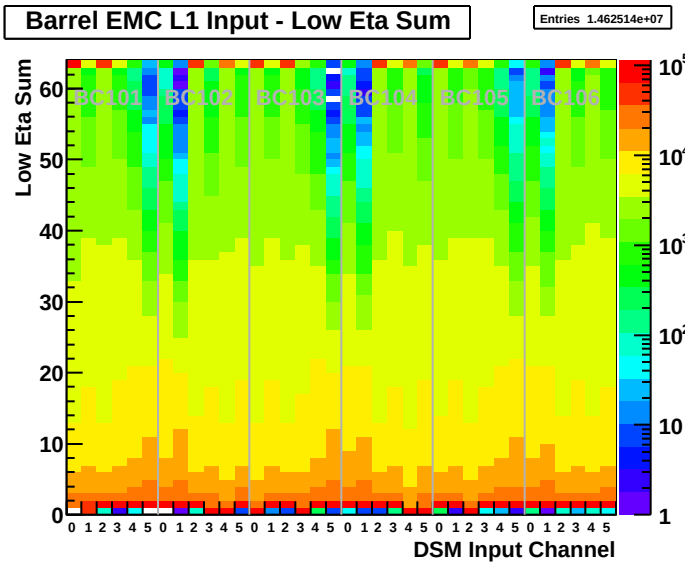
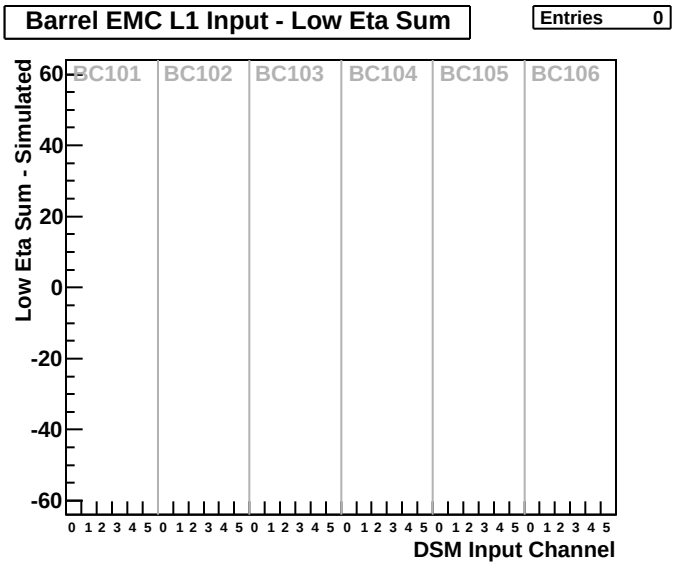
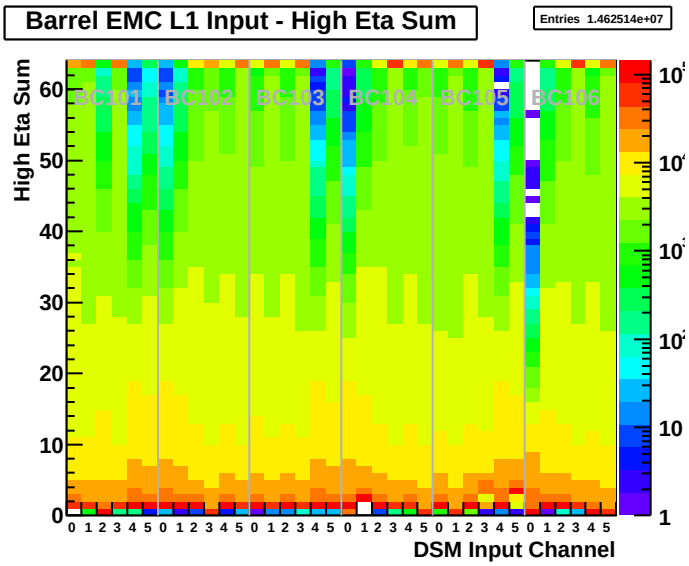
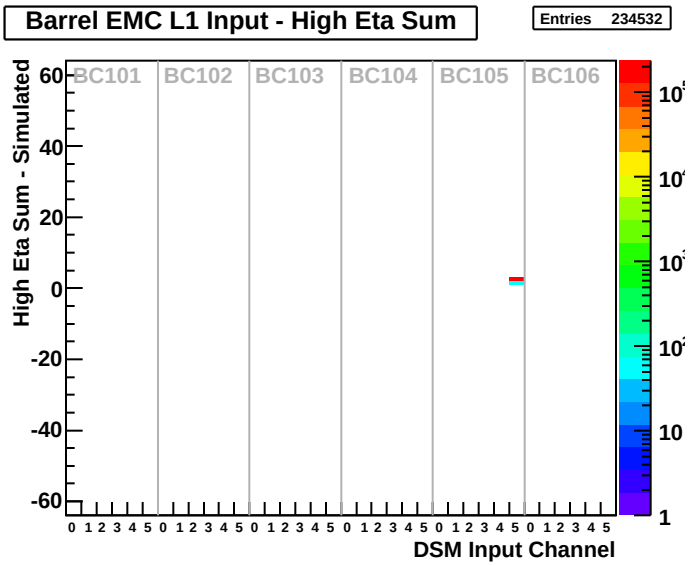
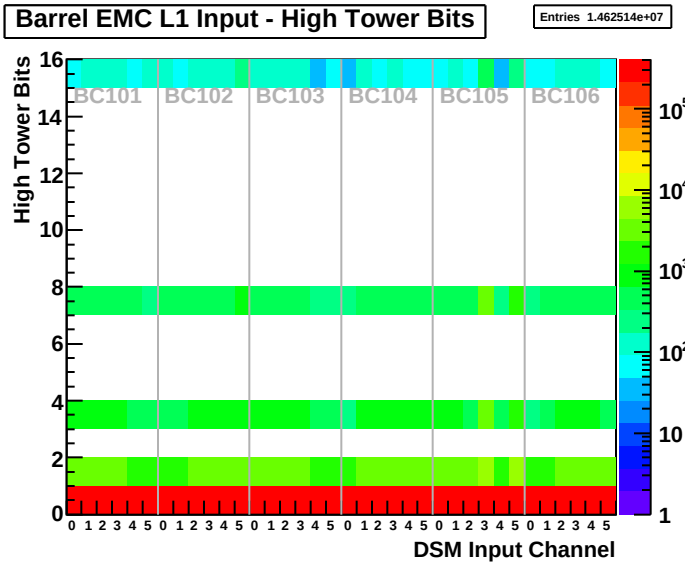
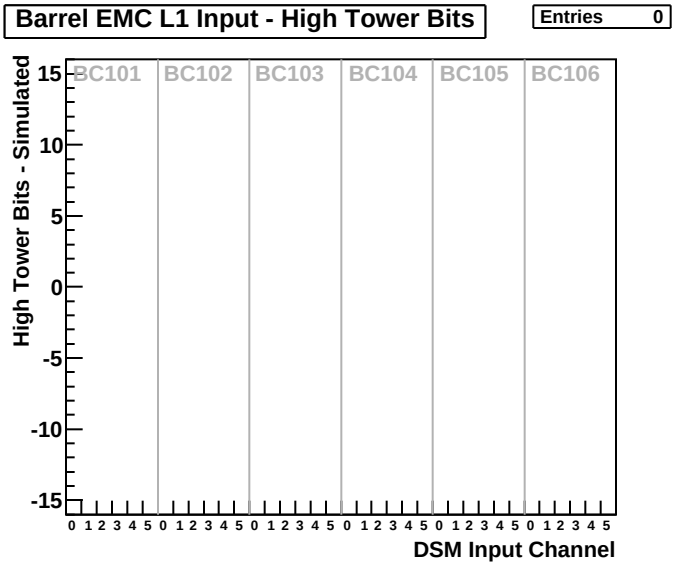

Barrel EMC L1 Input - Low Eta Sum
Entries 1.462514e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

