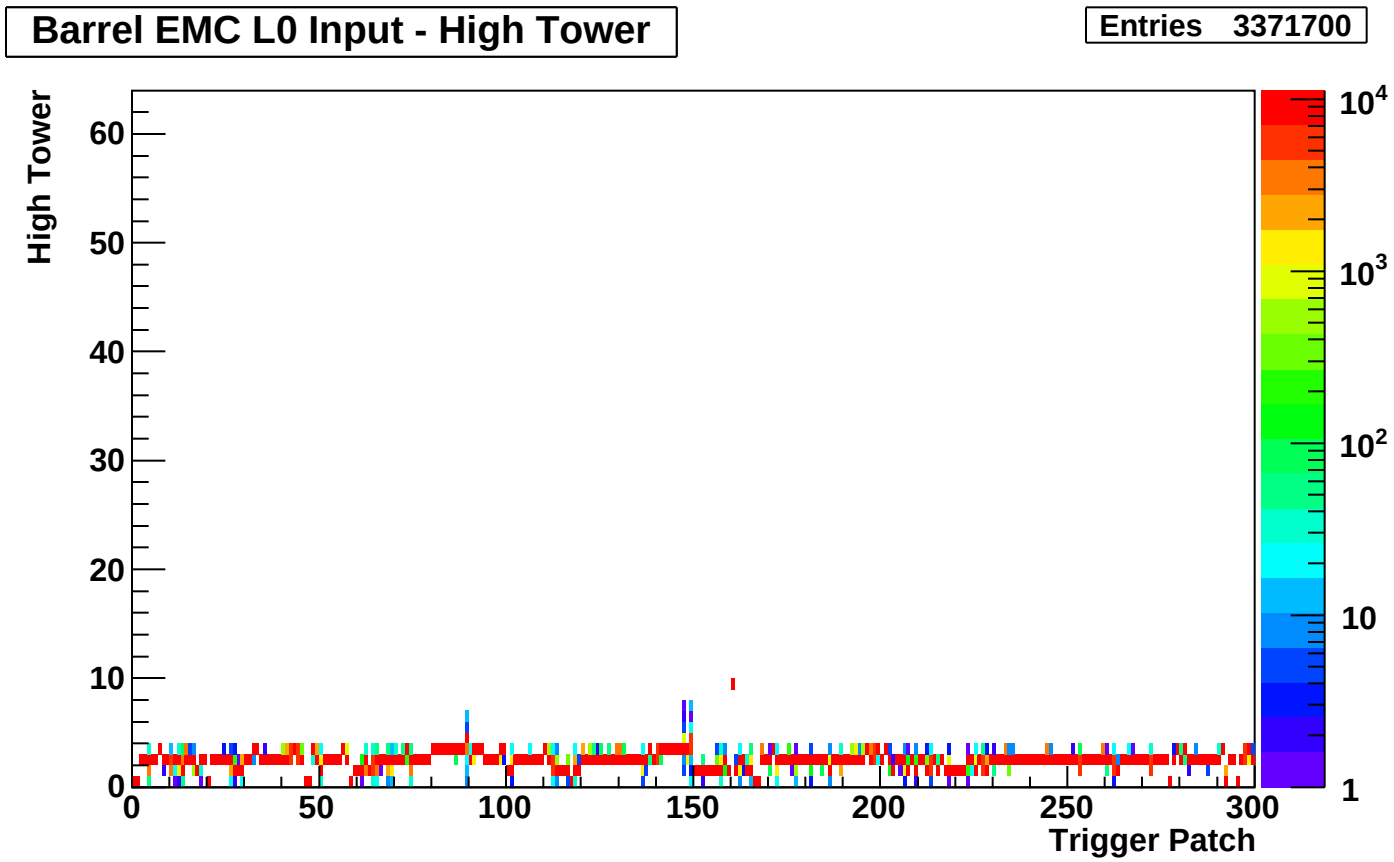
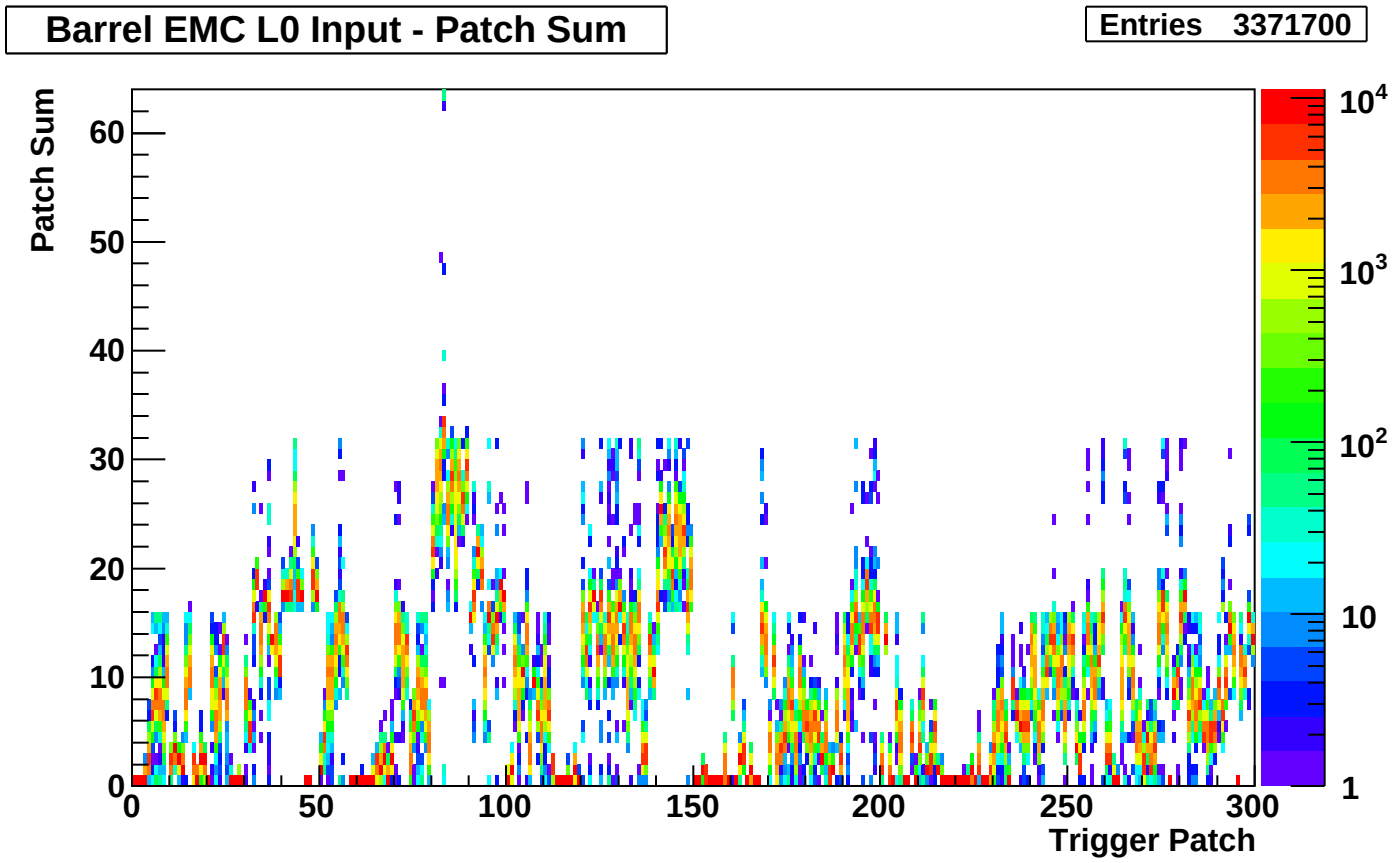
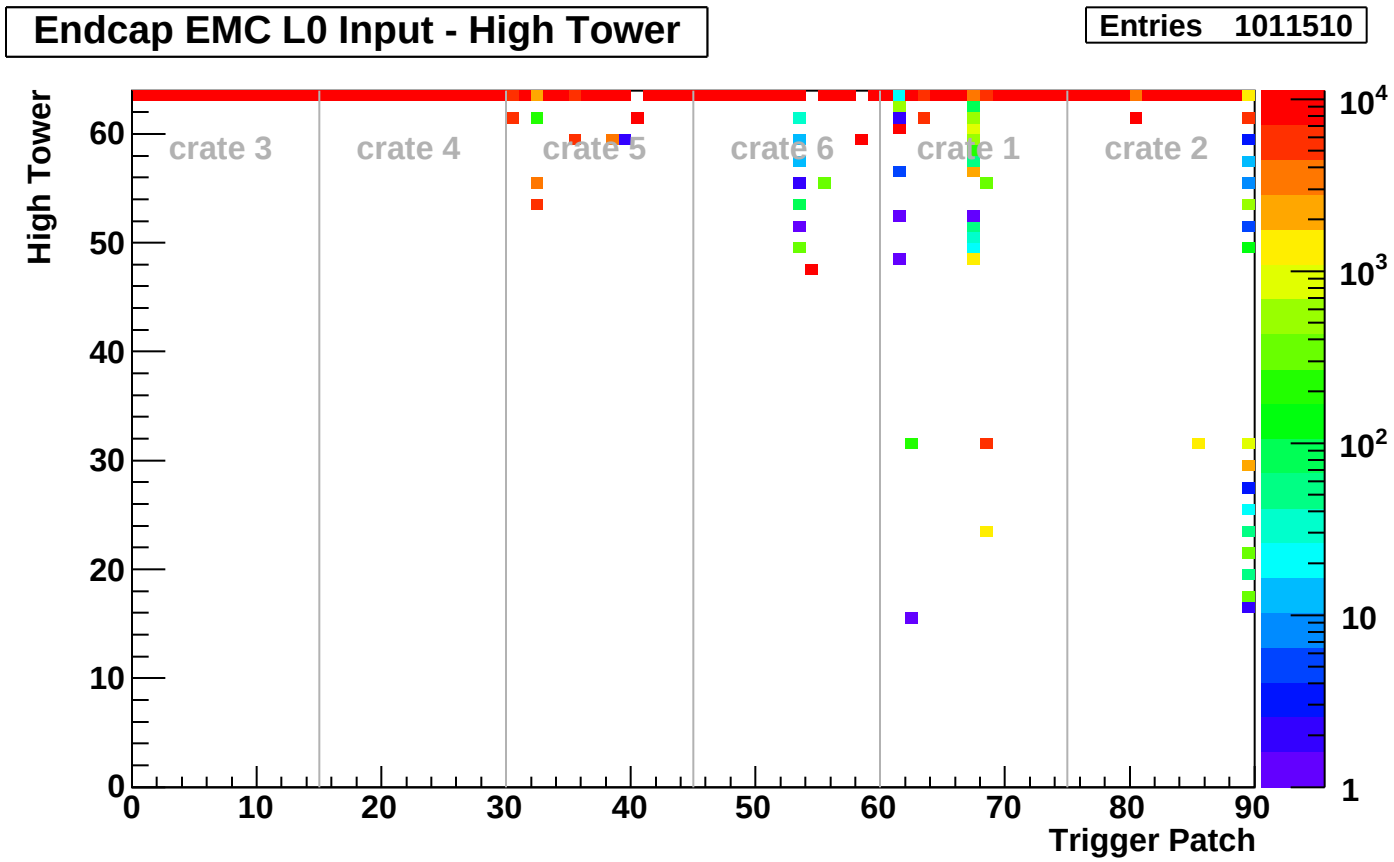
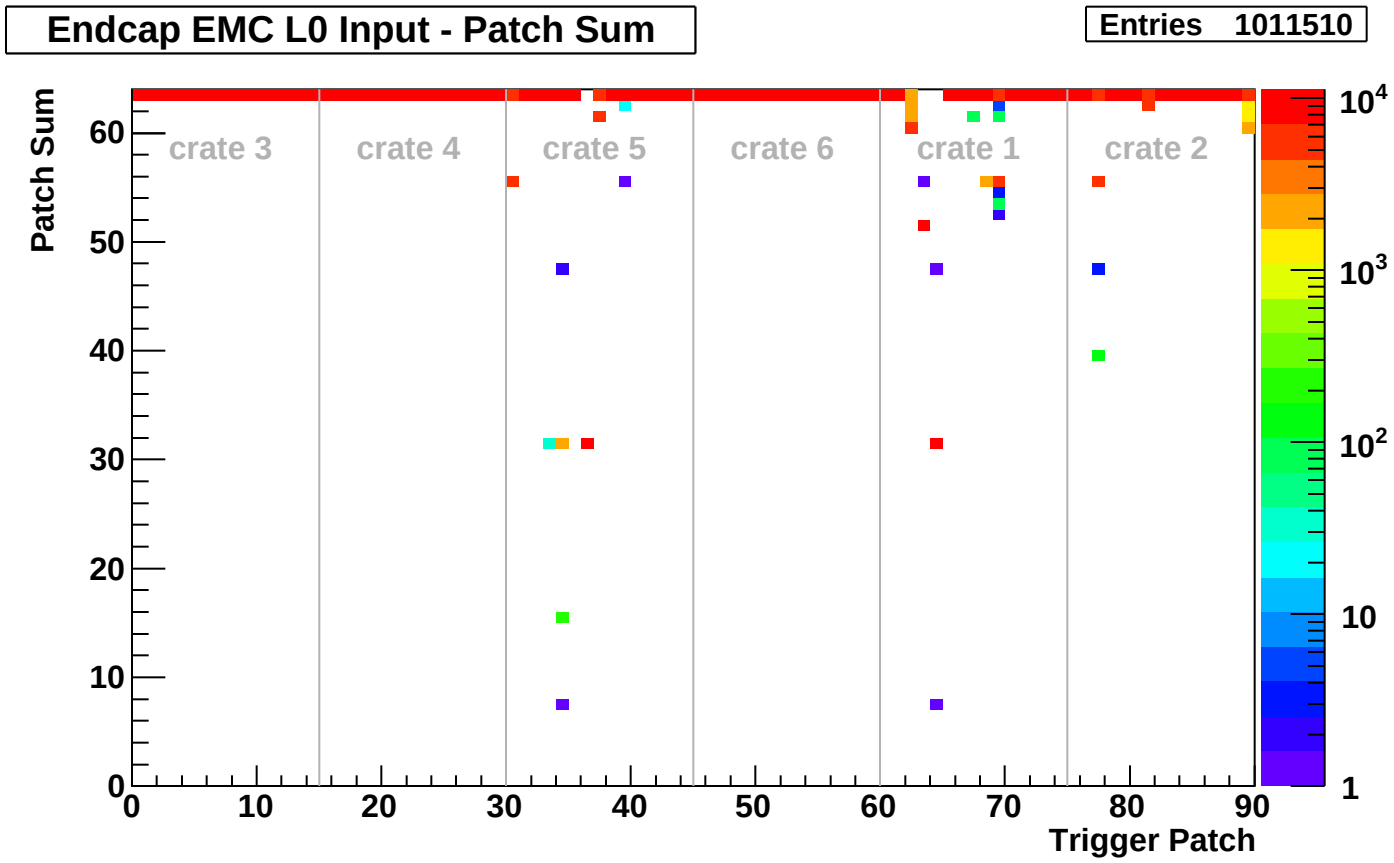
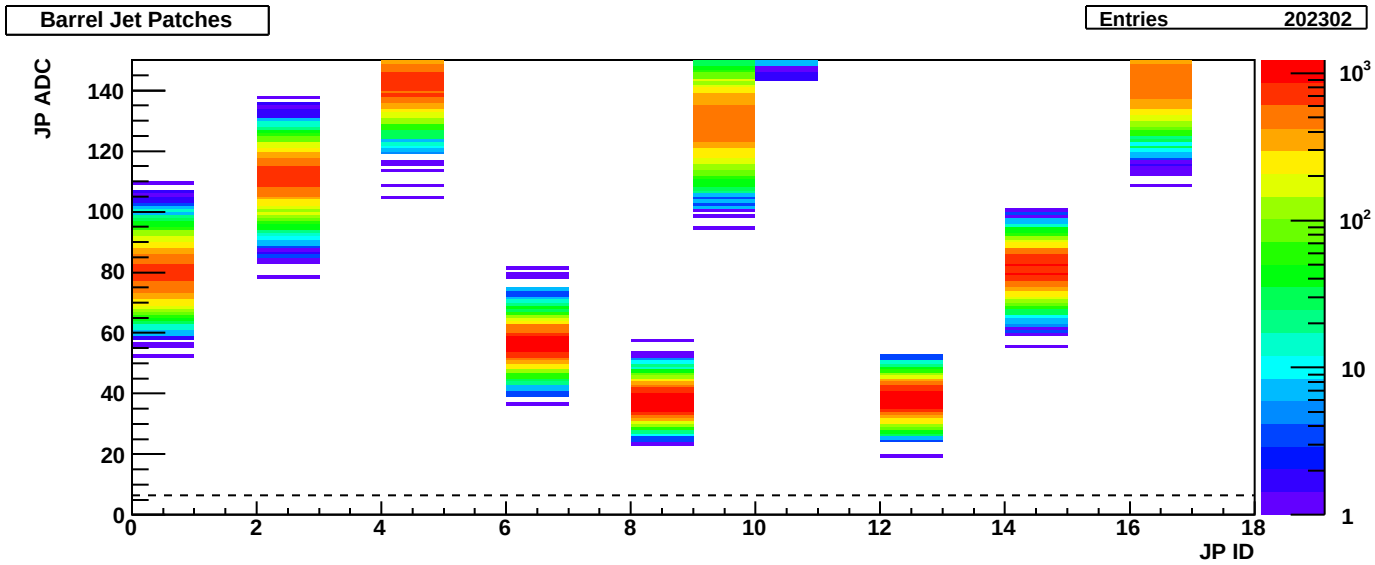
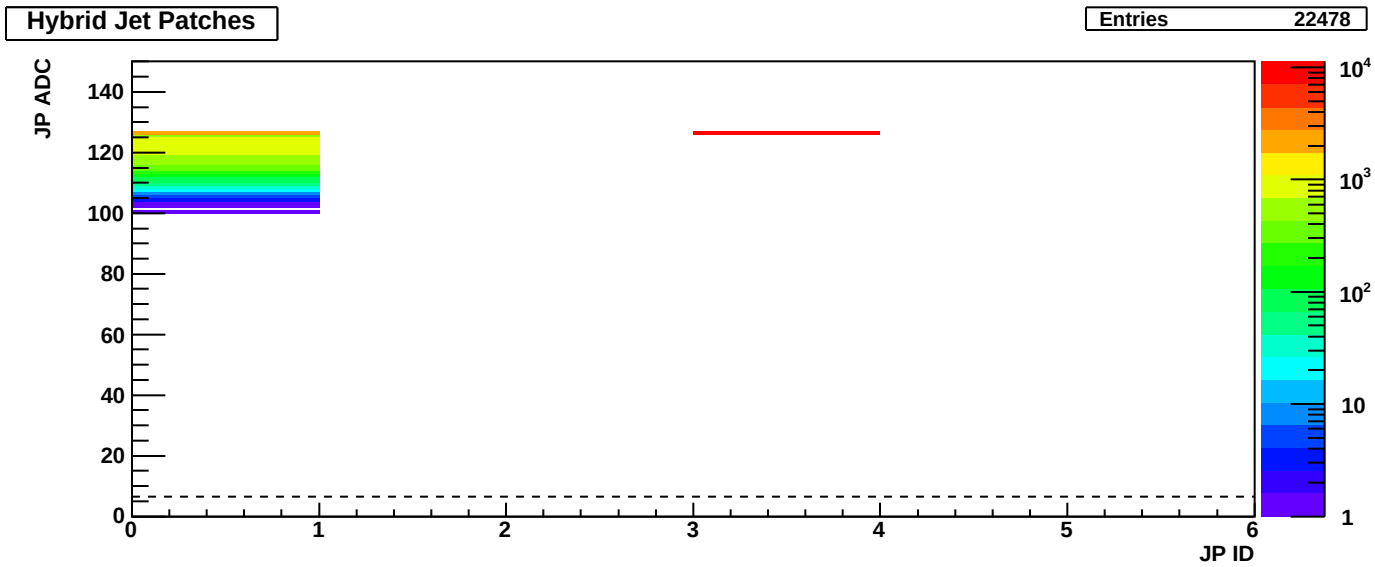

Barrel EMC L0 Input - High Tower
Entries 3371700
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

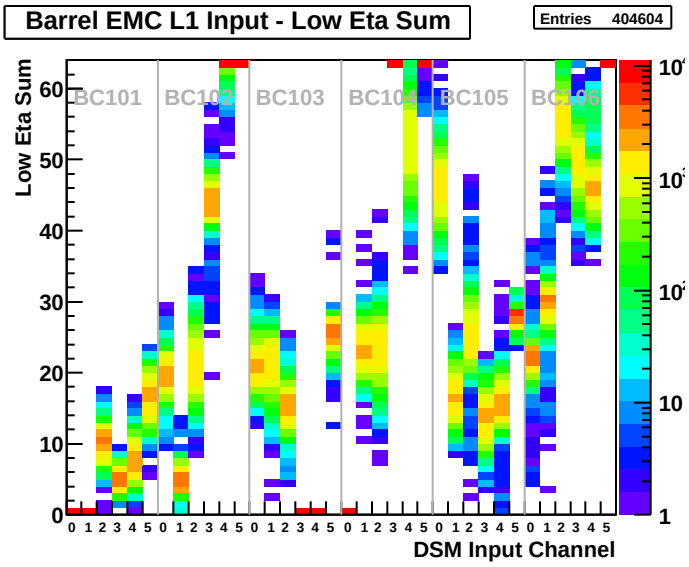

Barrel EMC L0 Input - Patch Sum
Entries 3371700
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

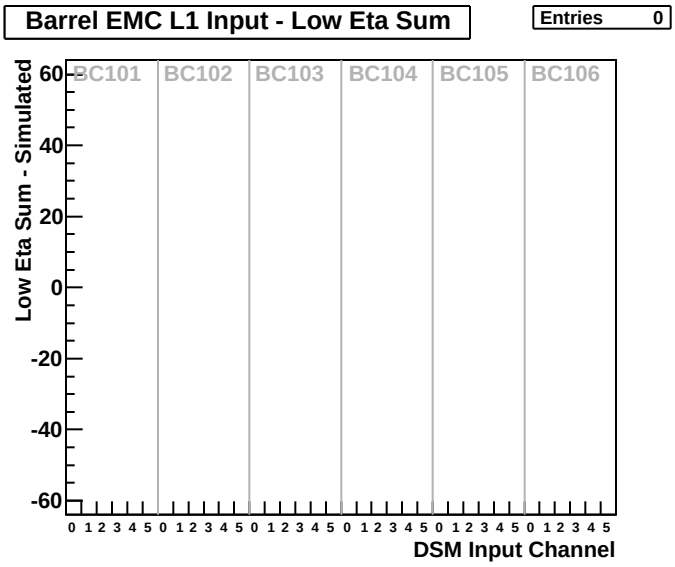

Endcap EMC L0 Input - High Tower
Entries 1011510
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

