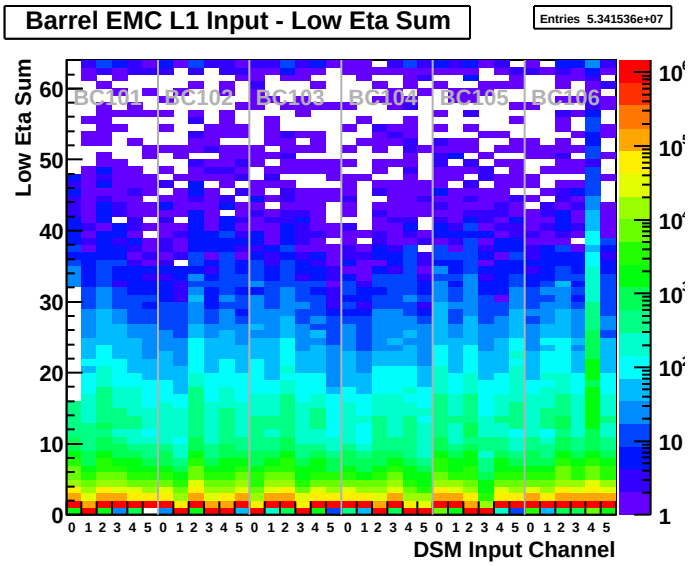
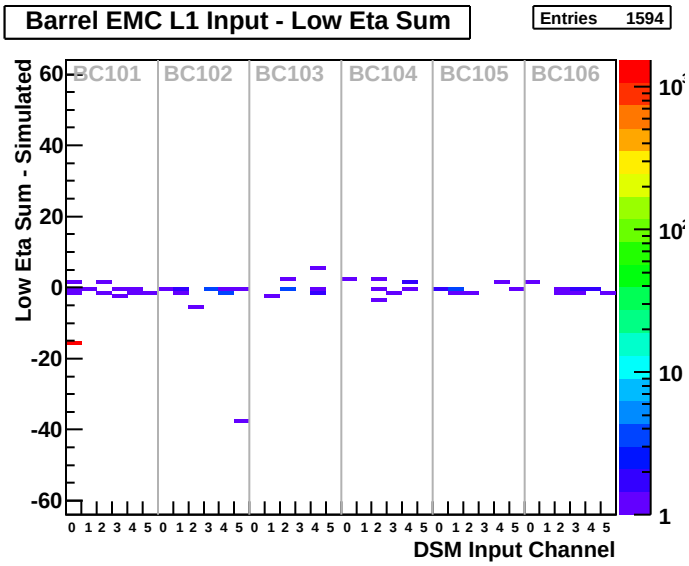
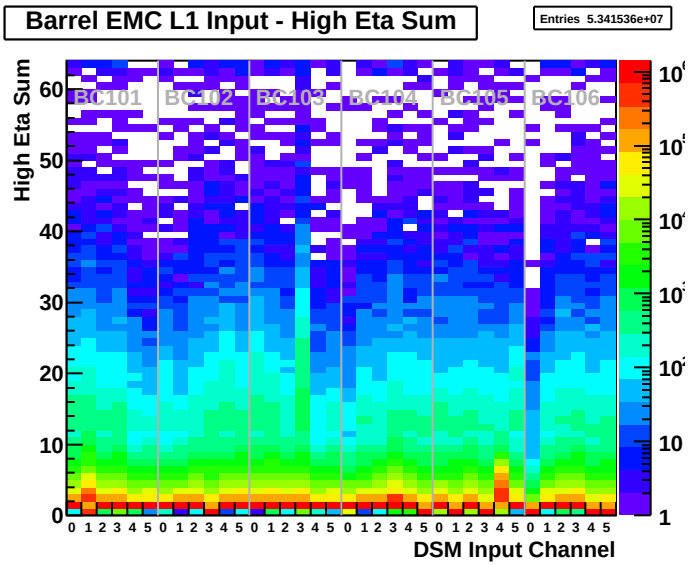
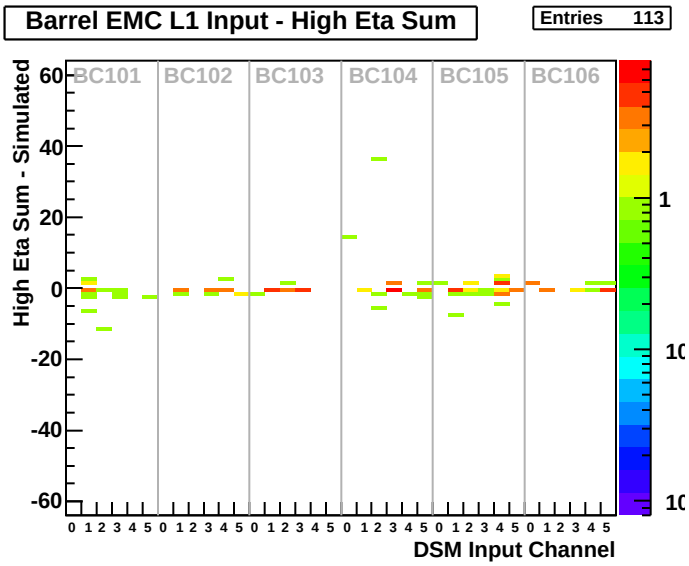
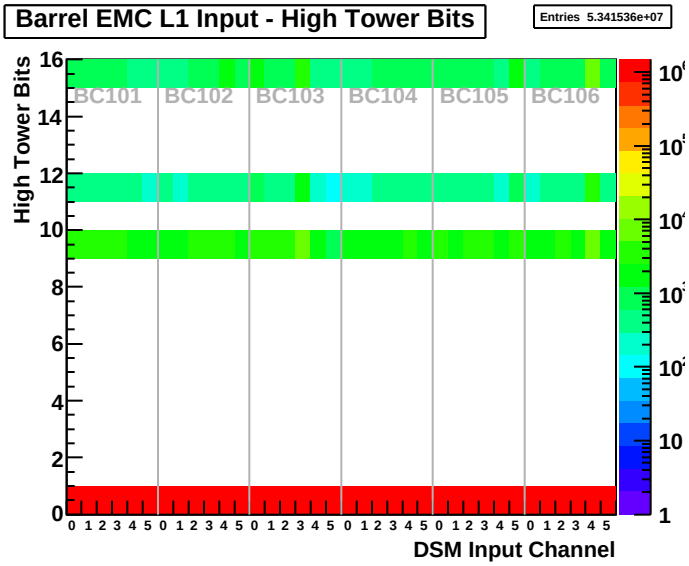
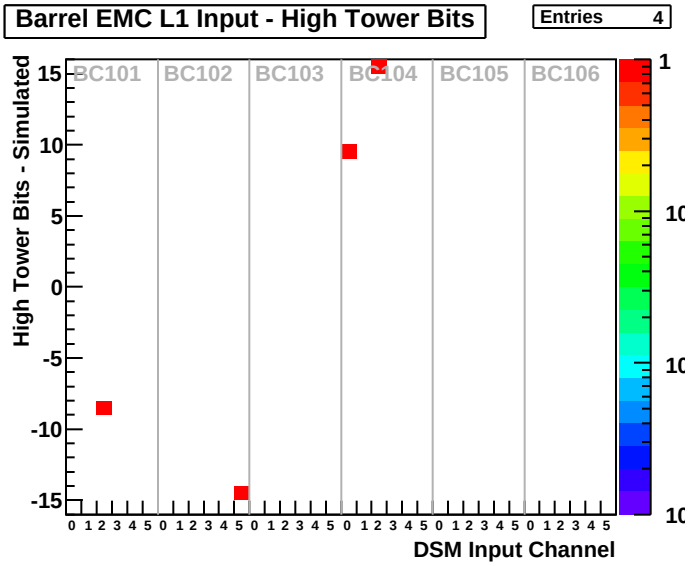

Barrel EMC L1 Input - Low Eta Sum
Entries 5.341536e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

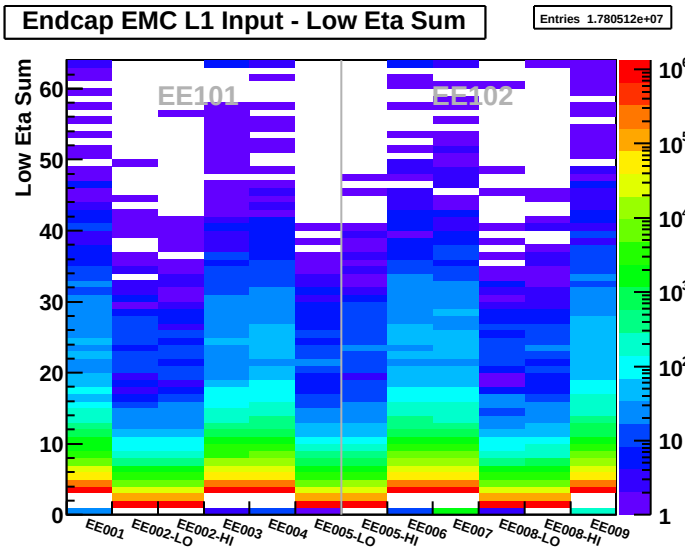

Barrel EMC L1 Input - Low Eta Sum
Entries 1594
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

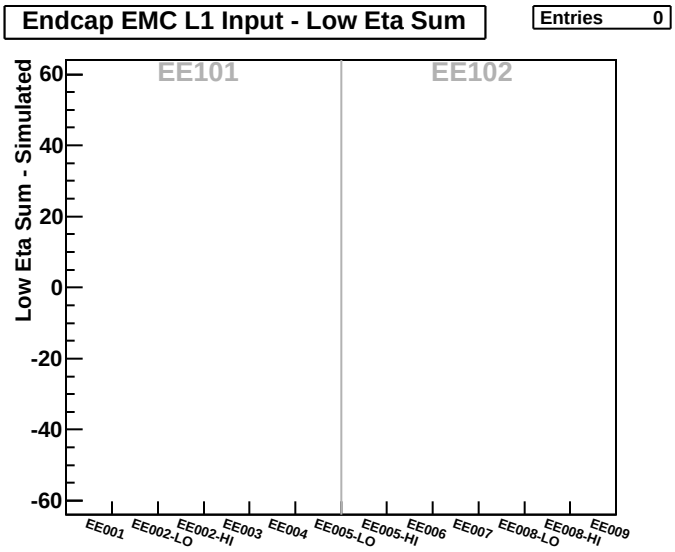

Barrel EMC L1 Input - High Eta Sum
Entries 5.341536e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

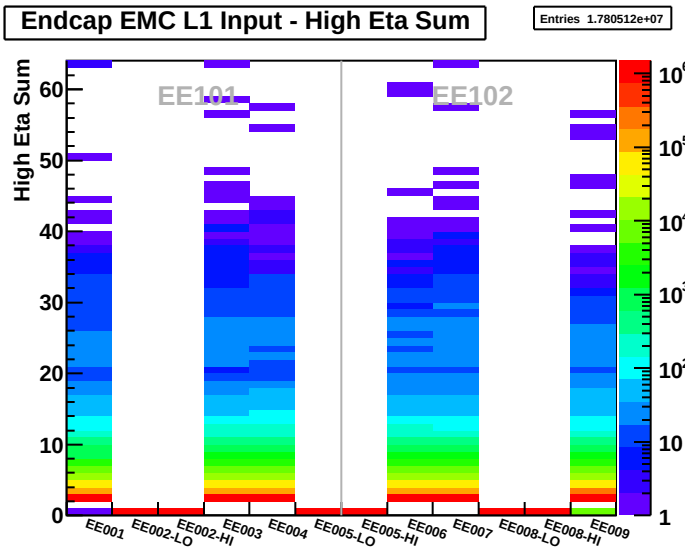

Barrel EMC L1 Input - High Eta Sum
Entries 113
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

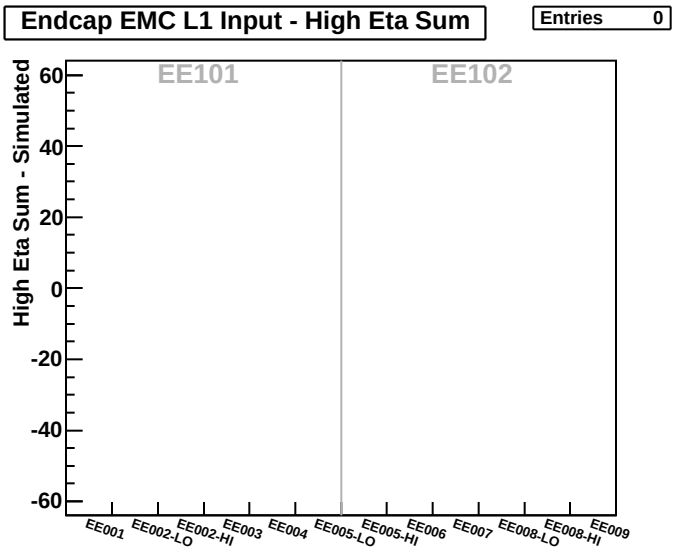

Barrel EMC L1 Input - High Tower Bits
Entries 5.341536e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

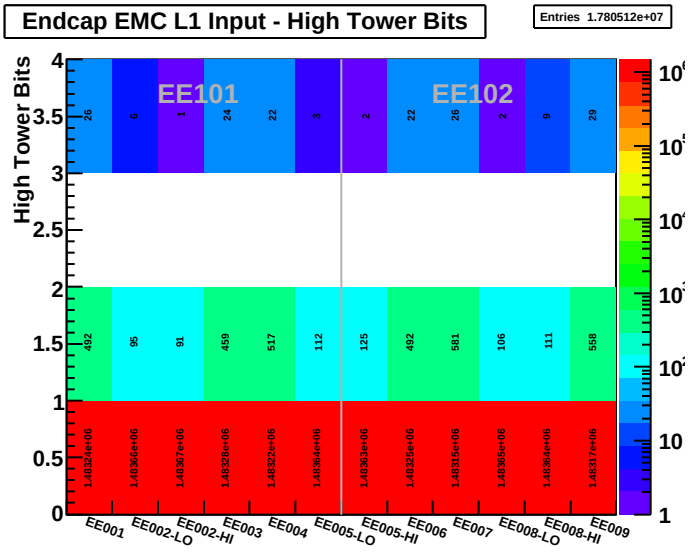

Barrel EMC L1 Input - High Tower Bits
Entries 4
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

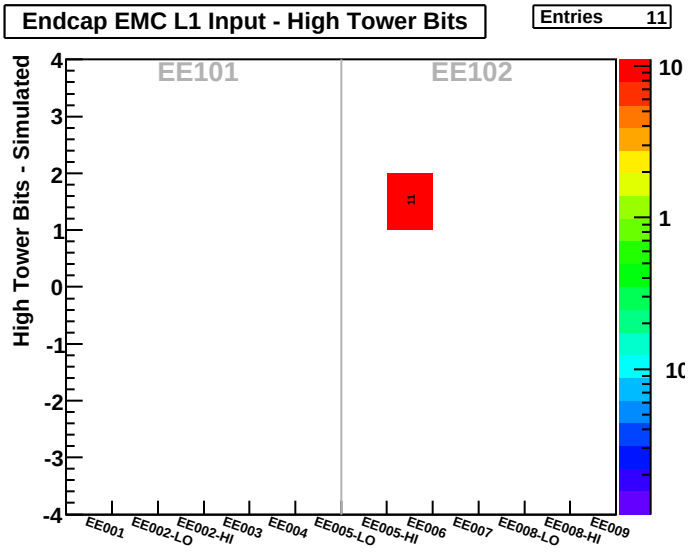

Endcap EMC L1 Input - Low Eta Sum
Entries 1.780512e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

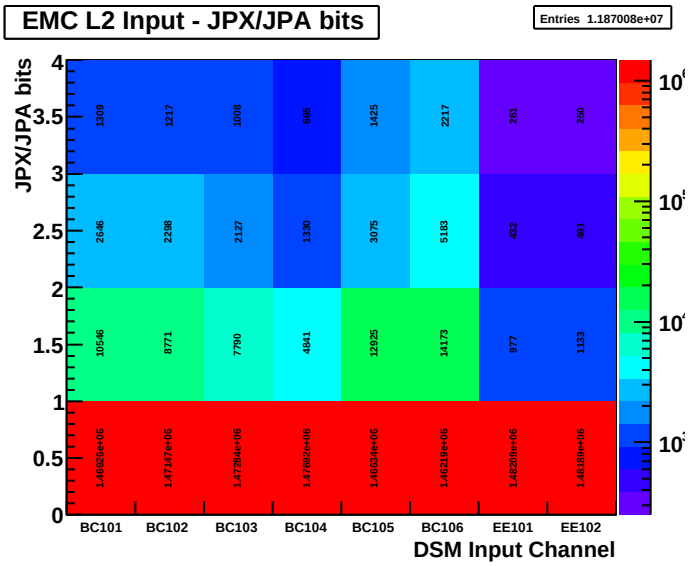

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

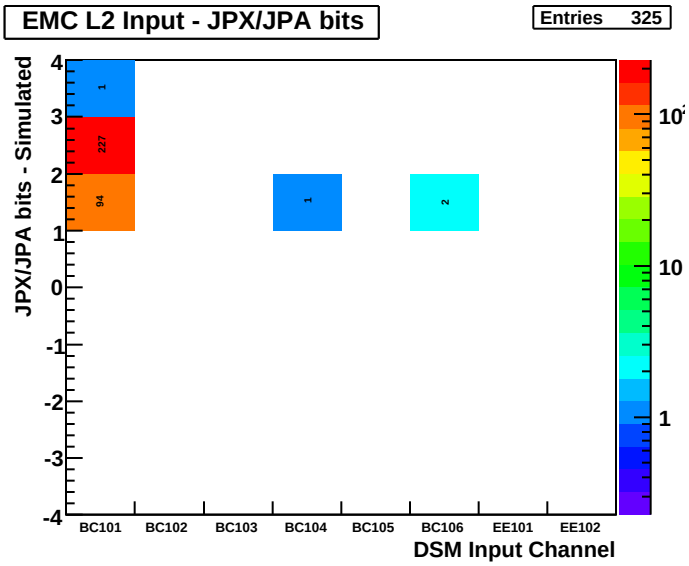

Endcap EMC L1 Input - High Eta Sum
Entries 1.780512e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

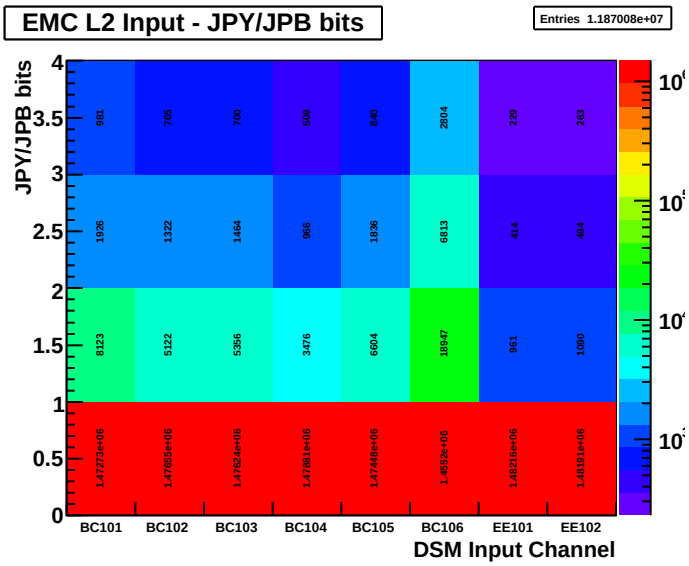

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

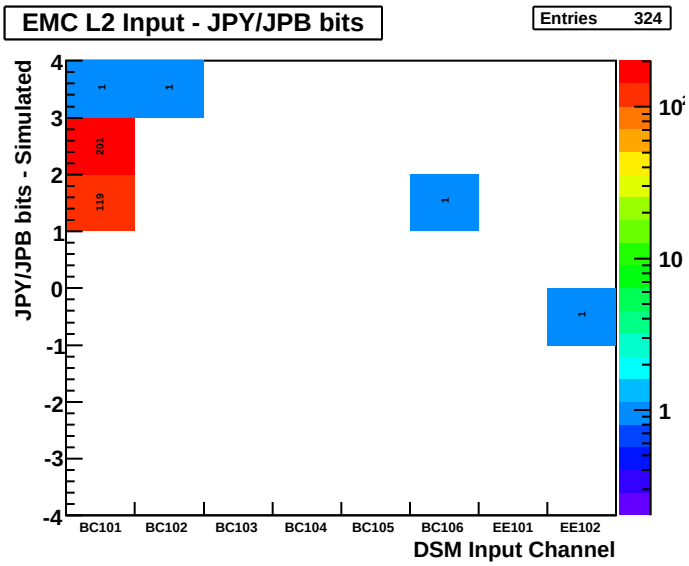

Endcap EMC L1 Input - High Tower Bits
Entries 1.780512e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

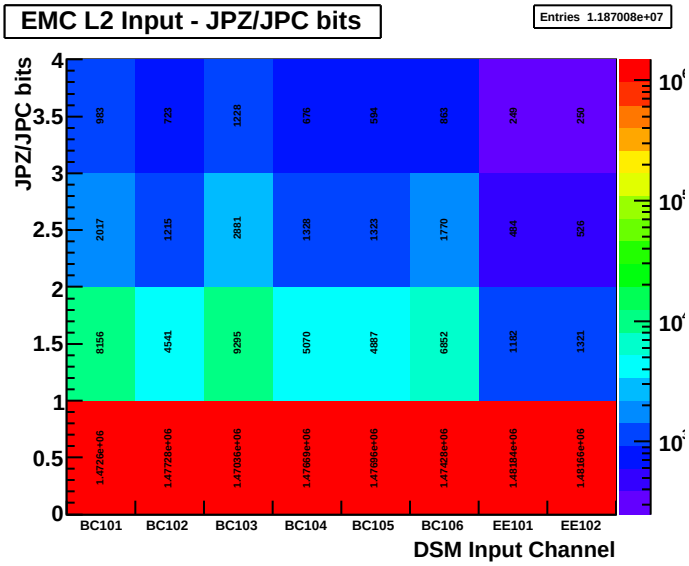

Endcap EMC L1 Input - High Tower Bits
Entries 11
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

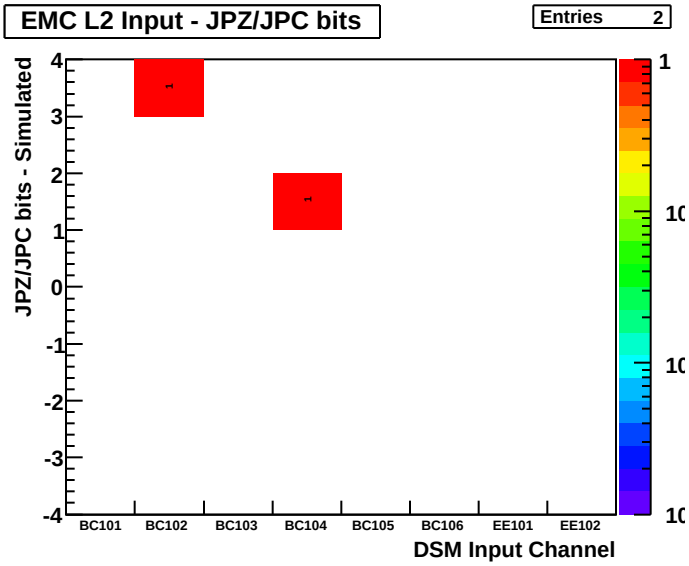

EMC L2 Input - JPX/JPA bits
Entries 1.187008e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1309 1217 1008 665 1425 2217 261 250
2646 2298 2127 1330 3075 5183 432 491
10546 8771 7790 4841 12925 14173 977 1133
1.46926e+06 1.47147e+06 1.47324e+06 1.47682e+06 1.46634e+06 1.46219e+06 1.48209e+06 1.48193e+06

