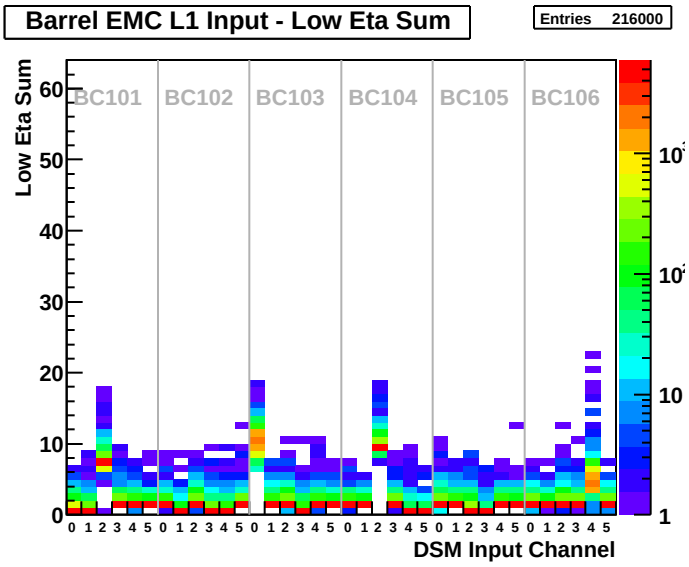
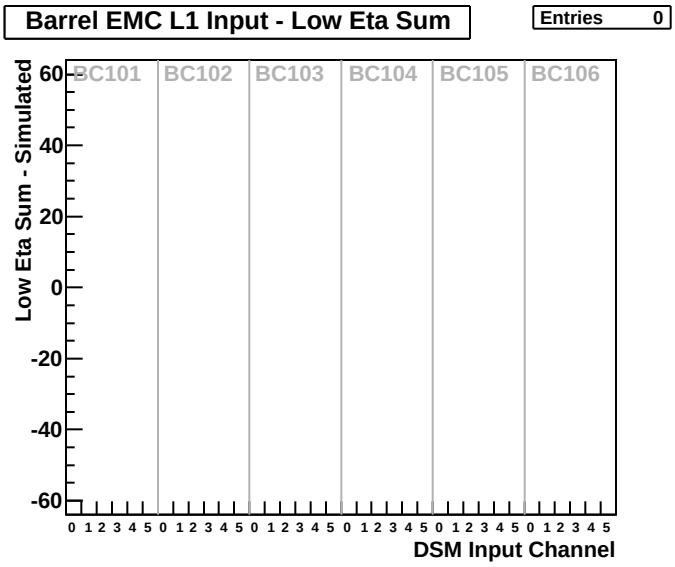
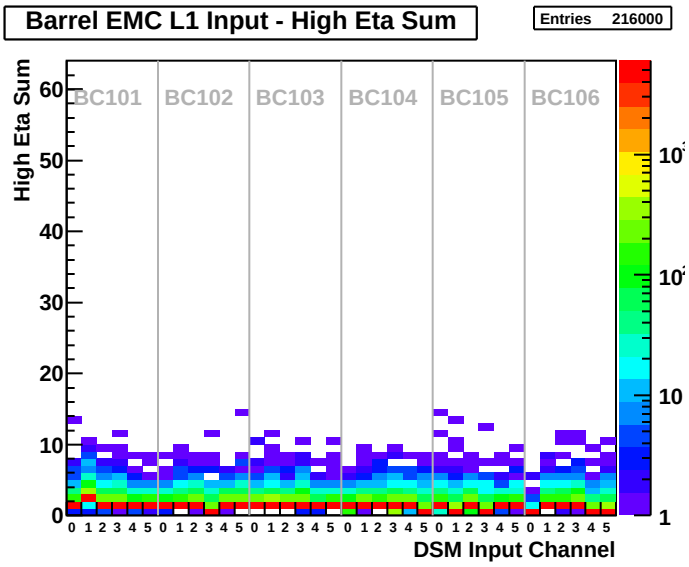
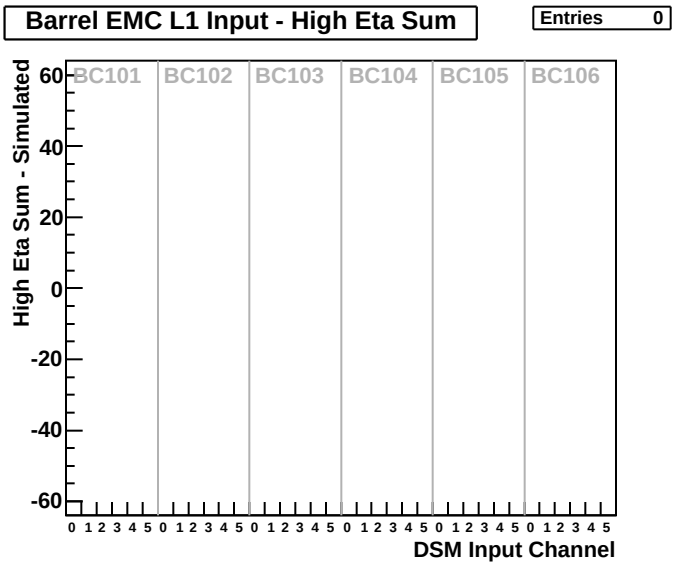
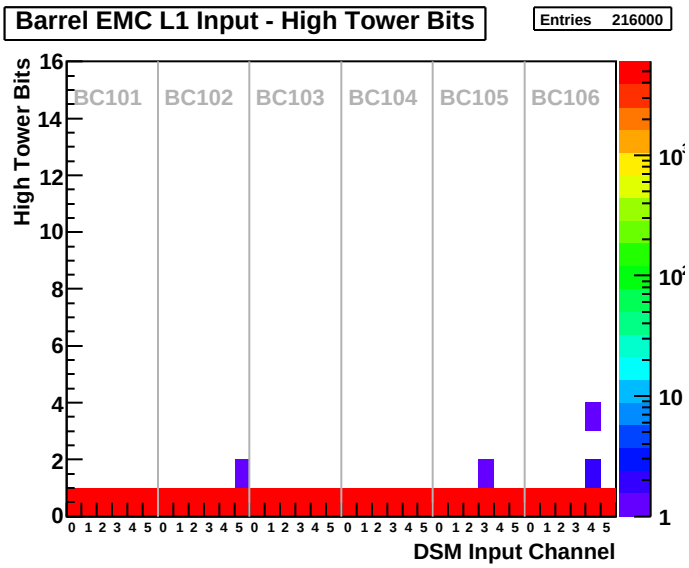
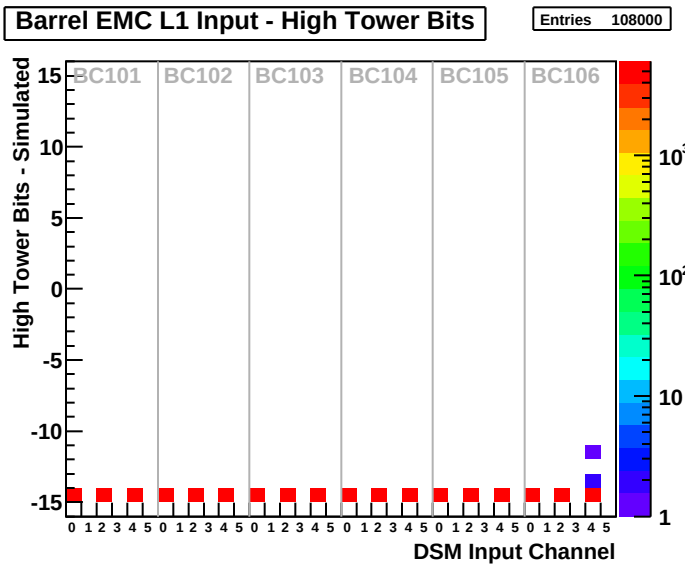

Barrel EMC L1 Input - Low Eta Sum
Entries 216000
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

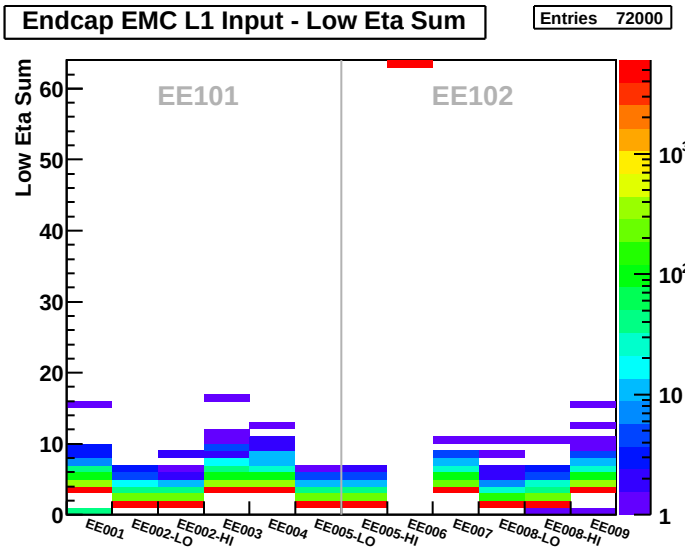

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

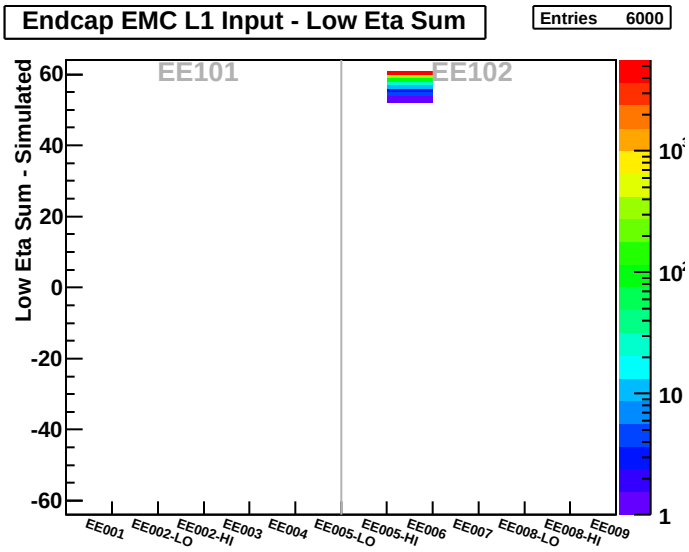

Barrel EMC L1 Input - High Eta Sum
Entries 216000
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

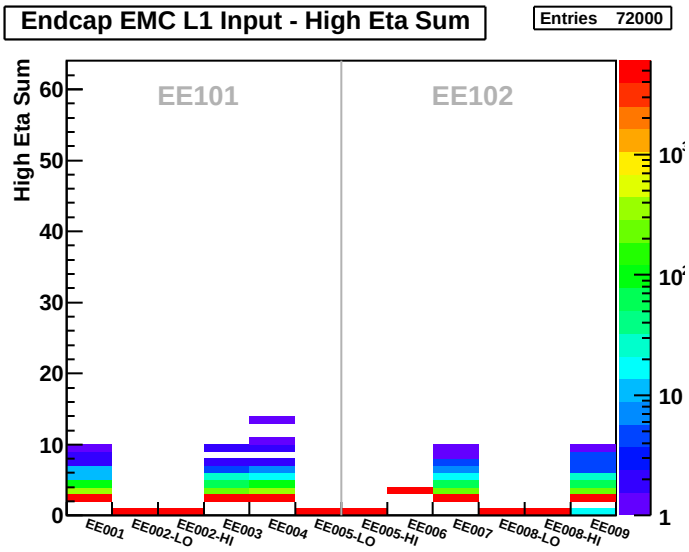

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

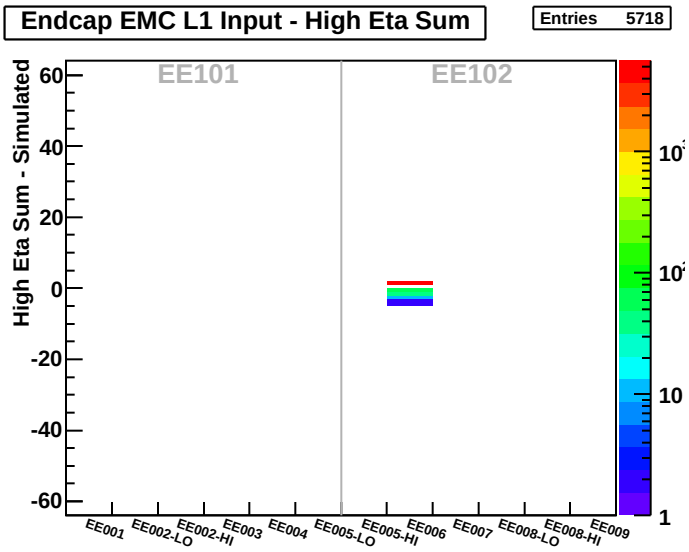

Barrel EMC L1 Input - High Tower Bits
Entries 216000
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

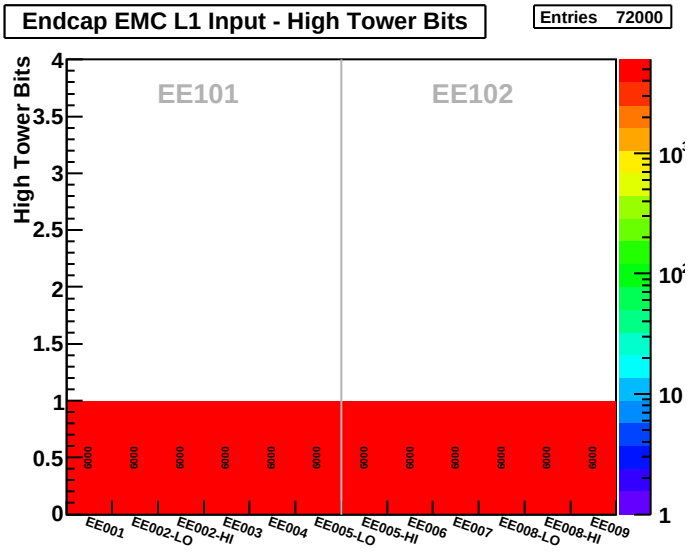

Barrel EMC L1 Input - High Tower Bits
Entries 108000
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

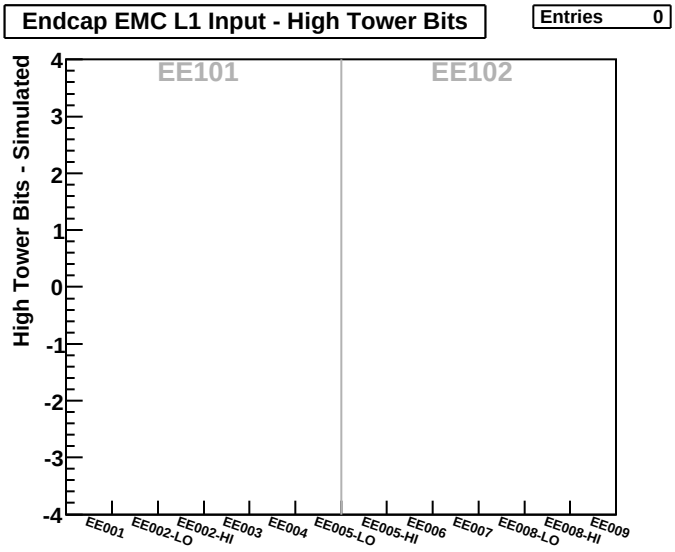

Endcap EMC L1 Input - Low Eta Sum
Entries 72000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

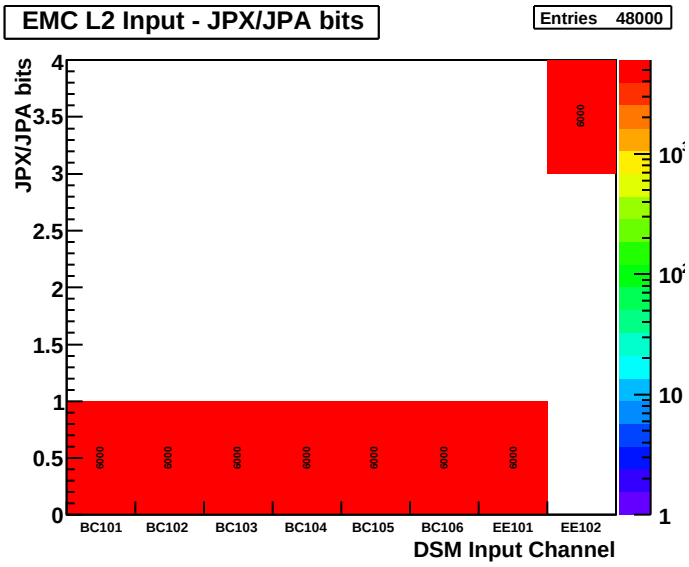

Endcap EMC L1 Input - Low Eta Sum
Entries 6000
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

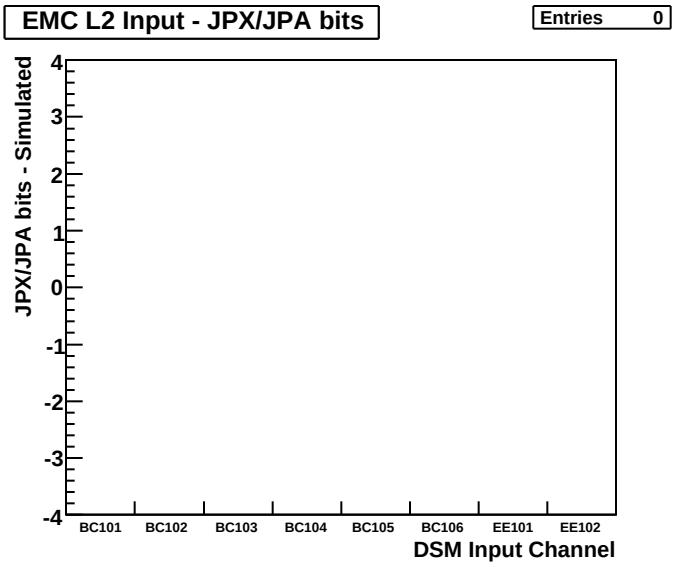

Endcap EMC L1 Input - High Eta Sum
Entries 72000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

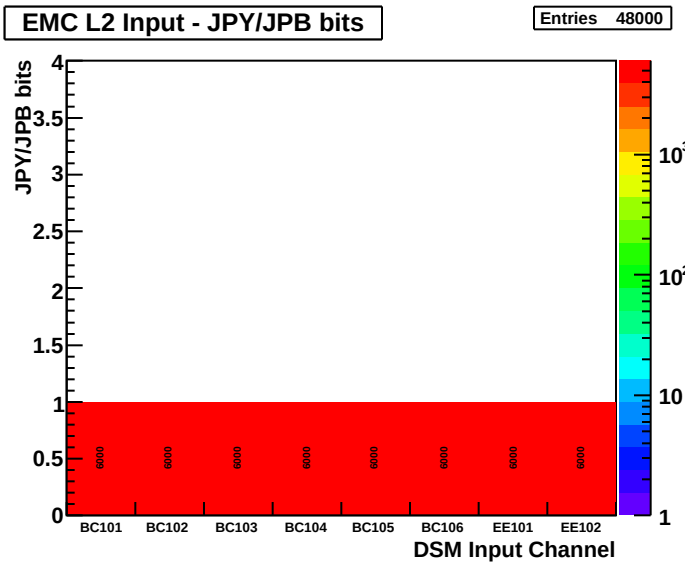

Endcap EMC L1 Input - High Eta Sum
Entries 5718
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

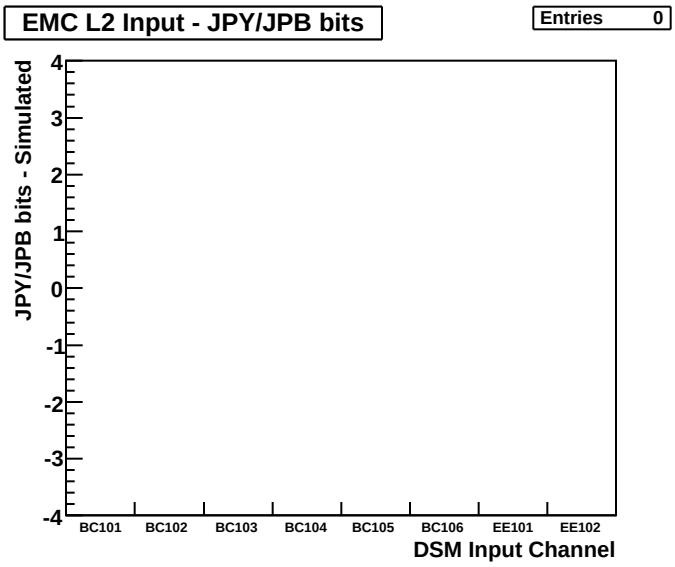

Endcap EMC L1 Input - High Tower Bits
Entries 72000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

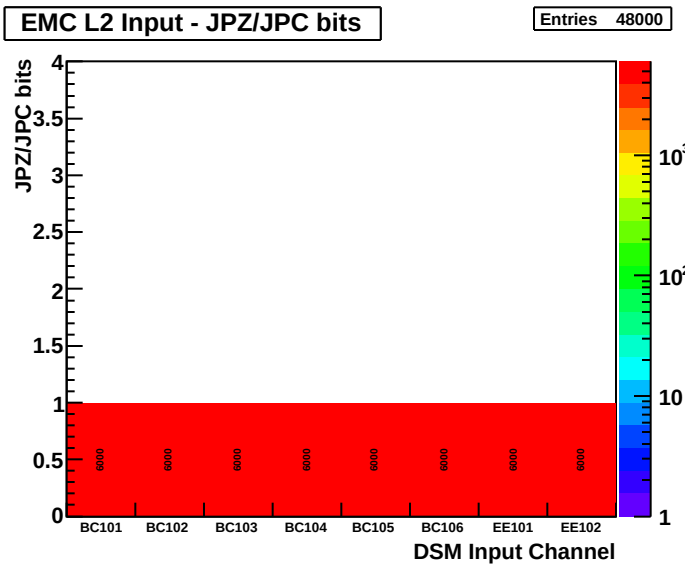

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

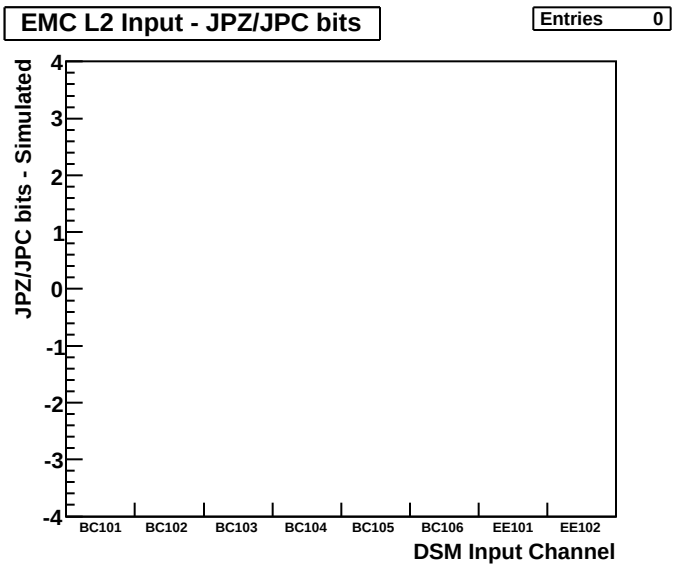

EMC L2 Input - JPX/JPA bits
Entries 48000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

