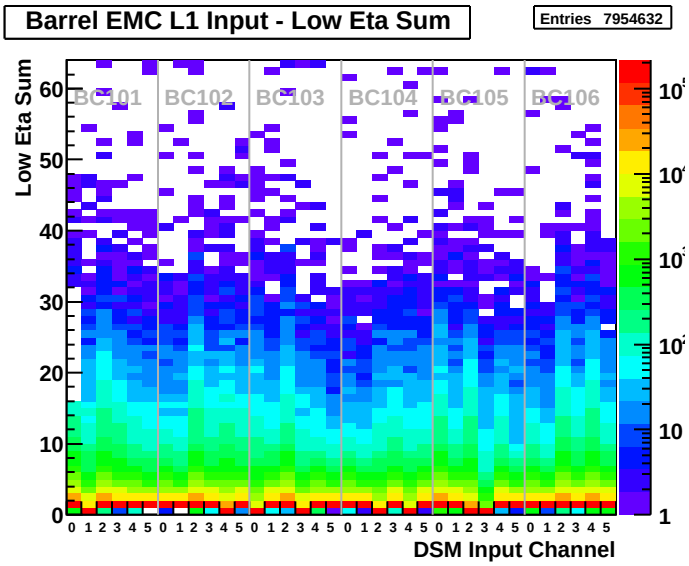
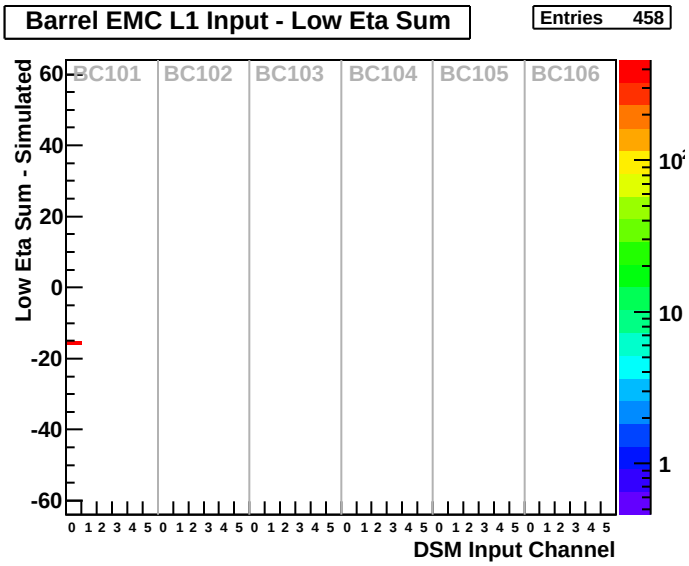
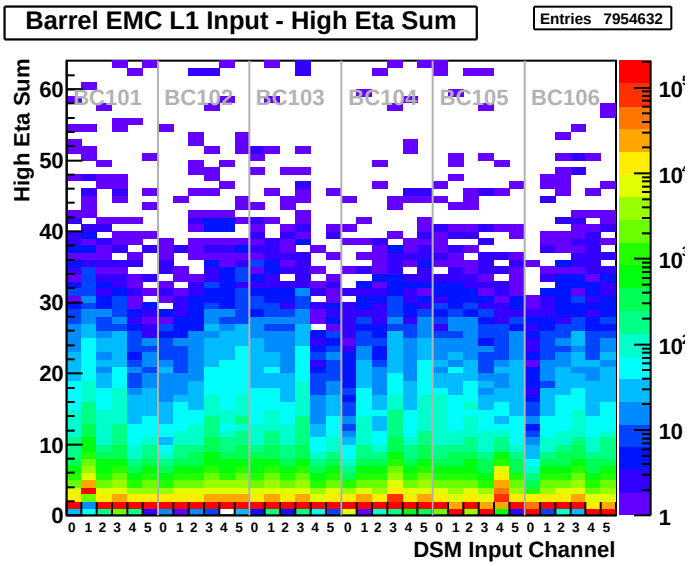
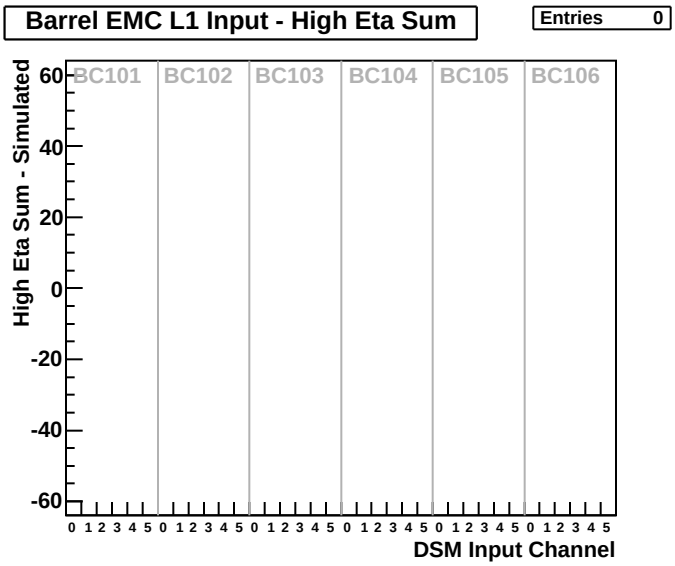
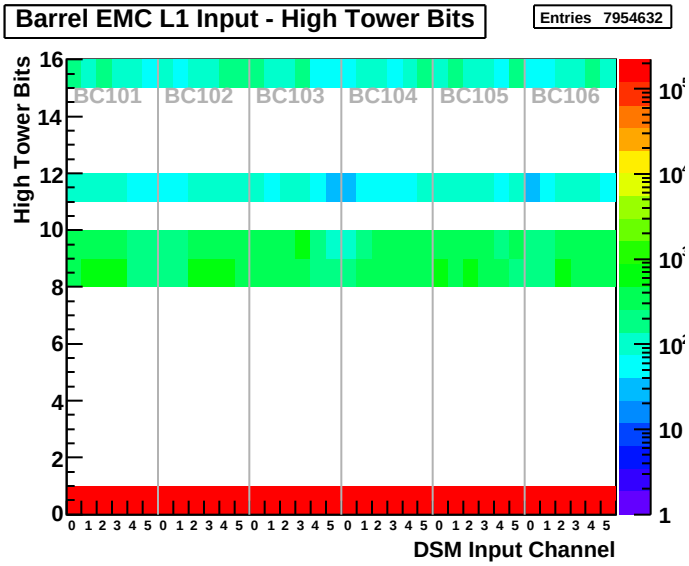
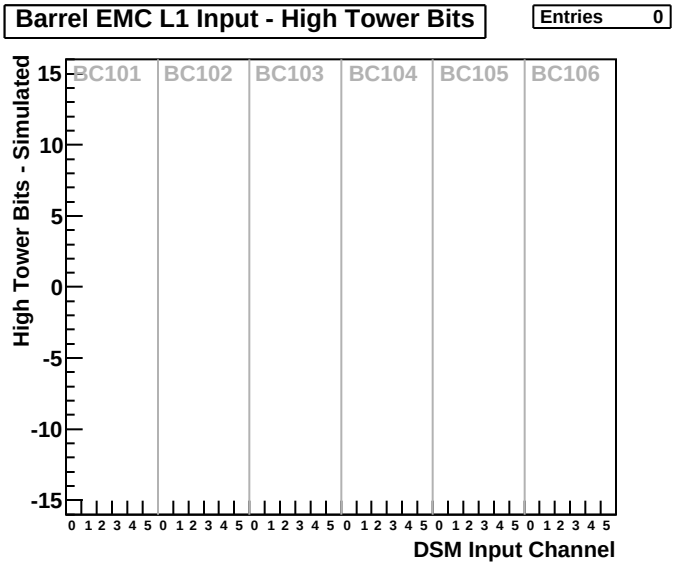

Barrel EMC L1 Input - Low Eta Sum
Entries 7954632
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

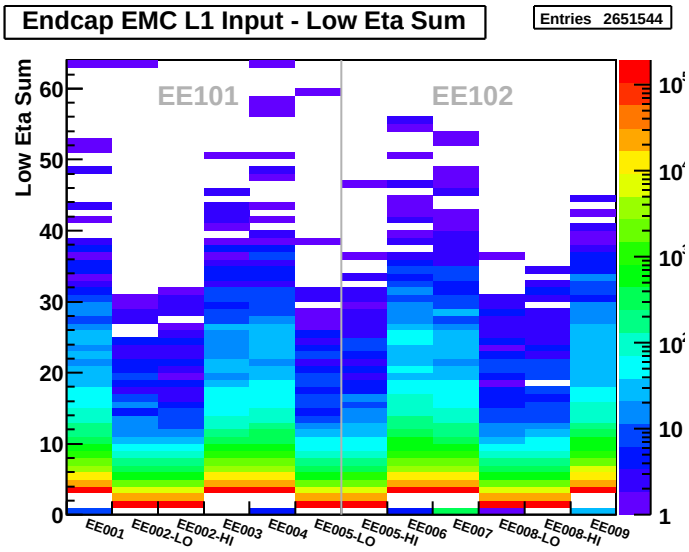

Barrel EMC L1 Input - Low Eta Sum
Entries 458
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

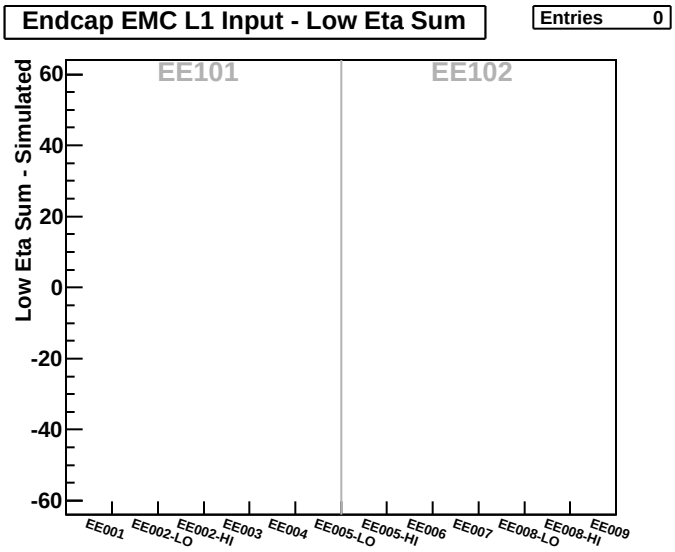

Barrel EMC L1 Input - High Eta Sum
Entries 7954632
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

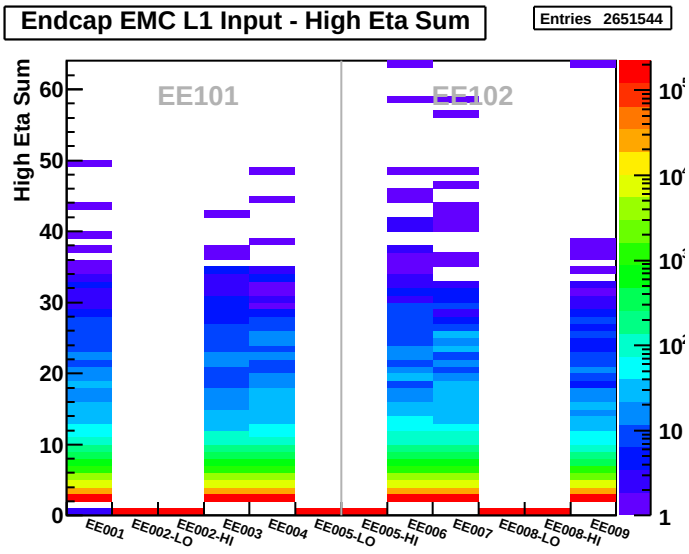

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

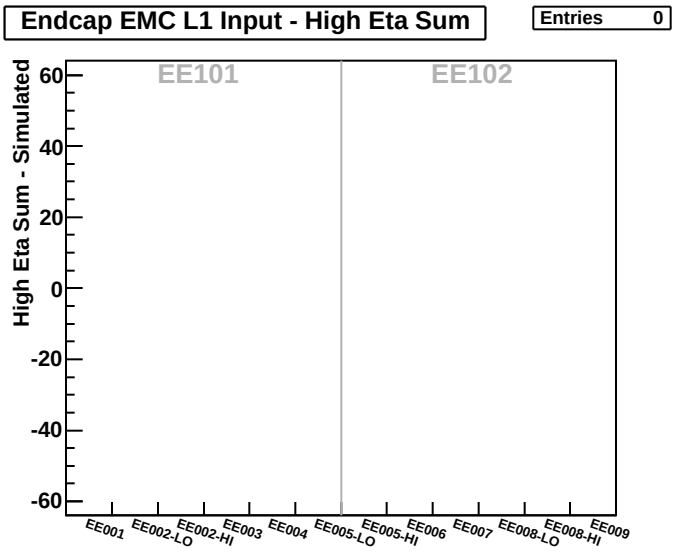

Barrel EMC L1 Input - High Tower Bits
Entries 7954632
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

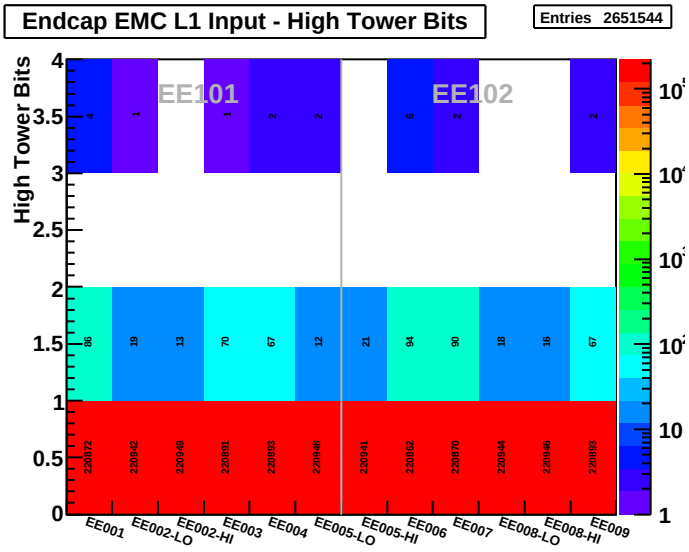

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

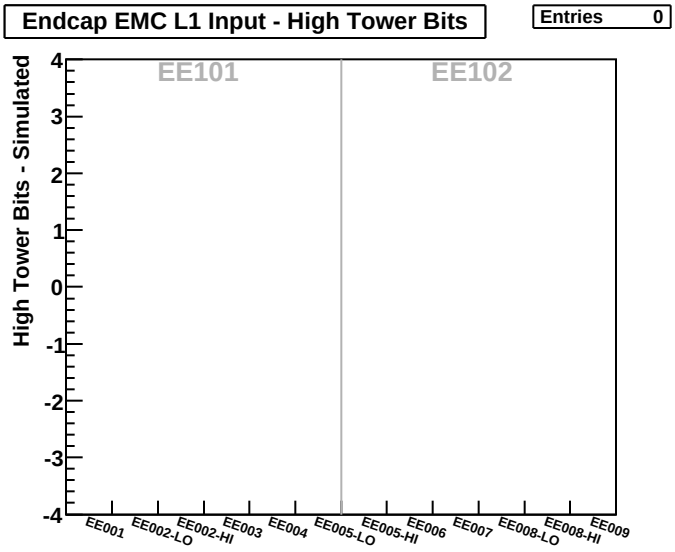

Endcap EMC L1 Input - Low Eta Sum
Entries 2651544
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

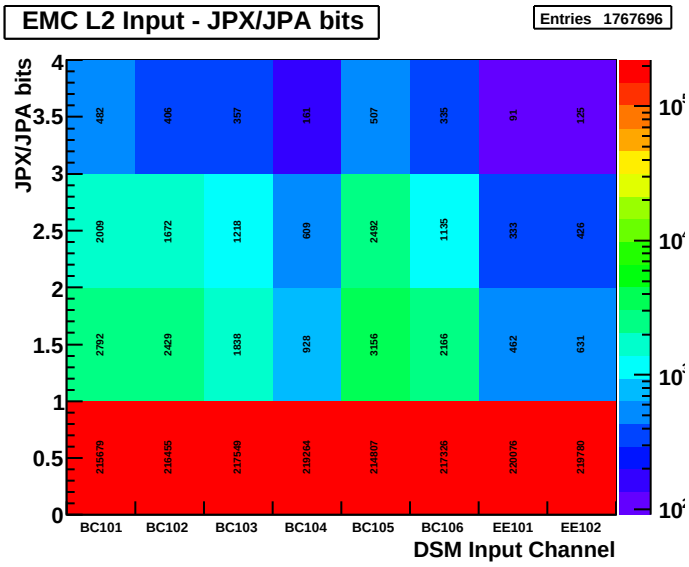

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

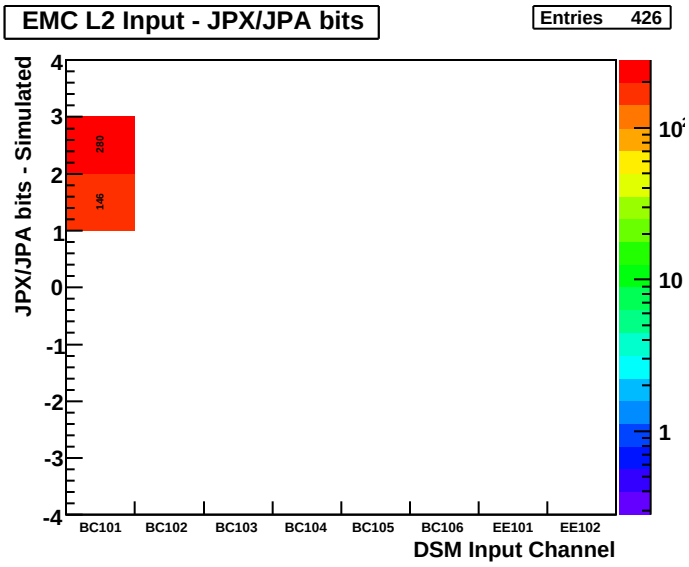

Endcap EMC L1 Input - High Eta Sum
Entries 2651544
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

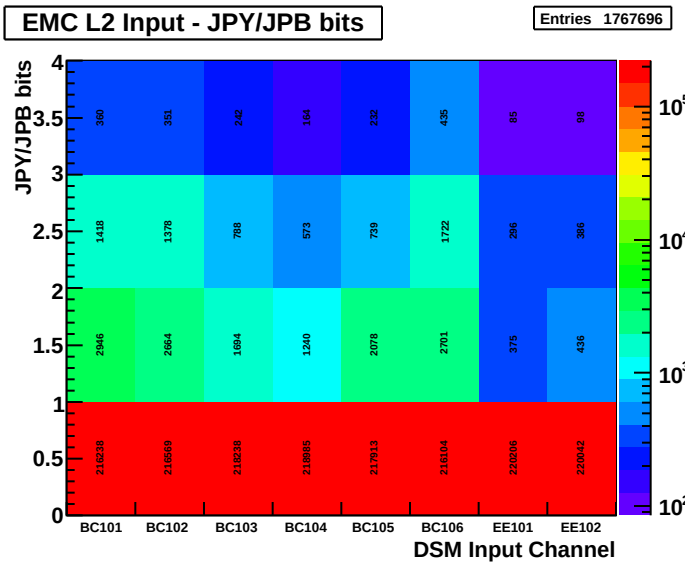

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

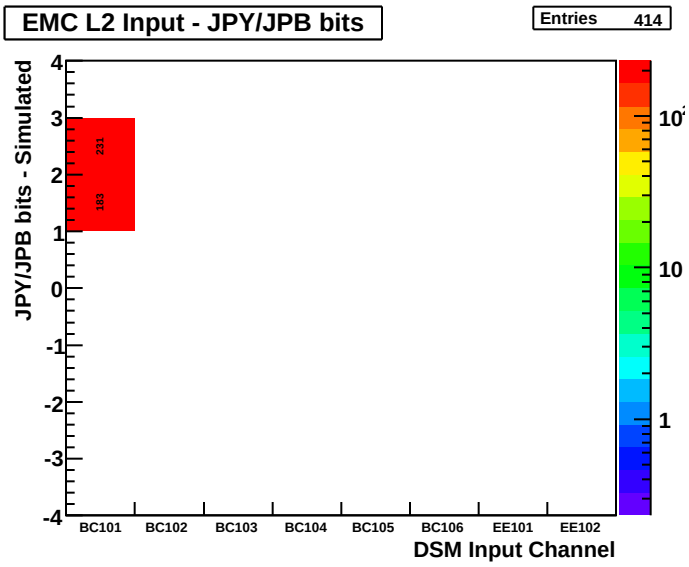

Endcap EMC L1 Input - High Tower Bits
Entries 2651544
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

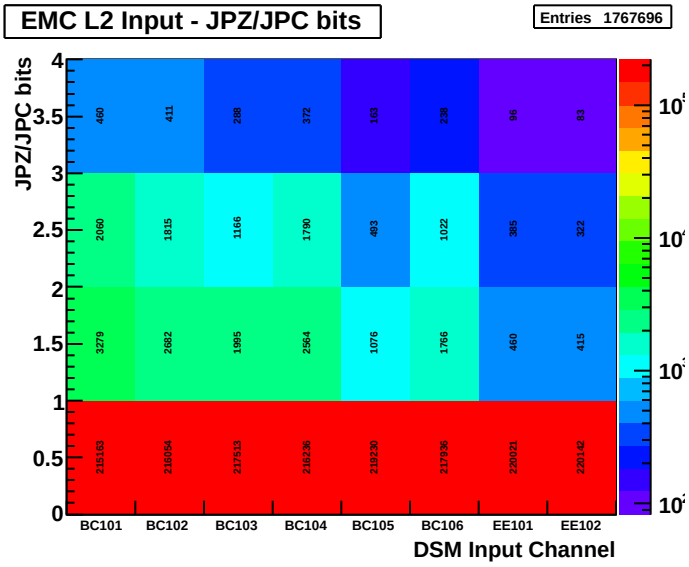

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

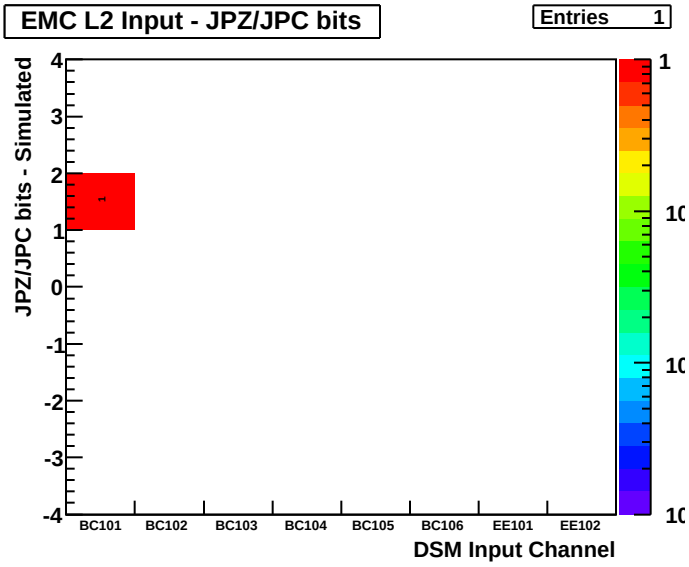

EMC L2 Input - JPX/JPA bits
Entries 1767696
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
482 406 357 161 507 335 91 125
2009 1672 1218 609 2492 1135 333 426
2792 2429 1838 928 3156 2166 462 631
215679 218455 217549 219264 214807 217336 220076 219760

