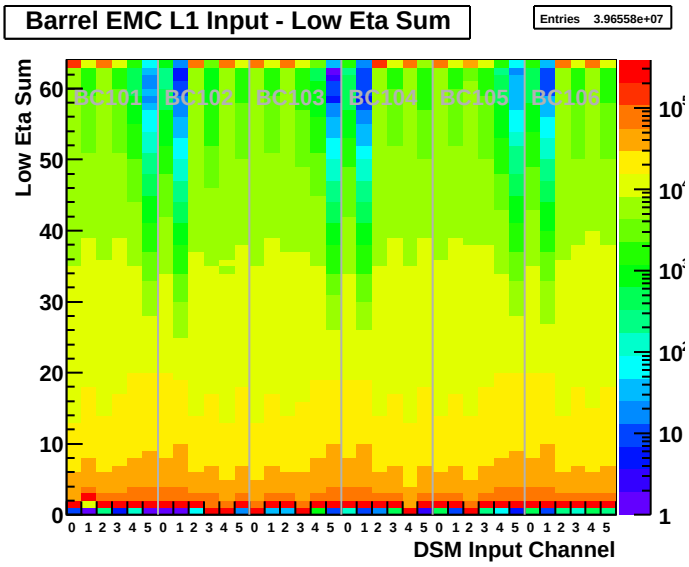
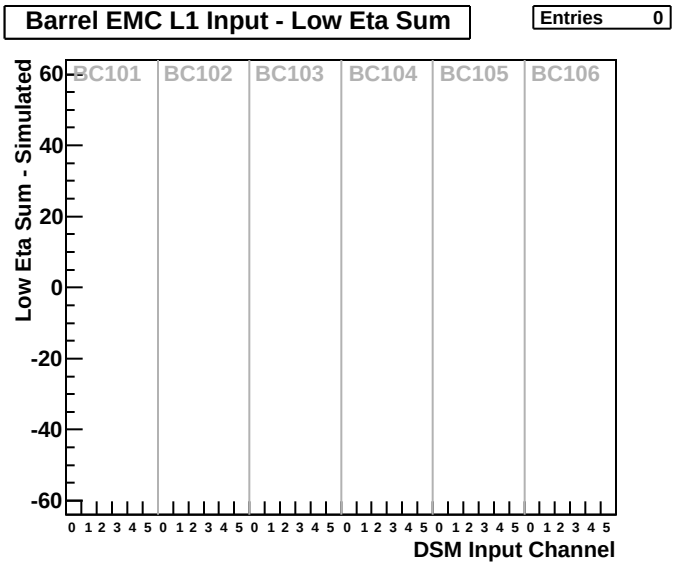
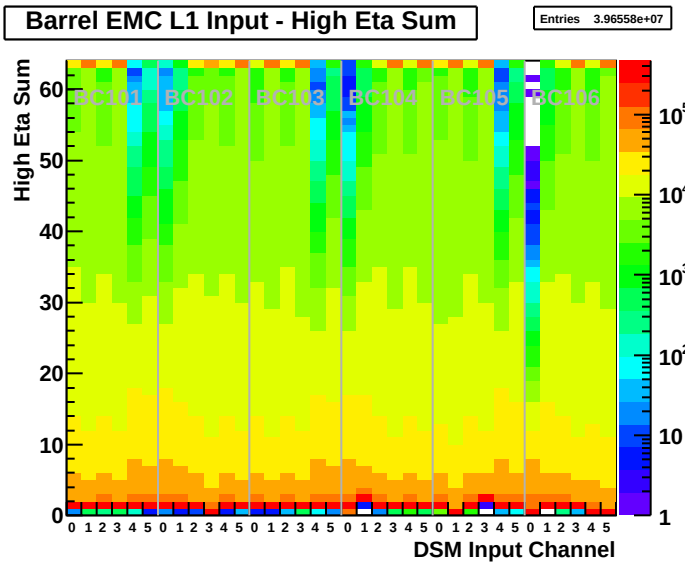
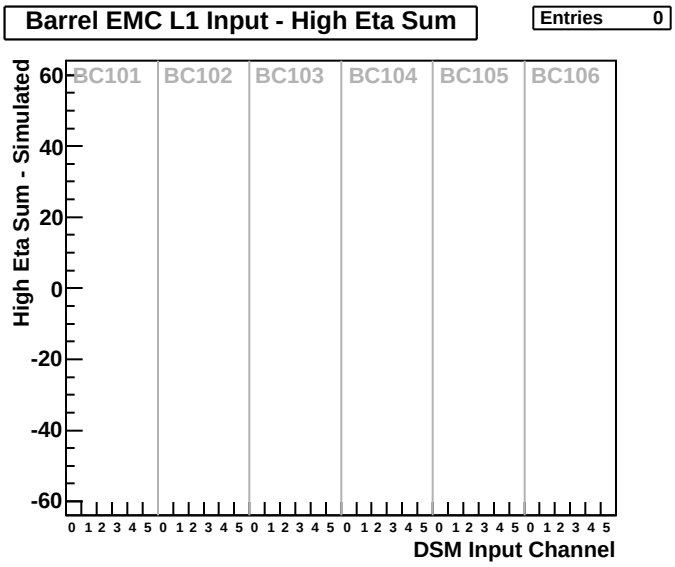
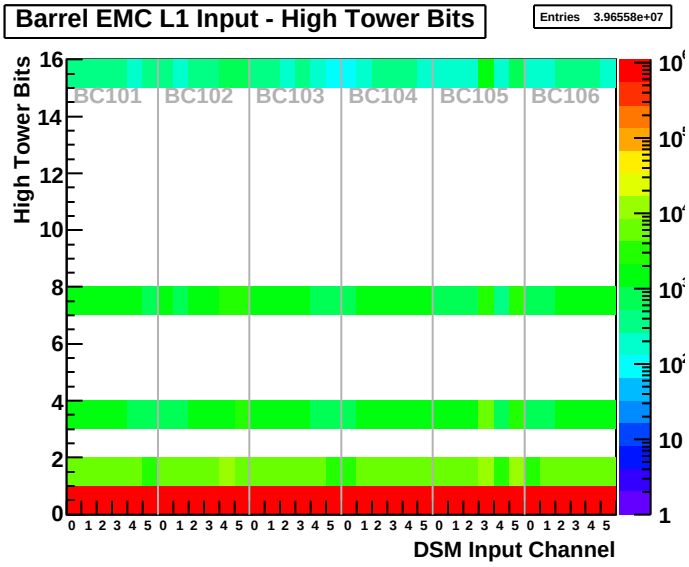
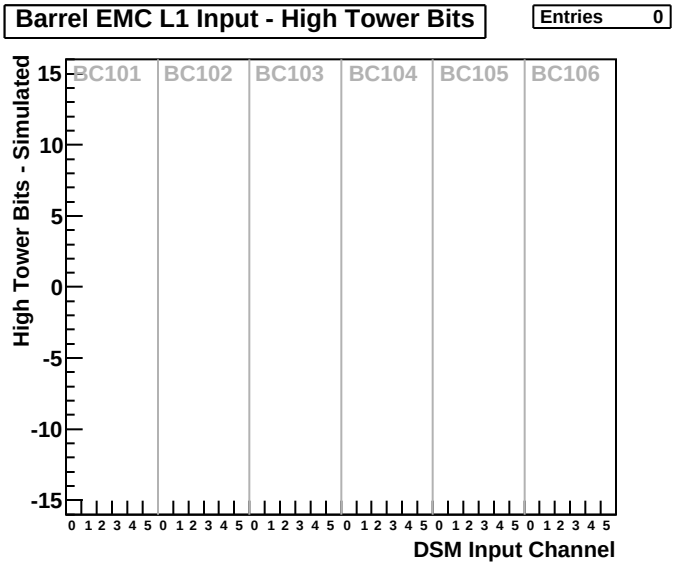

Barrel EMC L1 Input - Low Eta Sum
Entries 3.96558e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

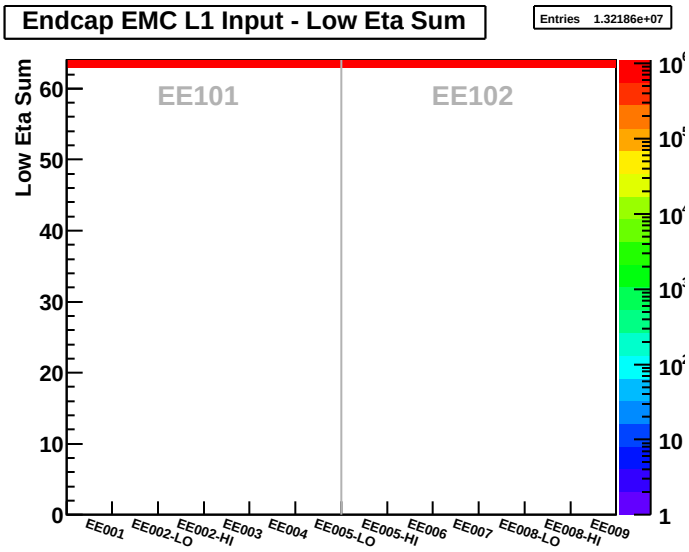

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

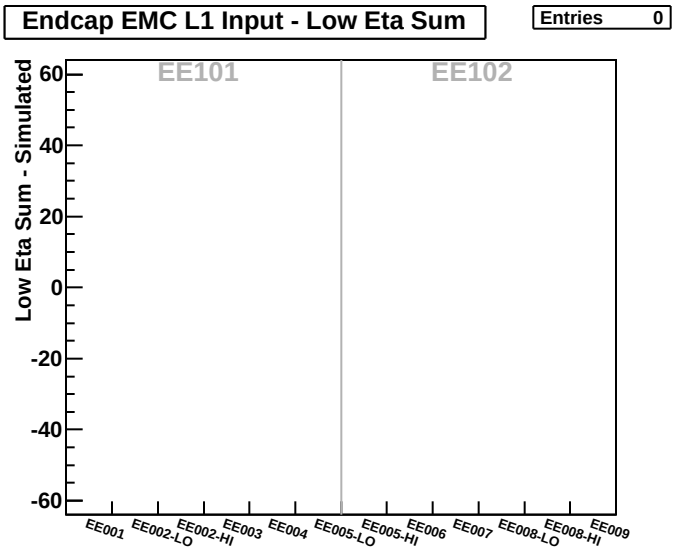

Barrel EMC L1 Input - High Eta Sum
Entries 3.96558e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

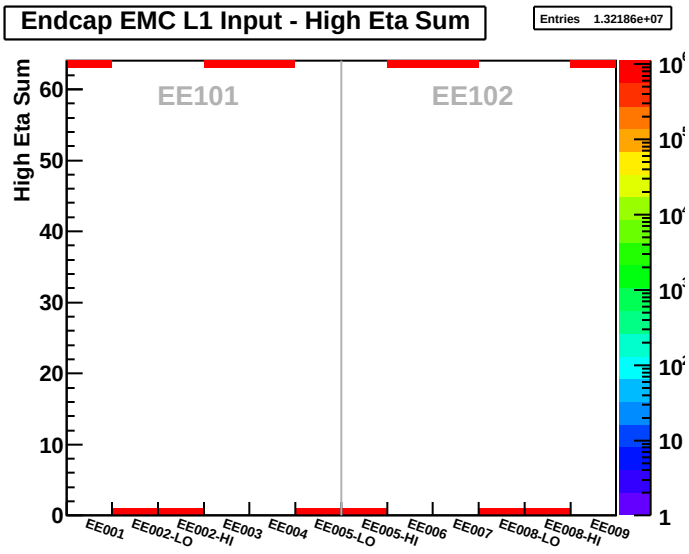

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

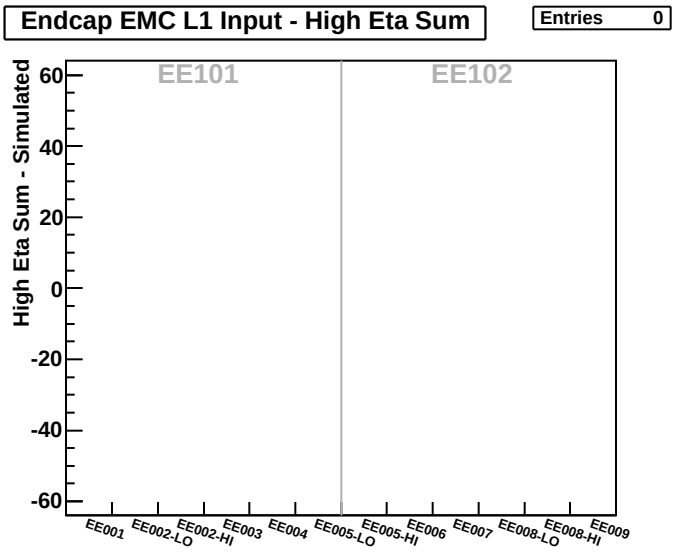

Barrel EMC L1 Input - High Tower Bits
Entries 3.96558e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

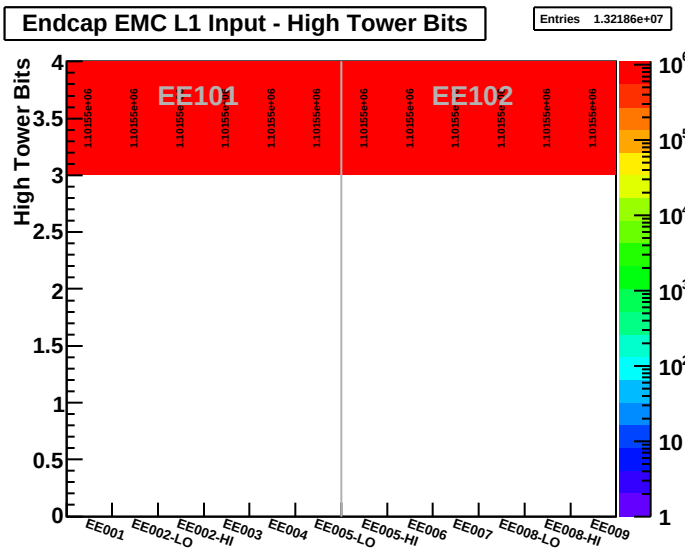

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

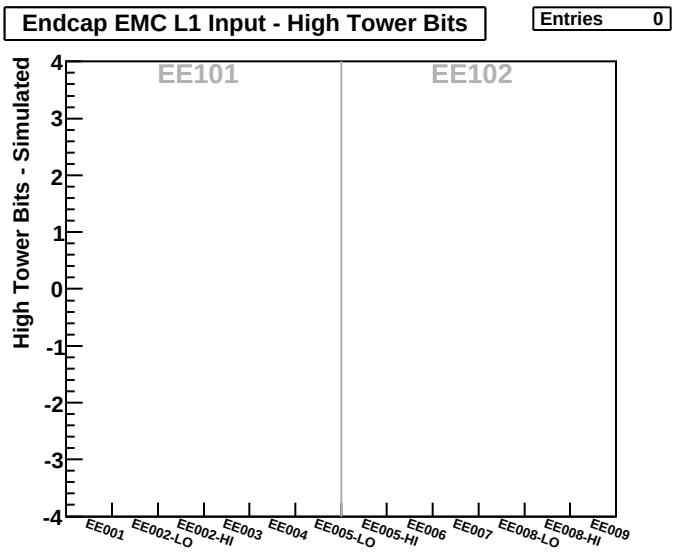

Endcap EMC L1 Input - Low Eta Sum
Entries 1.32186e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

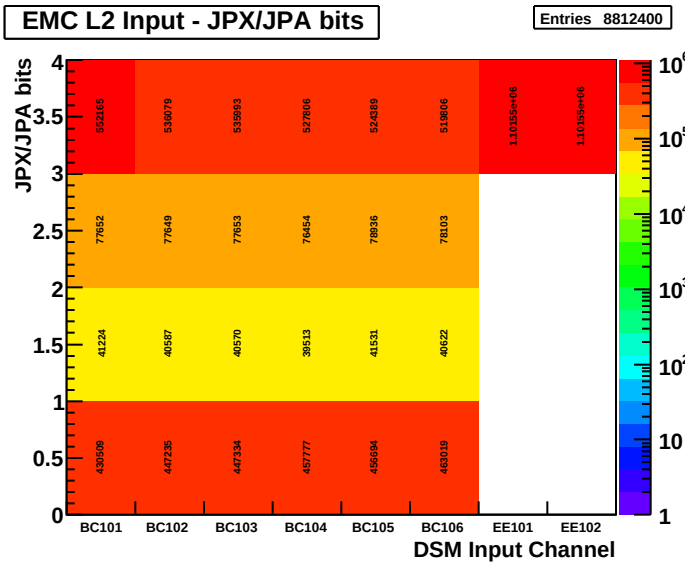

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

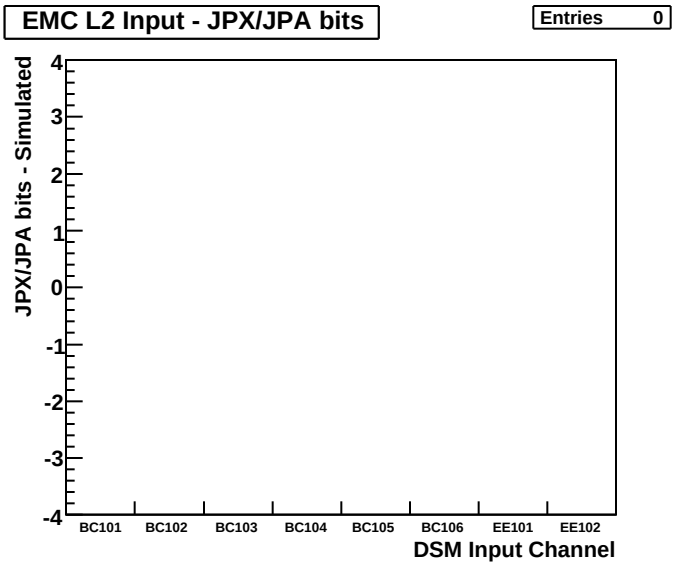

Endcap EMC L1 Input - High Eta Sum
Entries 1.32186e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

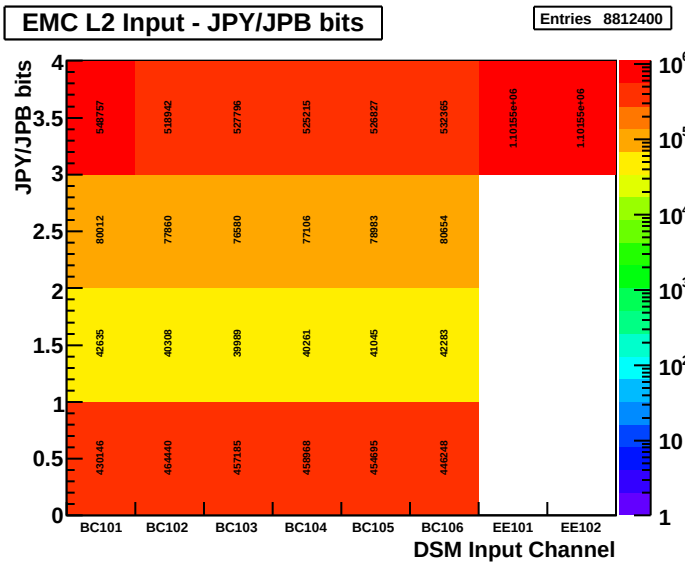

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

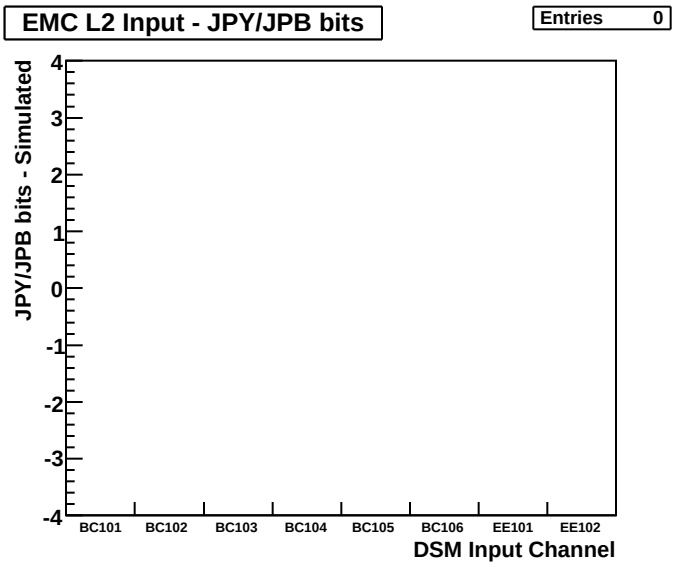

Endcap EMC L1 Input - High Tower Bits
Entries 1.32186e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

