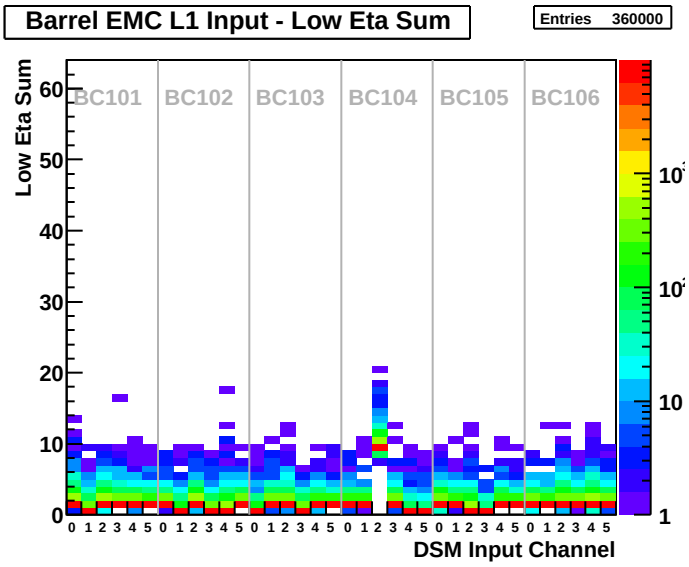
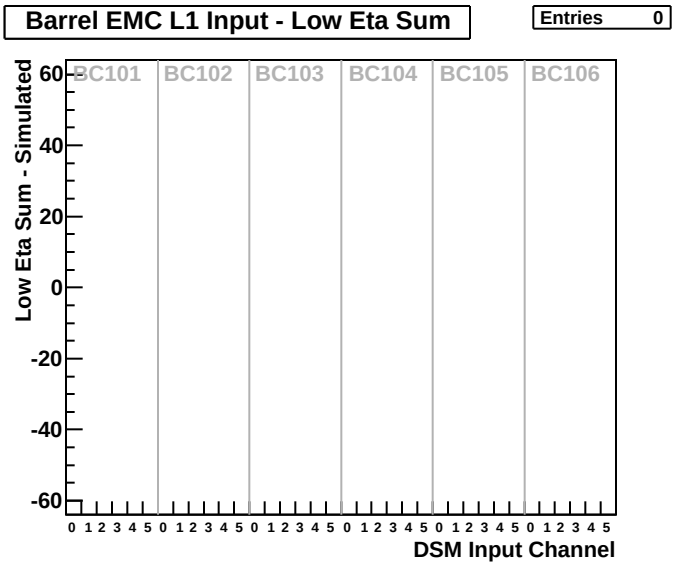
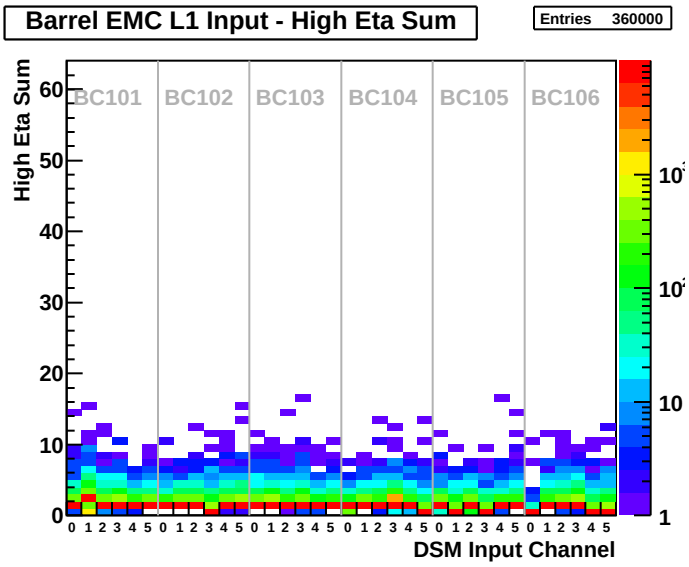
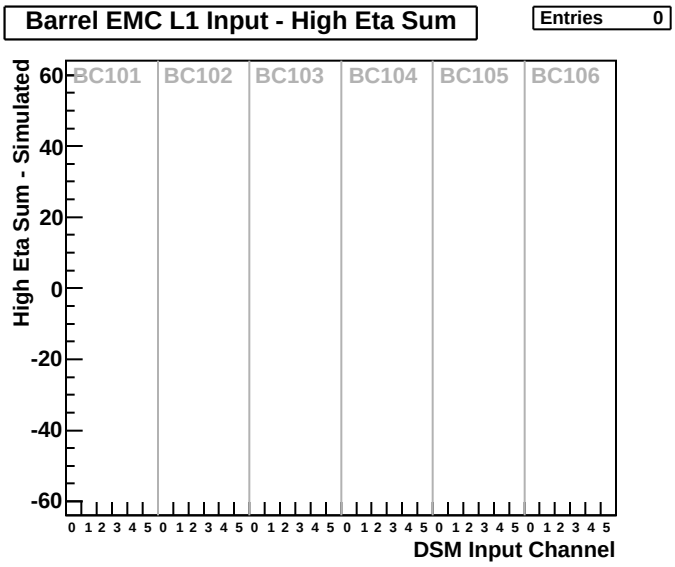
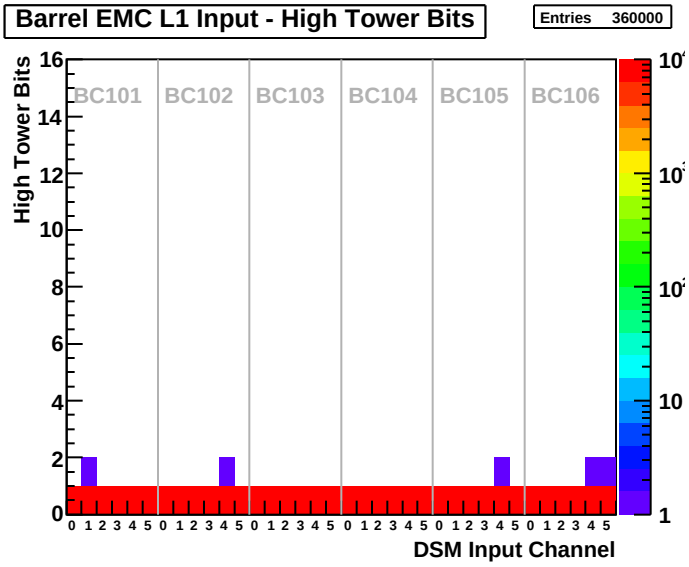
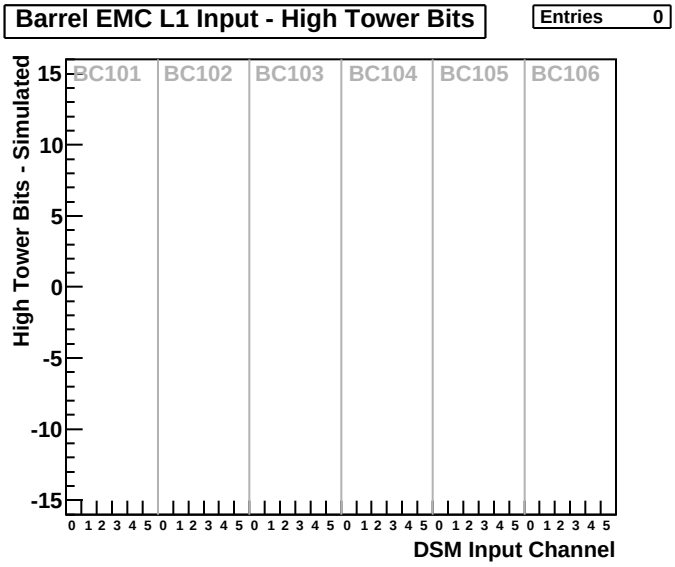

Barrel EMC L1 Input - Low Eta Sum
Entries 360000
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

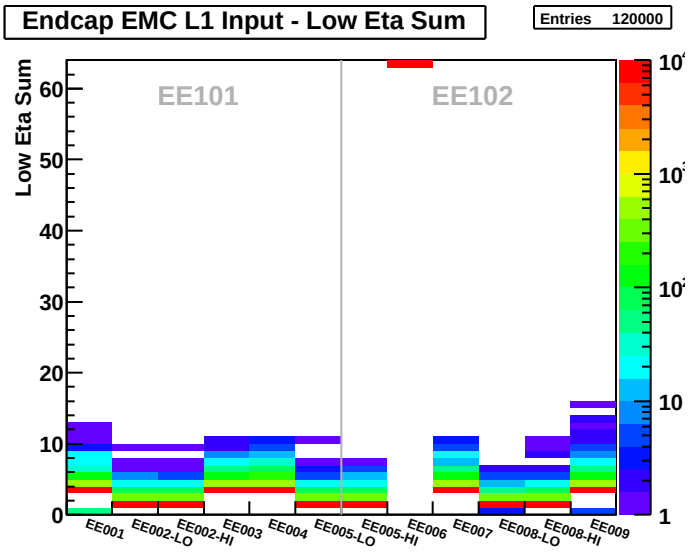

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

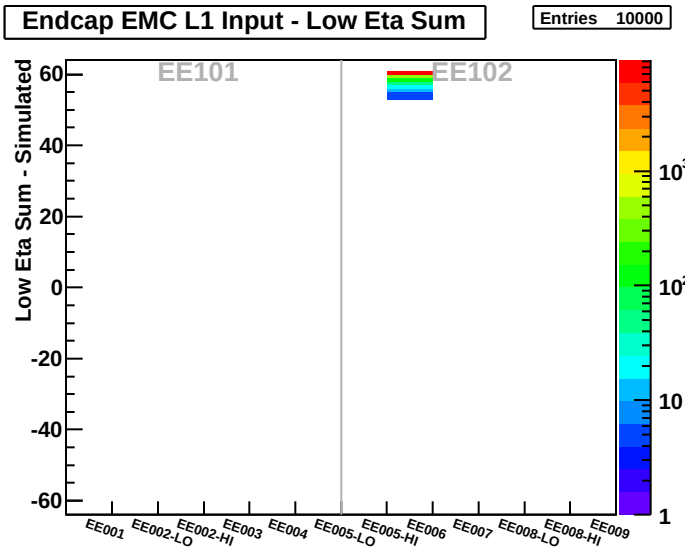

Barrel EMC L1 Input - High Eta Sum
Entries 360000
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

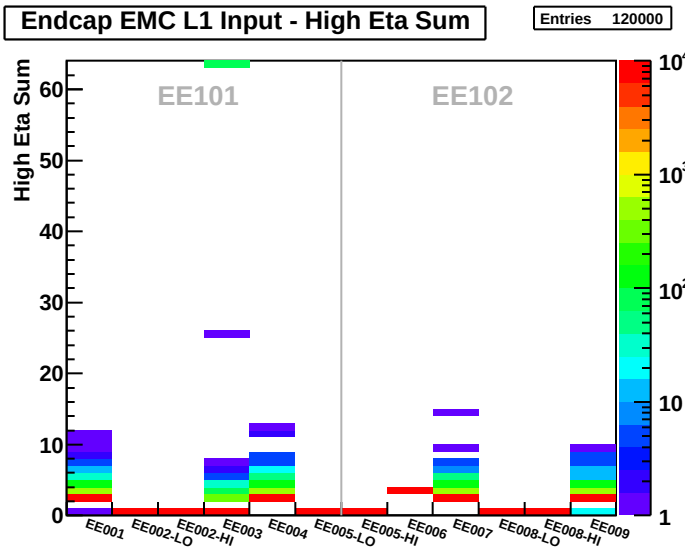

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

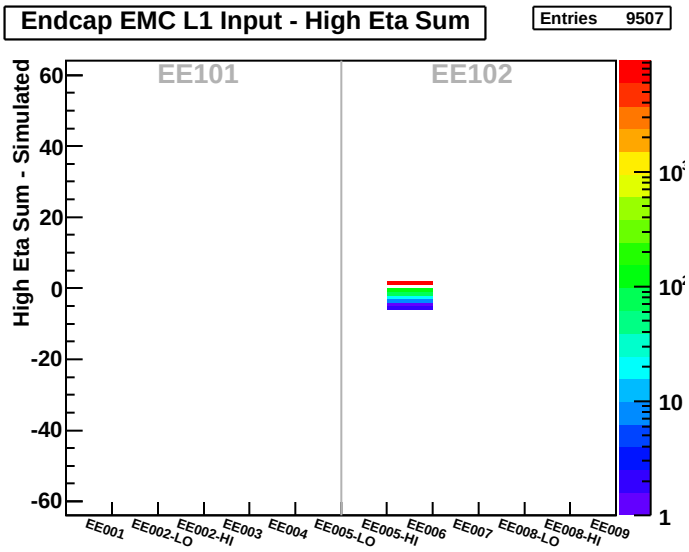

Barrel EMC L1 Input - High Tower Bits
Entries 360000
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

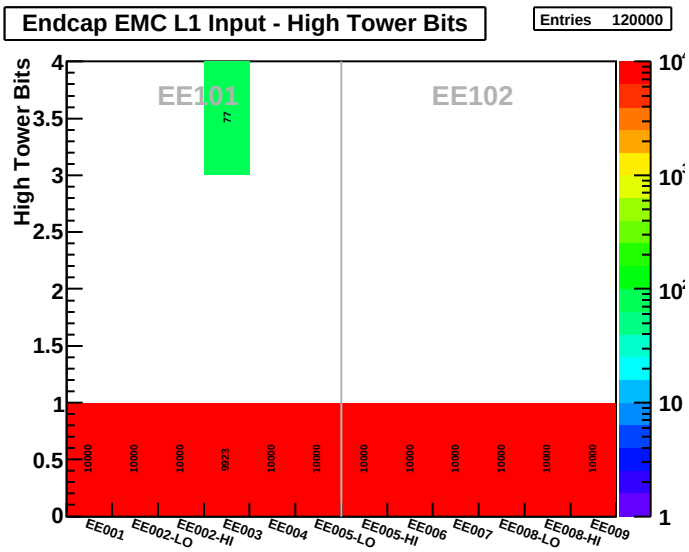

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

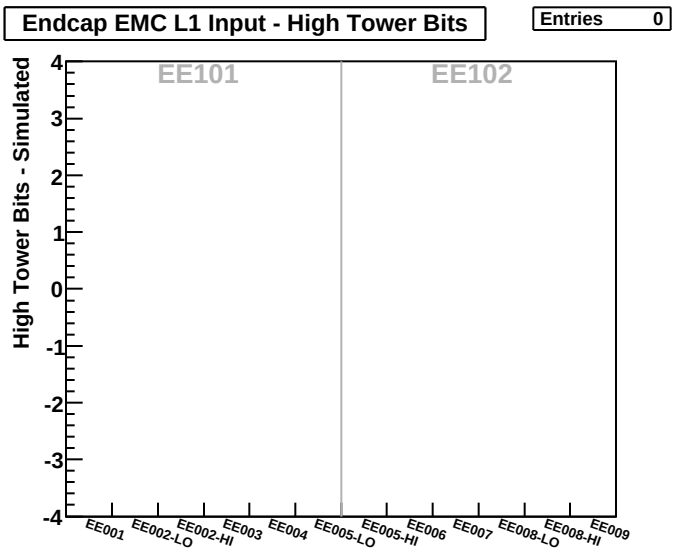

Endcap EMC L1 Input - Low Eta Sum
Entries 120000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

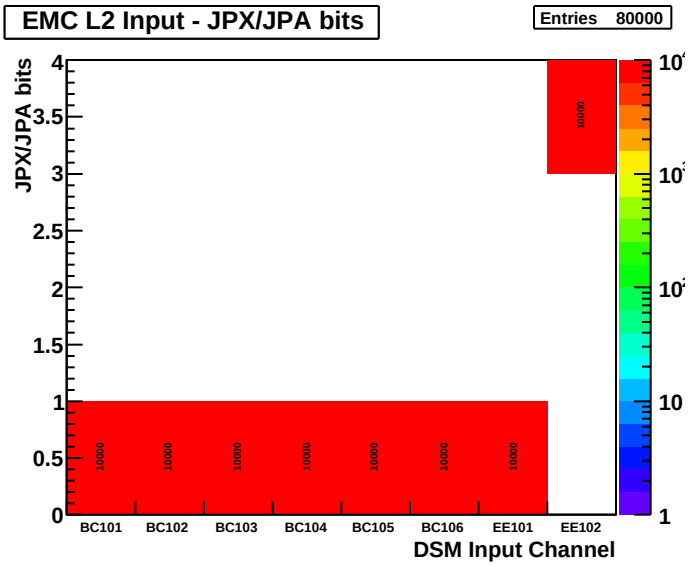

Endcap EMC L1 Input - Low Eta Sum
Entries 10000
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

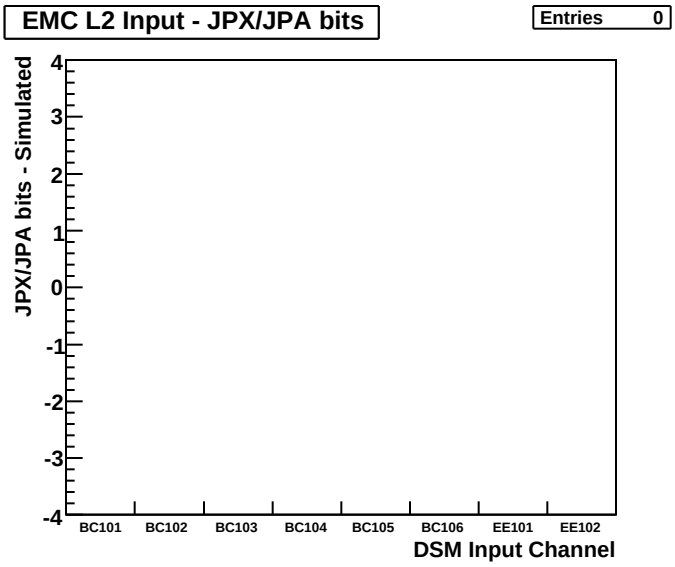

Endcap EMC L1 Input - High Eta Sum
Entries 120000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

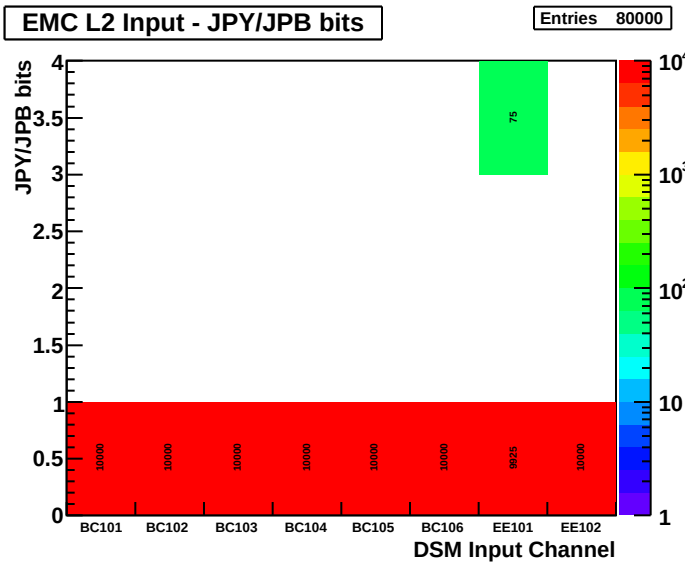

Endcap EMC L1 Input - High Eta Sum
Entries 9507
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

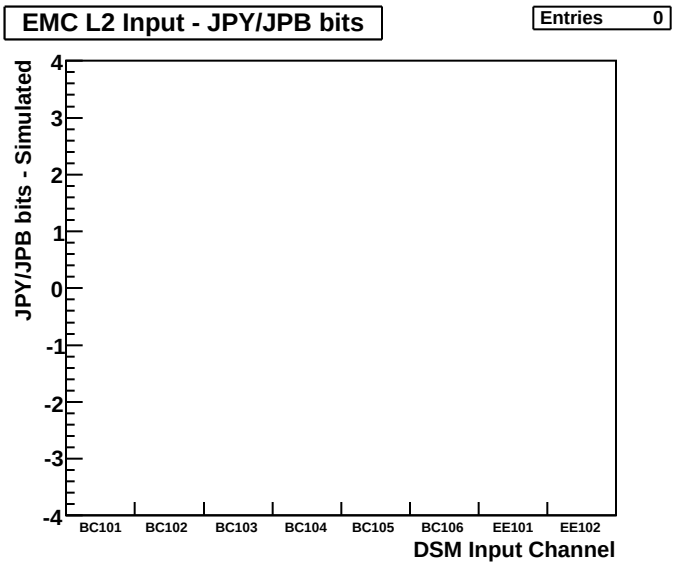

Endcap EMC L1 Input - High Tower Bits
Entries 120000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

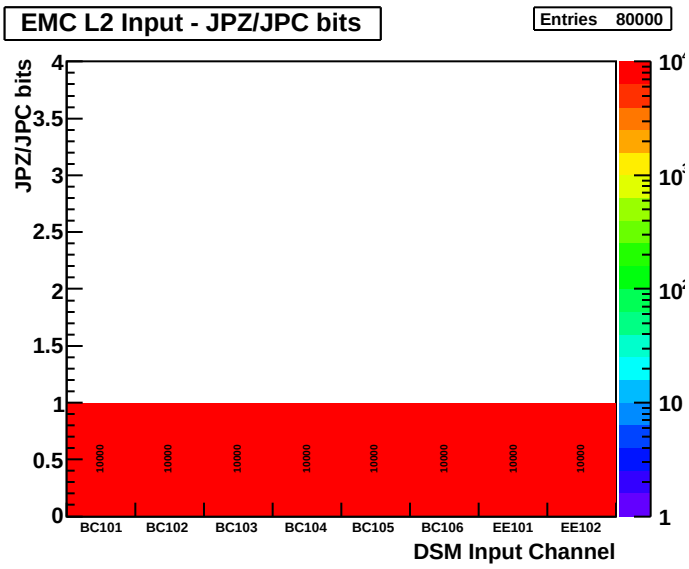

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

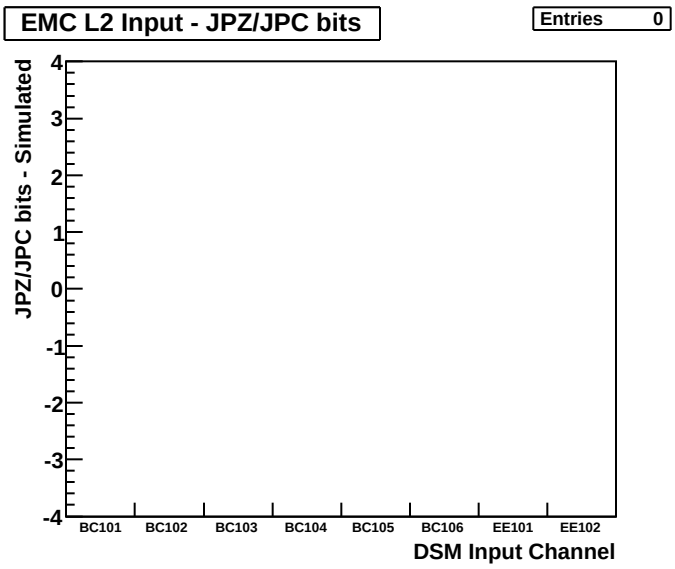

EMC L2 Input - JPX/JPA bits
Entries 80000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

