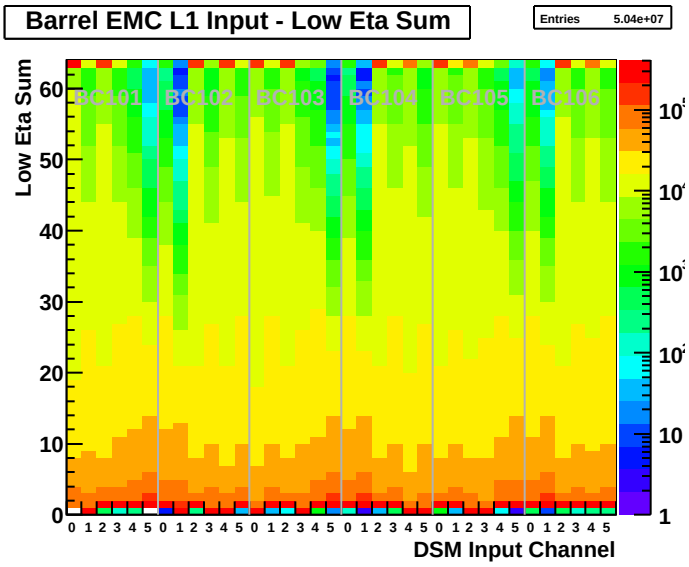
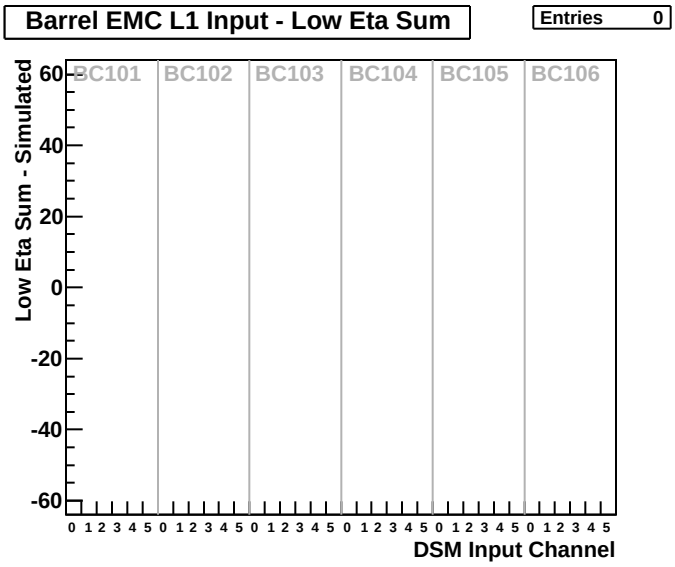
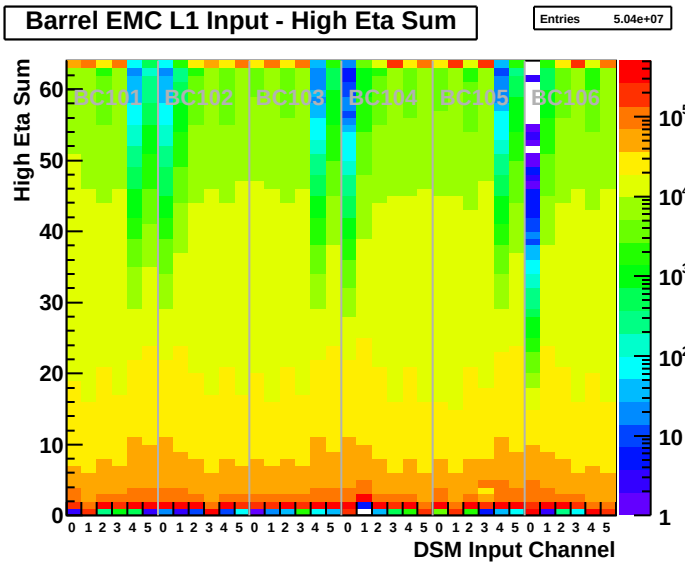
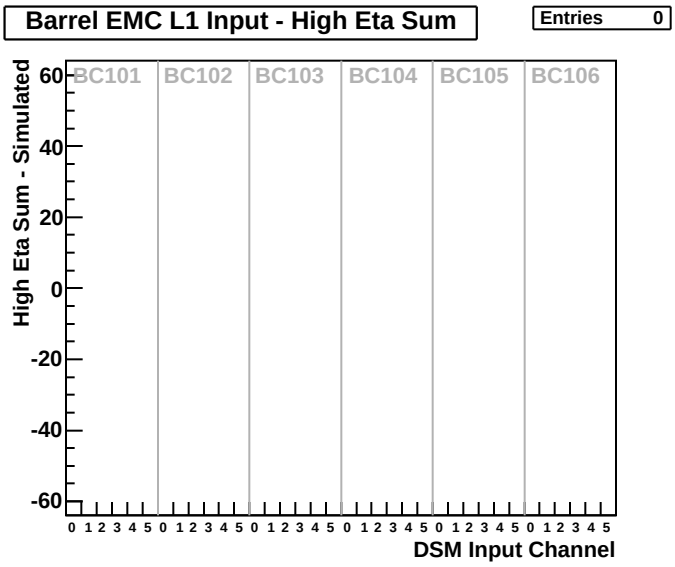
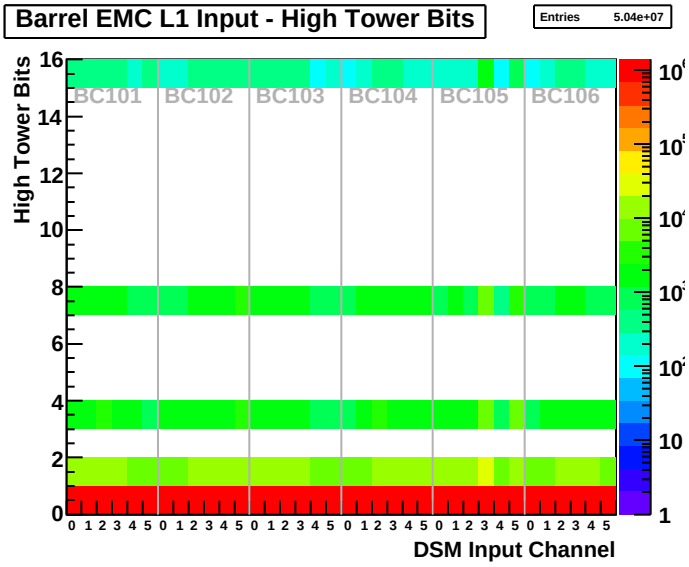
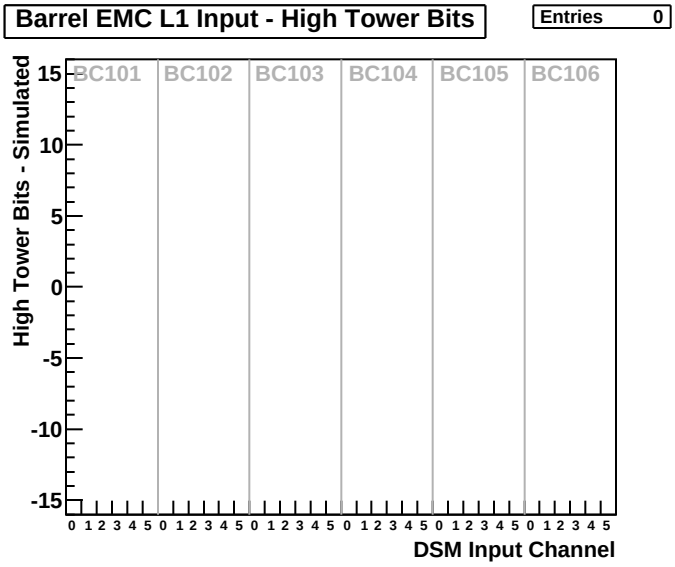

Barrel EMC L1 Input - Low Eta Sum
Entries 5.04e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

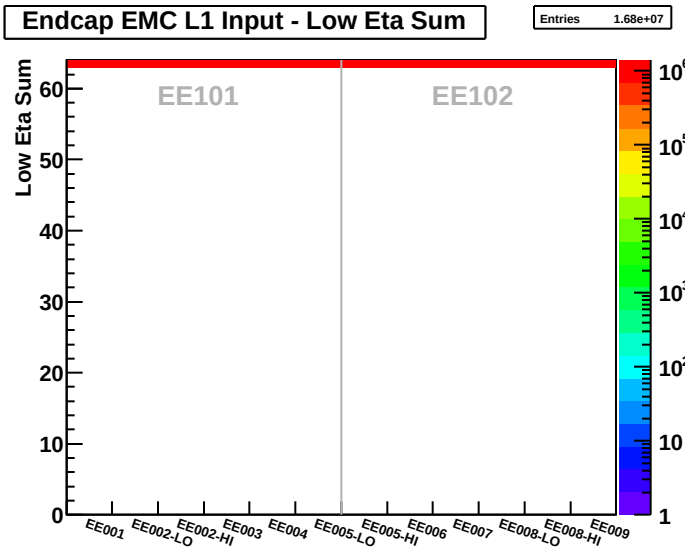

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

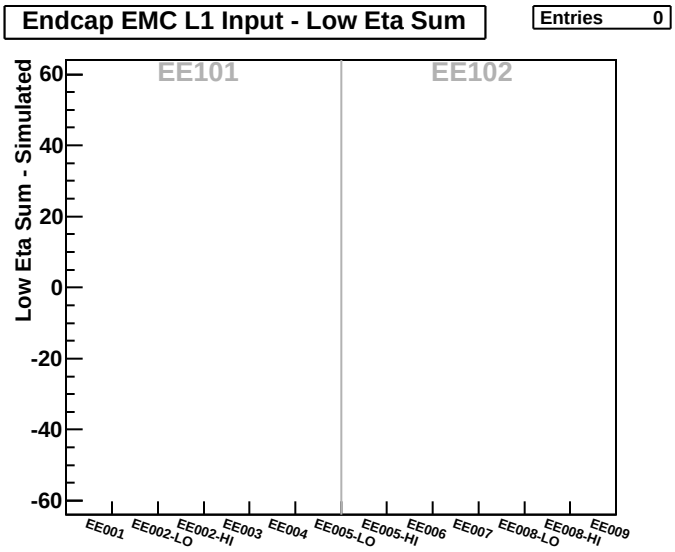

Barrel EMC L1 Input - High Eta Sum
Entries 5.04e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

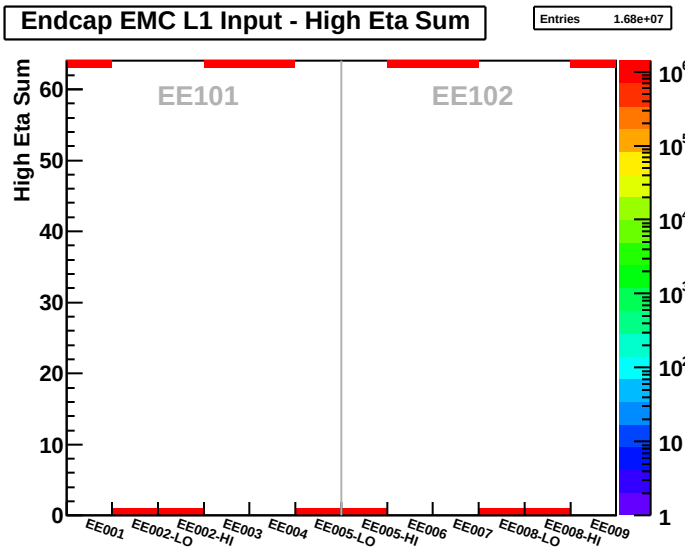

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

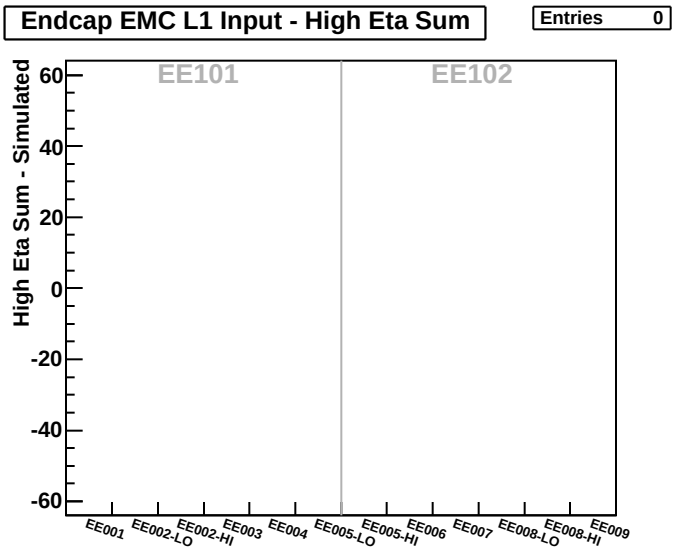

Barrel EMC L1 Input - High Tower Bits
Entries 5.04e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

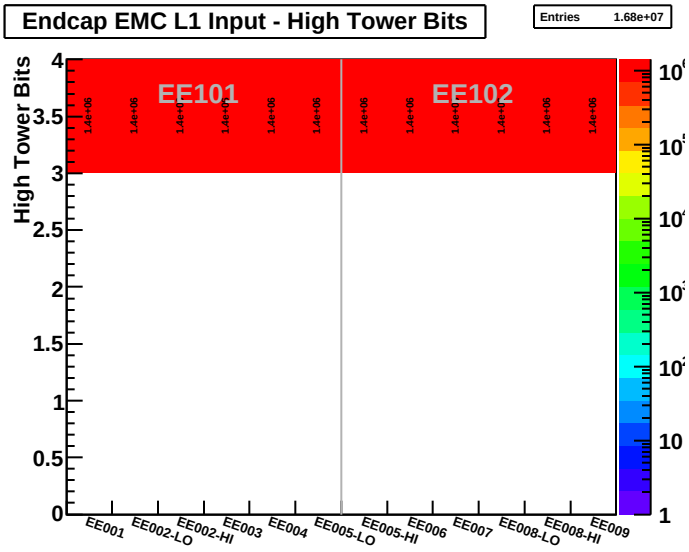

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

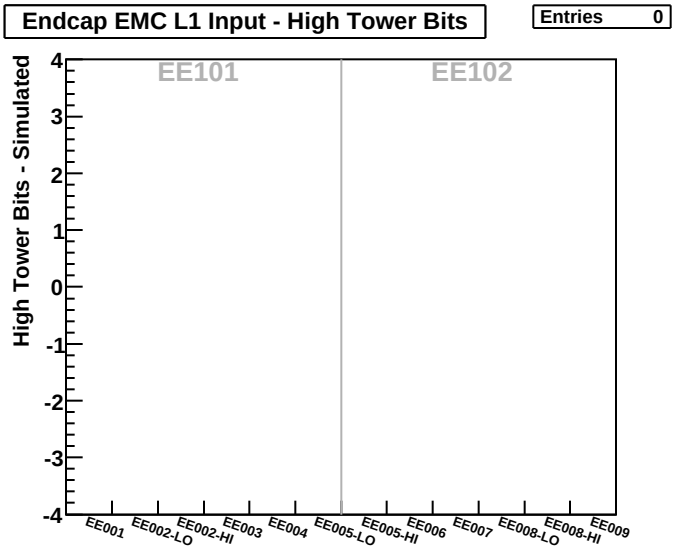

Endcap EMC L1 Input - Low Eta Sum
Entries 1.68e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

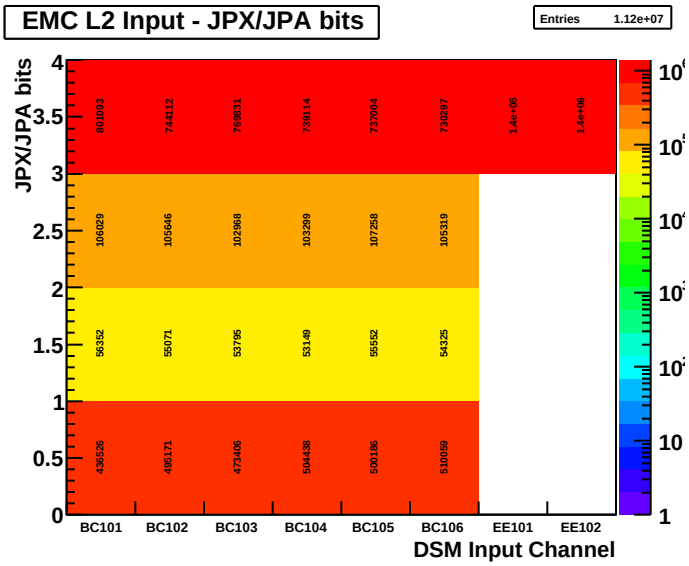

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

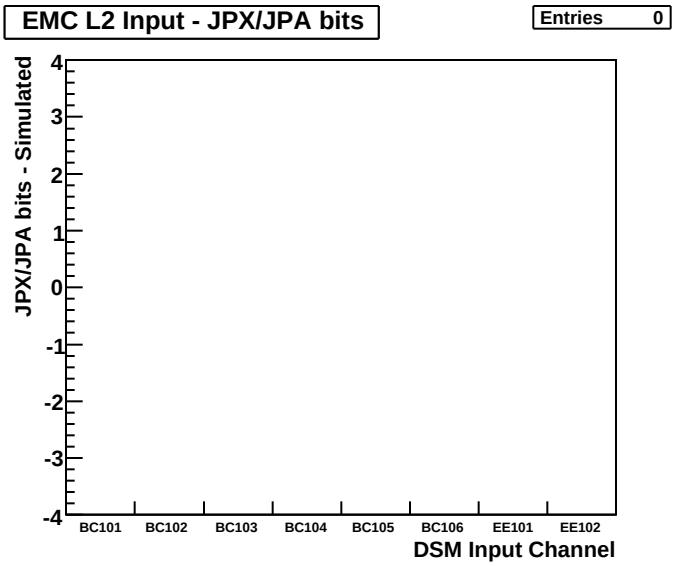

Endcap EMC L1 Input - High Eta Sum
Entries 1.68e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

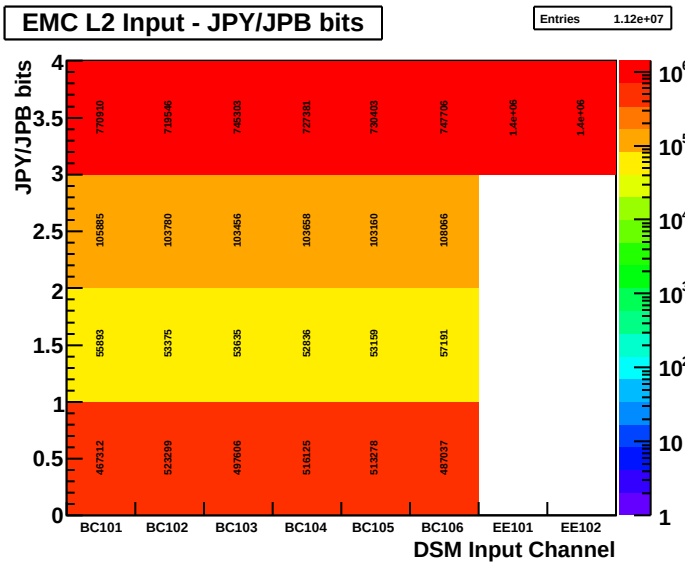

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

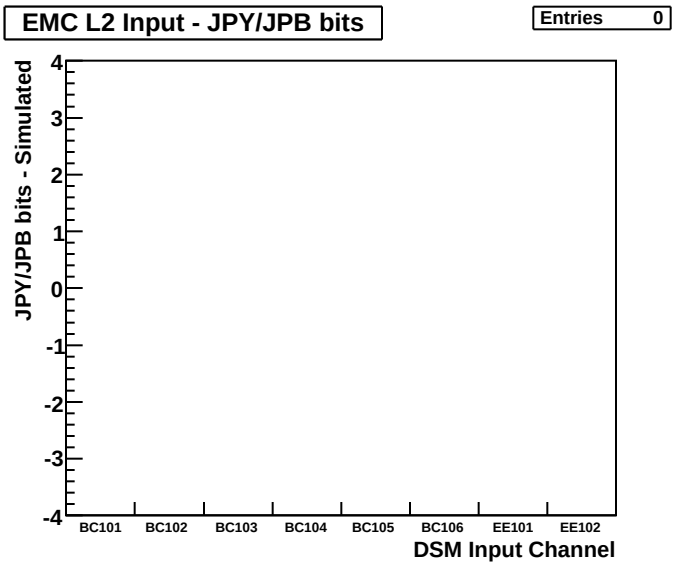

Endcap EMC L1 Input - High Tower Bits
Entries 1.68e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

