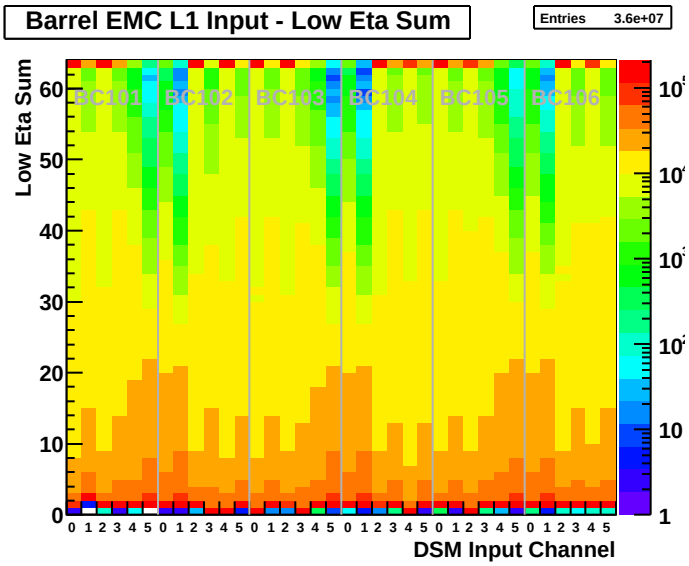
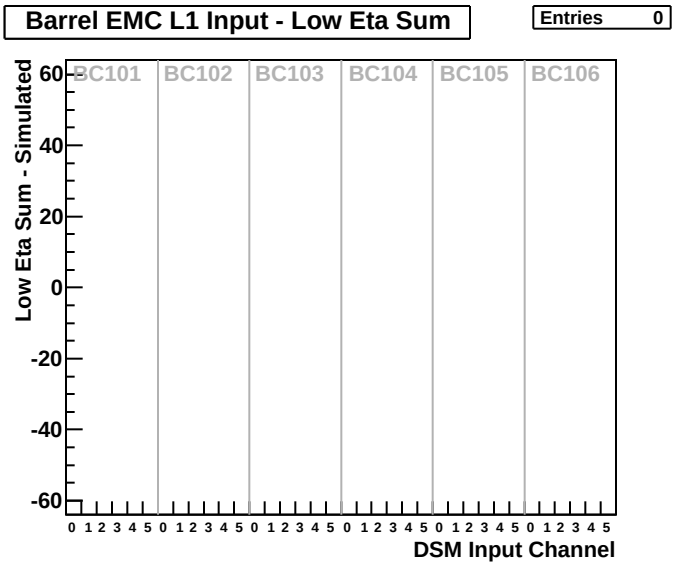
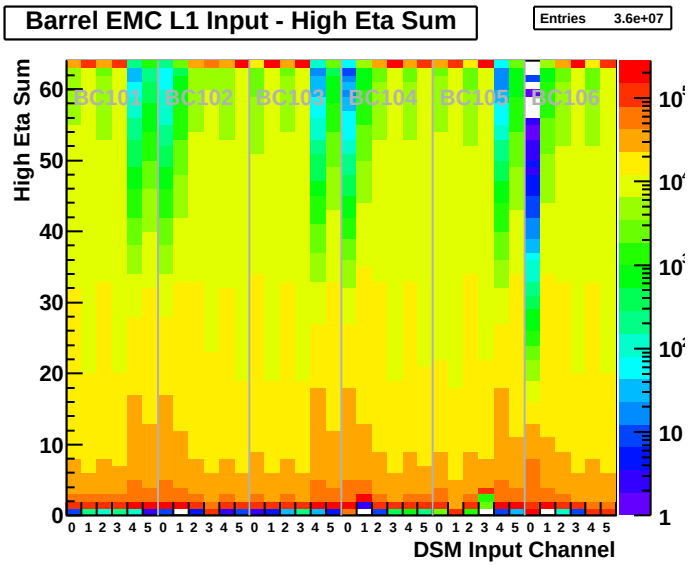
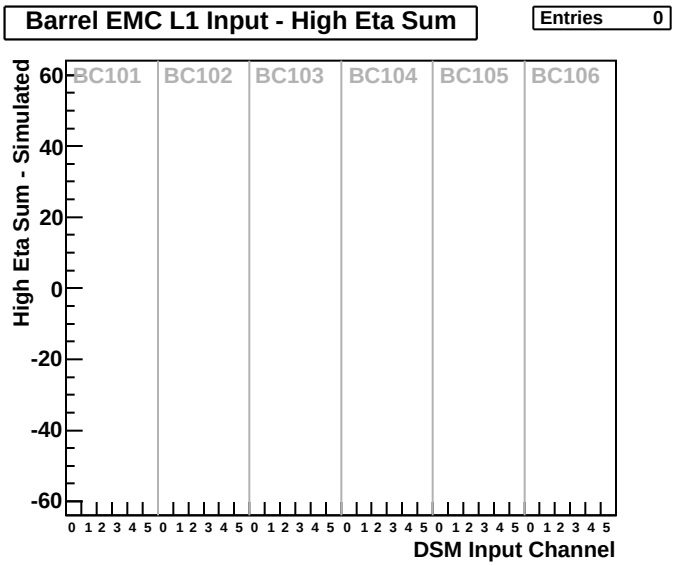
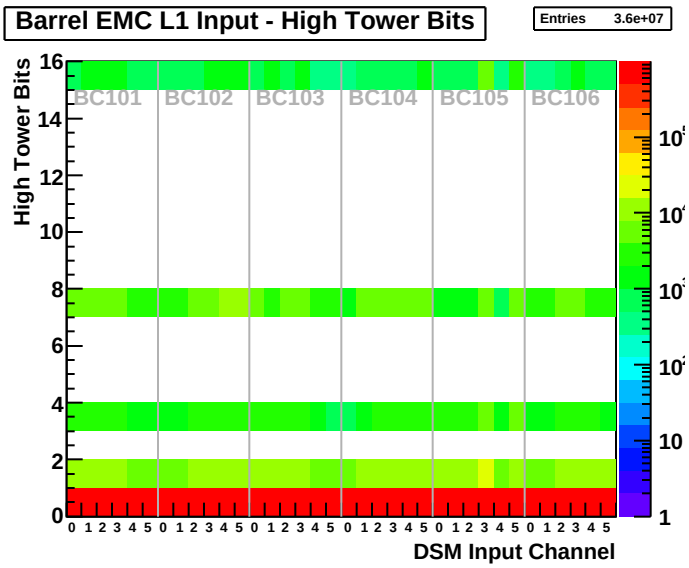
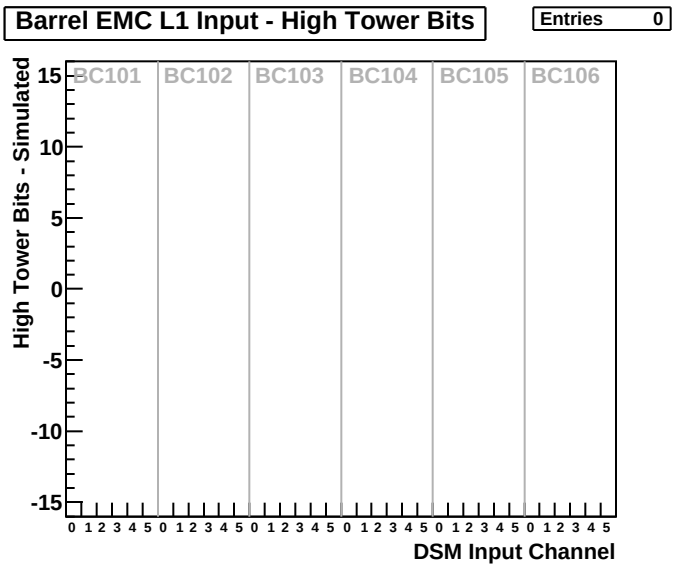

Barrel EMC L1 Input - Low Eta Sum
Entries 3.6e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

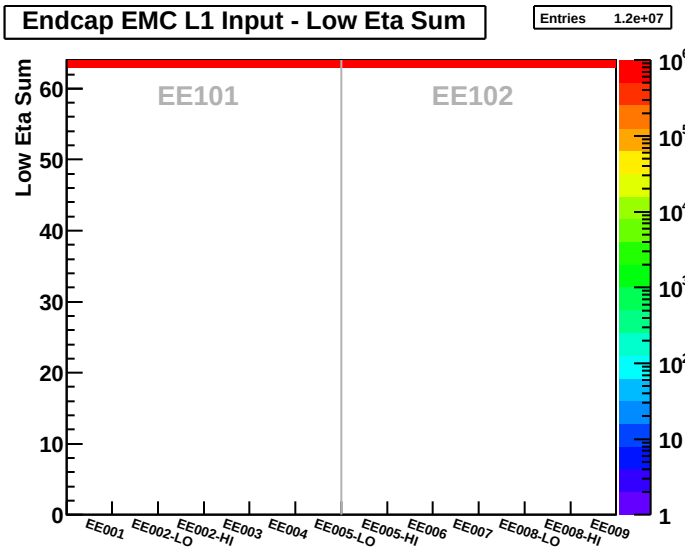

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

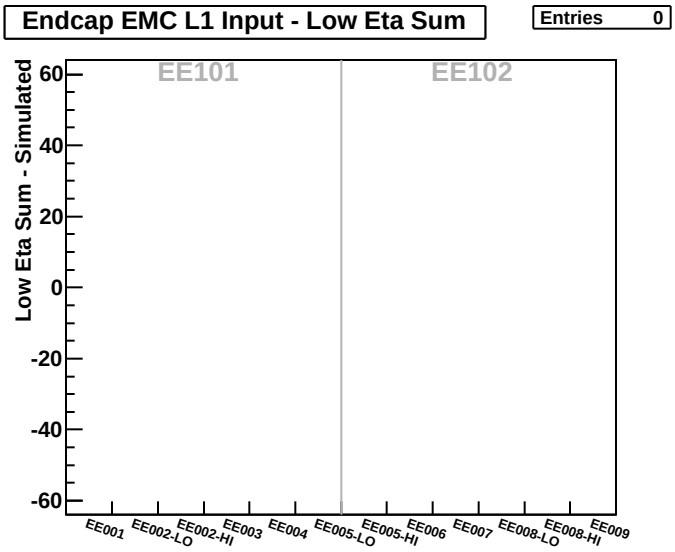

Barrel EMC L1 Input - High Eta Sum
Entries 3.6e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

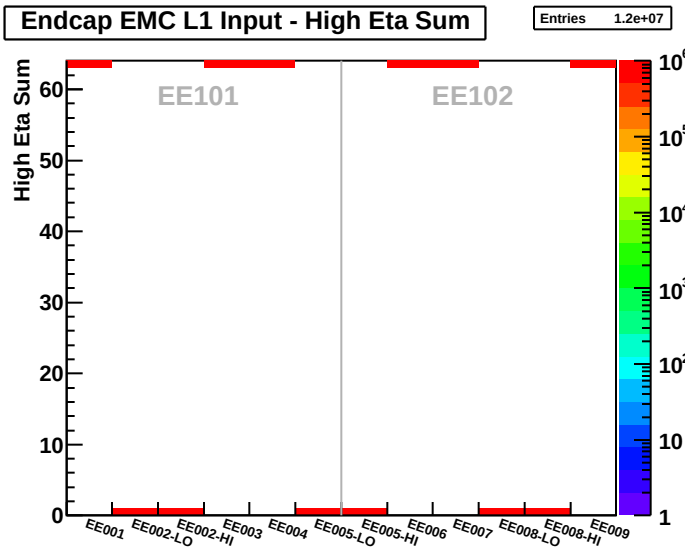

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

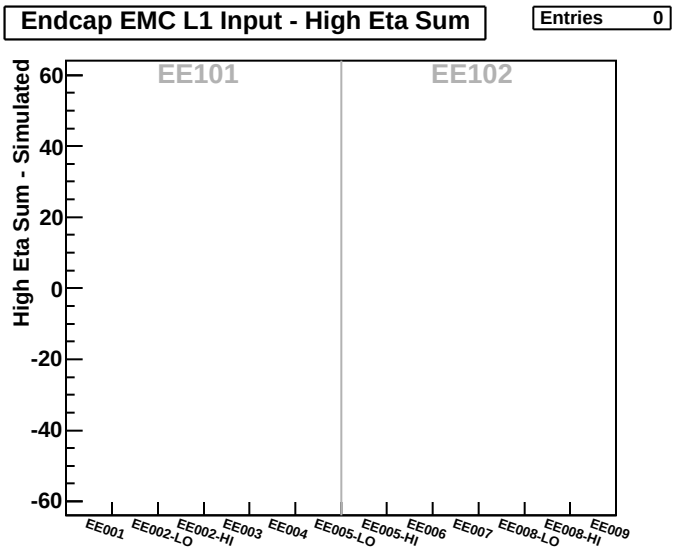

Barrel EMC L1 Input - High Tower Bits
Entries 3.6e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

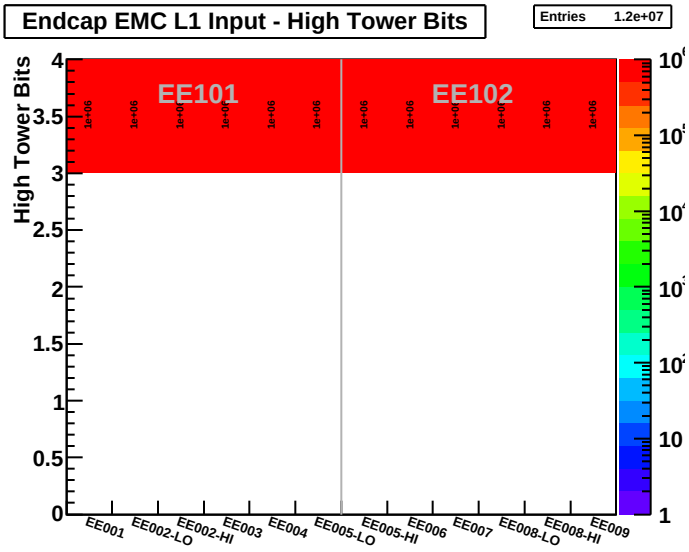

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

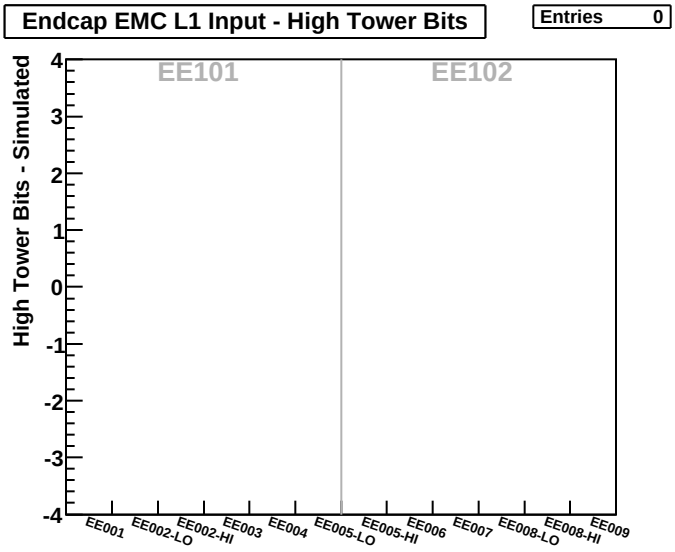

Endcap EMC L1 Input - Low Eta Sum
Entries 1.2e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

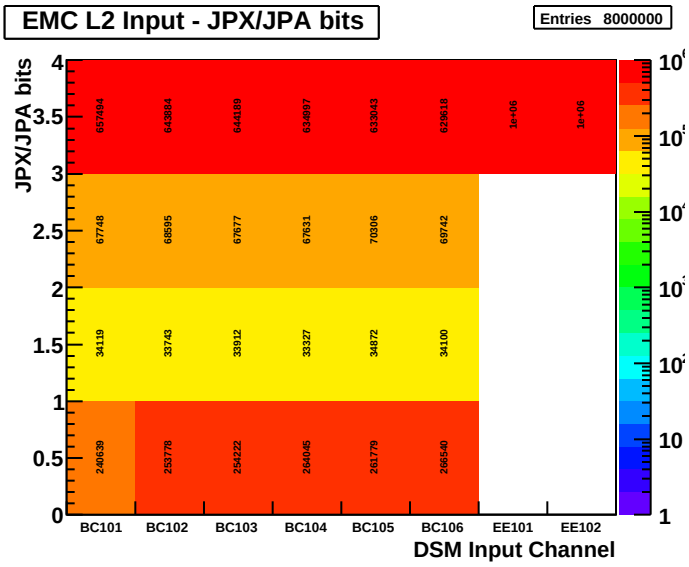

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

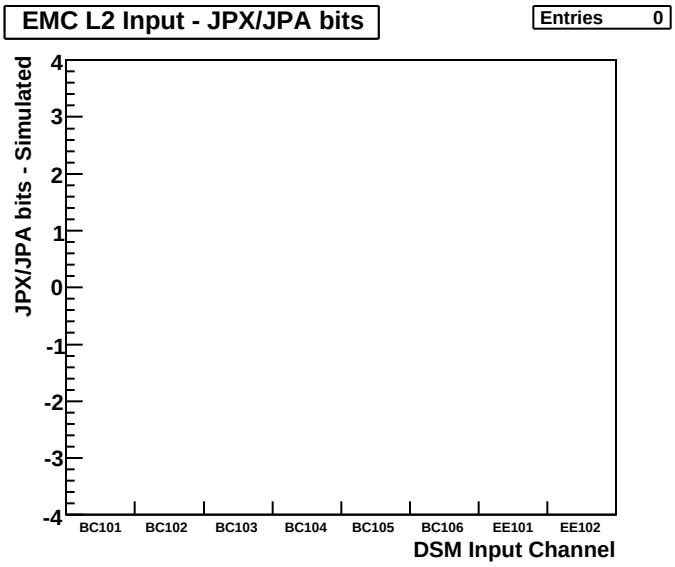

Endcap EMC L1 Input - High Eta Sum
Entries 1.2e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

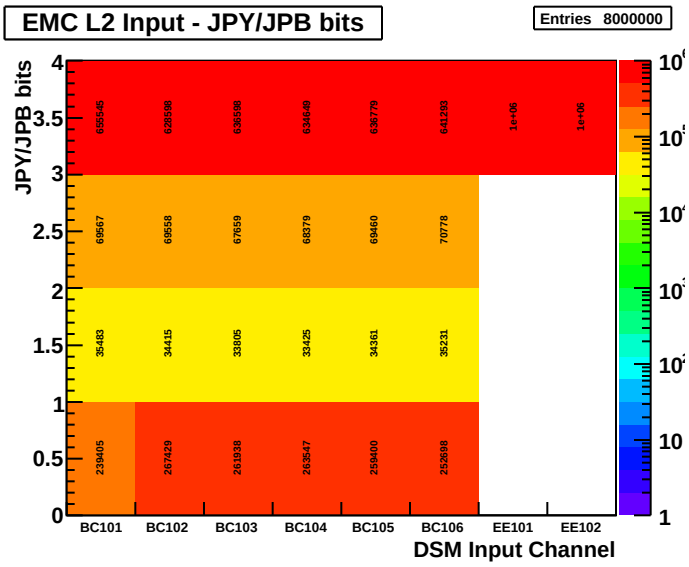

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

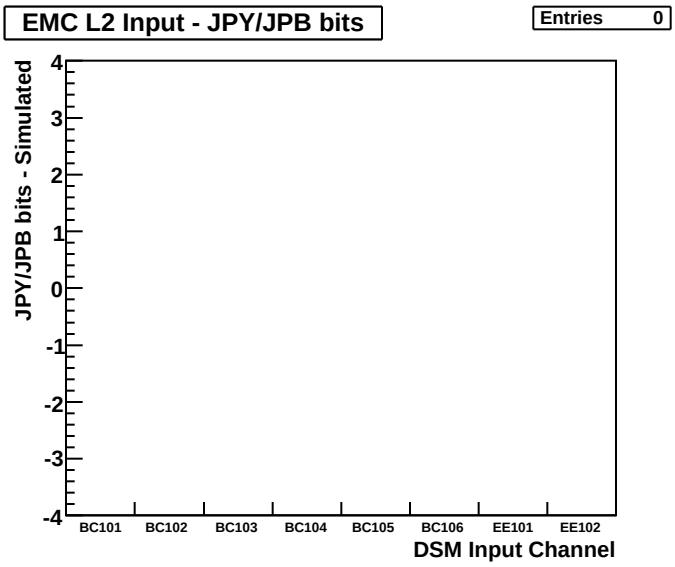

Endcap EMC L1 Input - High Tower Bits
Entries 1.2e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