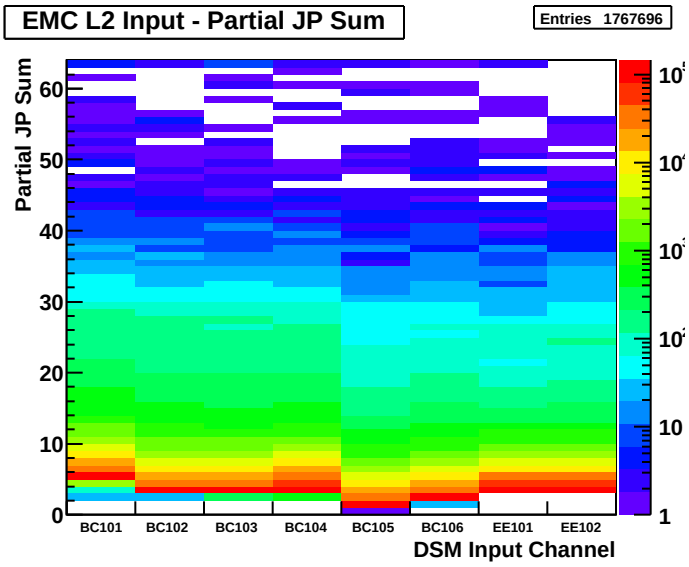

EMC L2 Input - JPX/JPA bits
Entries 426
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
280
146

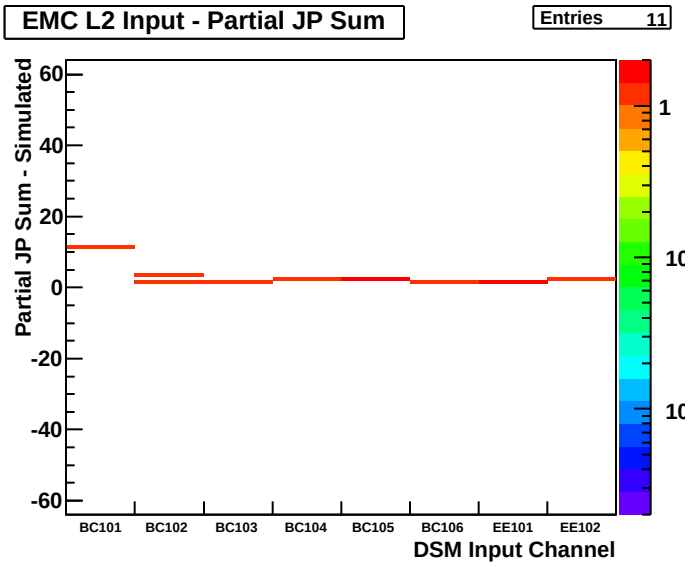

EMC L2 Input - JPY/JPB bits
Entries 1767696
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
360 351 242 164 232 435 85 98
1418 1378 788 573 739 1722 296 386
2946 2664 1694 1240 2078 2701 375 436
216238 216569 218238 218985 217913 216104 220206 220042

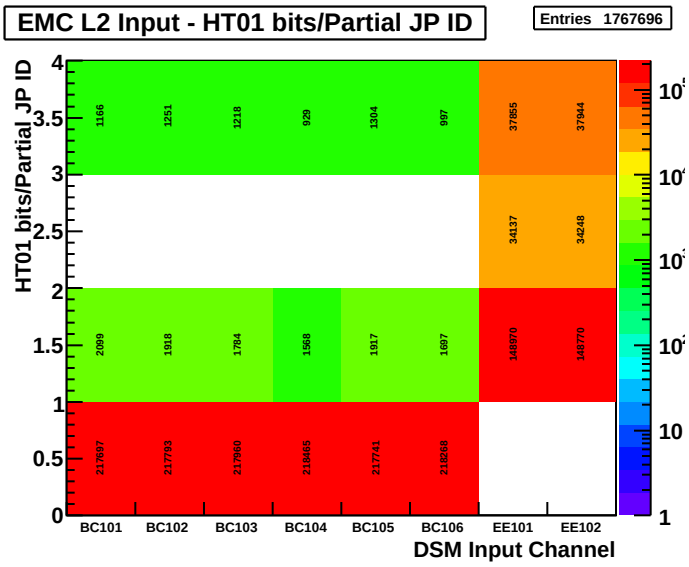

EMC L2 Input - JPY/JPB bits
Entries 414
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
231
183

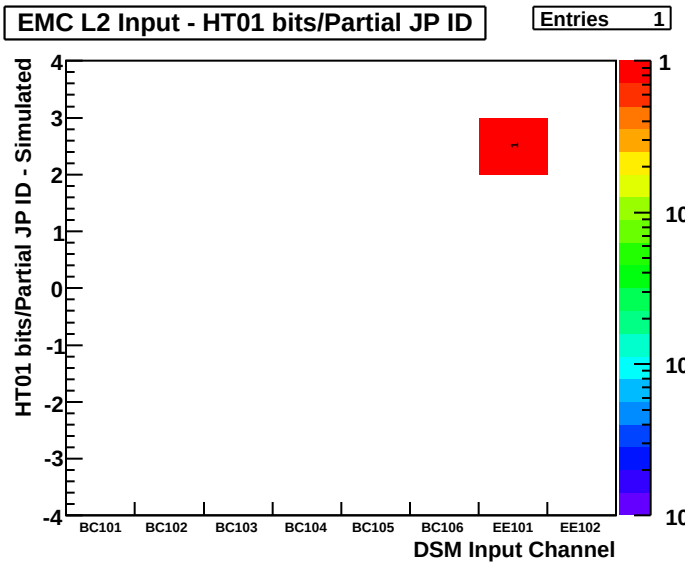

EMC L2 Input - JPZ/JPC bits
Entries 1767696
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
460 411 288 372 163 238 96 83
2060 1815 1166 1790 493 1022 385 322
3279 2682 1995 2564 1076 1766 460 415
215163 216054 217513 216236 219230 217938 220021 220142

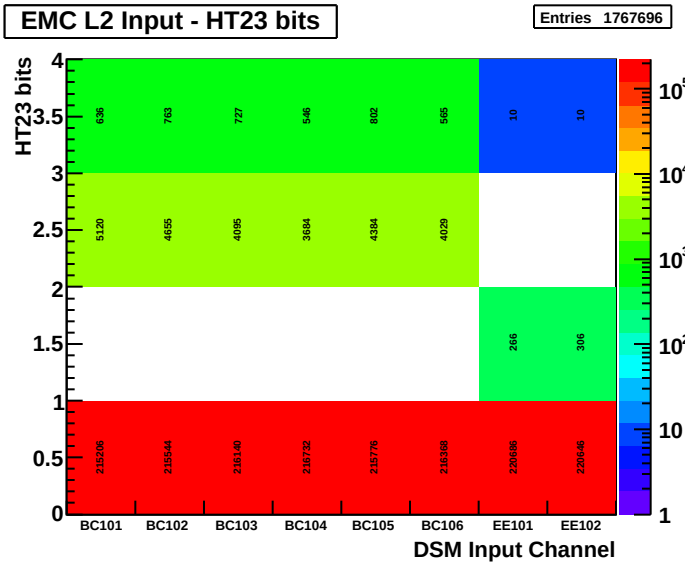

EMC L2 Input - JPZ/JPC bits
Entries 1
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

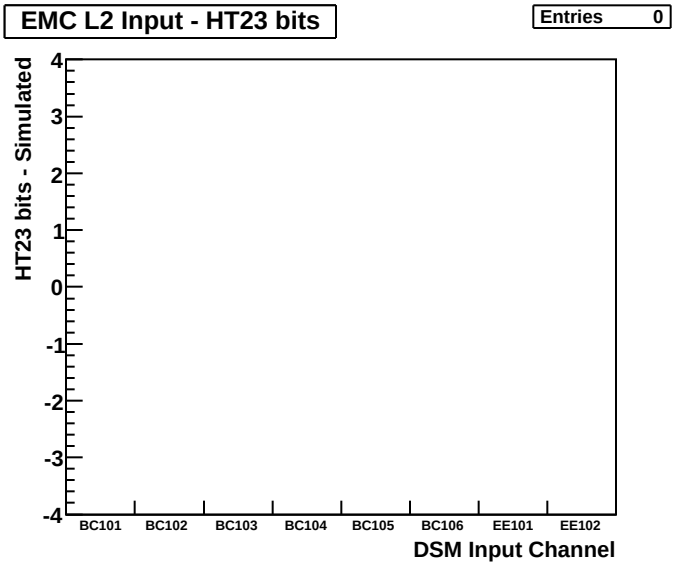

EMC L2 Input - Partial JP Sum
Entries 1767696
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

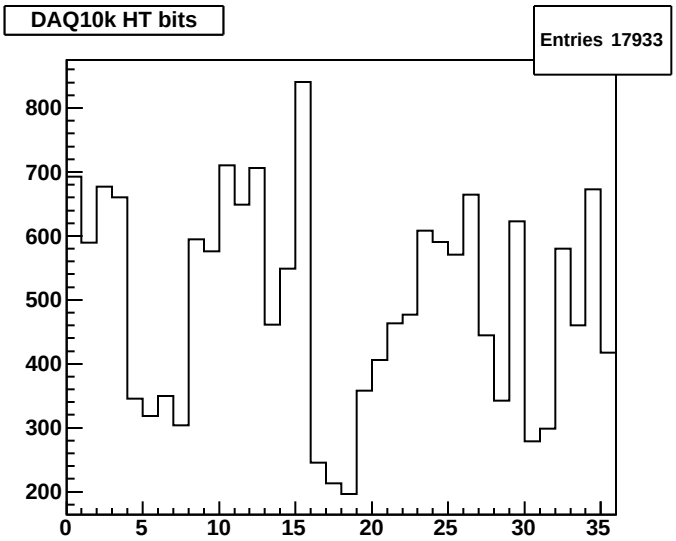

EMC L2 Input - Partial JP Sum
Entries 11
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

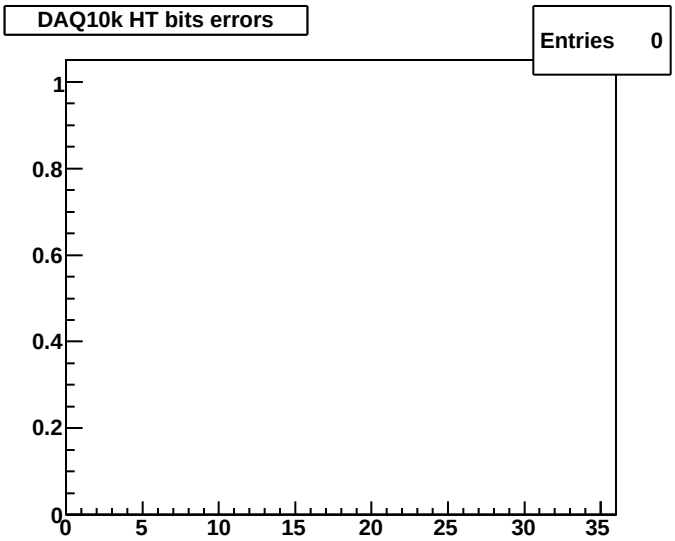

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1767696
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

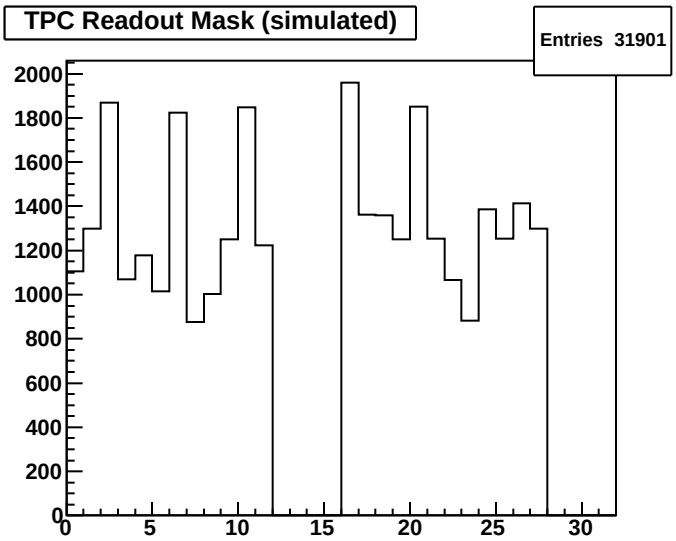

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

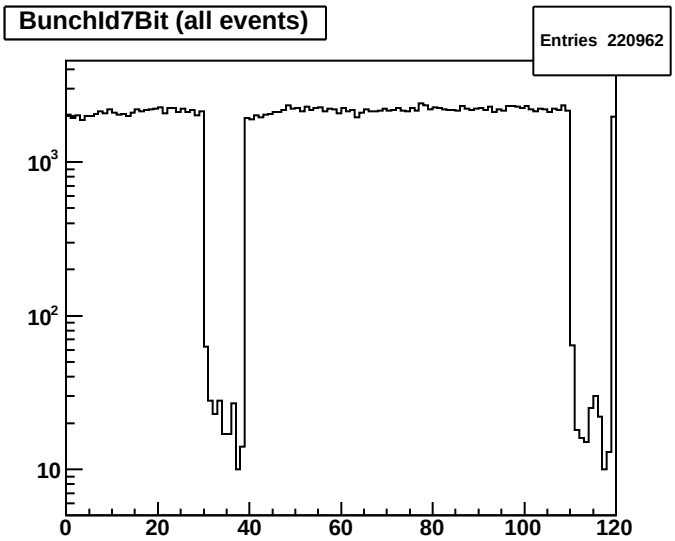

EMC L2 Input - HT23 bits
Entries 1767696
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

