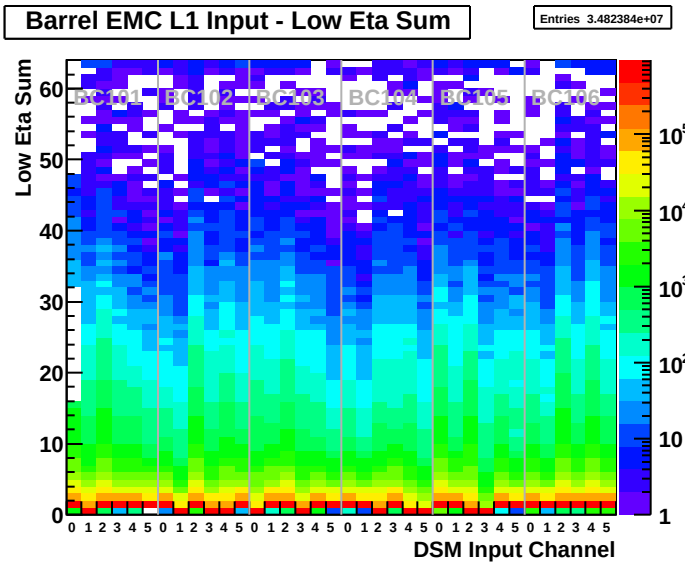
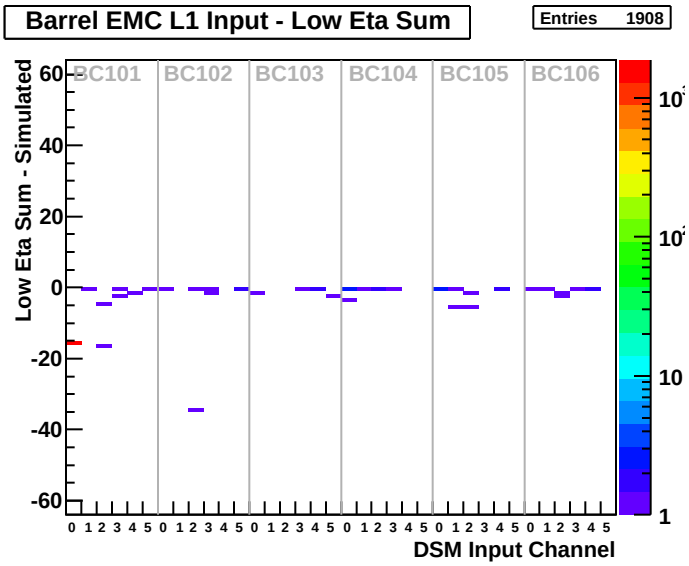
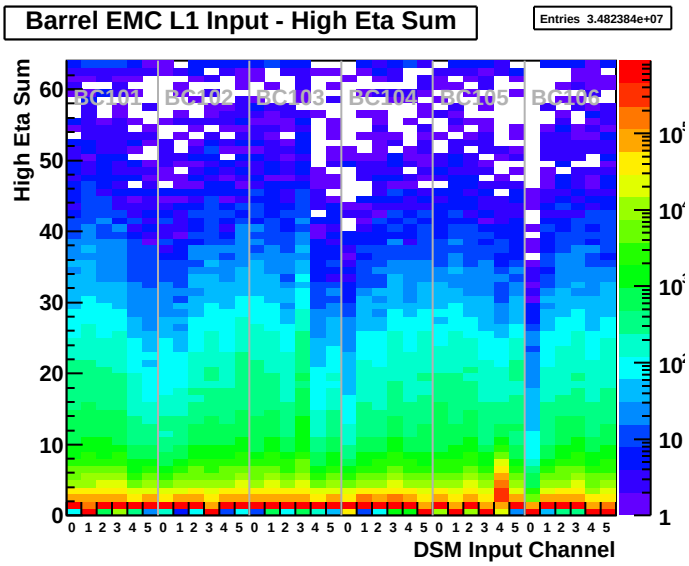
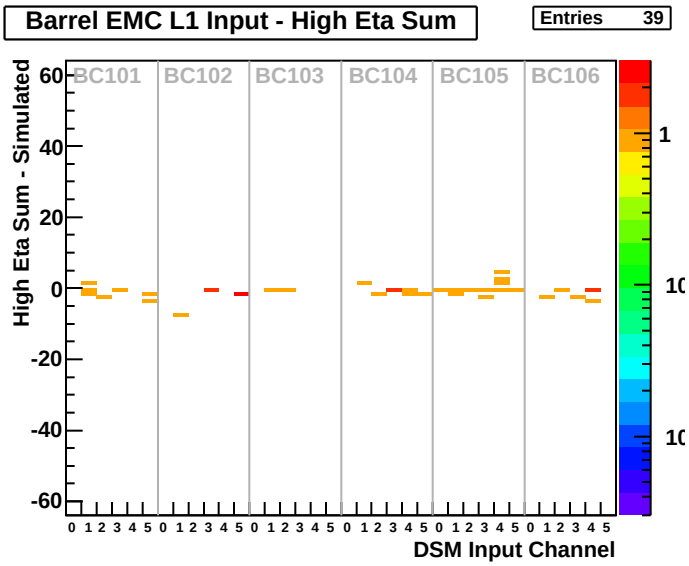
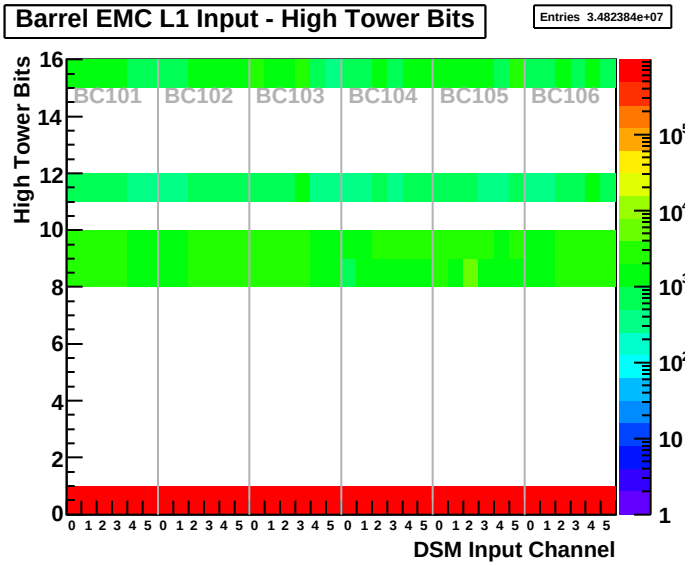
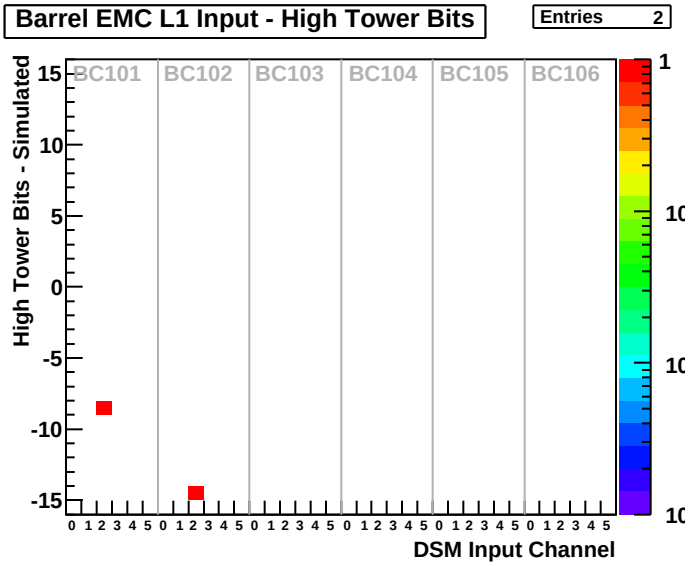

Barrel EMC L1 Input - Low Eta Sum
Entries 3.482384e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

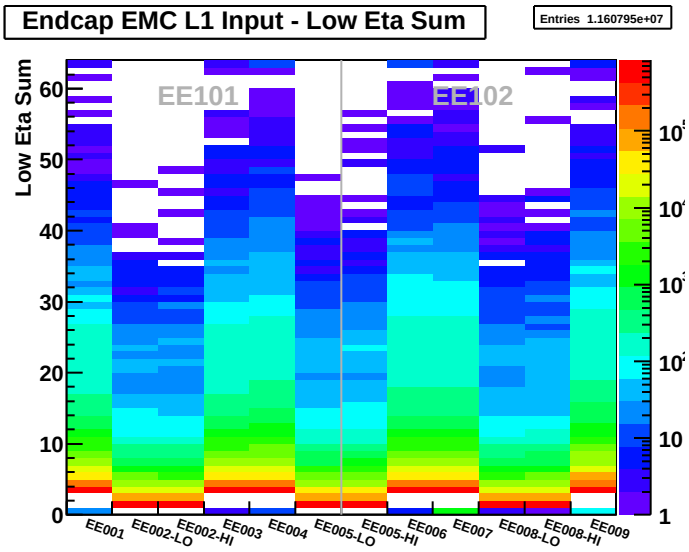

Barrel EMC L1 Input - Low Eta Sum
Entries 1908
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

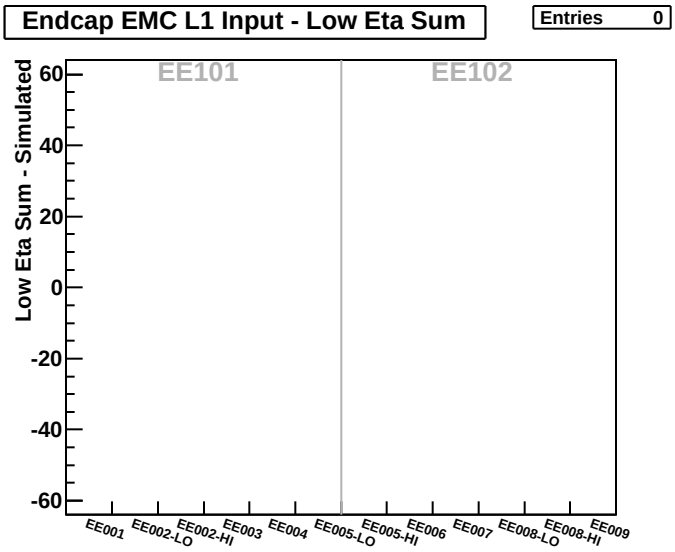

Barrel EMC L1 Input - High Eta Sum
Entries 3.482384e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

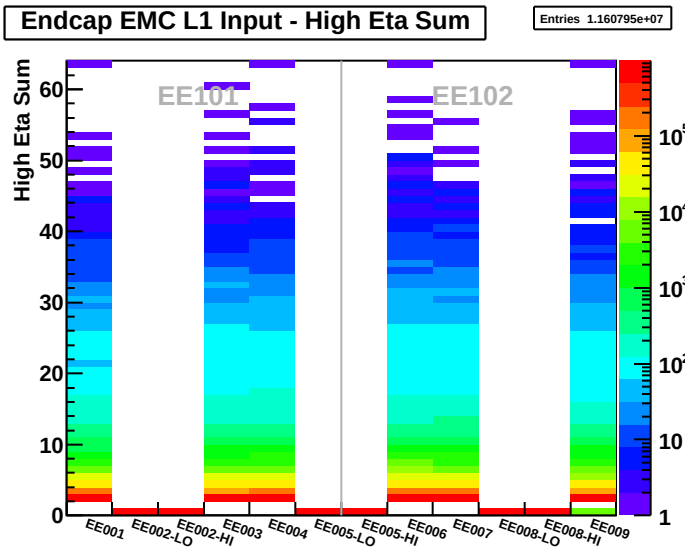

Barrel EMC L1 Input - High Eta Sum
Entries 39
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

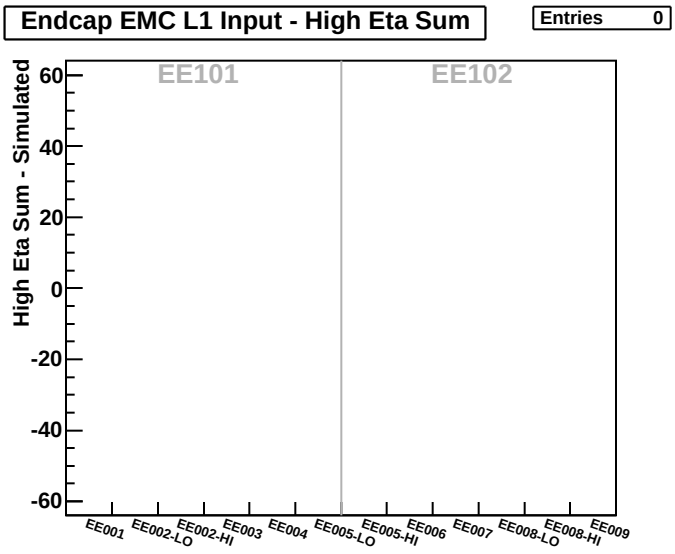

Barrel EMC L1 Input - High Tower Bits
Entries 3.482384e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

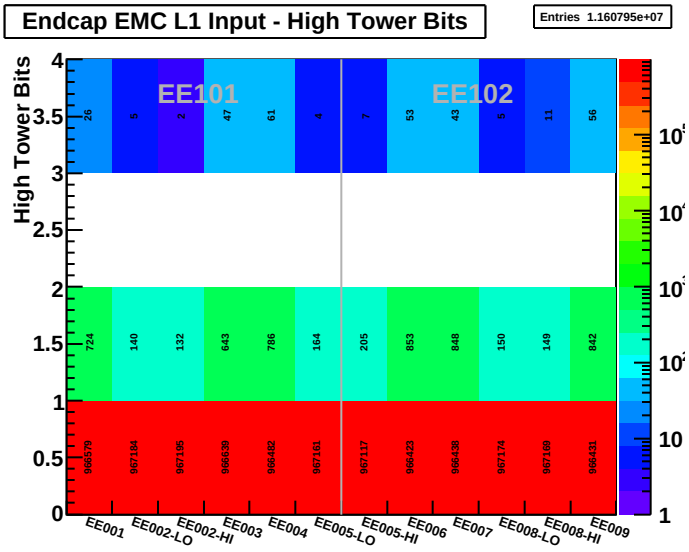

Barrel EMC L1 Input - High Tower Bits
Entries 2
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

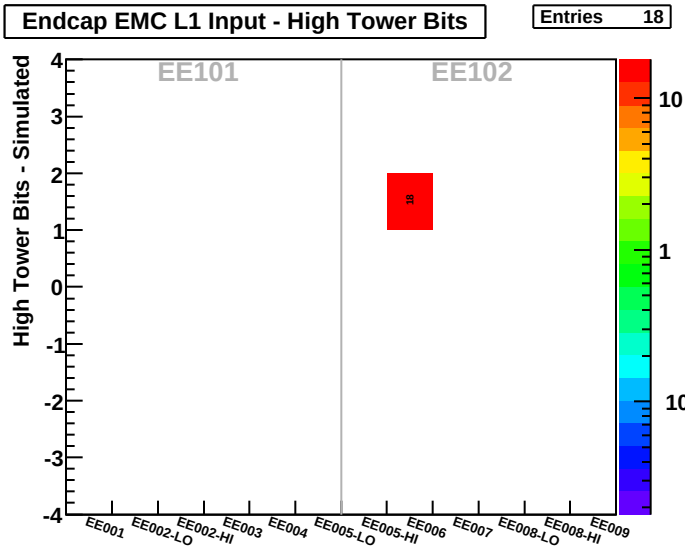

Endcap EMC L1 Input - Low Eta Sum
Entries 1.160795e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

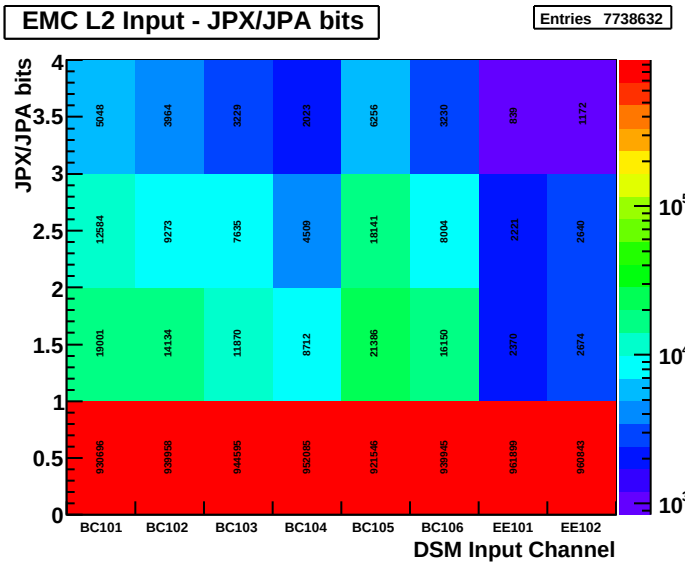

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

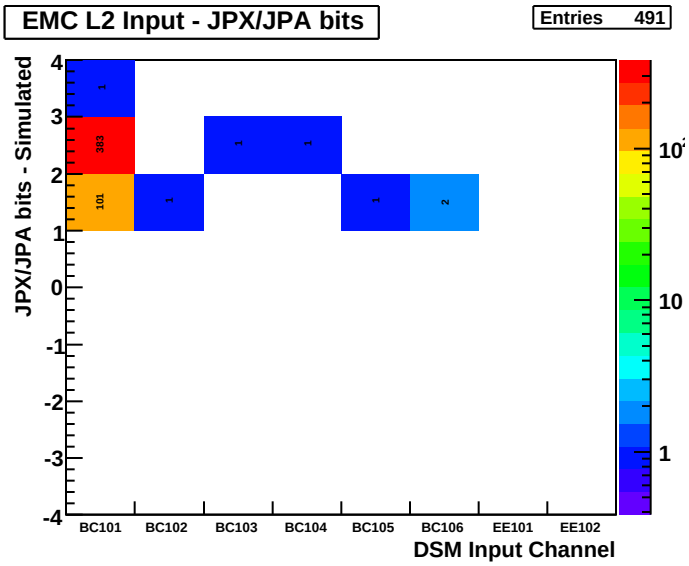

Endcap EMC L1 Input - High Eta Sum
Entries 1.160795e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

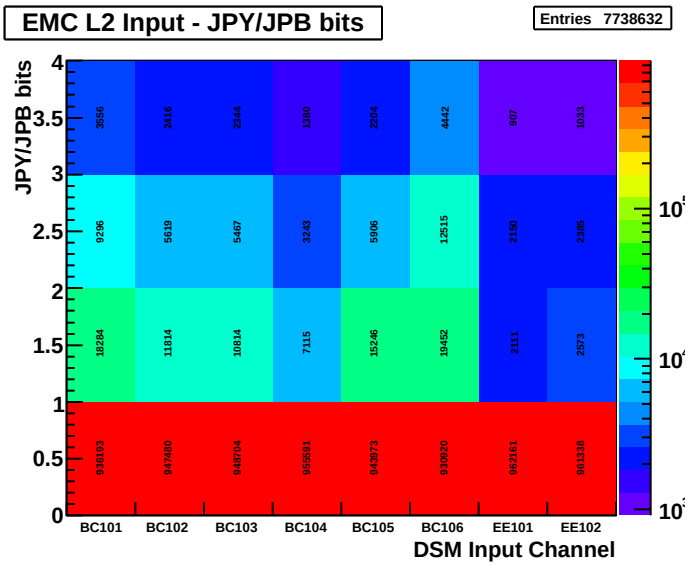

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

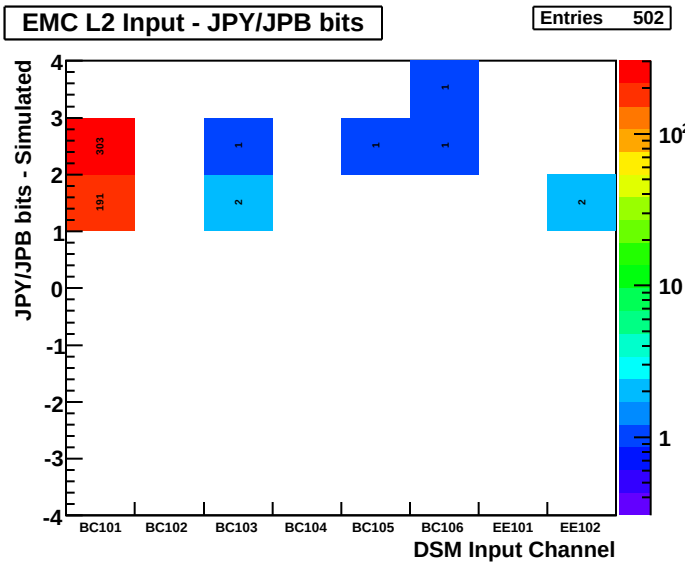

Endcap EMC L1 Input - High Tower Bits
Entries 1.160795e+07
High Tower Bits
EE101
EE102
26 5 2 47 61 4 7 53 43 5 11 56
724 140 132 643 786 164 205 853 848 150 149 842
966579 967184 967195 966339 966482 967161 967117 966423 966438 967174 967169 966431
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

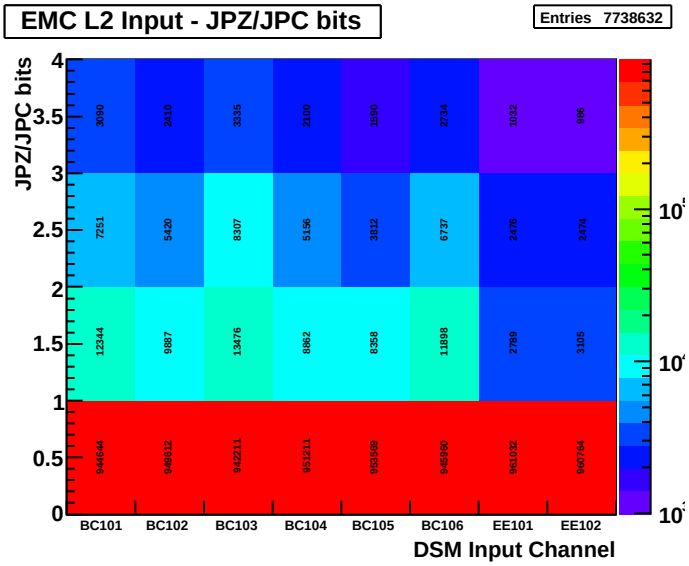

Endcap EMC L1 Input - High Tower Bits
Entries 18
High Tower Bits - Simulated
EE101
EE102
18
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

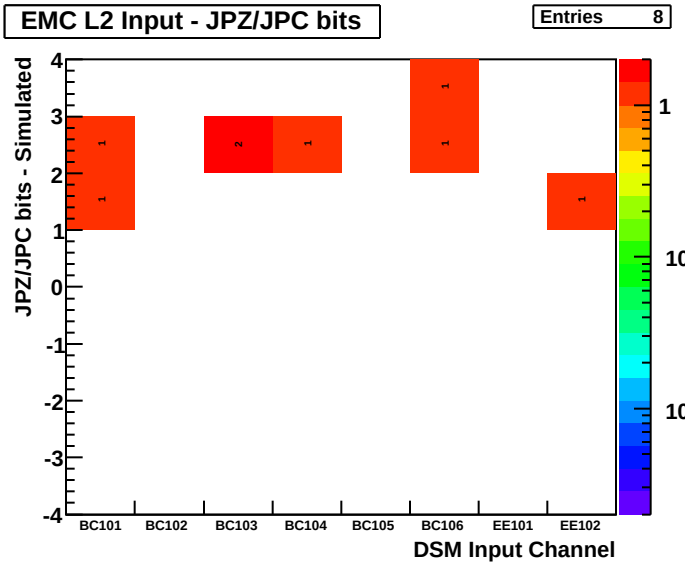

EMC L2 Input - JPX/JPA bits
Entries 7738632
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5048 3964 3229 2023 6256 3230 839 1172
12584 9273 7635 4509 18141 8004 2221 2640
19001 14134 11870 8712 21386 16150 2370 2674
930696 939938 944595 952085 921546 939945 961899 960843