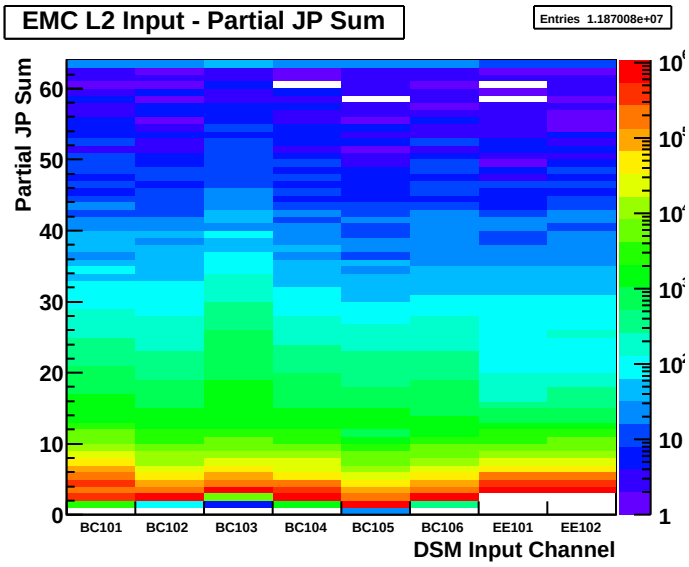

EMC L2 Input - JPX/JPA bits
Entries 325
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
227
94
1
2

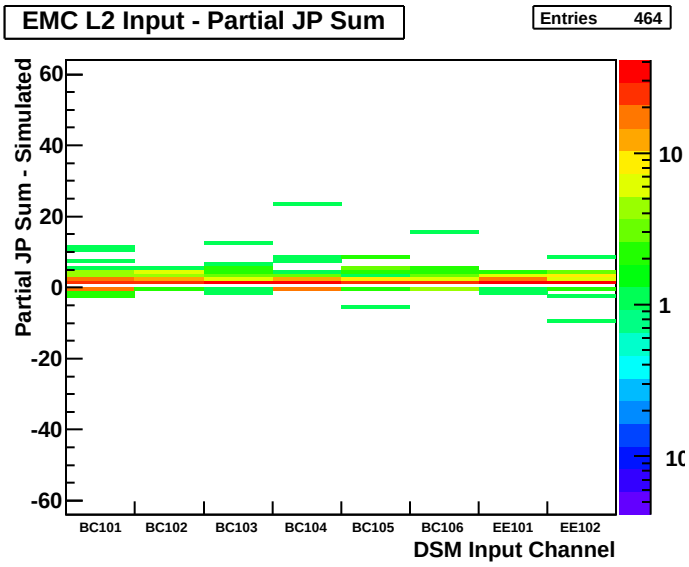

EMC L2 Input - JPY/JPB bits
Entries 1.187008e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
981 766 700 500 840 2804 229 263
1926 1322 1464 966 1836 6813 414 494
8123 5122 5356 3476 6604 18947 961 1030
1.47273e+06 1.47655e+06 1.47624e+06 1.47881e+06 1.47449e+06 1.46520e+06 1.48216e+06 1.48191e+06

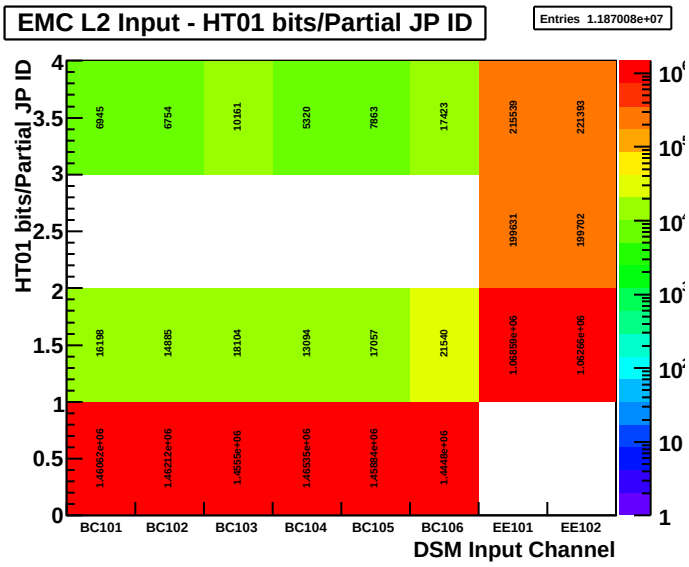

EMC L2 Input - JPY/JPB bits
Entries 324
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1
201
119
1
1

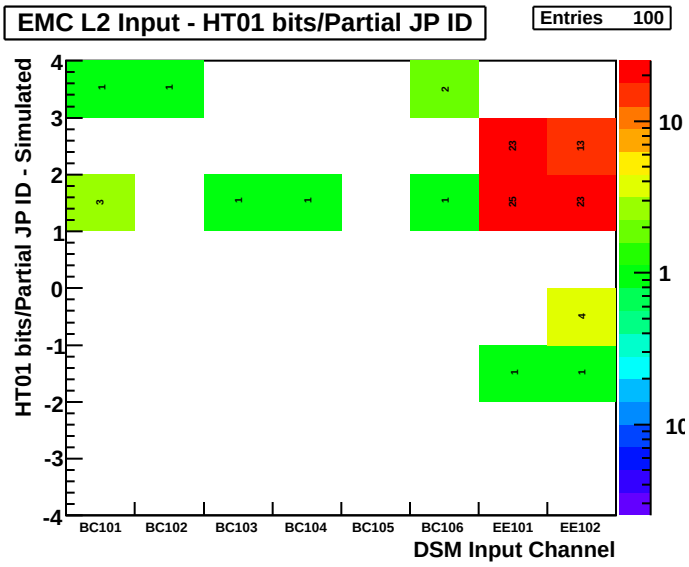

EMC L2 Input - JPZ/JPC bits
Entries 1.187008e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
983 723 1228 676 594 863 249 250
2017 1215 2081 1328 1323 1770 484 526
8156 4541 9295 5070 4987 6852 1182 1321
1.47266e+06 1.47728e+06 1.47036e+06 1.47669e+06 1.47596e+06 1.47428e+06 1.48184e+06 1.48166e+06

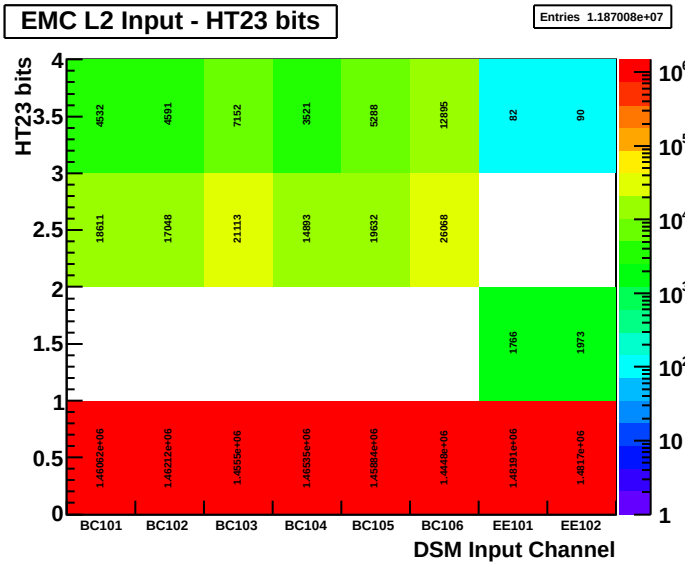

EMC L2 Input - JPZ/JPC bits
Entries 2
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1

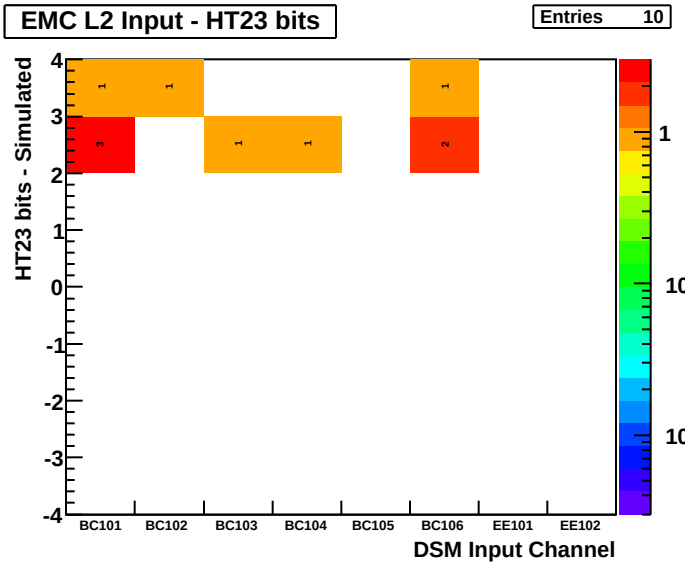

EMC L2 Input - Partial JP Sum
Entries 1.187008e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

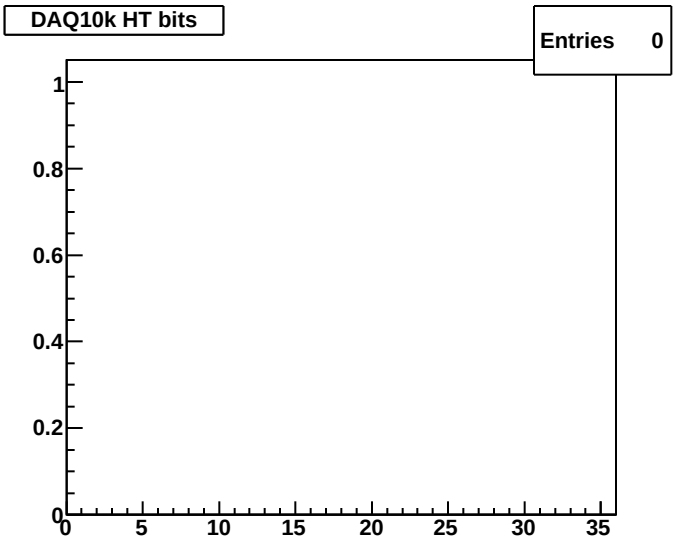

EMC L2 Input - Partial JP Sum
Entries 464
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

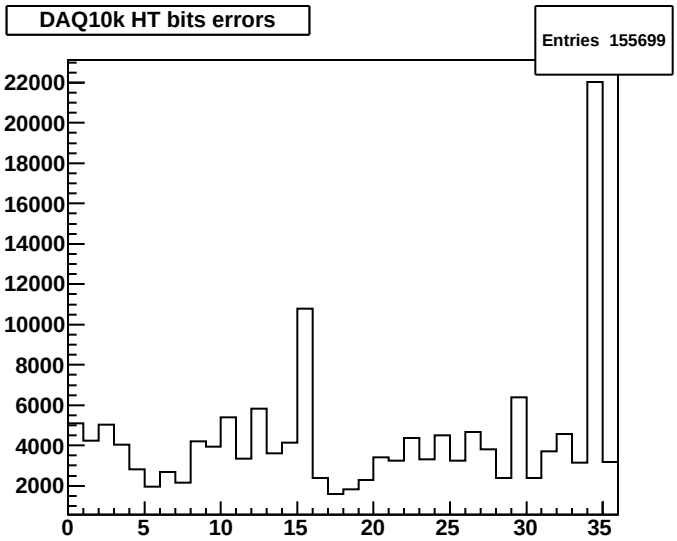

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.187008e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

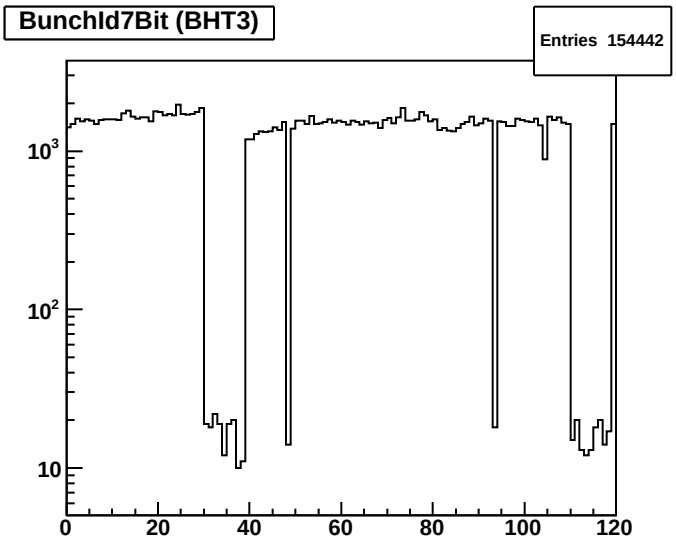

EMC L2 Input - HT01 bits/Partial JP ID
Entries 100
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

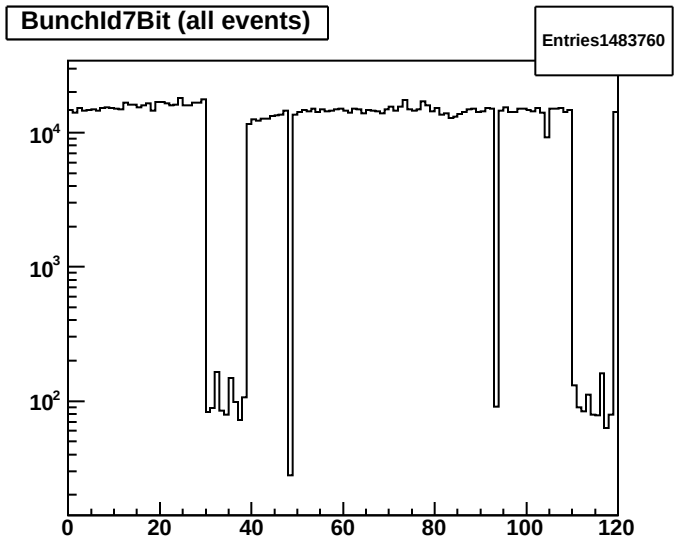

EMC L2 Input - HT23 bits
Entries 1.187008e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

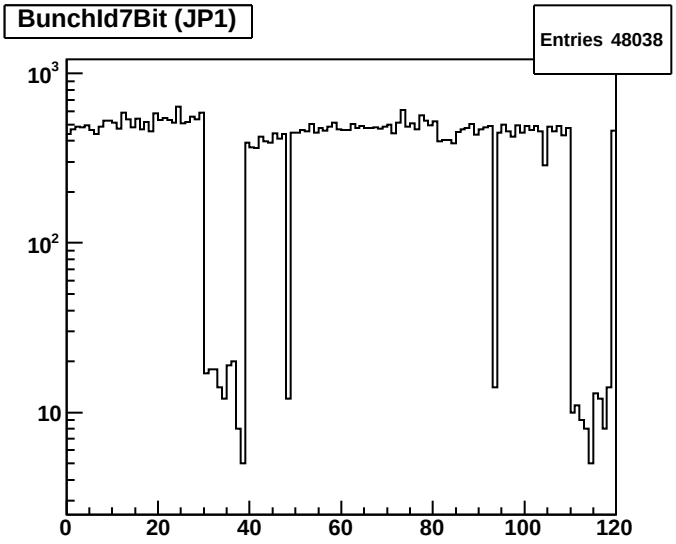

EMC L2 Input - HT23 bits
Entries 10
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