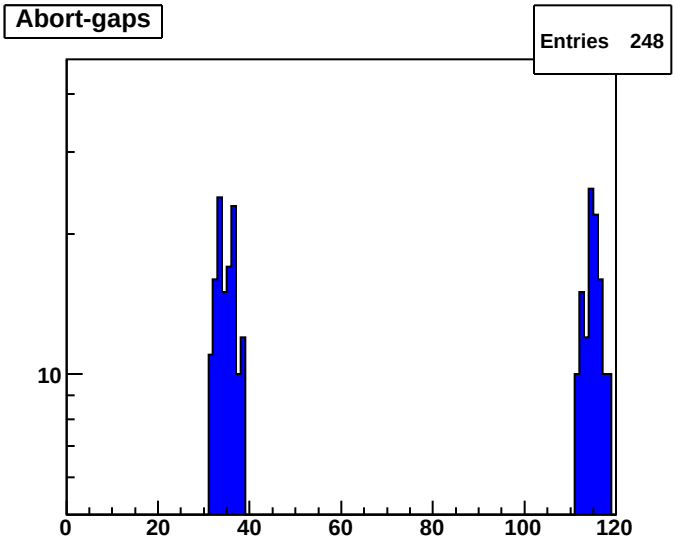

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

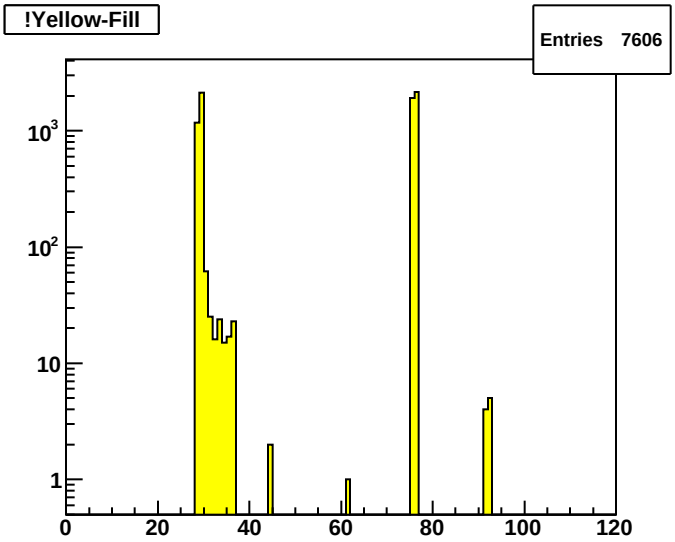

DAQ10k HT bits
Entries 17933

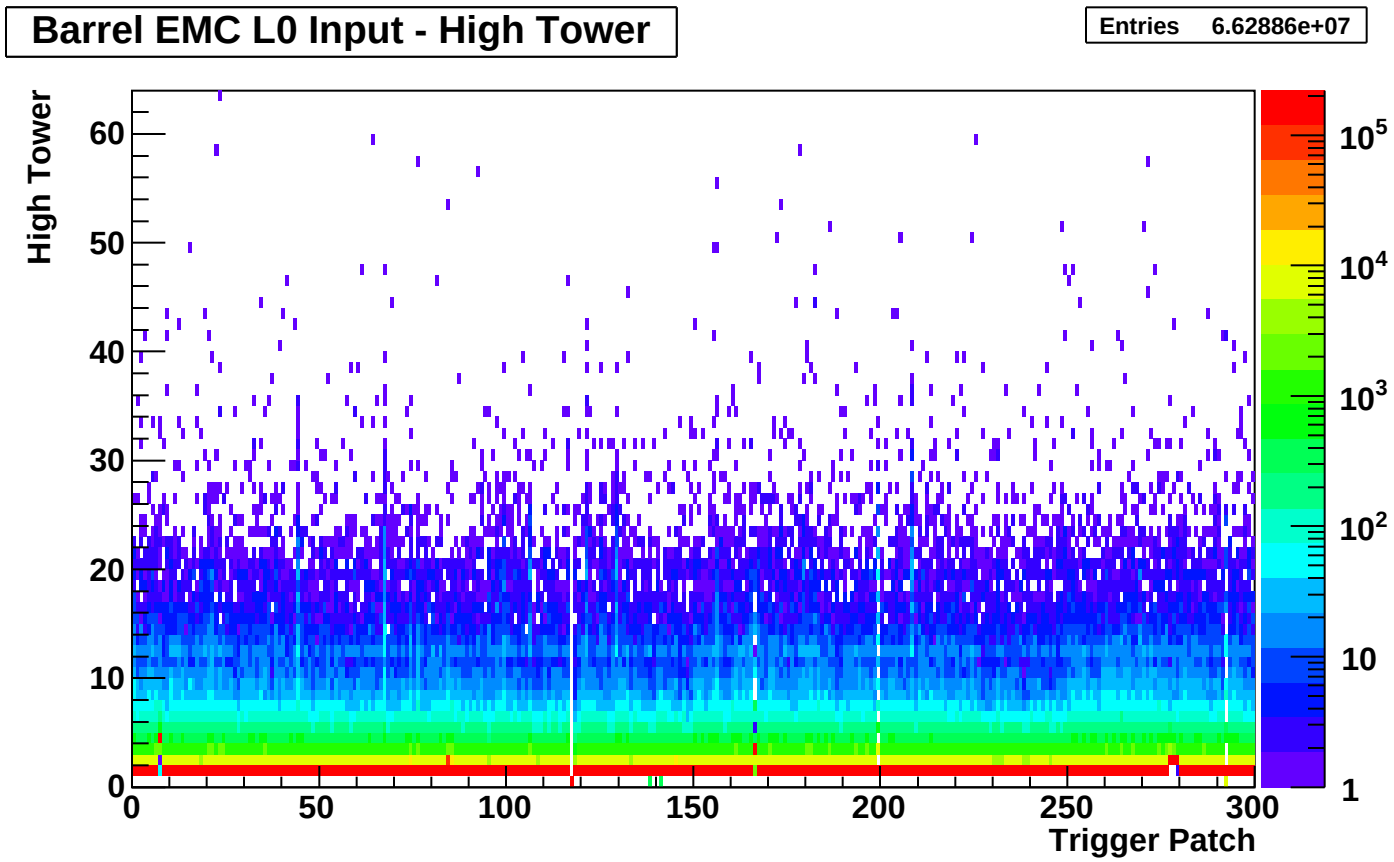

DAQ10k HT bits errors
Entries 0

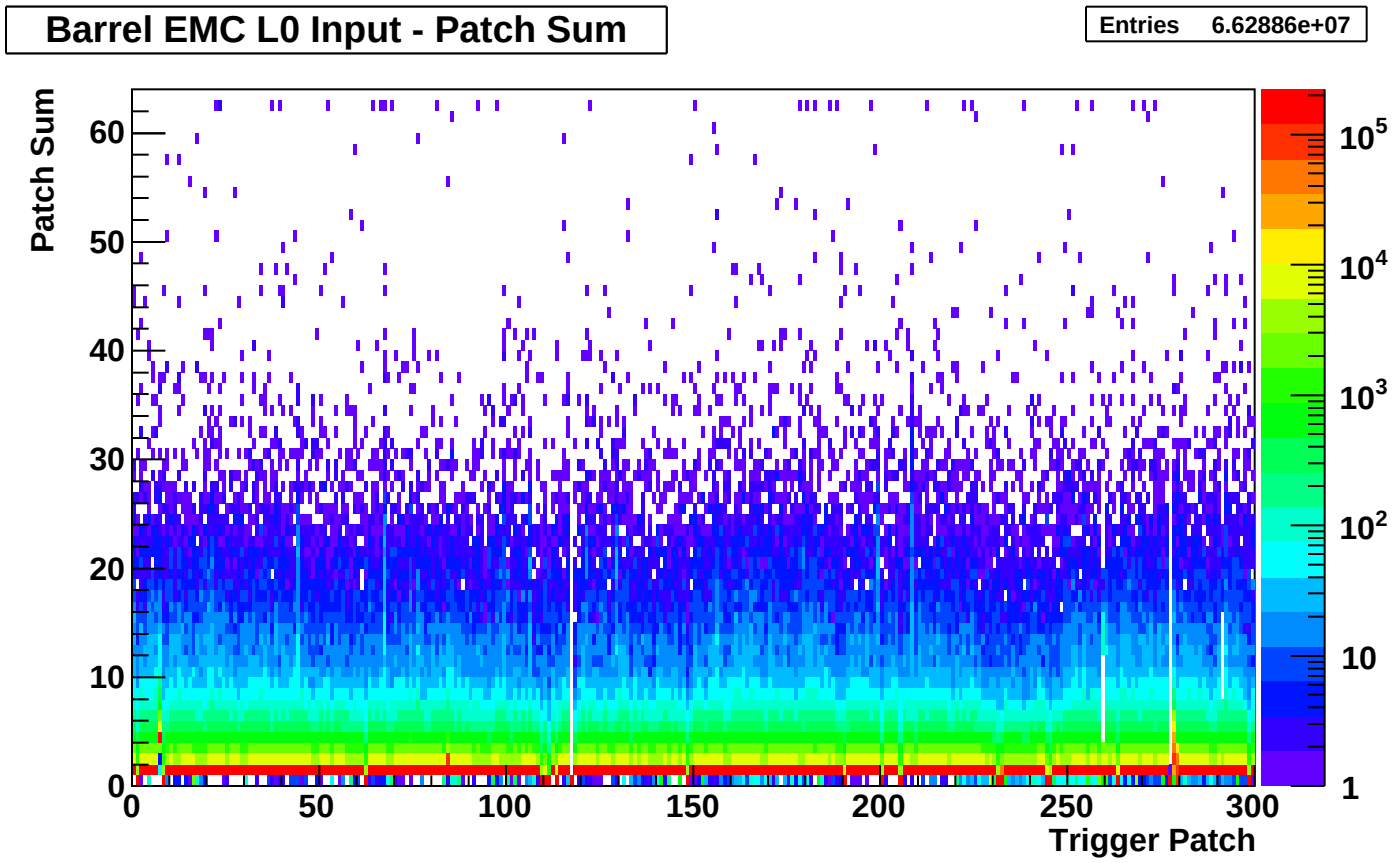

TPC Readout Mask (simulated)
Entries 31901

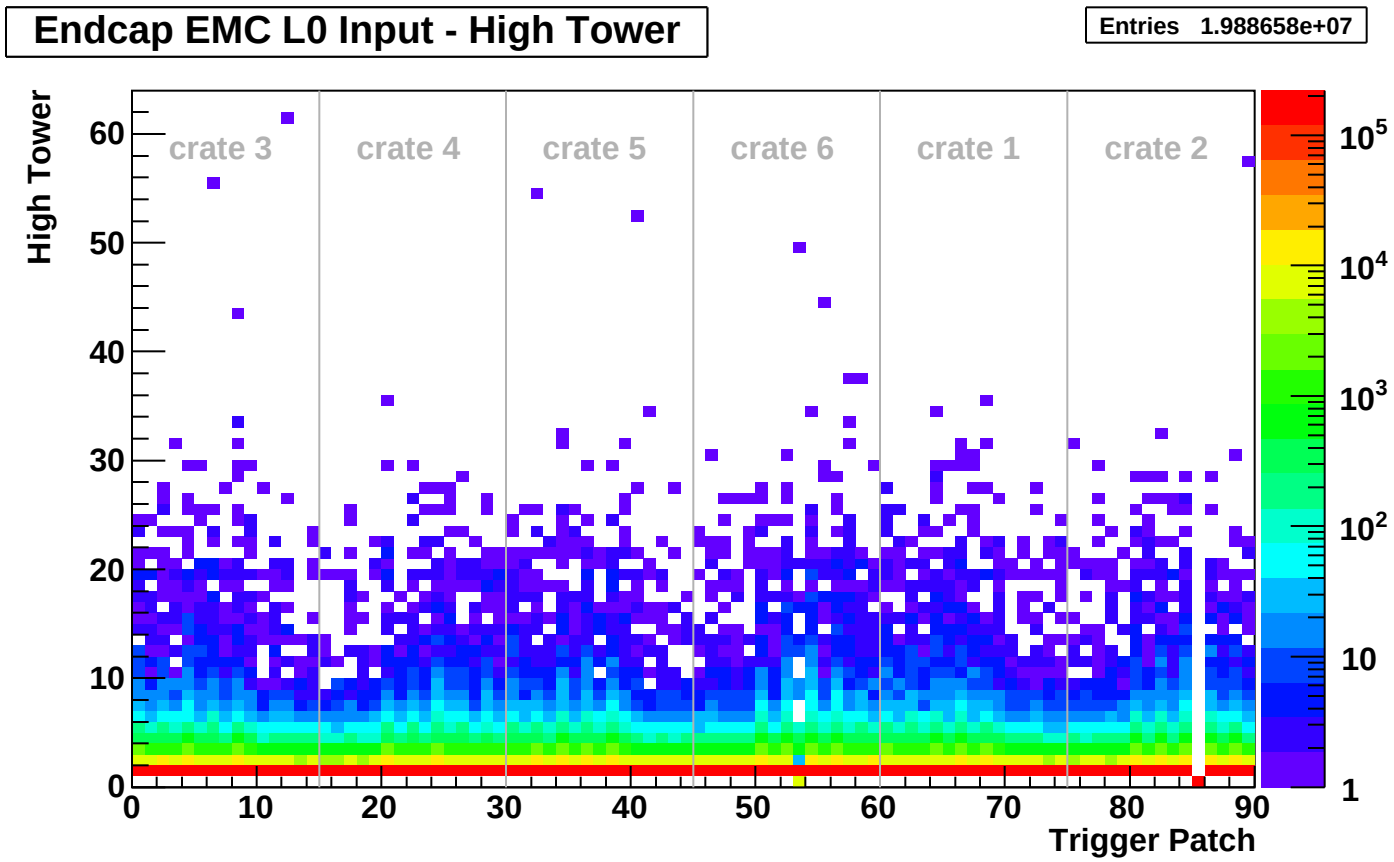

BunchId7Bit (all events)
Entries 220962

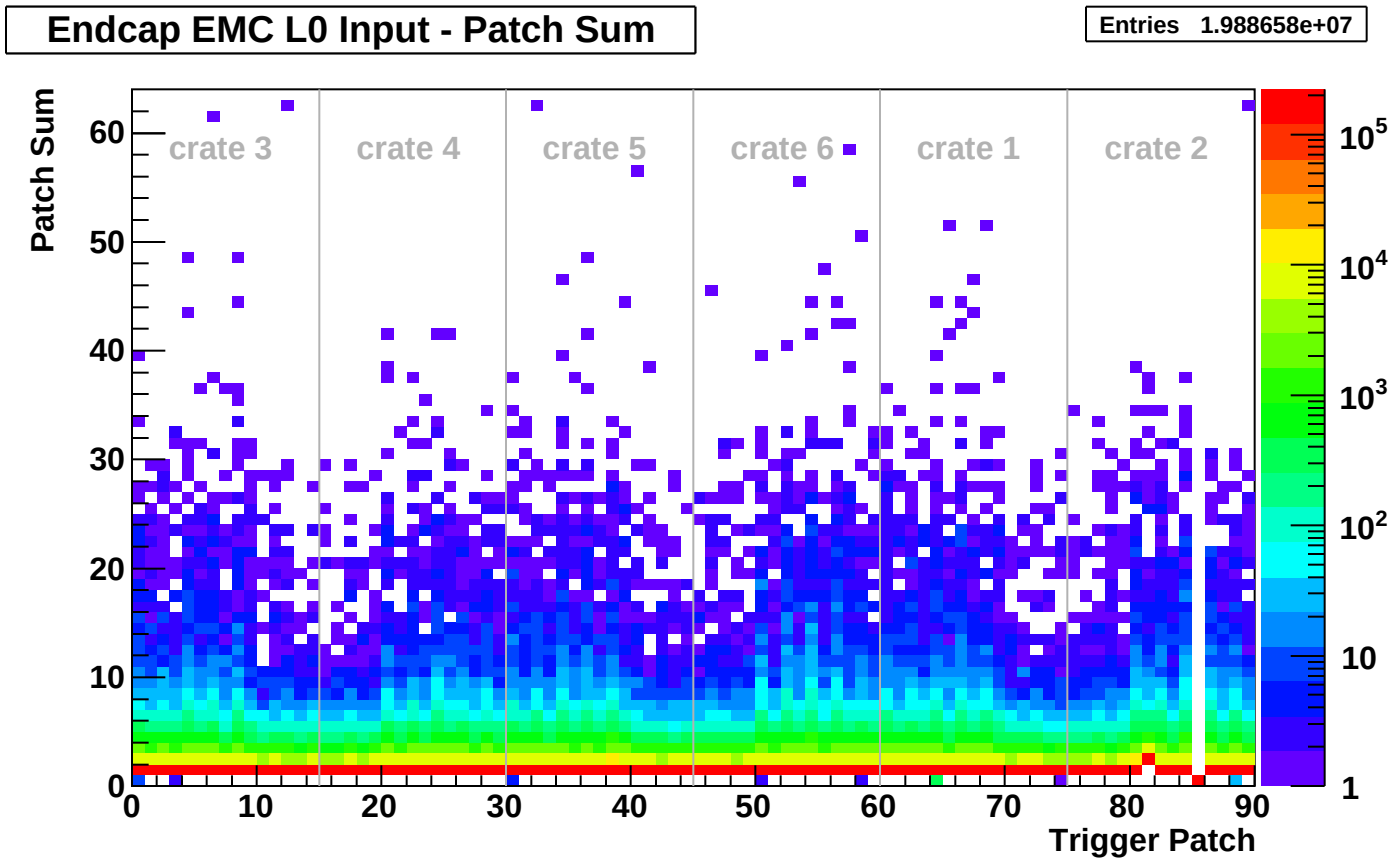

Abort-gaps
Entries 248

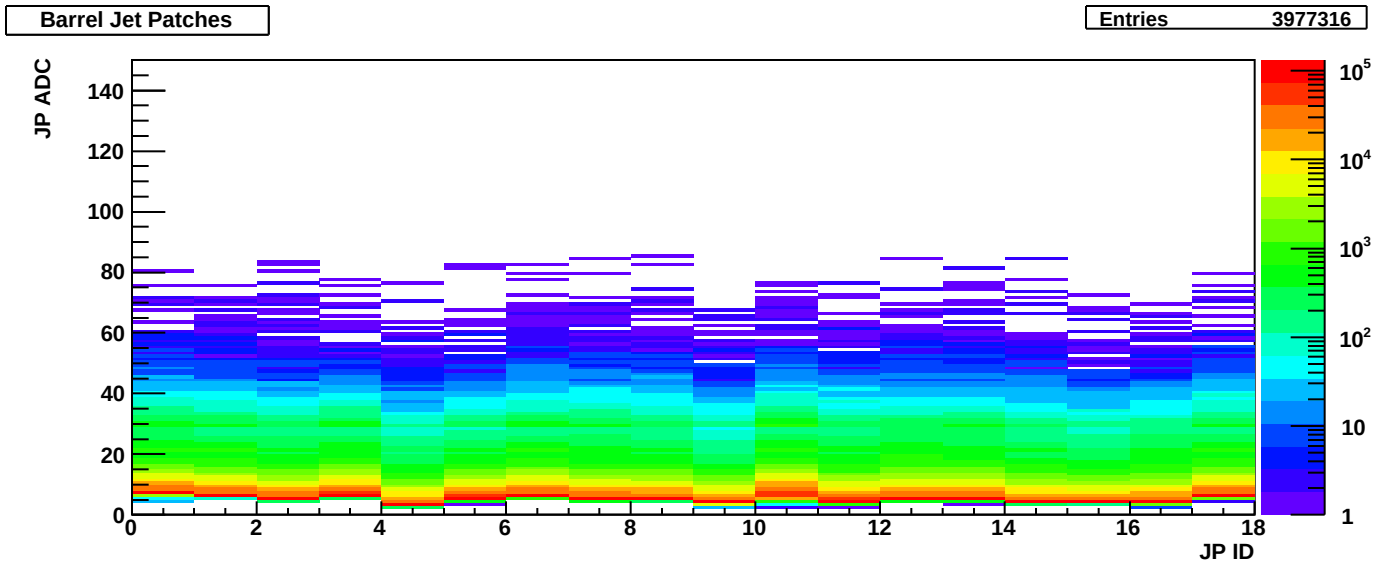

!Yellow-Fill
Entries 7606

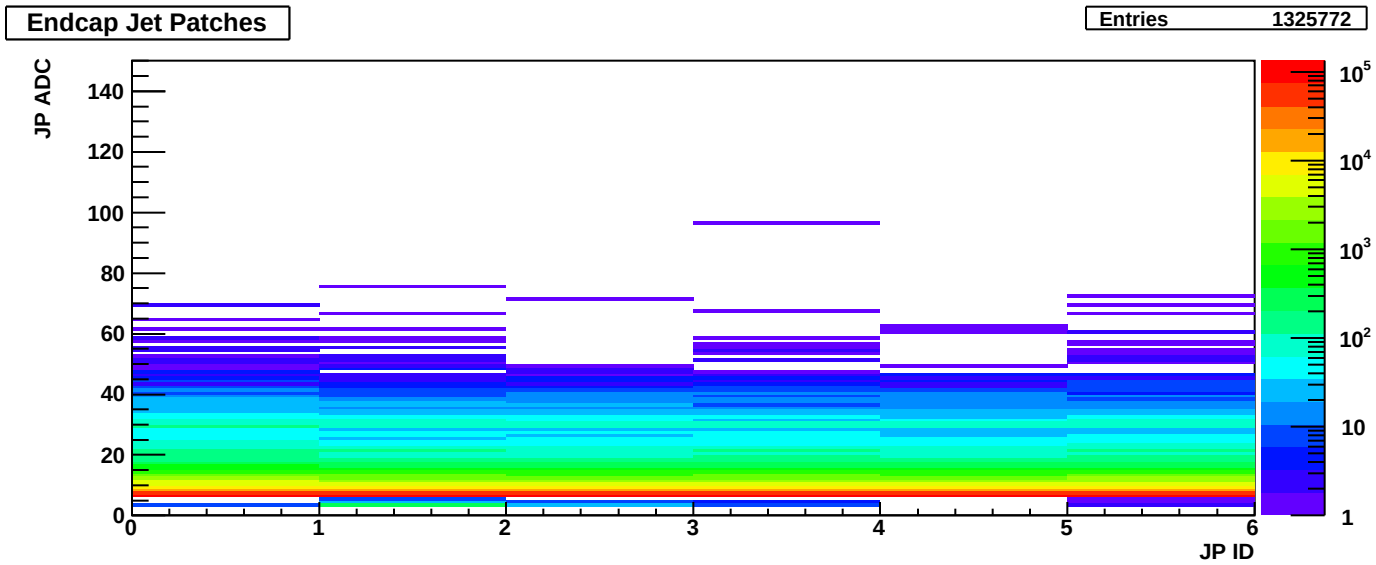

Barrel EMC L0 Input - High Tower
Entries 6.62886e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

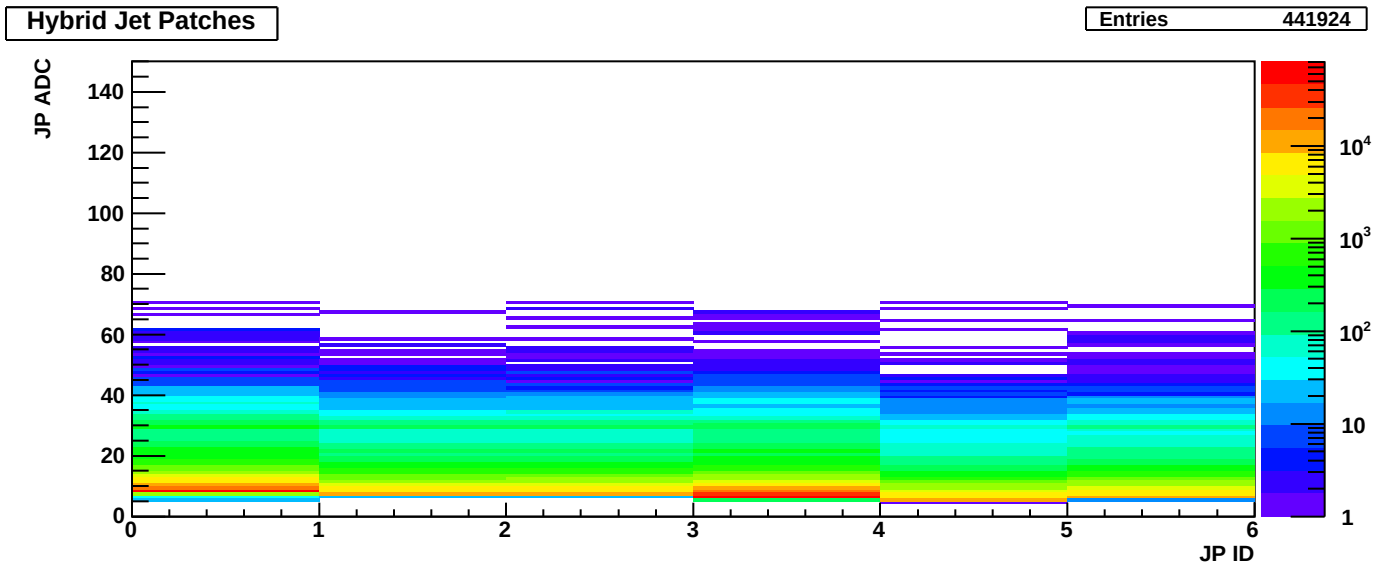

Barrel EMC L0 Input - Patch Sum
Entries 6.62886e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

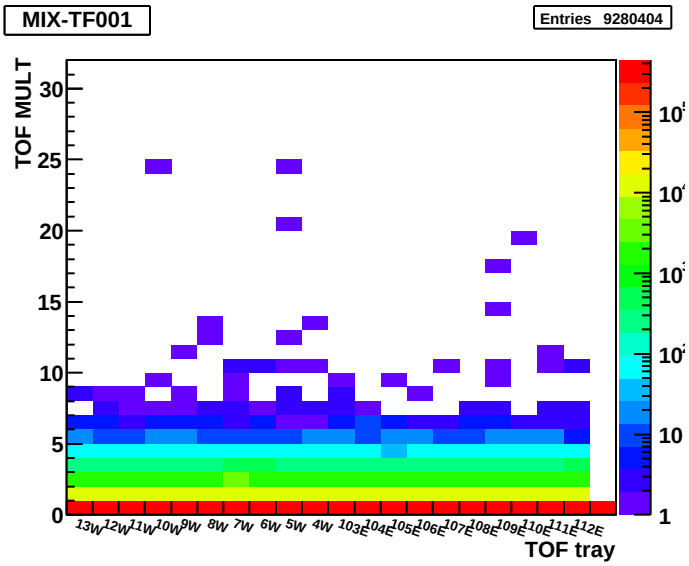

Endcap EMC L0 Input - High Tower
Entries 1.988658e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

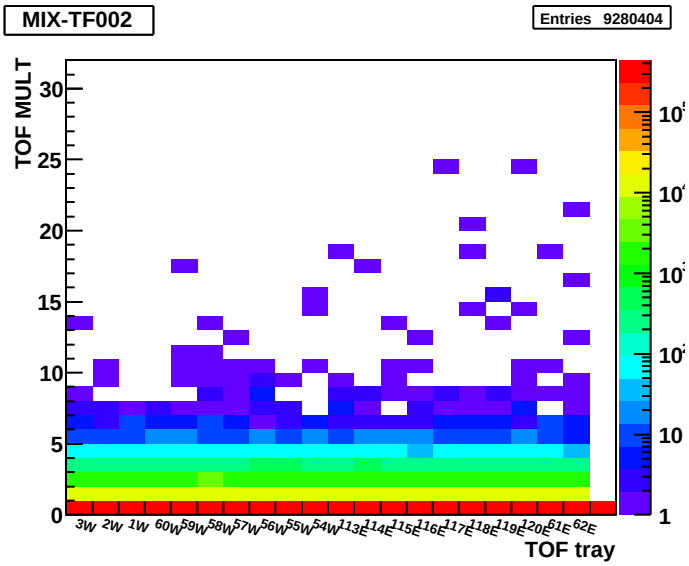

Endcap EMC L0 Input - Patch Sum
Entries 1.988658e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

