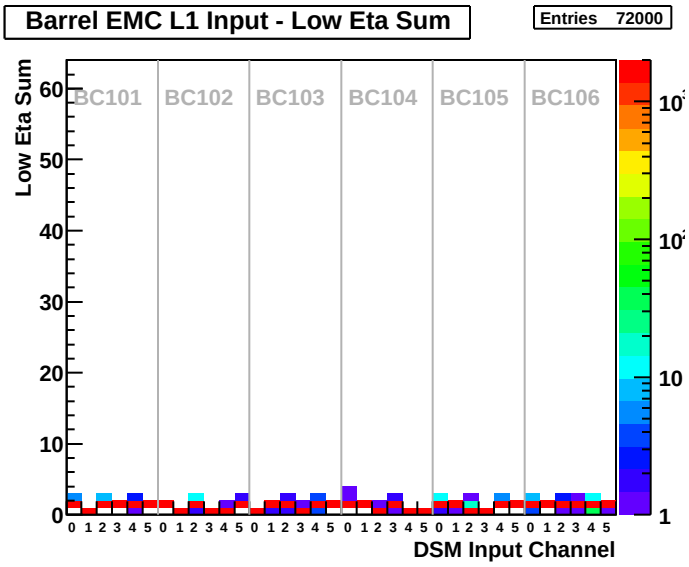
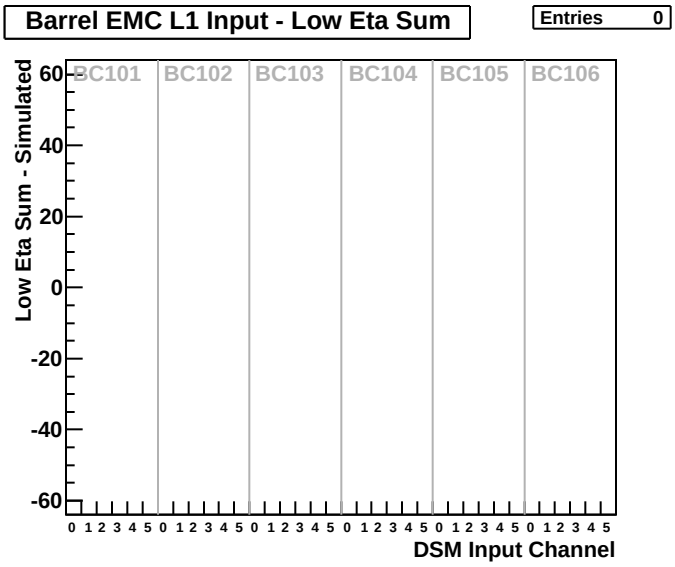
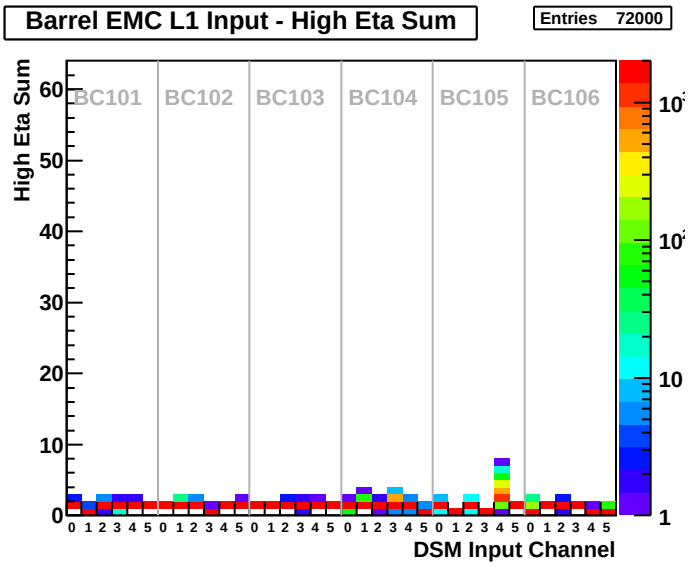
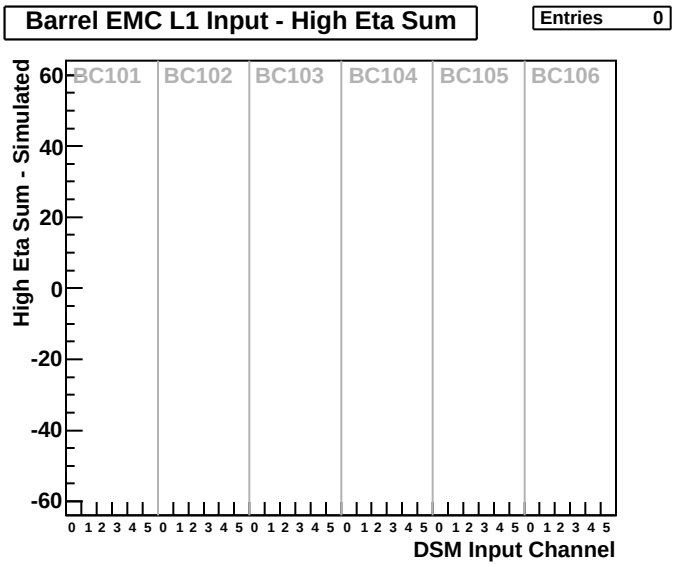
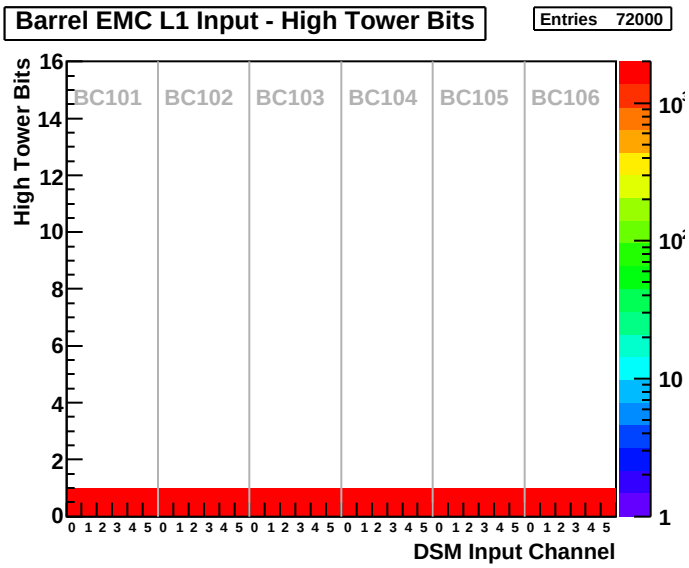
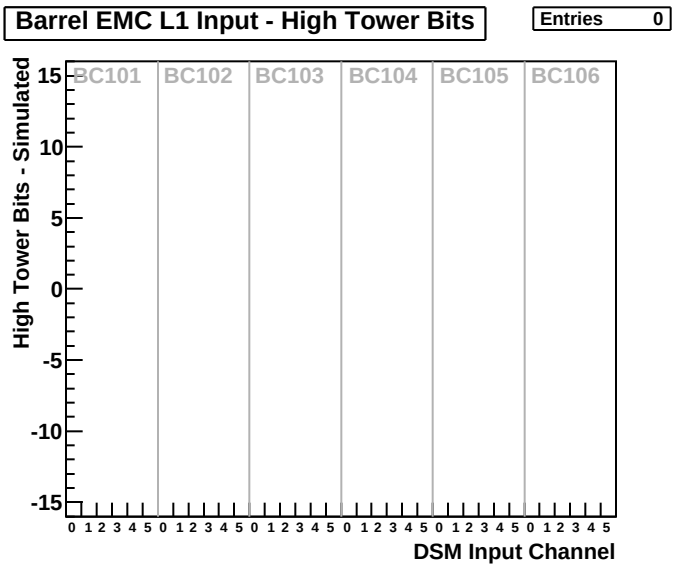

Barrel EMC L1 Input - Low Eta Sum
Entries 72000
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

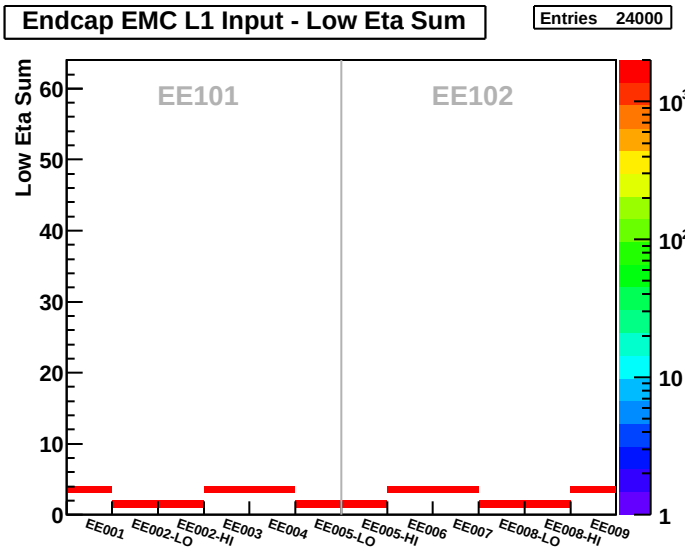

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

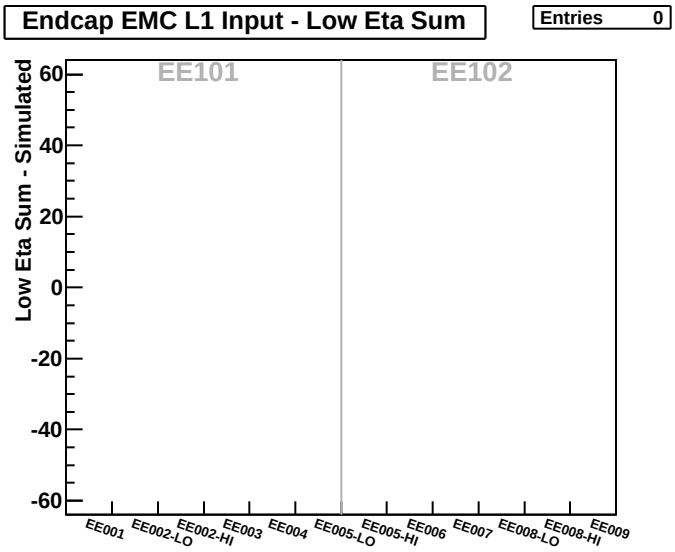

Barrel EMC L1 Input - High Eta Sum
Entries 72000
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

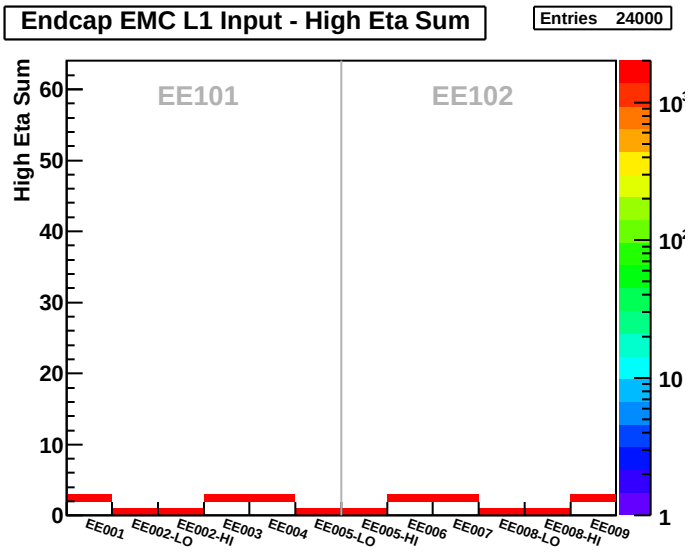

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

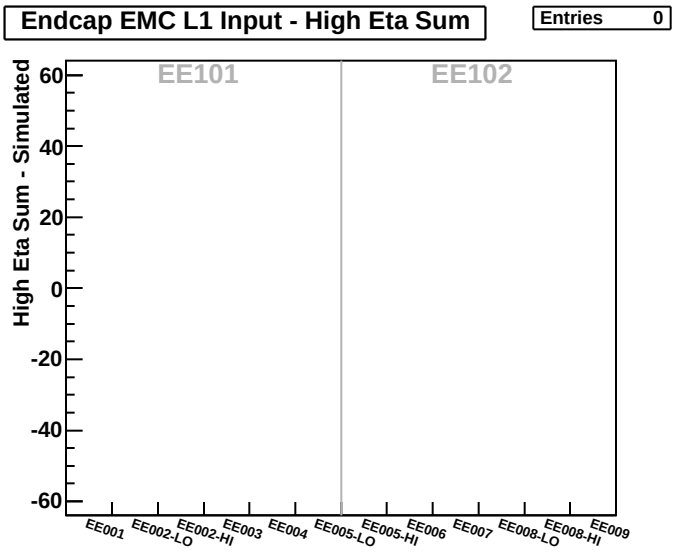

Barrel EMC L1 Input - High Tower Bits
Entries 72000
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

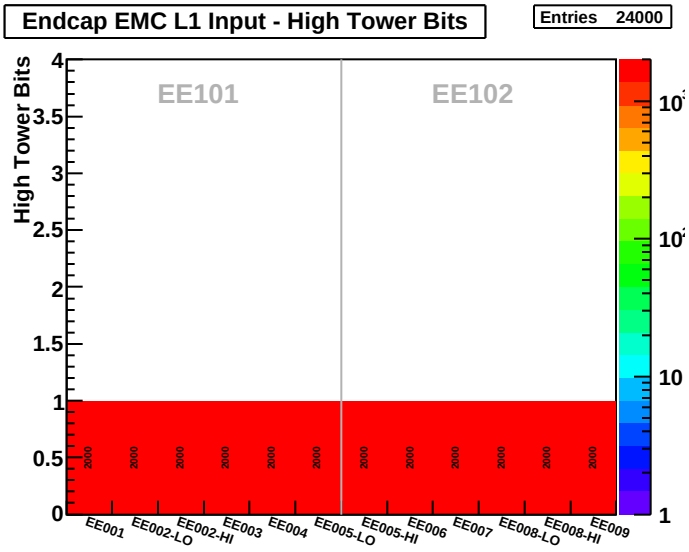

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

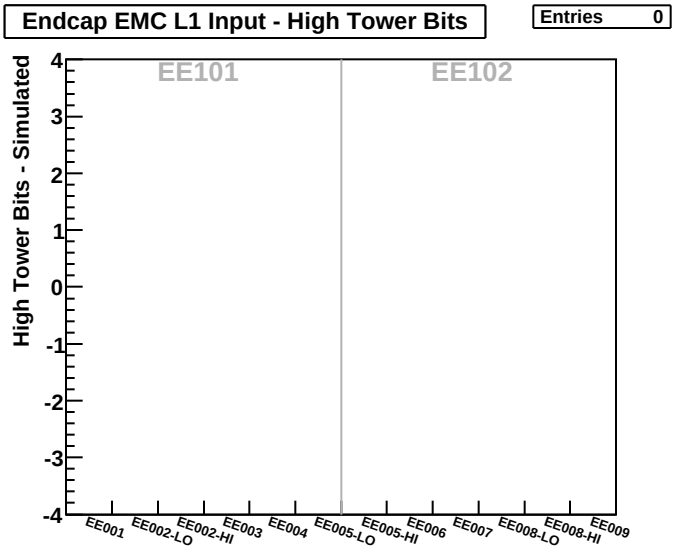

Endcap EMC L1 Input - Low Eta Sum
Entries 24000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

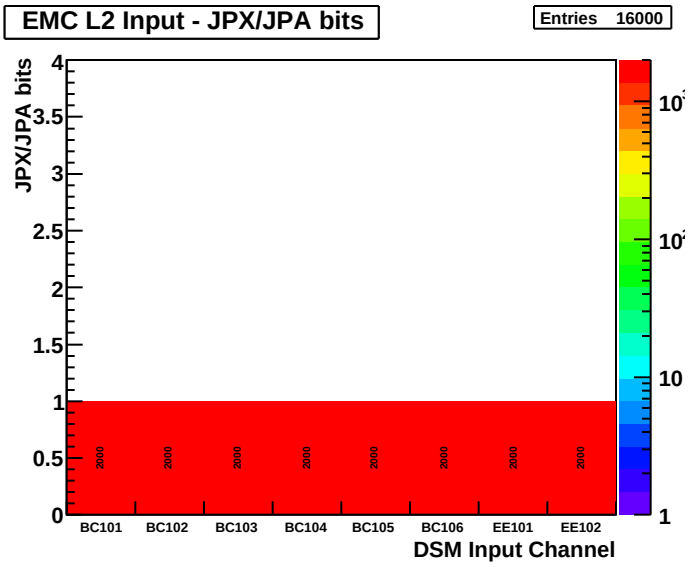

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

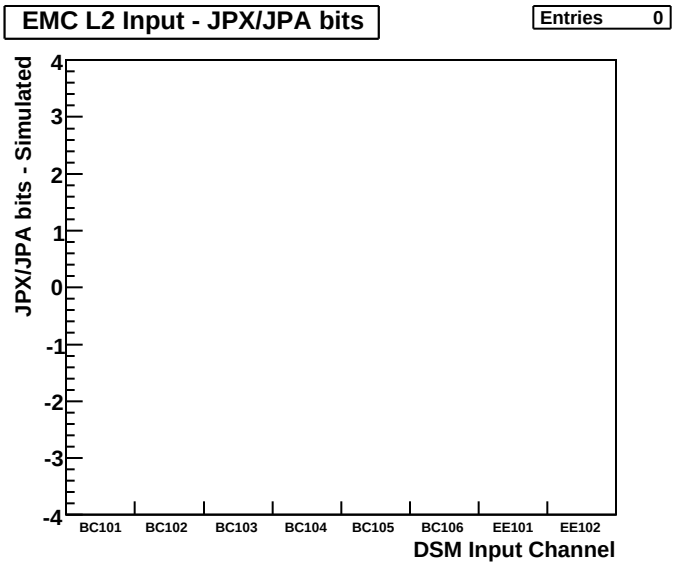

Endcap EMC L1 Input - High Eta Sum
Entries 24000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

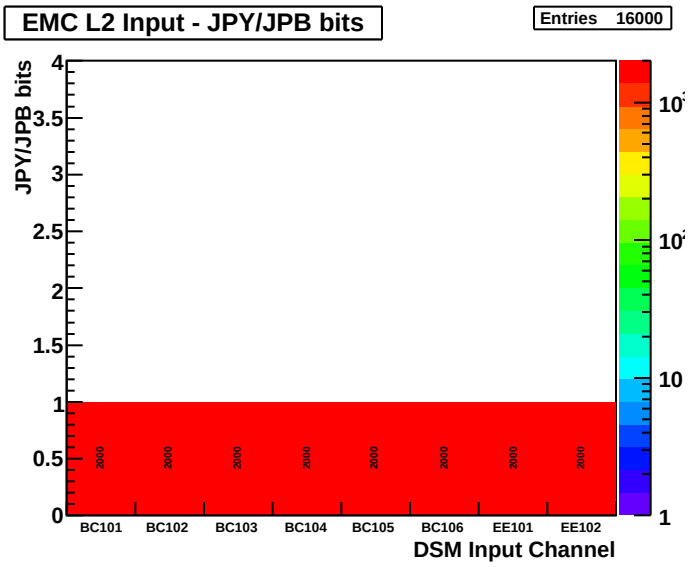

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

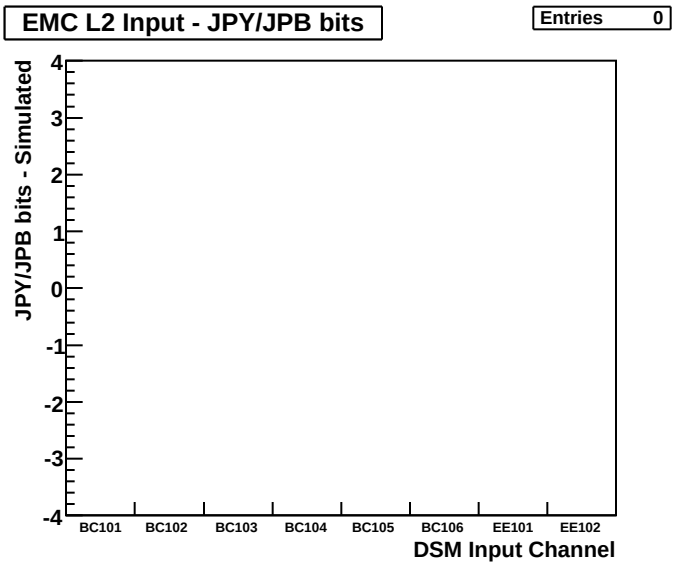

Endcap EMC L1 Input - High Tower Bits
Entries 24000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

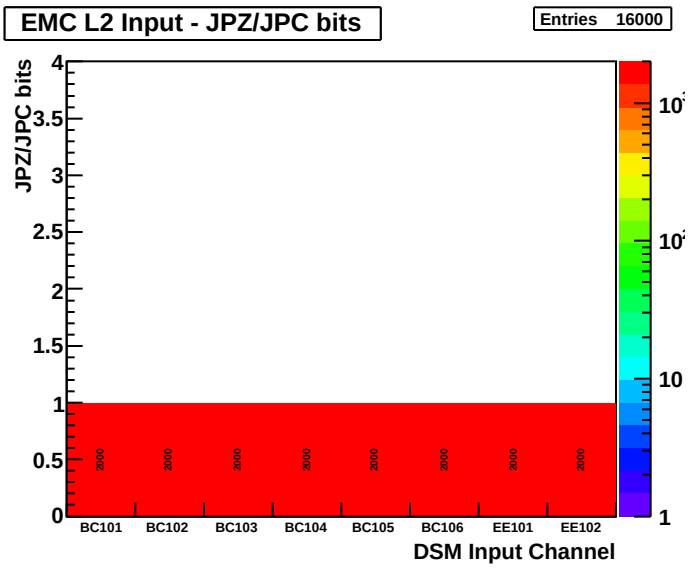

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

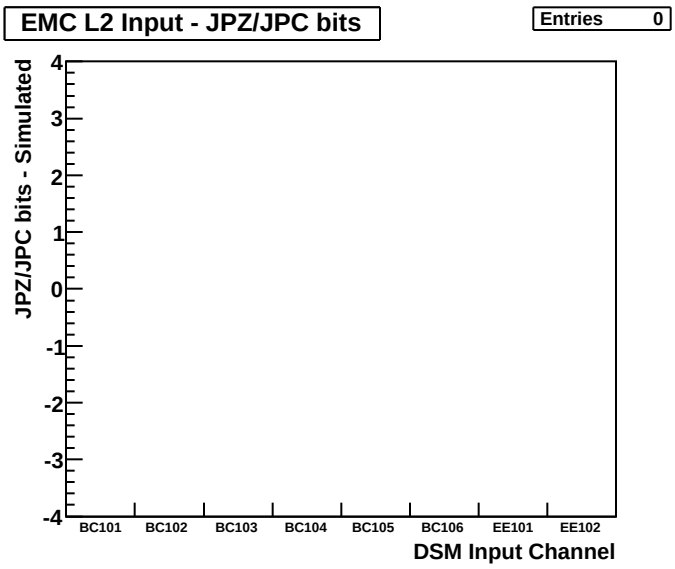

EMC L2 Input - JPX/JPA bits
Entries 16000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