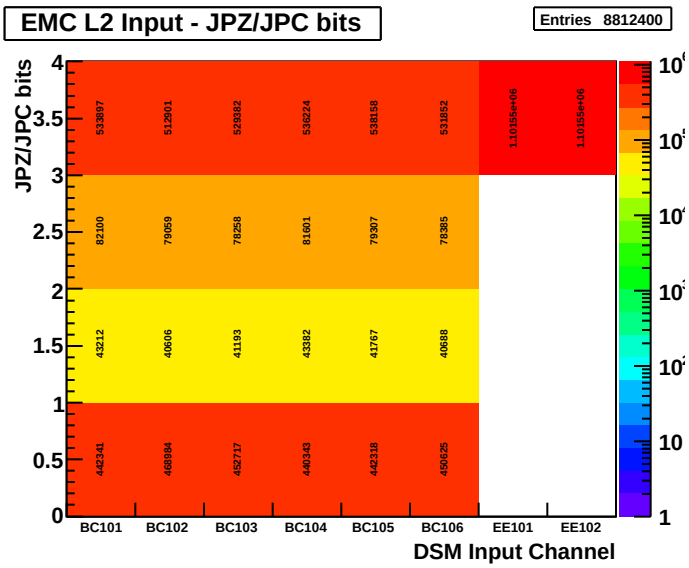

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

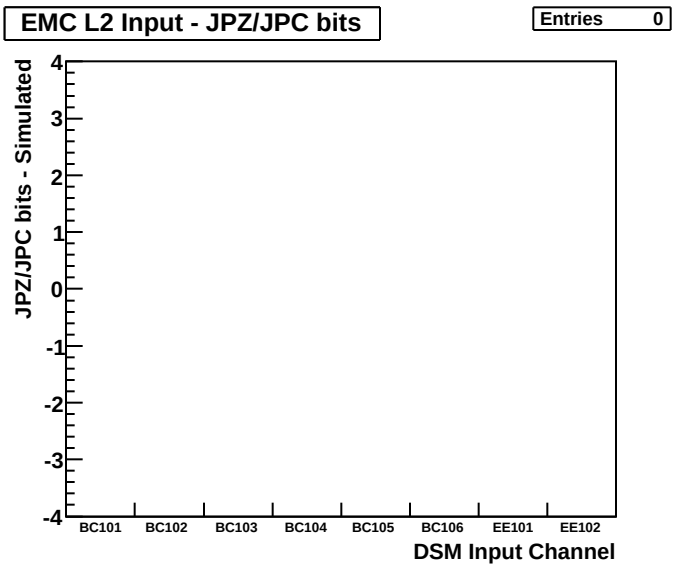

EMC L2 Input - JPX/JPA bits
Entries 8812400
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
552165 536079 535993 527806 524389 519806 1.10155e+06 1.10155e+06
77652 77649 77653 76454 78936 78103
41224 40567 40570 39513 41531 40622
430509 447235 447334 457777 456694 463019

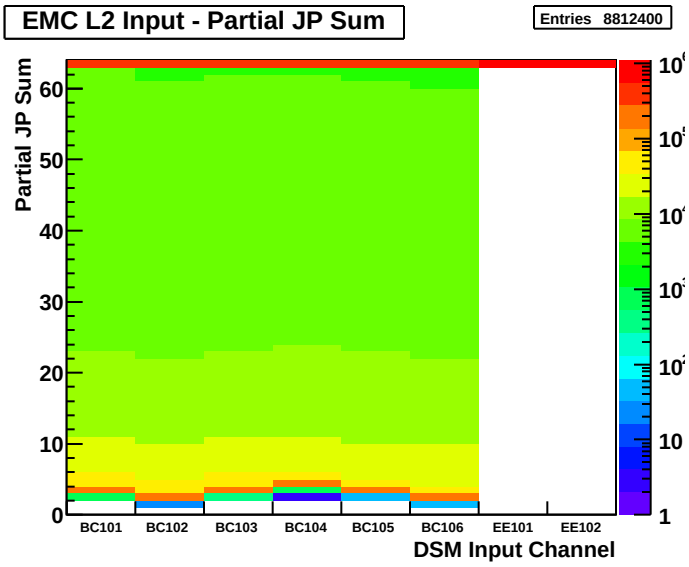

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

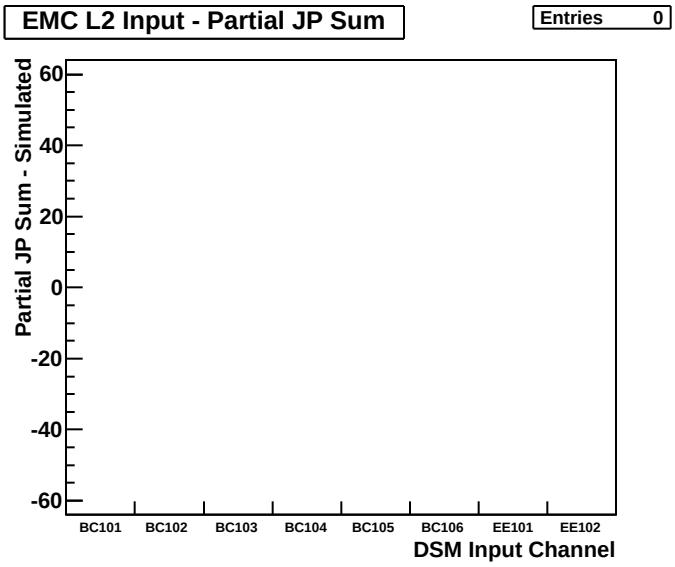

EMC L2 Input - JPY/JPB bits
Entries 8812400
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
548757 518942 527796 525215 526827 532365 1.10155e+06 1.10155e+06
80012 77860 76580 77106 78983 80654
42635 40308 39989 40261 41045 42283
430146 464440 457185 458968 454695 446248

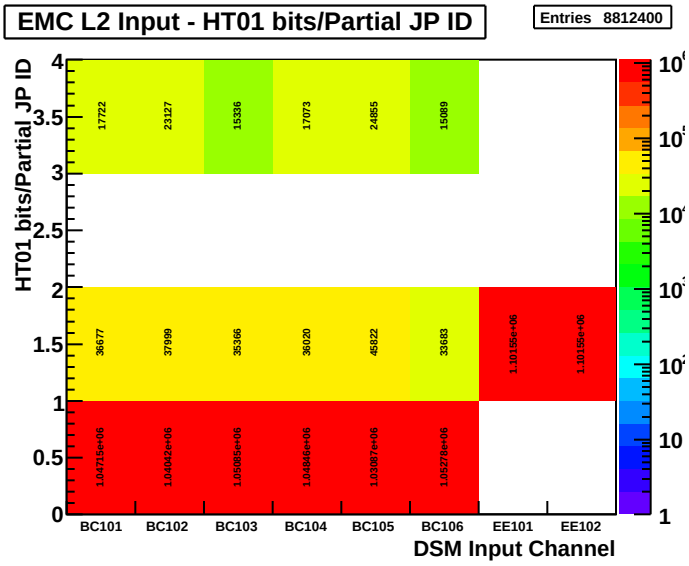

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

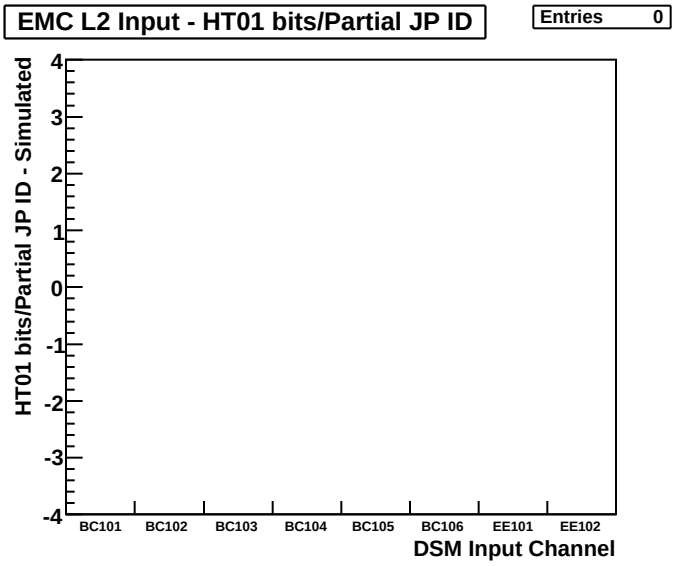

EMC L2 Input - JPZ/JPC bits
Entries 8812400
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
533897 512901 520382 538224 538158 531952 1.10155e+06 1.10155e+06
82100 79059 78258 81601 79307 78385
43212 40606 41193 43382 41767 40688
442341 468394 452717 440343 442318 450625

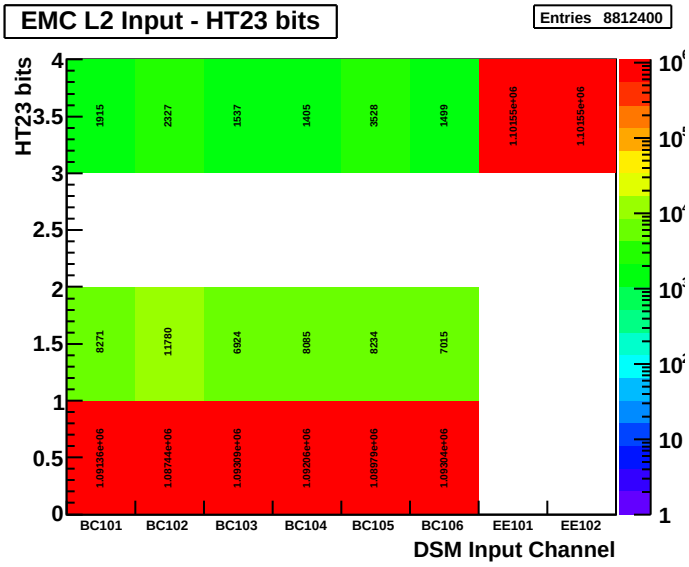

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

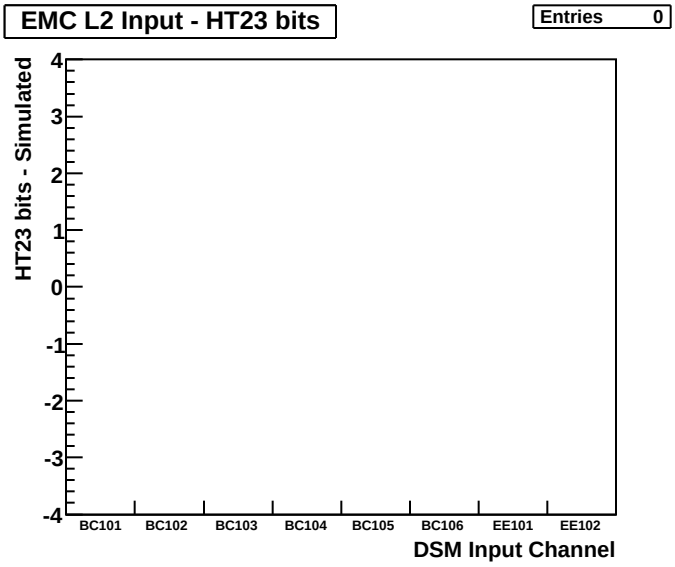

EMC L2 Input - Partial JP Sum
Entries 8812400
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

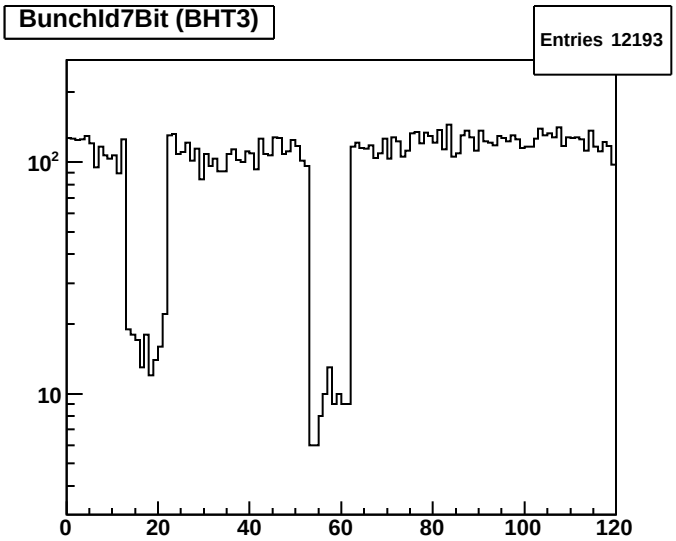

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

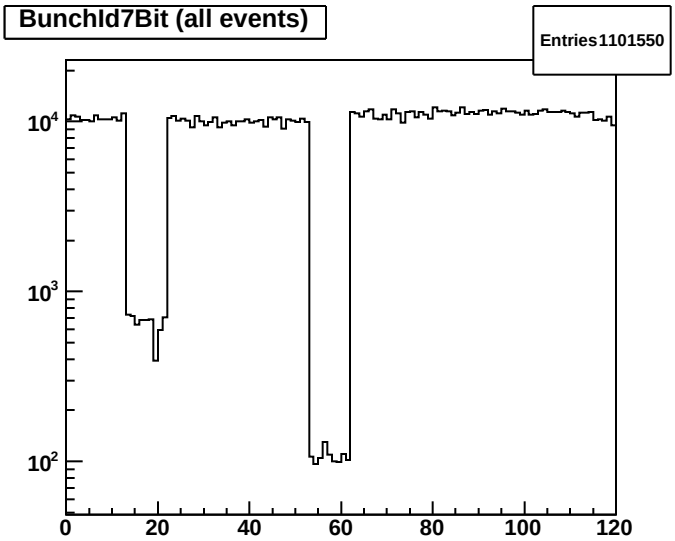

EMC L2 Input - HT01 bits/Partial JP ID
Entries 8812400
HT01 bits/Partial JP ID
17722 23127 15336 17073 24855 15089
36677 37999 35366 36020 45822 33683 1.10155e+06 1.10155e+06
1.04715e+06 1.04042e+06 1.05085e+06 1.04946e+06 1.03097e+06 1.05278e+06
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

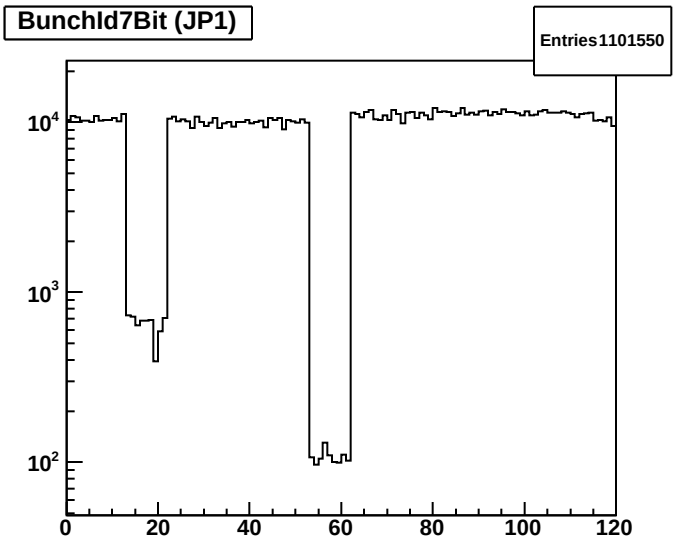

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

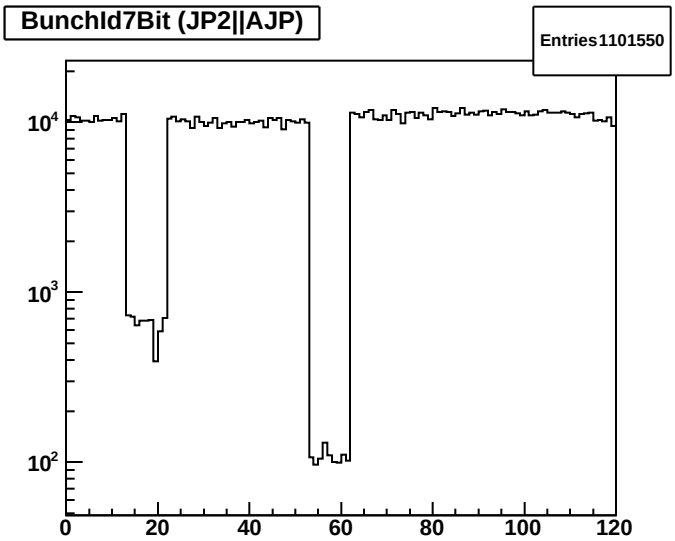

EMC L2 Input - HT23 bits
Entries 8812400
HT23 bits
1915 2327 1537 1405 3528 1499 1.10155e+06 1.10155e+06
8271 11780 6924 8085 8234 7015
1.09136e+06 1.08744e+06 1.09309e+06 1.09206e+06 1.08979e+06 1.09304e+06
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

