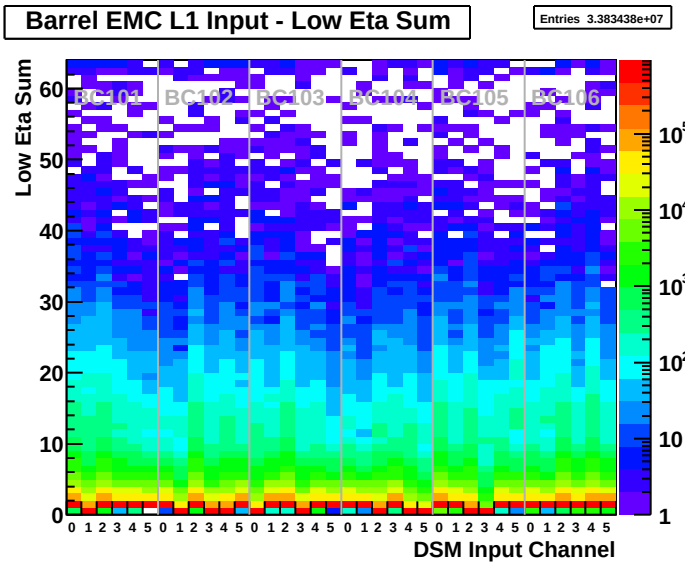
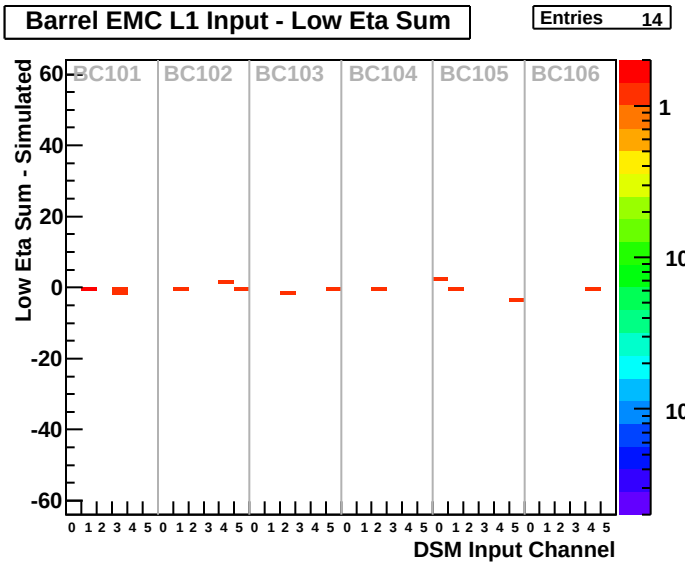
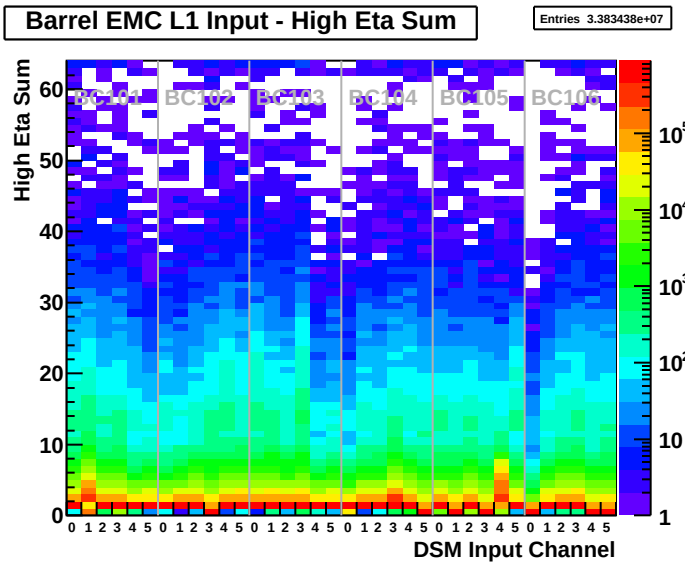
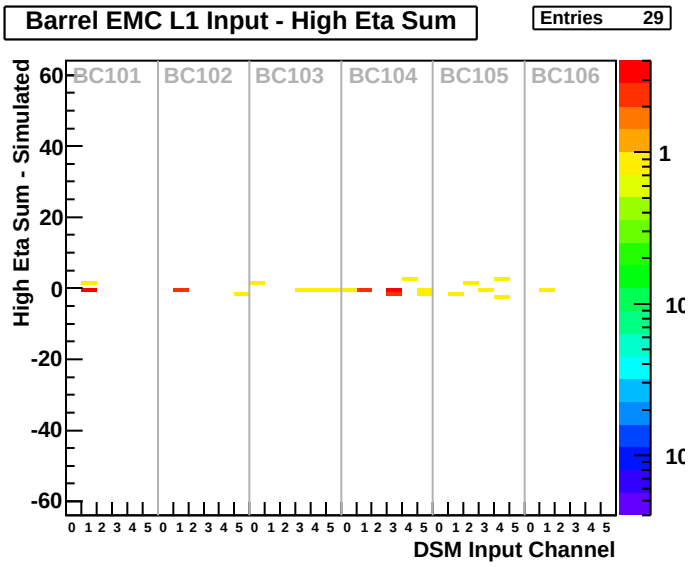
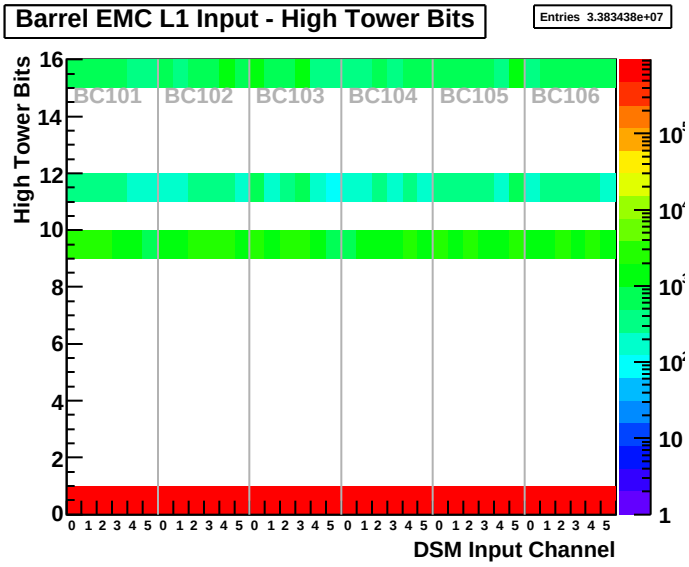
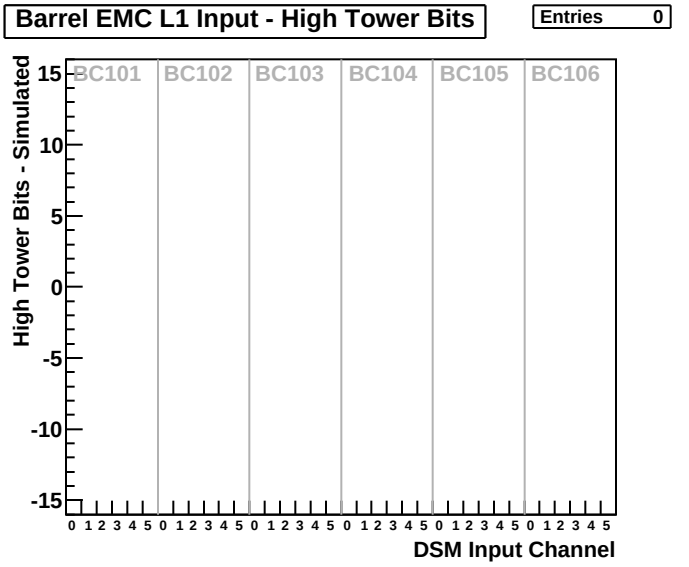

Barrel EMC L1 Input - Low Eta Sum
Entries 3.383438e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

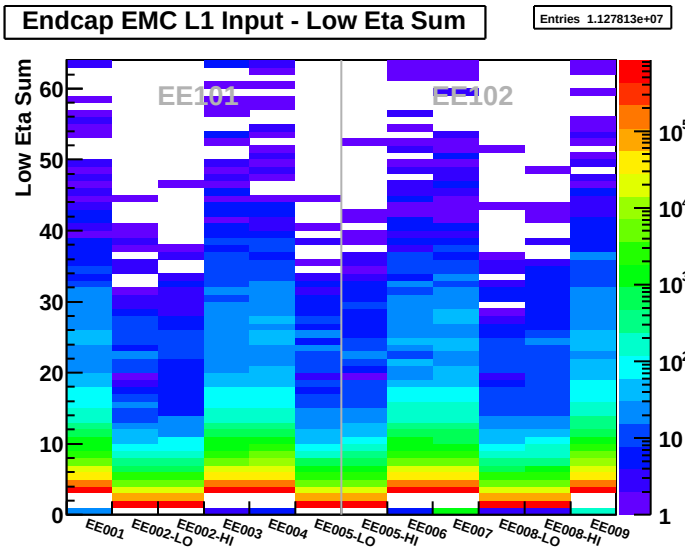

Barrel EMC L1 Input - Low Eta Sum
Entries 14
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

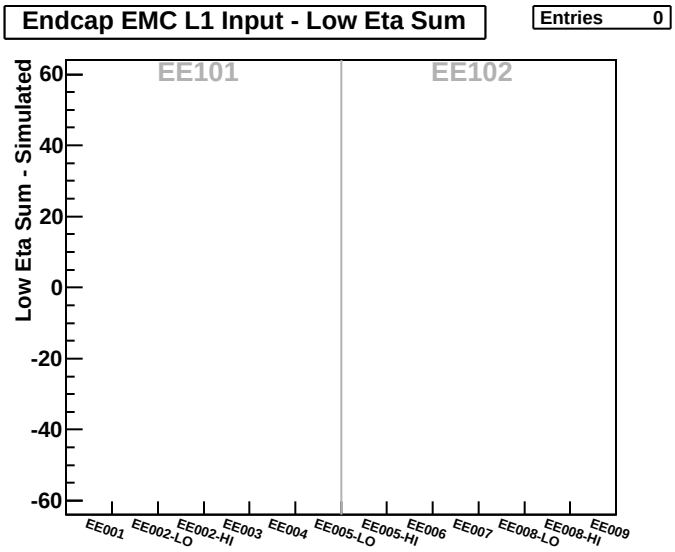

Barrel EMC L1 Input - High Eta Sum
Entries 3.383438e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

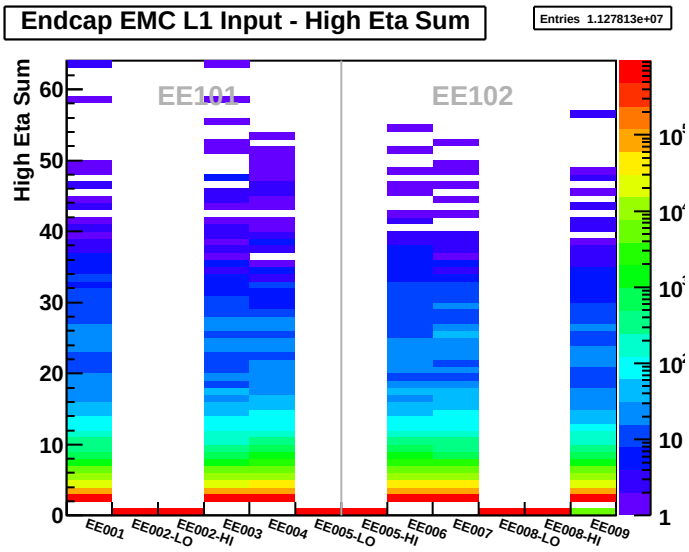

Barrel EMC L1 Input - High Eta Sum
Entries 29
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

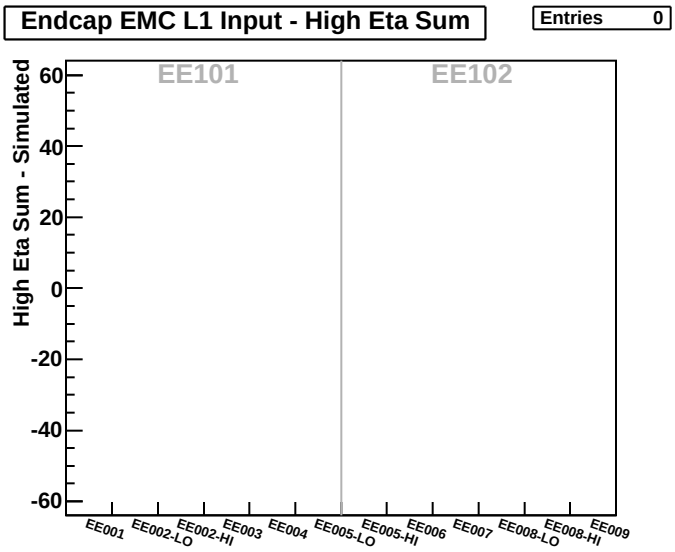

Barrel EMC L1 Input - High Tower Bits
Entries 3.383438e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

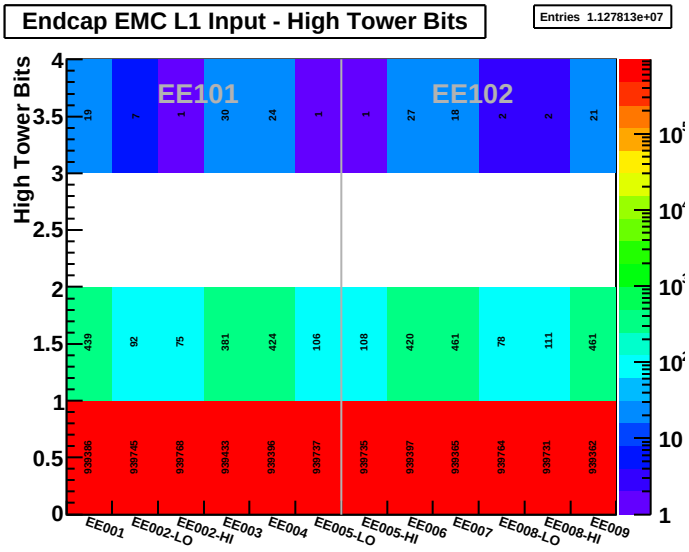

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

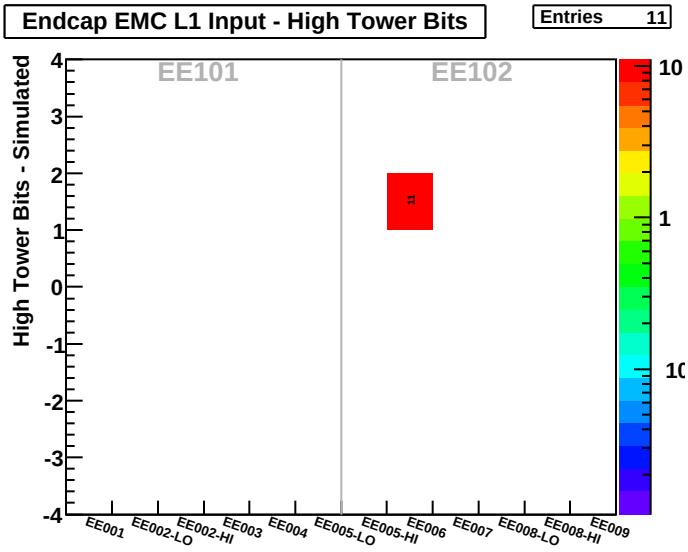

Endcap EMC L1 Input - Low Eta Sum
Entries 1.127813e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

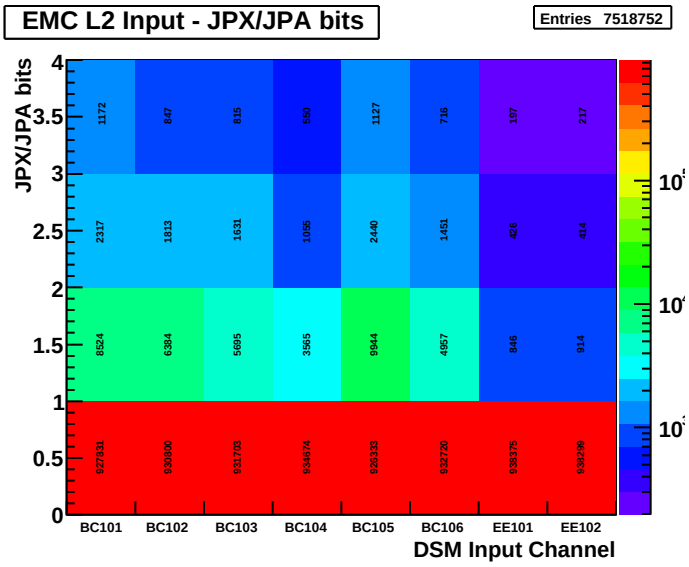

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

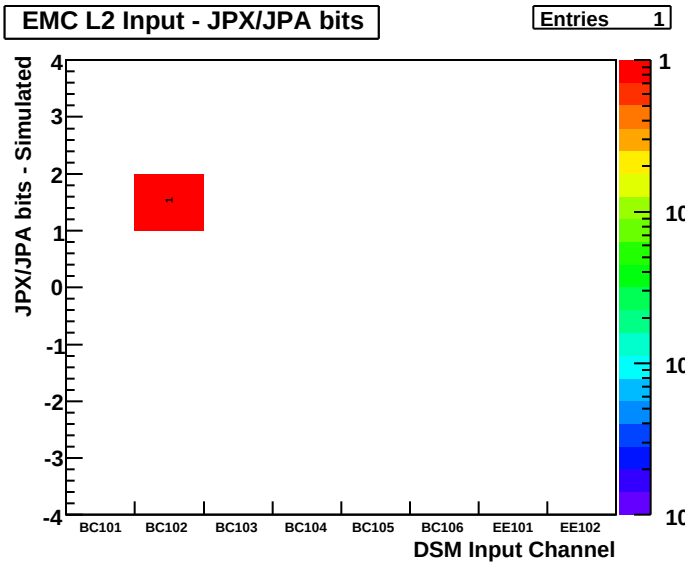

Endcap EMC L1 Input - High Eta Sum
Entries 1.127813e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

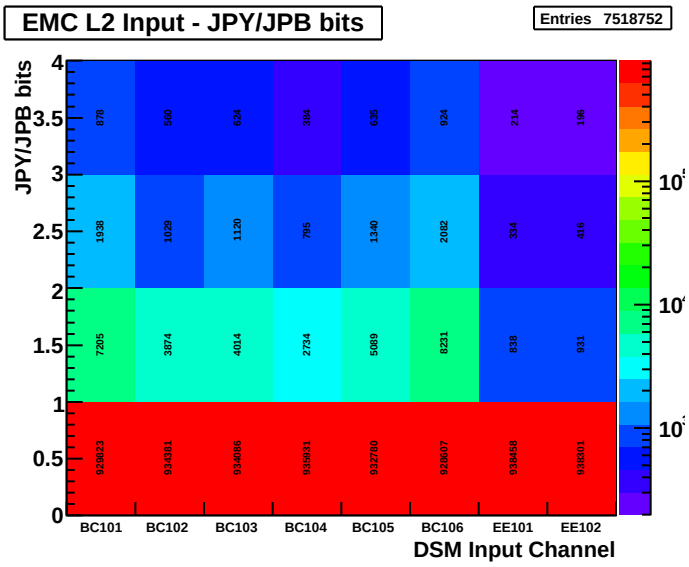

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

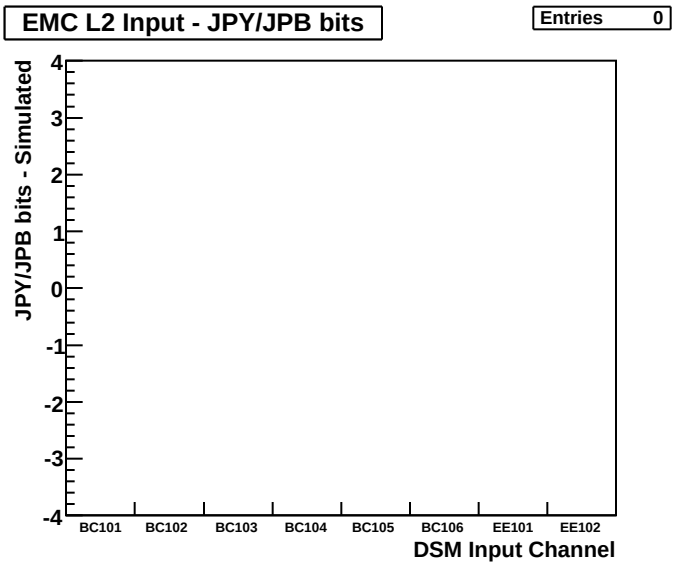

Endcap EMC L1 Input - High Tower Bits
Entries 1.127813e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

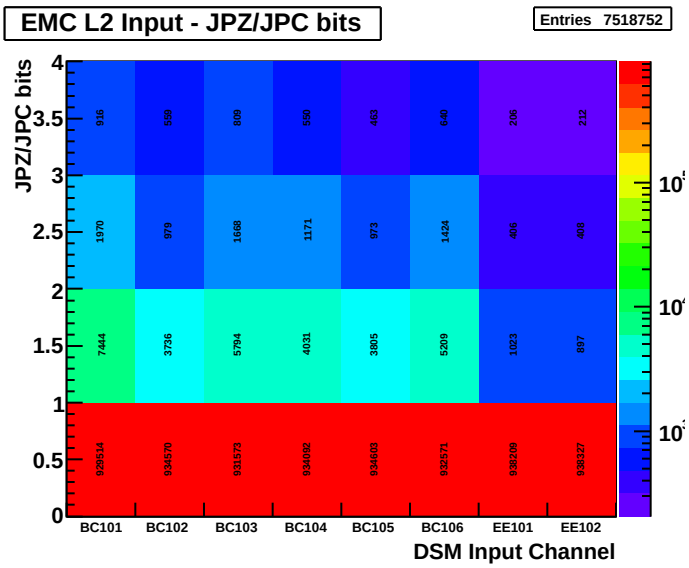

Endcap EMC L1 Input - High Tower Bits
Entries 11
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

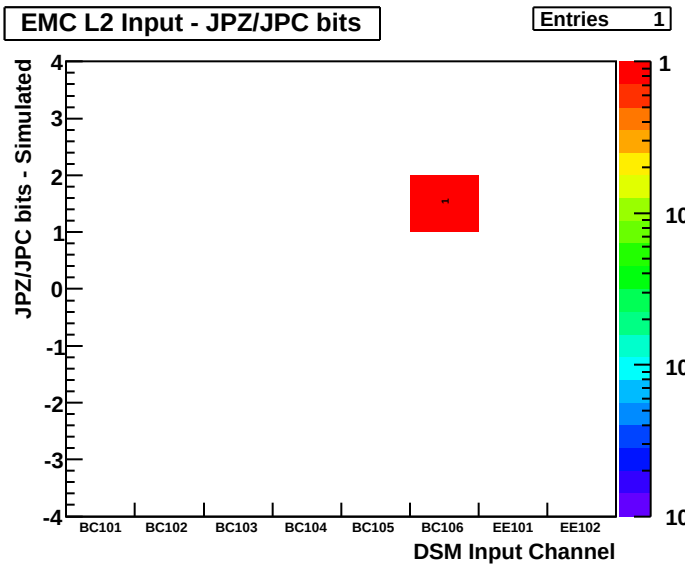

EMC L2 Input - JPX/JPA bits
Entries 7518752
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1172 847 815 550 1127 716 197 217
2317 1813 1631 1055 2440 1451 426 414
8524 6384 5695 3565 9944 4957 846 914
927831 930800 931703 934674 926333 932720 938375 938209

