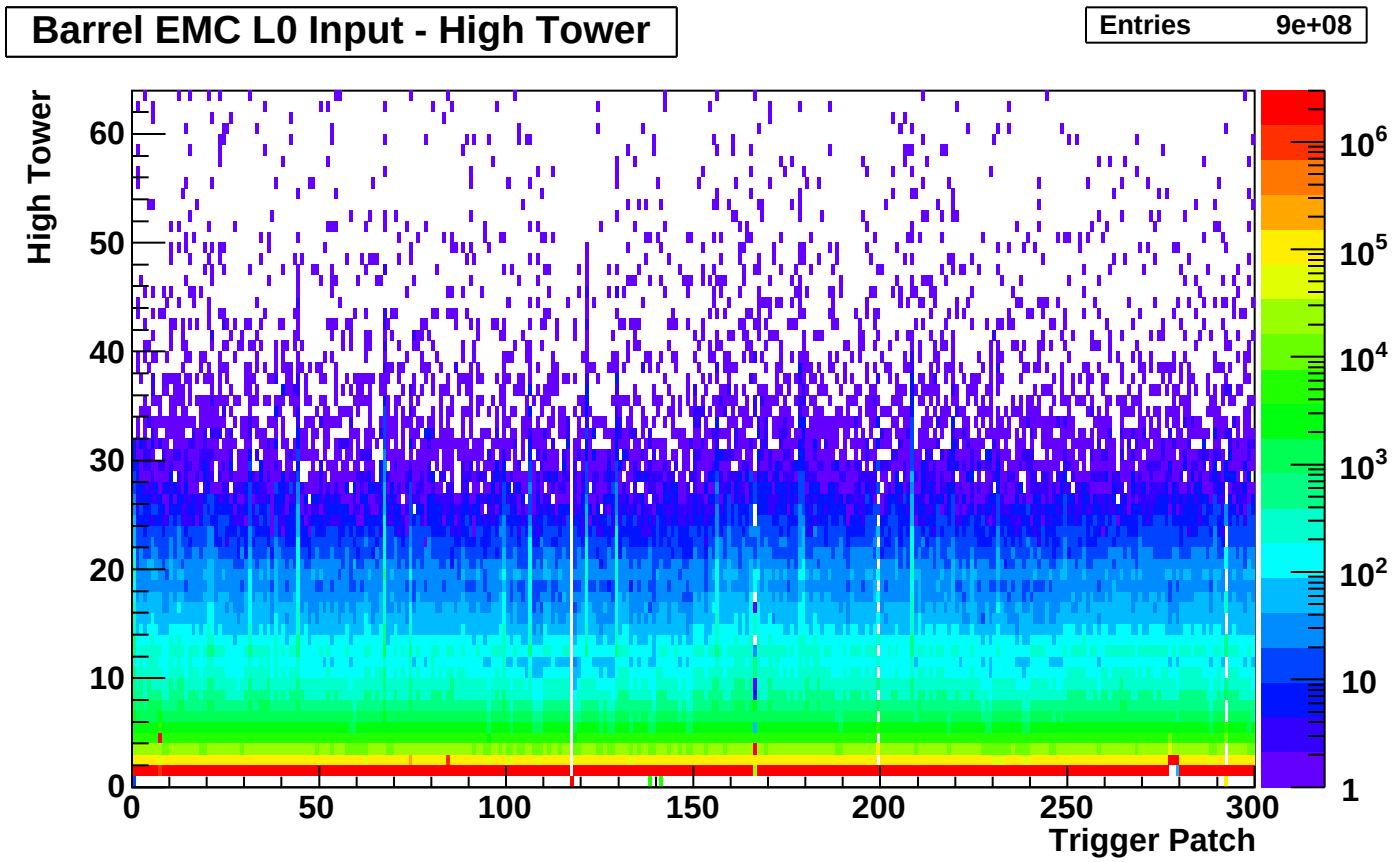
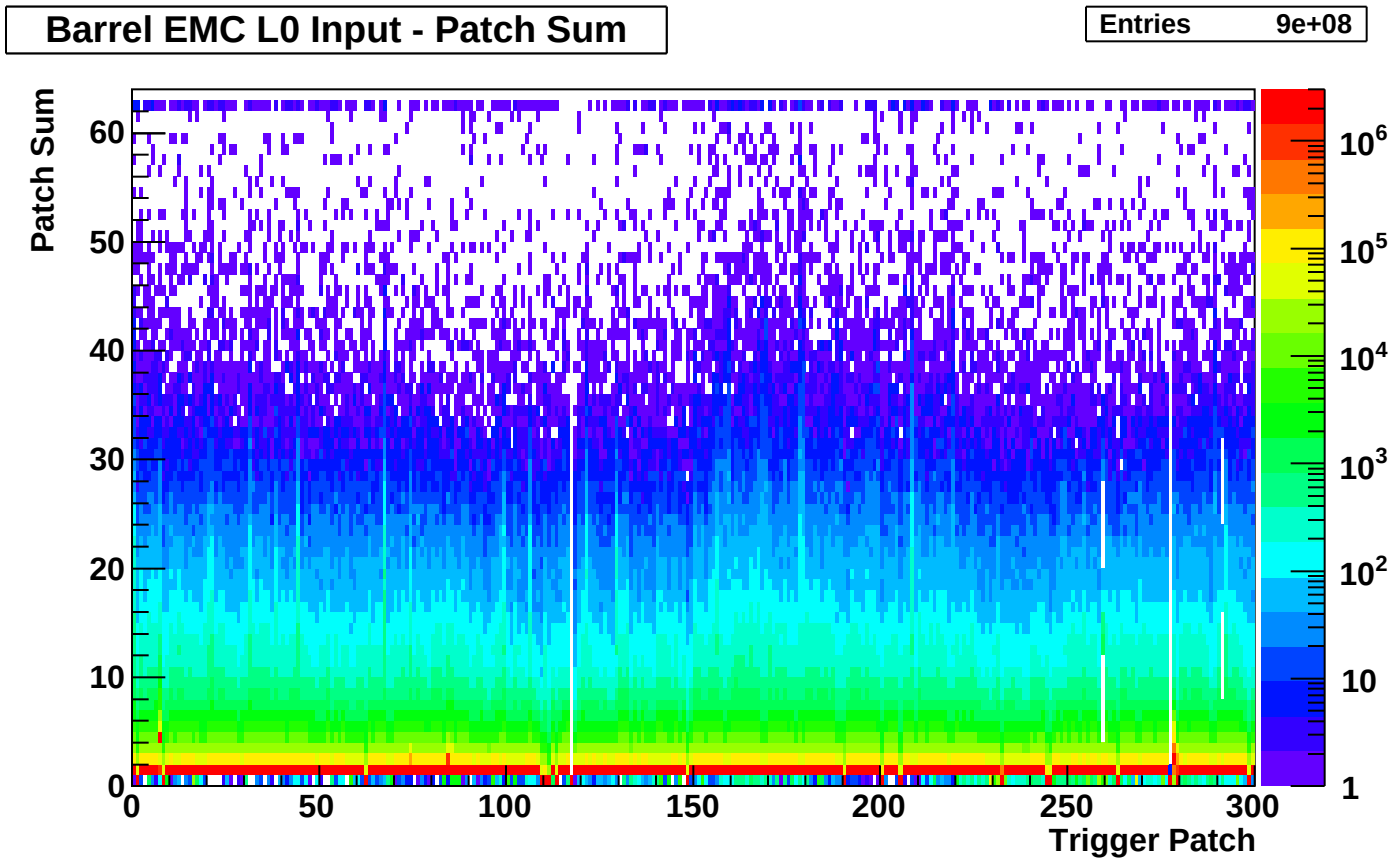
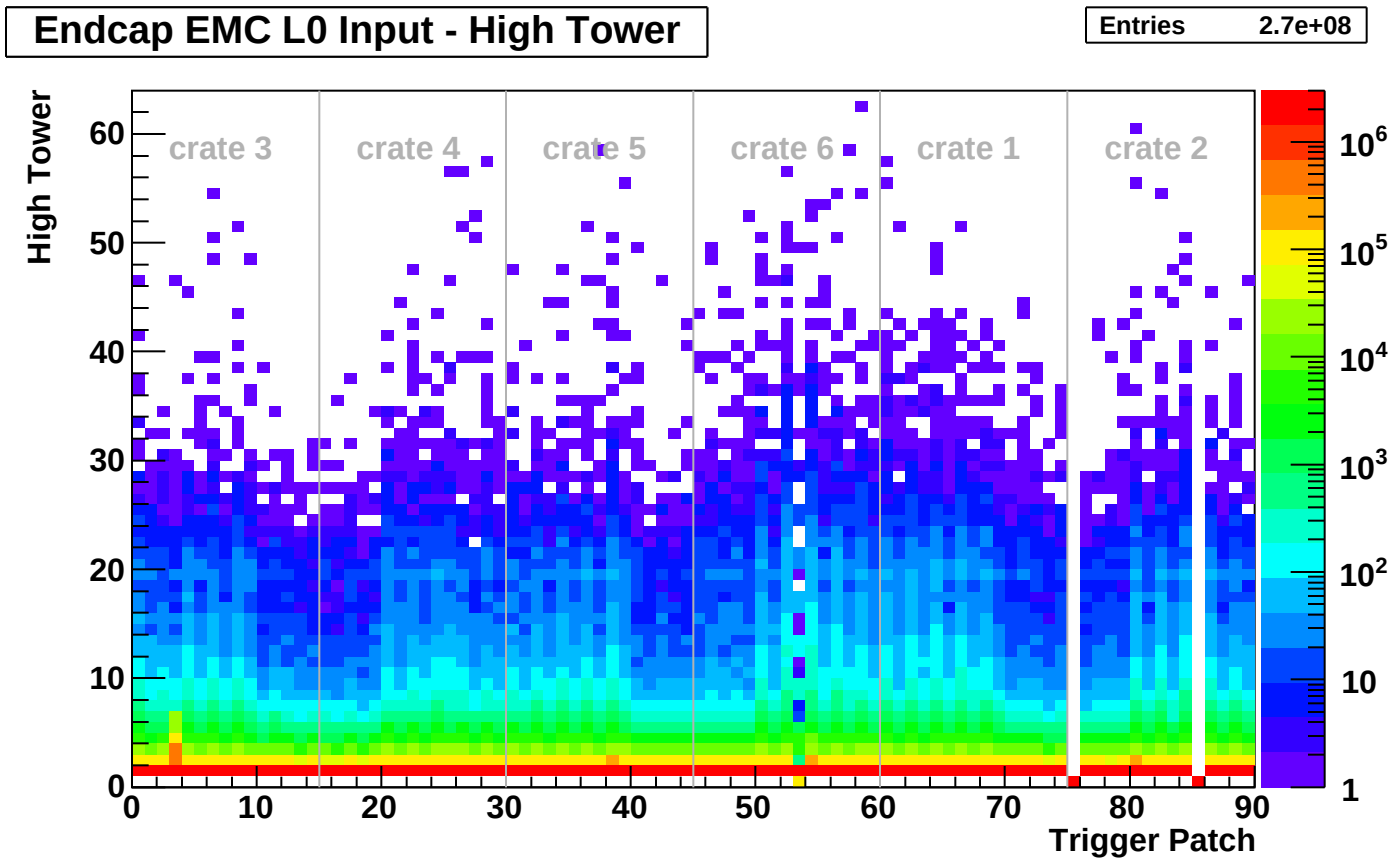
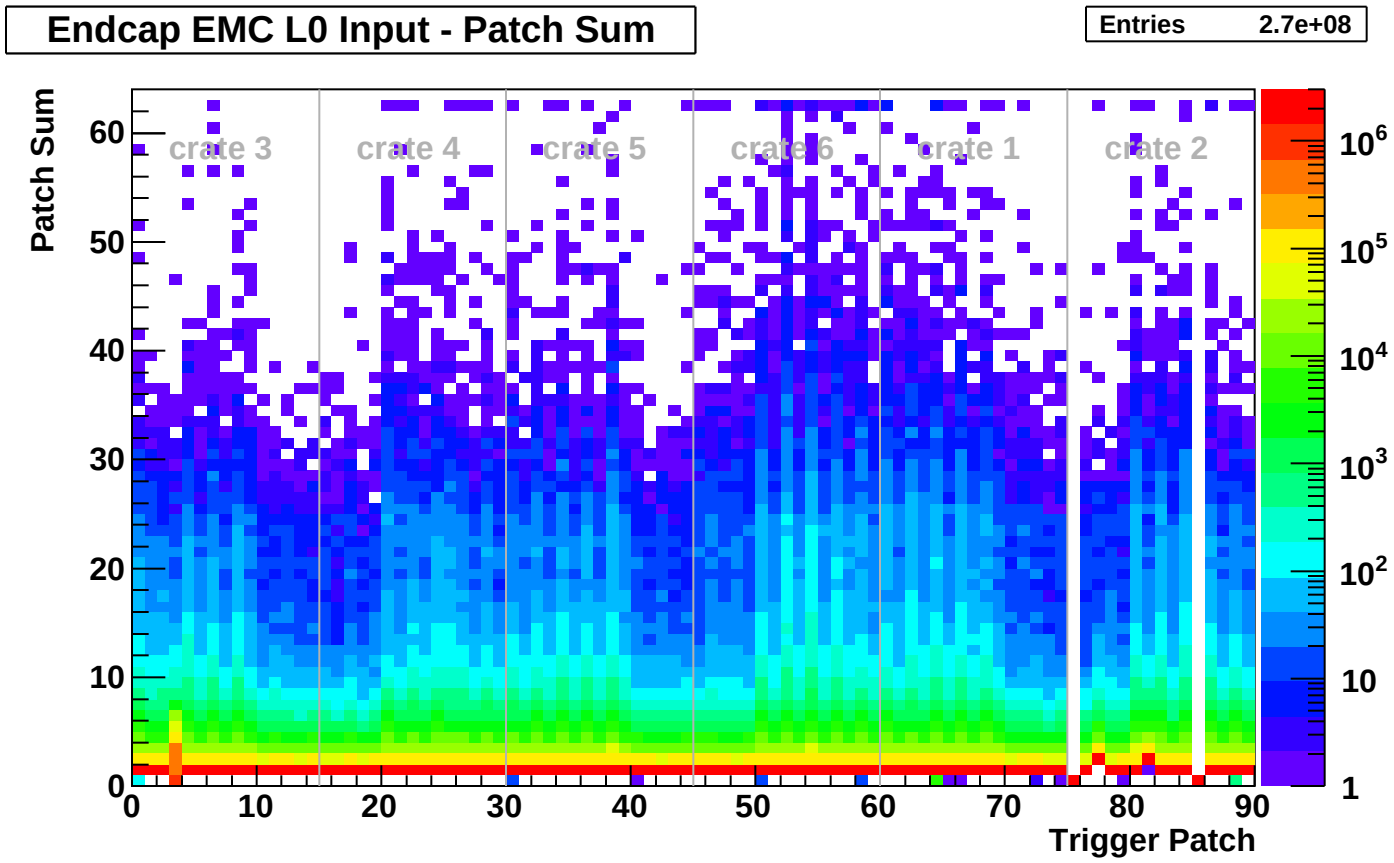
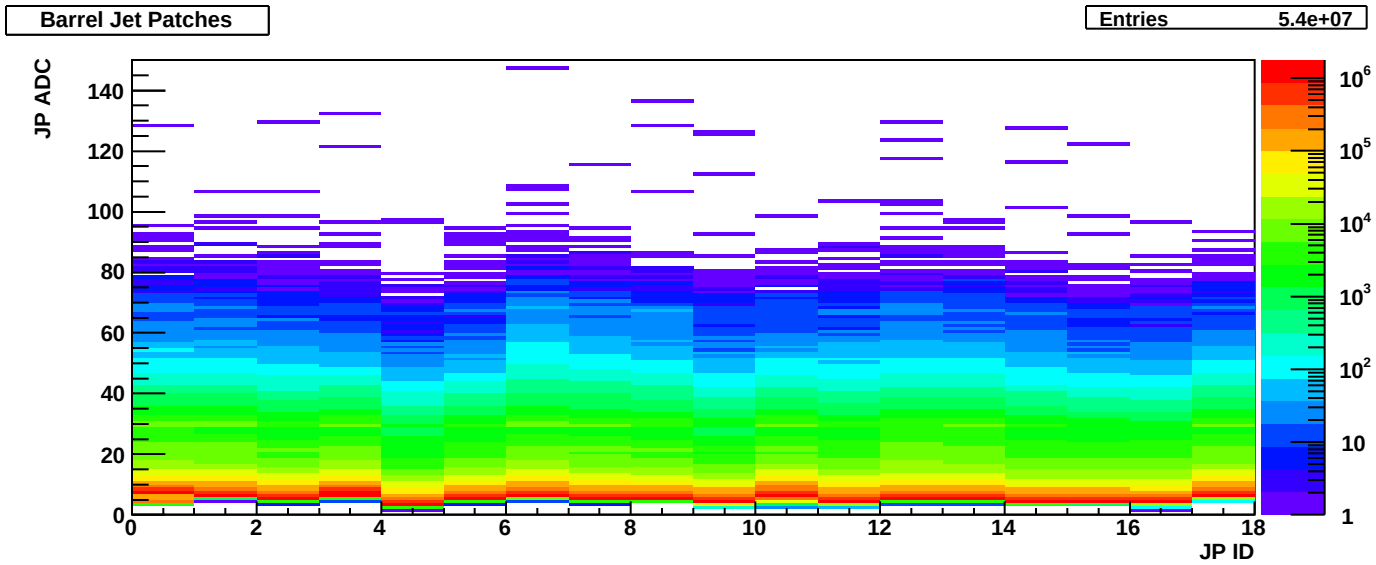
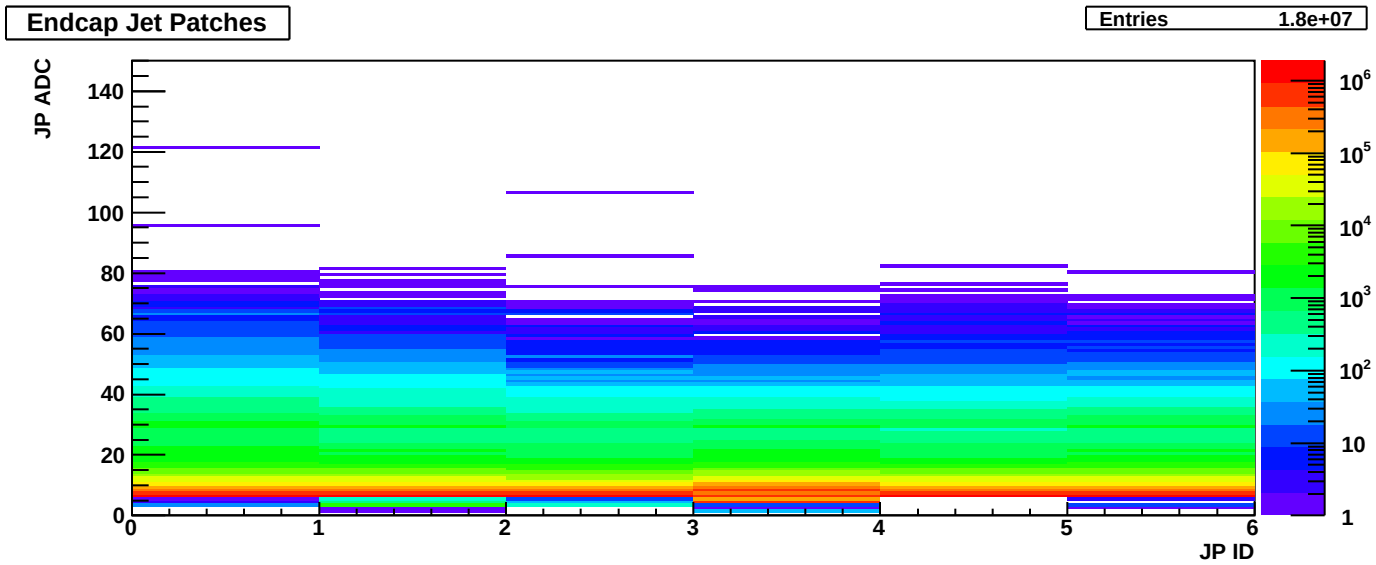

Barrel EMC L0 Input - High Tower
Entries 9e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

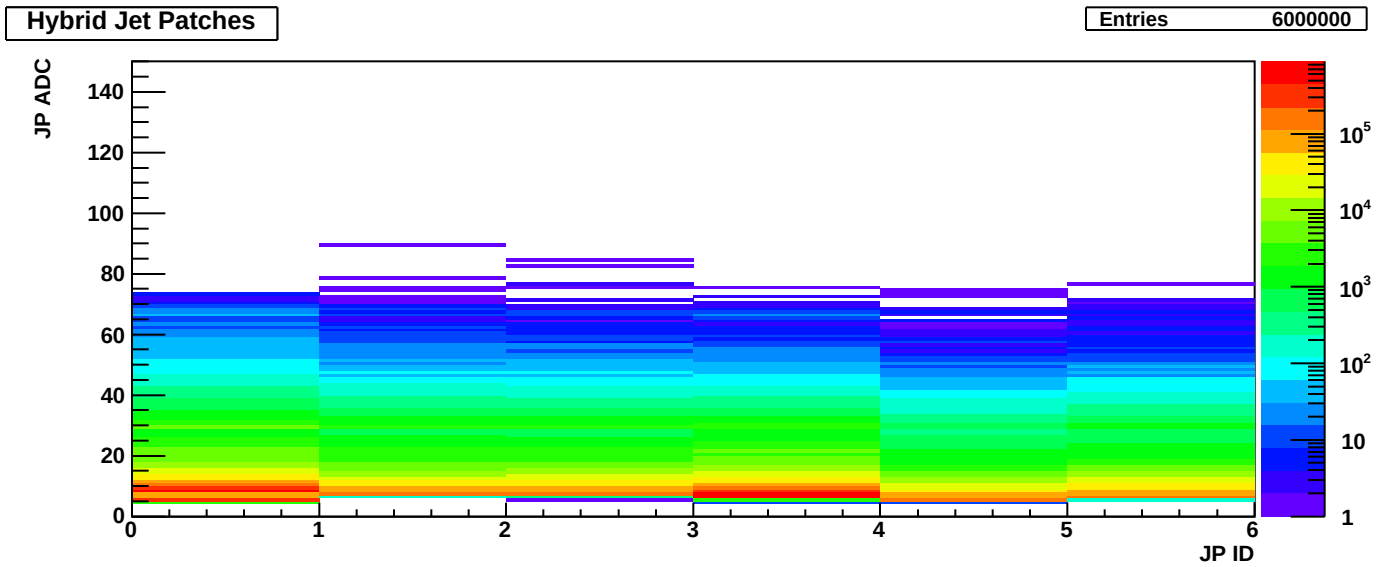

Barrel EMC L0 Input - Patch Sum
Entries 9e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

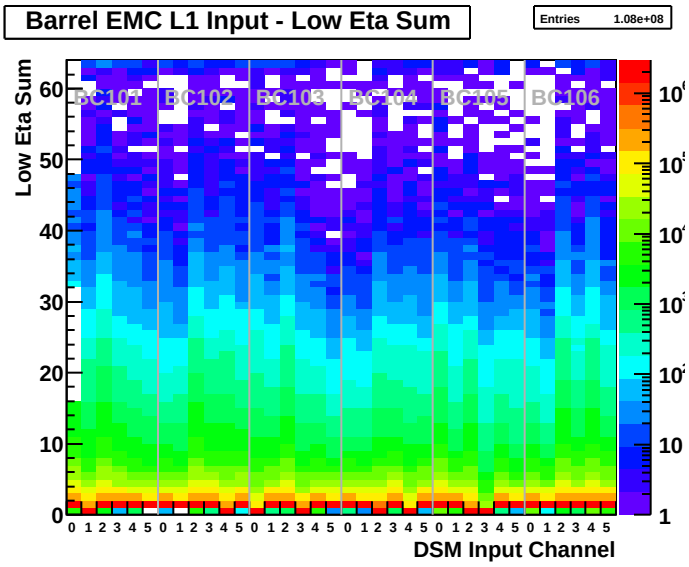

Endcap EMC L0 Input - High Tower
Entries 2.7e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

