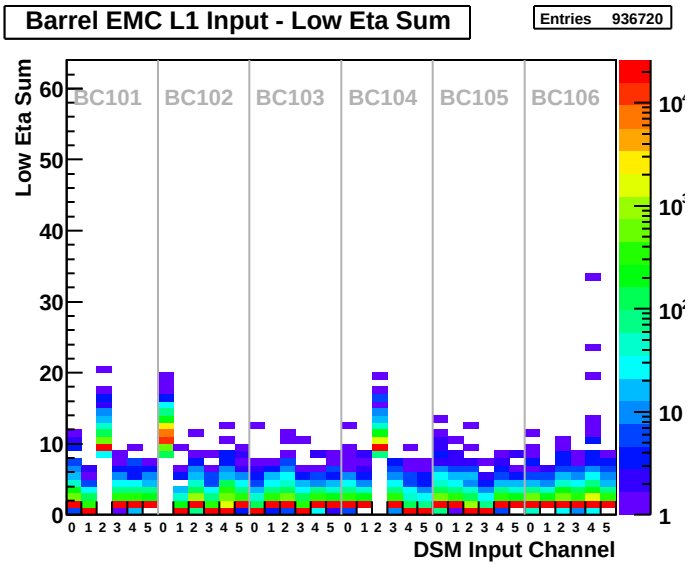
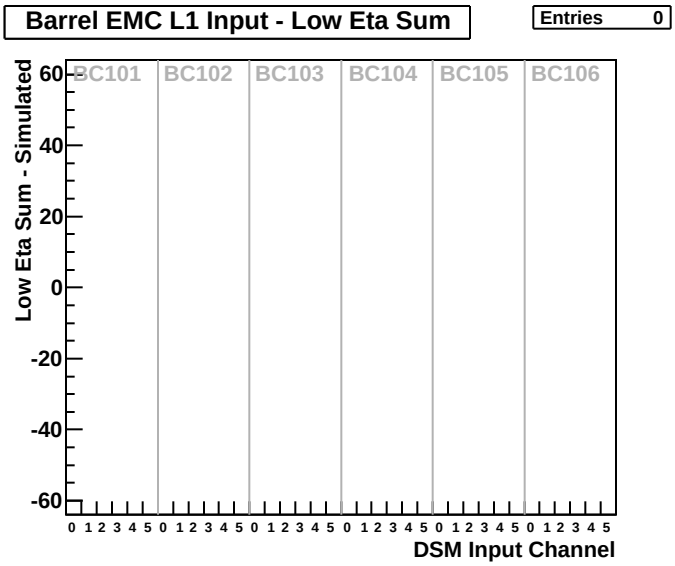
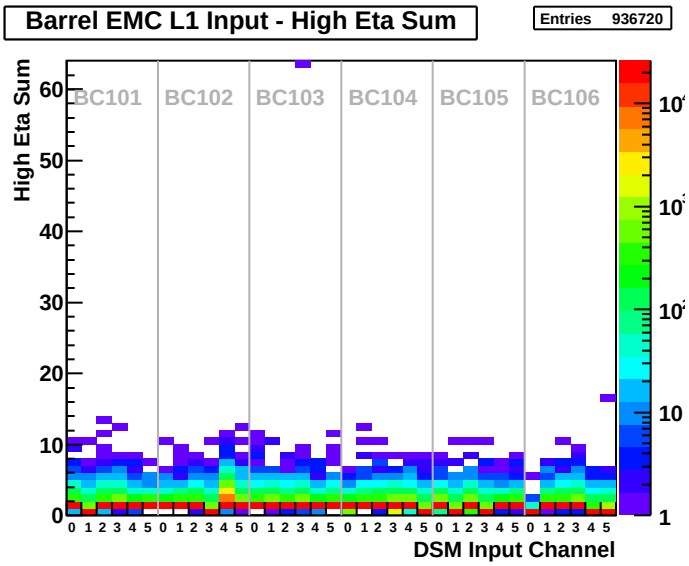
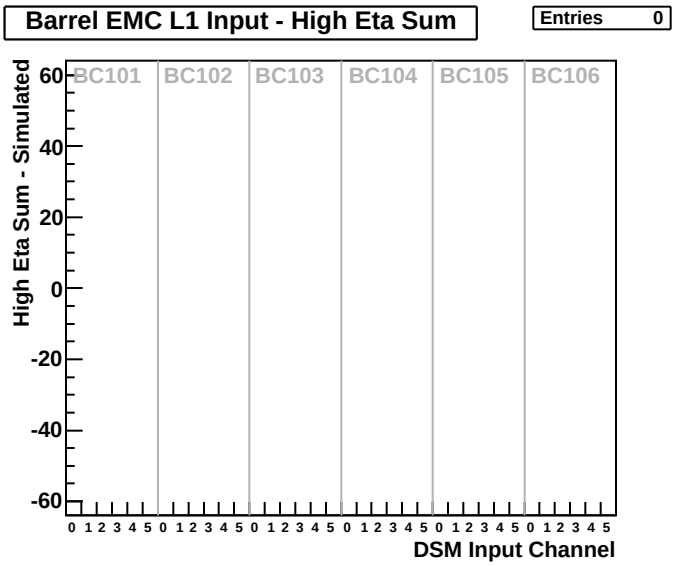
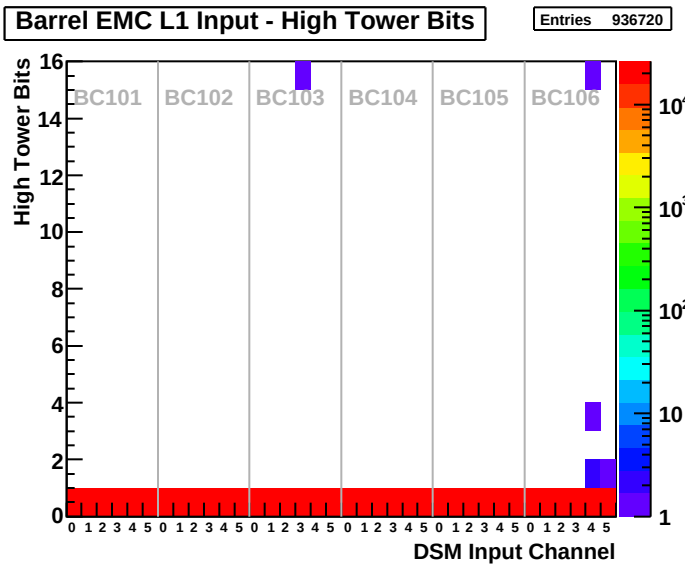
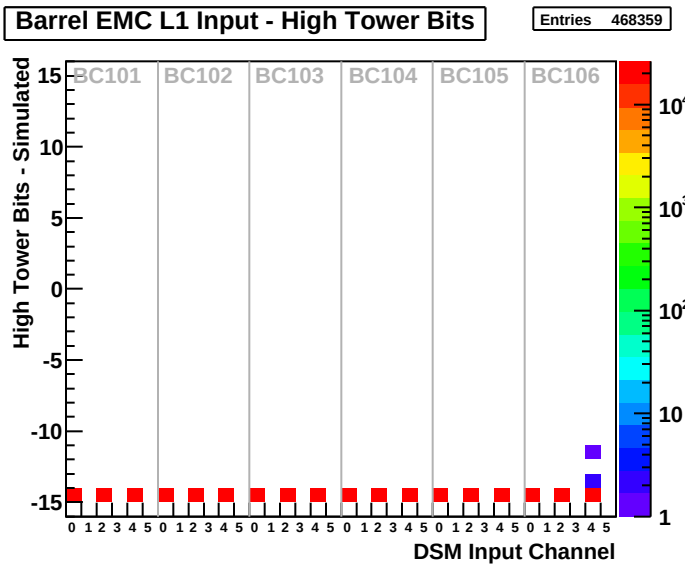

Barrel EMC L1 Input - Low Eta Sum
Entries 936720
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

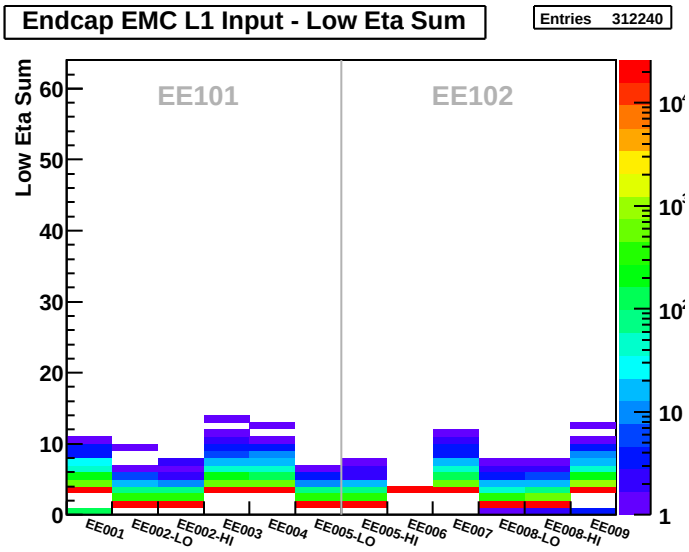

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

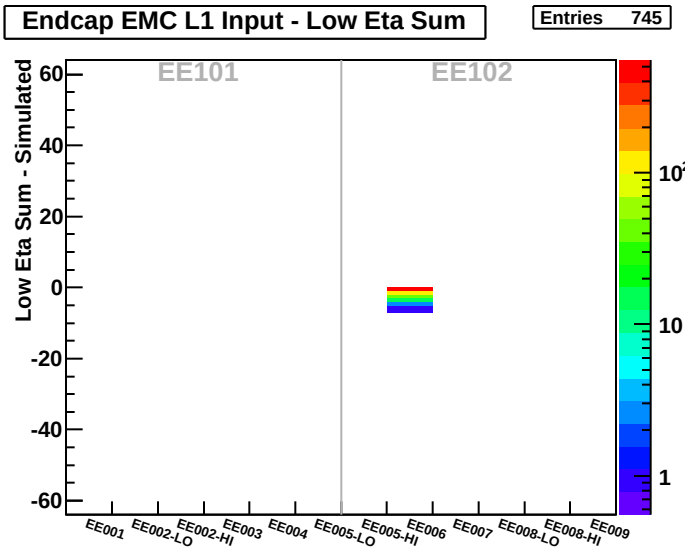

Barrel EMC L1 Input - High Eta Sum
Entries 936720
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

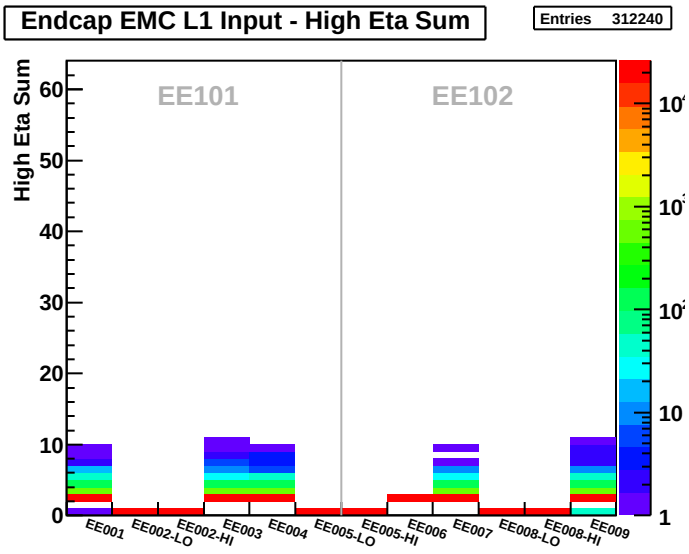

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

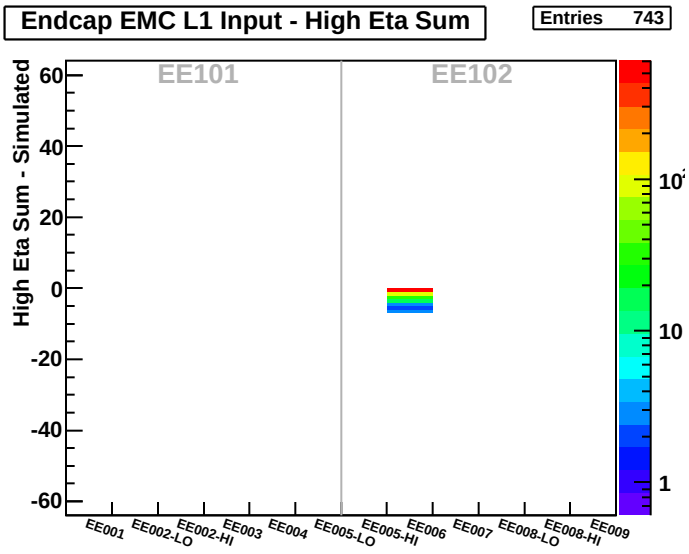

Barrel EMC L1 Input - High Tower Bits
Entries 936720
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

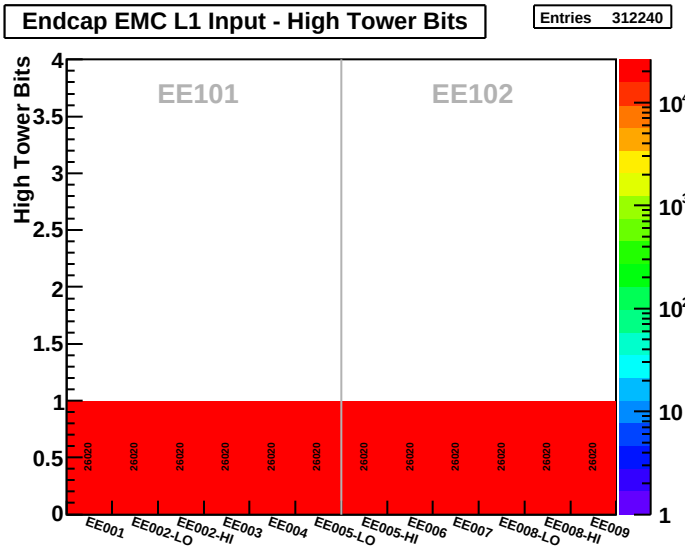

Barrel EMC L1 Input - High Tower Bits
Entries 468359
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

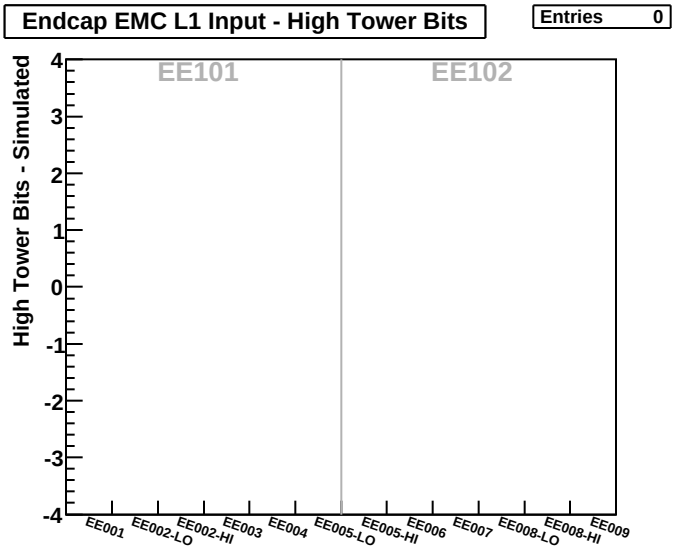

Endcap EMC L1 Input - Low Eta Sum
Entries 312240
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

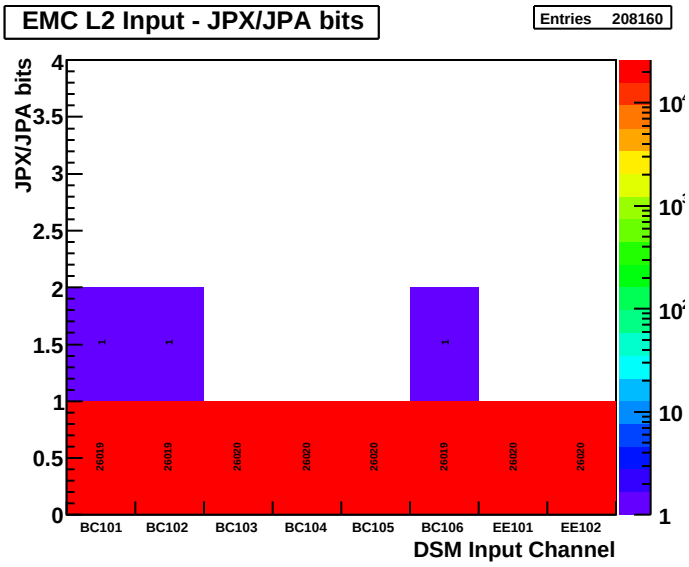

Endcap EMC L1 Input - Low Eta Sum
Entries 745
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

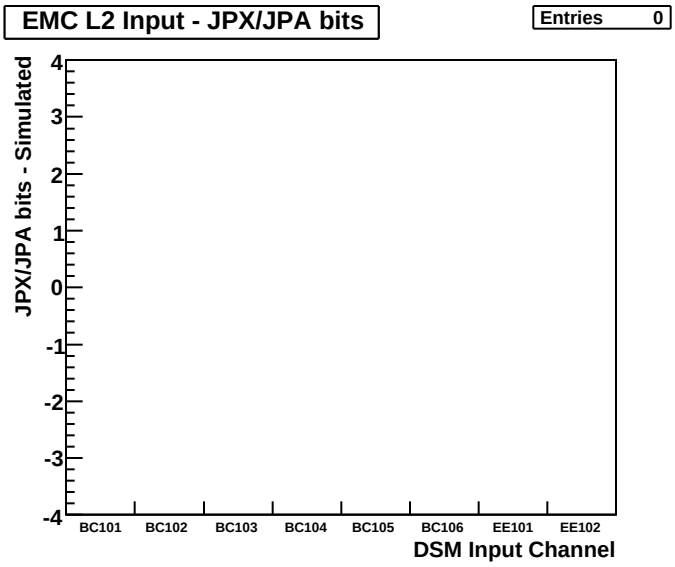

Endcap EMC L1 Input - High Eta Sum
Entries 312240
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

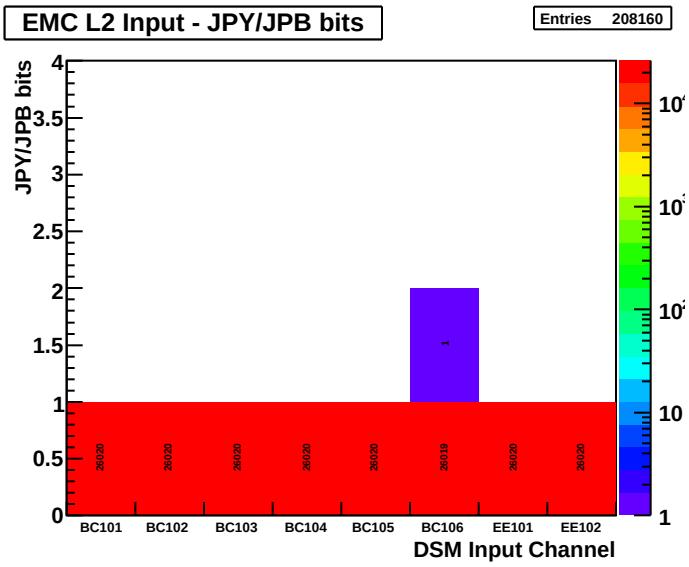

Endcap EMC L1 Input - High Eta Sum
Entries 743
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

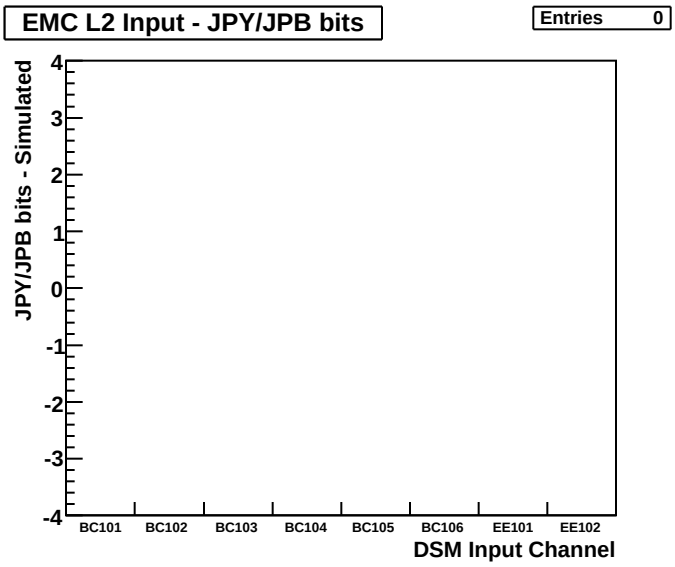

Endcap EMC L1 Input - High Tower Bits
Entries 312240
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

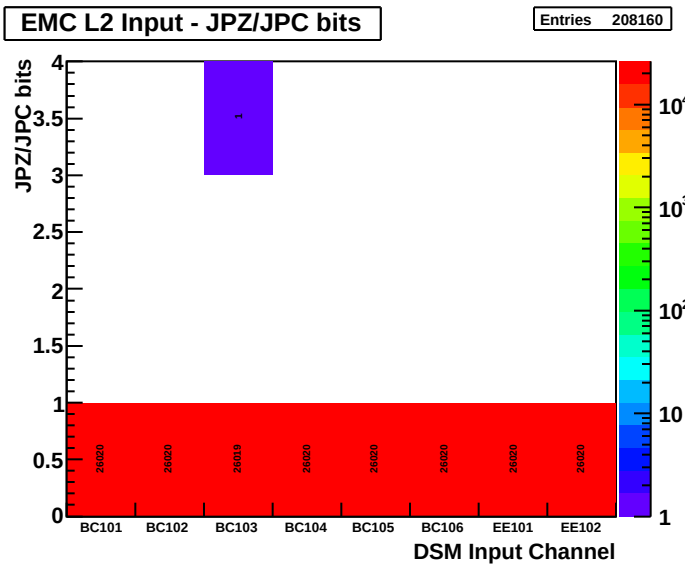

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

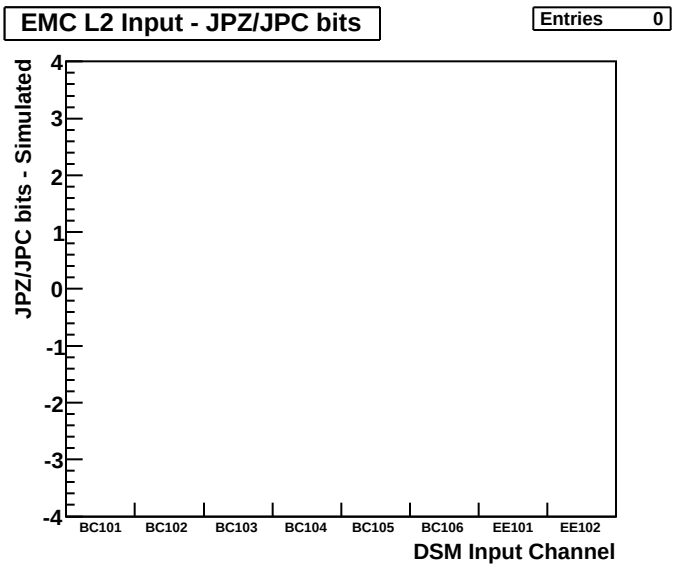

EMC L2 Input - JPX/JPA bits
Entries 208160
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

