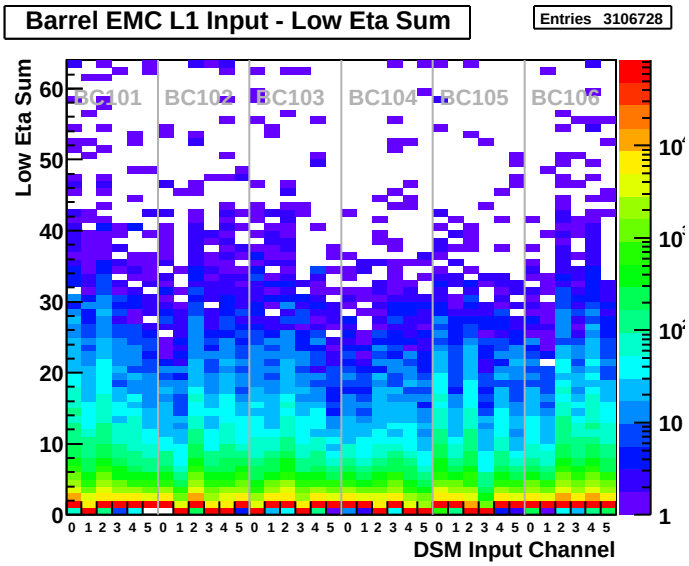
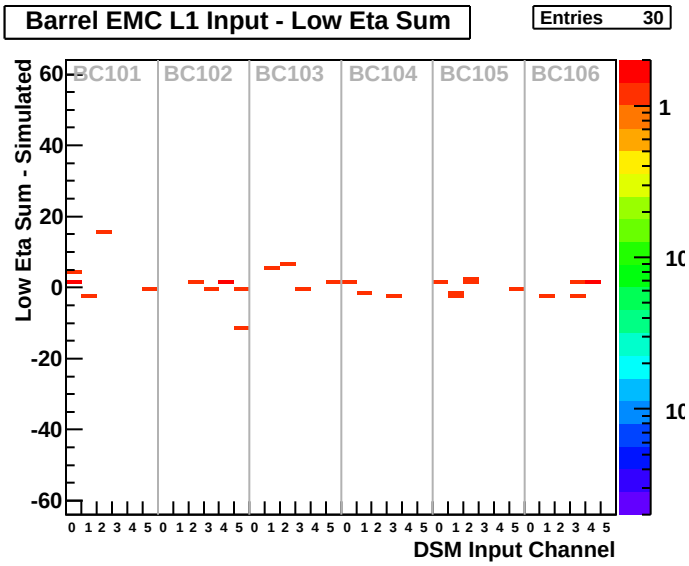
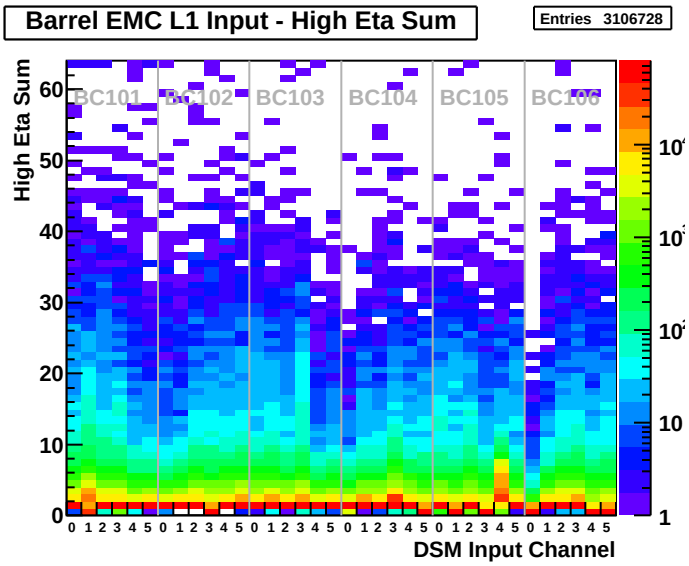
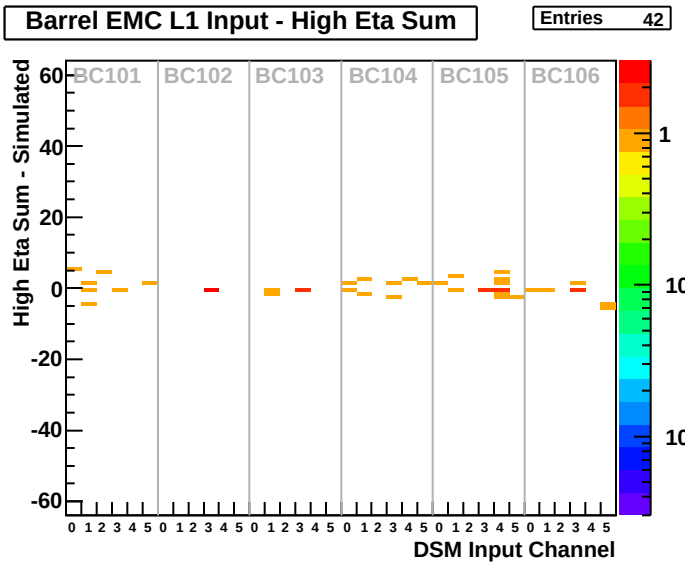
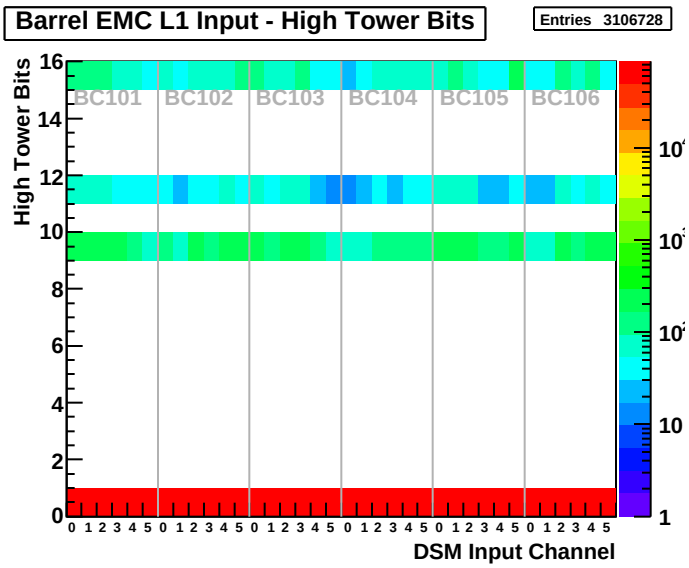
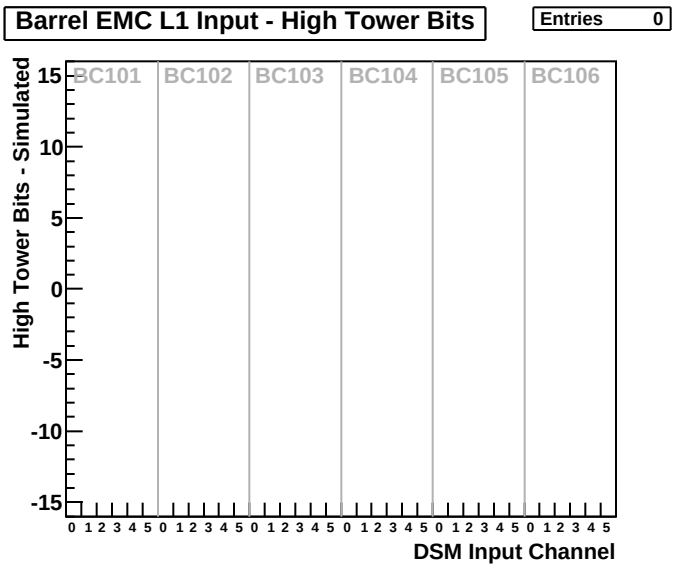

Barrel EMC L1 Input - Low Eta Sum
Entries 3106728
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

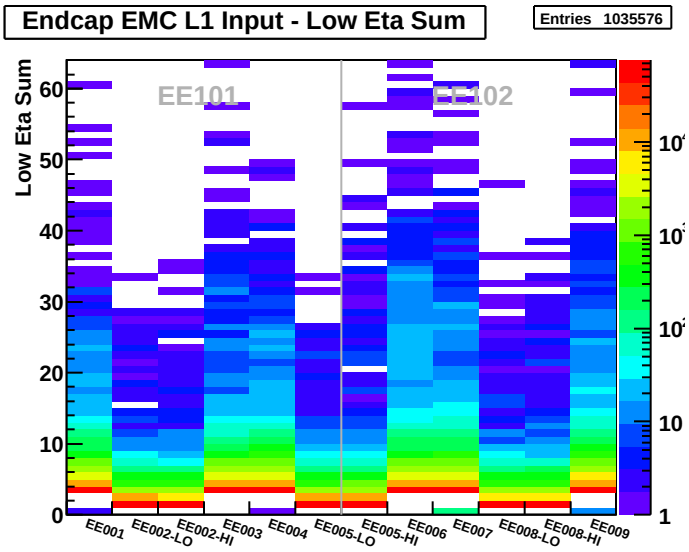

Barrel EMC L1 Input - Low Eta Sum
Entries 30
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

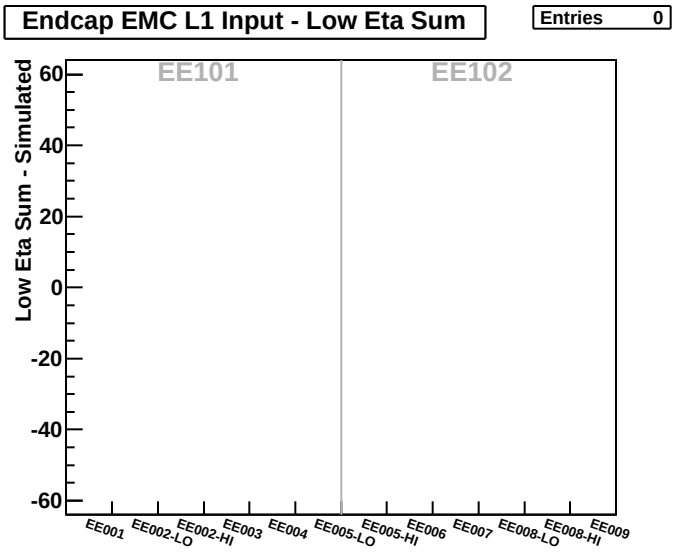

Barrel EMC L1 Input - High Eta Sum
Entries 3106728
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

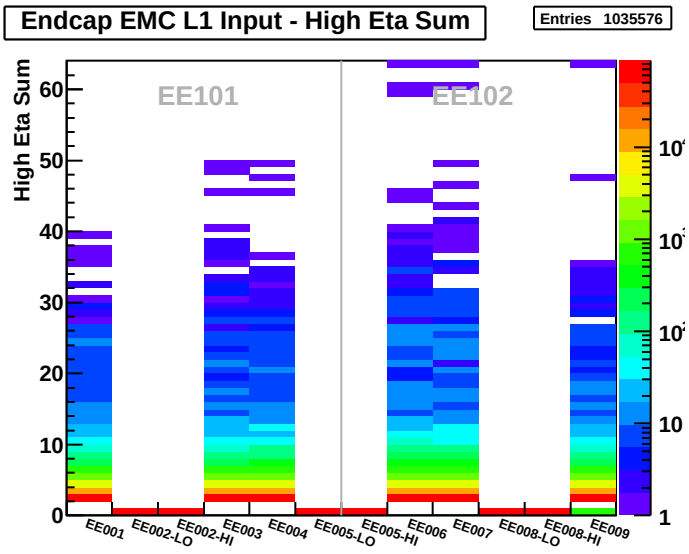

Barrel EMC L1 Input - High Eta Sum
Entries 42
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

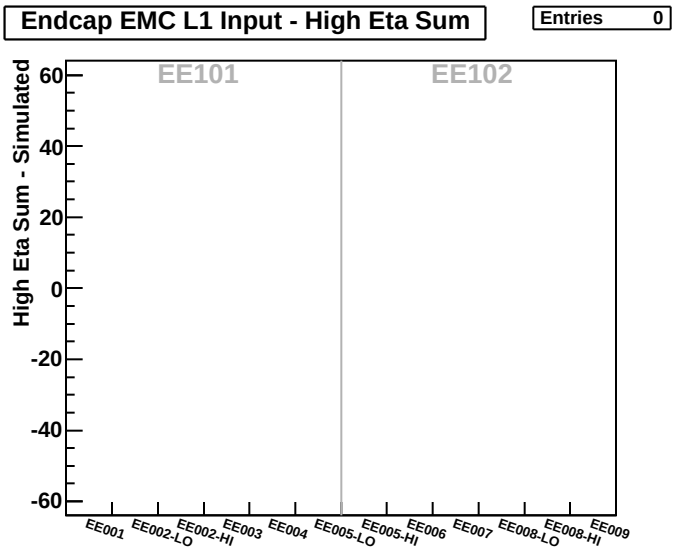

Barrel EMC L1 Input - High Tower Bits
Entries 3106728
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

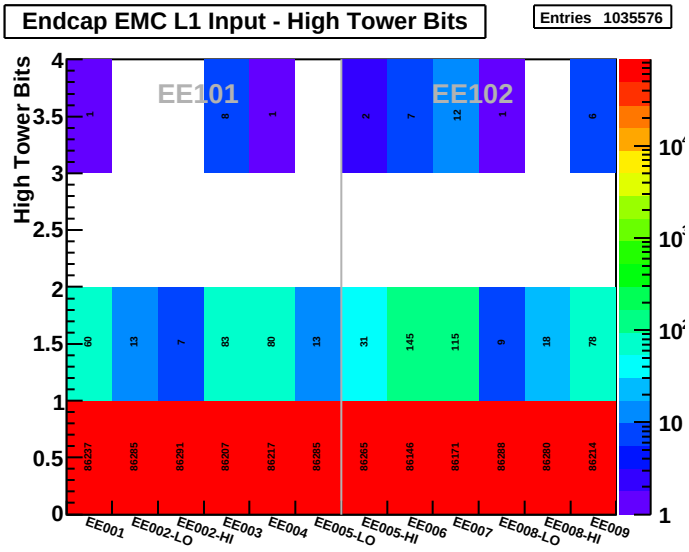

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

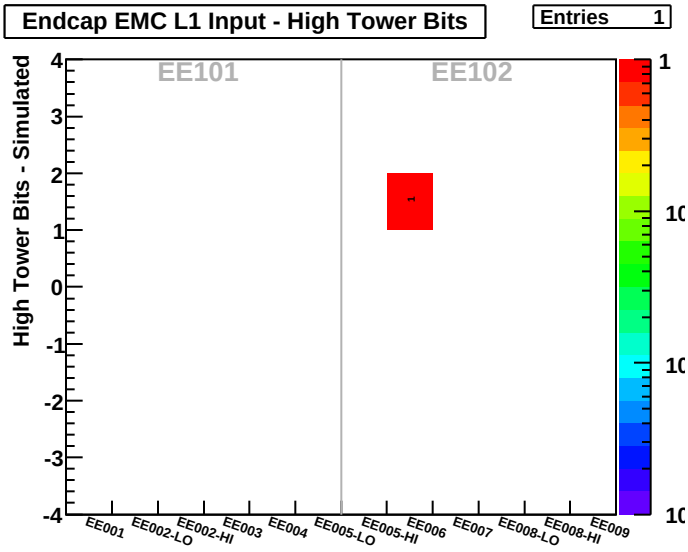

Endcap EMC L1 Input - Low Eta Sum
Entries 1035576
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

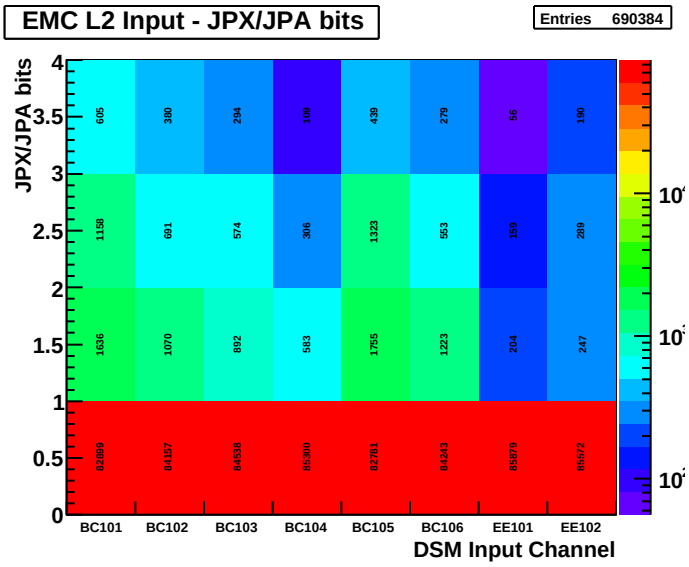

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

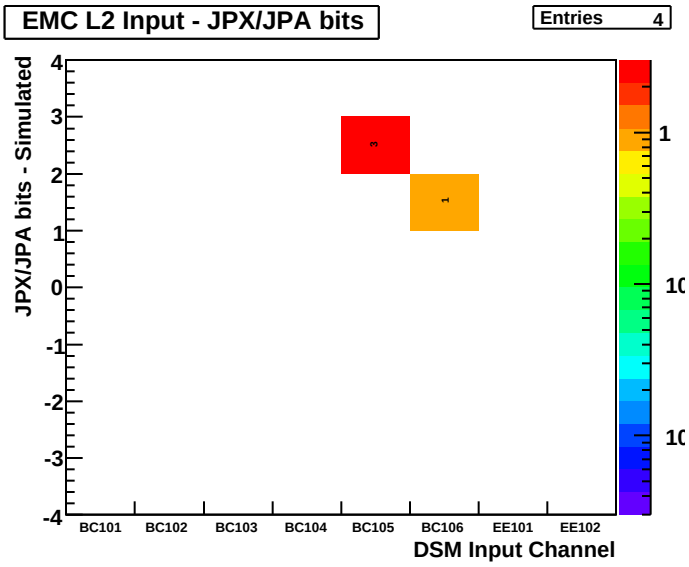

Endcap EMC L1 Input - High Eta Sum
Entries 1035576
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

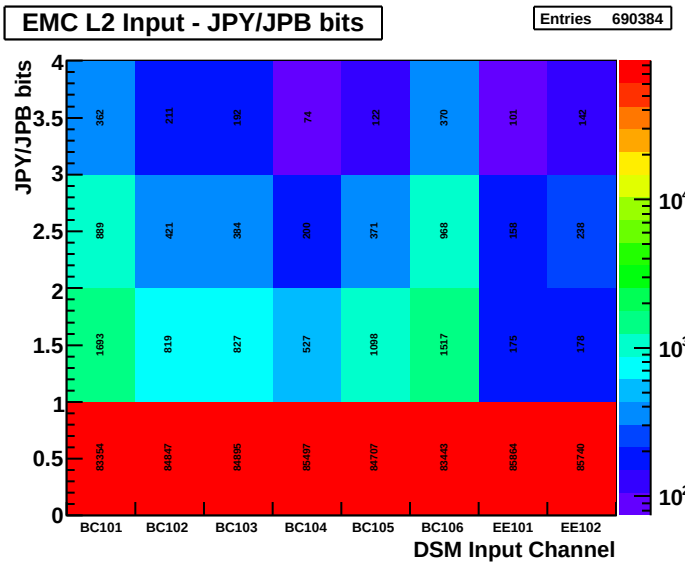

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

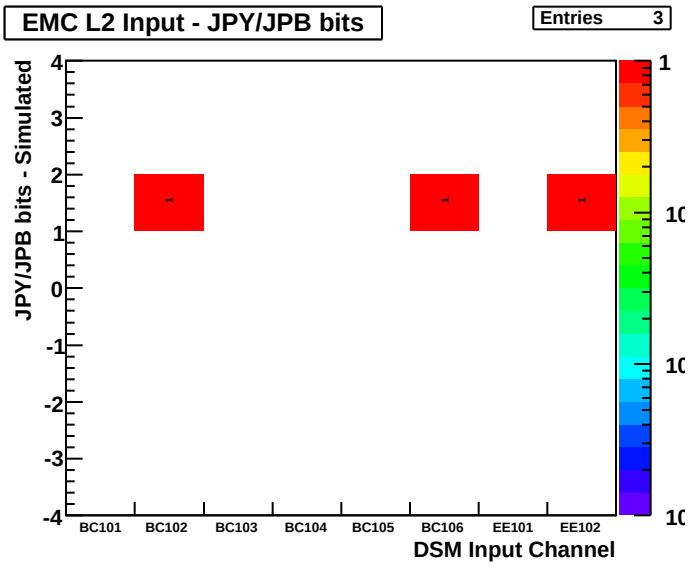

Endcap EMC L1 Input - High Tower Bits
Entries 1035576
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

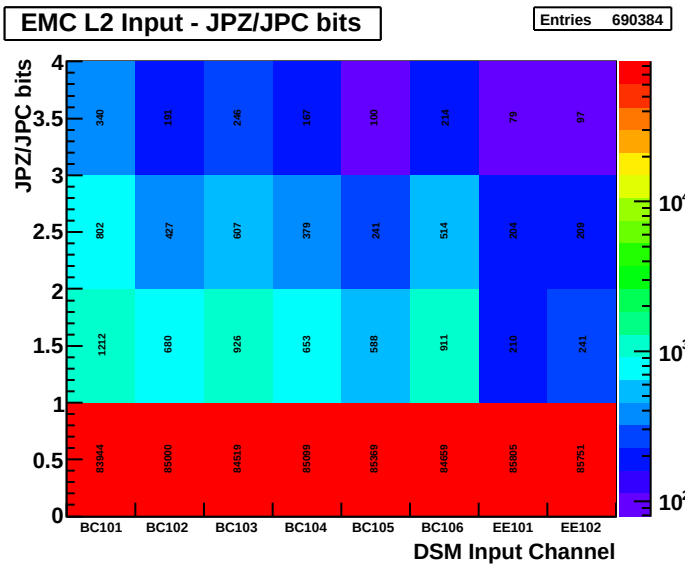

Endcap EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

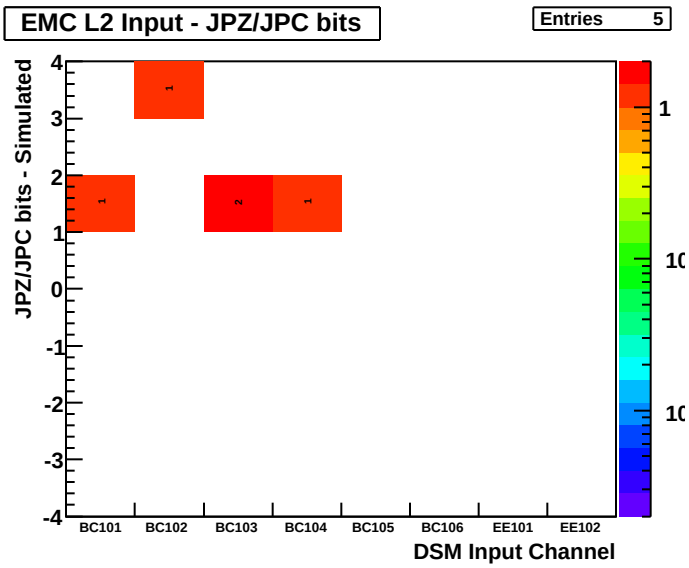

EMC L2 Input - JPX/JPA bits
Entries 690384
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
605 380 294 109 439 279 56 190
1158 691 574 306 1323 553 159 289
1636 1070 892 583 1755 1223 204 247
82899 84157 84538 85300 82781 84243 85879 85572

