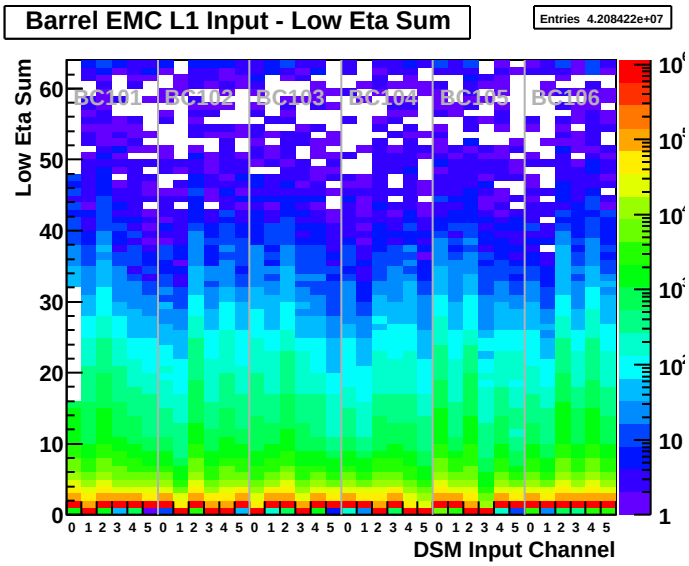
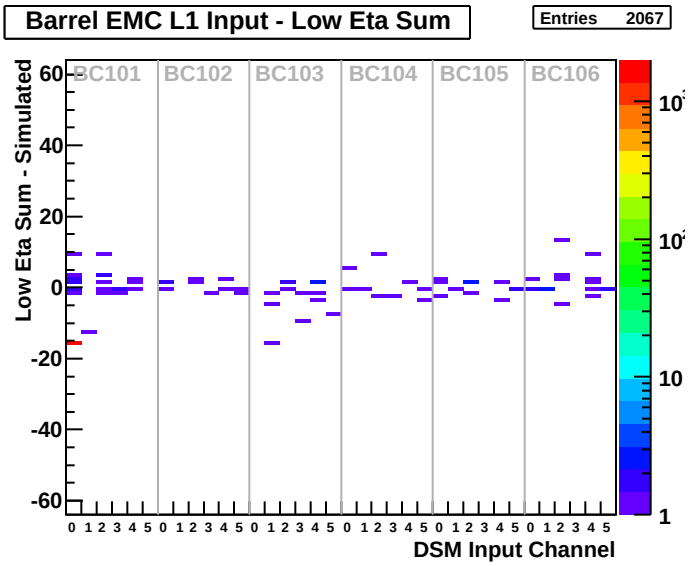
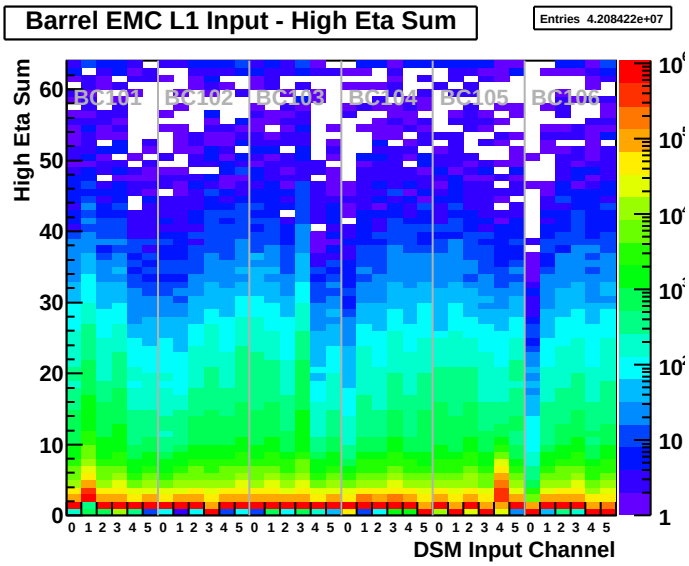
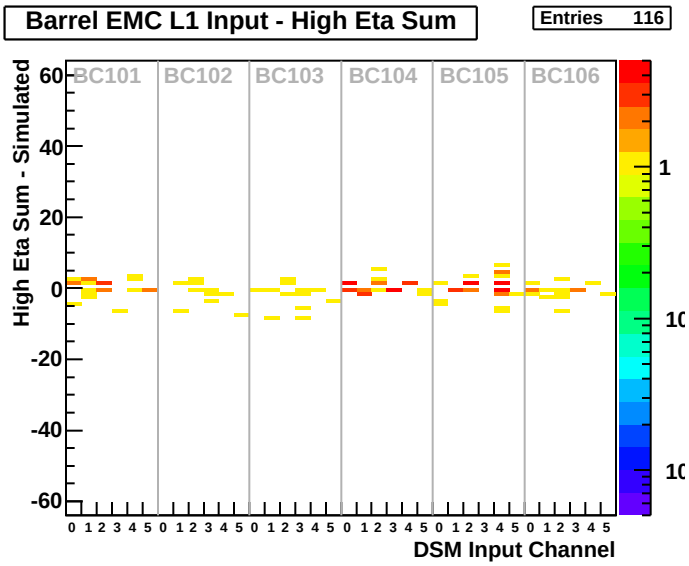
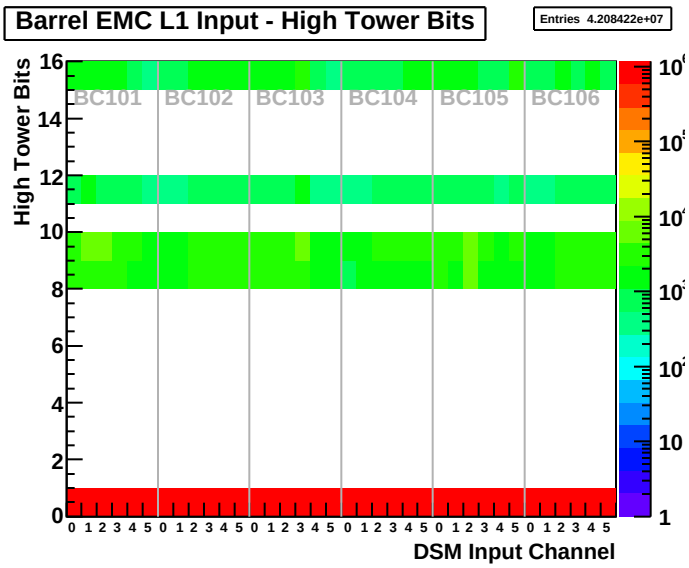
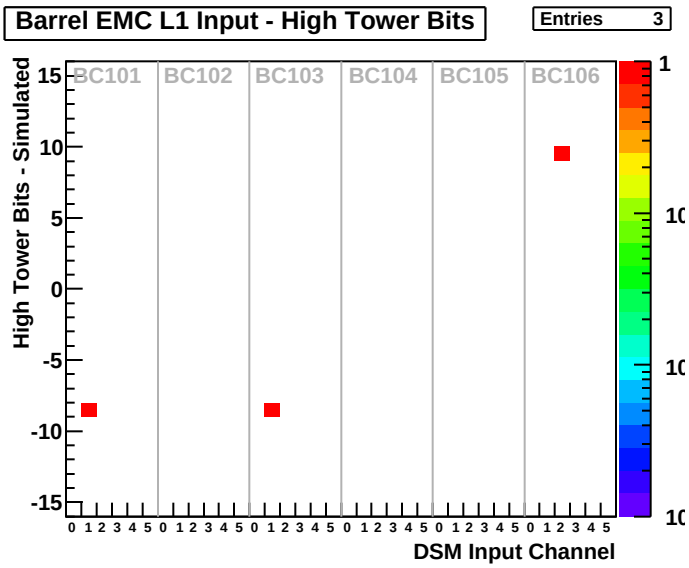

Barrel EMC L1 Input - Low Eta Sum
Entries 4.208422e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

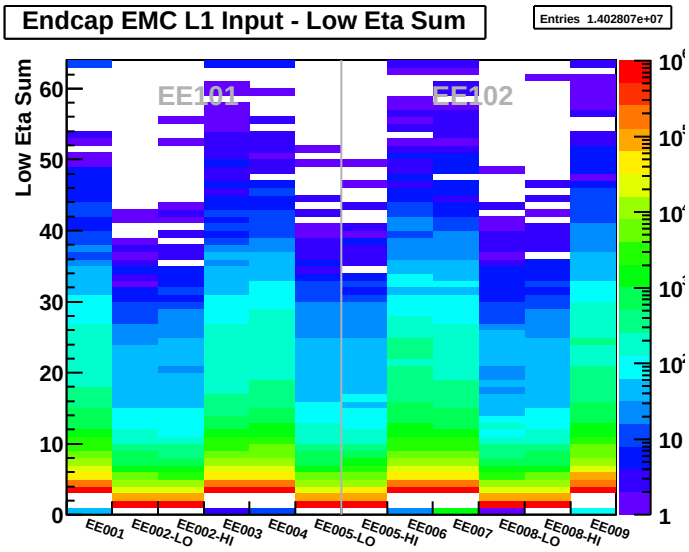

Barrel EMC L1 Input - Low Eta Sum
Entries 2067
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

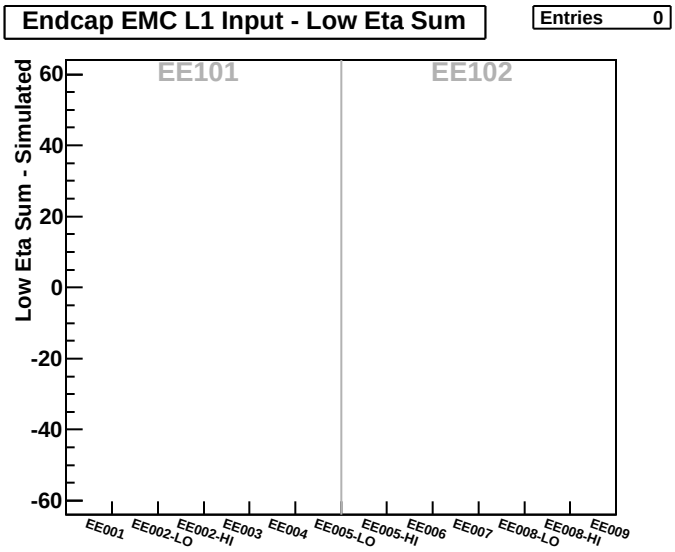

Barrel EMC L1 Input - High Eta Sum
Entries 4.208422e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

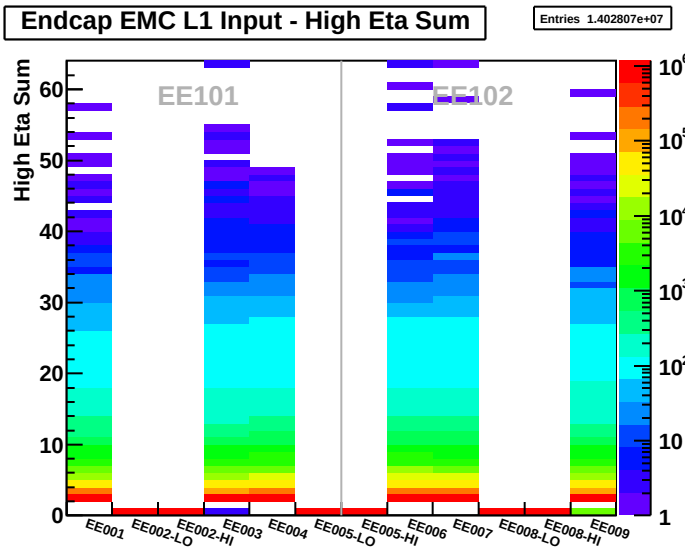

Barrel EMC L1 Input - High Eta Sum
Entries 116
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

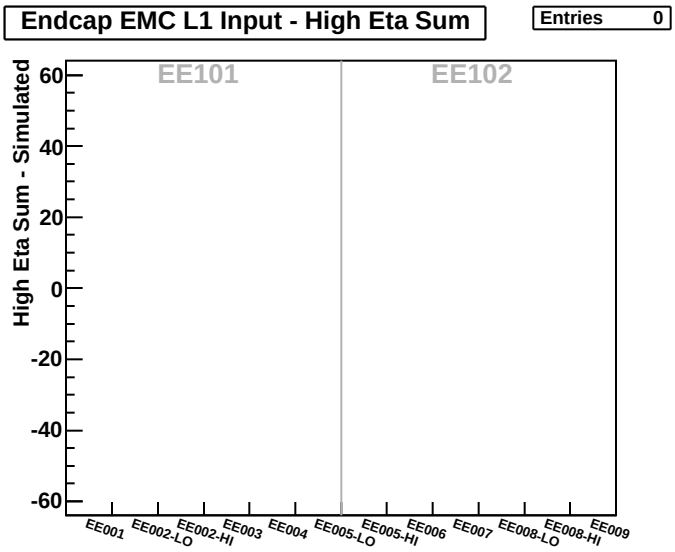

Barrel EMC L1 Input - High Tower Bits
Entries 4.208422e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

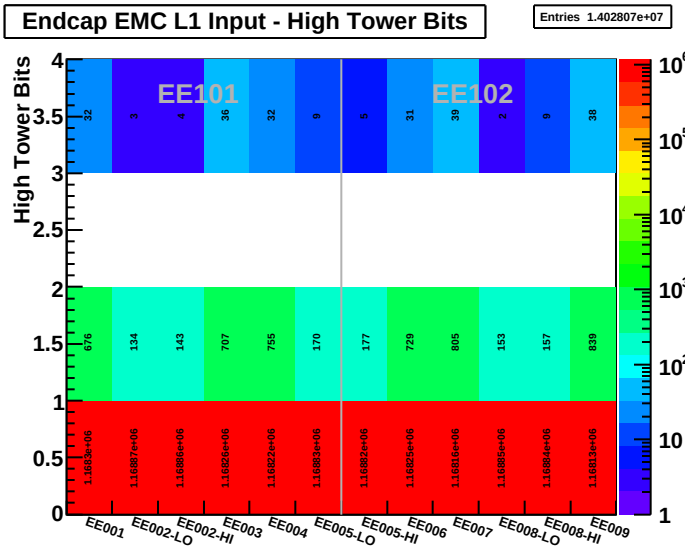

Barrel EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

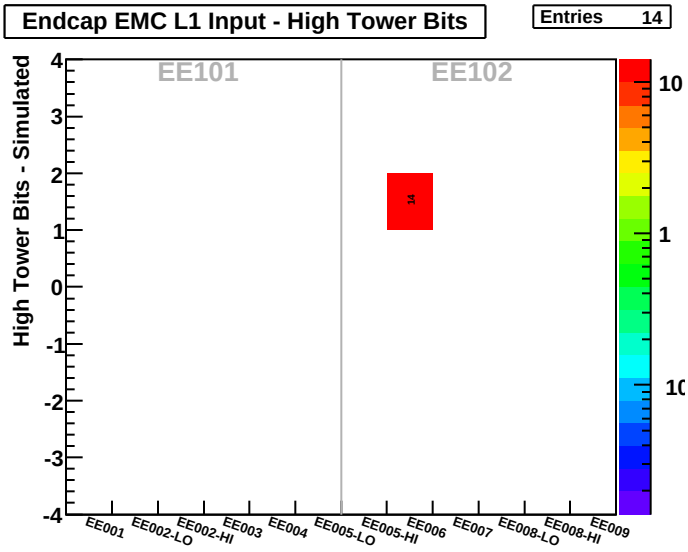

Endcap EMC L1 Input - Low Eta Sum
Entries 1.402807e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

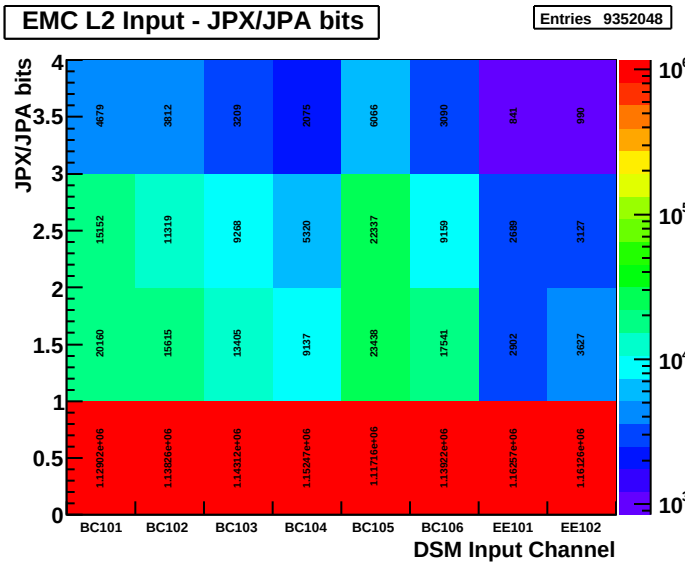

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

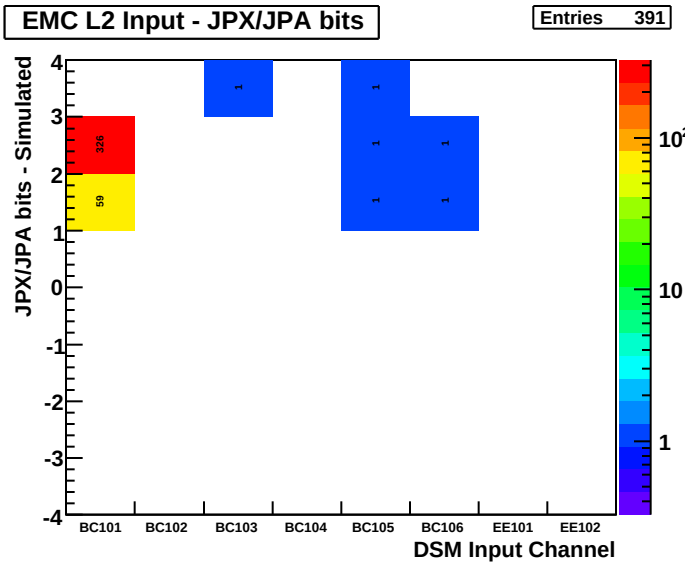

Endcap EMC L1 Input - High Eta Sum
Entries 1.402807e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

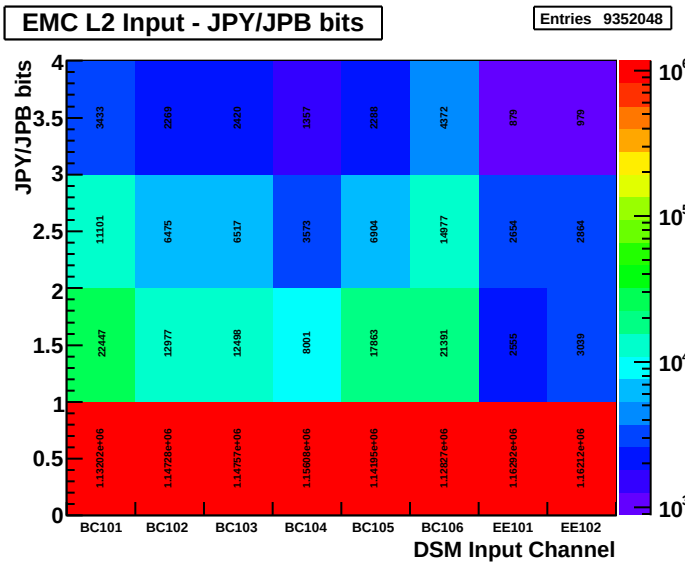

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

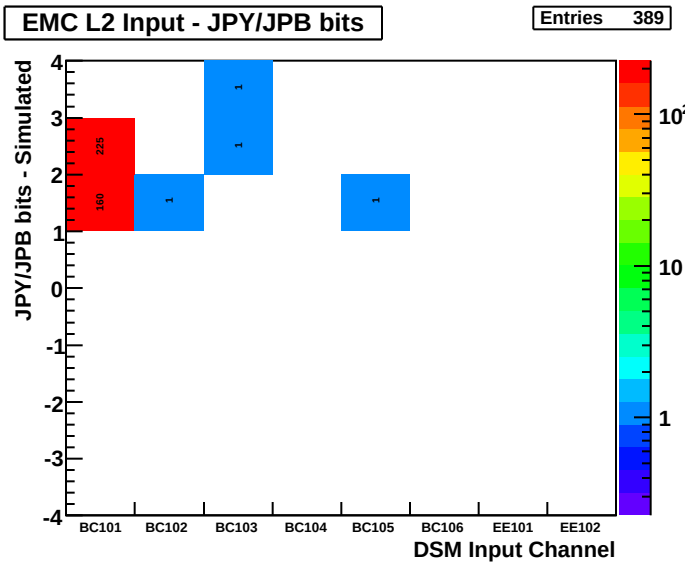

Endcap EMC L1 Input - High Tower Bits
Entries 1.402807e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

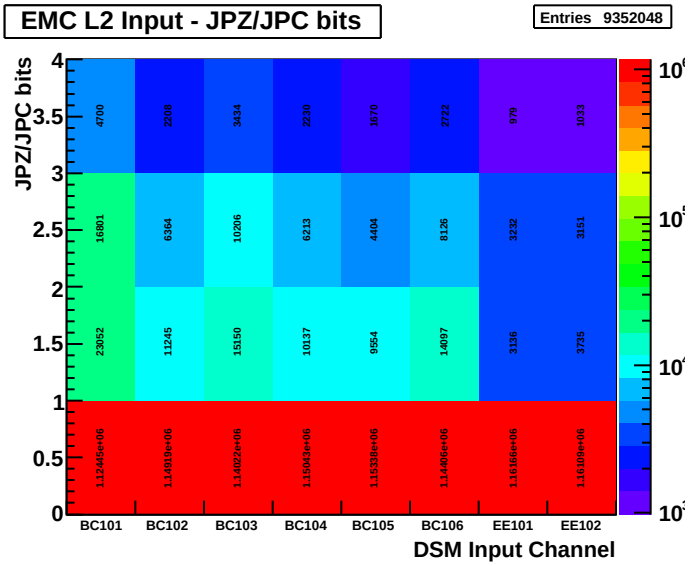

Endcap EMC L1 Input - High Tower Bits
Entries 14
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

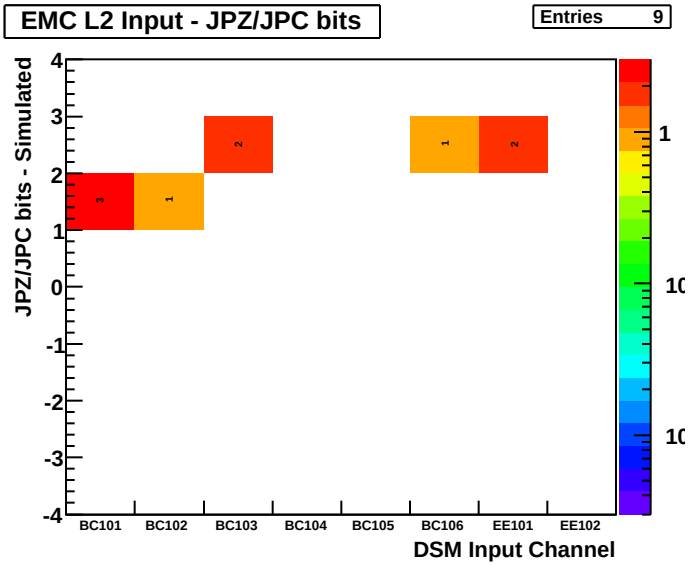

EMC L2 Input - JPX/JPA bits
Entries 9352048
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4679 3812 3209 2075 6066 3090 841 990
15152 11319 9268 5320 22337 9159 2689 3127
20160 15615 13405 9137 23438 17541 2902 3627
1.12902e+06 1.13826e+06 1.14312e+06 1.15247e+06 1.11716e+06 1.13922e+06 1.16257e+06 1.16126e+06

