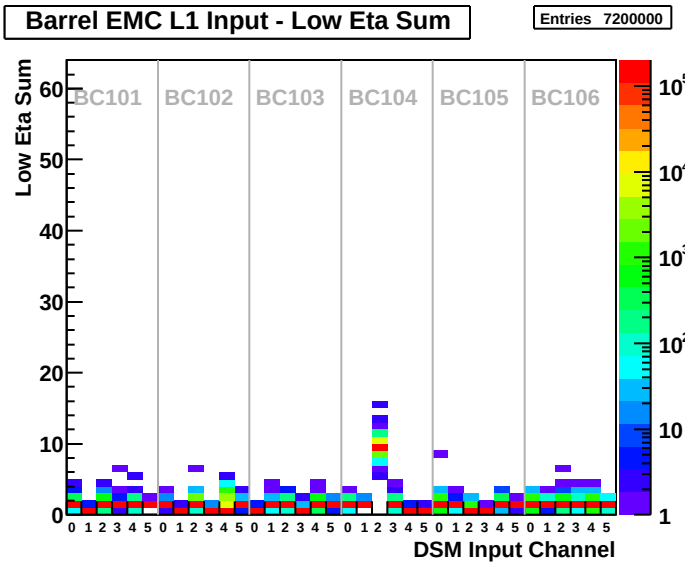
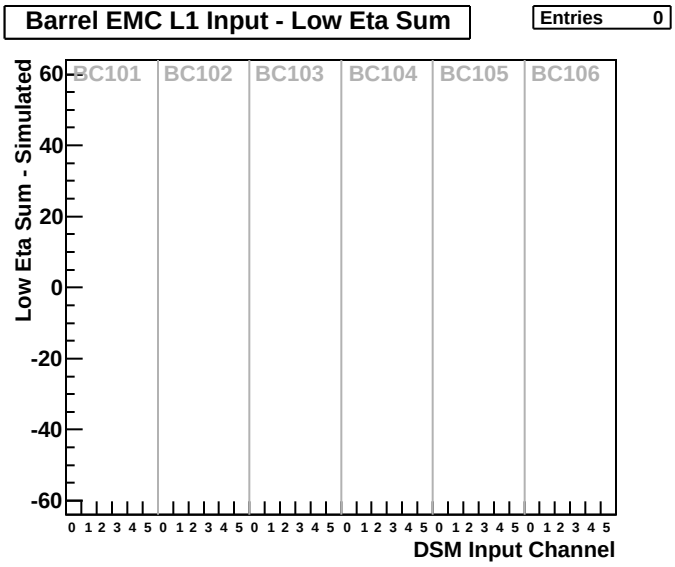
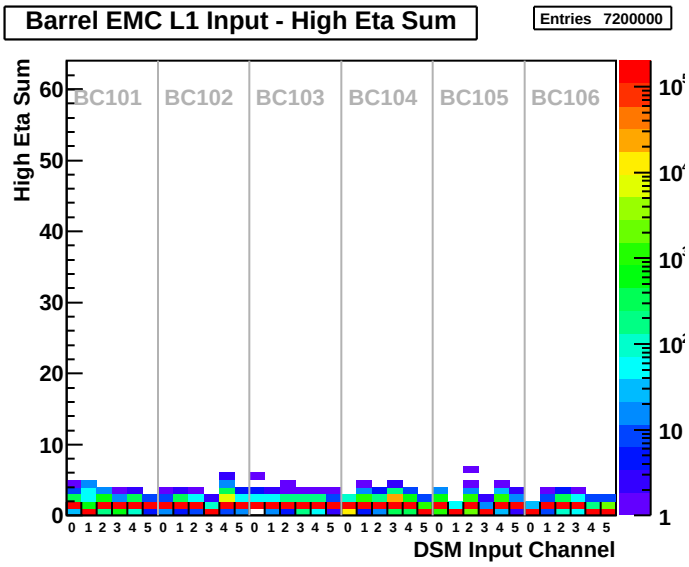
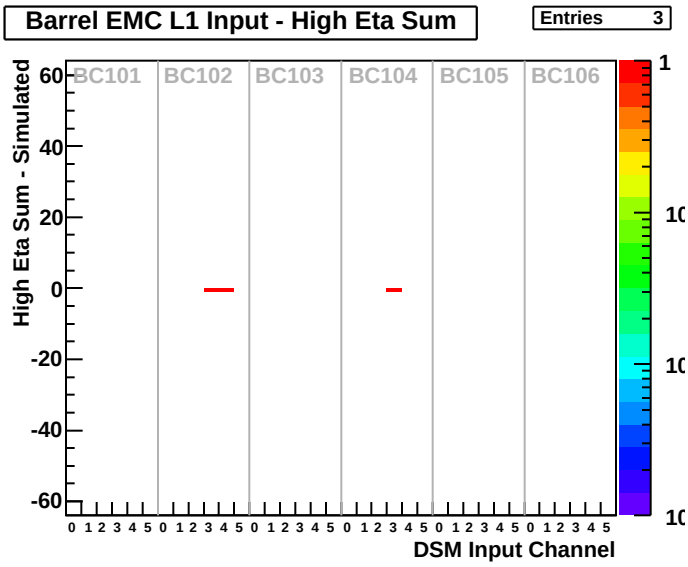
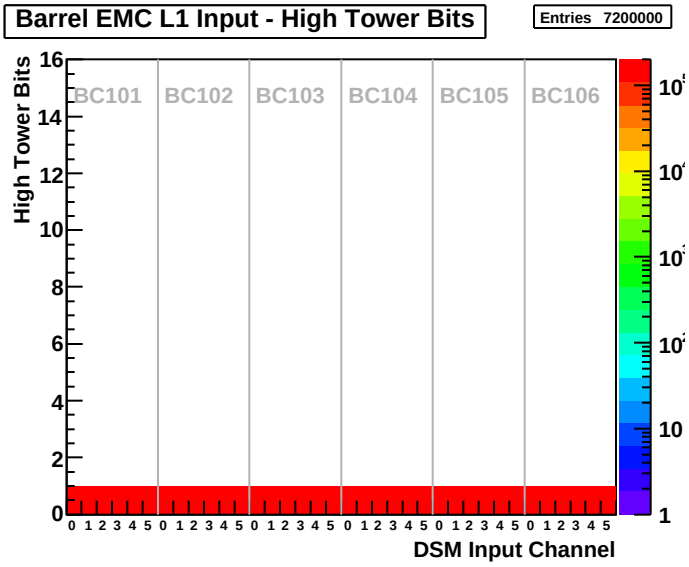
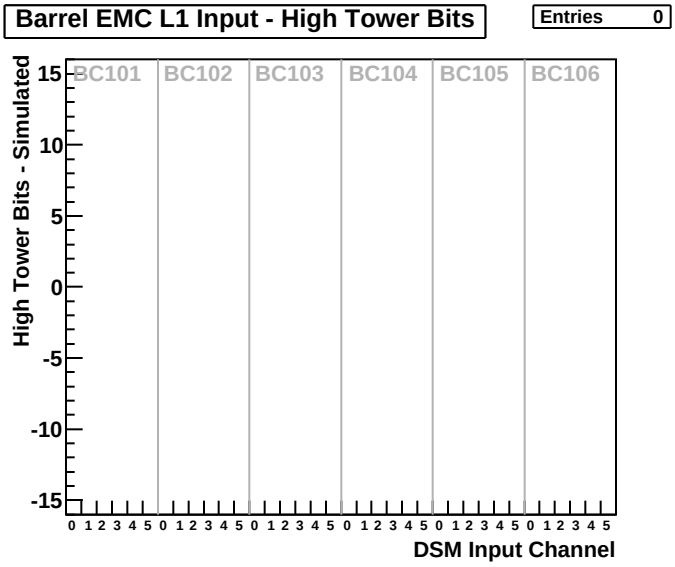

Barrel EMC L1 Input - Low Eta Sum
Entries 7200000
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

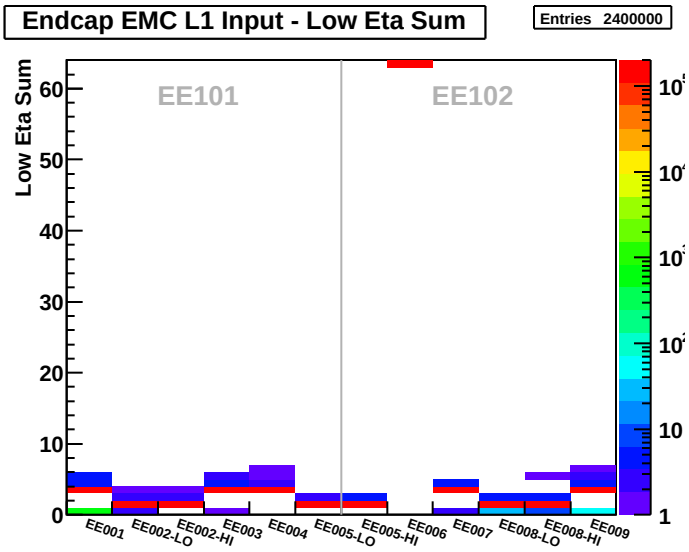

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

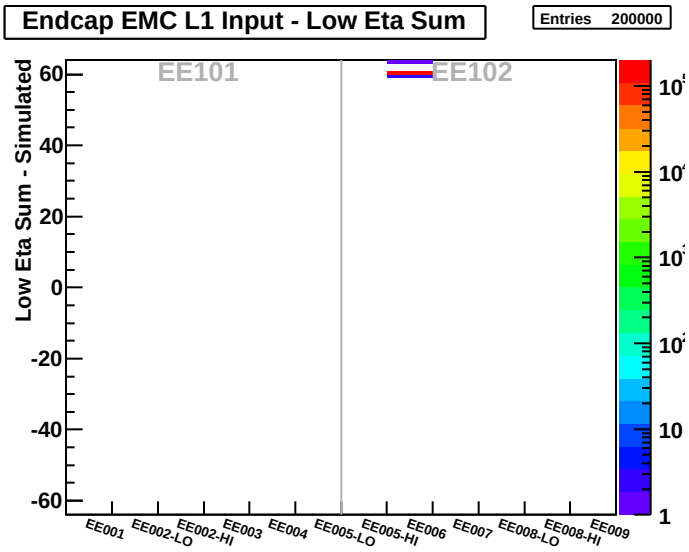

Barrel EMC L1 Input - High Eta Sum
Entries 7200000
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

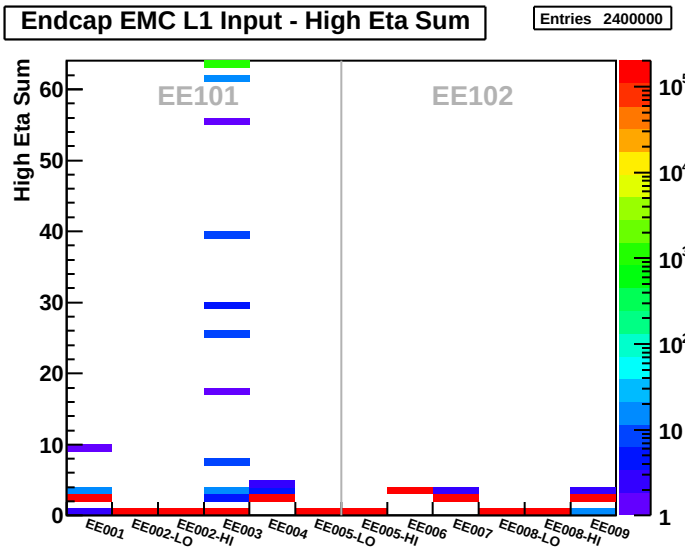

Barrel EMC L1 Input - High Eta Sum
Entries 3
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

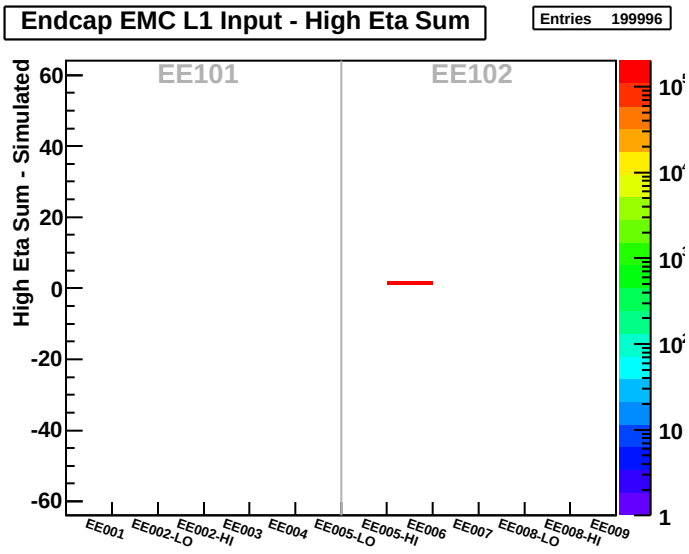

Barrel EMC L1 Input - High Tower Bits
Entries 7200000
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

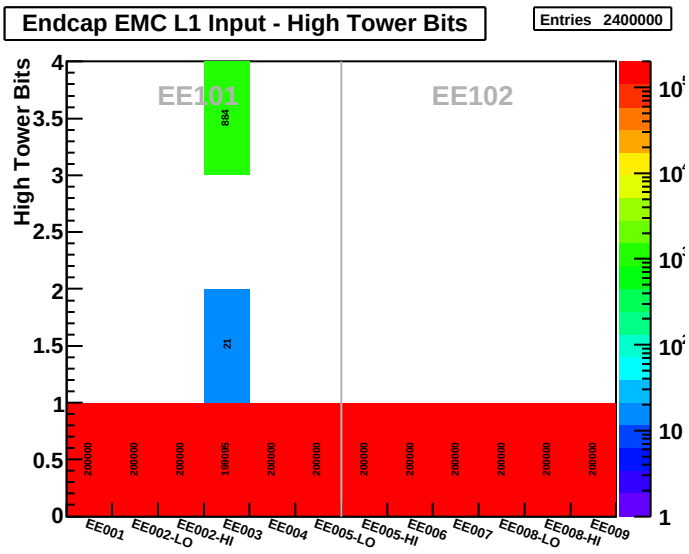

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

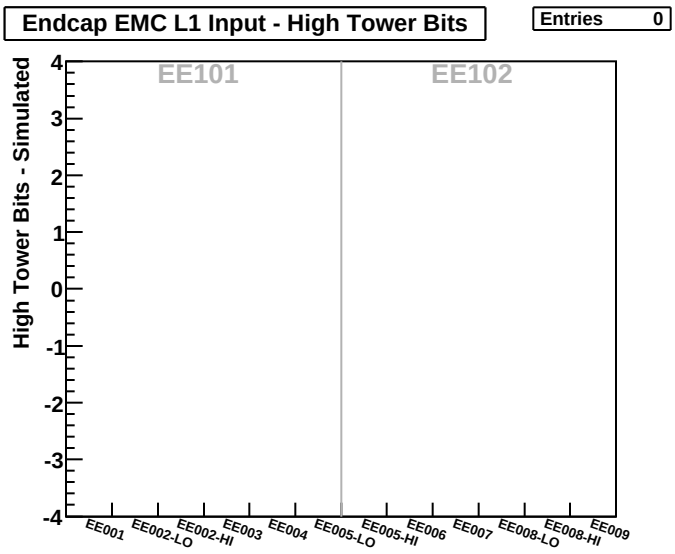

Endcap EMC L1 Input - Low Eta Sum
Entries 2400000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

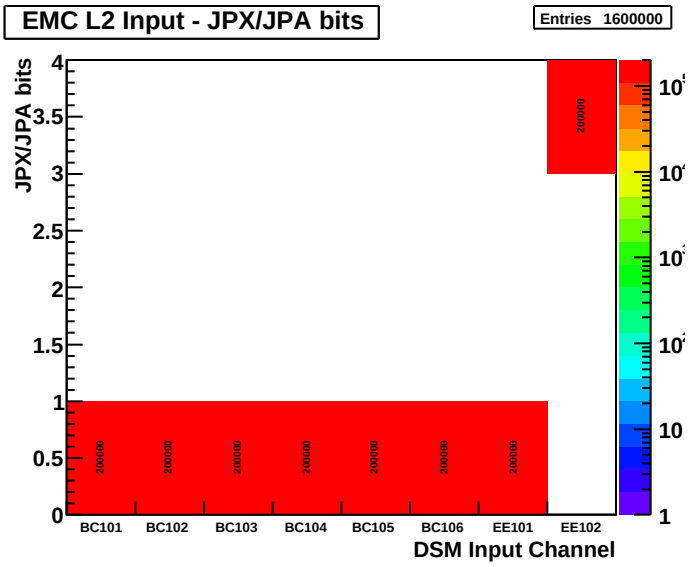

Endcap EMC L1 Input - Low Eta Sum
Entries 200000
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

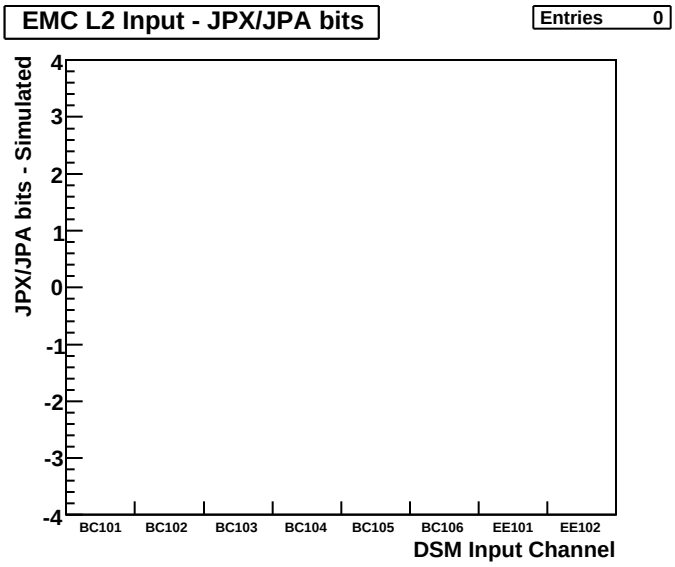

Endcap EMC L1 Input - High Eta Sum
Entries 2400000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

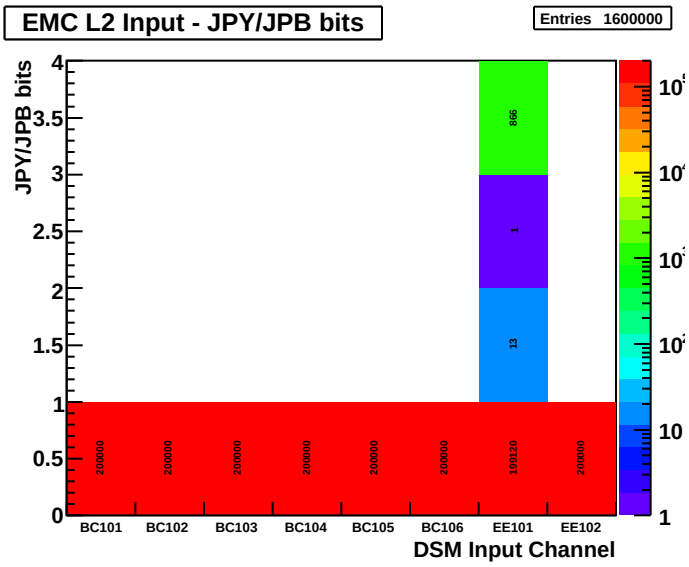

Endcap EMC L1 Input - High Eta Sum
Entries 199996
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

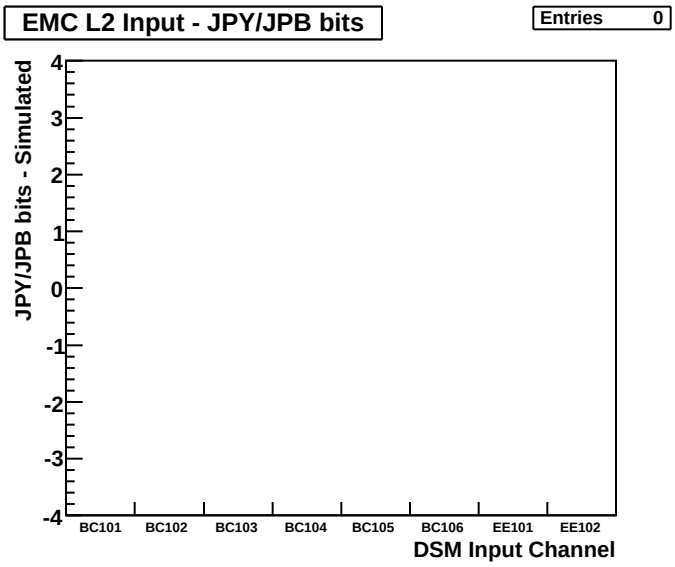

Endcap EMC L1 Input - High Tower Bits
Entries 2400000
High Tower Bits
EE101
EE102
804
21
200000 200000 200000 199995 200000 200000 200000 200000 200000 200000 200000 200000
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

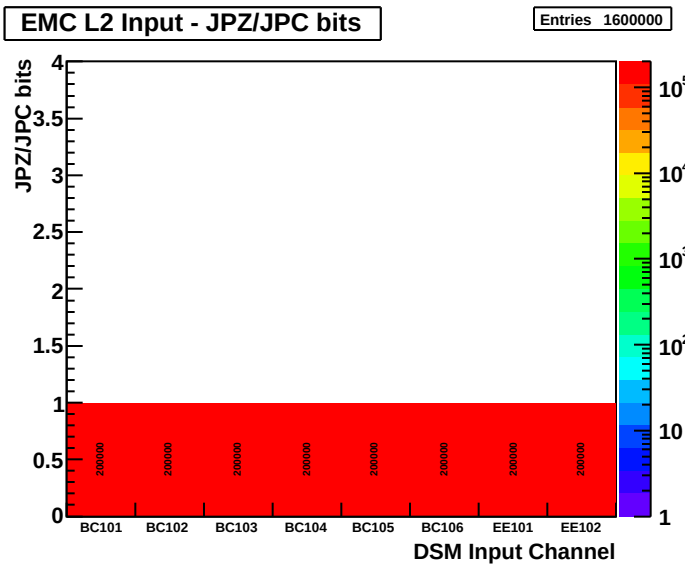

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

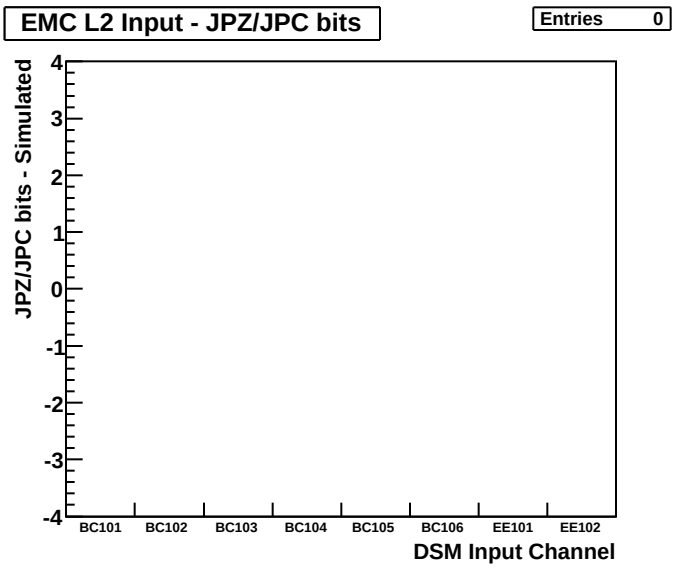

EMC L2 Input - JPX/JPA bits
Entries 1600000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
200000