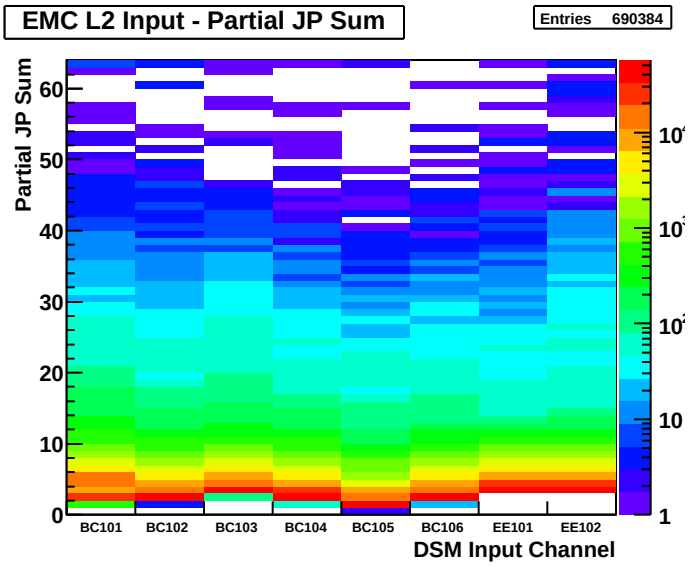

EMC L2 Input - JPX/JPA bits
Entries 4
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3
1

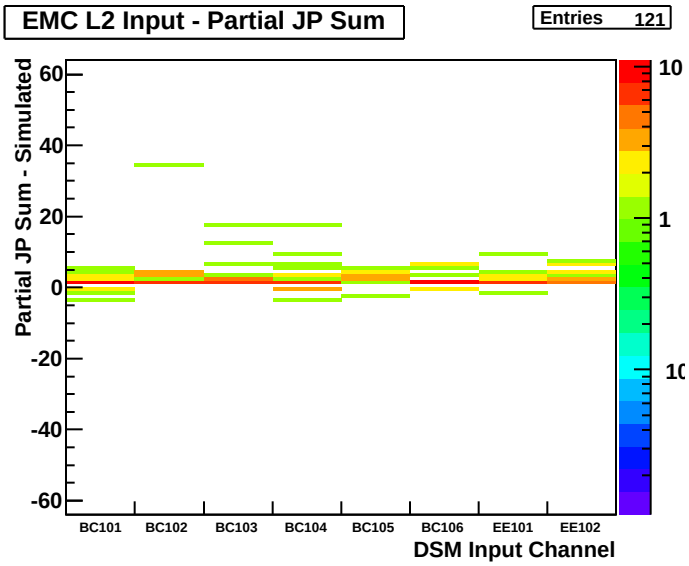

EMC L2 Input - JPY/JPB bits
Entries 690384
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
362 211 192 74 122 370 101 142
889 421 384 200 371 968 158 238
1693 819 827 527 1098 1517 175 178
83354 84847 84895 85497 84707 83443 85864 85740

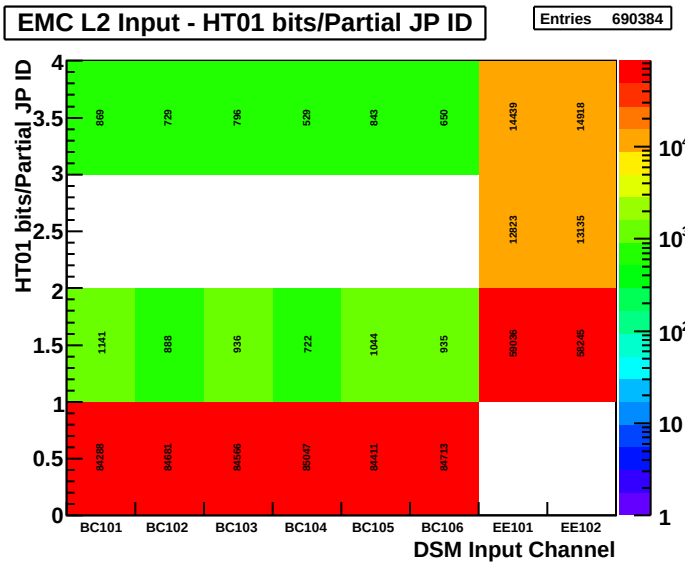

EMC L2 Input - JPY/JPB bits
Entries 3
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1

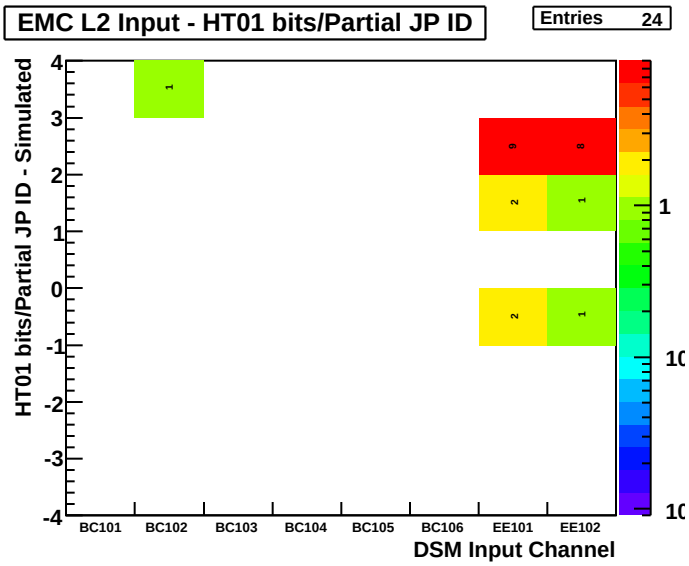

EMC L2 Input - JPZ/JPC bits
Entries 690384
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
340 191 246 167 100 214 79 97
802 427 607 379 241 514 204 209
1212 680 926 653 588 911 210 241
83944 85000 84519 85099 85369 84659 85805 85751

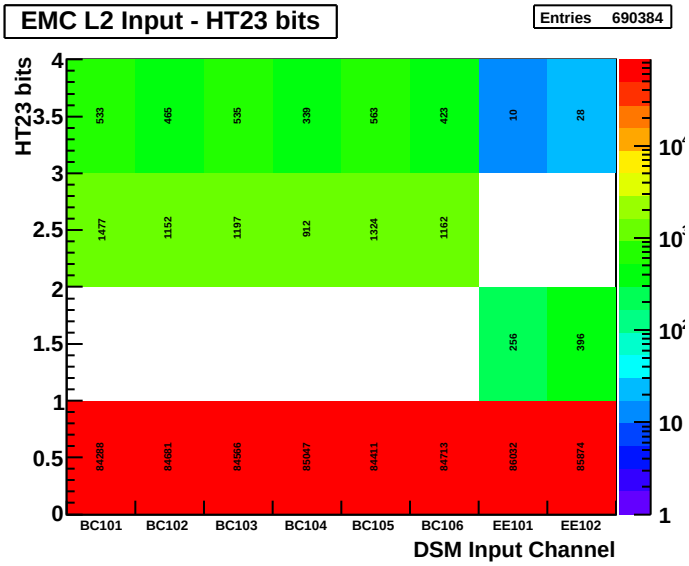

EMC L2 Input - JPZ/JPC bits
Entries 5
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1 2 1

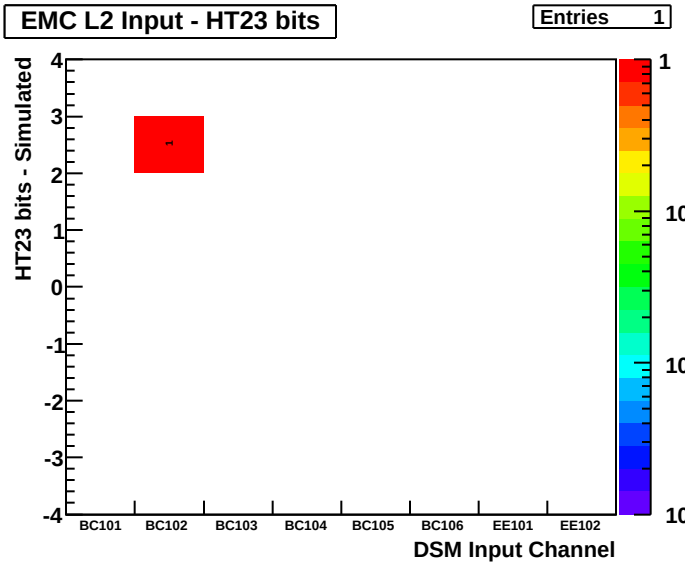

EMC L2 Input - Partial JP Sum
Entries 690384
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

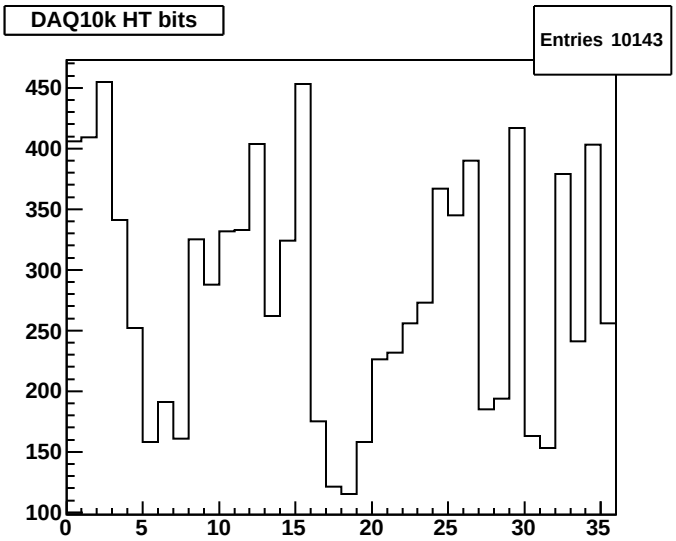

EMC L2 Input - Partial JP Sum
Entries 121
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

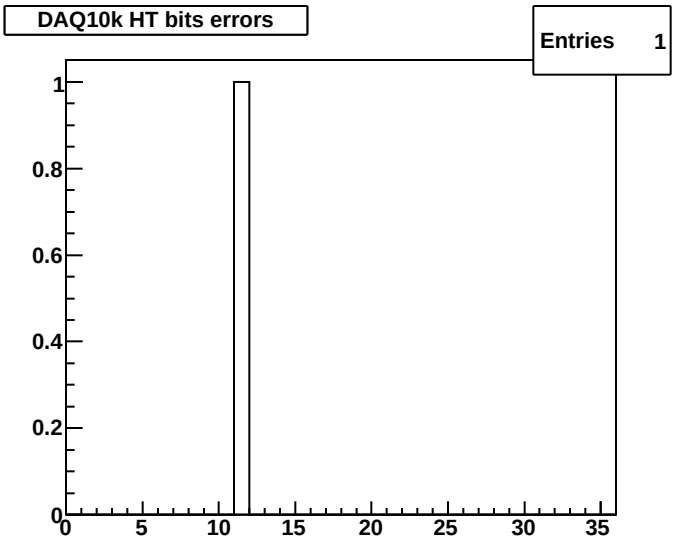

EMC L2 Input - HT01 bits/Partial JP ID
Entries 690384
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

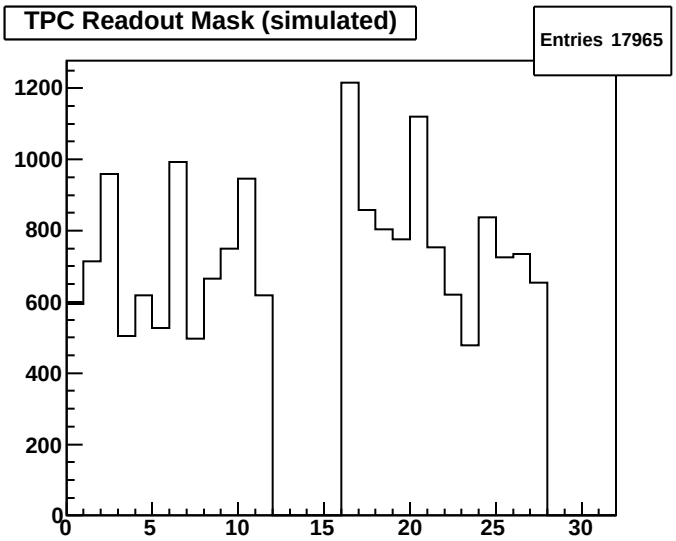

EMC L2 Input - HT01 bits/Partial JP ID
Entries 24
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

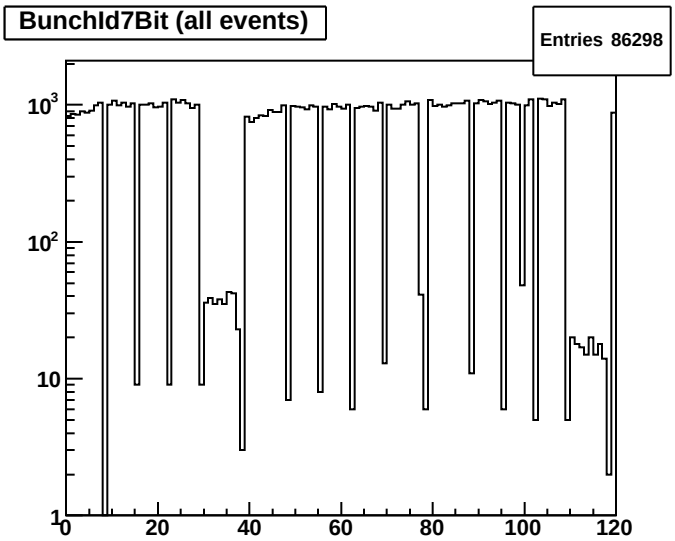

EMC L2 Input - HT23 bits
Entries 690384
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

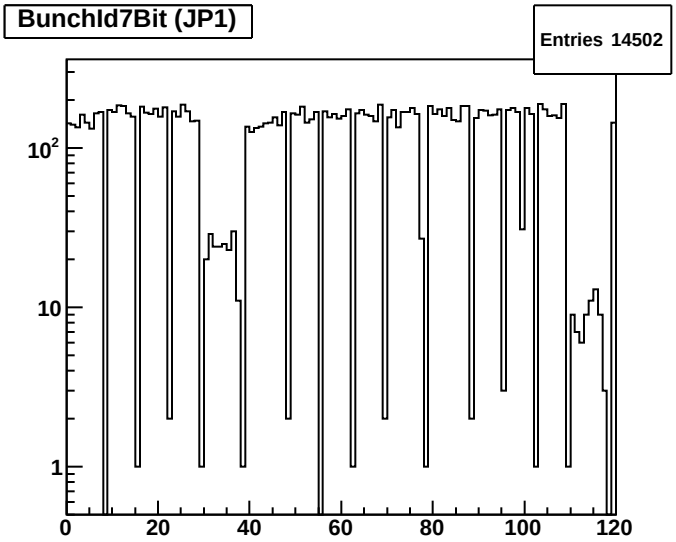

EMC L2 Input - HT23 bits
Entries 1
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