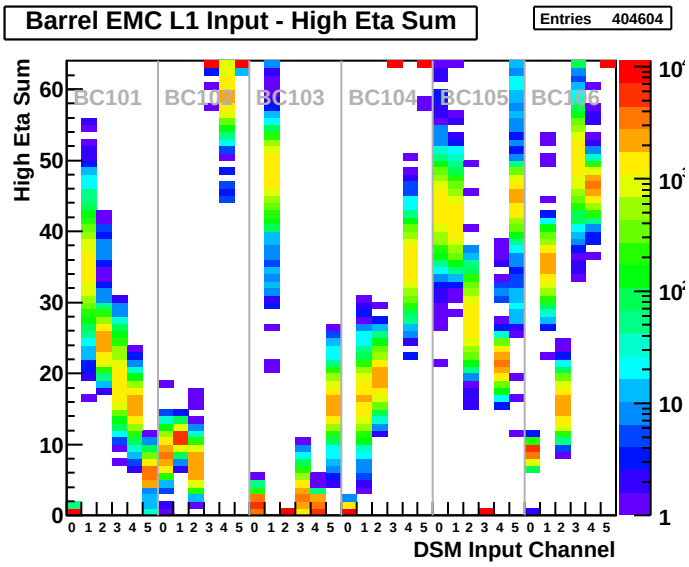

Endcap EMC L0 Input - Patch Sum
Entries 1011510
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

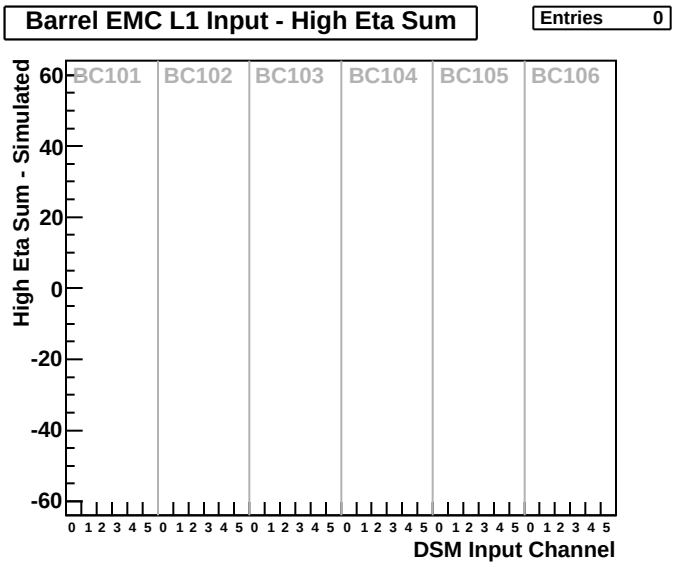

Barrel Jet Patches
Entries 202302
JP ADC
JP ID

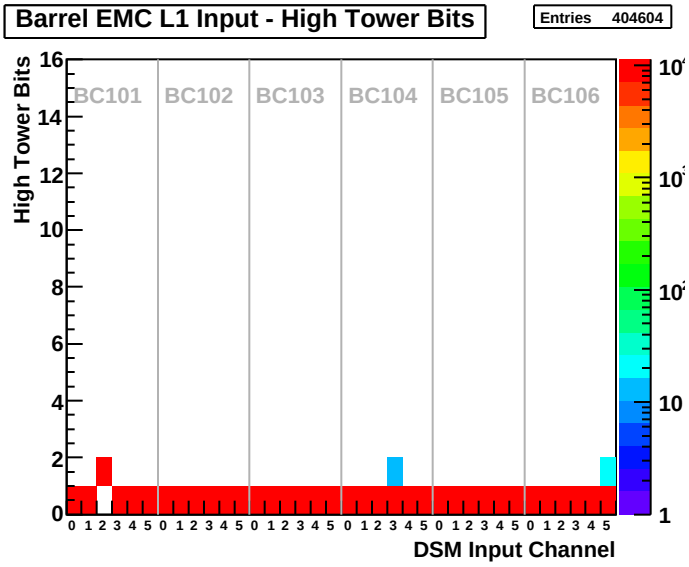

Hybrid Jet Patches
Entries 22478
JP ADC
JP ID

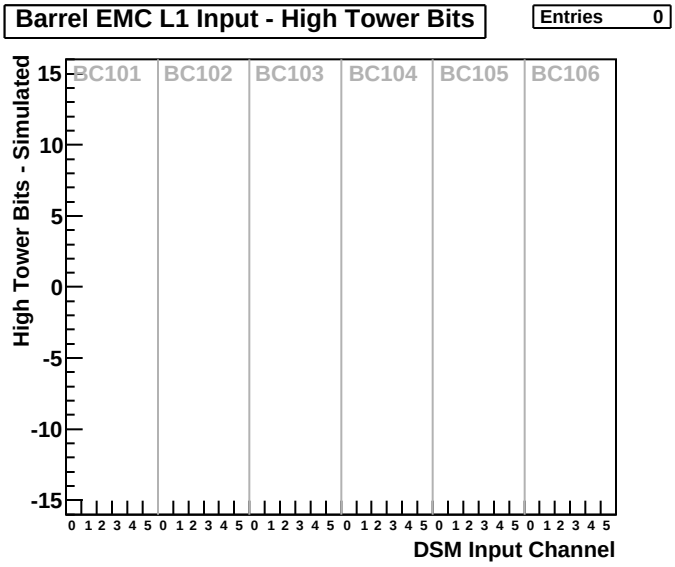

Barrel EMC L1 Input - Low Eta Sum
Entries 404604
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

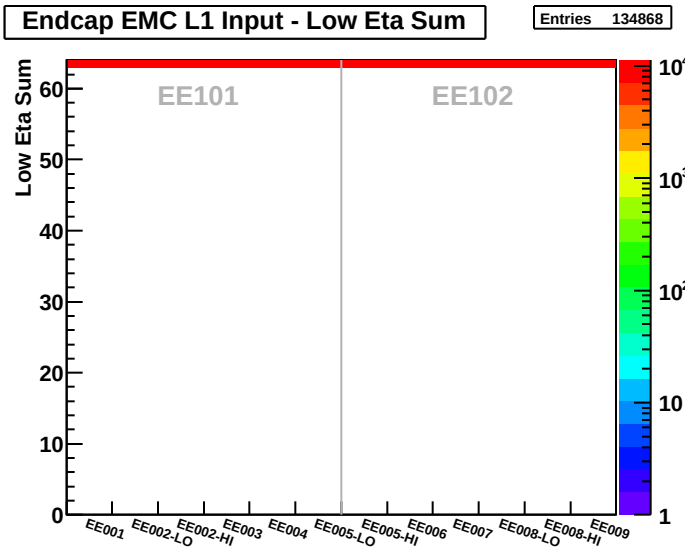

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

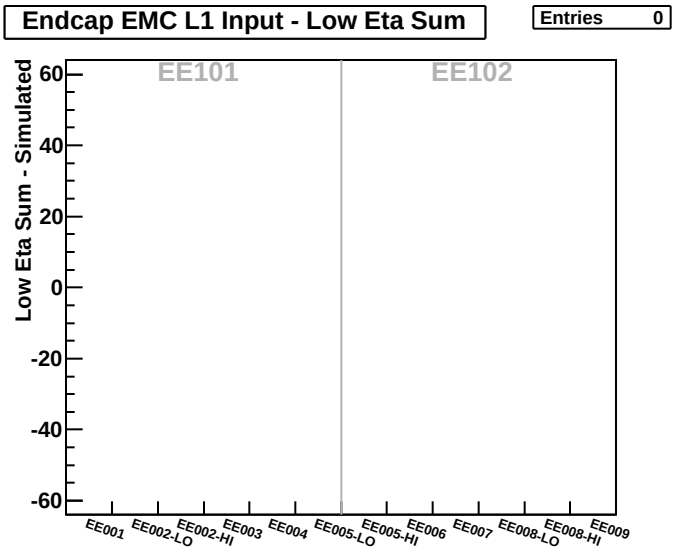

Barrel EMC L1 Input - High Eta Sum
Entries 404604
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

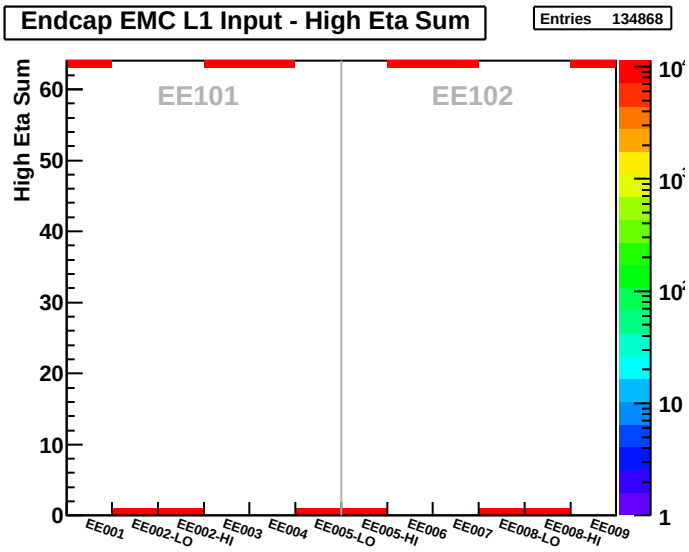

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

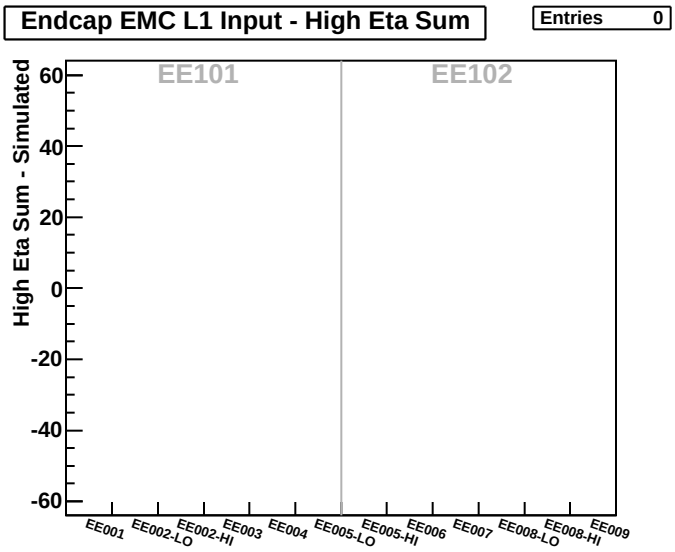

Barrel EMC L1 Input - High Tower Bits
Entries 404604
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

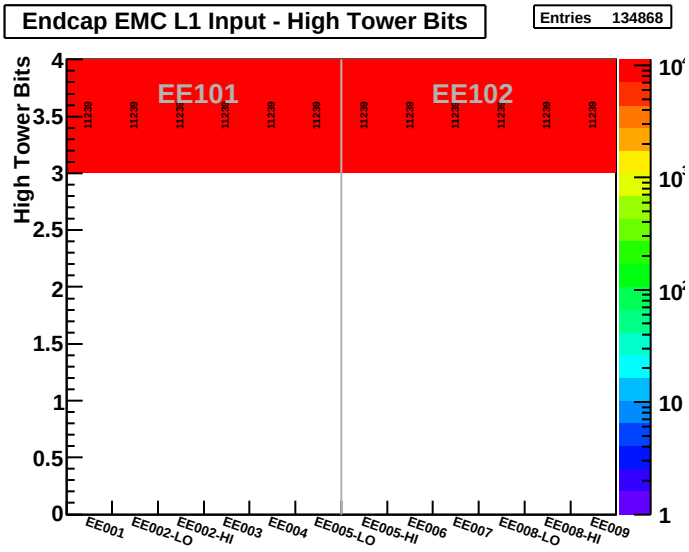

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

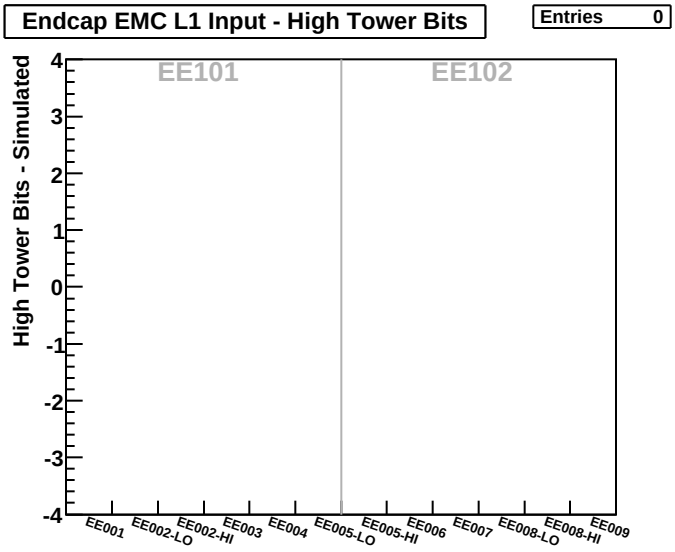

Endcap EMC L1 Input - Low Eta Sum
Entries 134868
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

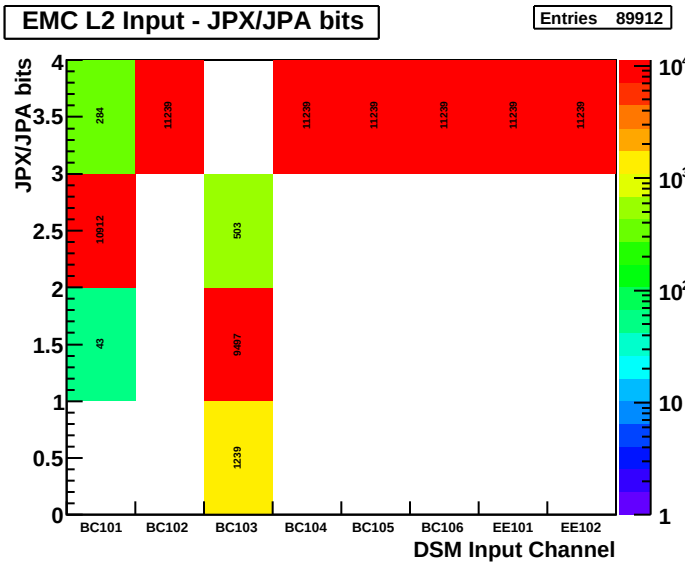

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

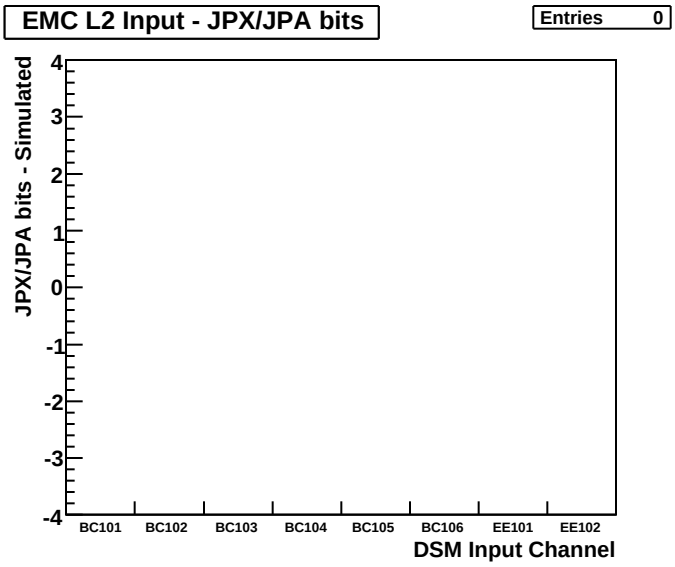

Endcap EMC L1 Input - High Eta Sum
Entries 134868
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

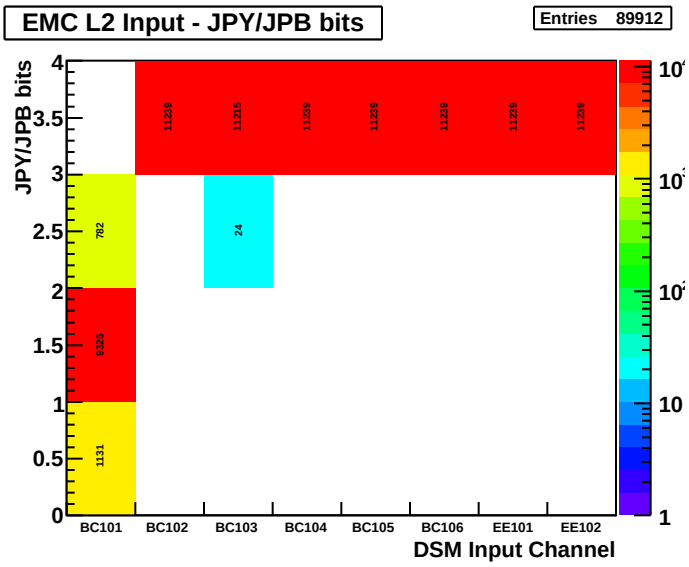

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

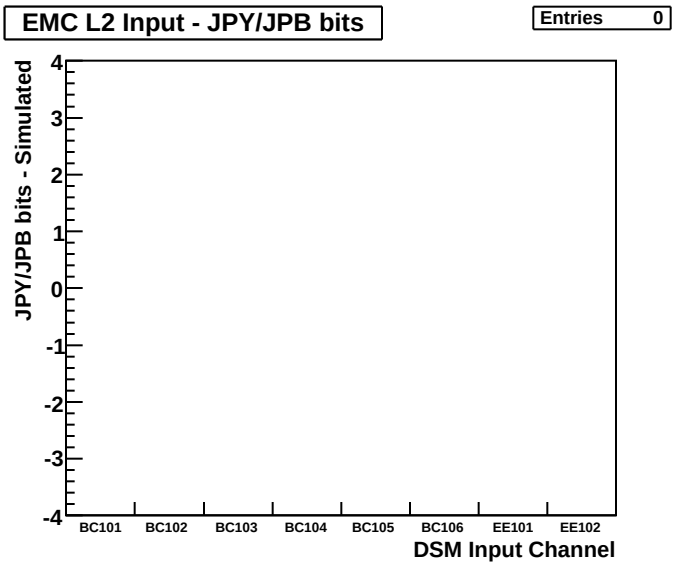

Endcap EMC L1 Input - High Tower Bits
Entries 134868
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

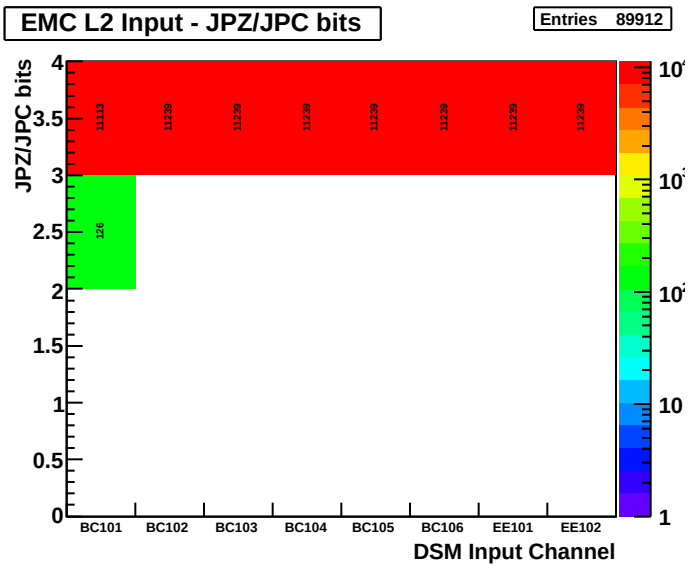

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

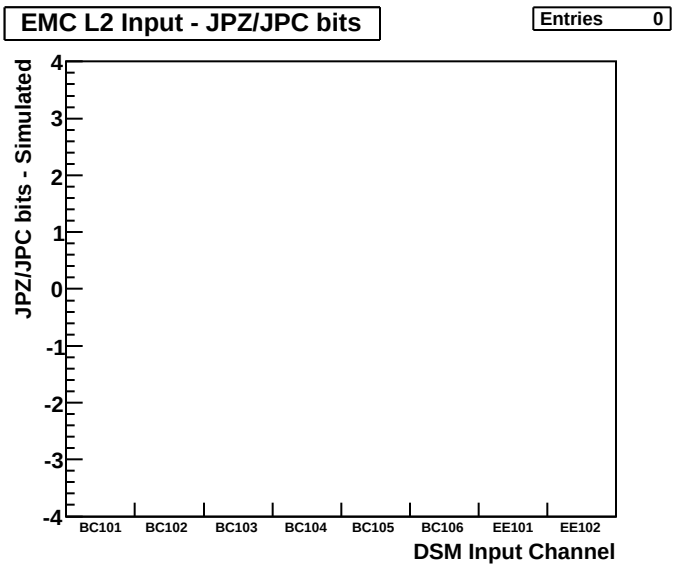

EMC L2 Input - JPX/JPA bits
Entries 89912
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
284
11239
11239 11239 11239 11239 11239
10912
503
43
9497
1239

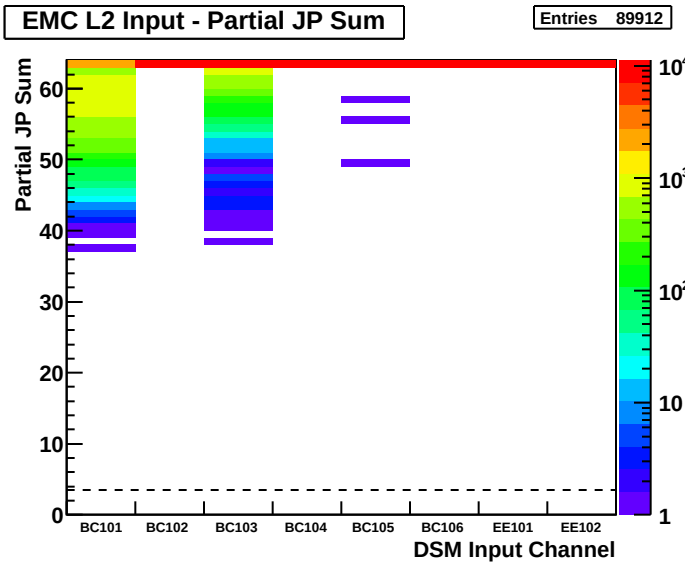

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

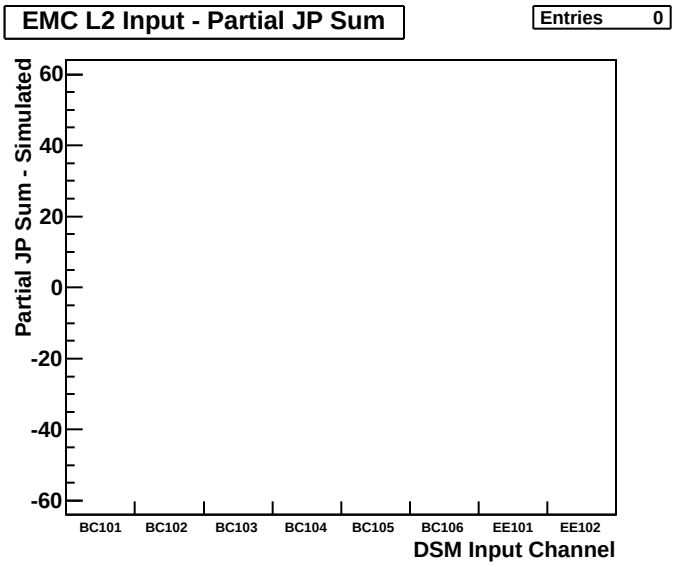

EMC L2 Input - JPY/JPB bits
Entries 89912
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
11239
11215
11239 11239 11239 11239 11239
782
24
9326
1131