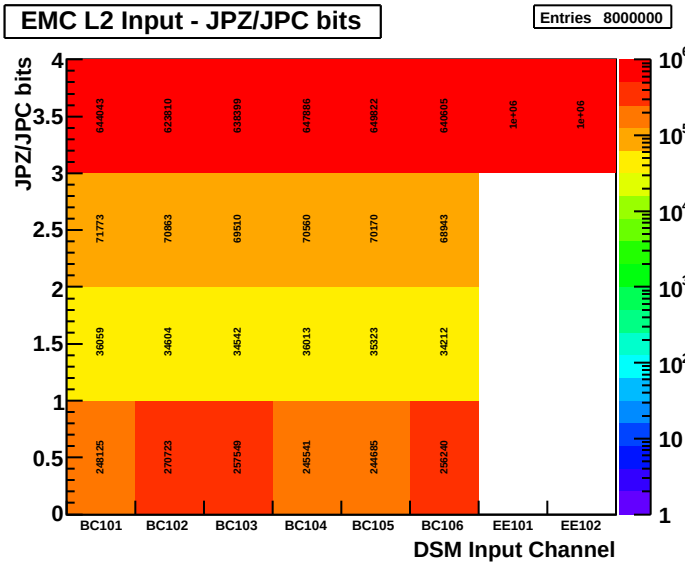

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

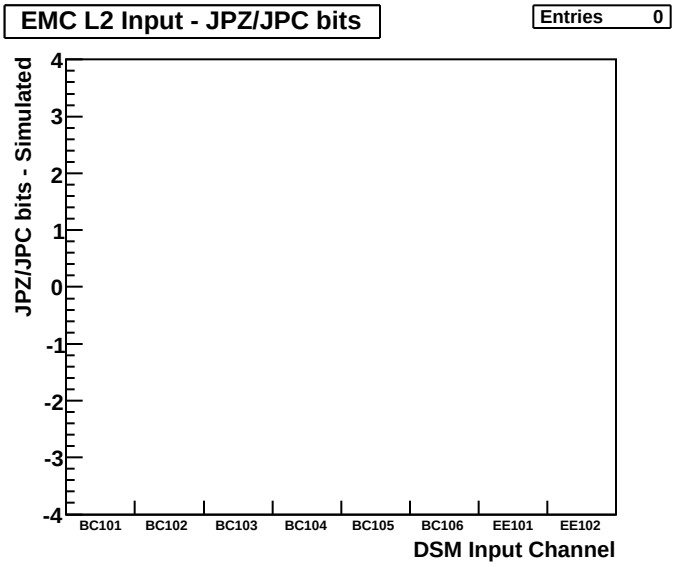

EMC L2 Input - JPX/JPA bits
Entries 8000000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
657494 643084 644189 634697 633043 629618 1e+06 1e+06
67748 68595 67677 67631 70306 69742
34119 33743 33912 33327 34872 34100
240639 253778 254222 264045 261779 266540

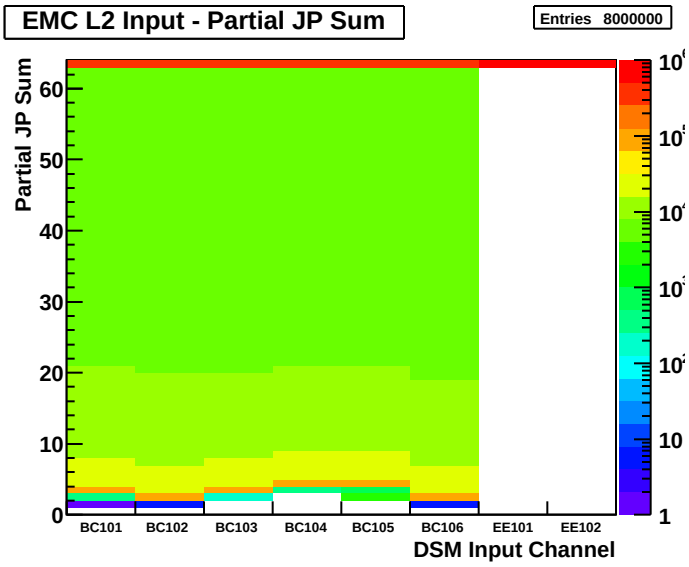

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

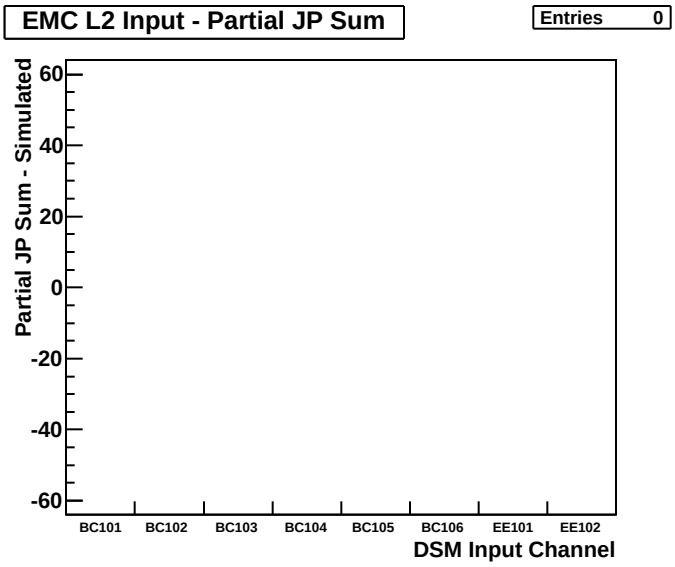

EMC L2 Input - JPY/JPB bits
Entries 8000000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
655545 628588 636588 634649 636779 641293 1e+06 1e+06
69567 69558 67659 68379 69460 70778
35483 34415 33805 33425 34361 35231
239405 267429 261938 263547 259400 252698

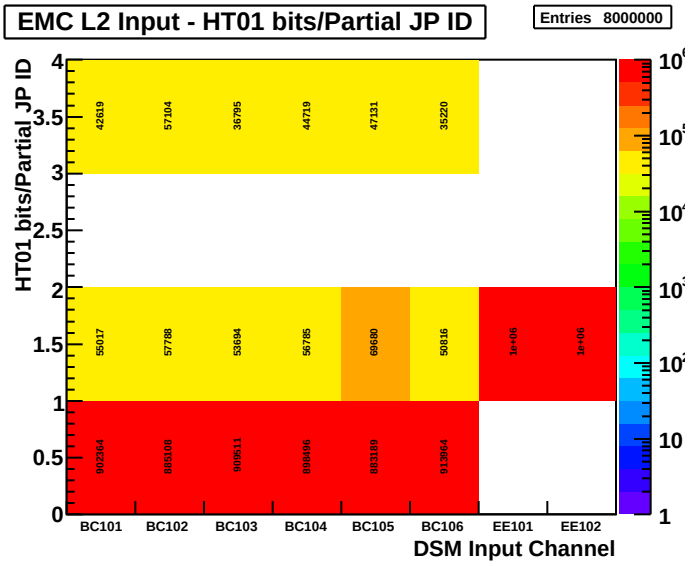

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

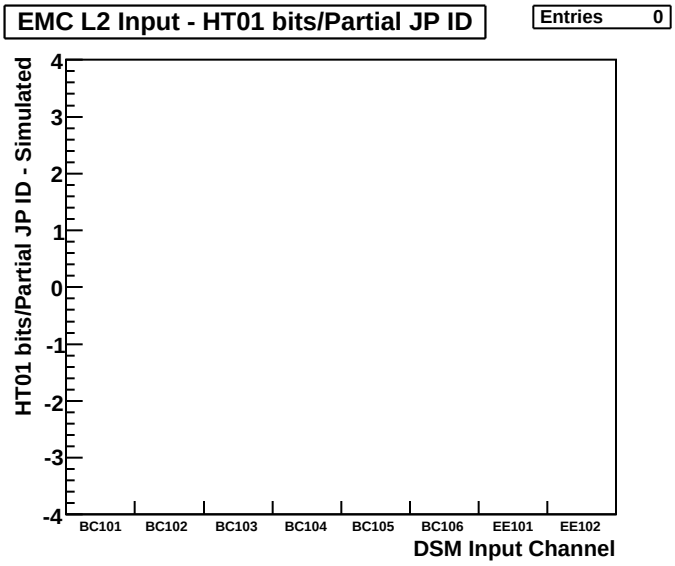

EMC L2 Input - JPZ/JPC bits
Entries 8000000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
644043 623810 632939 647386 648822 640605 1e+06 1e+06
71773 70863 69510 70560 70170 68943
36059 34604 34542 36013 35323 34212
248125 270723 257549 245541 244685 256240

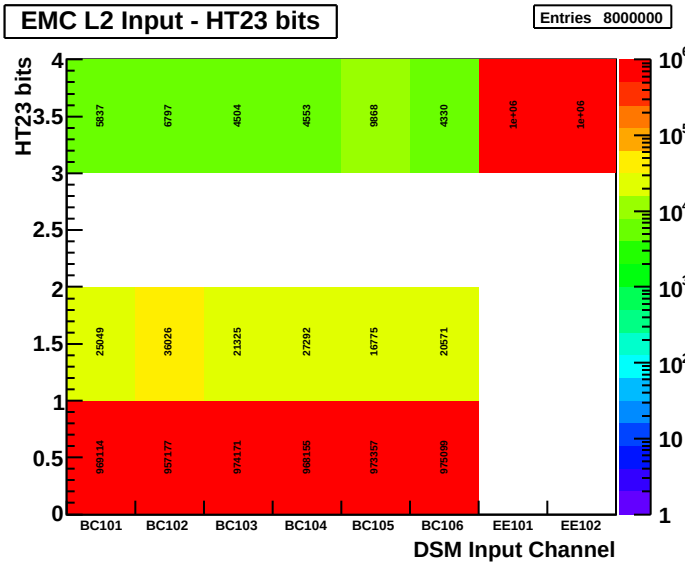

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

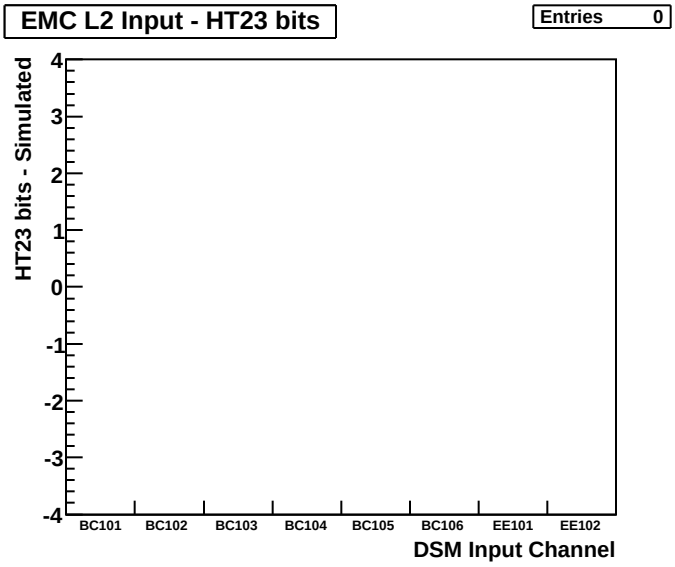

EMC L2 Input - Partial JP Sum
Entries 8000000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

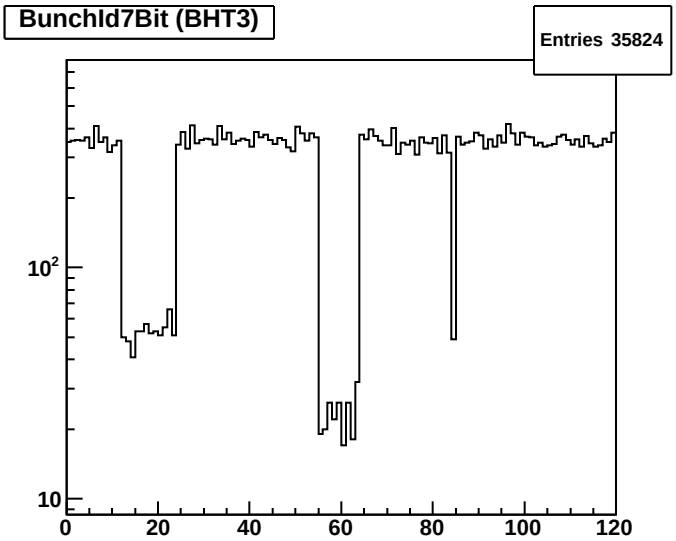

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

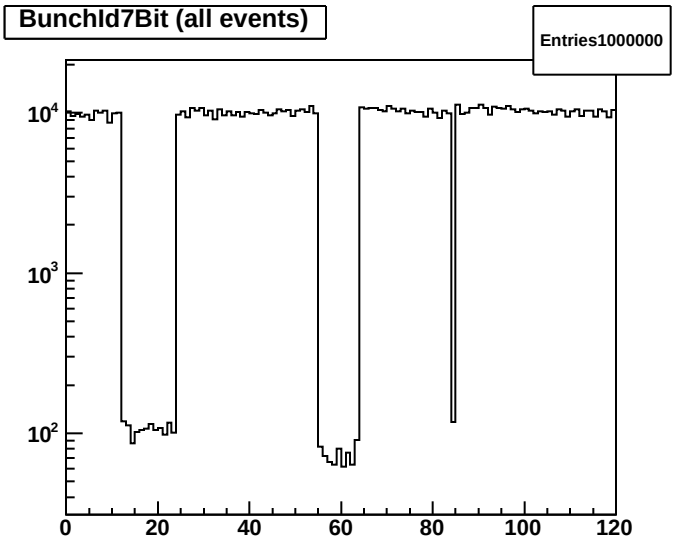

EMC L2 Input - HT01 bits/Partial JP ID
Entries 8000000
HT01 bits/Partial JP ID
42619 57104 36795 44719 47131 35220
55017 57788 53694 56785 69680 50816 1e+06 1e+06
902364 885108 900511 899496 883189 913964
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

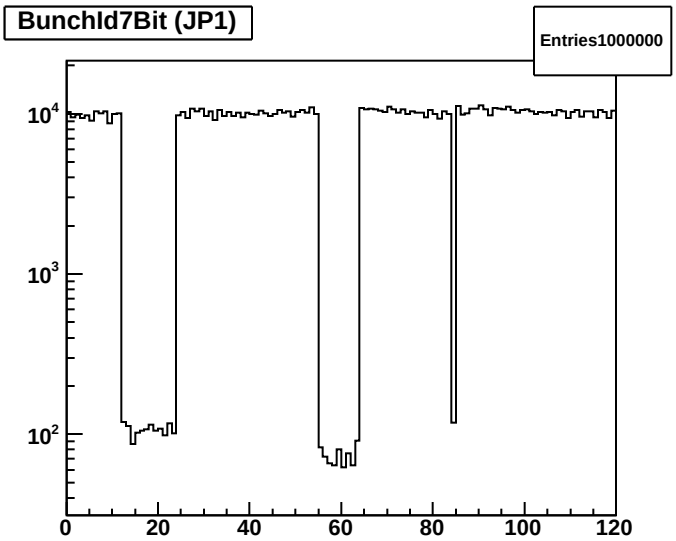

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

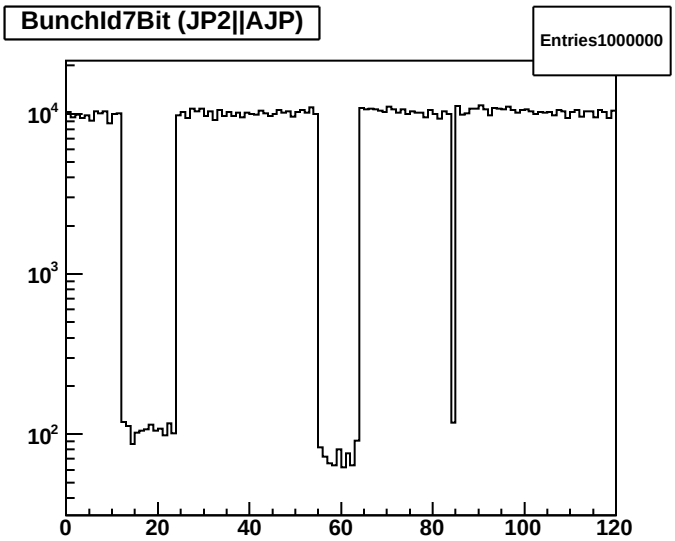

EMC L2 Input - HT23 bits
Entries 8000000
HT23 bits
5837 6797 4504 4553 9868 4330 1e+06 1e+06
25049 36026 21325 27292 16775 20571
969114 957177 974171 968155 973357 975099
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