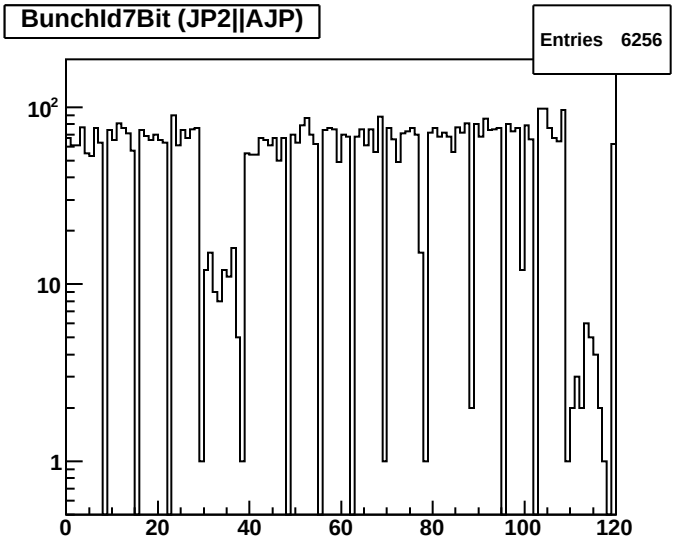

DAQ10k HT bits
Entries 10143

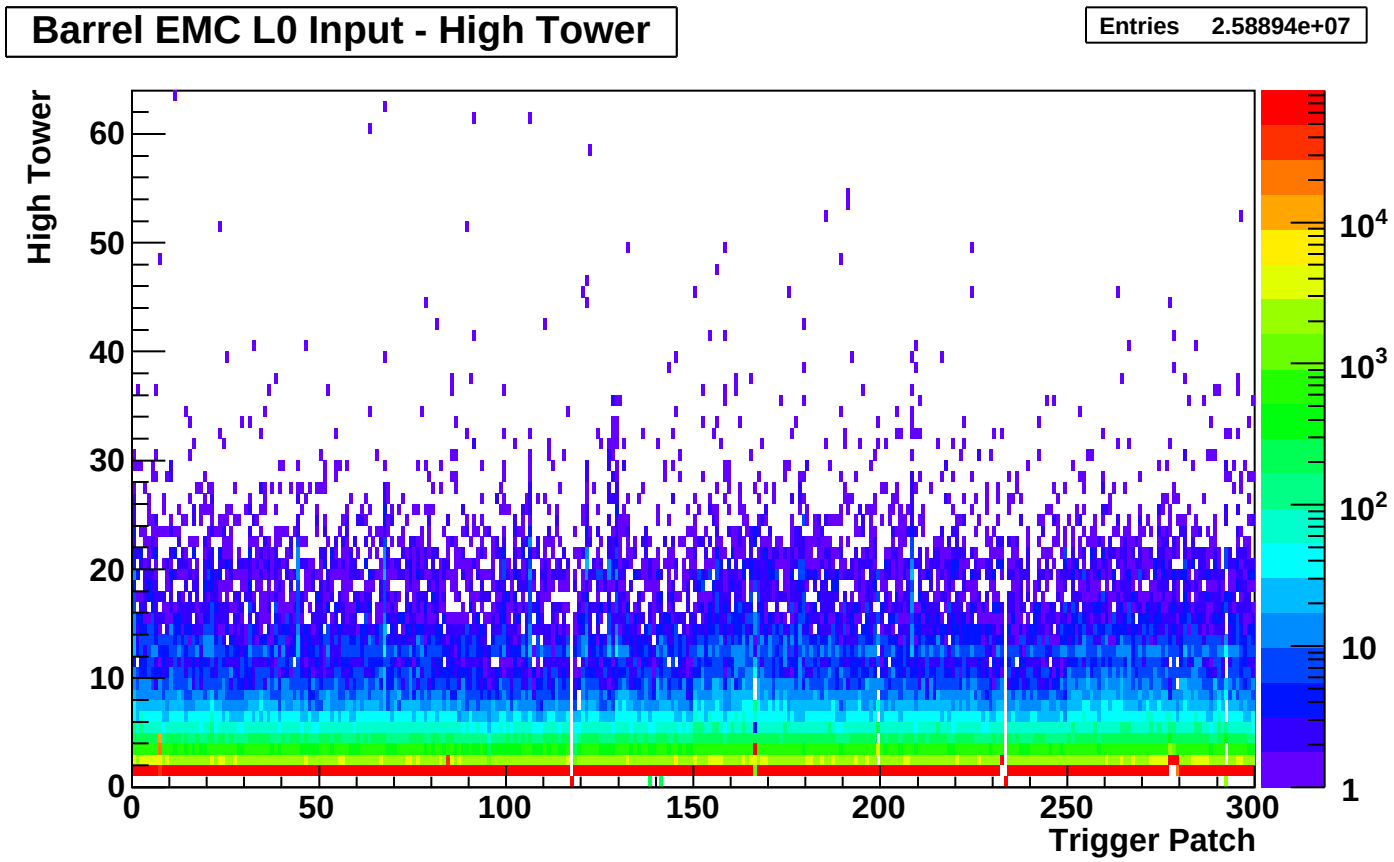

DAQ10k HT bits errors
Entries 1

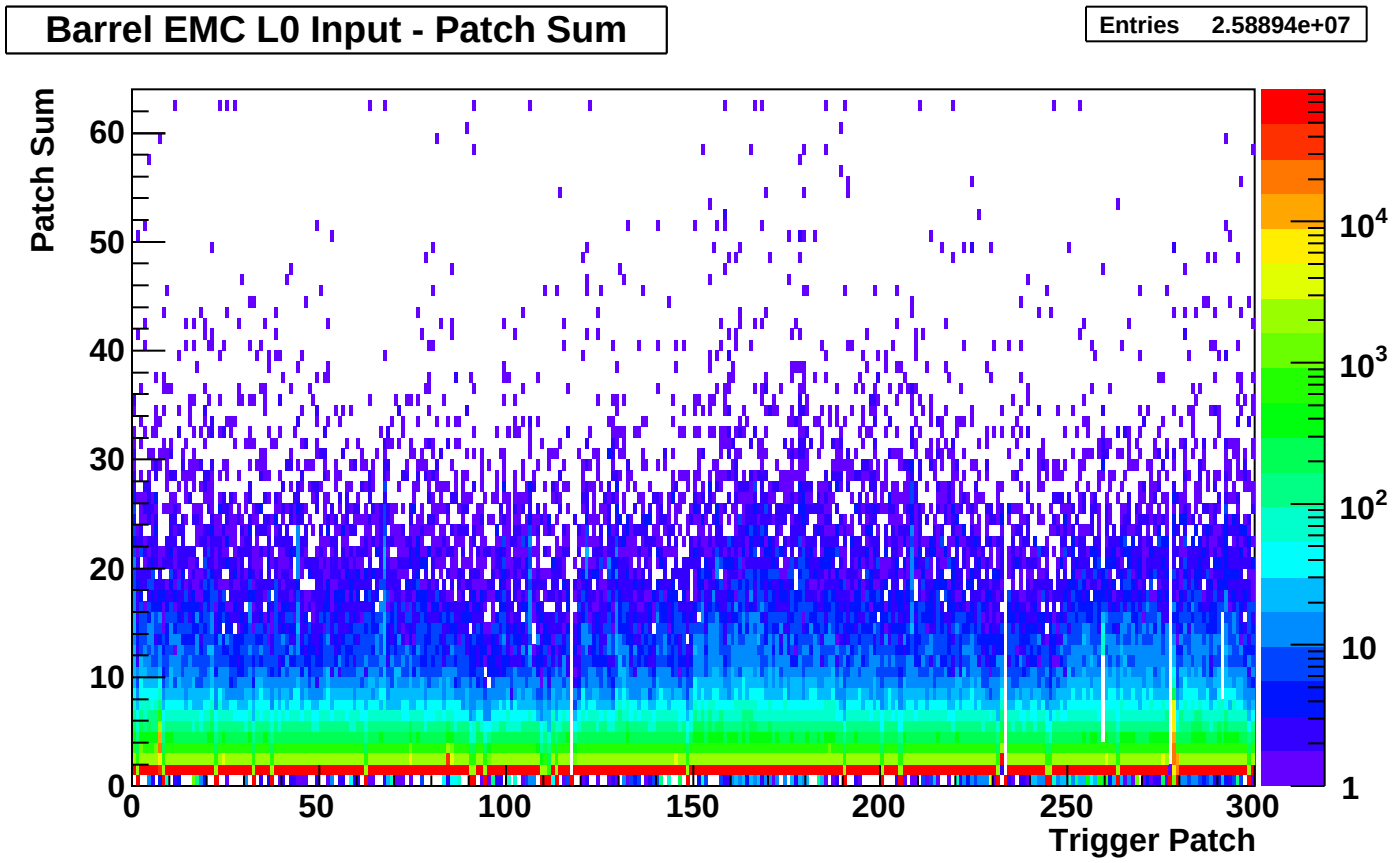

TPC Readout Mask (simulated)
Entries 17965

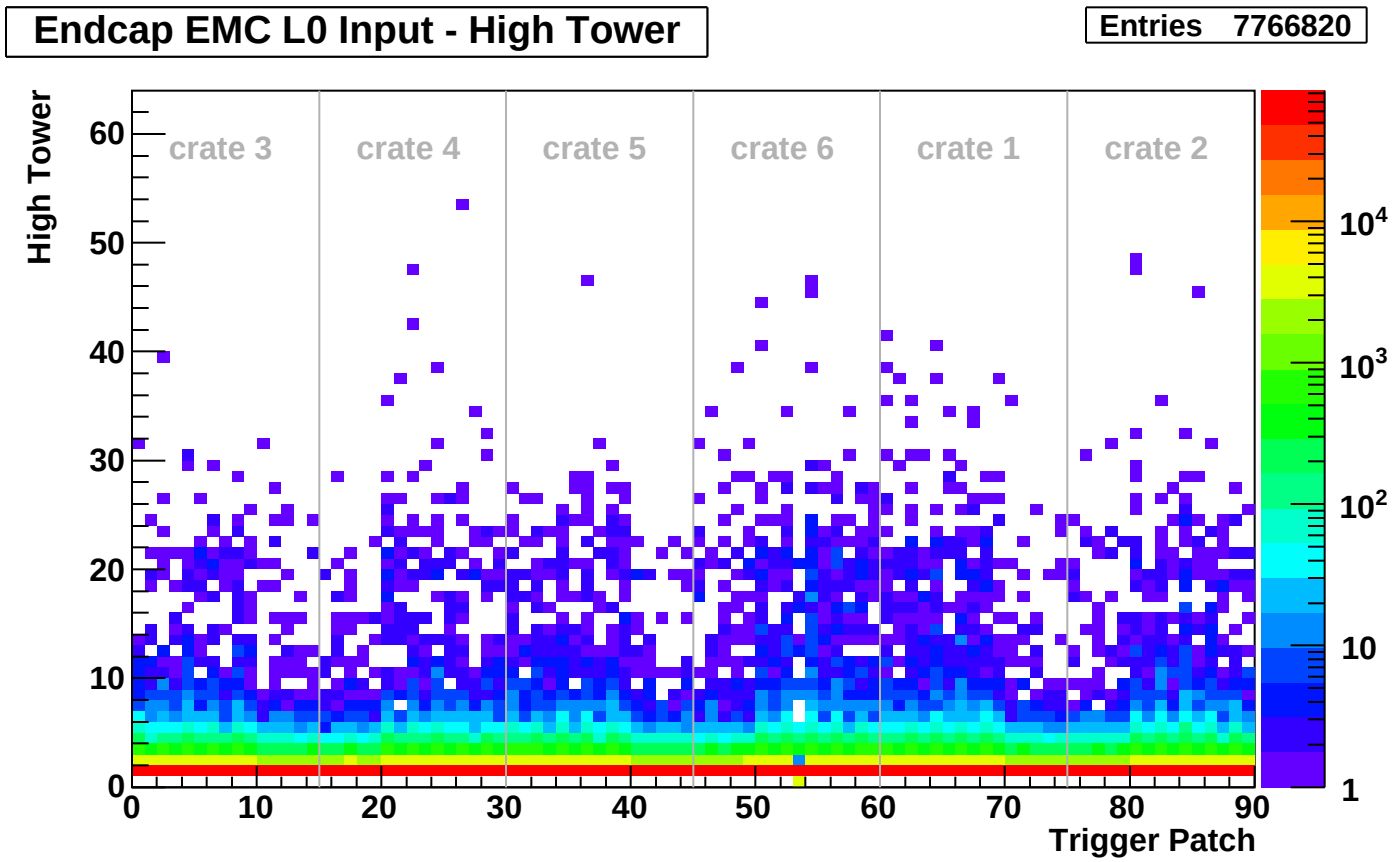

BunchId7Bit (all events)
Entries 86298

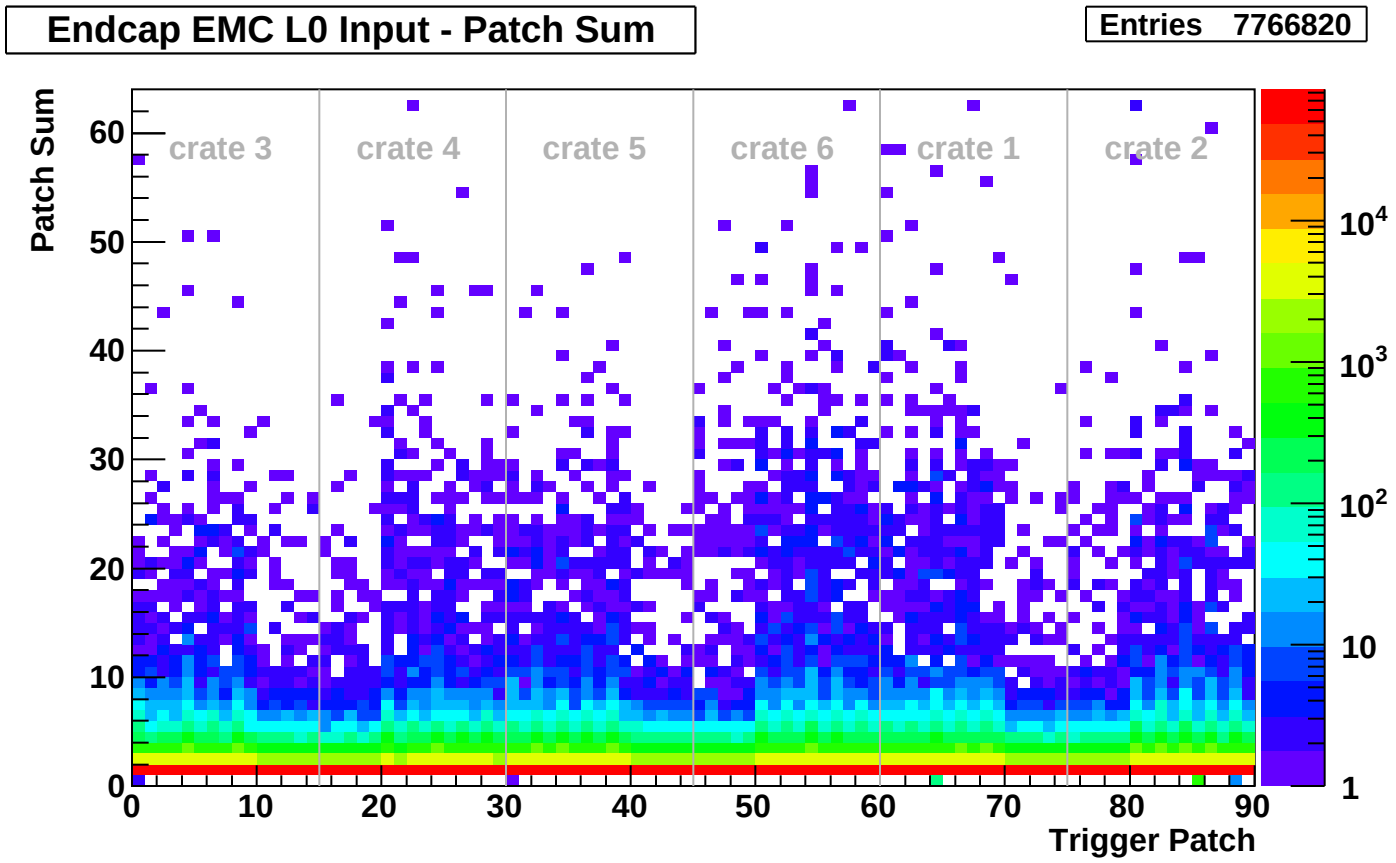

BunchId7Bit (JP1)
Entries 14502

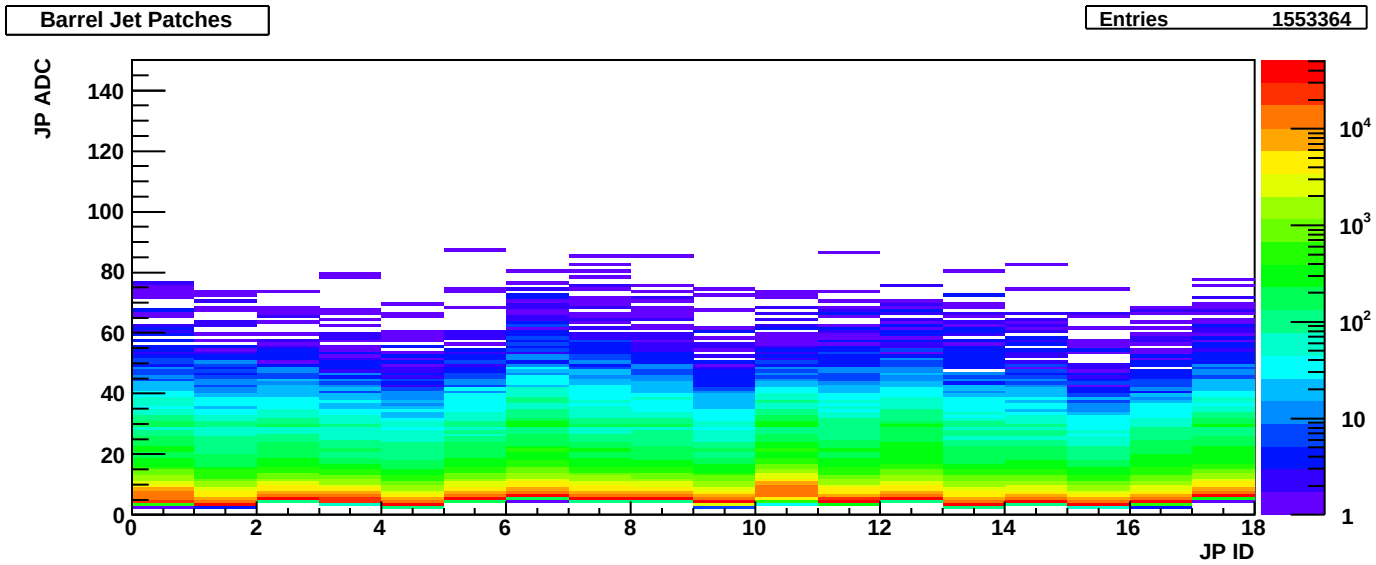

BunchId7Bit (JP2||AJP)
Entries 6256

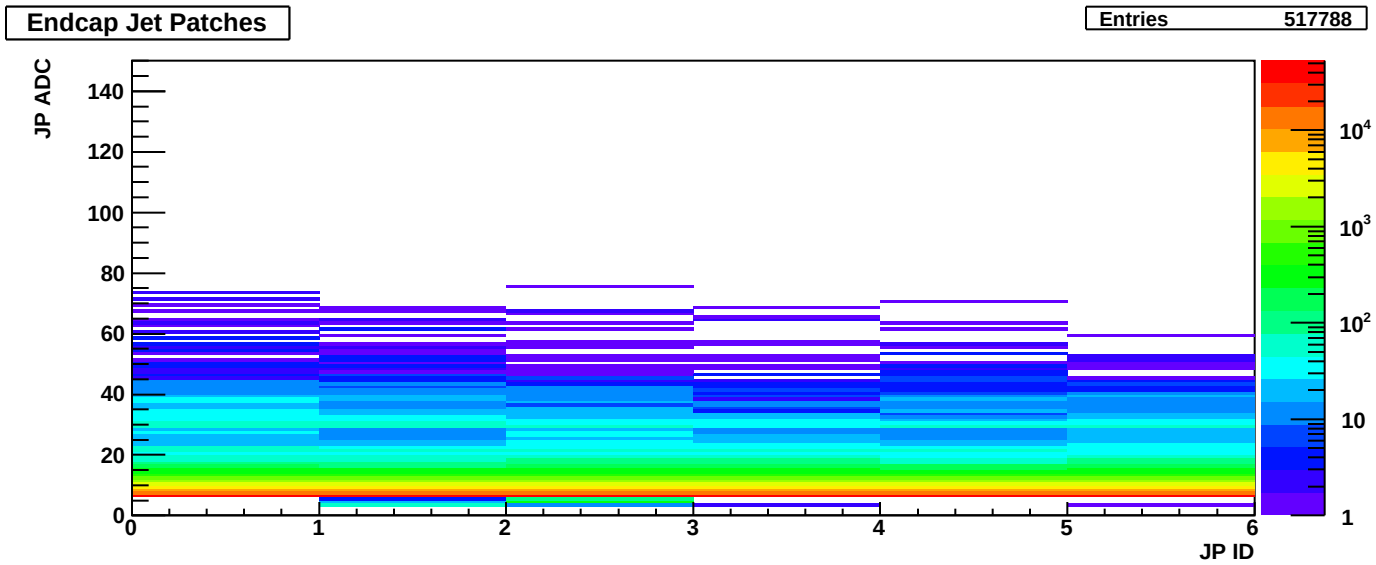

Barrel EMC L0 Input - High Tower
Entries 2.58894e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

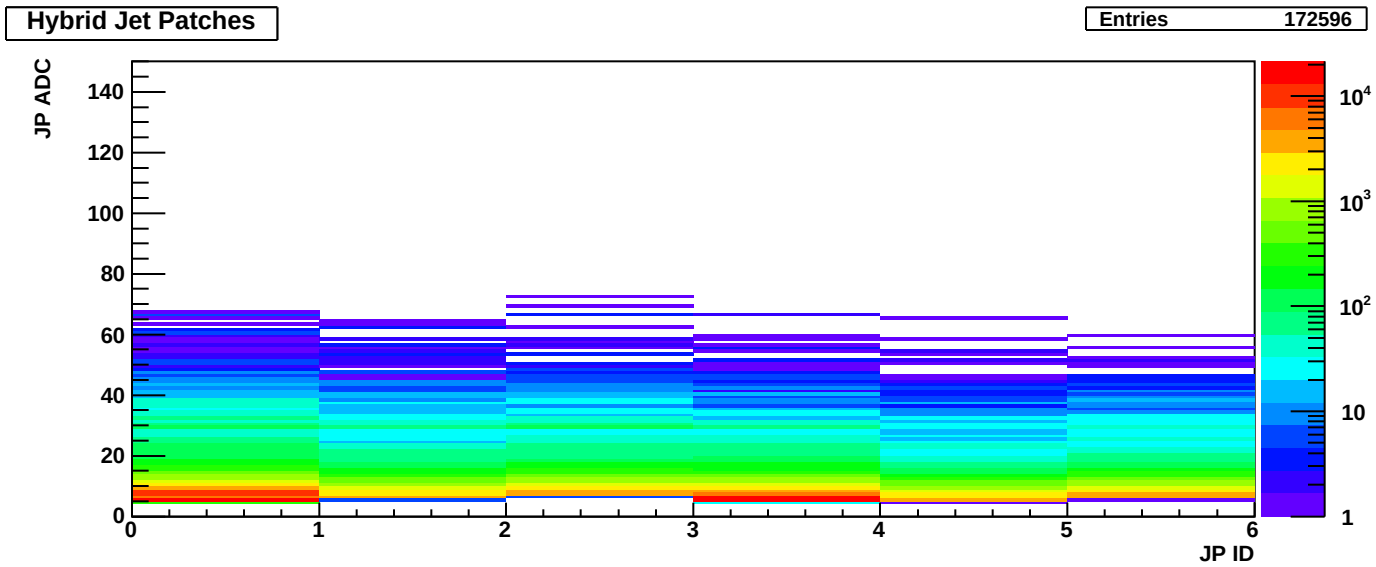

Barrel EMC L0 Input - Patch Sum
Entries 2.58894e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

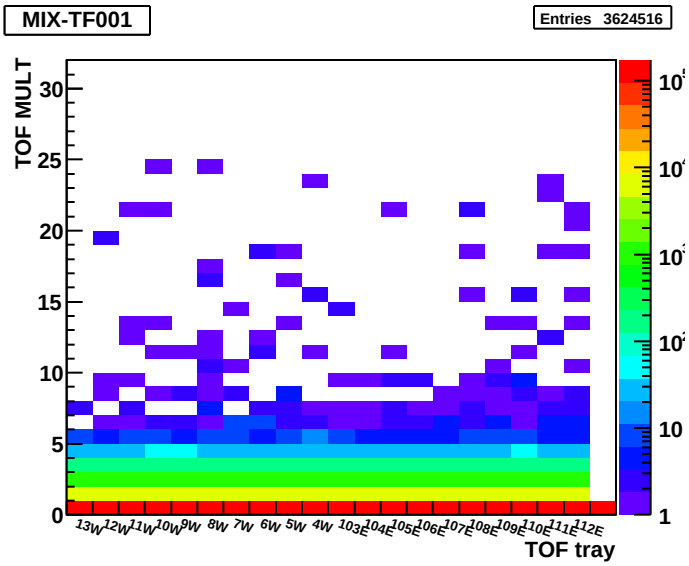

Endcap EMC L0 Input - High Tower
Entries 7766820
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

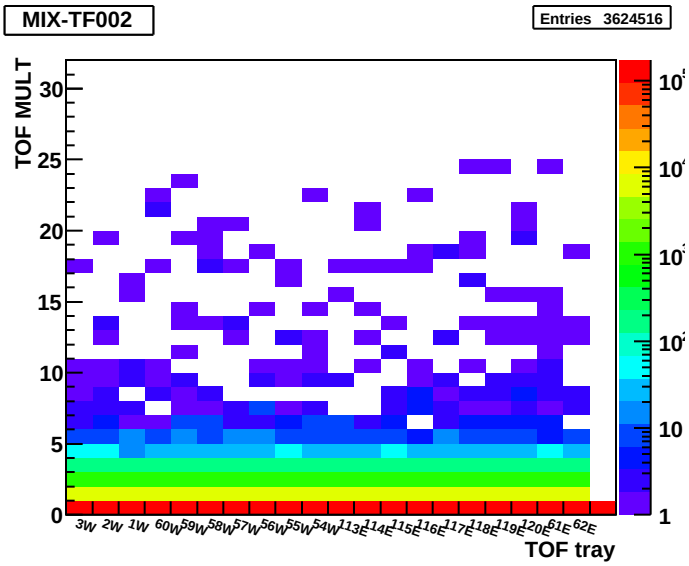

Endcap EMC L0 Input - Patch Sum
Entries 7766820
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