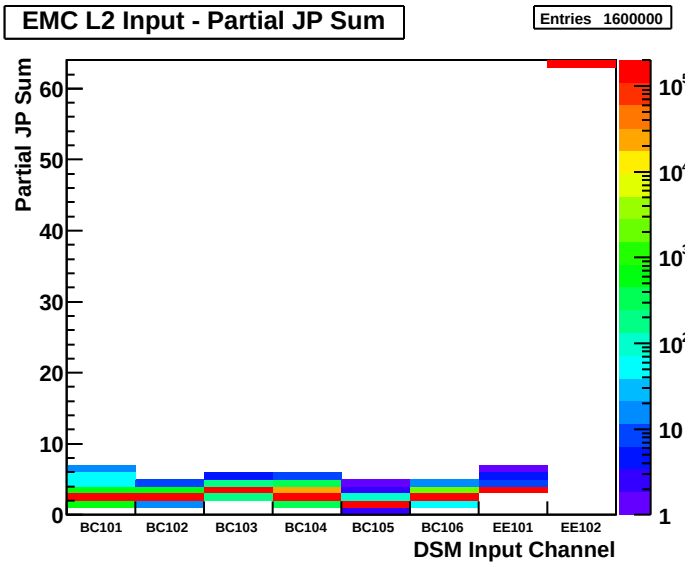

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

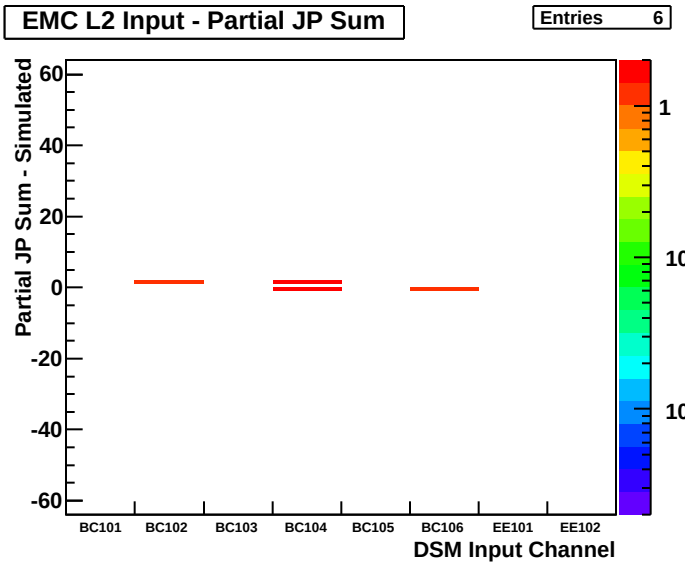

EMC L2 Input - JPY/JPB bits
Entries 1600000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
200000
866
1
13
199120

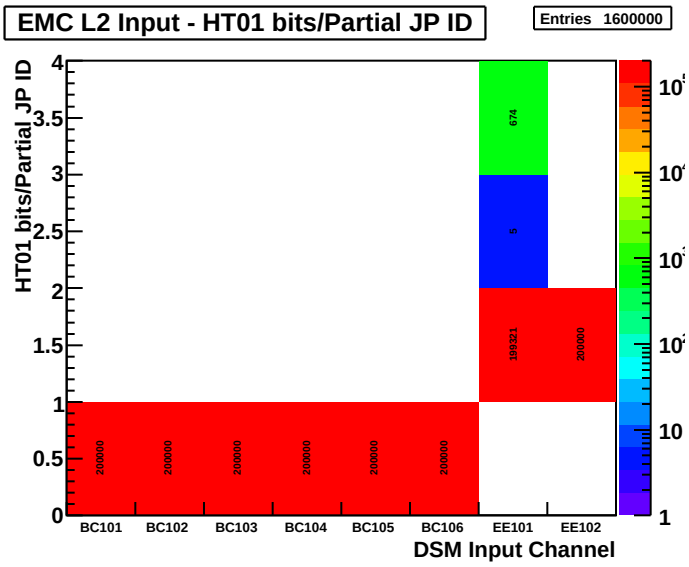

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

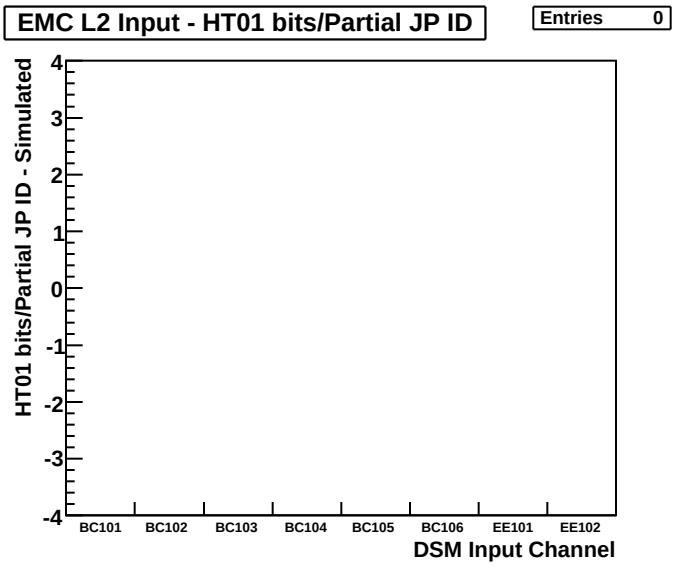

EMC L2 Input - JPZ/JPC bits
Entries 1600000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
200000

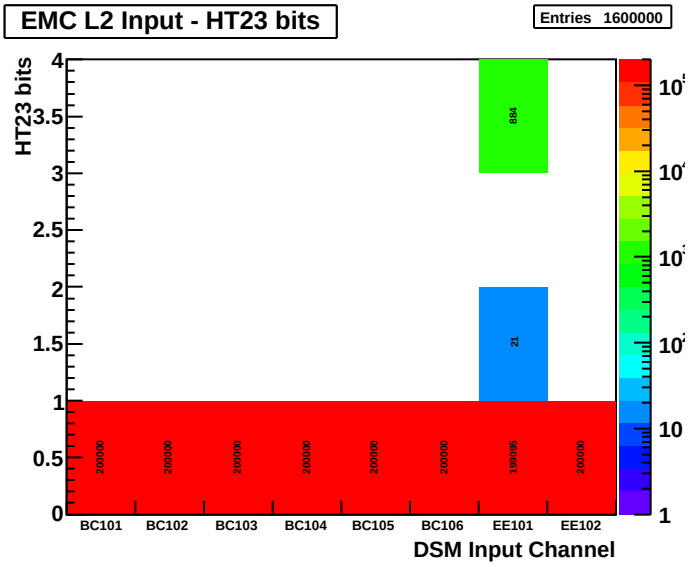

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

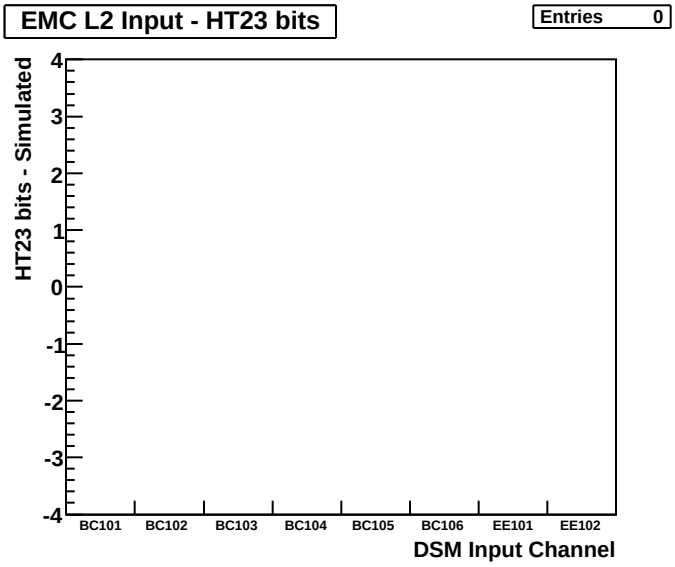

EMC L2 Input - Partial JP Sum
Entries 1600000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

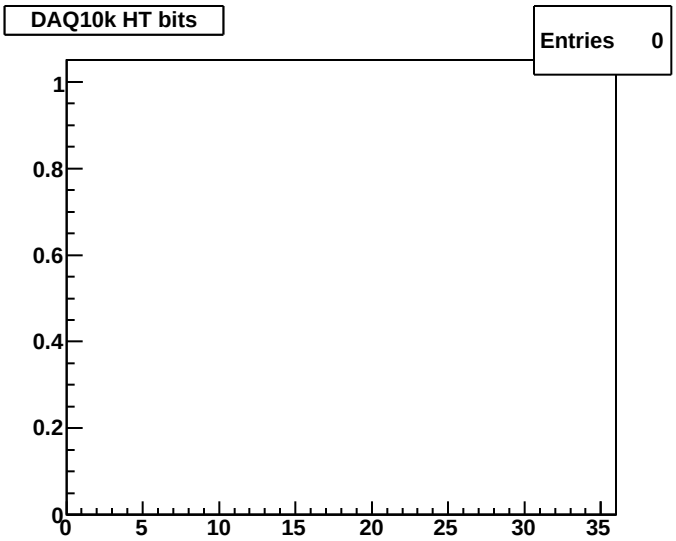

EMC L2 Input - Partial JP Sum
Entries 6
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

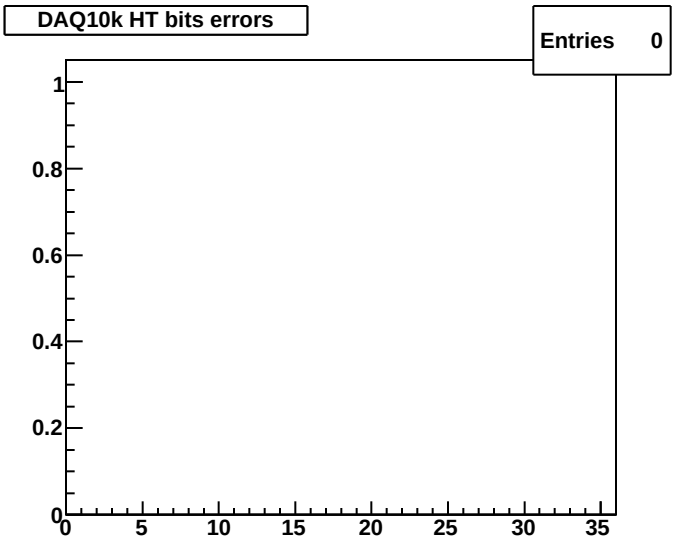

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1600000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

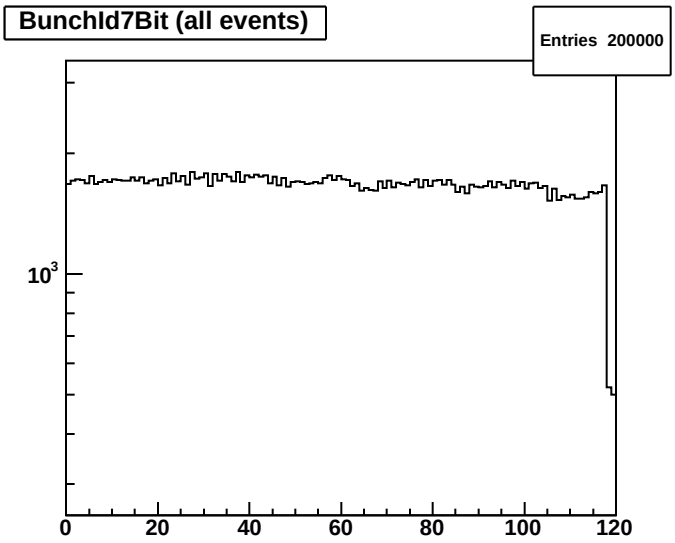

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

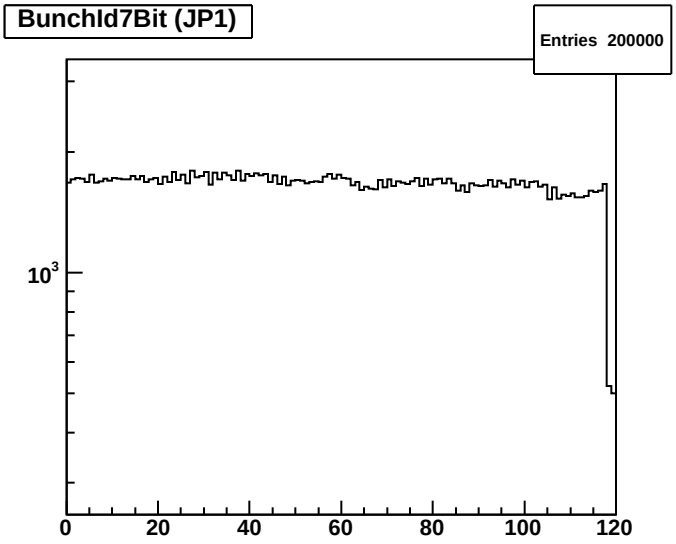

EMC L2 Input - HT23 bits
Entries 1600000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