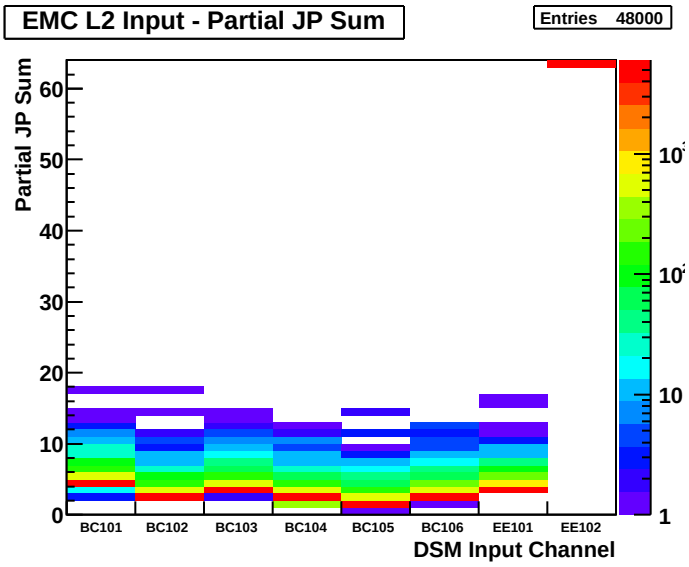

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

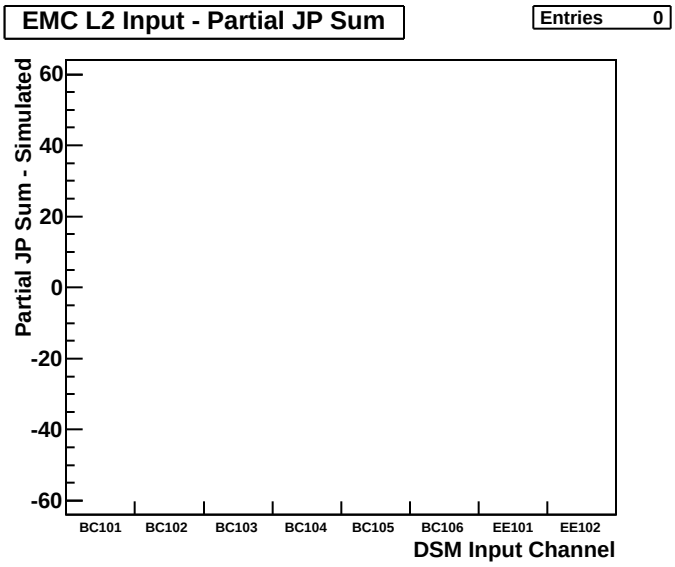

EMC L2 Input - JPY/JPB bits
Entries 48000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

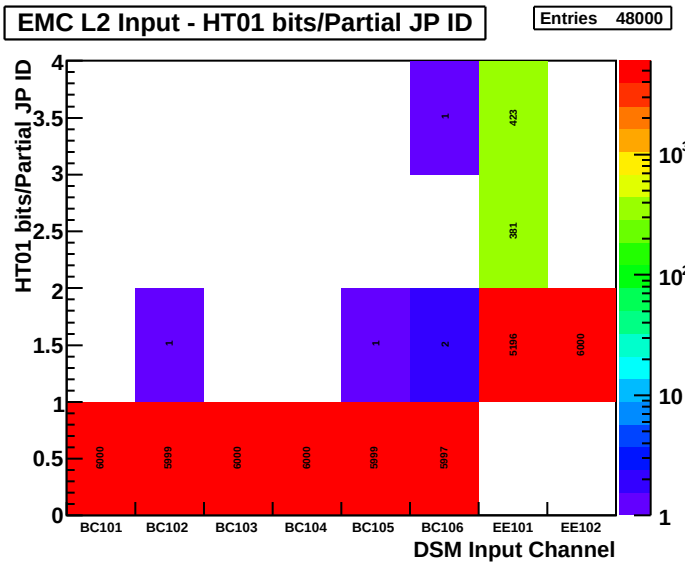

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

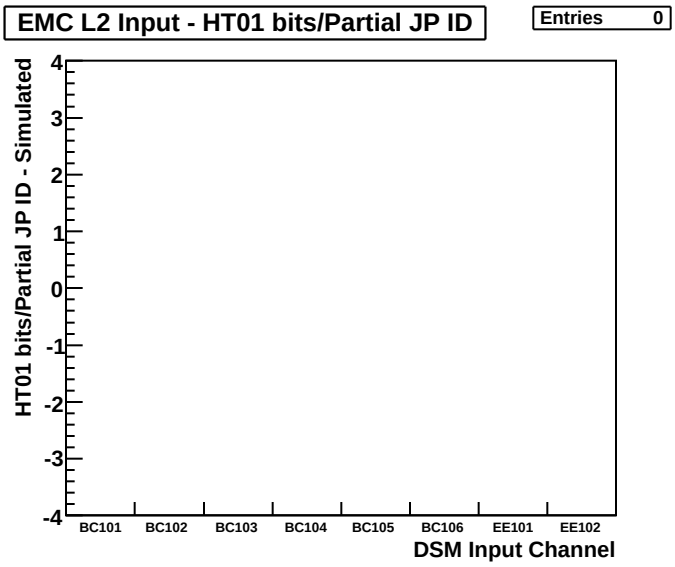

EMC L2 Input - JPZ/JPC bits
Entries 48000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

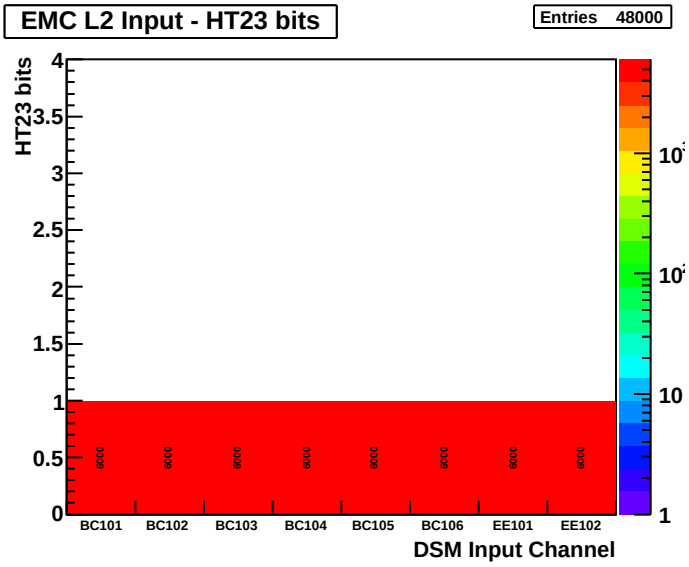

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

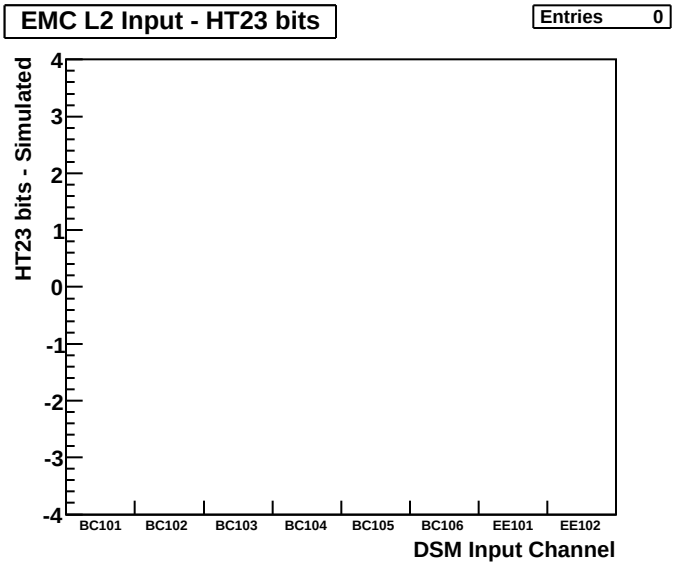

EMC L2 Input - Partial JP Sum
Entries 48000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

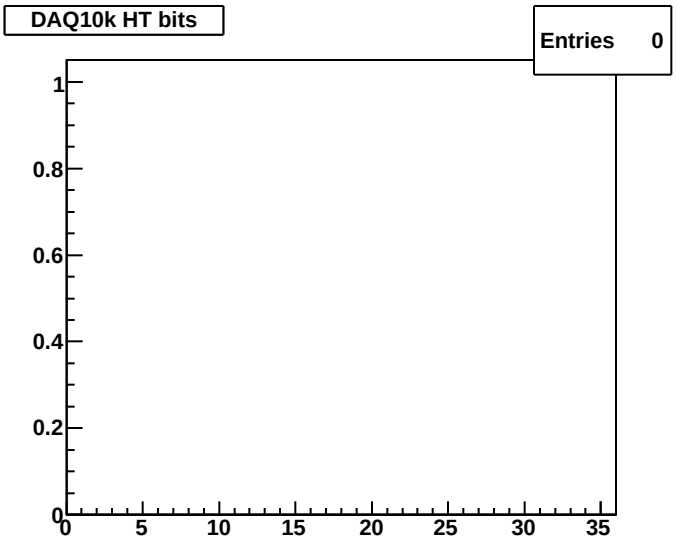

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

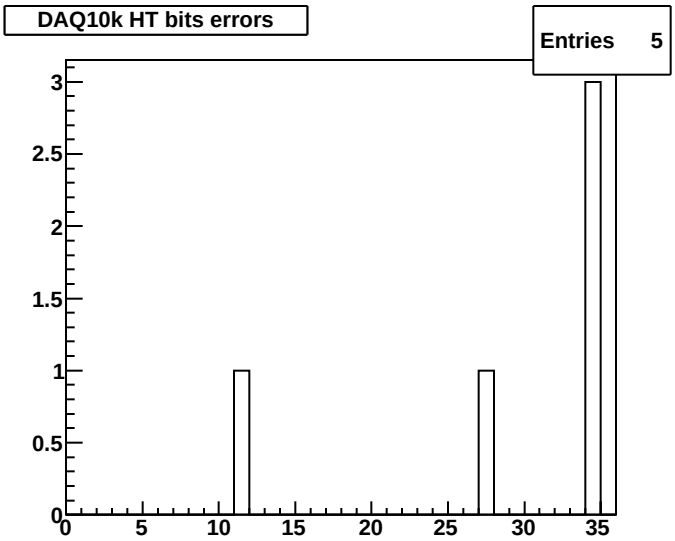

EMC L2 Input - HT01 bits/Partial JP ID
Entries 48000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

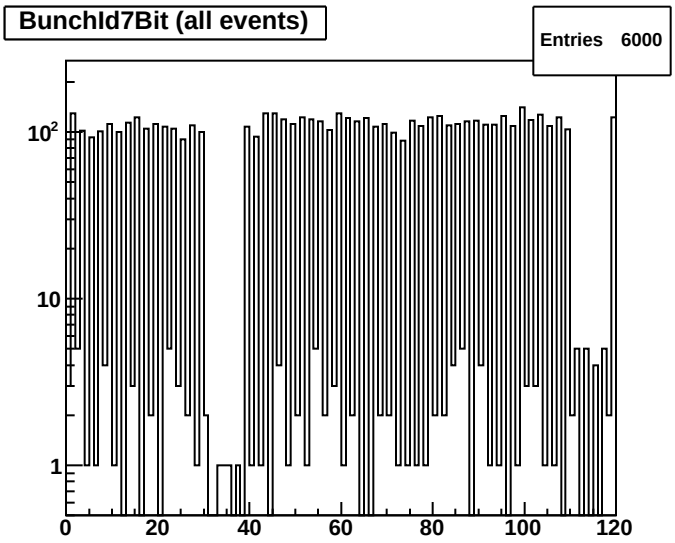

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

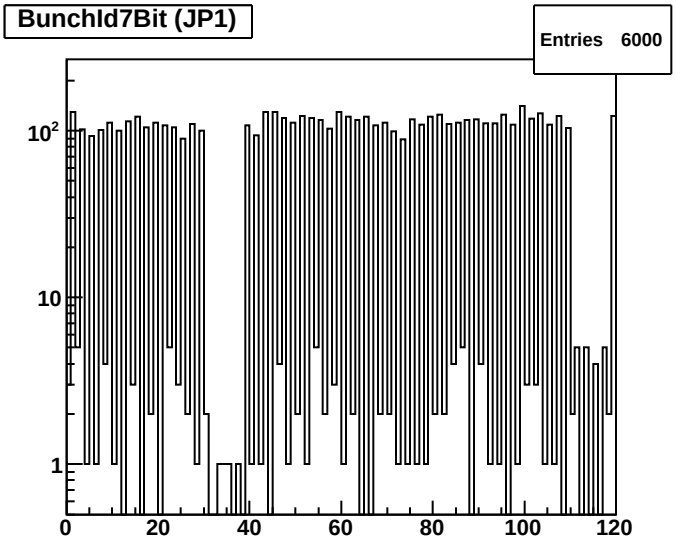

EMC L2 Input - HT23 bits
Entries 48000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