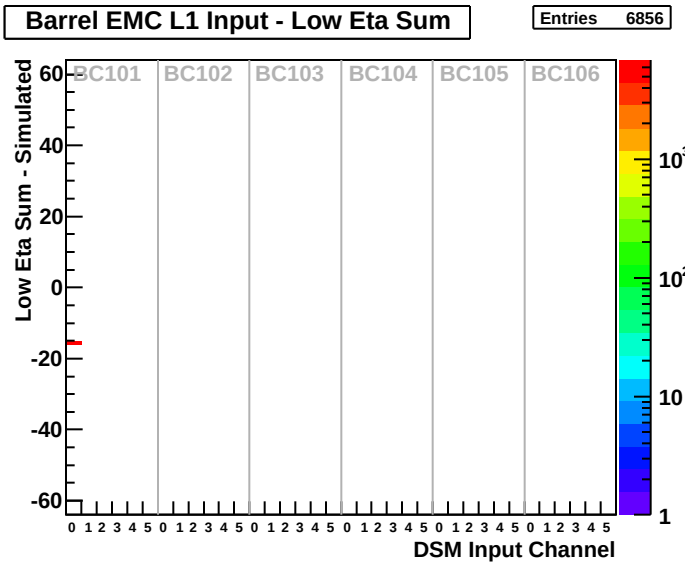

Endcap EMC L0 Input - Patch Sum
Entries 2.7e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

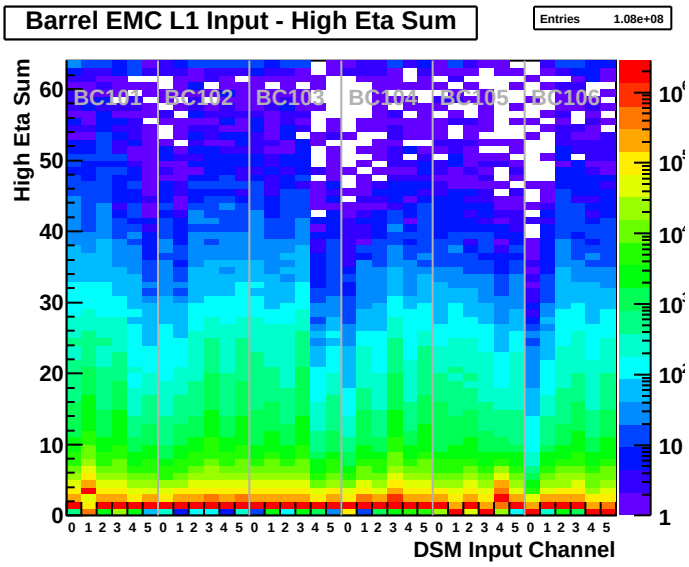

Barrel Jet Patches
Entries 5.4e+07
JP ADC
JP ID

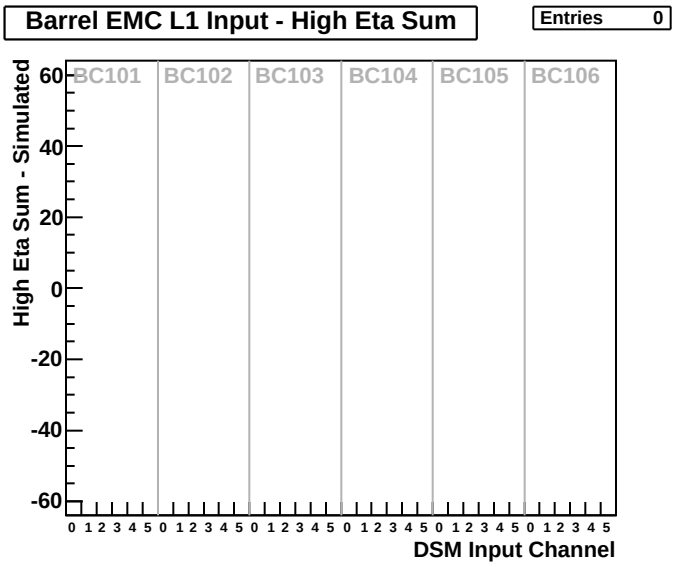

Endcap Jet Patches
Entries 1.8e+07
JP ADC
JP ID

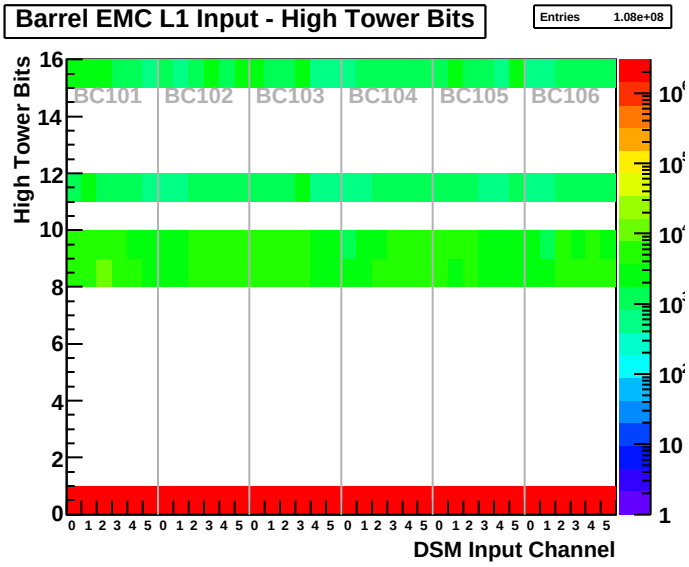

Hybrid Jet Patches
Entries 6000000
JP ADC
JP ID

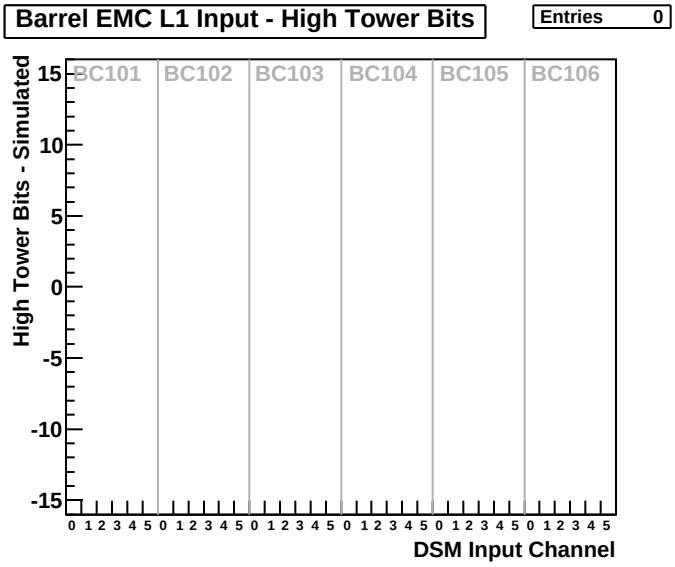

Barrel EMC L1 Input - Low Eta Sum
Entries 1.08e+08
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

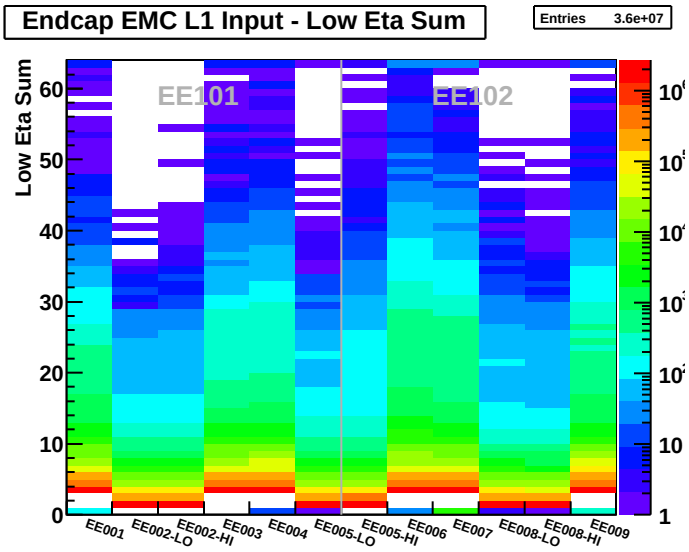

Barrel EMC L1 Input - Low Eta Sum
Entries 6856
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

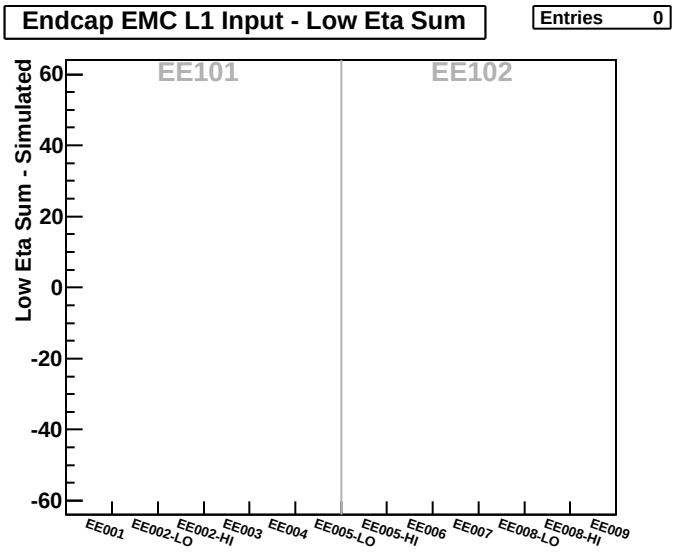

Barrel EMC L1 Input - High Eta Sum
Entries 1.08e+08
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

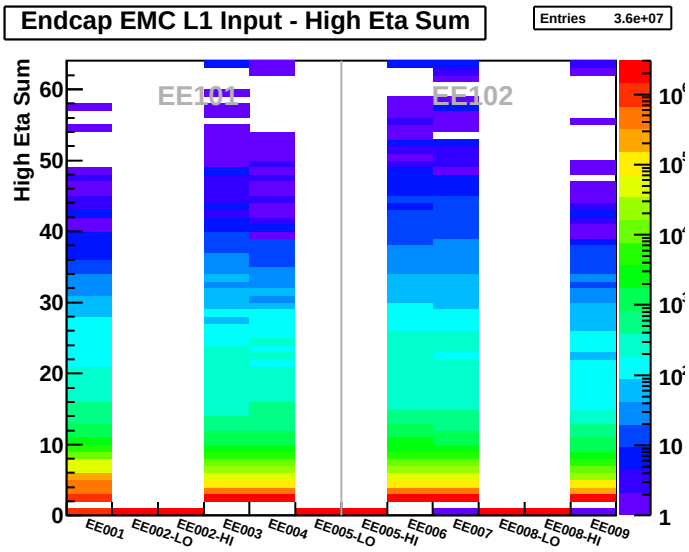

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

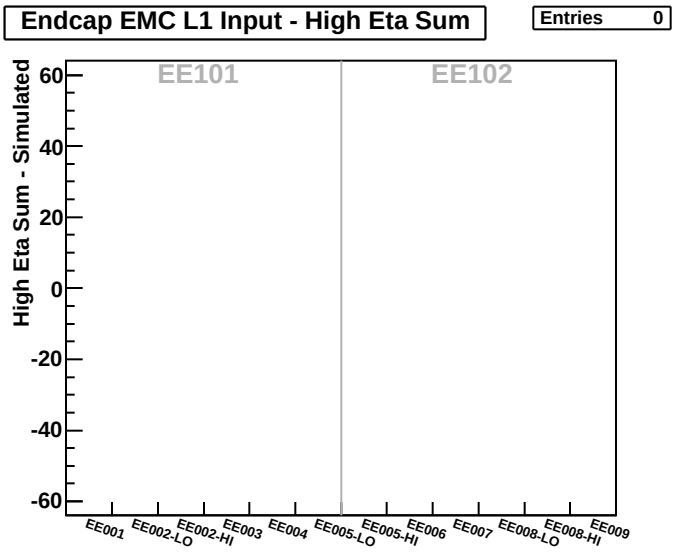

Barrel EMC L1 Input - High Tower Bits
Entries 1.08e+08
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

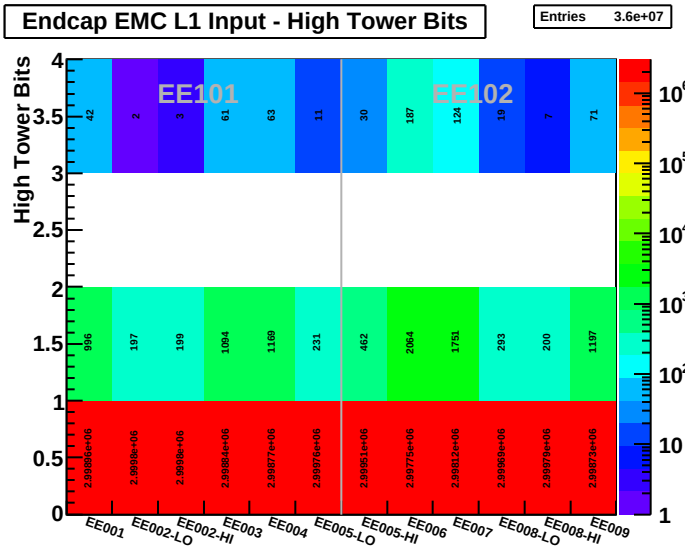

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

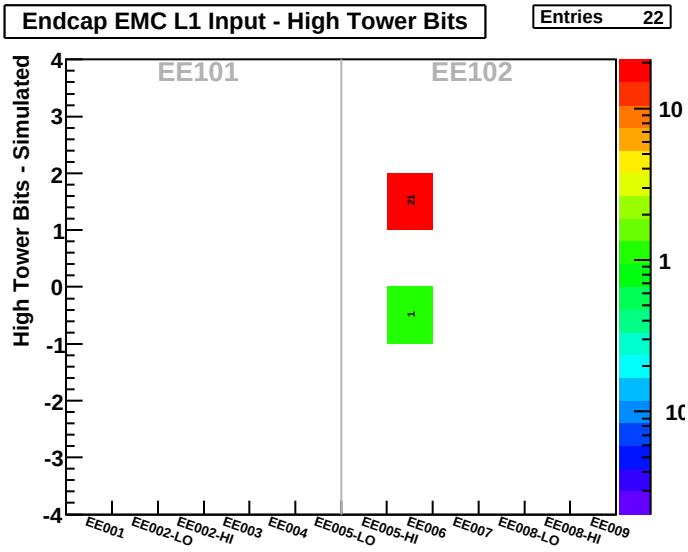

Endcap EMC L1 Input - Low Eta Sum
Entries 3.6e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

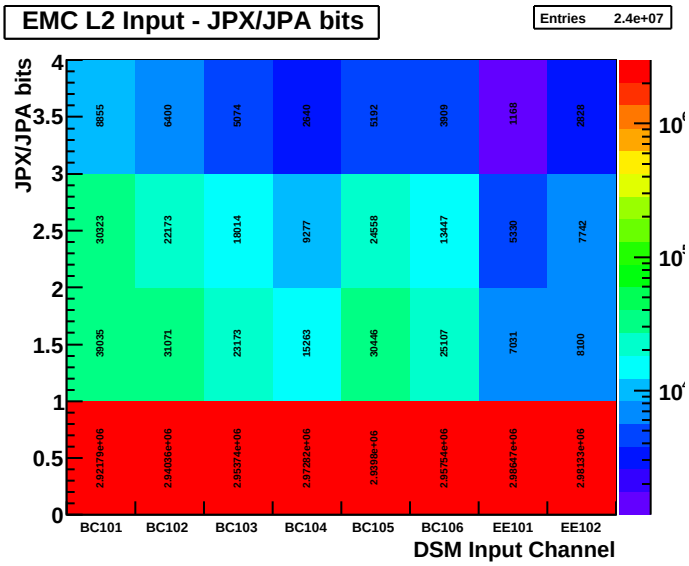

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

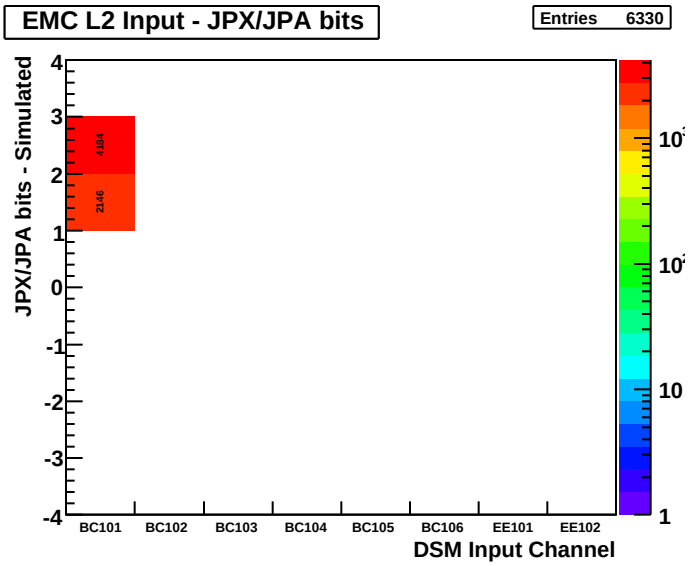

Endcap EMC L1 Input - High Eta Sum
Entries 3.6e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

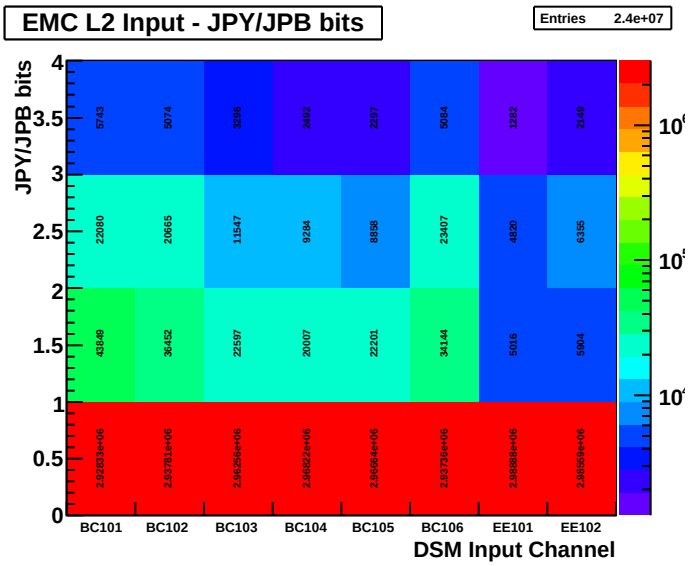

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

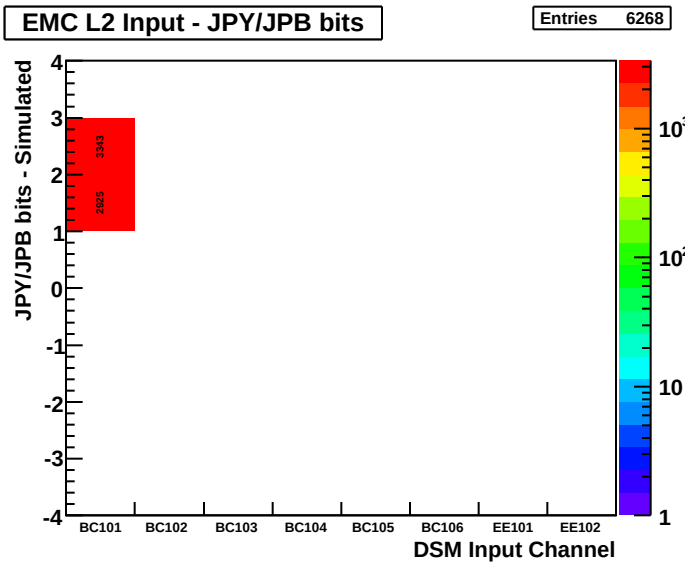

Endcap EMC L1 Input - High Tower Bits
Entries 3.6e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

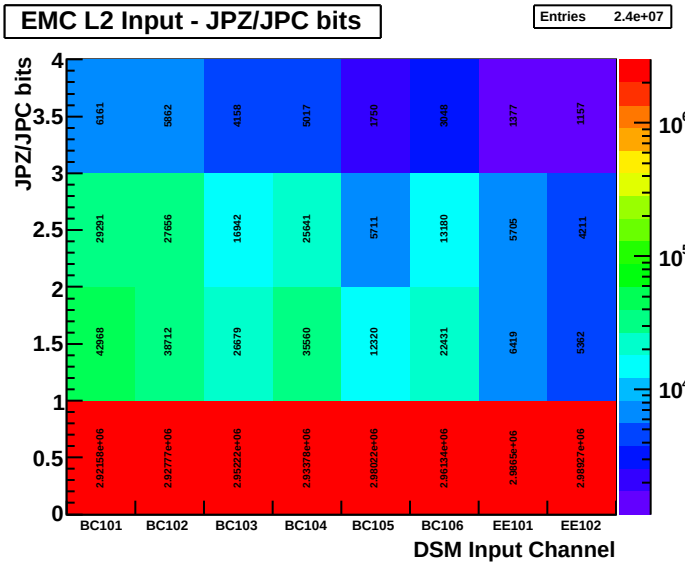

Endcap EMC L1 Input - High Tower Bits
Entries 22
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

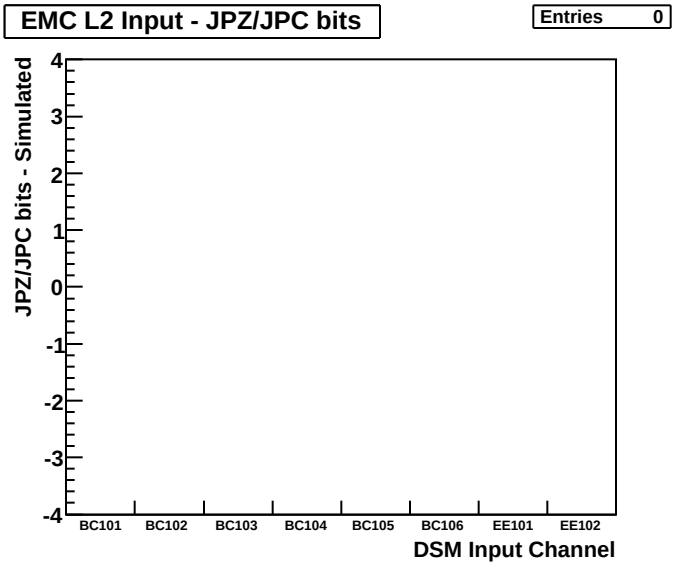

EMC L2 Input - JPX/JPA bits
Entries 2.4e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8855 6400 5074 2640 5192 3909 1168 2828
30323 22173 18014 9277 24558 13447 5380 7742
39035 31071 23173 15263 30446 25107 7031 8100
2.92179e+06 2.94036e+06 2.95374e+06 2.97282e+06 2.9398e+06 2.95754e+06 2.98647e+06 2.98133e+06

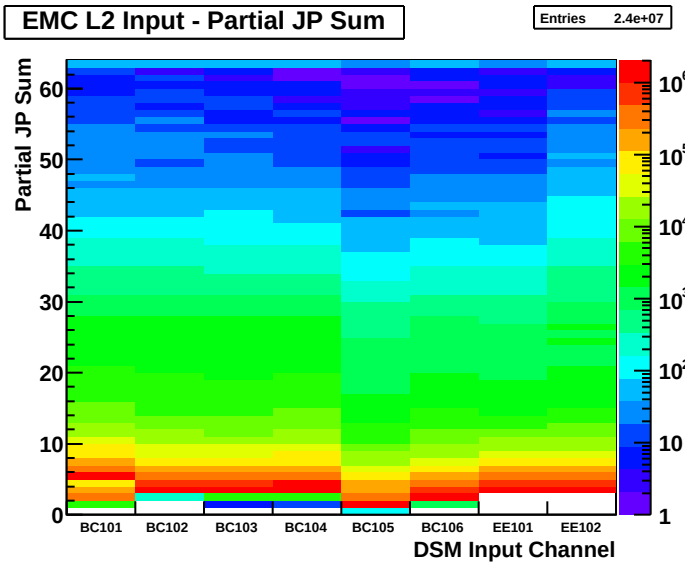

EMC L2 Input - JPX/JPA bits
Entries 6330
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4184
2146

