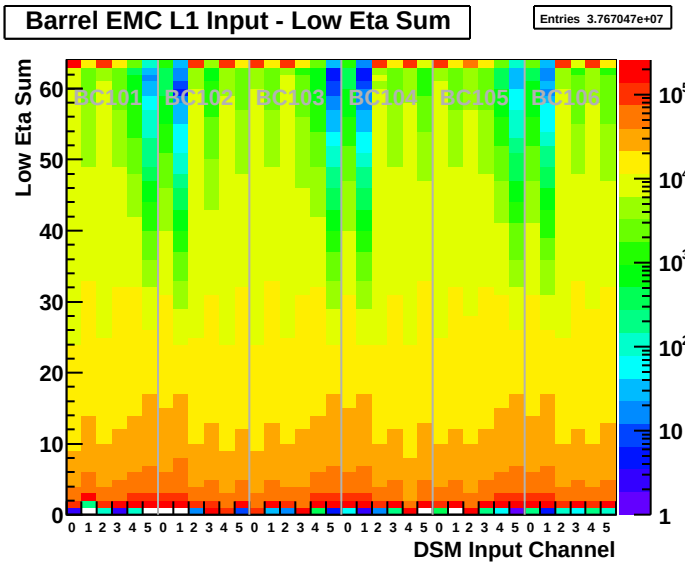
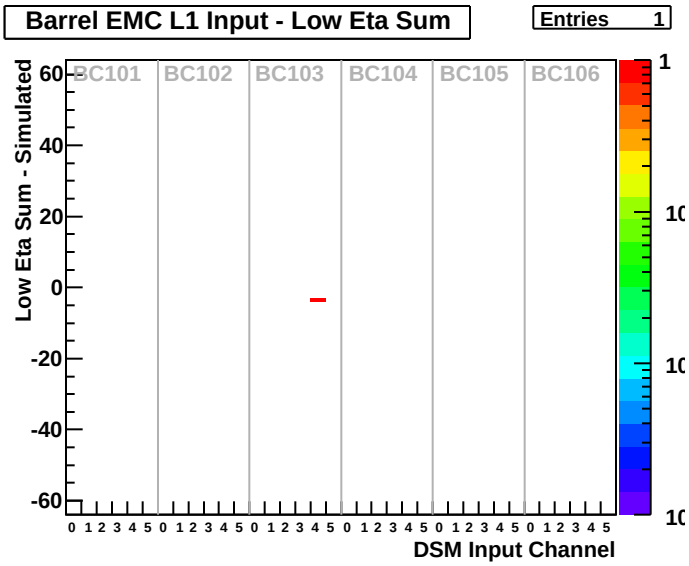
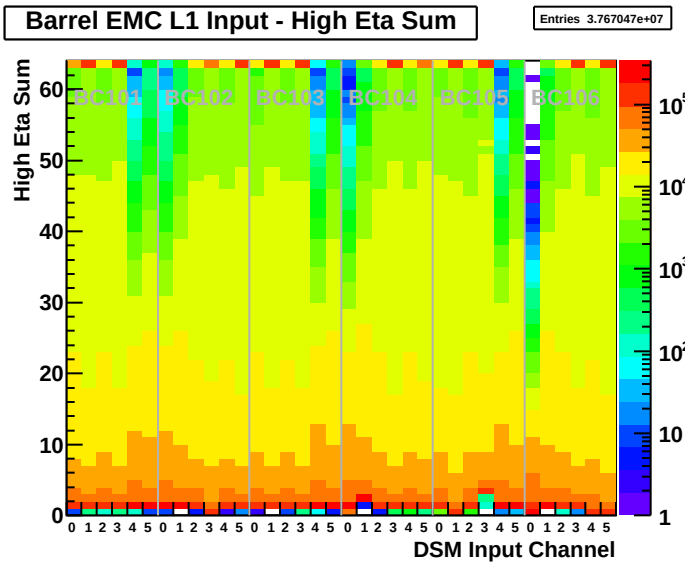
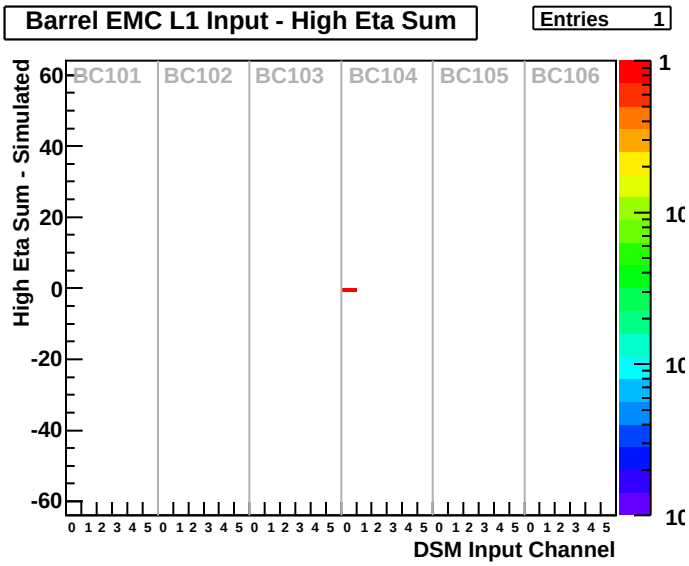
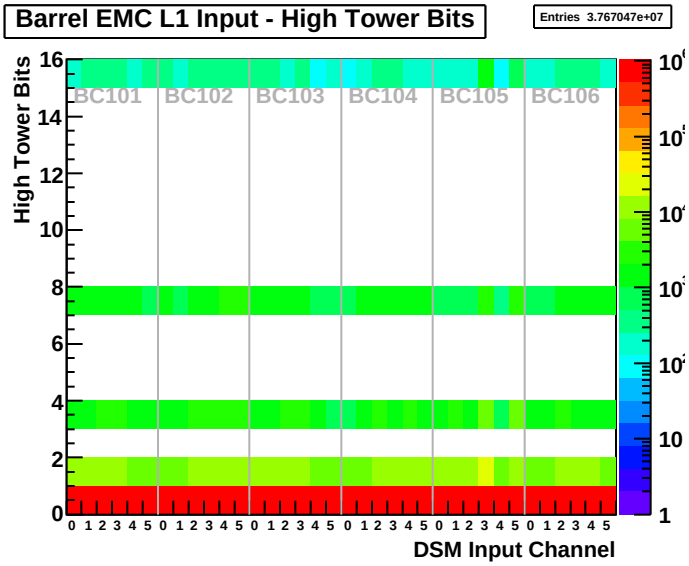
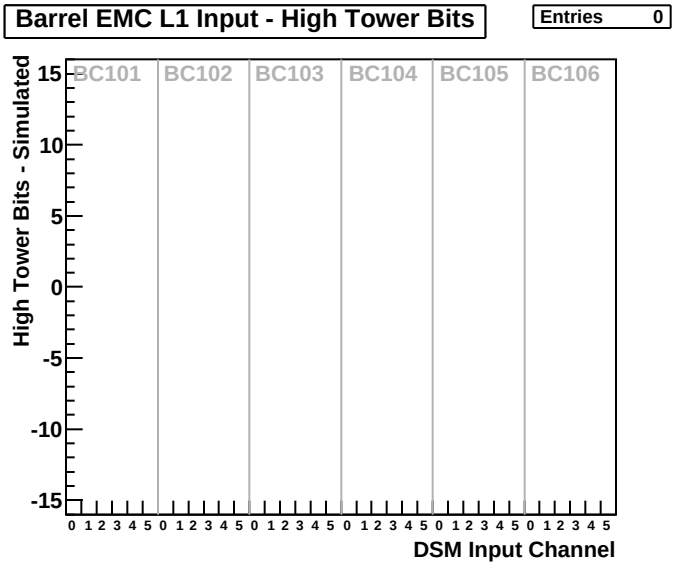

Barrel EMC L1 Input - Low Eta Sum
Entries 3.767047e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

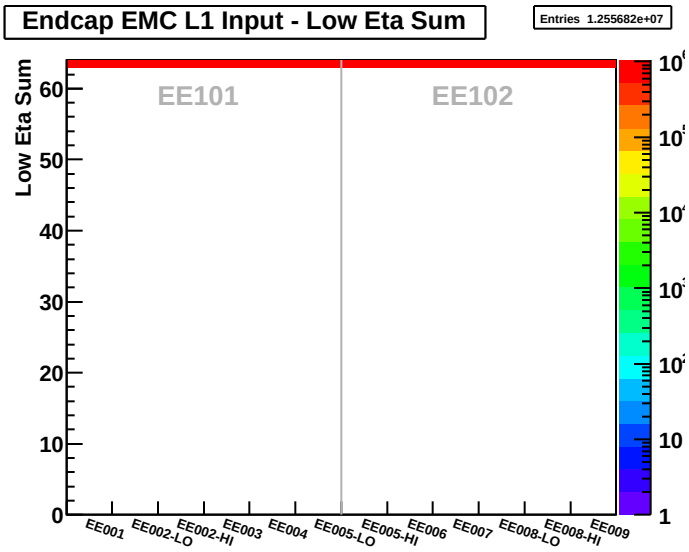

Barrel EMC L1 Input - Low Eta Sum
Entries 1
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

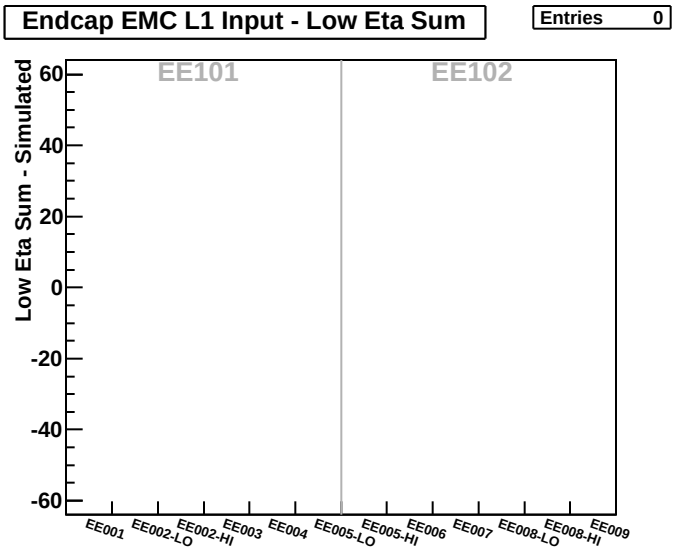

Barrel EMC L1 Input - High Eta Sum
Entries 3.767047e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

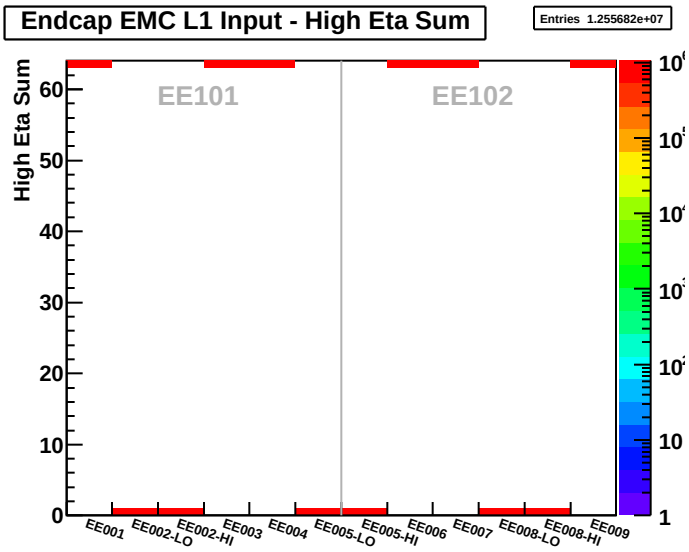

Barrel EMC L1 Input - High Eta Sum
Entries 1
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

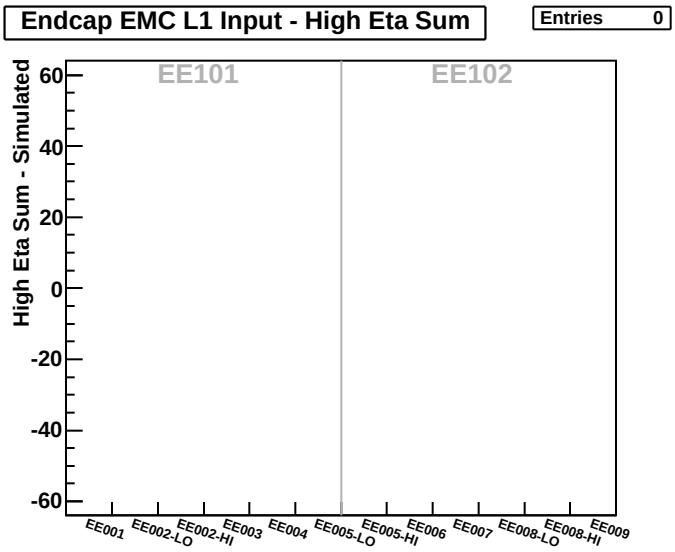

Barrel EMC L1 Input - High Tower Bits
Entries 3.767047e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

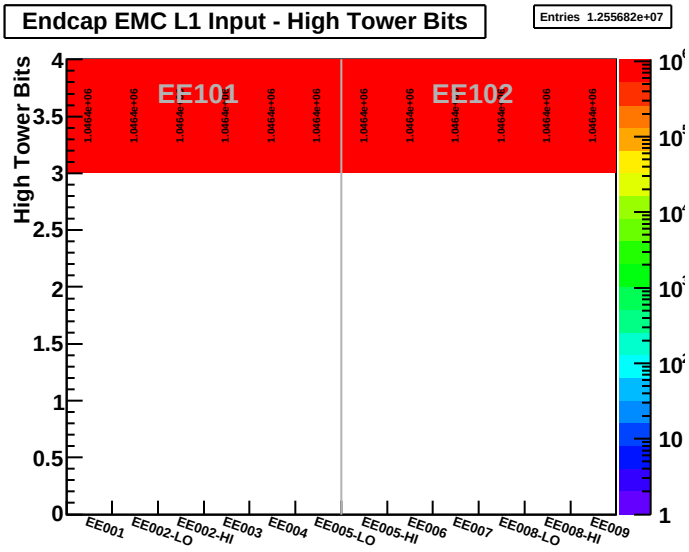

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

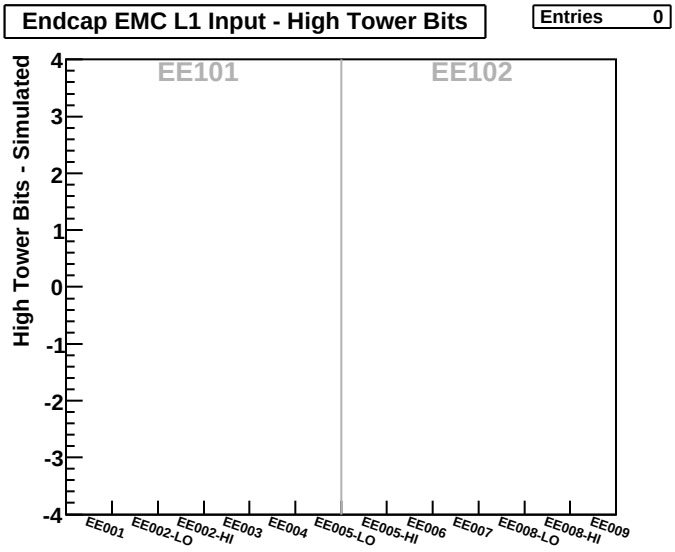

Endcap EMC L1 Input - Low Eta Sum
Entries 1.255682e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

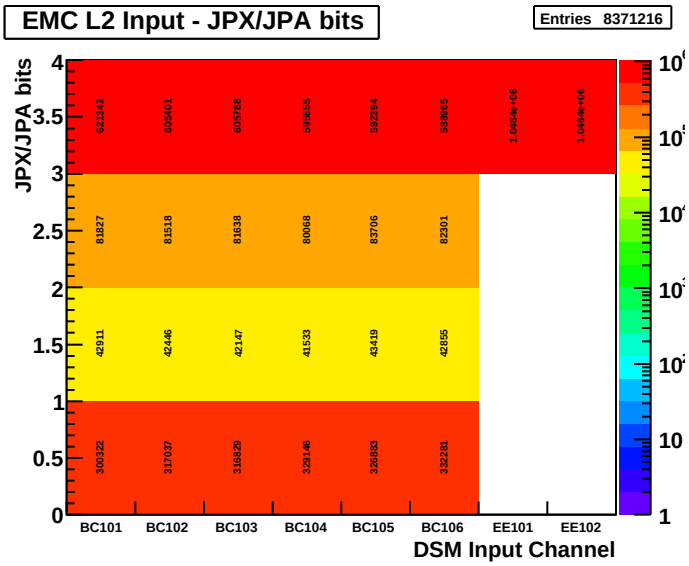

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

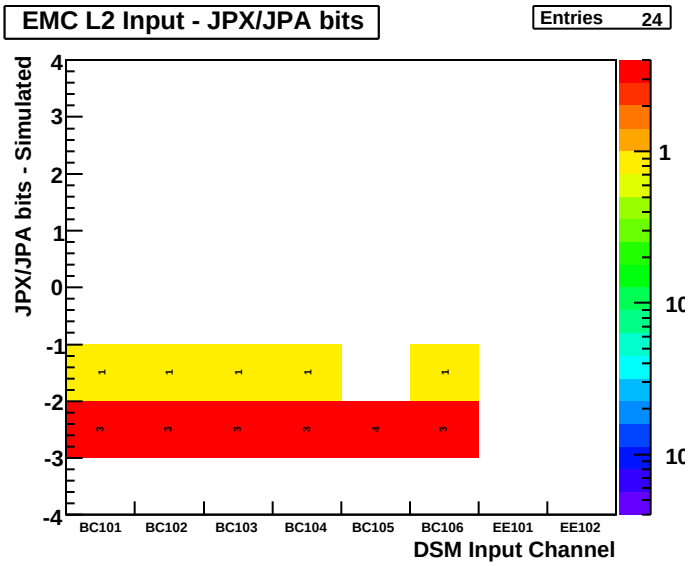

Endcap EMC L1 Input - High Eta Sum
Entries 1.255682e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

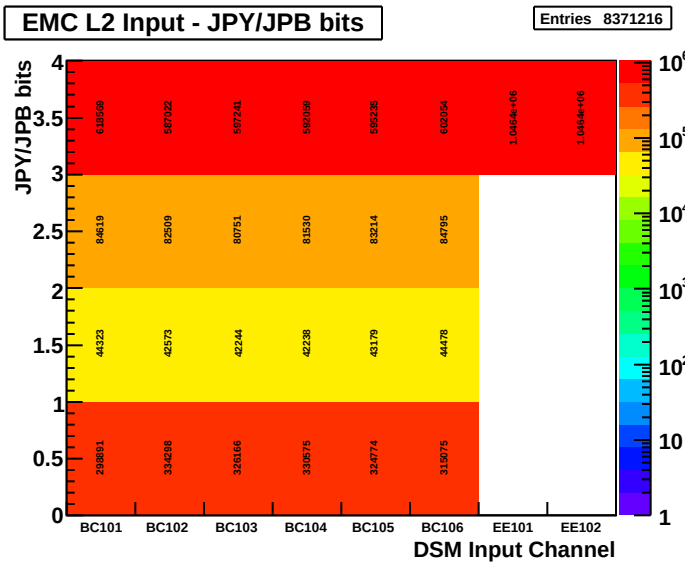

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

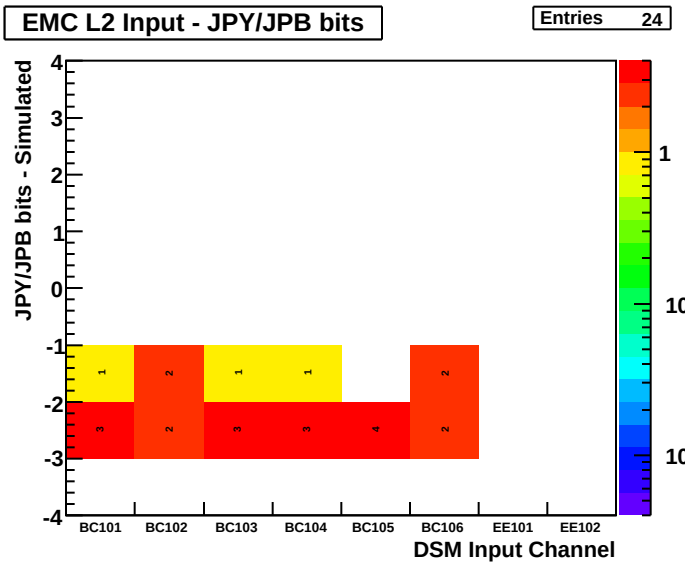

Endcap EMC L1 Input - High Tower Bits
Entries 1.255682e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