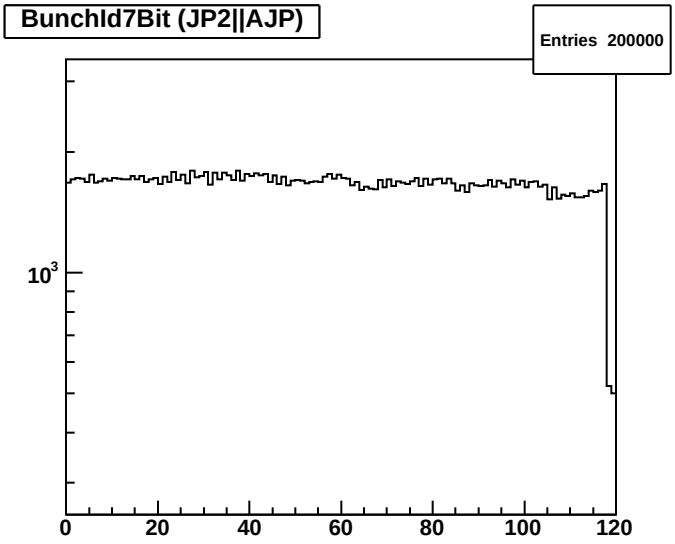

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

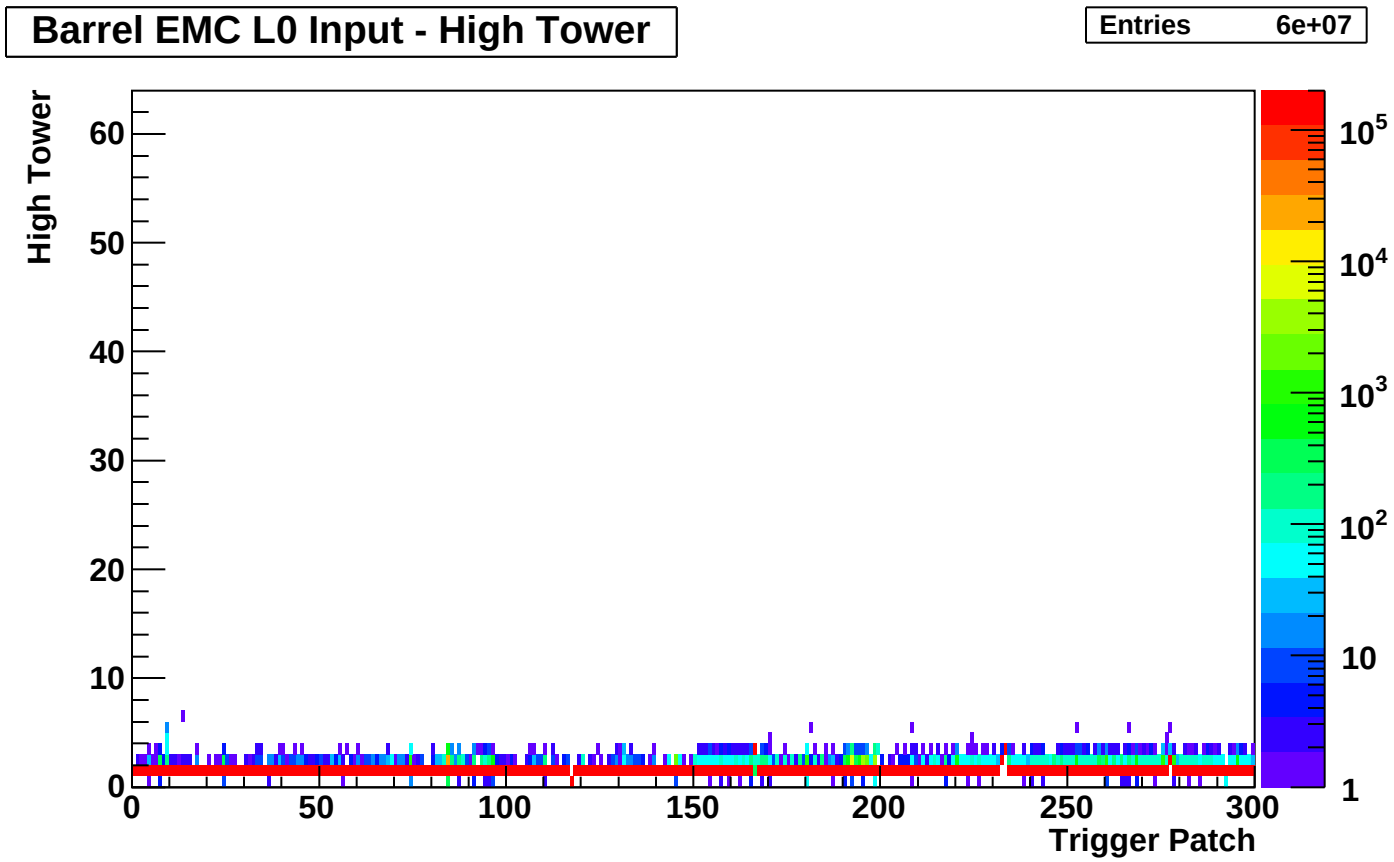

DAQ10k HT bits
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

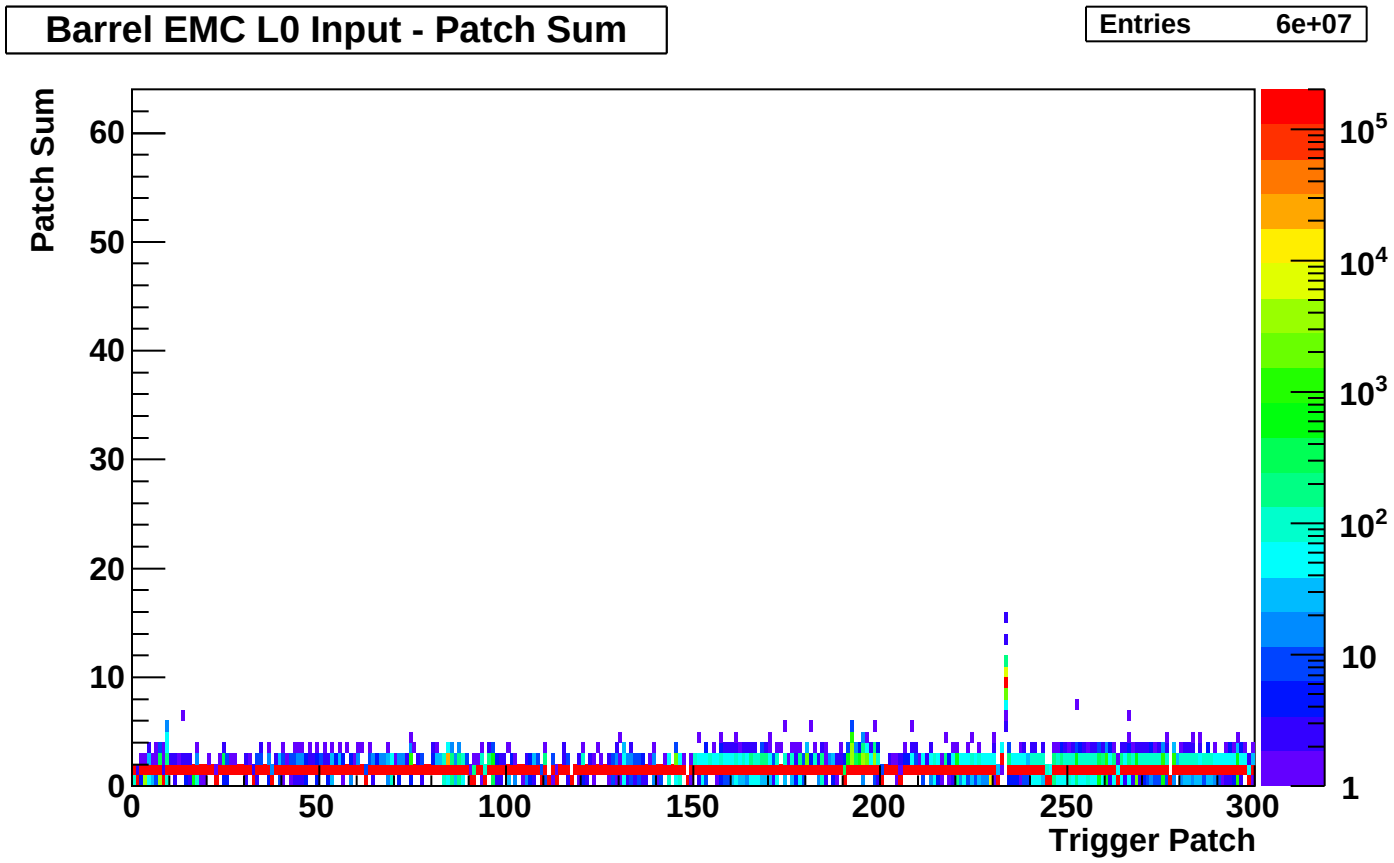

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

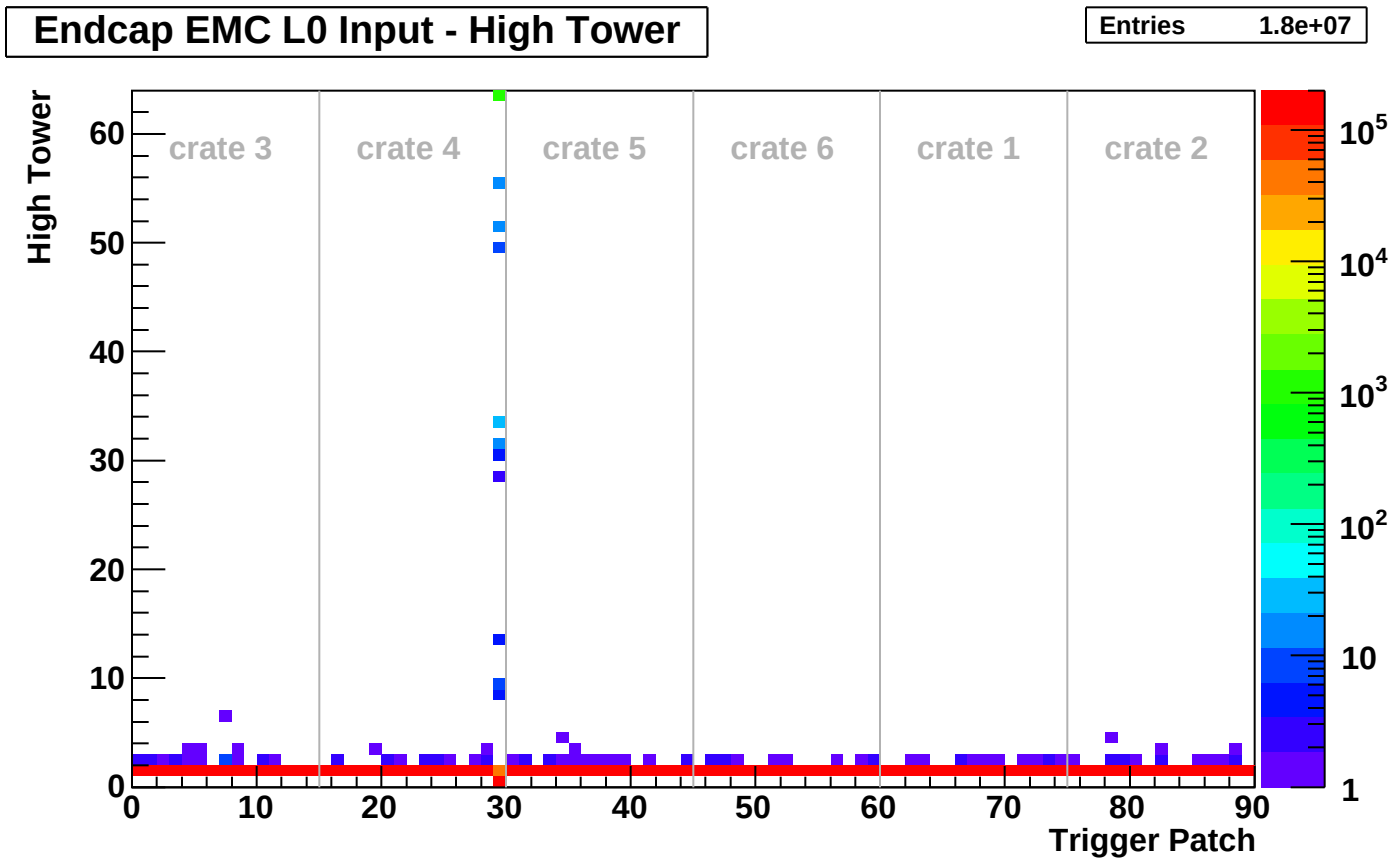

BunchId7Bit (all events)
Entries 200000
10^3
0 20 40 60 80 100 120

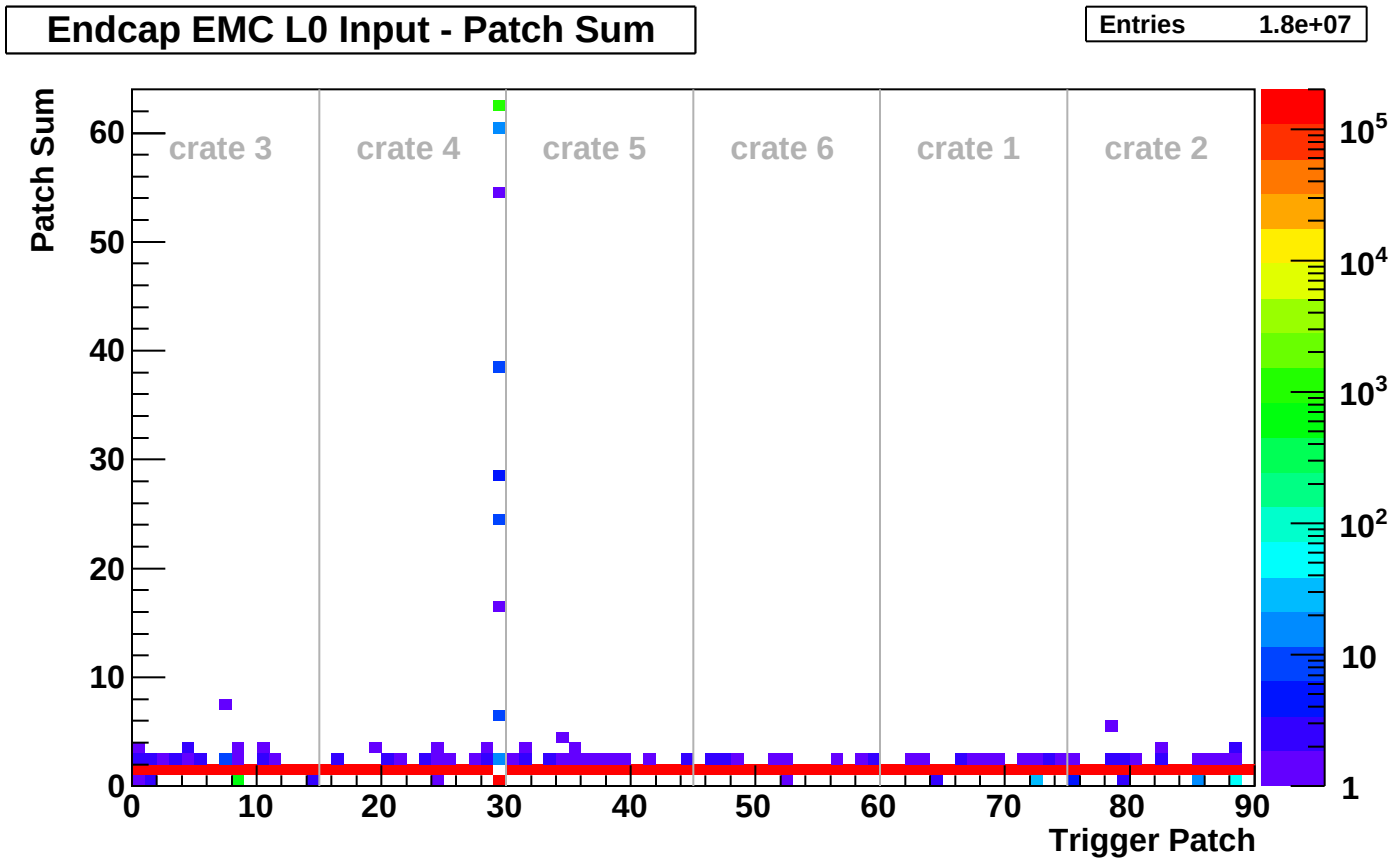

BunchId7Bit (JP1)
Entries 200000
10^3
0 20 40 60 80 100 120

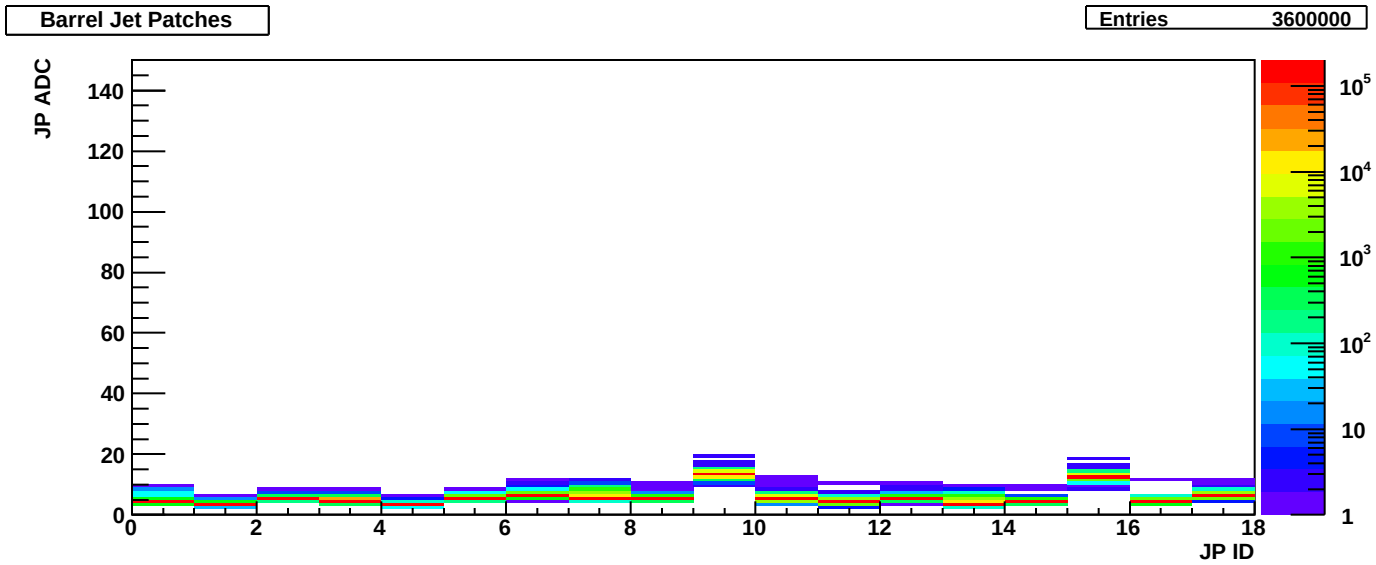

BunchId7Bit (JP2||AJP)
Entries 200000
10^3
0 20 40 60 80 100 120

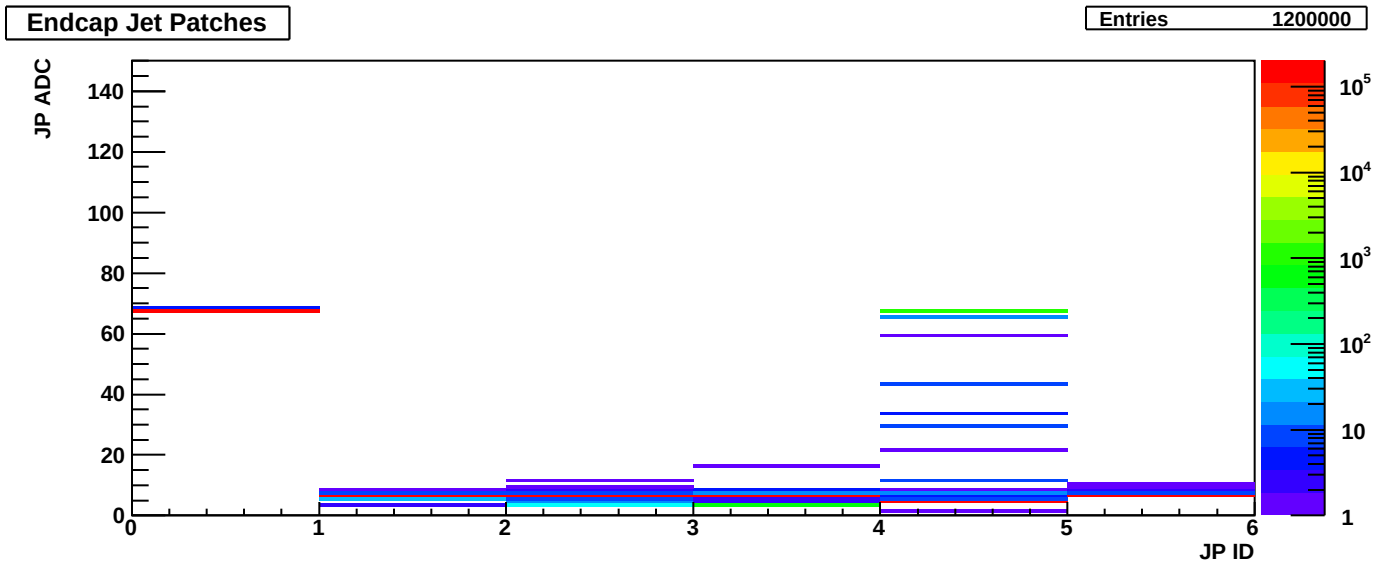

Barrel EMC L0 Input - High Tower
Entries 6e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

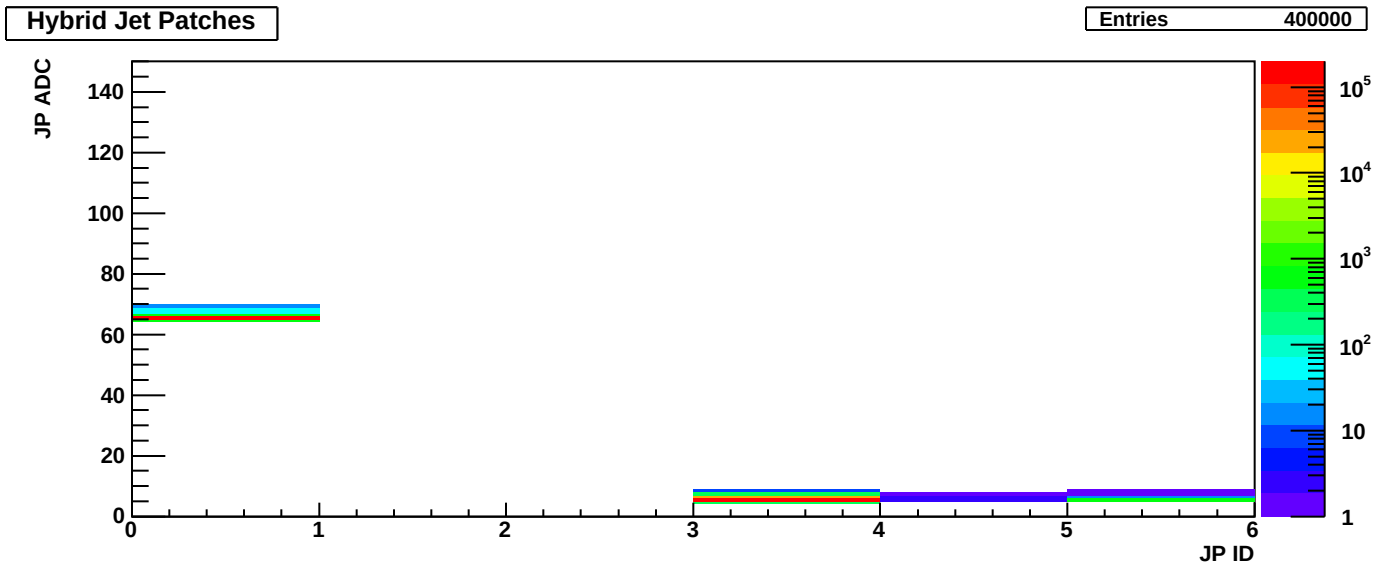

Barrel EMC L0 Input - Patch Sum
Entries 6e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

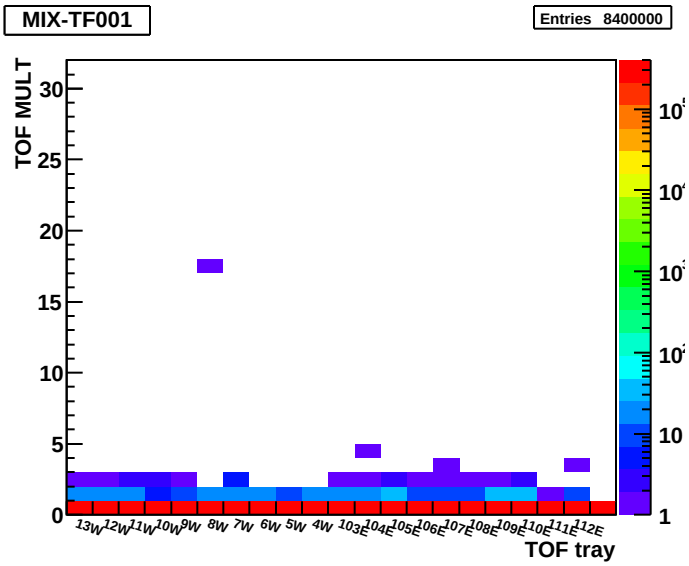

Endcap EMC L0 Input - High Tower
Entries 1.8e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

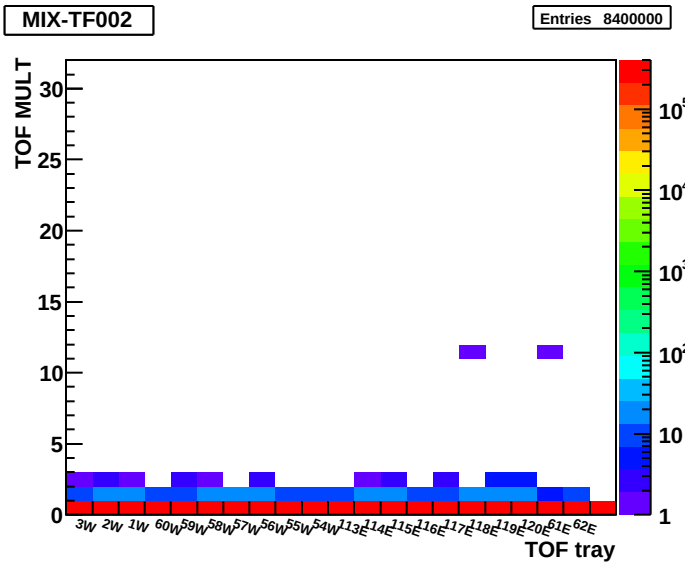

Endcap EMC L0 Input - Patch Sum
Entries 1.8e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