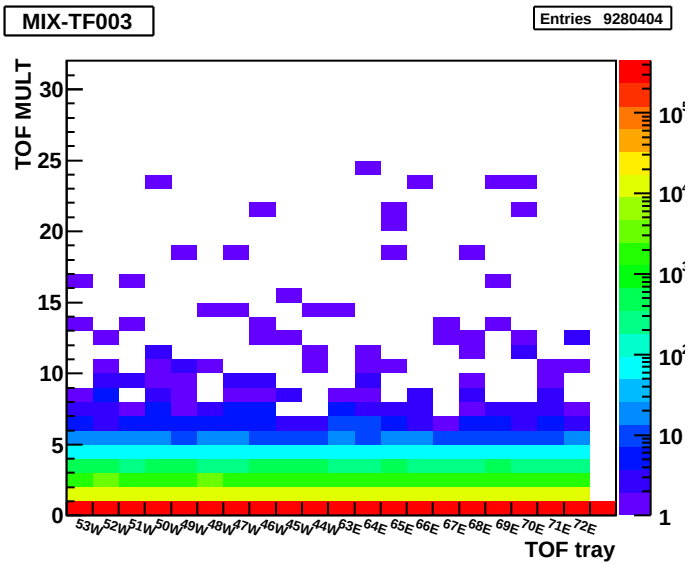

Barrel Jet Patches
Entries 3977316
JP ADC
JP ID

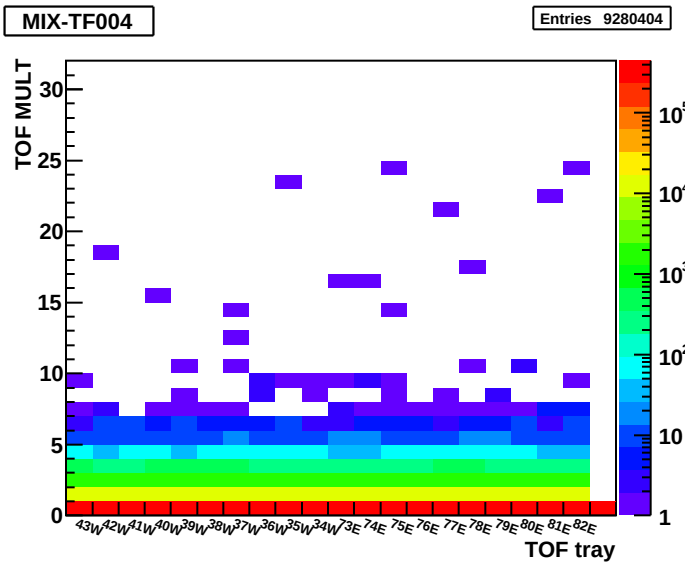

Endcap Jet Patches
Entries 1325772
JP ADC
JP ID

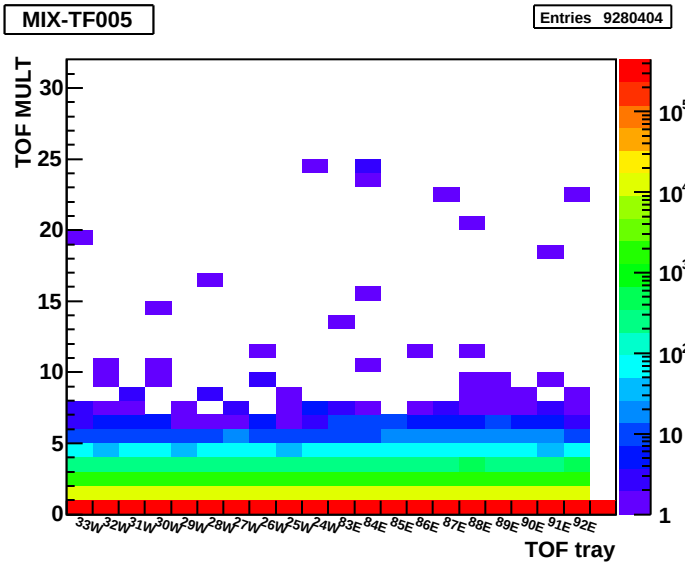

Hybrid Jet Patches
Entries 441924
JP ADC
JP ID

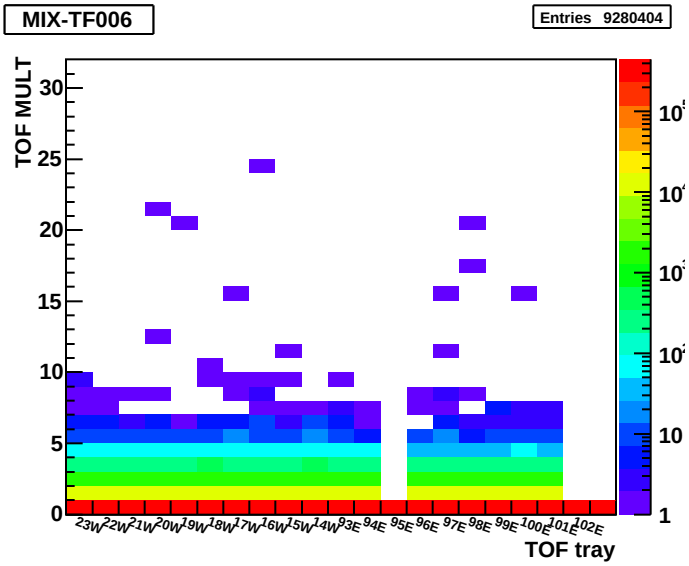

MIX-TF001
Entries 9280404
TOF MULT
TOF tray

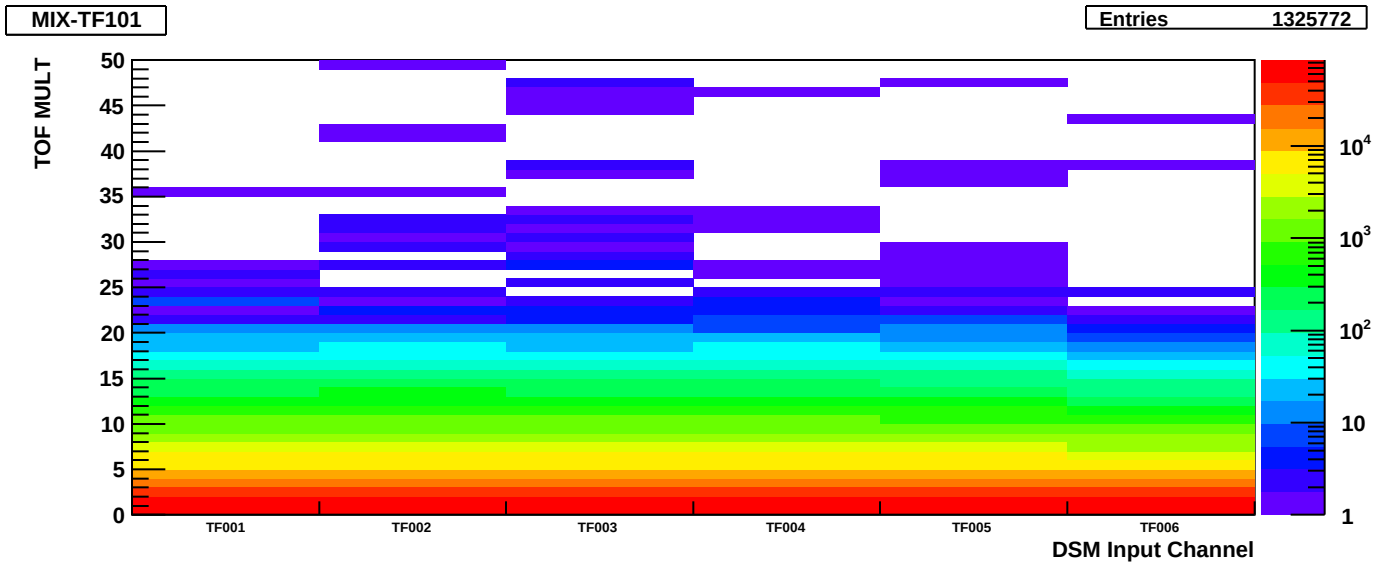

MIX-TF002
Entries 9280404
TOF MULT
TOF tray

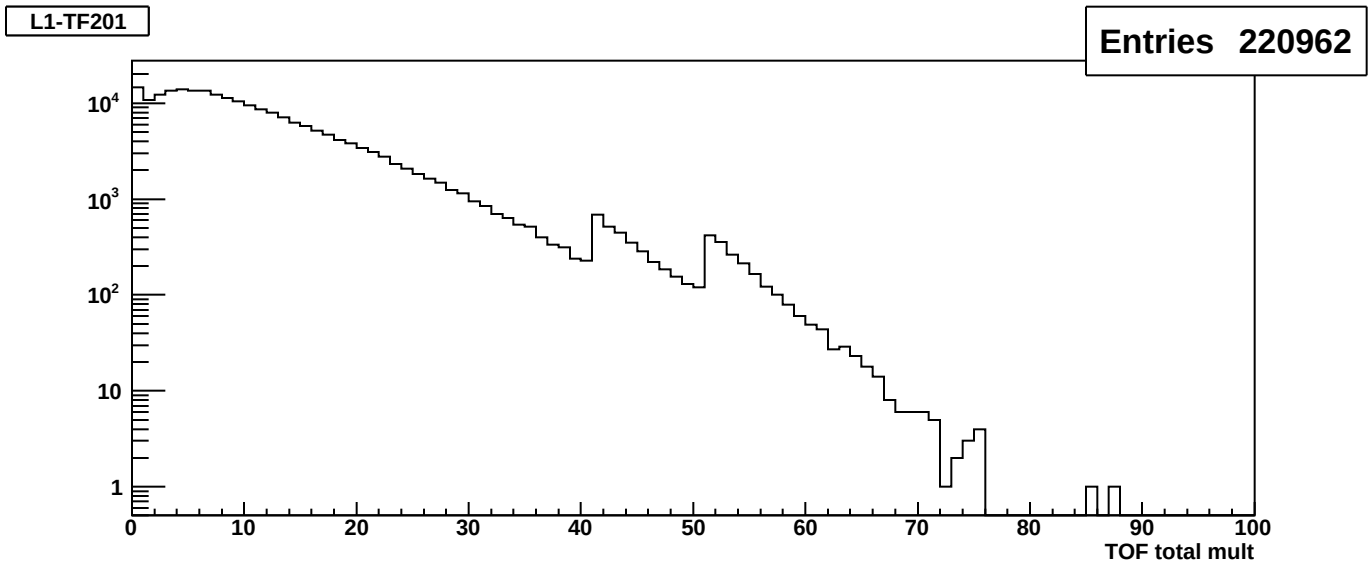

MIX-TF003
Entries 9280404
TOF MULT
TOF tray

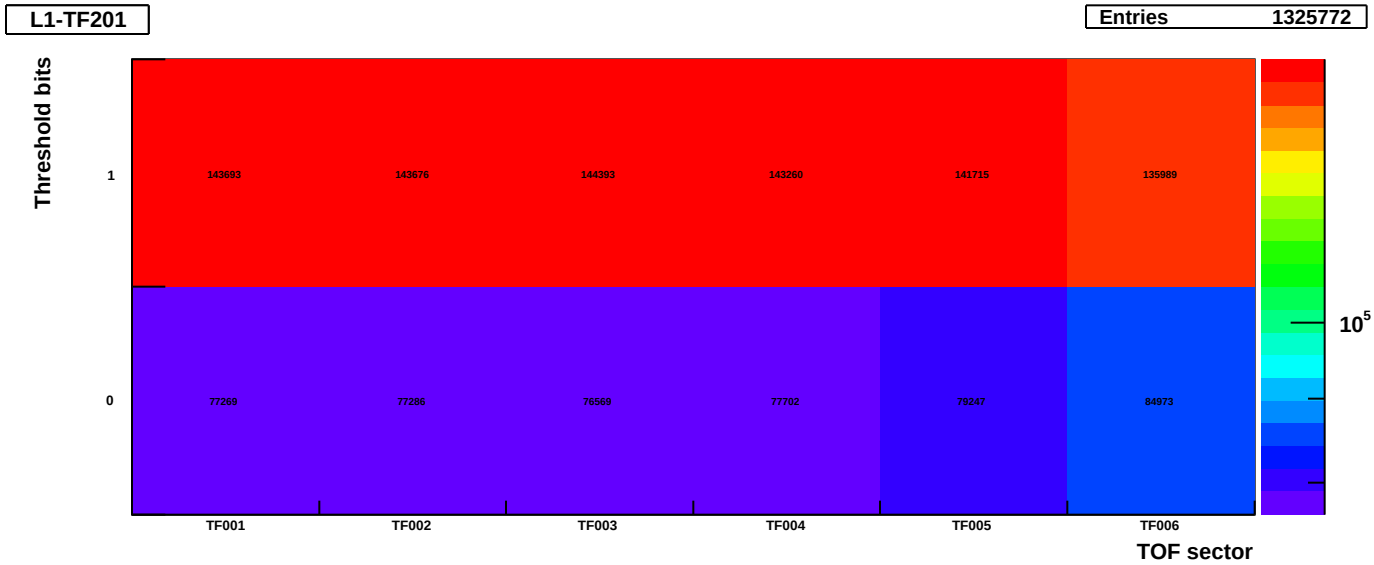

MIX-TF004
Entries 9280404
TOF MULT
TOF tray

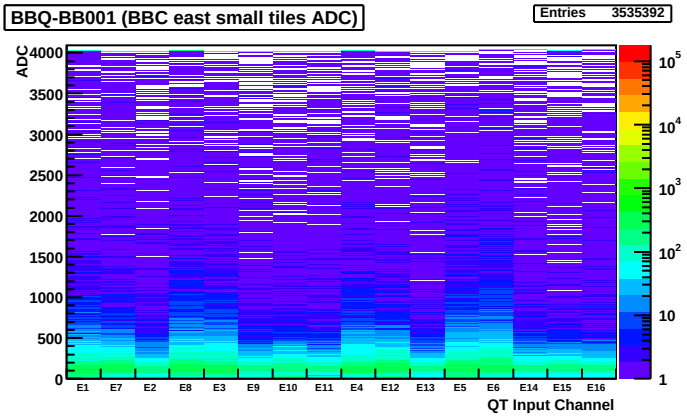

MIX-TF005
Entries 9280404
TOF MULT
TOF tray

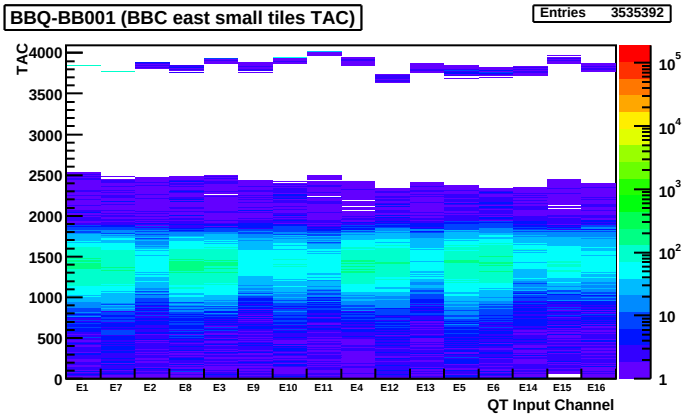

MIX-TF006
Entries 9280404
TOF MULT
TOF tray

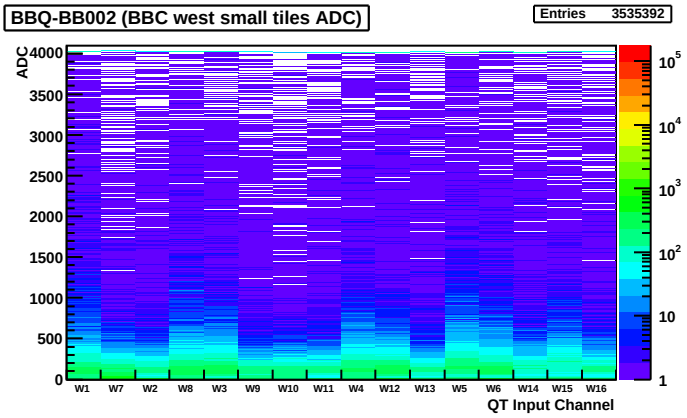

MIX-TF101
Entries 1325772
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

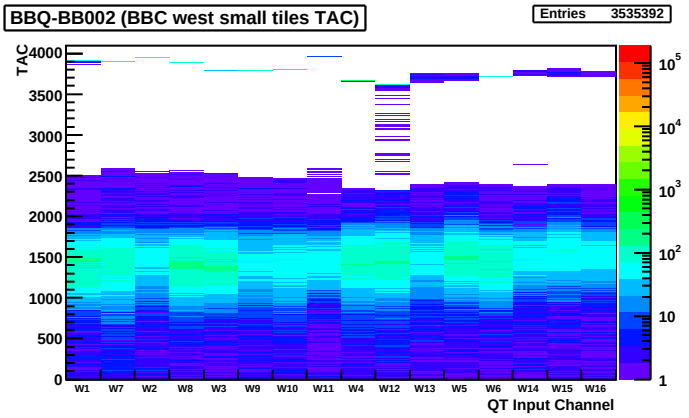

L1-TF201
Entries 220962
TOF total mult

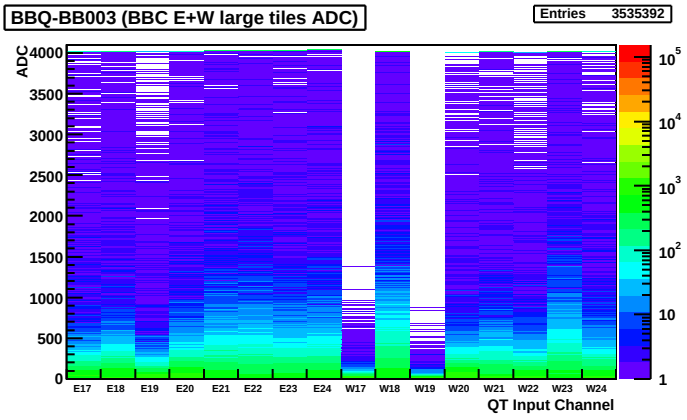

L1-TF201
Entries 1325772
Threshold bits
143693
143676
144393
143260
141715
135989
77269
77286
76569
77702
79247
84973
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

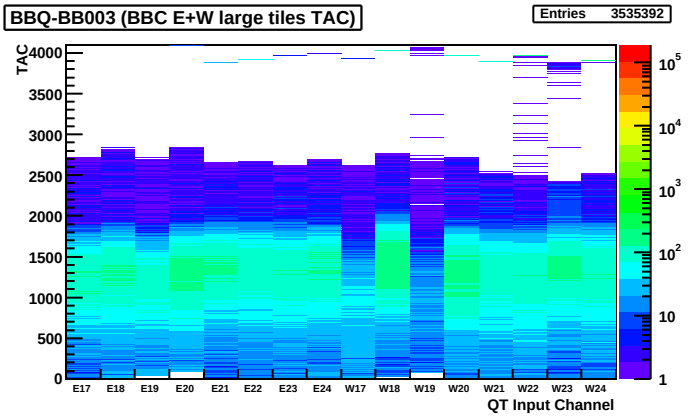

BBQ-BB001 (BBC east small tiles ADC)
Entries 3535392
ADC
QT Input Channel

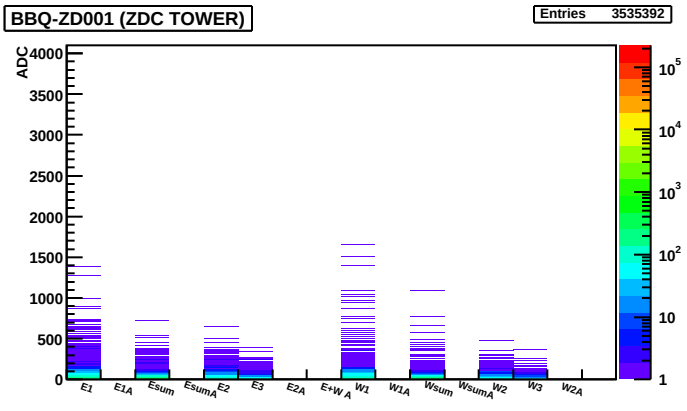

BBQ-BB001 (BBC east small tiles TAC)
Entries 3535392
TAC
QT Input Channel

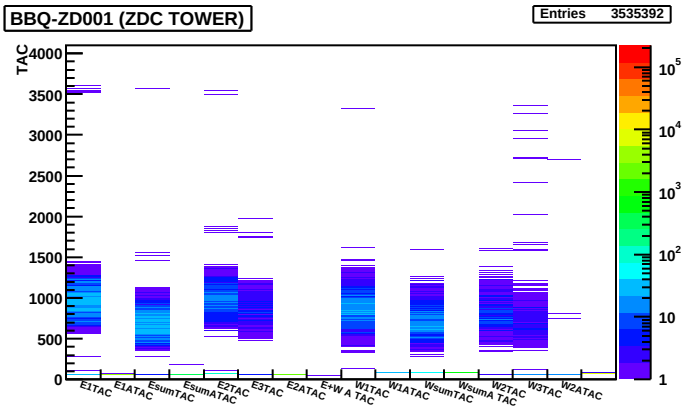

BBQ-BB002 (BBC west small tiles ADC)
Entries 3535392
ADC
QT Input Channel

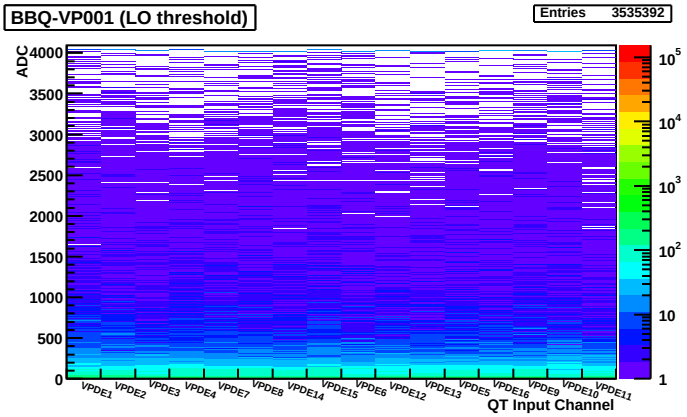

BBQ-BB002 (BBC west small tiles TAC)
Entries 3535392
TAC
QT Input Channel

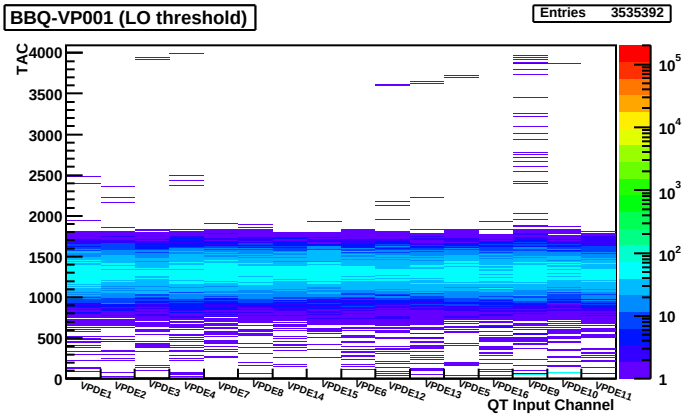

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3535392
ADC
QT Input Channel

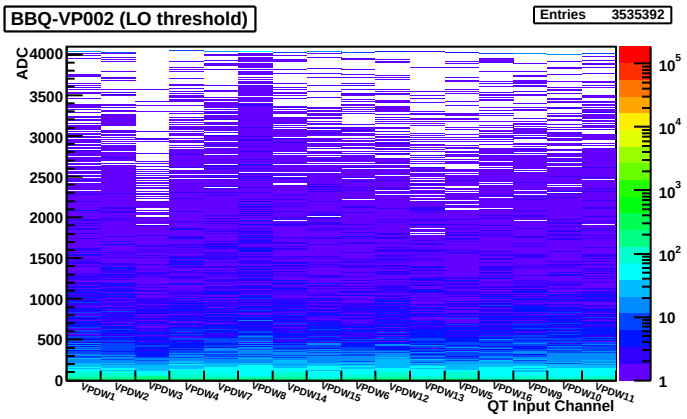

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3535392
TAC
QT Input Channel