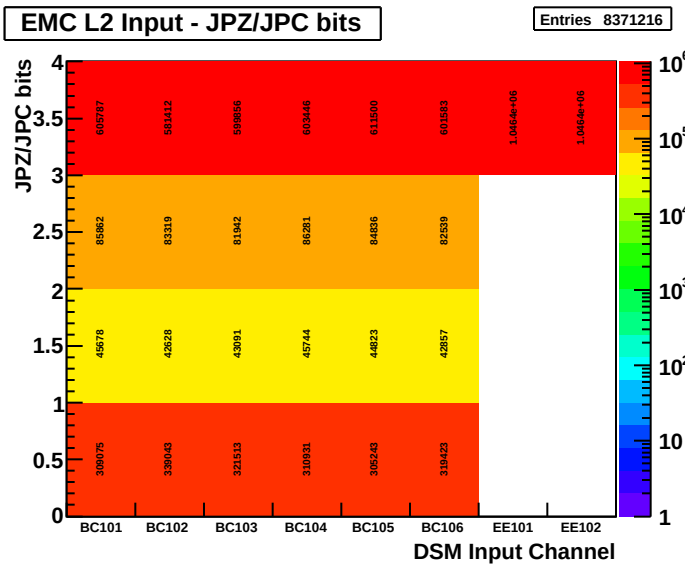

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

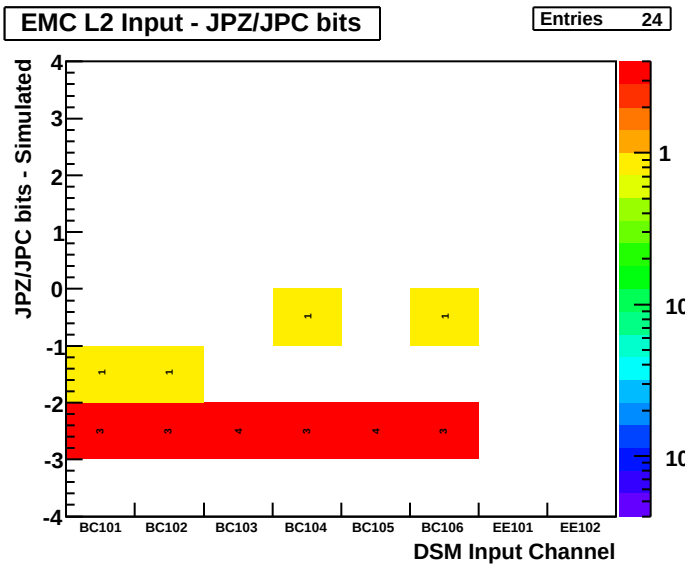

EMC L2 Input - JPX/JPA bits
Entries 8371216
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
621342 605401 605788 595655 592394 588865 1.0464e+06 1.0464e+06
81827 81518 81638 80068 83706 82301
42911 42446 42147 41533 43419 42855
300322 317037 316829 329146 326883 332281

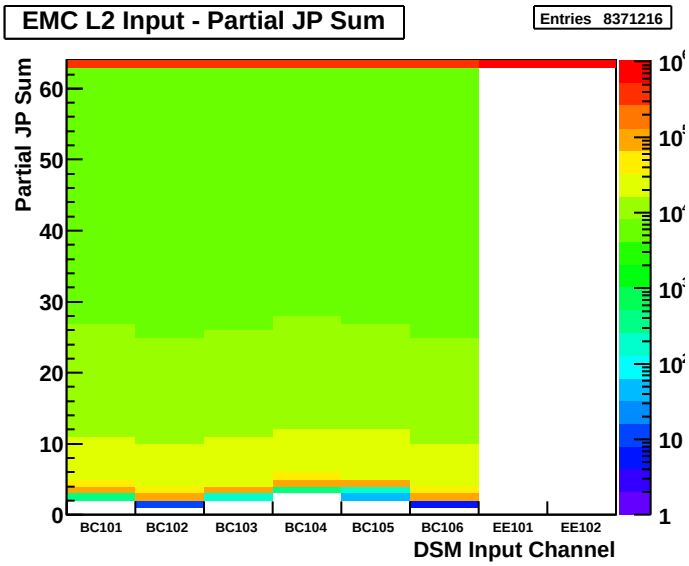

EMC L2 Input - JPX/JPA bits
Entries 24
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

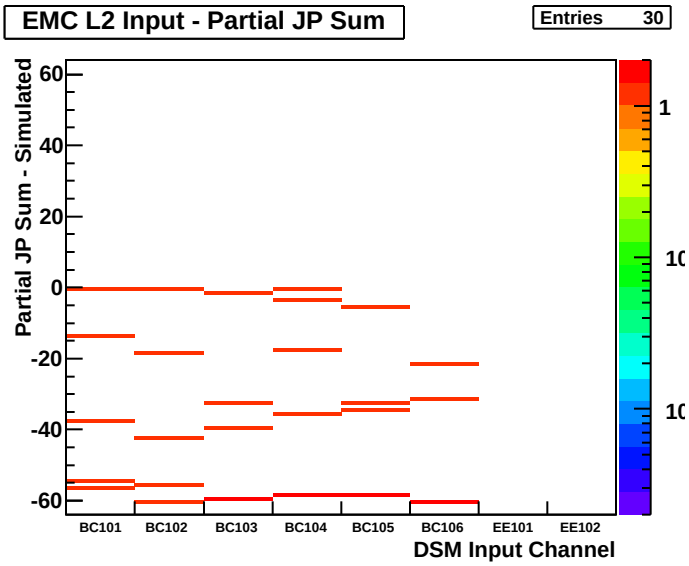

EMC L2 Input - JPY/JPB bits
Entries 8371216
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
618569 587022 597241 592039 595235 602054 1.0464e+06 1.0464e+06
84619 82509 80751 81530 83214 84795
44323 42573 42244 42238 43179 44478
298891 334298 326166 330575 324774 315075

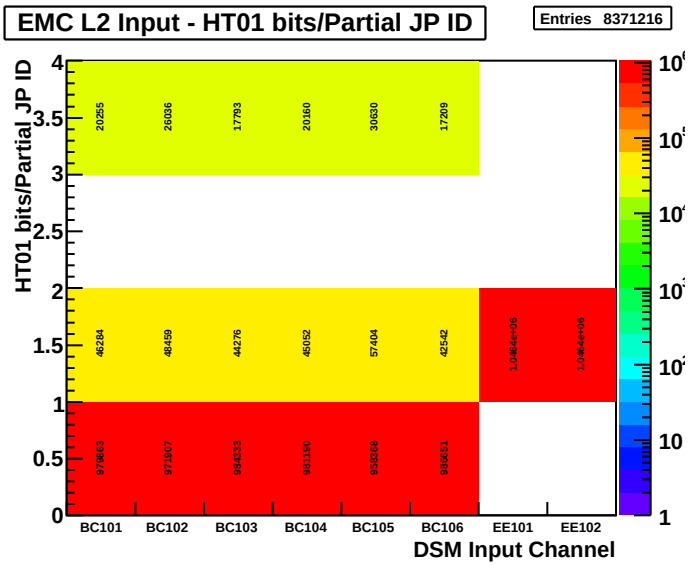

EMC L2 Input - JPY/JPB bits
Entries 24
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

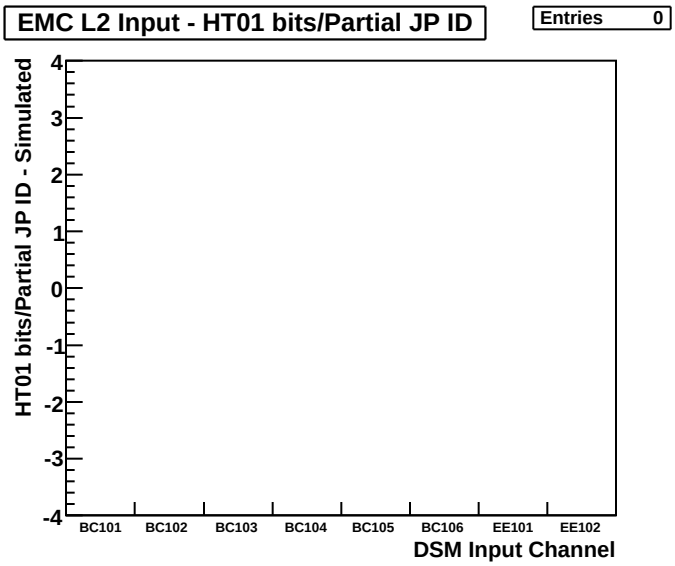

EMC L2 Input - JPZ/JPC bits
Entries 8371216
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
605787 581412 598656 603446 611500 601583 1.0464e+06 1.0464e+06
85862 83319 81942 86281 84836 82539
45678 42628 43091 45744 44823 42857
309075 339043 321513 310931 305243 319423

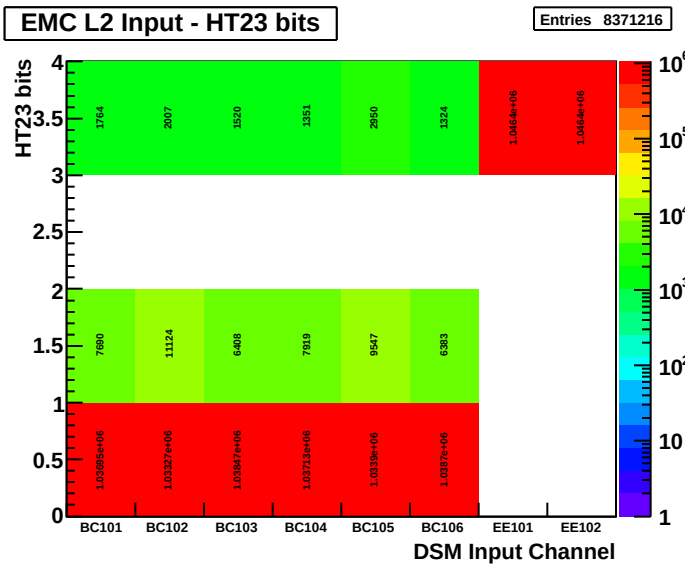

EMC L2 Input - JPZ/JPC bits
Entries 24
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

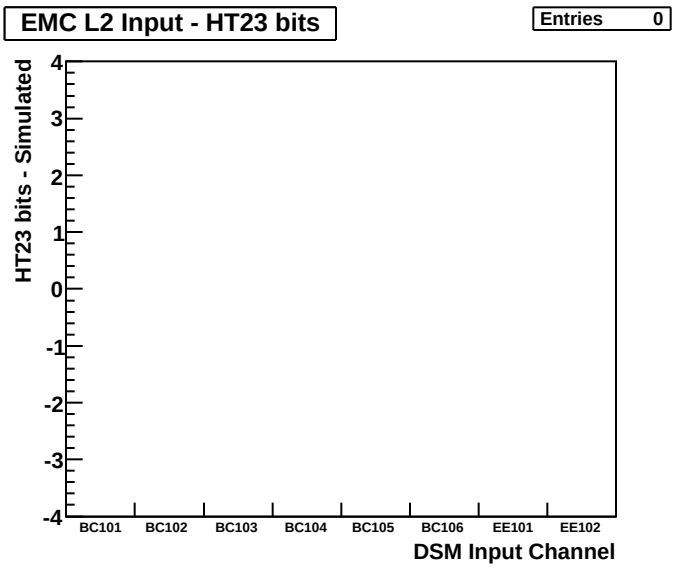

EMC L2 Input - Partial JP Sum
Entries 8371216
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

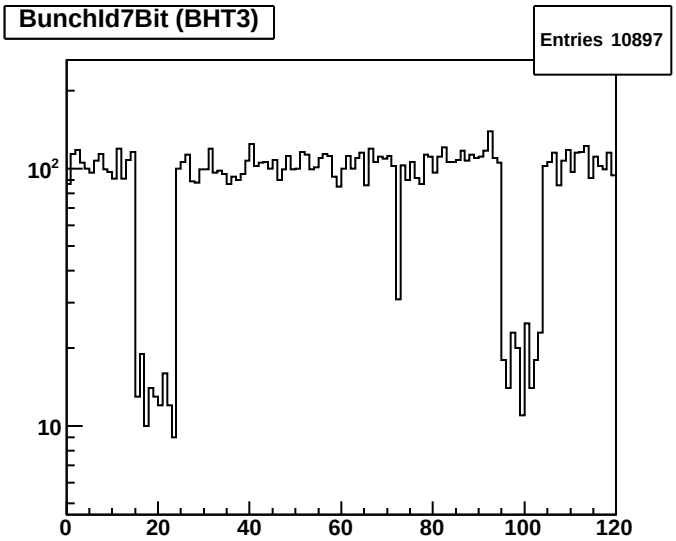

EMC L2 Input - Partial JP Sum
Entries 30
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

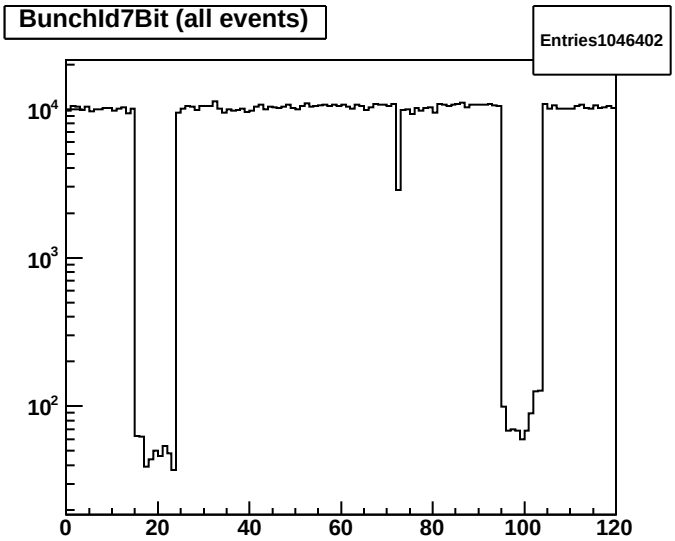

EMC L2 Input - HT01 bits/Partial JP ID
Entries 8371216
HT01 bits/Partial JP ID
20255 26036 17793 20160 30630 17209
46284 48459 44276 45052 57404 42542 1.0464e+06 1.0464e+06
979863 972907 984233 981190 958368 986651
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

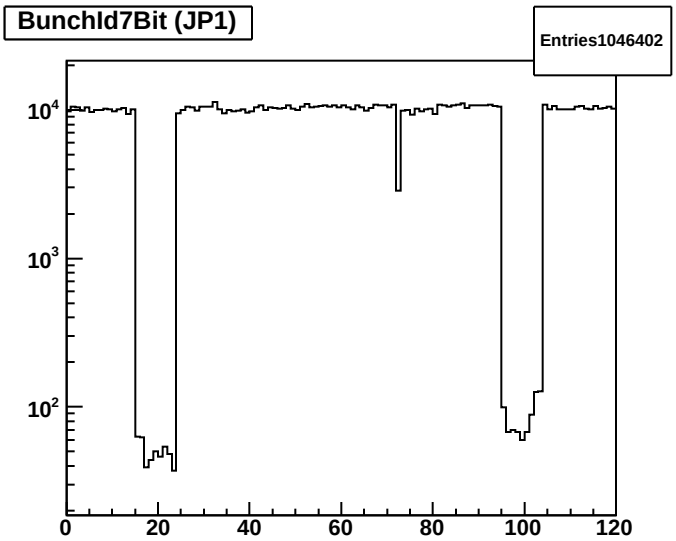

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

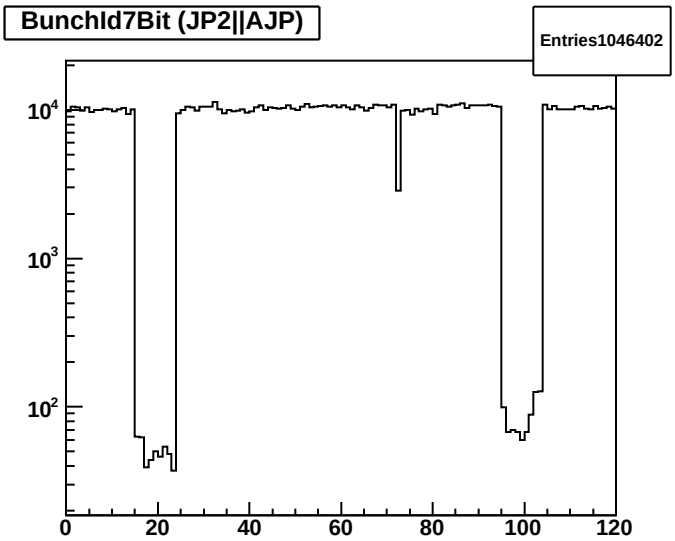

EMC L2 Input - HT23 bits
Entries 8371216
HT23 bits
1764 2007 1520 1351 2950 1324 1.0464e+06 1.0464e+06
7680 11124 6408 7919 9547 6383
1.03695e+06 1.03327e+06 1.03847e+06 1.03713e+06 1.0339e+06 1.0387e+06
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