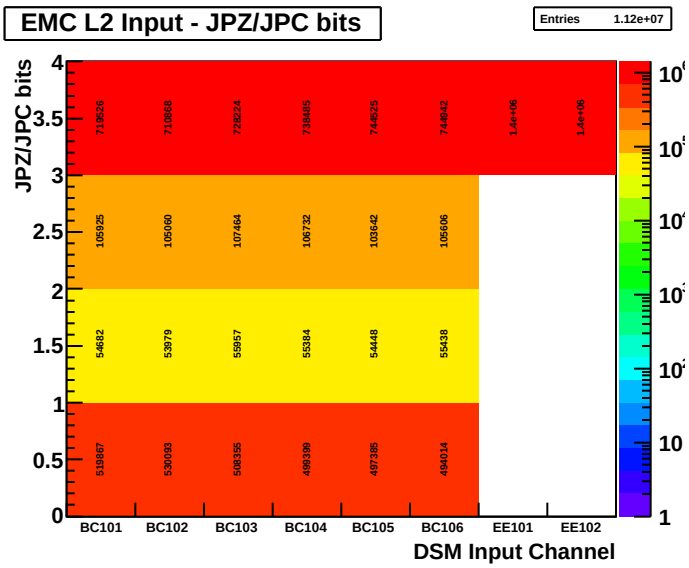

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

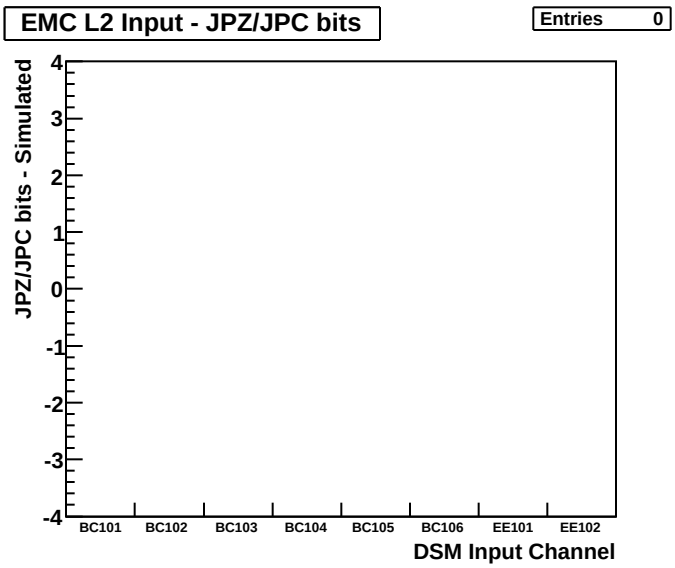

EMC L2 Input - JPX/JPA bits
Entries 1.12e+07
JPX/JPA bits
801093 744112 759831 739114 737004 730297 1.4e+06 1.4e+06
106029 105646 102968 103299 107258 105319
56352 55071 53795 53149 55552 54325
436526 495171 472406 504438 500186 510059
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

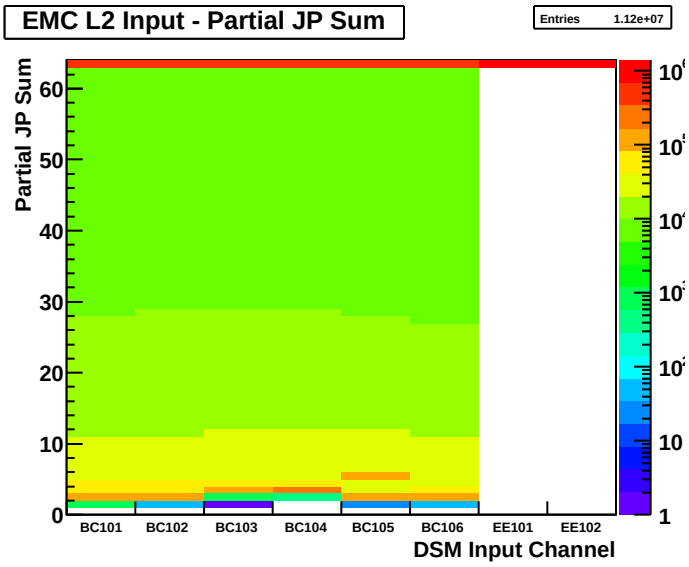

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

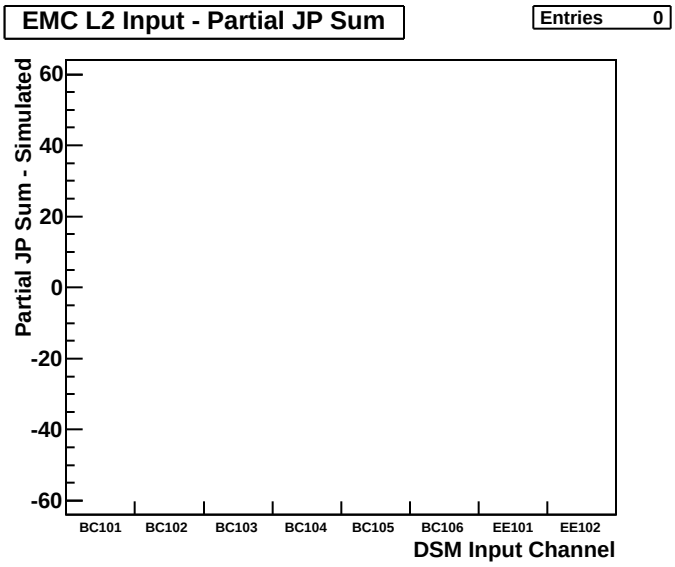

EMC L2 Input - JPY/JPB bits
Entries 1.12e+07
JPY/JPB bits
770910 719546 746303 727381 730403 747706 1.4e+06 1.4e+06
105885 103780 103456 103658 103160 108056
55893 53375 53635 52836 53159 57191
467312 522299 497606 516125 513278 487037
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

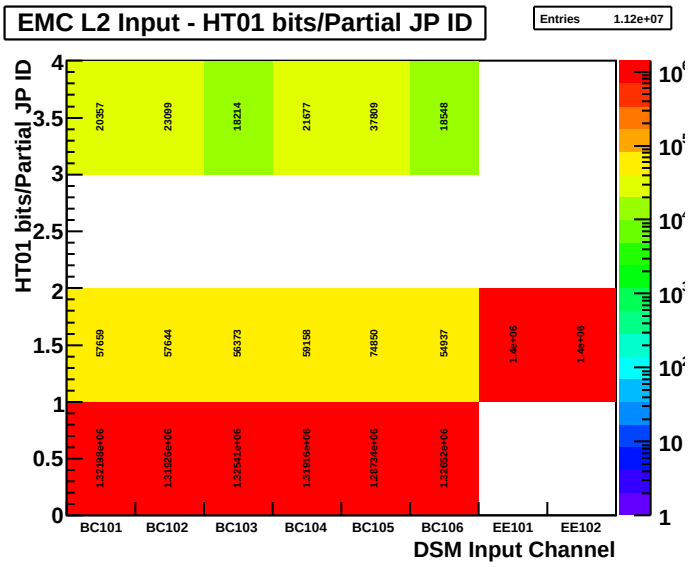

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

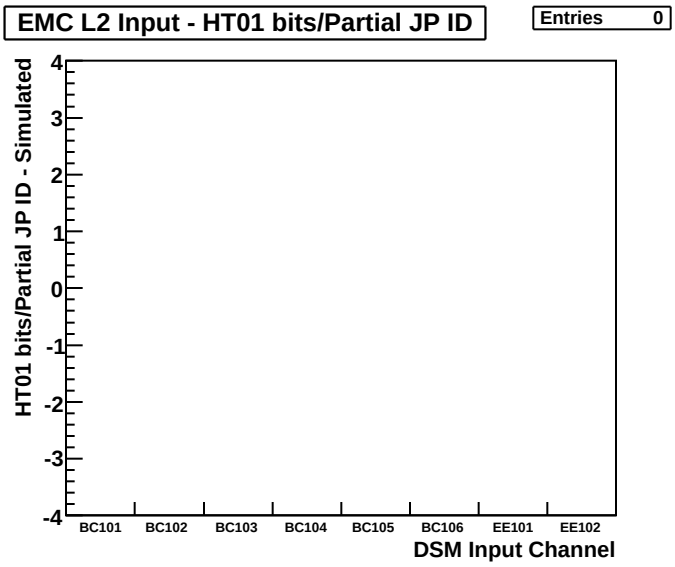

EMC L2 Input - JPZ/JPC bits
Entries 1.12e+07
JPZ/JPC bits
718526 710868 728224 738485 744525 749942 1.4e+06 1.4e+06
106925 106060 107464 106732 103642 105606
54682 53979 55957 55384 54448 55438
519867 530093 508355 499399 497385 494014
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

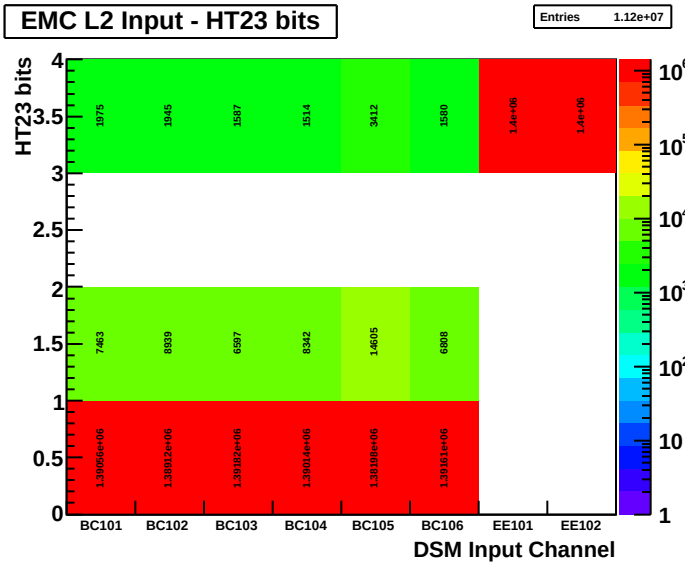

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

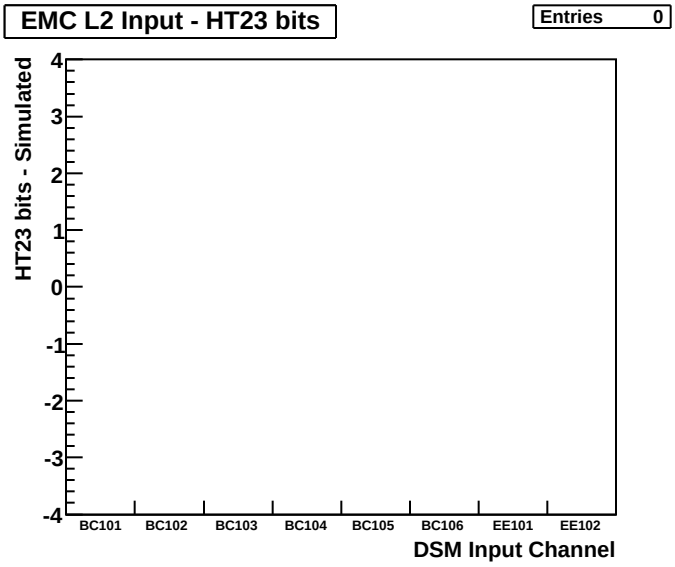

EMC L2 Input - Partial JP Sum
Entries 1.12e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

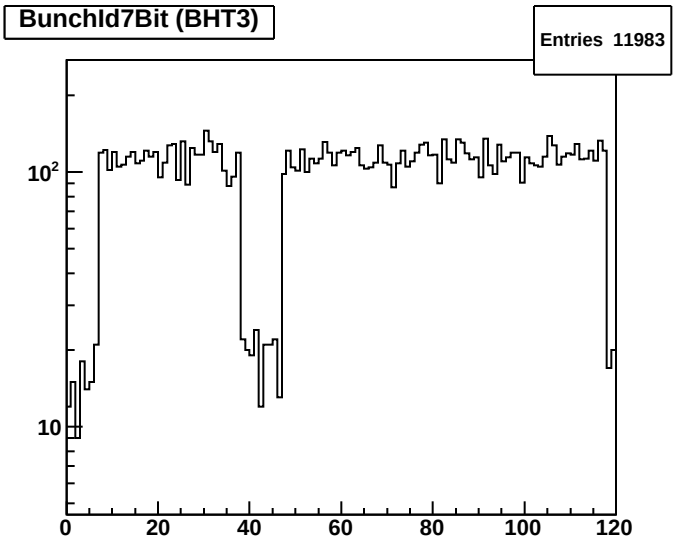

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

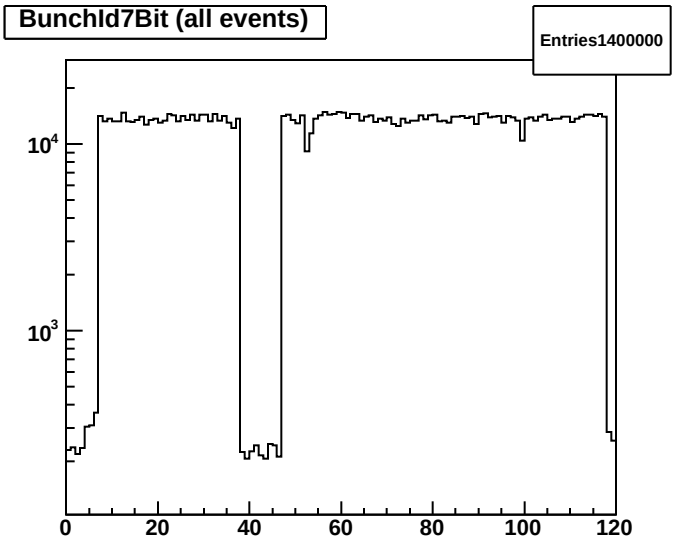

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.12e+07
HT01 bits/Partial JP ID
20357 23099 18214 21677 37809 18548
57659 57644 56373 59158 74850 54937 1.4e+06 1.4e+06
1.32169e+06 1.31926e+06 1.32541e+06 1.31916e+06 1.28734e+06 1.32652e+06
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

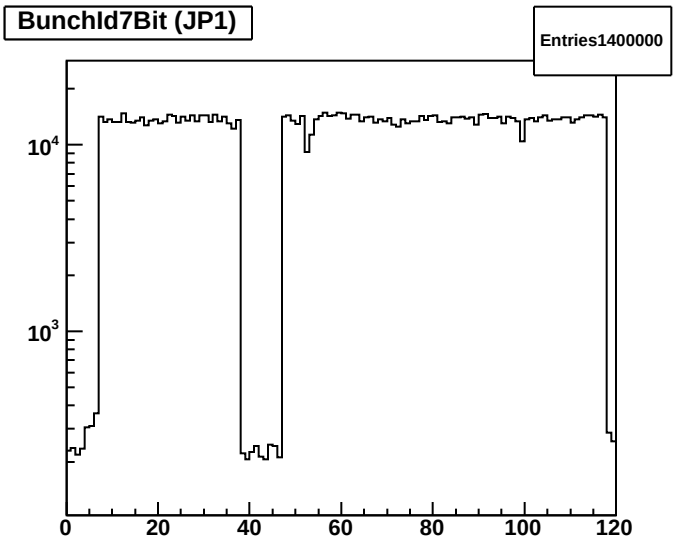

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

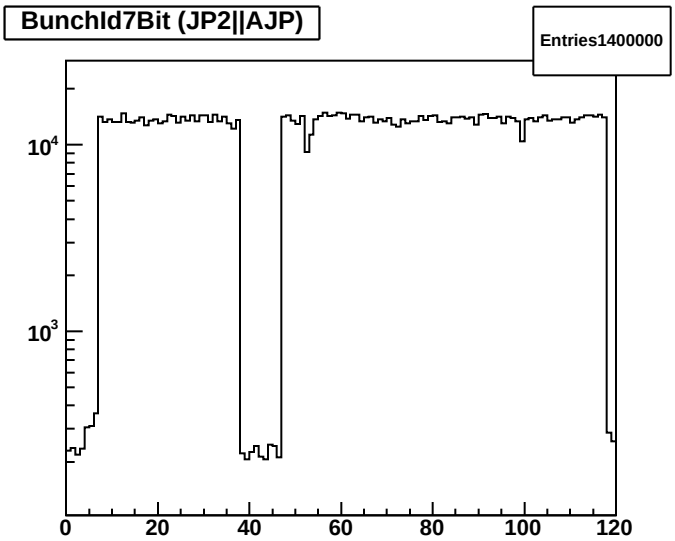

EMC L2 Input - HT23 bits
Entries 1.12e+07
HT23 bits
1975 1945 1587 1514 3412 1580 1.4e+06 1.4e+06
7463 8939 6597 8342 14605 6808
1.39056e+06 1.38912e+06 1.39182e+06 1.39014e+06 1.38198e+06 1.39161e+06
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

