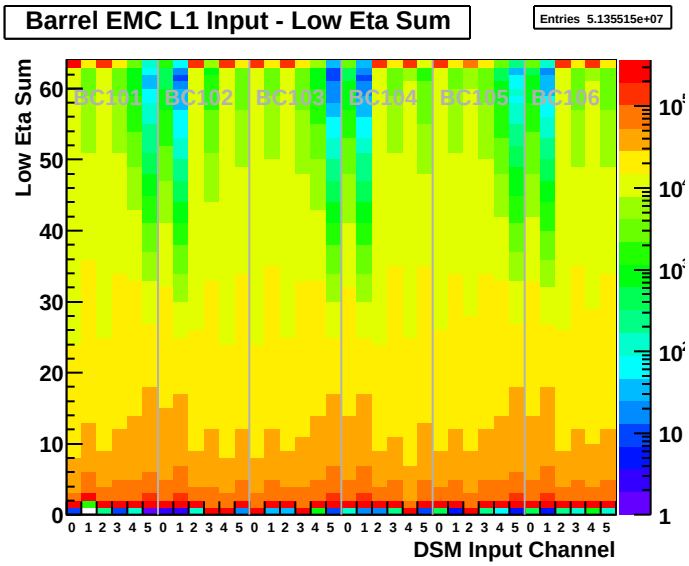
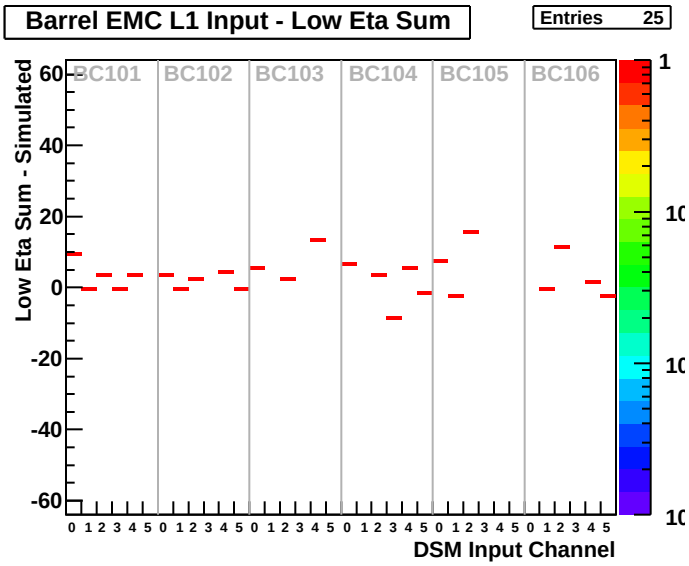
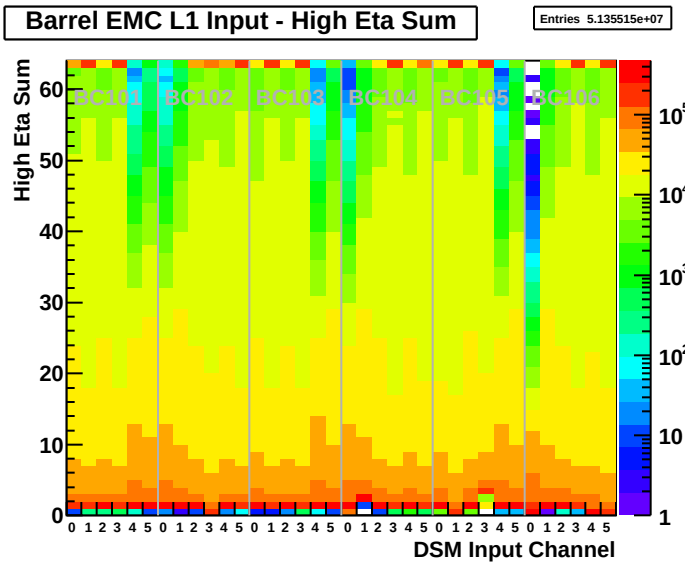
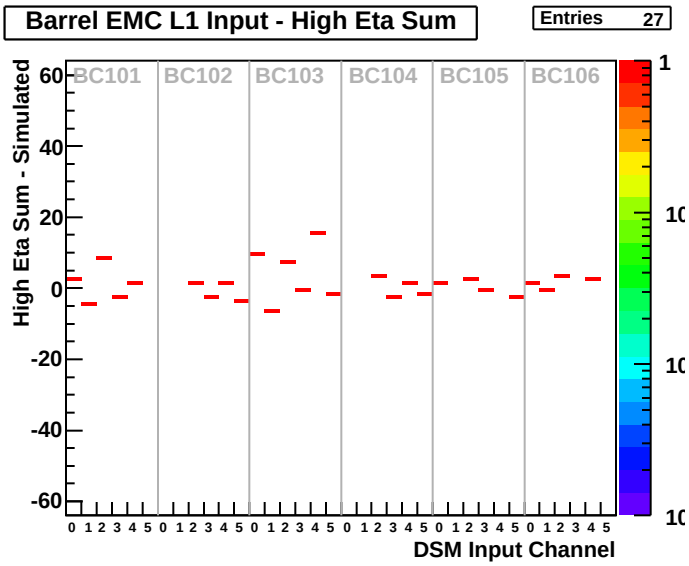
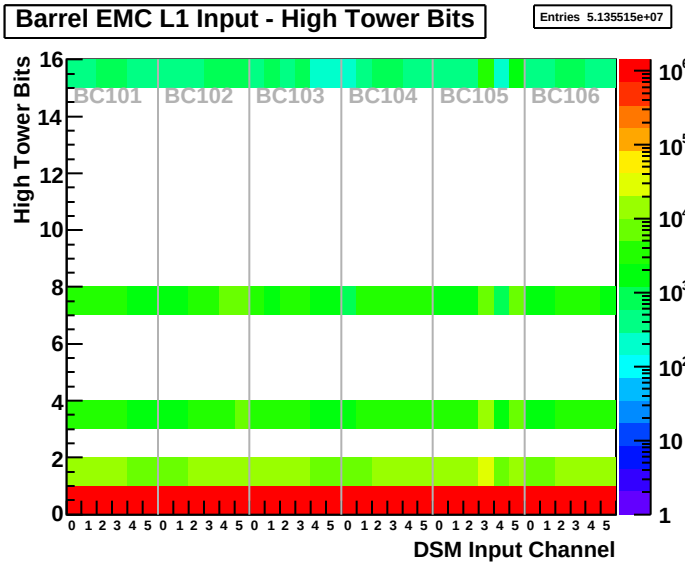
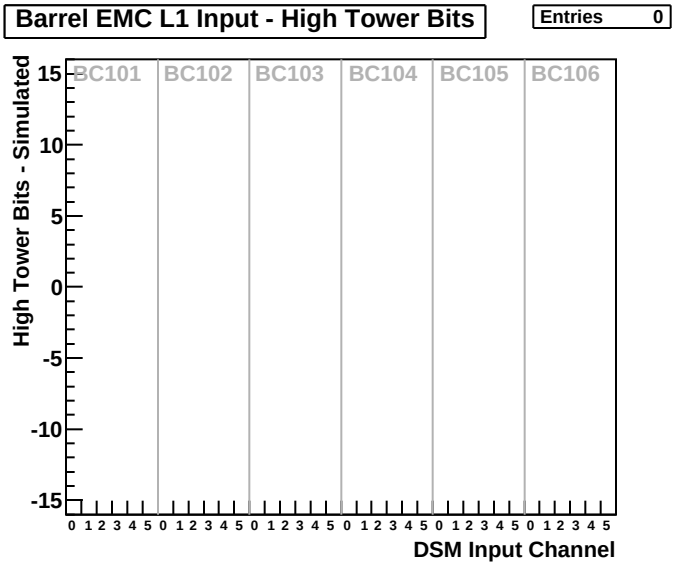

Barrel EMC L1 Input - Low Eta Sum
Entries 5.135515e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

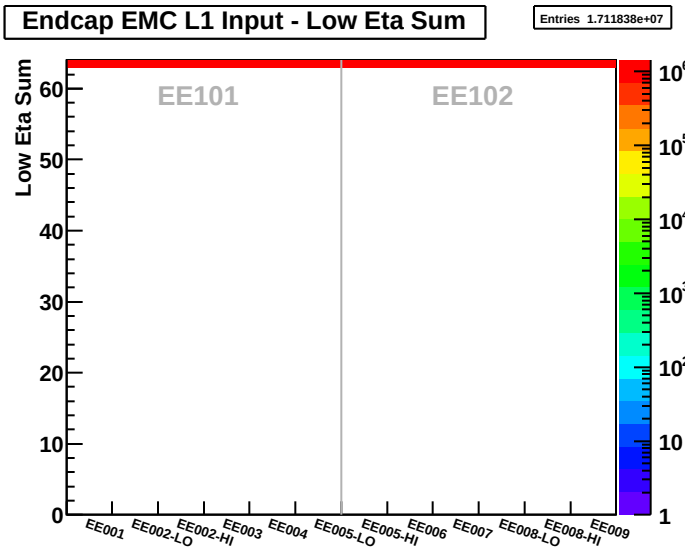

Barrel EMC L1 Input - Low Eta Sum
Entries 25
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

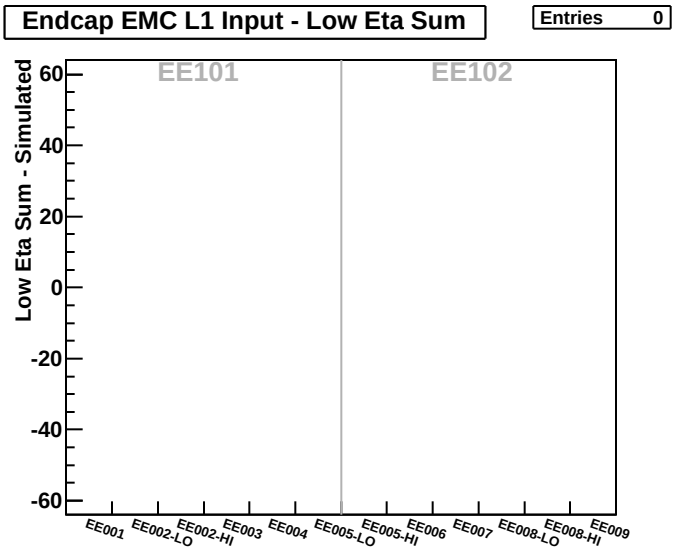

Barrel EMC L1 Input - High Eta Sum
Entries 5.135515e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

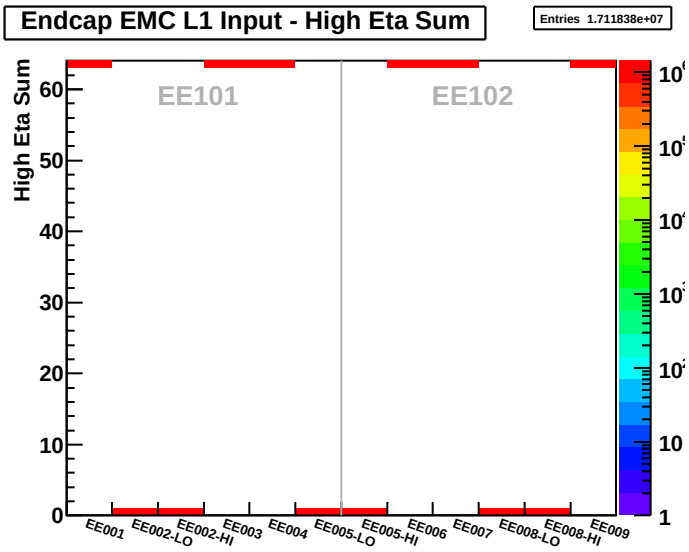

Barrel EMC L1 Input - High Eta Sum
Entries 27
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

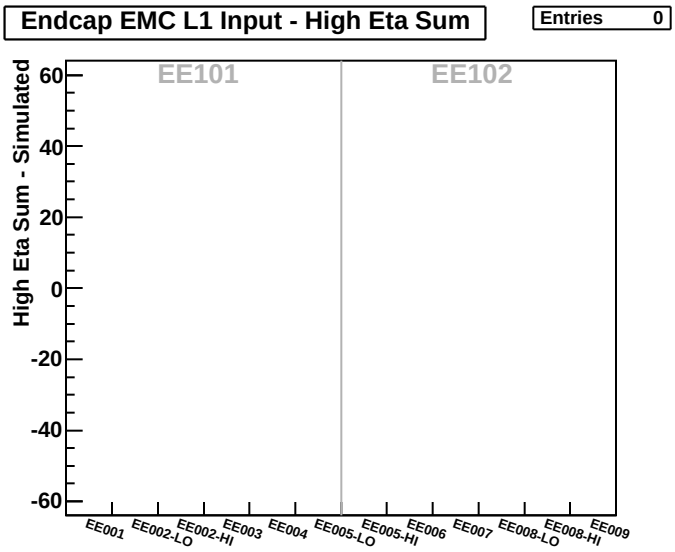

Barrel EMC L1 Input - High Tower Bits
Entries 5.135515e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

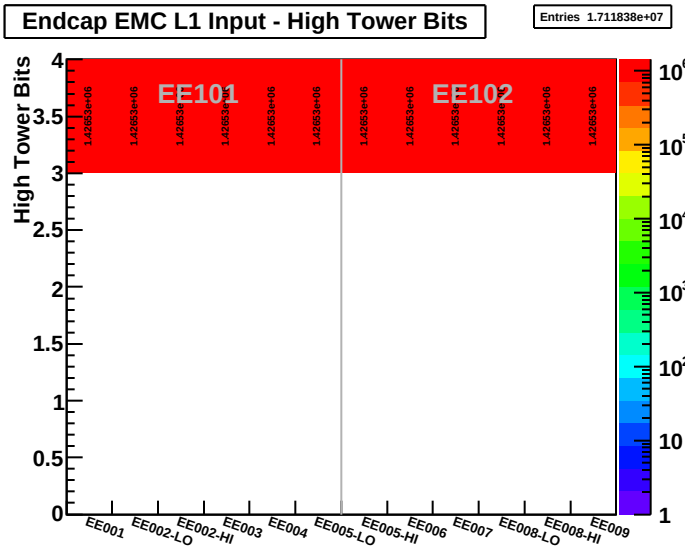

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

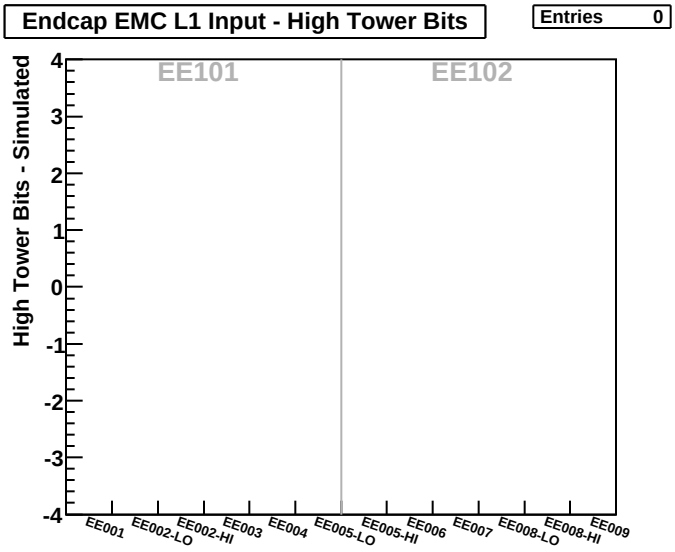

Endcap EMC L1 Input - Low Eta Sum
Entries 1.711838e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

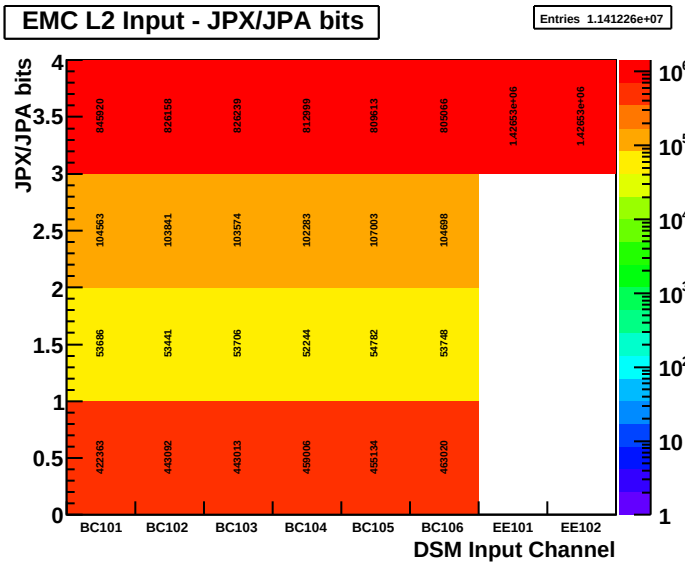

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

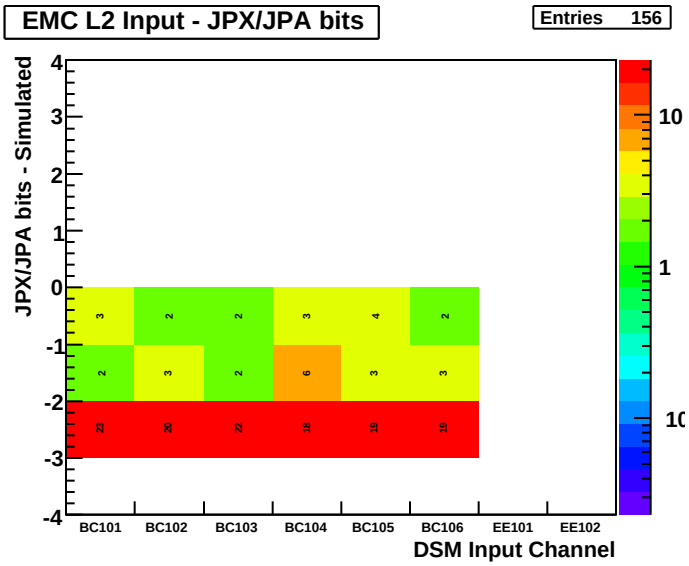

Endcap EMC L1 Input - High Eta Sum
Entries 1.711838e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

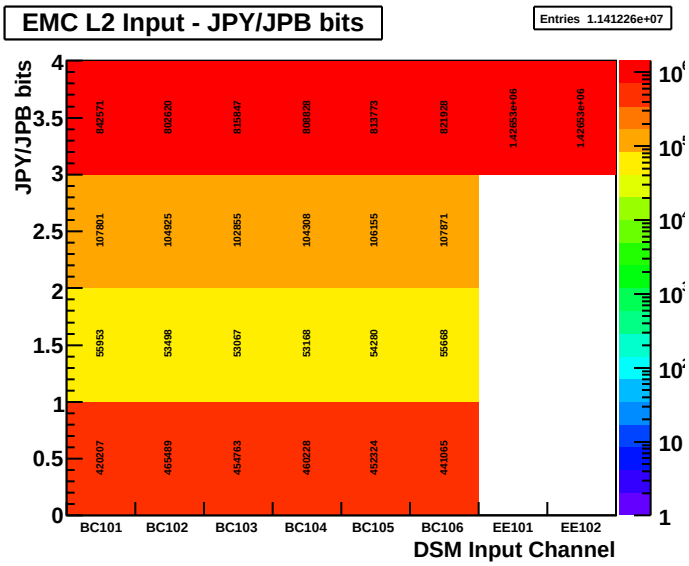

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

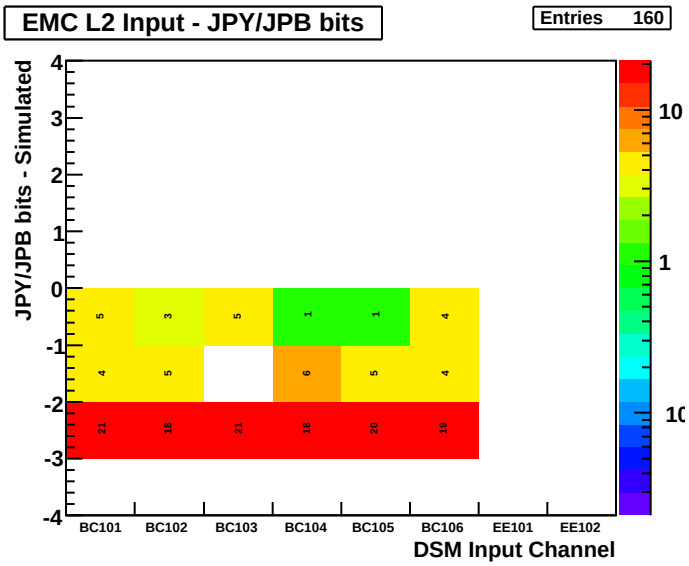

Endcap EMC L1 Input - High Tower Bits
Entries 1.711838e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

