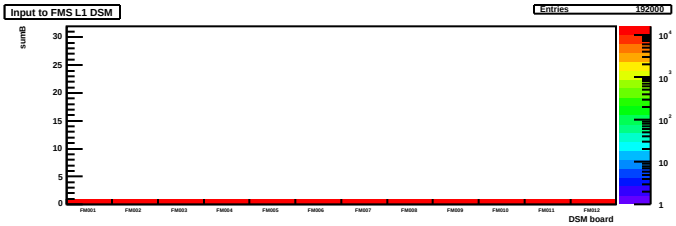

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

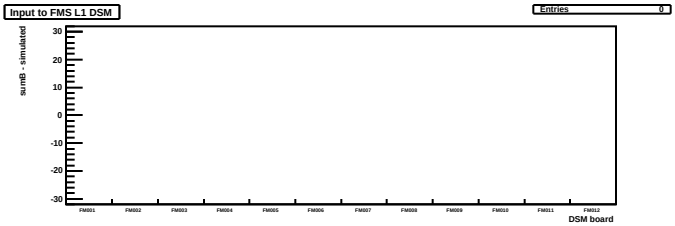

Input to FMS L1 DSM
Entries 192000
sumC
DSM board

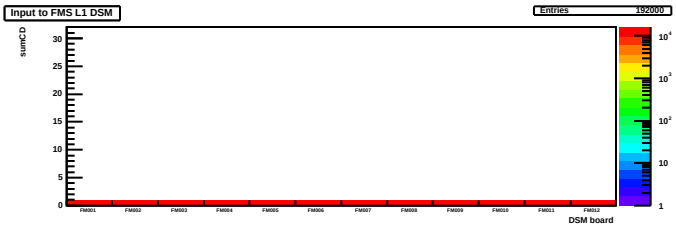

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

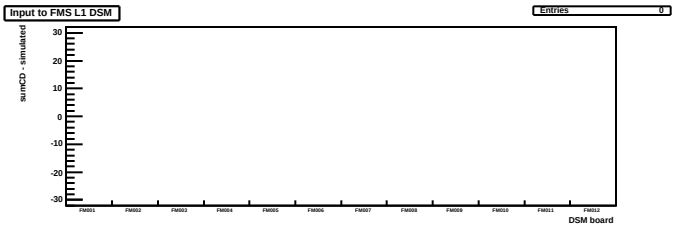

Input to FMS L1 DSM
Entries 192000
sumBC
DSM board

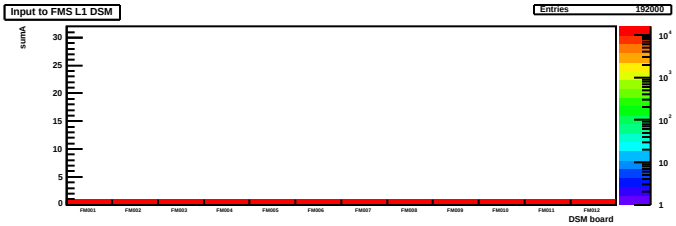

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

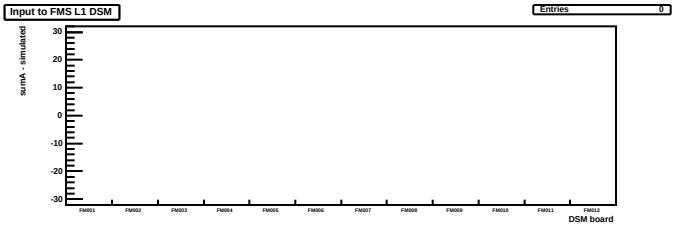

Input to FMS L1 DSM
Entries 192000
sumB
DSM board

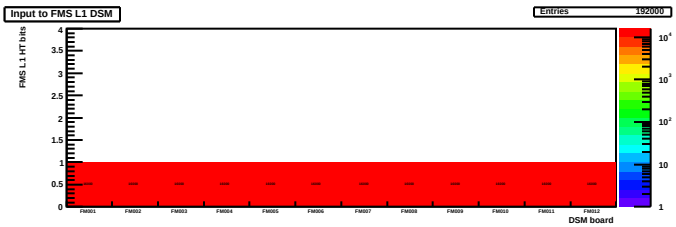

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

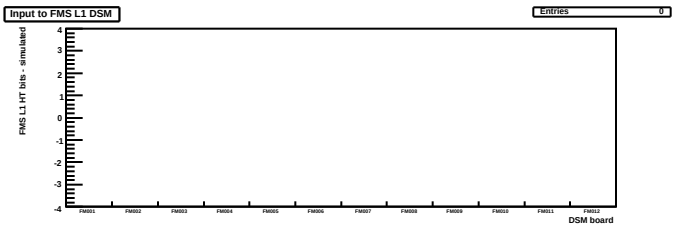