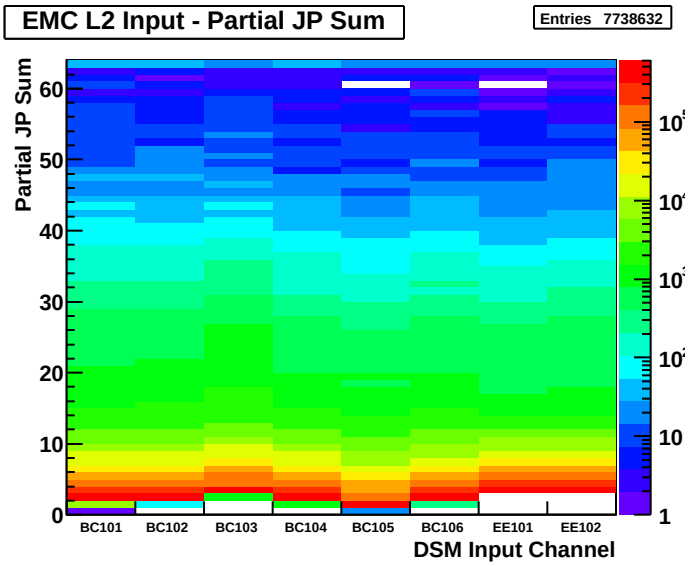

EMC L2 Input - JPX/JPA bits
Entries 491
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
383
101 1 1 1 2

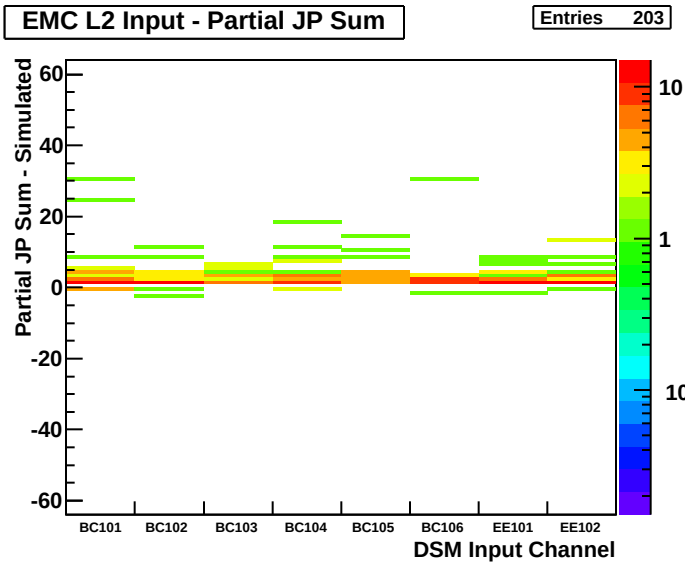

EMC L2 Input - JPY/JPB bits
Entries 7738632
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3556 2416 2344 1380 2204 4442 907 1033
9296 5619 5467 3243 5906 12515 2150 2385
18284 11814 10814 7115 15246 19452 2111 2573
936193 947480 948704 955591 943973 939920 962161 961338

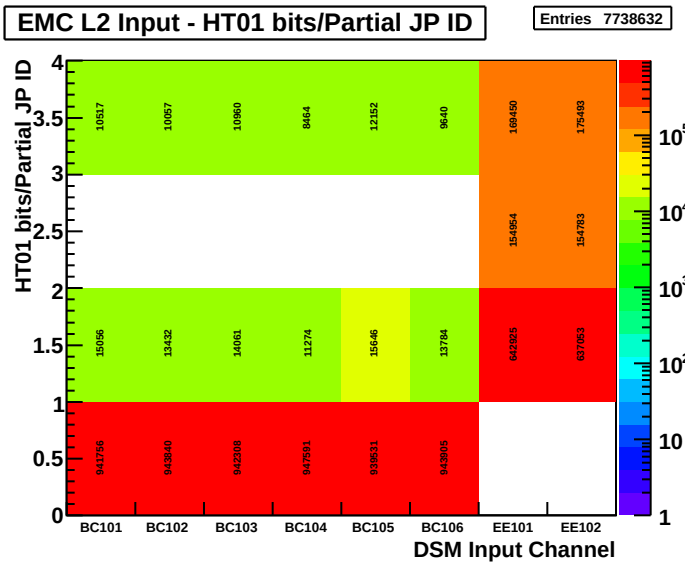

EMC L2 Input - JPY/JPB bits
Entries 502
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
303
191
1 1 1 1 1 2 2

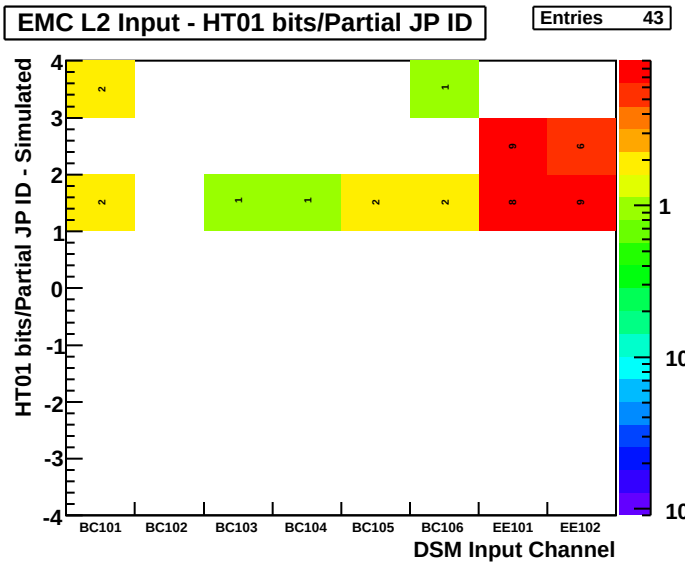

EMC L2 Input - JPZ/JPC bits
Entries 7738632
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3090 2610 3335 2100 1590 2734 1032 986
7251 5420 8307 5156 3812 6737 2476 2474
12344 9887 13476 8862 8358 11898 2789 3105
944644 949512 942211 951211 953569 945960 961032 960764

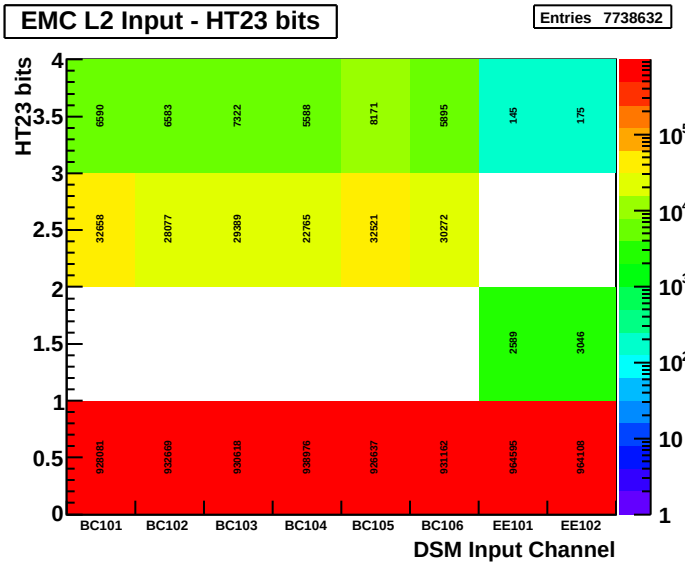

EMC L2 Input - JPZ/JPC bits
Entries 8
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1 2 1 1 1 1

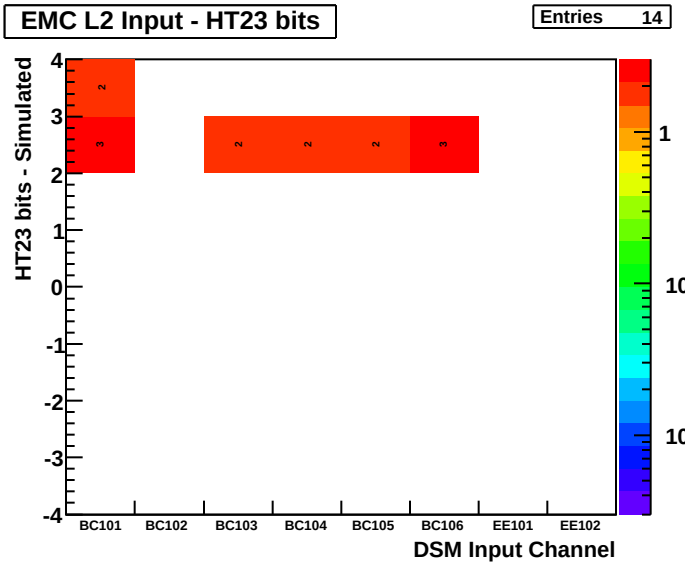

EMC L2 Input - Partial JP Sum
Entries 7738632
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

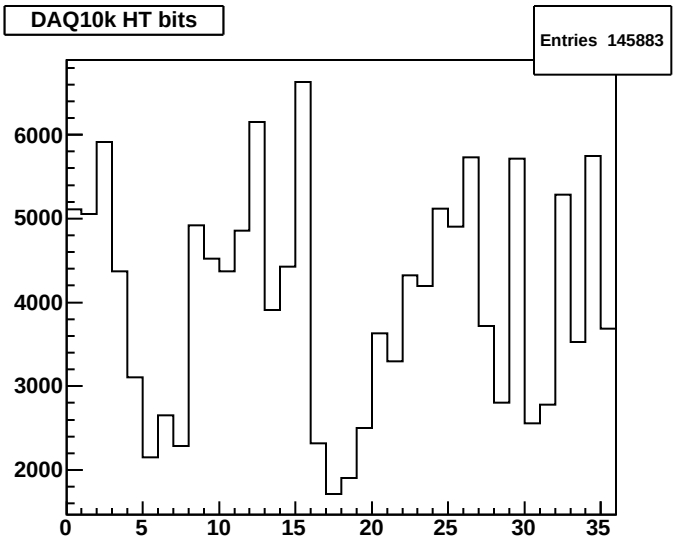

EMC L2 Input - Partial JP Sum
Entries 203
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

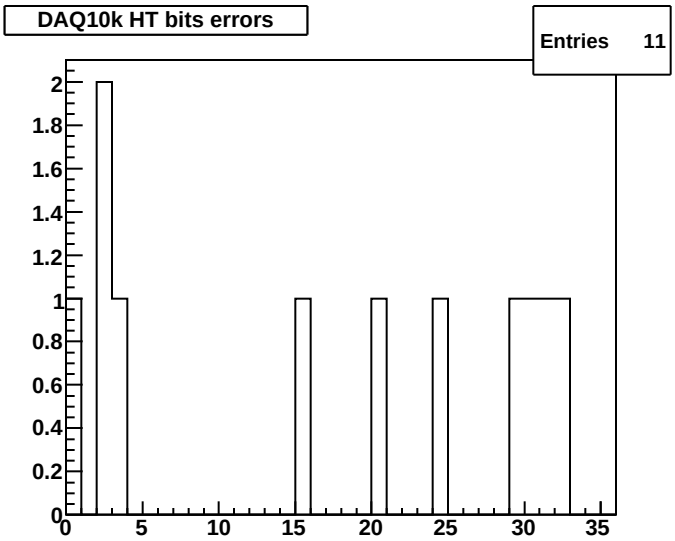

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7738632
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

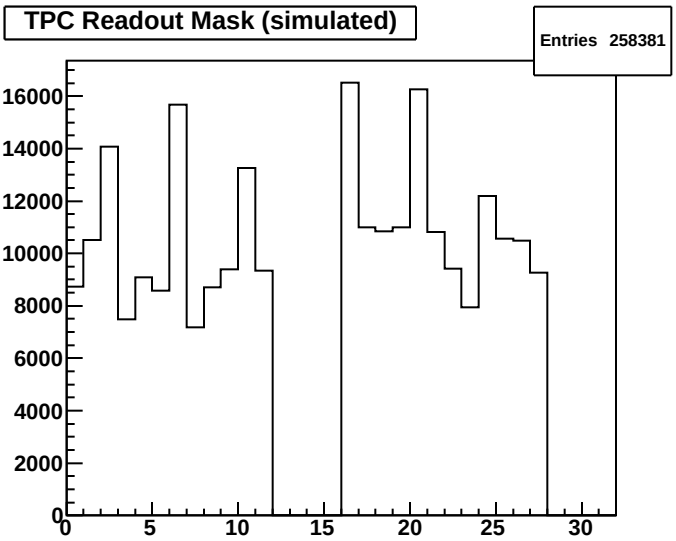

EMC L2 Input - HT01 bits/Partial JP ID
Entries 43
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

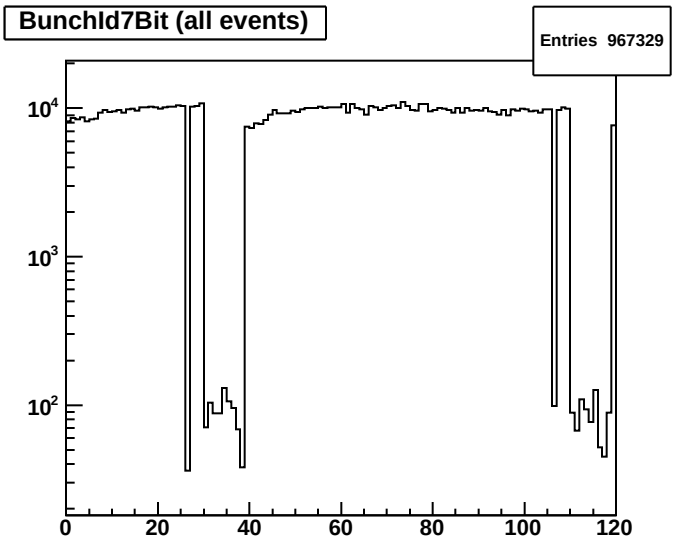

EMC L2 Input - HT23 bits
Entries 7738632
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

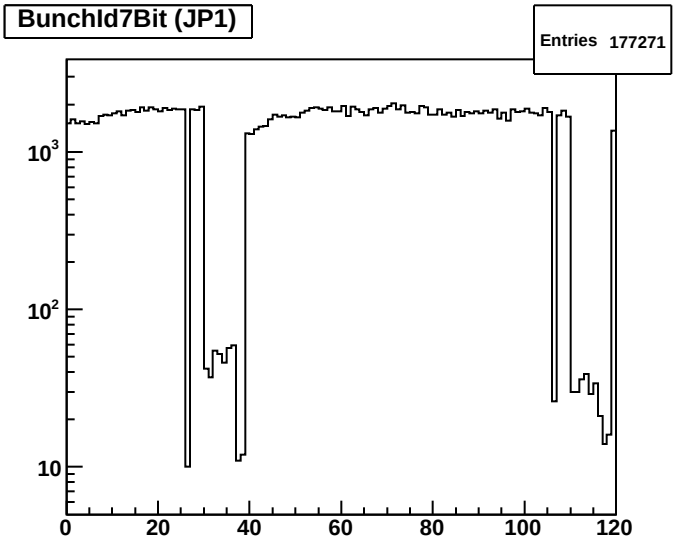

EMC L2 Input - HT23 bits
Entries 14
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