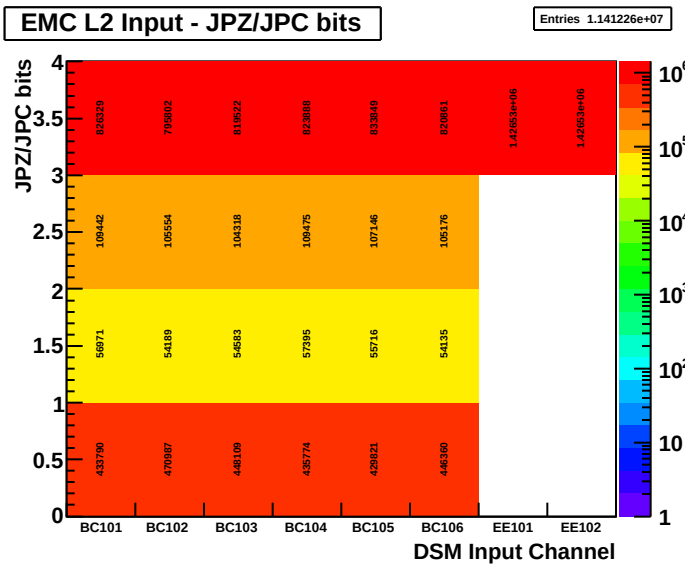

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

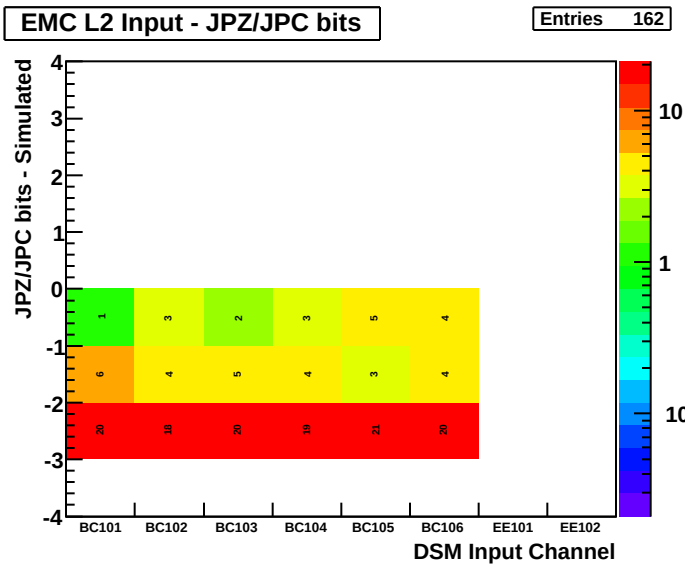

EMC L2 Input - JPX/JPA bits
Entries 1.141226e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
845920 826158 826239 812899 809813 805066 1.42653e+06 1.42653e+06
104563 103841 103574 102283 107003 104698
53686 53441 53706 52244 54782 53748
422363 443092 443013 459006 455134 463020

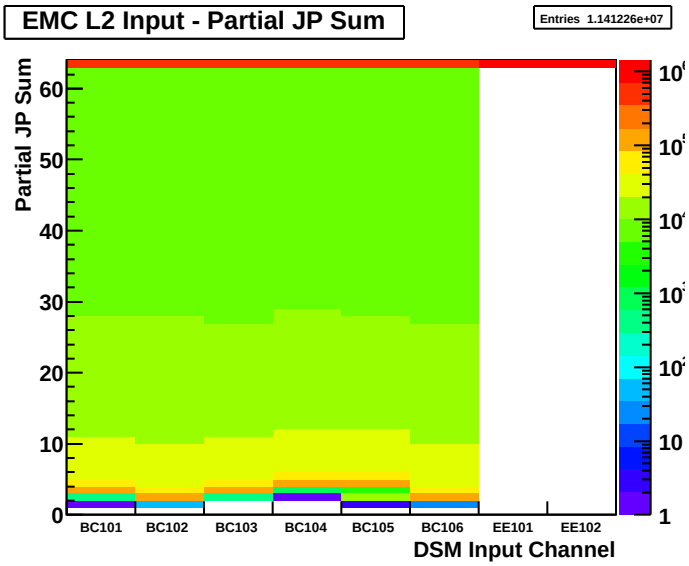

EMC L2 Input - JPX/JPA bits
Entries 156
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3 2 2 3 4 2
2 3 2 6 3 3
23 20 22 18 19 19

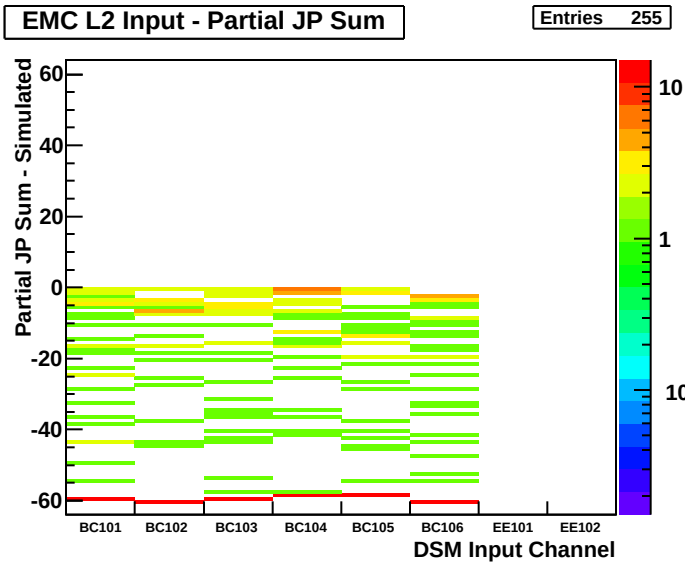

EMC L2 Input - JPY/JPB bits
Entries 1.141226e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
842571 802620 815847 808828 813773 821928 1.42653e+06 1.42653e+06
107801 104925 102855 104308 106155 107871
55953 53498 53067 53168 54280 55668
420207 465489 454763 460228 452324 441065

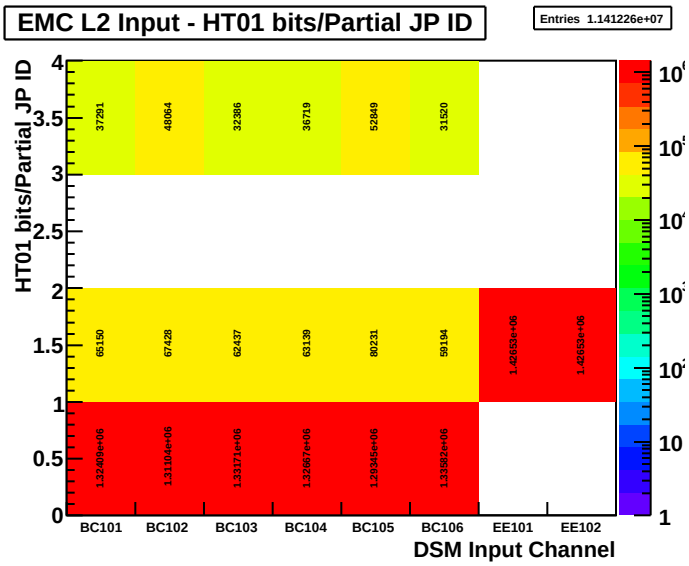

EMC L2 Input - JPY/JPB bits
Entries 160
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5 3 5 1 1 4
4 5 6 5 4
21 18 21 18 20 19

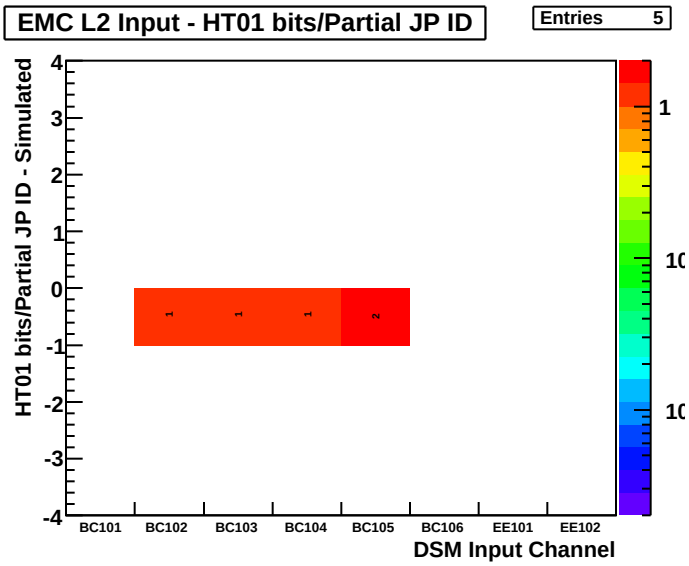

EMC L2 Input - JPZ/JPC bits
Entries 1.141226e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
826329 798602 818522 823888 833849 820861 1.42653e+06 1.42653e+06
109442 105554 104318 109475 107146 105176
56871 54189 54683 57395 55716 54135
433790 470987 448109 435774 429821 446360

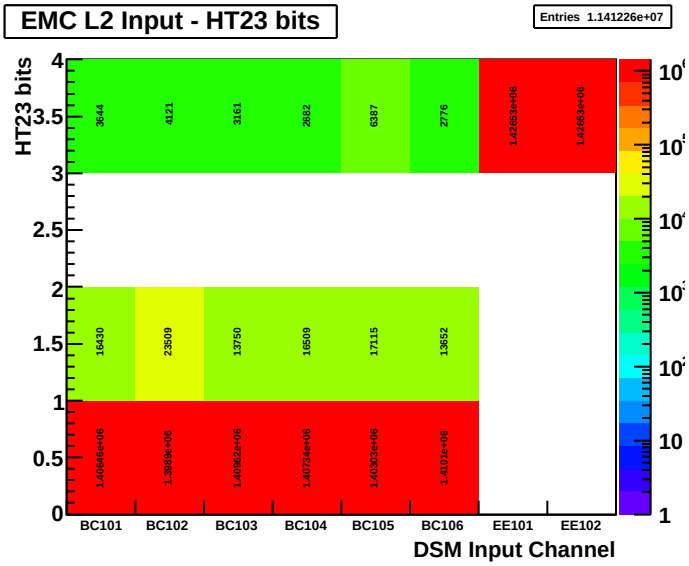

EMC L2 Input - JPZ/JPC bits
Entries 162
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 3 2 3 5 4
6 4 5 4 3 4
20 18 20 19 21 20

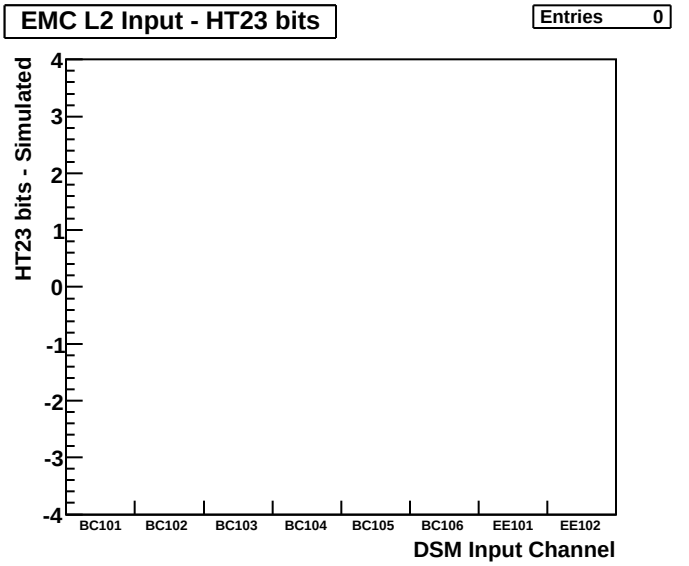

EMC L2 Input - Partial JP Sum
Entries 1.141226e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

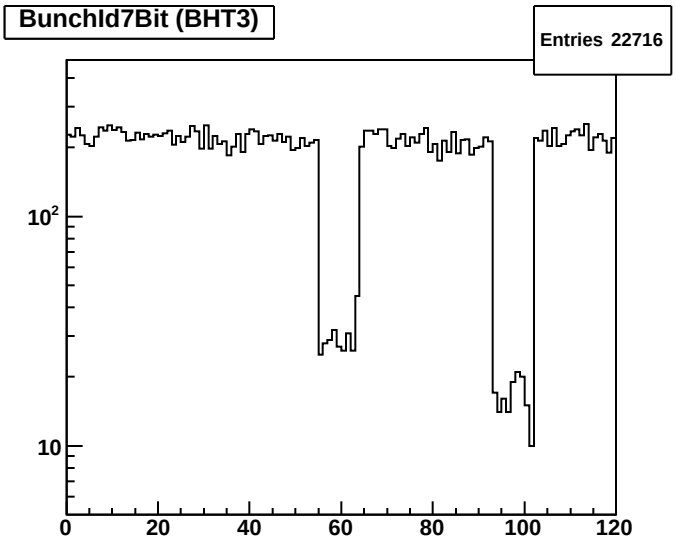

EMC L2 Input - Partial JP Sum
Entries 255
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

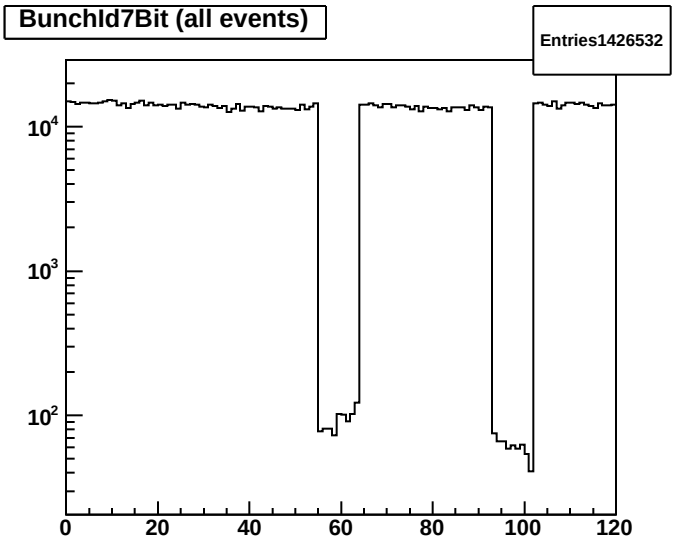

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.141226e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

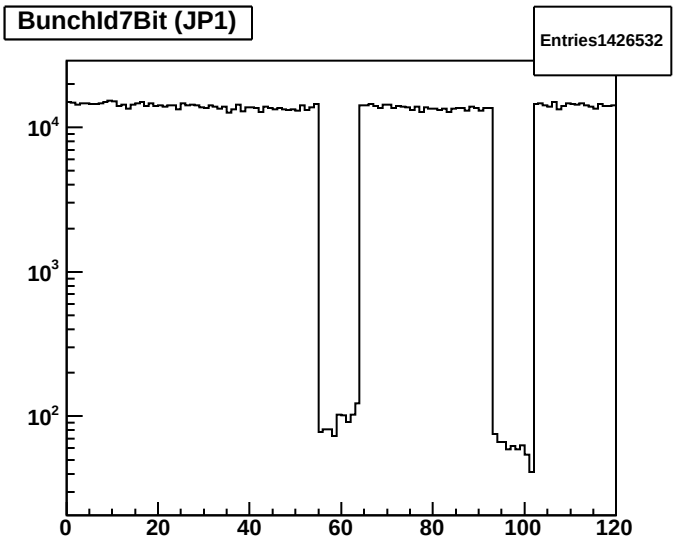

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

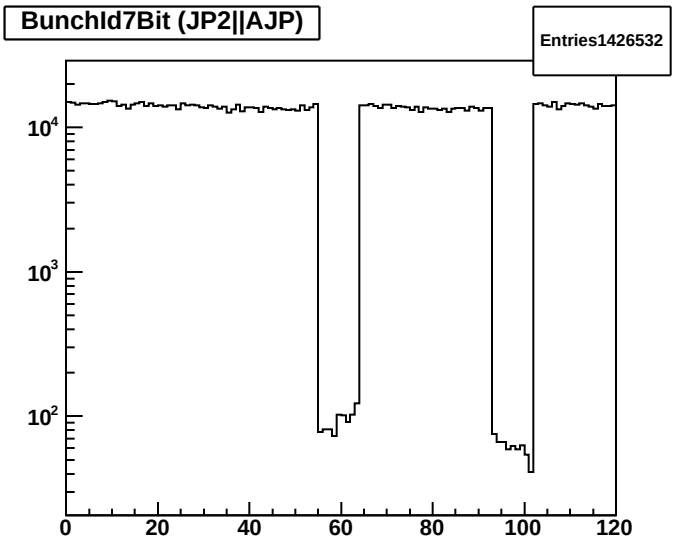

EMC L2 Input - HT23 bits
Entries 1.141226e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