Input to FMS L1 DSM
Entries 192000
sumCD
DSM board

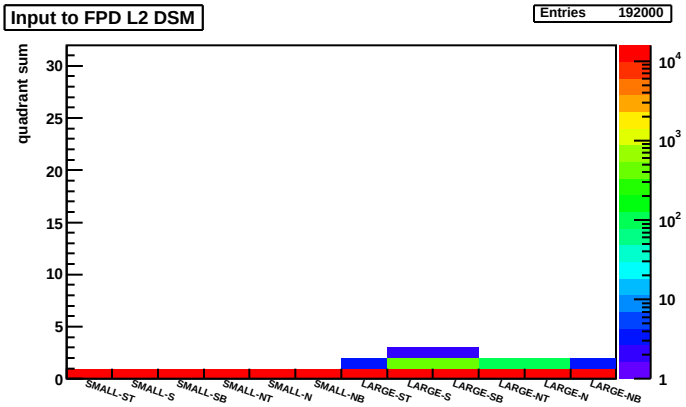

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

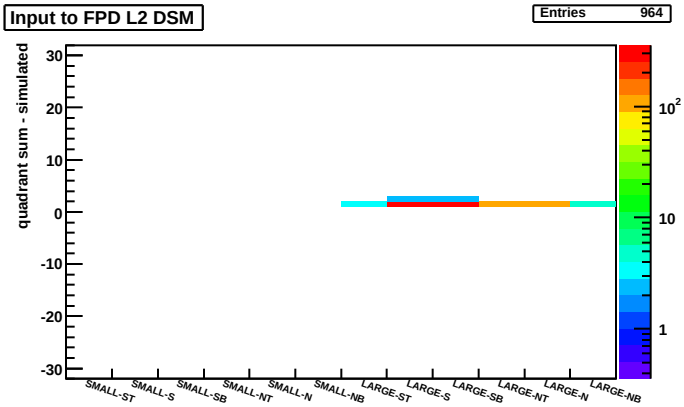

Input to FMS L1 DSM
Entries 192000
sumA
DSM board

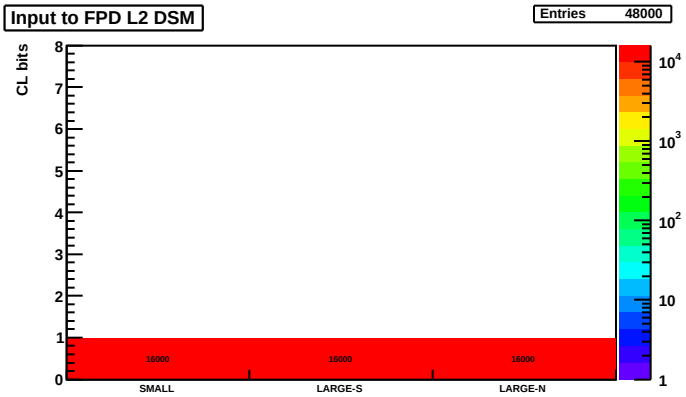

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

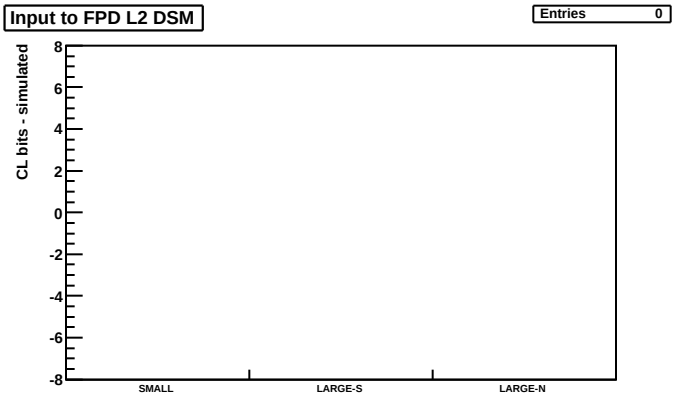

Input to FMS L1 DSM
Entries 192000
FMS L1 HT bits
DSM board

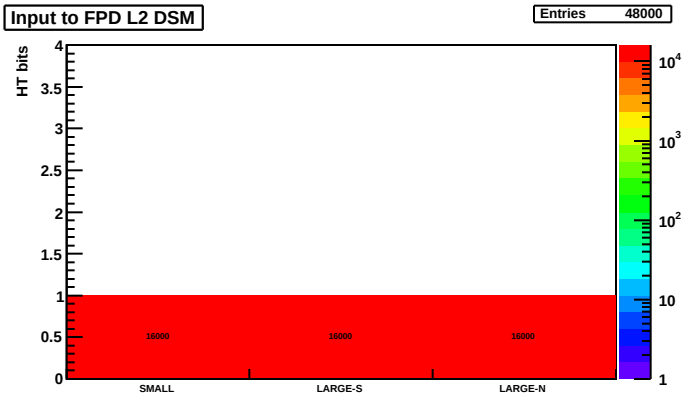

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

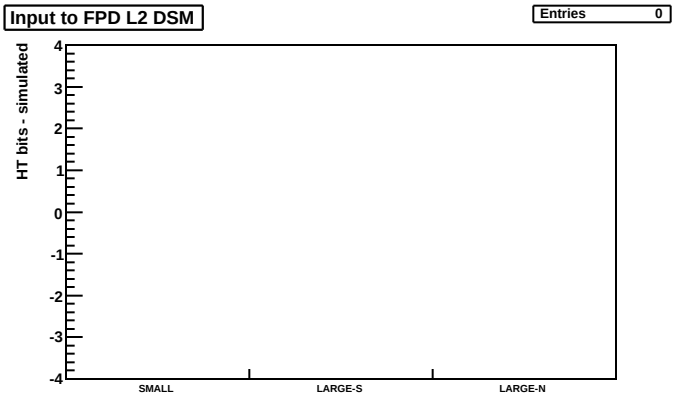

Input to FPD L2 DSM
Entries 192000
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