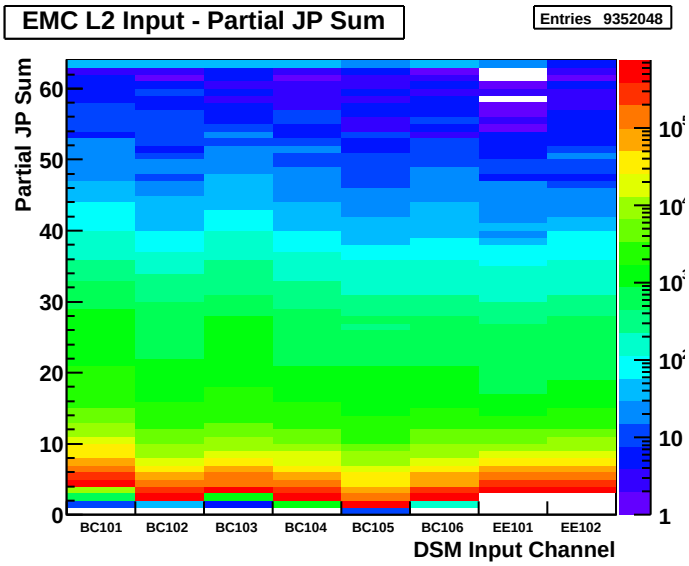

EMC L2 Input - JPX/JPA bits
Entries 391
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
326
59
1
1
1
1
1
1

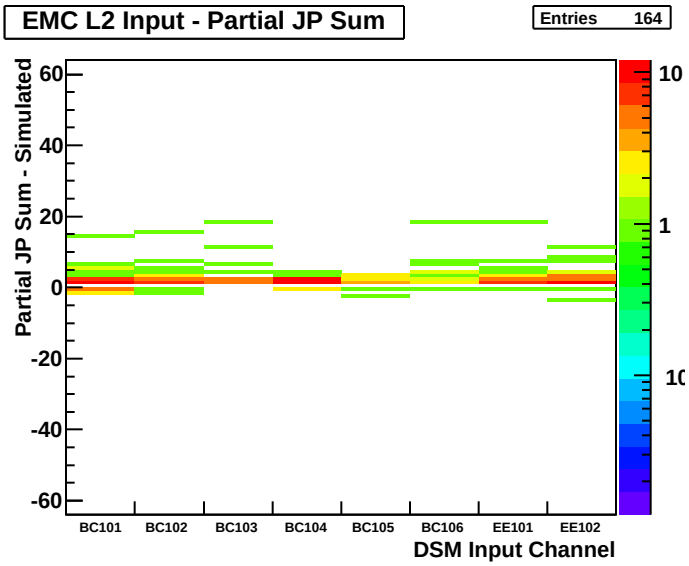

EMC L2 Input - JPY/JPB bits
Entries 9352048
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3433 2269 2420 1357 2288 4372 879 979
11101 6475 6517 3573 6904 14977 2654 2864
22447 12977 12498 8001 17863 21391 2555 3039
1.13302e+06 1.14728e+06 1.14757e+06 1.15608e+06 1.14195e+06 1.12827e+06 1.16292e+06 1.16212e+06

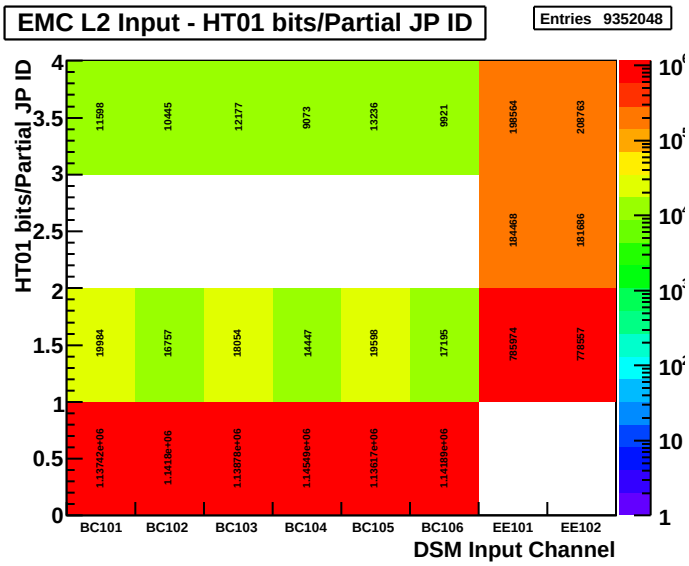

EMC L2 Input - JPY/JPB bits
Entries 389
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
225
160
1
1
1
1

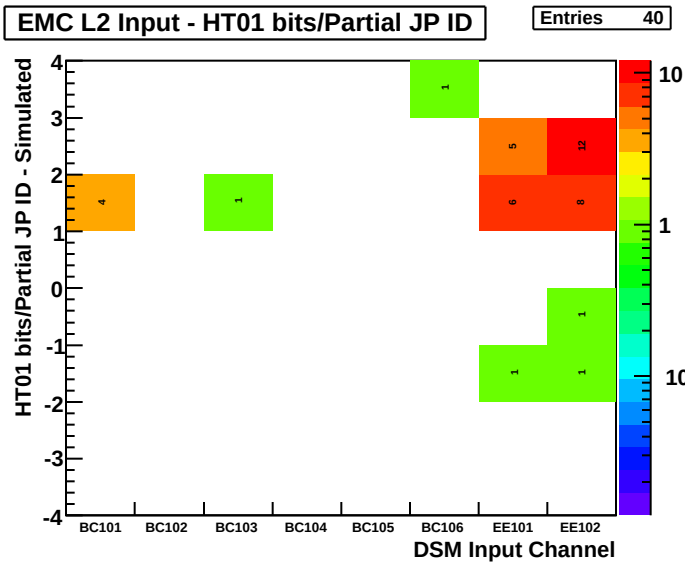

EMC L2 Input - JPZ/JPC bits
Entries 9352048
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4700 2208 3434 2230 1670 2722 979 1033
16801 6364 10206 6213 4404 8126 3232 3151
23052 11245 15150 10137 9554 14097 3136 3735
1.12445e+06 1.14019e+06 1.14022e+06 1.15043e+06 1.15338e+06 1.14406e+06 1.16166e+06 1.16109e+06

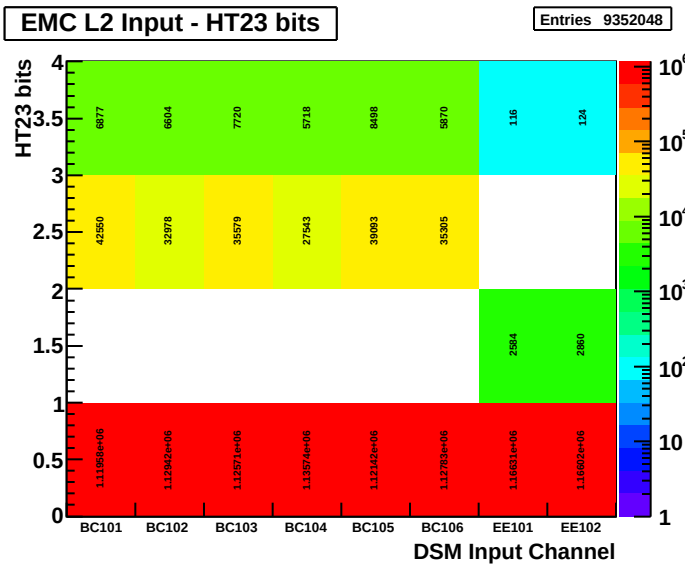

EMC L2 Input - JPZ/JPC bits
Entries 9
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3
1
2
1
2

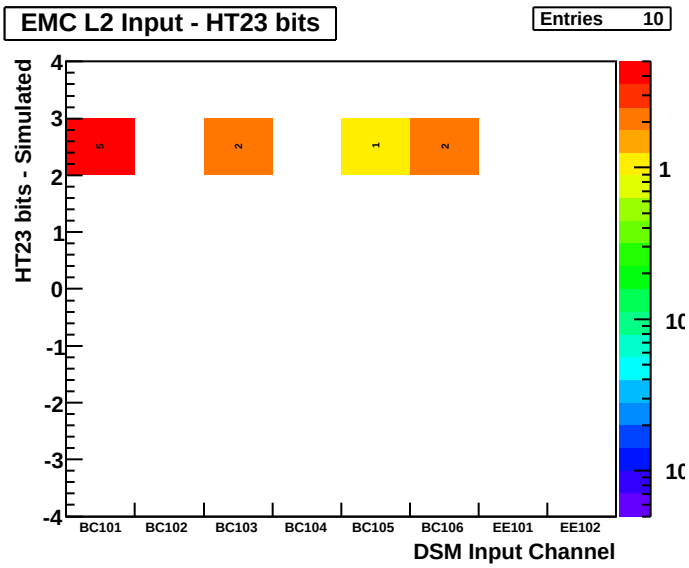

EMC L2 Input - Partial JP Sum
Entries 9352048
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

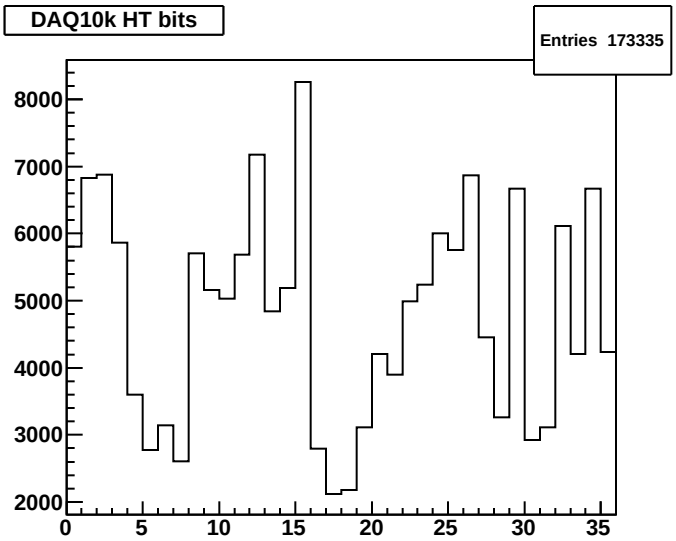

EMC L2 Input - Partial JP Sum
Entries 164
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

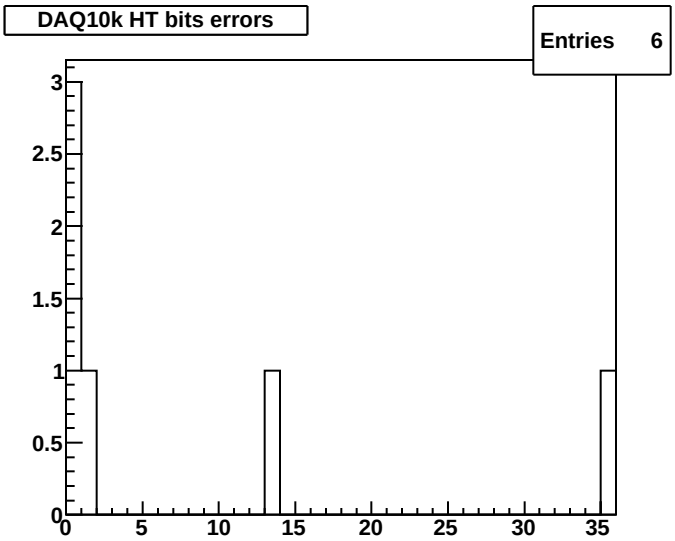

EMC L2 Input - HT01 bits/Partial JP ID
Entries 9352048
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

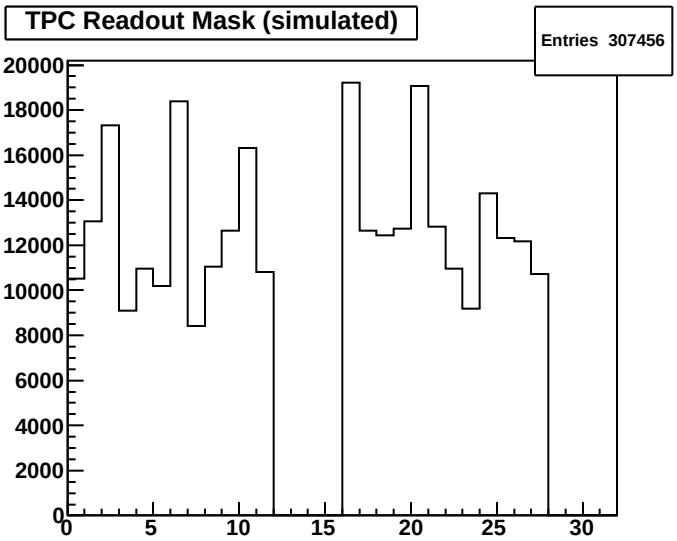

EMC L2 Input - HT01 bits/Partial JP ID
Entries 40
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

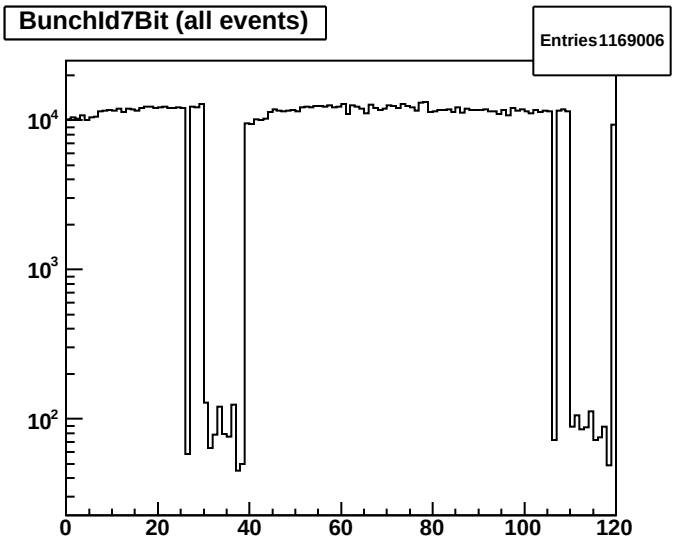

EMC L2 Input - HT23 bits
Entries 9352048
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

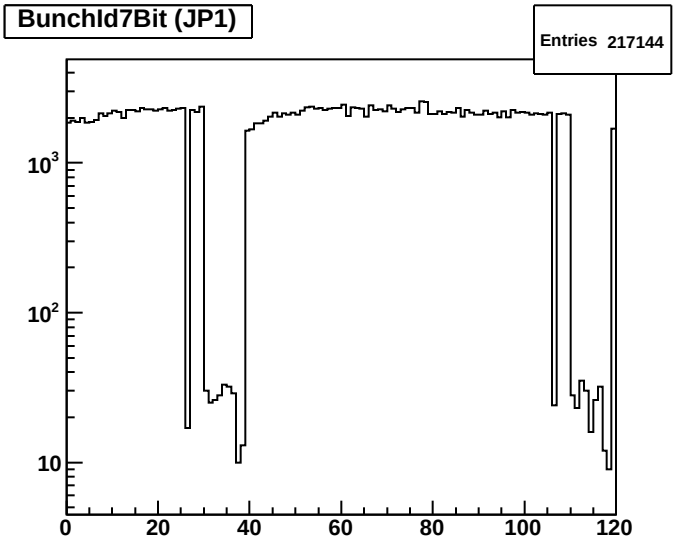

EMC L2 Input - HT23 bits
Entries 10
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