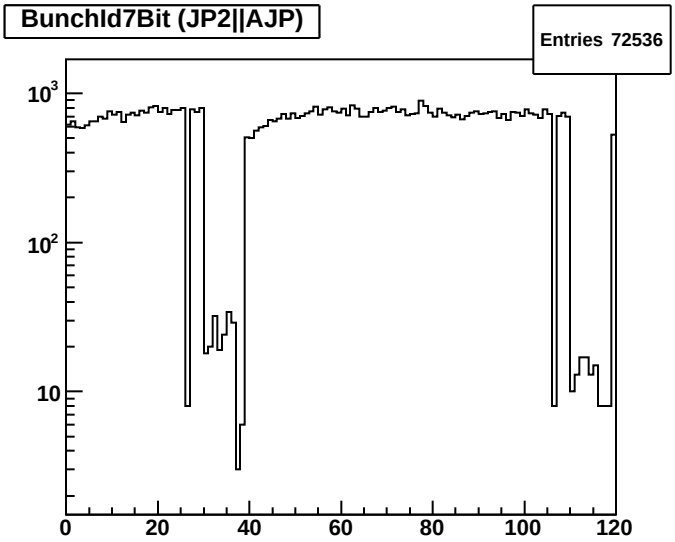

DAQ10k HT bits
Entries 145883

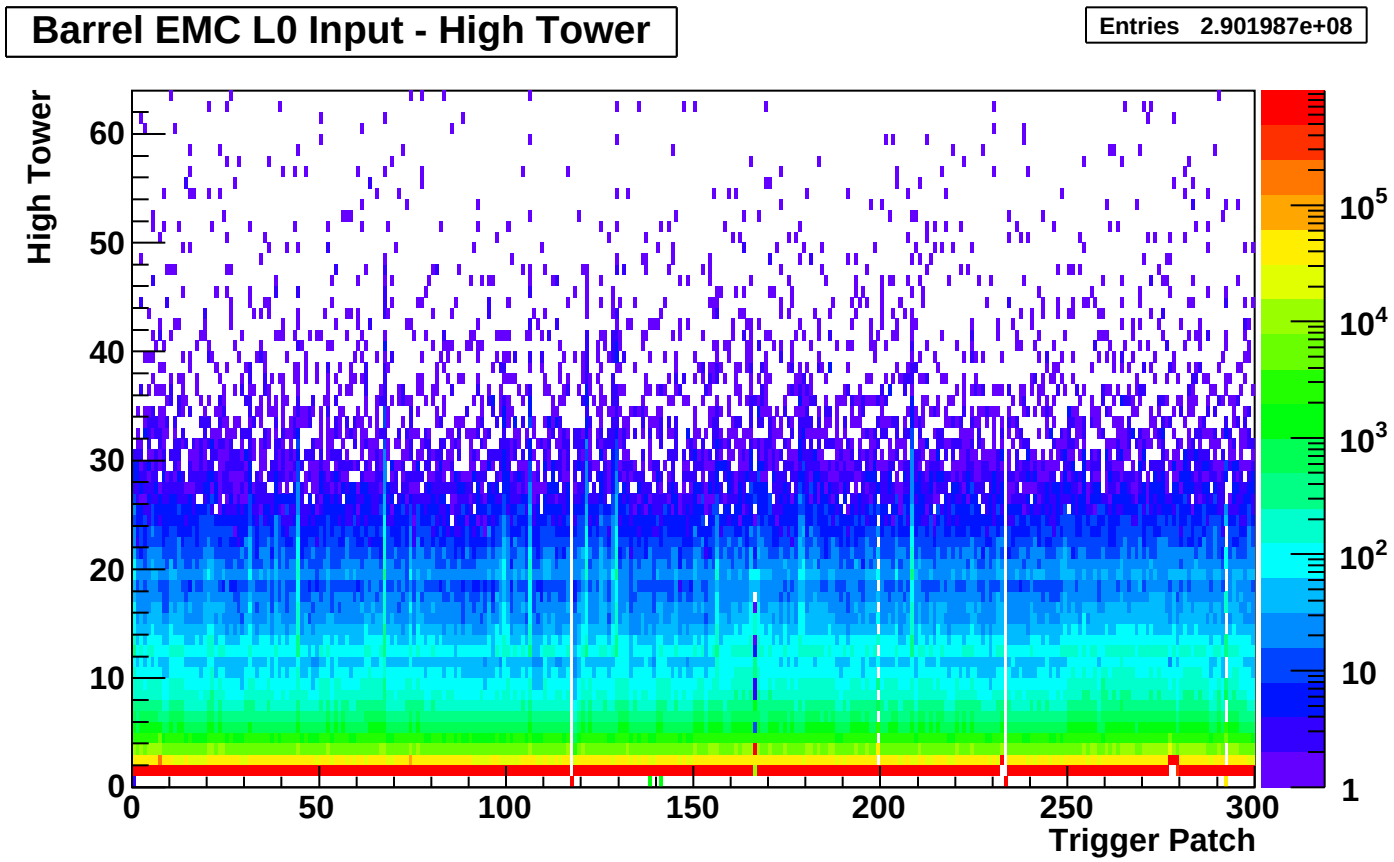

DAQ10k HT bits errors
Entries 11

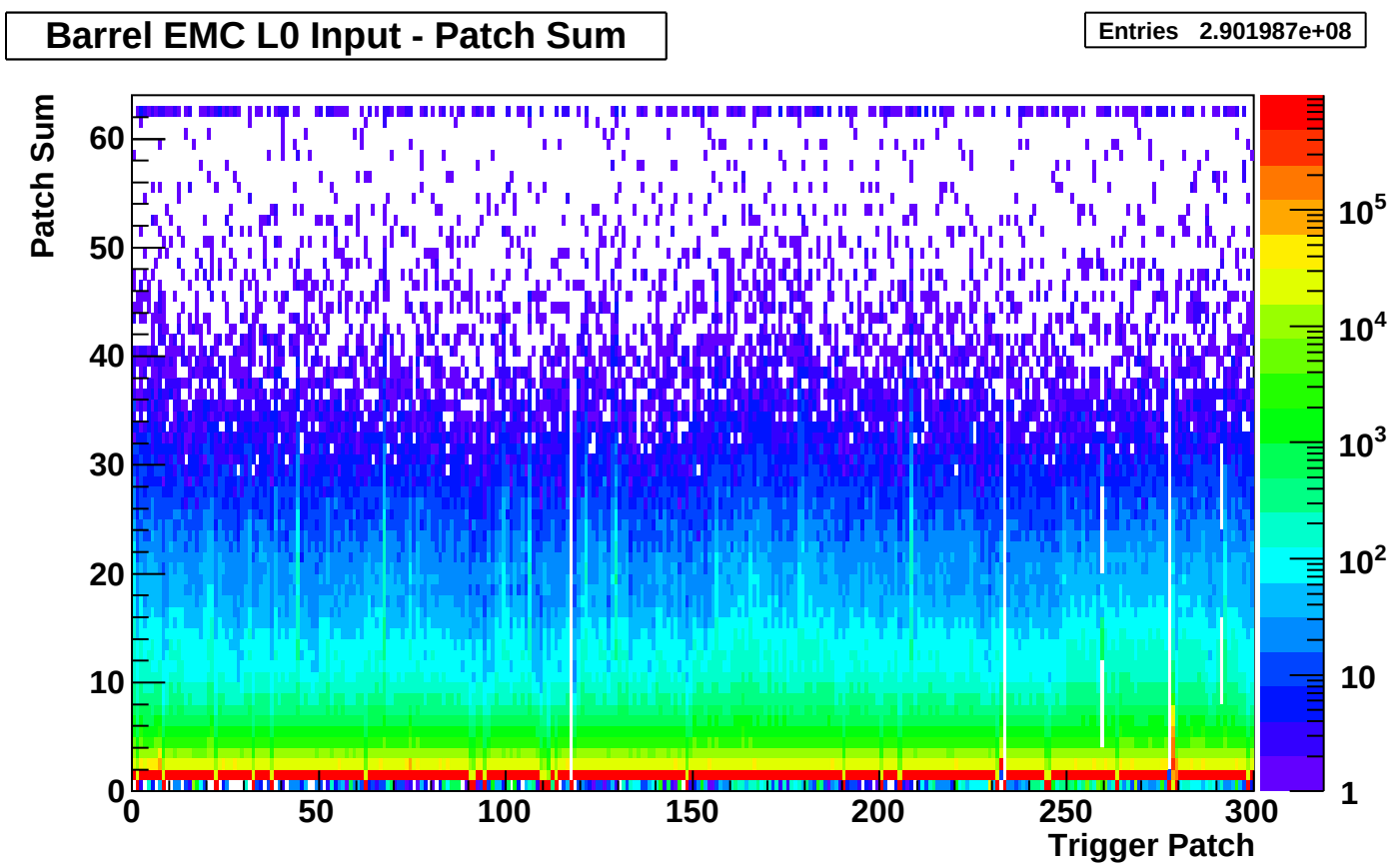

TPC Readout Mask (simulated)
Entries 258381

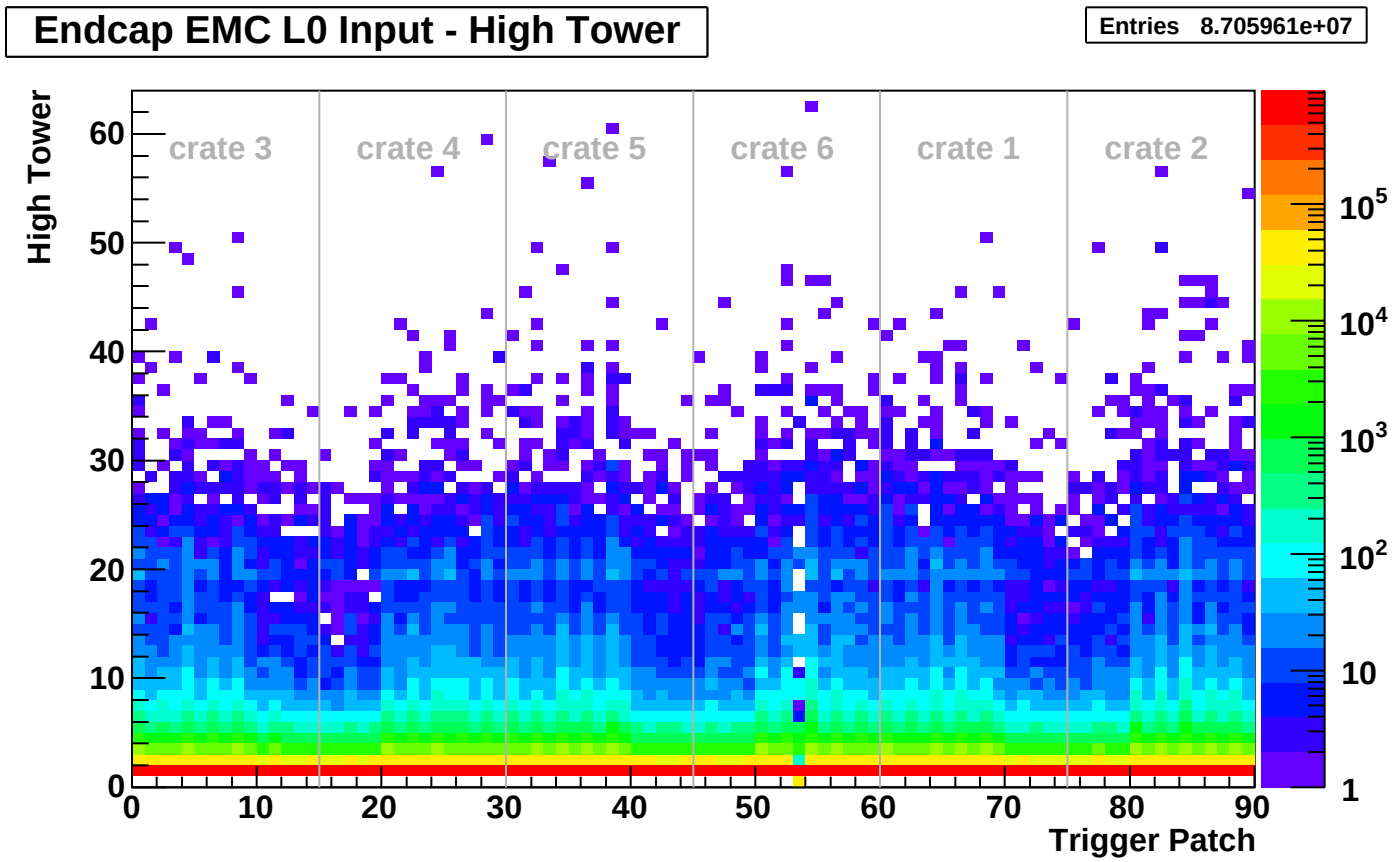

BunchId7Bit (all events)
Entries 967329

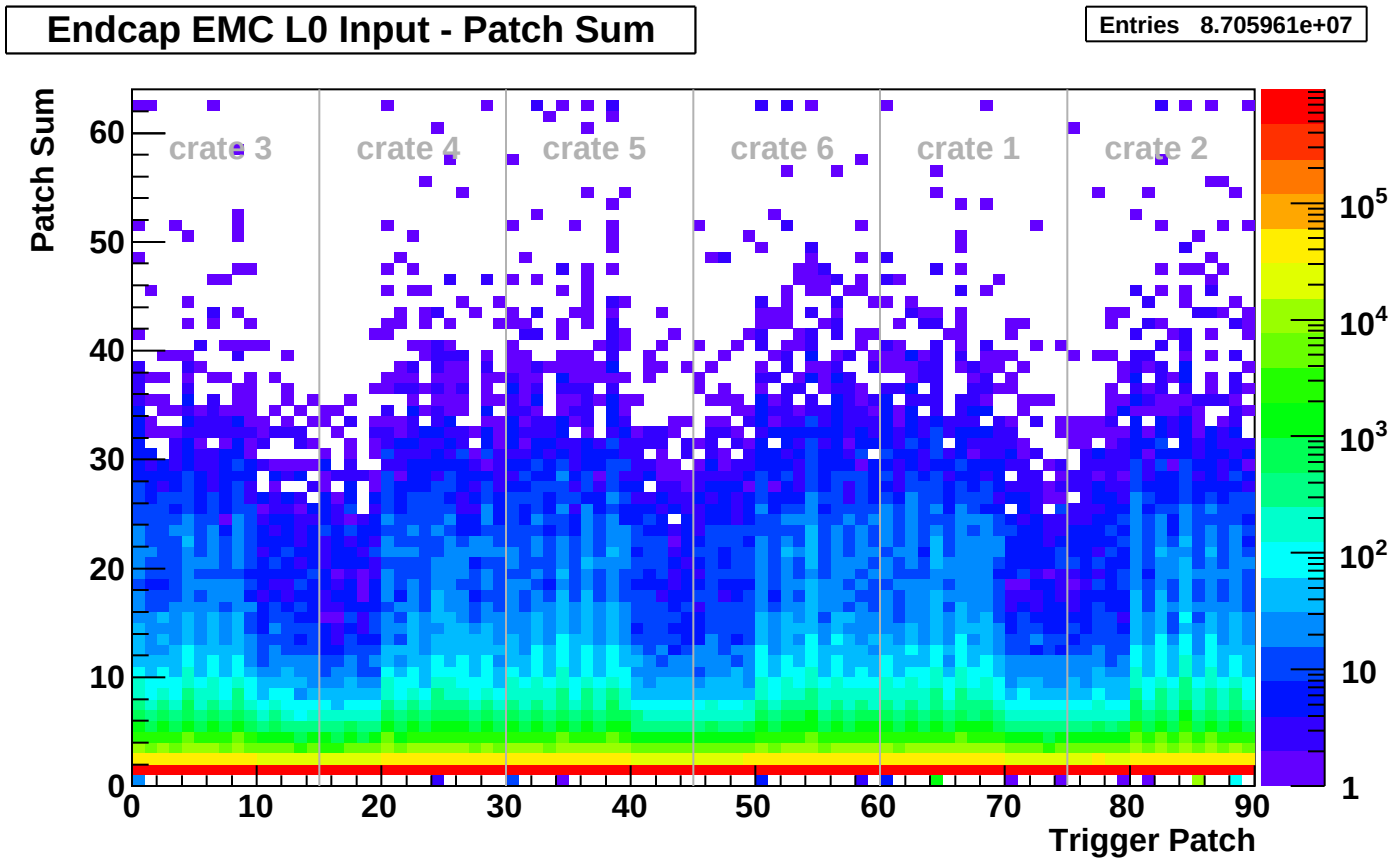

BunchId7Bit (JP1)
Entries 177271

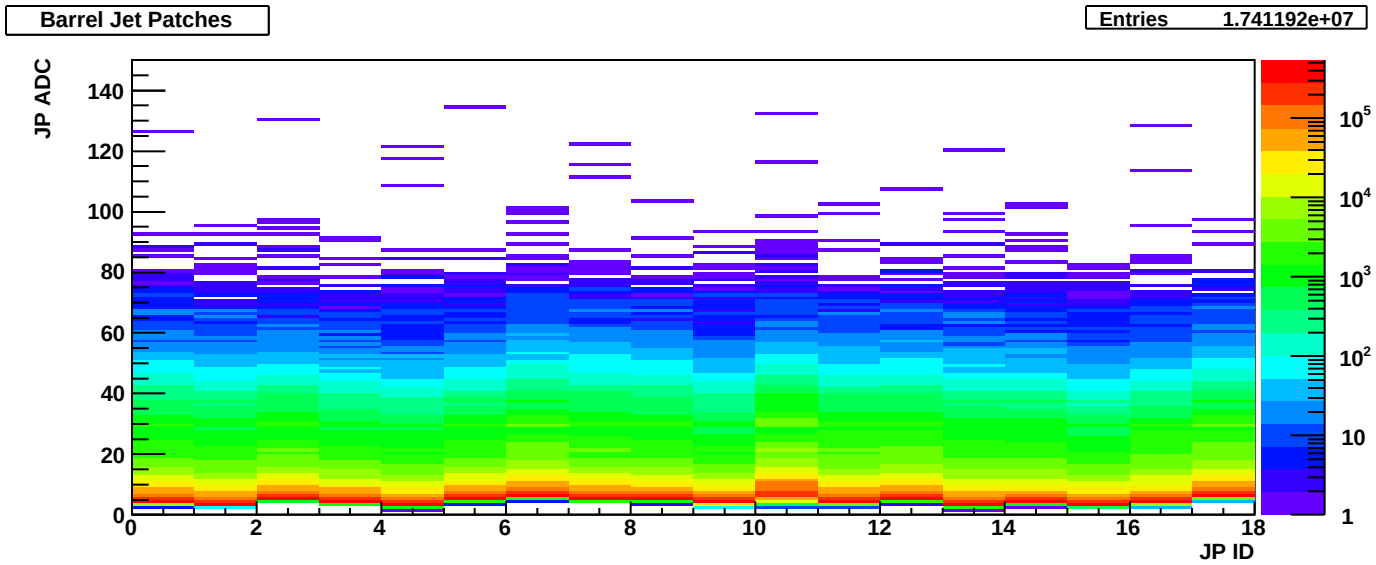

BunchId7Bit (JP2||AJP)
Entries 72536

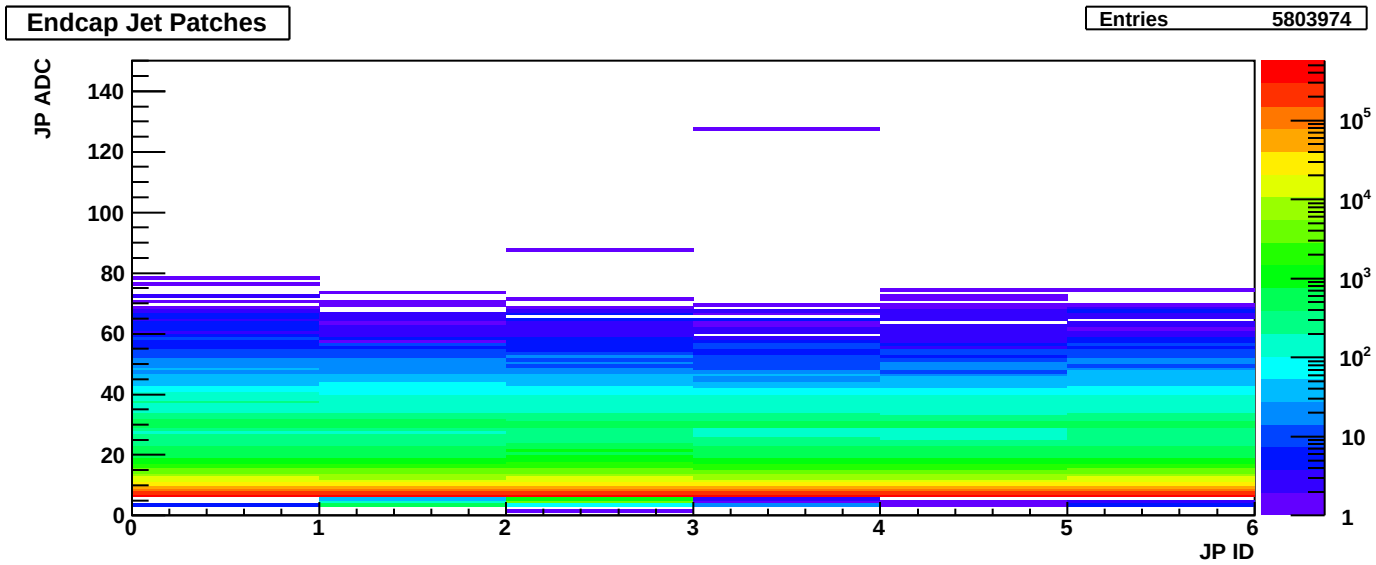

Barrel EMC L0 Input - High Tower
Entries 2.901987e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

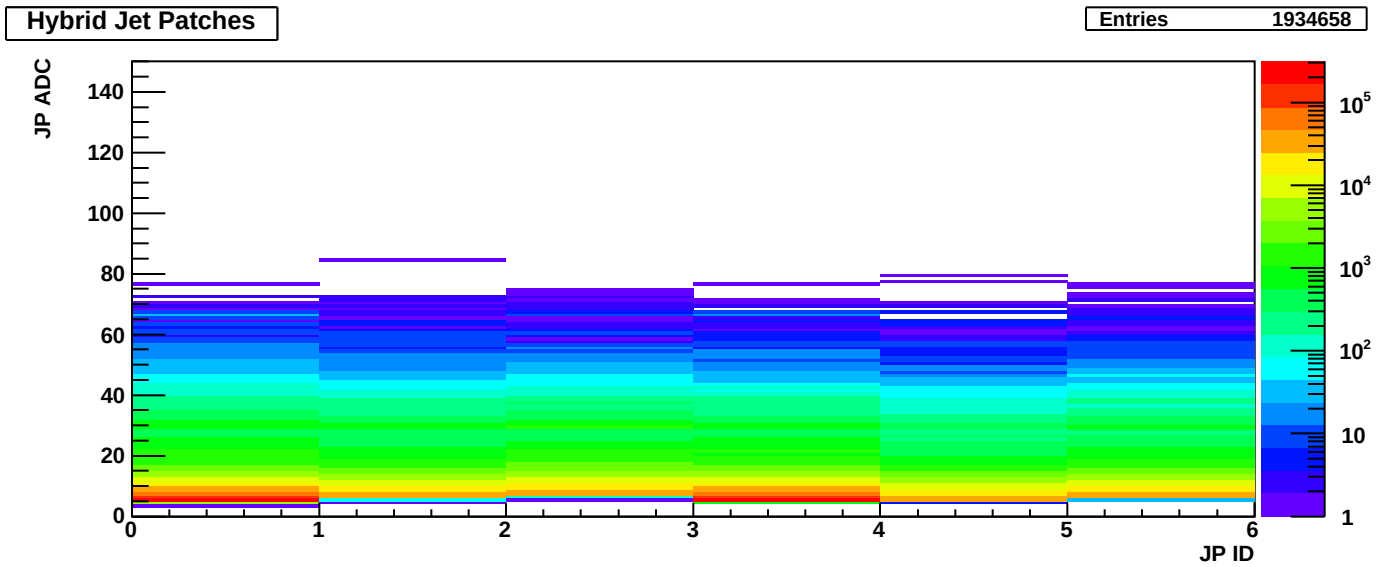

Barrel EMC L0 Input - Patch Sum
Entries 2.901987e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

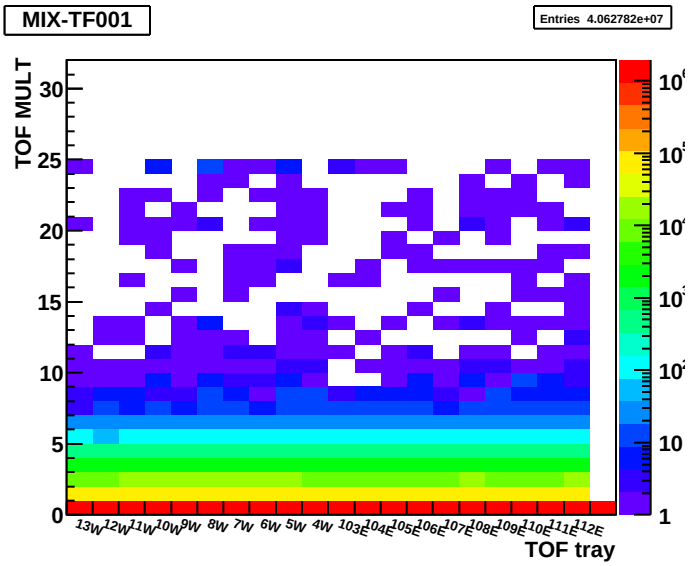

Endcap EMC L0 Input - High Tower
Entries 8.705961e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

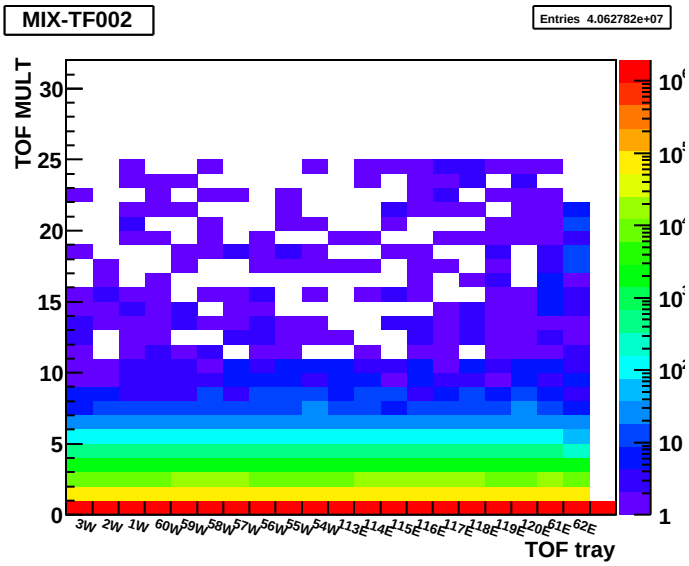

Endcap EMC L0 Input - Patch Sum
Entries 8.705961e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