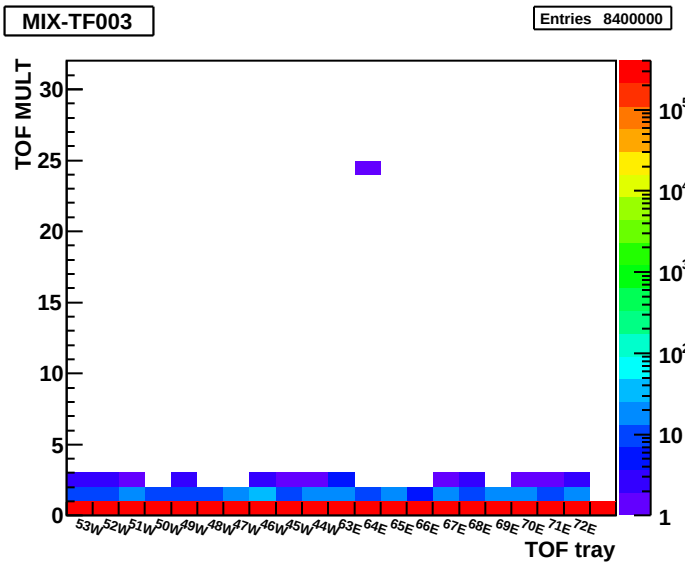

Barrel Jet Patches
Entries 3600000
JP ADC
JP ID

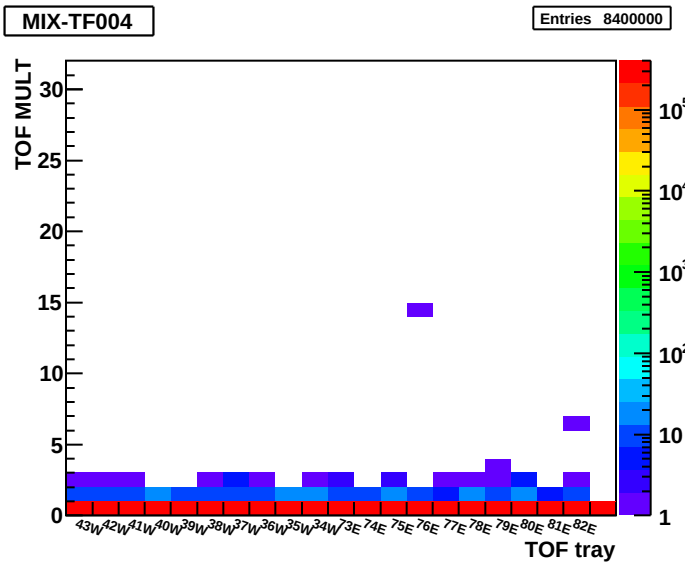

Endcap Jet Patches
Entries 1200000
JP ADC
JP ID

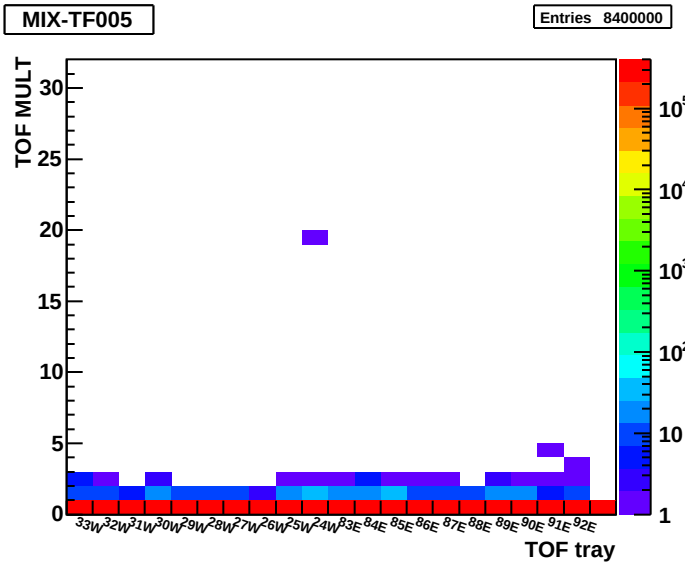

Hybrid Jet Patches
Entries 400000
JP ADC
JP ID

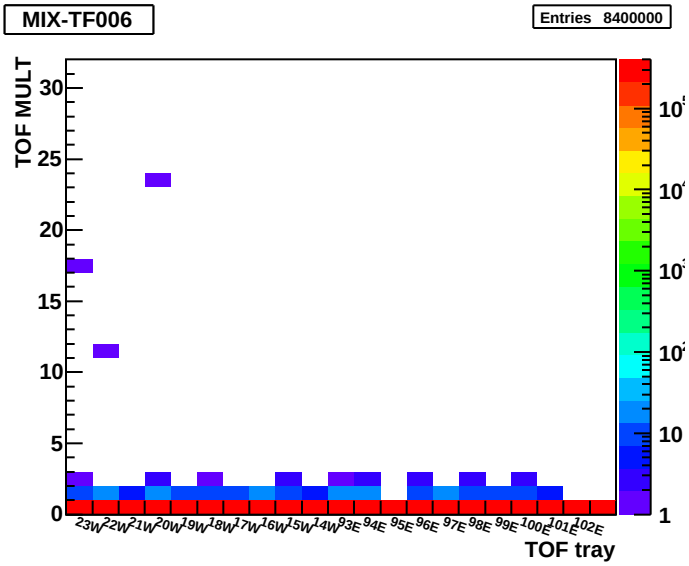

MIX-TF001
Entries 8400000
TOF MULT
TOF tray

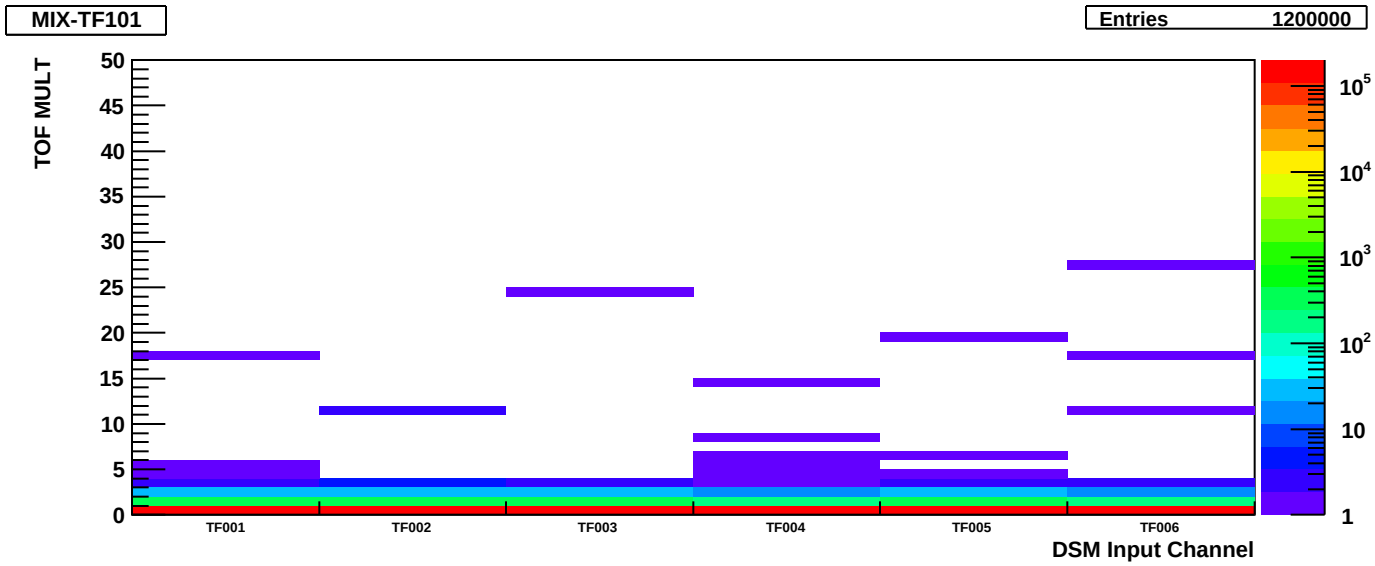

MIX-TF002
Entries 8400000
TOF MULT
TOF tray

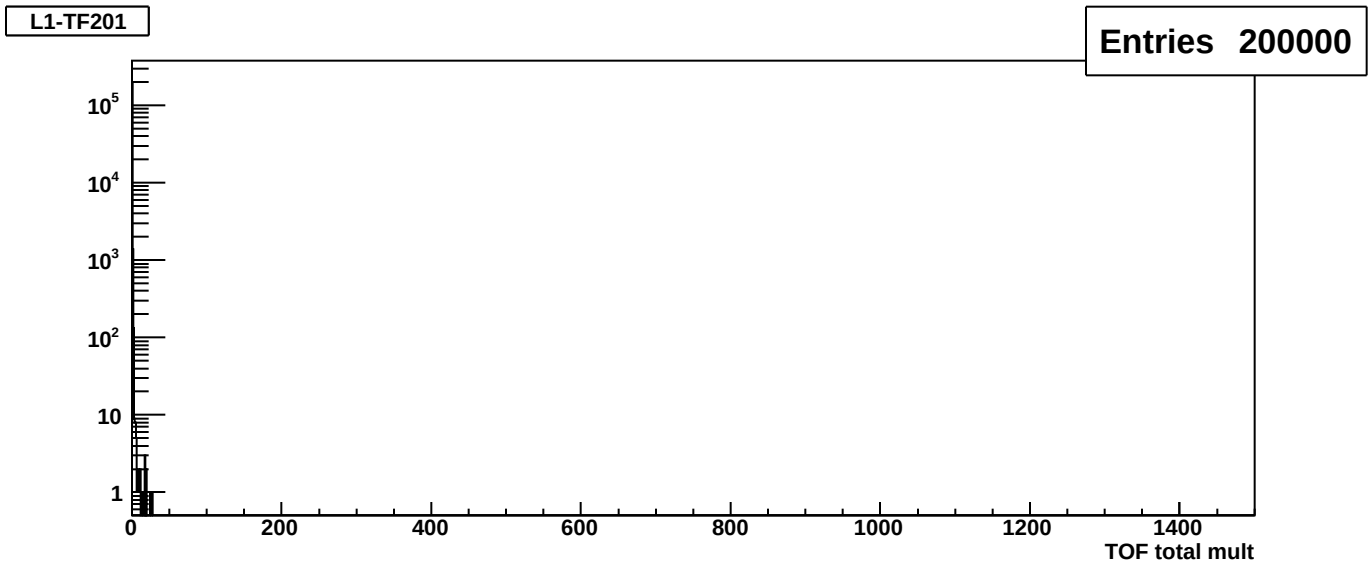

MIX-TF003
Entries 8400000
TOF MULT
TOF tray

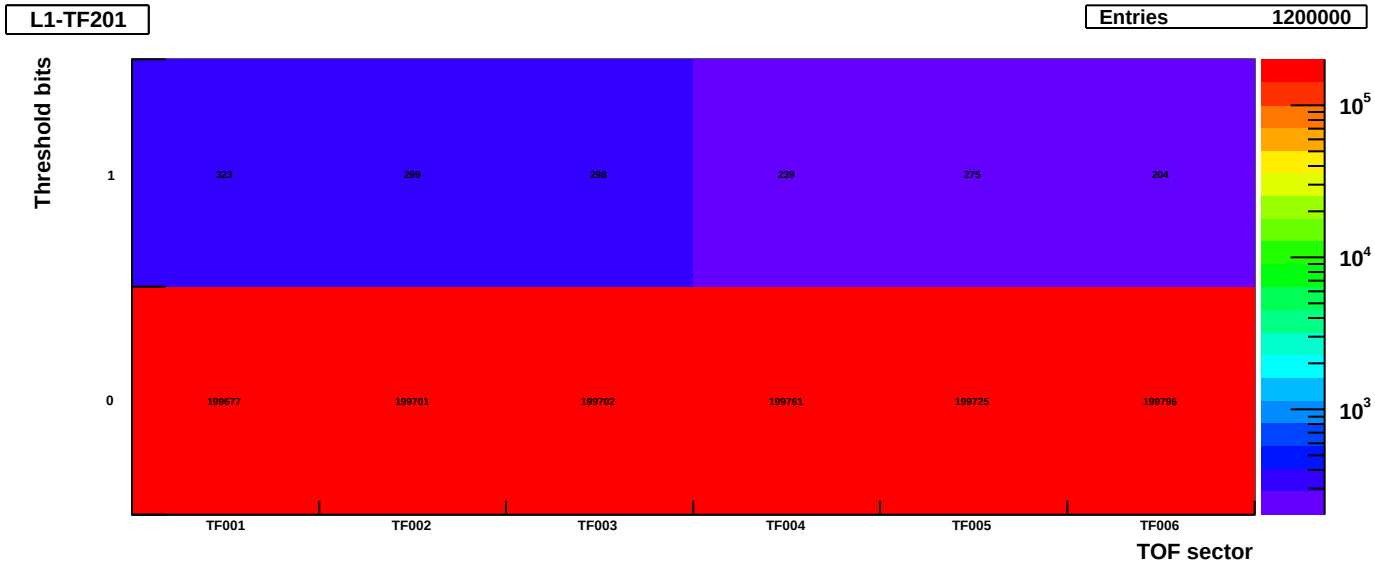

MIX-TF004
Entries 8400000
TOF MULT
TOF tray

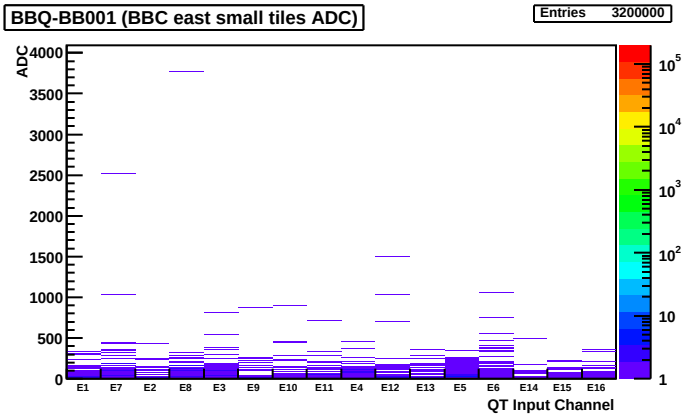

MIX-TF005
Entries 8400000
TOF MULT
TOF tray

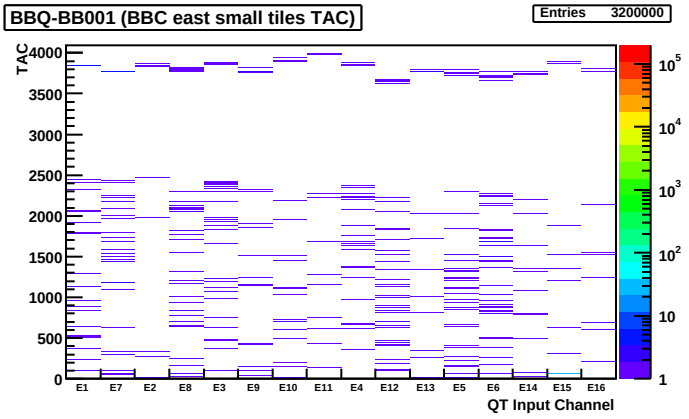

MIX-TF006
Entries 8400000
TOF MULT
TOF tray

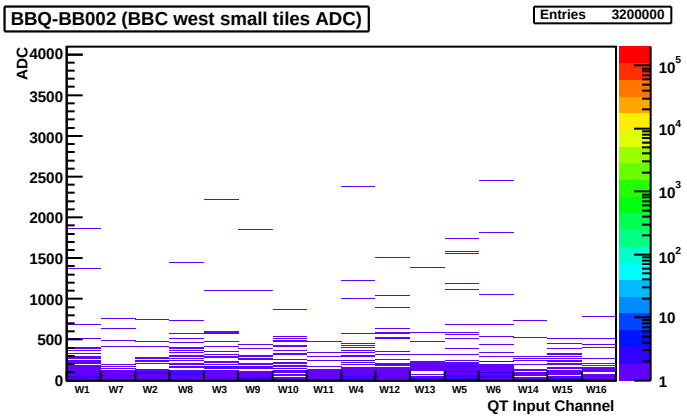

MIX-TF101
Entries 1200000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

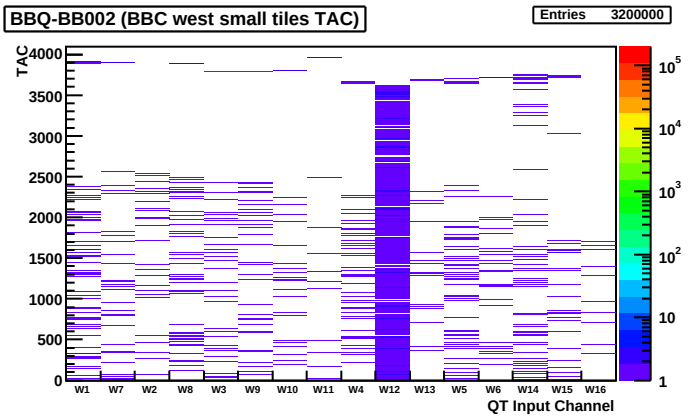

L1-TF201
Entries 200000
TOF total mult

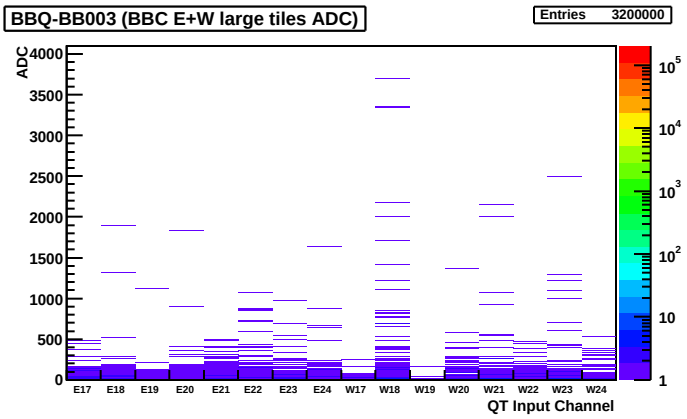

L1-TF201
Entries 1200000
Threshold bits
323
299
298
239
275
204
199677
199701
199702
199761
199725
199796
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

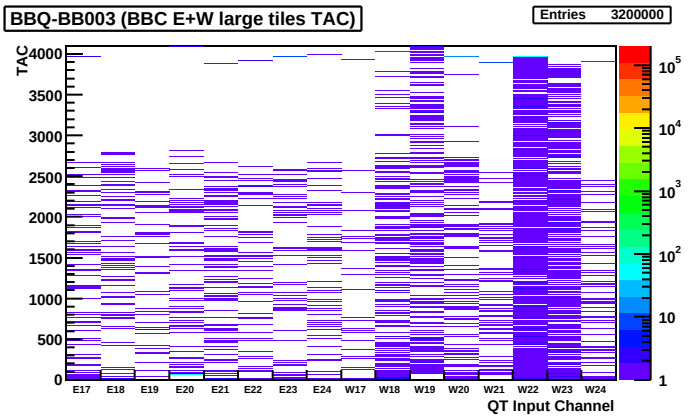

BBQ-BB001 (BBC east small tiles ADC)
Entries 3200000
ADC
QT Input Channel

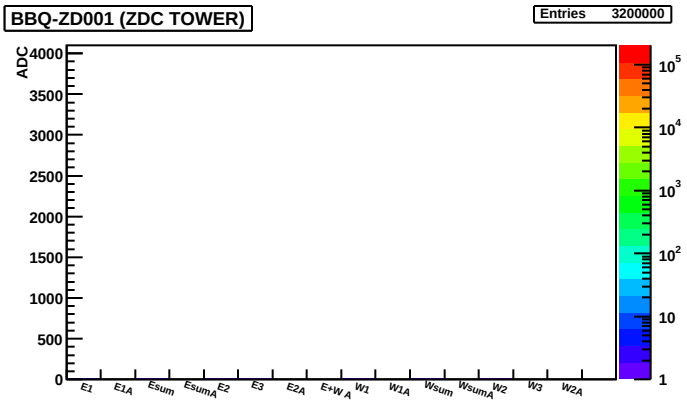

BBQ-BB001 (BBC east small tiles TAC)
Entries 3200000
TAC
QT Input Channel

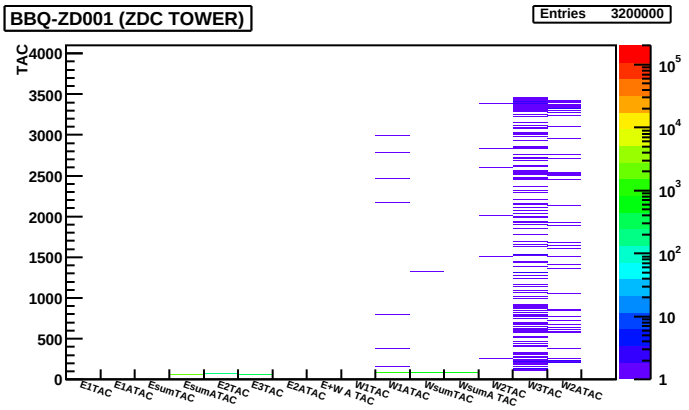

BBQ-BB002 (BBC west small tiles ADC)
Entries 3200000
ADC
QT Input Channel

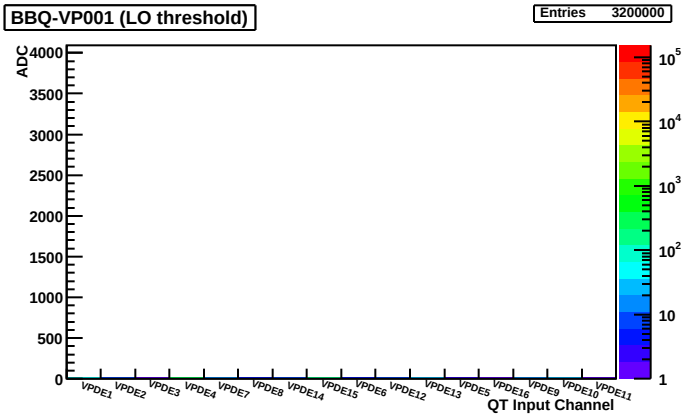

BBQ-BB002 (BBC west small tiles TAC)
Entries 3200000
TAC
QT Input Channel

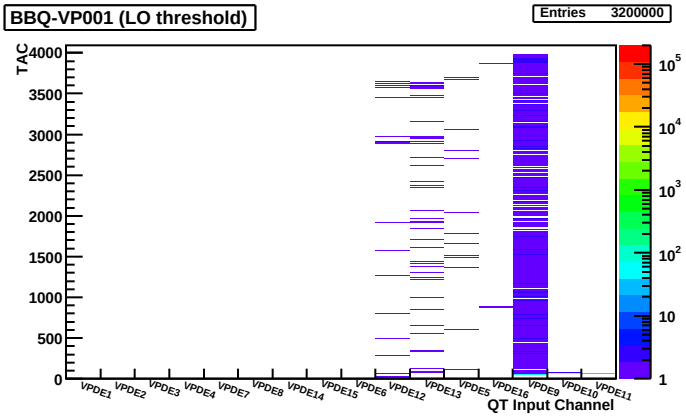

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3200000
ADC
QT Input Channel

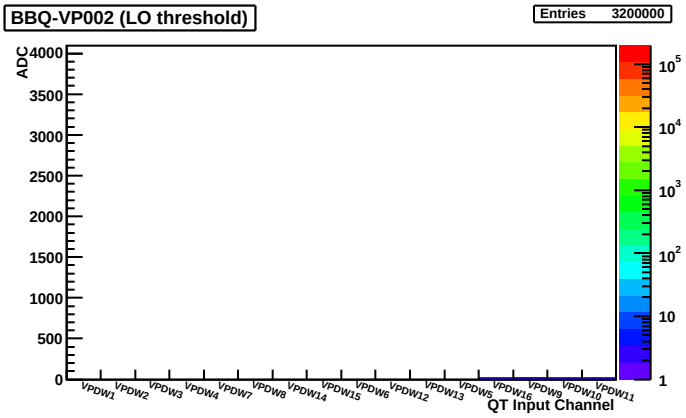

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3200000
TAC
QT Input Channel