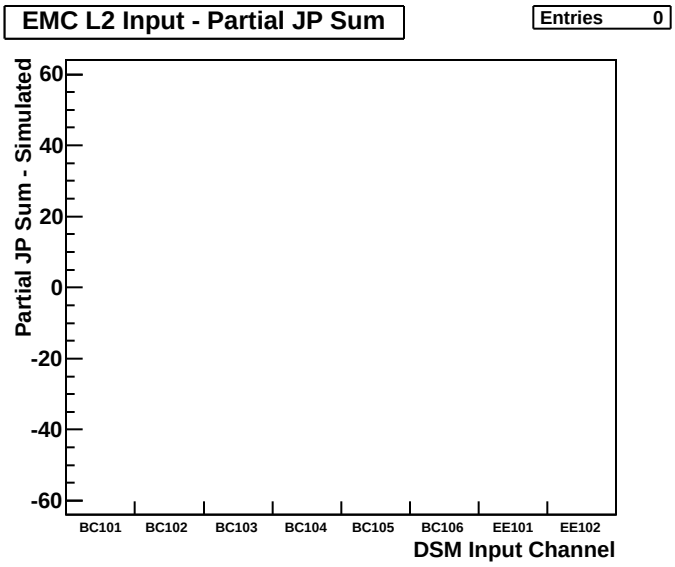

EMC L2 Input - JPY/JPB bits
Entries 2.4e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5743 5074 3296 2492 2297 5084 1282 2149
22080 20665 11547 9284 8858 23407 4820 6355
43849 36452 22597 20007 22201 34144 5016 5904
2.92833e+06 2.93781e+06 2.96256e+06 2.96822e+06 2.96694e+06 2.93736e+06 2.98898e+06 2.96559e+06

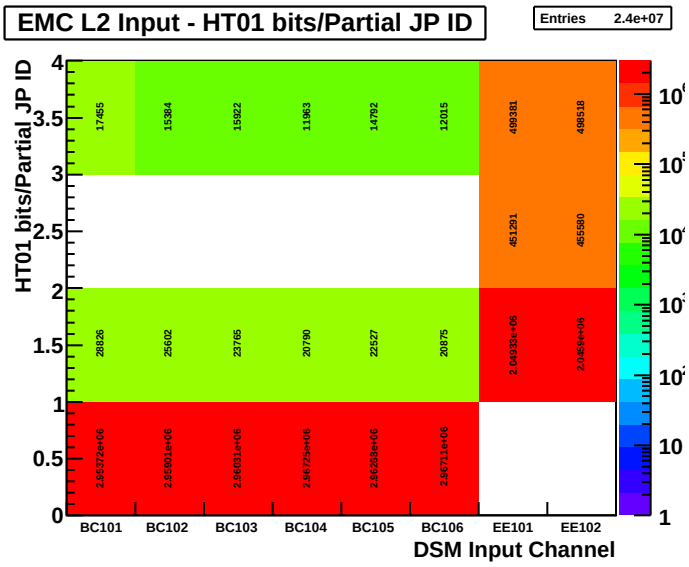

EMC L2 Input - JPY/JPB bits
Entries 6268
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3343
2925

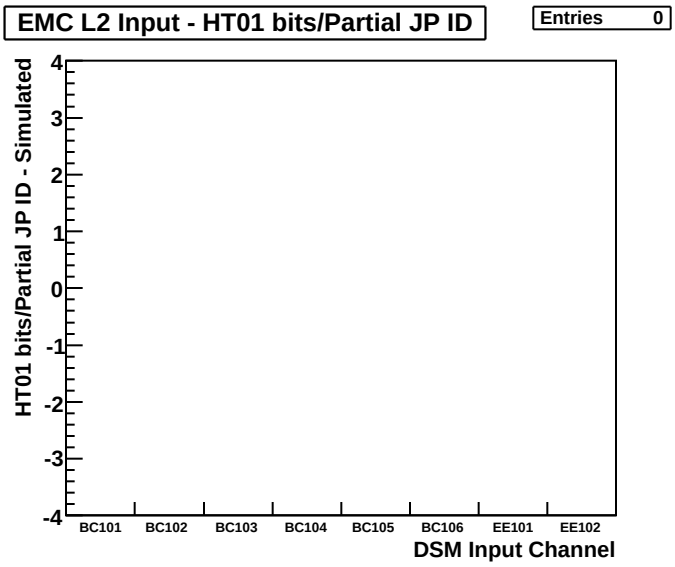

EMC L2 Input - JPZ/JPC bits
Entries 2.4e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
6161 5062 4158 5017 1750 3048 1377 1157
29291 27656 16942 25641 5711 13180 5705 4211
42868 38712 28679 35560 12320 22431 6419 5362
2.92158e+06 2.92777e+06 2.95222e+06 2.93378e+06 2.98022e+06 2.96134e+06 2.9865e+06 2.98927e+06

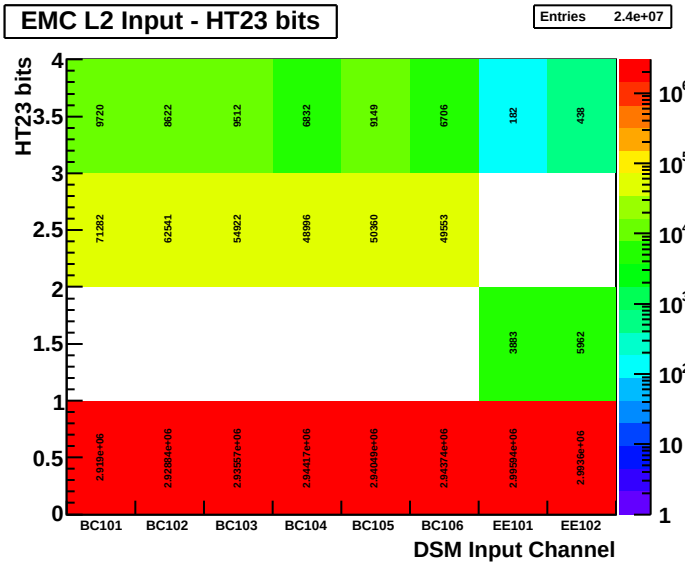

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

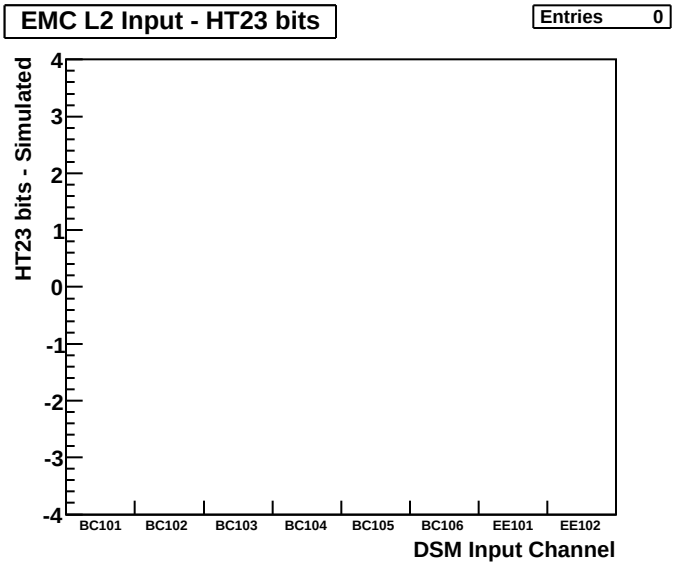

EMC L2 Input - Partial JP Sum
Entries 2.4e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

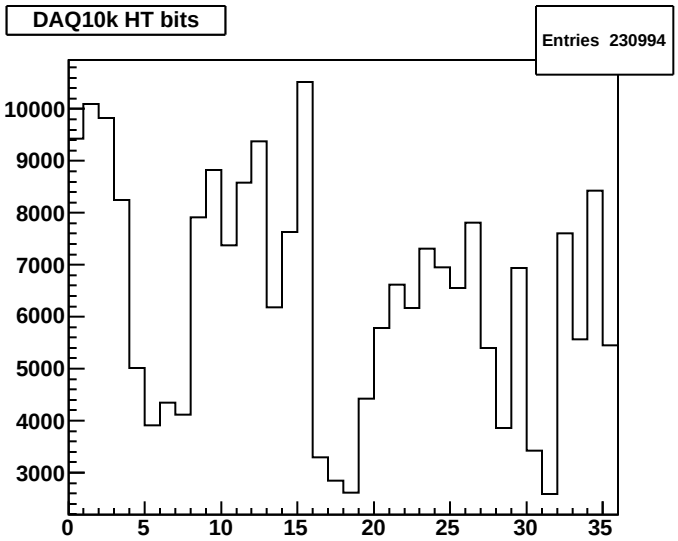

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

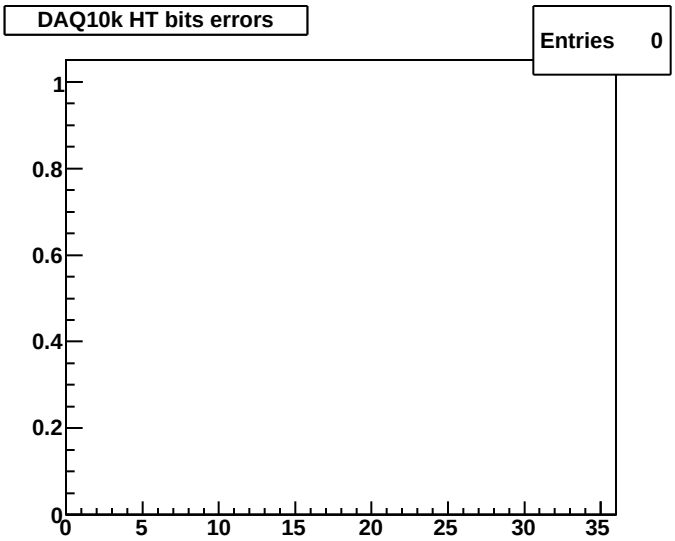

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2.4e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

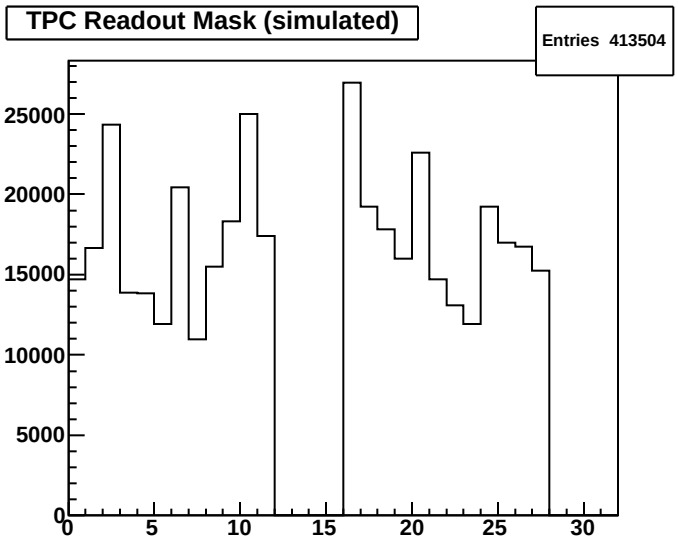

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

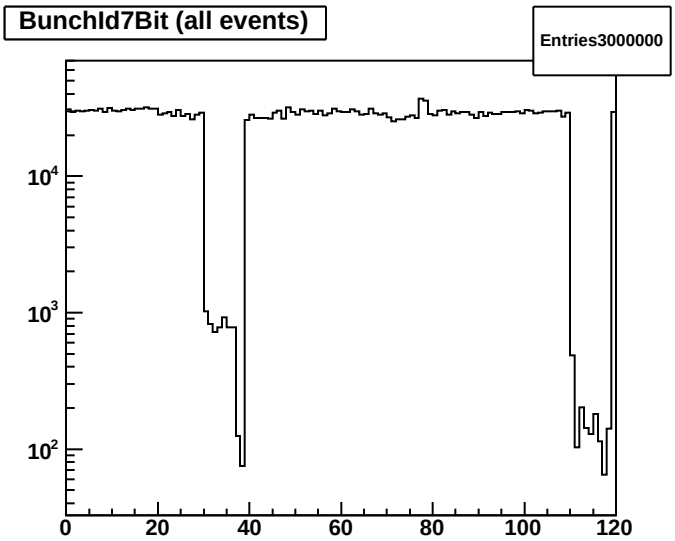

EMC L2 Input - HT23 bits
Entries 2.4e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