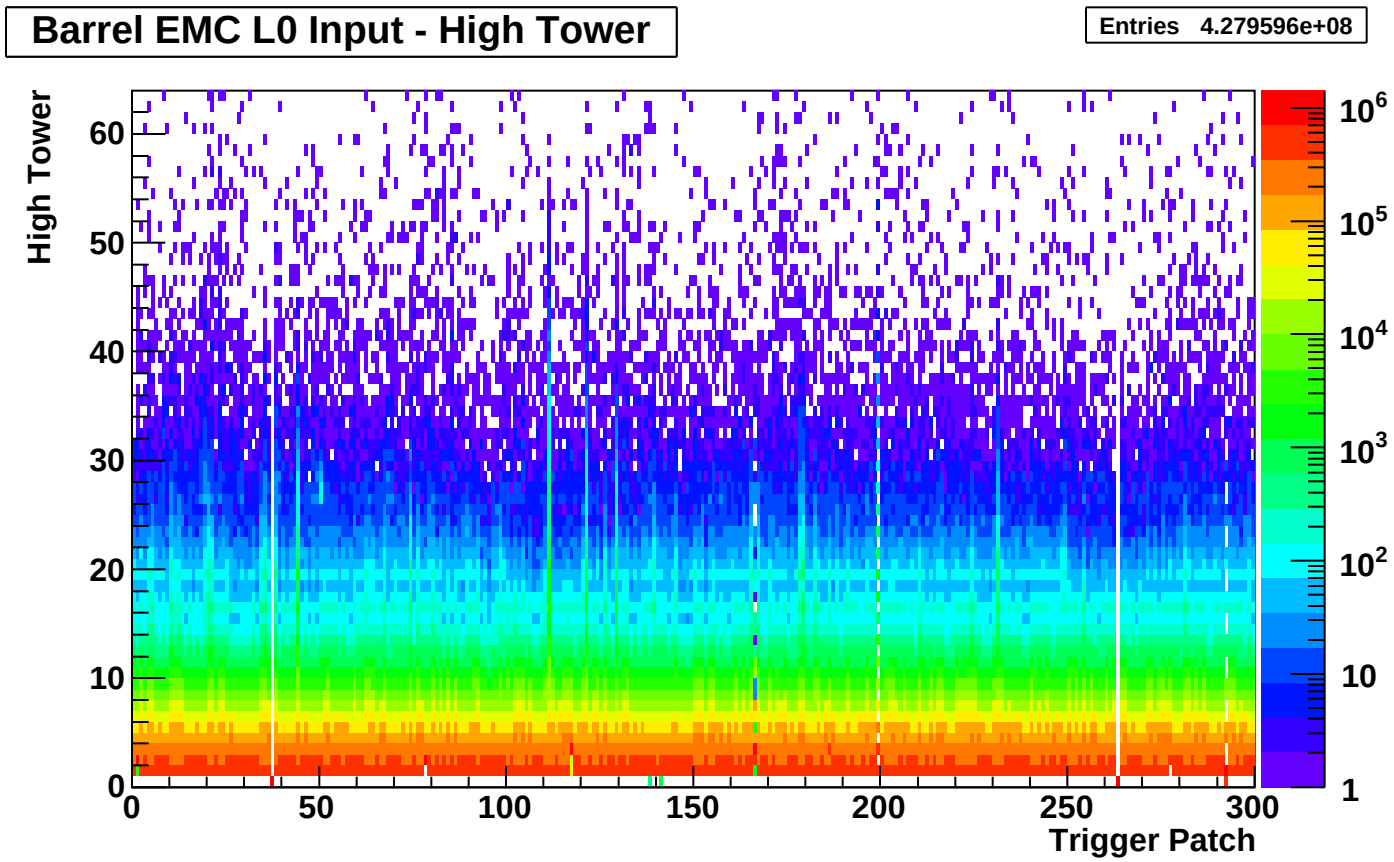

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

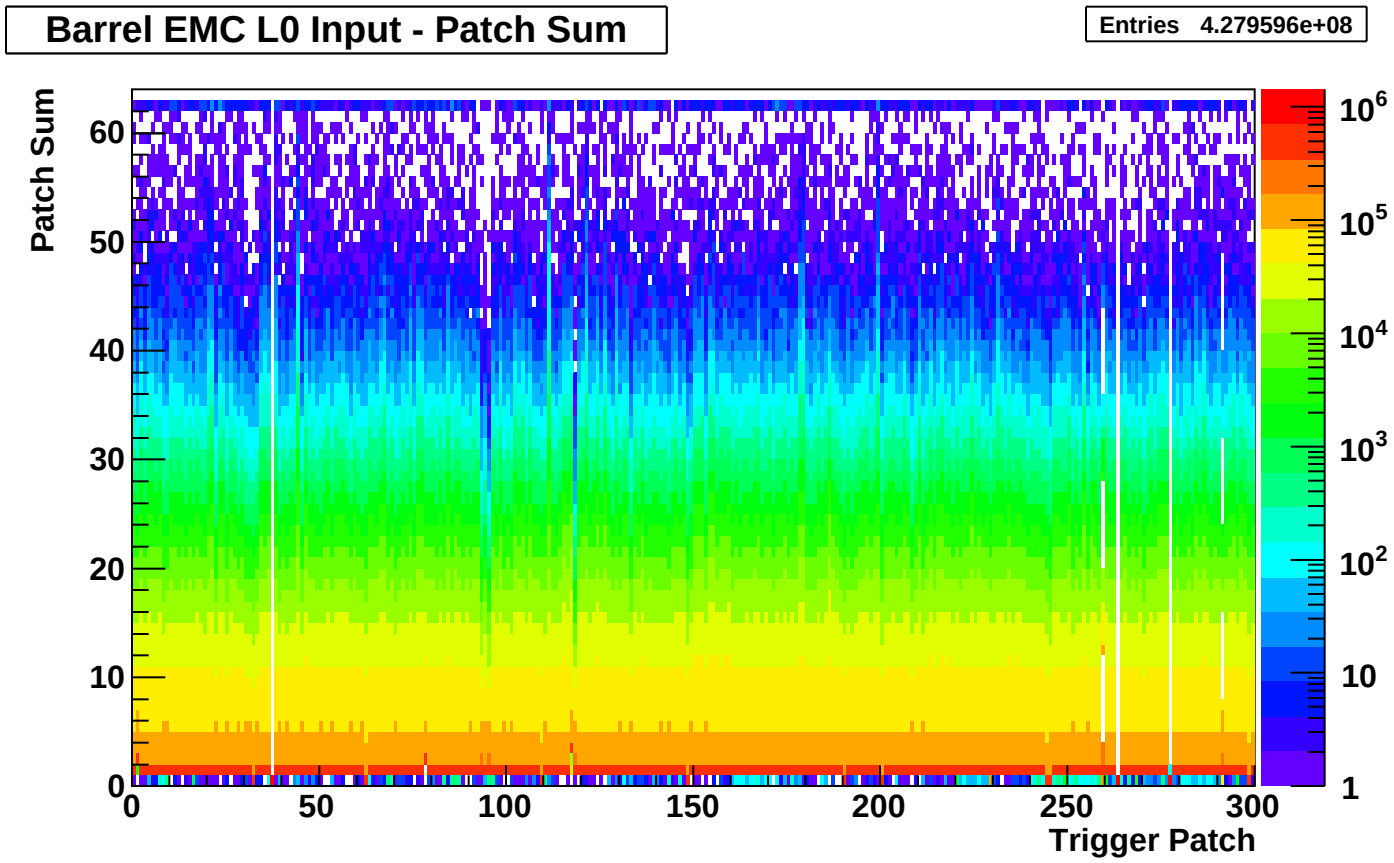

BunchId7Bit (BHT3)
Entries 22716
$10^2$
10
0
20
40
60
80
100
120

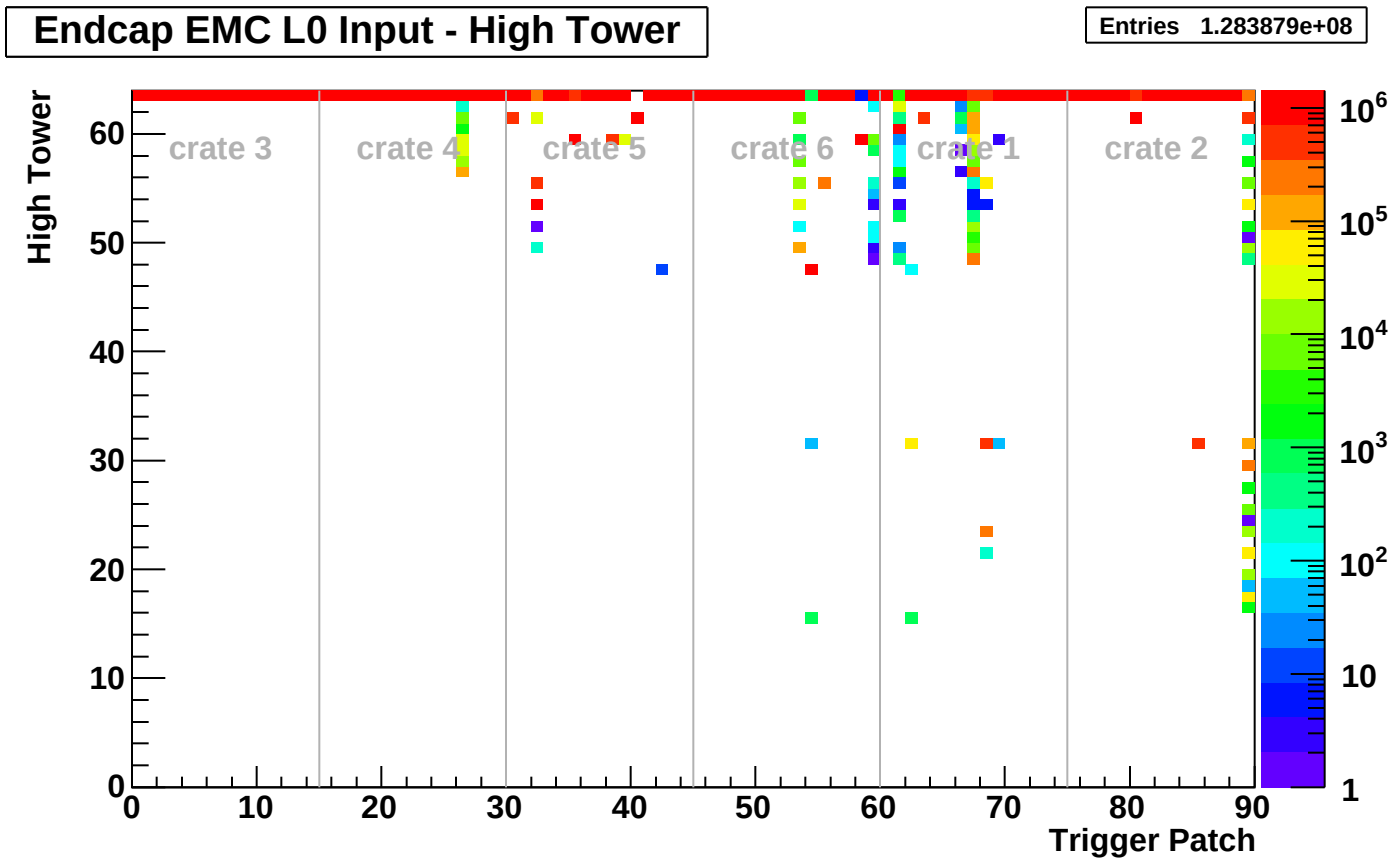

BunchId7Bit (all events)
Entries1426532
$10^4$
$10^3$
$10^2$
0
20
40
60
80
100
120

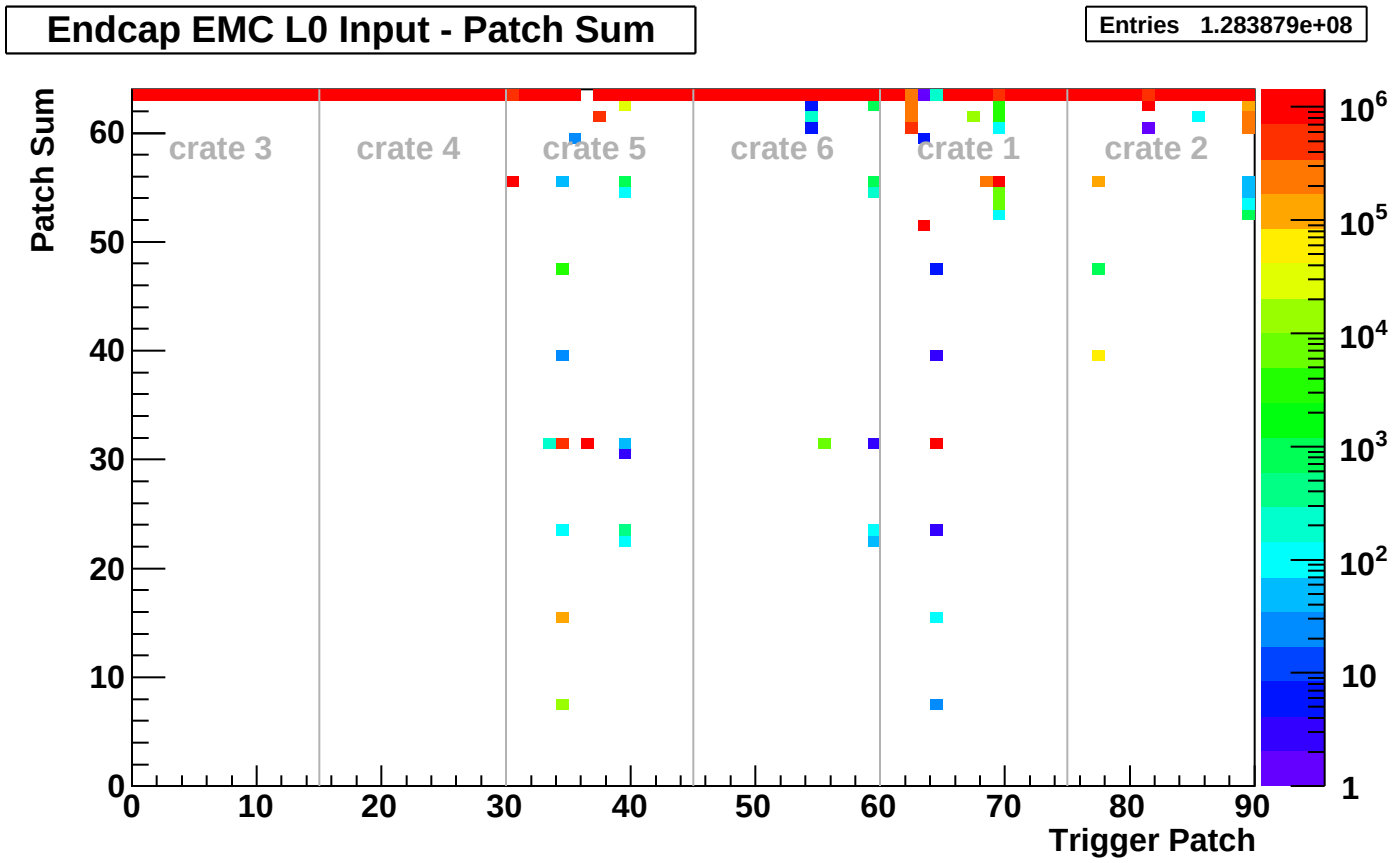

BunchId7Bit (JP1)
Entries1426532
$10^4$
$10^3$
$10^2$
0
20
40
60
80
100
120

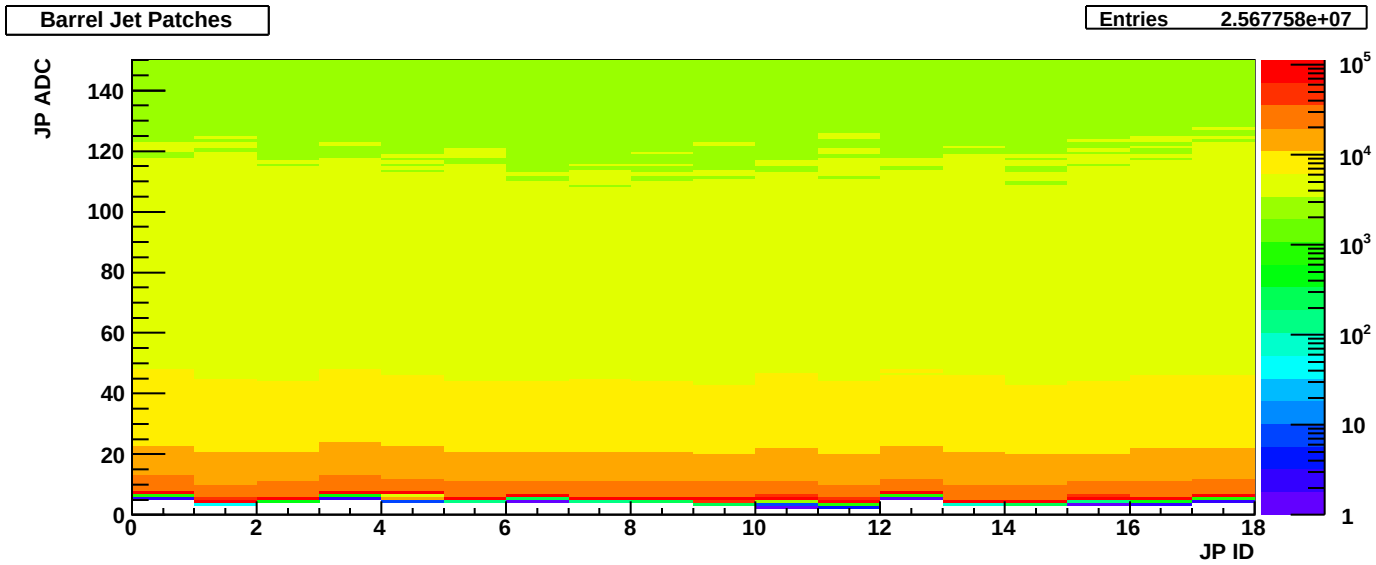

BunchId7Bit (JP2||AJP)
Entries1426532
$10^4$
$10^3$
$10^2$
0
20
40
60
80
100
120

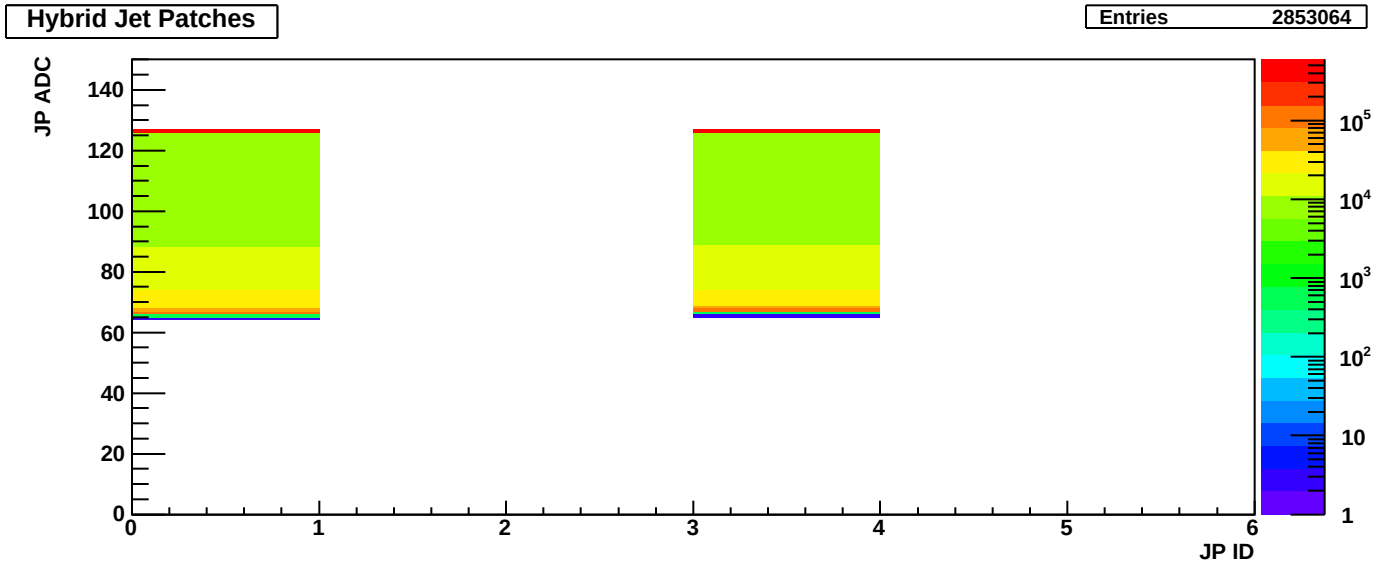

Barrel EMC L0 Input - High Tower
Entries 4.279596e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

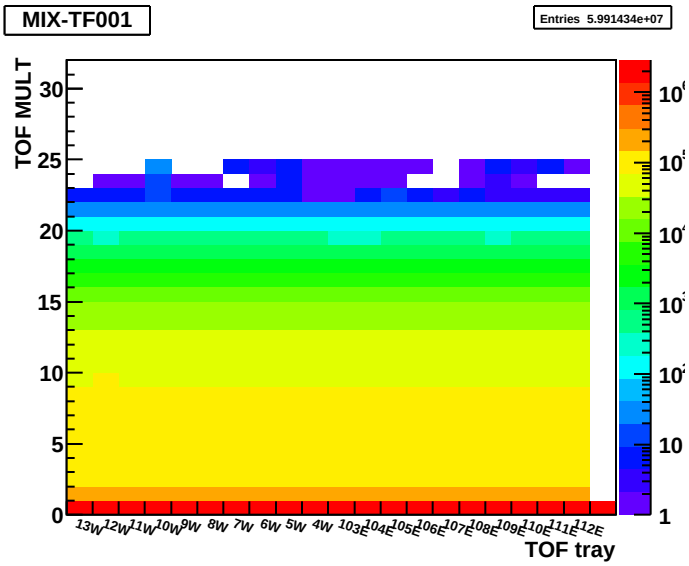

Barrel EMC L0 Input - Patch Sum
Entries 4.279596e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

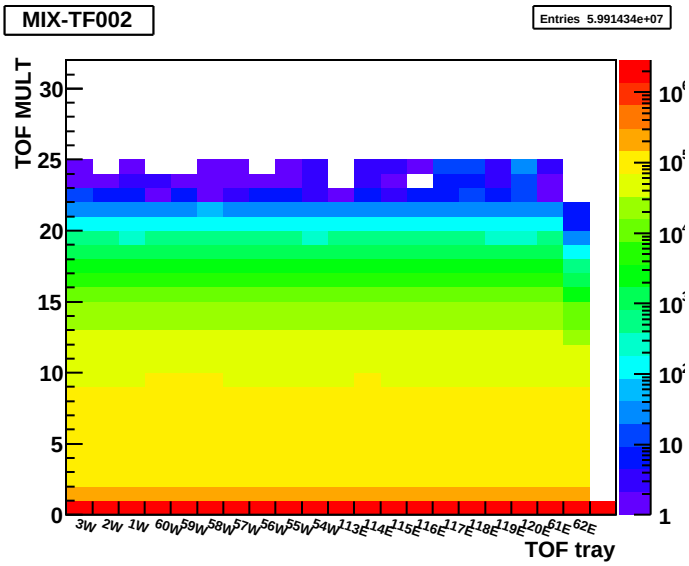

Endcap EMC L0 Input - High Tower
Entries 1.283879e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

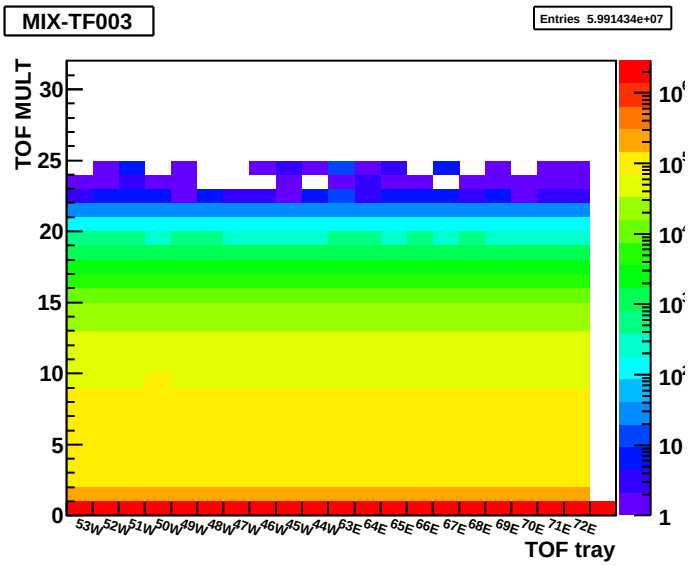

Endcap EMC L0 Input - Patch Sum
Entries 1.283879e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