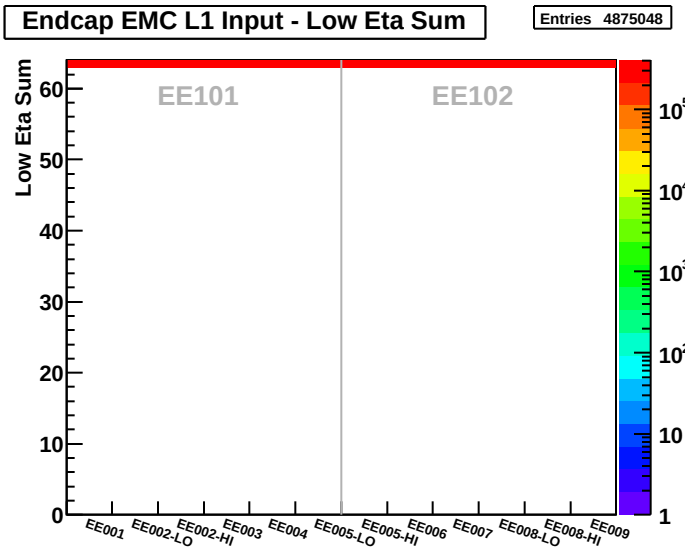

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

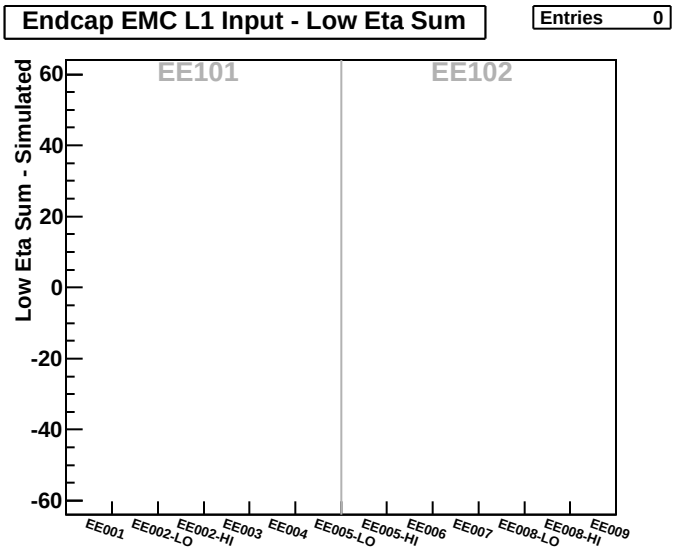

Barrel EMC L1 Input - High Eta Sum
Entries 1.462514e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

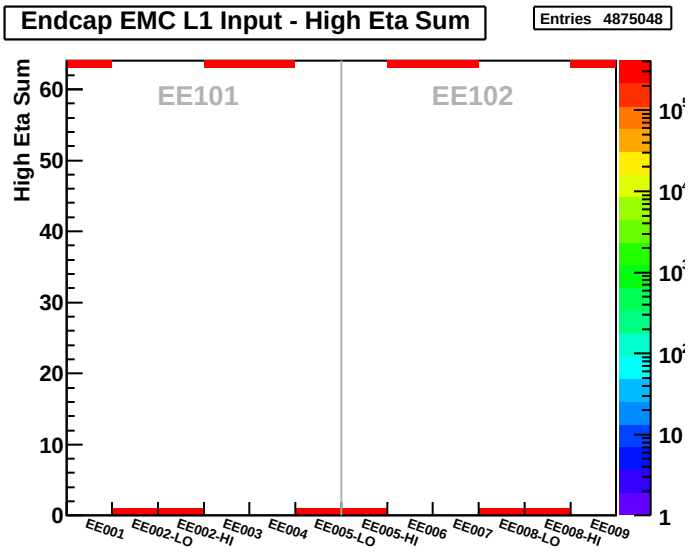

Barrel EMC L1 Input - High Eta Sum
Entries 234532
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

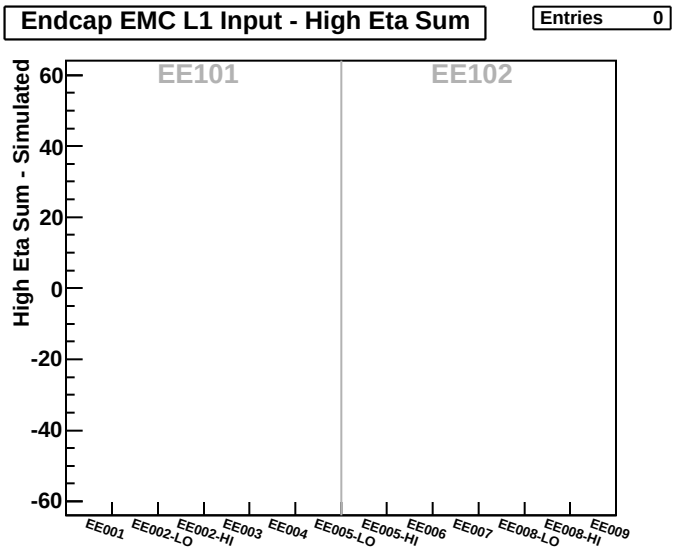

Barrel EMC L1 Input - High Tower Bits
Entries 1.462514e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

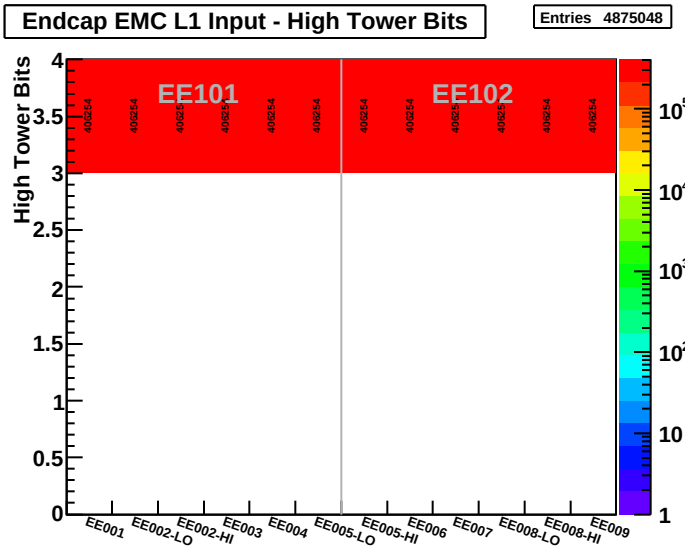

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

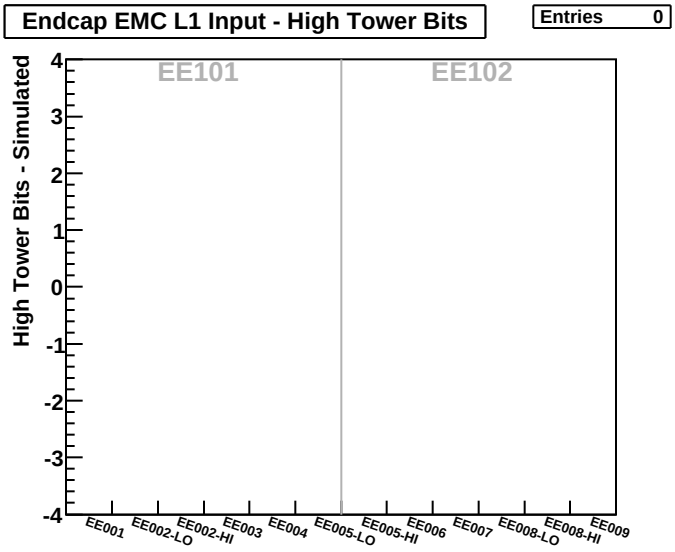

Endcap EMC L1 Input - Low Eta Sum
Entries 4875048
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

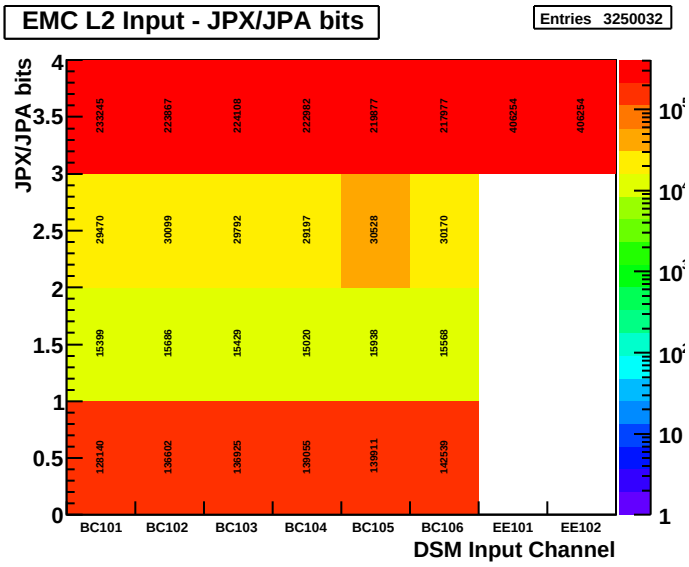

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

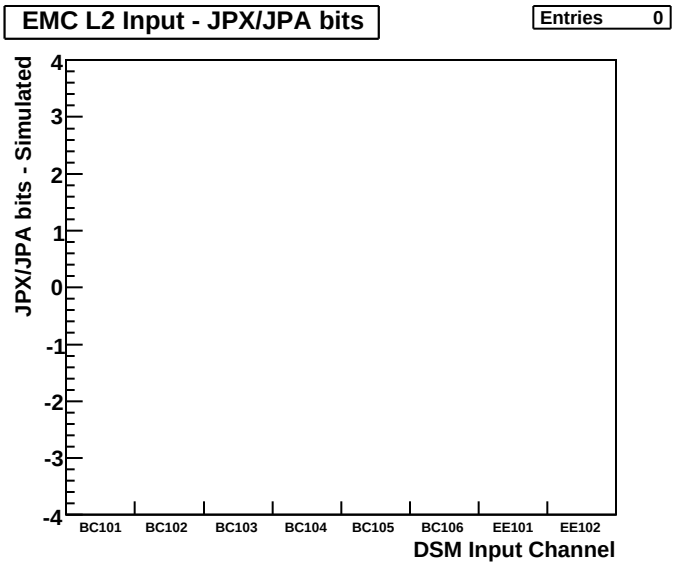

Endcap EMC L1 Input - High Eta Sum
Entries 4875048
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