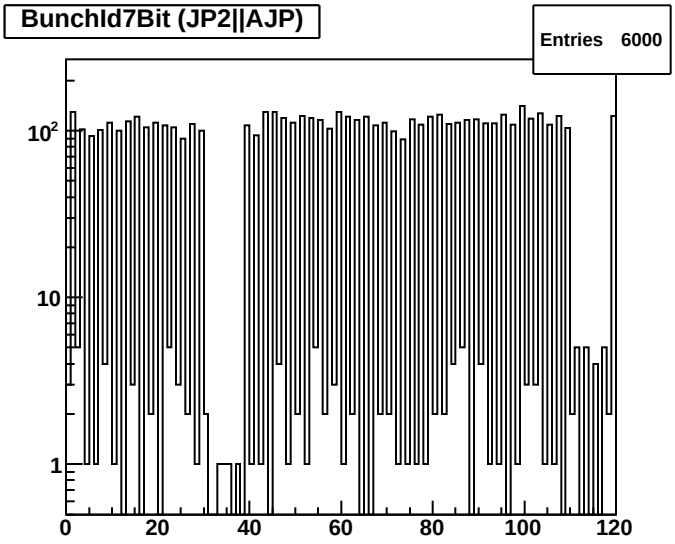

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

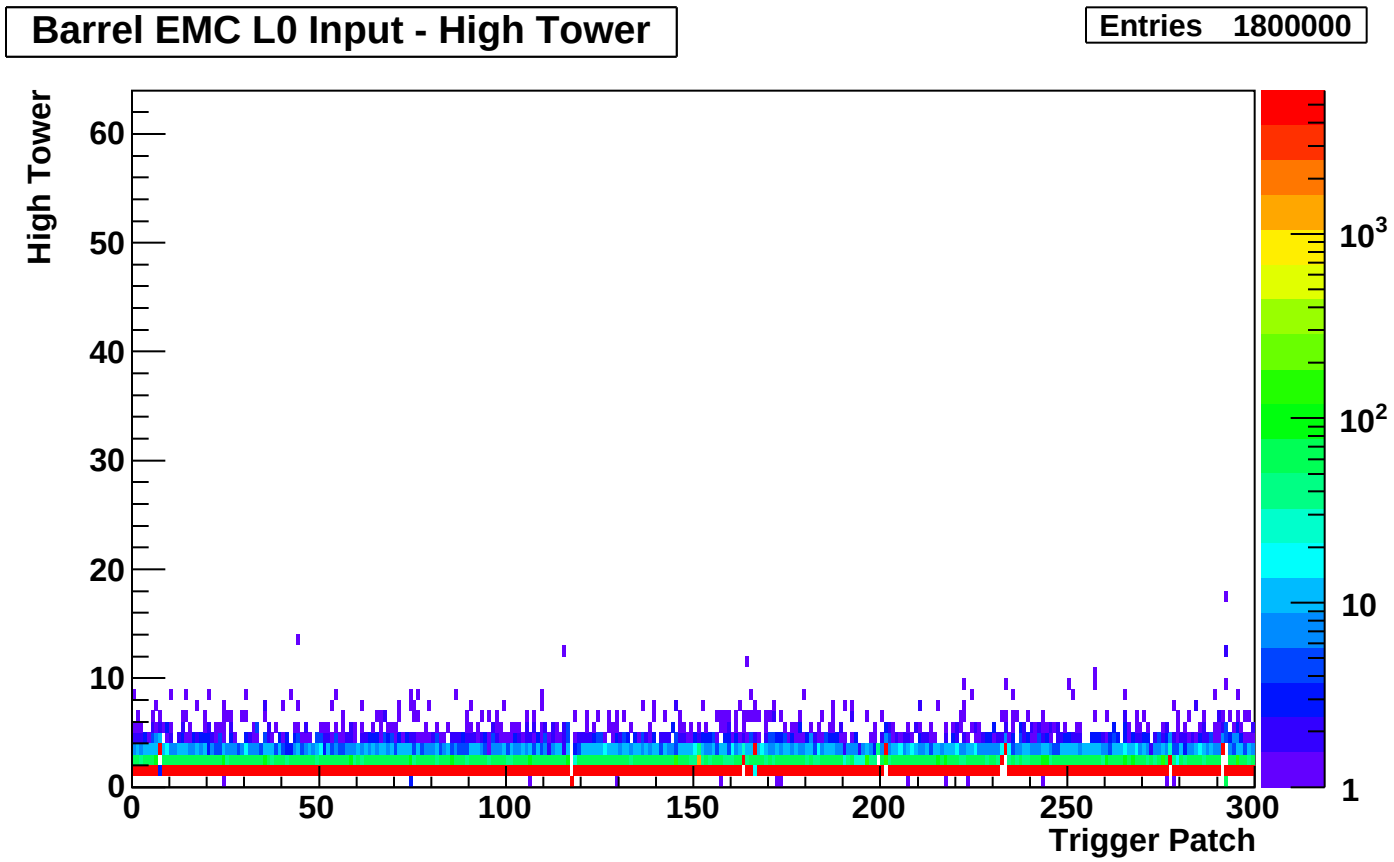

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

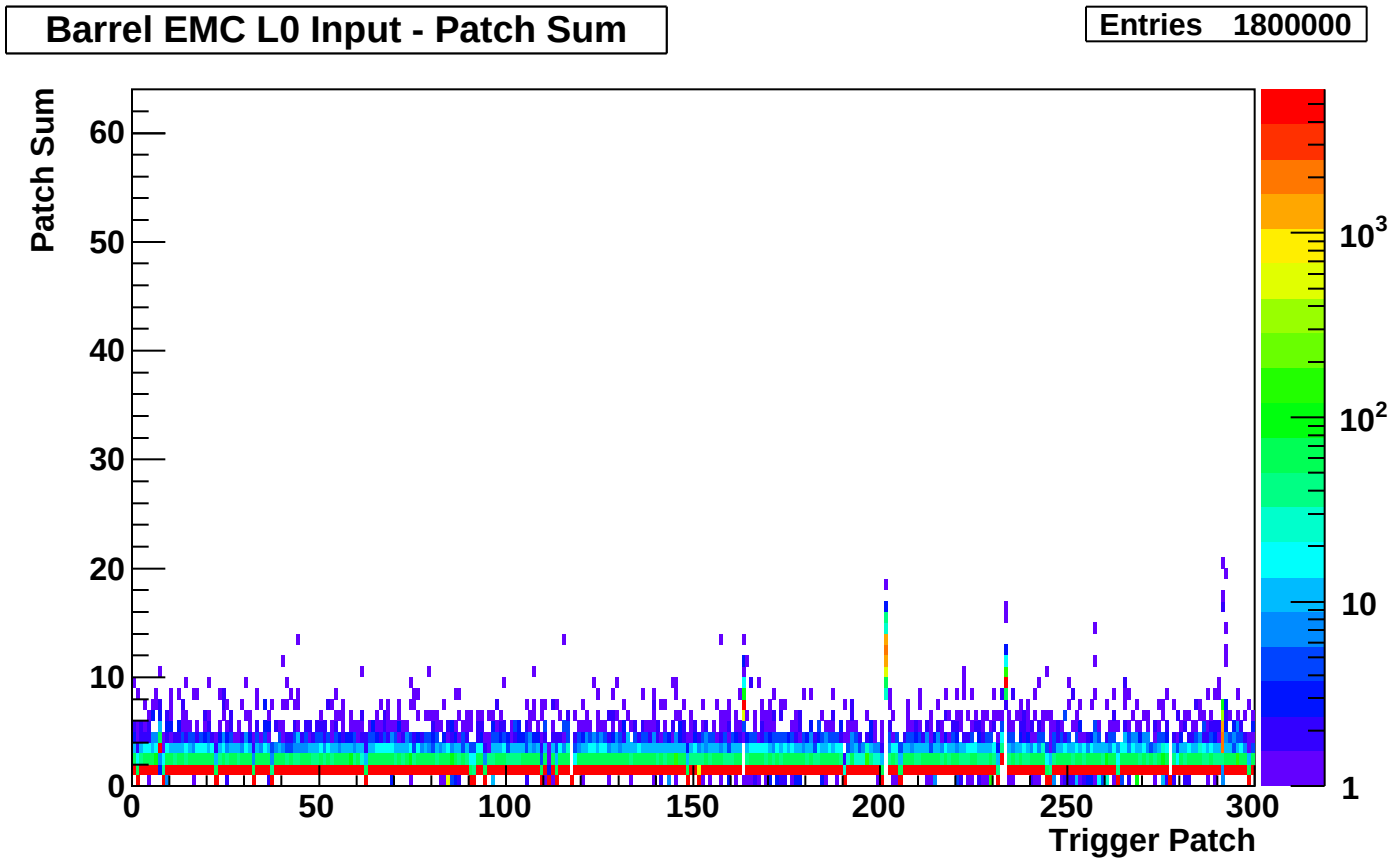

DAQ10k HT bits errors
Entries 5
3
2.5
2
1.5
1
0.5
0
0 5 10 15 20 25 30 35

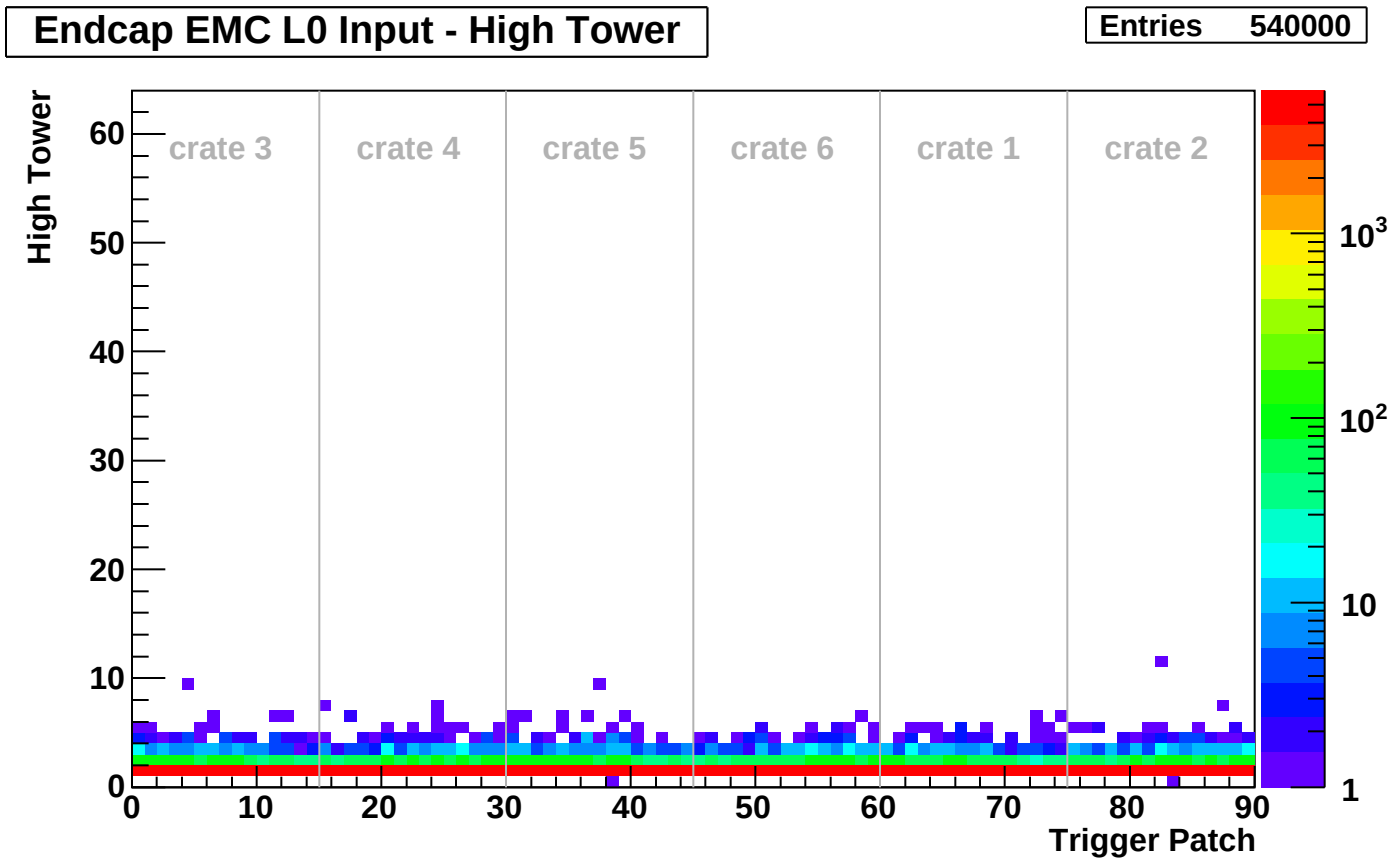

BunchId7Bit (all events)
Entries 6000
10^2
10
1
0 20 40 60 80 100 120

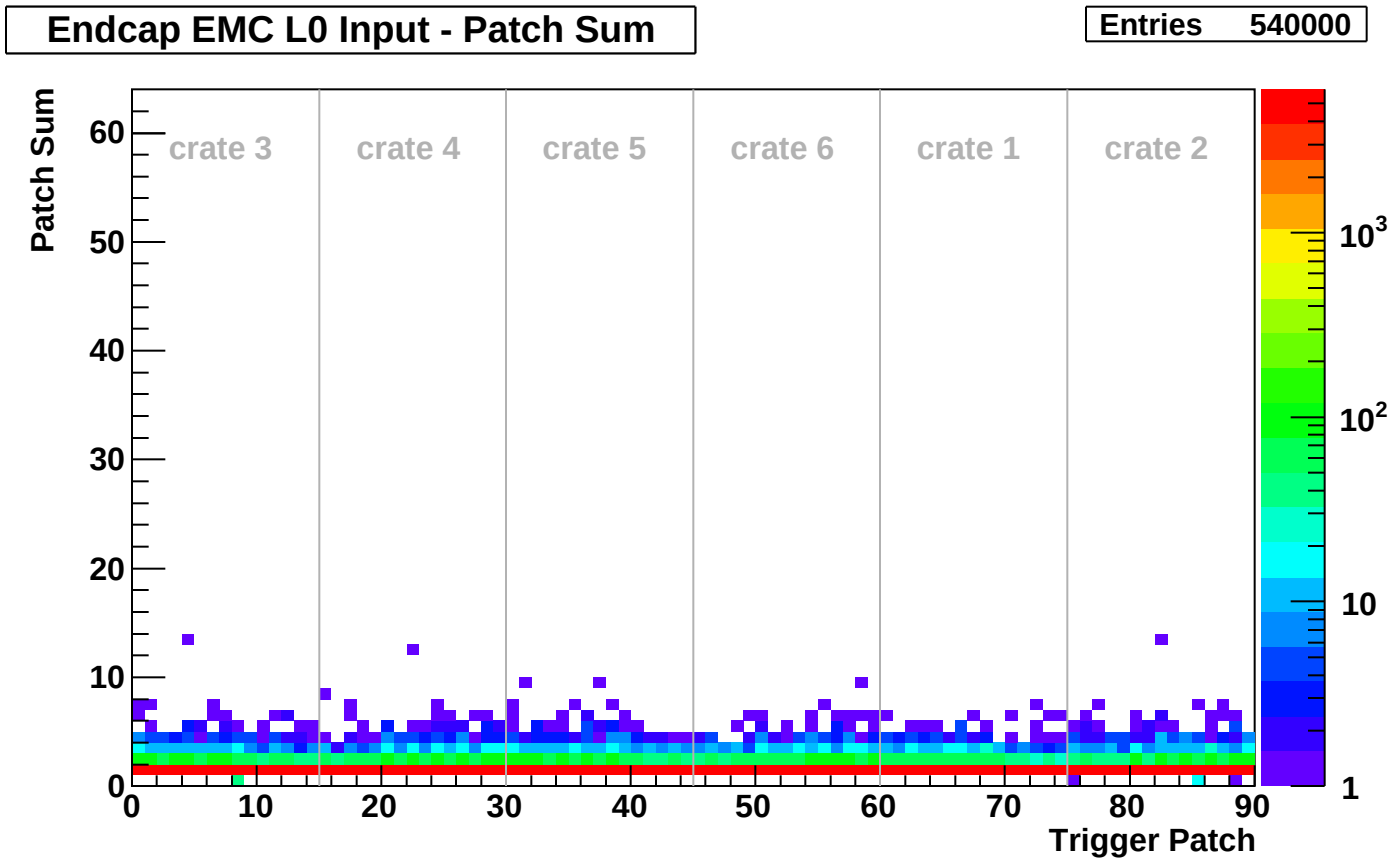

BunchId7Bit (JP1)
Entries 6000
10^2
10
1
0 20 40 60 80 100 120

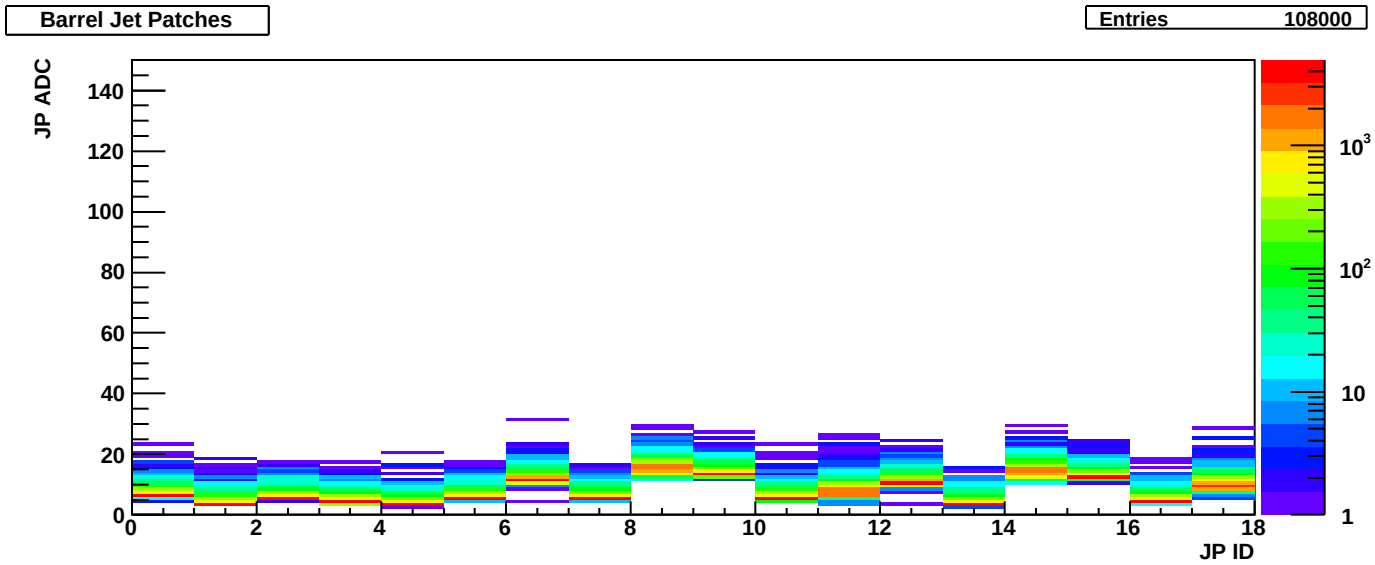

BunchId7Bit (JP2||AJP)
Entries 6000
10^2
10
1
0 20 40 60 80 100 120

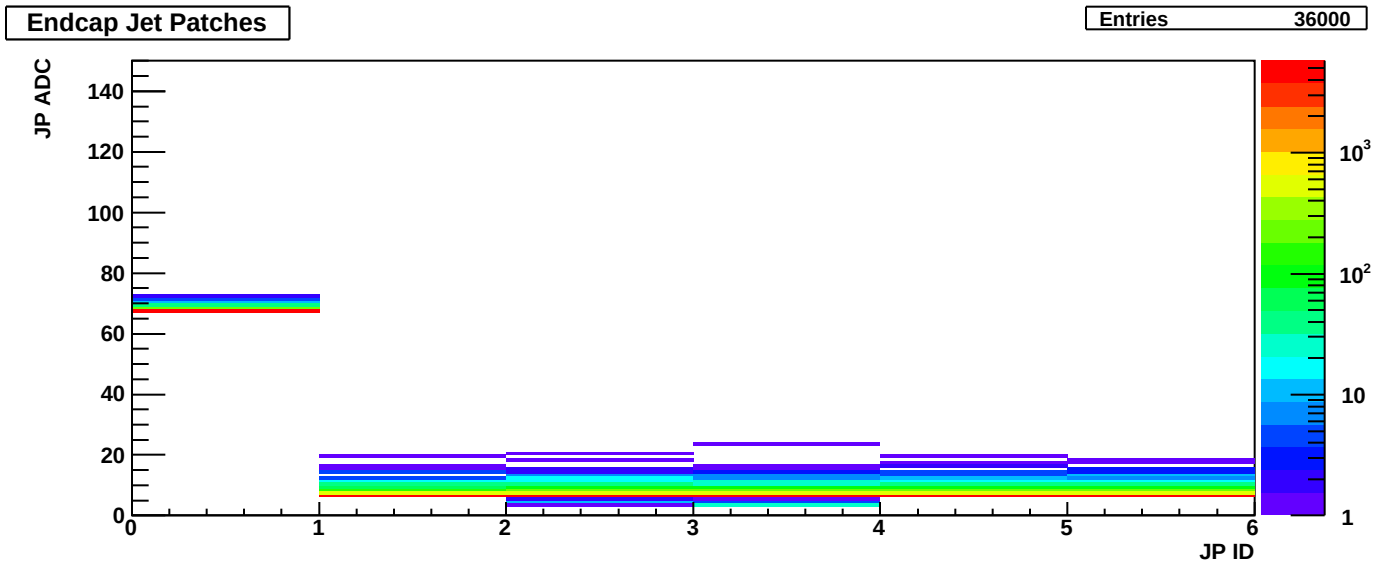

Barrel EMC L0 Input - High Tower
Entries 1800000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

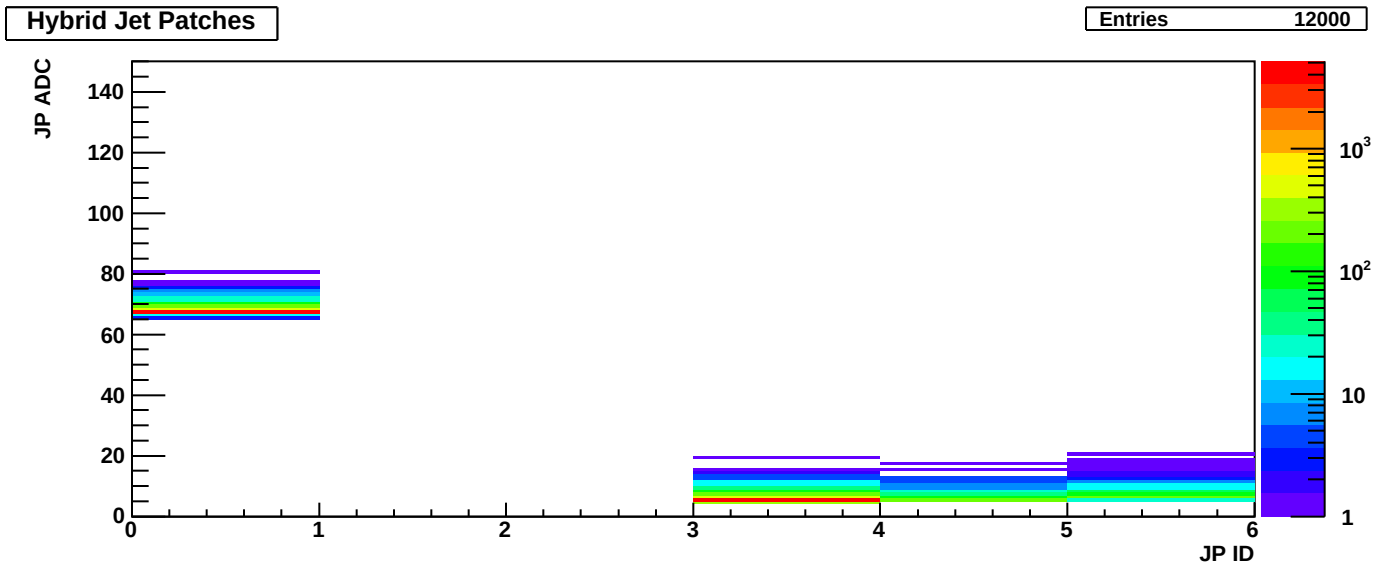

Barrel EMC L0 Input - Patch Sum
Entries 1800000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

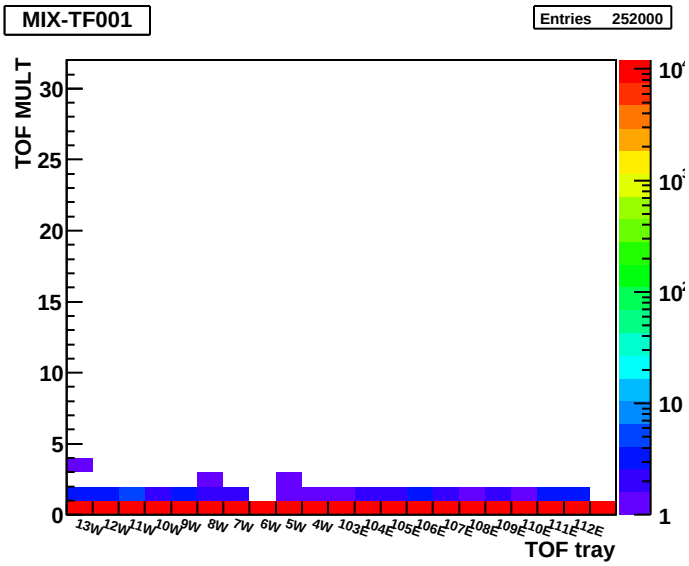

Endcap EMC L0 Input - High Tower
Entries 540000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

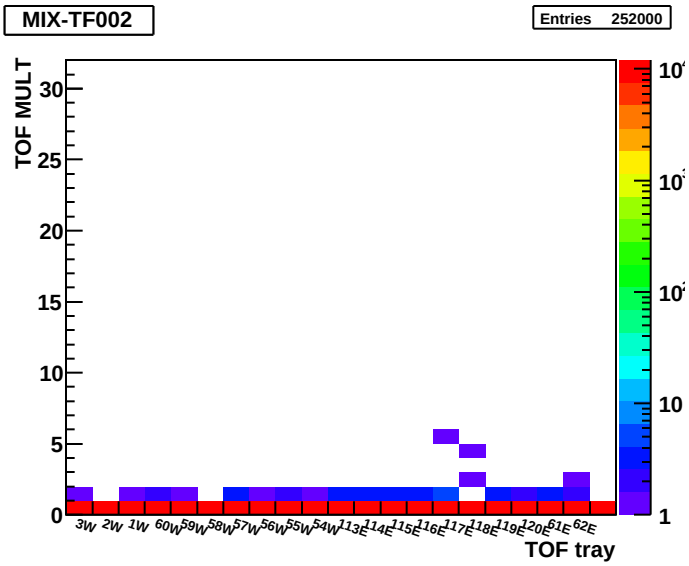

Endcap EMC L0 Input - Patch Sum
Entries 540000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

