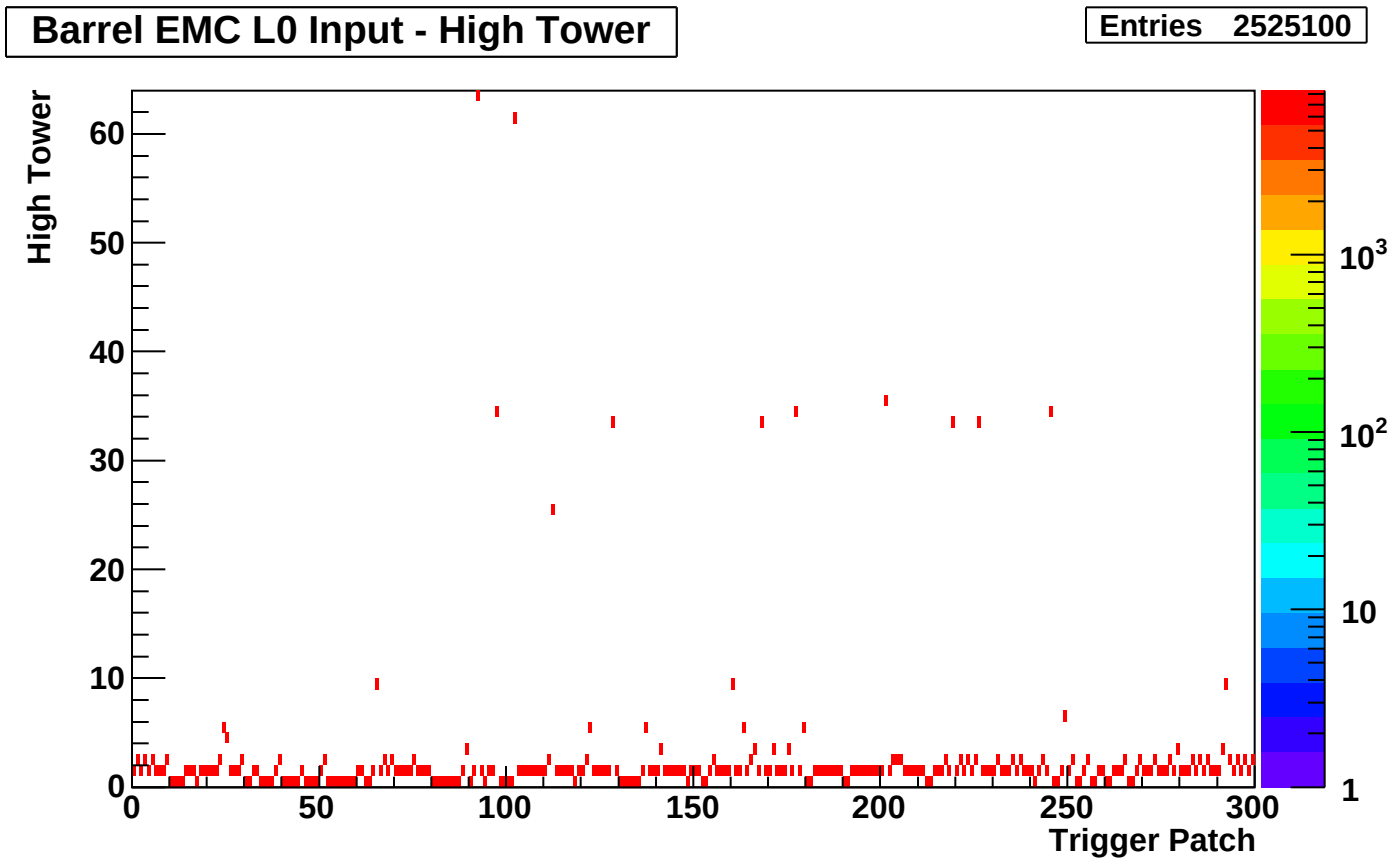
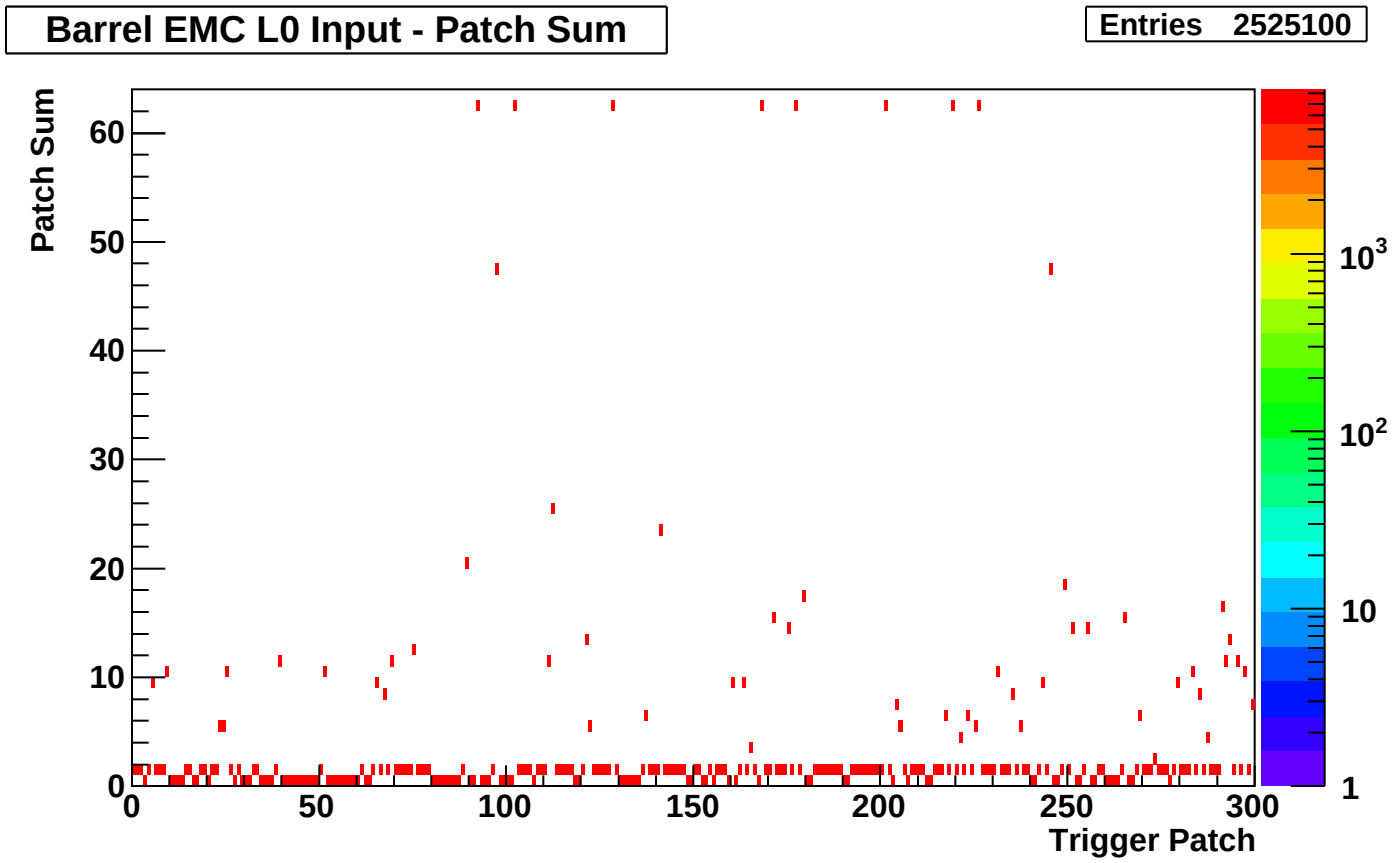
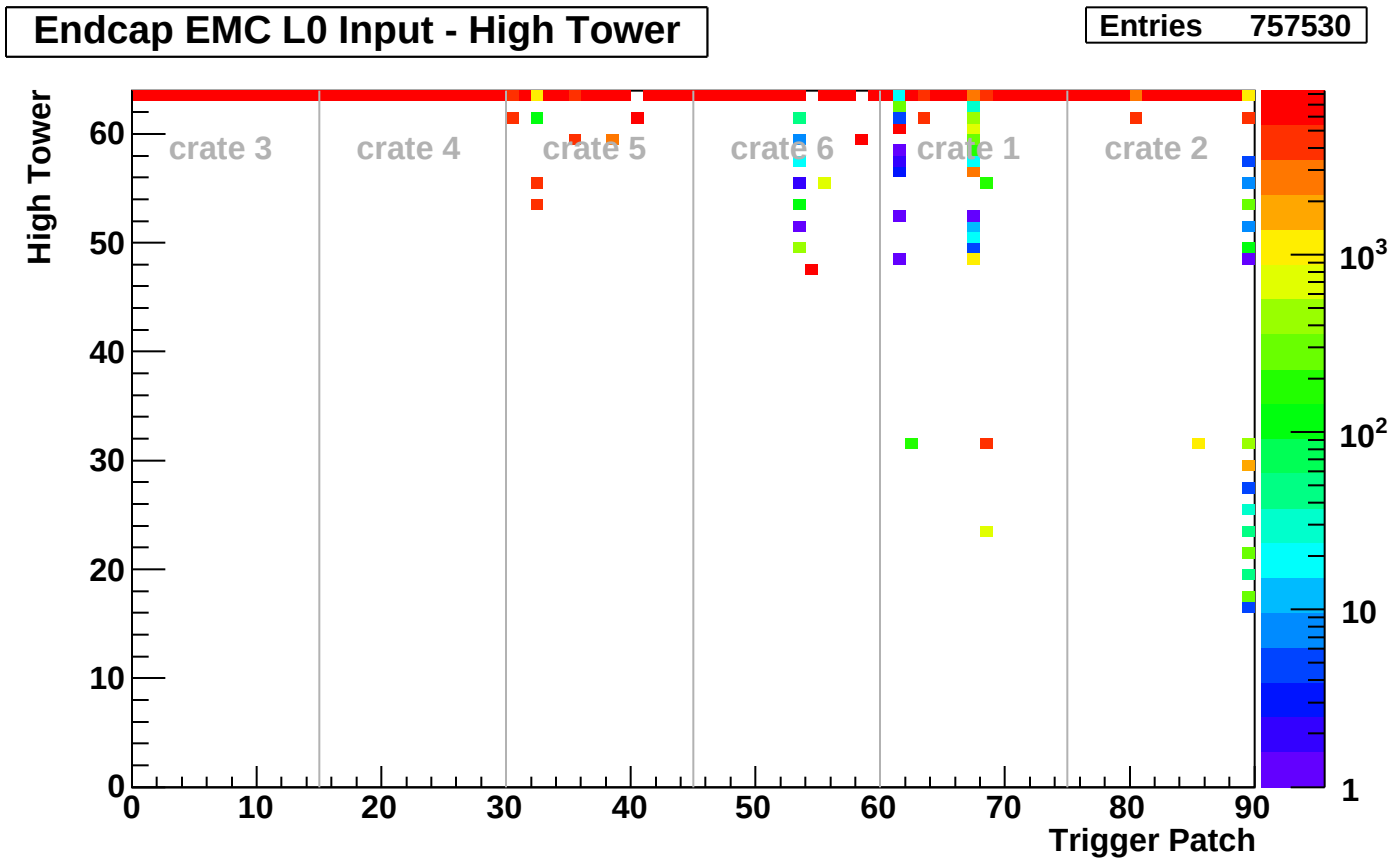
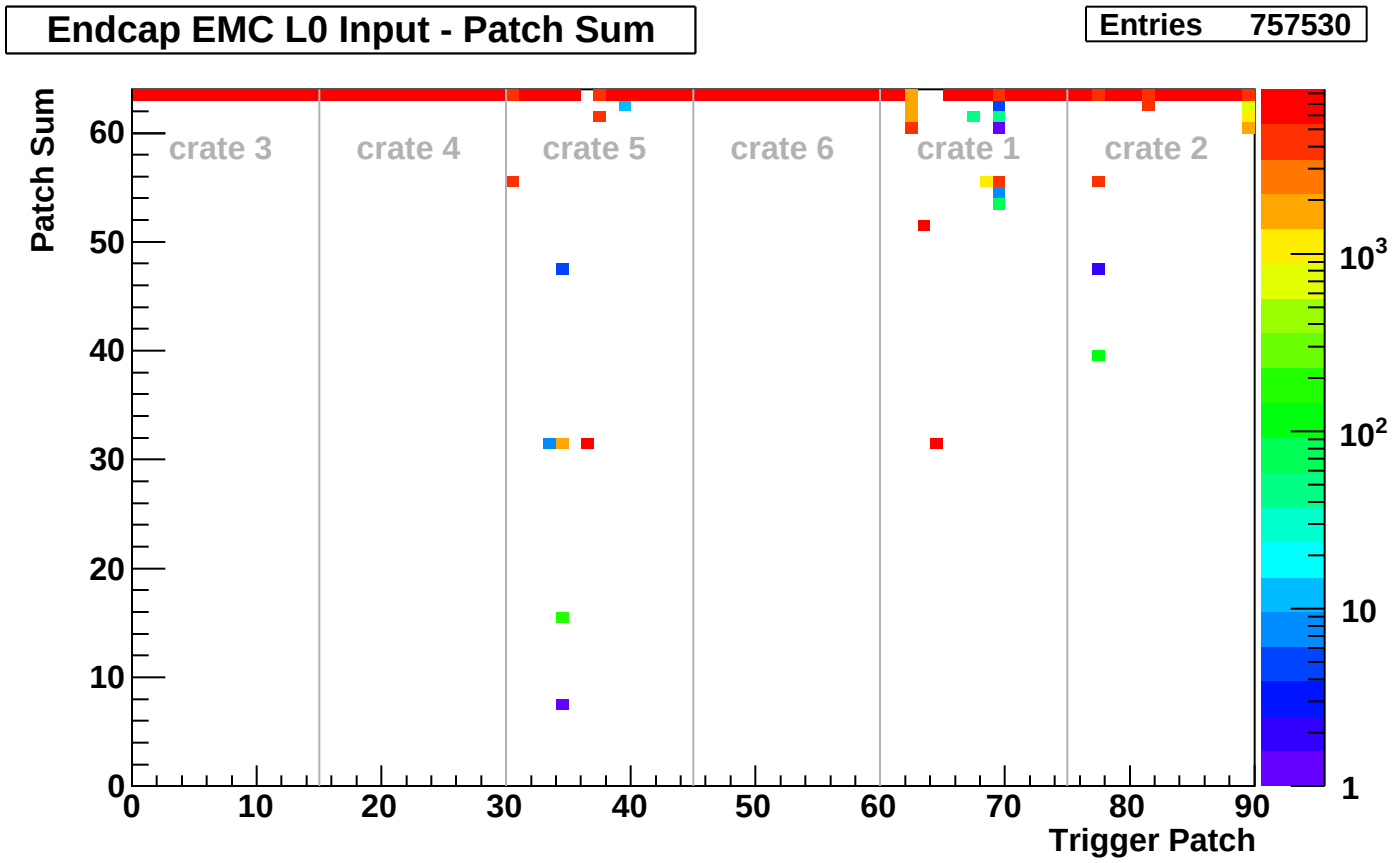
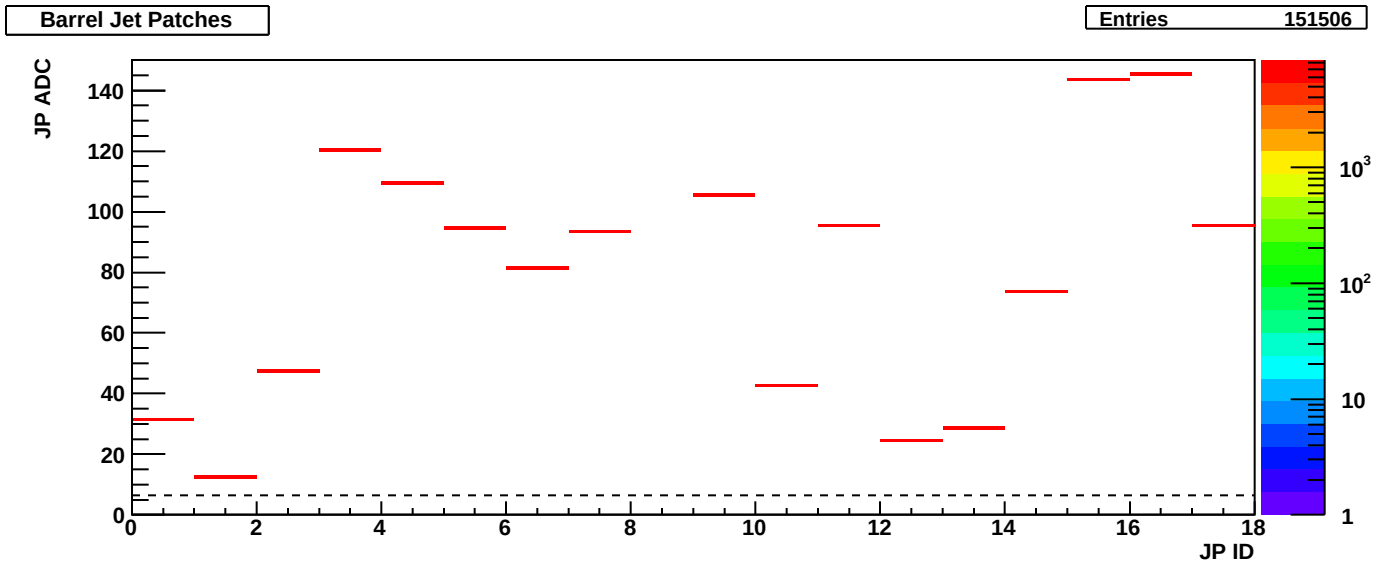
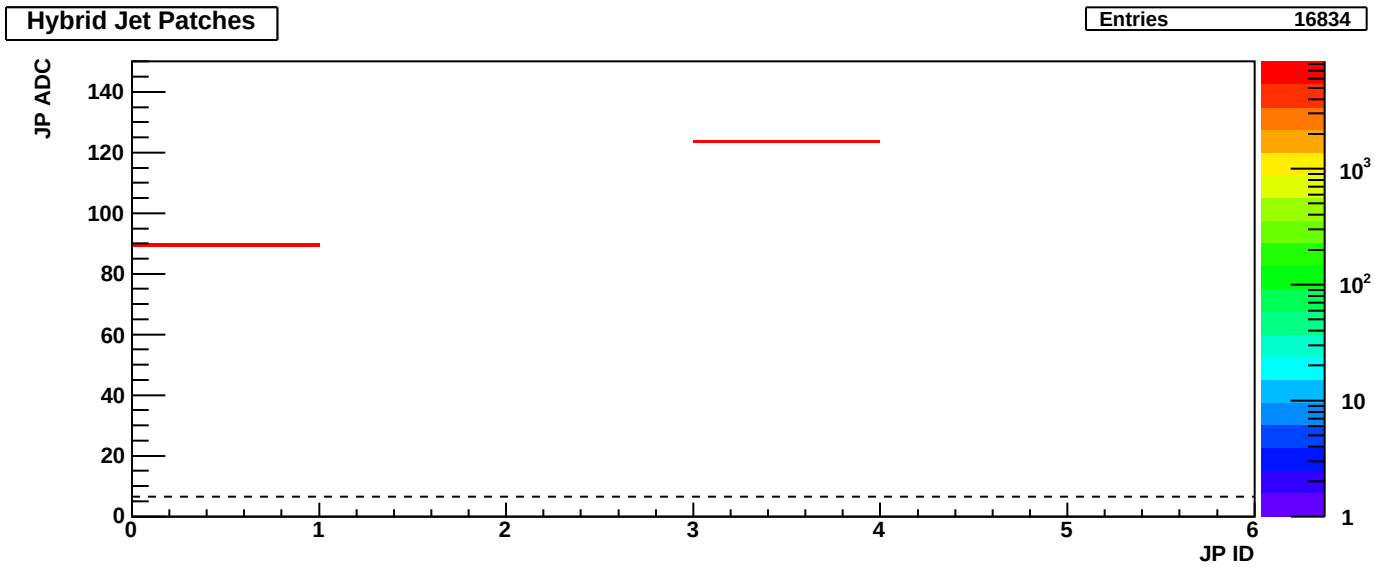

Barrel EMC L0 Input - High Tower
Entries 2525100
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

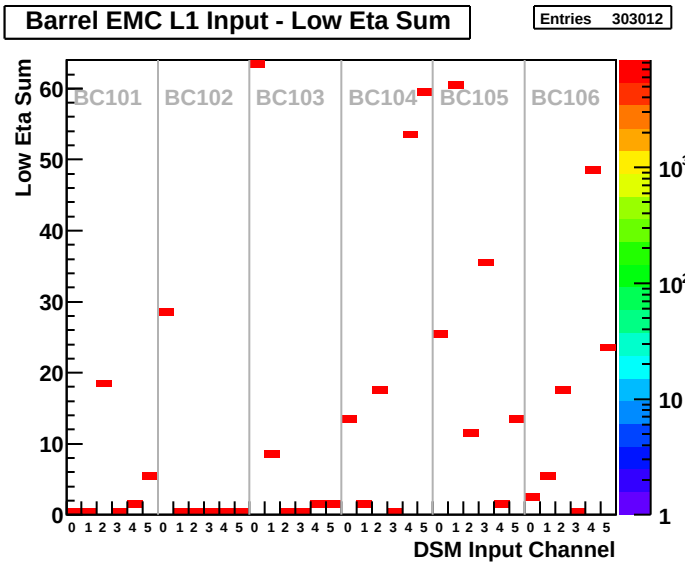

Barrel EMC L0 Input - Patch Sum
Entries 2525100
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

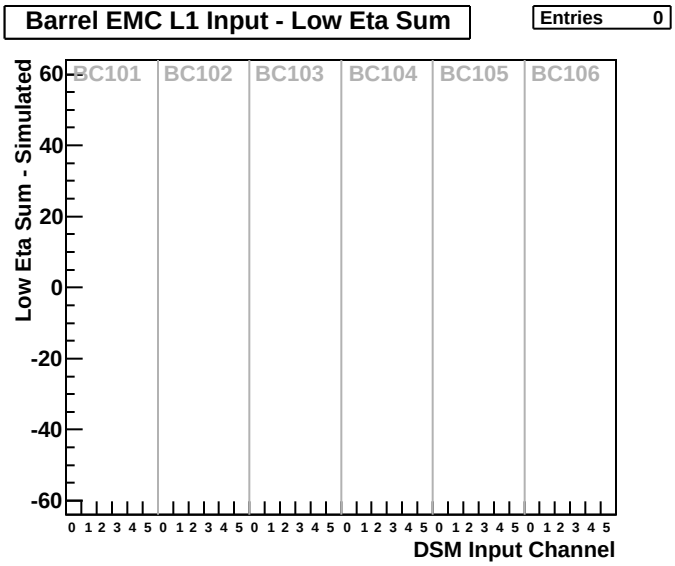

Endcap EMC L0 Input - High Tower
Entries 757530
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