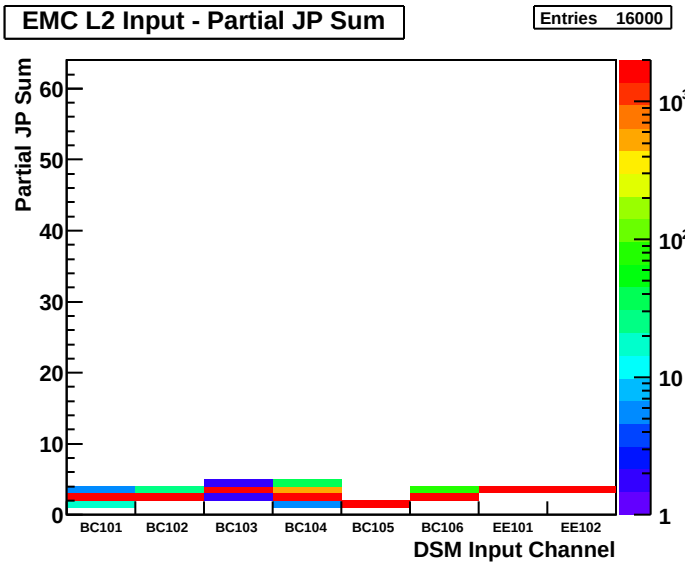

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

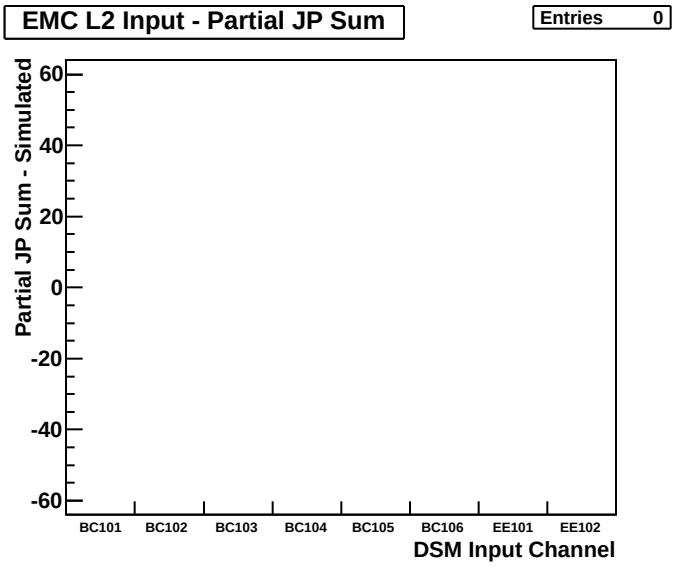

EMC L2 Input - JPY/JPB bits
Entries 16000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

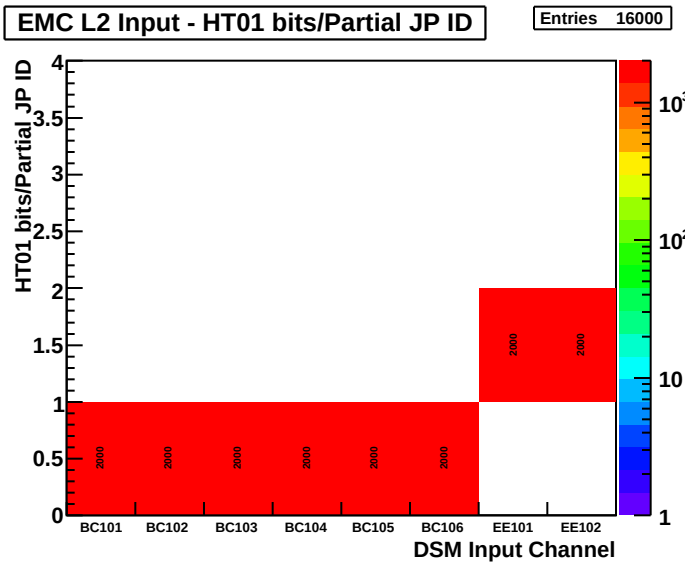

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

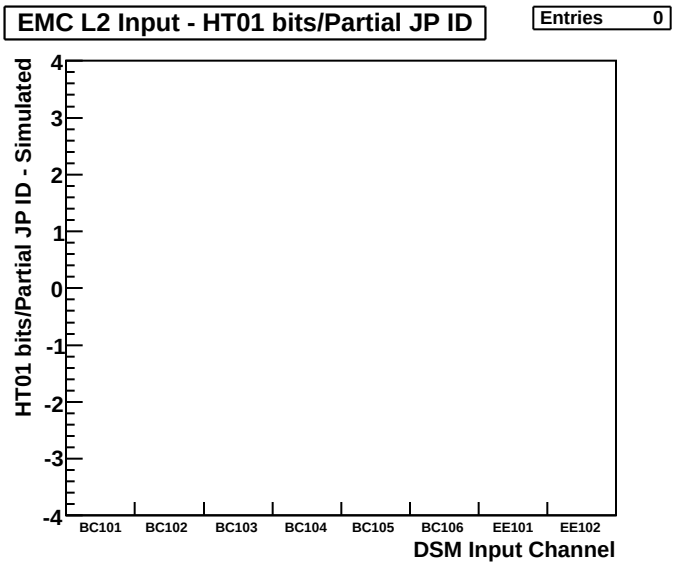

EMC L2 Input - JPZ/JPC bits
Entries 16000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

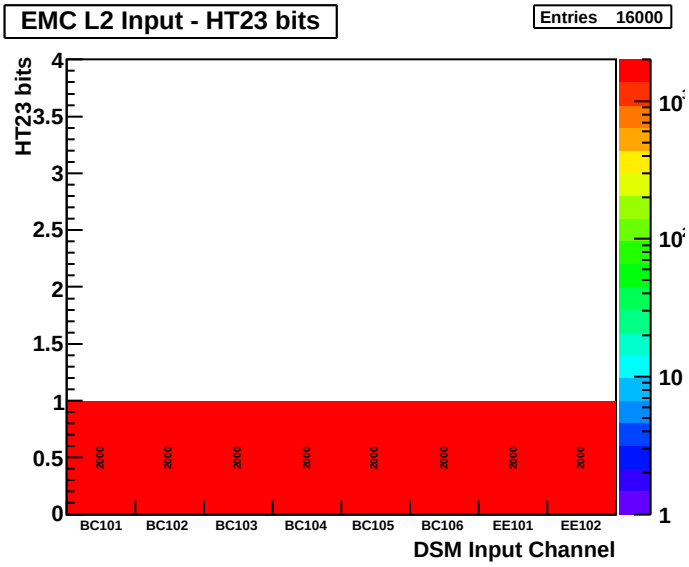

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

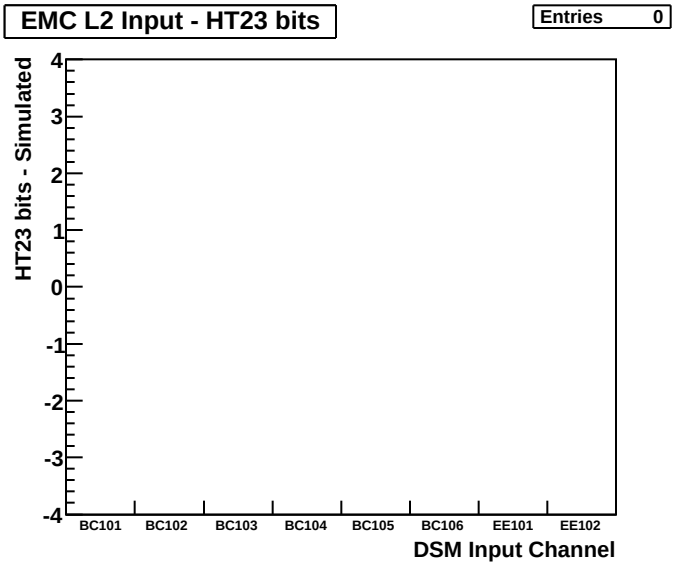

EMC L2 Input - Partial JP Sum
Entries 16000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

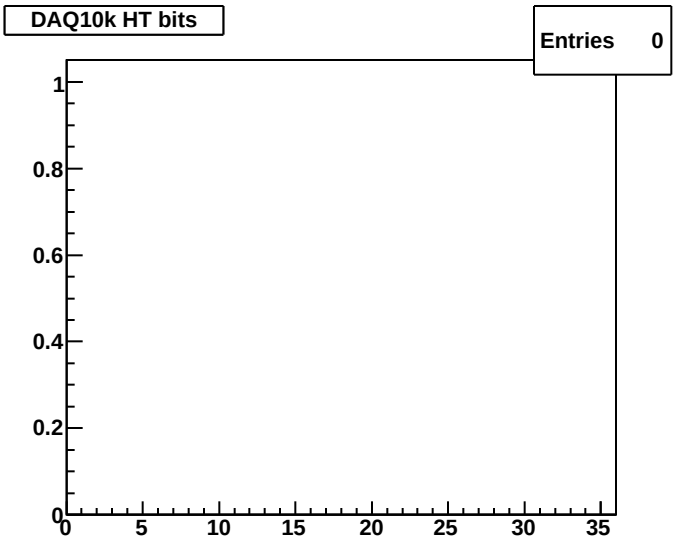

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

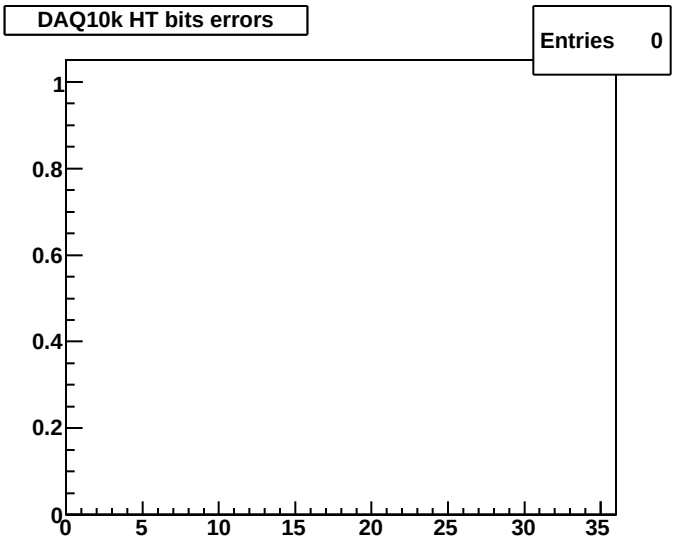

EMC L2 Input - HT01 bits/Partial JP ID
Entries 16000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

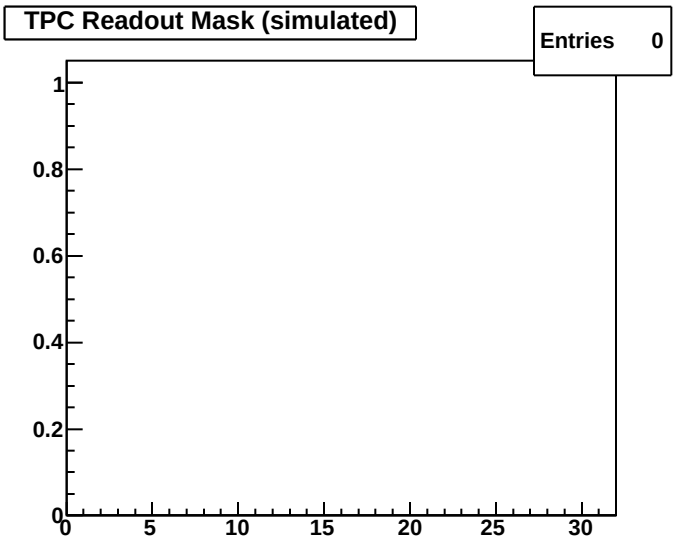

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

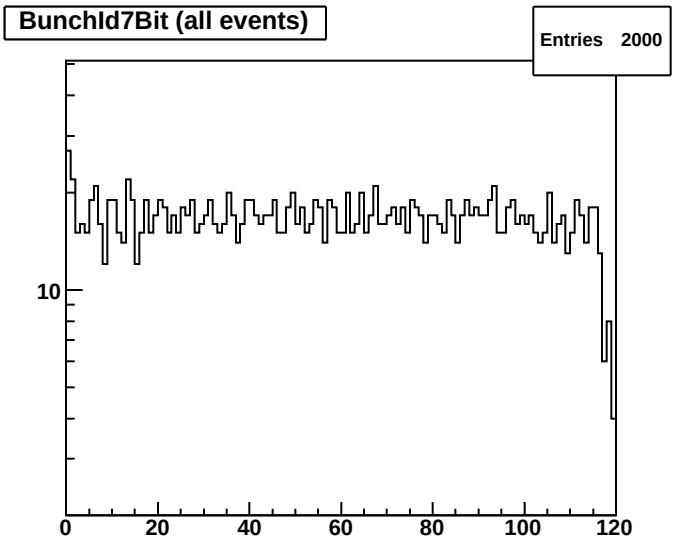

EMC L2 Input - HT23 bits
Entries 16000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