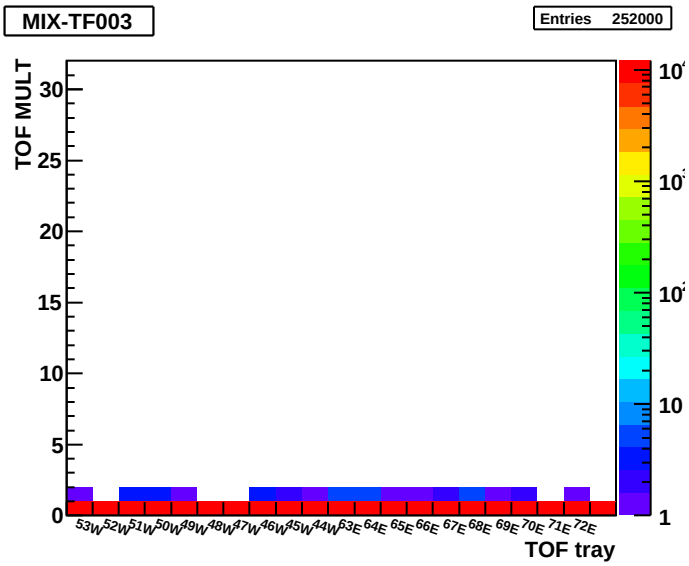

Barrel Jet Patches
Entries 108000
JP ADC
JP ID

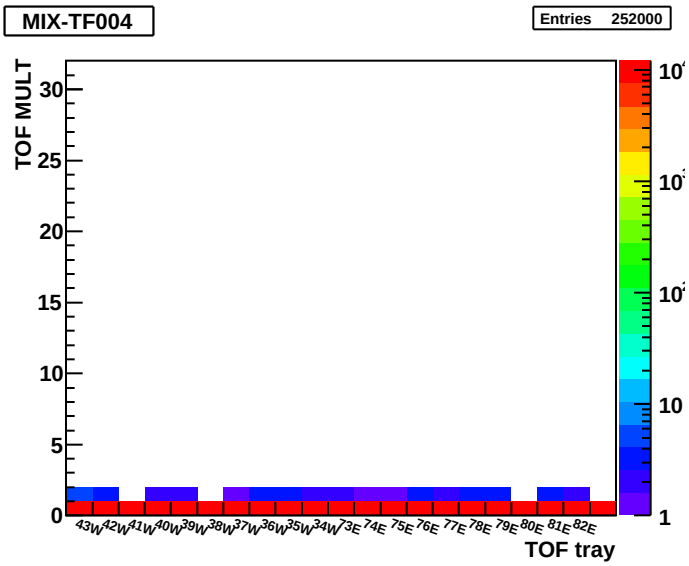

Endcap Jet Patches
Entries 36000
JP ADC
JP ID

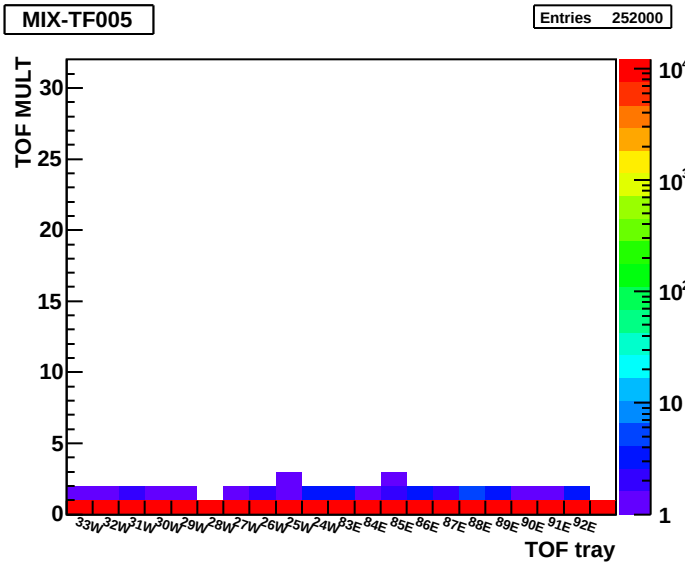

Hybrid Jet Patches
Entries 12000
JP ADC
JP ID

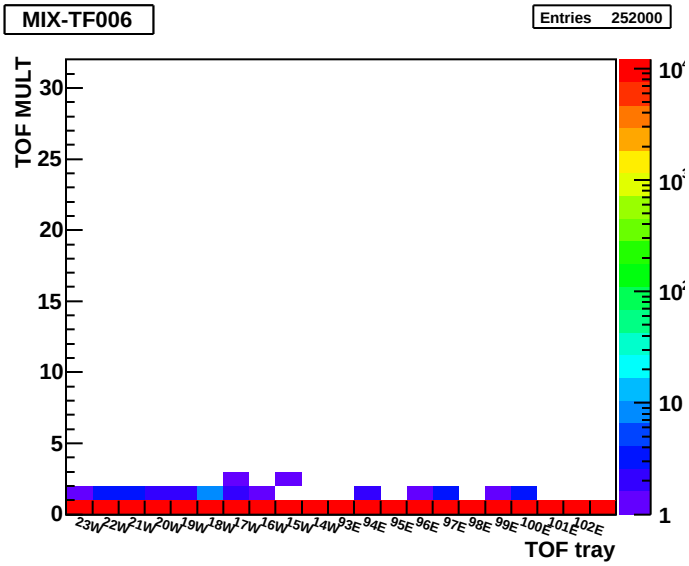

MIX-TF001
Entries 252000
TOF MULT
TOF tray

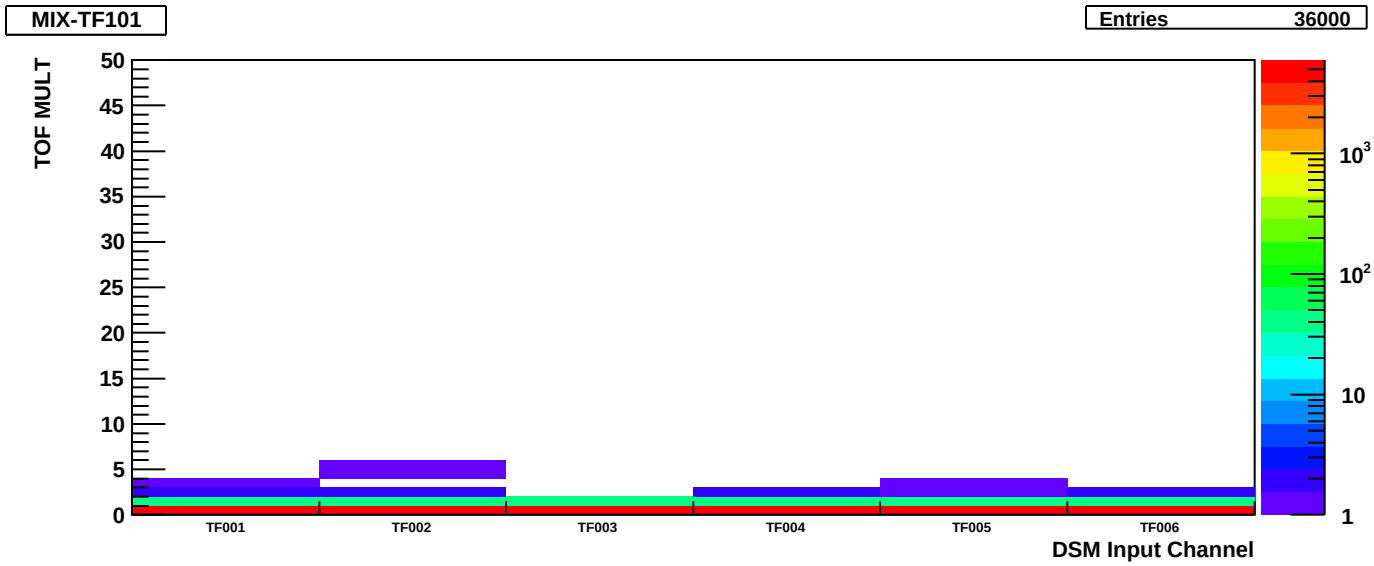

MIX-TF002
Entries 252000
TOF MULT
TOF tray

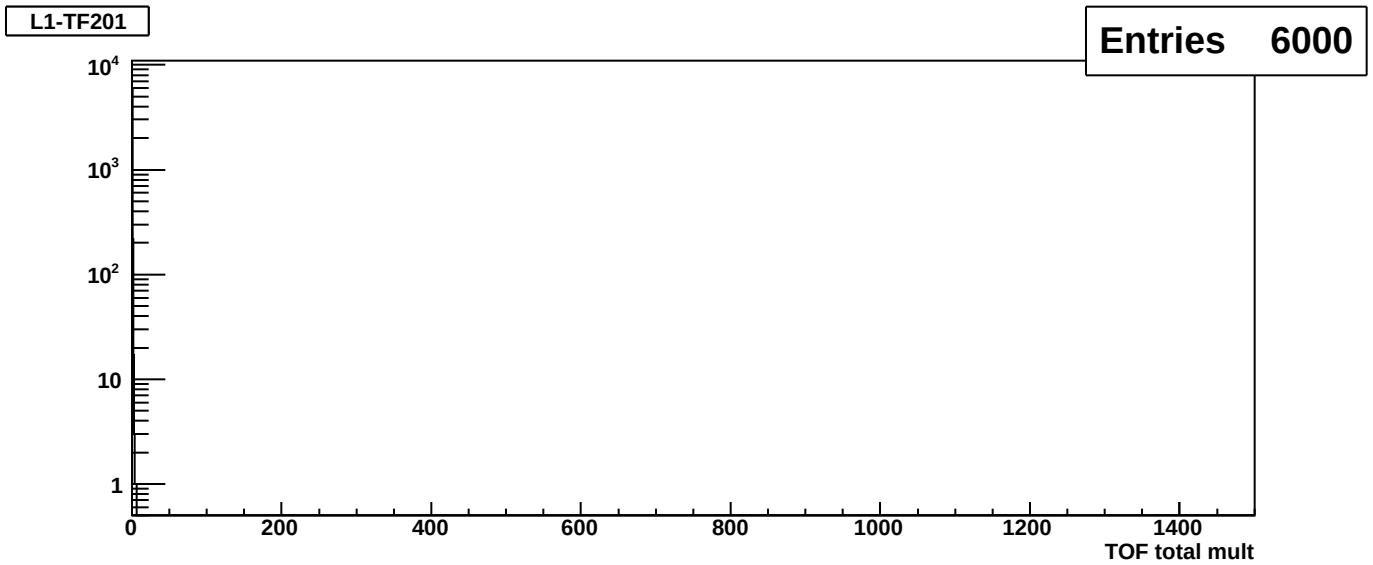

MIX-TF003
Entries 252000
TOF MULT
TOF tray

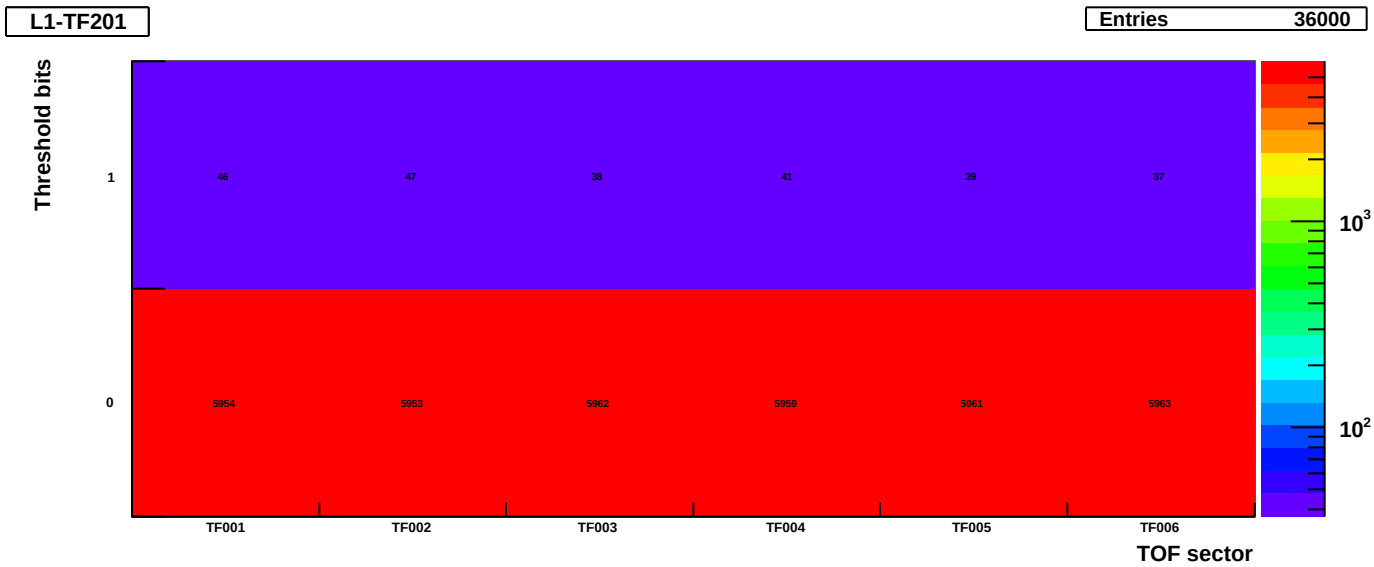

MIX-TF004
Entries 252000
TOF MULT
TOF tray

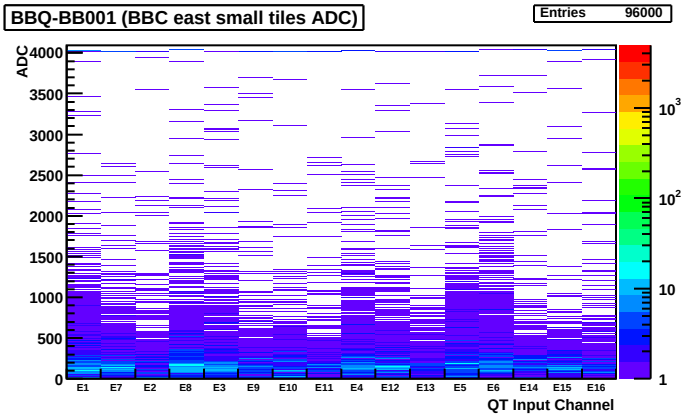

MIX-TF005
Entries 252000
TOF MULT
TOF tray

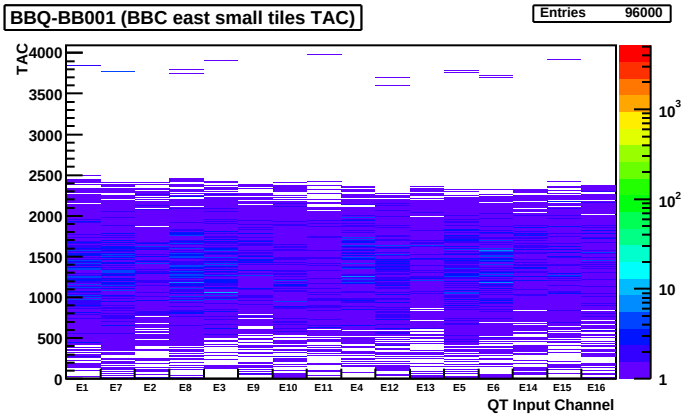

MIX-TF006
Entries 252000
TOF MULT
TOF tray

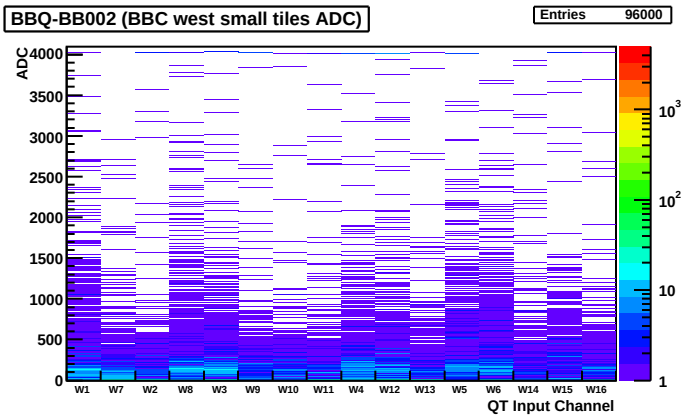

MIX-TF101
Entries 36000
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

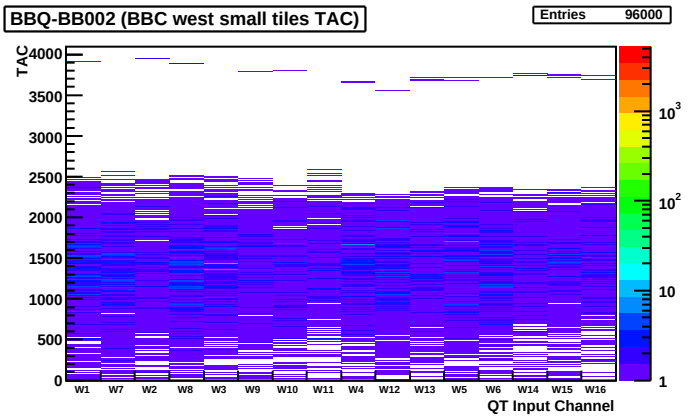

L1-TF201
Entries 6000
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

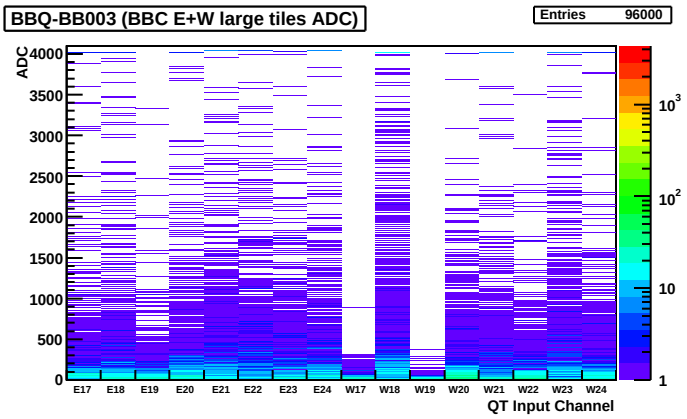

L1-TF201
Entries 36000
Threshold bits
1
0
46
47
38
41
39
37
5954
5953
5962
5959
5961
5963
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2