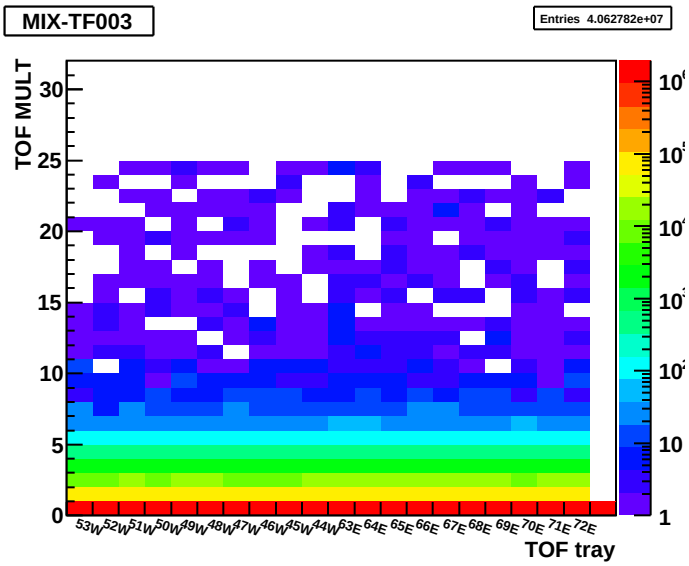

Barrel Jet Patches
Entries 1.741192e+07
JP ADC
JP ID

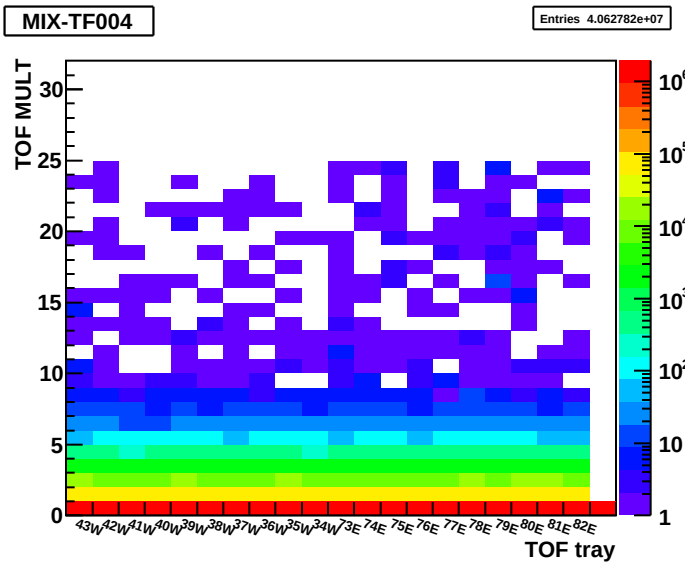

Endcap Jet Patches
Entries 5803974
JP ADC
JP ID

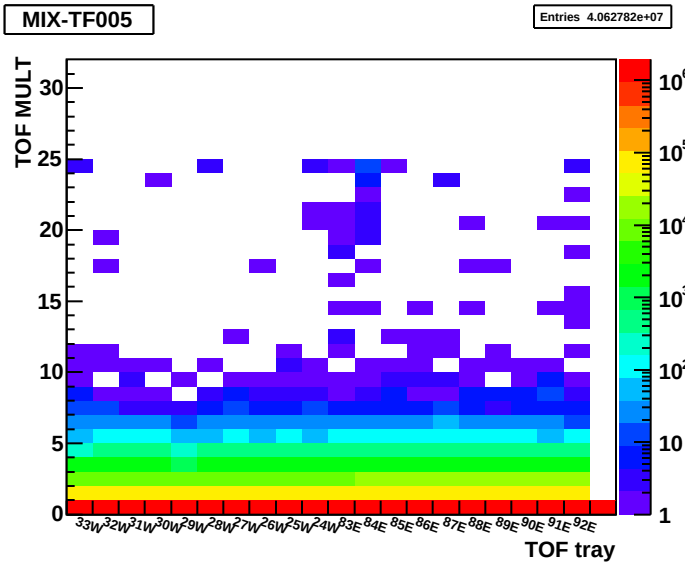

Hybrid Jet Patches
Entries 1934658
JP ADC
JP ID

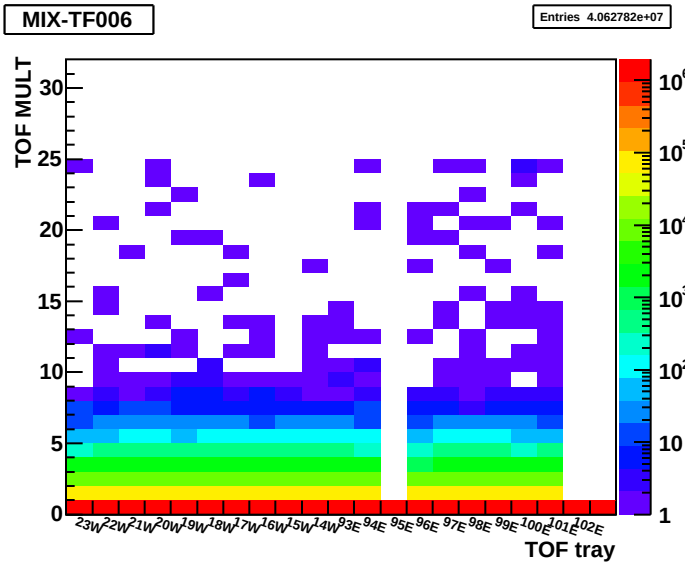

MIX-TF001
Entries 4.062782e+07
TOF MULT
TOF tray

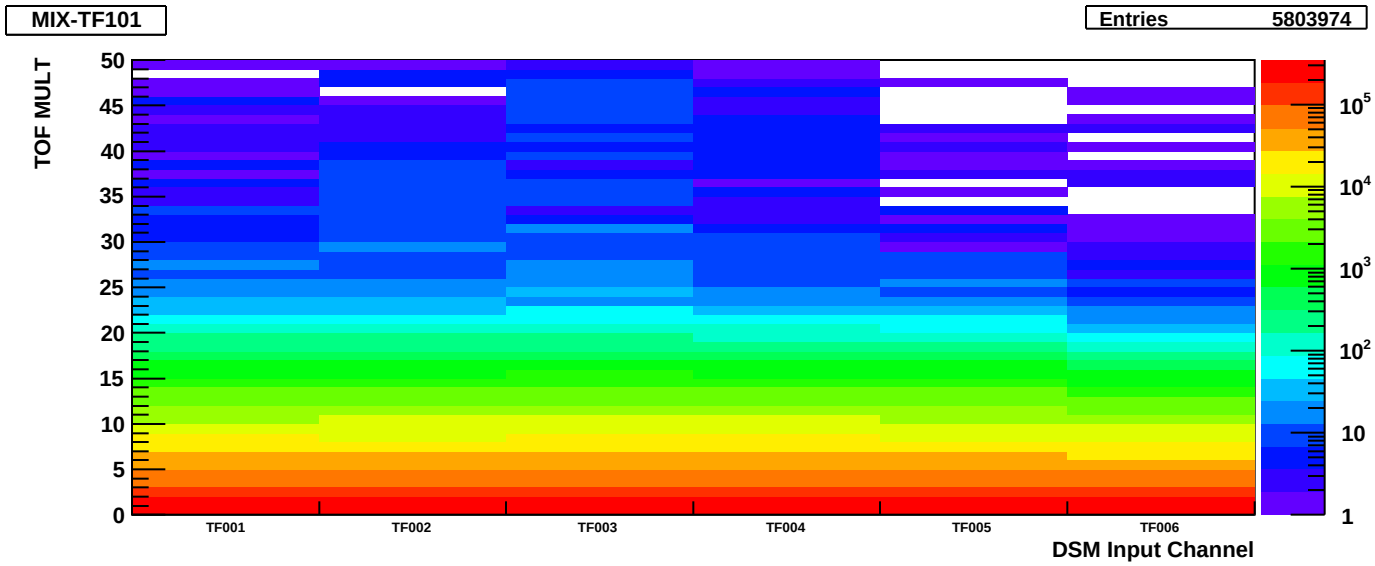

MIX-TF002
Entries 4.062782e+07
TOF MULT
TOF tray

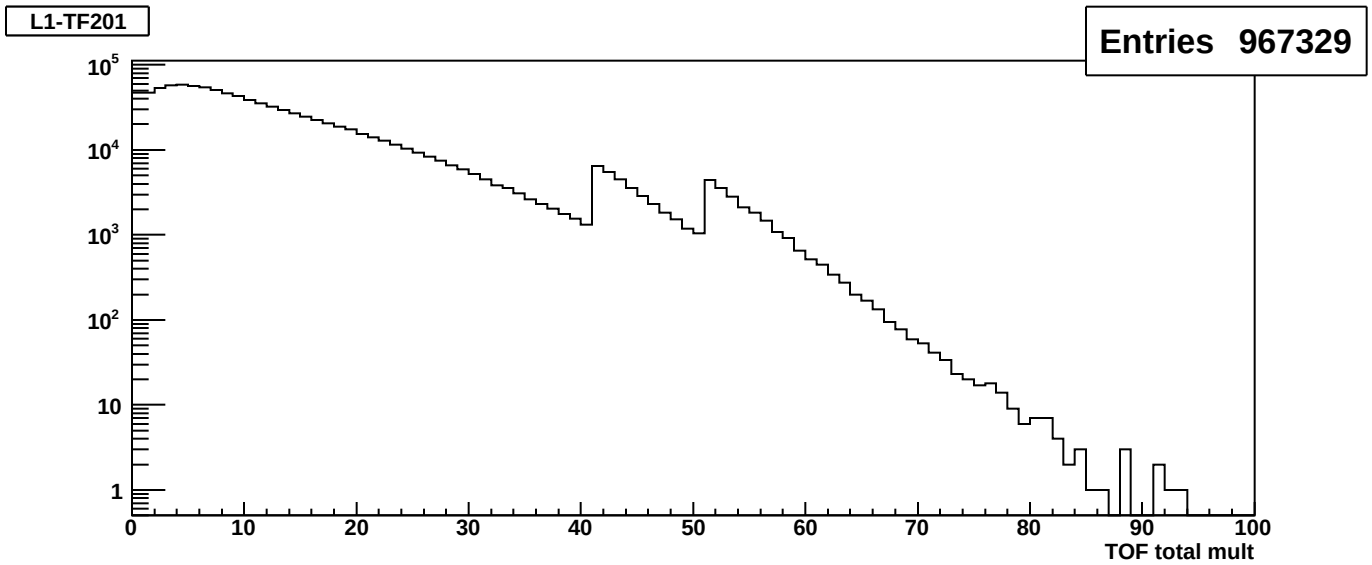

MIX-TF003
Entries 4.062782e+07
TOF MULT
TOF tray

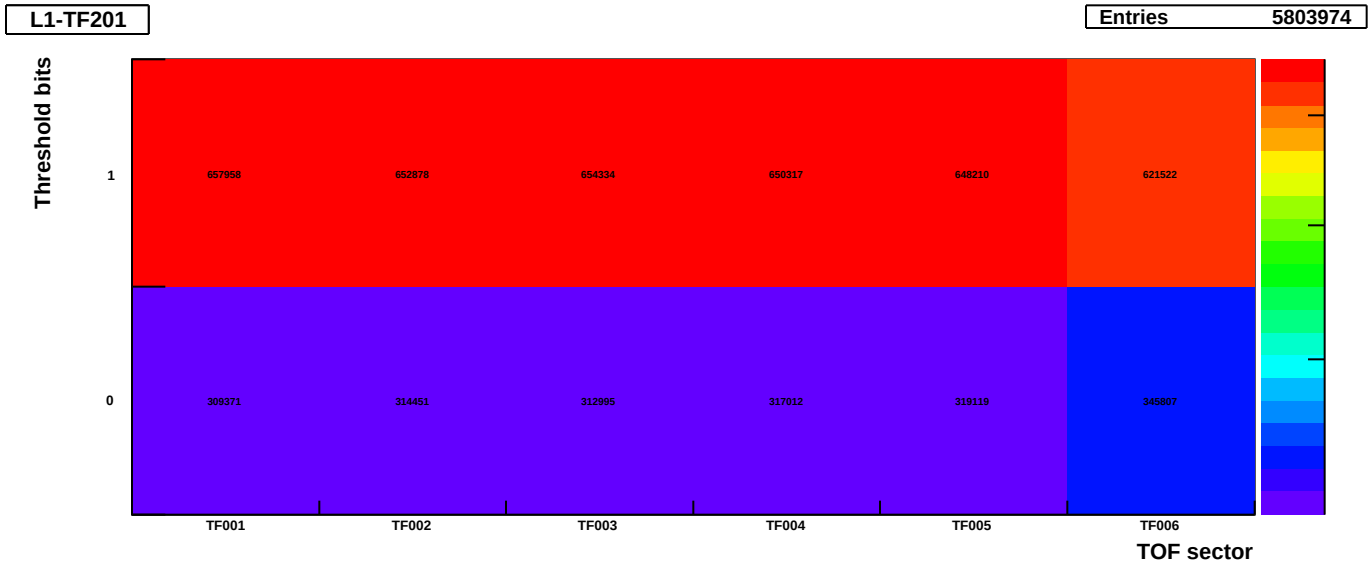

MIX-TF004
Entries 4.062782e+07
TOF MULT
TOF tray

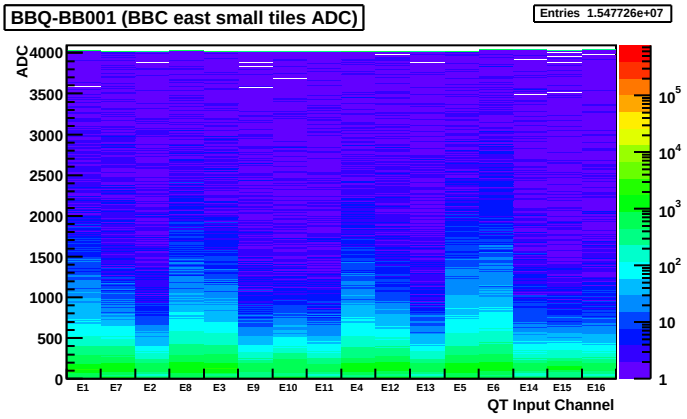

MIX-TF005
Entries 4.062782e+07
TOF MULT
TOF tray

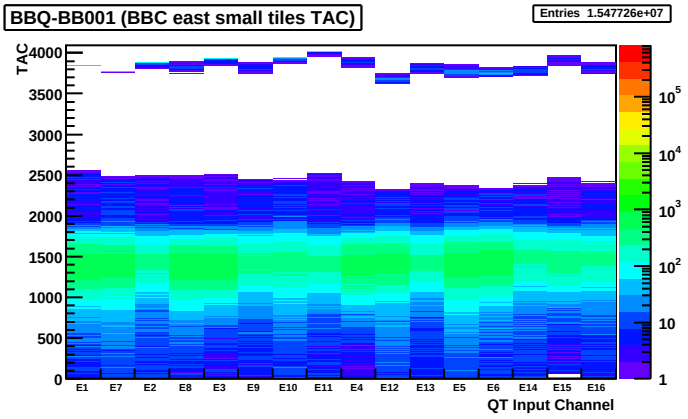

MIX-TF006
Entries 4.062782e+07
TOF MULT
TOF tray

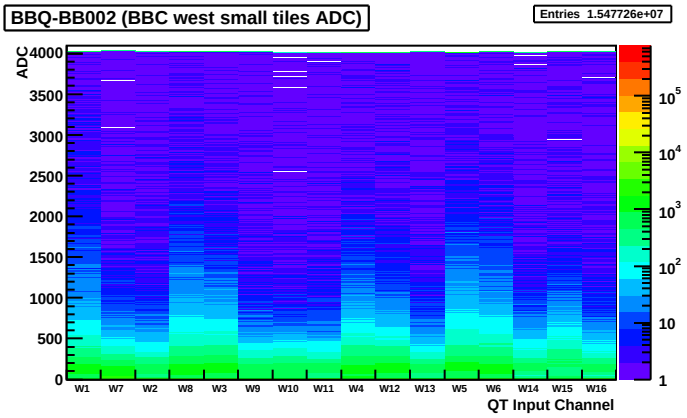

MIX-TF101
Entries 5803974
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

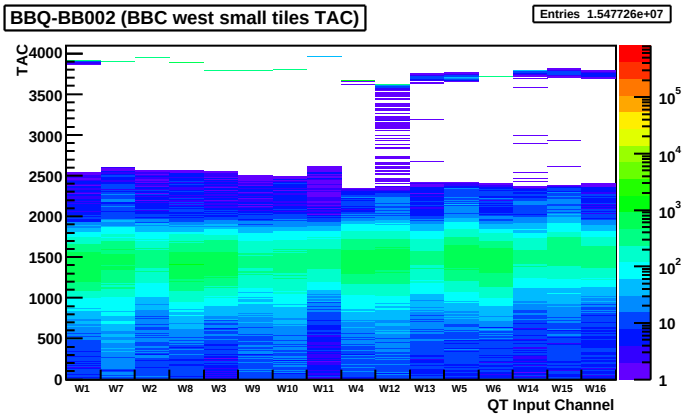

L1-TF201
Entries 967329
TOF total mult

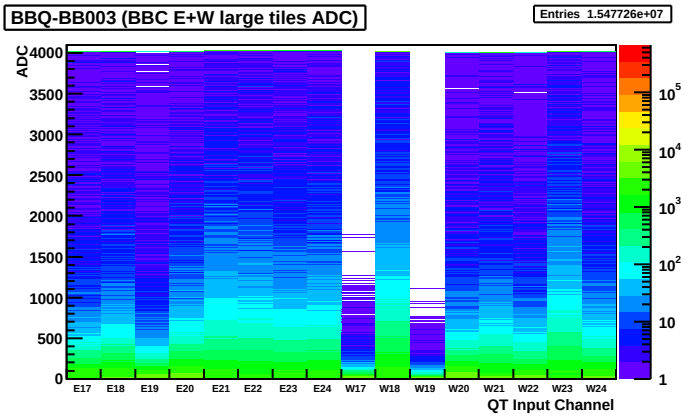

L1-TF201
Entries 5803974
Threshold bits
657958
652878
654334
650317
648210
621522
309371
314451
312995
317012
319119
345807
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

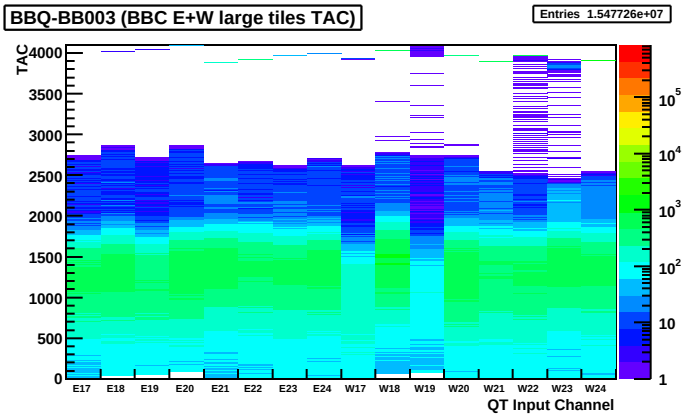

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.547726e+07
ADC
QT Input Channel

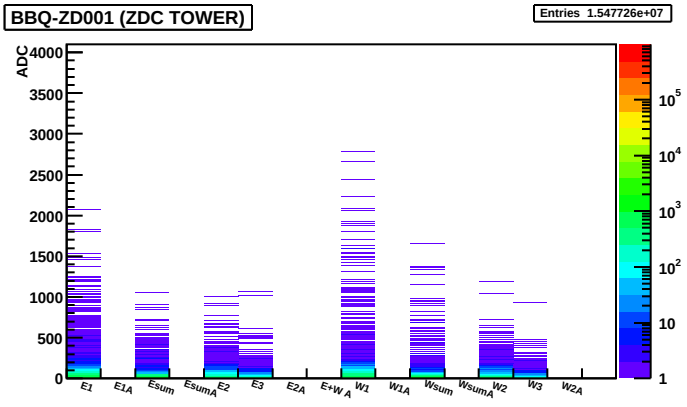

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.547726e+07
TAC
QT Input Channel

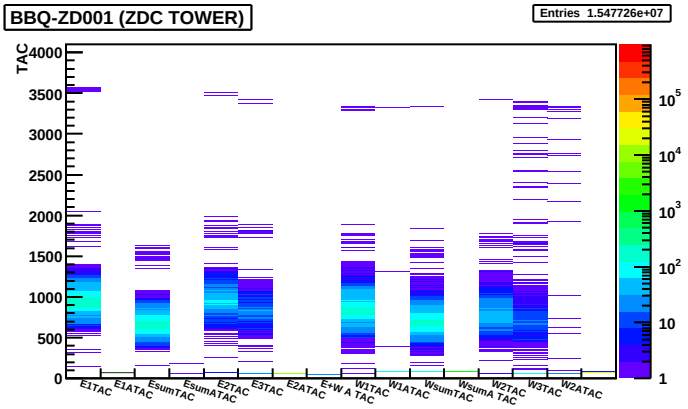

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.547726e+07
ADC
QT Input Channel

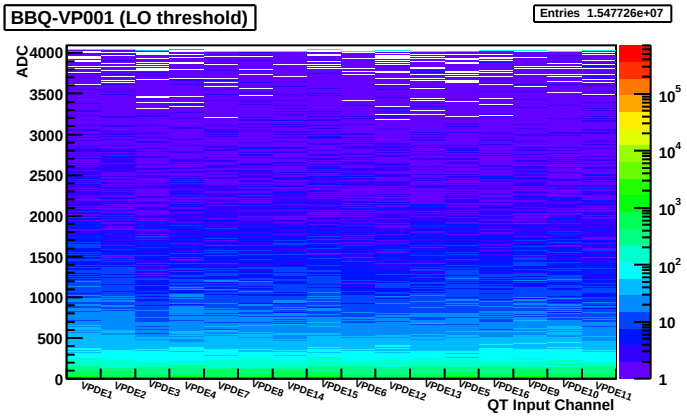

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.547726e+07
TAC
QT Input Channel

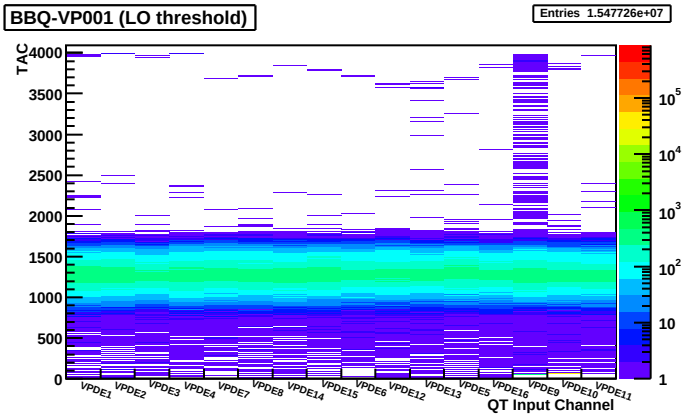

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.547726e+07
ADC
QT Input Channel

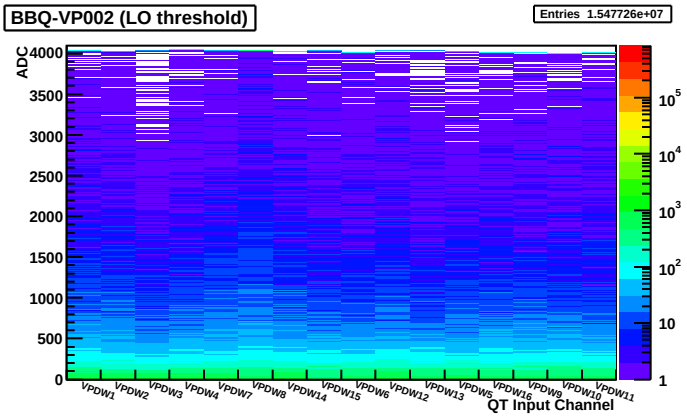

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.547726e+07
TAC
QT Input Channel