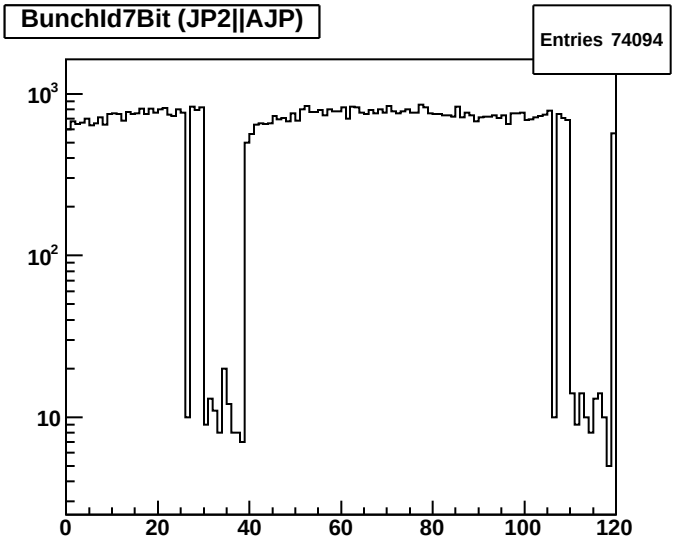

DAQ10k HT bits
Entries 173335

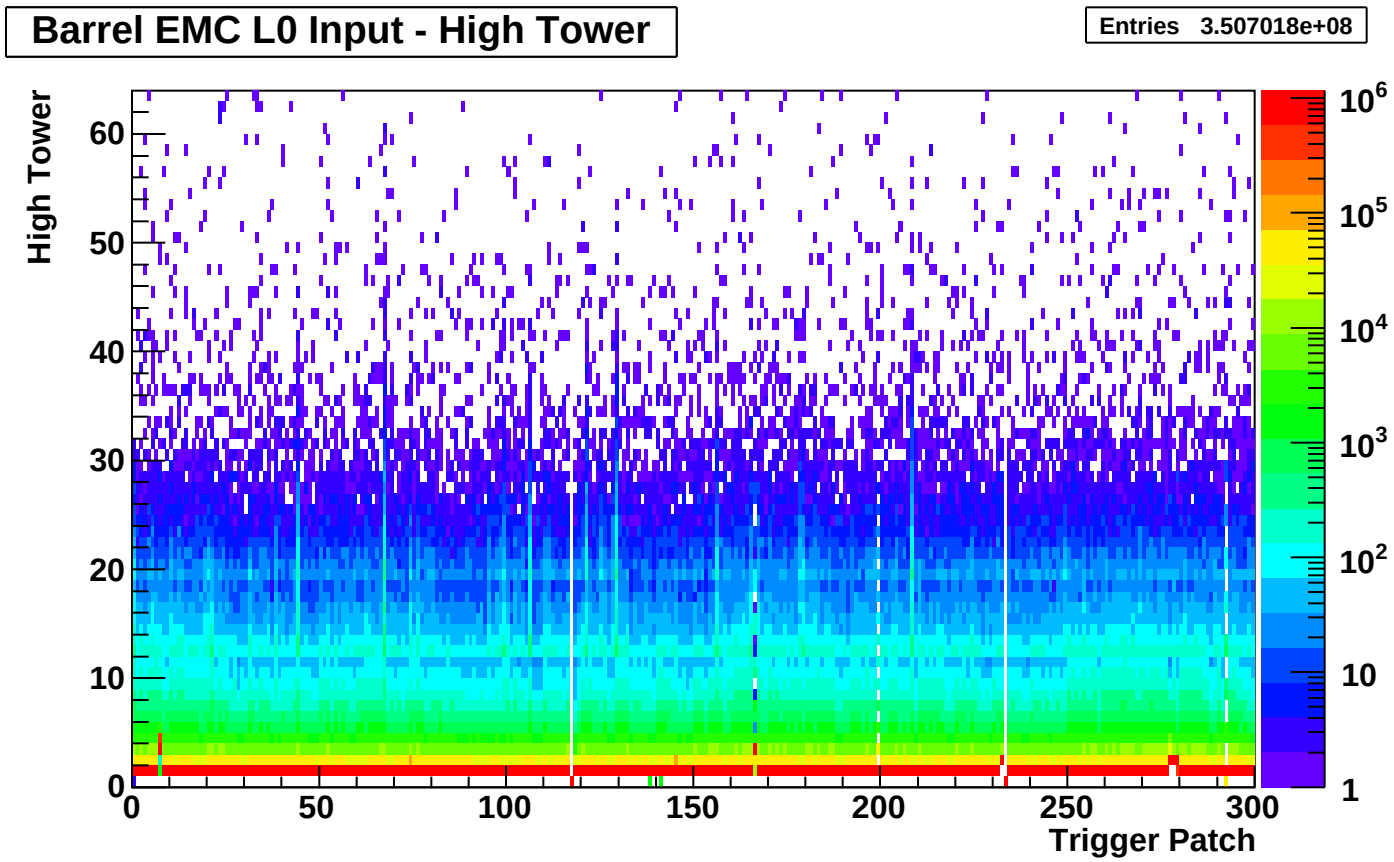

DAQ10k HT bits errors
Entries 6

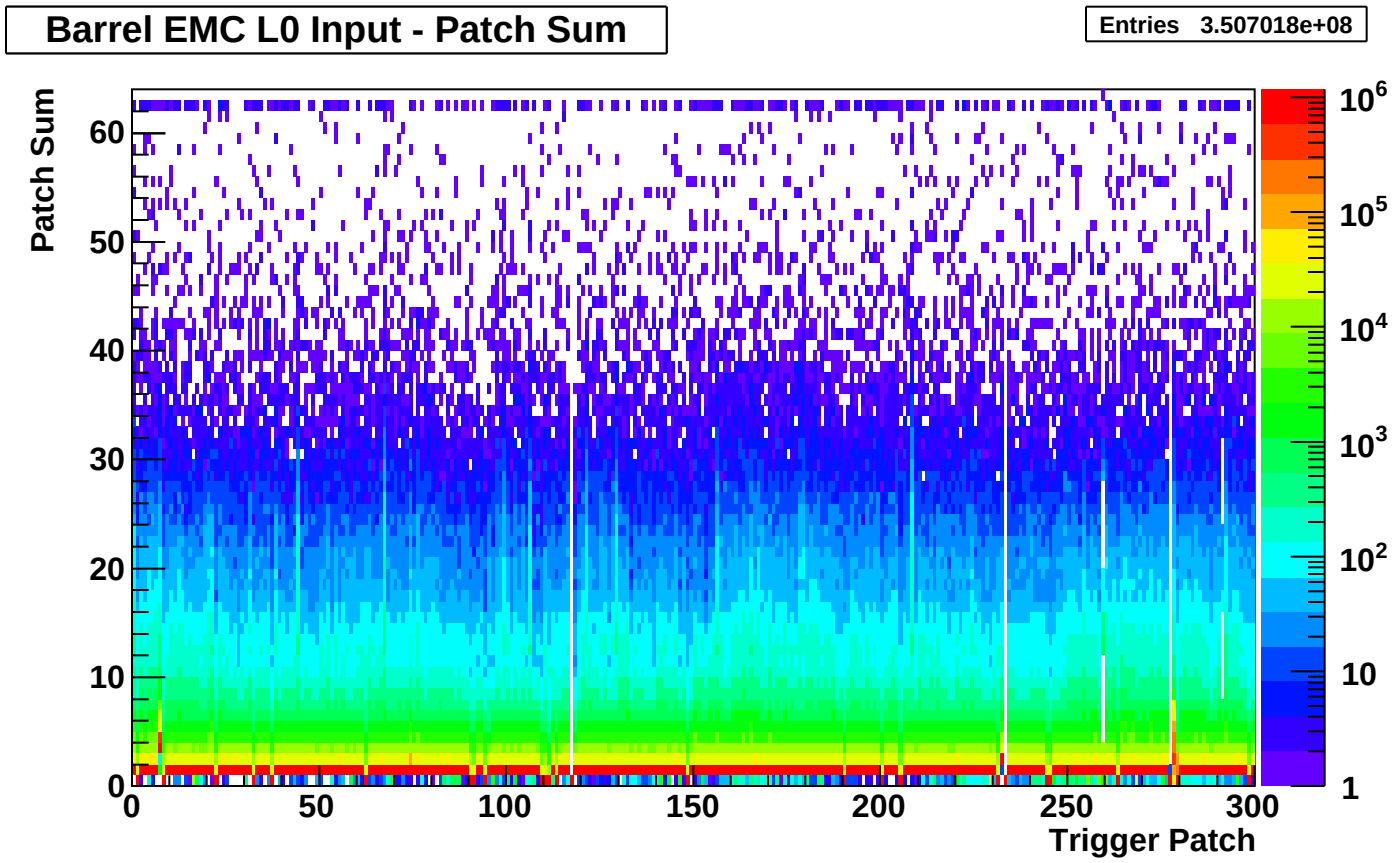

TPC Readout Mask (simulated)
Entries 307456

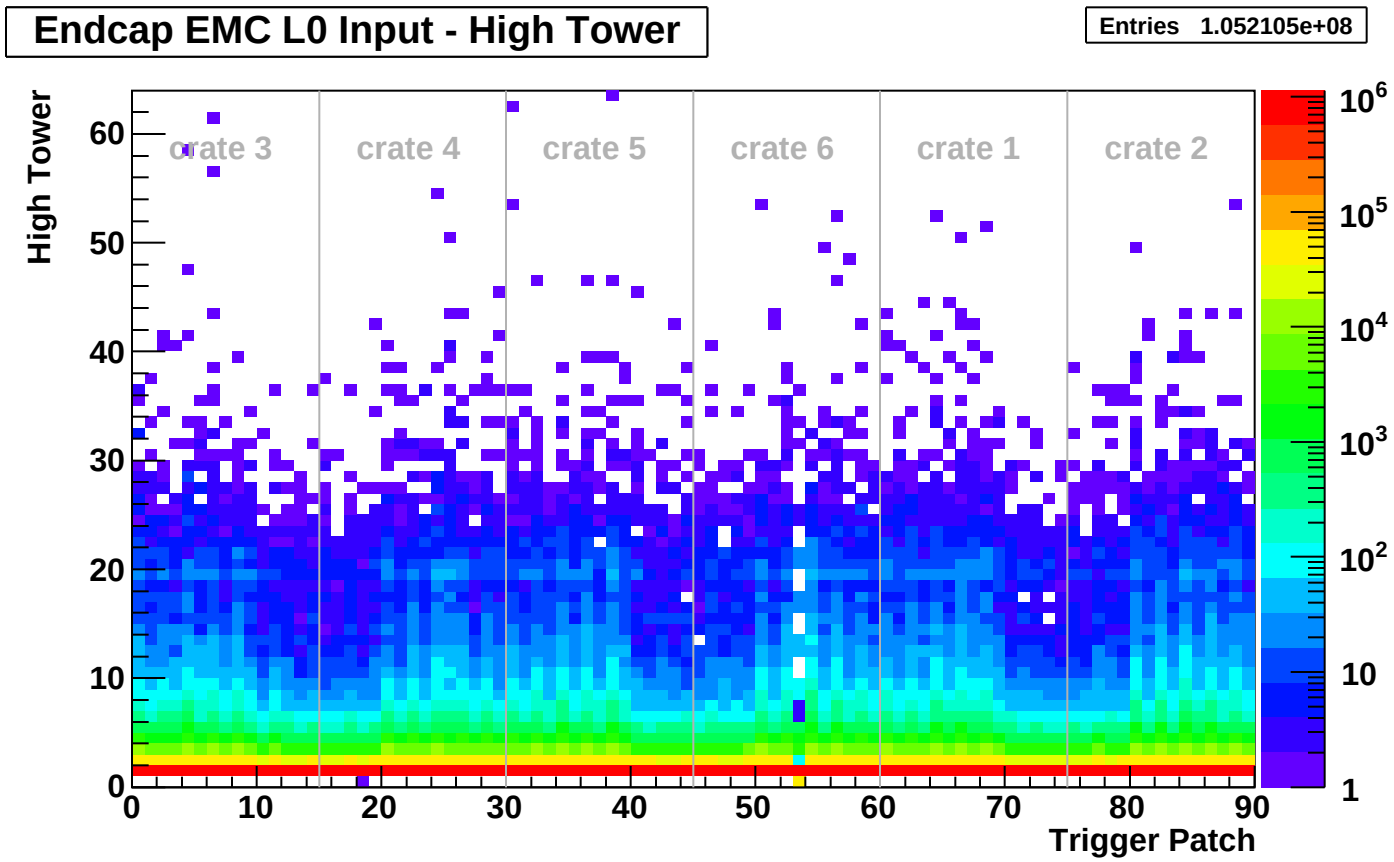

BunchId7Bit (all events)
Entries 1169006

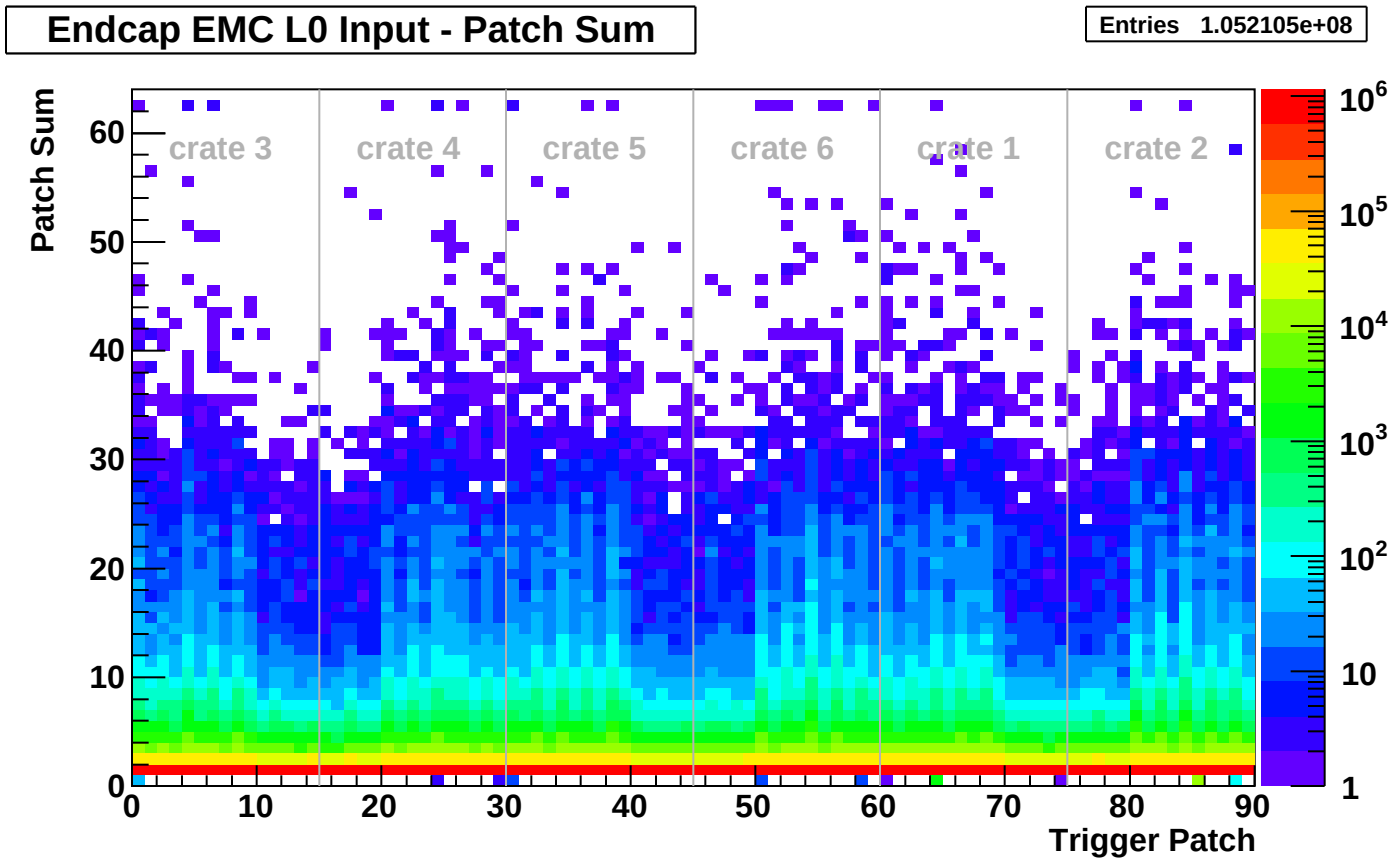

BunchId7Bit (JP1)
Entries 217144

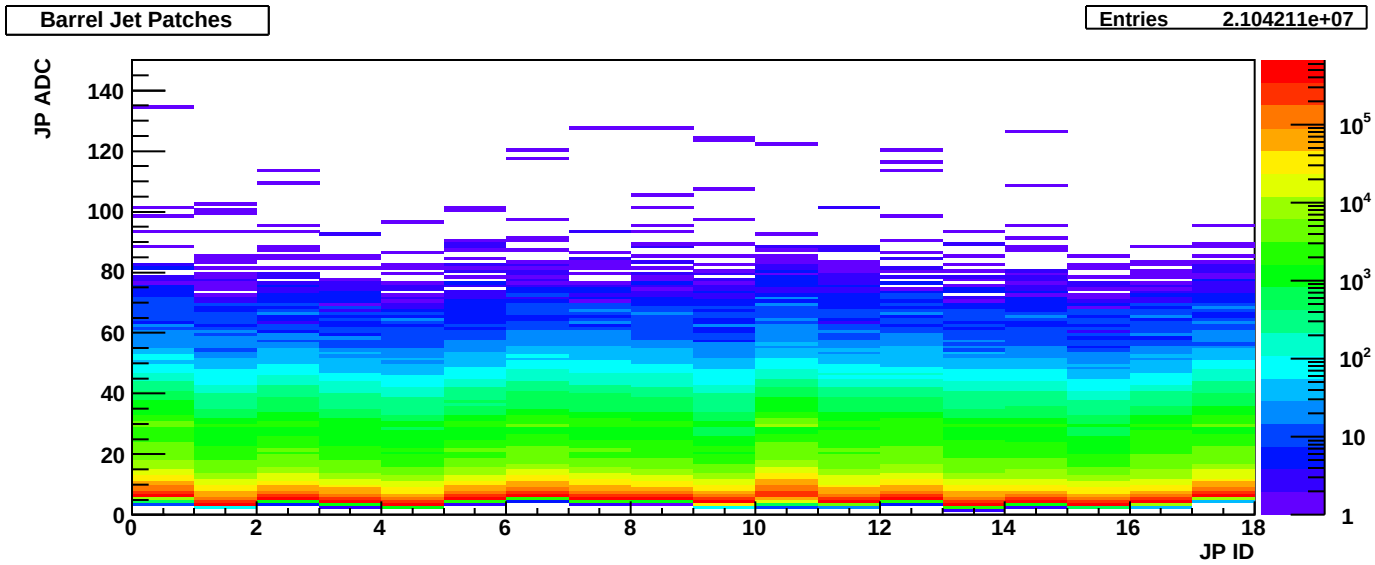

BunchId7Bit (JP2||AJP)
Entries 74094

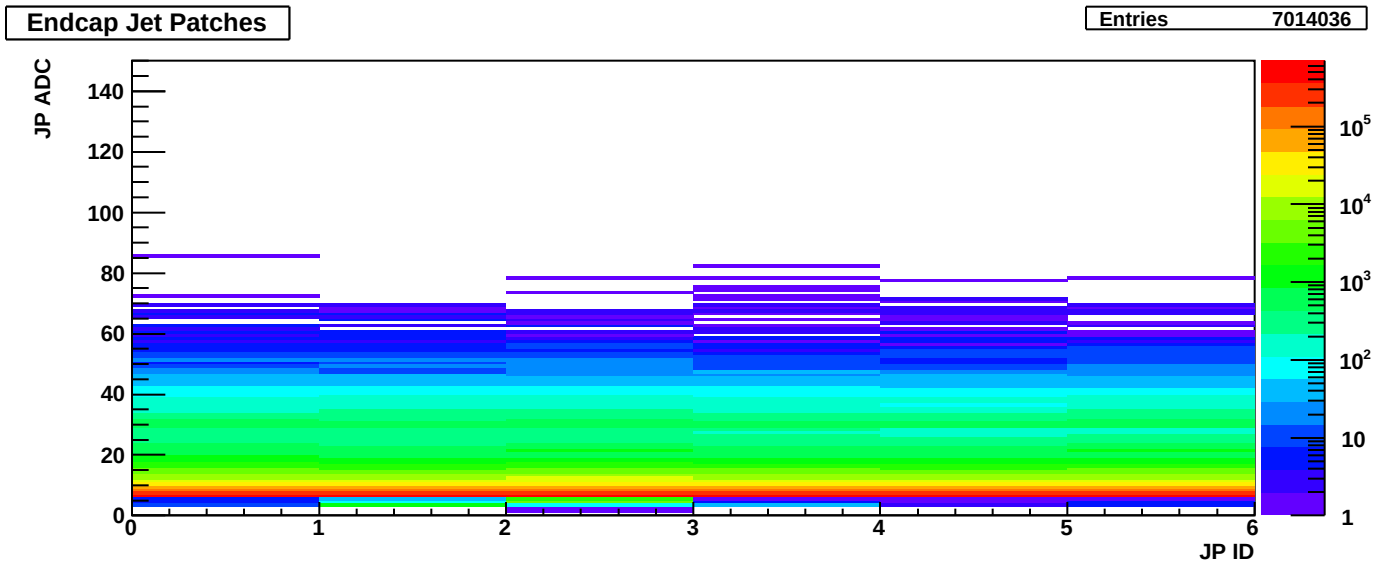

Barrel EMC L0 Input - High Tower
Entries 3.507018e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

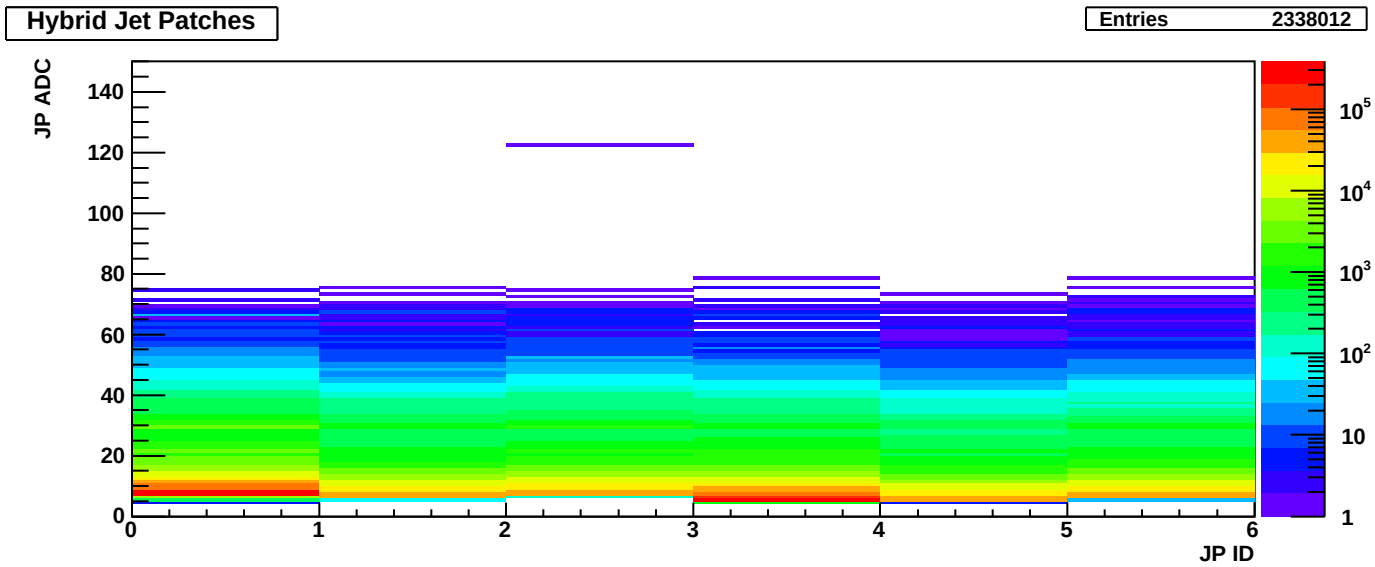

Barrel EMC L0 Input - Patch Sum
Entries 3.507018e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

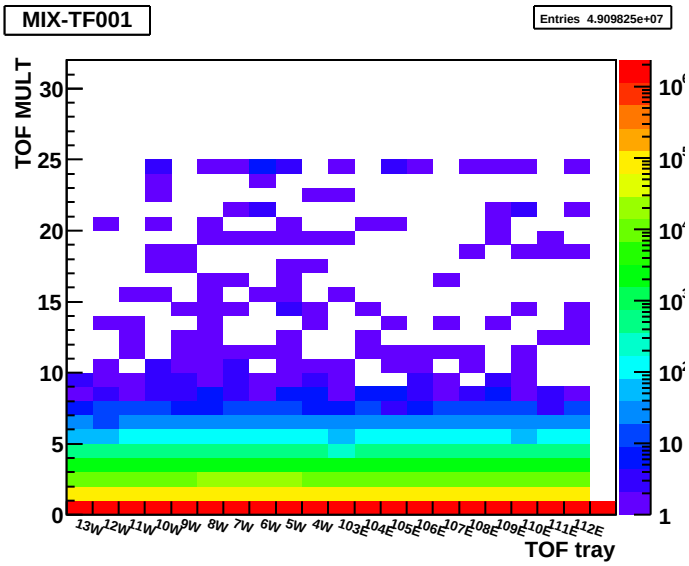

Endcap EMC L0 Input - High Tower
Entries 1.052105e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

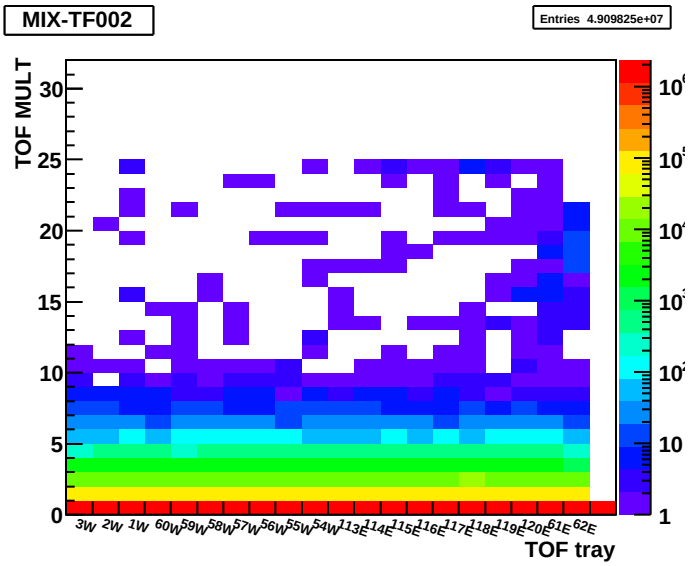

Endcap EMC L0 Input - Patch Sum
Entries 1.052105e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