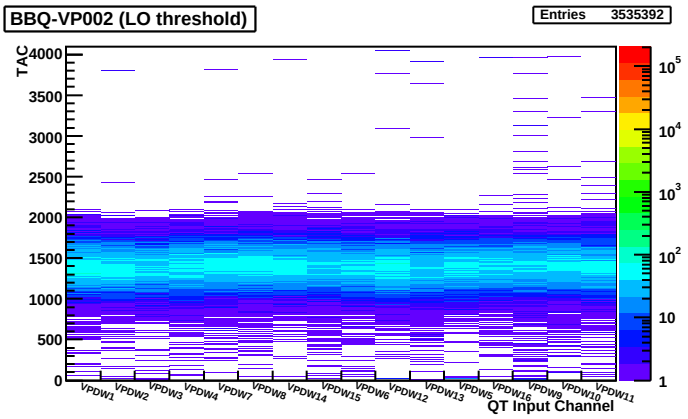

BBQ-ZD001 (ZDC TOWER)
Entries 3535392
ADC

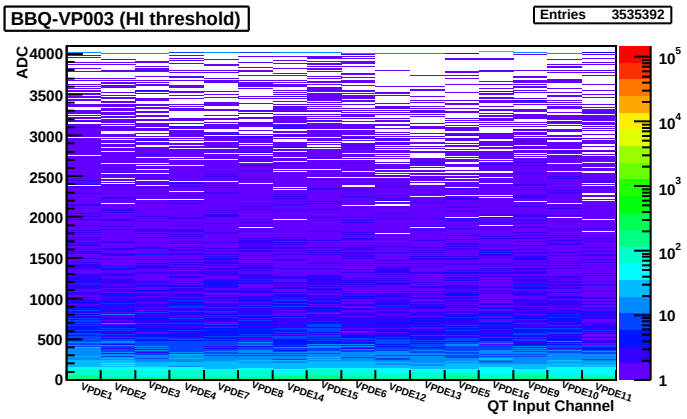

BBQ-ZD001 (ZDC TOWER)
Entries 3535392
TAC

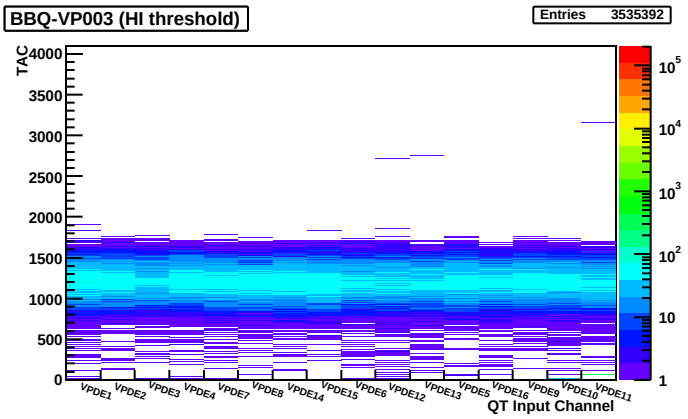

BBQ-VP001 (LO threshold)
Entries 3535392
ADC
QT Input Channel

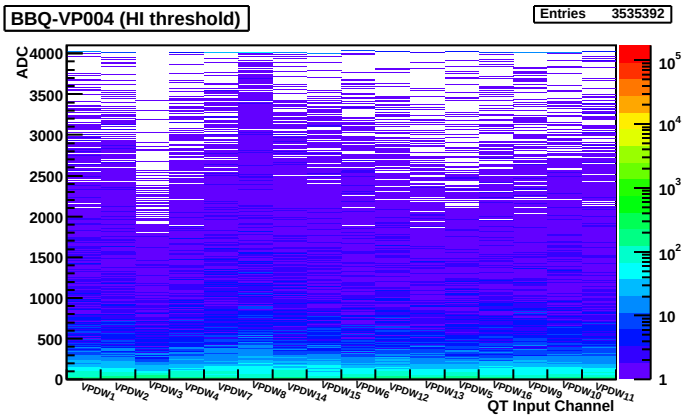

BBQ-VP001 (LO threshold)
Entries 3535392
TAC
QT Input Channel

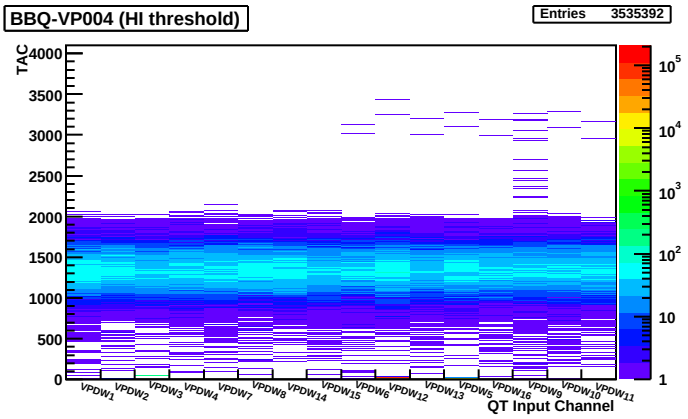

BBQ-VP002 (LO threshold)
Entries 3535392
ADC
QT Input Channel

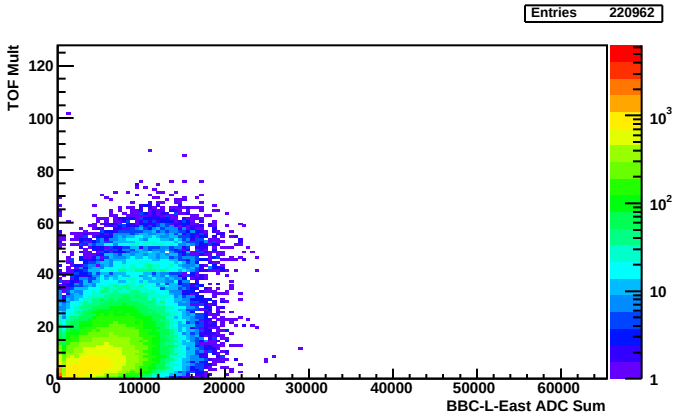

BBQ-VP002 (LO threshold)
Entries 3535392
TAC
QT Input Channel

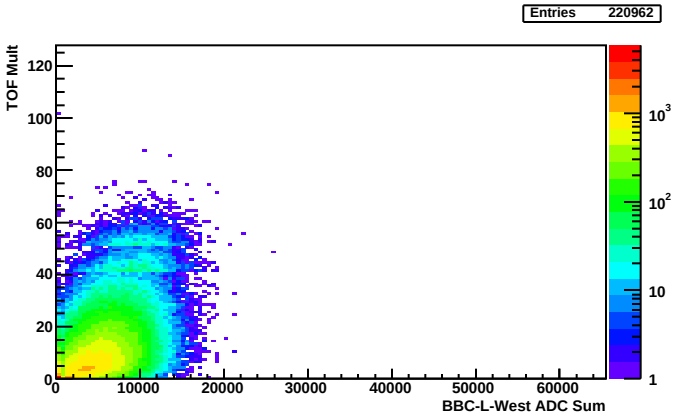

BBQ-VP003 (HI threshold)
Entries 3535392
ADC
QT Input Channel

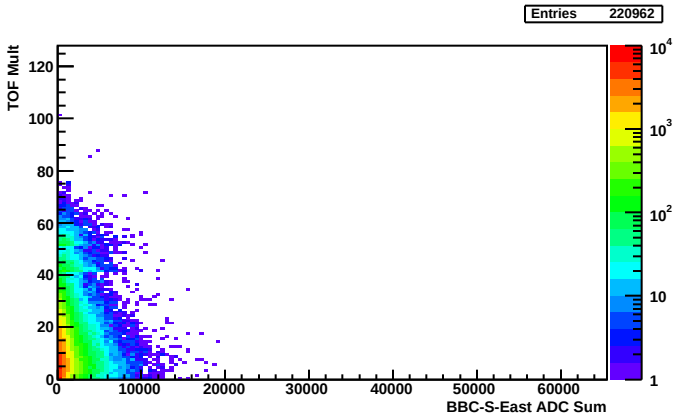

BBQ-VP003 (HI threshold)
Entries 3535392
TAC
QT Input Channel

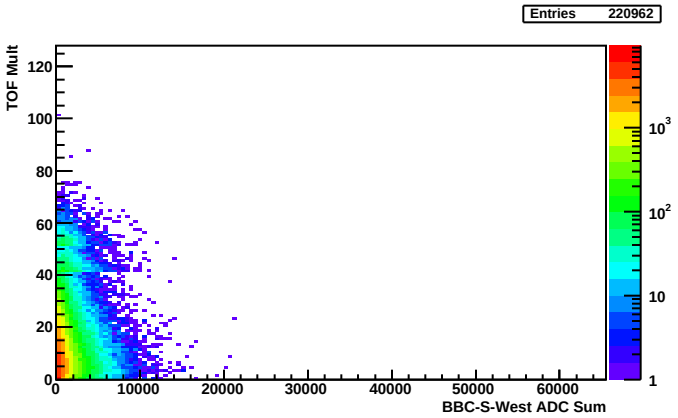

BBQ-VP004 (HI threshold)
Entries 3535392
ADC
QT Input Channel

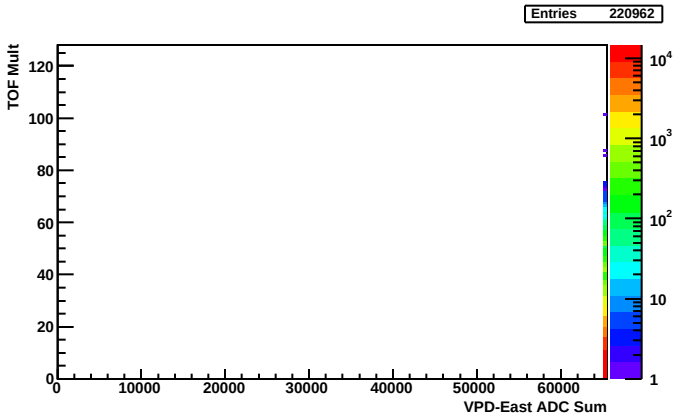

BBQ-VP004 (HI threshold)
Entries 3535392
TAC
QT Input Channel

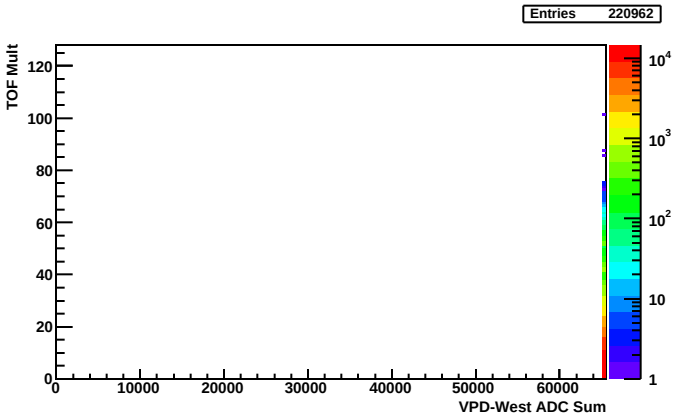

Entries 220962
TOF Mult
BBC-L-East ADC Sum

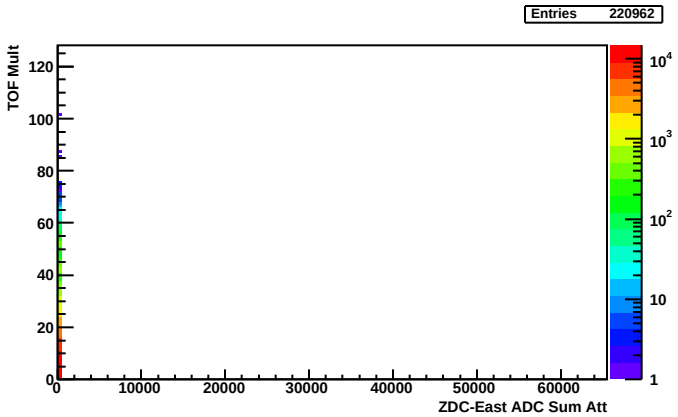

Entries 220962
TOF Mult
BBC-L-West ADC Sum

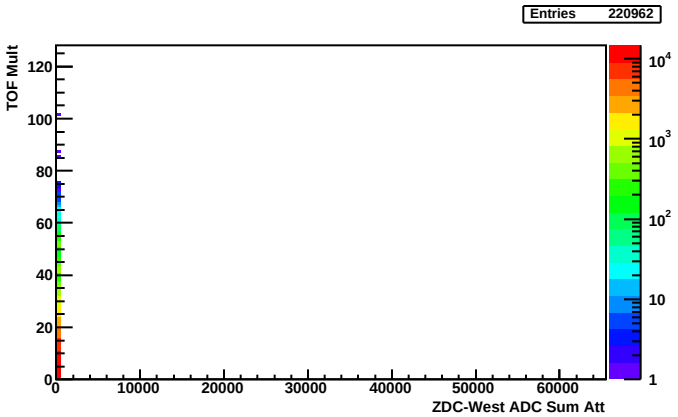

Entries 220962
TOF Mult
BBC-S-East ADC Sum

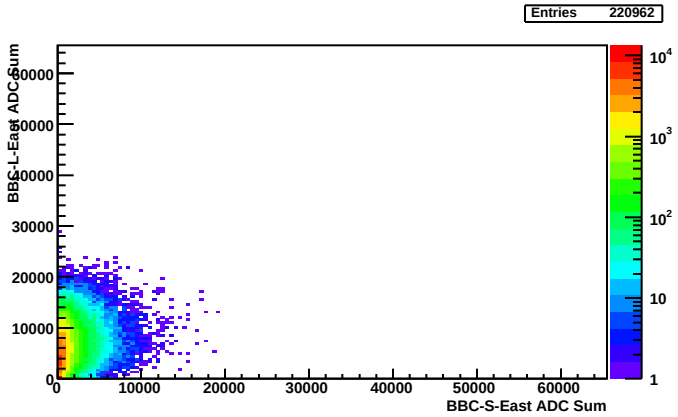

Entries 220962
TOF Mult
BBC-S-West ADC Sum

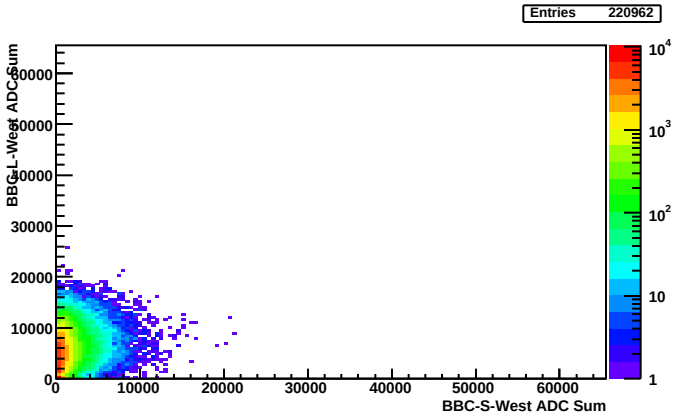

Entries 220962
TOF Mult
VPD-East ADC Sum

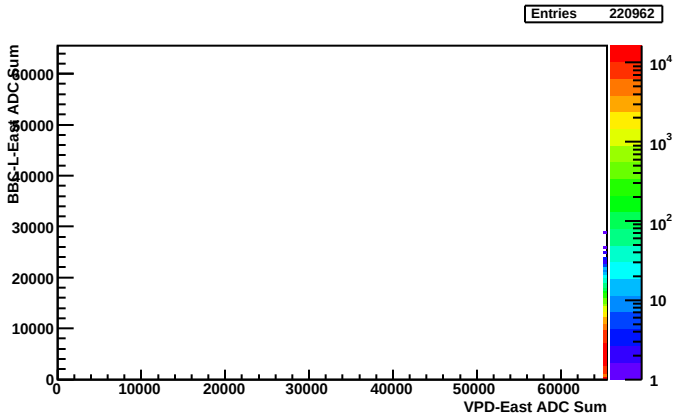

Entries 220962
TOF Mult
VPD-West ADC Sum

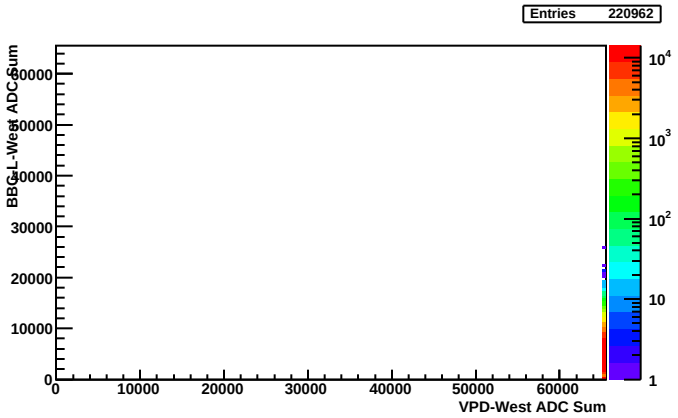

Entries 220962
TOF Mult
ZDC-East ADC Sum Att

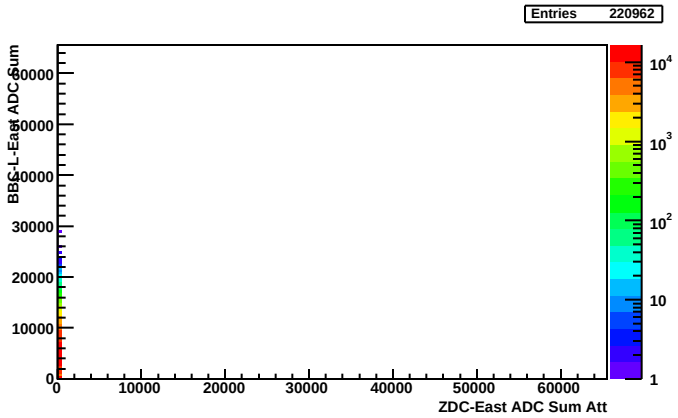

Entries 220962
TOF Mult
ZDC-West ADC Sum Att

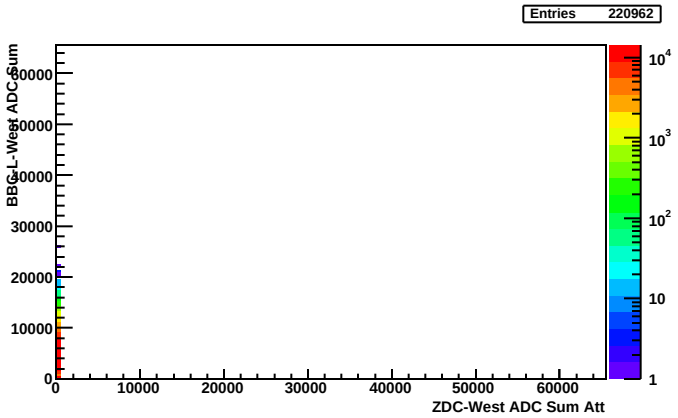

Entries 220962
BBC-L-East ADC Sum
BBC-S-East ADC Sum

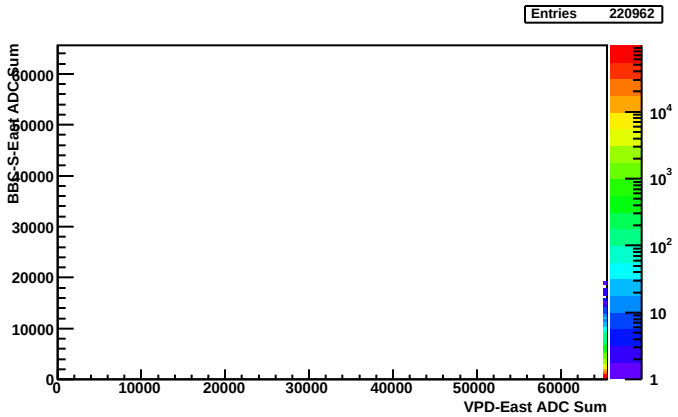

Entries 220962
BBC-L-West ADC Sum
BBC-S-West ADC Sum

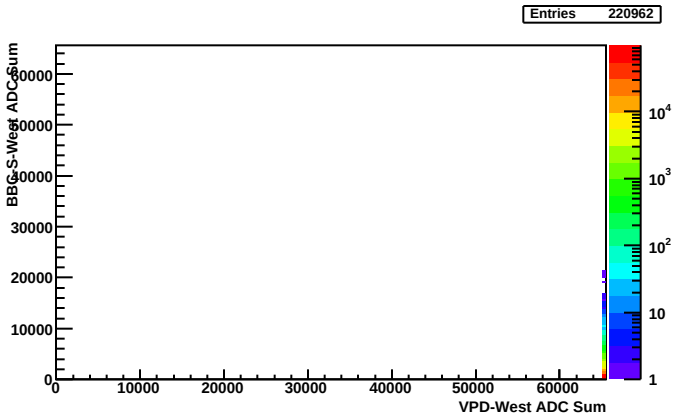

Entries 220962
BBC-L-East ADC Sum
VPD-East ADC Sum

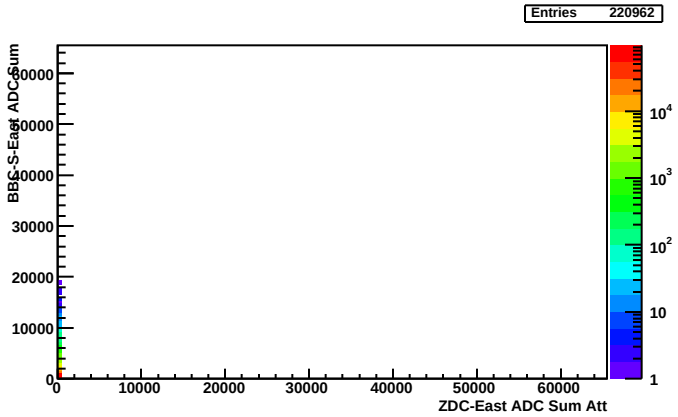

Entries 220962
BBC-L-West ADC Sum
VPD-West ADC Sum

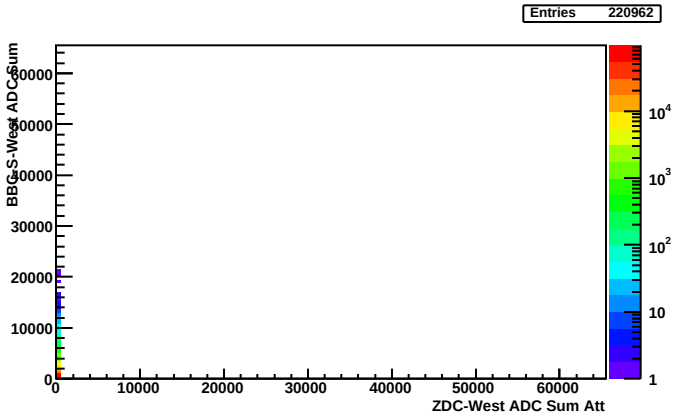

Entries 220962
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

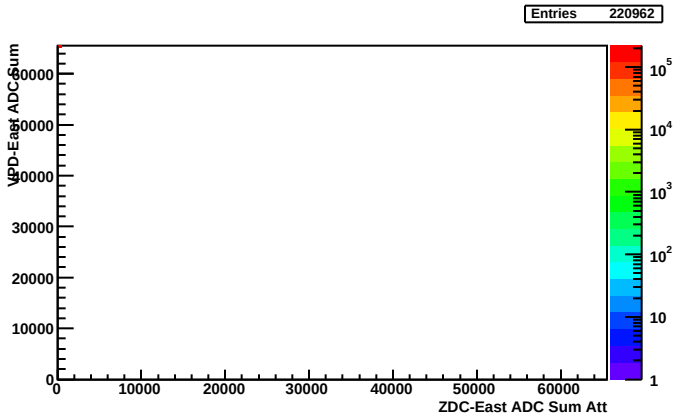

Entries 220962
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

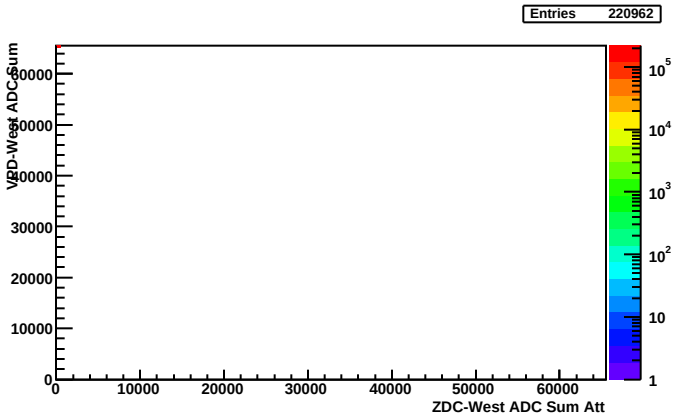

Entries 220962
BBC-S-East ADC Sum
VPD-East ADC Sum

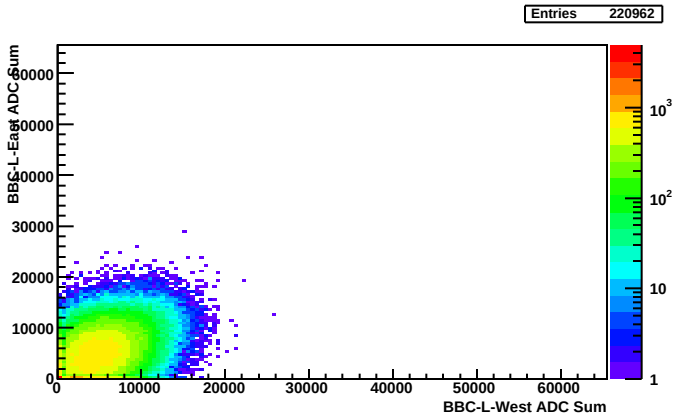

Entries 220962
BBC-S-West ADC Sum
VPD-West ADC Sum

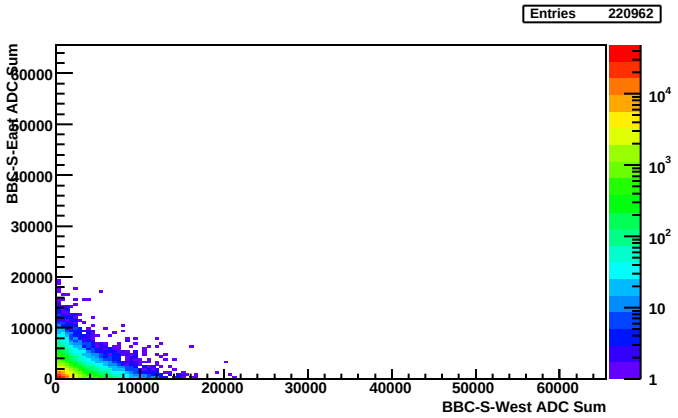

Entries 220962
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

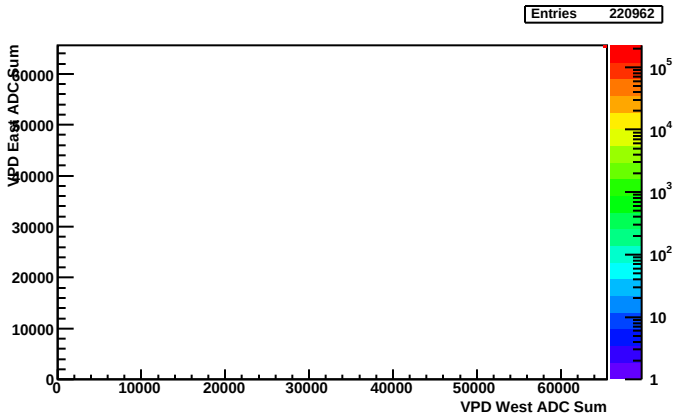

Entries 220962
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

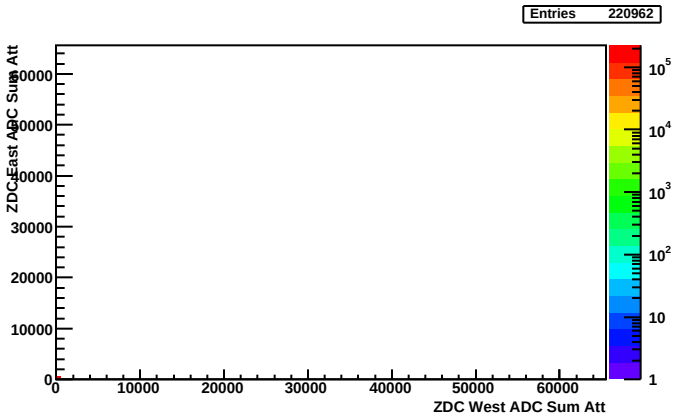

Entries 220962
VPD-East ADC Sum
ZDC-East ADC Sum Att

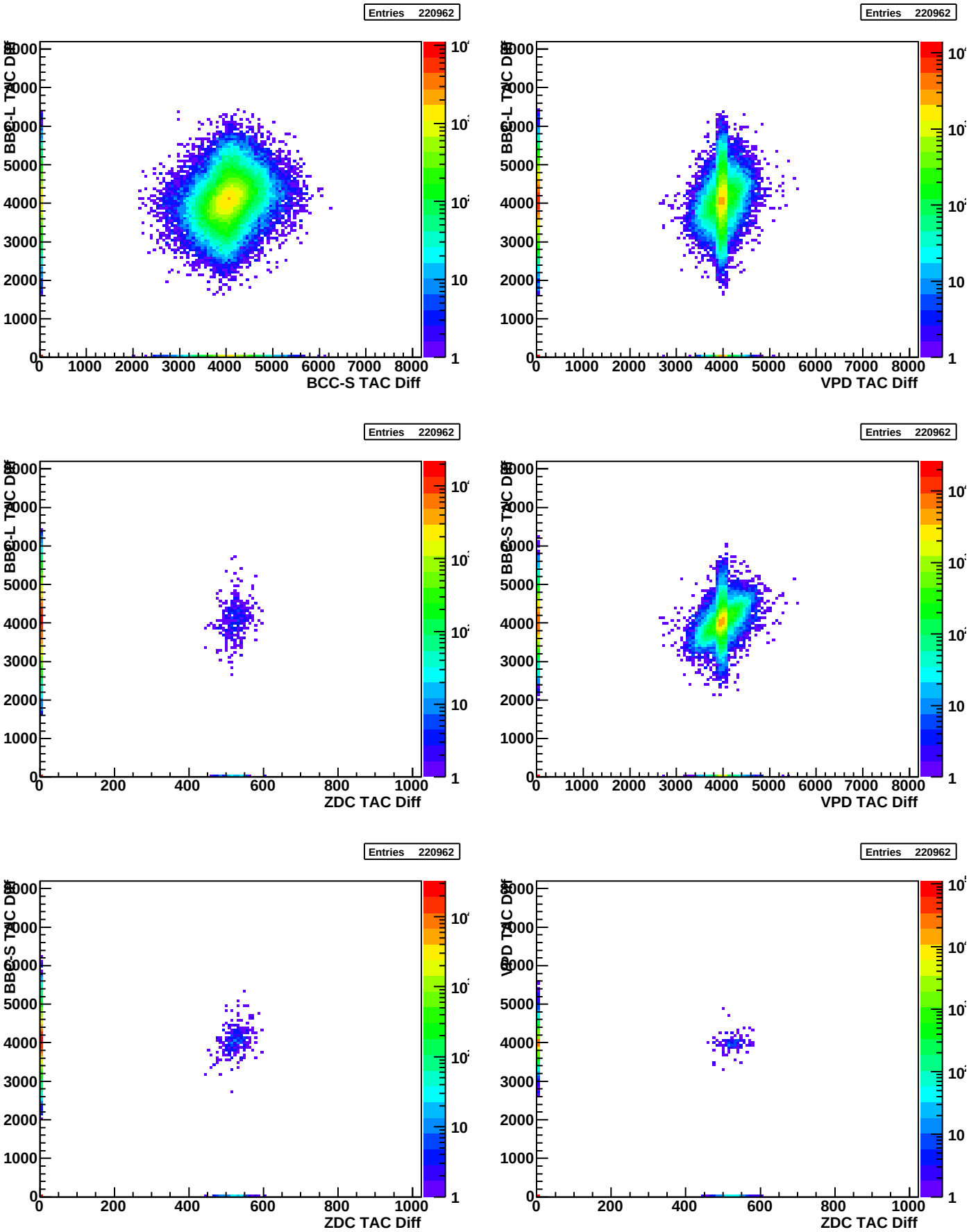

Entries 220962
VPD-West ADC Sum
ZDC-West ADC Sum Att

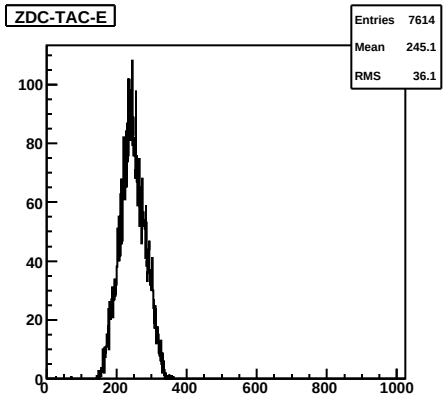

Entries 220962
BBC-L-East ADC Sum
BBC-L-West ADC Sum

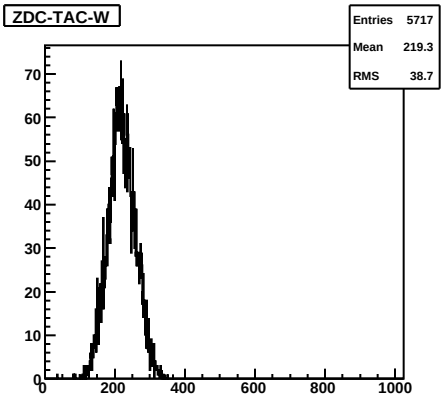

Entries 220962
BBC-S-East ADC Sum
BBC-S-West ADC Sum

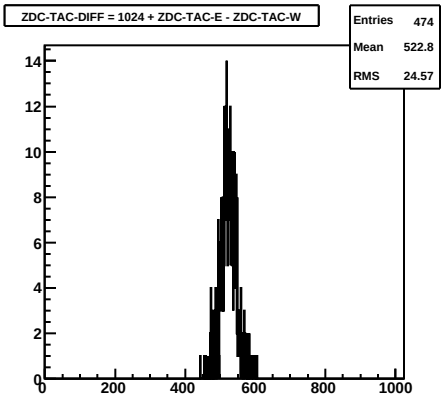

Entries 220962
VPD East ADC Sum
VPD West ADC Sum

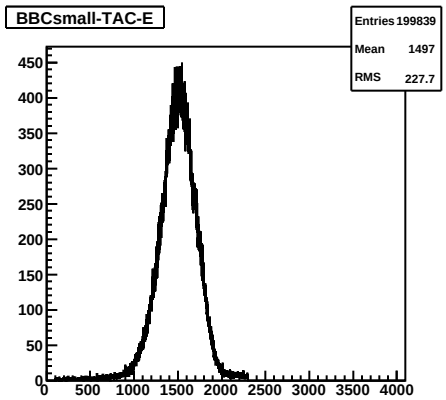

Entries 220962
ZDC East ADC Sum Att
ZDC West ADC Sum Att

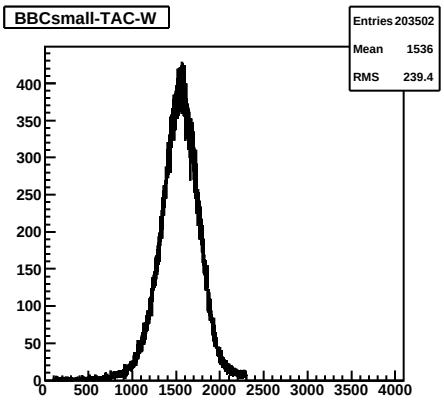

Entries 220962
BBC-L TAC Diff
BCC-S TAC Diff
Entries 220962
BBC-L TAC Diff
VPD TAC Diff
Entries 220962
BBC-L TAC Diff
ZDC TAC Diff
Entries 220962
BBC-S TAC Diff
VPD TAC Diff
Entries 220962
BBC-S TAC Diff
ZDC TAC Diff
Entries 220962
VPD TAC Diff
ZDC TAC Diff