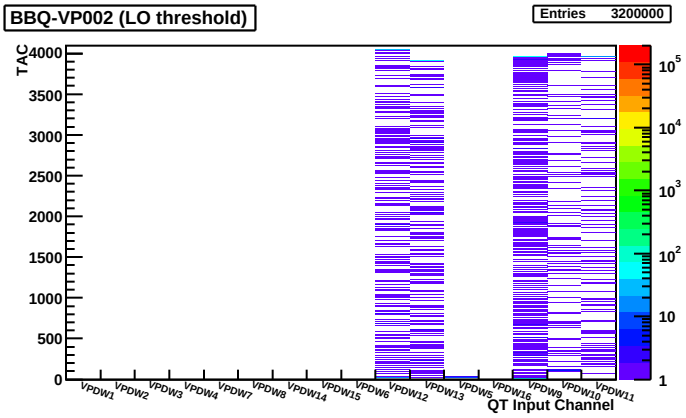

BBQ-ZD001 (ZDC TOWER)
Entries 3200000
ADC

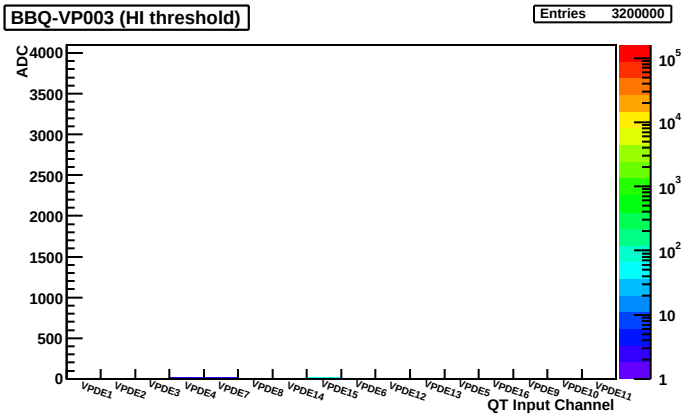

BBQ-ZD001 (ZDC TOWER)
Entries 3200000
TAC

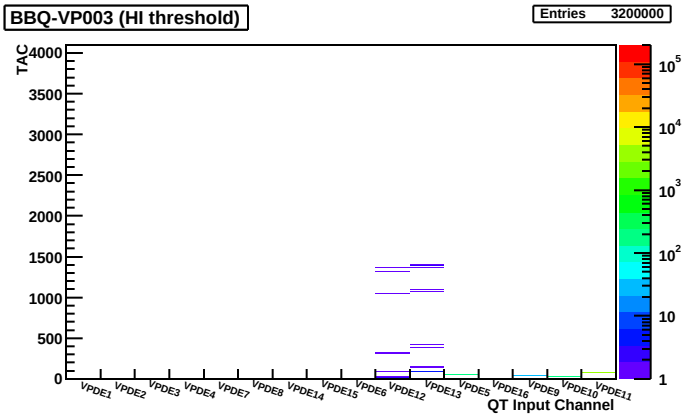

BBQ-VP001 (LO threshold)
Entries 3200000
ADC
QT Input Channel

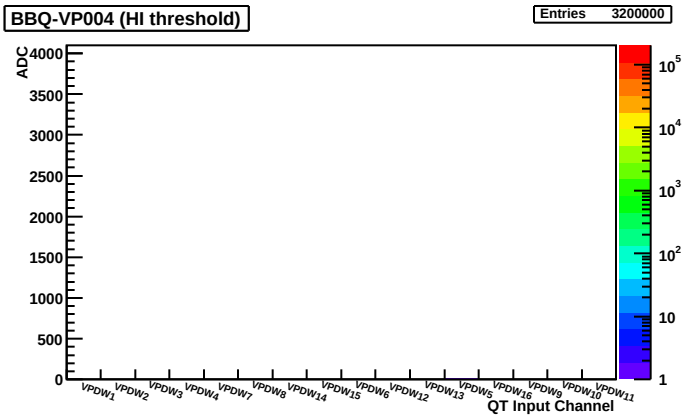

BBQ-VP001 (LO threshold)
Entries 3200000
TAC
QT Input Channel

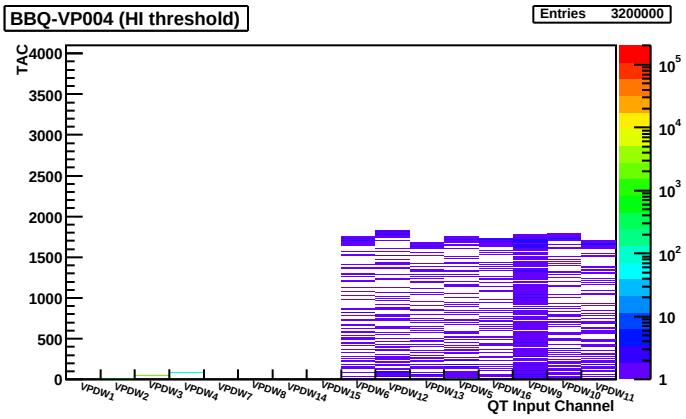

BBQ-VP002 (LO threshold)
Entries 3200000
ADC
QT Input Channel

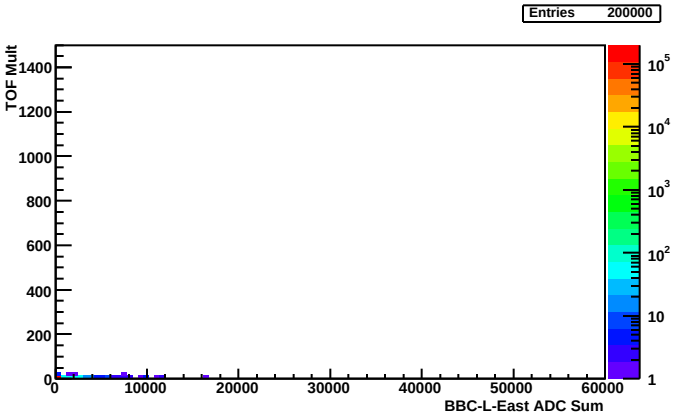

BBQ-VP002 (LO threshold)
Entries 3200000
TAC
QT Input Channel

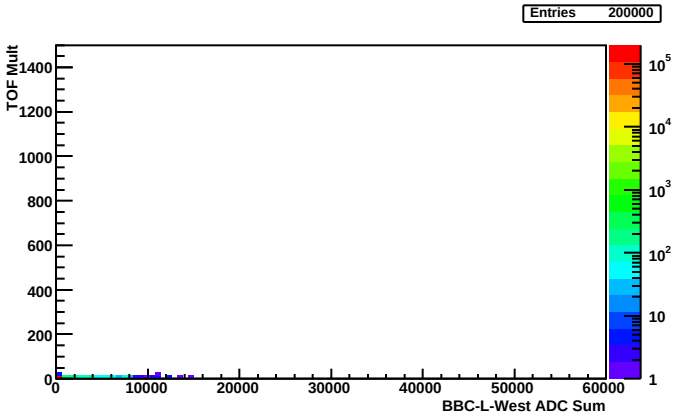

BBQ-VP003 (HI threshold)
Entries 3200000
ADC
QT Input Channel

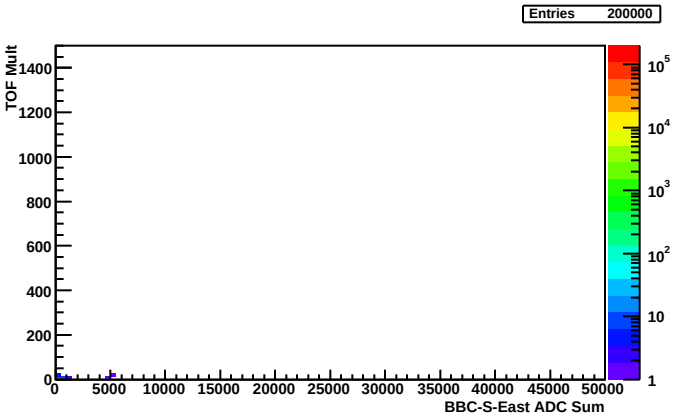

BBQ-VP003 (HI threshold)
Entries 3200000
TAC
QT Input Channel

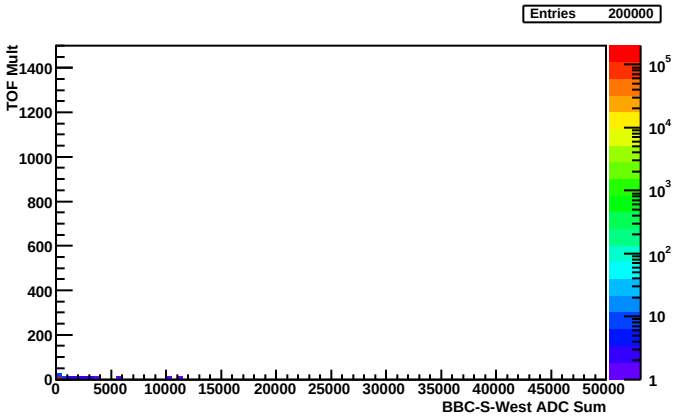

BBQ-VP004 (HI threshold)
Entries 3200000
ADC
QT Input Channel

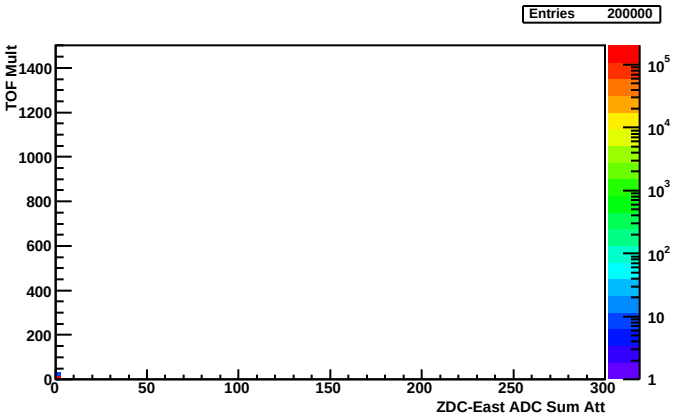

BBQ-VP004 (HI threshold)
Entries 3200000
TAC
QT Input Channel

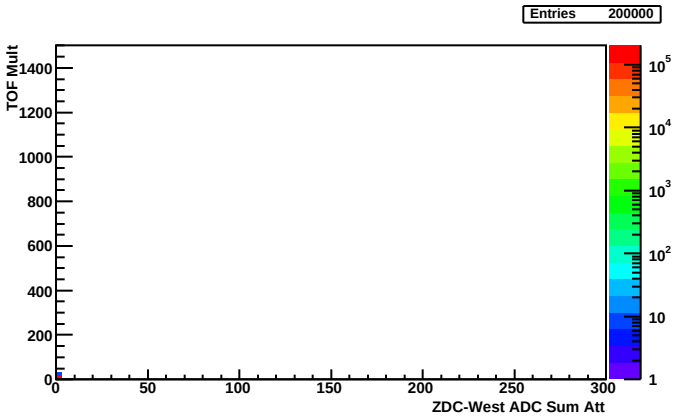

Entries 200000
TOF Mult
BBC-L-East ADC Sum

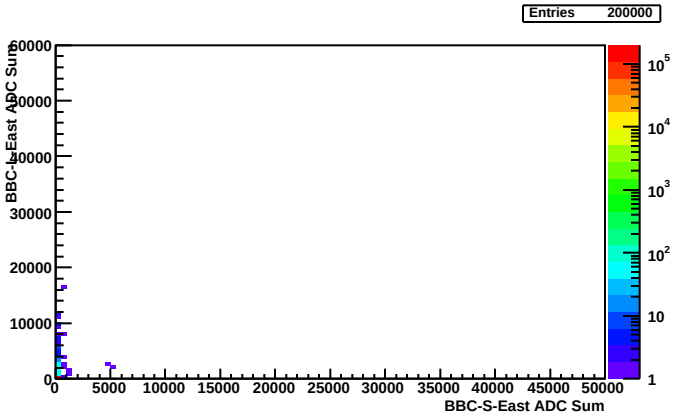

Entries 200000
TOF Mult
BBC-L-West ADC Sum

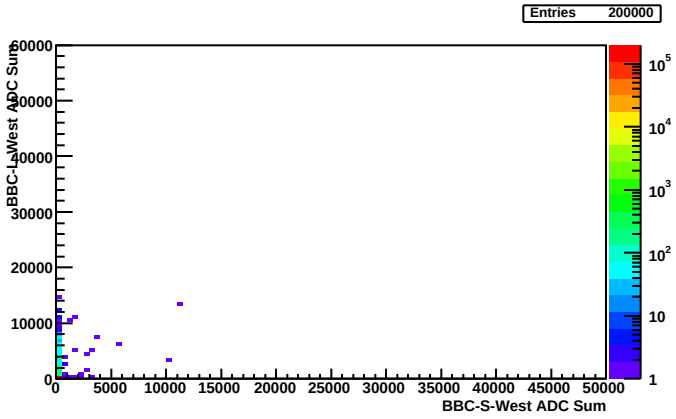

Entries 200000
TOF Mult
BBC-S-East ADC Sum

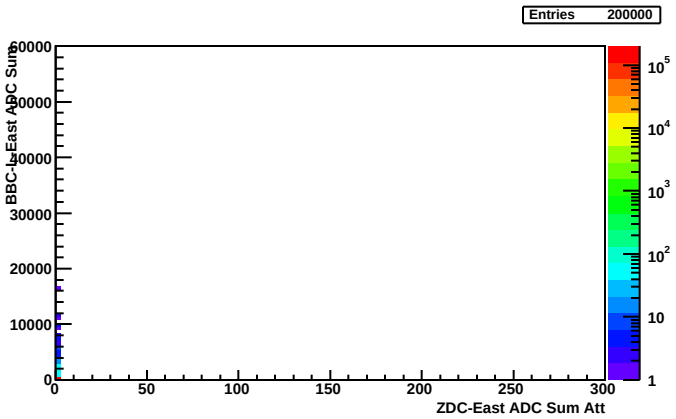

Entries 200000
TOF Mult
BBC-S-West ADC Sum

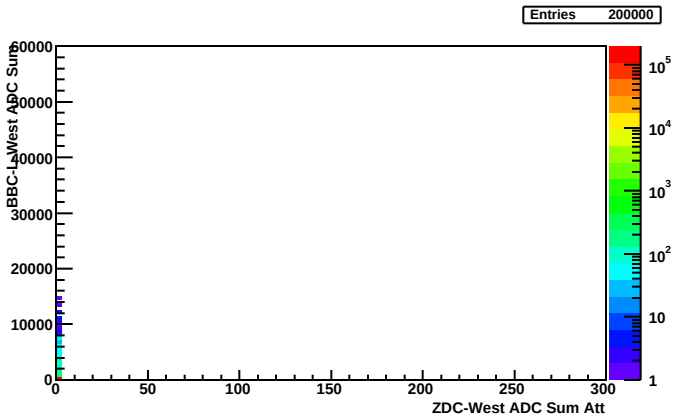

Entries 200000
TOF Mult
ZDC-East ADC Sum Att

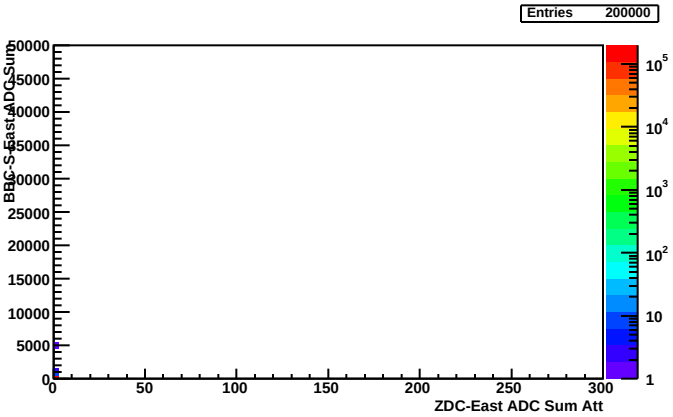

Entries 200000
TOF Mult
ZDC-West ADC Sum Att

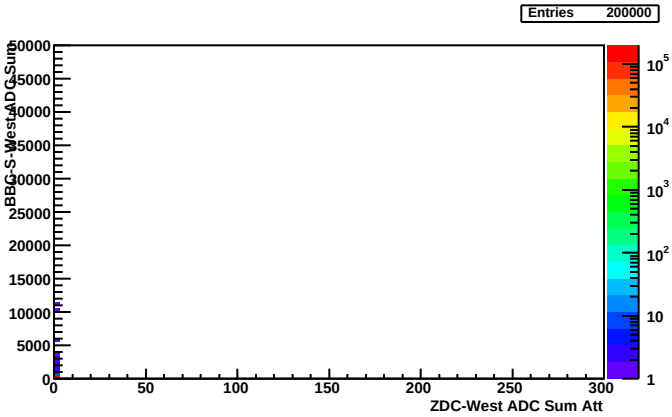

Entries 200000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

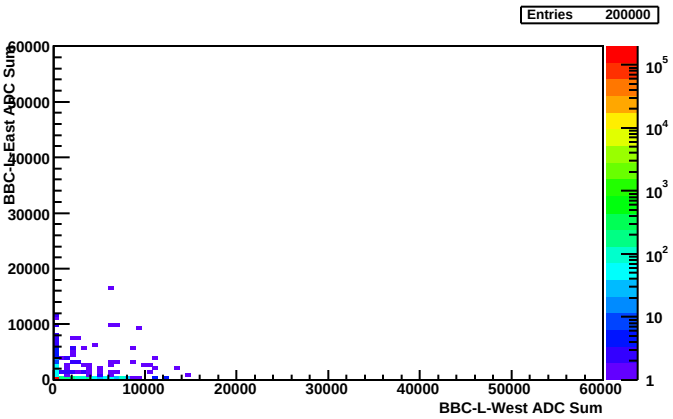

Entries 200000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

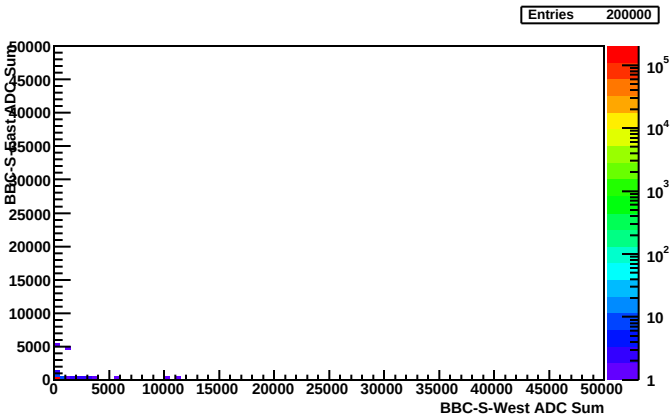

Entries 200000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

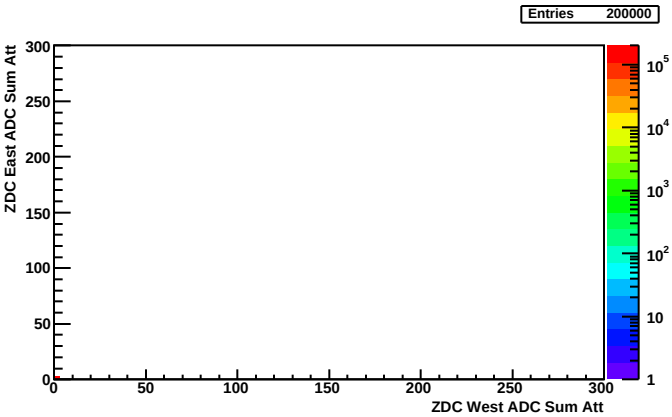

Entries 200000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

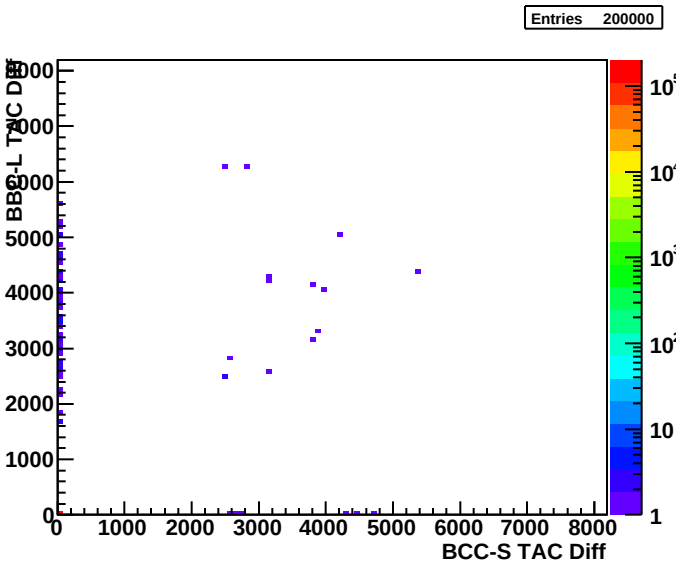

Entries 200000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

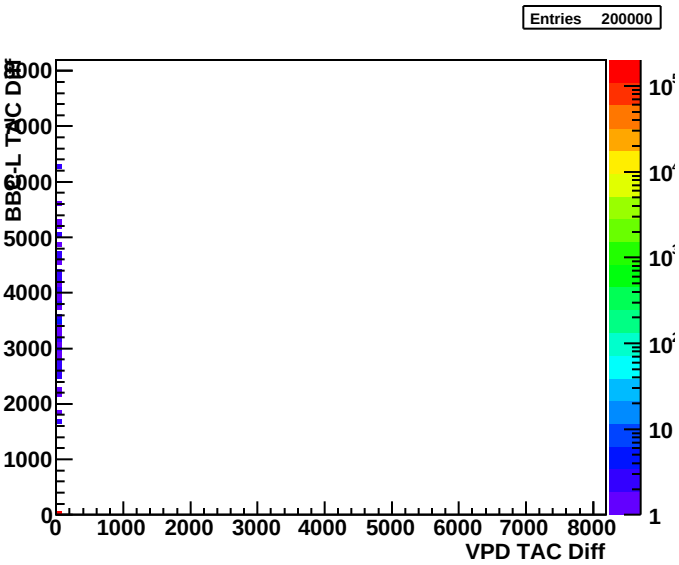

Entries 200000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

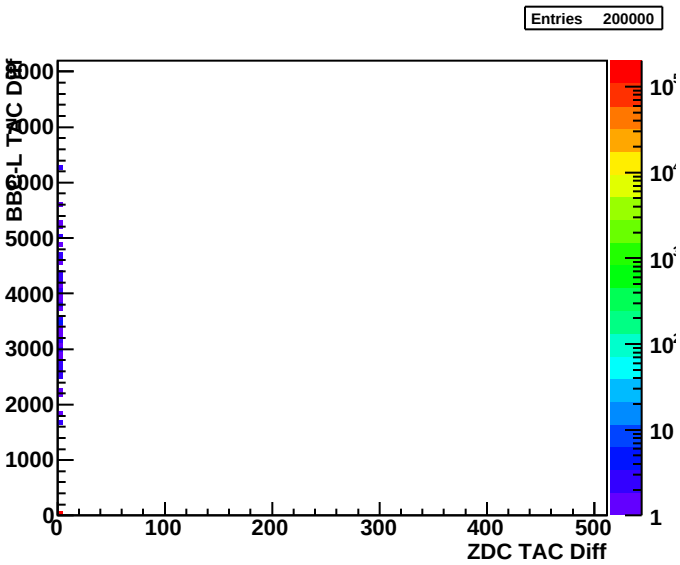

Entries 200000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

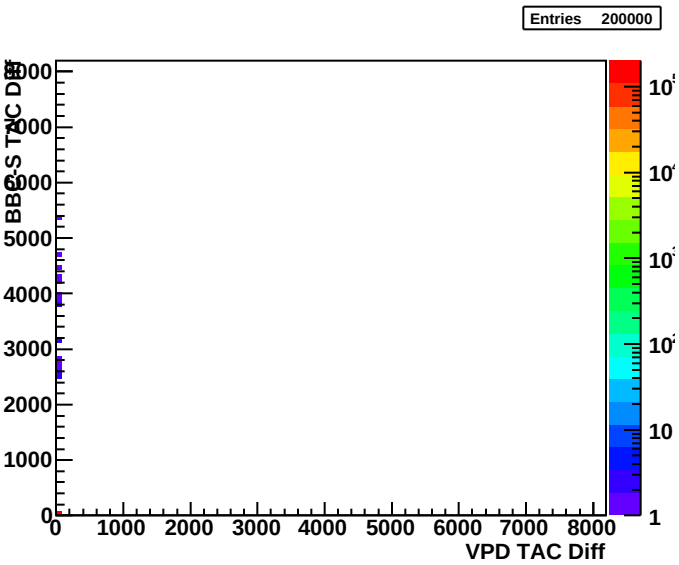

Entries 200000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

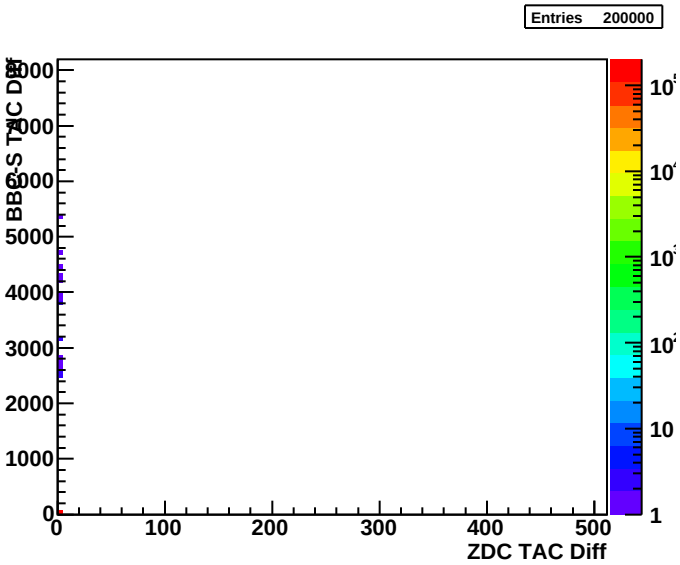

Entries 200000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

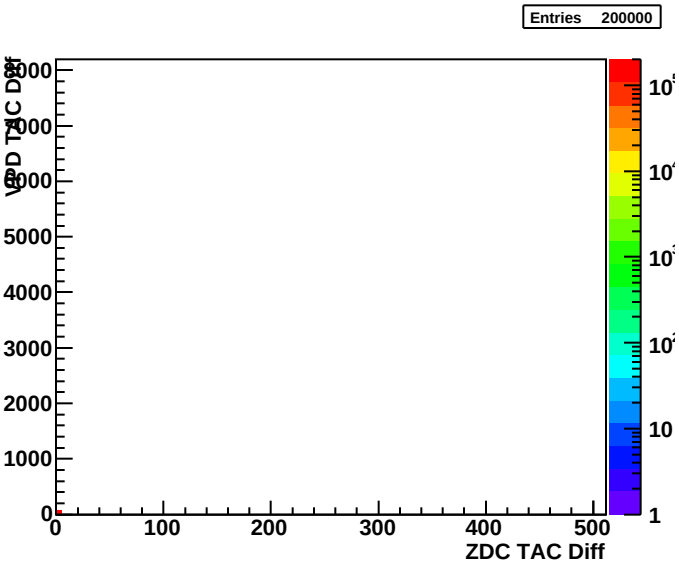