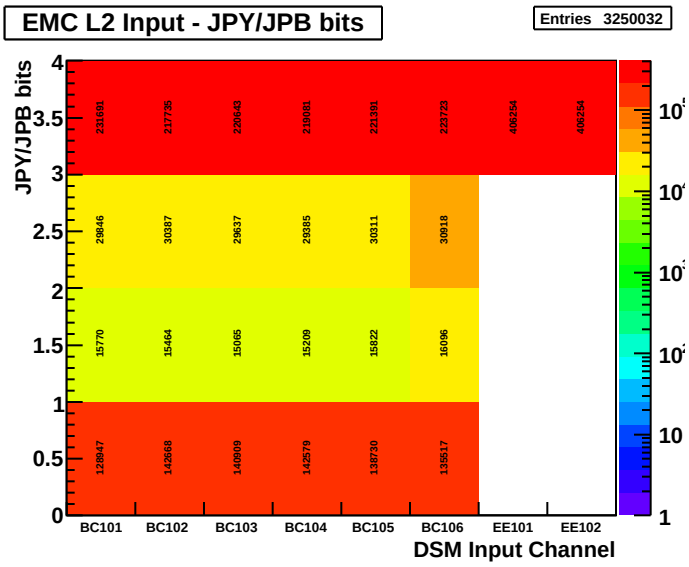

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

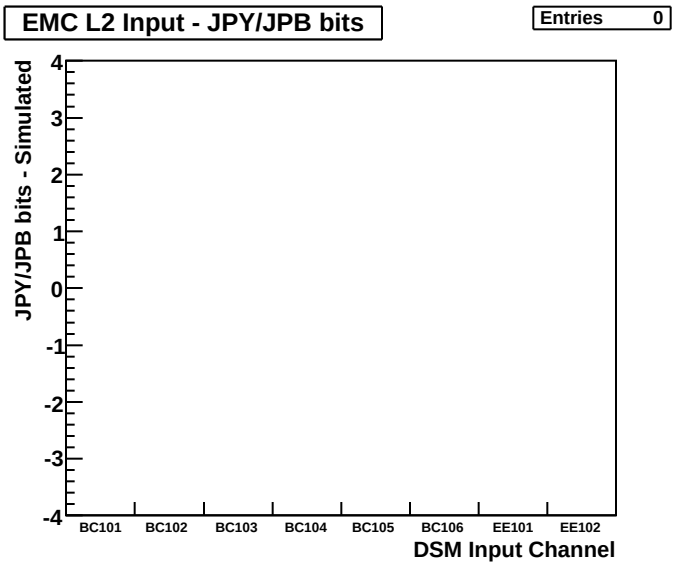

Endcap EMC L1 Input - High Tower Bits
Entries 4875048
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

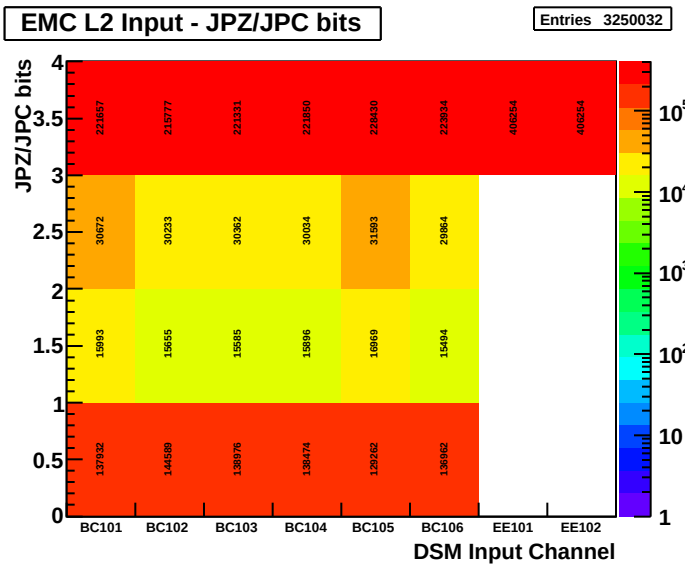

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

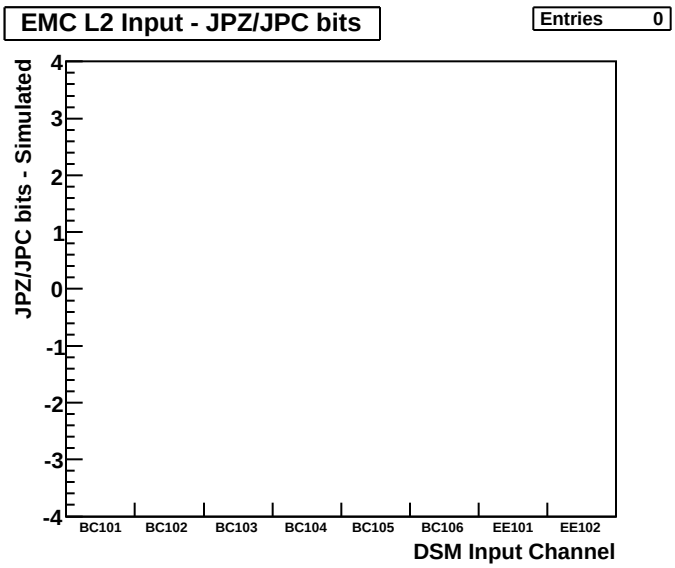

EMC L2 Input - JPX/JPA bits
Entries 3250032
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
233245 223867 224108 222882 219877 217977 406254 406254
29470 30099 29792 29197 30528 30170
15399 15686 15429 15020 15938 15568
128140 136602 136925 130055 139911 142539

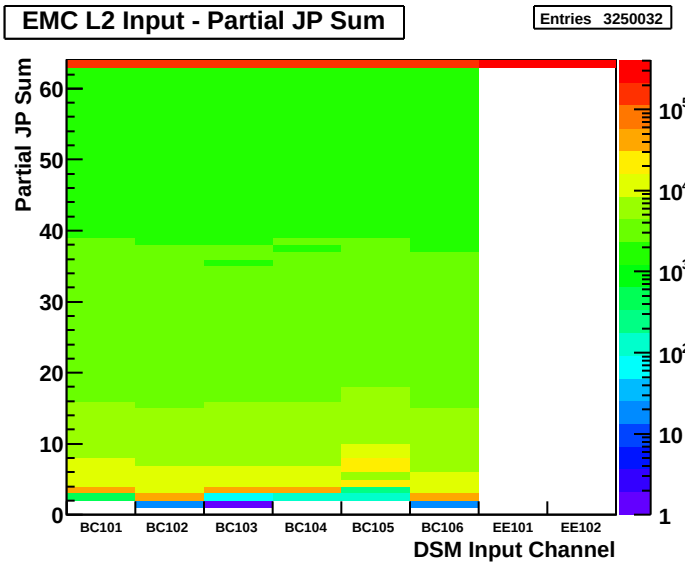

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

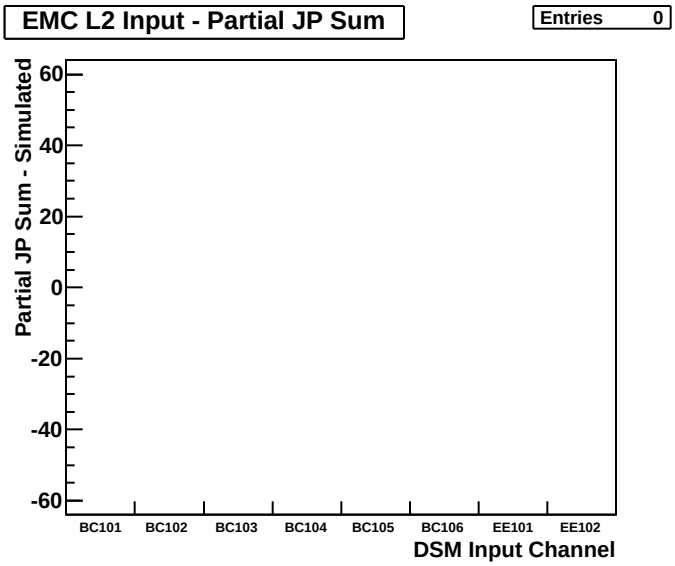

EMC L2 Input - JPY/JPB bits
Entries 3250032
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
231691 217735 220643 219081 221391 223723 406254 406254
28646 30387 28637 29385 30311 30918
15770 15464 15065 15209 15822 16096
128947 142568 140909 142579 138730 135517