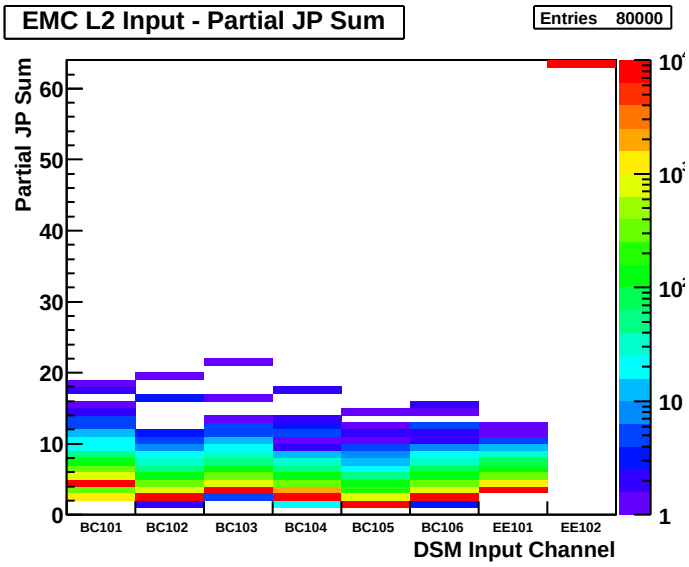

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

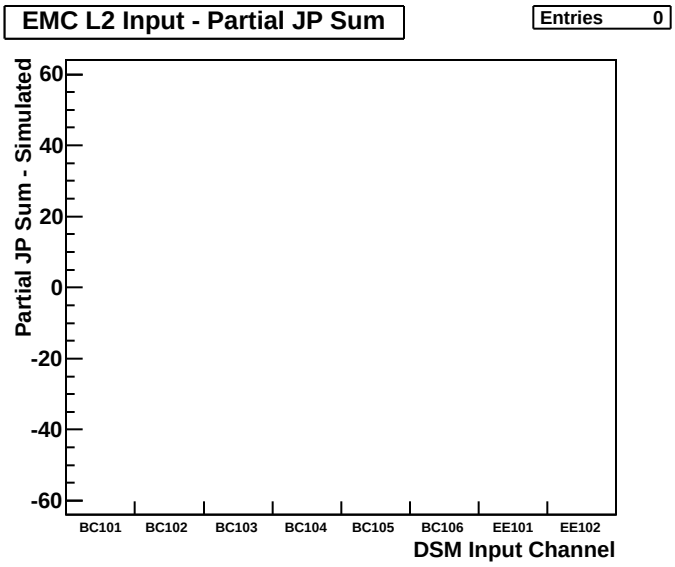

EMC L2 Input - JPY/JPB bits
Entries 80000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

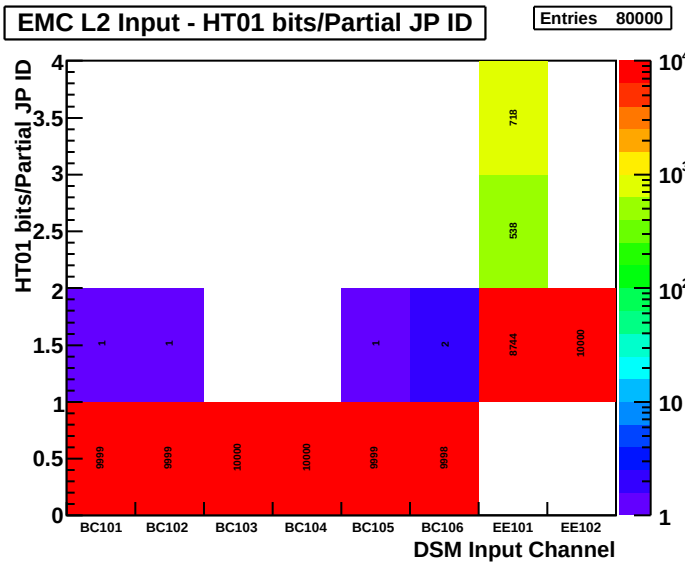

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

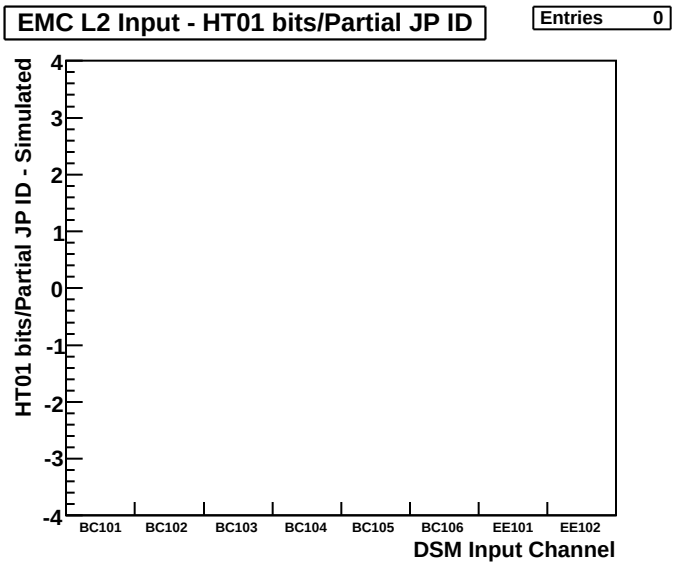

EMC L2 Input - JPZ/JPC bits
Entries 80000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

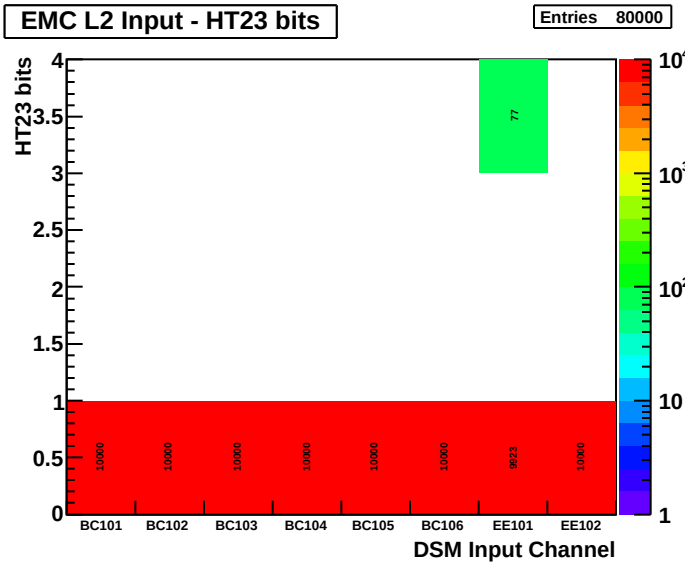

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

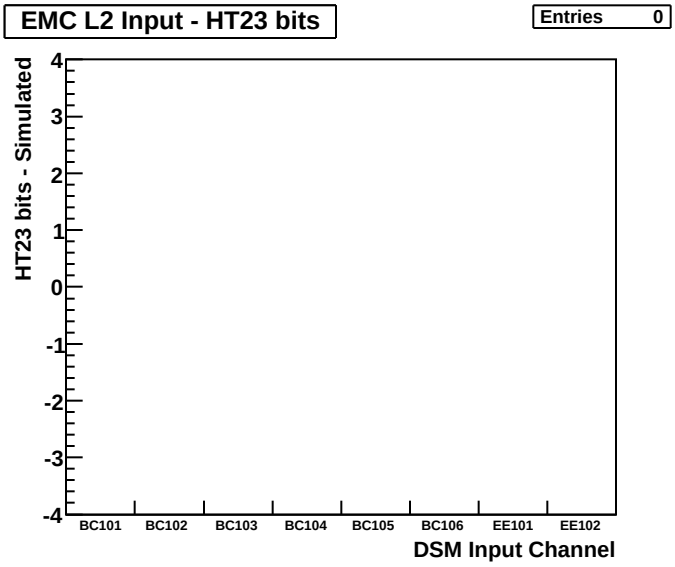

EMC L2 Input - Partial JP Sum
Entries 80000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

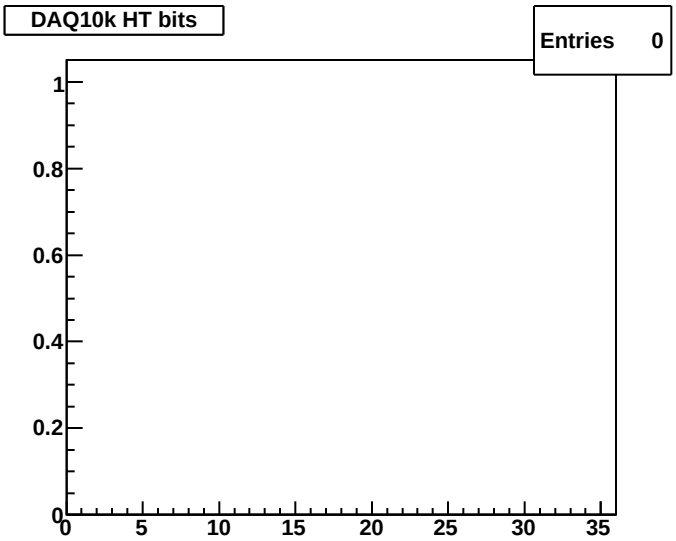

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

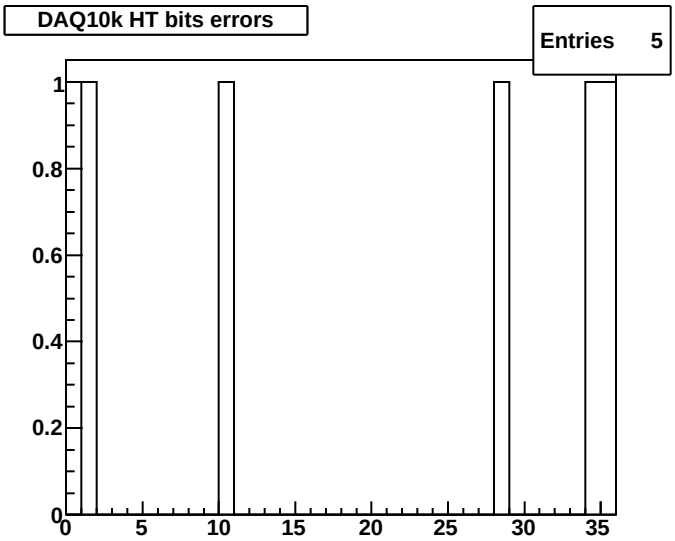

EMC L2 Input - HT01 bits/Partial JP ID
Entries 80000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

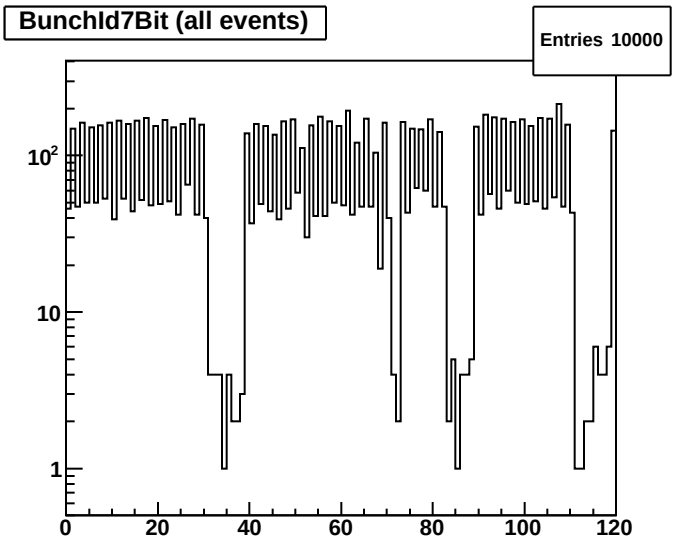

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

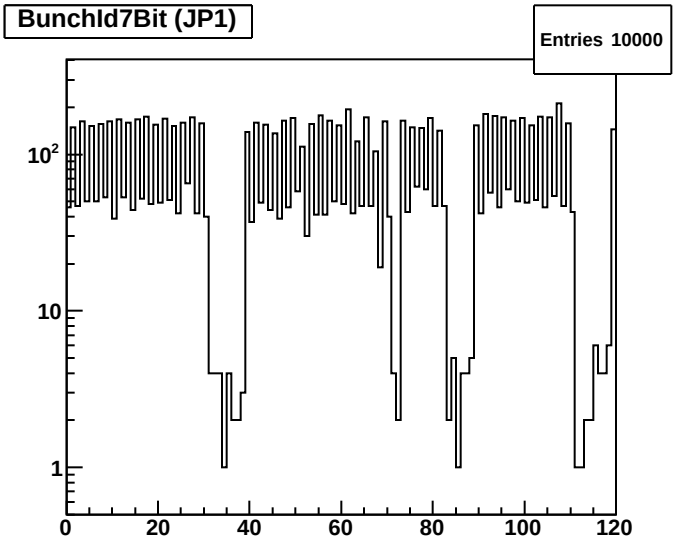

EMC L2 Input - HT23 bits
Entries 80000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

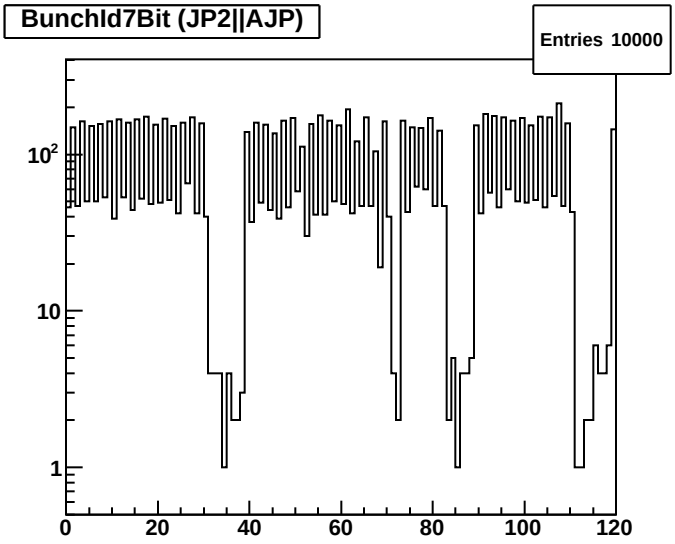

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

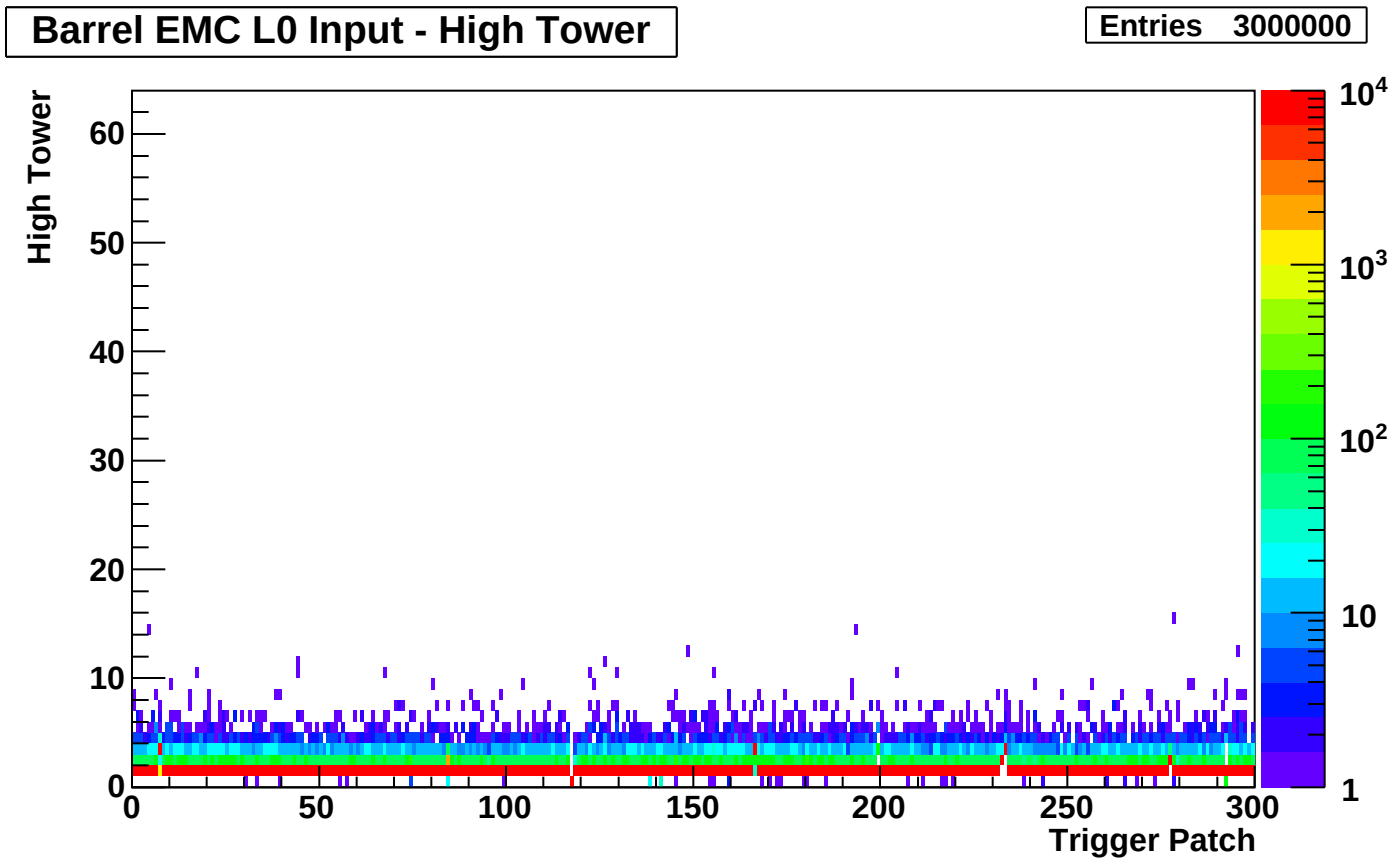

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

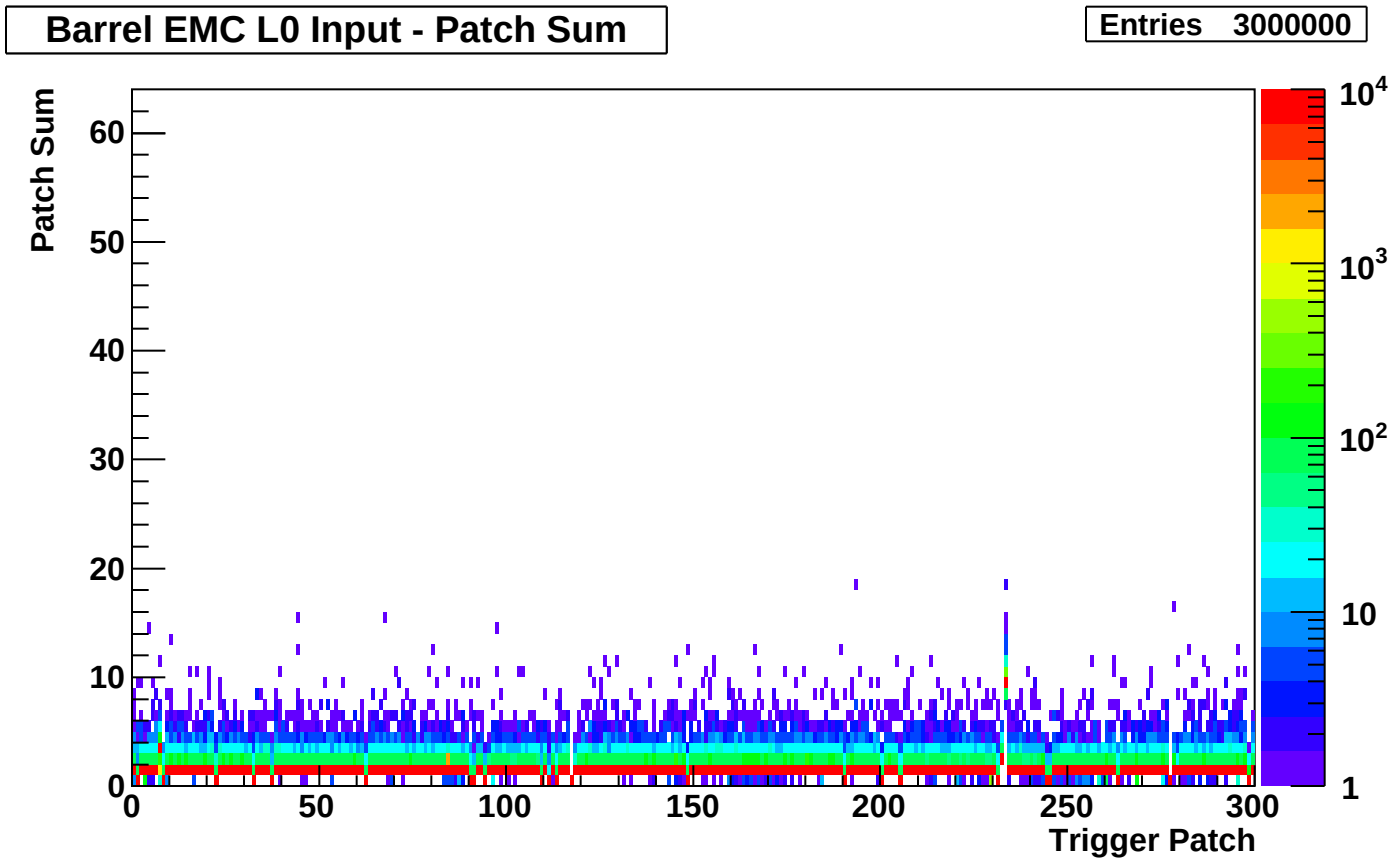

DAQ10k HT bits errors
Entries 5
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