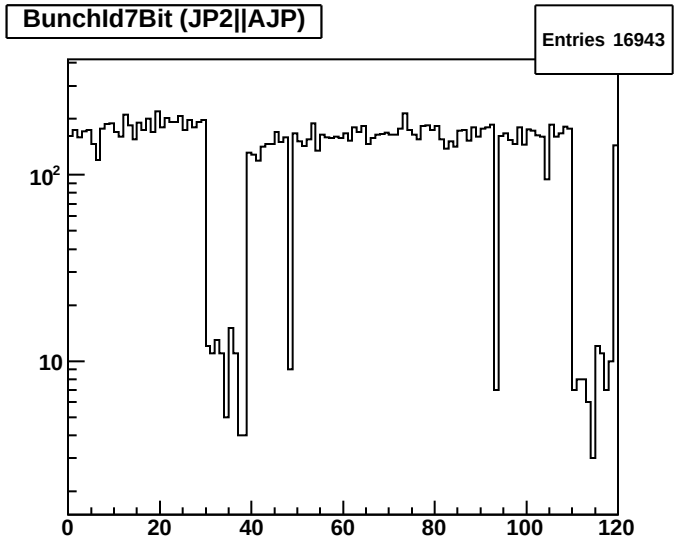

DAQ10k HT bits
Entries 0

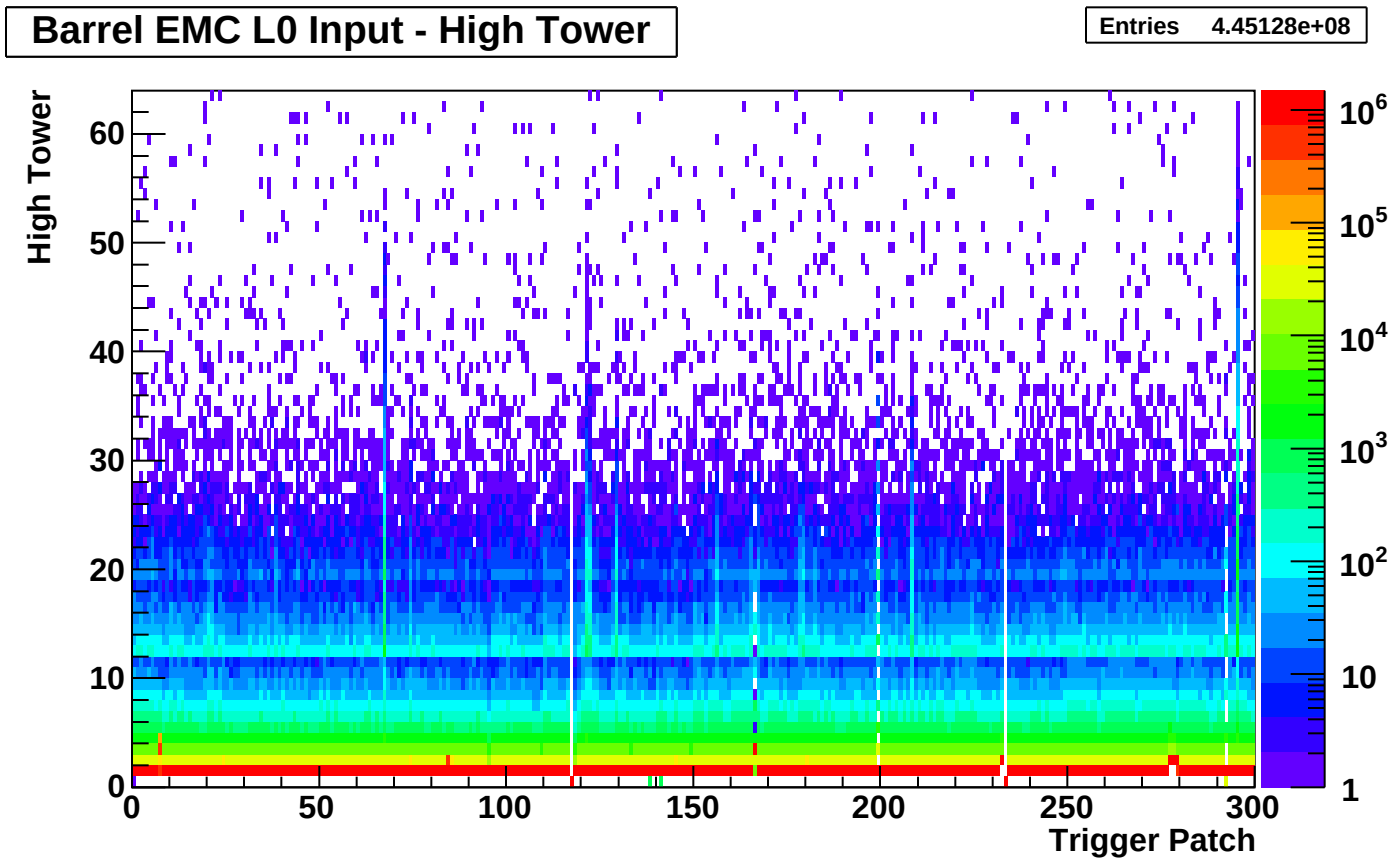

DAQ10k HT bits errors
Entries 155699

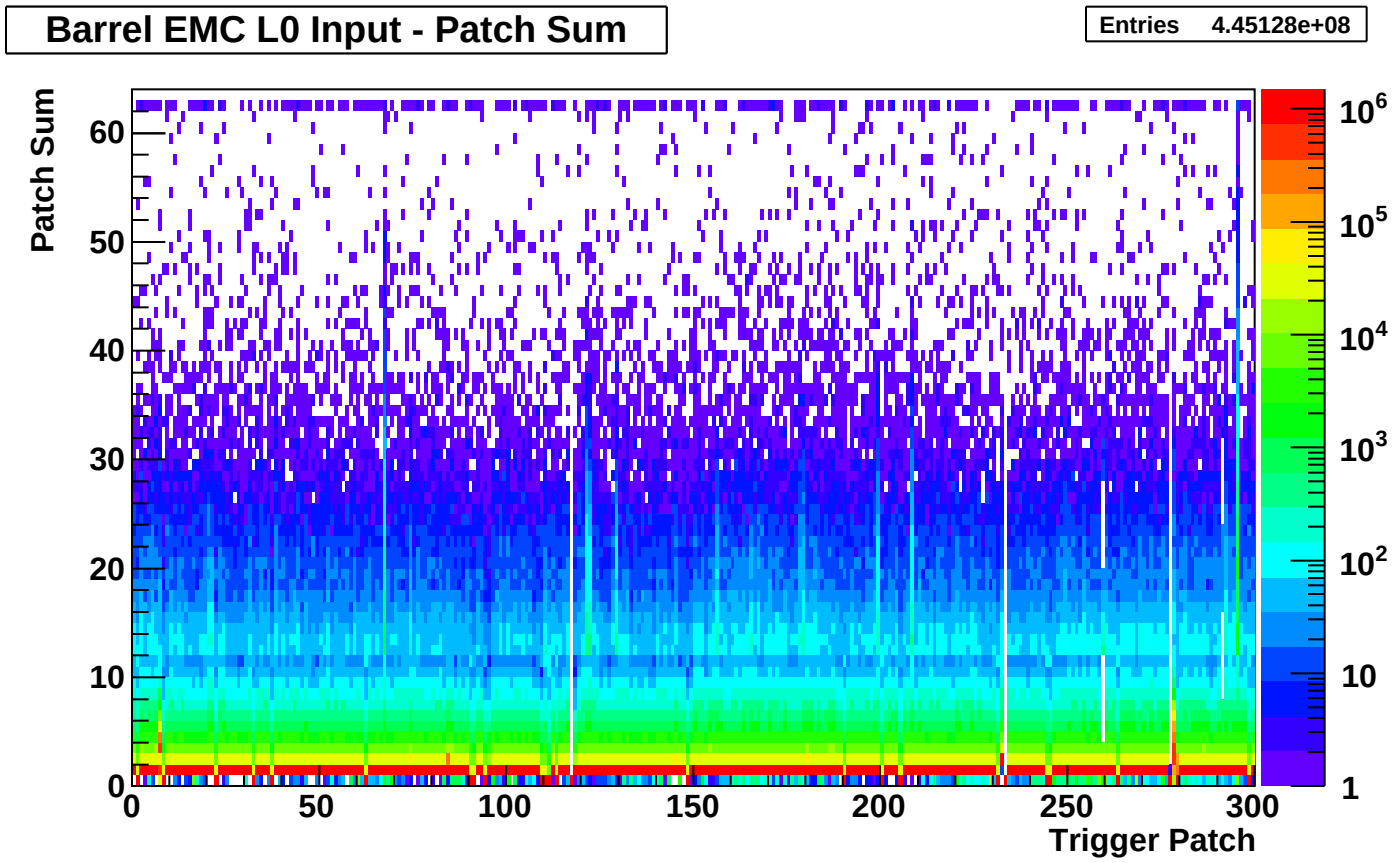

BunchId7Bit (BHT3)
Entries 154442

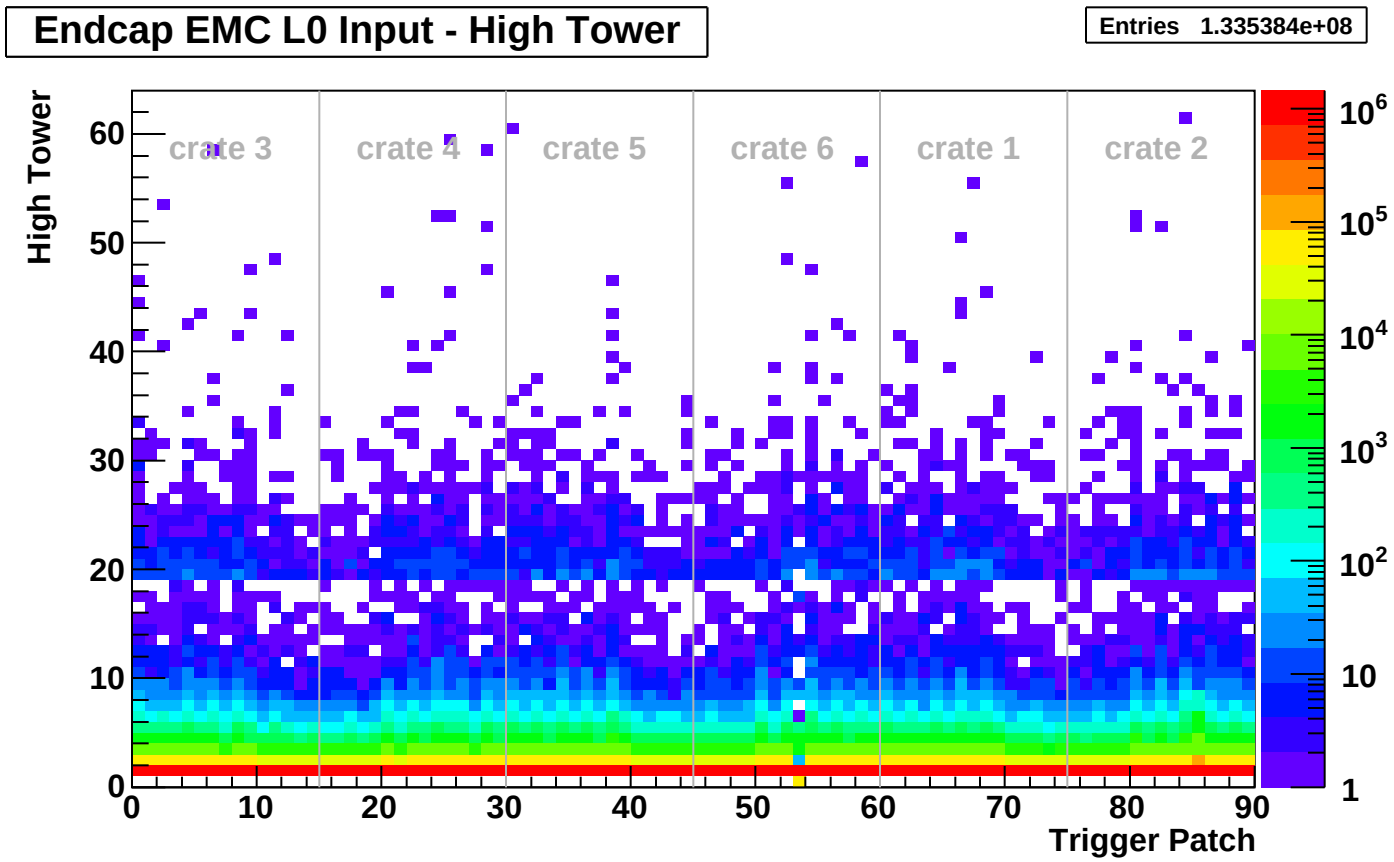

BunchId7Bit (all events)
Entries1483760

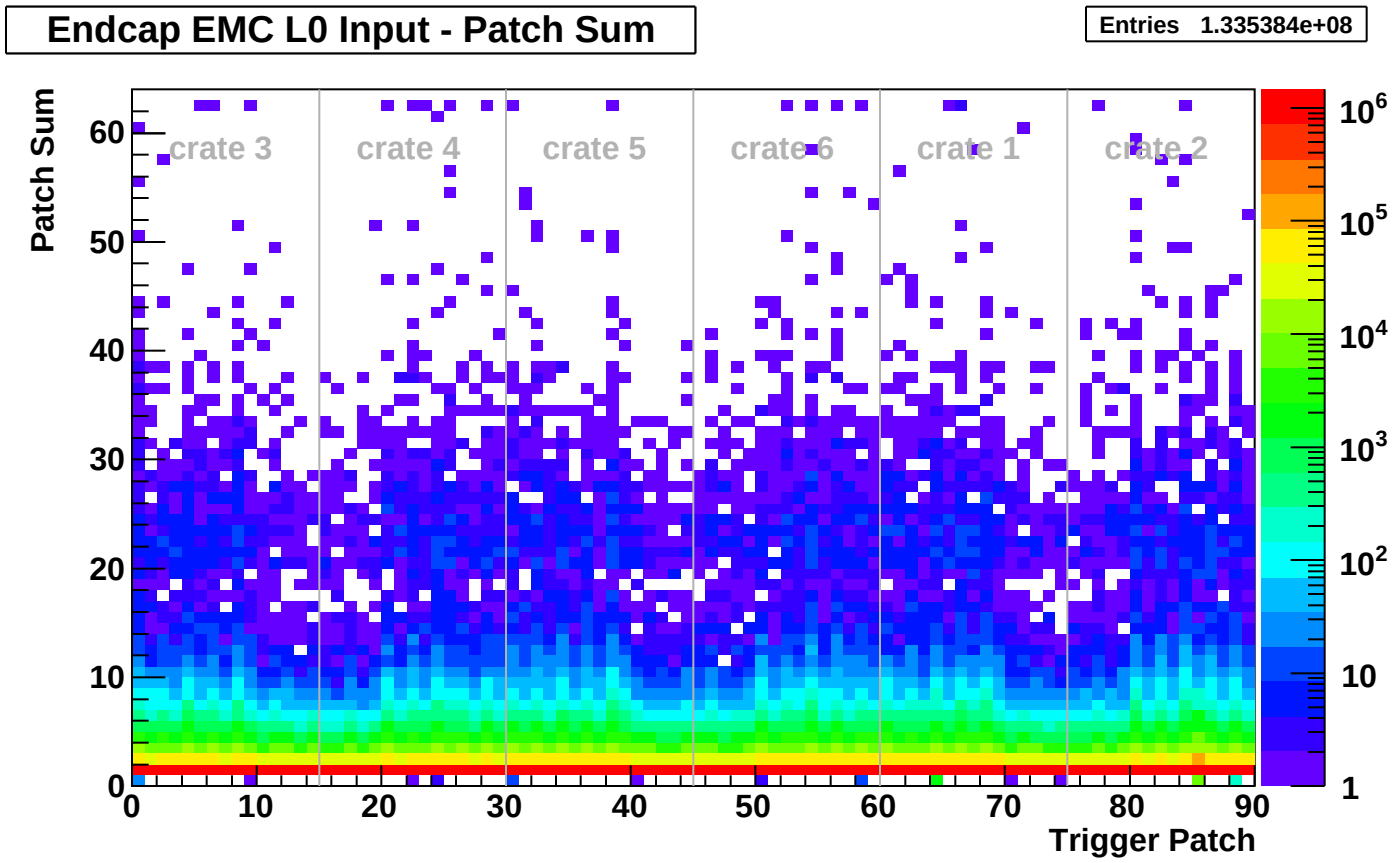

BunchId7Bit (JP1)
Entries 48038

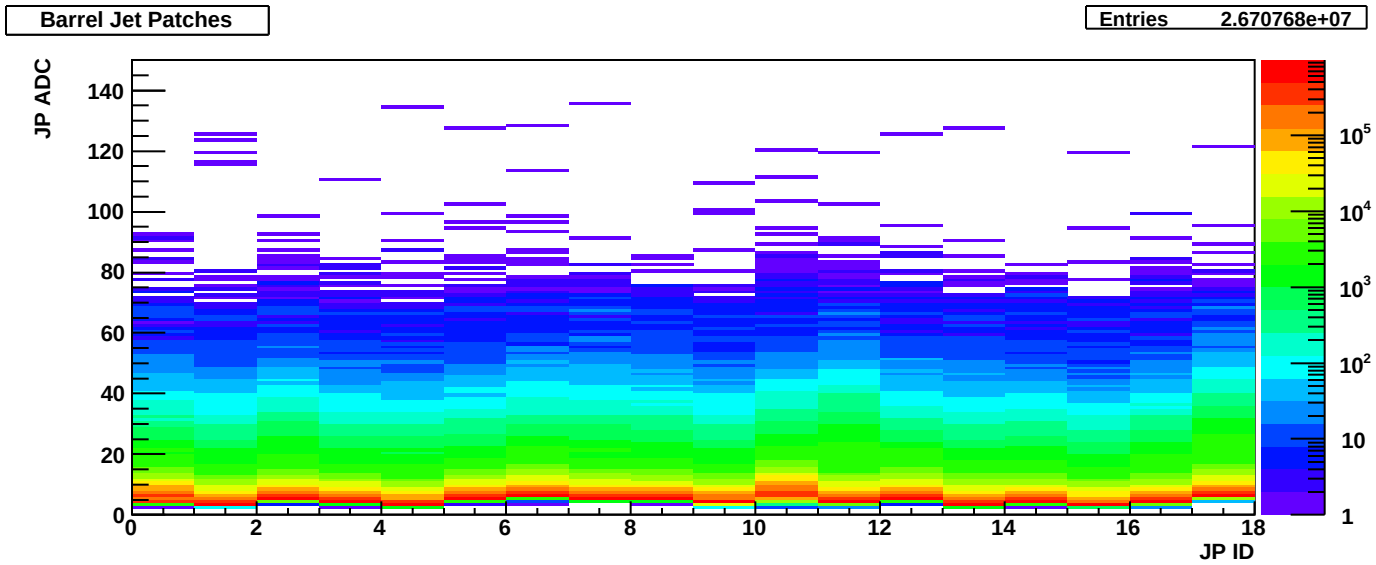

BunchId7Bit (JP2||AJP)
Entries 16943

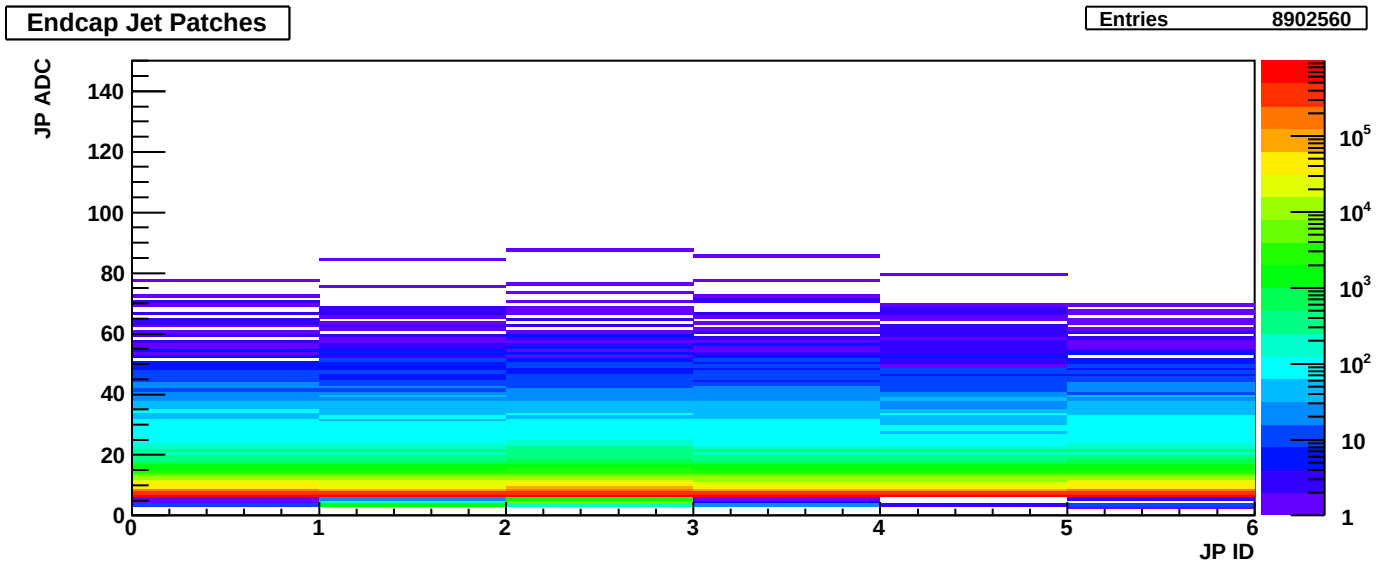

Barrel EMC L0 Input - High Tower
Entries 4.45128e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

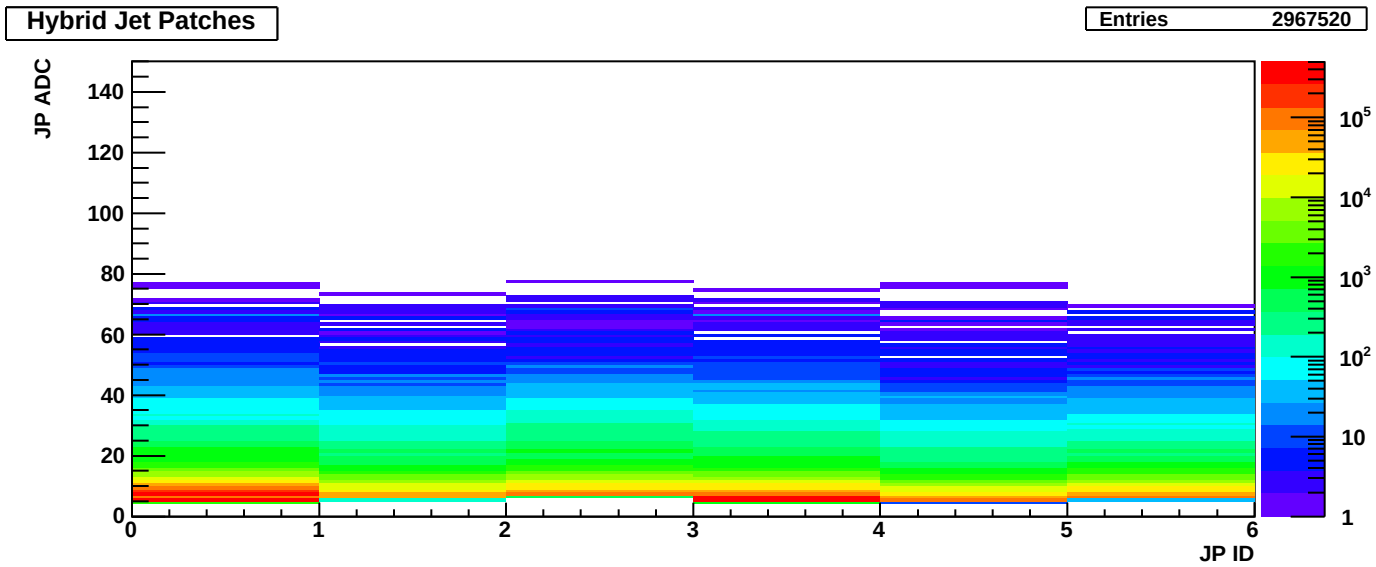

Barrel EMC L0 Input - Patch Sum
Entries 4.45128e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

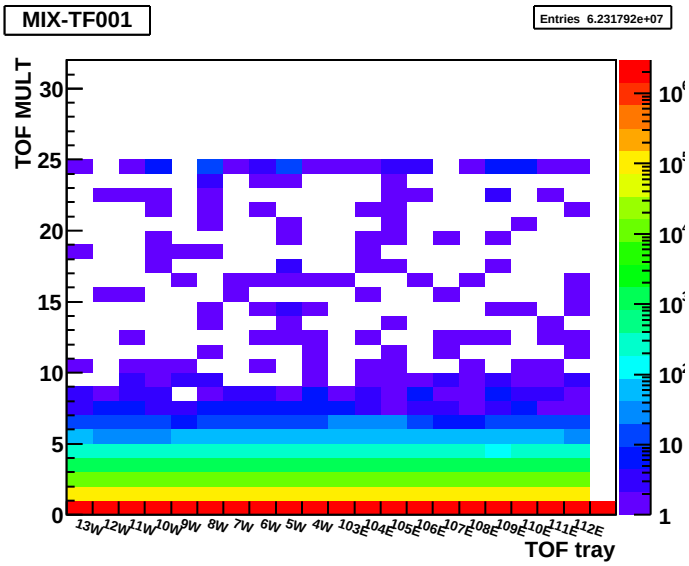

Endcap EMC L0 Input - High Tower
Entries 1.335384e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

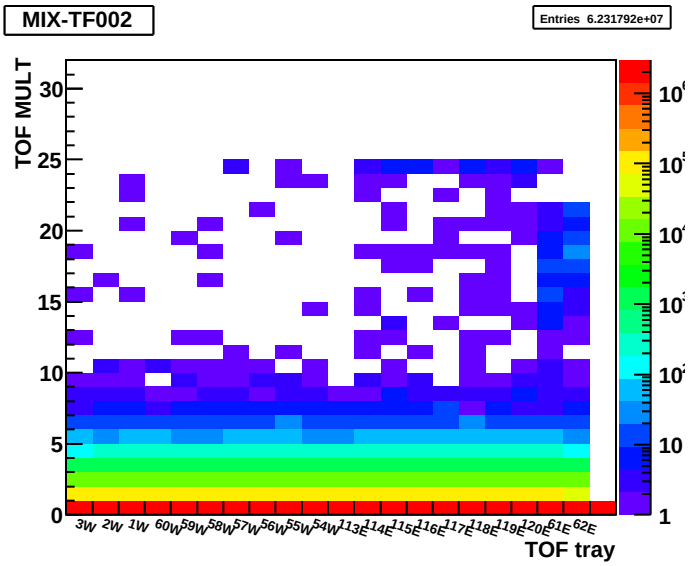

Endcap EMC L0 Input - Patch Sum
Entries 1.335384e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