Entries 200000
BBC-L TAC Diff
BCC-S TAC Diff

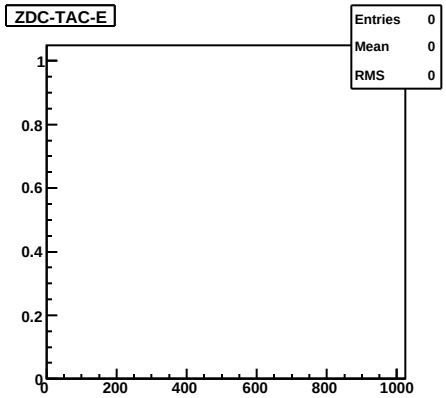

Entries 200000
BBC-L TAC Diff
VPD TAC Diff

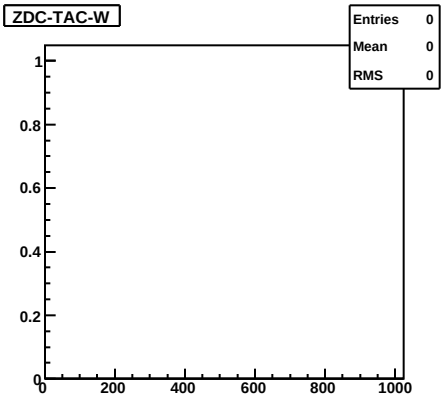

Entries 200000
BBC-L TAC Diff
ZDC TAC Diff

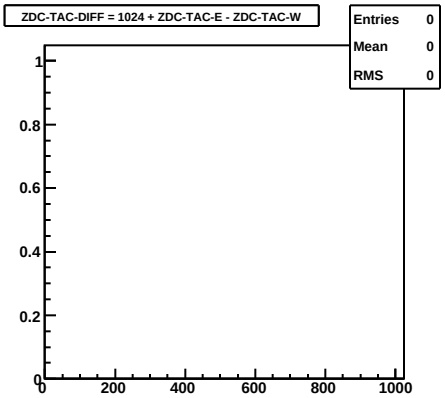

Entries 200000
BBC-S TAC Diff
VPD TAC Diff

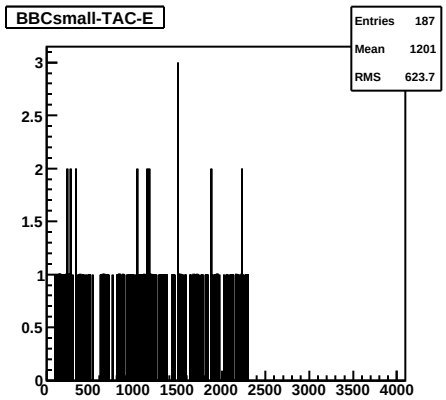

Entries 200000
BBC-S TAC Diff
ZDC TAC Diff

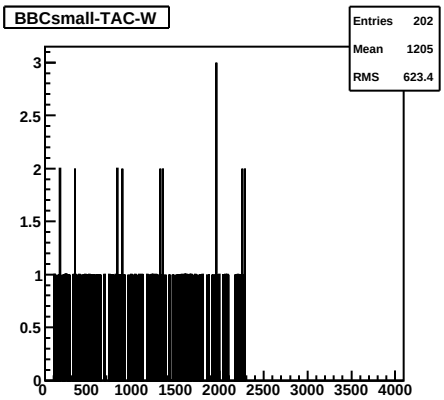

Entries 200000
VPD TAC Diff
ZDC TAC Diff

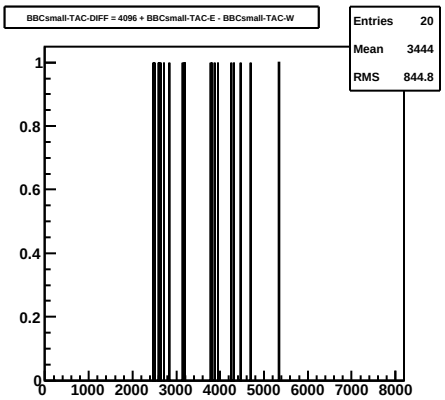

ZDC-TAC-E
Entries 0
Mean 0
RMS 0

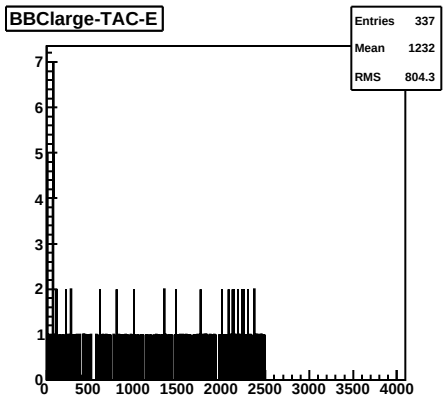

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

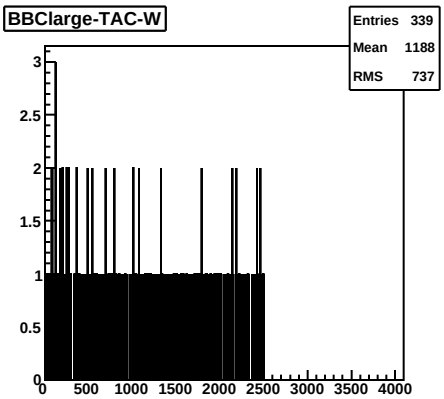

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

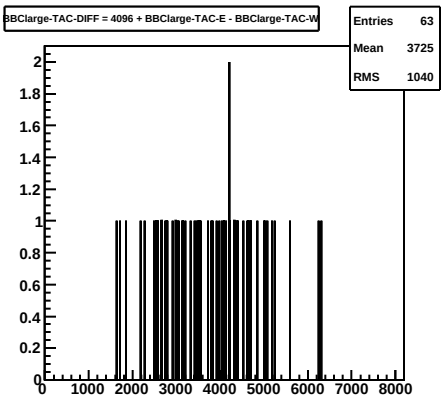

BBCsmall-TAC-E
Entries 187
Mean 1201
RMS 623.7

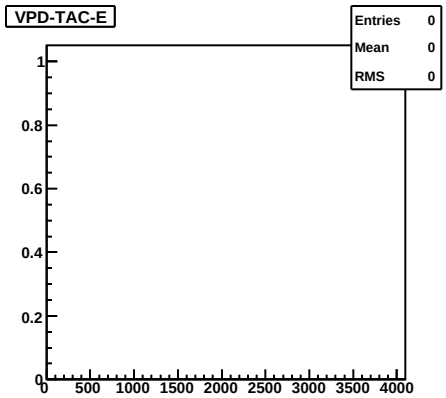

BBCsmall-TAC-W
Entries 202
Mean 1205
RMS 623.4

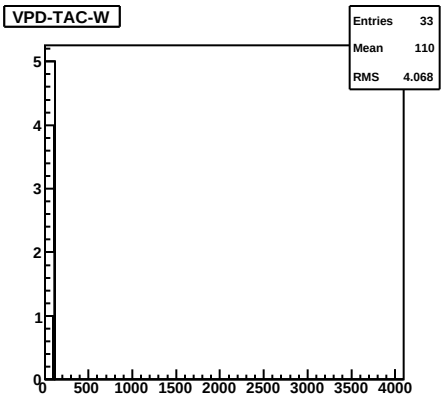

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 20
Mean 3444
RMS 844.8

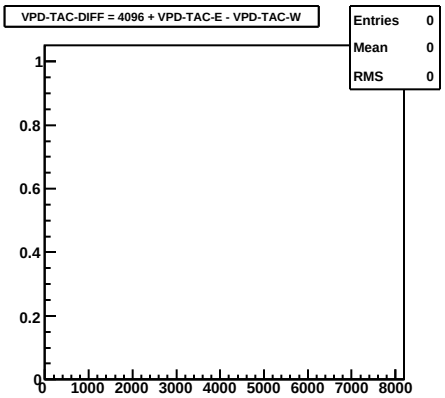

BBClarge-TAC-E
Entries 337
Mean 1232
RMS 804.3

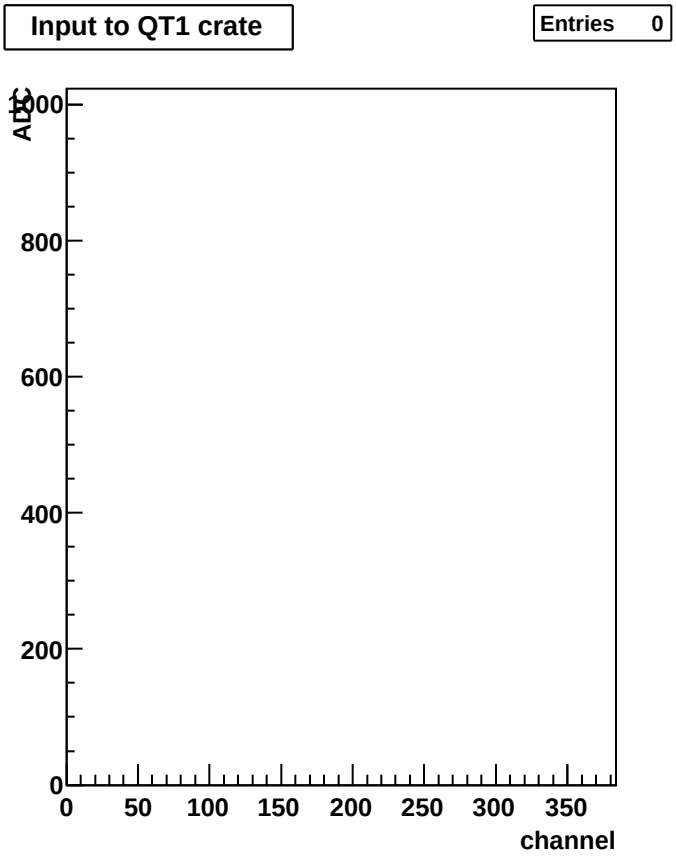

BBClarge-TAC-W
Entries 339
Mean 1188
RMS 737

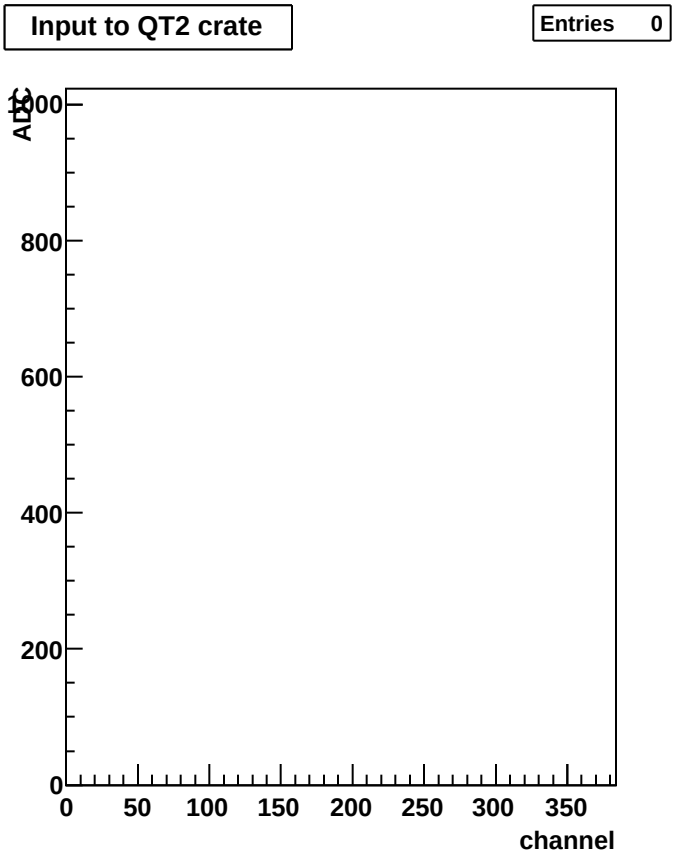

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 63
Mean 3725
RMS 1040

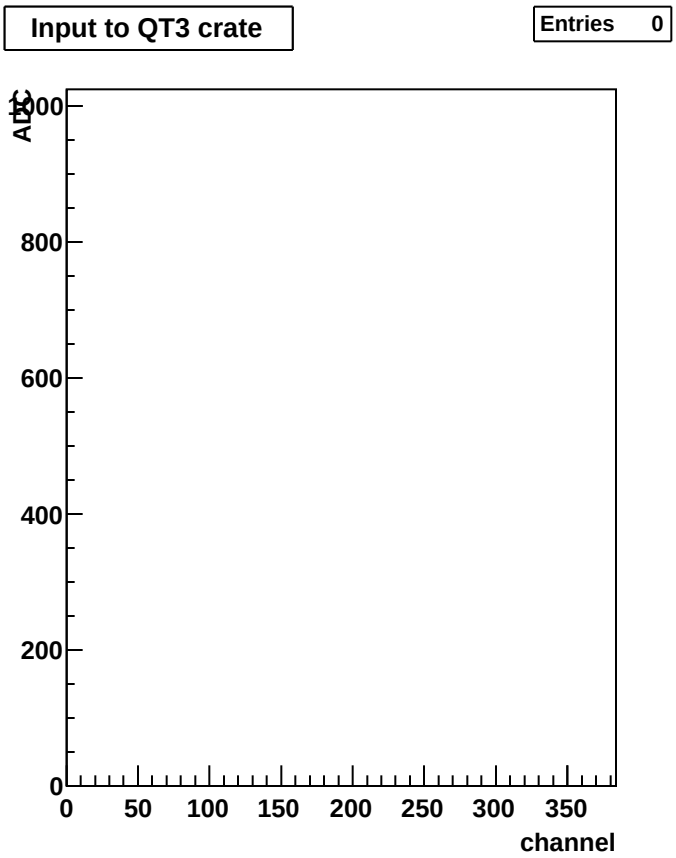

VPD-TAC-E
Entries 0
Mean 0
RMS 0

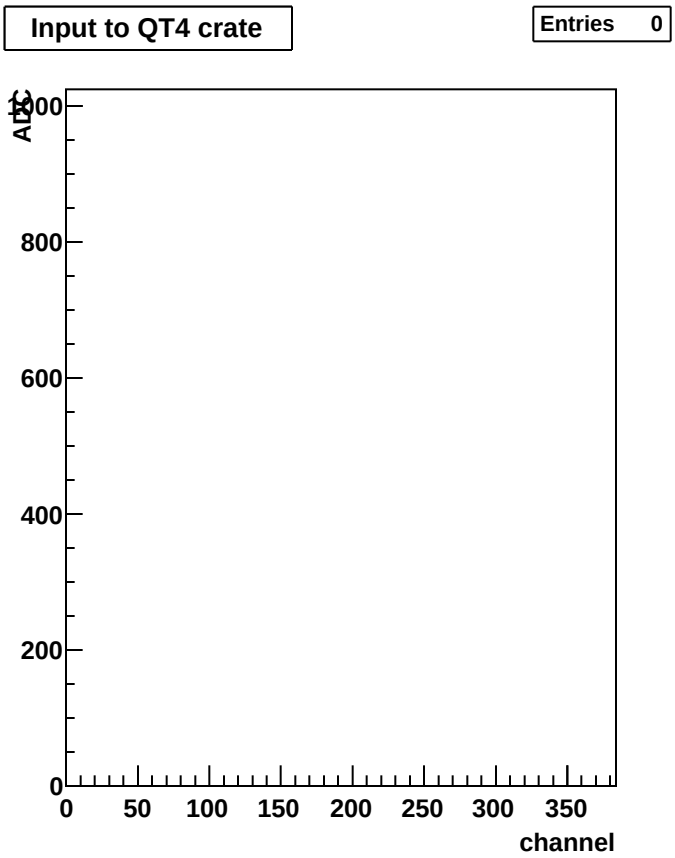

VPD-TAC-W
Entries 33
Mean 110
RMS 4.068

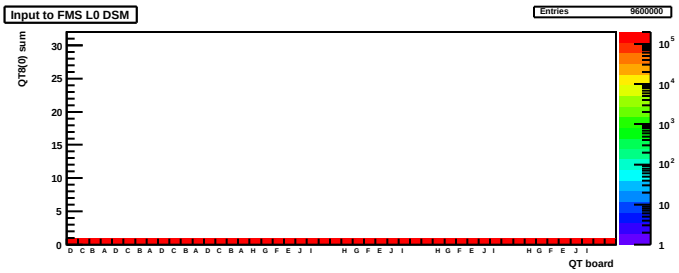

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

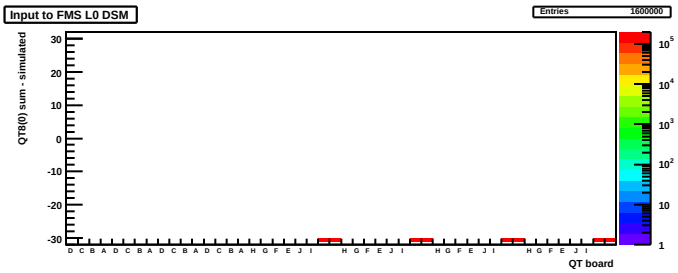

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

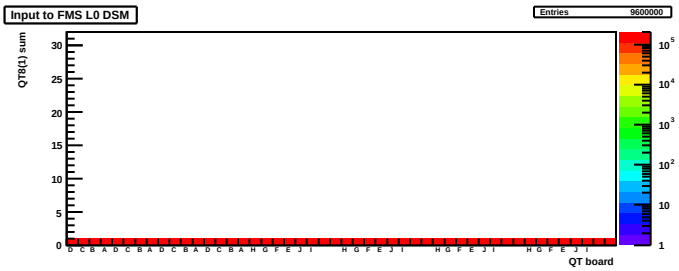

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

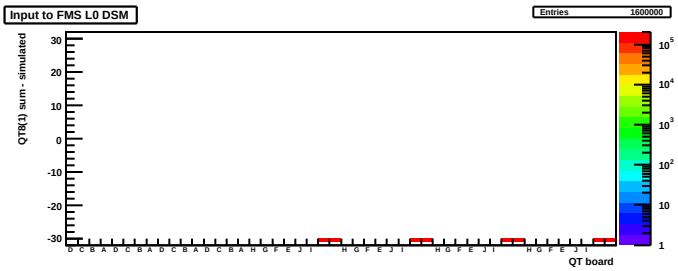

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

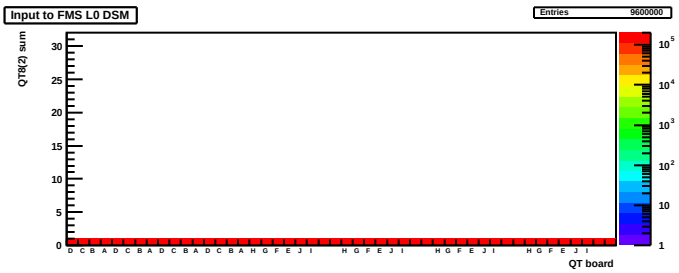

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

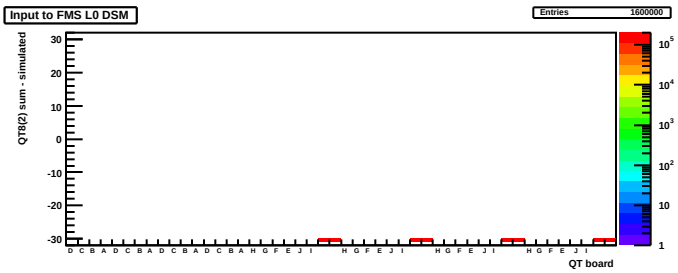

Input to FMS L0 DSM
Entries 9600000
QT8(0) sum
QT board

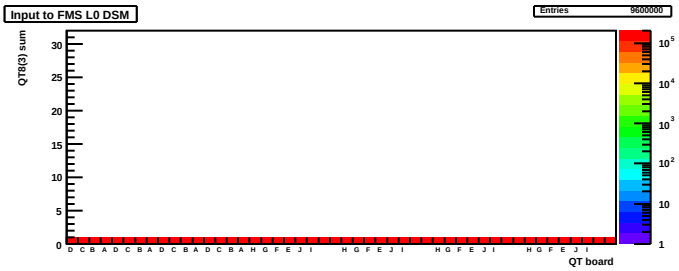

Input to FMS L0 DSM
Entries 1600000
QT8(0) sum - simulated
QT board

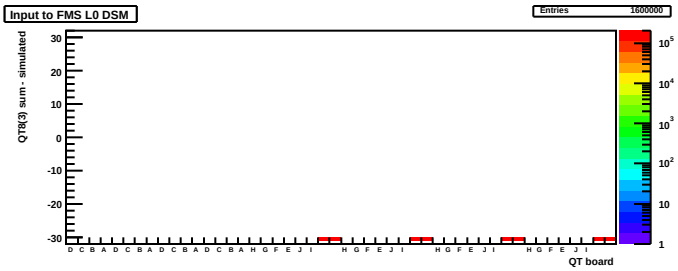

Input to FMS L0 DSM
Entries 9600000
QT8(1) sum
QT board

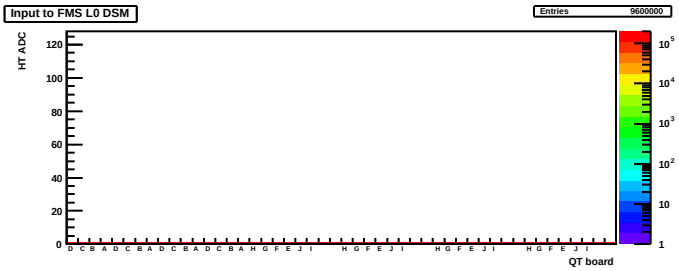

Input to FMS L0 DSM
Entries 1600000
QT8(1) sum - simulated
QT board

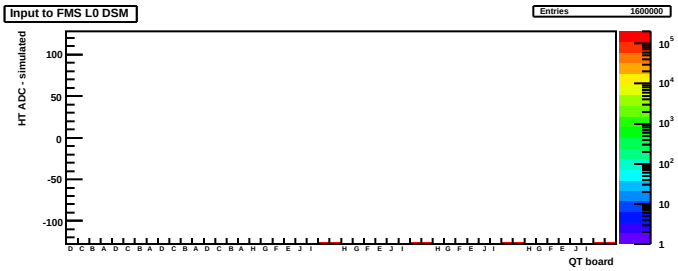

Input to FMS L0 DSM
Entries 9600000
QT8(2) sum
QT board

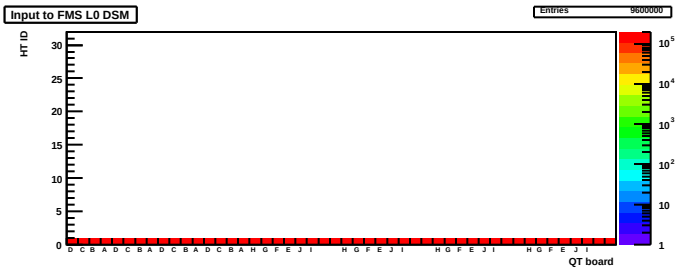