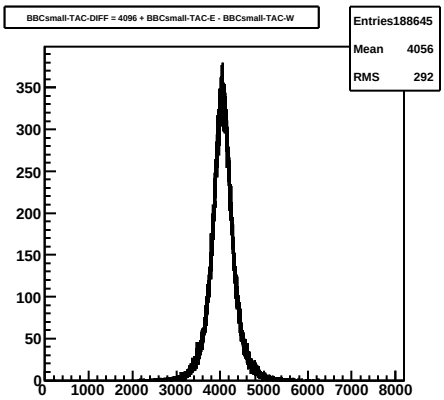

ZDC-TAC-E
Entries 7614
Mean 245.1
RMS 36.1

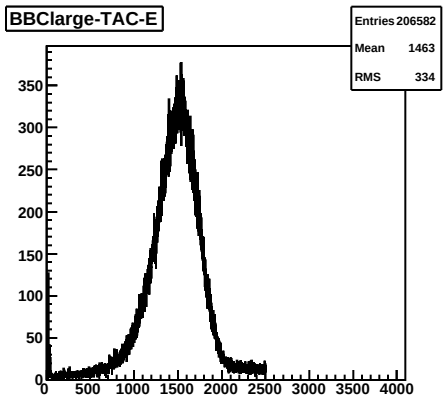

ZDC-TAC-W
Entries 5717
Mean 219.3
RMS 38.7

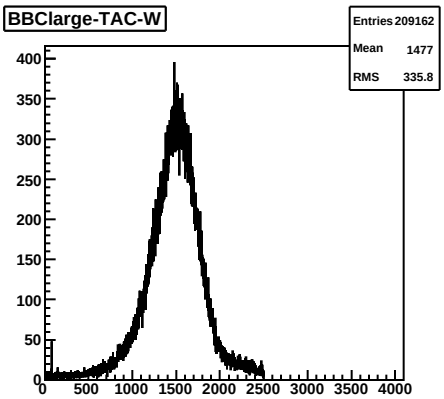

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 474
Mean 522.8
RMS 24.57

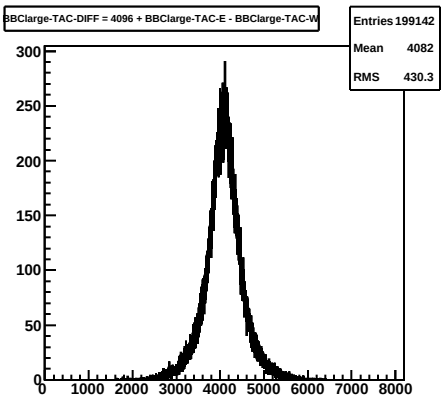

BBCsmall-TAC-E
Entries 199839
Mean 1497
RMS 227.7

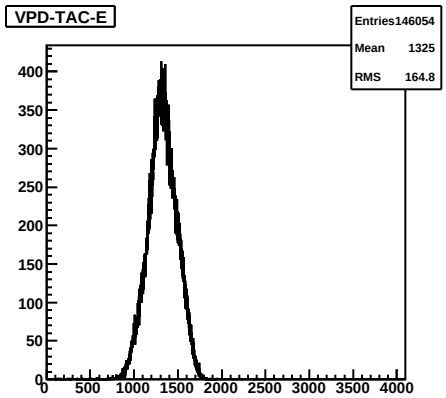

BBCsmall-TAC-W
Entries 203502
Mean 1536
RMS 239.4

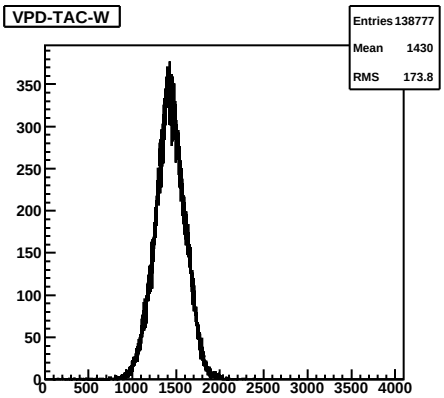

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 188645
Mean 4056
RMS 292

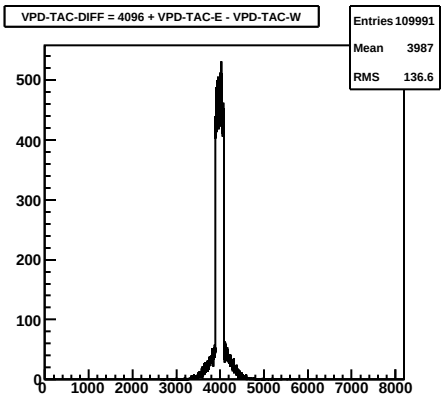

BBClarge-TAC-E
Entries 206582
Mean 1463
RMS 334

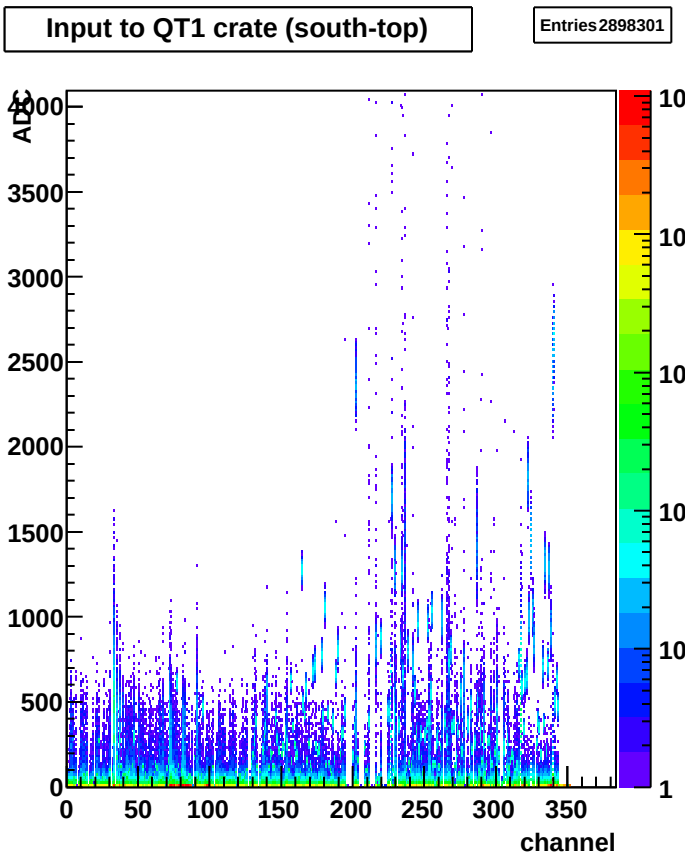

BBClarge-TAC-W
Entries 209162
Mean 1477
RMS 335.8

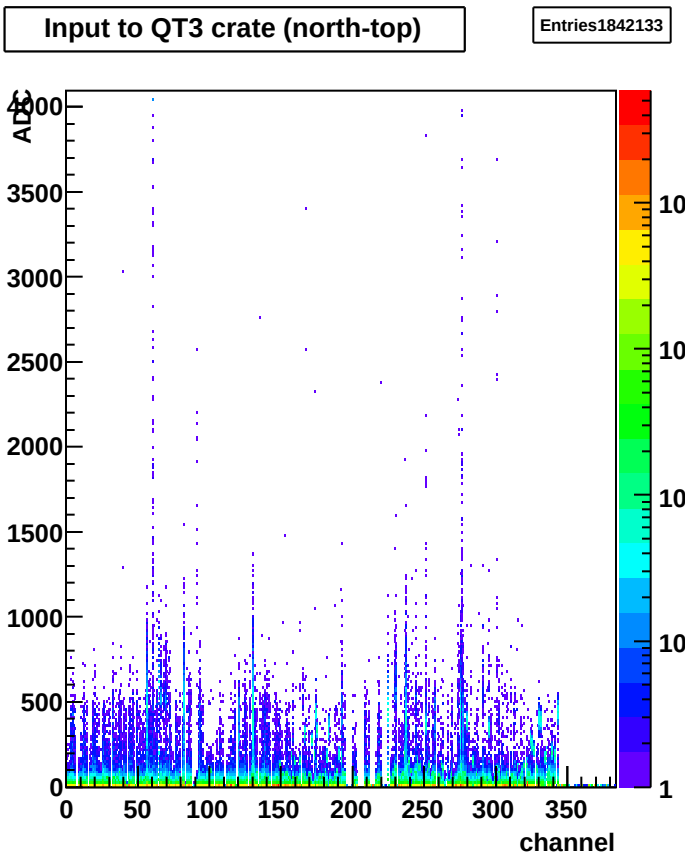

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 199142
Mean 4082
RMS 430.3

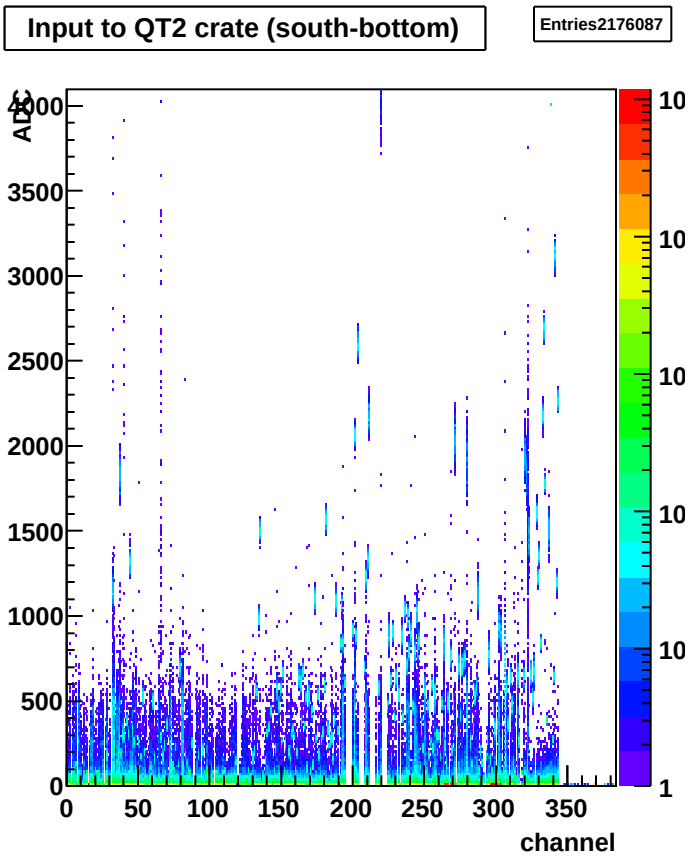

VPD-TAC-E
Entries 146054
Mean 1325
RMS 164.8

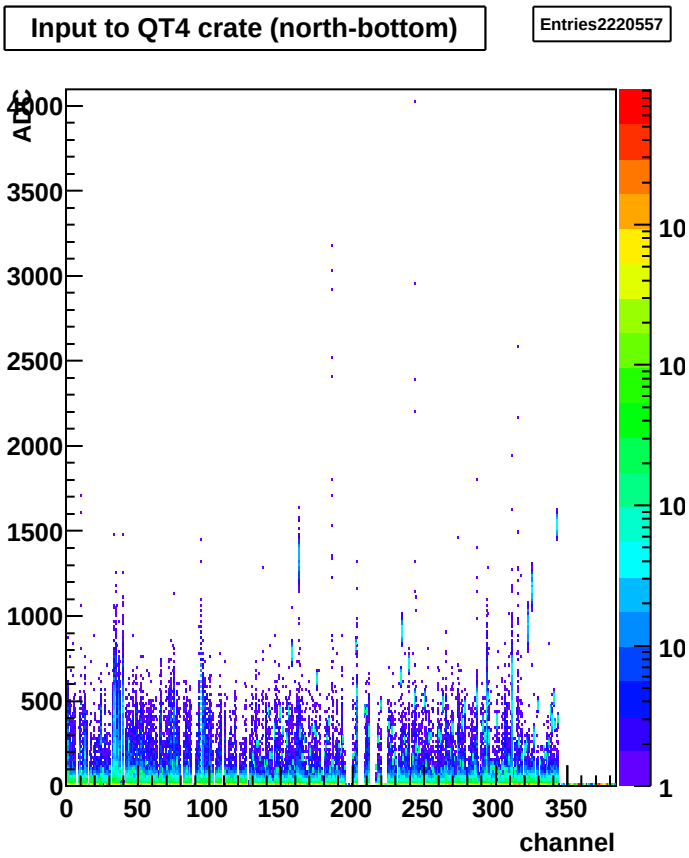

VPD-TAC-W
Entries 138777
Mean 1430
RMS 173.8

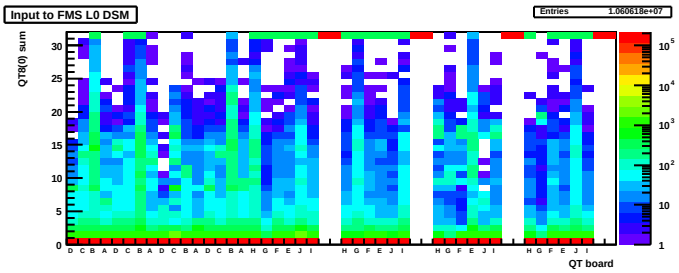

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 109991
Mean 3987
RMS 136.6

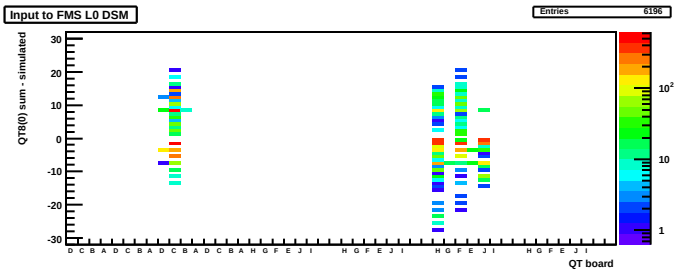

Input to QT1 crate (south-top)
Entries2898301
ADC
channel

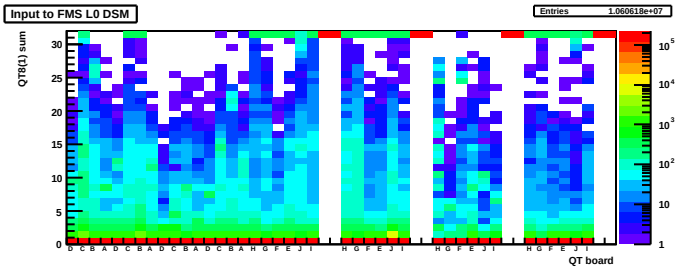

Input to QT3 crate (north-top)
Entries1842133
ADC
channel

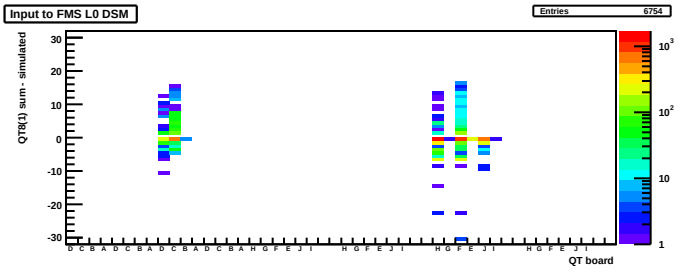

Input to QT2 crate (south-bottom)
Entries2176087
ADC
channel

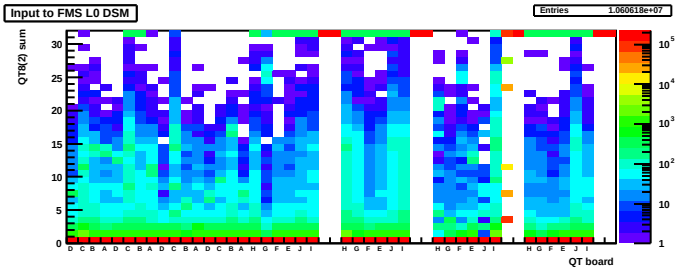

Input to QT4 crate (north-bottom)
Entries2220557
ADC
channel

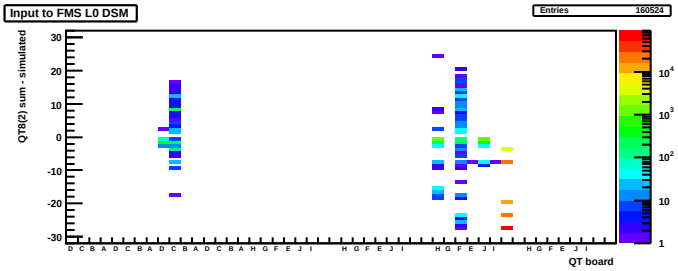

Input to FMS L0 DSM
Entries 1.060618e+07
QT8(0) sum
QT board

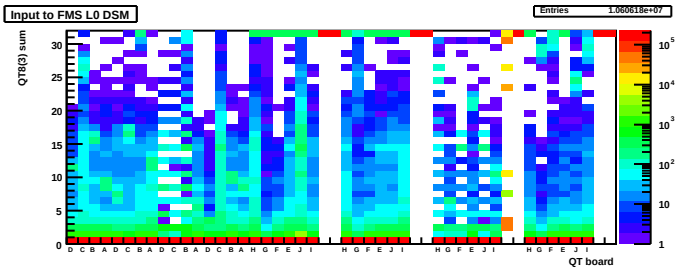

Input to FMS L0 DSM
Entries 6196
QT8(0) sum - simulated
QT board

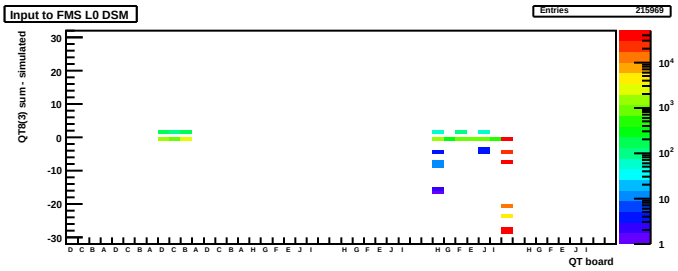

Input to FMS L0 DSM
Entries 1.060618e+07
QT8(1) sum
QT board

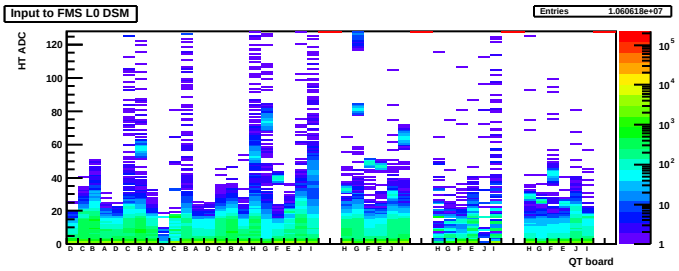

Input to FMS L0 DSM
Entries 6754
QT8(1) sum - simulated
QT board

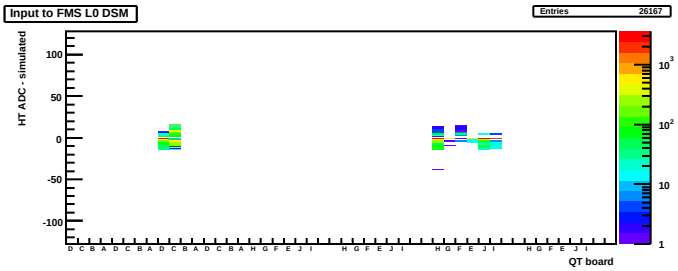

Input to FMS L0 DSM
Entries 1.060618e+07
QT8(2) sum
QT board

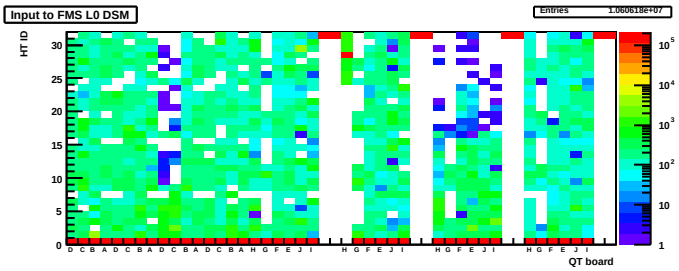

Input to FMS L0 DSM
Entries 160524
QT8(2) sum - simulated
QT board

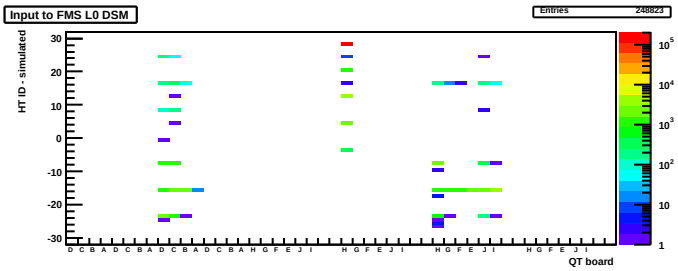

Input to FMS L0 DSM
Entries 1.060618e+07