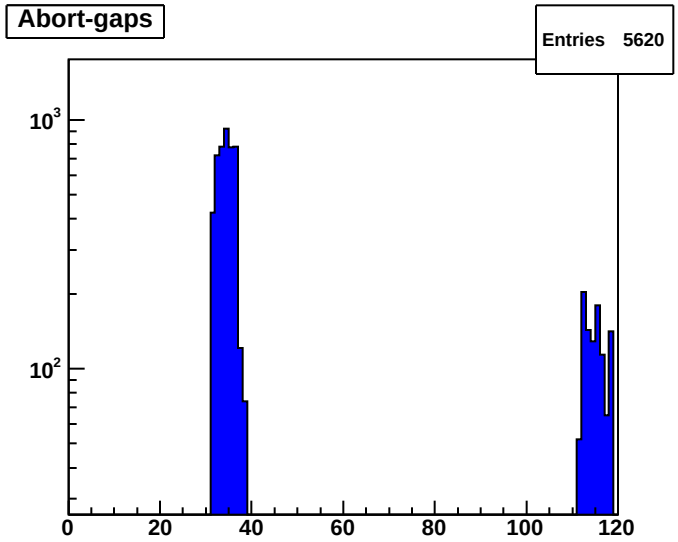

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

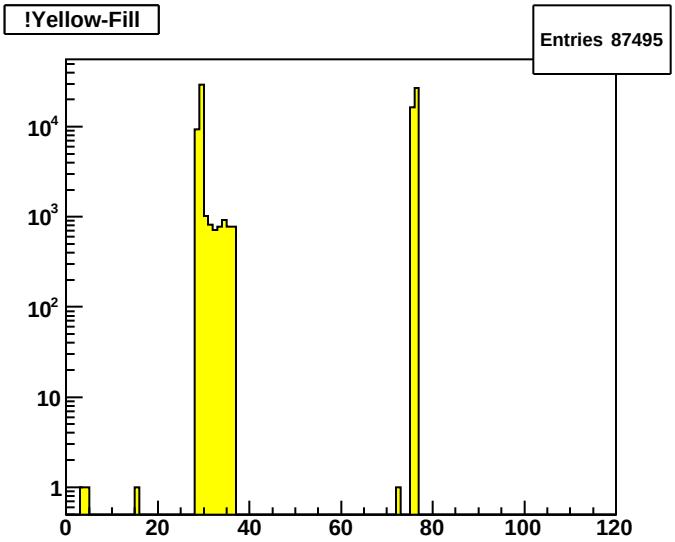

DAQ10k HT bits
Entries 230994

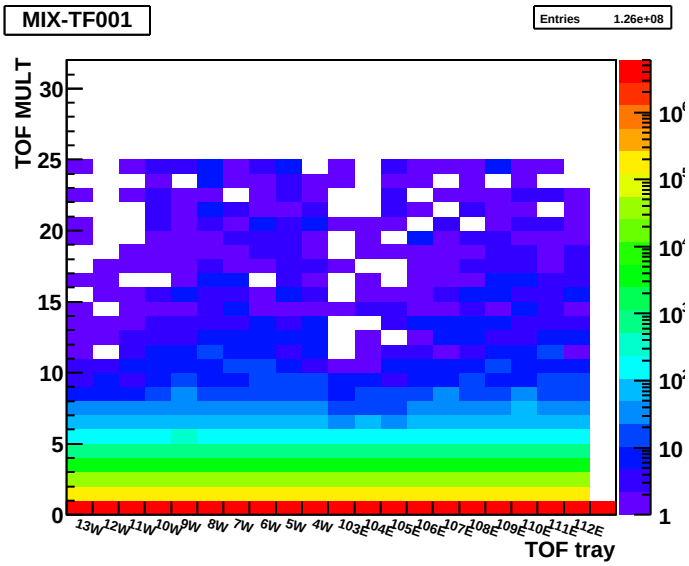

DAQ10k HT bits errors
Entries 0

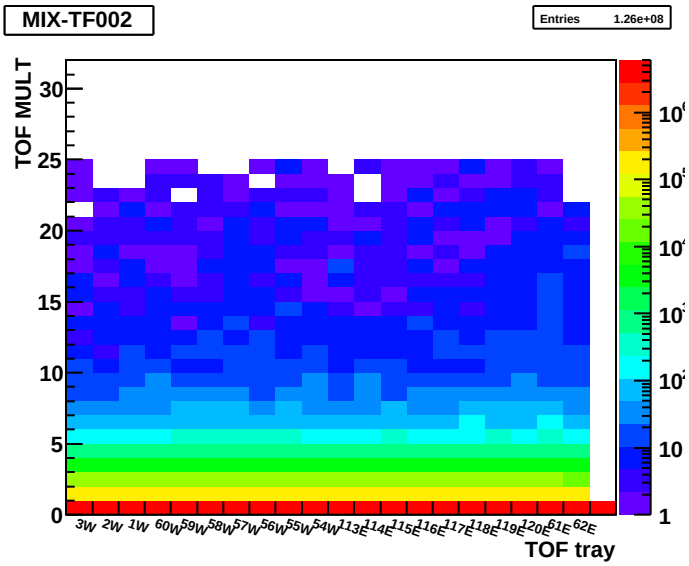

TPC Readout Mask (simulated)
Entries 413504

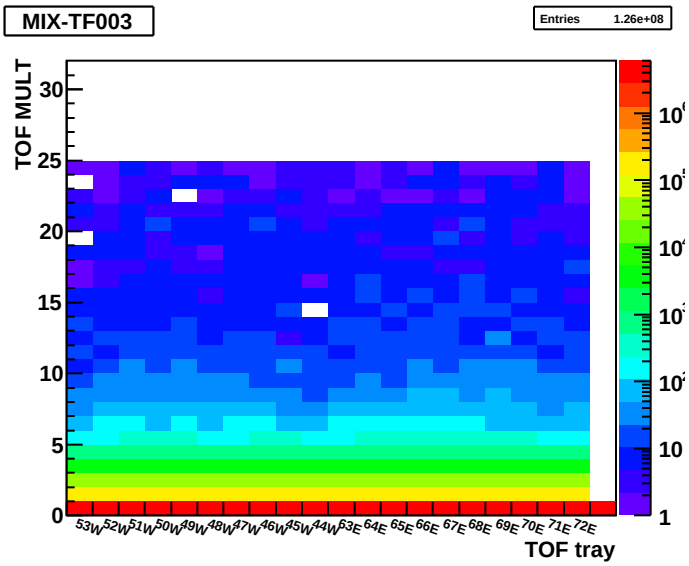

BunchId7Bit (all events)
Entries3000000

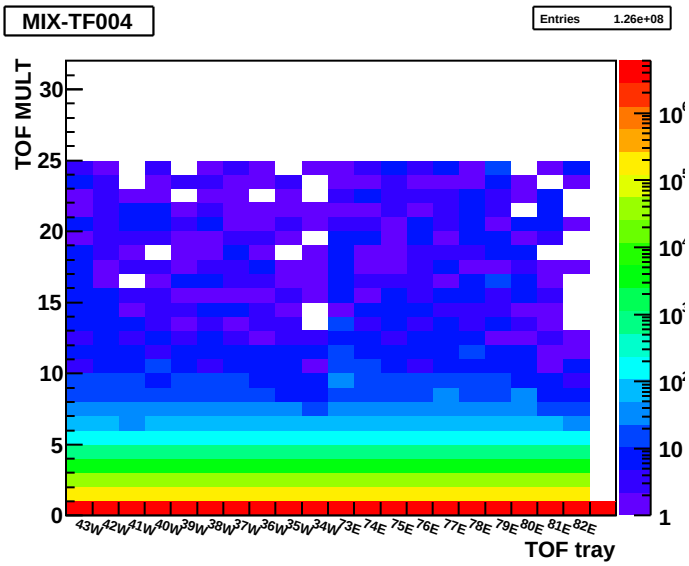

Abort-gaps
Entries 5620

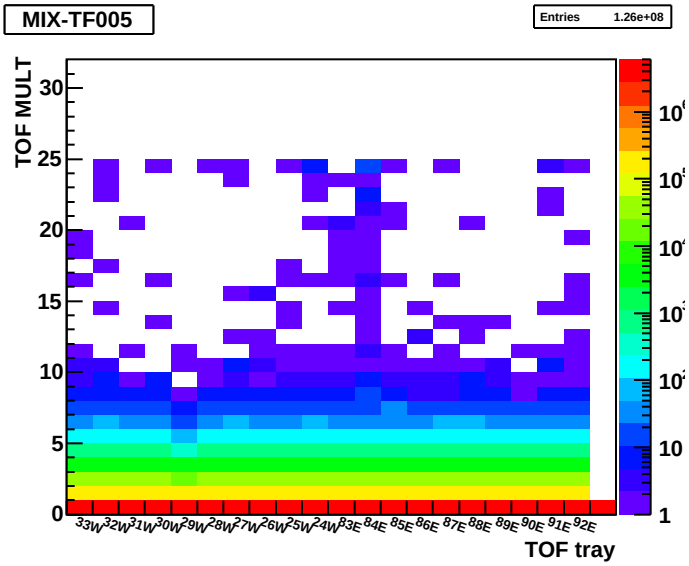

!Yellow-Fill
Entries 87495

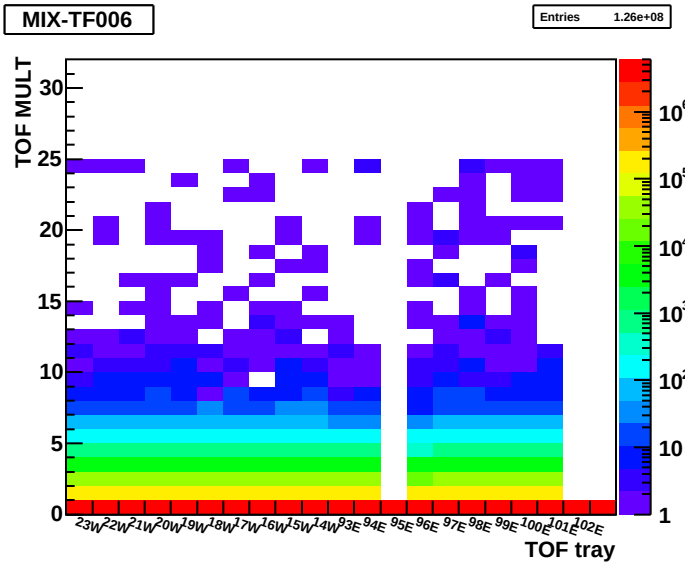

MIX-TF001
Entries 1.26e+08
TOF MULT
TOF tray

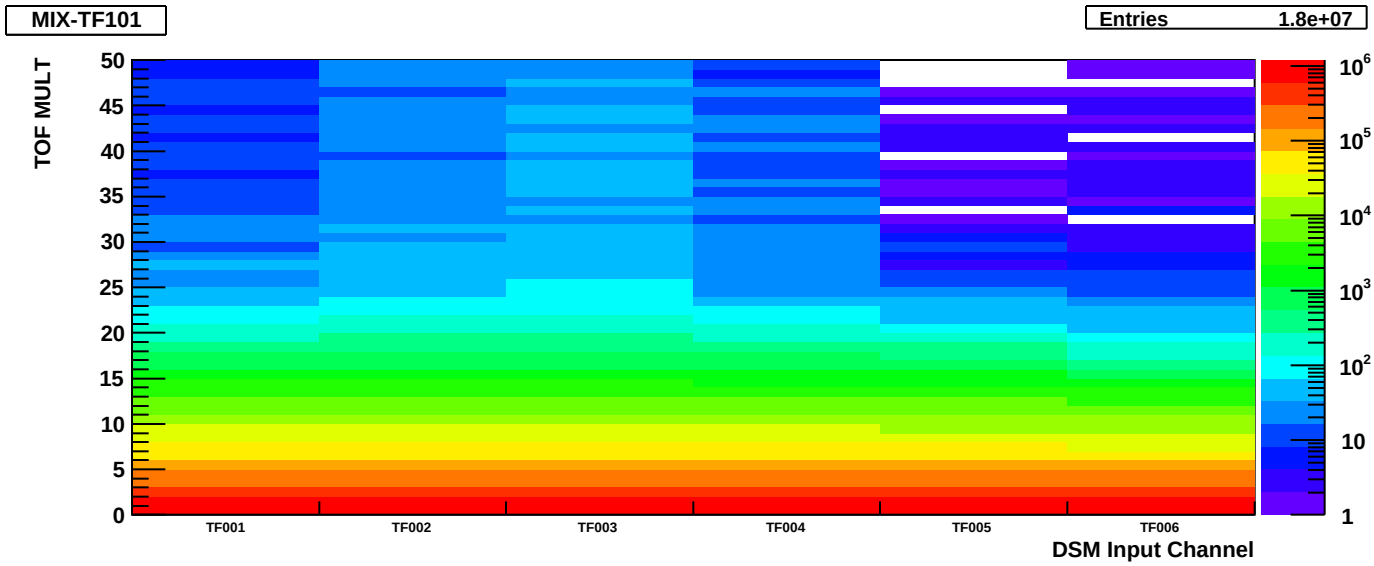

MIX-TF002
Entries 1.26e+08
TOF MULT
TOF tray

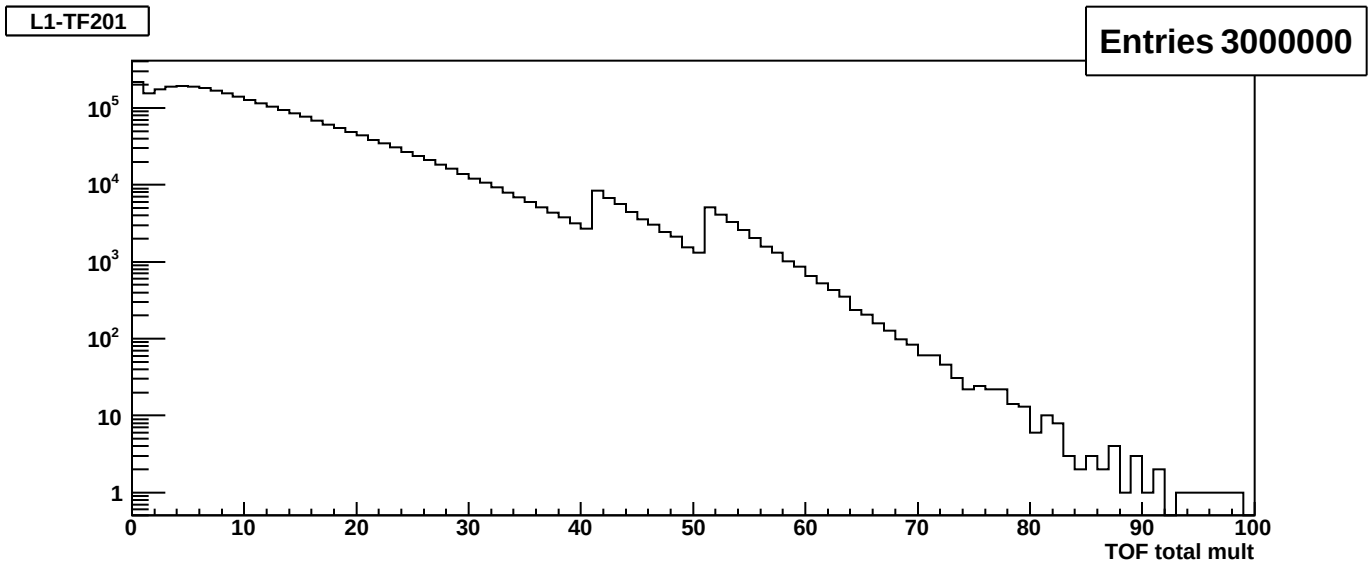

MIX-TF003
Entries 1.26e+08
TOF MULT
TOF tray

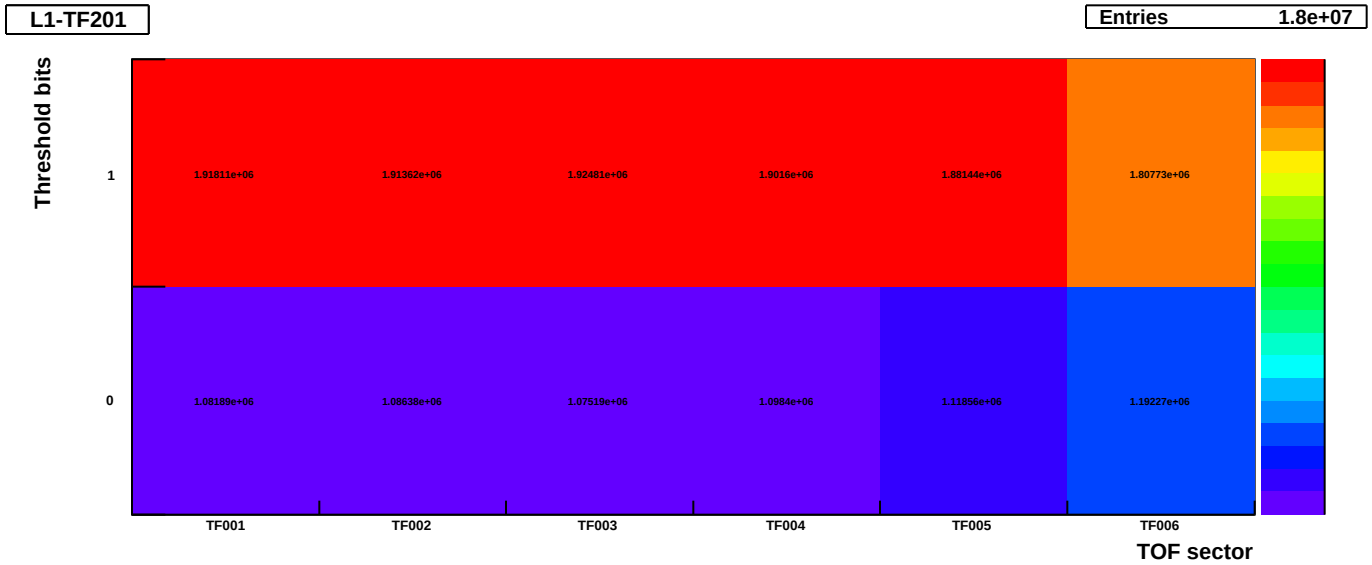

MIX-TF004
Entries 1.26e+08
TOF MULT
TOF tray

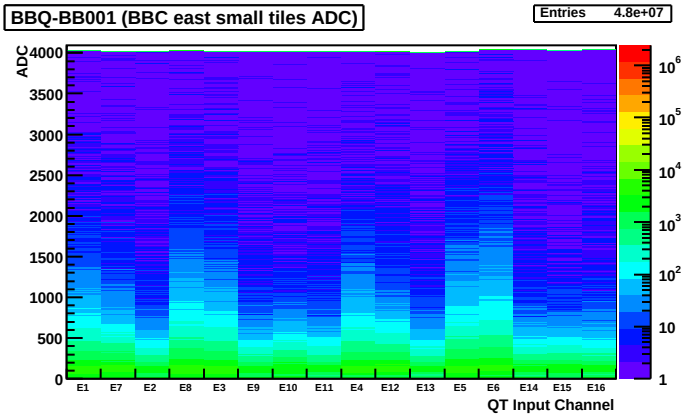

MIX-TF005
Entries 1.26e+08
TOF MULT
TOF tray

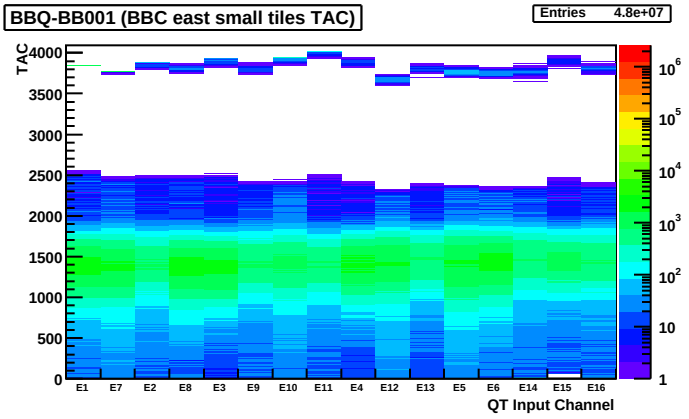

MIX-TF006
Entries 1.26e+08
TOF MULT
TOF tray

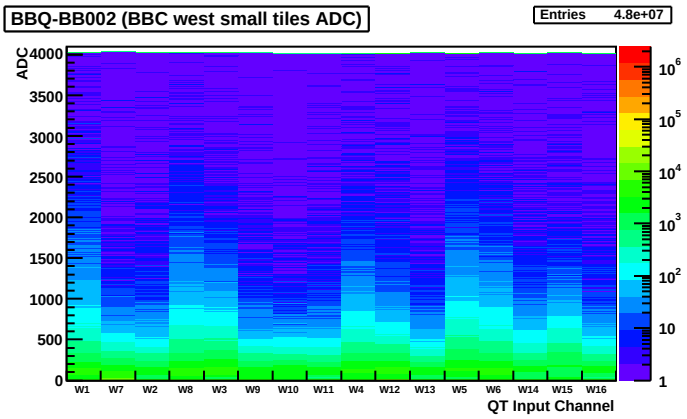

MIX-TF101
Entries 1.8e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

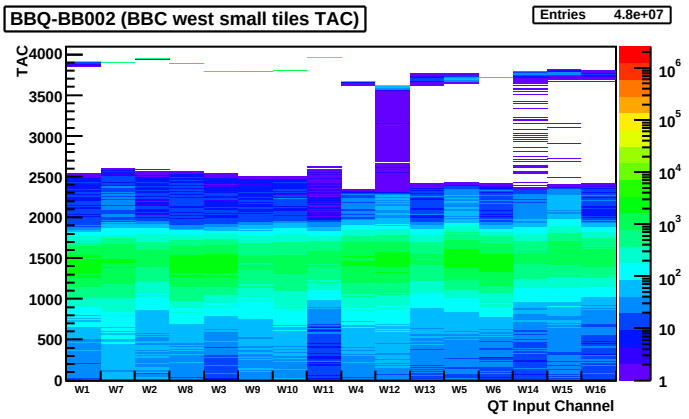

L1-TF201
Entries 3000000
TOF total mult

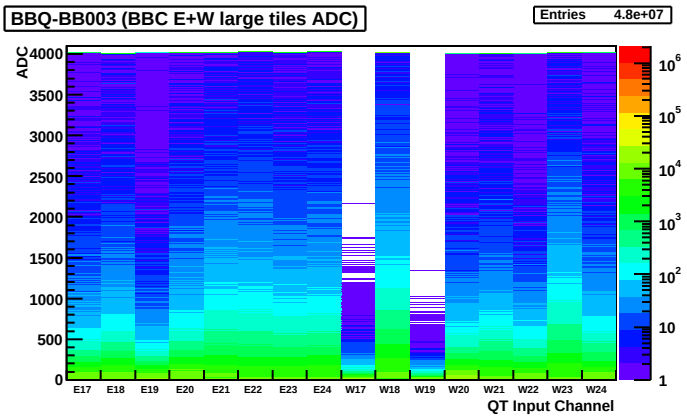

L1-TF201
Entries 1.8e+07
Threshold bits
1.91811e+06
1.91362e+06
1.92481e+06
1.9016e+06
1.88144e+06
1.80773e+06
1.08189e+06
1.08638e+06
1.07519e+06
1.0984e+06
1.11856e+06
1.19227e+06
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

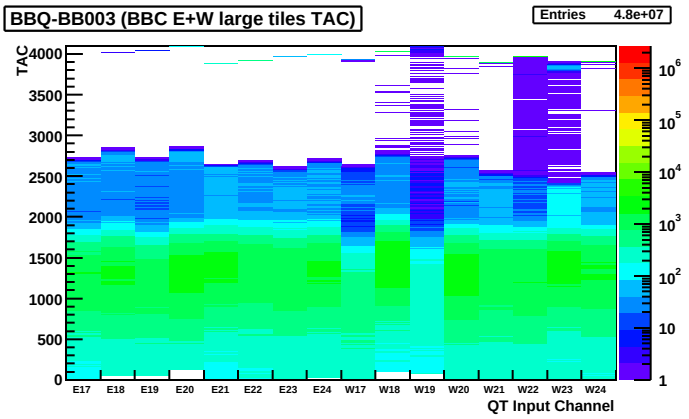

BBQ-BB001 (BBC east small tiles ADC)
Entries 4.8e+07
ADC
QT Input Channel

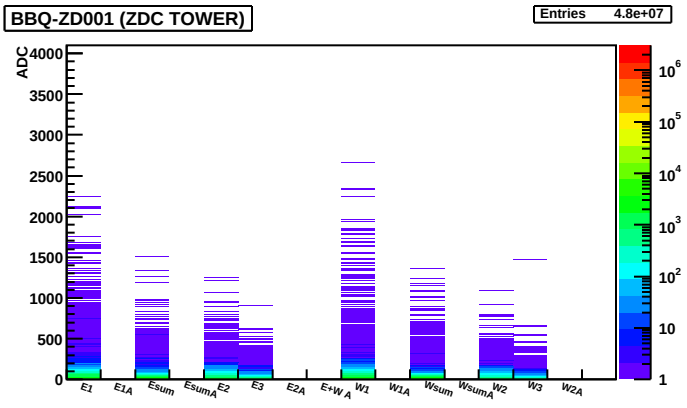

BBQ-BB001 (BBC east small tiles TAC)
Entries 4.8e+07
TAC
QT Input Channel

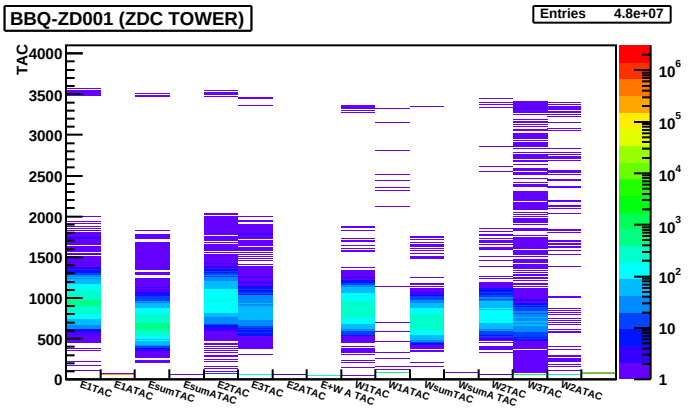

BBQ-BB002 (BBC west small tiles ADC)
Entries 4.8e+07
ADC
QT Input Channel

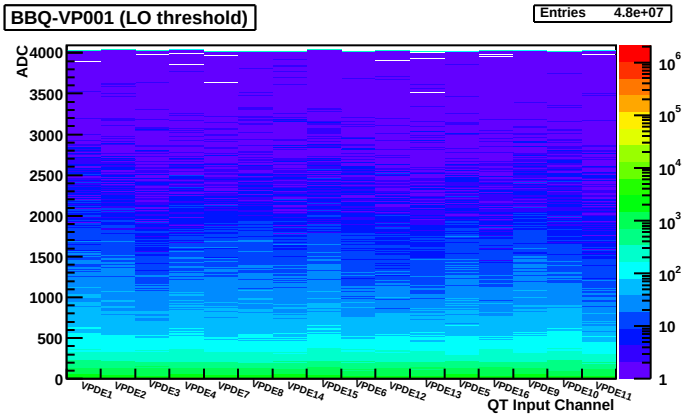

BBQ-BB002 (BBC west small tiles TAC)
Entries 4.8e+07
TAC
QT Input Channel

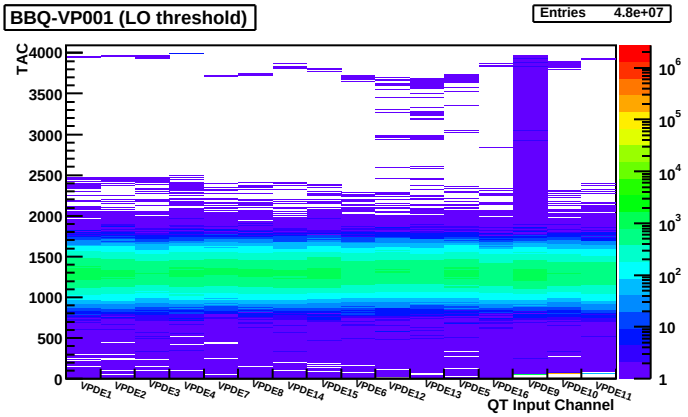

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4.8e+07
ADC
QT Input Channel

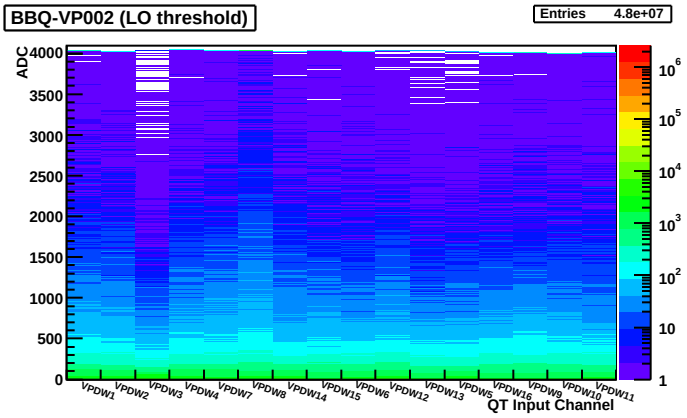

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4.8e+07
TAC
QT Input Channel