Input to FMS L0 DSM
Entries 1600000
QT8(2) sum - simulated
QT board

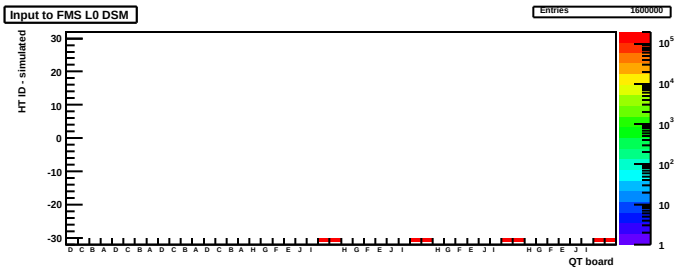

Input to FMS L0 DSM
Entries 9600000
QT8(3) sum
QT board

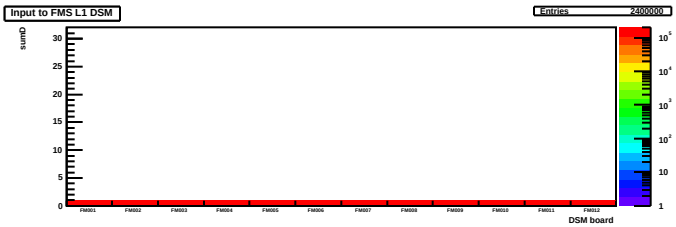

Input to FMS L0 DSM
Entries 1600000
QT8(3) sum - simulated
QT board

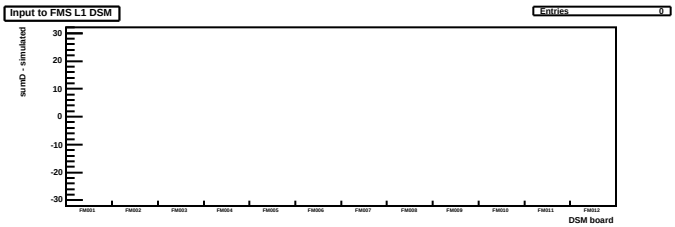

Input to FMS L0 DSM
Entries 9600000
HT ADC
QT board

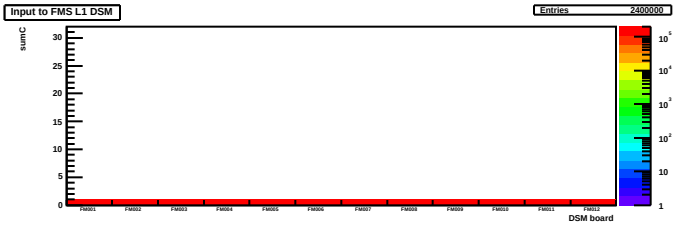

Input to FMS L0 DSM
Entries 1600000
HT ADC - simulated
QT board

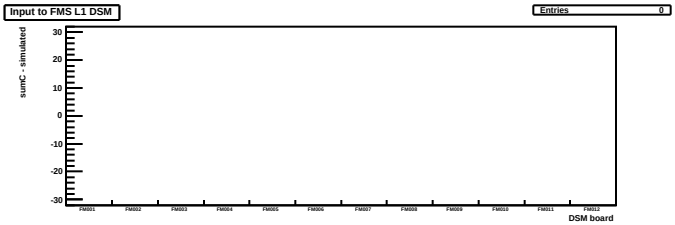

Input to FMS L0 DSM
Entries 9600000
HT ID
QT board

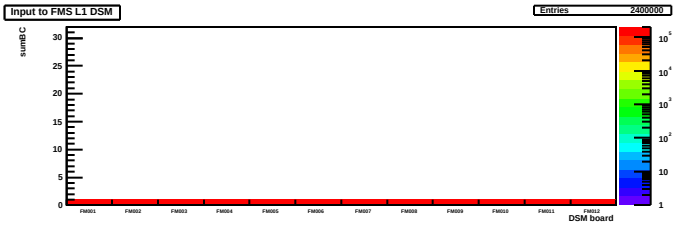

Input to FMS L0 DSM
Entries 1600000
HT ID - simulated
QT board

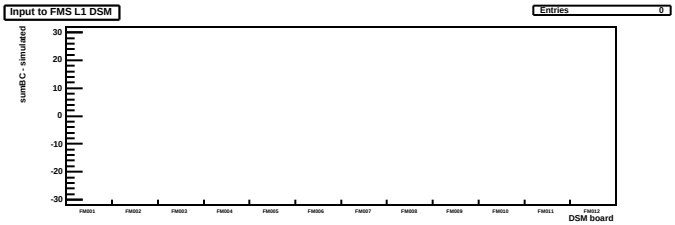

Input to FMS L1 DSM
Entries 2400000
sumD
DSM board

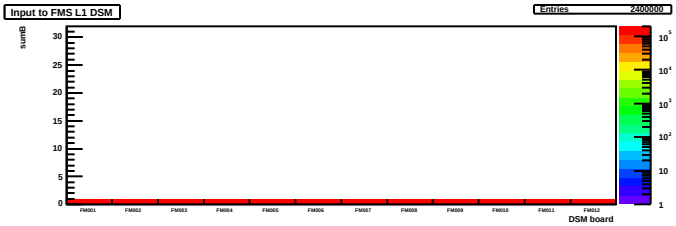

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

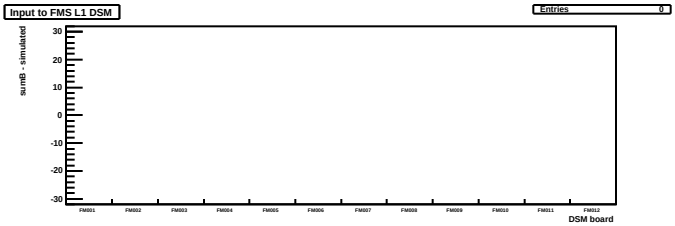

Input to FMS L1 DSM
Entries 2400000
sumC
DSM board

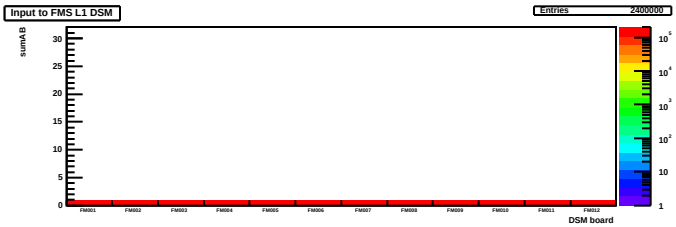

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

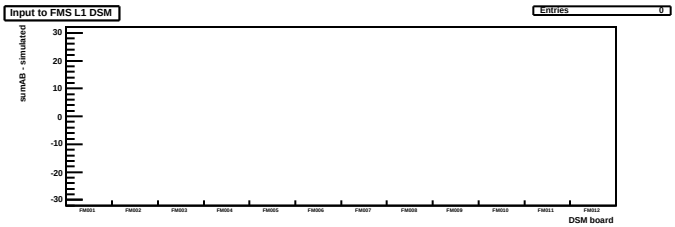

Input to FMS L1 DSM
Entries 2400000
sumBC
DSM board

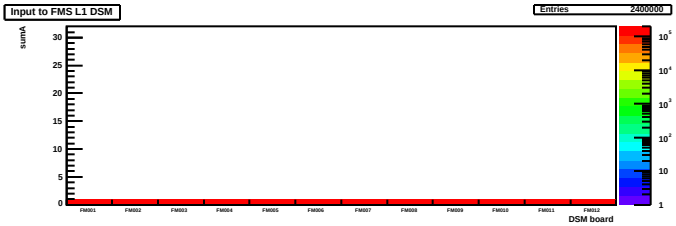

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

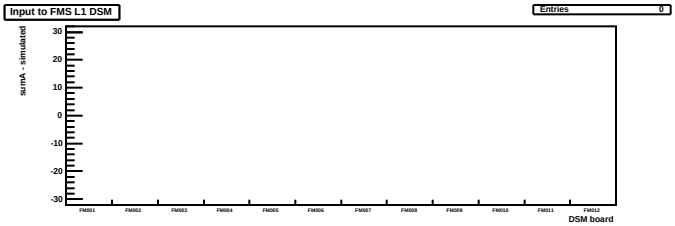

Input to FMS L1 DSM
Entries 2400000
sumB
DSM board

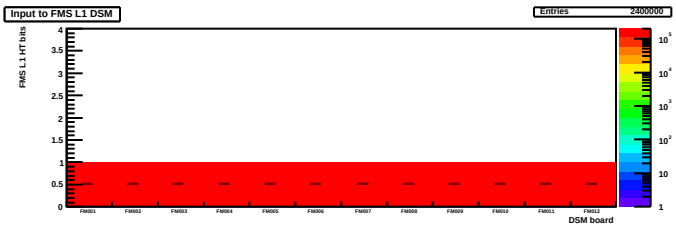

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

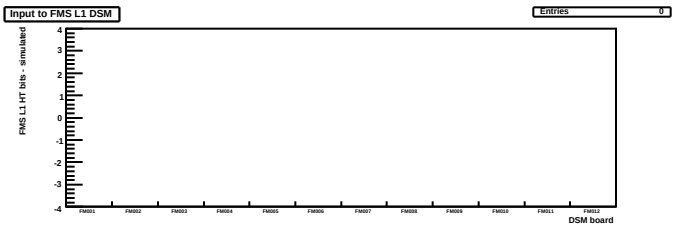

Input to FMS L1 DSM
Entries 2400000
sumAB
DSM board

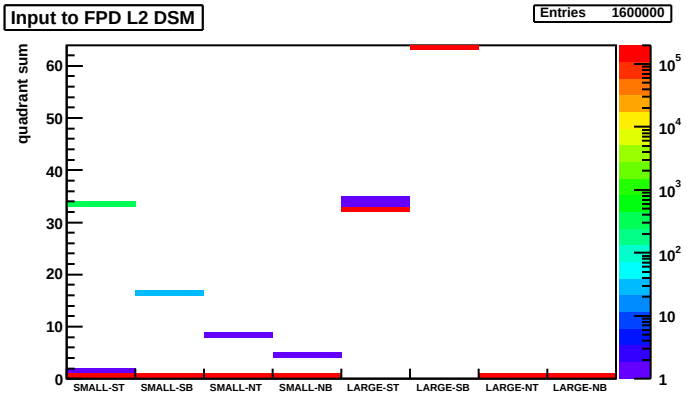

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

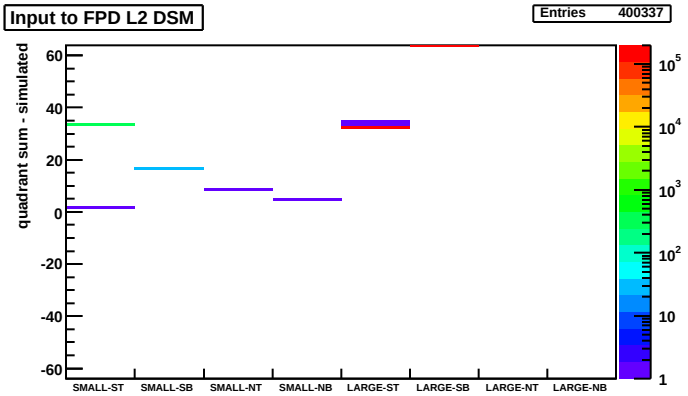

Input to FMS L1 DSM
Entries 2400000
sumA
DSM board

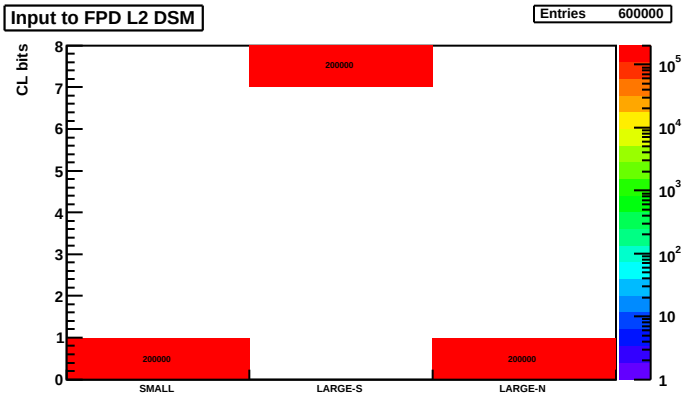

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

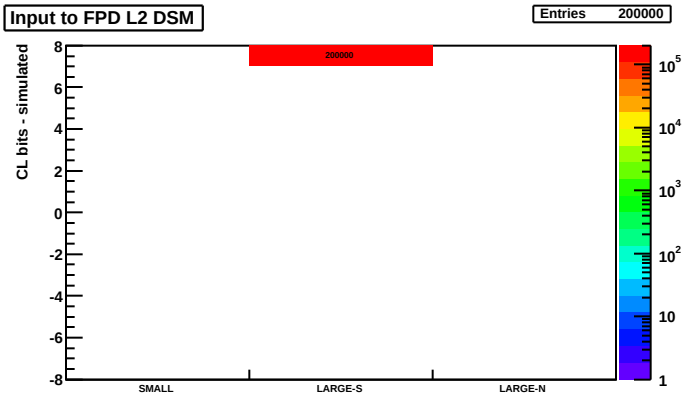

Input to FMS L1 DSM
Entries 2400000
FMS L1 HT bits
DSM board

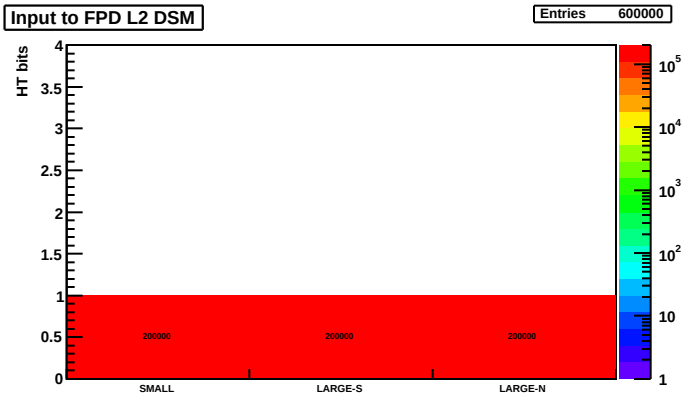

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

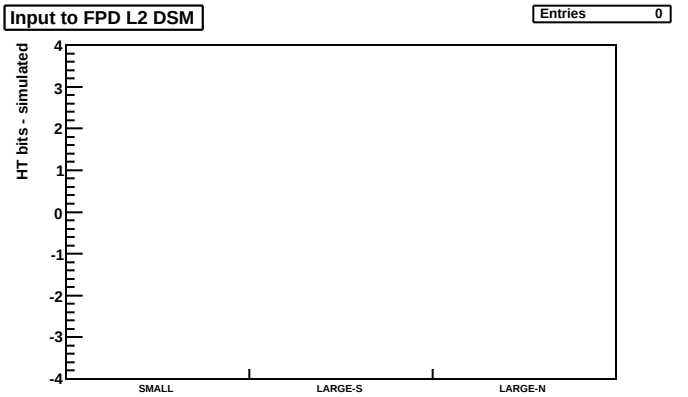

Input to FPD L2 DSM
Entries 1600000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

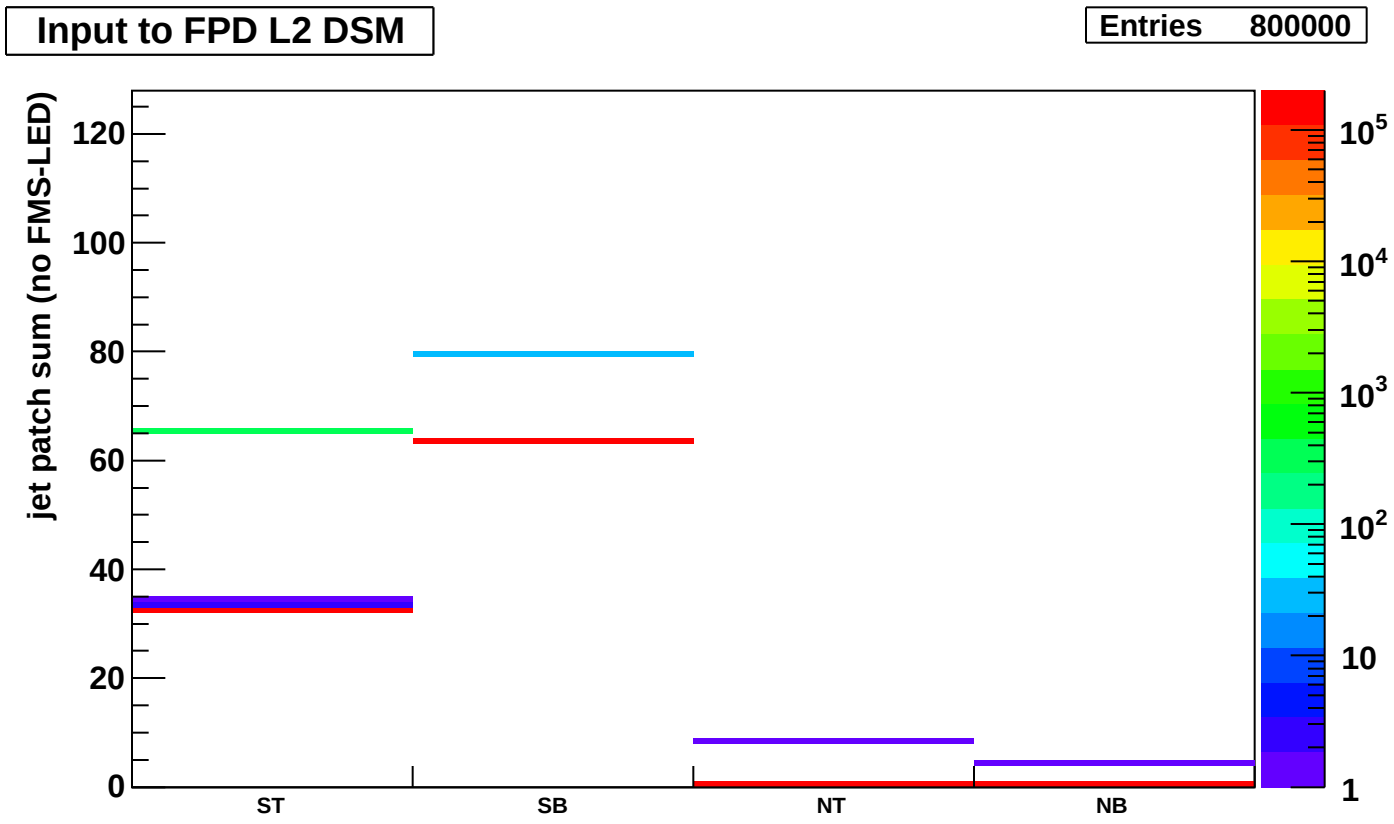

Input to FPD L2 DSM
Entries 400337
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

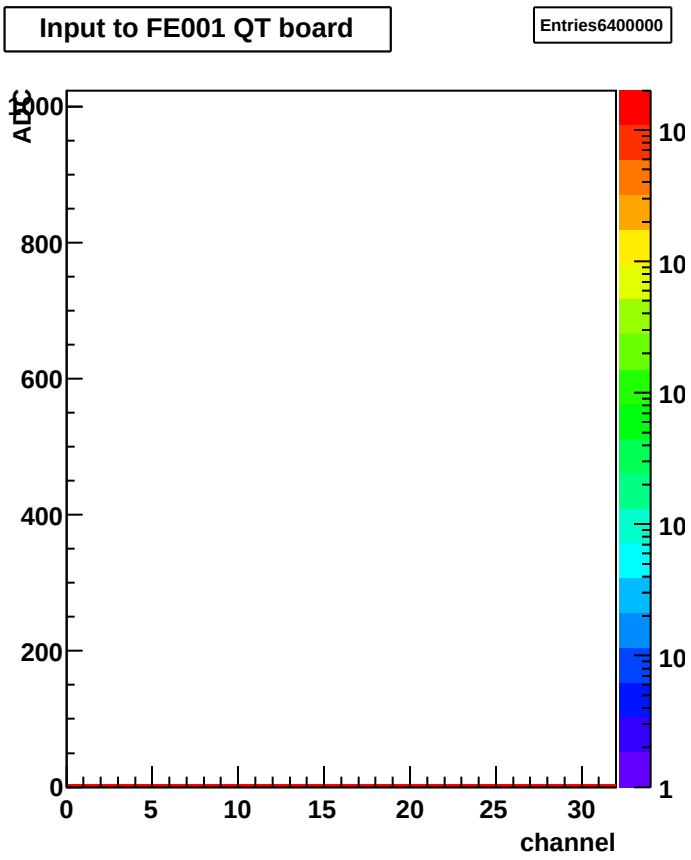

Input to FPD L2 DSM
Entries 600000
CL bits
200000
200000
200000
SMALL
LARGE-S
LARGE-N

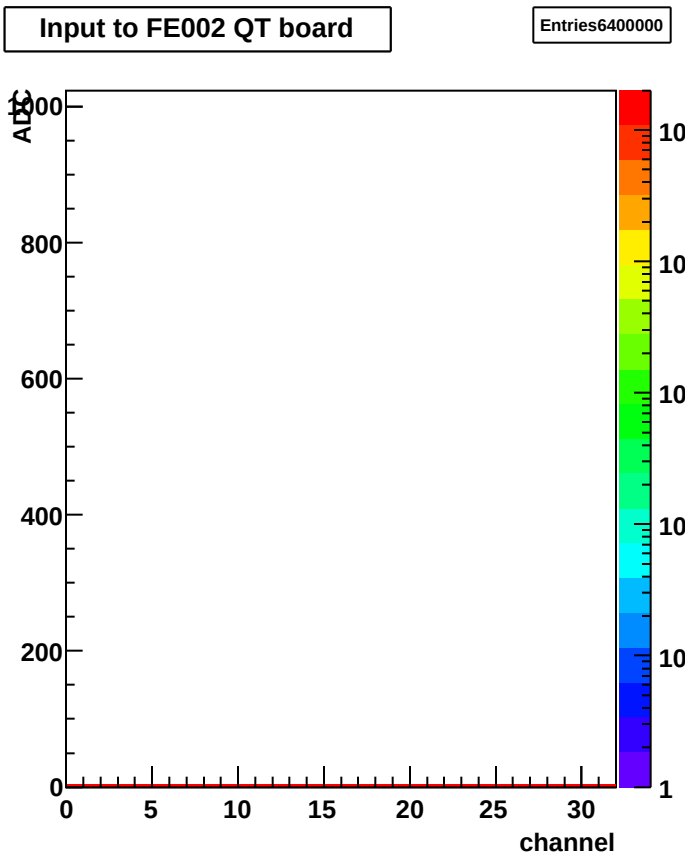

Input to FPD L2 DSM
Entries 200000
CL bits - simulated
200000
SMALL
LARGE-S
LARGE-N