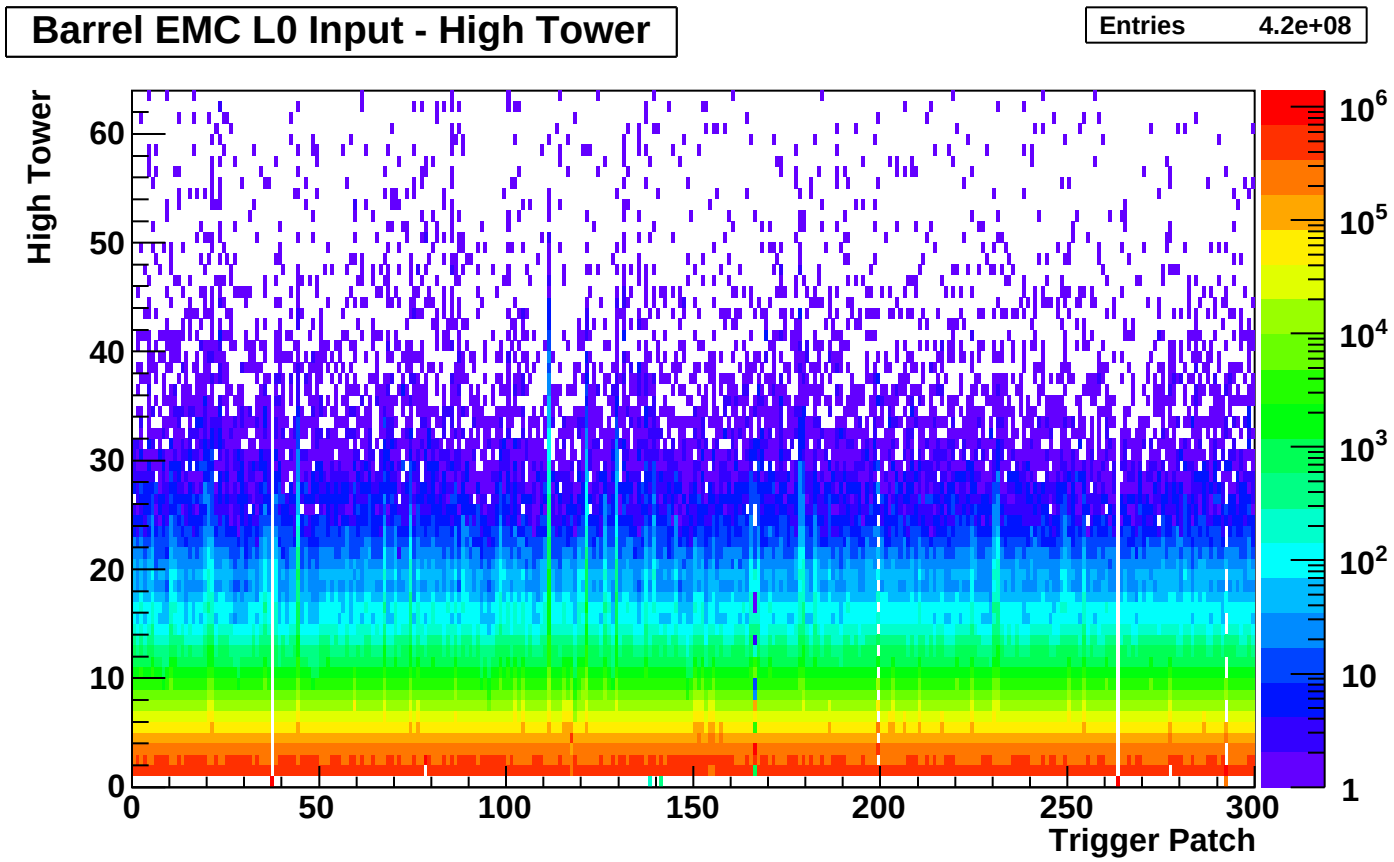

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

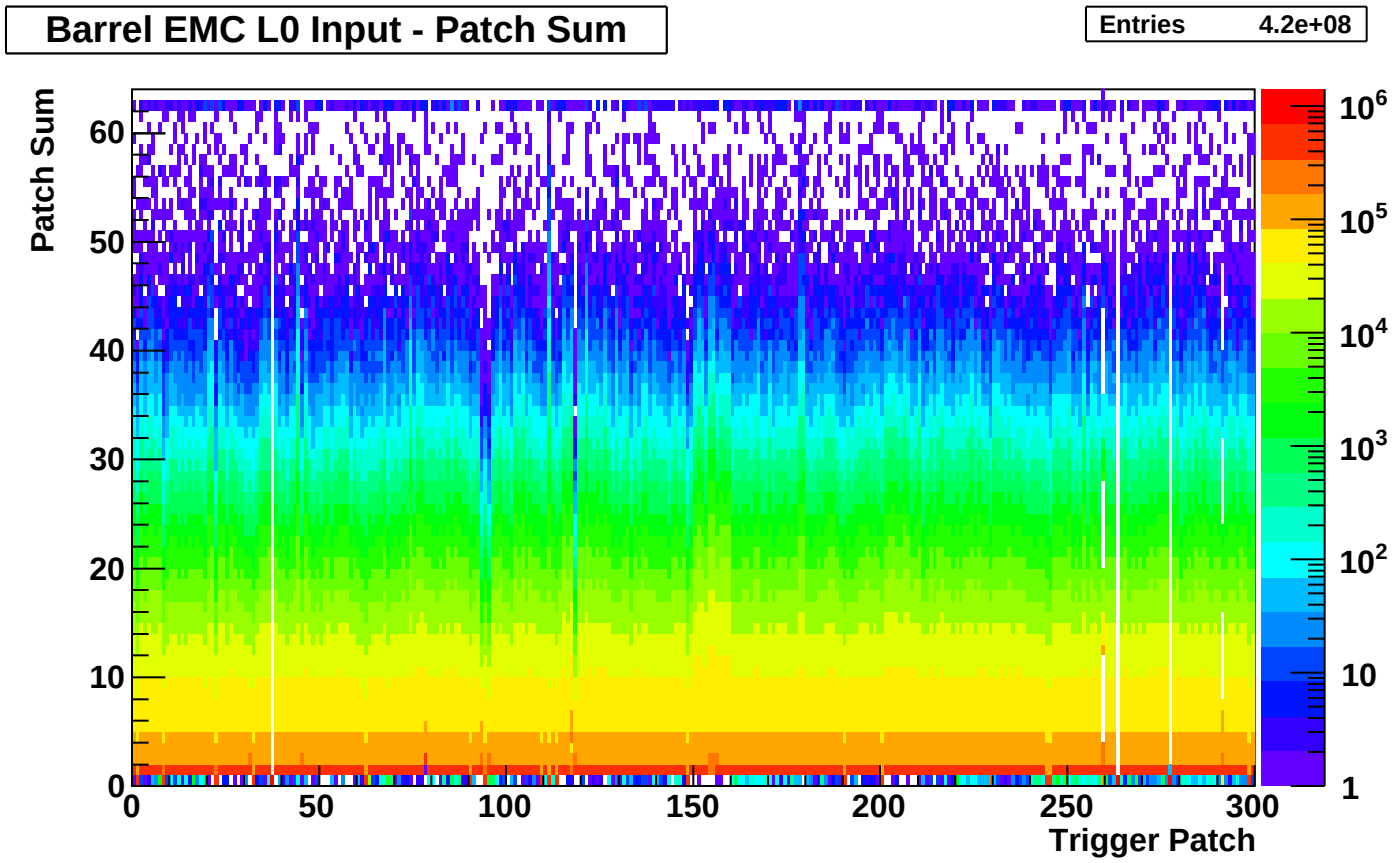

BunchId7Bit (BHT3)
Entries 11983
10^2
10
0
20
40
60
80
100
120

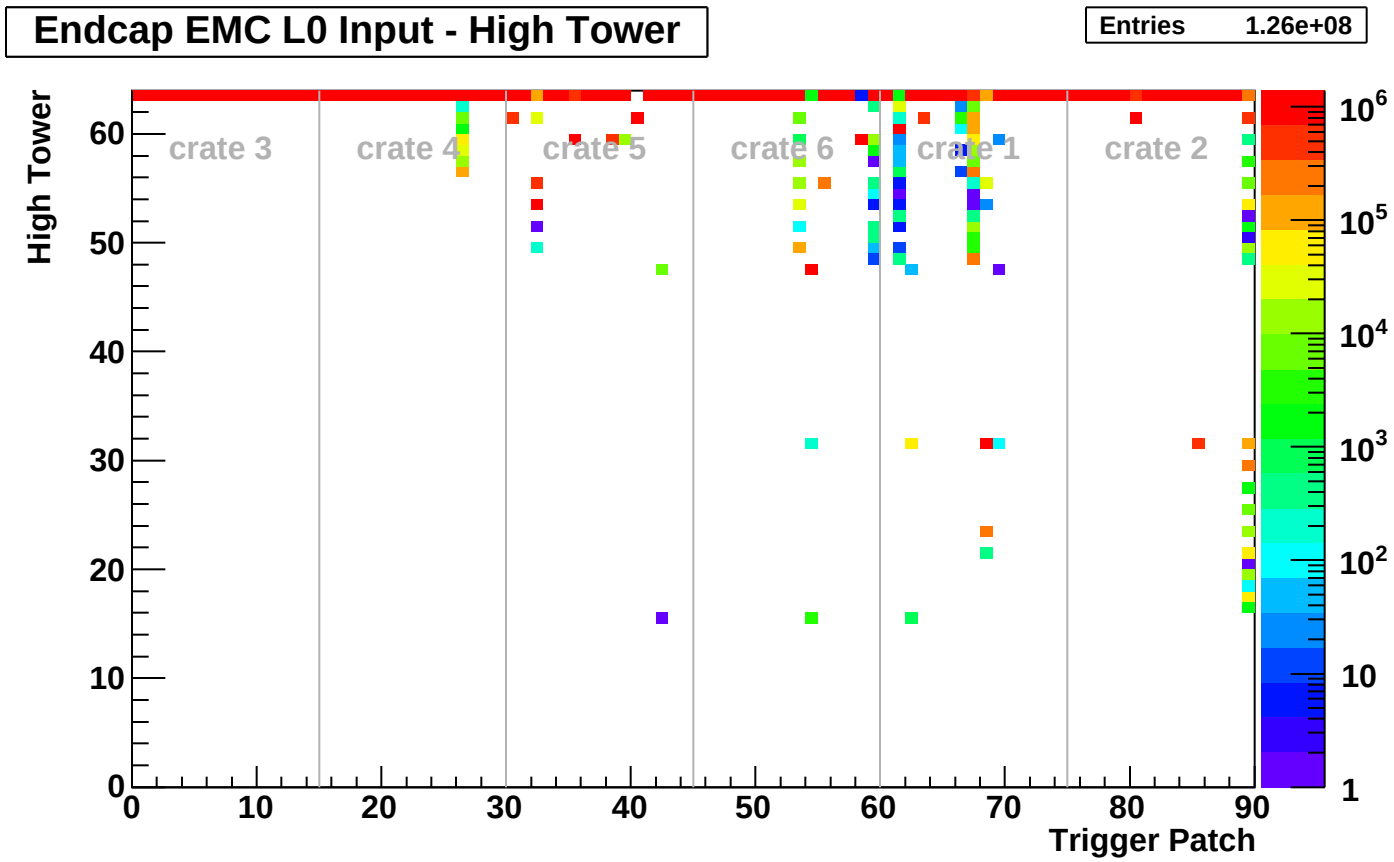

BunchId7Bit (all events)
Entries1400000
10^4
10^3
0
20
40
60
80
100
120

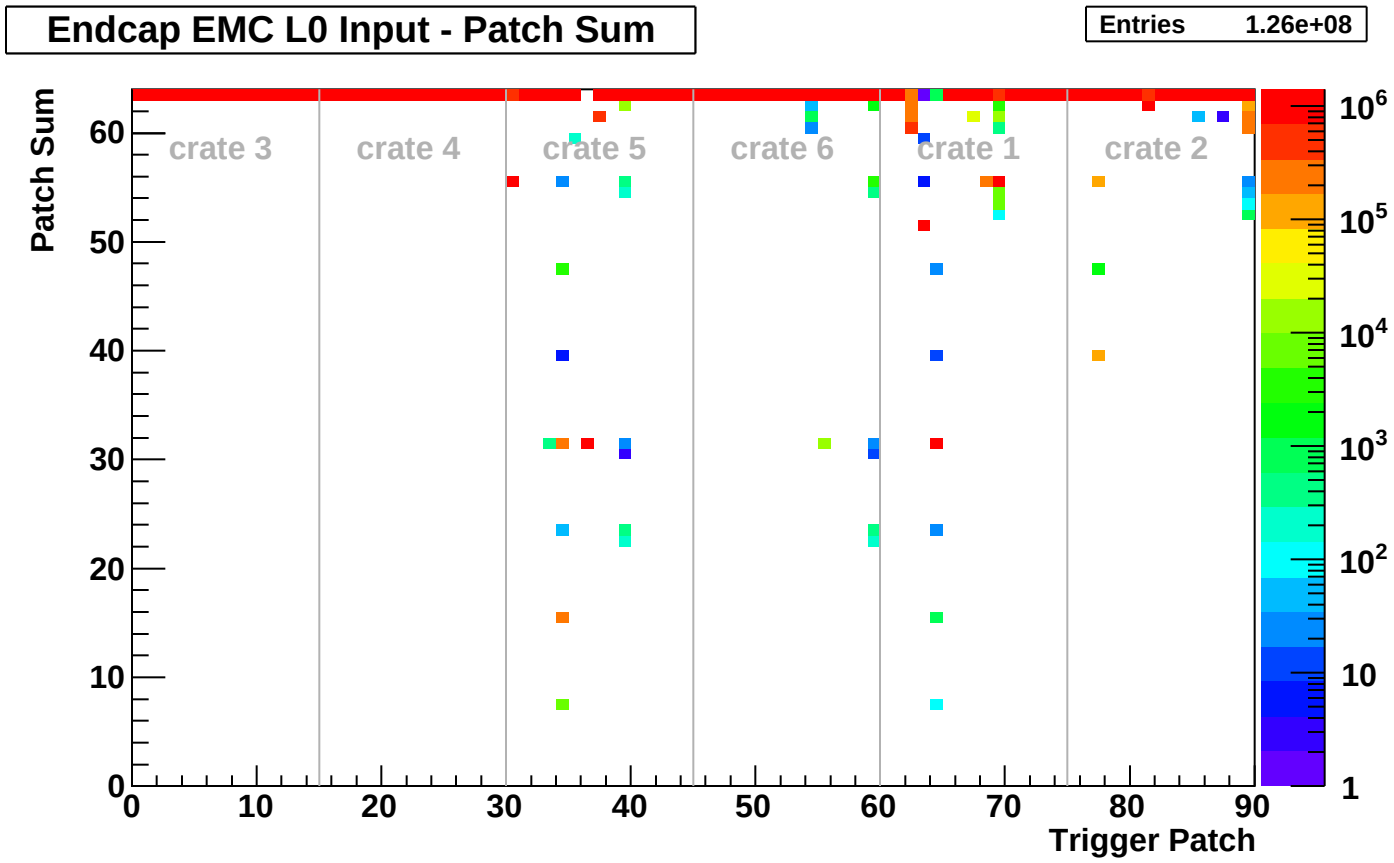

BunchId7Bit (JP1)
Entries1400000
10^4
10^3
0
20
40
60
80
100
120

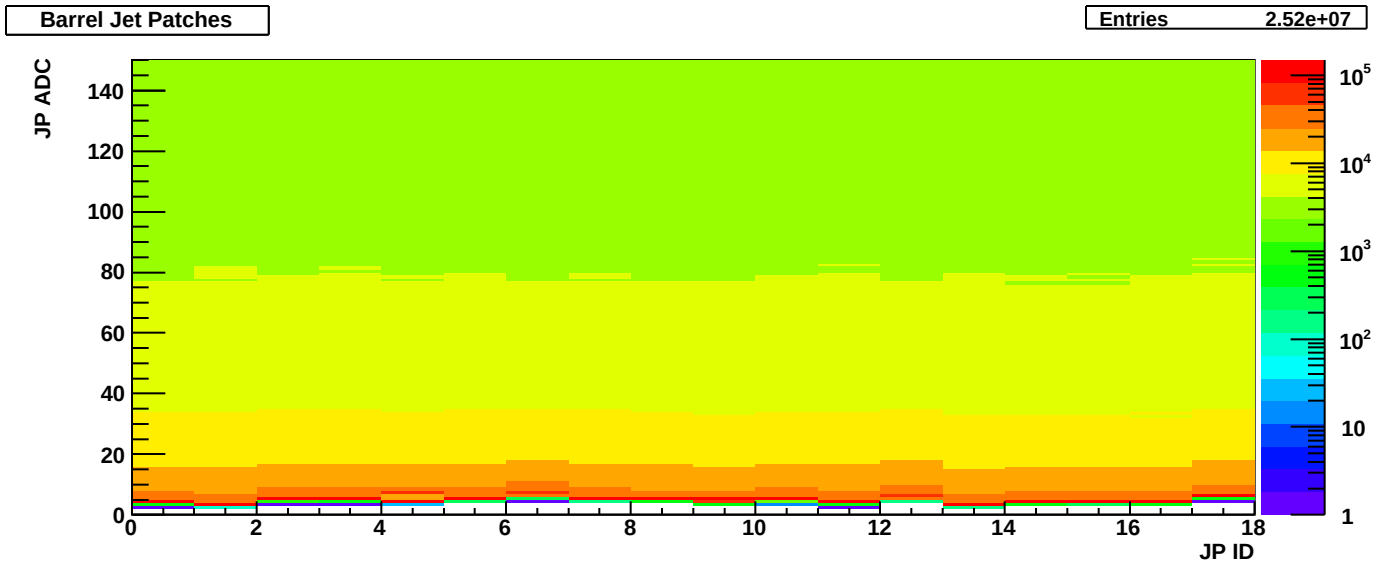

BunchId7Bit (JP2||AJP)
Entries1400000
10^4
10^3
0
20
40
60
80
100
120

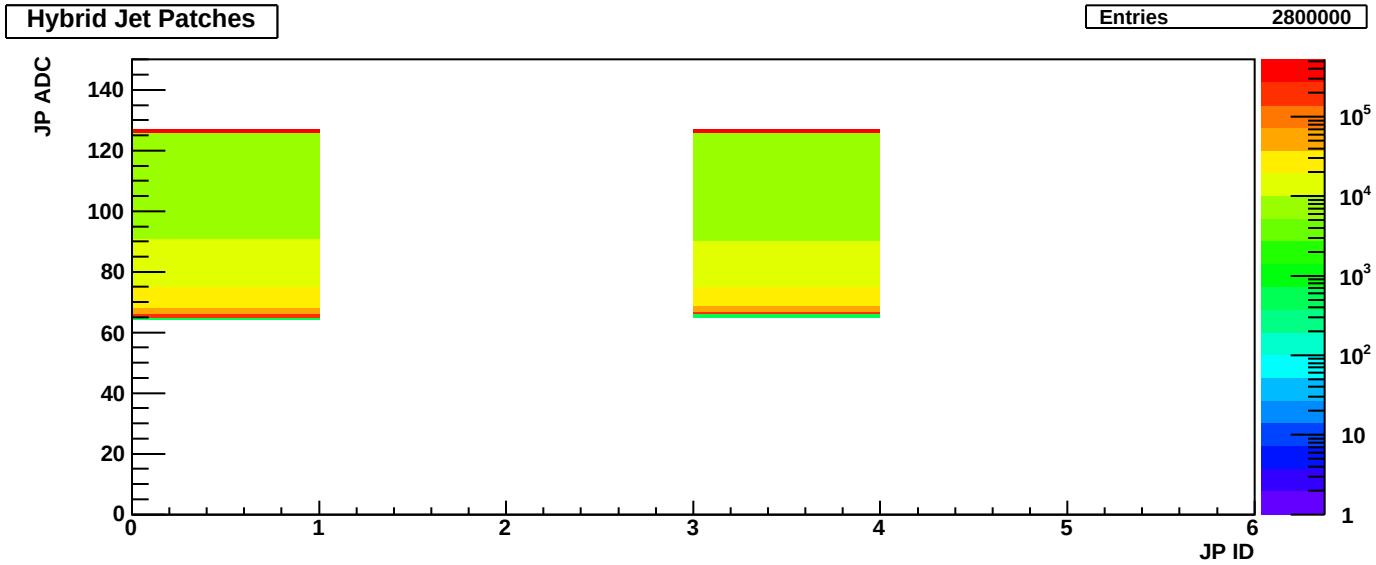

Barrel EMC L0 Input - High Tower
Entries 4.2e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

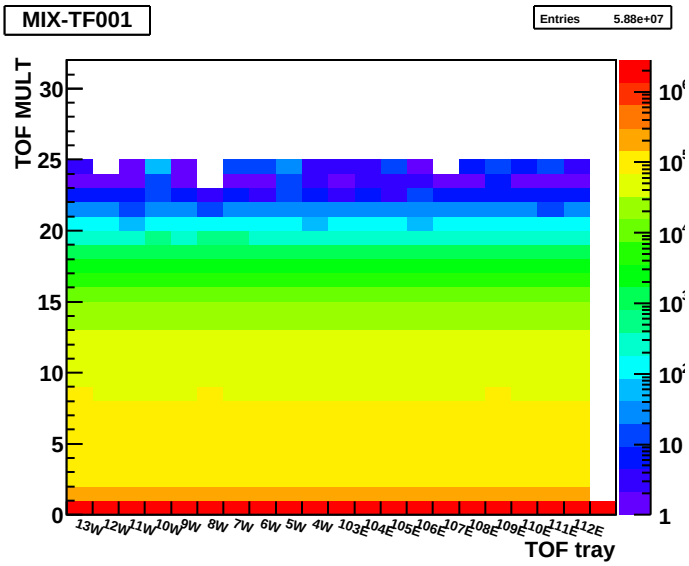

Barrel EMC L0 Input - Patch Sum
Entries 4.2e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

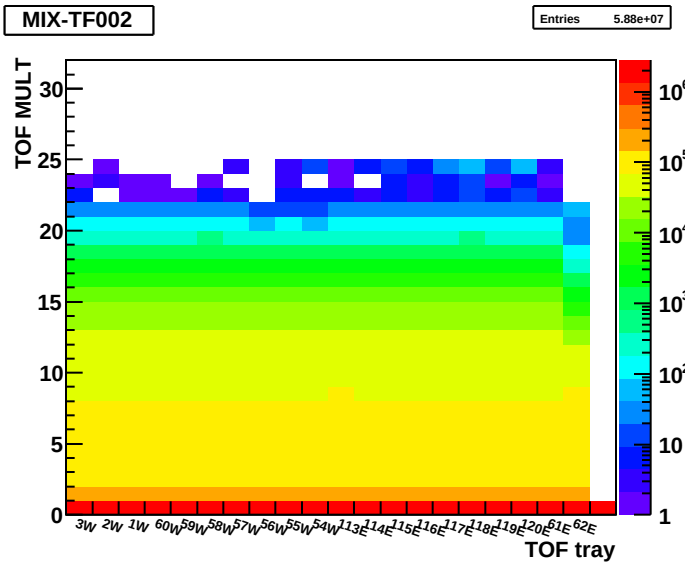

Endcap EMC L0 Input - High Tower
Entries 1.26e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

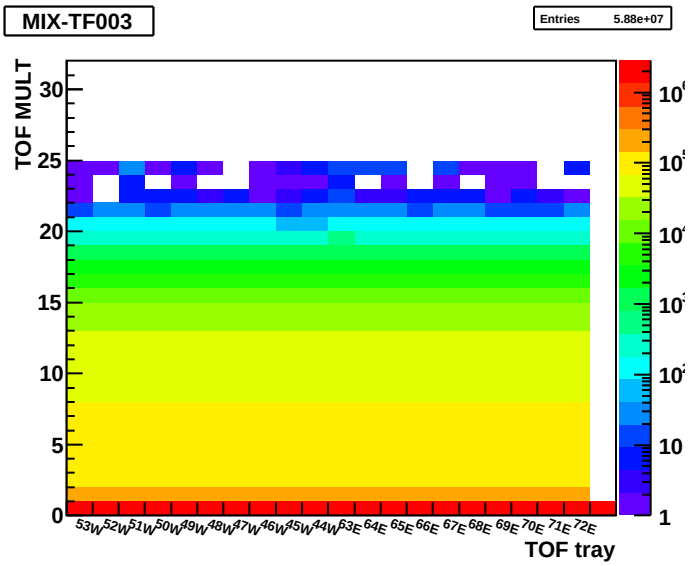

Endcap EMC L0 Input - Patch Sum
Entries 1.26e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