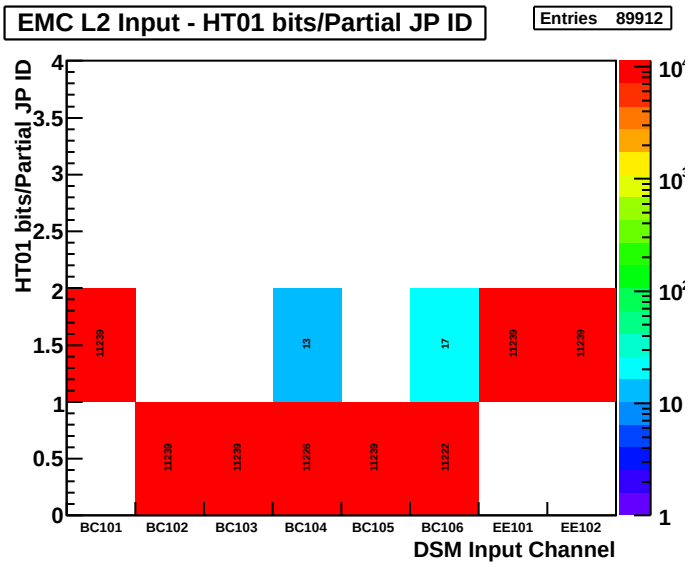

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

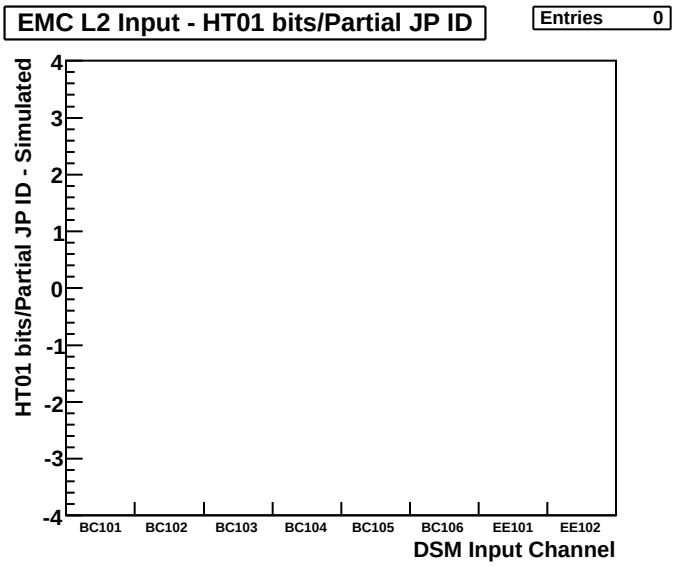

EMC L2 Input - JPZ/JPC bits
Entries 89912
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
11113
11239
11239 11239 11239 11239 11239
126

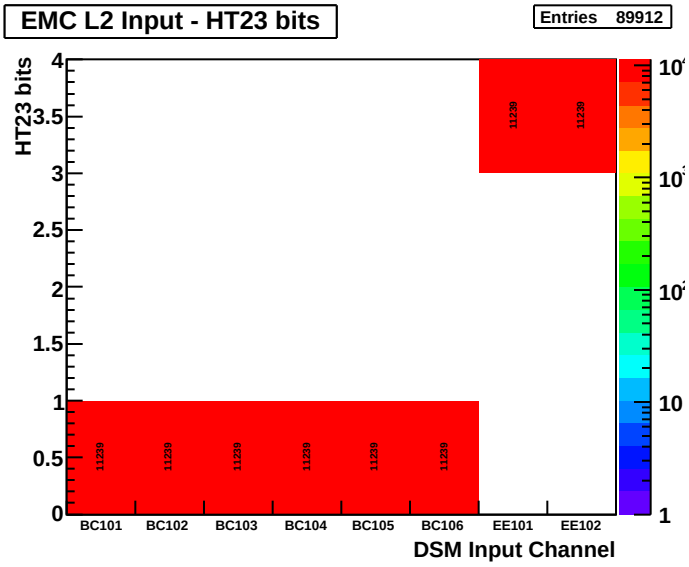

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

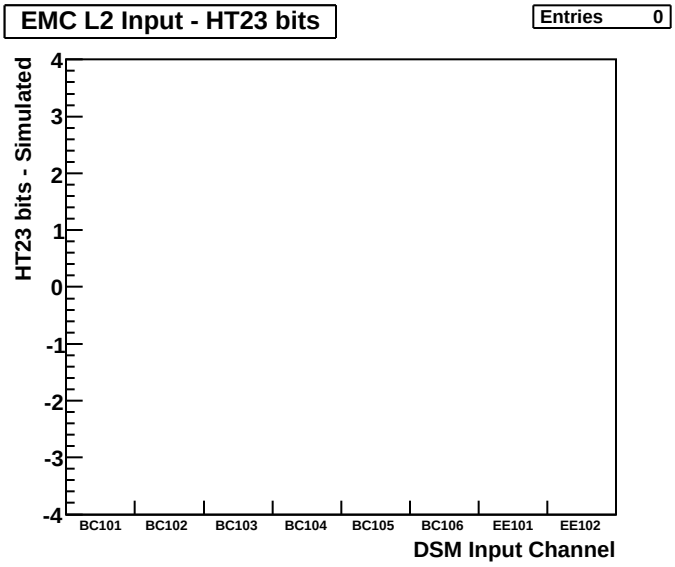

EMC L2 Input - Partial JP Sum
Entries 89912
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

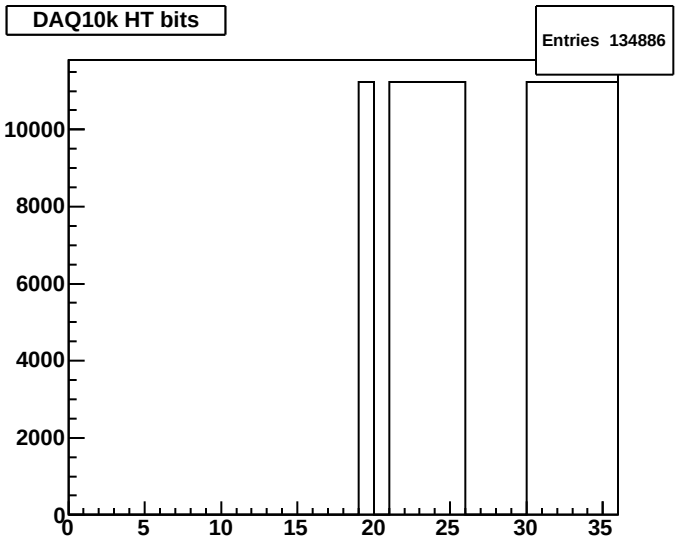

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

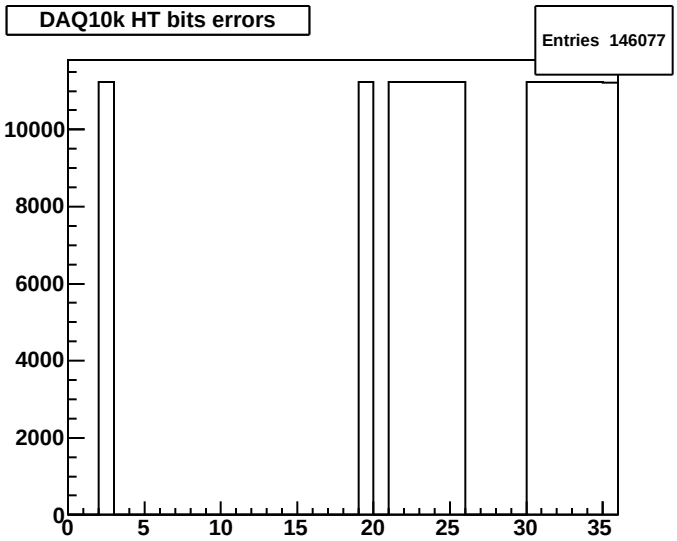

EMC L2 Input - HT01 bits/Partial JP ID
Entries 89912
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

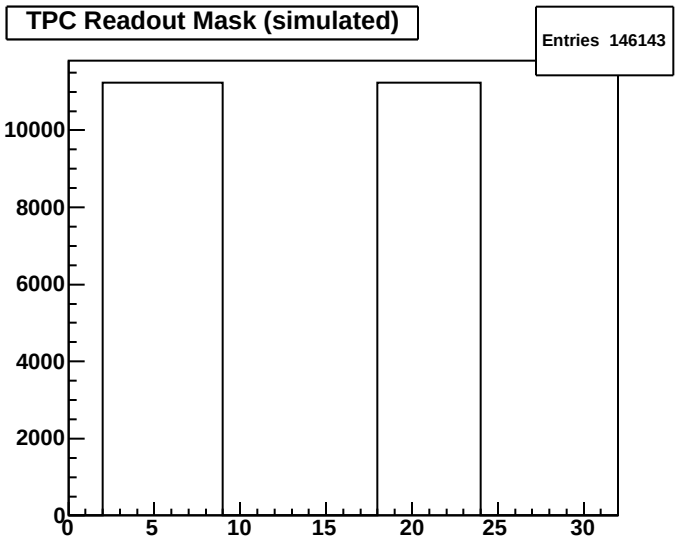

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

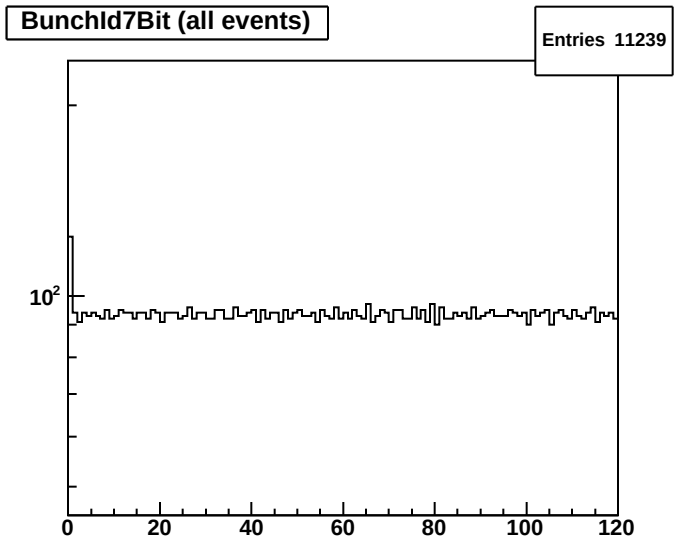

EMC L2 Input - HT23 bits
Entries 89912
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

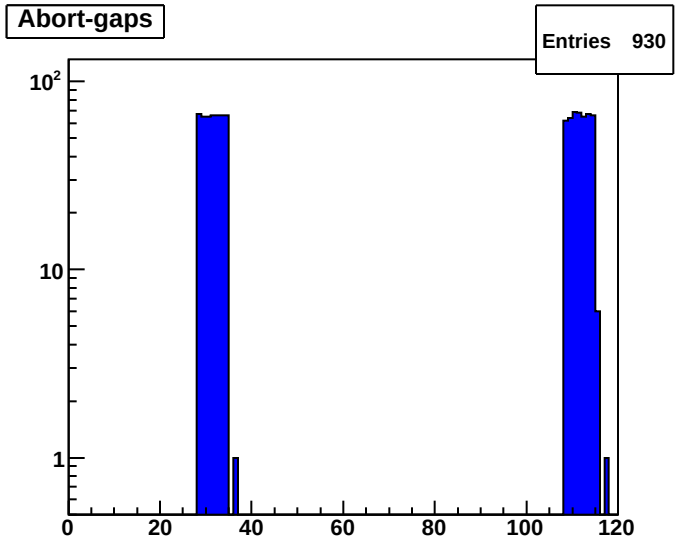

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

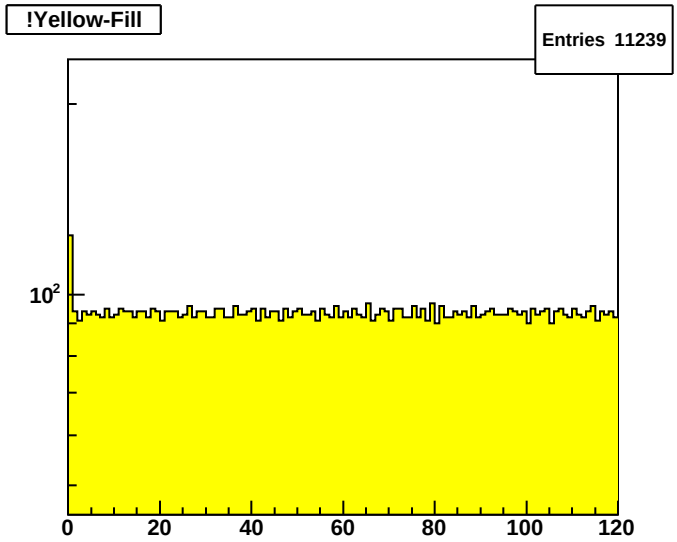

DAQ10k HT bits
Entries 134886
10000
8000
6000
4000
2000
0
0 5 10 15 20 25 30 35

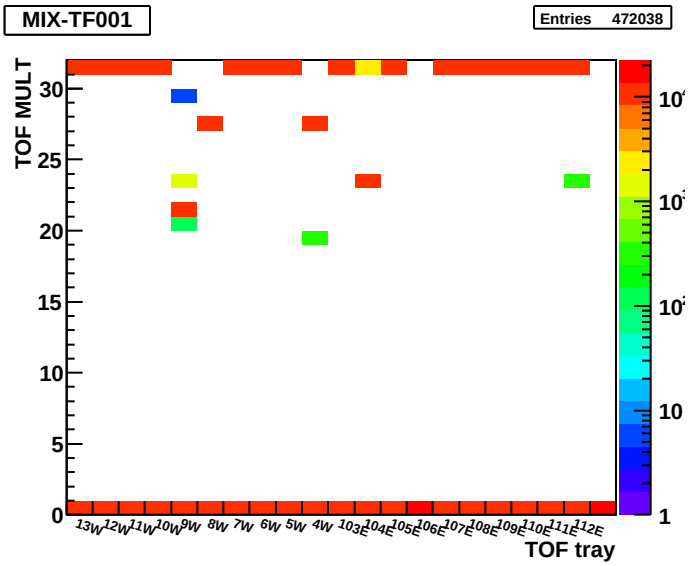

DAQ10k HT bits errors
Entries 146077
10000
8000
6000
4000
2000
0
0 5 10 15 20 25 30 35

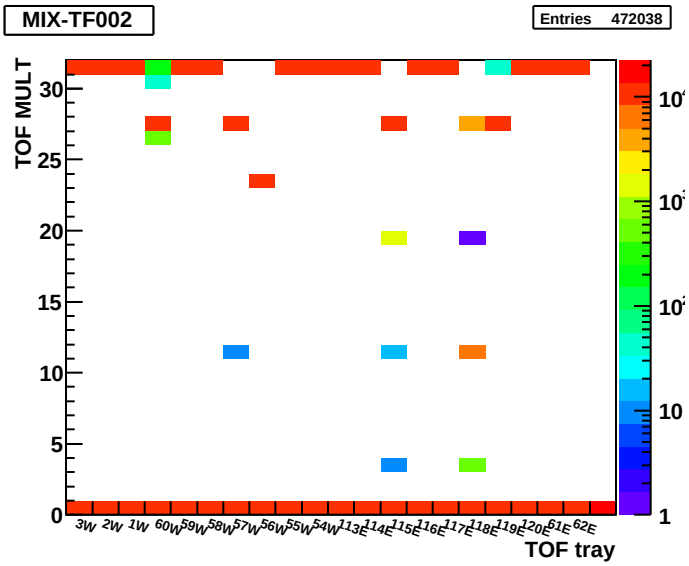

TPC Readout Mask (simulated)
Entries 146143
10000
8000
6000
4000
2000
0
0 5 10 15 20 25 30