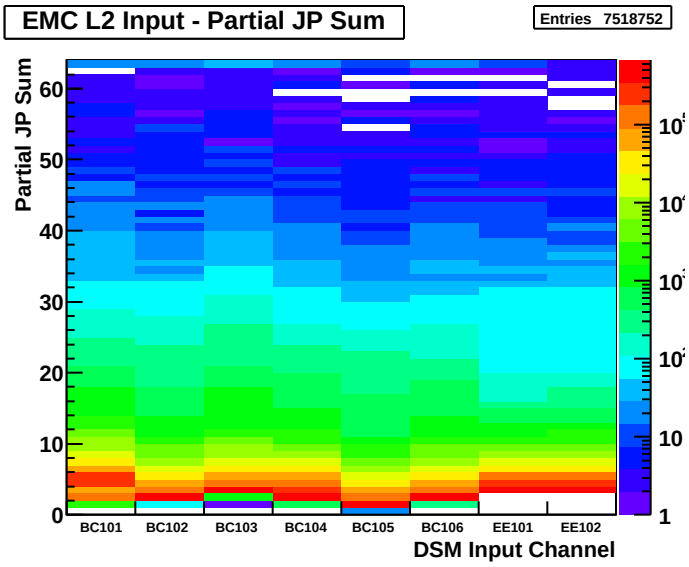

EMC L2 Input - JPX/JPA bits
Entries 1
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

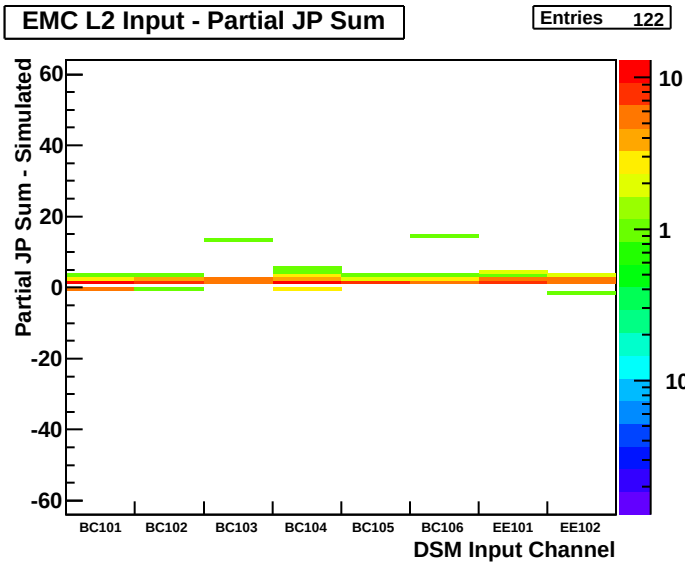

EMC L2 Input - JPY/JPB bits
Entries 7518752
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
878 560 624 384 635 924 214 196
1938 1029 1120 795 1340 2082 334 416
7205 3874 4014 2734 5089 8231 838 931
928823 934381 934086 935931 932780 928607 938458 938301

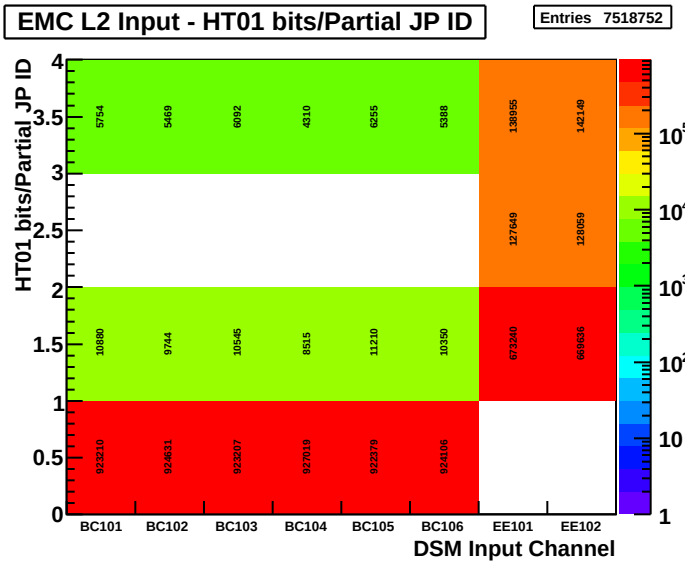

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

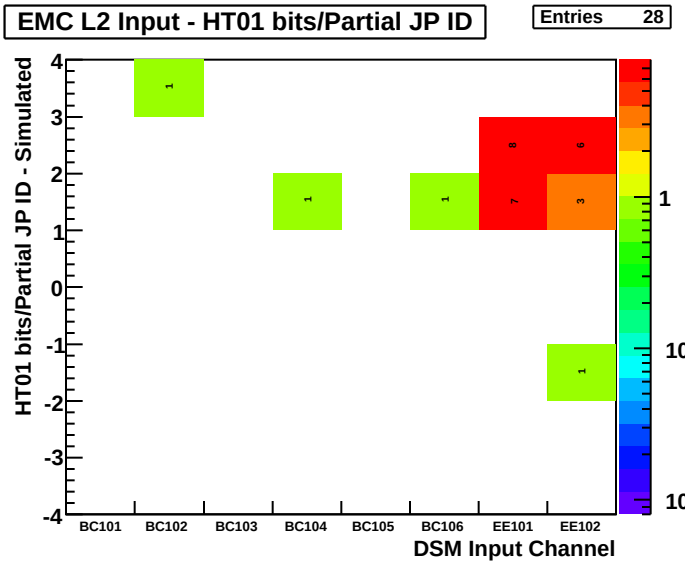

EMC L2 Input - JPZ/JPC bits
Entries 7518752
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
916 569 809 550 463 640 206 212
1970 979 1668 1171 973 1424 406 408
7444 3736 5794 4031 3805 5209 1023 897
929514 934570 931573 934092 934603 932571 938209 938327

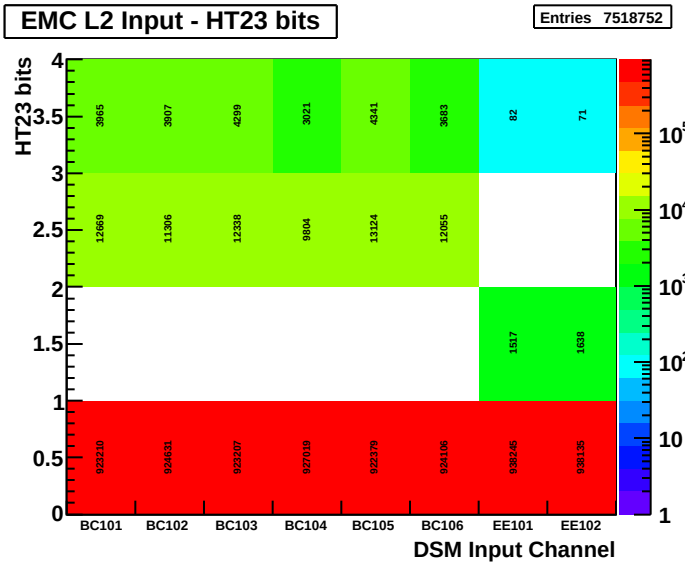

EMC L2 Input - JPZ/JPC bits
Entries 1
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

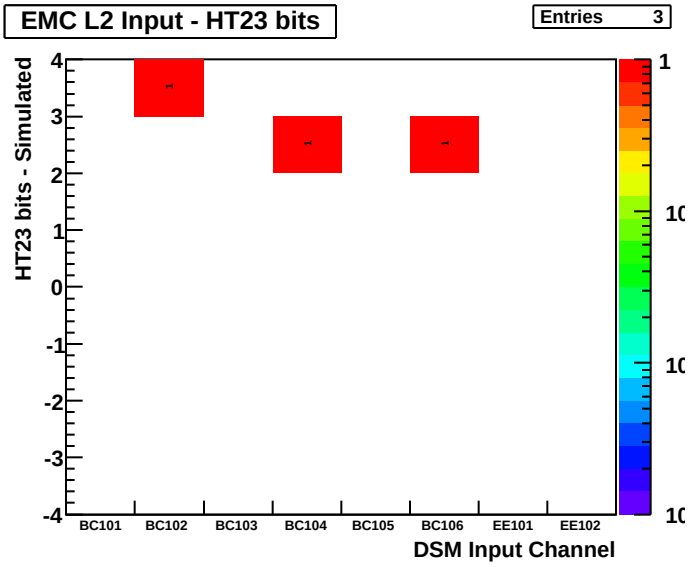

EMC L2 Input - Partial JP Sum
Entries 7518752
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

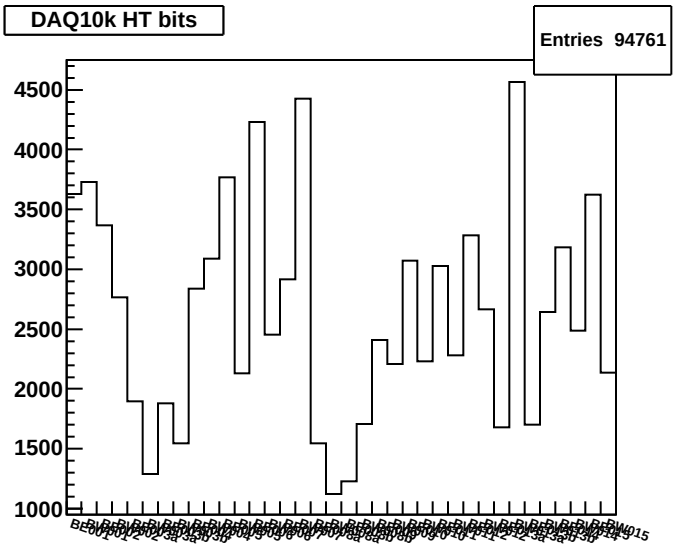

EMC L2 Input - Partial JP Sum
Entries 122
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

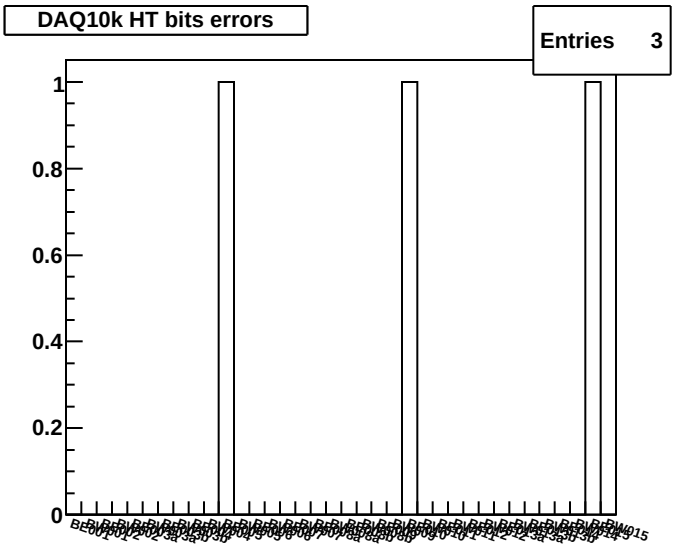

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7518752
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

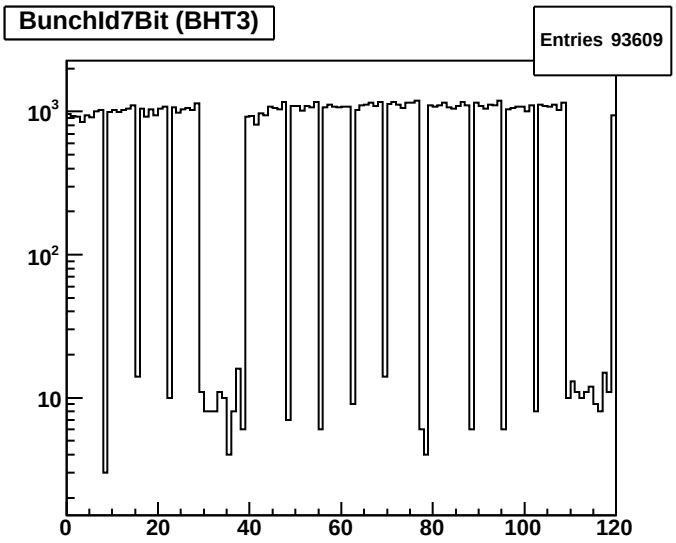

EMC L2 Input - HT01 bits/Partial JP ID
Entries 28
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

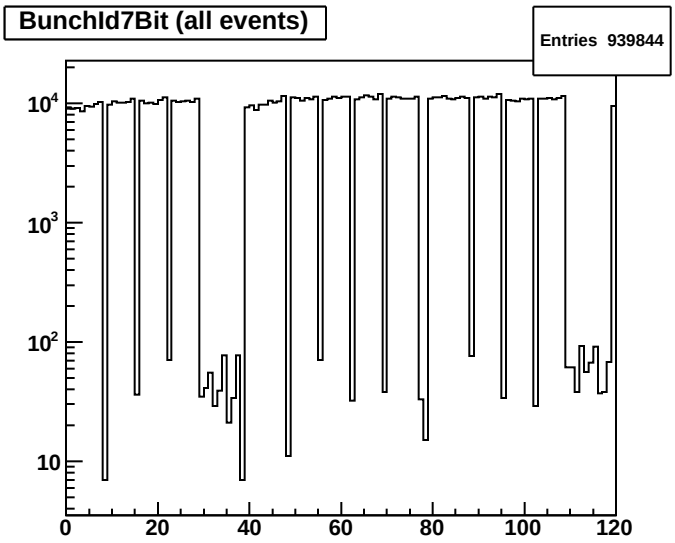

EMC L2 Input - HT23 bits
Entries 7518752
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

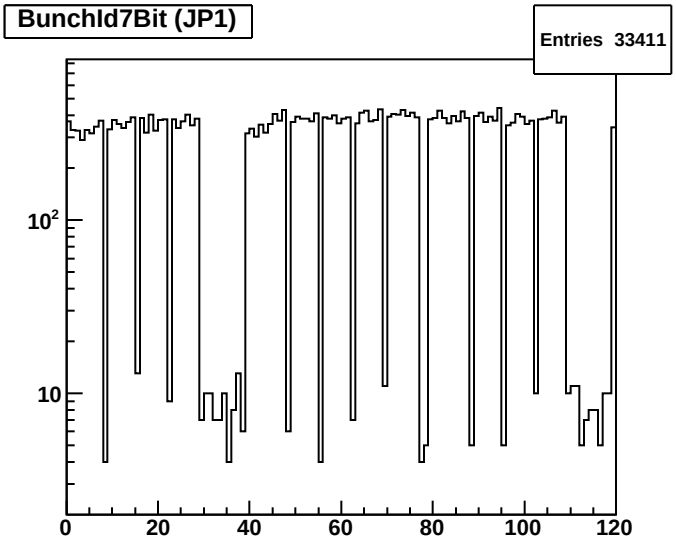

EMC L2 Input - HT23 bits
Entries 3
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