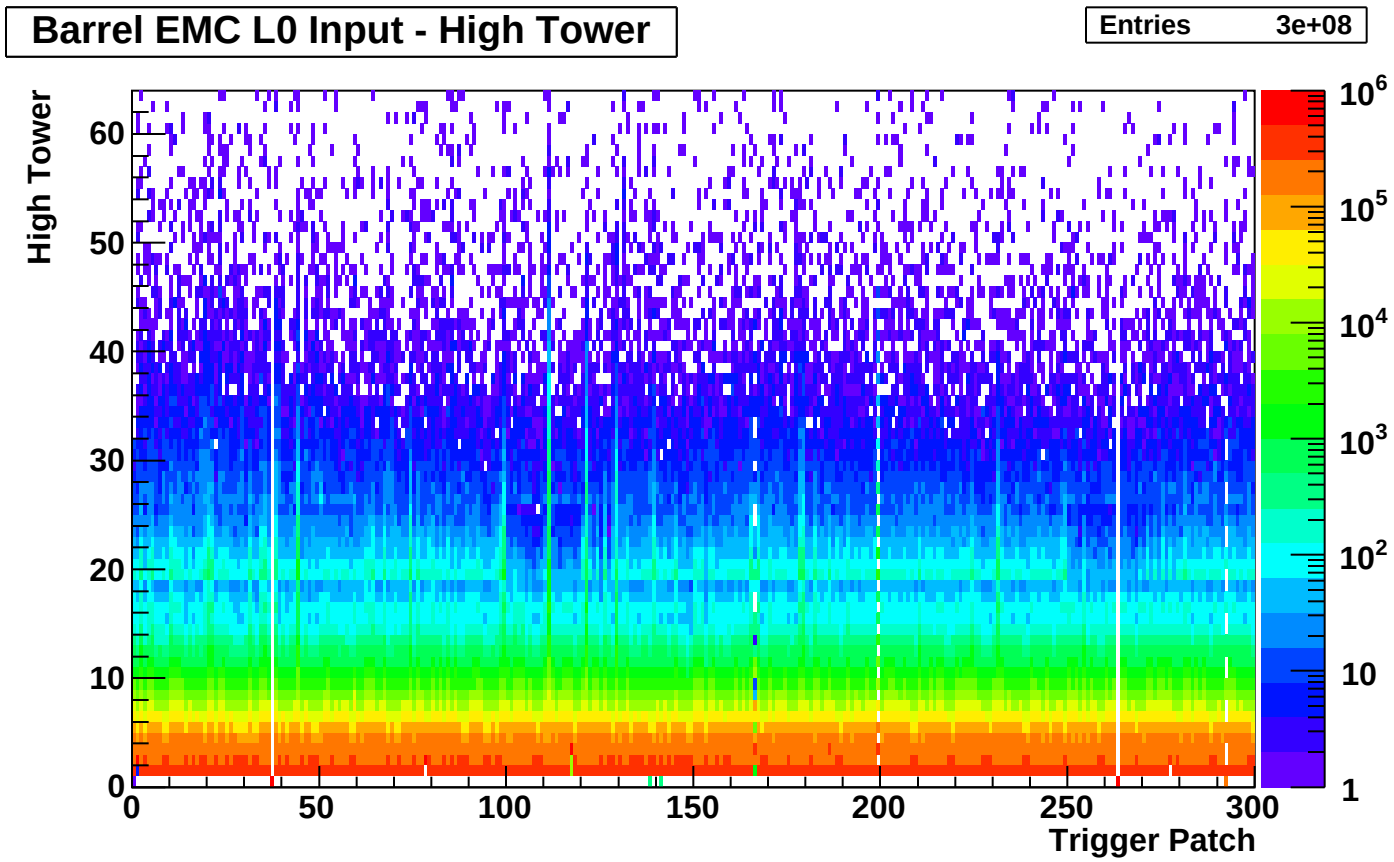

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

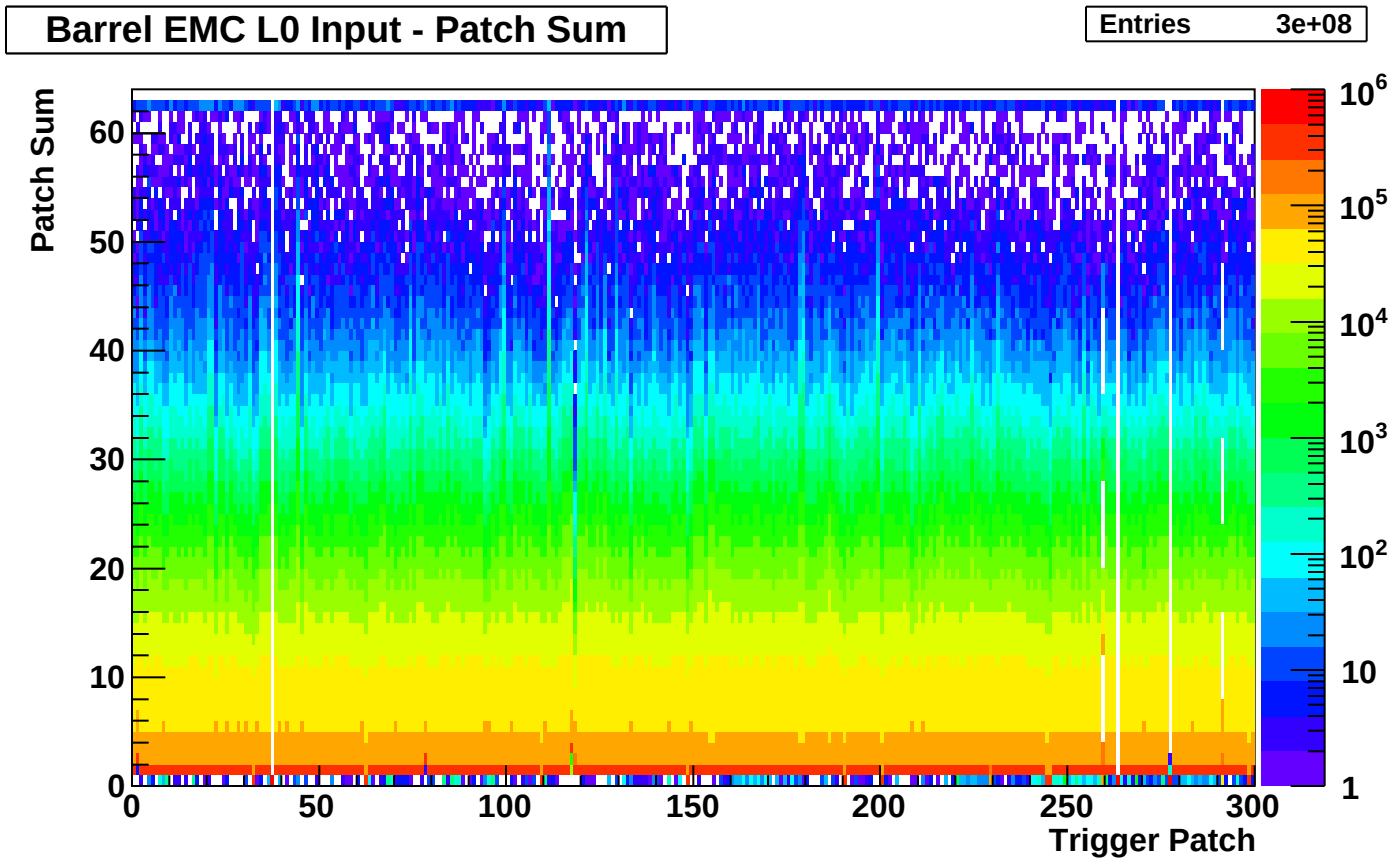

BunchId7Bit (BHT3)
Entries 35824
10^2
10
0
20
40
60
80
100
120

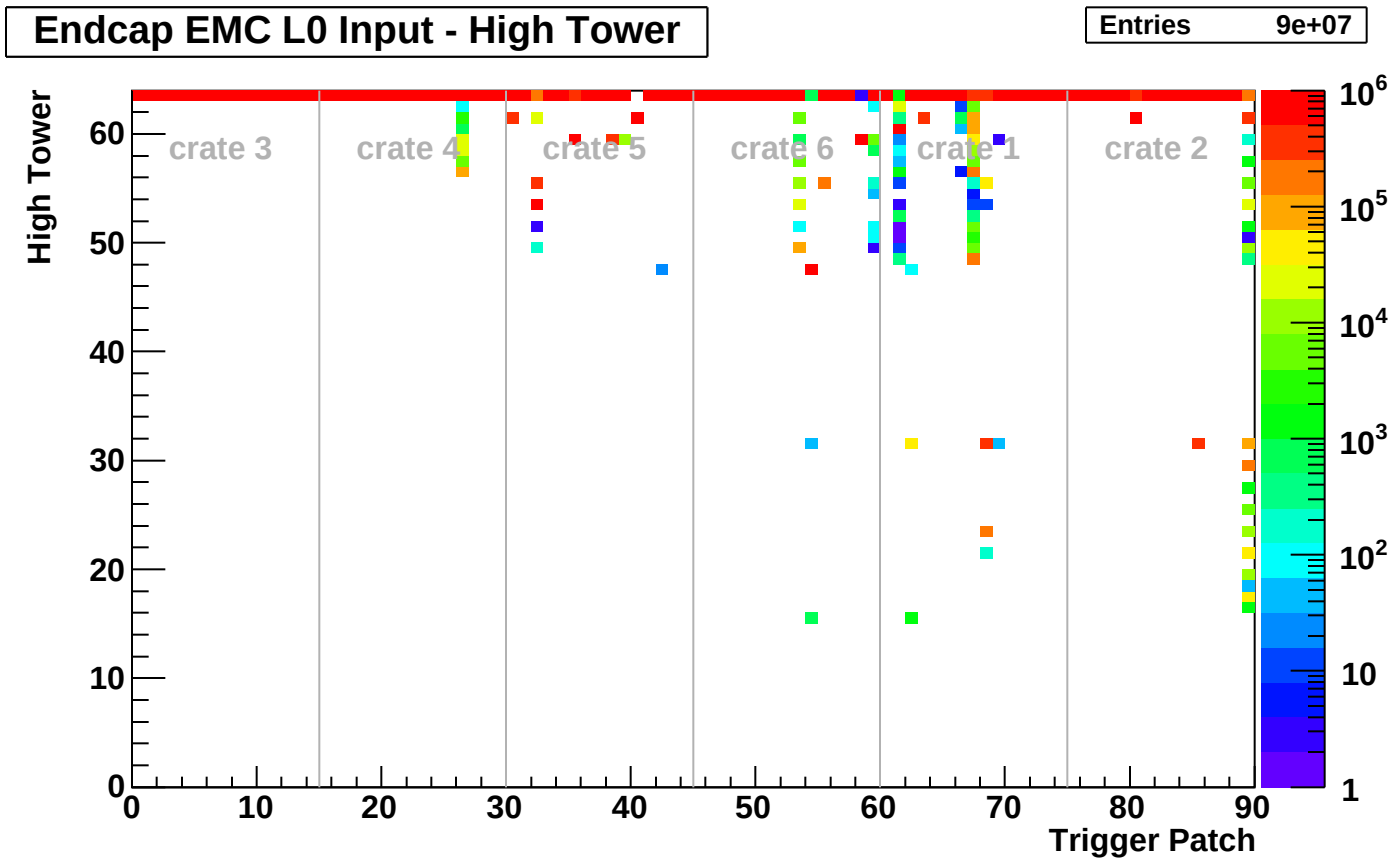

BunchId7Bit (all events)
Entries1000000
10^4
10^3
10^2
0
20
40
60
80
100
120

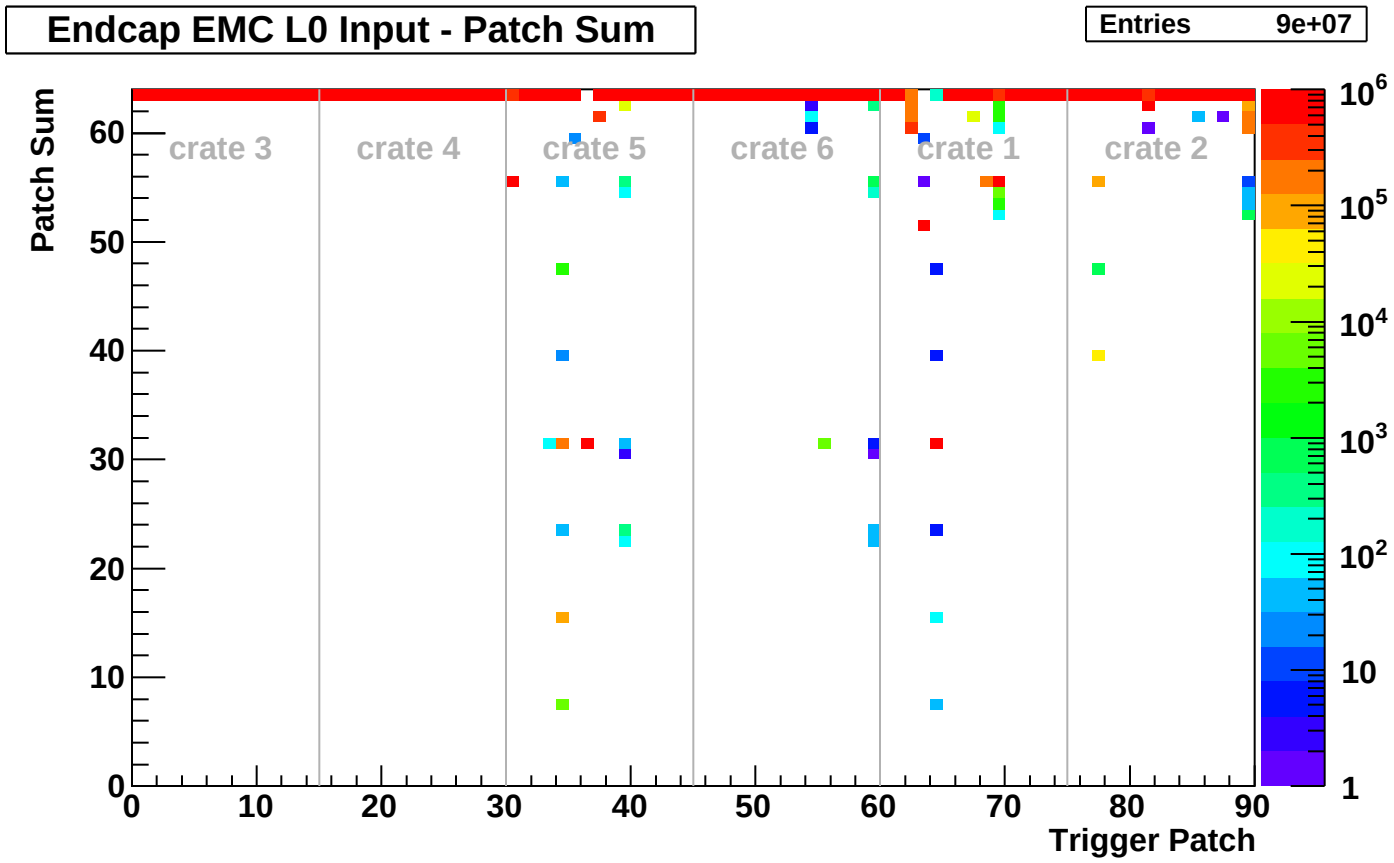

BunchId7Bit (JP1)
Entries1000000
10^4
10^3
10^2
0
20
40
60
80
100
120

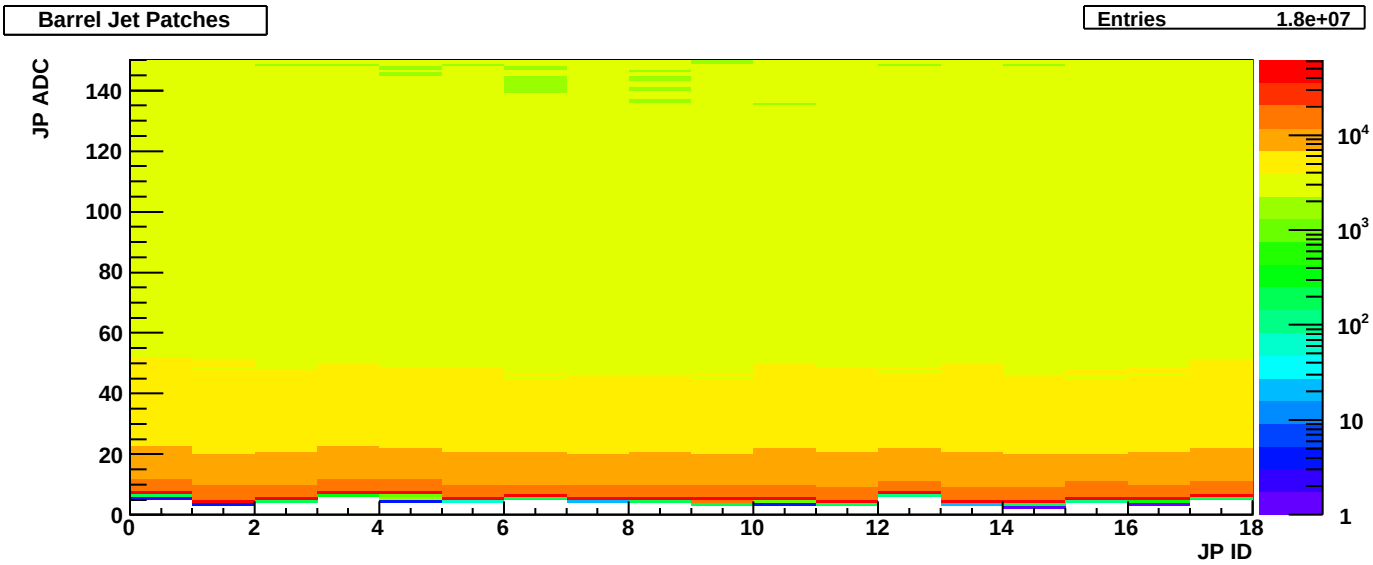

BunchId7Bit (JP2||AJP)
Entries1000000
10^4
10^3
10^2
0
20
40
60
80
100
120

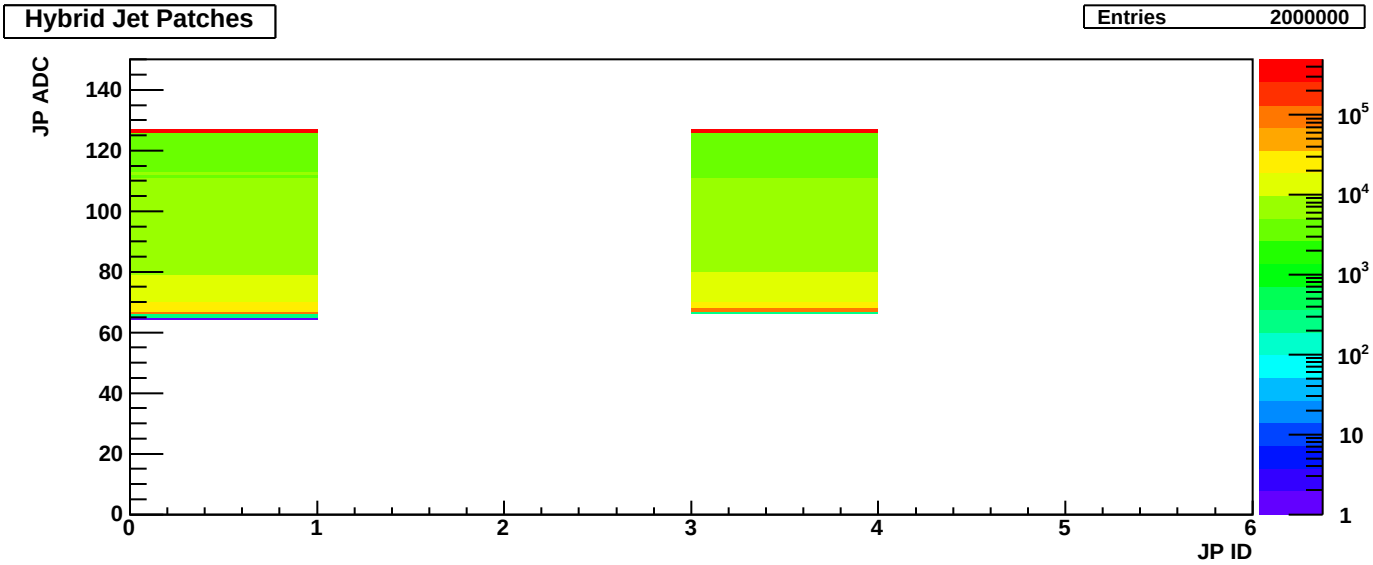

Barrel EMC L0 Input - High Tower
Entries 3e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

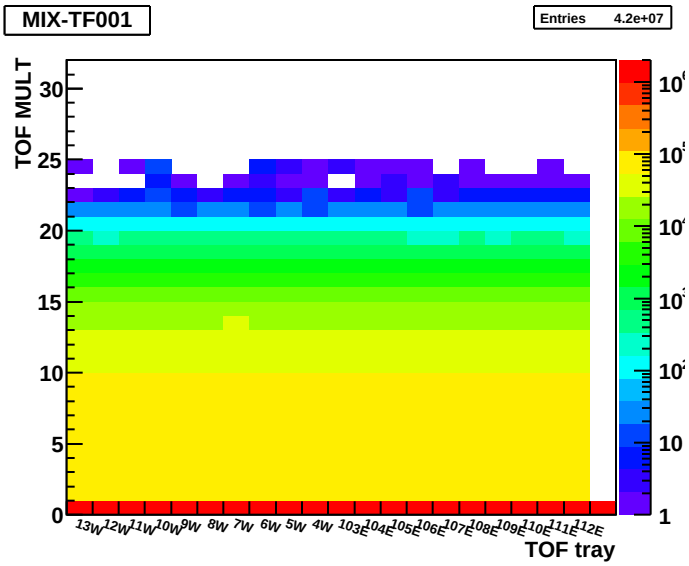

Barrel EMC L0 Input - Patch Sum
Entries 3e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

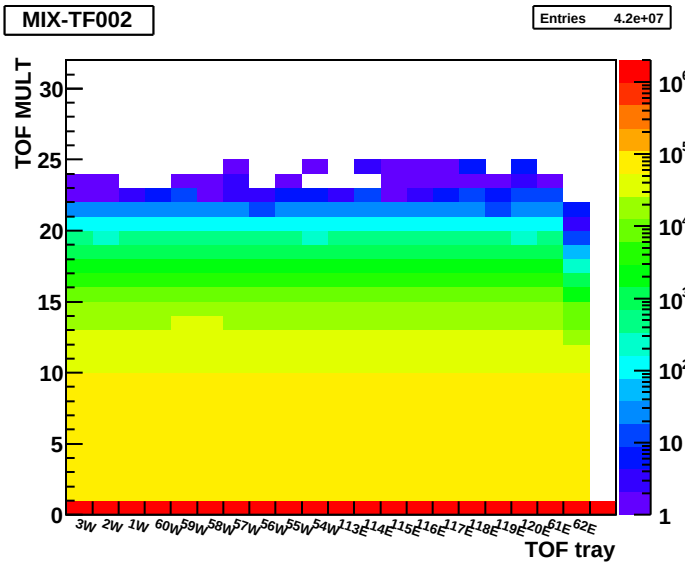

Endcap EMC L0 Input - High Tower
Entries 9e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

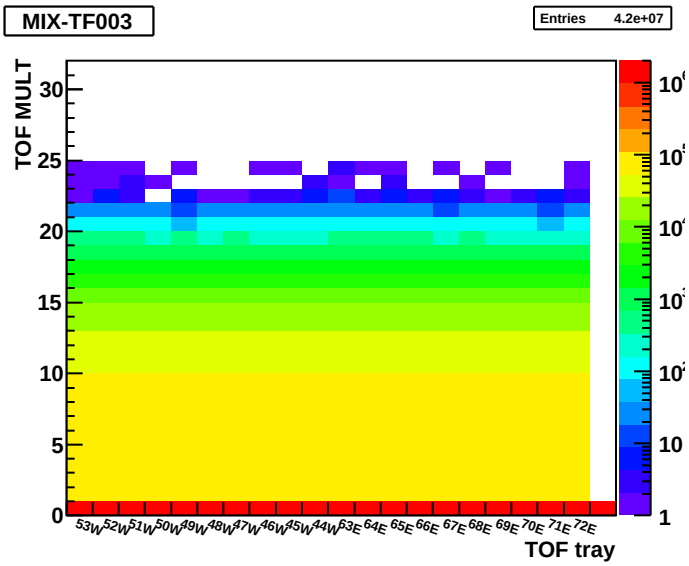

Endcap EMC L0 Input - Patch Sum
Entries 9e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