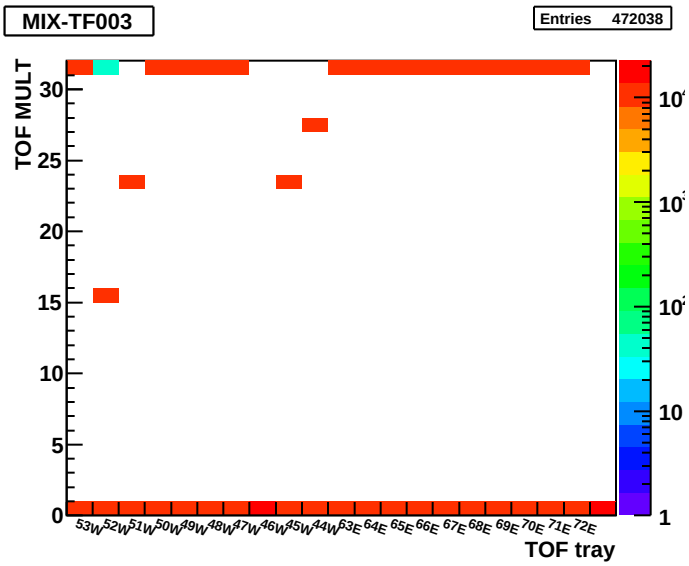

BunchId7Bit (all events)
Entries 11239
10^2
0 20 40 60 80 100 120

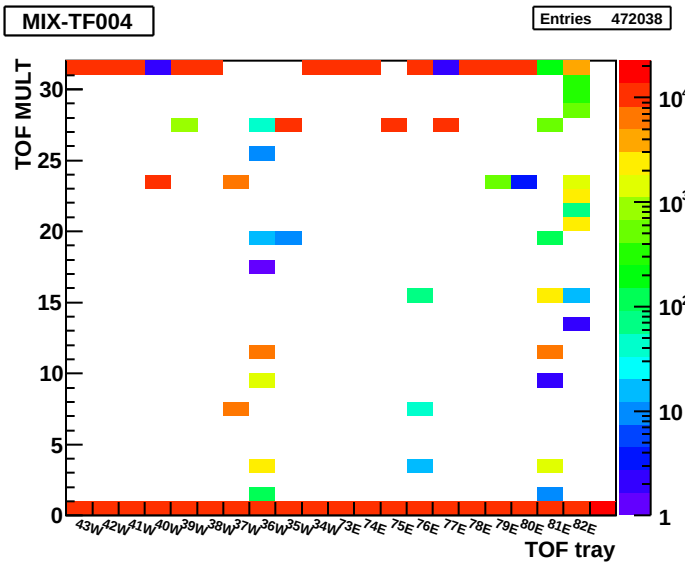

Abort-gaps
Entries 930
10^2
10
1
0 20 40 60 80 100 120

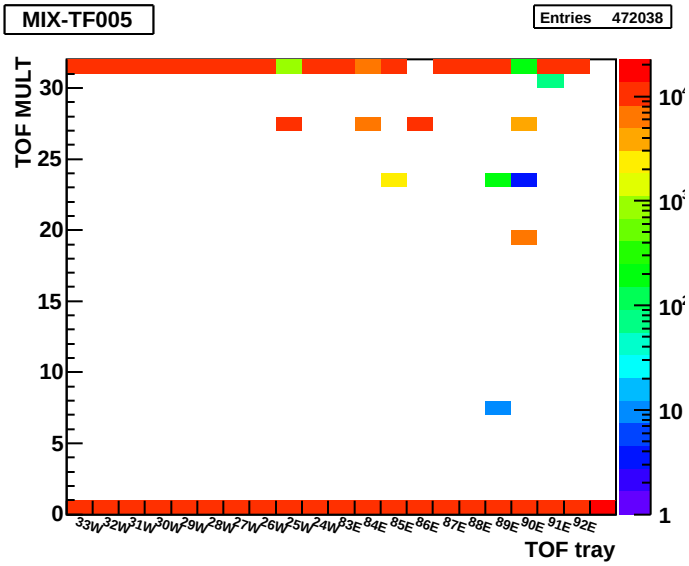

!Yellow-Fill
Entries 11239
10^2
0 20 40 60 80 100 120

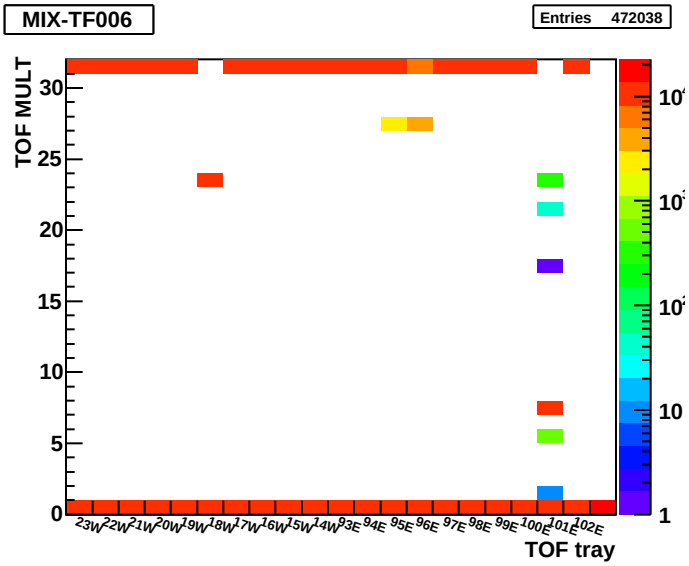

MIX-TF001
Entries 472038
TOF MULT
TOF tray

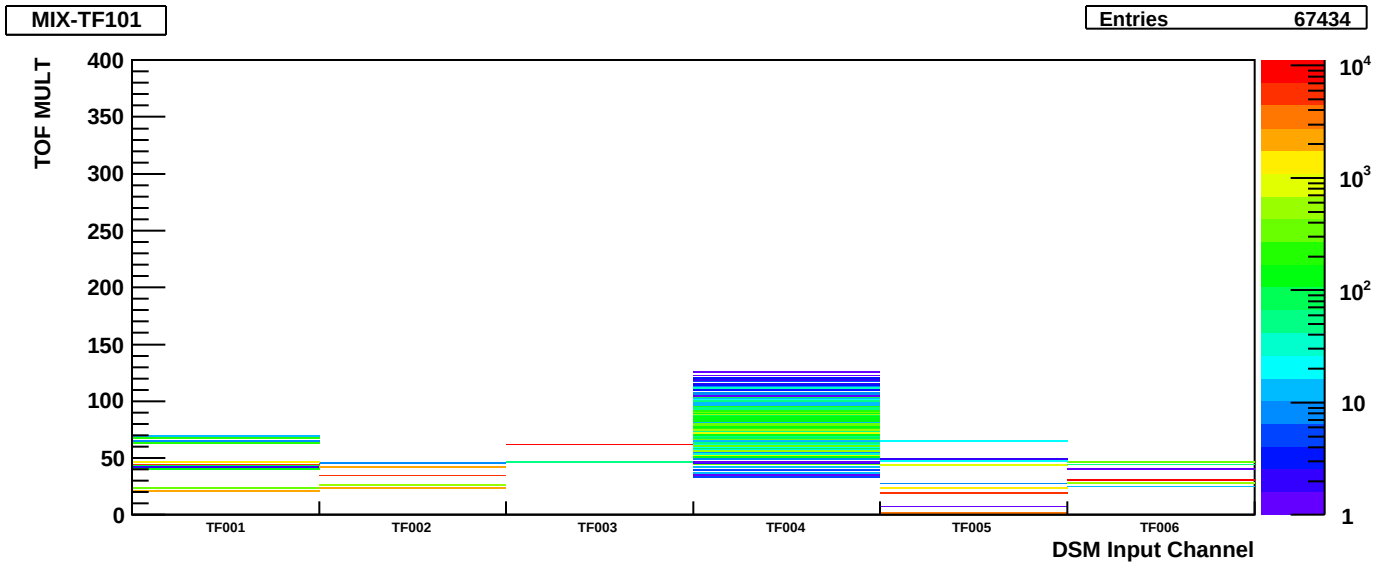

MIX-TF002
Entries 472038
TOF MULT
TOF tray

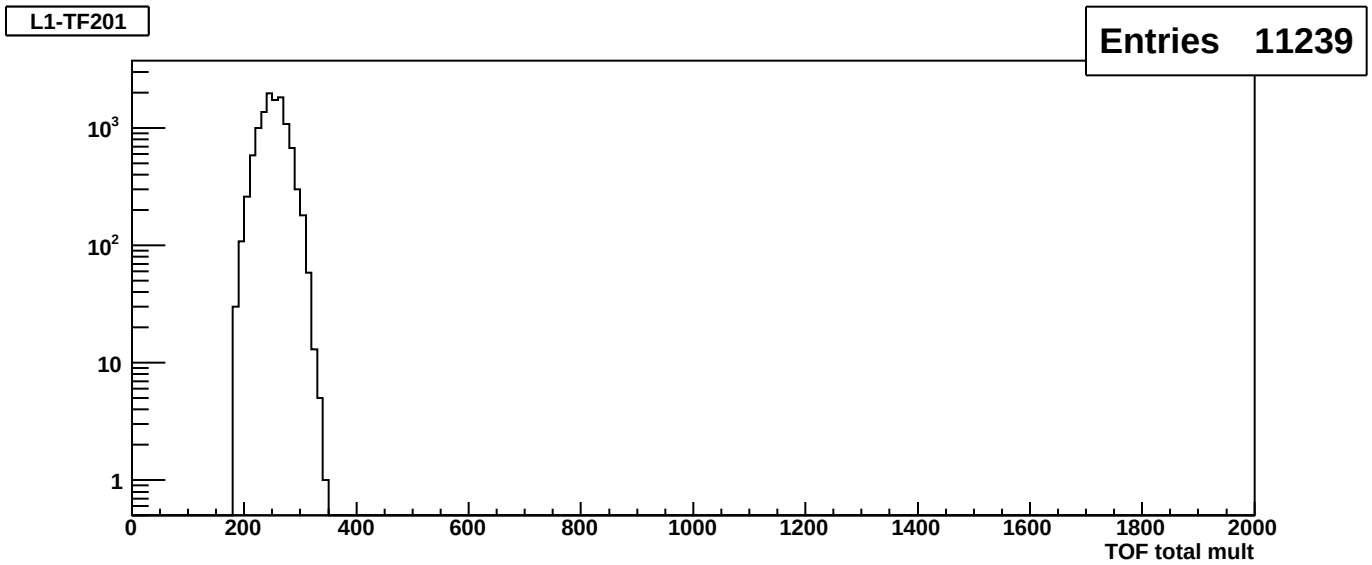

MIX-TF003
Entries 472038
TOF MULT
TOF tray

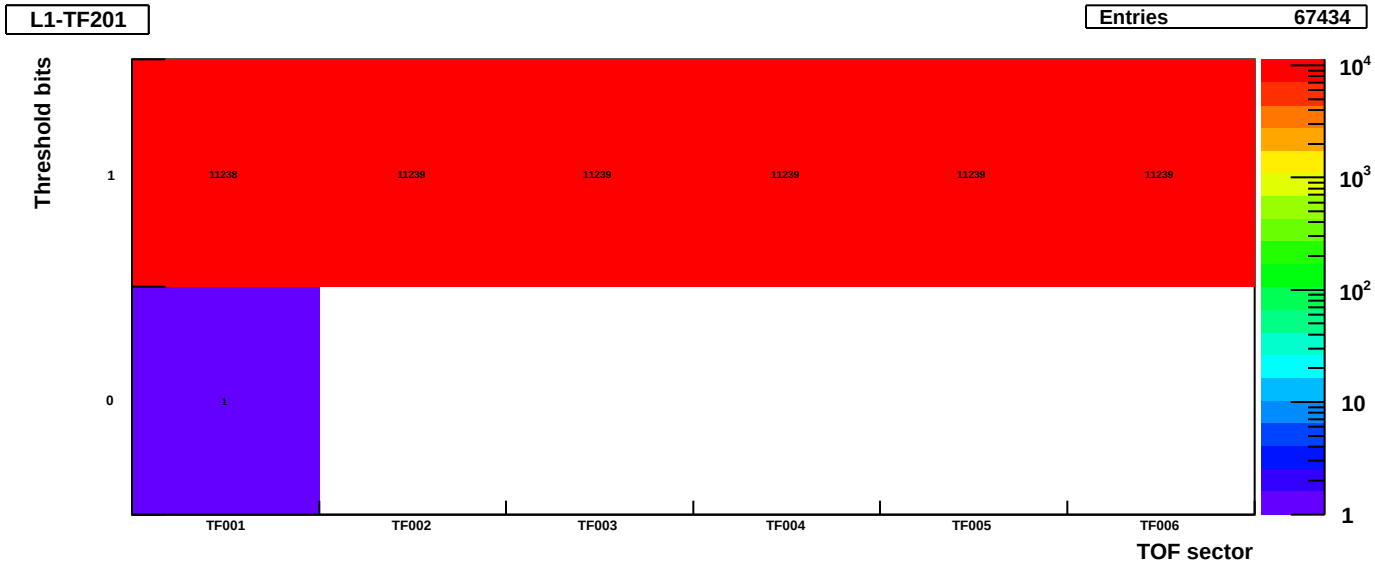

MIX-TF004
Entries 472038
TOF MULT
TOF tray

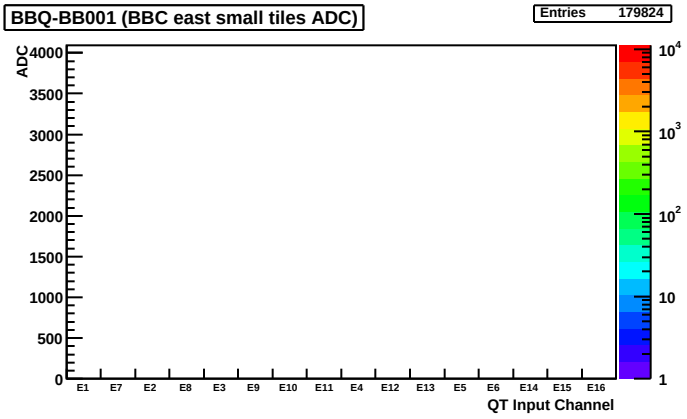

MIX-TF005
Entries 472038
TOF MULT
TOF tray

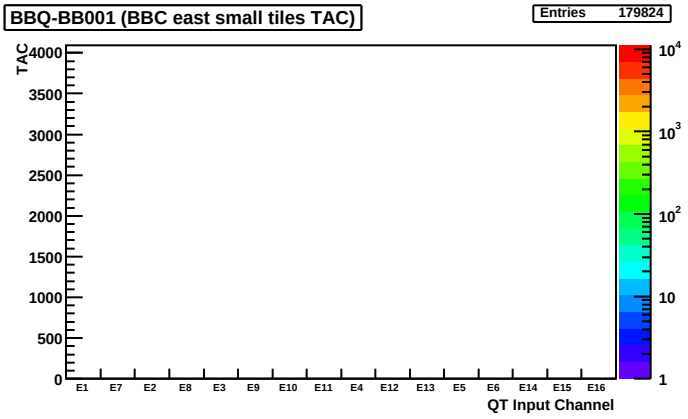

MIX-TF006
Entries 472038
TOF MULT
TOF tray

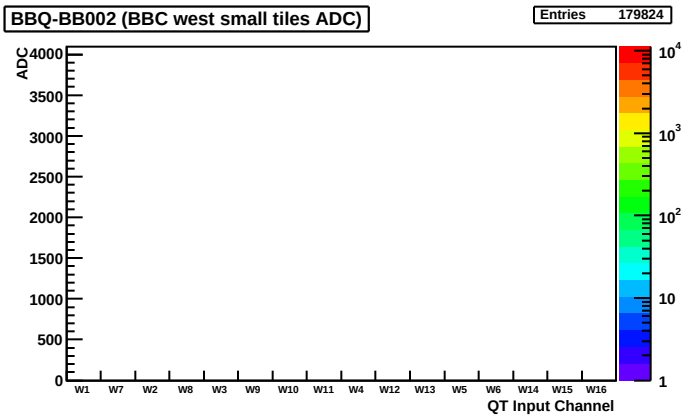

MIX-TF101
Entries 67434
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

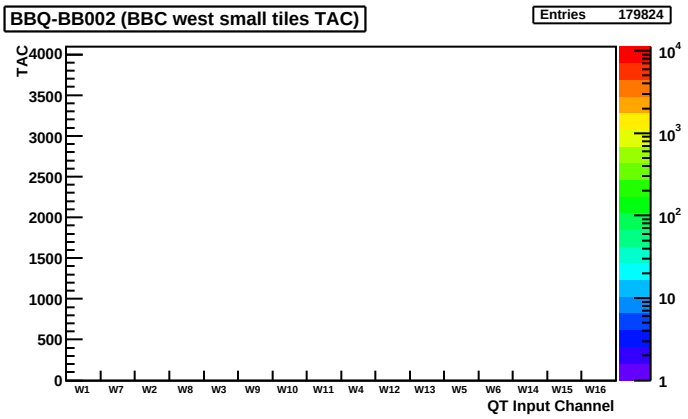

L1-TF201
Entries 11239
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

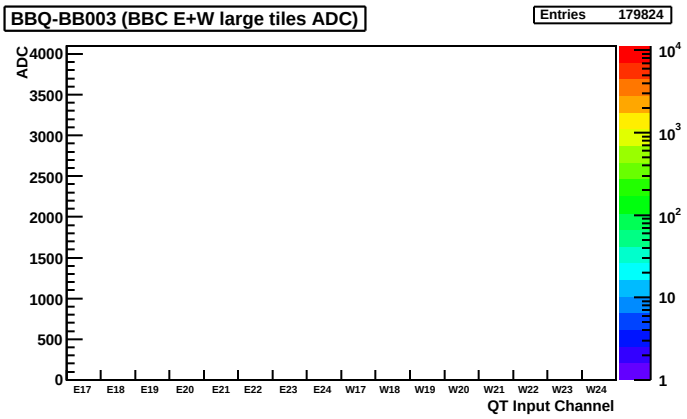

L1-TF201
Entries 67434
Threshold bits
1
0
11238
11239
11239
11239
11239
11239
1
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2
10
1

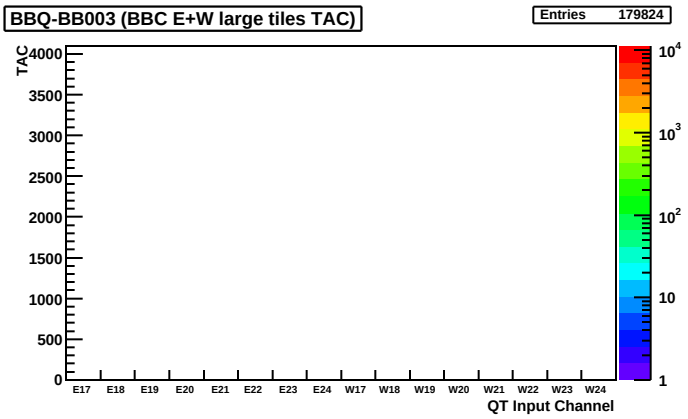

BBQ-BB001 (BBC east small tiles ADC)
Entries 179824
ADC
QT Input Channel

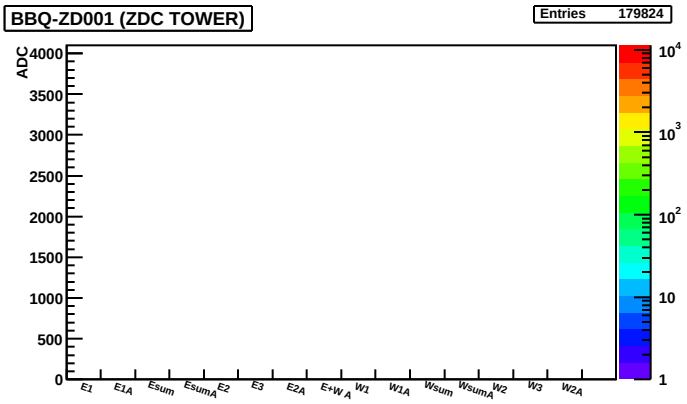

BBQ-BB001 (BBC east small tiles TAC)
Entries 179824
TAC
QT Input Channel

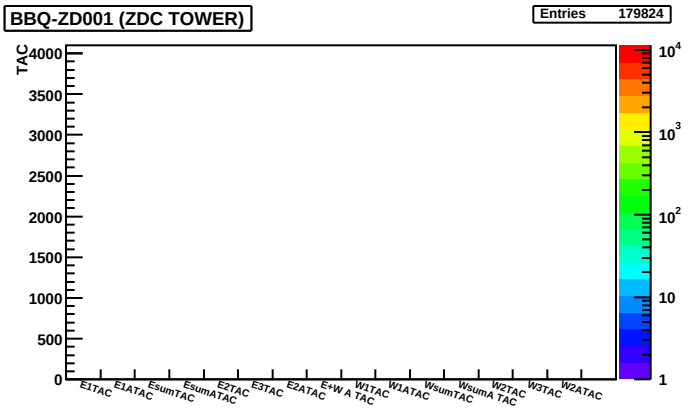

BBQ-BB002 (BBC west small tiles ADC)
Entries 179824
ADC
QT Input Channel

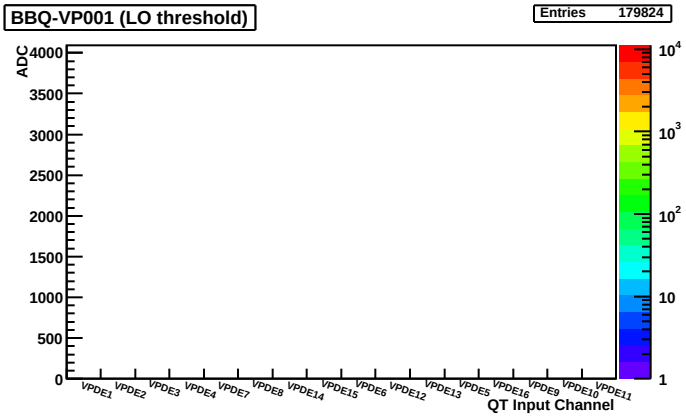

BBQ-BB002 (BBC west small tiles TAC)
Entries 179824
TAC
QT Input Channel

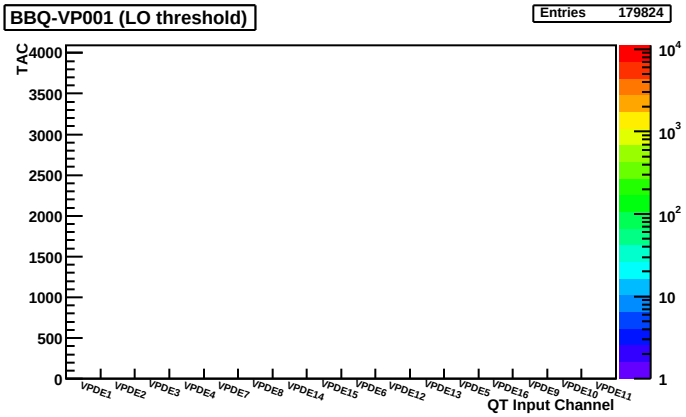

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 179824
ADC
QT Input Channel

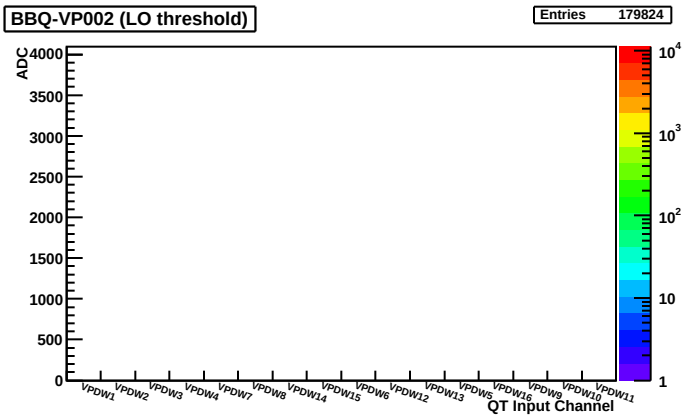

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 179824
TAC
QT Input Channel