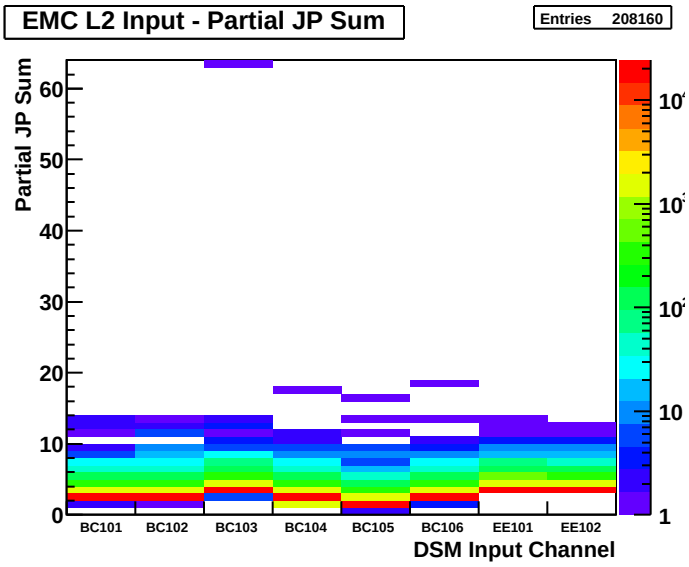

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

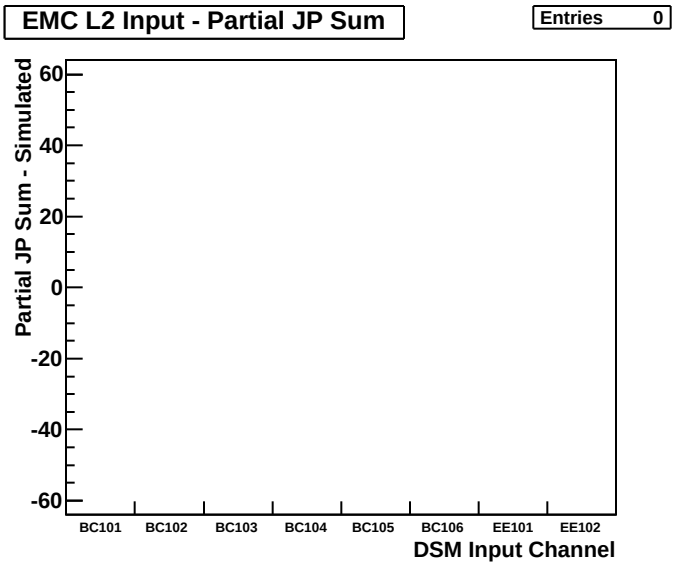

EMC L2 Input - JPY/JPB bits
Entries 208160
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

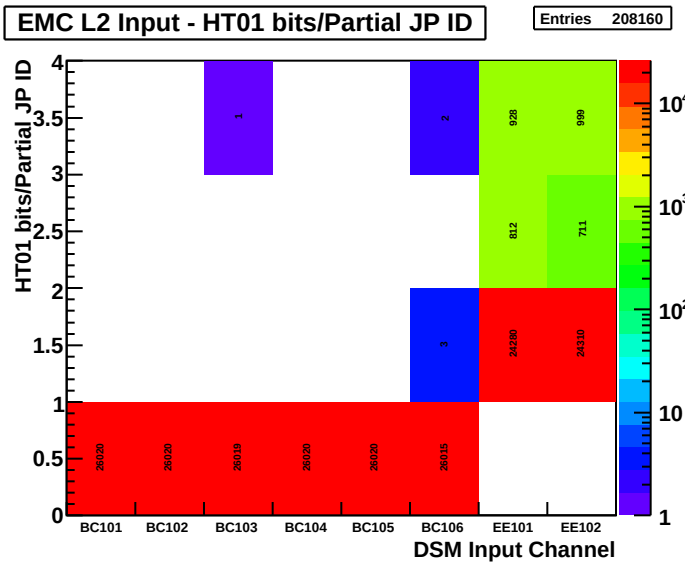

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

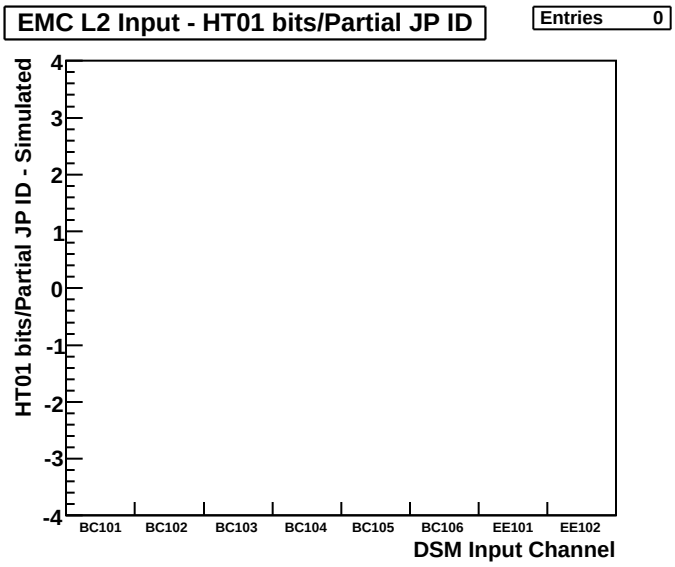

EMC L2 Input - JPZ/JPC bits
Entries 208160
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

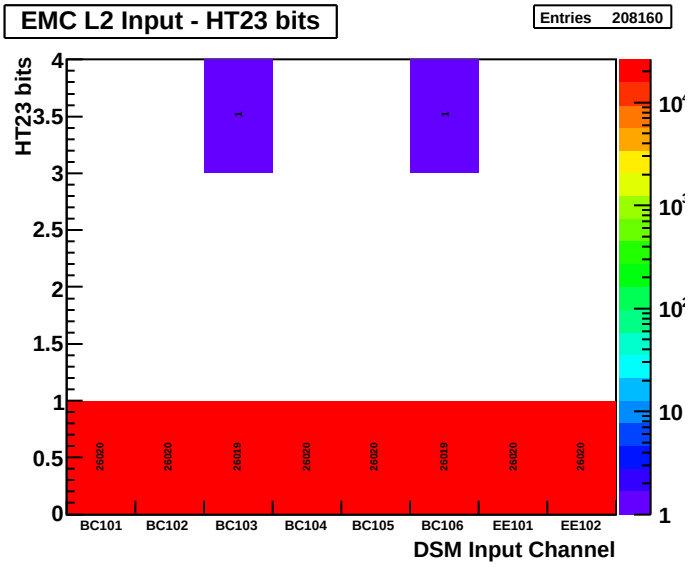

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

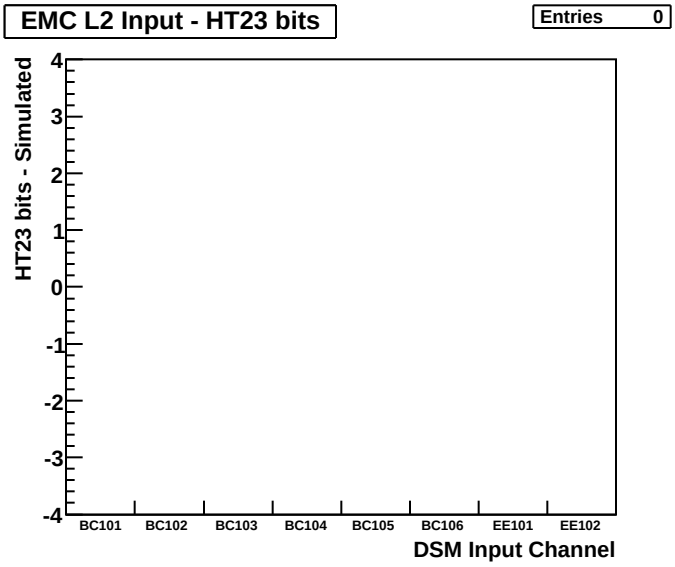

EMC L2 Input - Partial JP Sum
Entries 208160
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

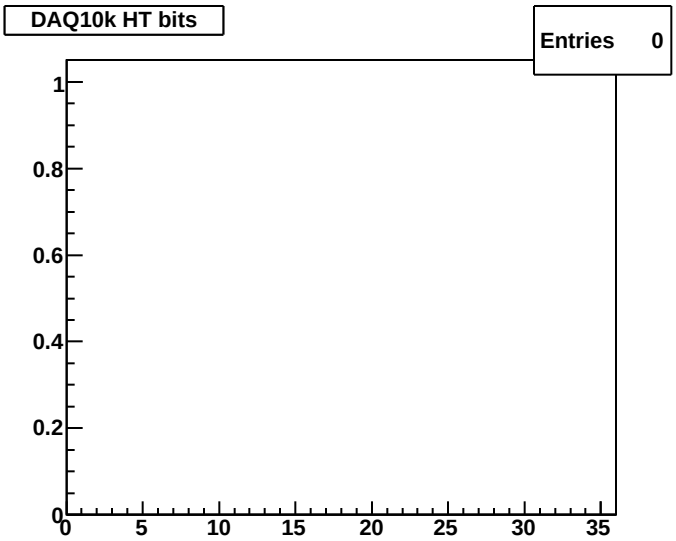

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

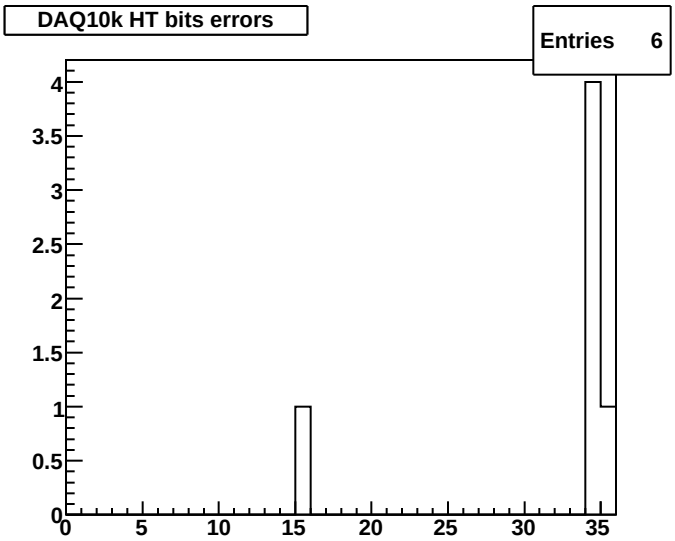

EMC L2 Input - HT01 bits/Partial JP ID
Entries 208160
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

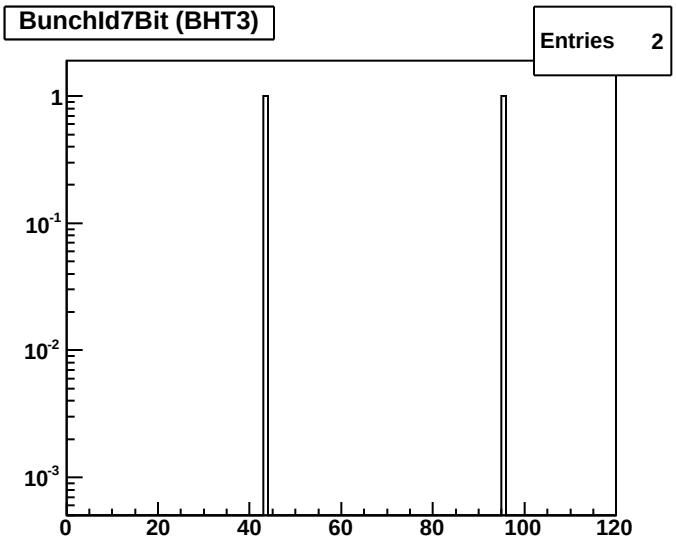

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

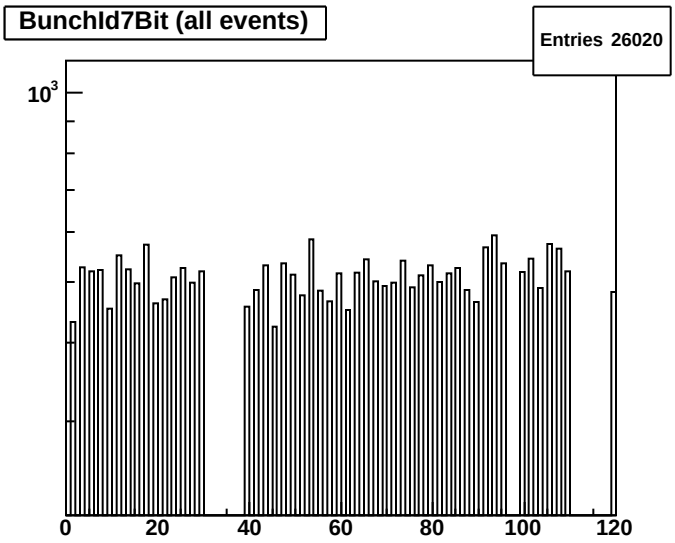

EMC L2 Input - HT23 bits
Entries 208160
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