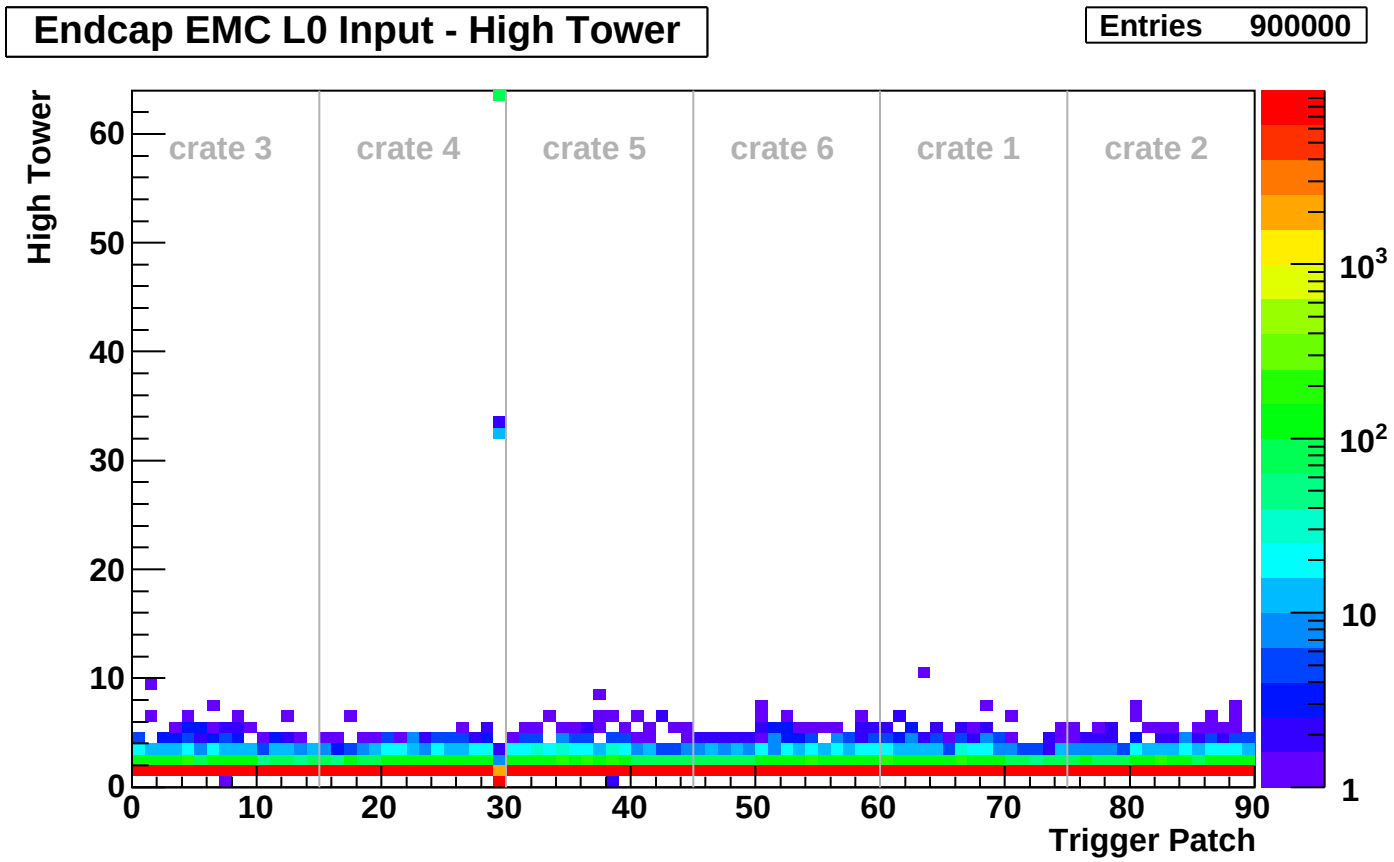

BunchId7Bit (all events)
Entries 10000
10^2
10
1
0 20 40 60 80 100 120

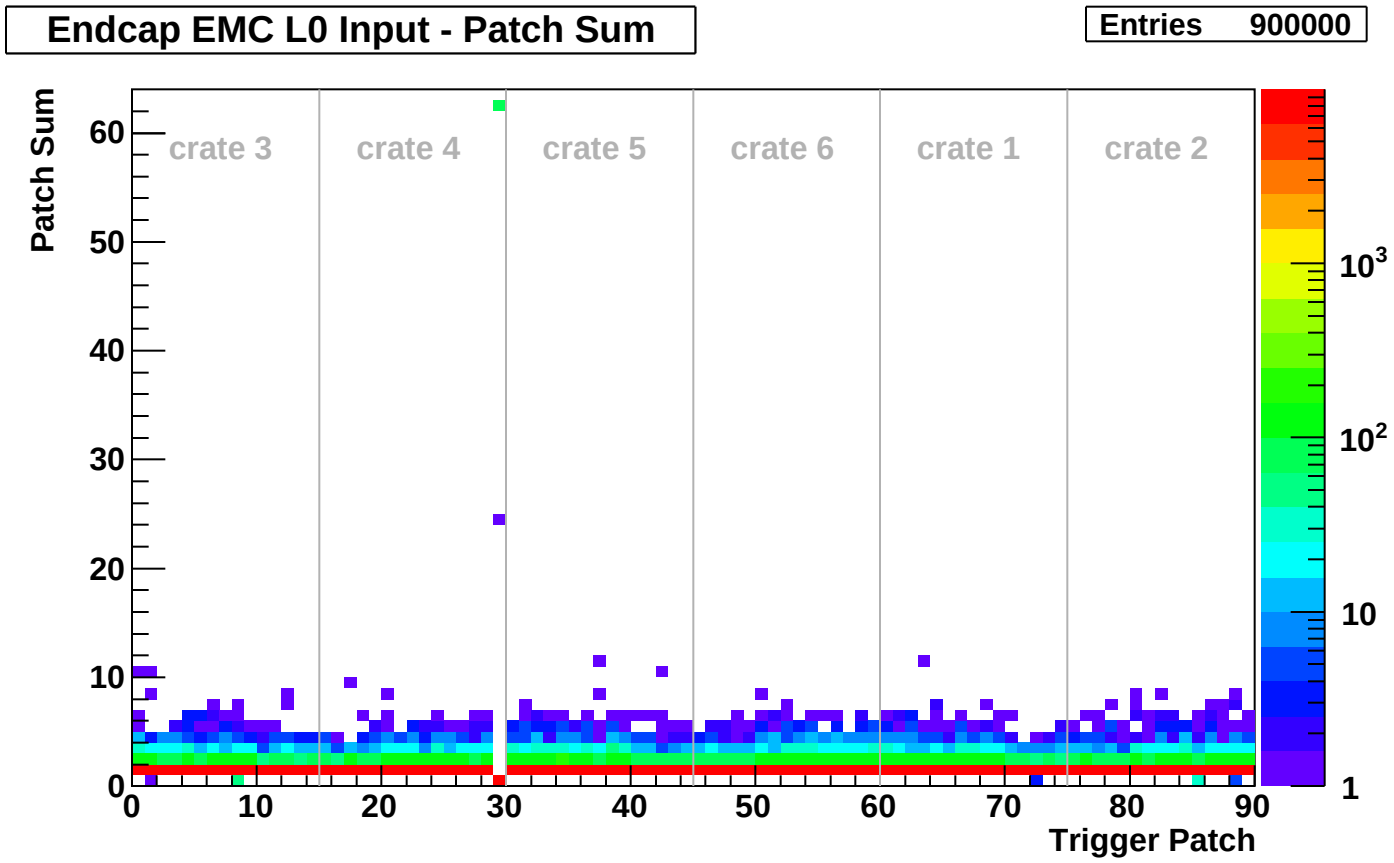

BunchId7Bit (JP1)
Entries 10000
10^2
10
1
0 20 40 60 80 100 120

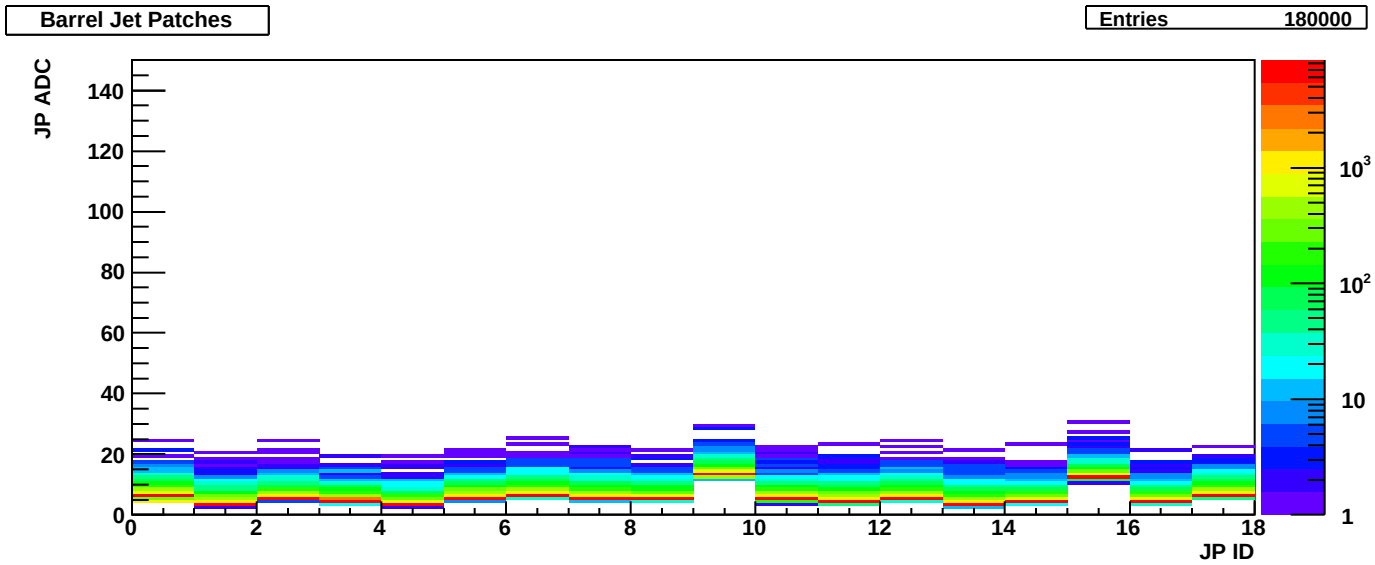

BunchId7Bit (JP2||AJP)
Entries 10000
10^2
10
1
0 20 40 60 80 100 120

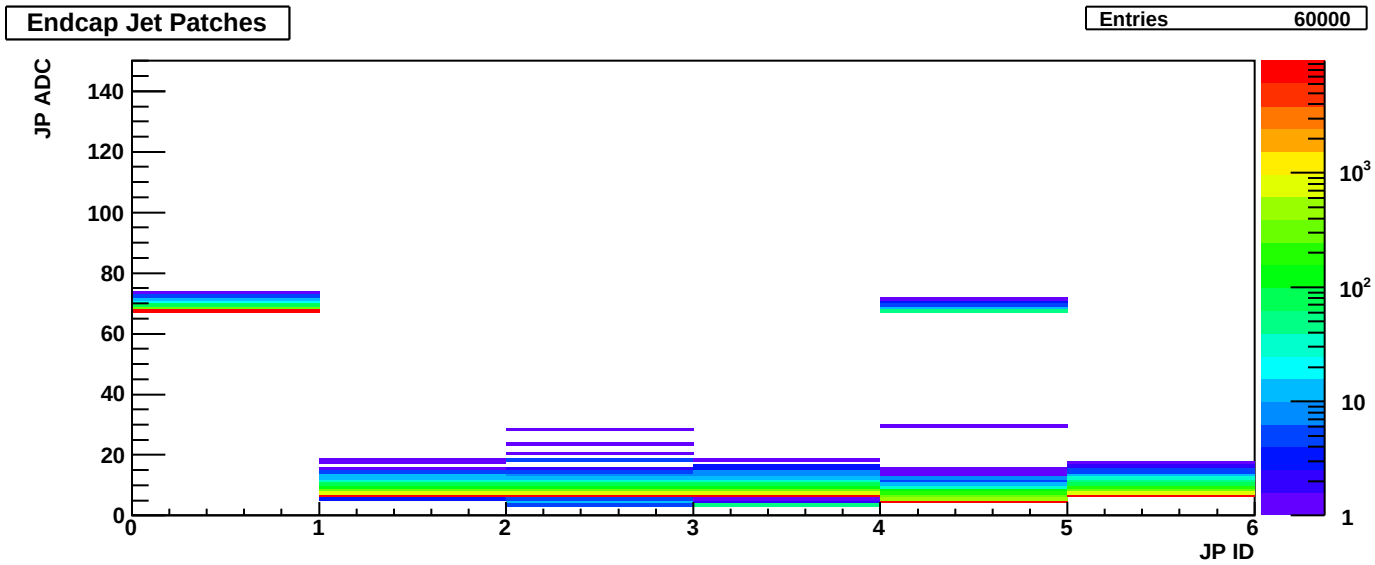

Barrel EMC L0 Input - High Tower
Entries 3000000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

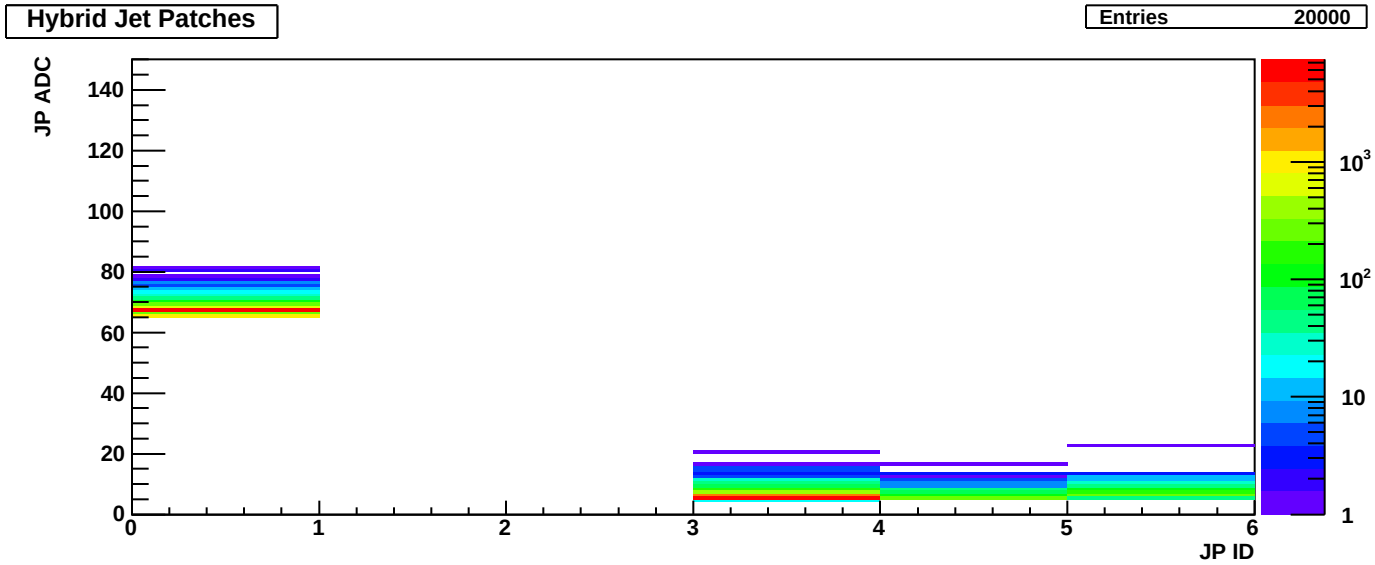

Barrel EMC L0 Input - Patch Sum
Entries 3000000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

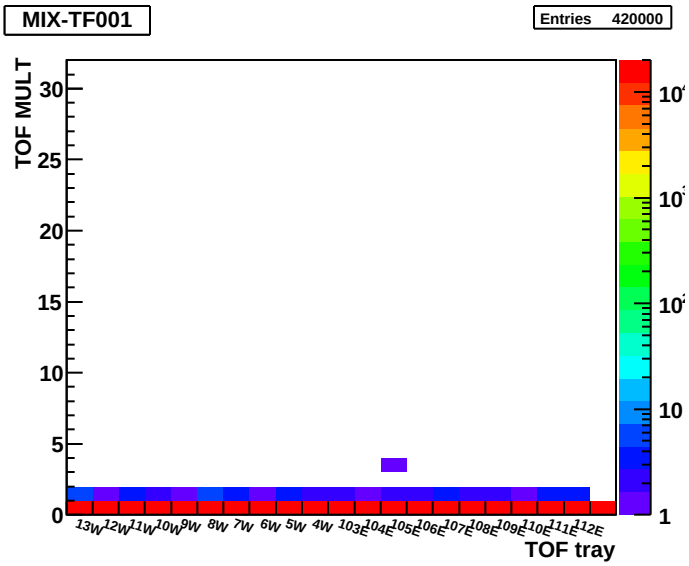

Endcap EMC L0 Input - High Tower
Entries 900000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

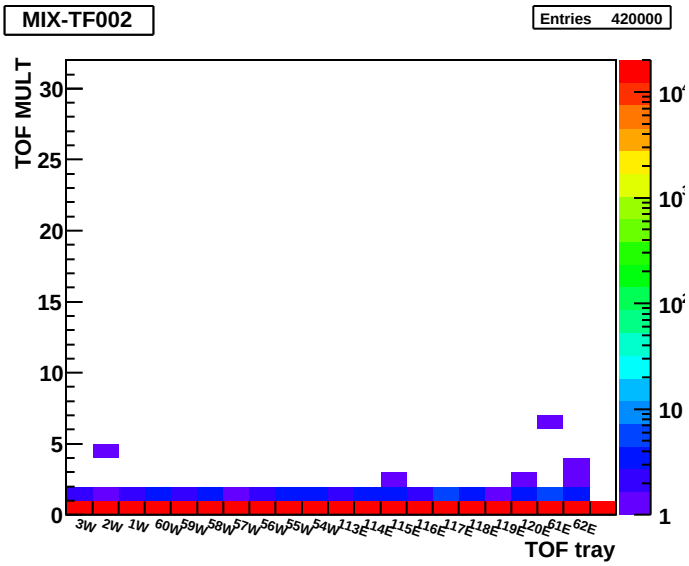

Endcap EMC L0 Input - Patch Sum
Entries 900000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