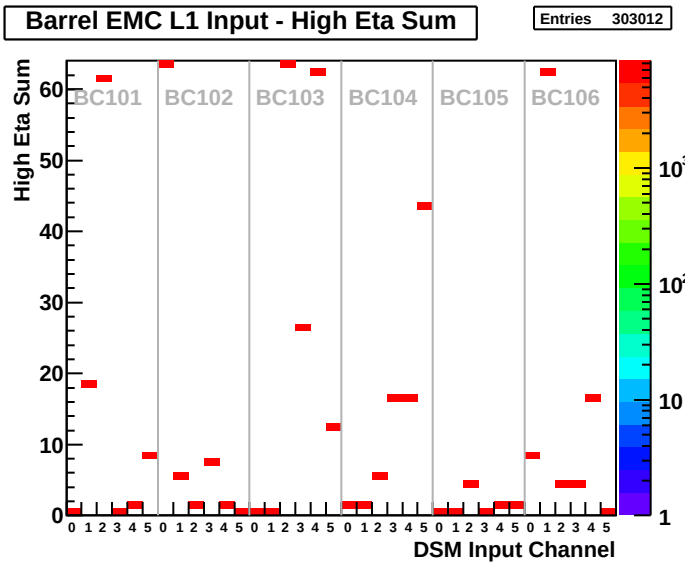

Endcap EMC L0 Input - Patch Sum
Entries 757530
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

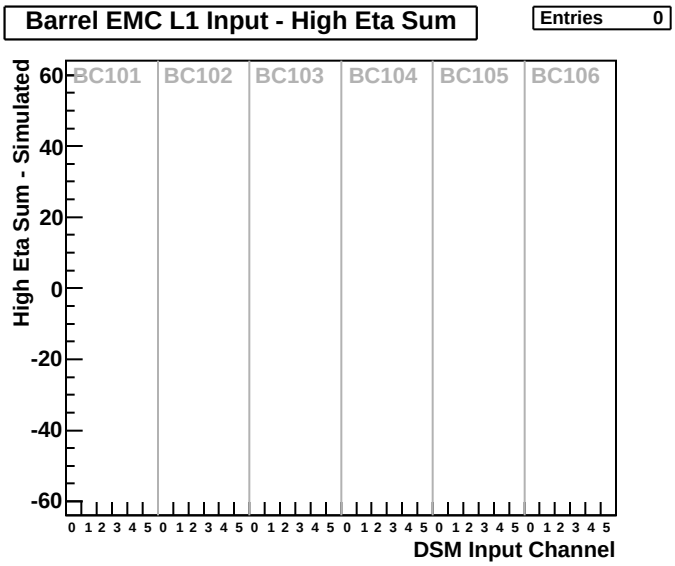

Barrel Jet Patches
Entries 151506
JP ADC
JP ID

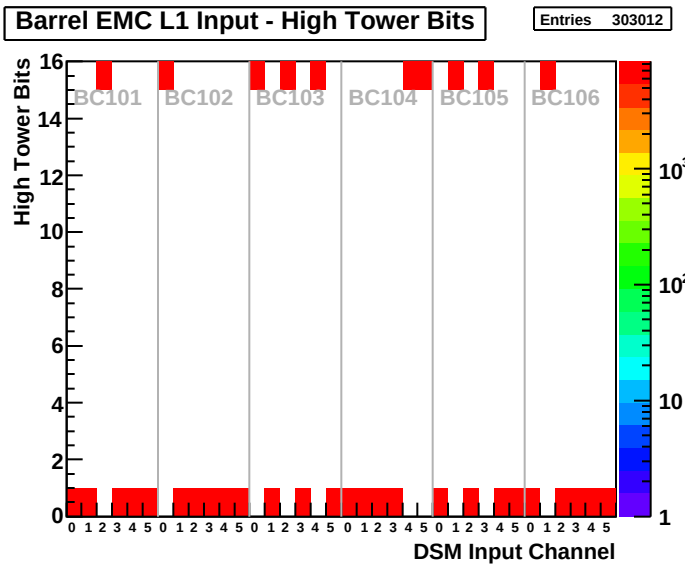

Hybrid Jet Patches
Entries 16834
JP ADC
JP ID

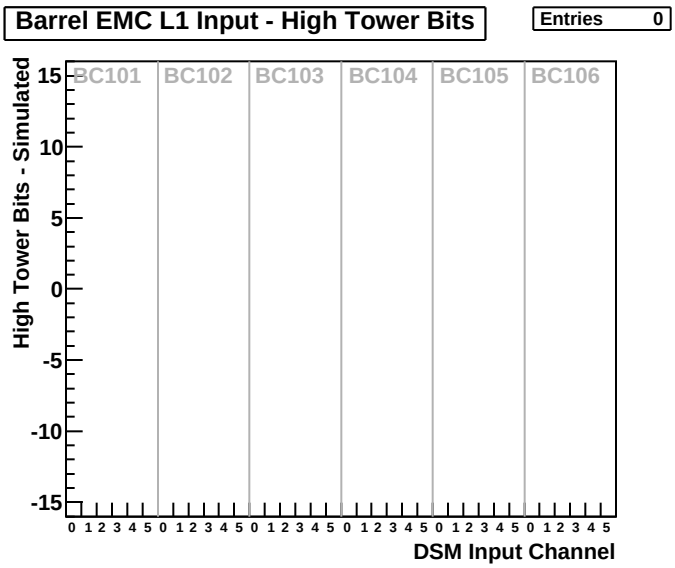

Barrel EMC L1 Input - Low Eta Sum
Entries 303012
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

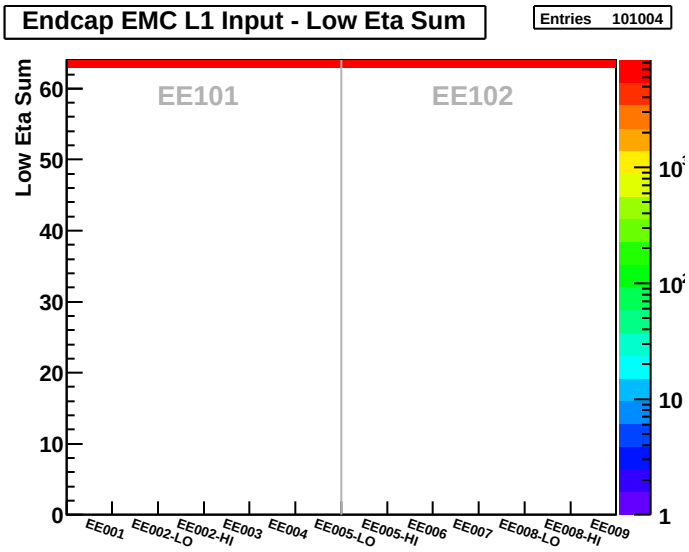

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

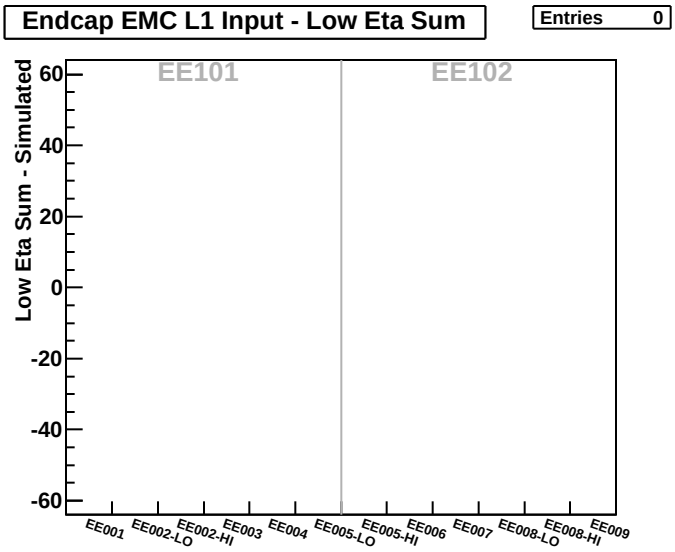

Barrel EMC L1 Input - High Eta Sum
Entries 303012
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

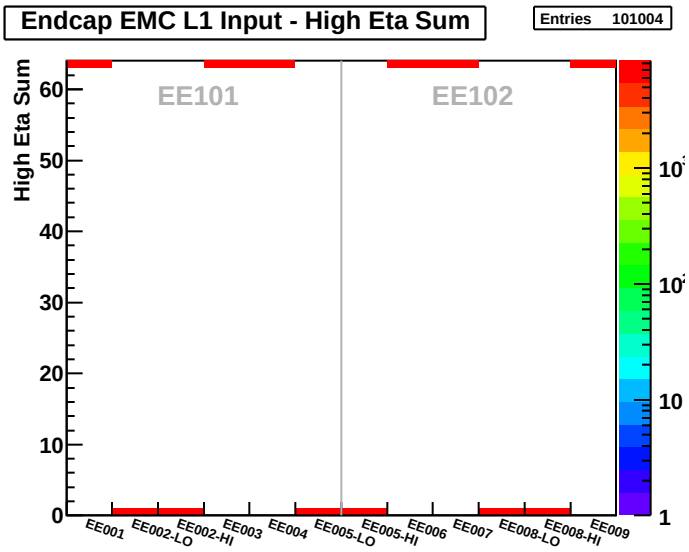

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

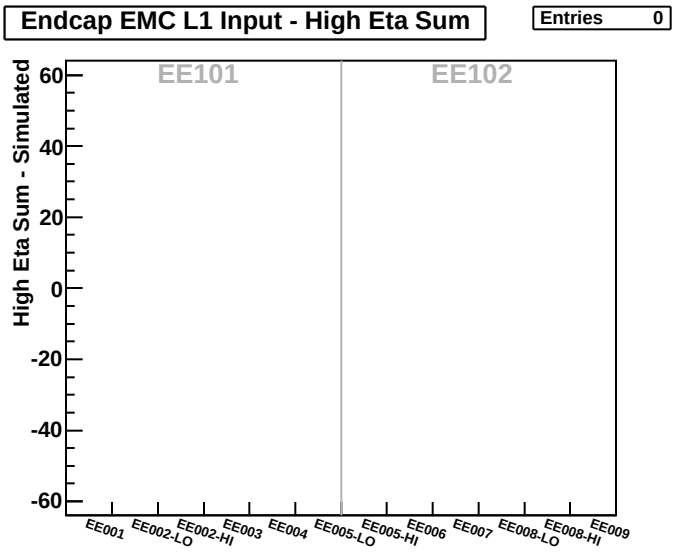

Barrel EMC L1 Input - High Tower Bits
Entries 303012
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

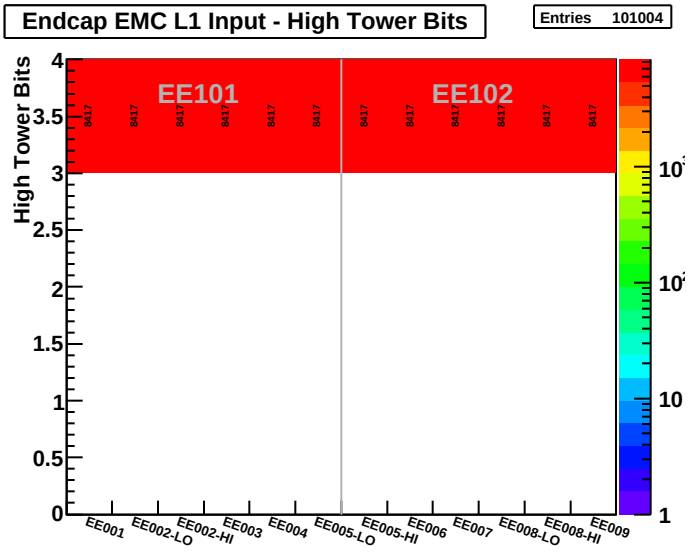

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

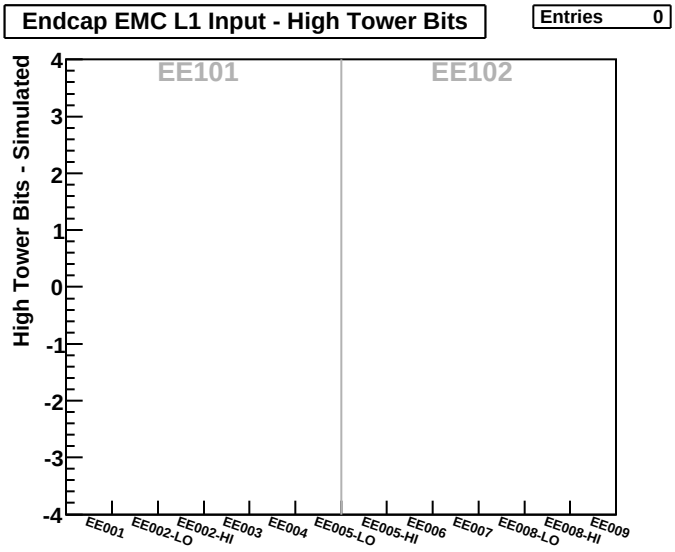

Endcap EMC L1 Input - Low Eta Sum
Entries 101004
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

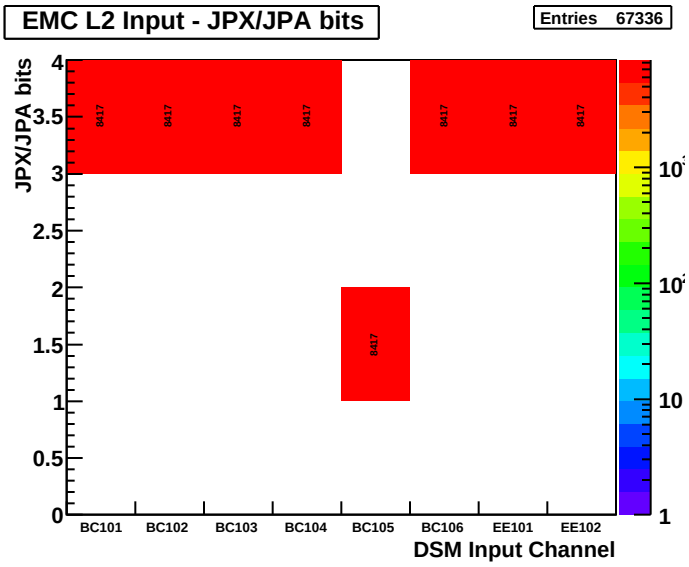

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

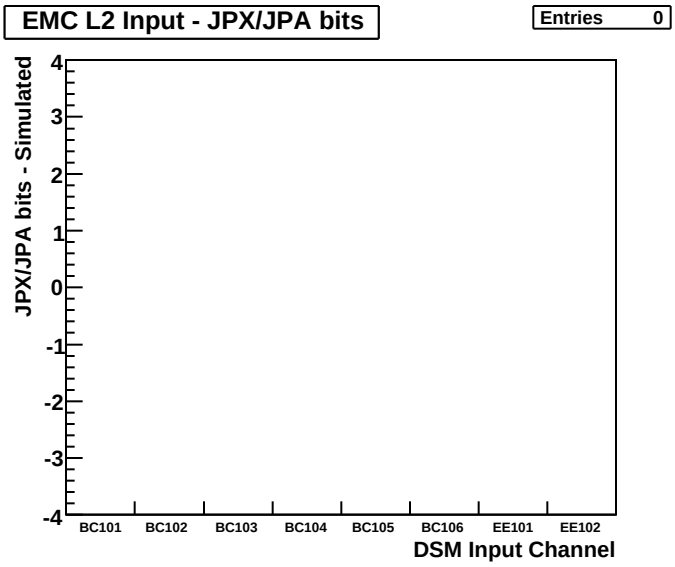

Endcap EMC L1 Input - High Eta Sum
Entries 101004
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

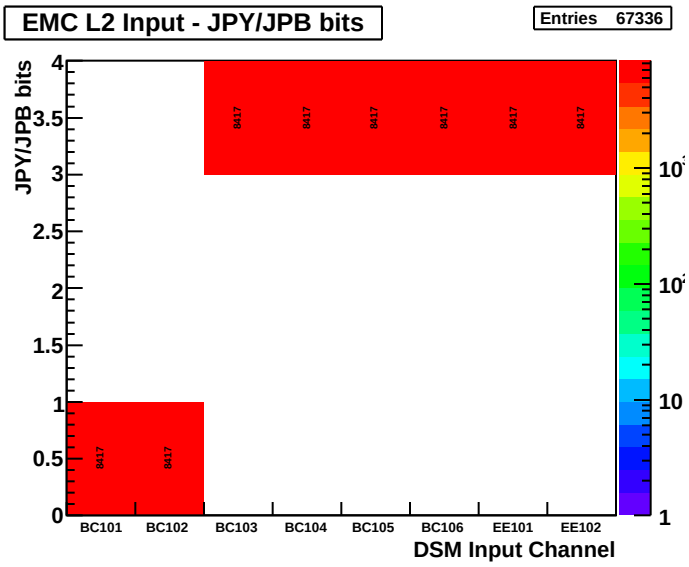

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

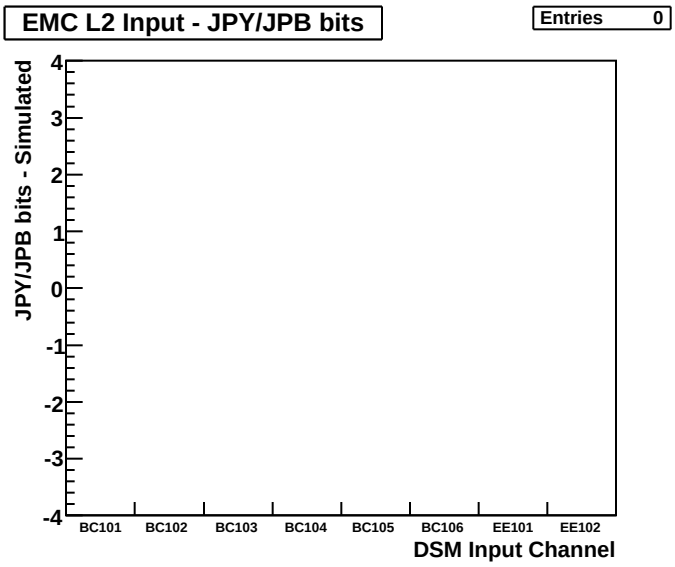

Endcap EMC L1 Input - High Tower Bits
Entries 101004
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

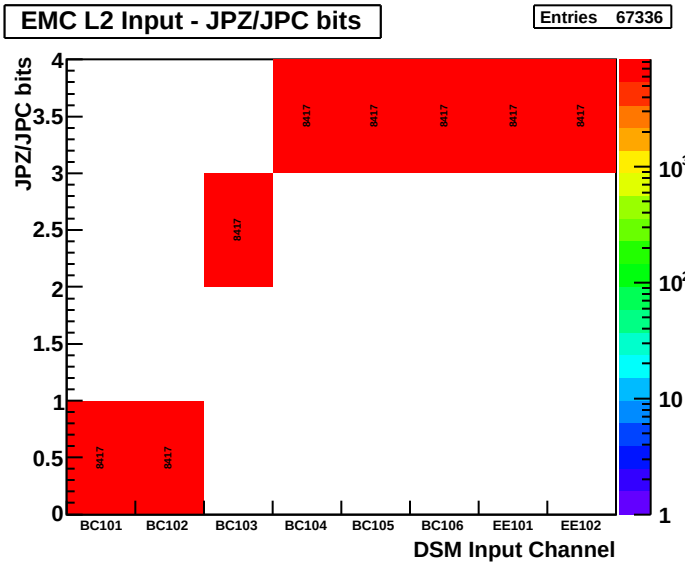

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

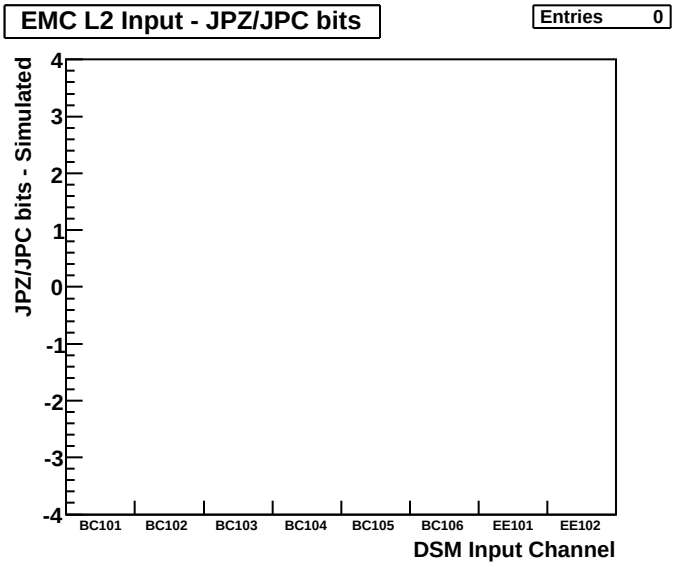

EMC L2 Input - JPX/JPA bits
Entries 67336
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8417

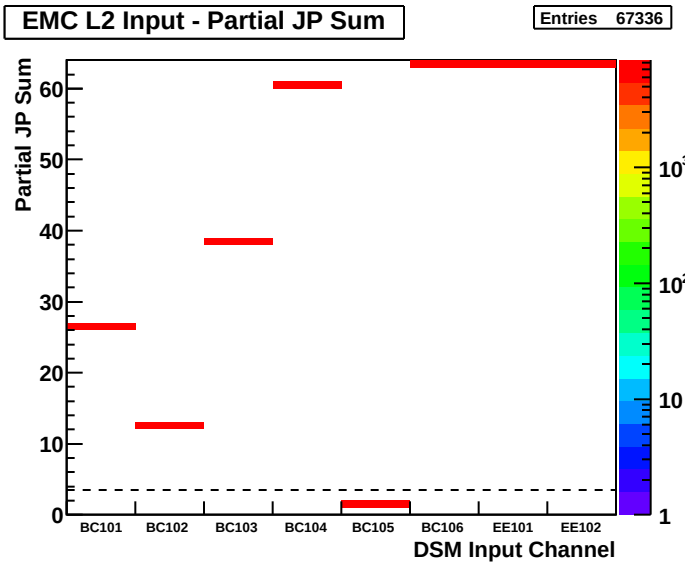

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

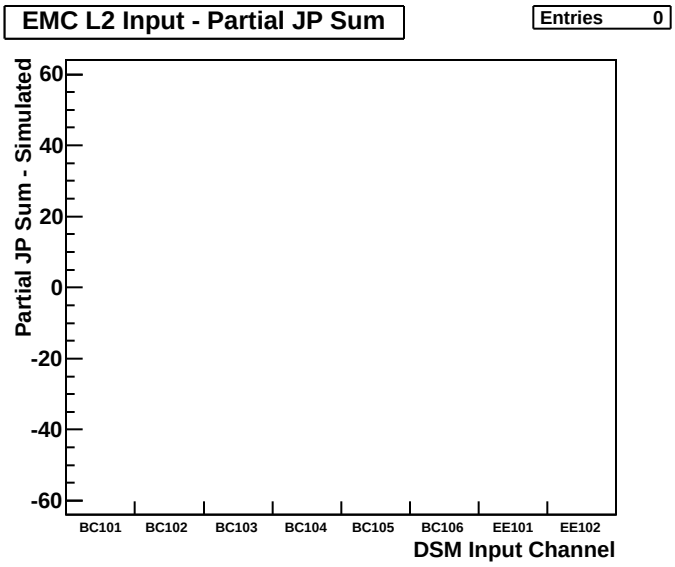

EMC L2 Input - JPY/JPB bits
Entries 67336
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8417