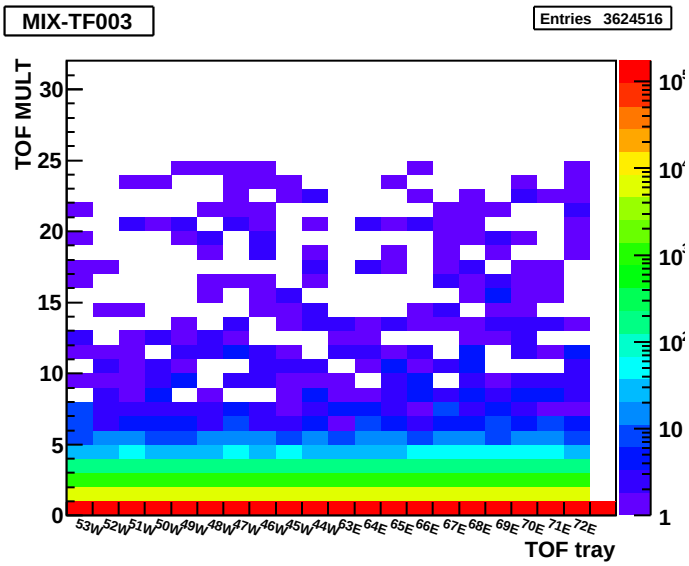

Barrel Jet Patches
Entries 1553364
JP ADC
JP ID

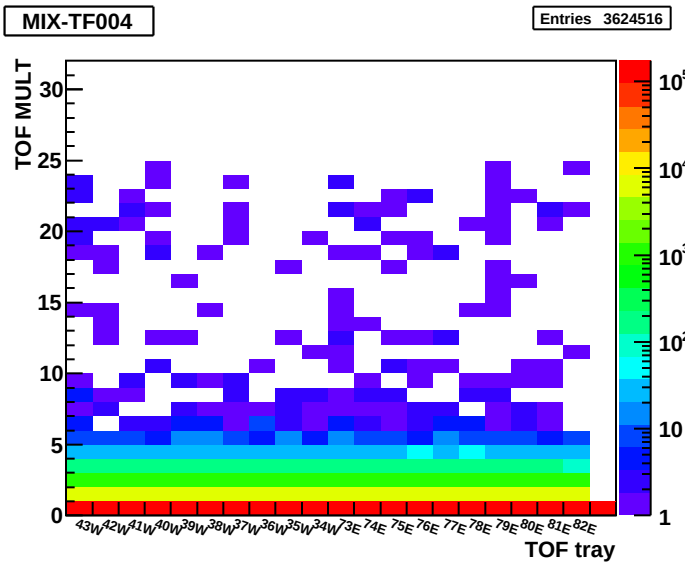

Endcap Jet Patches
Entries 517788
JP ADC
JP ID

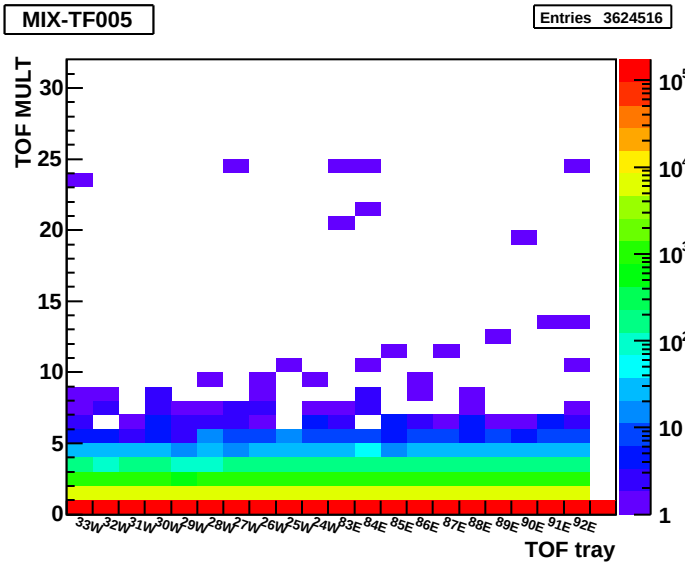

Hybrid Jet Patches
Entries 172596
JP ADC
JP ID

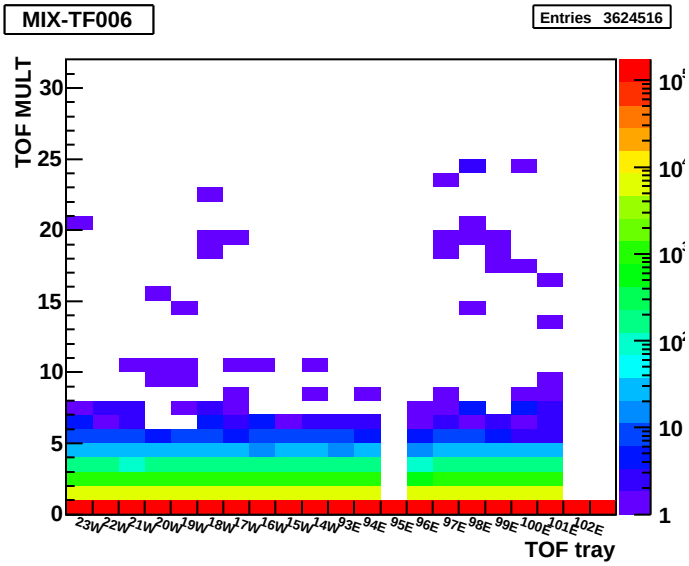

MIX-TF001
Entries 3624516
TOF MULT
TOF tray

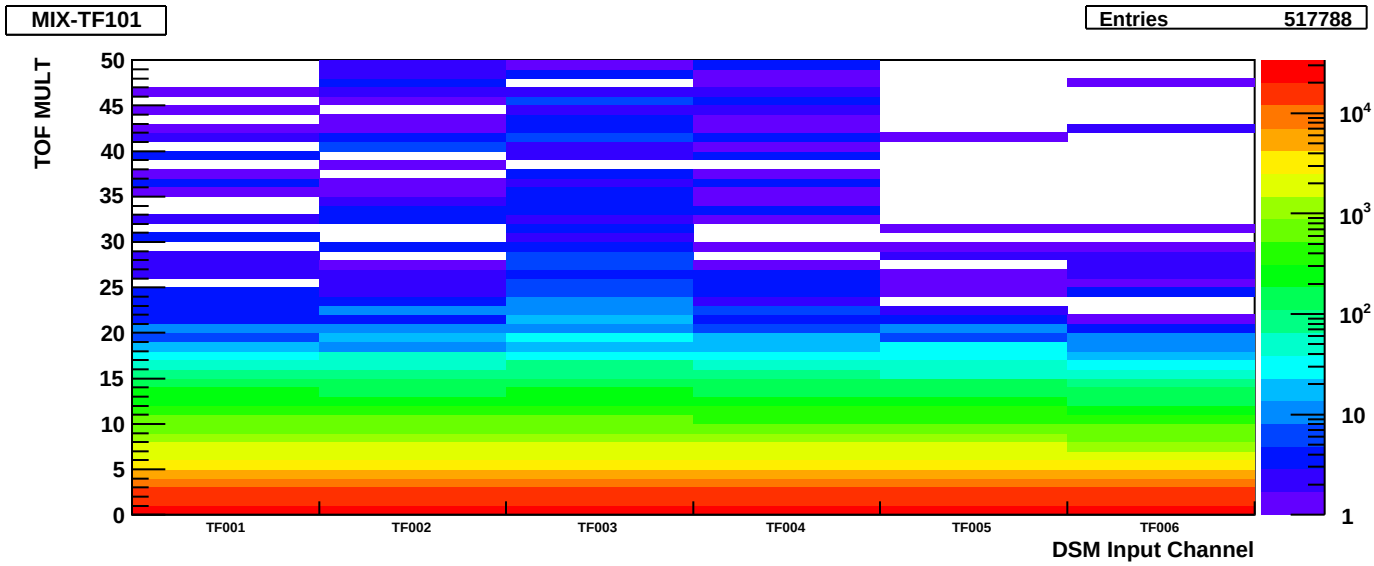

MIX-TF002
Entries 3624516
TOF MULT
TOF tray

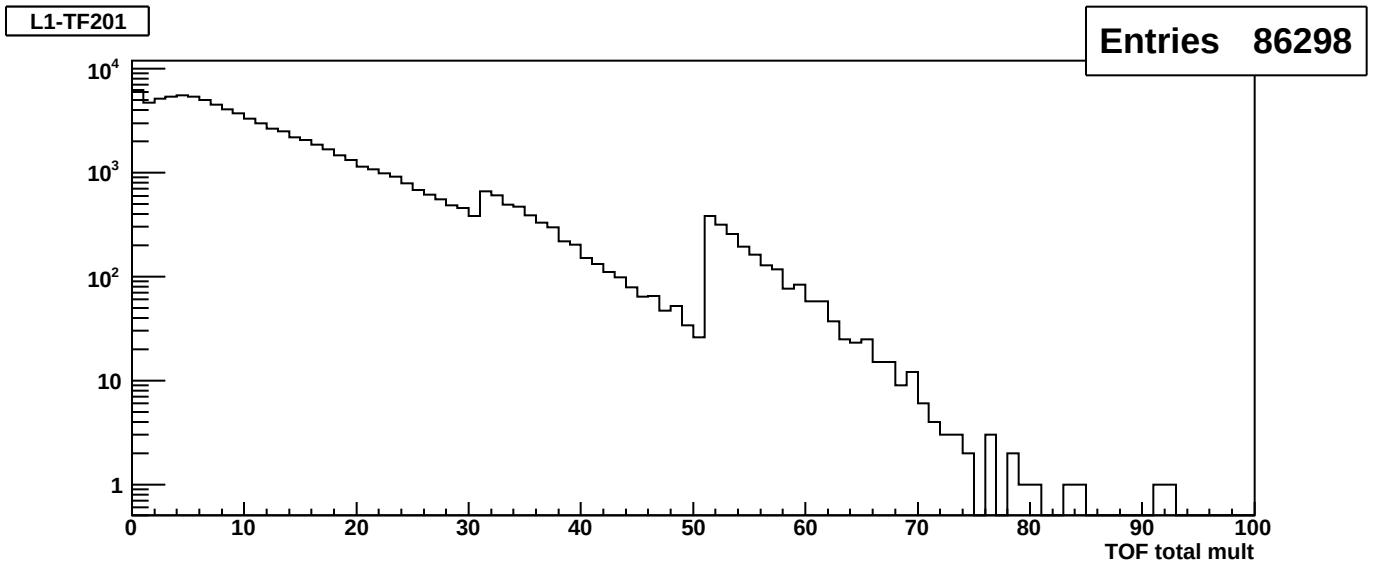

MIX-TF003
Entries 3624516
TOF MULT
TOF tray

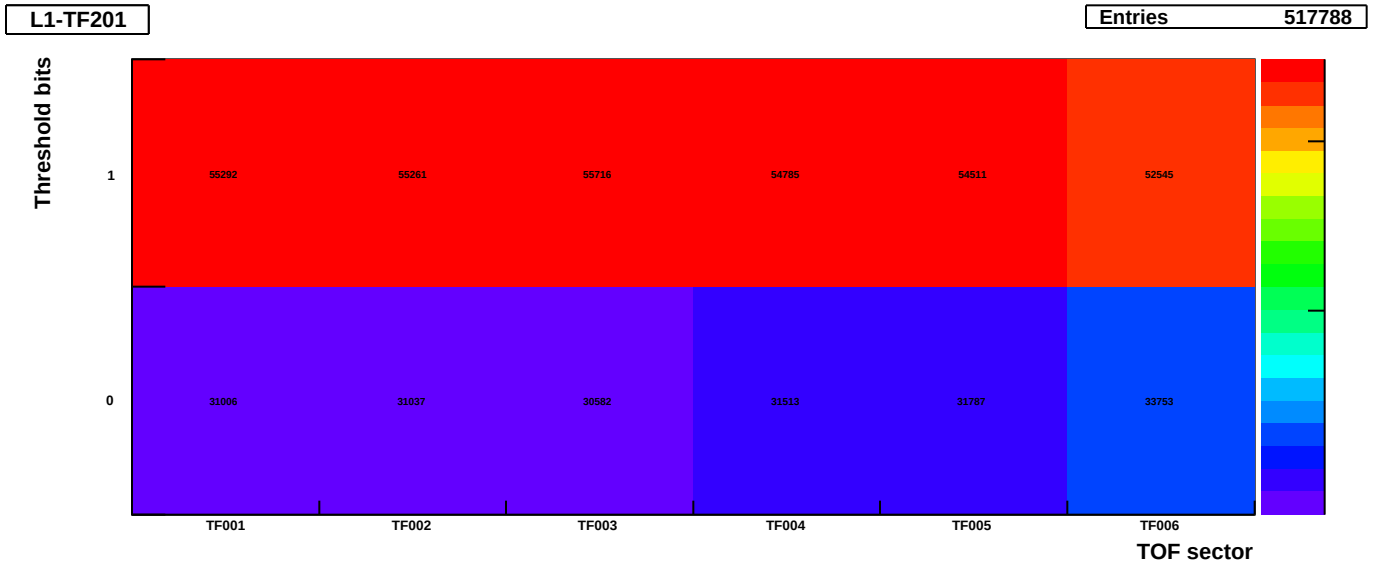

MIX-TF004
Entries 3624516
TOF MULT
TOF tray

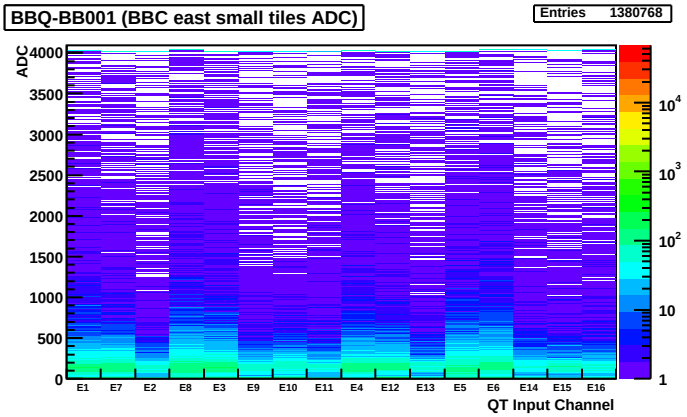

MIX-TF005
Entries 3624516
TOF MULT
TOF tray

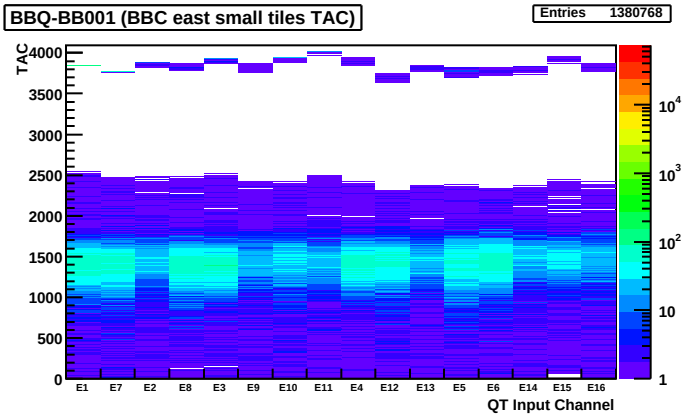

MIX-TF006
Entries 3624516
TOF MULT
TOF tray

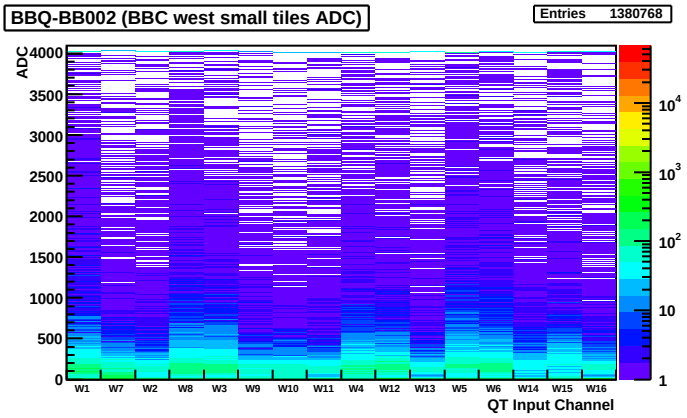

MIX-TF101
Entries 517788
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

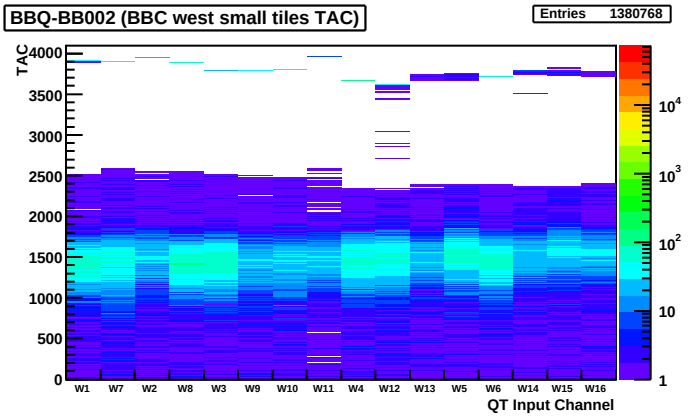

L1-TF201
Entries 86298
TOF total mult

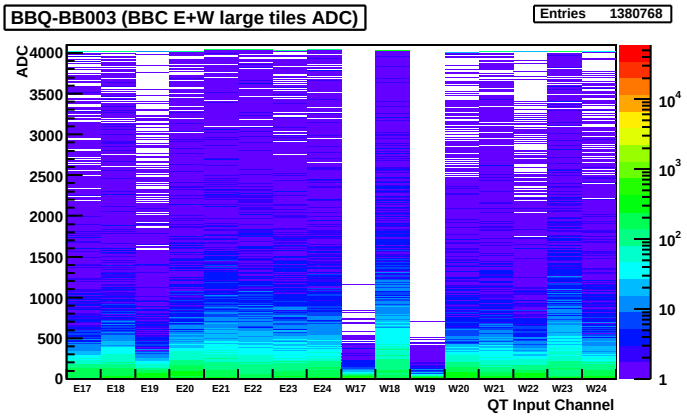

L1-TF201
Entries 517788
Threshold bits
55292
55261
55716
54785
54511
52545
31006
31037
30582
31513
31787
33753
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

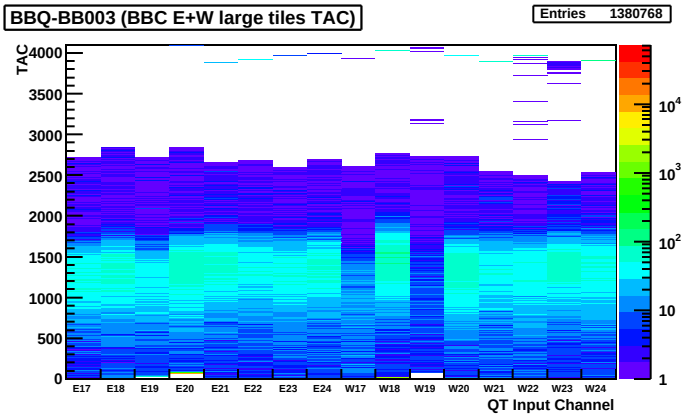

BBQ-BB001 (BBC east small tiles ADC)
Entries 1380768
ADC
QT Input Channel

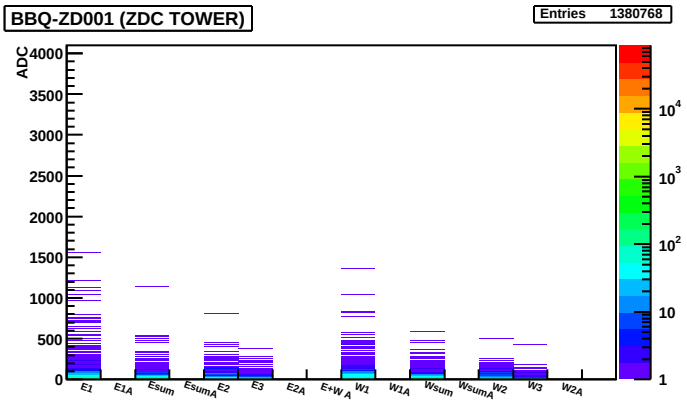

BBQ-BB001 (BBC east small tiles TAC)
Entries 1380768
TAC
QT Input Channel

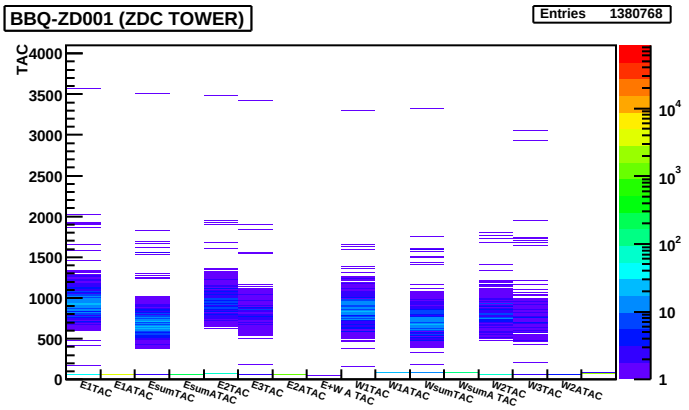

BBQ-BB002 (BBC west small tiles ADC)
Entries 1380768
ADC
QT Input Channel

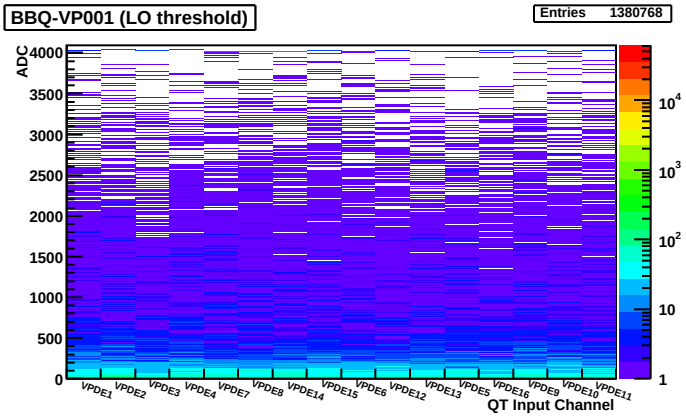

BBQ-BB002 (BBC west small tiles TAC)
Entries 1380768
TAC
QT Input Channel

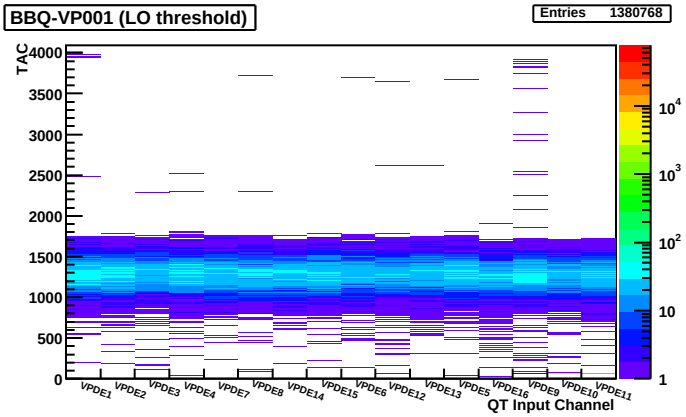

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1380768
ADC
QT Input Channel

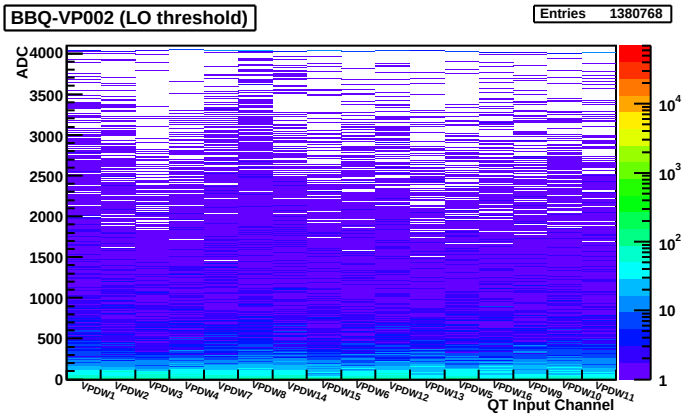

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1380768
TAC
QT Input Channel