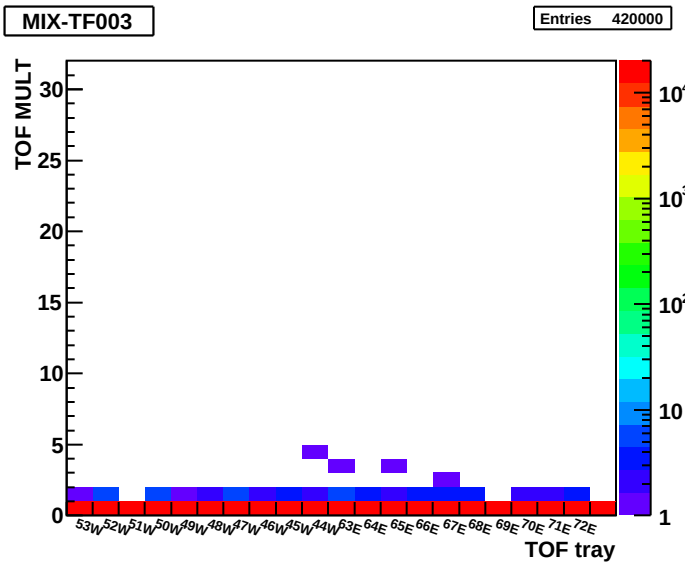

Barrel Jet Patches
Entries 180000
JP ADC
JP ID

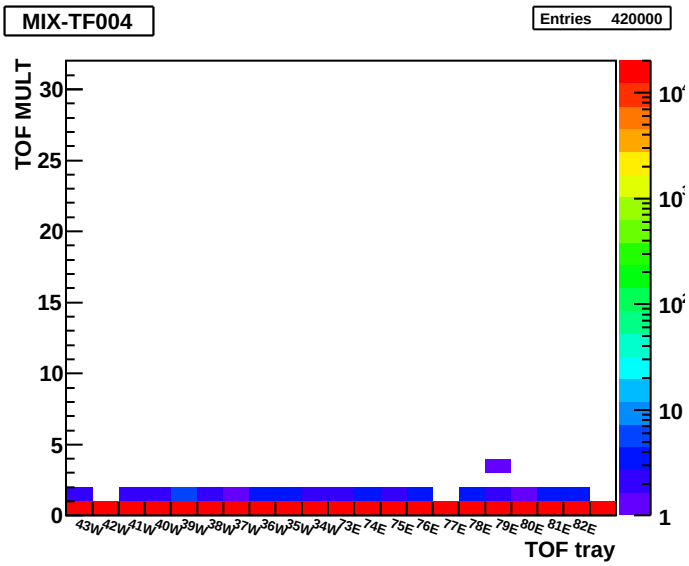

Endcap Jet Patches
Entries 60000
JP ADC
JP ID

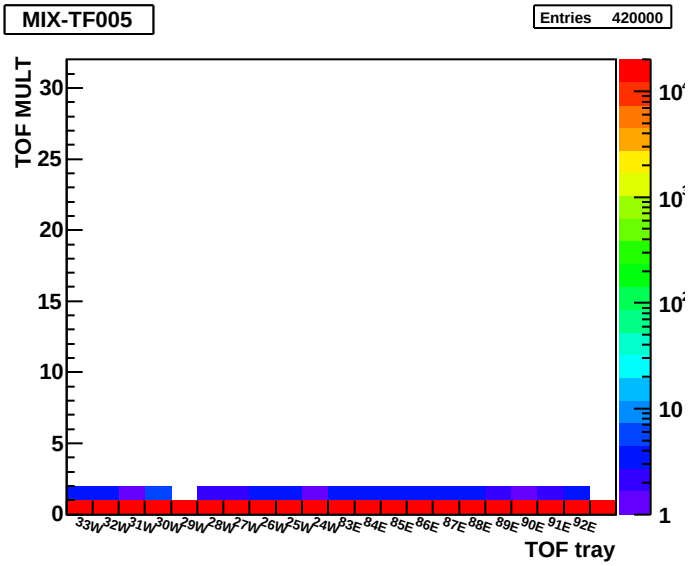

Hybrid Jet Patches
Entries 20000
JP ADC
JP ID

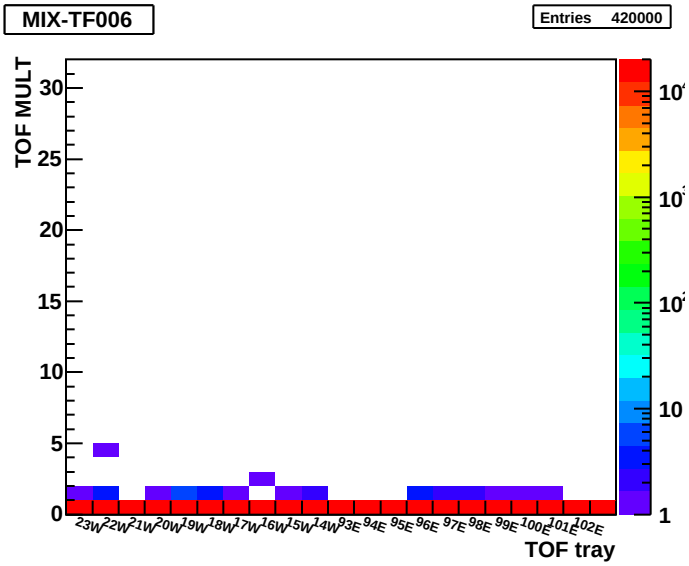

MIX-TF001
Entries 420000
TOF MULT
TOF tray

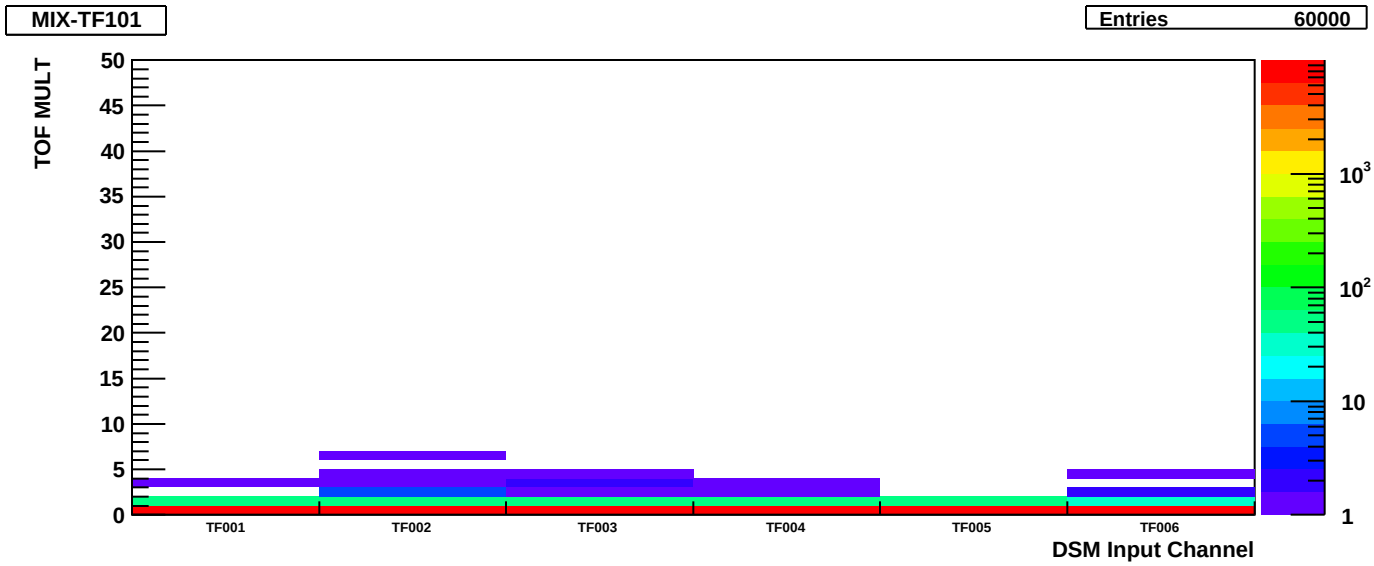

MIX-TF002
Entries 420000
TOF MULT
TOF tray

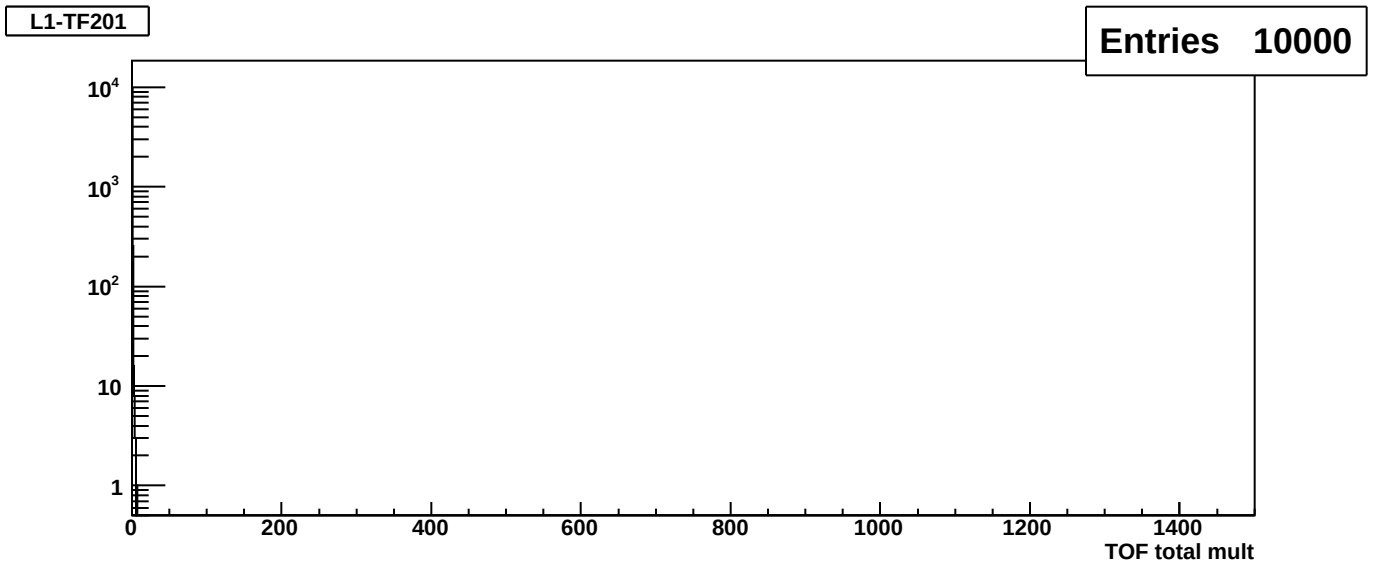

MIX-TF003
Entries 420000
TOF MULT
TOF tray

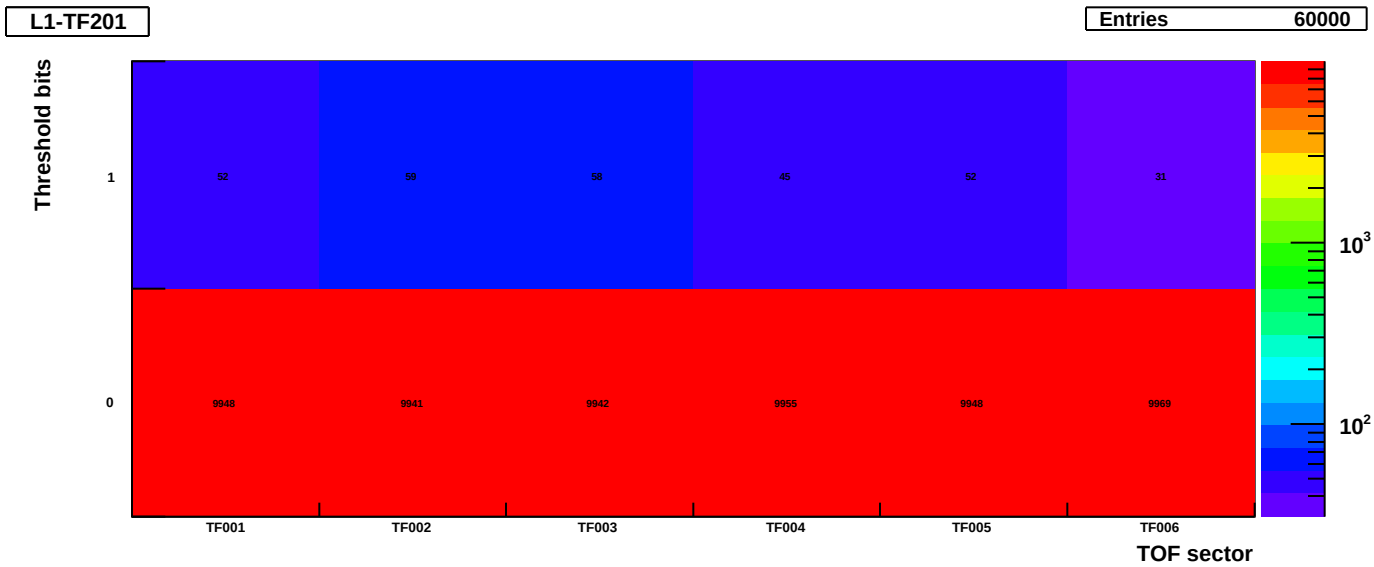

MIX-TF004
Entries 420000
TOF MULT
TOF tray

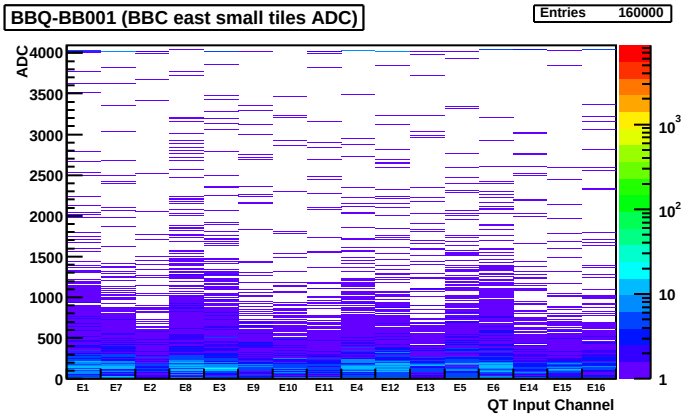

MIX-TF005
Entries 420000
TOF MULT
TOF tray

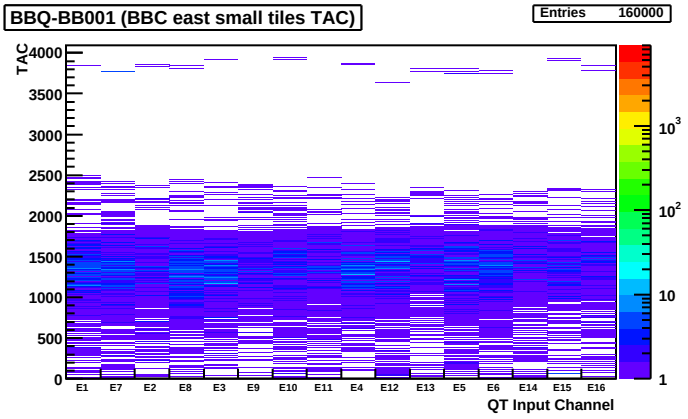

MIX-TF006
Entries 420000
TOF MULT
TOF tray

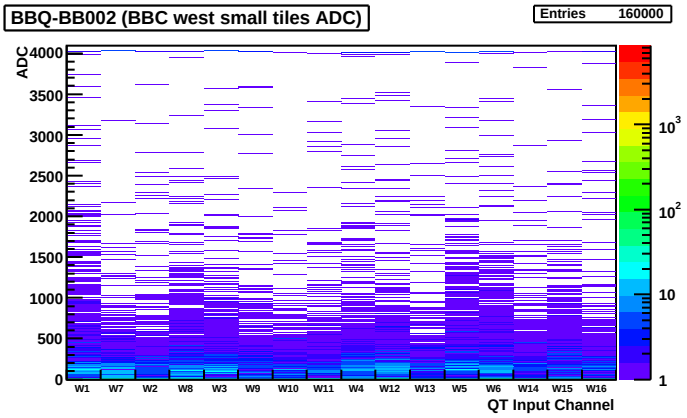

MIX-TF101
Entries 60000
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

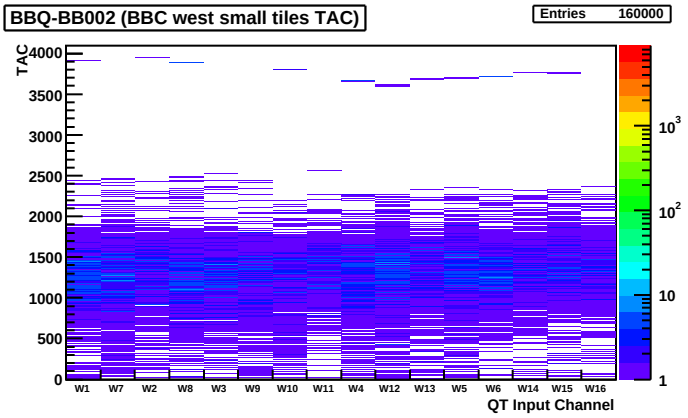

L1-TF201
Entries 10000
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

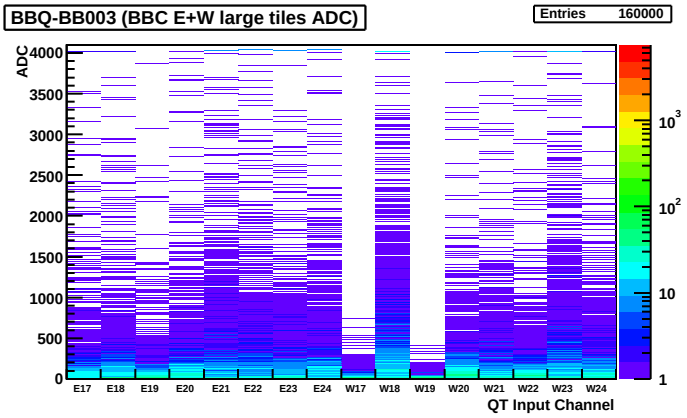

L1-TF201
Entries 60000
Threshold bits
1
0
52
59
58
45
52
31
9948
9941
9942
9955
9948
9969
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2

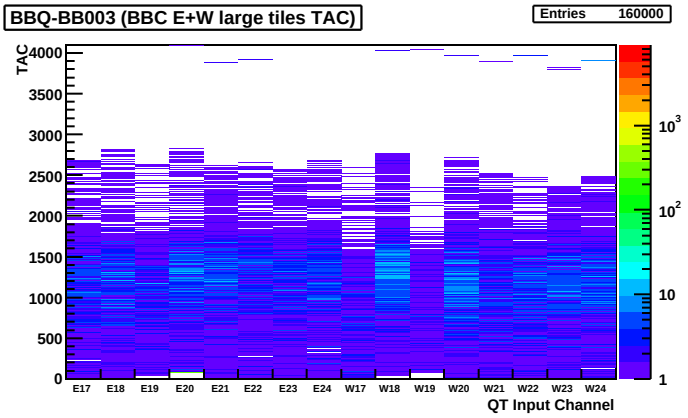

BBQ-BB001 (BBC east small tiles ADC)
Entries 160000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

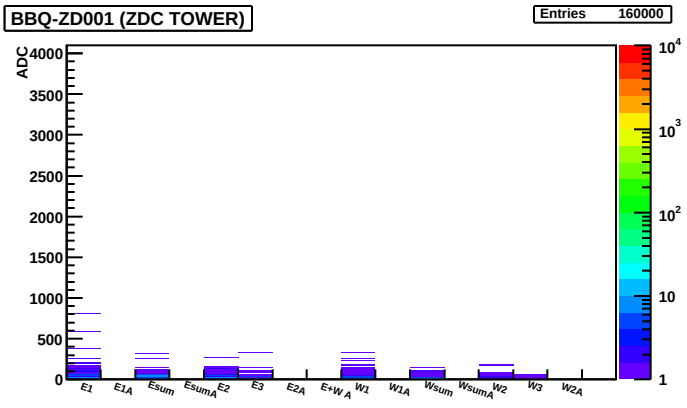

BBQ-BB001 (BBC east small tiles TAC)
Entries 160000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

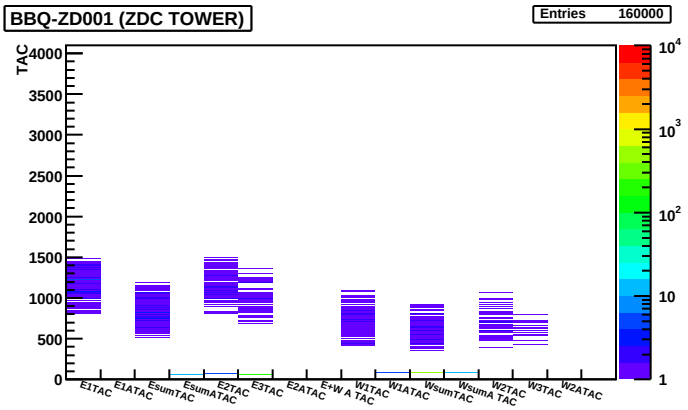

BBQ-BB002 (BBC west small tiles ADC)
Entries 160000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

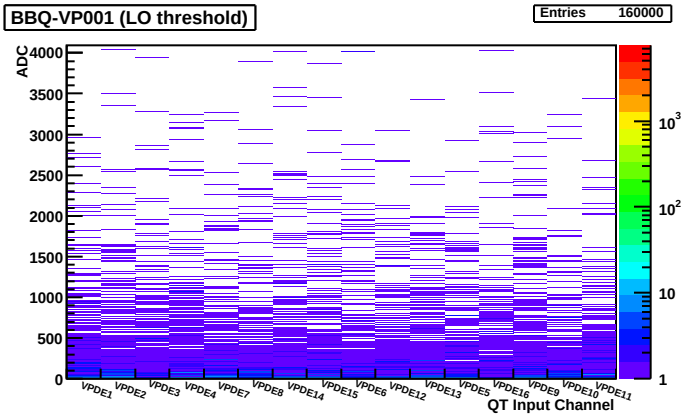

BBQ-BB002 (BBC west small tiles TAC)
Entries 160000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

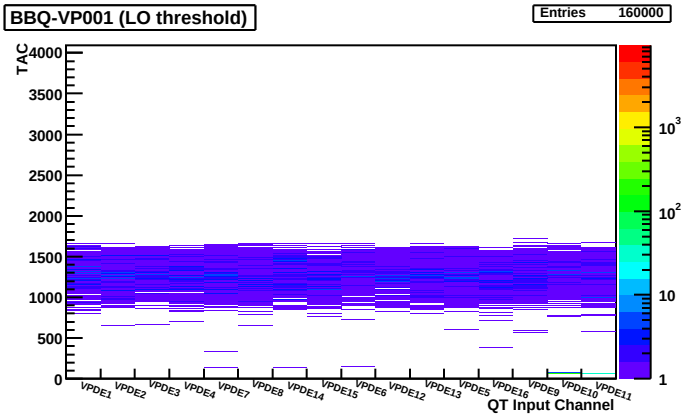

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 160000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

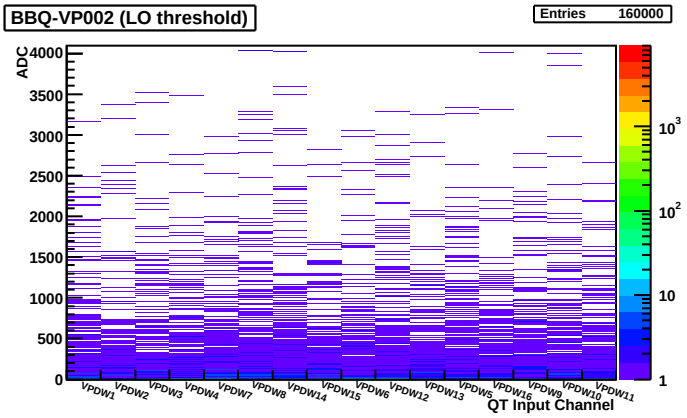

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 160000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

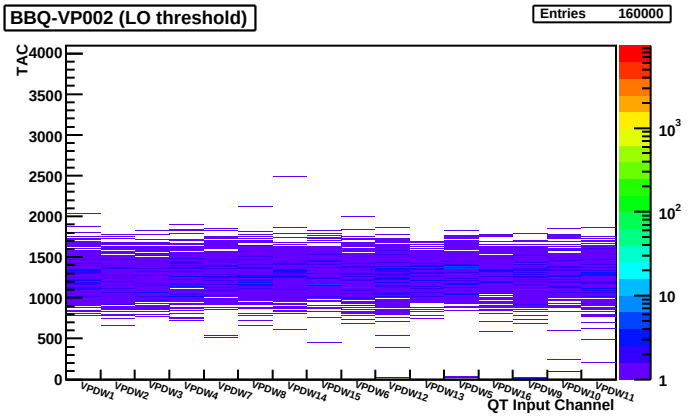

BBQ-ZD001 (ZDC TOWER)
Entries 160000
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

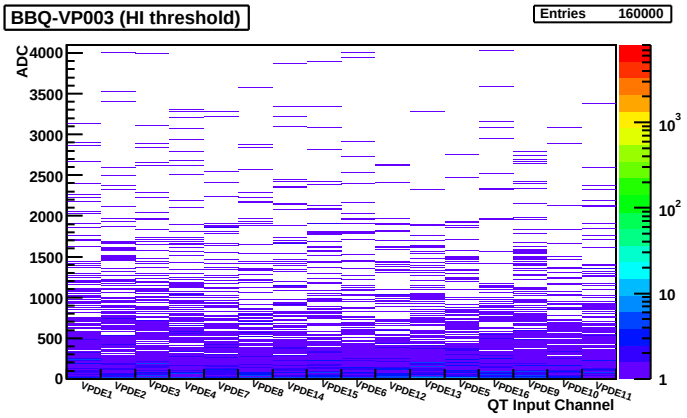

BBQ-ZD001 (ZDC TOWER)
Entries 160000
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