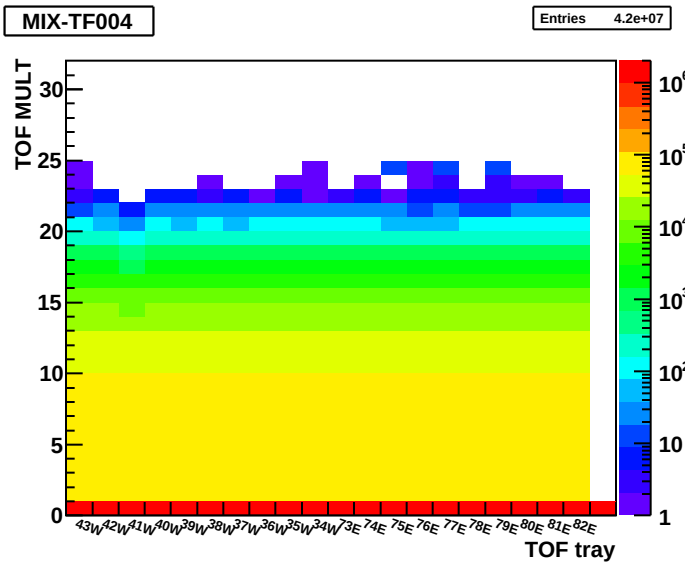

Barrel Jet Patches
Entries 1.8e+07
JP ADC
JP ID

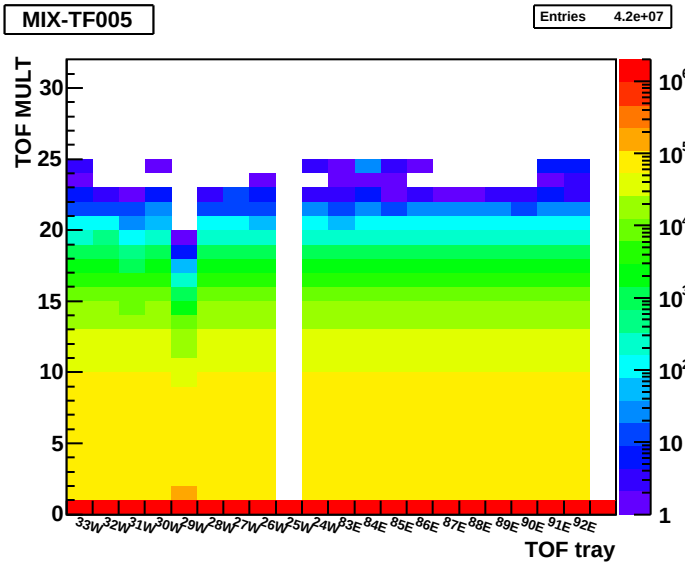

Hybrid Jet Patches
Entries 2000000
JP ADC
JP ID

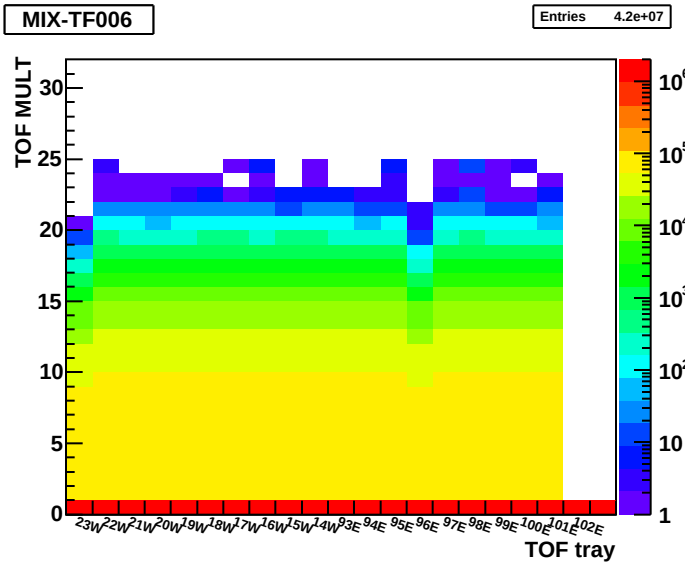

MIX-TF001
Entries 4.2e+07
TOF MULT
TOF tray

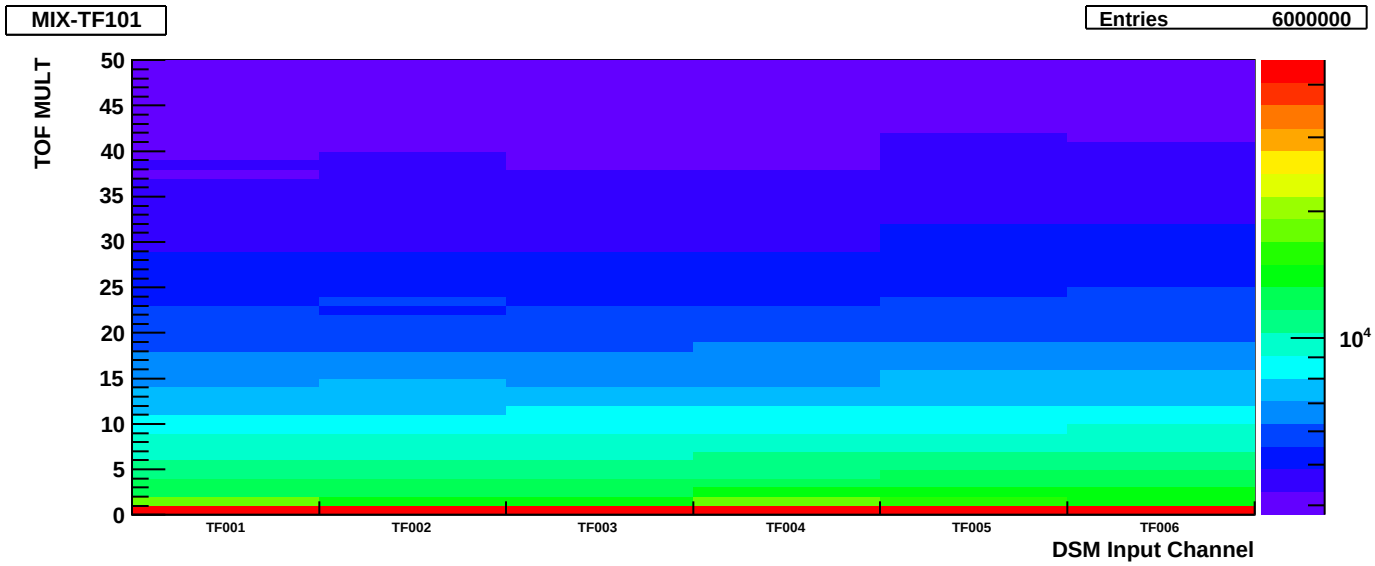

MIX-TF002
Entries 4.2e+07
TOF MULT
TOF tray

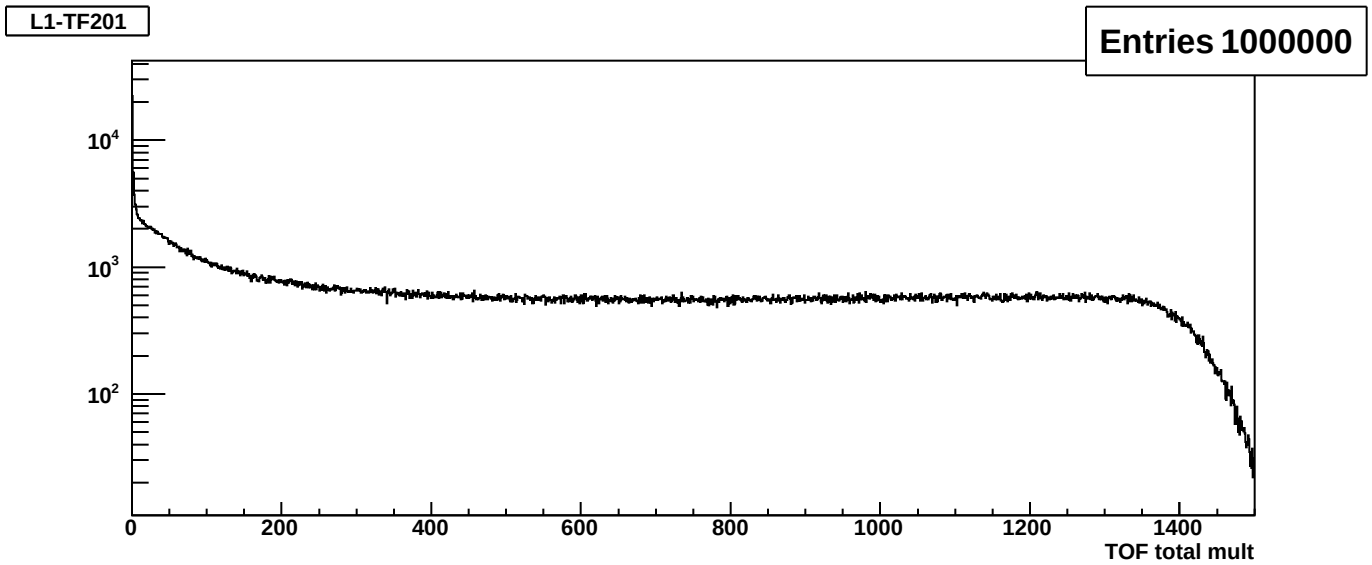

MIX-TF003
Entries 4.2e+07
TOF MULT
TOF tray

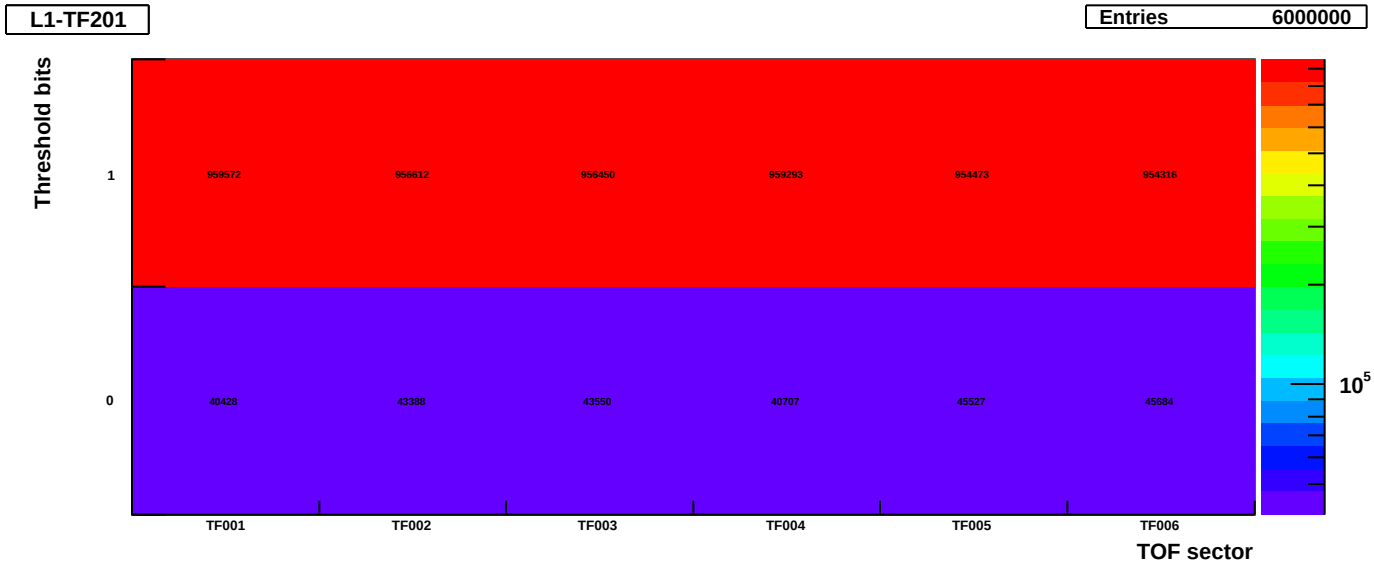

MIX-TF004
Entries 4.2e+07
TOF MULT
TOF tray

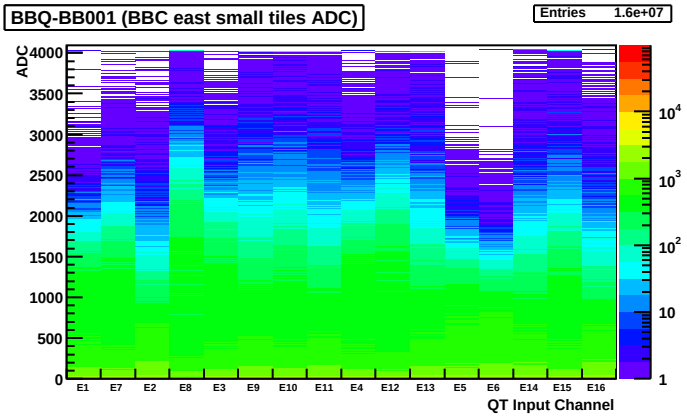

MIX-TF005
Entries 4.2e+07
TOF MULT
TOF tray

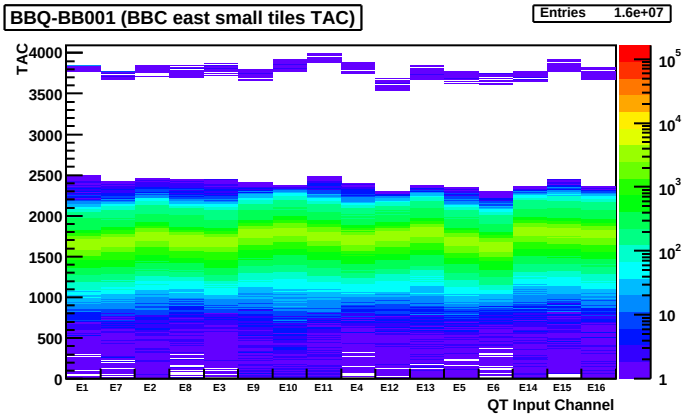

MIX-TF006
Entries 4.2e+07
TOF MULT
TOF tray

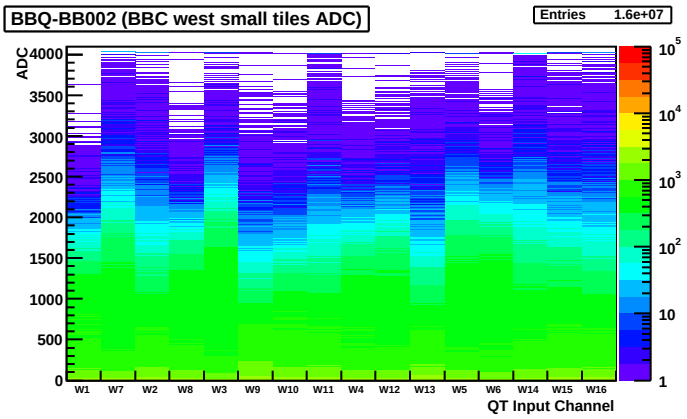

MIX-TF101
Entries 6000000
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4

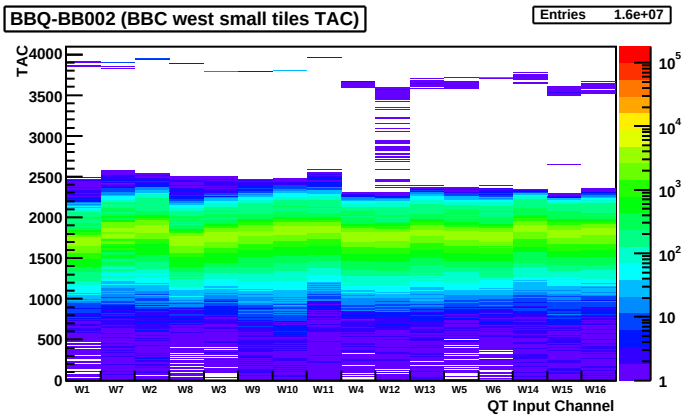

L1-TF201
Entries 1000000
10^4
10^3
10^2
0
200
400
600
800
1000
1200
1400
TOF total mult

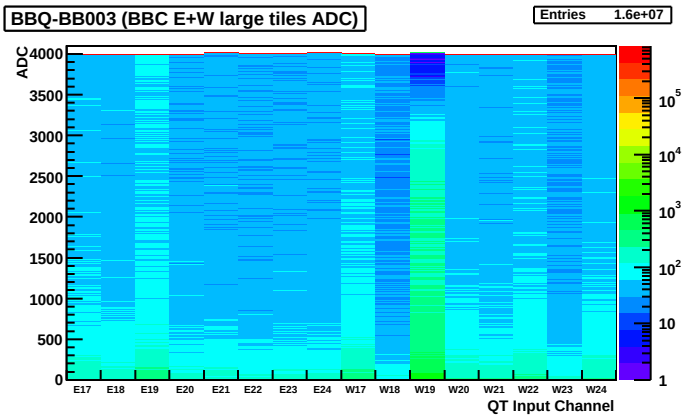

L1-TF201
Entries 6000000
Threshold bits
1
0
959572
956612
956450
959293
954473
954316
40428
43388
43550
40707
45527
45684
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