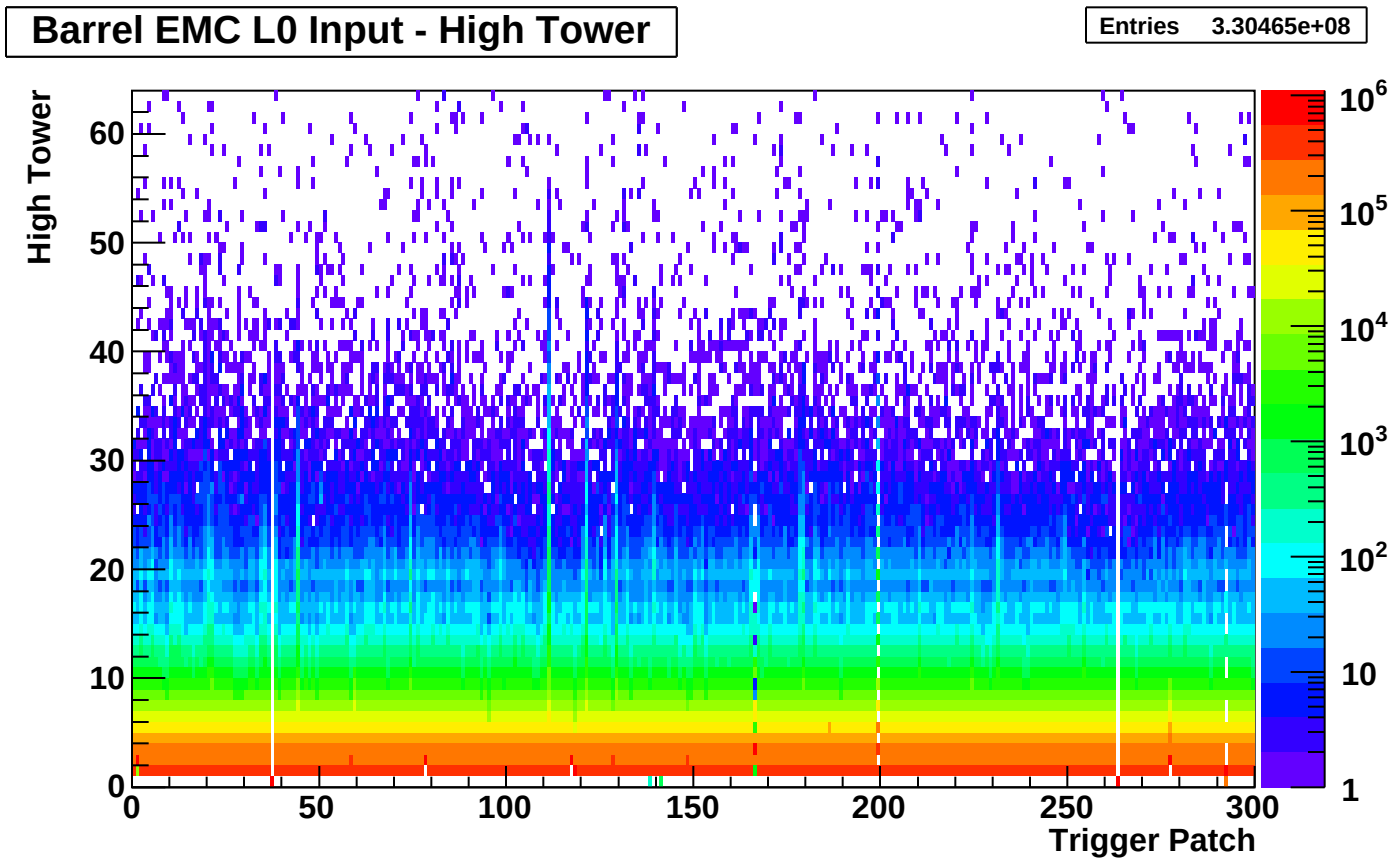

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

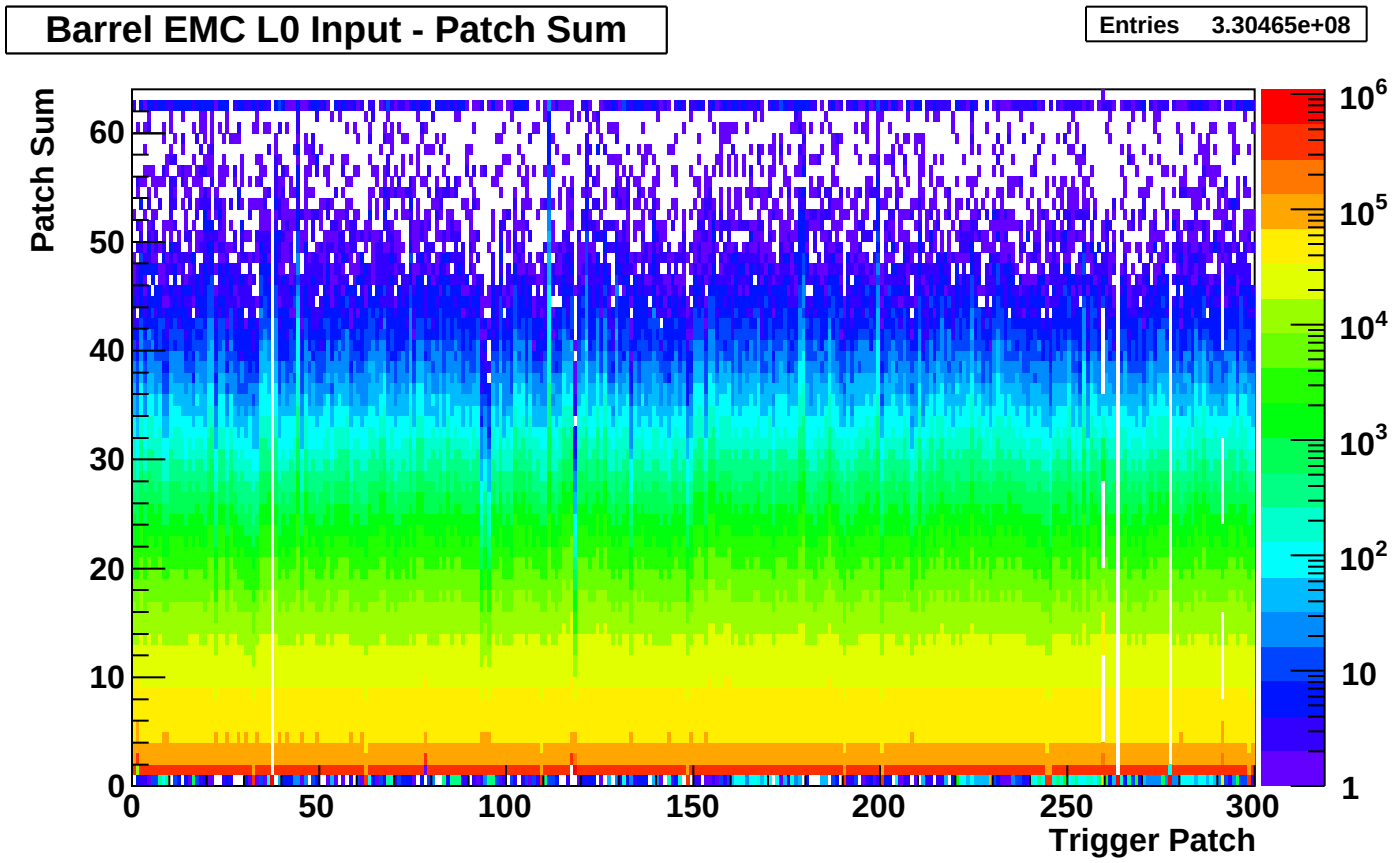

BunchId7Bit (BHT3)
Entries 12193
10^2
10
0
20
40
60
80
100
120

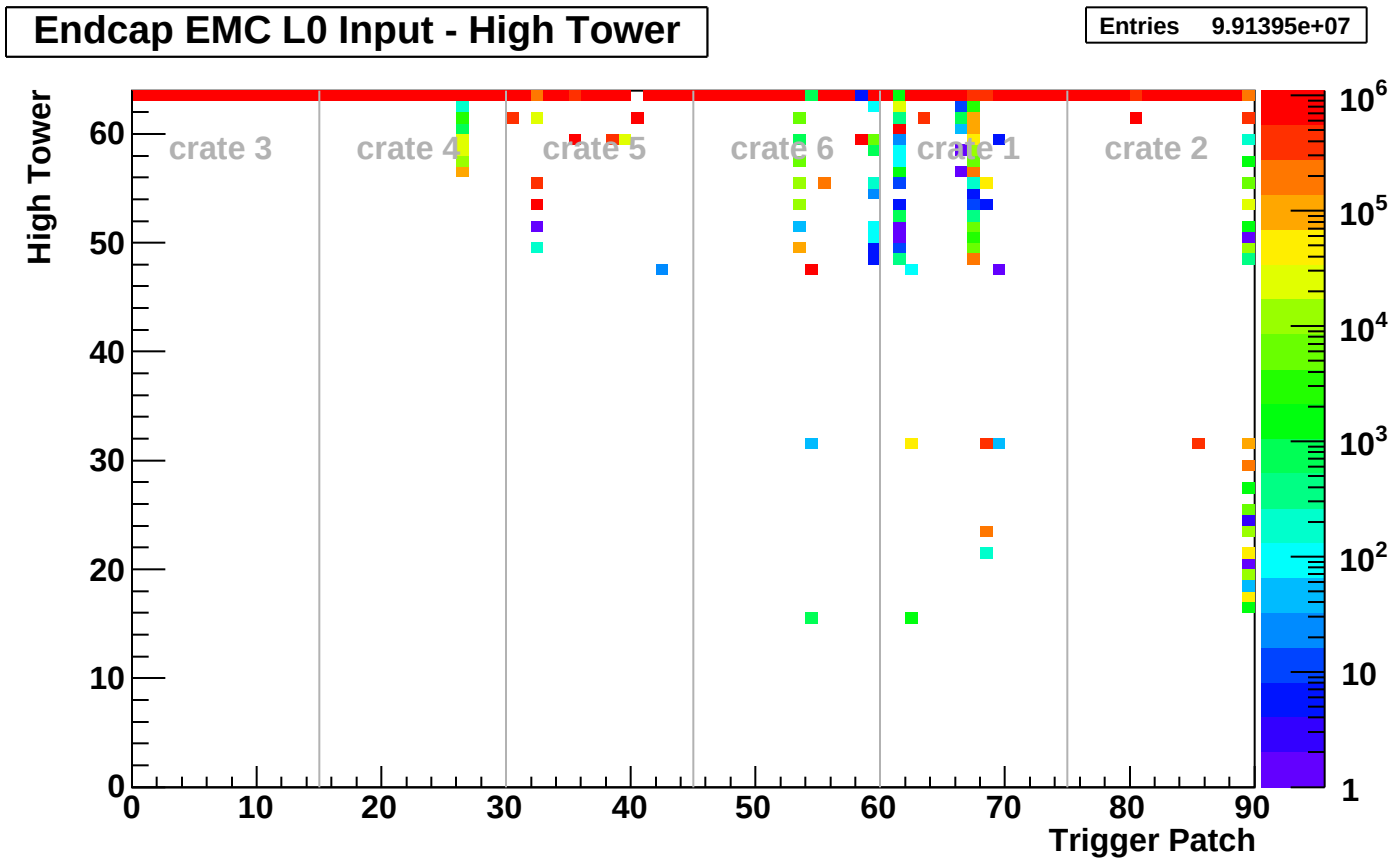

BunchId7Bit (all events)
Entries 1101550
10^4
10^3
10^2
0
20
40
60
80
100
120

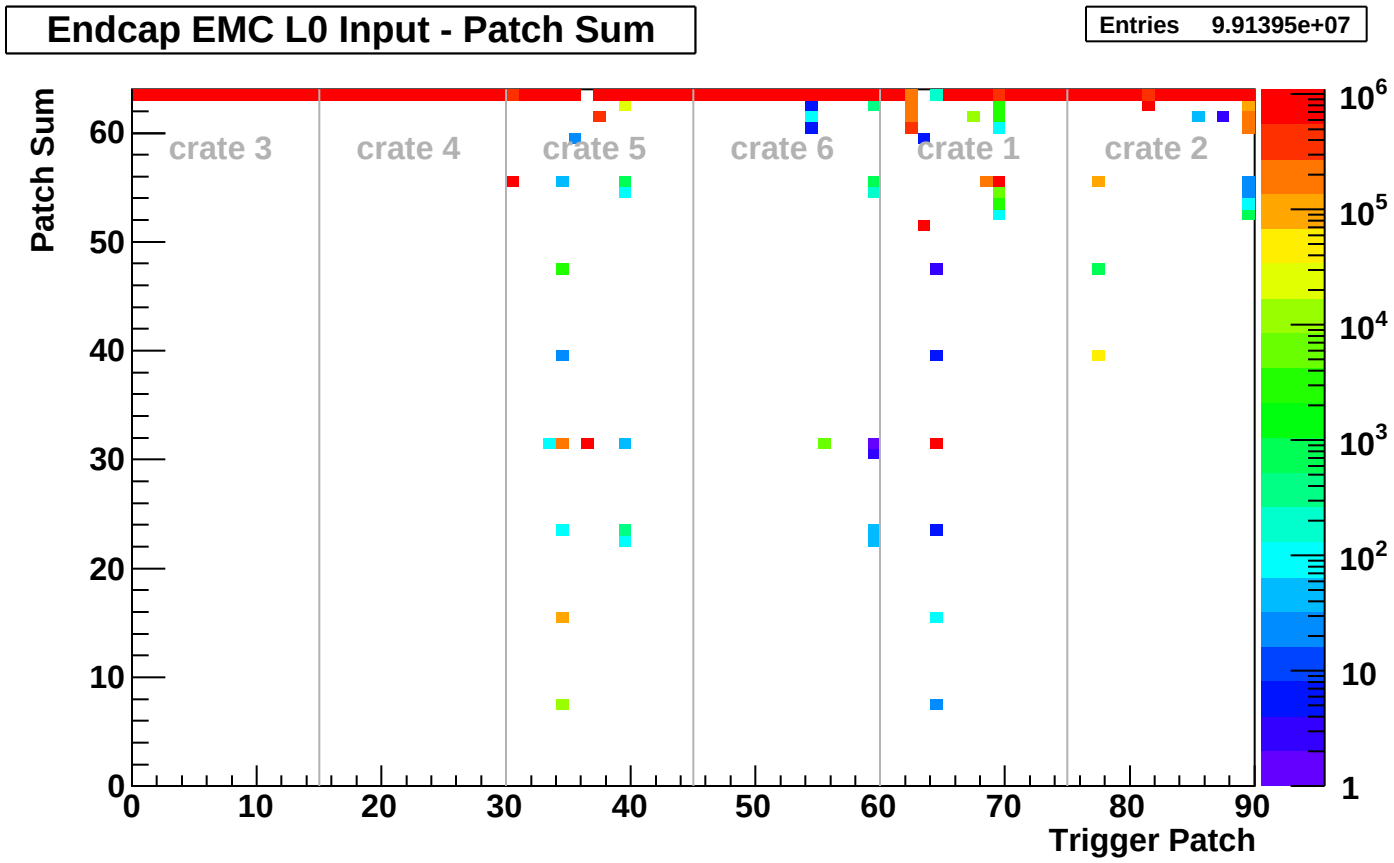

BunchId7Bit (JP1)
Entries 1101550
10^4
10^3
10^2
0
20
40
60
80
100
120

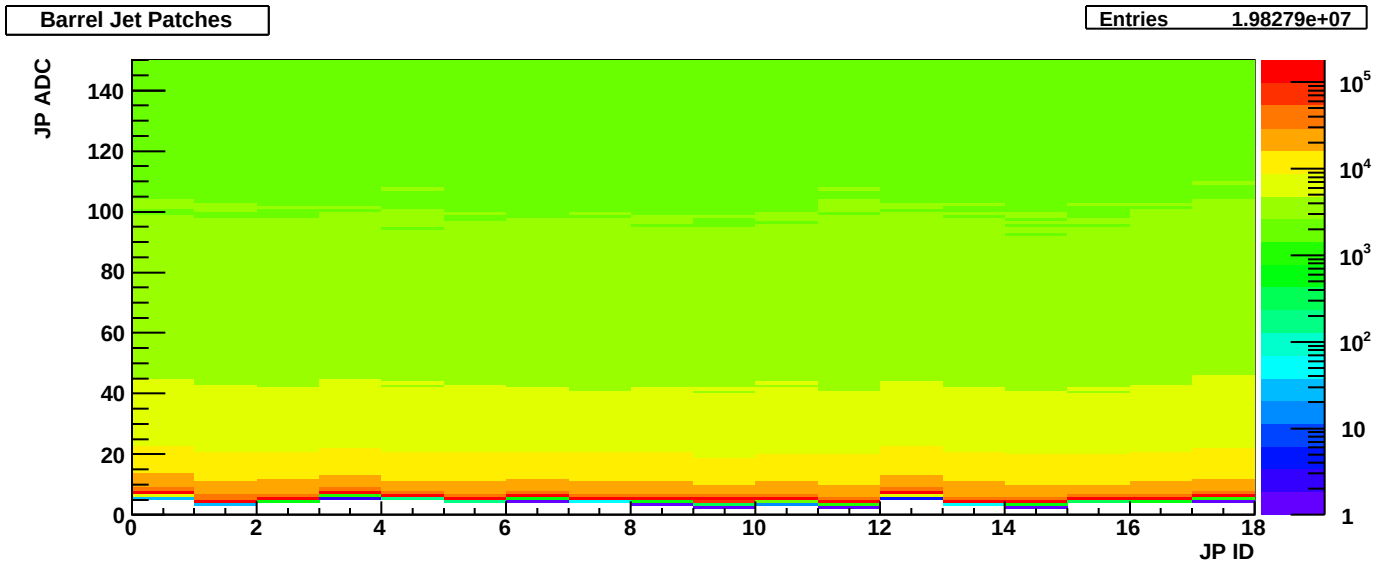

BunchId7Bit (JP2||AJP)
Entries 1101550
10^4
10^3
10^2
0
20
40
60
80
100
120

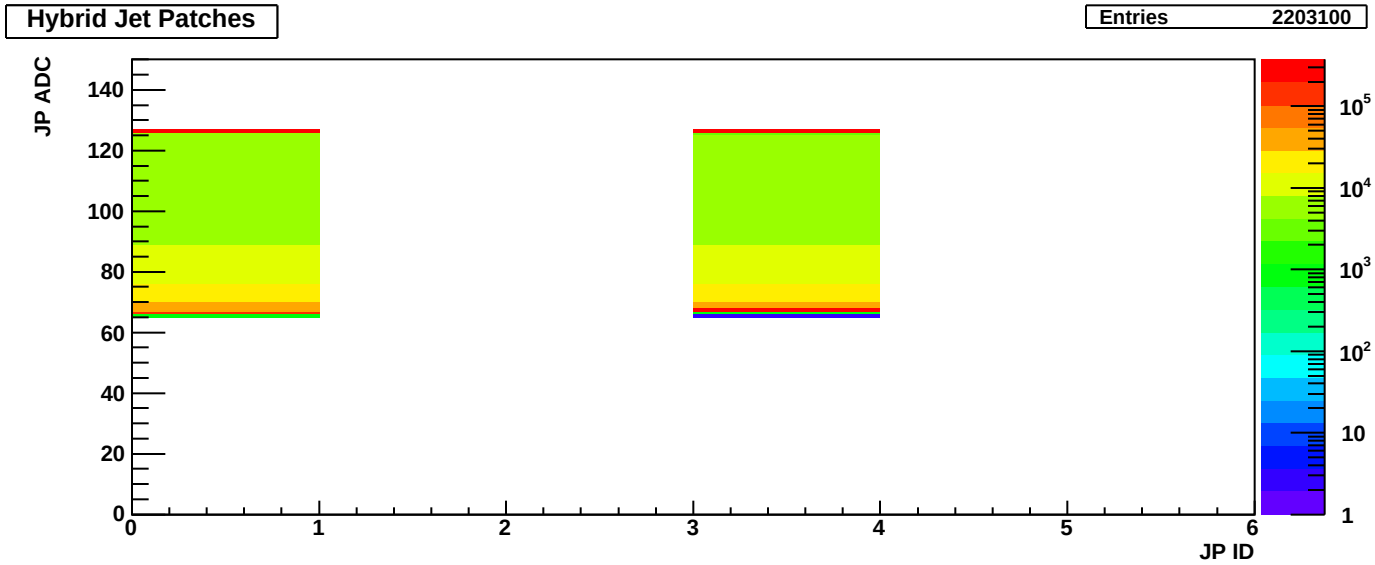

Barrel EMC L0 Input - High Tower
Entries 3.30465e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

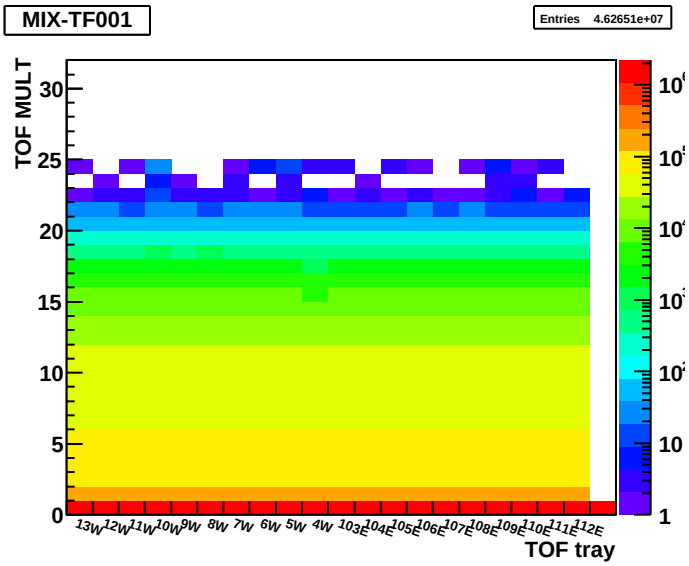

Barrel EMC L0 Input - Patch Sum
Entries 3.30465e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

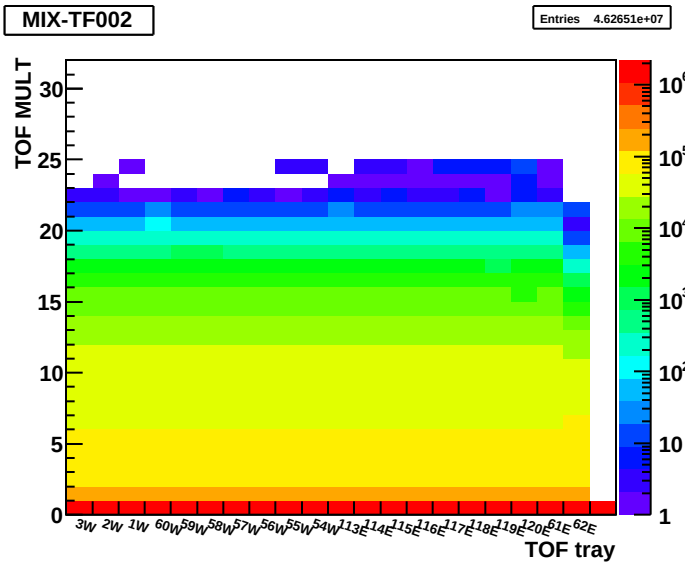

Endcap EMC L0 Input - High Tower
Entries 9.91395e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

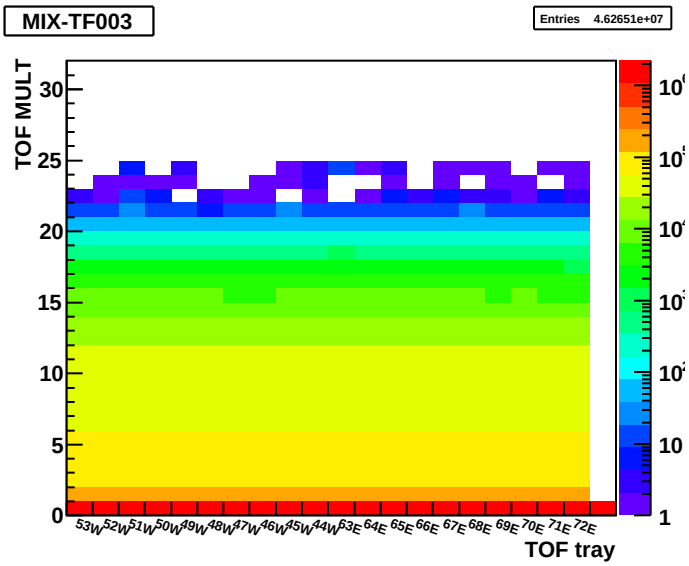

Endcap EMC L0 Input - Patch Sum
Entries 9.91395e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