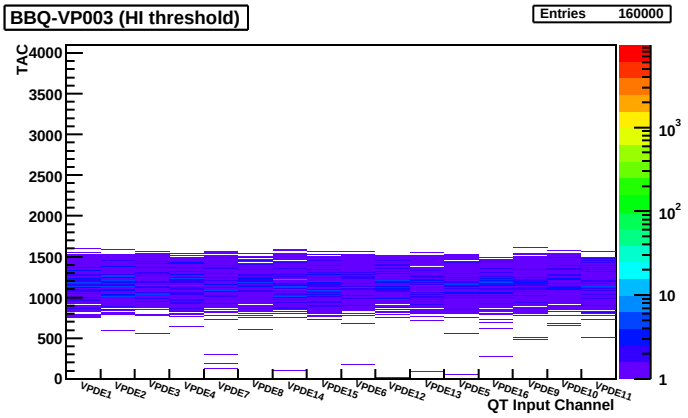

BBQ-VP001 (LO threshold)
Entries 160000
ADC
QT Input Channel

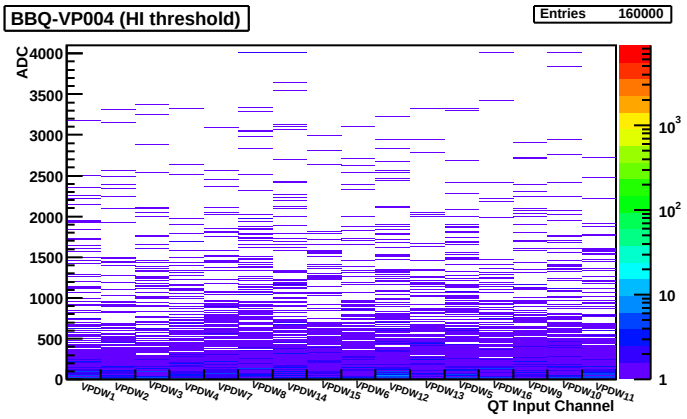

BBQ-VP001 (LO threshold)
Entries 160000
TAC
QT Input Channel

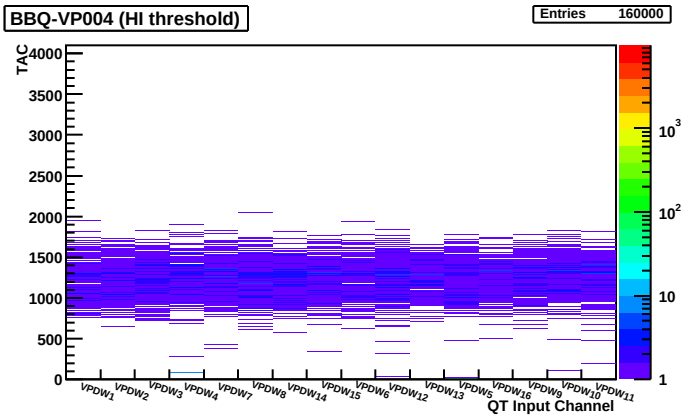

BBQ-VP002 (LO threshold)
Entries 160000
ADC
QT Input Channel

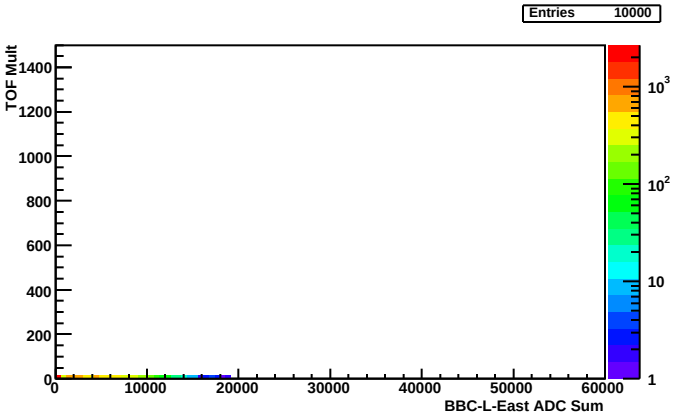

BBQ-VP002 (LO threshold)
Entries 160000
TAC
QT Input Channel

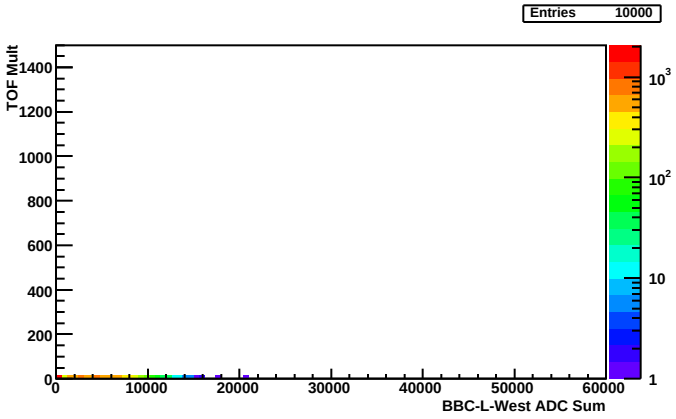

BBQ-VP003 (HI threshold)
Entries 160000
ADC
QT Input Channel

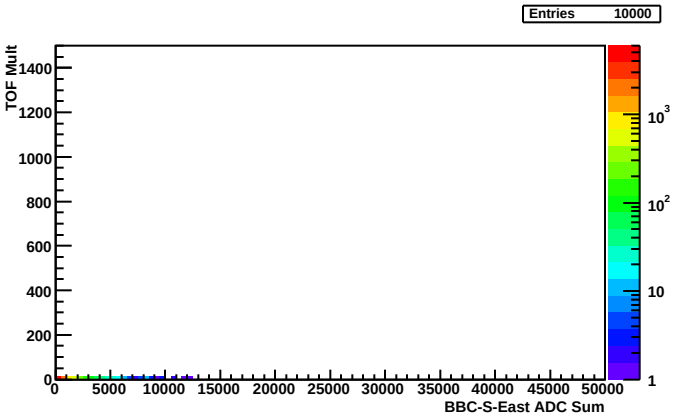

BBQ-VP003 (HI threshold)
Entries 160000
TAC
QT Input Channel

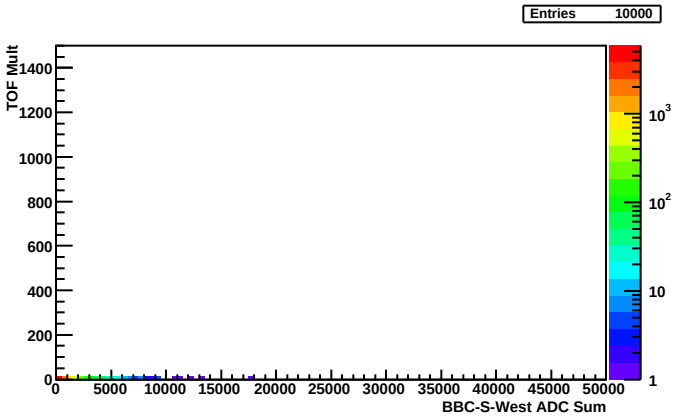

BBQ-VP004 (HI threshold)
Entries 160000
ADC
QT Input Channel

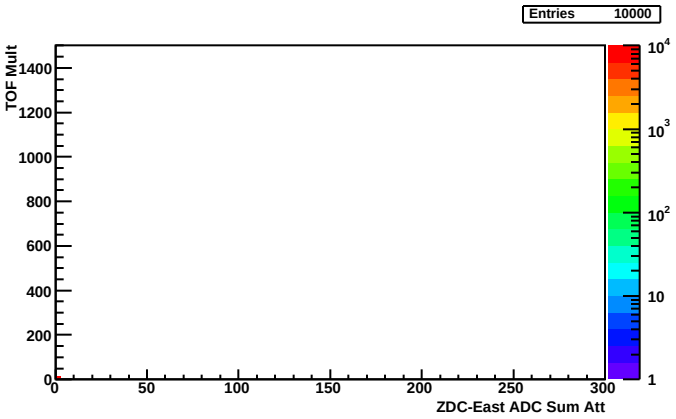

BBQ-VP004 (HI threshold)
Entries 160000
TAC
QT Input Channel

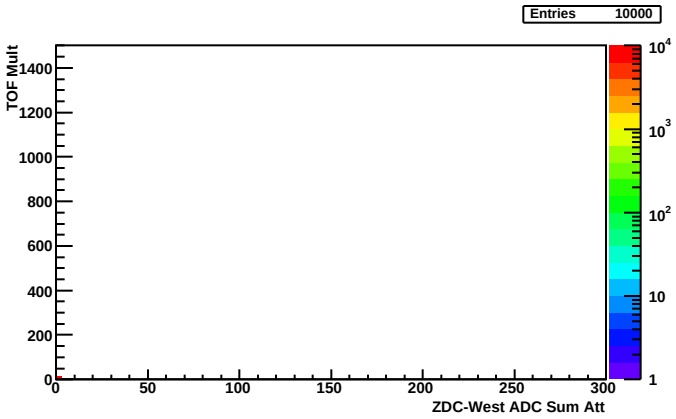

Entries 10000
TOF Mult
BBC-L-East ADC Sum

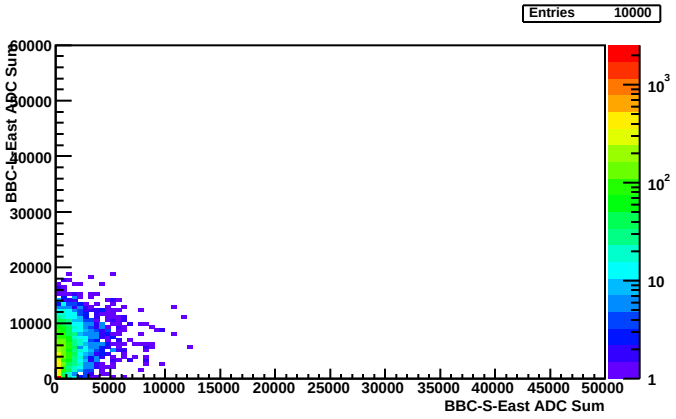

Entries 10000
TOF Mult
BBC-L-West ADC Sum

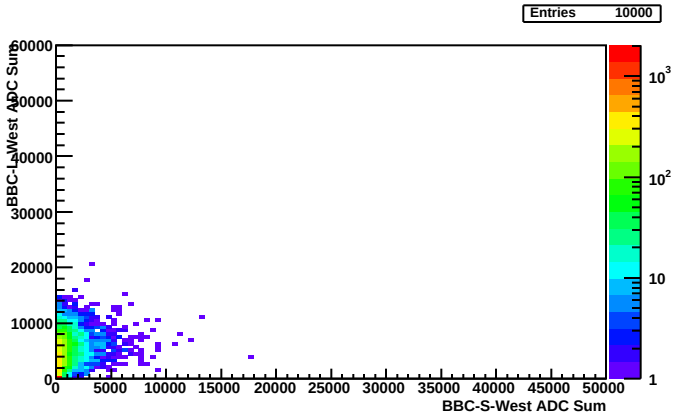

Entries 10000
TOF Mult
BBC-S-East ADC Sum

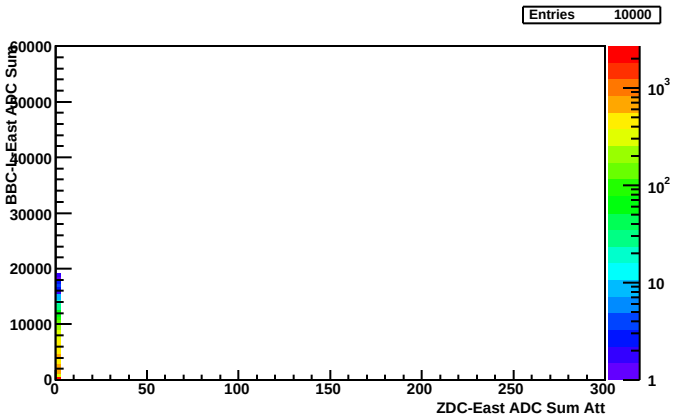

Entries 10000
TOF Mult
BBC-S-West ADC Sum

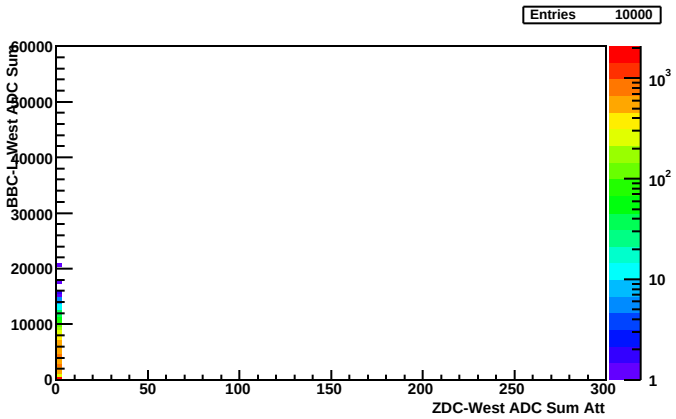

Entries 10000
TOF Mult
ZDC-East ADC Sum Att

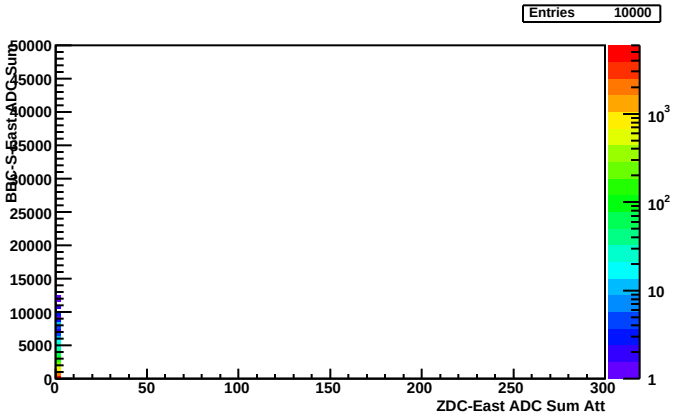

Entries 10000
TOF Mult
ZDC-West ADC Sum Att

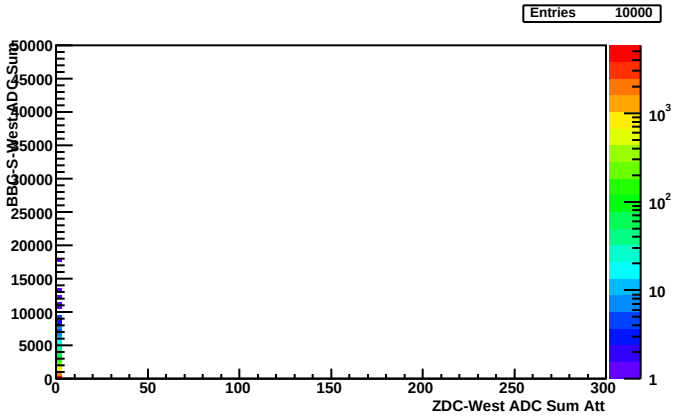

Entries 10000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

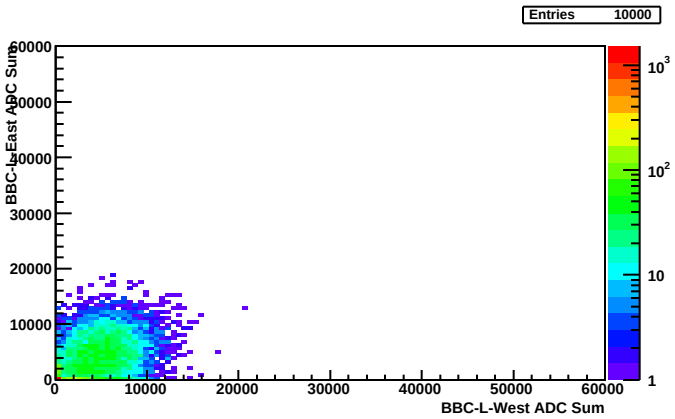

Entries 10000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

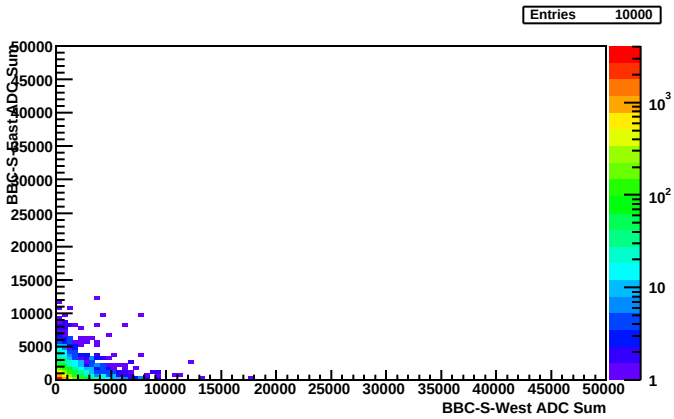

Entries 10000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

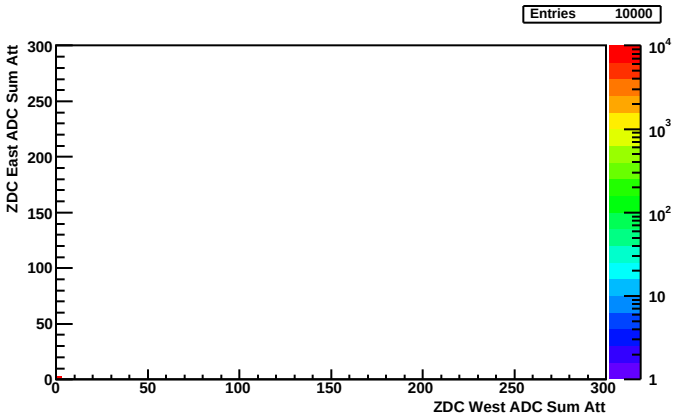

Entries 10000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

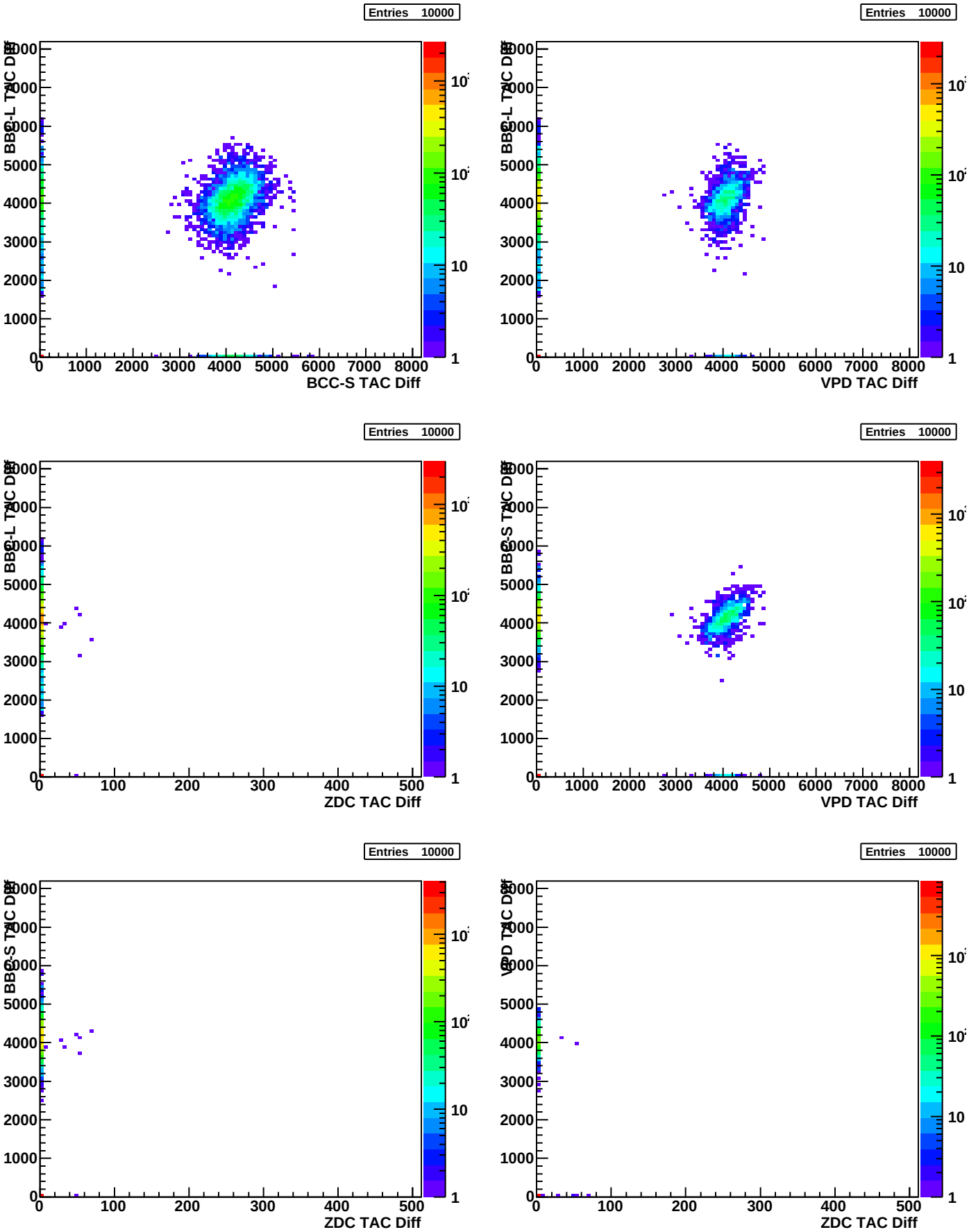

Entries 10000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

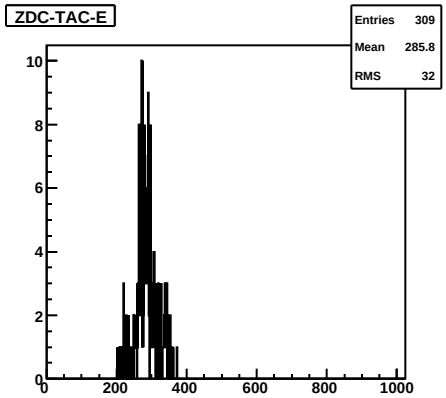

Entries 10000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

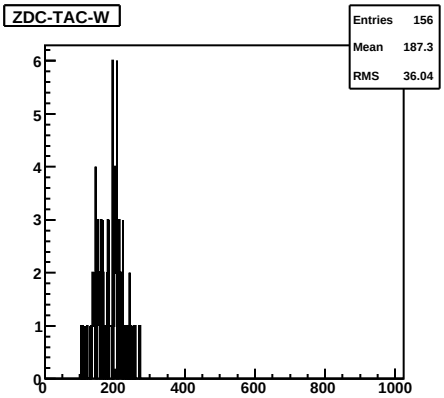

Entries 10000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

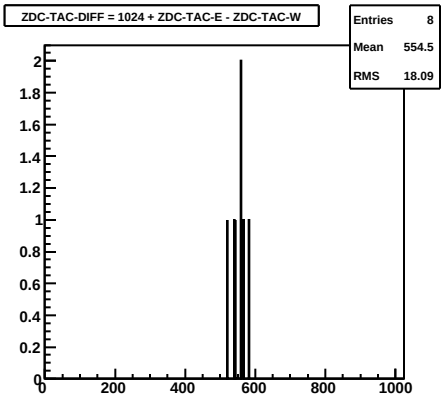

Entries 10000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

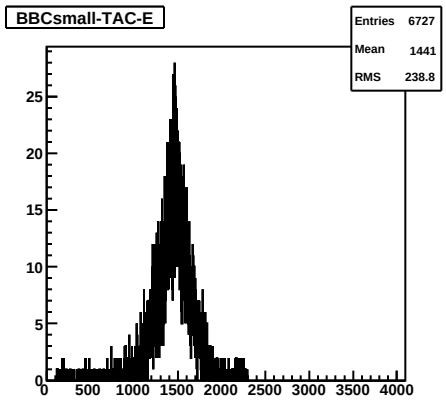

Entries 10000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

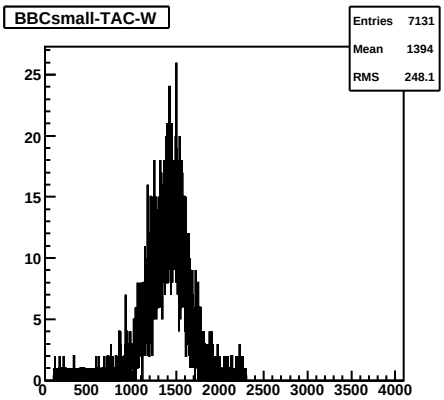

Entries 10000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 10000
BBC-L TAC Diff
VPD TAC Diff
Entries 10000
BBC-L TAC Diff
ZDC TAC Diff
Entries 10000
BBC-S TAC Diff
VPD TAC Diff
Entries 10000
BBC-S TAC Diff
ZDC TAC Diff
Entries 10000
VPD TAC Diff
ZDC TAC Diff