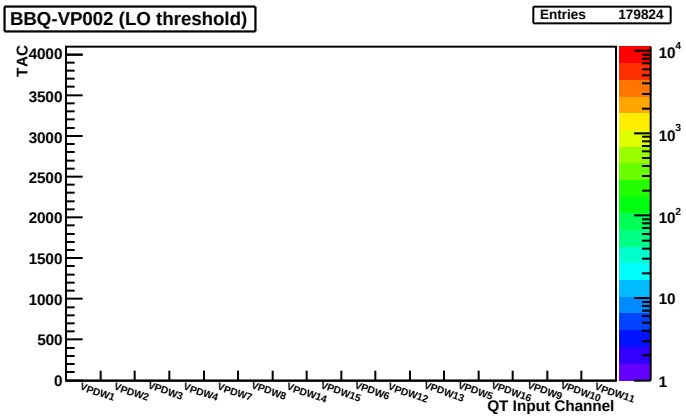

BBQ-ZD001 (ZDC TOWER)
Entries 179824
ADC

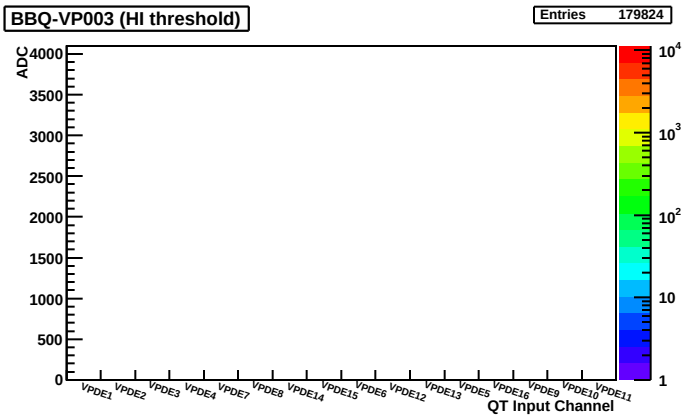

BBQ-ZD001 (ZDC TOWER)
Entries 179824
TAC

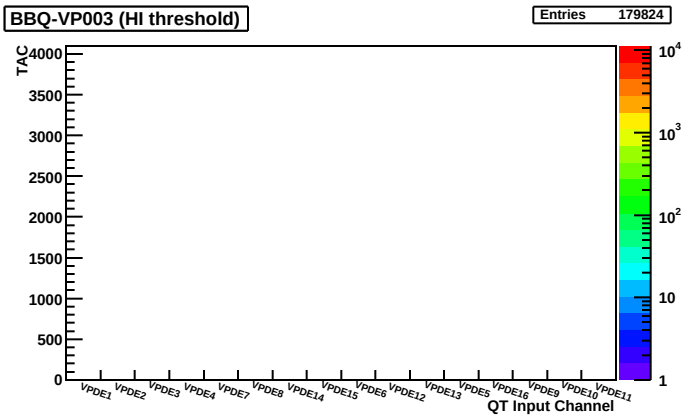

BBQ-VP001 (LO threshold)
Entries 179824
ADC
QT Input Channel

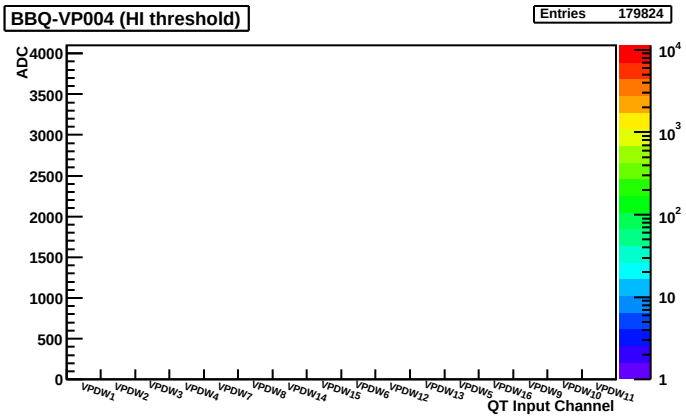

BBQ-VP001 (LO threshold)
Entries 179824
TAC
QT Input Channel

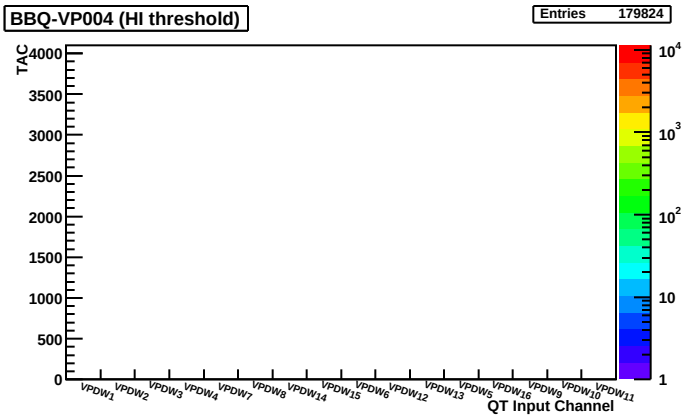

BBQ-VP002 (LO threshold)
Entries 179824
ADC
QT Input Channel

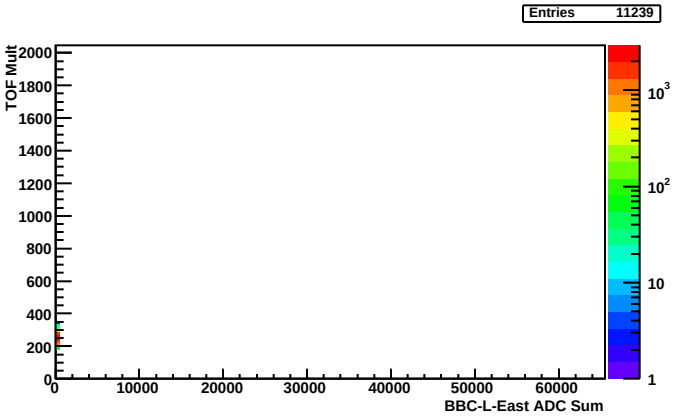

BBQ-VP002 (LO threshold)
Entries 179824
TAC
QT Input Channel

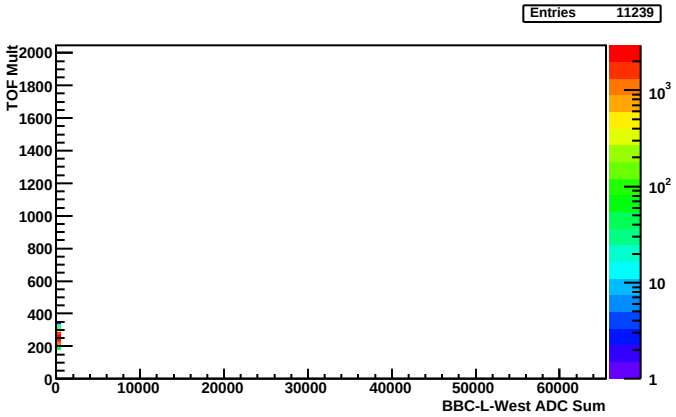

BBQ-VP003 (HI threshold)
Entries 179824
ADC
QT Input Channel

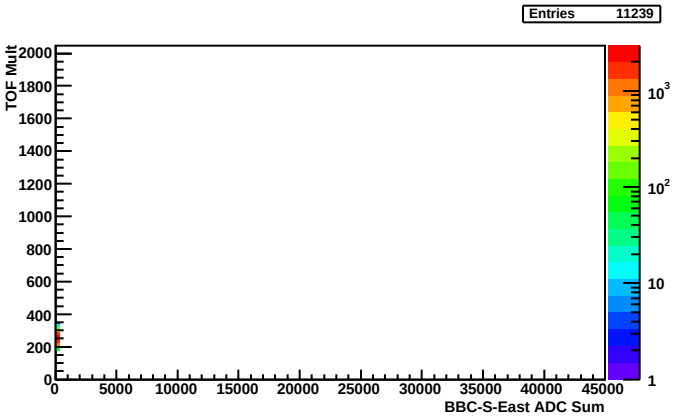

BBQ-VP003 (HI threshold)
Entries 179824
TAC
QT Input Channel

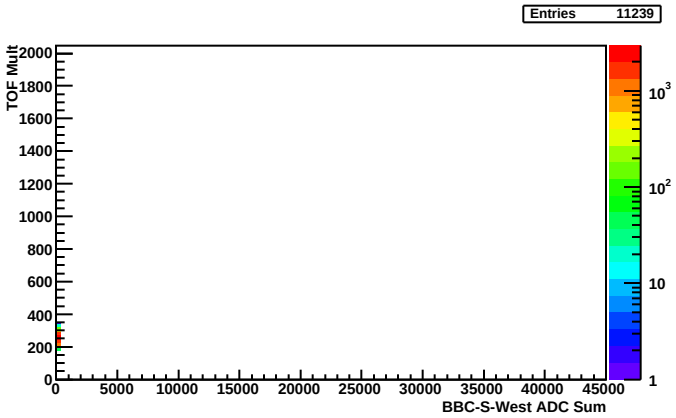

BBQ-VP004 (HI threshold)
Entries 179824
ADC
QT Input Channel

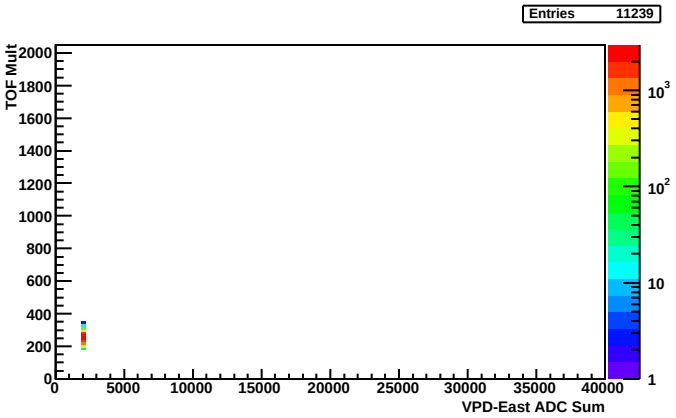

BBQ-VP004 (HI threshold)
Entries 179824
TAC
QT Input Channel

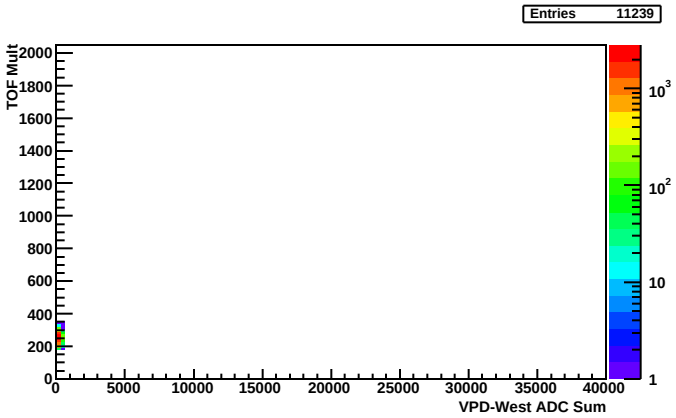

Entries 11239
TOF Mult
BBC-L-East ADC Sum

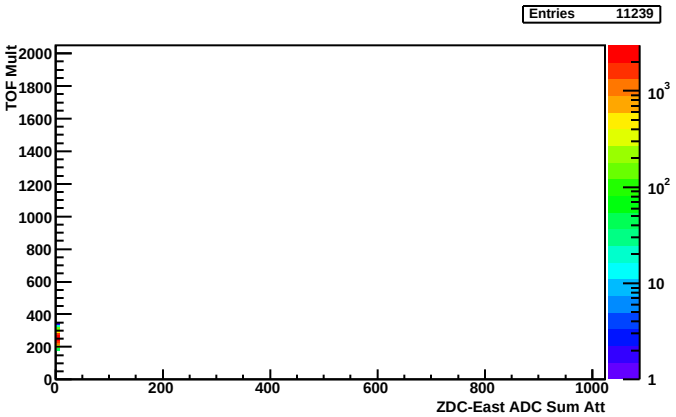

Entries 11239
TOF Mult
BBC-L-West ADC Sum

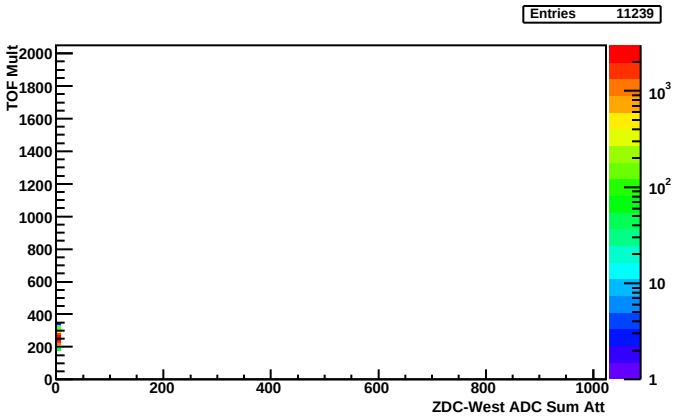

Entries 11239
TOF Mult
BBC-S-East ADC Sum

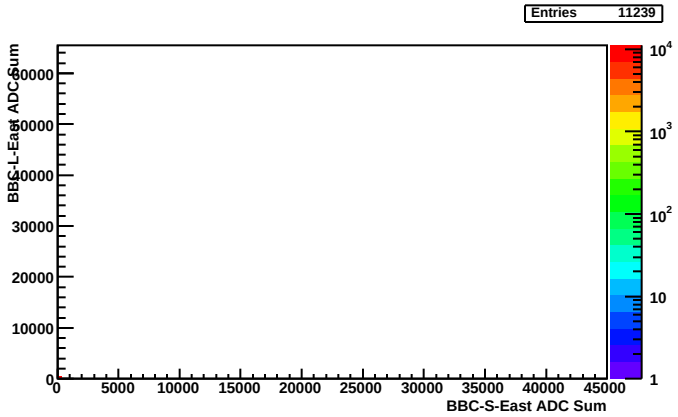

Entries 11239
TOF Mult
BBC-S-West ADC Sum

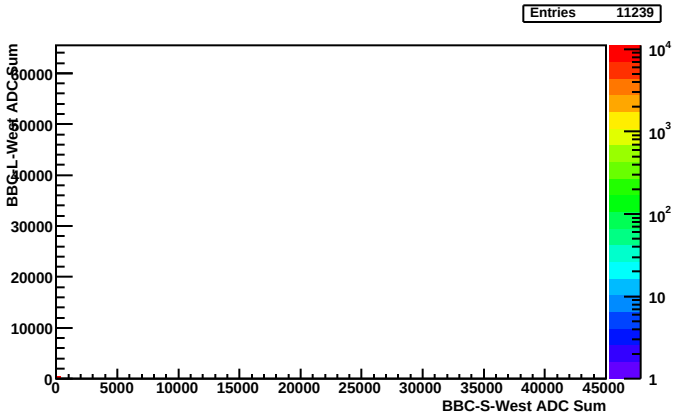

Entries 11239
TOF Mult
VPD-East ADC Sum

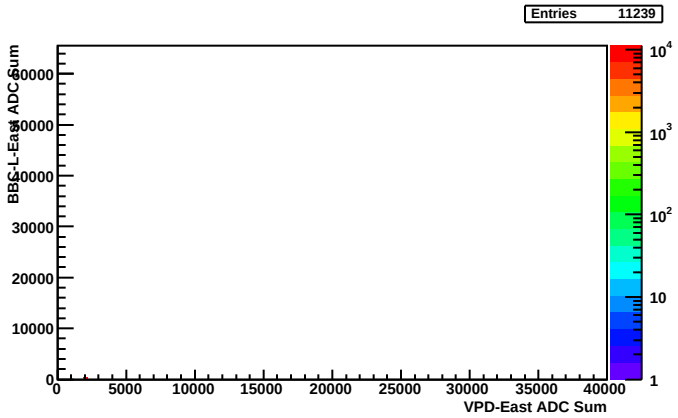

Entries 11239
TOF Mult
VPD-West ADC Sum

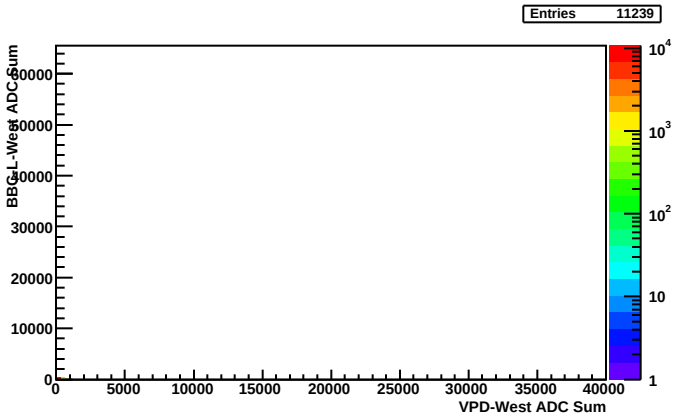

Entries 11239
TOF Mult
ZDC-East ADC Sum Att

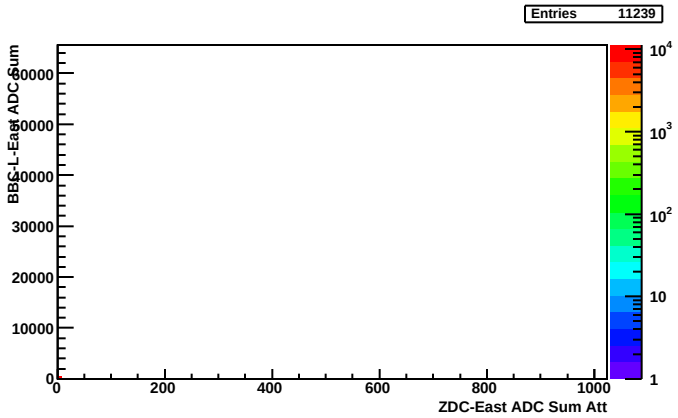

Entries 11239
TOF Mult
ZDC-West ADC Sum Att

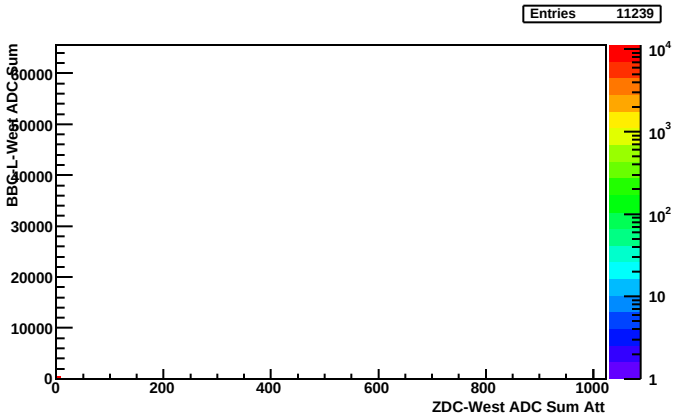

Entries 11239
BBC-L-East ADC Sum
BBC-S-East ADC Sum

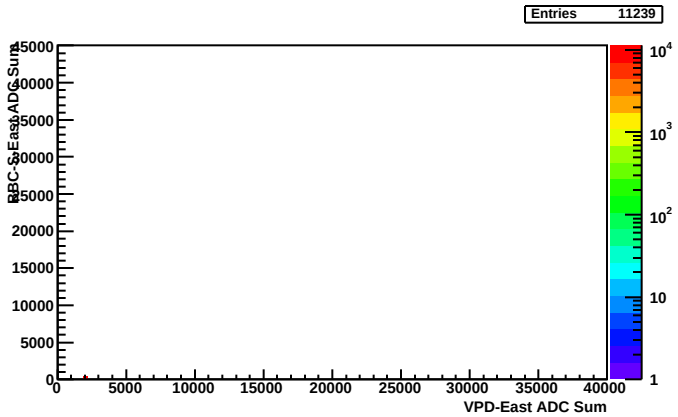

Entries 11239
BBC-L-West ADC Sum
BBC-S-West ADC Sum

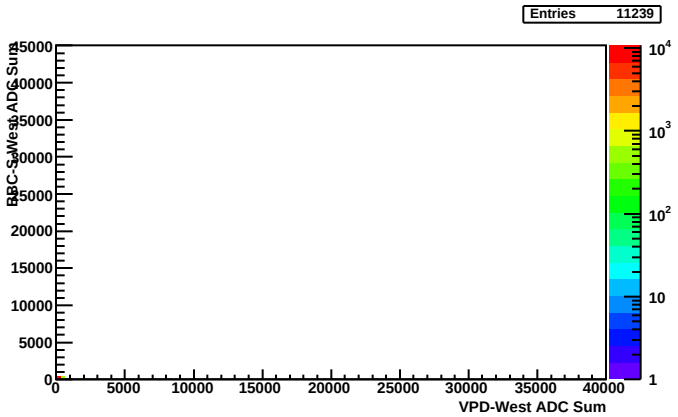

Entries 11239
BBC-L-East ADC Sum
VPD-East ADC Sum

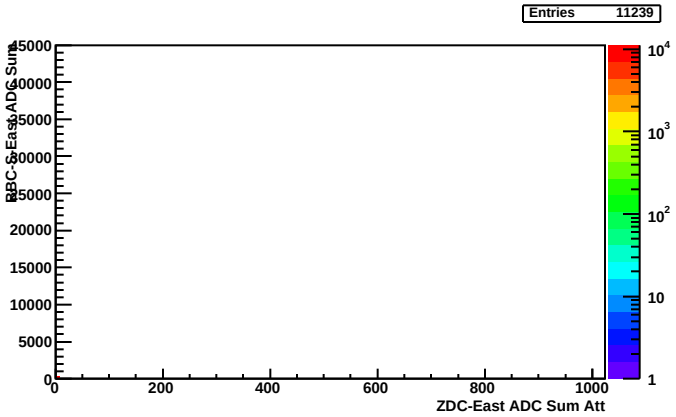

Entries 11239
BBC-L-West ADC Sum
VPD-West ADC Sum

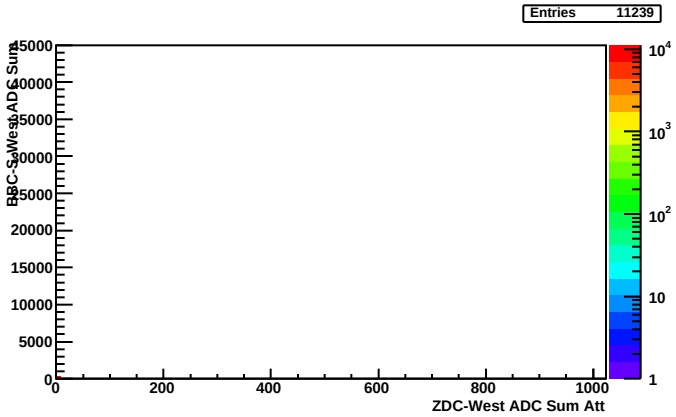

Entries 11239
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

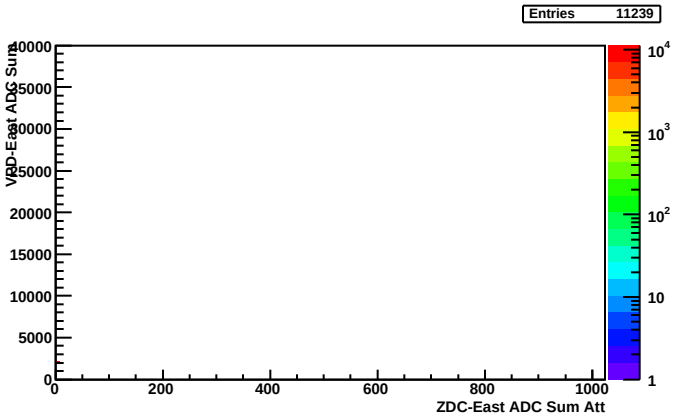

Entries 11239
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

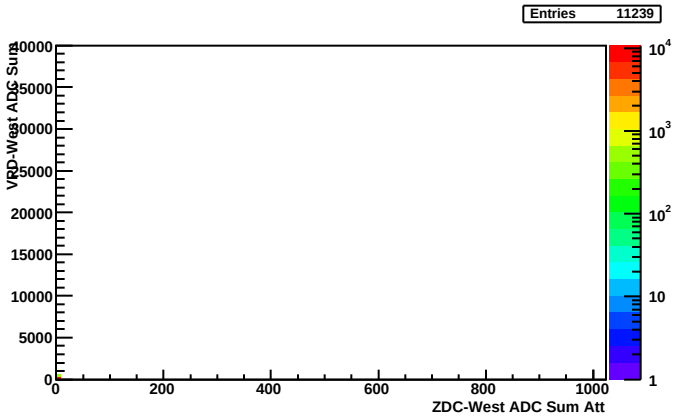

Entries 11239
BBC-S-East ADC Sum
VPD-East ADC Sum

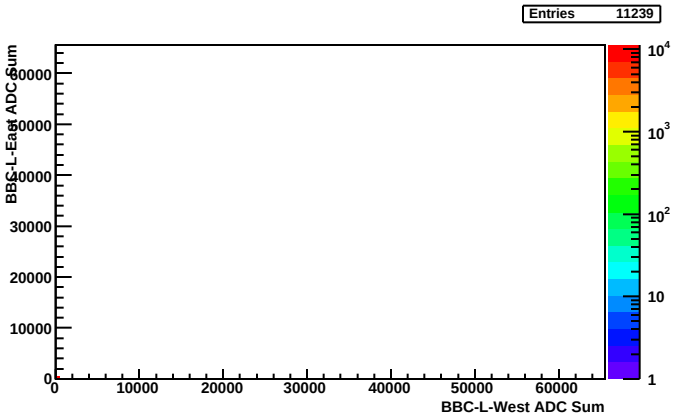

Entries 11239
BBC-S-West ADC Sum
VPD-West ADC Sum

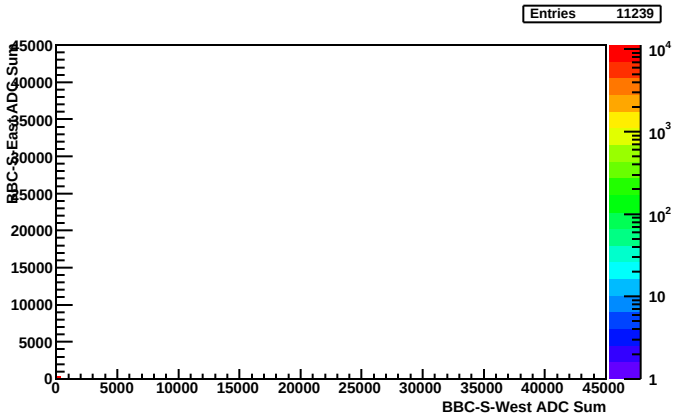

Entries 11239
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

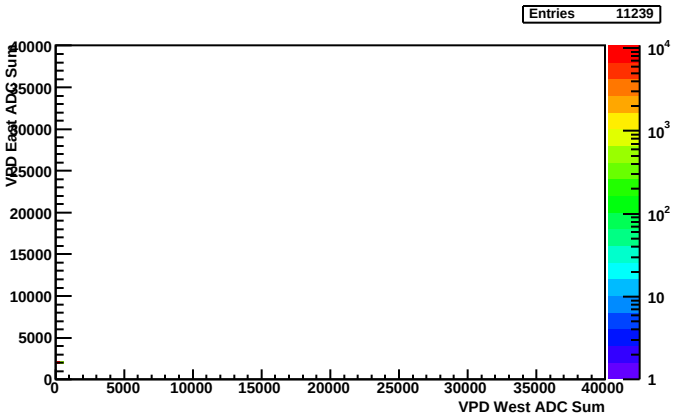

Entries 11239
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

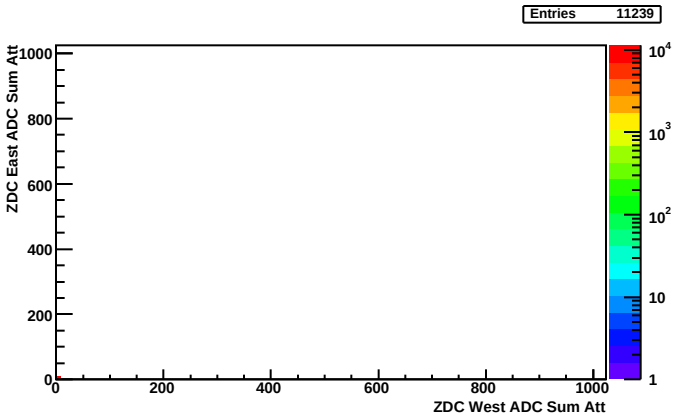