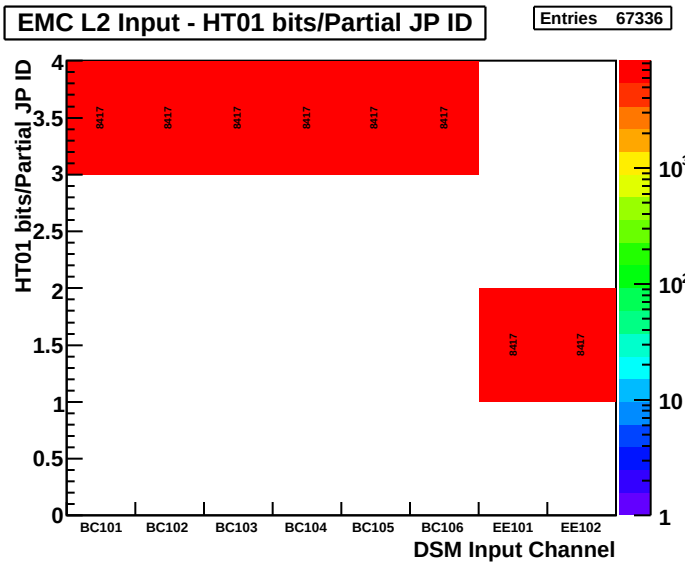

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

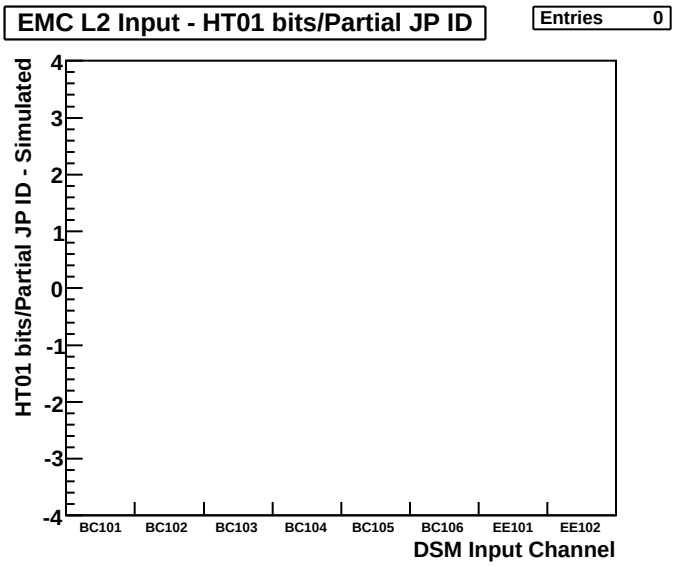

EMC L2 Input - JPZ/JPC bits
Entries 67336
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8417

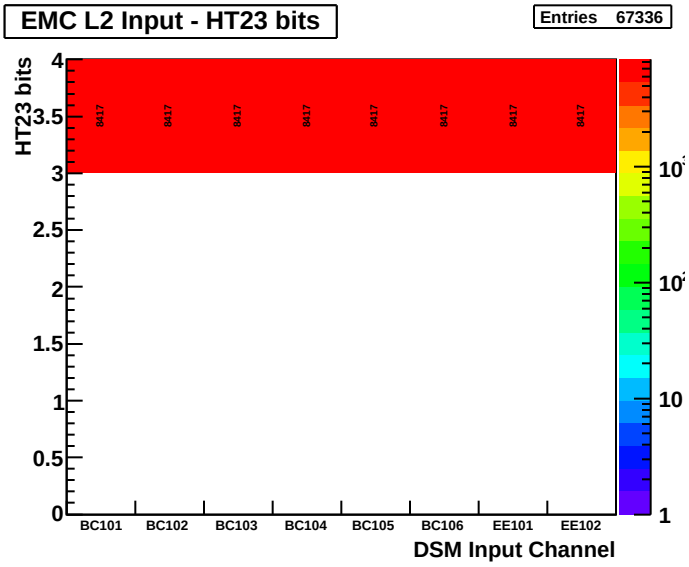

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

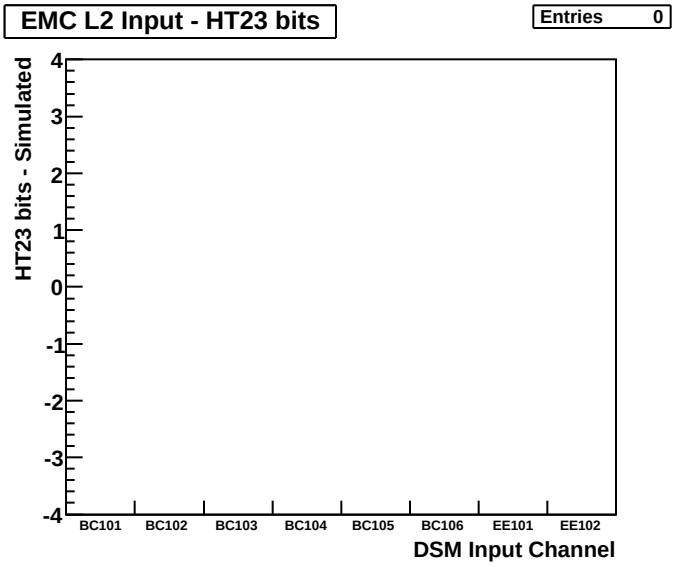

EMC L2 Input - Partial JP Sum
Entries 67336
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

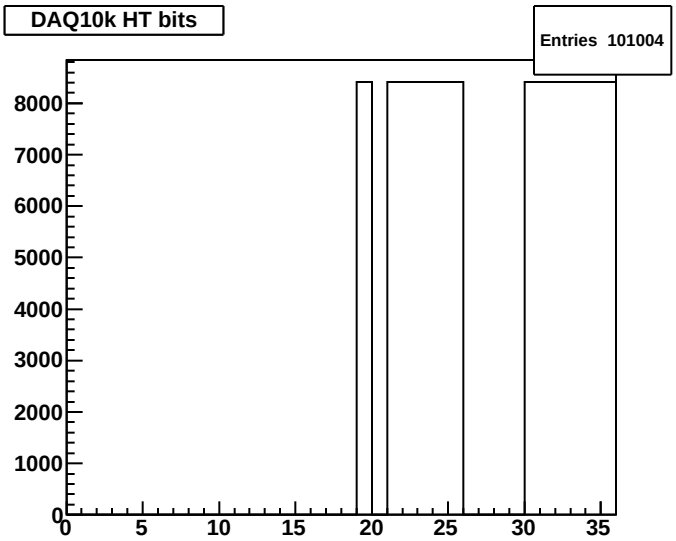

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

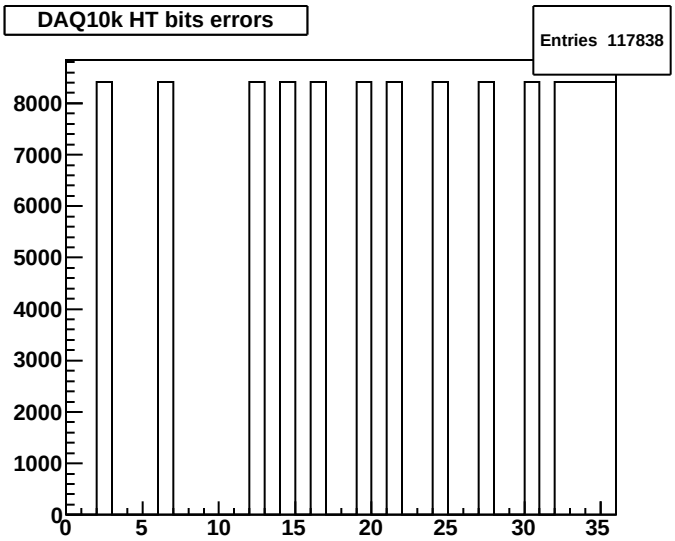

EMC L2 Input - HT01 bits/Partial JP ID
Entries 67336
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

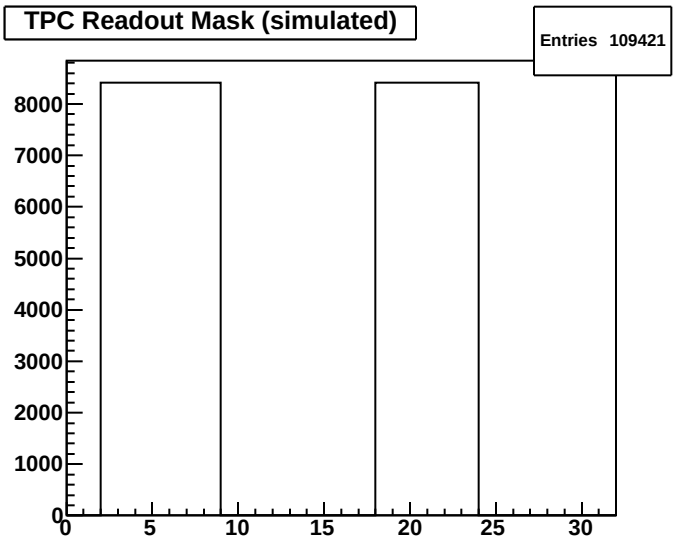

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

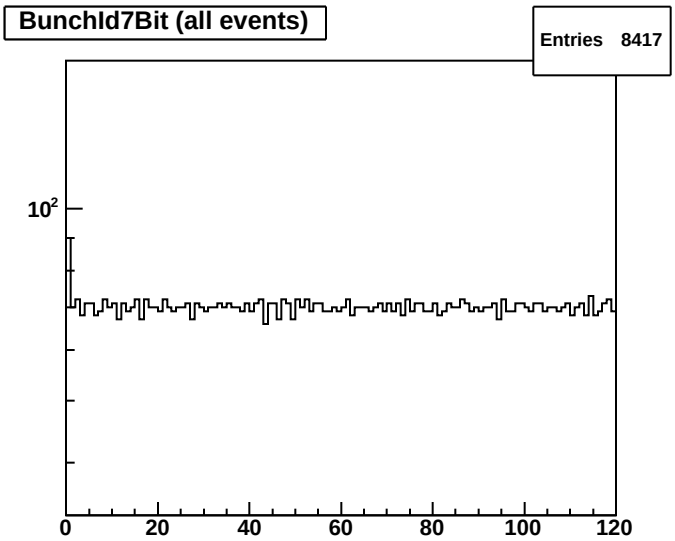

EMC L2 Input - HT23 bits
Entries 67336
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

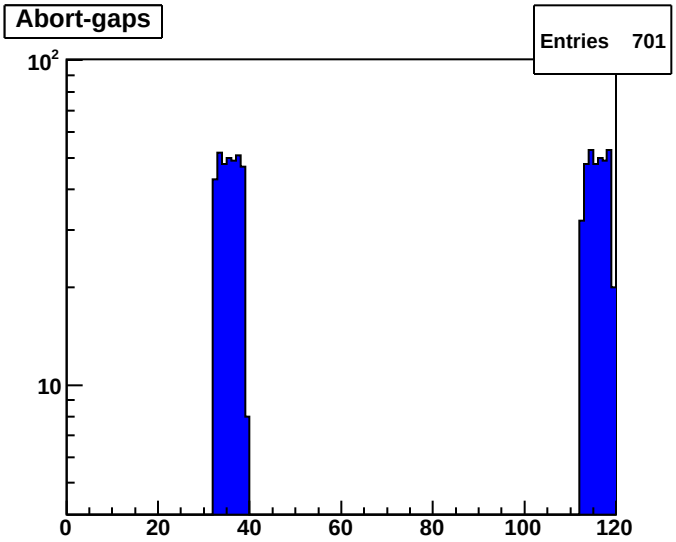

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

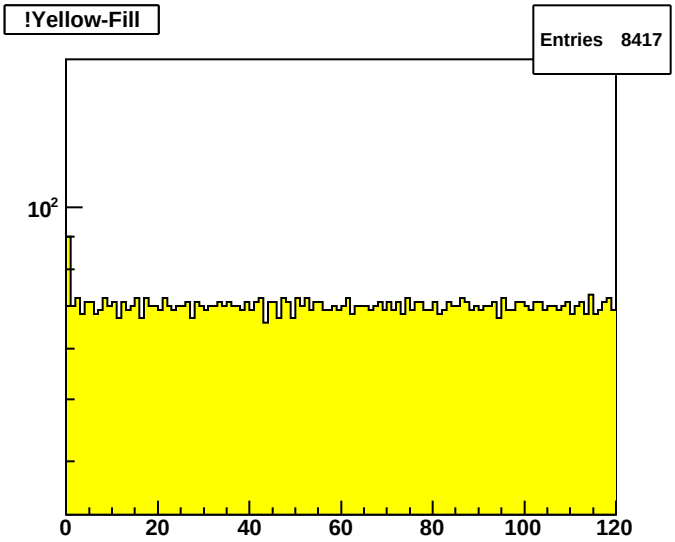

DAQ10k HT bits
Entries 101004
8000
7000
6000
5000
4000
3000
2000
1000
0
0 5 10 15 20 25 30 35

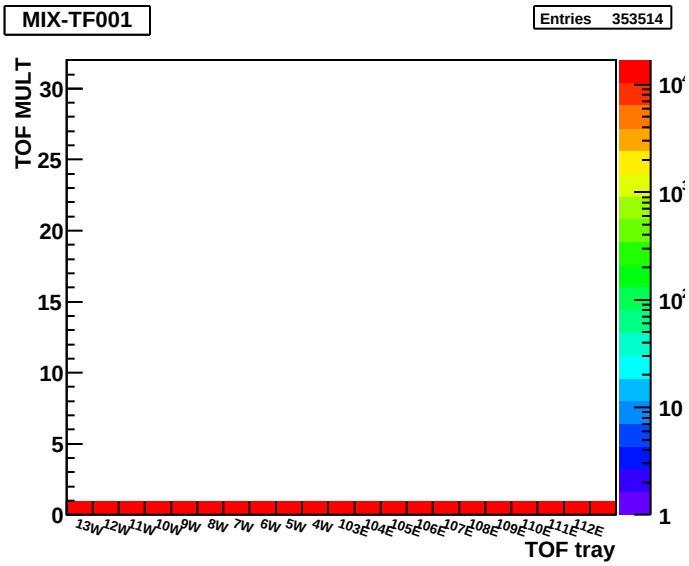

DAQ10k HT bits errors
Entries 117838
8000
7000
6000
5000
4000
3000
2000
1000
0
0 5 10 15 20 25 30 35

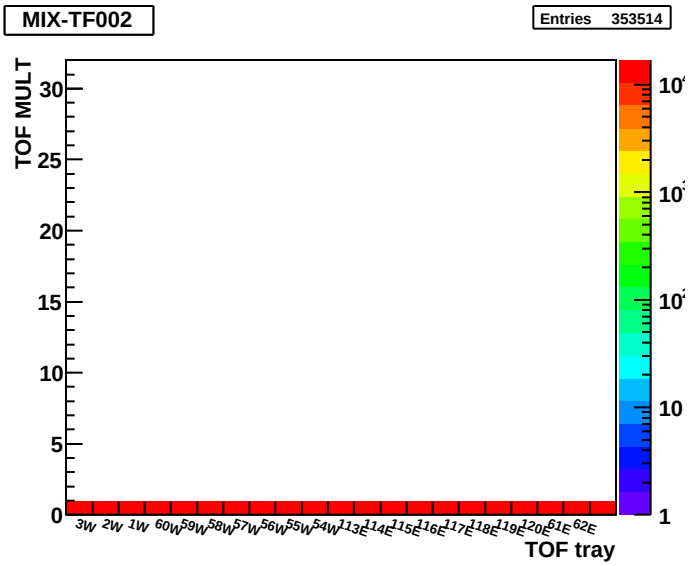

TPC Readout Mask (simulated)
Entries 109421
8000
7000
6000
5000
4000
3000
2000
1000
0
0 5 10 15 20 25 30