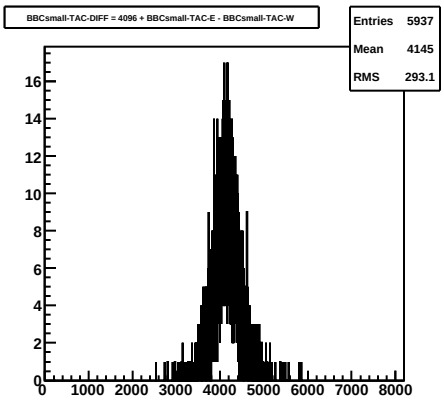

ZDC-TAC-E
Entries 309
Mean 285.8
RMS 32

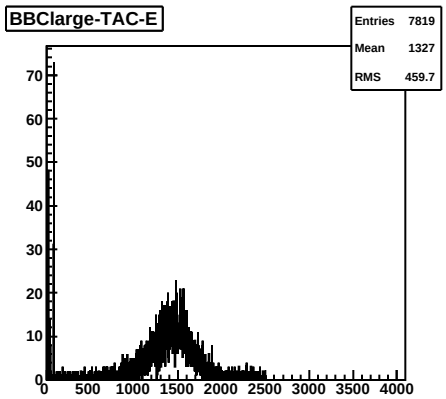

ZDC-TAC-W
Entries 156
Mean 187.3
RMS 36.04

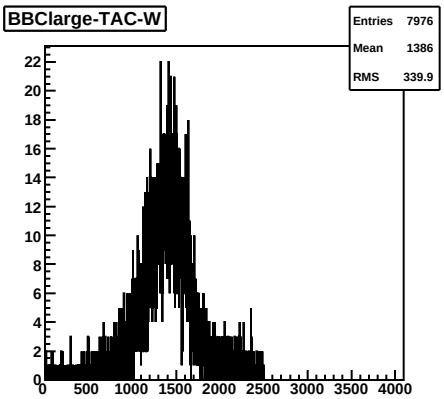

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 8
Mean 554.5
RMS 18.09

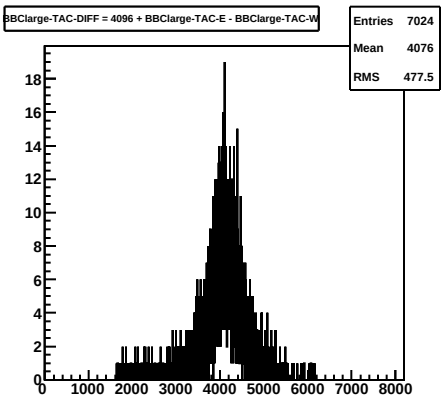

BBCsmall-TAC-E
Entries 6727
Mean 1441
RMS 238.8

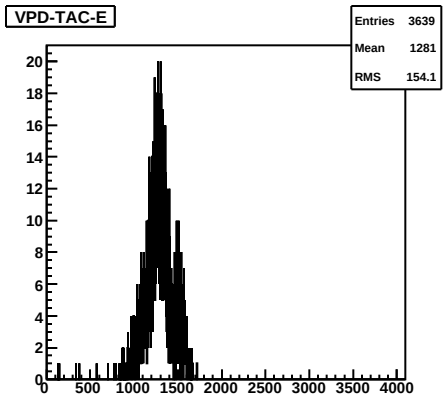

BBCsmall-TAC-W
Entries 7131
Mean 1394
RMS 248.1

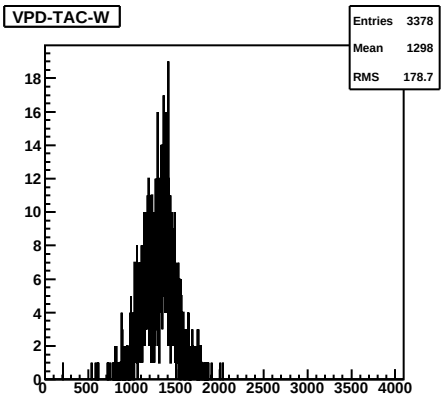

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 5937
Mean 4145
RMS 293.1

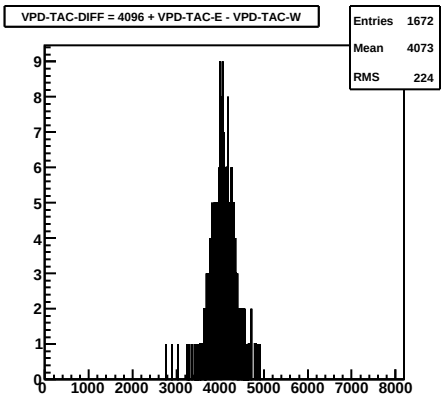

BBClarge-TAC-E
Entries 7819
Mean 1327
RMS 459.7

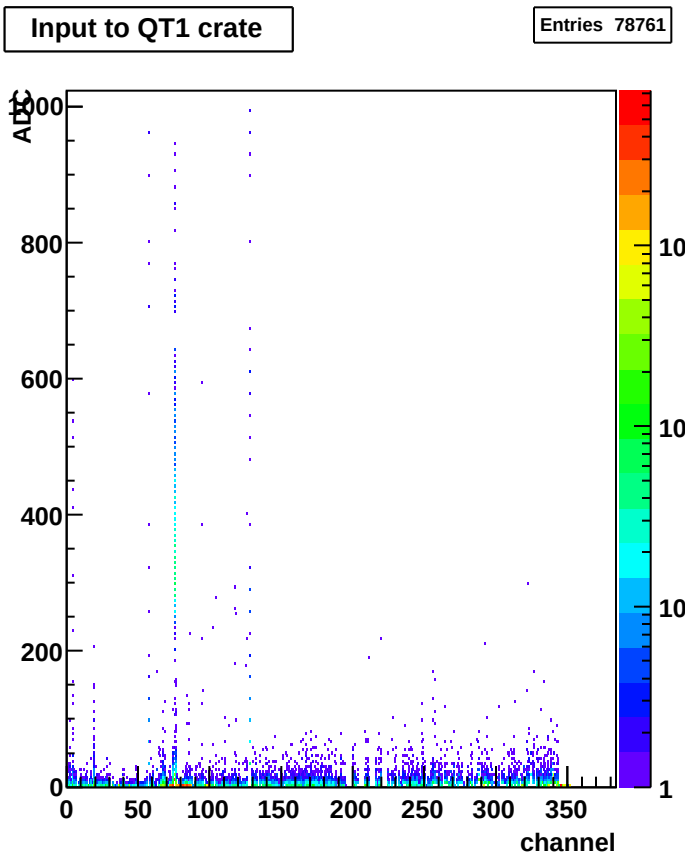

BBClarge-TAC-W
Entries 7976
Mean 1386
RMS 339.9

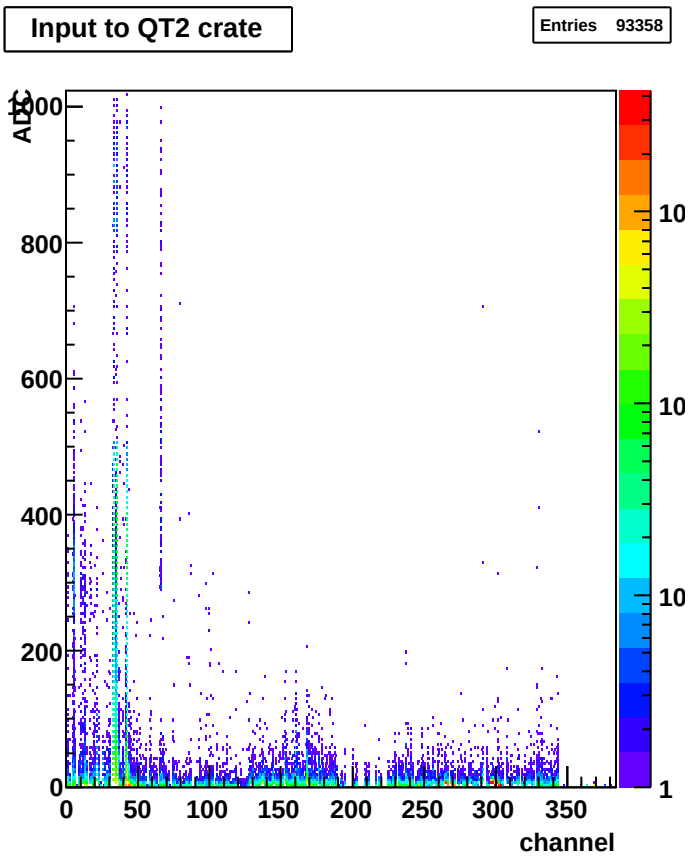

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 7024
Mean 4076
RMS 477.5

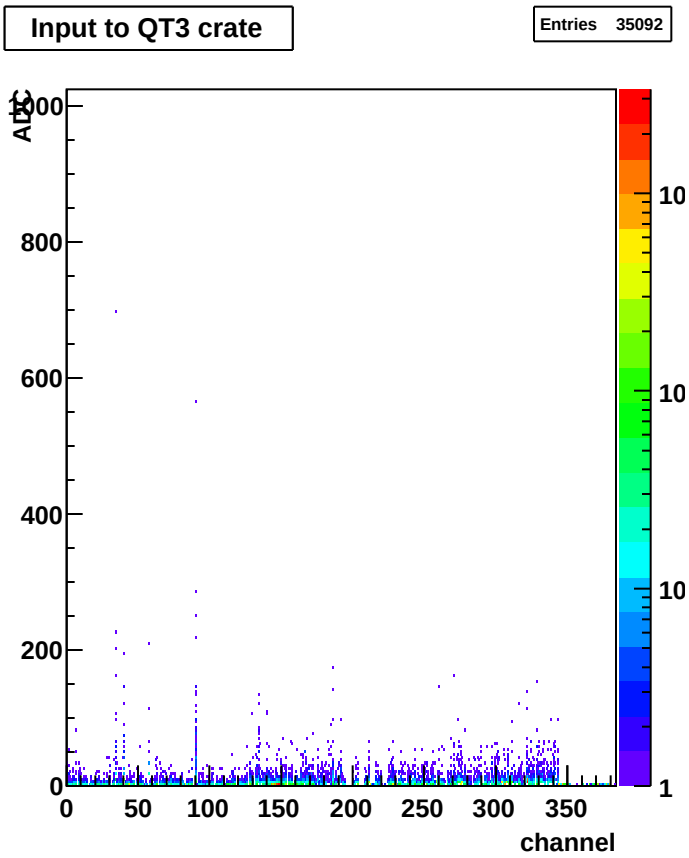

VPD-TAC-E
Entries 3639
Mean 1281
RMS 154.1

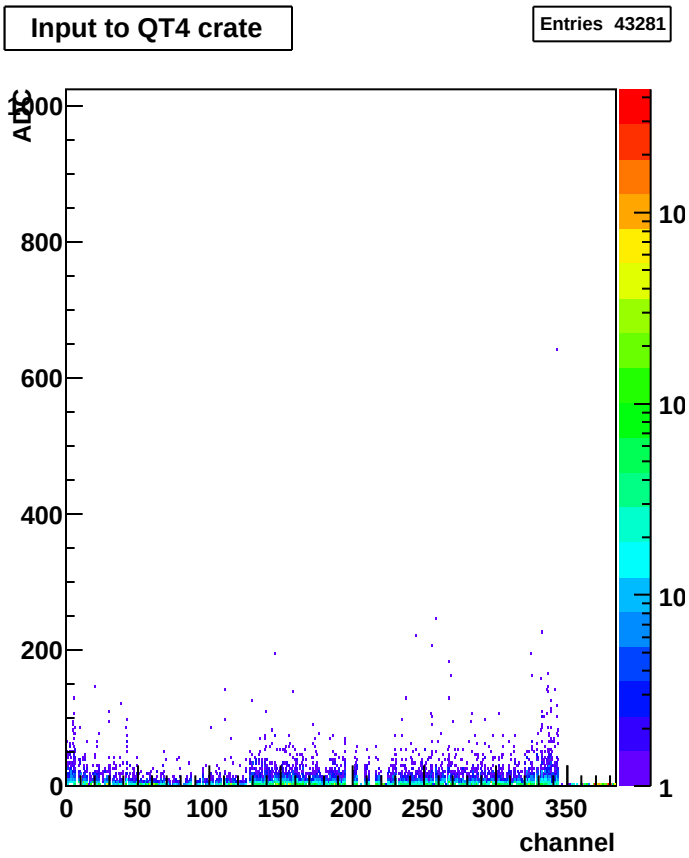

VPD-TAC-W
Entries 3378
Mean 1298
RMS 178.7

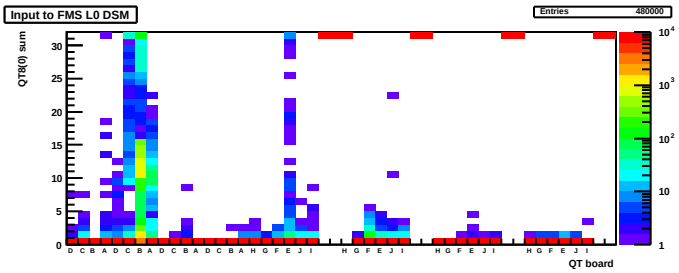

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1672
Mean 4073
RMS 224

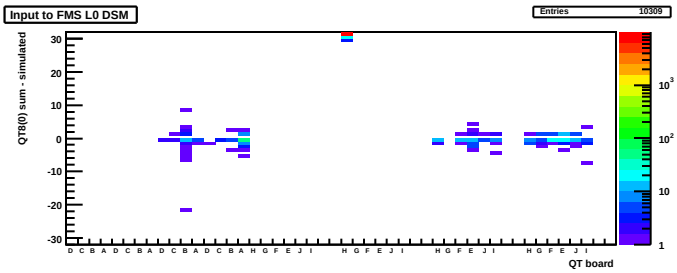

Input to QT1 crate
Entries 78761
ADC
channel

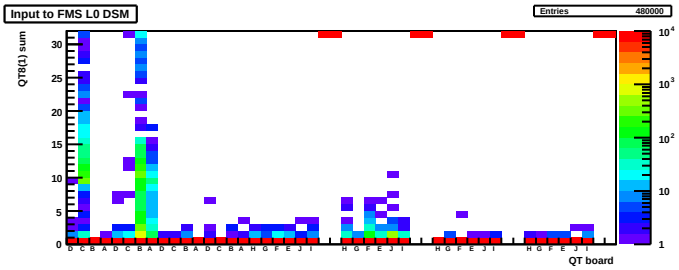

Input to QT2 crate
Entries 93358
ADC
channel

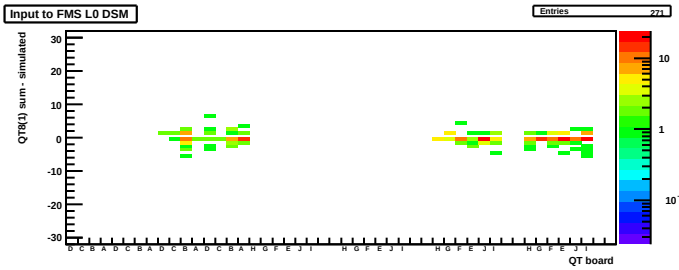

Input to QT3 crate
Entries 35092
ADC
channel

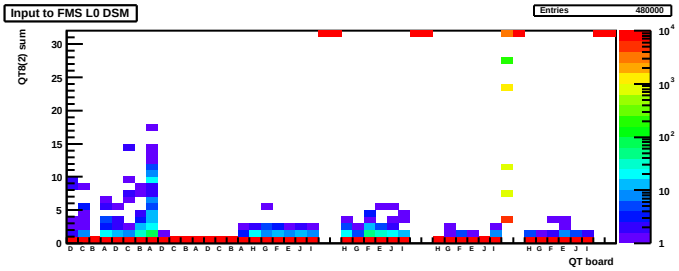

Input to QT4 crate
Entries 43281
ADC
channel

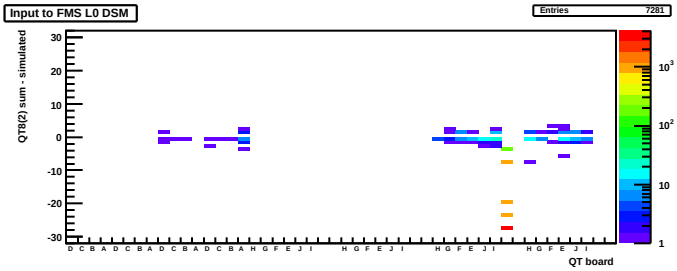

Input to FMS L0 DSM
Entries 480000
QT8(0) sum
QT board

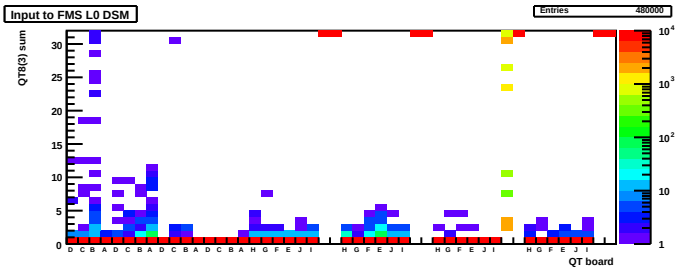

Input to FMS L0 DSM
Entries 10309
QT8(0) sum - simulated
QT board

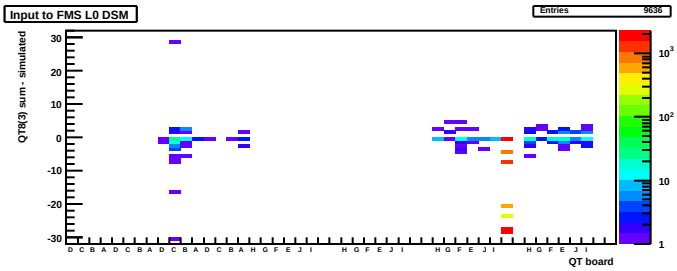

Input to FMS L0 DSM
Entries 480000
QT8(1) sum
QT board

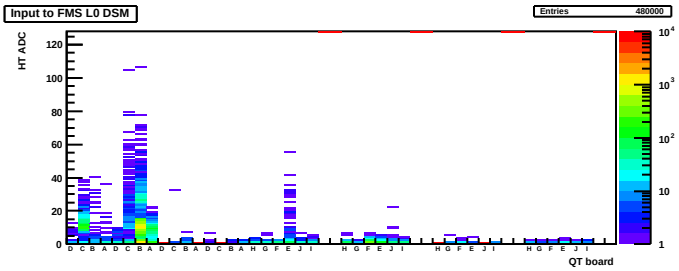

Input to FMS L0 DSM
Entries 271
QT8(1) sum - simulated
QT board

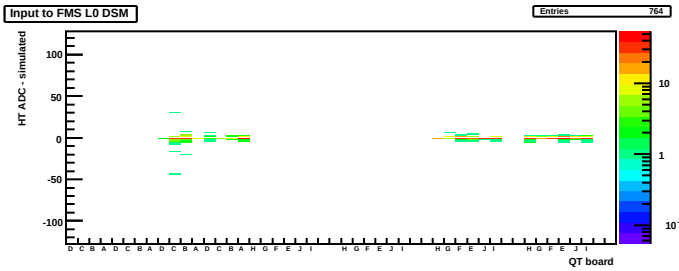

Input to FMS L0 DSM
Entries 480000
QT8(2) sum
QT board

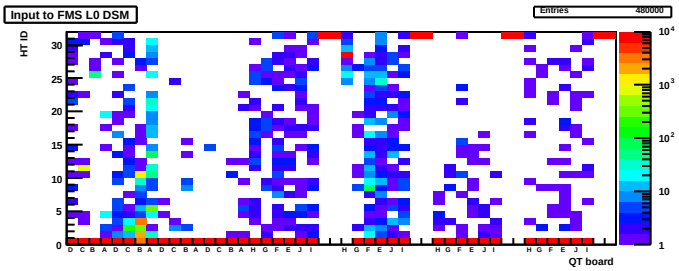

Input to FMS L0 DSM
Entries 7281
QT8(2) sum - simulated
QT board

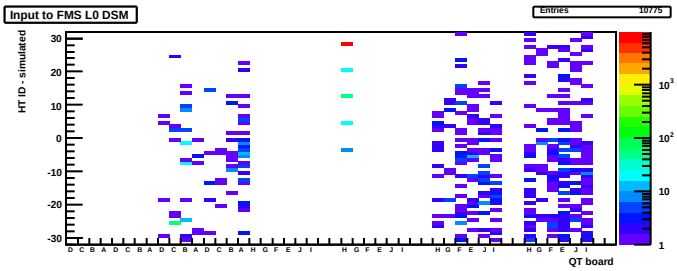

Input to FMS L0 DSM
Entries 480000
QT8(3) sum
QT board

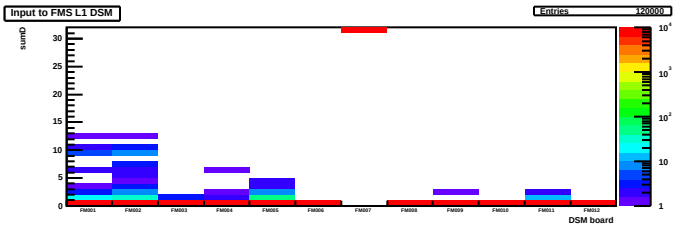

Input to FMS L0 DSM
Entries 9636