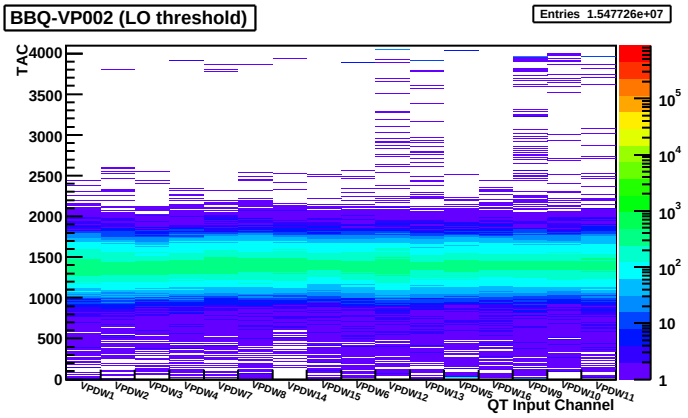

BBQ-ZD001 (ZDC TOWER)
Entries 1.547726e+07
ADC

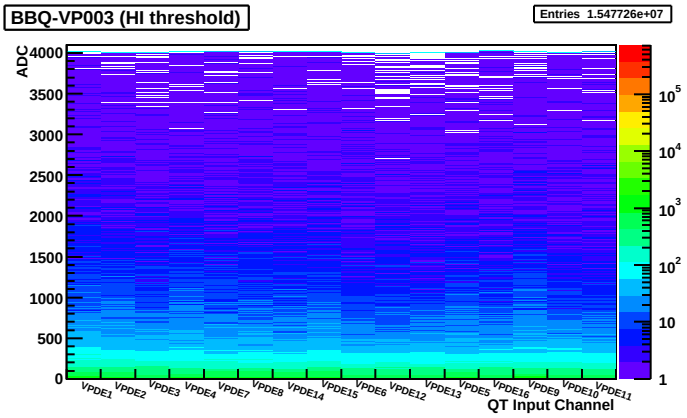

BBQ-ZD001 (ZDC TOWER)
Entries 1.547726e+07
TAC

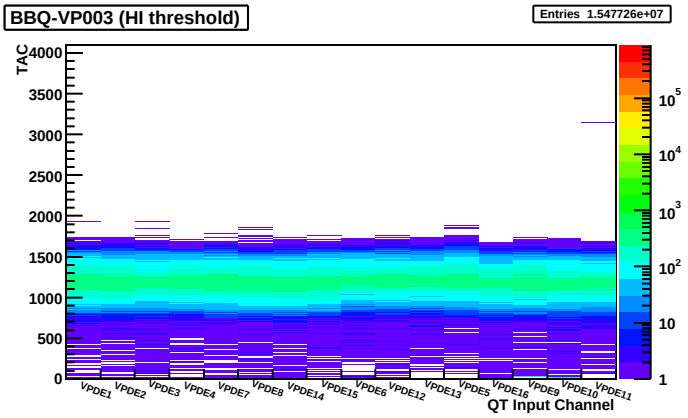

BBQ-VP001 (LO threshold)
Entries 1.547726e+07
ADC
QT Input Channel

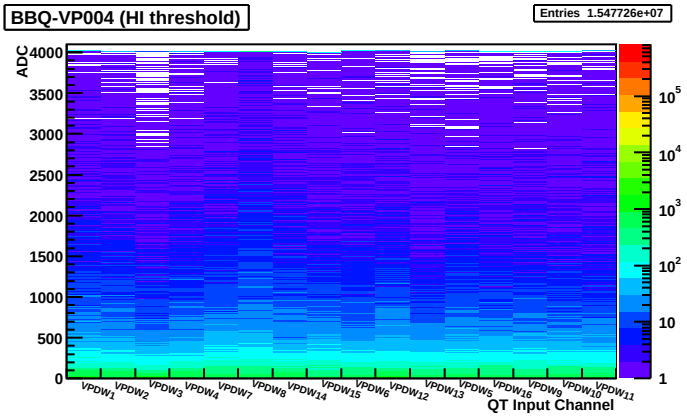

BBQ-VP001 (LO threshold)
Entries 1.547726e+07
TAC
QT Input Channel

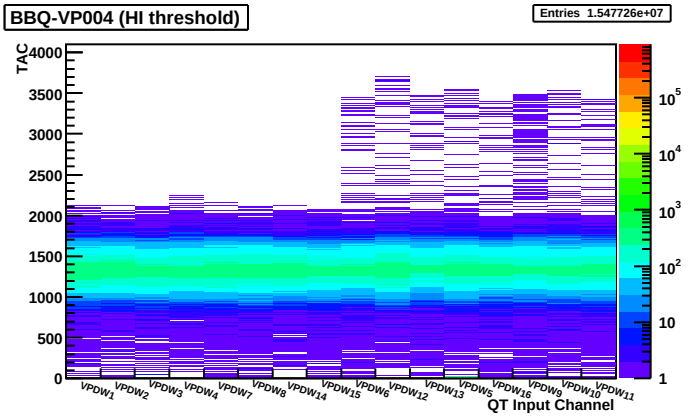

BBQ-VP002 (LO threshold)
Entries 1.547726e+07
ADC
QT Input Channel

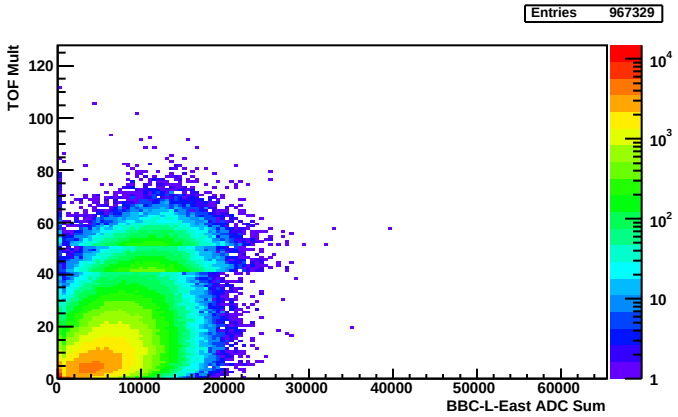

BBQ-VP002 (LO threshold)
Entries 1.547726e+07
TAC
QT Input Channel

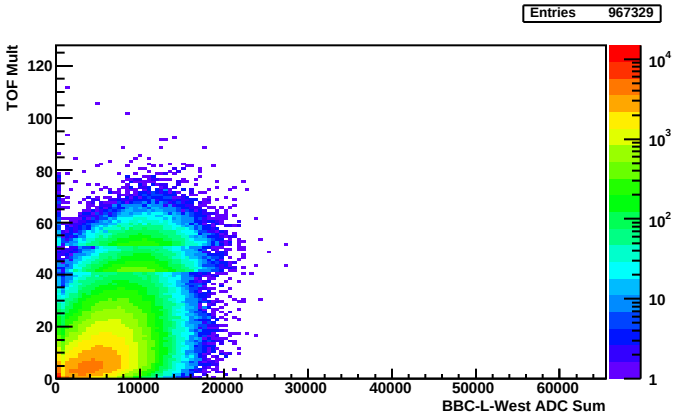

BBQ-VP003 (HI threshold)
Entries 1.547726e+07
ADC
QT Input Channel

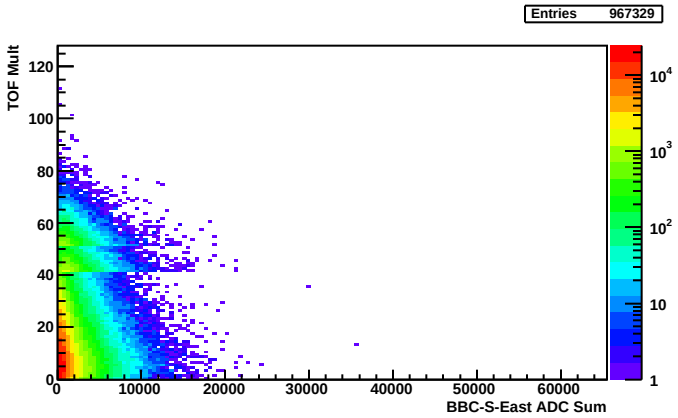

BBQ-VP003 (HI threshold)
Entries 1.547726e+07
TAC
QT Input Channel

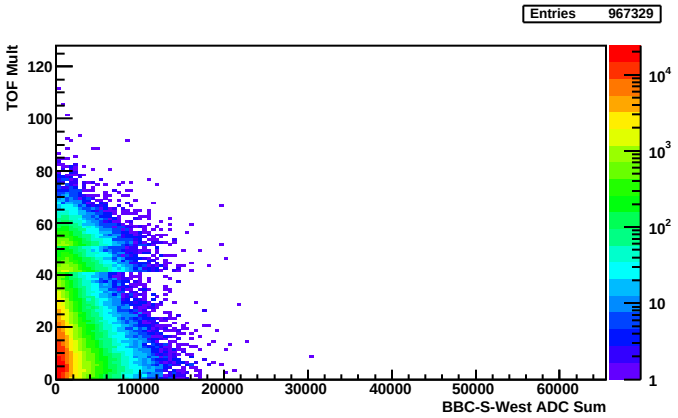

BBQ-VP004 (HI threshold)
Entries 1.547726e+07
ADC
QT Input Channel

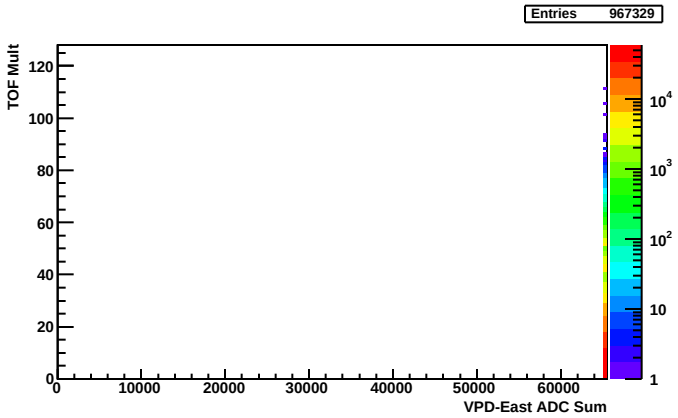

BBQ-VP004 (HI threshold)
Entries 1.547726e+07
TAC
QT Input Channel

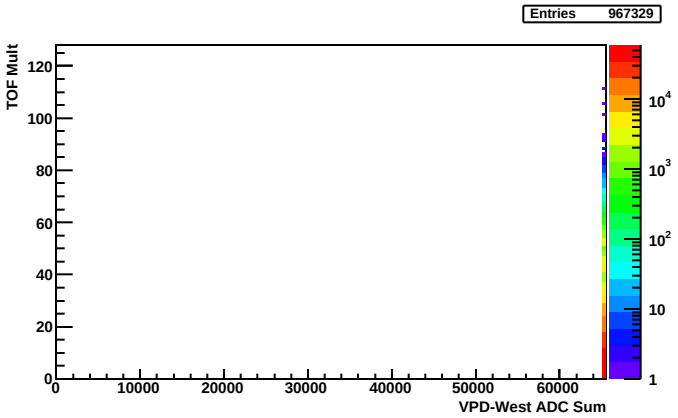

Entries 967329
TOF Mult
BBC-L-East ADC Sum

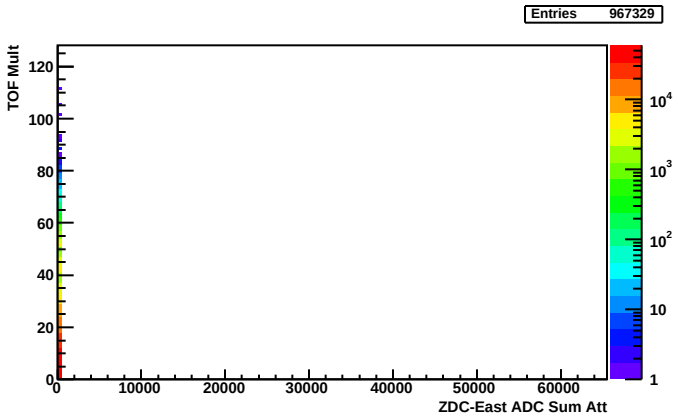

Entries 967329
TOF Mult
BBC-L-West ADC Sum

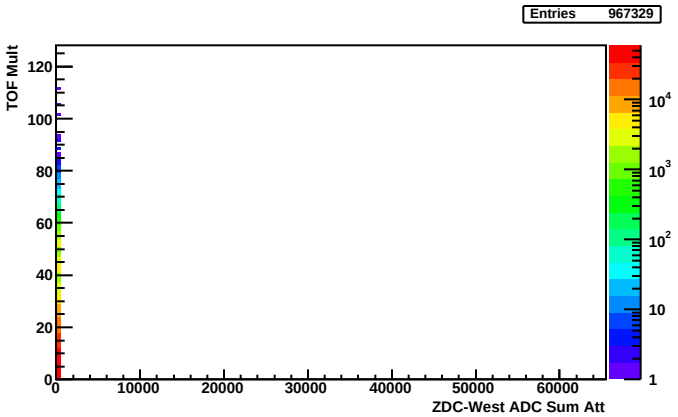

Entries 967329
TOF Mult
BBC-S-East ADC Sum

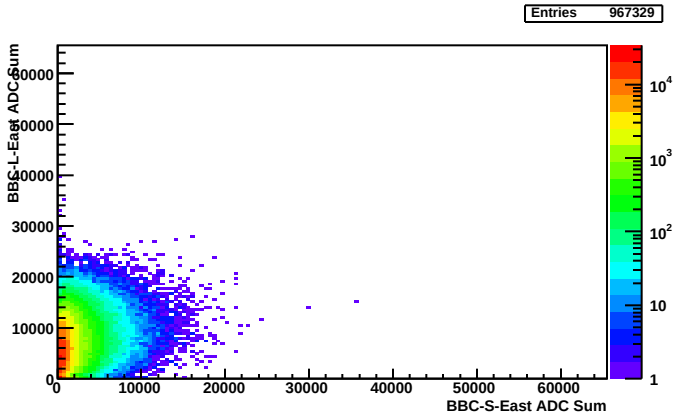

Entries 967329
TOF Mult
BBC-S-West ADC Sum

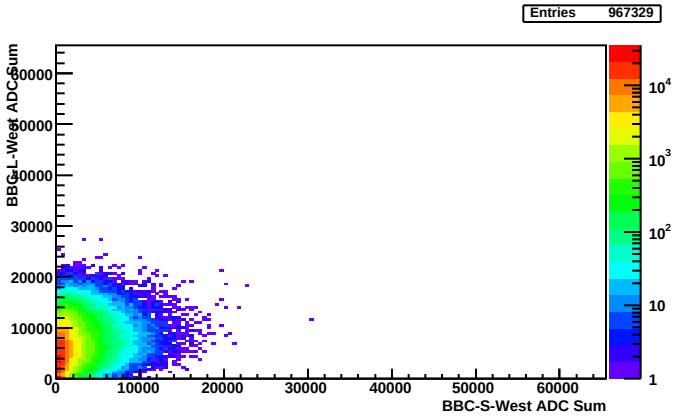

Entries 967329
TOF Mult
VPD-East ADC Sum

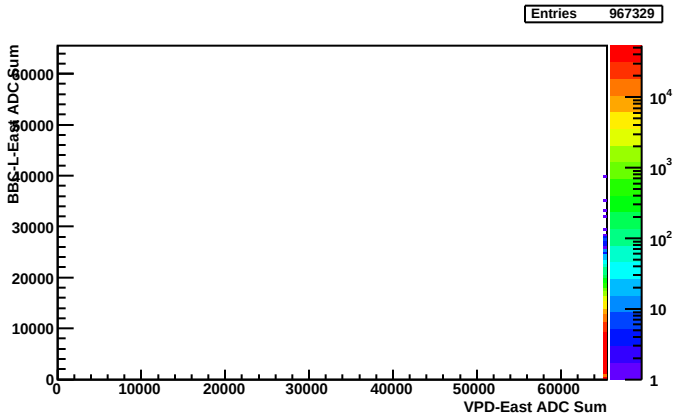

Entries 967329
TOF Mult
VPD-West ADC Sum

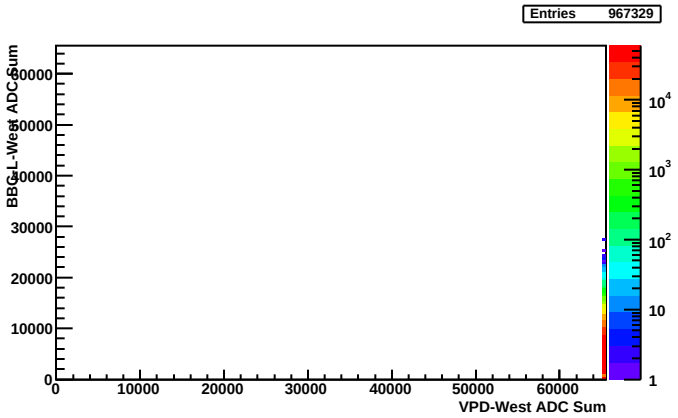

Entries 967329
TOF Mult
ZDC-East ADC Sum Att

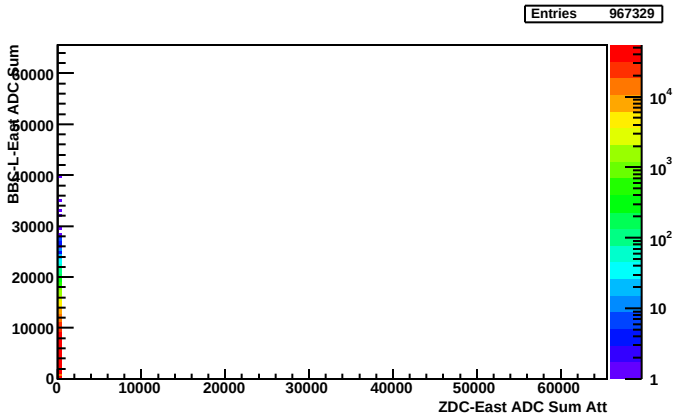

Entries 967329
TOF Mult
ZDC-West ADC Sum Att

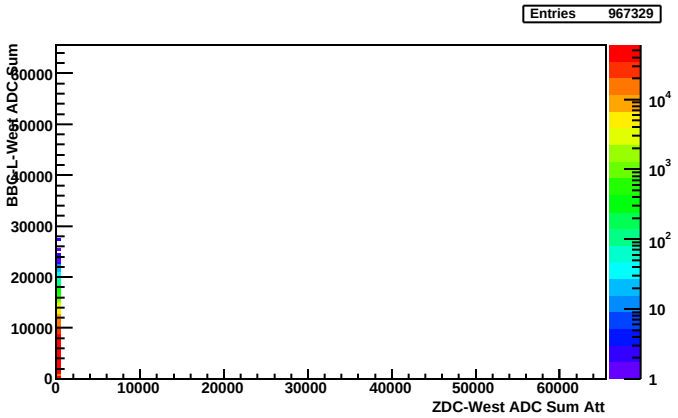

Entries 967329
BBC-L-East ADC Sum
BBC-S-East ADC Sum

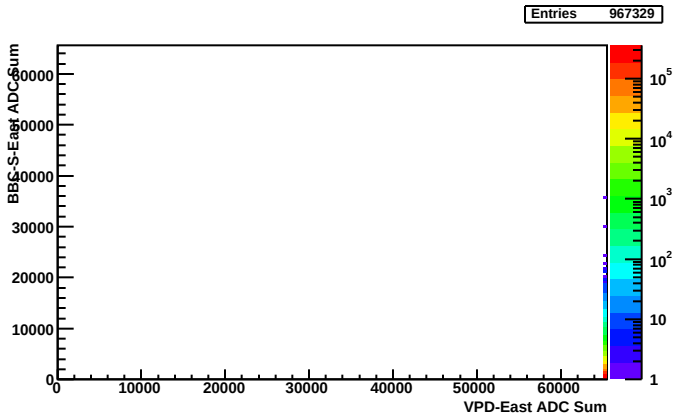

Entries 967329
BBC-L-West ADC Sum
BBC-S-West ADC Sum

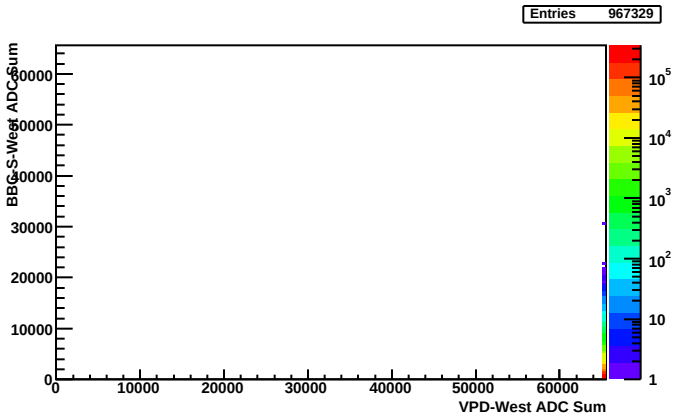

Entries 967329
BBC-L-East ADC Sum
VPD-East ADC Sum

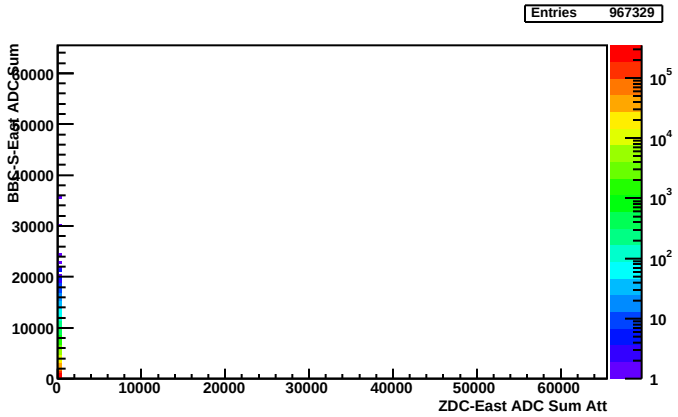

Entries 967329
BBC-L-West ADC Sum
VPD-West ADC Sum

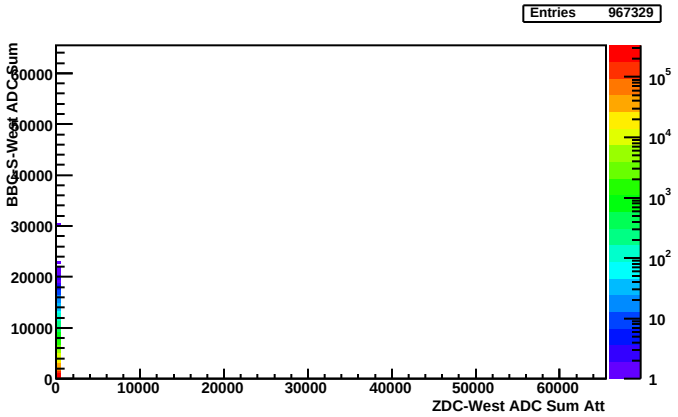

Entries 967329
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

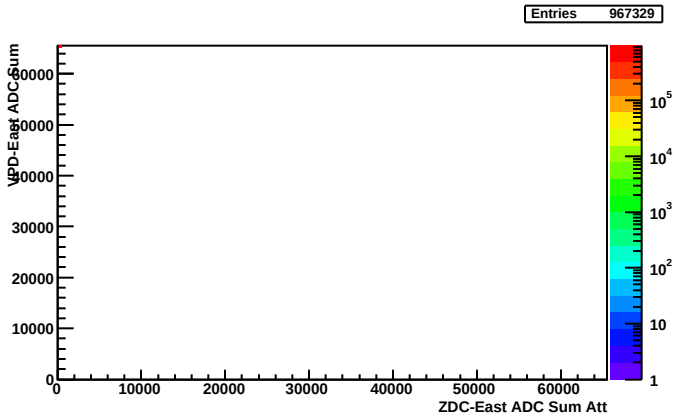

Entries 967329
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

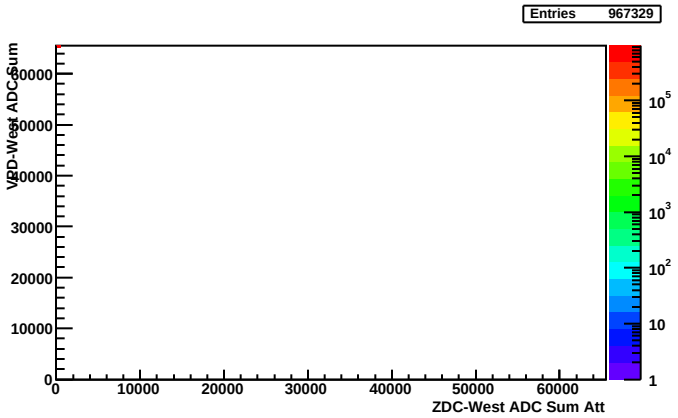

Entries 967329
BBC-S-East ADC Sum
VPD-East ADC Sum

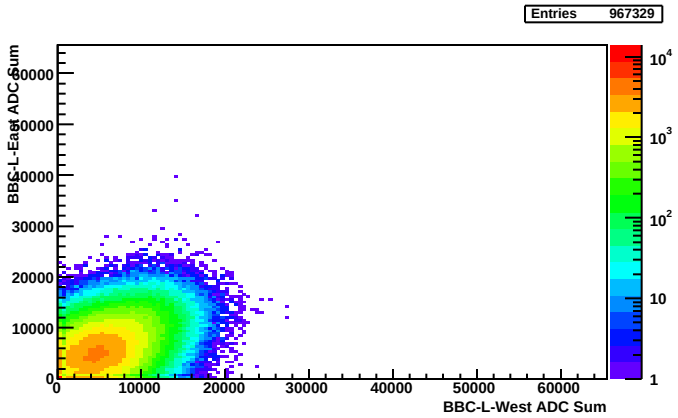

Entries 967329
BBC-S-West ADC Sum
VPD-West ADC Sum

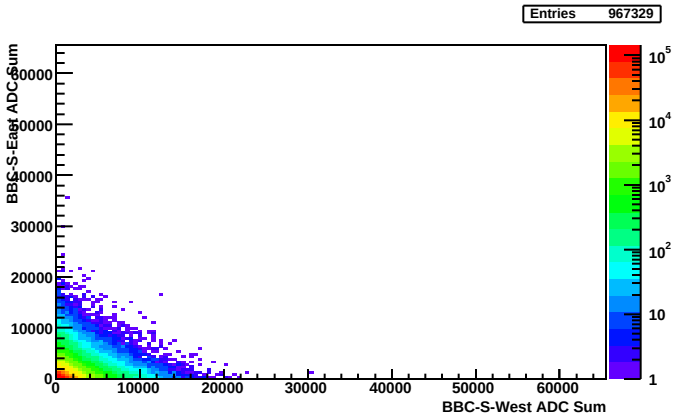

Entries 967329
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

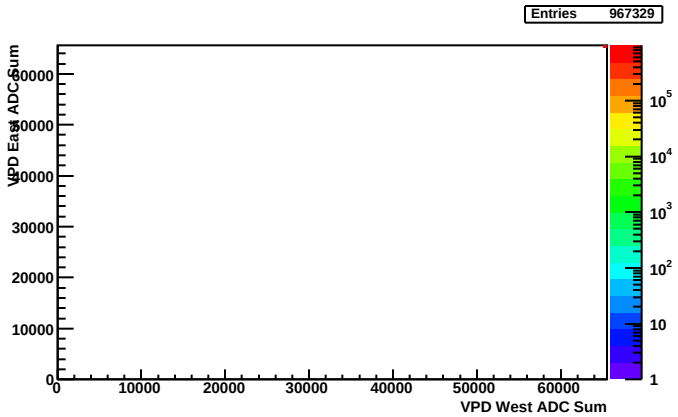

Entries 967329
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

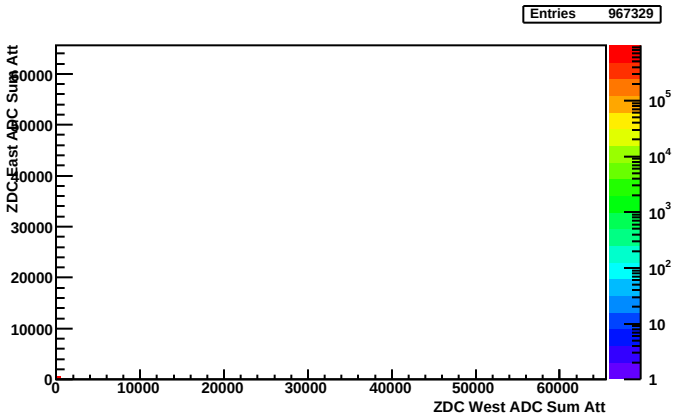

Entries 967329
VPD-East ADC Sum
ZDC-East ADC Sum Att

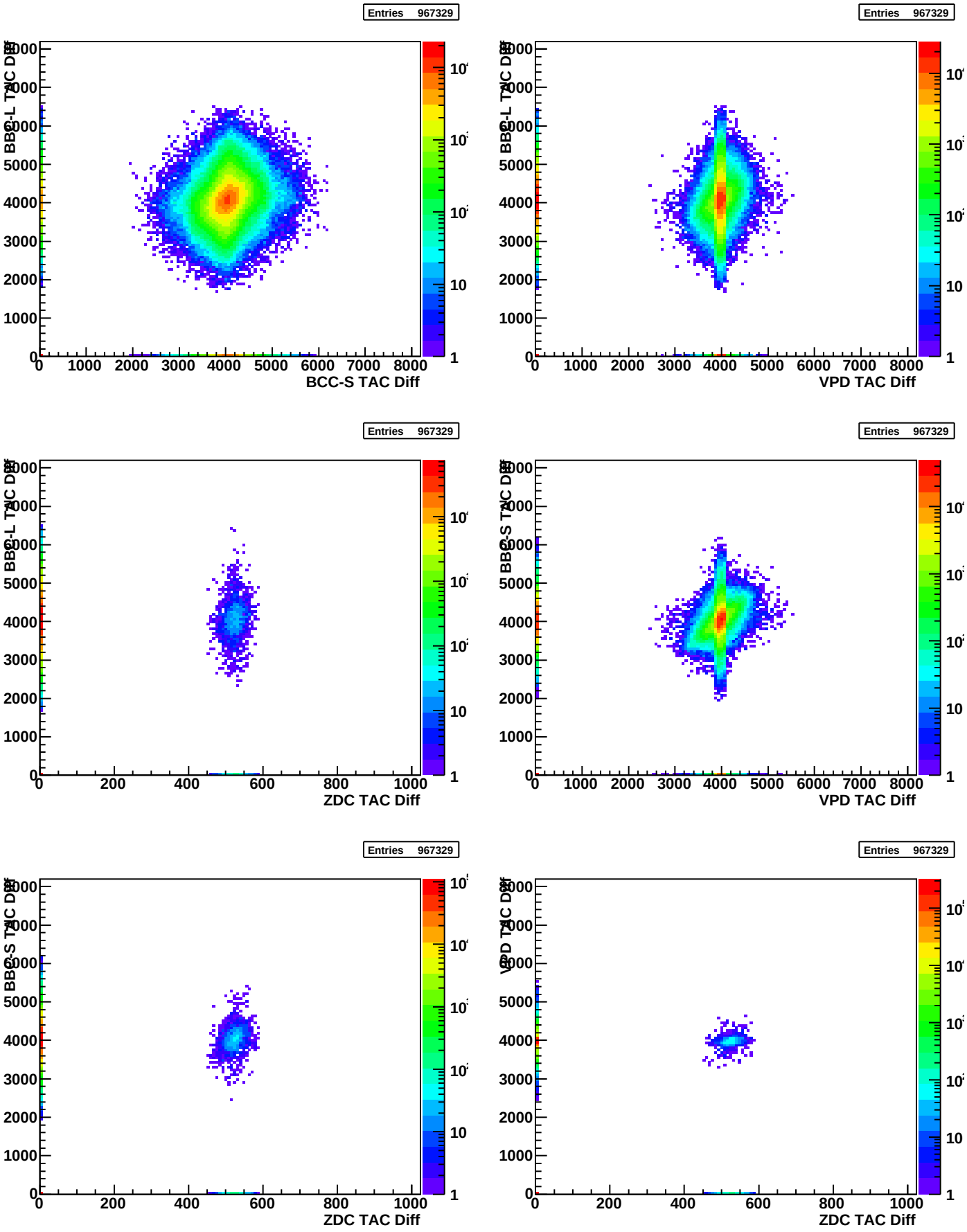

Entries 967329
VPD-West ADC Sum
ZDC-West ADC Sum Att

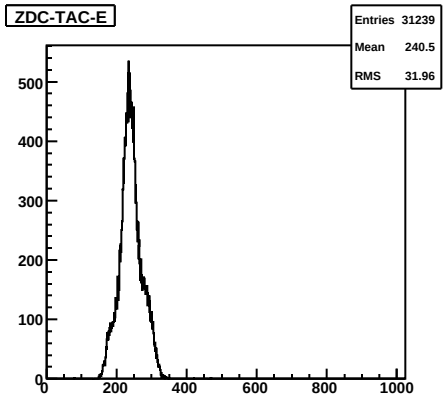

Entries 967329
BBC-L-East ADC Sum
BBC-L-West ADC Sum

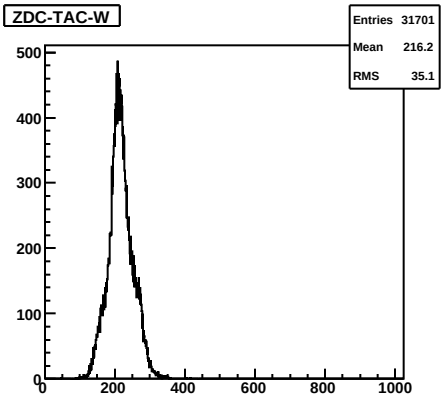

Entries 967329
BBC-S-East ADC Sum
BBC-S-West ADC Sum

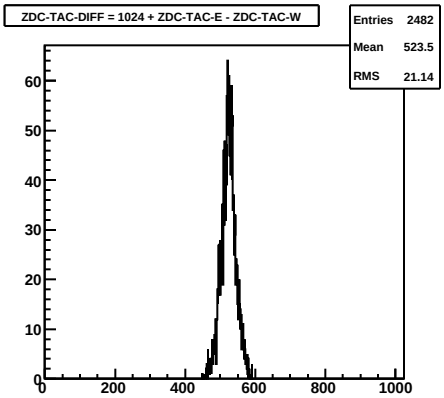

Entries 967329
VPD East ADC Sum
VPD West ADC Sum

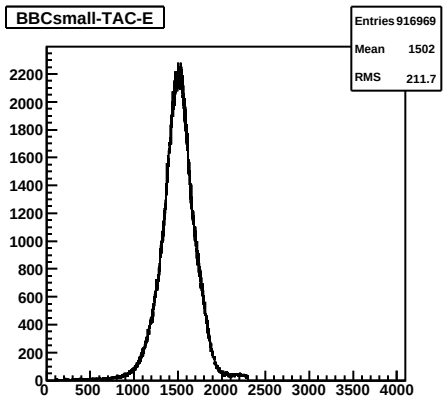

Entries 967329
ZDC East ADC Sum Att
ZDC West ADC Sum Att

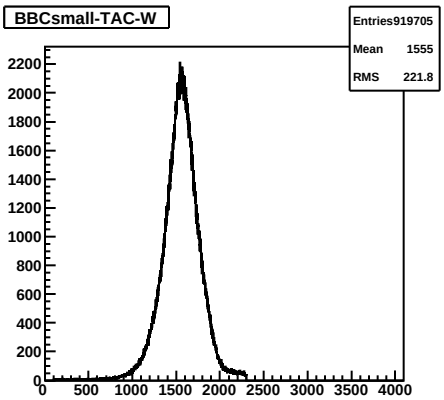

Entries 967329
BBC-L TAC Diff
BCC-S TAC Diff
Entries 967329
BBC-L TAC Diff
VPD TAC Diff
Entries 967329
BBC-L TAC Diff
ZDC TAC Diff
Entries 967329
BBC-S TAC Diff
VPD TAC Diff
Entries 967329
BBC-S TAC Diff
ZDC TAC Diff
Entries 967329
VPD TAC Diff
ZDC TAC Diff