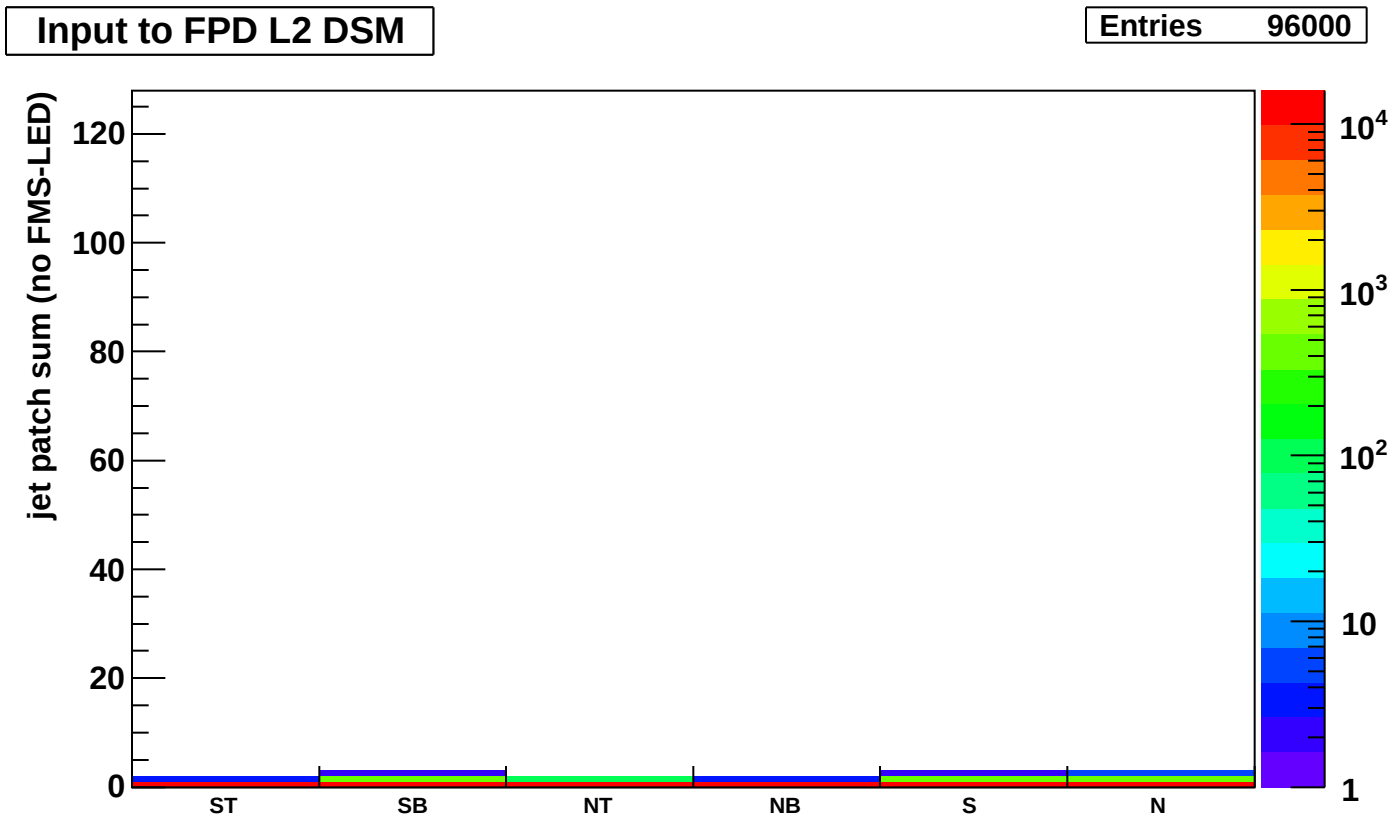

Input to FPD L2 DSM
Entries 964
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