Entries 11239
VPD-East ADC Sum
ZDC-East ADC Sum Att

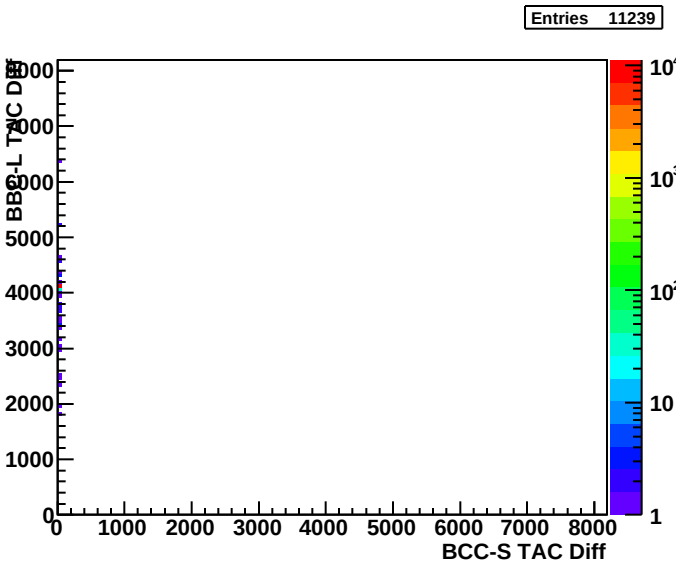

Entries 11239
VPD-West ADC Sum
ZDC-West ADC Sum Att

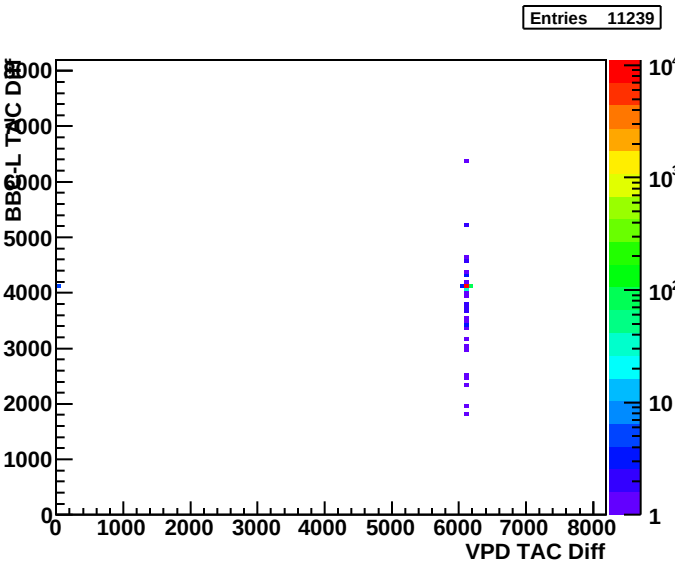

Entries 11239
BBC-L-East ADC Sum
BBC-L-West ADC Sum

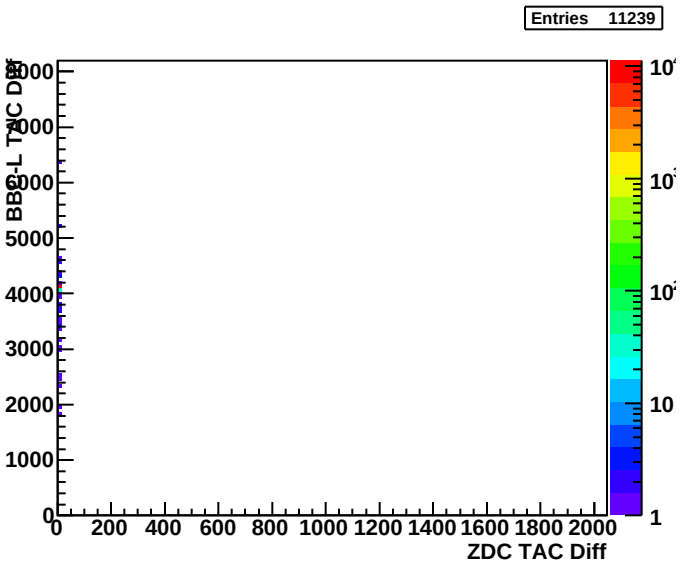

Entries 11239
BBC-S-East ADC Sum
BBC-S-West ADC Sum

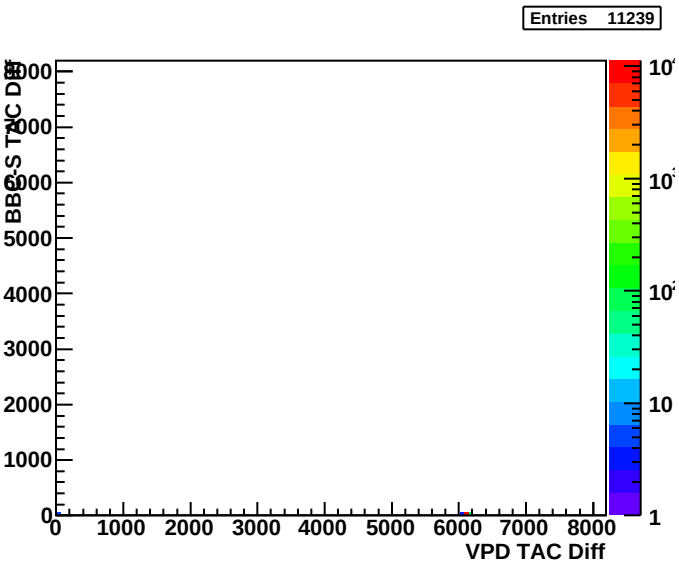

Entries 11239
VPD East ADC Sum
VPD West ADC Sum

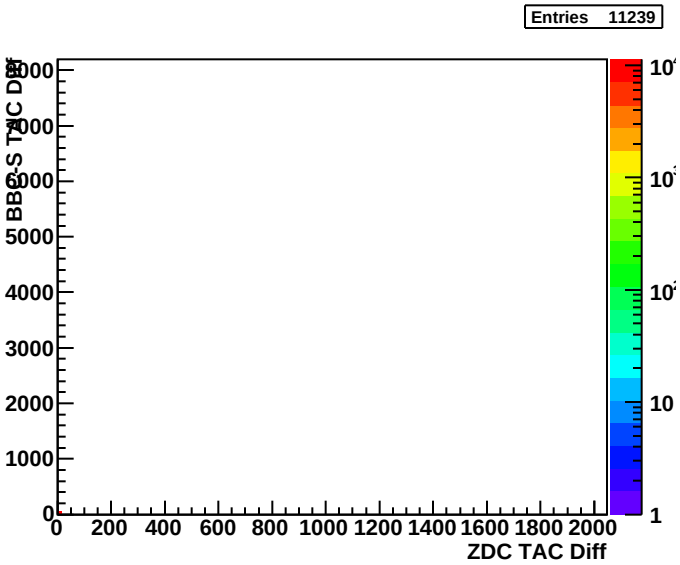

Entries 11239
ZDC East ADC Sum Att
ZDC West ADC Sum Att

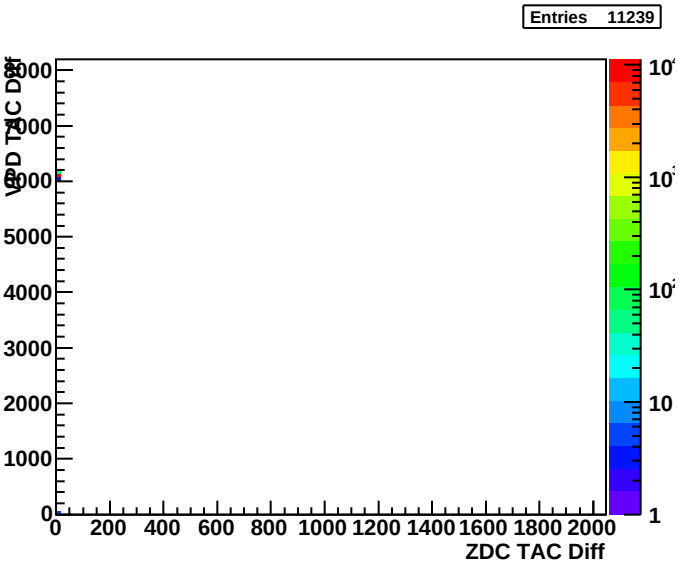

Entries 11239
BBC-L TAC Diff
BCC-S TAC Diff

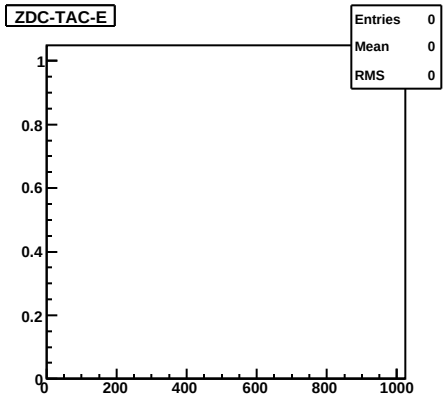

Entries 11239
BBC-L TAC Diff
VPD TAC Diff

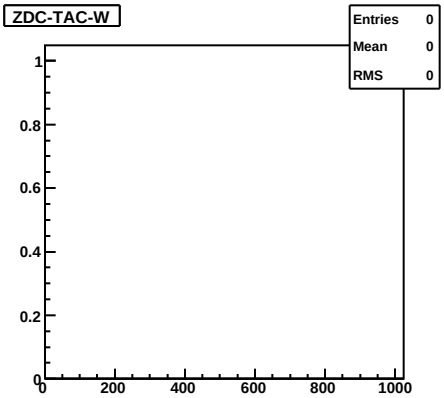

Entries 11239
BBC-L TAC Diff
ZDC TAC Diff

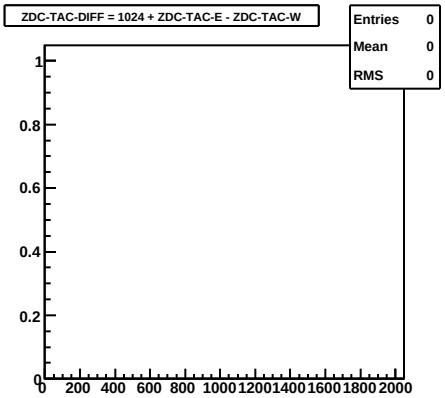

Entries 11239
BBC-S TAC Diff
VPD TAC Diff

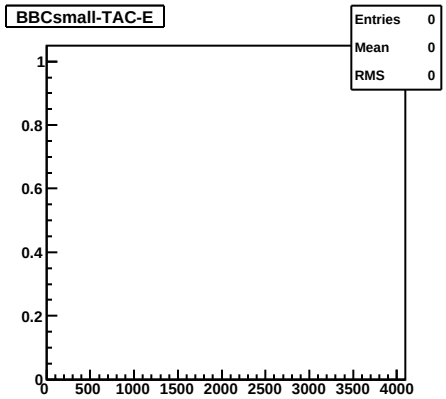

Entries 11239
BBC-S TAC Diff
ZDC TAC Diff

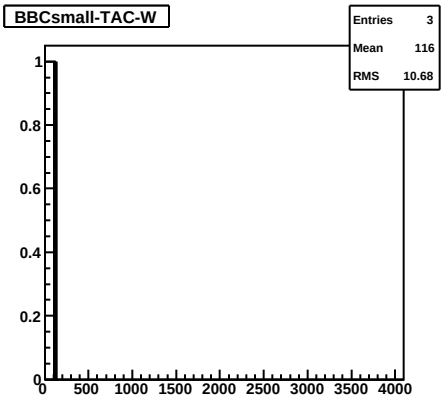

Entries 11239
VPD TAC Diff
ZDC TAC Diff

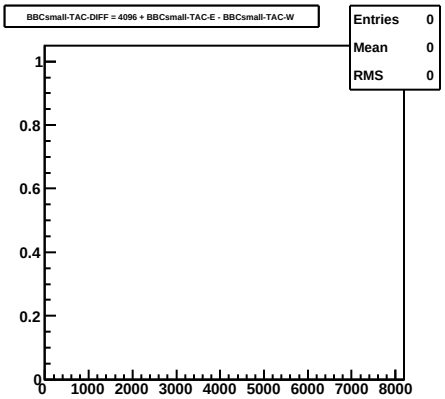

ZDC-TAC-E
Entries 0
Mean 0
RMS 0

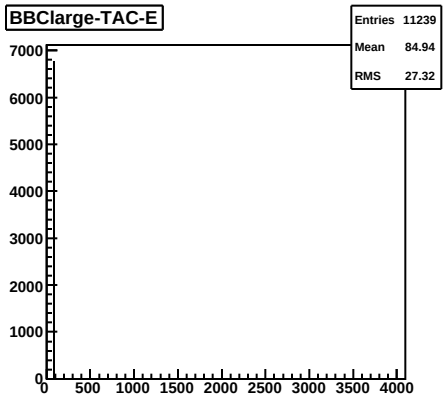

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

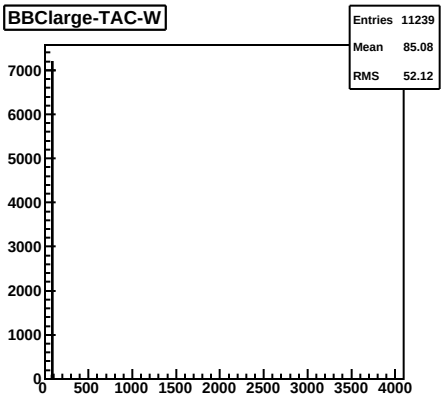

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

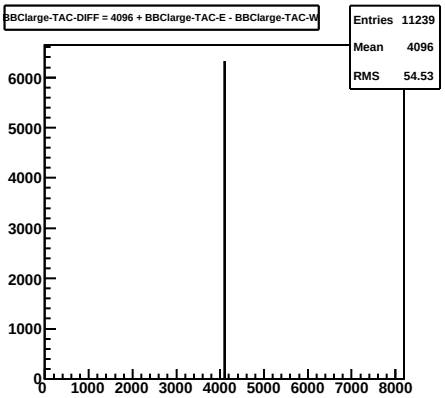

BBCsmall-TAC-E
Entries 0
Mean 0
RMS 0

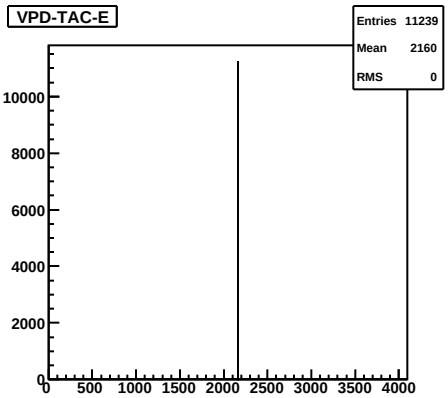

BBCsmall-TAC-W
Entries 3
Mean 116
RMS 10.68

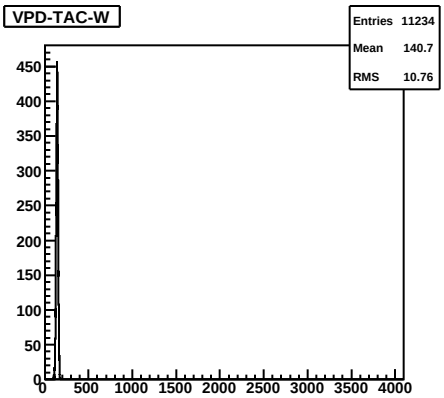

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

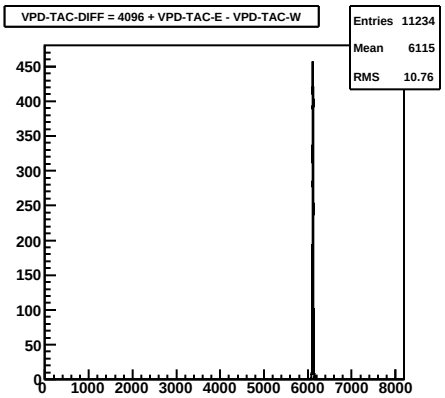

BBClarge-TAC-E
Entries 11239
Mean 84.94
RMS 27.32

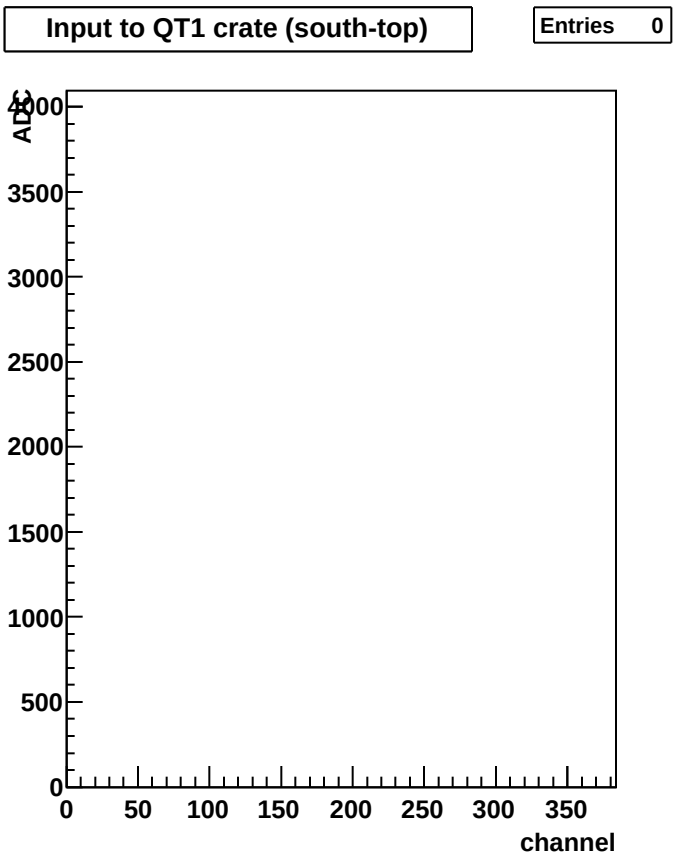

BBClarge-TAC-W
Entries 11239
Mean 85.08
RMS 52.12

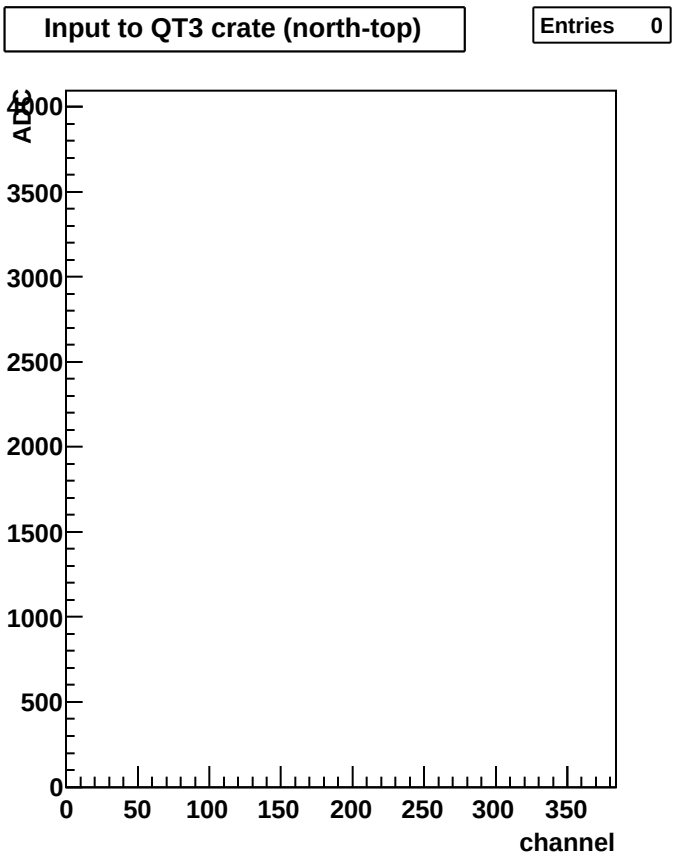

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 11239
Mean 4096
RMS 54.53

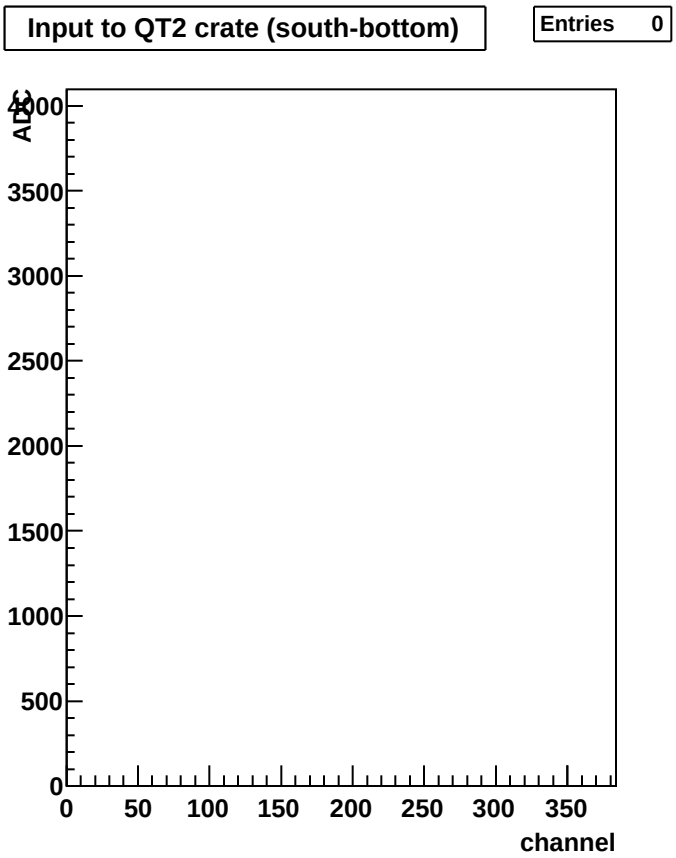

VPD-TAC-E
Entries 11239
Mean 2160
RMS 0

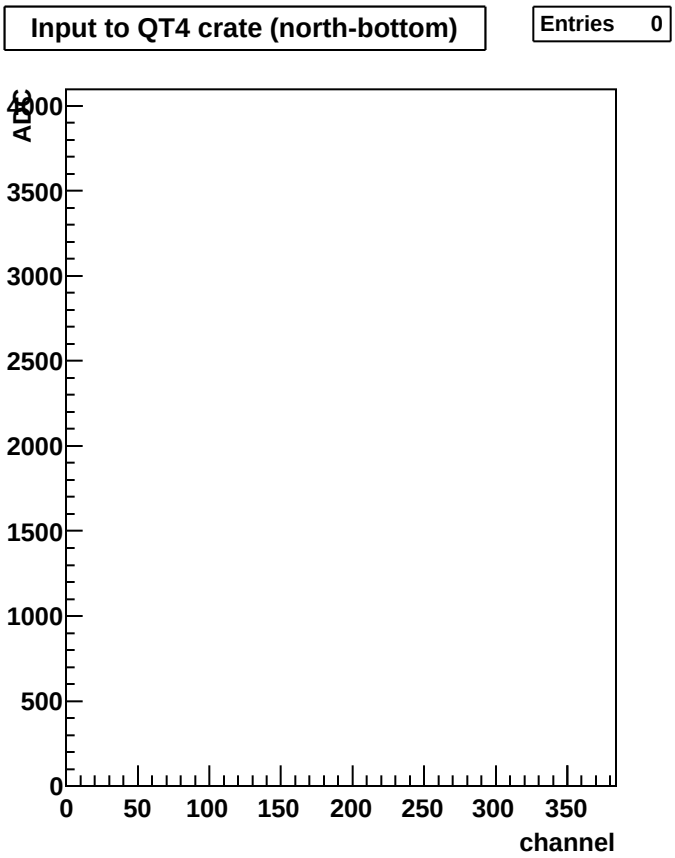

VPD-TAC-W
Entries 11234
Mean 140.7
RMS 10.76

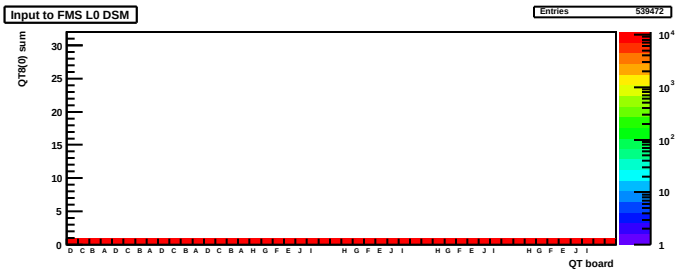

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 11234
Mean 6115
RMS 10.76

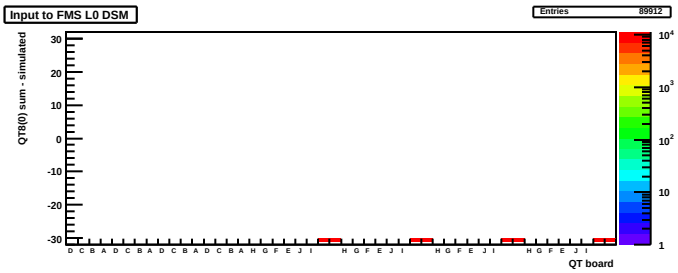

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

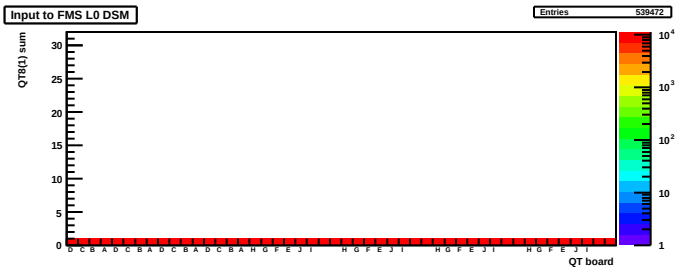

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

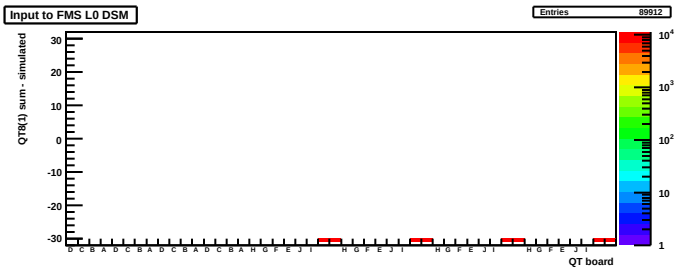

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

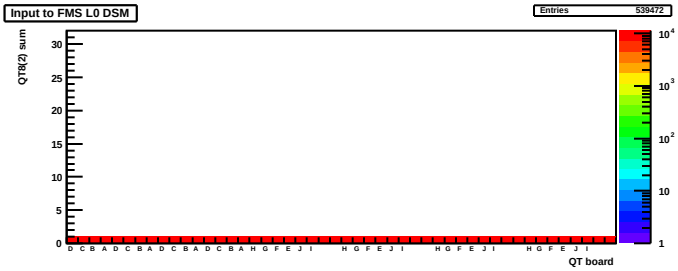

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

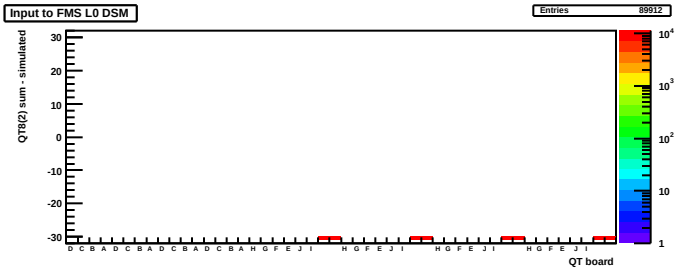

Input to FMS L0 DSM
Entries 539472
QT8(0) sum
QT board

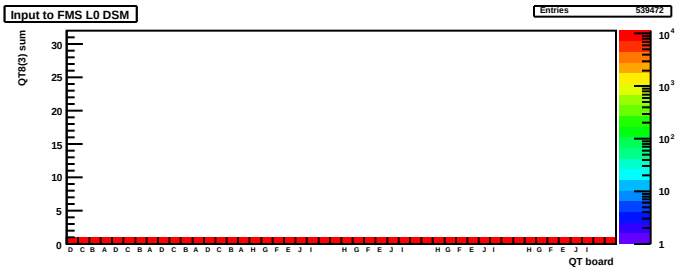