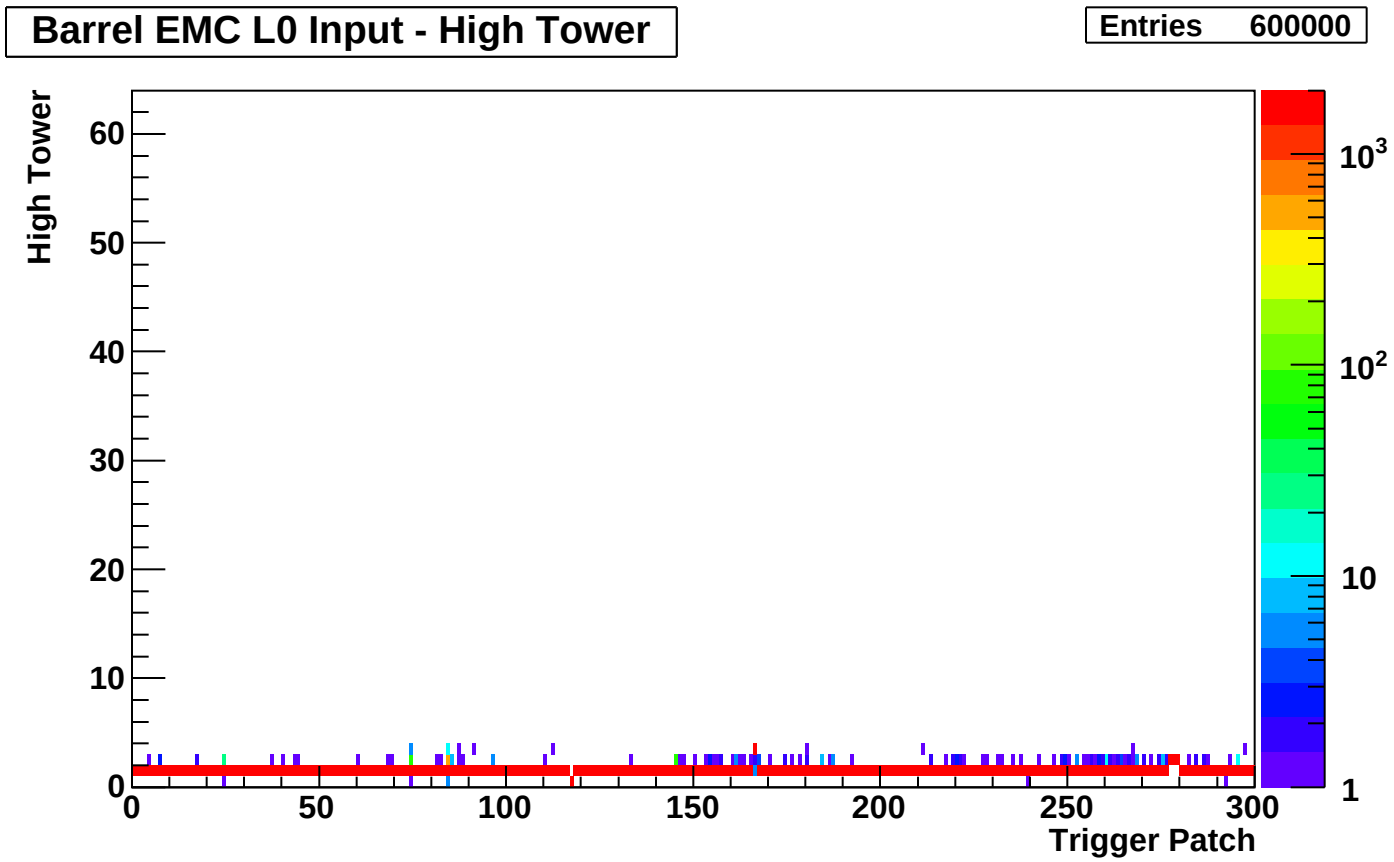

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

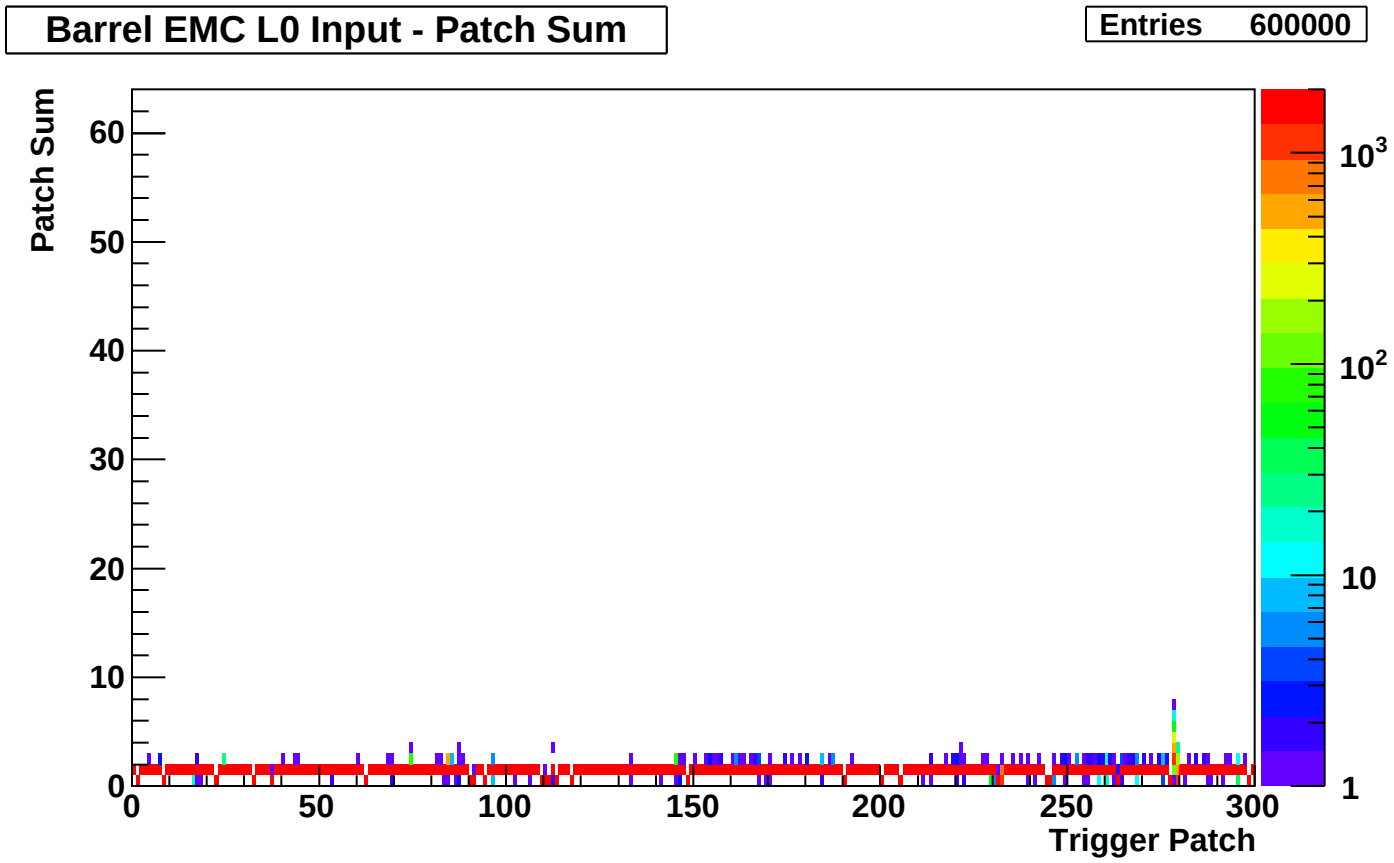

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

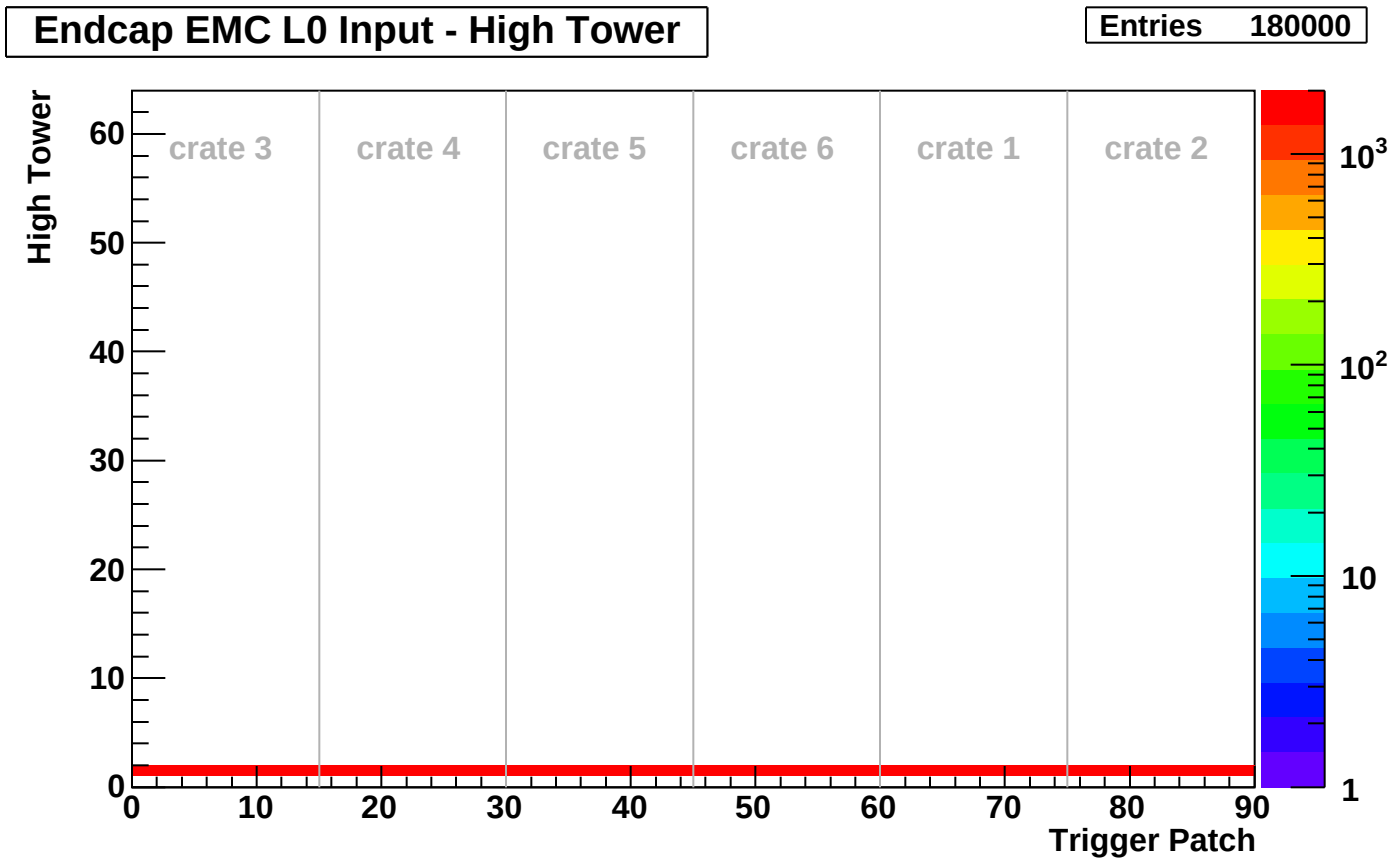

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

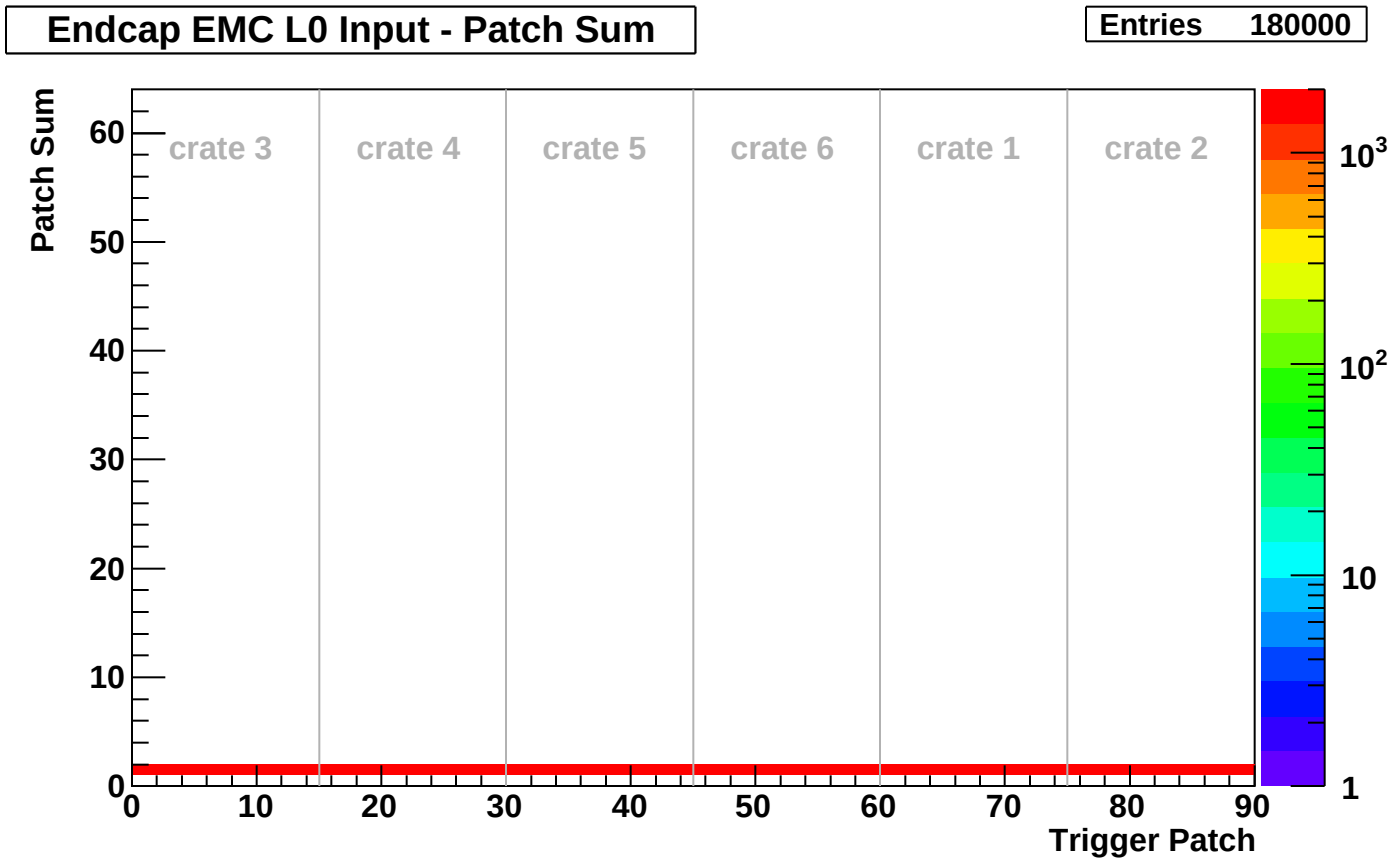

TPC Readout Mask (simulated)
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30

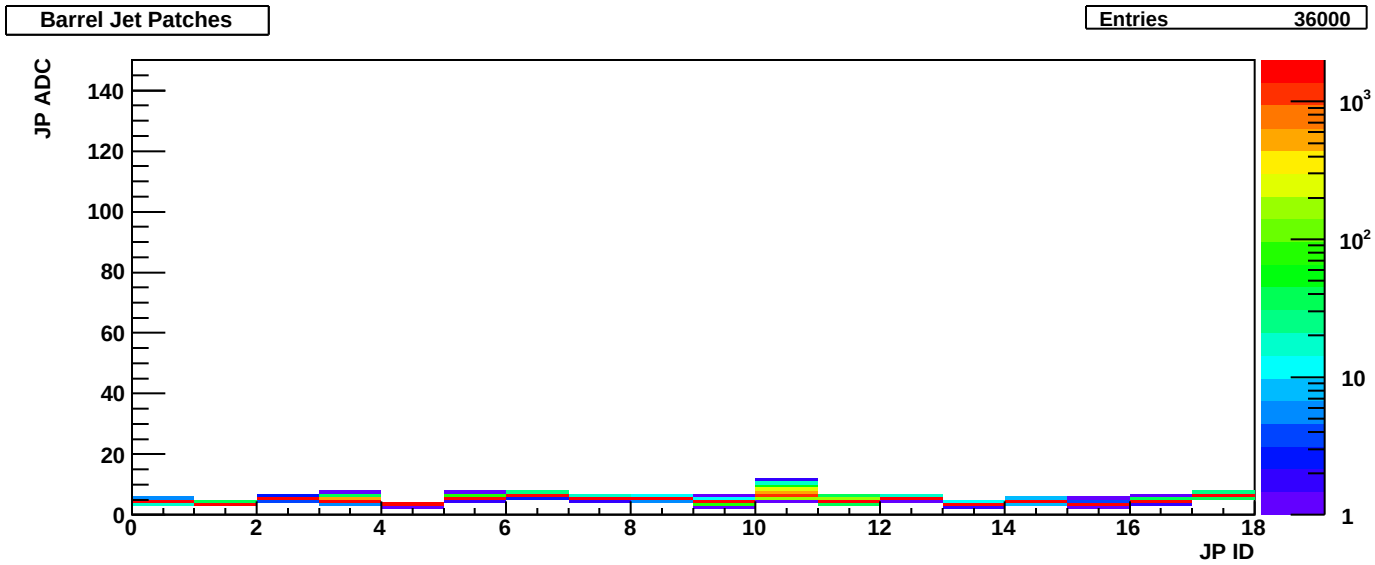

BunchId7Bit (all events)
Entries 2000
10
0 20 40 60 80 100 120

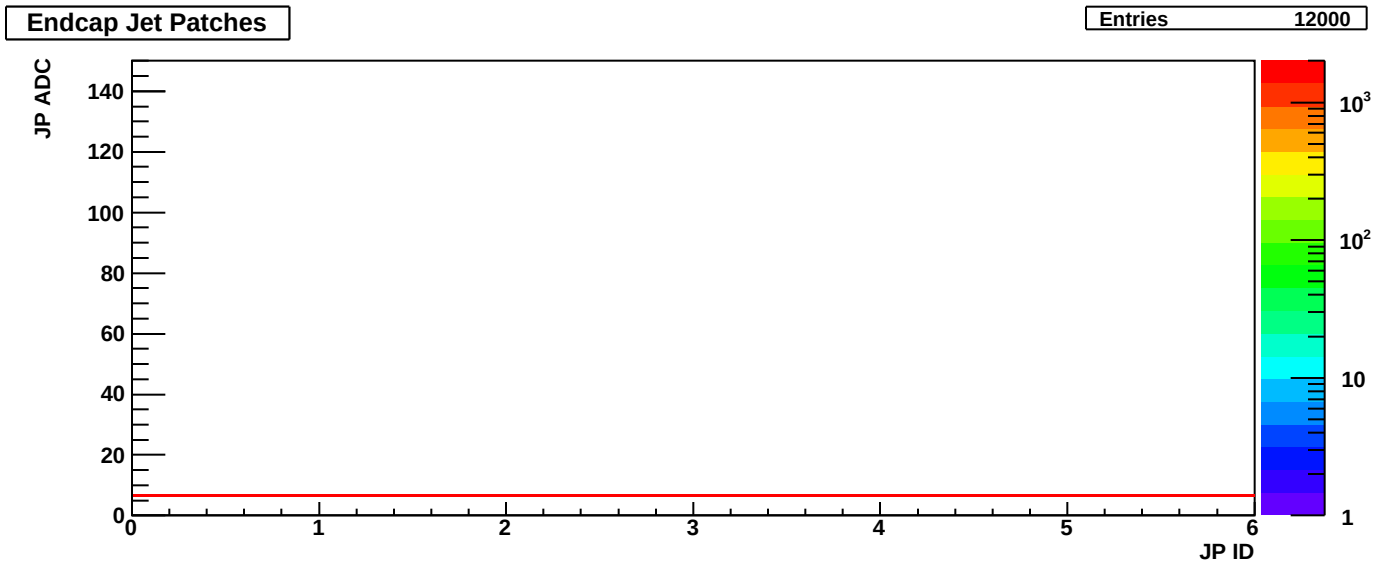

Barrel EMC L0 Input - High Tower
Entries 600000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

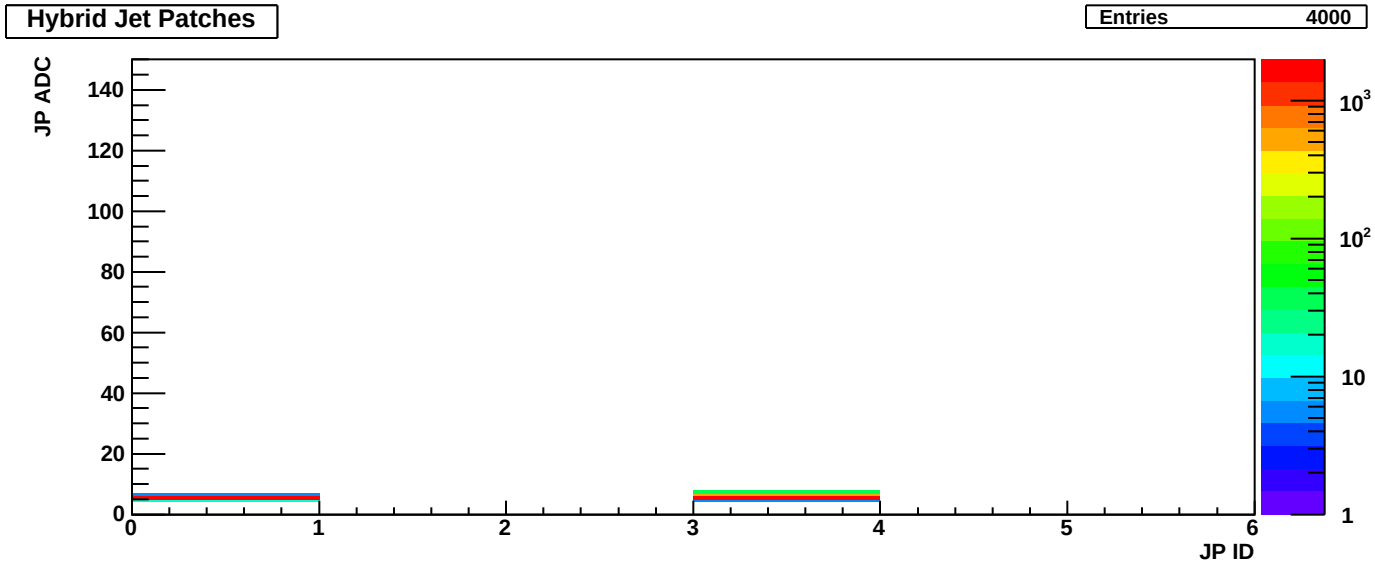

Barrel EMC L0 Input - Patch Sum
Entries 600000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

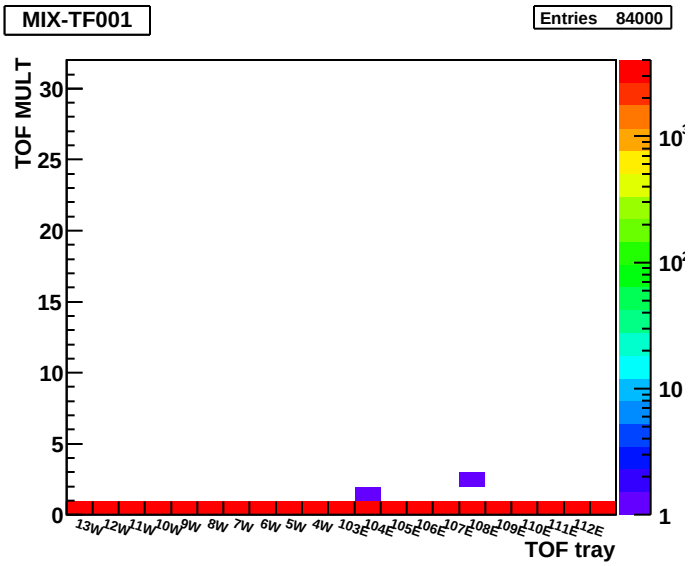

Endcap EMC L0 Input - High Tower
Entries 180000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3

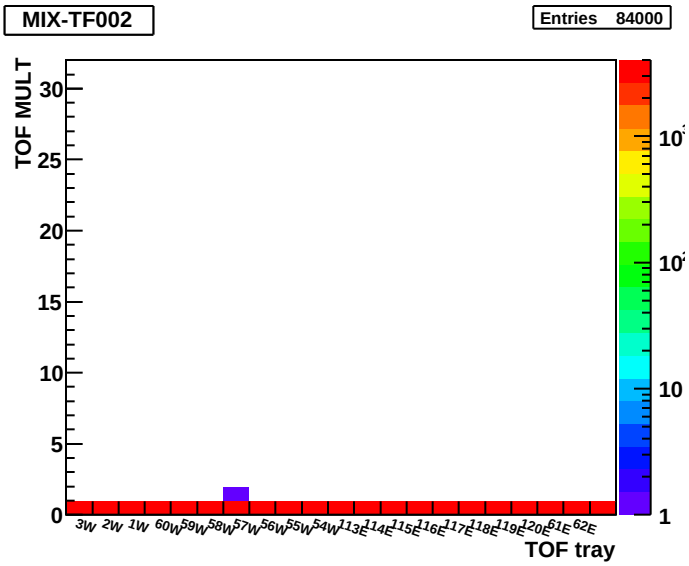

Endcap EMC L0 Input - Patch Sum
Entries 180000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3