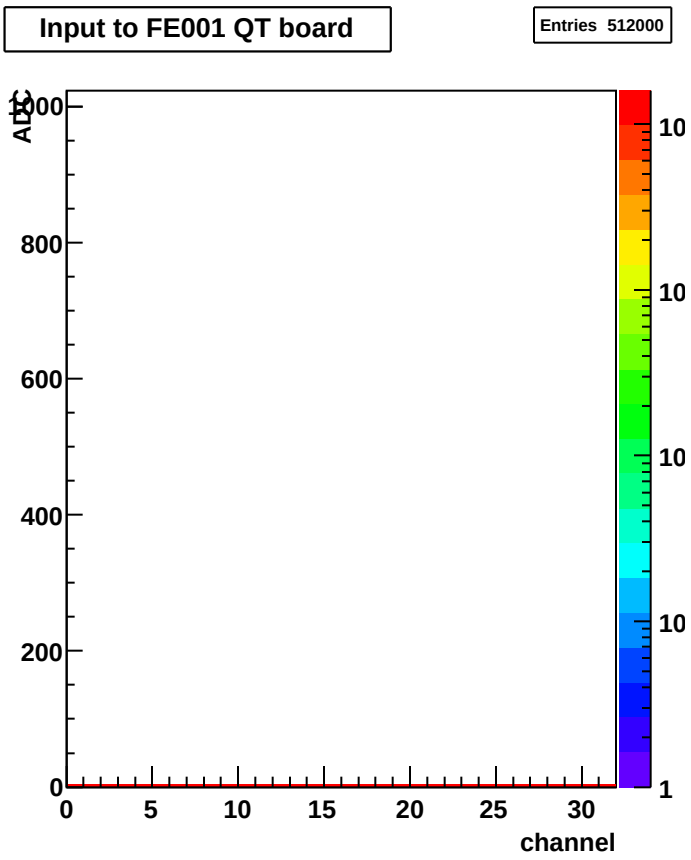

Input to FPD L2 DSM
Entries 48000
CL bits
16000
16000
16000
SMALL
LARGE-S
LARGE-N

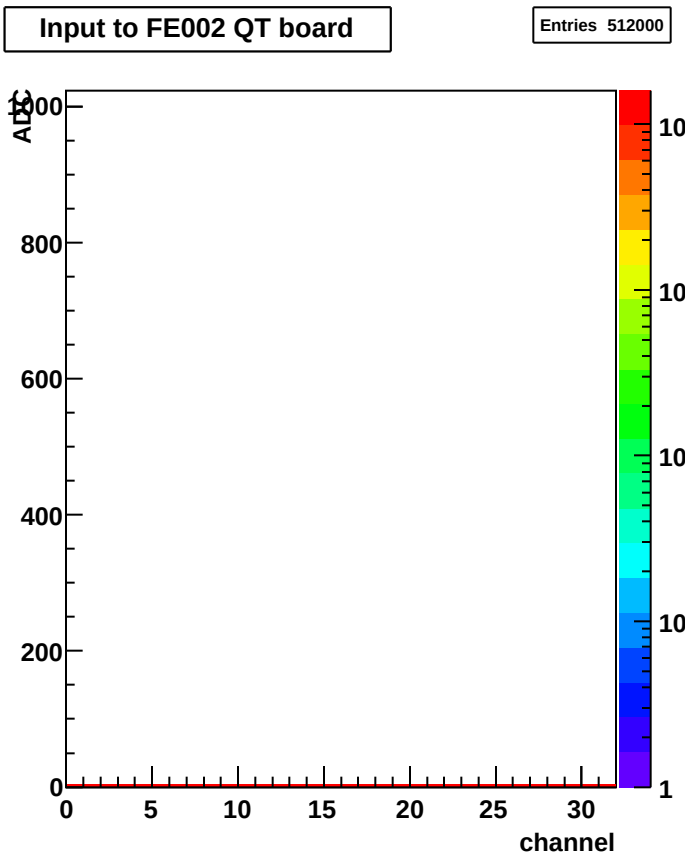

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

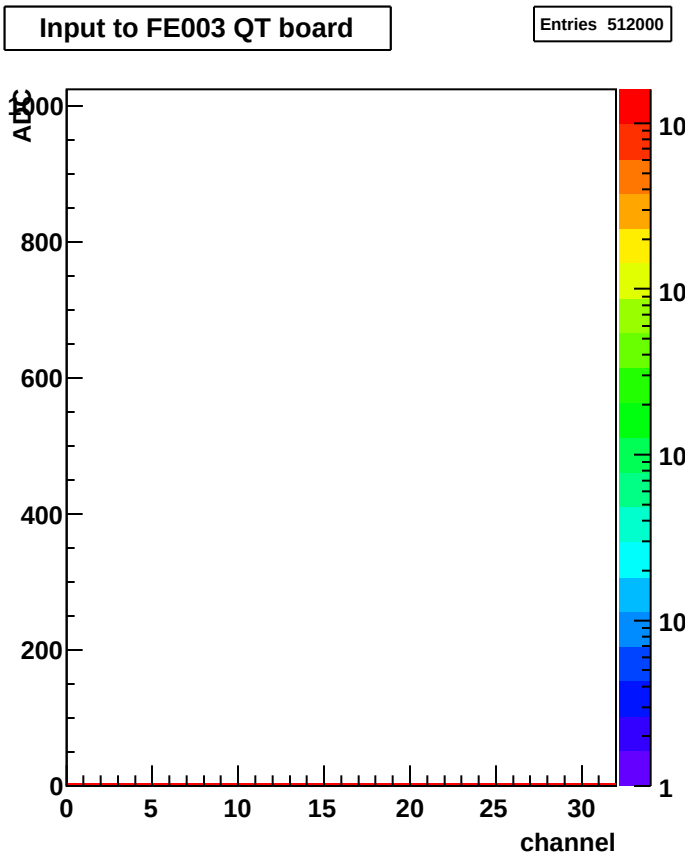

Input to FPD L2 DSM
Entries 48000
HT bits
16000
16000
16000
SMALL
LARGE-S
LARGE-N