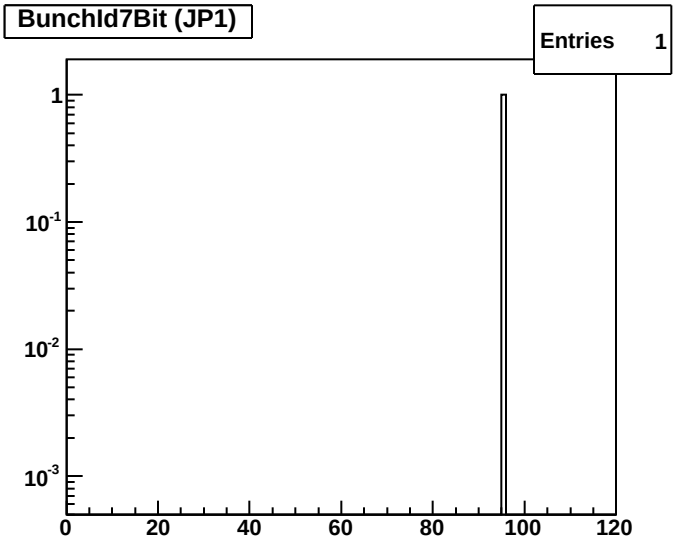

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

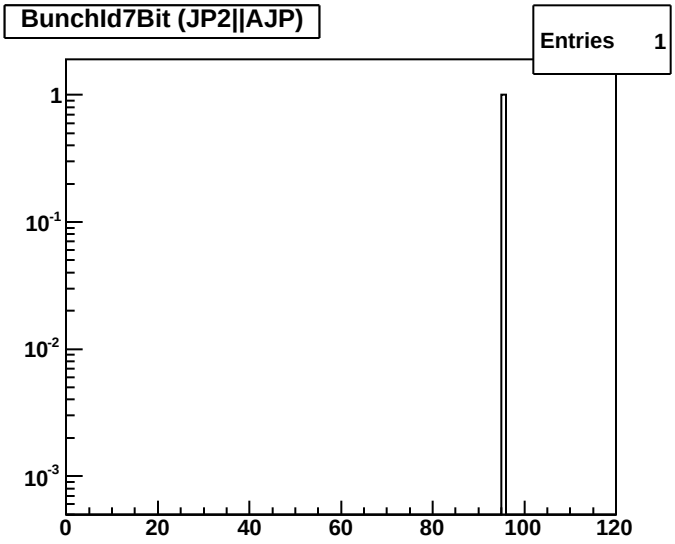

DAQ10k HT bits
Entries 0

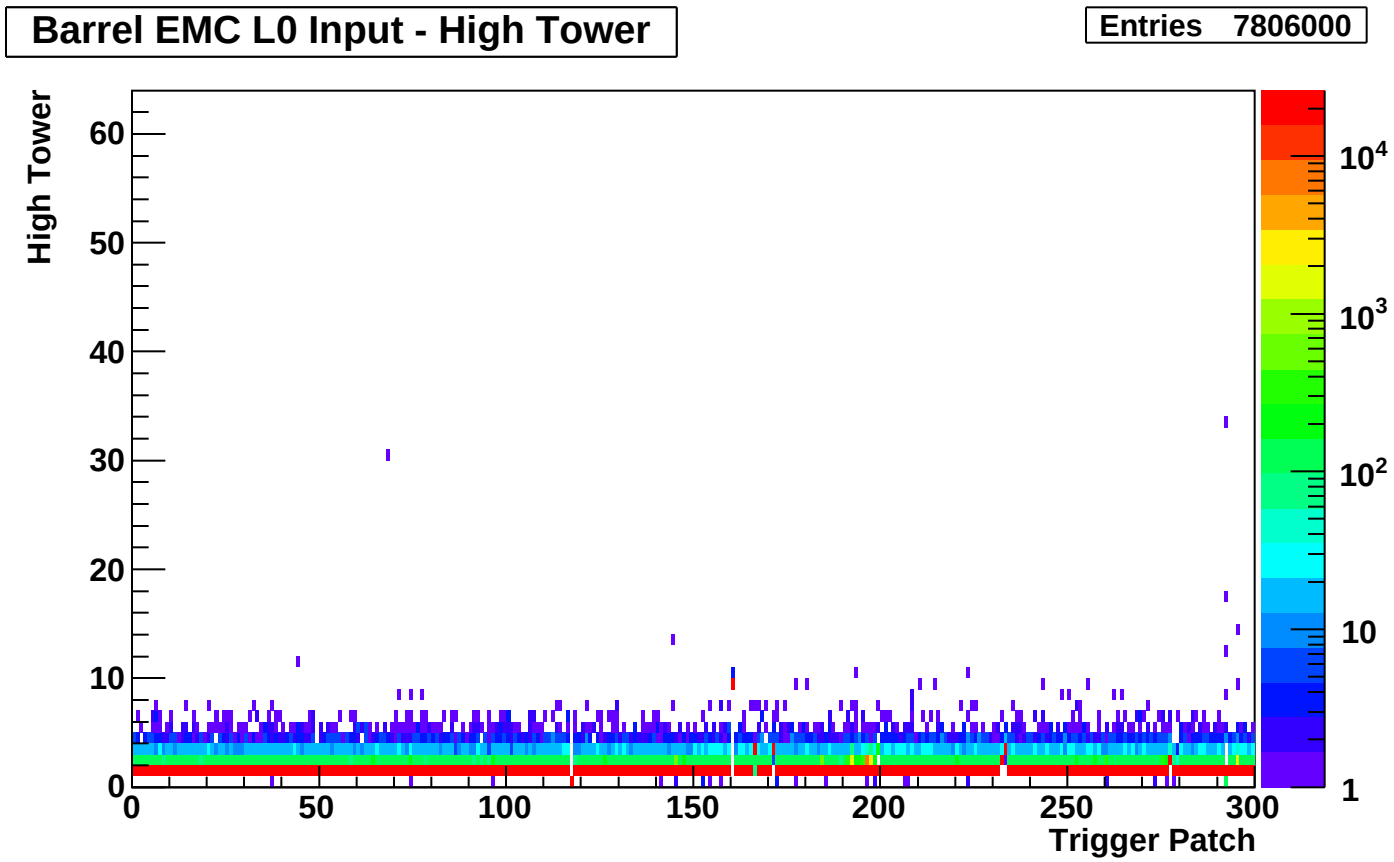

DAQ10k HT bits errors
Entries 6

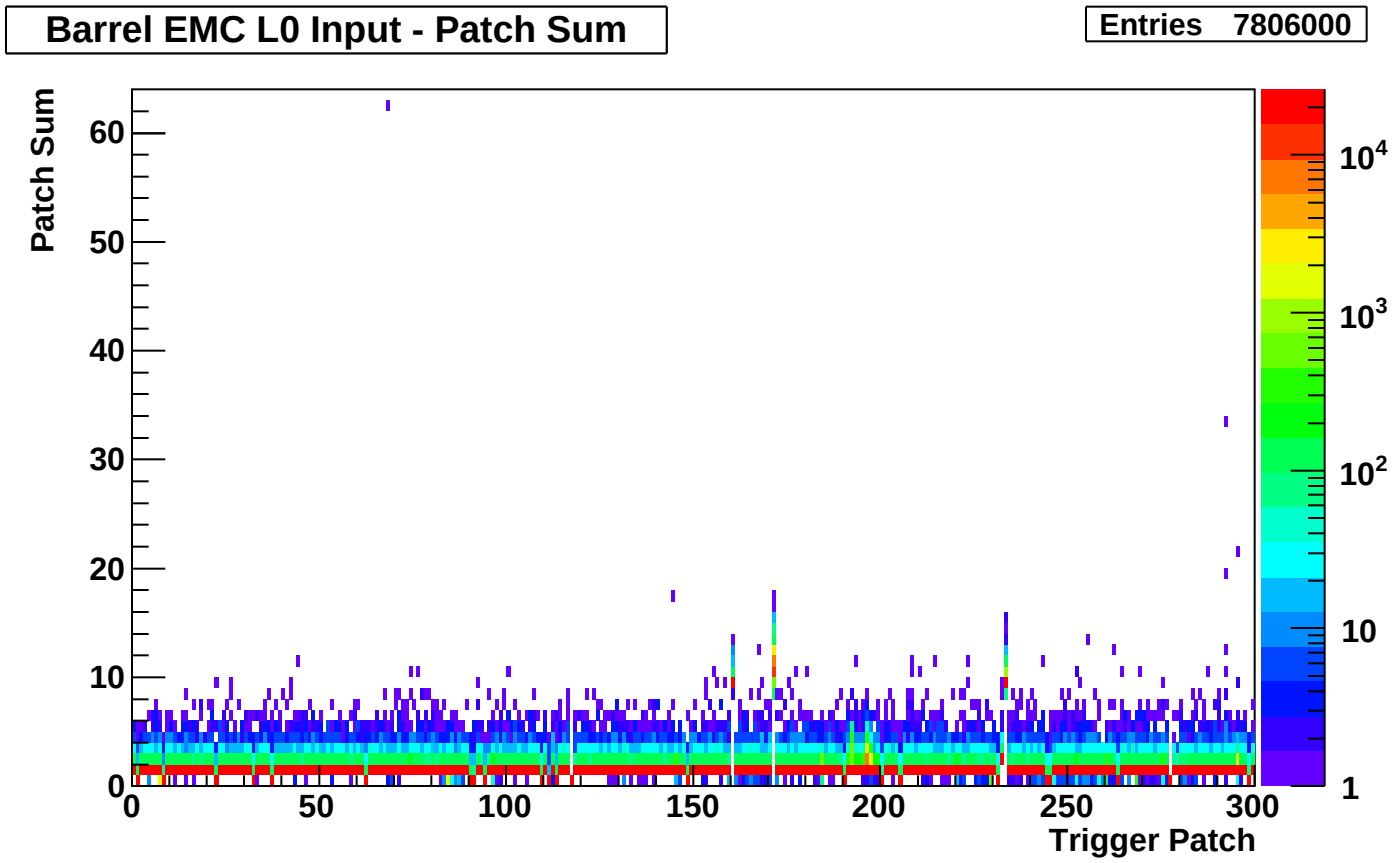

BunchId7Bit (BHT3)
Entries 2

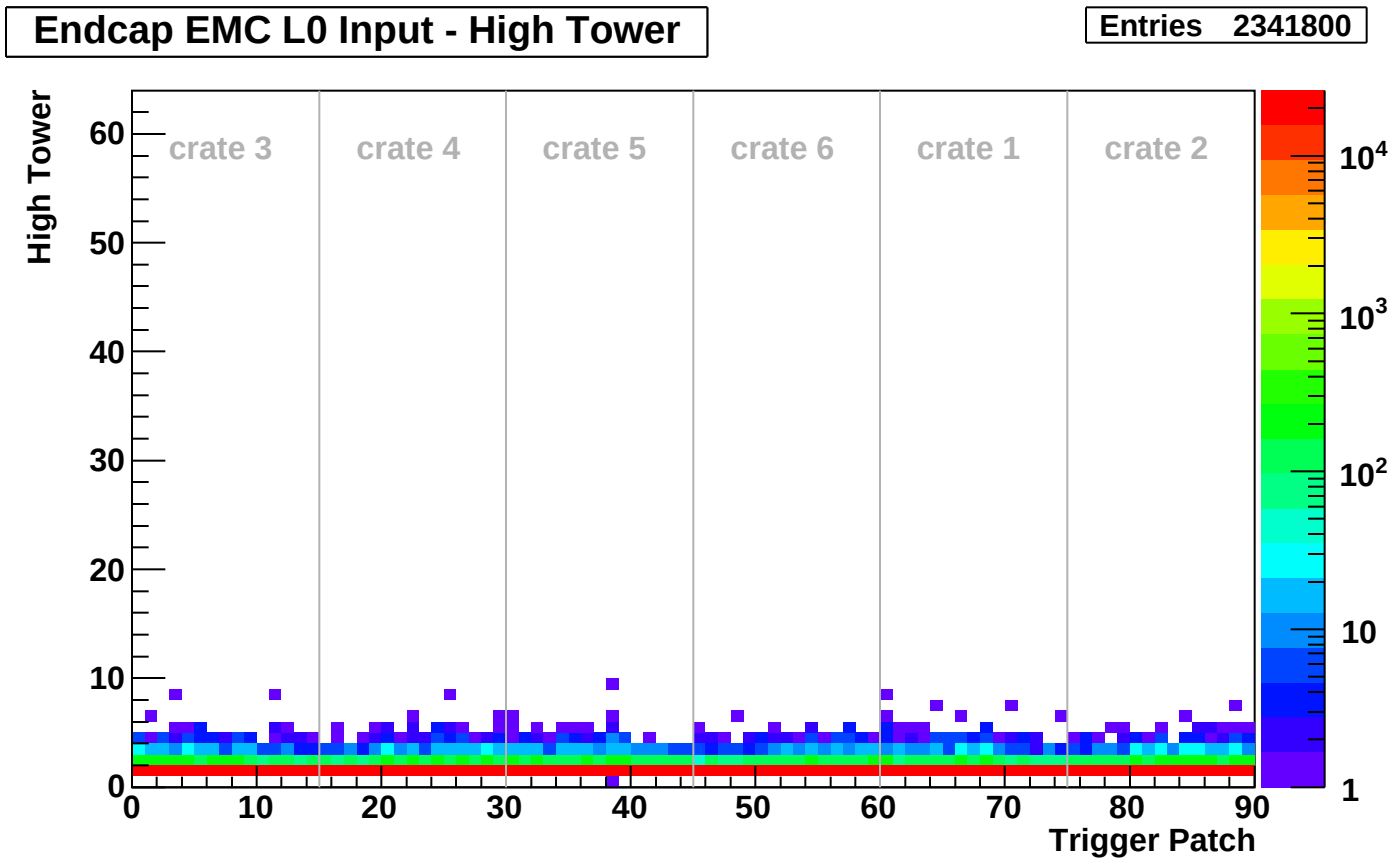

BunchId7Bit (all events)
Entries 26020

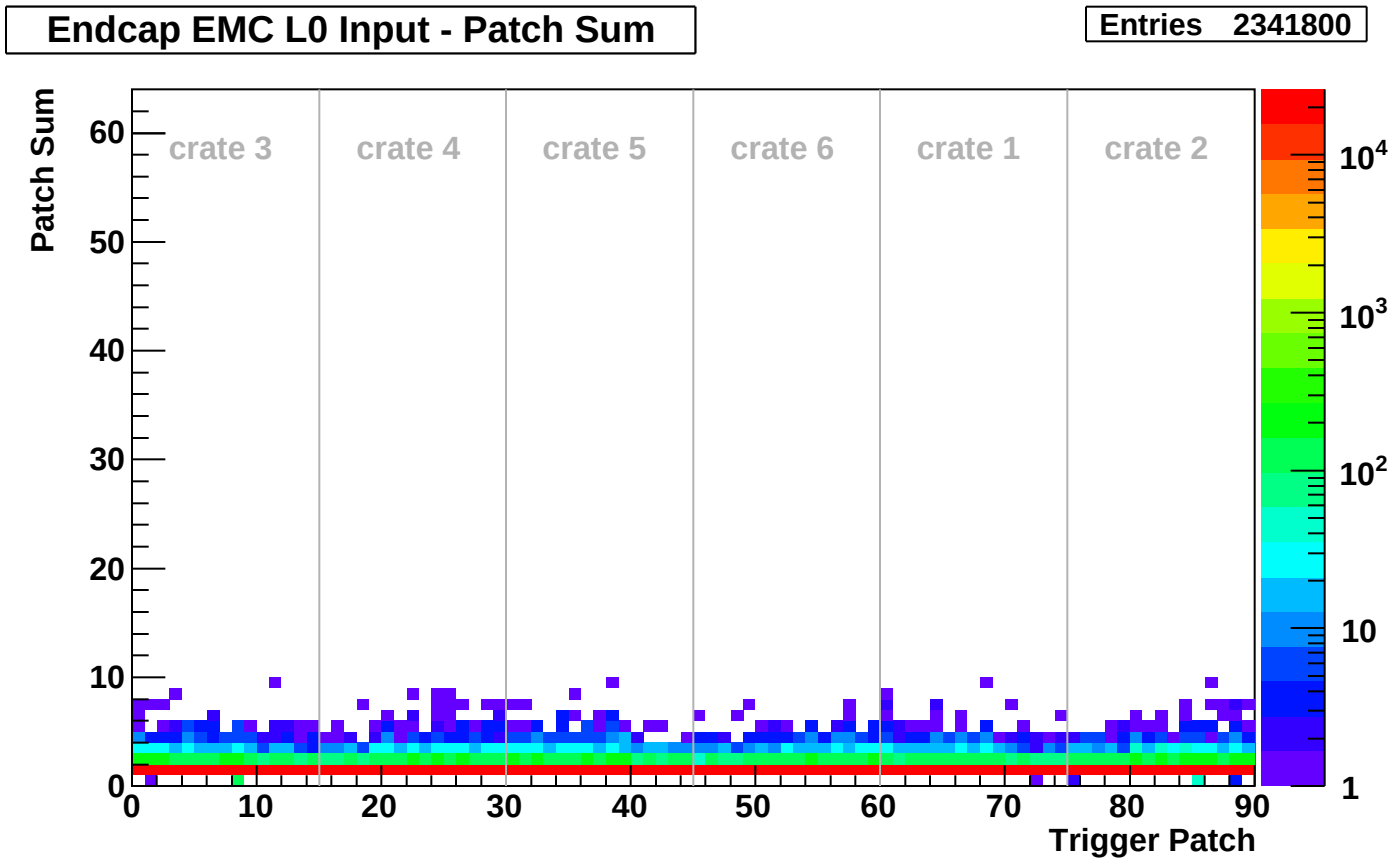

BunchId7Bit (JP1)
Entries 1

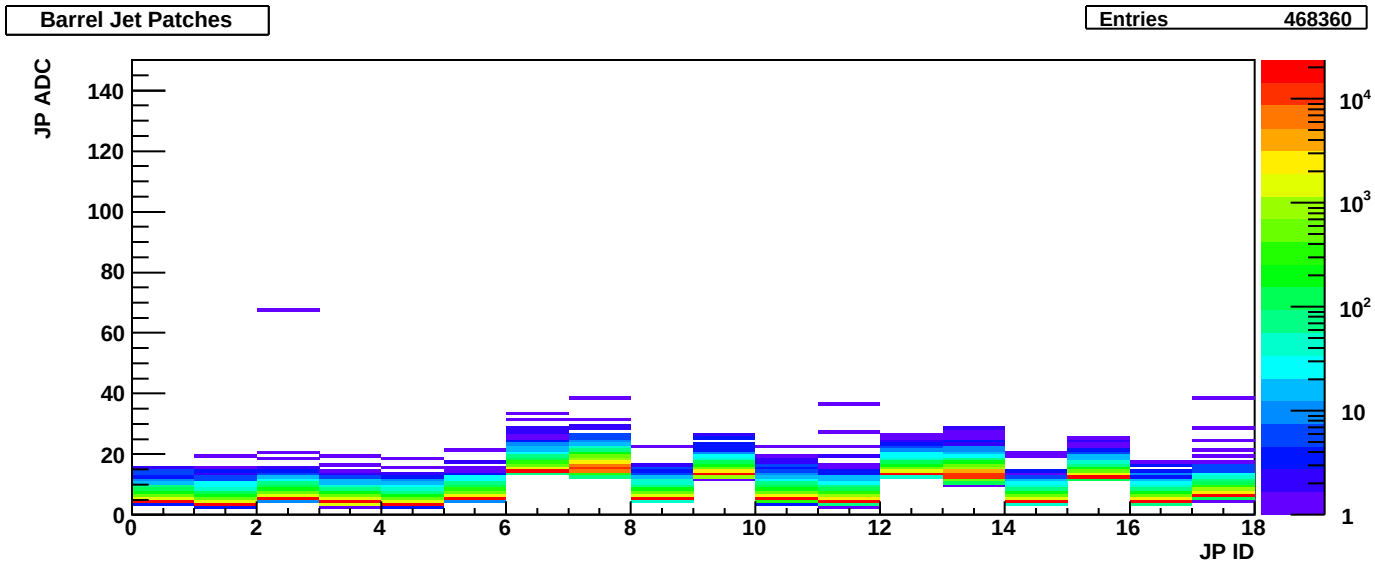

BunchId7Bit (JP2||AJP)
Entries 1

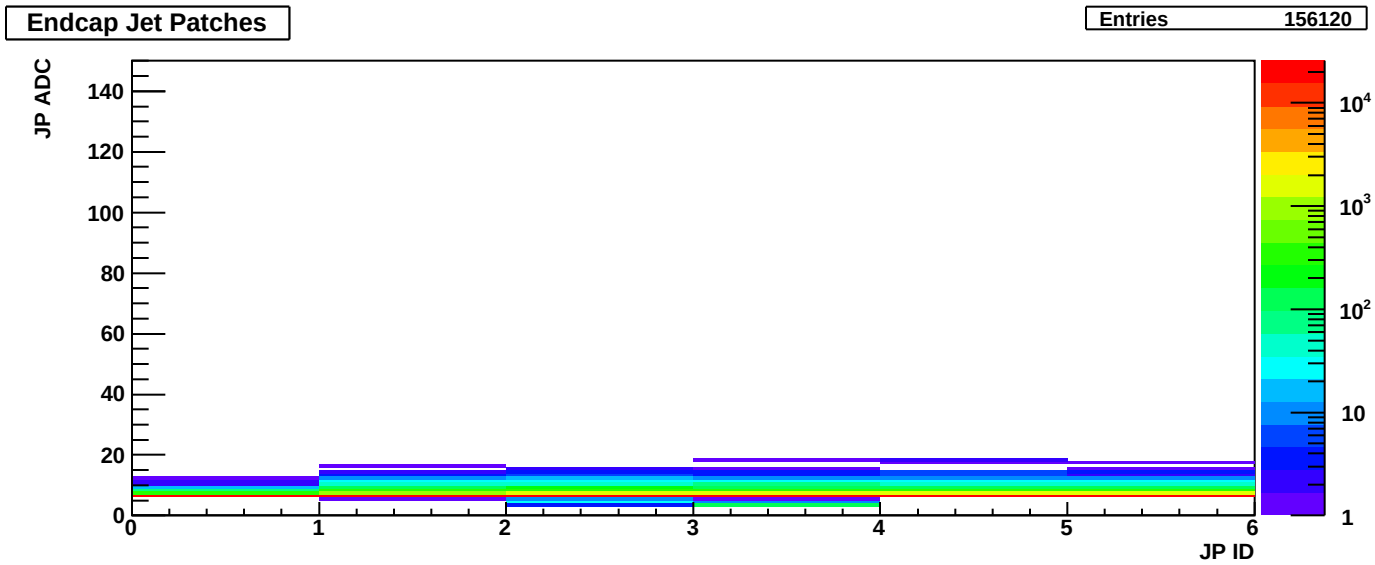

Barrel EMC L0 Input - High Tower
Entries 7806000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

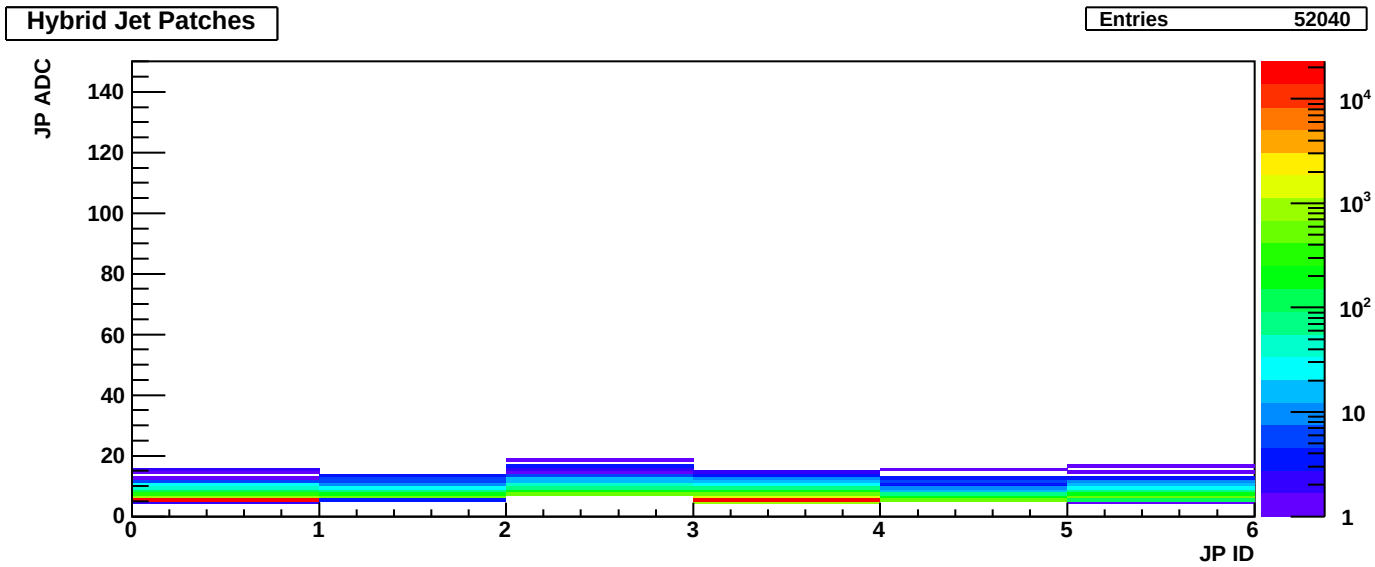

Barrel EMC L0 Input - Patch Sum
Entries 7806000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

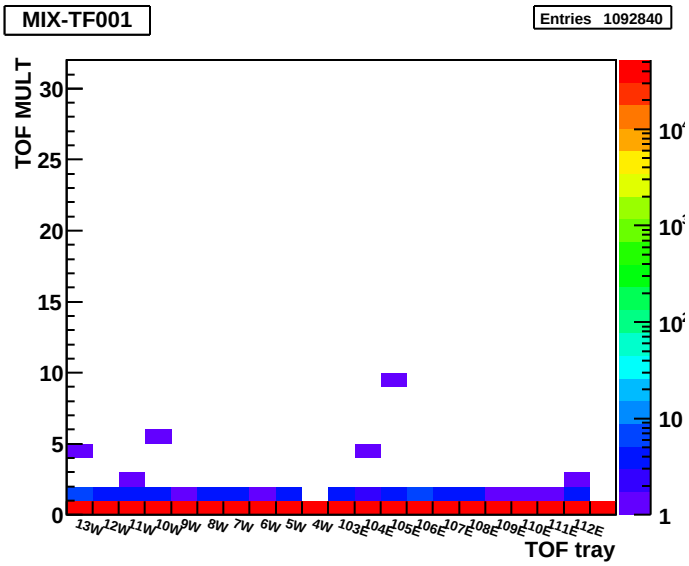

Endcap EMC L0 Input - High Tower
Entries 2341800
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

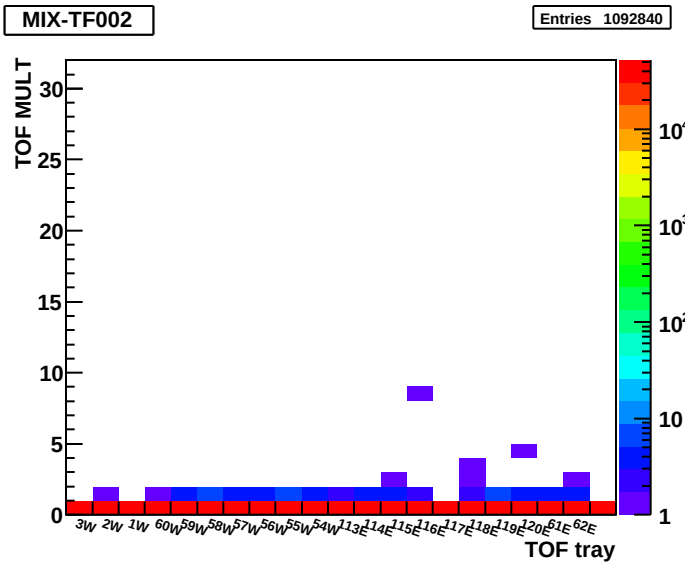

Endcap EMC L0 Input - Patch Sum
Entries 2341800
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