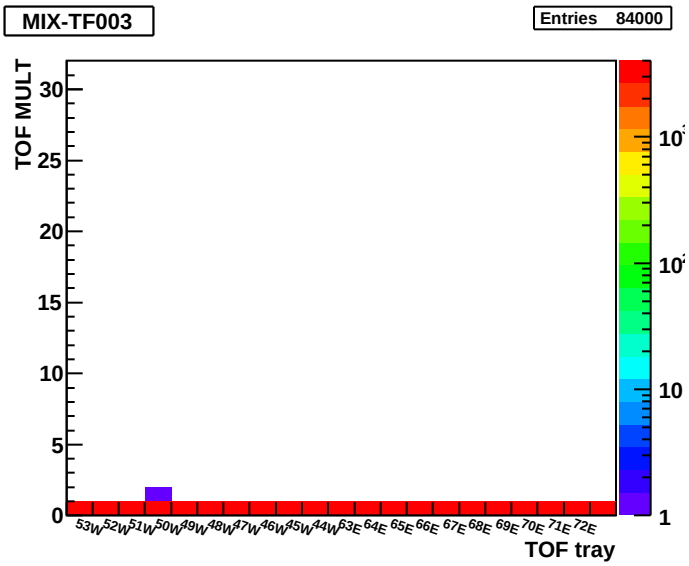

Barrel Jet Patches
Entries 36000
JP ADC
JP ID

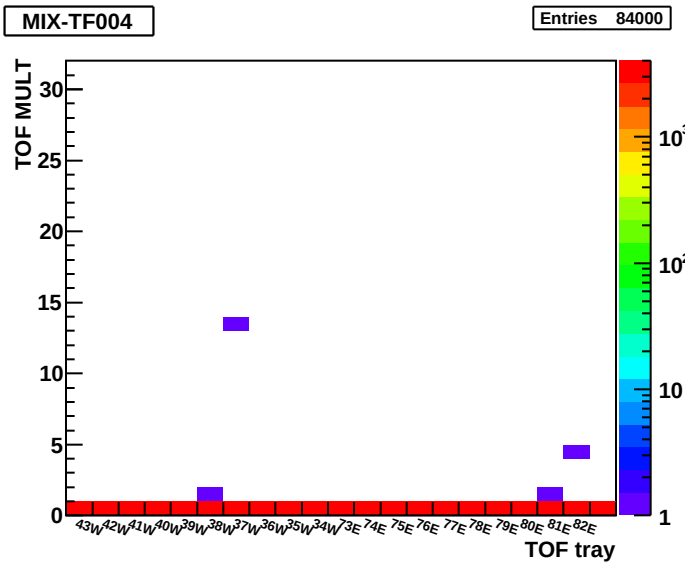

Endcap Jet Patches
Entries 12000
JP ADC
JP ID

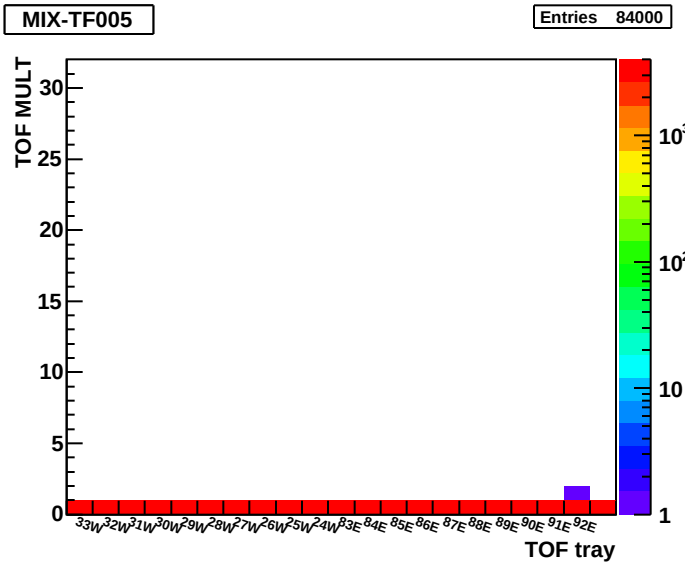

Hybrid Jet Patches
Entries 4000
JP ADC
JP ID

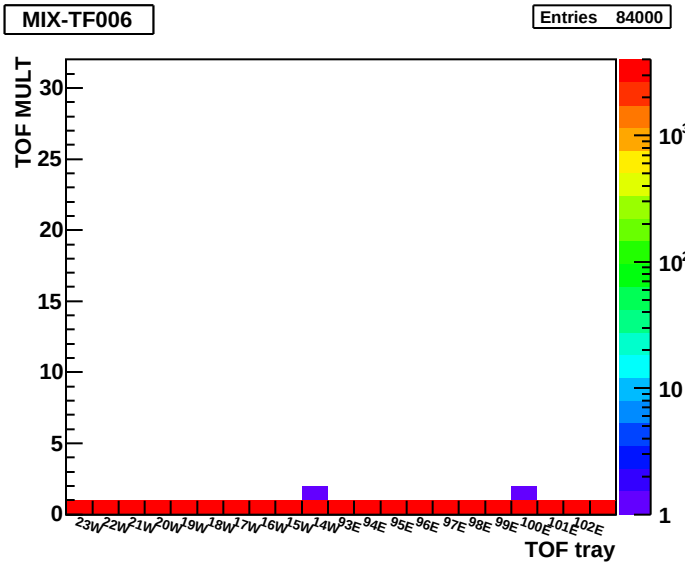

MIX-TF001
Entries 84000
TOF MULT
TOF tray

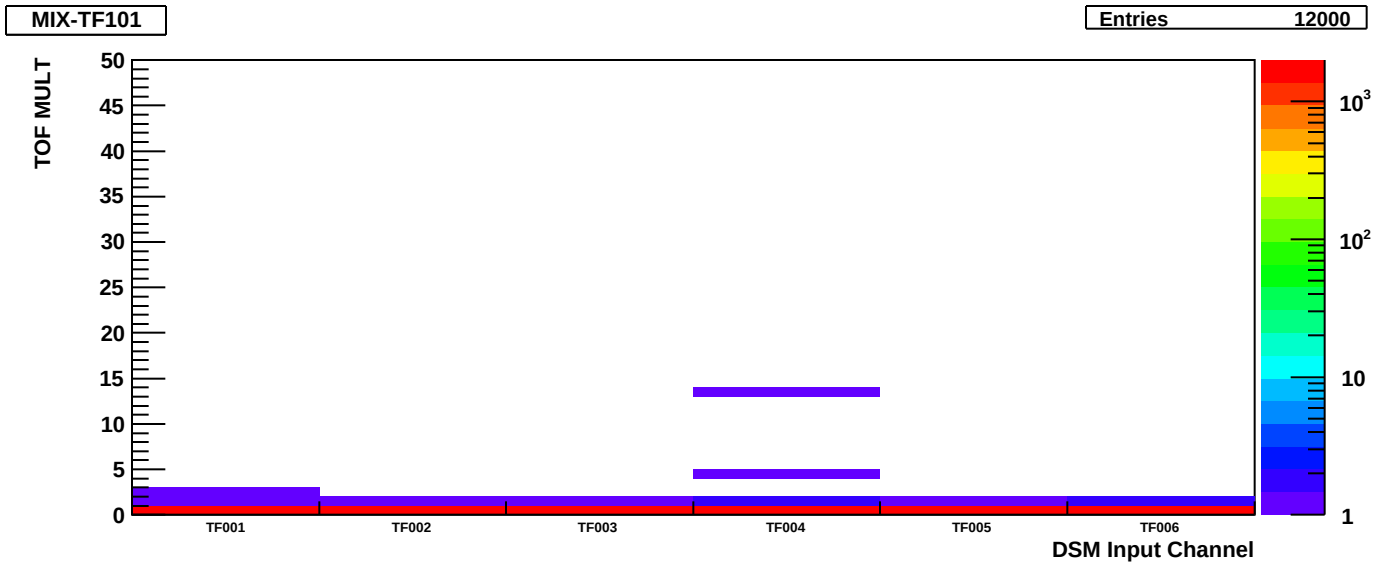

MIX-TF002
Entries 84000
TOF MULT
TOF tray

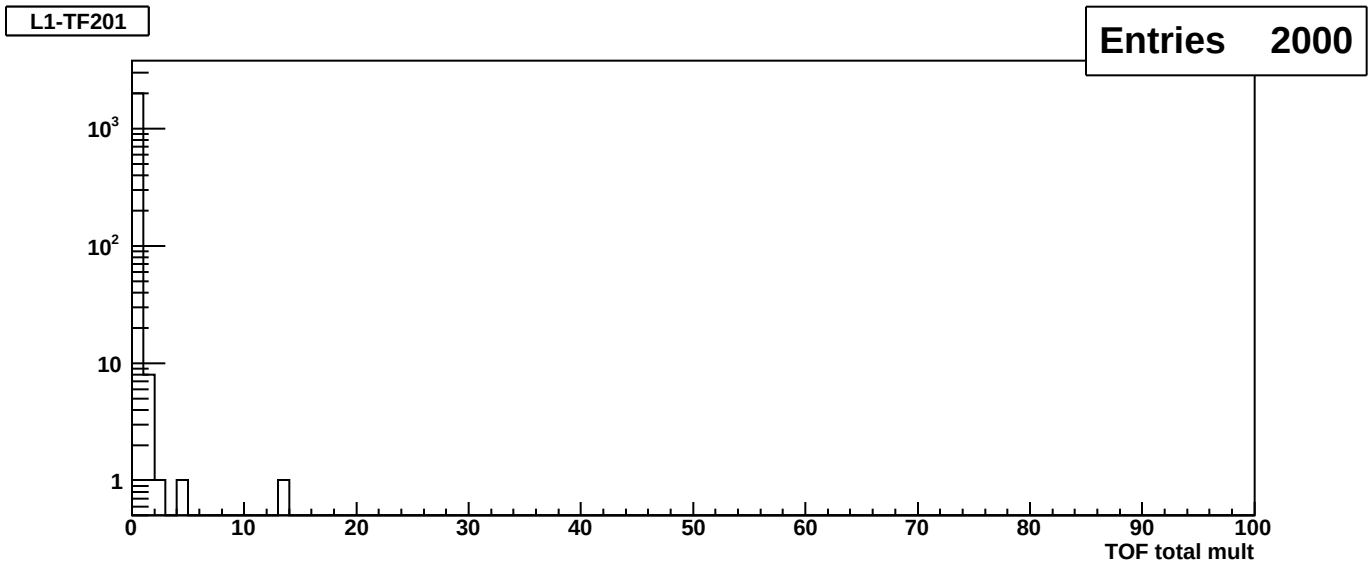

MIX-TF003
Entries 84000
TOF MULT
TOF tray

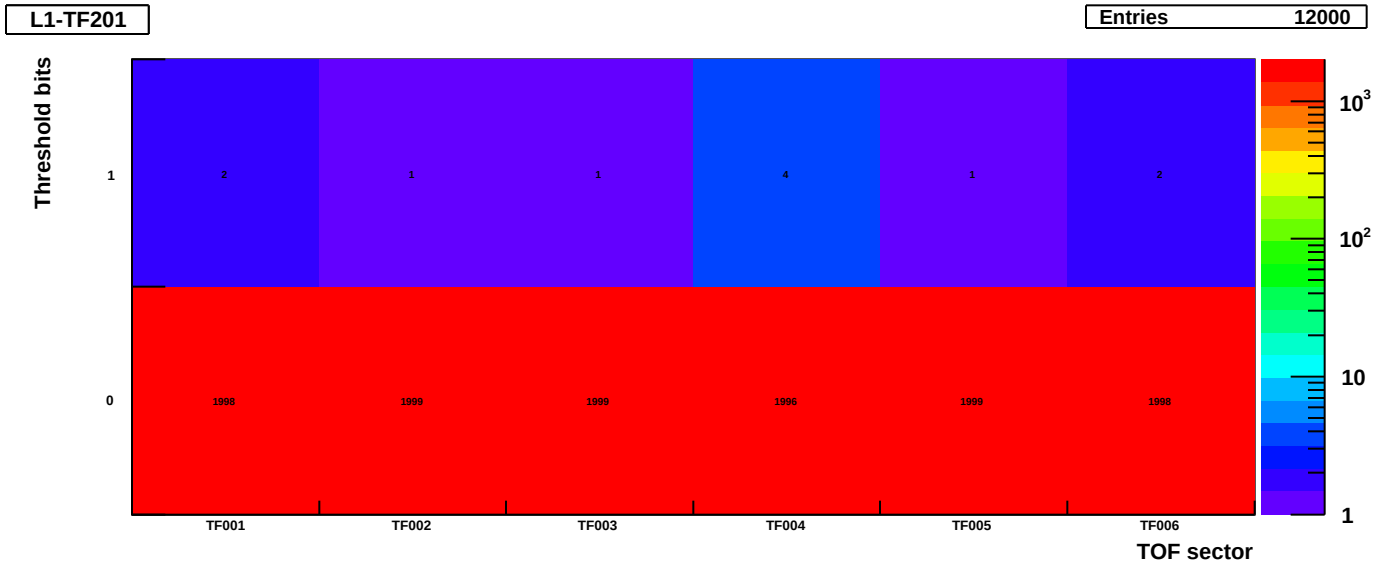

MIX-TF004
Entries 84000
TOF MULT
TOF tray

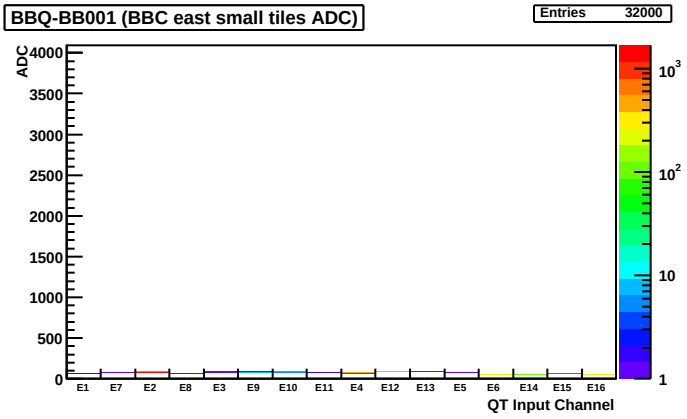

MIX-TF005
Entries 84000
TOF MULT
TOF tray

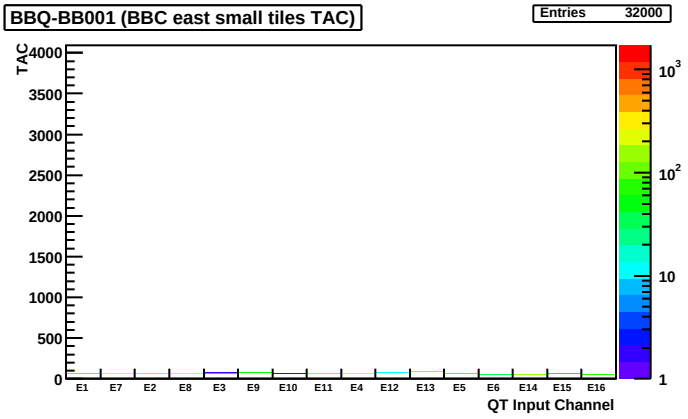

MIX-TF006
Entries 84000
TOF MULT
TOF tray

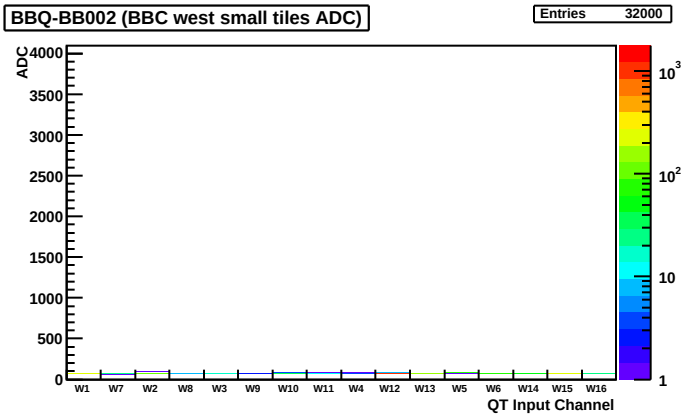

MIX-TF101
Entries 12000
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

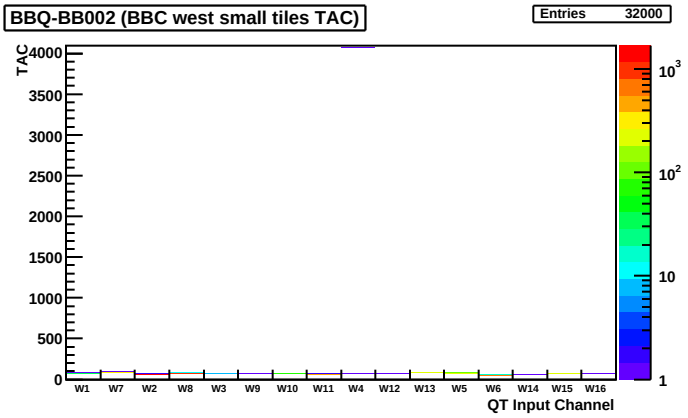

L1-TF201
Entries 2000
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

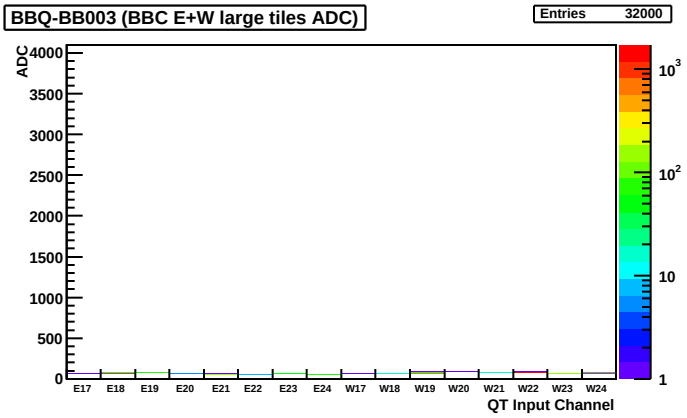

L1-TF201
Entries 12000
Threshold bits
1
0
2
1
1
4
1
2
1998
1999
1999
1996
1999
1998
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2
10
1

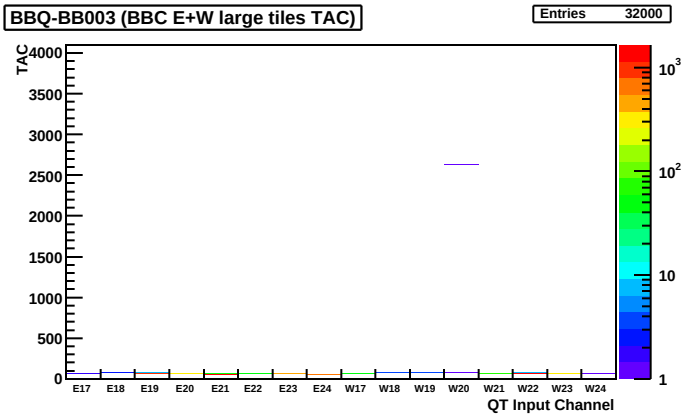

BBQ-BB001 (BBC east small tiles ADC)
Entries 32000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

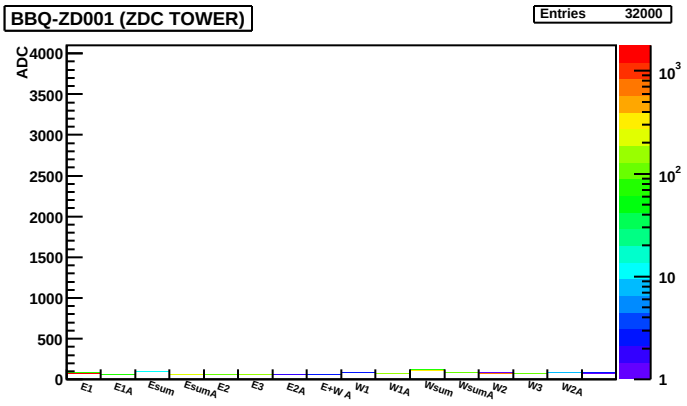

BBQ-BB001 (BBC east small tiles TAC)
Entries 32000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

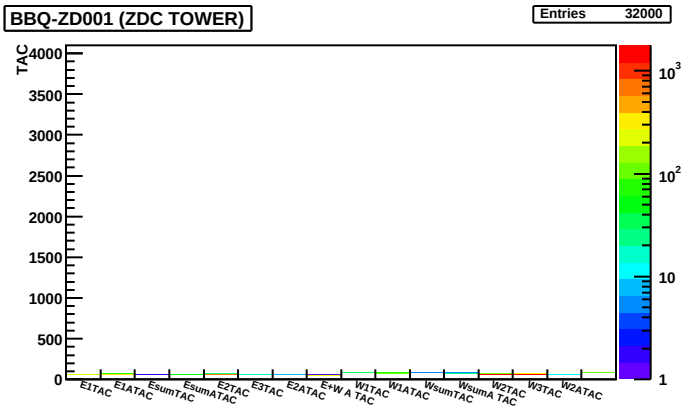

BBQ-BB002 (BBC west small tiles ADC)
Entries 32000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

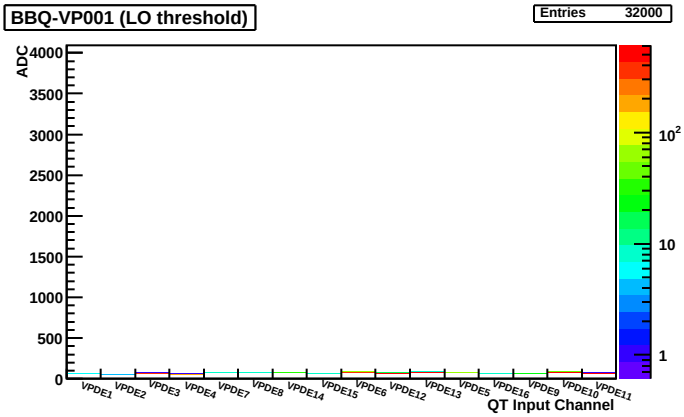

BBQ-BB002 (BBC west small tiles TAC)
Entries 32000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

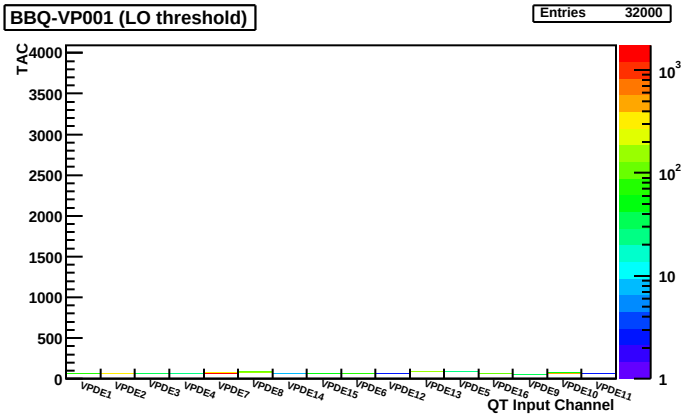

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 32000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

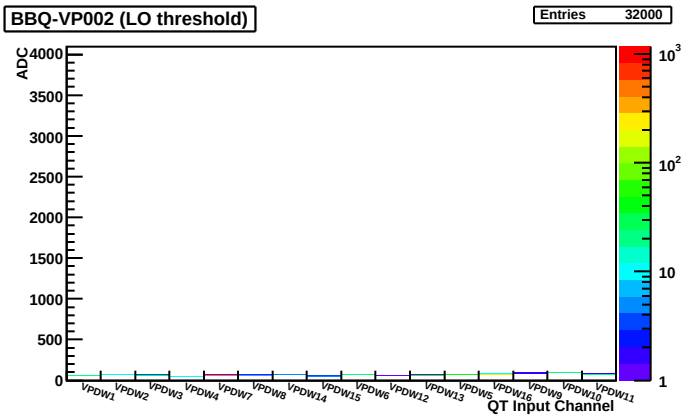

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 32000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

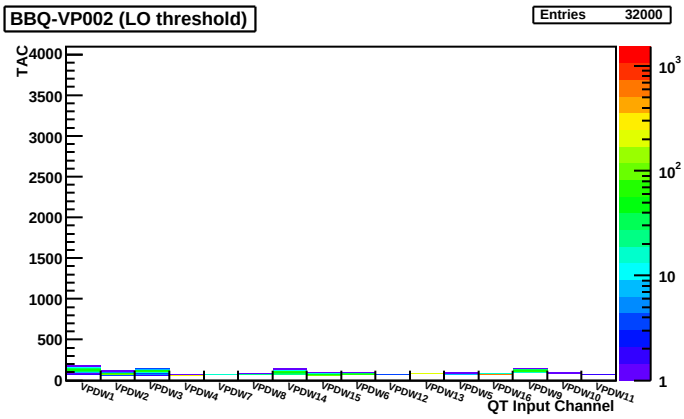

BBQ-ZD001 (ZDC TOWER)
Entries 32000
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

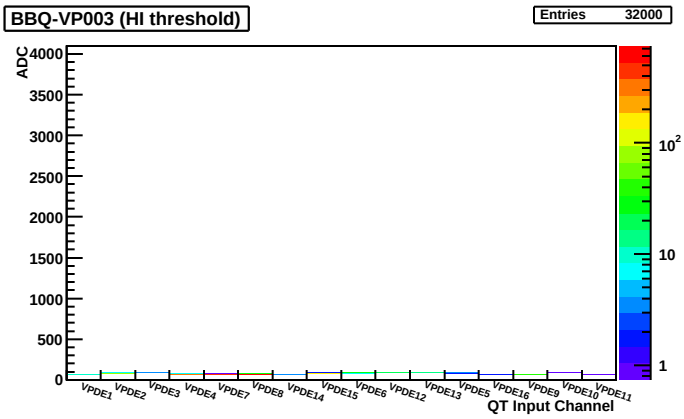

BBQ-ZD001 (ZDC TOWER)
Entries 32000
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