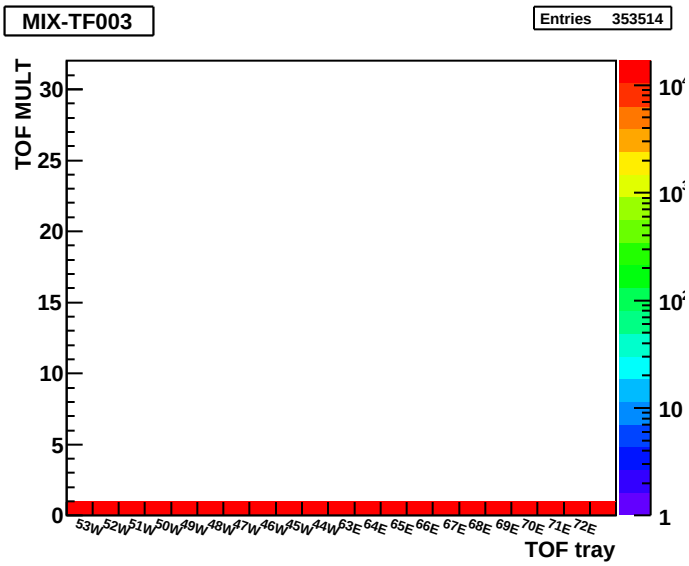

BunchId7Bit (all events)
Entries 8417
10^2
0 20 40 60 80 100 120

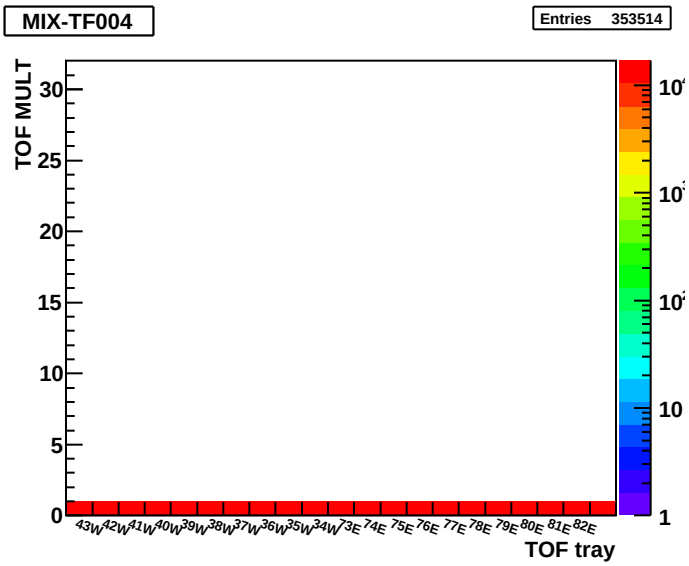

Abort-gaps
Entries 701
10^2
10
0 20 40 60 80 100 120

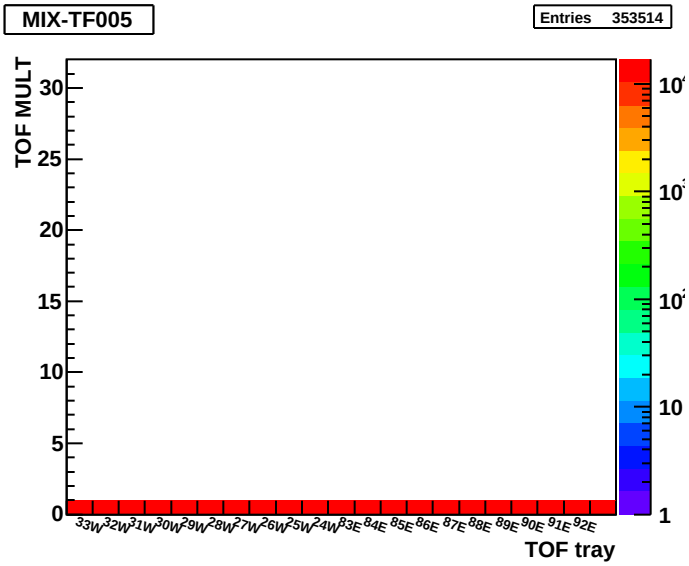

!Yellow-Fill
Entries 8417
10^2
0 20 40 60 80 100 120

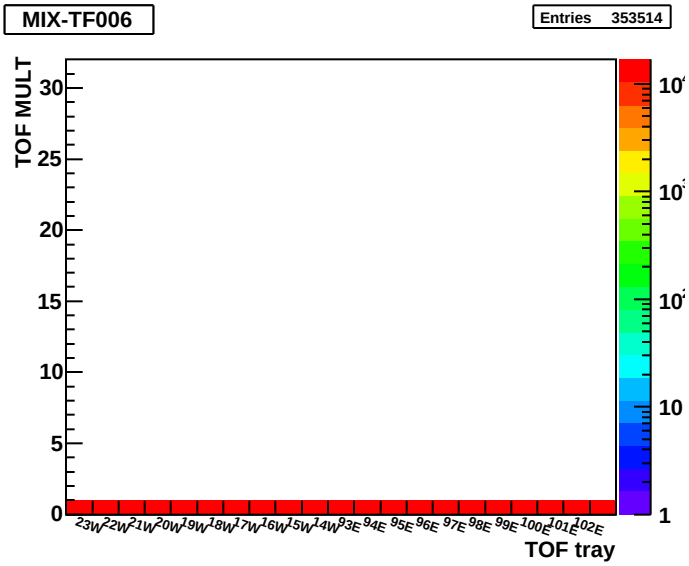

MIX-TF001
Entries 353514
TOF MULT
TOF tray

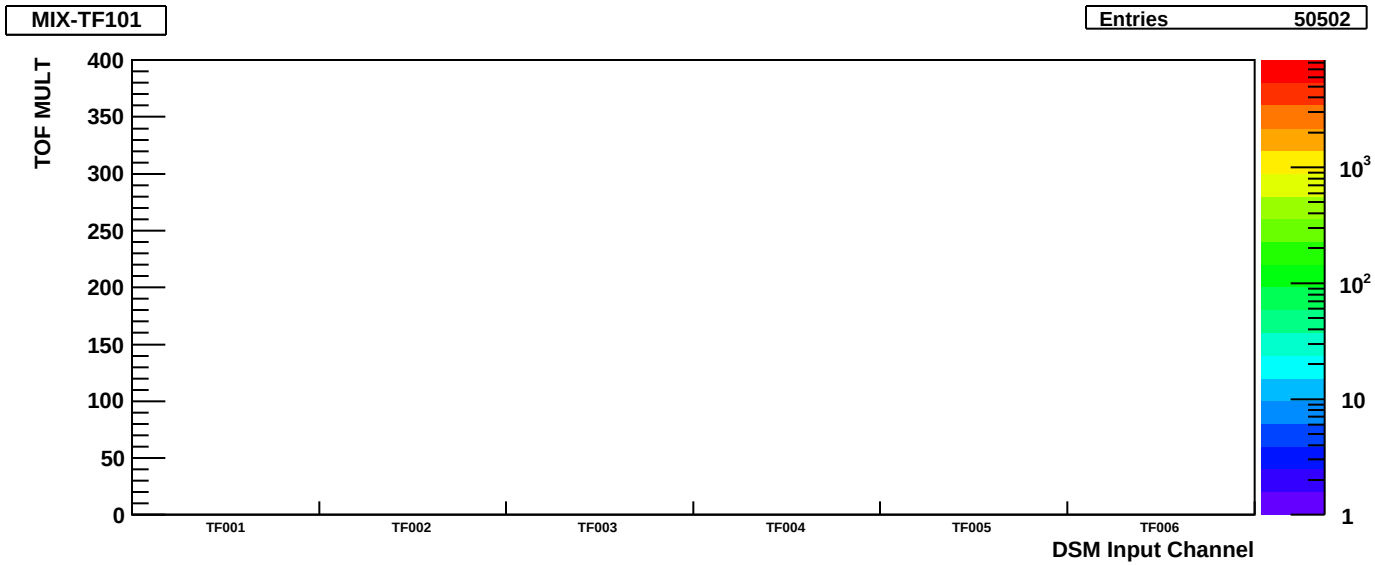

MIX-TF002
Entries 353514
TOF MULT
TOF tray

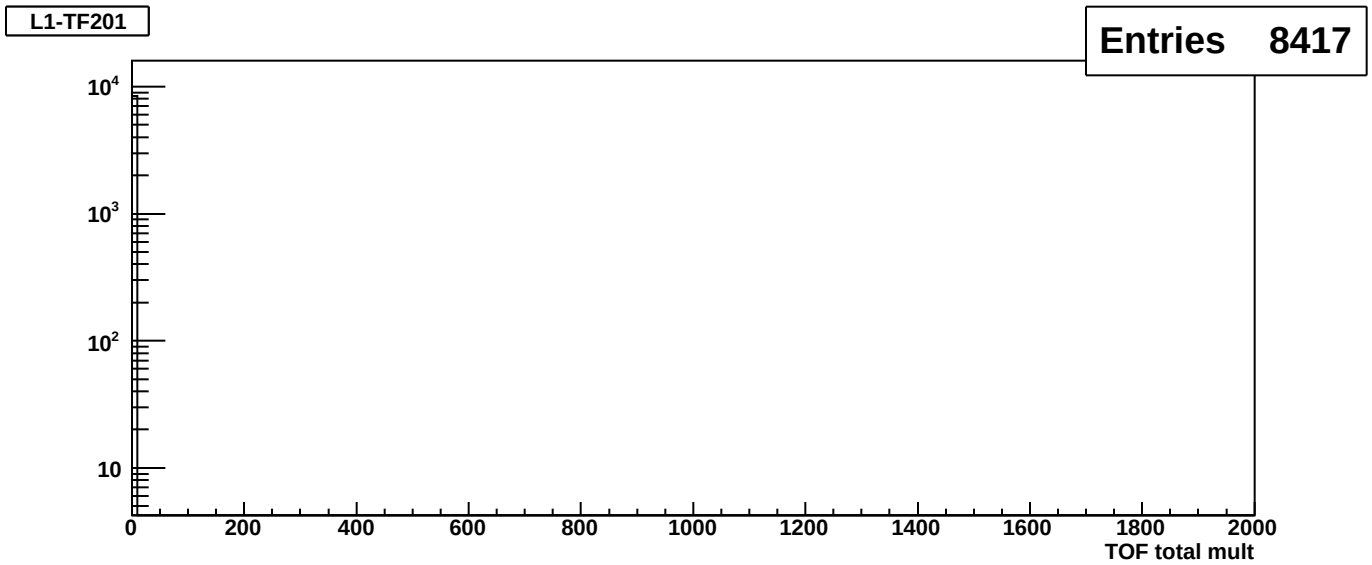

MIX-TF003
Entries 353514
TOF MULT
TOF tray

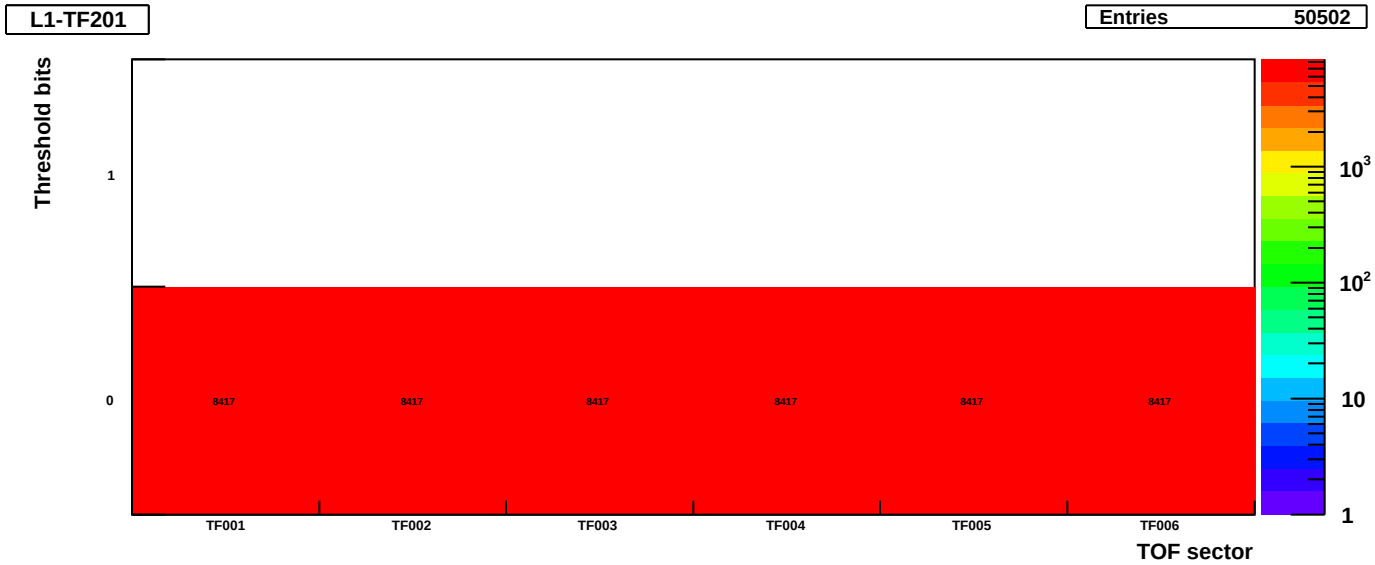

MIX-TF004
Entries 353514
TOF MULT
TOF tray

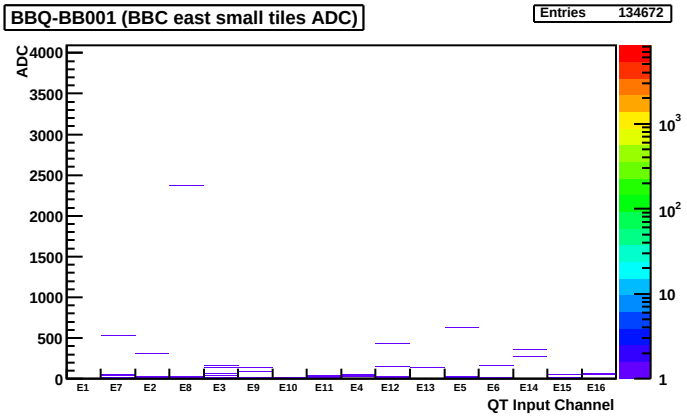

MIX-TF005
Entries 353514
TOF MULT
TOF tray

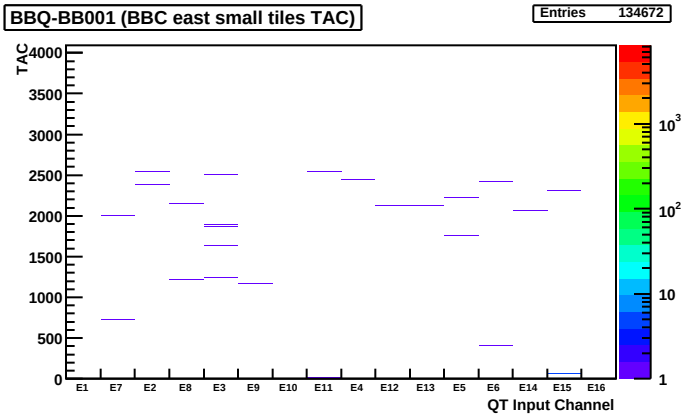

MIX-TF006
Entries 353514
TOF MULT
TOF tray

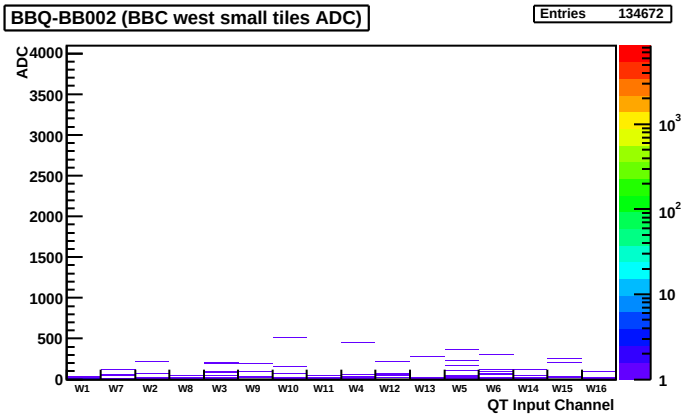

MIX-TF101
Entries 50502
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

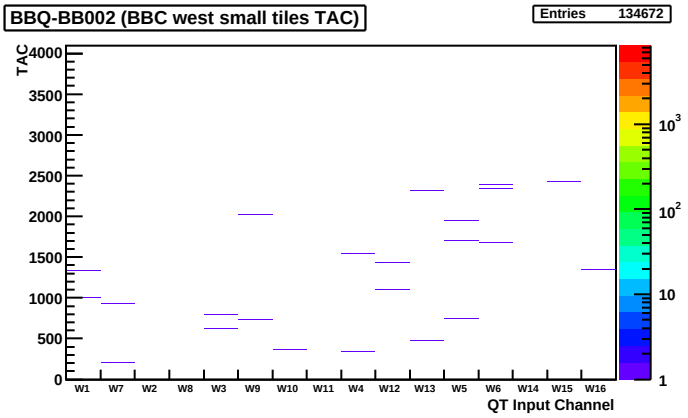

L1-TF201
Entries 8417
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

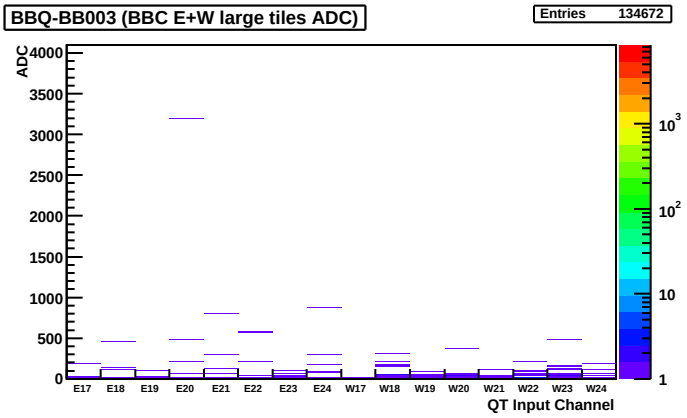

L1-TF201
Entries 50502
Threshold bits
1
0
8417
8417
8417
8417
8417
8417
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2
10
1

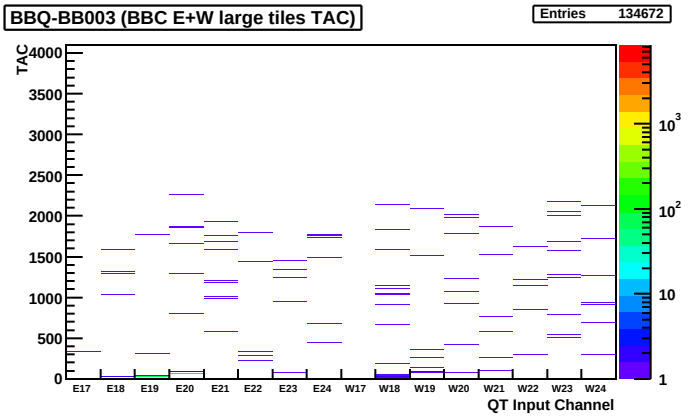

BBQ-BB001 (BBC east small tiles ADC)
Entries 134672
ADC
QT Input Channel

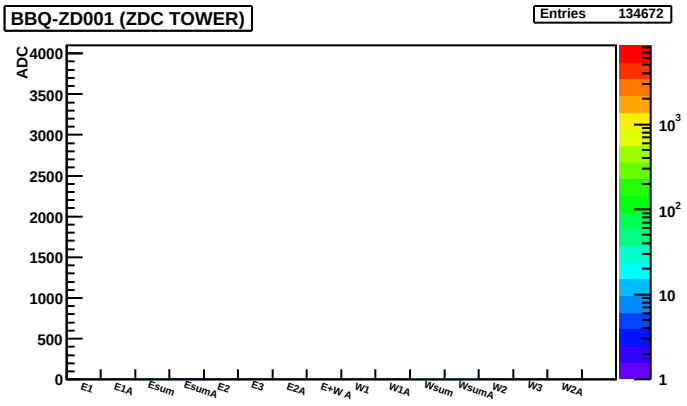

BBQ-BB001 (BBC east small tiles TAC)
Entries 134672
TAC
QT Input Channel

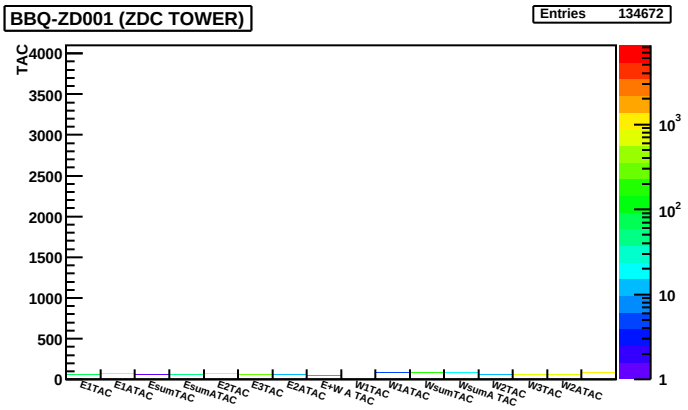

BBQ-BB002 (BBC west small tiles ADC)
Entries 134672
ADC
QT Input Channel

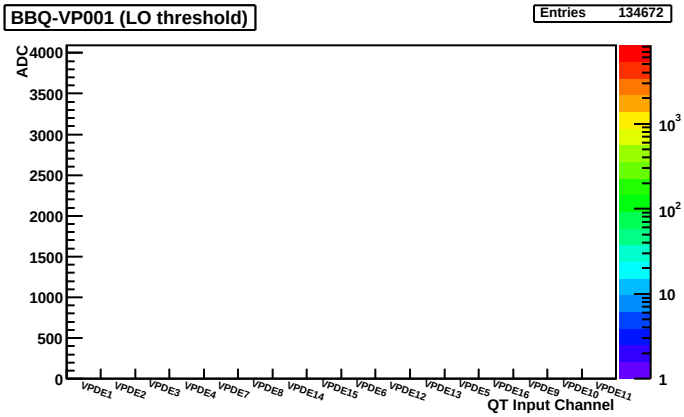

BBQ-BB002 (BBC west small tiles TAC)
Entries 134672
TAC
QT Input Channel

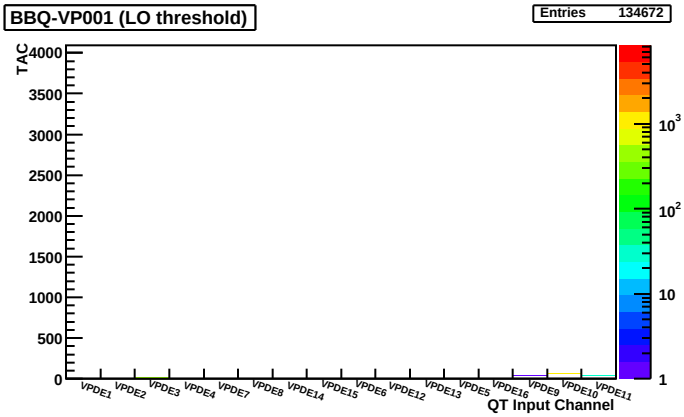

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 134672
ADC
QT Input Channel

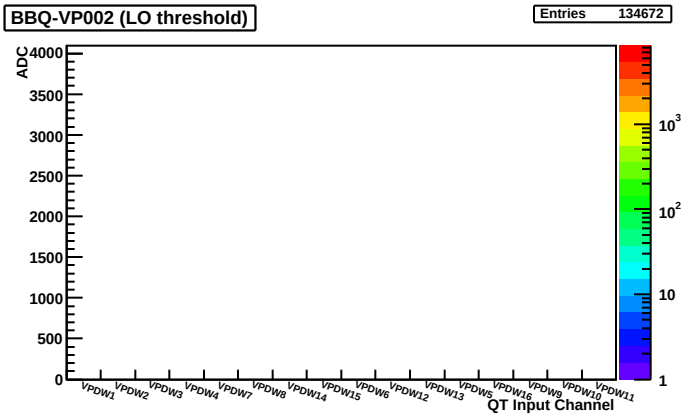

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 134672
TAC
QT Input Channel