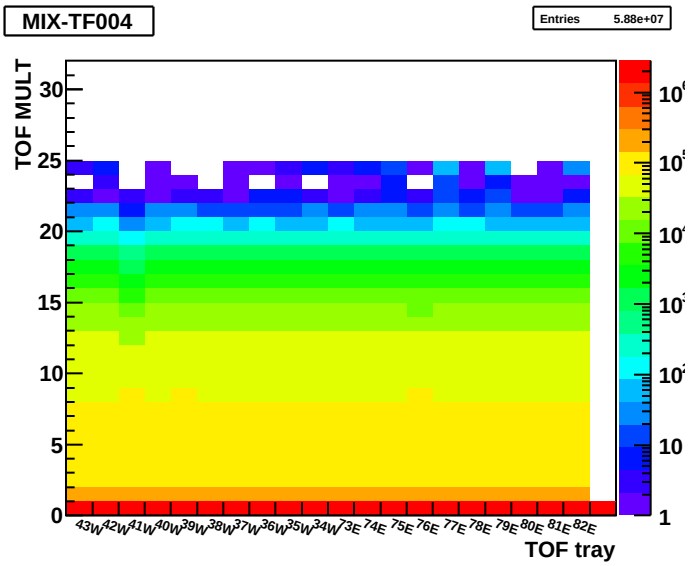

Barrel Jet Patches
Entries 2.52e+07
JP ADC
JP ID

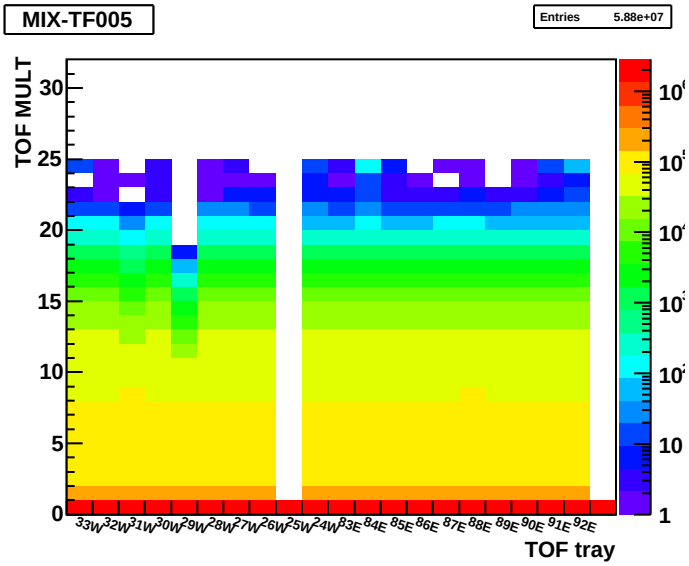

Hybrid Jet Patches
Entries 2800000
JP ADC
JP ID

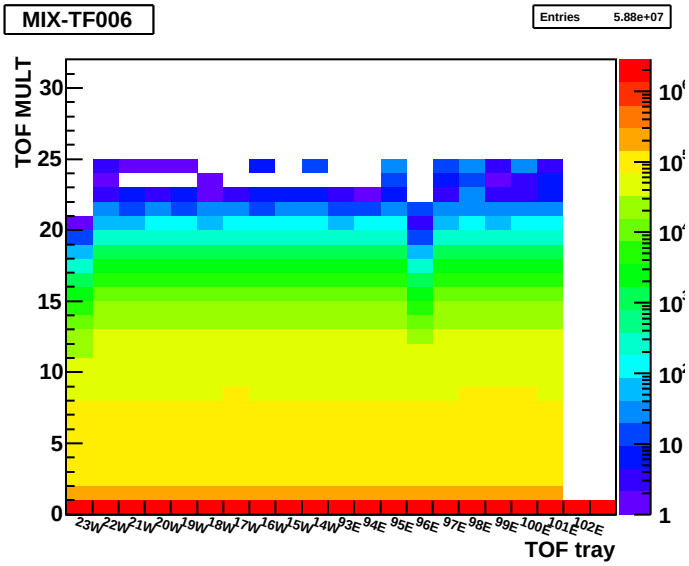

MIX-TF001
Entries 5.88e+07
TOF MULT
TOF tray

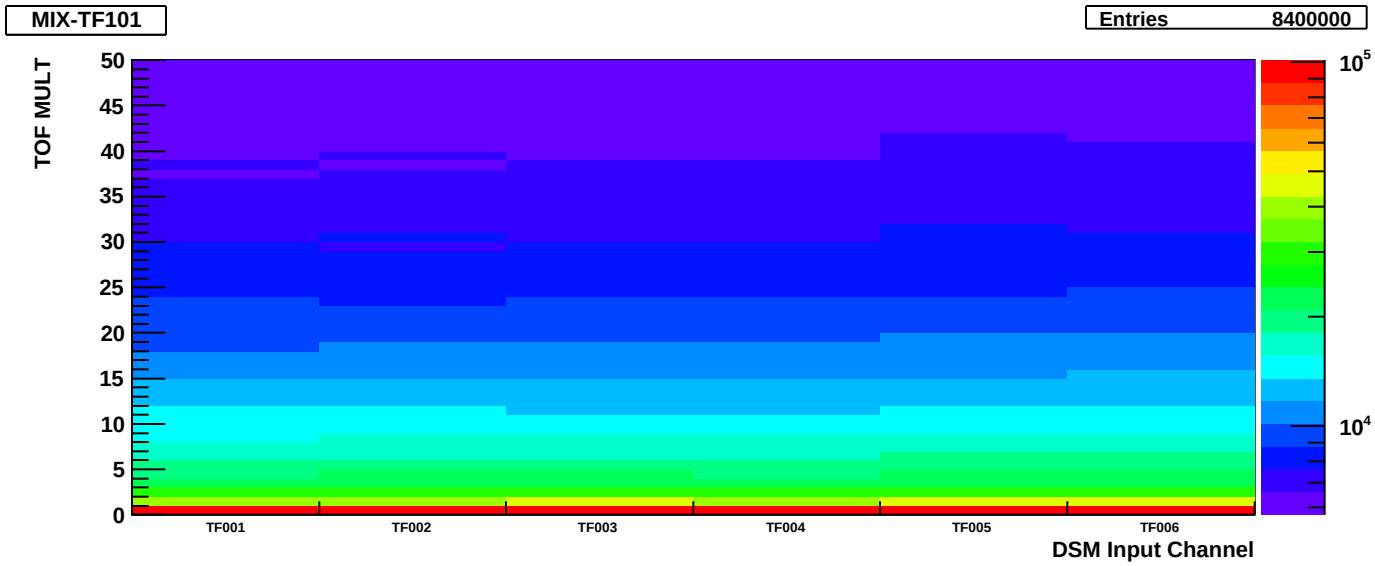

MIX-TF002
Entries 5.88e+07
TOF MULT
TOF tray

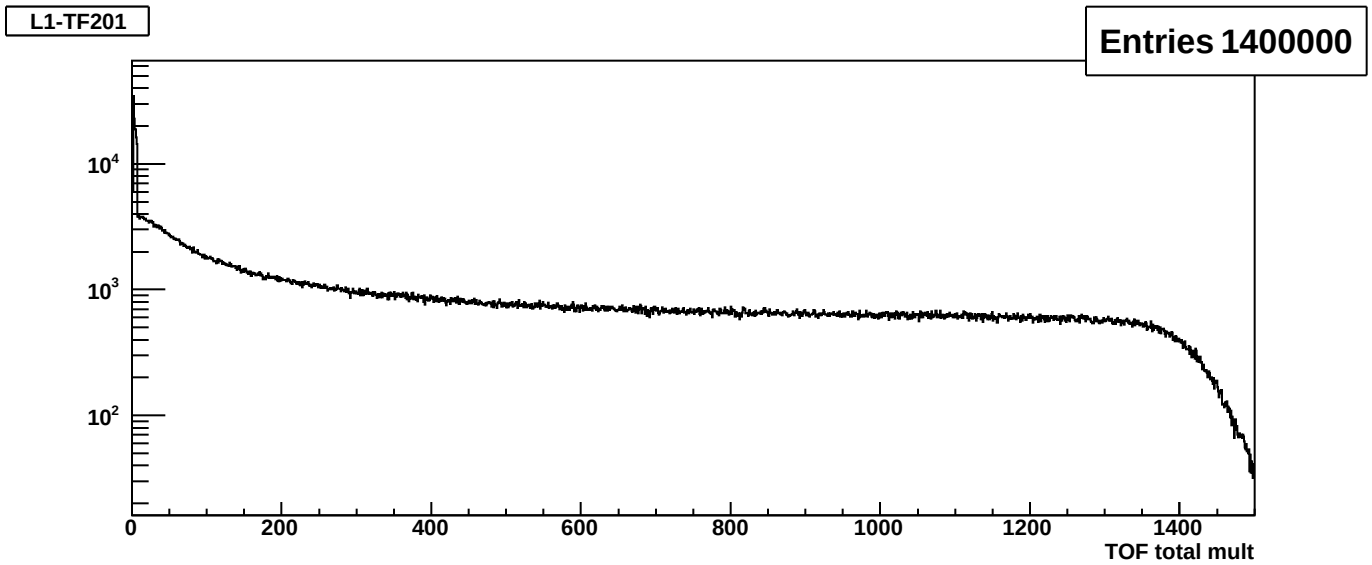

MIX-TF003
Entries 5.88e+07
TOF MULT
TOF tray

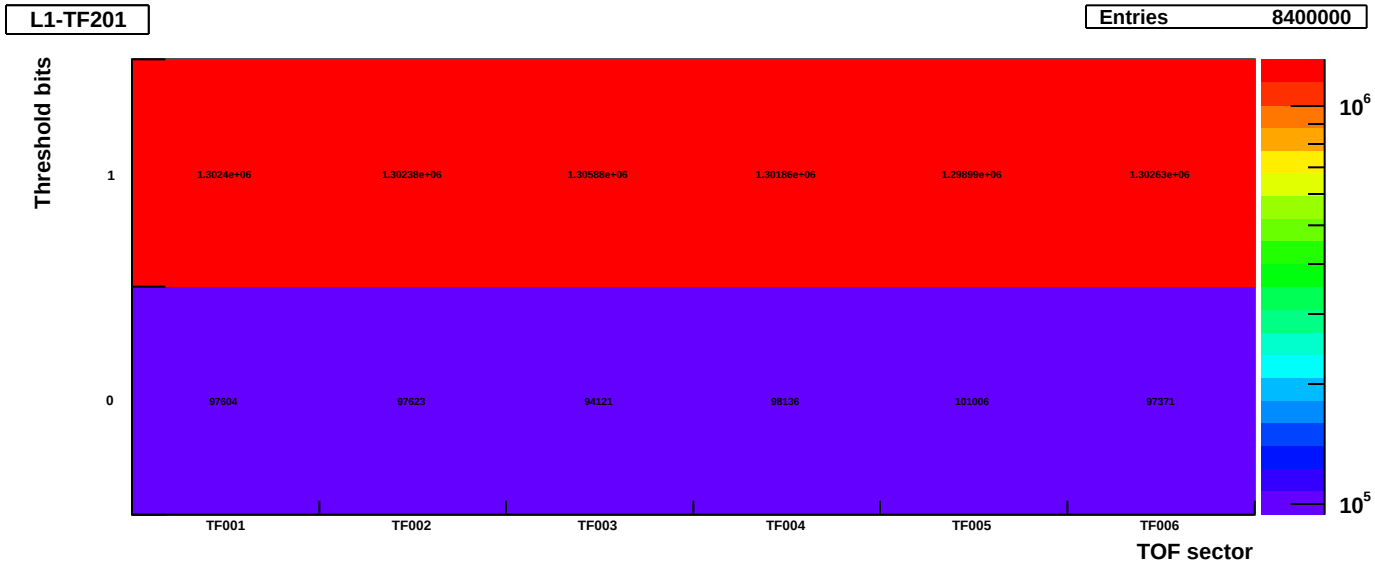

MIX-TF004
Entries 5.88e+07
TOF MULT
TOF tray

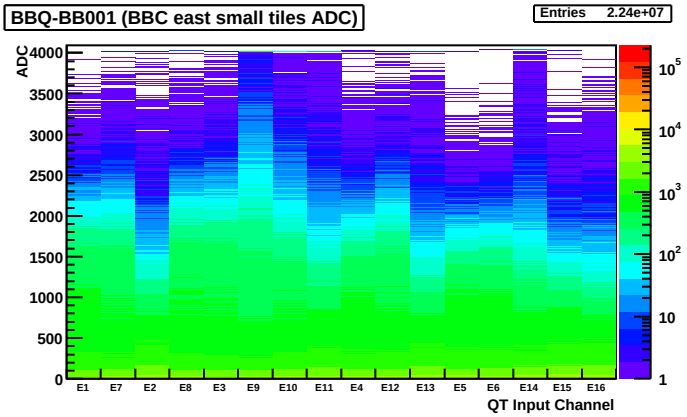

MIX-TF005
Entries 5.88e+07
TOF MULT
TOF tray

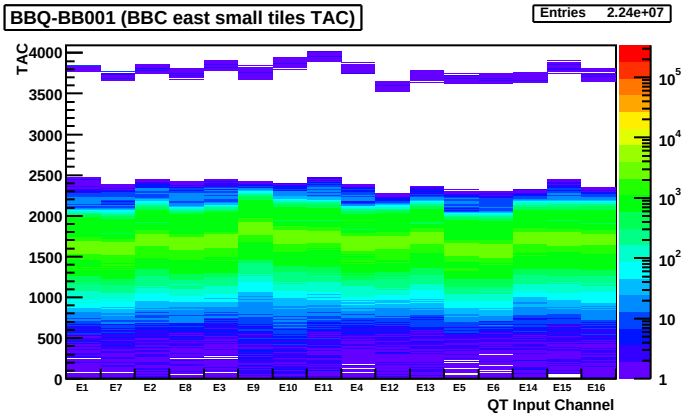

MIX-TF006
Entries 5.88e+07
TOF MULT
TOF tray

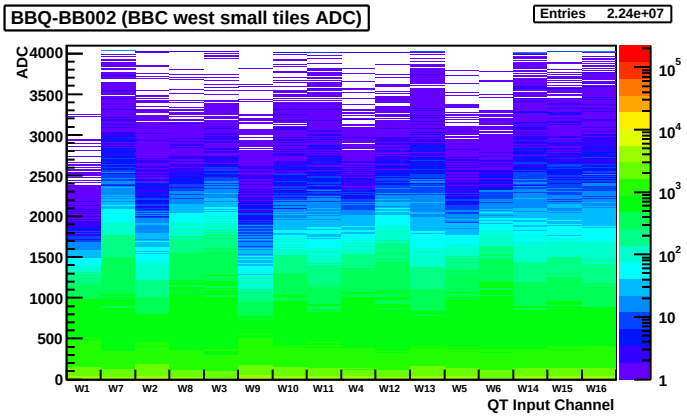

MIX-TF101
Entries 8400000
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4

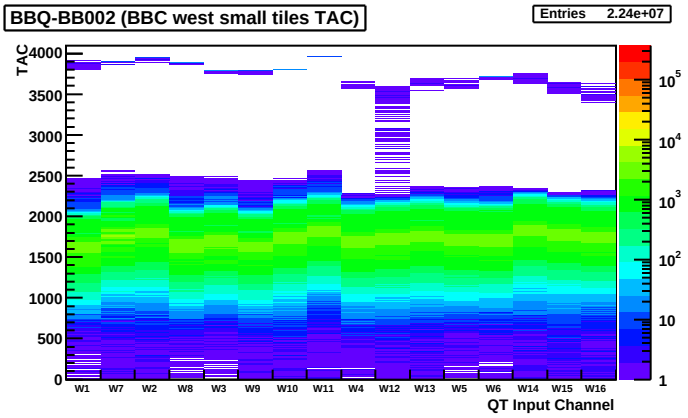

L1-TF201
Entries 1400000
10^4
10^3
10^2
0
200
400
600
800
1000
1200
1400
TOF total mult

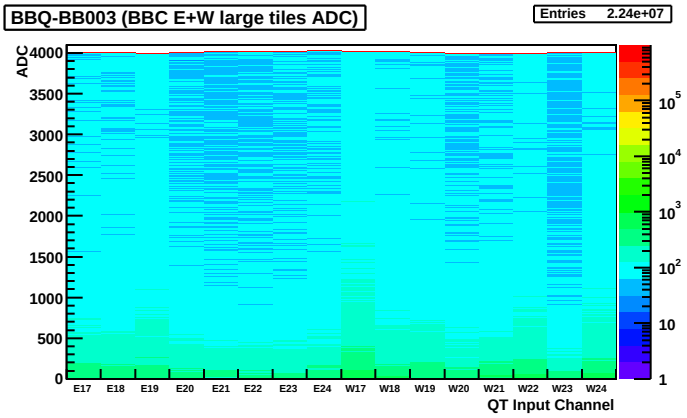

L1-TF201
Entries 8400000
Threshold bits
1
0
1.3024e+06
1.30238e+06
1.30588e+06
1.30186e+06
1.29899e+06
1.30263e+06
97604
97623
94121
98136
101006
97371
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6
10^5

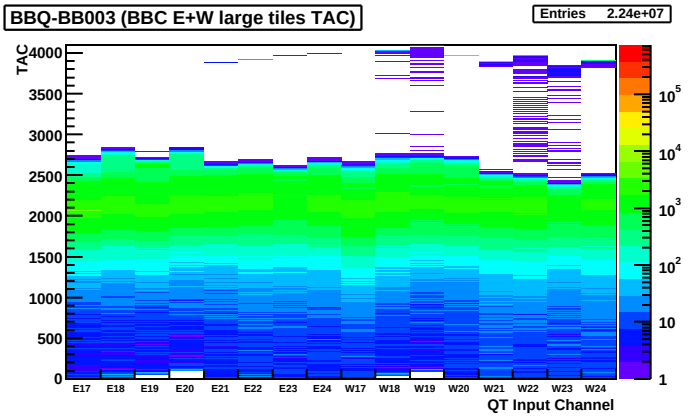

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.24e+07
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

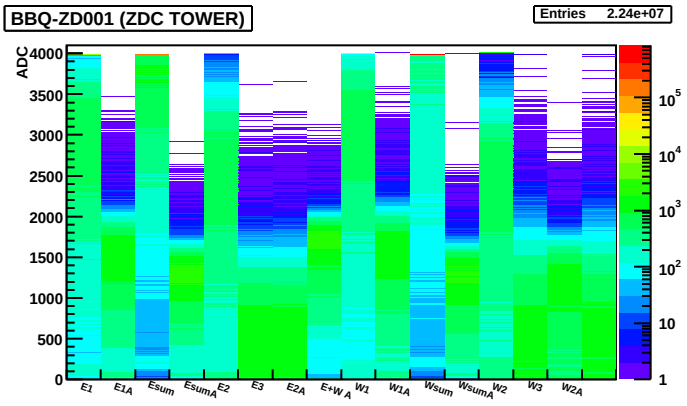

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.24e+07
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

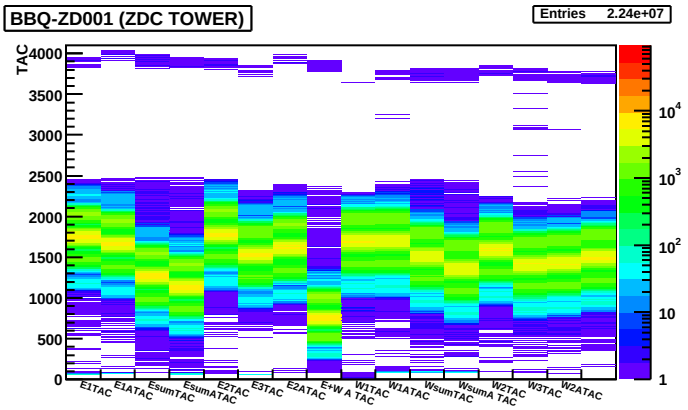

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.24e+07
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

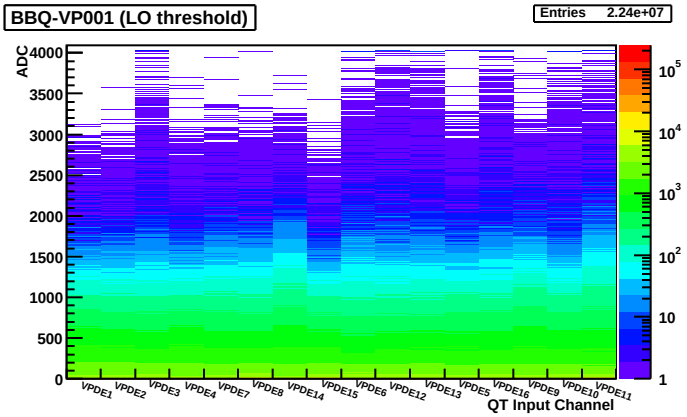

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.24e+07
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