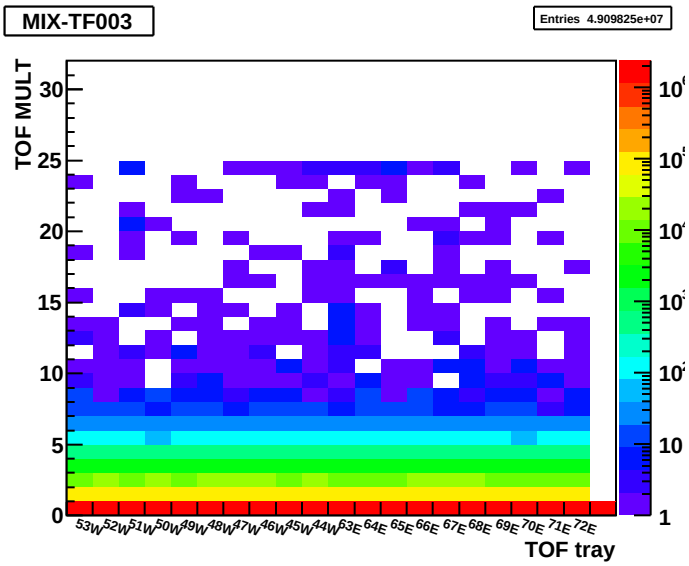

Barrel Jet Patches
Entries 2.104211e+07
JP ADC
JP ID

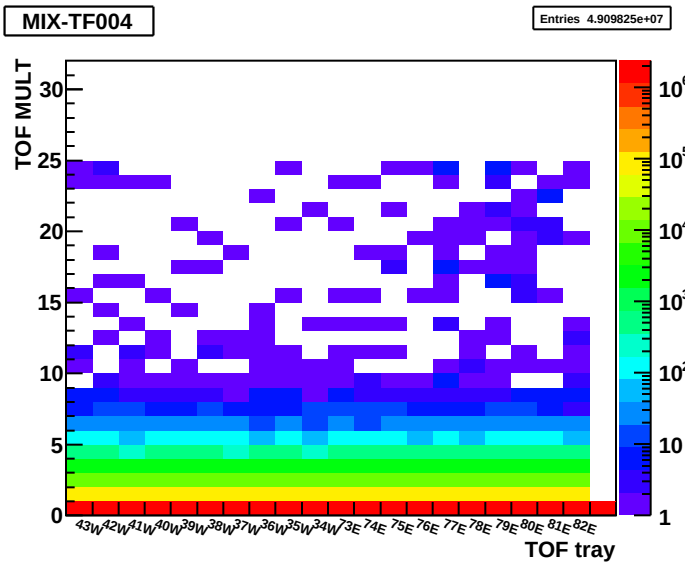

Endcap Jet Patches
Entries 7014036
JP ADC
JP ID

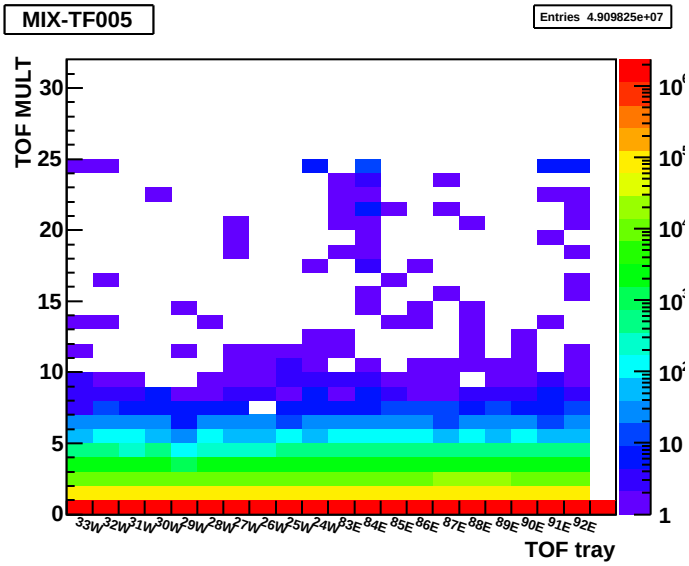

Hybrid Jet Patches
Entries 2338012
JP ADC
JP ID

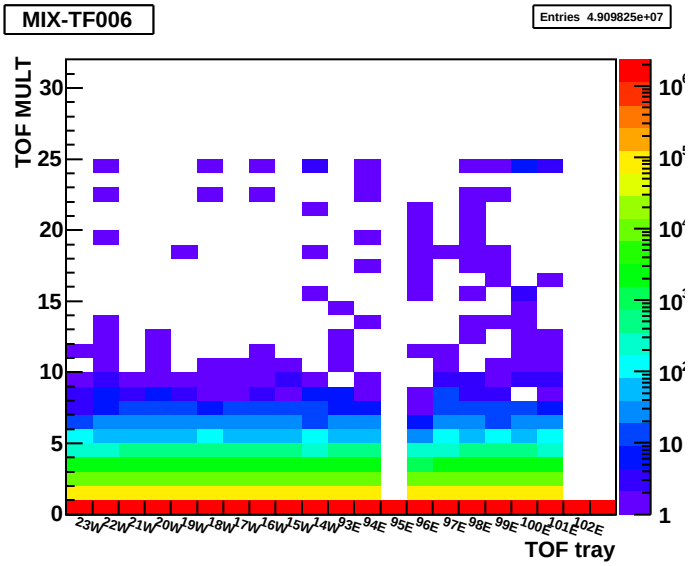

MIX-TF001
Entries 4.909825e+07
TOF MULT
TOF tray

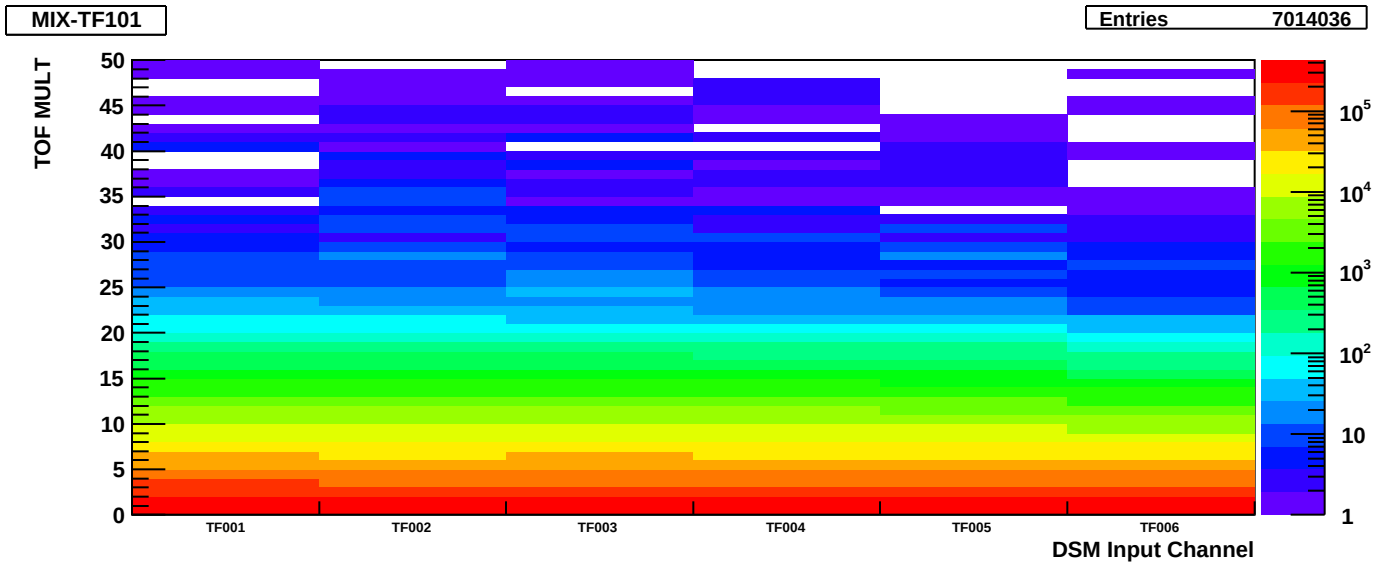

MIX-TF002
Entries 4.909825e+07
TOF MULT
TOF tray

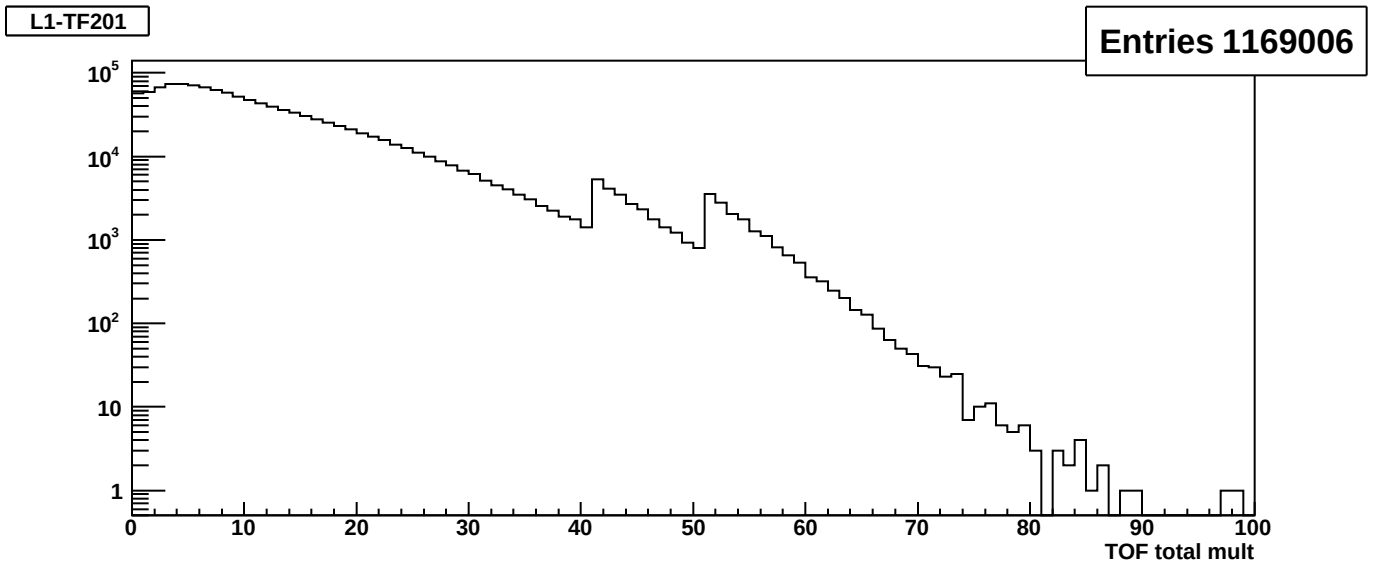

MIX-TF003
Entries 4.909825e+07
TOF MULT
TOF tray

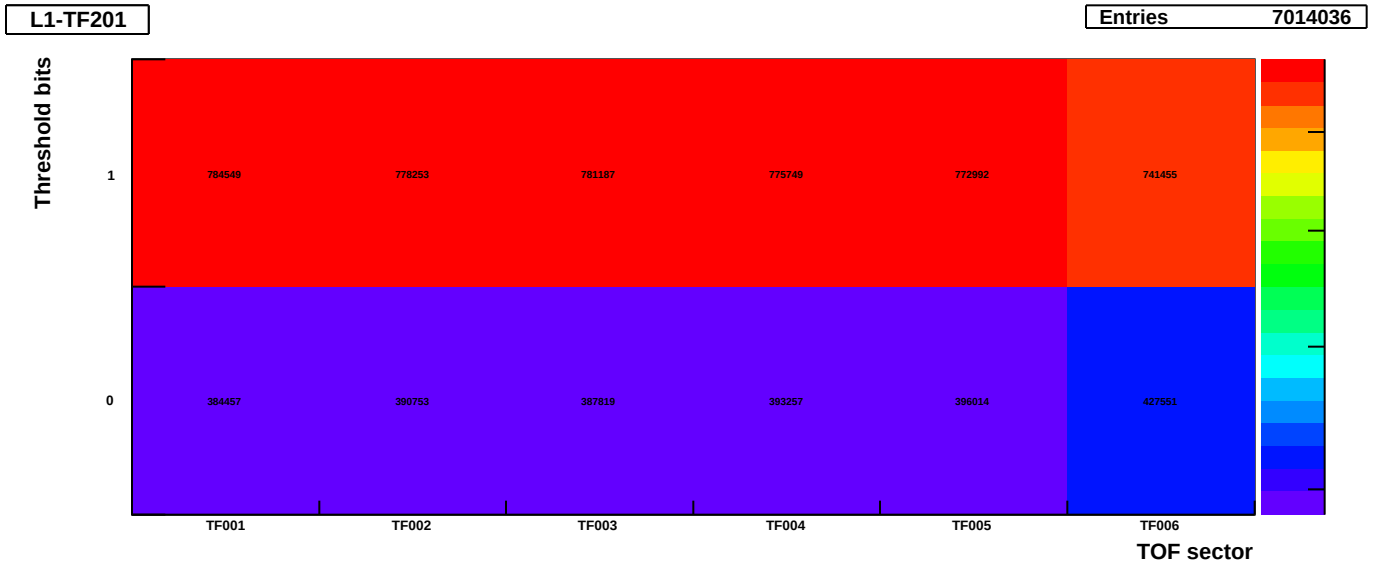

MIX-TF004
Entries 4.909825e+07
TOF MULT
TOF tray

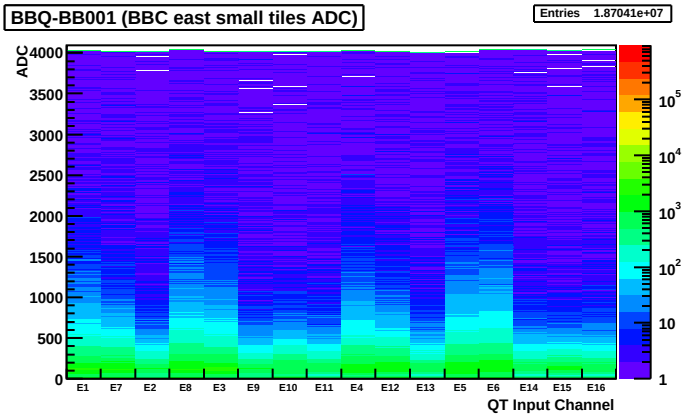

MIX-TF005
Entries 4.909825e+07
TOF MULT
TOF tray

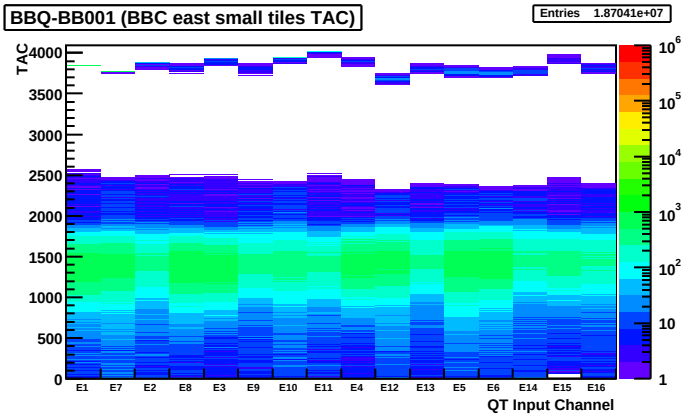

MIX-TF006
Entries 4.909825e+07
TOF MULT
TOF tray

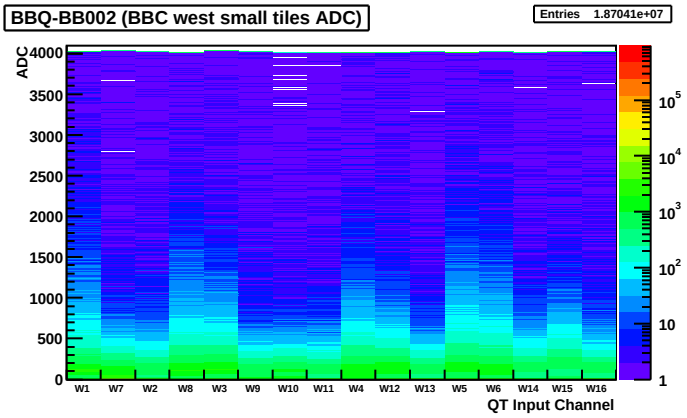

MIX-TF101
Entries 7014036
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

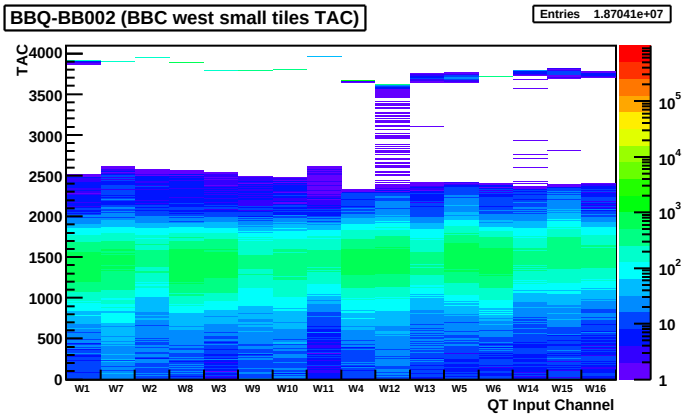

L1-TF201
Entries 1169006
TOF total mult

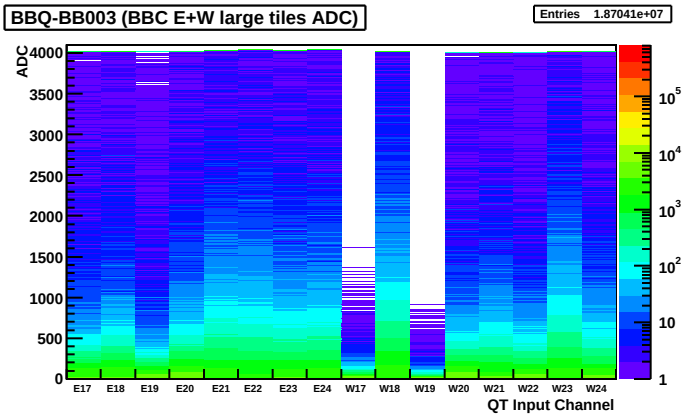

L1-TF201
Entries 7014036
Threshold bits
784549
778253
781187
775749
772992
741455
384457
390753
387819
393257
396014
427551
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

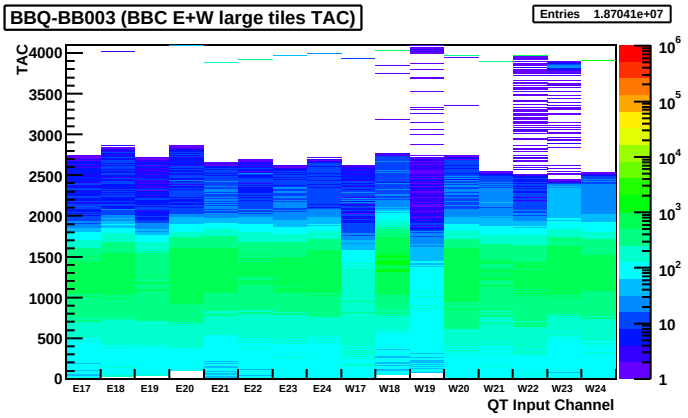

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.87041e+07
ADC
QT Input Channel

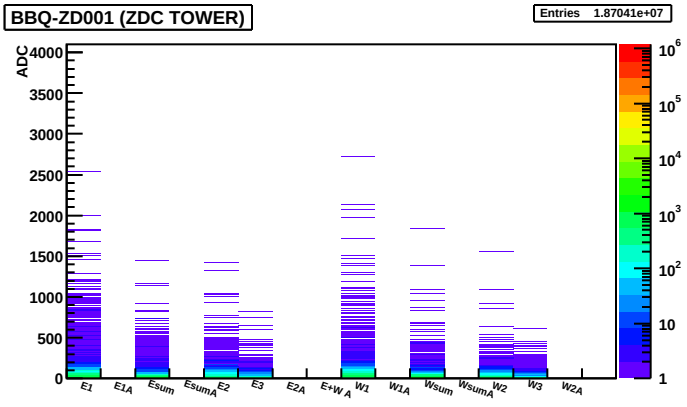

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.87041e+07
TAC
QT Input Channel

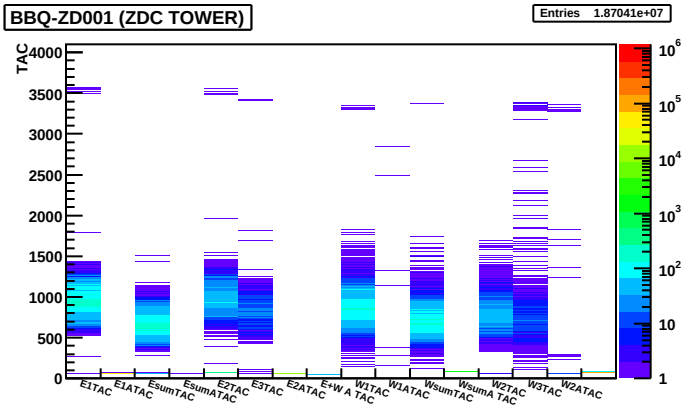

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.87041e+07
ADC
QT Input Channel

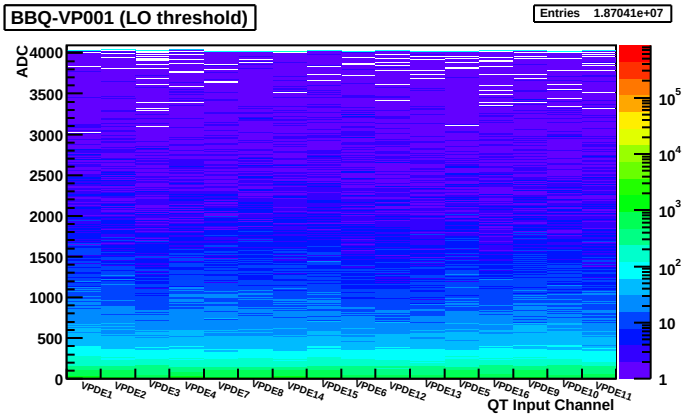

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.87041e+07
TAC
QT Input Channel

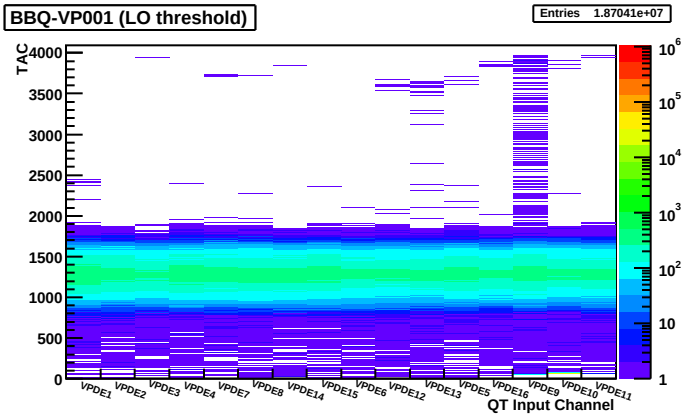

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.87041e+07
ADC
QT Input Channel

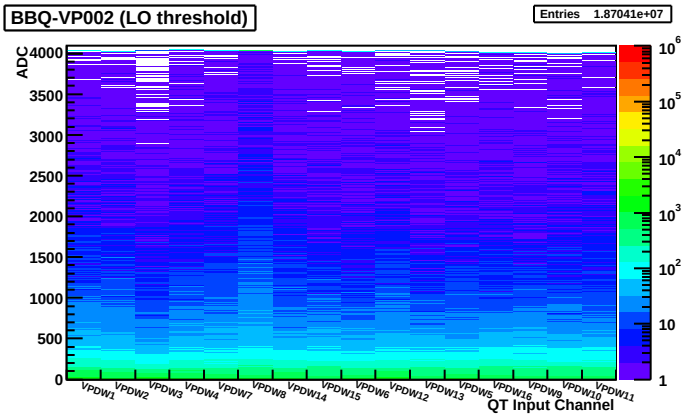

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.87041e+07
TAC
QT Input Channel