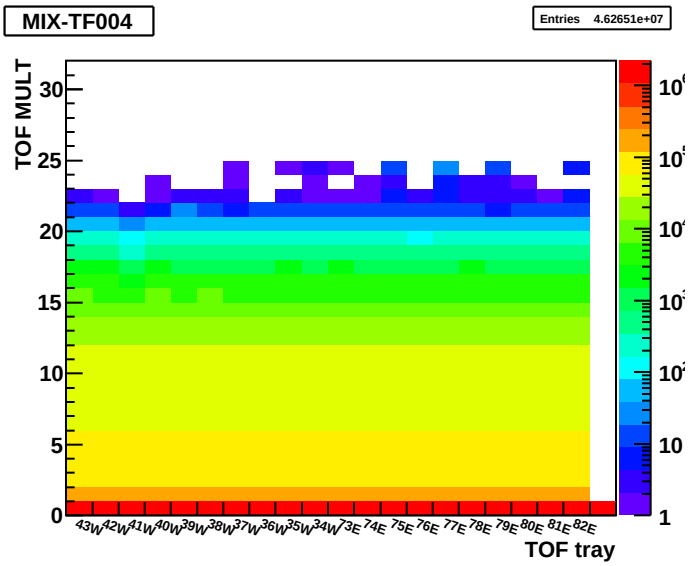

Barrel Jet Patches
Entries 1.98279e+07
JP ADC
JP ID

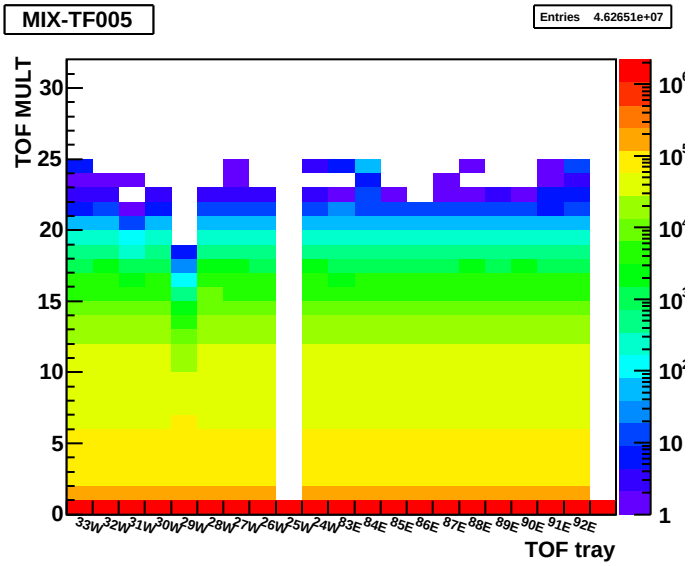

Hybrid Jet Patches
Entries 2203100
JP ADC
JP ID

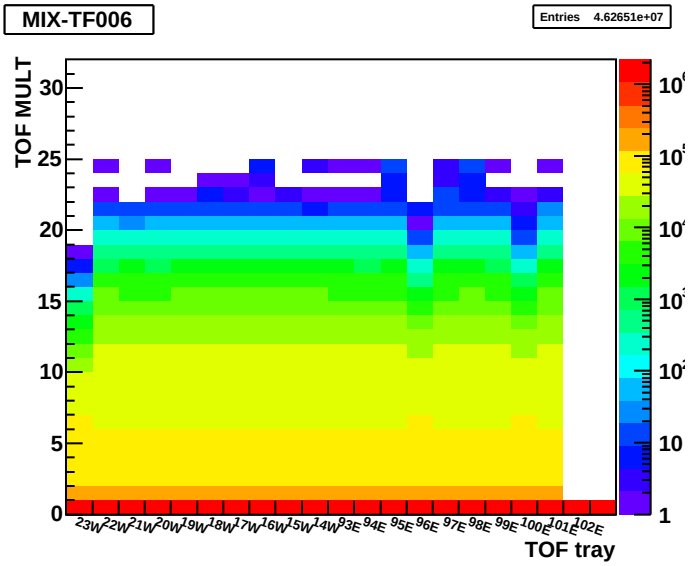

MIX-TF001
Entries 4.62651e+07
TOF MULT
TOF tray

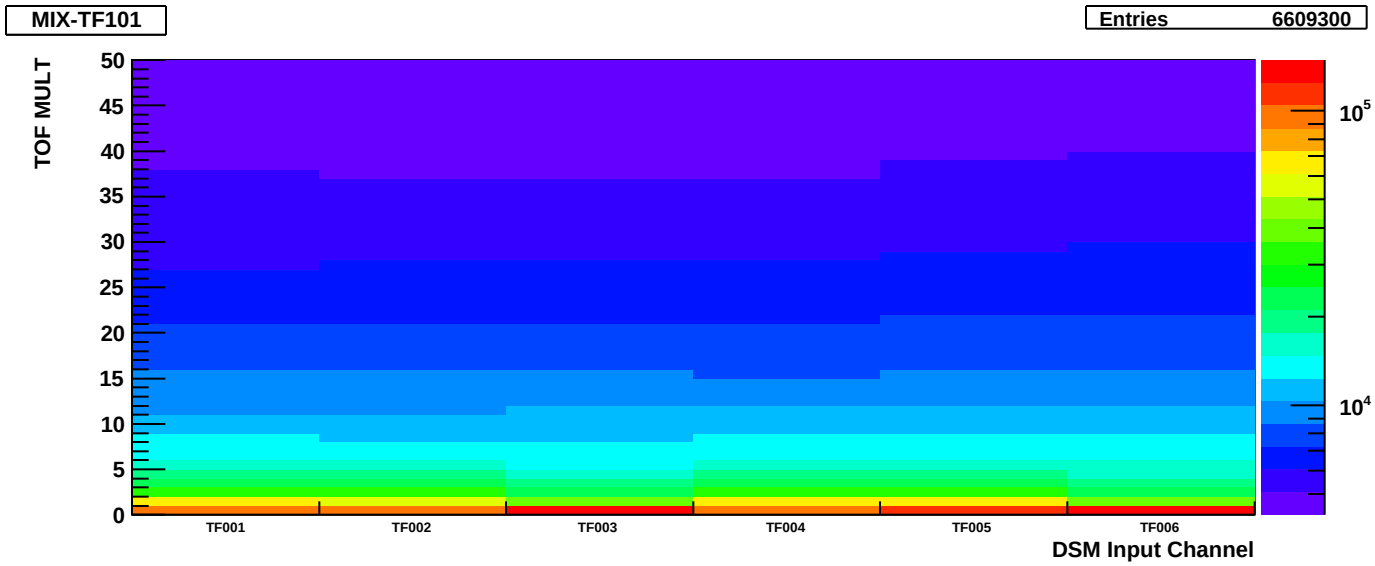

MIX-TF002
Entries 4.62651e+07
TOF MULT
TOF tray

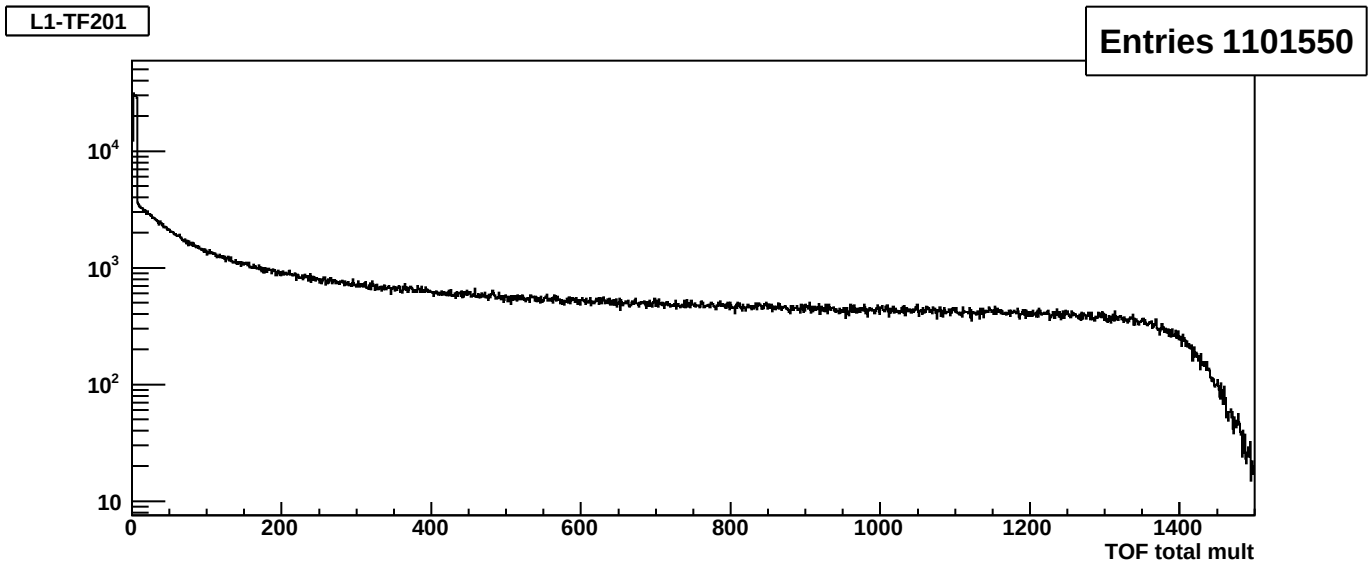

MIX-TF003
Entries 4.62651e+07
TOF MULT
TOF tray

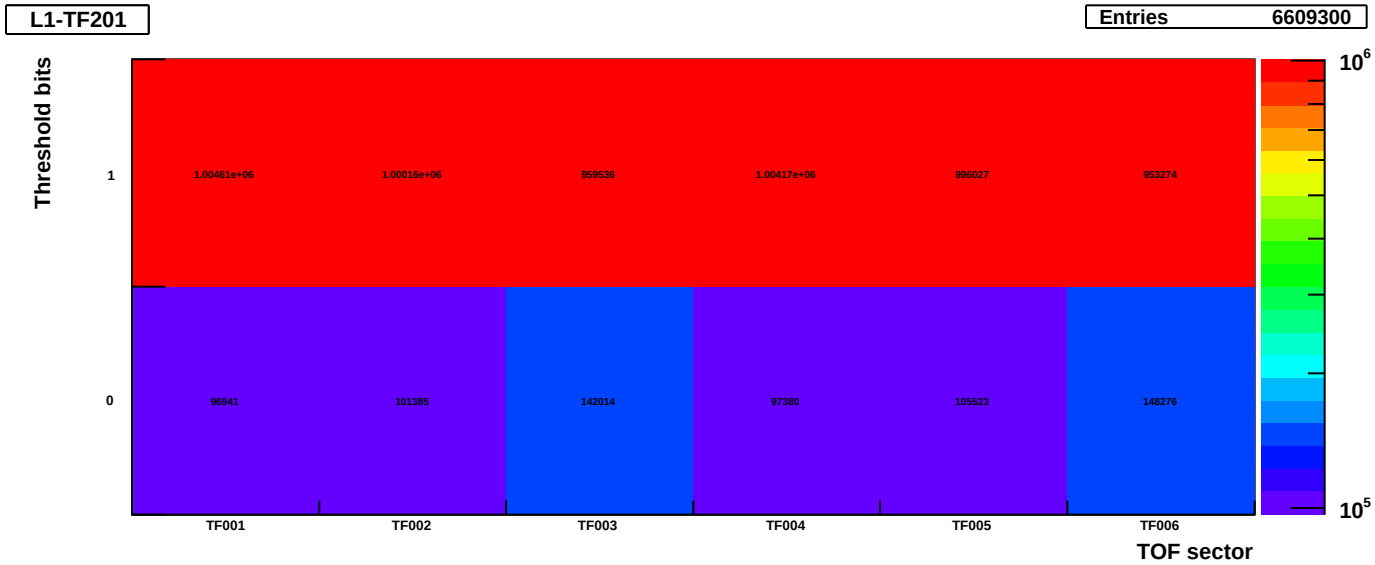

MIX-TF004
Entries 4.62651e+07
TOF MULT
TOF tray

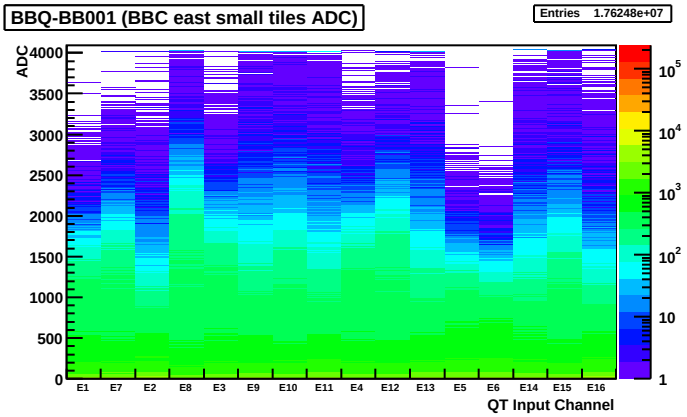

MIX-TF005
Entries 4.62651e+07
TOF MULT
TOF tray

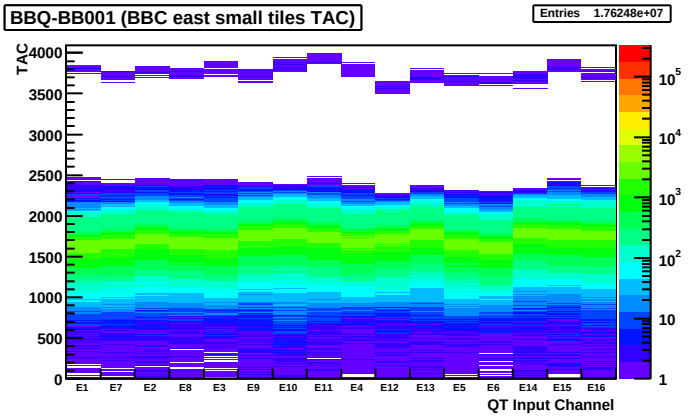

MIX-TF006
Entries 4.62651e+07
TOF MULT
TOF tray

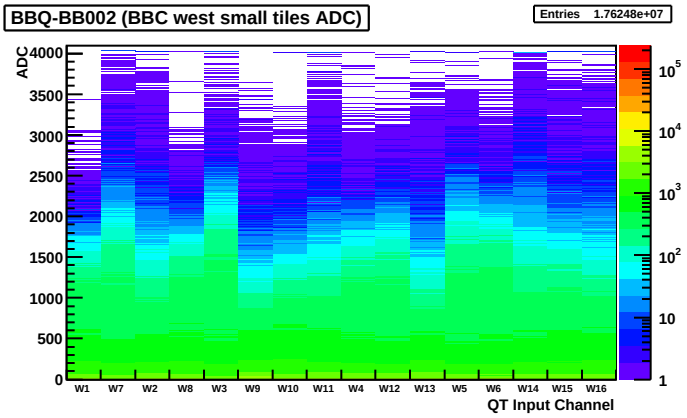

MIX-TF101
Entries 6609300
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4

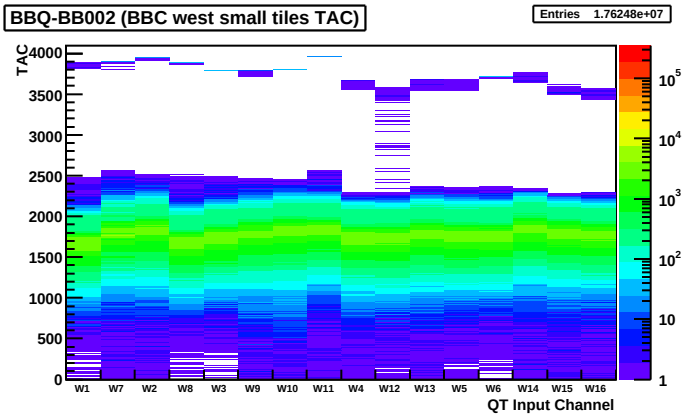

L1-TF201
Entries 1101550
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
TOF total mult

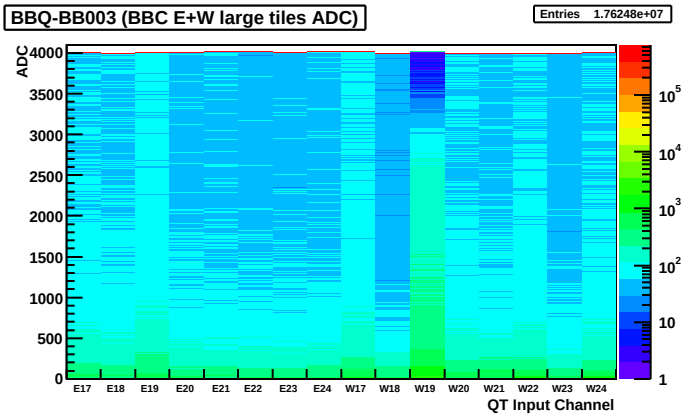

L1-TF201
Entries 6609300
Threshold bits
1
0
1.00461e+06
1.00016e+06
959536
1.00417e+06
996027
953274
96941
101385
142014
97380
105523
148276
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6
10^5

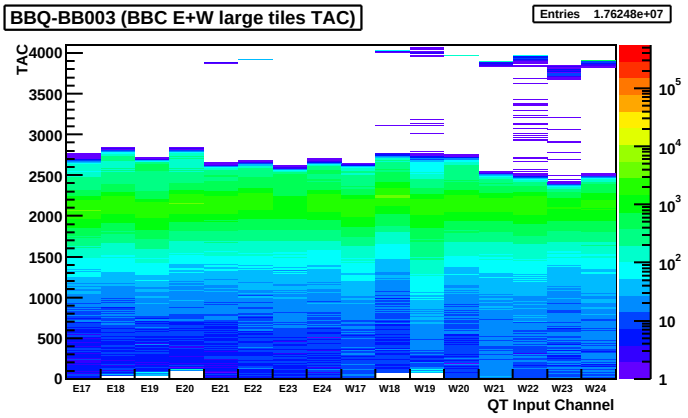

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.76248e+07
ADC
QT Input Channel

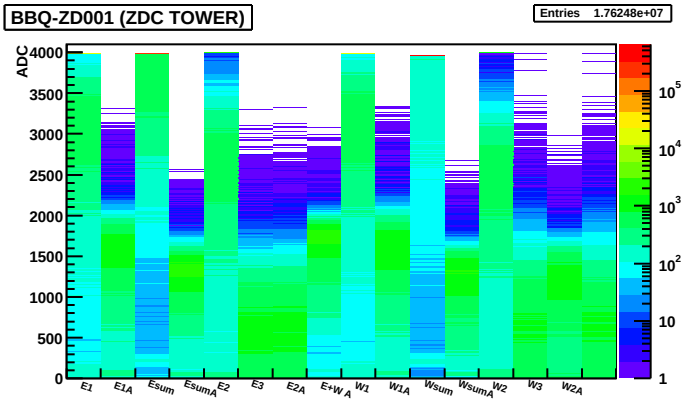

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.76248e+07
TAC
QT Input Channel

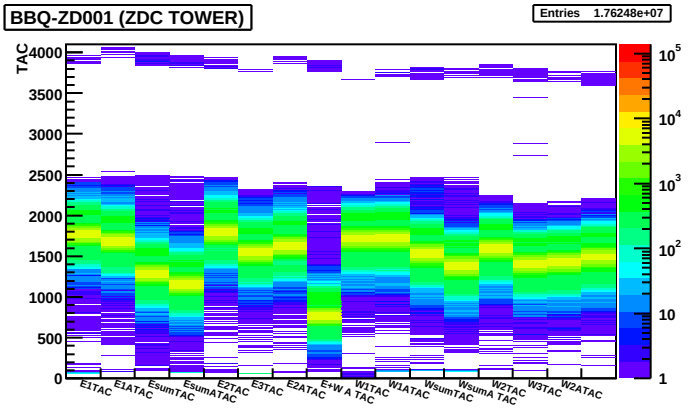

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.76248e+07
ADC
QT Input Channel

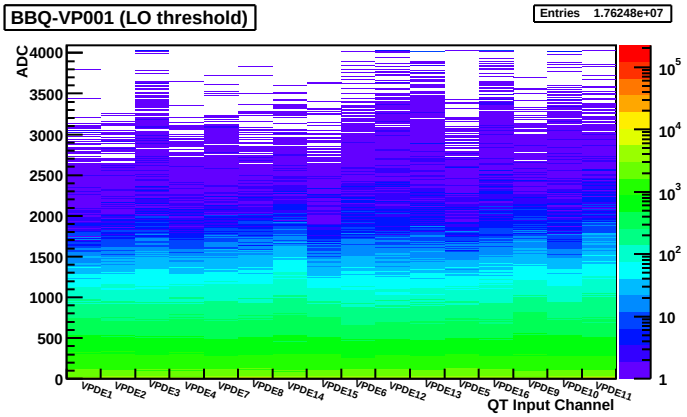

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.76248e+07
TAC
QT Input Channel