Input to FMS L0 DSM
Entries 89912
QT8(0) sum - simulated
QT board

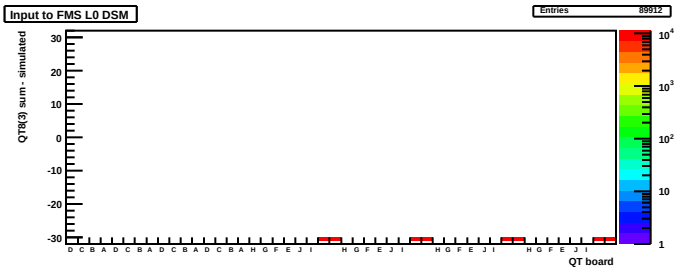

Input to FMS L0 DSM
Entries 539472
QT8(1) sum
QT board

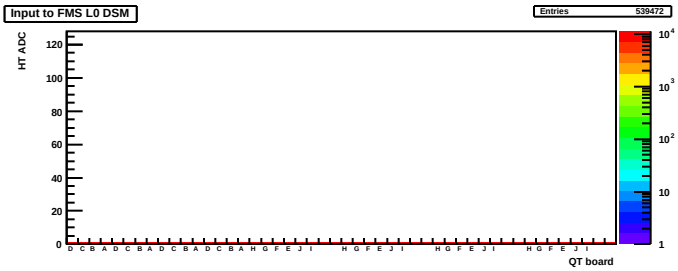

Input to FMS L0 DSM
Entries 89912
QT8(1) sum - simulated
QT board

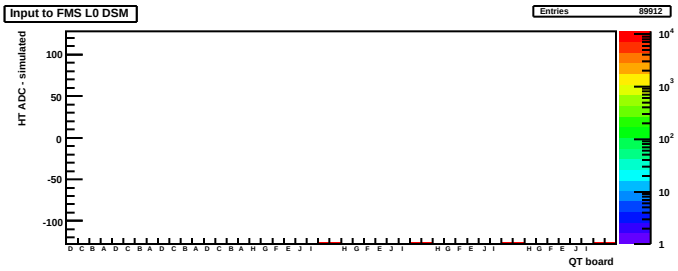

Input to FMS L0 DSM
Entries 539472
QT8(2) sum
QT board

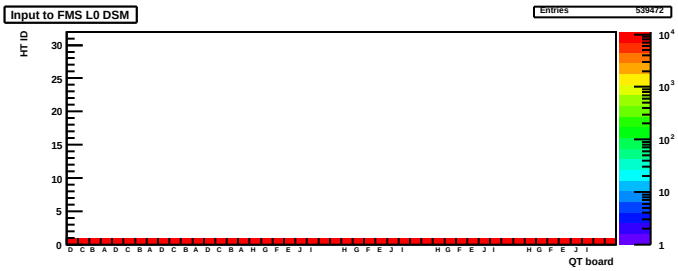

Input to FMS L0 DSM
Entries 89912
QT8(2) sum - simulated
QT board

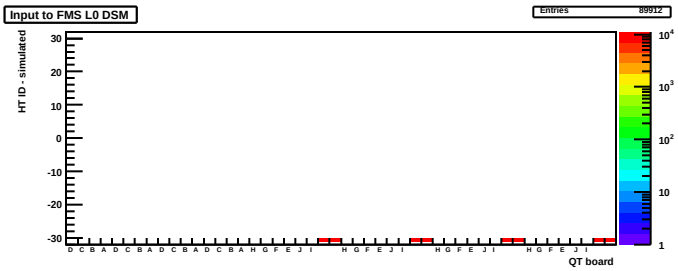

Input to FMS L0 DSM
Entries 539472
QT8(3) sum
QT board

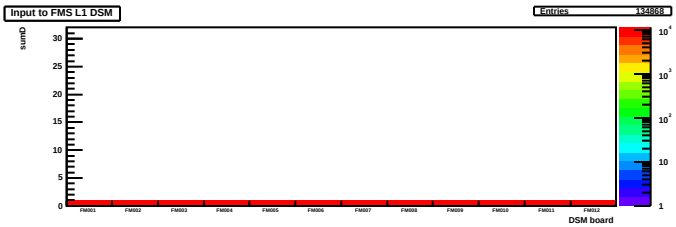

Input to FMS L0 DSM
Entries 89912
QT8(3) sum - simulated
QT board

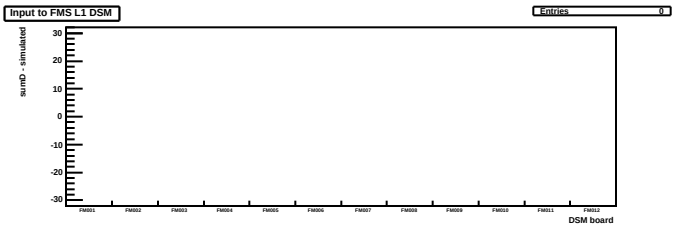

Input to FMS L0 DSM
Entries 539472
HT ADC
QT board

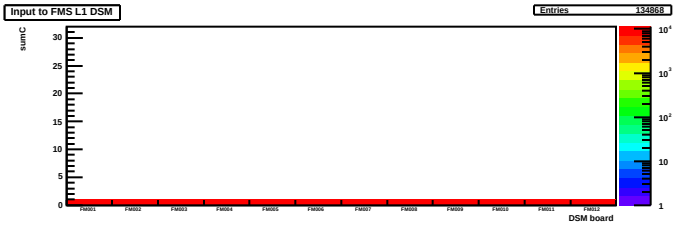

Input to FMS L0 DSM
Entries 89912
HT ADC - simulated
QT board

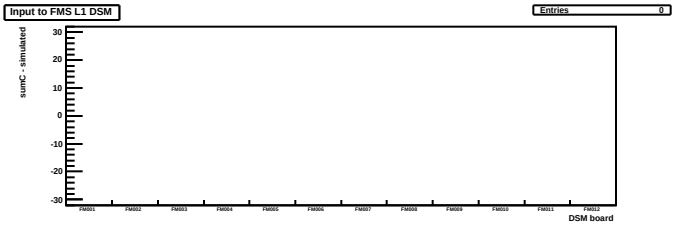

Input to FMS L0 DSM
Entries 539472
HT ID
QT board

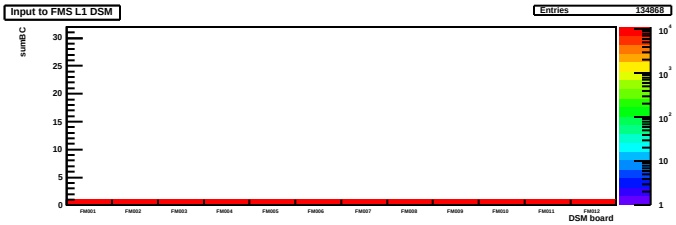

Input to FMS L0 DSM
Entries 89912
HT ID - simulated
QT board

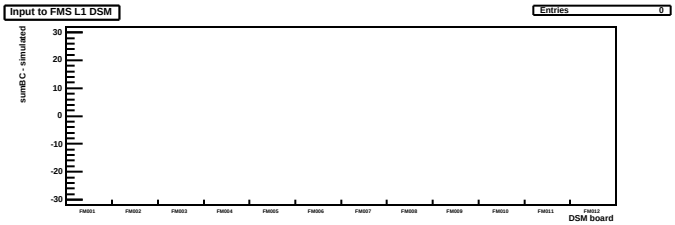

Input to FMS L1 DSM
Entries 134868
sumD
DSM board

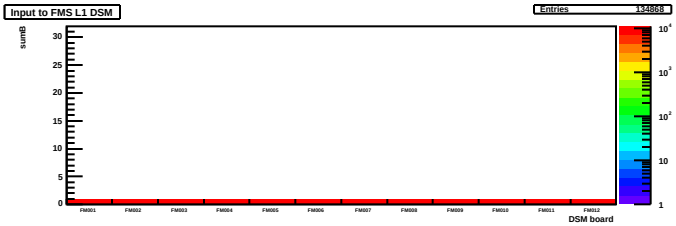

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

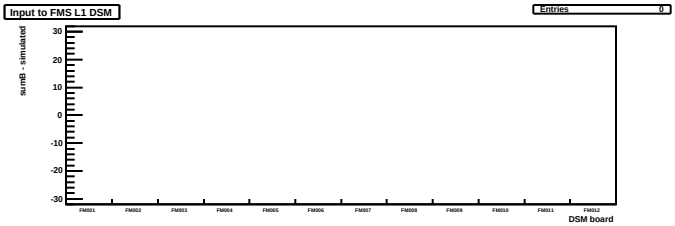

Input to FMS L1 DSM
Entries 134868
sumC
DSM board

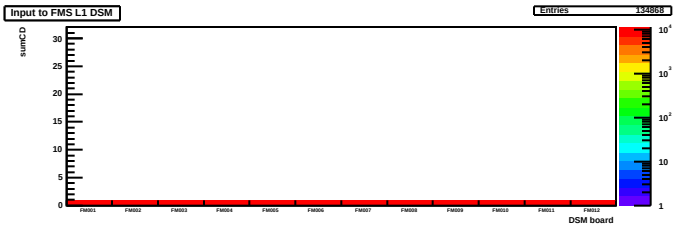

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

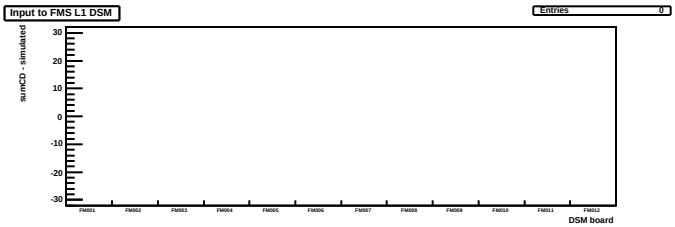

Input to FMS L1 DSM
Entries 134868
sumBC
DSM board

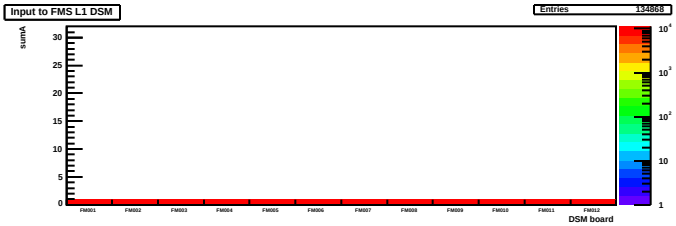

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

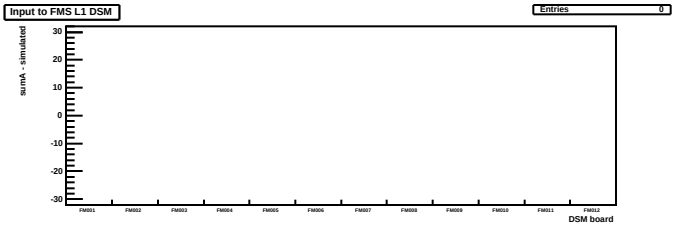

Input to FMS L1 DSM
Entries 134868
sumB
DSM board

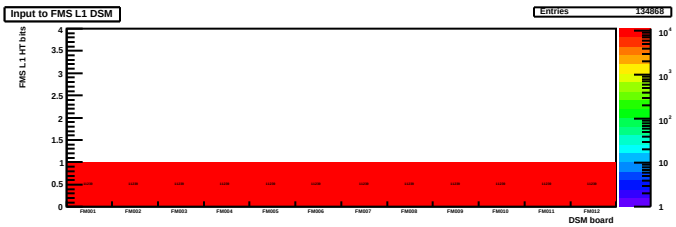

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

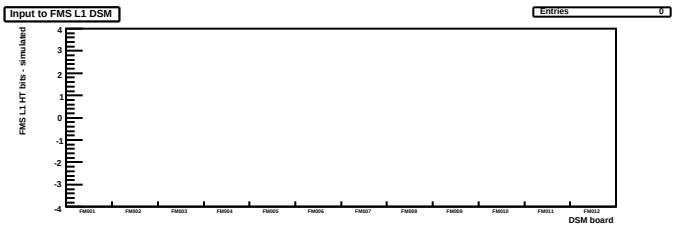

Input to FMS L1 DSM
Entries 134868
sumCD
DSM board

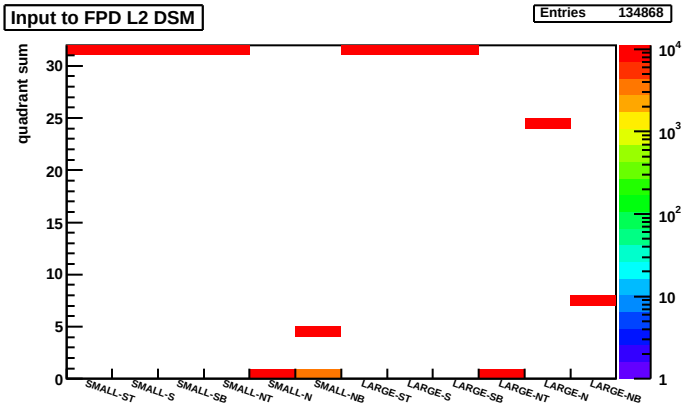

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

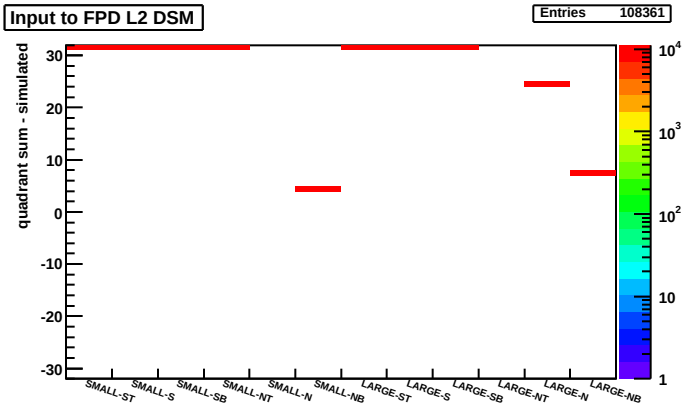

Input to FMS L1 DSM
Entries 134868
sumA
DSM board

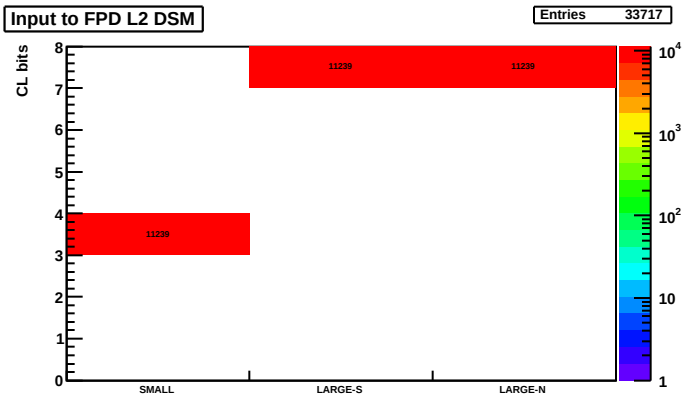

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

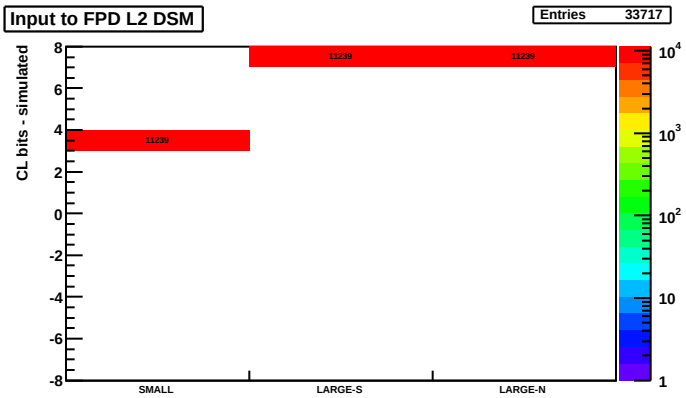

Input to FMS L1 DSM
Entries 134868
FMS L1 HT bits
DSM board

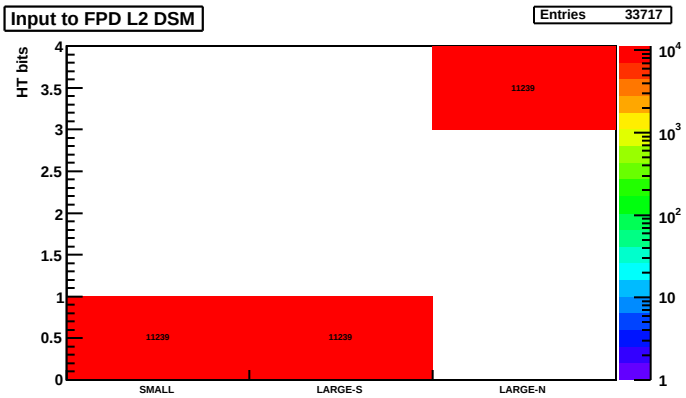

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

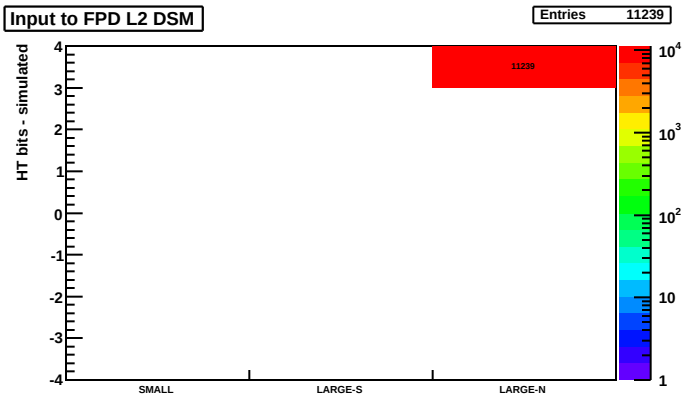

Input to FPD L2 DSM
Entries 134868
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

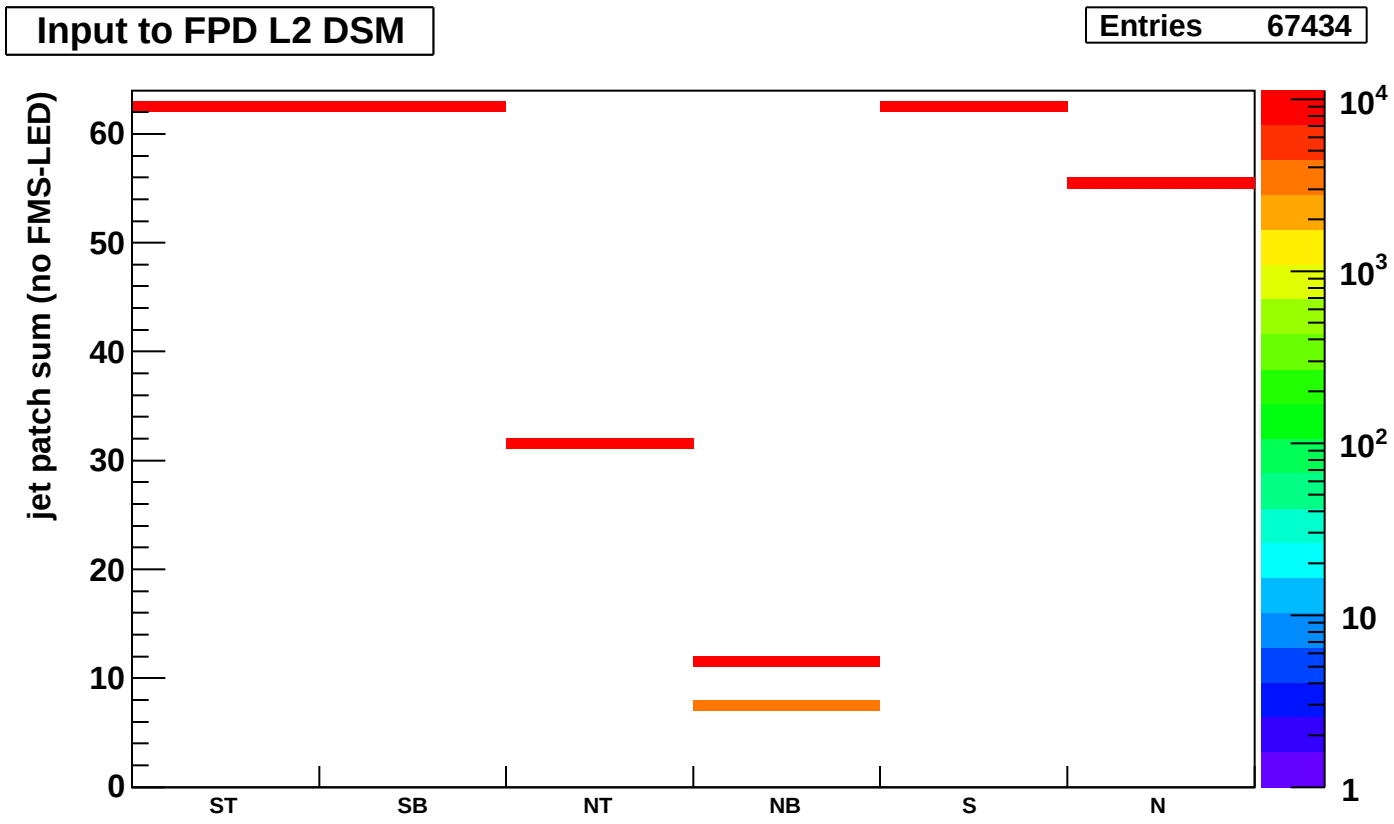

Input to FPD L2 DSM
Entries 108361
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