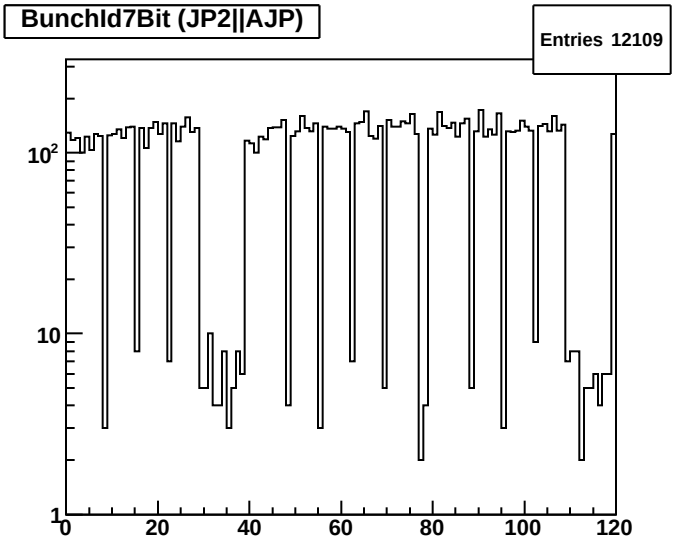

DAQ10k HT bits
Entries 94761
4500
4000
3500
3000
2500
2000
1500
1000

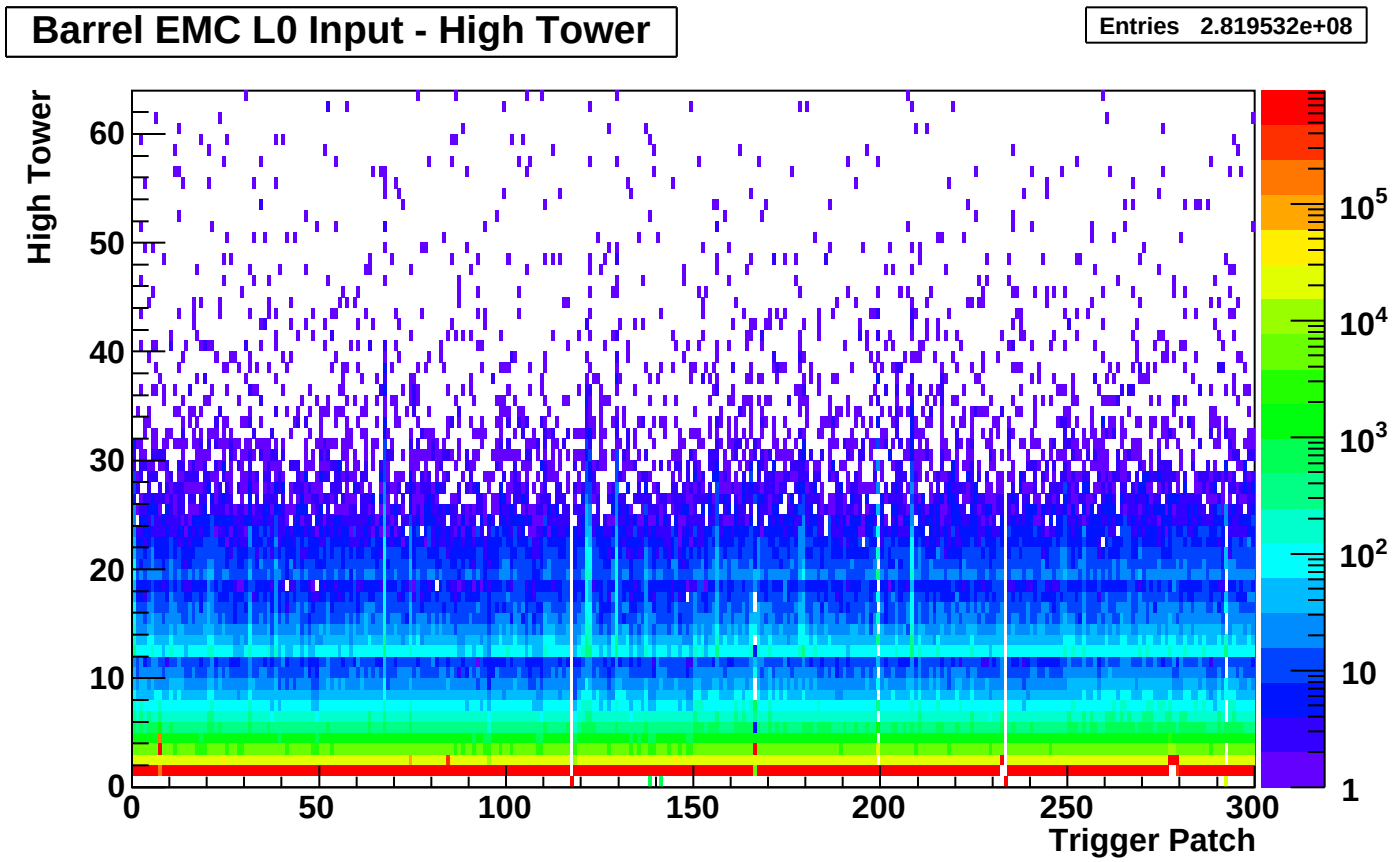

DAQ10k HT bits errors
Entries 3
1
0.8
0.6
0.4
0.2
0

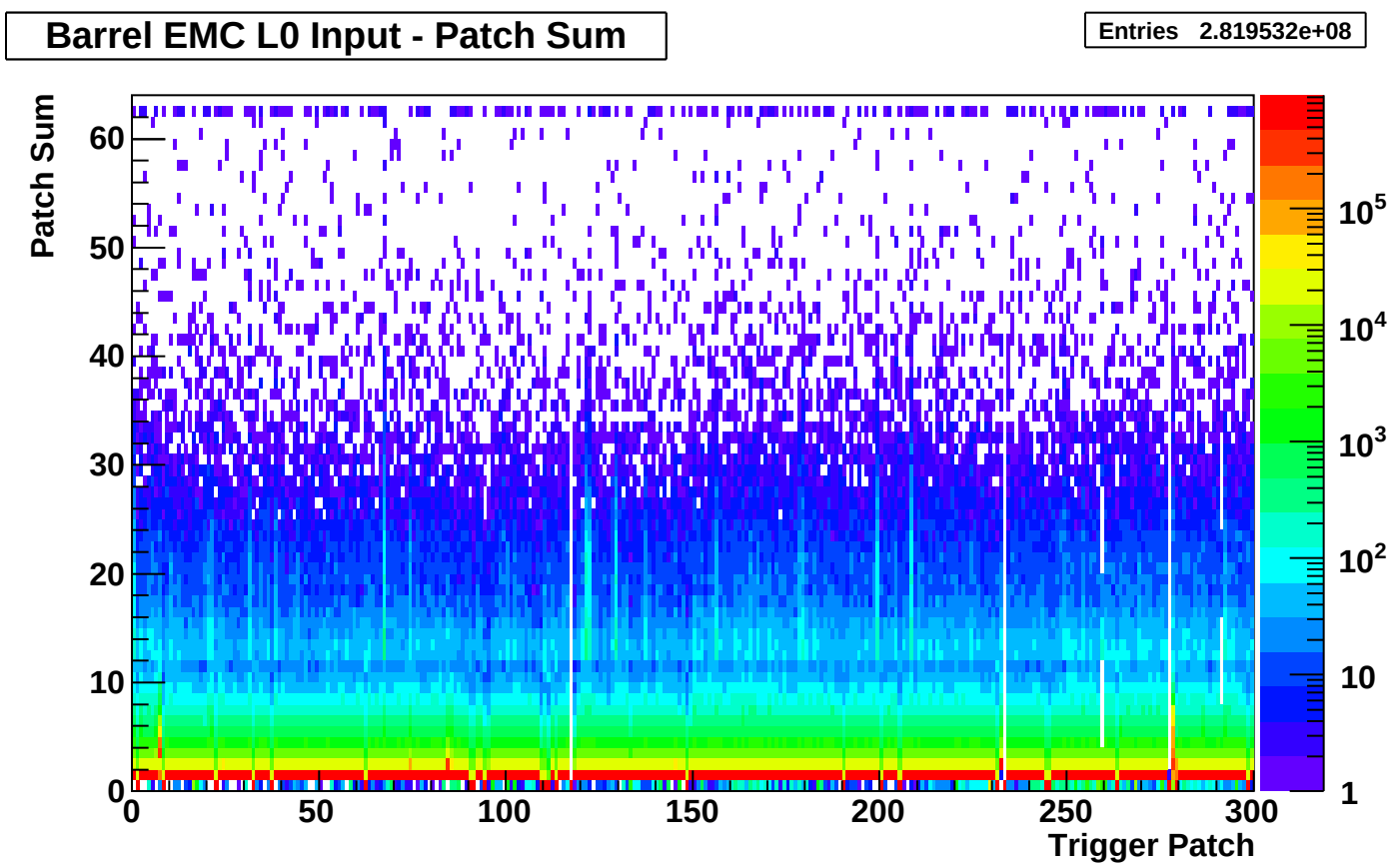

BunchId7Bit (BHT3)
Entries 93609
10^3
10^2
10
0
20
40
60
80
100
120

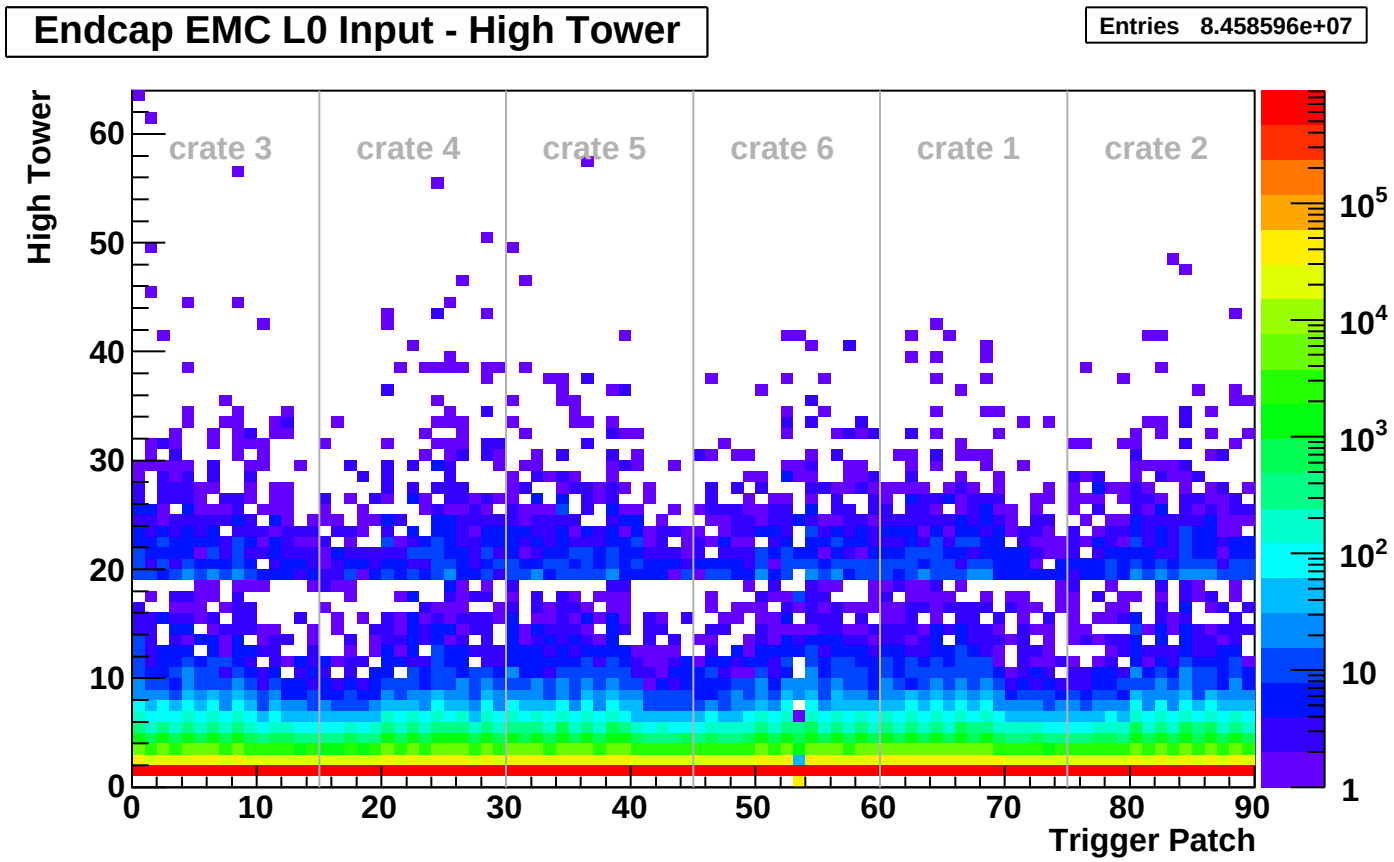

BunchId7Bit (all events)
Entries 939844
10^4
10^3
10^2
10
0
20
40
60
80
100
120

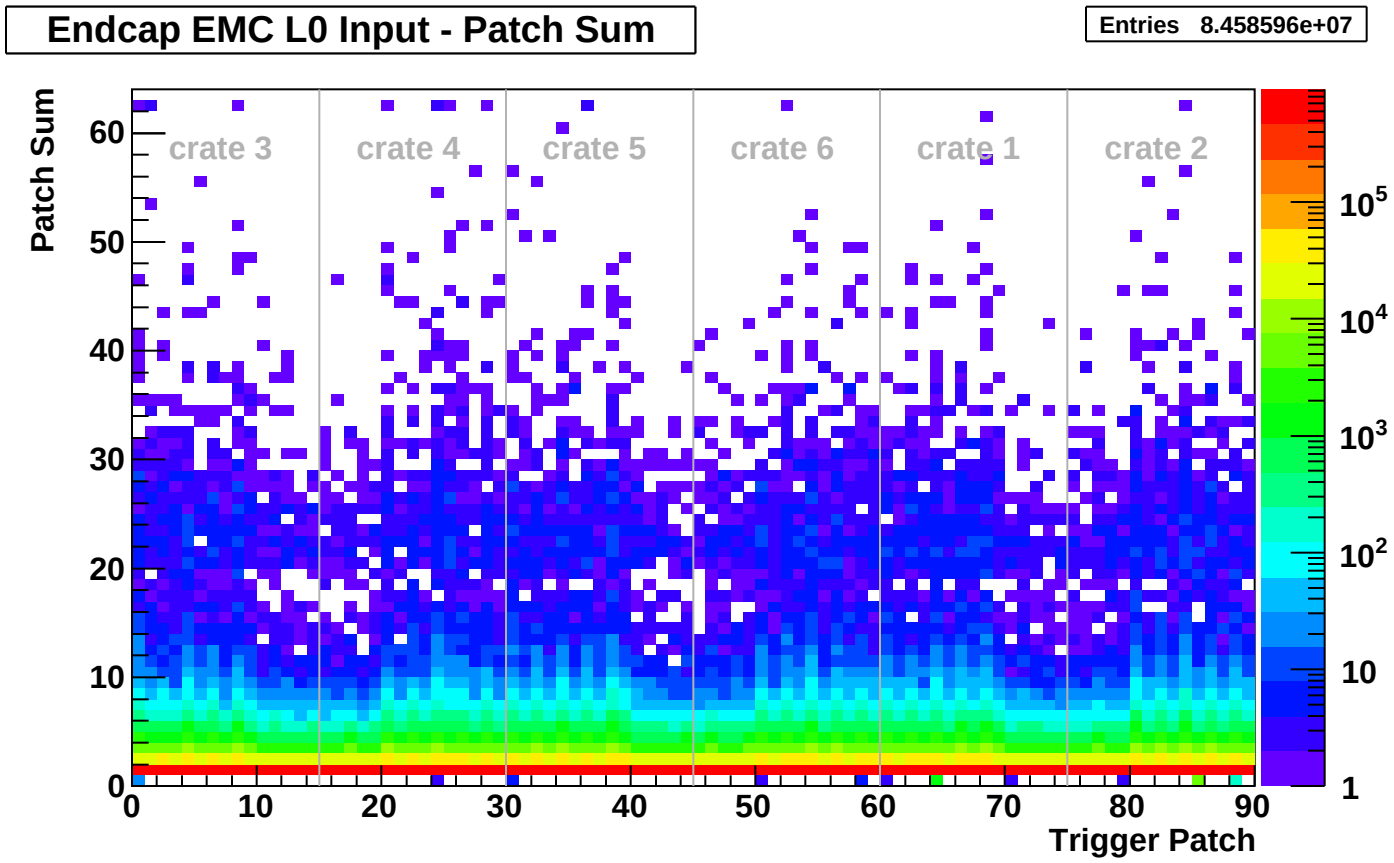

BunchId7Bit (JP1)
Entries 33411
10^2
10
0
20
40
60
80
100
120

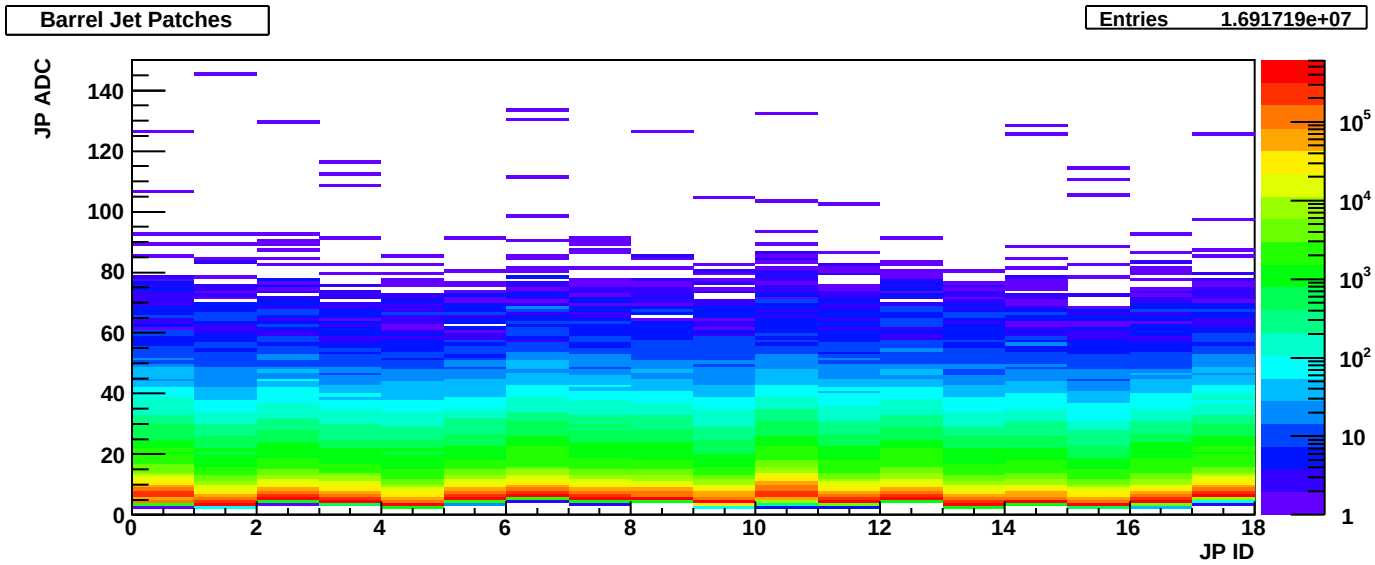

BunchId7Bit (JP2||AJP)
Entries 12109
10^2
10
1
0
20
40
60
80
100
120

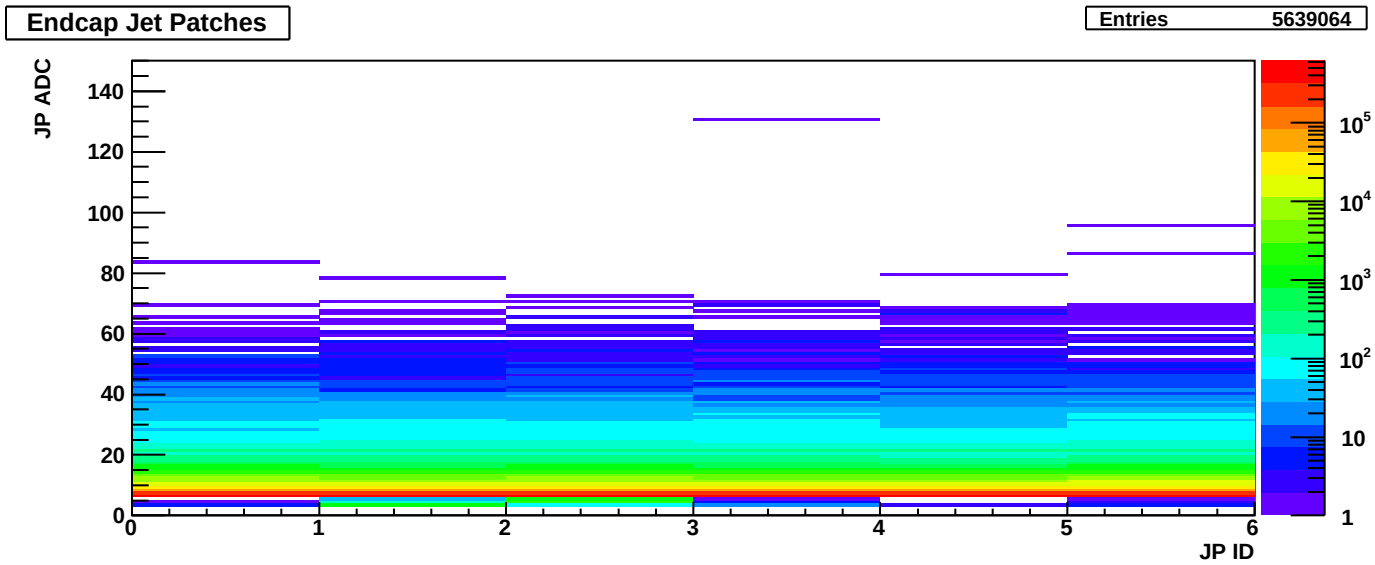

Barrel EMC L0 Input - High Tower
Entries 2.819532e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

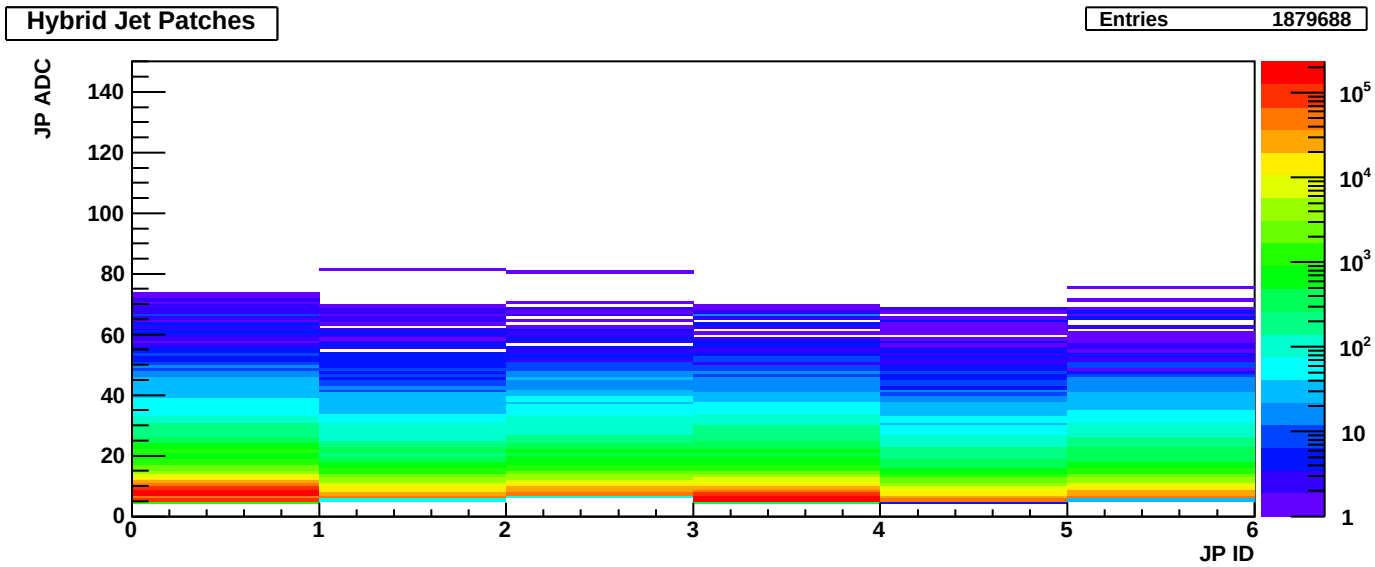

Barrel EMC L0 Input - Patch Sum
Entries 2.819532e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

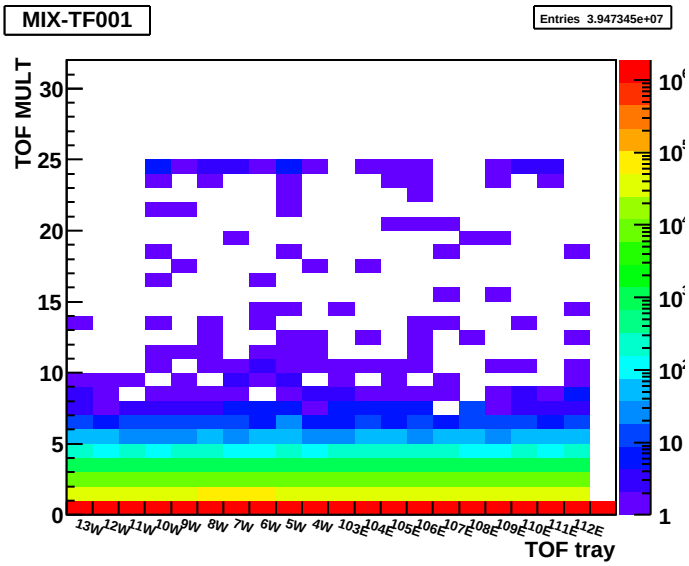

Endcap EMC L0 Input - High Tower
Entries 8.458596e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

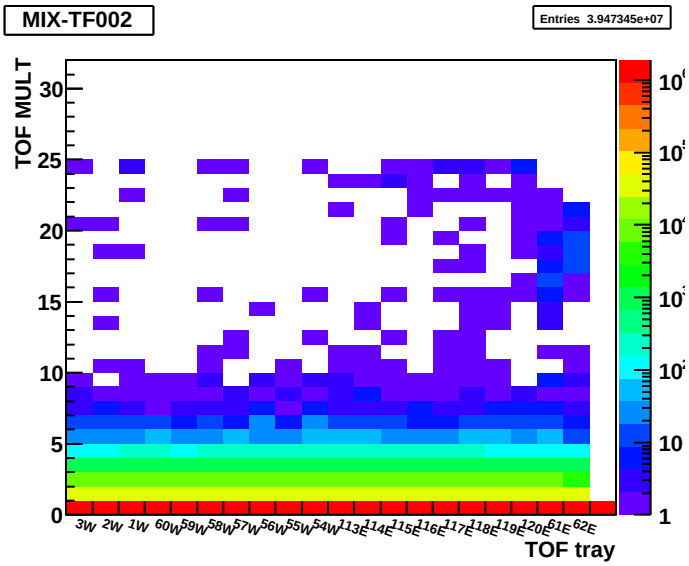

Endcap EMC L0 Input - Patch Sum
Entries 8.458596e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