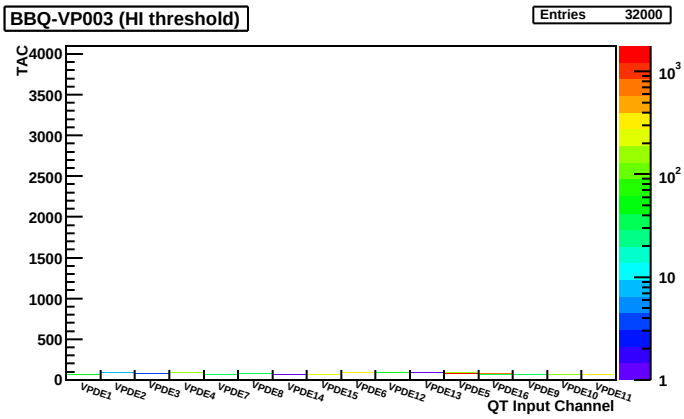

BBQ-VP001 (LO threshold)
Entries 32000
ADC
QT Input Channel

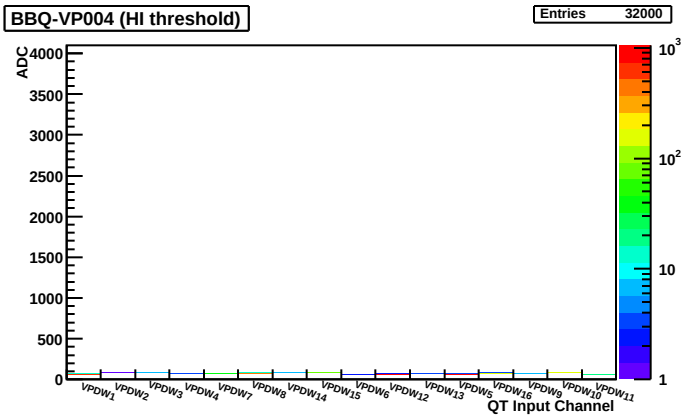

BBQ-VP001 (LO threshold)
Entries 32000
TAC
QT Input Channel

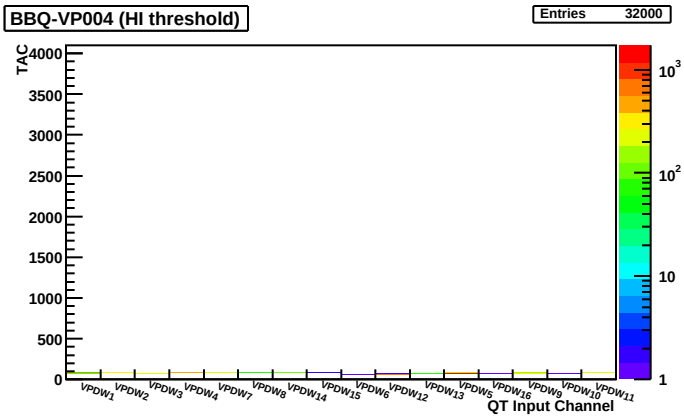

BBQ-VP002 (LO threshold)
Entries 32000
ADC
QT Input Channel

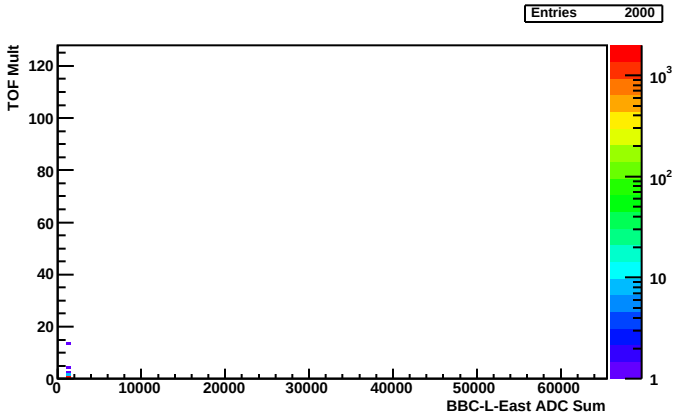

BBQ-VP002 (LO threshold)
Entries 32000
TAC
QT Input Channel

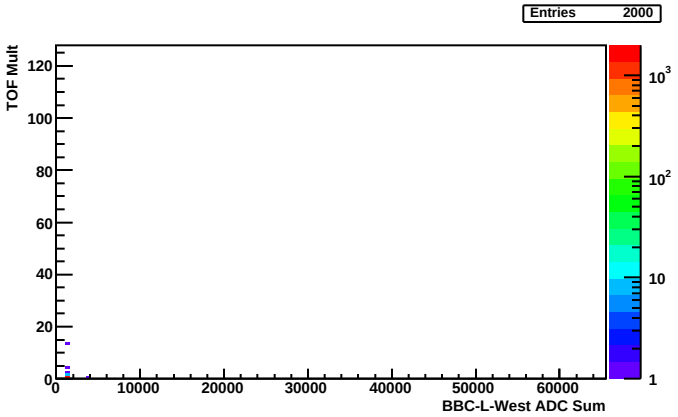

BBQ-VP003 (HI threshold)
Entries 32000
ADC
QT Input Channel

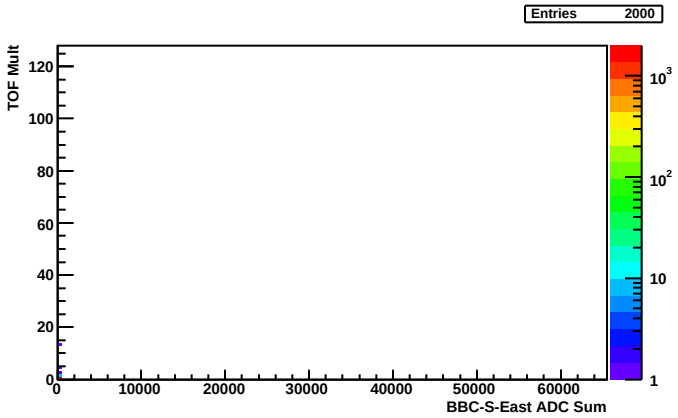

BBQ-VP003 (HI threshold)
Entries 32000
TAC
QT Input Channel

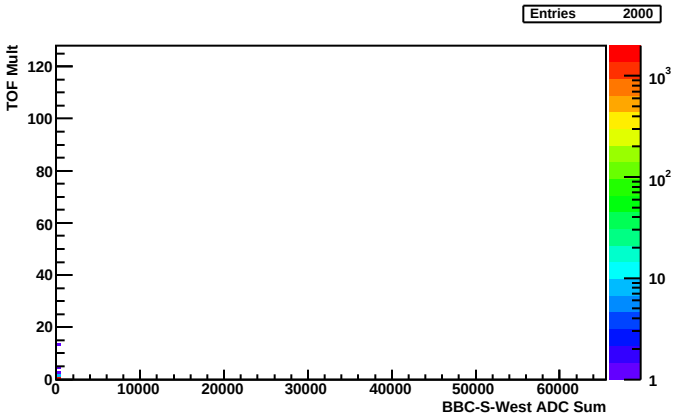

BBQ-VP004 (HI threshold)
Entries 32000
ADC
QT Input Channel

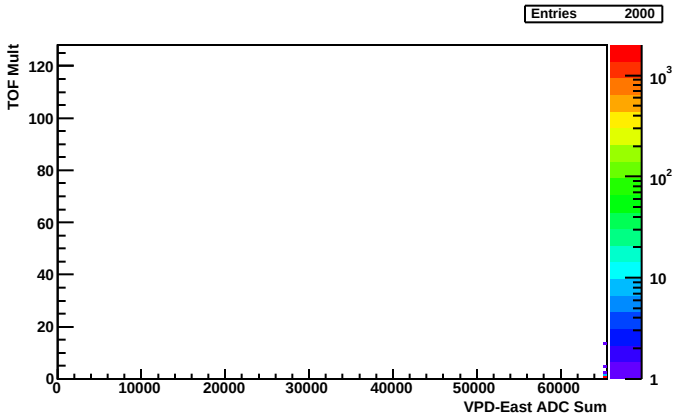

BBQ-VP004 (HI threshold)
Entries 32000
TAC
QT Input Channel

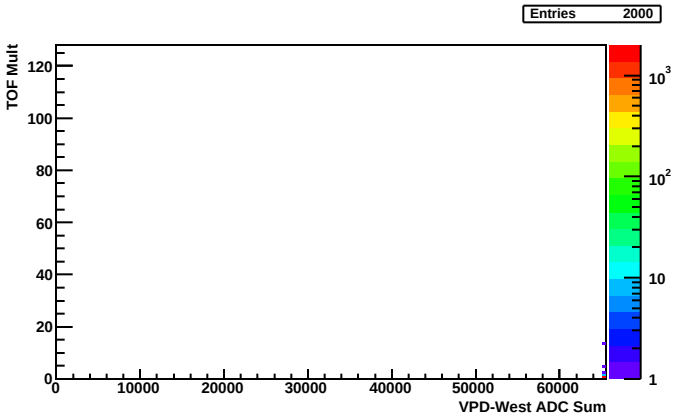

Entries 2000
TOF Mult
BBC-L-East ADC Sum

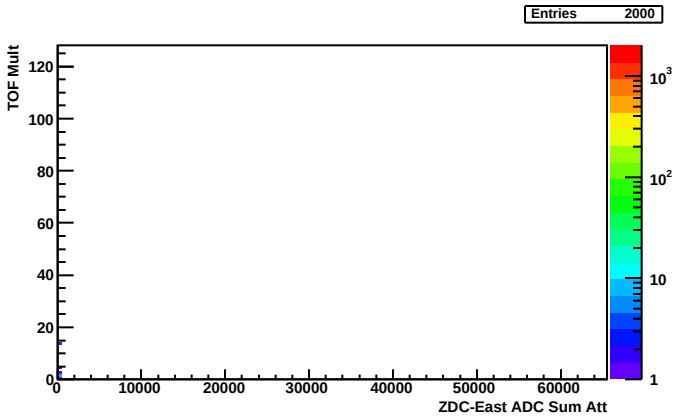

Entries 2000
TOF Mult
BBC-L-West ADC Sum

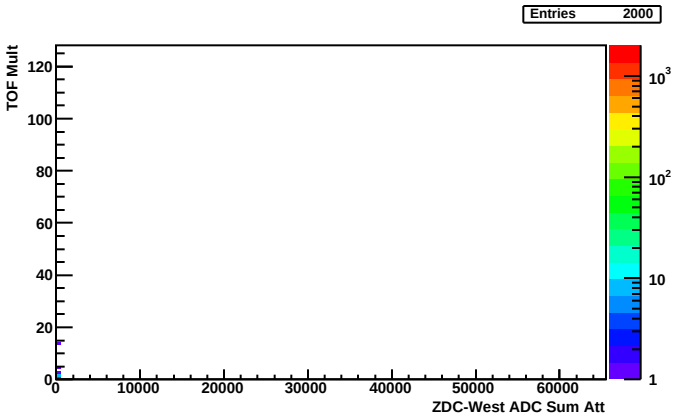

Entries 2000
TOF Mult
BBC-S-East ADC Sum

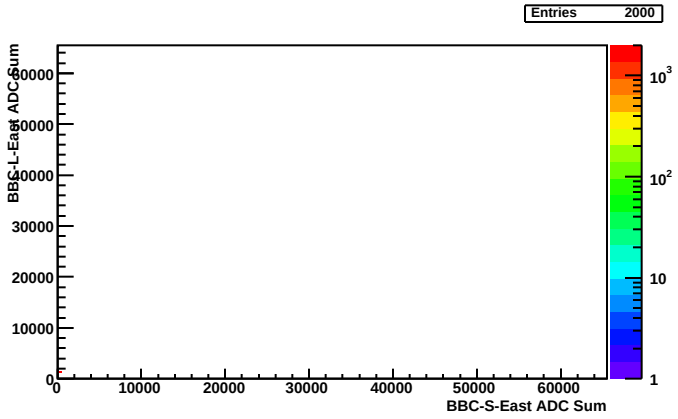

Entries 2000
TOF Mult
BBC-S-West ADC Sum

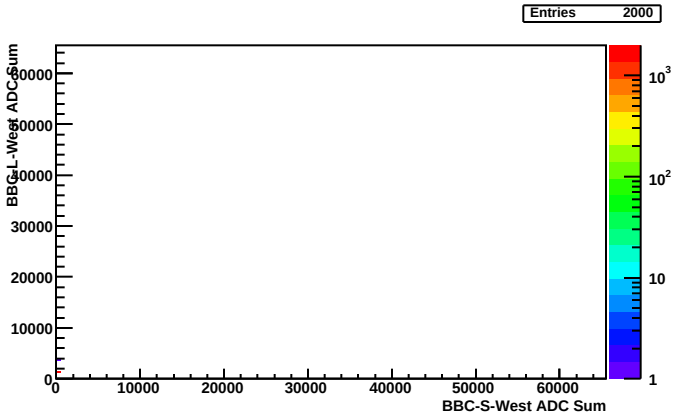

Entries 2000
TOF Mult
VPD-East ADC Sum

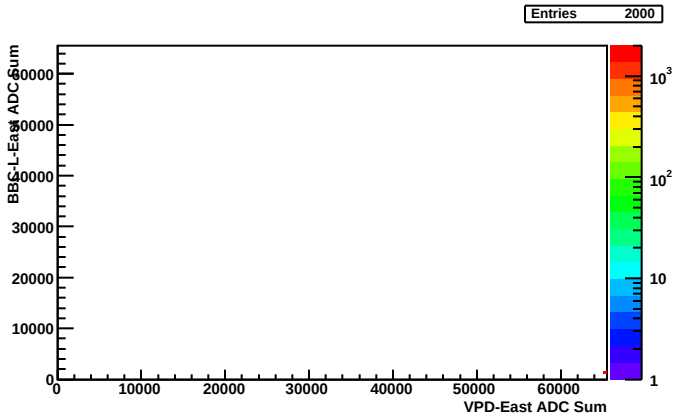

Entries 2000
TOF Mult
VPD-West ADC Sum

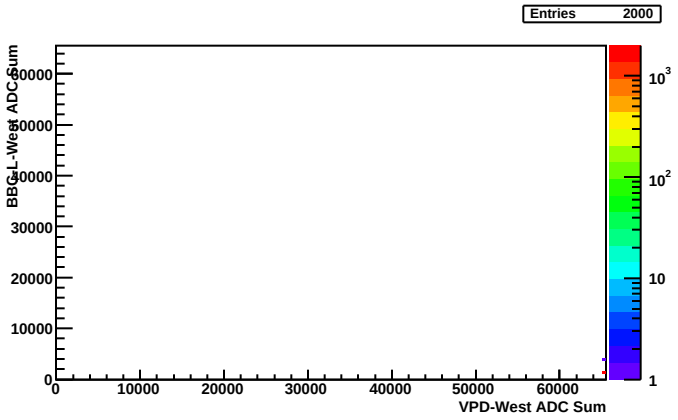

Entries 2000
TOF Mult
ZDC-East ADC Sum Att

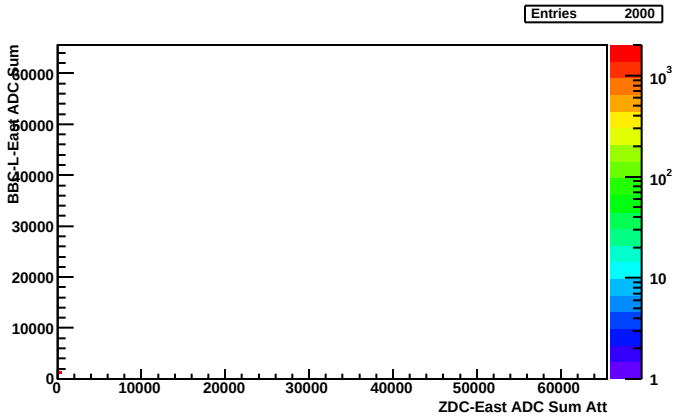

Entries 2000
TOF Mult
ZDC-West ADC Sum Att

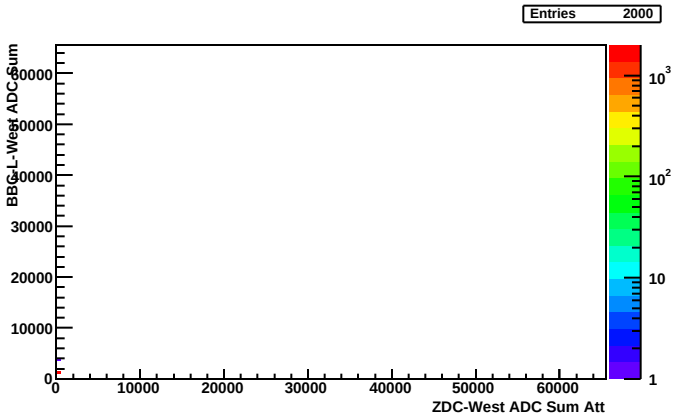

Entries 2000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

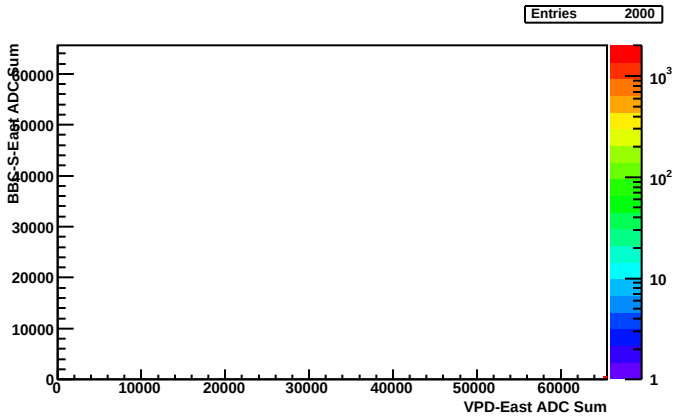

Entries 2000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

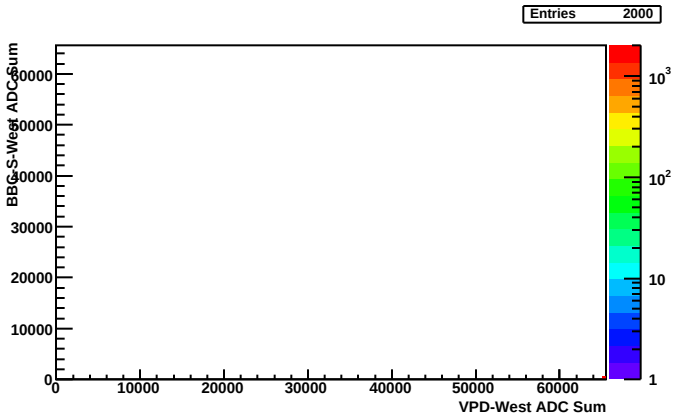

Entries 2000
BBC-L-East ADC Sum
VPD-East ADC Sum

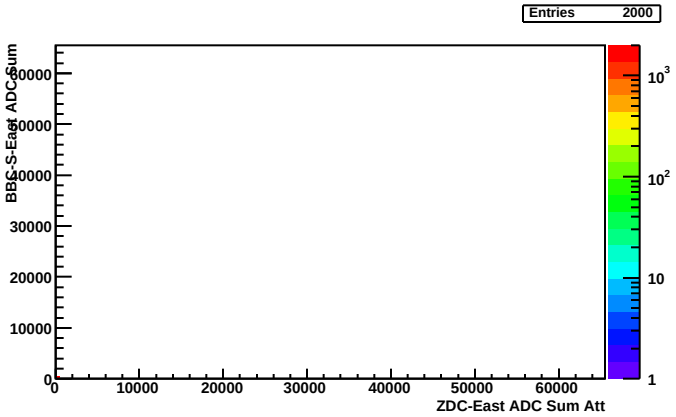

Entries 2000
BBC-L-West ADC Sum
VPD-West ADC Sum

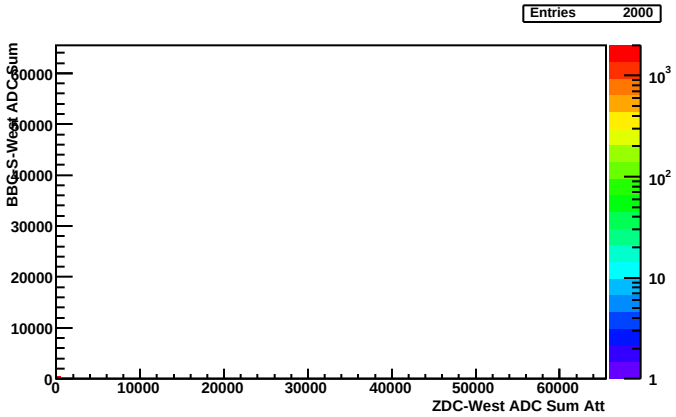

Entries 2000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

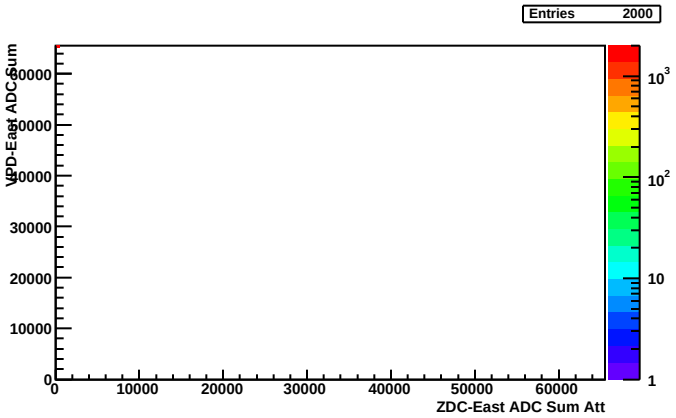

Entries 2000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

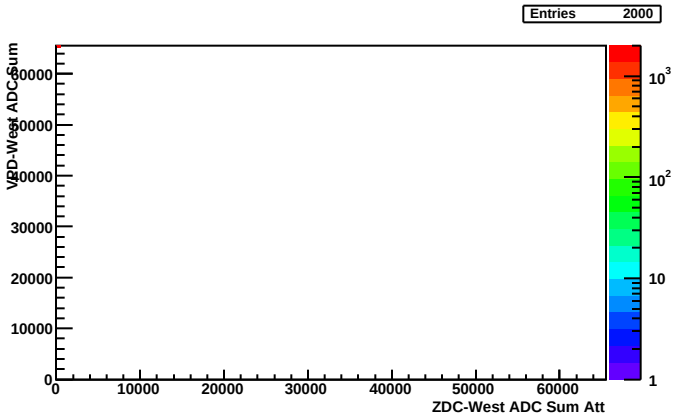

Entries 2000
BBC-S-East ADC Sum
VPD-East ADC Sum

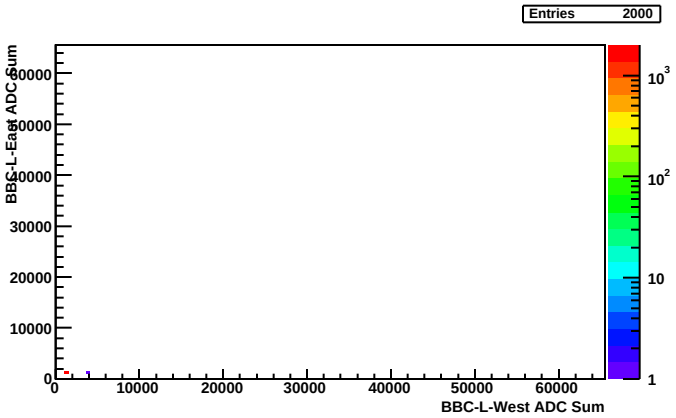

Entries 2000
BBC-S-West ADC Sum
VPD-West ADC Sum

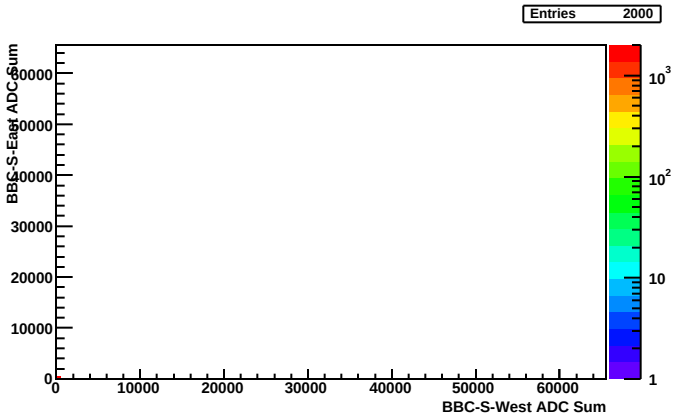

Entries 2000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

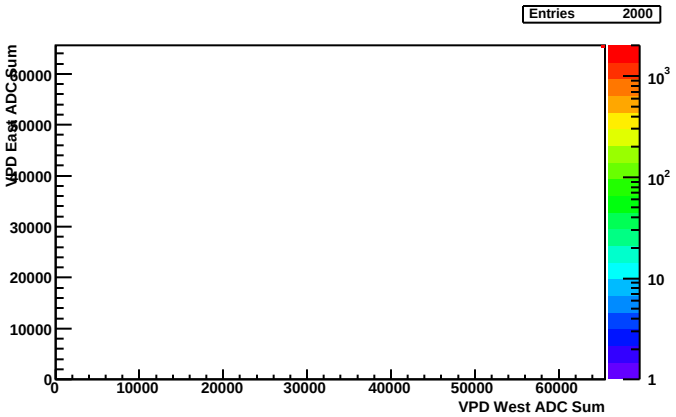

Entries 2000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

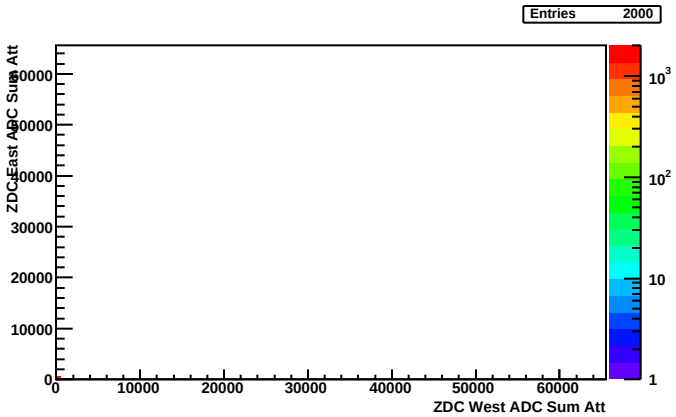

Entries 2000
VPD-East ADC Sum
ZDC-East ADC Sum Att

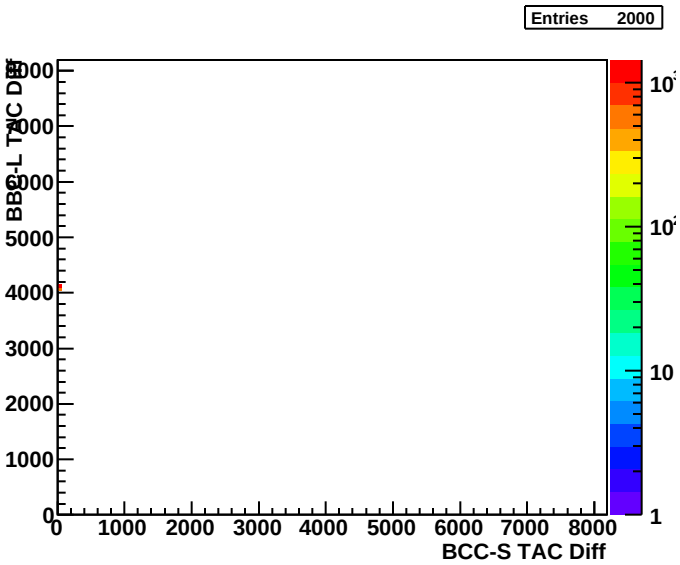