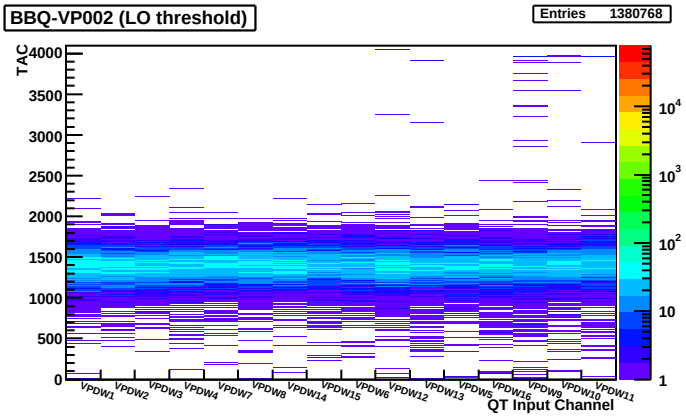

BBQ-ZD001 (ZDC TOWER)
Entries 1380768
ADC

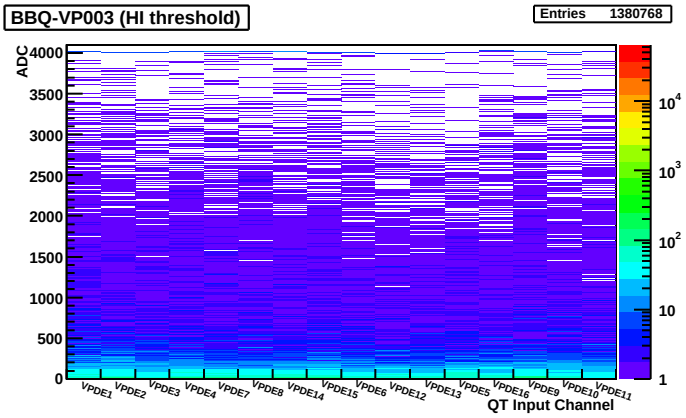

BBQ-ZD001 (ZDC TOWER)
Entries 1380768
TAC

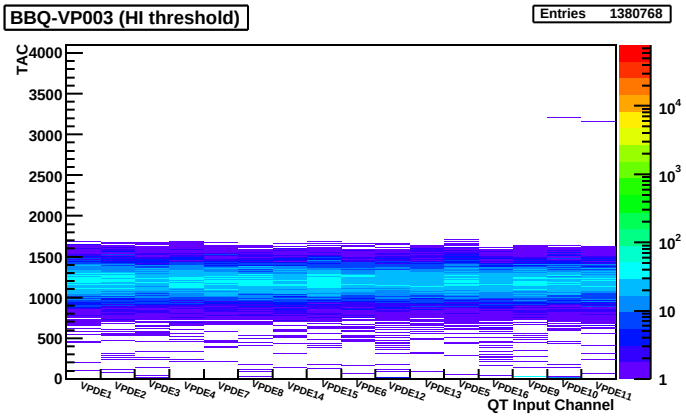

BBQ-VP001 (LO threshold)
Entries 1380768
ADC
QT Input Channel

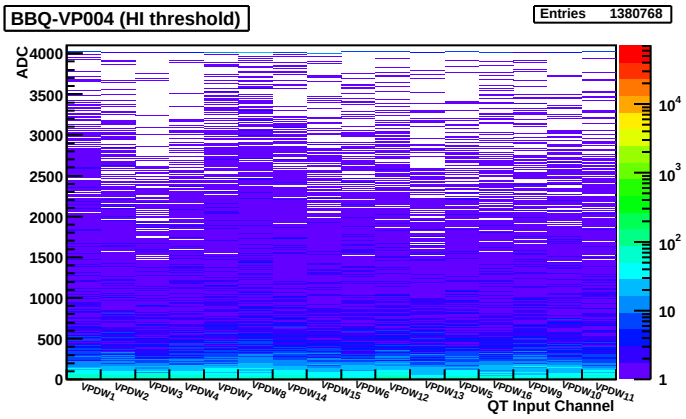

BBQ-VP001 (LO threshold)
Entries 1380768
TAC
QT Input Channel

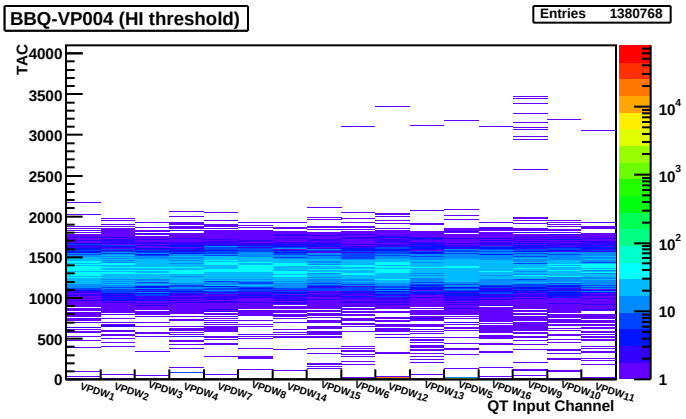

BBQ-VP002 (LO threshold)
Entries 1380768
ADC
QT Input Channel

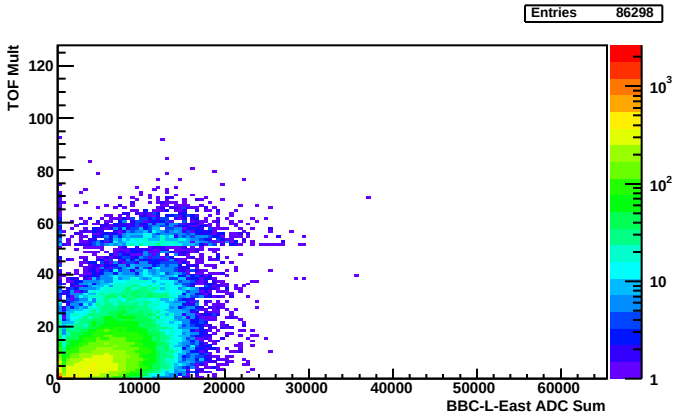

BBQ-VP002 (LO threshold)
Entries 1380768
TAC
QT Input Channel

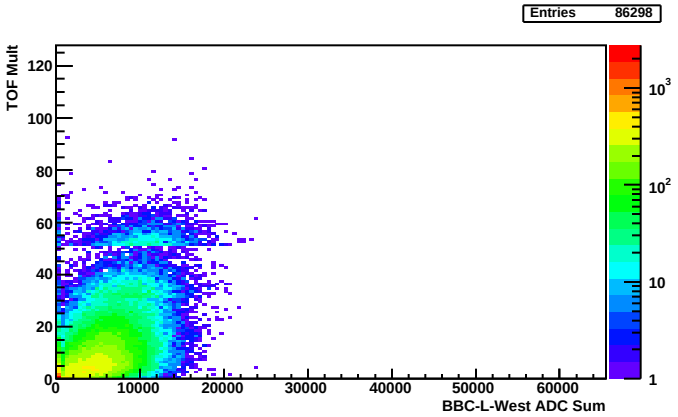

BBQ-VP003 (HI threshold)
Entries 1380768
ADC
QT Input Channel

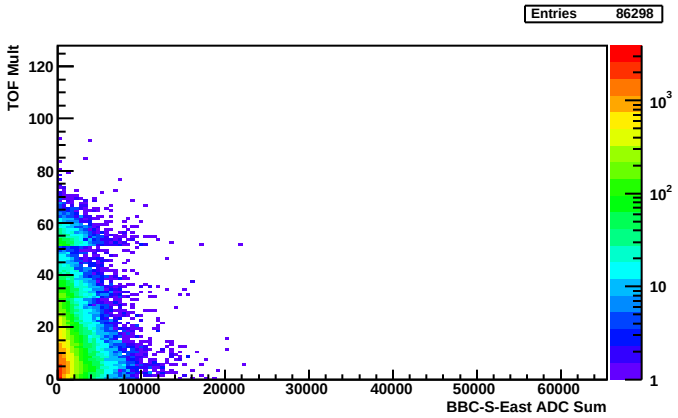

BBQ-VP003 (HI threshold)
Entries 1380768
TAC
QT Input Channel

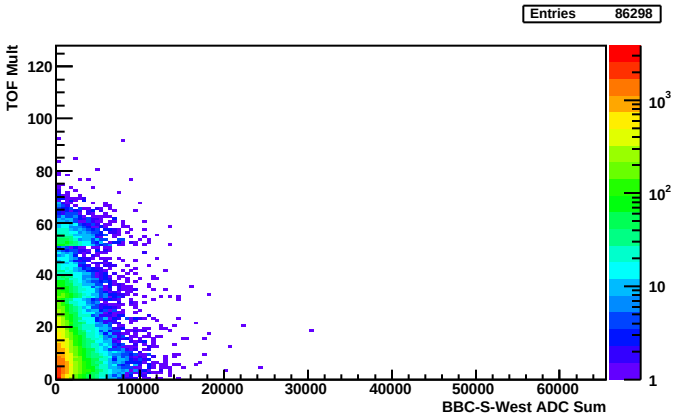

BBQ-VP004 (HI threshold)
Entries 1380768
ADC
QT Input Channel

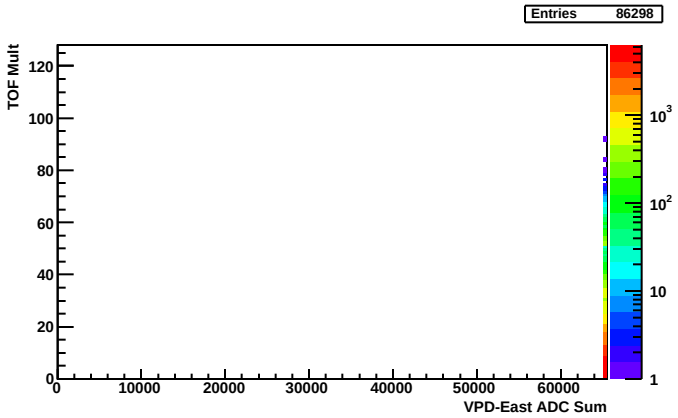

BBQ-VP004 (HI threshold)
Entries 1380768
TAC
QT Input Channel

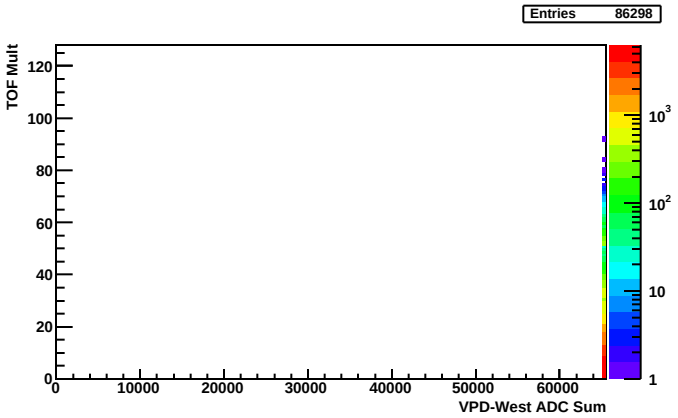

Entries 86298
TOF Mult
BBC-L-East ADC Sum

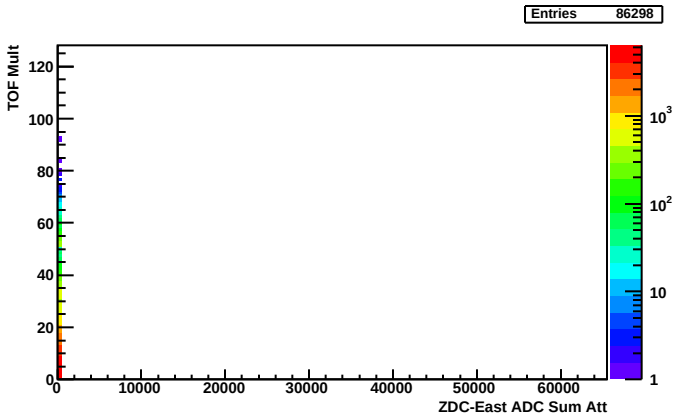

Entries 86298
TOF Mult
BBC-L-West ADC Sum

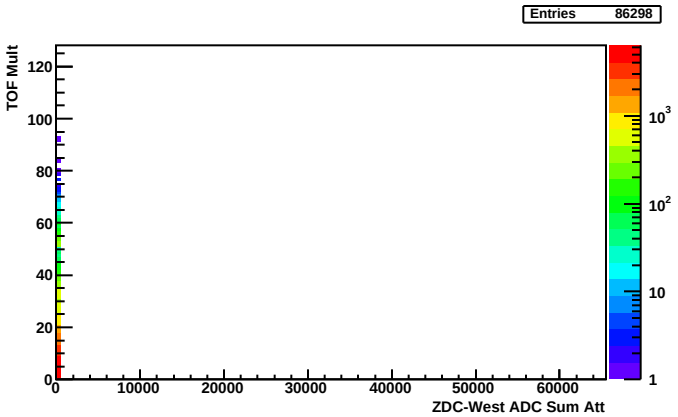

Entries 86298
TOF Mult
BBC-S-East ADC Sum

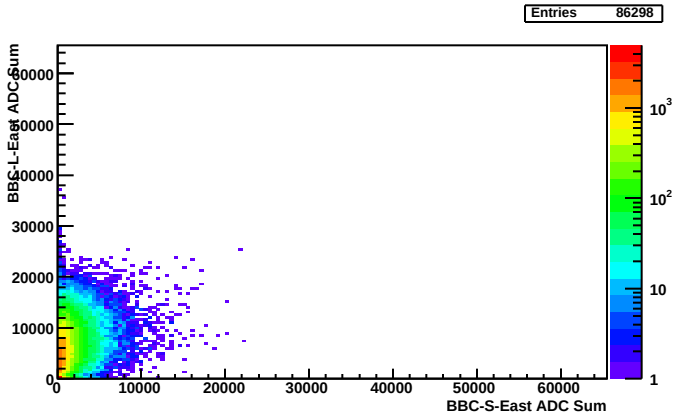

Entries 86298
TOF Mult
BBC-S-West ADC Sum

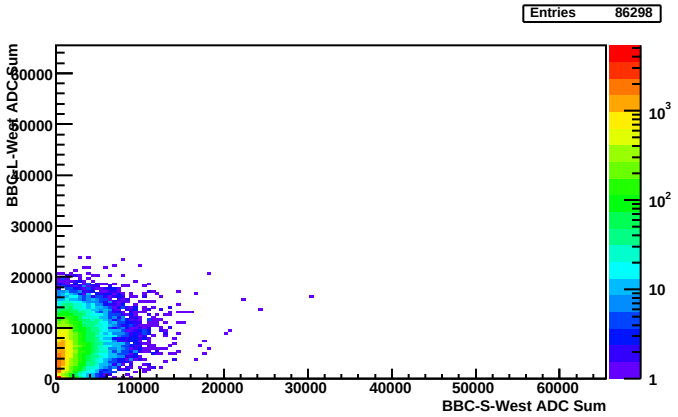

Entries 86298
TOF Mult
VPD-East ADC Sum

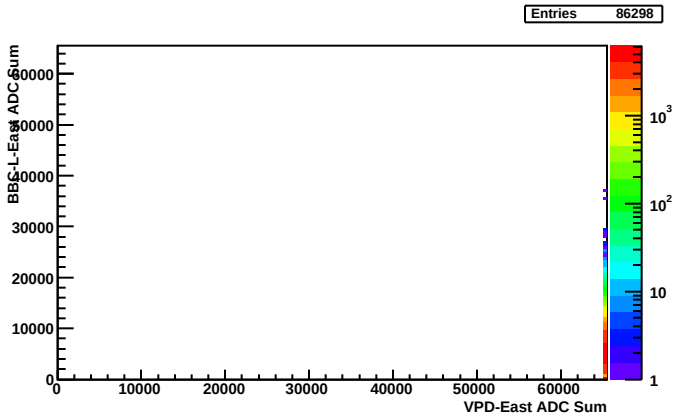

Entries 86298
TOF Mult
VPD-West ADC Sum

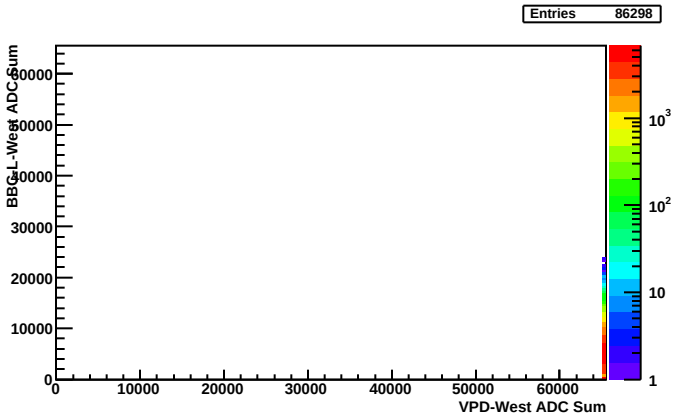

Entries 86298
TOF Mult
ZDC-East ADC Sum Att

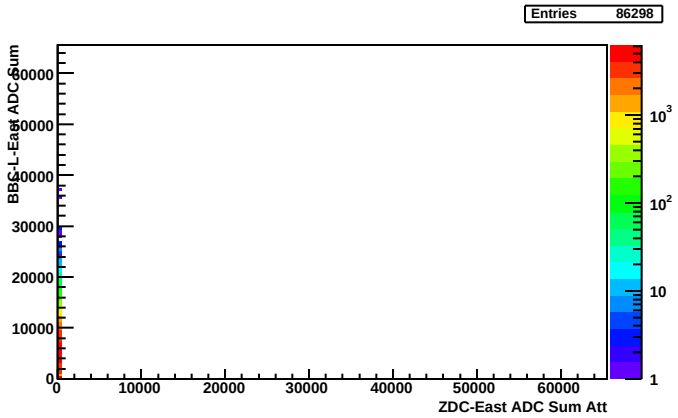

Entries 86298
TOF Mult
ZDC-West ADC Sum Att

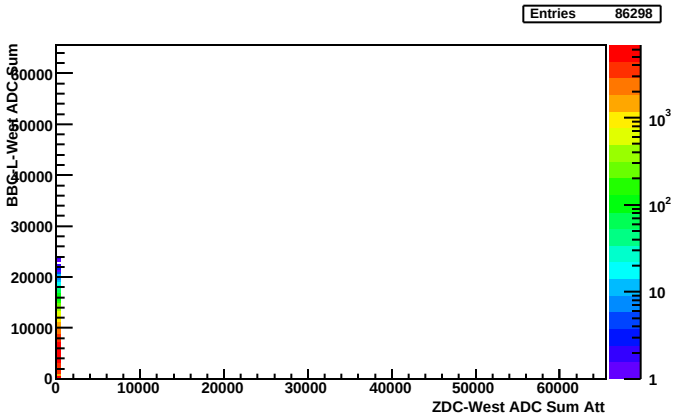

Entries 86298
BBC-L-East ADC Sum
BBC-S-East ADC Sum

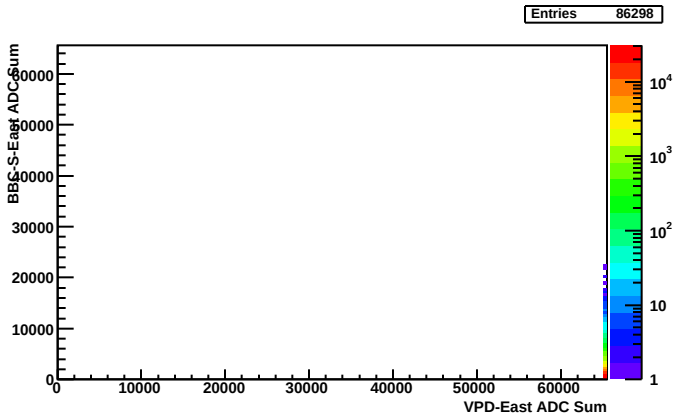

Entries 86298
BBC-L-West ADC Sum
BBC-S-West ADC Sum

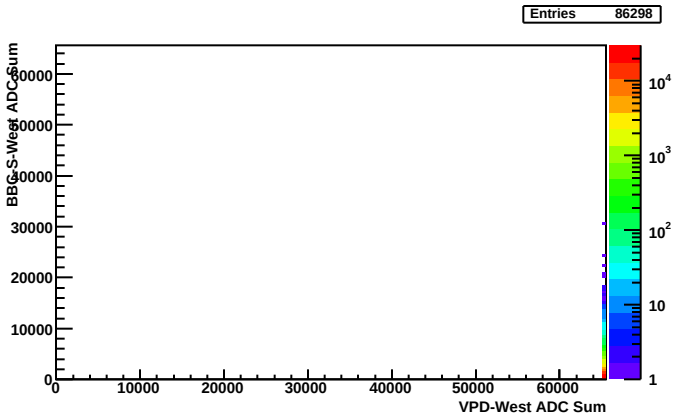

Entries 86298
BBC-L-East ADC Sum
VPD-East ADC Sum

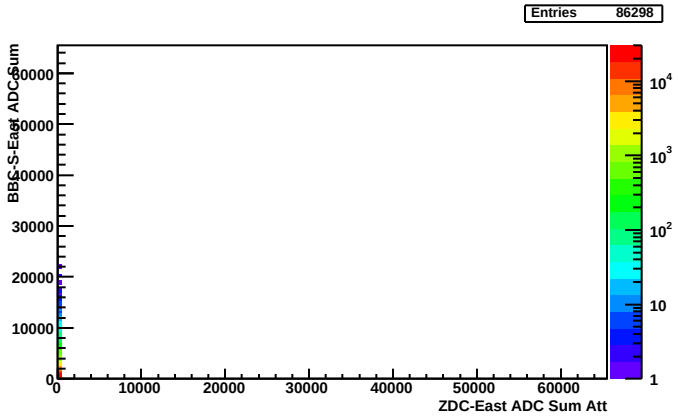

Entries 86298
BBC-L-West ADC Sum
VPD-West ADC Sum

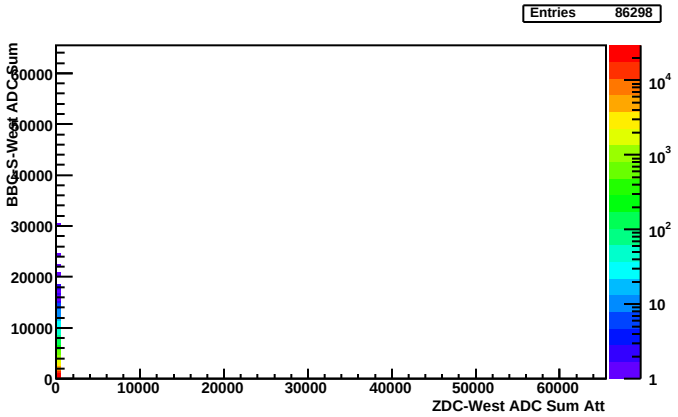

Entries 86298
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

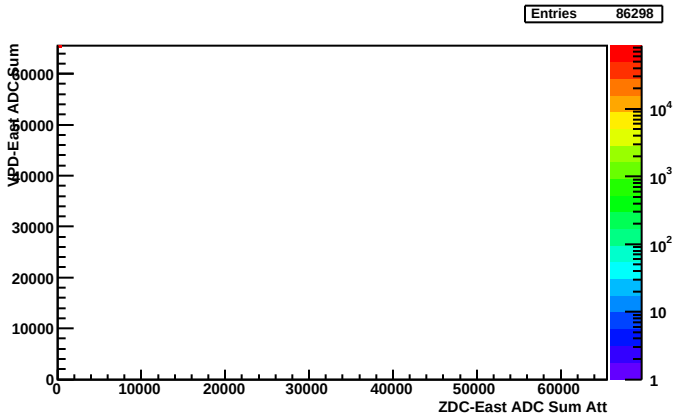

Entries 86298
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

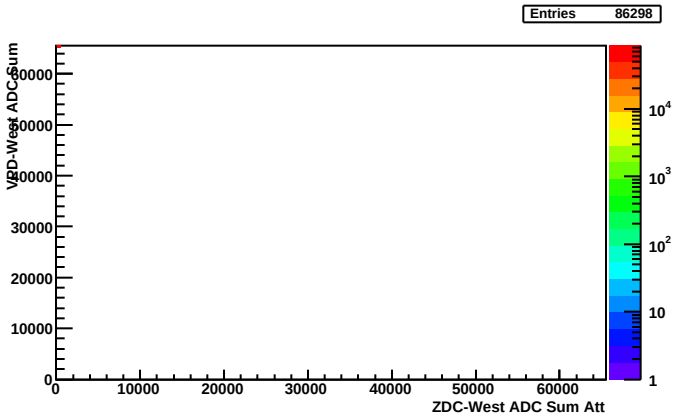

Entries 86298
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 86298
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 86298
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 86298
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 86298
VPD-East ADC Sum
ZDC-East ADC Sum Att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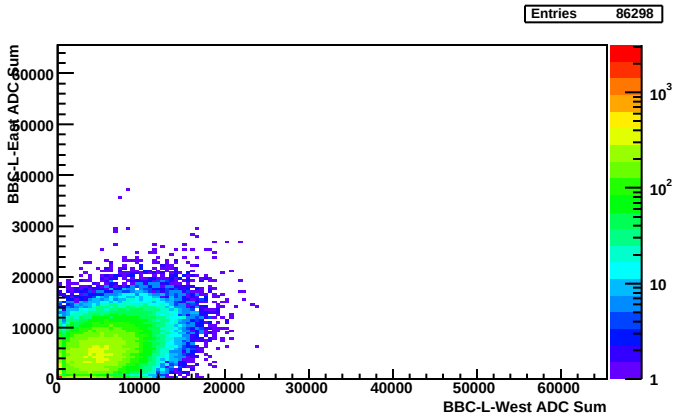
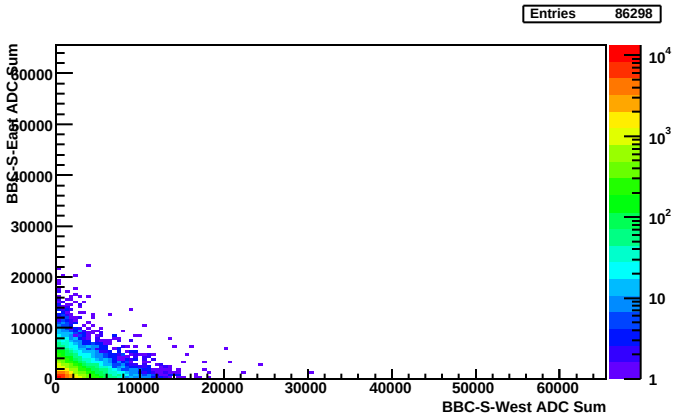
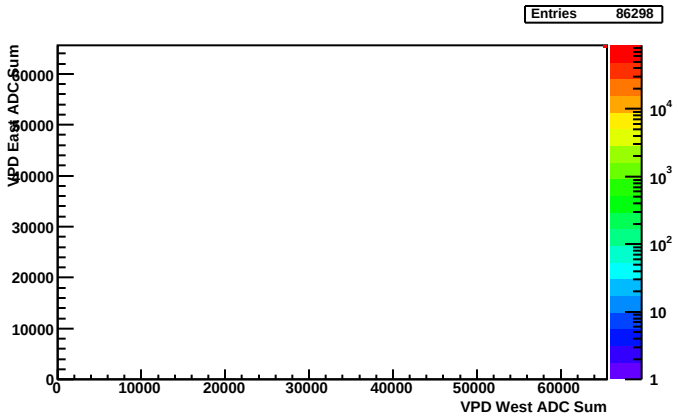
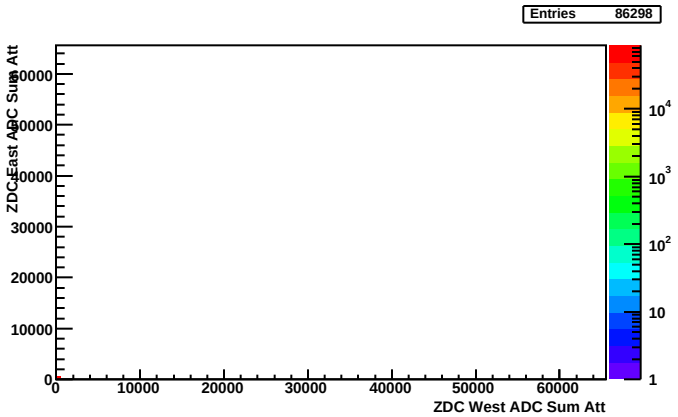
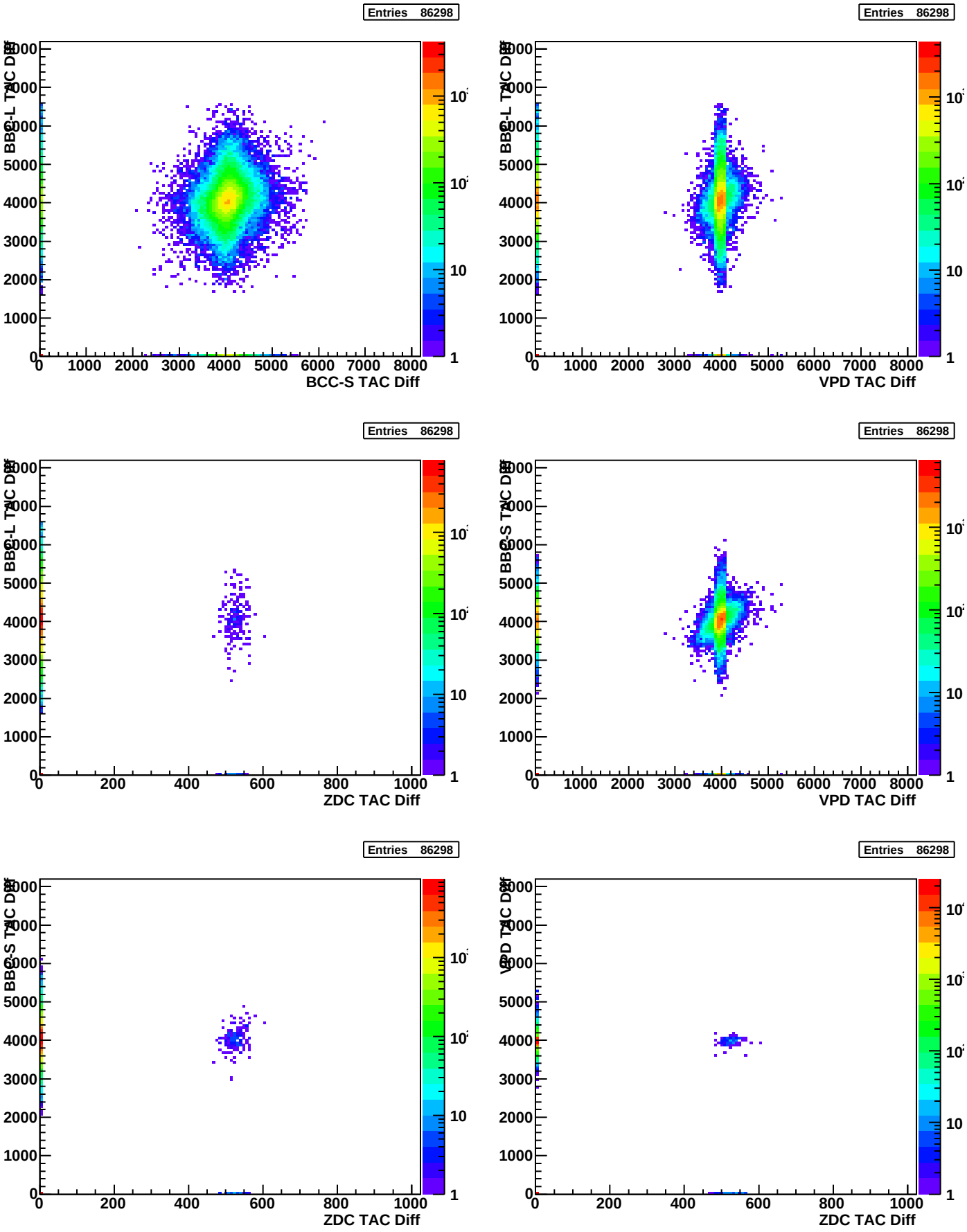
VPD-West ADC Sum
ZDC-West ADC Sum Att

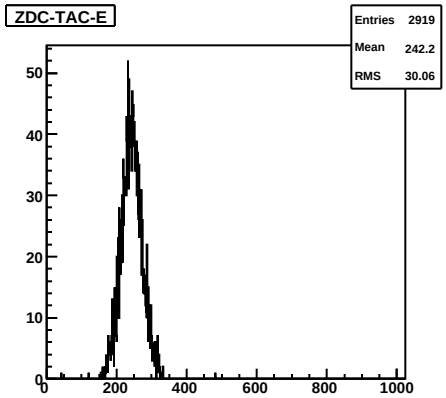

Entries 86298
BBC-L-East ADC Sum
BBC-L-West ADC Sum

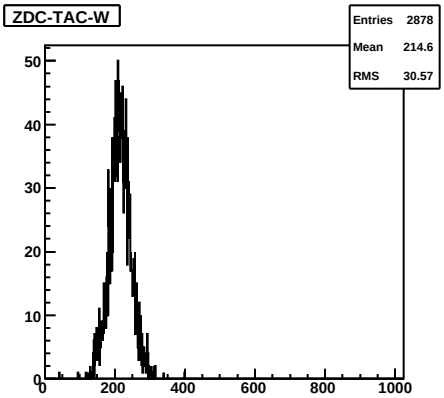

Entries 86298
BBC-S-East ADC Sum
BBC-S-West ADC Sum

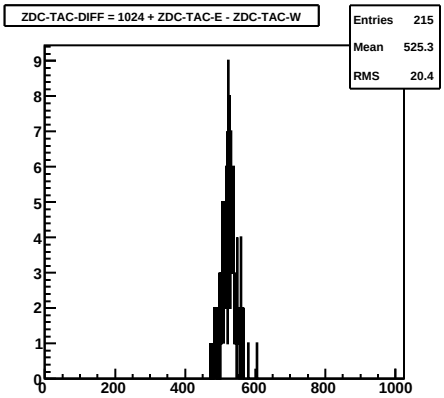

Entries 86298
VPD East ADC Sum
VPD West ADC Sum

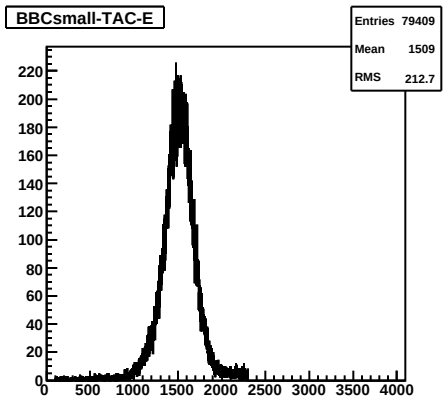

Entries 86298
ZDC East ADC Sum Att
ZDC West ADC Sum Att

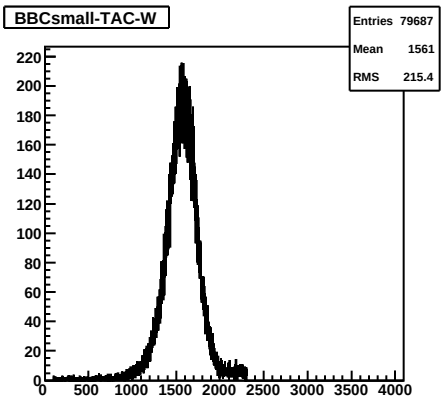

Entries 86298
BBC-L TAC Diff
BCC-S TAC Diff
Entries 86298
BBC-L TAC Diff
VPD TAC Diff
Entries 86298
BBC-L TAC Diff
ZDC TAC Diff
Entries 86298
BBC-S TAC Diff
VPD TAC Diff
Entries 86298
BBC-S TAC Diff
ZDC TAC Diff
Entries 86298
VPD TAC Diff
ZDC TAC Diff