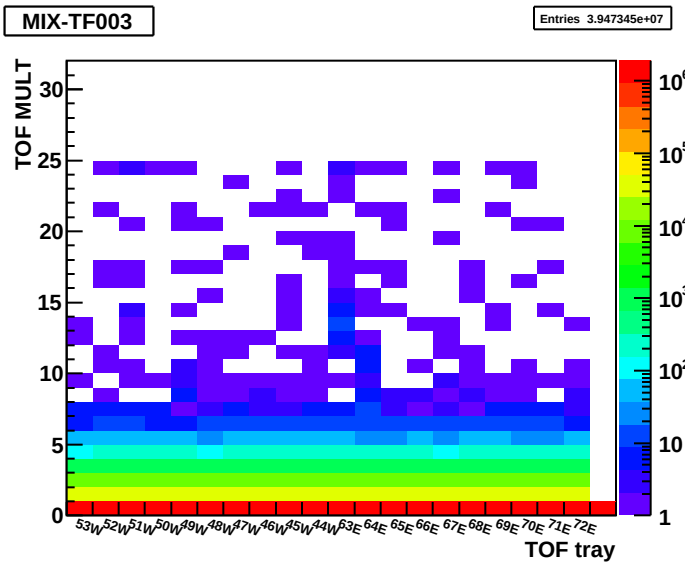

Barrel Jet Patches
Entries 1.691719e+07
JP ADC
JP ID

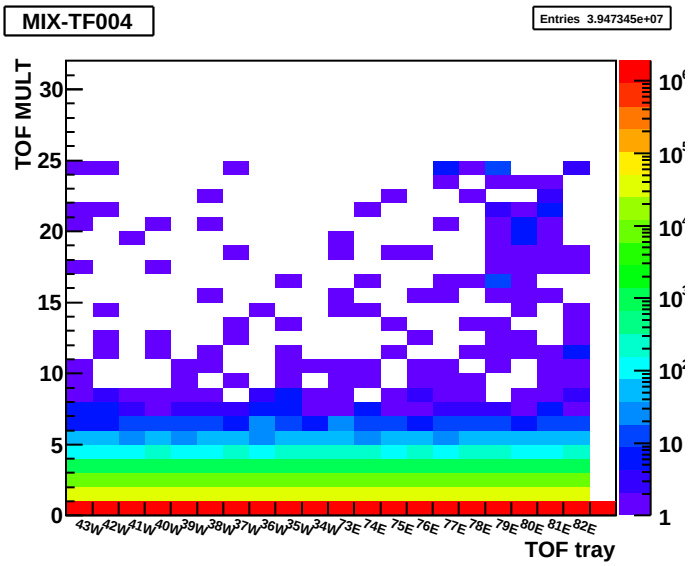

Endcap Jet Patches
Entries 5639064
JP ADC
JP ID

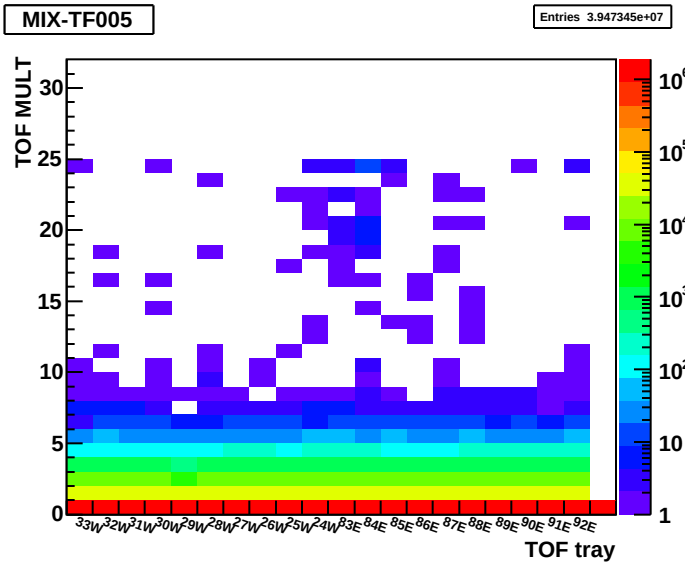

Hybrid Jet Patches
Entries 1879688
JP ADC
JP ID

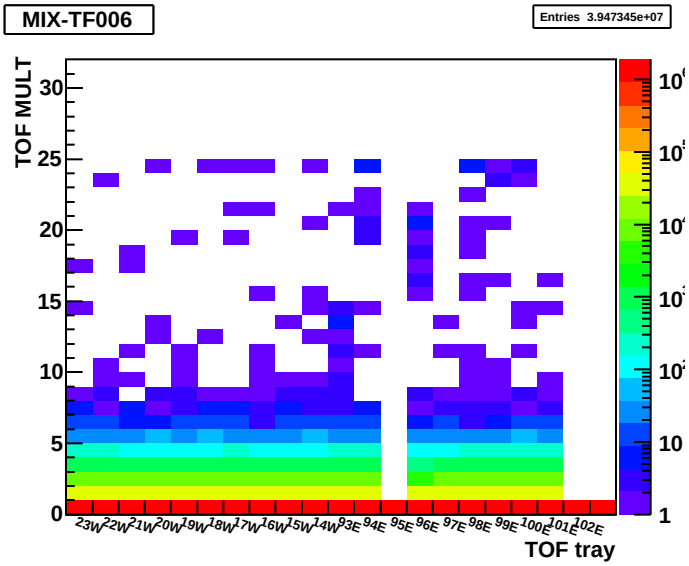

MIX-TF001
Entries 3.947345e+07
TOF MULT
TOF tray

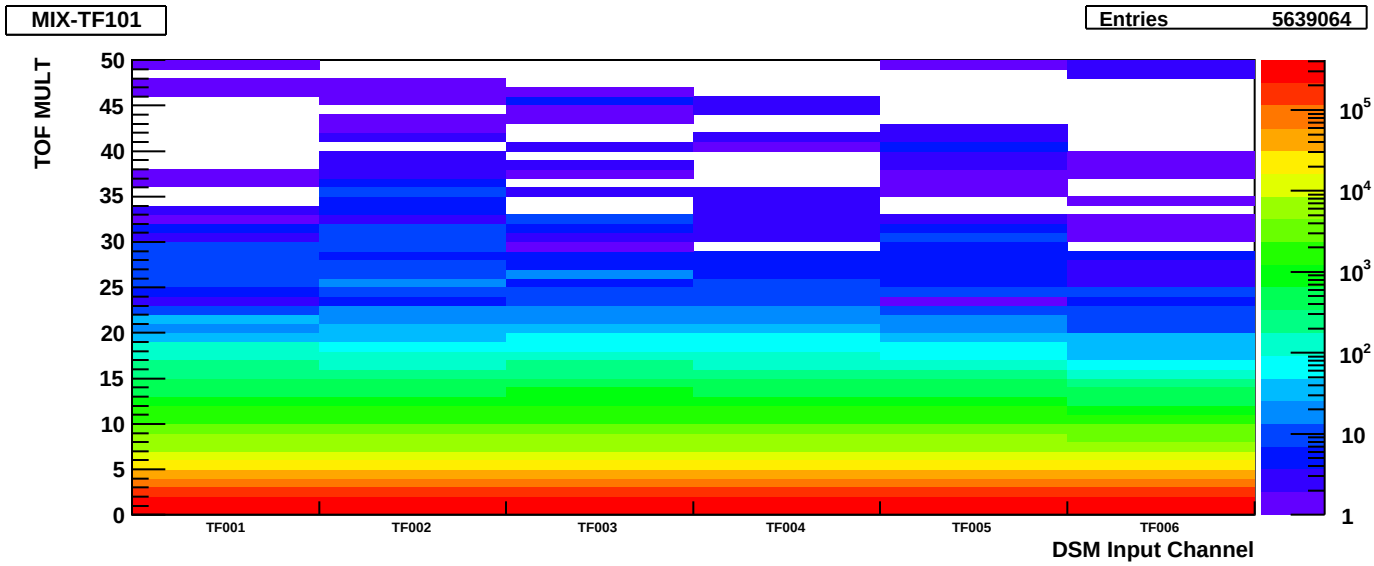

MIX-TF002
Entries 3.947345e+07
TOF MULT
TOF tray

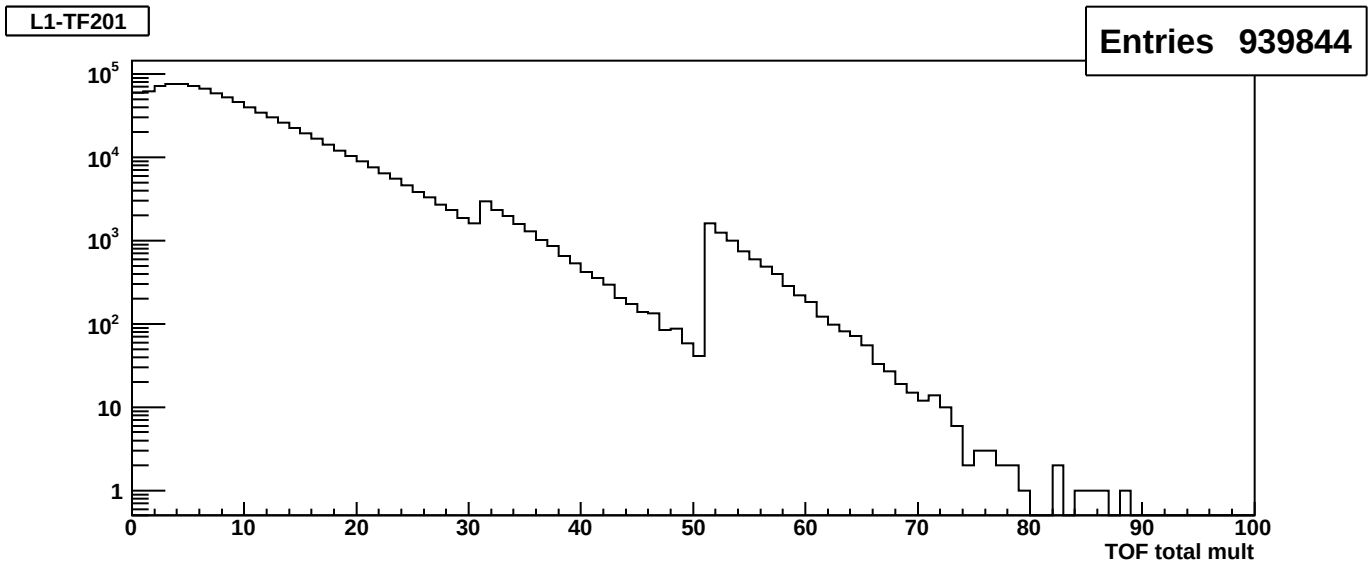

MIX-TF003
Entries 3.947345e+07
TOF MULT
TOF tray

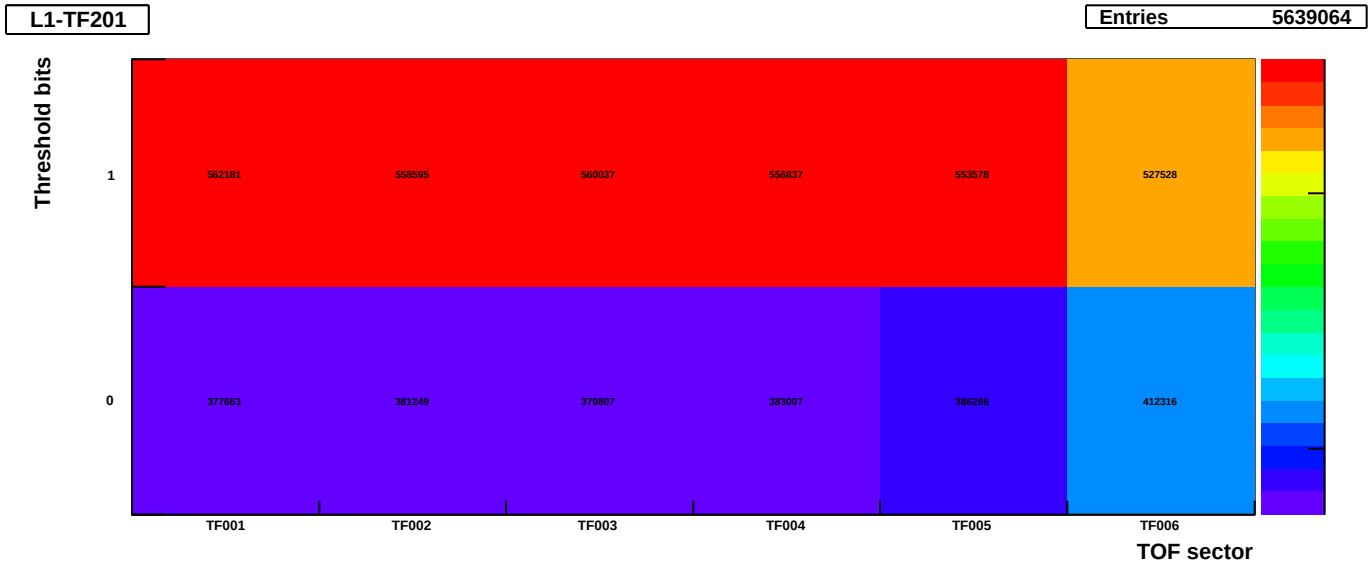

MIX-TF004
Entries 3.947345e+07
TOF MULT
TOF tray

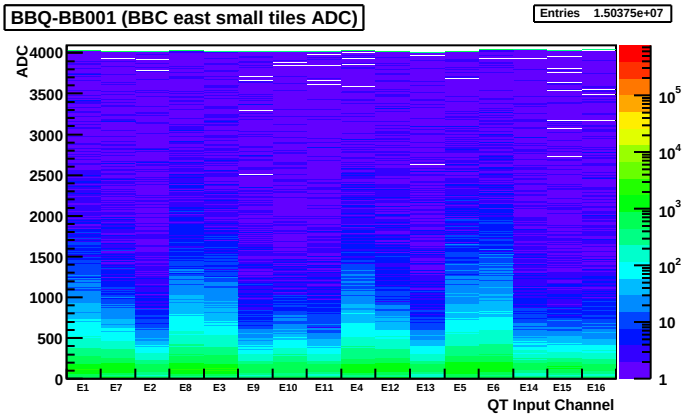

MIX-TF005
Entries 3.947345e+07
TOF MULT
TOF tray

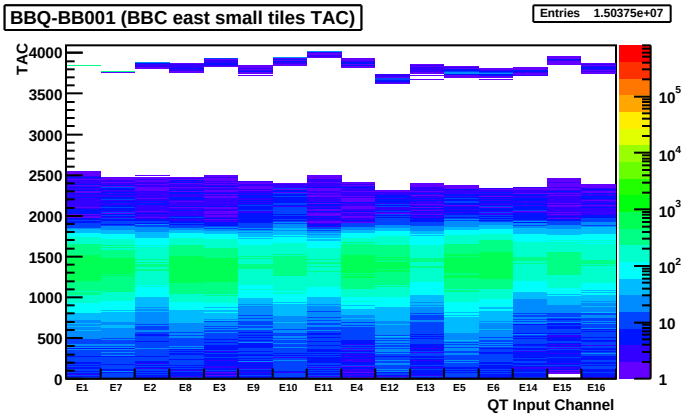

MIX-TF006
Entries 3.947345e+07
TOF MULT
TOF tray

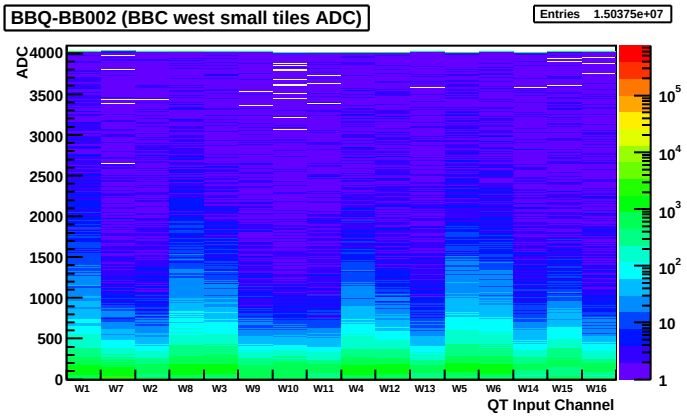

MIX-TF101
Entries 5639064
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

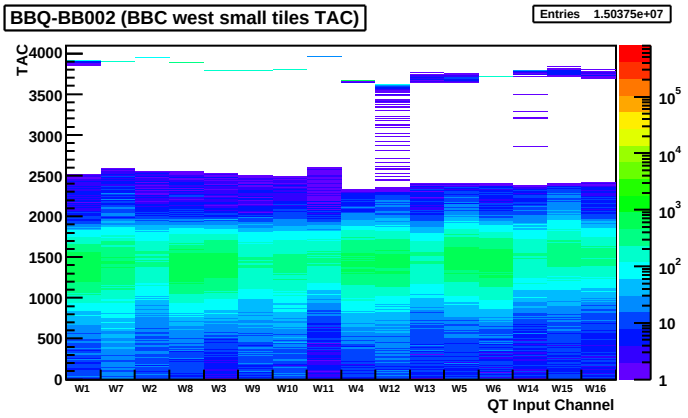

L1-TF201
Entries 939844
TOF total mult

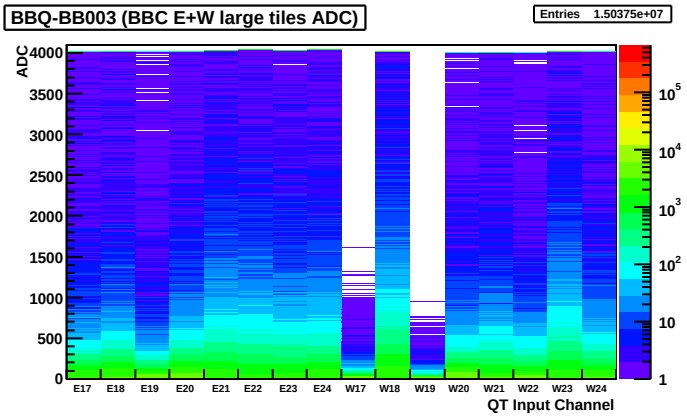

L1-TF201
Entries 5639064
Threshold bits
562181
558595
560037
556837
553578
527528
377663
381249
379807
383007
386266
412316
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

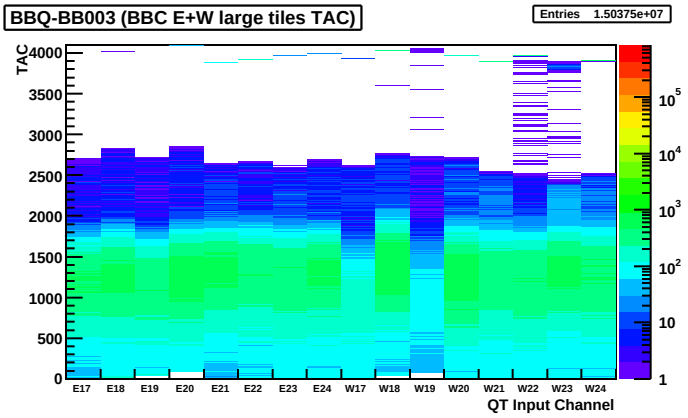

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.50375e+07
ADC
QT Input Channel

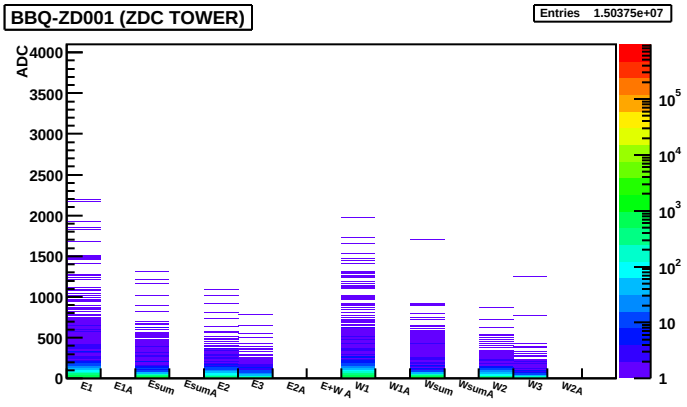

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.50375e+07
TAC
QT Input Channel

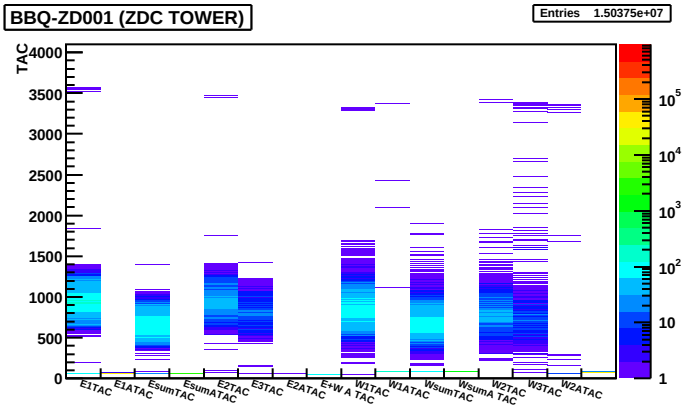

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.50375e+07
ADC
QT Input Channel

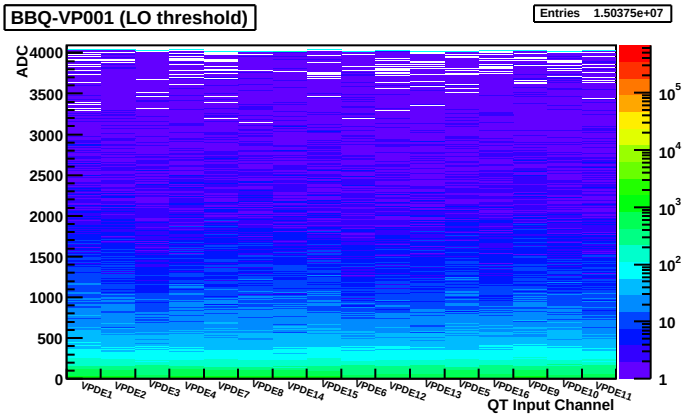

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.50375e+07
TAC
QT Input Channel

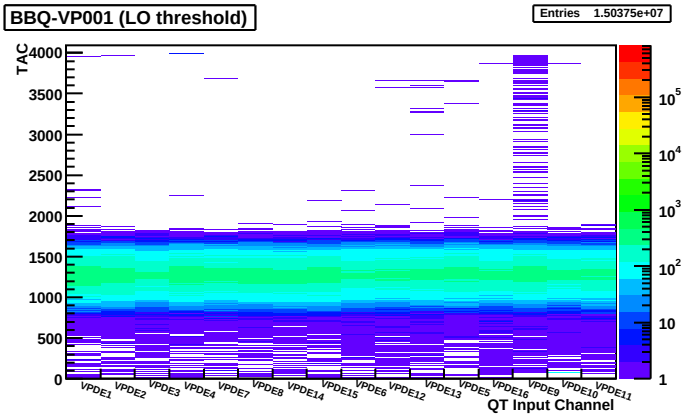

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.50375e+07
ADC
QT Input Channel

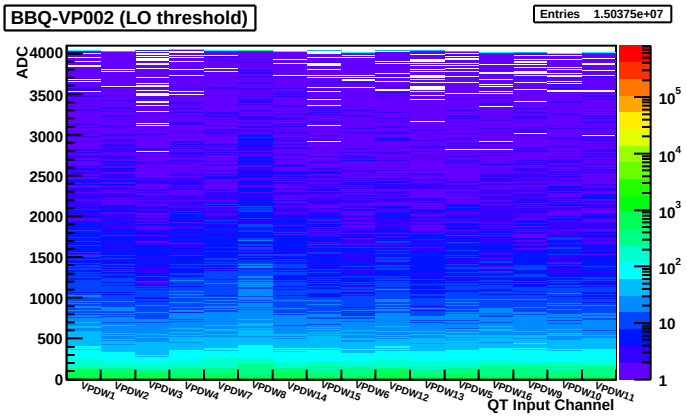

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.50375e+07
TAC
QT Input Channel