Entries 2000
VPD-West ADC Sum
ZDC-West ADC Sum Att

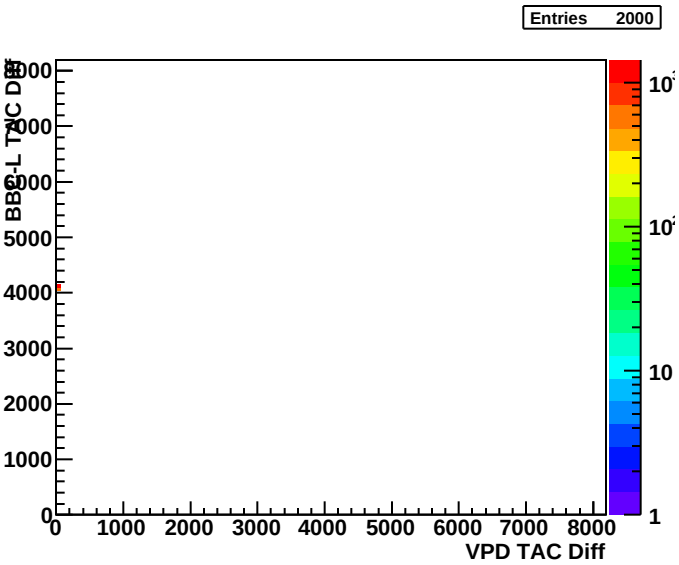

Entries 2000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

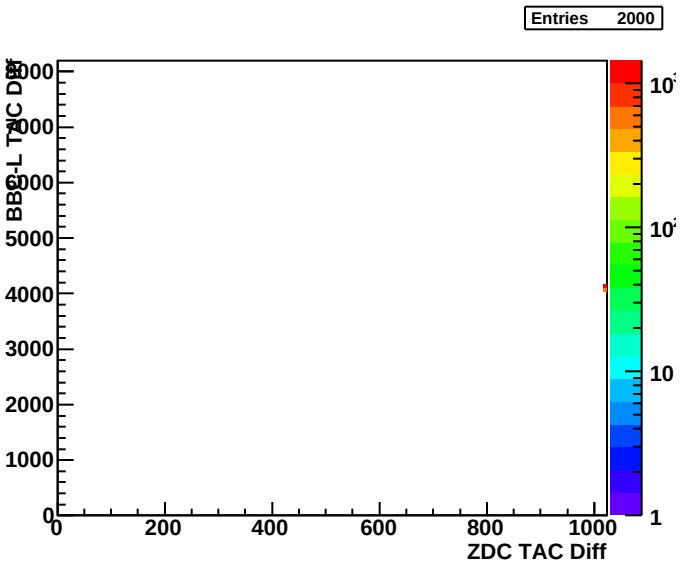

Entries 2000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

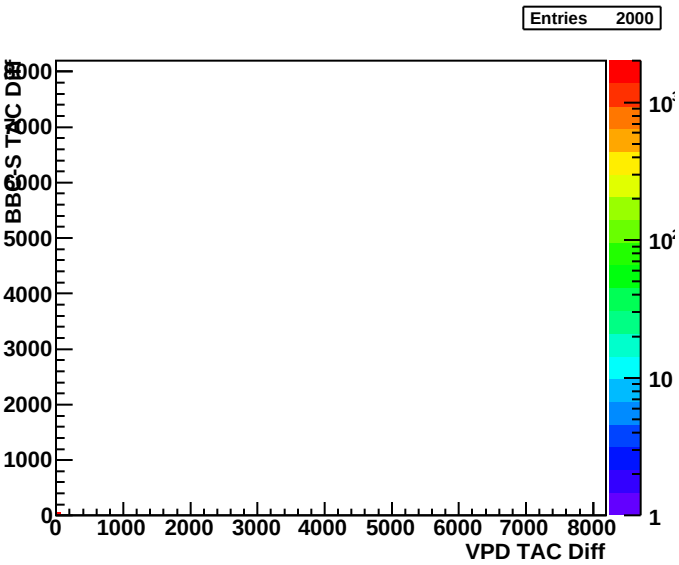

Entries 2000
VPD East ADC Sum
VPD West ADC Sum

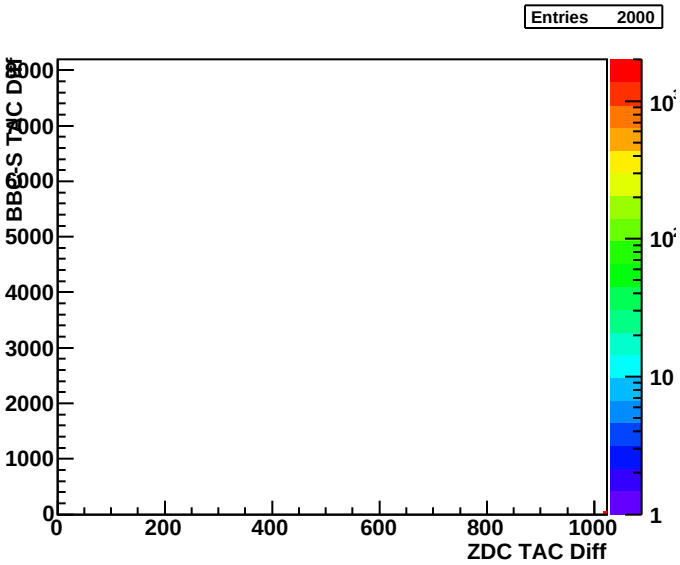

Entries 2000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

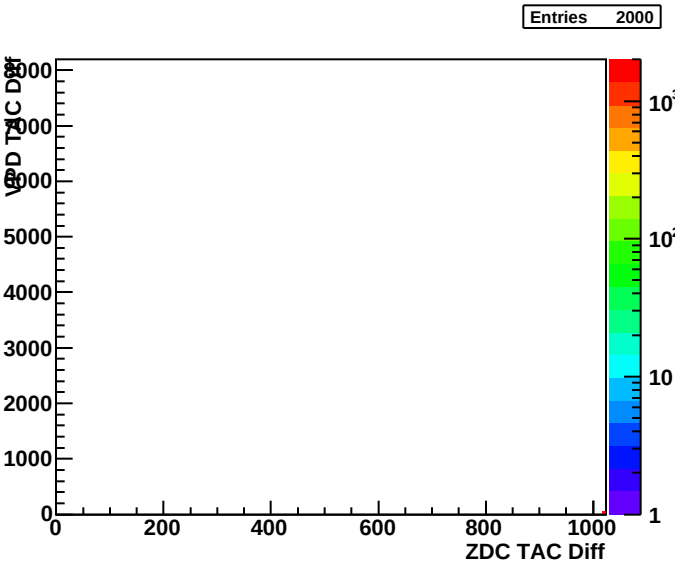

Entries 2000
BBC-L TAC Diff
BCC-S TAC Diff

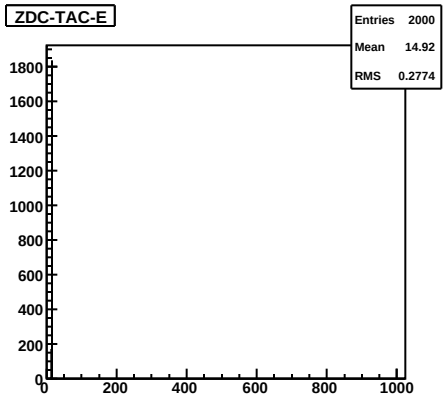

Entries 2000
BBC-L TAC Diff
VPD TAC Diff

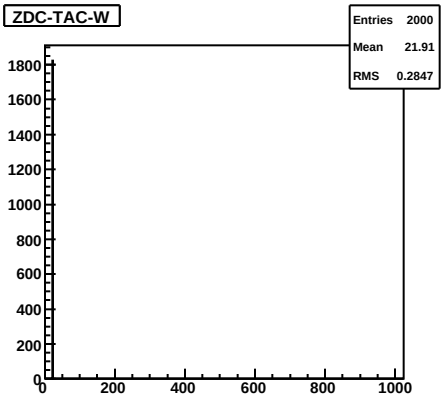

Entries 2000
BBC-L TAC Diff
ZDC TAC Diff

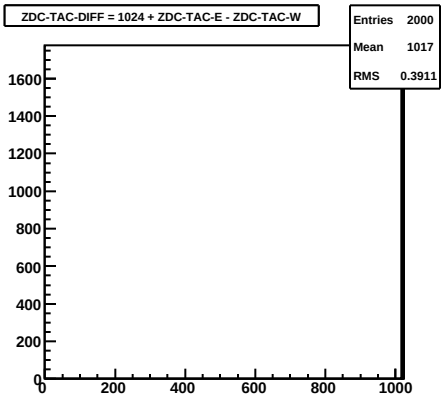

Entries 2000
BBC-S TAC Diff
VPD TAC Diff

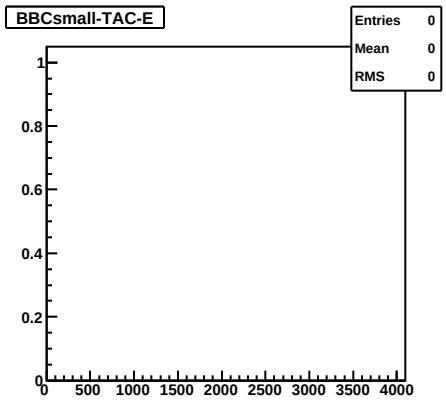

Entries 2000
BBC-S TAC Diff
ZDC TAC Diff

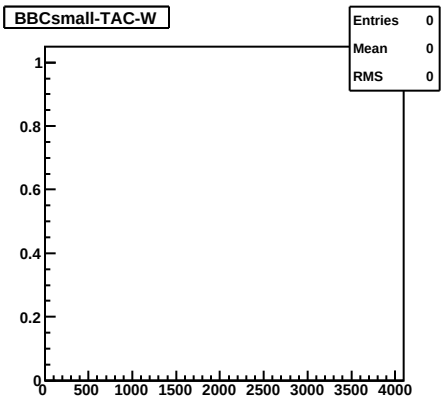

Entries 2000
VPD TAC Diff
ZDC TAC Diff

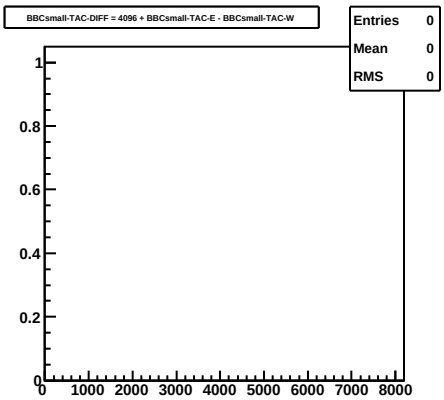

ZDC-TAC-E
Entries 2000
Mean 14.92
RMS 0.2774

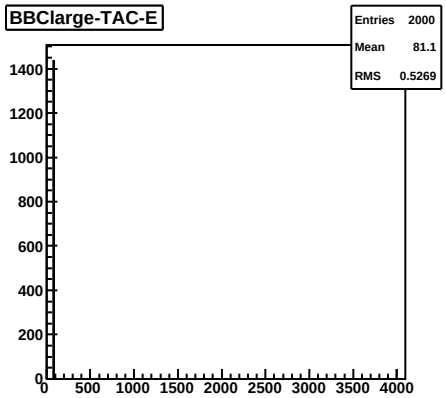

ZDC-TAC-W
Entries 2000
Mean 21.91
RMS 0.2847

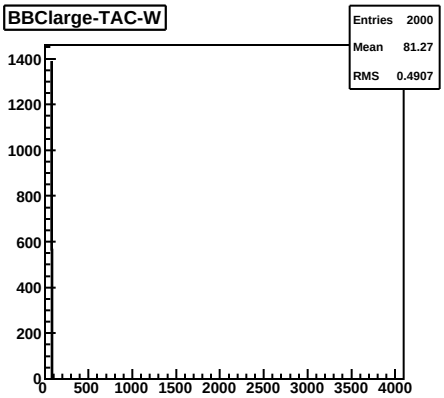

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2000
Mean 1017
RMS 0.3911

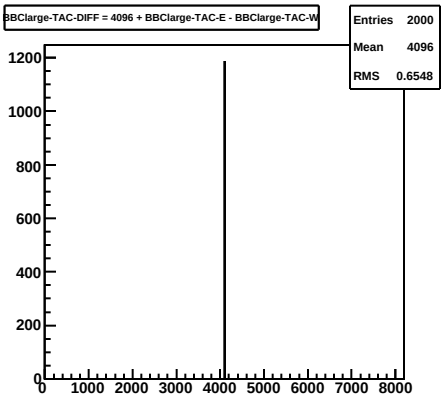

BBCsmall-TAC-E
Entries 0
Mean 0
RMS 0

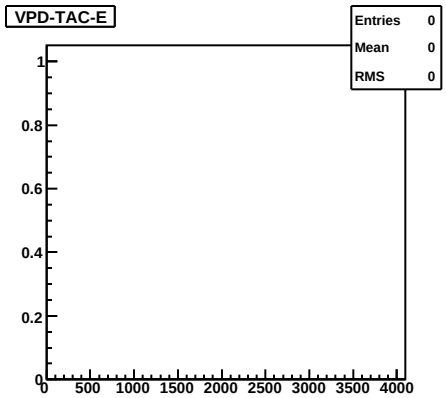

BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

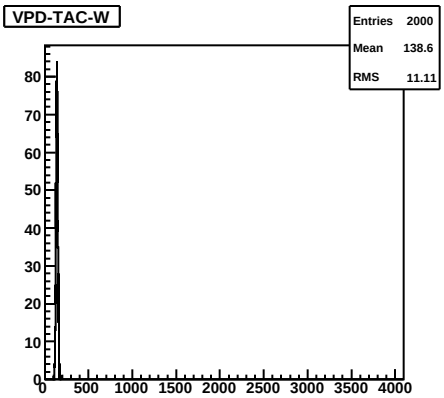

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

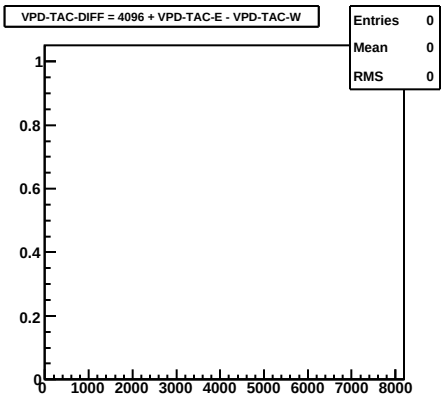

BBClarge-TAC-E
Entries 2000
Mean 81.1
RMS 0.5269

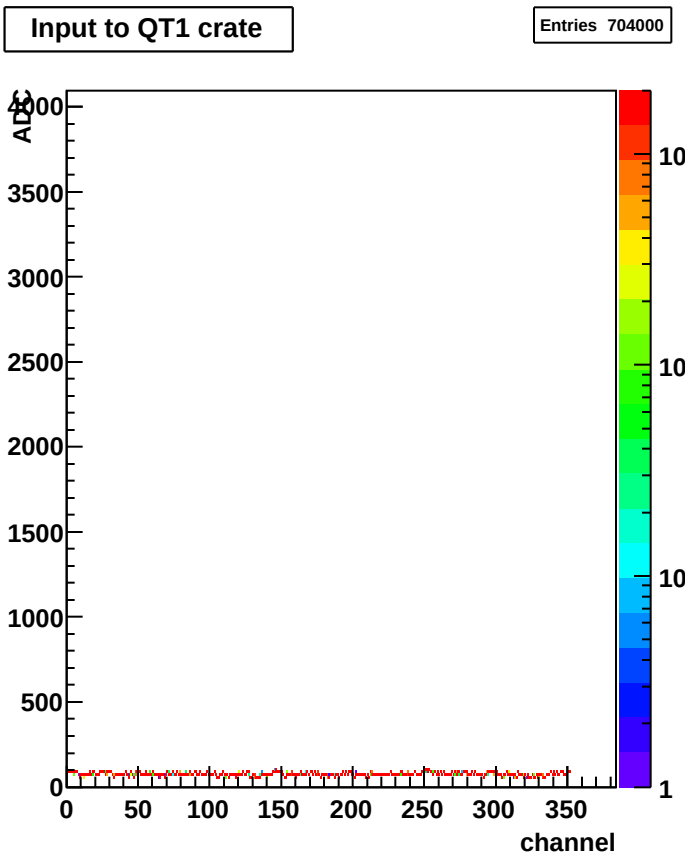

BBClarge-TAC-W
Entries 2000
Mean 81.27
RMS 0.4907

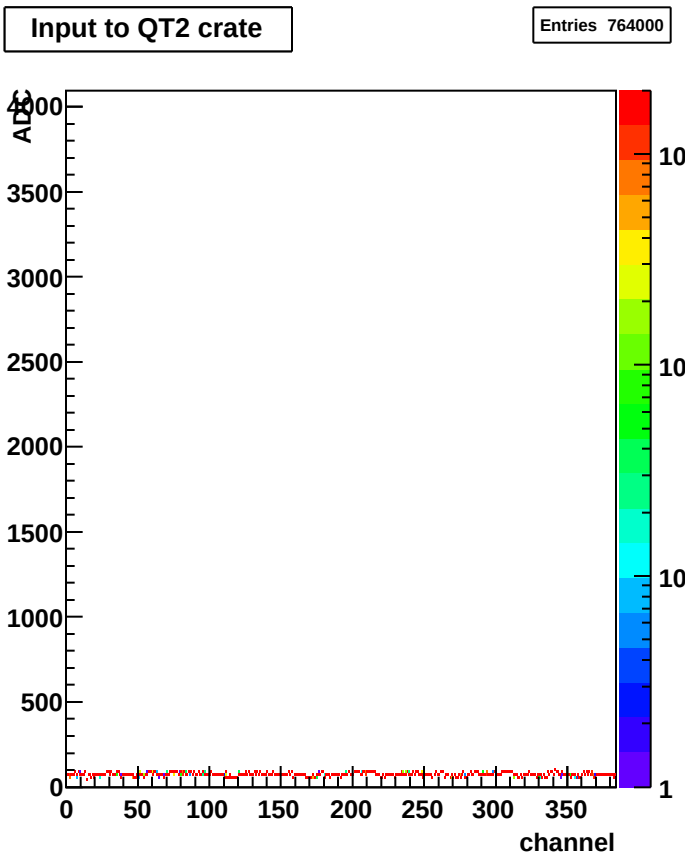

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2000
Mean 4096
RMS 0.6548

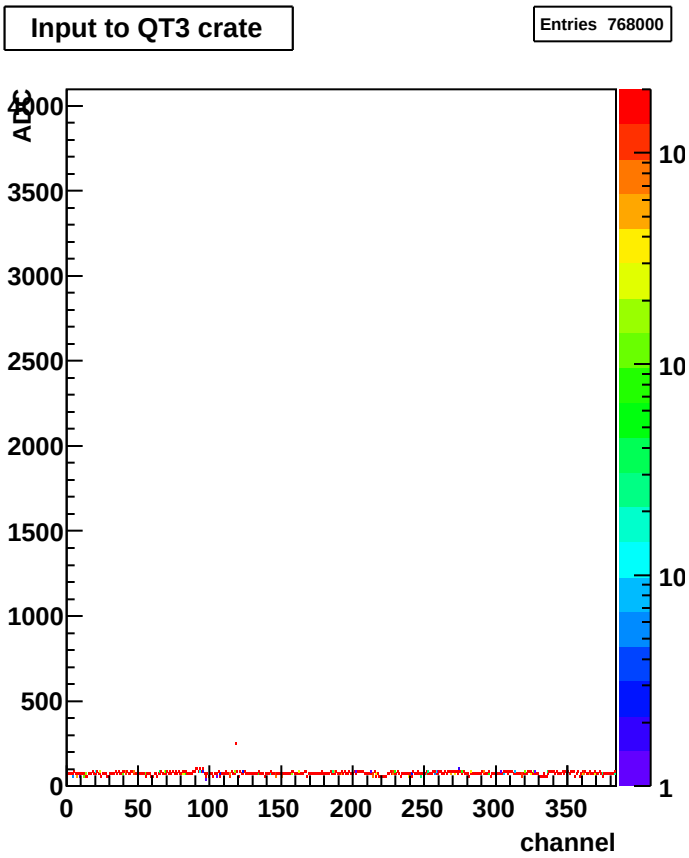

VPD-TAC-E
Entries 0
Mean 0
RMS 0

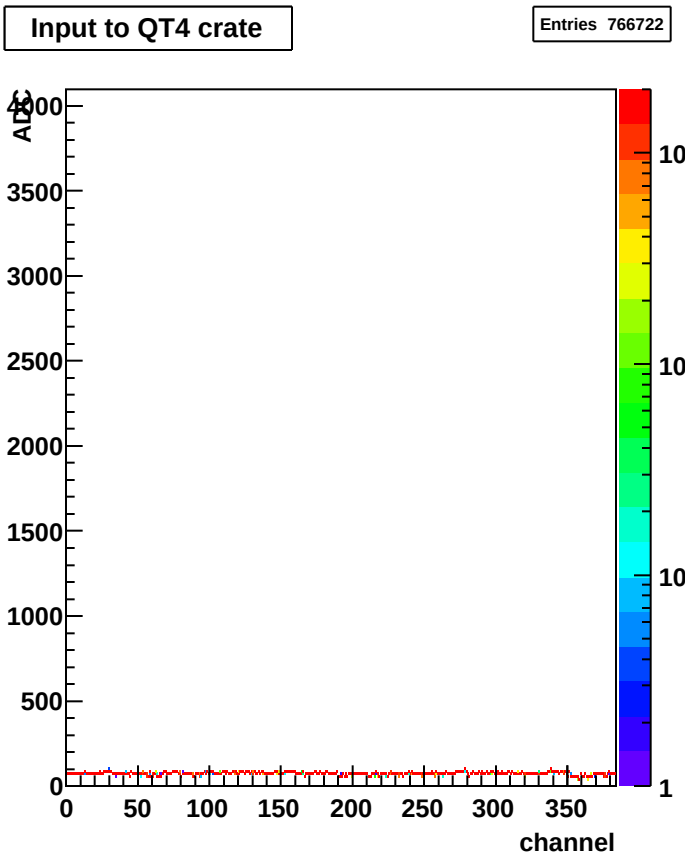

VPD-TAC-W
Entries 2000
Mean 138.6
RMS 11.11

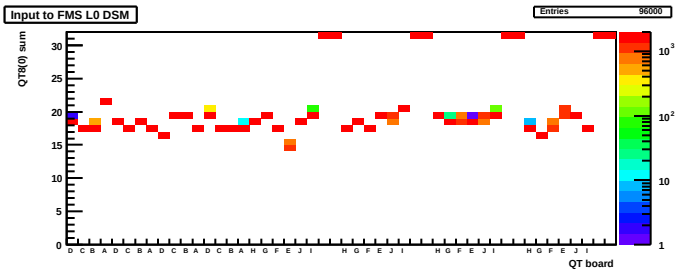

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

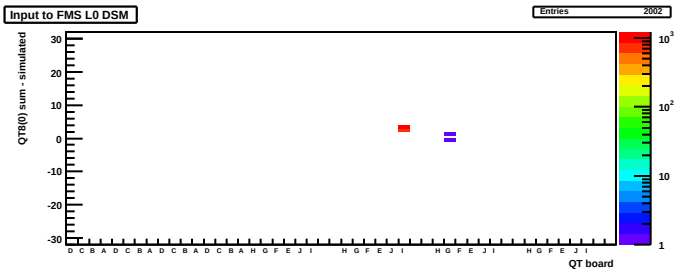

Input to QT1 crate
Entries 704000
ADC
channel

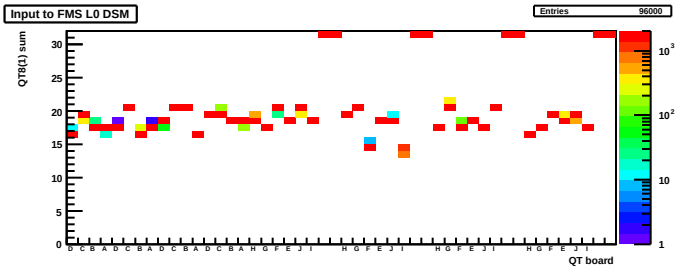

Input to QT2 crate
Entries 764000
ADC
channel

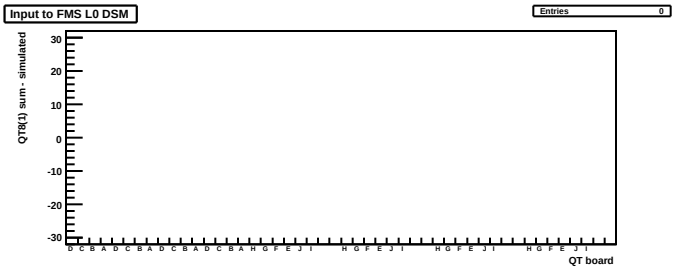

Input to QT3 crate
Entries 768000
ADC
channel

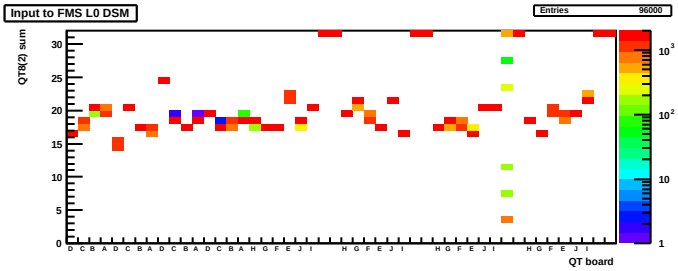

Input to QT4 crate
Entries 766722
ADC
channel

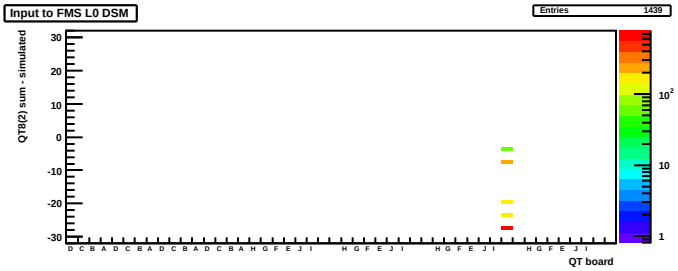

Input to FMS L0 DSM
Entries 96000
QT8(0) sum
QT board

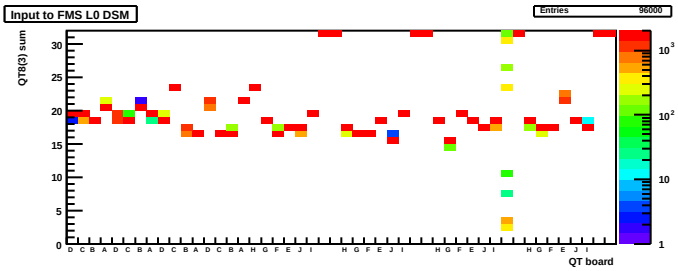

Input to FMS L0 DSM