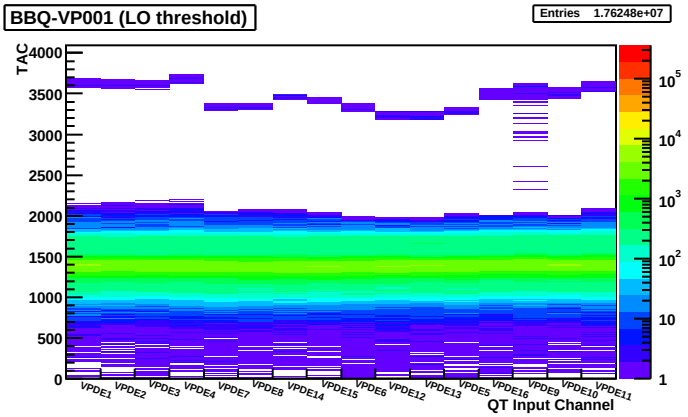

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.76248e+07
ADC
QT Input Channel

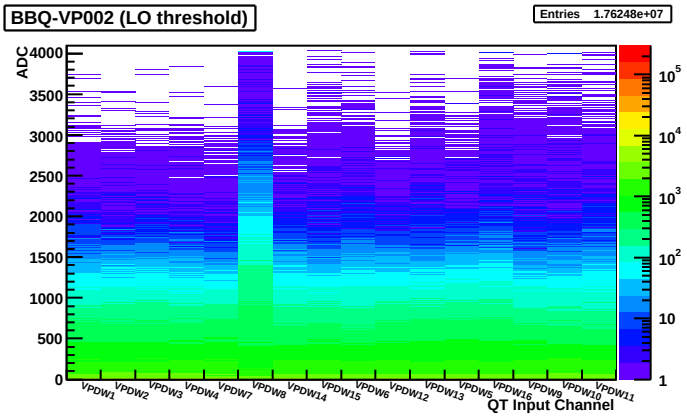

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.76248e+07
TAC
QT Input Channel