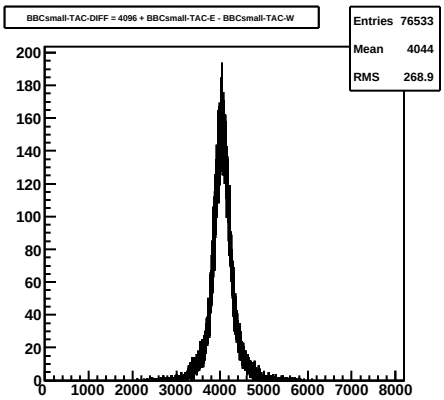

ZDC-TAC-E
Entries 2919
Mean 242.2
RMS 30.06

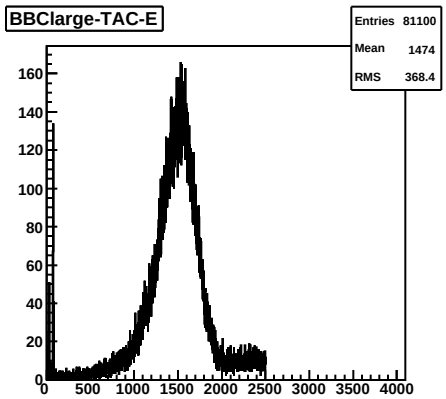

ZDC-TAC-W
Entries 2878
Mean 214.6
RMS 30.57

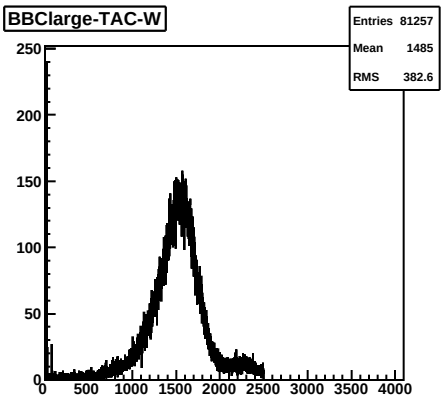

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 215
Mean 525.3
RMS 20.4

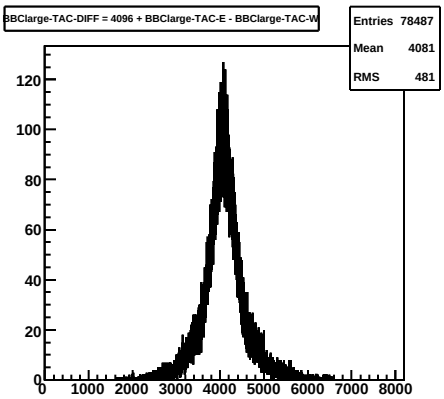

BBCsmall-TAC-E
Entries 79409
Mean 1509
RMS 212.7

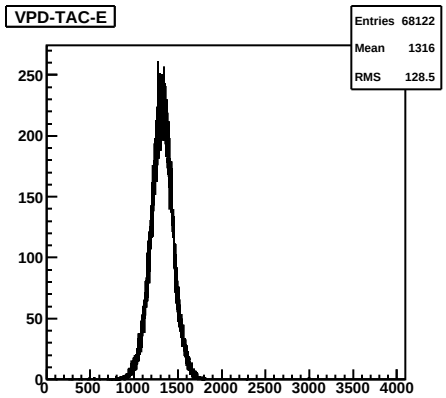

BBCsmall-TAC-W
Entries 79687
Mean 1561
RMS 215.4

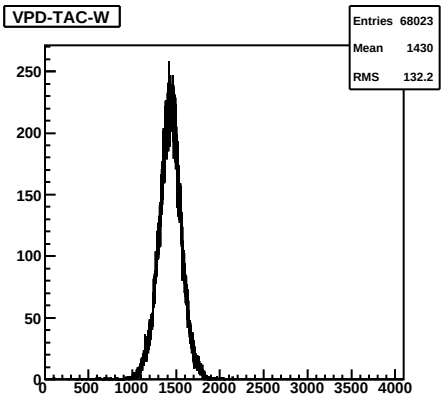

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 76533
Mean 4044
RMS 268.9

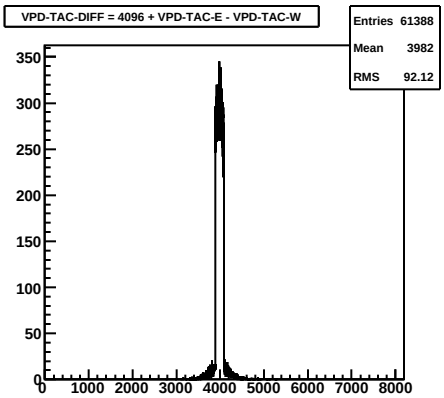

BBClarge-TAC-E
Entries 81100
Mean 1474
RMS 368.4

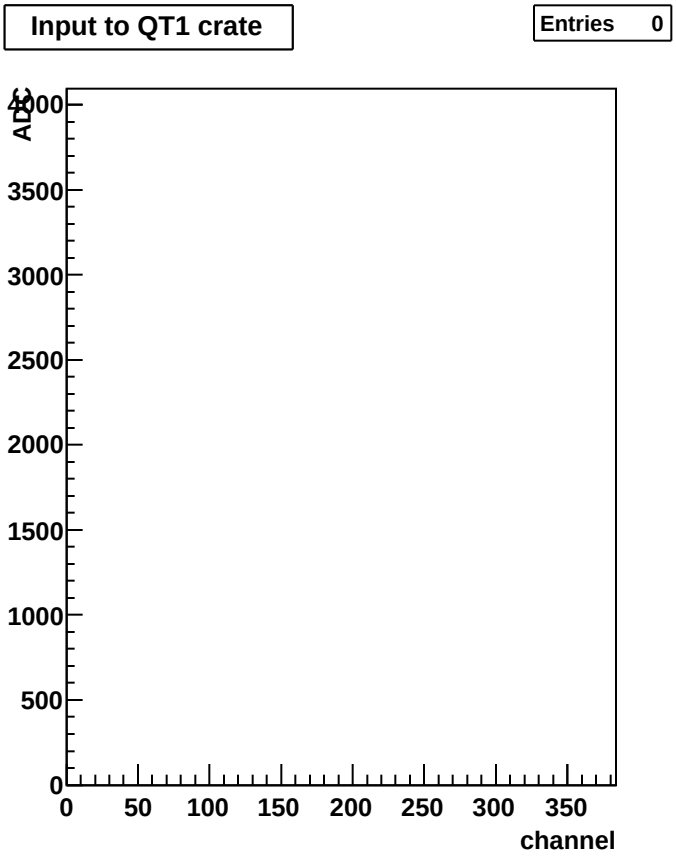

BBClarge-TAC-W
Entries 81257
Mean 1485
RMS 382.6

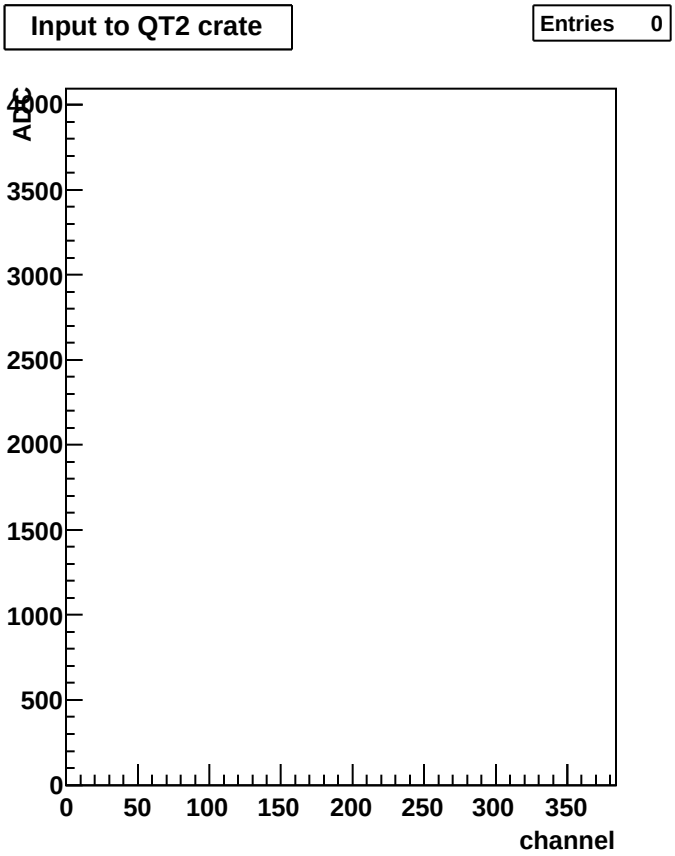

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 78487
Mean 4081
RMS 481

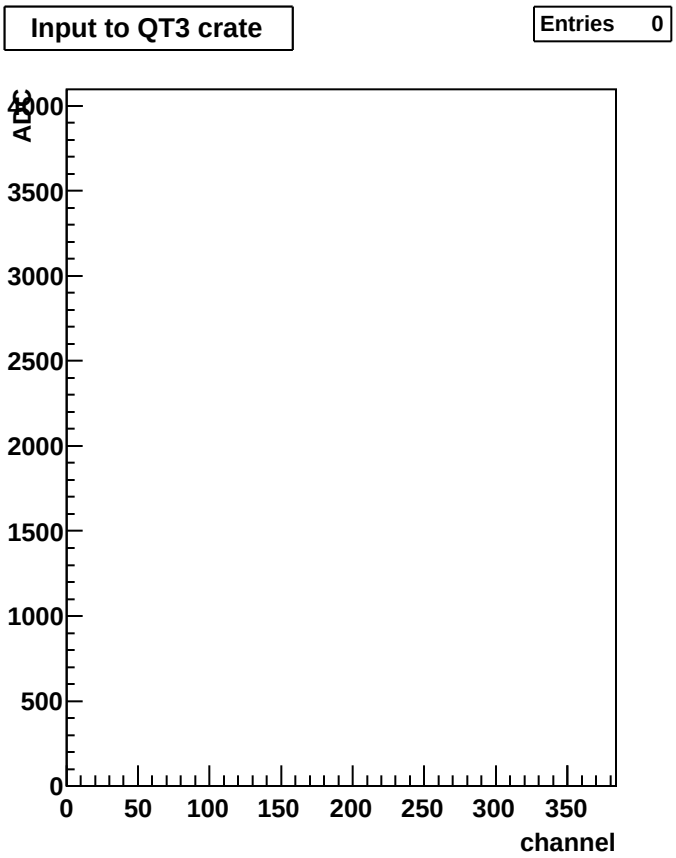

VPD-TAC-E
Entries 68122
Mean 1316
RMS 128.5

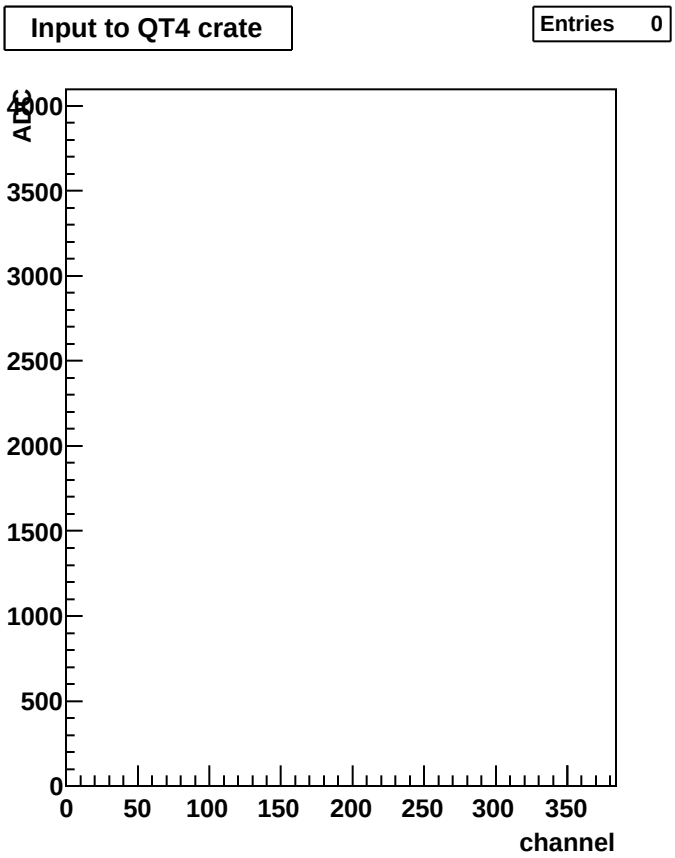

VPD-TAC-W
Entries 68023
Mean 1430
RMS 132.2

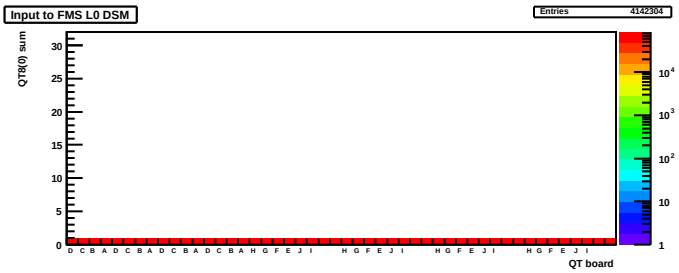

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 61388
Mean 3982
RMS 92.12

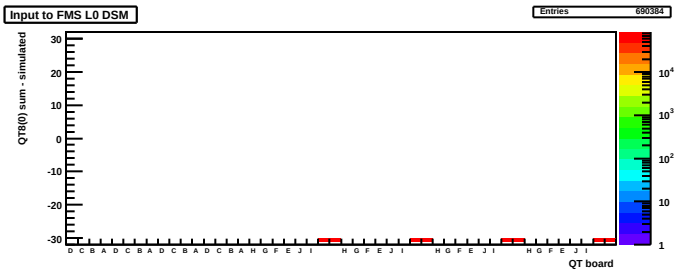

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

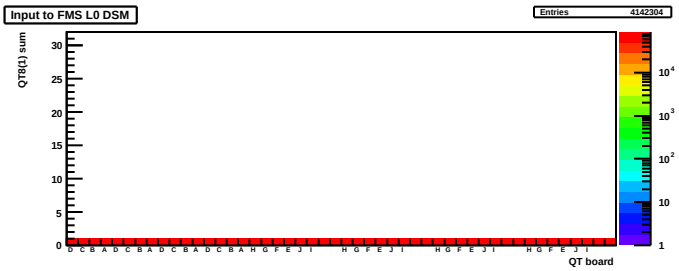

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

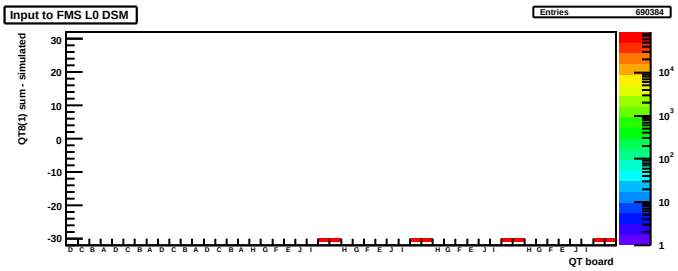

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

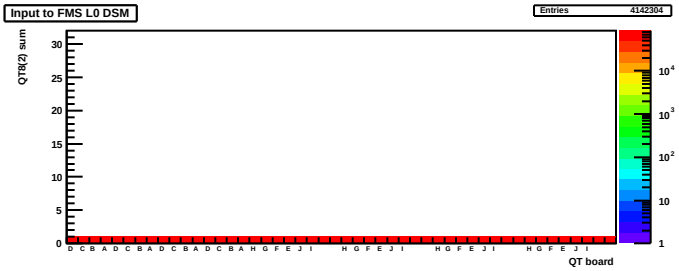

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

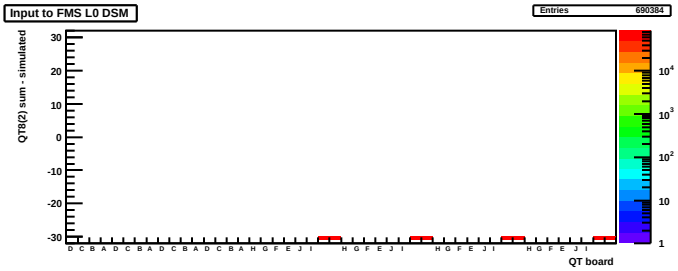

Input to FMS L0 DSM
Entries 4142304
QT8(0) sum
QT board

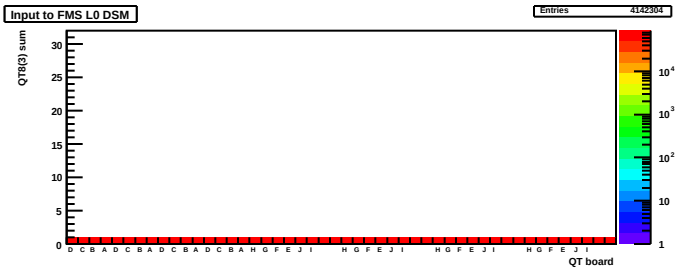

Input to FMS L0 DSM
Entries 690384
QT8(0) sum - simulated
QT board

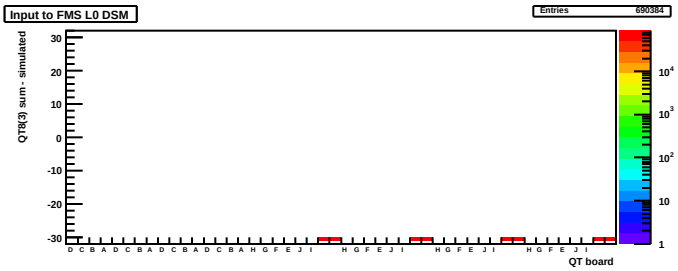

Input to FMS L0 DSM
Entries 4142304
QT8(1) sum
QT board

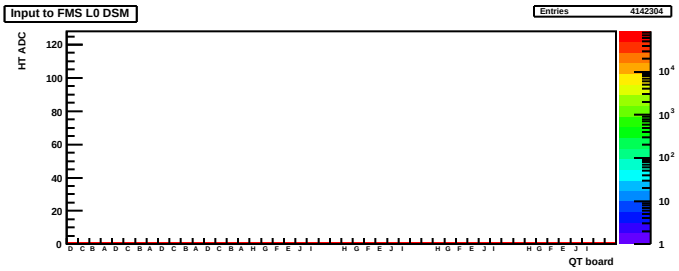

Input to FMS L0 DSM
Entries 690384
QT8(1) sum - simulated
QT board

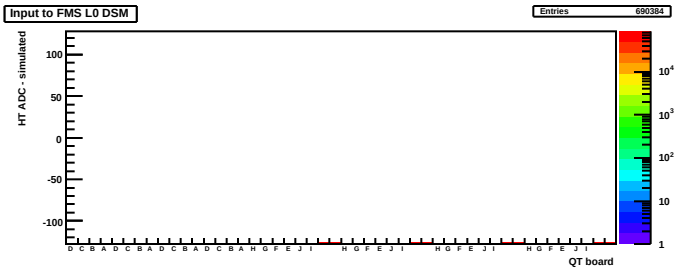

Input to FMS L0 DSM
Entries 4142304
QT8(2) sum
QT board

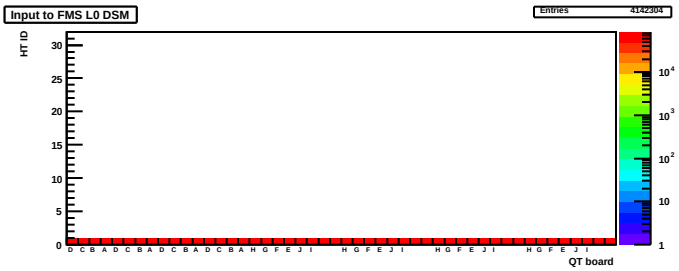

Input to FMS L0 DSM
Entries 690384
QT8(2) sum - simulated
QT board

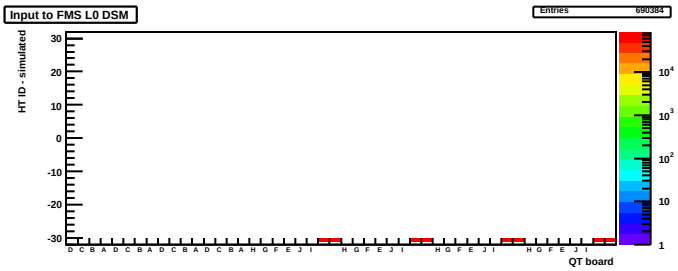

Input to FMS L0 DSM