QT8(3) sum - simulated
QT board

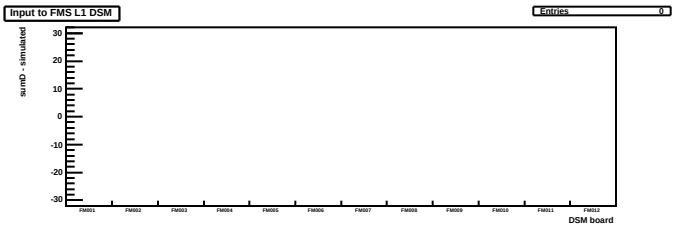

Input to FMS L0 DSM
Entries 480000
HT ADC
QT board

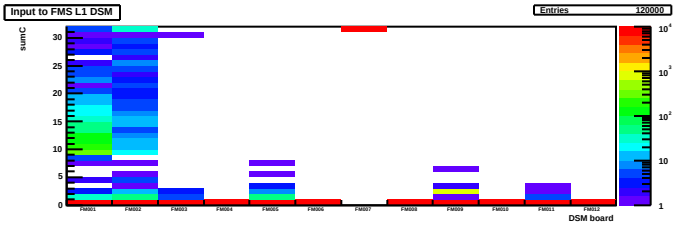

Input to FMS L0 DSM
Entries 764
HT ADC - simulated
QT board

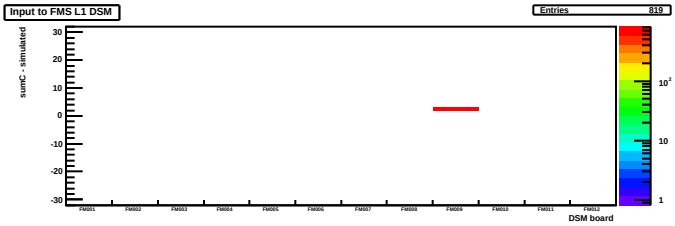

Input to FMS L0 DSM
Entries 480000
HT ID
QT board

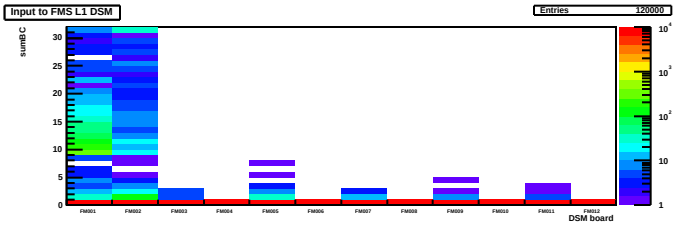

Input to FMS L0 DSM
Entries 10775
HT ID - simulated
QT board

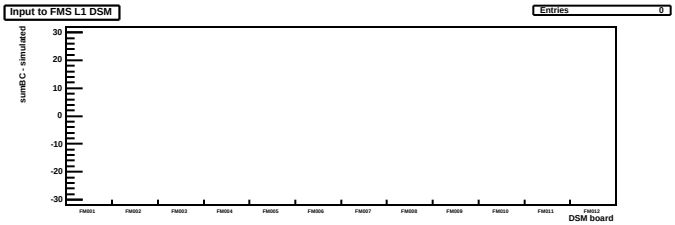

Input to FMS L1 DSM
Entries 120000
sumD
DSM board

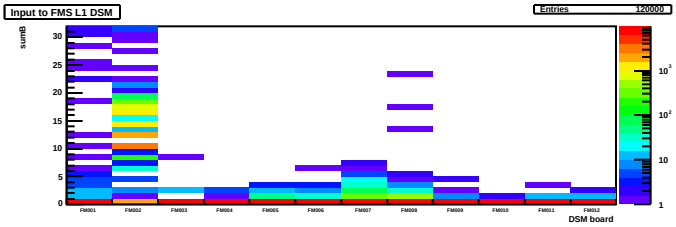

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

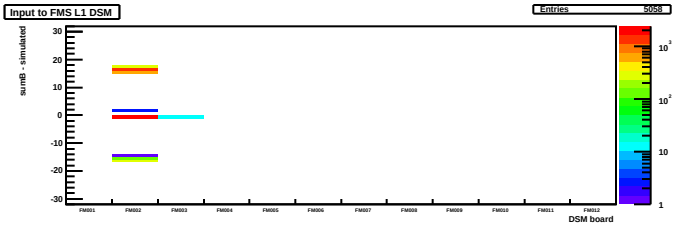

Input to FMS L1 DSM
Entries 120000
sumC
DSM board

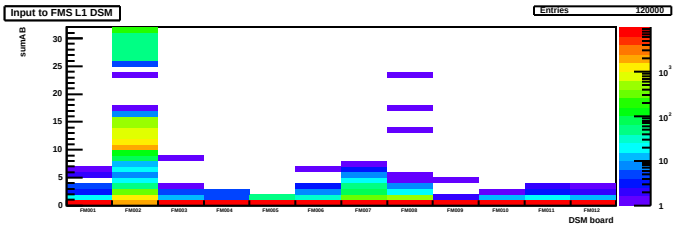

Input to FMS L1 DSM
Entries 819
sumC - simulated
DSM board

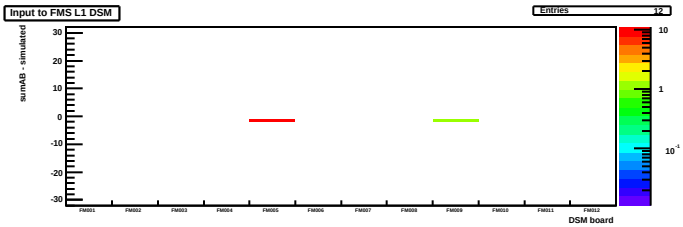

Input to FMS L1 DSM
Entries 120000
sumBC
DSM board

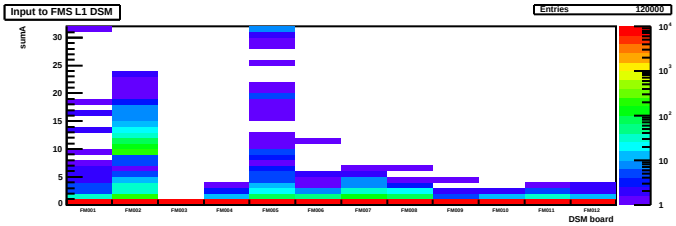

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

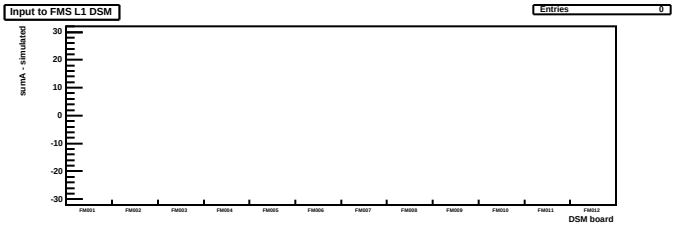

Input to FMS L1 DSM
Entries 120000
sumB
DSM board

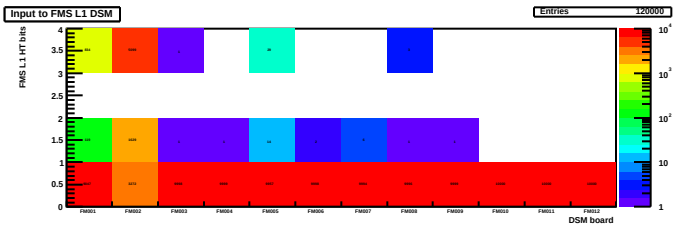

Input to FMS L1 DSM
Entries 5058
sumB - simulated
DSM board

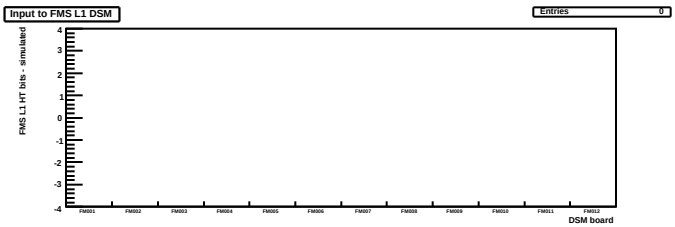

Input to FMS L1 DSM
Entries 120000
sumAB
DSM board

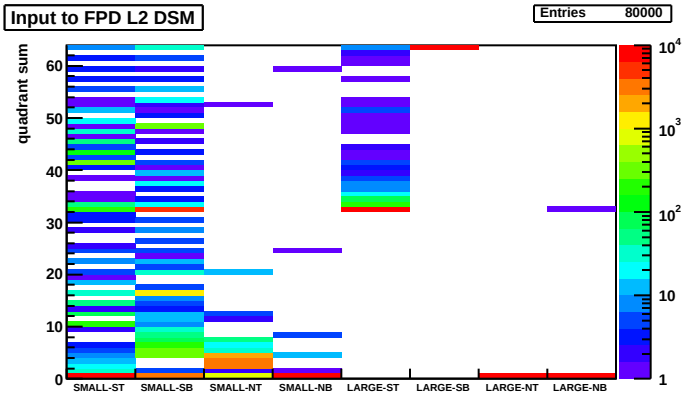

Input to FMS L1 DSM
Entries 12
sumAB - simulated
DSM board

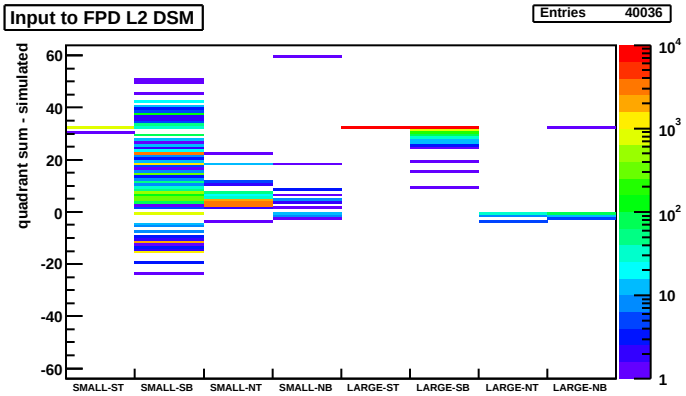

Input to FMS L1 DSM
Entries 120000
sumA
DSM board

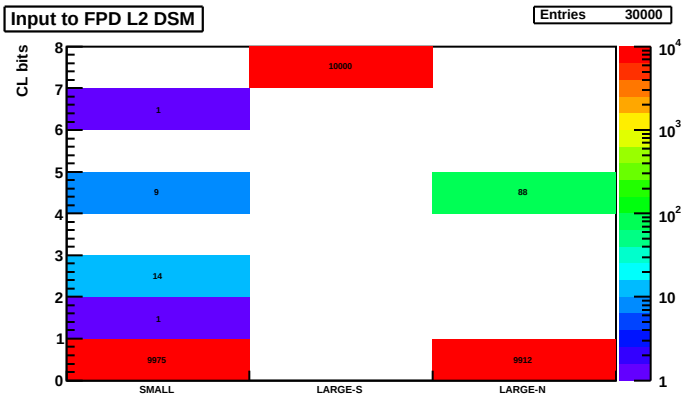

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

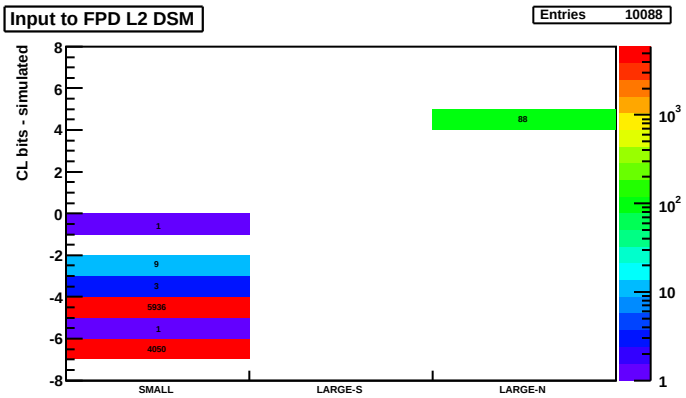

Input to FMS L1 DSM
Entries 120000
FMS L1 HT bits
DSM board

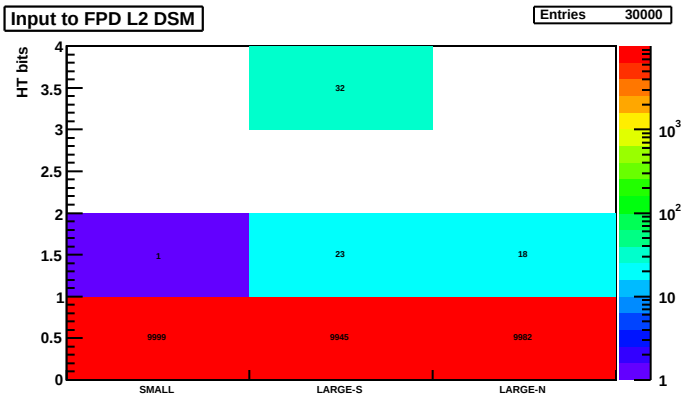

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

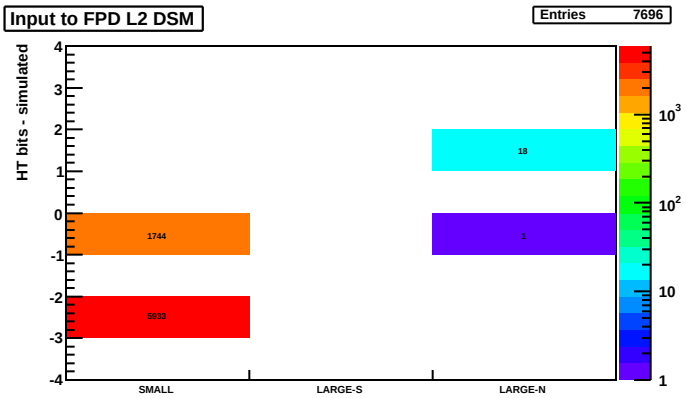

Input to FPD L2 DSM
Entries 80000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

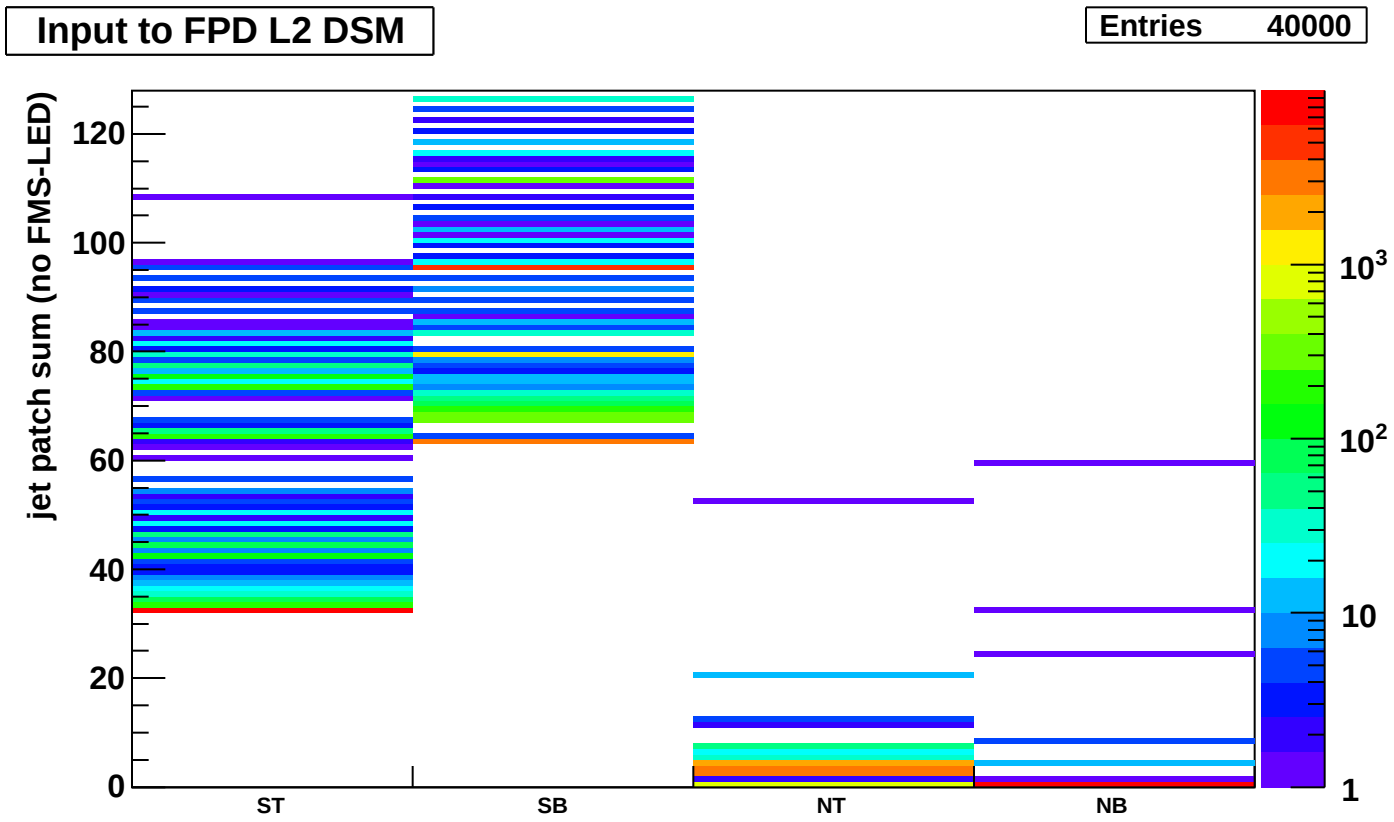

Input to FPD L2 DSM
Entries 40036
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

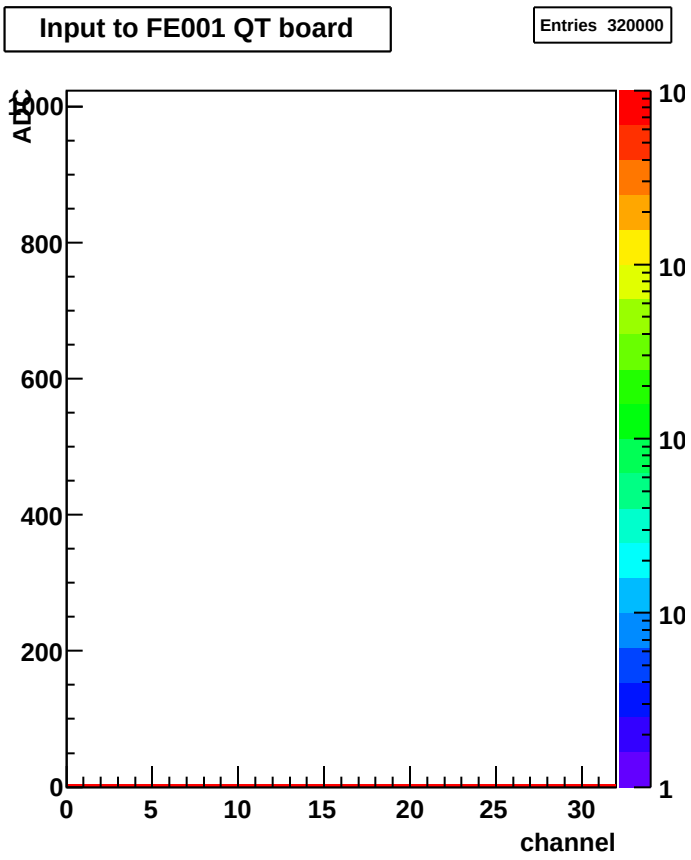

Input to FPD L2 DSM
Entries 30000
CL bits
10000
1
9
88
14
1
9975
9912
SMALL
LARGE-S
LARGE-N

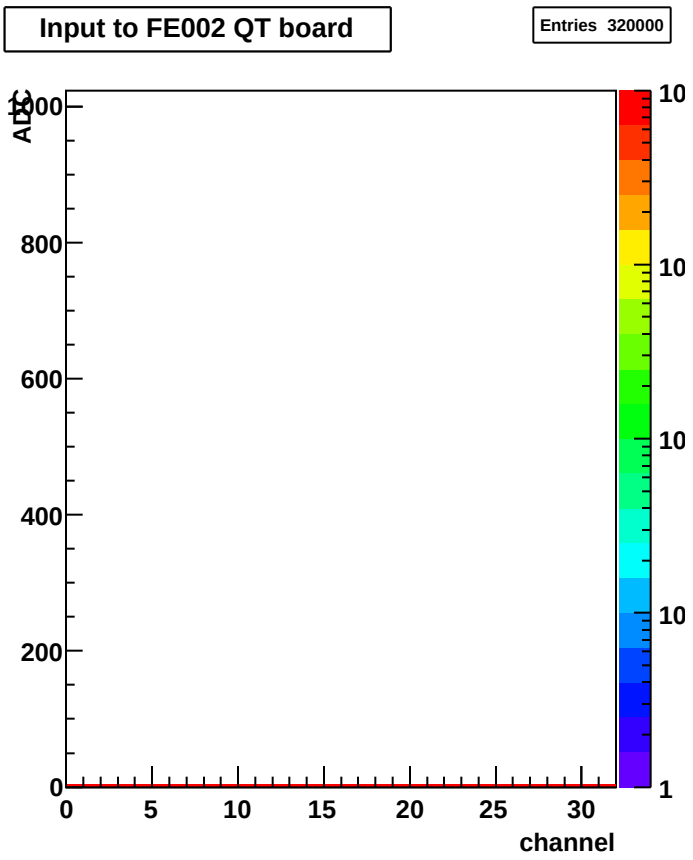

Input to FPD L2 DSM
Entries 10088
CL bits - simulated
88
1
9
3
5936
1
4050
SMALL
LARGE-S
LARGE-N