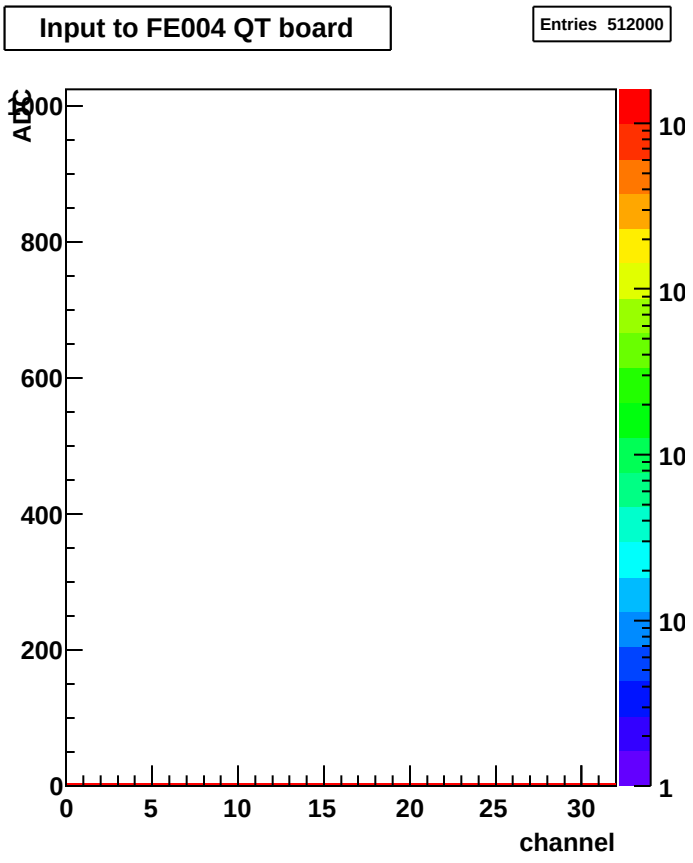

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

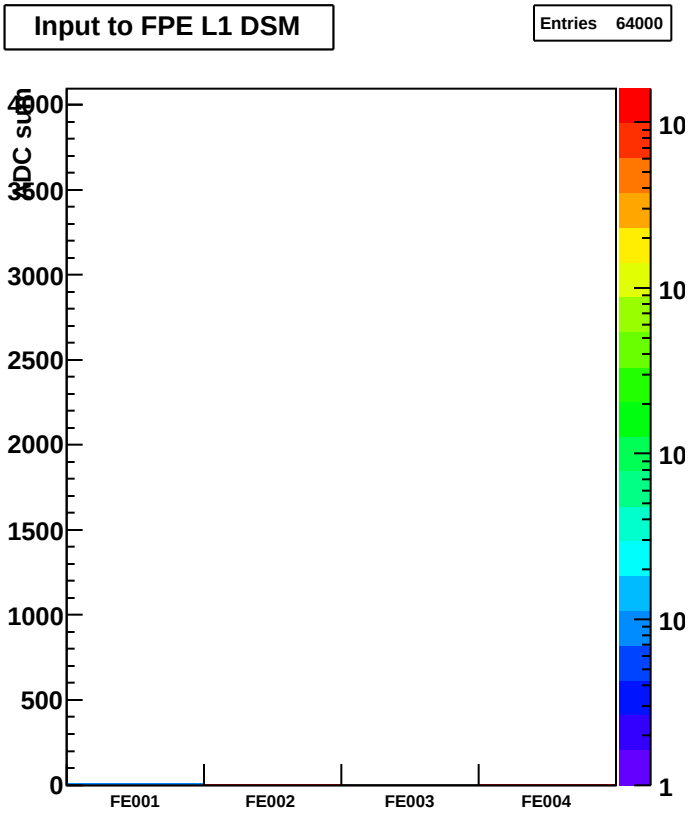

Input to FPD L2 DSM
Entries 96000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