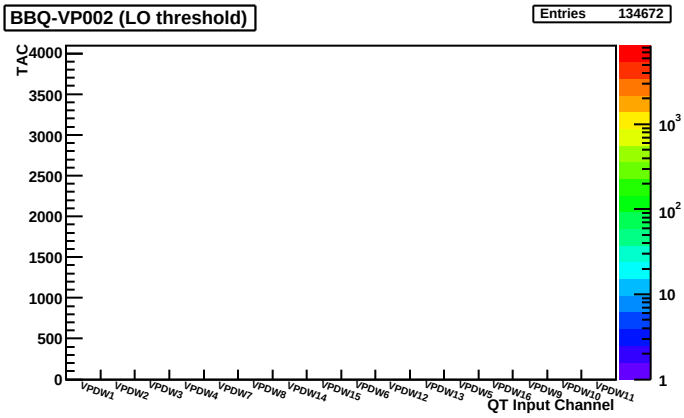

BBQ-ZD001 (ZDC TOWER)
Entries 134672
ADC

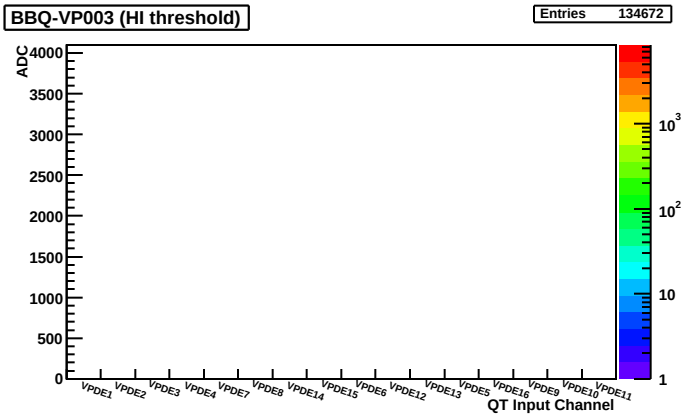

BBQ-ZD001 (ZDC TOWER)
Entries 134672
TAC

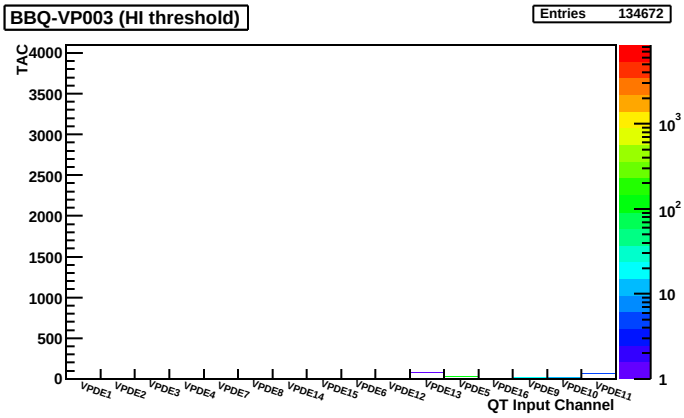

BBQ-VP001 (LO threshold)
Entries 134672
ADC
QT Input Channel

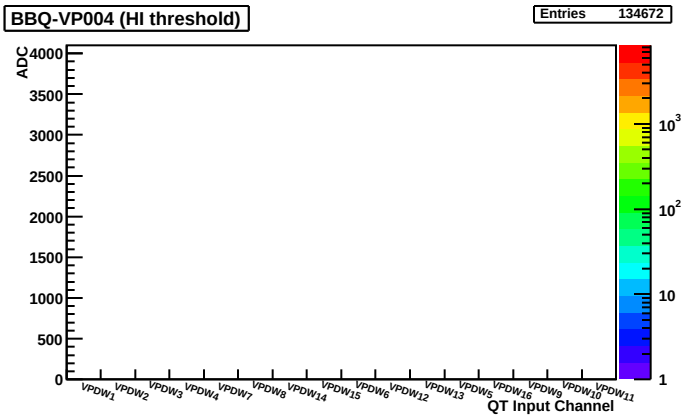

BBQ-VP001 (LO threshold)
Entries 134672
TAC
QT Input Channel

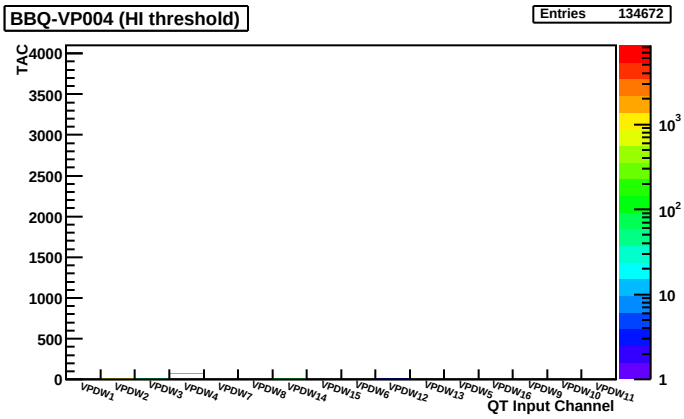

BBQ-VP002 (LO threshold)
Entries 134672
ADC
QT Input Channel

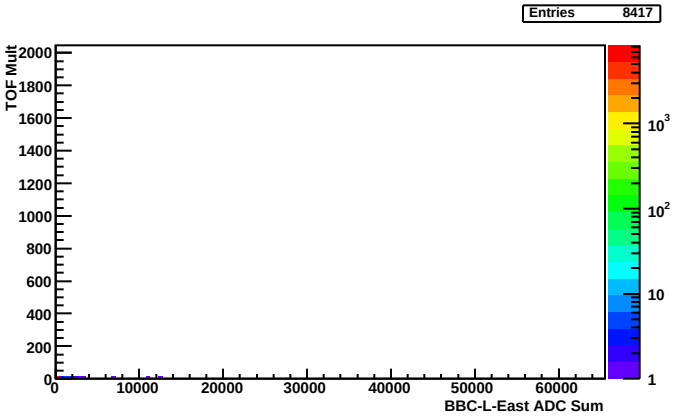

BBQ-VP002 (LO threshold)
Entries 134672
TAC
QT Input Channel

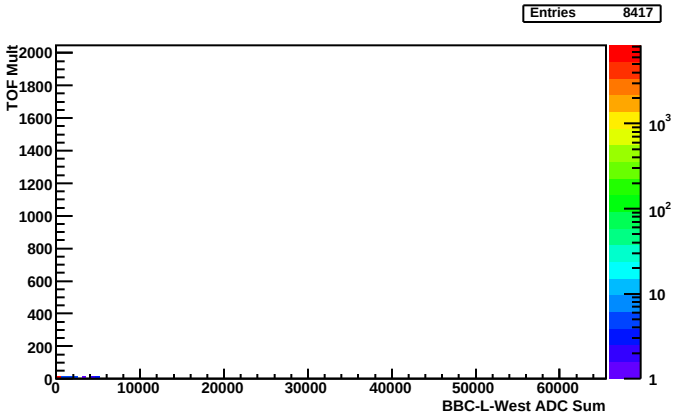

BBQ-VP003 (HI threshold)
Entries 134672
ADC
QT Input Channel

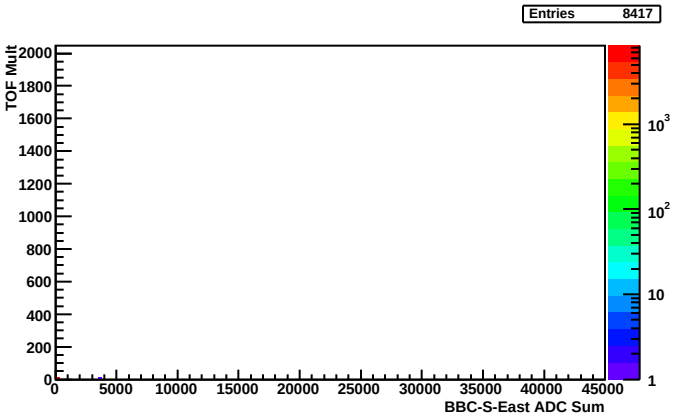

BBQ-VP003 (HI threshold)
Entries 134672
TAC
QT Input Channel

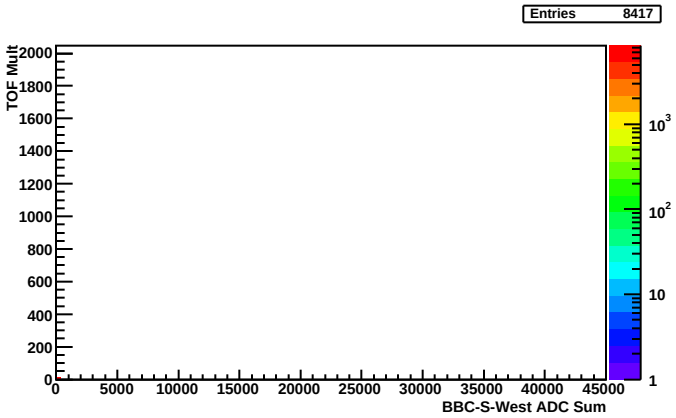

BBQ-VP004 (HI threshold)
Entries 134672
ADC
QT Input Channel

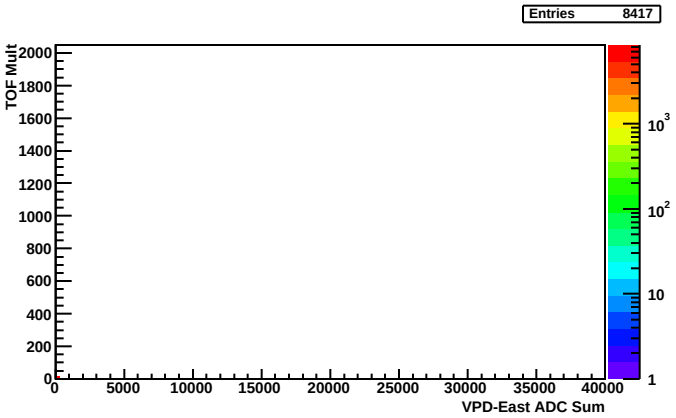

BBQ-VP004 (HI threshold)
Entries 134672
TAC
QT Input Channel

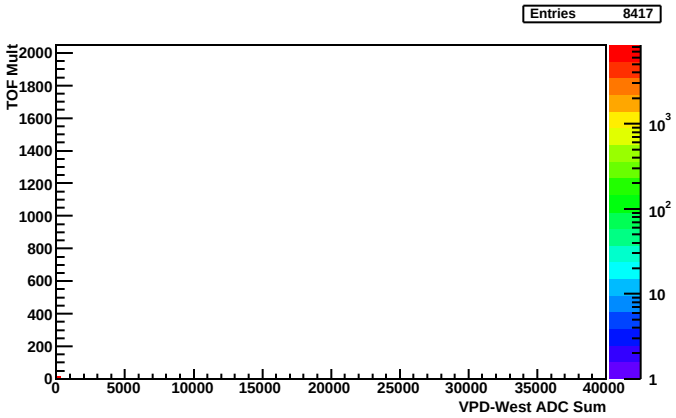

Entries 8417
TOF Mult
BBC-L-East ADC Sum

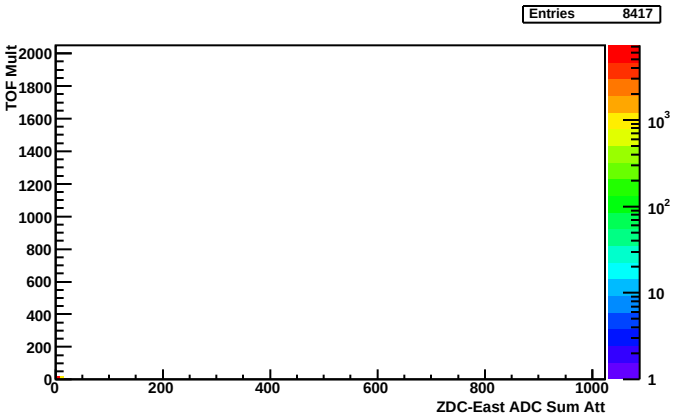

Entries 8417
TOF Mult
BBC-L-West ADC Sum

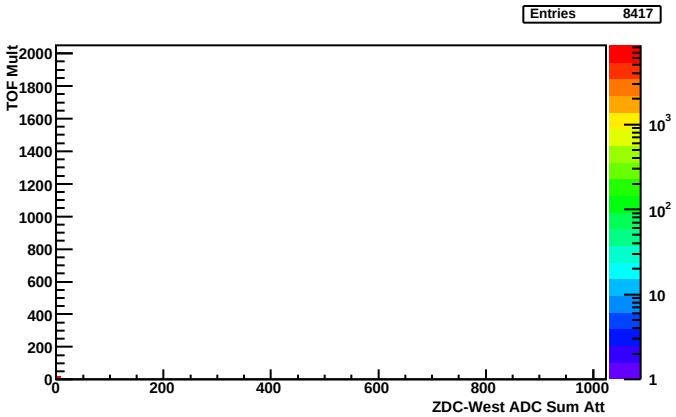

Entries 8417
TOF Mult
BBC-S-East ADC Sum

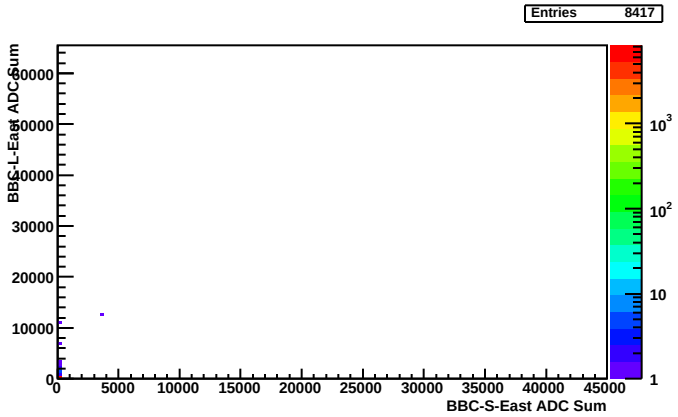

Entries 8417
TOF Mult
BBC-S-West ADC Sum

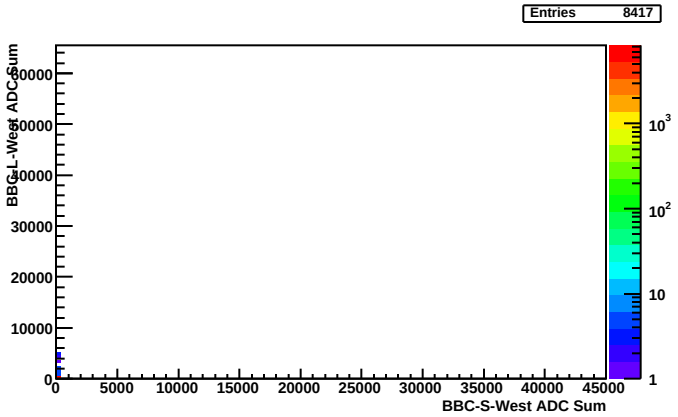

Entries 8417
TOF Mult
VPD-East ADC Sum

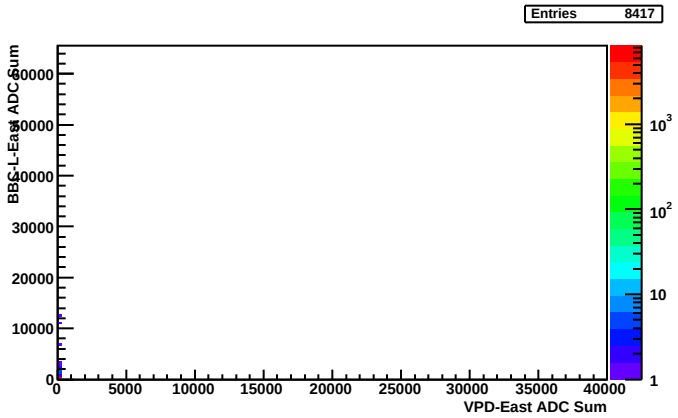

Entries 8417
TOF Mult
VPD-West ADC Sum

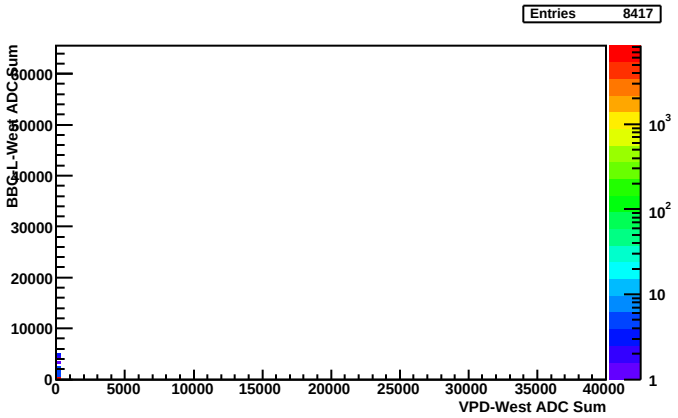

Entries 8417
TOF Mult
ZDC-East ADC Sum Att

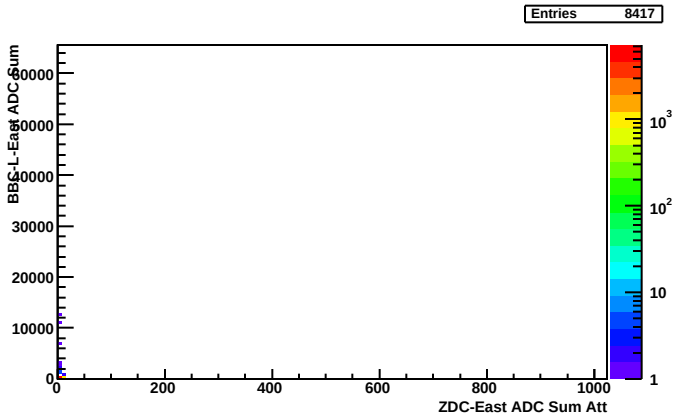

Entries 8417
TOF Mult
ZDC-West ADC Sum Att

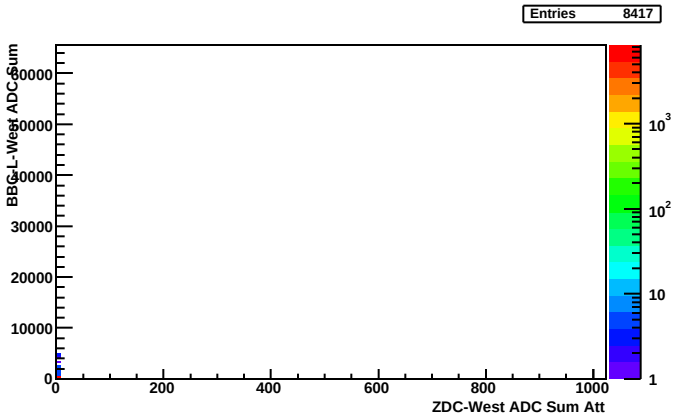

Entries 8417
BBC-L-East ADC Sum
BBC-S-East ADC Sum

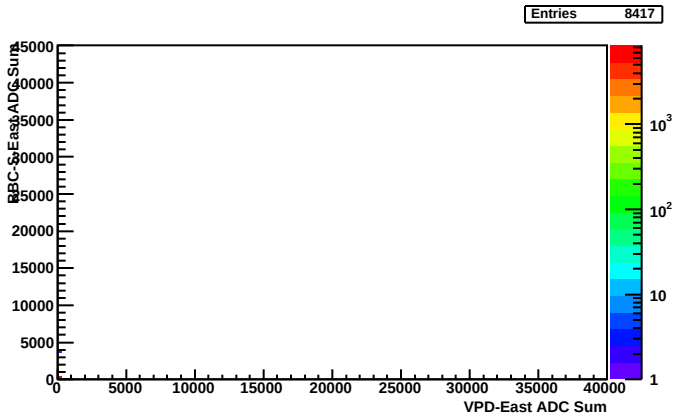

Entries 8417
BBC-L-West ADC Sum
BBC-S-West ADC Sum

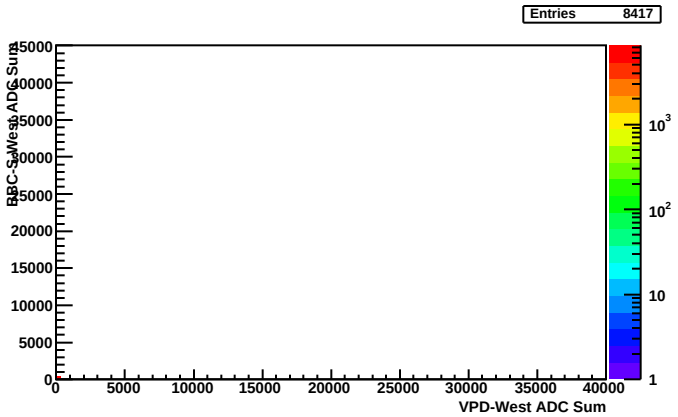

Entries 8417
BBC-L-East ADC Sum
VPD-East ADC Sum

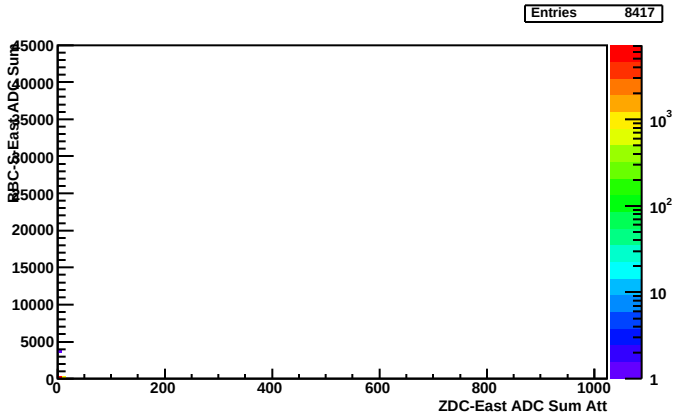

Entries 8417
BBC-L-West ADC Sum
VPD-West ADC Sum

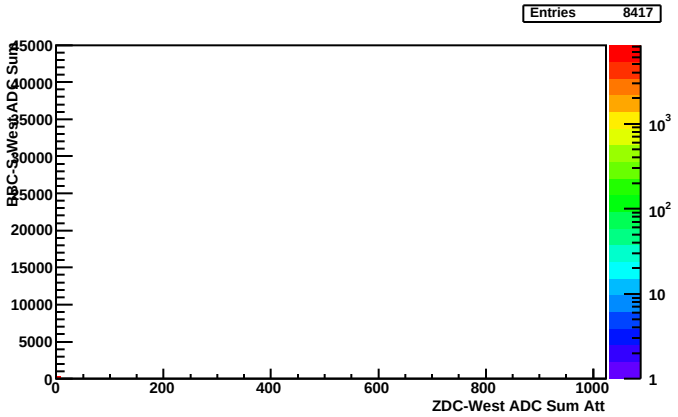

Entries 8417
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

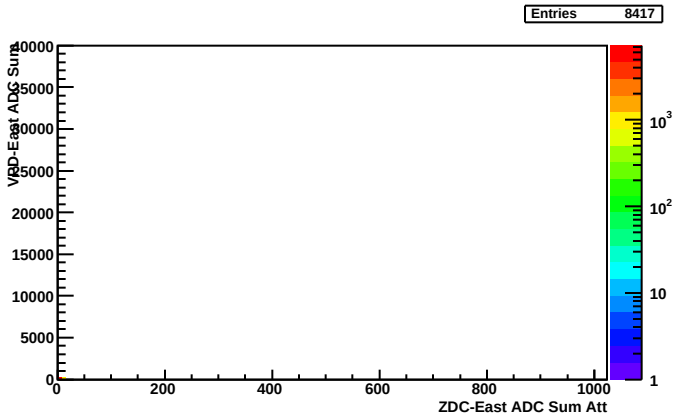

Entries 8417
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

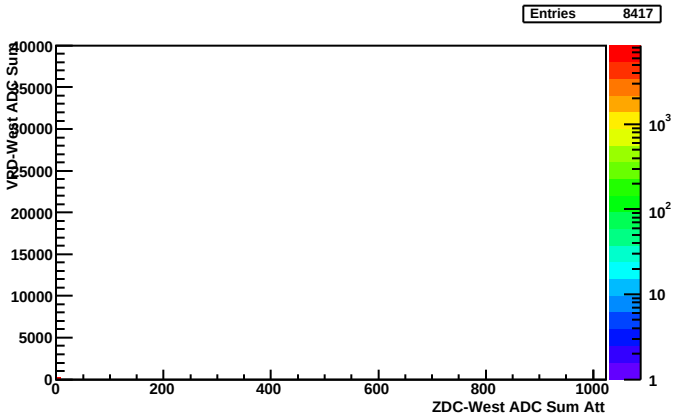

Entries 8417
BBC-S-East ADC Sum
VPD-East ADC Sum

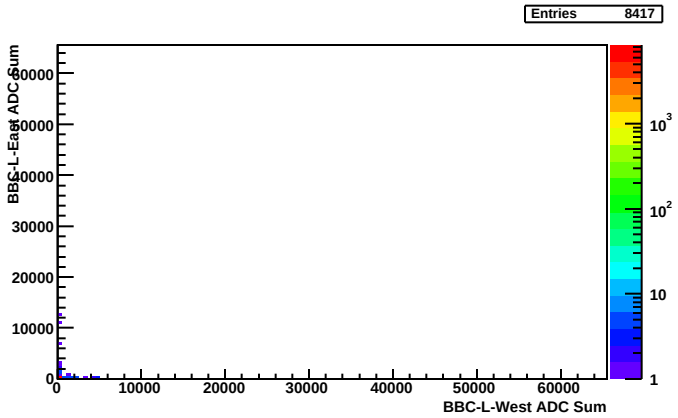

Entries 8417
BBC-S-West ADC Sum
VPD-West ADC Sum

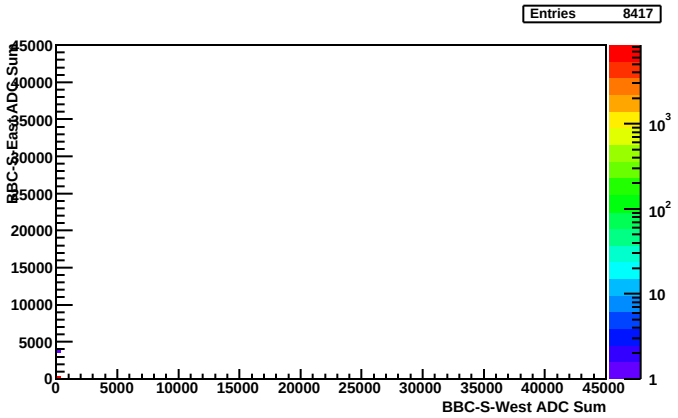

Entries 8417
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

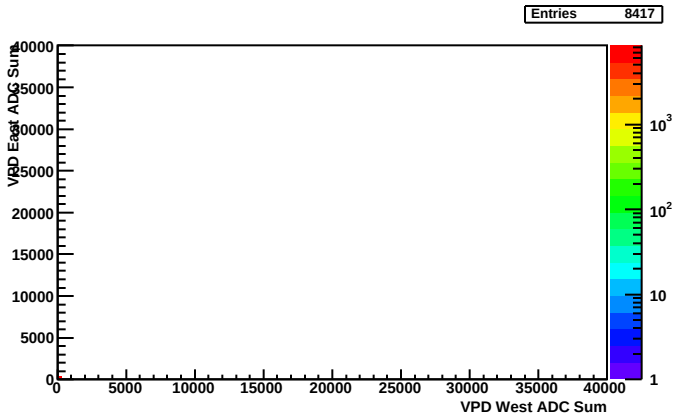

Entries 8417
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

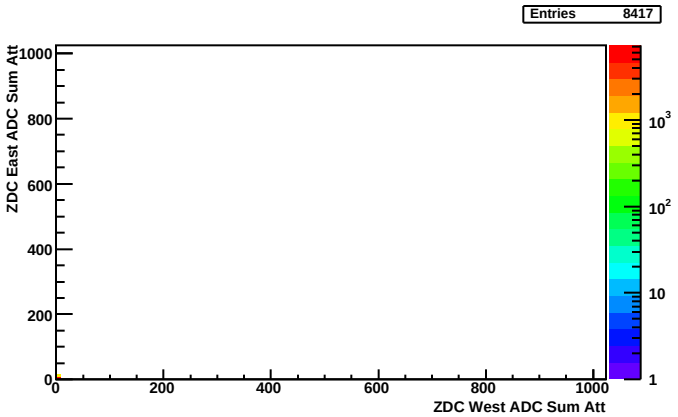

Entries 8417
VPD-East ADC Sum
ZDC-East ADC Sum Att

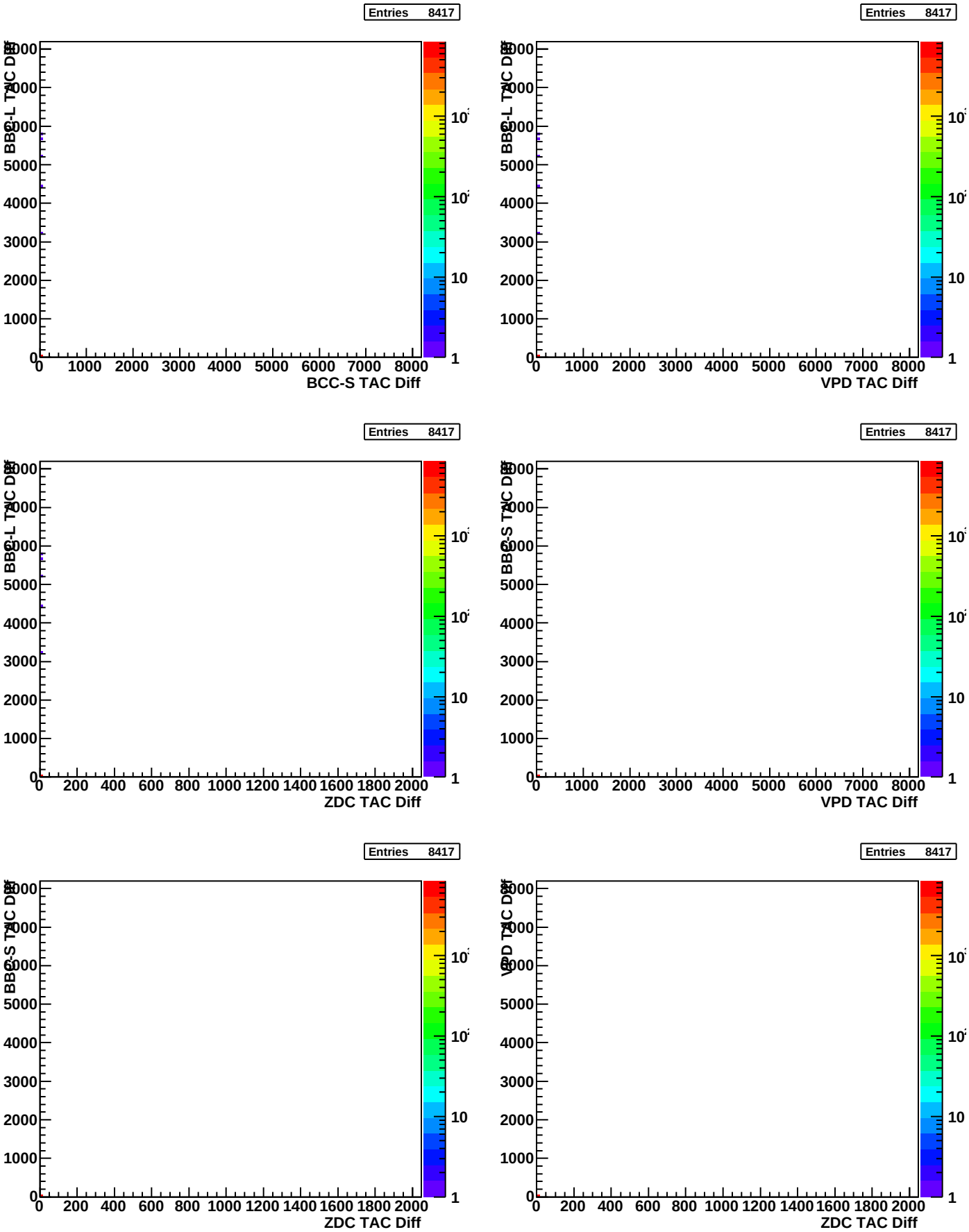

Entries 8417
VPD-West ADC Sum
ZDC-West ADC Sum Att

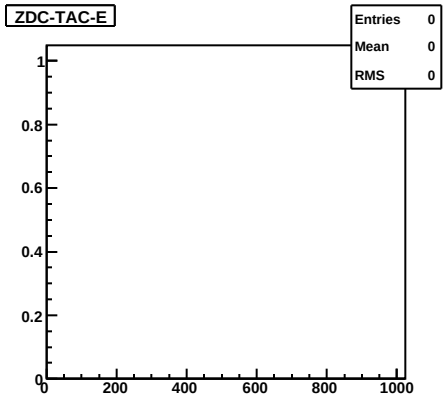

Entries 8417
BBC-L-East ADC Sum
BBC-L-West ADC Sum

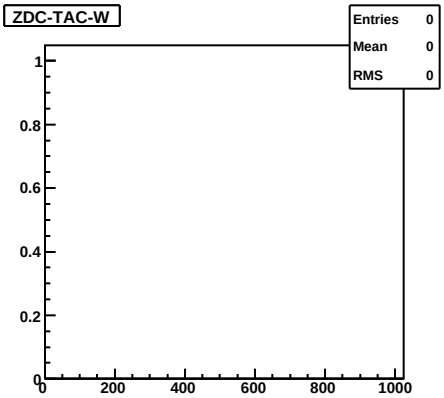

Entries 8417
BBC-S-East ADC Sum
BBC-S-West ADC Sum

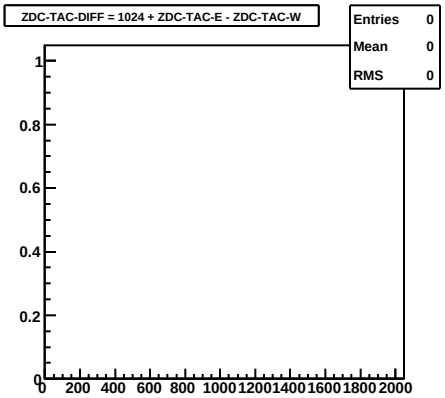

Entries 8417
VPD East ADC Sum
VPD West ADC Sum

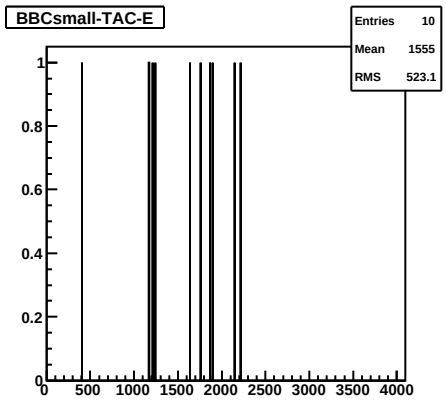

Entries 8417
ZDC East ADC Sum Att
ZDC West ADC Sum Att

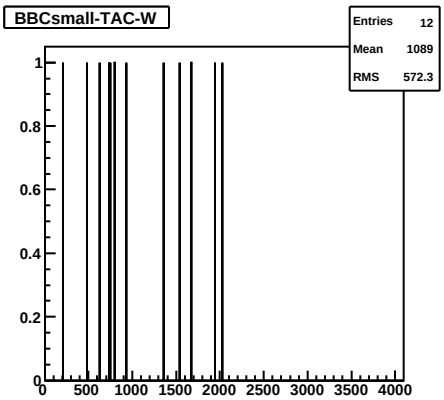

Entries 8417
BBC-L TAC Diff
BCC-S TAC Diff
Entries 8417
BBC-L TAC Diff
VPD TAC Diff
Entries 8417
BBC-L TAC Diff
ZDC TAC Diff
Entries 8417
BBC-S TAC Diff
VPD TAC Diff
Entries 8417
BBC-S TAC Diff
ZDC TAC Diff
Entries 8417
VPD TAC Diff
ZDC TAC Diff