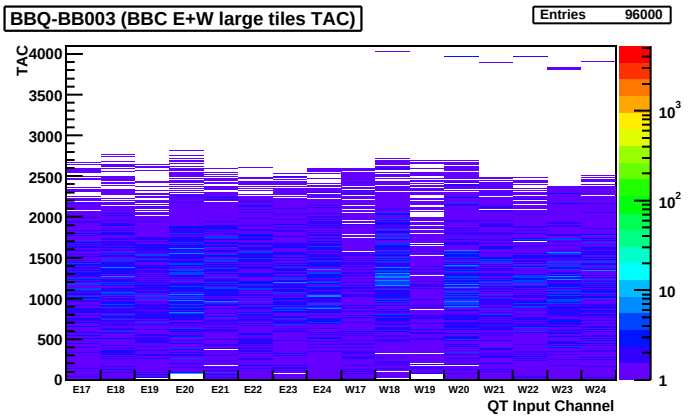

BBQ-BB001 (BBC east small tiles ADC)
Entries 96000
ADC
QT Input Channel

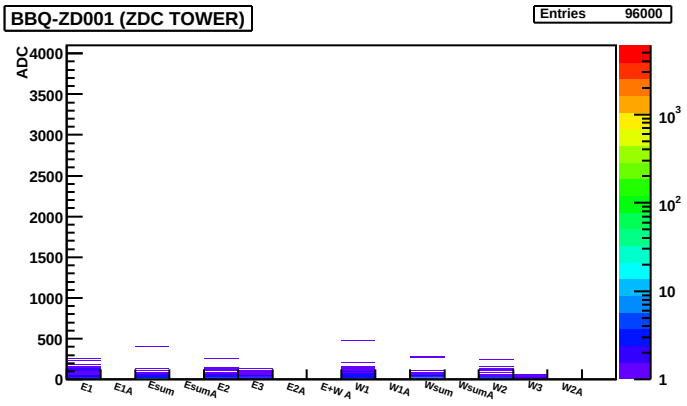

BBQ-BB001 (BBC east small tiles TAC)
Entries 96000
TAC
QT Input Channel

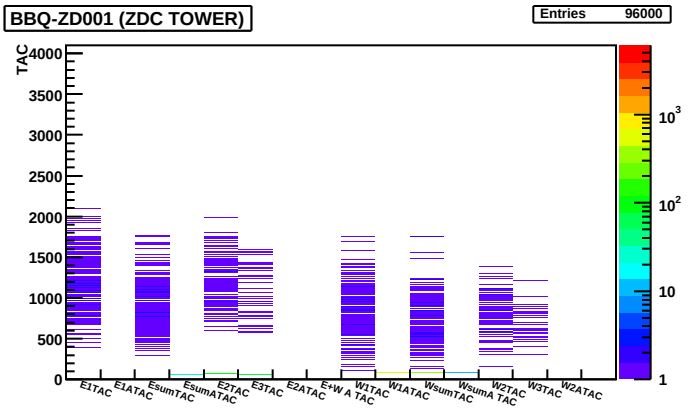

BBQ-BB002 (BBC west small tiles ADC)
Entries 96000
ADC
QT Input Channel

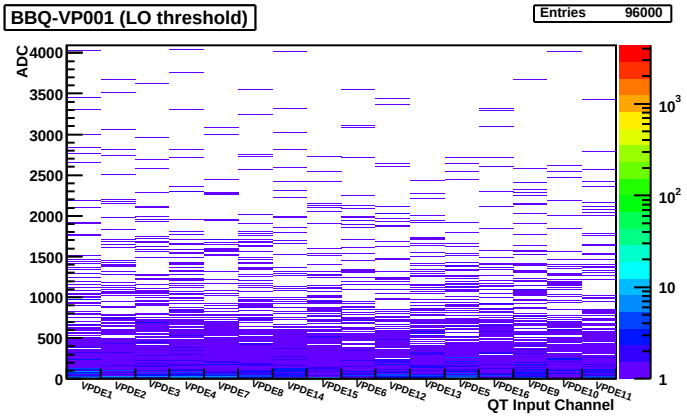

BBQ-BB002 (BBC west small tiles TAC)
Entries 96000
TAC
QT Input Channel

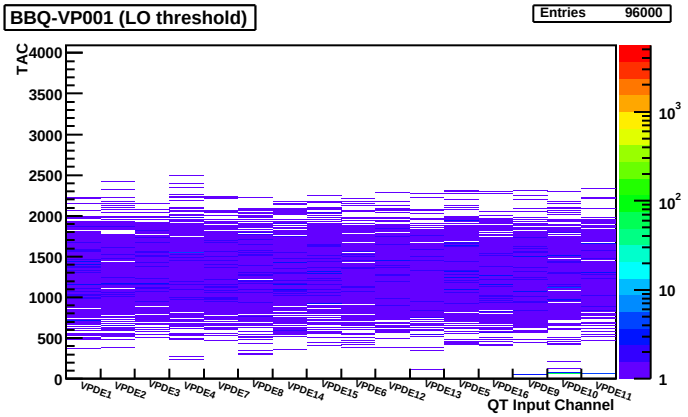

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 96000
ADC
QT Input Channel

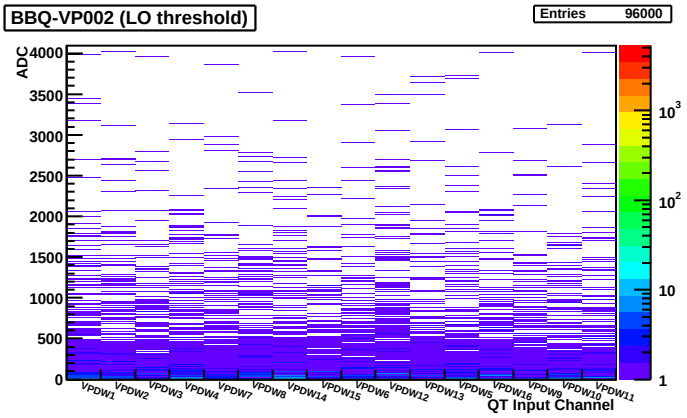

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 96000
TAC
QT Input Channel

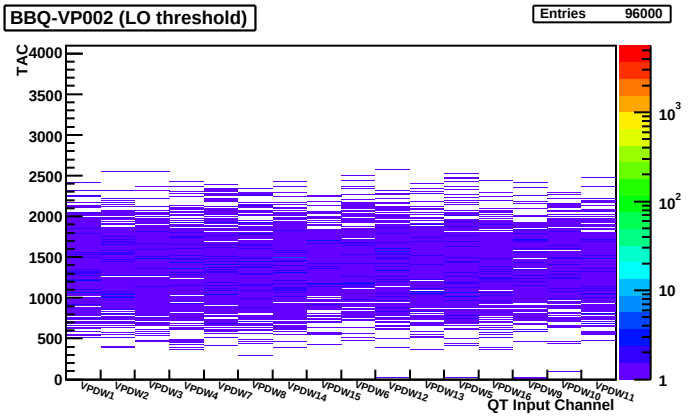

BBQ-ZD001 (ZDC TOWER)
Entries 96000
ADC

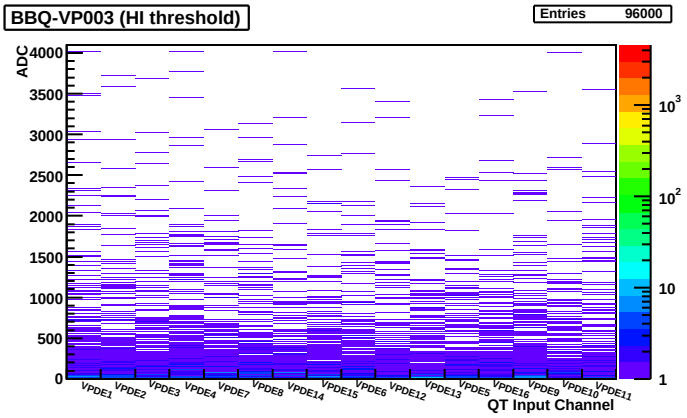

BBQ-ZD001 (ZDC TOWER)
Entries 96000
TAC

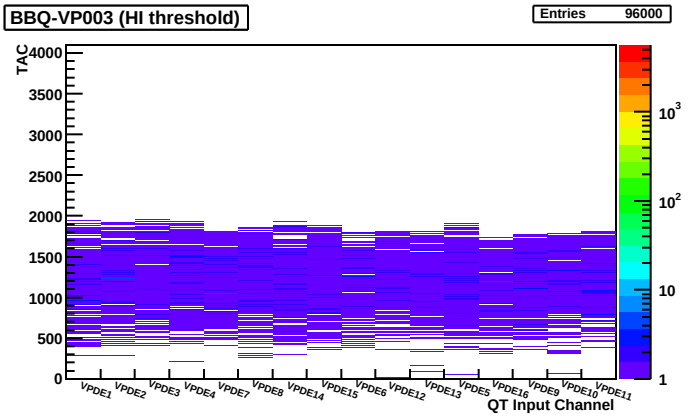

BBQ-VP001 (LO threshold)
Entries 96000
ADC
QT Input Channel

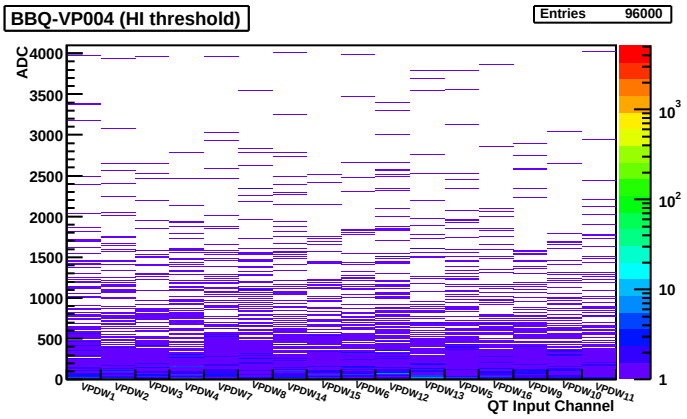

BBQ-VP001 (LO threshold)
Entries 96000
TAC
QT Input Channel

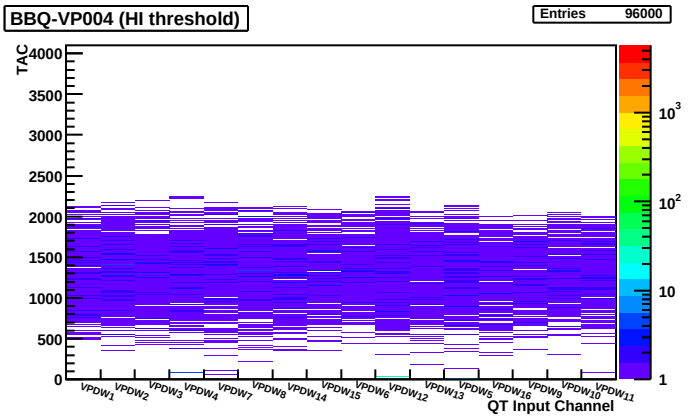

BBQ-VP002 (LO threshold)
Entries 96000
ADC
QT Input Channel

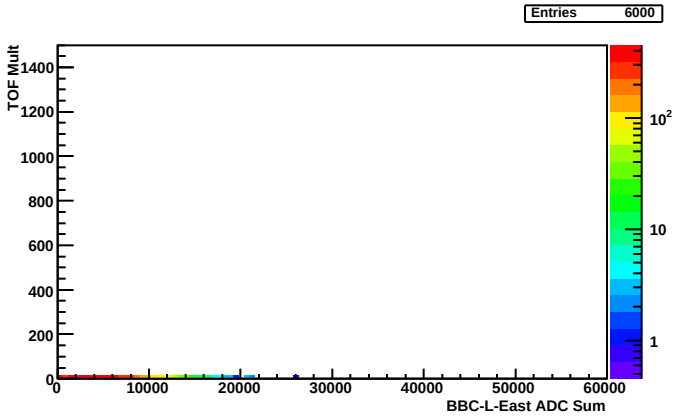

BBQ-VP002 (LO threshold)
Entries 96000
TAC
QT Input Channel

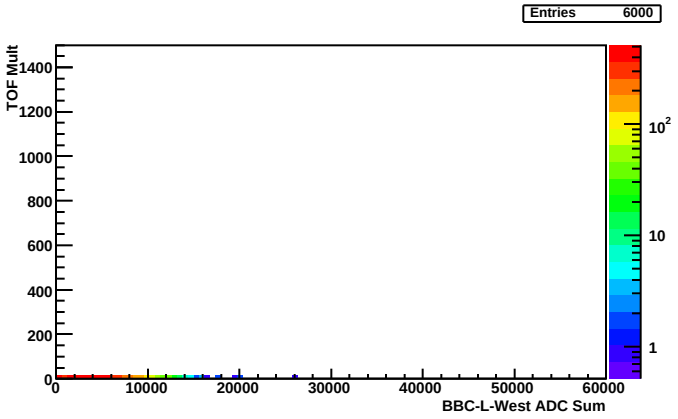

BBQ-VP003 (HI threshold)
Entries 96000
ADC
QT Input Channel

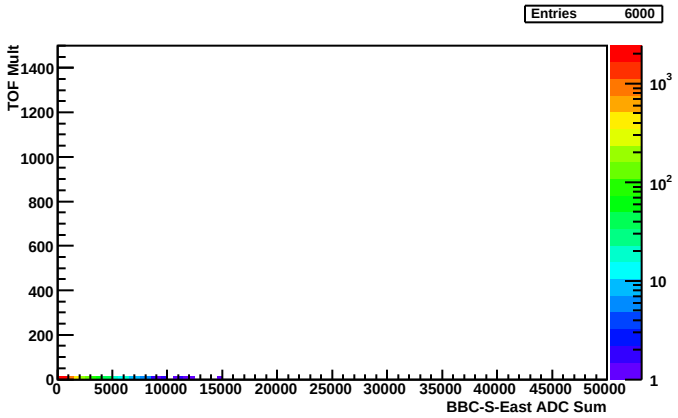

BBQ-VP003 (HI threshold)
Entries 96000
TAC
QT Input Channel

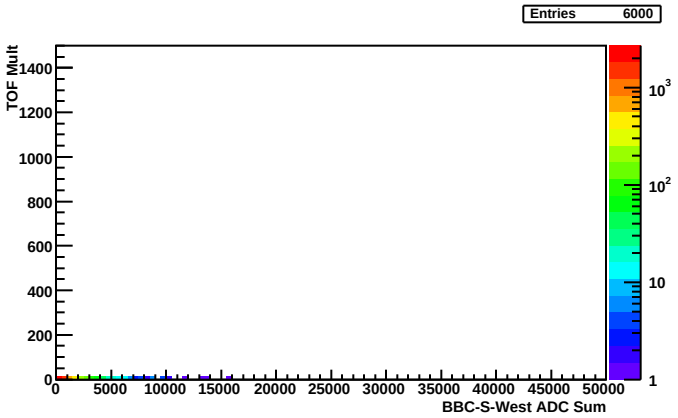

BBQ-VP004 (HI threshold)
Entries 96000
ADC
QT Input Channel

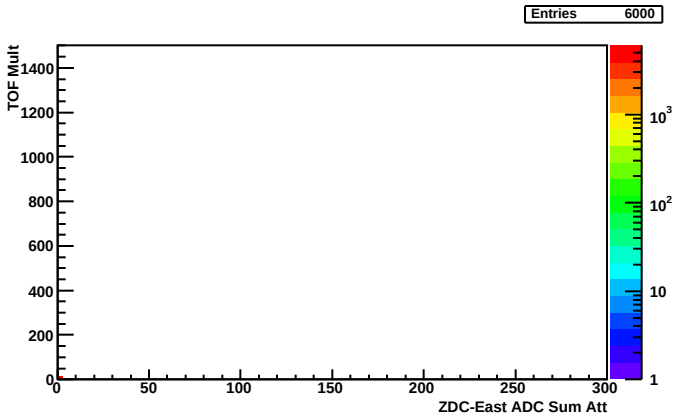

BBQ-VP004 (HI threshold)
Entries 96000
TAC
QT Input Channel

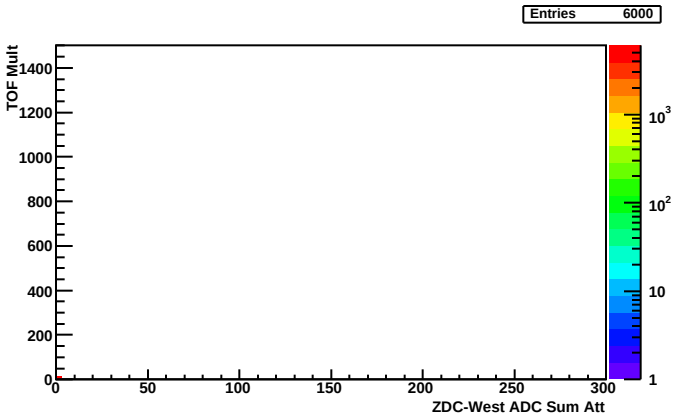

Entries 6000
TOF Mult
BBC-L-East ADC Sum

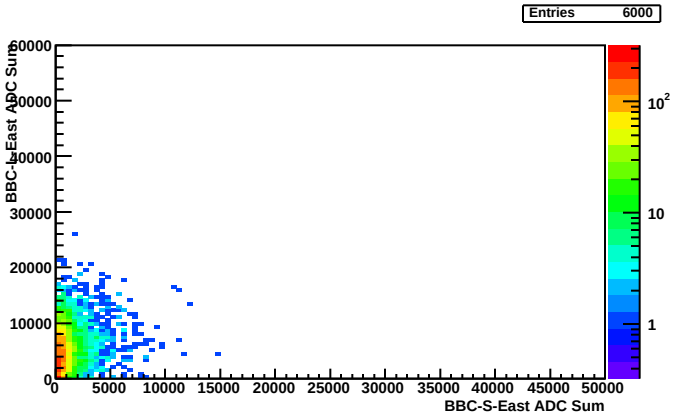

Entries 6000
TOF Mult
BBC-L-West ADC Sum

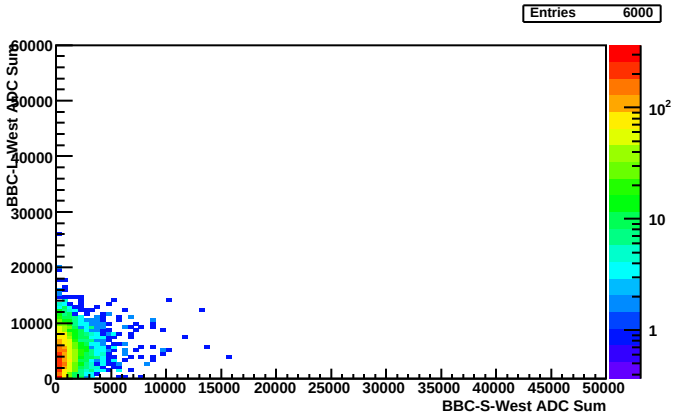

Entries 6000
TOF Mult
BBC-S-East ADC Sum

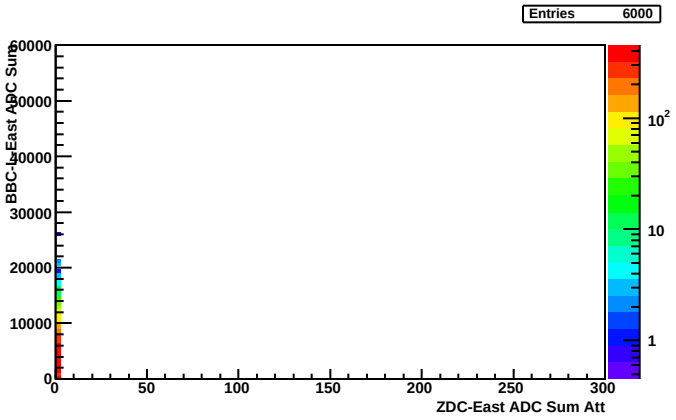

Entries 6000
TOF Mult
BBC-S-West ADC Sum

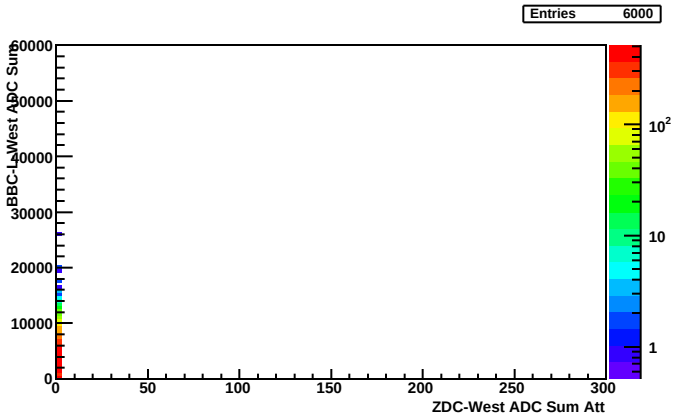

Entries 6000
TOF Mult
ZDC-East ADC Sum Att

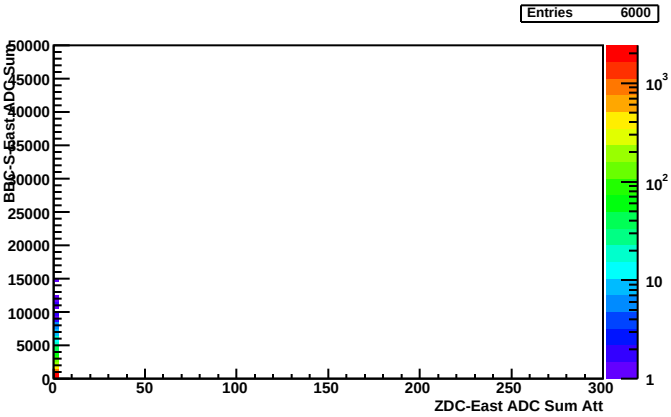

Entries 6000
TOF Mult
ZDC-West ADC Sum Att

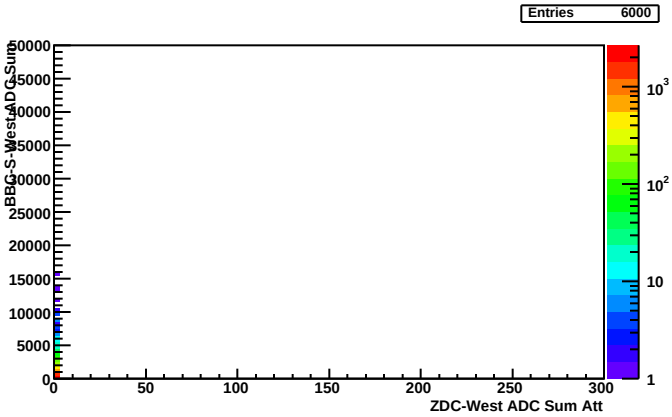

Entries 6000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

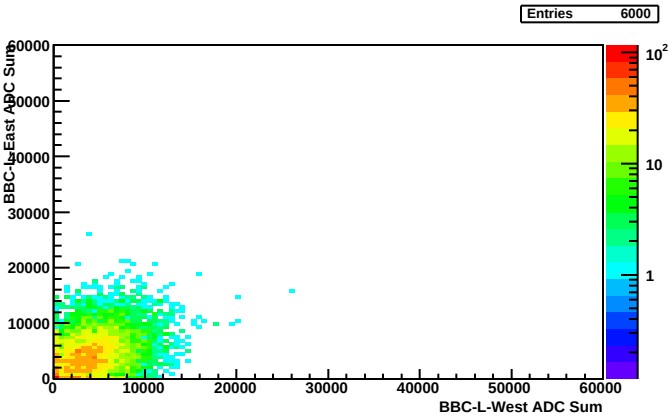

Entries 6000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

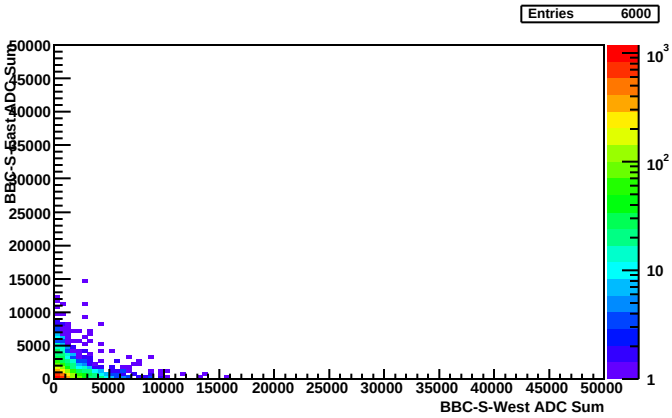

Entries 6000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

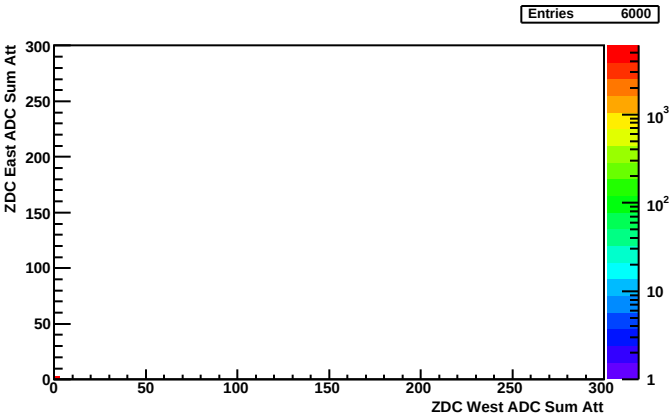

Entries 6000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

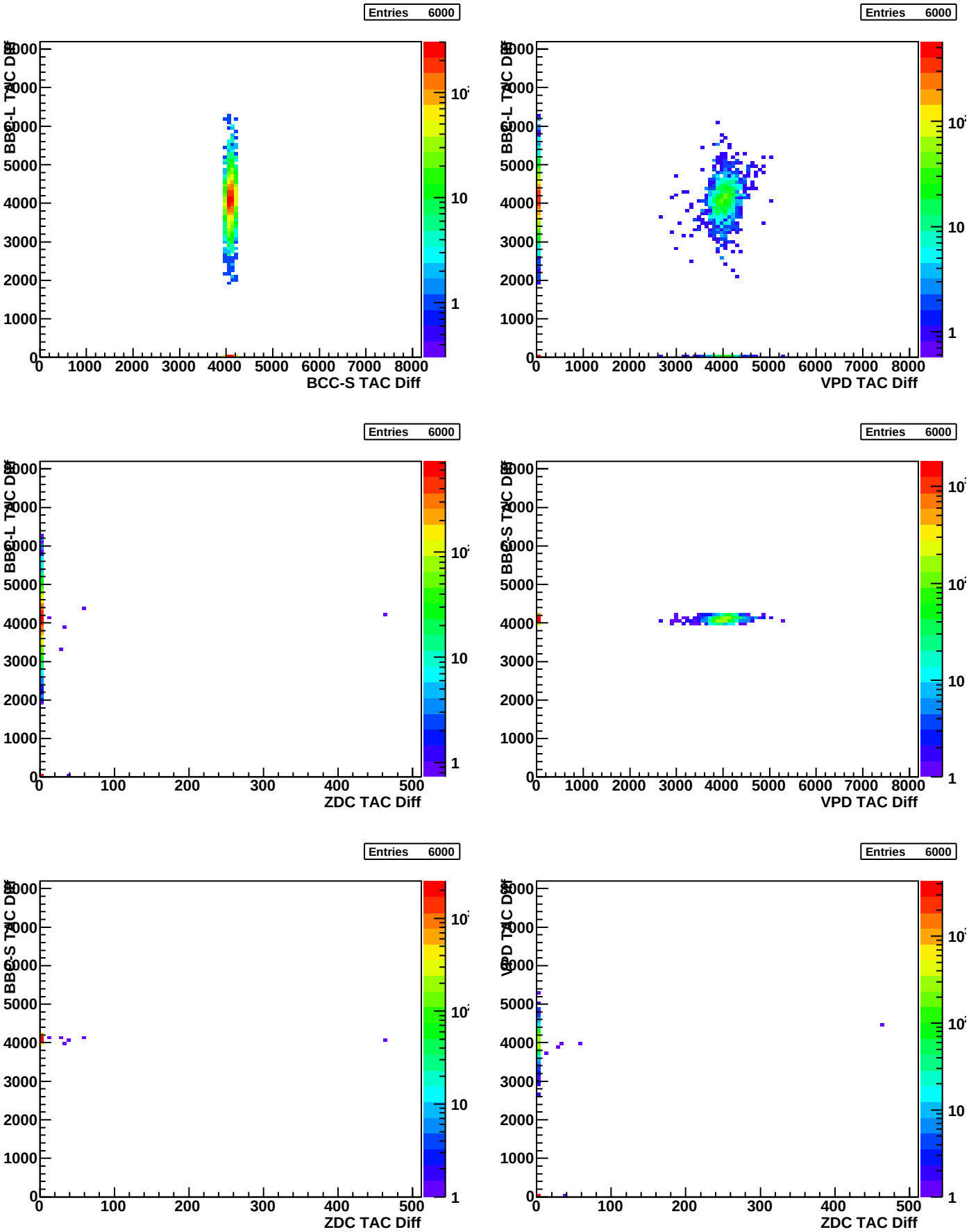

Entries 6000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

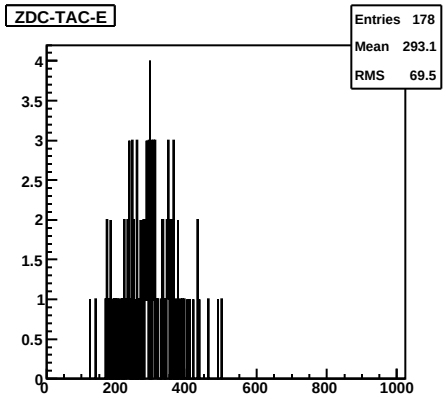

Entries 6000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

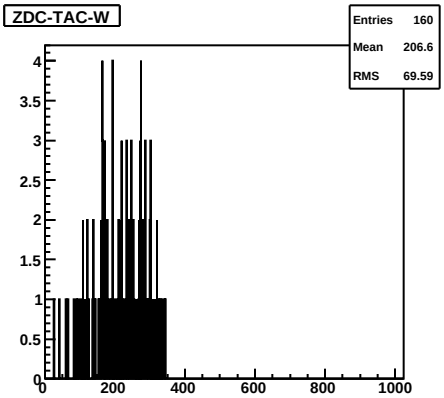

Entries 6000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

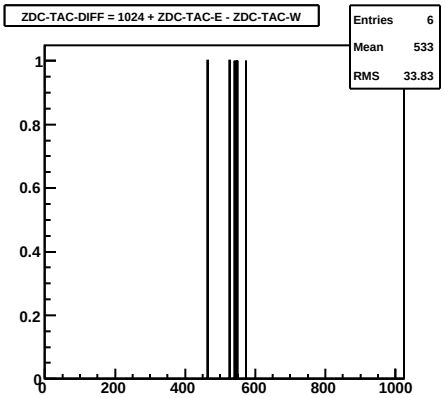

Entries 6000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

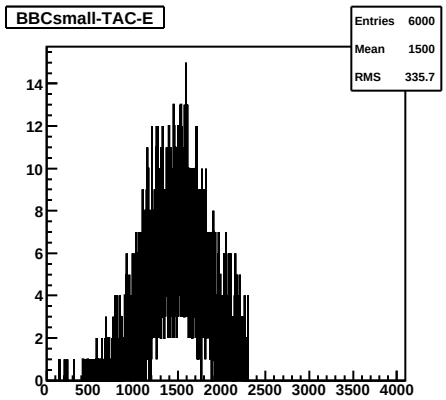

Entries 6000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

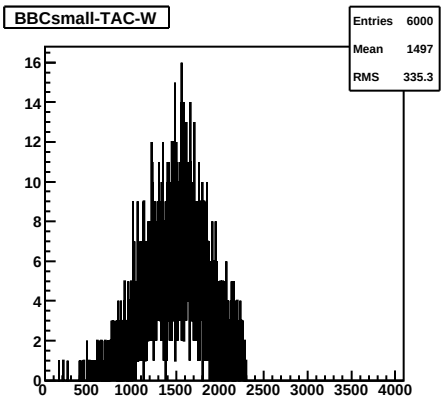

Entries 6000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 6000
BBC-L TAC Diff
VPD TAC Diff
Entries 6000
BBC-L TAC Diff
ZDC TAC Diff
Entries 6000
BBC-S TAC Diff
VPD TAC Diff
Entries 6000
BBC-S TAC Diff
ZDC TAC Diff
Entries 6000
VPD TAC Diff
ZDC TAC Diff