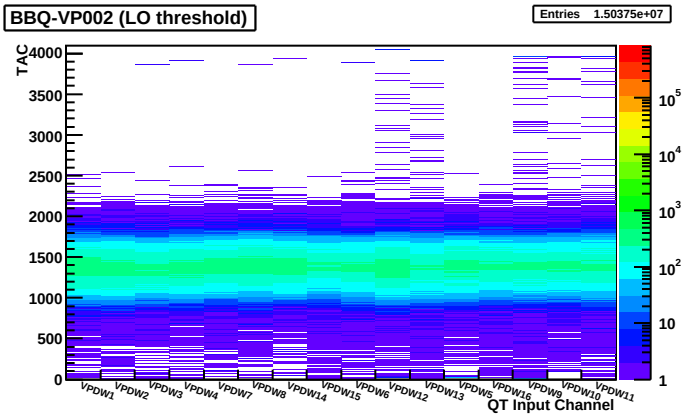

BBQ-ZD001 (ZDC TOWER)
Entries 1.50375e+07
ADC

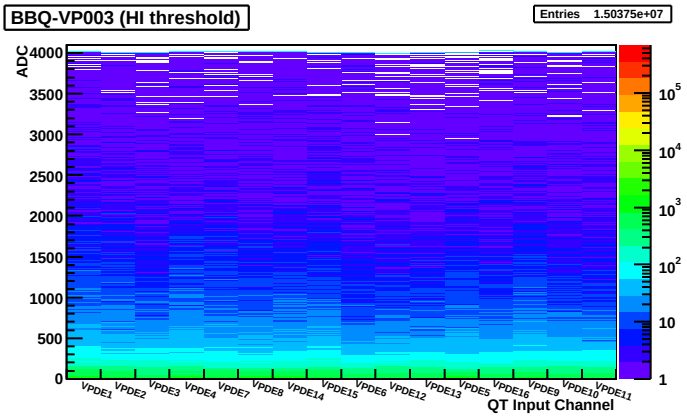

BBQ-ZD001 (ZDC TOWER)
Entries 1.50375e+07
TAC

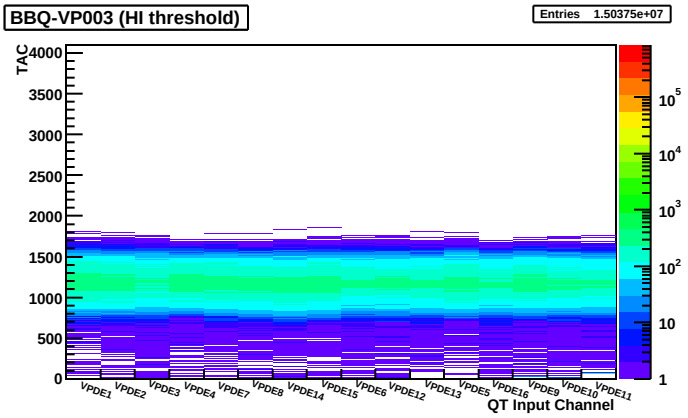

BBQ-VP001 (LO threshold)
Entries 1.50375e+07
ADC
QT Input Channel

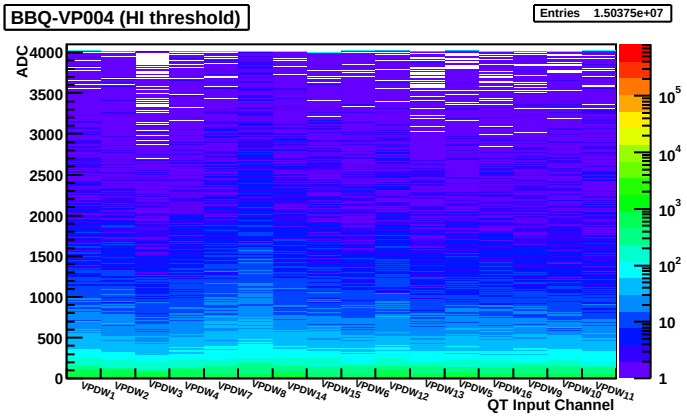

BBQ-VP001 (LO threshold)
Entries 1.50375e+07
TAC
QT Input Channel

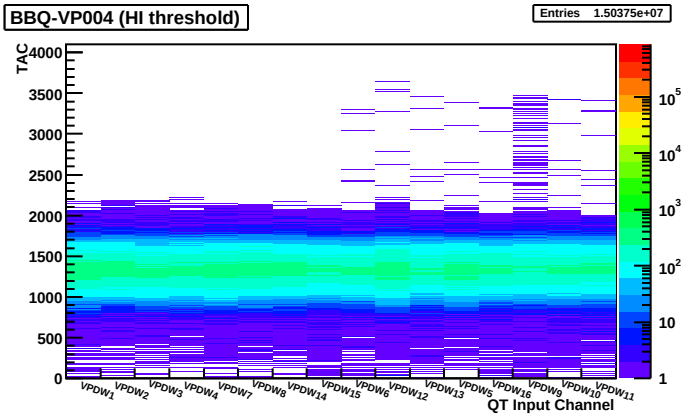

BBQ-VP002 (LO threshold)
Entries 1.50375e+07
ADC
QT Input Channel

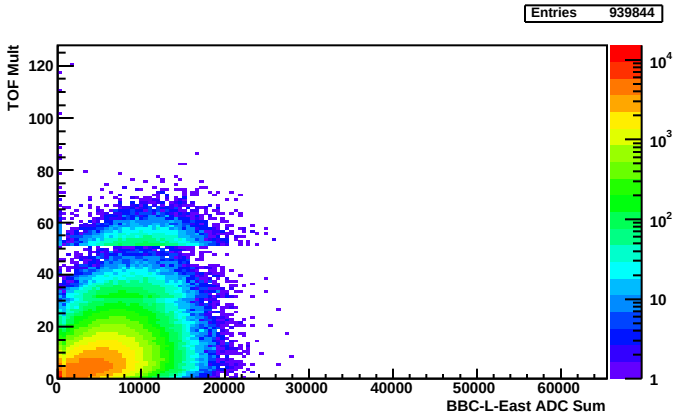

BBQ-VP002 (LO threshold)
Entries 1.50375e+07
TAC
QT Input Channel

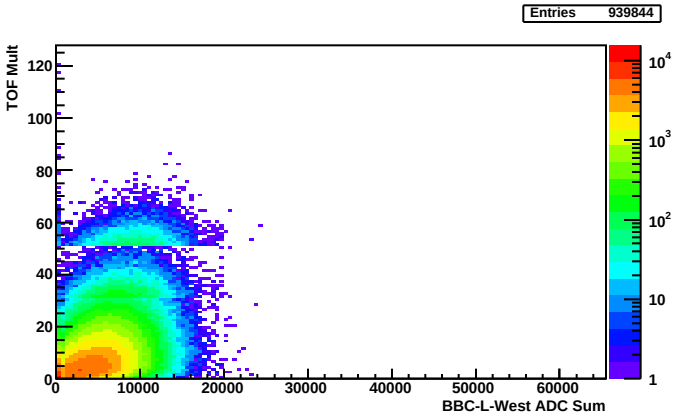

BBQ-VP003 (HI threshold)
Entries 1.50375e+07
ADC
QT Input Channel

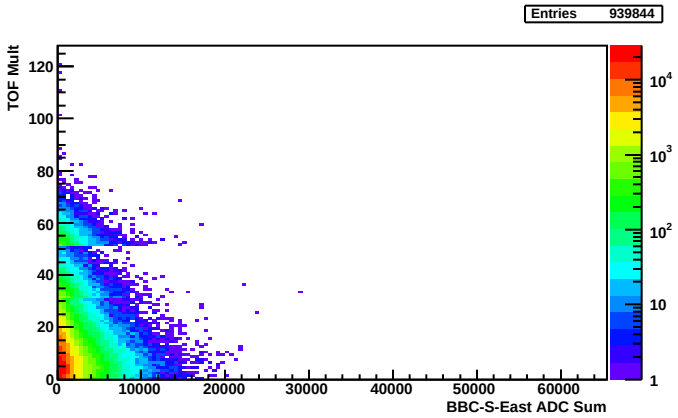

BBQ-VP003 (HI threshold)
Entries 1.50375e+07
TAC
QT Input Channel

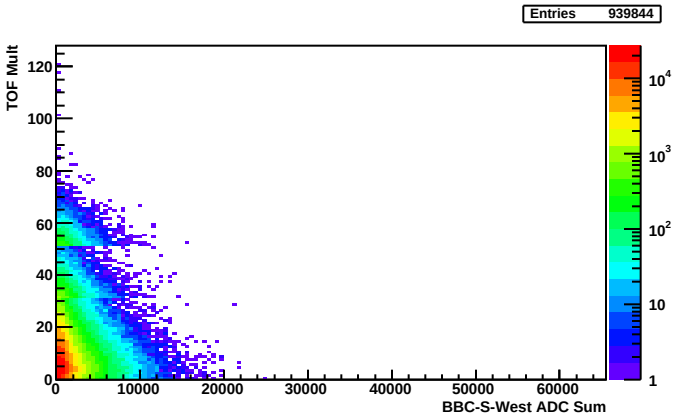

BBQ-VP004 (HI threshold)
Entries 1.50375e+07
ADC
QT Input Channel

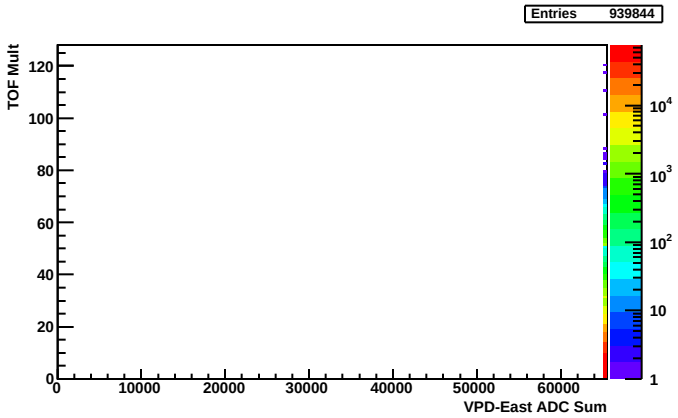

BBQ-VP004 (HI threshold)
Entries 1.50375e+07
TAC
QT Input Channel

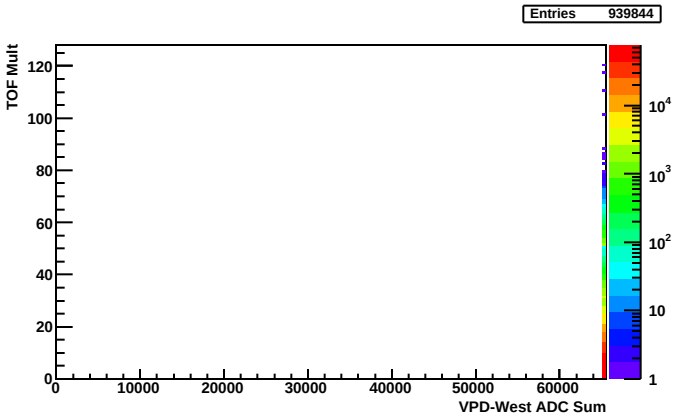

Entries 939844
TOF Mult
BBC-L-East ADC Sum

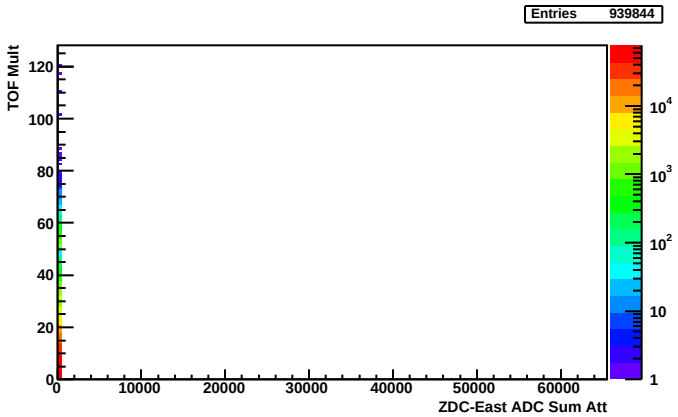

Entries 939844
TOF Mult
BBC-L-West ADC Sum

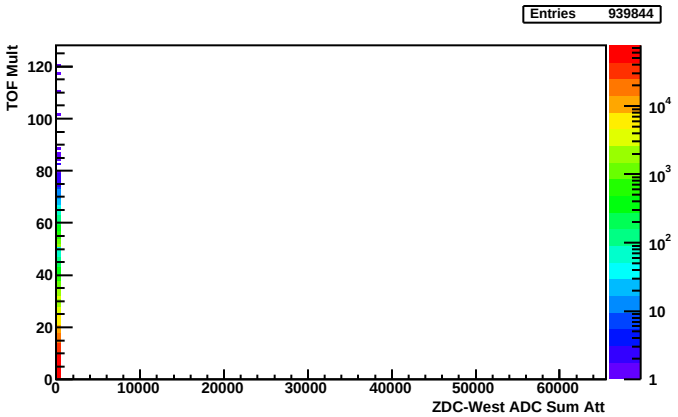

Entries 939844
TOF Mult
BBC-S-East ADC Sum

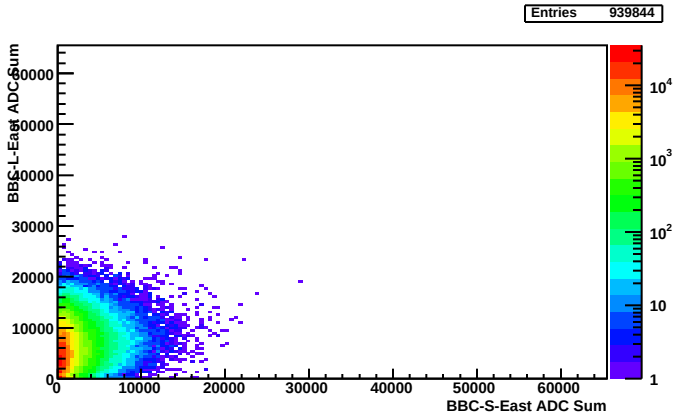

Entries 939844
TOF Mult
BBC-S-West ADC Sum

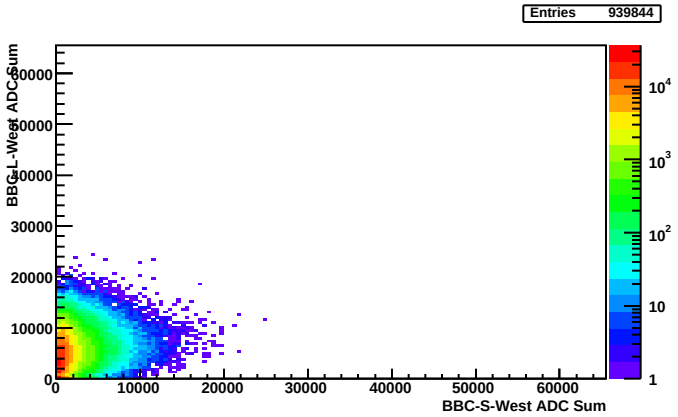

Entries 939844
TOF Mult
VPD-East ADC Sum

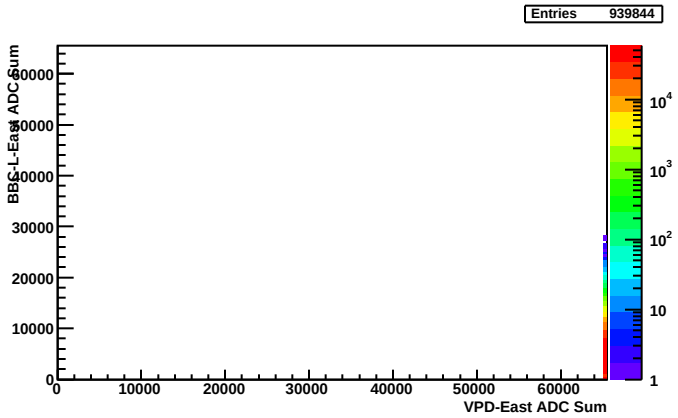

Entries 939844
TOF Mult
VPD-West ADC Sum

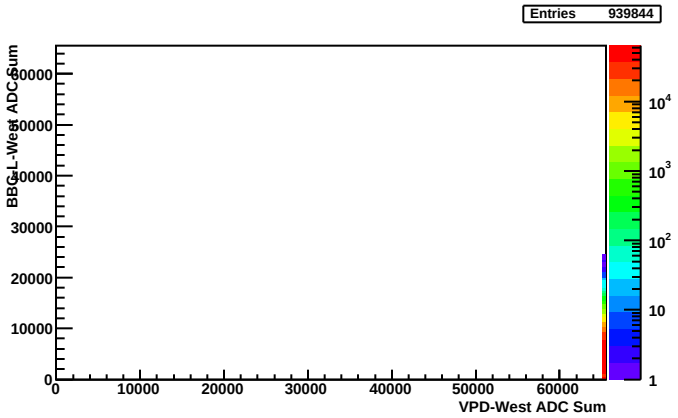

Entries 939844
TOF Mult
ZDC-East ADC Sum Att

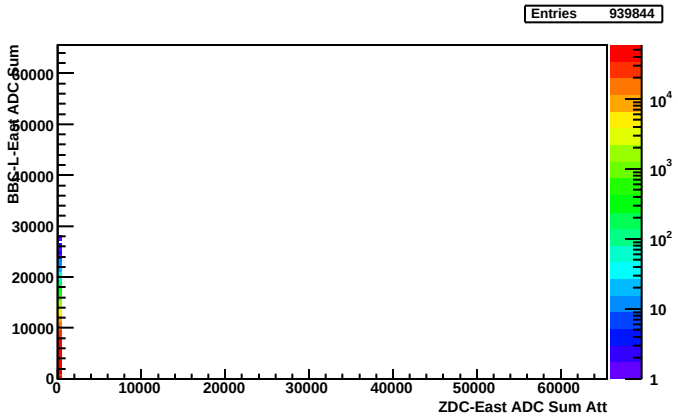

Entries 939844
TOF Mult
ZDC-West ADC Sum Att

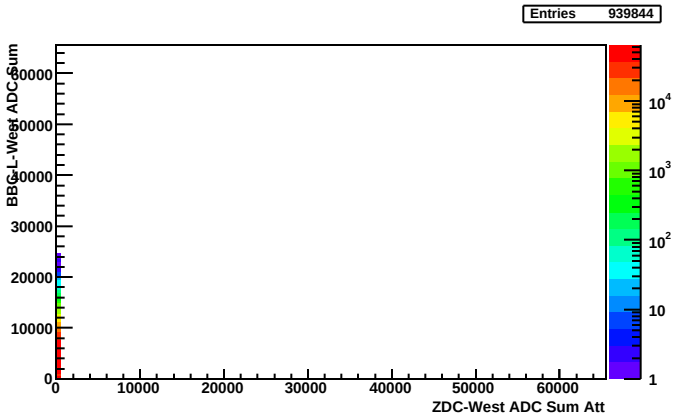

Entries 939844
BBC-L-East ADC Sum
BBC-S-East ADC Sum

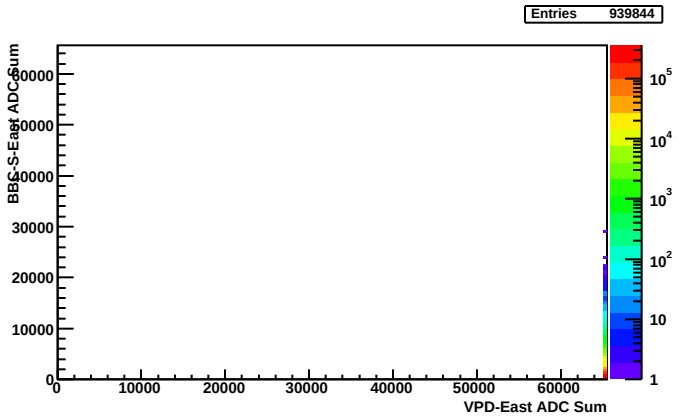

Entries 939844
BBC-L-West ADC Sum
BBC-S-West ADC Sum

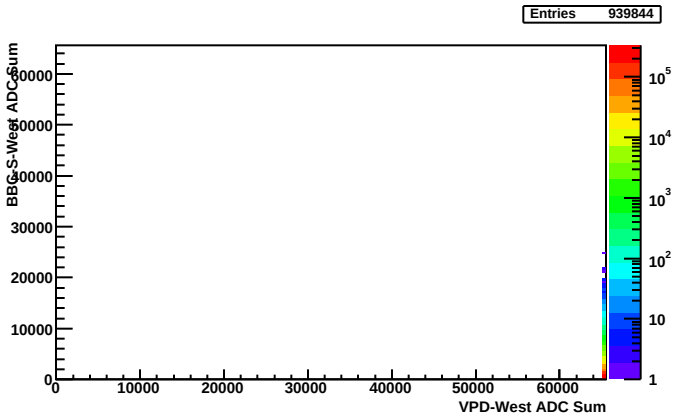

Entries 939844
BBC-L-East ADC Sum
VPD-East ADC Sum

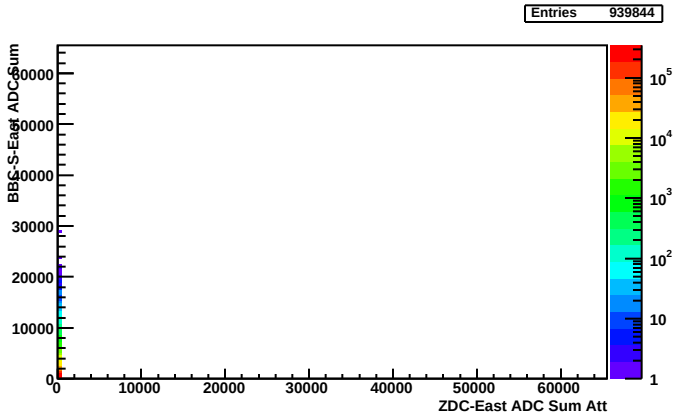

Entries 939844
BBC-L-West ADC Sum
VPD-West ADC Sum

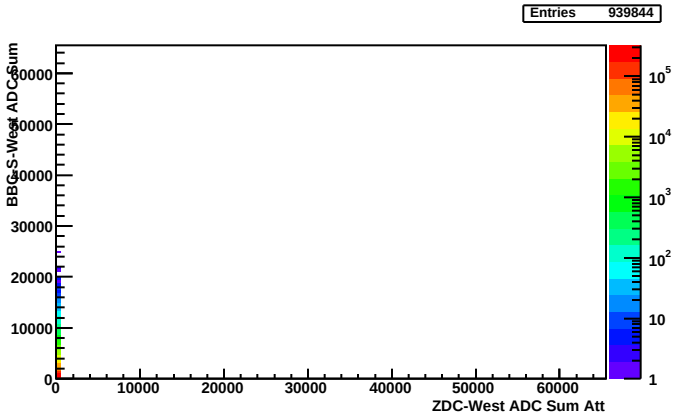

Entries 939844
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

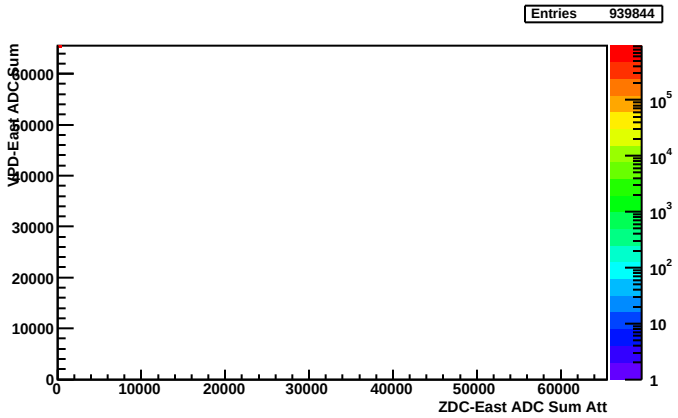

Entries 939844
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

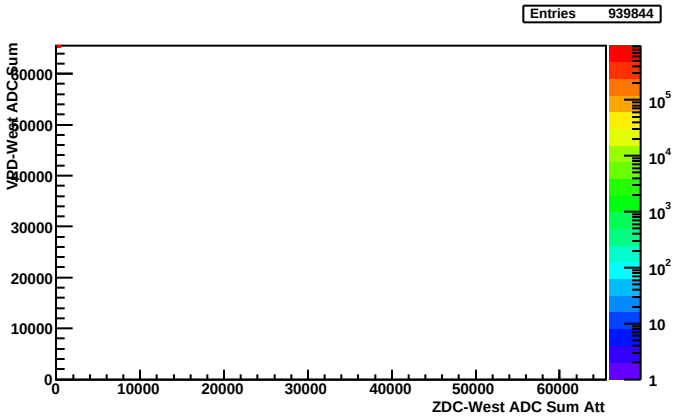

Entries 939844
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 939844
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 939844
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 939844
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 939844
VPD-East ADC Sum
ZDC-East ADC Sum Att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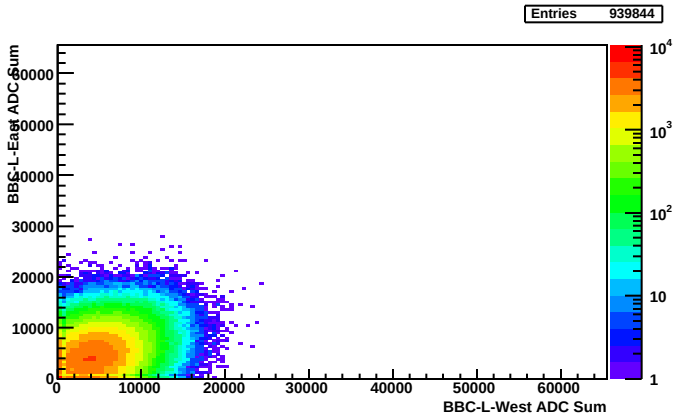
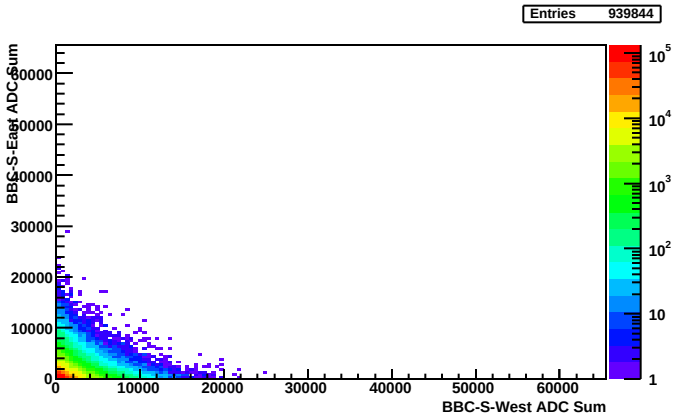
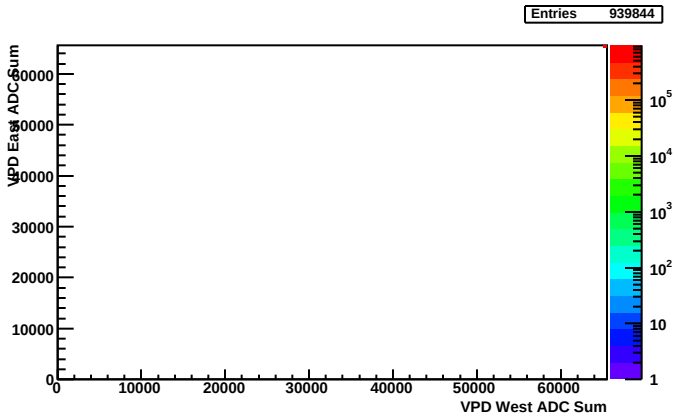
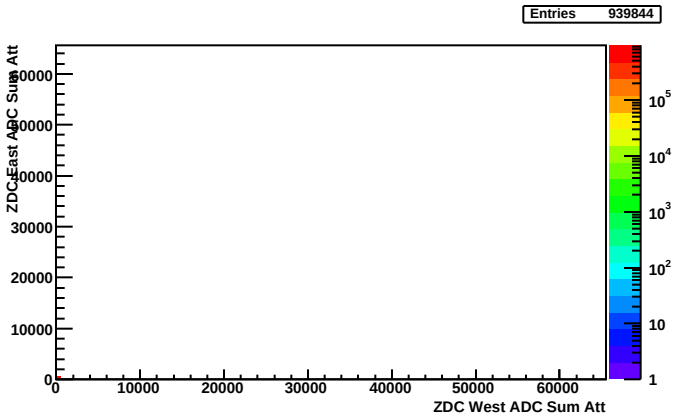
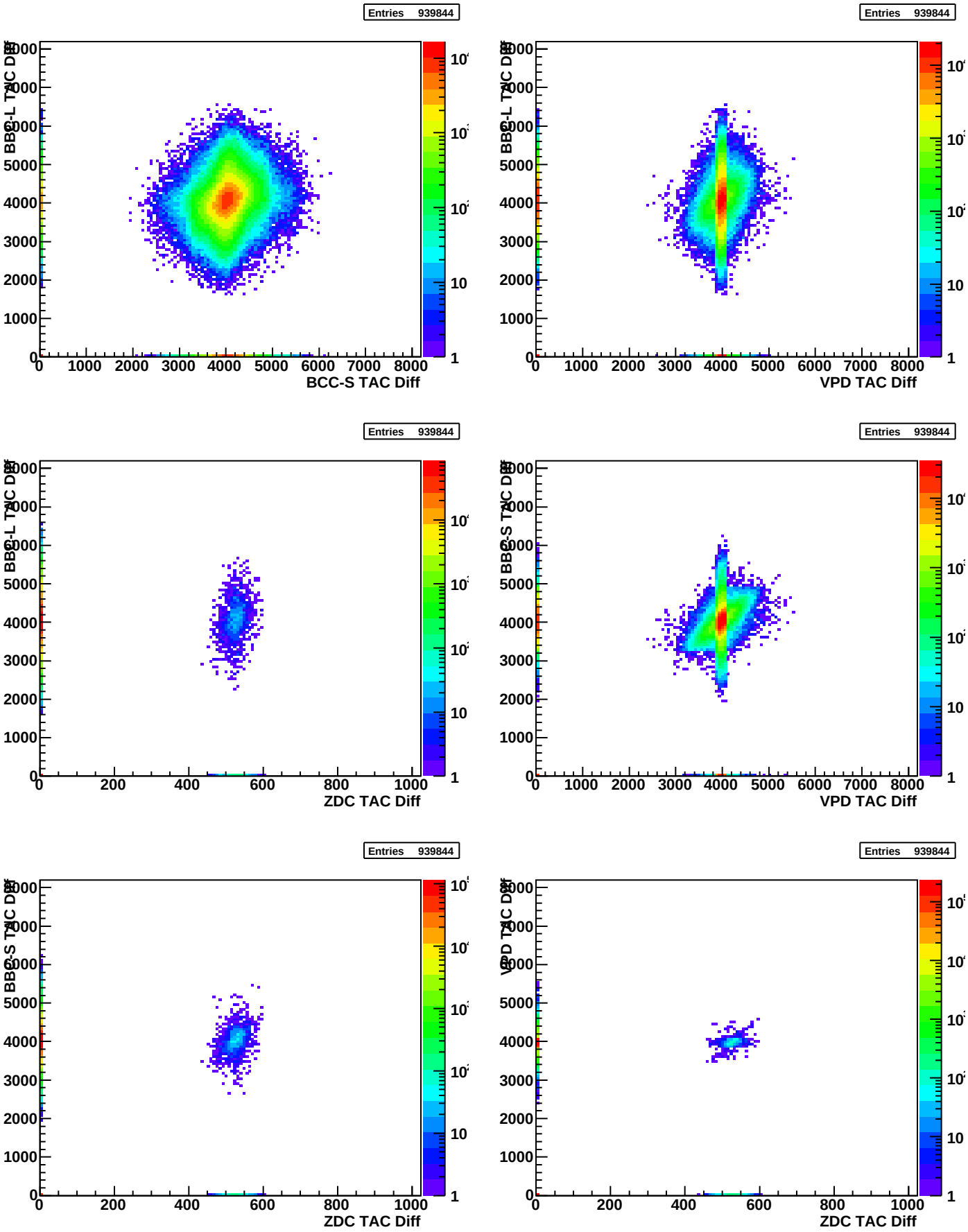
VPD-West ADC Sum
ZDC-West ADC Sum Att

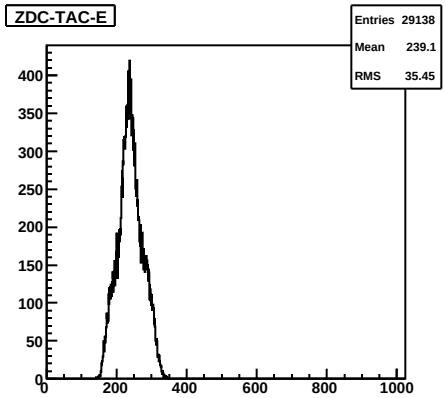

Entries 939844
BBC-L-East ADC Sum
BBC-L-West ADC Sum

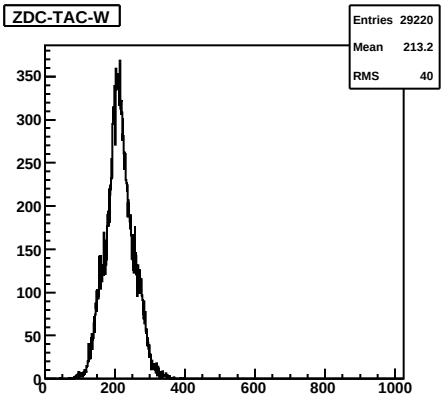

Entries 939844
BBC-S-East ADC Sum
BBC-S-West ADC Sum

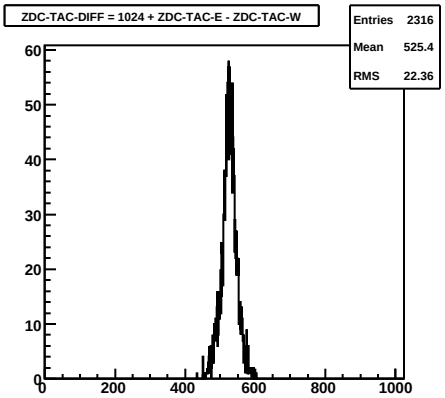

Entries 939844
VPD East ADC Sum
VPD West ADC Sum

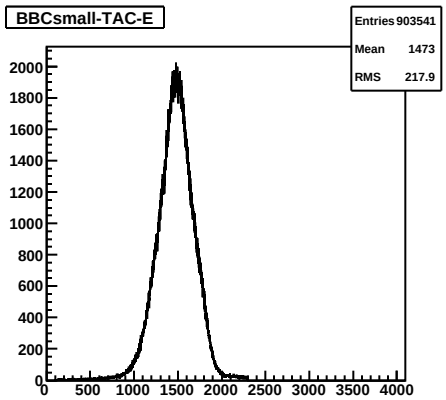

Entries 939844
ZDC East ADC Sum Att
ZDC West ADC Sum Att

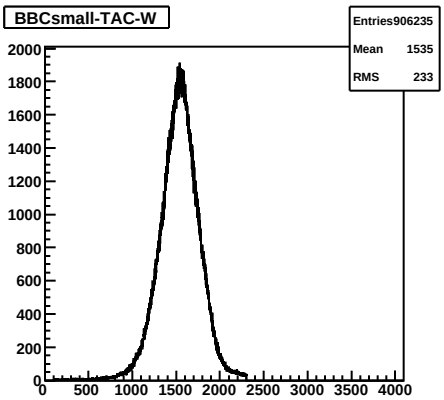

Entries 939844
BBC-L TAC Diff
BCC-S TAC Diff
Entries 939844
BBC-L TAC Diff
VPD TAC Diff
Entries 939844
BBC-L TAC Diff
ZDC TAC Diff
Entries 939844
BBC-S TAC Diff
VPD TAC Diff
Entries 939844
BBC-S TAC Diff
ZDC TAC Diff
Entries 939844
VPD TAC Diff
ZDC TAC Diff