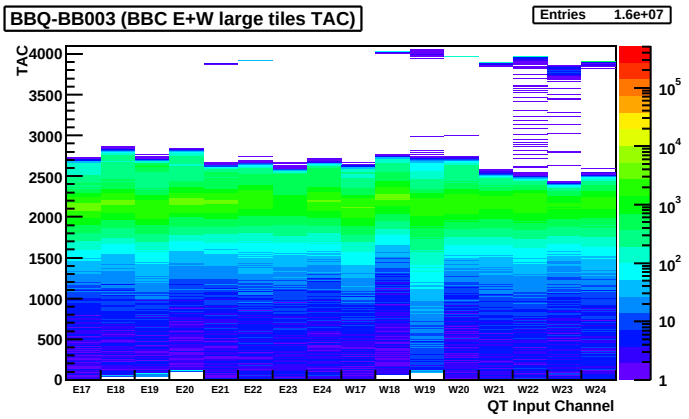

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.6e+07
ADC
QT Input Channel

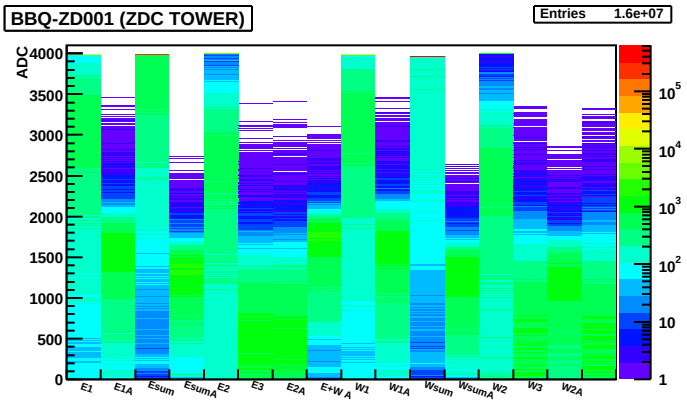

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.6e+07
TAC
QT Input Channel

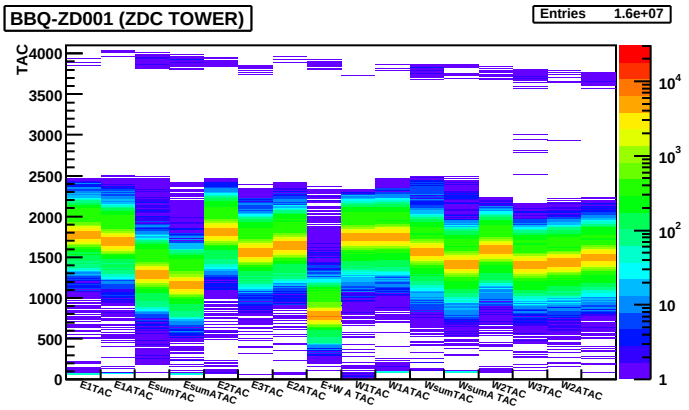

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.6e+07
ADC
QT Input Channel

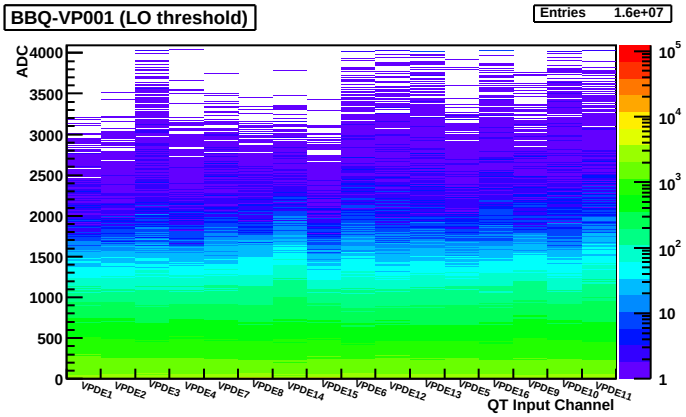

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.6e+07
TAC
QT Input Channel

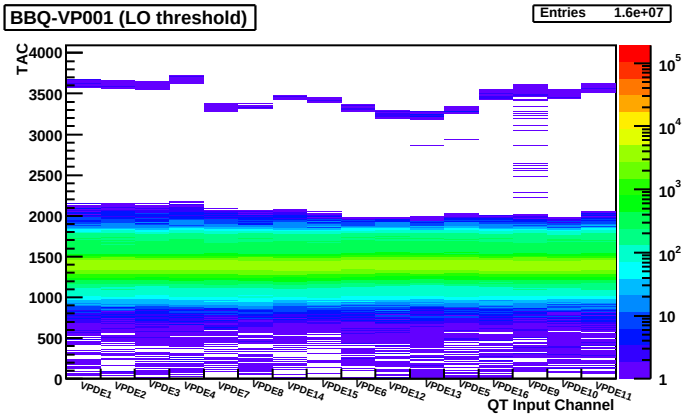

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.6e+07
ADC
QT Input Channel

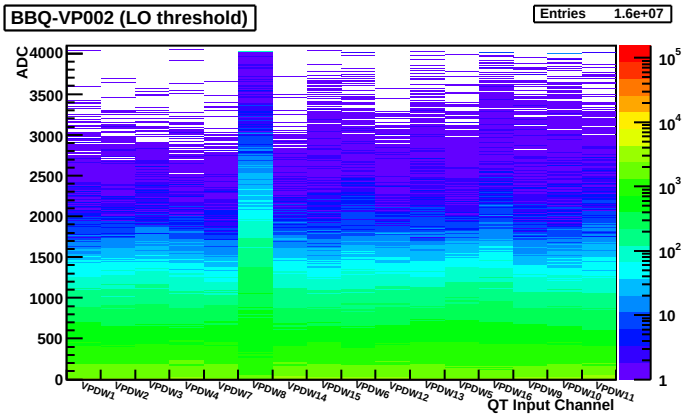

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.6e+07
TAC
QT Input Channel

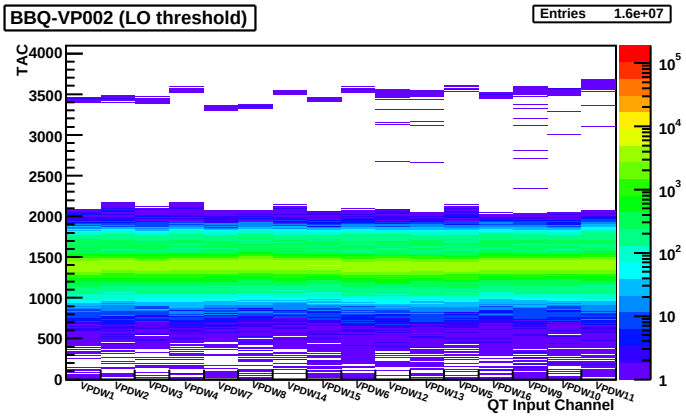

BBQ-ZD001 (ZDC TOWER)
Entries 1.6e+07
ADC

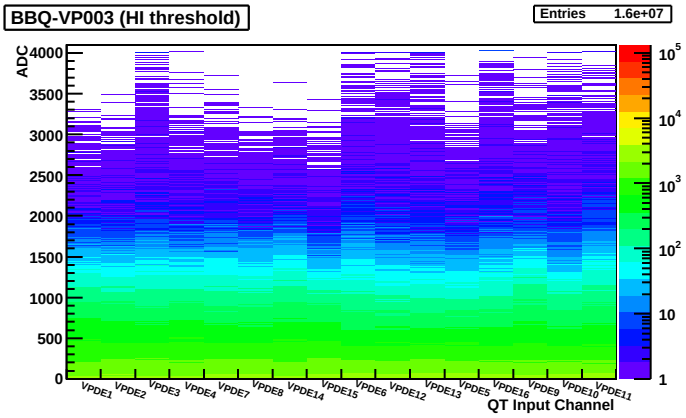

BBQ-ZD001 (ZDC TOWER)
Entries 1.6e+07
TAC

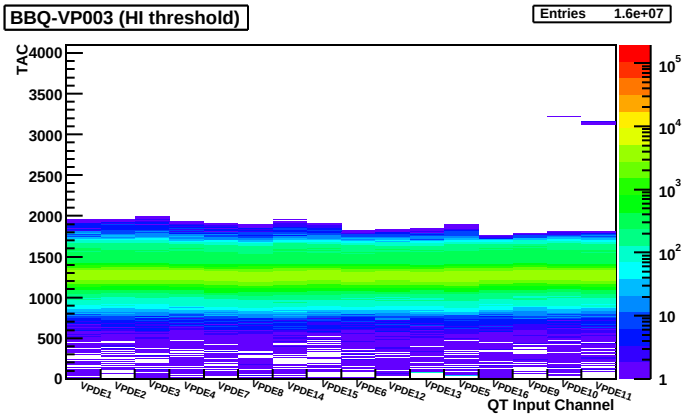

BBQ-VP001 (LO threshold)
Entries 1.6e+07
ADC
QT Input Channel

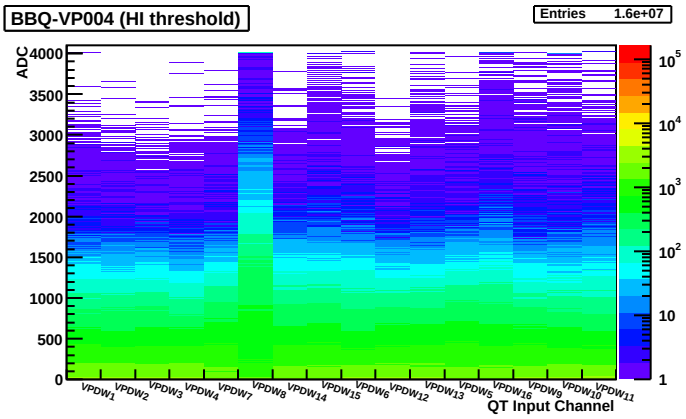

BBQ-VP001 (LO threshold)
Entries 1.6e+07
TAC
QT Input Channel

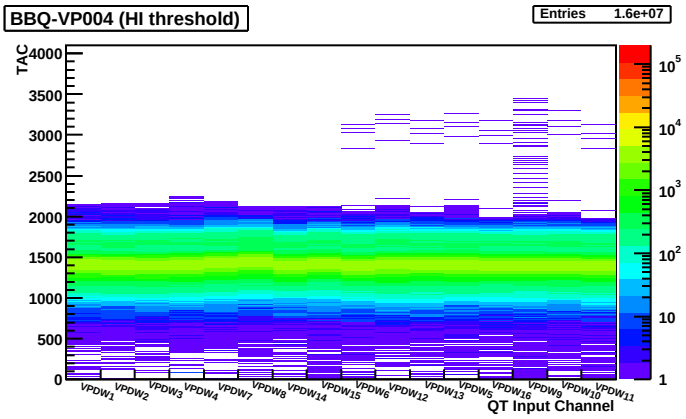

BBQ-VP002 (LO threshold)
Entries 1.6e+07
ADC
QT Input Channel

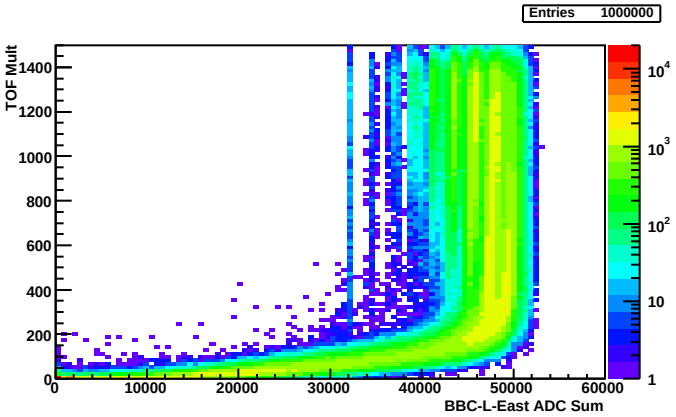

BBQ-VP002 (LO threshold)
Entries 1.6e+07
TAC
QT Input Channel

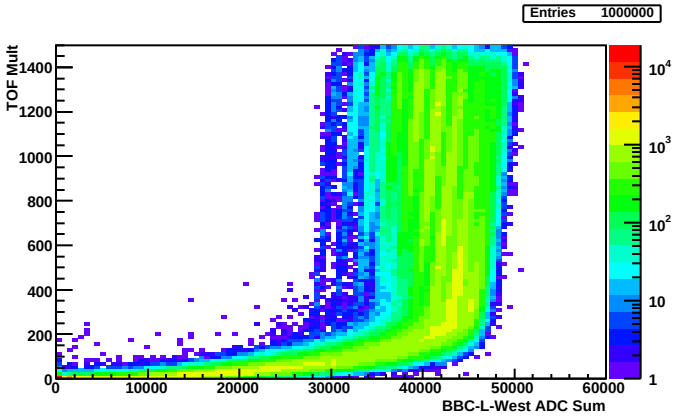

BBQ-VP003 (HI threshold)
Entries 1.6e+07
ADC
QT Input Channel

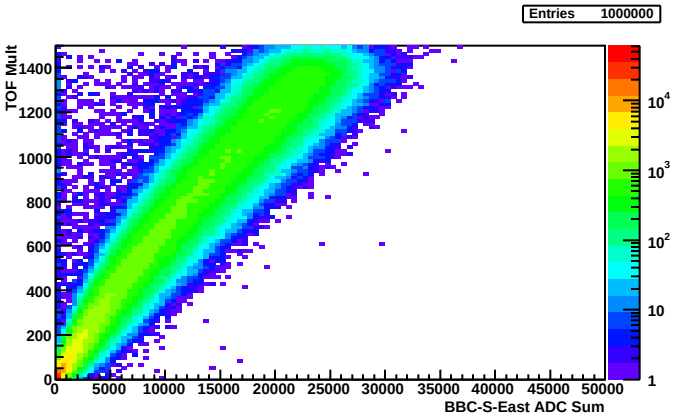

BBQ-VP003 (HI threshold)
Entries 1.6e+07
TAC
QT Input Channel

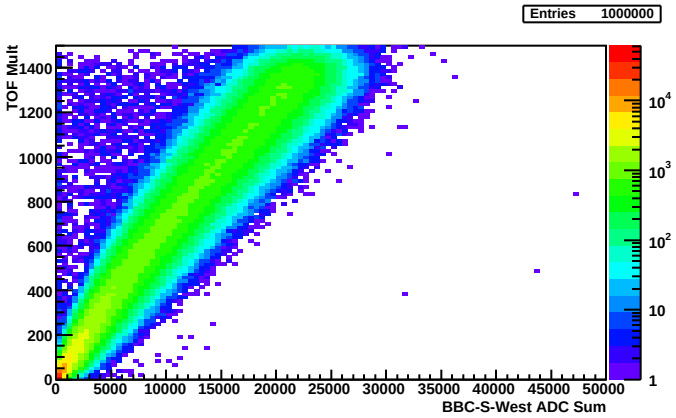

BBQ-VP004 (HI threshold)
Entries 1.6e+07
ADC
QT Input Channel

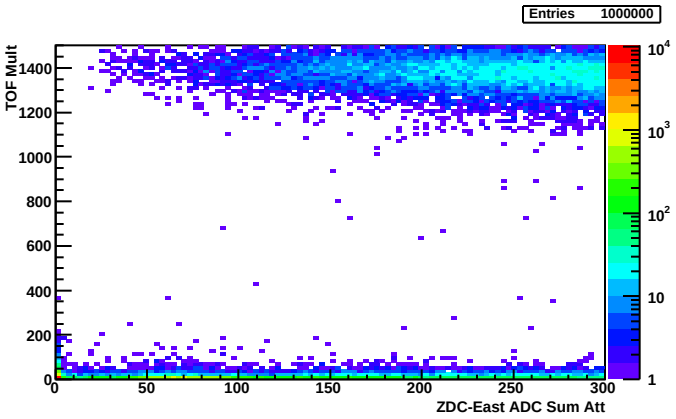

BBQ-VP004 (HI threshold)
Entries 1.6e+07
TAC
QT Input Channel

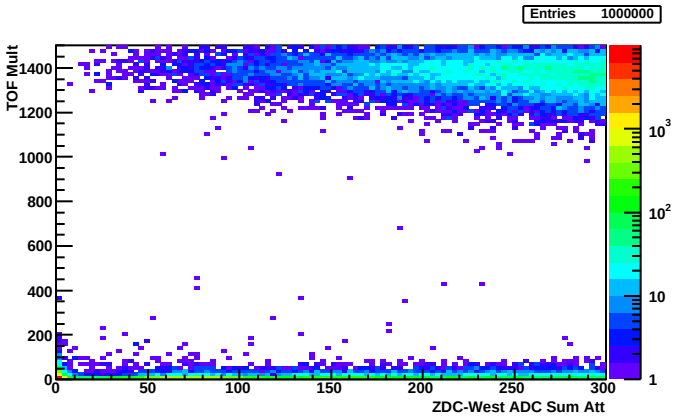

Entries 1000000