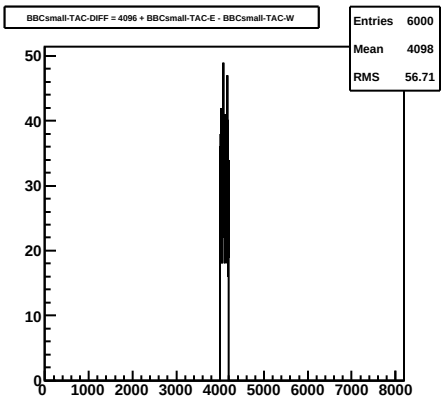

ZDC-TAC-E
Entries 178
Mean 293.1
RMS 69.5

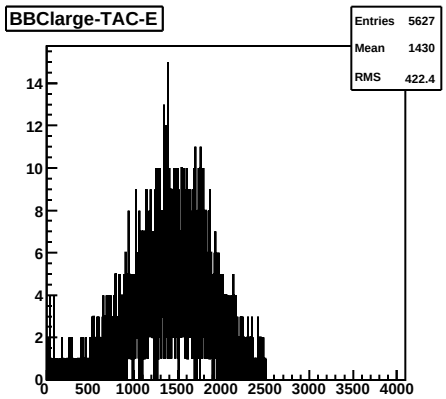

ZDC-TAC-W
Entries 160
Mean 206.6
RMS 69.59

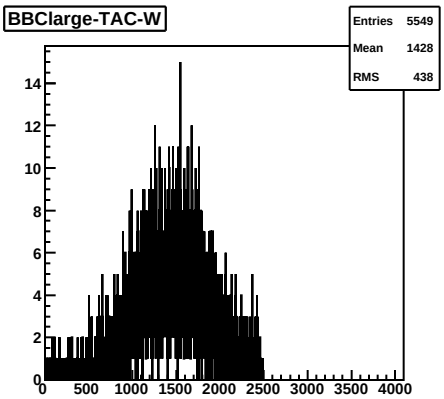

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 6
Mean 533
RMS 33.83

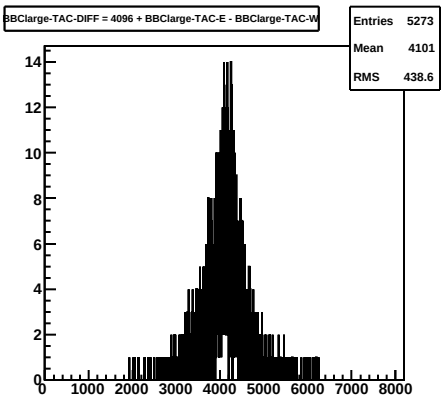

BBCsmall-TAC-E
Entries 6000
Mean 1500
RMS 335.7

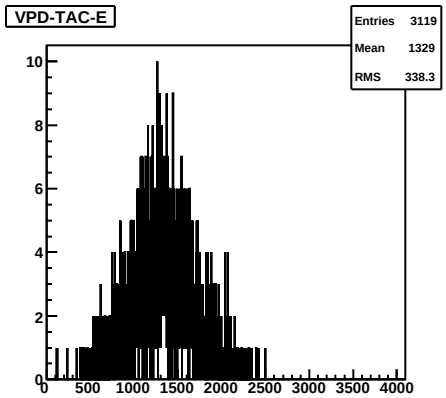

BBCsmall-TAC-W
Entries 6000
Mean 1497
RMS 335.3

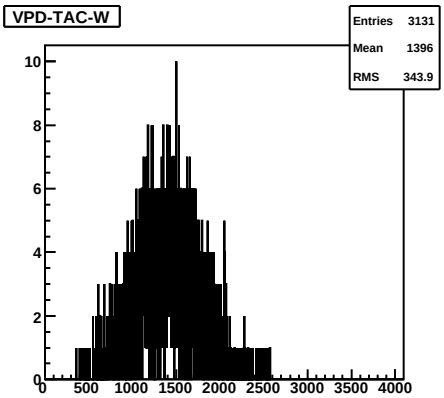

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 6000
Mean 4098
RMS 56.71

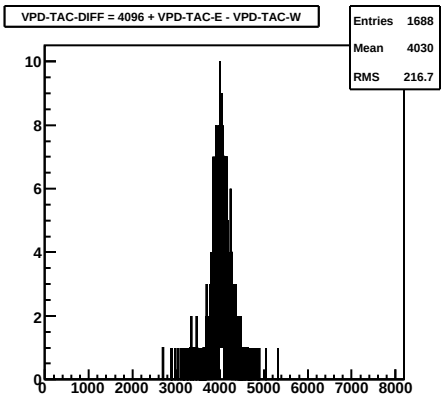

BBClarge-TAC-E
Entries 5627
Mean 1430
RMS 422.4

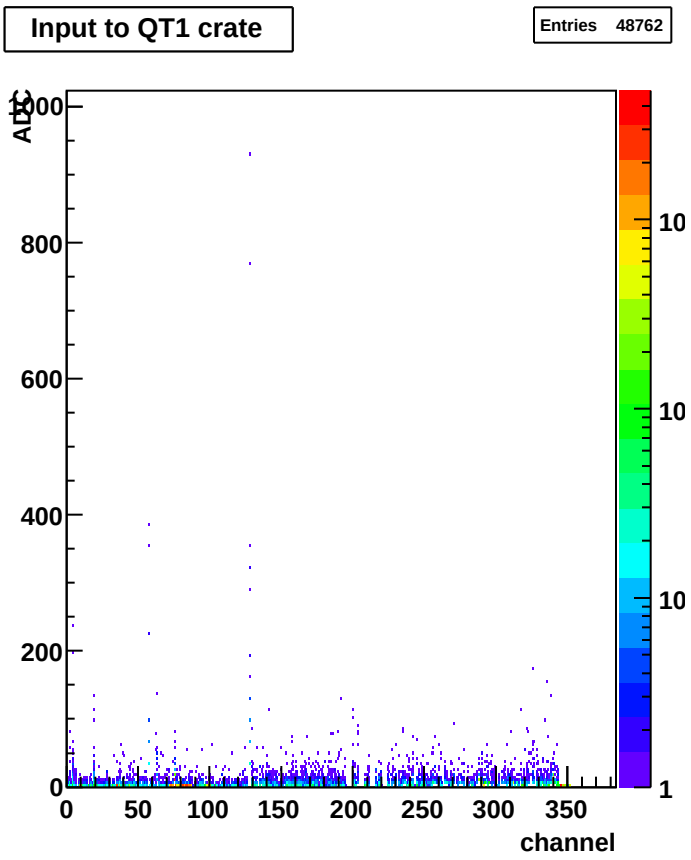

BBClarge-TAC-W
Entries 5549
Mean 1428
RMS 438

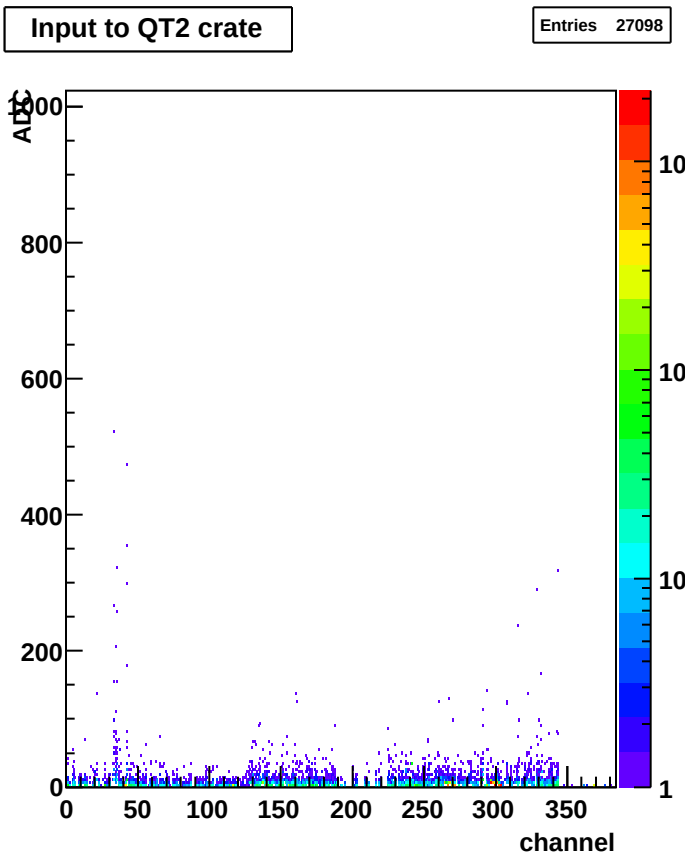

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 5273
Mean 4101
RMS 438.6

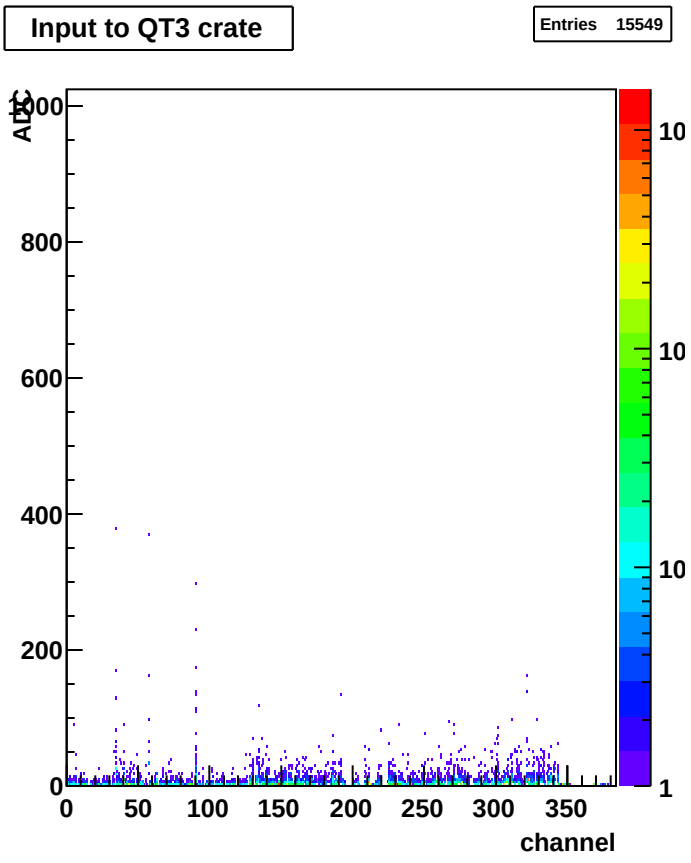

VPD-TAC-E
Entries 3119
Mean 1329
RMS 338.3

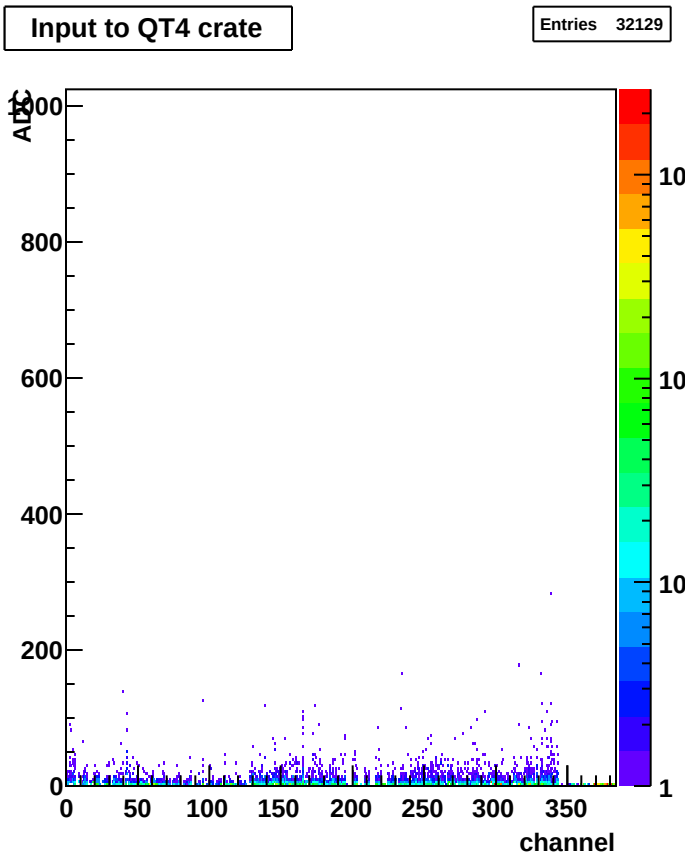

VPD-TAC-W
Entries 3131
Mean 1396
RMS 343.9

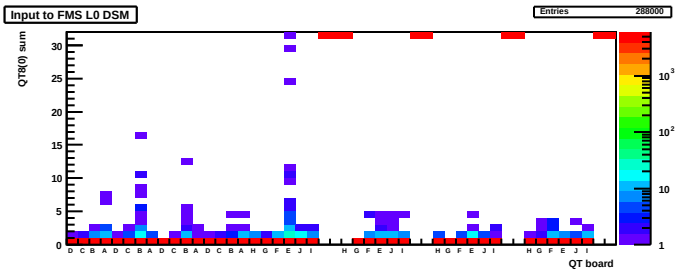

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1688
Mean 4030
RMS 216.7

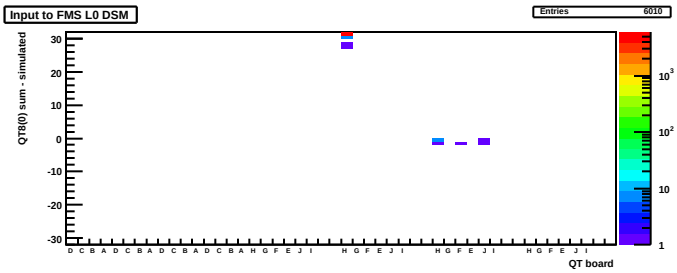

Input to QT1 crate
Entries 48762
ADC
channel

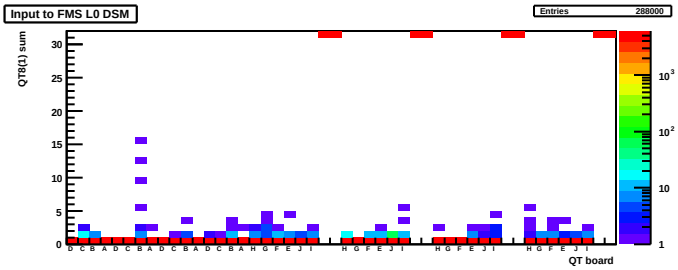

Input to QT2 crate
Entries 27098
ADC
channel

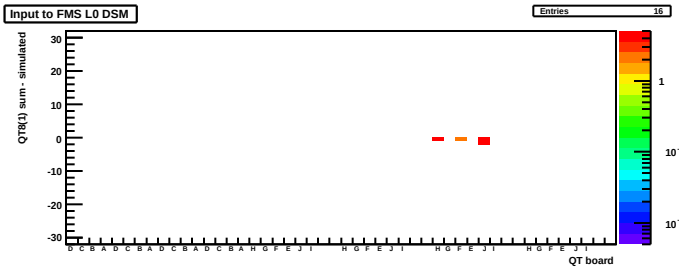

Input to QT3 crate
Entries 15549
ADC
channel

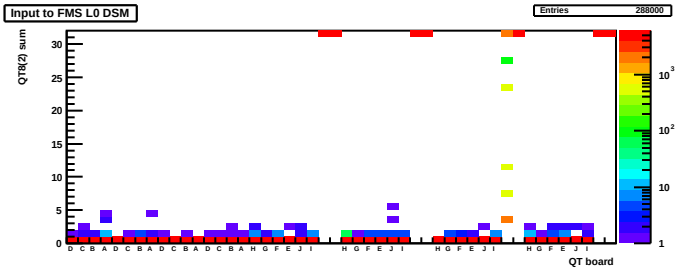

Input to QT4 crate
Entries 32129
ADC
channel

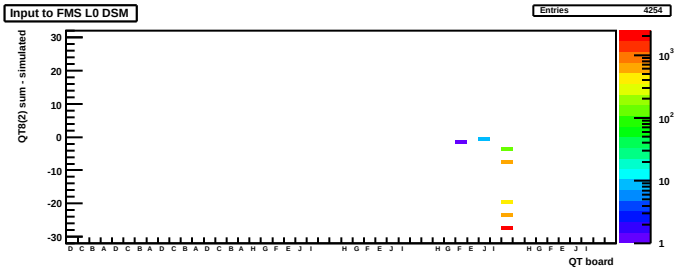

Input to FMS L0 DSM
Entries 288000
QT8(0) sum
QT board

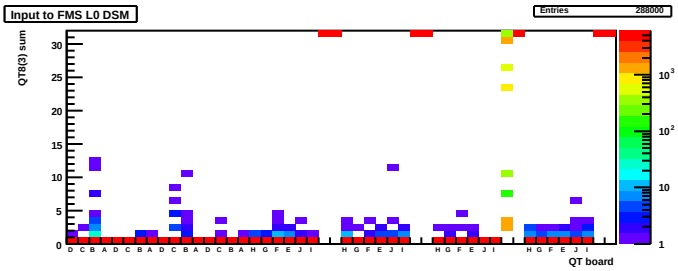

Input to FMS L0 DSM
Entries 6010
QT8(0) sum - simulated
QT board

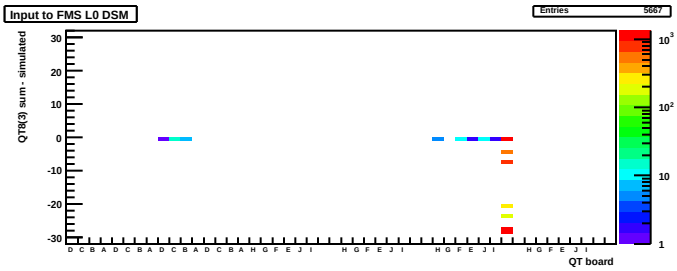

Input to FMS L0 DSM
Entries 288000
QT8(1) sum
QT board

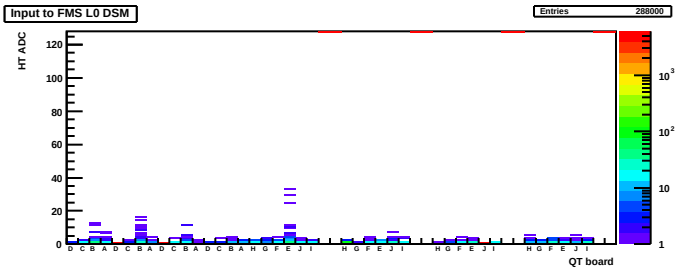

Input to FMS L0 DSM
Entries 16
QT8(1) sum - simulated
QT board

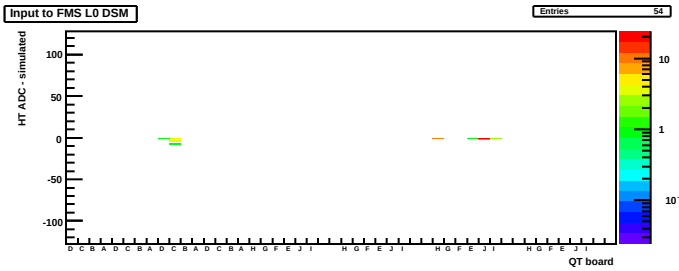

Input to FMS L0 DSM
Entries 288000
QT8(2) sum
QT board

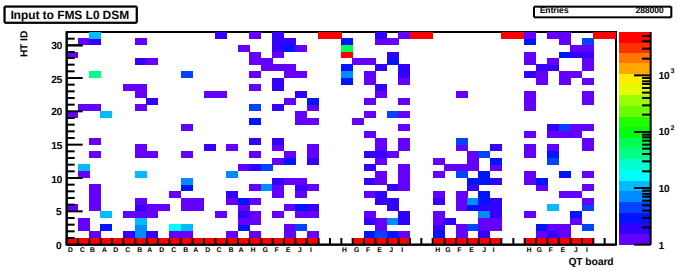

Input to FMS L0 DSM
Entries 4254
QT8(2) sum - simulated
QT board

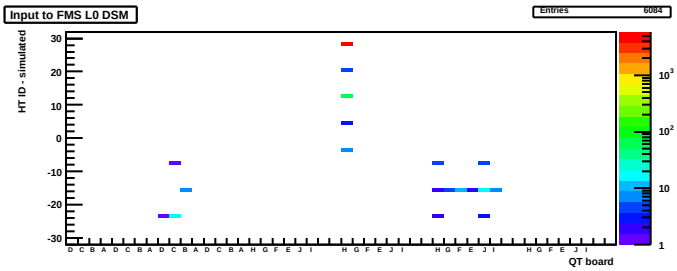

Input to FMS L0 DSM
Entries 288000
QT8(3) sum
QT board

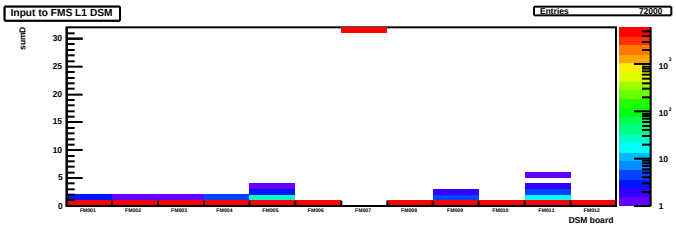

Input to FMS L0 DSM