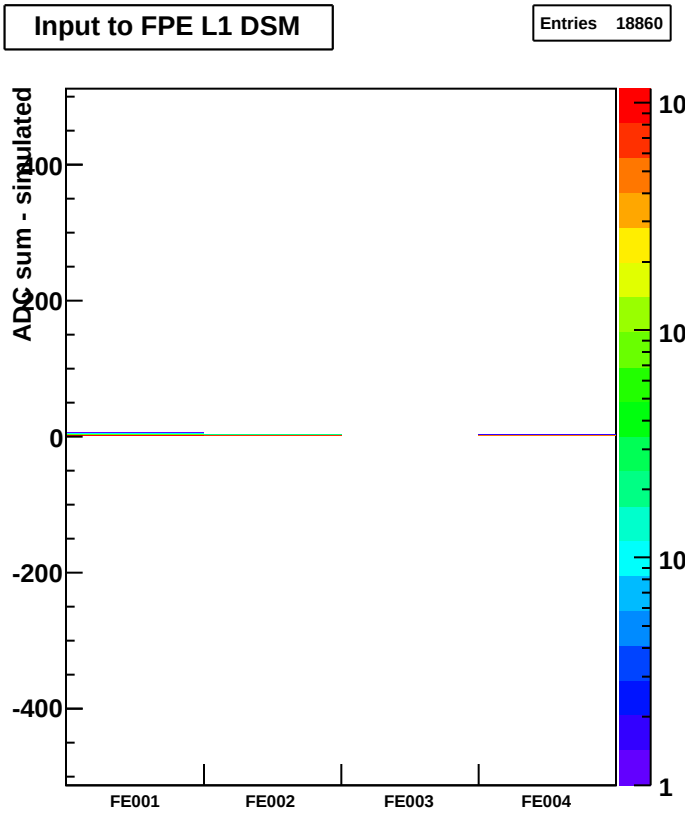

Input to FE001 QT board
Entries 512000
ADC
channel

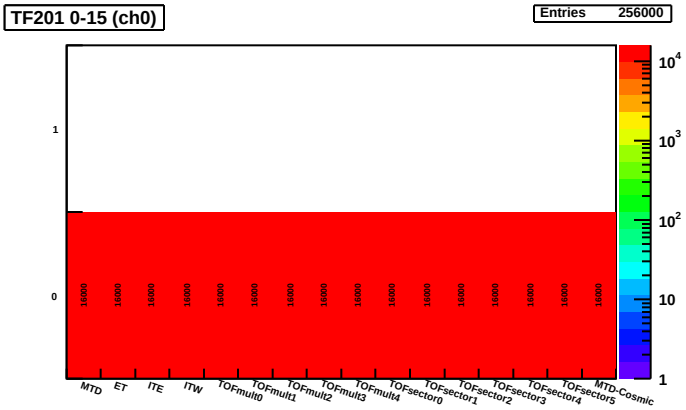

Input to FE002 QT board
Entries 512000
ADC
channel

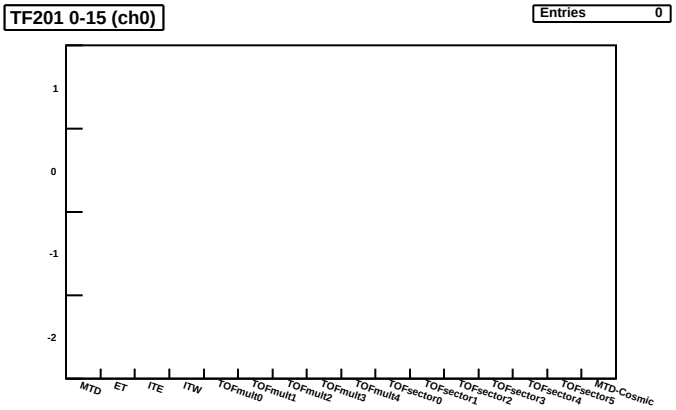

Input to FE003 QT board
Entries 512000
ADC
channel

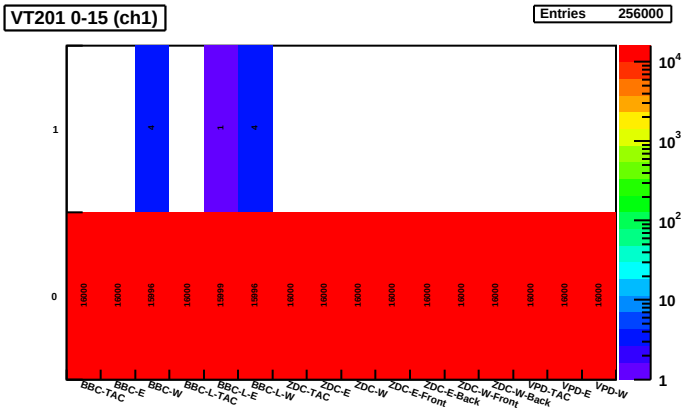

Input to FE004 QT board
Entries 512000
ADC
channel

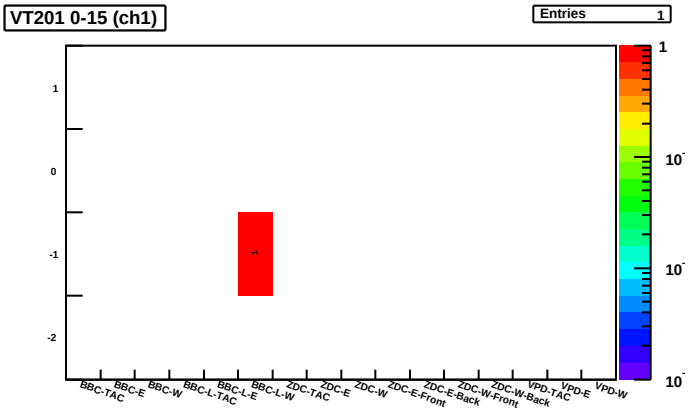

Input to FPE L1 DSM
Entries 64000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

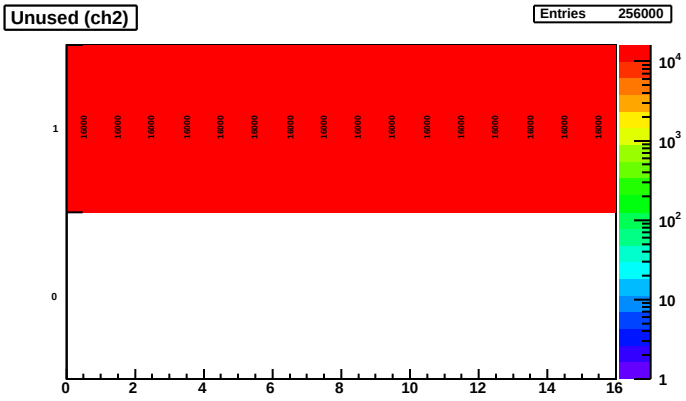

Input to FPE L1 DSM
Entries 18860
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1