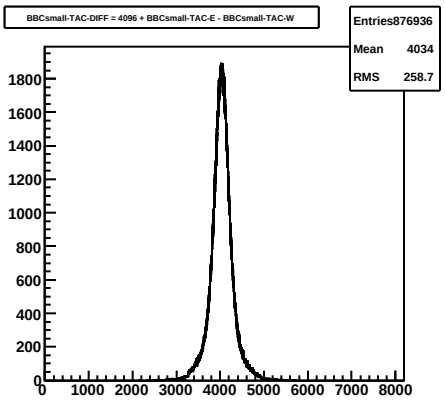

ZDC-TAC-E
Entries 29138
Mean 239.1
RMS 35.45

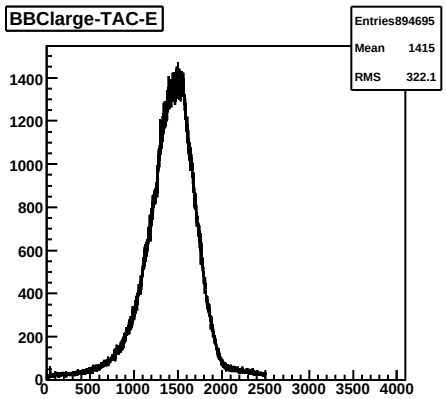

ZDC-TAC-W
Entries 29220
Mean 213.2
RMS 40

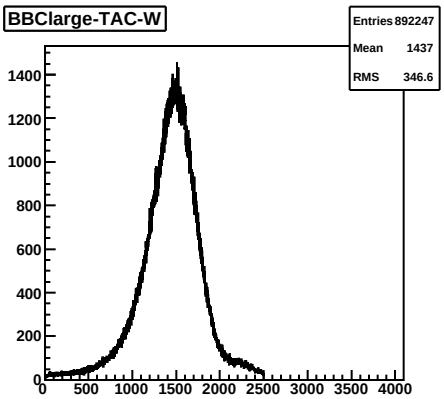

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2316
Mean 525.4
RMS 22.36

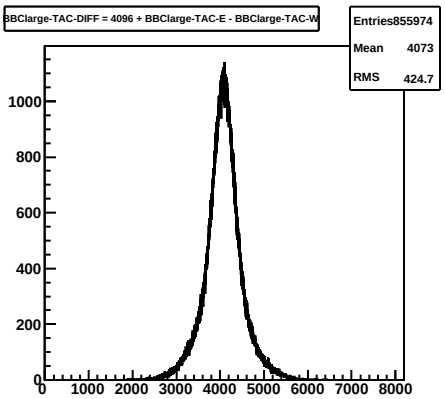

BBCsmall-TAC-E
Entries 903541
Mean 1473
RMS 217.9

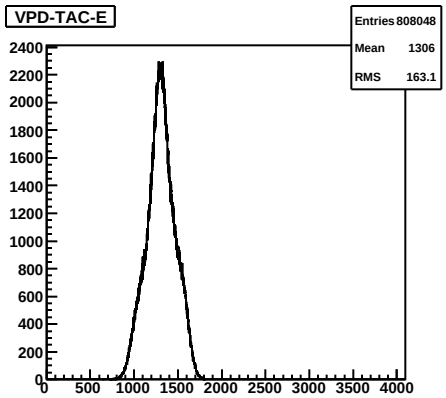

BBCsmall-TAC-W
Entries 906235
Mean 1535
RMS 233

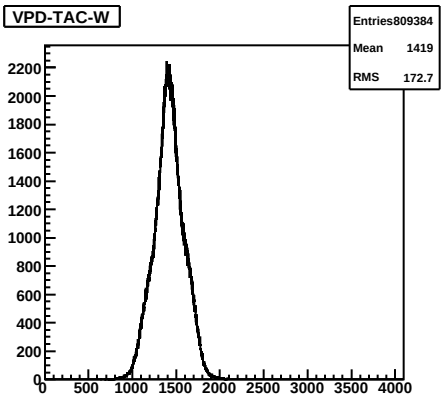

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 876936
Mean 4034
RMS 258.7

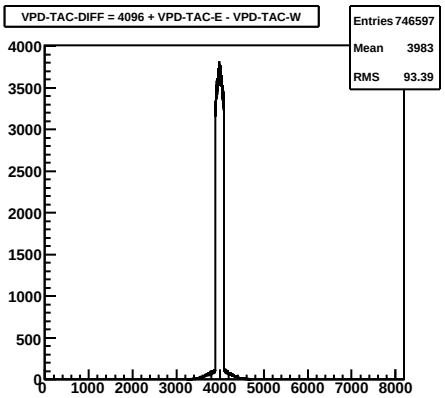

BBClarge-TAC-E
Entries 894695
Mean 1415
RMS 322.1

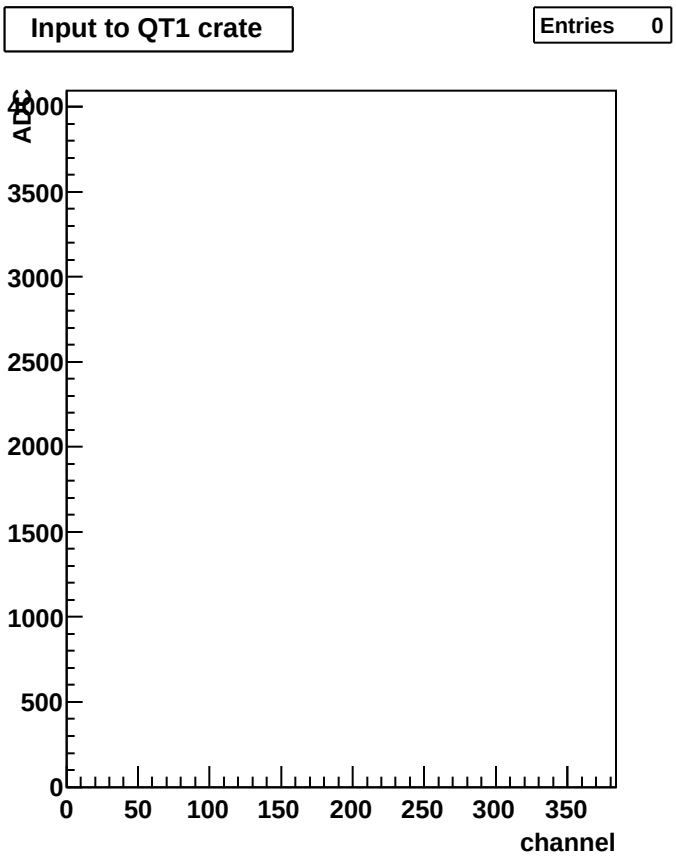

BBClarge-TAC-W
Entries 892247
Mean 1437
RMS 346.6

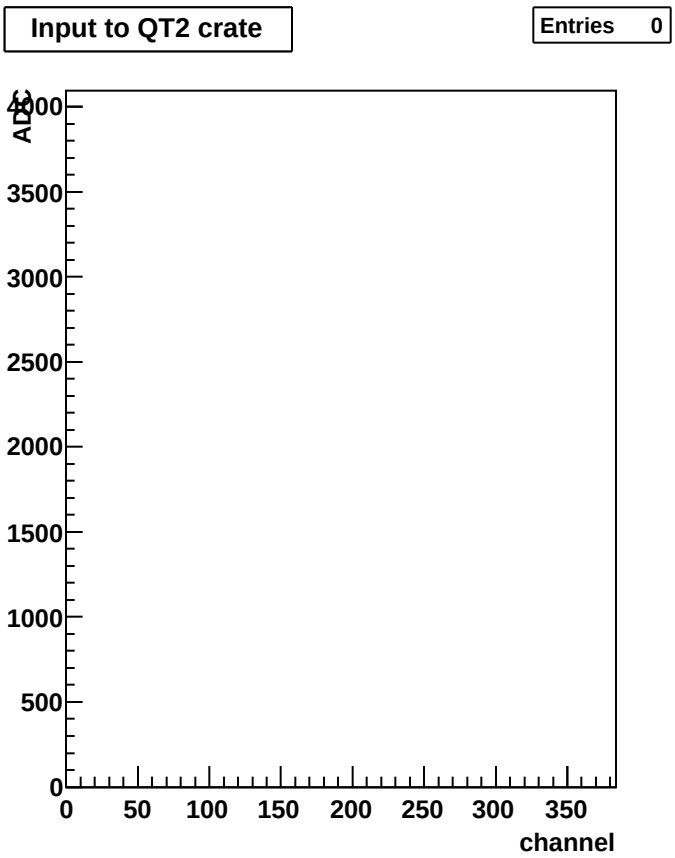

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 855974
Mean 4073
RMS 424.7

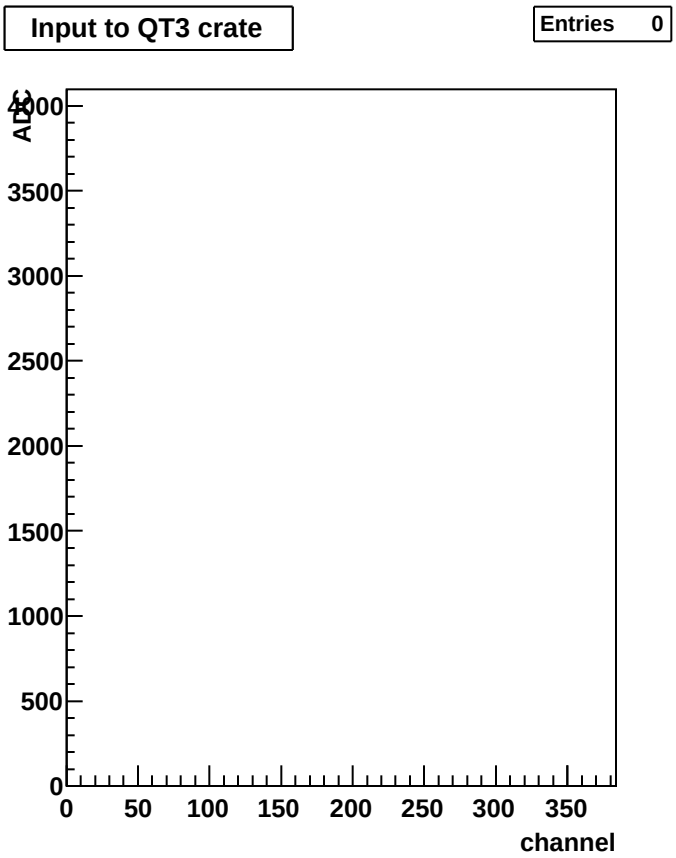

VPD-TAC-E
Entries 808048
Mean 1306
RMS 163.1

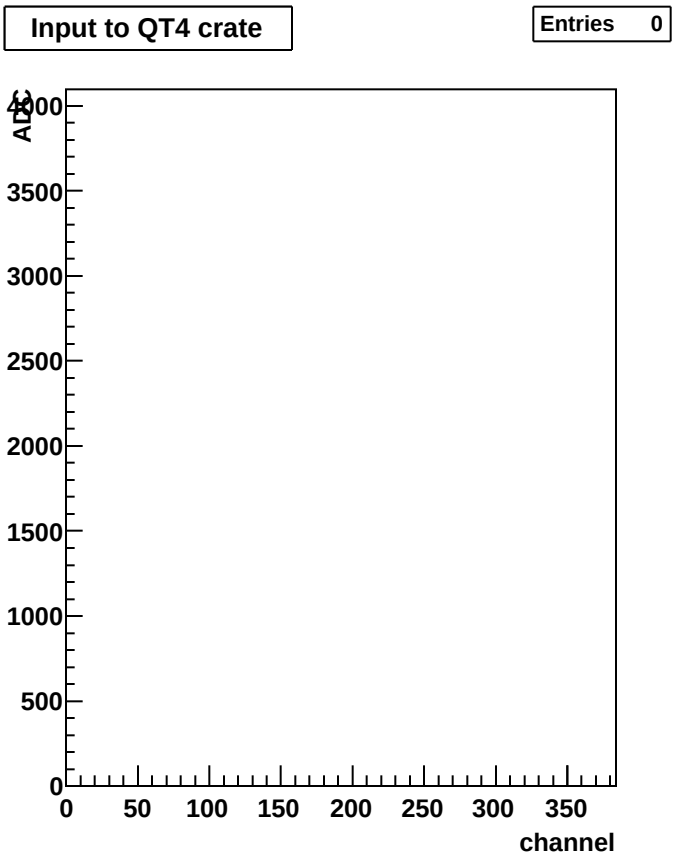

VPD-TAC-W
Entries 809384
Mean 1419
RMS 172.7

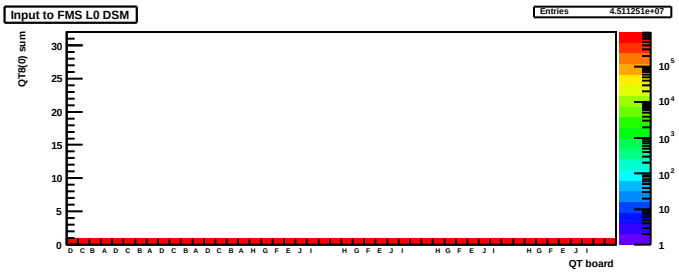

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 746597
Mean 3983
RMS 93.39

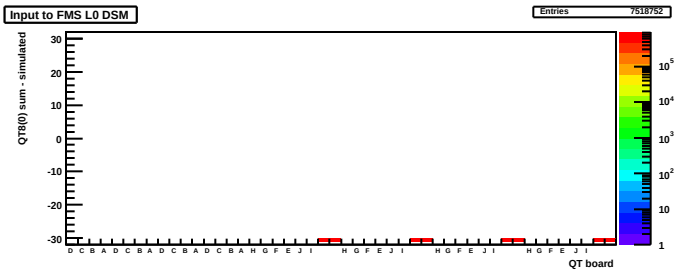

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

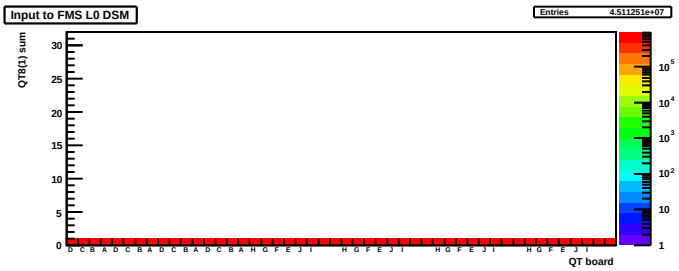

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

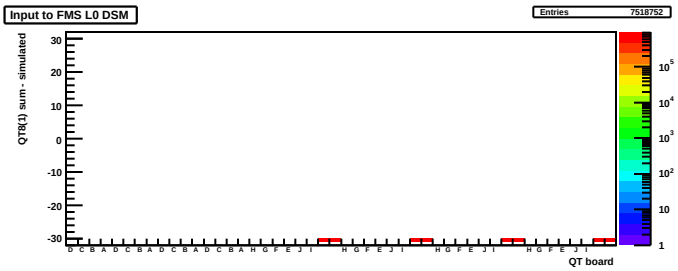

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

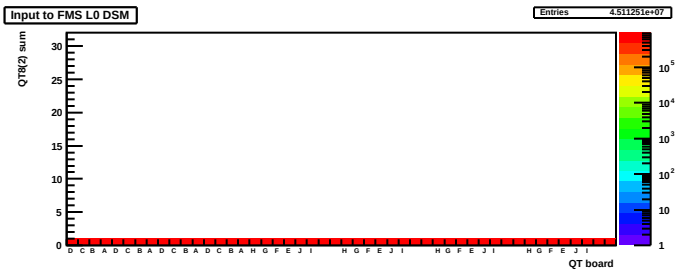

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

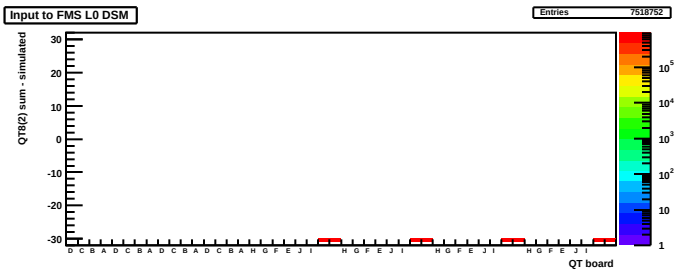

Input to FMS L0 DSM
Entries 4.511251e+07
QT8(0) sum
QT board

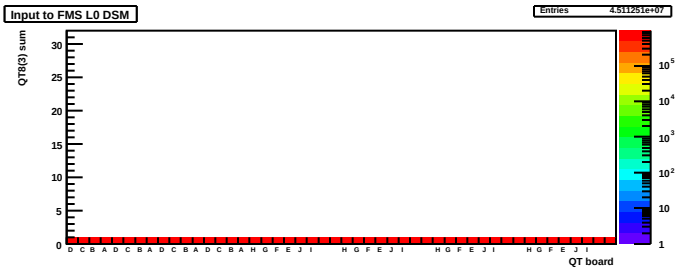

Input to FMS L0 DSM
Entries 7518752
QT8(0) sum - simulated
QT board

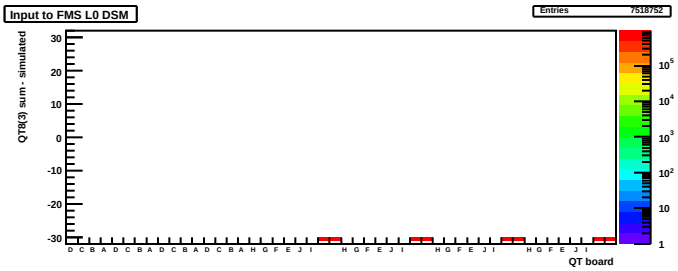

Input to FMS L0 DSM
Entries 4.511251e+07
QT8(1) sum
QT board

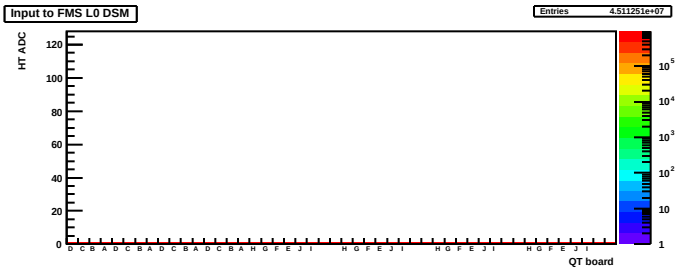

Input to FMS L0 DSM
Entries 7518752
QT8(1) sum - simulated
QT board

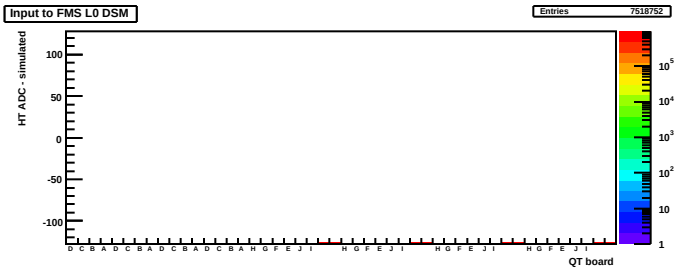

Input to FMS L0 DSM
Entries 4.511251e+07
QT8(2) sum
QT board

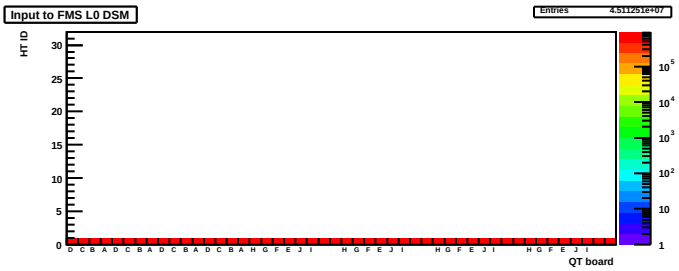

Input to FMS L0 DSM
Entries 7518752
QT8(2) sum - simulated
QT board

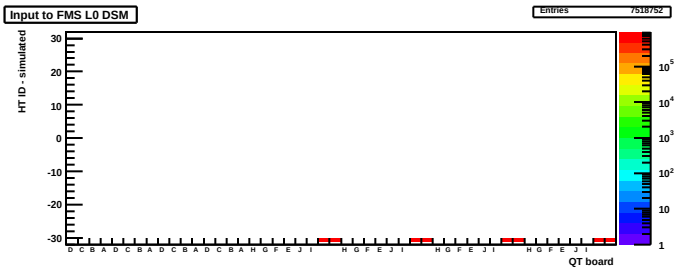

Input to FMS L0 DSM
Entries 4.511251e+07
QT8(3) sum