QT8(3) sum
QT board

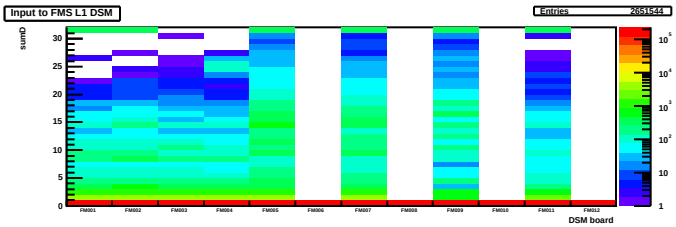

Input to FMS L0 DSM
Entries 215969
QT8(3) sum - simulated
QT board

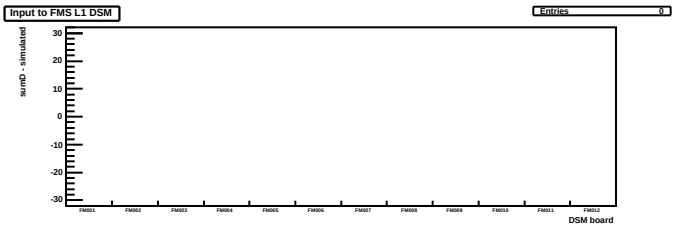

Input to FMS L0 DSM
Entries 1.060618e+07
HT ADC
QT board

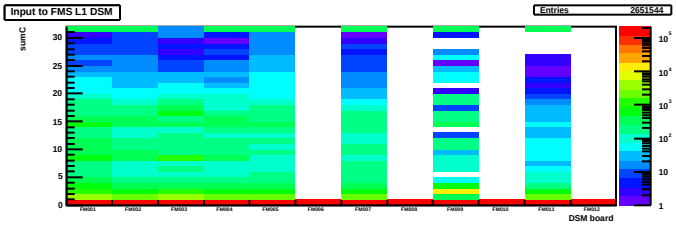

Input to FMS L0 DSM
Entries 26167
HT ADC - simulated
QT board

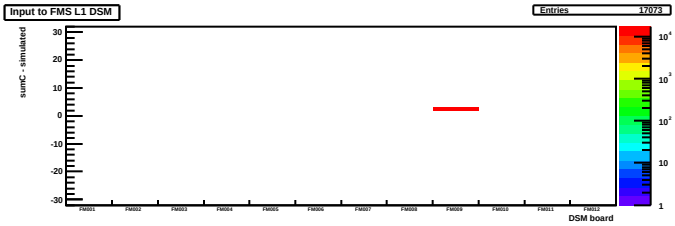

Input to FMS L0 DSM
Entries 1.060618e+07
HT ID
QT board

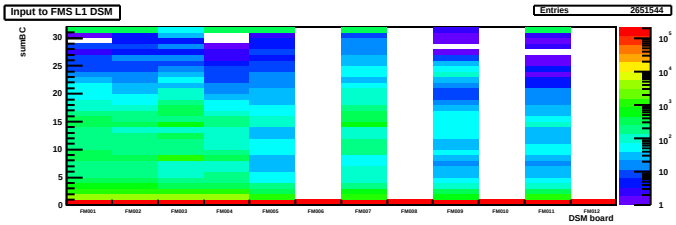

Input to FMS L0 DSM
Entries 248823
HT ID - simulated
QT board

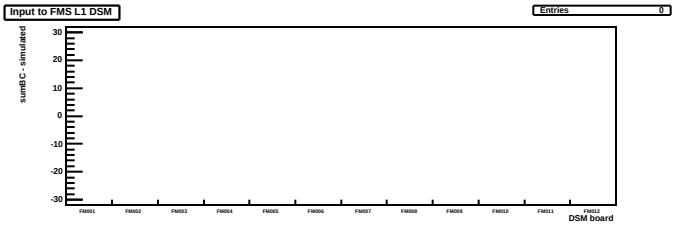

Input to FMS L1 DSM
Entries 2651544
sumD
DSM board

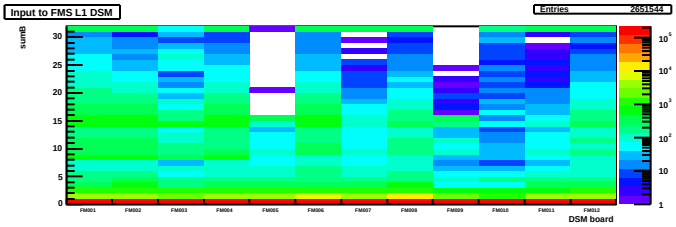

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

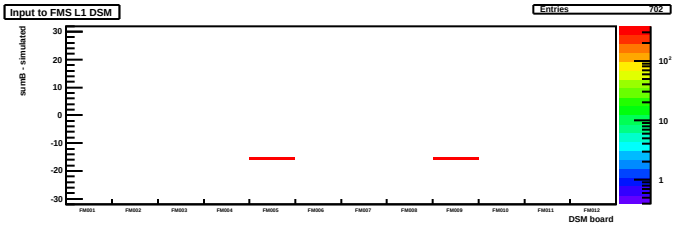

Input to FMS L1 DSM
Entries 2651544
sumC
DSM board

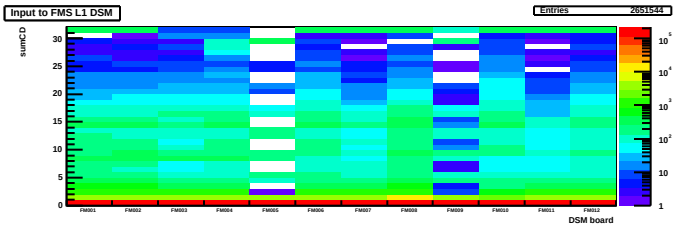

Input to FMS L1 DSM
Entries 17073
sumC - simulated
DSM board

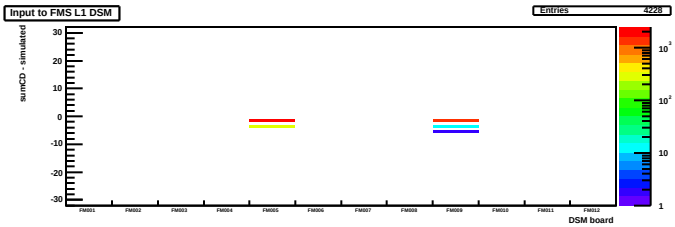

Input to FMS L1 DSM
Entries 2651544
sumBC
DSM board

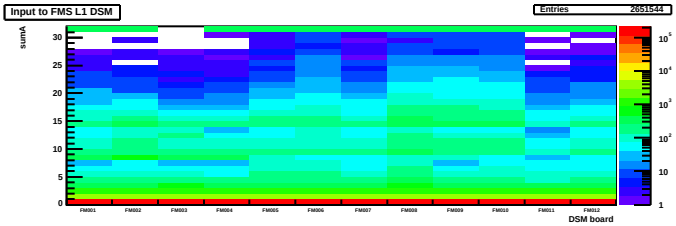

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

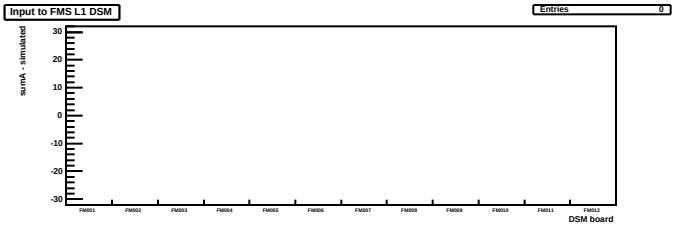

Input to FMS L1 DSM
Entries 2651544
sumB
DSM board

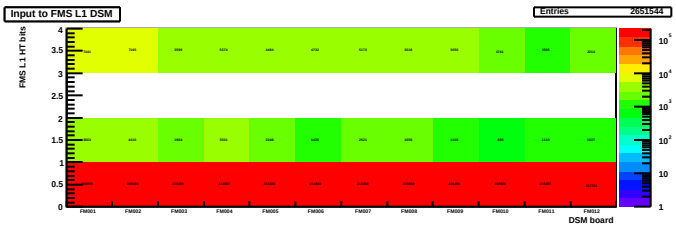

Input to FMS L1 DSM
Entries 702
sumB - simulated
DSM board

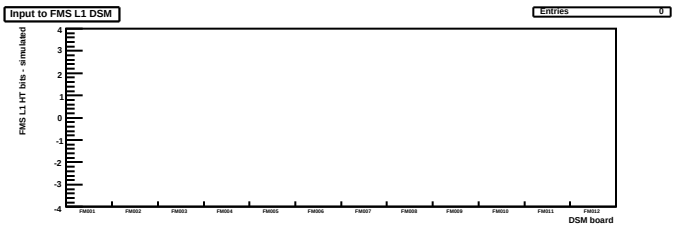

Input to FMS L1 DSM
Entries 2651544
sumCD
DSM board

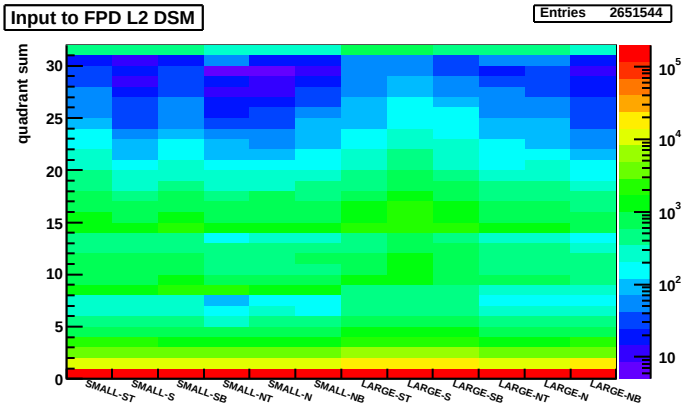

Input to FMS L1 DSM
Entries 4228
sumCD - simulated
DSM board

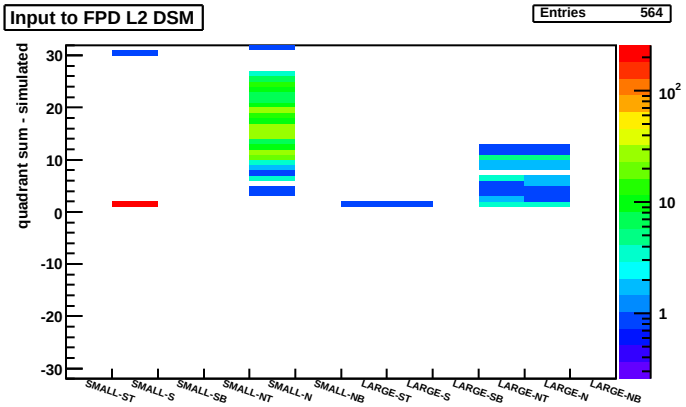

Input to FMS L1 DSM
Entries 2651544
sumA
DSM board

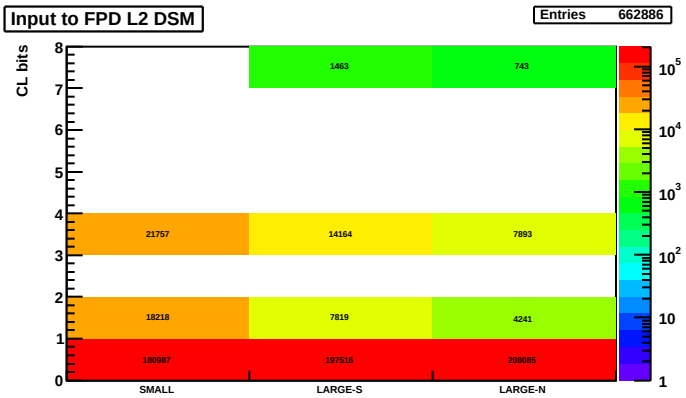

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

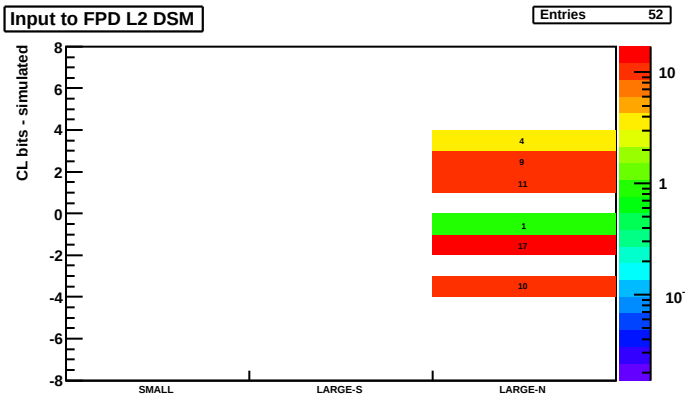

Input to FMS L1 DSM
Entries 2651544
FMS L1 HT bits
DSM board

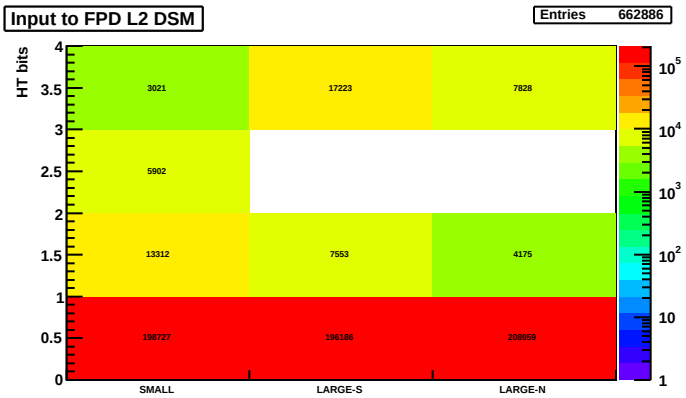

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

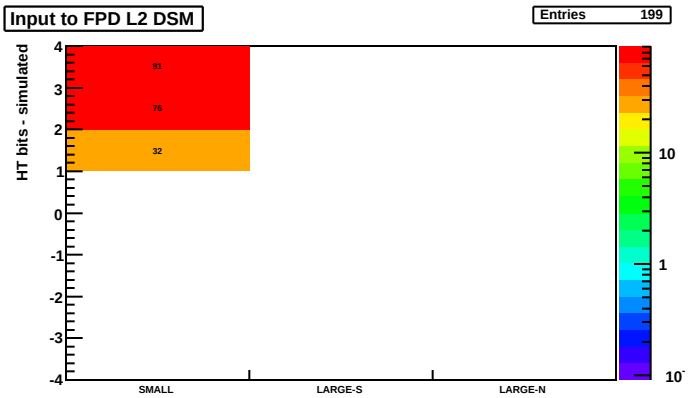

Input to FPD L2 DSM
Entries 2651544
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

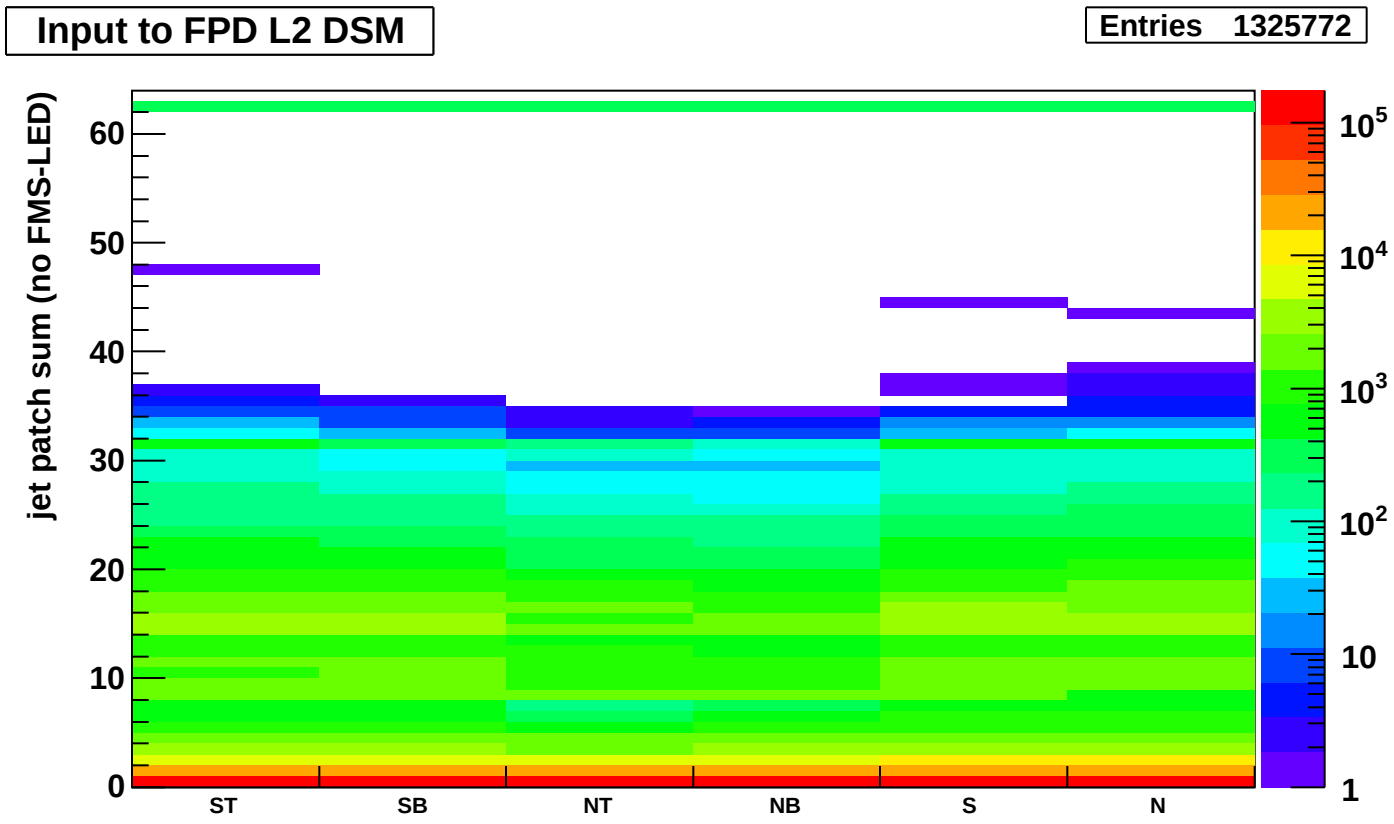

Input to FPD L2 DSM
Entries 564
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

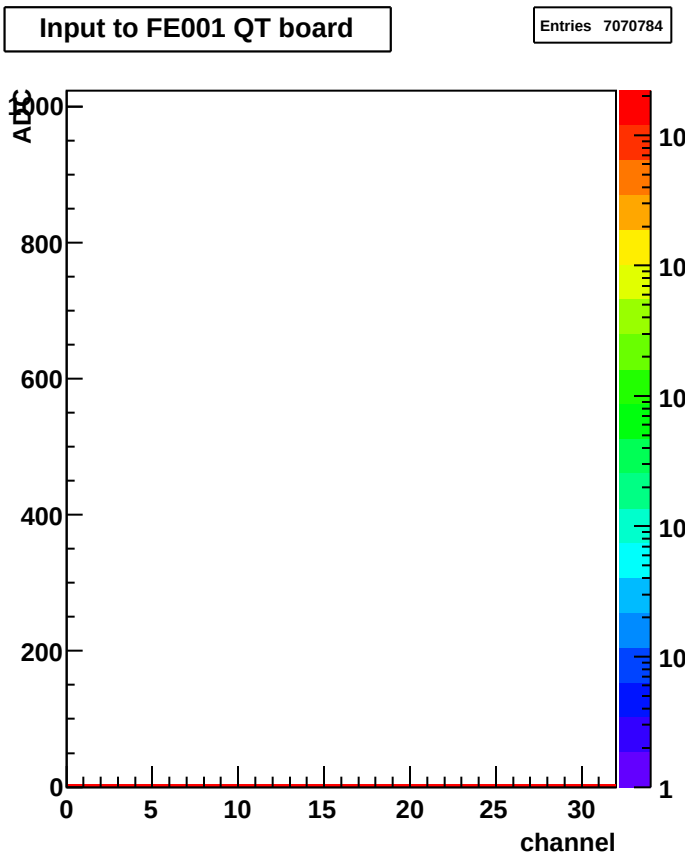

Input to FPD L2 DSM
Entries 662886
CL bits
1463
743
21757
14164
7893
18218
7819
4241
180987
197516
208085
SMALL
LARGE-S
LARGE-N