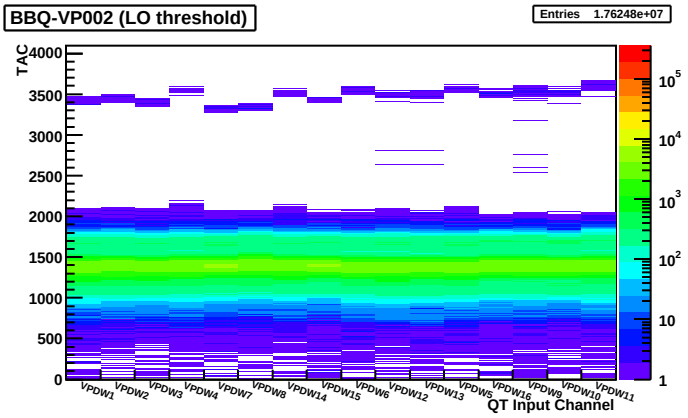

BBQ-ZD001 (ZDC TOWER)
Entries 1.76248e+07
ADC

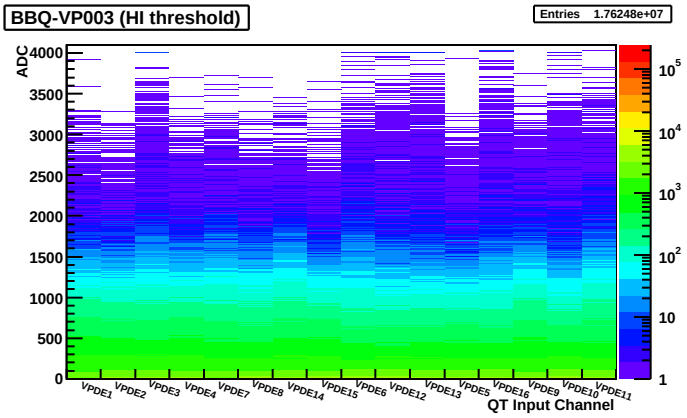

BBQ-ZD001 (ZDC TOWER)
Entries 1.76248e+07
TAC

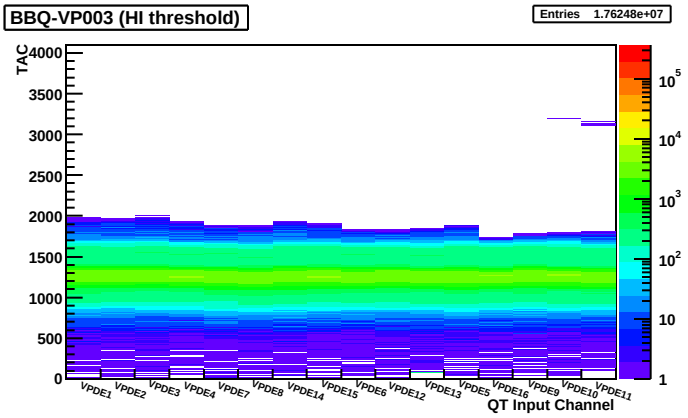

BBQ-VP001 (LO threshold)
Entries 1.76248e+07
ADC
QT Input Channel

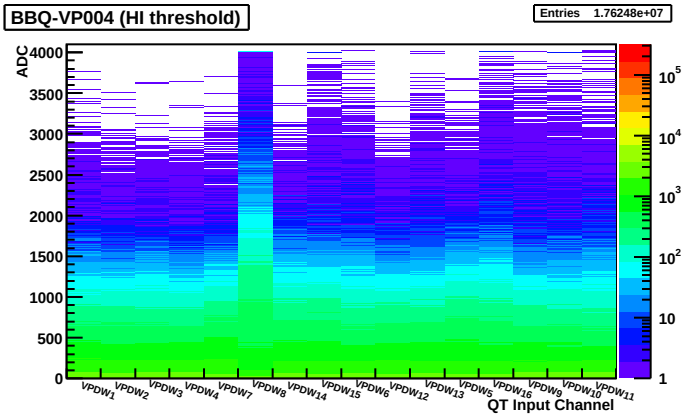

BBQ-VP001 (LO threshold)
Entries 1.76248e+07
TAC
QT Input Channel

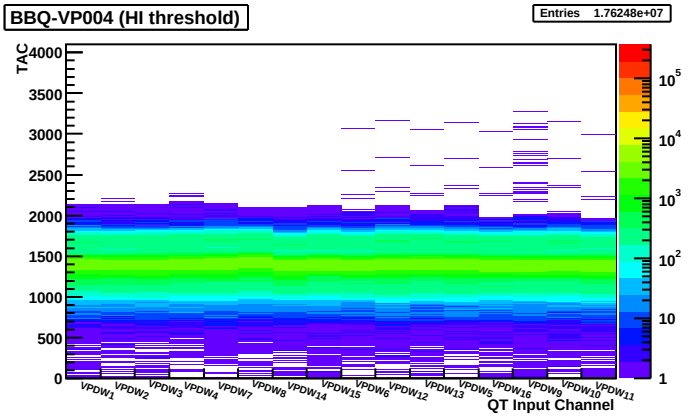

BBQ-VP002 (LO threshold)
Entries 1.76248e+07
ADC
QT Input Channel

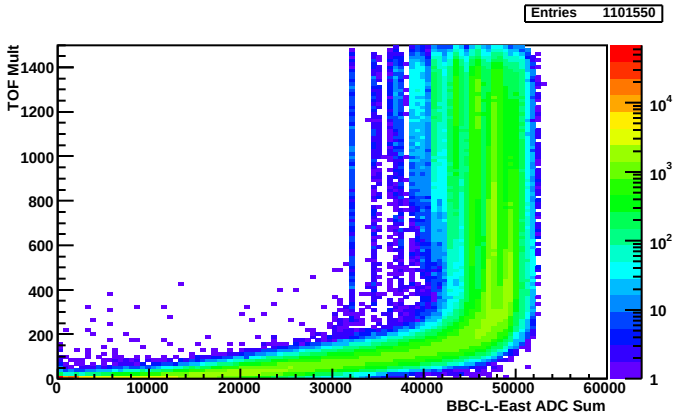

BBQ-VP002 (LO threshold)
Entries 1.76248e+07
TAC
QT Input Channel

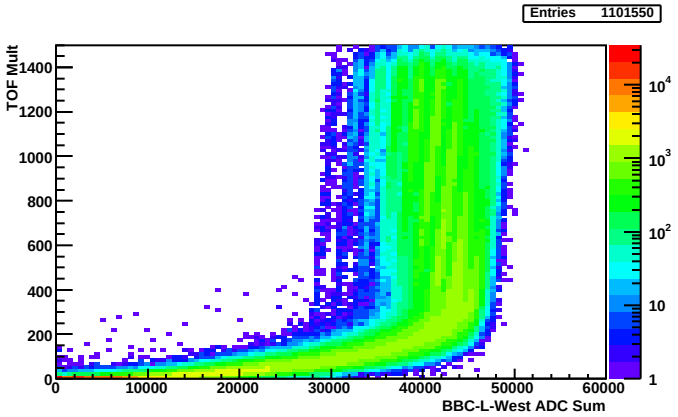

BBQ-VP003 (HI threshold)
Entries 1.76248e+07
ADC
QT Input Channel

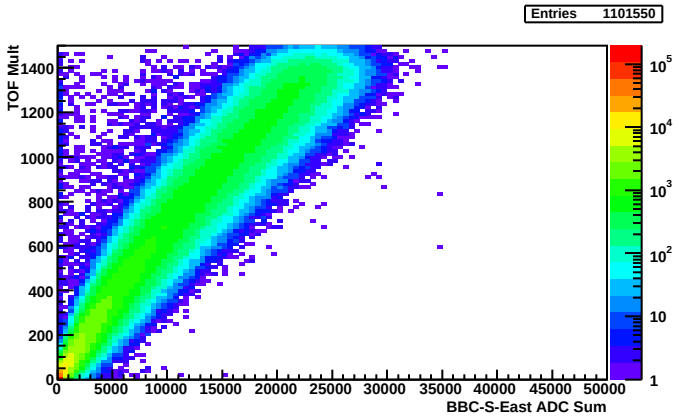

BBQ-VP003 (HI threshold)
Entries 1.76248e+07
TAC
QT Input Channel

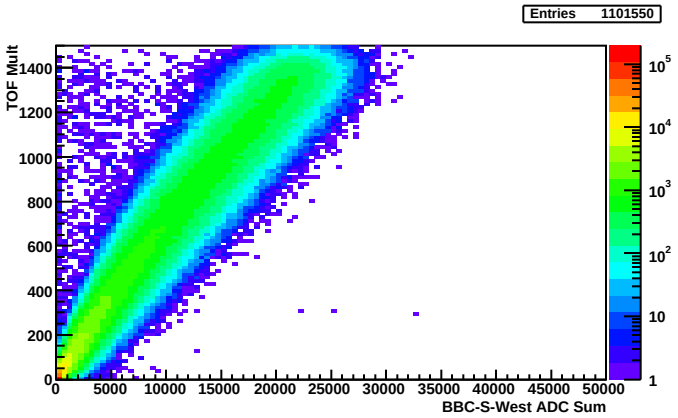

BBQ-VP004 (HI threshold)
Entries 1.76248e+07
ADC
QT Input Channel

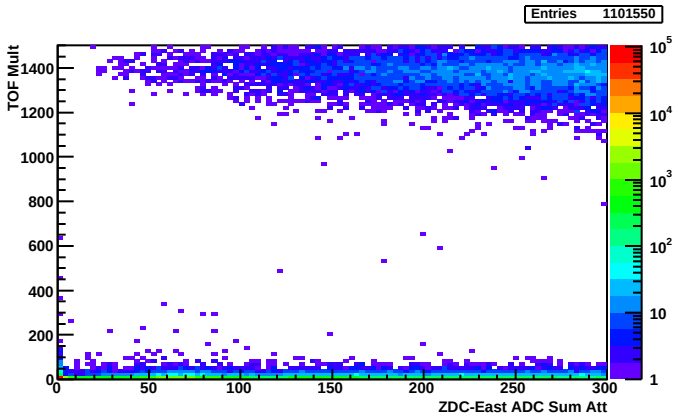

BBQ-VP004 (HI threshold)
Entries 1.76248e+07
TAC
QT Input Channel

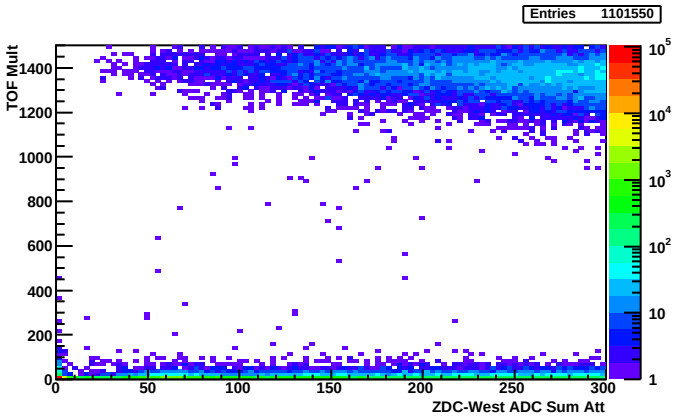

Entries 1101550
TOF Mult
BBC-L-East ADC Sum

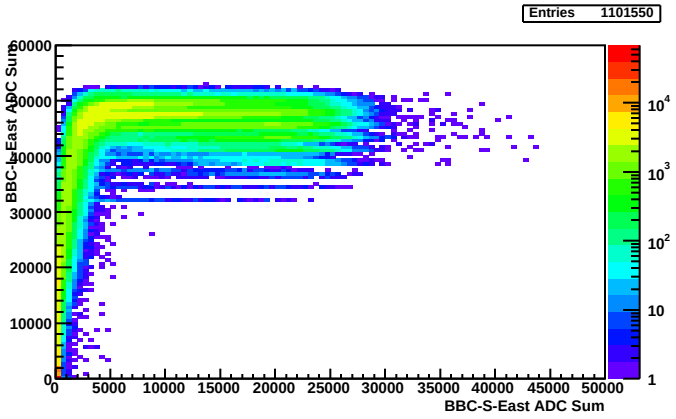

Entries 1101550
TOF Mult
BBC-L-West ADC Sum

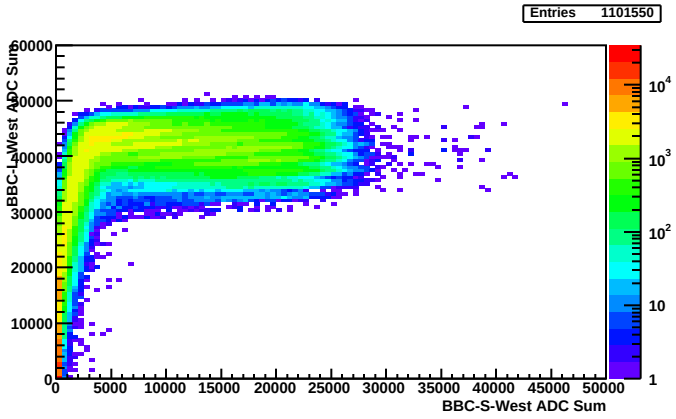

Entries 1101550
TOF Mult
BBC-S-East ADC Sum

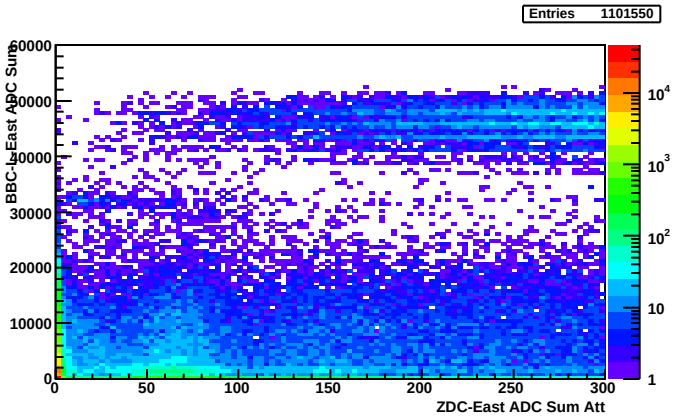

Entries 1101550
TOF Mult
BBC-S-West ADC Sum

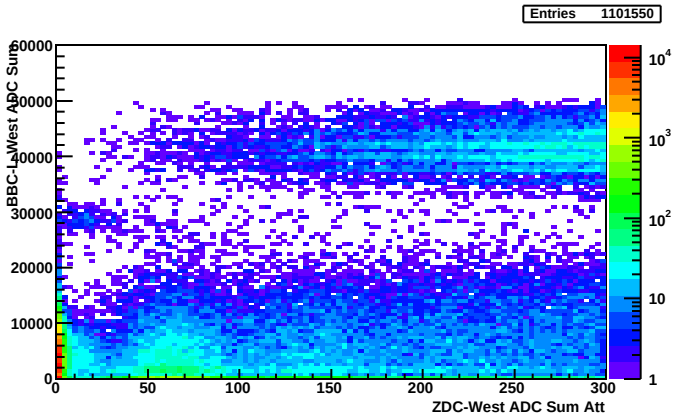

Entries 1101550
TOF Mult
ZDC-East ADC Sum Att

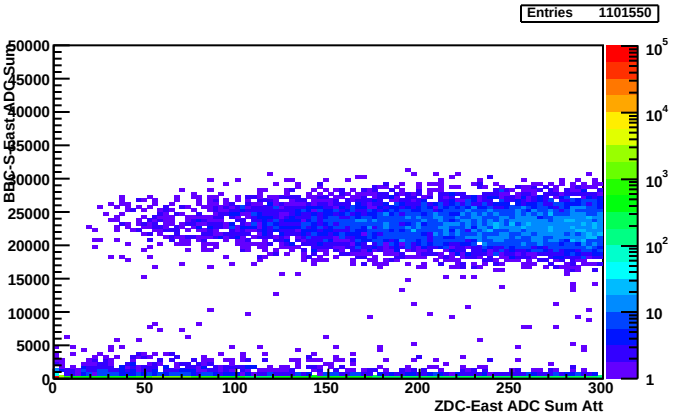

Entries 1101550
TOF Mult
ZDC-West ADC Sum Att

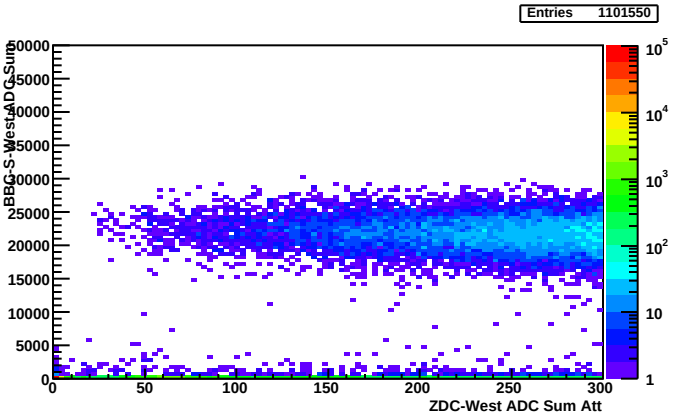

Entries 1101550
BBC-L-East ADC Sum
BBC-S-East ADC Sum

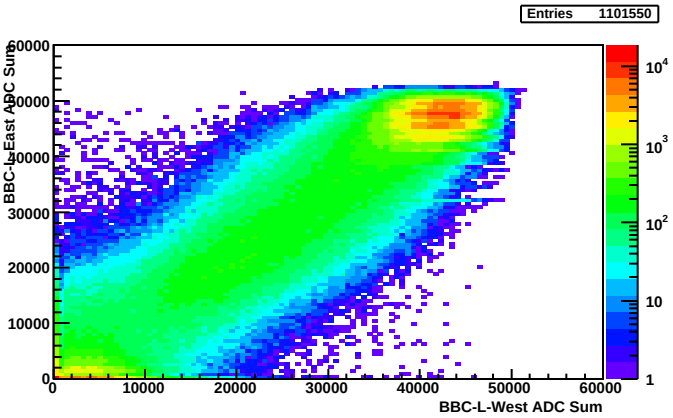

Entries 1101550
BBC-L-West ADC Sum
BBC-S-West ADC Sum

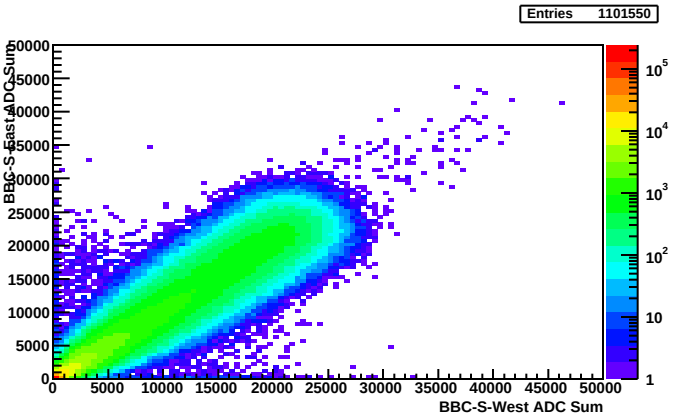

Entries 1101550
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

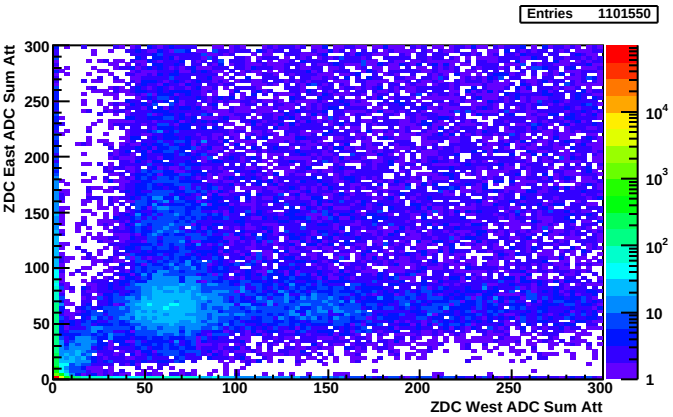

Entries 1101550
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

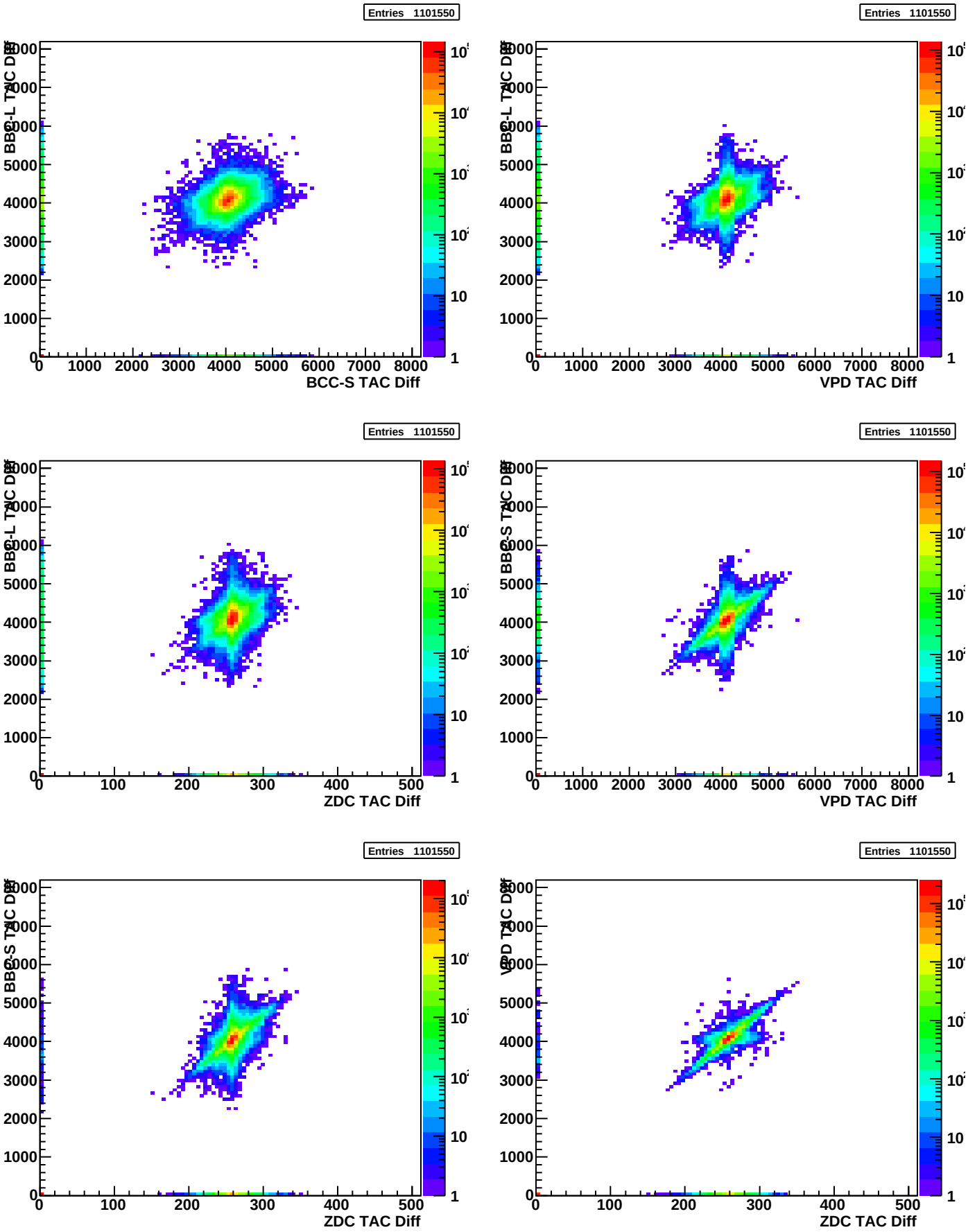

Entries 1101550
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

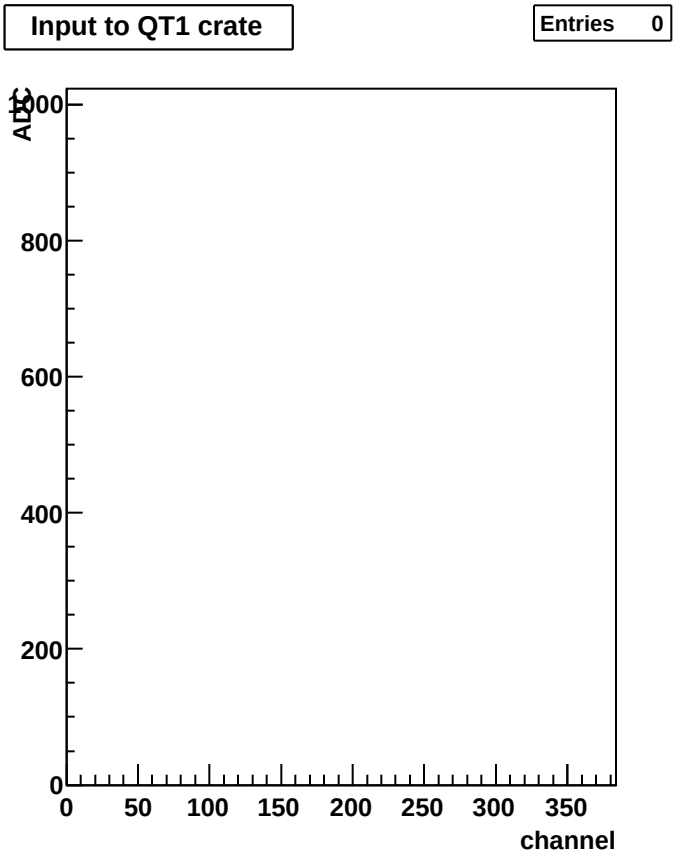

Entries 1101550
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

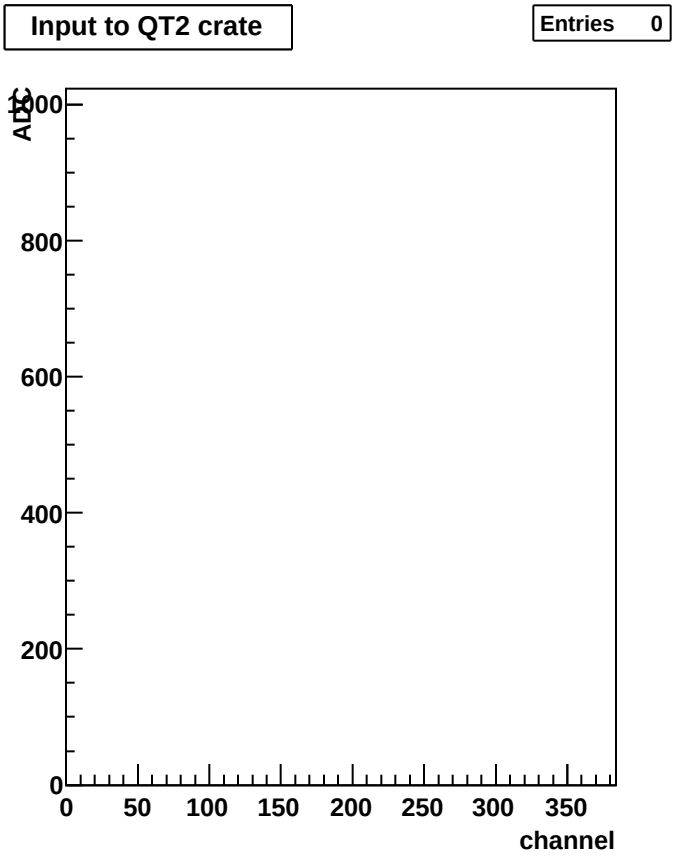

Entries 1101550
BBC-L-East ADC Sum
BBC-L-West ADC Sum

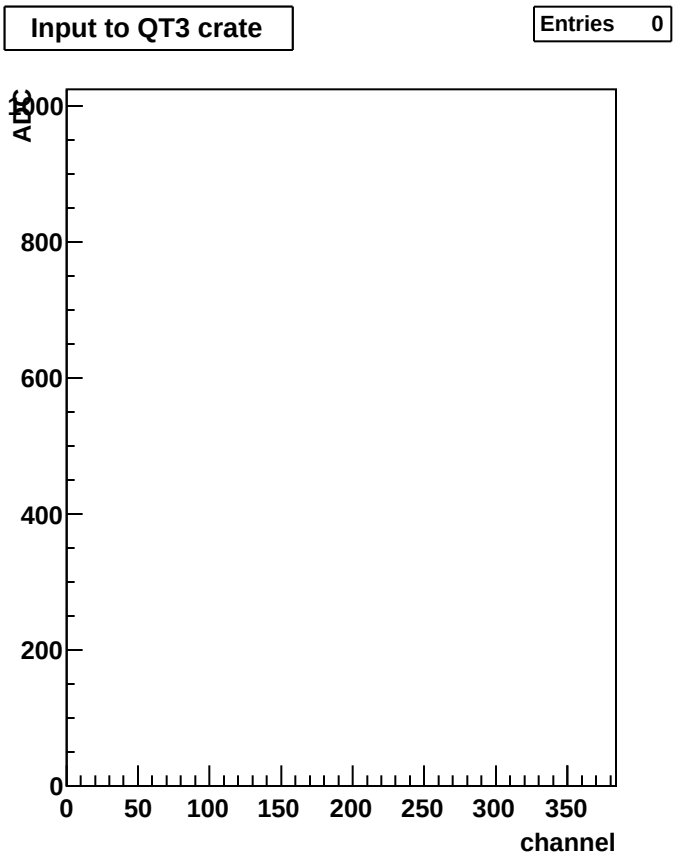

Entries 1101550
BBC-S-East ADC Sum
BBC-S-West ADC Sum

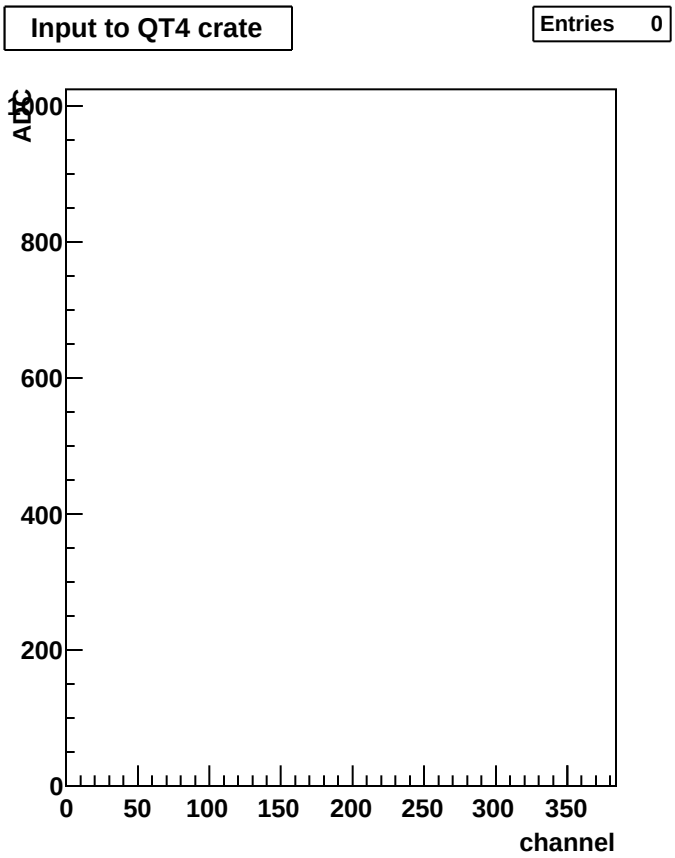

Entries 1101550
ZDC East ADC Sum Att
ZDC West ADC Sum Att

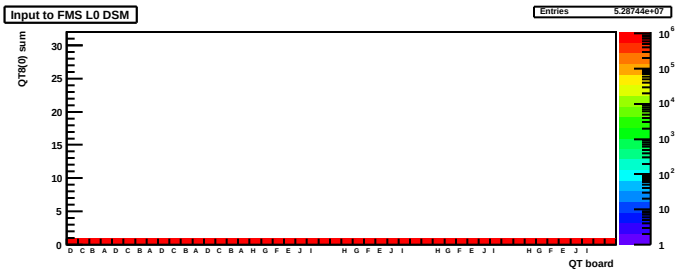

Entries 1101550
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1101550
BBC-L TAC Diff
VPD TAC Diff
Entries 1101550
BBC-L TAC Diff
ZDC TAC Diff
Entries 1101550
BBC-S TAC Diff
VPD TAC Diff
Entries 1101550
BBC-S TAC Diff
ZDC TAC Diff
Entries 1101550
VPD TAC Diff
ZDC TAC Diff