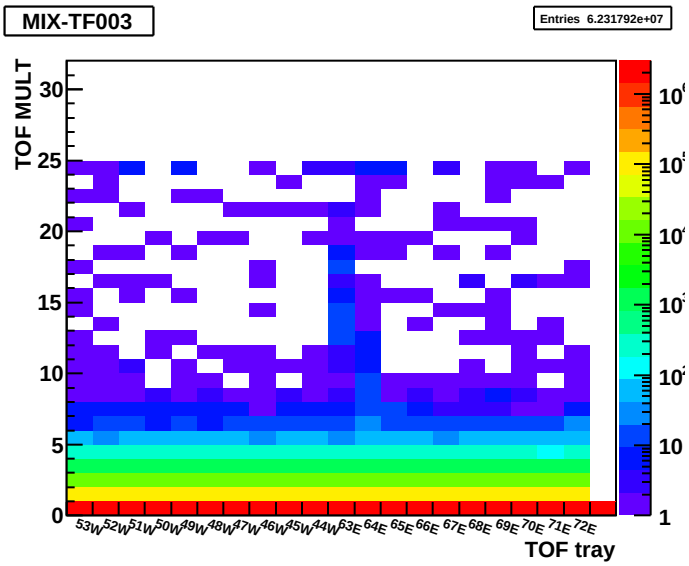

Barrel Jet Patches
Entries 2.670768e+07
JP ADC
JP ID

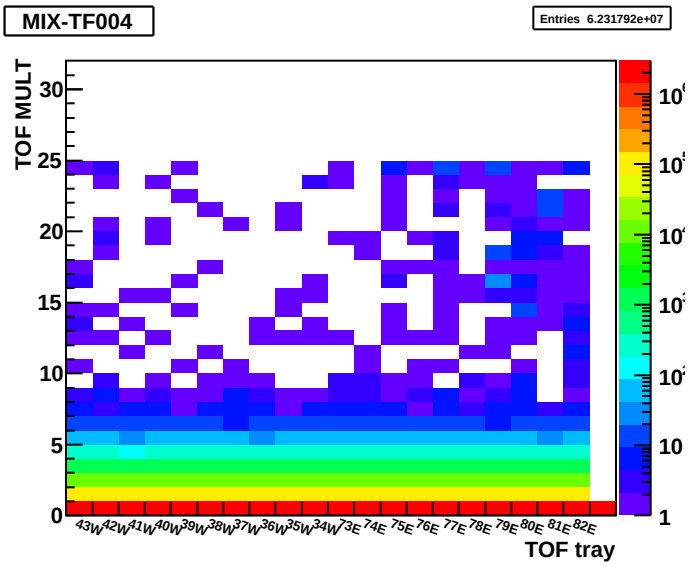

Endcap Jet Patches
Entries 8902560
JP ADC
JP ID

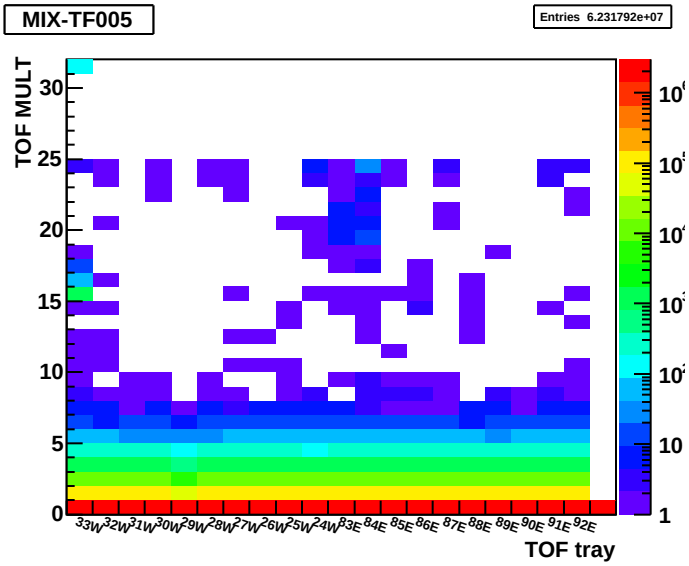

Hybrid Jet Patches
Entries 2967520
JP ADC
JP ID

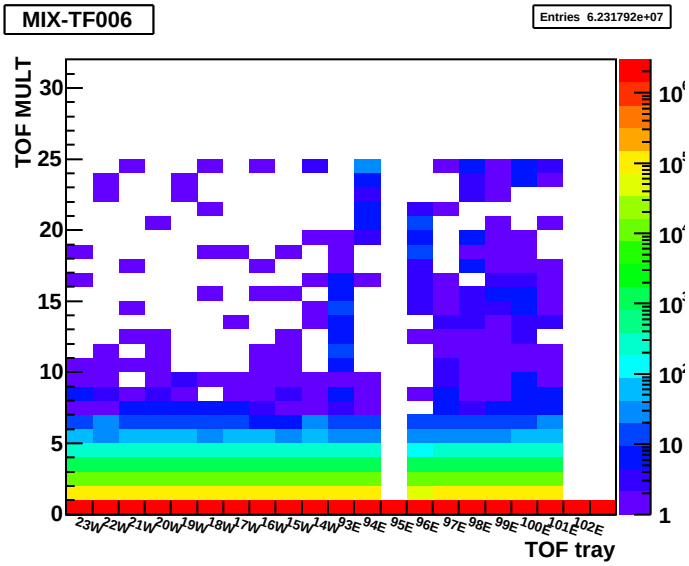

MIX-TF001
Entries 6.231792e+07
TOF MULT
TOF tray

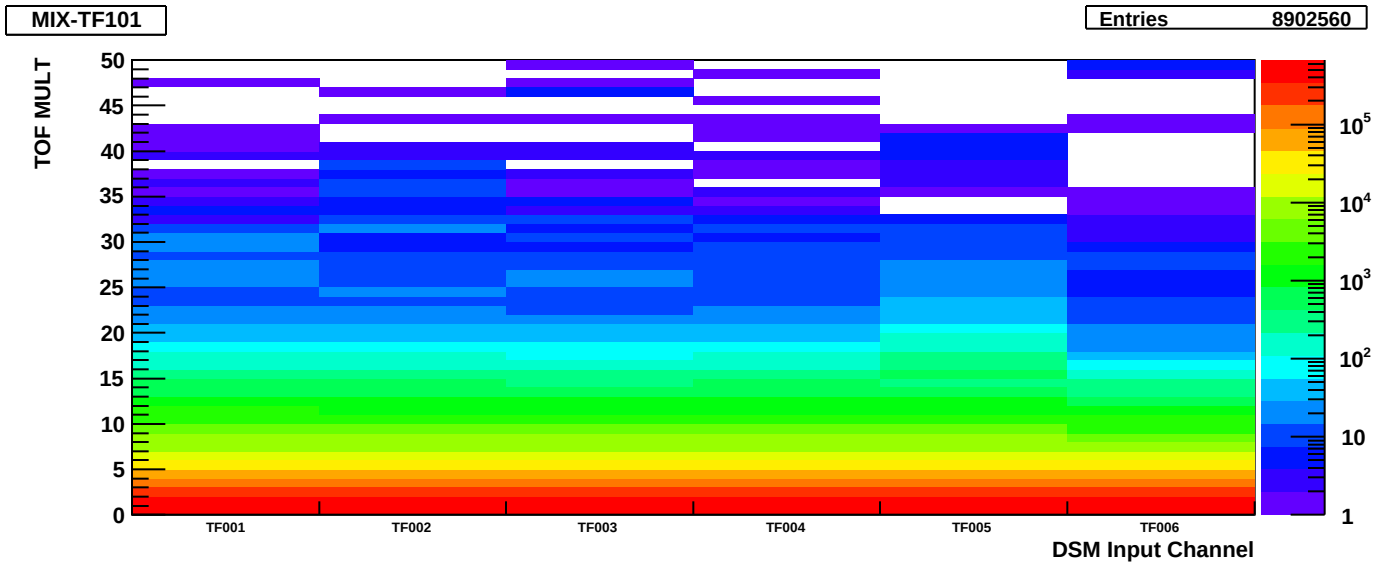

MIX-TF002
Entries 6.231792e+07
TOF MULT
TOF tray

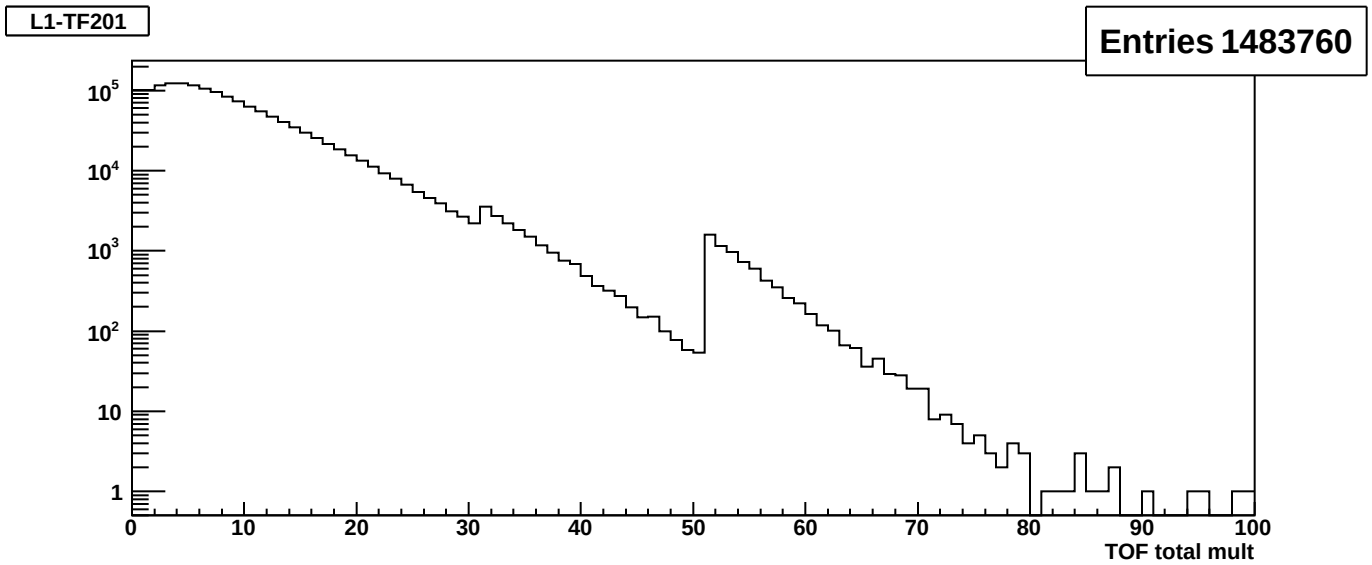

MIX-TF003
Entries 6.231792e+07
TOF MULT
TOF tray

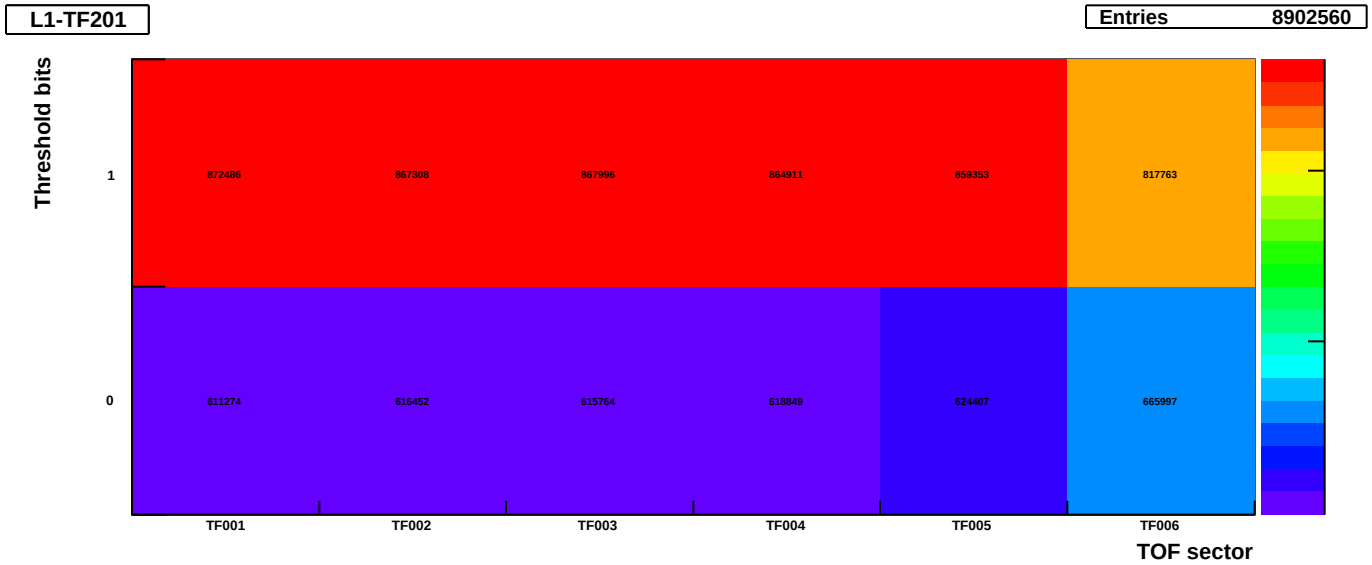

MIX-TF004
Entries 6.231792e+07
TOF MULT
TOF tray

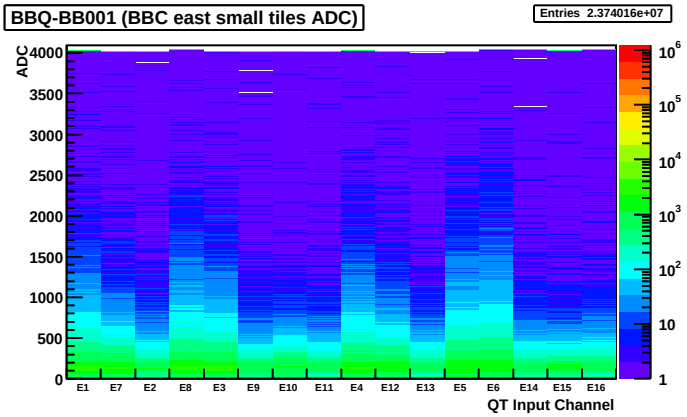

MIX-TF005
Entries 6.231792e+07
TOF MULT
TOF tray

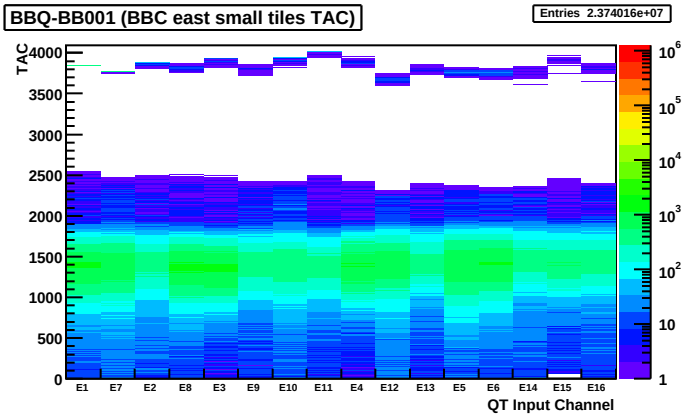

MIX-TF006
Entries 6.231792e+07
TOF MULT
TOF tray

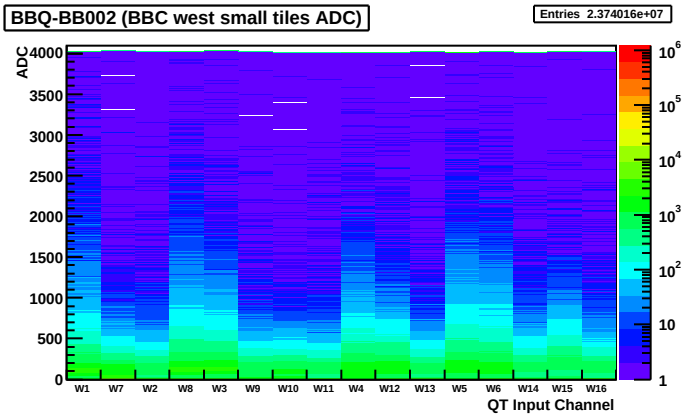

MIX-TF101
Entries 8902560
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

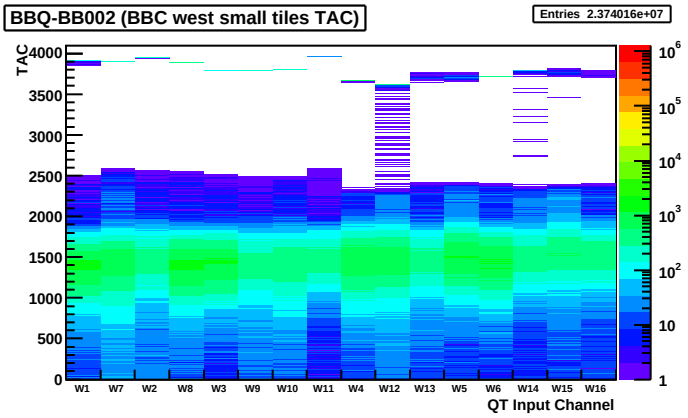

L1-TF201
Entries 1483760
TOF total mult

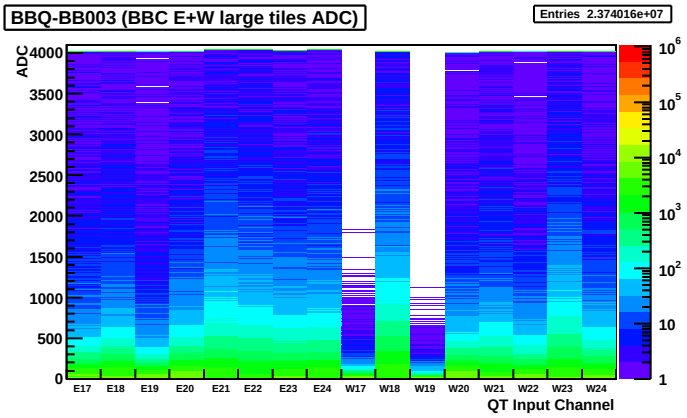

L1-TF201
Entries 8902560
Threshold bits
872486
867308
867996
864911
859353
817763
611274
616452
615764
618849
624407
665997
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

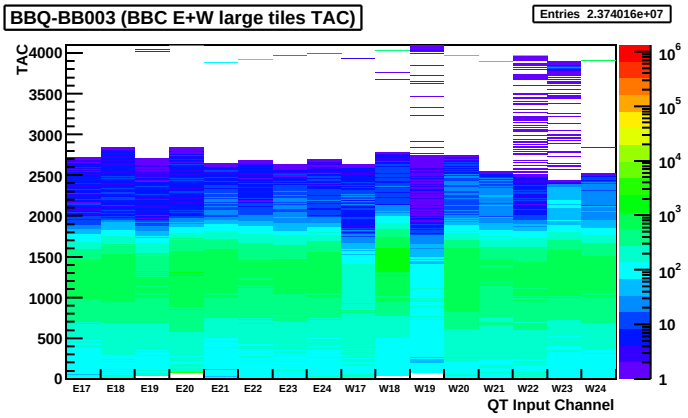

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.374016e+07
ADC
QT Input Channel

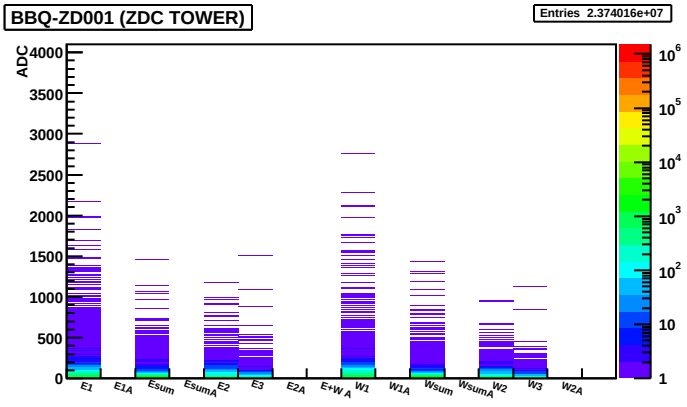

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.374016e+07
TAC
QT Input Channel

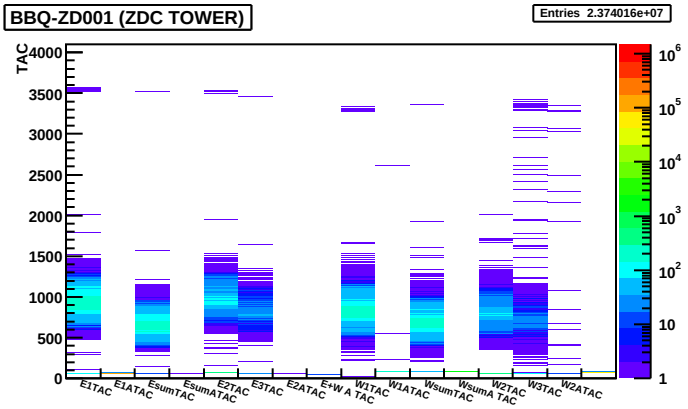

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.374016e+07
ADC
QT Input Channel

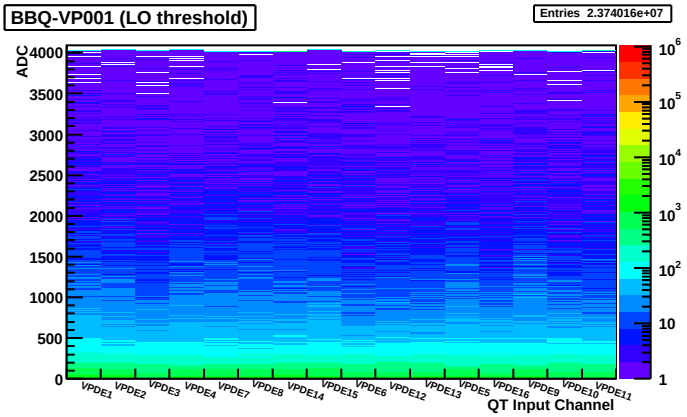

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.374016e+07
TAC
QT Input Channel

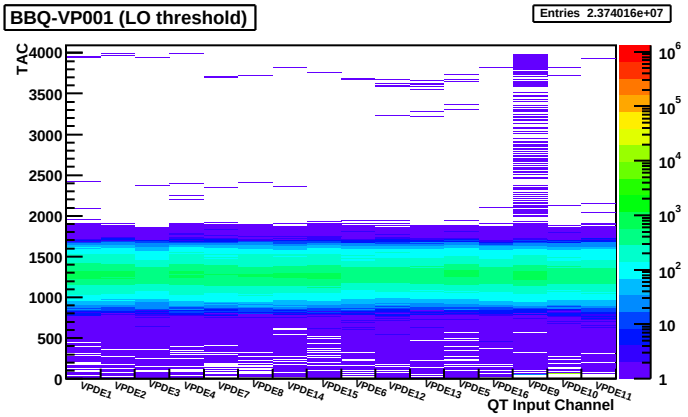

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.374016e+07
ADC
QT Input Channel

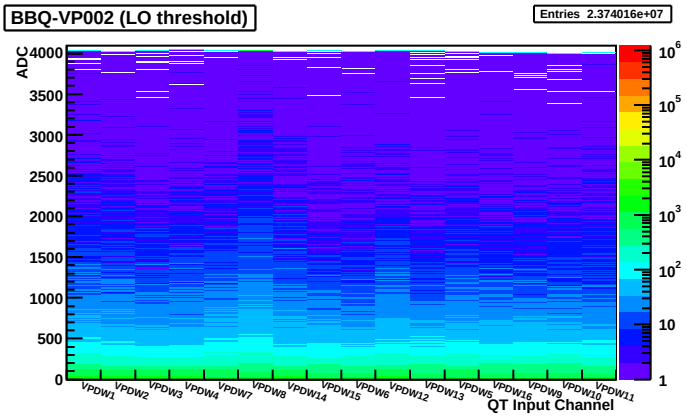

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.374016e+07
TAC
QT Input Channel