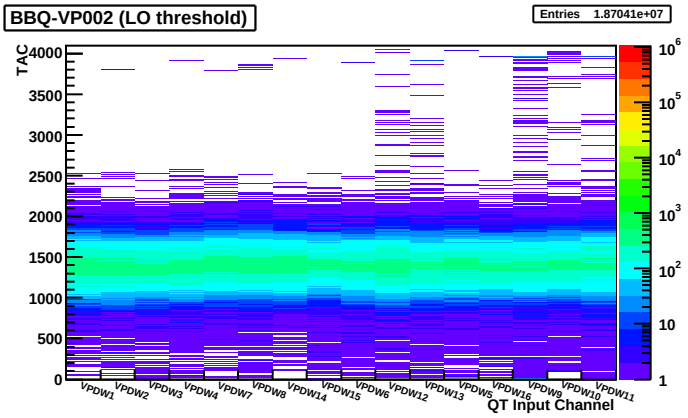

BBQ-ZD001 (ZDC TOWER)
Entries 1.87041e+07
ADC

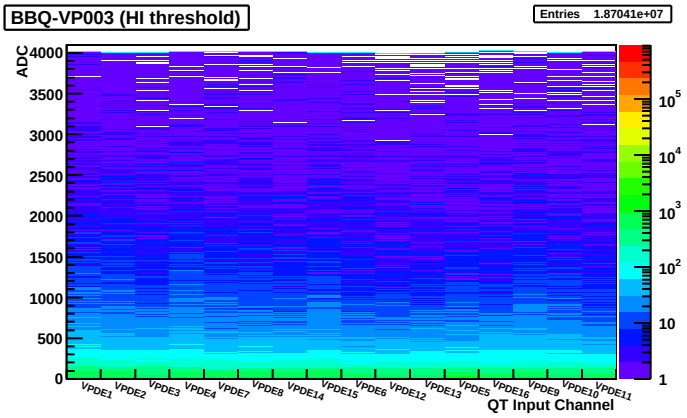

BBQ-ZD001 (ZDC TOWER)
Entries 1.87041e+07
TAC

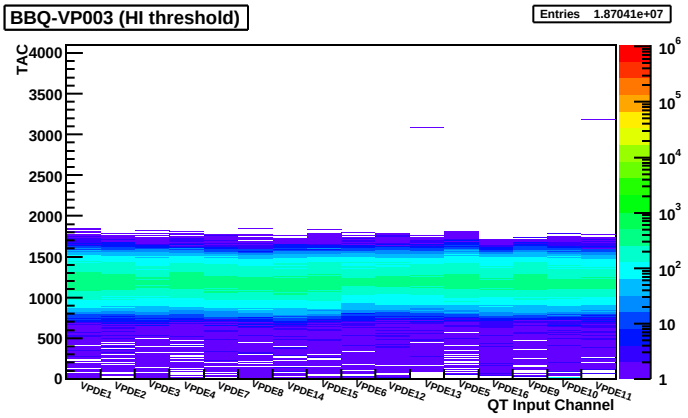

BBQ-VP001 (LO threshold)
Entries 1.87041e+07
ADC
QT Input Channel

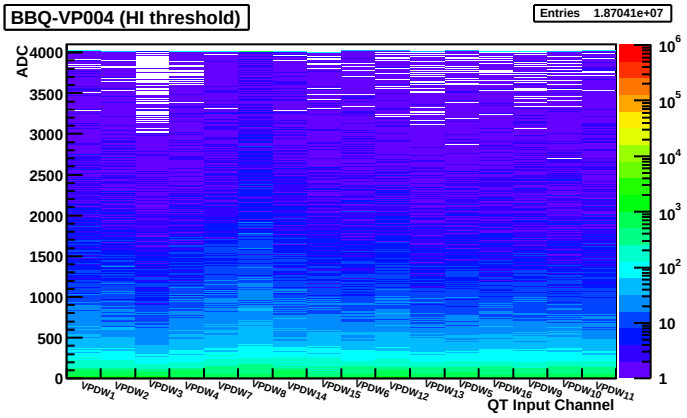

BBQ-VP001 (LO threshold)
Entries 1.87041e+07
TAC
QT Input Channel

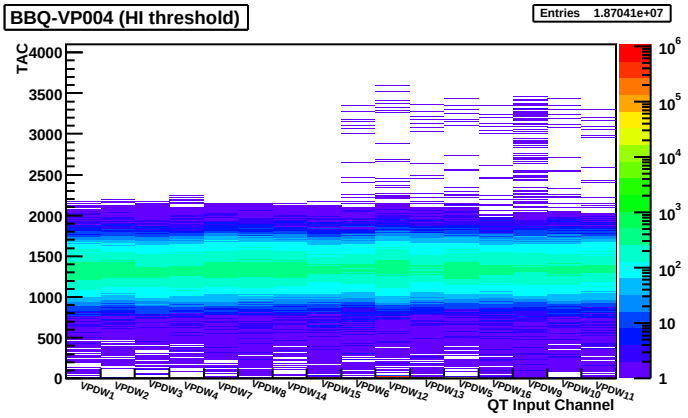

BBQ-VP002 (LO threshold)
Entries 1.87041e+07
ADC
QT Input Channel

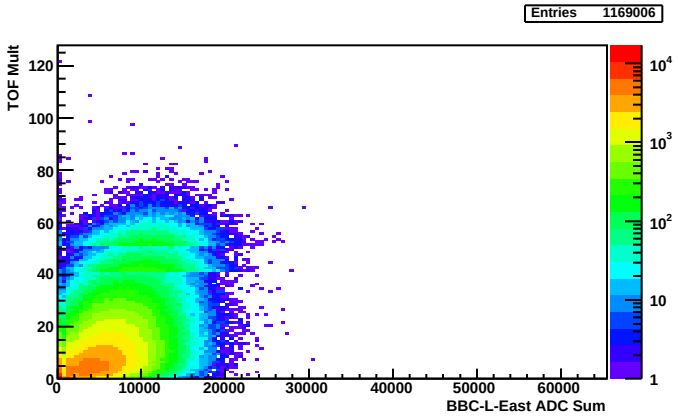

BBQ-VP002 (LO threshold)
Entries 1.87041e+07
TAC
QT Input Channel

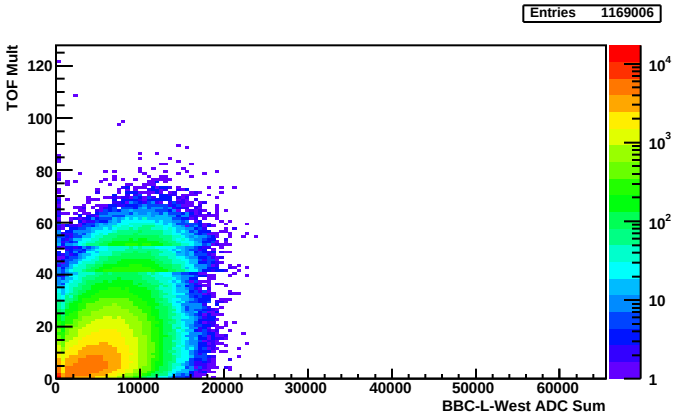

BBQ-VP003 (HI threshold)
Entries 1.87041e+07
ADC
QT Input Channel

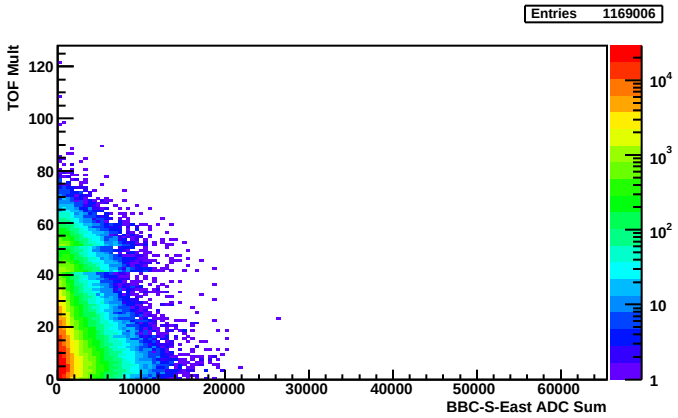

BBQ-VP003 (HI threshold)
Entries 1.87041e+07
TAC
QT Input Channel

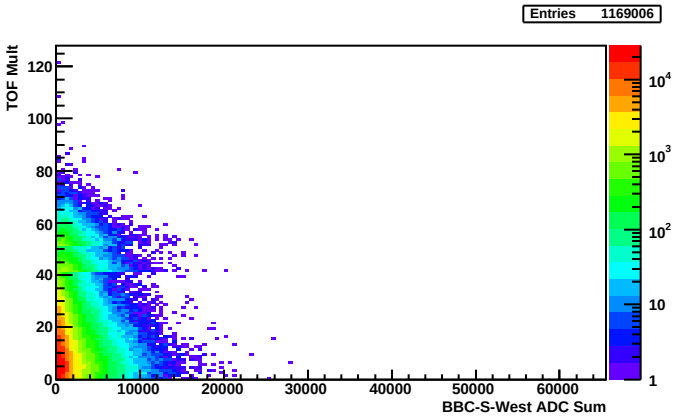

BBQ-VP004 (HI threshold)
Entries 1.87041e+07
ADC
QT Input Channel

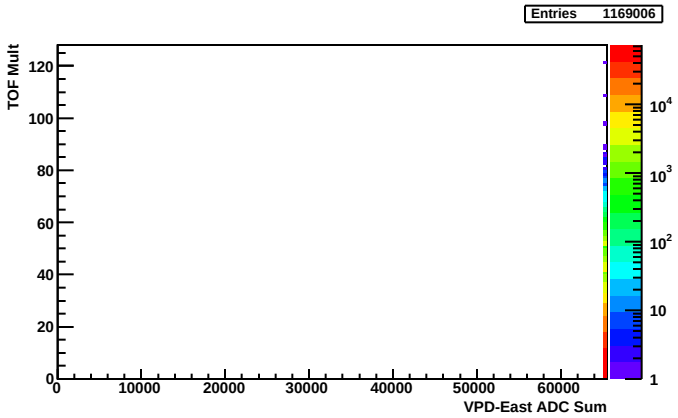

BBQ-VP004 (HI threshold)
Entries 1.87041e+07
TAC
QT Input Channel

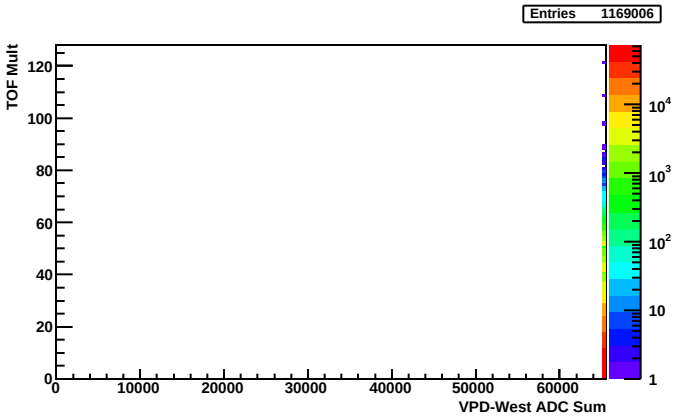

Entries 1169006
TOF Mult
BBC-L-East ADC Sum

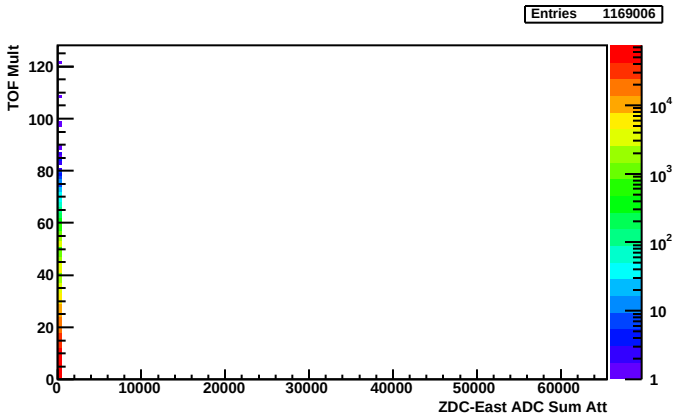

Entries 1169006
TOF Mult
BBC-L-West ADC Sum

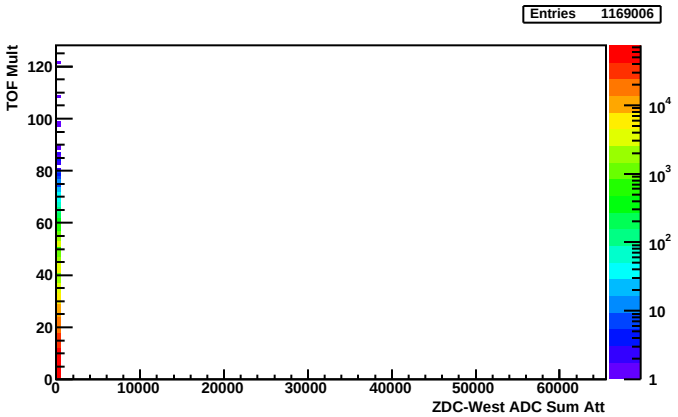

Entries 1169006
TOF Mult
BBC-S-East ADC Sum

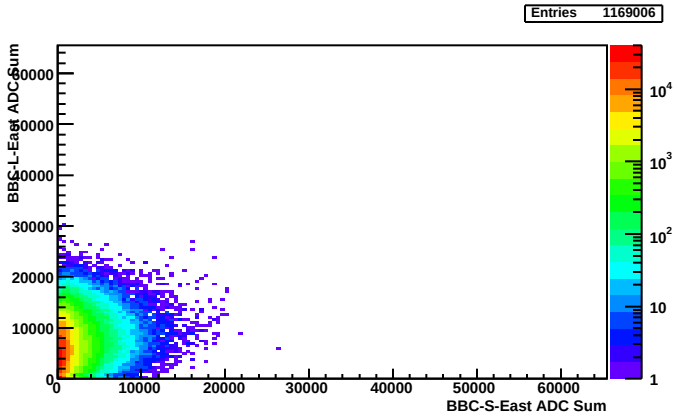

Entries 1169006
TOF Mult
BBC-S-West ADC Sum

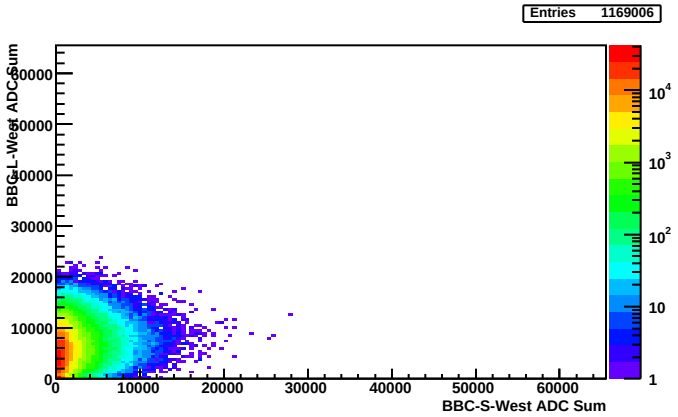

Entries 1169006
TOF Mult
VPD-East ADC Sum

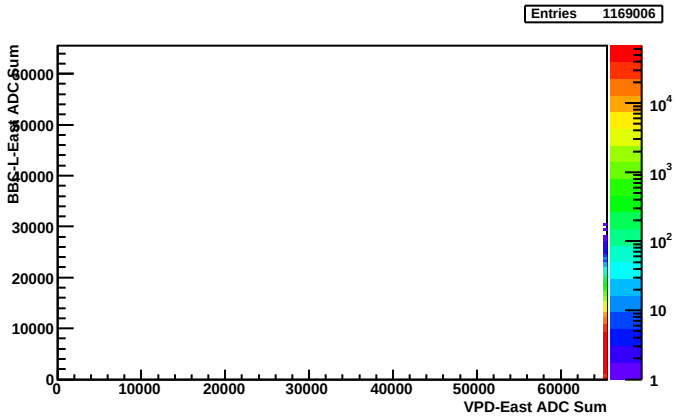

Entries 1169006
TOF Mult
VPD-West ADC Sum

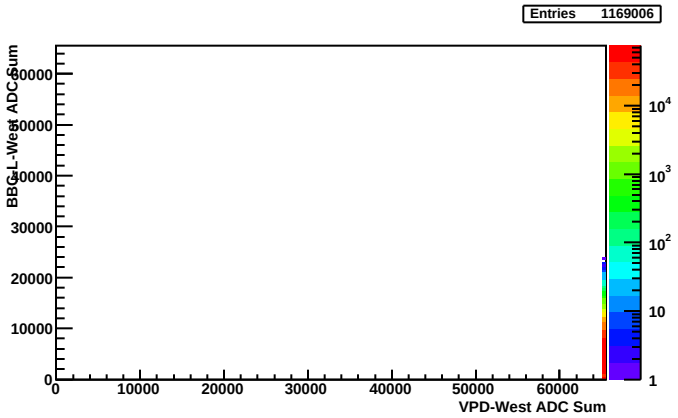

Entries 1169006
TOF Mult
ZDC-East ADC Sum Att

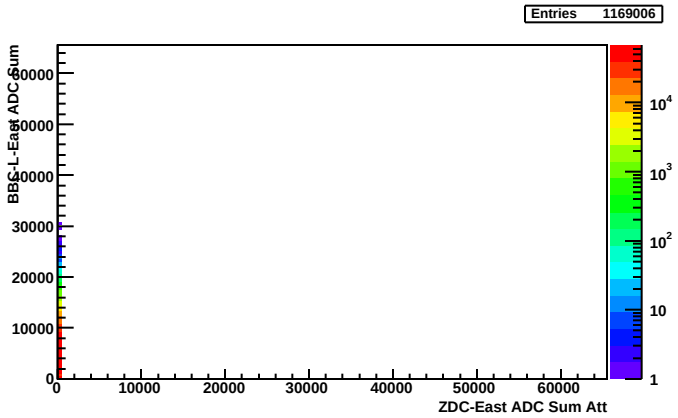

Entries 1169006
TOF Mult
ZDC-West ADC Sum Att

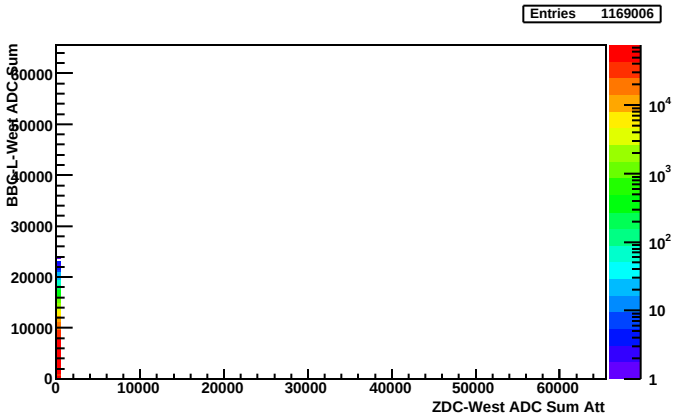

Entries 1169006
BBC-L-East ADC Sum
BBC-S-East ADC Sum

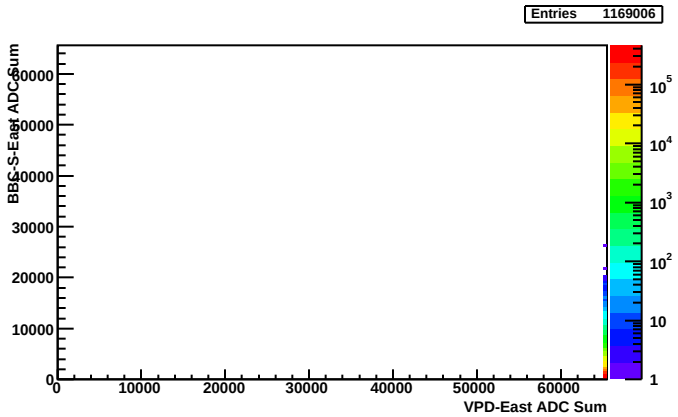

Entries 1169006
BBC-L-West ADC Sum
BBC-S-West ADC Sum

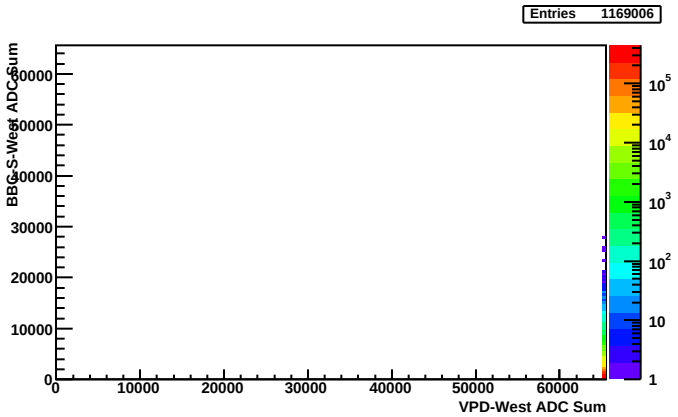

Entries 1169006
BBC-L-East ADC Sum
VPD-East ADC Sum

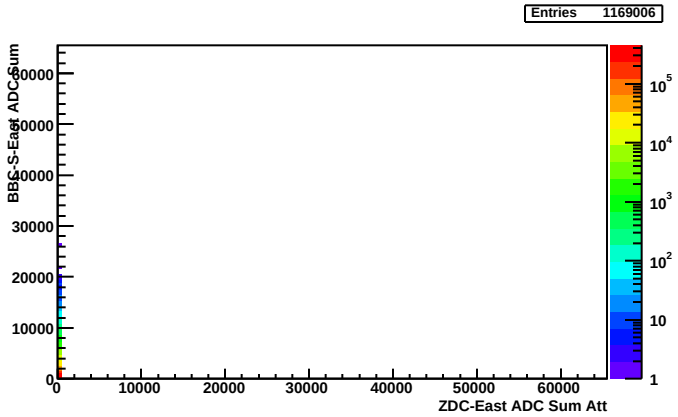

Entries 1169006
BBC-L-West ADC Sum
VPD-West ADC Sum

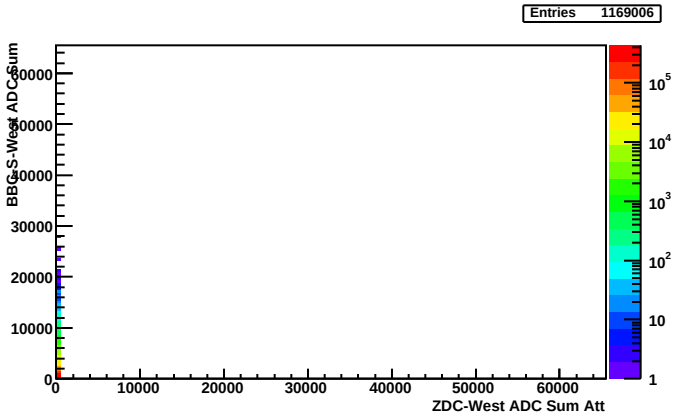

Entries 1169006
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

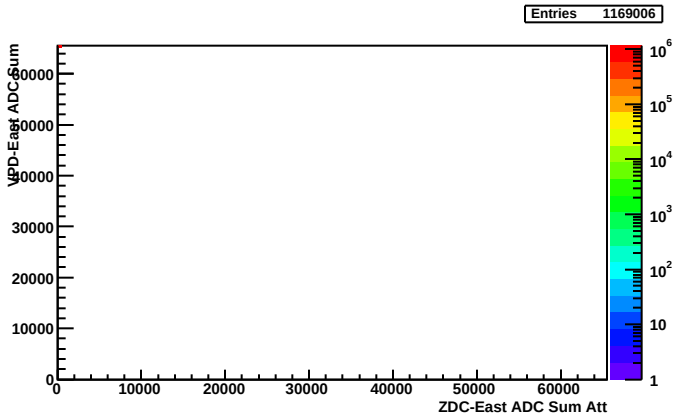

Entries 1169006
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

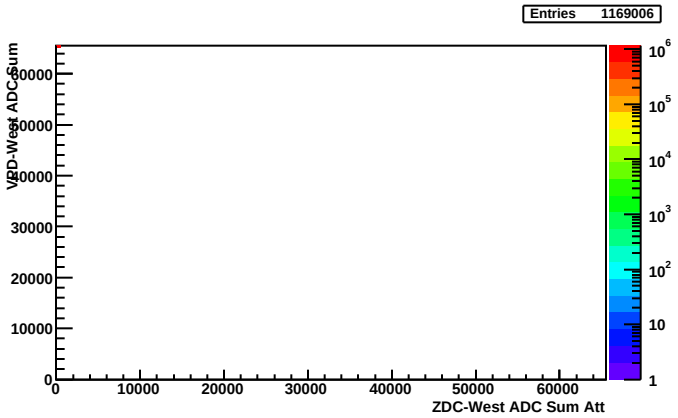

Entries 1169006
BBC-S-East ADC Sum
VPD-East ADC Sum

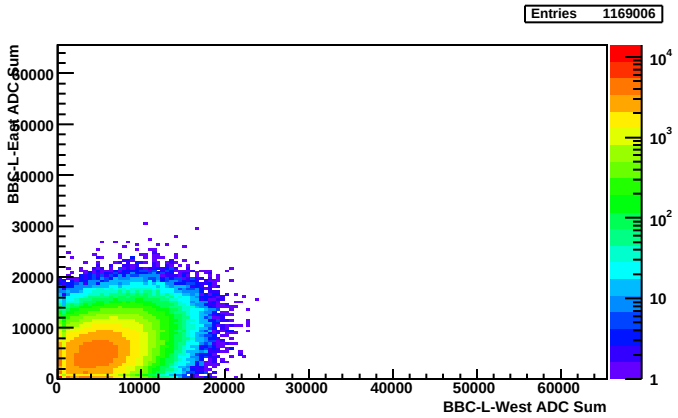

Entries 1169006
BBC-S-West ADC Sum
VPD-West ADC Sum

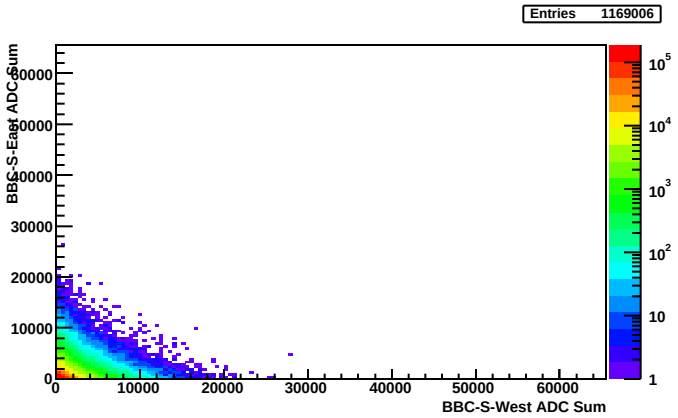

Entries 1169006
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

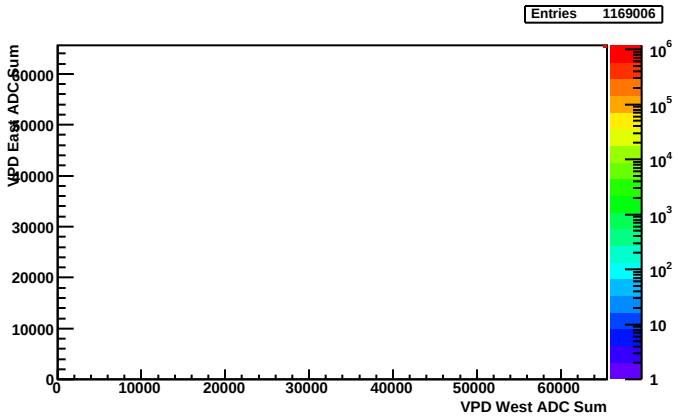

Entries 1169006
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

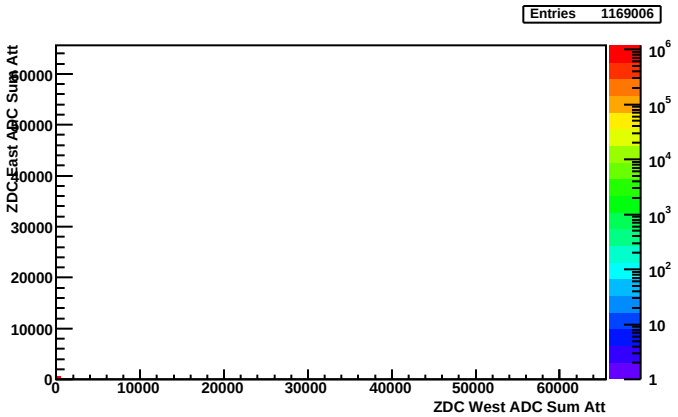

Entries 1169006
VPD-East ADC Sum
ZDC-East ADC Sum Att

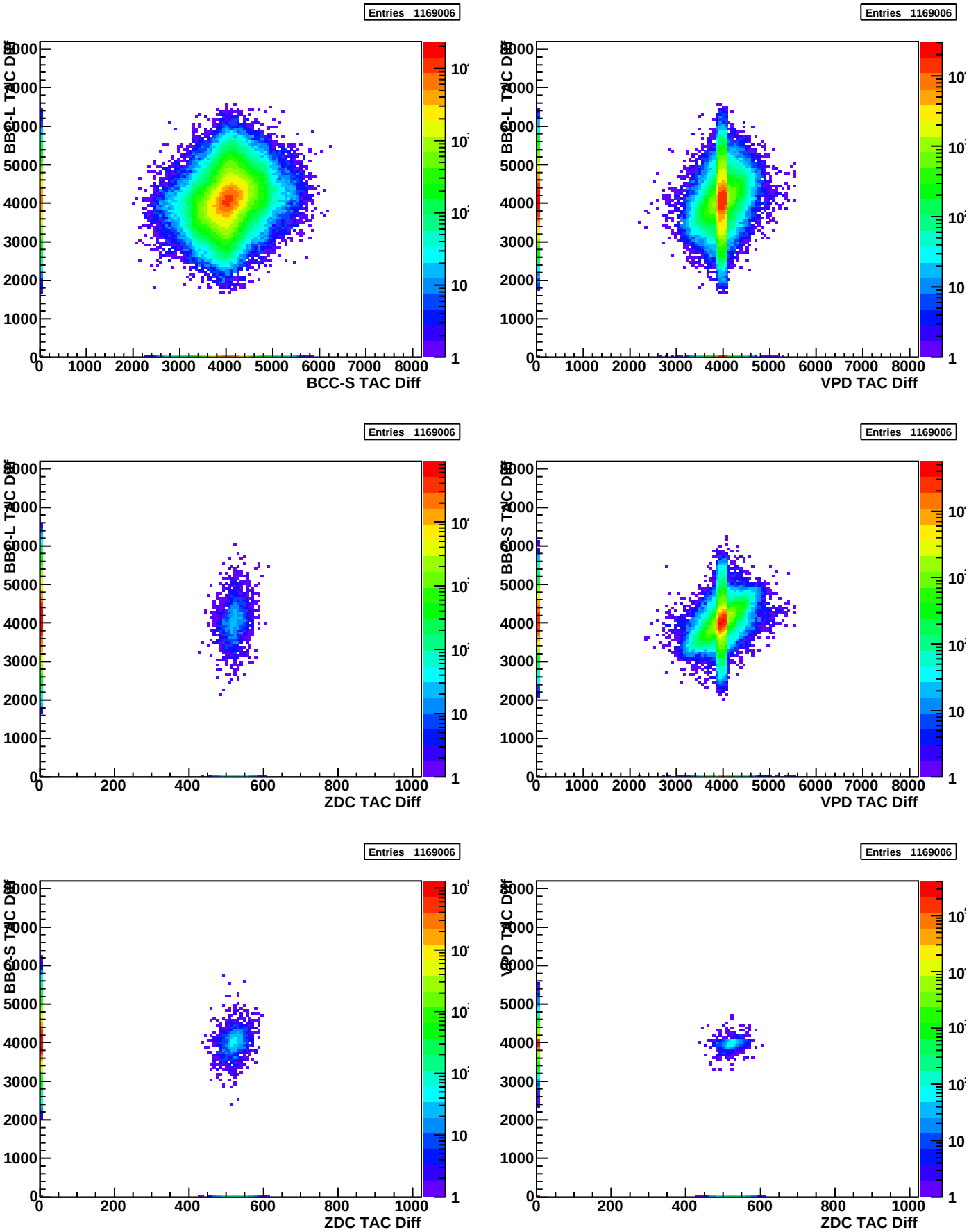

Entries 1169006
VPD-West ADC Sum
ZDC-West ADC Sum Att

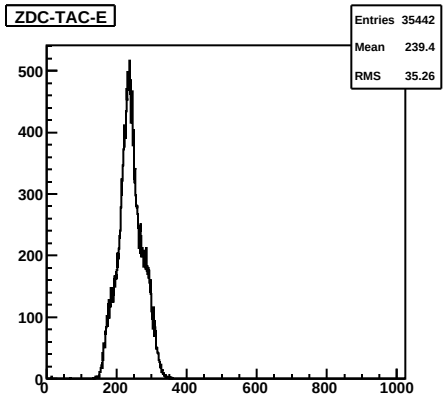

Entries 1169006
BBC-L-East ADC Sum
BBC-L-West ADC Sum

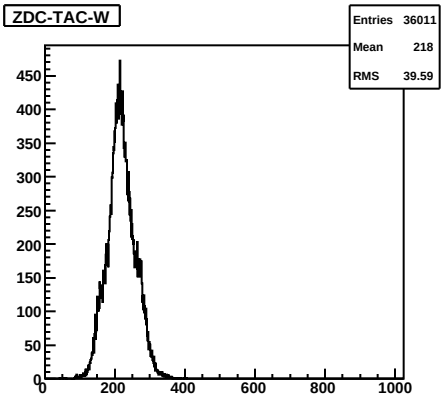

Entries 1169006
BBC-S-East ADC Sum
BBC-S-West ADC Sum

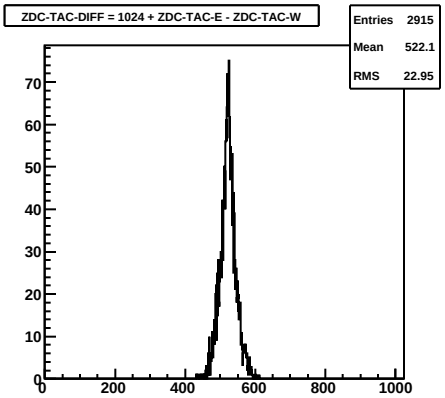

Entries 1169006
VPD East ADC Sum
VPD West ADC Sum

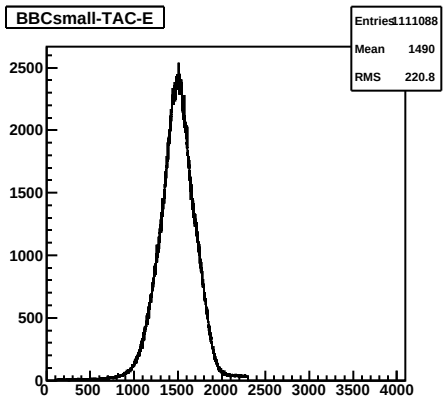

Entries 1169006
ZDC East ADC Sum Att
ZDC West ADC Sum Att

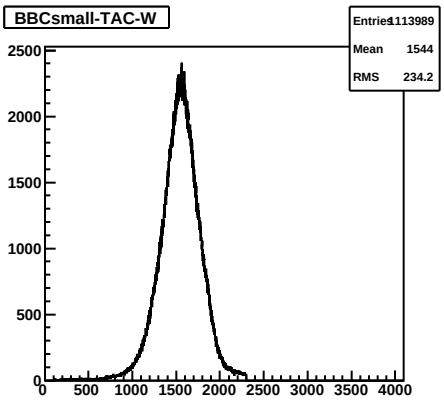

Entries 1169006
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1169006
BBC-L TAC Diff
VPD TAC Diff
Entries 1169006
BBC-L TAC Diff
ZDC TAC Diff
Entries 1169006
BBC-S TAC Diff
VPD TAC Diff
Entries 1169006
BBC-S TAC Diff
ZDC TAC Diff
Entries 1169006
VPD TAC Diff
ZDC TAC Diff