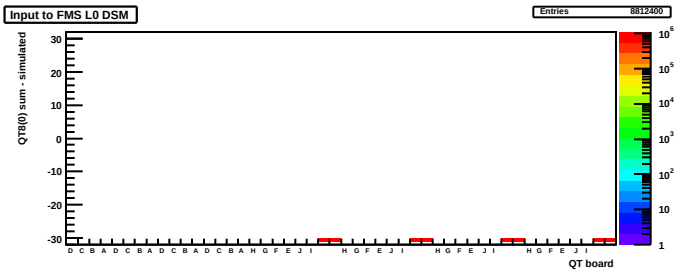

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

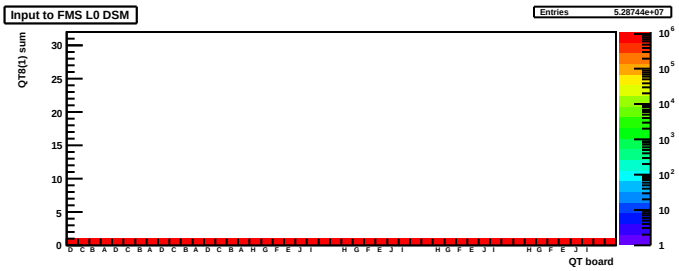

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

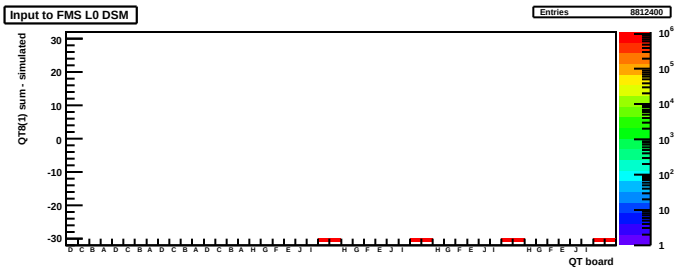

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

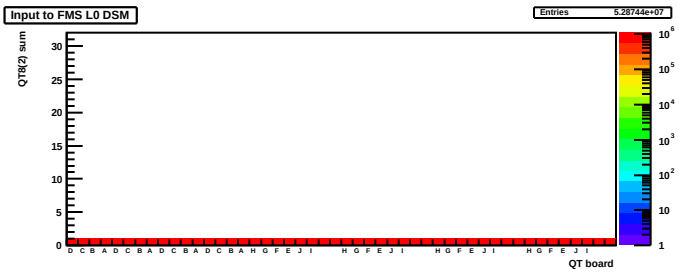

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

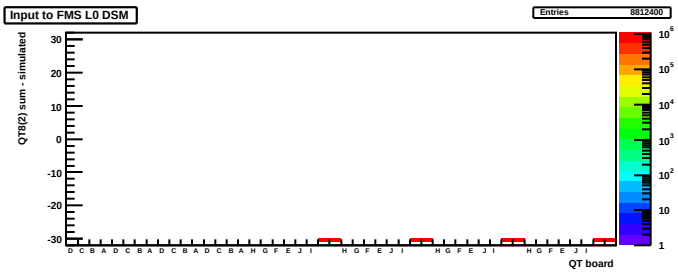

Input to FMS L0 DSM
Entries 5.28744e+07
QT8(0) sum
QT board

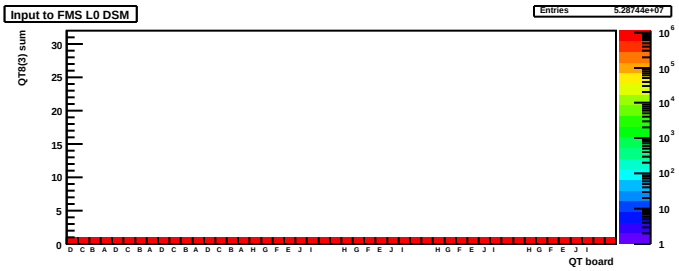

Input to FMS L0 DSM
Entries 8812400
QT8(0) sum - simulated
QT board

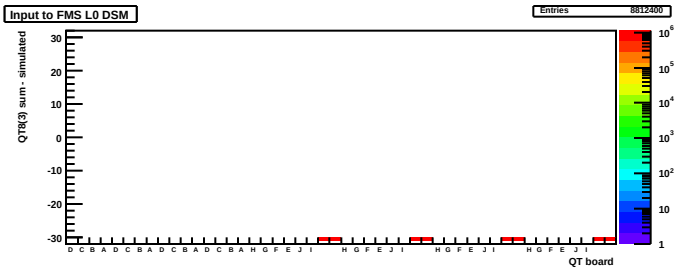

Input to FMS L0 DSM
Entries 5.28744e+07
QT8(1) sum
QT board

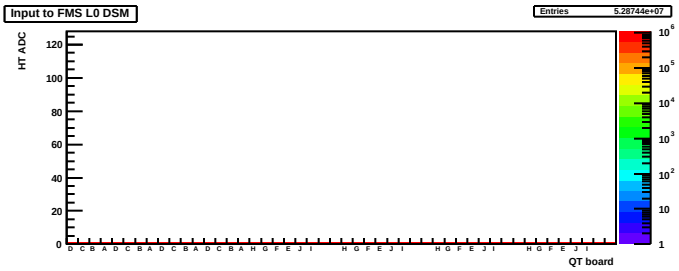

Input to FMS L0 DSM
Entries 8812400
QT8(1) sum - simulated
QT board

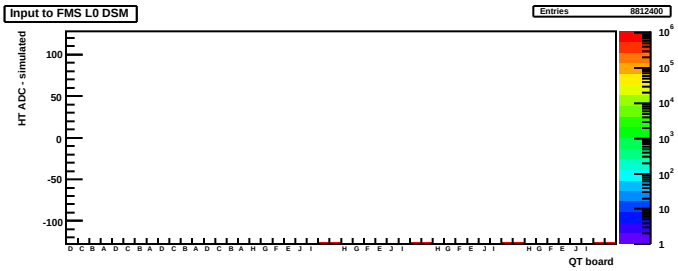

Input to FMS L0 DSM
Entries 5.28744e+07
QT8(2) sum
QT board

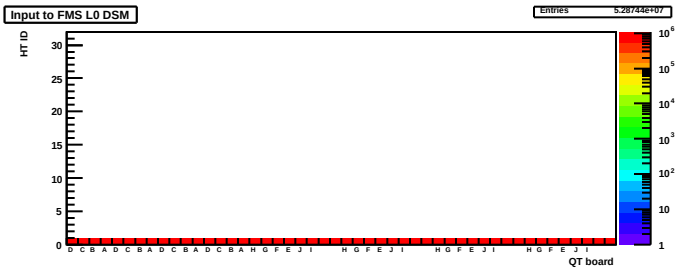

Input to FMS L0 DSM
Entries 8812400
QT8(2) sum - simulated
QT board

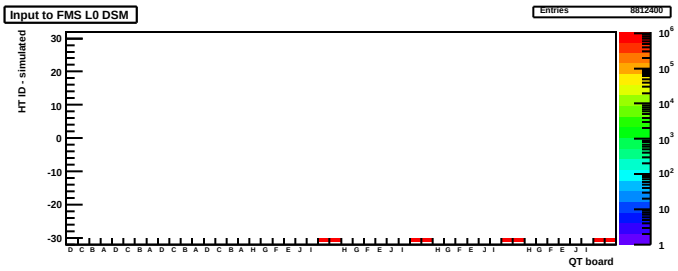

Input to FMS L0 DSM
Entries 5.28744e+07
QT8(3) sum
QT board

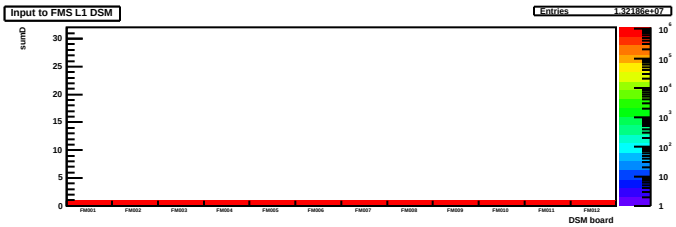

Input to FMS L0 DSM
Entries 8812400
QT8(3) sum - simulated
QT board

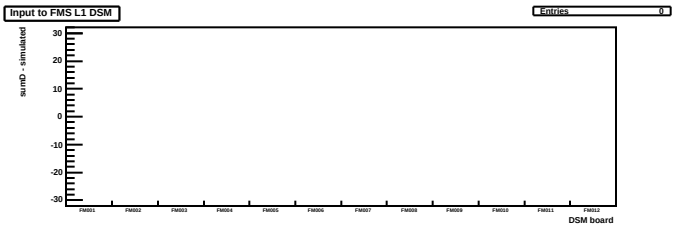

Input to FMS L0 DSM
Entries 5.28744e+07
HT ADC
QT board

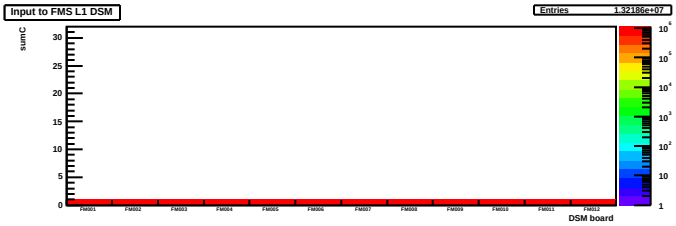

Input to FMS L0 DSM
Entries 8812400
HT ADC - simulated
QT board

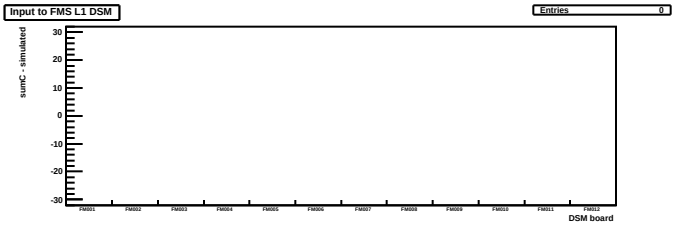

Input to FMS L0 DSM
Entries 5.28744e+07
HT ID
QT board

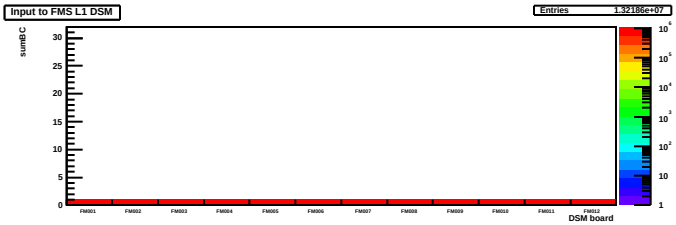

Input to FMS L0 DSM
Entries 8812400
HT ID - simulated
QT board

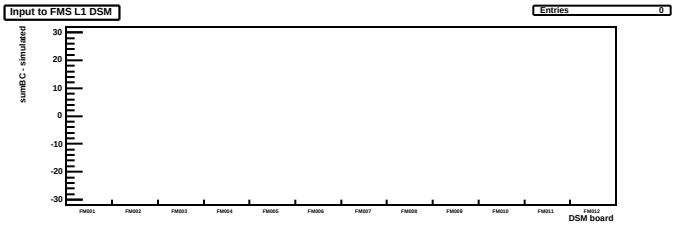

Input to FMS L1 DSM
Entries 1.32186e+07
sumD
DSM board

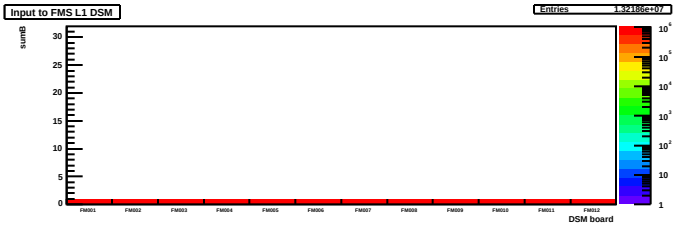

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

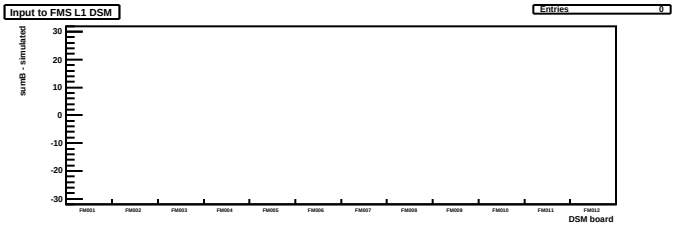

Input to FMS L1 DSM
Entries 1.32186e+07
sumC
DSM board

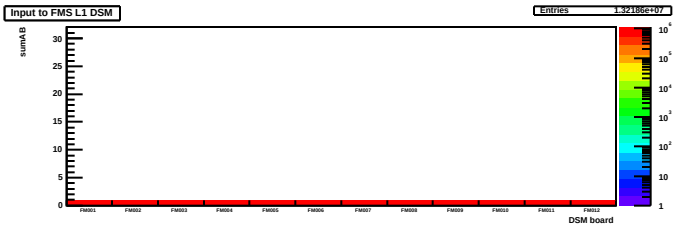

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

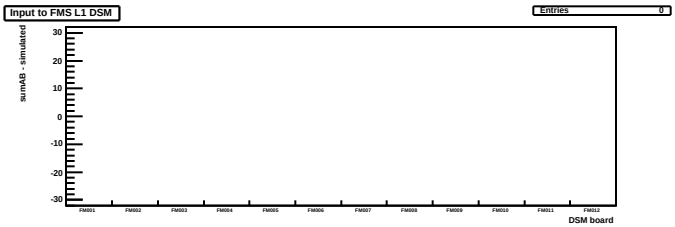

Input to FMS L1 DSM
Entries 1.32186e+07
sumBC
DSM board

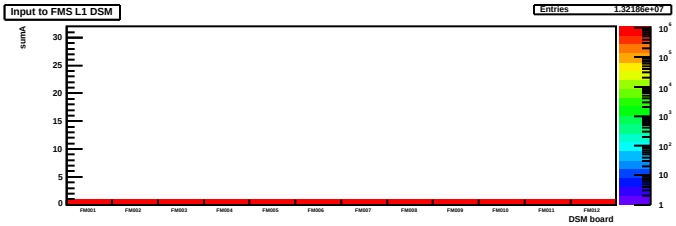

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

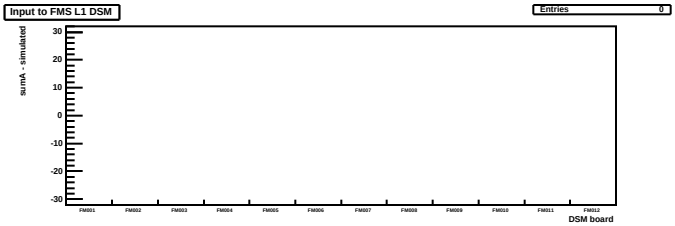

Input to FMS L1 DSM
Entries 1.32186e+07
sumB
DSM board

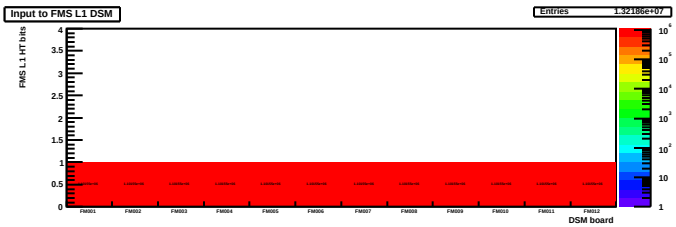

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

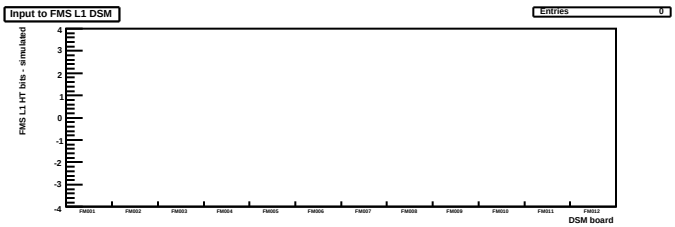

Input to FMS L1 DSM
Entries 1.32186e+07
sumAB
DSM board

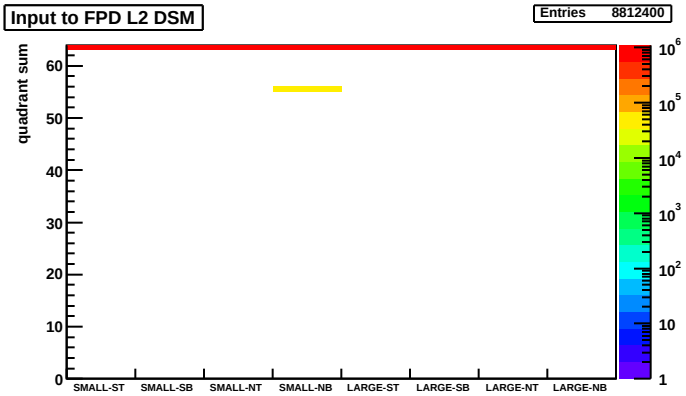

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

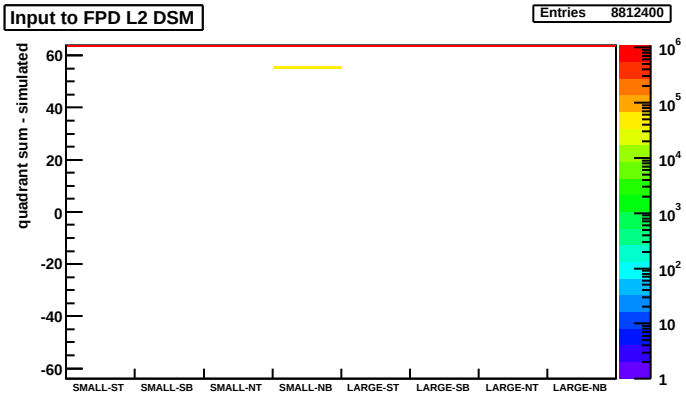

Input to FMS L1 DSM
Entries 1.32186e+07
sumA
DSM board

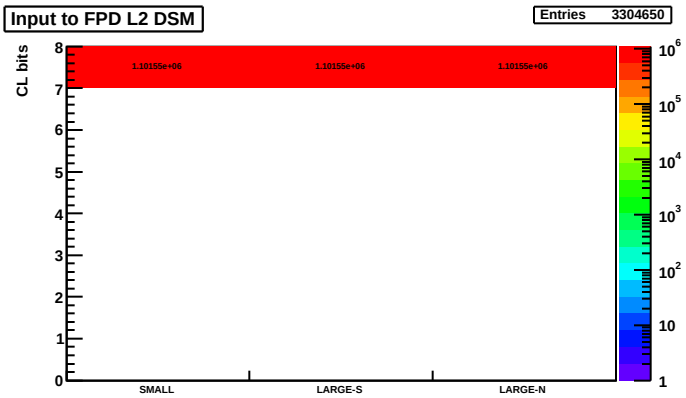

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

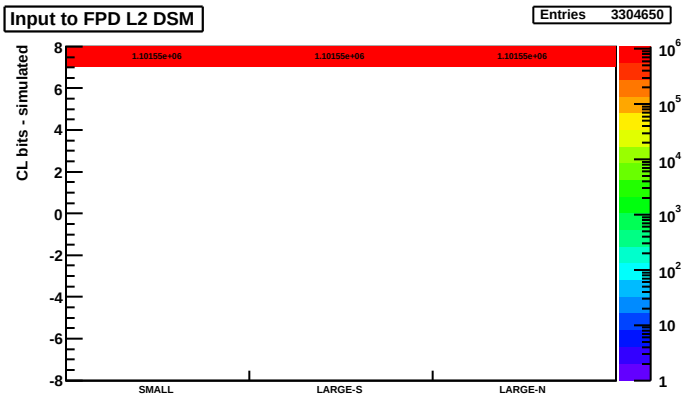

Input to FMS L1 DSM
Entries 1.32186e+07
FMS L1 HT bits
DSM board

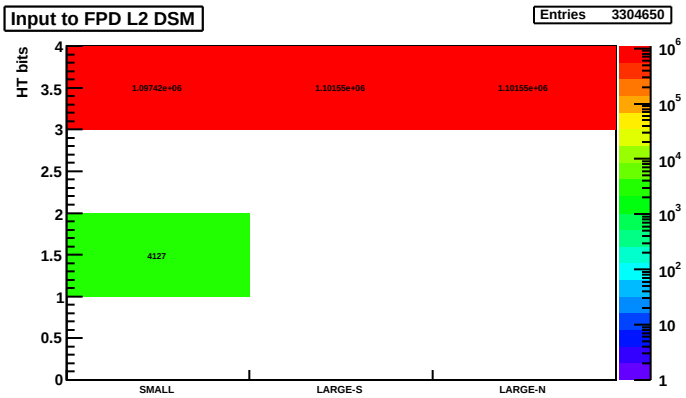

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

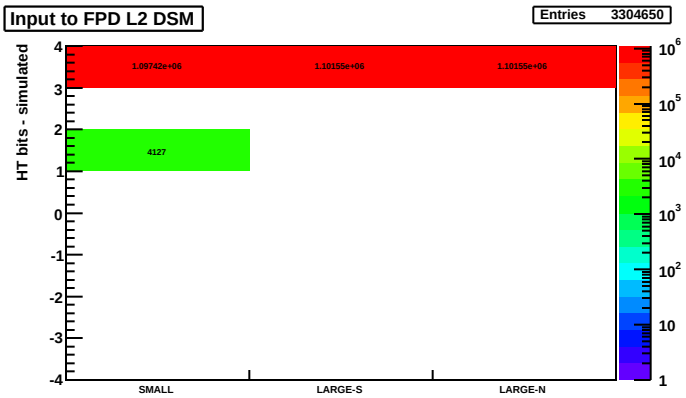

Input to FPD L2 DSM
Entries 8812400
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

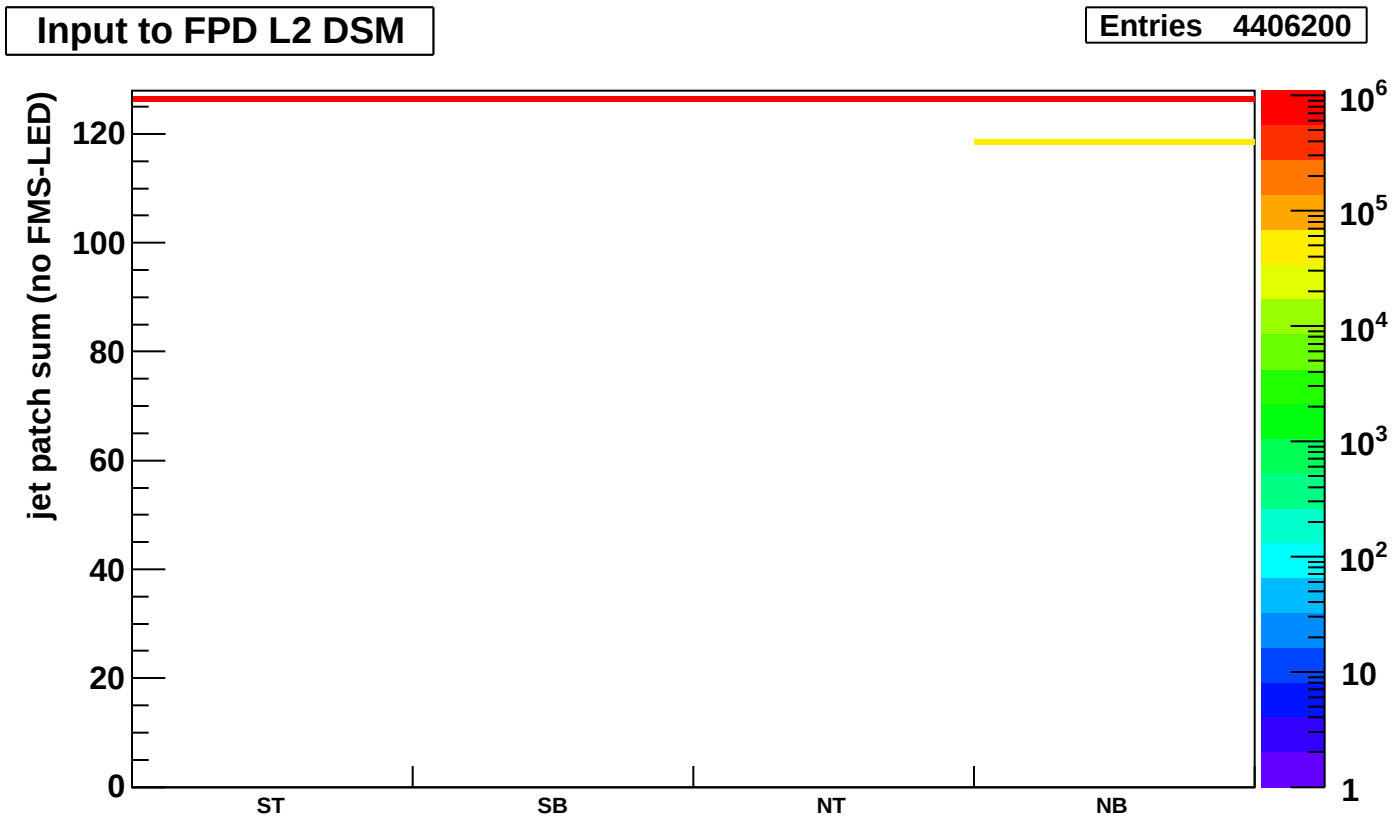

Input to FPD L2 DSM
Entries 8812400
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

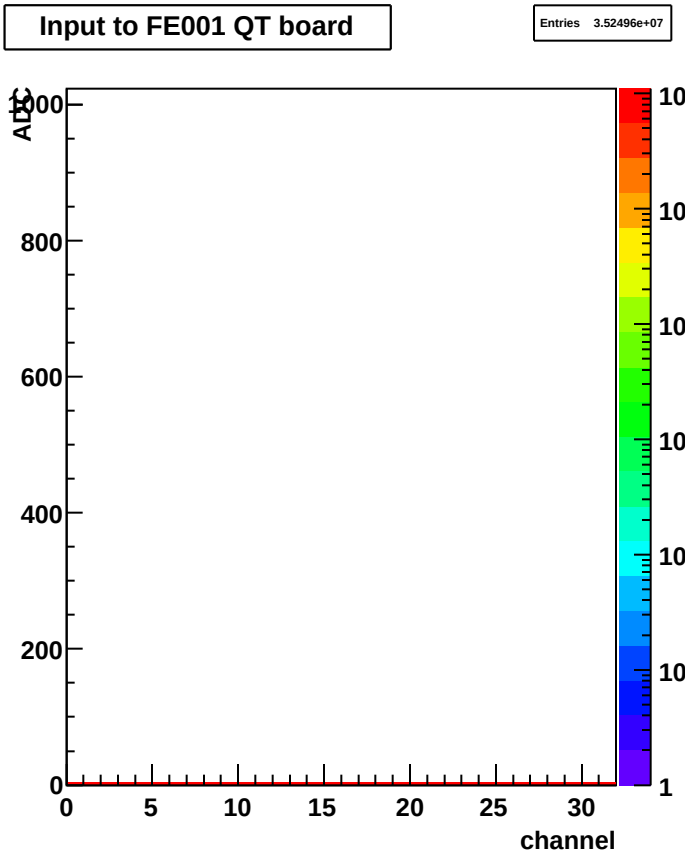

Input to FPD L2 DSM
Entries 3304650
CL bits
1.10155e+06
1.10155e+06
1.10155e+06
SMALL
LARGE-S
LARGE-N