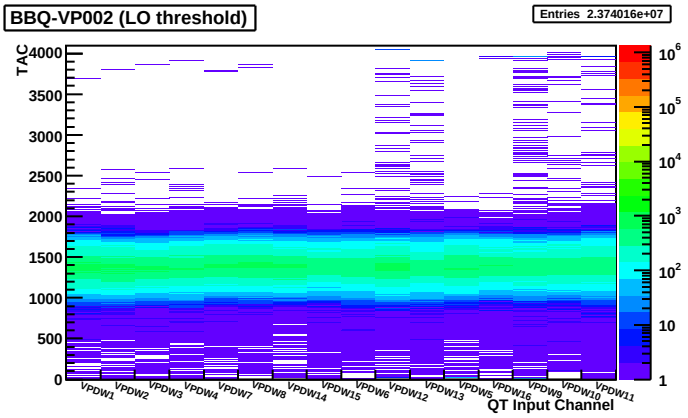

BBQ-ZD001 (ZDC TOWER)
Entries 2.374016e+07
ADC

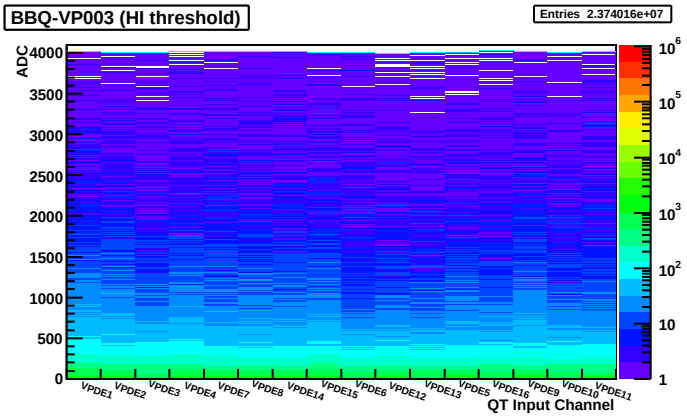

BBQ-ZD001 (ZDC TOWER)
Entries 2.374016e+07
TAC

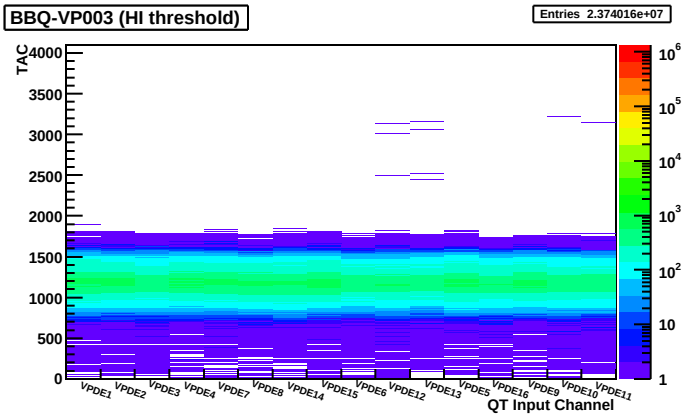

BBQ-VP001 (LO threshold)
Entries 2.374016e+07
ADC
QT Input Channel

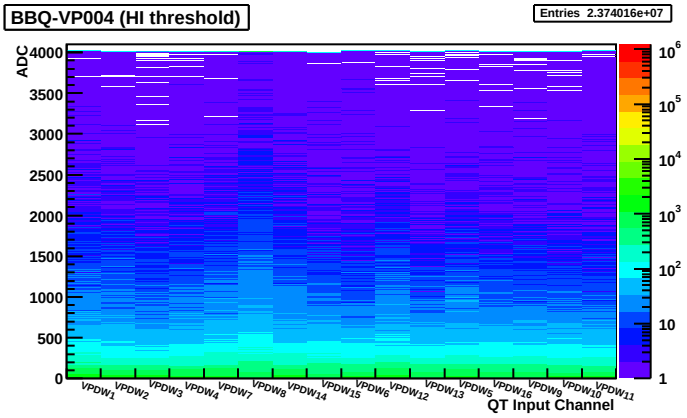

BBQ-VP001 (LO threshold)
Entries 2.374016e+07
TAC
QT Input Channel

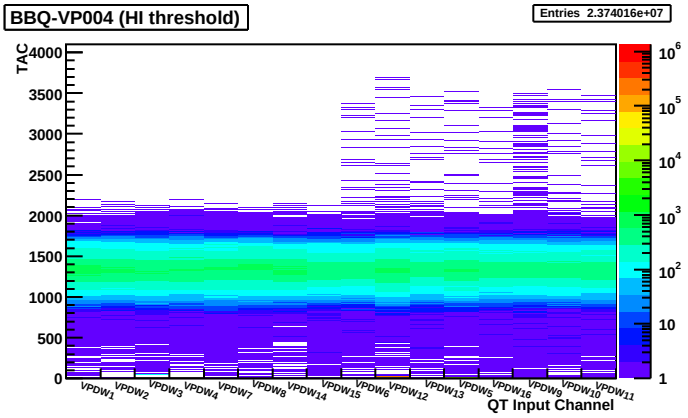

BBQ-VP002 (LO threshold)
Entries 2.374016e+07
ADC
QT Input Channel

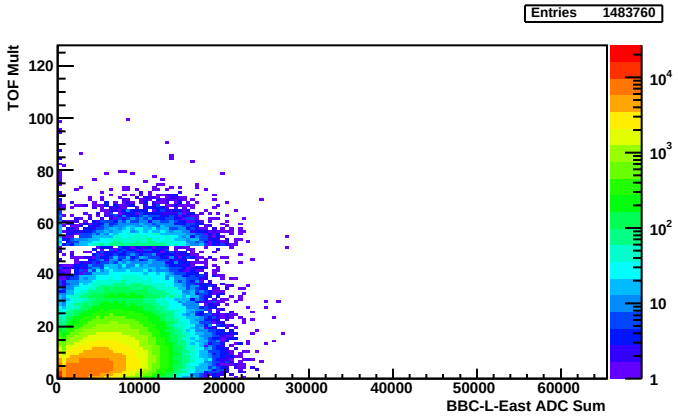

BBQ-VP002 (LO threshold)
Entries 2.374016e+07
TAC
QT Input Channel

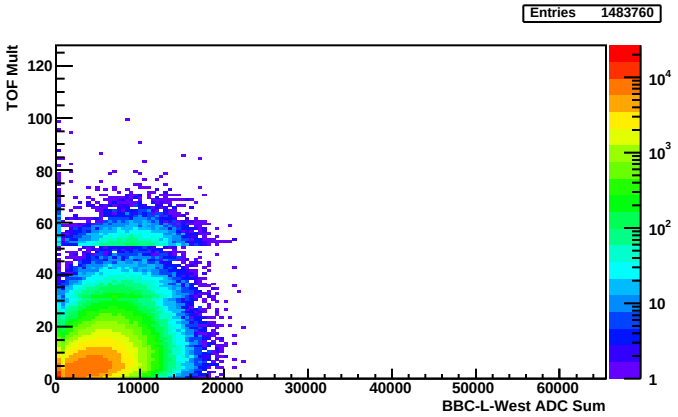

BBQ-VP003 (HI threshold)
Entries 2.374016e+07
ADC
QT Input Channel

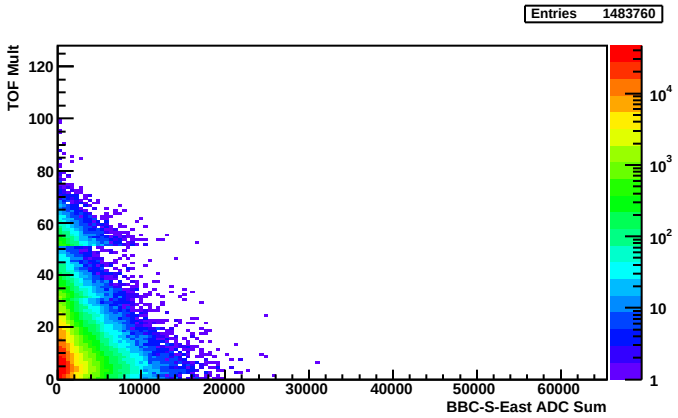

BBQ-VP003 (HI threshold)
Entries 2.374016e+07
TAC
QT Input Channel

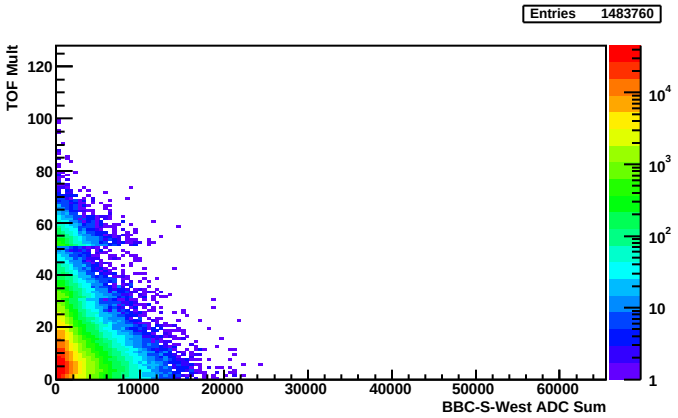

BBQ-VP004 (HI threshold)
Entries 2.374016e+07
ADC
QT Input Channel

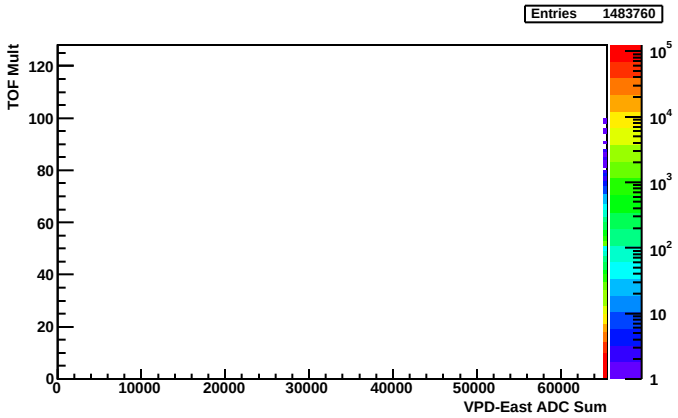

BBQ-VP004 (HI threshold)
Entries 2.374016e+07
TAC
QT Input Channel

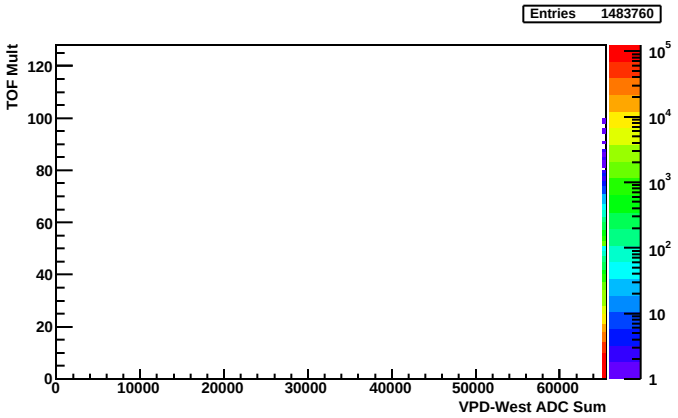

Entries 1483760
TOF Mult
BBC-L-East ADC Sum

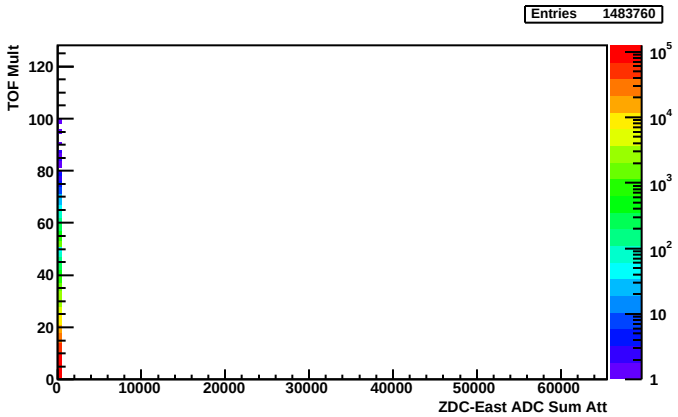

Entries 1483760
TOF Mult
BBC-L-West ADC Sum

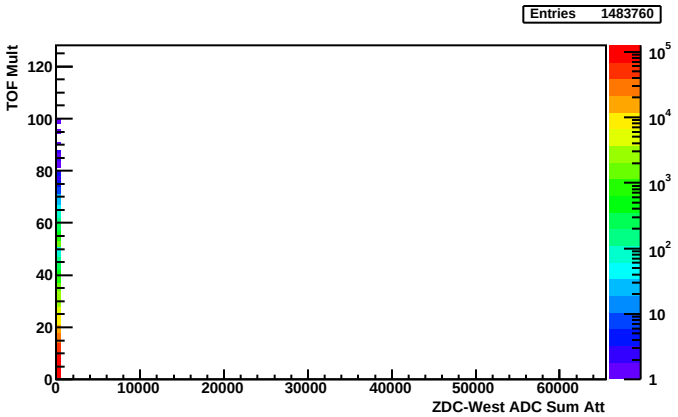

Entries 1483760
TOF Mult
BBC-S-East ADC Sum

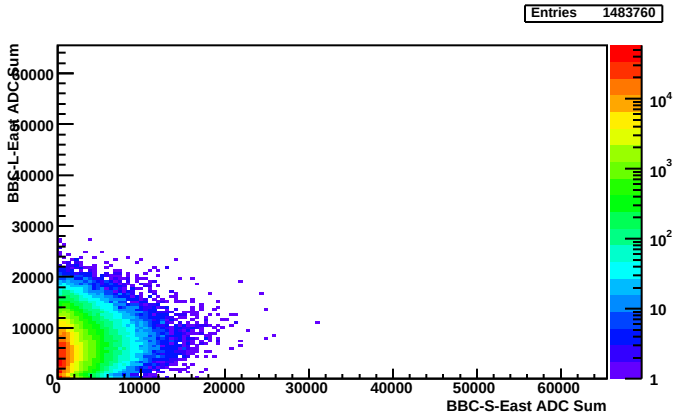

Entries 1483760
TOF Mult
BBC-S-West ADC Sum

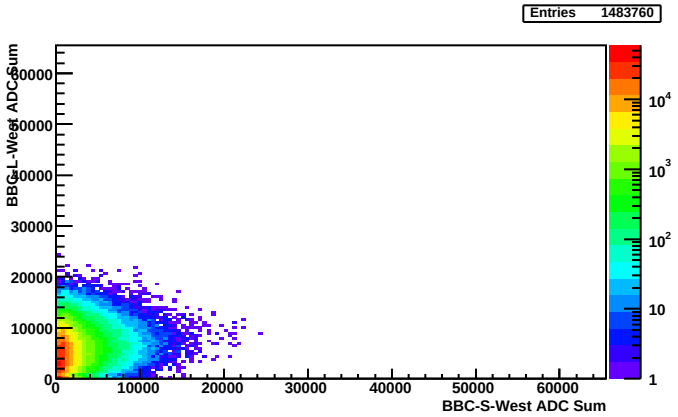

Entries 1483760
TOF Mult
VPD-East ADC Sum

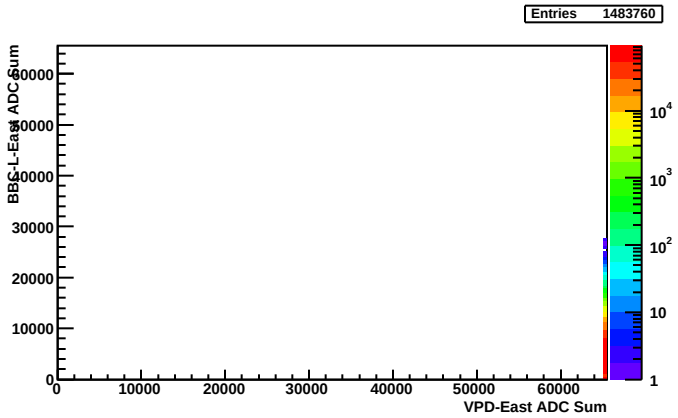

Entries 1483760
TOF Mult
VPD-West ADC Sum

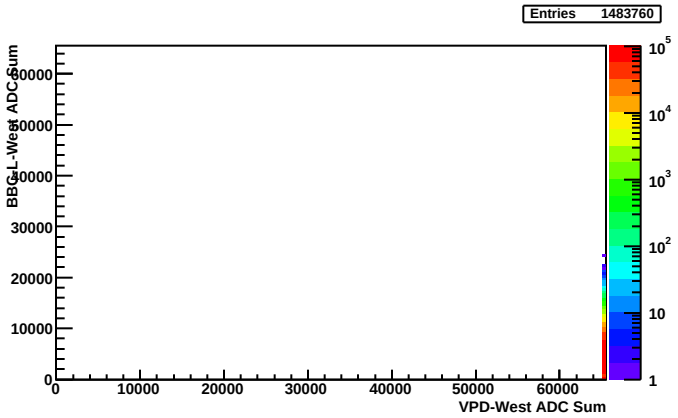

Entries 1483760
TOF Mult
ZDC-East ADC Sum Att

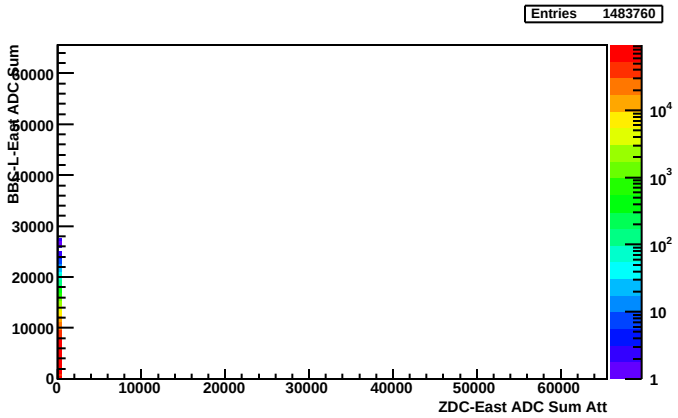

Entries 1483760
TOF Mult
ZDC-West ADC Sum Att

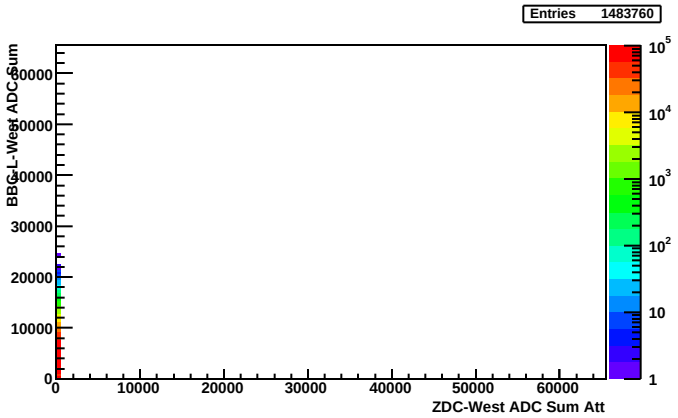

Entries 1483760
BBC-L-East ADC Sum
BBC-S-East ADC Sum

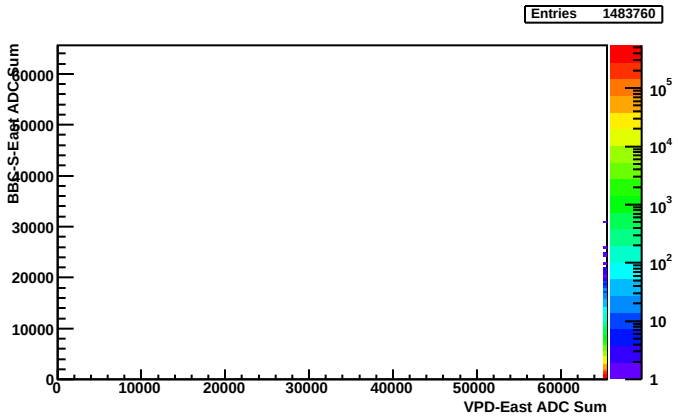

Entries 1483760
BBC-L-West ADC Sum
BBC-S-West ADC Sum

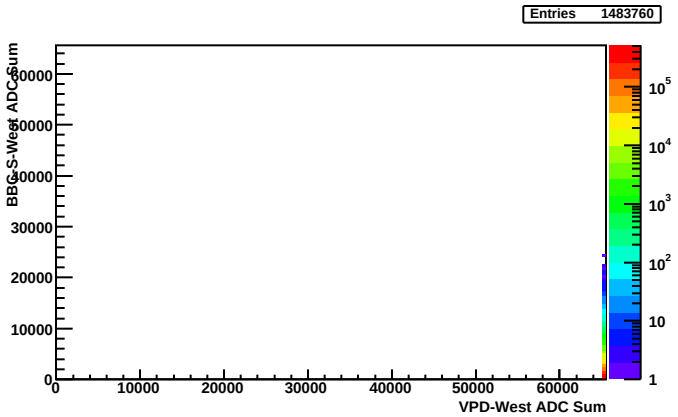

Entries 1483760
BBC-L-East ADC Sum
VPD-East ADC Sum

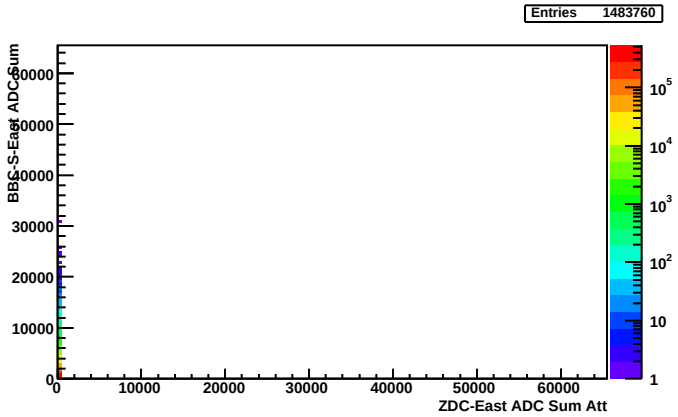

Entries 1483760
BBC-L-West ADC Sum
VPD-West ADC Sum

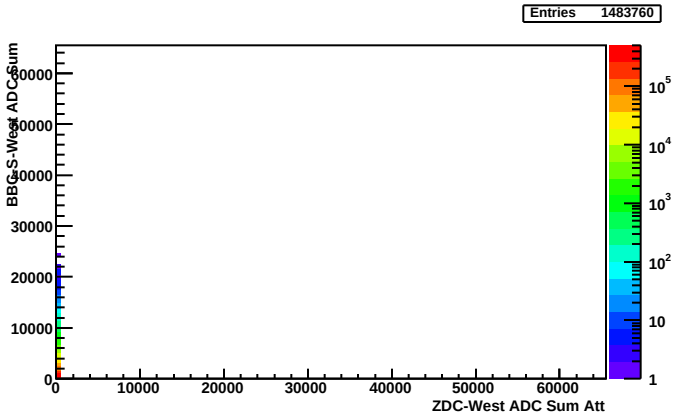

Entries 1483760
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

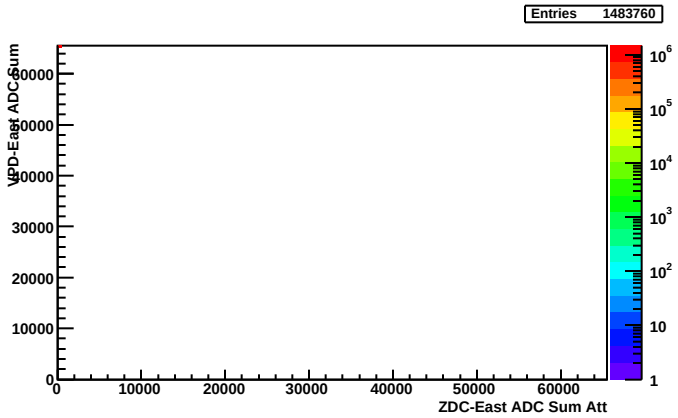

Entries 1483760
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

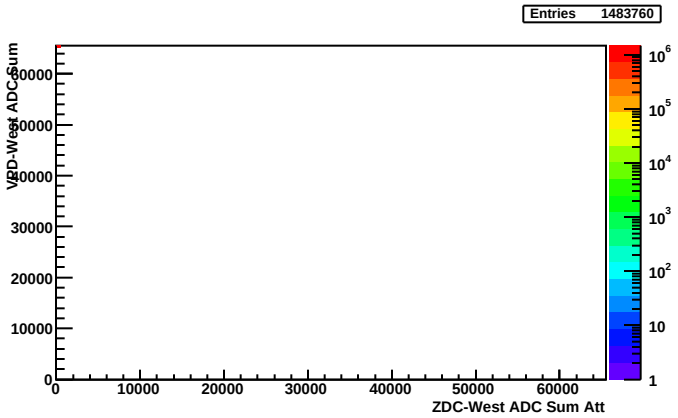

Entries 1483760
BBC-S-East ADC Sum
VPD-East ADC Sum

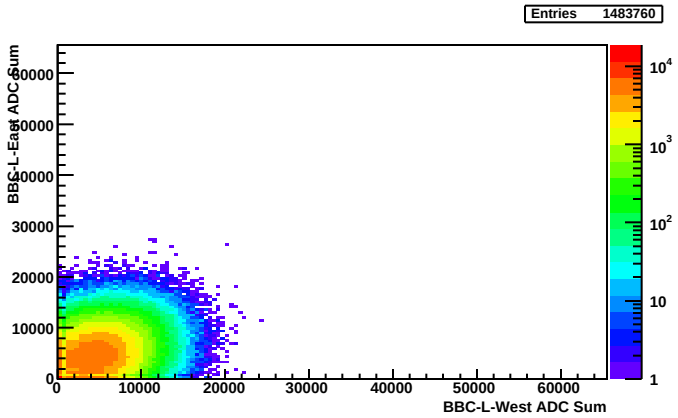

Entries 1483760
BBC-S-West ADC Sum
VPD-West ADC Sum

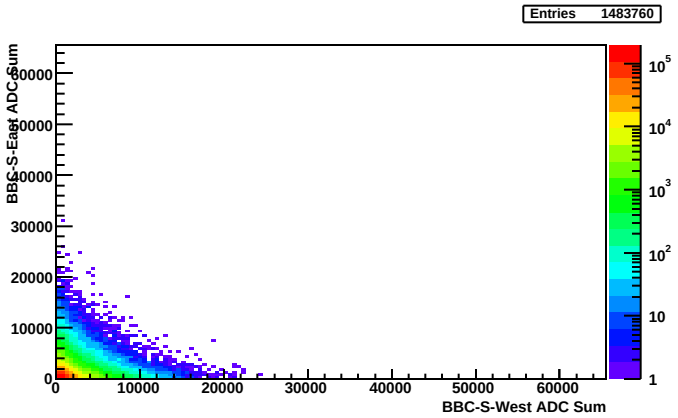

Entries 1483760
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

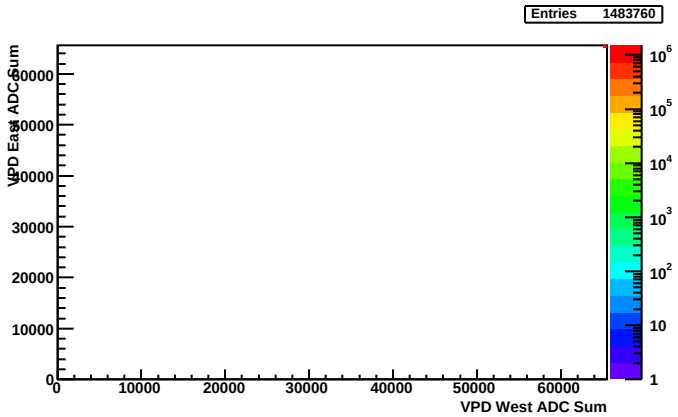

Entries 1483760
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

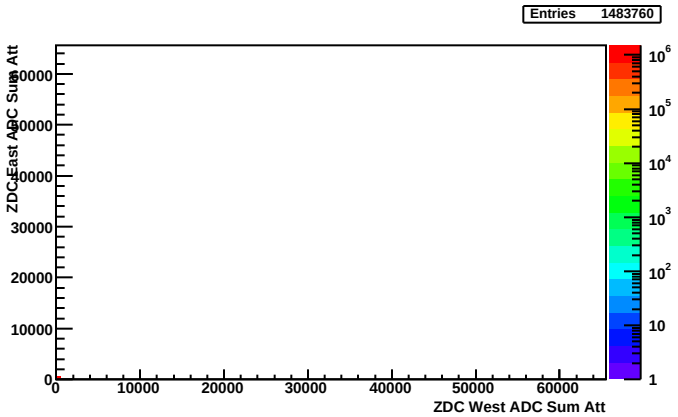

Entries 1483760
VPD-East ADC Sum
ZDC-East ADC Sum Att

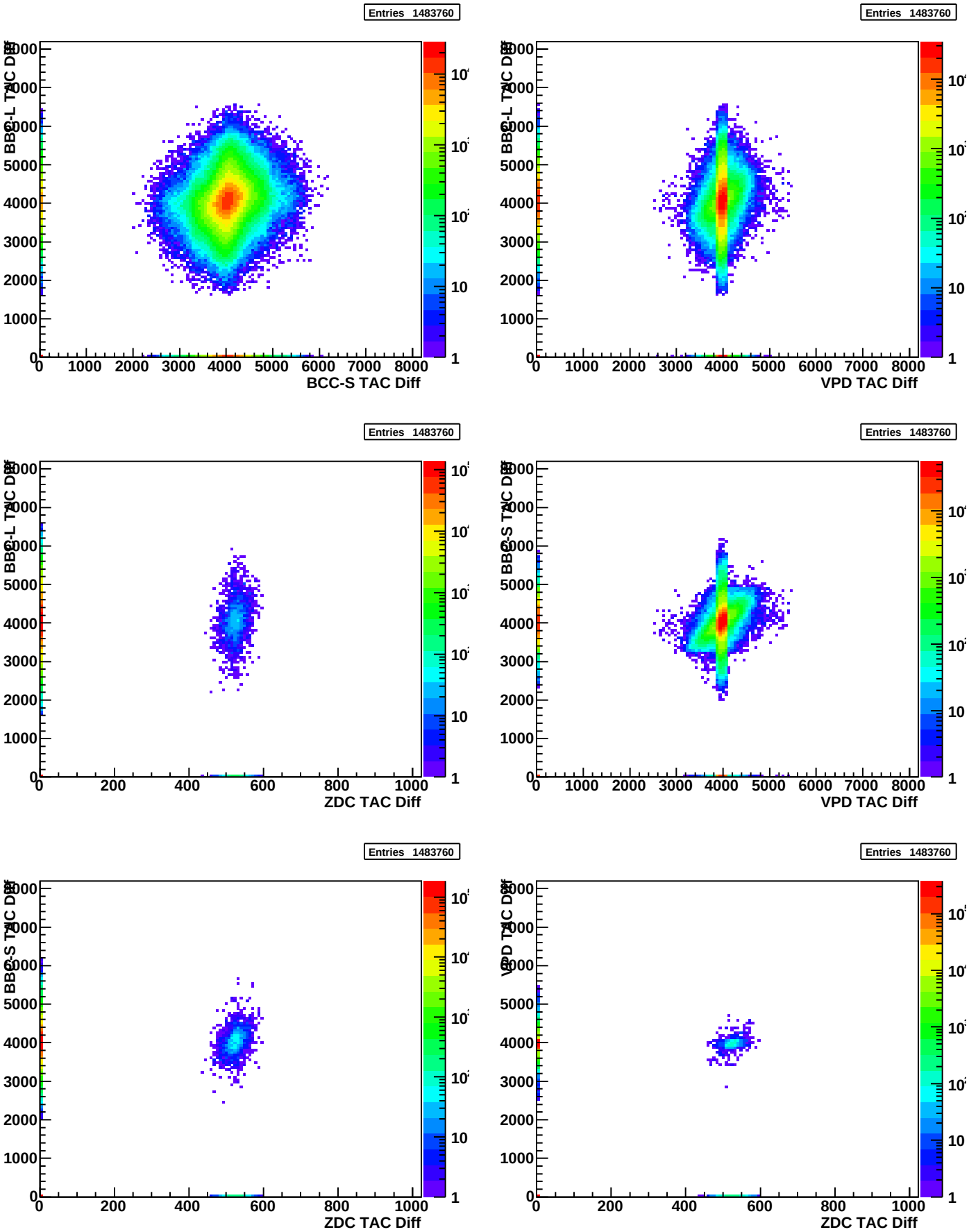

Entries 1483760
VPD-West ADC Sum
ZDC-West ADC Sum Att

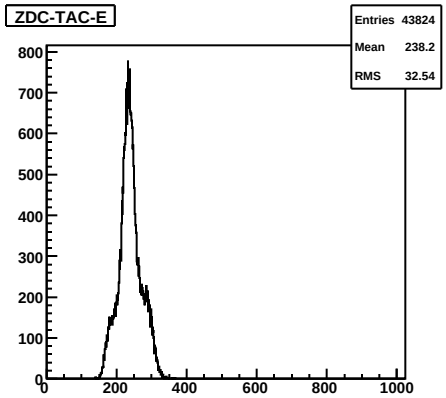

Entries 1483760
BBC-L-East ADC Sum
BBC-L-West ADC Sum

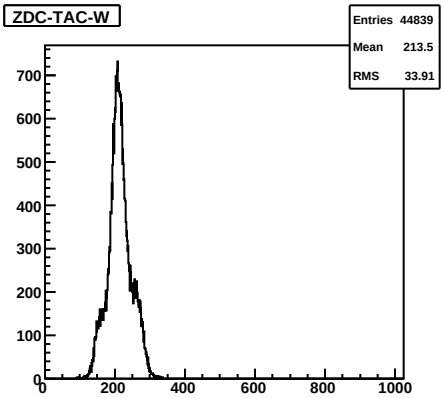

Entries 1483760
BBC-S-East ADC Sum
BBC-S-West ADC Sum

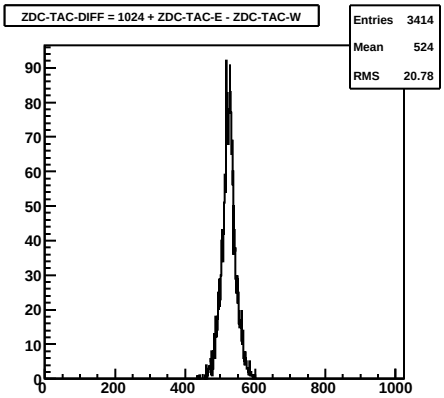

Entries 1483760
VPD East ADC Sum
VPD West ADC Sum

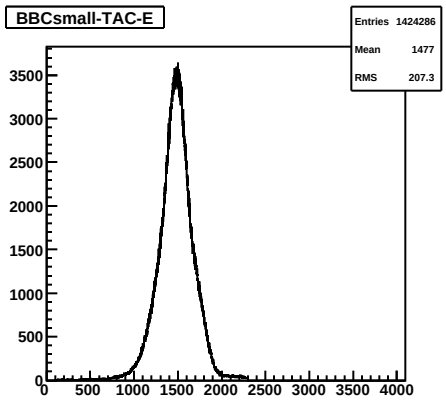

Entries 1483760
ZDC East ADC Sum Att
ZDC West ADC Sum Att

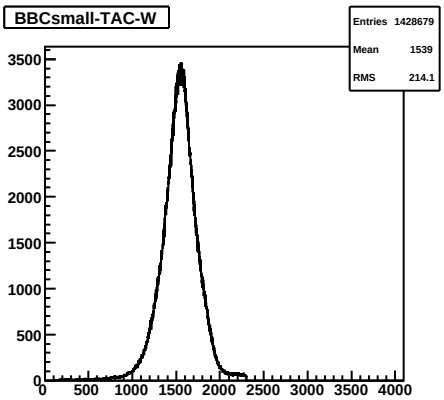

Entries 1483760
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1483760
BBC-L TAC Diff
VPD TAC Diff
Entries 1483760
BBC-L TAC Diff
ZDC TAC Diff
Entries 1483760
BBC-S TAC Diff
VPD TAC Diff
Entries 1483760
BBC-S TAC Diff
ZDC TAC Diff
Entries 1483760
VPD TAC Diff
ZDC TAC Diff