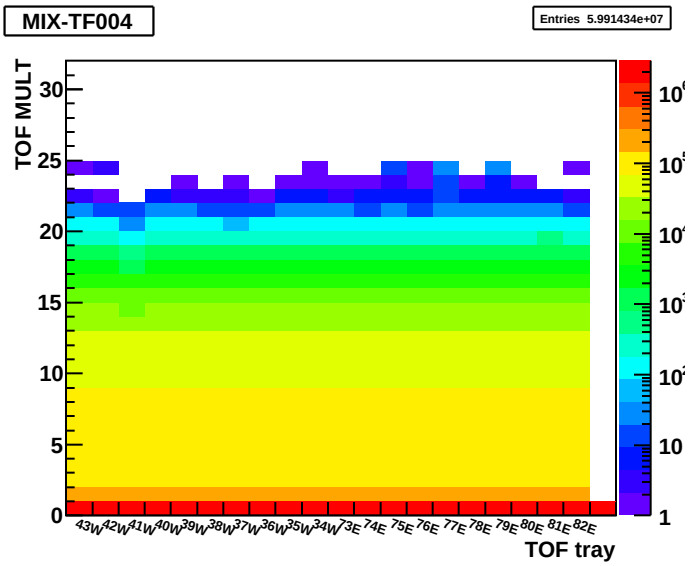

Barrel Jet Patches
Entries 2.567758e+07
JP ADC
JP ID

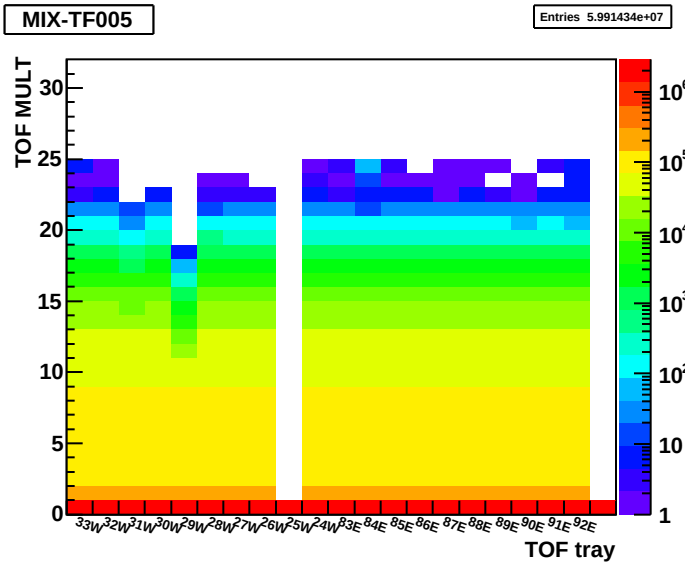

Hybrid Jet Patches
Entries 2853064
JP ADC
JP ID

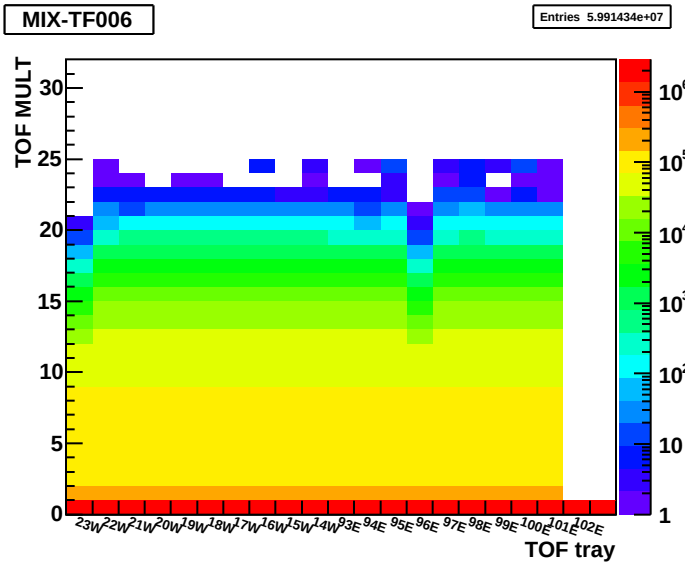

MIX-TF001
Entries 5.991434e+07
TOF MULT
TOF tray

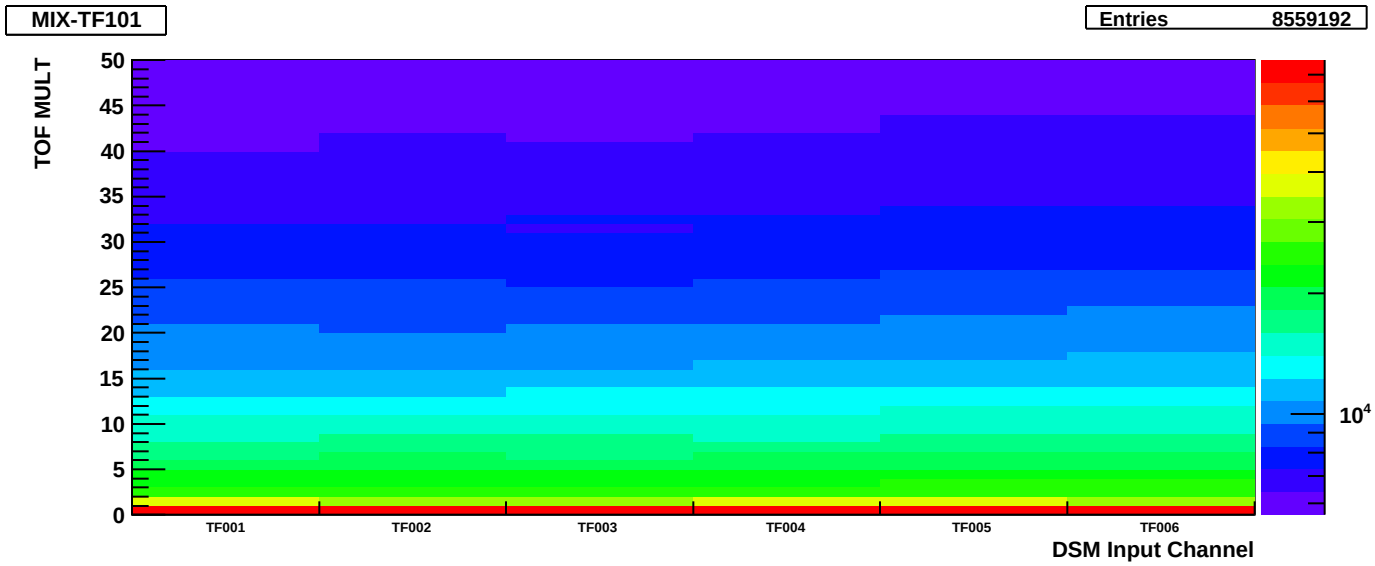

MIX-TF002
Entries 5.991434e+07
TOF MULT
TOF tray

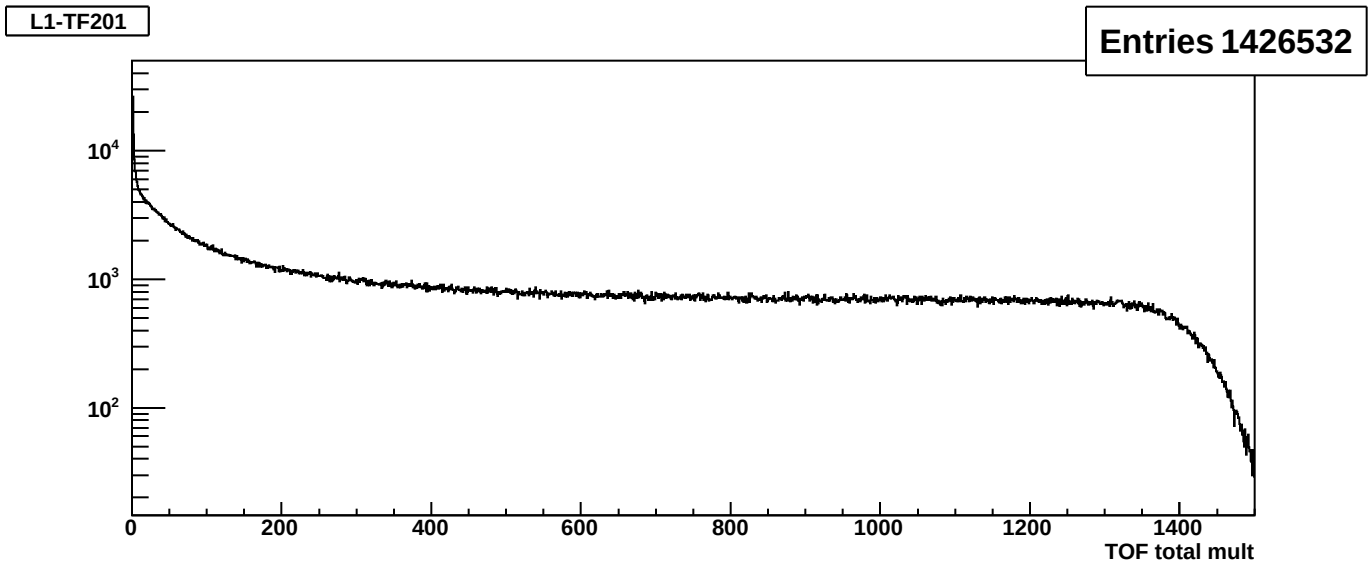

MIX-TF003
Entries 5.991434e+07
TOF MULT
TOF tray

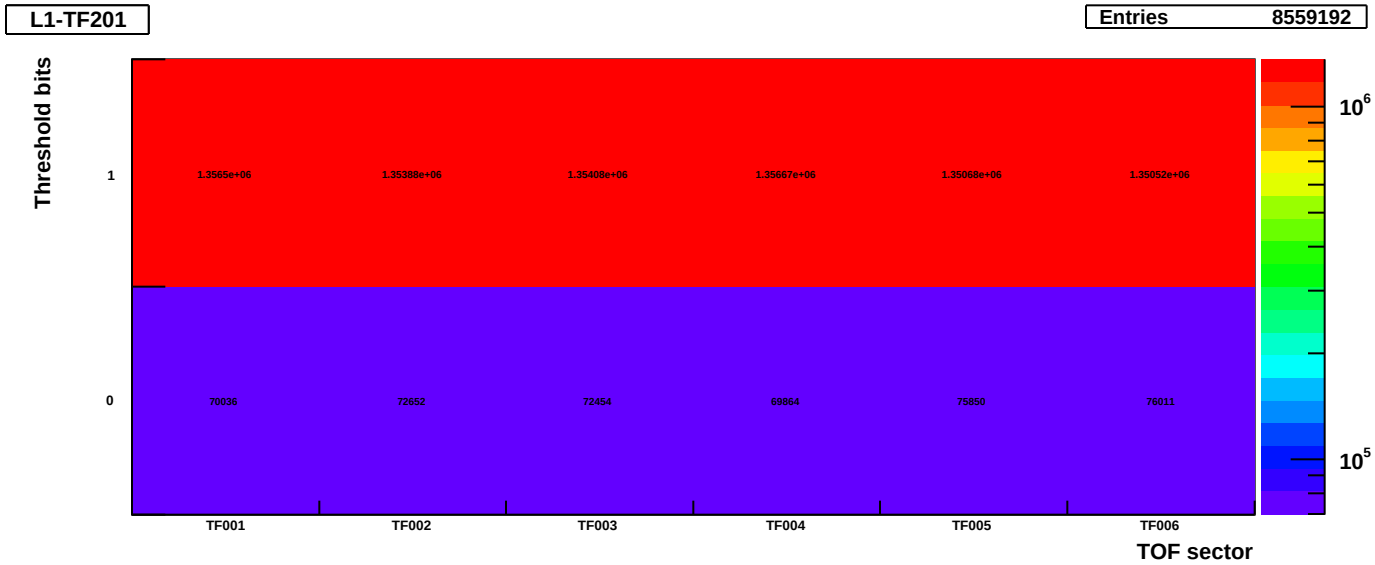

MIX-TF004
Entries 5.991434e+07
TOF MULT
TOF tray

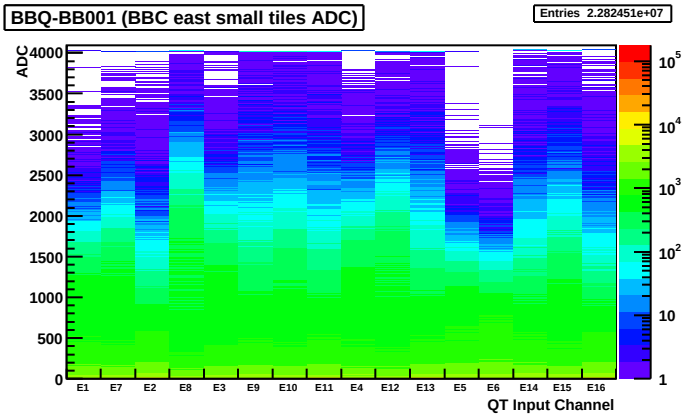

MIX-TF005
Entries 5.991434e+07
TOF MULT
TOF tray

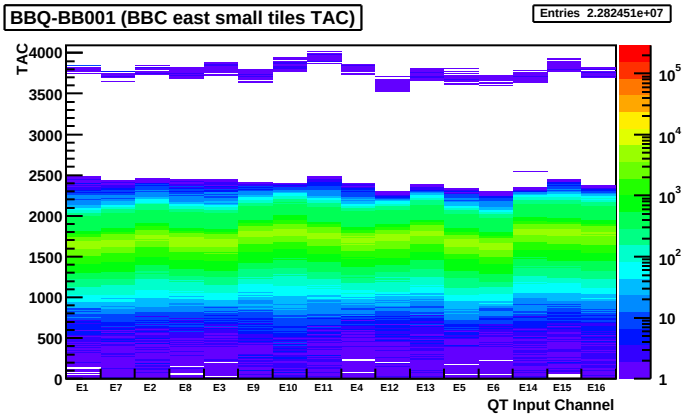

MIX-TF006
Entries 5.991434e+07
TOF MULT
TOF tray

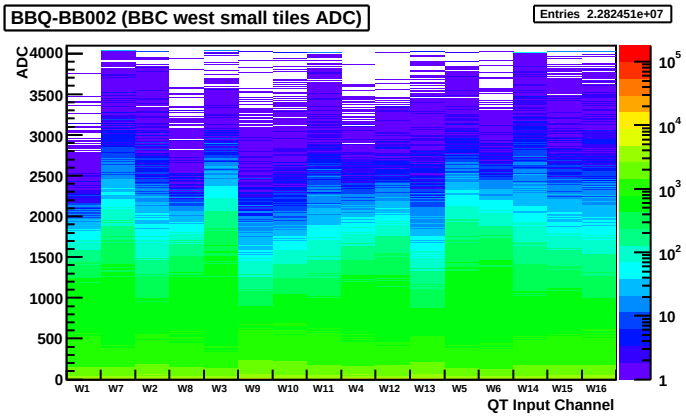

MIX-TF101
Entries 8559192
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^4$

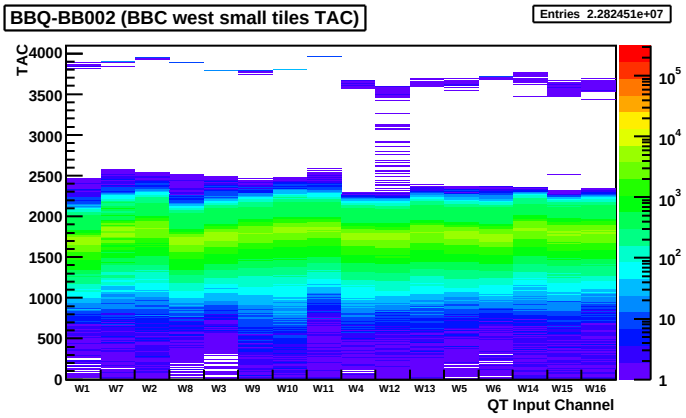

L1-TF201
Entries 1426532
$10^4$
$10^3$
$10^2$
0
200
400
600
800
1000
1200
1400
TOF total mult

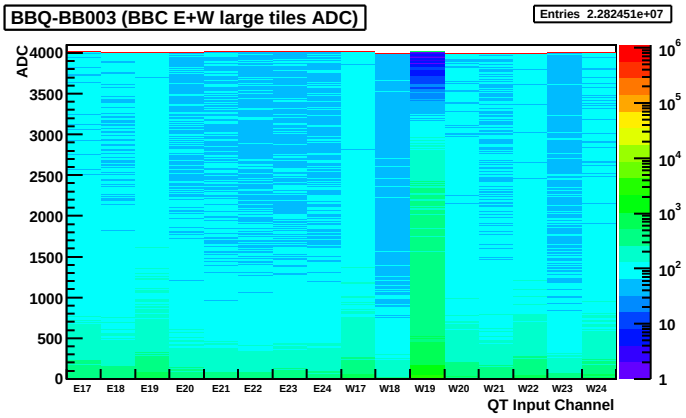

L1-TF201
Entries 8559192
Threshold bits
1
0
1.3565e+06
1.35388e+06
1.35408e+06
1.35667e+06
1.35068e+06
1.35052e+06
70036
72652
72454
69864
75850
76011
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
$10^6$
$10^5$

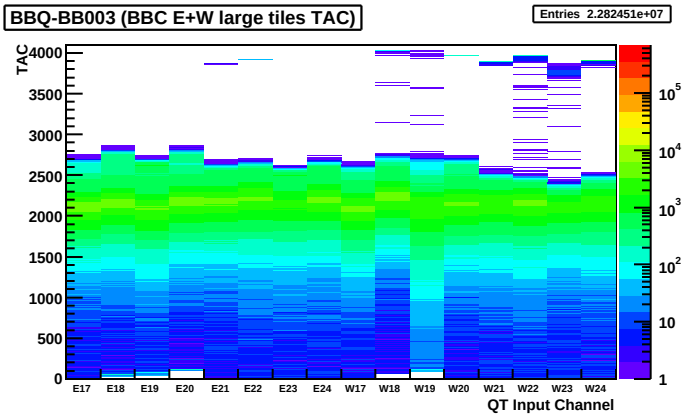

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.282451e+07
ADC
QT Input Channel

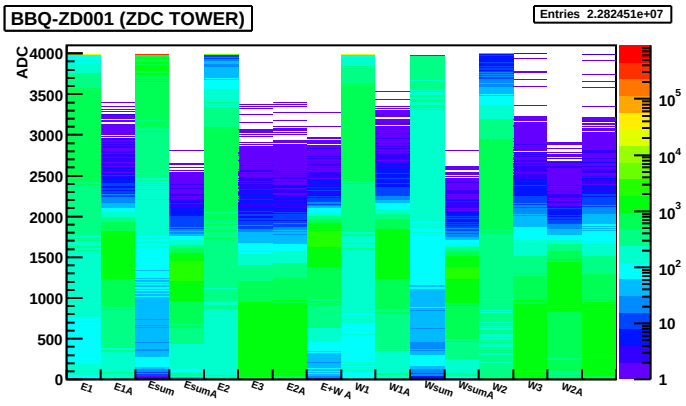

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.282451e+07
TAC
QT Input Channel

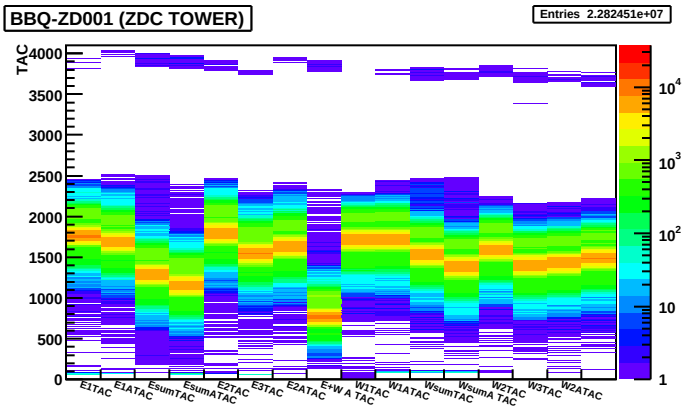

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.282451e+07
ADC
QT Input Channel

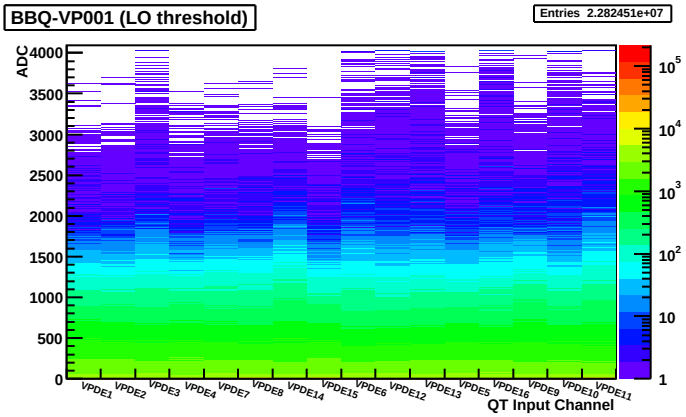

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.282451e+07
TAC
QT Input Channel