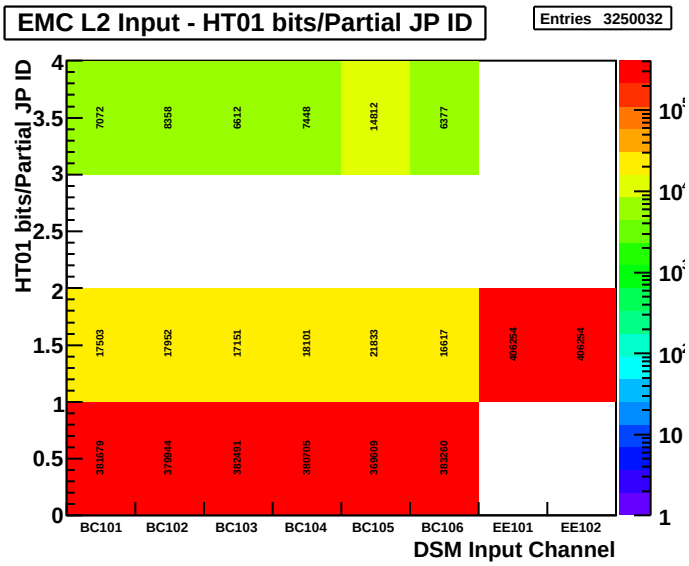

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

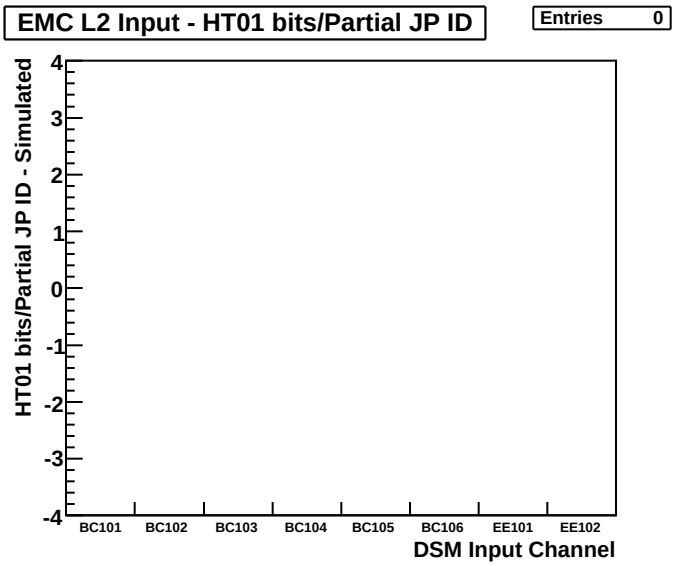

EMC L2 Input - JPZ/JPC bits
Entries 3250032
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
221657 215777 221331 221850 229430 223934 406254 406254
30672 30233 30362 30034 31593 29864
15993 15655 15585 15896 16969 15494
137932 144589 138976 138474 129262 136962

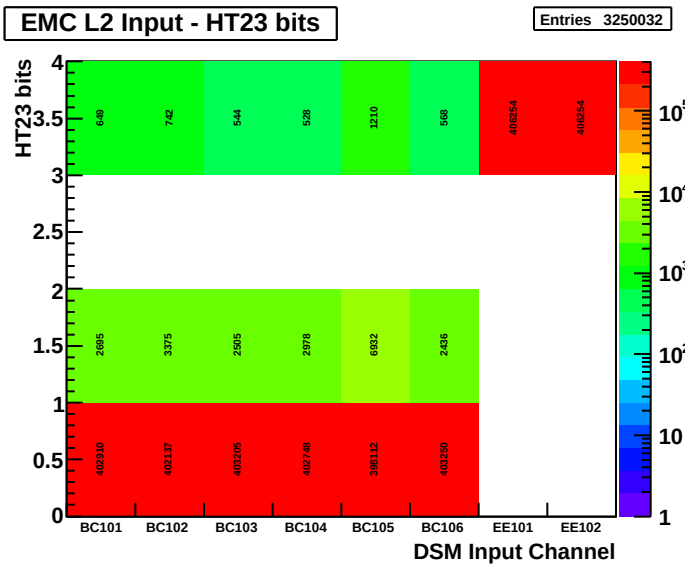

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

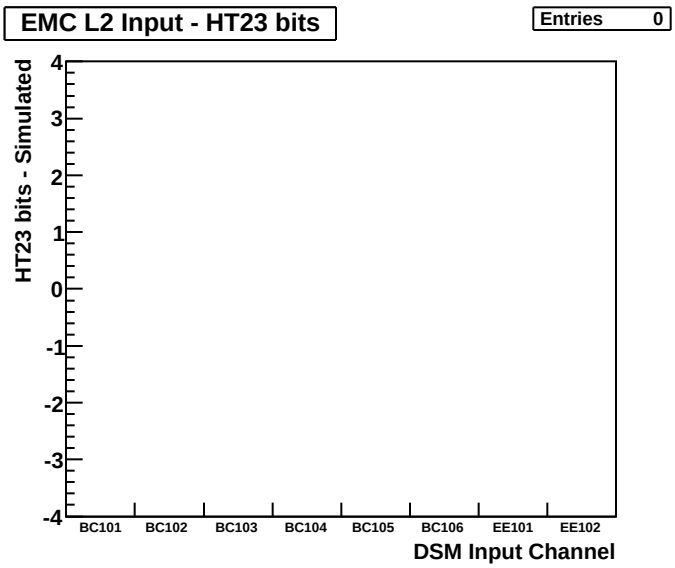

EMC L2 Input - Partial JP Sum
Entries 3250032
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

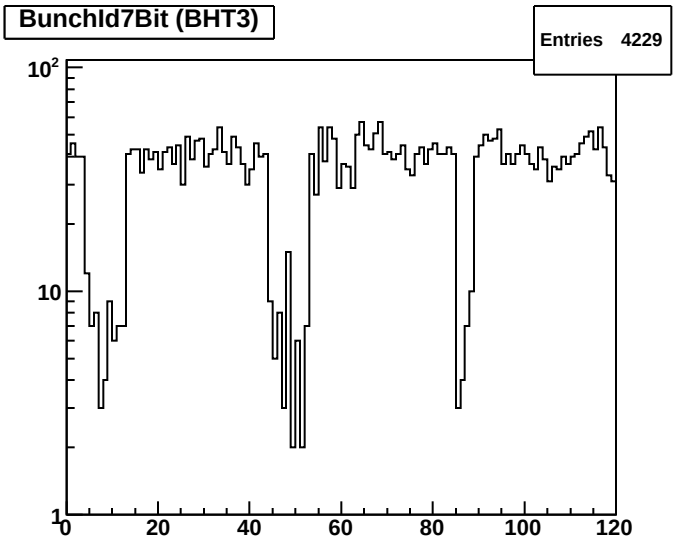

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

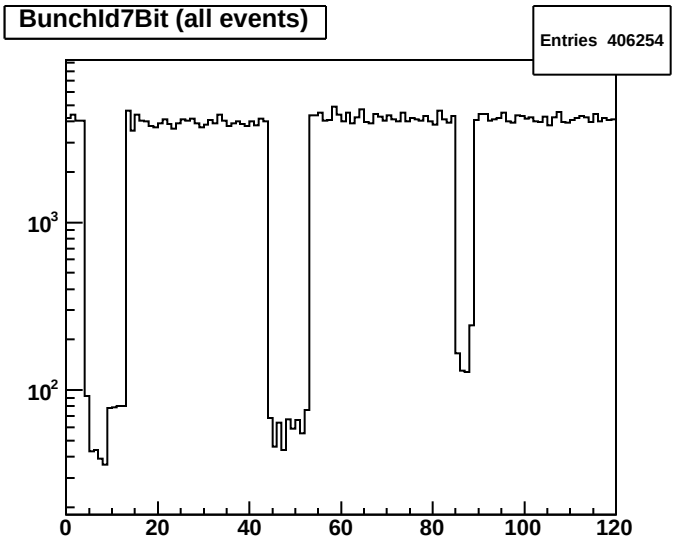

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3250032
HT01 bits/Partial JP ID
7072 8358 6612 7448 14812 6377
17503 17952 17151 18101 21833 16617 406254 406254
381679 379944 382491 380705 369609 383260
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