QT board

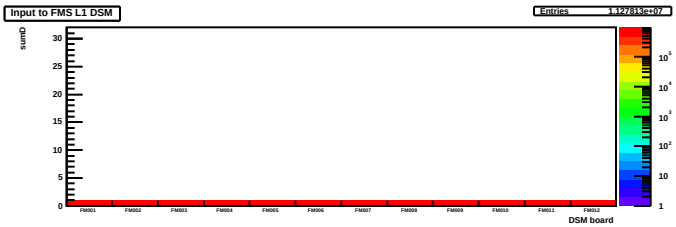

Input to FMS L0 DSM
Entries 7518752
QT8(3) sum - simulated
QT board

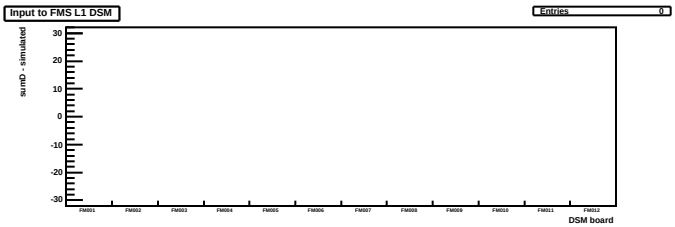

Input to FMS L0 DSM
Entries 4.511251e+07
HT ADC
QT board

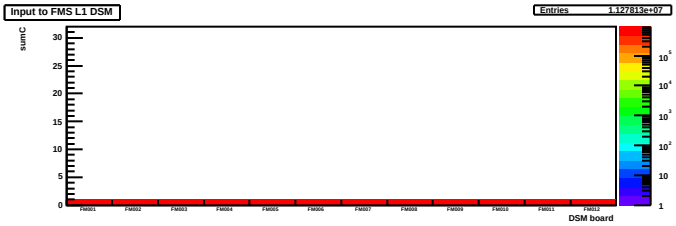

Input to FMS L0 DSM
Entries 7518752
HT ADC - simulated
QT board

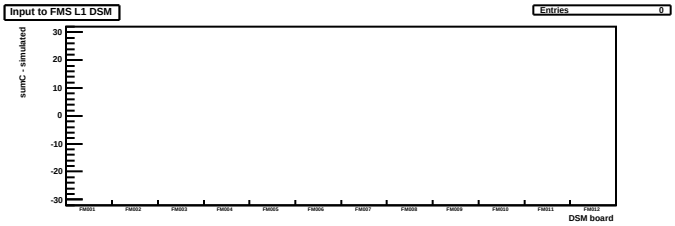

Input to FMS L0 DSM
Entries 4.511251e+07
HT ID
QT board

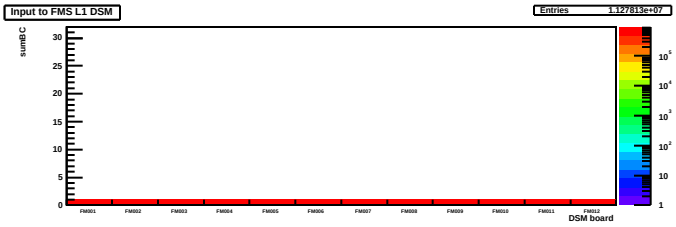

Input to FMS L0 DSM
Entries 7518752
HT ID - simulated
QT board

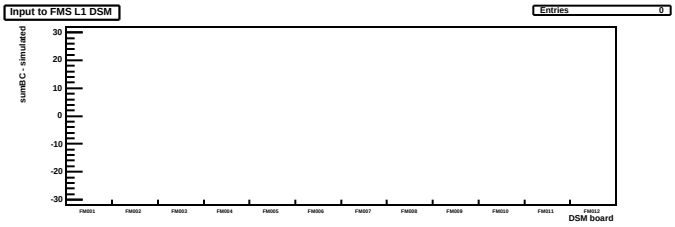

Input to FMS L1 DSM
Entries 1.127813e+07
sumD
DSM board

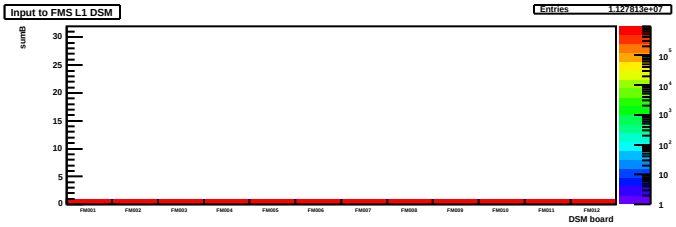

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

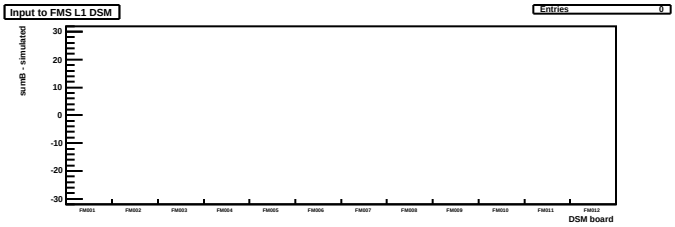

Input to FMS L1 DSM
Entries 1.127813e+07
sumC
DSM board

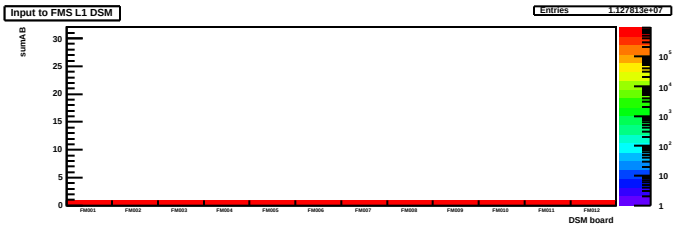

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

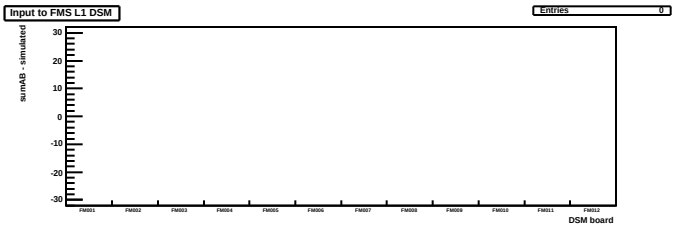

Input to FMS L1 DSM
Entries 1.127813e+07
sumBC
DSM board

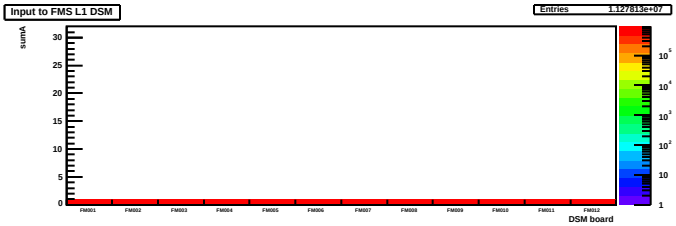

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

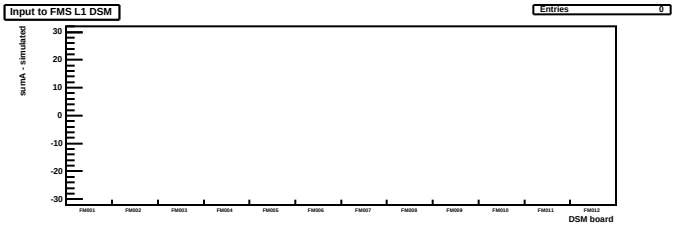

Input to FMS L1 DSM
Entries 1.127813e+07
sumB
DSM board

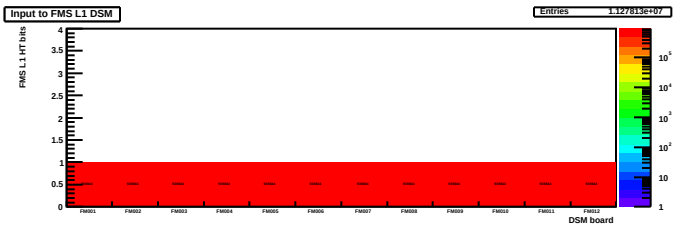

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

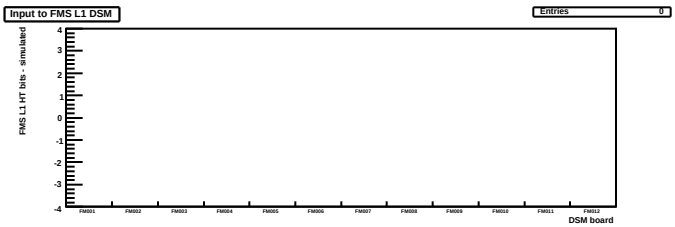

Input to FMS L1 DSM
Entries 1.127813e+07
sumAB
DSM board

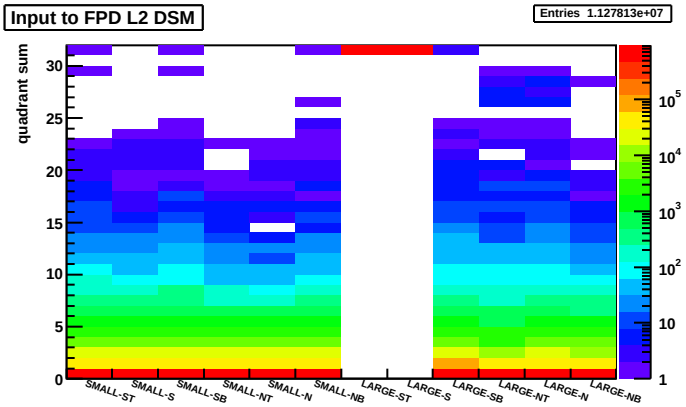

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

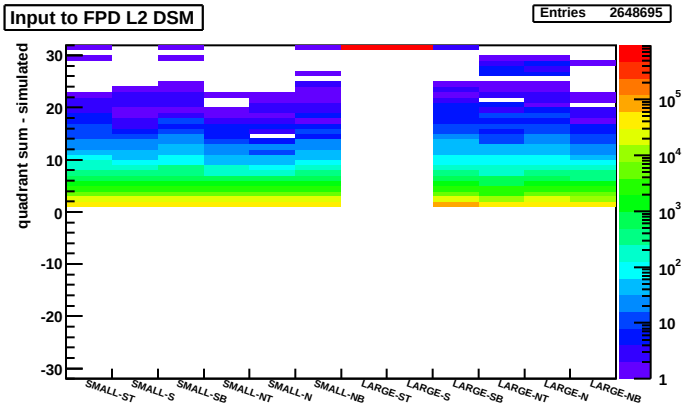

Input to FMS L1 DSM
Entries 1.127813e+07
sumA
DSM board

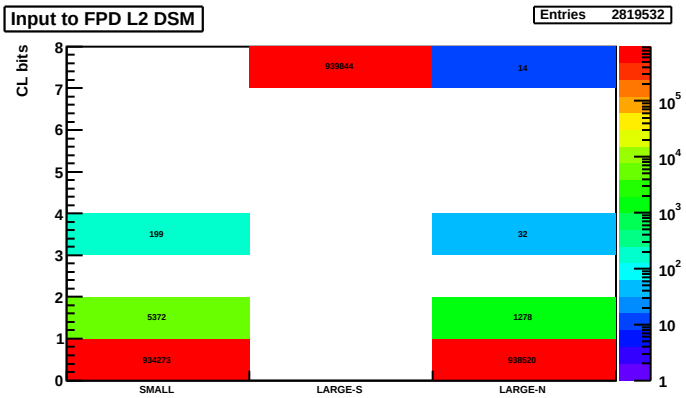

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

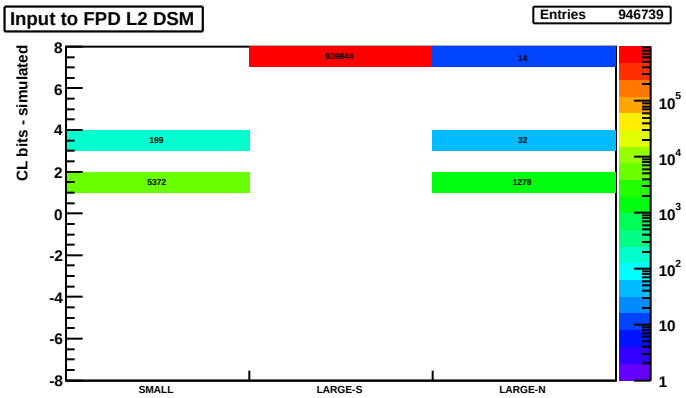

Input to FMS L1 DSM
Entries 1.127813e+07
FMS L1 HT bits
DSM board

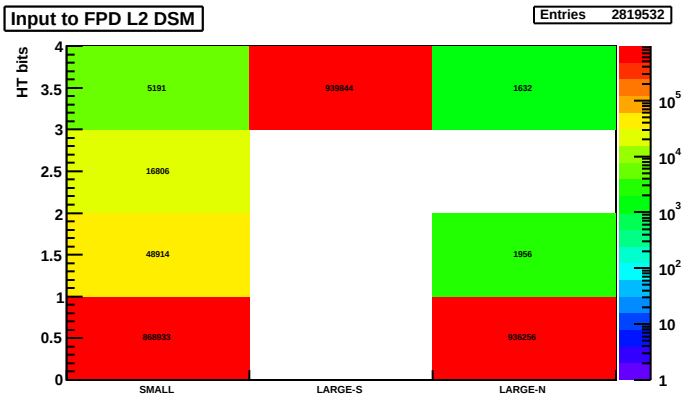

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

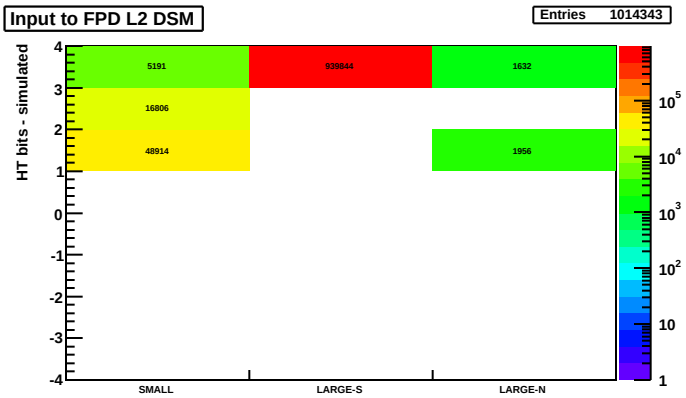

Input to FPD L2 DSM
Entries 1.127813e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

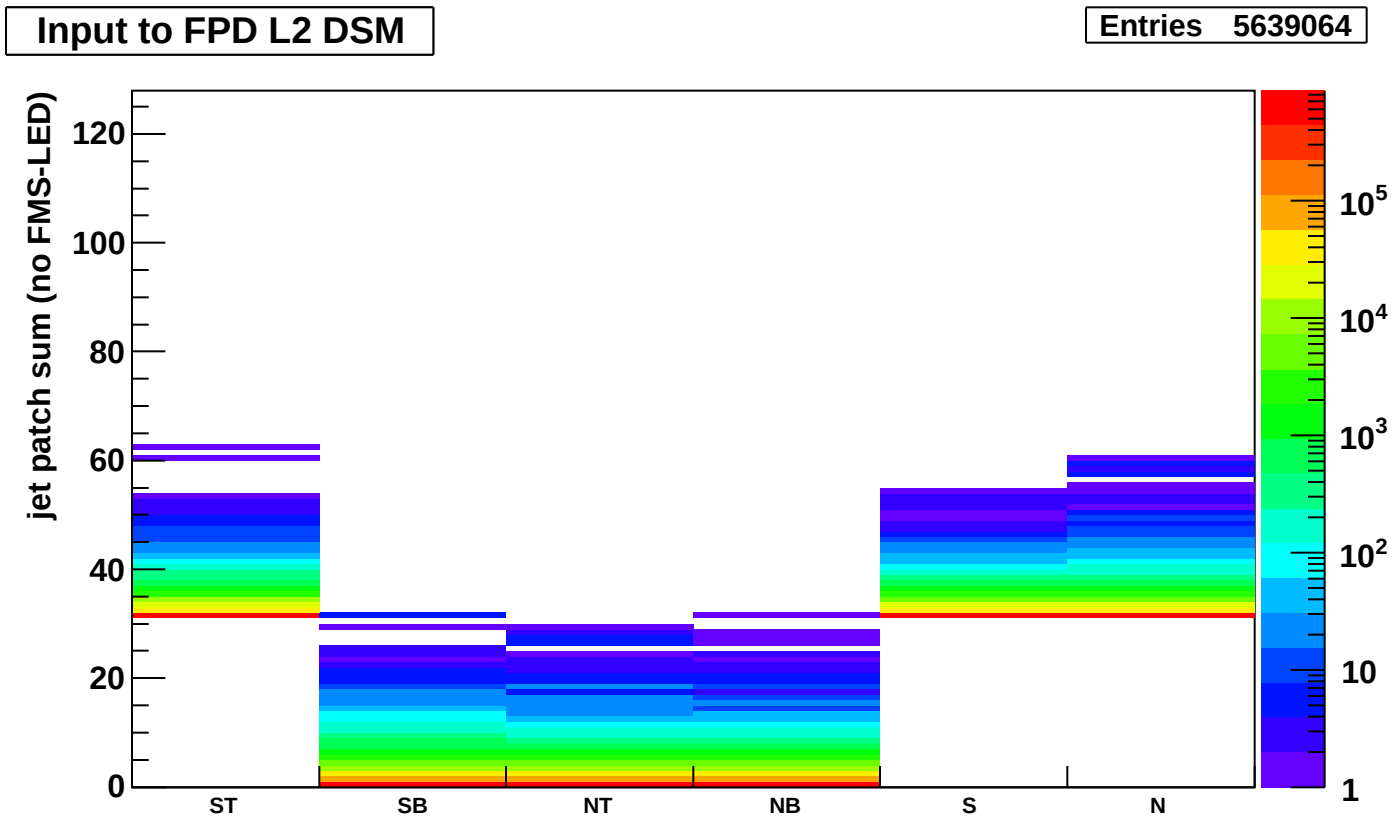

Input to FPD L2 DSM
Entries 2648695
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

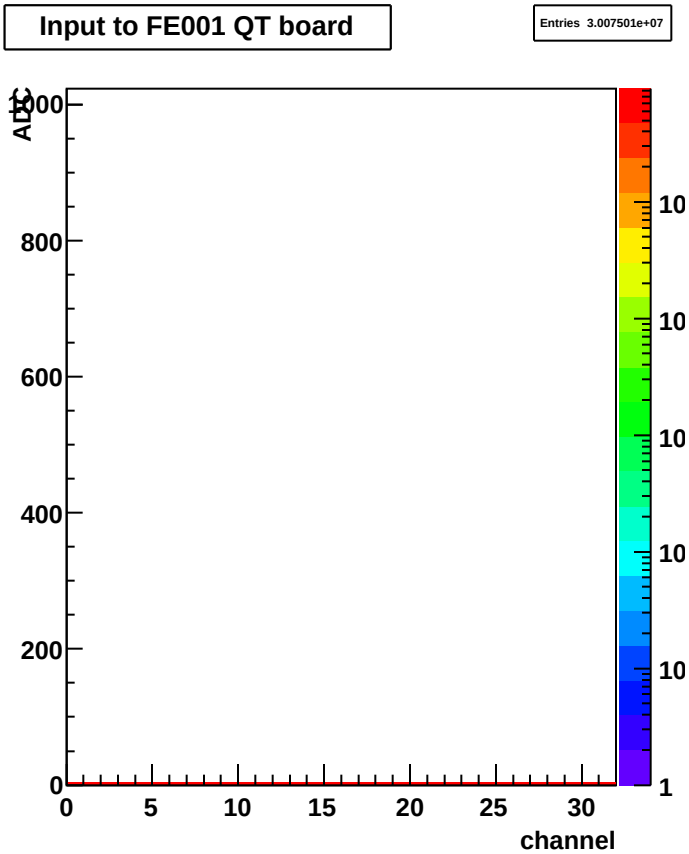

Input to FPD L2 DSM
Entries 2819532
CL bits
939844
14
199
32
5372
1278
934273
938520
SMALL
LARGE-S
LARGE-N