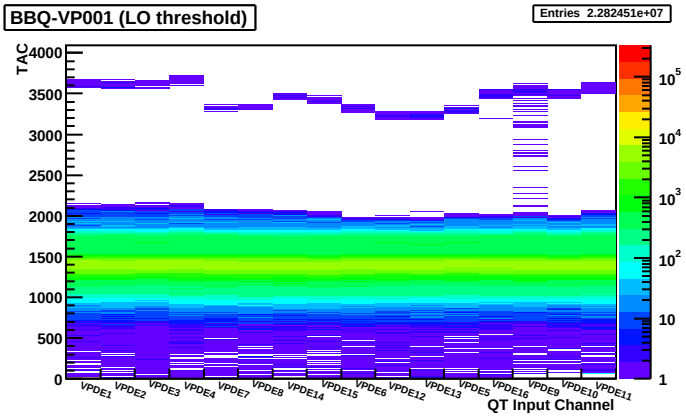

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.282451e+07
ADC
QT Input Channel

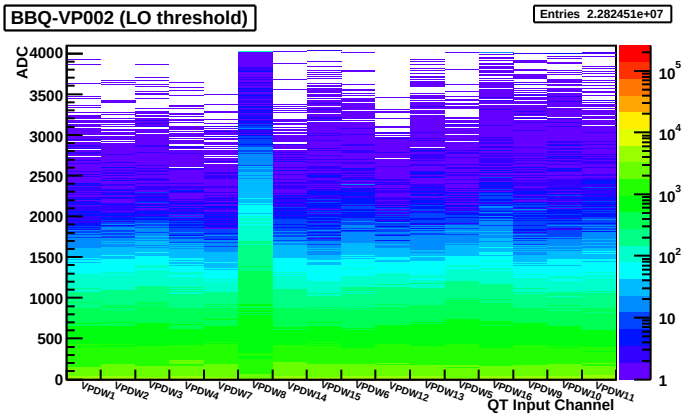

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.282451e+07
TAC
QT Input Channel