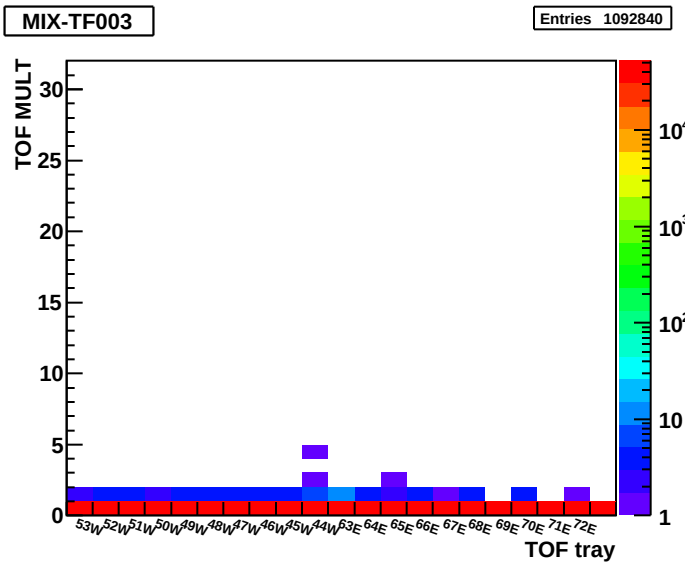

Barrel Jet Patches
Entries 468360
JP ADC
JP ID

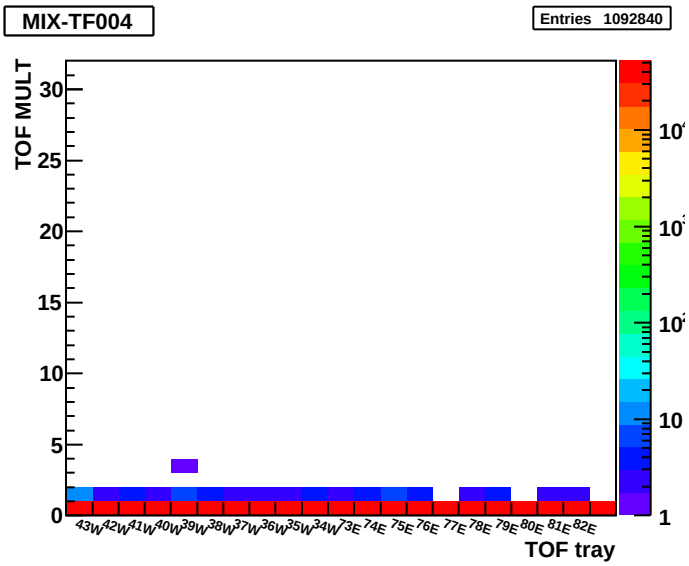

Endcap Jet Patches
Entries 156120
JP ADC
JP ID

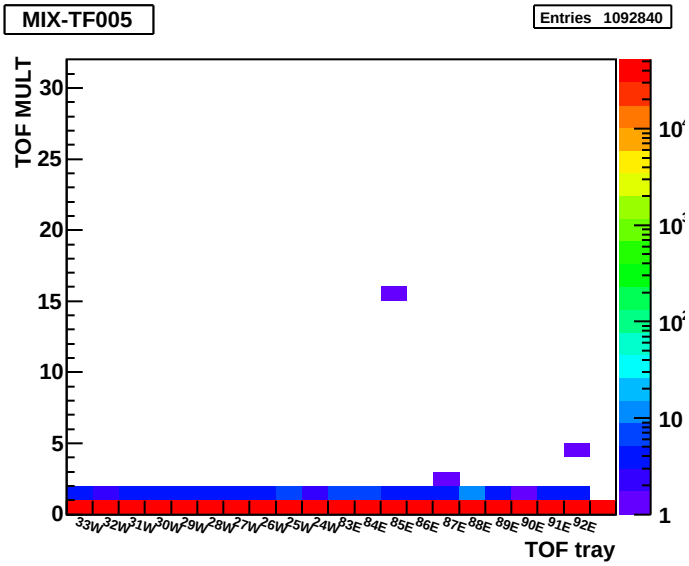

Hybrid Jet Patches
Entries 52040
JP ADC
JP ID

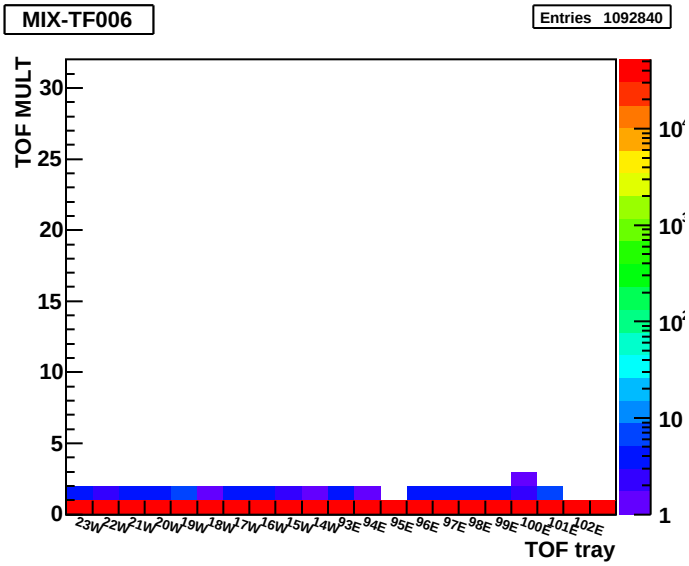

MIX-TF001
Entries 1092840
TOF MULT
TOF tray

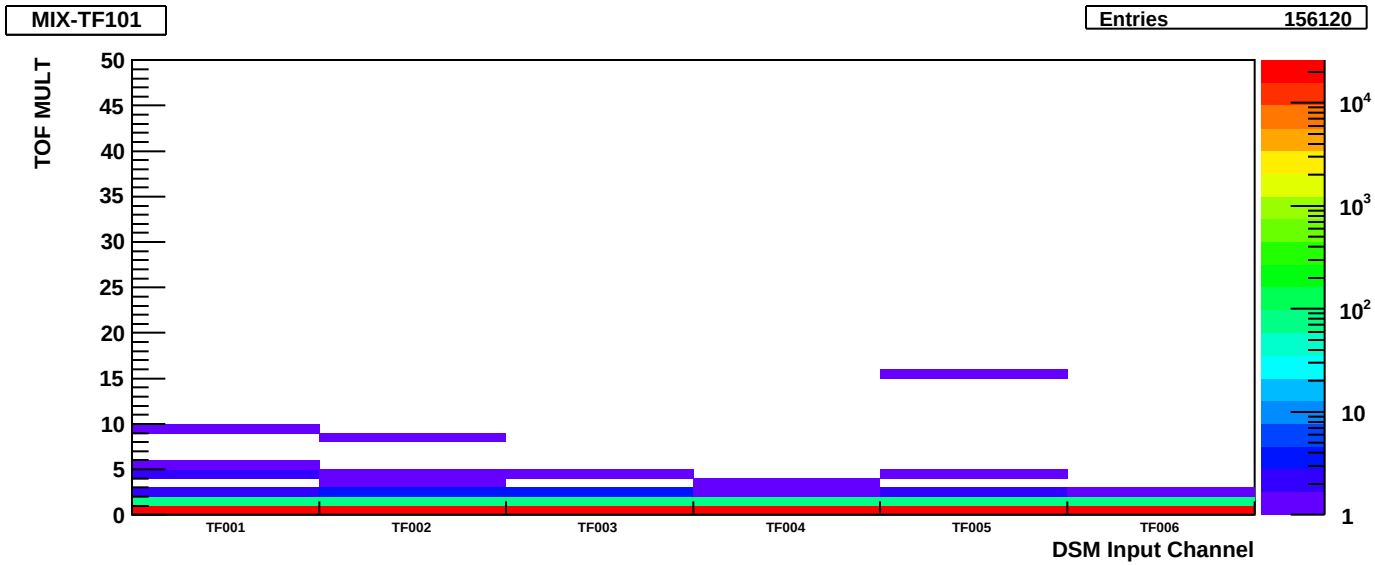

MIX-TF002
Entries 1092840
TOF MULT
TOF tray

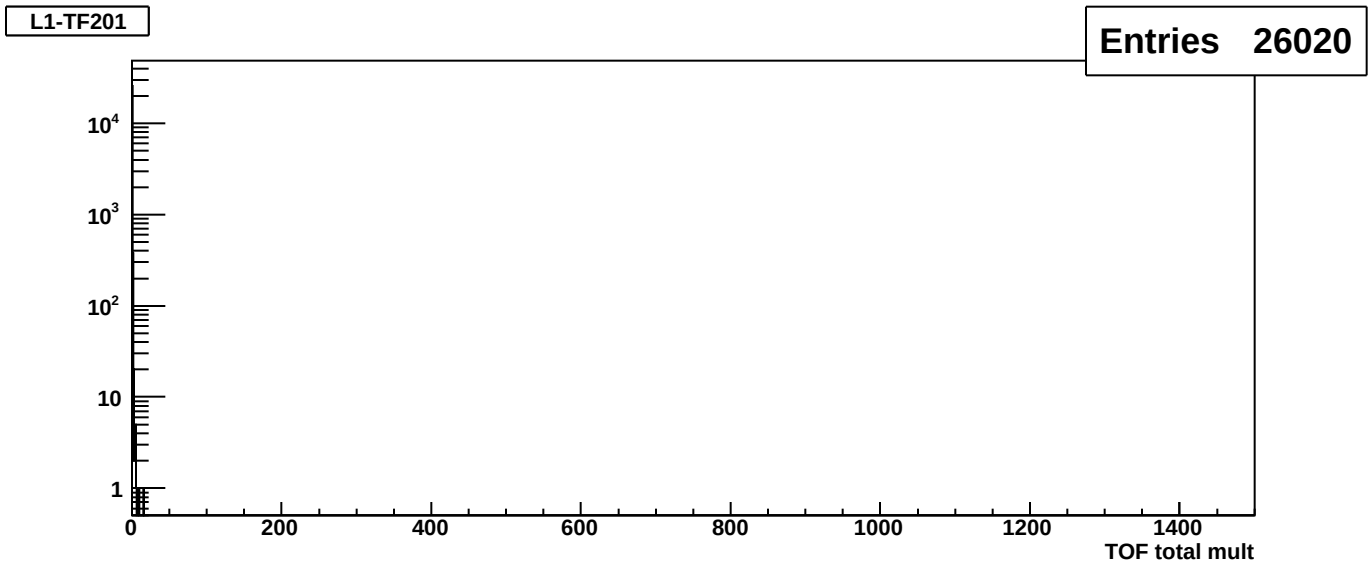

MIX-TF003
Entries 1092840
TOF MULT
TOF tray

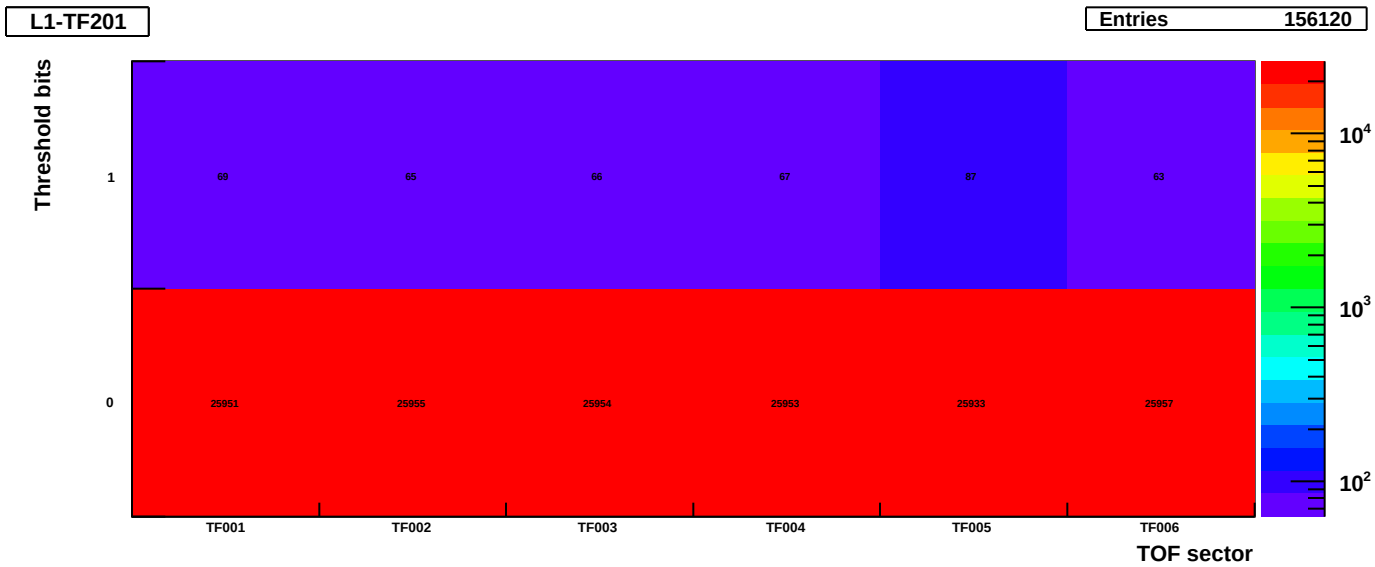

MIX-TF004
Entries 1092840
TOF MULT
TOF tray

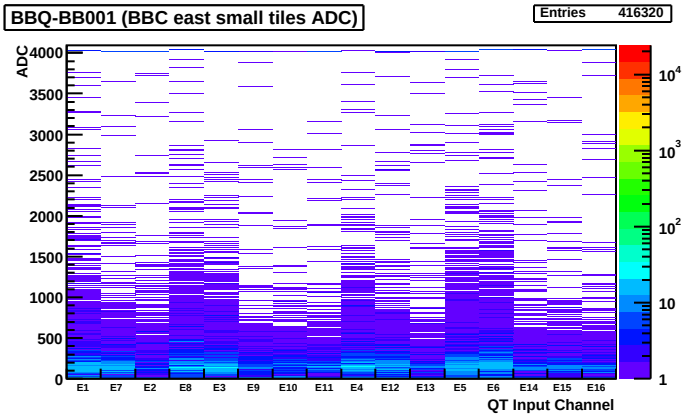

MIX-TF005
Entries 1092840
TOF MULT
TOF tray

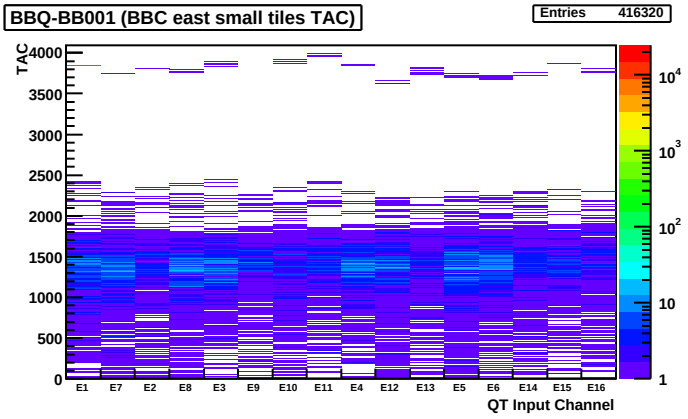

MIX-TF006
Entries 1092840
TOF MULT
TOF tray

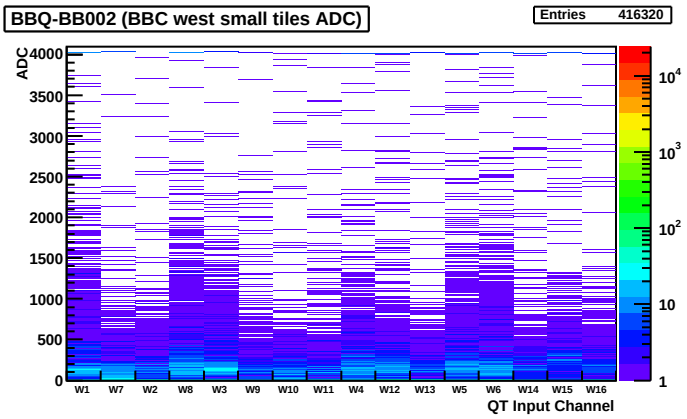

MIX-TF101
Entries 156120
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

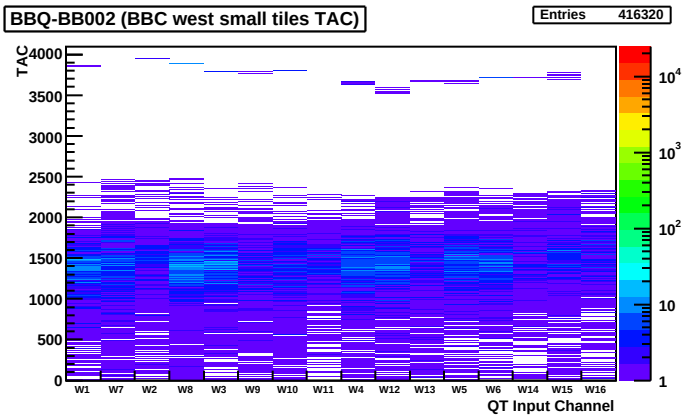

L1-TF201
Entries 26020
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

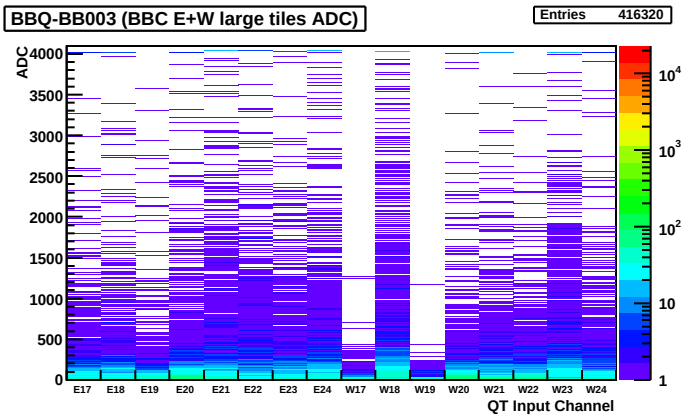

L1-TF201
Entries 156120
Threshold bits
1
0
69
65
66
67
87
63
25951
25955
25954
25953
25933
25957
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2

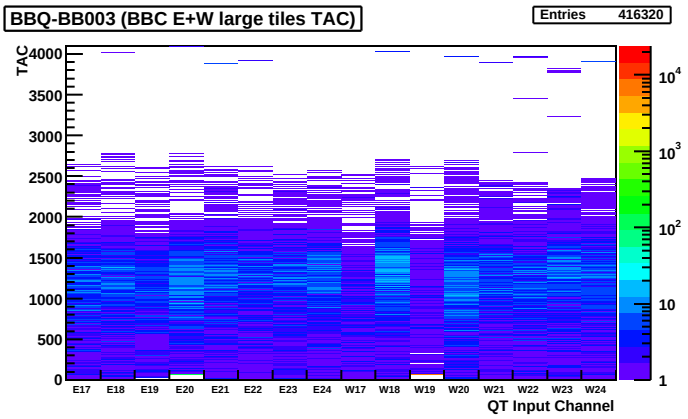

BBQ-BB001 (BBC east small tiles ADC)
Entries 416320
ADC
QT Input Channel

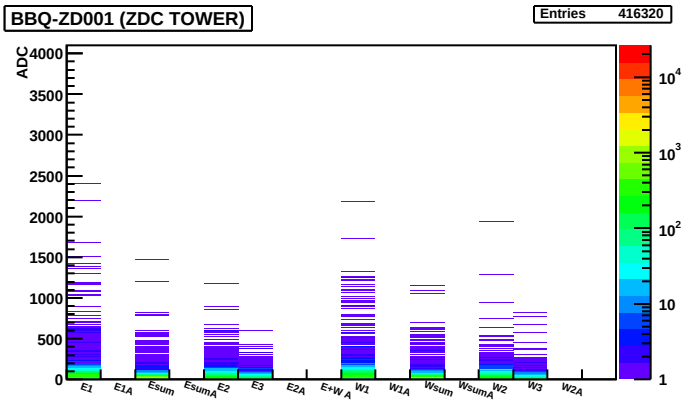

BBQ-BB001 (BBC east small tiles TAC)
Entries 416320
TAC
QT Input Channel

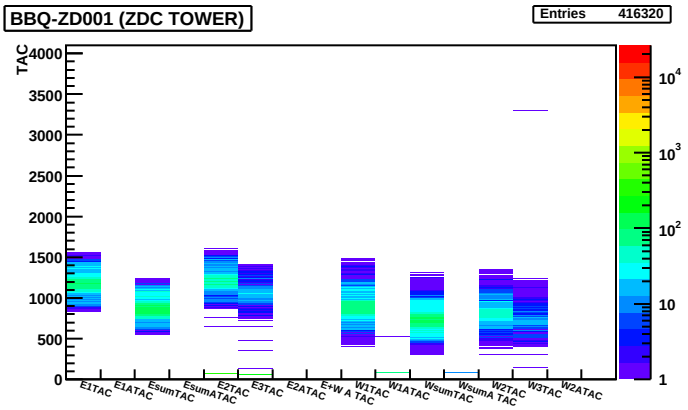

BBQ-BB002 (BBC west small tiles ADC)
Entries 416320
ADC
QT Input Channel

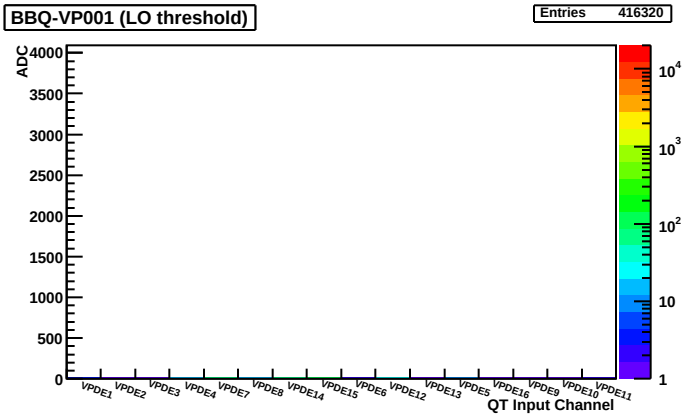

BBQ-BB002 (BBC west small tiles TAC)
Entries 416320
TAC
QT Input Channel

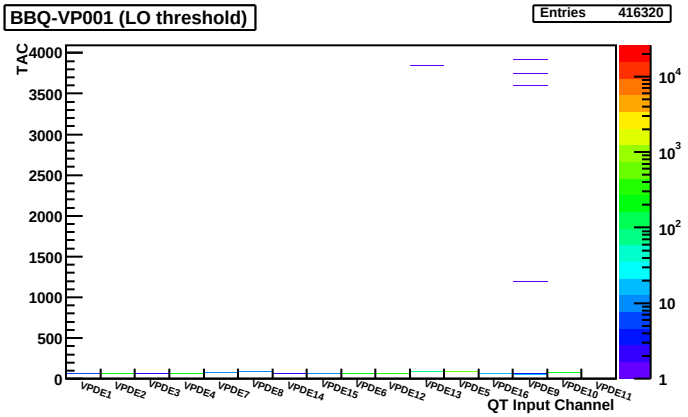

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 416320
ADC
QT Input Channel

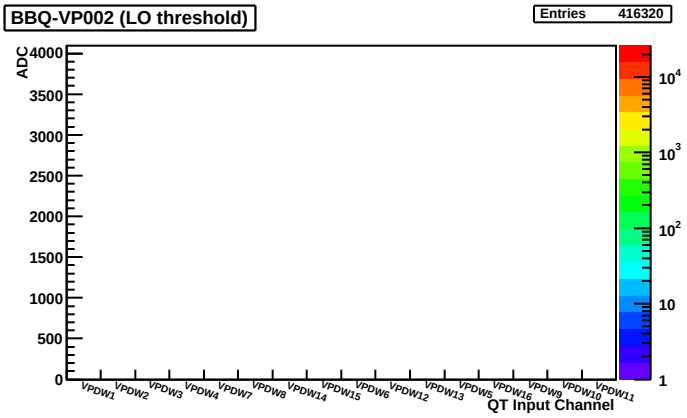

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 416320
TAC
QT Input Channel