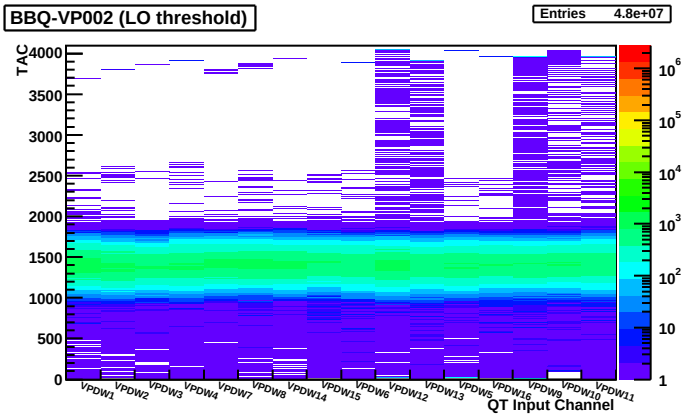

BBQ-ZD001 (ZDC TOWER)
Entries 4.8e+07
ADC

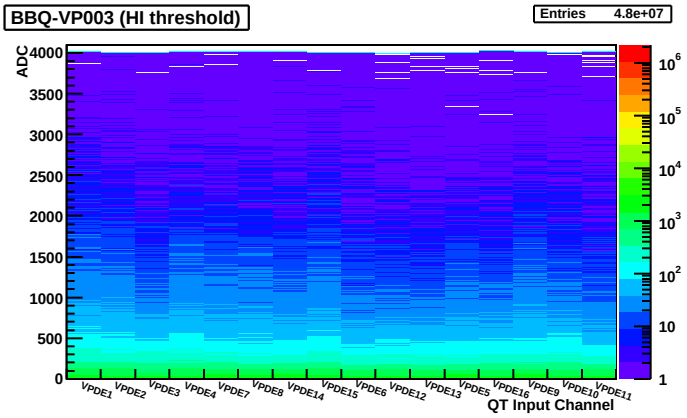

BBQ-ZD001 (ZDC TOWER)
Entries 4.8e+07
TAC

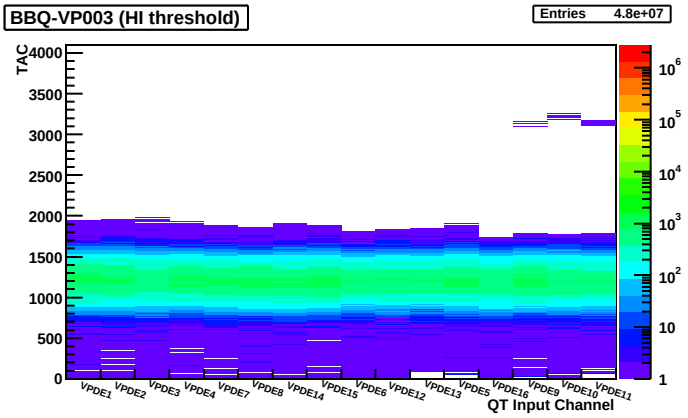

BBQ-VP001 (LO threshold)
Entries 4.8e+07
ADC
QT Input Channel

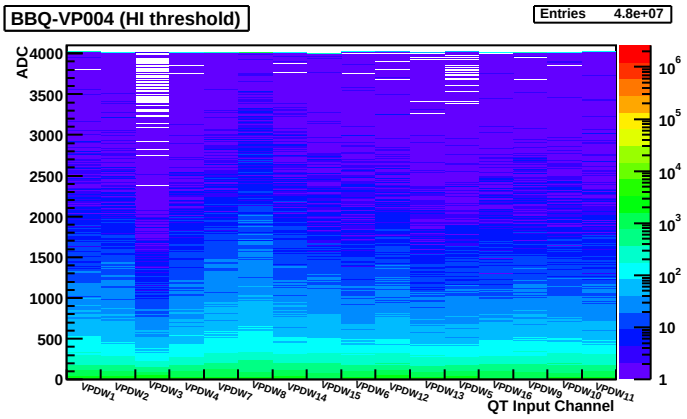

BBQ-VP001 (LO threshold)
Entries 4.8e+07
TAC
QT Input Channel

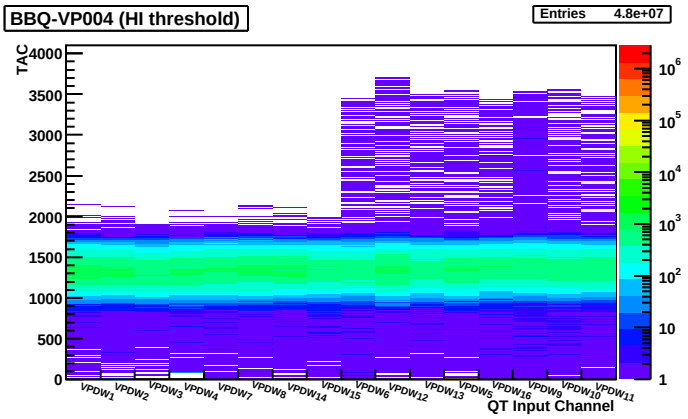

BBQ-VP002 (LO threshold)
Entries 4.8e+07
ADC
QT Input Channel

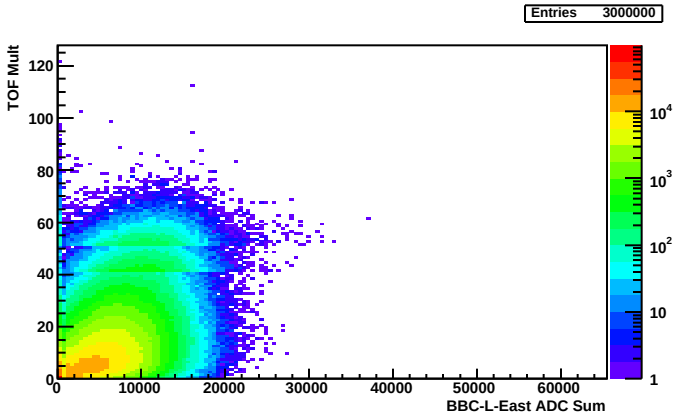

BBQ-VP002 (LO threshold)
Entries 4.8e+07
TAC
QT Input Channel

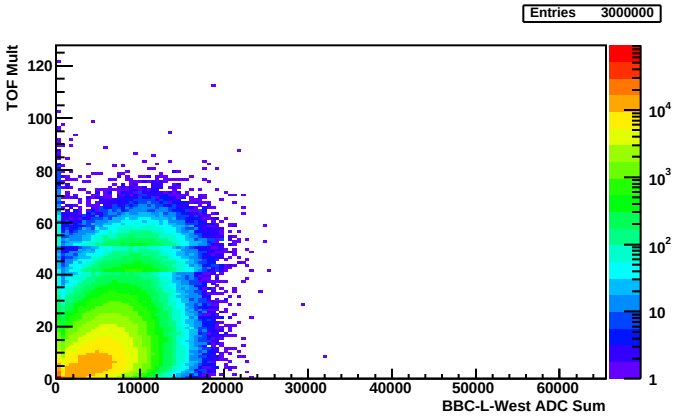

BBQ-VP003 (HI threshold)
Entries 4.8e+07
ADC
QT Input Channel

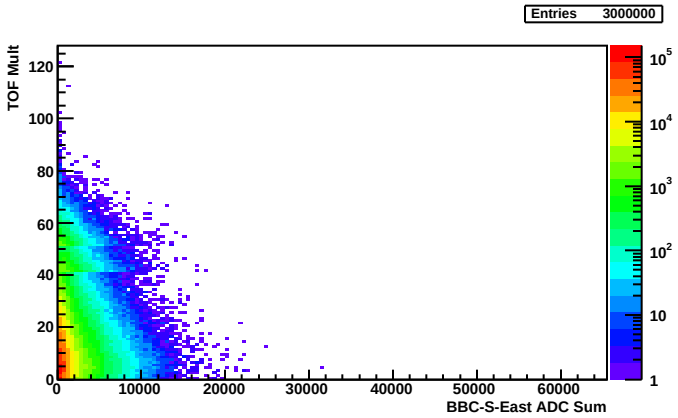

BBQ-VP003 (HI threshold)
Entries 4.8e+07
TAC
QT Input Channel

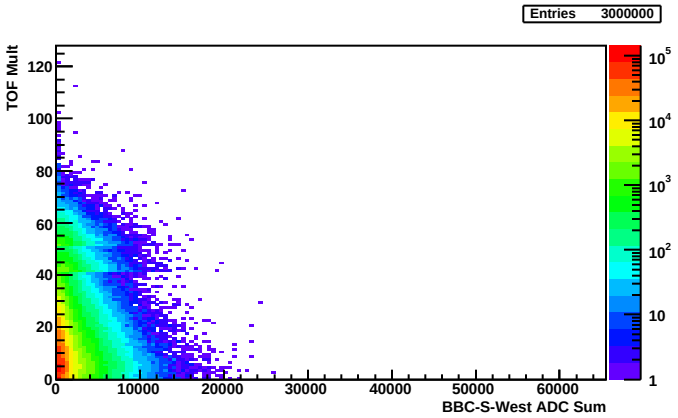

BBQ-VP004 (HI threshold)
Entries 4.8e+07
ADC
QT Input Channel

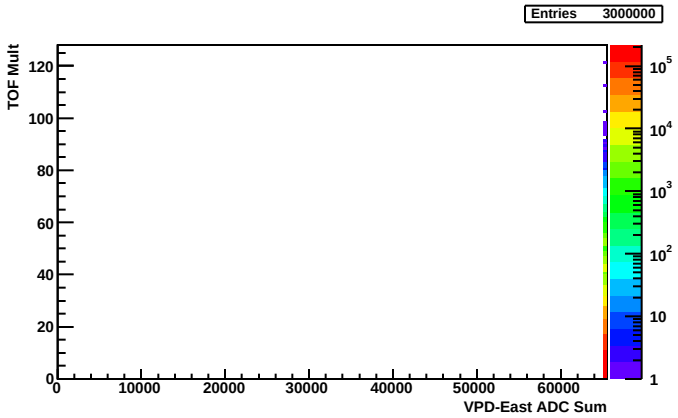

BBQ-VP004 (HI threshold)
Entries 4.8e+07
TAC
QT Input Channel

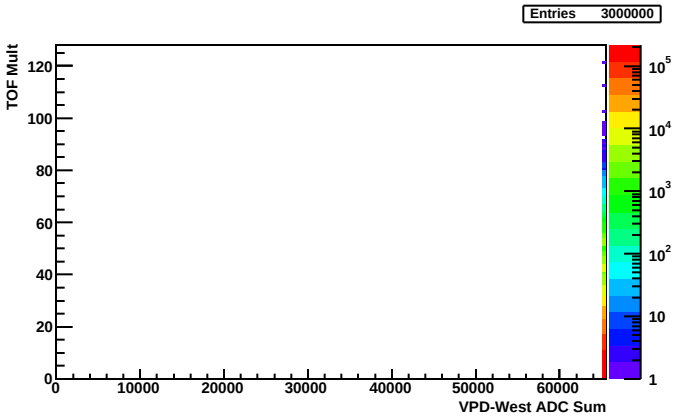

Entries 3000000
TOF Mult
BBC-L-East ADC Sum

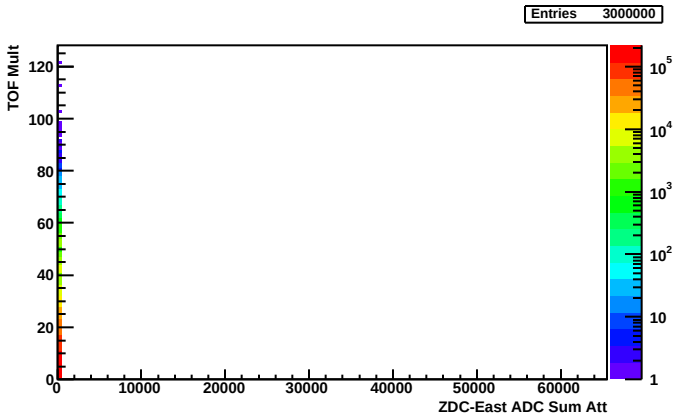

Entries 3000000
TOF Mult
BBC-L-West ADC Sum

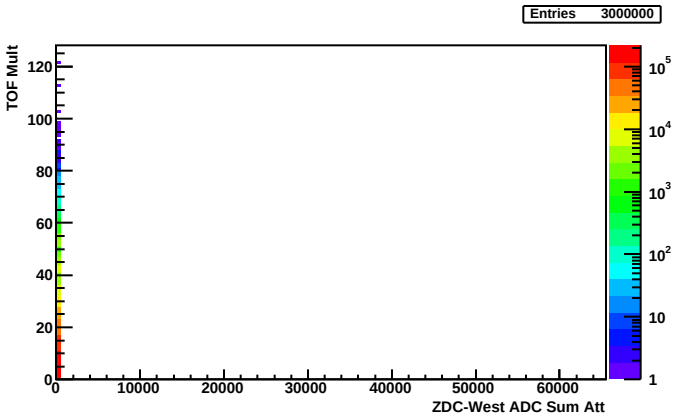

Entries 3000000
TOF Mult
BBC-S-East ADC Sum

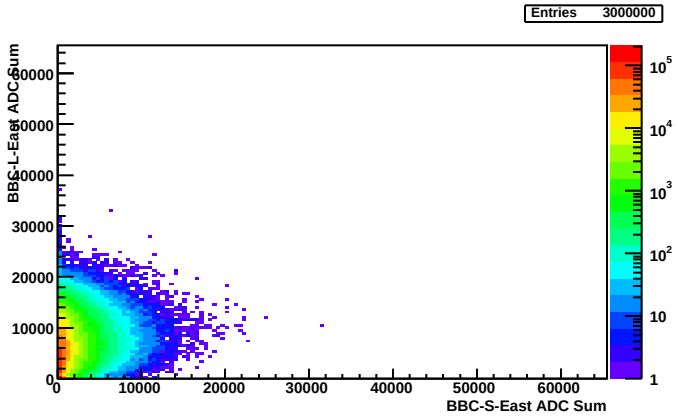

Entries 3000000
TOF Mult
BBC-S-West ADC Sum

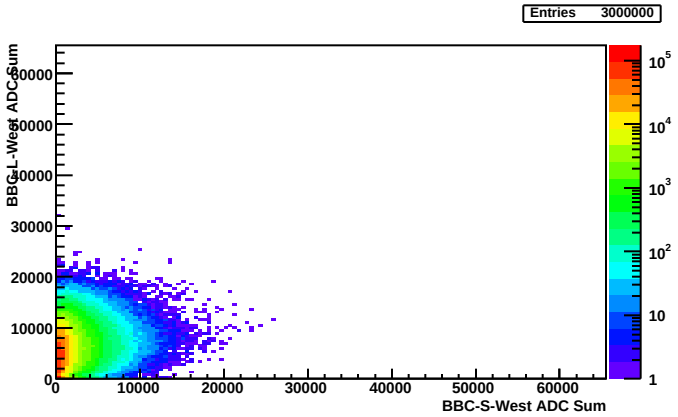

Entries 3000000
TOF Mult
VPD-East ADC Sum

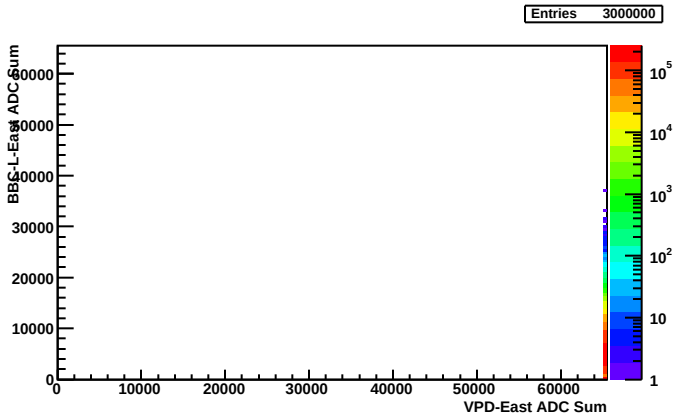

Entries 3000000
TOF Mult
VPD-West ADC Sum

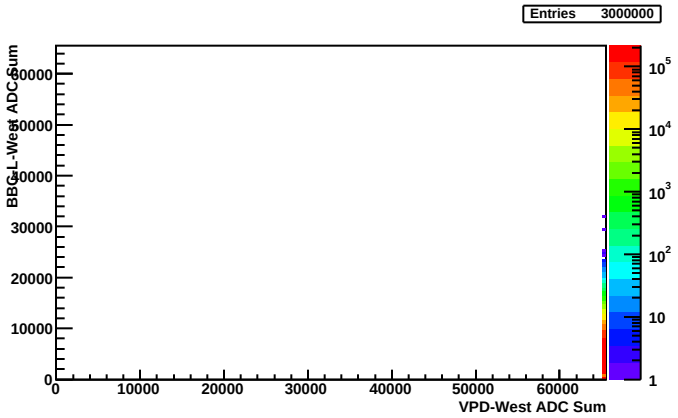

Entries 3000000
TOF Mult
ZDC-East ADC Sum Att

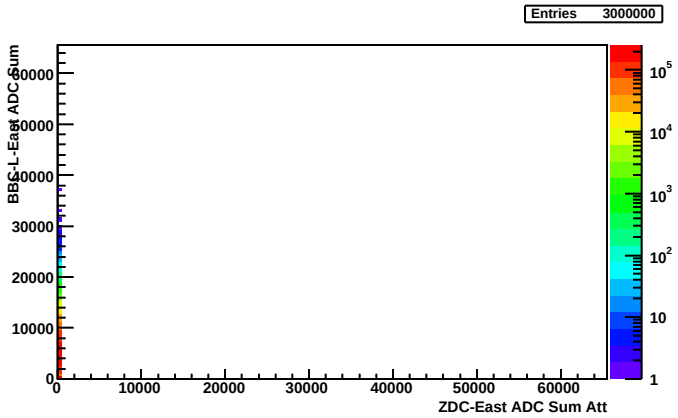

Entries 3000000
TOF Mult
ZDC-West ADC Sum Att

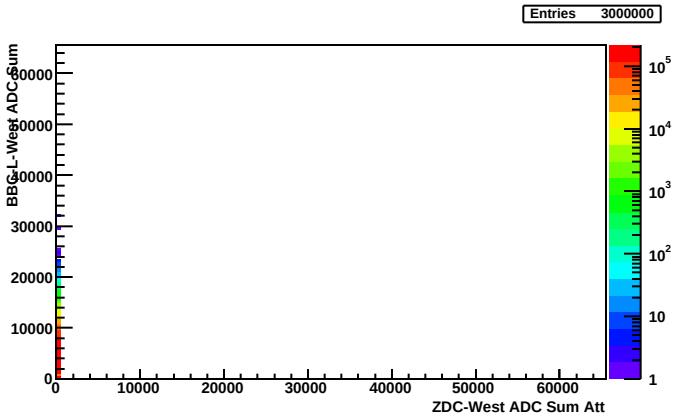

Entries 3000000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

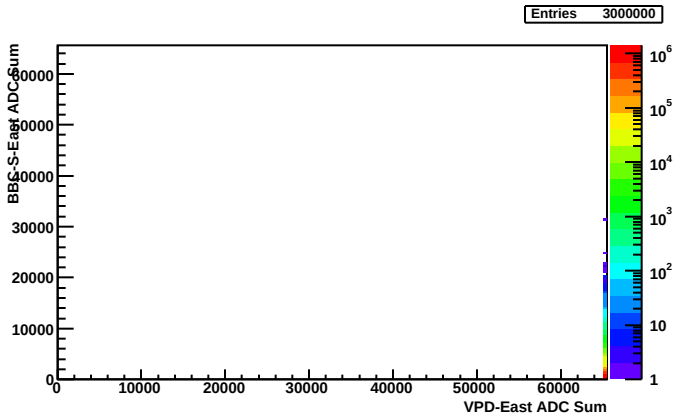

Entries 3000000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

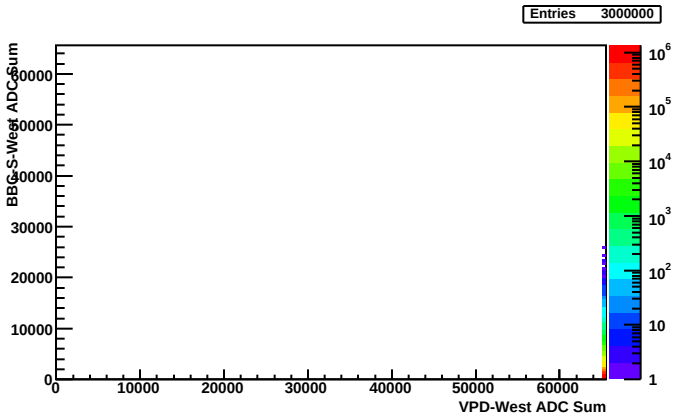

Entries 3000000
BBC-L-East ADC Sum
VPD-East ADC Sum

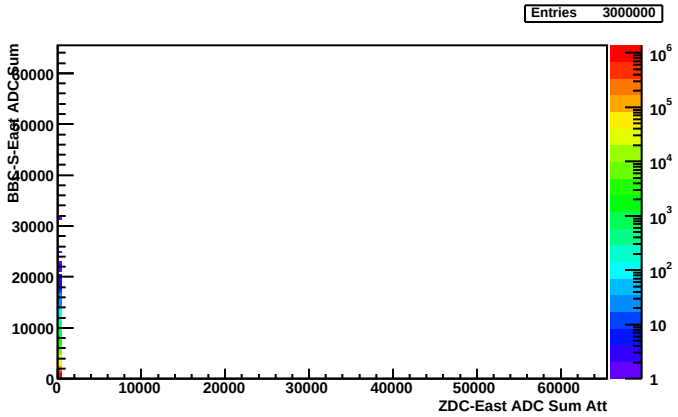

Entries 3000000
BBC-L-West ADC Sum
VPD-West ADC Sum

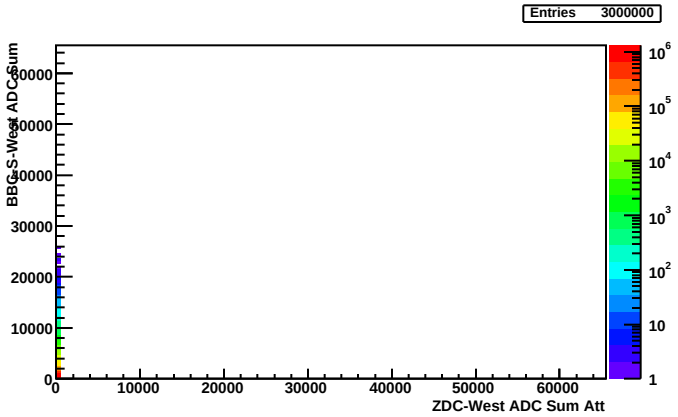

Entries 3000000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

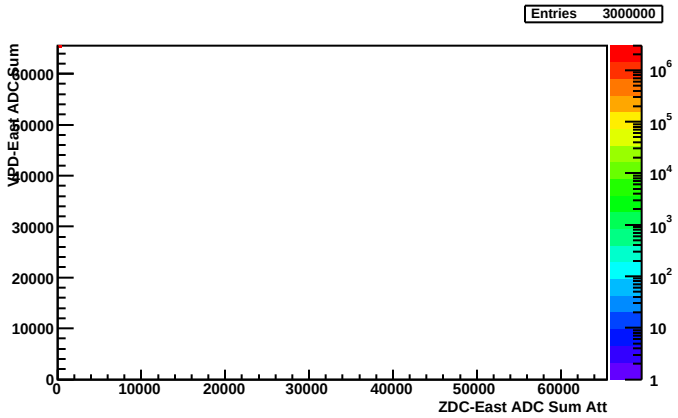