Entries 2002
QT8(0) sum - simulated
QT board

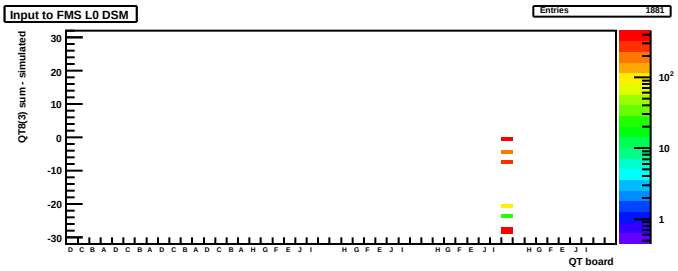

Input to FMS L0 DSM
Entries 96000
QT8(1) sum
QT board

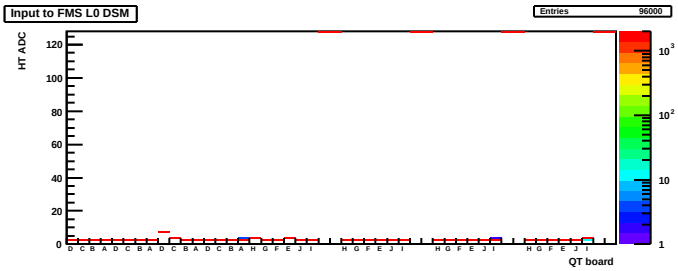

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

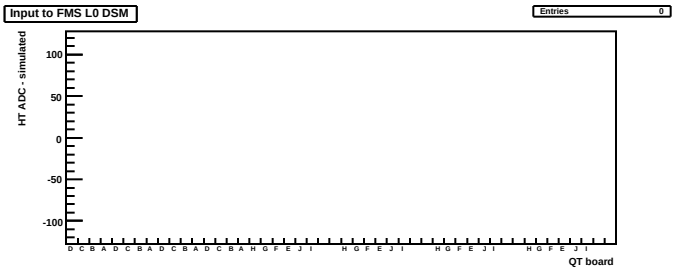

Input to FMS L0 DSM
Entries 96000
QT8(2) sum
QT board

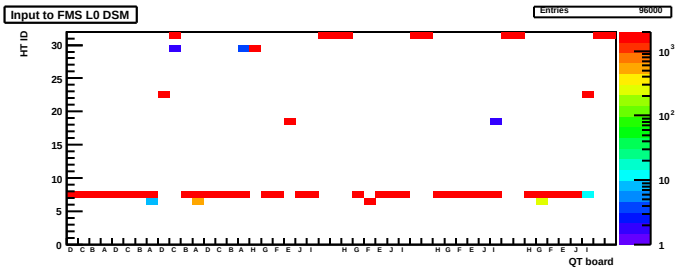

Input to FMS L0 DSM
Entries 1439
QT8(2) sum - simulated
QT board

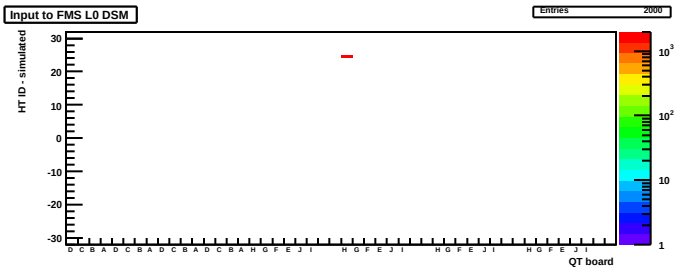

Input to FMS L0 DSM
Entries 96000
QT8(3) sum
QT board

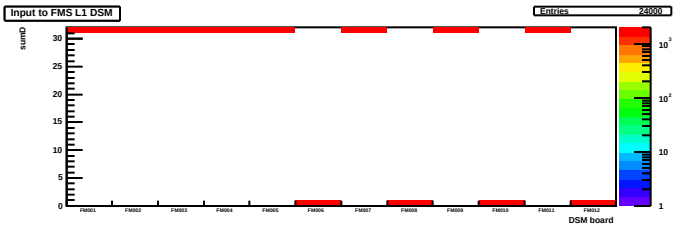

Input to FMS L0 DSM
Entries 1881
QT8(3) sum - simulated
QT board

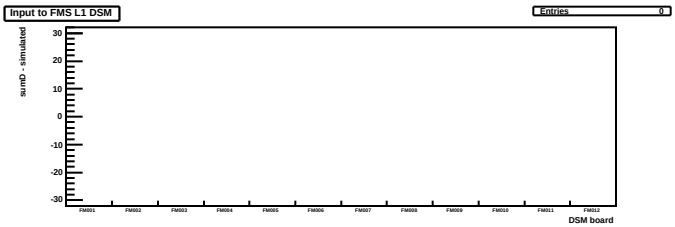

Input to FMS L0 DSM
Entries 96000
HT ADC
QT board

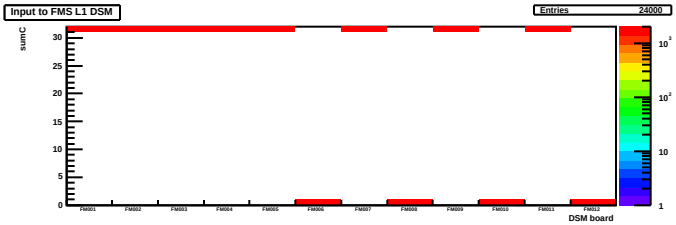

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

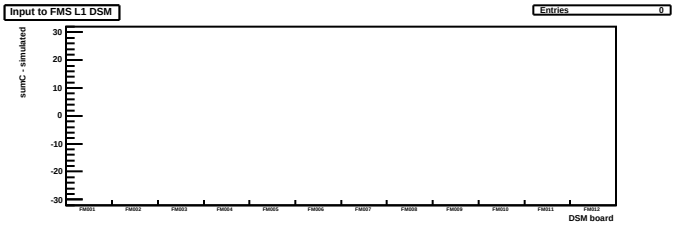

Input to FMS L0 DSM
Entries 96000
HT ID
QT board

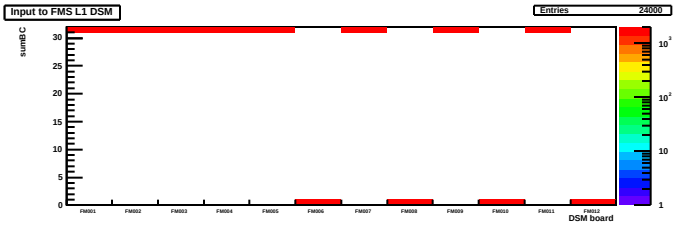

Input to FMS L0 DSM
Entries 2000
HT ID - simulated
QT board

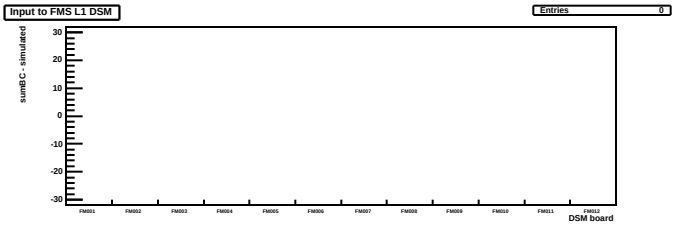

Input to FMS L1 DSM
Entries 24000
sumD
DSM board

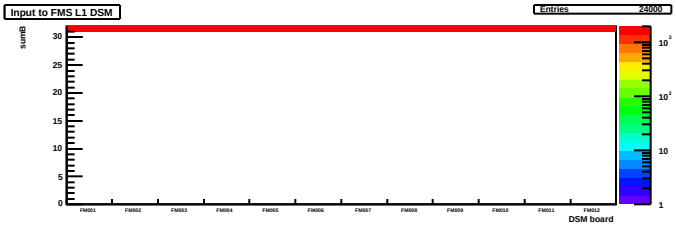

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

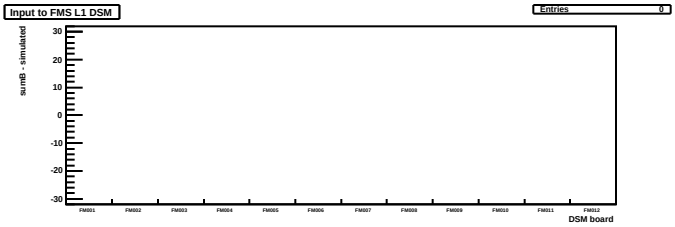

Input to FMS L1 DSM
Entries 24000
sumC
DSM board

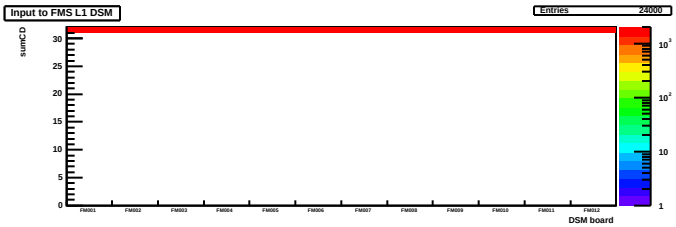

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

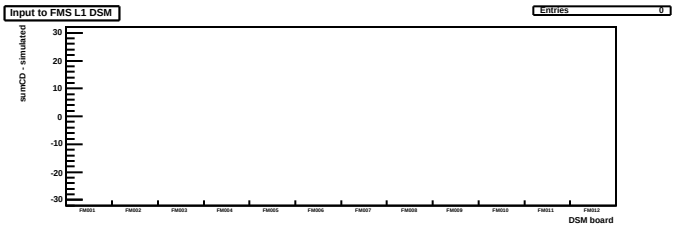

Input to FMS L1 DSM
Entries 24000
sumBC
DSM board

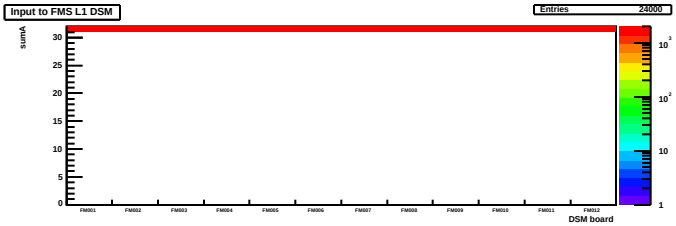

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

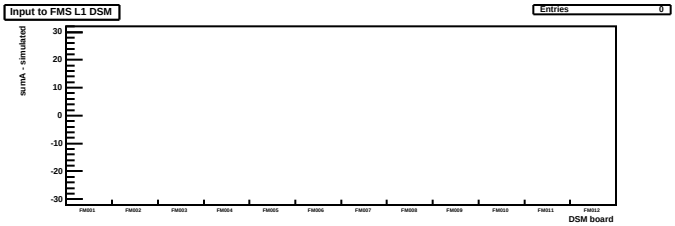

Input to FMS L1 DSM
Entries 24000
sumB
DSM board

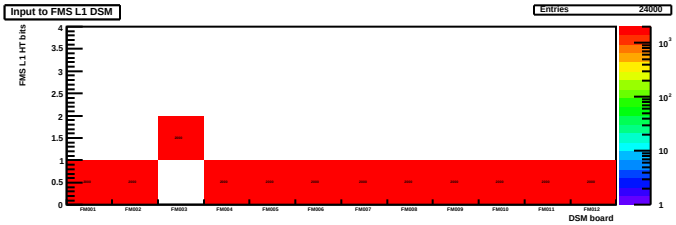

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

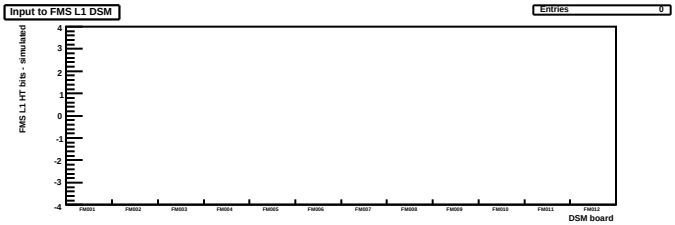

Input to FMS L1 DSM
Entries 24000
sumCD
DSM board

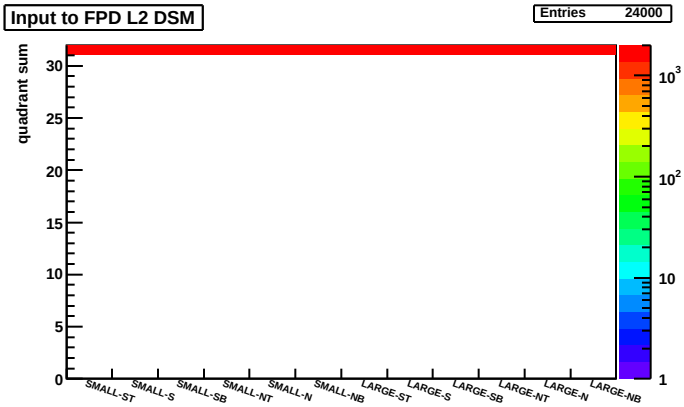

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

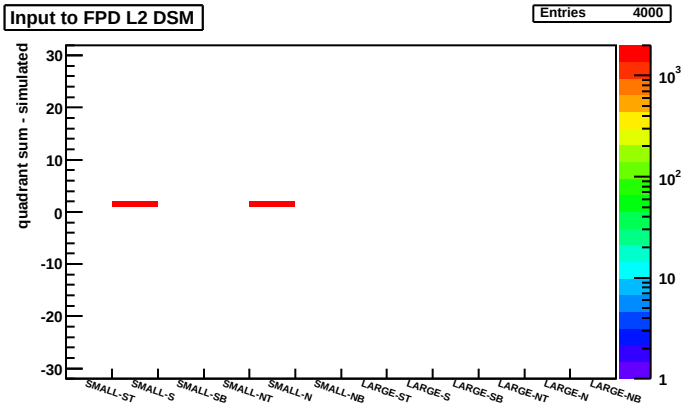

Input to FMS L1 DSM
Entries 24000
sumA
DSM board

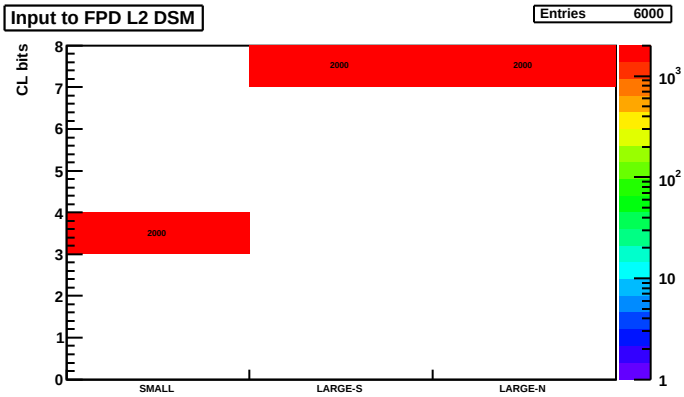

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

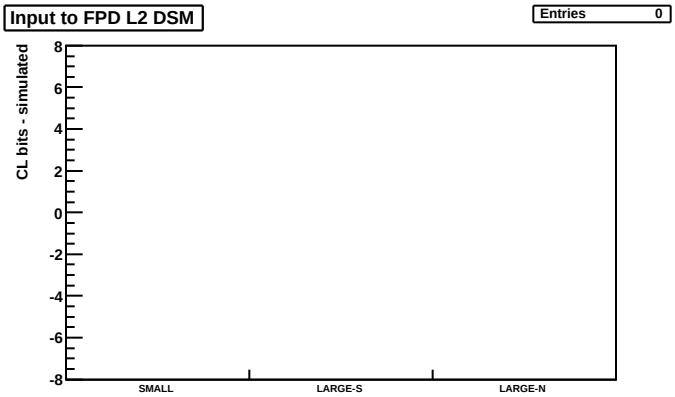

Input to FMS L1 DSM
Entries 24000
FMS L1 HT bits
DSM board

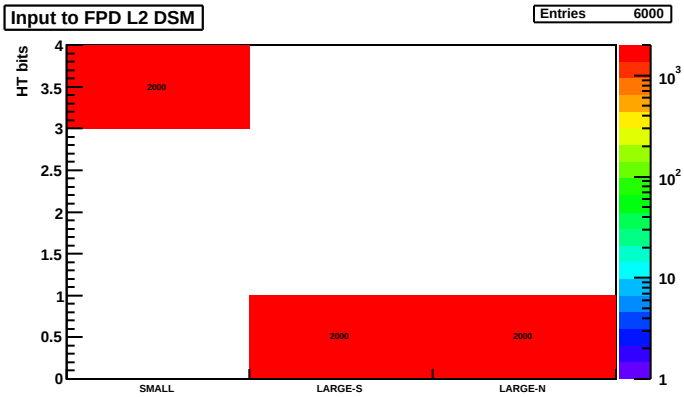

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

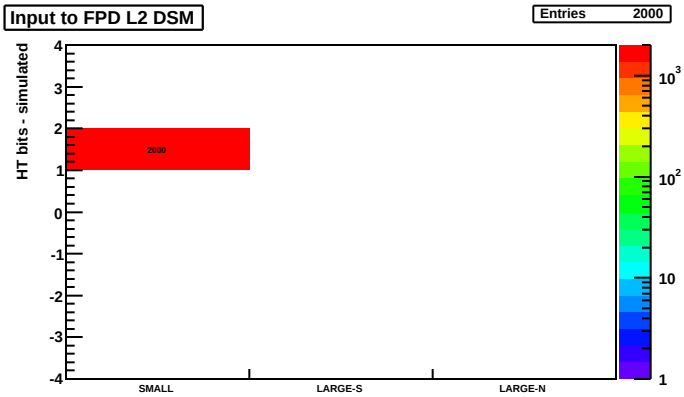

Input to FPD L2 DSM
Entries 24000
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

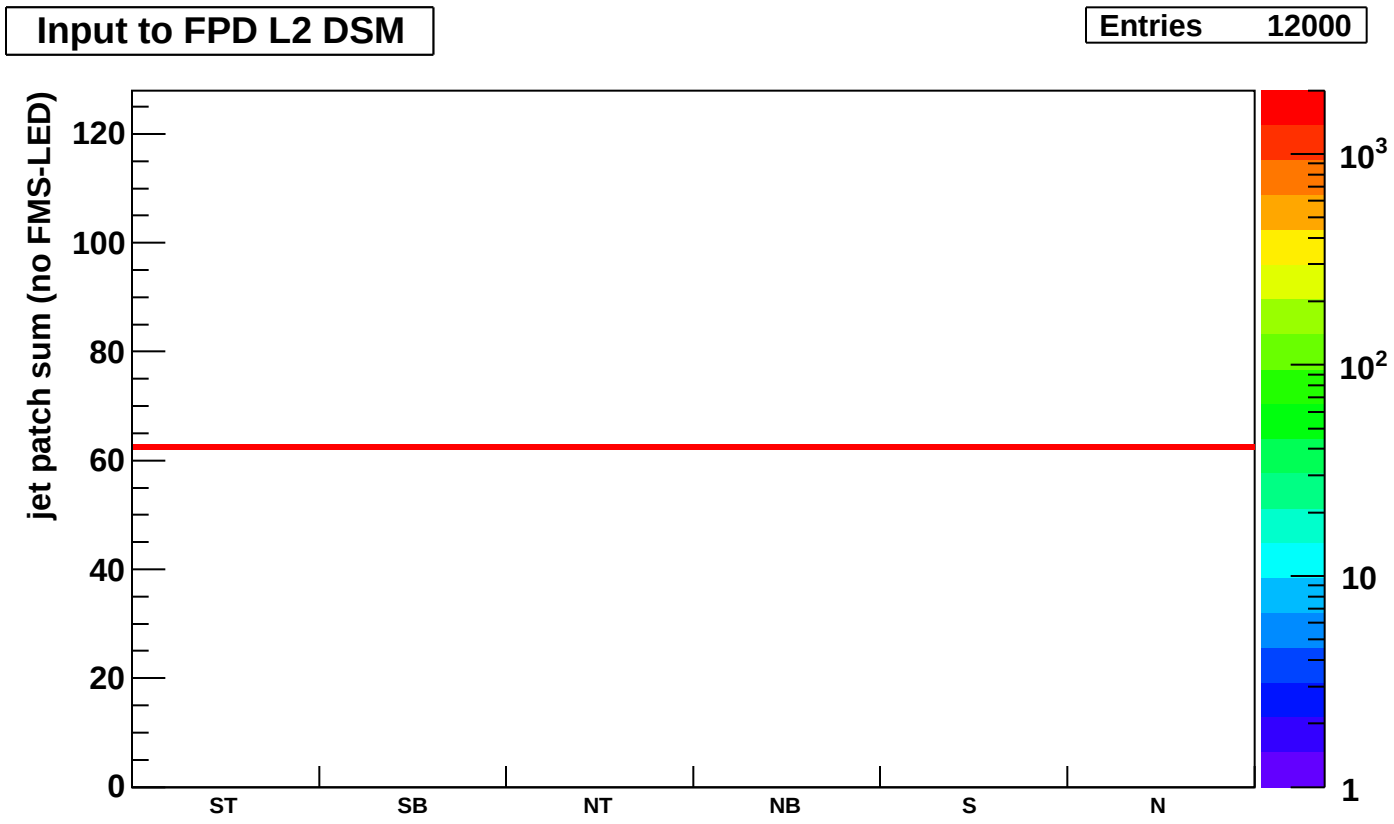

Input to FPD L2 DSM
Entries 4000
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