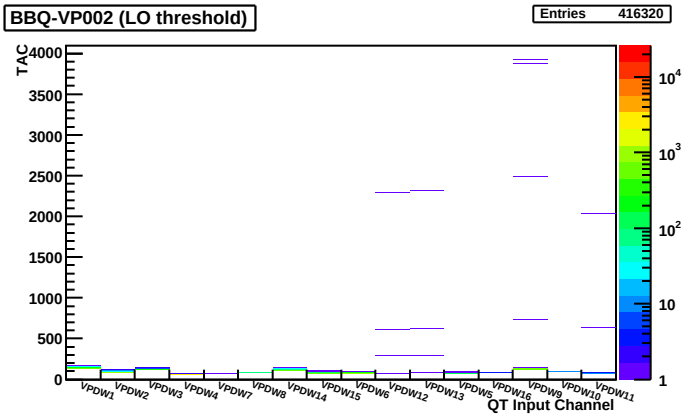

BBQ-ZD001 (ZDC TOWER)
Entries 416320
ADC

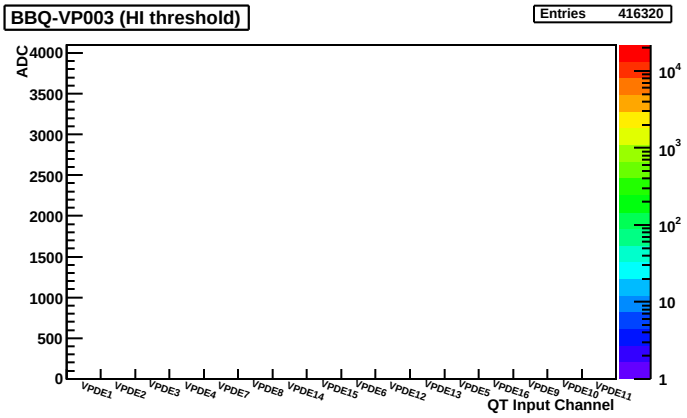

BBQ-ZD001 (ZDC TOWER)
Entries 416320
TAC

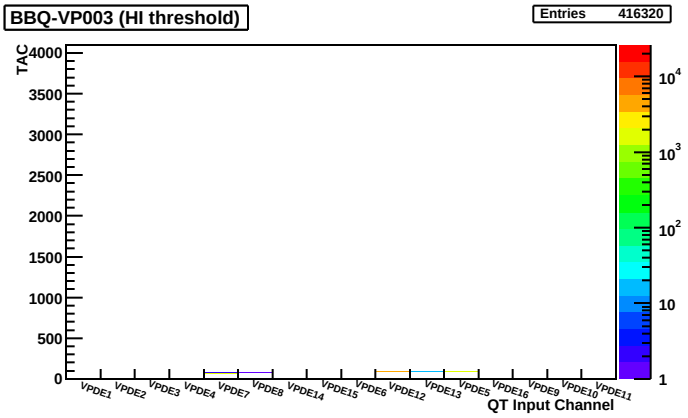

BBQ-VP001 (LO threshold)
Entries 416320
ADC
QT Input Channel

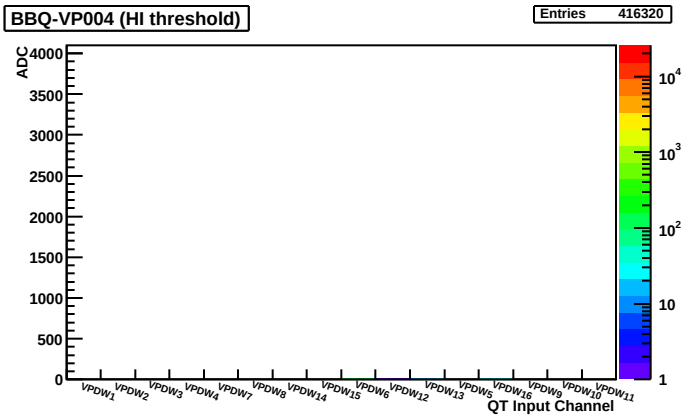

BBQ-VP001 (LO threshold)
Entries 416320
TAC
QT Input Channel

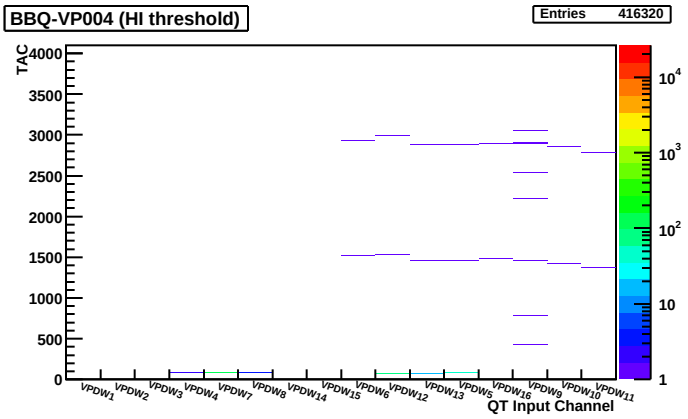

BBQ-VP002 (LO threshold)
Entries 416320
ADC
QT Input Channel

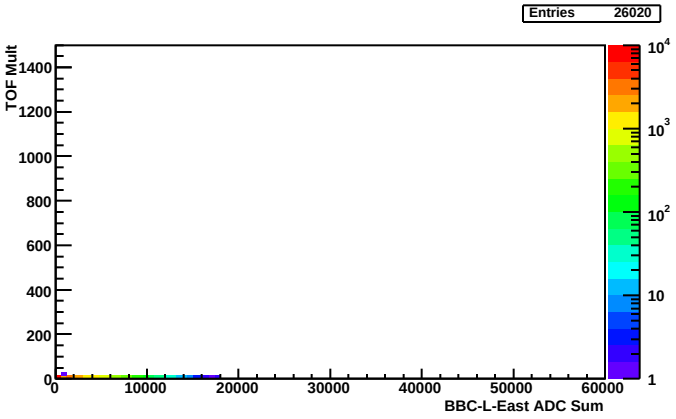

BBQ-VP002 (LO threshold)
Entries 416320
TAC
QT Input Channel

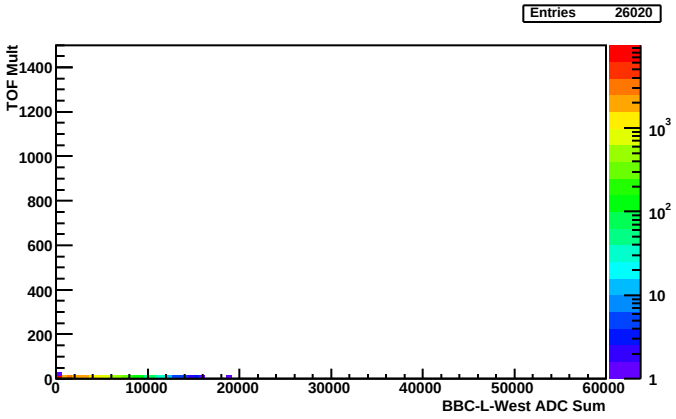

BBQ-VP003 (HI threshold)
Entries 416320
ADC
QT Input Channel

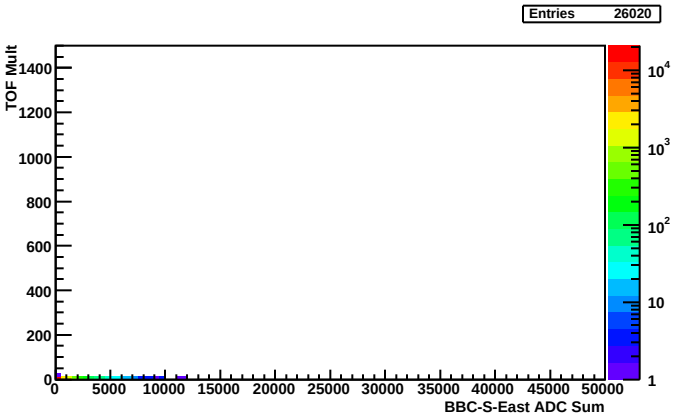

BBQ-VP003 (HI threshold)
Entries 416320
TAC
QT Input Channel

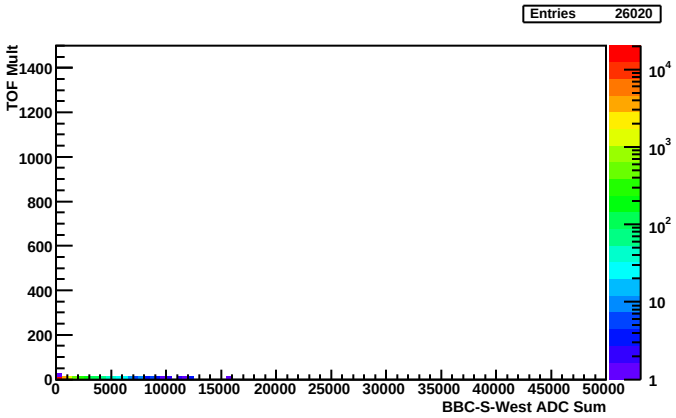

BBQ-VP004 (HI threshold)
Entries 416320
ADC
QT Input Channel

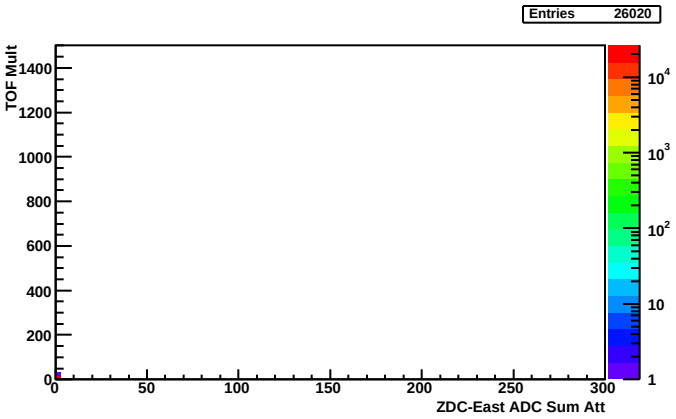

BBQ-VP004 (HI threshold)
Entries 416320
TAC
QT Input Channel

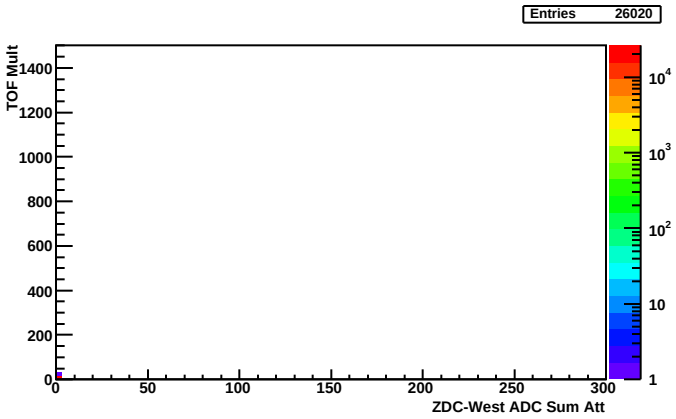

Entries 26020
TOF Mult
BBC-L-East ADC Sum

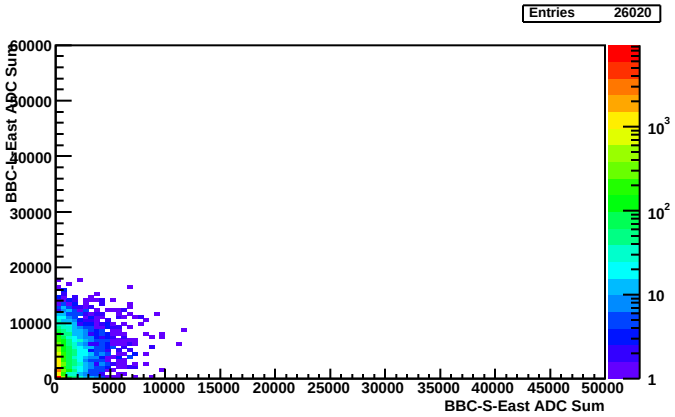

Entries 26020
TOF Mult
BBC-L-West ADC Sum

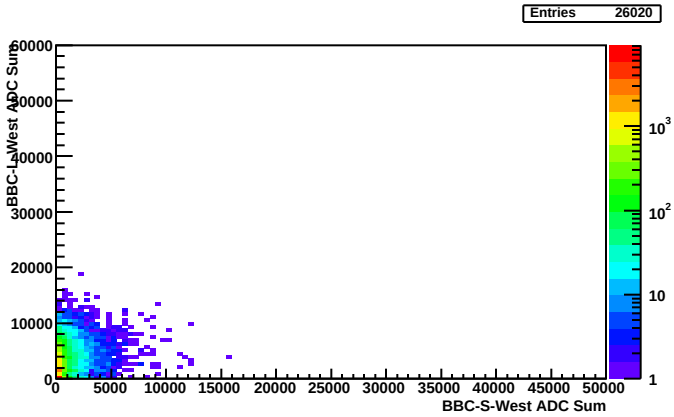

Entries 26020
TOF Mult
BBC-S-East ADC Sum

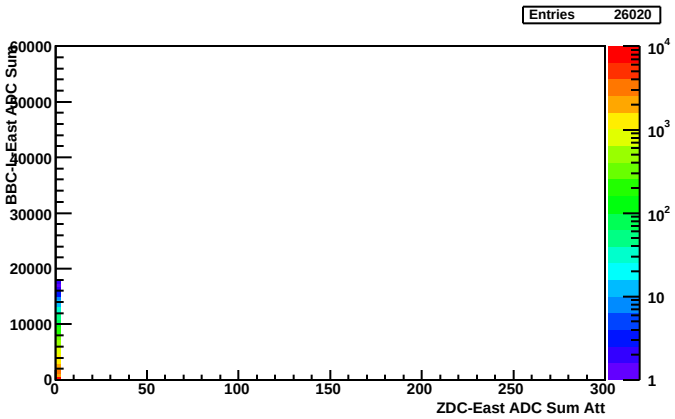

Entries 26020
TOF Mult
BBC-S-West ADC Sum

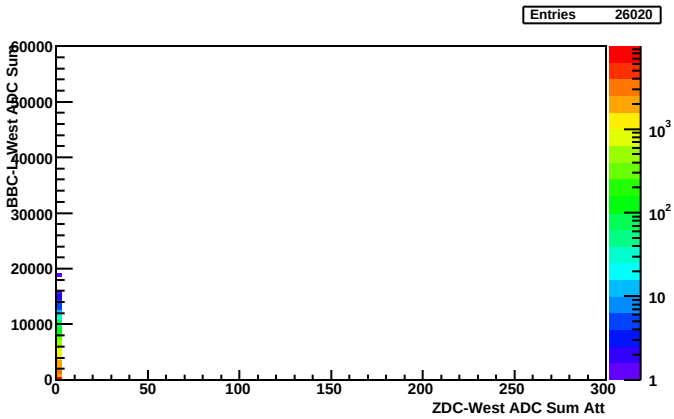

Entries 26020
TOF Mult
ZDC-East ADC Sum Att

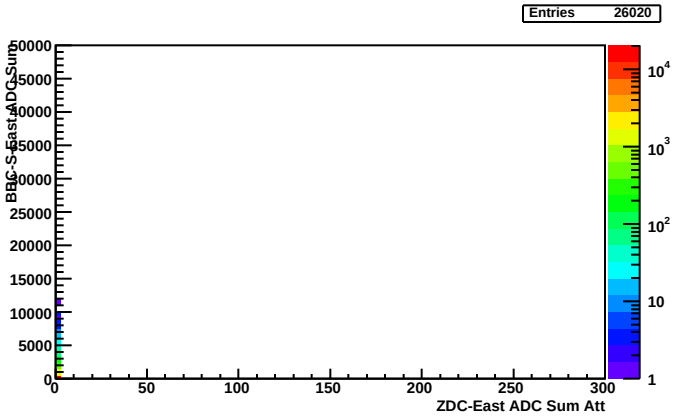

Entries 26020
TOF Mult
ZDC-West ADC Sum Att

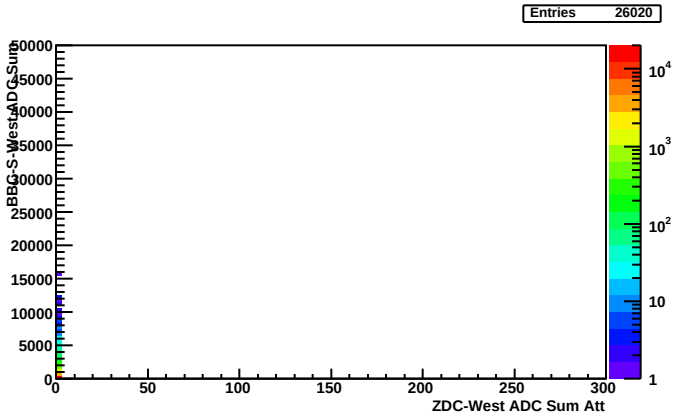

Entries 26020
BBC-L-East ADC Sum
BBC-S-East ADC Sum

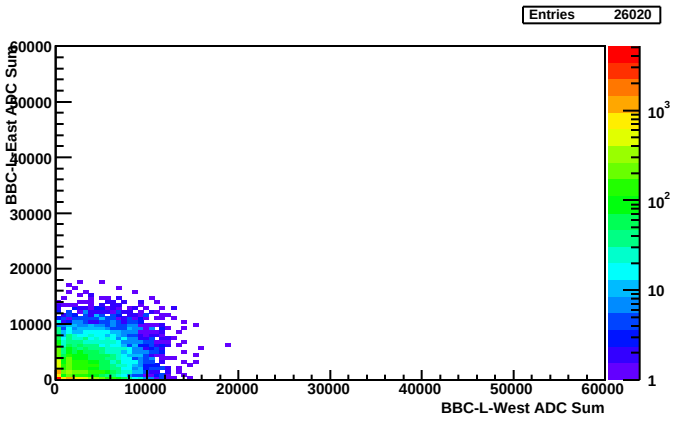

Entries 26020
BBC-L-West ADC Sum
BBC-S-West ADC Sum

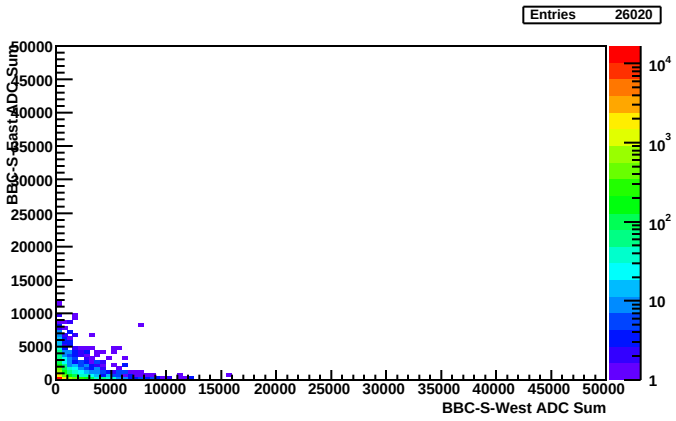

Entries 26020
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

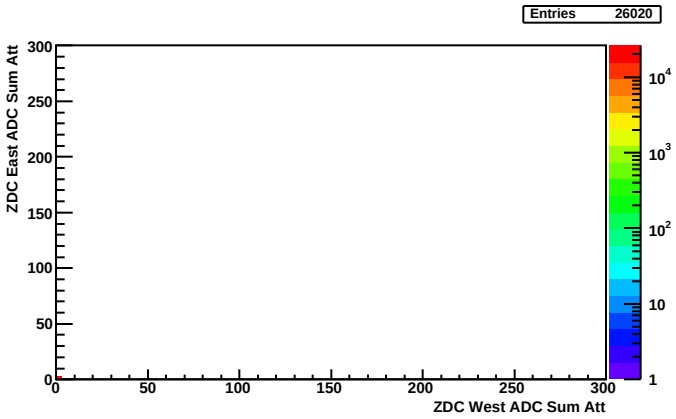

Entries 26020
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

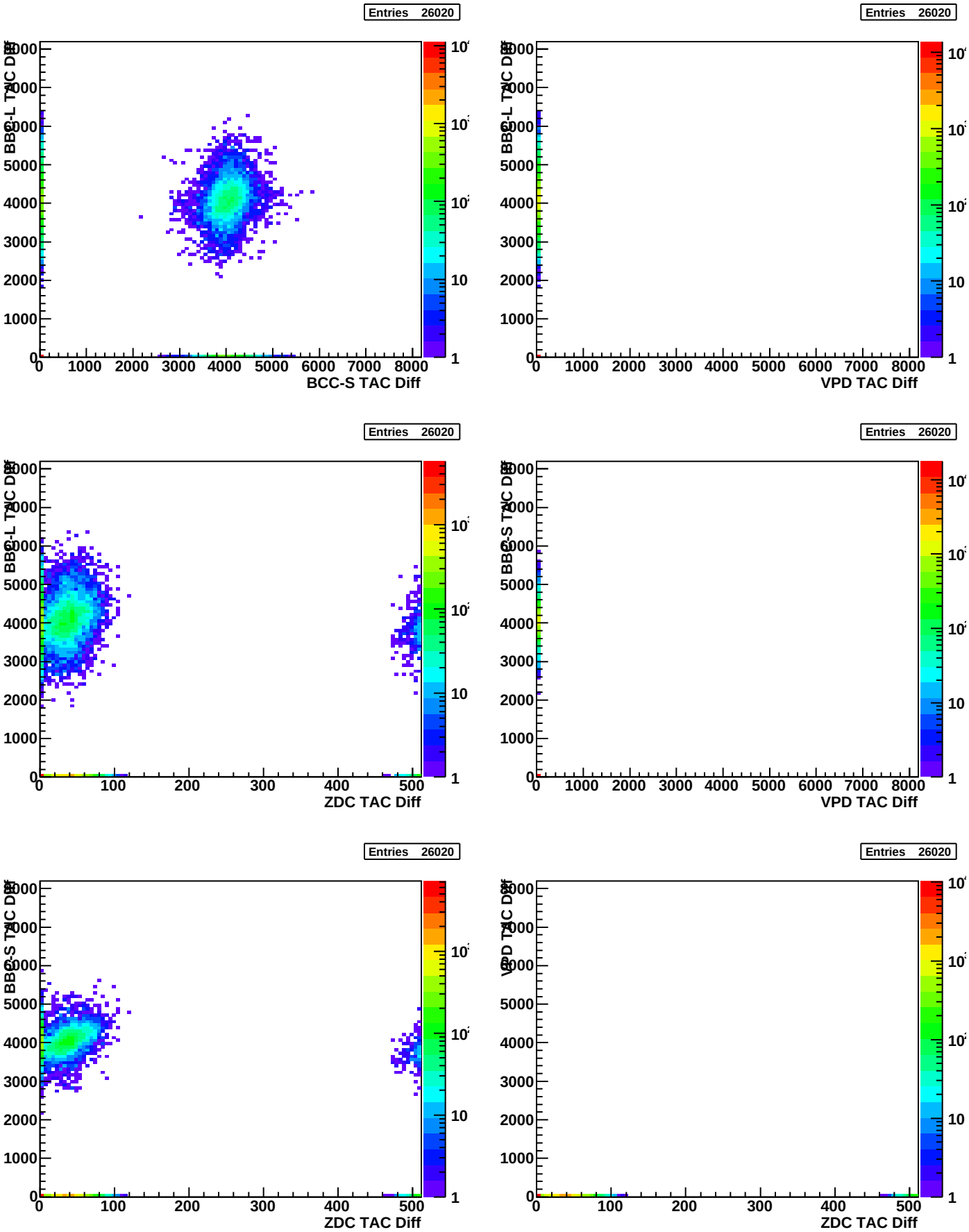

Entries 26020
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

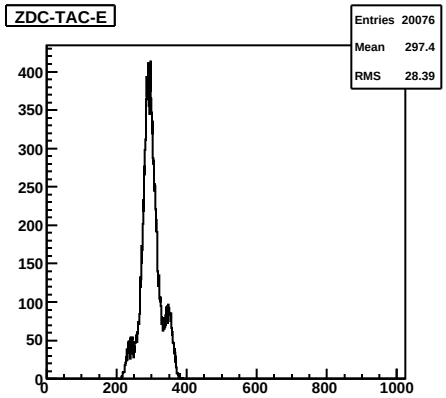

Entries 26020
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

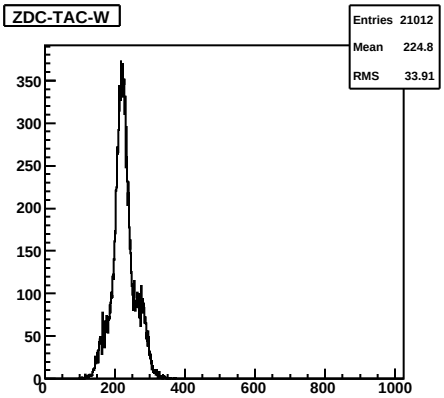

Entries 26020
BBC-L-East ADC Sum
BBC-L-West ADC Sum

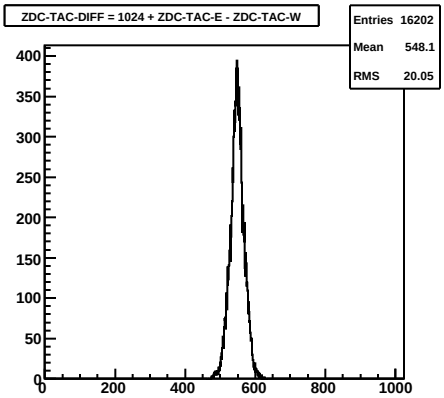

Entries 26020
BBC-S-East ADC Sum
BBC-S-West ADC Sum

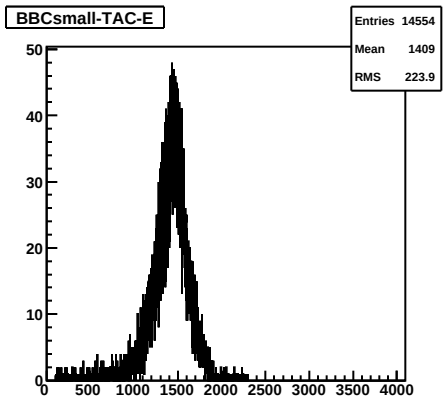

Entries 26020
ZDC East ADC Sum Att
ZDC West ADC Sum Att

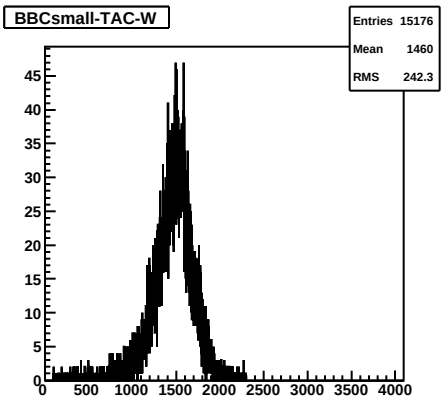

Entries 26020
BBC-L TAC Diff
BCC-S TAC Diff
Entries 26020
BBC-L TAC Diff
VPD TAC Diff
Entries 26020
BBC-L TAC Diff
ZDC TAC Diff
Entries 26020
BBC-S TAC Diff
VPD TAC Diff
Entries 26020
BBC-S TAC Diff
ZDC TAC Diff
Entries 26020
VPD TAC Diff
ZDC TAC Diff