TOF Mult
BBC-L-East ADC Sum

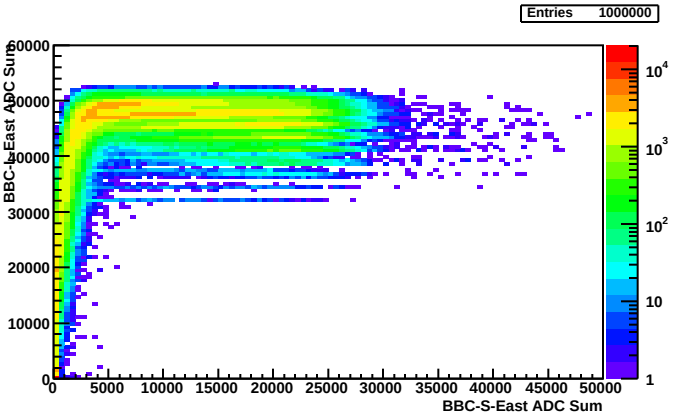

Entries 1000000
TOF Mult
BBC-L-West ADC Sum

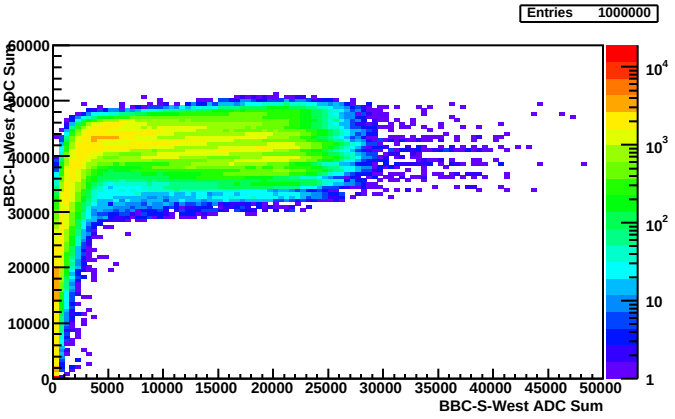

Entries 1000000
TOF Mult
BBC-S-East ADC Sum

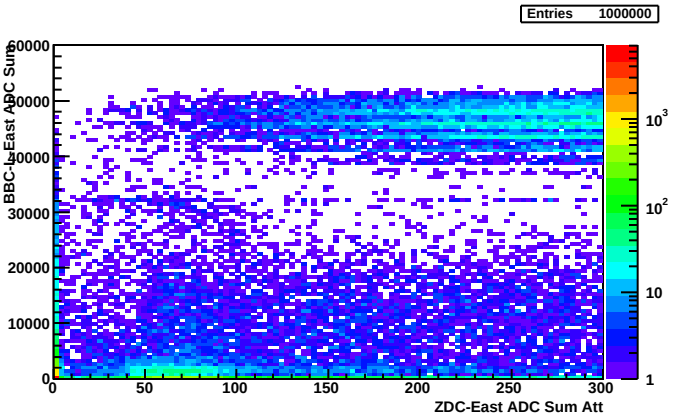

Entries 1000000
TOF Mult
BBC-S-West ADC Sum

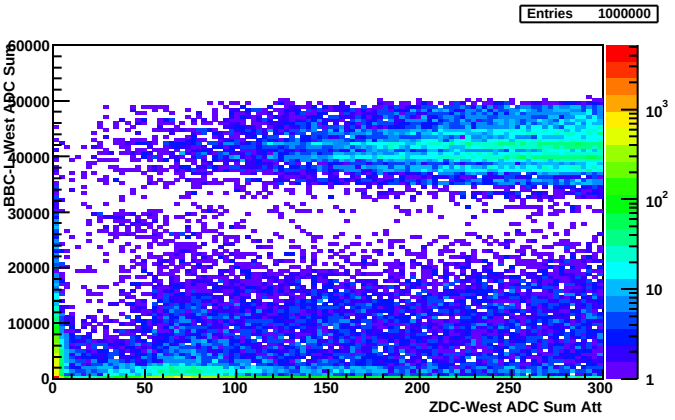

Entries 1000000
TOF Mult
ZDC-East ADC Sum Att

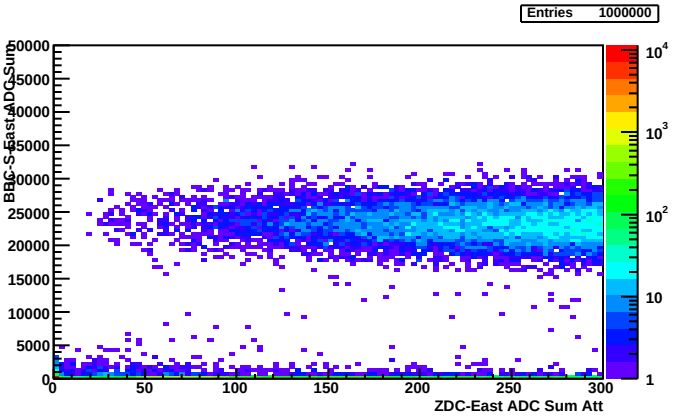

Entries 1000000
TOF Mult
ZDC-West ADC Sum Att

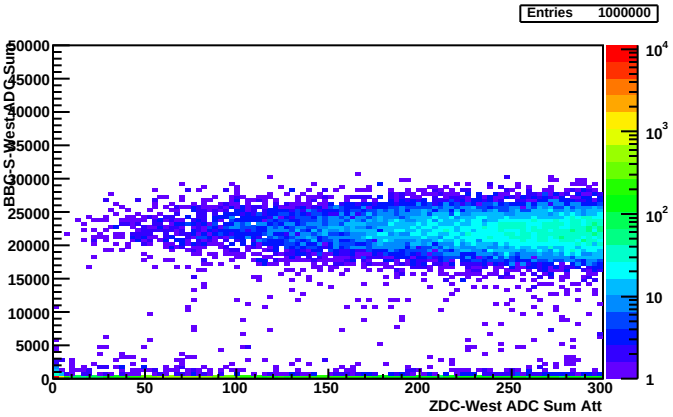

Entries 1000000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

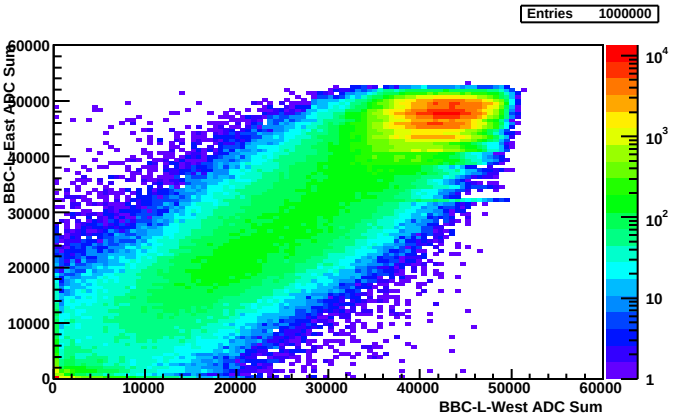

Entries 1000000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

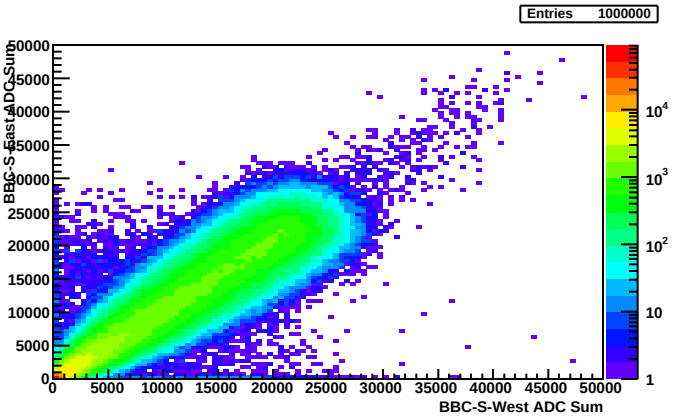

Entries 1000000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

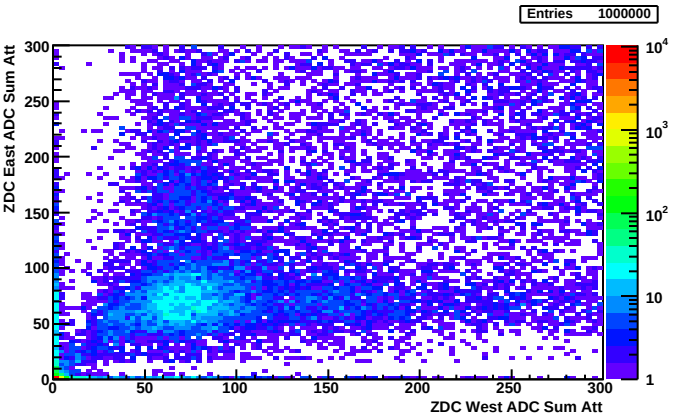

Entries 1000000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

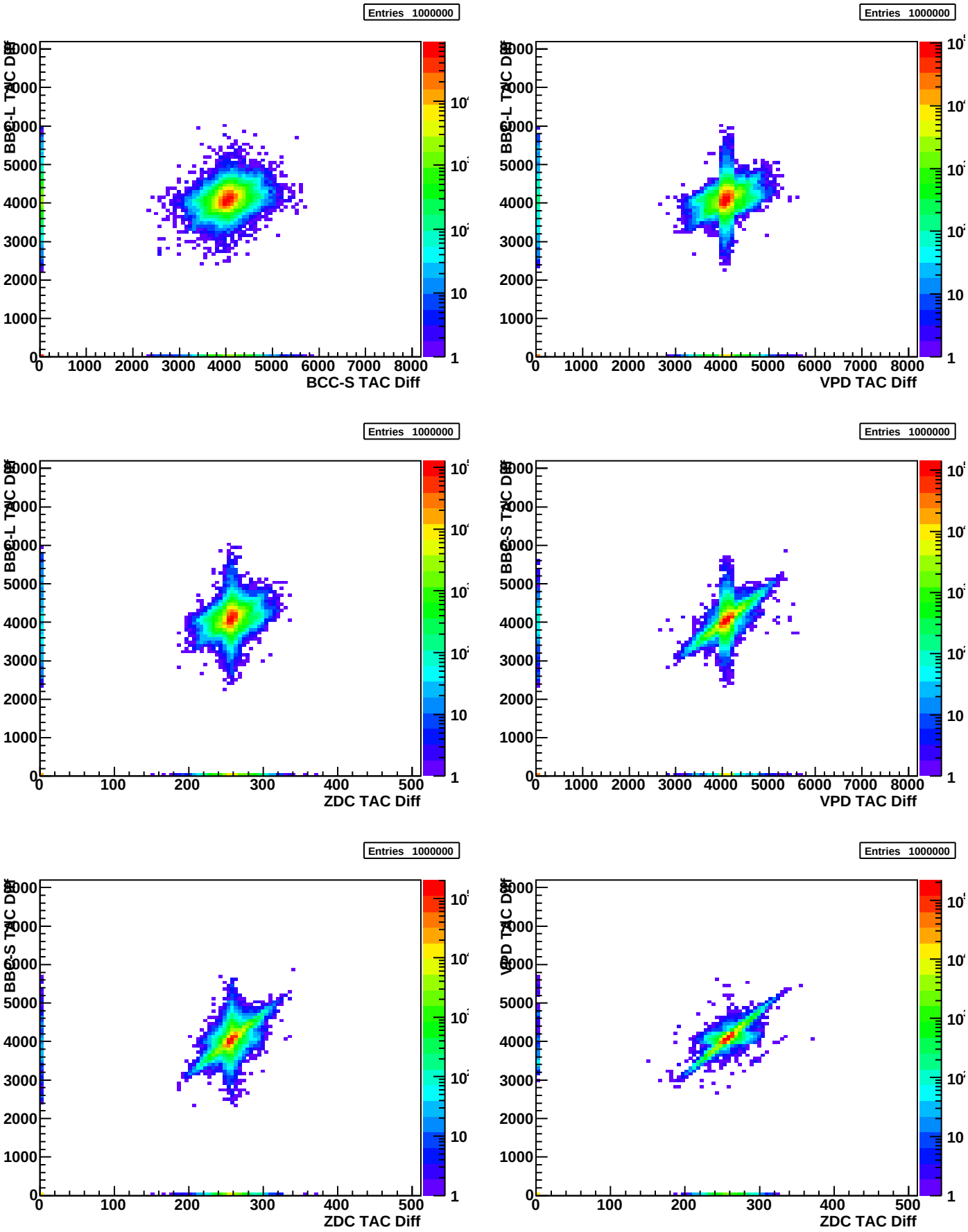

Entries 1000000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

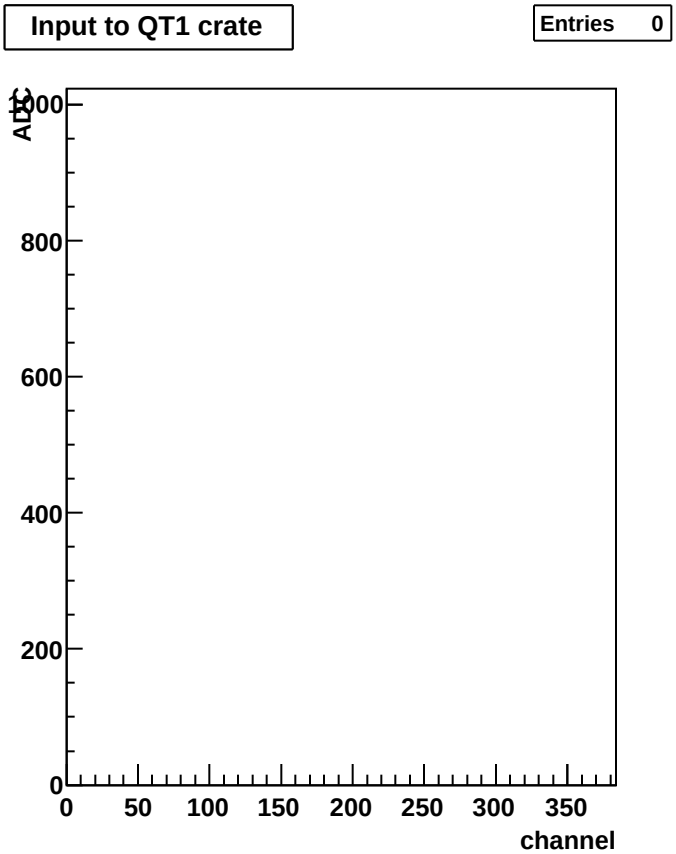

Entries 1000000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

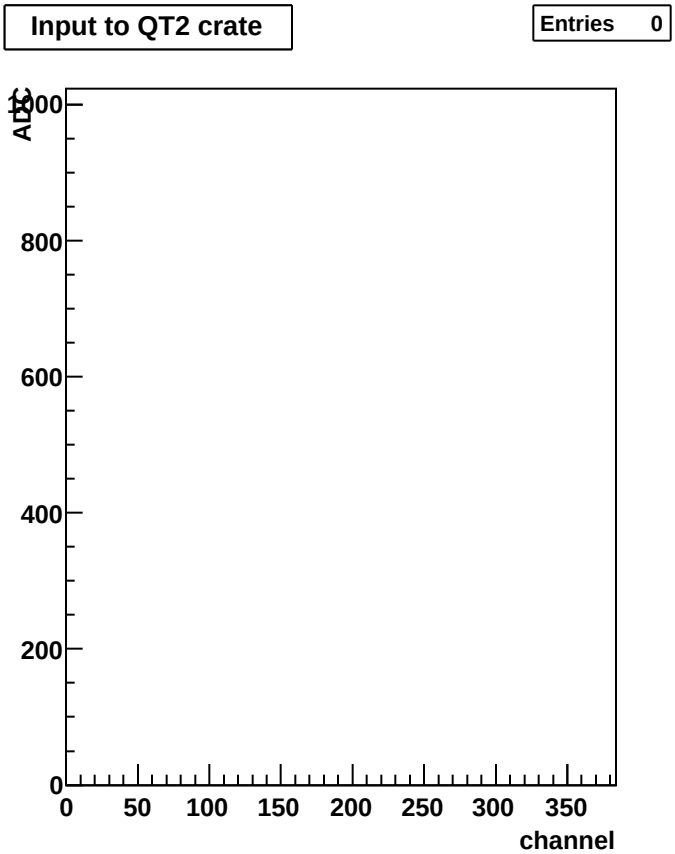

Entries 1000000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

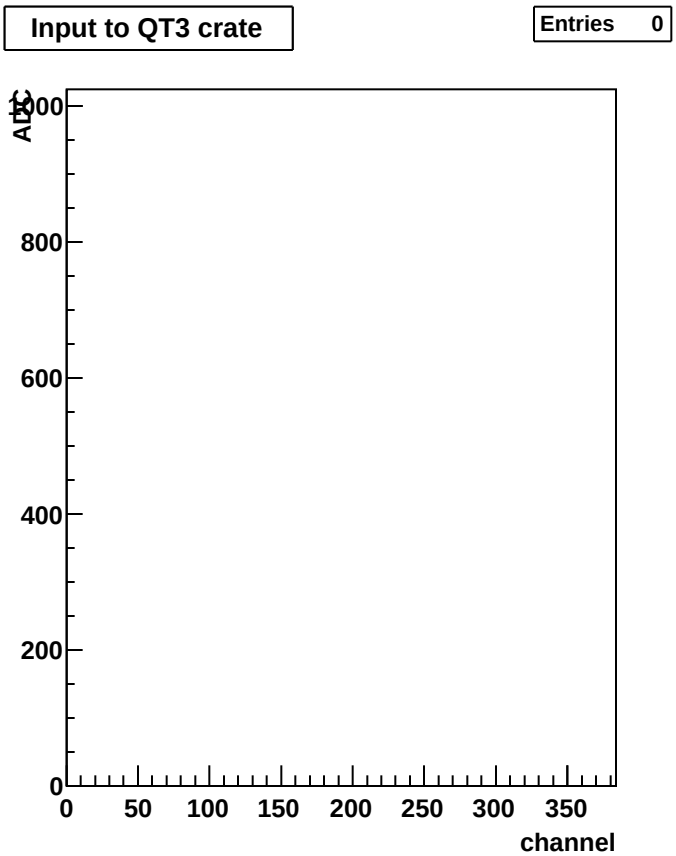

Entries 1000000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

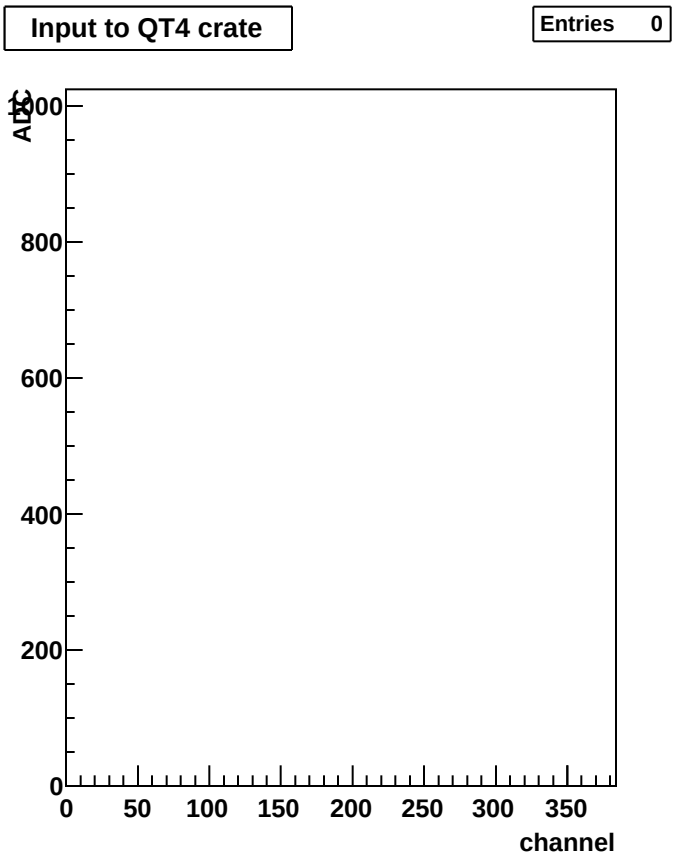

Entries 1000000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

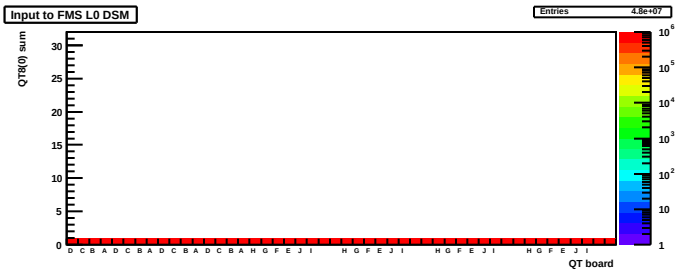

Entries 1000000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1000000
BBC-L TAC Diff
VPD TAC Diff
Entries 1000000
BBC-L TAC Diff
ZDC TAC Diff
Entries 1000000
BBC-S TAC Diff
VPD TAC Diff
Entries 1000000
BBC-S TAC Diff
ZDC TAC Diff
Entries 1000000
VPD TAC Diff
ZDC TAC Diff