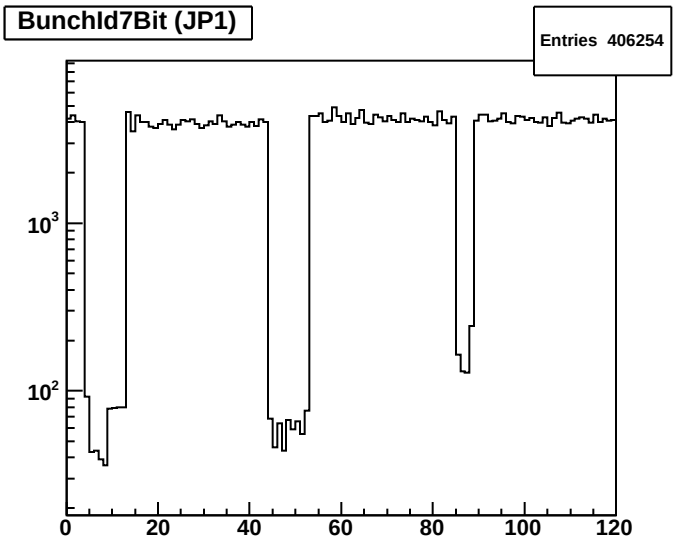

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

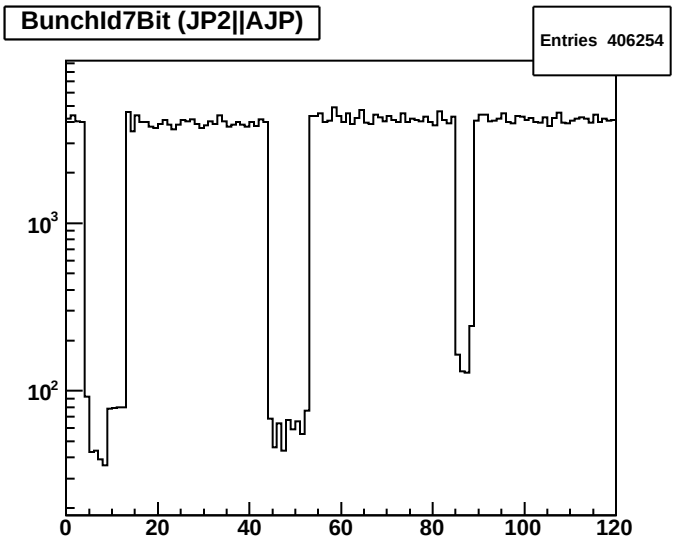

EMC L2 Input - HT23 bits
Entries 3250032
HT23 bits
649 742 544 528 1210 568 406254 406254
2695 3375 2505 2978 6932 2436
402910 402137 403205 402748 398112 403250
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