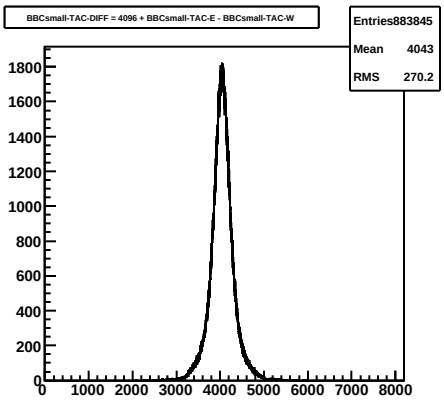

ZDC-TAC-E
Entries 31239
Mean 240.5
RMS 31.96

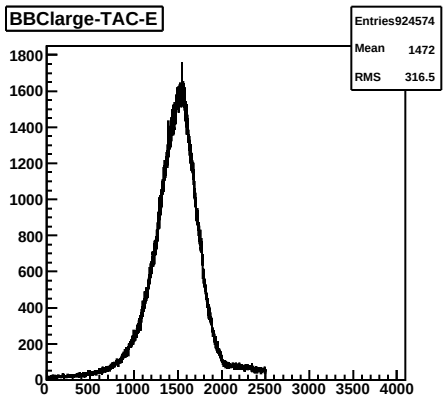

ZDC-TAC-W
Entries 31701
Mean 216.2
RMS 35.1

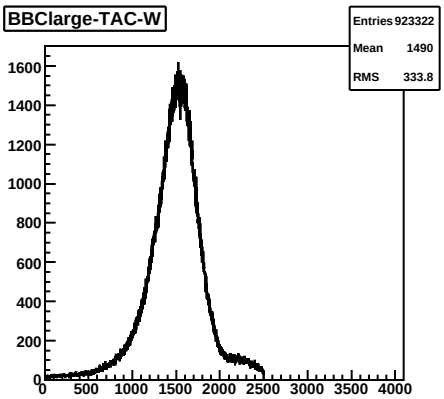

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2482
Mean 523.5
RMS 21.14

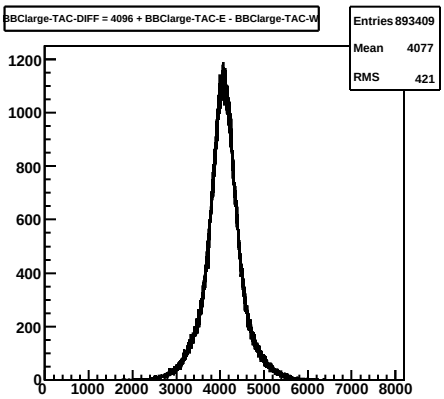

BBCsmall-TAC-E
Entries 916969
Mean 1502
RMS 211.7

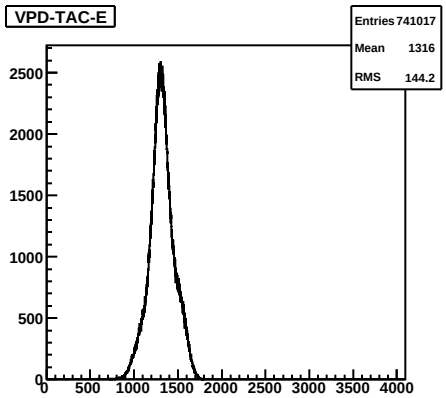

BBCsmall-TAC-W
Entries 919705
Mean 1555
RMS 221.8

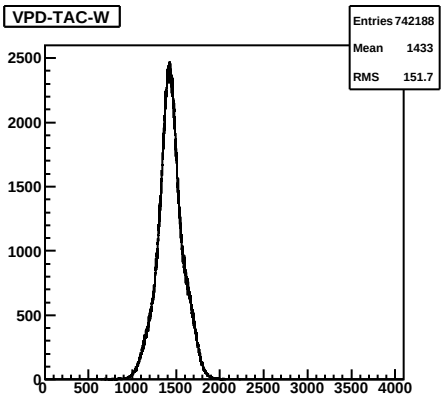

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 883845
Mean 4043
RMS 270.2

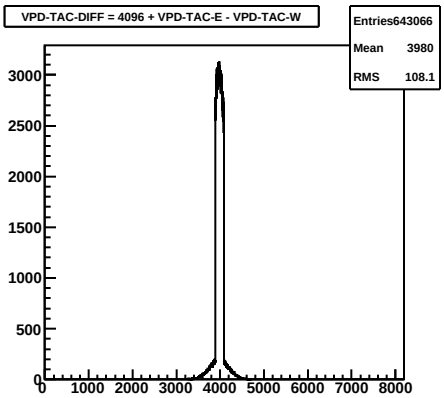

BBClarge-TAC-E
Entries 924574
Mean 1472
RMS 316.5

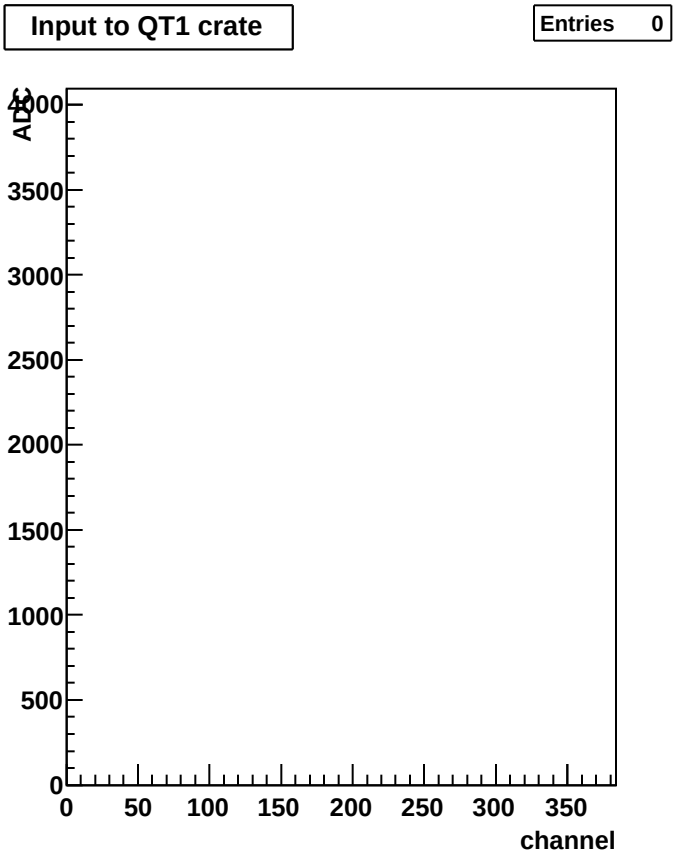

BBClarge-TAC-W
Entries 923322
Mean 1490
RMS 333.8

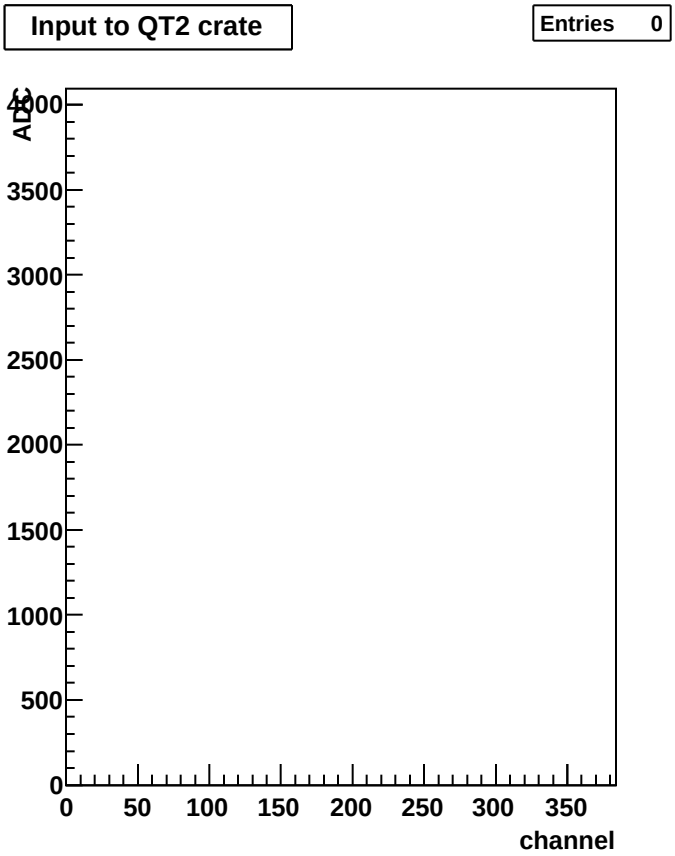

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 893409
Mean 4077
RMS 421

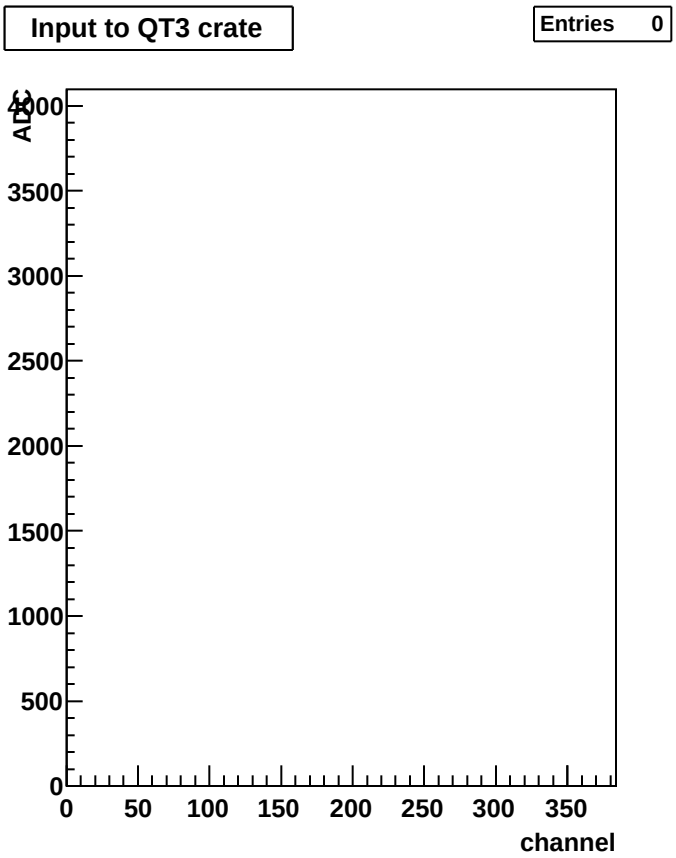

VPD-TAC-E
Entries 741017
Mean 1316
RMS 144.2

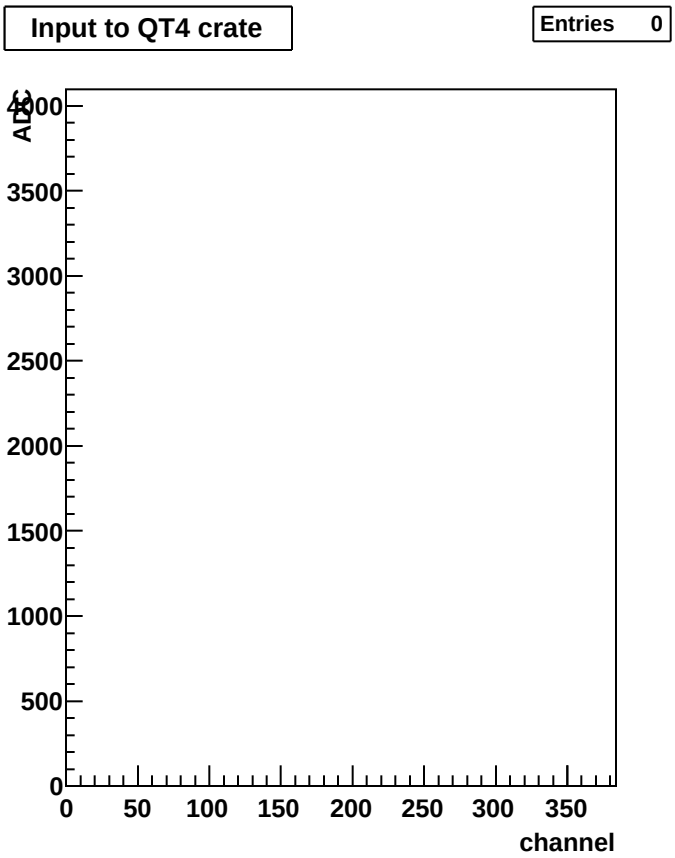

VPD-TAC-W
Entries 742188
Mean 1433
RMS 151.7

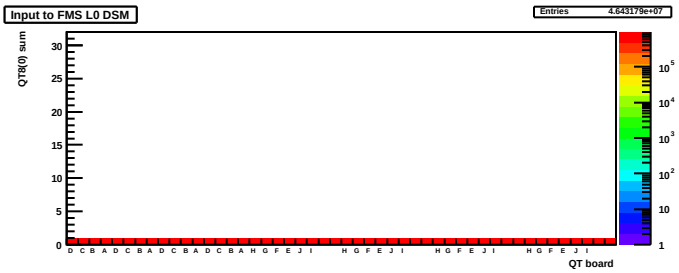

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 643066
Mean 3980
RMS 108.1

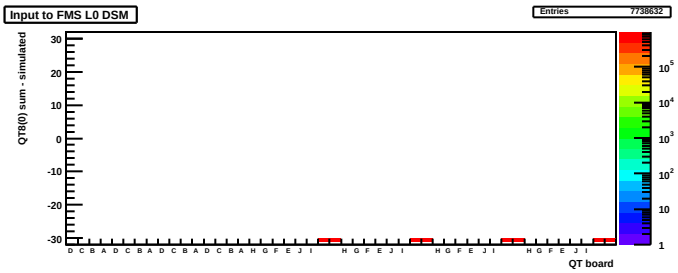

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

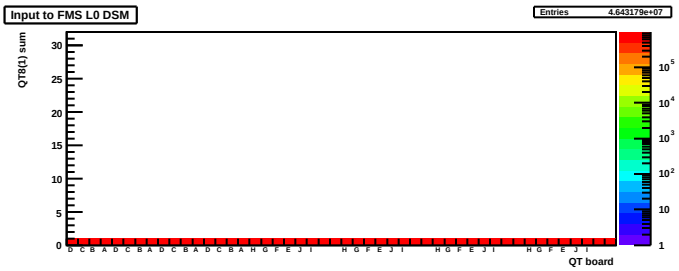

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

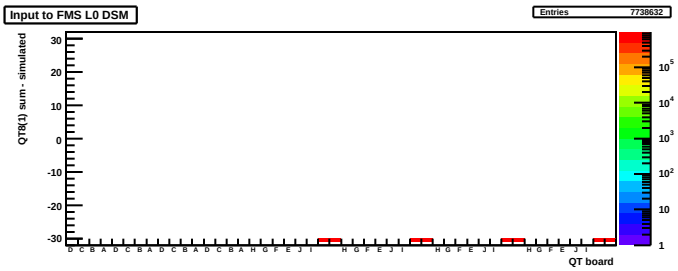

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

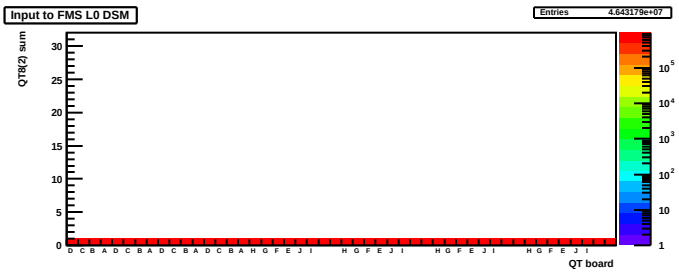

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

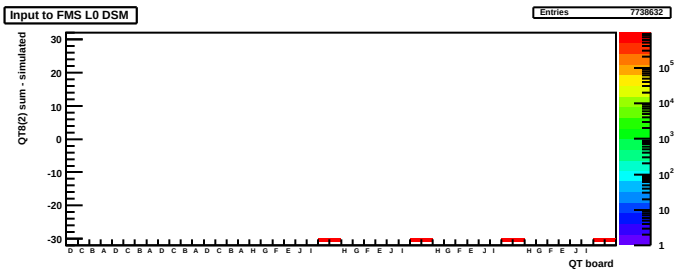

Input to FMS L0 DSM
Entries 4.643179e+07
QT8(0) sum
QT board

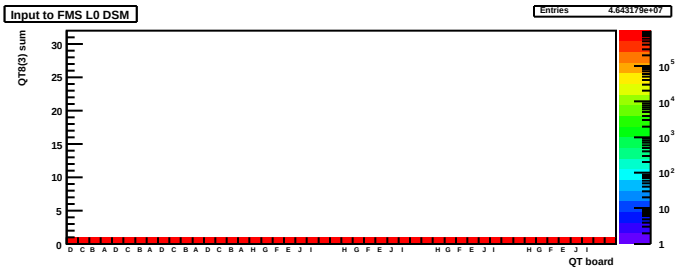

Input to FMS L0 DSM
Entries 7738632
QT8(0) sum - simulated
QT board

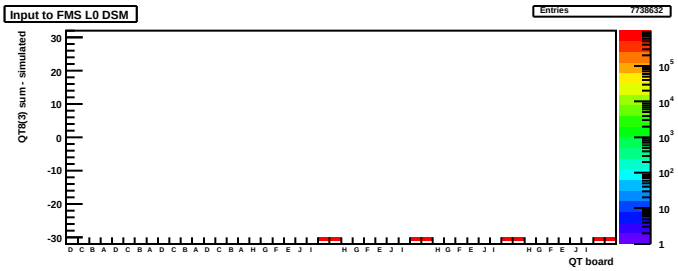

Input to FMS L0 DSM
Entries 4.643179e+07
QT8(1) sum
QT board

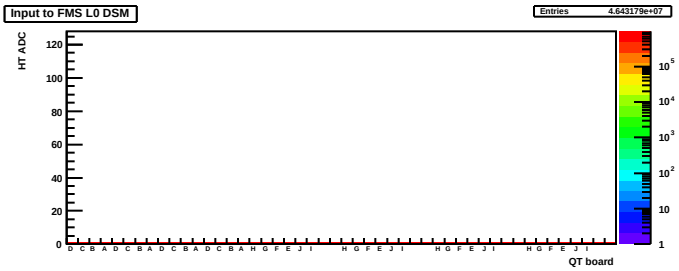

Input to FMS L0 DSM
Entries 7738632
QT8(1) sum - simulated
QT board

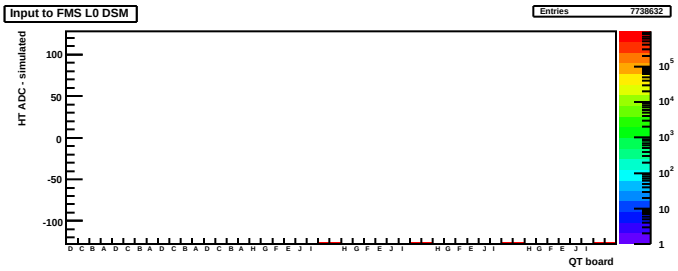

Input to FMS L0 DSM
Entries 4.643179e+07
QT8(2) sum
QT board

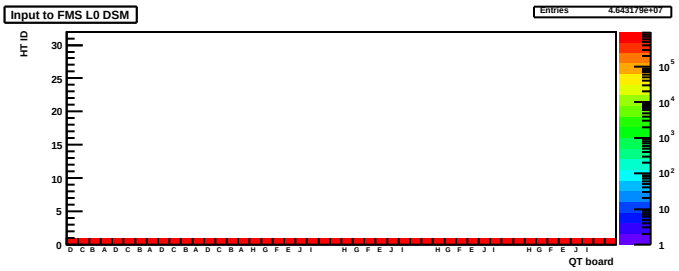

Input to FMS L0 DSM
Entries 7738632
QT8(2) sum - simulated
QT board

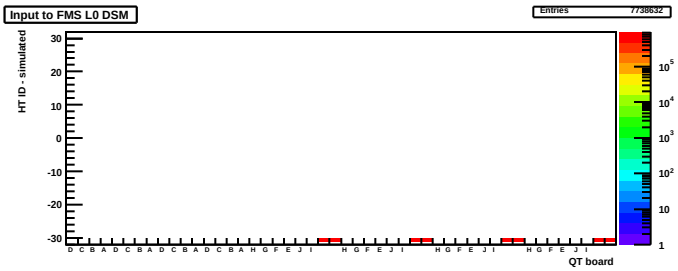

Input to FMS L0 DSM
Entries 4.643179e+07
QT8(3) sum