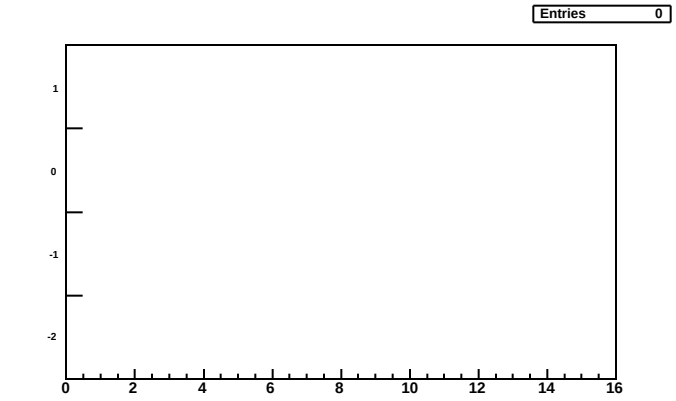

TF201 0-15 (ch0)
Entries 256000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

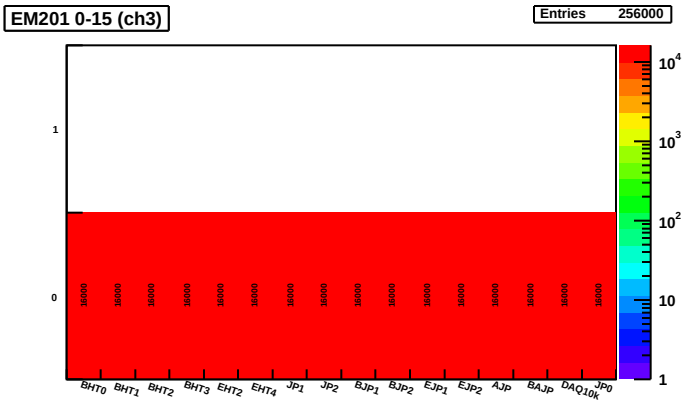

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 256000
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 1
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 256000


Entries 0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Entries 256000
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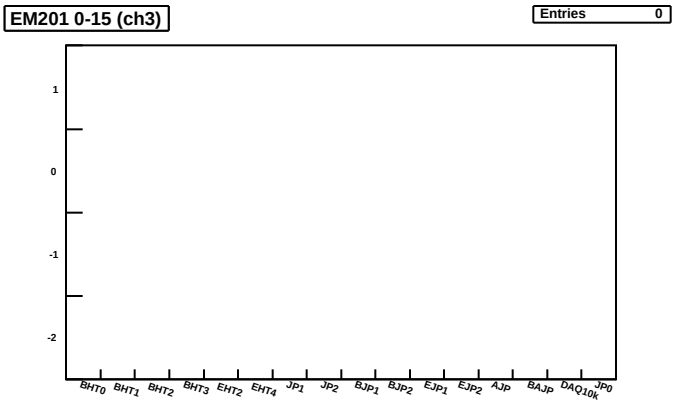
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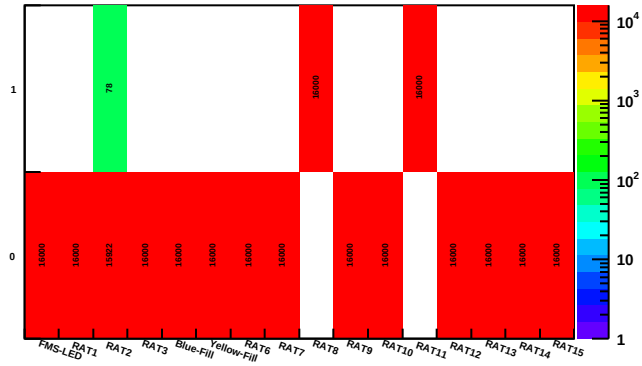
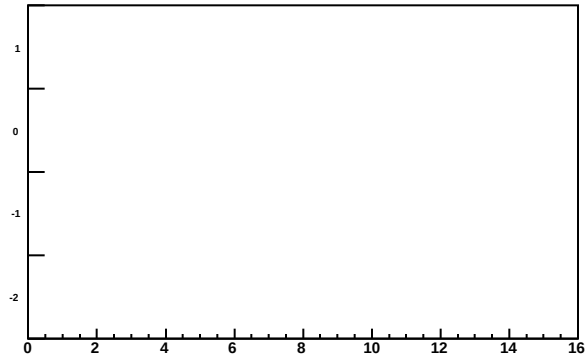
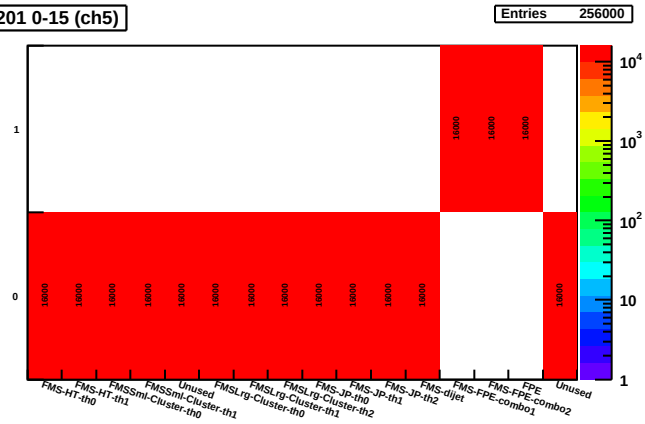
RAT board (ch4)