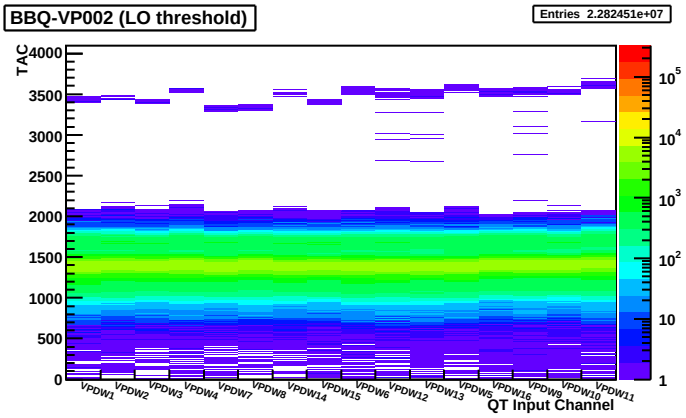

BBQ-ZD001 (ZDC TOWER)
Entries 2.282451e+07
ADC

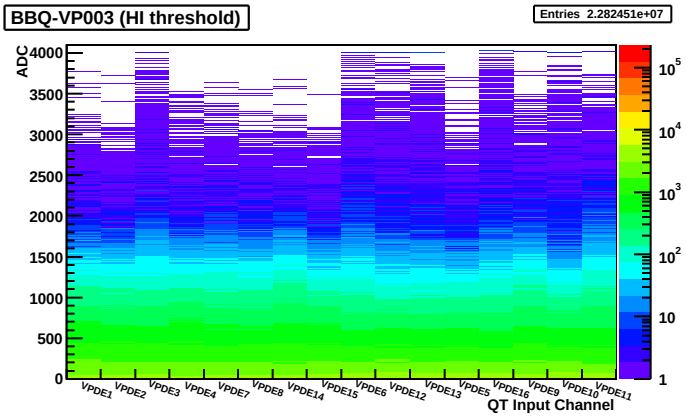

BBQ-ZD001 (ZDC TOWER)
Entries 2.282451e+07
TAC

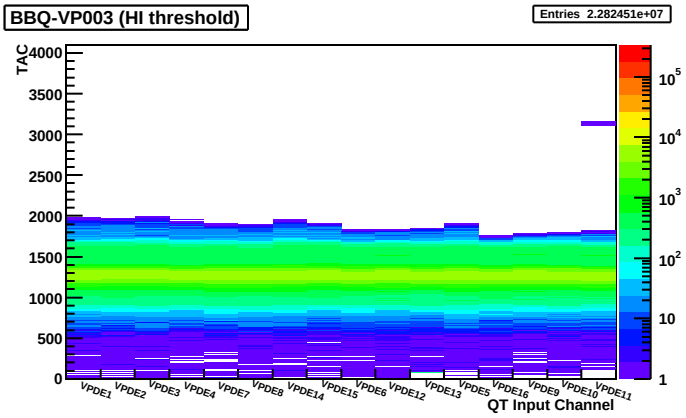

BBQ-VP001 (LO threshold)
Entries 2.282451e+07
ADC
QT Input Channel

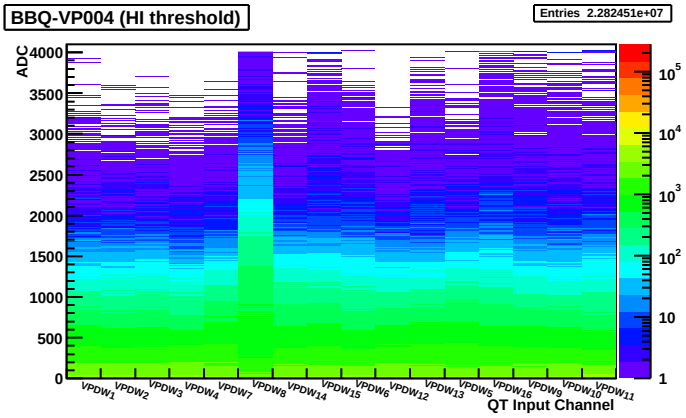

BBQ-VP001 (LO threshold)
Entries 2.282451e+07
TAC
QT Input Channel

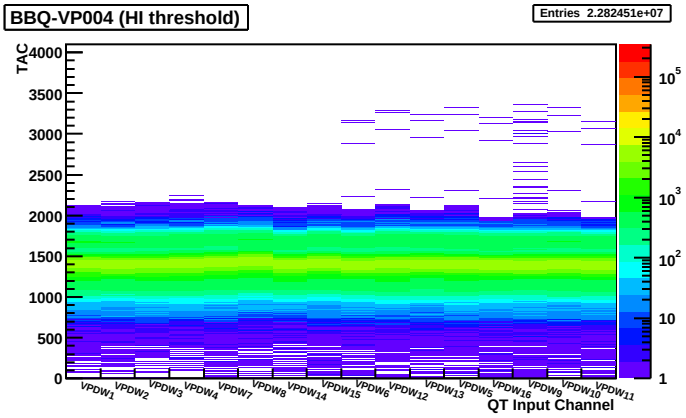

BBQ-VP002 (LO threshold)
Entries 2.282451e+07
ADC
QT Input Channel

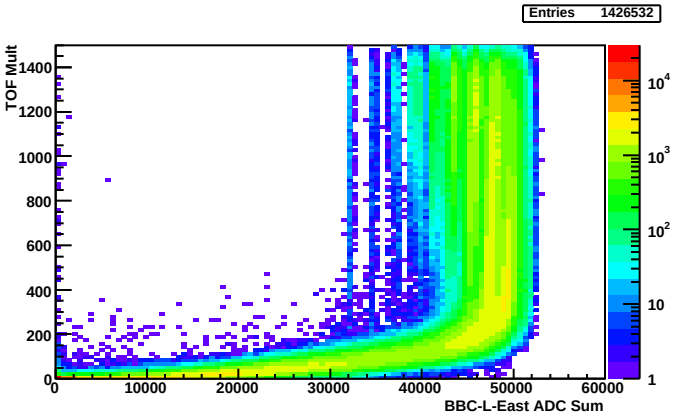

BBQ-VP002 (LO threshold)
Entries 2.282451e+07
TAC
QT Input Channel

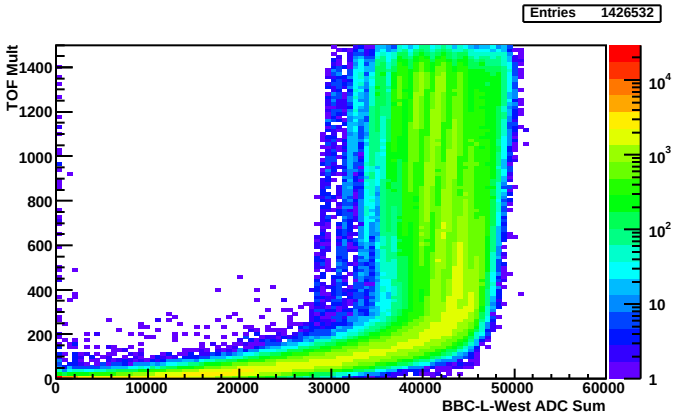

BBQ-VP003 (HI threshold)
Entries 2.282451e+07
ADC
QT Input Channel

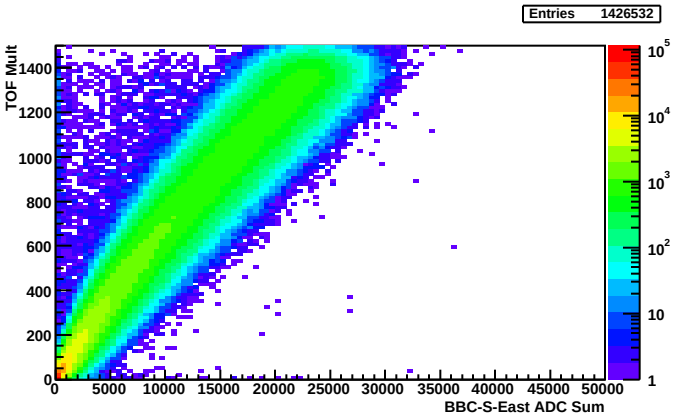

BBQ-VP003 (HI threshold)
Entries 2.282451e+07
TAC
QT Input Channel

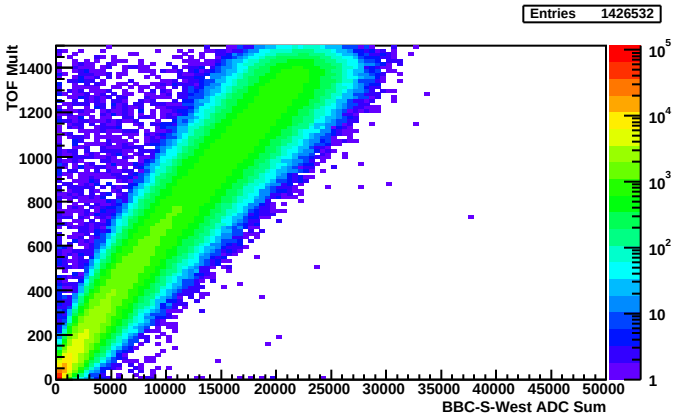

BBQ-VP004 (HI threshold)
Entries 2.282451e+07
ADC
QT Input Channel

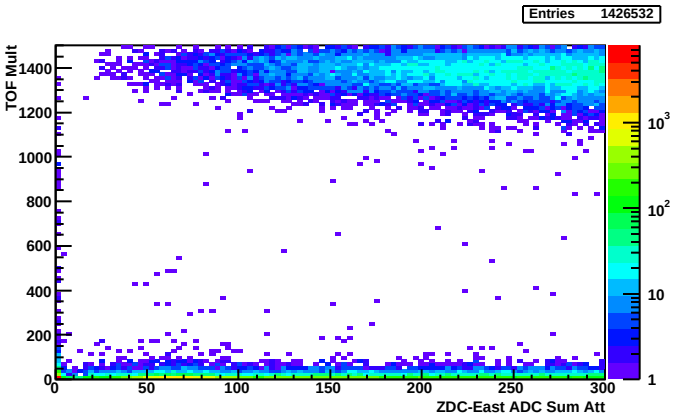

BBQ-VP004 (HI threshold)
Entries 2.282451e+07
TAC
QT Input Channel

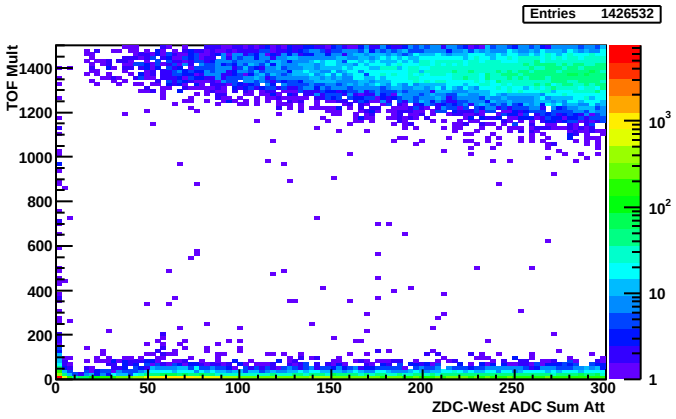

Entries 1426532
TOF Mult
BBC-L-East ADC Sum

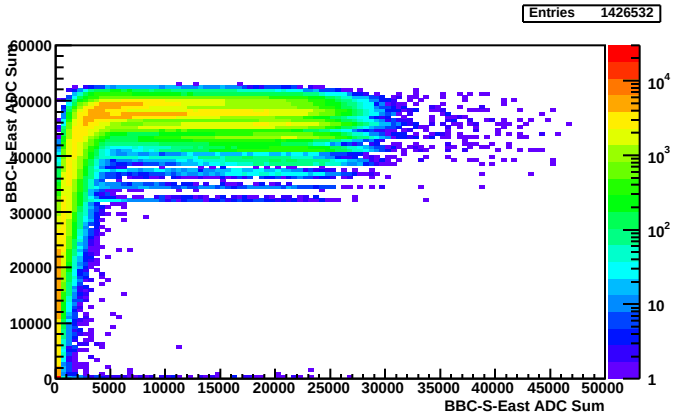

Entries 1426532
TOF Mult
BBC-L-West ADC Sum

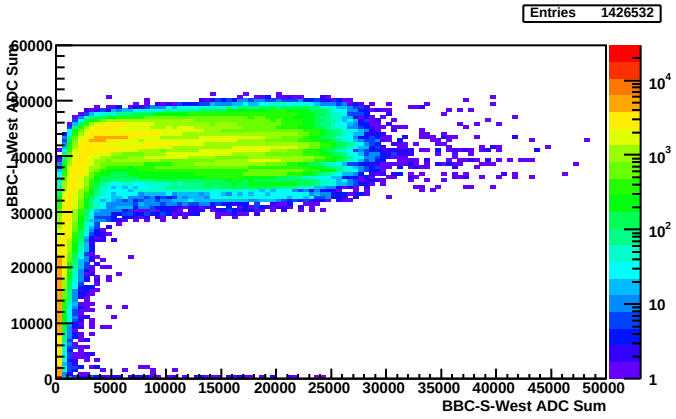

Entries 1426532
TOF Mult
BBC-S-East ADC Sum

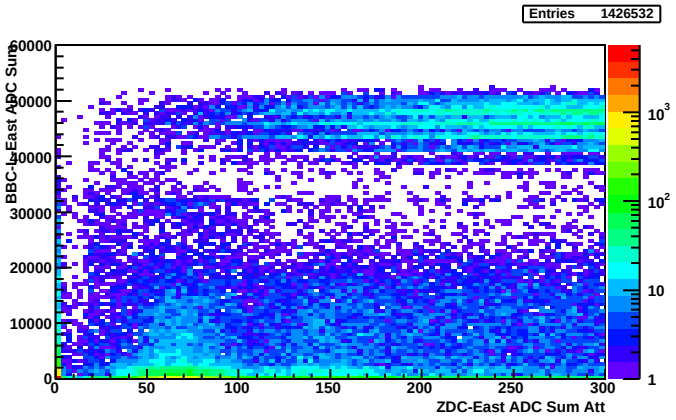

Entries 1426532
TOF Mult
BBC-S-West ADC Sum

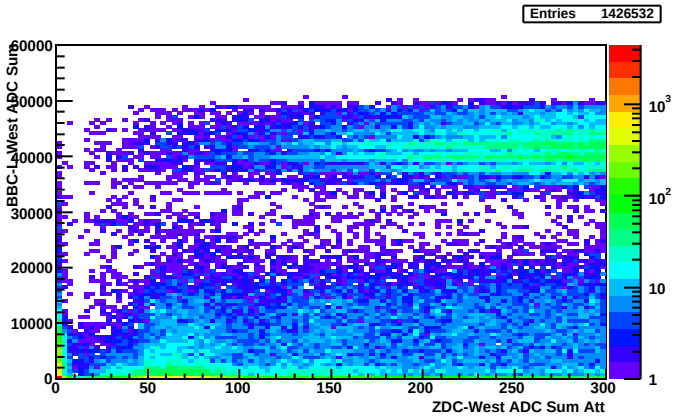

Entries 1426532
TOF Mult
ZDC-East ADC Sum Att

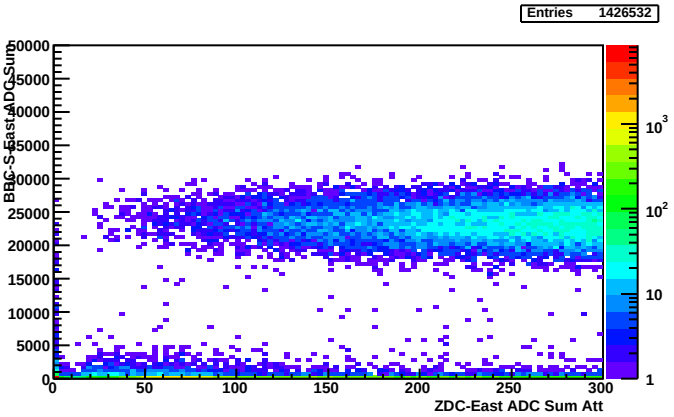

Entries 1426532
TOF Mult
ZDC-West ADC Sum Att

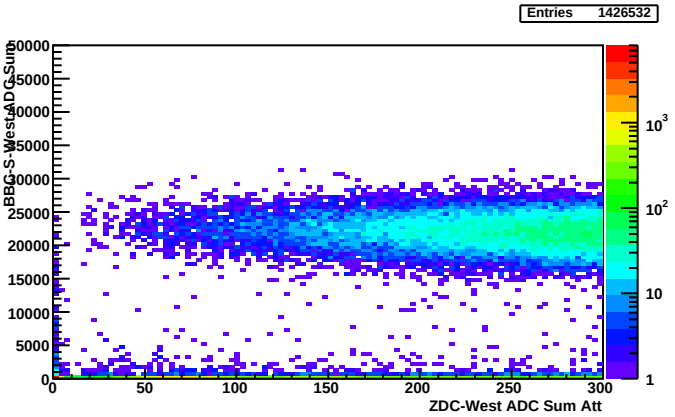

Entries 1426532
BBC-L-East ADC Sum
BBC-S-East ADC Sum

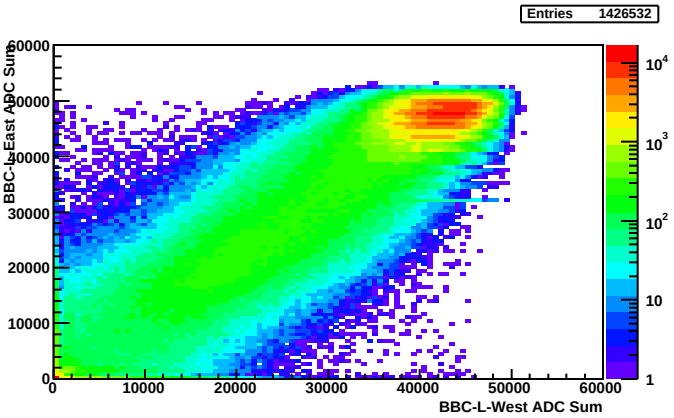

Entries 1426532
BBC-L-West ADC Sum
BBC-S-West ADC Sum

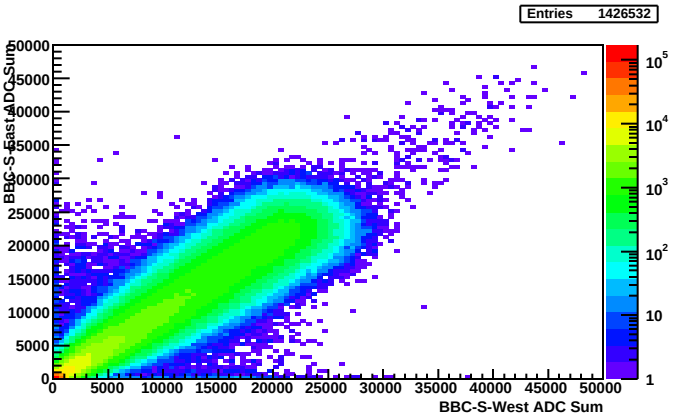

Entries 1426532
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

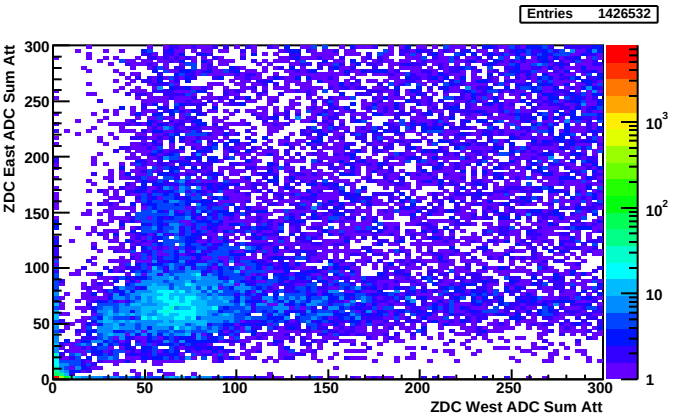

Entries 1426532
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

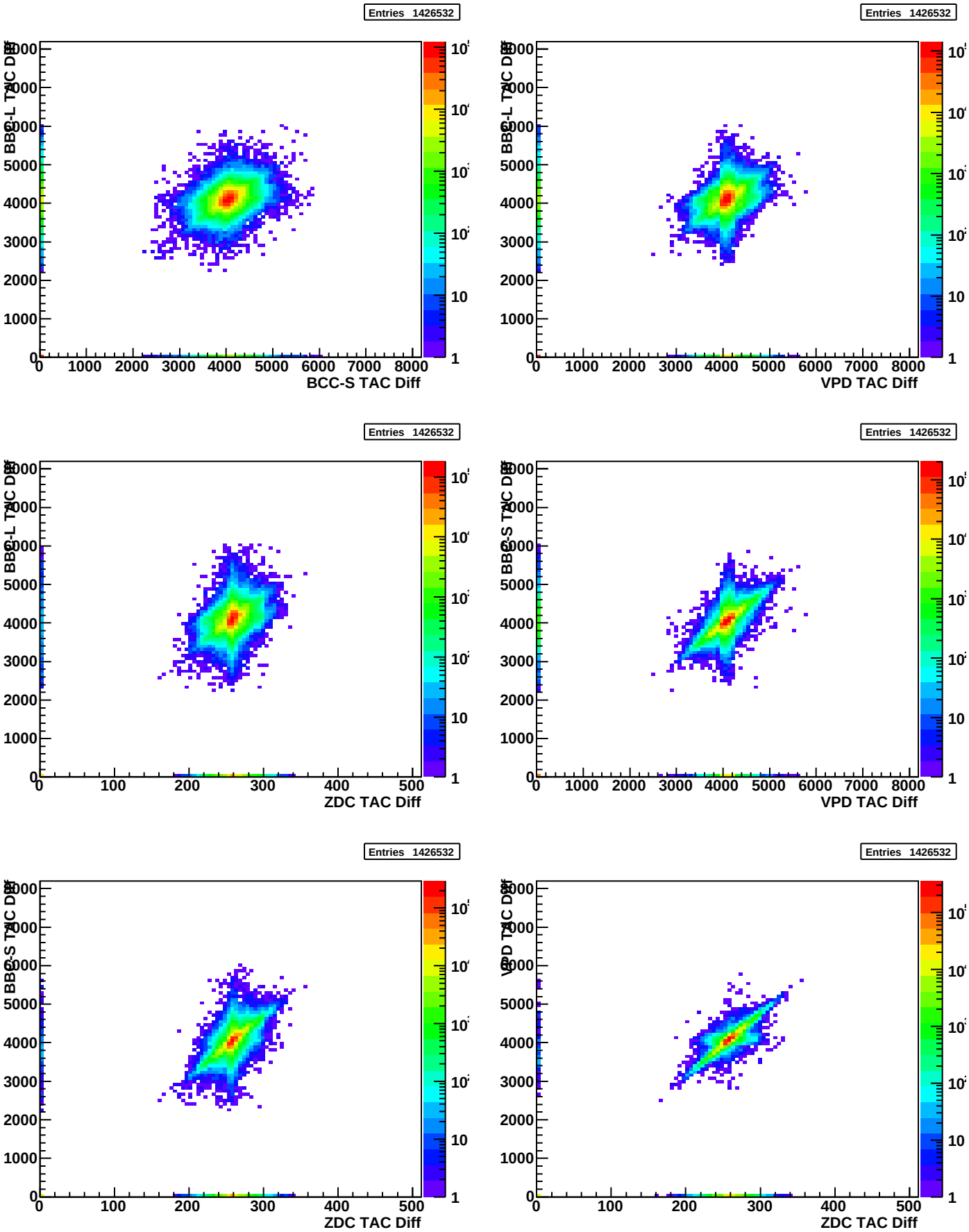

Entries 1426532
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

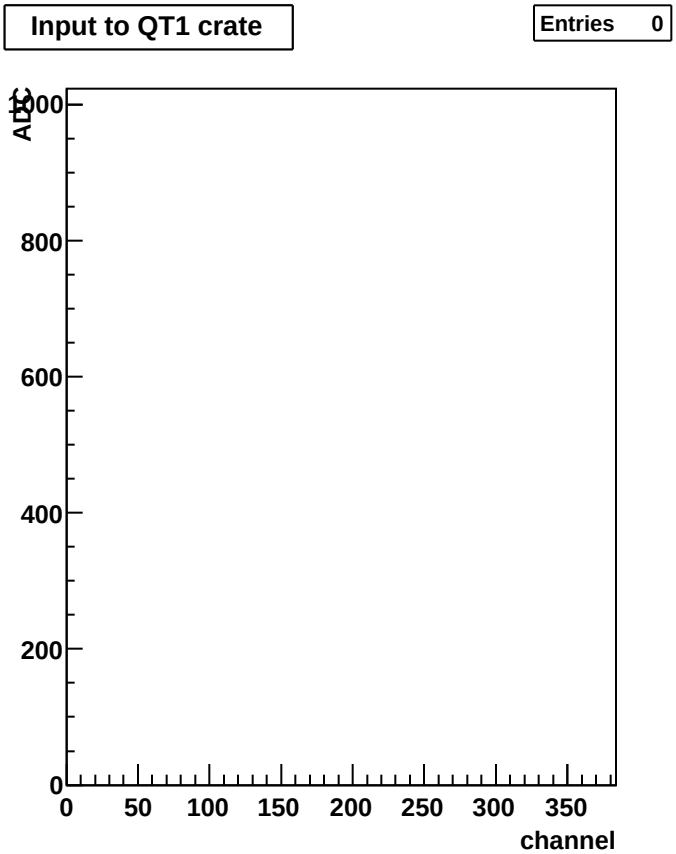

Entries 1426532
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

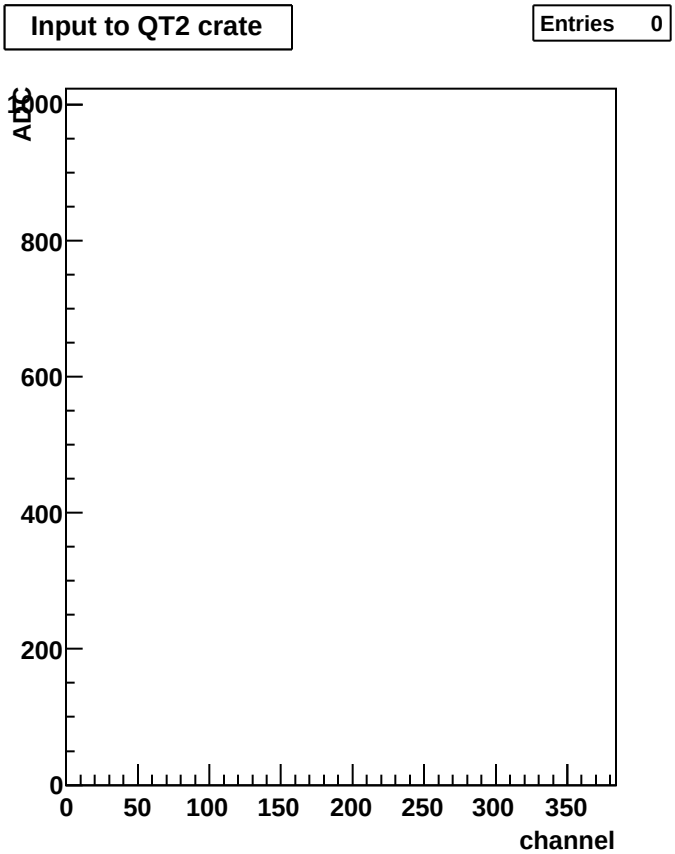

Entries 1426532
BBC-L-East ADC Sum
BBC-L-West ADC Sum

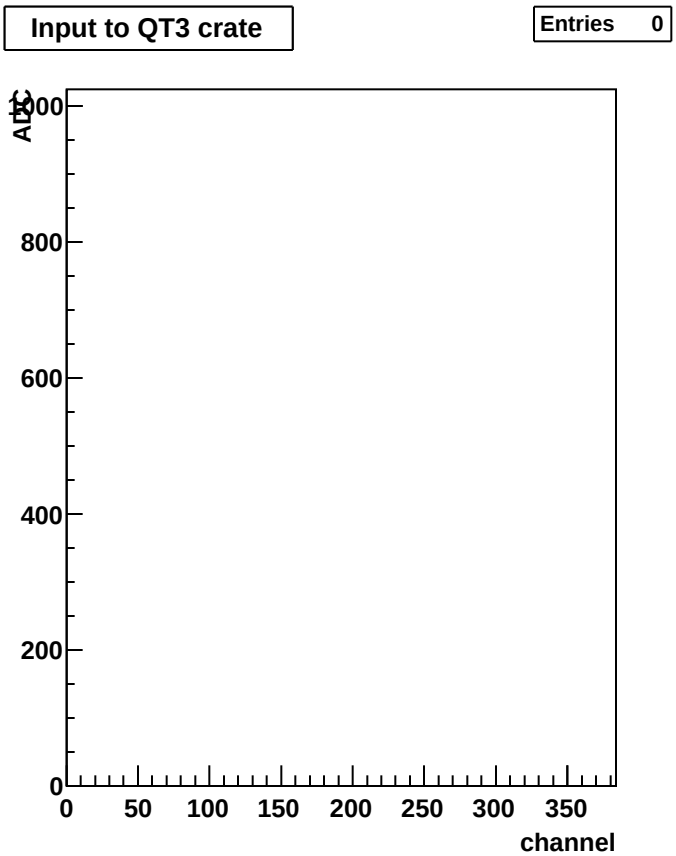

Entries 1426532
BBC-S-East ADC Sum
BBC-S-West ADC Sum

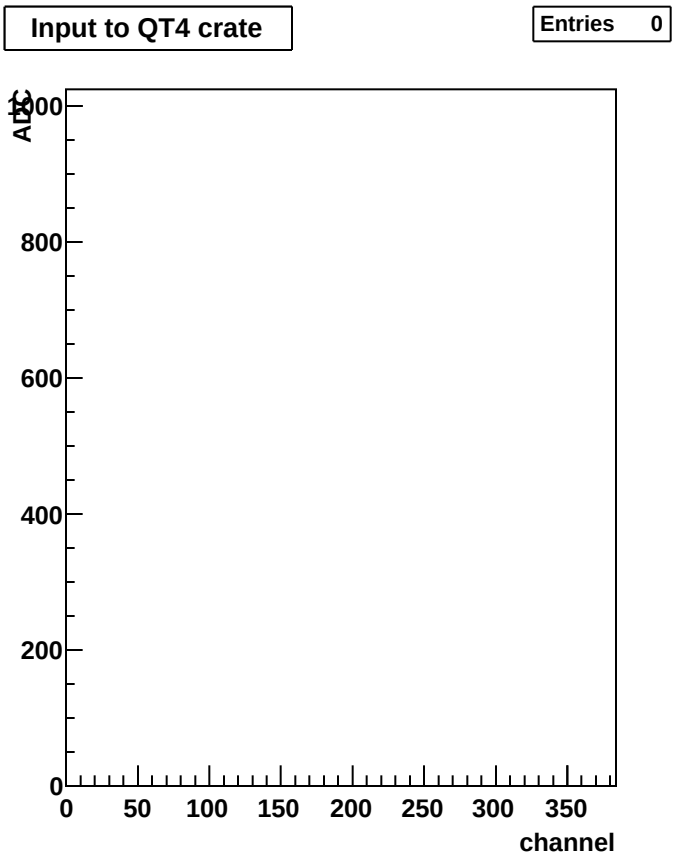

Entries 1426532
ZDC East ADC Sum Att
ZDC West ADC Sum Att

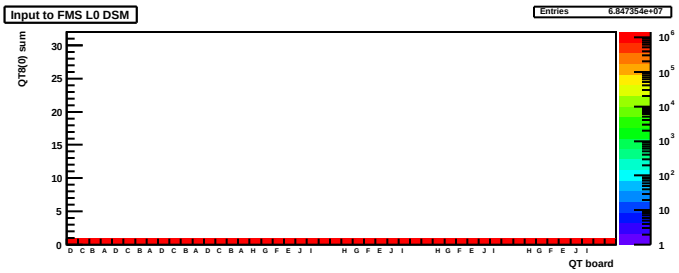

Entries 1426532
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1426532
BBC-L TAC Diff
VPD TAC Diff
Entries 1426532
BBC-L TAC Diff
ZDC TAC Diff
Entries 1426532
BBC-S TAC Diff
VPD TAC Diff
Entries 1426532
BBC-S TAC Diff
ZDC TAC Diff
Entries 1426532
VPD TAC Diff
ZDC TAC Diff