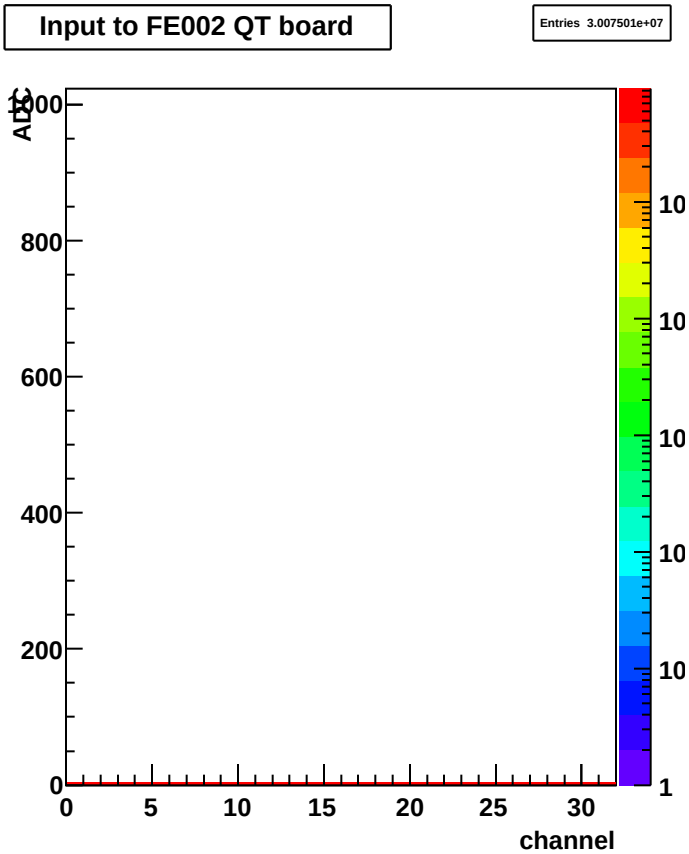

Input to FPD L2 DSM
Entries 946739
CL bits - simulated
939844
14
199
32
5372
1278
SMALL
LARGE-S
LARGE-N

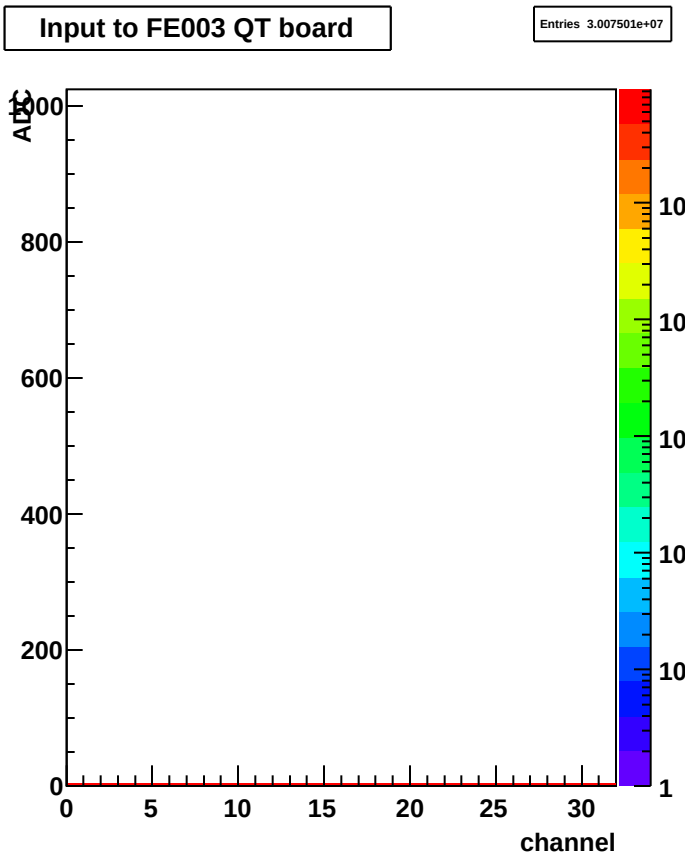

Input to FPD L2 DSM
Entries 2819532
HT bits
5191
939844
1632
16806
48914
1956
868933
936256
SMALL
LARGE-S
LARGE-N

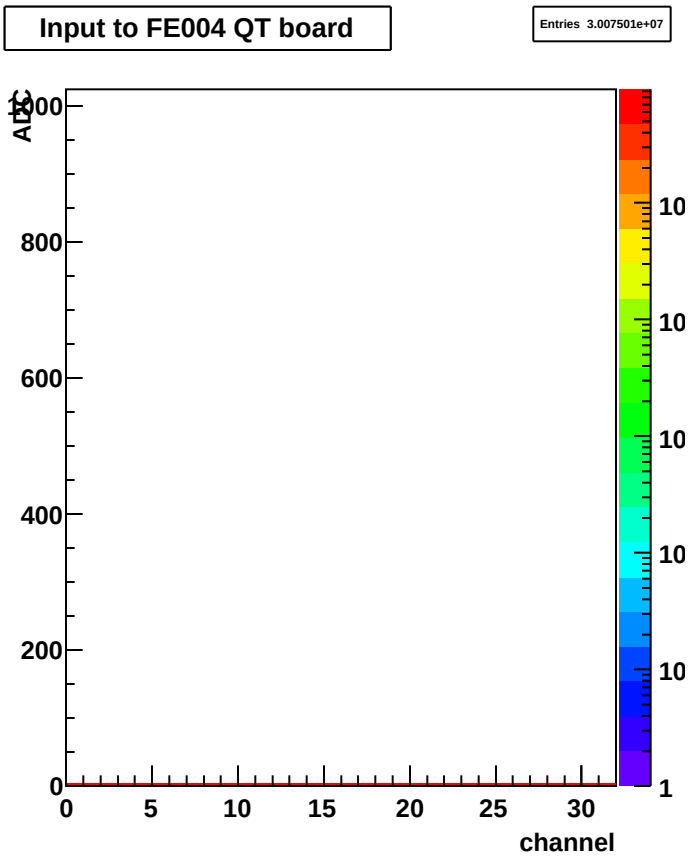

Input to FPD L2 DSM
Entries 1014343
HT bits - simulated
5191
939844
1632
16806
48914
1956
SMALL
LARGE-S
LARGE-N

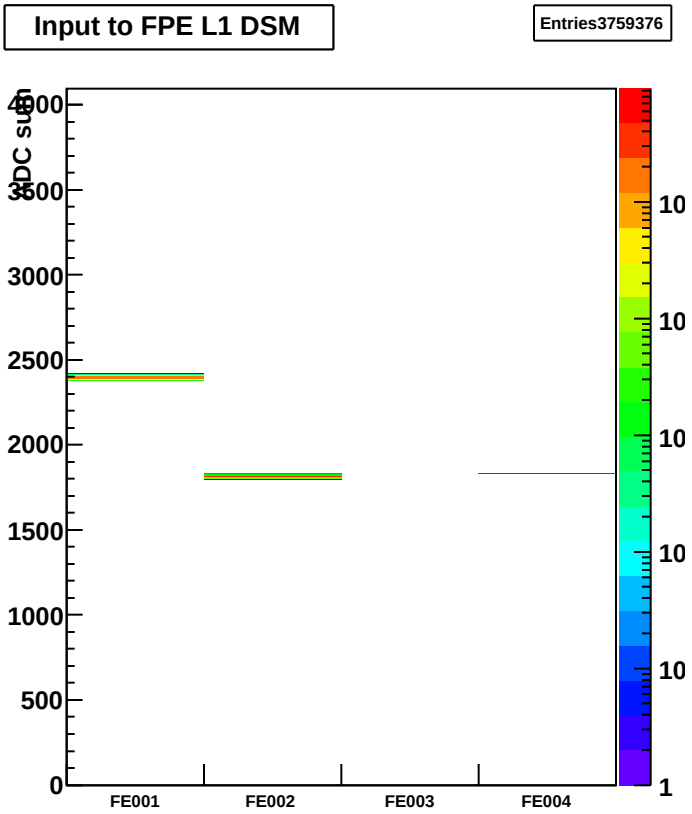

Input to FPD L2 DSM
Entries 5639064
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

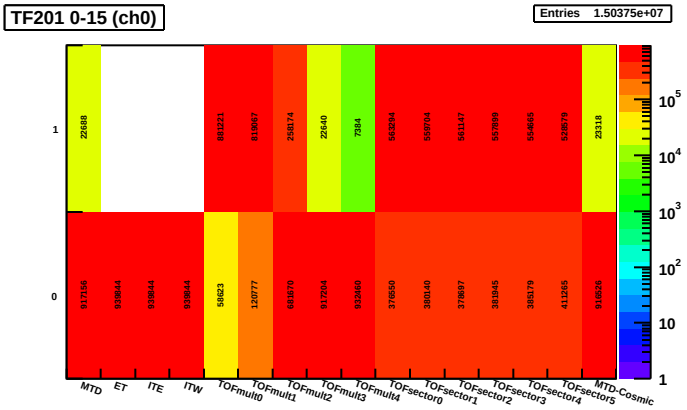

Input to FE001 QT board
Entries 3.007501e+07
ADC
channel

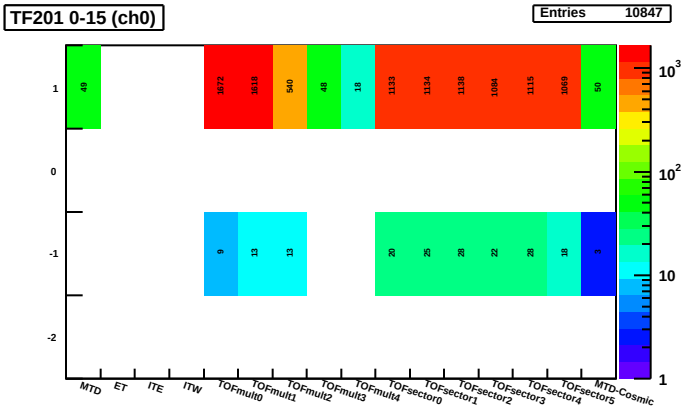

Input to FE002 QT board
Entries 3.007501e+07
ADC
channel

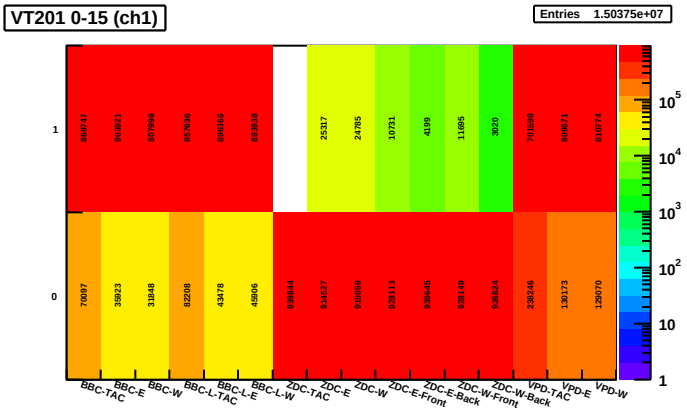

Input to FE003 QT board
Entries 3.007501e+07
ADC
channel

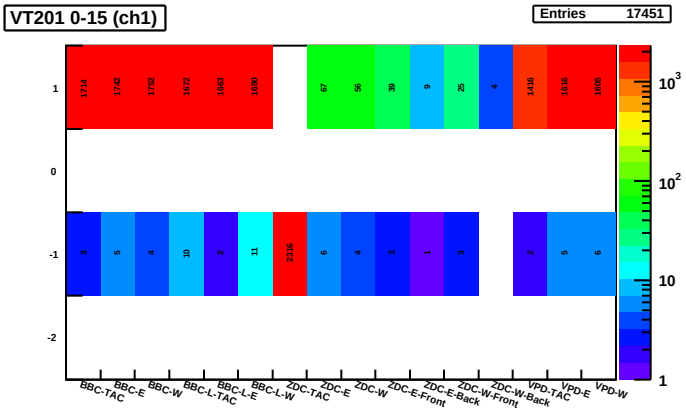

Input to FE004 QT board
Entries 3.007501e+07
ADC
channel


Input to FPE L1 DSM
Entries3759376
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 1.50375e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 10847
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1.50375e+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 17451
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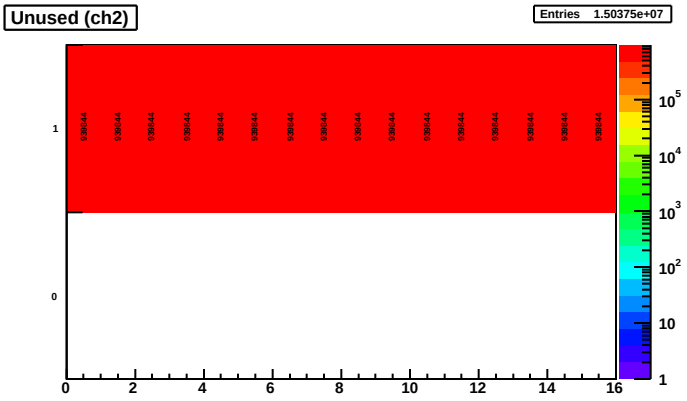
Unused (ch2)
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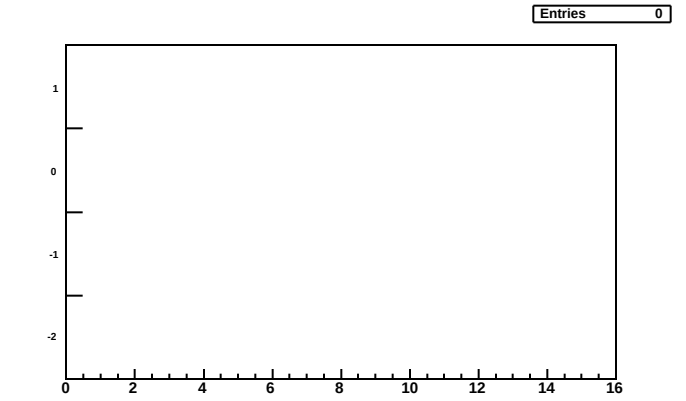
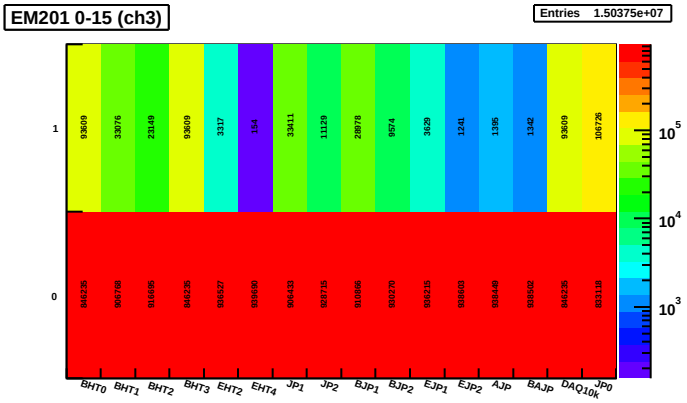
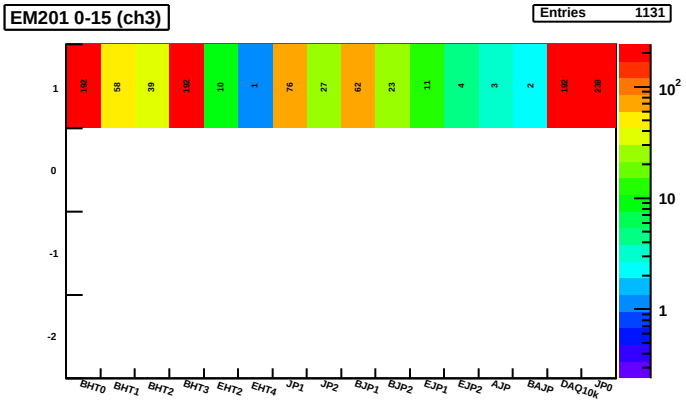
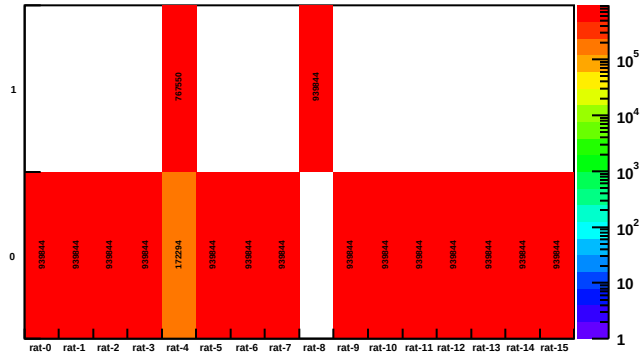
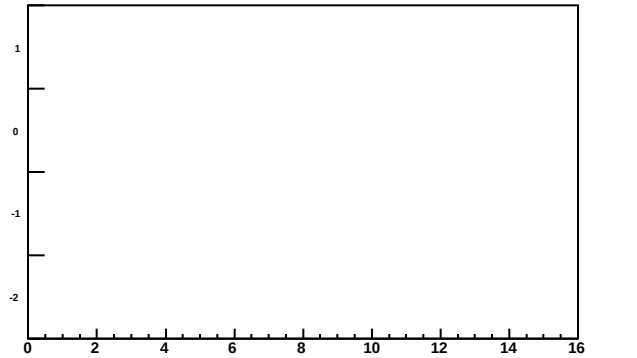

Entries 0


EM201 0-15 (ch3)
Entries 1.50375e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

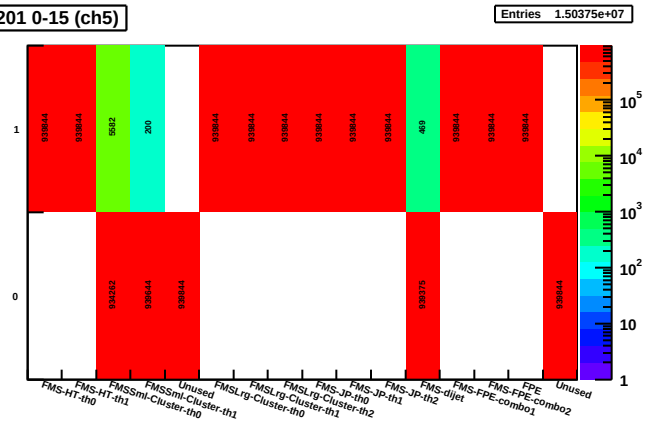

EM201 0-15 (ch3)
Entries 1131
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)





FP201 0-15 (ch5)



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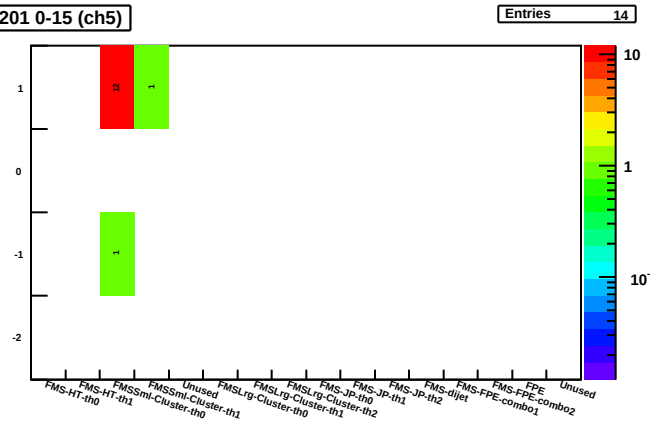
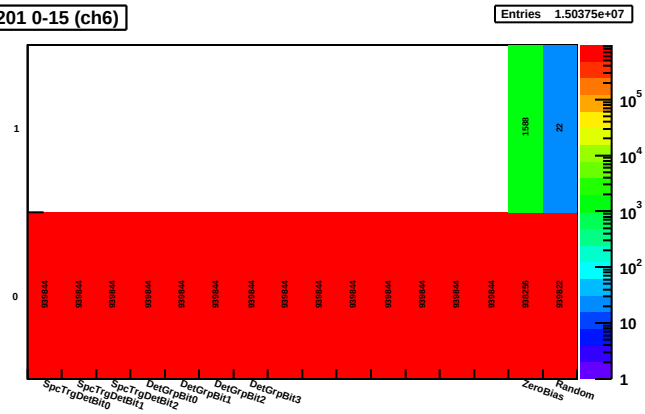
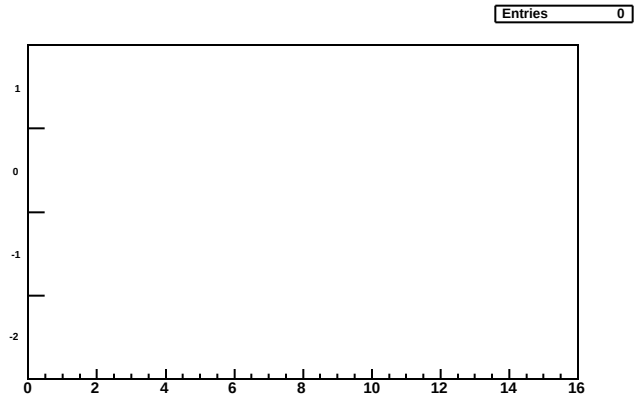
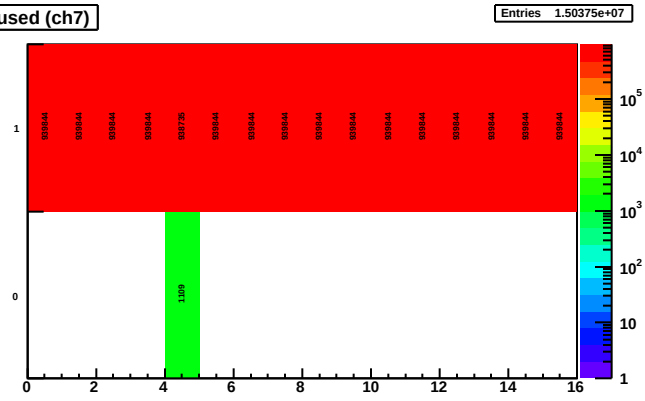
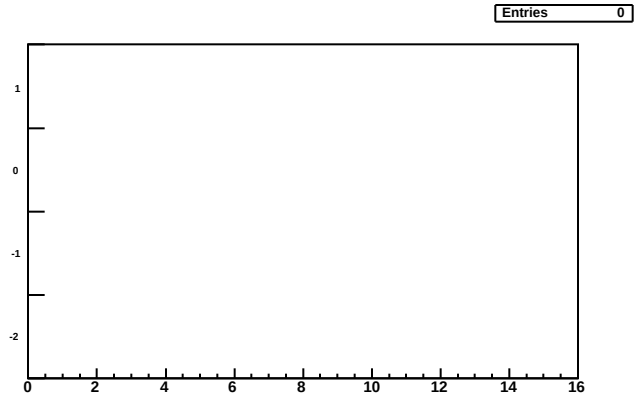


ST201 0-15 (ch6)





Unused (ch7)