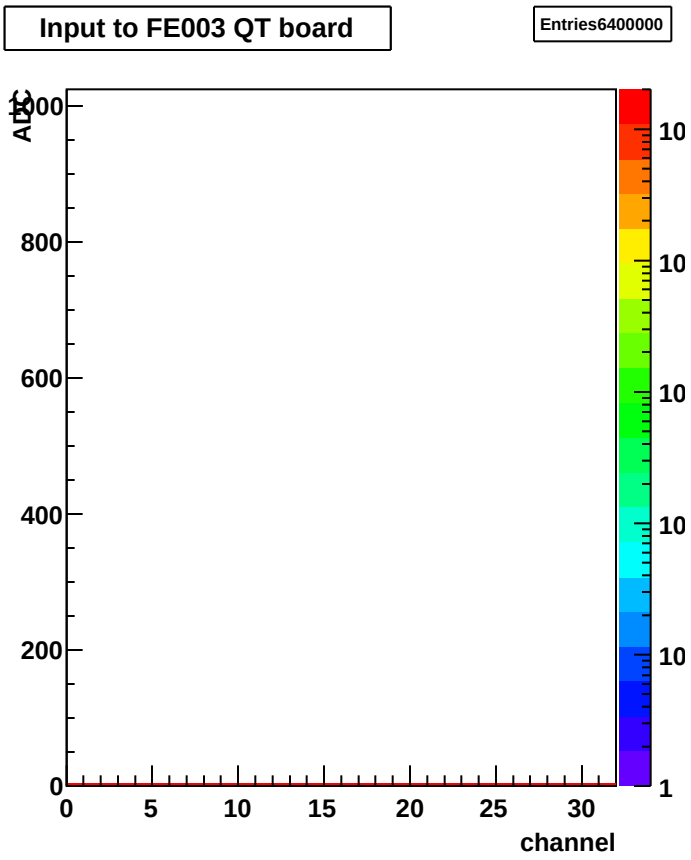

Input to FPD L2 DSM
Entries 600000
HT bits
200000
200000
200000
SMALL
LARGE-S
LARGE-N

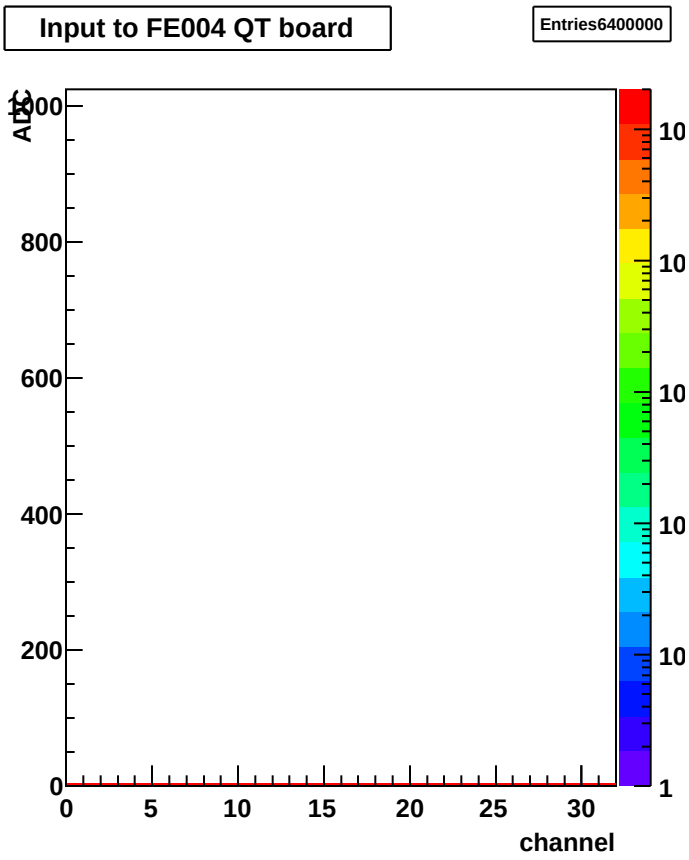

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

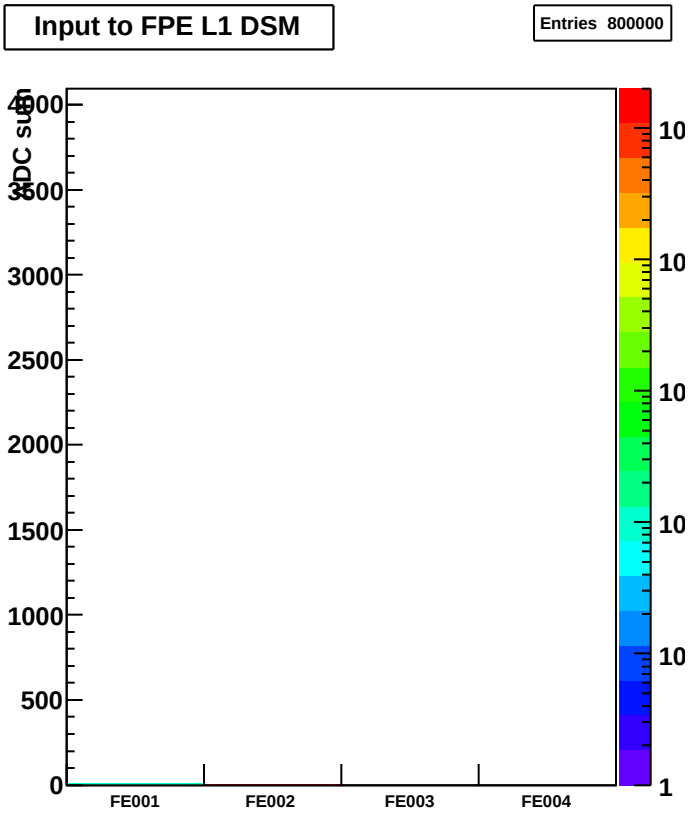

Input to FPD L2 DSM
Entries 800000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

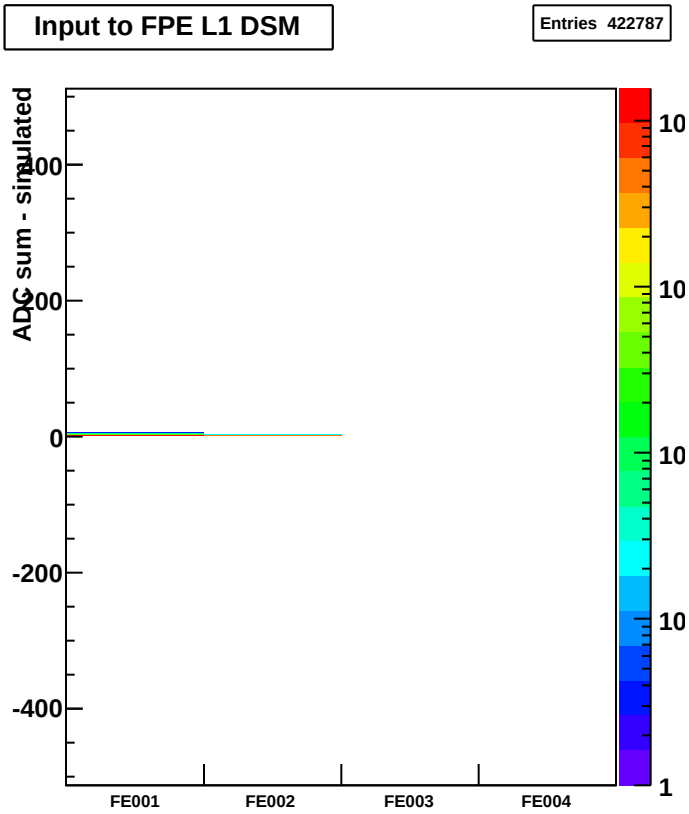

Input to FE001 QT board
Entries6400000
ADC
channel

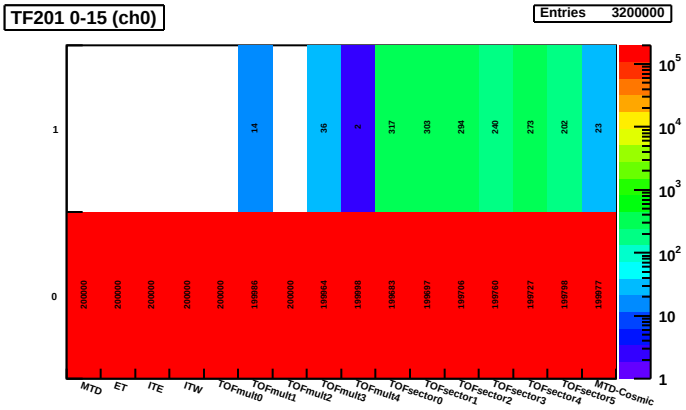

Input to FE002 QT board
Entries6400000
ADC
channel

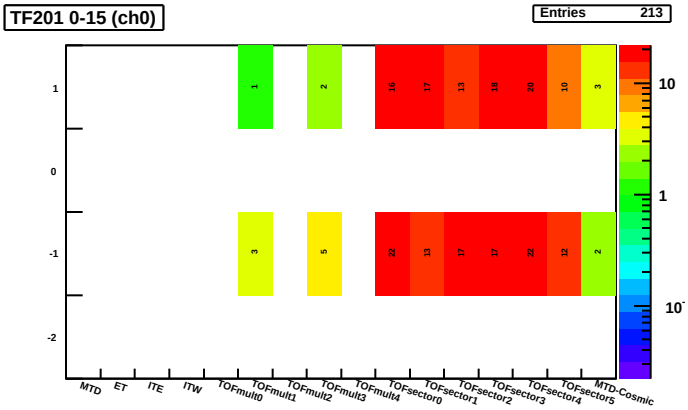

Input to FE003 QT board
Entries6400000
ADC
channel

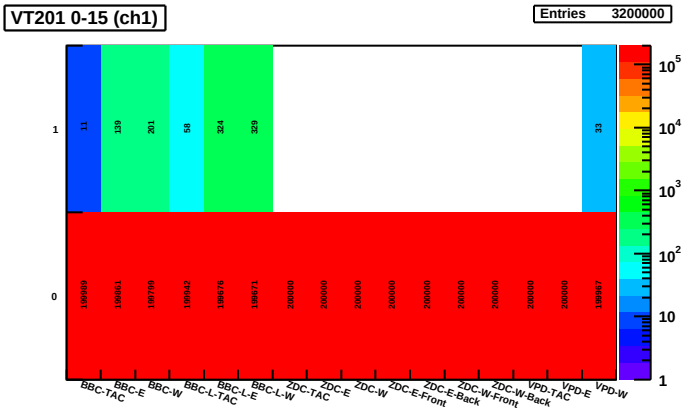

Input to FE004 QT board
Entries6400000
ADC
channel

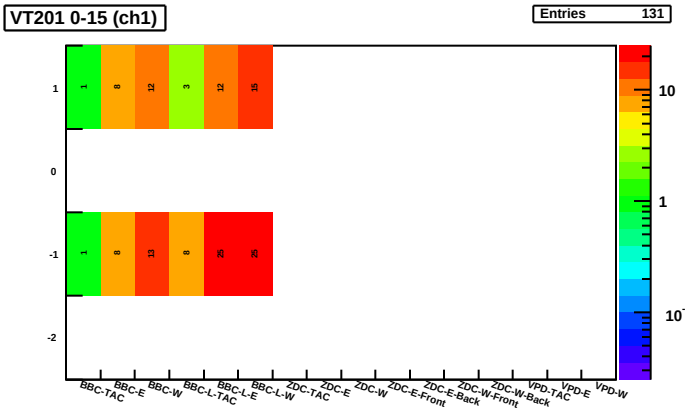

Input to FPE L1 DSM
Entries 800000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

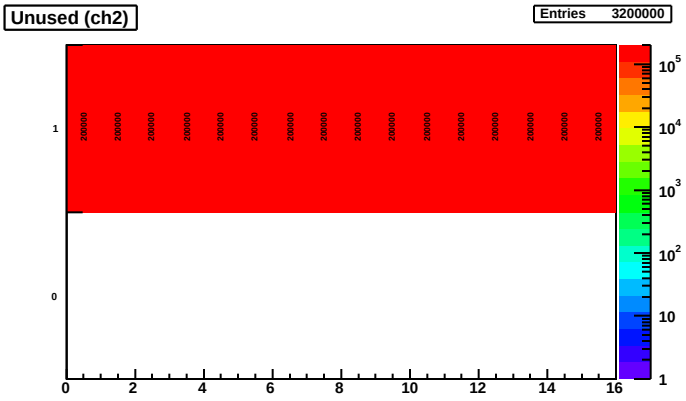

Input to FPE L1 DSM
Entries 422787
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1

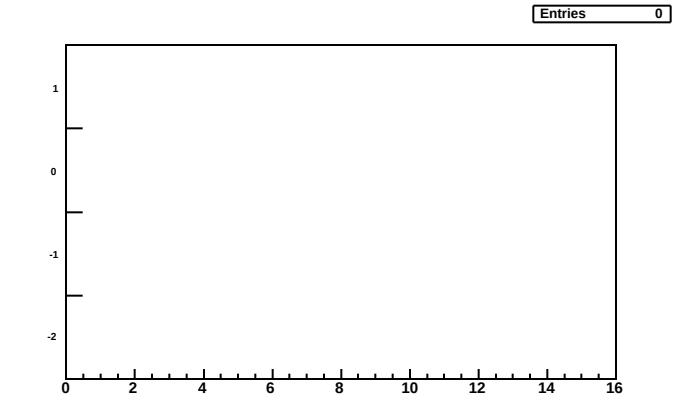

TF201 0-15 (ch0)
Entries 3200000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

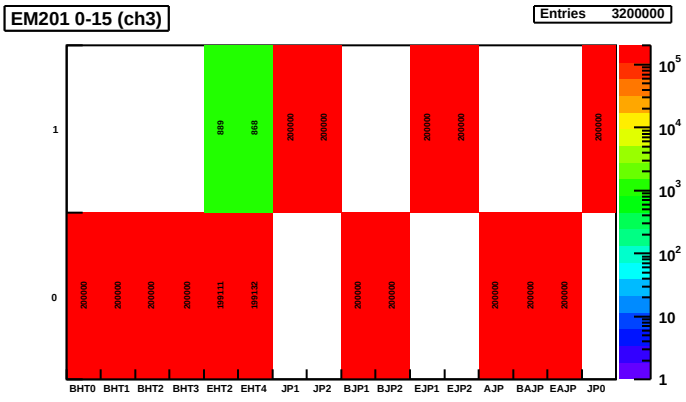

TF201 0-15 (ch0)
Entries 213
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

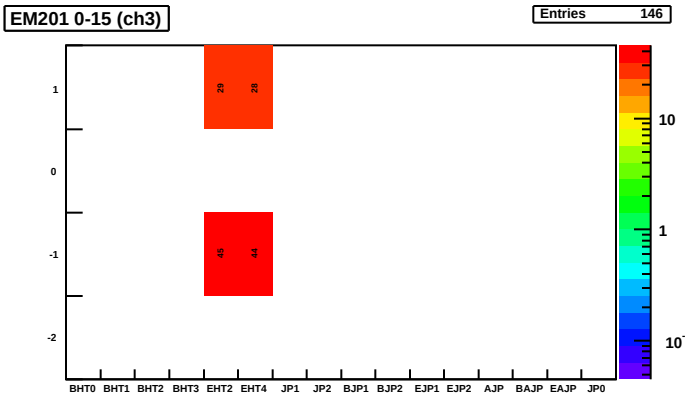

VT201 0-15 (ch1)
Entries 3200000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 131
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

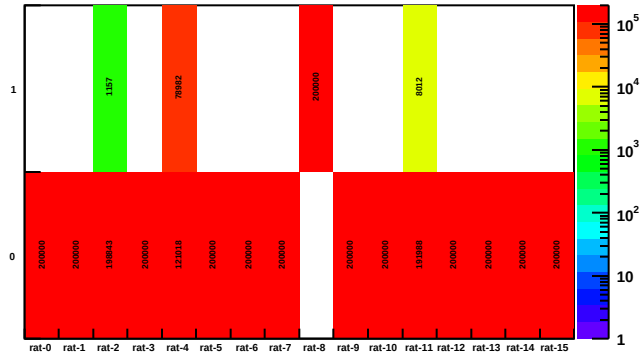

Unused (ch2)
Entries 3200000

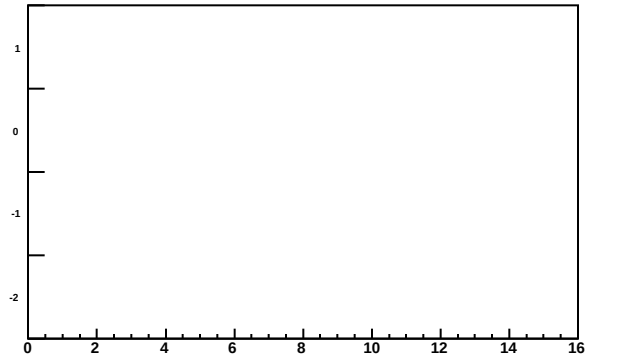

Entries 0


EM201 0-15 (ch3)
Entries 3200000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

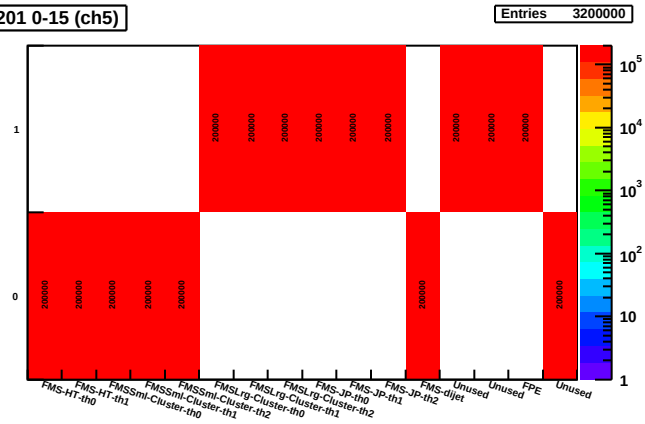

EM201 0-15 (ch3)
Entries 146
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

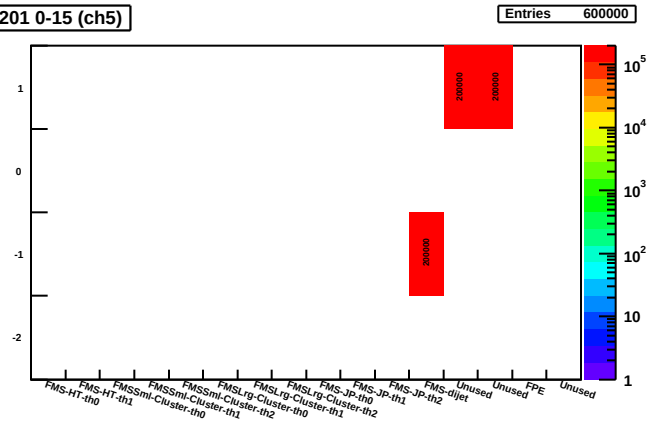




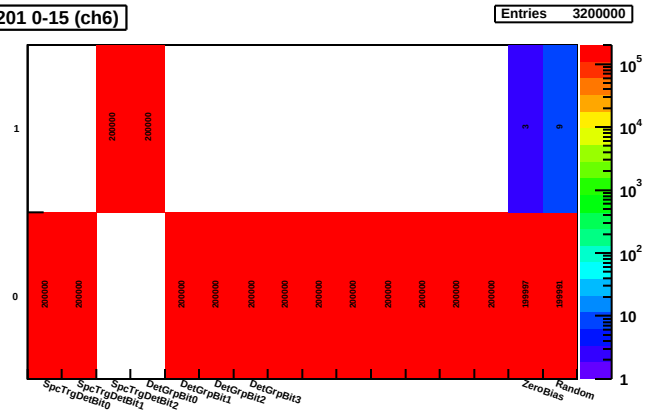
FP201 0-15 (ch5)

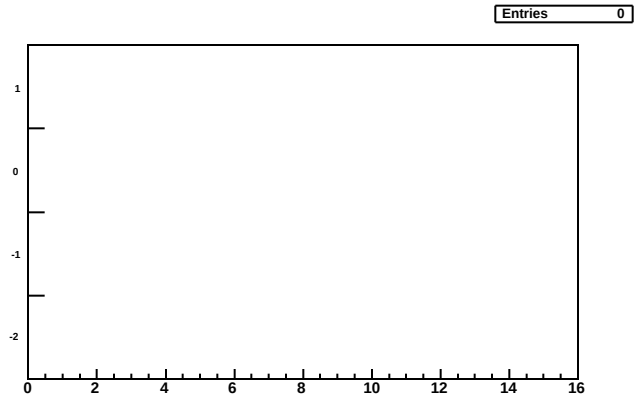
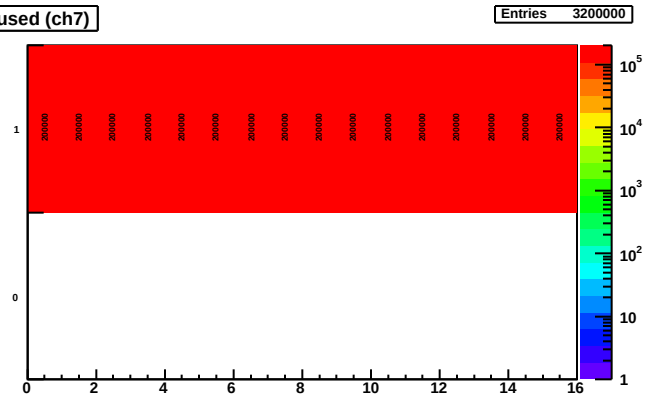
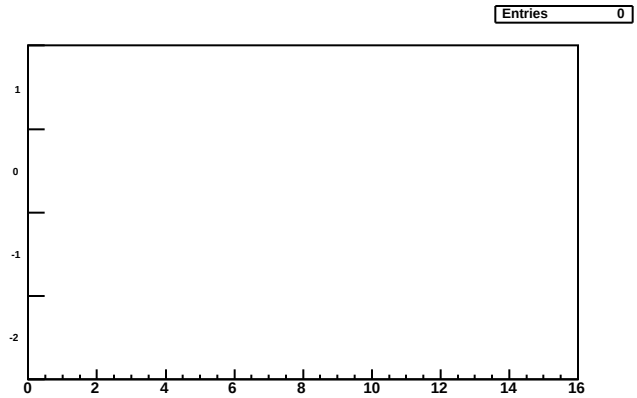


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)