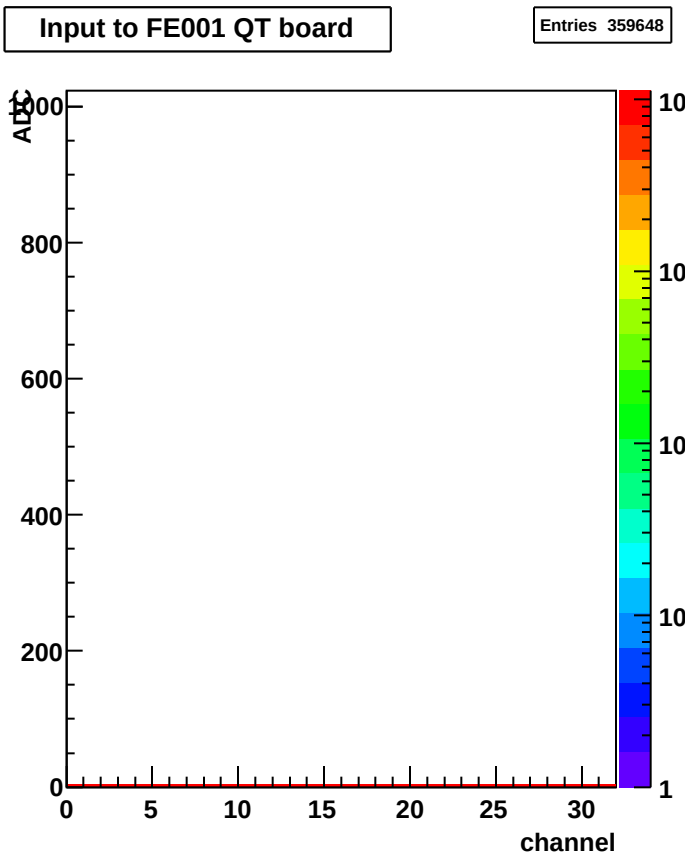

Input to FPD L2 DSM
Entries 33717
CL bits
11239
SMALL
LARGE-S
LARGE-N

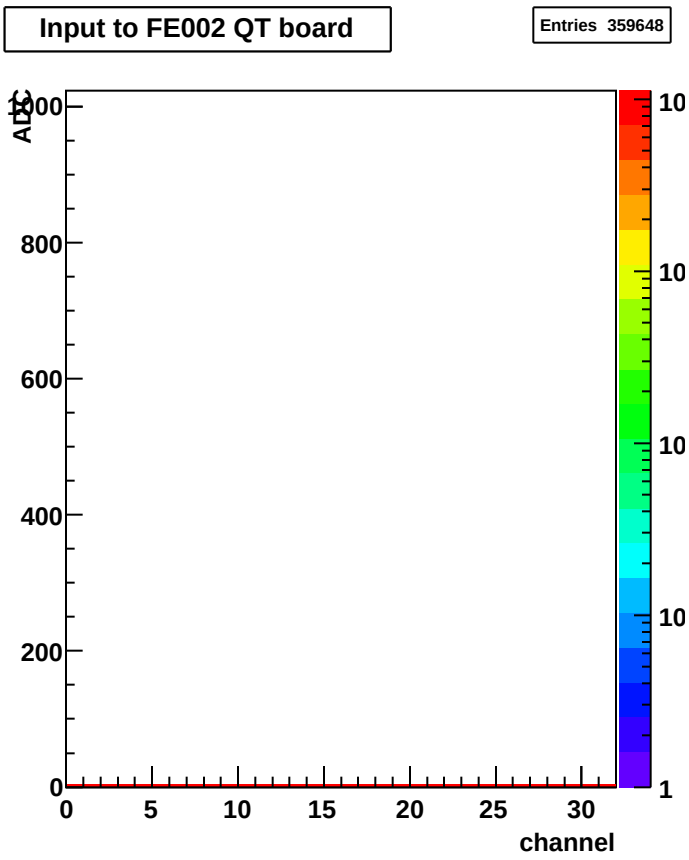

Input to FPD L2 DSM
Entries 33717
CL bits - simulated
11239
SMALL
LARGE-S
LARGE-N

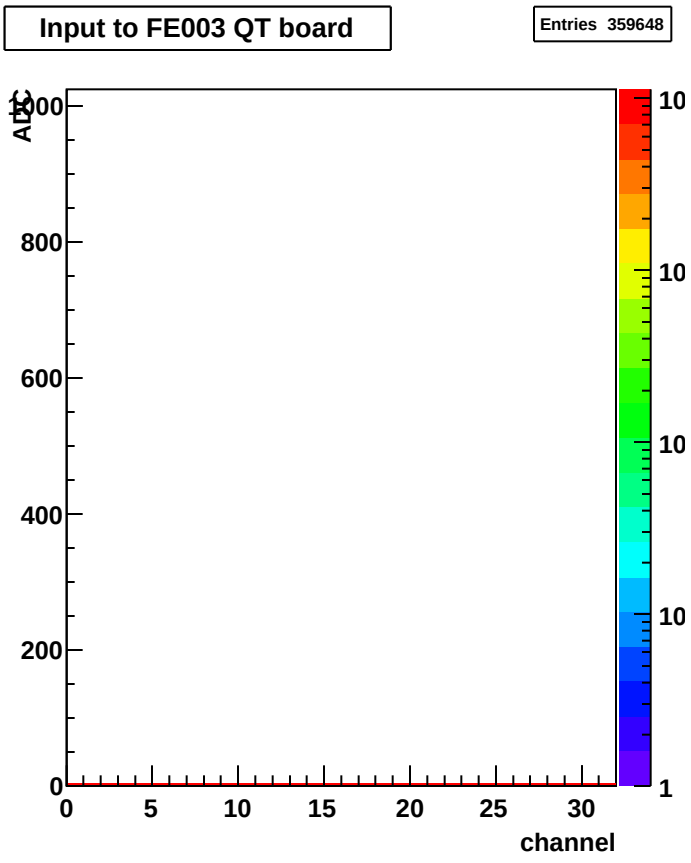

Input to FPD L2 DSM
Entries 33717
HT bits
11239
SMALL
LARGE-S
LARGE-N

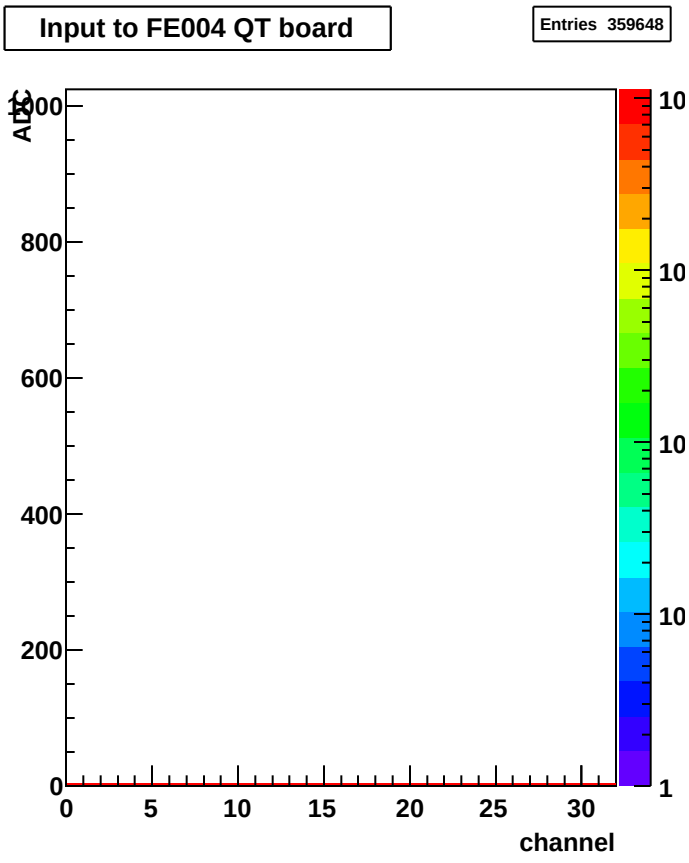

Input to FPD L2 DSM
Entries 11239
HT bits - simulated
11239
SMALL
LARGE-S
LARGE-N

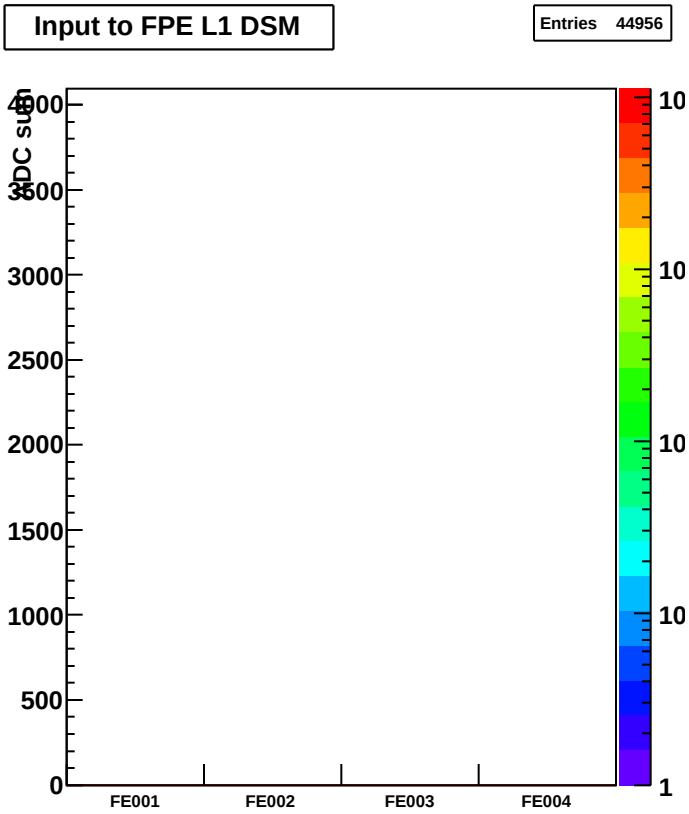

Input to FPD L2 DSM
Entries 67434
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

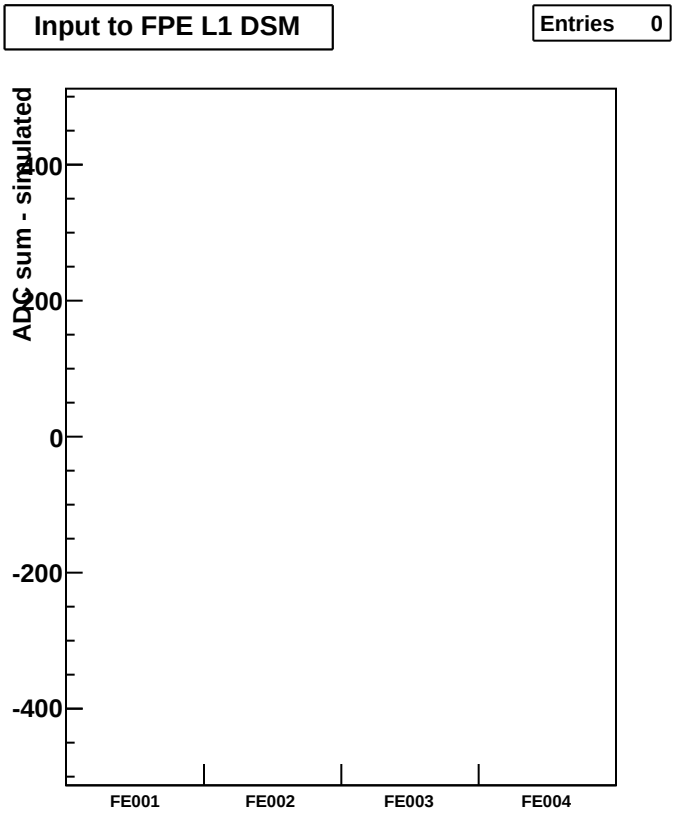

Input to FE001 QT board
Entries 359648
ADC
channel

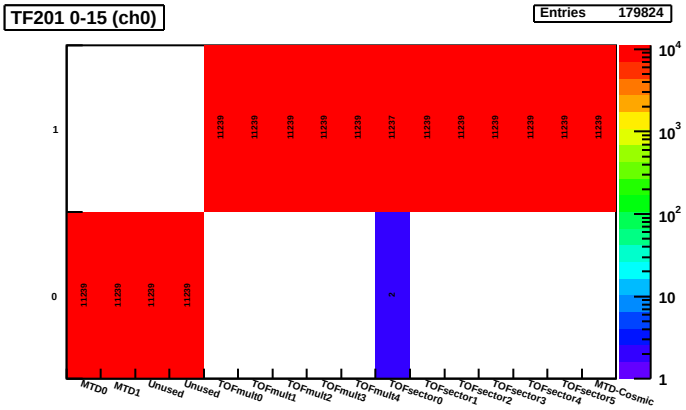

Input to FE002 QT board
Entries 359648
ADC
channel

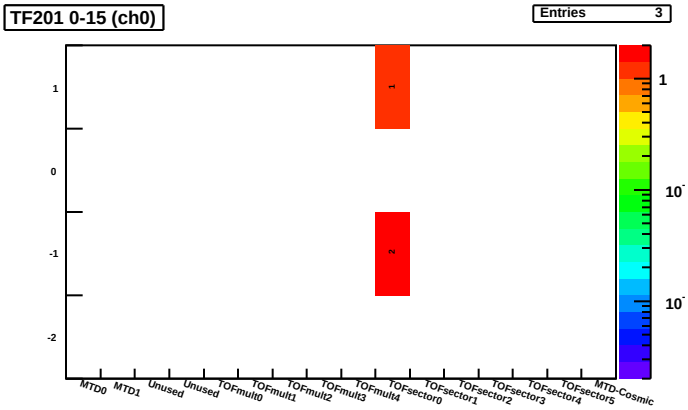

Input to FE003 QT board
Entries 359648
ADC
channel

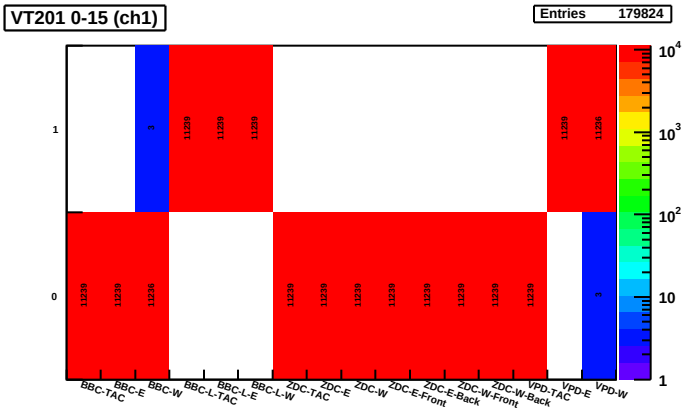

Input to FE004 QT board
Entries 359648
ADC
channel

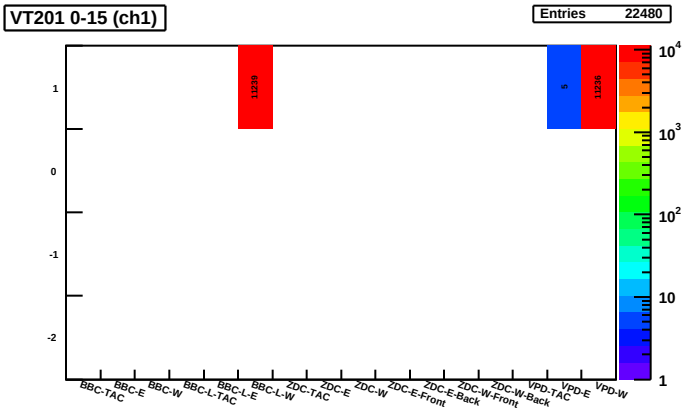

Input to FPE L1 DSM
Entries 44956
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

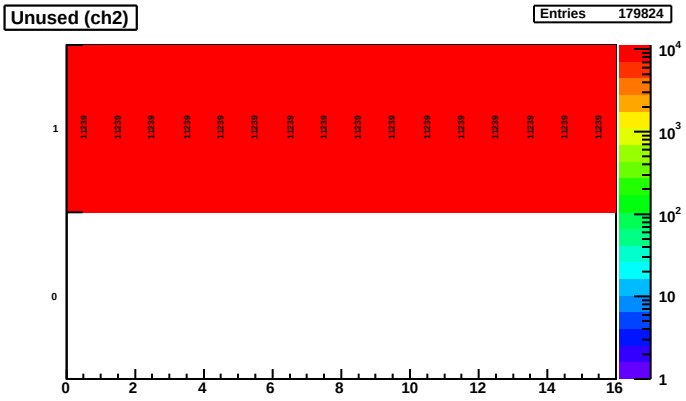

Input to FPE L1 DSM
Entries 0
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004

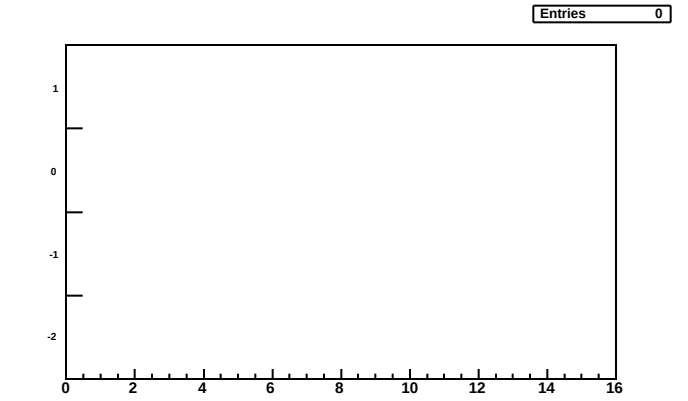

TF201 0-15 (ch0)
Entries 179824
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

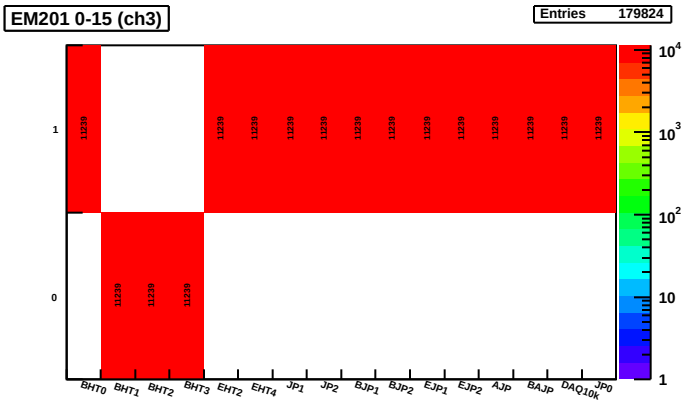

TF201 0-15 (ch0)
Entries 3
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

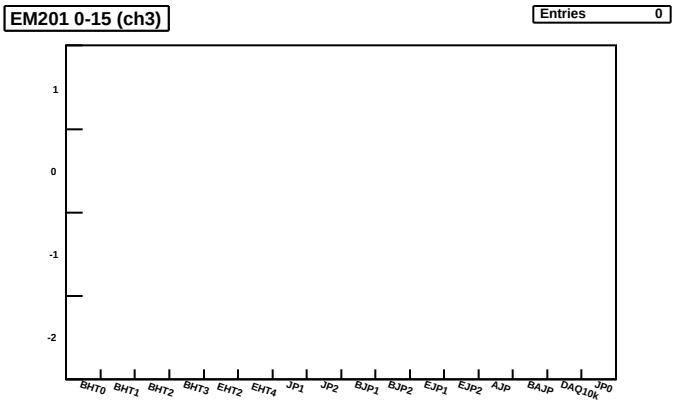

VT201 0-15 (ch1)
Entries 179824
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

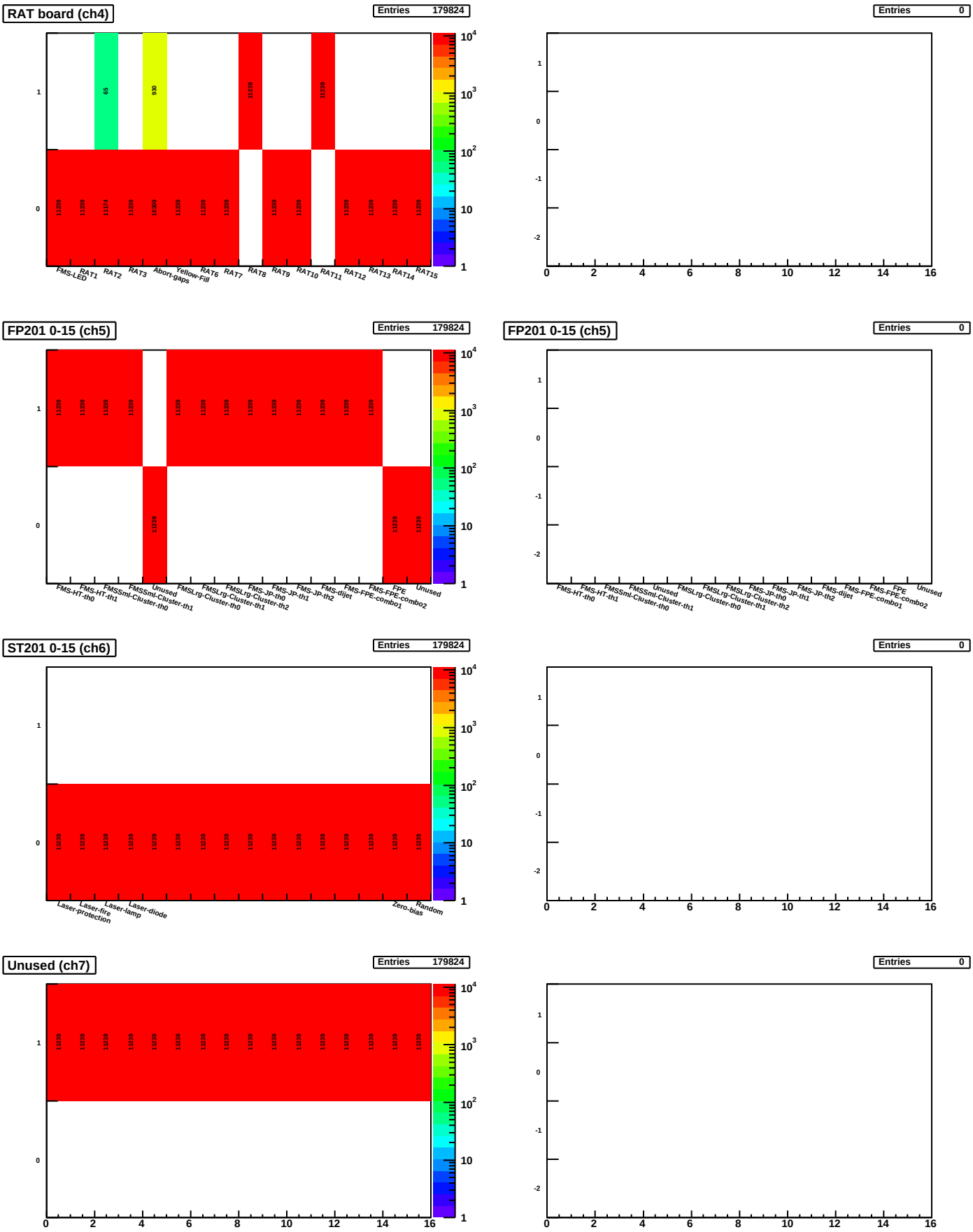

VT201 0-15 (ch1)
Entries 22480
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


Unused (ch2)
Entries 179824


Entries 0


EM201 0-15 (ch3)
Entries 179824
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0


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


RAT board (ch4)
Entries 179824
Entries 0
FP201 0-15 (ch5)
Entries 179824
FP201 0-15 (ch5)
Entries 0
ST201 0-15 (ch6)
Entries 179824
Entries 0
Unused (ch7)
Entries 179824
Entries 0