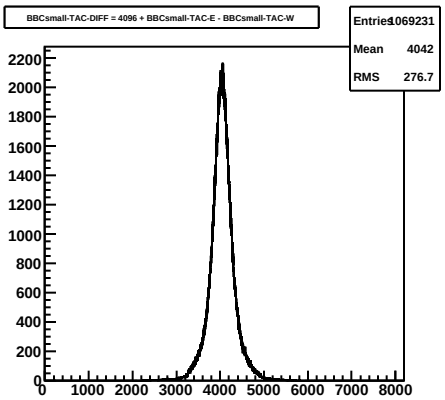

ZDC-TAC-E
Entries 35442
Mean 239.4
RMS 35.26

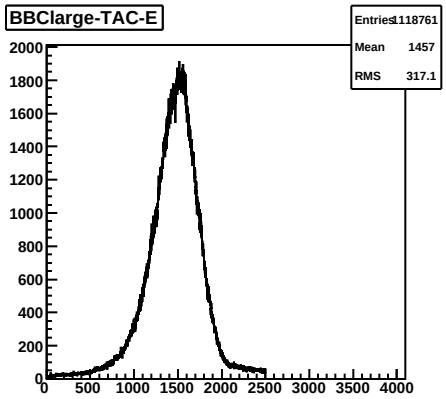

ZDC-TAC-W
Entries 36011
Mean 218
RMS 39.59

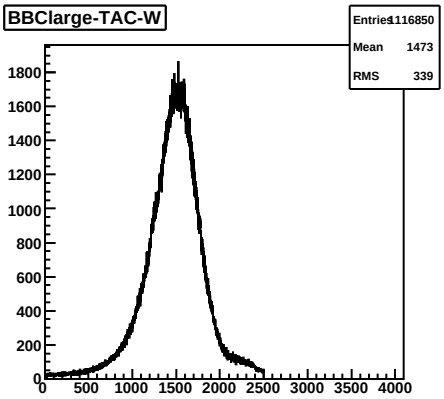

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2915
Mean 522.1
RMS 22.95

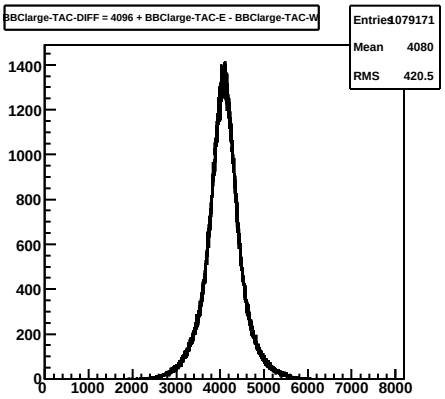

BBCsmall-TAC-E
Entries 1111088
Mean 1490
RMS 220.8

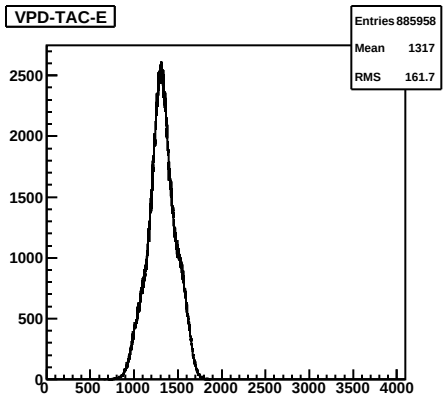

BBCsmall-TAC-W
Entries 1113989
Mean 1544
RMS 234.2

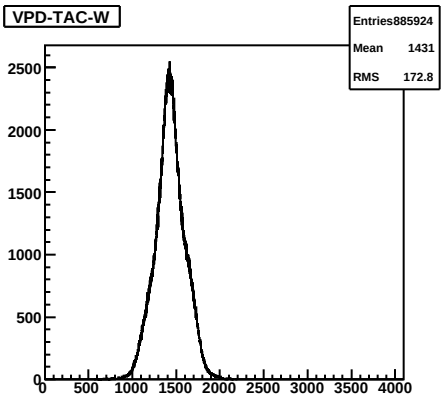

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1069231
Mean 4042
RMS 276.7

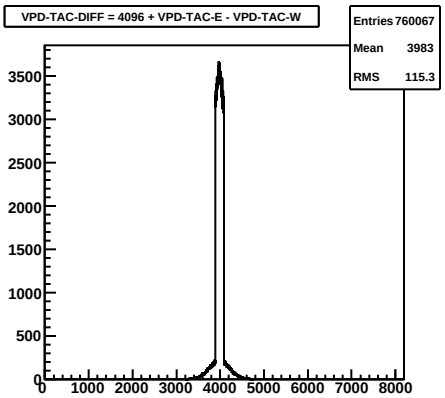

BBClarge-TAC-E
Entries 1118761
Mean 1457
RMS 317.1

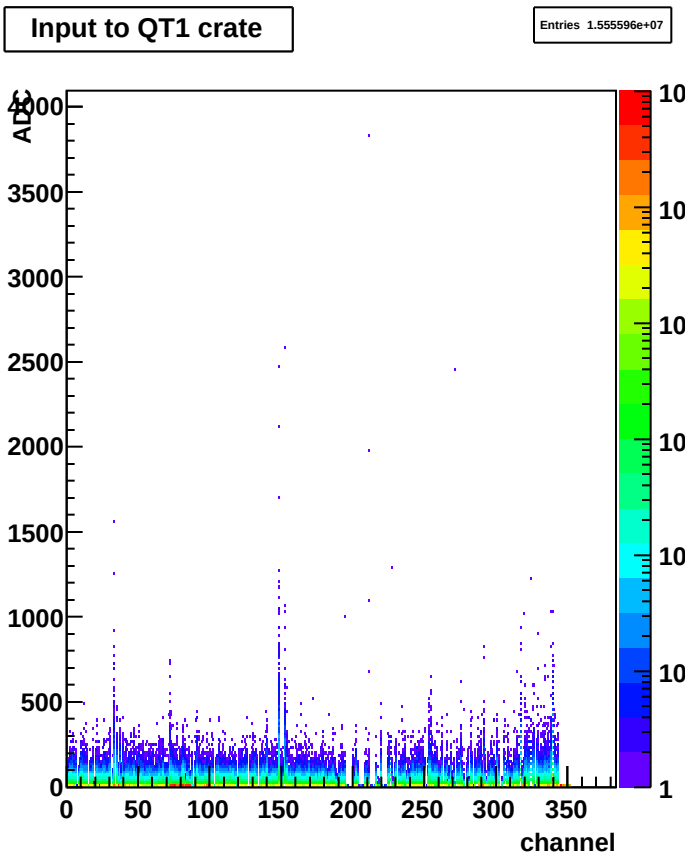

BBClarge-TAC-W
Entries 1116850
Mean 1473
RMS 339

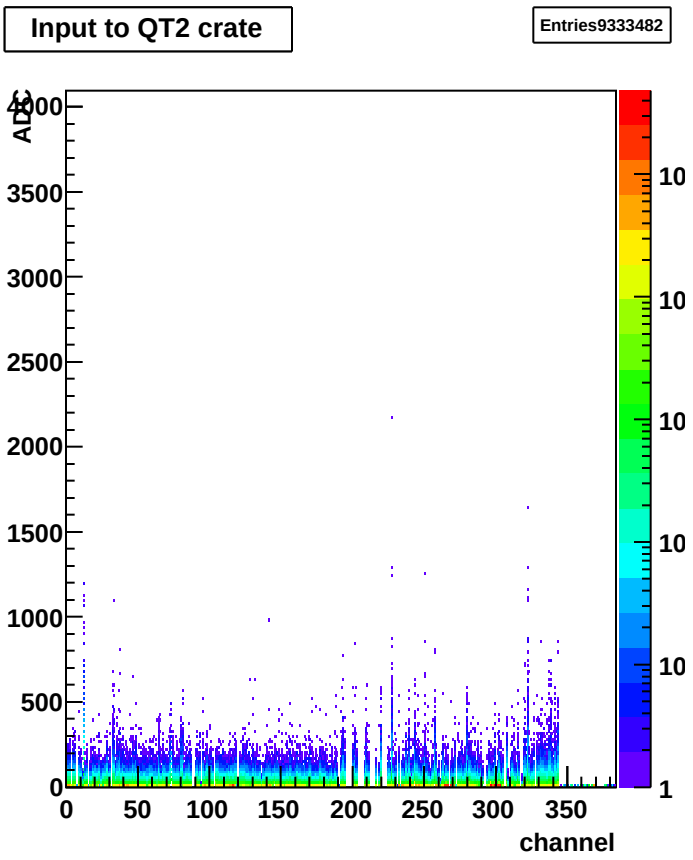

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1079171
Mean 4080
RMS 420.5

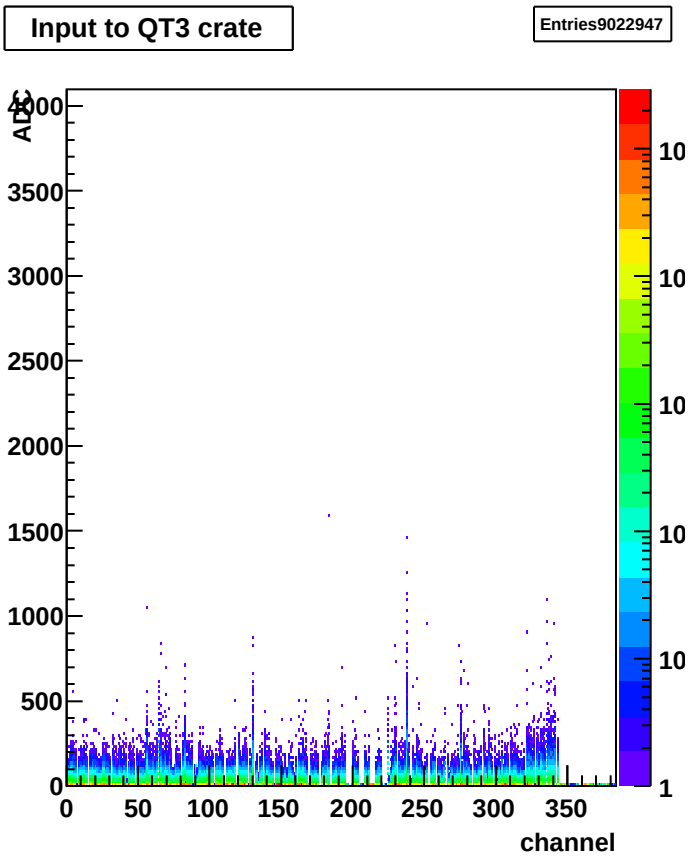

VPD-TAC-E
Entries 885958
Mean 1317
RMS 161.7

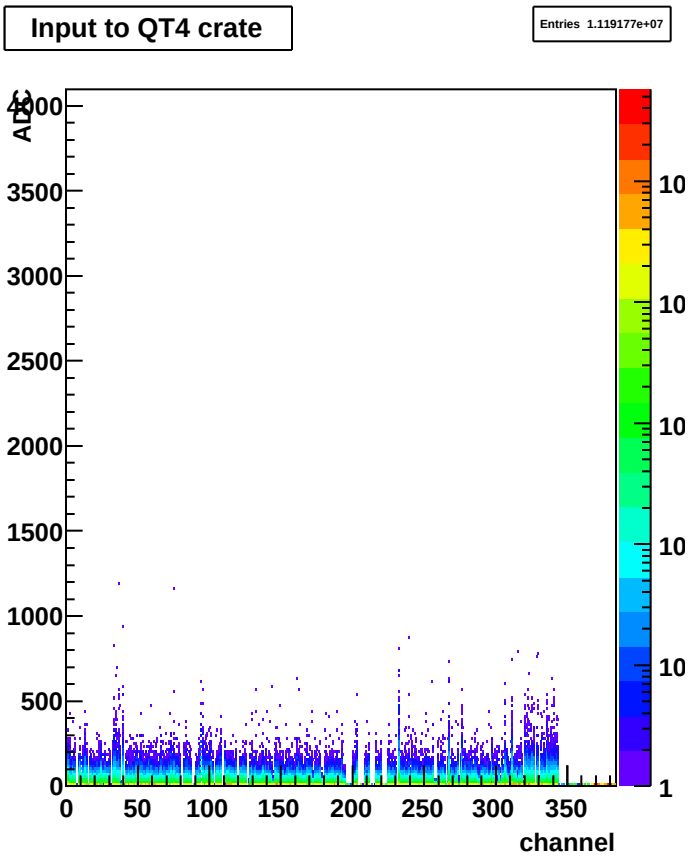

VPD-TAC-W
Entries 885924
Mean 1431
RMS 172.8

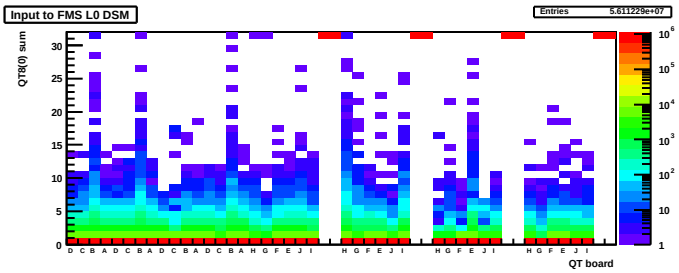

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 760067
Mean 3983
RMS 115.3

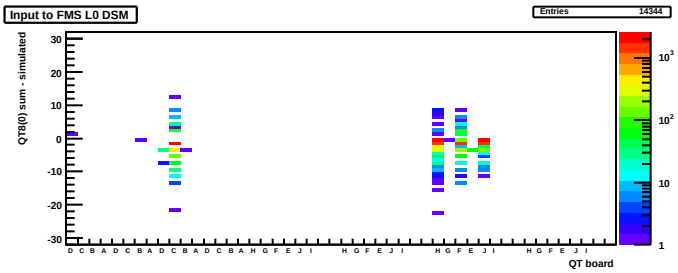

Input to QT1 crate
Entries 1.555596e+07
ADC
channel

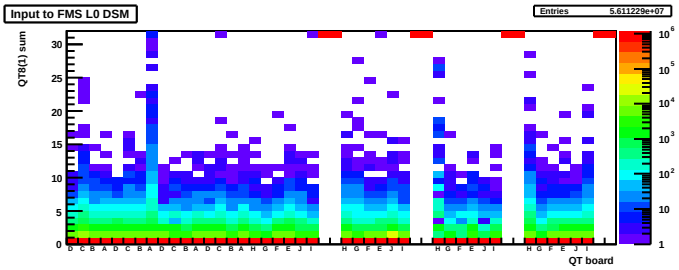

Input to QT2 crate
Entries9333482
ADC
channel

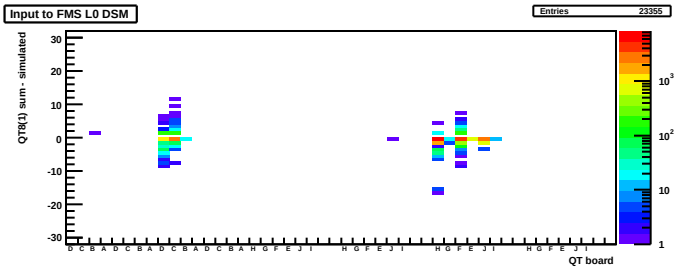

Input to QT3 crate
Entries9022947
ADC
channel

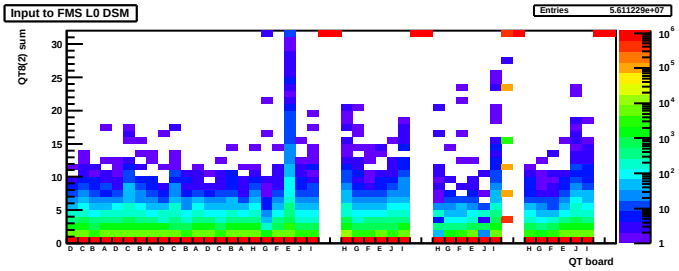

Input to QT4 crate
Entries 1.119177e+07
ADC
channel

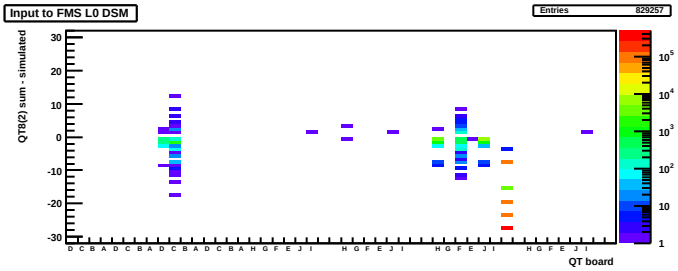

Input to FMS L0 DSM
Entries 5.611229e+07
QT8(0) sum
QT board

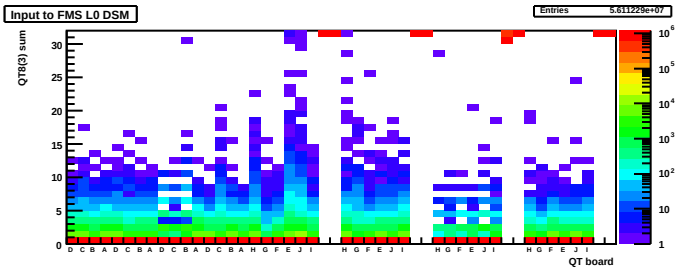

Input to FMS L0 DSM
Entries 14344
QT8(0) sum - simulated
QT board

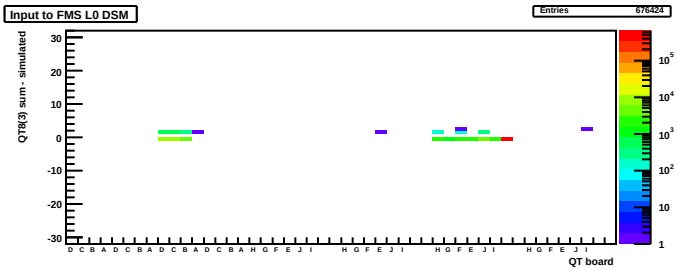

Input to FMS L0 DSM
Entries 5.611229e+07
QT8(1) sum
QT board

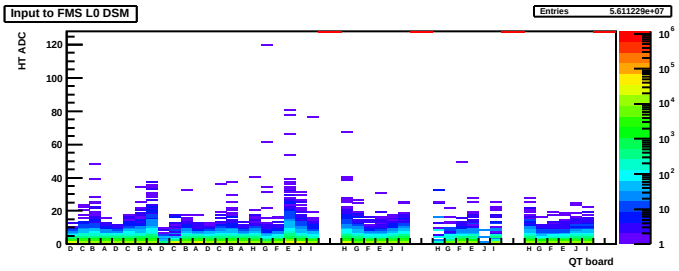

Input to FMS L0 DSM
Entries 23355
QT8(1) sum - simulated
QT board

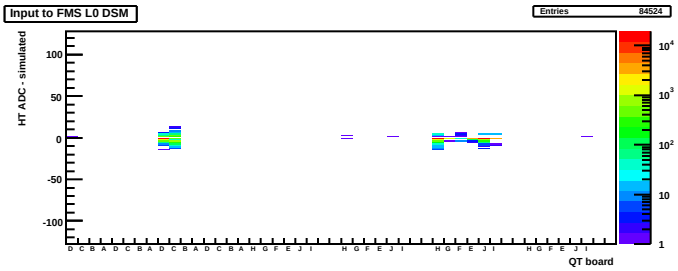

Input to FMS L0 DSM
Entries 5.611229e+07
QT8(2) sum
QT board

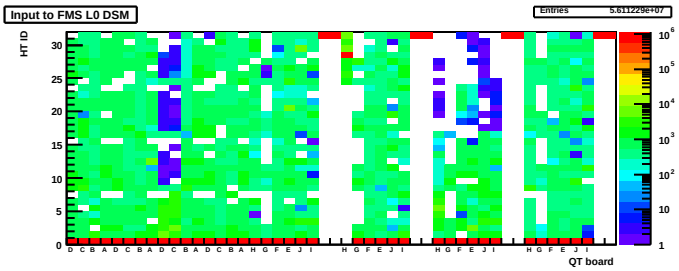

Input to FMS L0 DSM
Entries 829257
QT8(2) sum - simulated
QT board

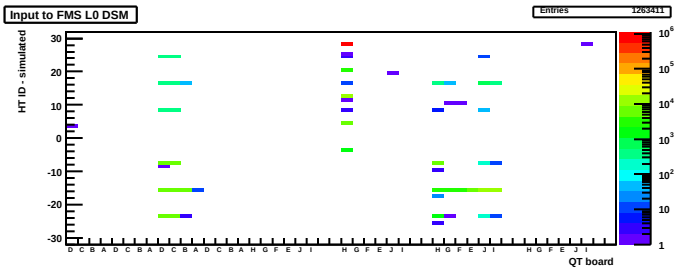

Input to FMS L0 DSM
Entries 5.611229e+07
QT8(3) sum
QT board