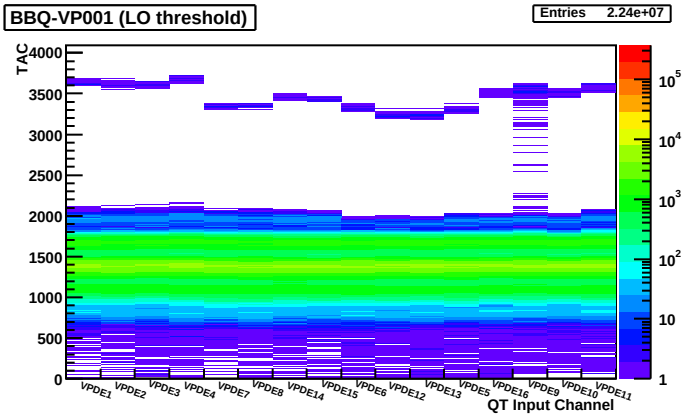

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.24e+07
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

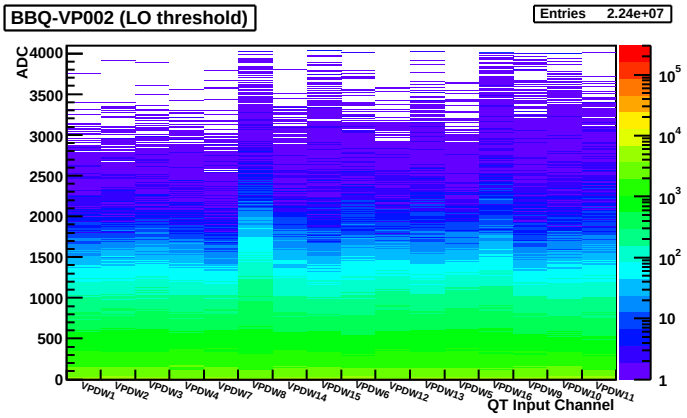

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.24e+07
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

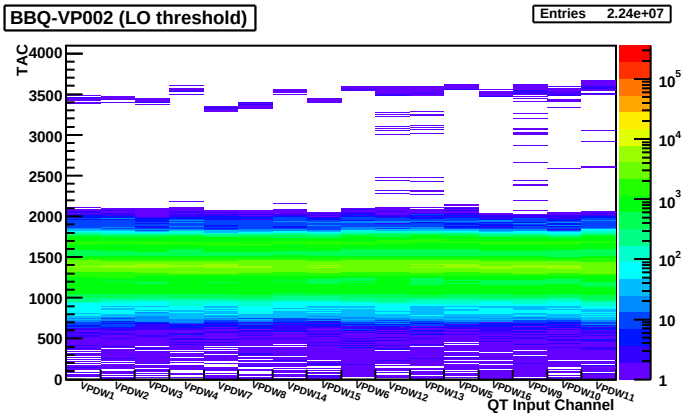

BBQ-ZD001 (ZDC TOWER)
Entries 2.24e+07
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

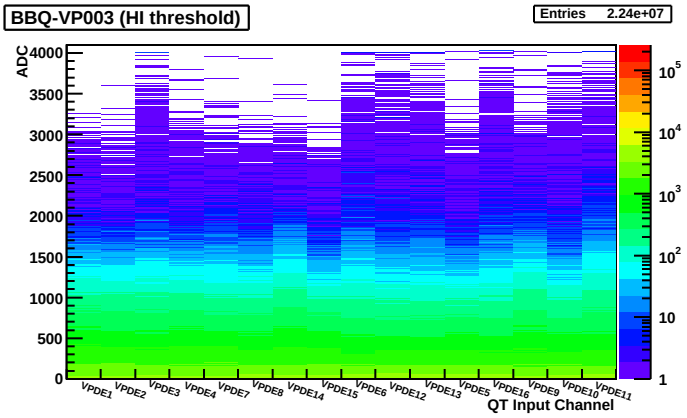

BBQ-ZD001 (ZDC TOWER)
Entries 2.24e+07
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