Entries 5667
QT8(3) sum - simulated
QT board

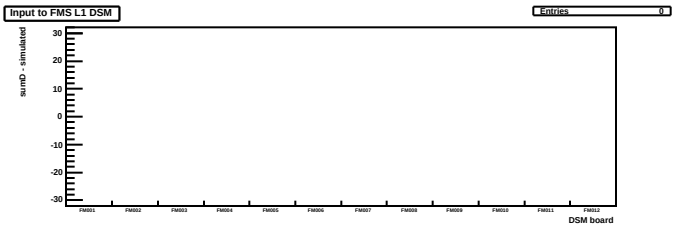

Input to FMS L0 DSM
Entries 288000
HT ADC
QT board

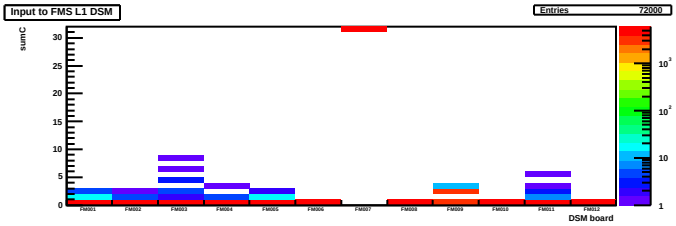

Input to FMS L0 DSM
Entries 54
HT ADC - simulated
QT board

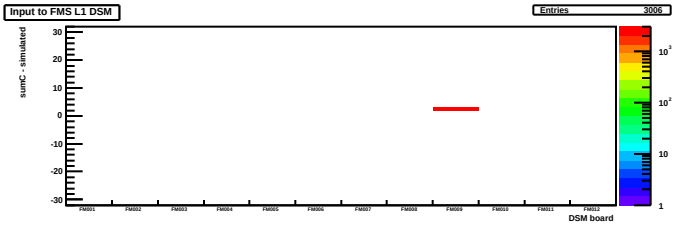

Input to FMS L0 DSM
Entries 288000
HT ID
QT board

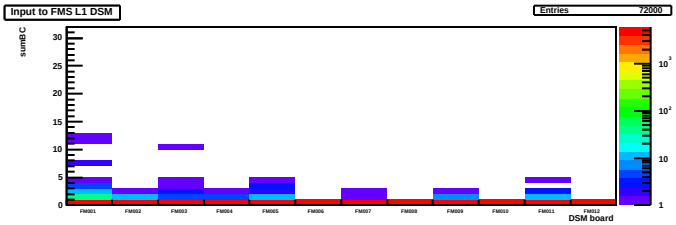

Input to FMS L0 DSM
Entries 6084
HT ID - simulated
QT board

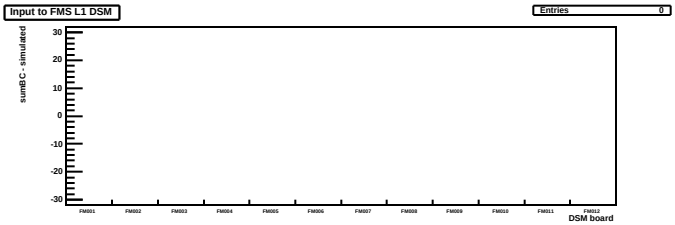

Input to FMS L1 DSM
Entries 72000
sumD
DSM board

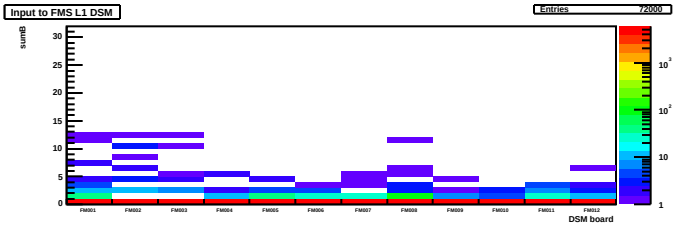

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

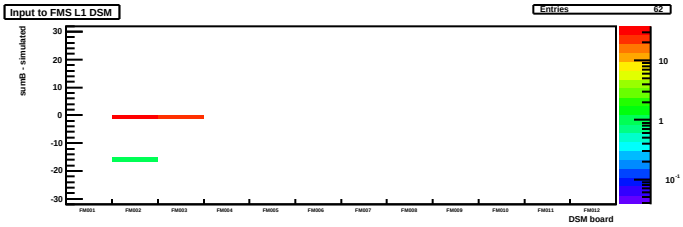

Input to FMS L1 DSM
Entries 72000
sumC
DSM board

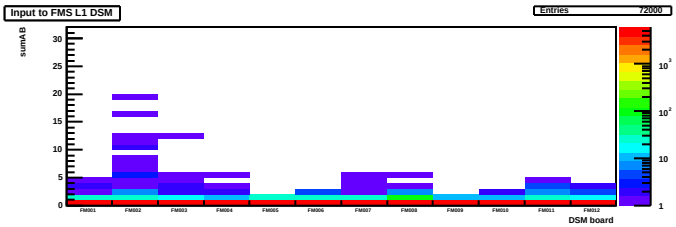

Input to FMS L1 DSM
Entries 3006
sumC - simulated
DSM board

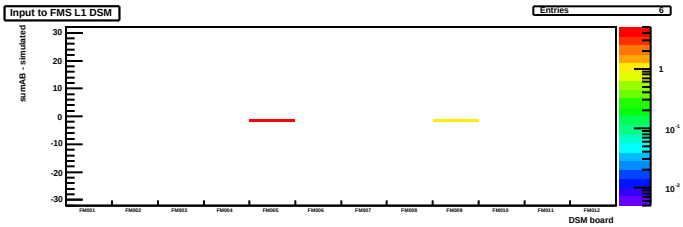

Input to FMS L1 DSM
Entries 72000
sumBC
DSM board

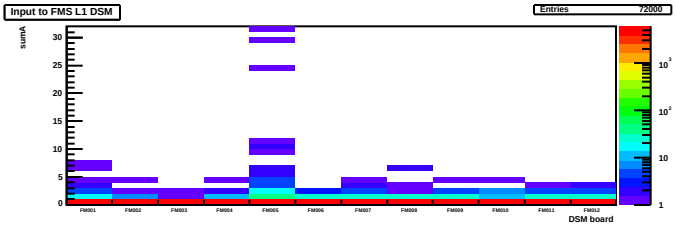

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

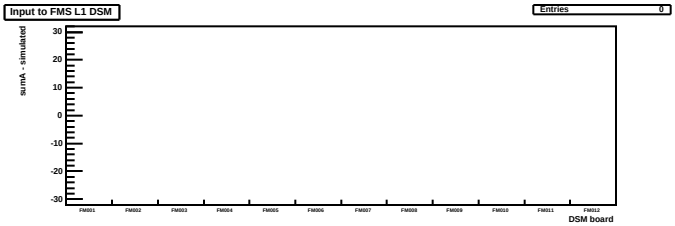

Input to FMS L1 DSM
Entries 72000
sumB
DSM board

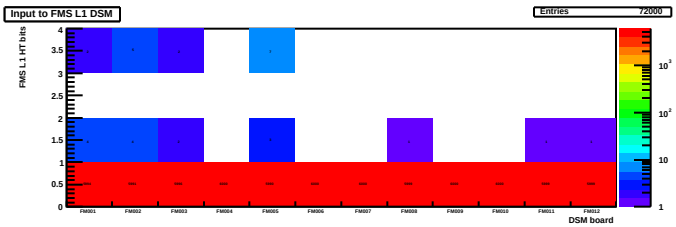

Input to FMS L1 DSM
Entries 62
sumB - simulated
DSM board

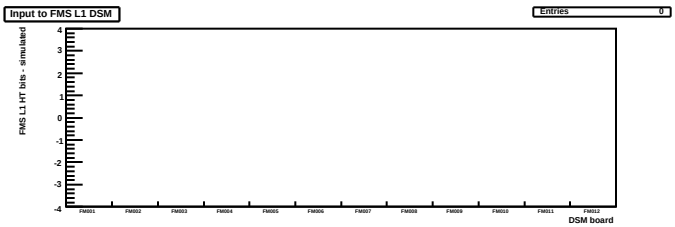

Input to FMS L1 DSM
Entries 72000
sumAB
DSM board

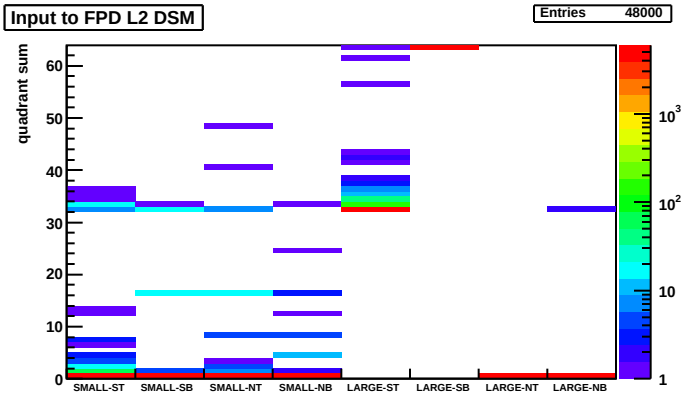

Input to FMS L1 DSM
Entries 6
sumAB - simulated
DSM board

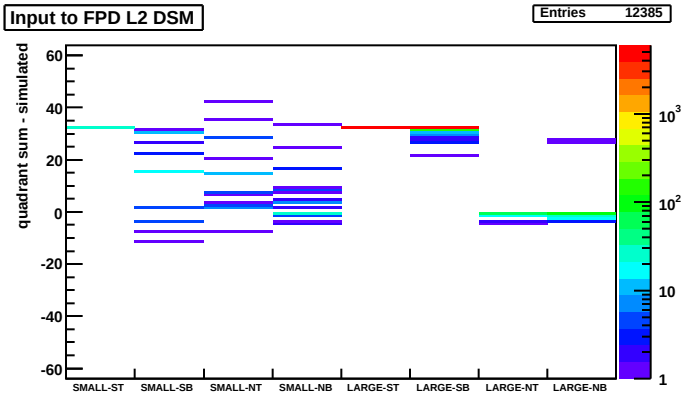

Input to FMS L1 DSM
Entries 72000
sumA
DSM board

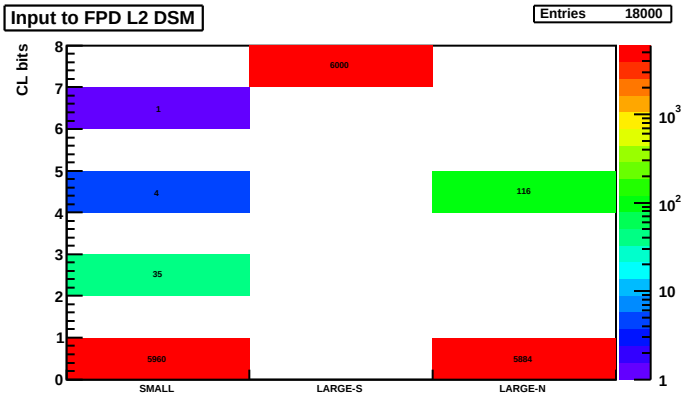

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

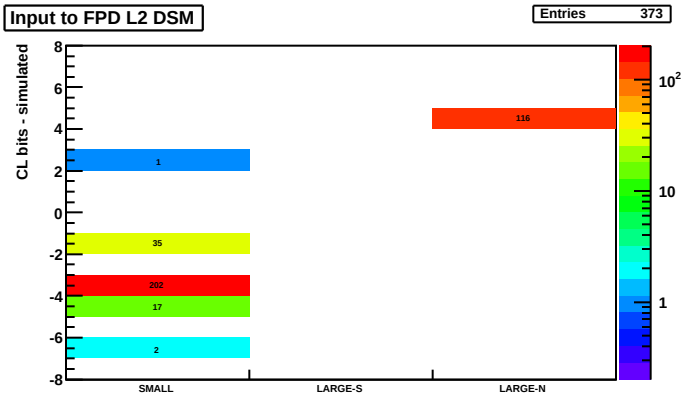

Input to FMS L1 DSM
Entries 72000
FMS L1 HT bits
DSM board

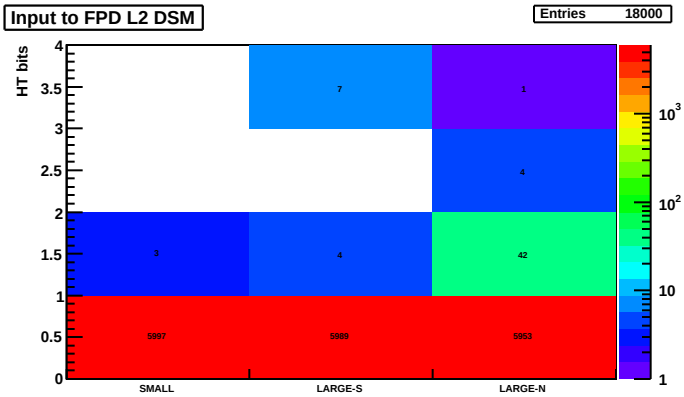

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

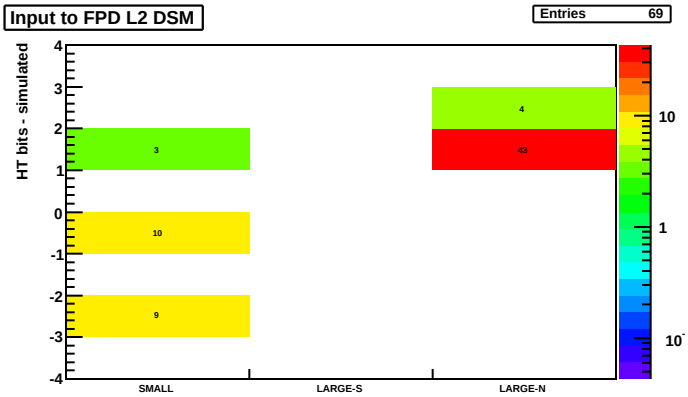

Input to FPD L2 DSM
Entries 48000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

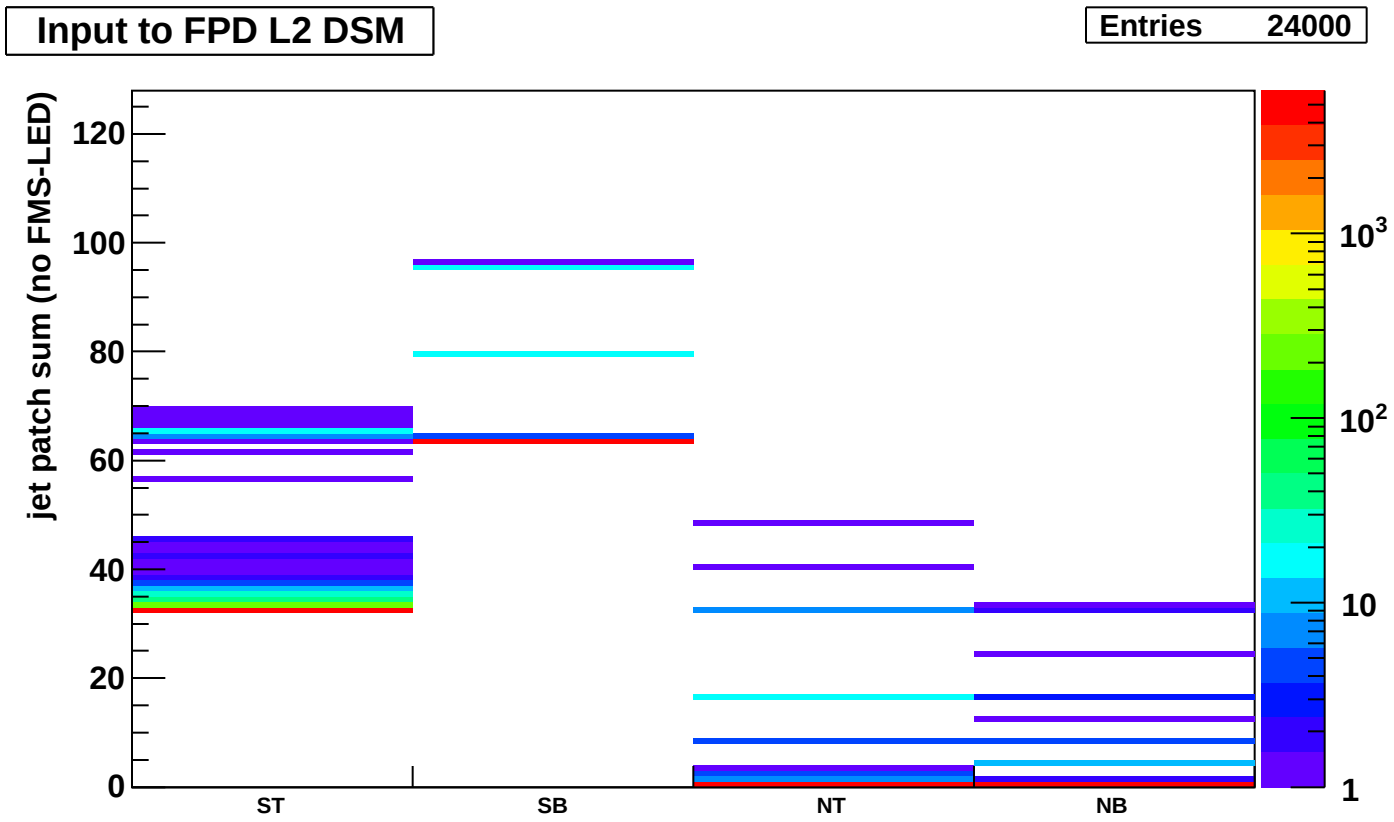

Input to FPD L2 DSM
Entries 12385
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

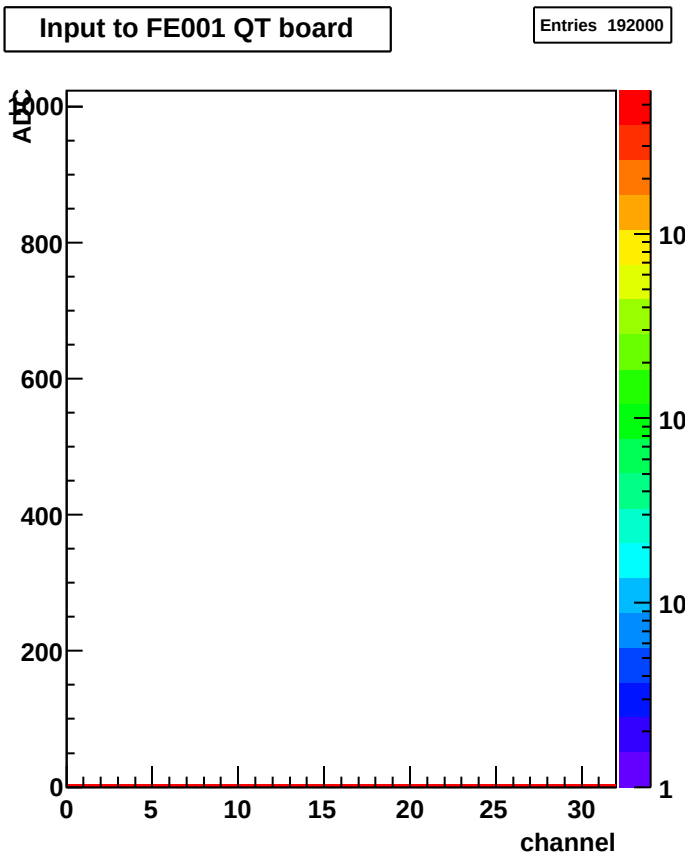

Input to FPD L2 DSM
Entries 18000
CL bits
6000
1
4
116
35
5960
5884
SMALL
LARGE-S
LARGE-N

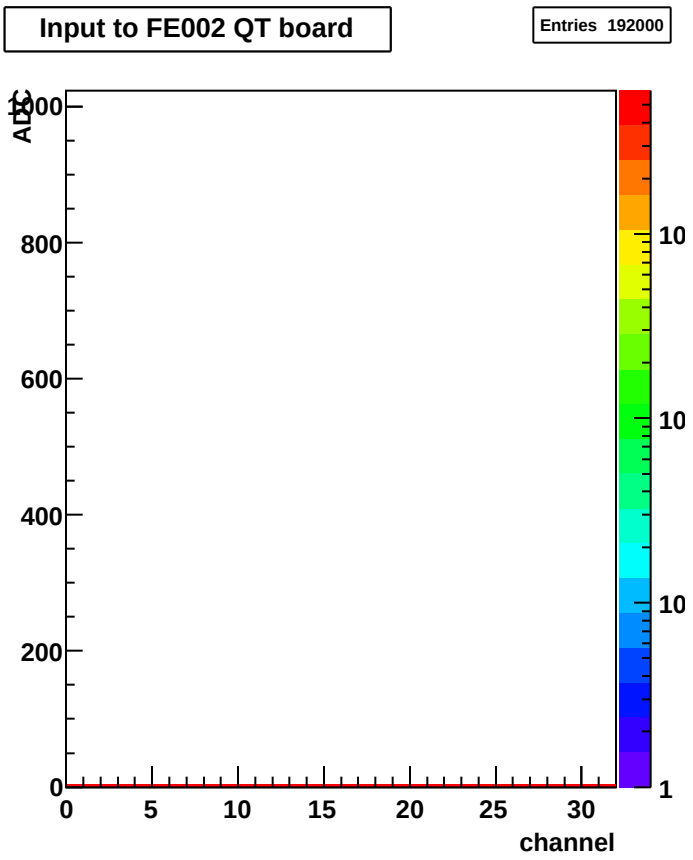

Input to FPD L2 DSM
Entries 373
CL bits - simulated
116
1
35
202
17
2
SMALL
LARGE-S
LARGE-N