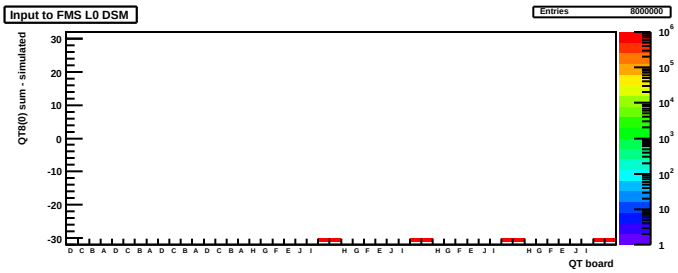

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

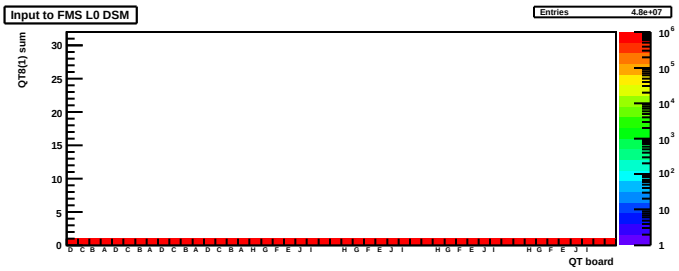

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

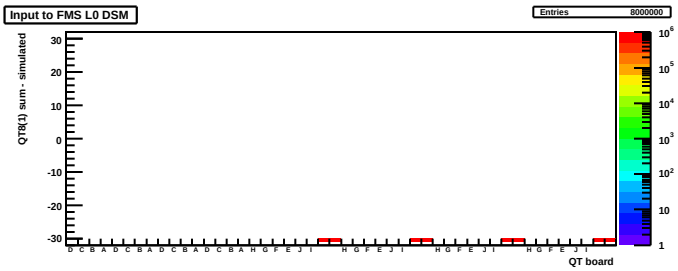

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

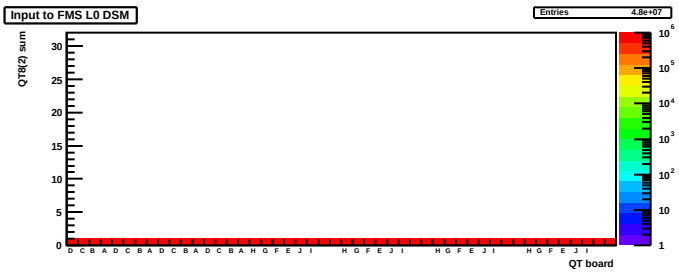

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

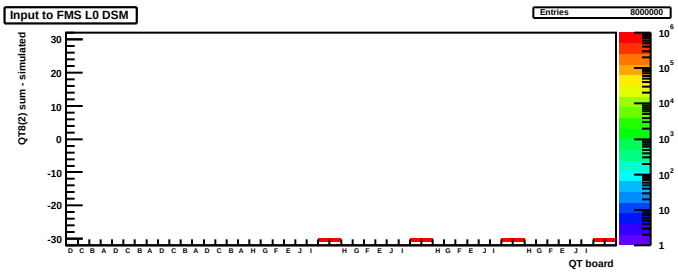

Input to FMS L0 DSM
Entries 4.8e+07
QT8(0) sum
QT board

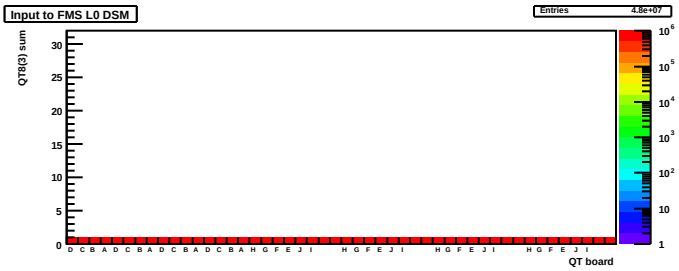

Input to FMS L0 DSM
Entries 8000000
QT8(0) sum - simulated
QT board

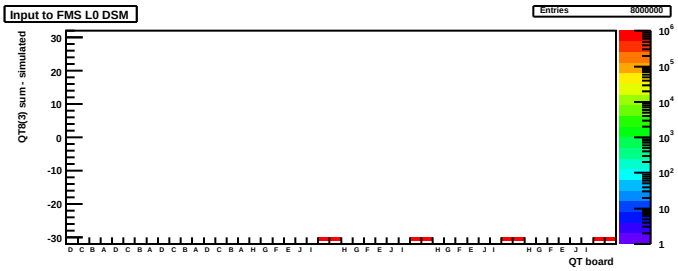

Input to FMS L0 DSM
Entries 4.8e+07
QT8(1) sum
QT board

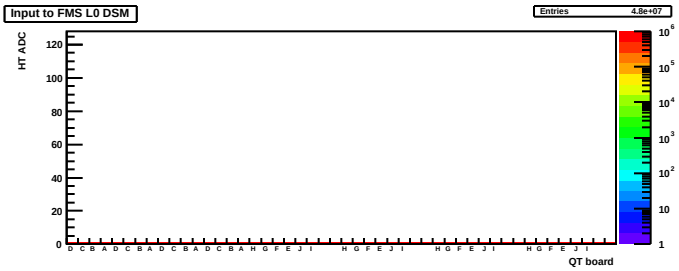

Input to FMS L0 DSM
Entries 8000000
QT8(1) sum - simulated
QT board

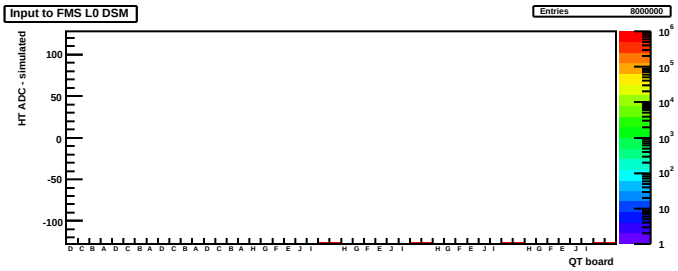

Input to FMS L0 DSM
Entries 4.8e+07
QT8(2) sum
QT board

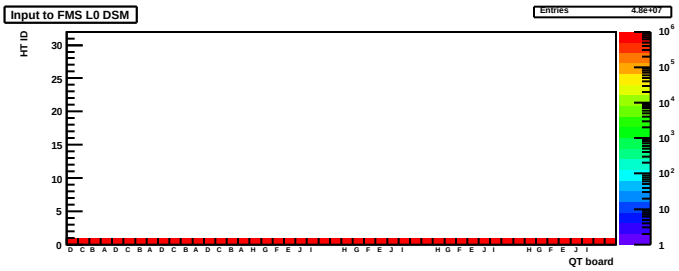

Input to FMS L0 DSM
Entries 8000000
QT8(2) sum - simulated
QT board

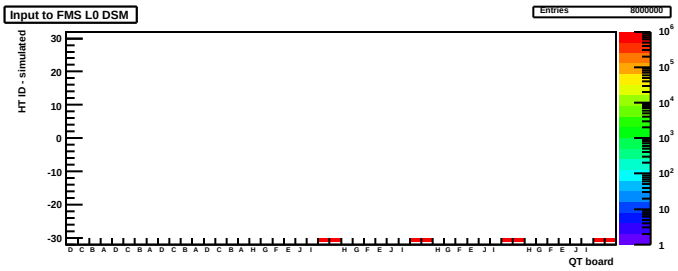

Input to FMS L0 DSM
Entries 4.8e+07
QT8(3) sum
QT board

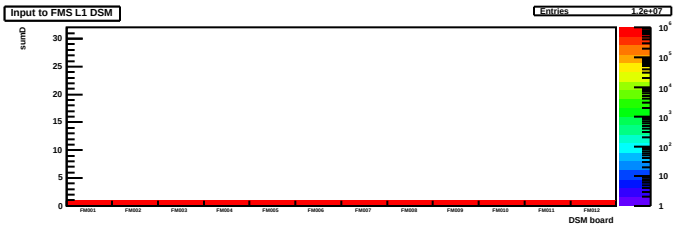

Input to FMS L0 DSM
Entries 8000000
QT8(3) sum - simulated
QT board

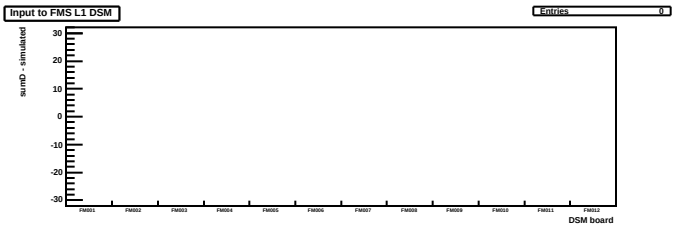

Input to FMS L0 DSM
Entries 4.8e+07
HT ADC
QT board

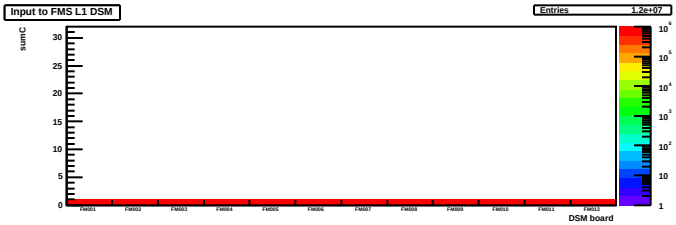

Input to FMS L0 DSM
Entries 8000000
HT ADC - simulated
QT board

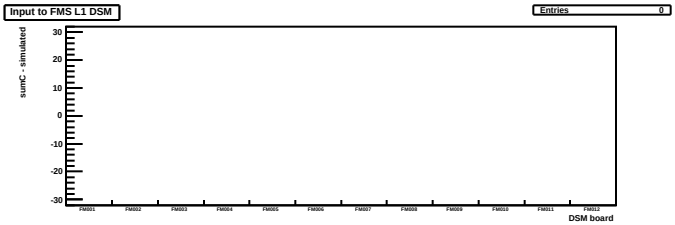

Input to FMS L0 DSM
Entries 4.8e+07
HT ID
QT board

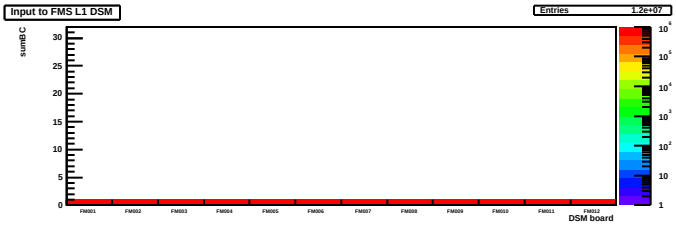

Input to FMS L0 DSM
Entries 8000000
HT ID - simulated
QT board

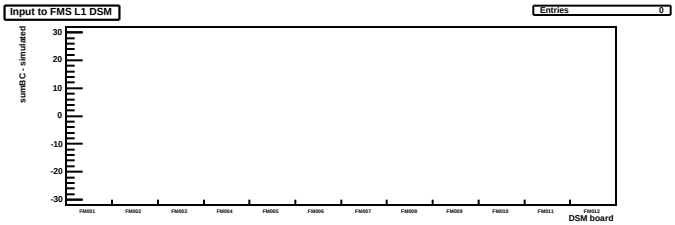

Input to FMS L1 DSM
Entries 1.2e+07
sumD
DSM board

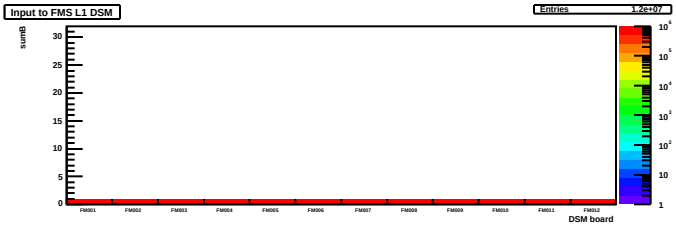

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

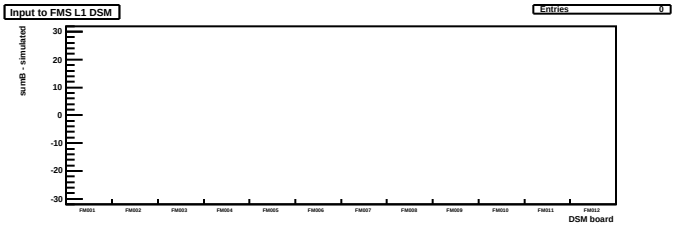

Input to FMS L1 DSM
Entries 1.2e+07
sumC
DSM board

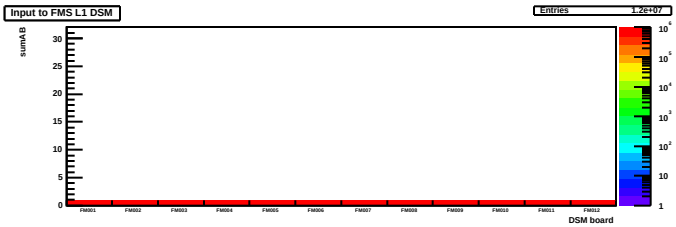

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

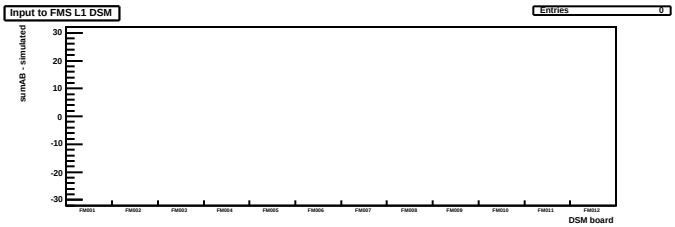

Input to FMS L1 DSM
Entries 1.2e+07
sumBC
DSM board

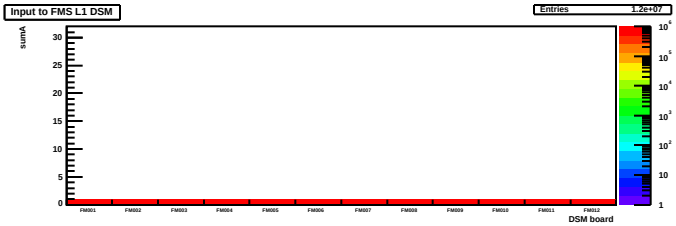

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

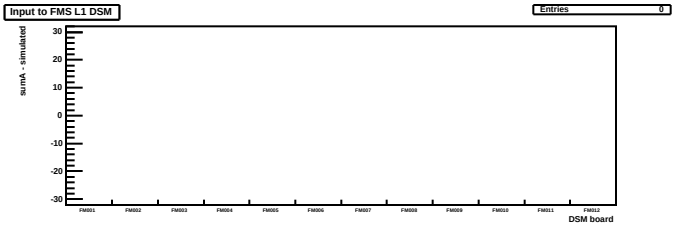

Input to FMS L1 DSM
Entries 1.2e+07
sumB
DSM board

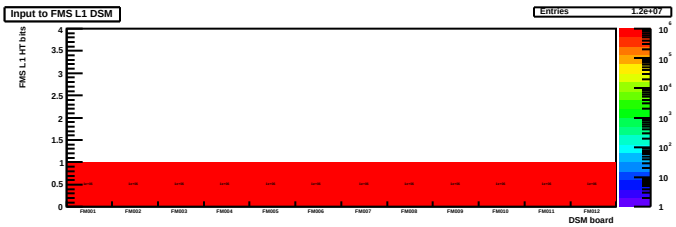

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

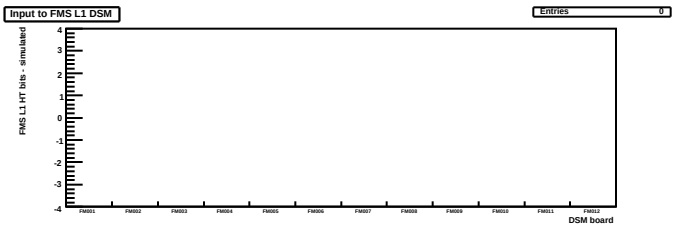

Input to FMS L1 DSM
Entries 1.2e+07
sumAB
DSM board

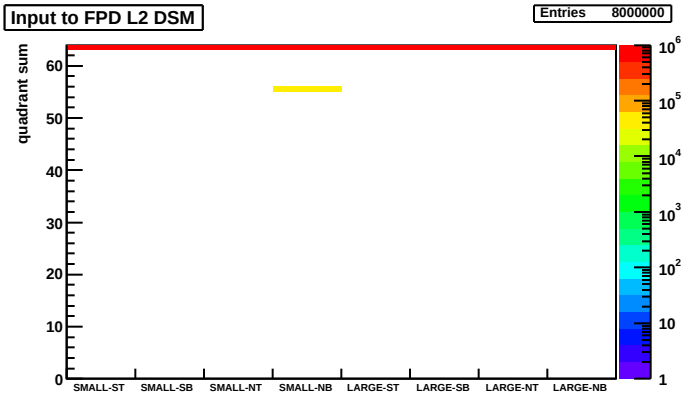

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

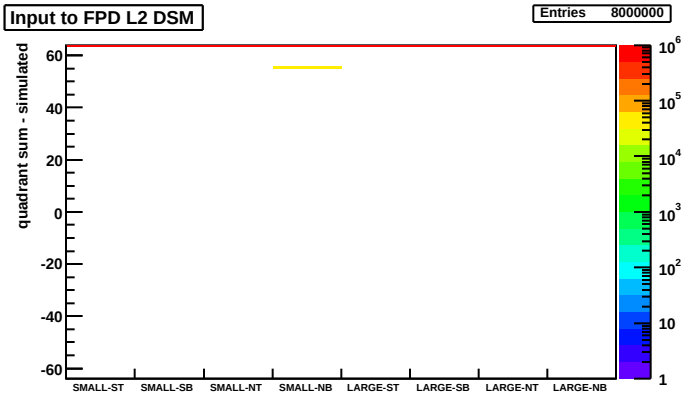

Input to FMS L1 DSM
Entries 1.2e+07
sumA
DSM board

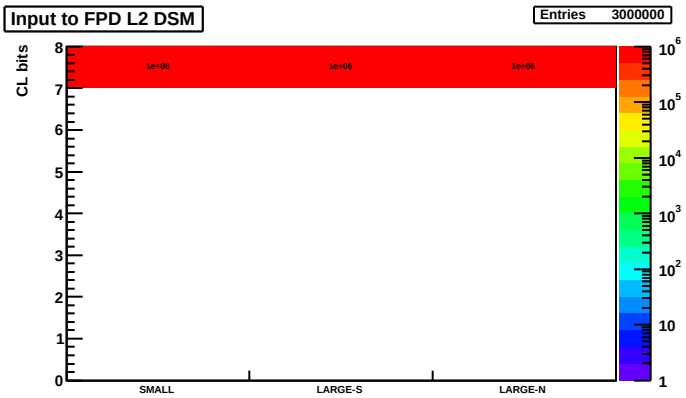

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

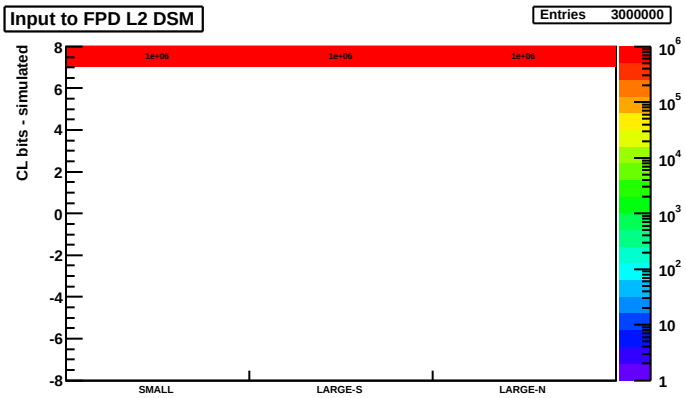

Input to FMS L1 DSM
Entries 1.2e+07
FMS L1 HT bits
DSM board

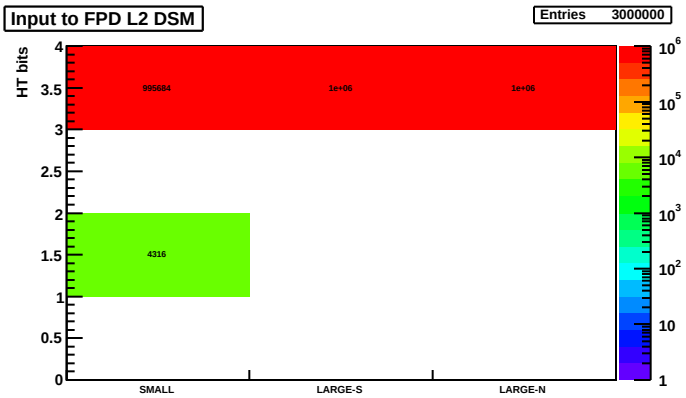

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

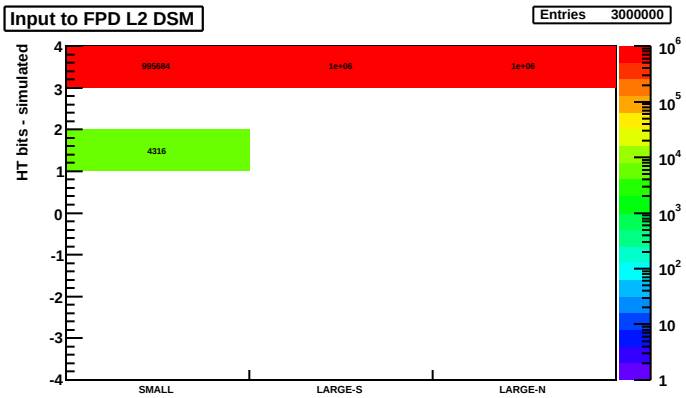

Input to FPD L2 DSM
Entries 8000000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

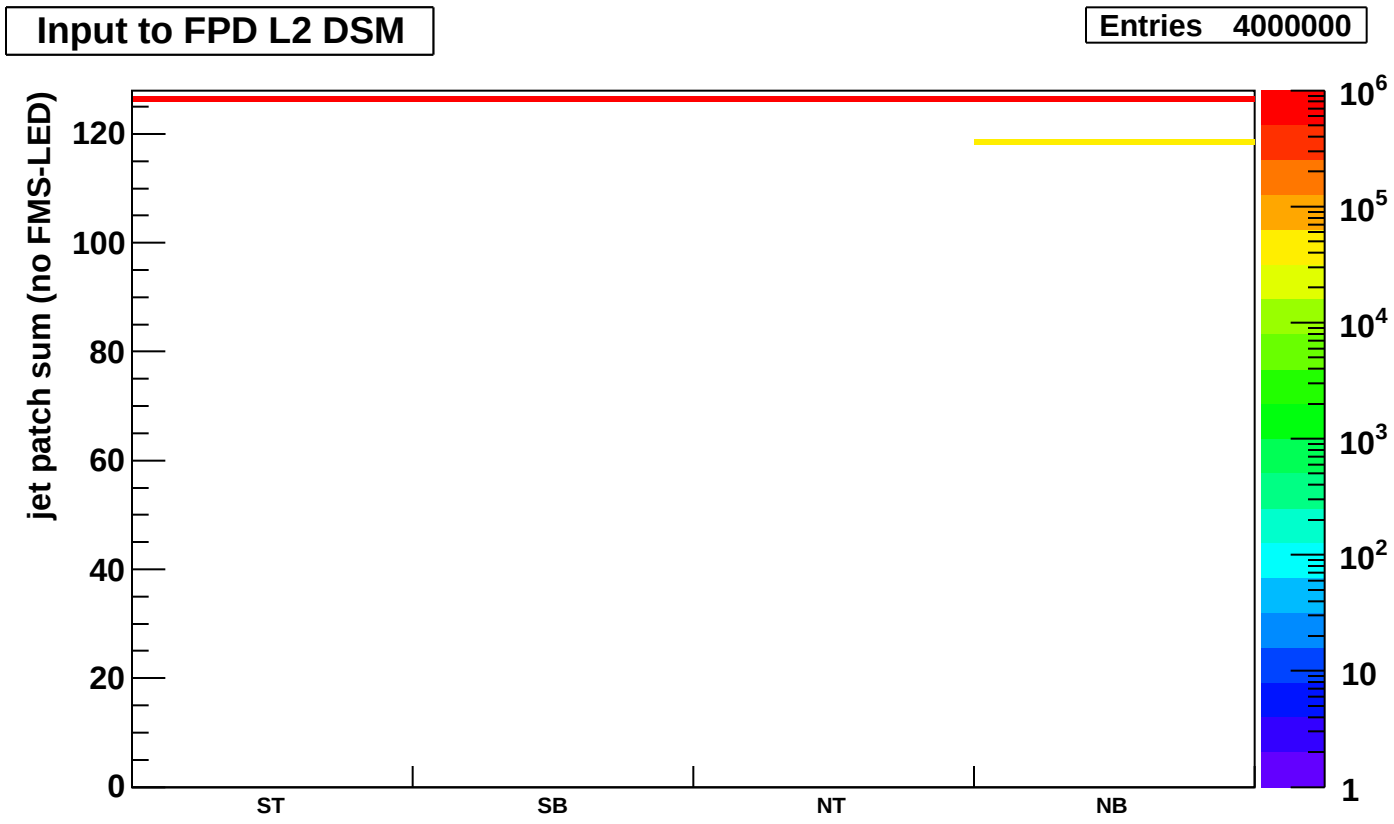

Input to FPD L2 DSM
Entries 8000000
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

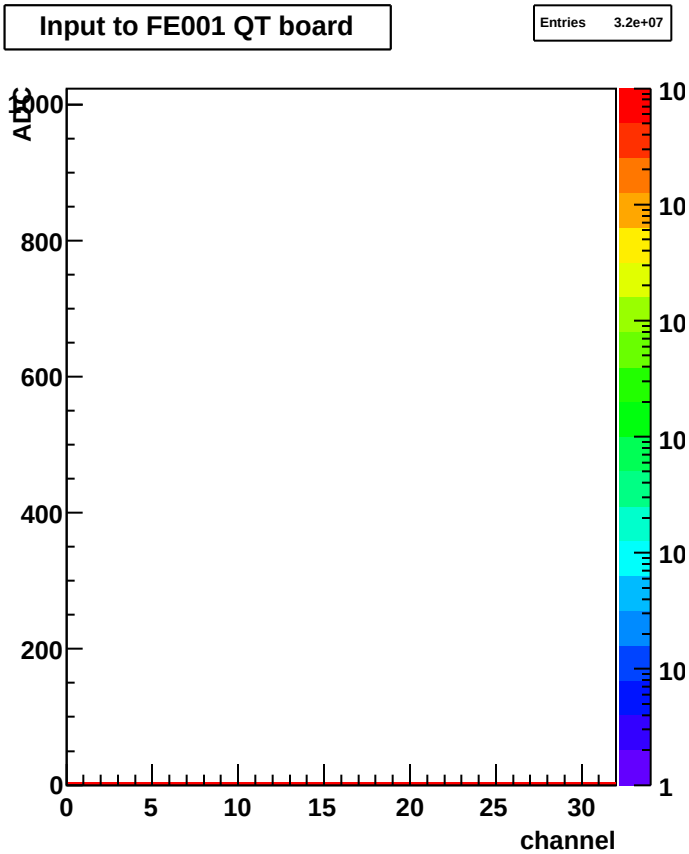

Input to FPD L2 DSM
Entries 3000000
CL bits
1e+06
1e+06
1e+06
SMALL
LARGE-S
LARGE-N

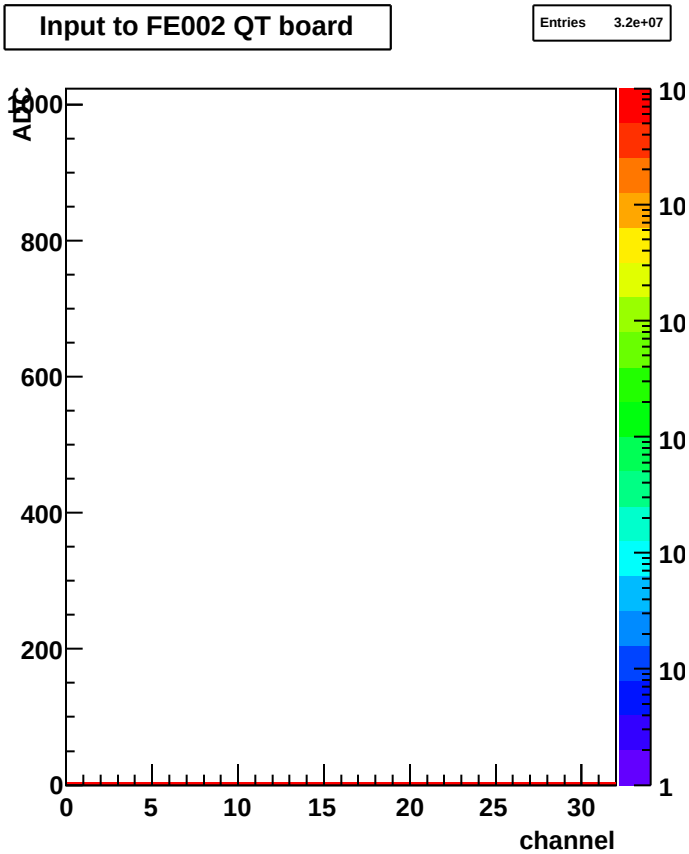

Input to FPD L2 DSM
Entries 3000000
CL bits - simulated
1e+06
1e+06
1e+06
SMALL
LARGE-S
LARGE-N