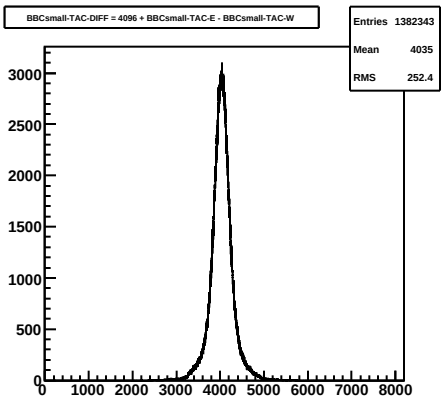

ZDC-TAC-E
Entries 43824
Mean 238.2
RMS 32.54

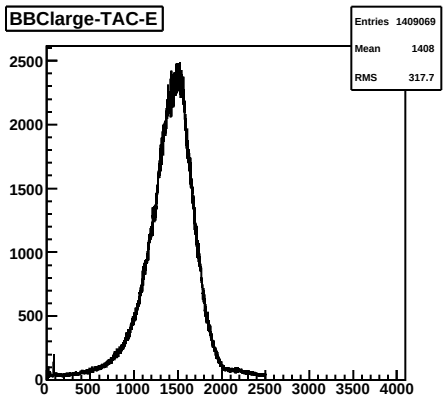

ZDC-TAC-W
Entries 44839
Mean 213.5
RMS 33.91

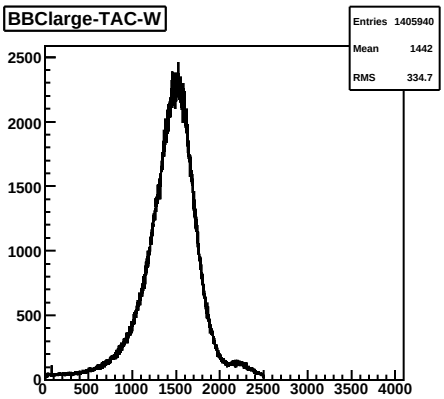

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 3414
Mean 524
RMS 20.78

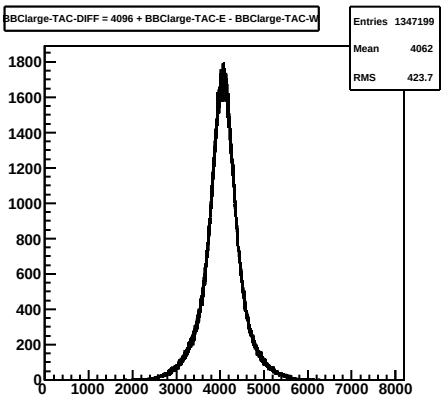

BBCsmall-TAC-E
Entries 1424286
Mean 1477
RMS 207.3

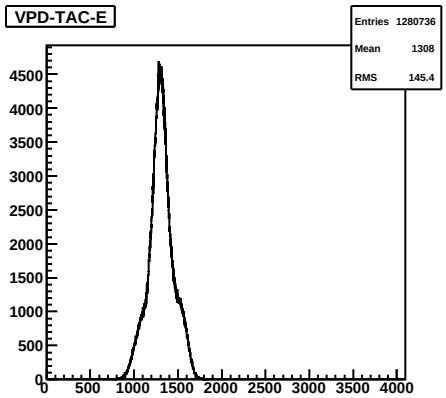

BBCsmall-TAC-W
Entries 1428679
Mean 1539
RMS 214.1

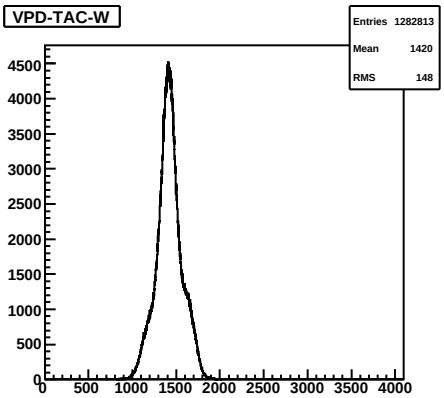

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1382343
Mean 4035
RMS 252.4

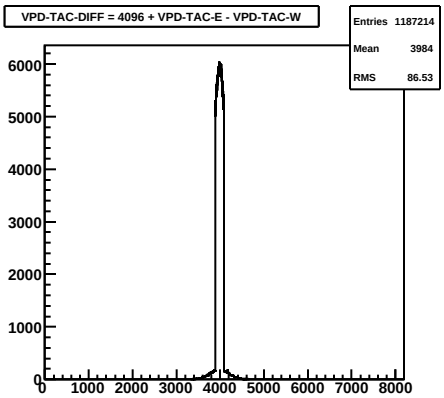

BBClarge-TAC-E
Entries 1409069
Mean 1408
RMS 317.7

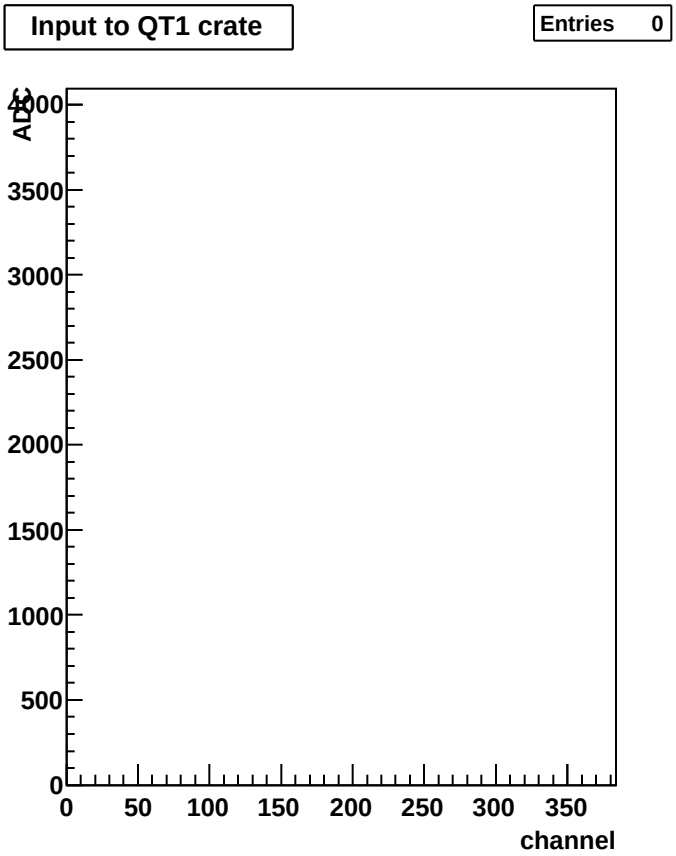

BBClarge-TAC-W
Entries 1405940
Mean 1442
RMS 334.7

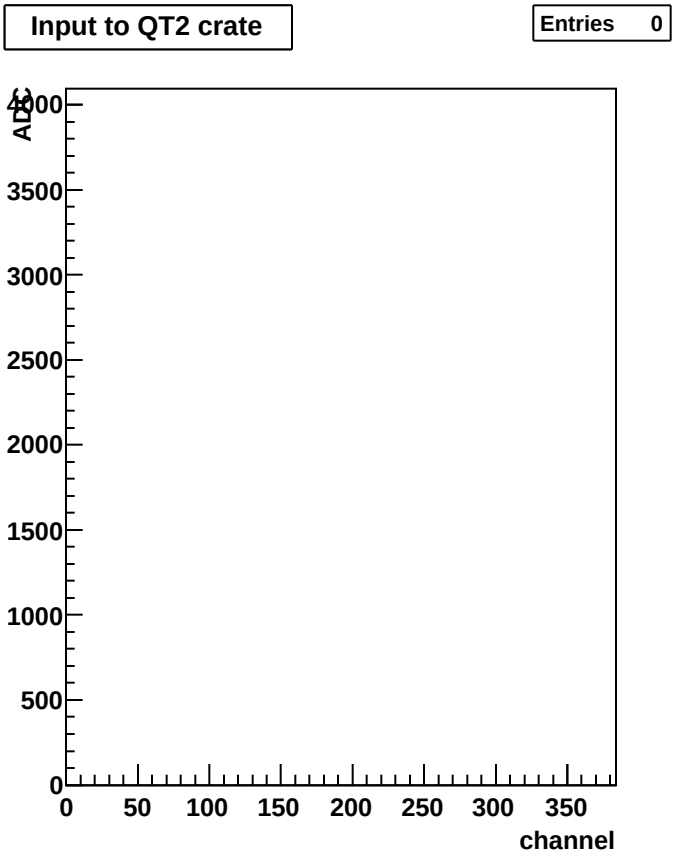

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1347199
Mean 4062
RMS 423.7

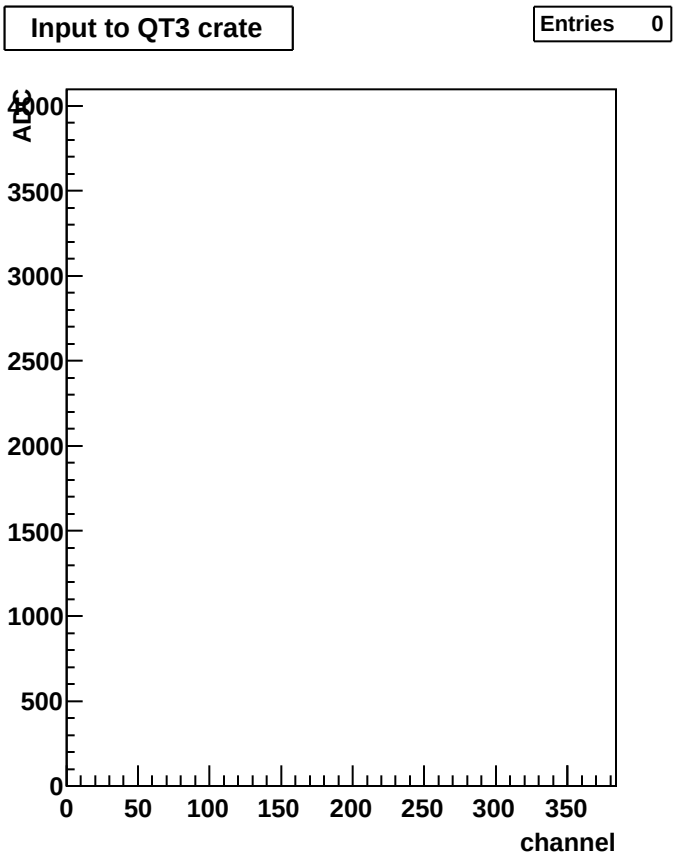

VPD-TAC-E
Entries 1280736
Mean 1308
RMS 145.4

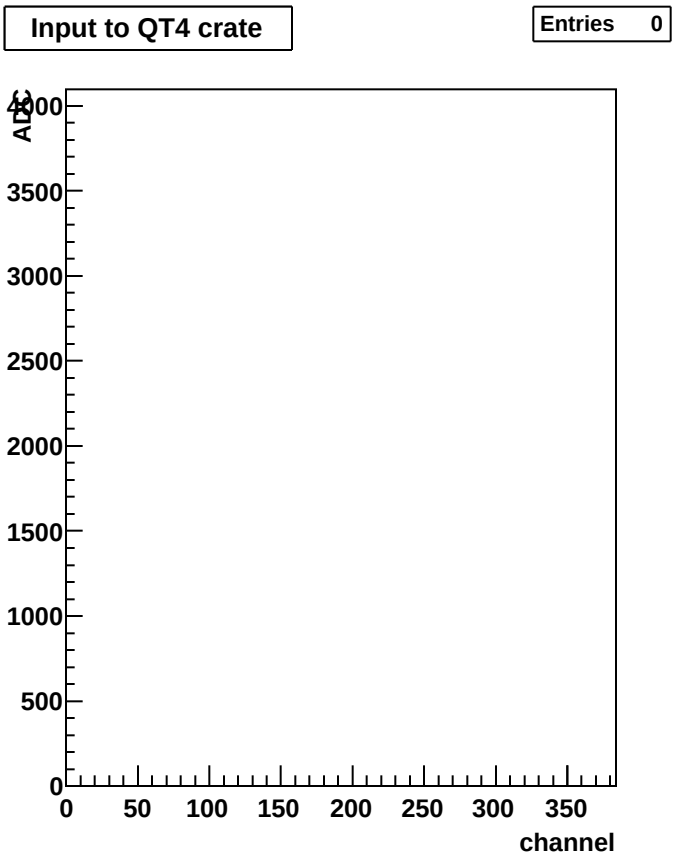

VPD-TAC-W
Entries 1282813
Mean 1420
RMS 148

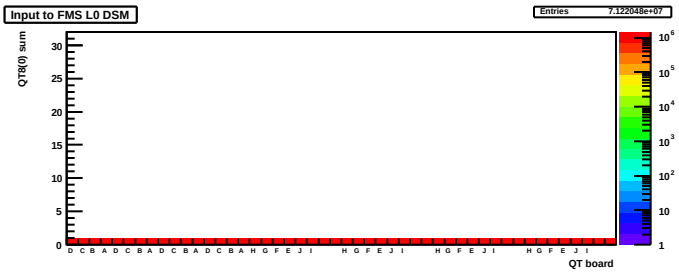

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1187214
Mean 3984
RMS 86.53

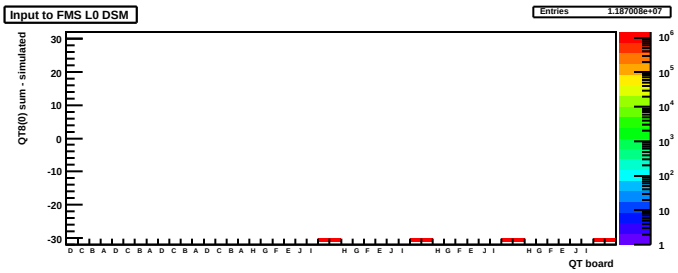

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

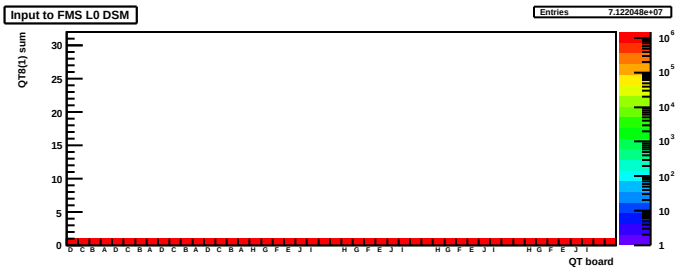

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

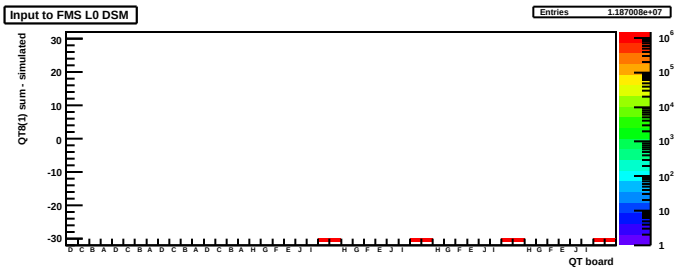

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

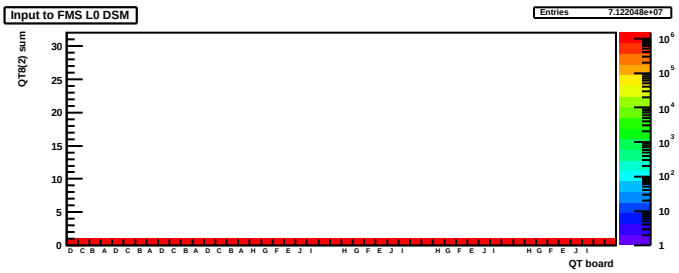

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

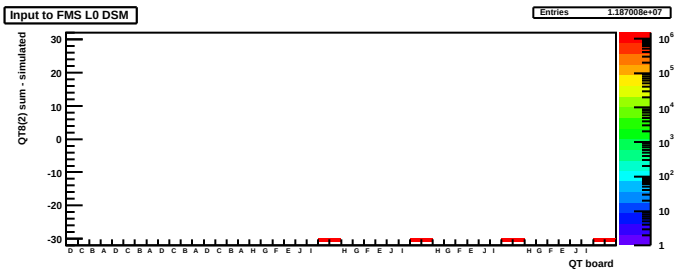

Input to FMS L0 DSM
Entries 7.122048e+07
QT8(0) sum
QT board

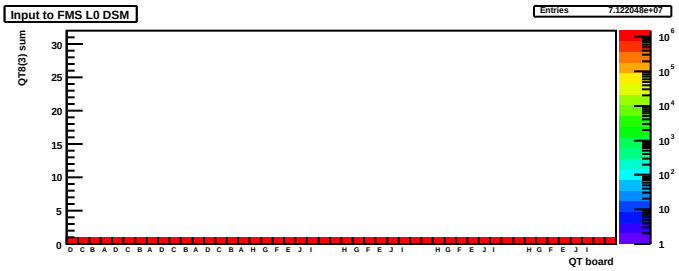

Input to FMS L0 DSM
Entries 1.187008e+07
QT8(0) sum - simulated
QT board

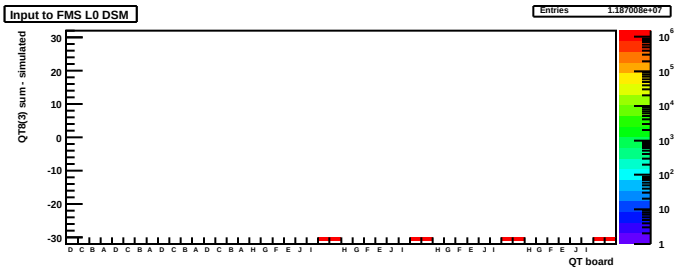

Input to FMS L0 DSM
Entries 7.122048e+07
QT8(1) sum
QT board

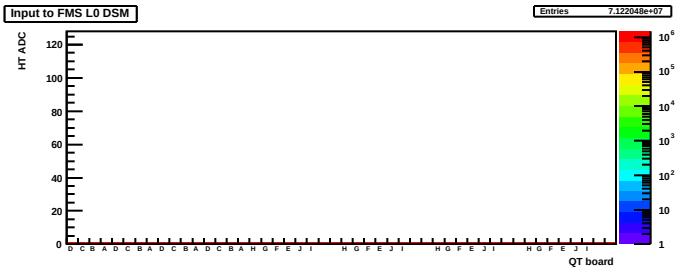

Input to FMS L0 DSM
Entries 1.187008e+07
QT8(1) sum - simulated
QT board

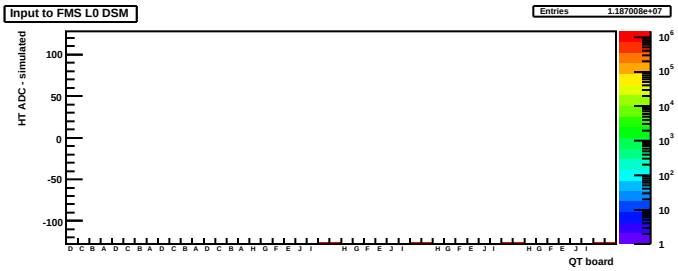

Input to FMS L0 DSM
Entries 7.122048e+07
QT8(2) sum
QT board

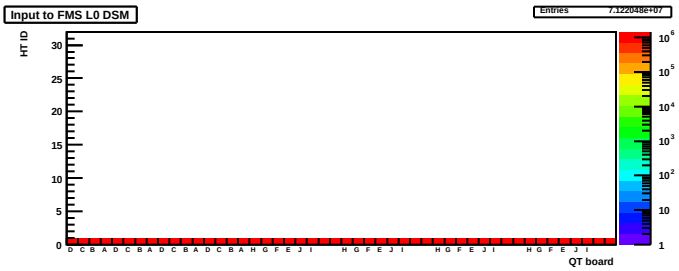

Input to FMS L0 DSM
Entries 1.187008e+07
QT8(2) sum - simulated
QT board

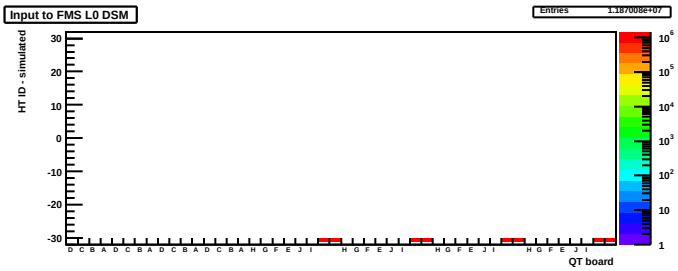

Input to FMS L0 DSM
Entries 7.122048e+07
QT8(3) sum