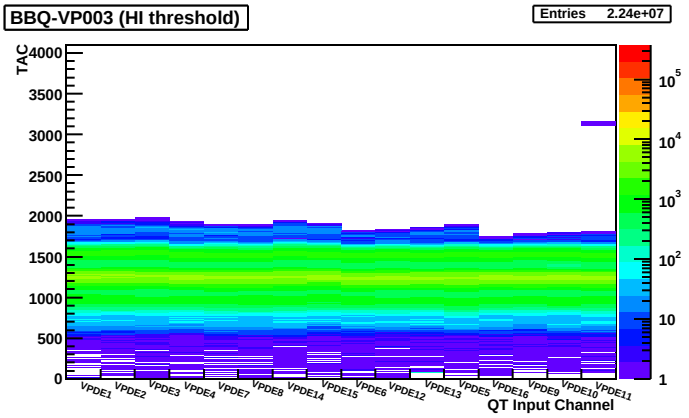

BBQ-VP001 (LO threshold)
Entries 2.24e+07
ADC
QT Input Channel

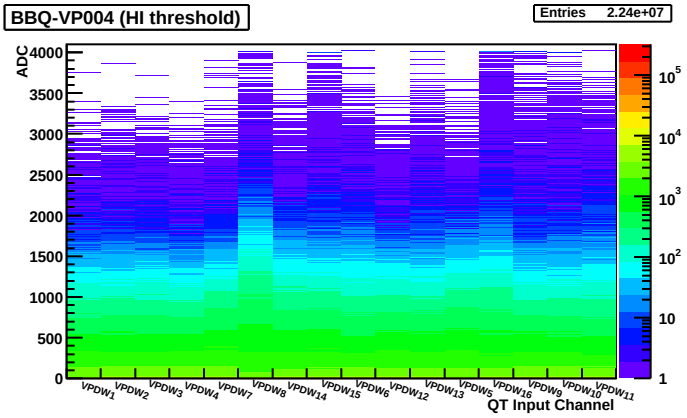

BBQ-VP001 (LO threshold)
Entries 2.24e+07
TAC
QT Input Channel

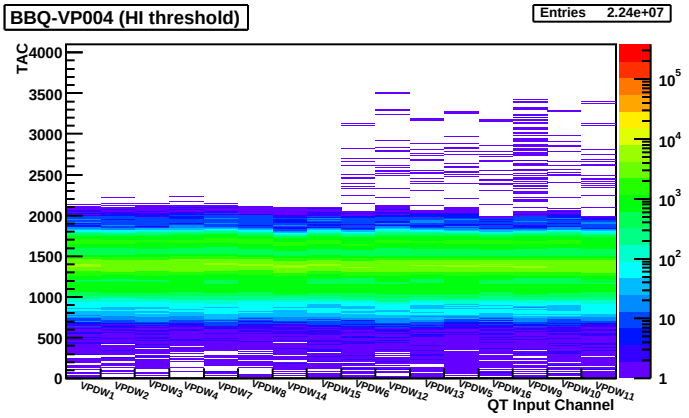

BBQ-VP002 (LO threshold)
Entries 2.24e+07
ADC
QT Input Channel

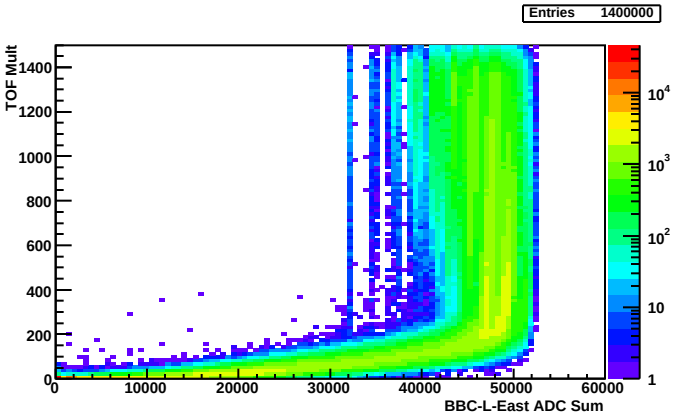

BBQ-VP002 (LO threshold)
Entries 2.24e+07
TAC
QT Input Channel

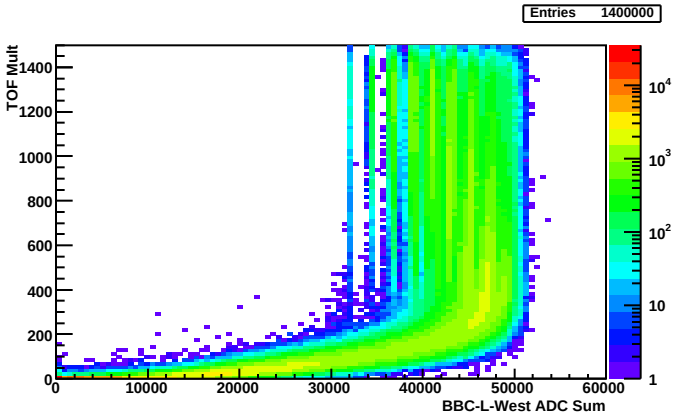

BBQ-VP003 (HI threshold)
Entries 2.24e+07
ADC
QT Input Channel

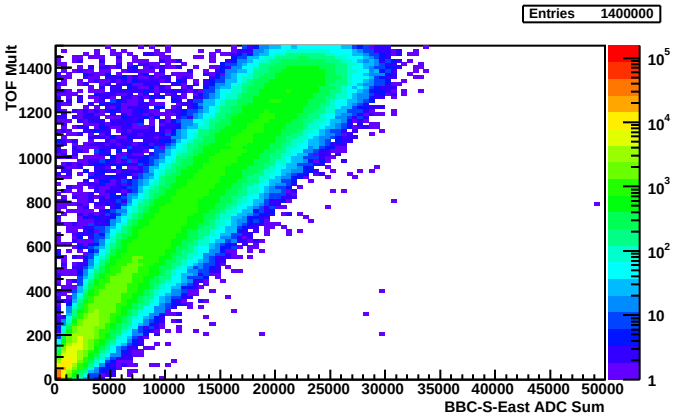

BBQ-VP003 (HI threshold)
Entries 2.24e+07
TAC
QT Input Channel

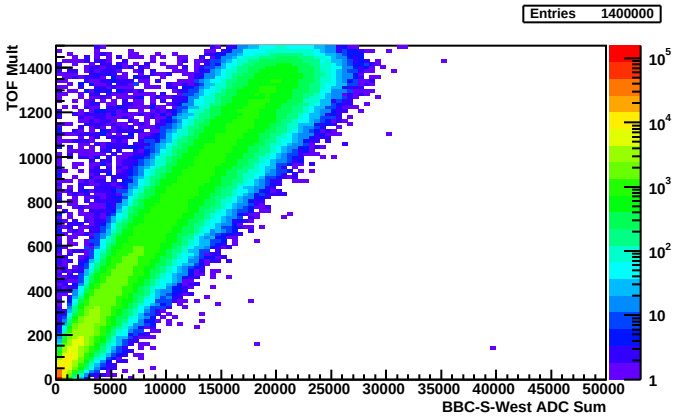

BBQ-VP004 (HI threshold)
Entries 2.24e+07
ADC
QT Input Channel

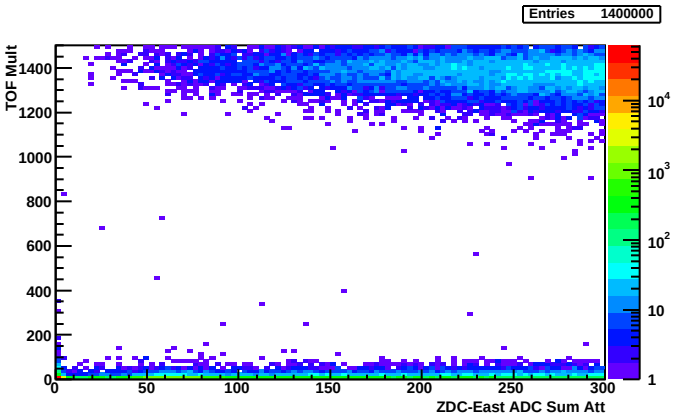

BBQ-VP004 (HI threshold)
Entries 2.24e+07
TAC
QT Input Channel

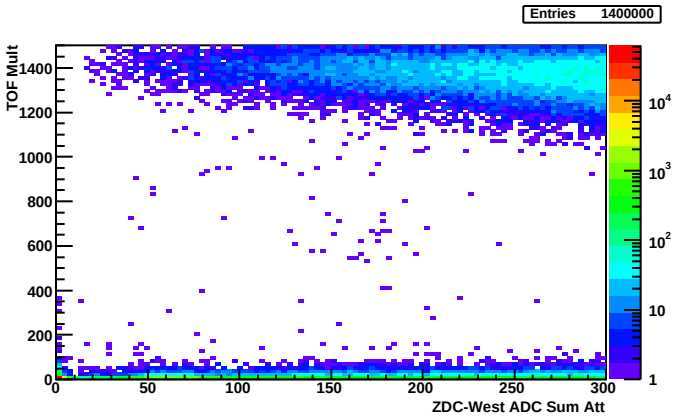

Entries 1400000
TOF Mult
BBC-L-East ADC Sum

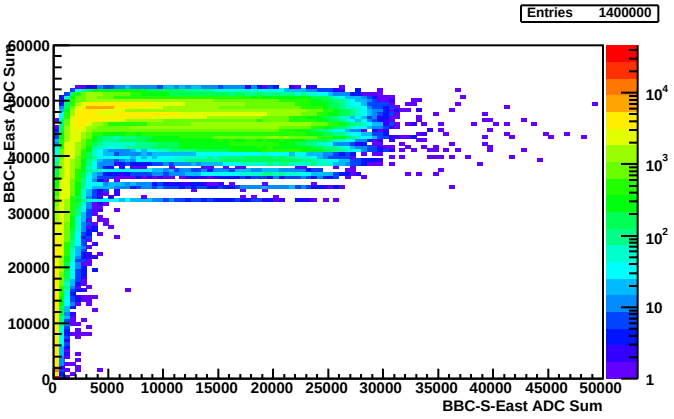

Entries 1400000
TOF Mult
BBC-L-West ADC Sum

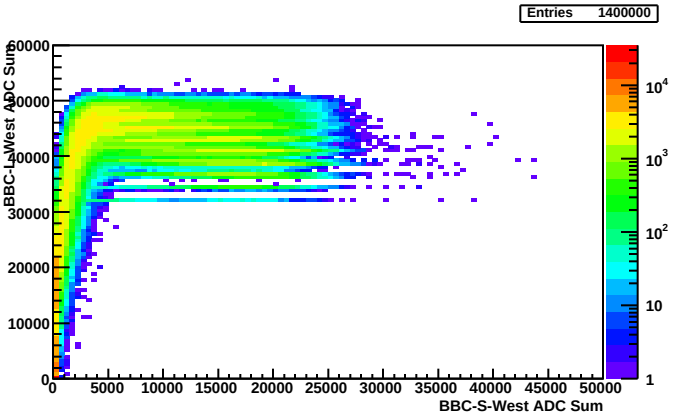

Entries 1400000
TOF Mult
BBC-S-East ADC Sum

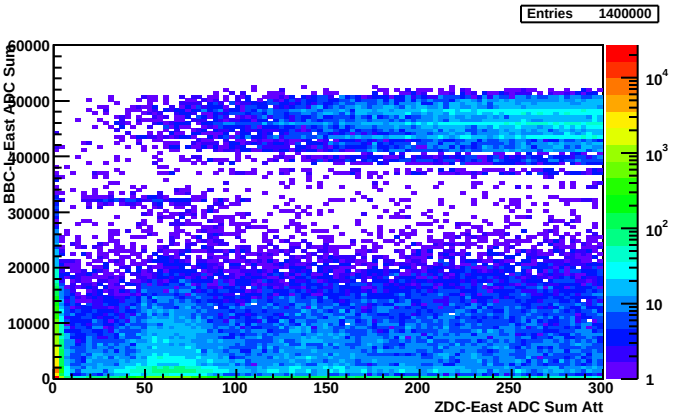

Entries 1400000
TOF Mult
BBC-S-West ADC Sum

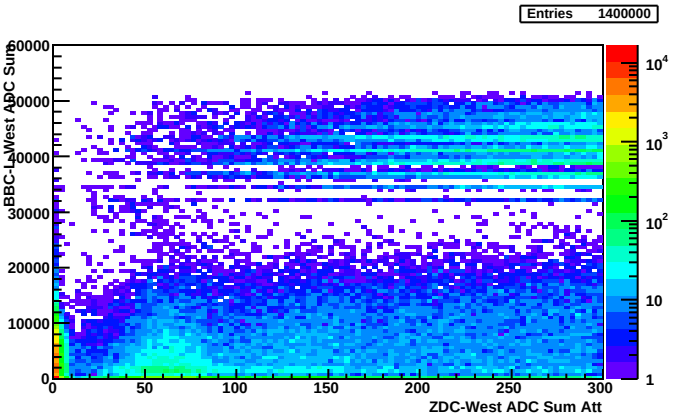

Entries 1400000
TOF Mult
ZDC-East ADC Sum Att

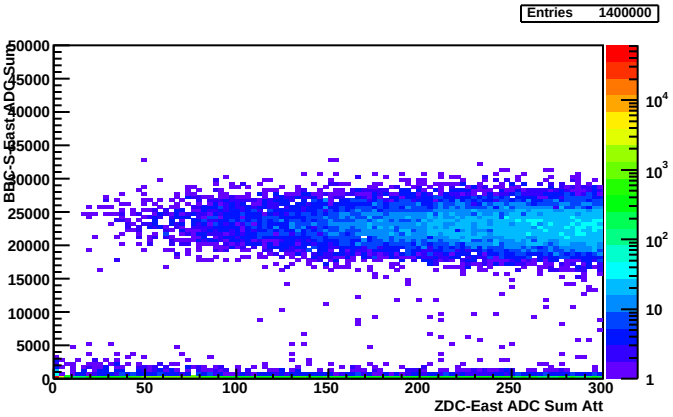

Entries 1400000
TOF Mult
ZDC-West ADC Sum Att

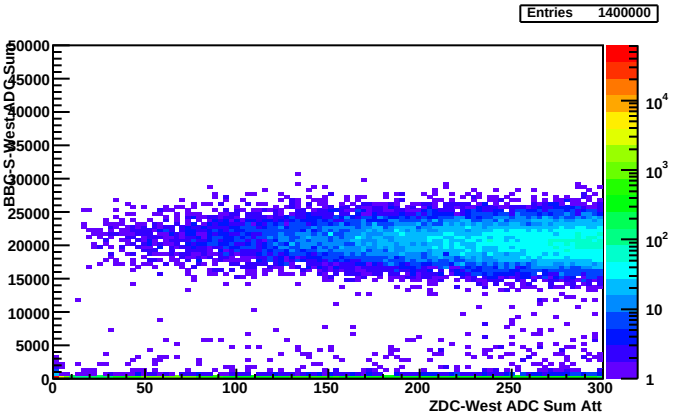

Entries 1400000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

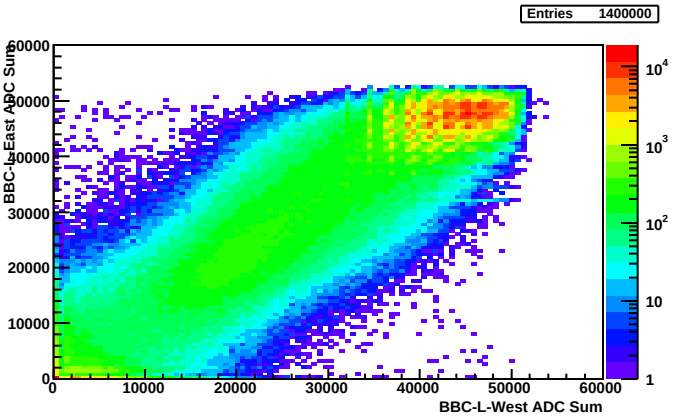

Entries 1400000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

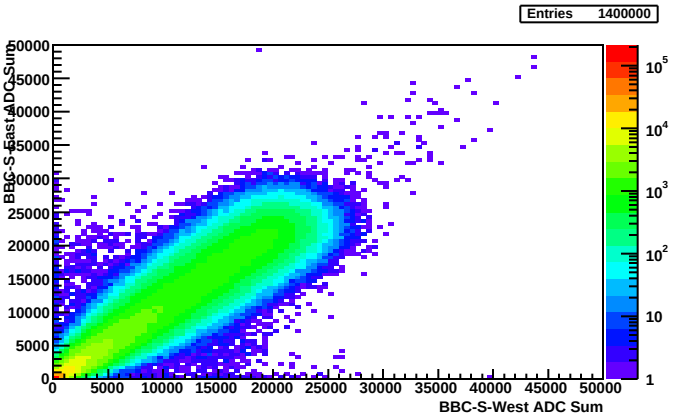

Entries 1400000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

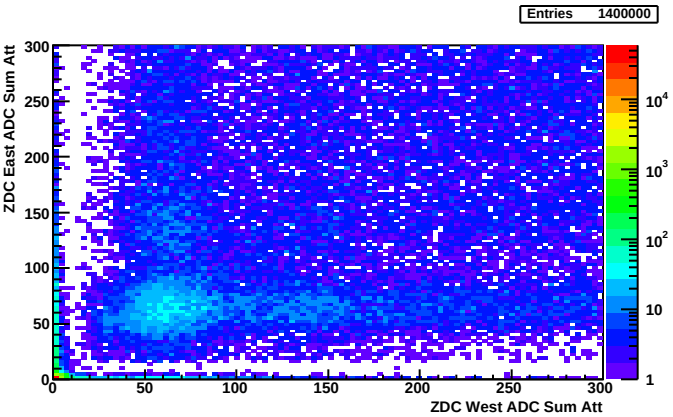

Entries 1400000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

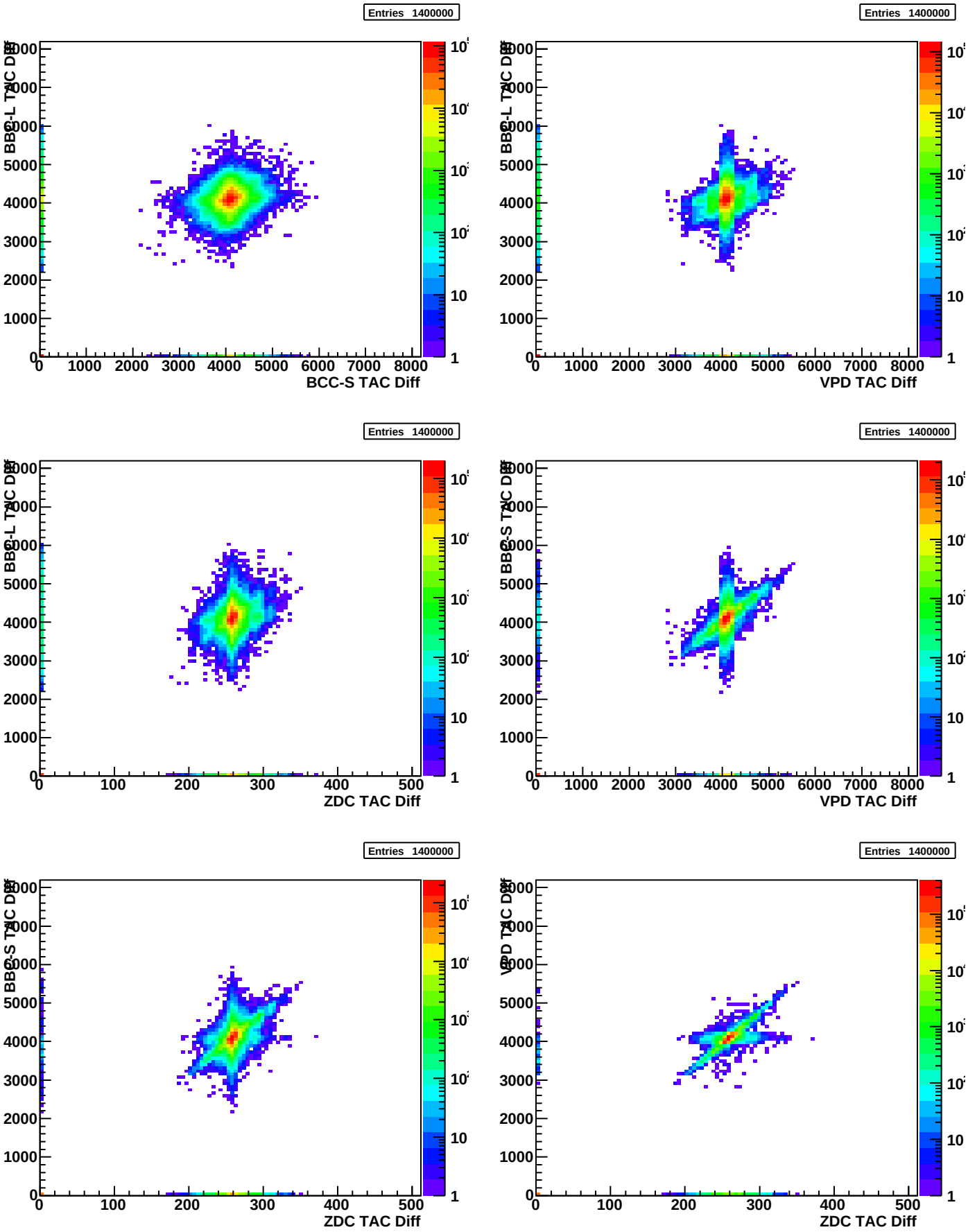

Entries 1400000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

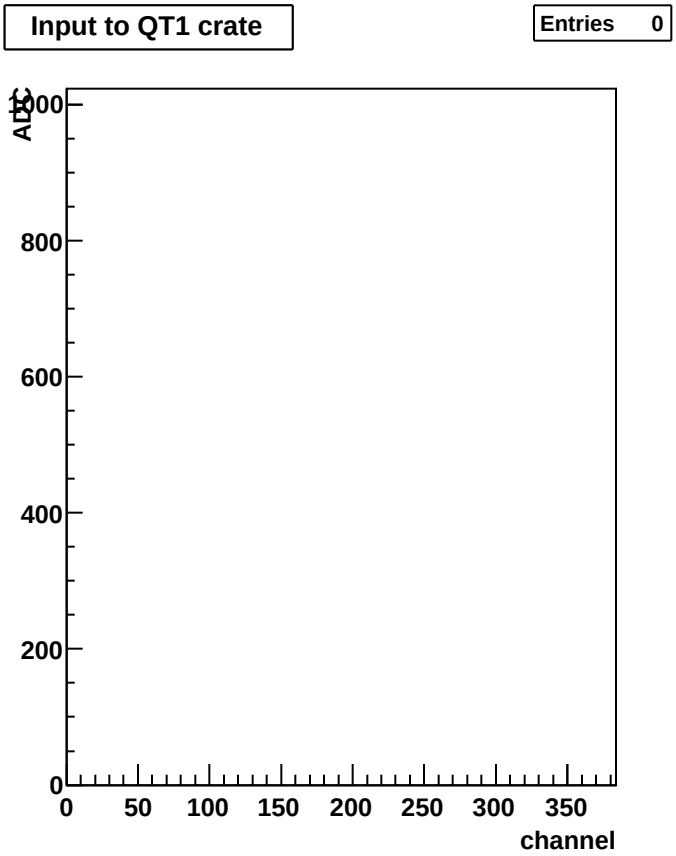

Entries 1400000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

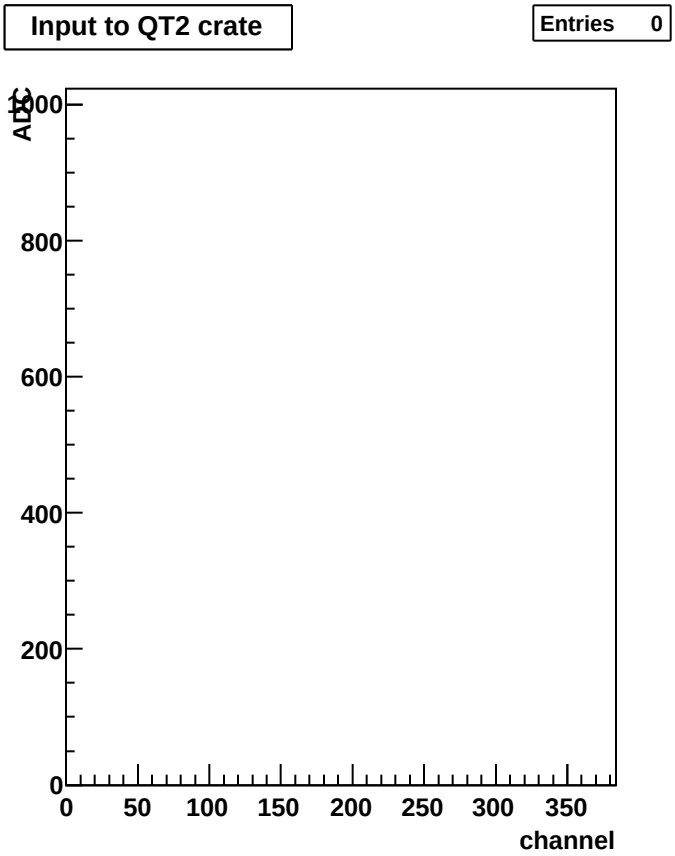

Entries 1400000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

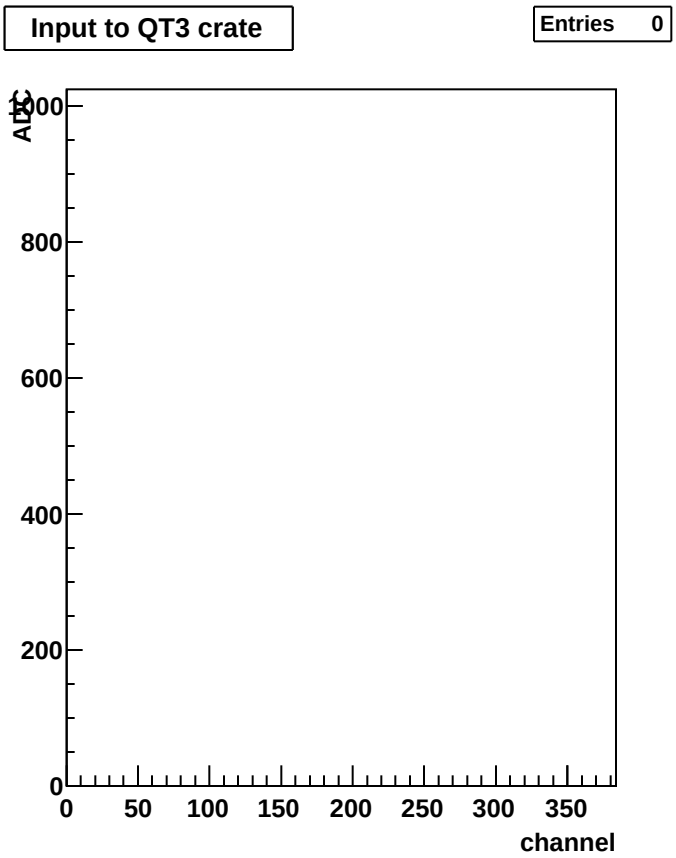

Entries 1400000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

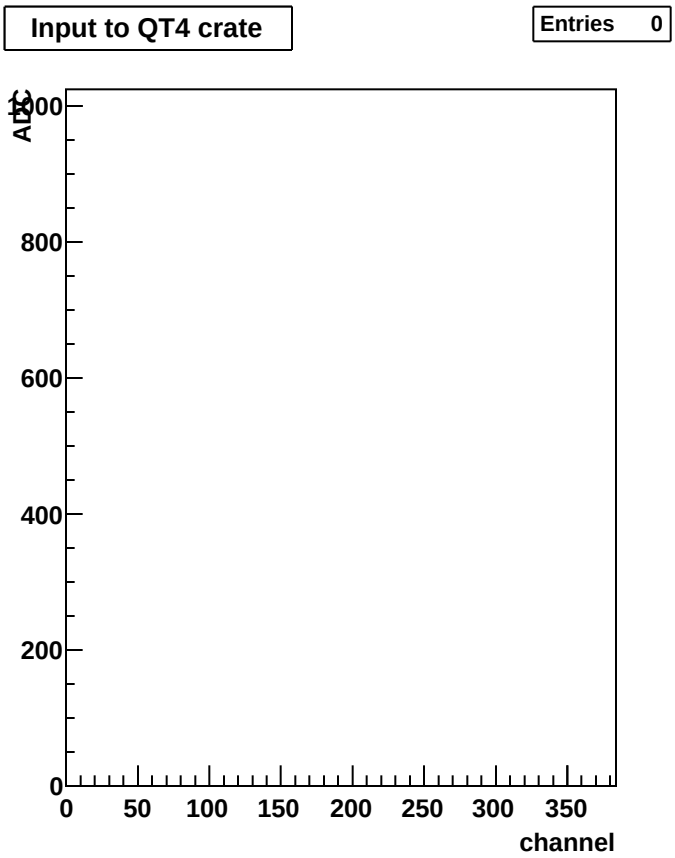

Entries 1400000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

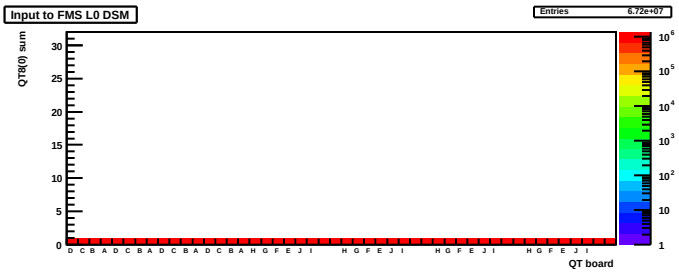

Entries 1400000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1400000
BBC-L TAC Diff
VPD TAC Diff
Entries 1400000
BBC-L TAC Diff
ZDC TAC Diff
Entries 1400000
BBC-S TAC Diff
VPD TAC Diff
Entries 1400000
BBC-S TAC Diff
ZDC TAC Diff
Entries 1400000
VPD TAC Diff
ZDC TAC Diff