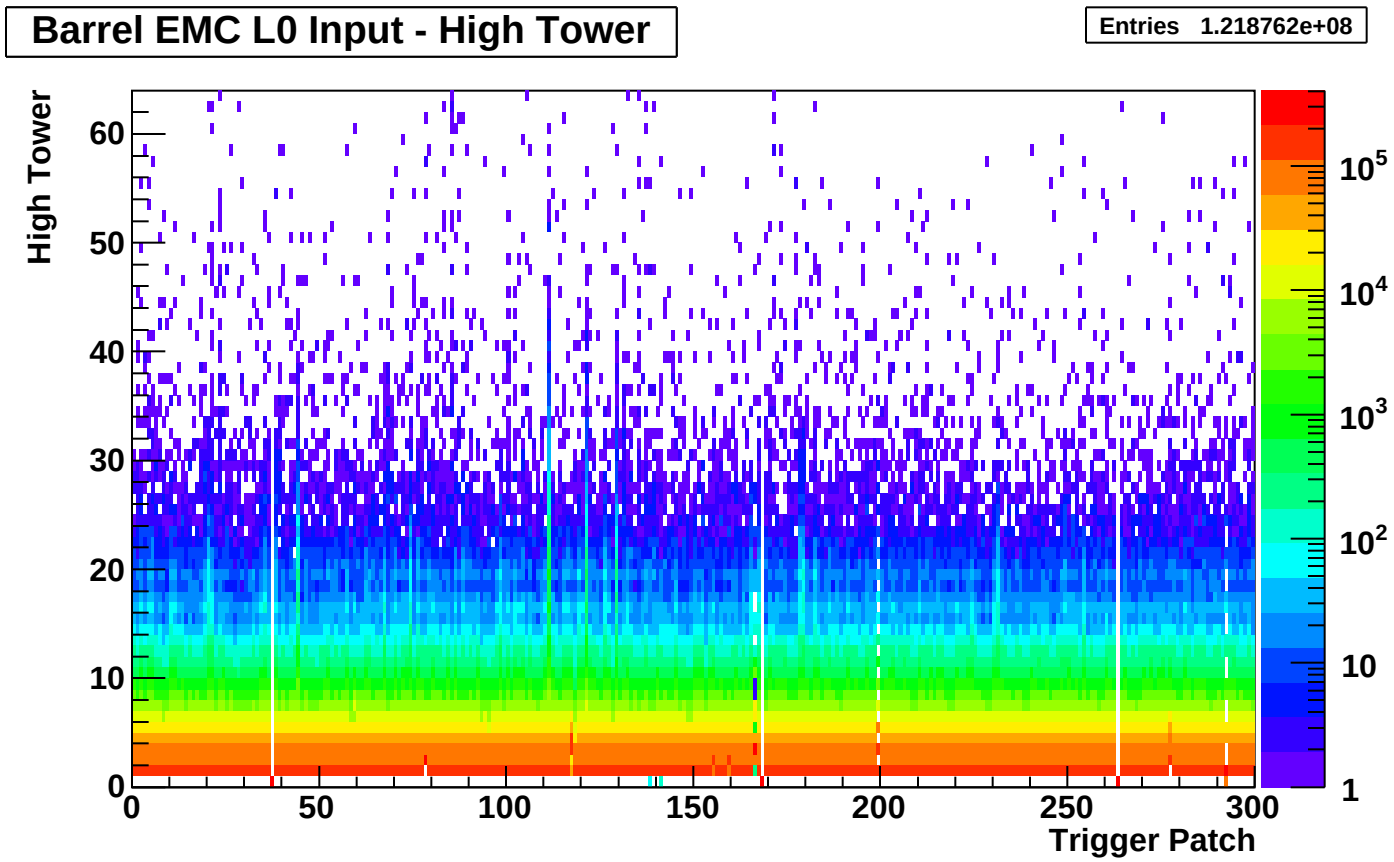

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

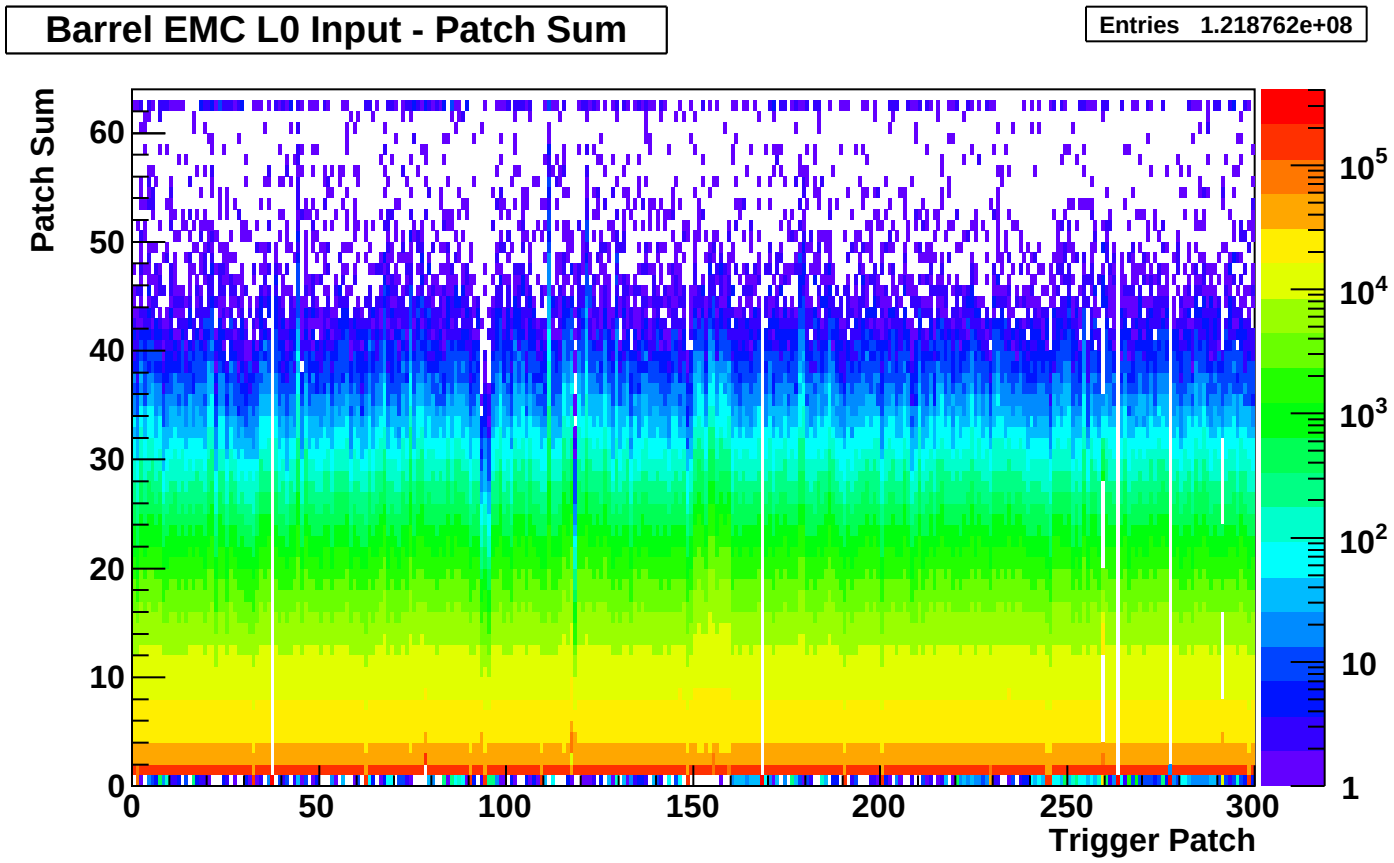

BunchId7Bit (BHT3)
Entries 4229
10^2
10
1
0
20
40
60
80
100
120

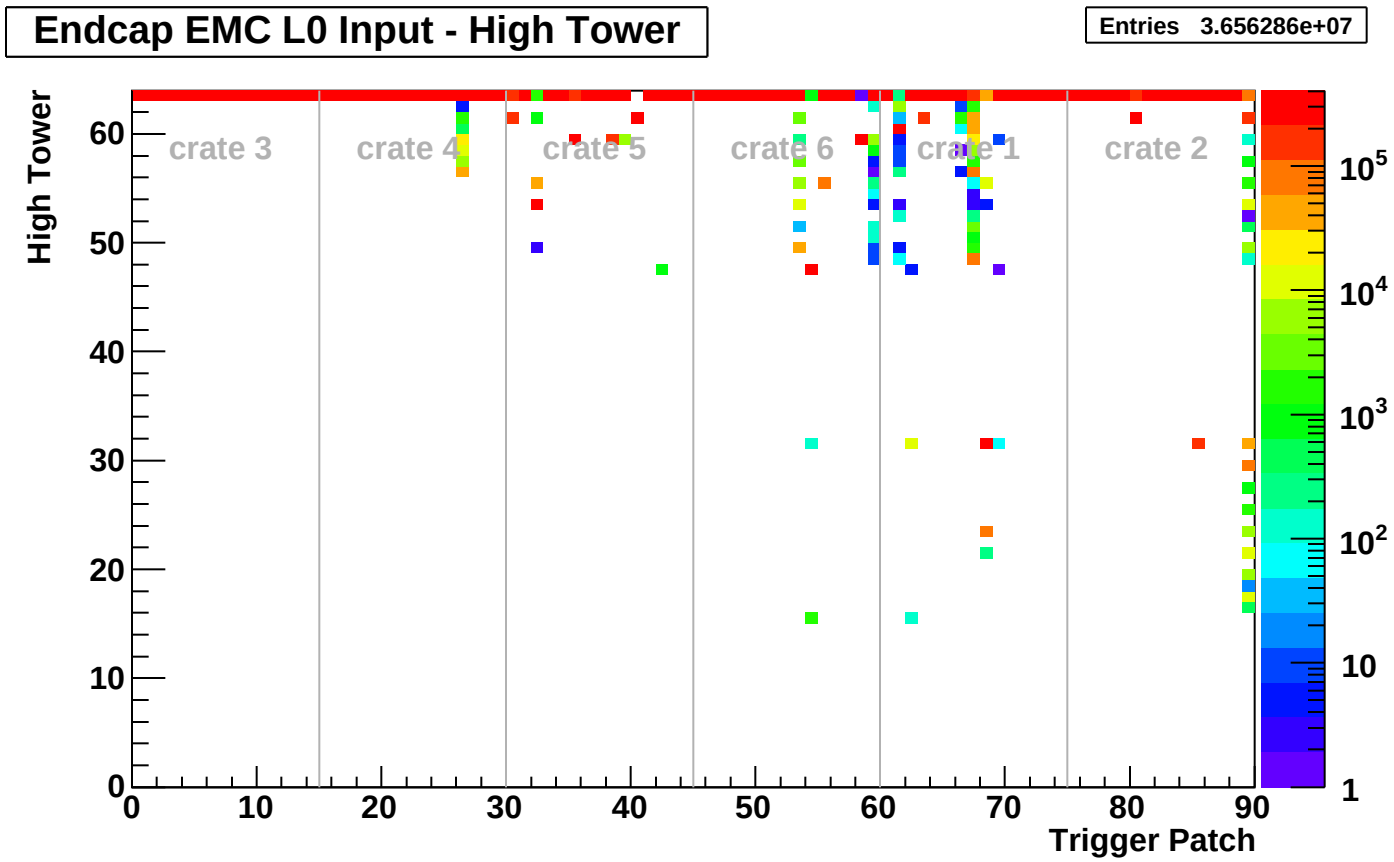

BunchId7Bit (all events)
Entries 406254
10^3
10^2
0
20
40
60
80
100
120

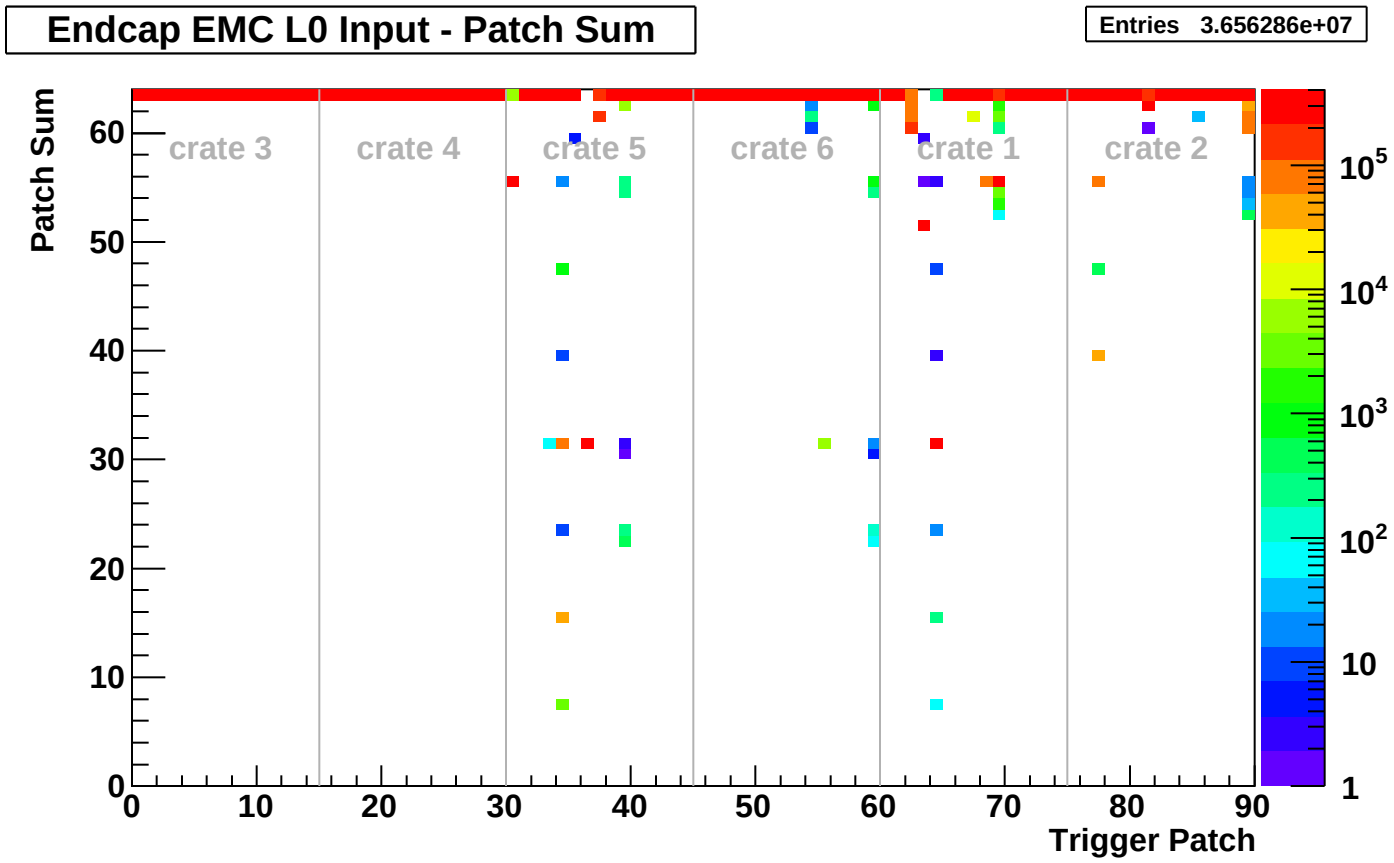

BunchId7Bit (JP1)
Entries 406254
10^3
10^2
0
20
40
60
80
100
120

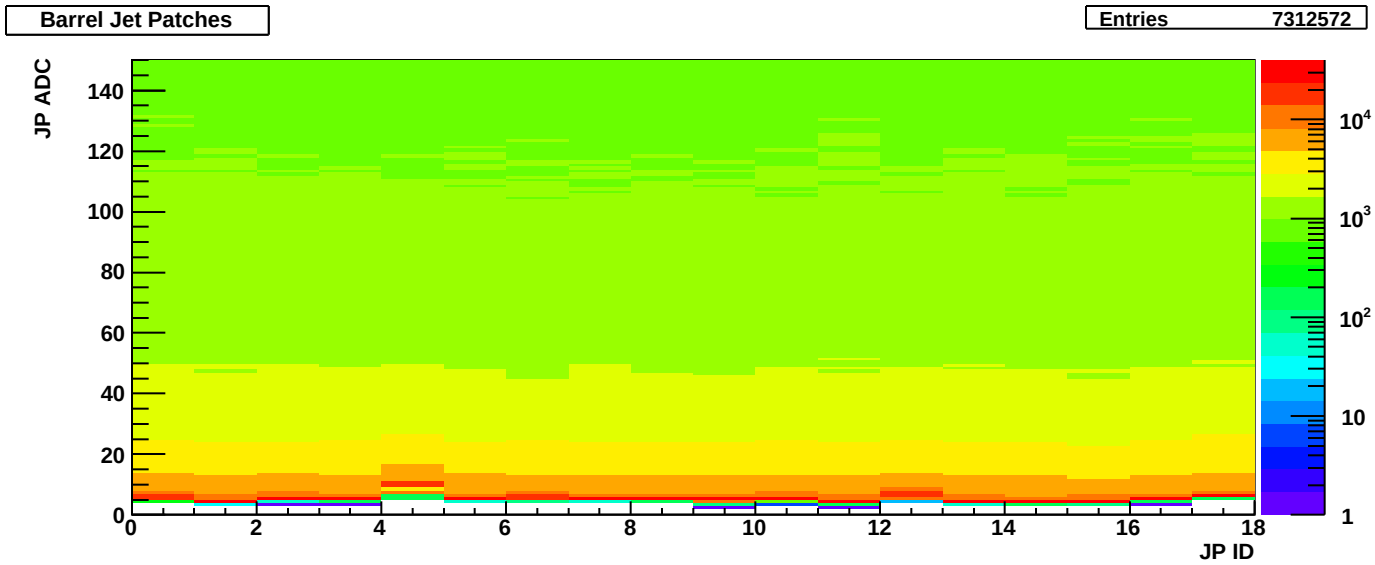

BunchId7Bit (JP2||AJP)