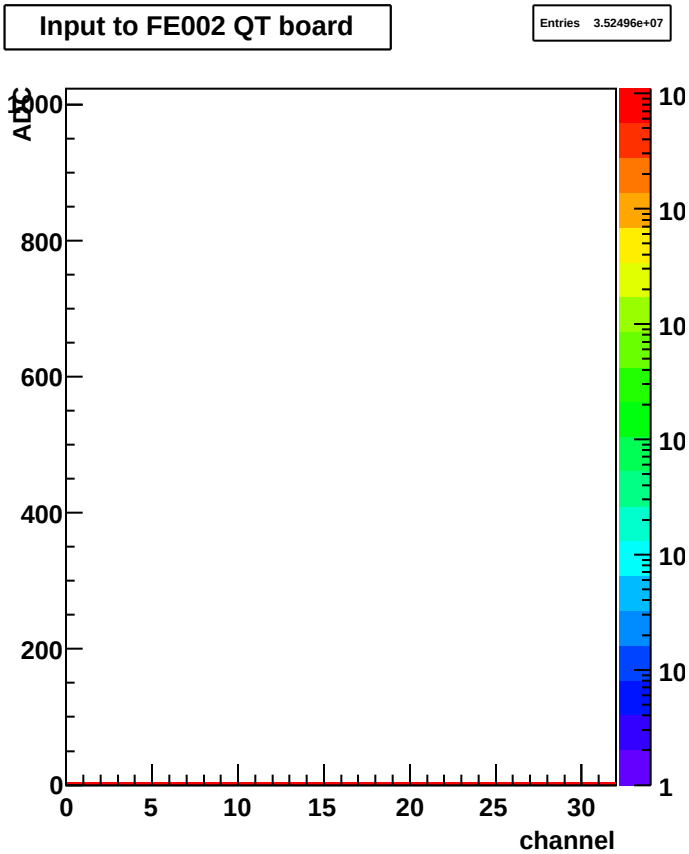

Input to FPD L2 DSM
Entries 3304650
CL bits - simulated
1.10155e+06
1.10155e+06
1.10155e+06
SMALL
LARGE-S
LARGE-N

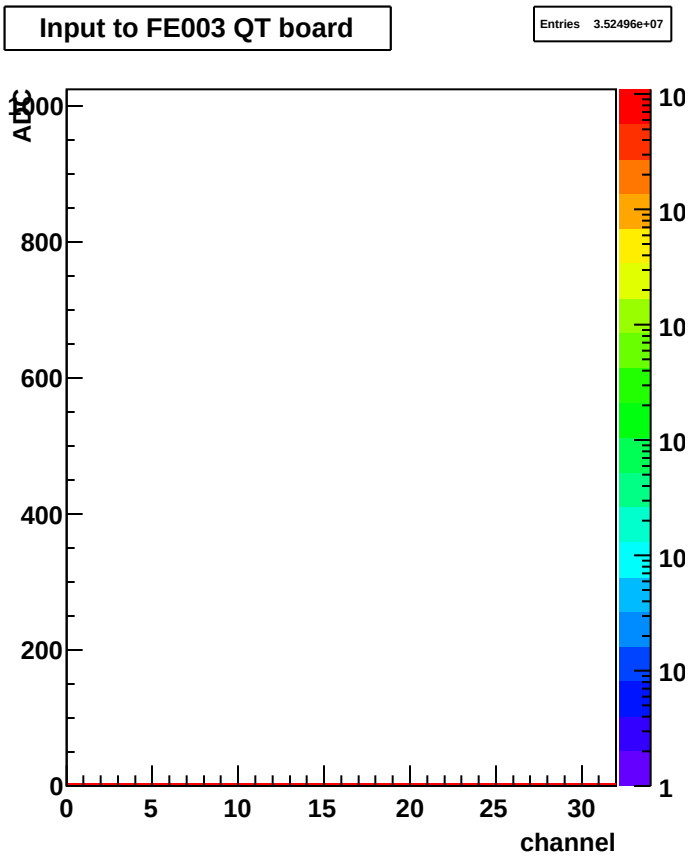

Input to FPD L2 DSM
Entries 3304650
HT bits
1.09742e+06
1.10155e+06
1.10155e+06
4127
SMALL
LARGE-S
LARGE-N

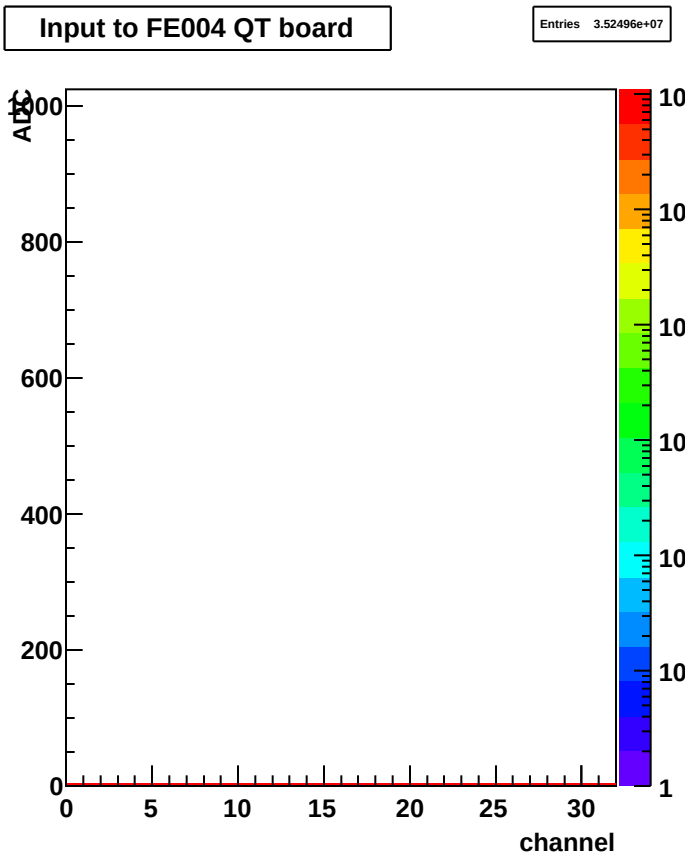

Input to FPD L2 DSM
Entries 3304650
HT bits - simulated
1.09742e+06
1.10155e+06
1.10155e+06
4127
SMALL
LARGE-S
LARGE-N

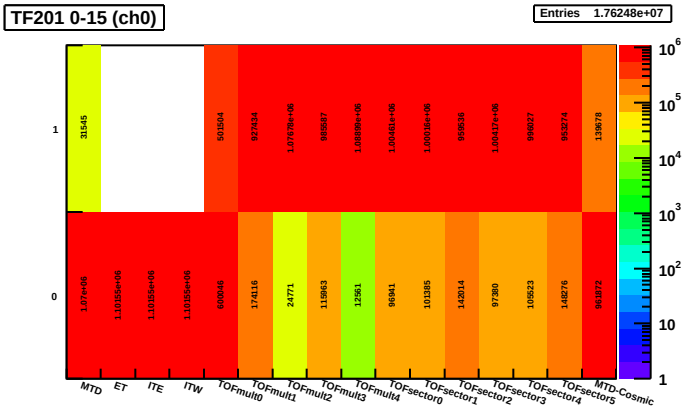

Input to FPD L2 DSM
Entries 4406200
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5
10^6

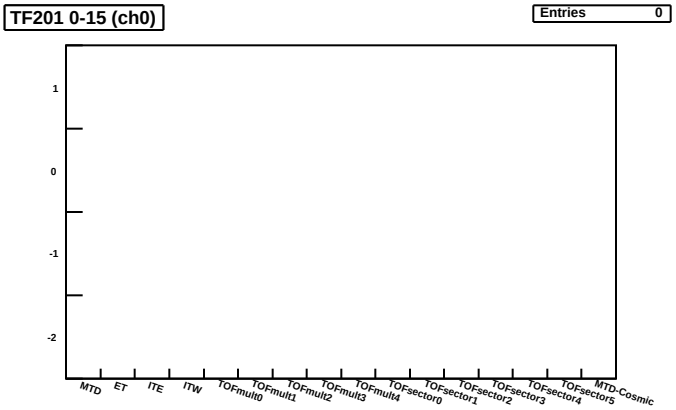

Input to FE001 QT board
Entries 3.52496e+07
ADC
channel

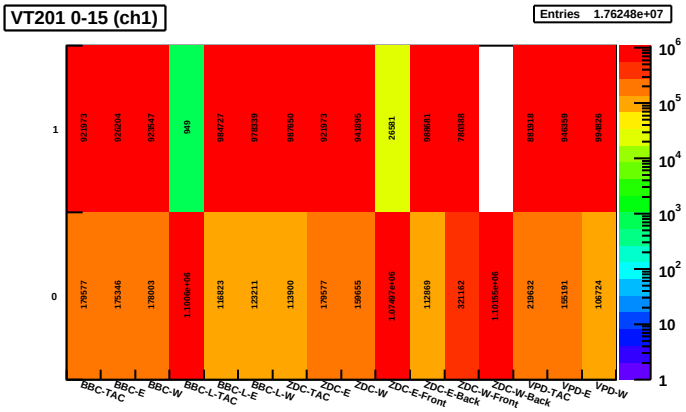

Input to FE002 QT board
Entries 3.52496e+07
ADC
channel

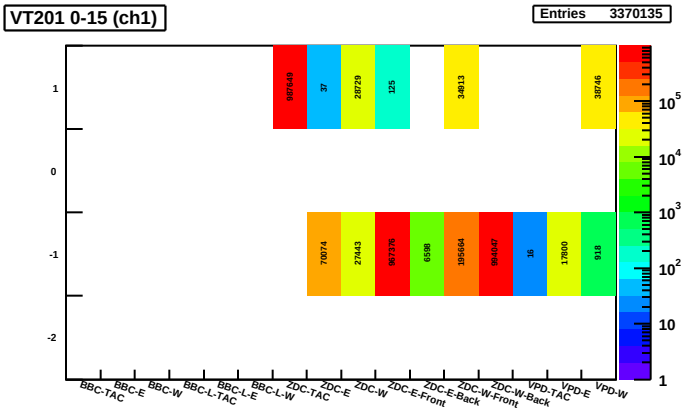

Input to FE003 QT board
Entries 3.52496e+07
ADC
channel

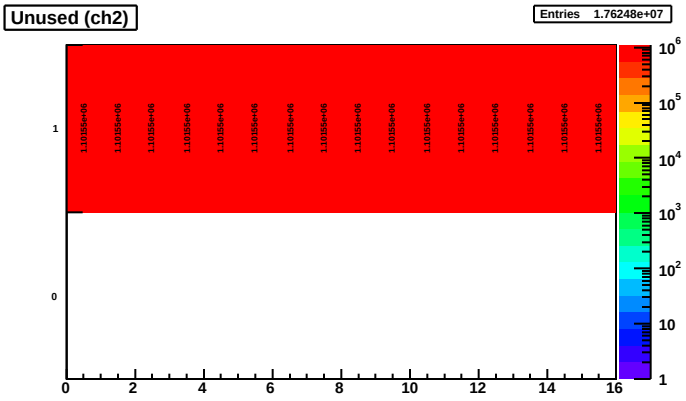

Input to FE004 QT board
Entries 3.52496e+07
ADC
channel

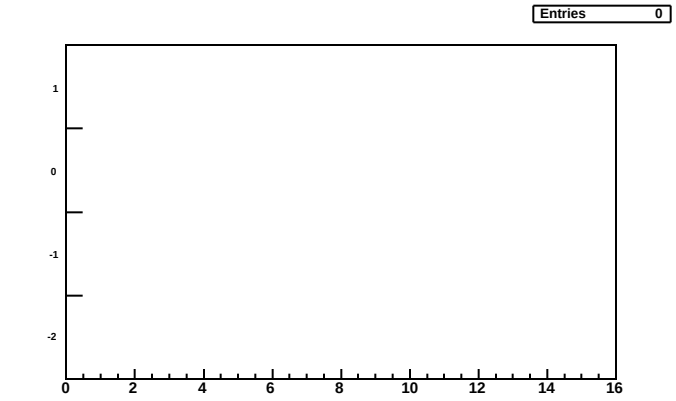

TF201 0-15 (ch0)
Entries 1.76248e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

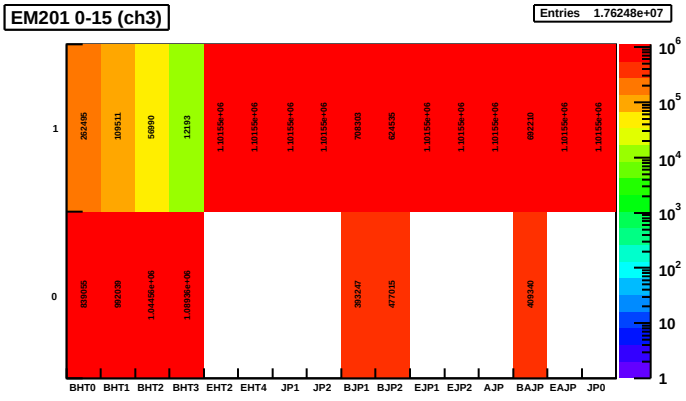

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

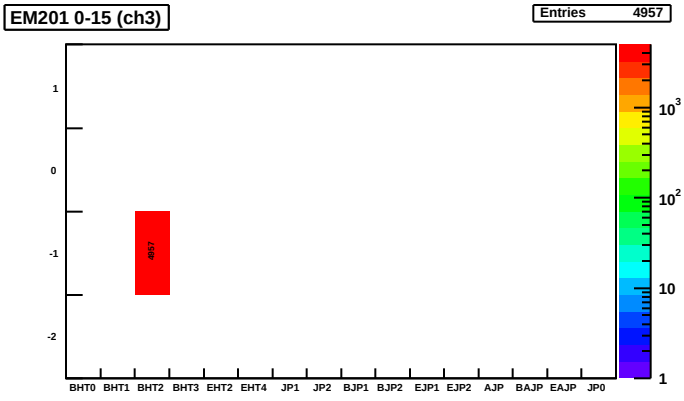

VT201 0-15 (ch1)
Entries 1.76248e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 3370135
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

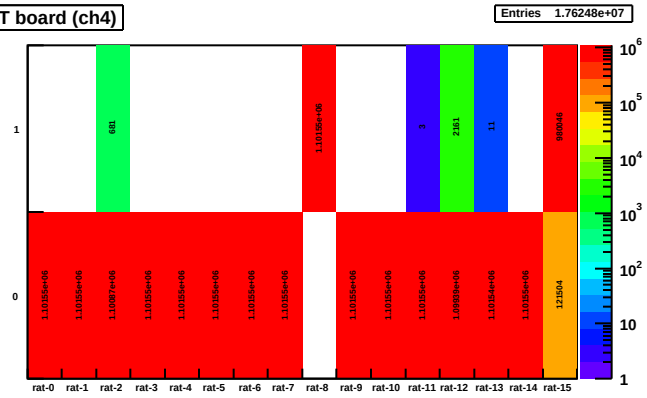

Unused (ch2)
Entries 1.76248e+07

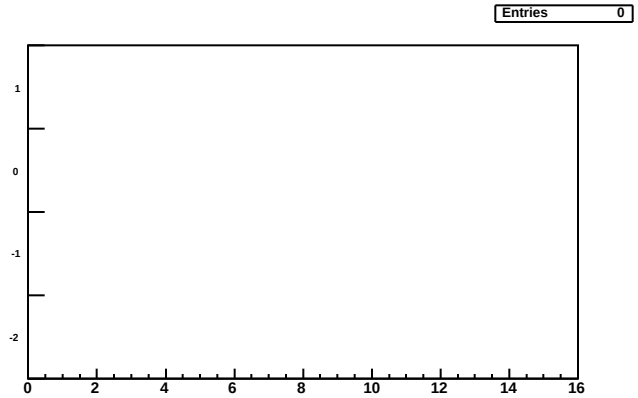

Entries 0


EM201 0-15 (ch3)
Entries 1.76248e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

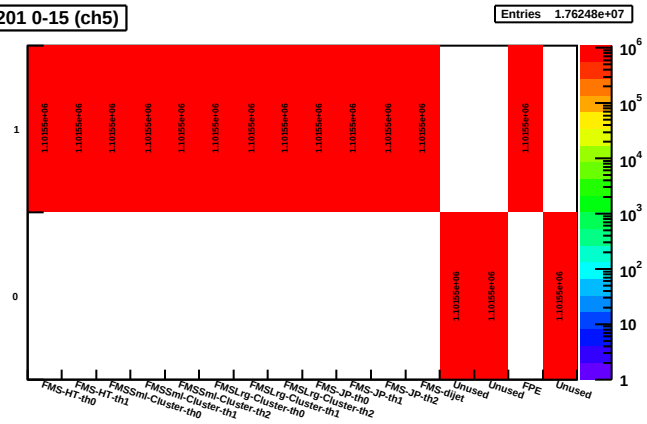

EM201 0-15 (ch3)
Entries 4957
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

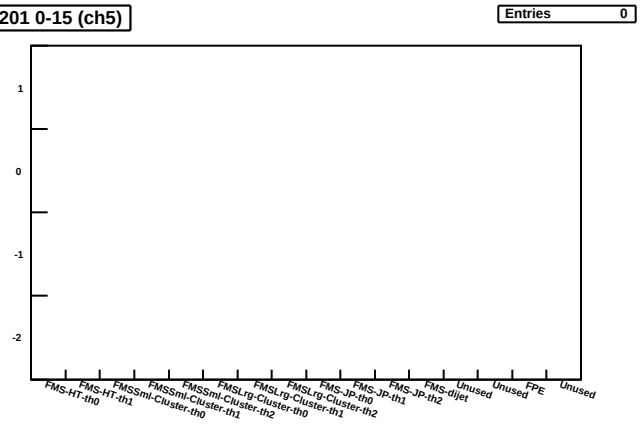




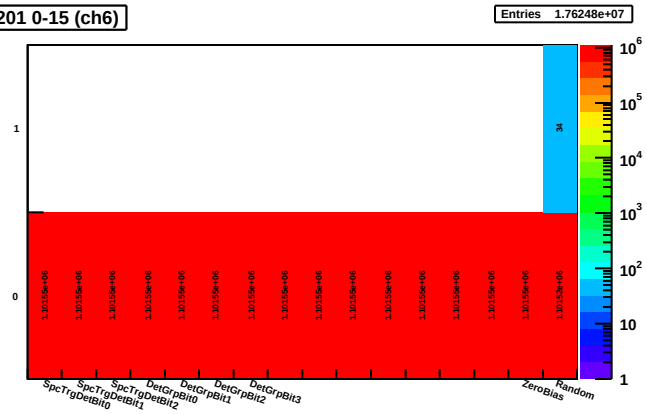
FP201 0-15 (ch5)

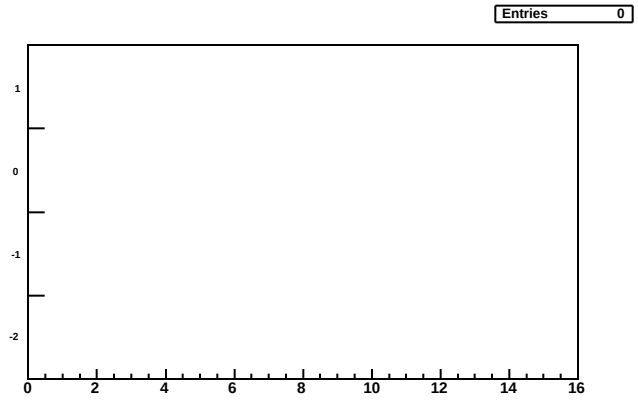
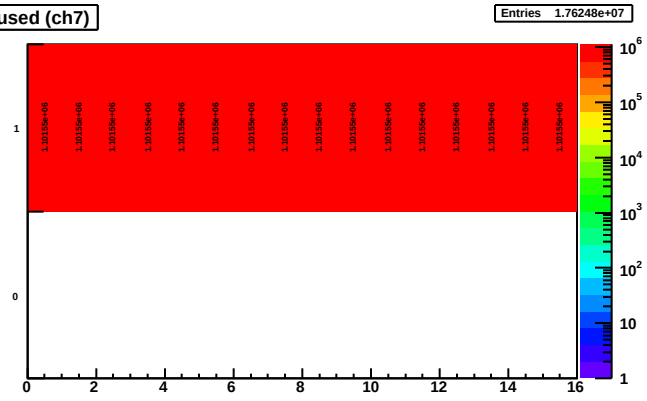
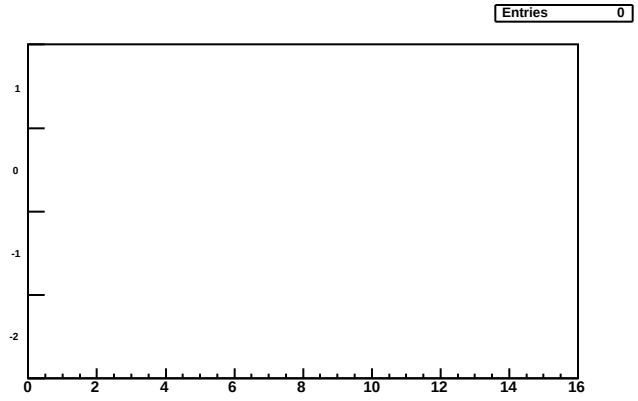


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)