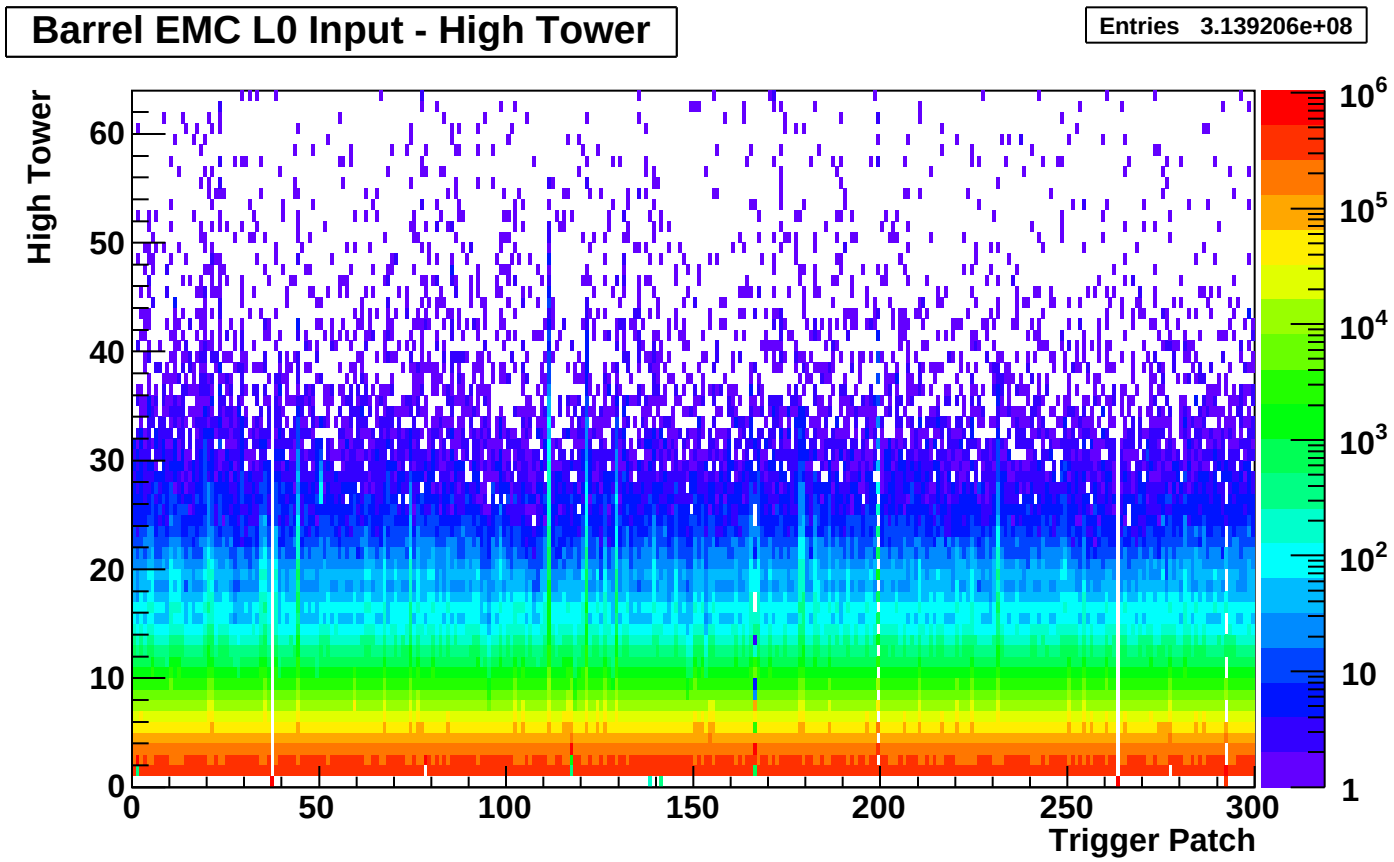

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

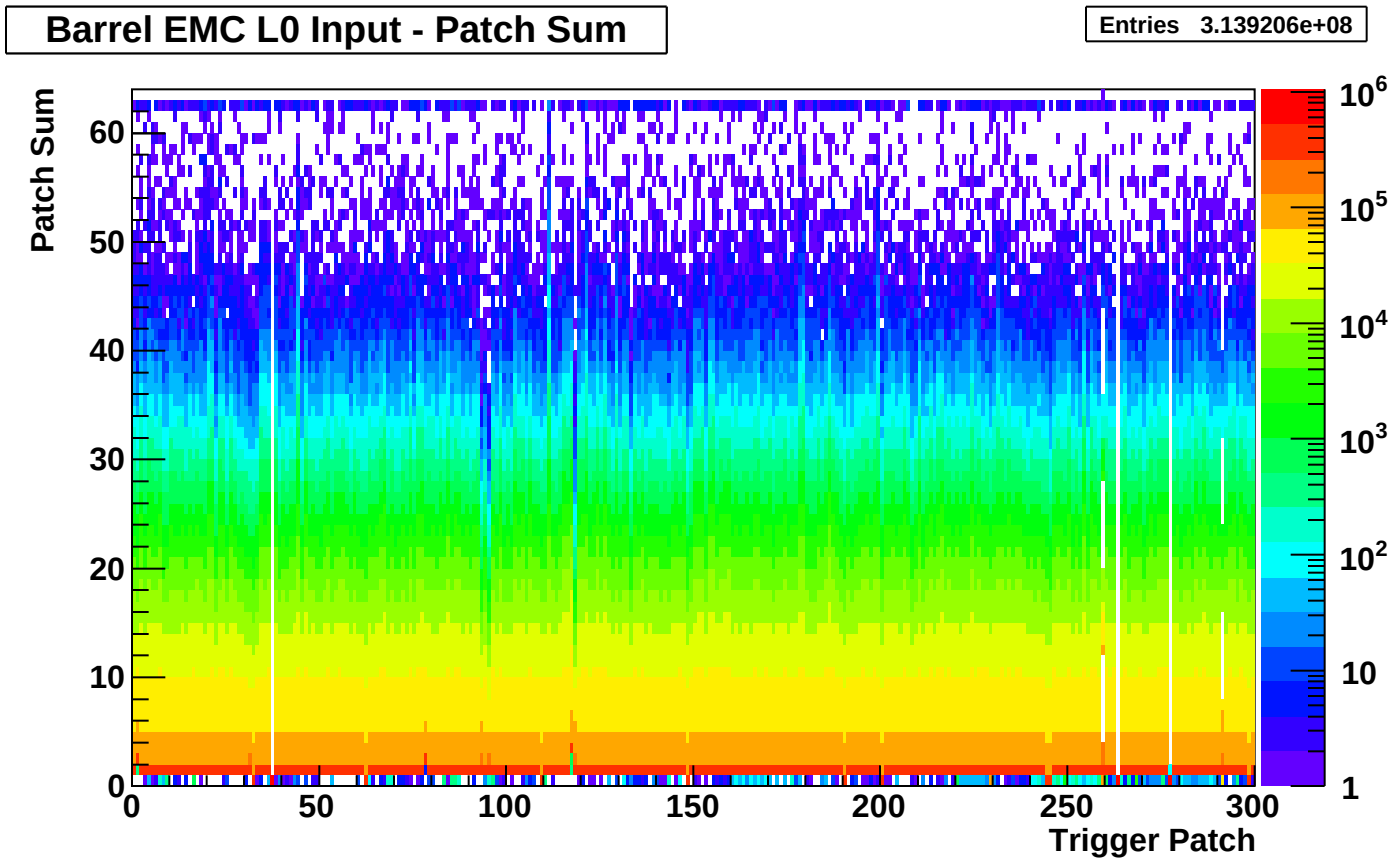

BunchId7Bit (BHT3)
Entries 10897
10^2
10
0
20
40
60
80
100
120

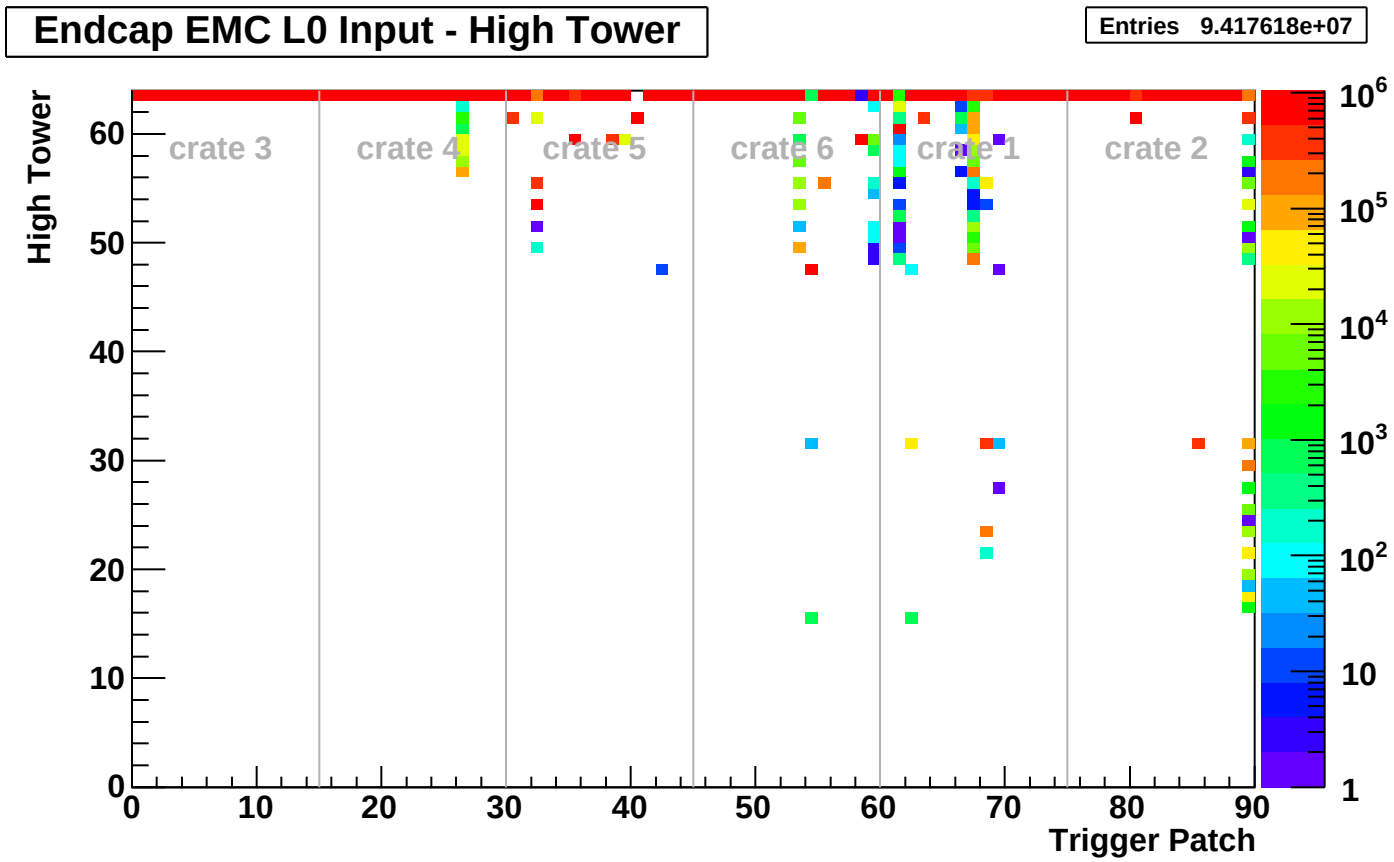

BunchId7Bit (all events)
Entries1046402
10^4
10^3
10^2
0
20
40
60
80
100
120

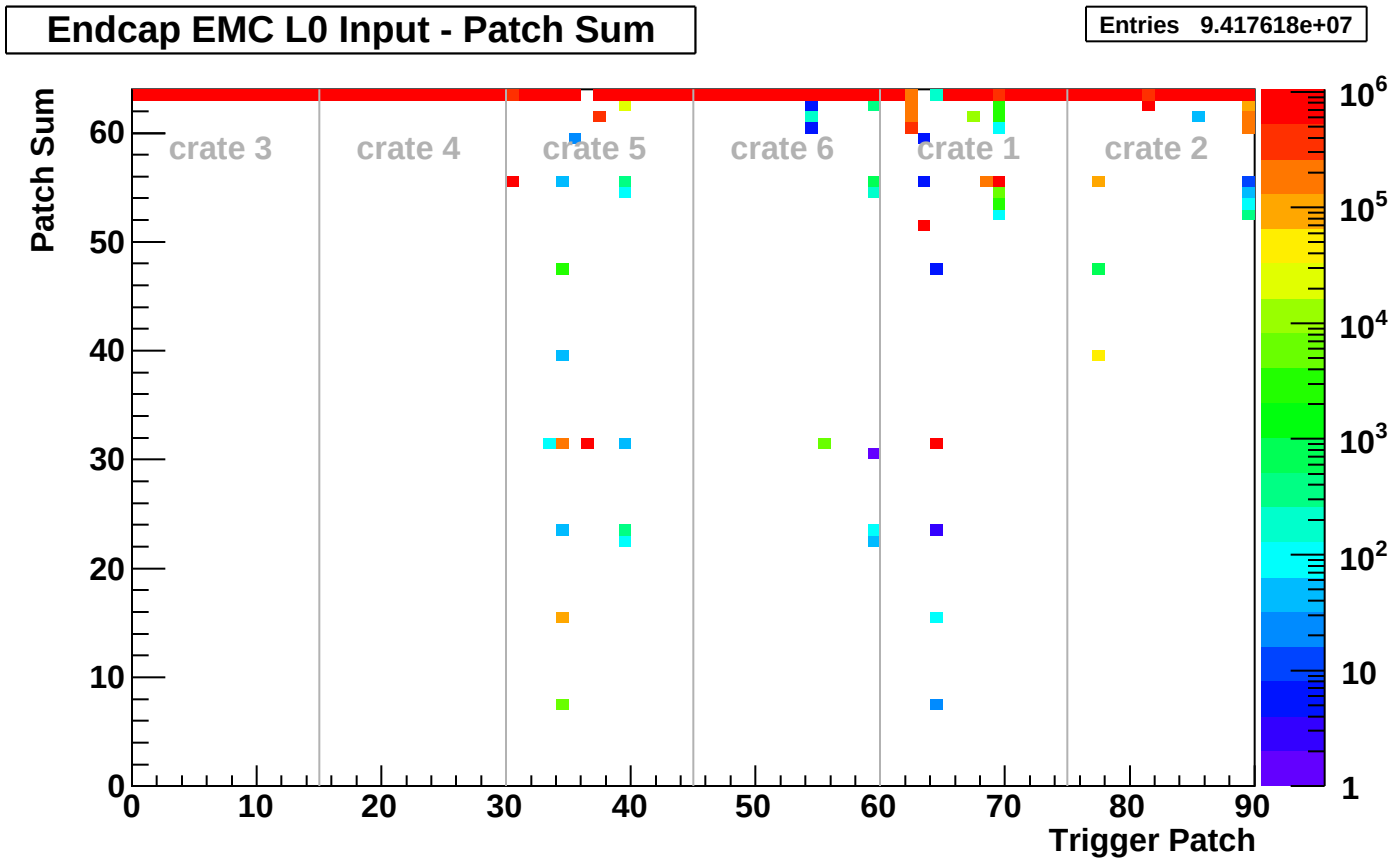

BunchId7Bit (JP1)
Entries1046402
10^4
10^3
10^2
0
20
40
60
80
100
120

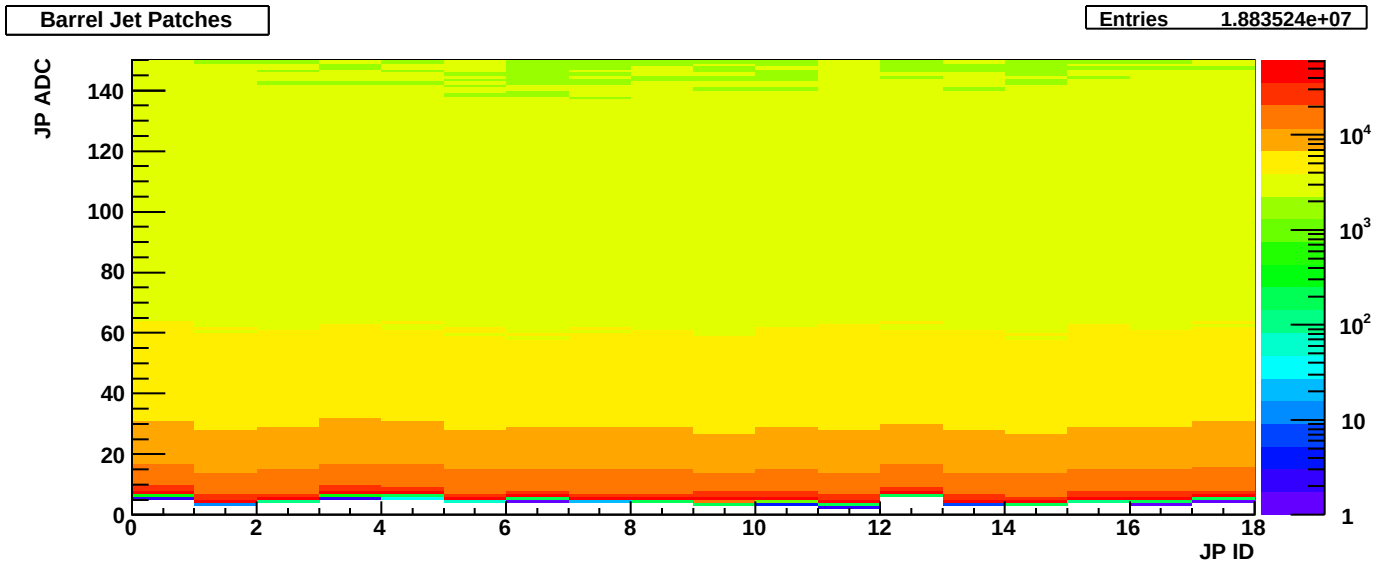

BunchId7Bit (JP2||AJP)
Entries1046402
10^4
10^3
10^2
0
20
40
60
80
100
120

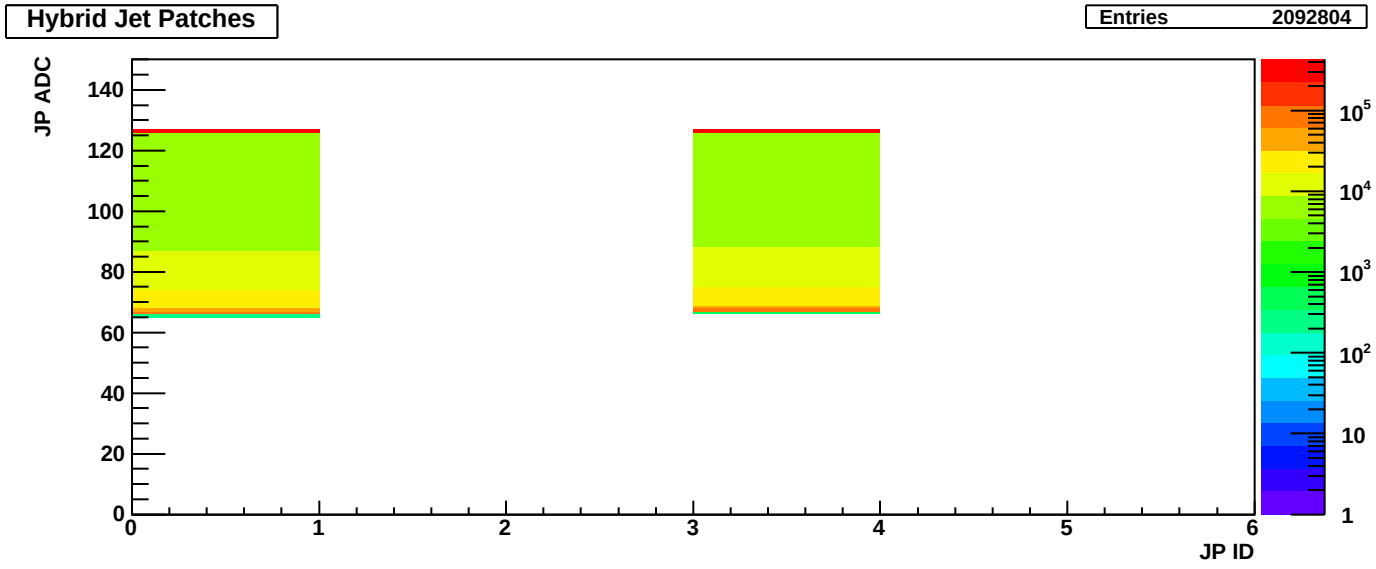

Barrel EMC L0 Input - High Tower
Entries 3.139206e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

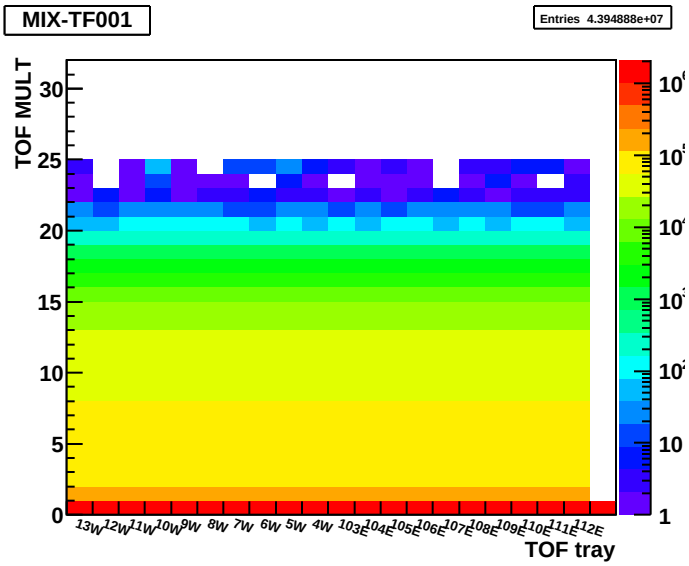

Barrel EMC L0 Input - Patch Sum
Entries 3.139206e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

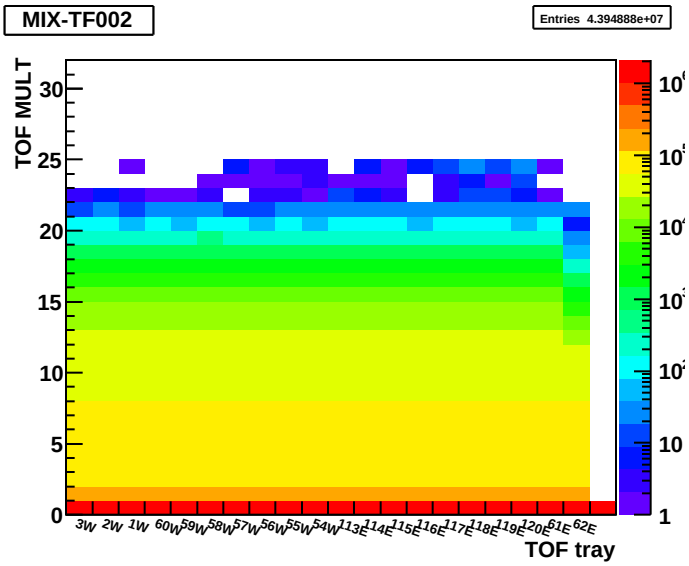

Endcap EMC L0 Input - High Tower
Entries 9.417618e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

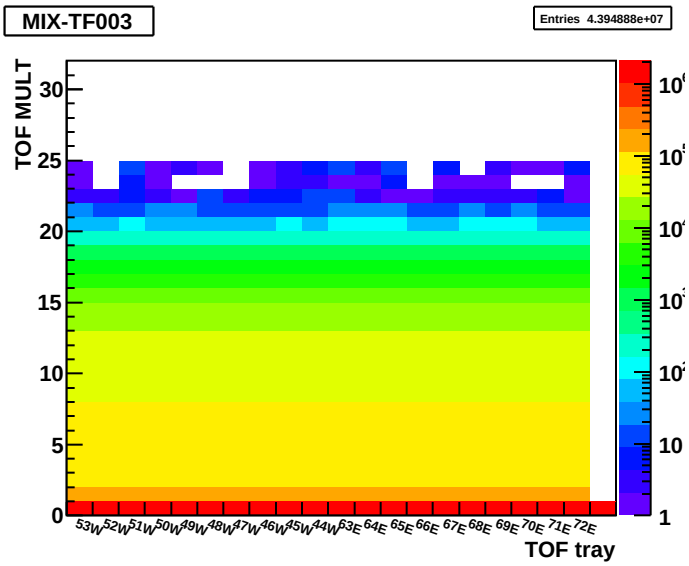

Endcap EMC L0 Input - Patch Sum
Entries 9.417618e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