QT board

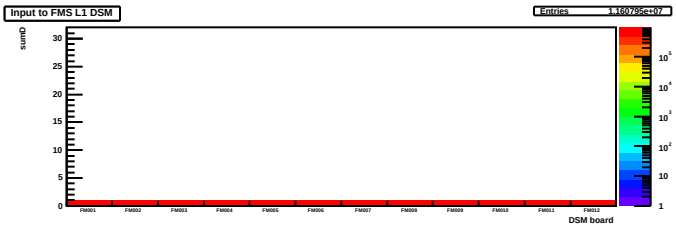

Input to FMS L0 DSM
Entries 7738632
QT8(3) sum - simulated
QT board

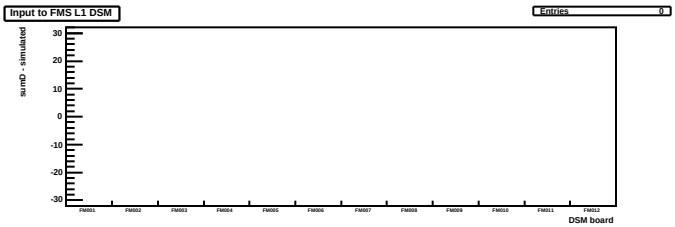

Input to FMS L0 DSM
Entries 4.643179e+07
HT ADC
QT board

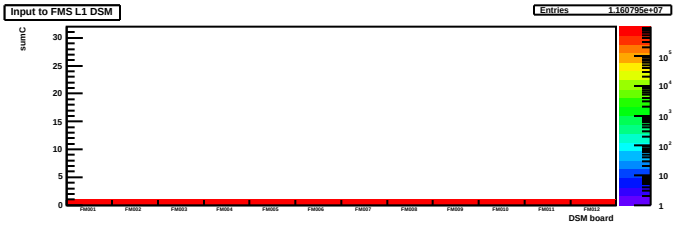

Input to FMS L0 DSM
Entries 7738632
HT ADC - simulated
QT board

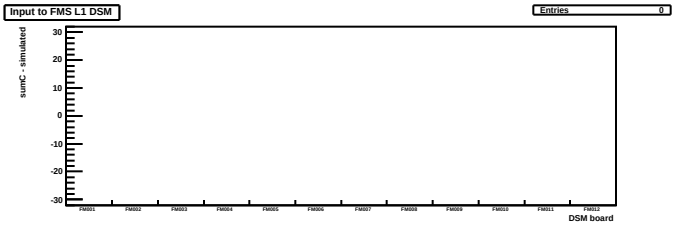

Input to FMS L0 DSM
Entries 4.643179e+07
HT ID
QT board

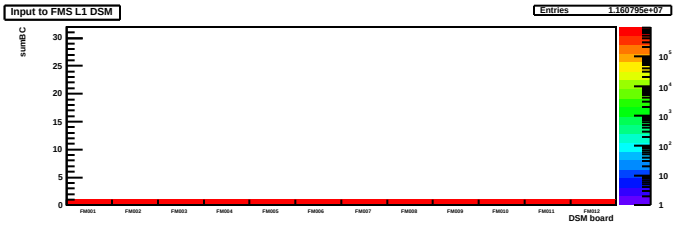

Input to FMS L0 DSM
Entries 7738632
HT ID - simulated
QT board

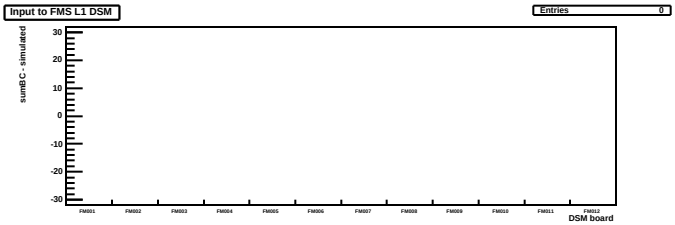

Input to FMS L1 DSM
Entries 1.160795e+07
sumD
DSM board

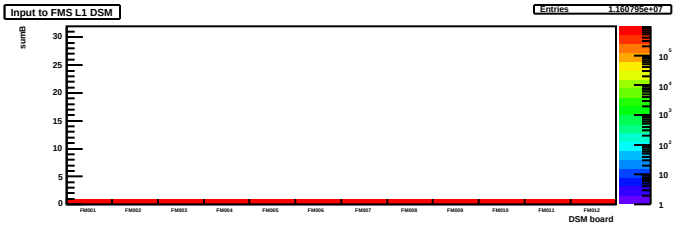

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

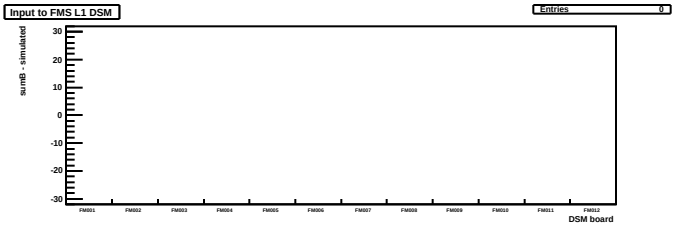

Input to FMS L1 DSM
Entries 1.160795e+07
sumC
DSM board

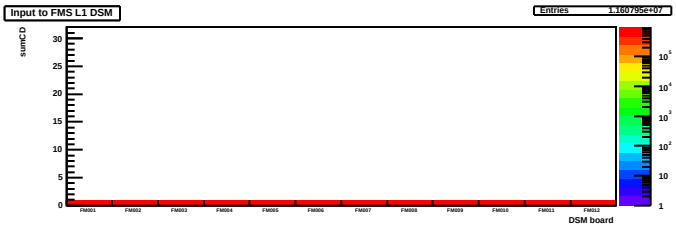

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

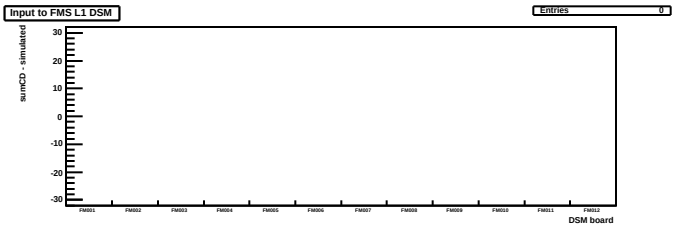

Input to FMS L1 DSM
Entries 1.160795e+07
sumBC
DSM board

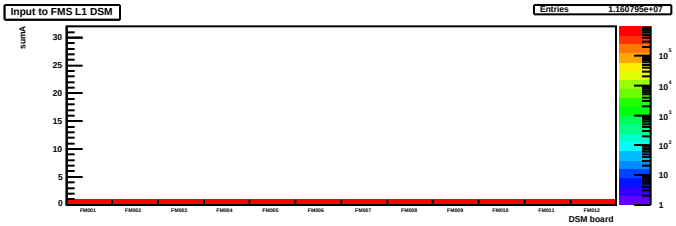

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

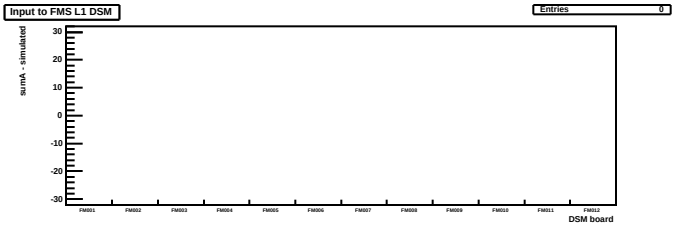

Input to FMS L1 DSM
Entries 1.160795e+07
sumB
DSM board

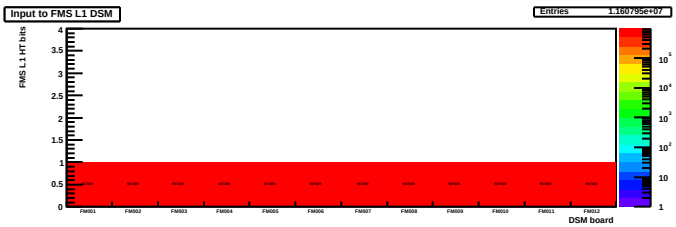

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

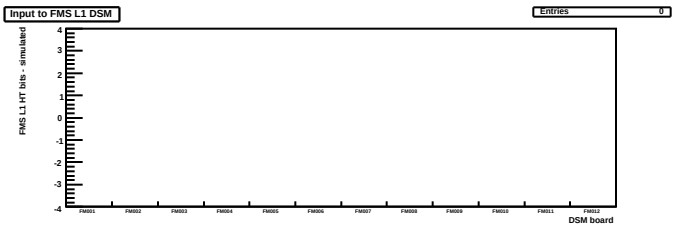

Input to FMS L1 DSM
Entries 1.160795e+07
sumCD
DSM board

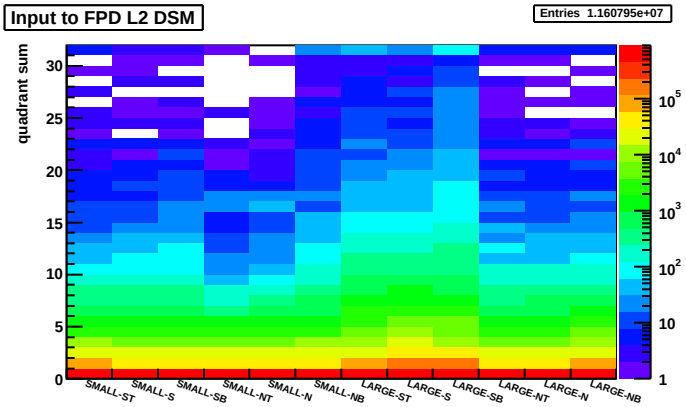

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

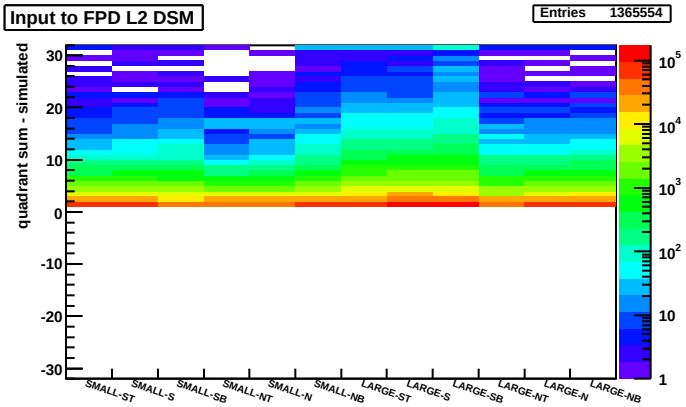

Input to FMS L1 DSM
Entries 1.160795e+07
sumA
DSM board

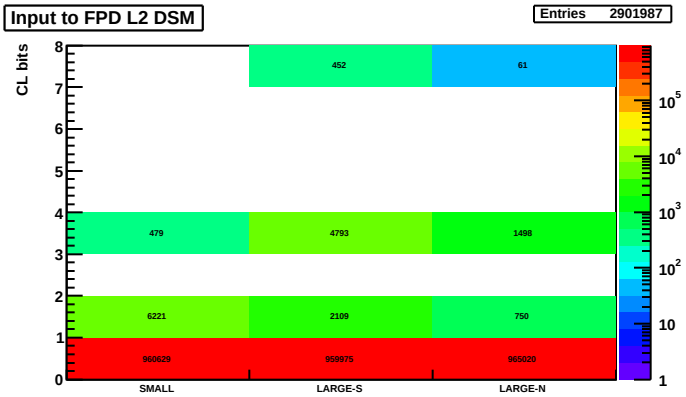

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

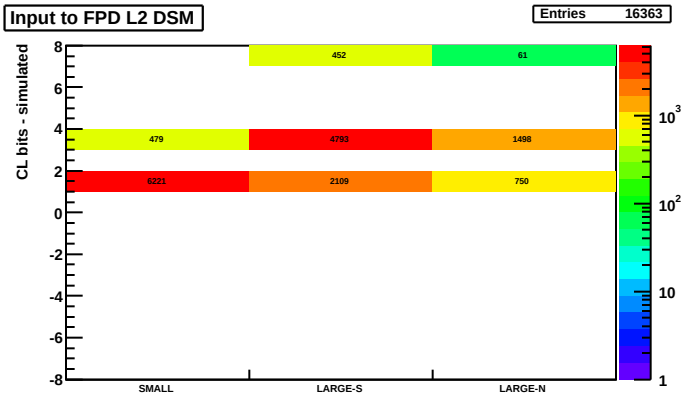

Input to FMS L1 DSM
Entries 1.160795e+07
FMS L1 HT bits
DSM board

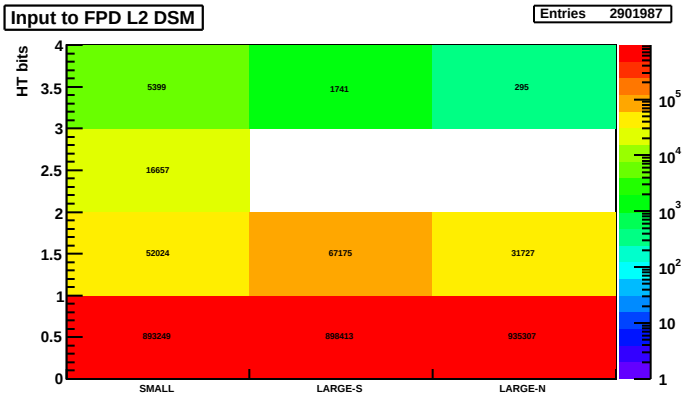

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

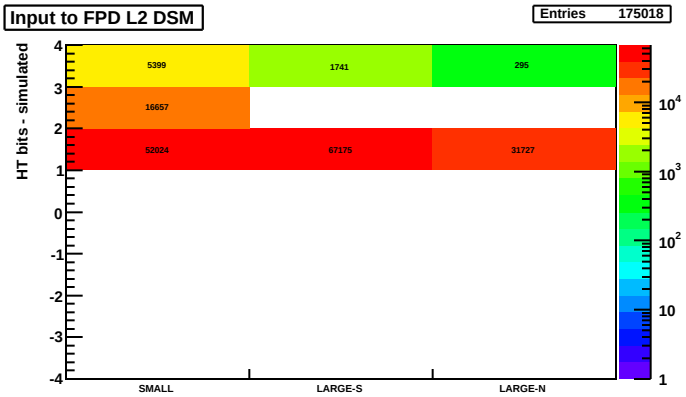

Input to FPD L2 DSM
Entries 1.160795e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

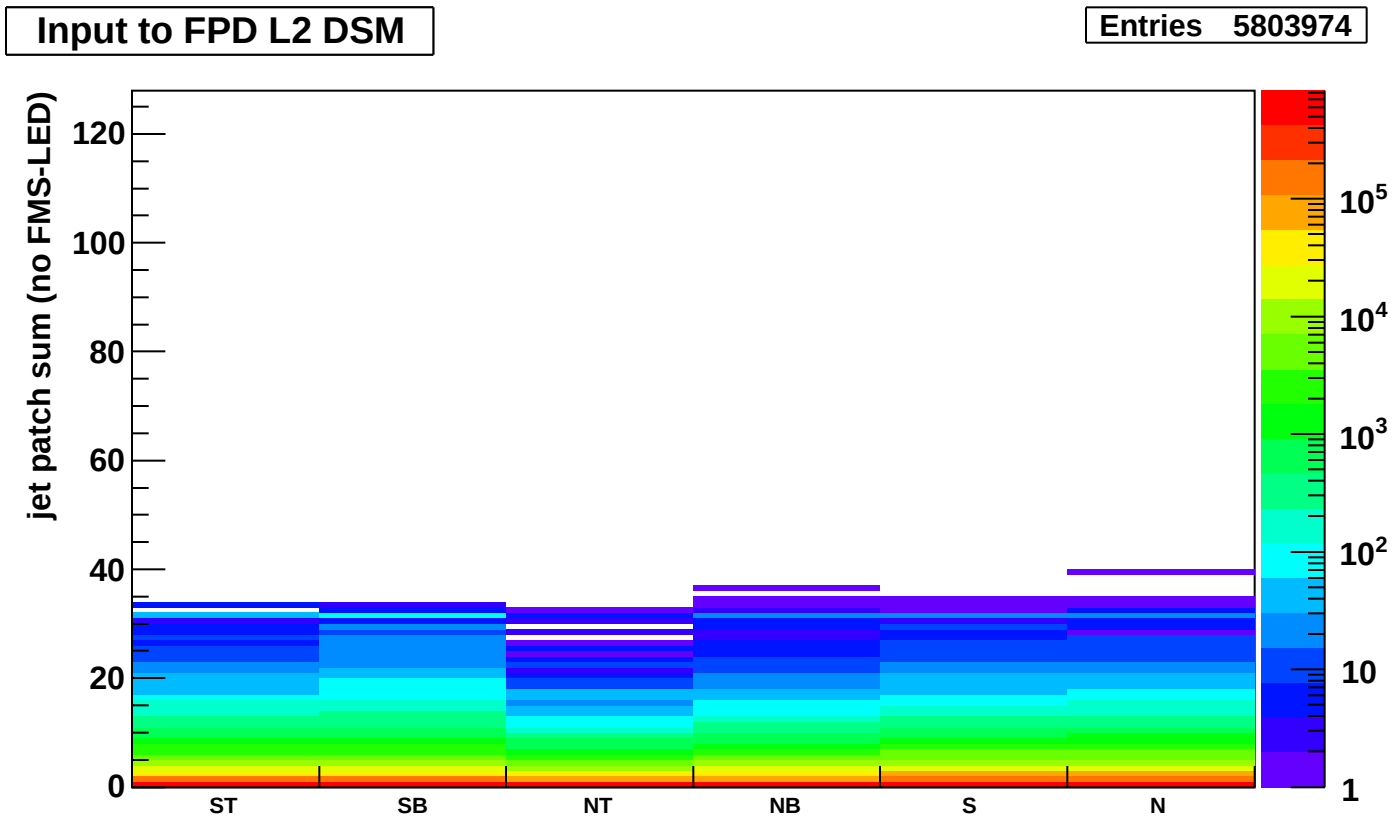

Input to FPD L2 DSM
Entries 1365554
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

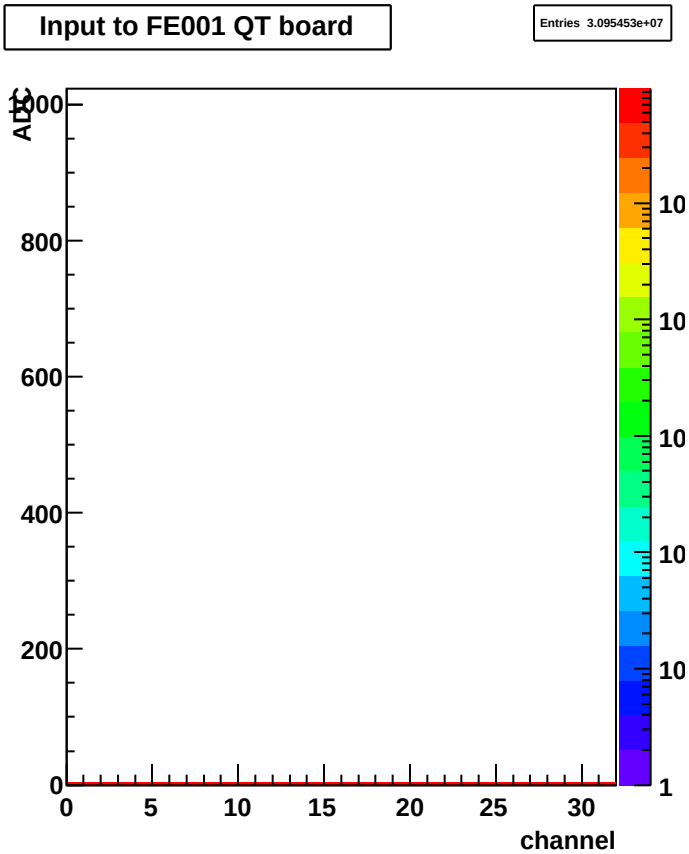

Input to FPD L2 DSM
Entries 2901987
CL bits
452
61
479
4793
1498
6221
2109
750
960629
959975
965020
SMALL
LARGE-S
LARGE-N