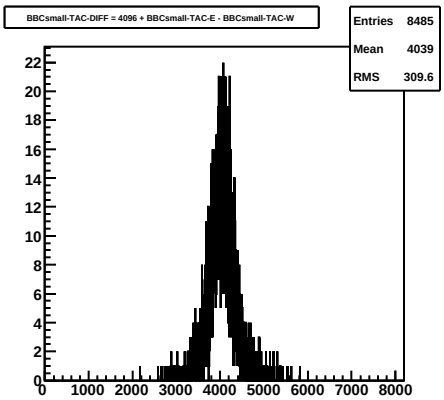

ZDC-TAC-E
Entries 20076
Mean 297.4
RMS 28.39

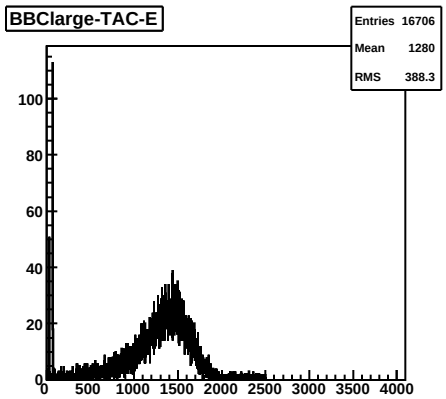

ZDC-TAC-W
Entries 21012
Mean 224.8
RMS 33.91

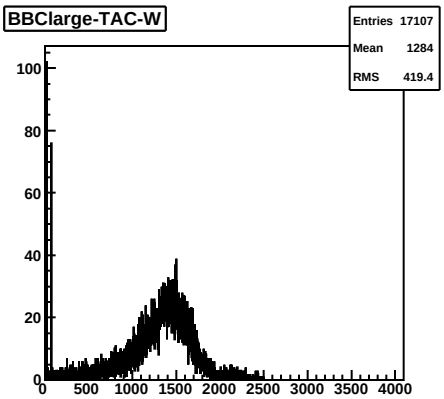

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 16202
Mean 548.1
RMS 20.05

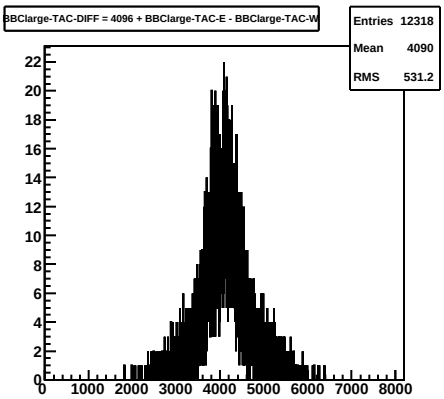

BBCsmall-TAC-E
Entries 14554
Mean 1409
RMS 223.9

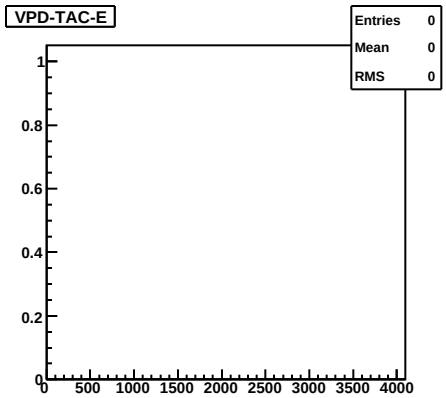

BBCsmall-TAC-W
Entries 15176
Mean 1460
RMS 242.3

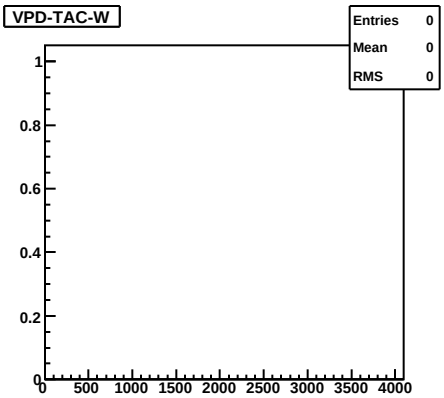

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 8485
Mean 4039
RMS 309.6

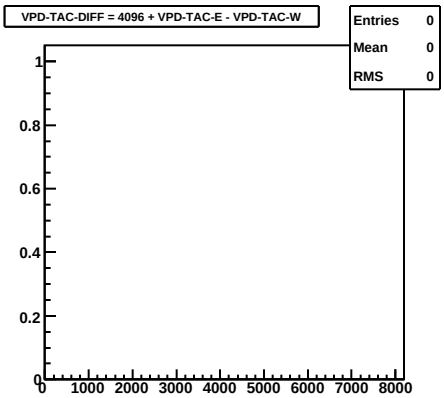

BBClarge-TAC-E
Entries 16706
Mean 1280
RMS 388.3

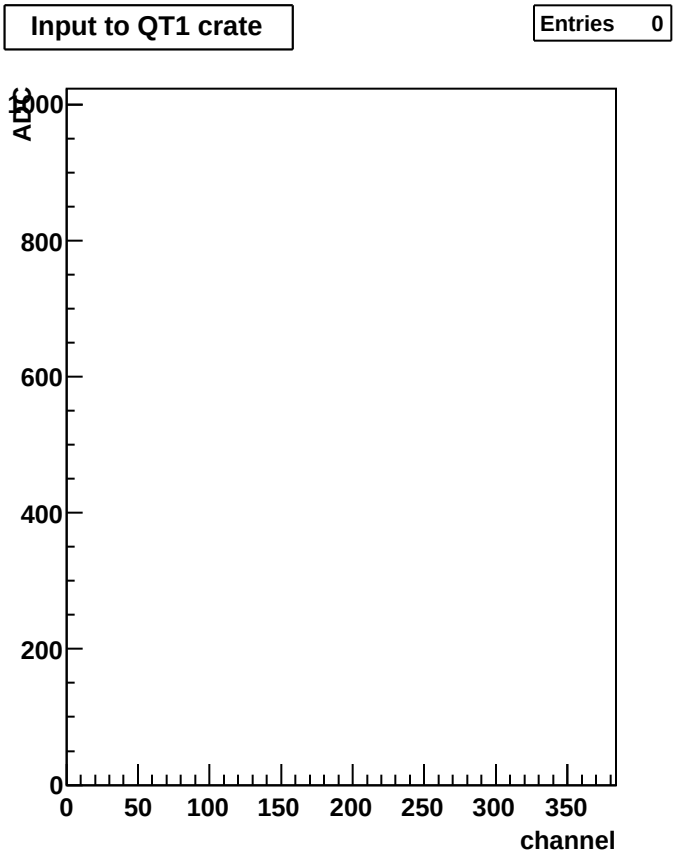

BBClarge-TAC-W
Entries 17107
Mean 1284
RMS 419.4

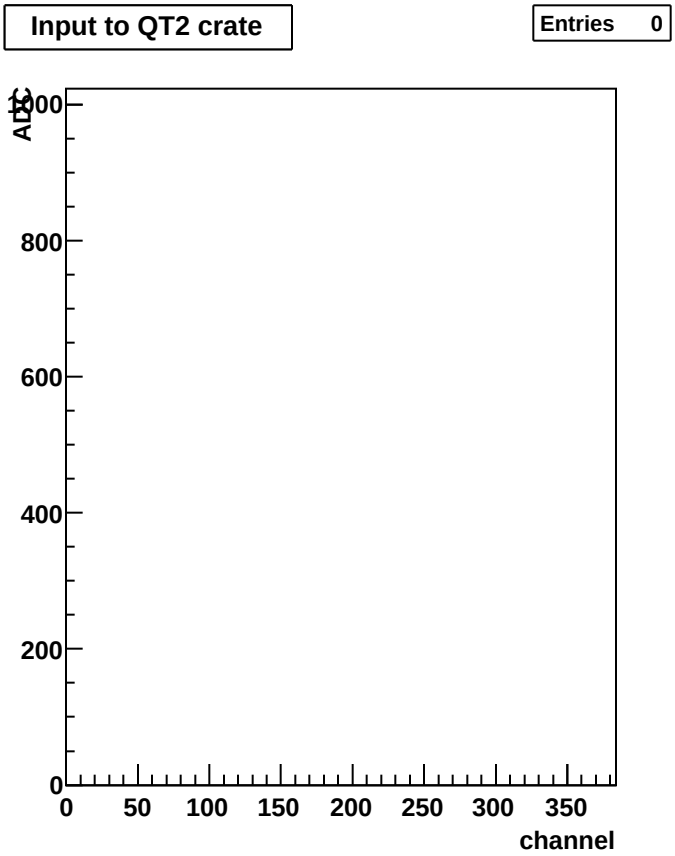

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 12318
Mean 4090
RMS 531.2

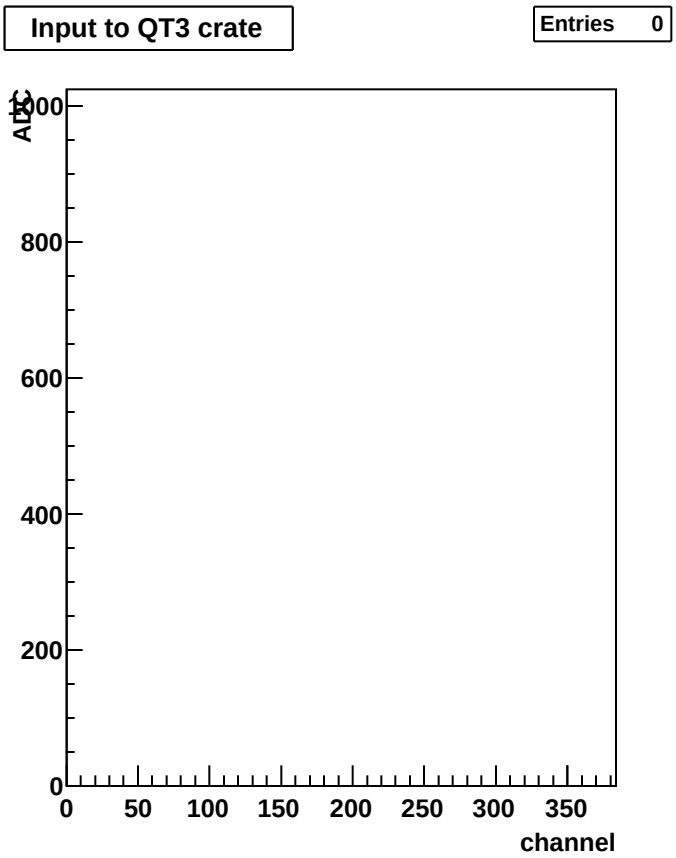

VPD-TAC-E
Entries 0
Mean 0
RMS 0

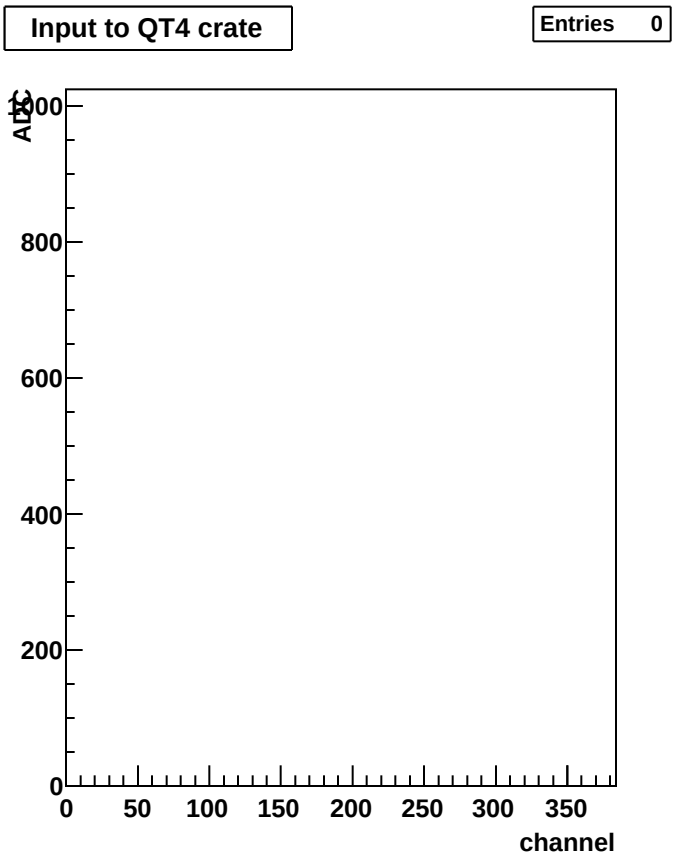

VPD-TAC-W
Entries 0
Mean 0
RMS 0

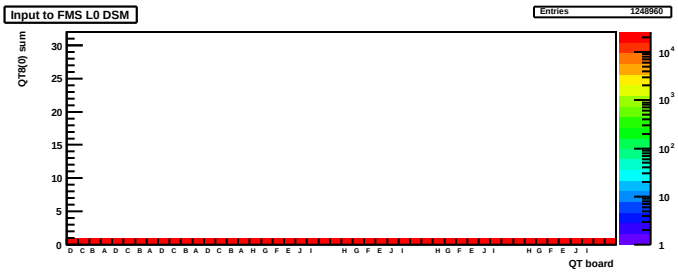

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

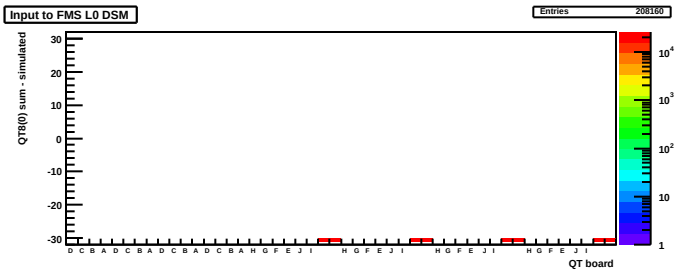

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

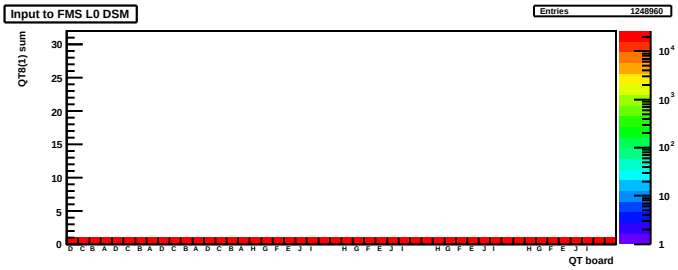

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

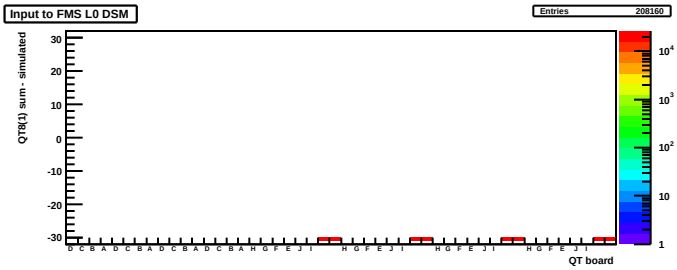

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

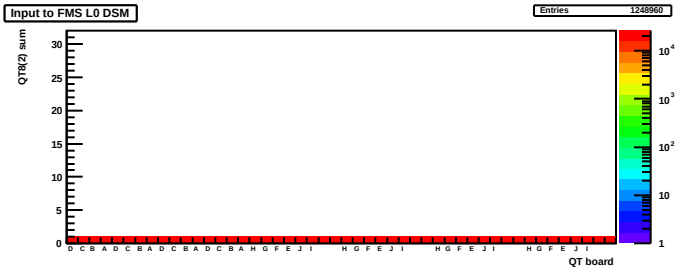

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

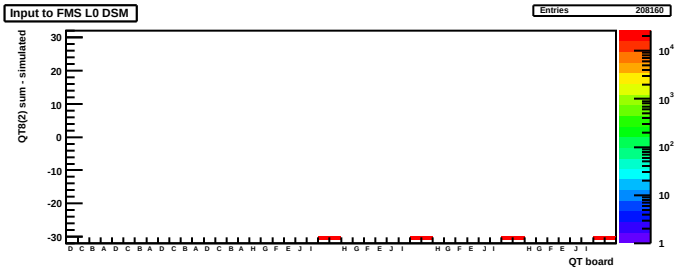

Input to FMS L0 DSM
Entries 1248960
QT8(0) sum
QT board

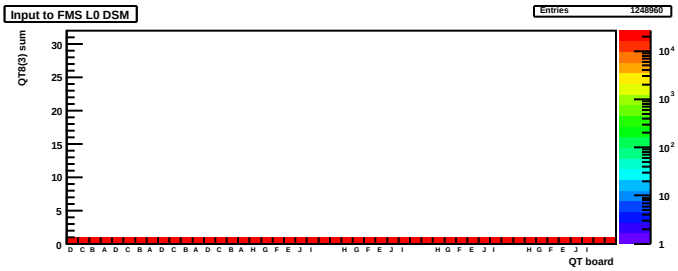

Input to FMS L0 DSM
Entries 208160
QT8(0) sum - simulated
QT board

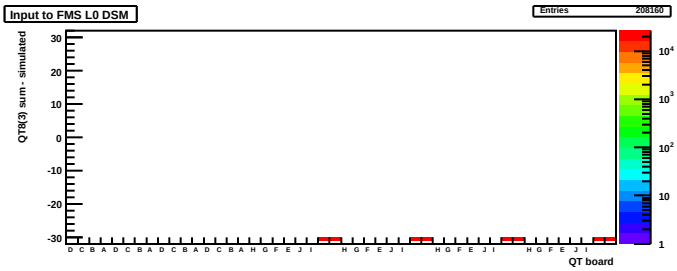

Input to FMS L0 DSM
Entries 1248960
QT8(1) sum
QT board

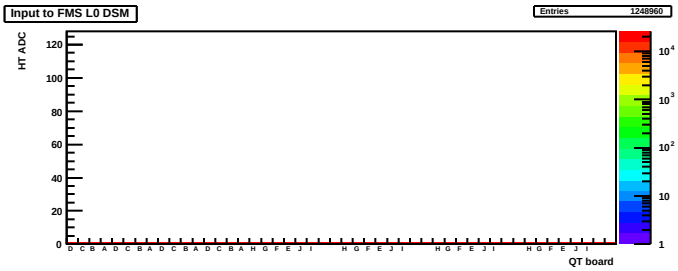

Input to FMS L0 DSM
Entries 208160
QT8(1) sum - simulated
QT board

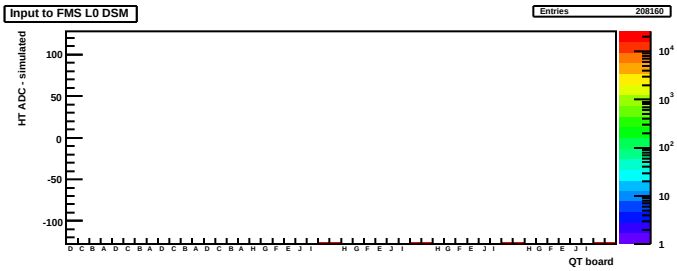

Input to FMS L0 DSM
Entries 1248960
QT8(2) sum
QT board

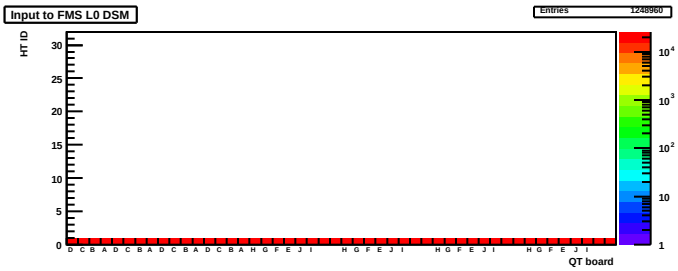

Input to FMS L0 DSM
Entries 208160
QT8(2) sum - simulated
QT board

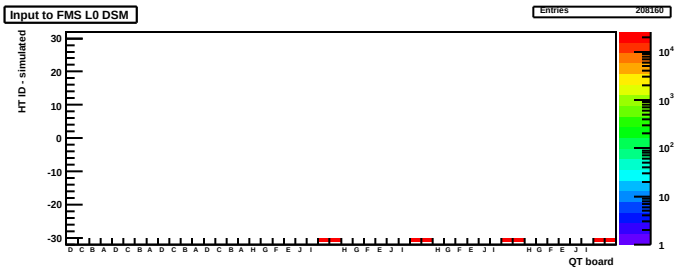

Input to FMS L0 DSM
Entries 1248960