Entries 4142304
QT8(3) sum
QT board

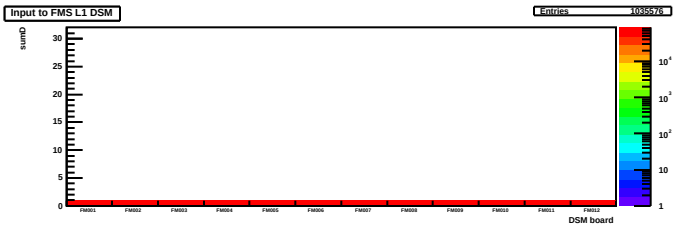

Input to FMS L0 DSM
Entries 690384
QT8(3) sum - simulated
QT board

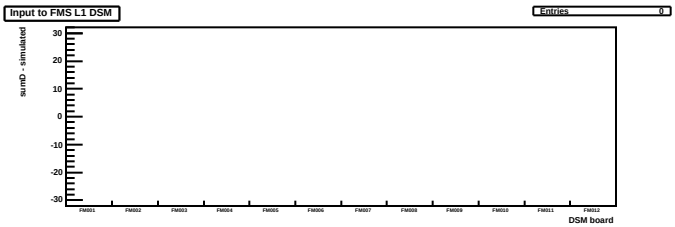

Input to FMS L0 DSM
Entries 4142304
HT ADC
QT board

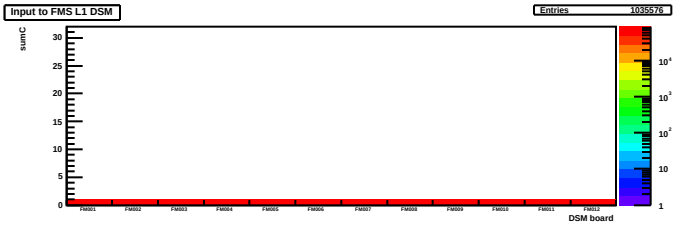

Input to FMS L0 DSM
Entries 690384
HT ADC - simulated
QT board

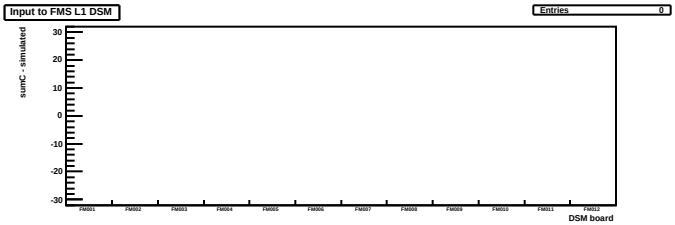

Input to FMS L0 DSM
Entries 4142304
HT ID
QT board

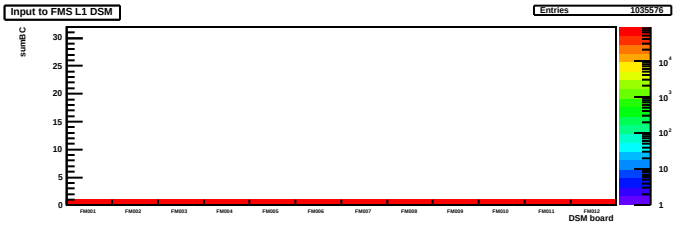

Input to FMS L0 DSM
Entries 690384
HT ID - simulated
QT board

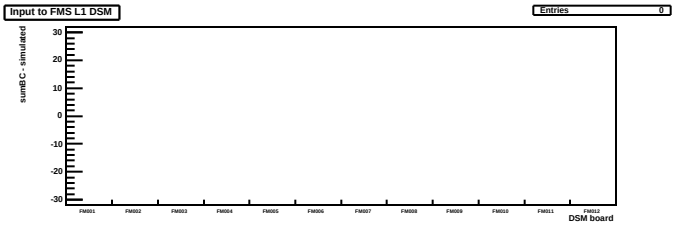

Input to FMS L1 DSM
Entries 1035576
sumD
DSM board

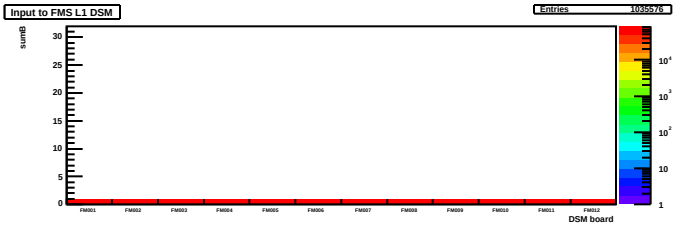

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

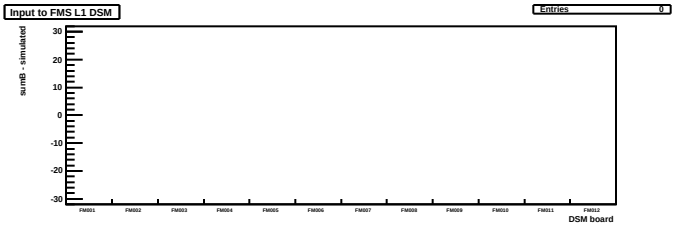

Input to FMS L1 DSM
Entries 1035576
sumC
DSM board

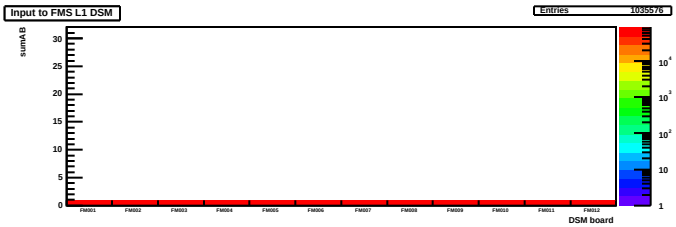

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

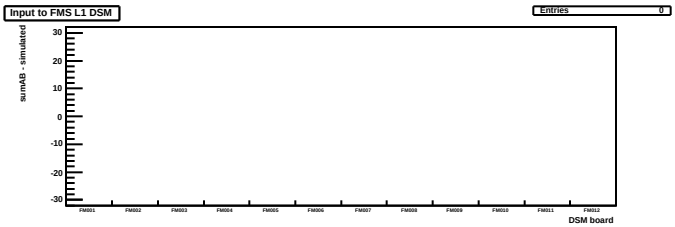

Input to FMS L1 DSM
Entries 1035576
sumBC
DSM board

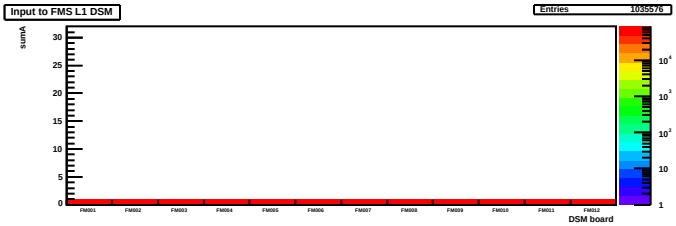

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

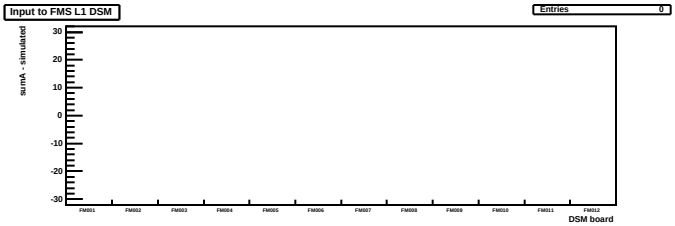

Input to FMS L1 DSM
Entries 1035576
sumB
DSM board

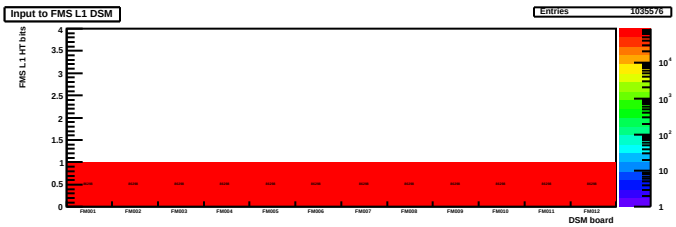

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

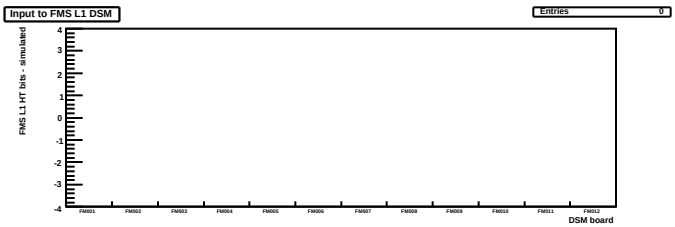

Input to FMS L1 DSM
Entries 1035576
sumAB
DSM board

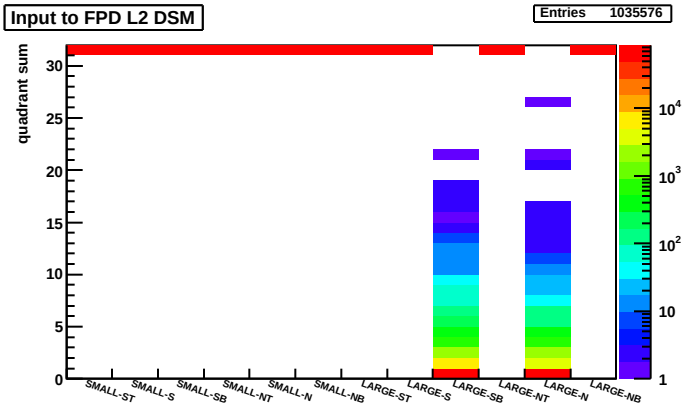

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

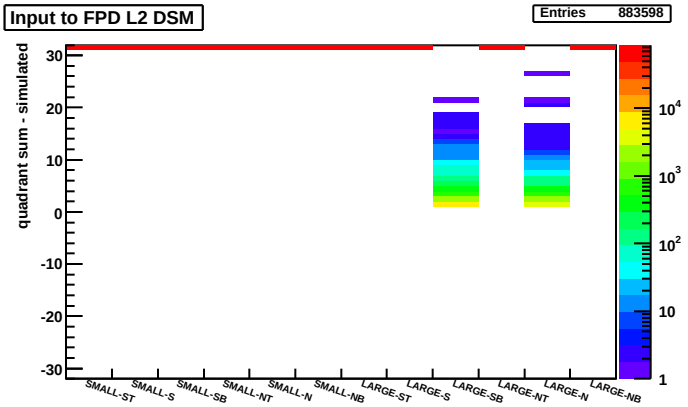

Input to FMS L1 DSM
Entries 1035576
sumA
DSM board

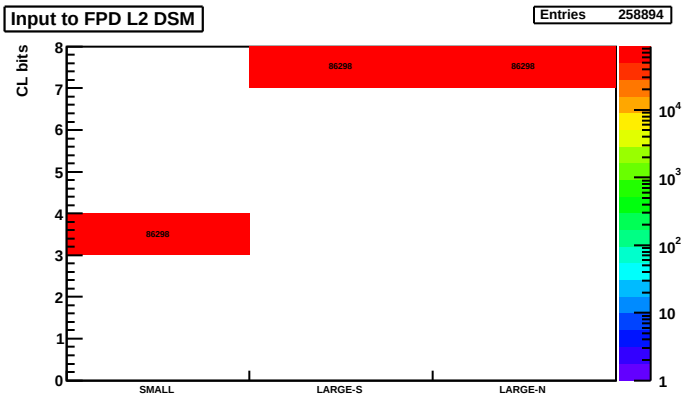

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

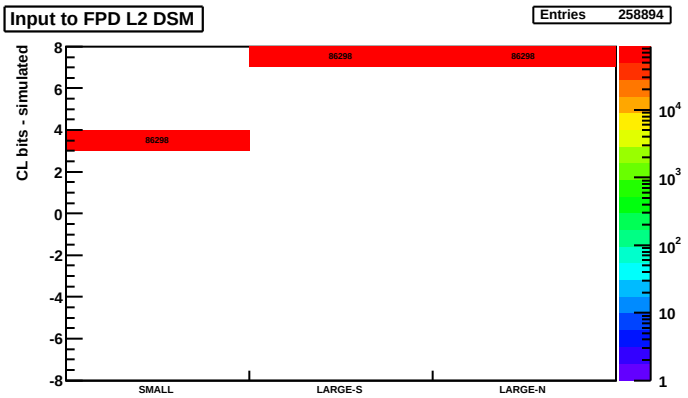

Input to FMS L1 DSM
Entries 1035576
FMS L1 HT bits
DSM board

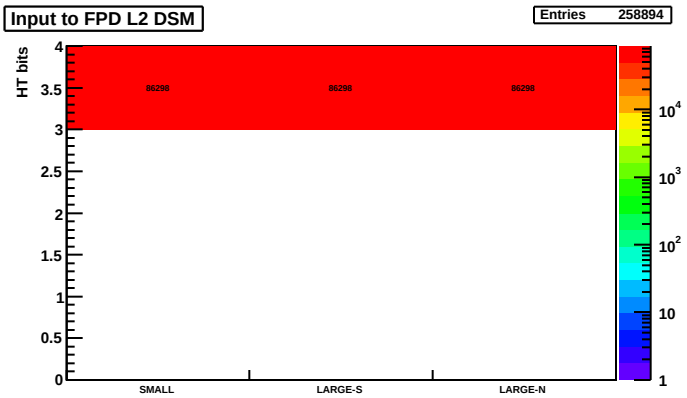

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

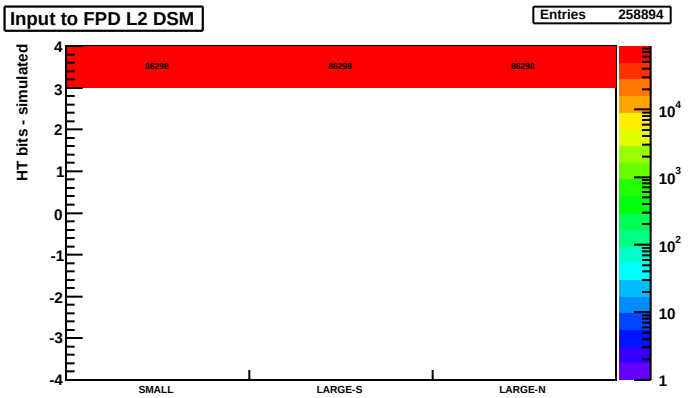

Input to FPD L2 DSM
Entries 1035576
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

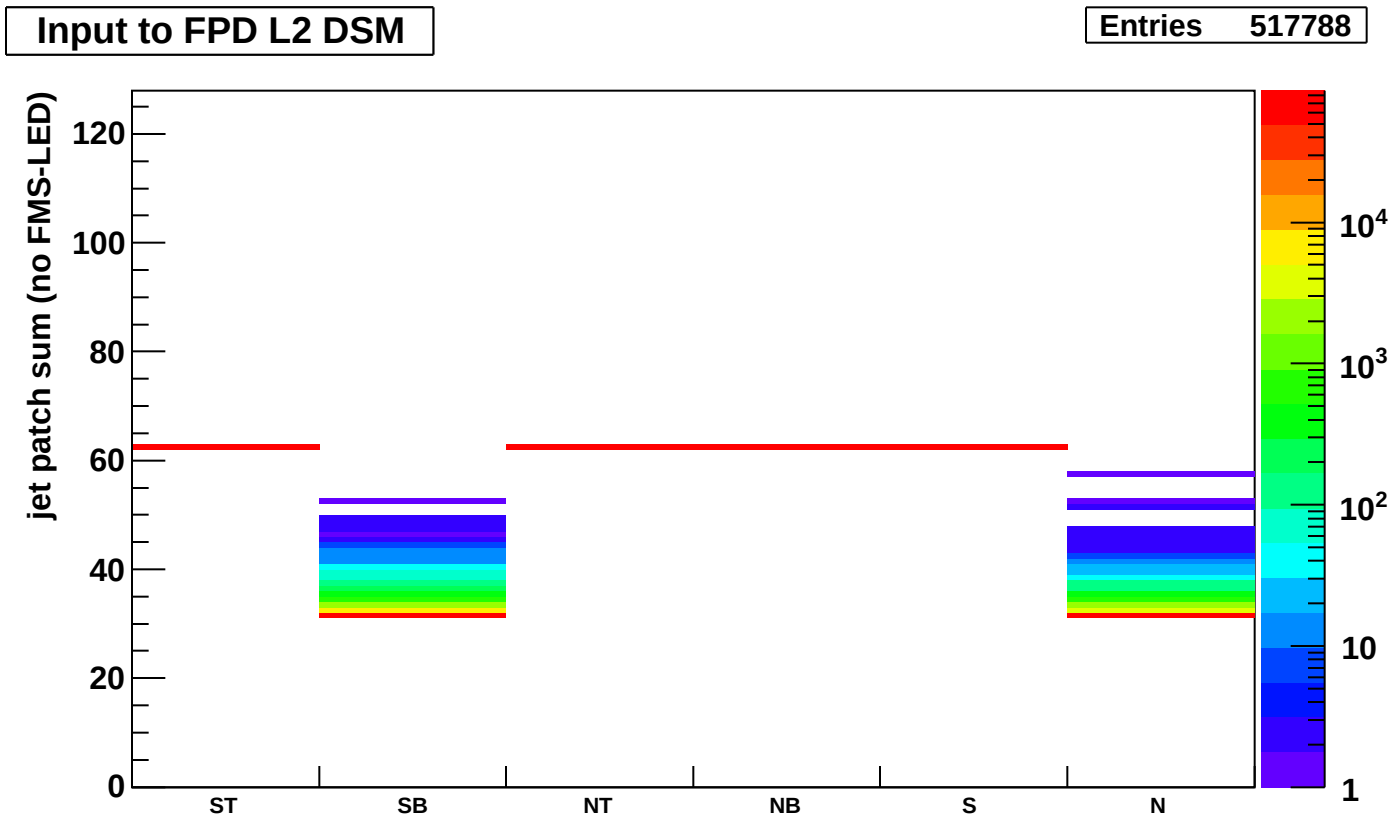

Input to FPD L2 DSM
Entries 883598
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

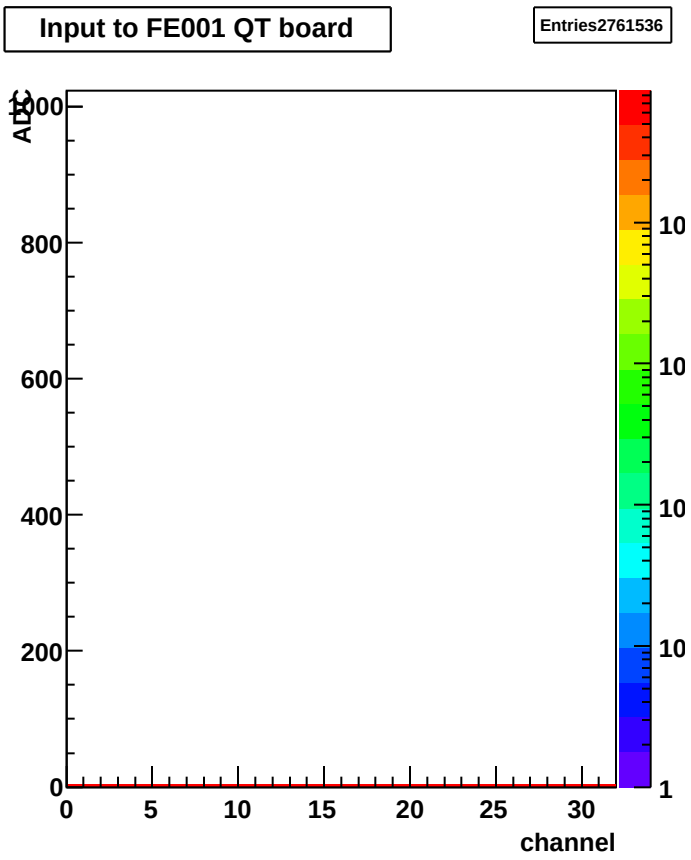

Input to FPD L2 DSM
Entries 258894
CL bits
86298
86298
86298
SMALL
LARGE-S
LARGE-N