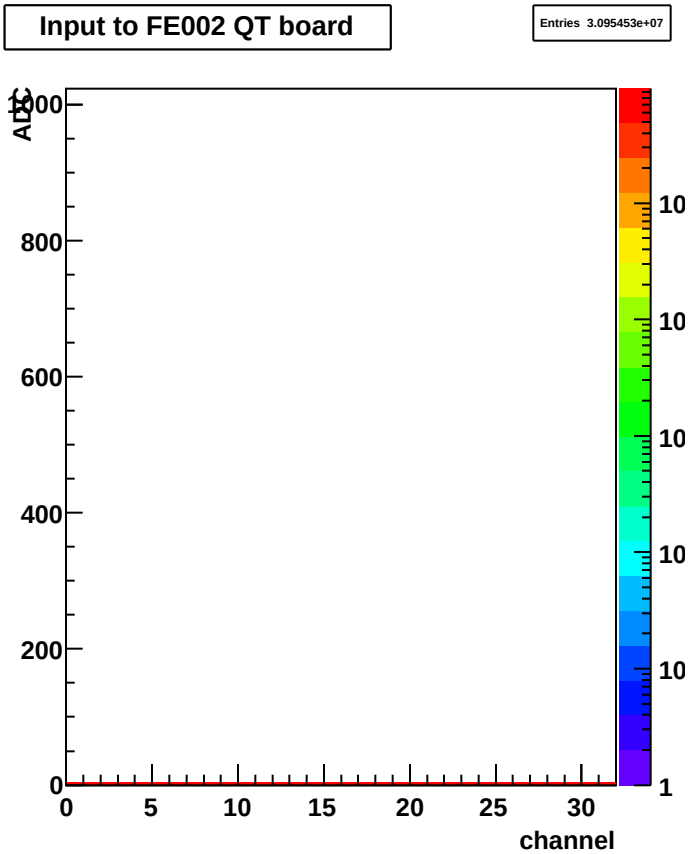

Input to FPD L2 DSM
Entries 16363
CL bits - simulated
452
61
479
4793
1498
6221
2109
750
SMALL
LARGE-S
LARGE-N

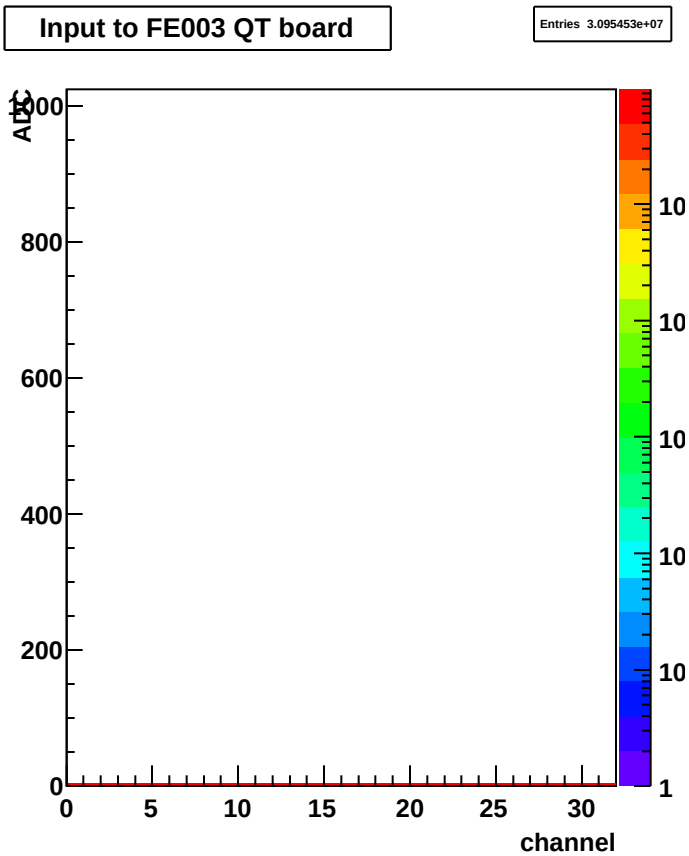

Input to FPD L2 DSM
Entries 2901987
HT bits
5399
1741
295
16657
52024
67175
31727
893249
898413
935307
SMALL
LARGE-S
LARGE-N

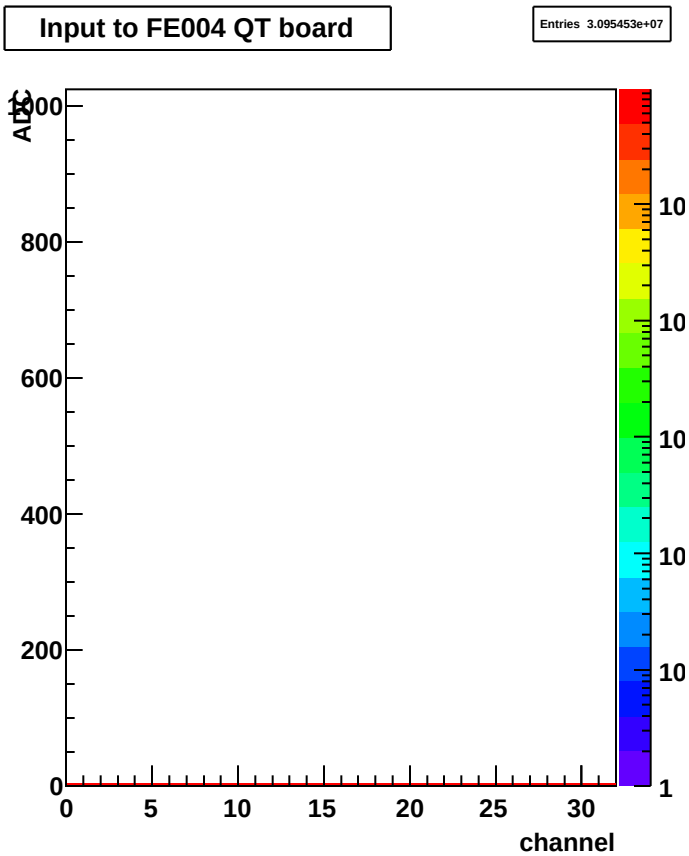

Input to FPD L2 DSM
Entries 175018
HT bits - simulated
5399
1741
295
16657
52024
67175
31727
SMALL
LARGE-S
LARGE-N

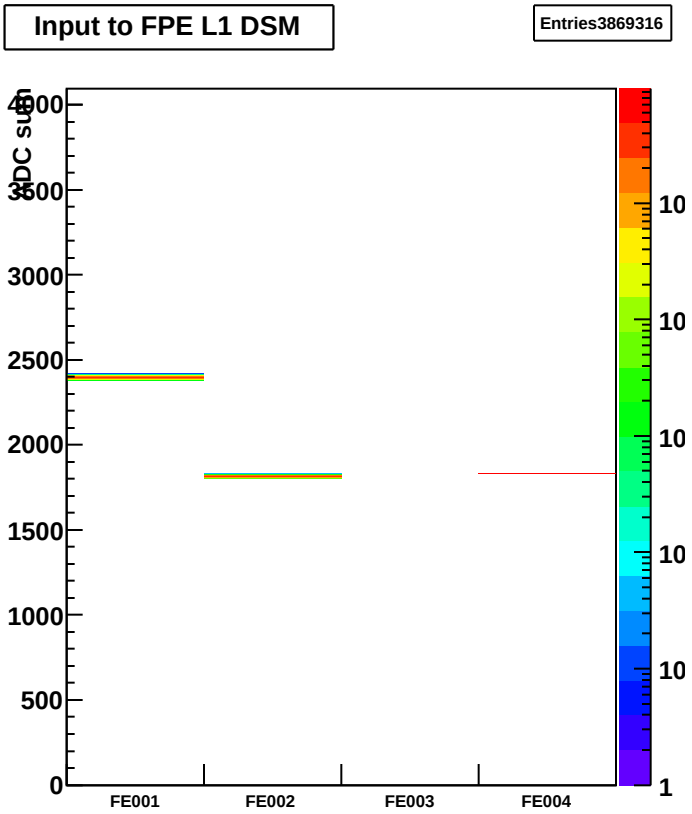

Input to FPD L2 DSM
Entries 5803974
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

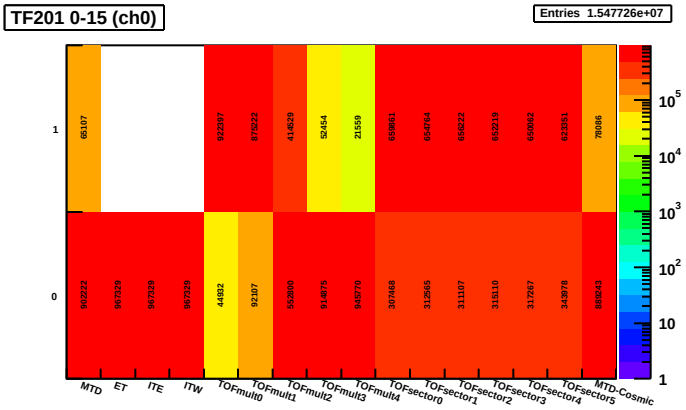

Input to FE001 QT board
Entries 3.095453e+07
ADC
channel

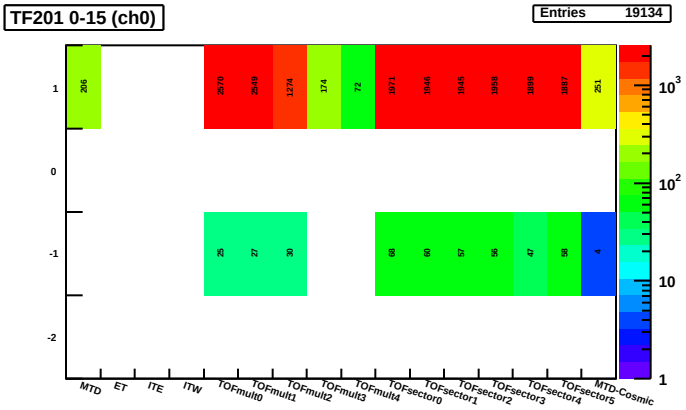

Input to FE002 QT board
Entries 3.095453e+07
ADC
channel

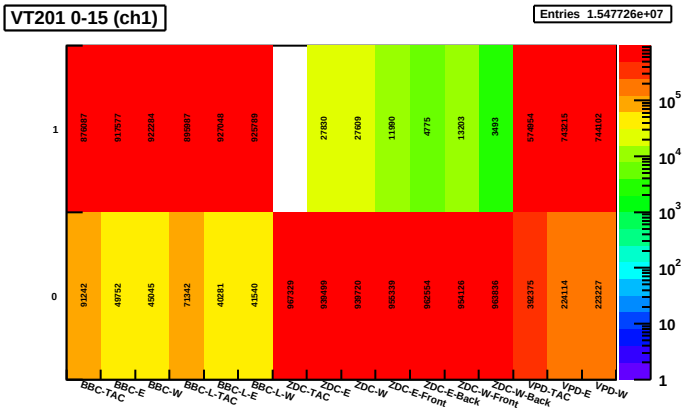

Input to FE003 QT board
Entries 3.095453e+07
ADC
channel

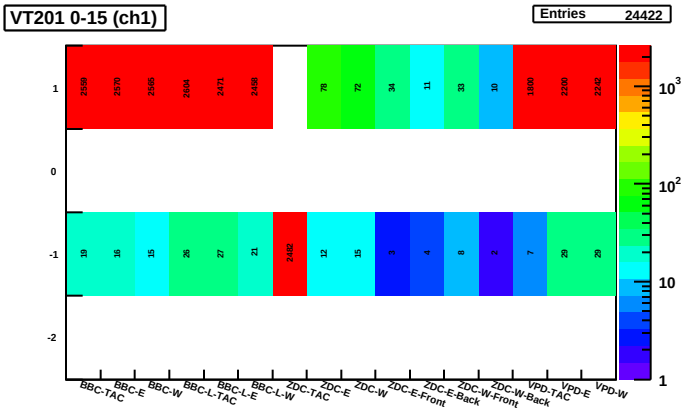

Input to FE004 QT board
Entries 3.095453e+07
ADC
channel

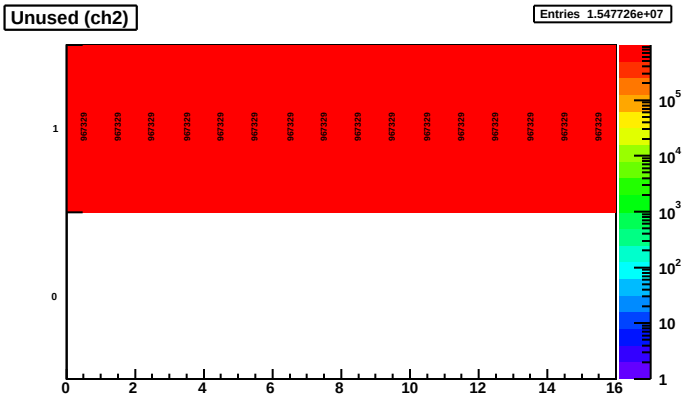

Input to FPE L1 DSM
Entries3869316
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

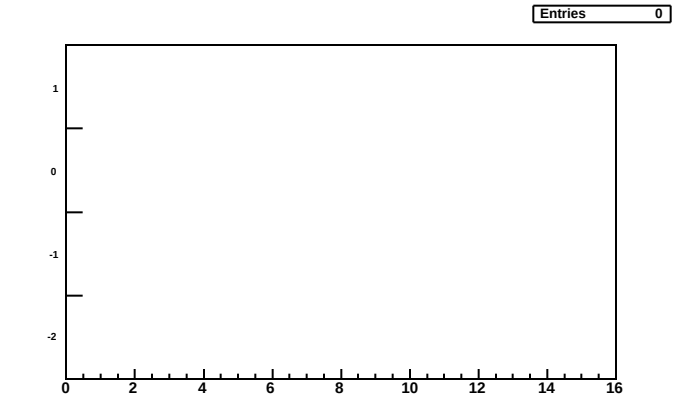

TF201 0-15 (ch0)
Entries 1.547726e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

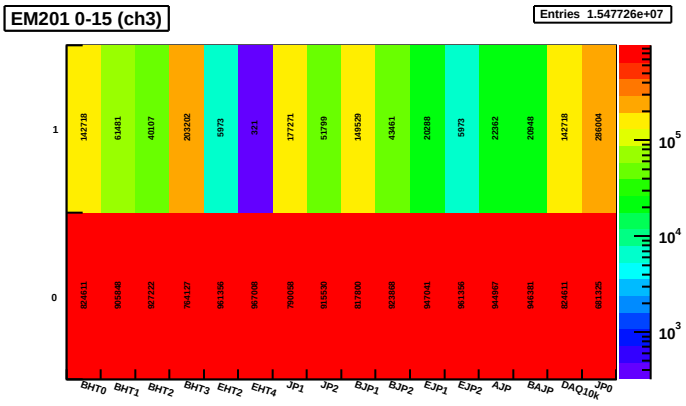

TF201 0-15 (ch0)
Entries 19134
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

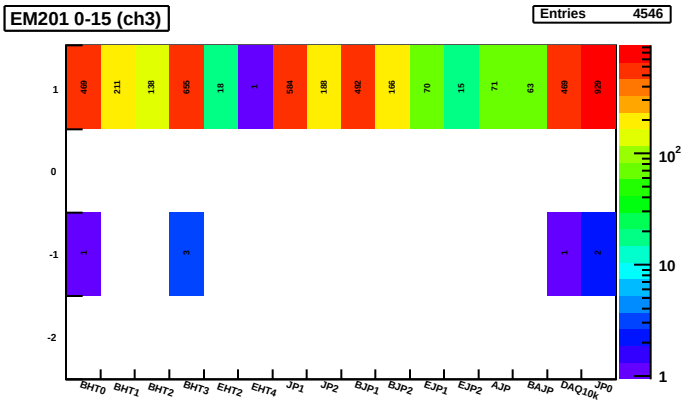

VT201 0-15 (ch1)
Entries 1.547726e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 24422
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

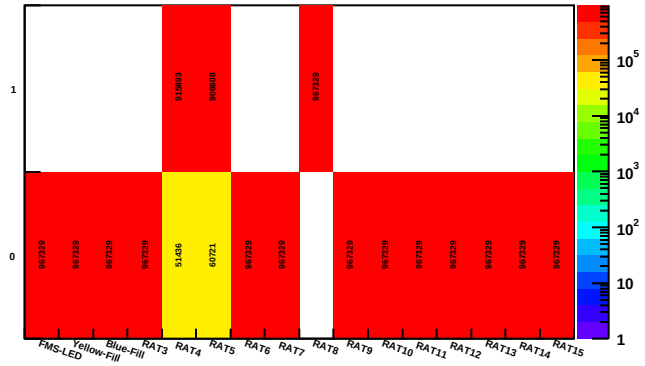

Unused (ch2)
Entries 1.547726e+07

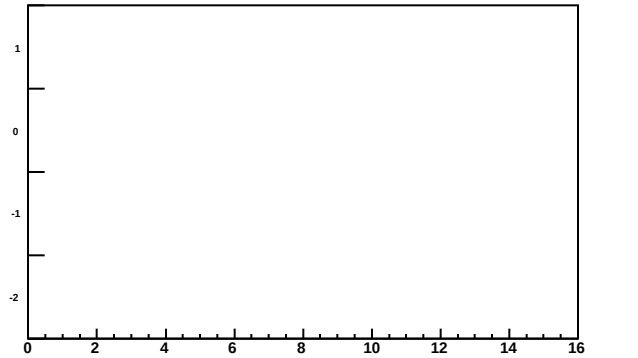

Entries 0


EM201 0-15 (ch3)
Entries 1.547726e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

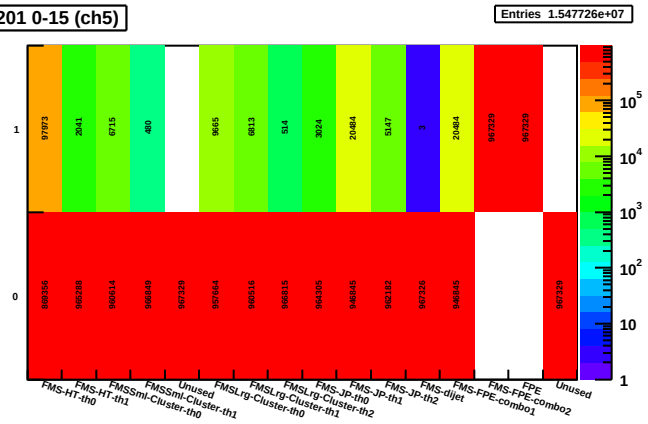

EM201 0-15 (ch3)
Entries 4546
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

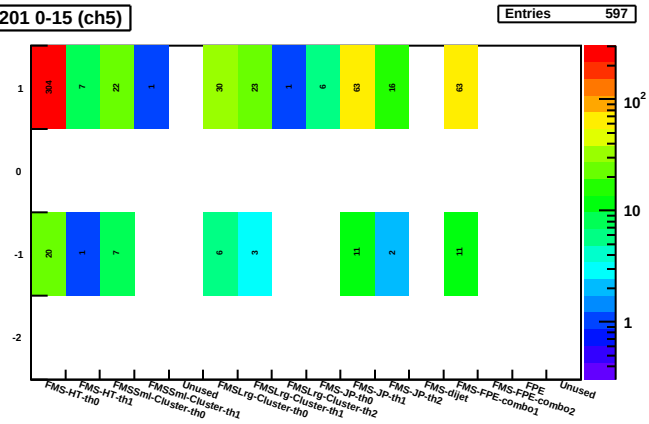




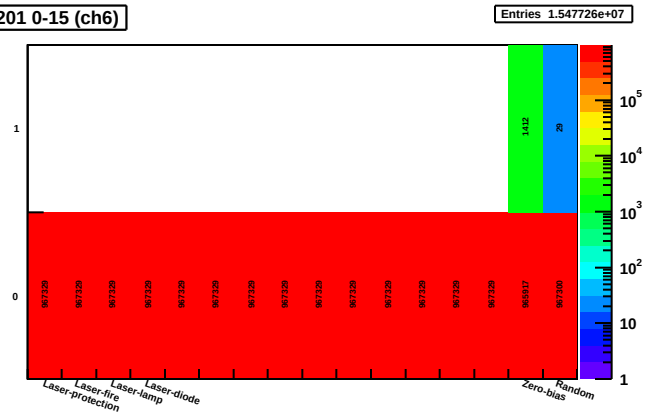
FP201 0-15 (ch5)

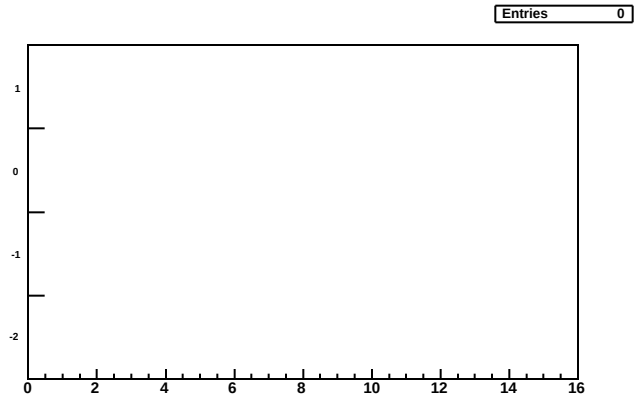
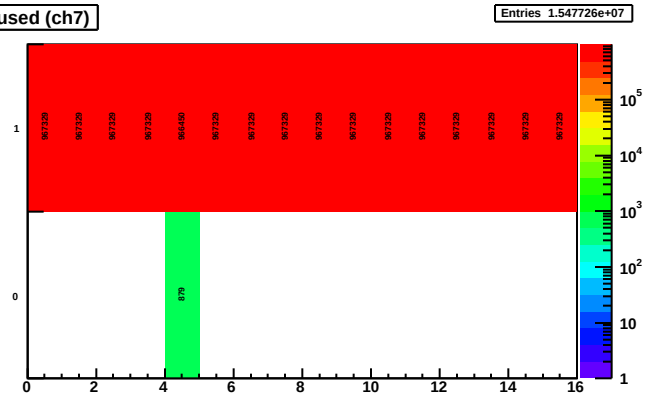
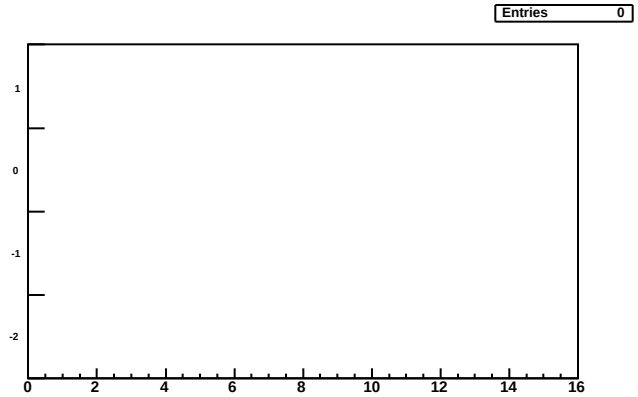


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)