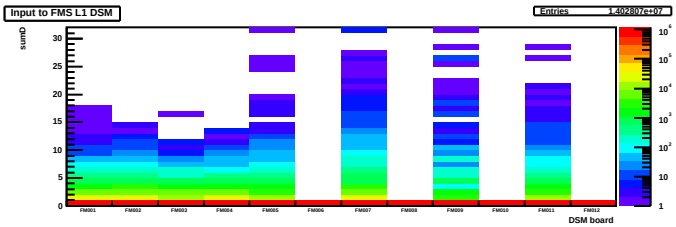

Input to FMS L0 DSM
Entries 676424
QT8(3) sum - simulated
QT board

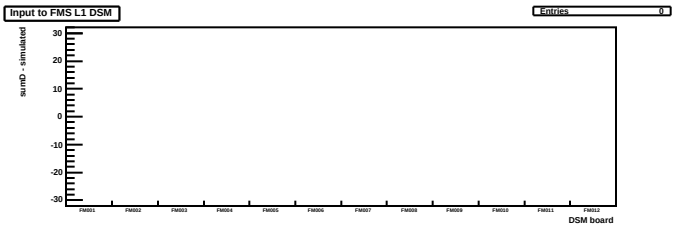

Input to FMS L0 DSM
Entries 5.611229e+07
HT ADC
QT board

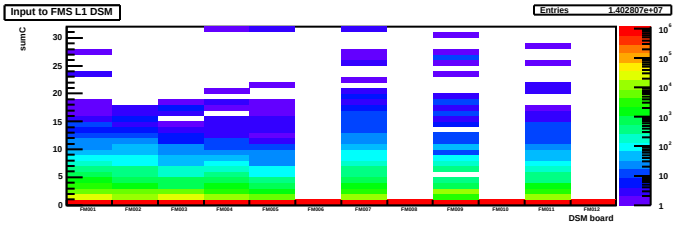

Input to FMS L0 DSM
Entries 84524
HT ADC - simulated
QT board

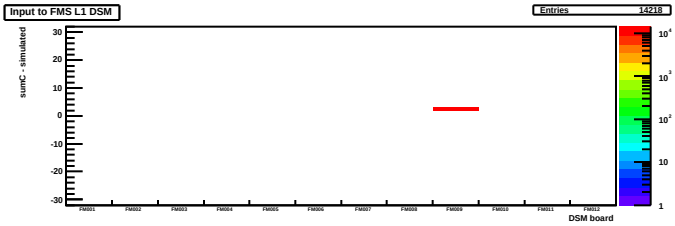

Input to FMS L0 DSM
Entries 5.611229e+07
HT ID
QT board

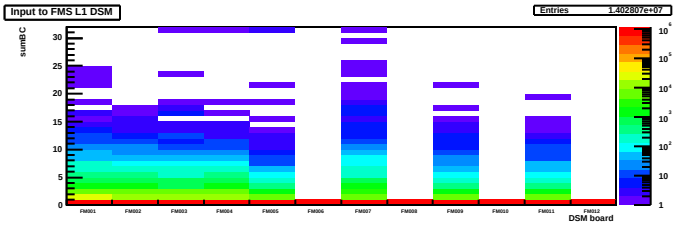

Input to FMS L0 DSM
Entries 1263411
HT ID - simulated
QT board

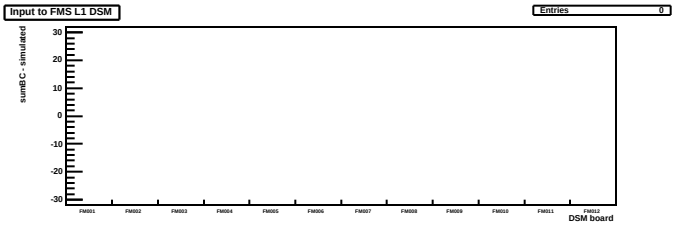

Input to FMS L1 DSM
Entries 1.402807e+07
sumD
DSM board

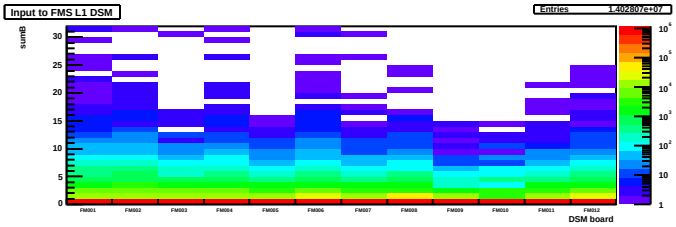

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

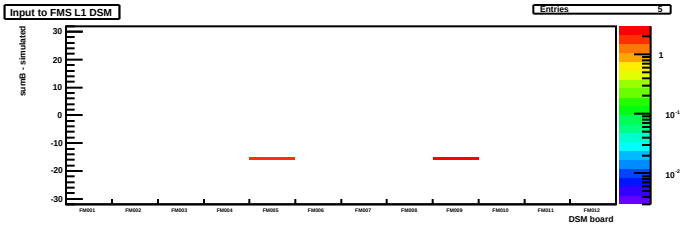

Input to FMS L1 DSM
Entries 1.402807e+07
sumC
DSM board

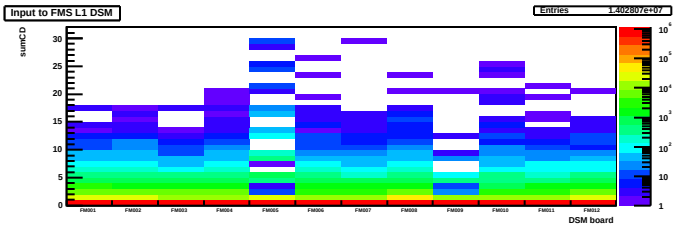

Input to FMS L1 DSM
Entries 14218
sumC - simulated
DSM board

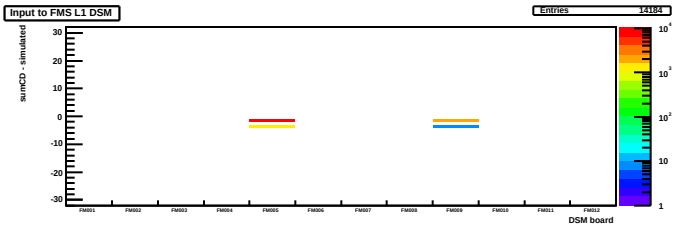

Input to FMS L1 DSM
Entries 1.402807e+07
sumBC
DSM board

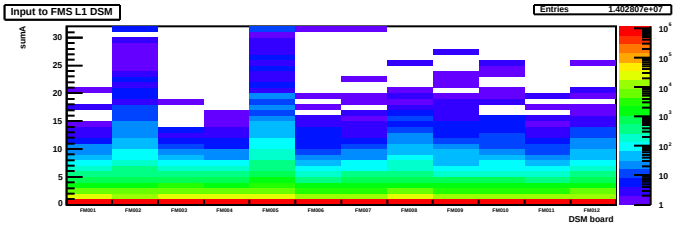

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

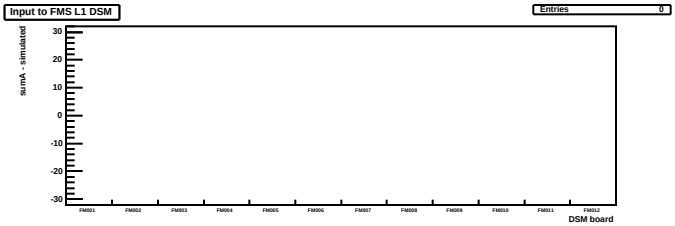

Input to FMS L1 DSM
Entries 1.402807e+07
sumB
DSM board

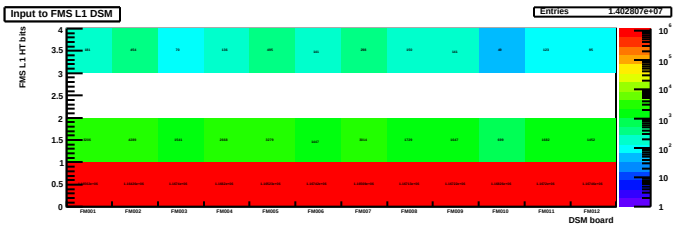

Input to FMS L1 DSM
Entries 5
sumB - simulated
DSM board

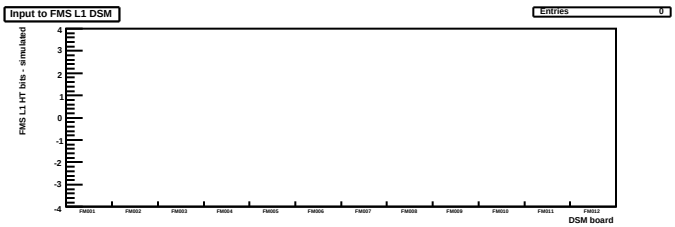

Input to FMS L1 DSM
Entries 1.402807e+07
sumCD
DSM board

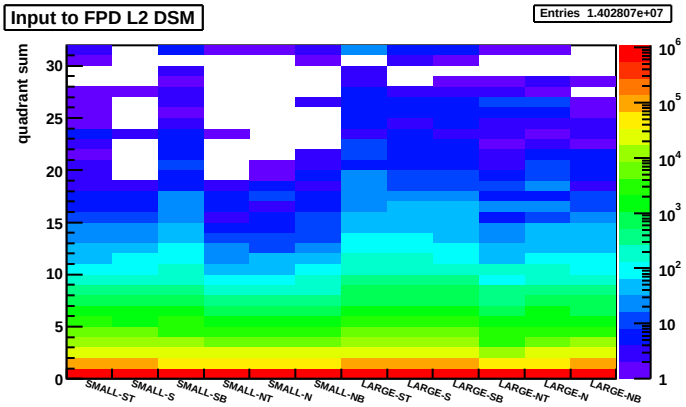

Input to FMS L1 DSM
Entries 14184
sumCD - simulated
DSM board

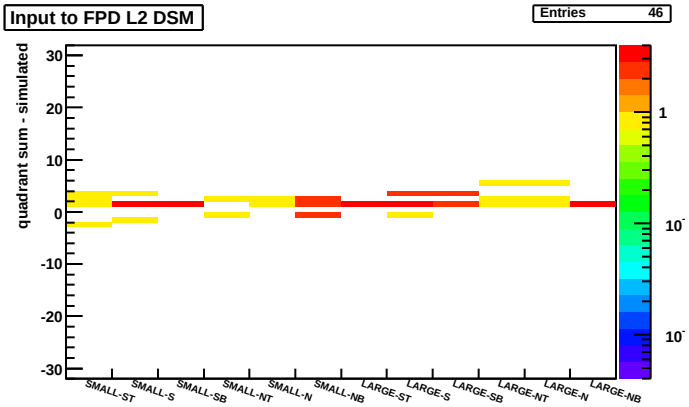

Input to FMS L1 DSM
Entries 1.402807e+07
sumA
DSM board

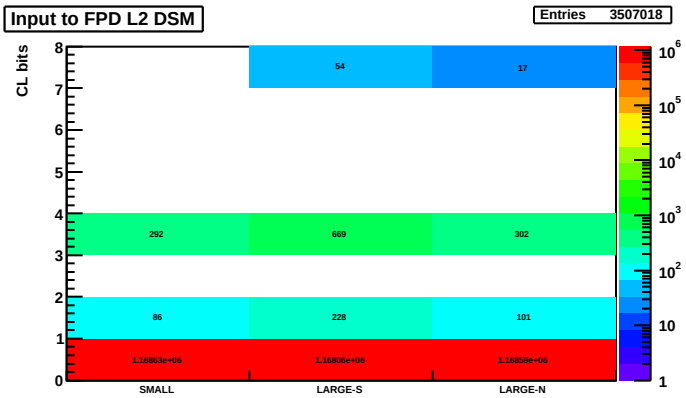

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

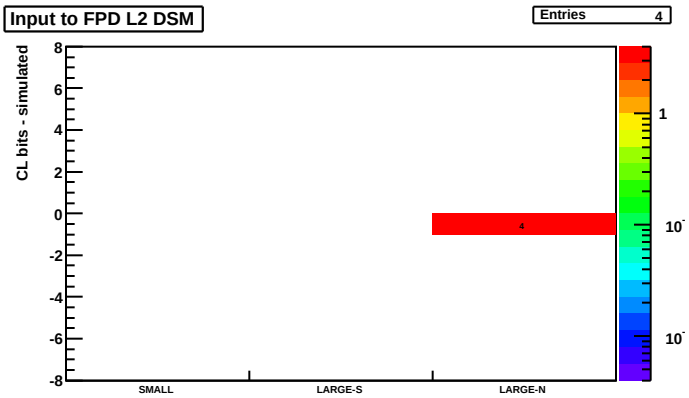

Input to FMS L1 DSM
Entries 1.402807e+07
FMS L1 HT bits
DSM board

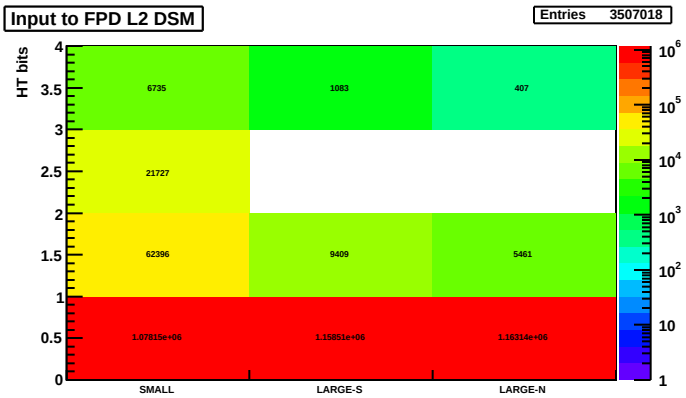

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

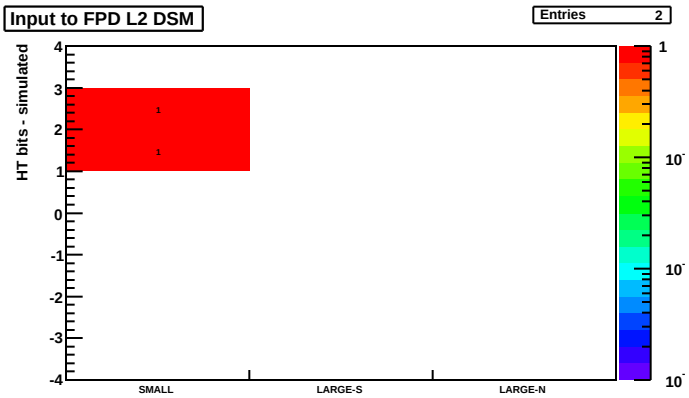

Input to FPD L2 DSM
Entries 1.402807e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

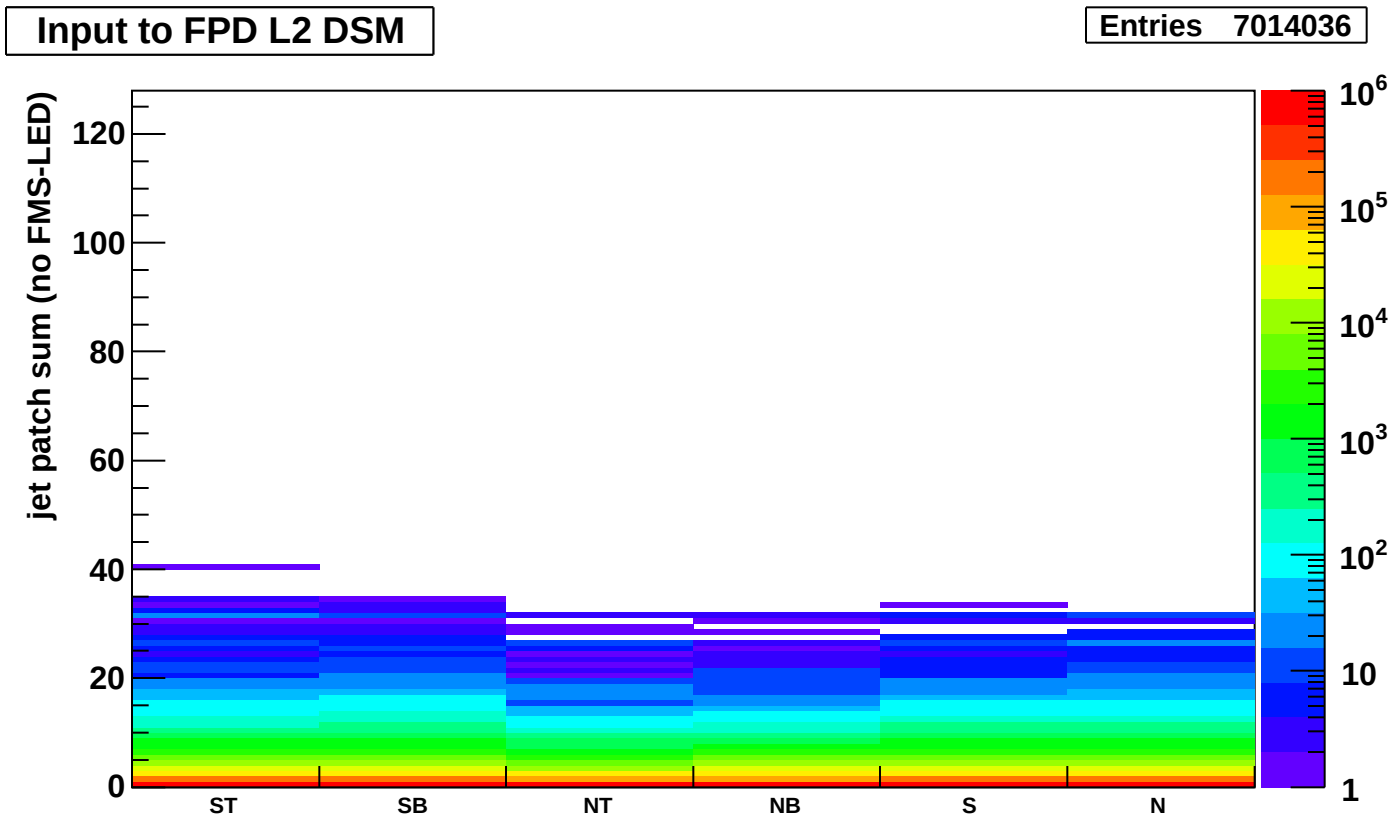

Input to FPD L2 DSM
Entries 46
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

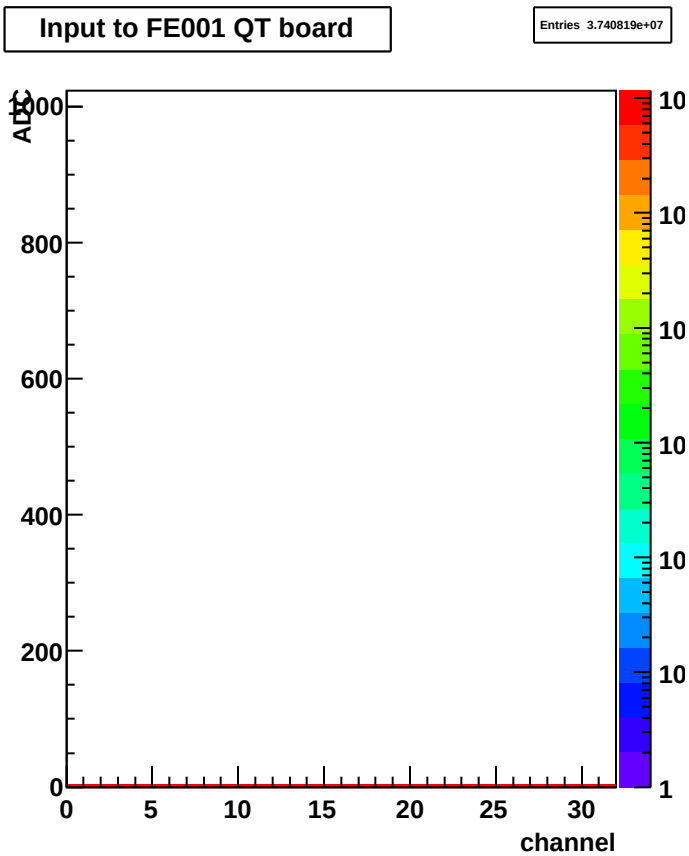

Input to FPD L2 DSM
Entries 3507018
CL bits
54
17
292
669
302
86
228
101
1.16863e+06
1.16806e+06
1.16859e+06
SMALL
LARGE-S
LARGE-N