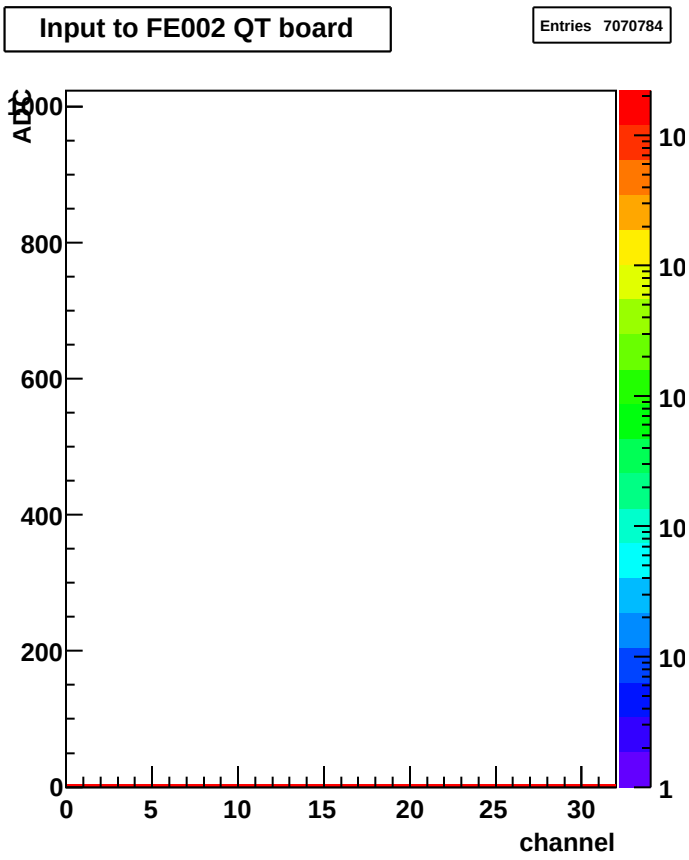

Input to FPD L2 DSM
Entries 52
CL bits - simulated
4
9
11
1
17
10
SMALL
LARGE-S
LARGE-N

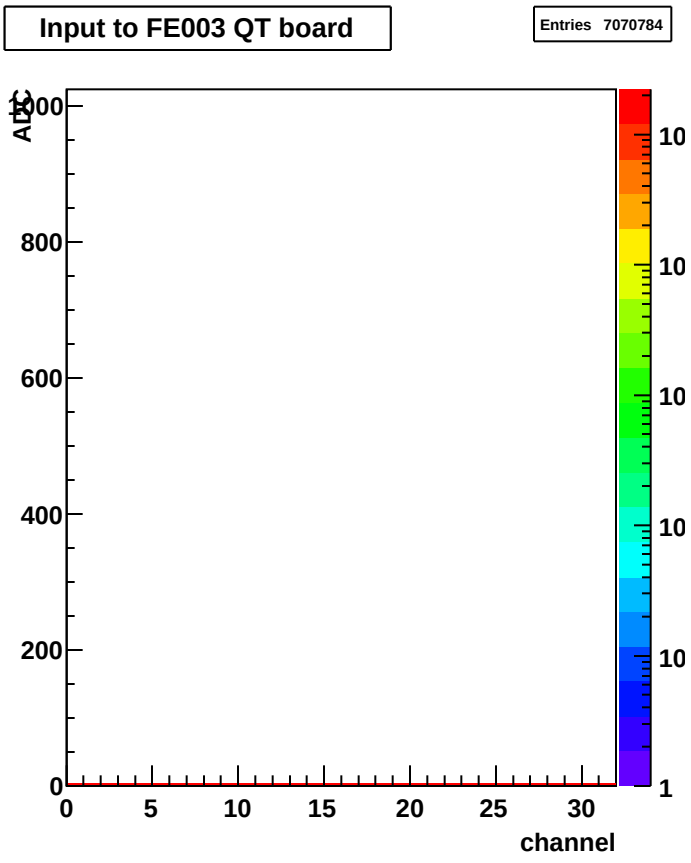

Input to FPD L2 DSM
Entries 662886
HT bits
3021
17223
7828
5902
13312
7553
4175
198727
196186
208959
SMALL
LARGE-S
LARGE-N

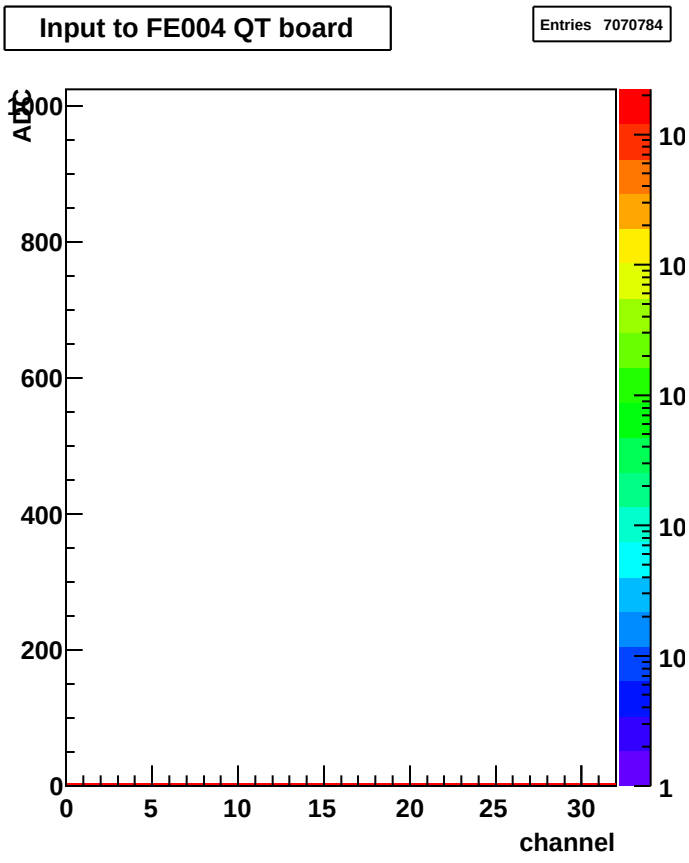

Input to FPD L2 DSM
Entries 199
HT bits - simulated
91
76
32
SMALL
LARGE-S
LARGE-N

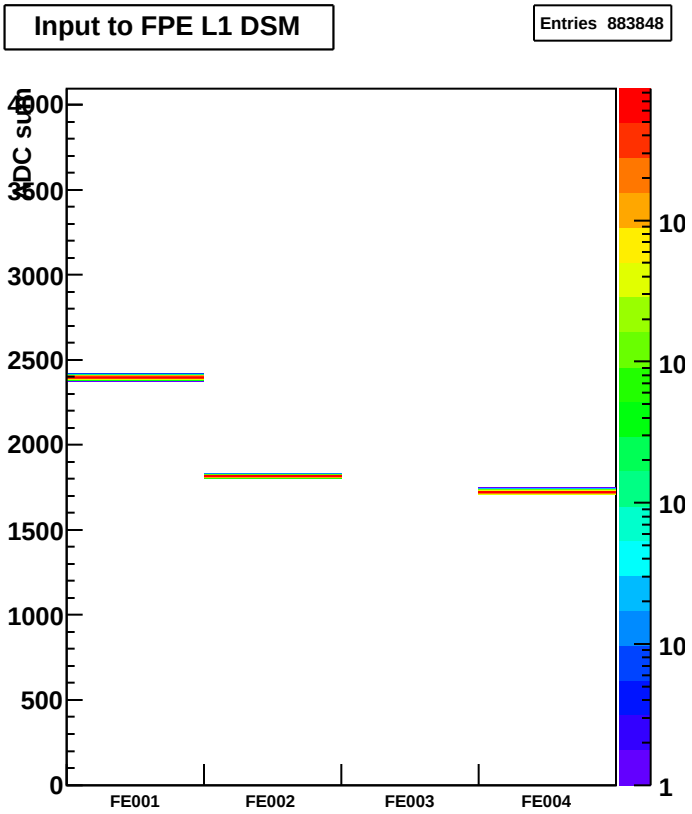

Input to FPD L2 DSM
Entries 1325772
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

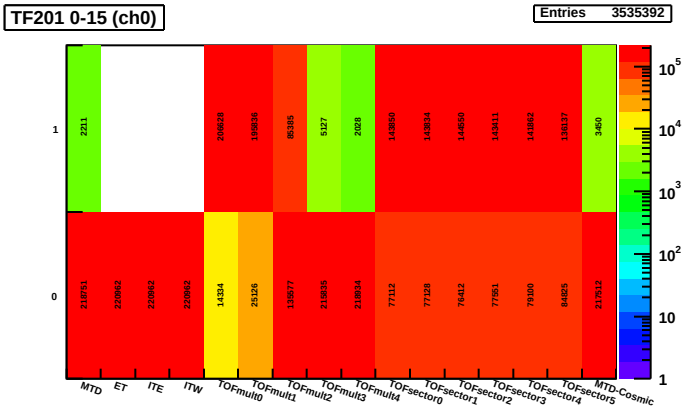

Input to FE001 QT board
Entries 7070784
ADC
channel

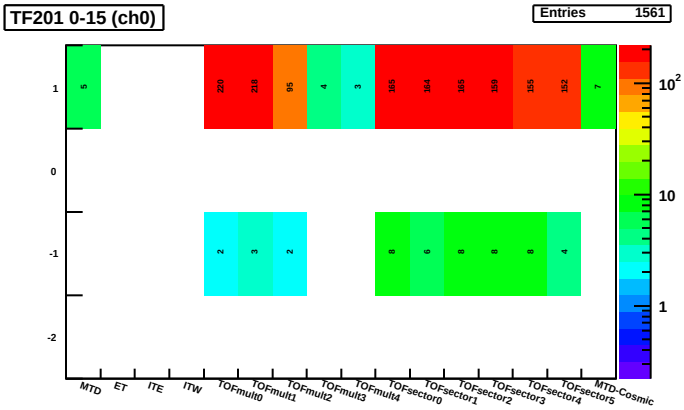

Input to FE002 QT board
Entries 7070784
ADC
channel

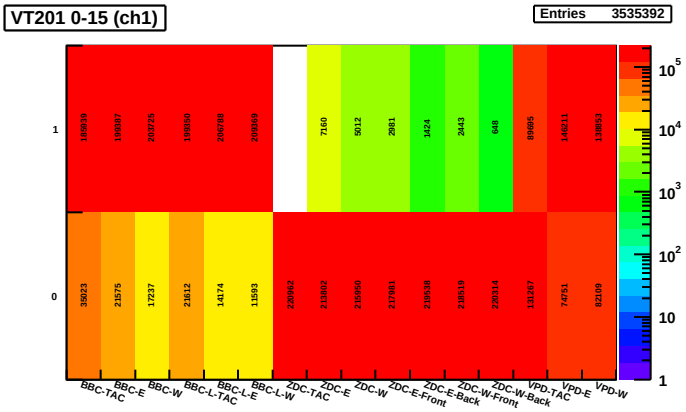

Input to FE003 QT board
Entries 7070784
ADC
channel

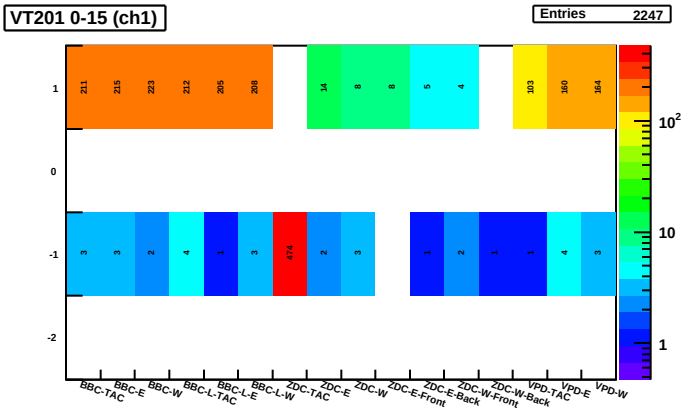

Input to FE004 QT board
Entries 7070784
ADC
channel

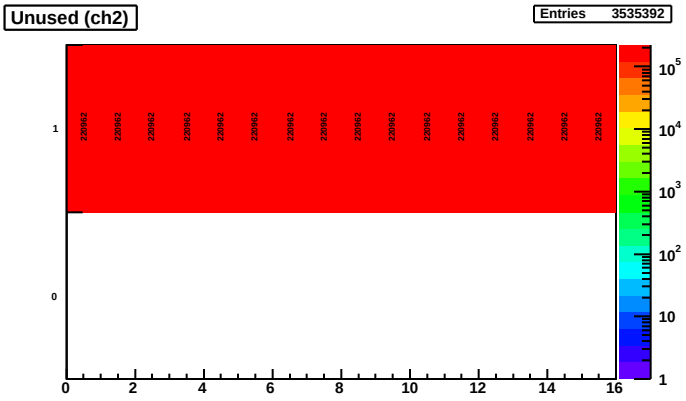

Input to FPE L1 DSM
Entries 883848
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

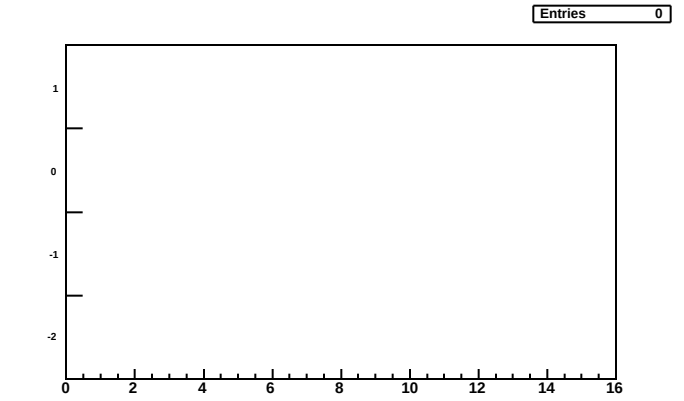

TF201 0-15 (ch0)
Entries 3535392
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

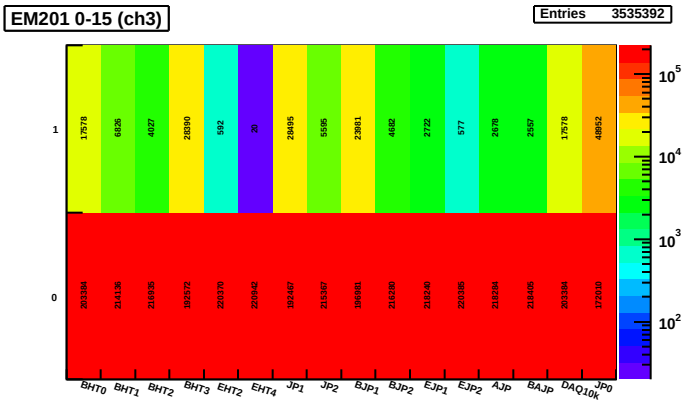

TF201 0-15 (ch0)
Entries 1561
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

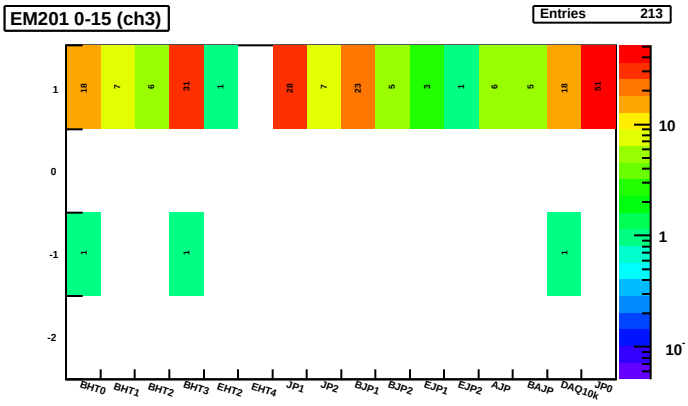

VT201 0-15 (ch1)
Entries 3535392
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 2247
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

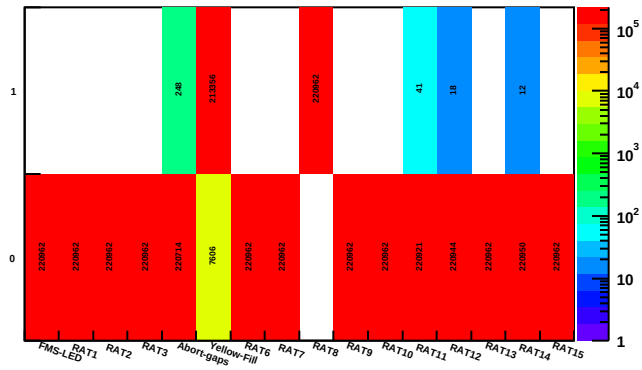

Unused (ch2)
Entries 3535392

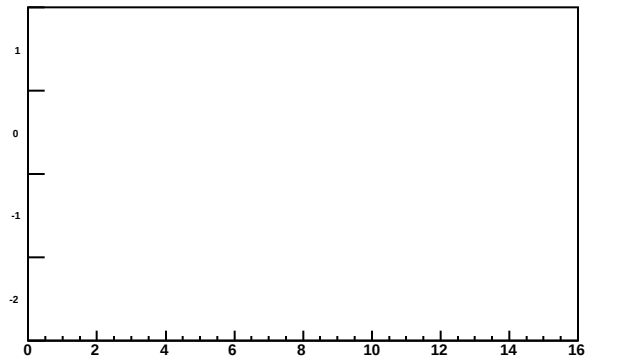

Entries 0


EM201 0-15 (ch3)
Entries 3535392
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

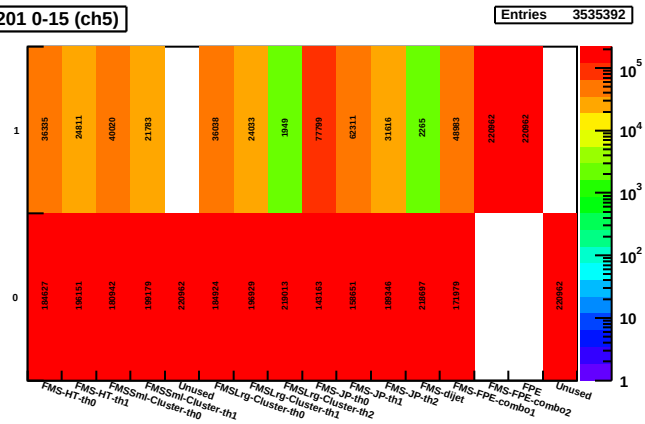

EM201 0-15 (ch3)
Entries 213
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

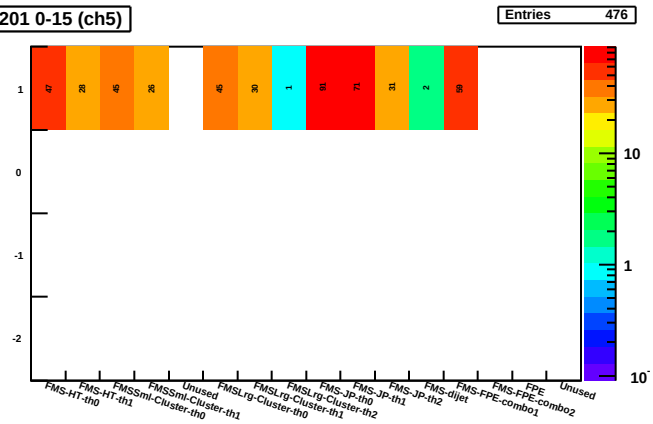




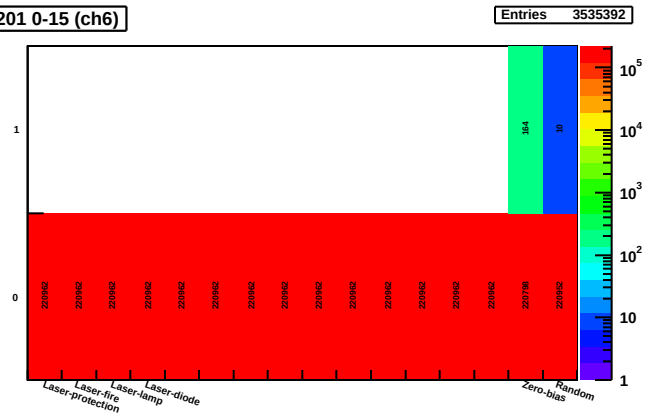
FP201 0-15 (ch5)

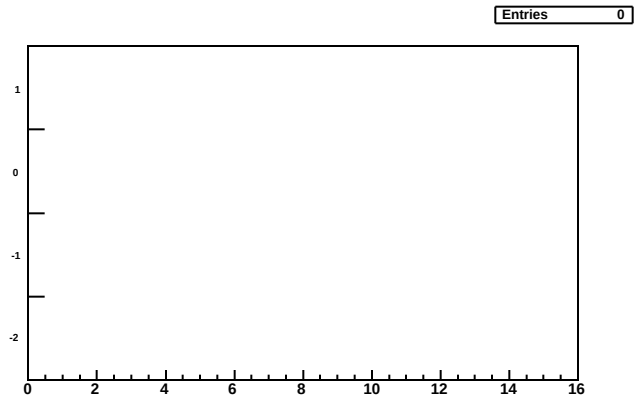
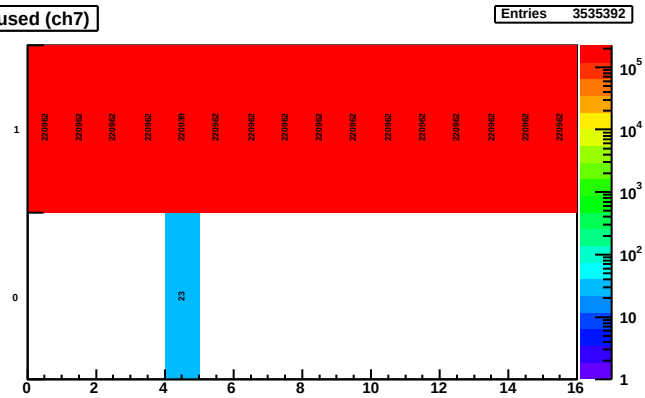
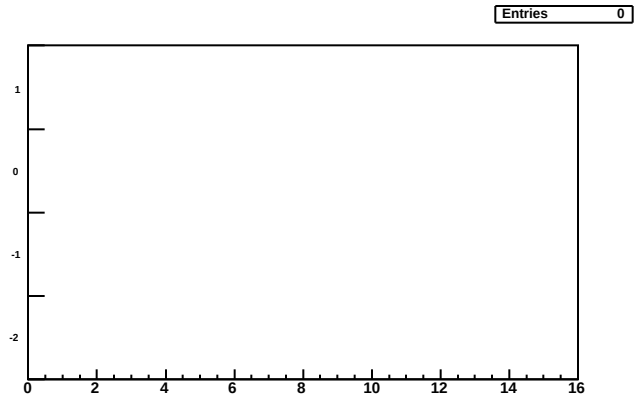


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)