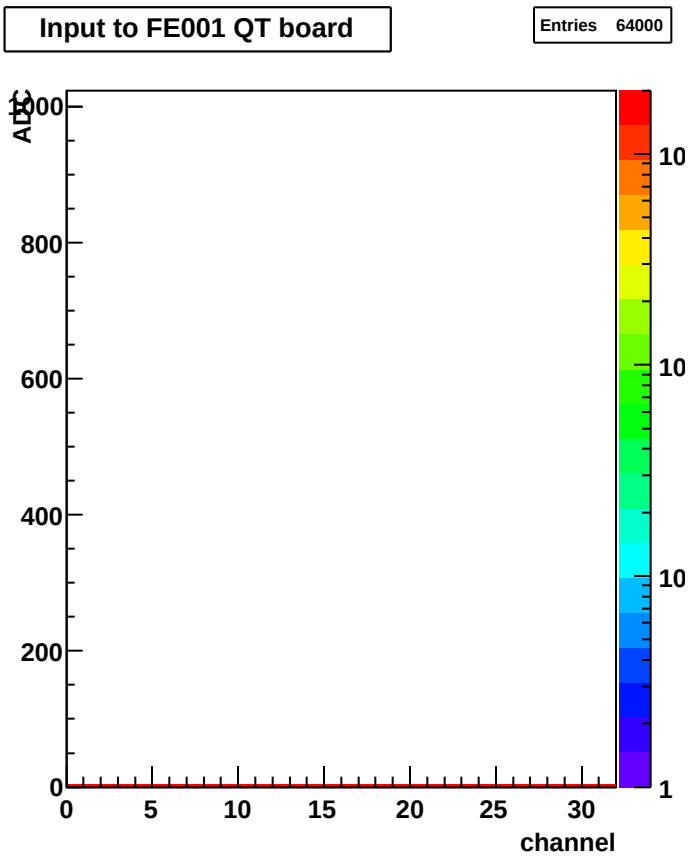

Input to FPD L2 DSM
Entries 6000
CL bits
2000
2000
2000
SMALL
LARGE-S
LARGE-N

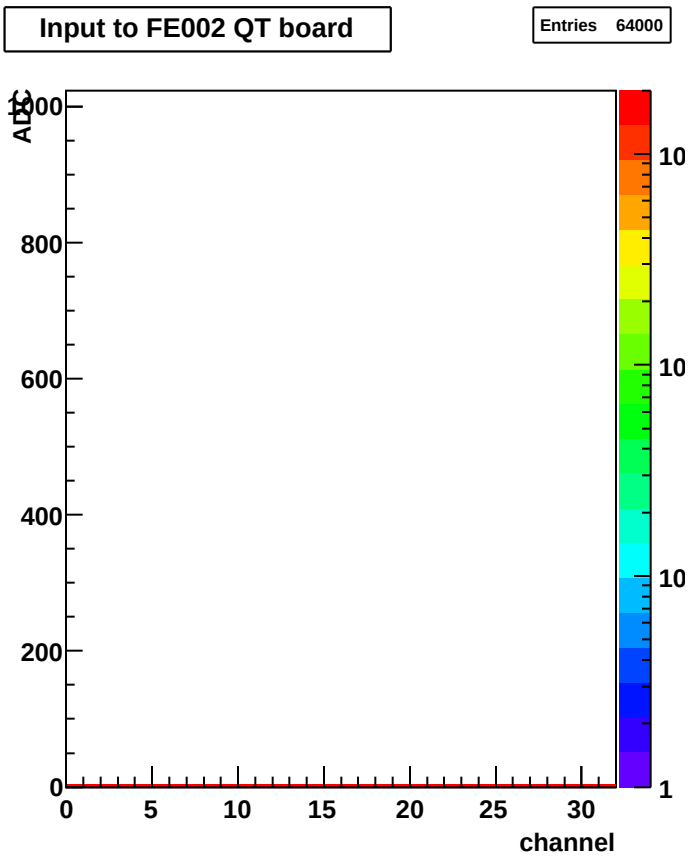

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

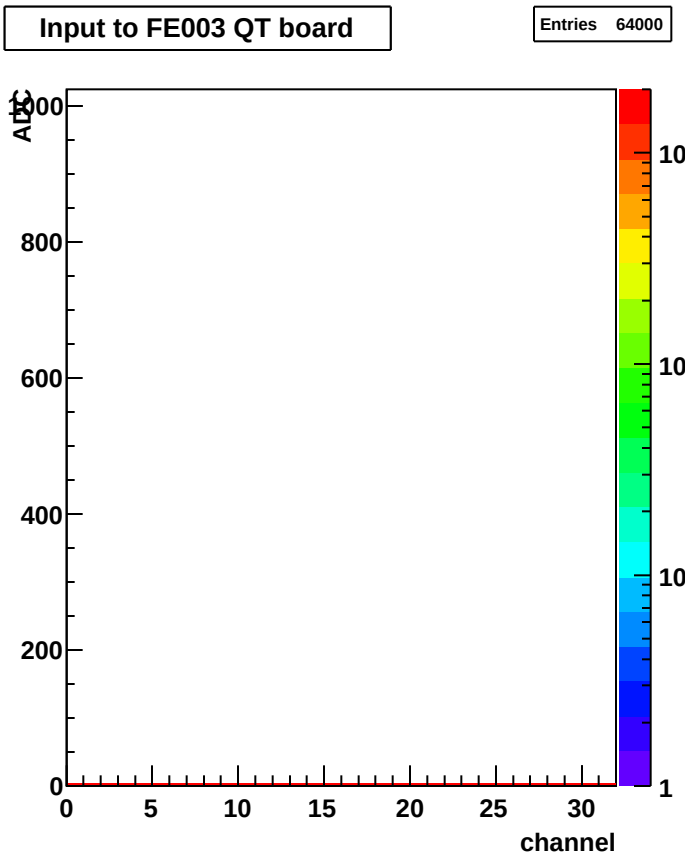

Input to FPD L2 DSM
Entries 6000
HT bits
2000
2000
2000
SMALL
LARGE-S
LARGE-N

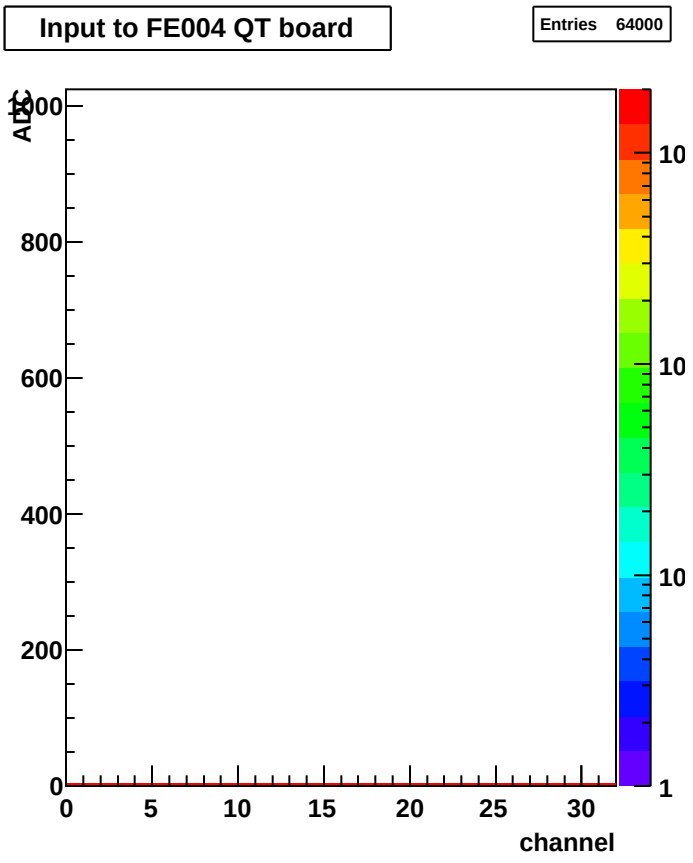

Input to FPD L2 DSM
Entries 2000
HT bits - simulated
2000
SMALL
LARGE-S
LARGE-N

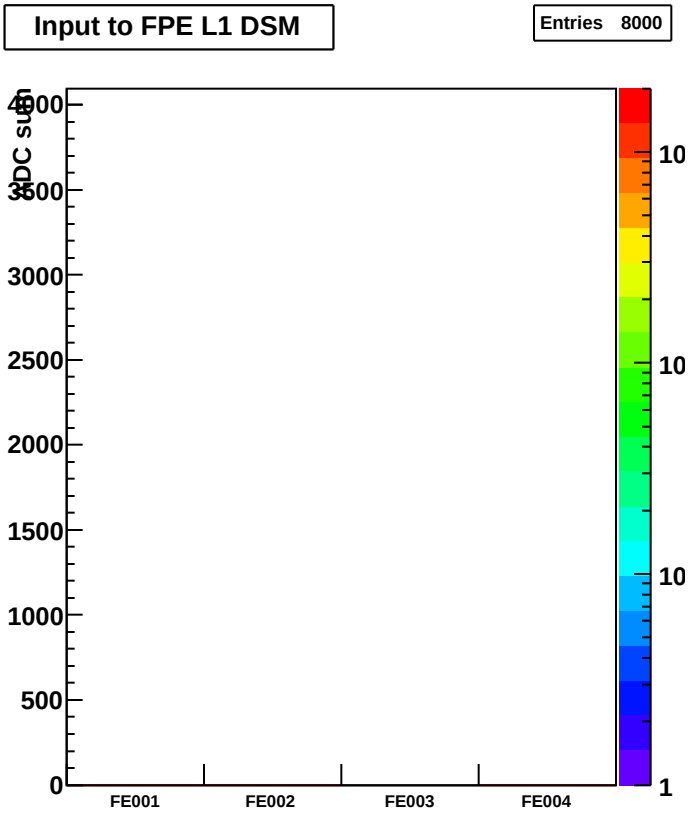

Input to FPD L2 DSM
Entries 12000
jet patch sum (no FMS-LED)
120
100
80
60
40
20
0
ST
SB
NT
NB
S
N
10^3
10^2
10
1

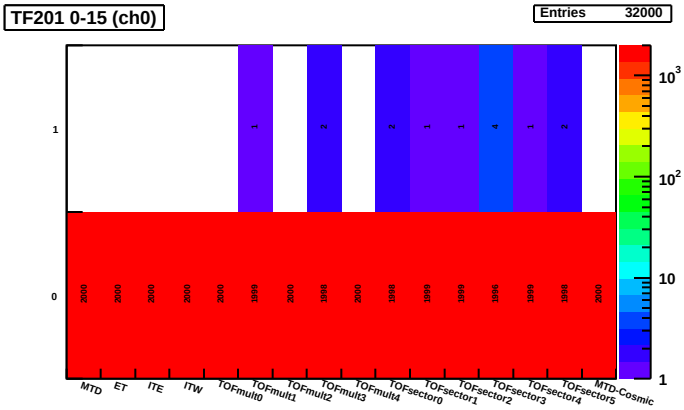

Input to FE001 QT board
Entries 64000
ADC
channel

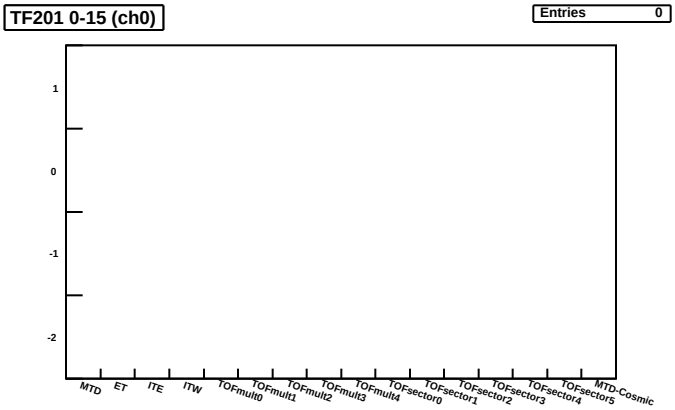

Input to FE002 QT board
Entries 64000
ADC
channel

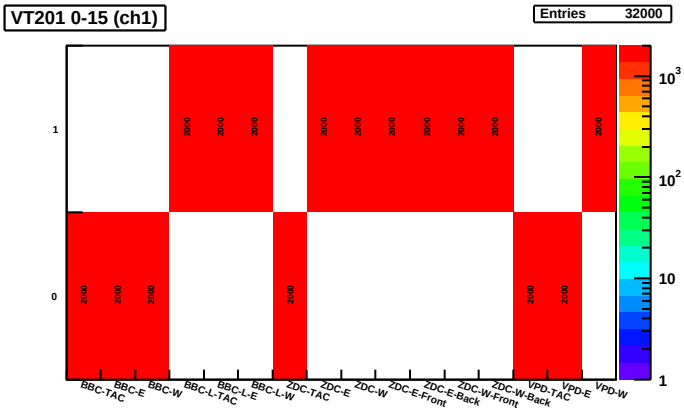

Input to FE003 QT board
Entries 64000
ADC
channel


Input to FE004 QT board
Entries 64000
ADC
channel


Input to FPE L1 DSM
Entries 8000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1


TF201 0-15 (ch0)
Entries 32000
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)
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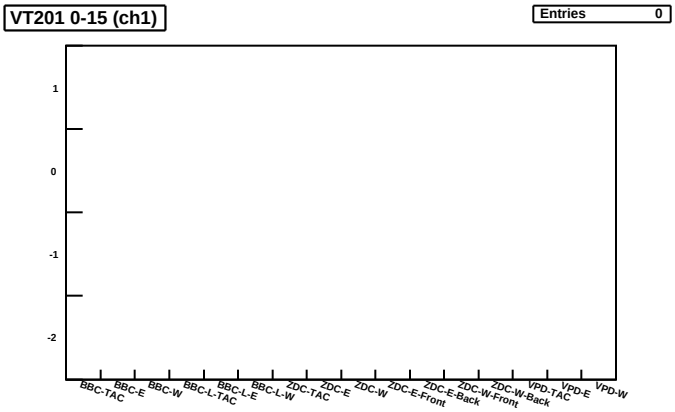
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
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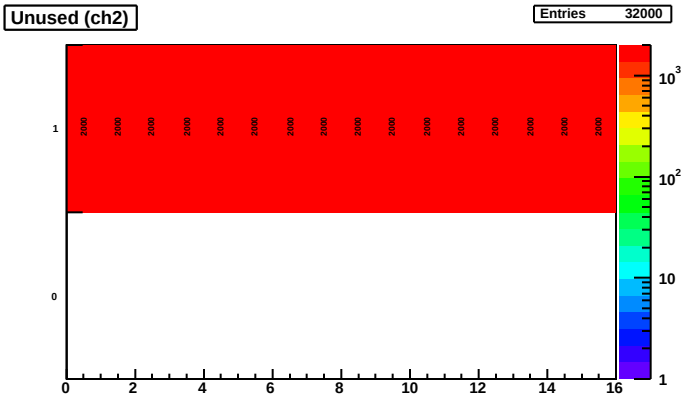
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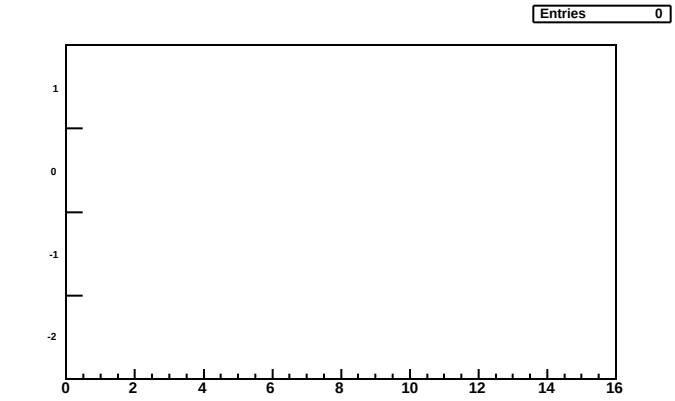
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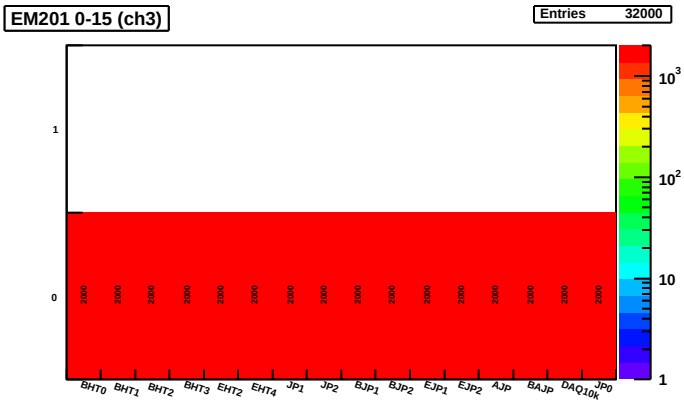
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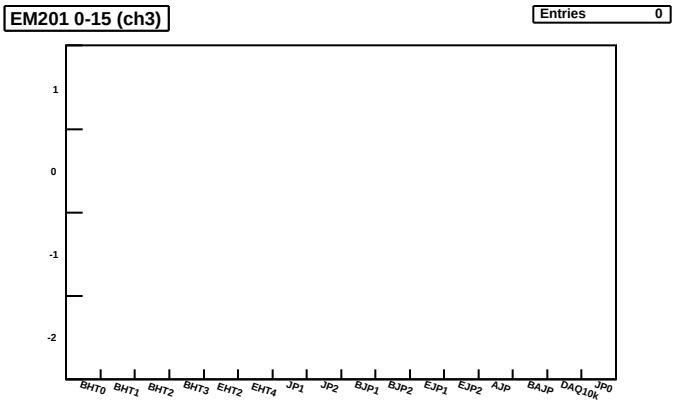
EM201 0-15 (ch3)
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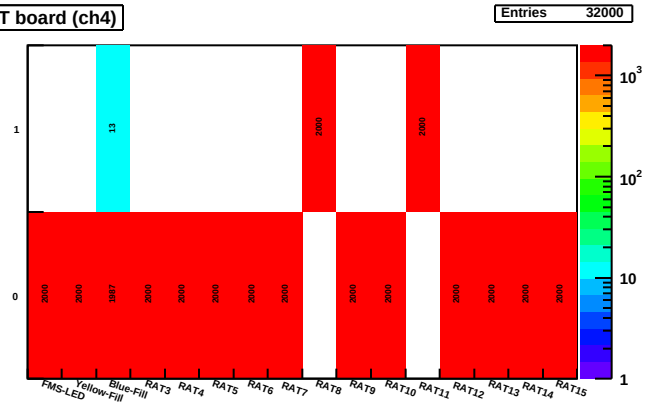
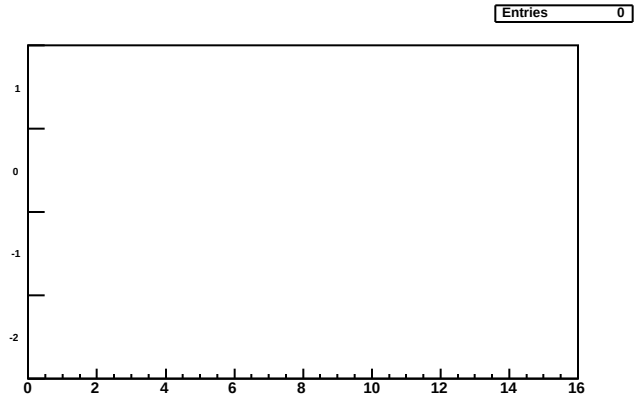
RAT board (ch4)





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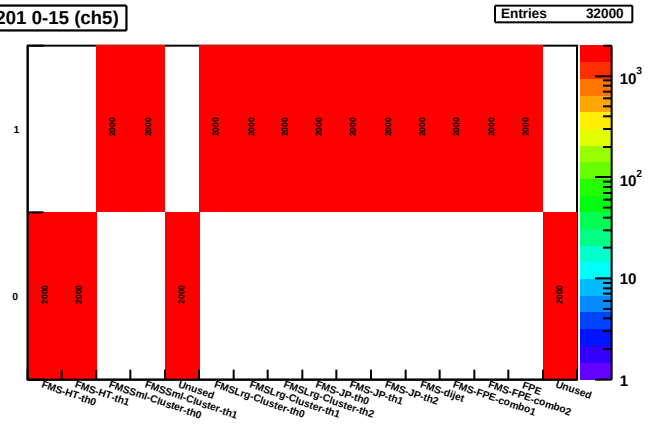

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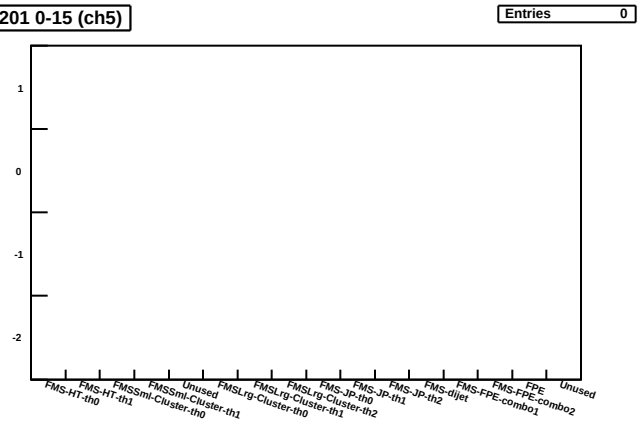
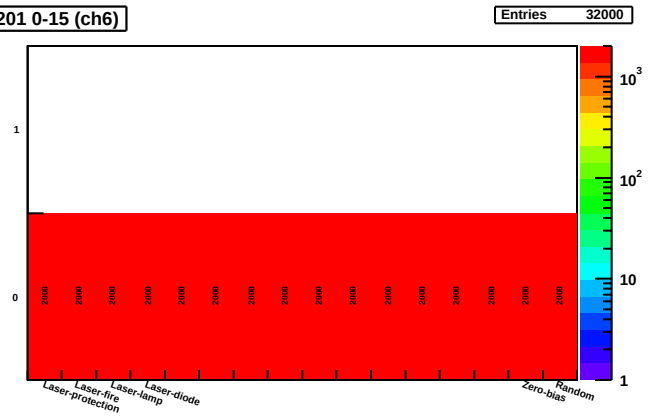
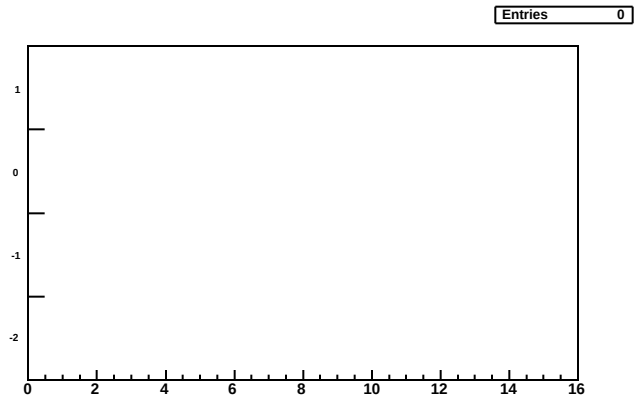
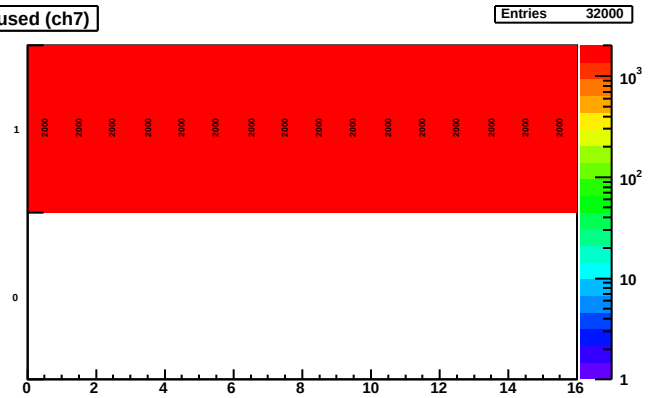
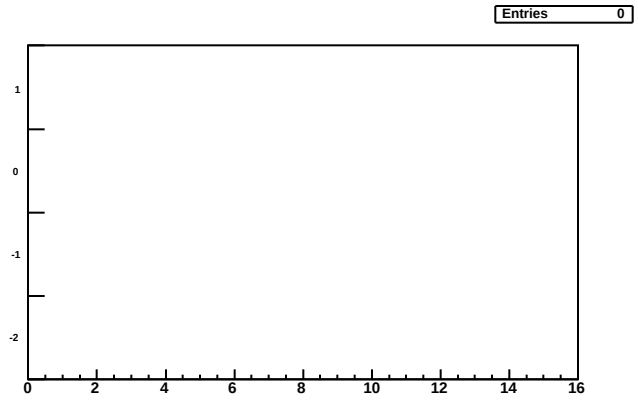


ST201 0-15 (ch6)





Unused (ch7)