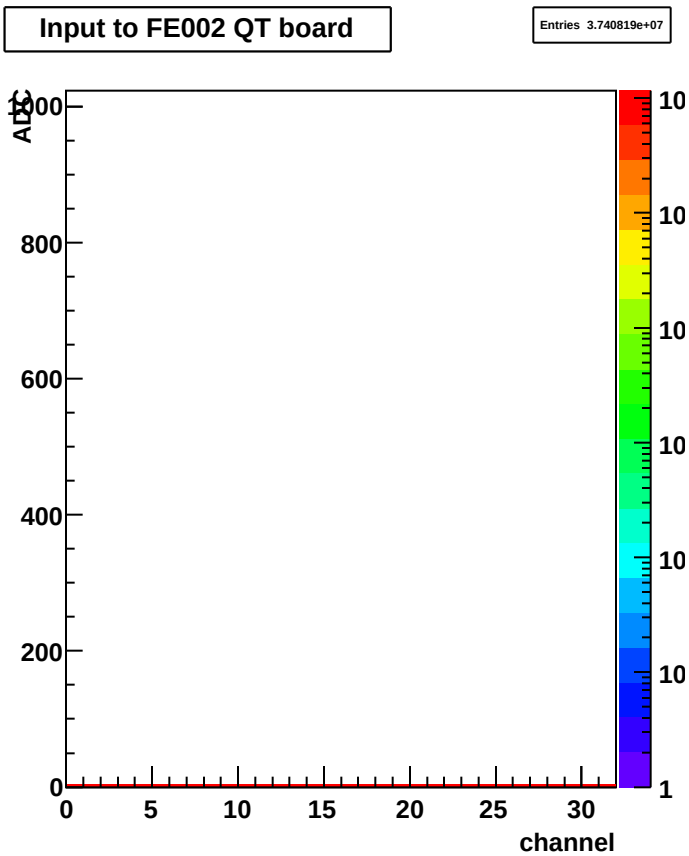

Input to FPD L2 DSM
Entries 4
CL bits - simulated
4
SMALL
LARGE-S
LARGE-N

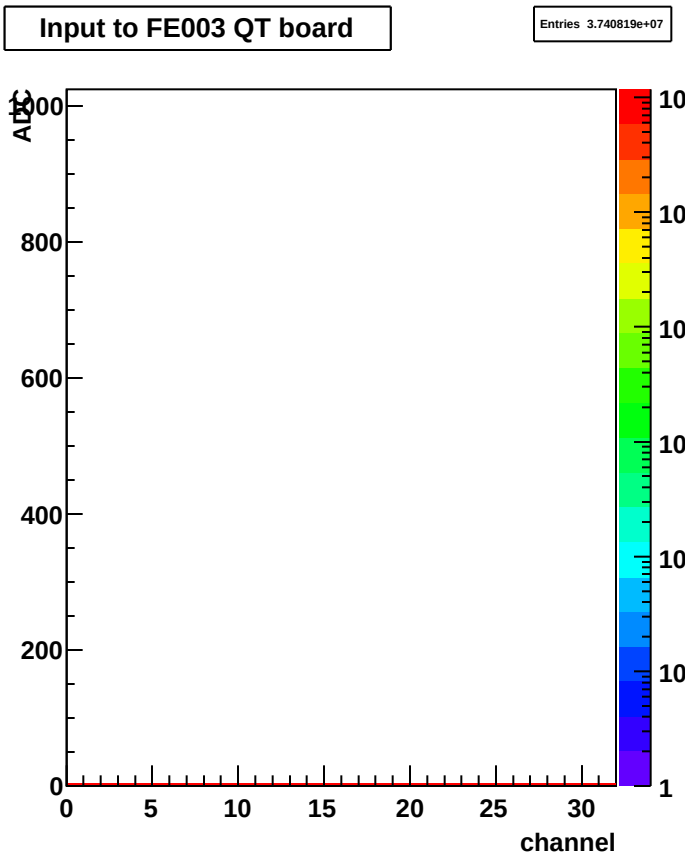

Input to FPD L2 DSM
Entries 3507018
HT bits
6735
1083
407
21727
62396
9409
5461
1.07815e+06
1.15851e+06
1.16314e+06
SMALL
LARGE-S
LARGE-N

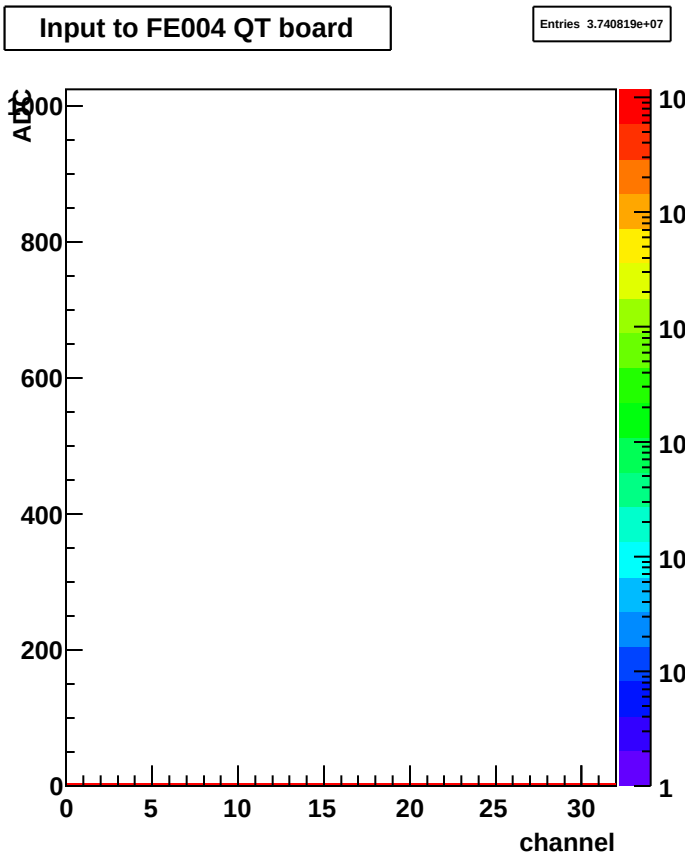

Input to FPD L2 DSM
Entries 2
HT bits - simulated
1
1
SMALL
LARGE-S
LARGE-N

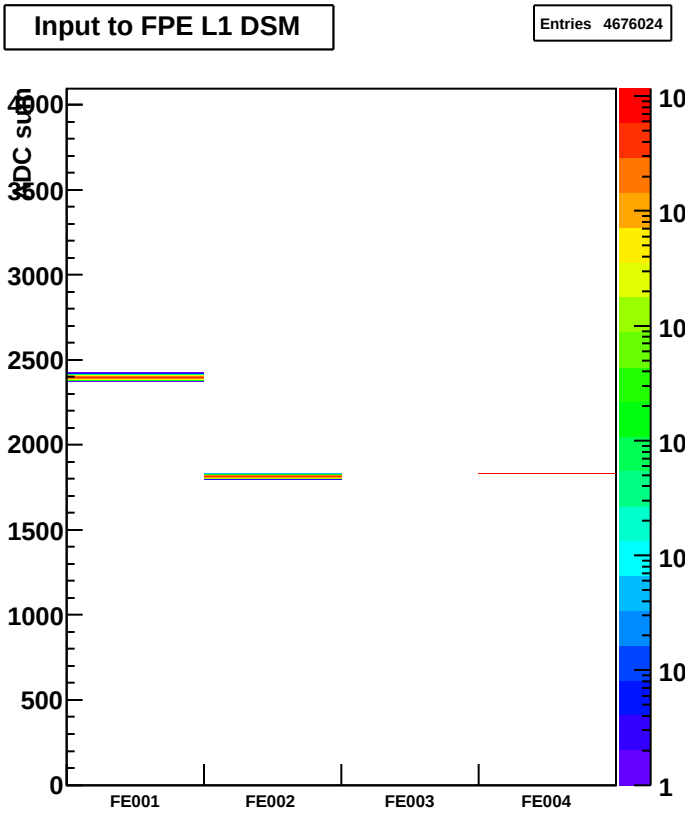

Input to FPD L2 DSM
Entries 7014036
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

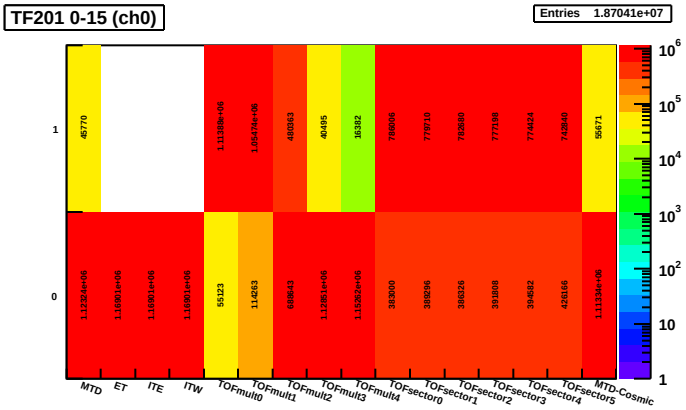

Input to FE001 QT board
Entries 3.740819e+07
ADC
channel

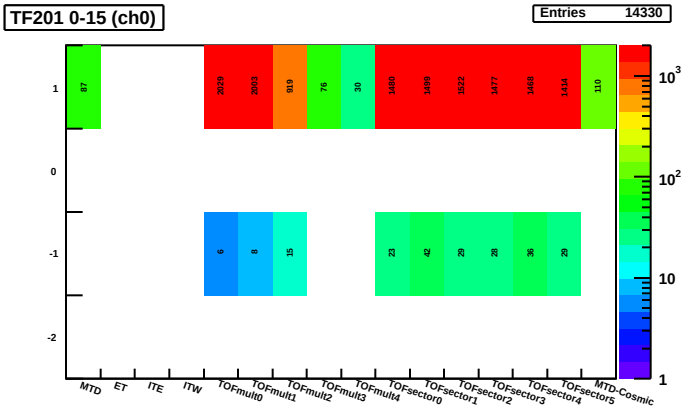

Input to FE002 QT board
Entries 3.740819e+07
ADC
channel

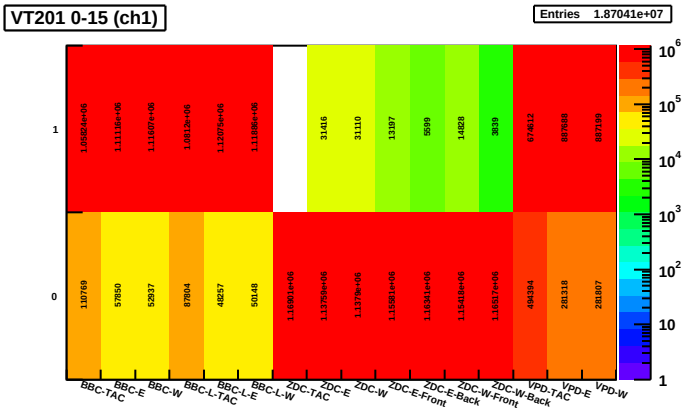

Input to FE003 QT board
Entries 3.740819e+07
ADC
channel

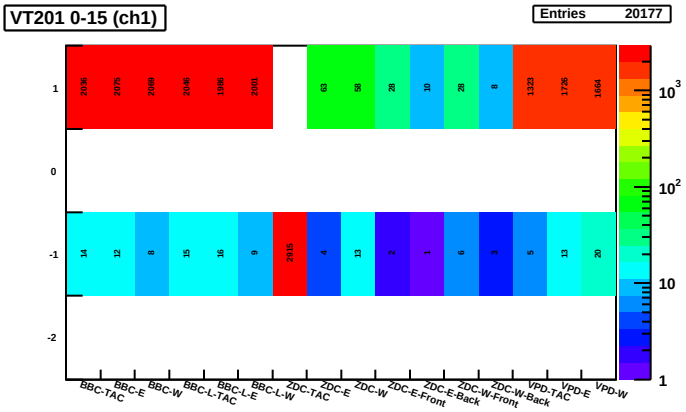

Input to FE004 QT board
Entries 3.740819e+07
ADC
channel

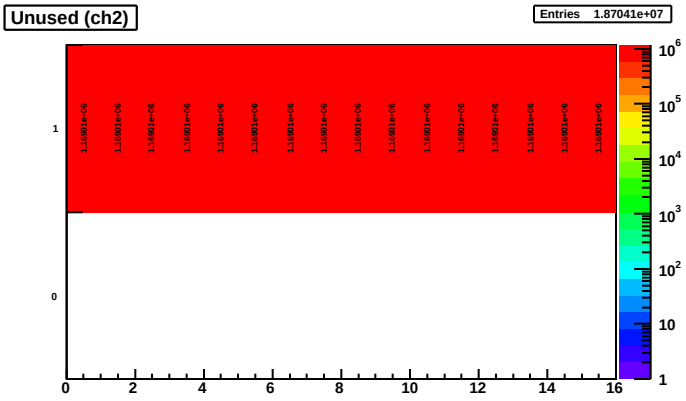

Input to FPE L1 DSM
Entries 4676024
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1

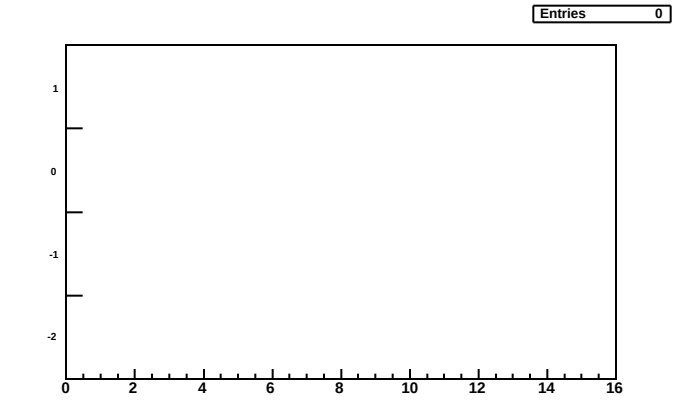

TF201 0-15 (ch0)
Entries 1.87041e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

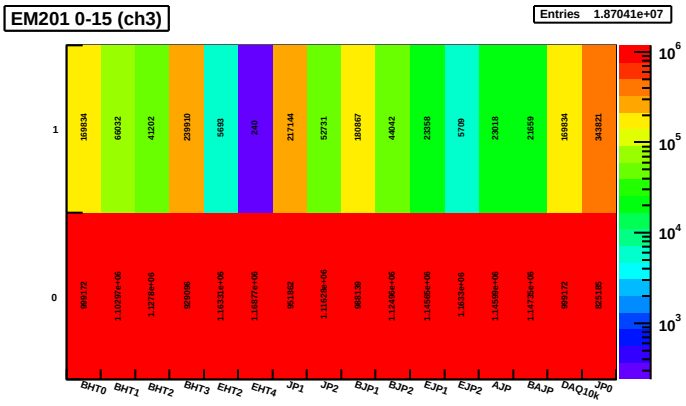

TF201 0-15 (ch0)
Entries 14330
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

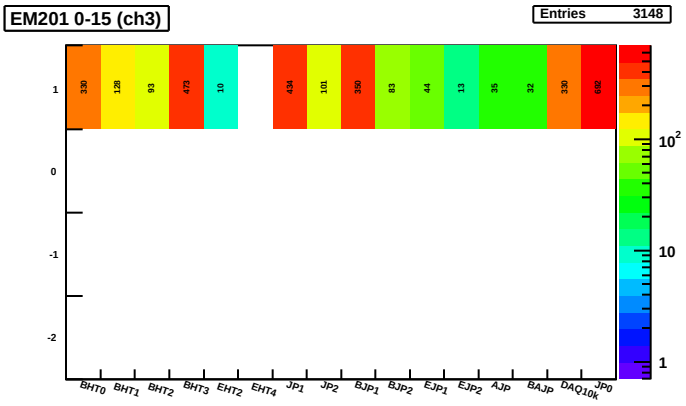

VT201 0-15 (ch1)
Entries 1.87041e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-E-Front
ZDC-E-Back
ZDC-W-Front
ZDC-W-Back
VPD-TAC
VPD-E
VPD-W


VT201 0-15 (ch1)
Entries 20177
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-E-Front
ZDC-E-Back
ZDC-W-Front
ZDC-W-Back
VPD-TAC
VPD-E
VPD-W

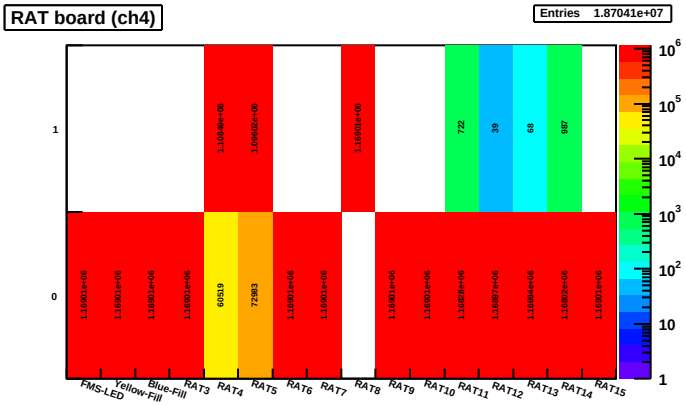

Unused (ch2)
Entries 1.87041e+07

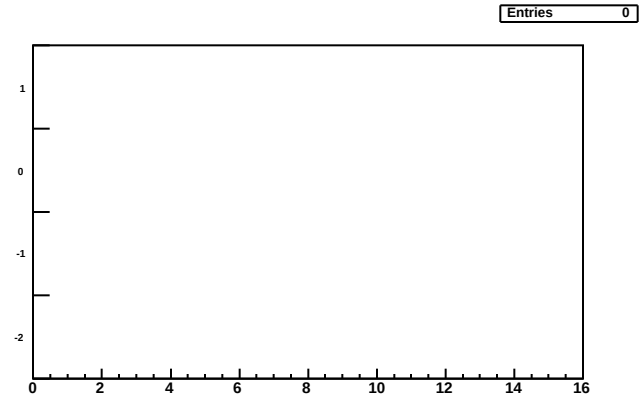

Entries 0


EM201 0-15 (ch3)
Entries 1.87041e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
DAQ10k
JP0

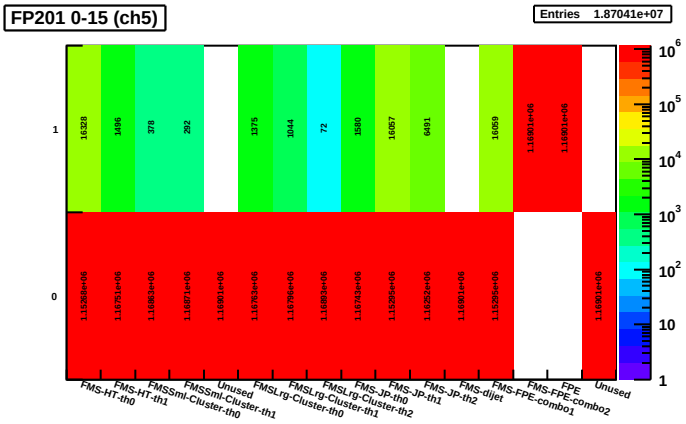

EM201 0-15 (ch3)
Entries 3148
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
DAQ10k
JP0

RAT board (ch4)





FP201 0-15 (ch5)



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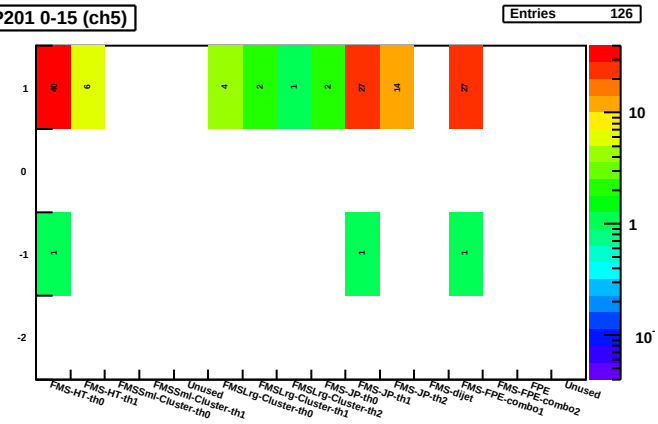
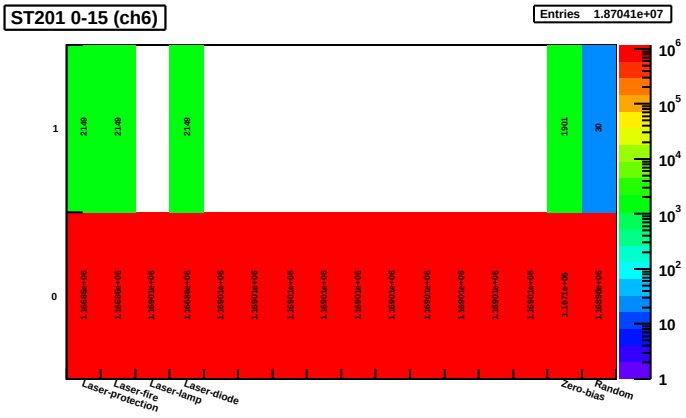
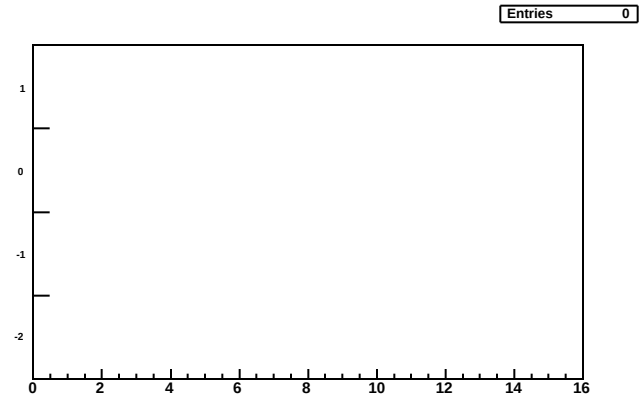
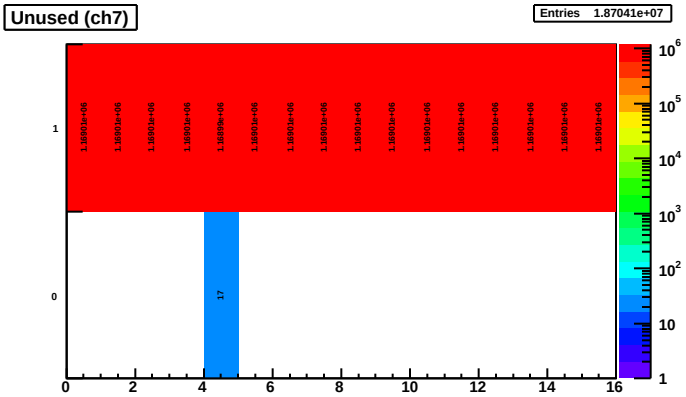
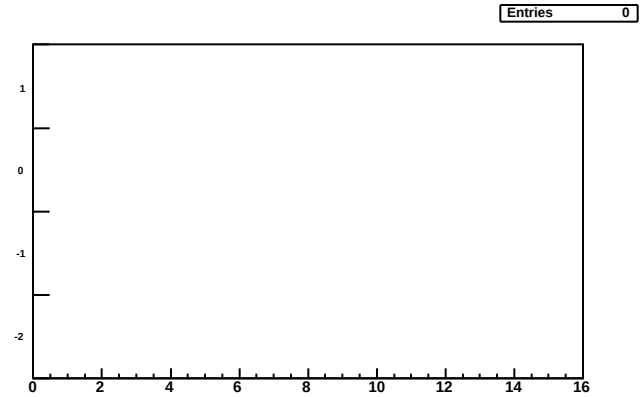


ST201 0-15 (ch6)





Unused (ch7)