Entries 406254
10^3
10^2
0
20
40
60
80
100
120

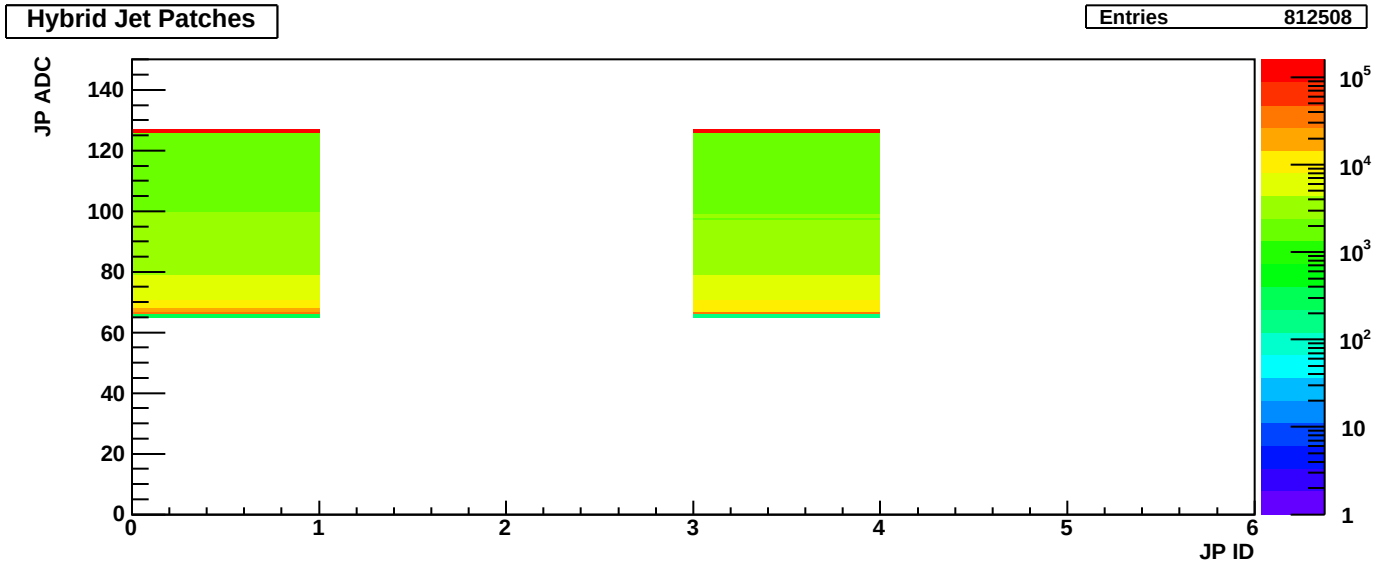

Barrel EMC L0 Input - High Tower
Entries 1.218762e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

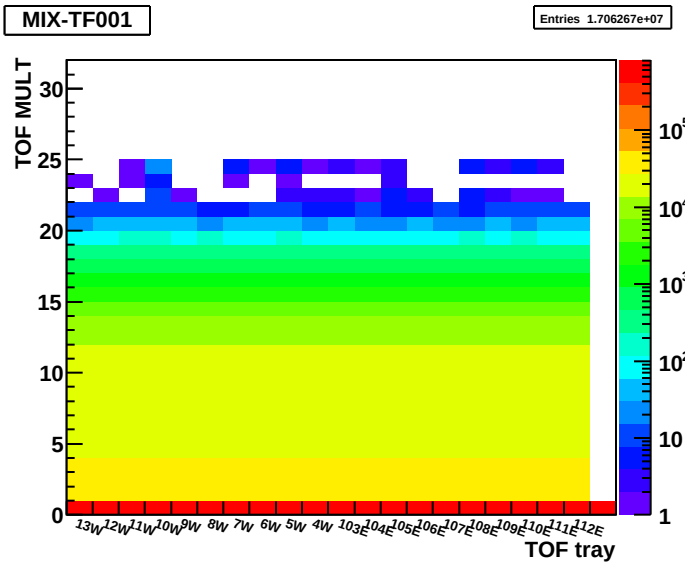

Barrel EMC L0 Input - Patch Sum
Entries 1.218762e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

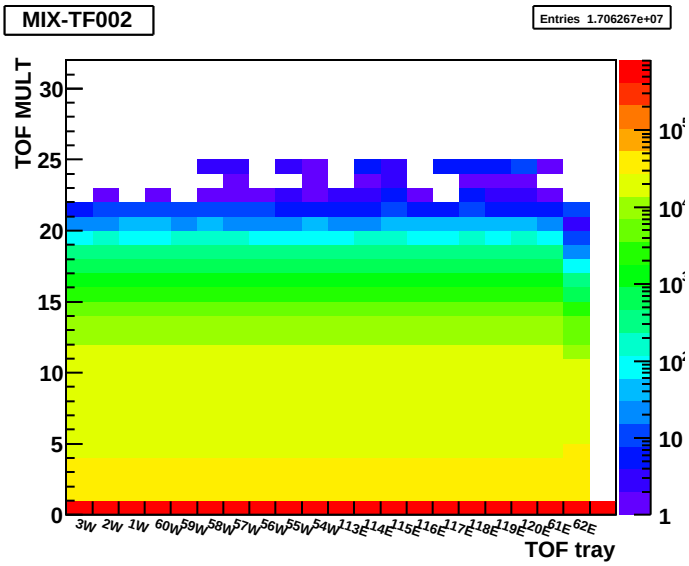

Endcap EMC L0 Input - High Tower
Entries 3.656286e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