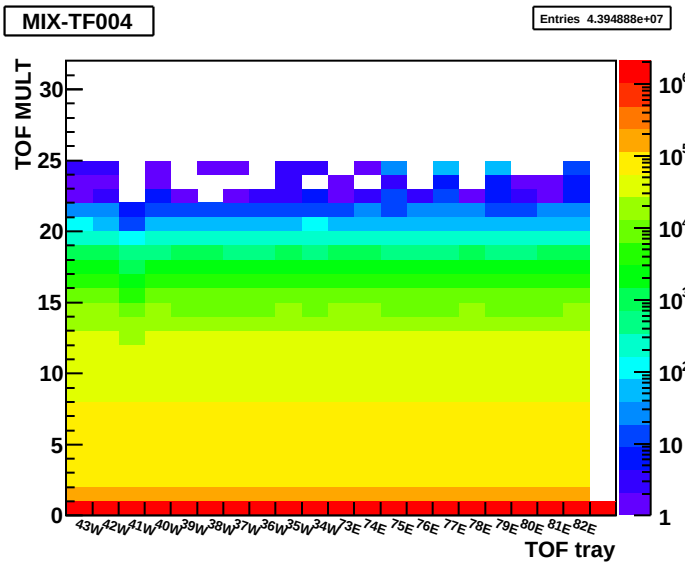

Barrel Jet Patches
Entries 1.883524e+07
JP ADC
JP ID

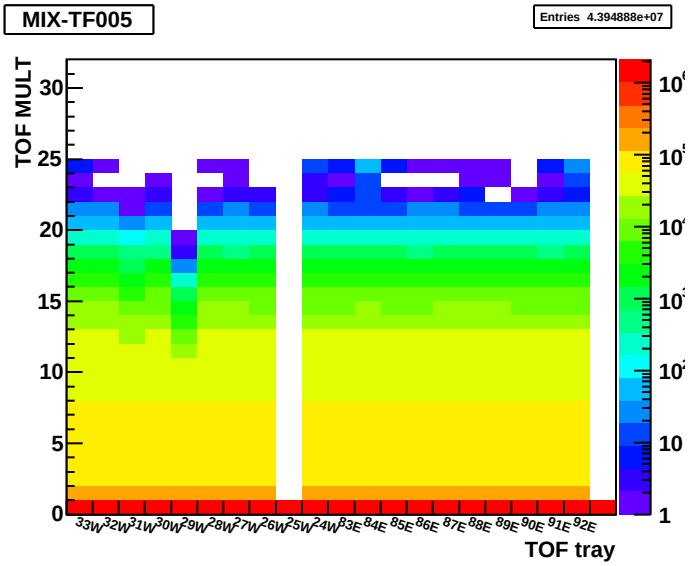

Hybrid Jet Patches
Entries 2092804
JP ADC
JP ID

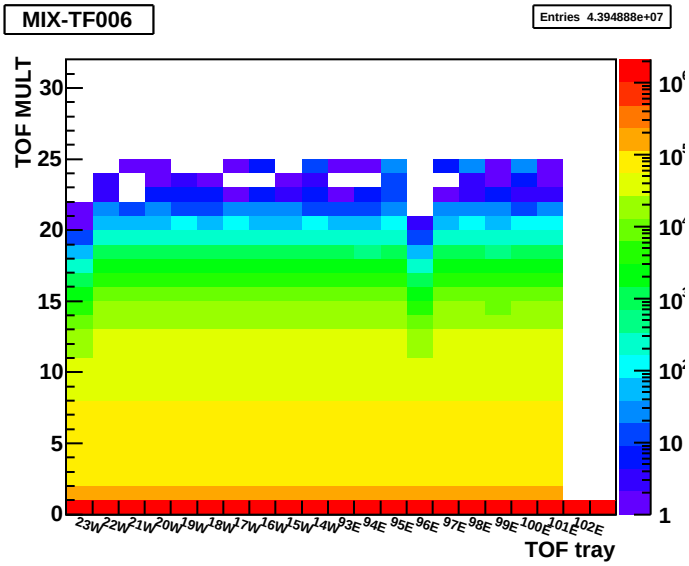

MIX-TF001
Entries 4.394888e+07
TOF MULT
TOF tray

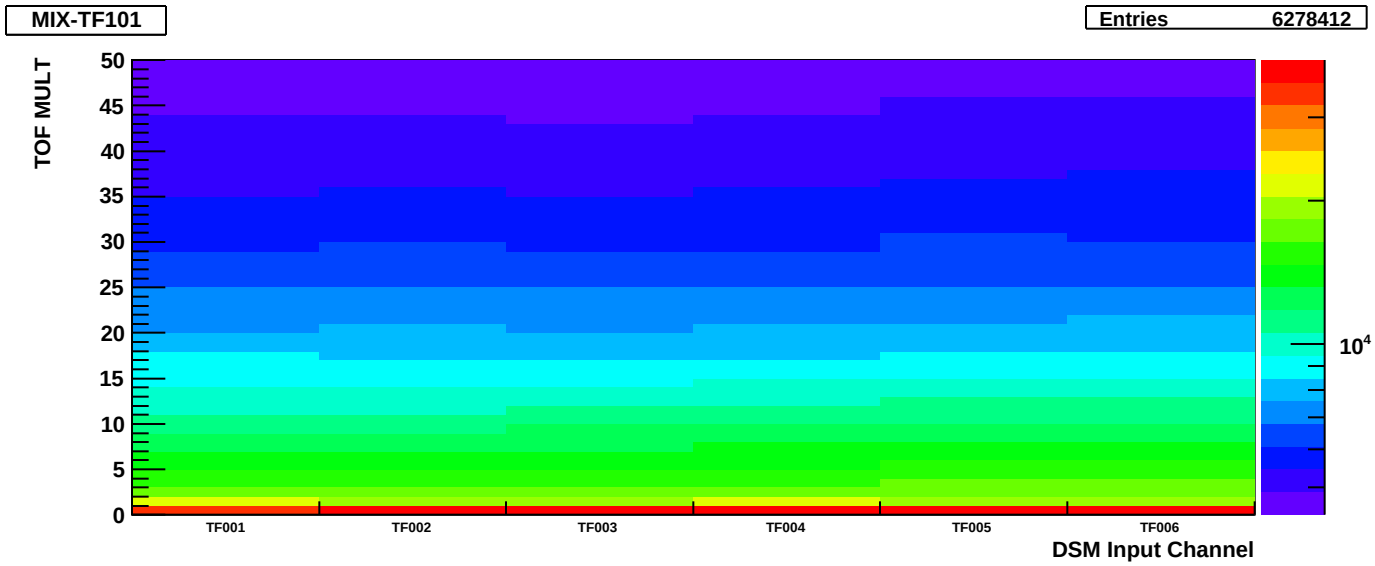

MIX-TF002
Entries 4.394888e+07
TOF MULT
TOF tray

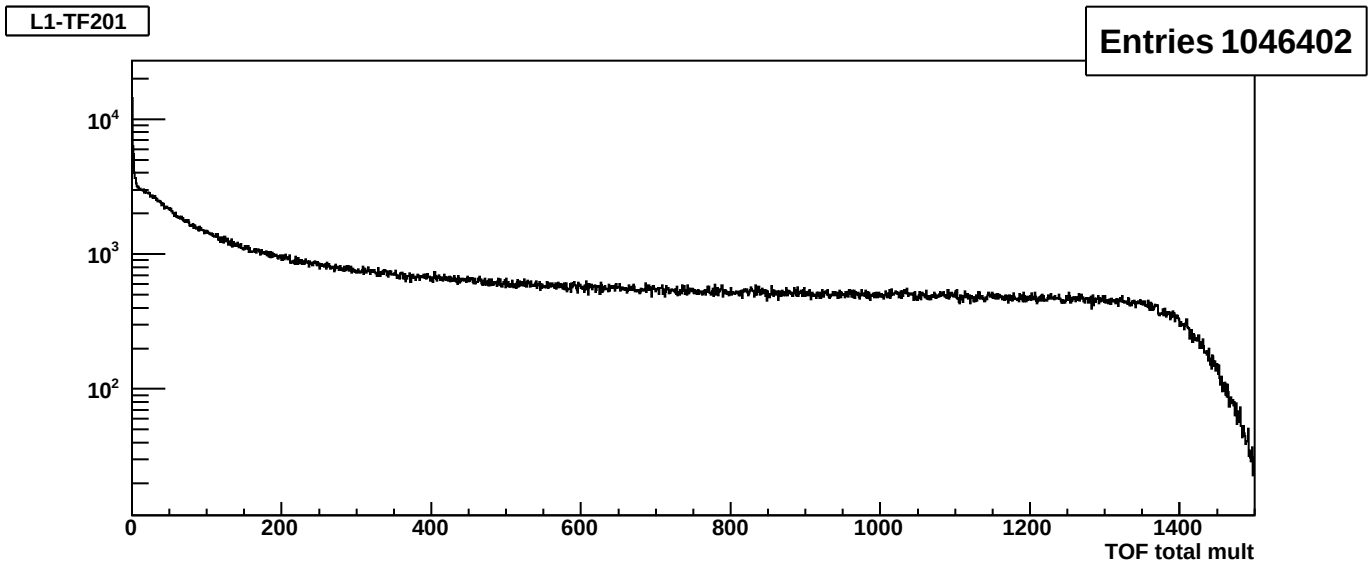

MIX-TF003
Entries 4.394888e+07
TOF MULT
TOF tray

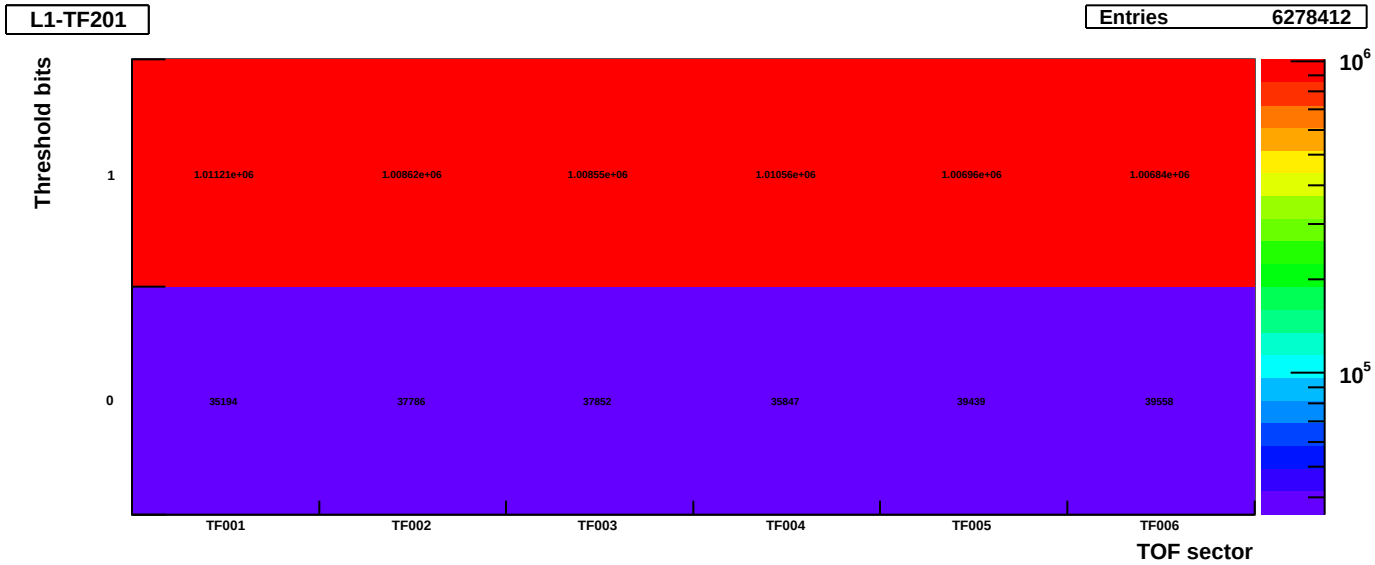

MIX-TF004
Entries 4.394888e+07
TOF MULT
TOF tray

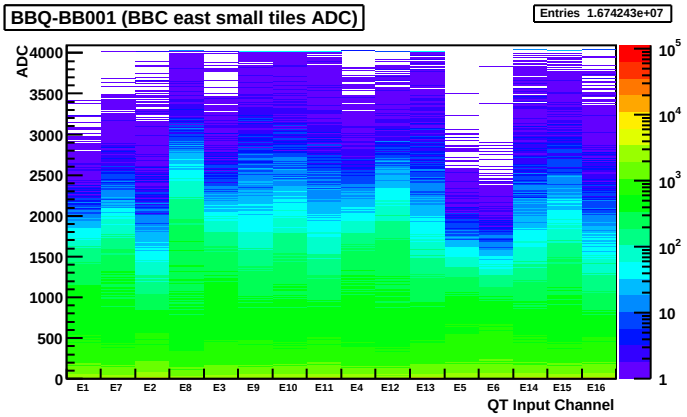

MIX-TF005
Entries 4.394888e+07
TOF MULT
TOF tray

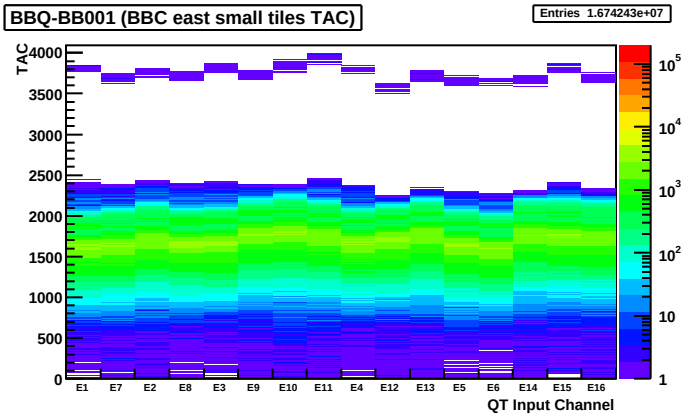

MIX-TF006
Entries 4.394888e+07
TOF MULT
TOF tray

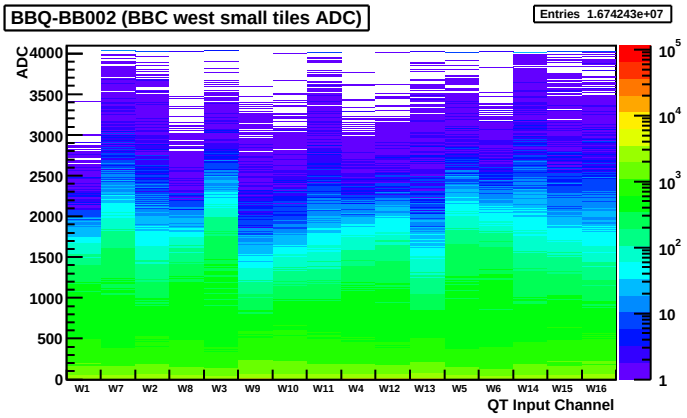

MIX-TF101
Entries 6278412
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4

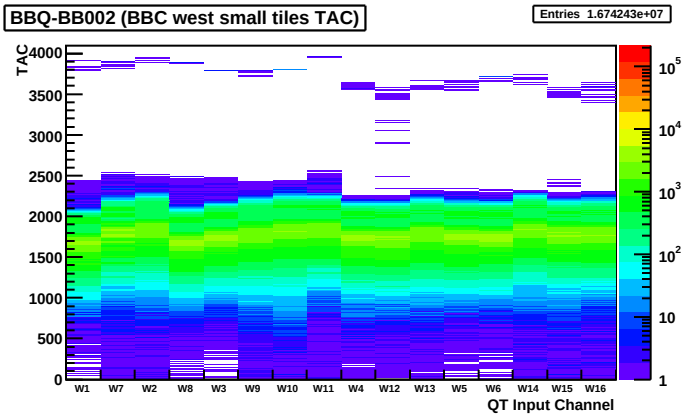

L1-TF201
Entries 1046402
10^4
10^3
10^2
0
200
400
600
800
1000
1200
1400
TOF total mult

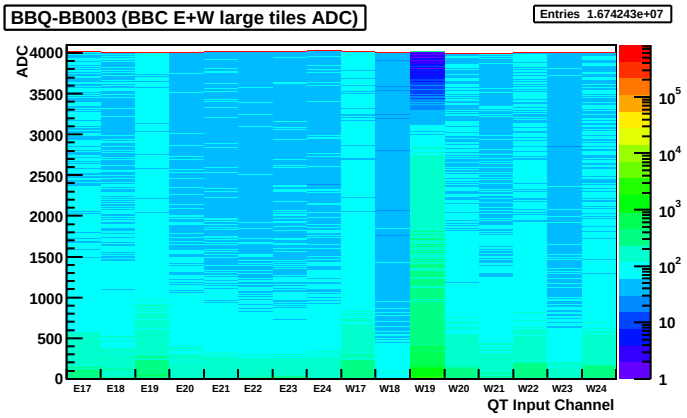

L1-TF201
Entries 6278412
Threshold bits
1
0
1.01121e+06
1.00862e+06
1.00855e+06
1.01056e+06
1.00696e+06
1.00684e+06
35194
37786
37852
35847
39439
39558
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6
10^5

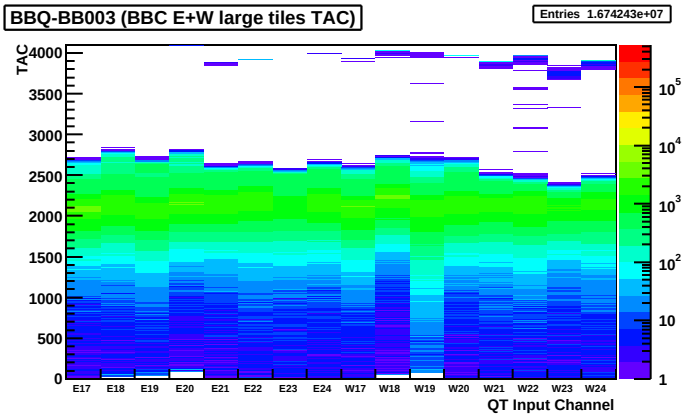

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.674243e+07
ADC
QT Input Channel

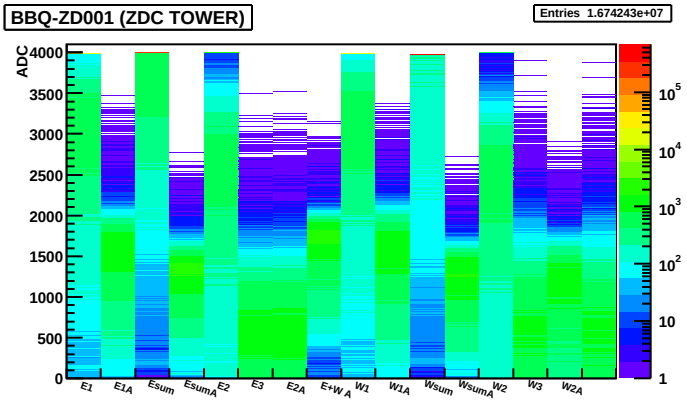

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.674243e+07
TAC
QT Input Channel

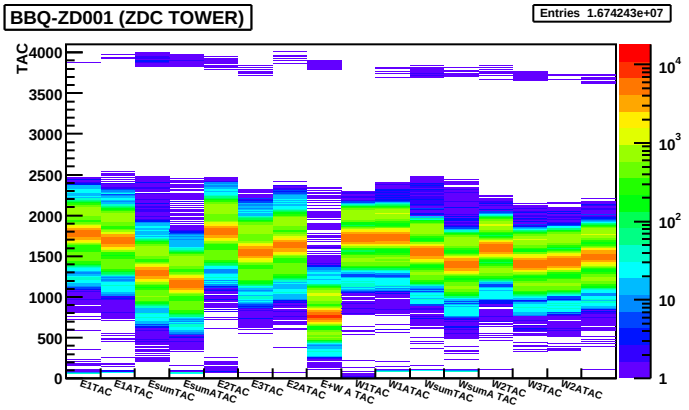

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.674243e+07
ADC
QT Input Channel

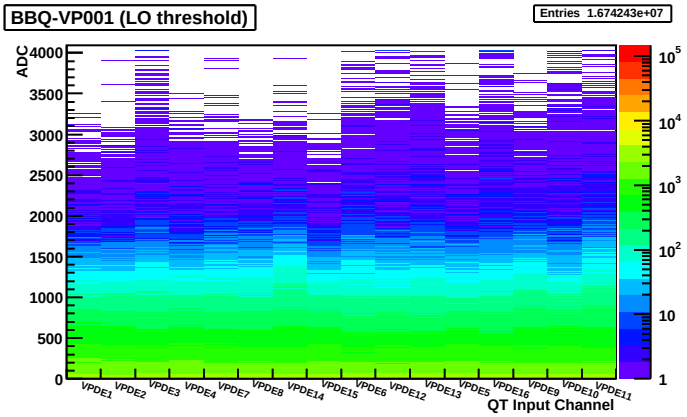

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.674243e+07
TAC
QT Input Channel

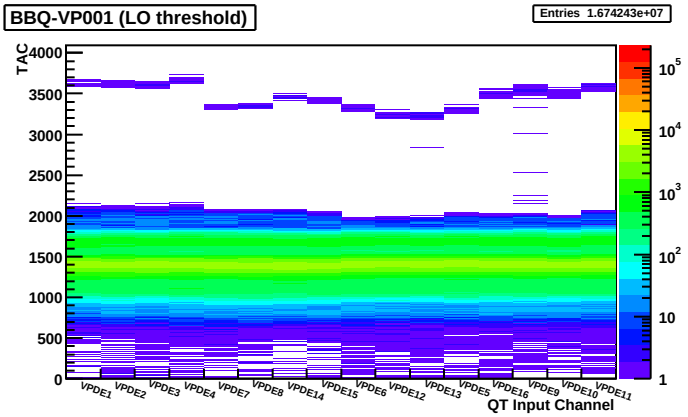

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.674243e+07
ADC
QT Input Channel