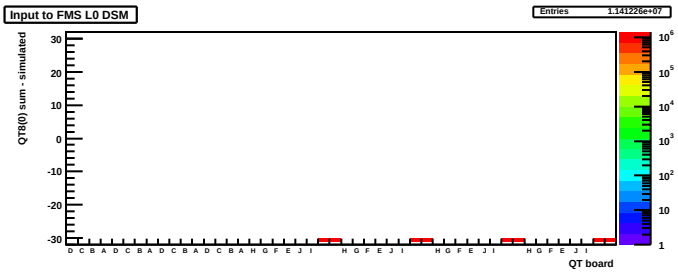

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

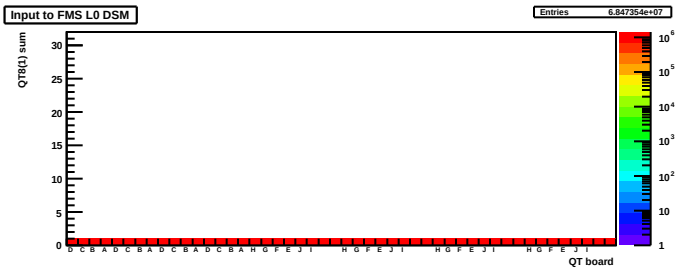

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

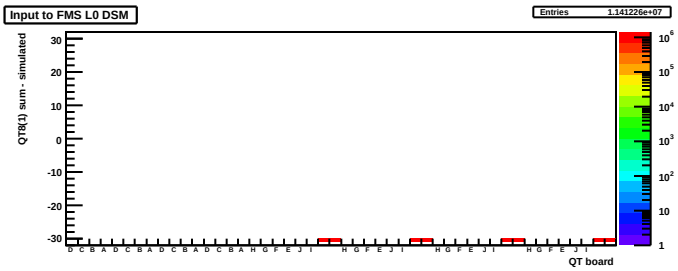

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

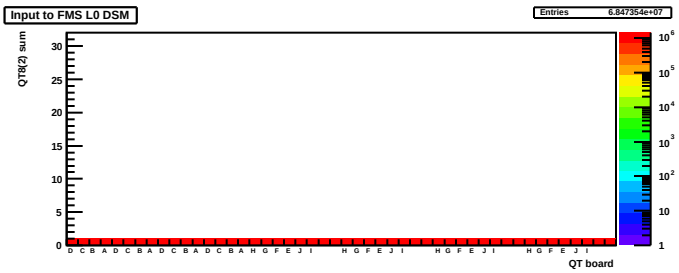

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

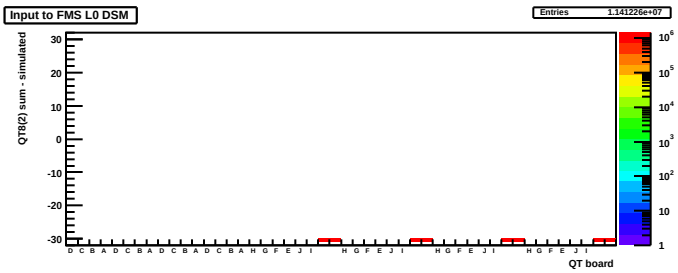

Input to FMS L0 DSM
Entries 6.847354e+07
QT8(0) sum
QT board

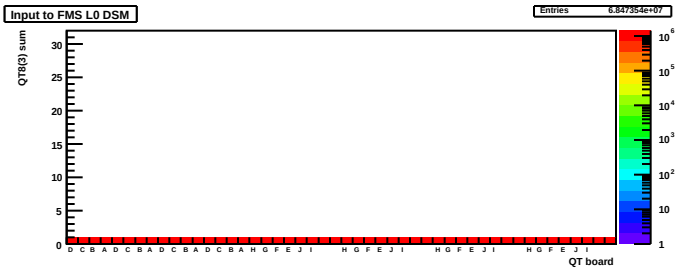

Input to FMS L0 DSM
Entries 1.141226e+07
QT8(0) sum - simulated
QT board

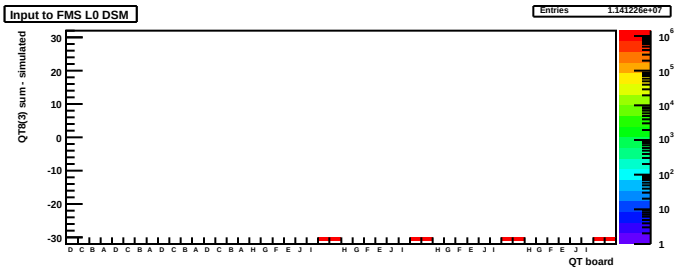

Input to FMS L0 DSM
Entries 6.847354e+07
QT8(1) sum
QT board

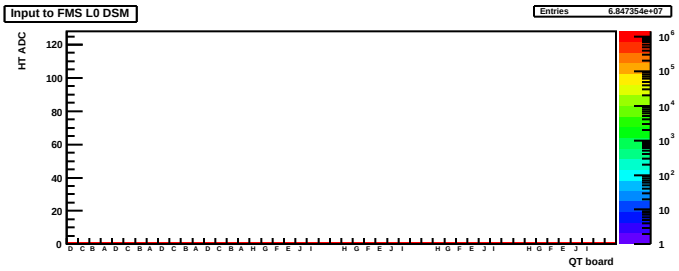

Input to FMS L0 DSM
Entries 1.141226e+07
QT8(1) sum - simulated
QT board

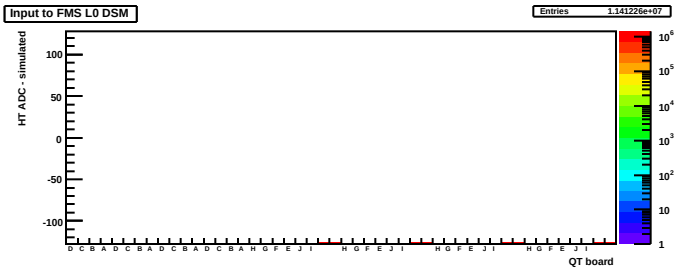

Input to FMS L0 DSM
Entries 6.847354e+07
QT8(2) sum
QT board

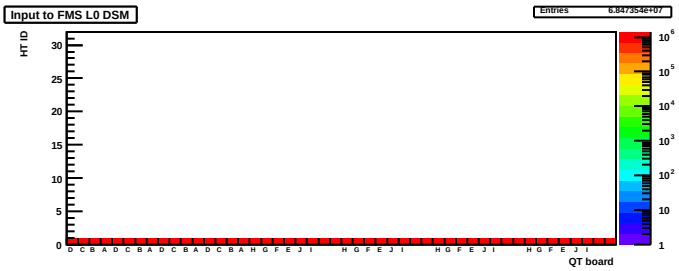

Input to FMS L0 DSM
Entries 1.141226e+07
QT8(2) sum - simulated
QT board

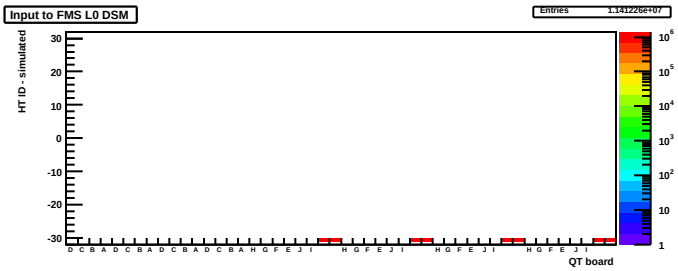

Input to FMS L0 DSM
Entries 6.847354e+07
QT8(3) sum
QT board

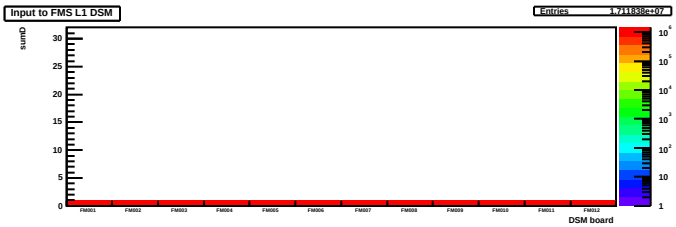

Input to FMS L0 DSM
Entries 1.141226e+07
QT8(3) sum - simulated
QT board

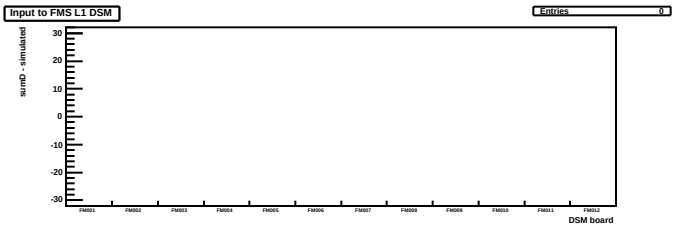

Input to FMS L0 DSM
Entries 6.847354e+07
HT ADC
QT board

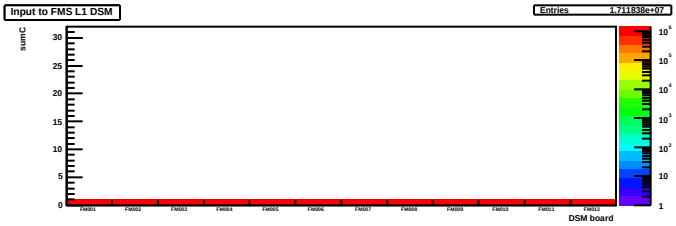

Input to FMS L0 DSM
Entries 1.141226e+07
HT ADC - simulated
QT board

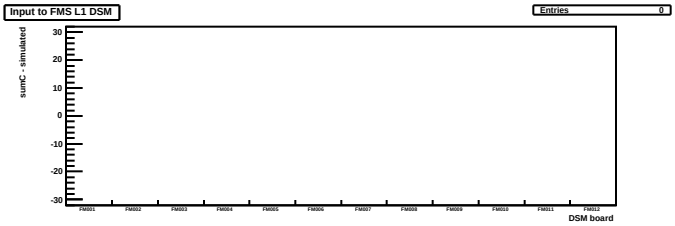

Input to FMS L0 DSM
Entries 6.847354e+07
HT ID
QT board

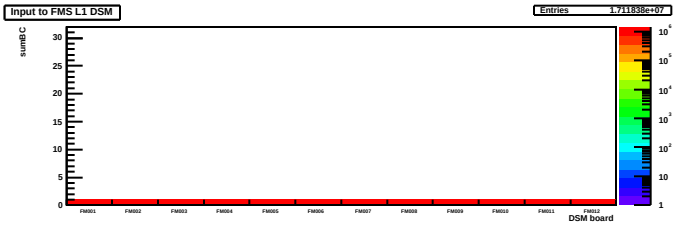

Input to FMS L0 DSM
Entries 1.141226e+07
HT ID - simulated
QT board

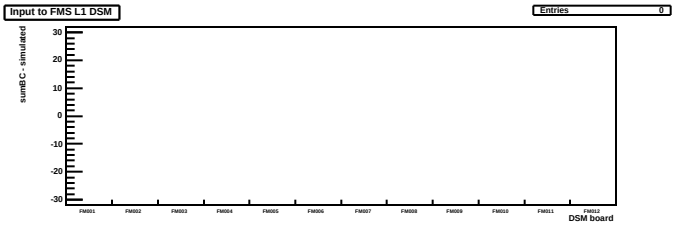

Input to FMS L1 DSM
Entries 1.711838e+07
sumD
DSM board

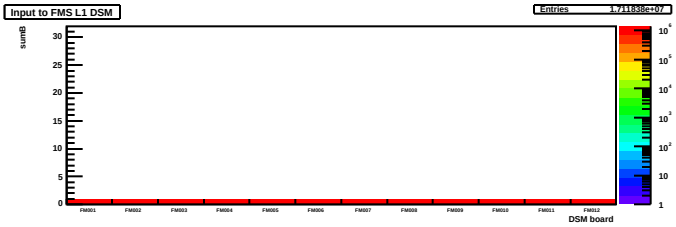

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

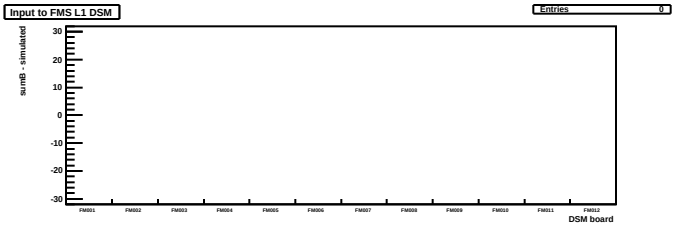

Input to FMS L1 DSM
Entries 1.711838e+07
sumC
DSM board

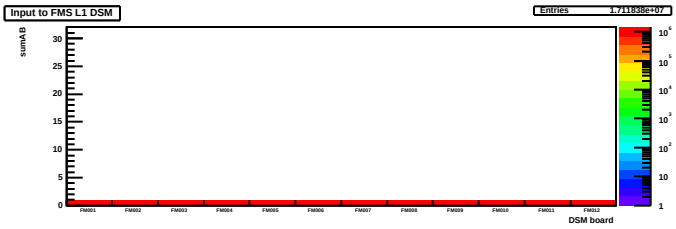

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

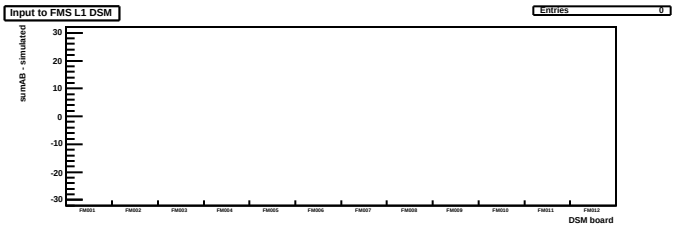

Input to FMS L1 DSM
Entries 1.711838e+07
sumBC
DSM board

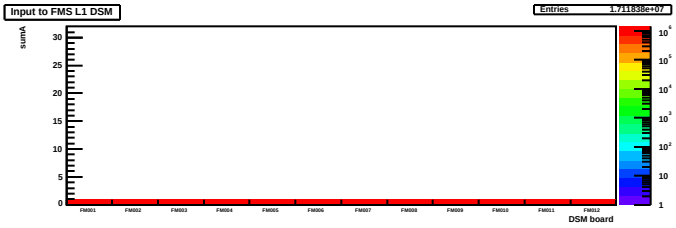

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

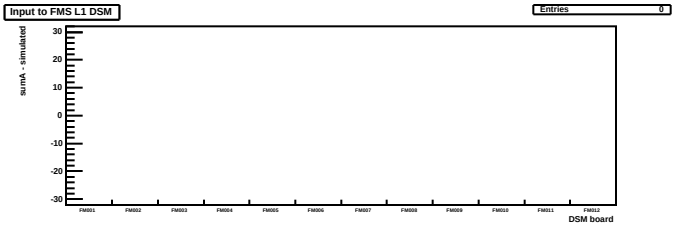

Input to FMS L1 DSM
Entries 1.711838e+07
sumB
DSM board

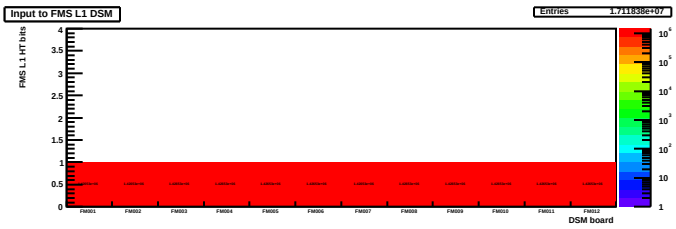

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

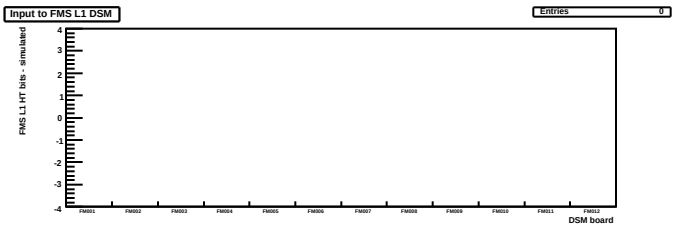

Input to FMS L1 DSM
Entries 1.711838e+07
sumAB
DSM board

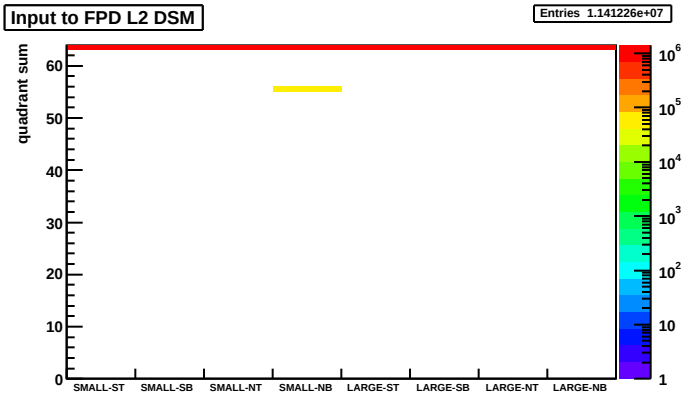

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

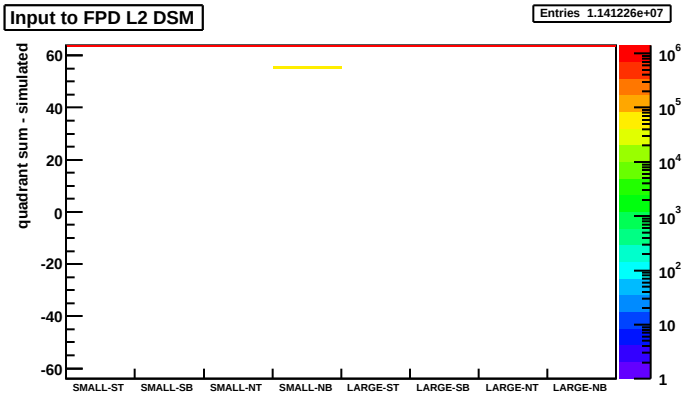

Input to FMS L1 DSM
Entries 1.711838e+07
sumA
DSM board

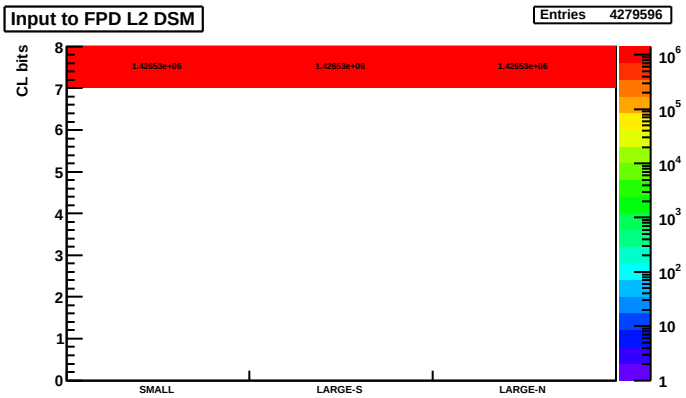

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

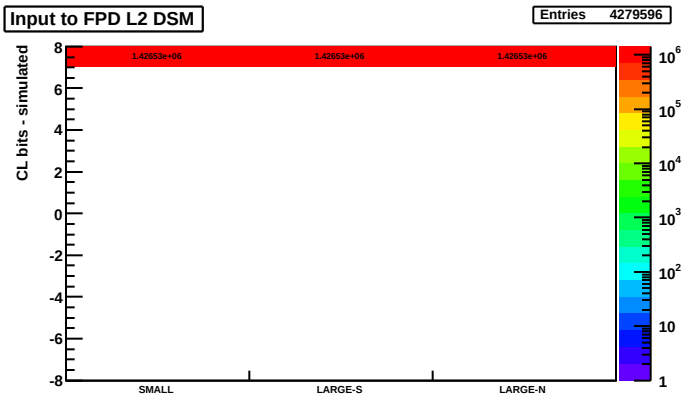

Input to FMS L1 DSM
Entries 1.711838e+07
FMS L1 HT bits
DSM board

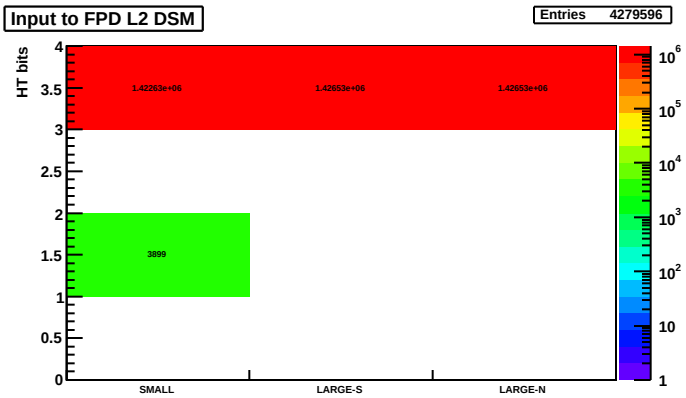

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

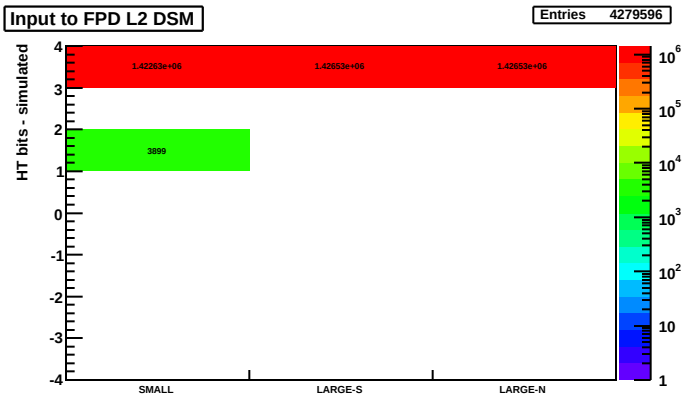

Input to FPD L2 DSM
Entries 1.141226e+07
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

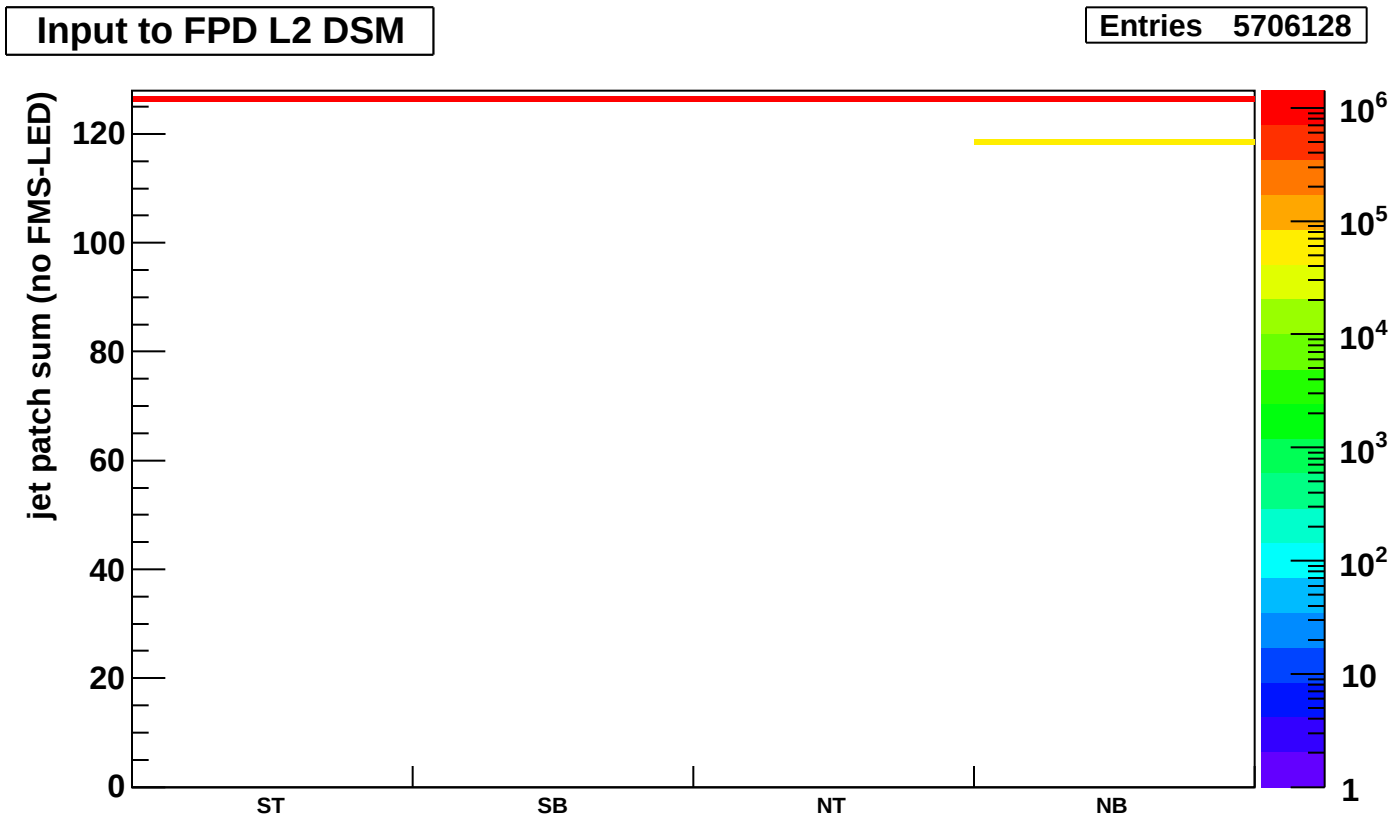

Input to FPD L2 DSM
Entries 1.141226e+07
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

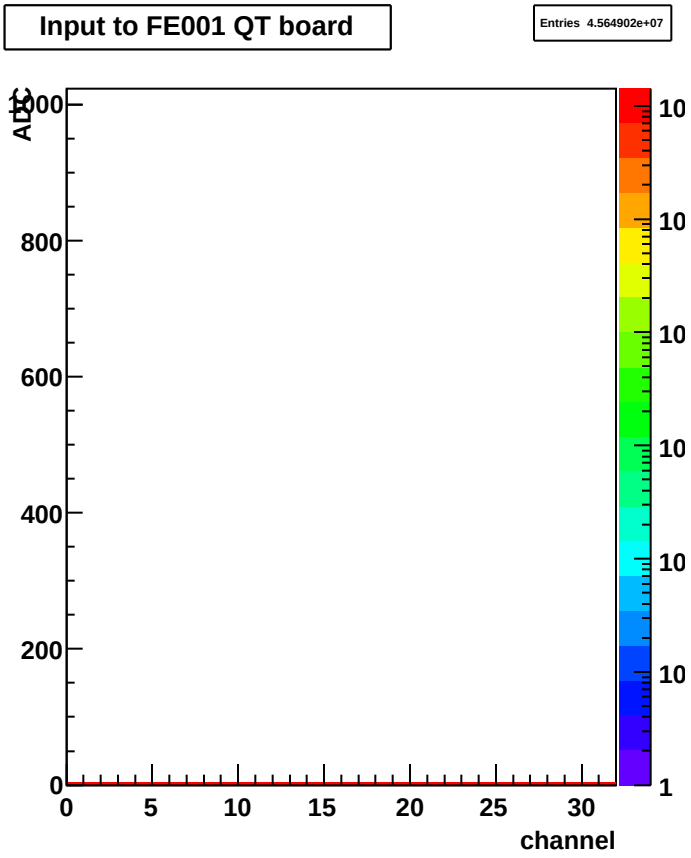

Input to FPD L2 DSM
Entries 4279596
CL bits
1.42653e+06
1.42653e+06
1.42653e+06
SMALL
LARGE-S
LARGE-N