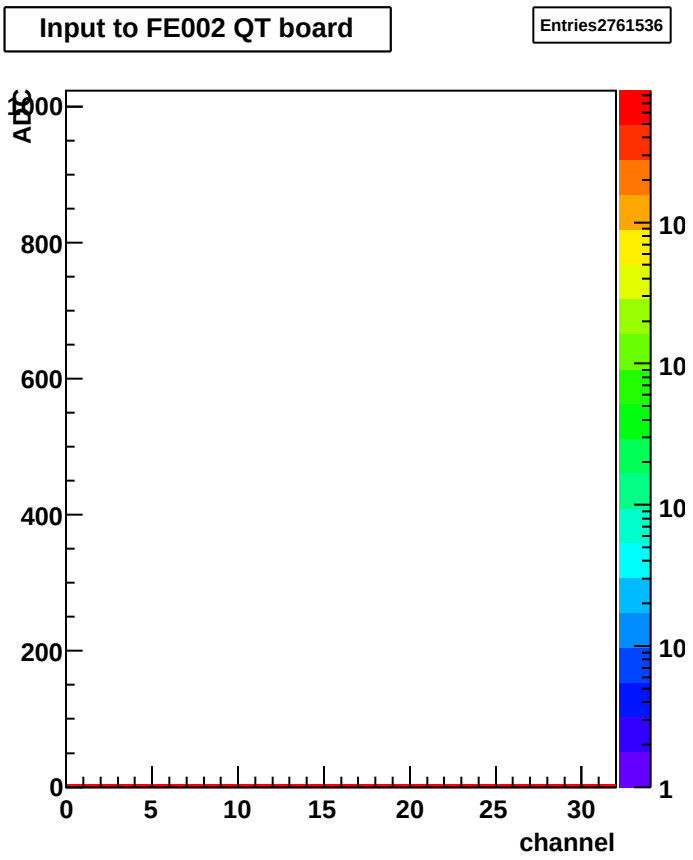

Input to FPD L2 DSM
Entries 258894
CL bits - simulated
86298
86298
86298
SMALL
LARGE-S
LARGE-N

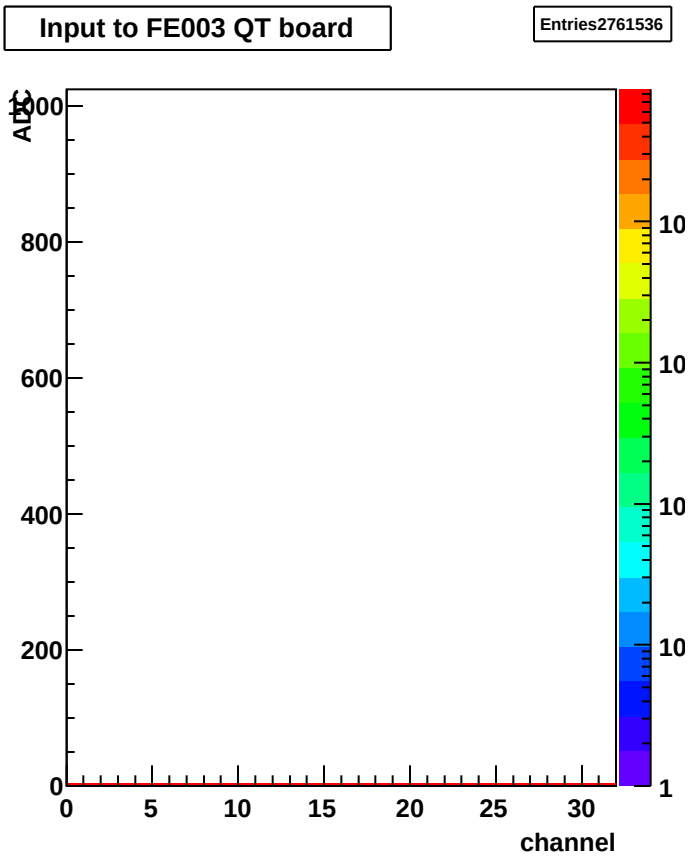

Input to FPD L2 DSM
Entries 258894
HT bits
86298
86298
86298
SMALL
LARGE-S
LARGE-N

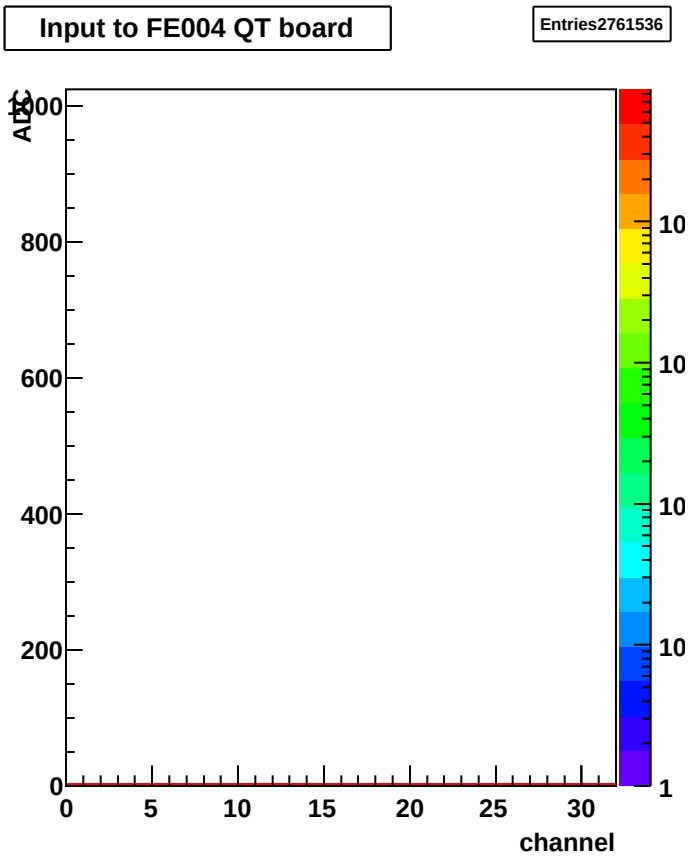

Input to FPD L2 DSM
Entries 258894
HT bits - simulated
86298
86298
86298
SMALL
LARGE-S
LARGE-N

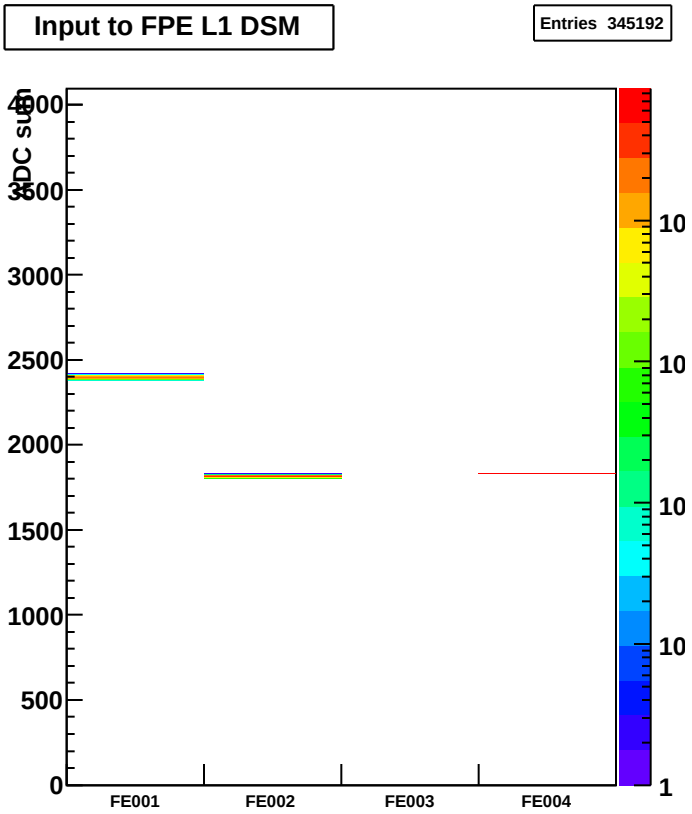

Input to FPD L2 DSM
Entries 517788
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4


Input to FE001 QT board
Entries2761536
ADC
channel

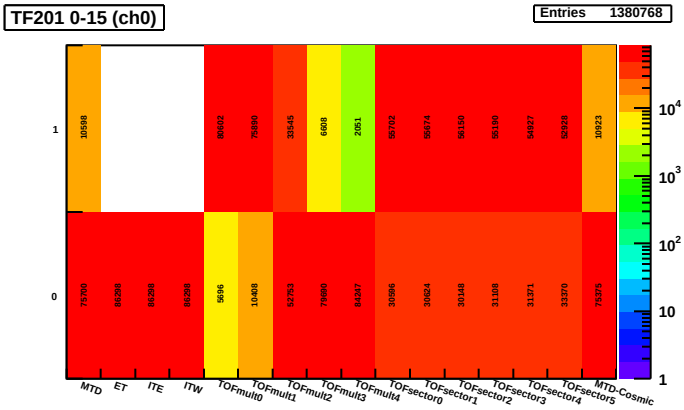

Input to FE002 QT board
Entries2761536
ADC
channel


Input to FE003 QT board
Entries2761536
ADC
channel

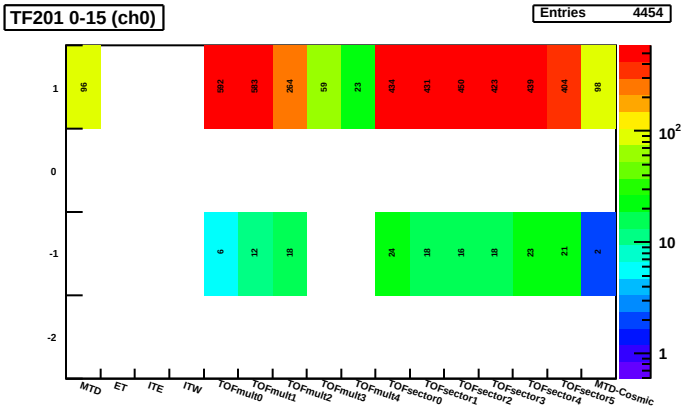

Input to FE004 QT board
Entries2761536
ADC
channel


Input to FPE L1 DSM
Entries 345192
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

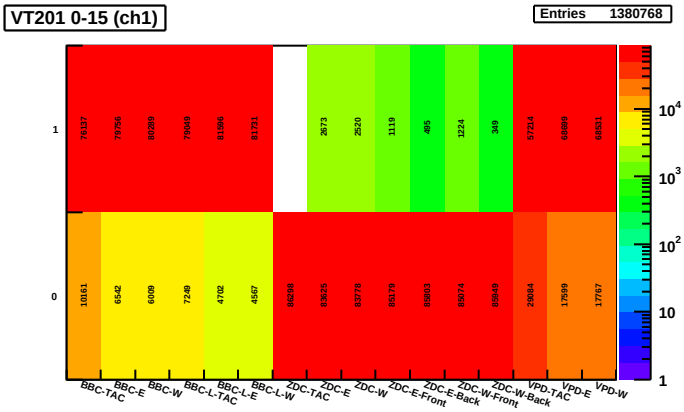
TF201 0-15 (ch0)



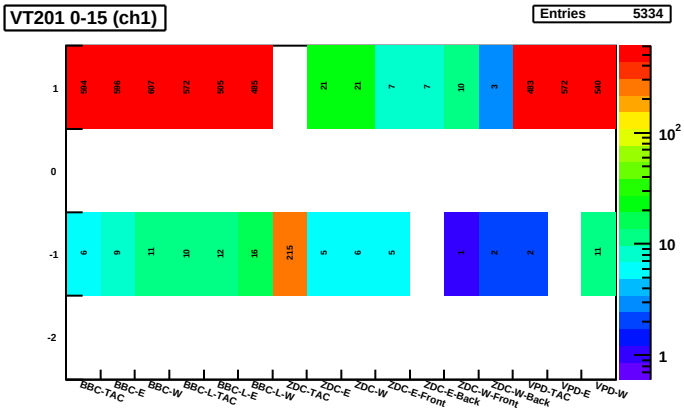
TF201 0-15 (ch0)



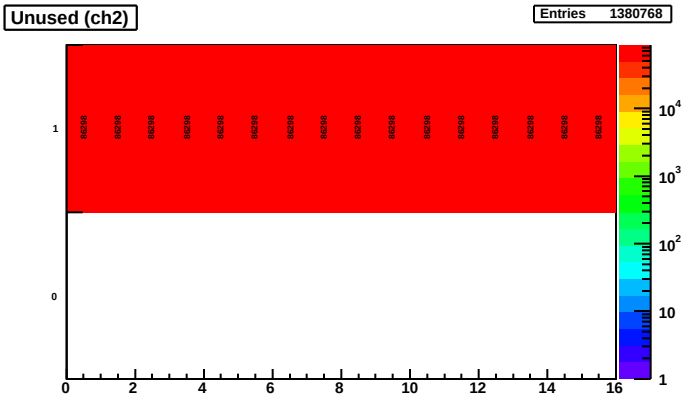
VT201 0-15 (ch1)

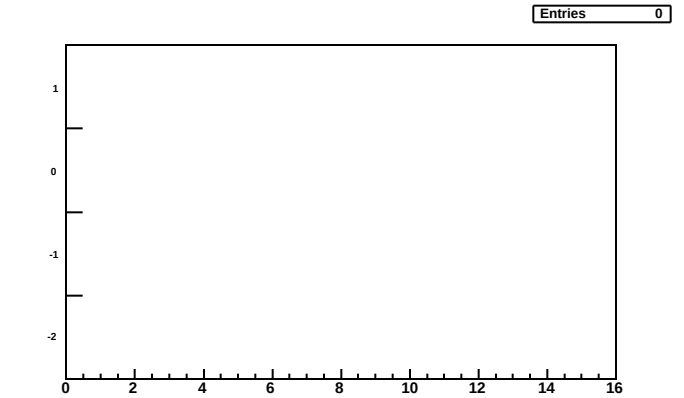


VT201 0-15 (ch1)

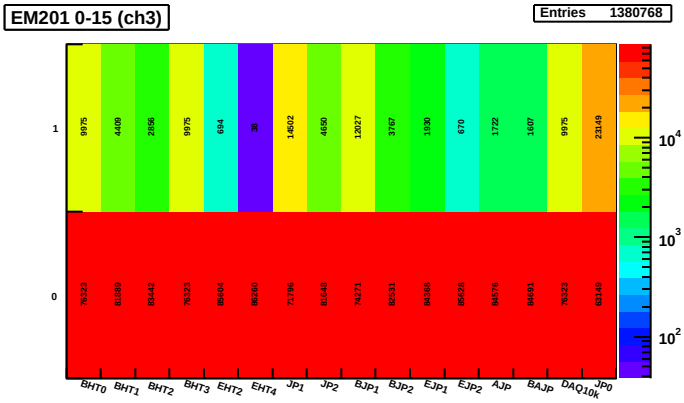


Unused (ch2)

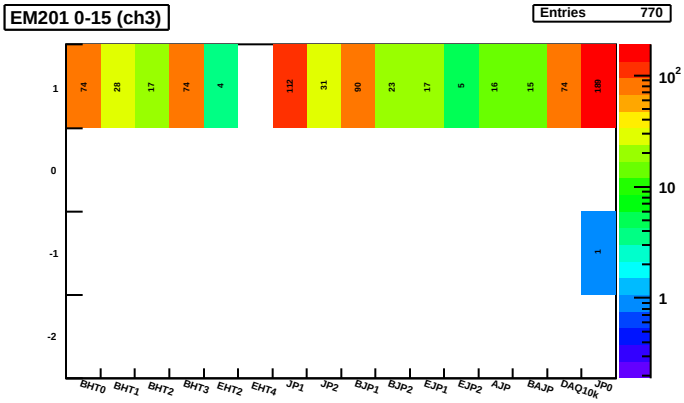




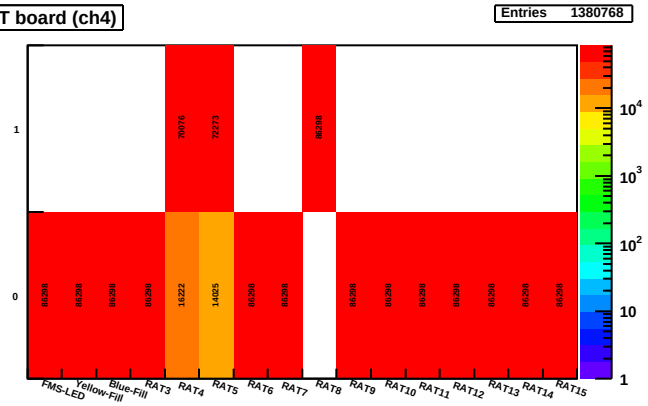
EM201 0-15 (ch3)

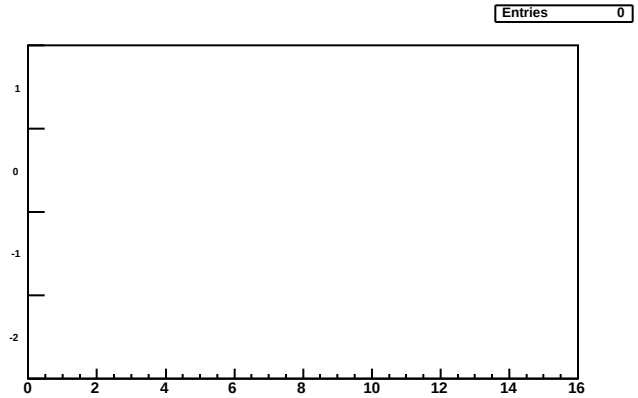


EM201 0-15 (ch3)

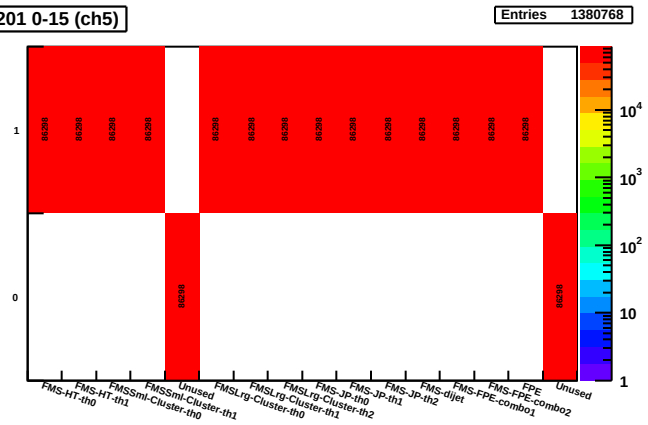


RAT board (ch4)





FP201 0-15 (ch5)



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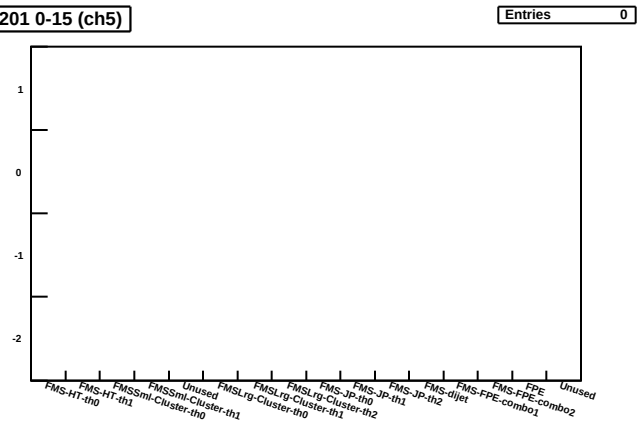
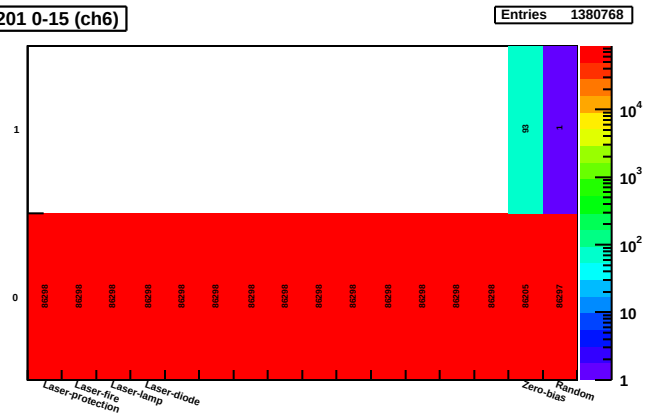
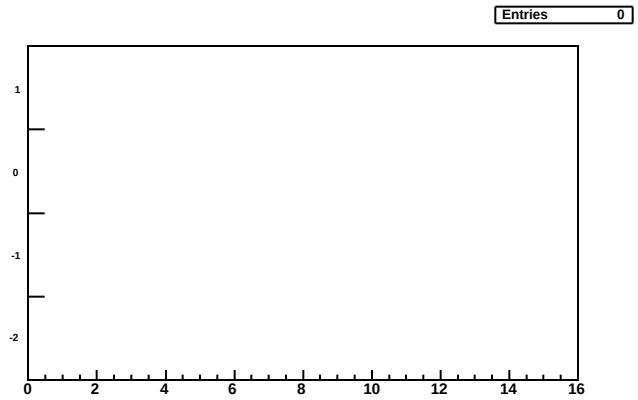
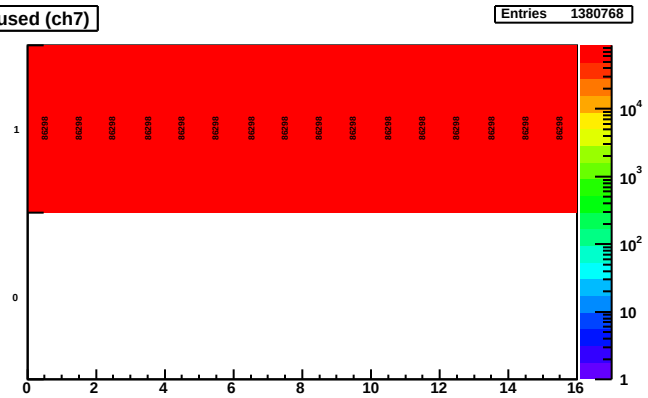
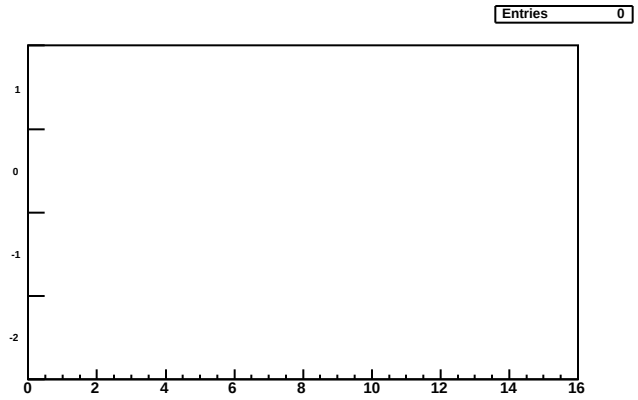


ST201 0-15 (ch6)





Unused (ch7)