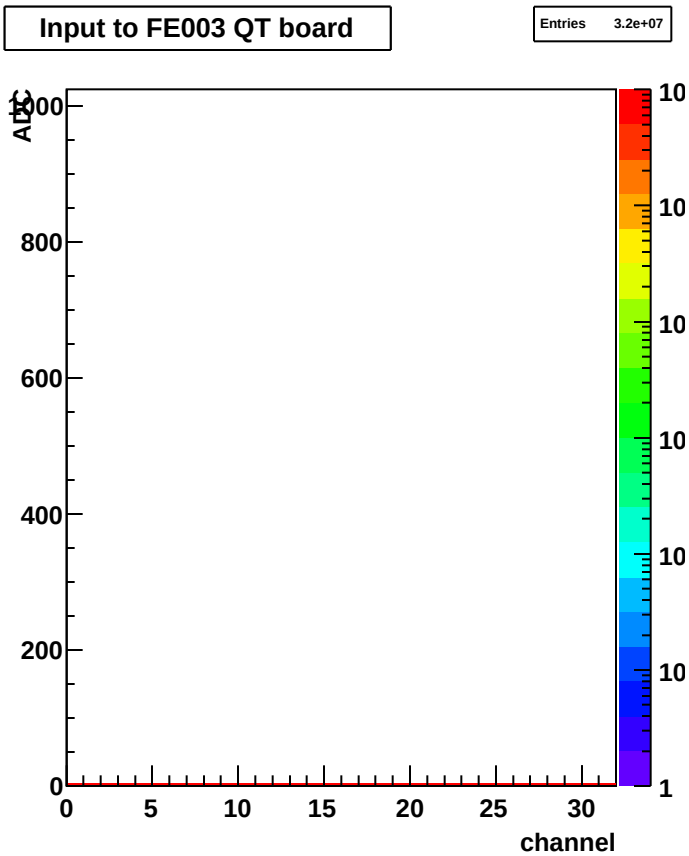

Input to FPD L2 DSM
Entries 3000000
HT bits
995684
1e+06
1e+06
4316
SMALL
LARGE-S
LARGE-N

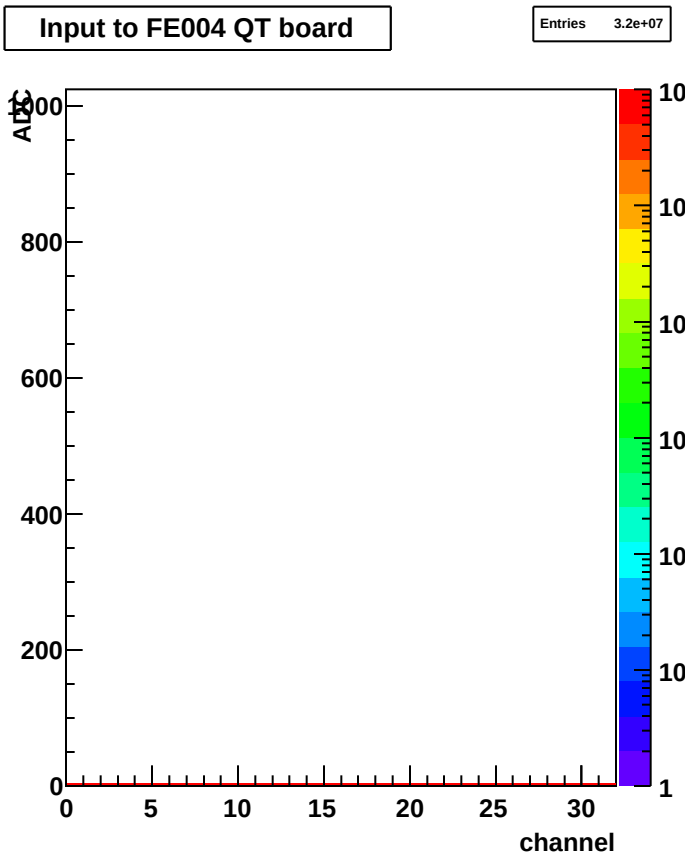

Input to FPD L2 DSM
Entries 3000000
HT bits - simulated
995684
1e+06
1e+06
4316
SMALL
LARGE-S
LARGE-N

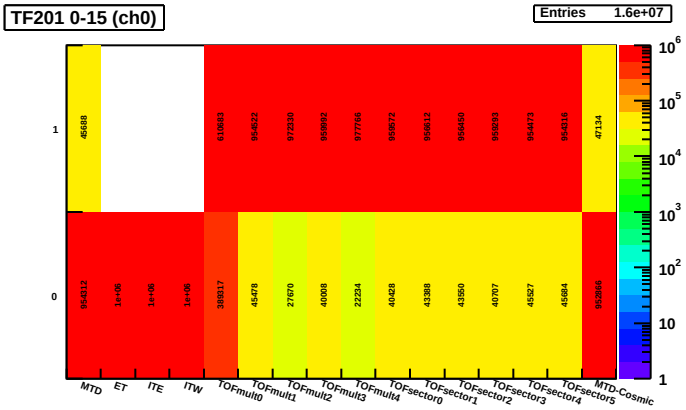

Input to FPD L2 DSM
Entries 4000000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5
10^6

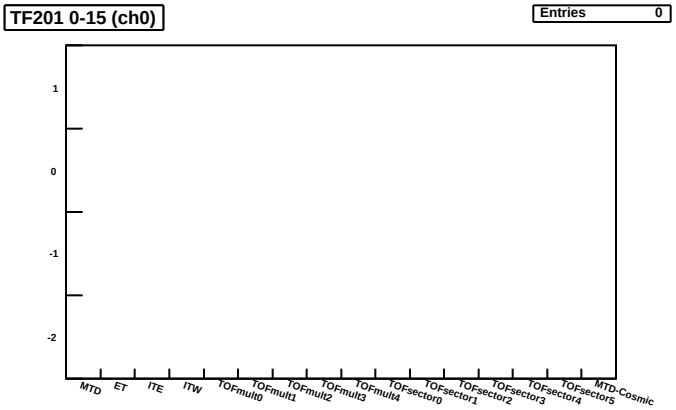

Input to FE001 QT board
Entries 3.2e+07
ADC
channel

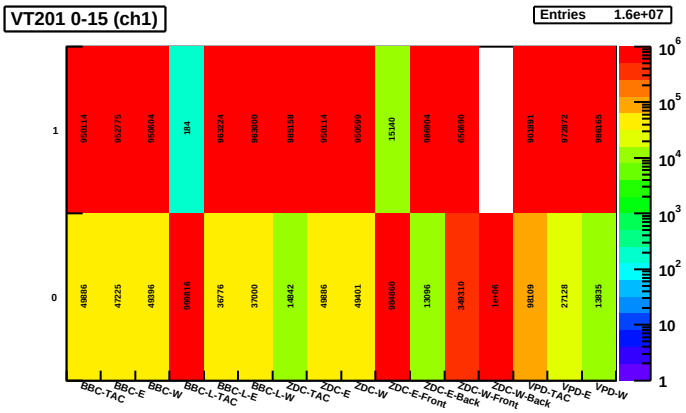

Input to FE002 QT board
Entries 3.2e+07
ADC
channel

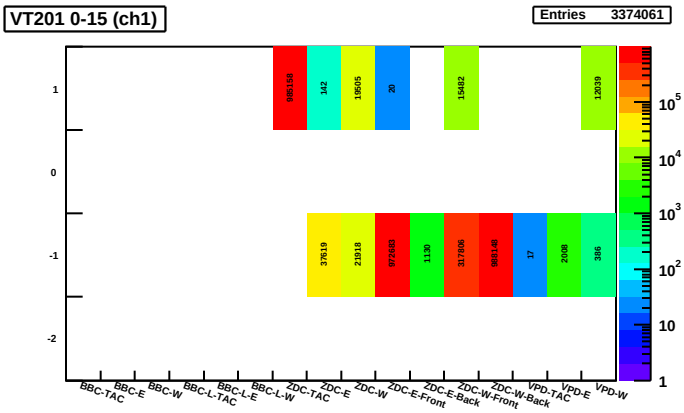

Input to FE003 QT board
Entries 3.2e+07
ADC
channel

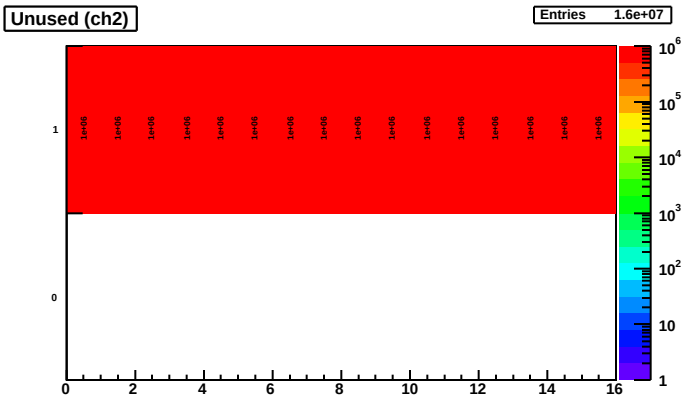

Input to FE004 QT board
Entries 3.2e+07
ADC
channel

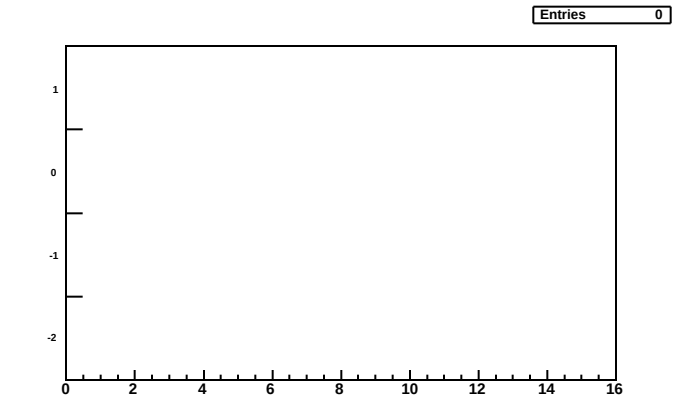

TF201 0-15 (ch0)
Entries 1.6e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

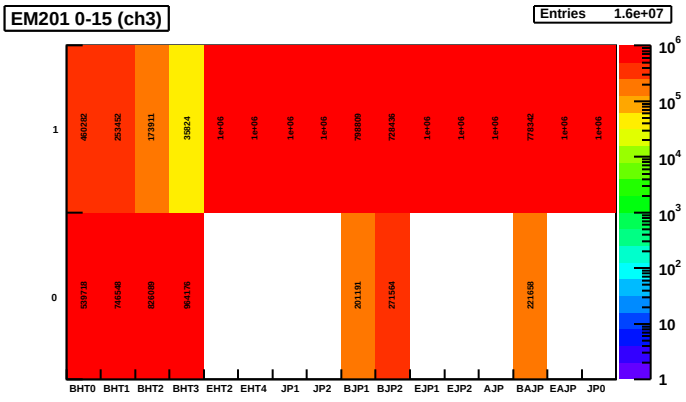

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

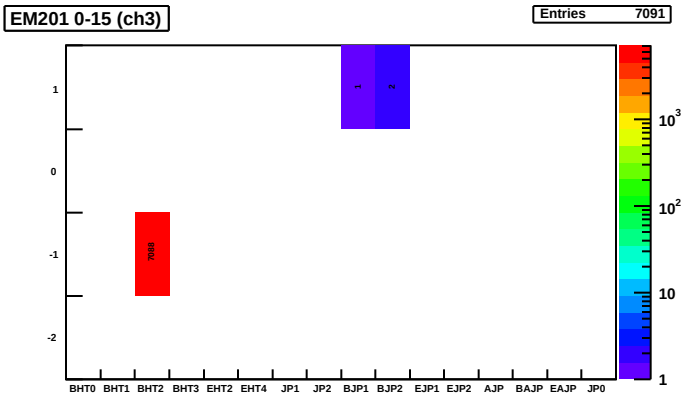

VT201 0-15 (ch1)
Entries 1.6e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

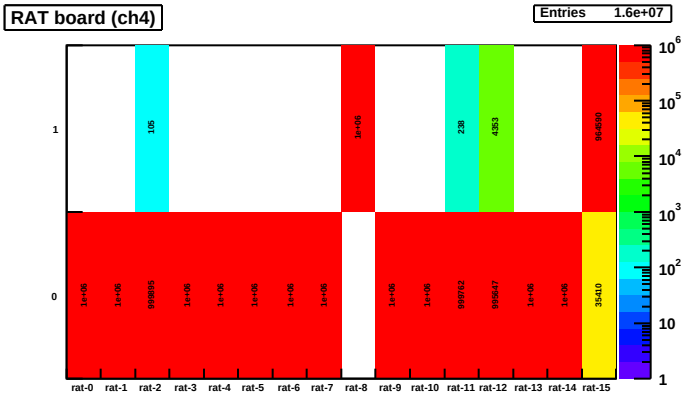

VT201 0-15 (ch1)
Entries 3374061
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

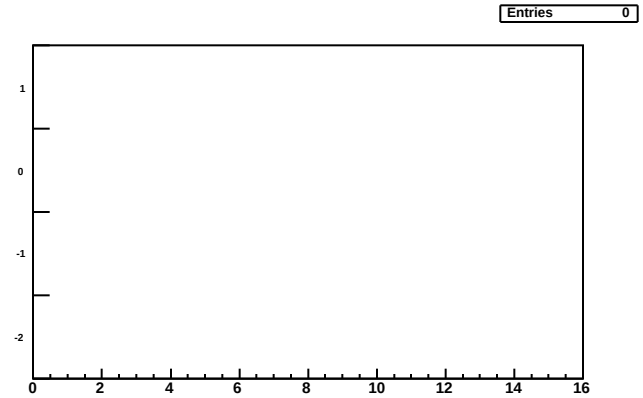

Unused (ch2)
Entries 1.6e+07

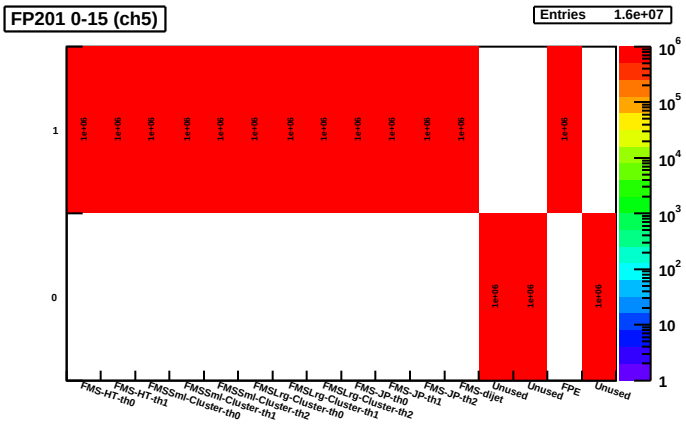

Entries 0

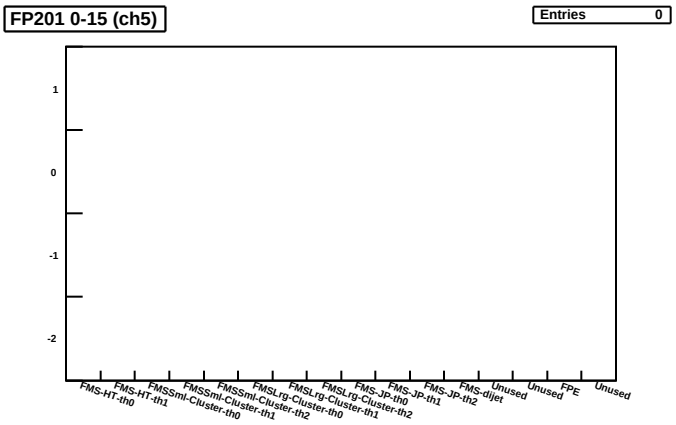

EM201 0-15 (ch3)
Entries 1.6e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

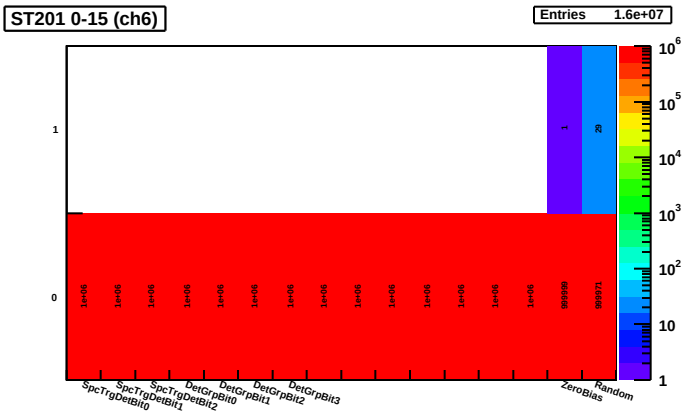

EM201 0-15 (ch3)
Entries 7091
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

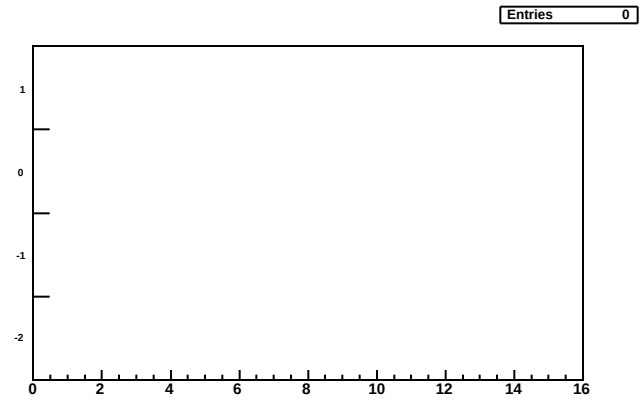

RAT board (ch4)
Entries 1.6e+07
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

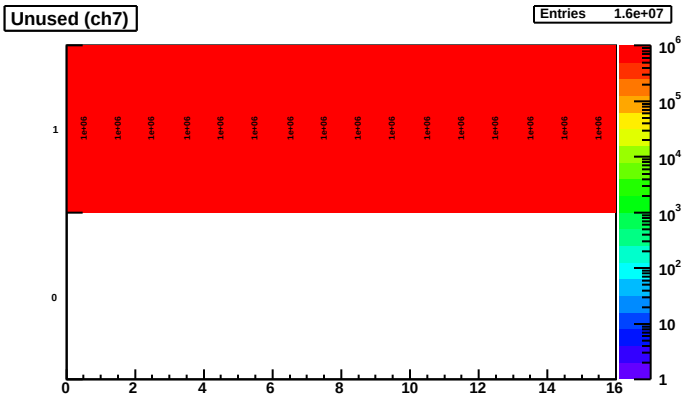

Entries 0

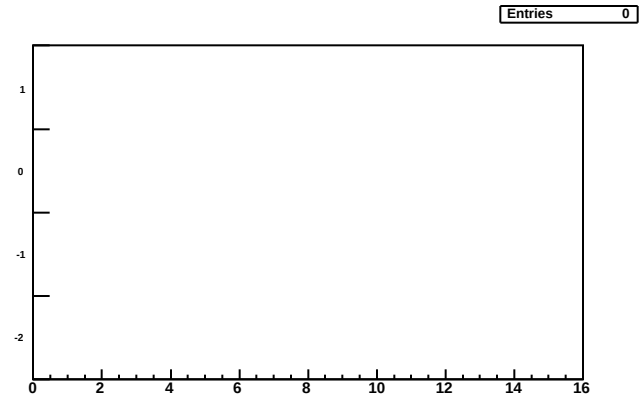

FP201 0-15 (ch5)
Entries 1.6e+07
FMS-HT-th0
FMS-HT-th1
FMSSml-Cluster-th0
FMSSml-Cluster-th1
FMSSml-Cluster-th2
FMSLrg-Cluster-th0
FMSLrg-Cluster-th1
FMSLrg-Cluster-th2
FMS-JP-th0
FMS-JP-th1
FMS-JP-th2
FMS-diJet
Unused
Unused
FPE
Unused


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 1.6e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random


Entries 0


Unused (ch7)
Entries 1.6e+07


Entries 0