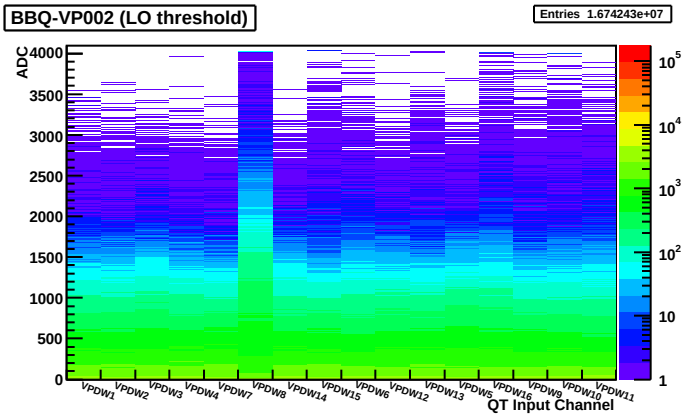

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.674243e+07
TAC
QT Input Channel

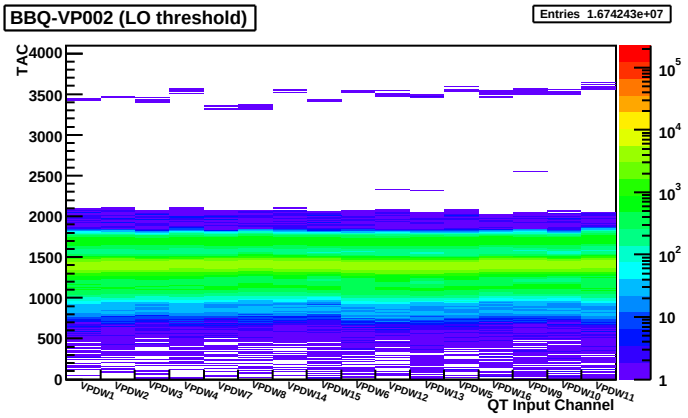

BBQ-ZD001 (ZDC TOWER)
Entries 1.674243e+07
ADC

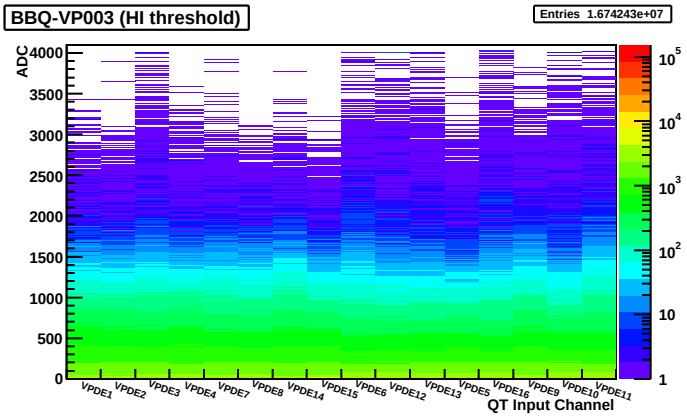

BBQ-ZD001 (ZDC TOWER)
Entries 1.674243e+07
TAC

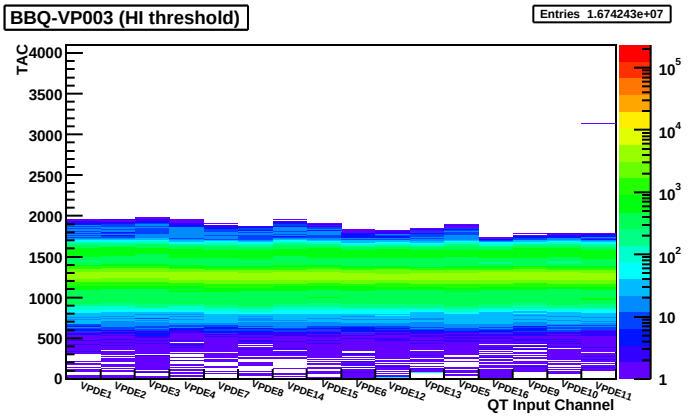

BBQ-VP001 (LO threshold)
Entries 1.674243e+07
ADC
QT Input Channel

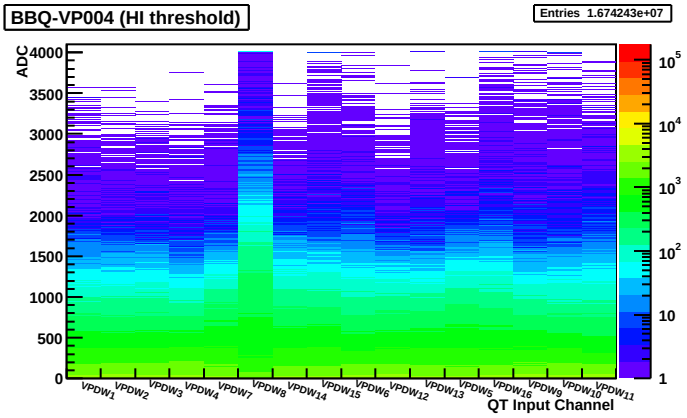

BBQ-VP001 (LO threshold)
Entries 1.674243e+07
TAC
QT Input Channel

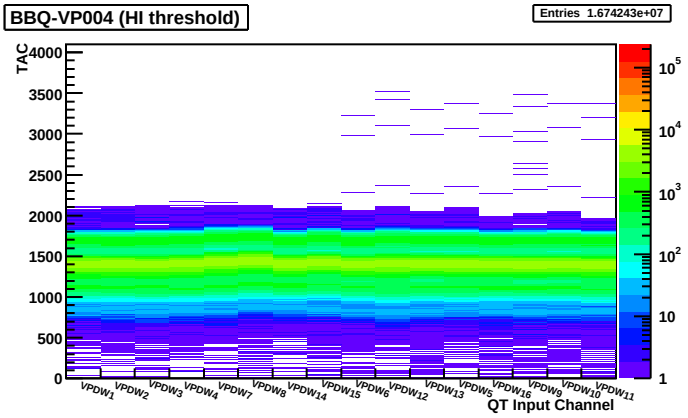

BBQ-VP002 (LO threshold)
Entries 1.674243e+07
ADC
QT Input Channel

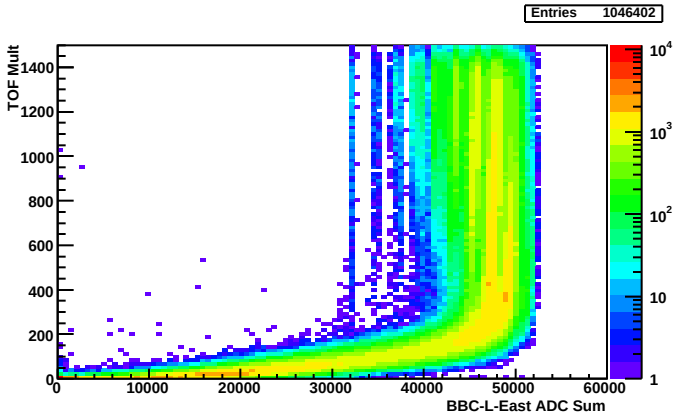

BBQ-VP002 (LO threshold)
Entries 1.674243e+07
TAC
QT Input Channel

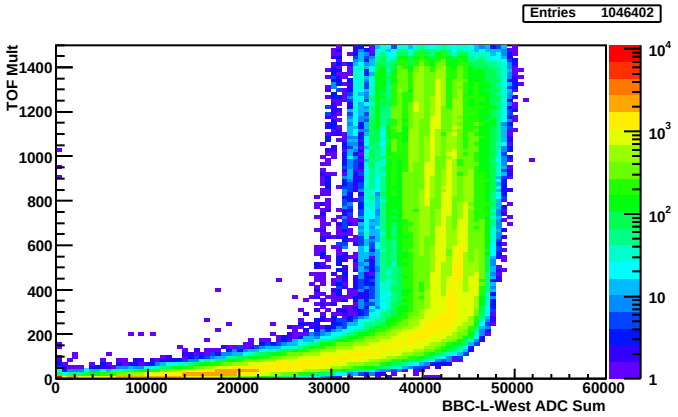

BBQ-VP003 (HI threshold)
Entries 1.674243e+07
ADC
QT Input Channel

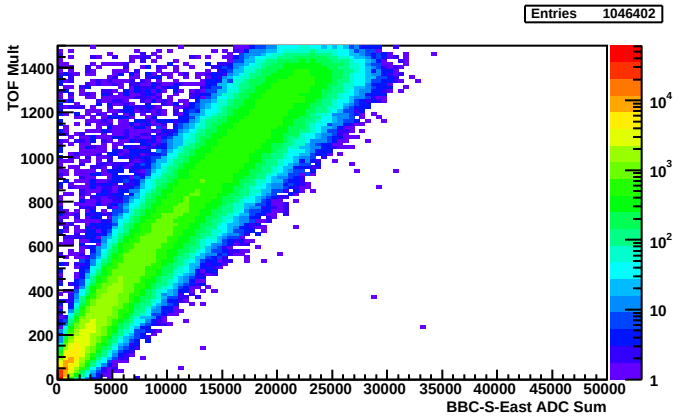

BBQ-VP003 (HI threshold)
Entries 1.674243e+07
TAC
QT Input Channel

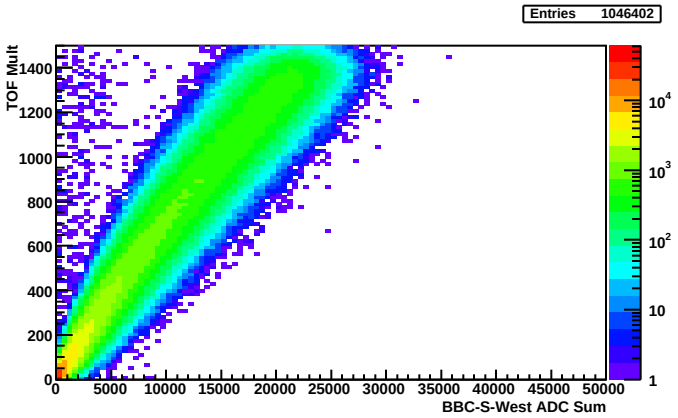

BBQ-VP004 (HI threshold)
Entries 1.674243e+07
ADC
QT Input Channel

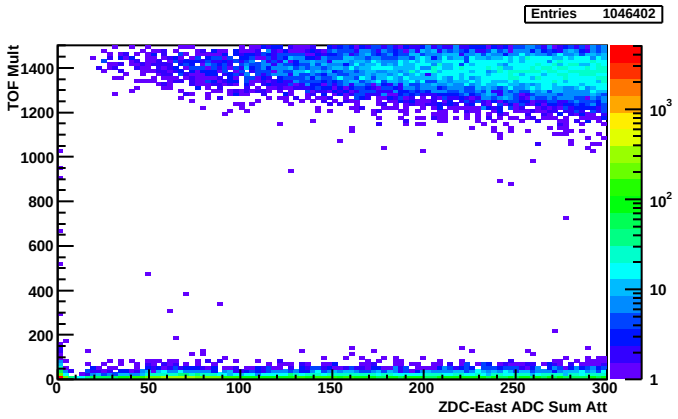

BBQ-VP004 (HI threshold)
Entries 1.674243e+07
TAC
QT Input Channel

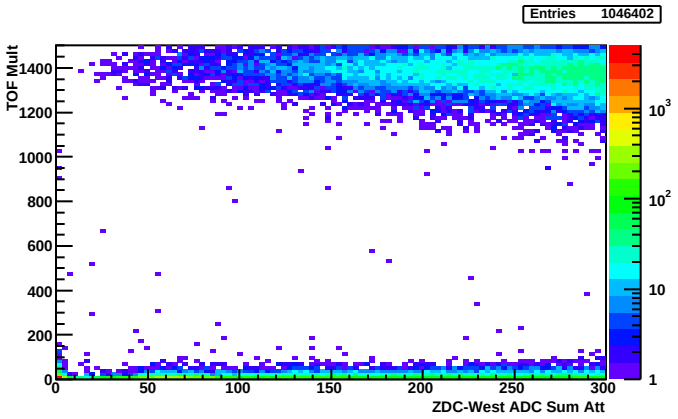

Entries 1046402
TOF Mult
BBC-L-East ADC Sum

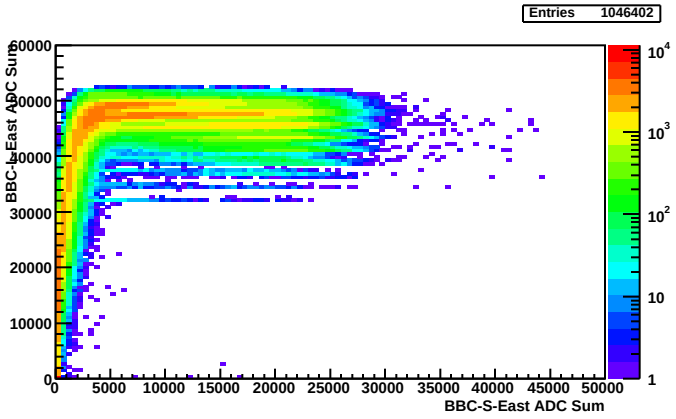

Entries 1046402
TOF Mult
BBC-L-West ADC Sum

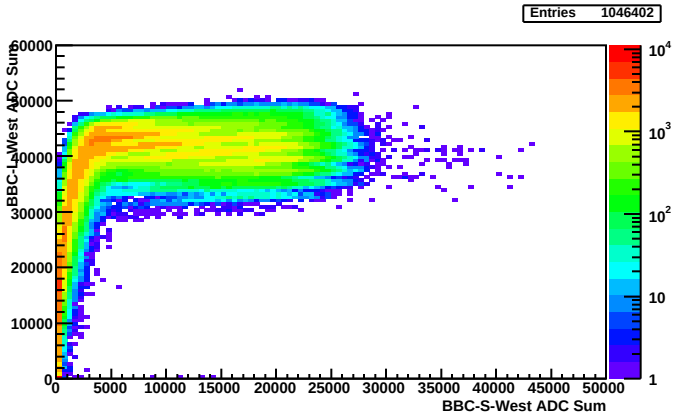

Entries 1046402
TOF Mult
BBC-S-East ADC Sum

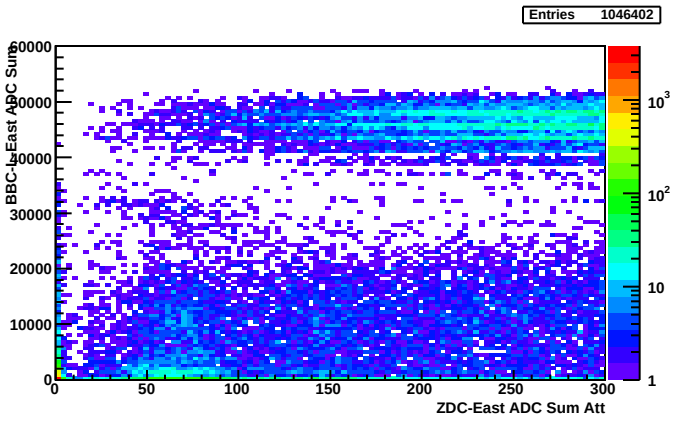