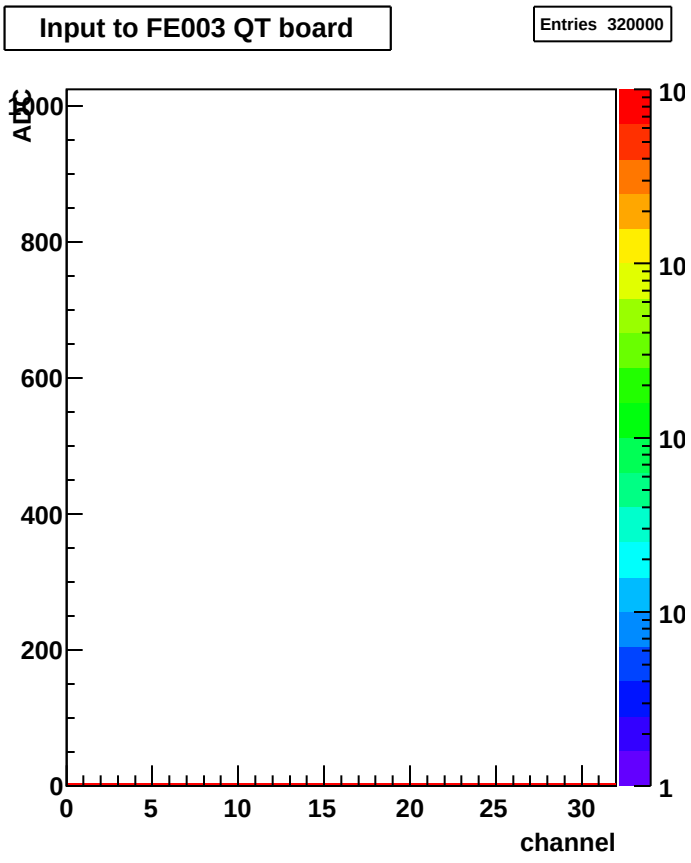

Input to FPD L2 DSM
Entries 30000
HT bits
32
1
23
18
9999
9945
9982
SMALL
LARGE-S
LARGE-N

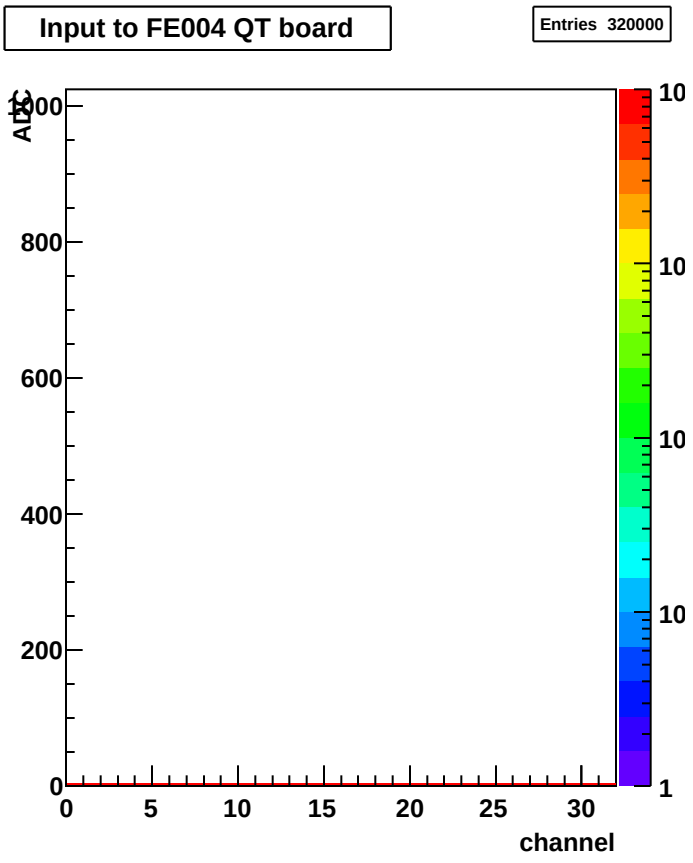

Input to FPD L2 DSM
Entries 7696
HT bits - simulated
18
1744
1
5933
SMALL
LARGE-S
LARGE-N

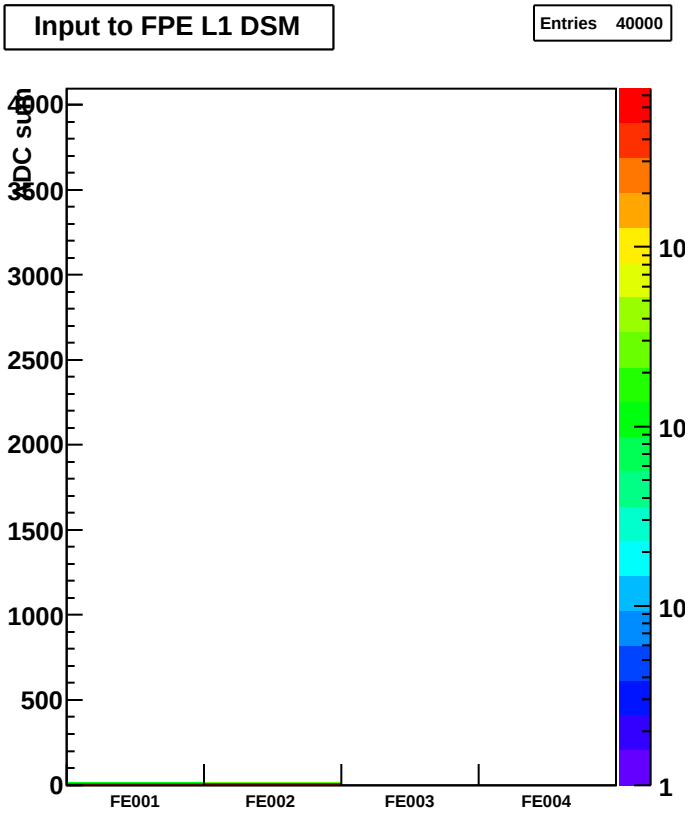

Input to FPD L2 DSM
Entries 40000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3

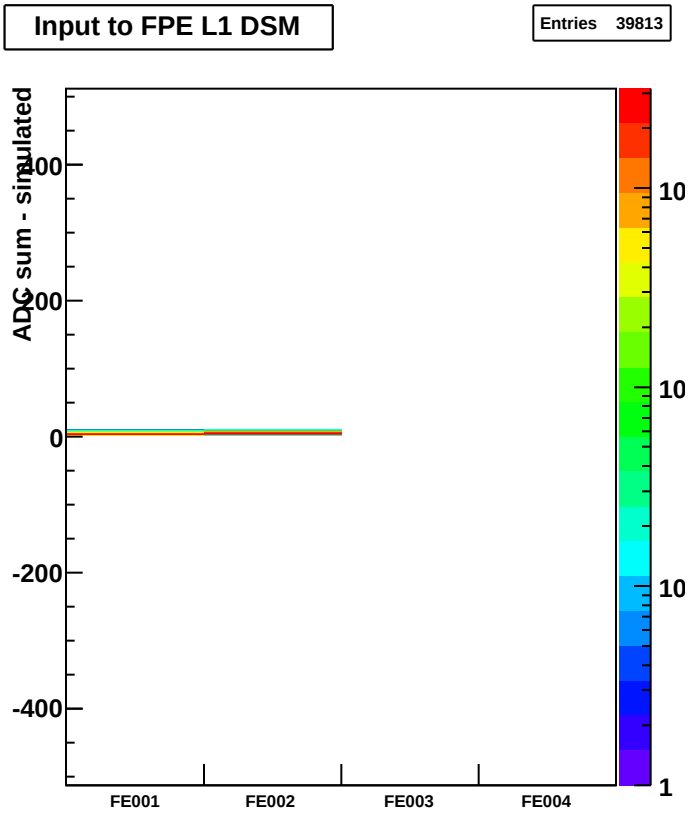

Input to FE001 QT board
Entries 320000
ADC
channel

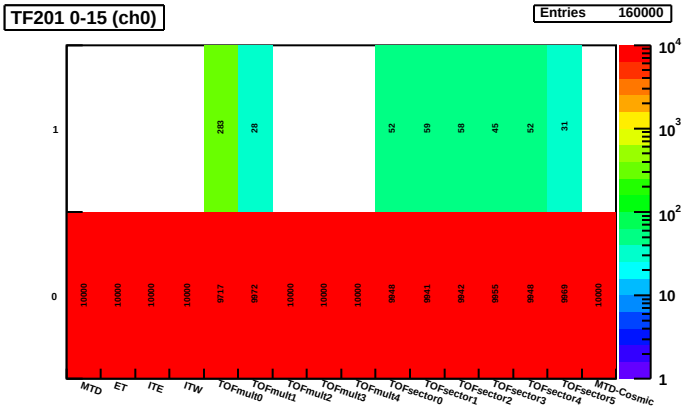

Input to FE002 QT board
Entries 320000
ADC
channel

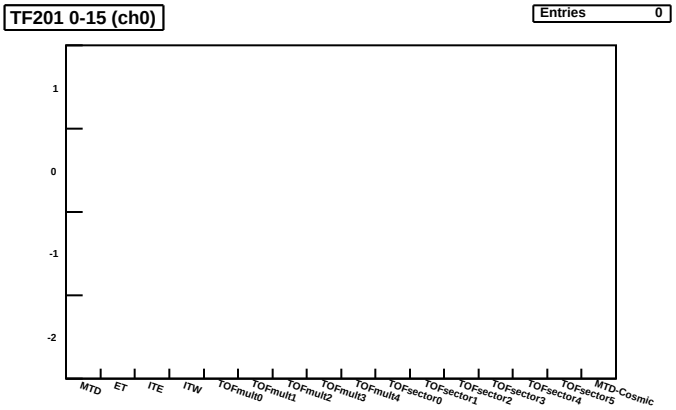

Input to FE003 QT board
Entries 320000
ADC
channel

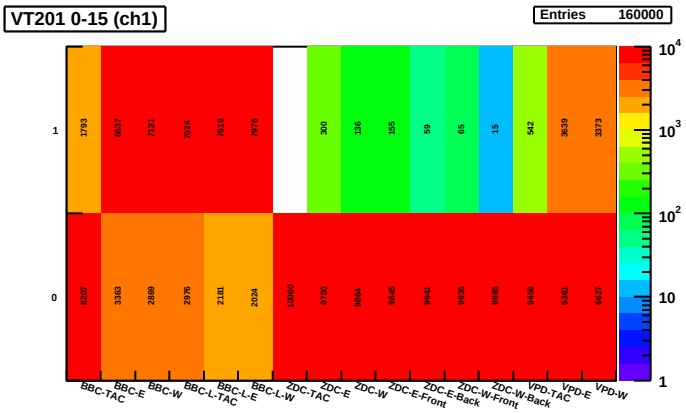

Input to FE004 QT board
Entries 320000
ADC
channel

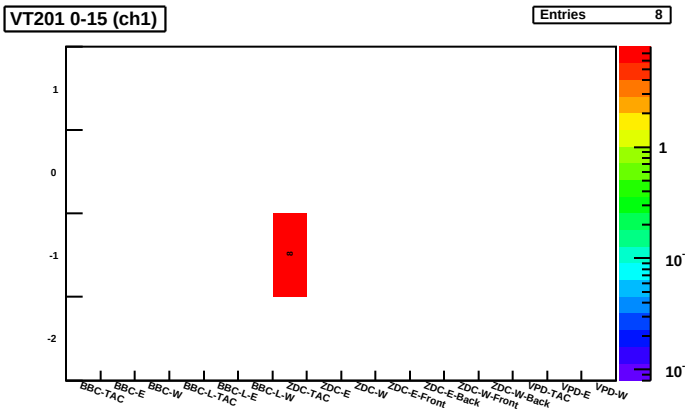

Input to FPE L1 DSM
Entries 40000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

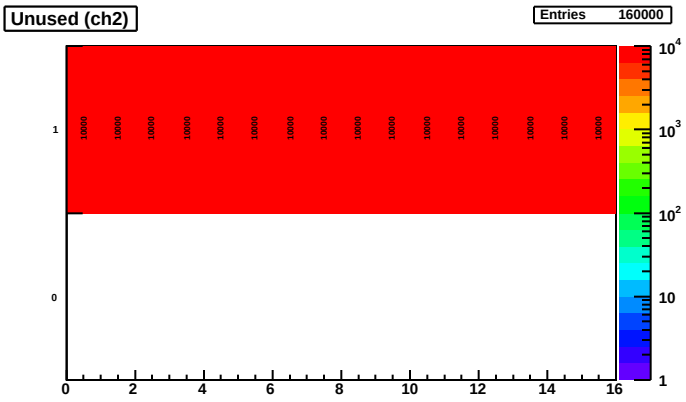

Input to FPE L1 DSM
Entries 39813
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1

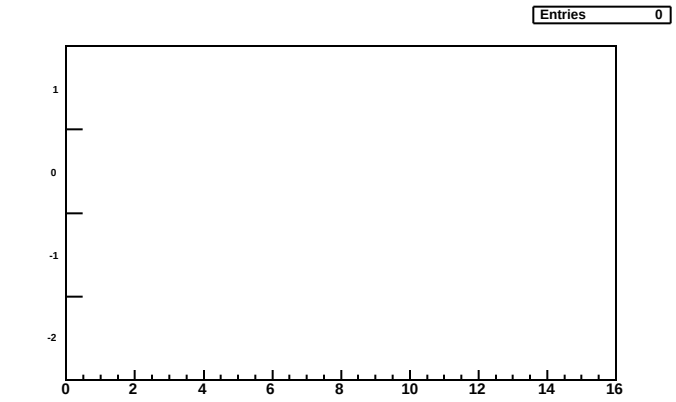

TF201 0-15 (ch0)
Entries 160000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

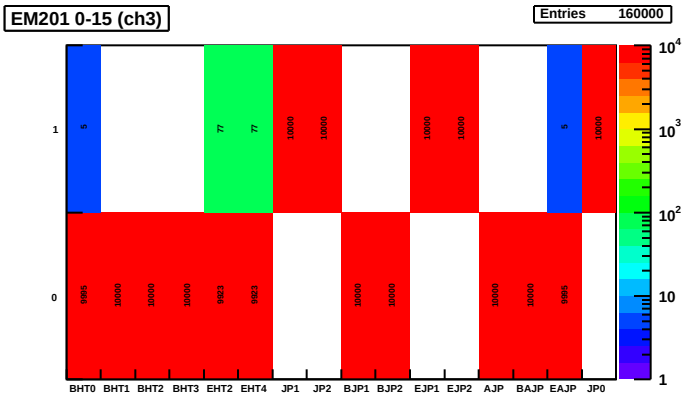

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

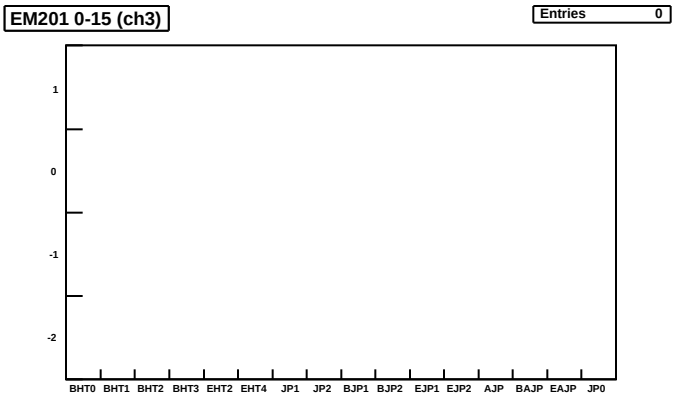

VT201 0-15 (ch1)
Entries 160000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 8
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

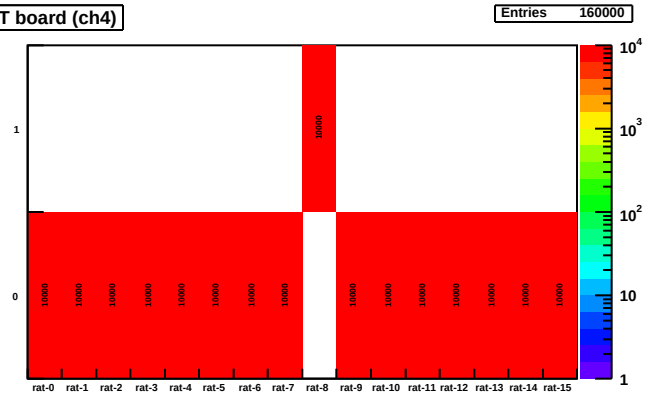

Unused (ch2)
Entries 160000

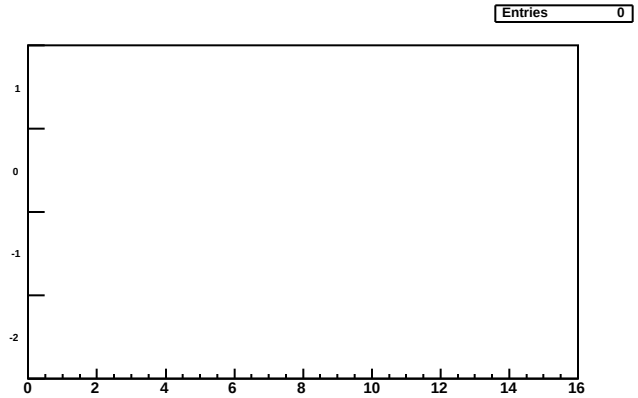

Entries 0


EM201 0-15 (ch3)
Entries 160000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

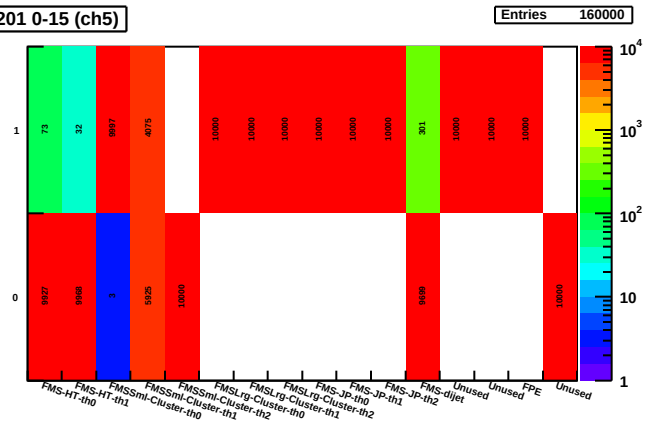

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

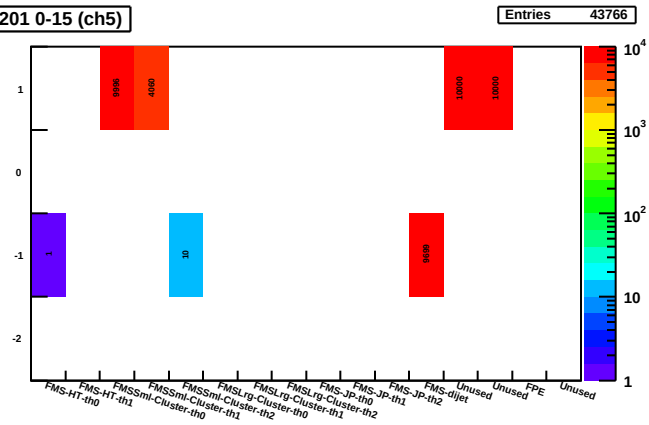




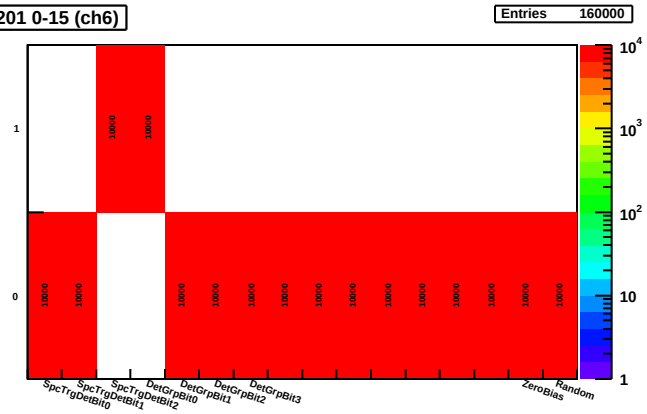
FP201 0-15 (ch5)

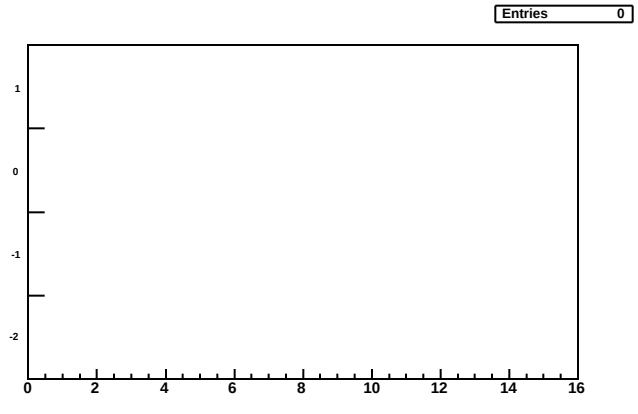
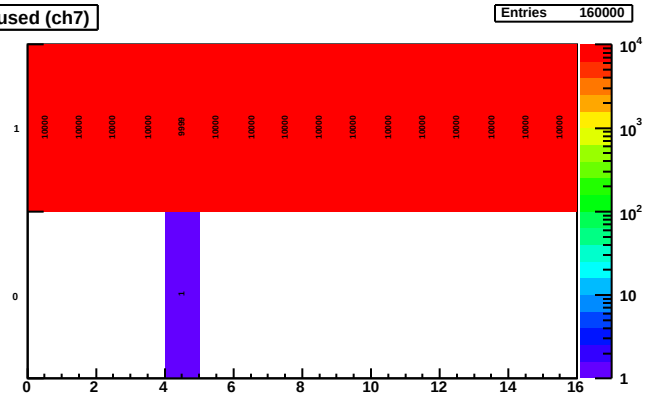
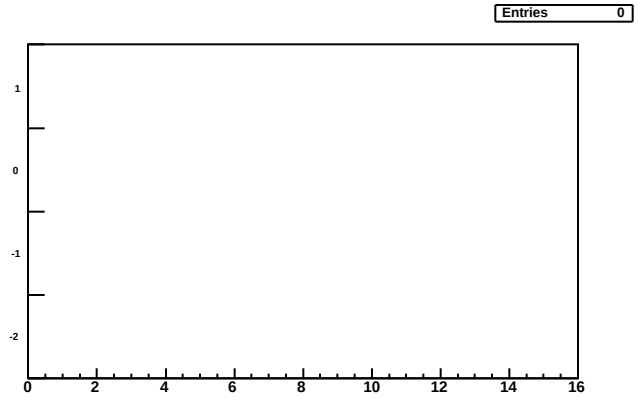


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)