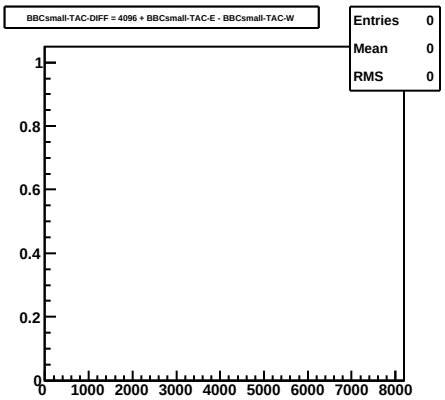

ZDC-TAC-E
Entries 0
Mean 0
RMS 0

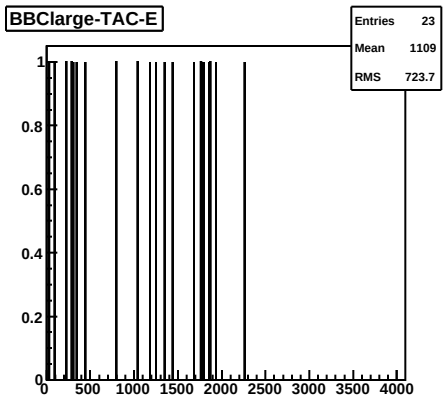

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

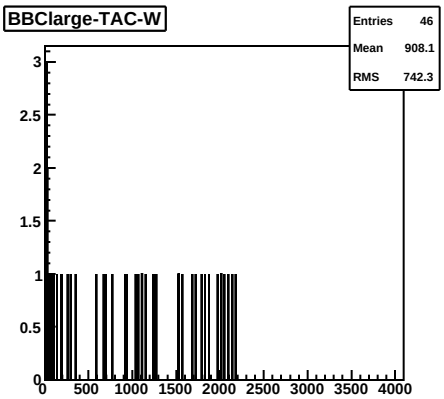

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

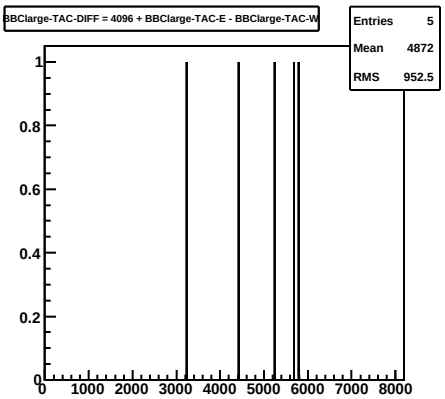

BBCsmall-TAC-E
Entries 10
Mean 1555
RMS 523.1

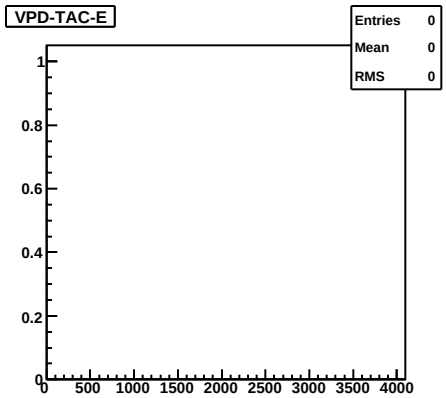

BBCsmall-TAC-W
Entries 12
Mean 1089
RMS 572.3

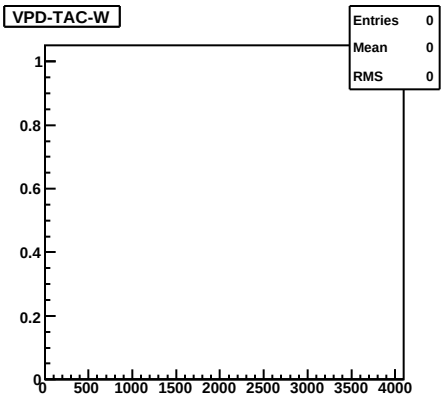

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

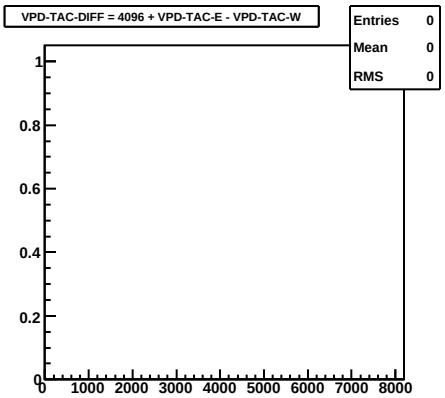

BBClarge-TAC-E
Entries 23
Mean 1109
RMS 723.7

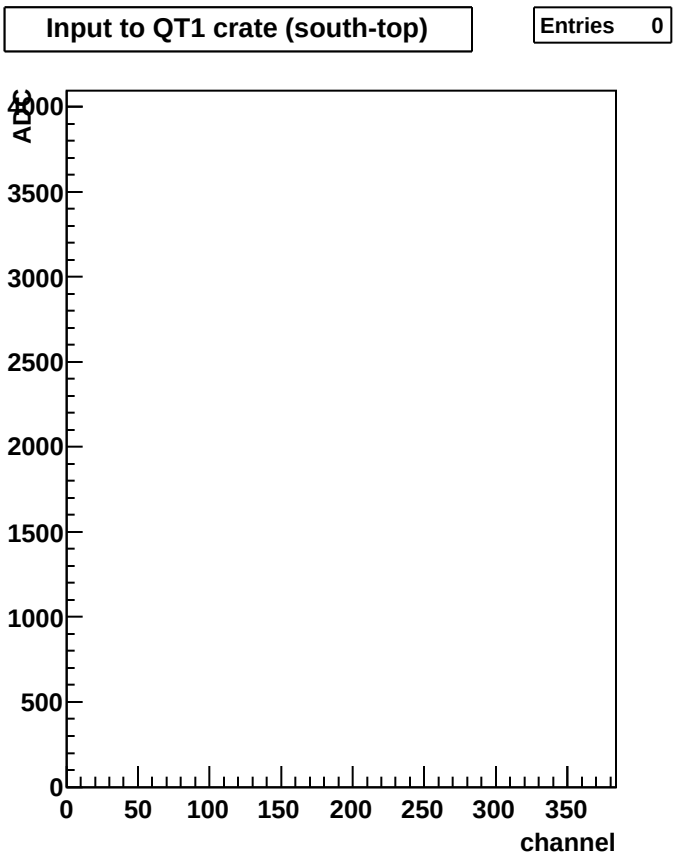

BBClarge-TAC-W
Entries 46
Mean 908.1
RMS 742.3

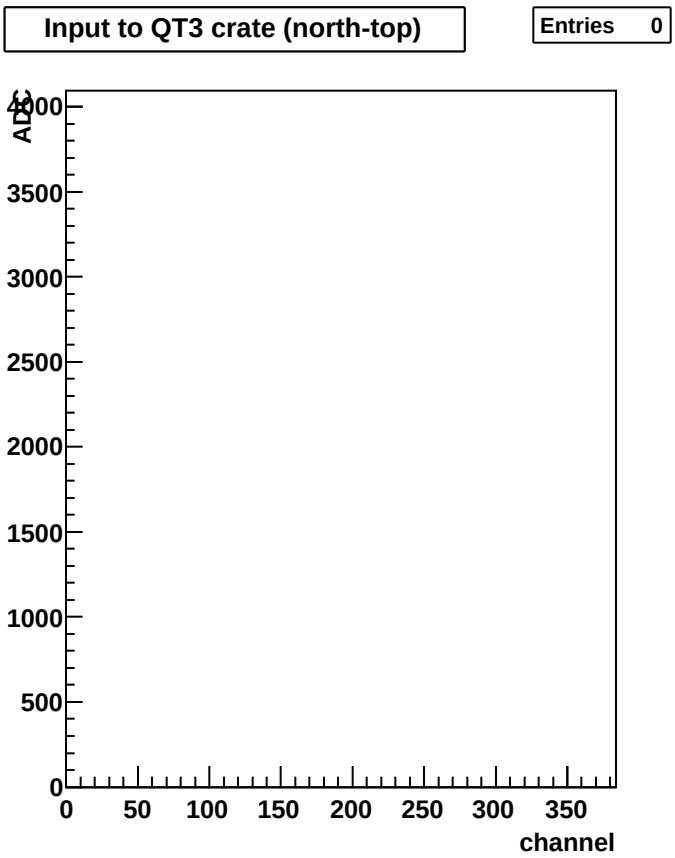

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 5
Mean 4872
RMS 952.5

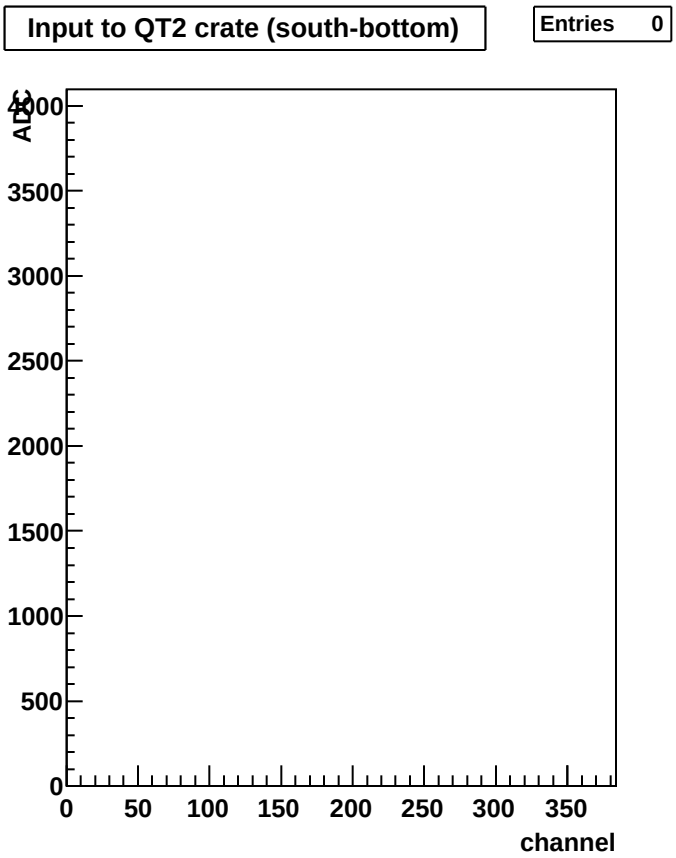

VPD-TAC-E
Entries 0
Mean 0
RMS 0

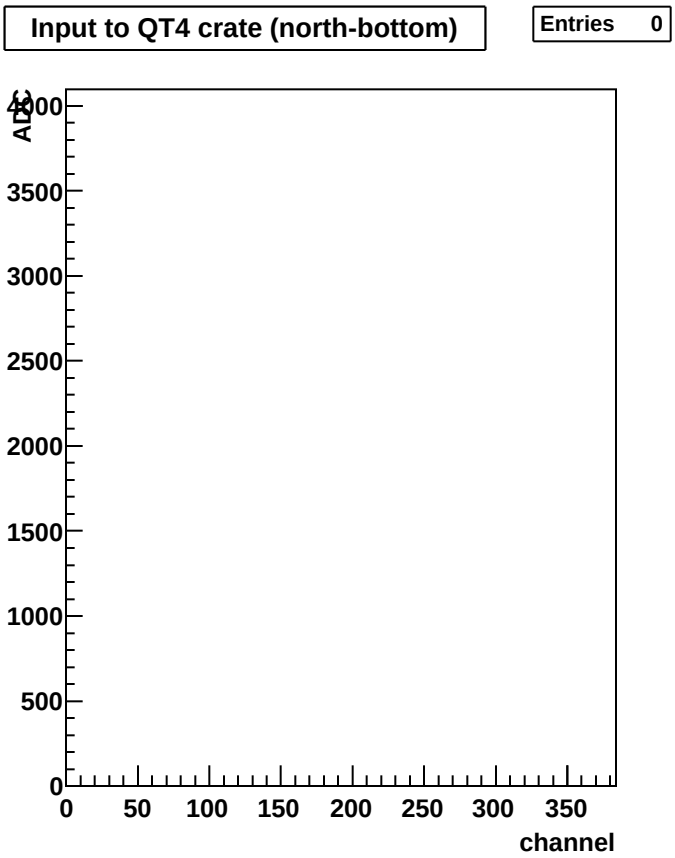

VPD-TAC-W
Entries 0
Mean 0
RMS 0

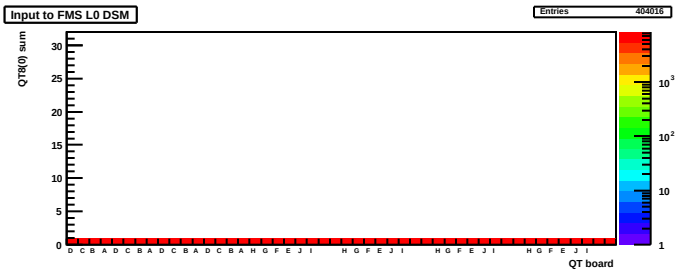

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

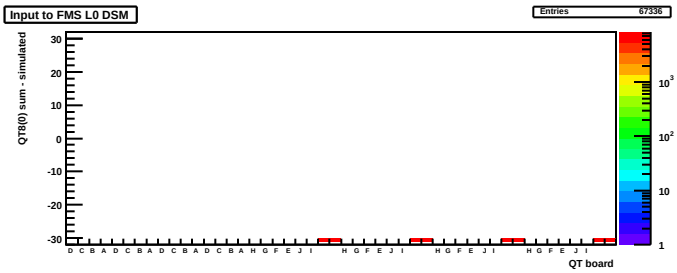

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

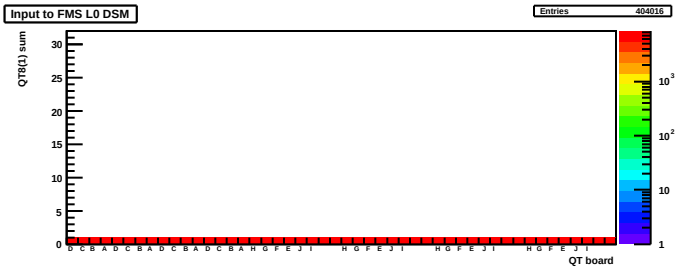

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

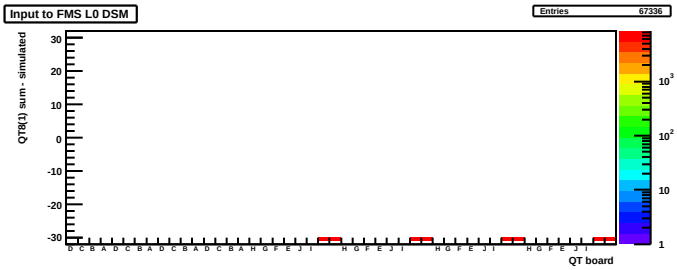

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

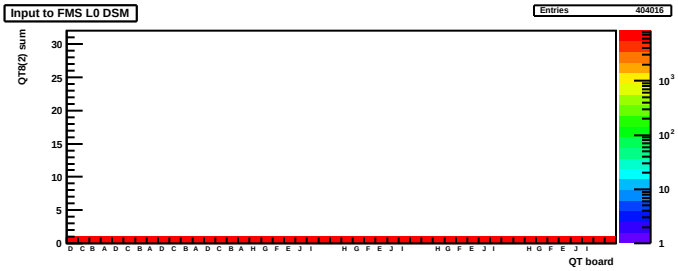

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

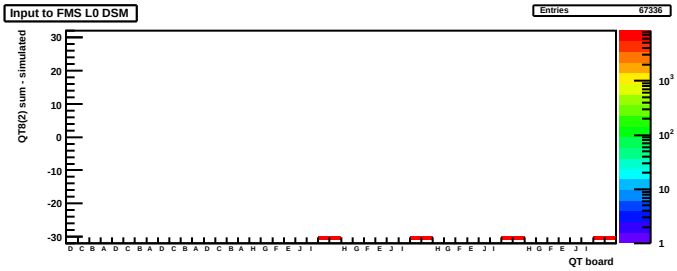

Input to FMS L0 DSM
Entries 404016
QT8(0) sum
QT board

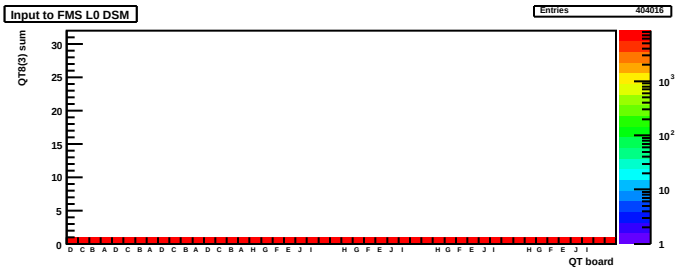

Input to FMS L0 DSM
Entries 67336
QT8(0) sum - simulated
QT board

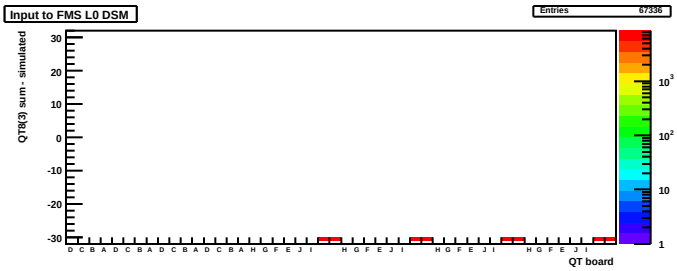

Input to FMS L0 DSM
Entries 404016
QT8(1) sum
QT board

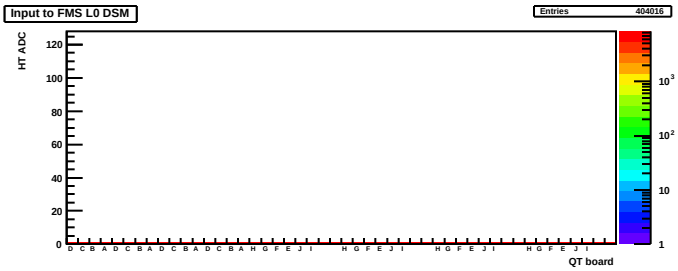

Input to FMS L0 DSM
Entries 67336
QT8(1) sum - simulated
QT board

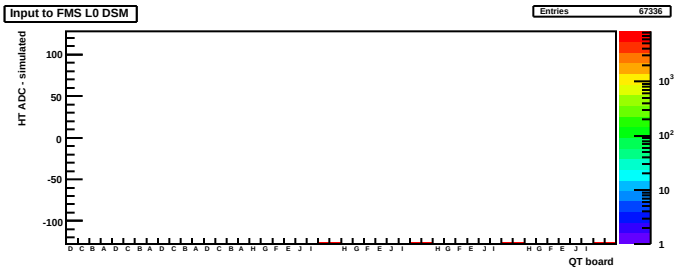

Input to FMS L0 DSM
Entries 404016
QT8(2) sum
QT board

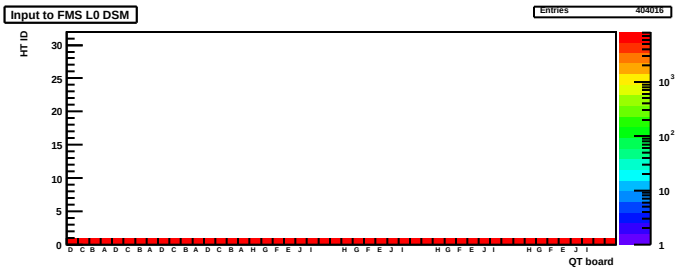

Input to FMS L0 DSM
Entries 67336
QT8(2) sum - simulated
QT board

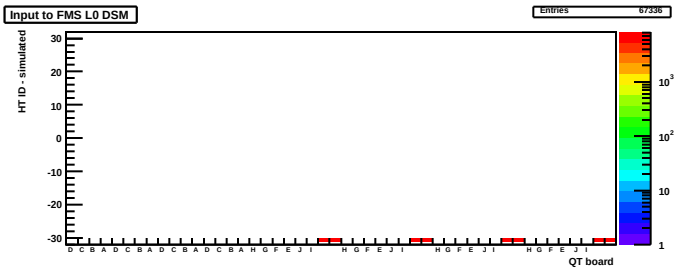

Input to FMS L0 DSM
Entries 404016
QT8(3) sum
QT board

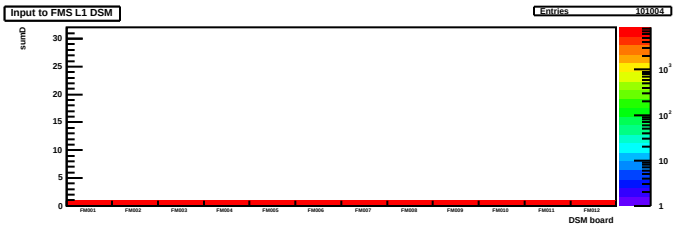

Input to FMS L0 DSM
Entries 67336