Entries 1046402
TOF Mult
BBC-S-West ADC Sum

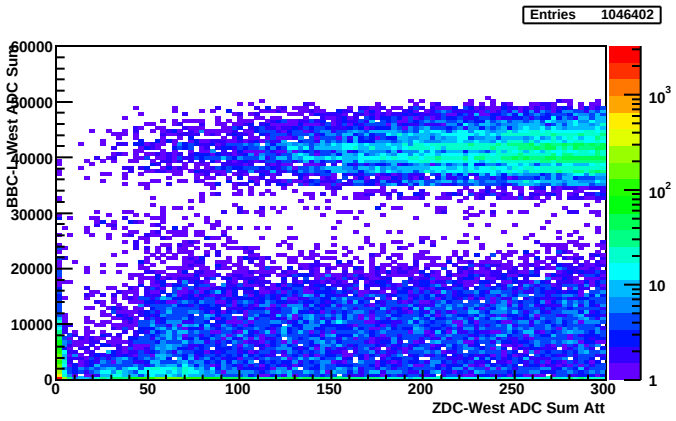

Entries 1046402
TOF Mult
ZDC-East ADC Sum Att

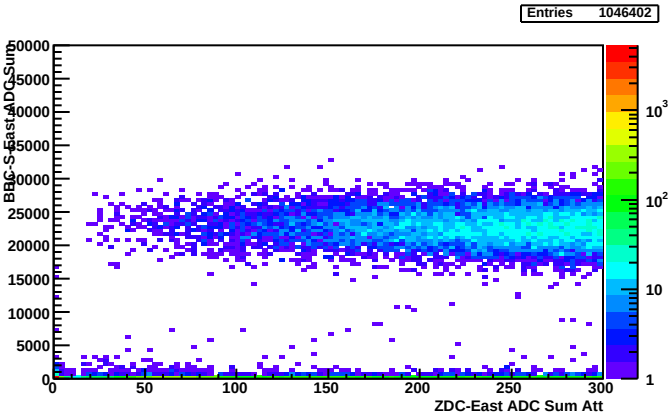

Entries 1046402
TOF Mult
ZDC-West ADC Sum Att

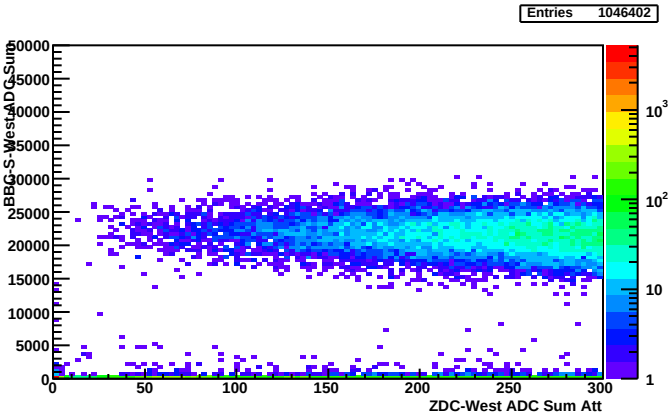

Entries 1046402
BBC-L-East ADC Sum
BBC-S-East ADC Sum

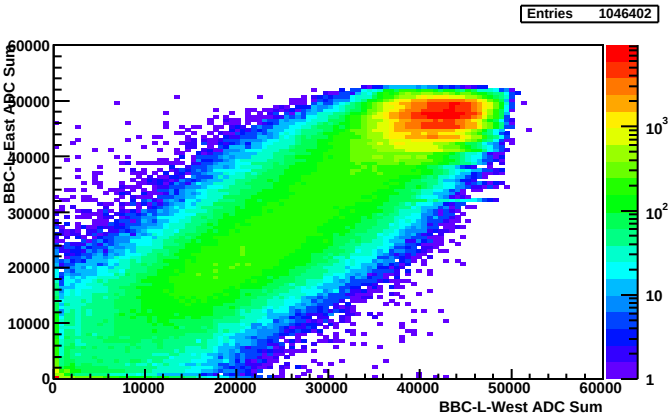

Entries 1046402
BBC-L-West ADC Sum
BBC-S-West ADC Sum

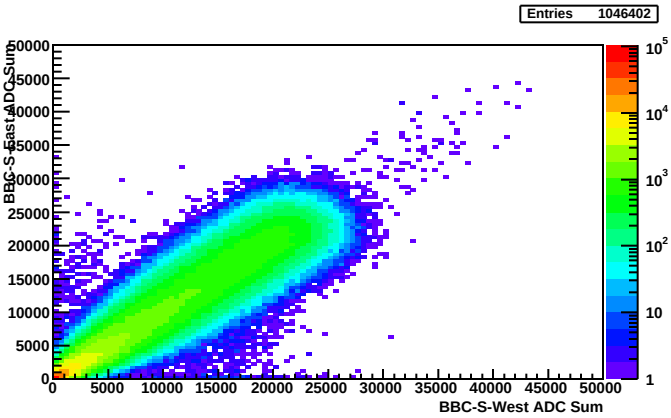

Entries 1046402
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

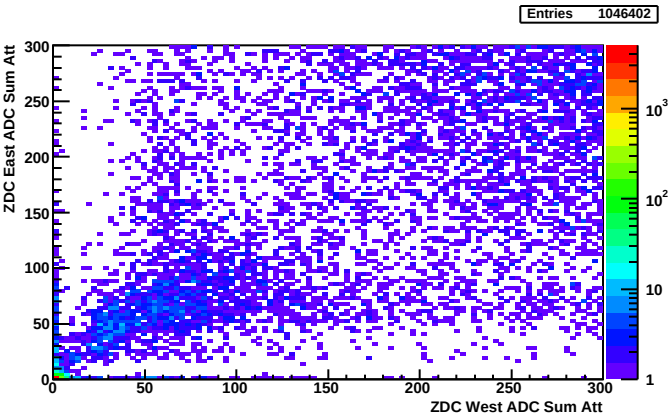

Entries 1046402
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

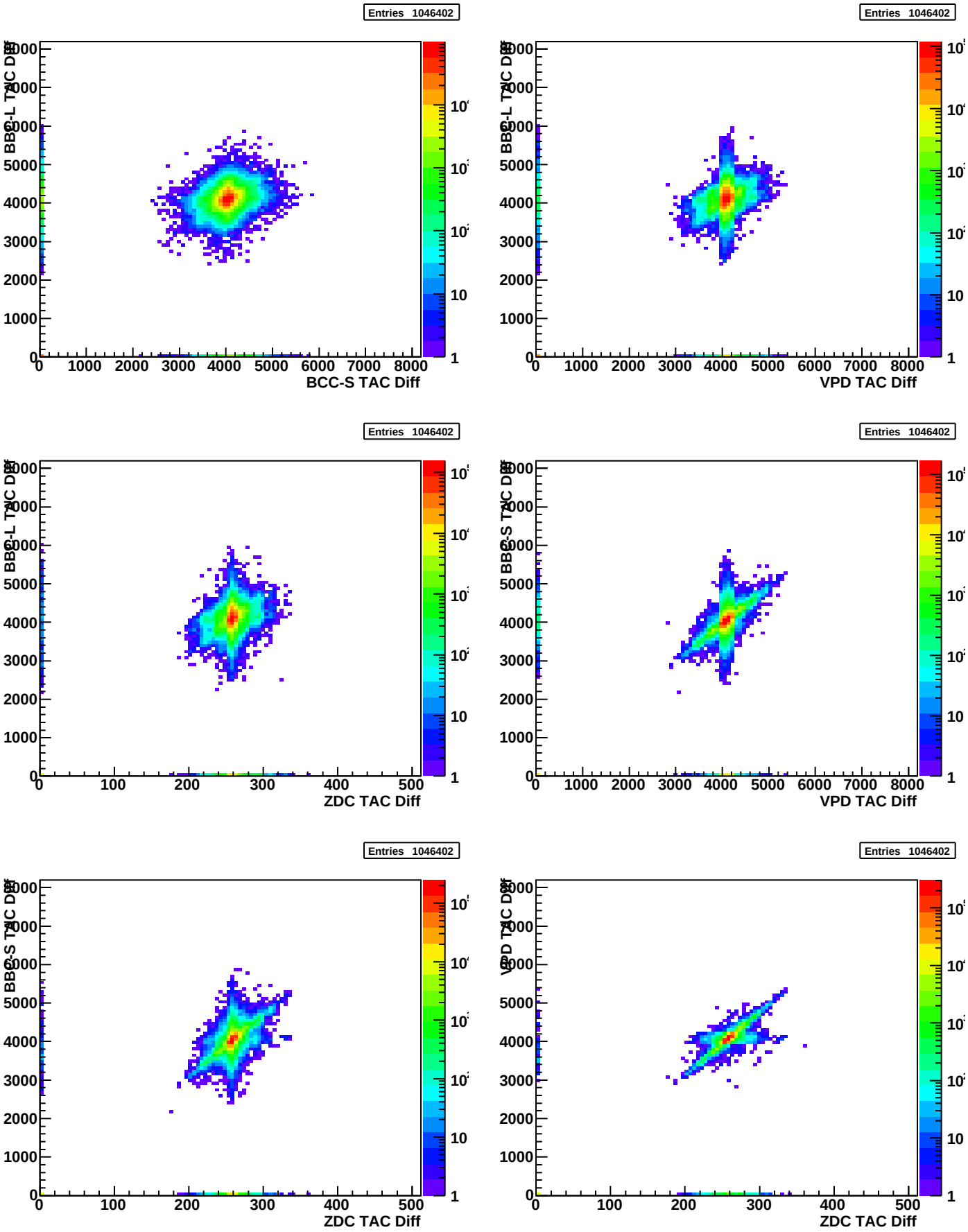

Entries 1046402
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

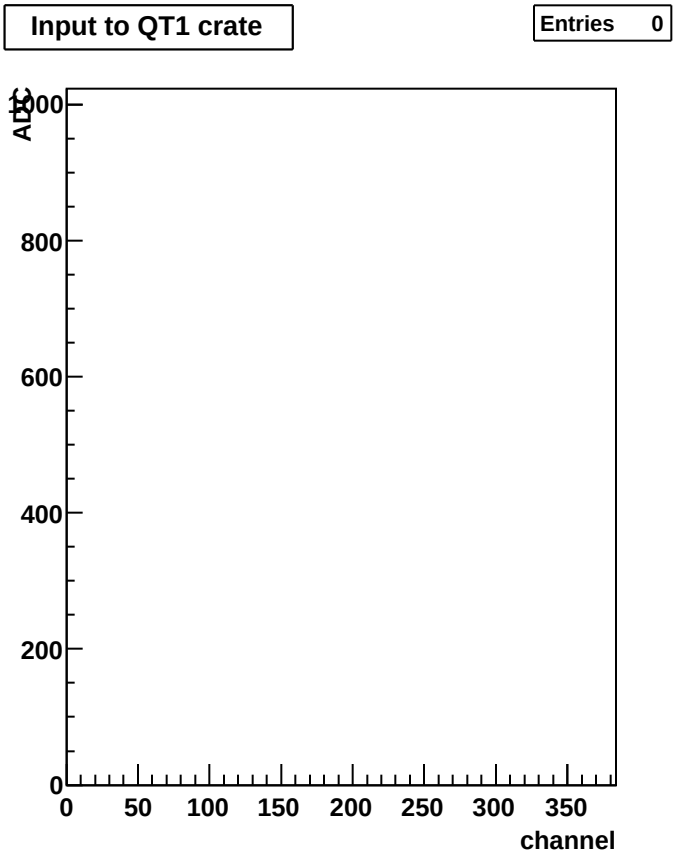

Entries 1046402
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

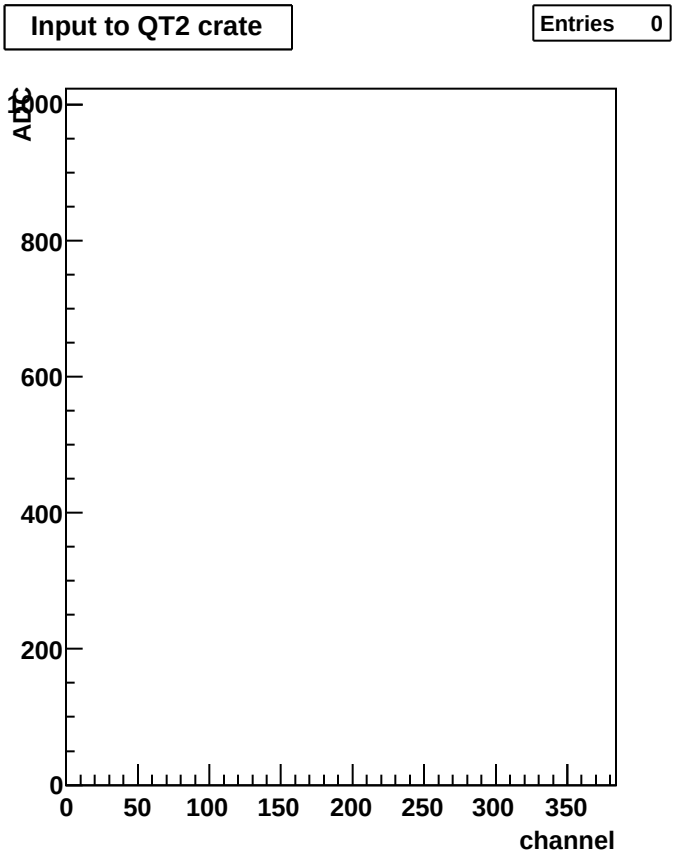

Entries 1046402
BBC-L-East ADC Sum
BBC-L-West ADC Sum

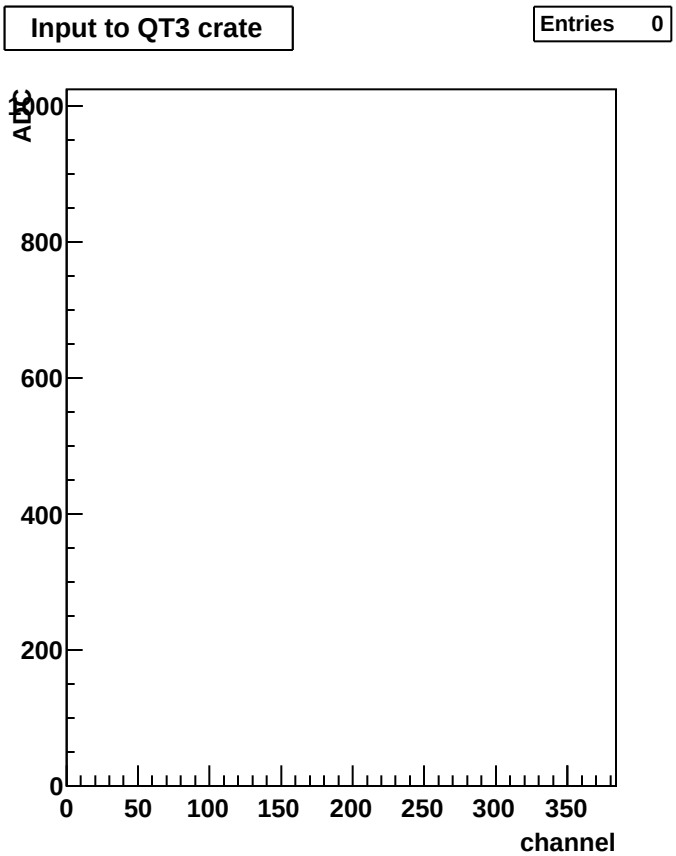

Entries 1046402
BBC-S-East ADC Sum
BBC-S-West ADC Sum

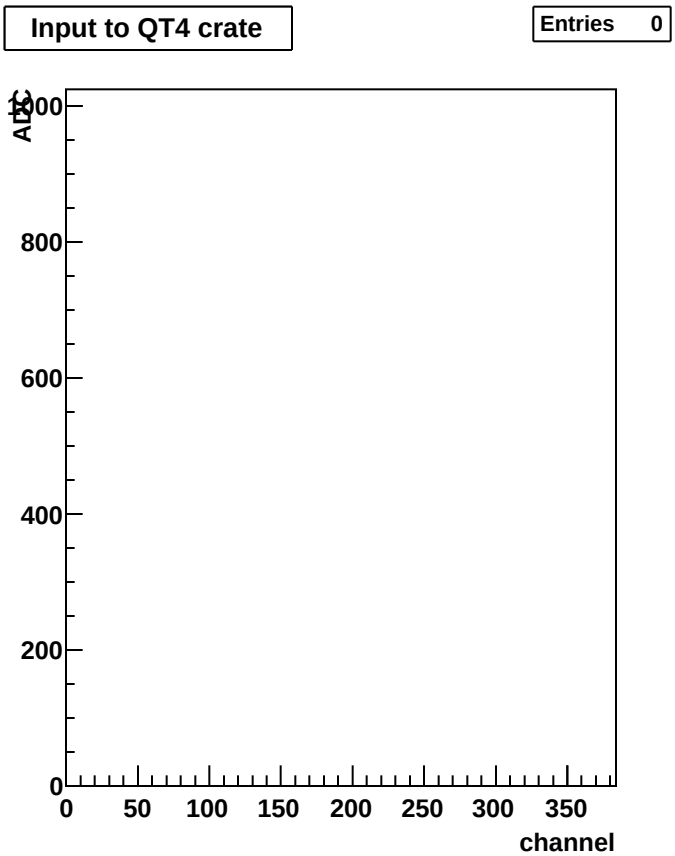

Entries 1046402
ZDC East ADC Sum Att
ZDC West ADC Sum Att

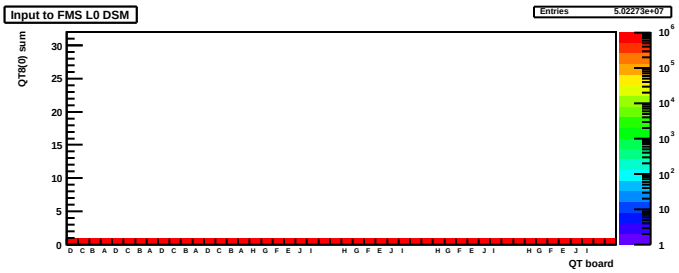

Entries 1046402
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1046402
BBC-L TAC Diff
VPD TAC Diff
Entries 1046402
BBC-L TAC Diff
ZDC TAC Diff
Entries 1046402
BBC-S TAC Diff
VPD TAC Diff
Entries 1046402
BBC-S TAC Diff
ZDC TAC Diff
Entries 1046402
VPD TAC Diff
ZDC TAC Diff