Entries 3000000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

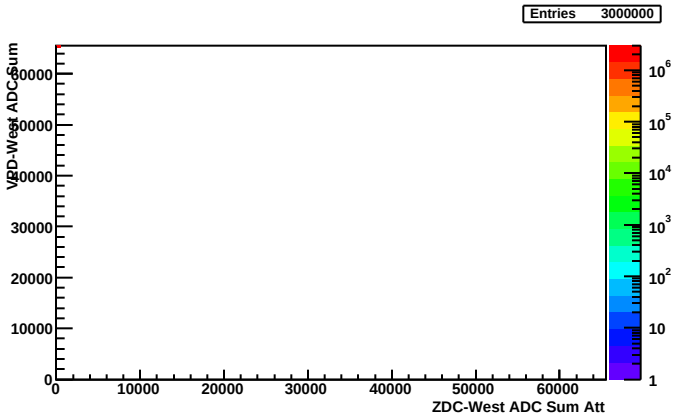

Entries 3000000
BBC-S-East ADC Sum
VPD-East ADC Sum

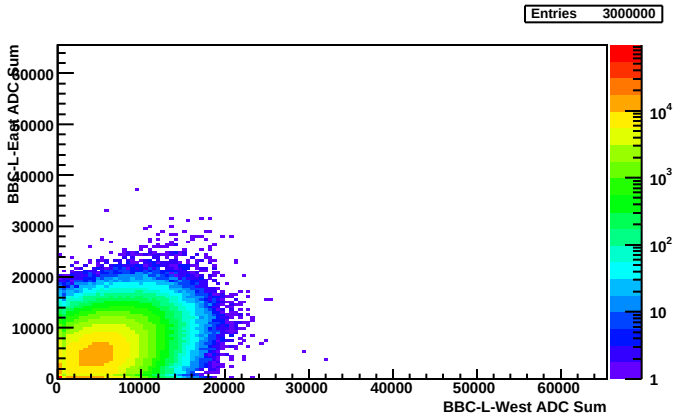

Entries 3000000
BBC-S-West ADC Sum
VPD-West ADC Sum

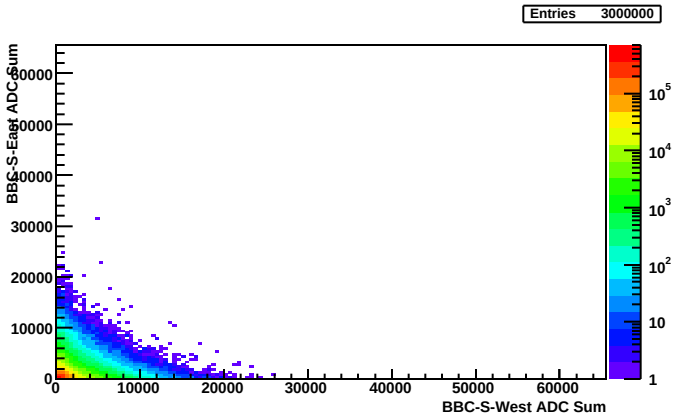

Entries 3000000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

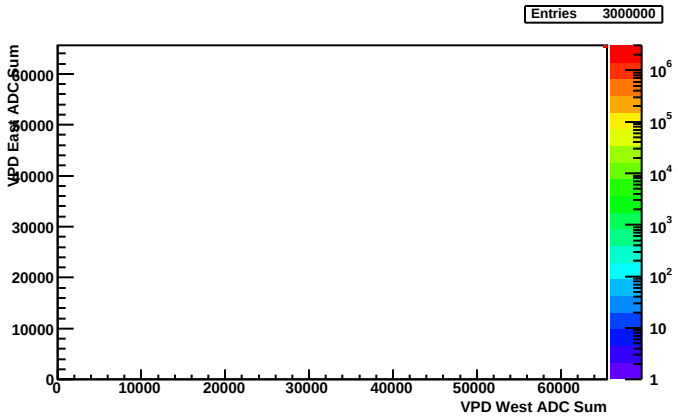

Entries 3000000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

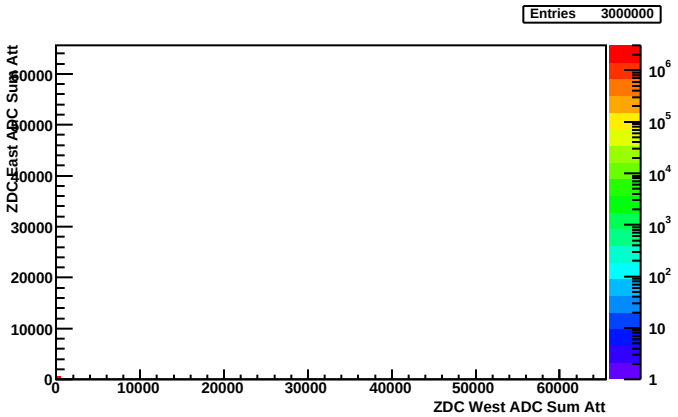

Entries 3000000
VPD-East ADC Sum
ZDC-East ADC Sum Att

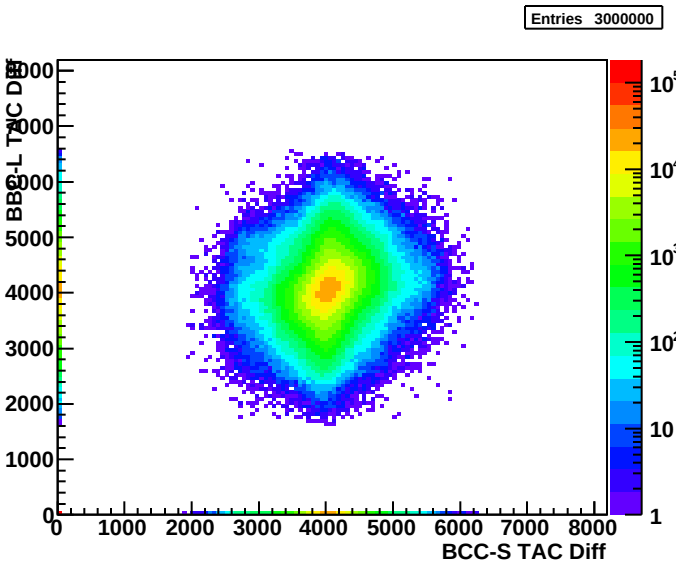

Entries 3000000
VPD-West ADC Sum
ZDC-West ADC Sum Att

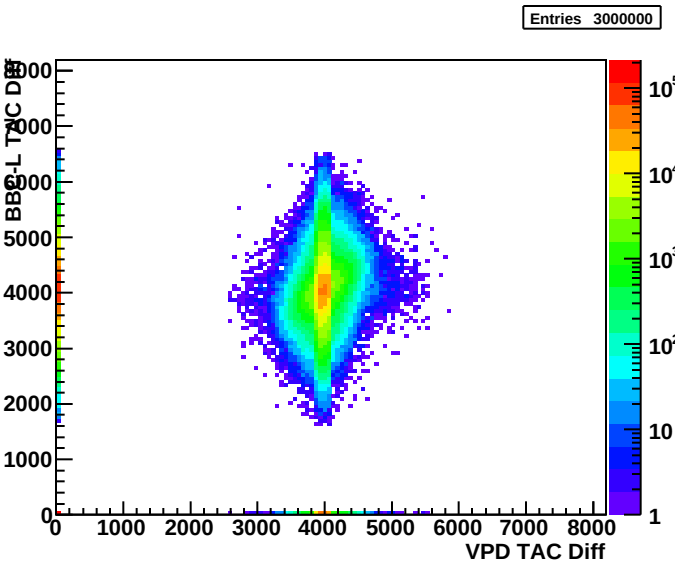

Entries 3000000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

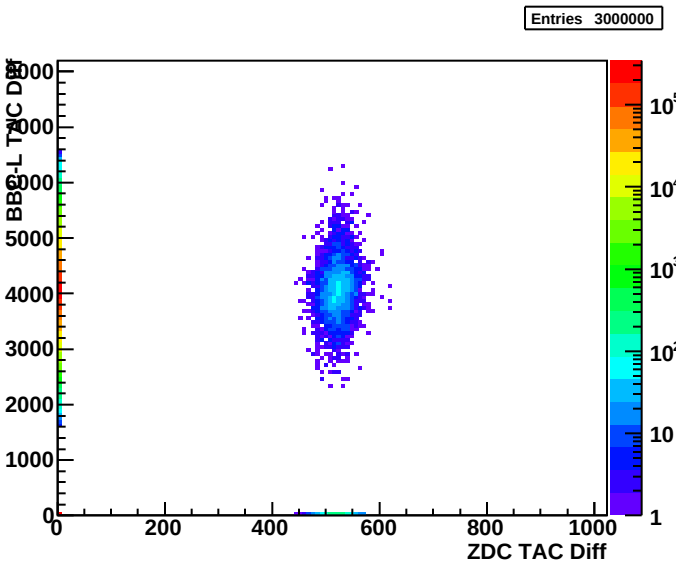

Entries 3000000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

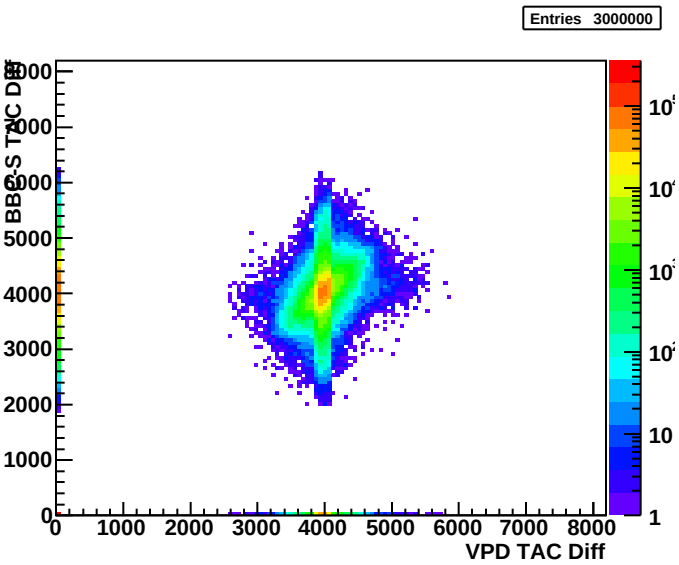

Entries 3000000
VPD East ADC Sum
VPD West ADC Sum

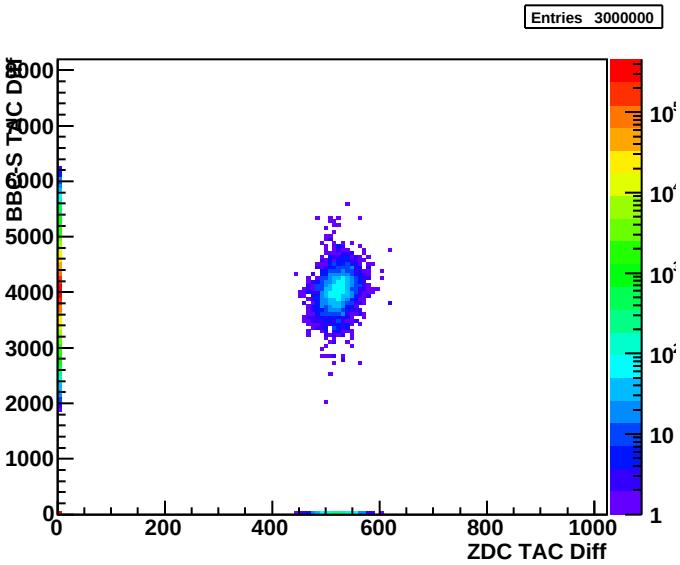

Entries 3000000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

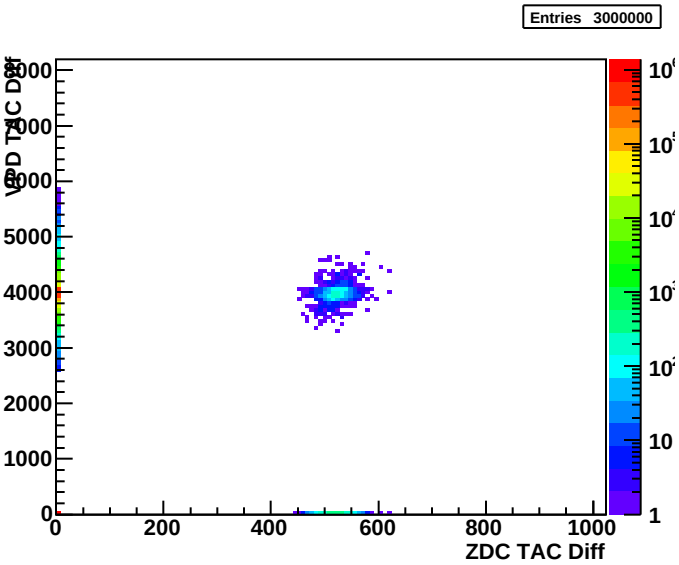

Entries 3000000
BBC-L TAC Diff
BCC-S TAC Diff

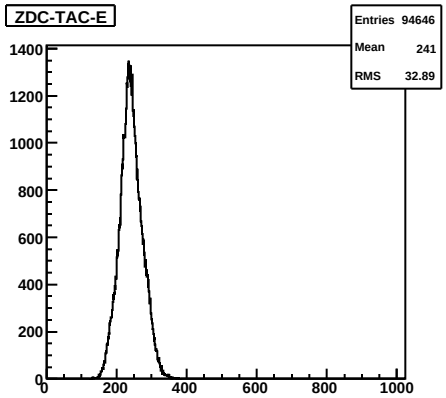

Entries 3000000
BBC-L TAC Diff
VPD TAC Diff

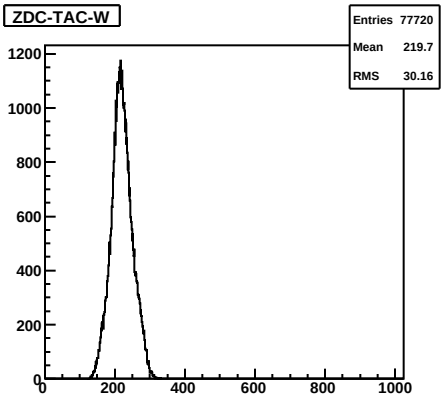

Entries 3000000
BBC-L TAC Diff
ZDC TAC Diff

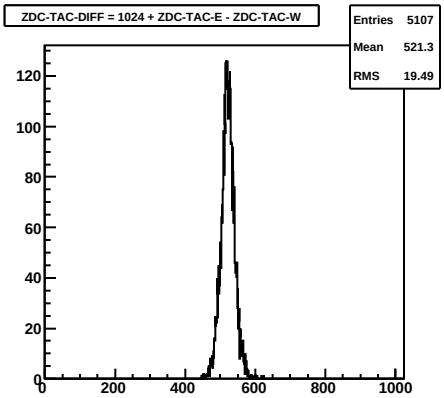

Entries 3000000
BBC-S TAC Diff
VPD TAC Diff

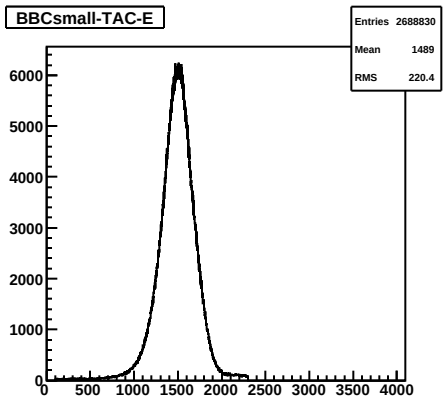

Entries 3000000
BBC-S TAC Diff
ZDC TAC Diff

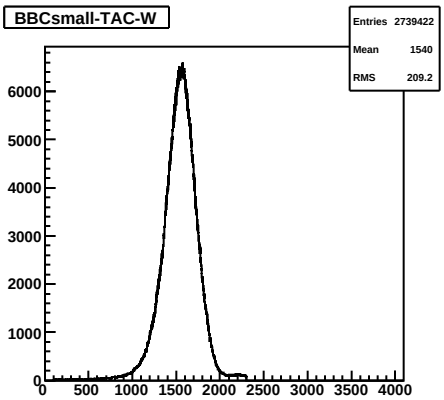

Entries 3000000
VPD TAC Diff
ZDC TAC Diff

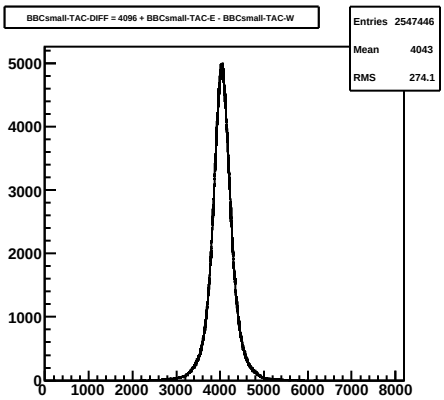

ZDC-TAC-E
Entries 94646
Mean 241
RMS 32.89

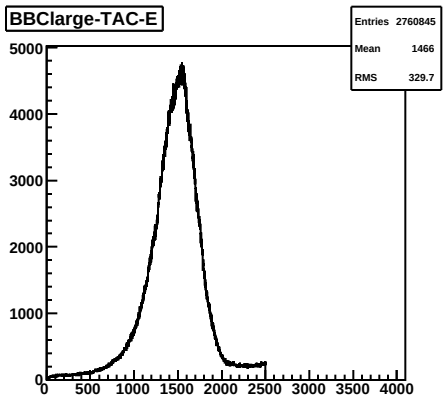

ZDC-TAC-W
Entries 77720
Mean 219.7
RMS 30.16

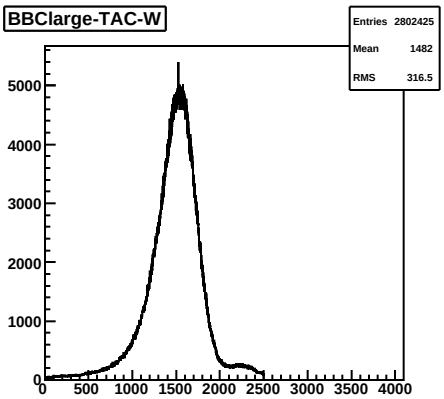

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 5107
Mean 521.3
RMS 19.49

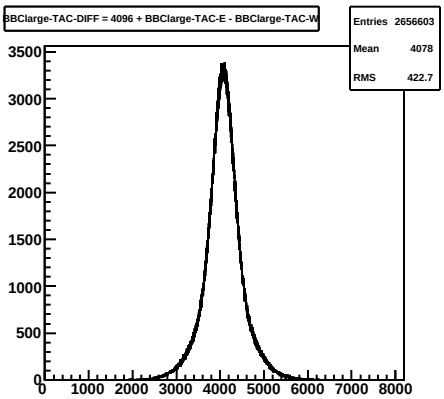

BBCsmall-TAC-E
Entries 2688830
Mean 1489
RMS 220.4

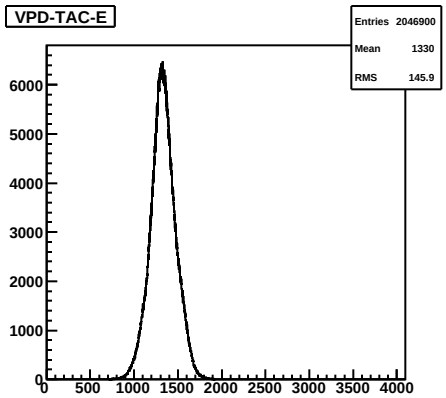

BBCsmall-TAC-W
Entries 2739422
Mean 1540
RMS 209.2

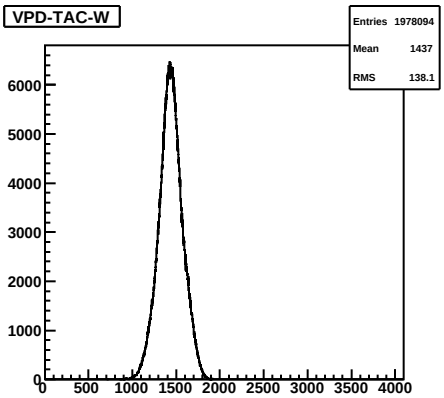

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 2547446
Mean 4043
RMS 274.1