QT8(3) sum - simulated
QT board

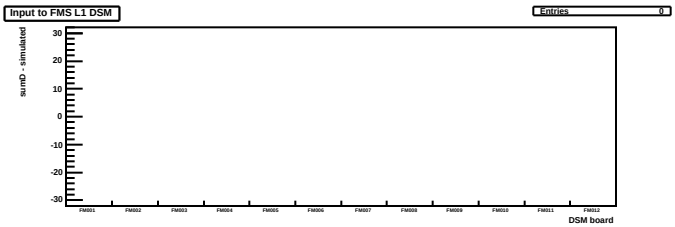

Input to FMS L0 DSM
Entries 404016
HT ADC
QT board

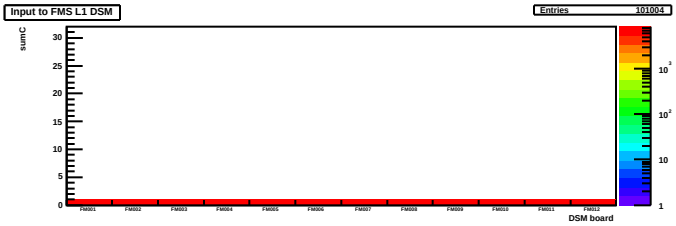

Input to FMS L0 DSM
Entries 67336
HT ADC - simulated
QT board

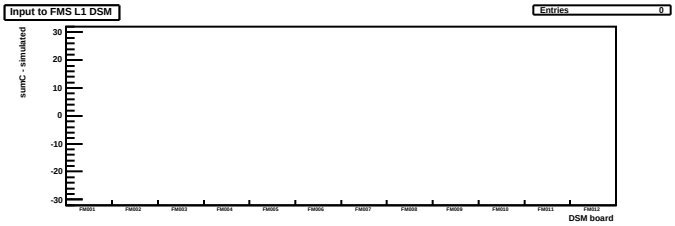

Input to FMS L0 DSM
Entries 404016
HT ID
QT board

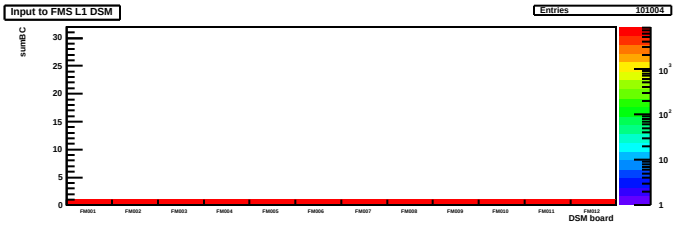

Input to FMS L0 DSM
Entries 67336
HT ID - simulated
QT board

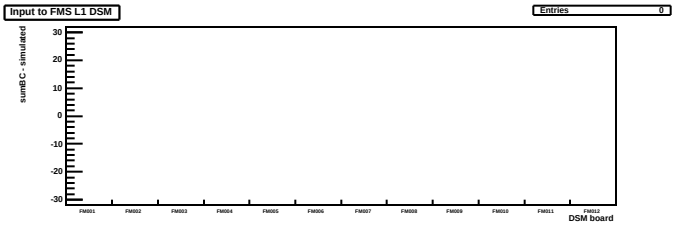

Input to FMS L1 DSM
Entries 101004
sumD
DSM board

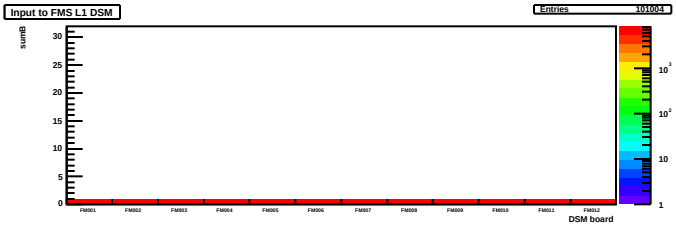

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

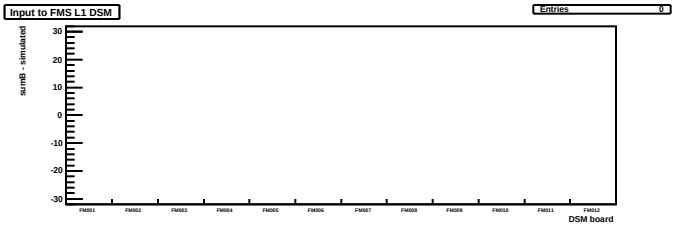

Input to FMS L1 DSM
Entries 101004
sumC
DSM board

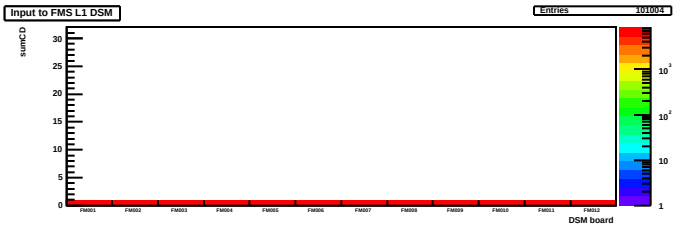

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

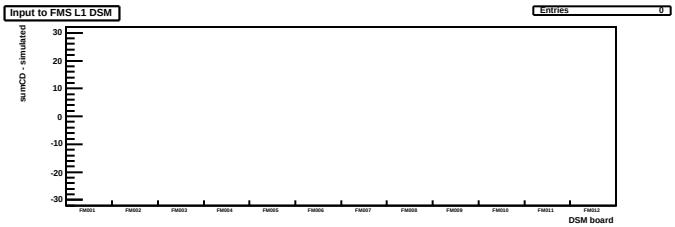

Input to FMS L1 DSM
Entries 101004
sumBC
DSM board

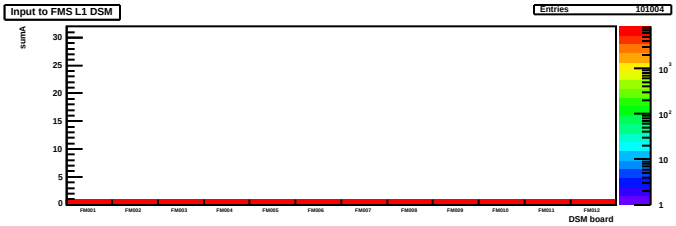

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

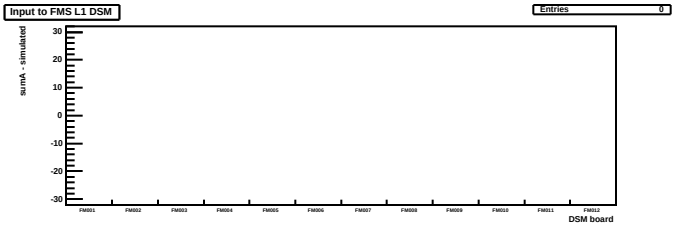

Input to FMS L1 DSM
Entries 101004
sumB
DSM board

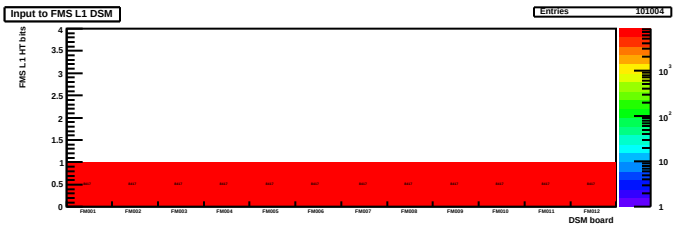

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

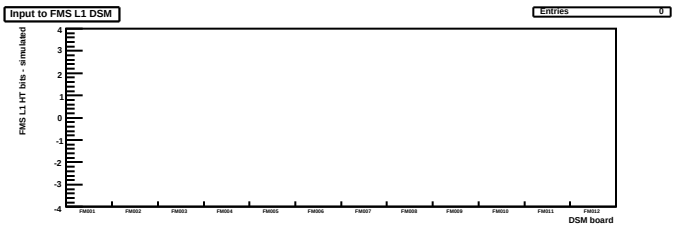

Input to FMS L1 DSM
Entries 101004
sumCD
DSM board

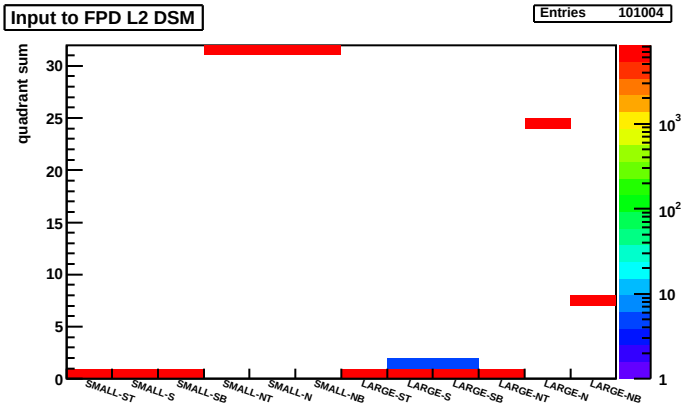

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

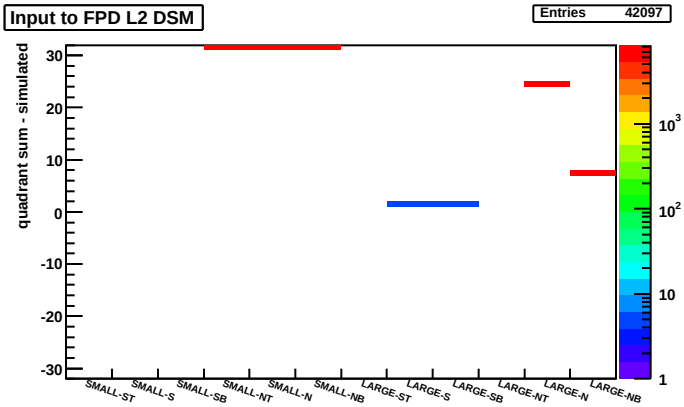

Input to FMS L1 DSM
Entries 101004
sumA
DSM board

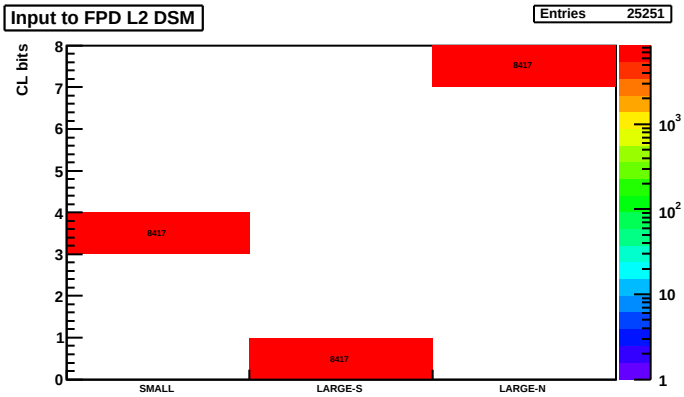

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

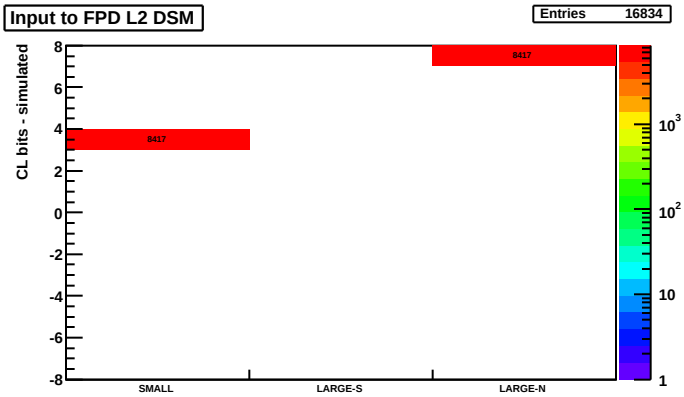

Input to FMS L1 DSM
Entries 101004
FMS L1 HT bits
DSM board

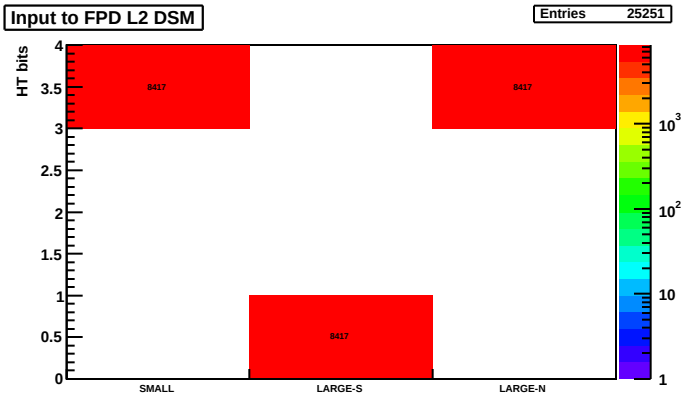

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

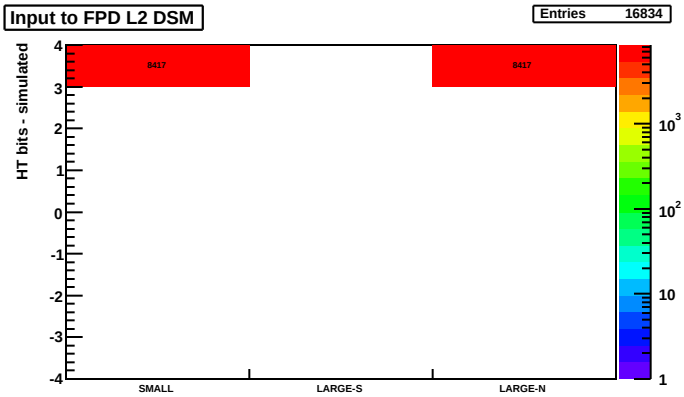

Input to FPD L2 DSM
Entries 101004
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

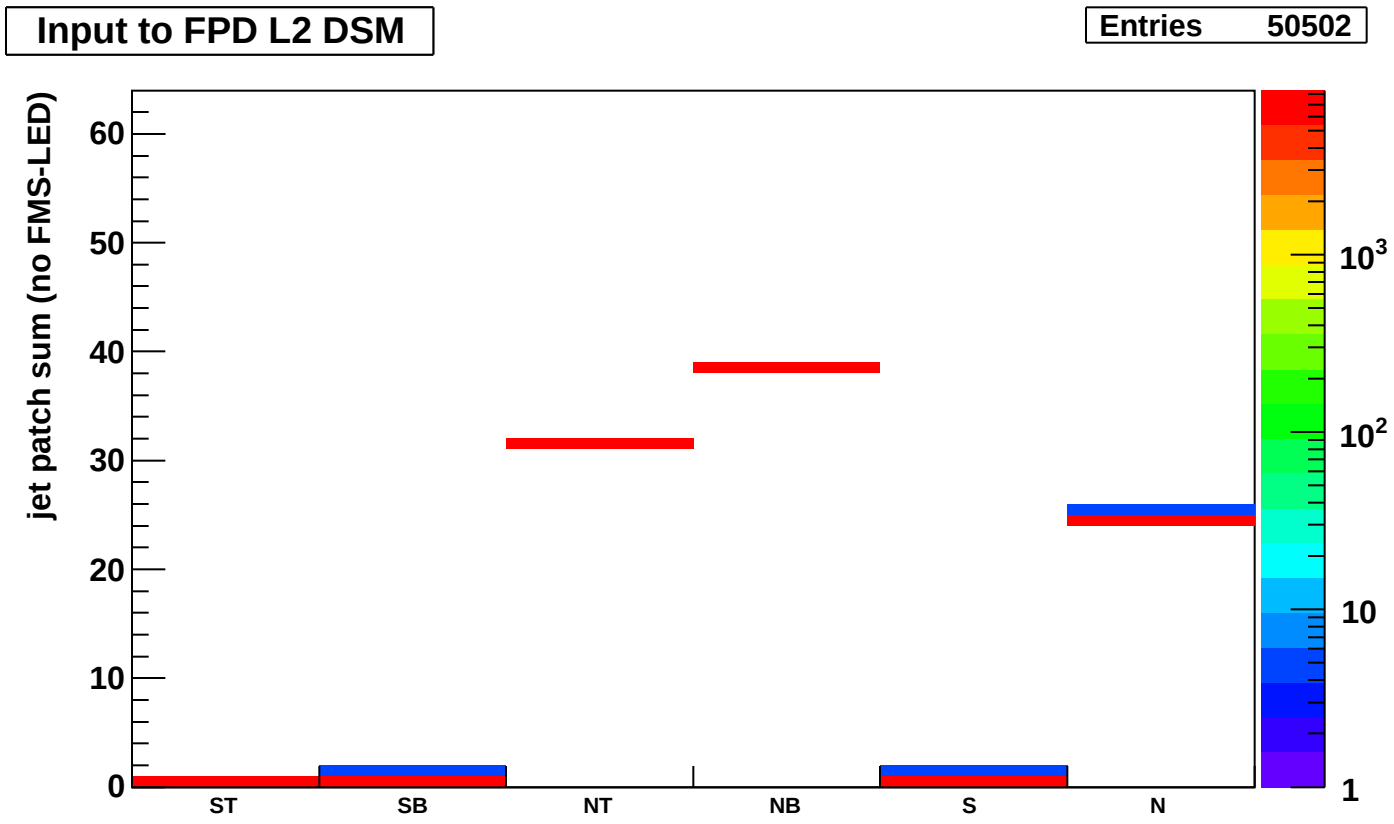

Input to FPD L2 DSM
Entries 42097
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

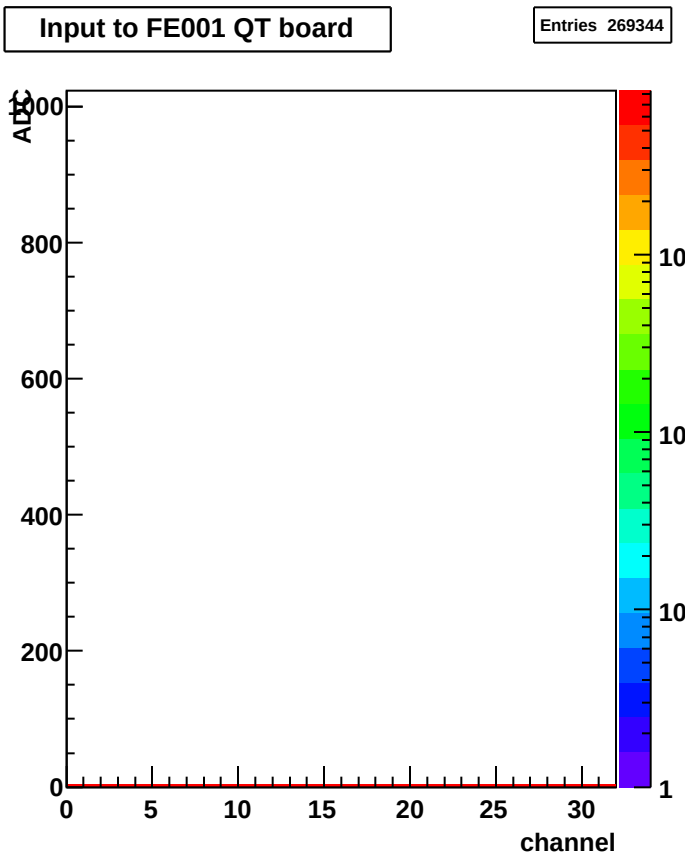

Input to FPD L2 DSM
Entries 25251
CL bits
8417
8417
SMALL
LARGE-S
LARGE-N

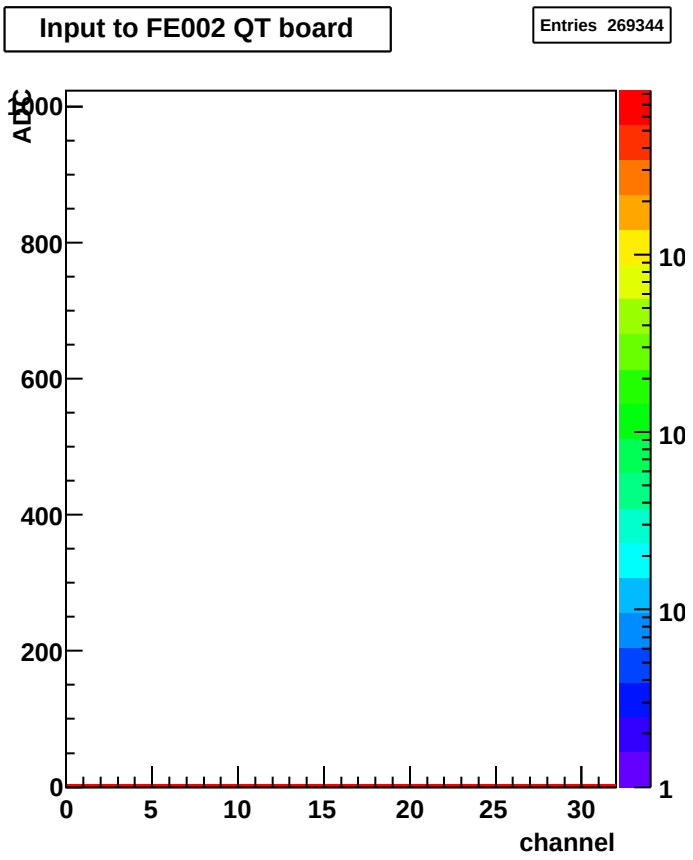

Input to FPD L2 DSM
Entries 16834
CL bits - simulated
8417
8417
SMALL
LARGE-S
LARGE-N