QT8(3) sum
QT board

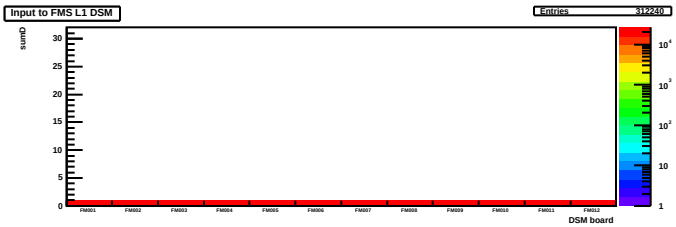

Input to FMS L0 DSM
Entries 208160
QT8(3) sum - simulated
QT board

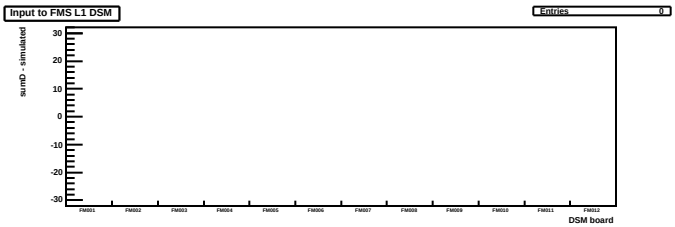

Input to FMS L0 DSM
Entries 1248960
HT ADC
QT board

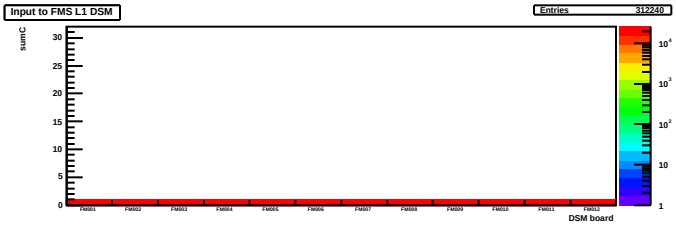

Input to FMS L0 DSM
Entries 208160
HT ADC - simulated
QT board

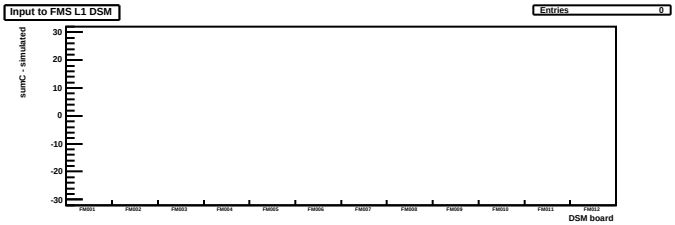

Input to FMS L0 DSM
Entries 1248960
HT ID
QT board

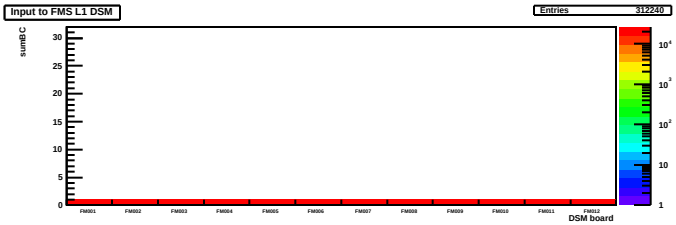

Input to FMS L0 DSM
Entries 208160
HT ID - simulated
QT board

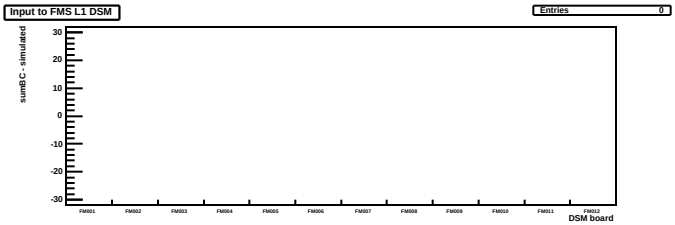

Input to FMS L1 DSM
Entries 312240
sumD
DSM board

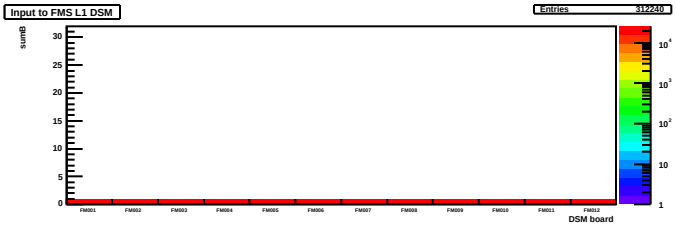

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

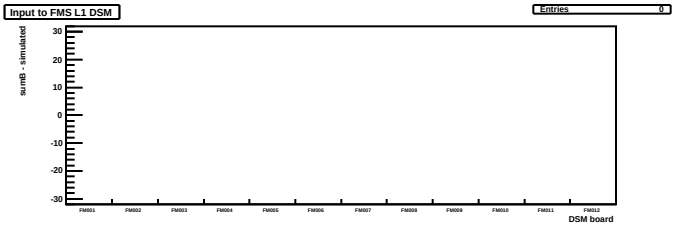

Input to FMS L1 DSM
Entries 312240
sumC
DSM board

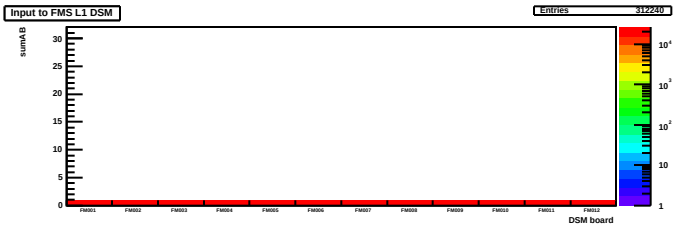

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

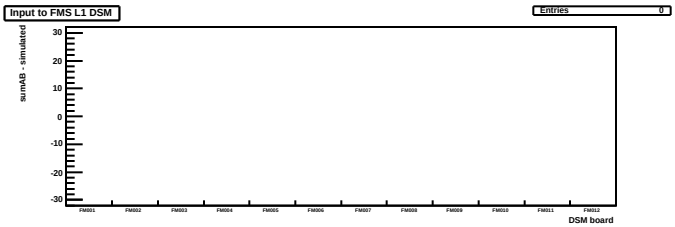

Input to FMS L1 DSM
Entries 312240
sumBC
DSM board

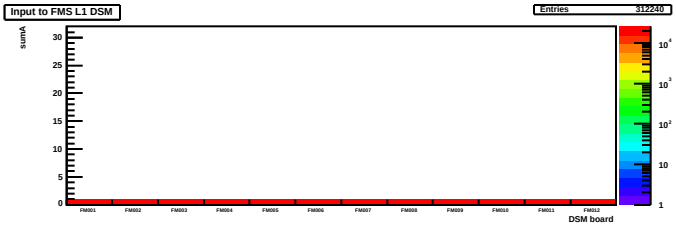

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

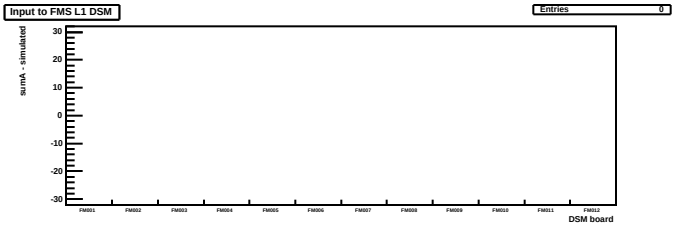

Input to FMS L1 DSM
Entries 312240
sumB
DSM board

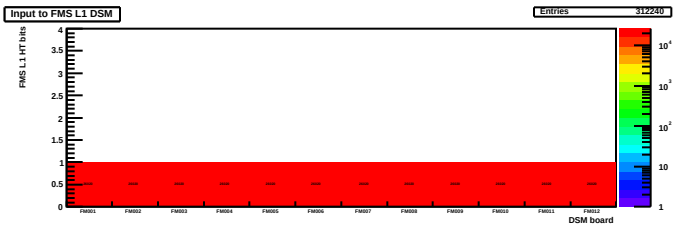

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

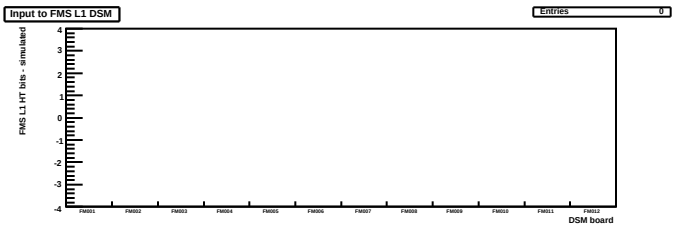

Input to FMS L1 DSM
Entries 312240
sumAB
DSM board

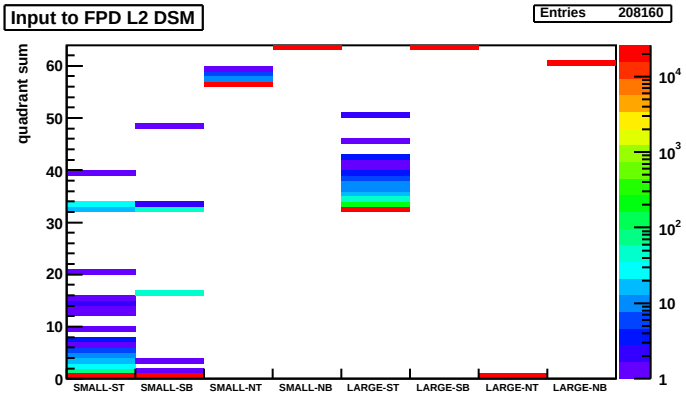

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

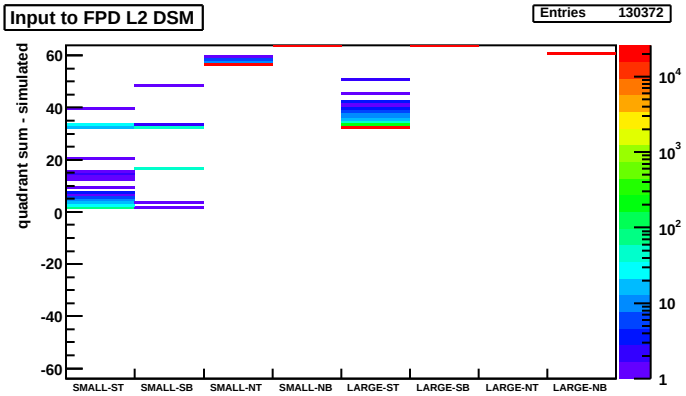

Input to FMS L1 DSM
Entries 312240
sumA
DSM board

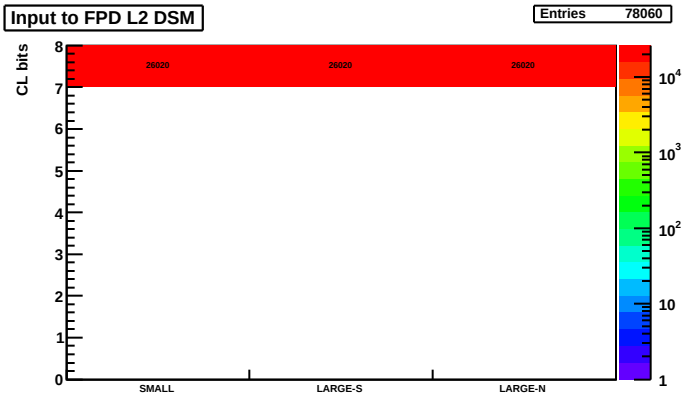

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

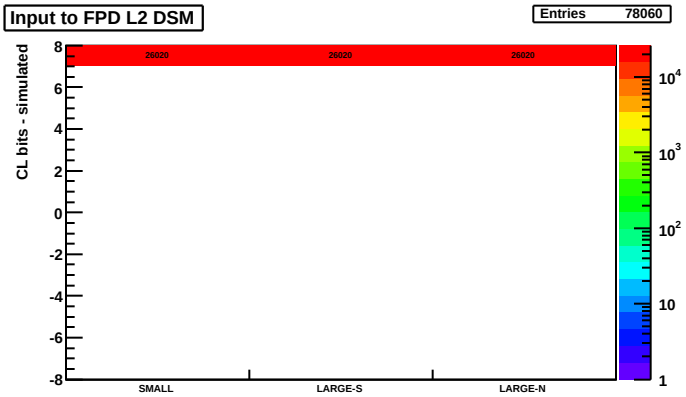

Input to FMS L1 DSM
Entries 312240
FMS L1 HT bits
DSM board

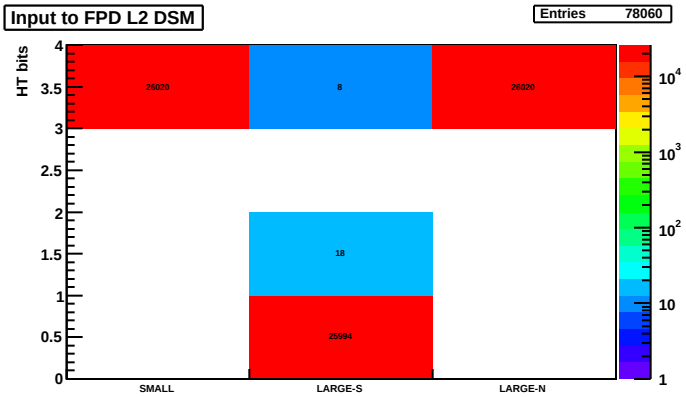

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

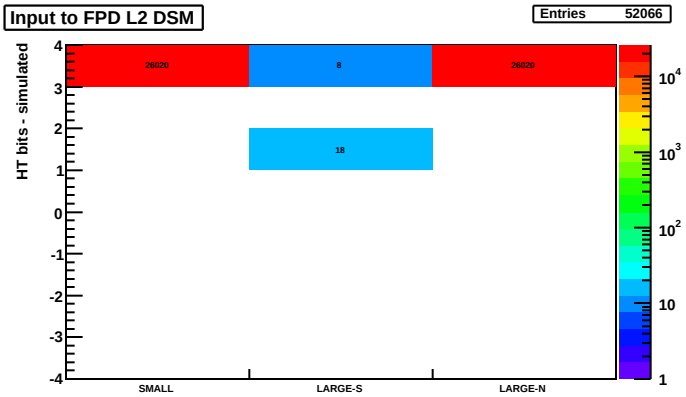

Input to FPD L2 DSM
Entries 208160
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

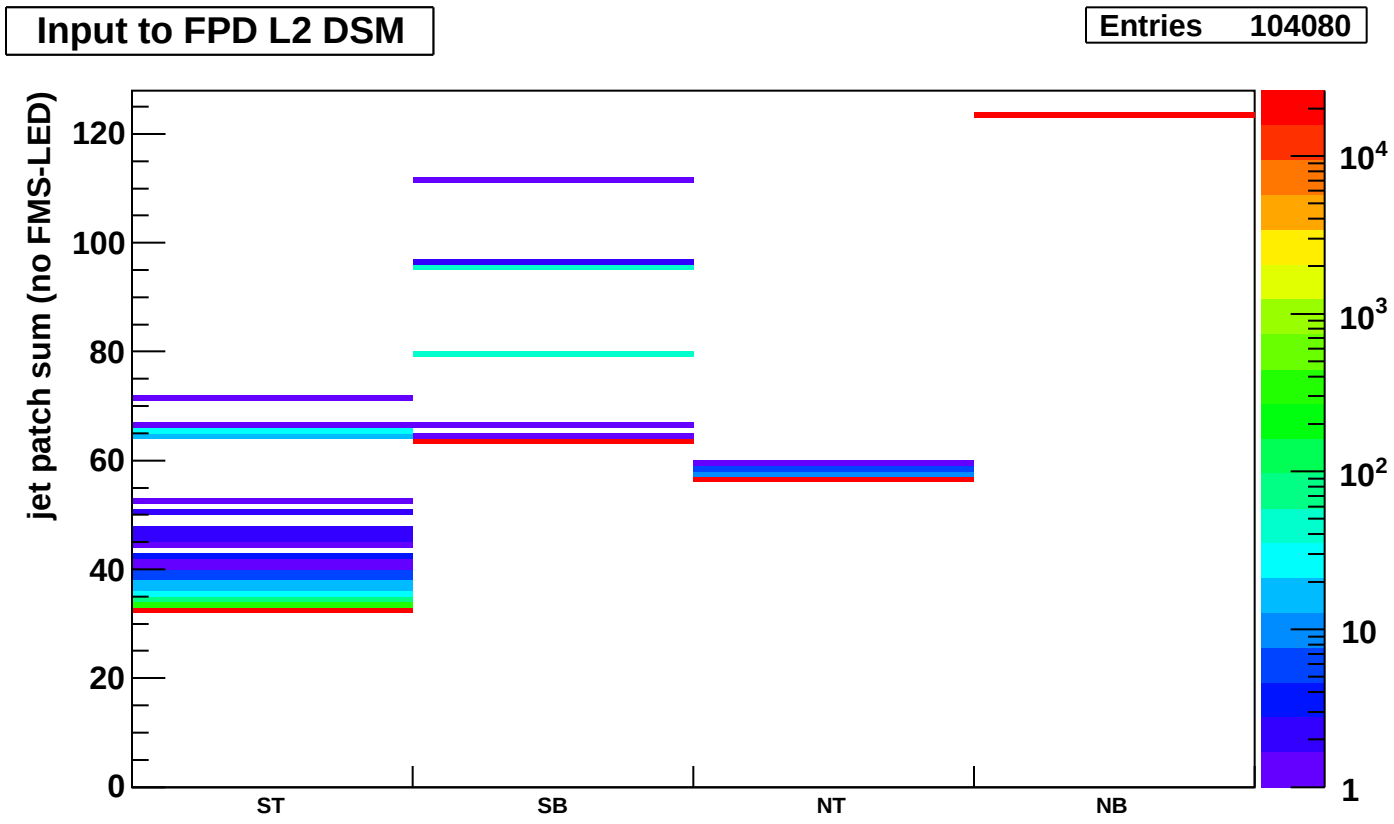

Input to FPD L2 DSM
Entries 130372
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

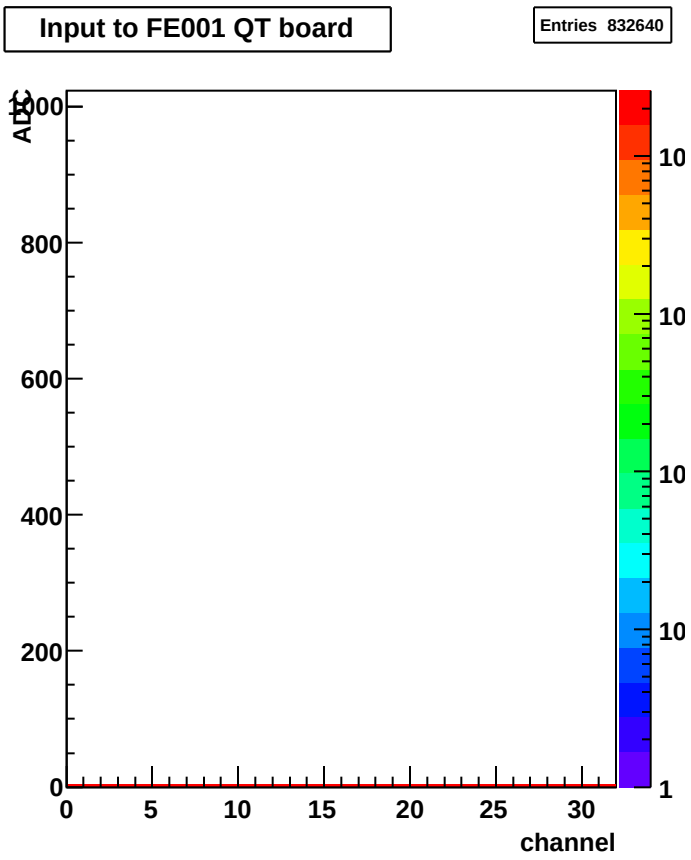

Input to FPD L2 DSM
Entries 78060
CL bits
26020
26020
26020
SMALL
LARGE-S
LARGE-N