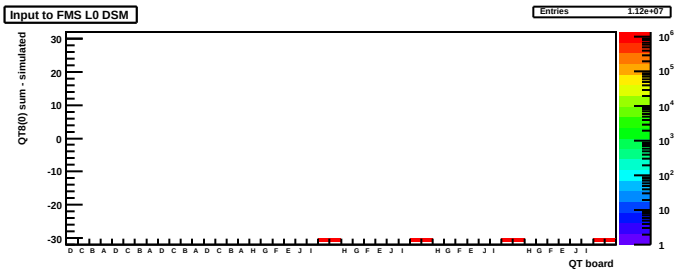

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

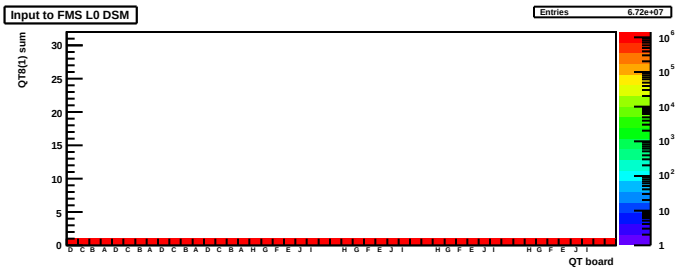

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

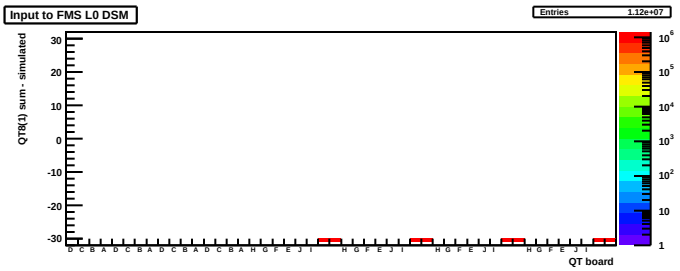

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

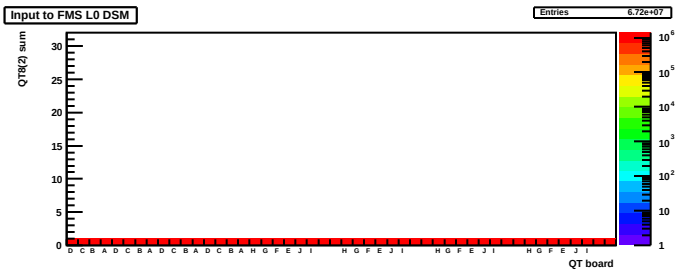

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

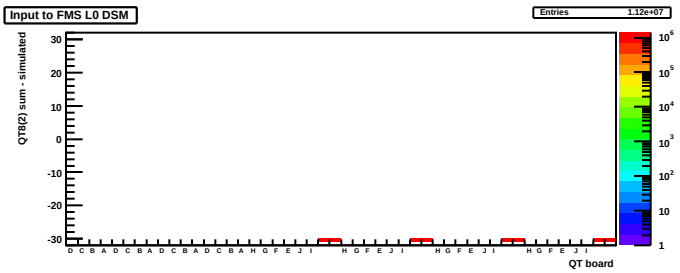

Input to FMS L0 DSM
Entries 6.72e+07
QT8(0) sum
QT board

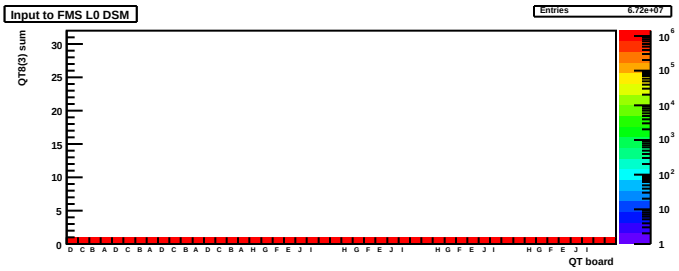

Input to FMS L0 DSM
Entries 1.12e+07
QT8(0) sum - simulated
QT board

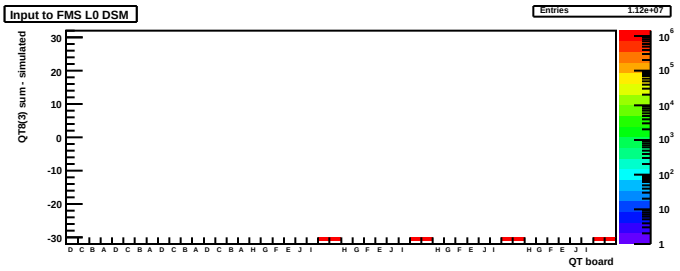

Input to FMS L0 DSM
Entries 6.72e+07
QT8(1) sum
QT board

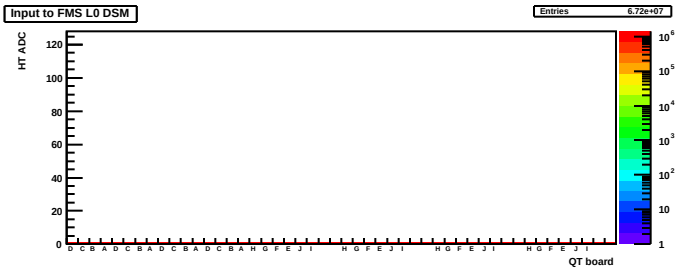

Input to FMS L0 DSM
Entries 1.12e+07
QT8(1) sum - simulated
QT board

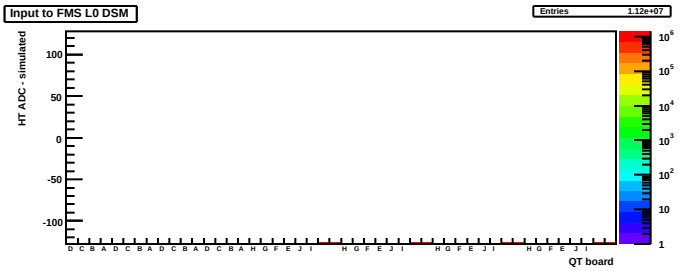

Input to FMS L0 DSM
Entries 6.72e+07
QT8(2) sum
QT board

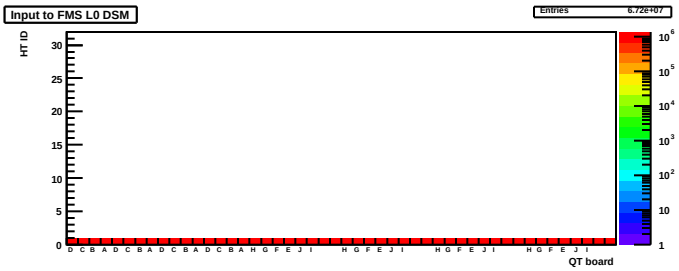

Input to FMS L0 DSM
Entries 1.12e+07
QT8(2) sum - simulated
QT board

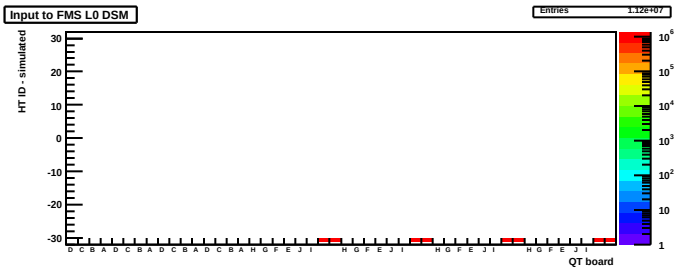

Input to FMS L0 DSM
Entries 6.72e+07
QT8(3) sum
QT board

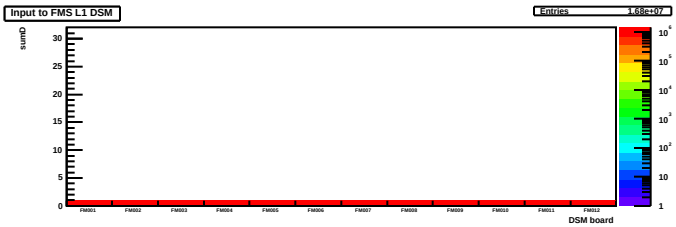

Input to FMS L0 DSM
Entries 1.12e+07
QT8(3) sum - simulated
QT board

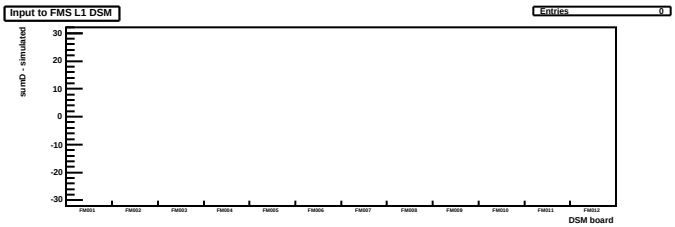

Input to FMS L0 DSM
Entries 6.72e+07
HT ADC
QT board

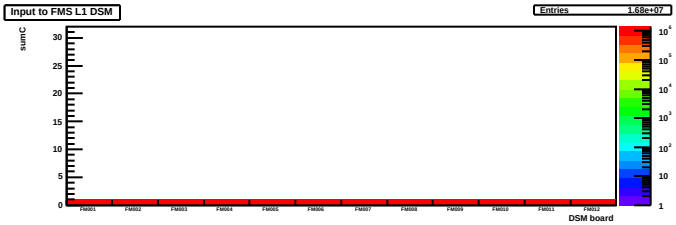

Input to FMS L0 DSM
Entries 1.12e+07
HT ADC - simulated
QT board

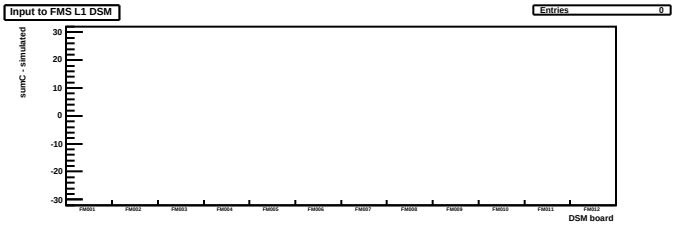

Input to FMS L0 DSM
Entries 6.72e+07
HT ID
QT board

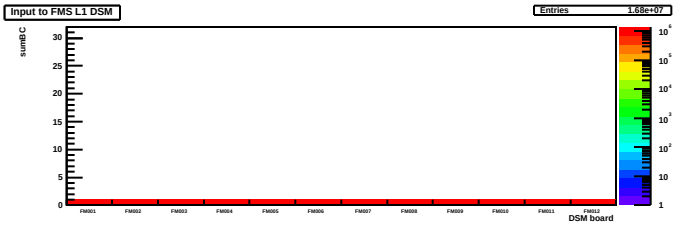

Input to FMS L0 DSM
Entries 1.12e+07
HT ID - simulated
QT board

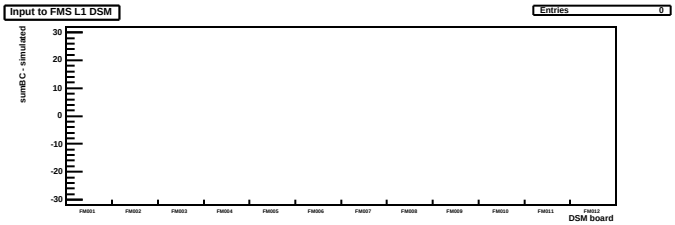

Input to FMS L1 DSM
Entries 1.68e+07
sumD
DSM board

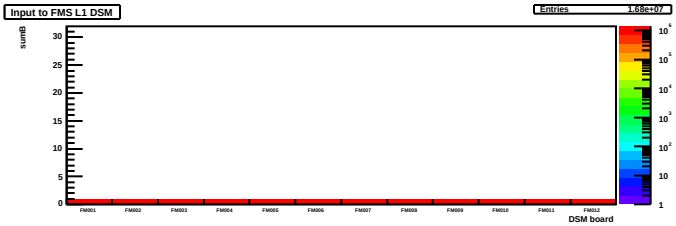

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

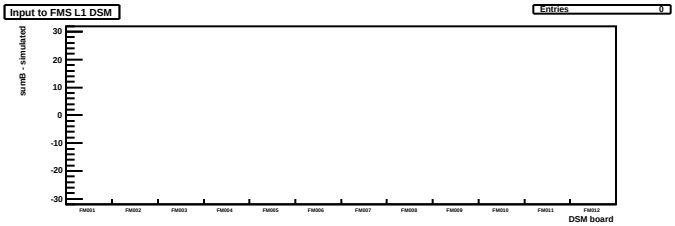

Input to FMS L1 DSM
Entries 1.68e+07
sumC
DSM board

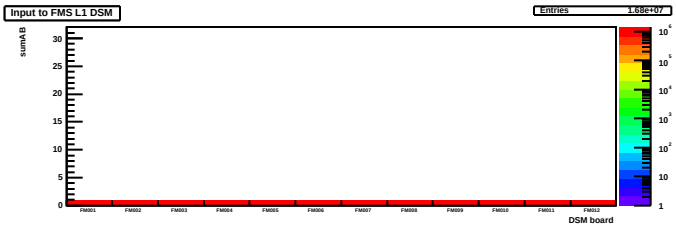

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

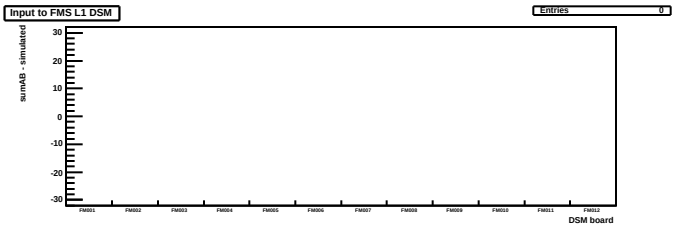

Input to FMS L1 DSM
Entries 1.68e+07
sumBC
DSM board

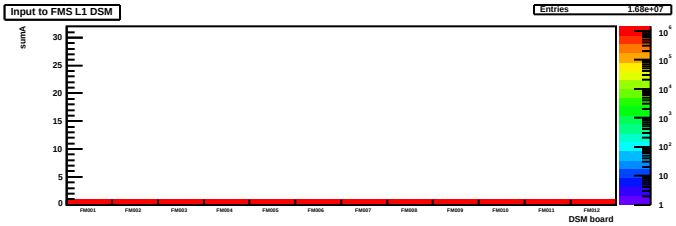

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

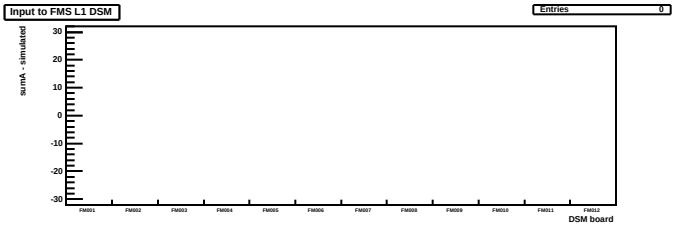

Input to FMS L1 DSM
Entries 1.68e+07
sumB
DSM board

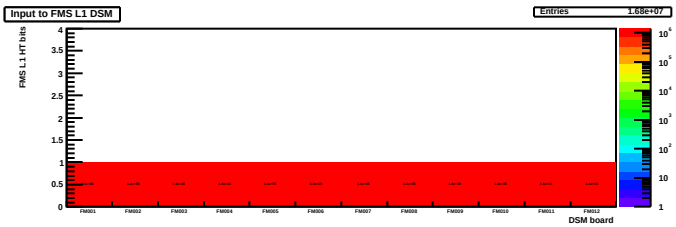

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

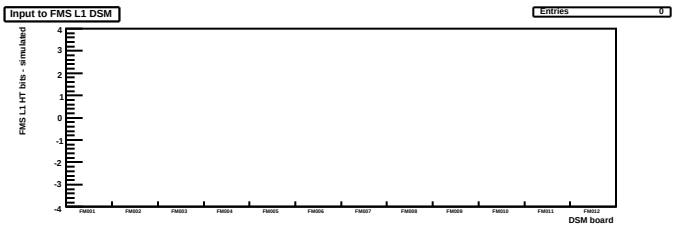

Input to FMS L1 DSM
Entries 1.68e+07
sumAB
DSM board

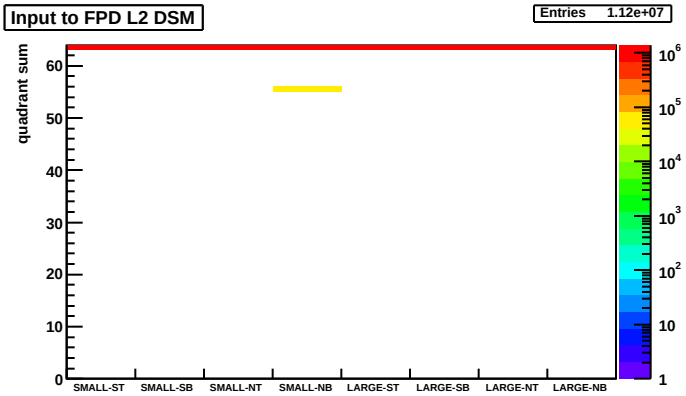

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

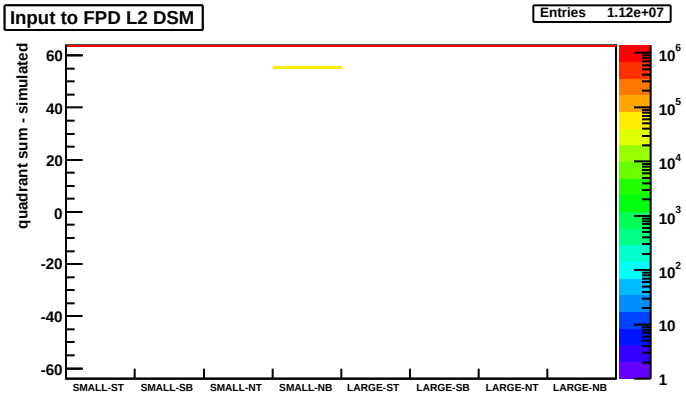

Input to FMS L1 DSM
Entries 1.68e+07
sumA
DSM board

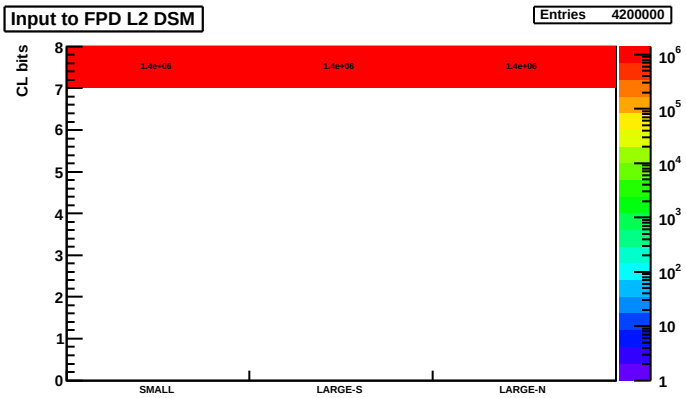

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

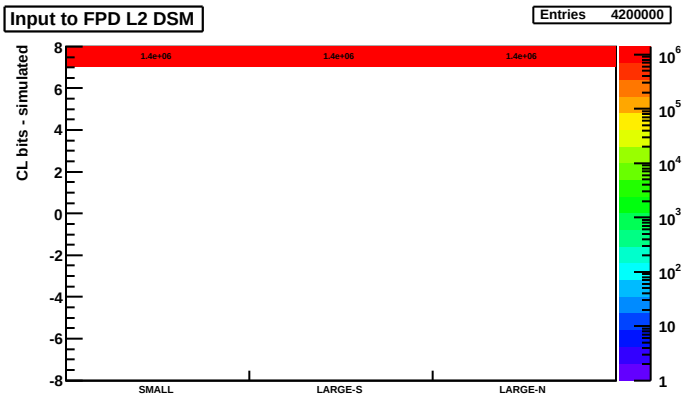

Input to FMS L1 DSM
Entries 1.68e+07
FMS L1 HT bits
DSM board

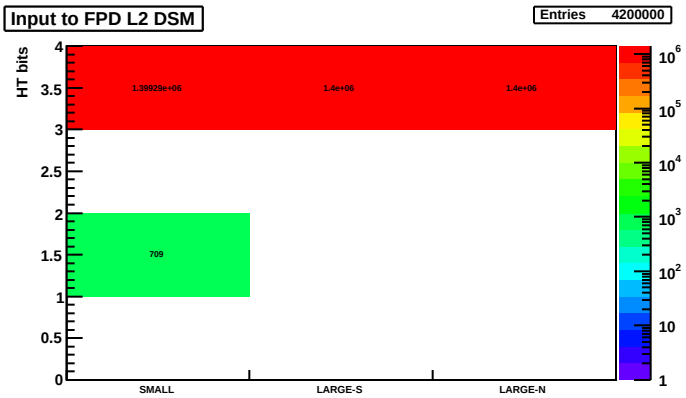

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

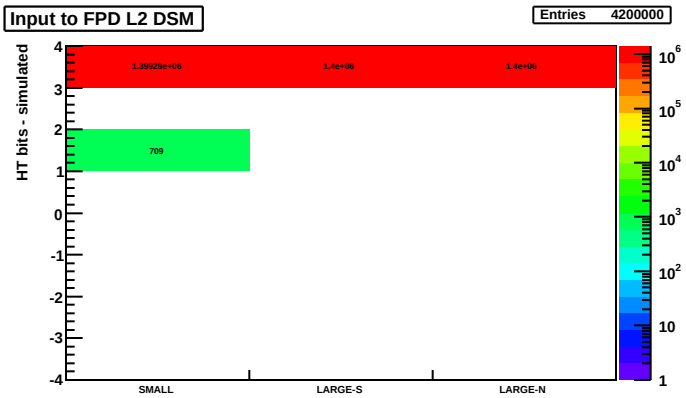

Input to FPD L2 DSM
Entries 1.12e+07
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

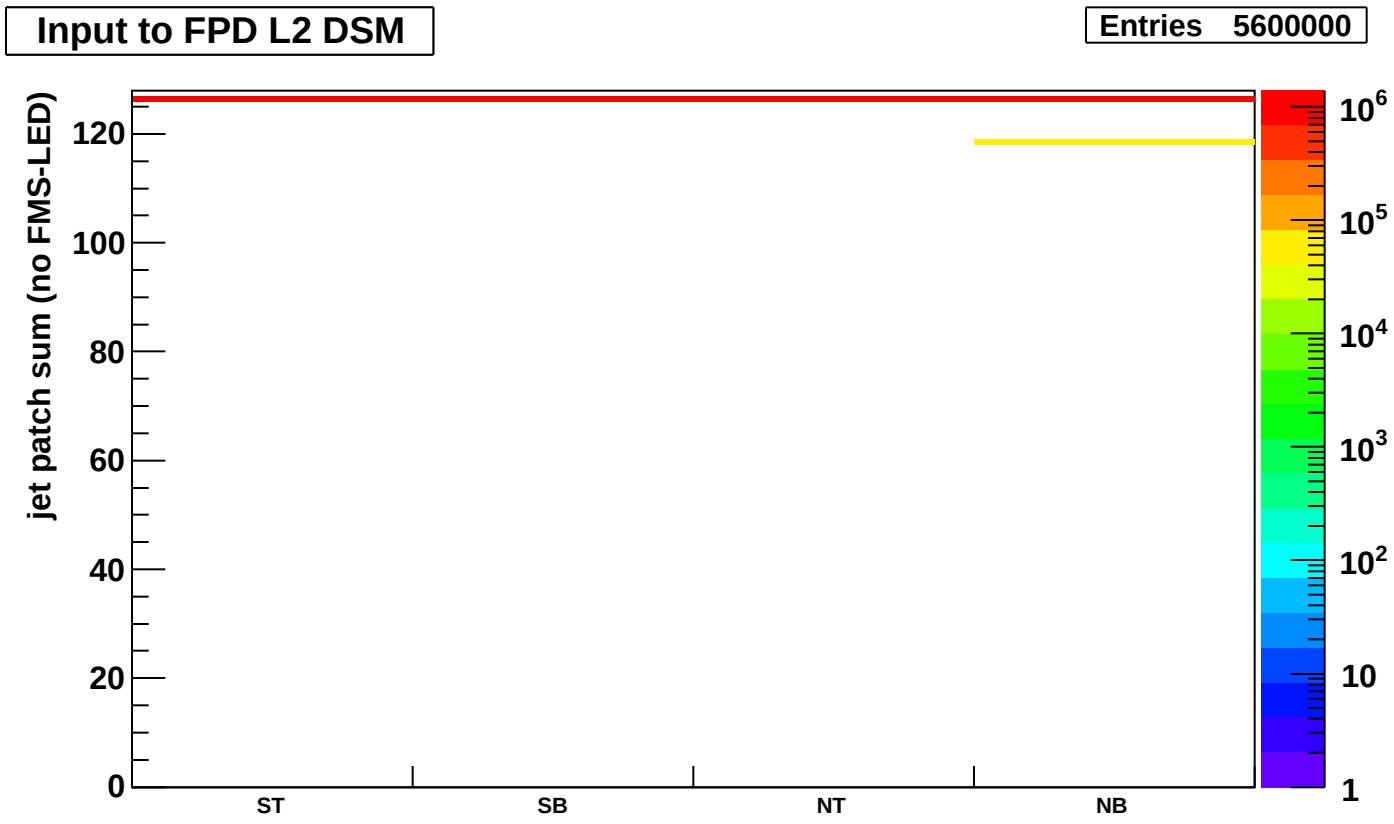

Input to FPD L2 DSM
Entries 1.12e+07
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

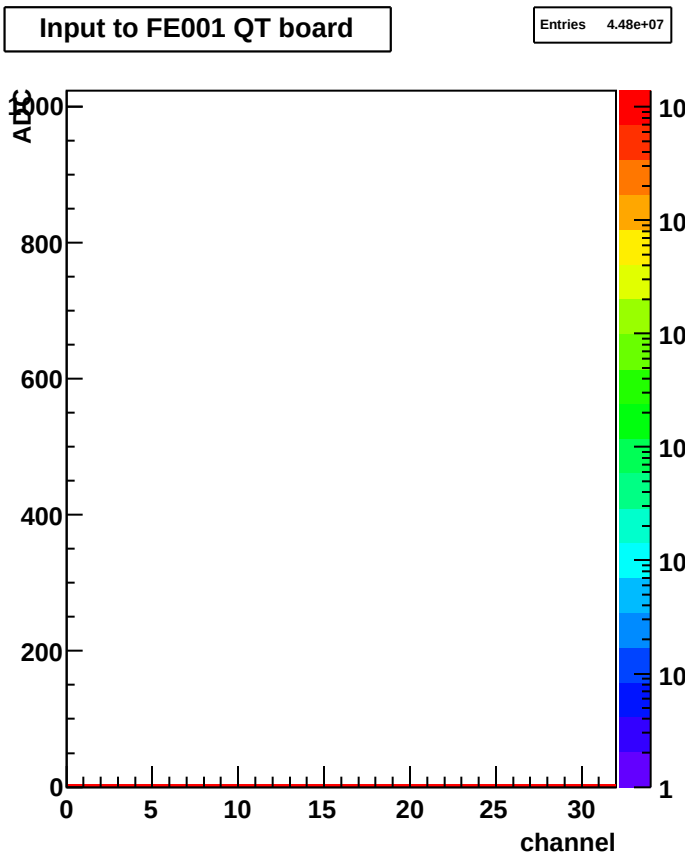

Input to FPD L2 DSM
Entries 4200000
CL bits
1.4e+06
1.4e+06
1.4e+06
SMALL
LARGE-S
LARGE-N