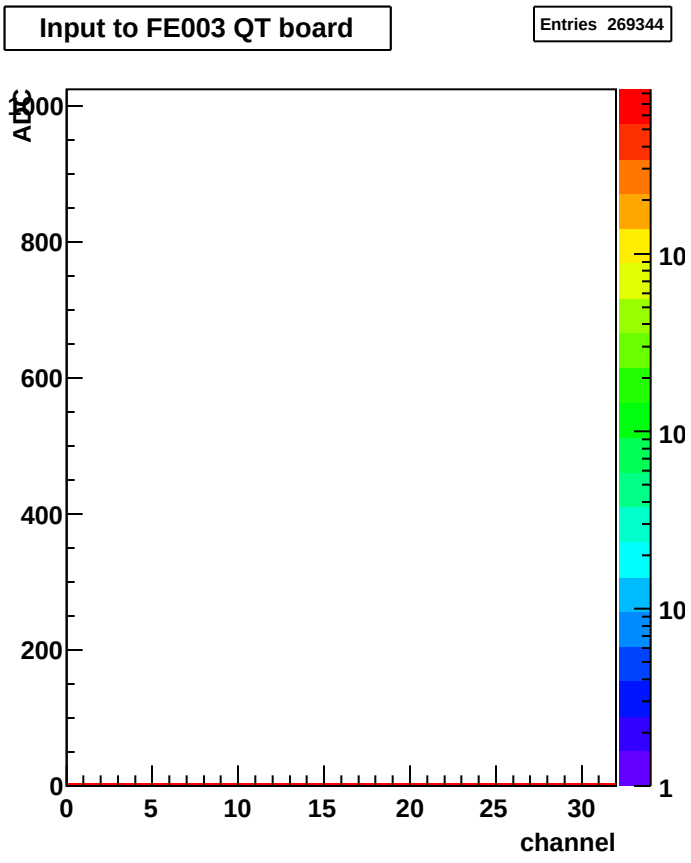

Input to FPD L2 DSM
Entries 25251
HT bits
8417
8417
8417
SMALL
LARGE-S
LARGE-N

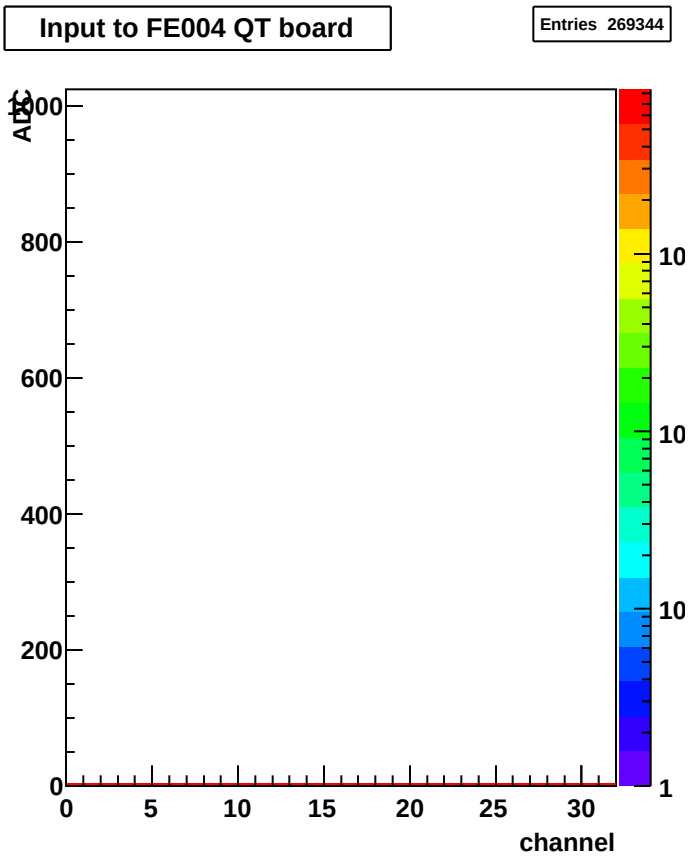

Input to FPD L2 DSM
Entries 16834
HT bits - simulated
8417
8417
SMALL
LARGE-S
LARGE-N

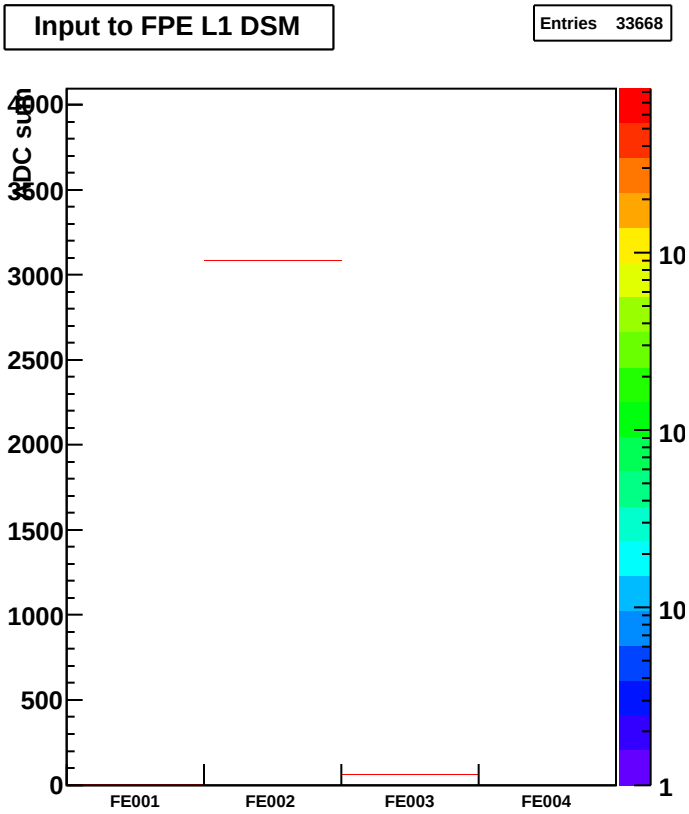

Input to FPD L2 DSM
Entries 50502
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3

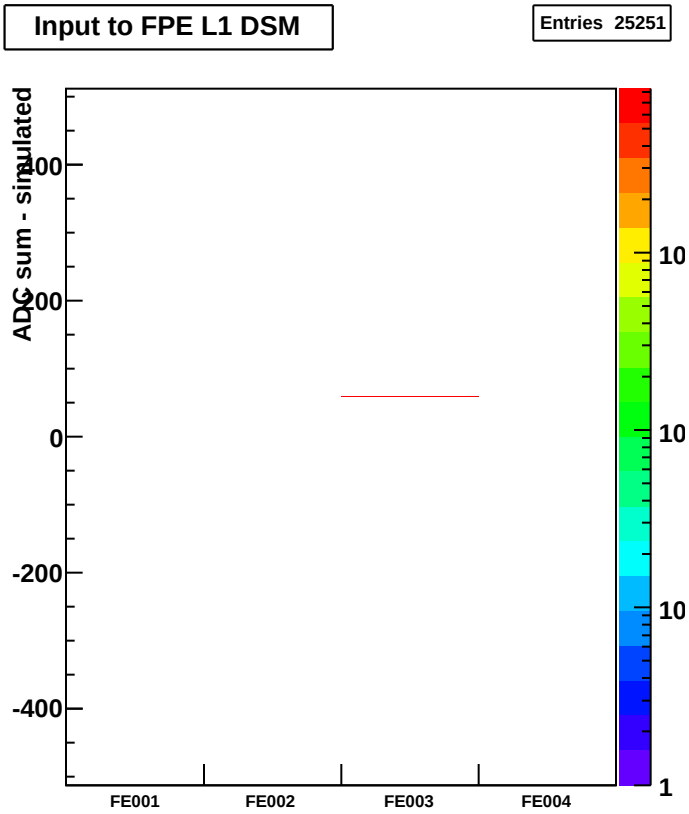

Input to FE001 QT board
Entries 269344
ADC
channel

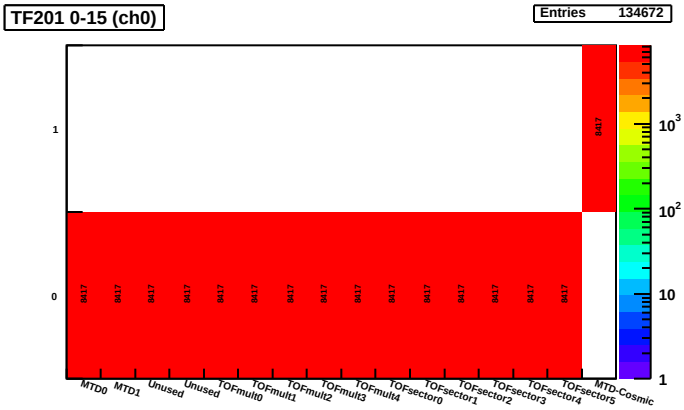

Input to FE002 QT board
Entries 269344
ADC
channel

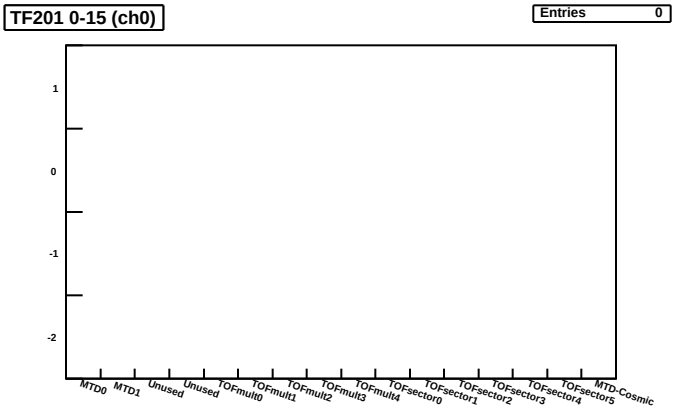

Input to FE003 QT board
Entries 269344
ADC
channel

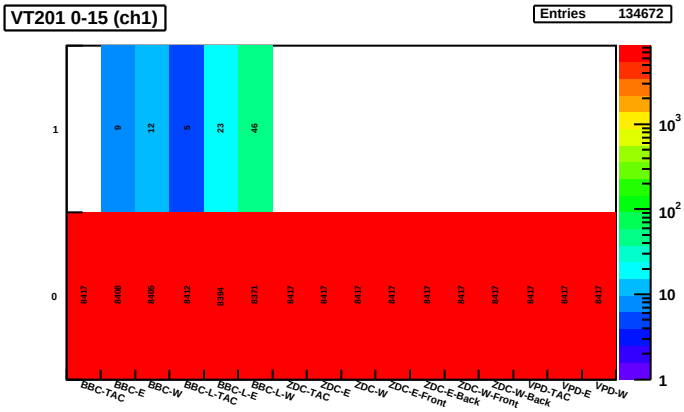

Input to FE004 QT board
Entries 269344
ADC
channel

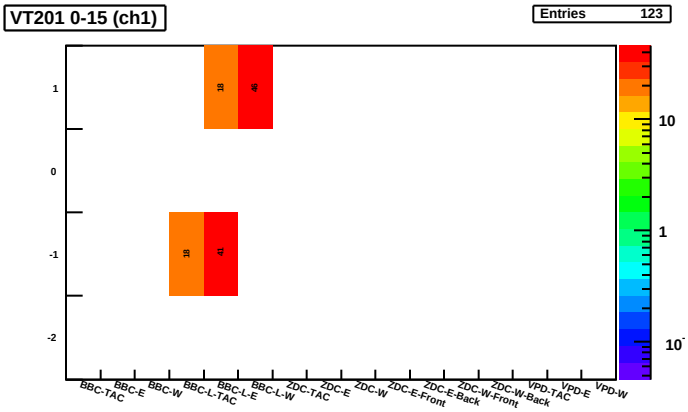

Input to FPE L1 DSM
Entries 33668
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

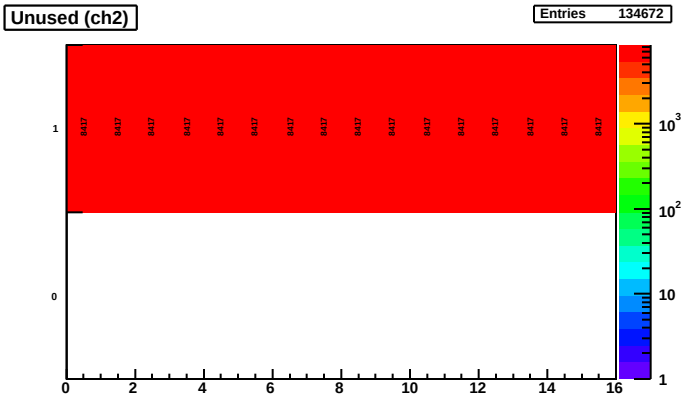

Input to FPE L1 DSM
Entries 25251
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1


TF201 0-15 (ch0)
Entries 134672
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 134672
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 123
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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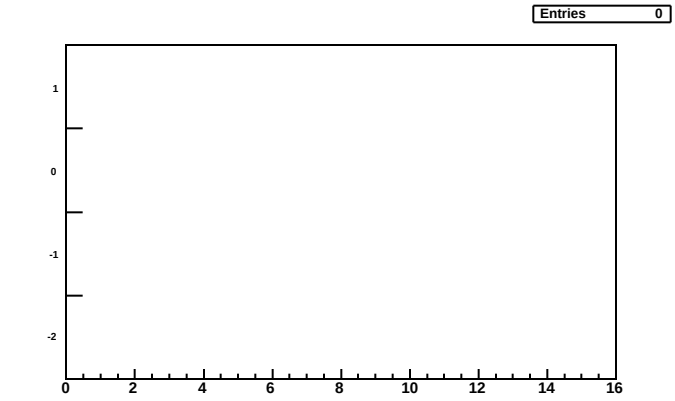
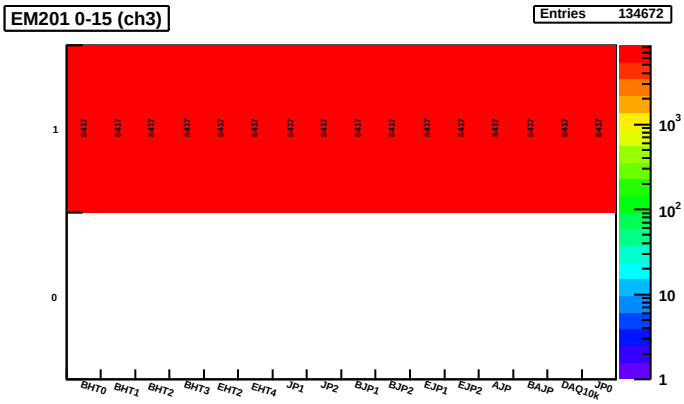
Entries 134672


Entries 0


EM201 0-15 (ch3)
Entries 134672
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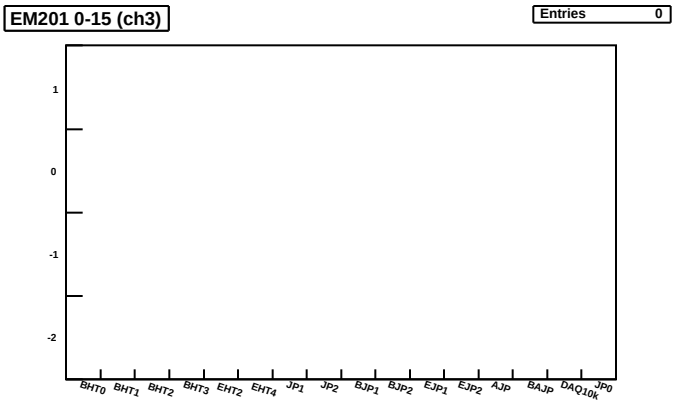
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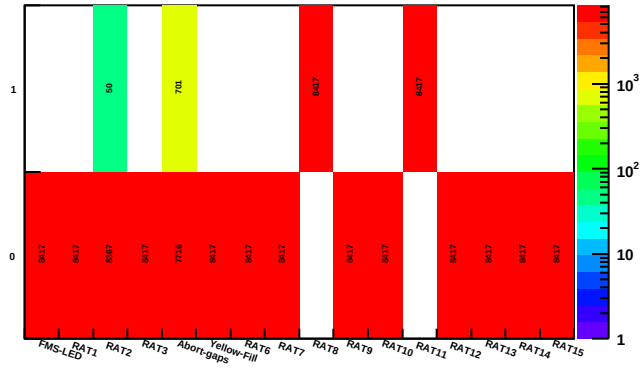
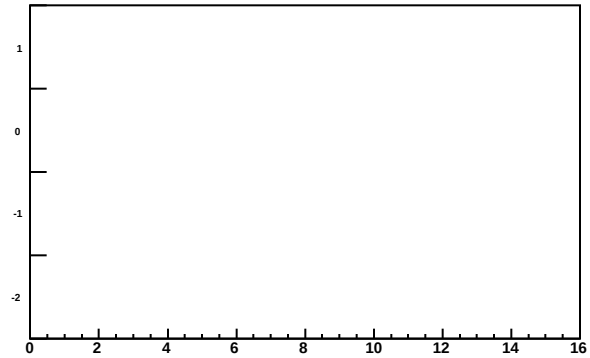
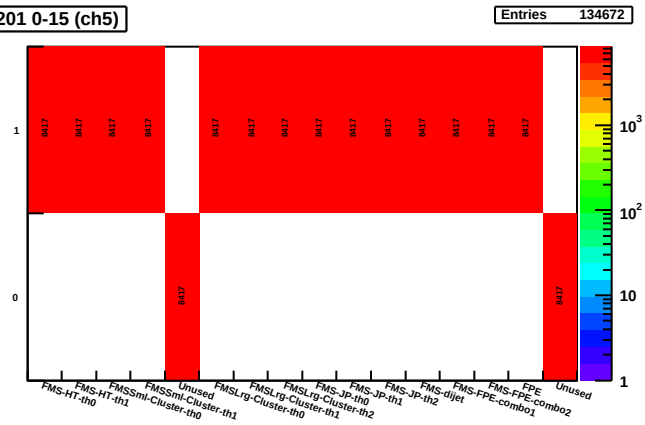
RAT board (ch4)





FP201 0-15 (ch5)



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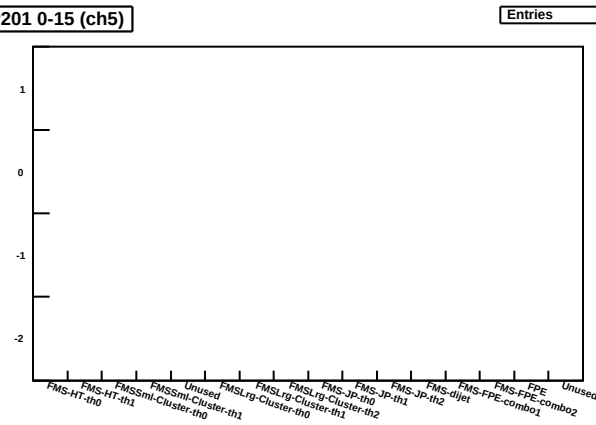
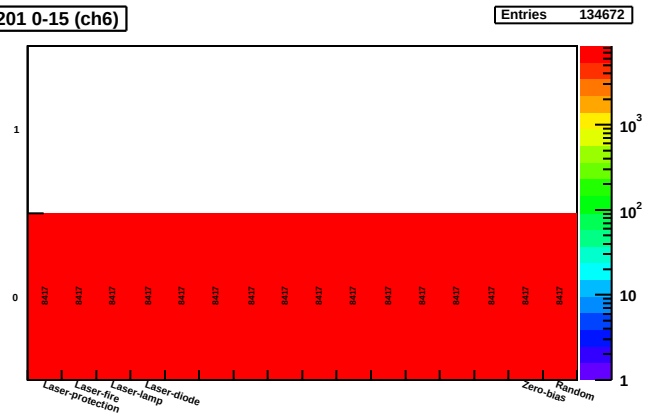
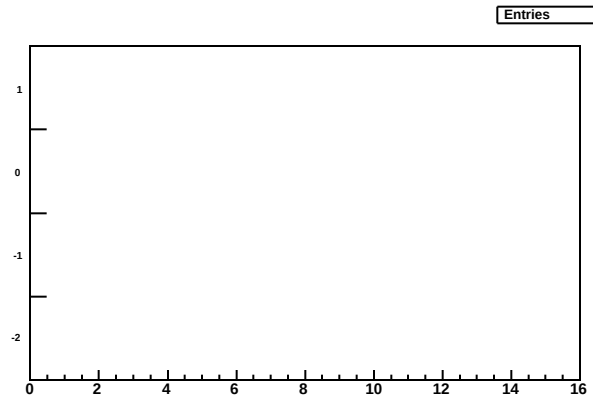
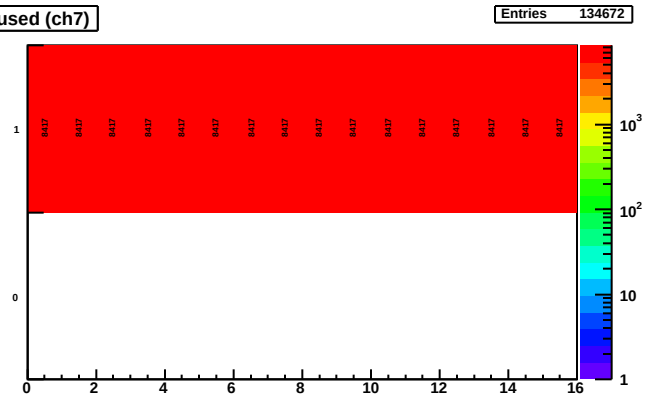
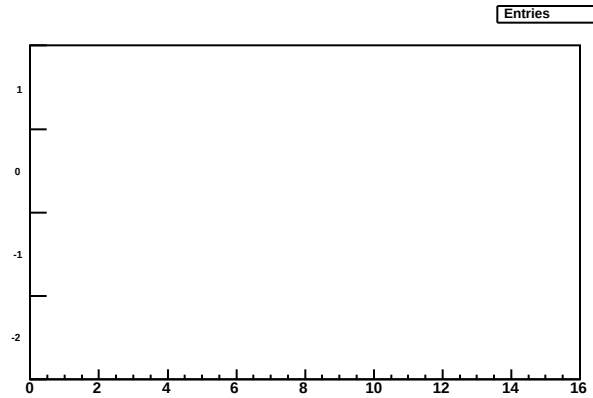


ST201 0-15 (ch6)





Unused (ch7)