FP201 0-15 (ch5)



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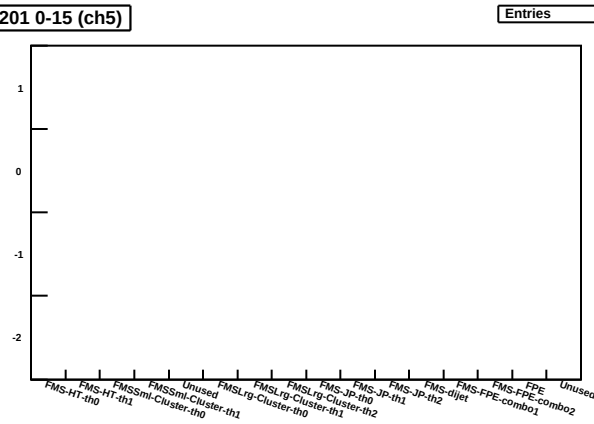
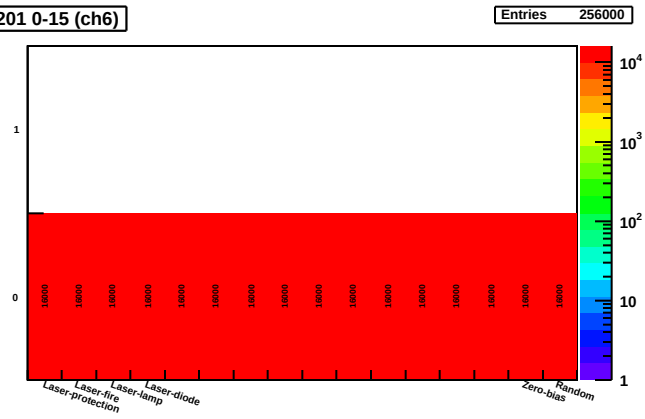
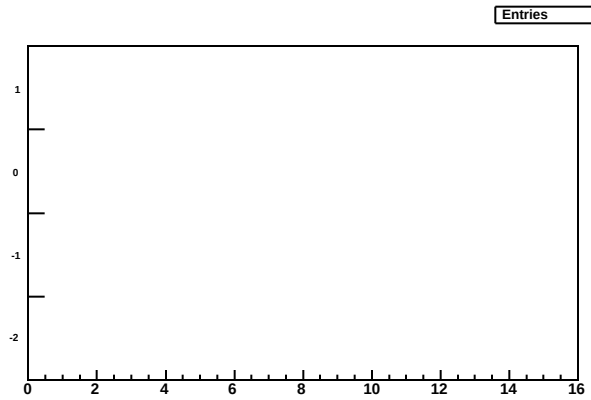
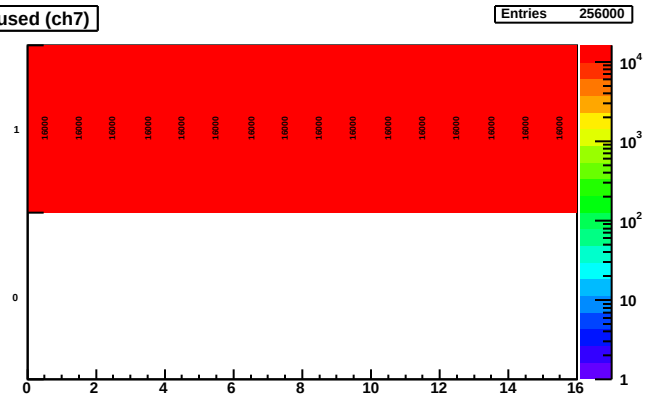
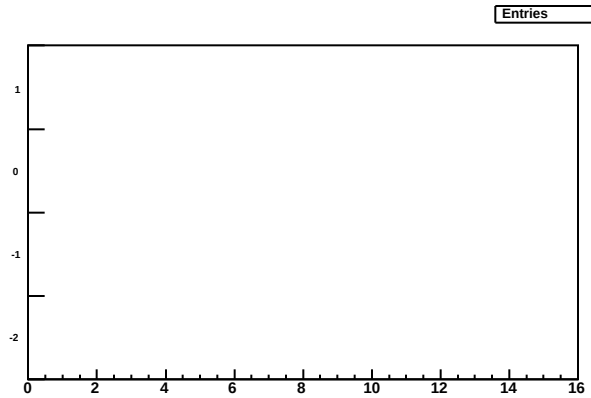


ST201 0-15 (ch6)





Unused (ch7)