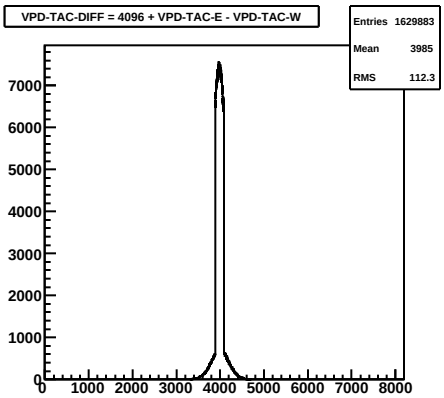

BBClarge-TAC-E
Entries 2760845
Mean 1466
RMS 329.7

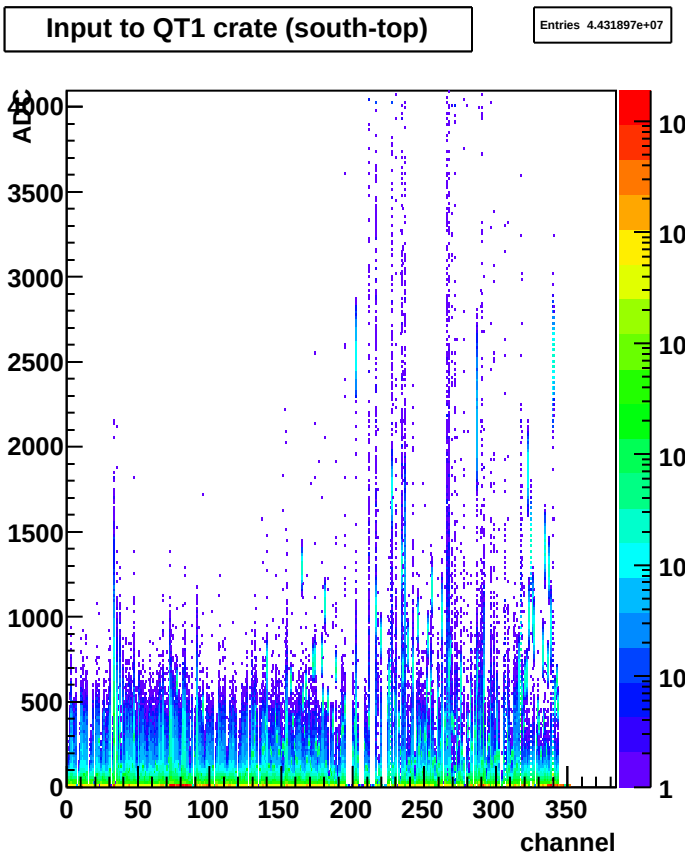

BBClarge-TAC-W
Entries 2802425
Mean 1482
RMS 316.5

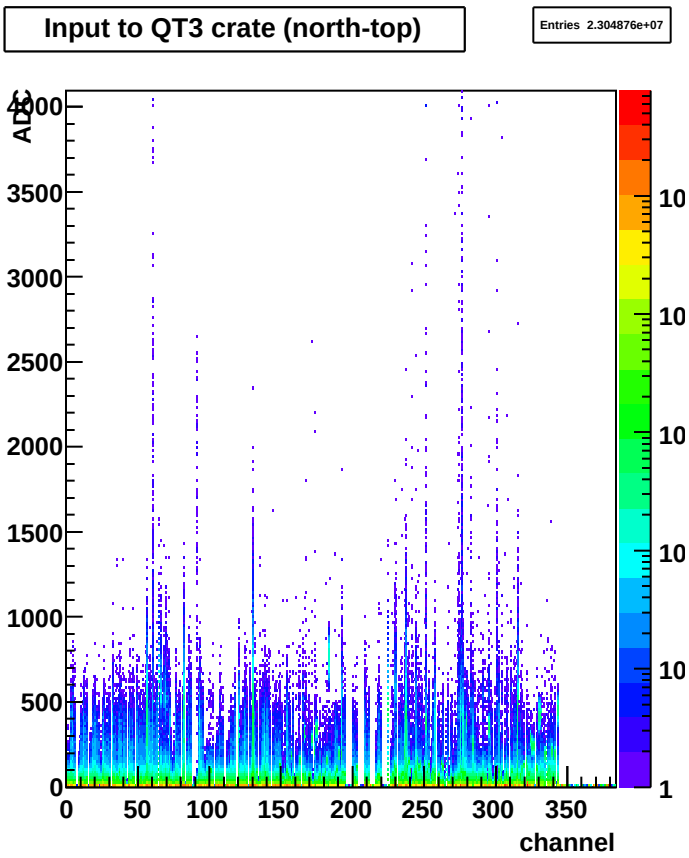

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2656603
Mean 4078
RMS 422.7

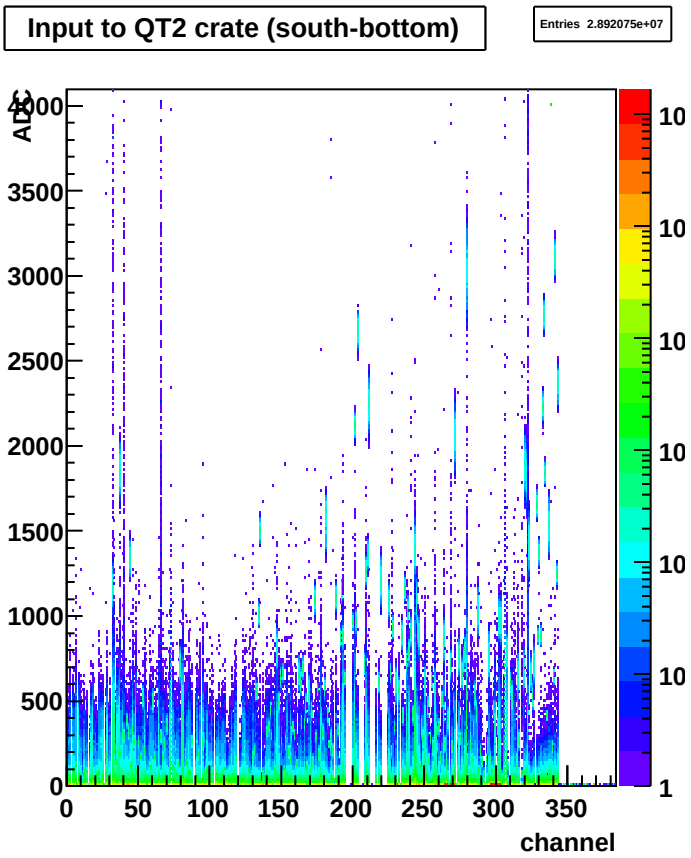

VPD-TAC-E
Entries 2046900
Mean 1330
RMS 145.9

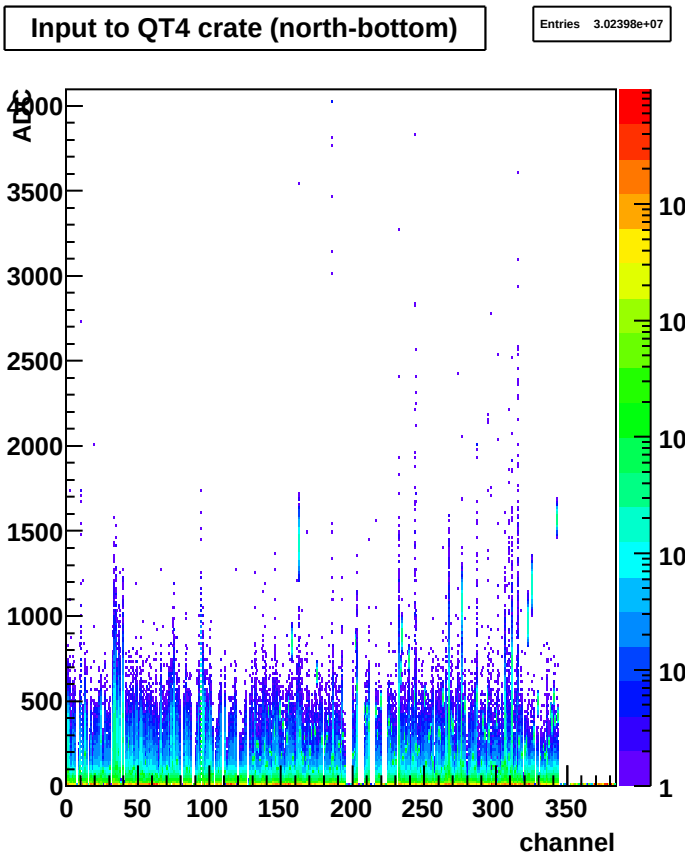

VPD-TAC-W
Entries 1978094
Mean 1437
RMS 138.1

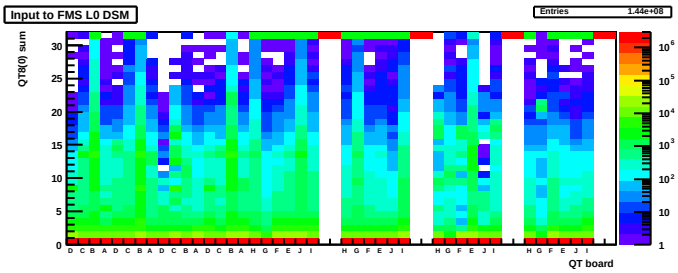

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1629883
Mean 3985
RMS 112.3

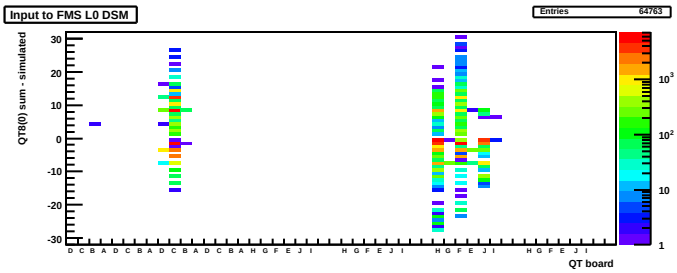

Input to QT1 crate (south-top)
Entries 4.431897e+07
ADC
channel

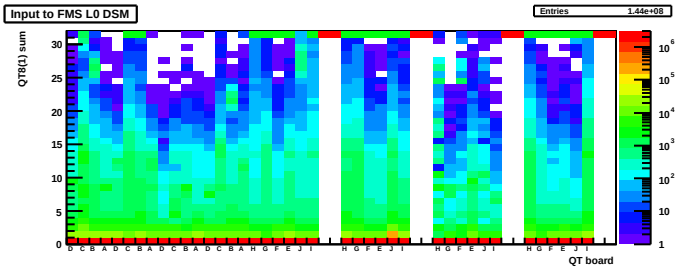

Input to QT3 crate (north-top)
Entries 2.304876e+07
ADC
channel

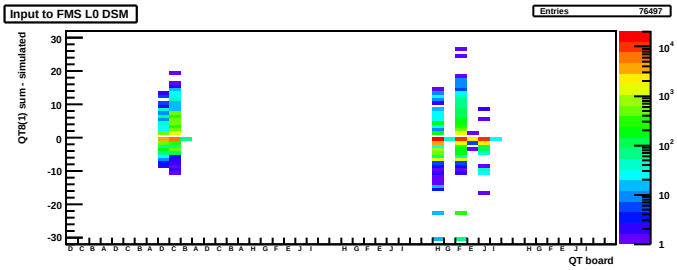

Input to QT2 crate (south-bottom)
Entries 2.892075e+07
ADC
channel

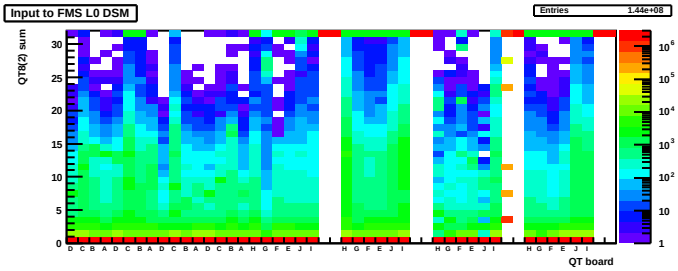

Input to QT4 crate (north-bottom)
Entries 3.02398e+07
ADC
channel

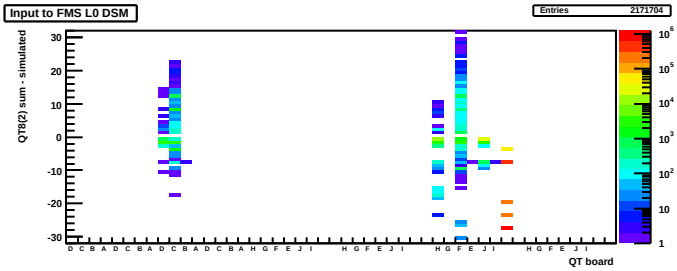

Input to FMS L0 DSM
Entries 1.44e+08
QT8(0) sum
QT board

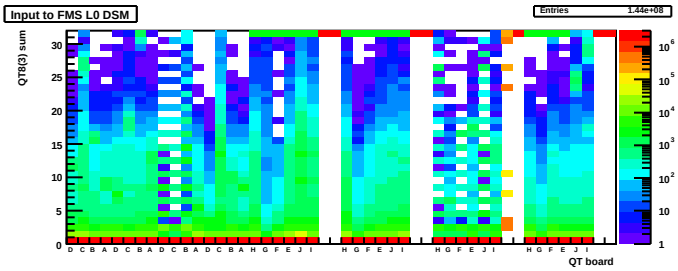

Input to FMS L0 DSM
Entries 64763
QT8(0) sum - simulated
QT board

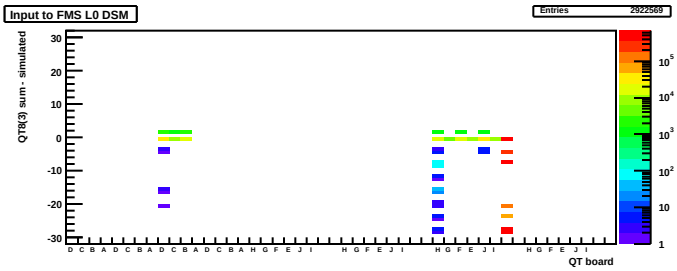

Input to FMS L0 DSM
Entries 1.44e+08
QT8(1) sum
QT board

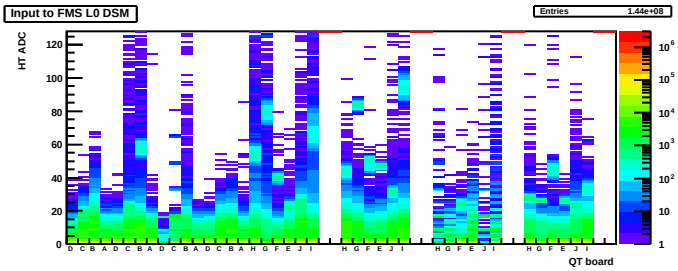

Input to FMS L0 DSM
Entries 76497
QT8(1) sum - simulated
QT board

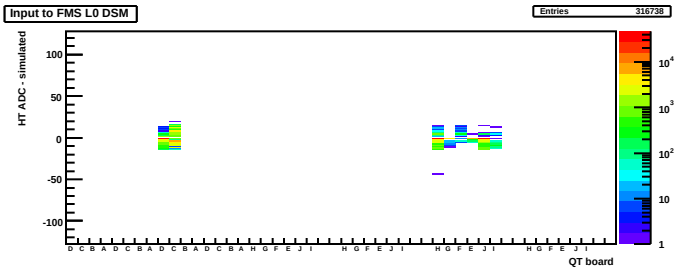

Input to FMS L0 DSM
Entries 1.44e+08
QT8(2) sum
QT board

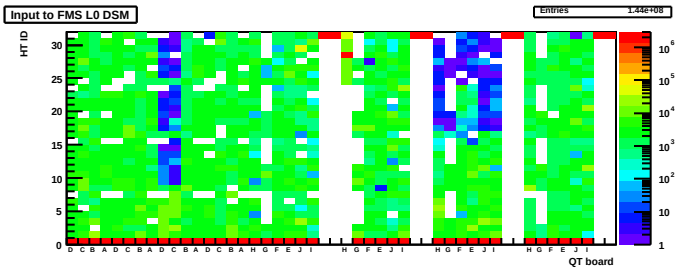

Input to FMS L0 DSM
Entries 2171704
QT8(2) sum - simulated
QT board

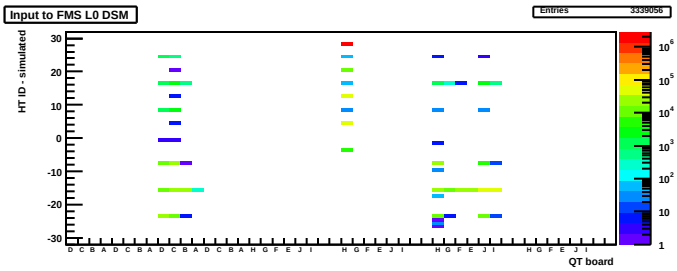

Input to FMS L0 DSM
Entries 1.44e+08
QT8(3) sum
QT board

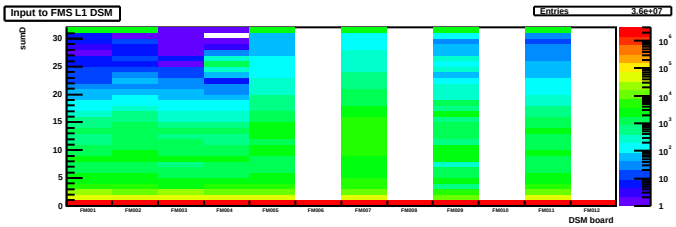

Input to FMS L0 DSM
Entries 2922569
QT8(3) sum - simulated
QT board

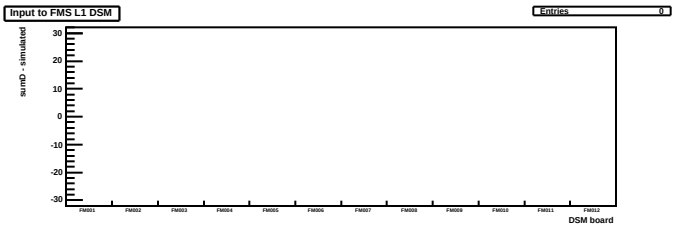

Input to FMS L0 DSM
Entries 1.44e+08
HT ADC
QT board

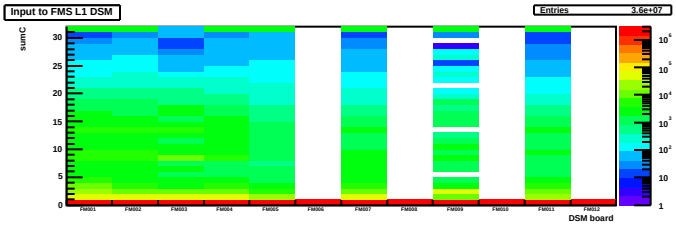

Input to FMS L0 DSM
Entries 316738
HT ADC - simulated
QT board

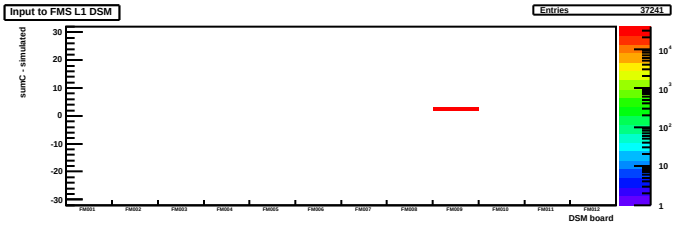

Input to FMS L0 DSM
Entries 1.44e+08
HT ID
QT board

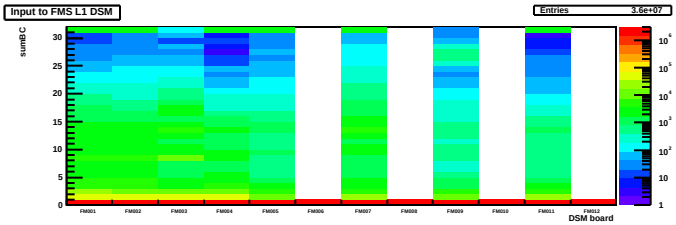

Input to FMS L0 DSM
Entries 3339056
HT ID - simulated
QT board

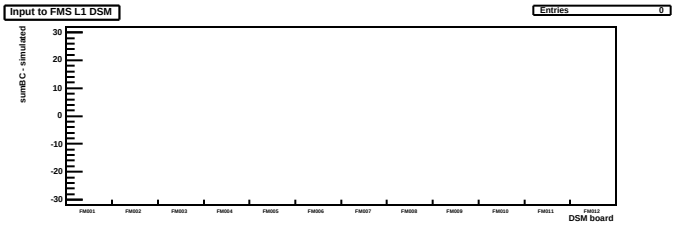

Input to FMS L1 DSM
Entries 3.6e+07
sumD
DSM board

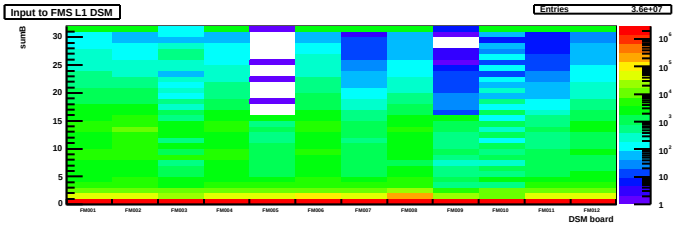

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

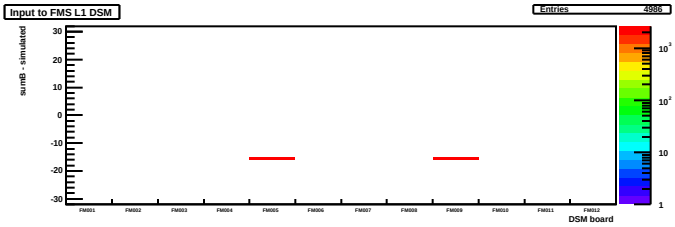

Input to FMS L1 DSM
Entries 3.6e+07
sumC
DSM board

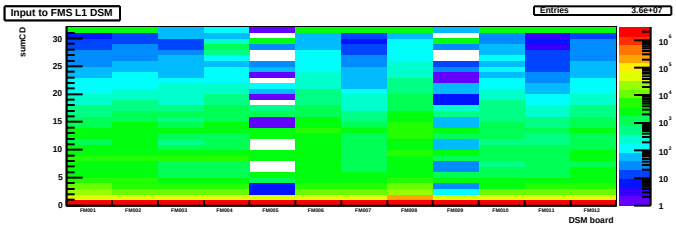

Input to FMS L1 DSM
Entries 37241
sumC - simulated
DSM board

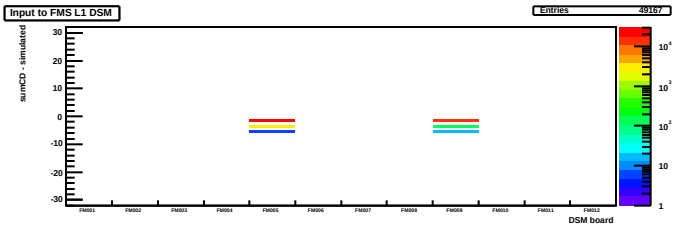

Input to FMS L1 DSM
Entries 3.6e+07
sumBC
DSM board

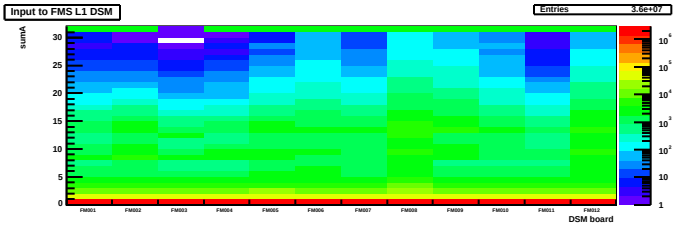

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

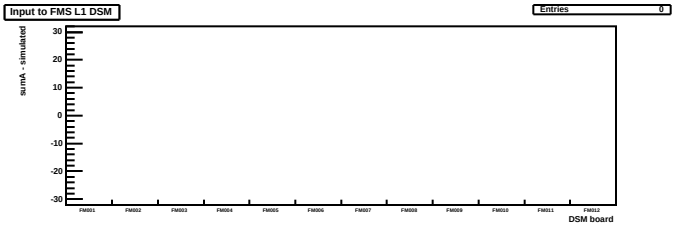

Input to FMS L1 DSM
Entries 3.6e+07
sumB
DSM board

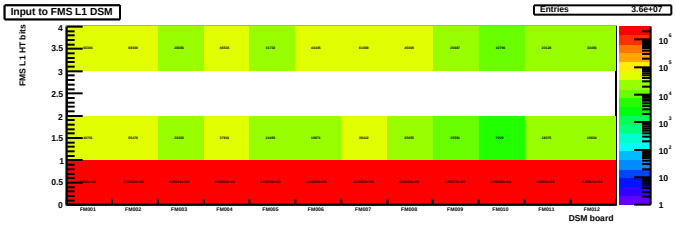

Input to FMS L1 DSM
Entries 4986
sumB - simulated
DSM board

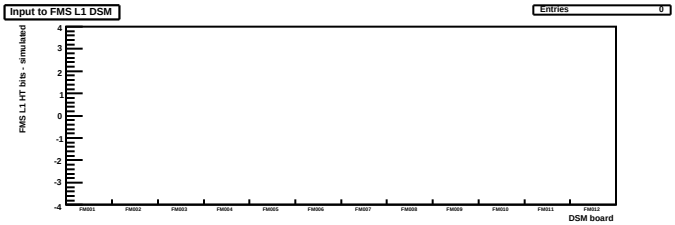

Input to FMS L1 DSM
Entries 3.6e+07
sumCD
DSM board

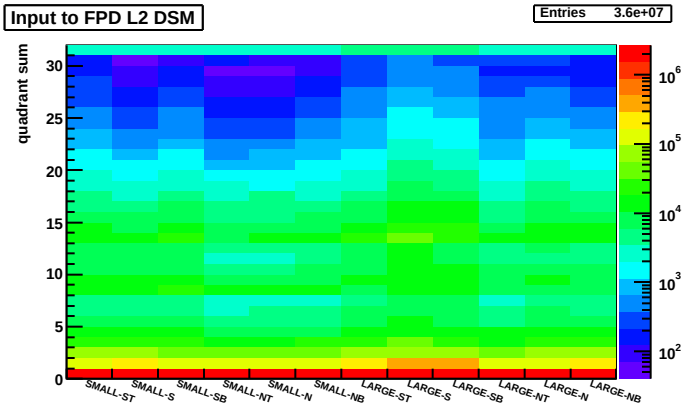

Input to FMS L1 DSM
Entries 49167
sumCD - simulated
DSM board

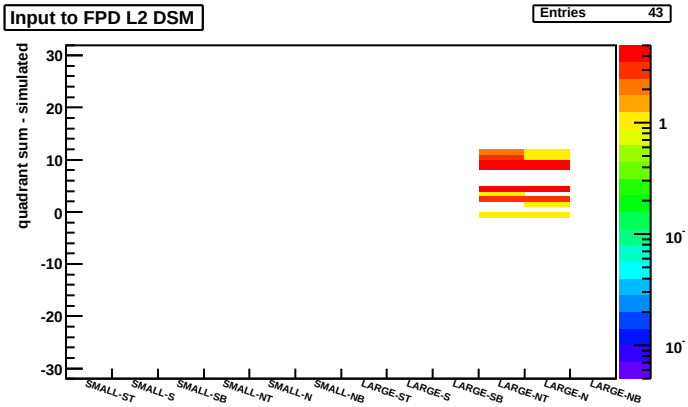

Input to FMS L1 DSM
Entries 3.6e+07
sumA
DSM board

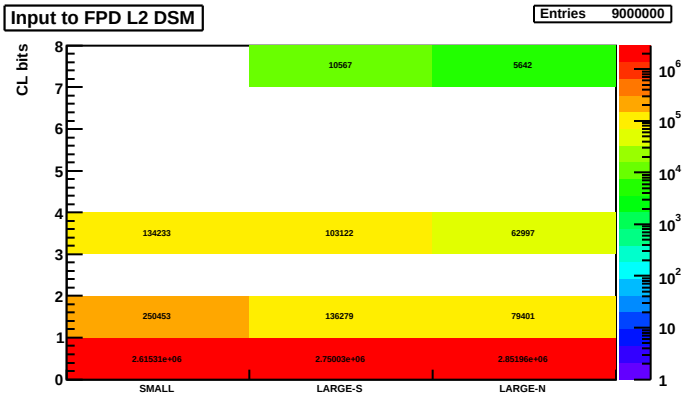

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

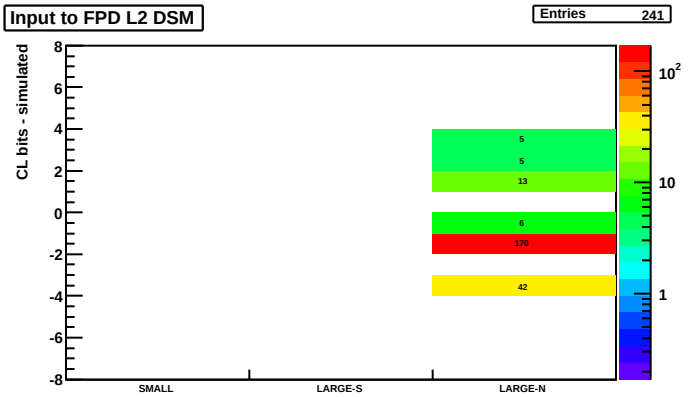

Input to FMS L1 DSM
Entries 3.6e+07
FMS L1 HT bits
DSM board

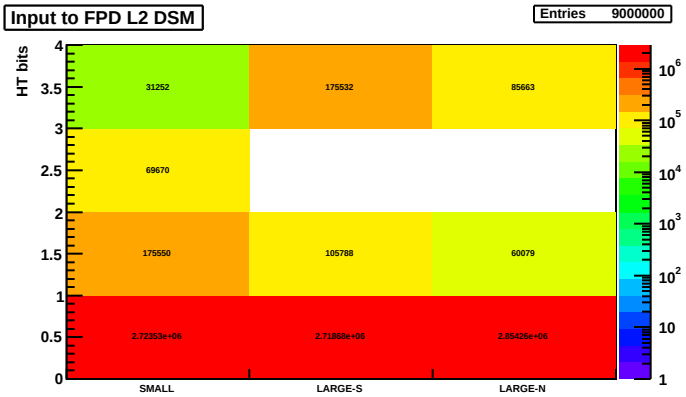

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

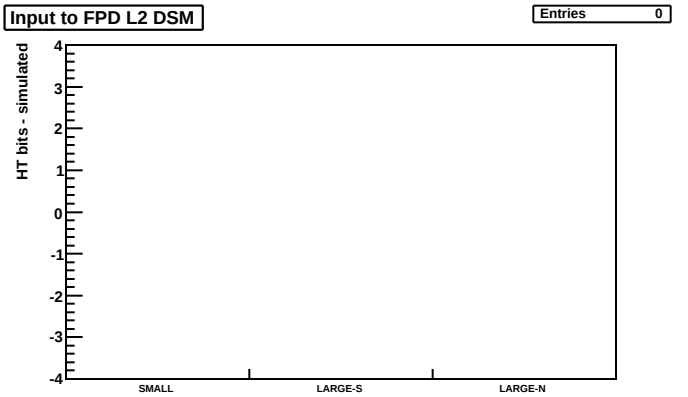

Input to FPD L2 DSM
Entries 3.6e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

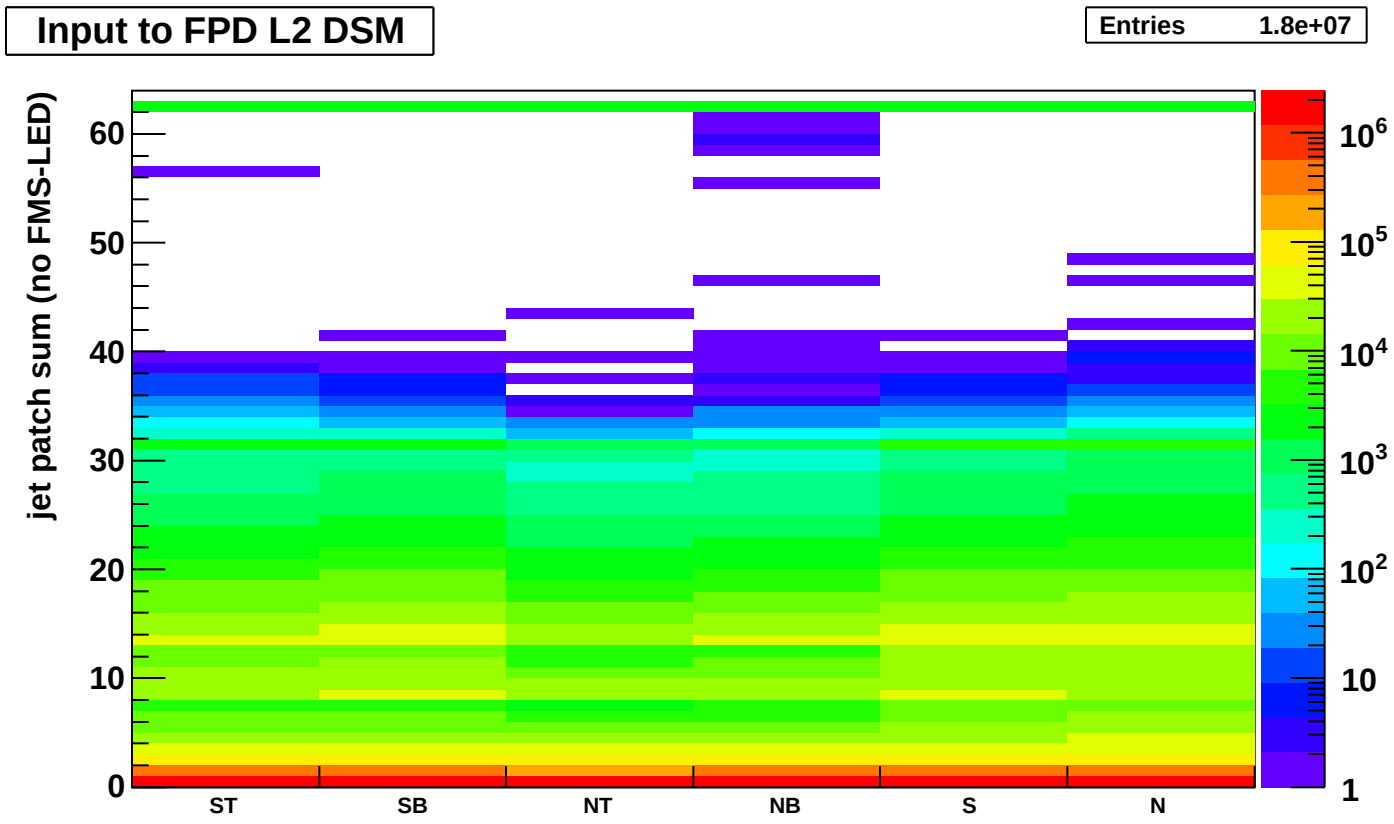

Input to FPD L2 DSM
Entries 43
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