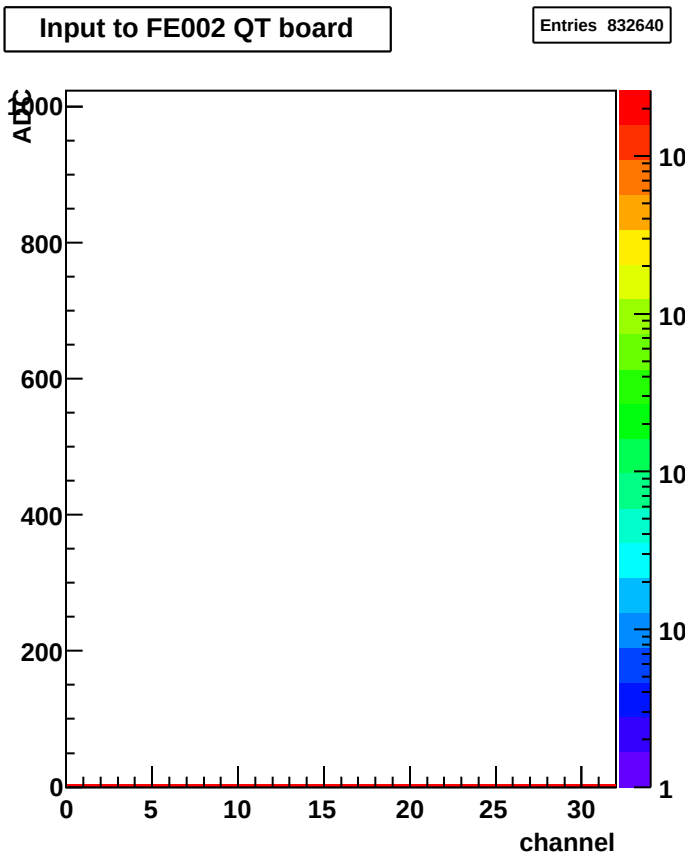

Input to FPD L2 DSM
Entries 78060
CL bits - simulated
26020
26020
26020
SMALL
LARGE-S
LARGE-N

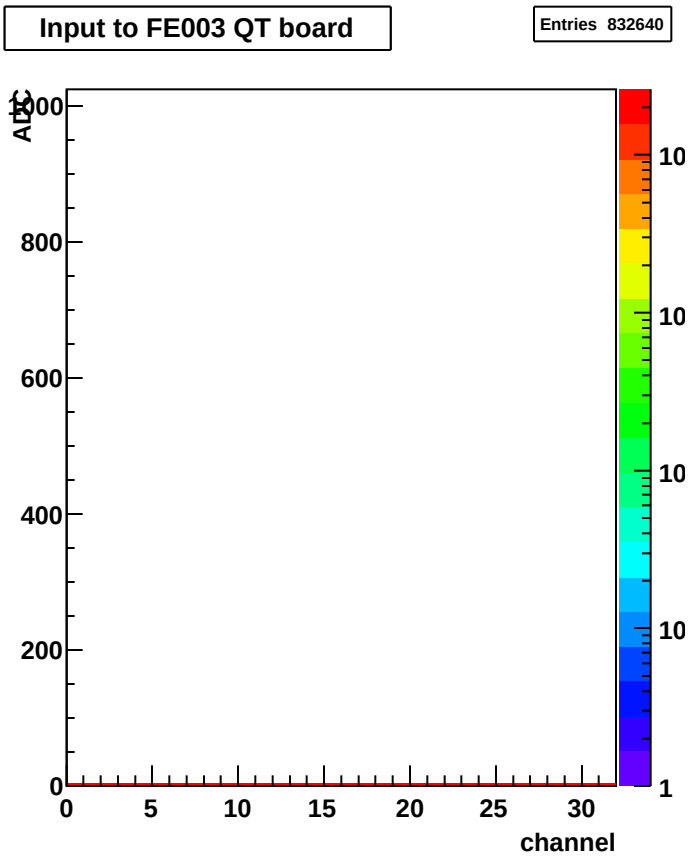

Input to FPD L2 DSM
Entries 78060
HT bits
26020
8
26020
18
25994
SMALL
LARGE-S
LARGE-N

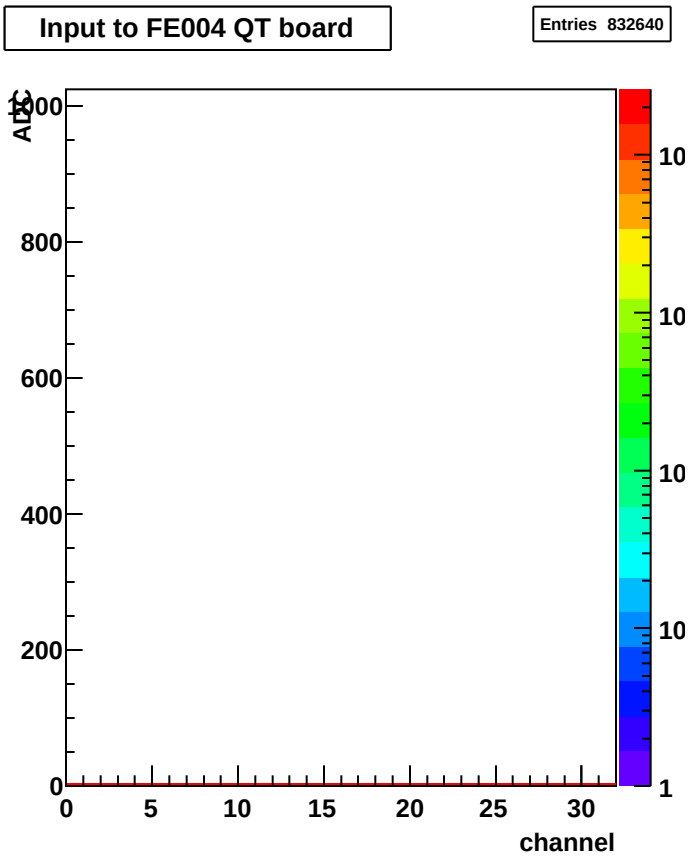

Input to FPD L2 DSM
Entries 52066
HT bits - simulated
26020
8
26020
18
SMALL
LARGE-S
LARGE-N

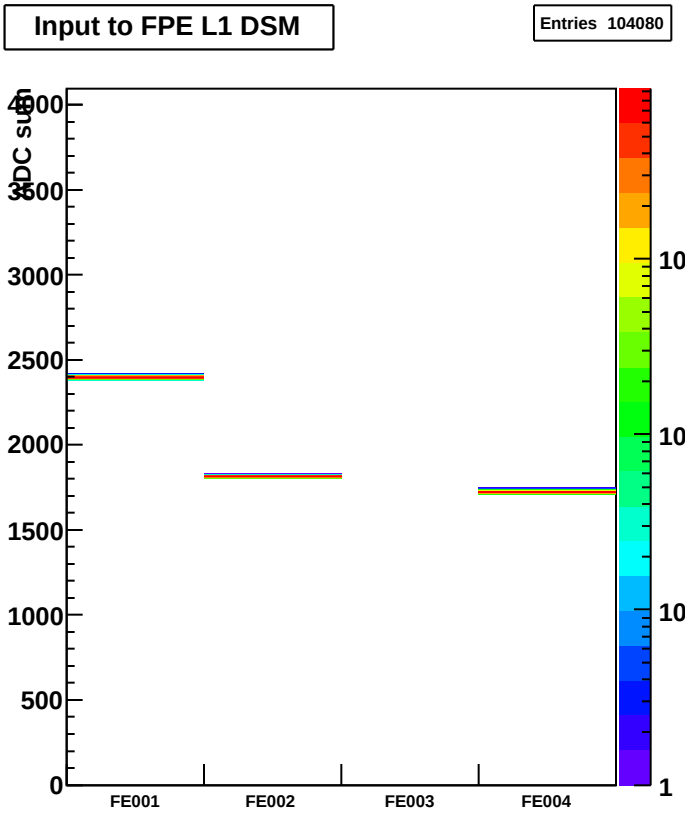

Input to FPD L2 DSM
Entries 104080
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

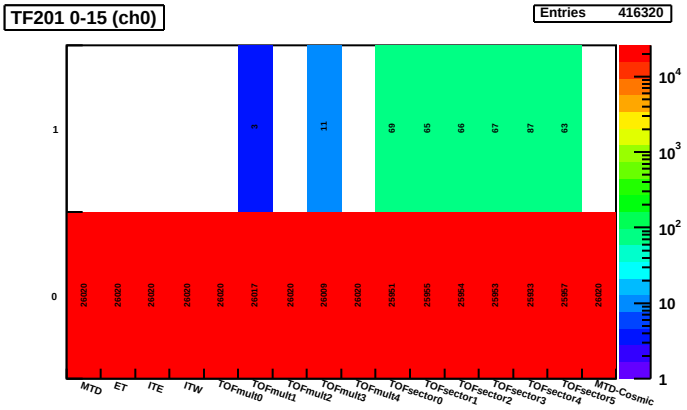

Input to FE001 QT board
Entries 832640
ADC
channel

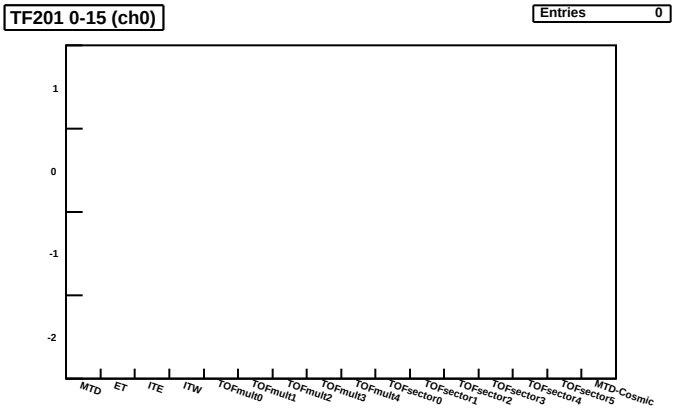

Input to FE002 QT board
Entries 832640
ADC
channel

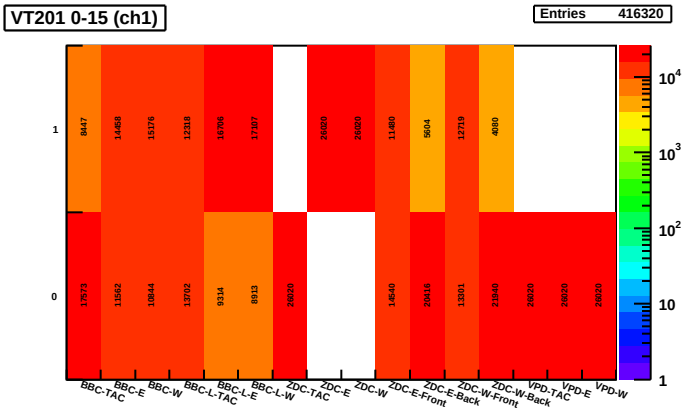

Input to FE003 QT board
Entries 832640
ADC
channel

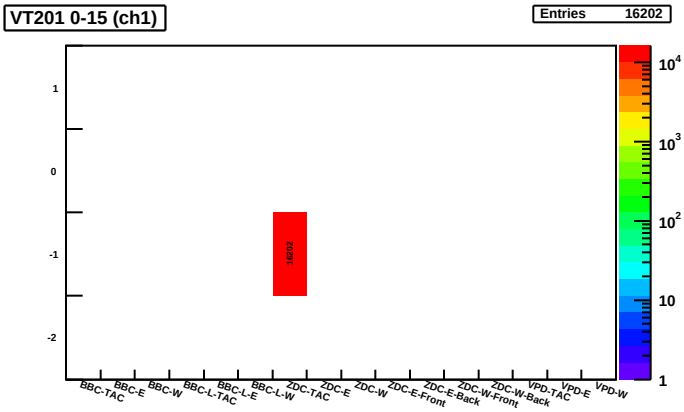

Input to FE004 QT board
Entries 832640
ADC
channel

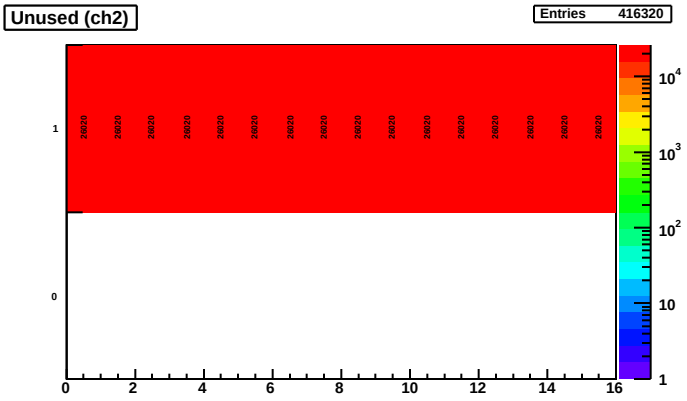

Input to FPE L1 DSM
Entries 104080
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

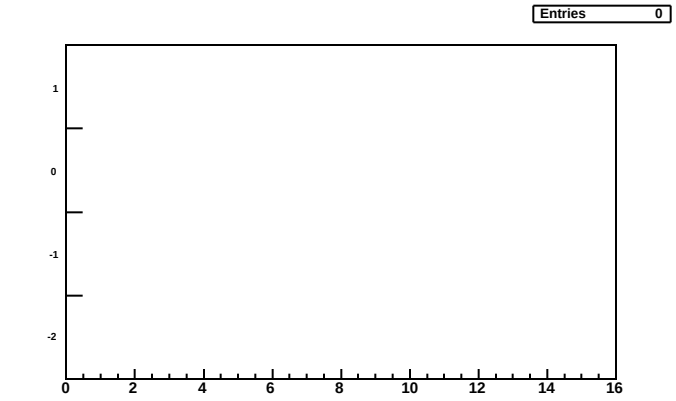

TF201 0-15 (ch0)
Entries 416320
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

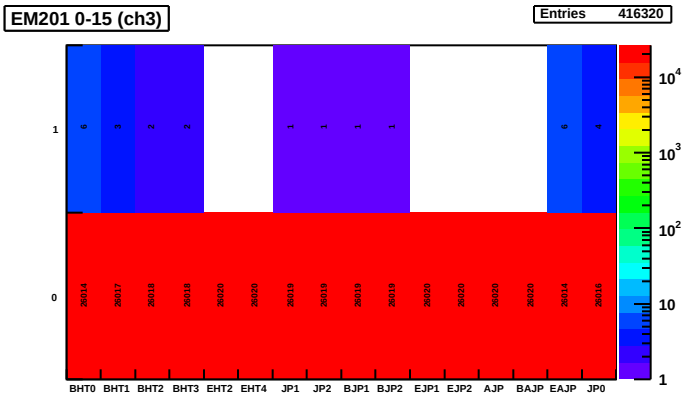

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

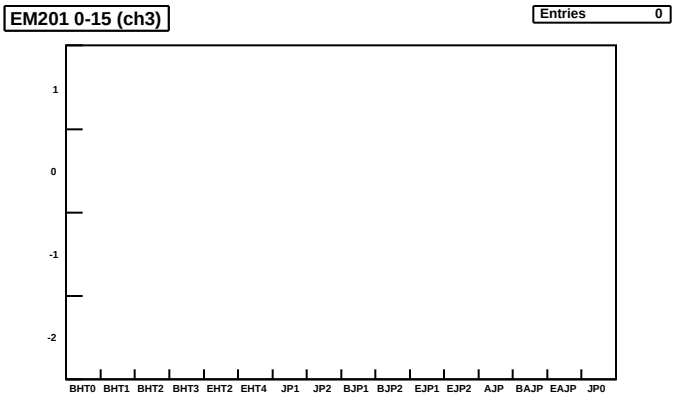

VT201 0-15 (ch1)
Entries 416320
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 16202
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

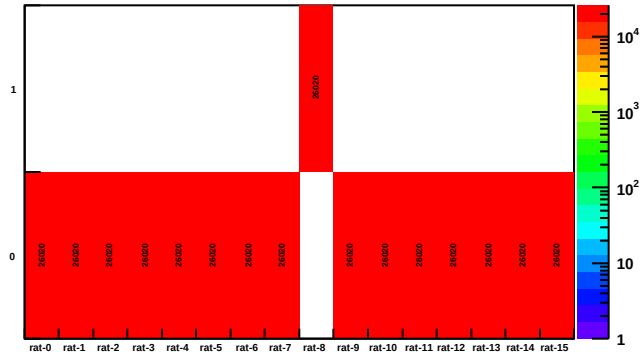

Unused (ch2)
Entries 416320

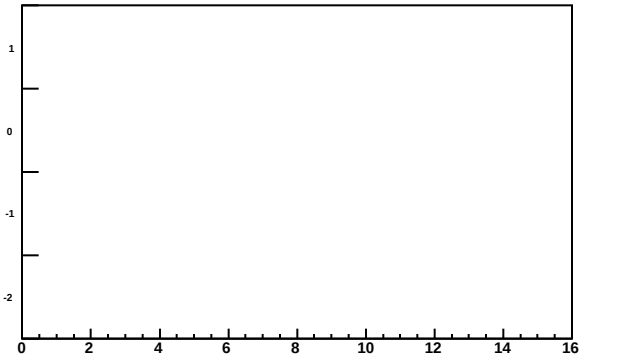

Entries 0


EM201 0-15 (ch3)
Entries 416320
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

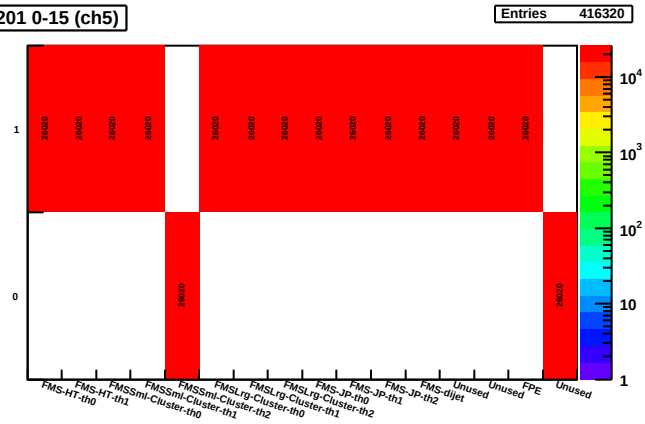

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

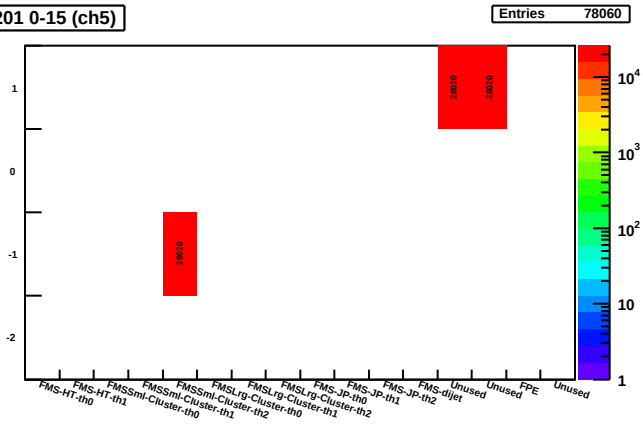




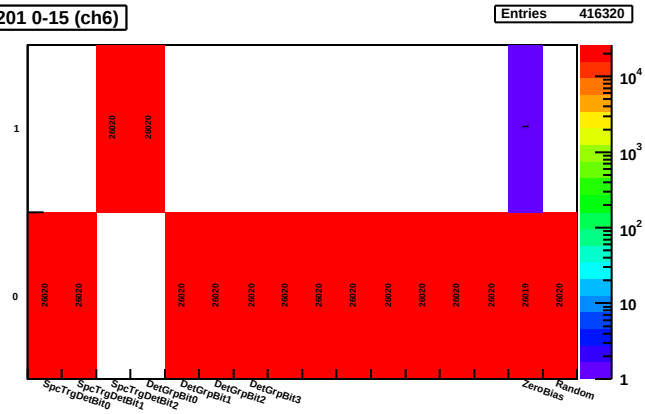
FP201 0-15 (ch5)

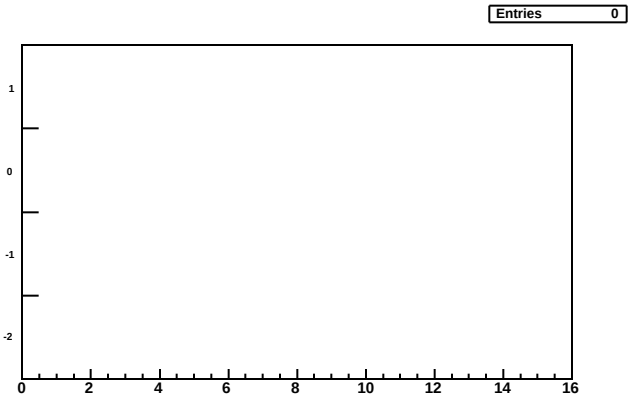
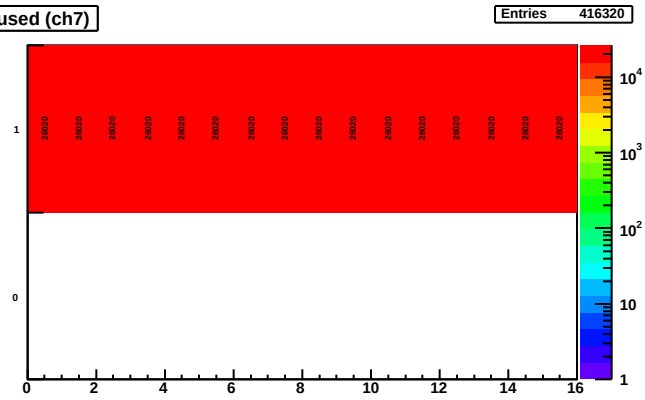
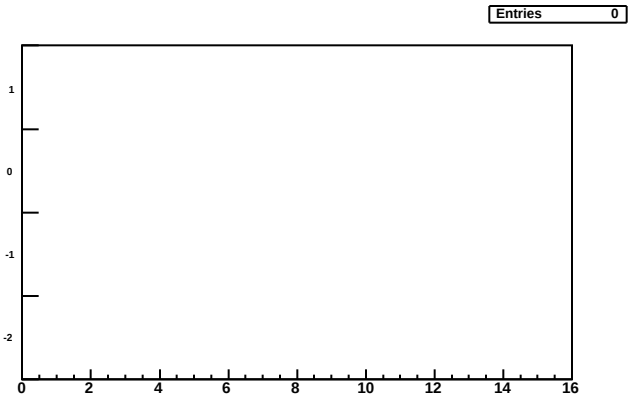


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)