QT board

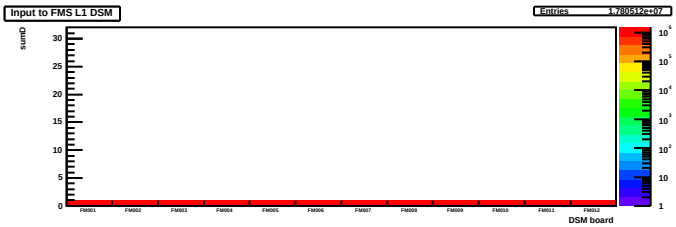

Input to FMS L0 DSM
Entries 1.187008e+07
QT8(3) sum - simulated
QT board

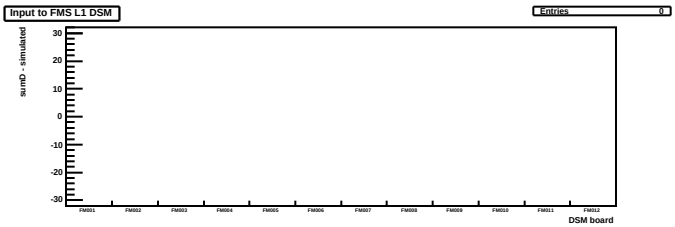

Input to FMS L0 DSM
Entries 7.122048e+07
HT ADC
QT board

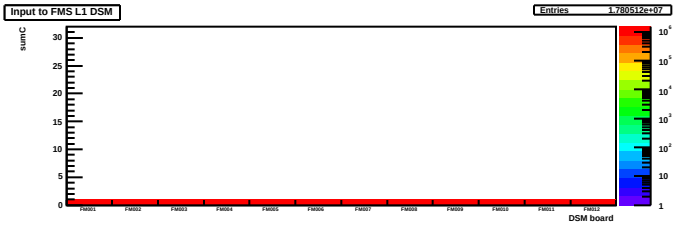

Input to FMS L0 DSM
Entries 1.187008e+07
HT ADC - simulated
QT board

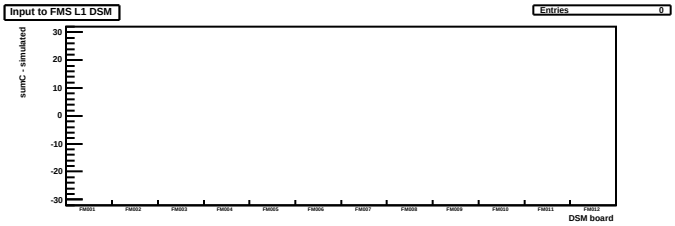

Input to FMS L0 DSM
Entries 7.122048e+07
HT ID
QT board

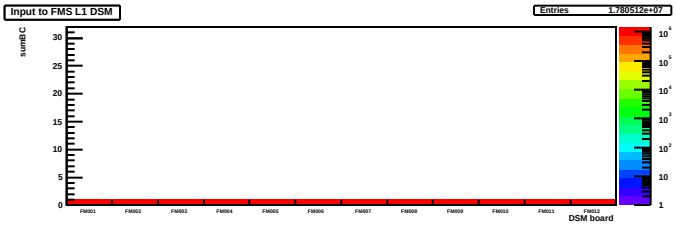

Input to FMS L0 DSM
Entries 1.187008e+07
HT ID - simulated
QT board

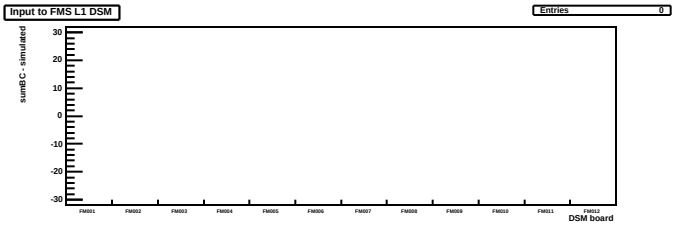

Input to FMS L1 DSM
Entries 1.780512e+07
sumD
DSM board

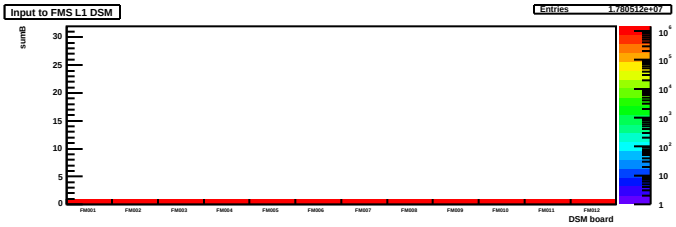

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

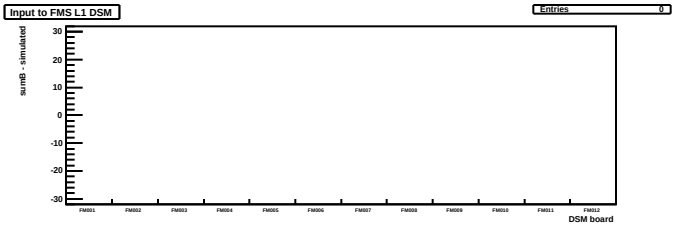

Input to FMS L1 DSM
Entries 1.780512e+07
sumC
DSM board

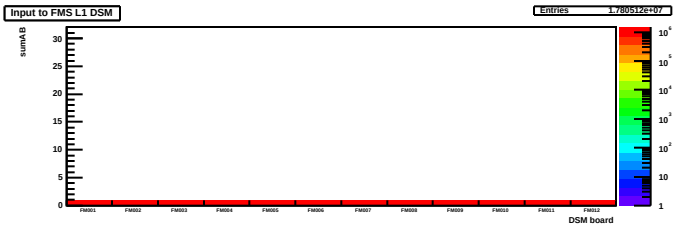

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

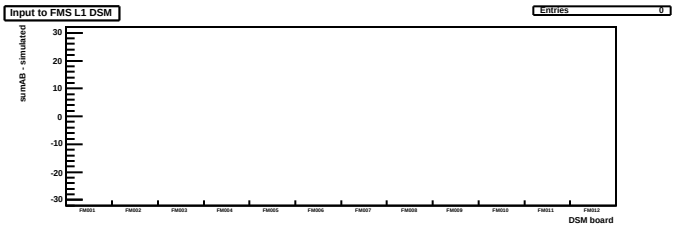

Input to FMS L1 DSM
Entries 1.780512e+07
sumBC
DSM board

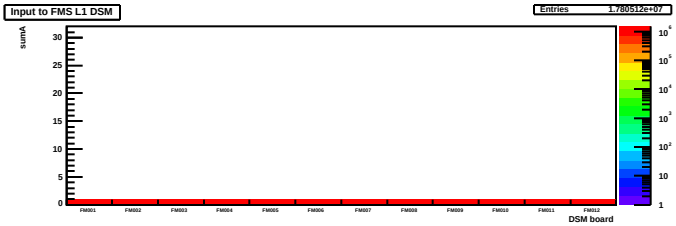

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

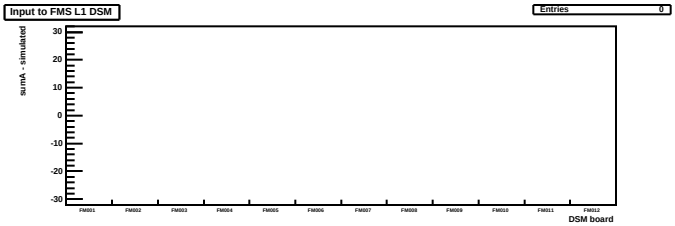

Input to FMS L1 DSM
Entries 1.780512e+07
sumB
DSM board

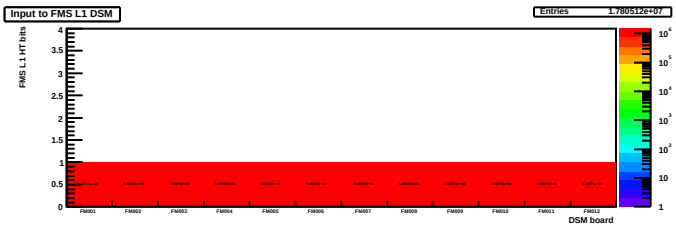

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

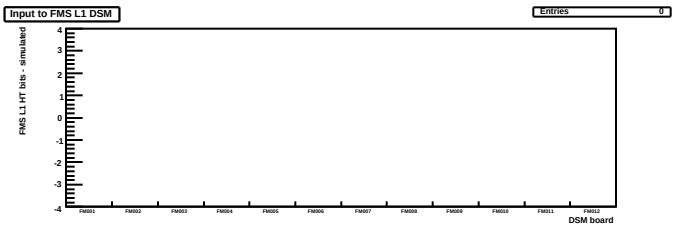

Input to FMS L1 DSM
Entries 1.780512e+07
sumAB
DSM board

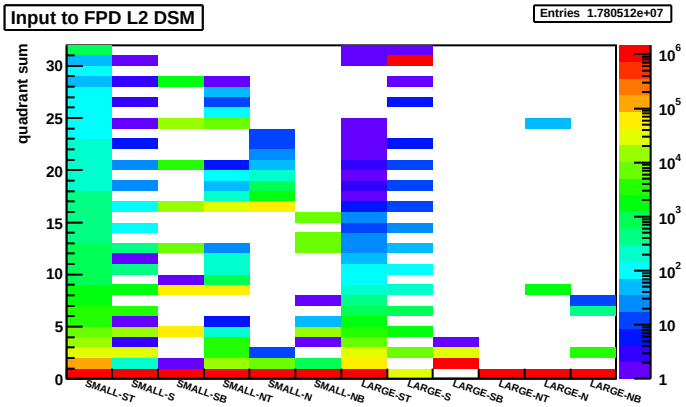

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

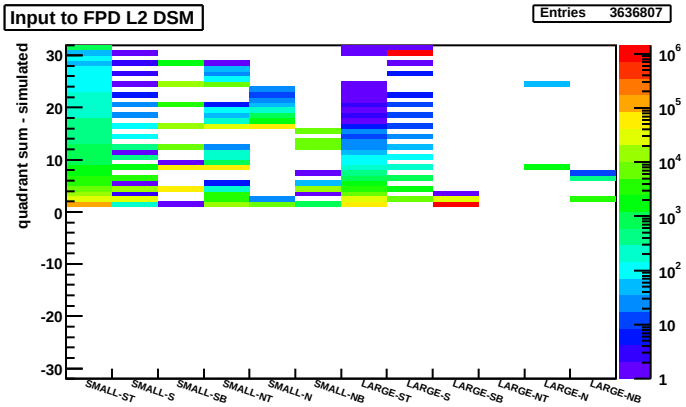

Input to FMS L1 DSM
Entries 1.780512e+07
sumA
DSM board

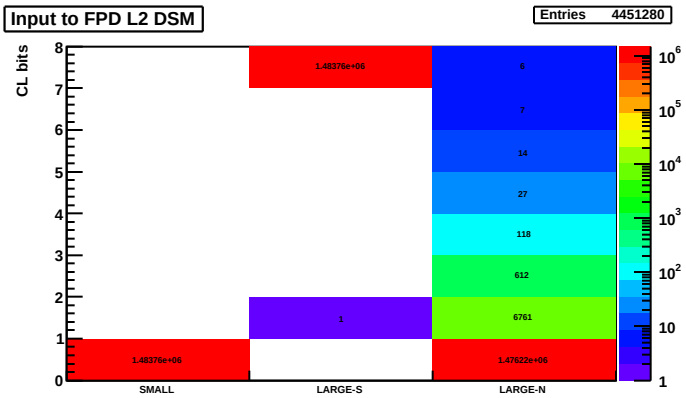

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

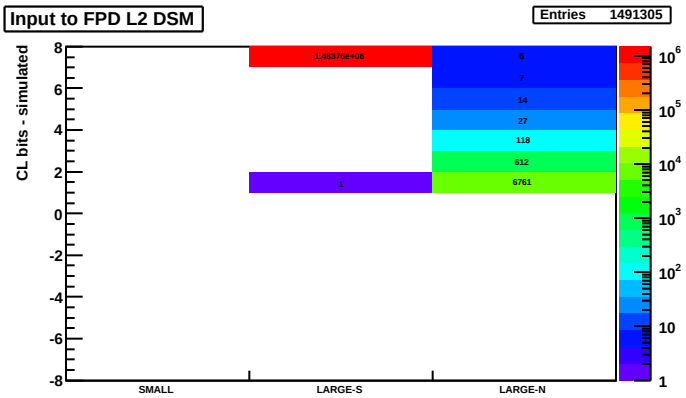

Input to FMS L1 DSM
Entries 1.780512e+07
FMS L1 HT bits
DSM board

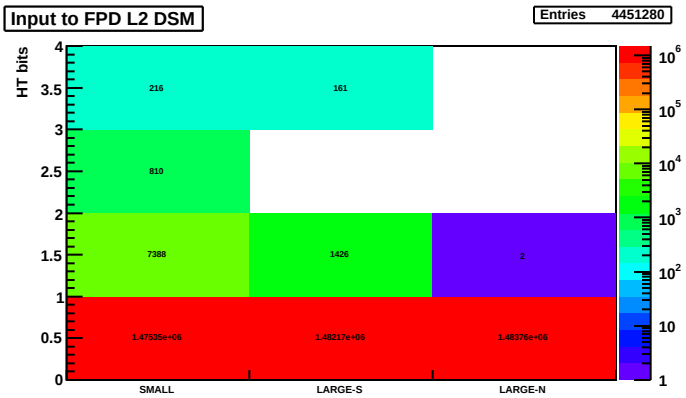

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

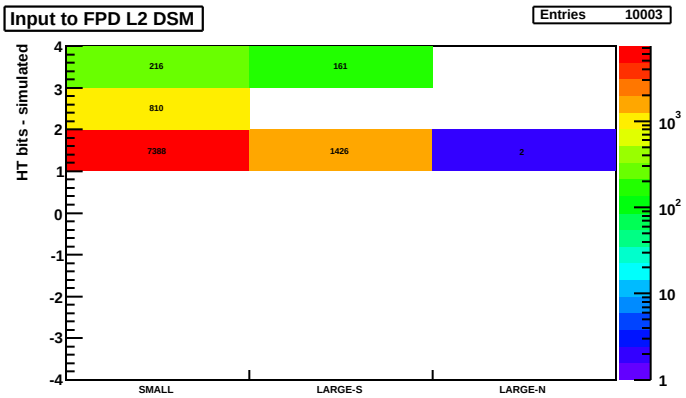

Input to FPD L2 DSM
Entries 1.780512e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

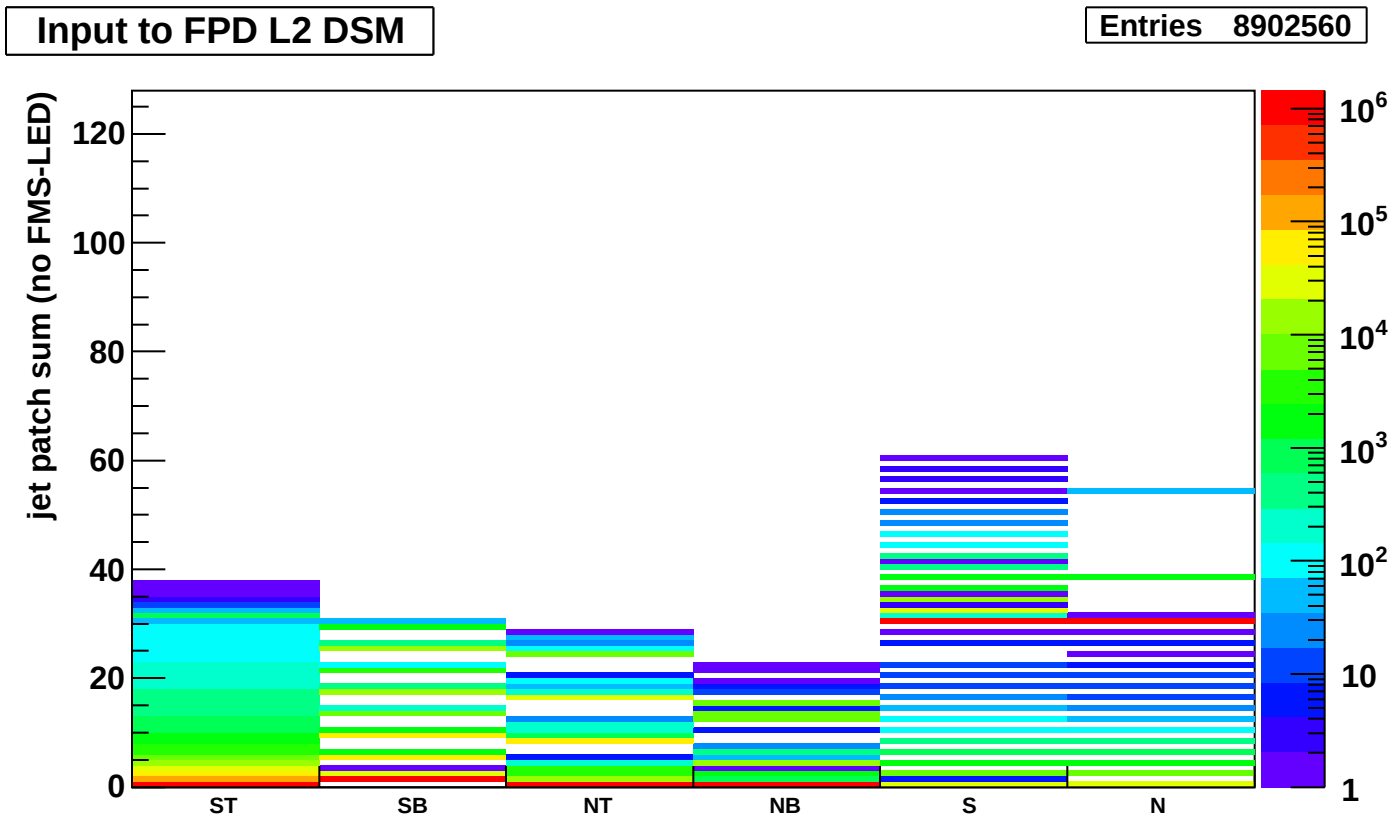

Input to FPD L2 DSM
Entries 3636807
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

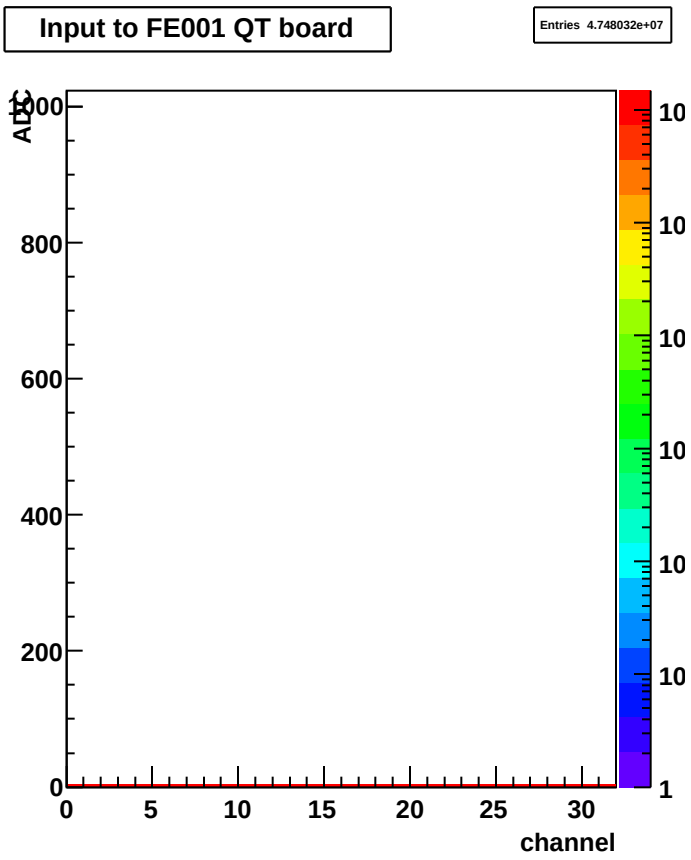

Input to FPD L2 DSM
Entries 4451280
CL bits
1.48376e+06
6
7
14
27
118
612
1
6761
1.47622e+06
SMALL
LARGE-S
LARGE-N