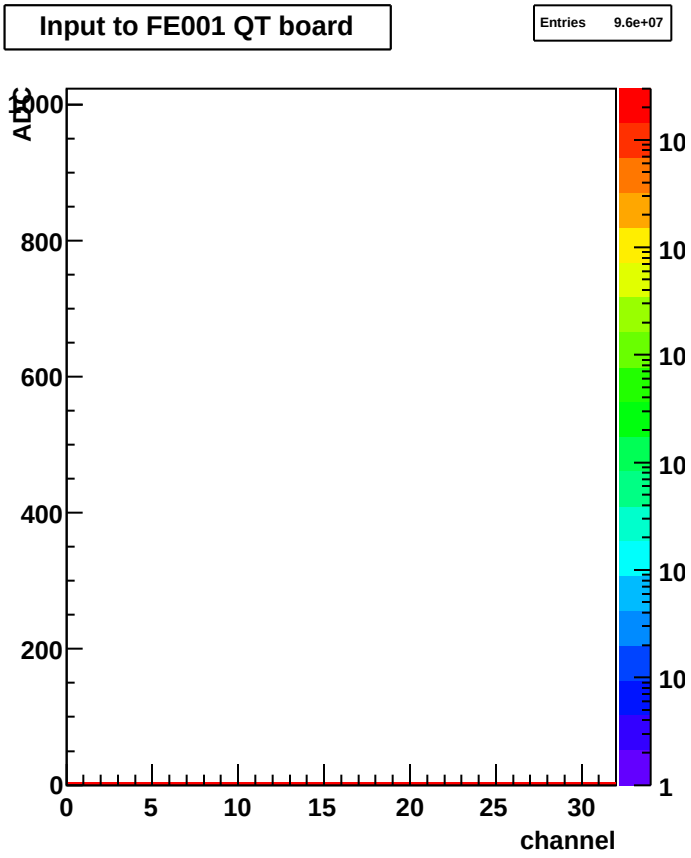

Input to FPD L2 DSM
Entries 9000000
CL bits
10567
5642
134233
103122
62997
250453
136279
79401
2.61531e+06
2.75003e+06
2.85196e+06
SMALL
LARGE-S
LARGE-N

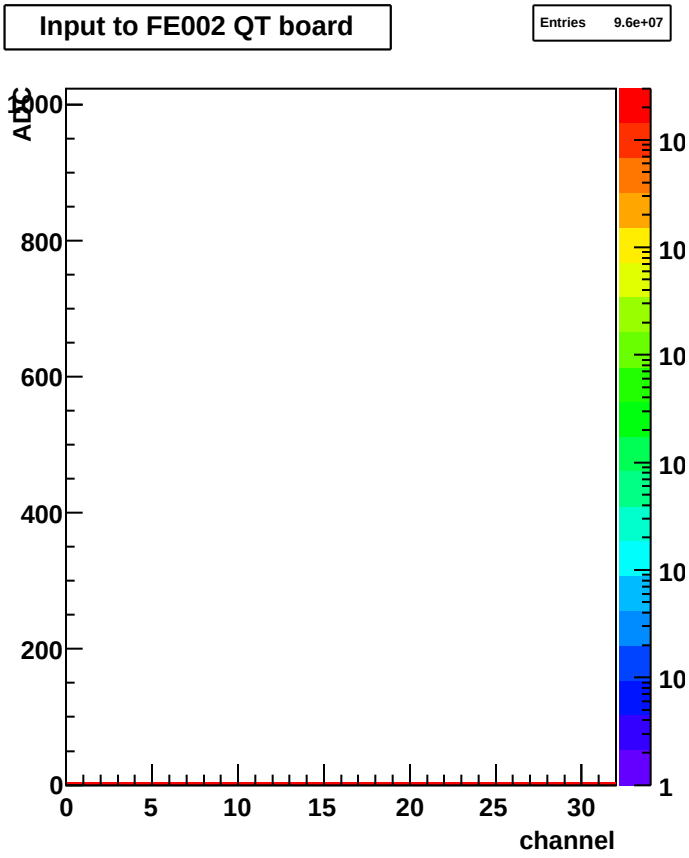

Input to FPD L2 DSM
Entries 241
CL bits - simulated
5
5
13
6
170
42
SMALL
LARGE-S
LARGE-N

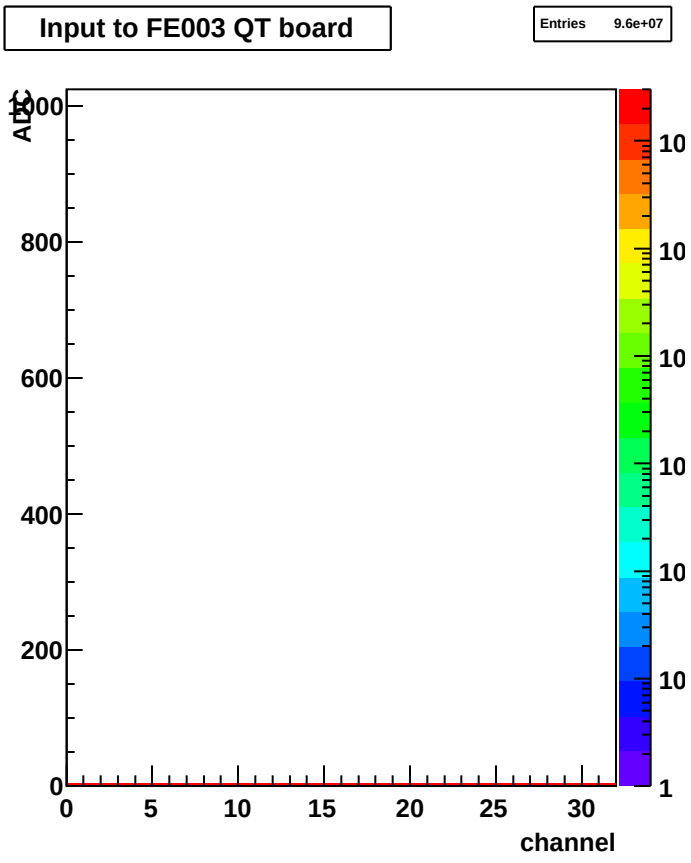

Input to FPD L2 DSM
Entries 9000000
HT bits
31252
175532
85663
69670
175550
105788
60079
2.72353e+06
2.71868e+06
2.85426e+06
SMALL
LARGE-S
LARGE-N

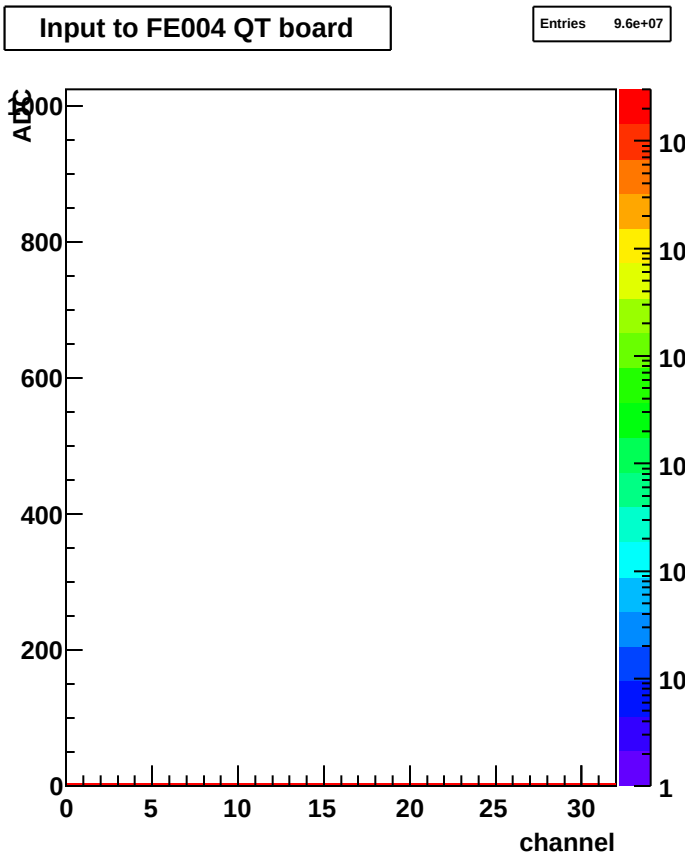

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

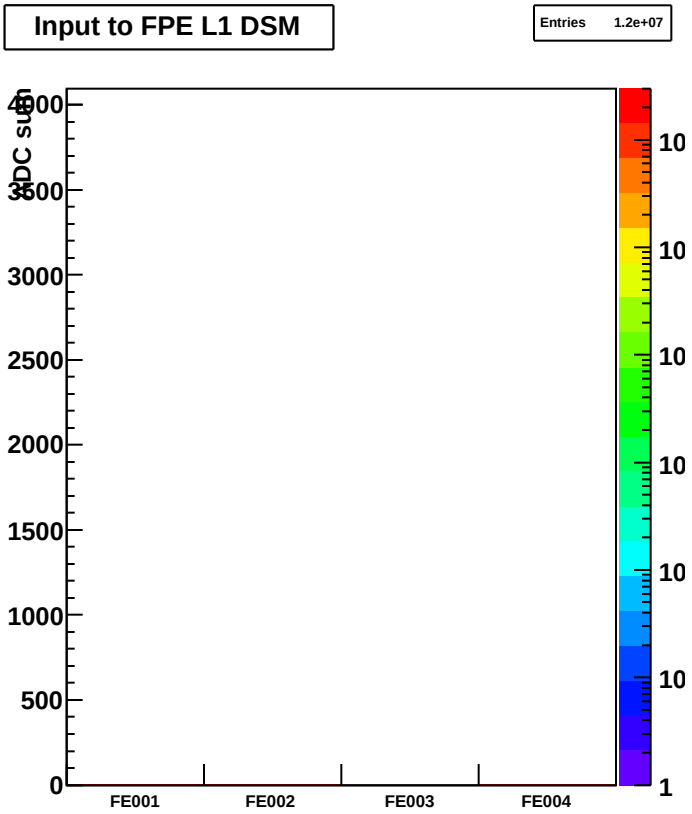

Input to FPD L2 DSM
Entries 1.8e+07
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

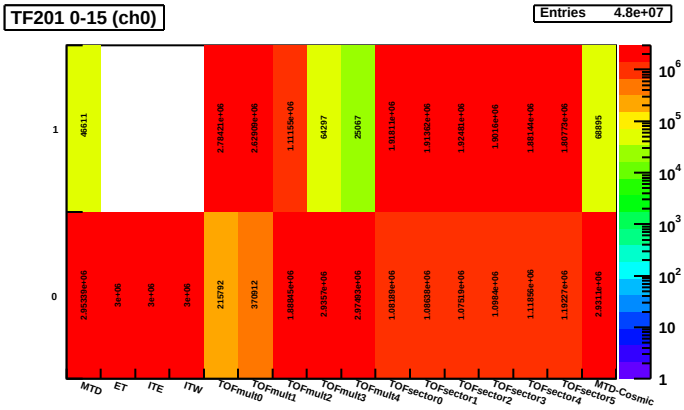

Input to FE001 QT board
Entries 9.6e+07
ADC
channel

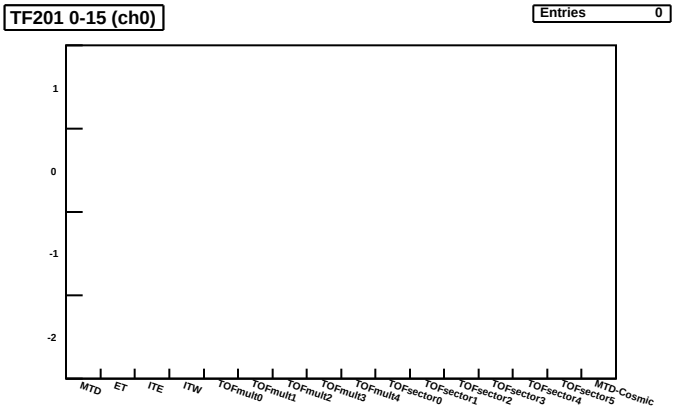

Input to FE002 QT board
Entries 9.6e+07
ADC
channel

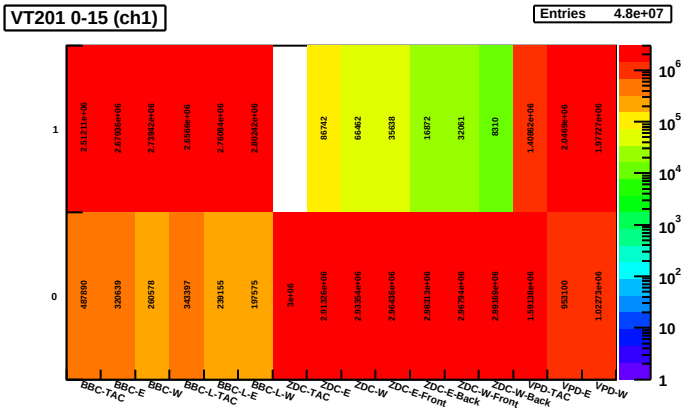

Input to FE003 QT board
Entries 9.6e+07
ADC
channel

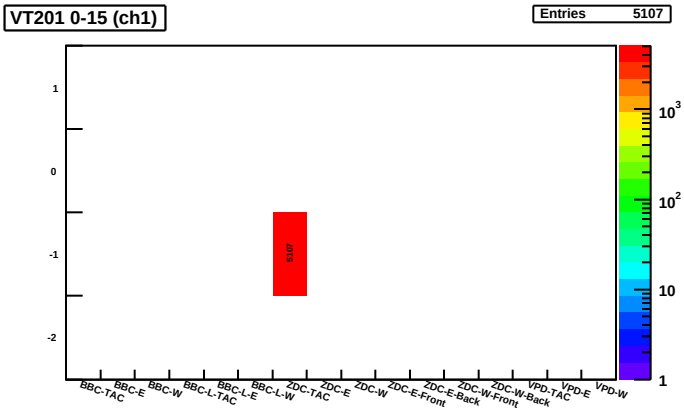

Input to FE004 QT board
Entries 9.6e+07
ADC
channel

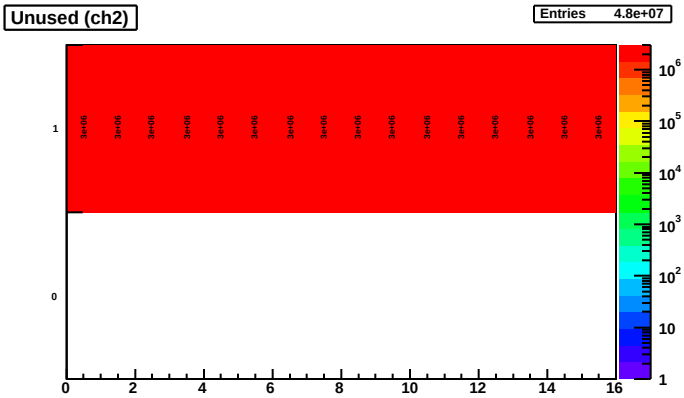

Input to FPE L1 DSM
Entries 1.2e+07
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1

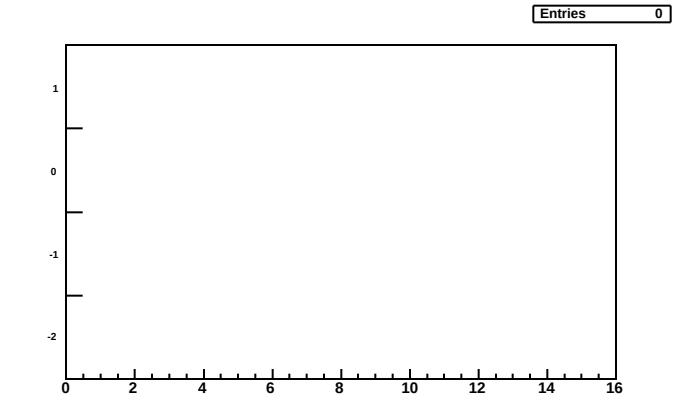

TF201 0-15 (ch0)
Entries 4.8e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

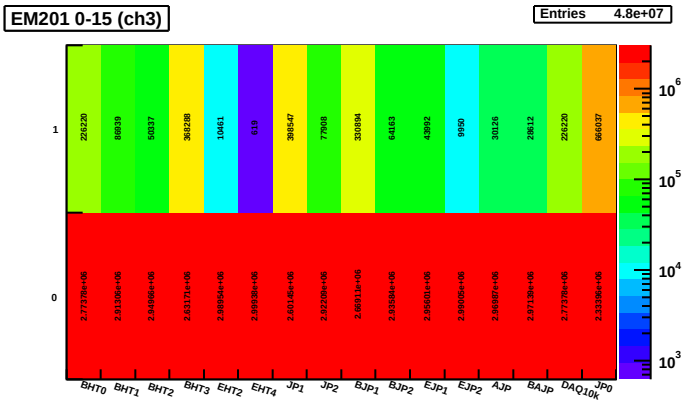

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

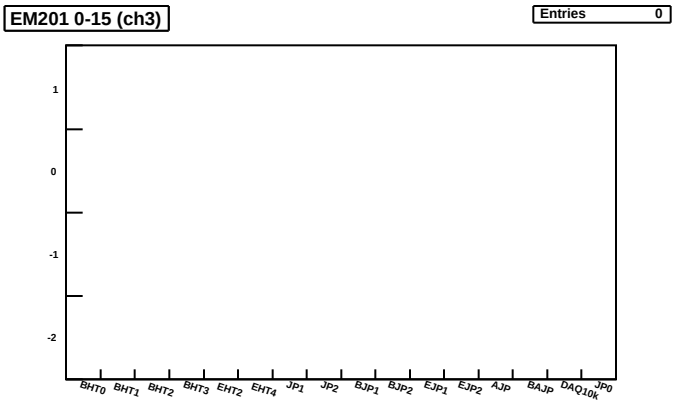

VT201 0-15 (ch1)
Entries 4.8e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 5107
5107
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

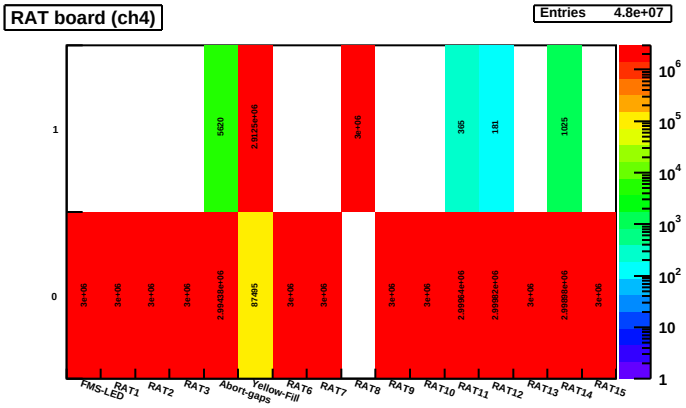

Unused (ch2)
Entries 4.8e+07

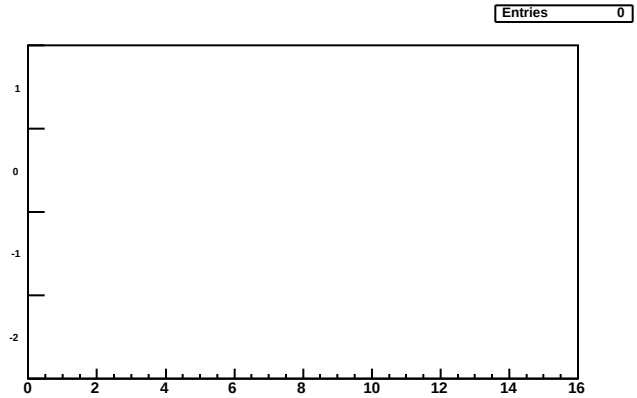

Entries 0


EM201 0-15 (ch3)
Entries 4.8e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

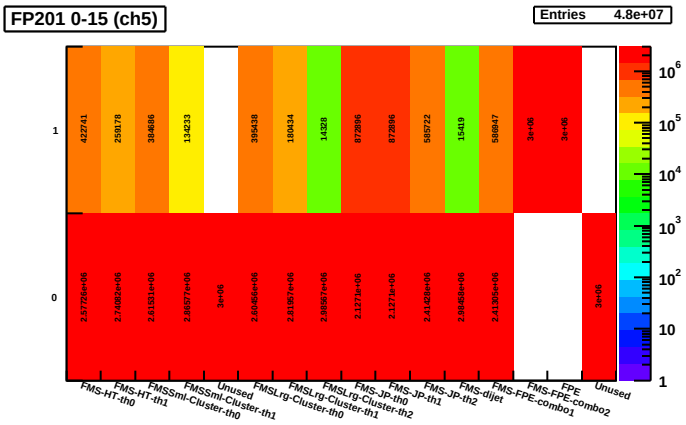

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

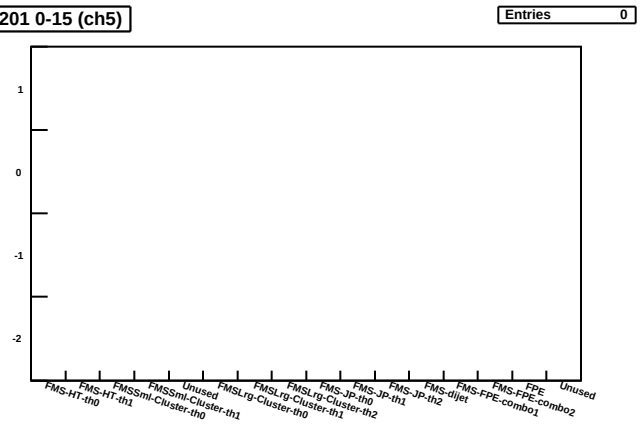




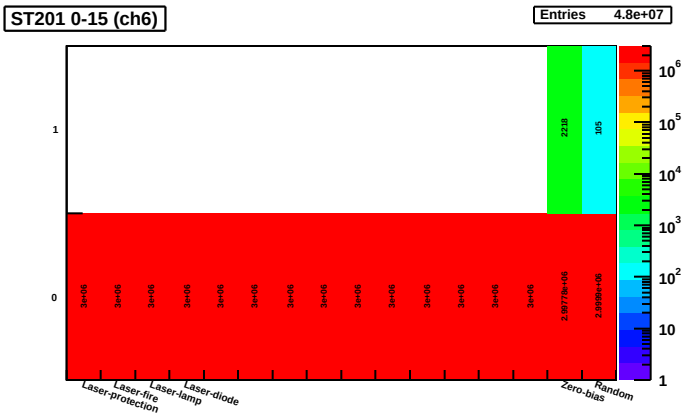
FP201 0-15 (ch5)

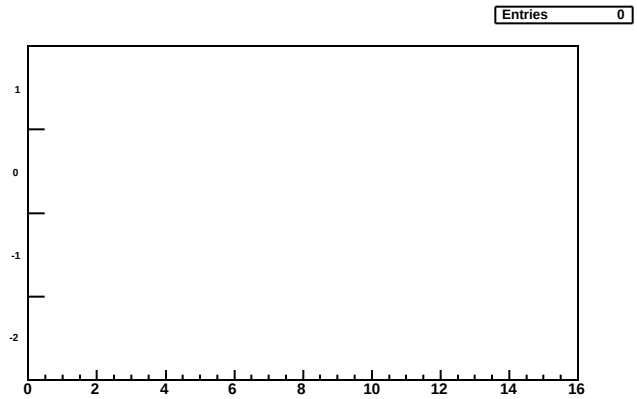
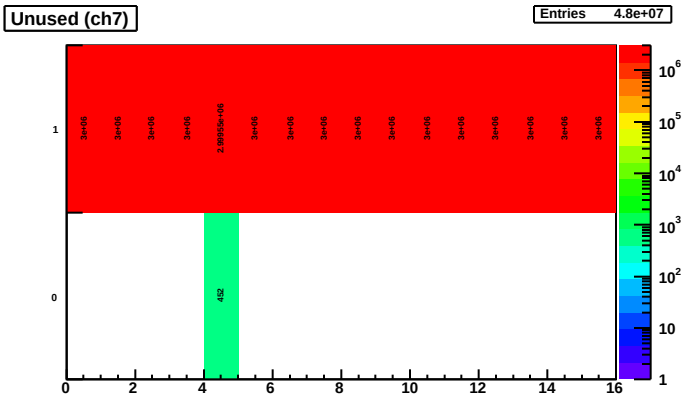
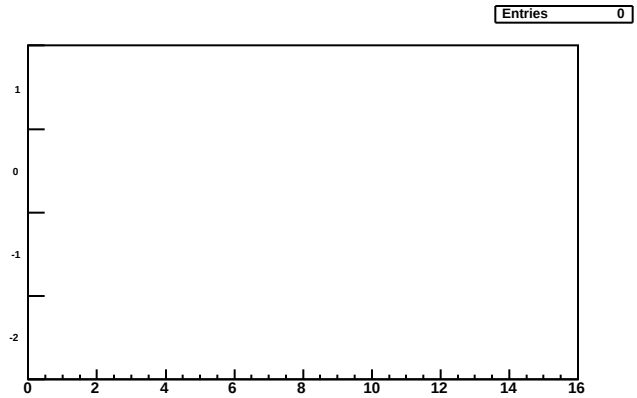


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)