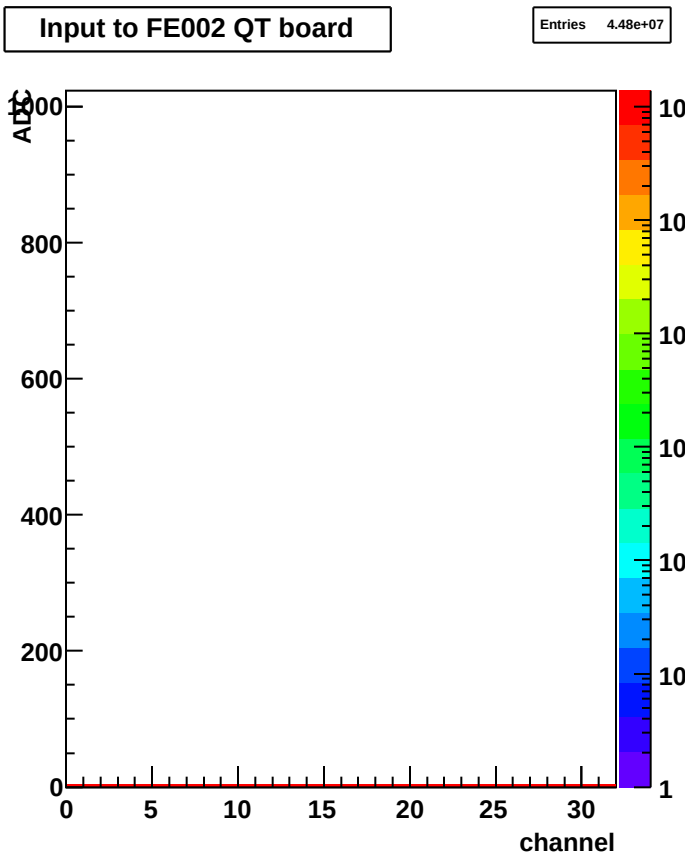

Input to FPD L2 DSM
Entries 4200000
CL bits - simulated
1.4e+06
1.4e+06
1.4e+06
SMALL
LARGE-S
LARGE-N

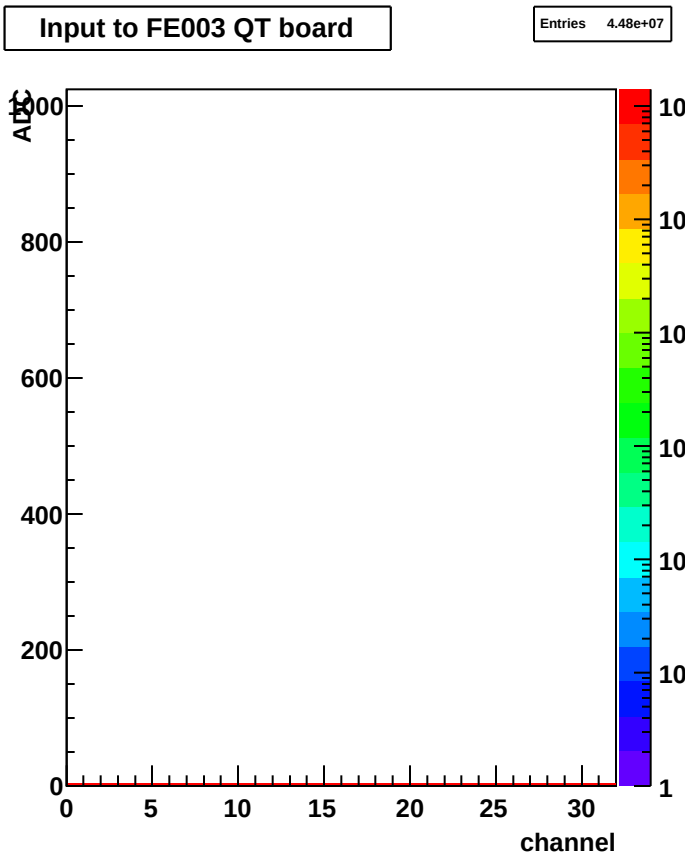

Input to FPD L2 DSM
Entries 4200000
HT bits
1.39929e+06
1.4e+06
1.4e+06
709
SMALL
LARGE-S
LARGE-N

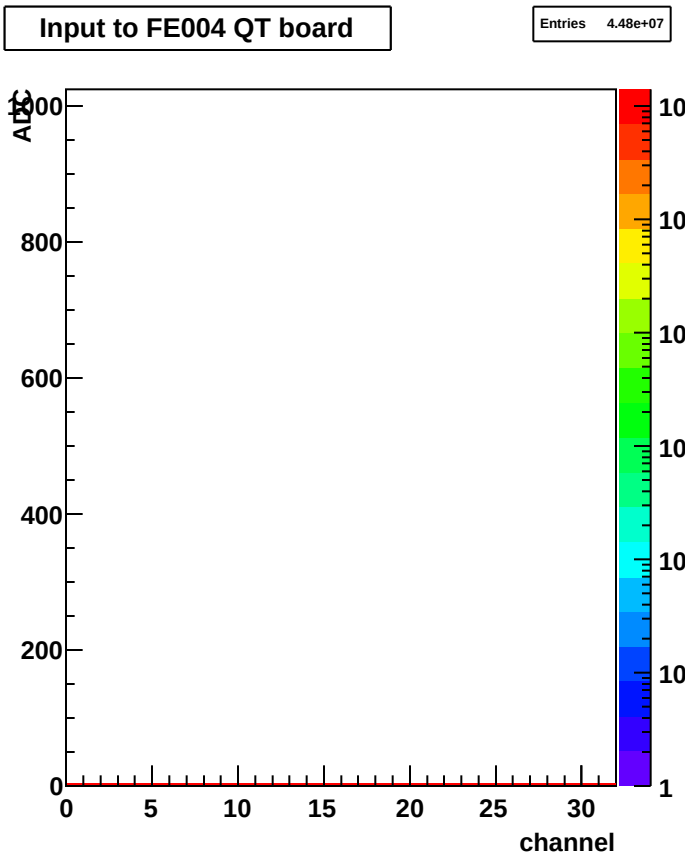

Input to FPD L2 DSM
Entries 4200000
HT bits - simulated
1.39929e+06
1.4e+06
1.4e+06
709
SMALL
LARGE-S
LARGE-N

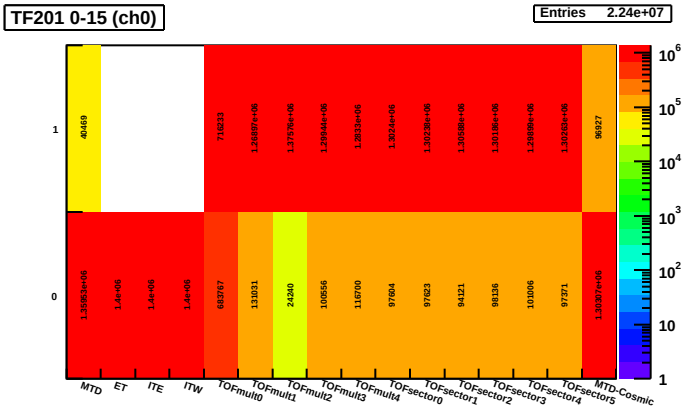

Input to FPD L2 DSM
Entries 5600000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5
10^6

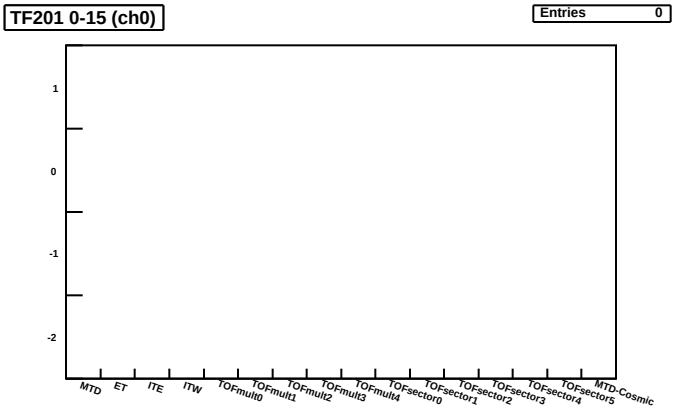

Input to FE001 QT board
Entries 4.48e+07
ADC
channel

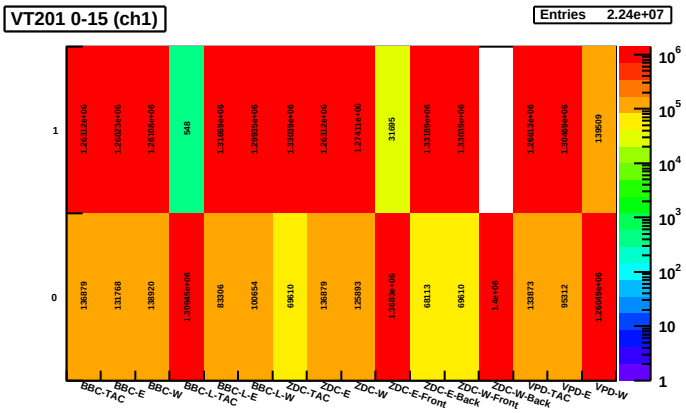

Input to FE002 QT board
Entries 4.48e+07
ADC
channel

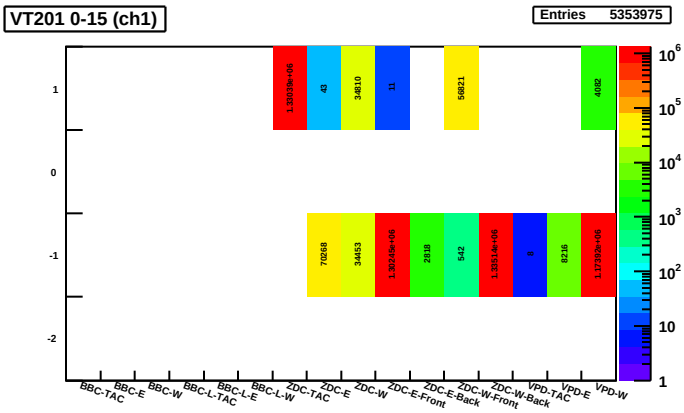

Input to FE003 QT board
Entries 4.48e+07
ADC
channel

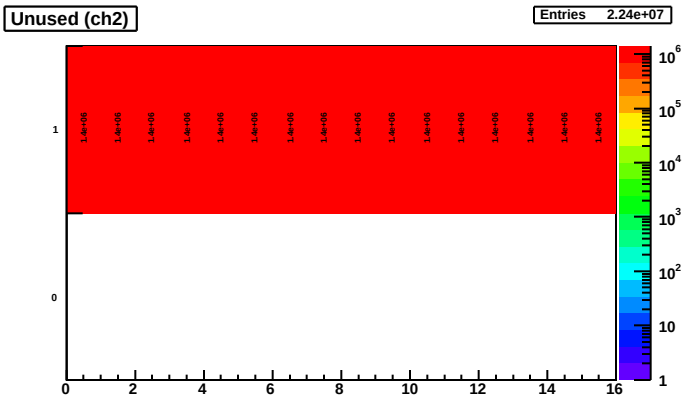

Input to FE004 QT board
Entries 4.48e+07
ADC
channel

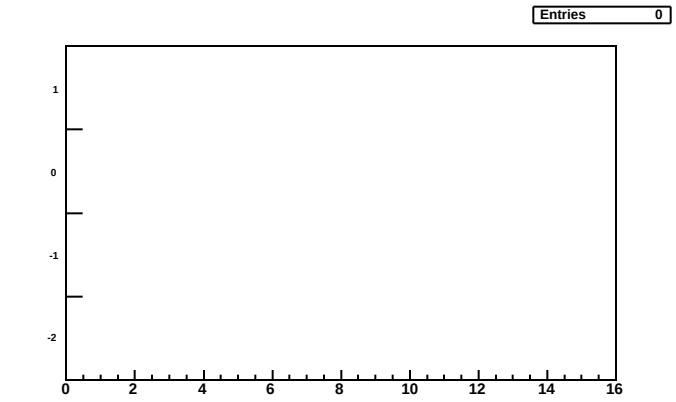

TF201 0-15 (ch0)
Entries 2.24e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

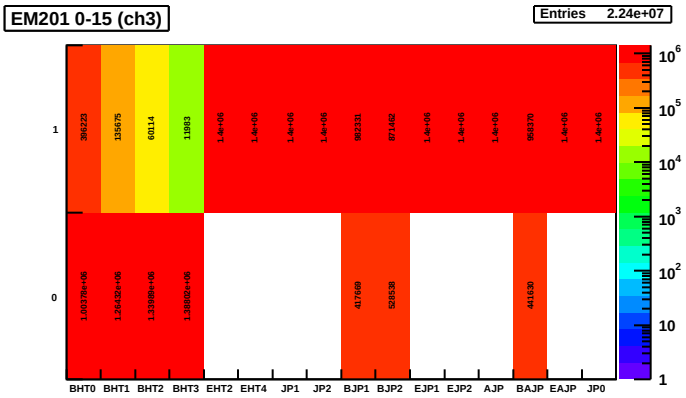

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

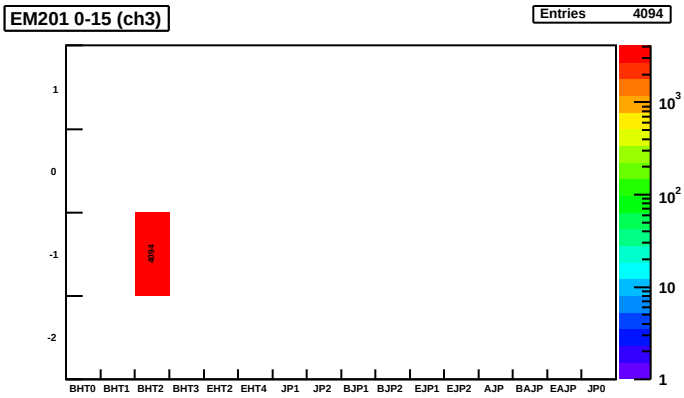

VT201 0-15 (ch1)
Entries 2.24e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 5353975
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

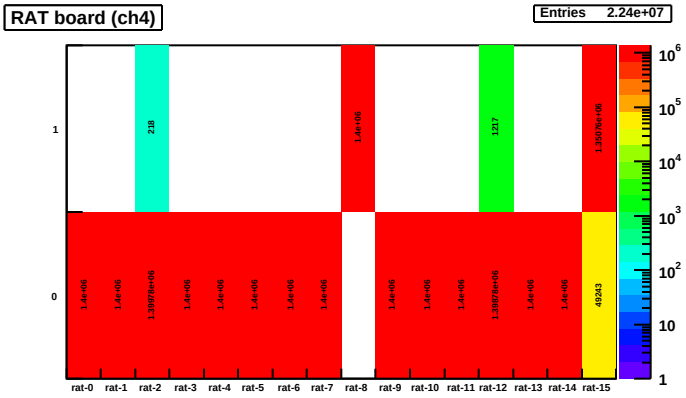

Unused (ch2)
Entries 2.24e+07

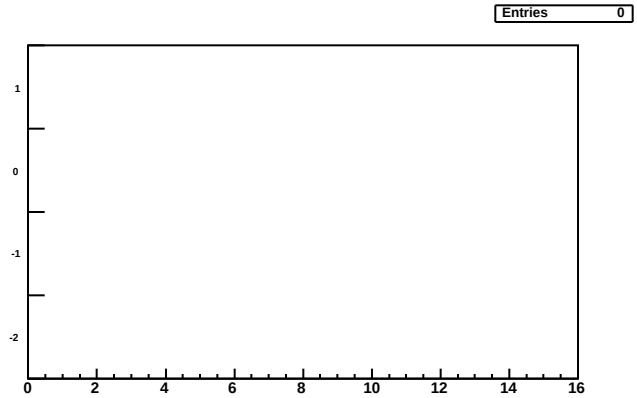

Entries 0


EM201 0-15 (ch3)
Entries 2.24e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

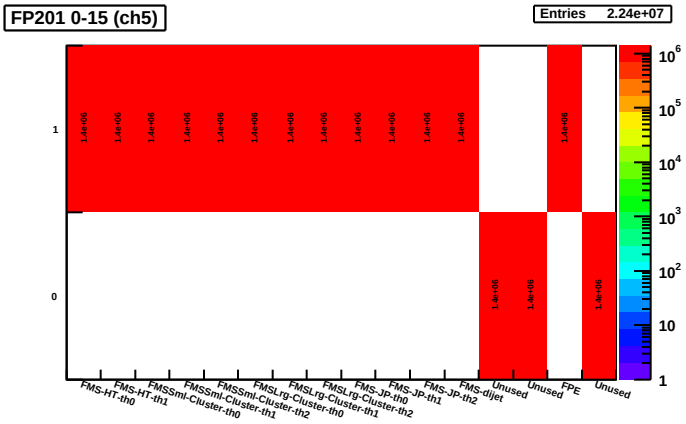

EM201 0-15 (ch3)
Entries 4094
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

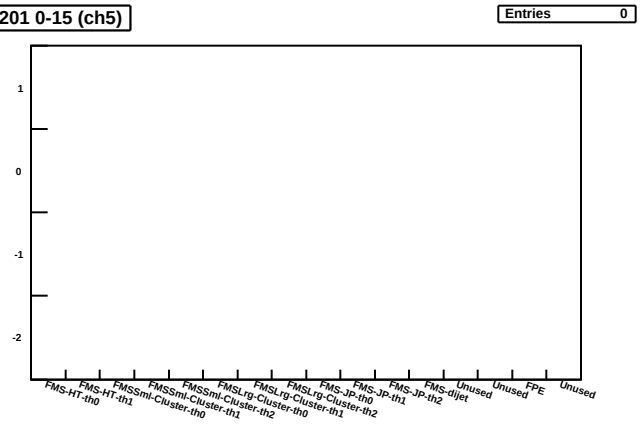




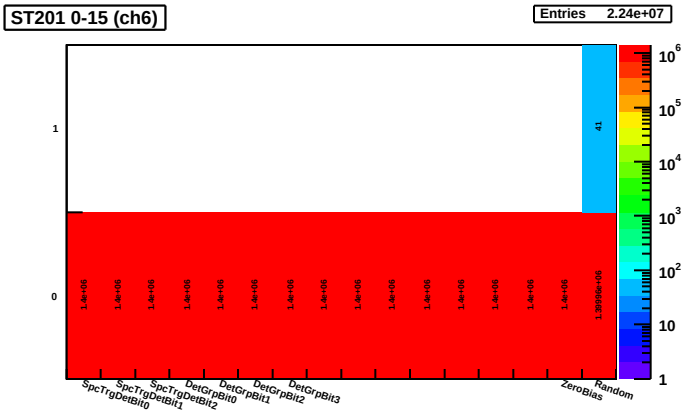
FP201 0-15 (ch5)

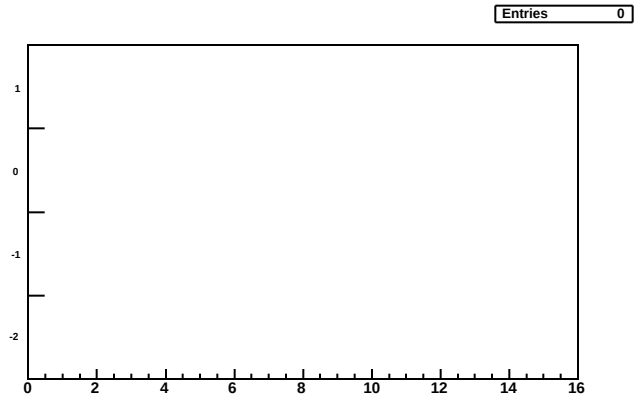
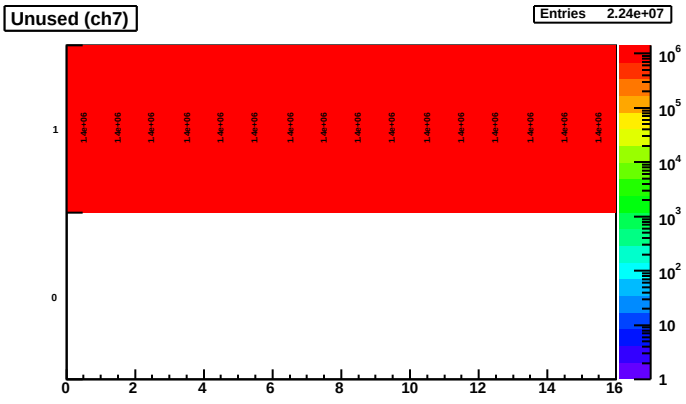
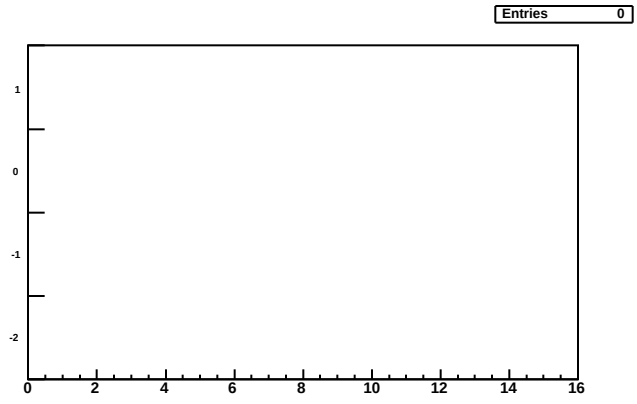


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)