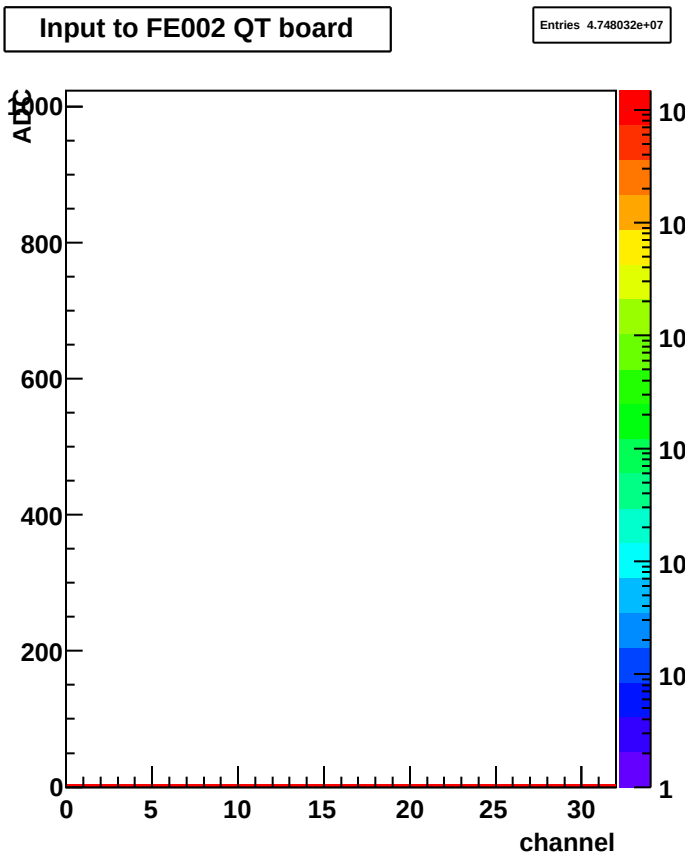

Input to FPD L2 DSM
Entries 1491305
CL bits - simulated
1.48376e+06
6
7
14
27
118
612
1
6761
SMALL
LARGE-S
LARGE-N

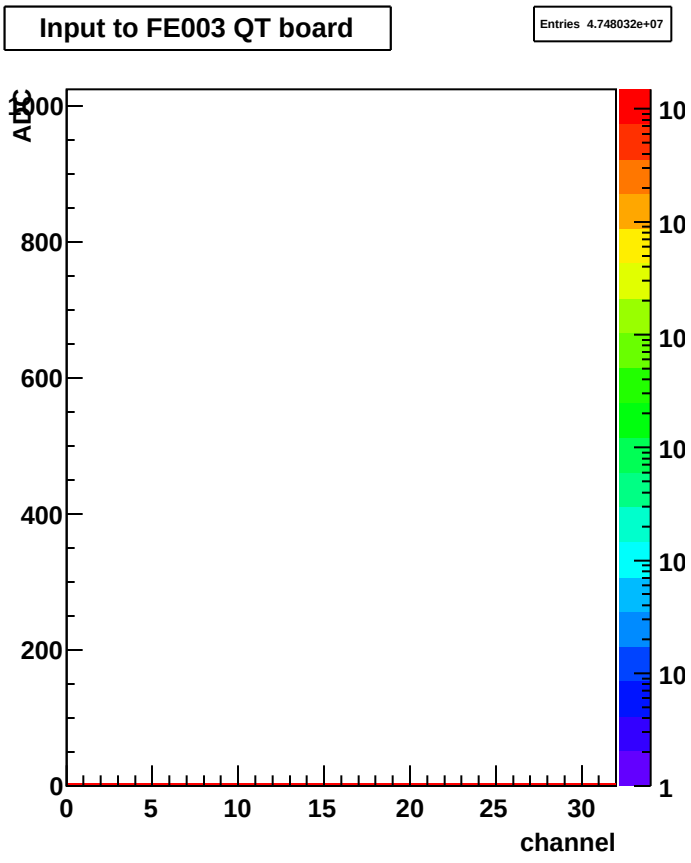

Input to FPD L2 DSM
Entries 4451280
HT bits
216
161
810
7388
1426
2
1.47535e+06
1.48217e+06
1.48376e+06
SMALL
LARGE-S
LARGE-N

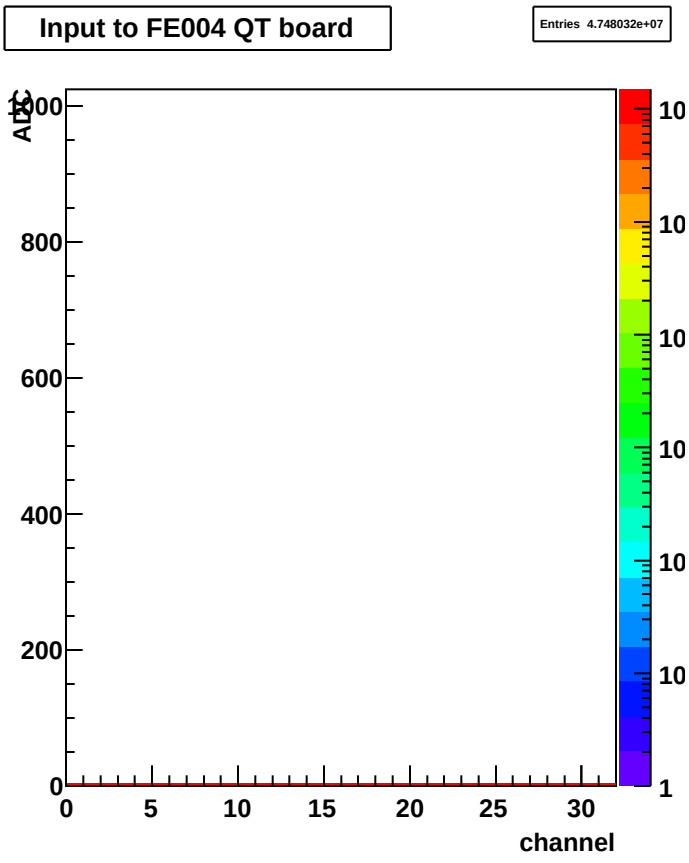

Input to FPD L2 DSM
Entries 10003
HT bits - simulated
216
161
810
7388
1426
2
SMALL
LARGE-S
LARGE-N

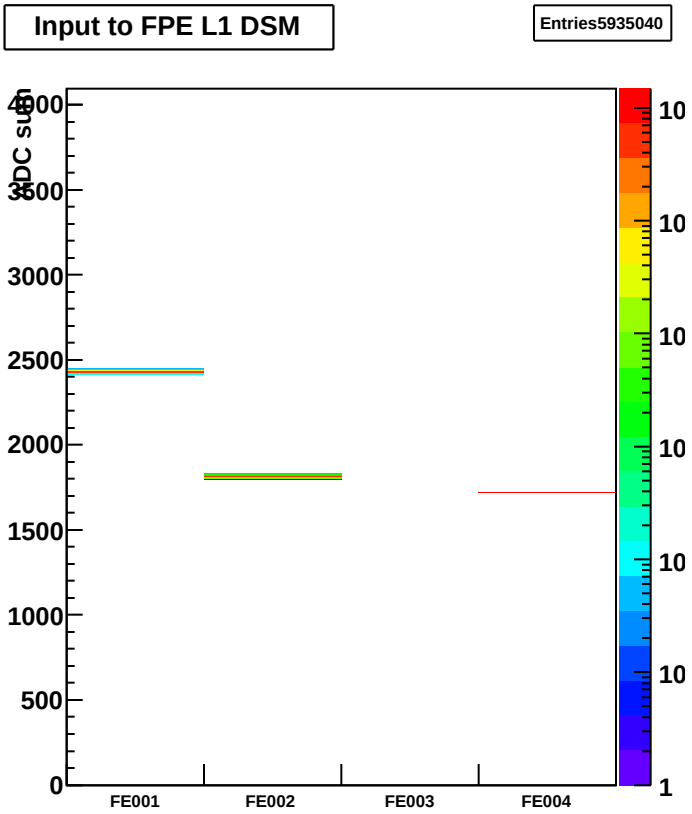

Input to FPD L2 DSM
Entries 8902560
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

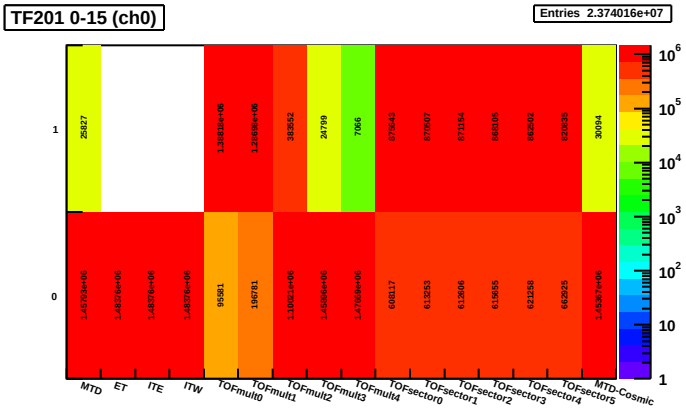

Input to FE001 QT board
Entries 4.748032e+07
ADC
channel

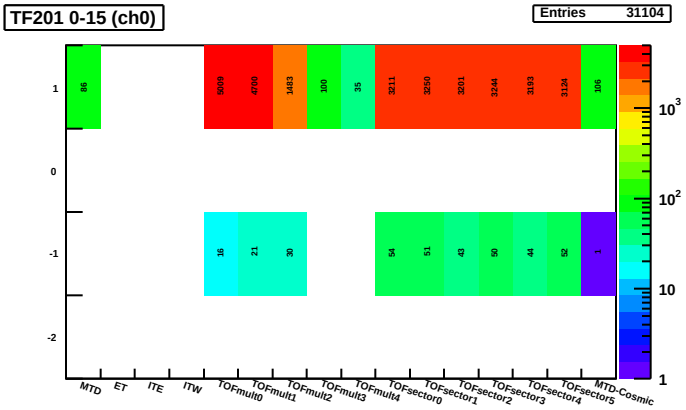

Input to FE002 QT board
Entries 4.748032e+07
ADC
channel

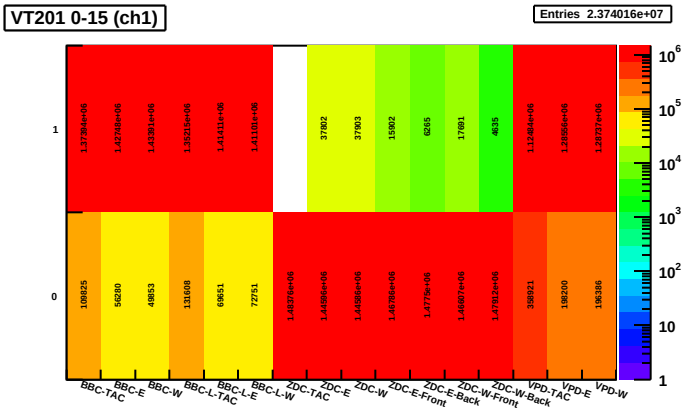

Input to FE003 QT board
Entries 4.748032e+07
ADC
channel

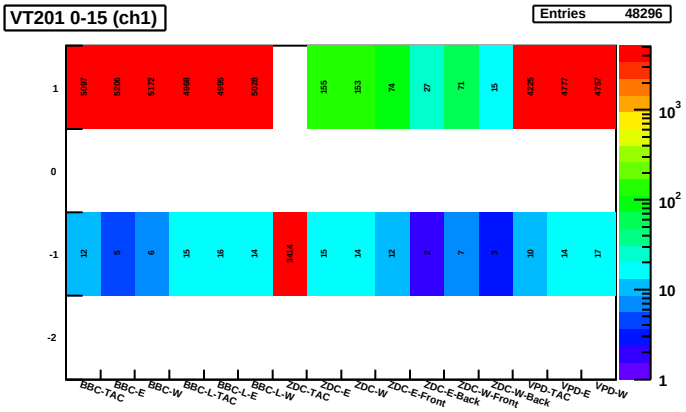

Input to FE004 QT board
Entries 4.748032e+07
ADC
channel

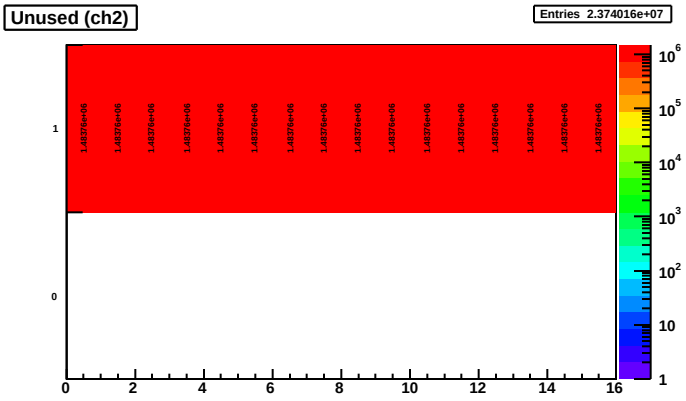

Input to FPE L1 DSM
Entries5935040
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 2.374016e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 31104
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 2.374016e+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 48296
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)
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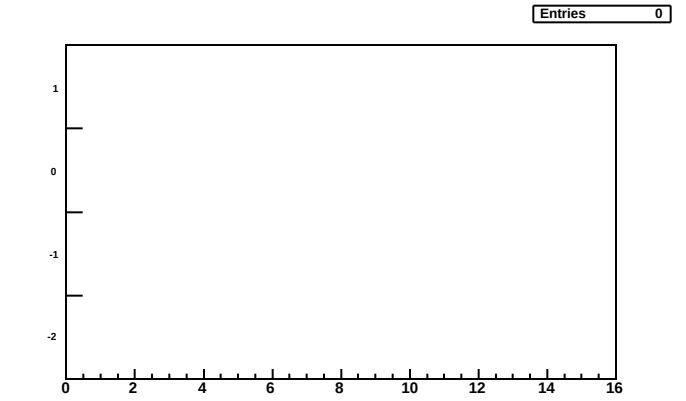
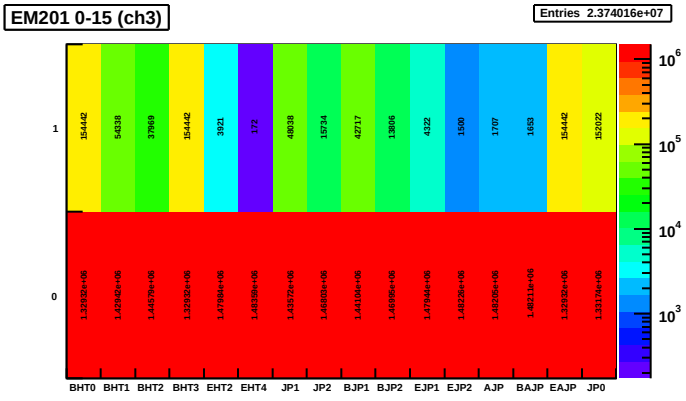
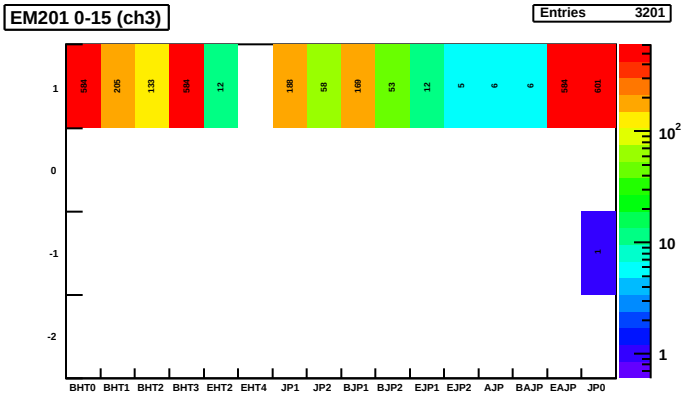
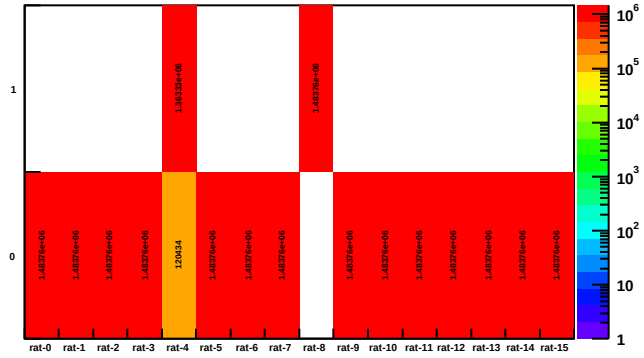
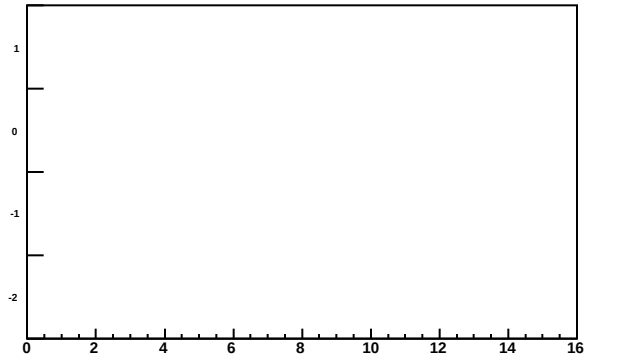

Entries 0


EM201 0-15 (ch3)
Entries 2.374016e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

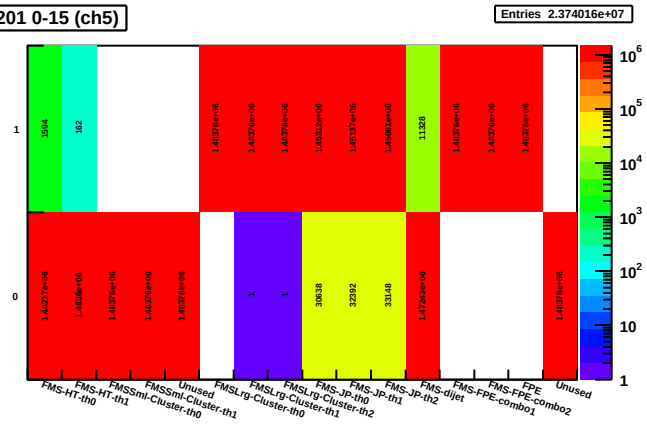

EM201 0-15 (ch3)
Entries 3201
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)





FP201 0-15 (ch5)



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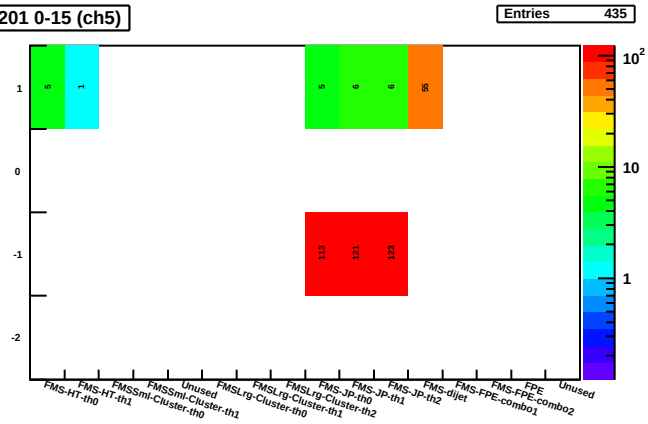
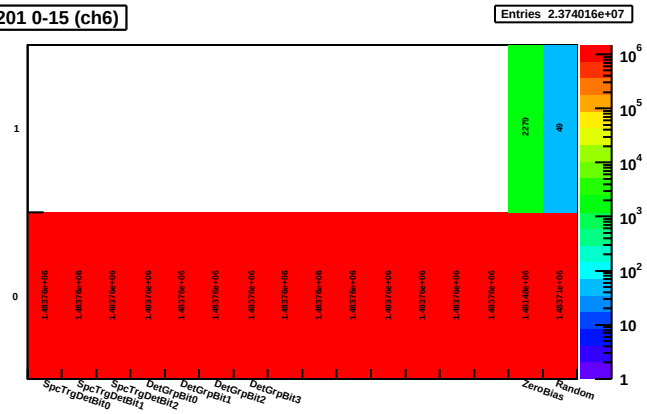
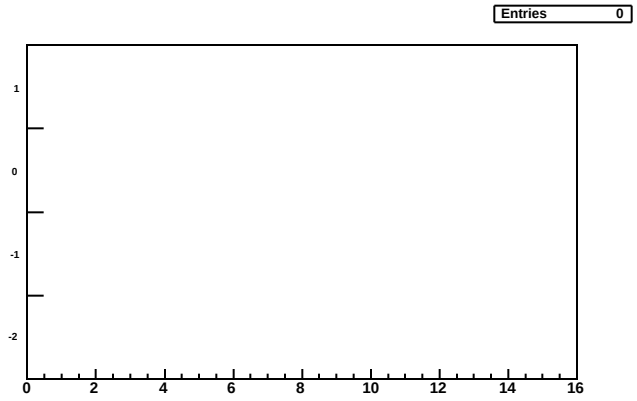
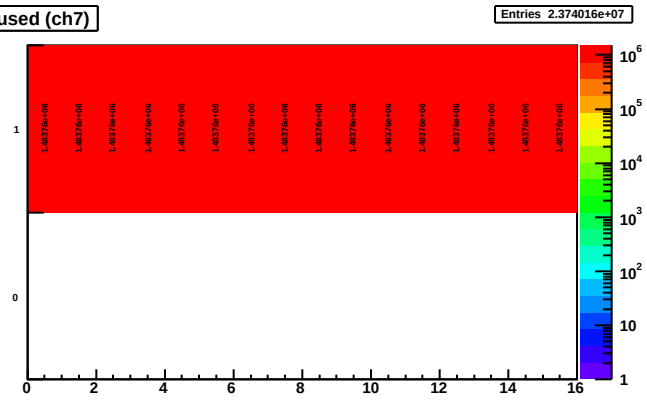
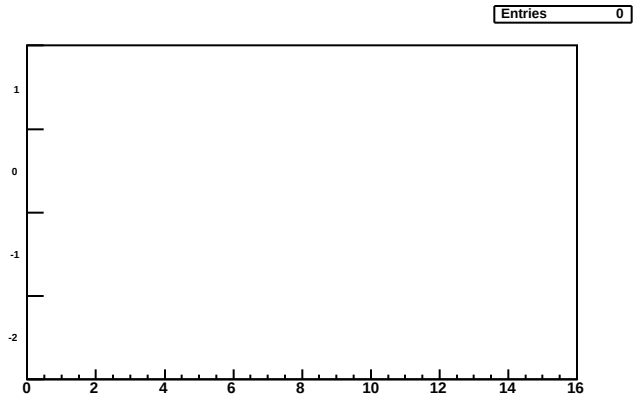


ST201 0-15 (ch6)





Unused (ch7)