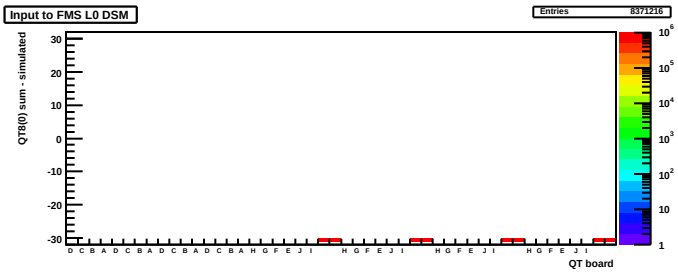

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

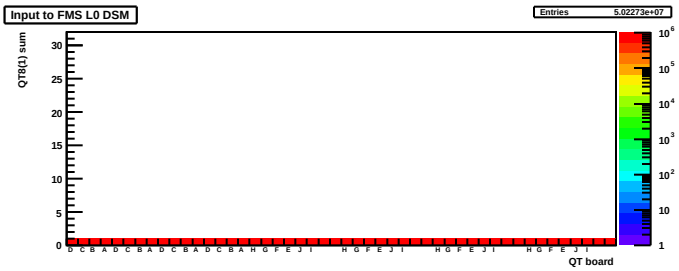

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

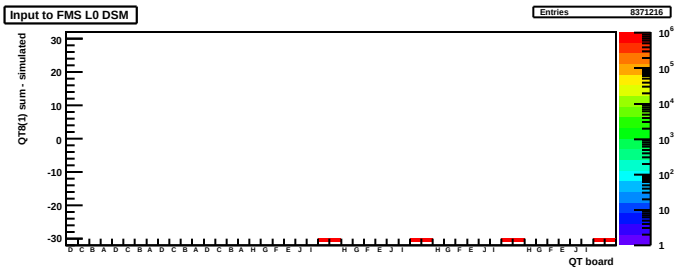

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

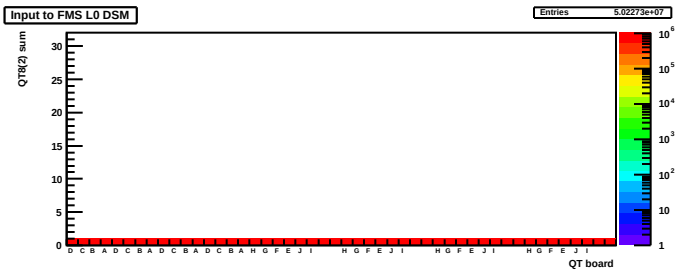

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

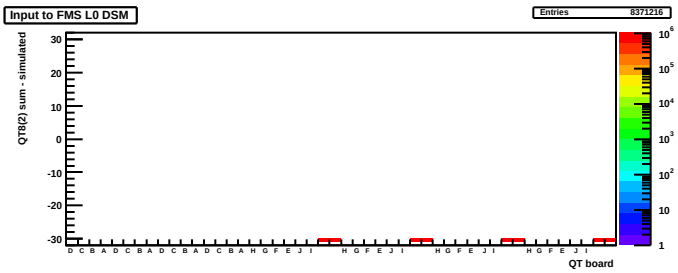

Input to FMS L0 DSM
Entries 5.02273e+07
QT8(0) sum
QT board

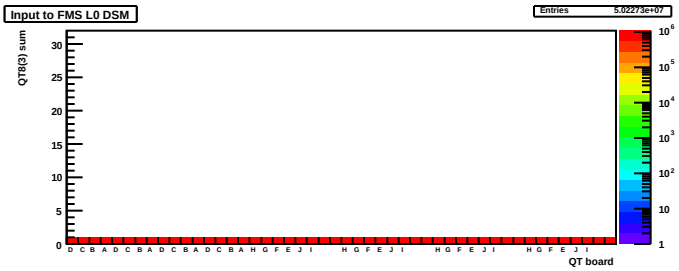

Input to FMS L0 DSM
Entries 8371216
QT8(0) sum - simulated
QT board

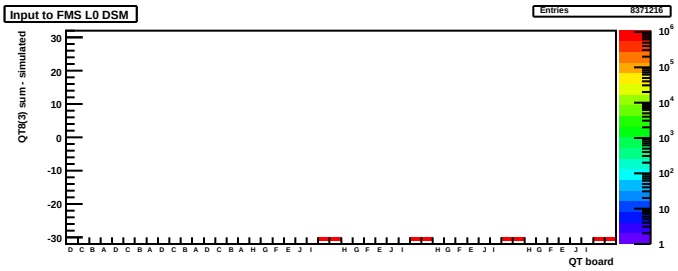

Input to FMS L0 DSM
Entries 5.02273e+07
QT8(1) sum
QT board

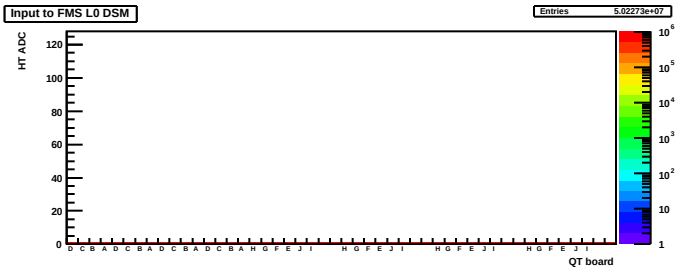

Input to FMS L0 DSM
Entries 8371216
QT8(1) sum - simulated
QT board

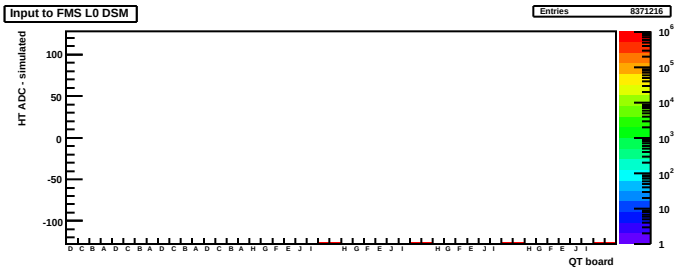

Input to FMS L0 DSM
Entries 5.02273e+07
QT8(2) sum
QT board

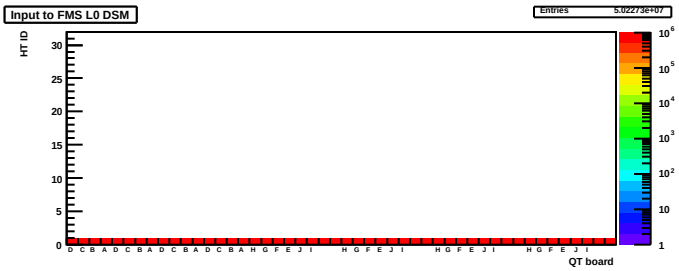

Input to FMS L0 DSM
Entries 8371216
QT8(2) sum - simulated
QT board

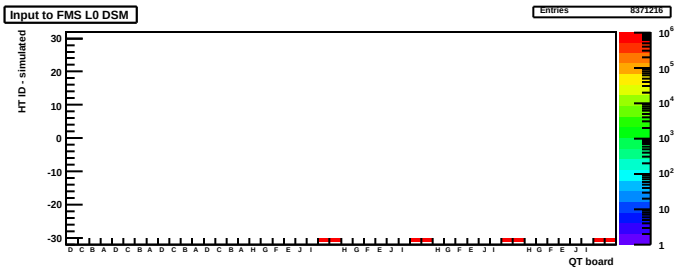

Input to FMS L0 DSM
Entries 5.02273e+07
QT8(3) sum
QT board

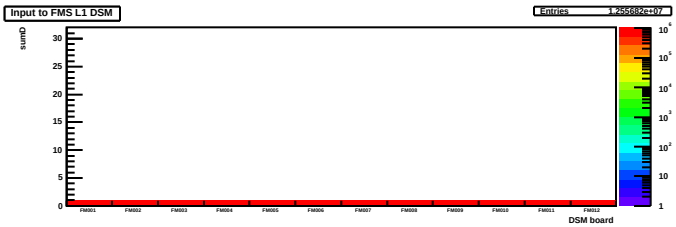

Input to FMS L0 DSM
Entries 8371216
QT8(3) sum - simulated
QT board

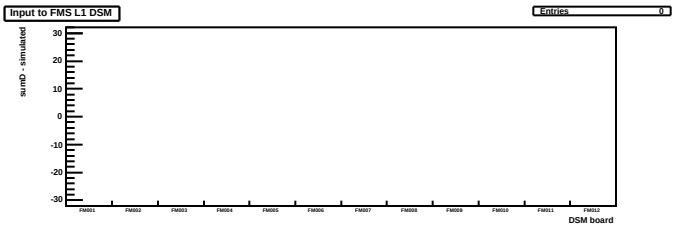

Input to FMS L0 DSM
Entries 5.02273e+07
HT ADC
QT board

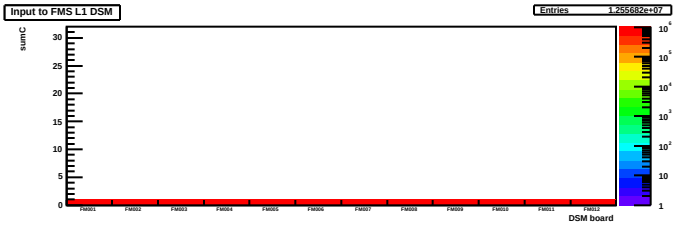

Input to FMS L0 DSM
Entries 8371216
HT ADC - simulated
QT board

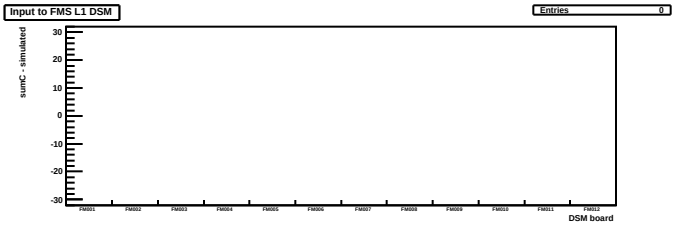

Input to FMS L0 DSM
Entries 5.02273e+07
HT ID
QT board

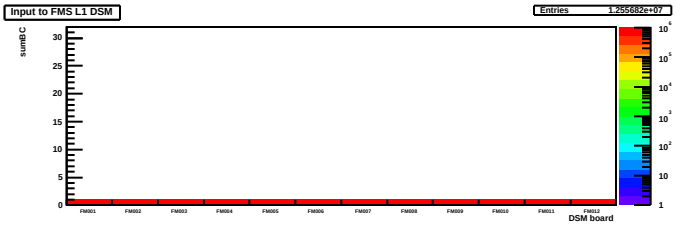

Input to FMS L0 DSM
Entries 8371216
HT ID - simulated
QT board

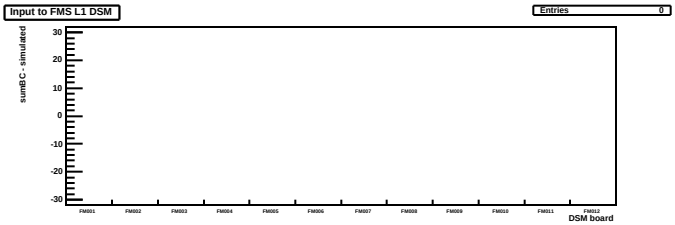

Input to FMS L1 DSM
Entries 1.255682e+07
sumD
DSM board

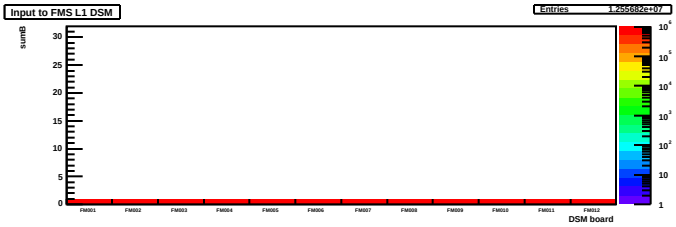

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

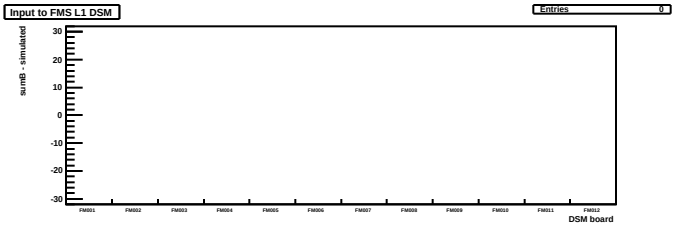

Input to FMS L1 DSM
Entries 1.255682e+07
sumC
DSM board

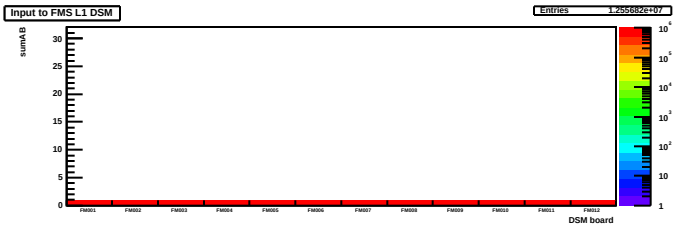

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

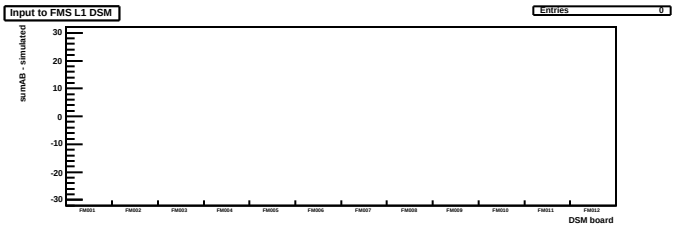

Input to FMS L1 DSM
Entries 1.255682e+07
sumBC
DSM board

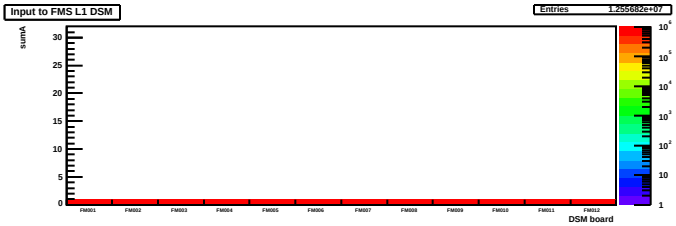

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

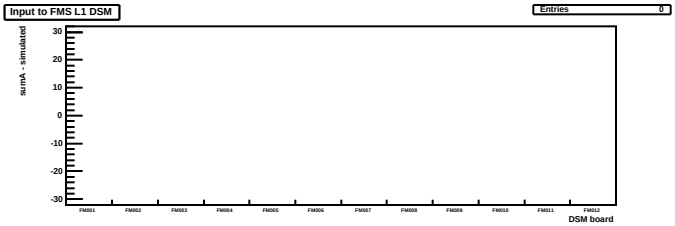

Input to FMS L1 DSM
Entries 1.255682e+07
sumB
DSM board

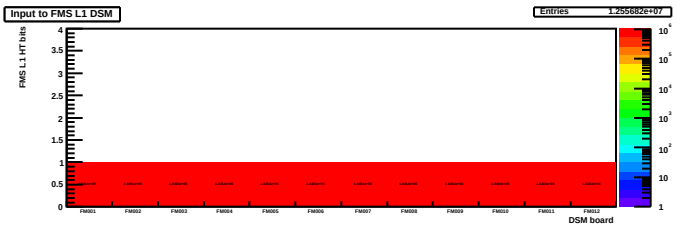

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

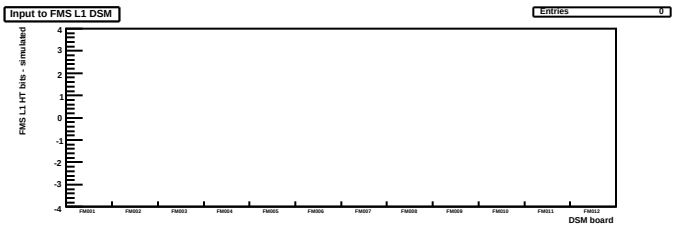

Input to FMS L1 DSM
Entries 1.255682e+07
sumAB
DSM board

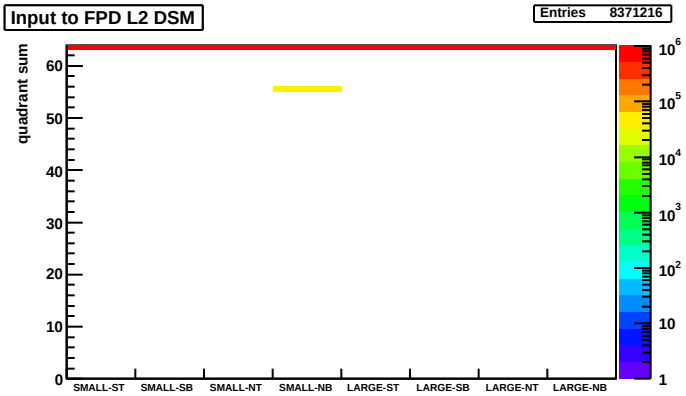

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

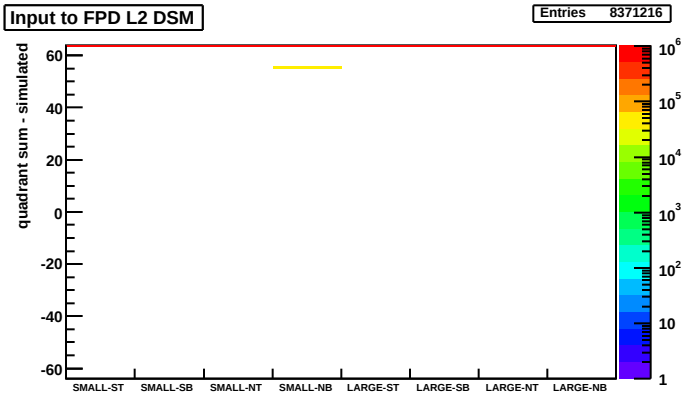

Input to FMS L1 DSM
Entries 1.255682e+07
sumA
DSM board

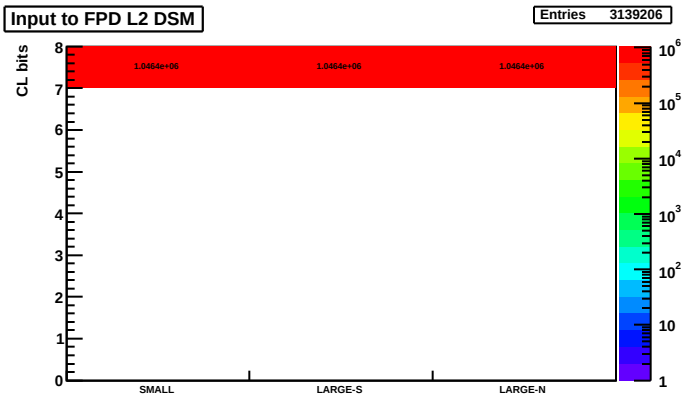

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

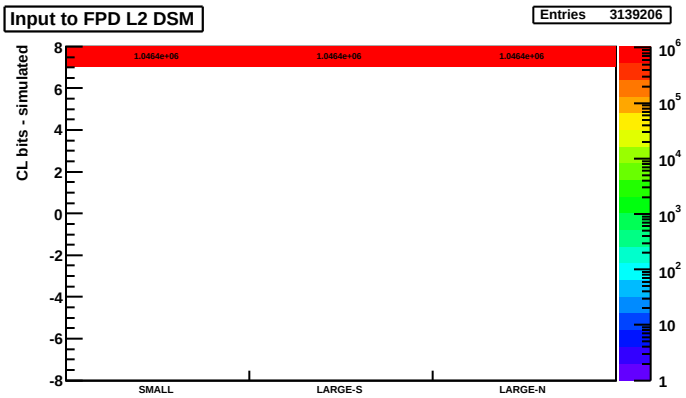

Input to FMS L1 DSM
Entries 1.255682e+07
FMS L1 HT bits
DSM board

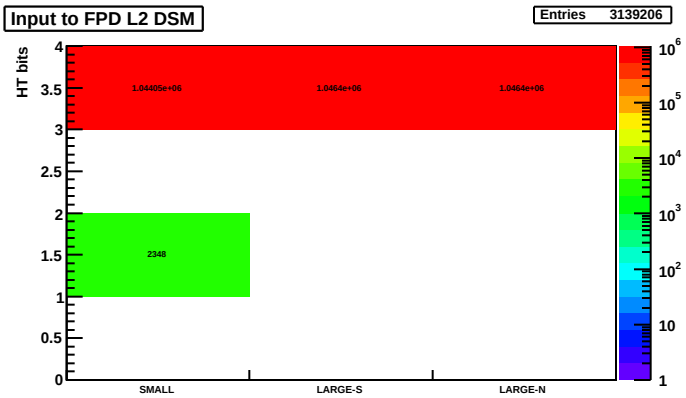

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

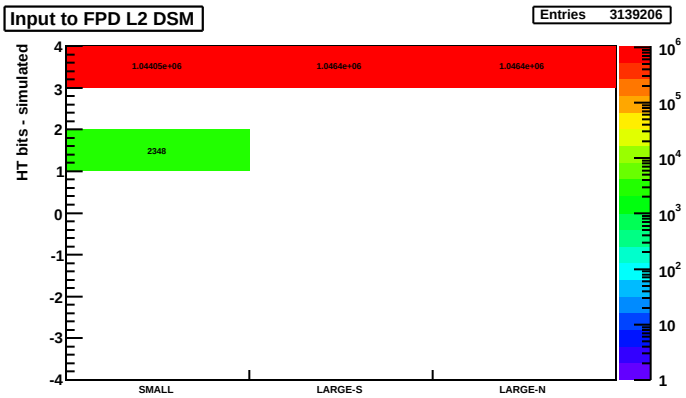

Input to FPD L2 DSM
Entries 8371216
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

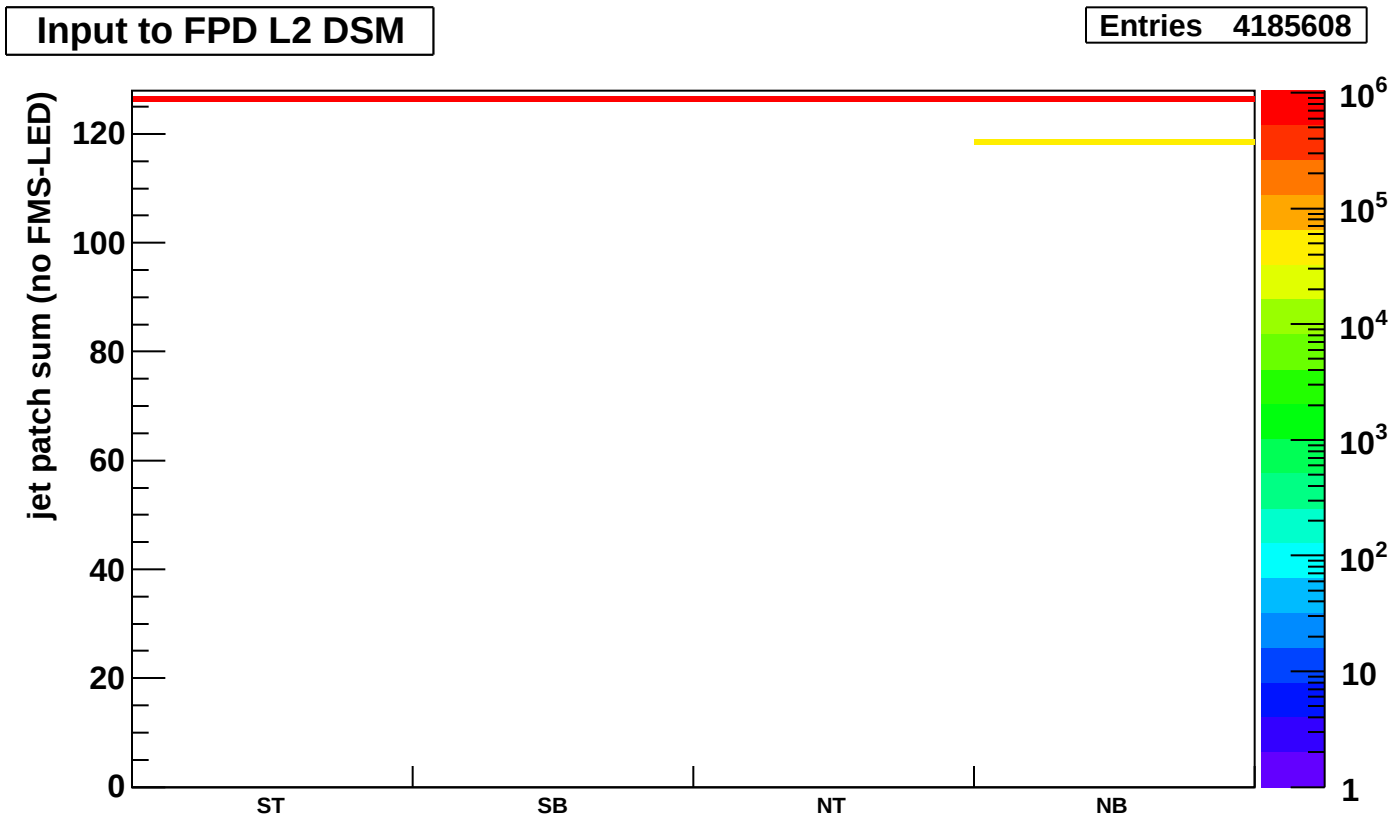

Input to FPD L2 DSM
Entries 8371216
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

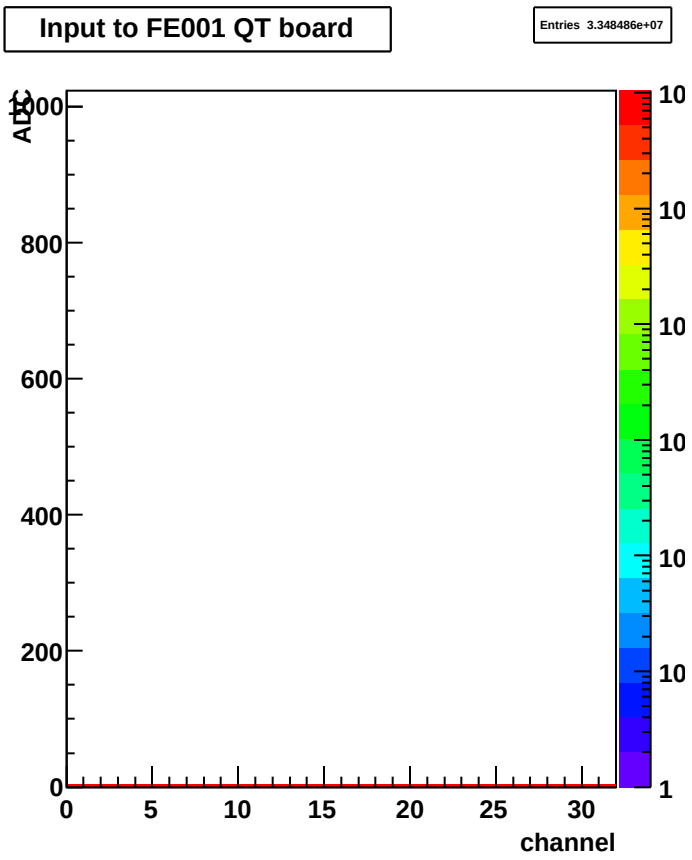

Input to FPD L2 DSM
Entries 3139206
CL bits
1.0464e+06
1.0464e+06
1.0464e+06
SMALL
LARGE-S
LARGE-N

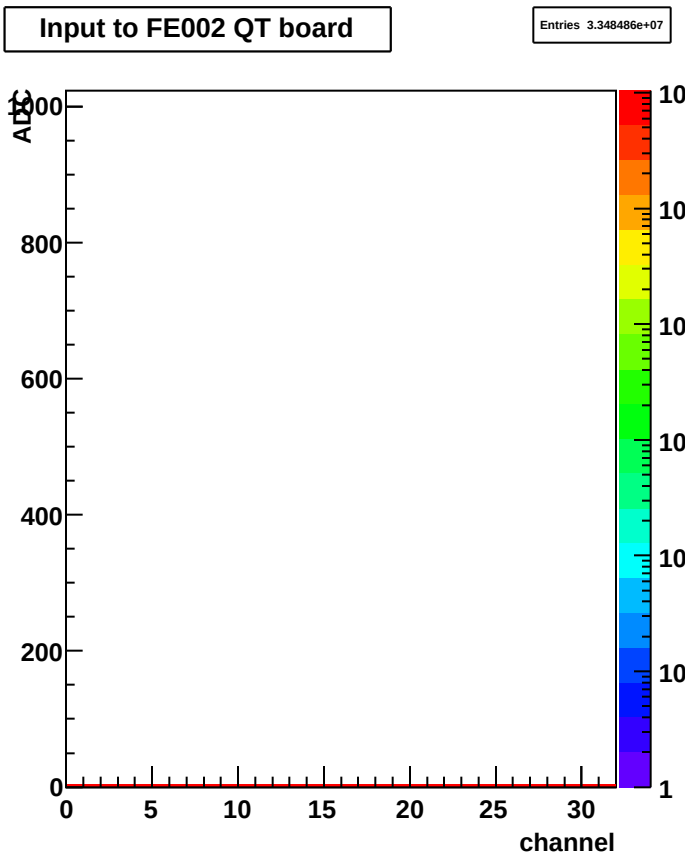

Input to FPD L2 DSM
Entries 3139206
CL bits - simulated
1.0464e+06
1.0464e+06
1.0464e+06
SMALL
LARGE-S
LARGE-N