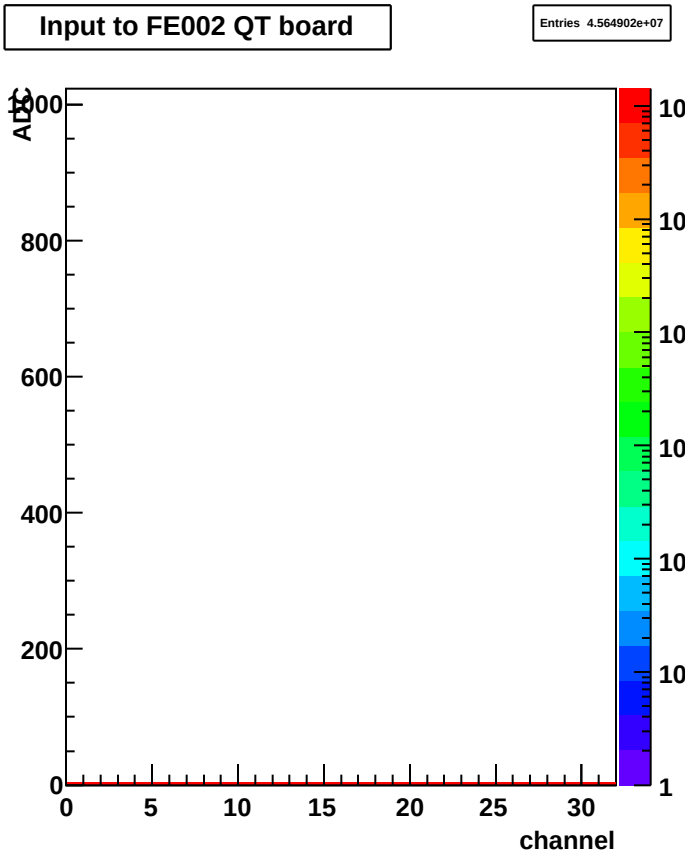

Input to FPD L2 DSM
Entries 4279596
CL bits - simulated
1.42653e+06
1.42653e+06
1.42653e+06
SMALL
LARGE-S
LARGE-N

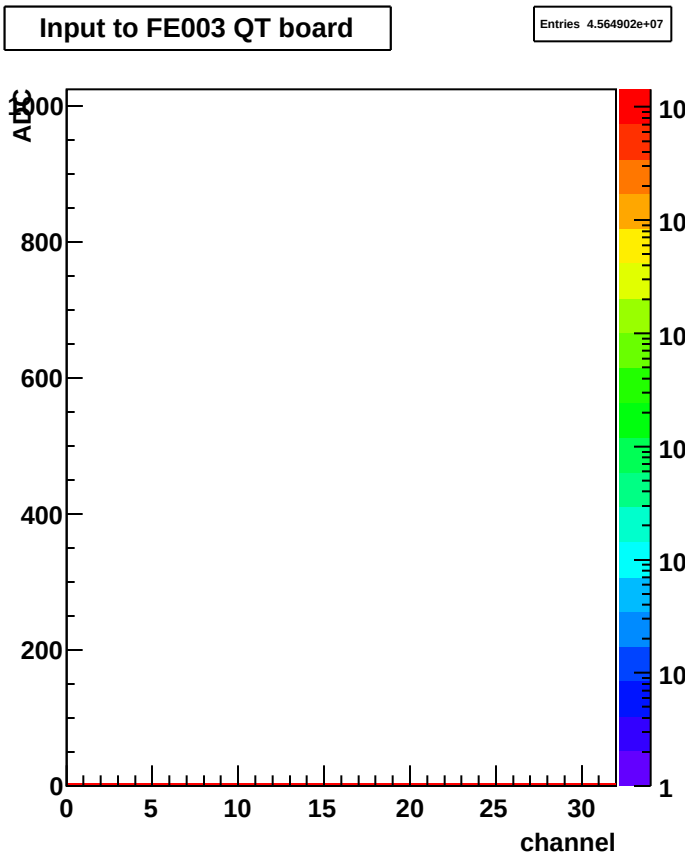

Input to FPD L2 DSM
Entries 4279596
HT bits
1.42263e+06
1.42653e+06
1.42653e+06
3899
SMALL
LARGE-S
LARGE-N

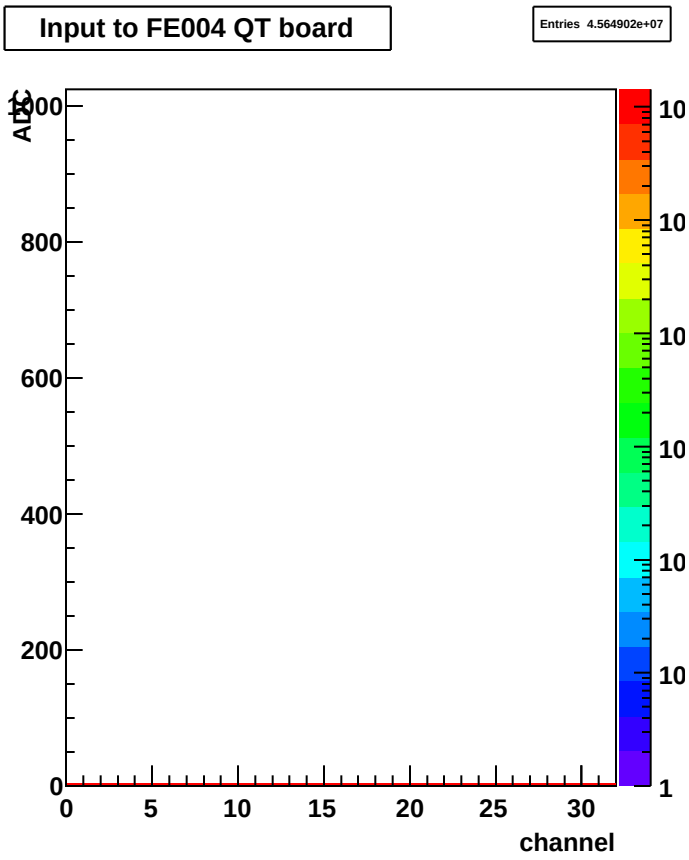

Input to FPD L2 DSM
Entries 4279596
HT bits - simulated
1.42263e+06
1.42653e+06
1.42653e+06
3899
SMALL
LARGE-S
LARGE-N

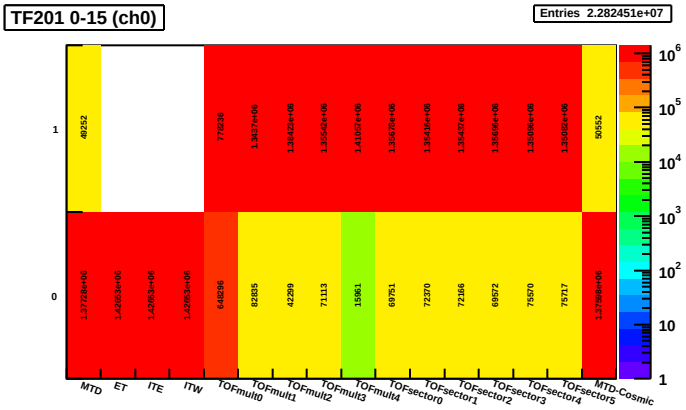

Input to FPD L2 DSM
Entries 5706128
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

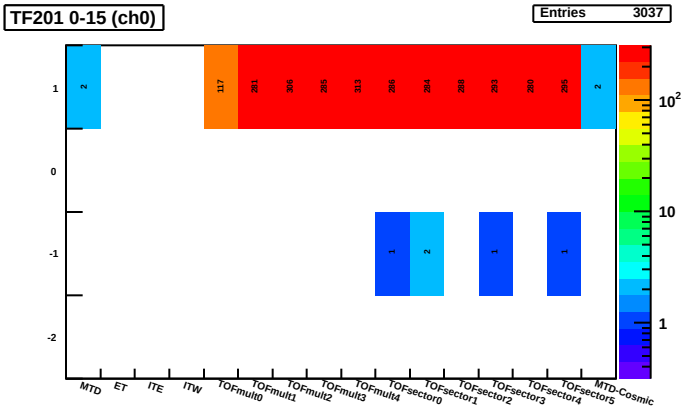

Input to FE001 QT board
Entries 4.564902e+07
ADC
channel

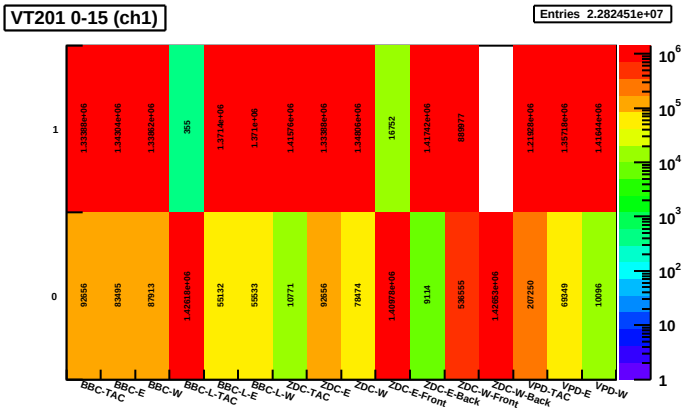

Input to FE002 QT board
Entries 4.564902e+07
ADC
channel

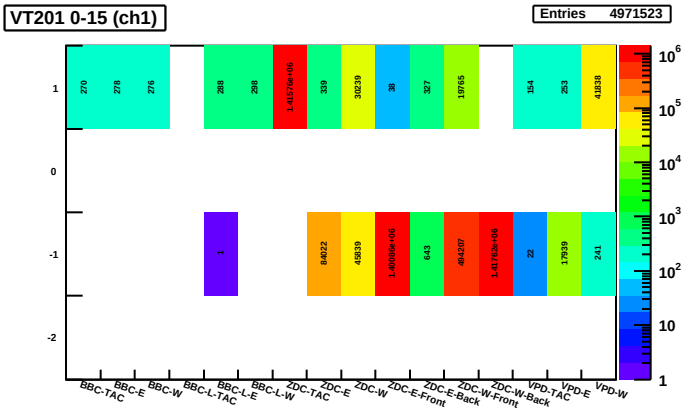

Input to FE003 QT board
Entries 4.564902e+07
ADC
channel

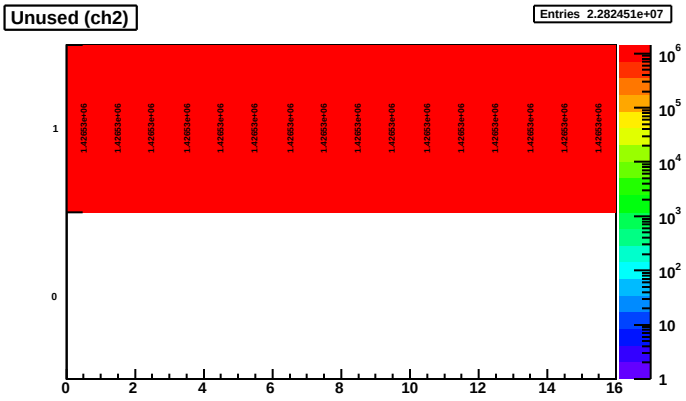

Input to FE004 QT board
Entries 4.564902e+07
ADC
channel

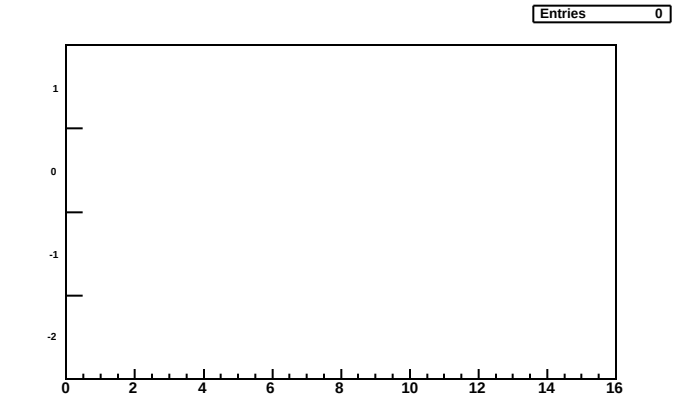

TF201 0-15 (ch0)
Entries 2.282451e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

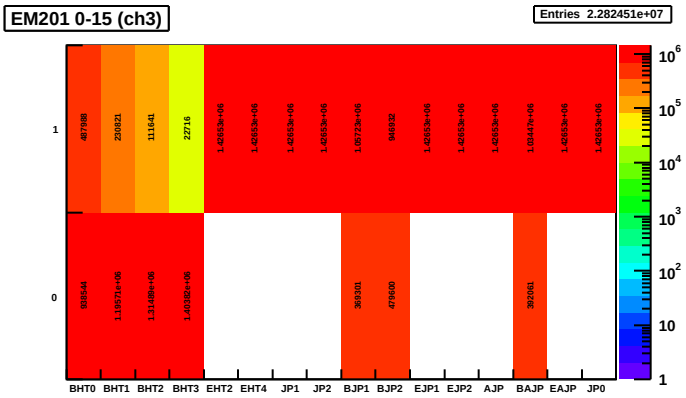

TF201 0-15 (ch0)
Entries 3037
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

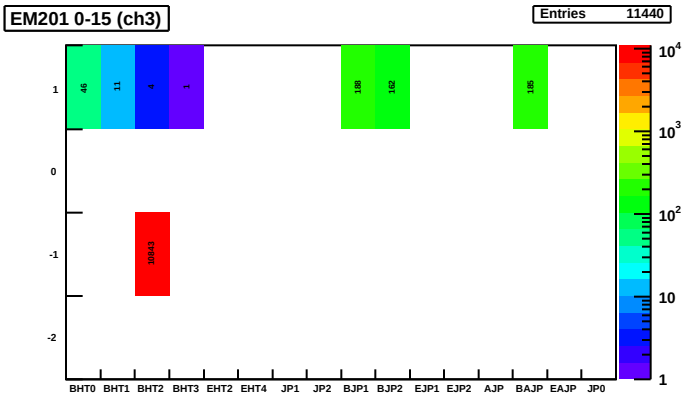

VT201 0-15 (ch1)
Entries 2.282451e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 4971523
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

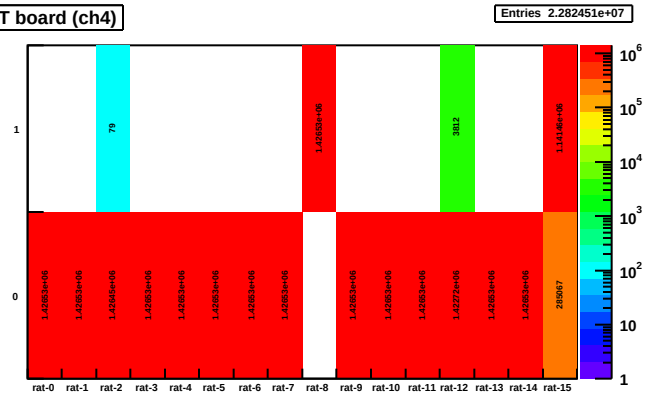

Unused (ch2)
Entries 2.282451e+07

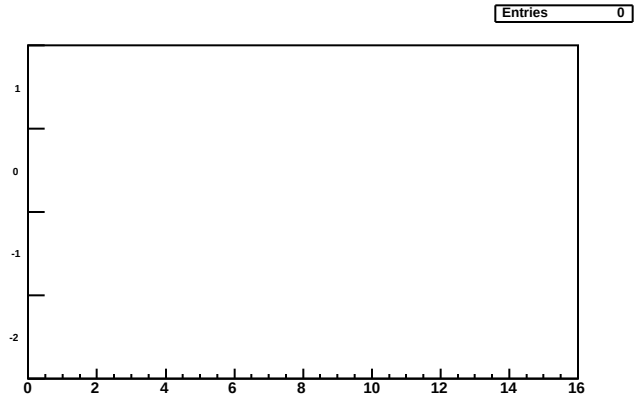

Entries 0


EM201 0-15 (ch3)
Entries 2.282451e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

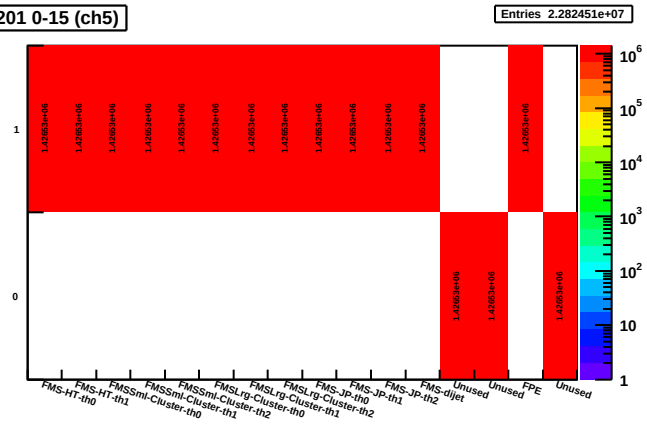

EM201 0-15 (ch3)
Entries 11440
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

**RAT board (ch4)**

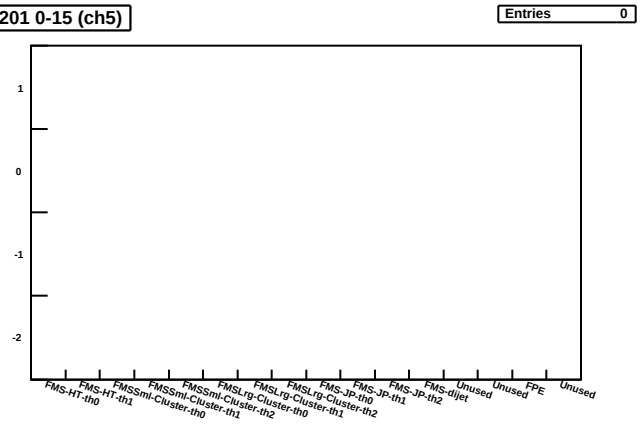


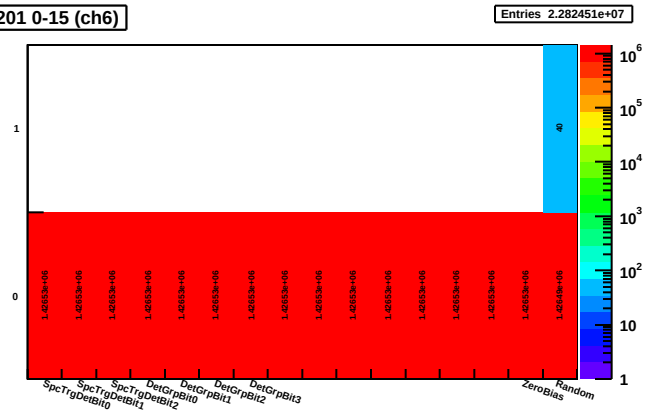

**FP201 0-15 (ch5)**

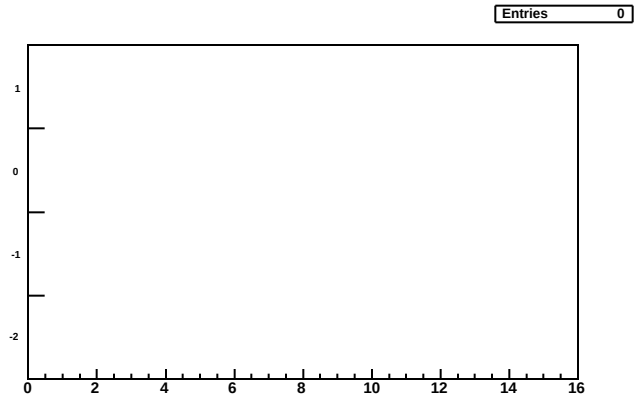


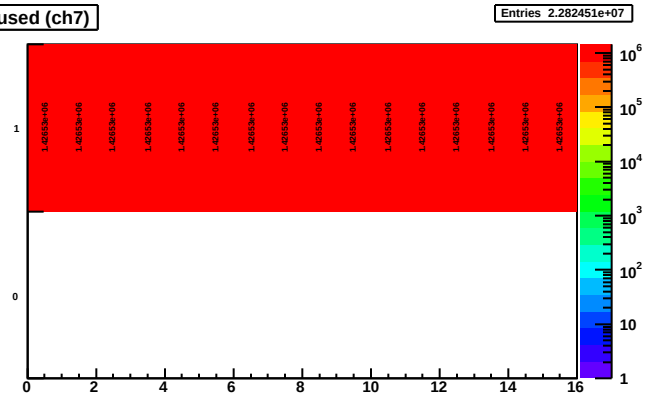
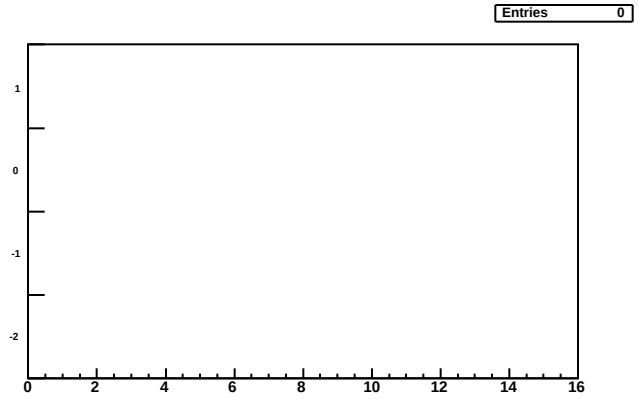

**FP201 0-15 (ch5)**




**ST201 0-15 (ch6)**




**Unused (ch7)**