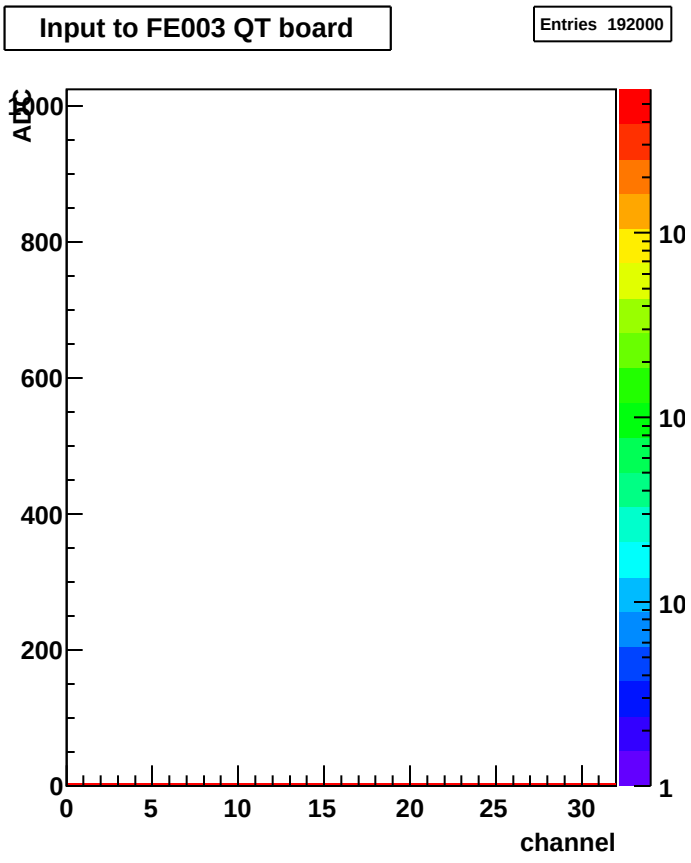

Input to FPD L2 DSM
Entries 18000
HT bits
7
1
4
3
4
42
5997
5989
5953
SMALL
LARGE-S
LARGE-N

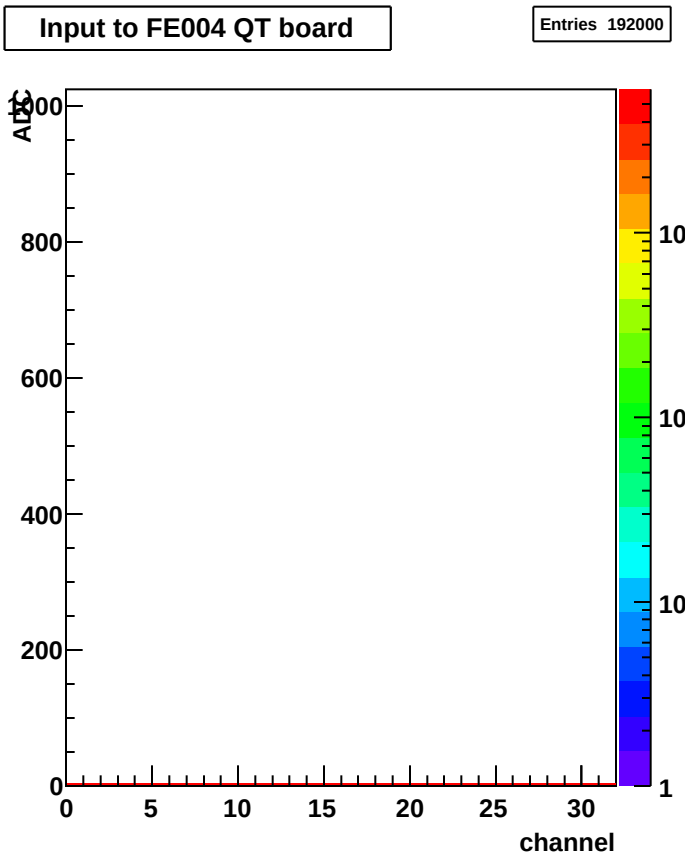

Input to FPD L2 DSM
Entries 69
HT bits - simulated
4
3
43
10
9
SMALL
LARGE-S
LARGE-N

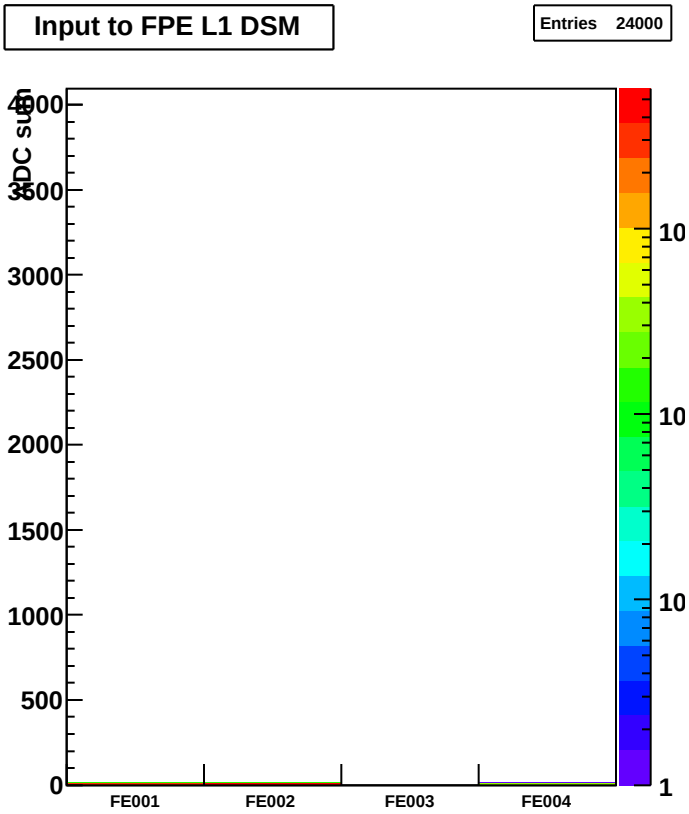

Input to FPD L2 DSM
Entries 24000
jet patch sum (no FMS-LED)
120
100
80
60
40
20
0
ST
SB
NT
NB
10^3
10^2
10
1

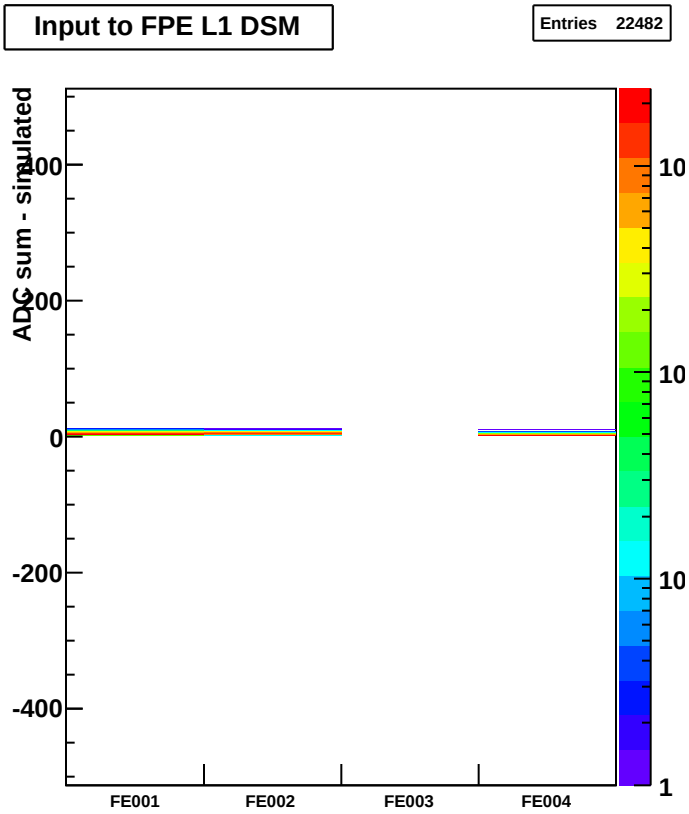

Input to FE001 QT board
Entries 192000
ADC
channel

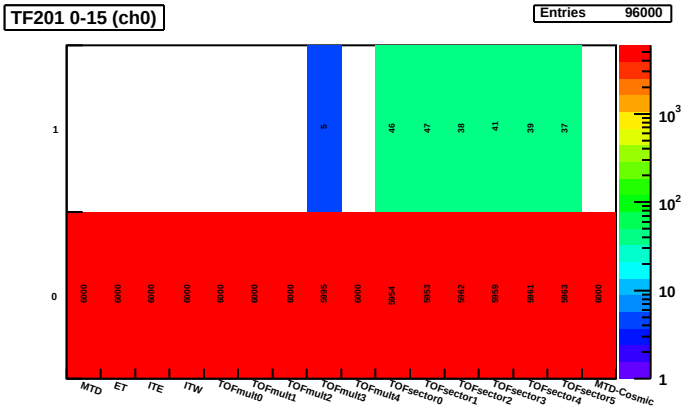

Input to FE002 QT board
Entries 192000
ADC
channel

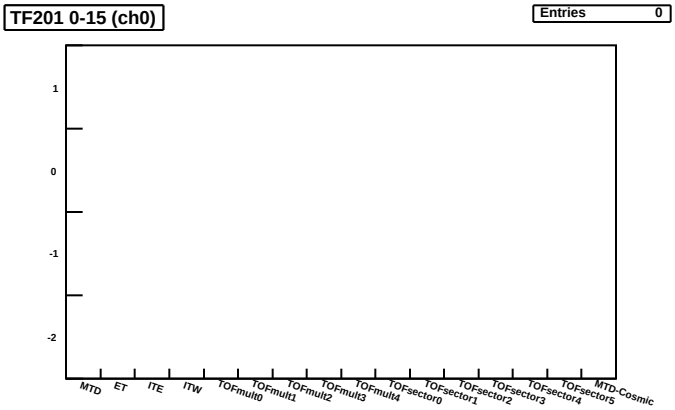

Input to FE003 QT board
Entries 192000
ADC
channel

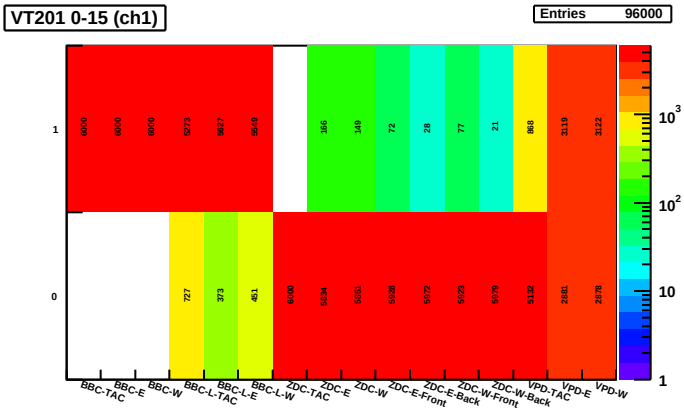

Input to FE004 QT board
Entries 192000
ADC
channel

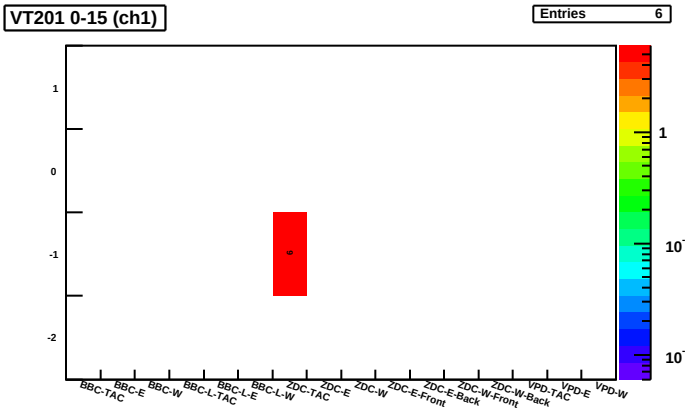

Input to FPE L1 DSM
Entries 24000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

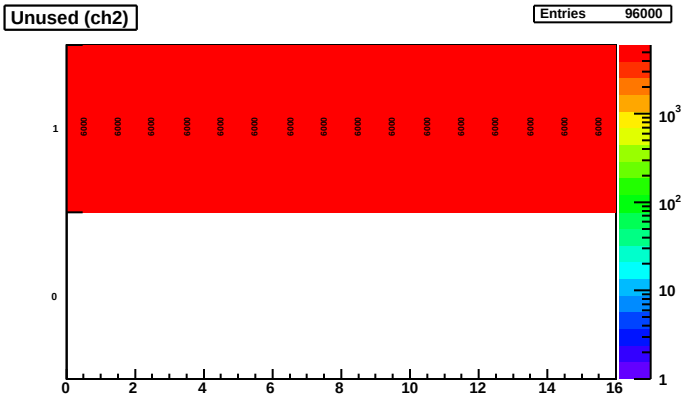

Input to FPE L1 DSM
Entries 22482
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1

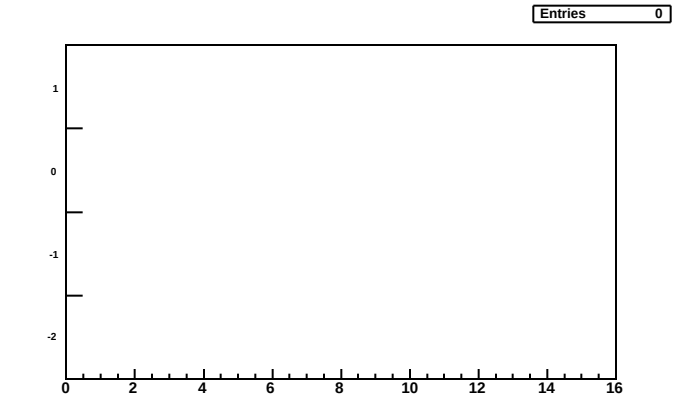

TF201 0-15 (ch0)
Entries 96000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

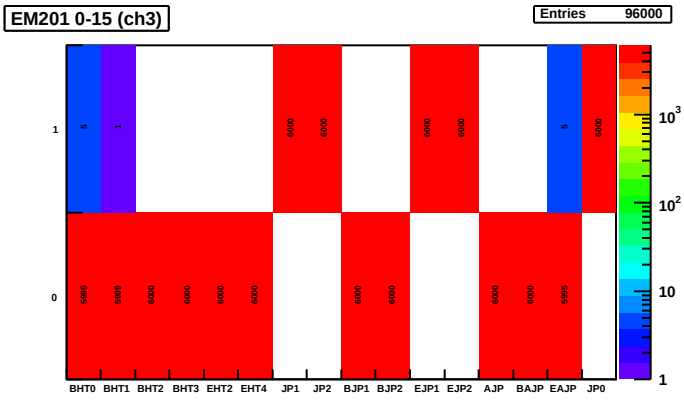

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

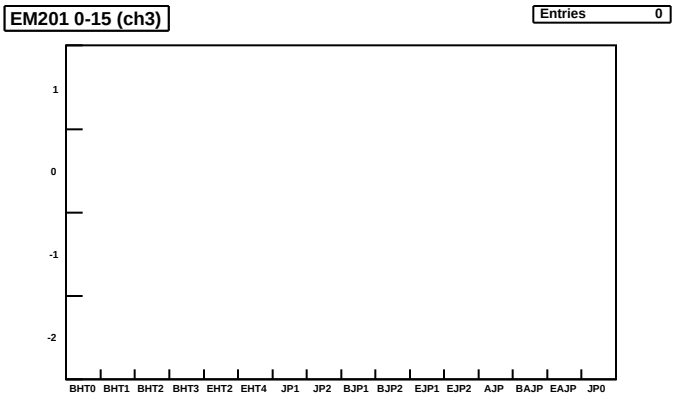

VT201 0-15 (ch1)
Entries 96000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 6
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

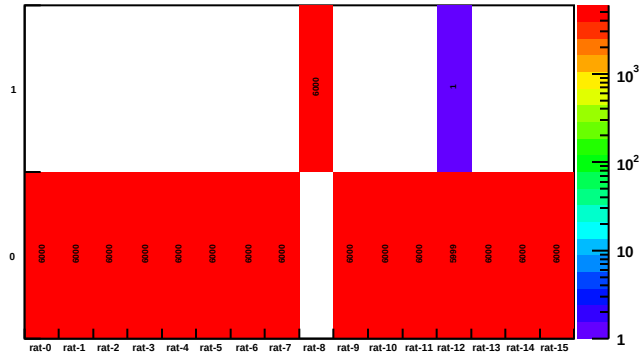

Unused (ch2)
Entries 96000

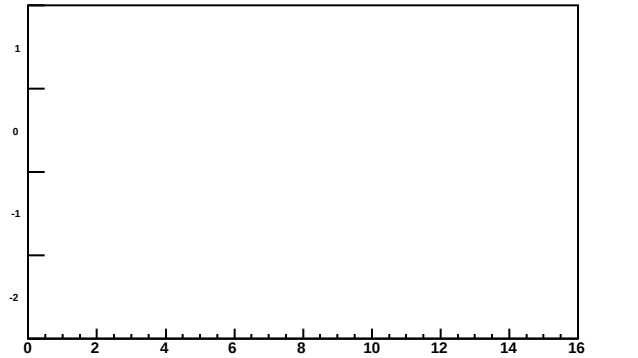

Entries 0


EM201 0-15 (ch3)
Entries 96000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

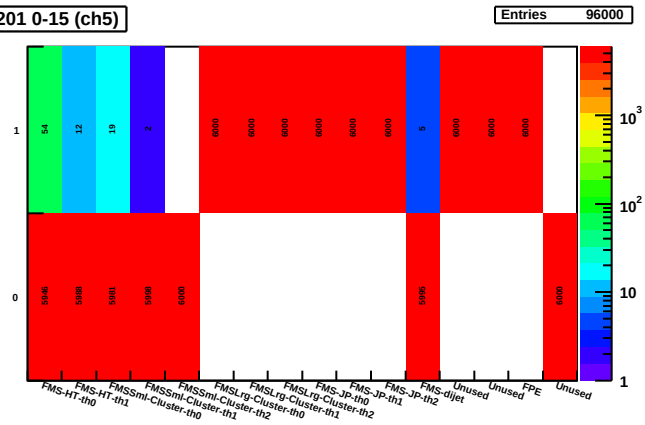

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

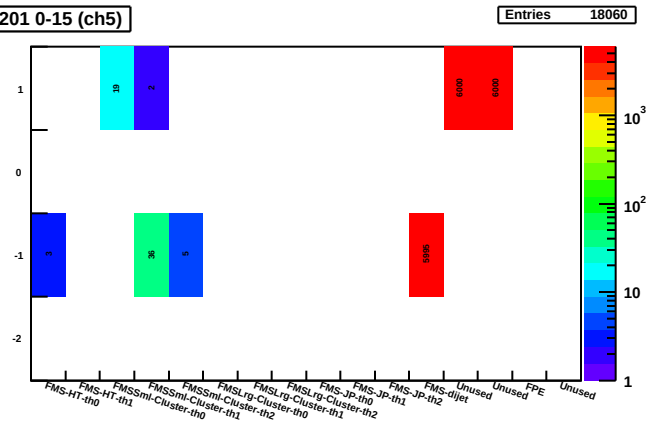




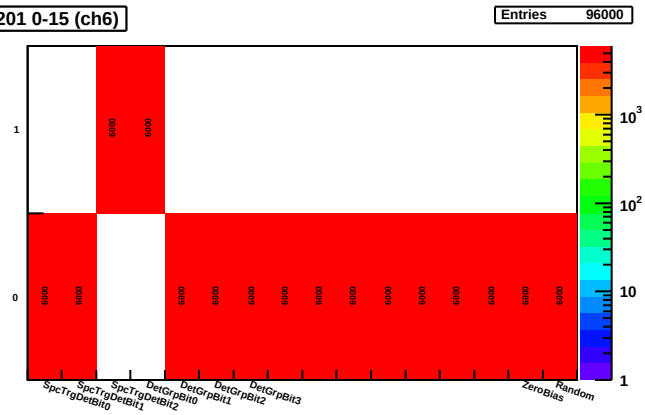
FP201 0-15 (ch5)

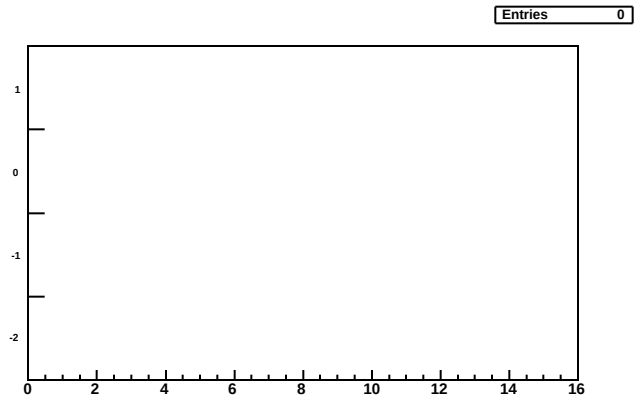
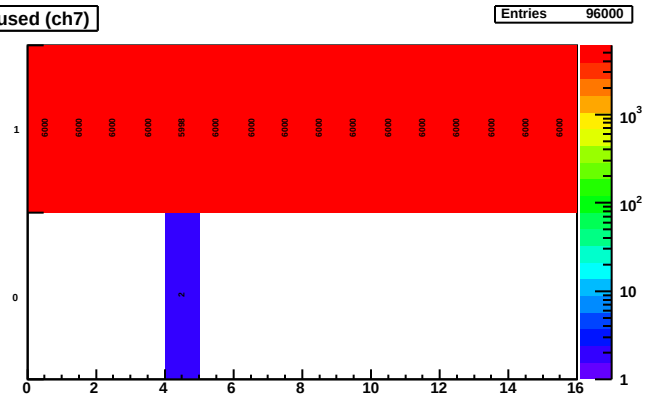
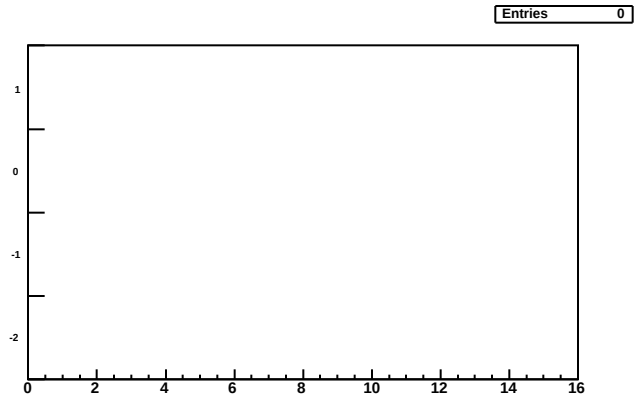


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)