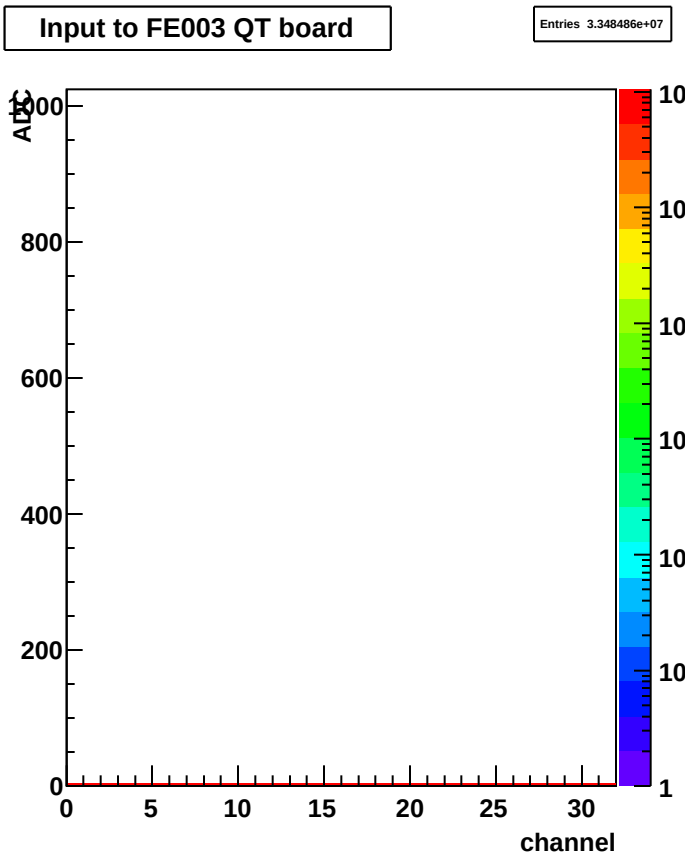

Input to FPD L2 DSM
Entries 3139206
HT bits
1.04405e+06
1.0464e+06
1.0464e+06
2348
SMALL
LARGE-S
LARGE-N

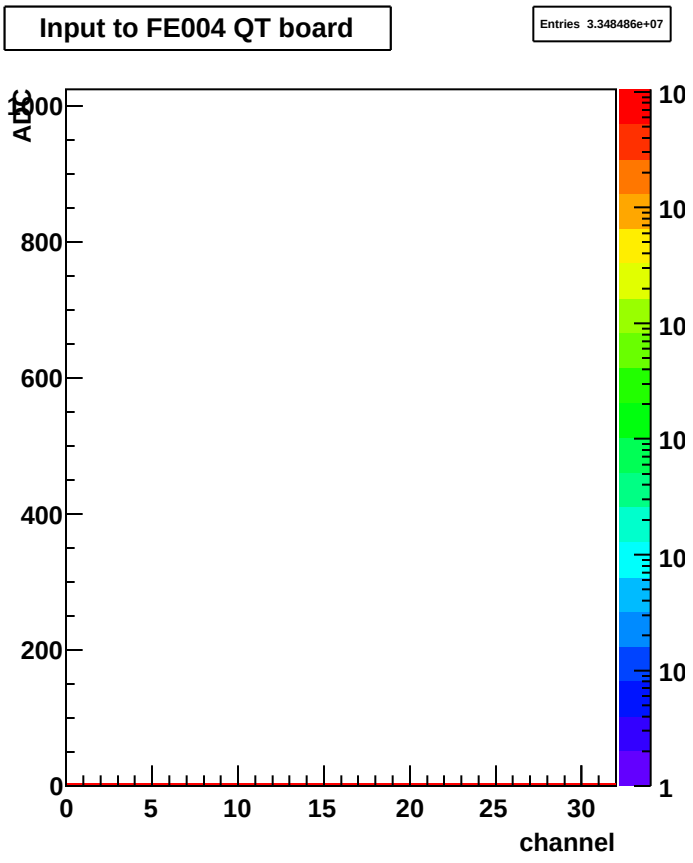

Input to FPD L2 DSM
Entries 3139206
HT bits - simulated
1.04405e+06
1.0464e+06
1.0464e+06
2348
SMALL
LARGE-S
LARGE-N

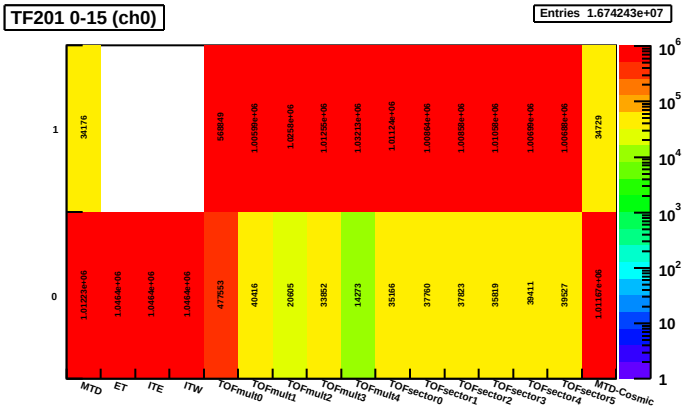

Input to FPD L2 DSM
Entries 4185608
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5
10^6

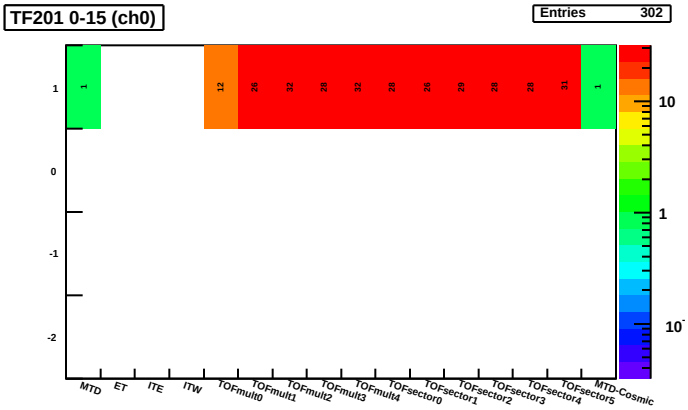

Input to FE001 QT board
Entries 3.348486e+07
ADC
channel

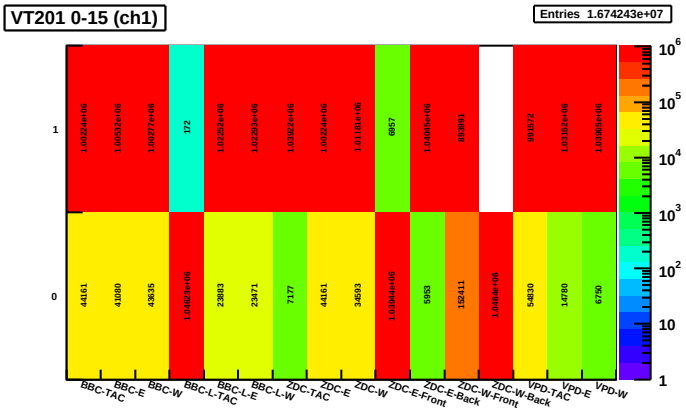

Input to FE002 QT board
Entries 3.348486e+07
ADC
channel

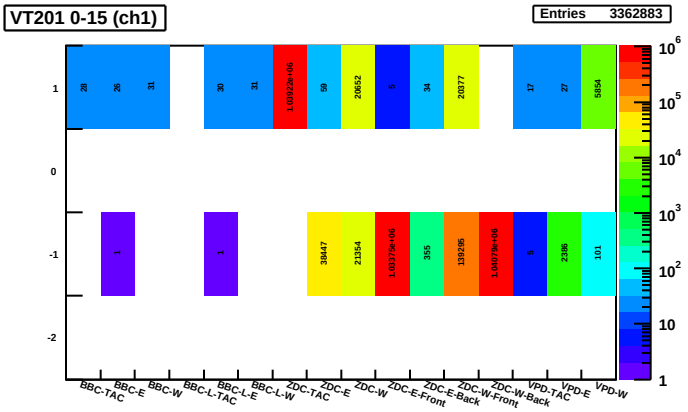

Input to FE003 QT board
Entries 3.348486e+07
ADC
channel

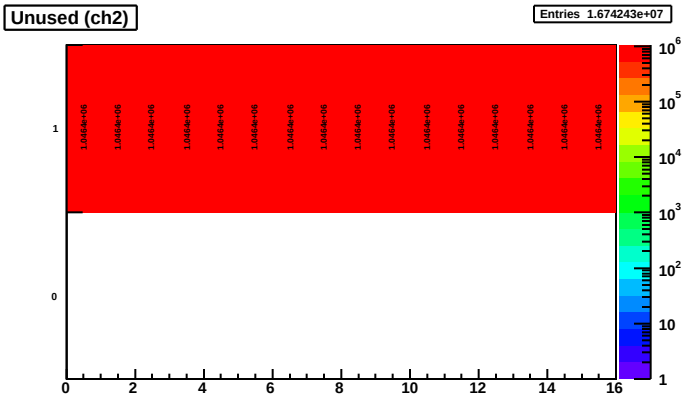

Input to FE004 QT board
Entries 3.348486e+07
ADC
channel

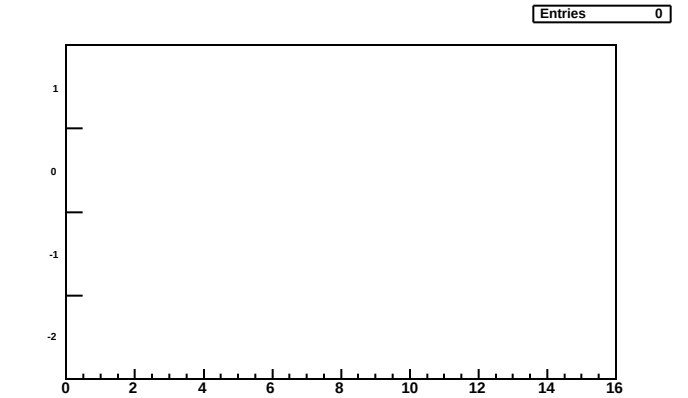

TF201 0-15 (ch0)
Entries 1.674243e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

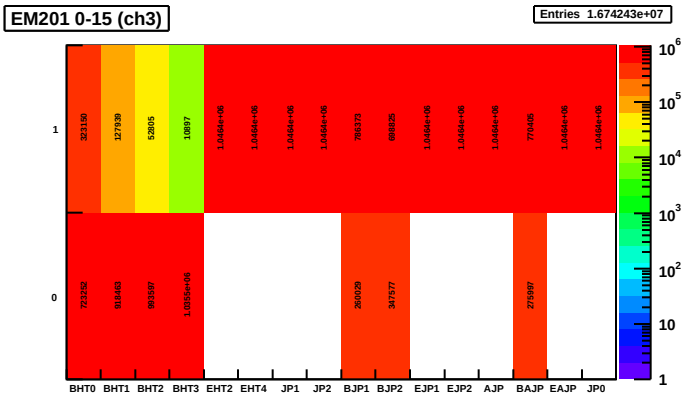

TF201 0-15 (ch0)
Entries 302
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

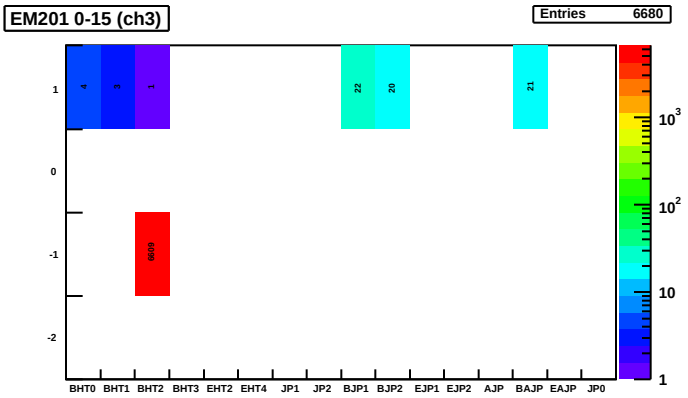

VT201 0-15 (ch1)
Entries 1.674243e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

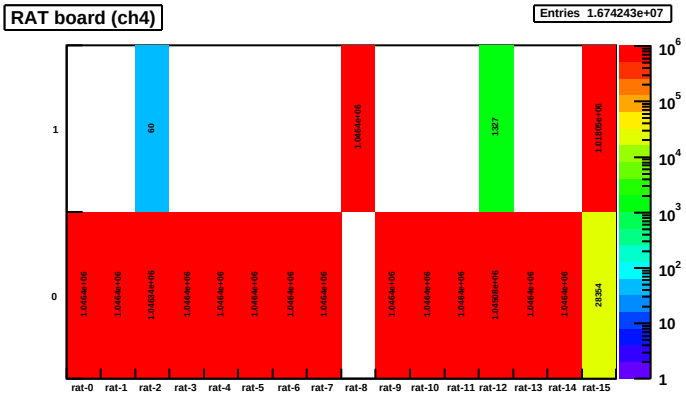

VT201 0-15 (ch1)
Entries 3362883
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

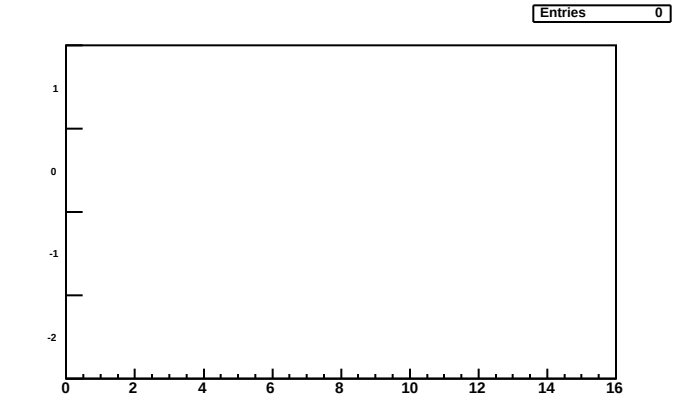

Unused (ch2)
Entries 1.674243e+07

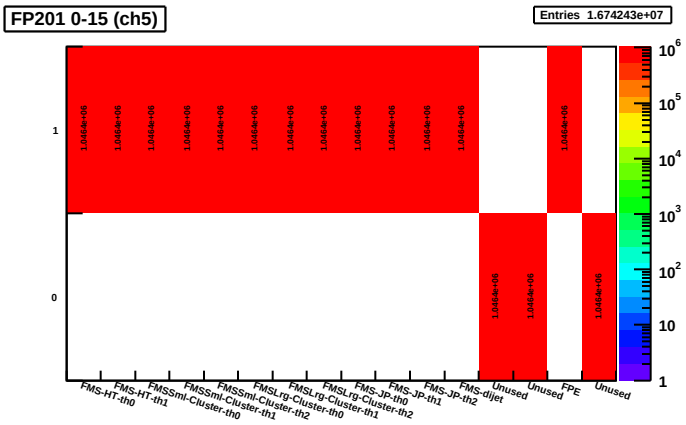

Entries 0

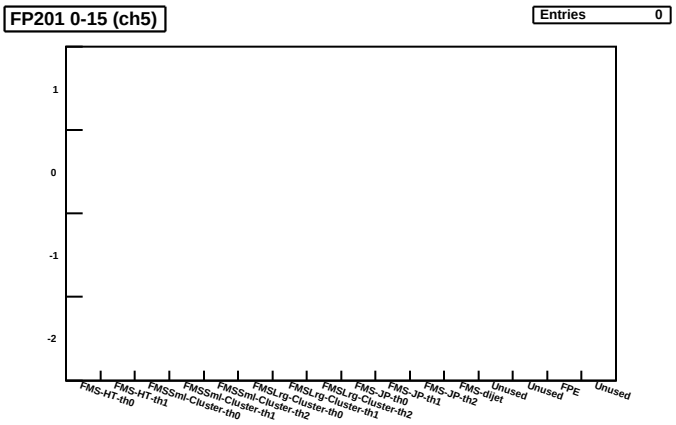

EM201 0-15 (ch3)
Entries 1.674243e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

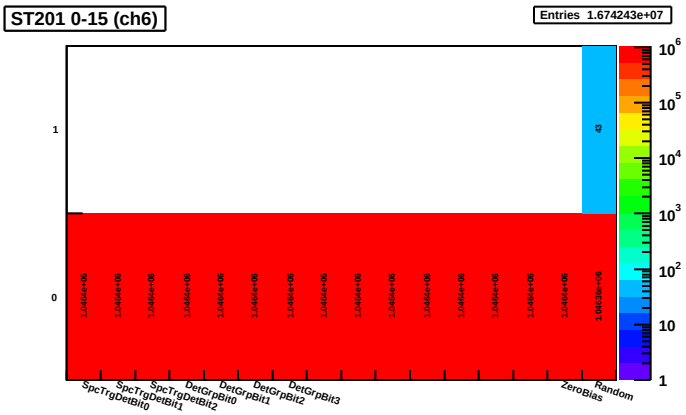

EM201 0-15 (ch3)
Entries 6680
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

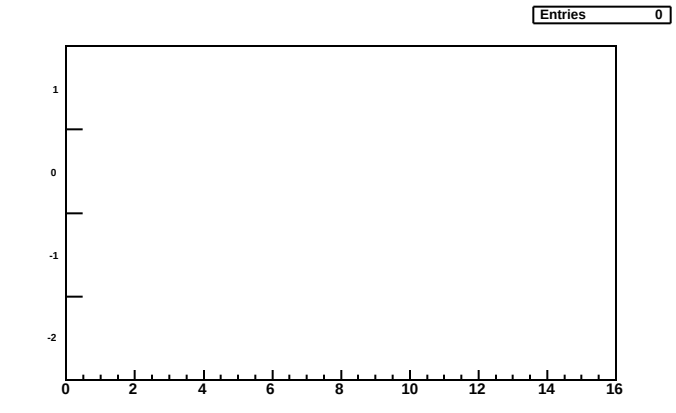

RAT board (ch4)
Entries 1.674243e+07
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

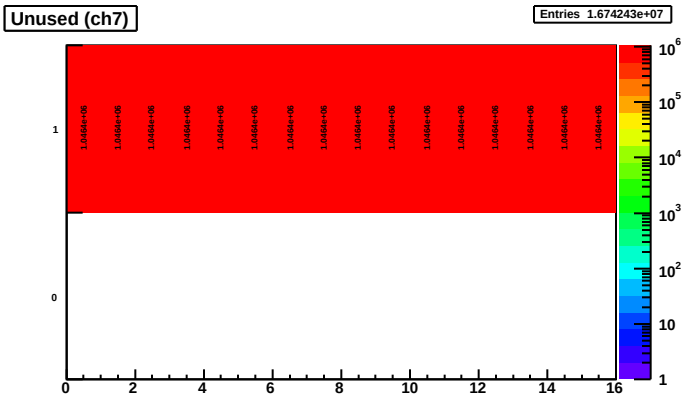

Entries 0

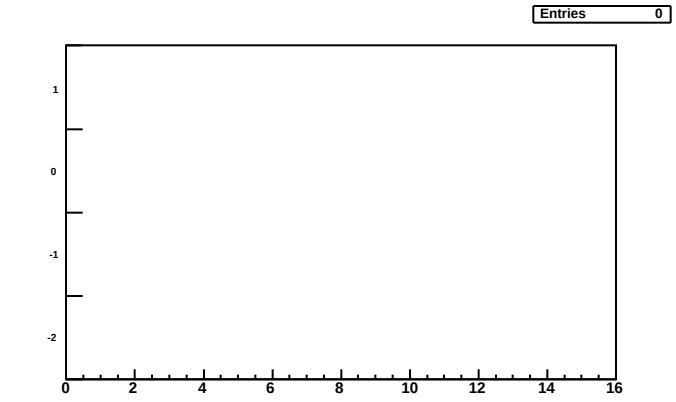

FP201 0-15 (ch5)
Entries 1.674243e+07
FMS-HT-th0 FMS-HT-th1 FMSSml-Cluster-th0 FMSSml-Cluster-th1 FMSSml-Cluster-th2 FMSLrg-Cluster-th0 FMSLrg-Cluster-th1 FMSLrg-Cluster-th2 FMS-JP-th0 FMS-JP-th1 FMS-JP-th2 FMS-dijet Unused Unused FPE Unused


FP201 0-15 (ch5)
Entries 0
FMS-HT-th0 FMS-HT-th1 FMSSml-Cluster-th0 FMSSml-Cluster-th1 FMSSml-Cluster-th2 FMSLrg-Cluster-th0 FMSLrg-Cluster-th1 FMSLrg-Cluster-th2 FMS-JP-th0 FMS-JP-th1 FMS-JP-th2 FMS-dijet Unused Unused FPE Unused


ST201 0-15 (ch6)
Entries 1.674243e+07
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random


Entries 0


Unused (ch7)
Entries 1.674243e+07


Entries 0