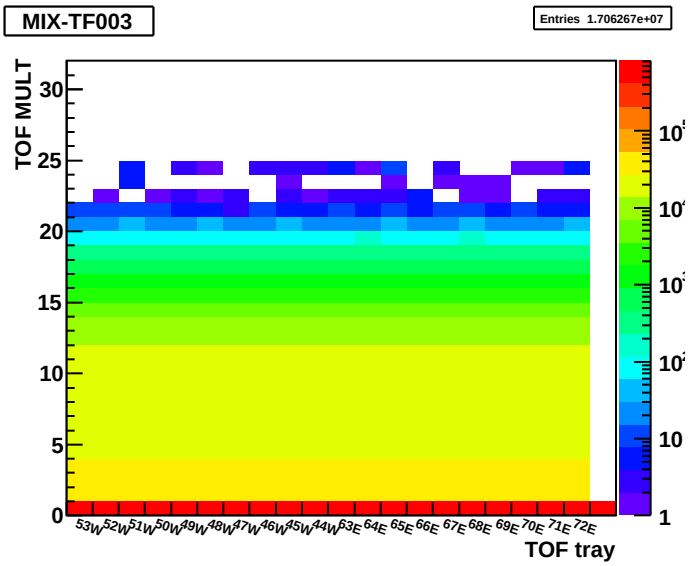

Endcap EMC L0 Input - Patch Sum
Entries 3.656286e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

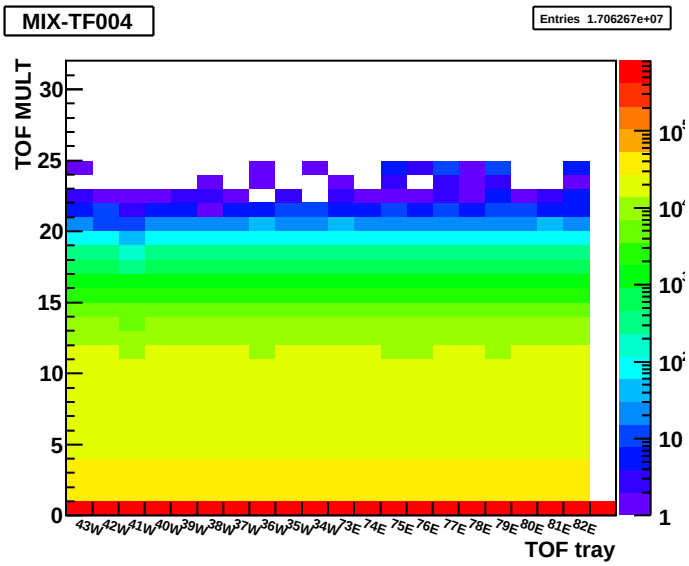

Barrel Jet Patches
Entries 7312572
JP ADC
JP ID

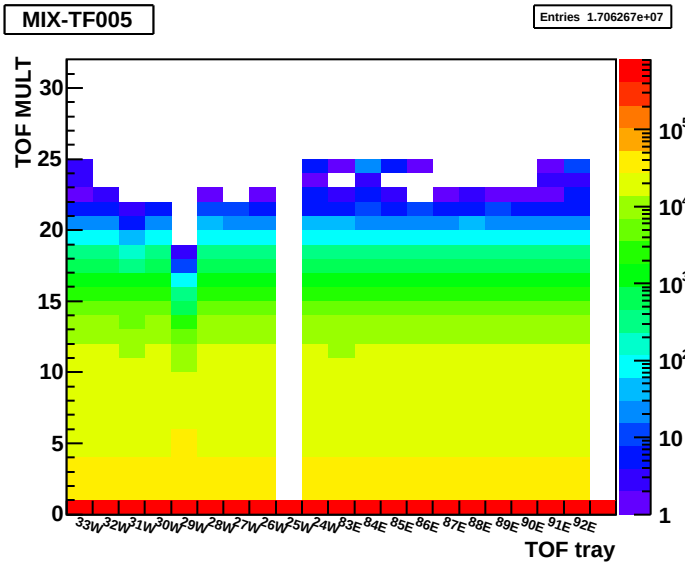

Hybrid Jet Patches
Entries 812508
JP ADC
JP ID

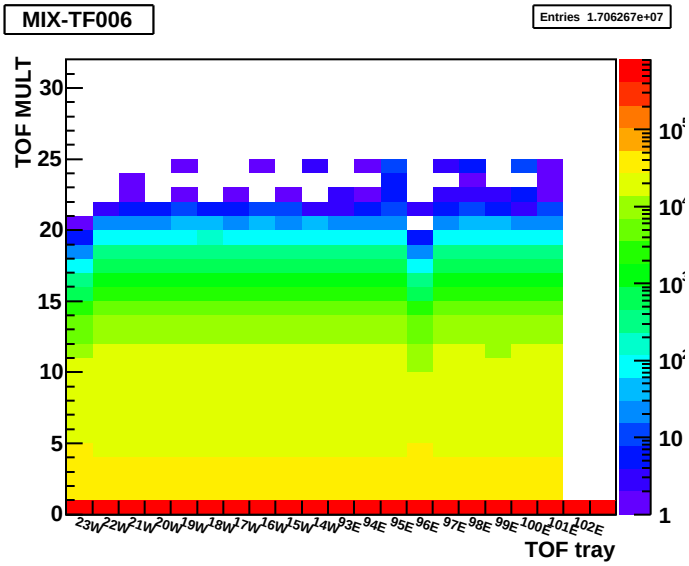

MIX-TF001
Entries 1.706267e+07
TOF MULT
TOF tray

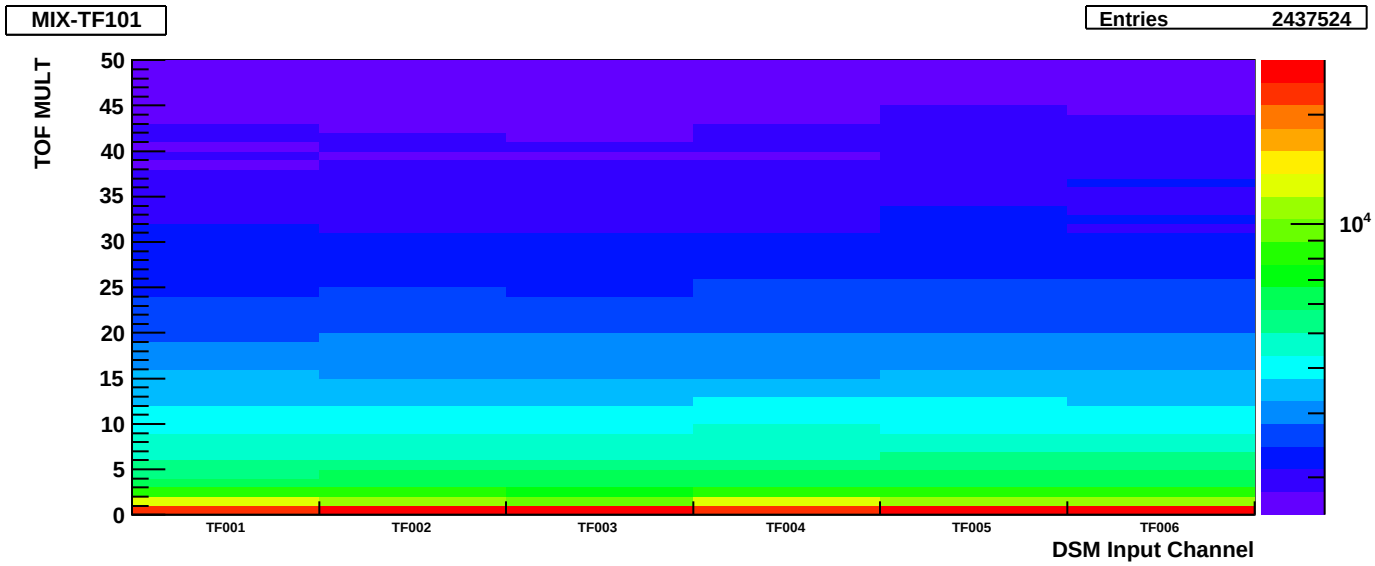

MIX-TF002
Entries 1.706267e+07
TOF MULT
TOF tray

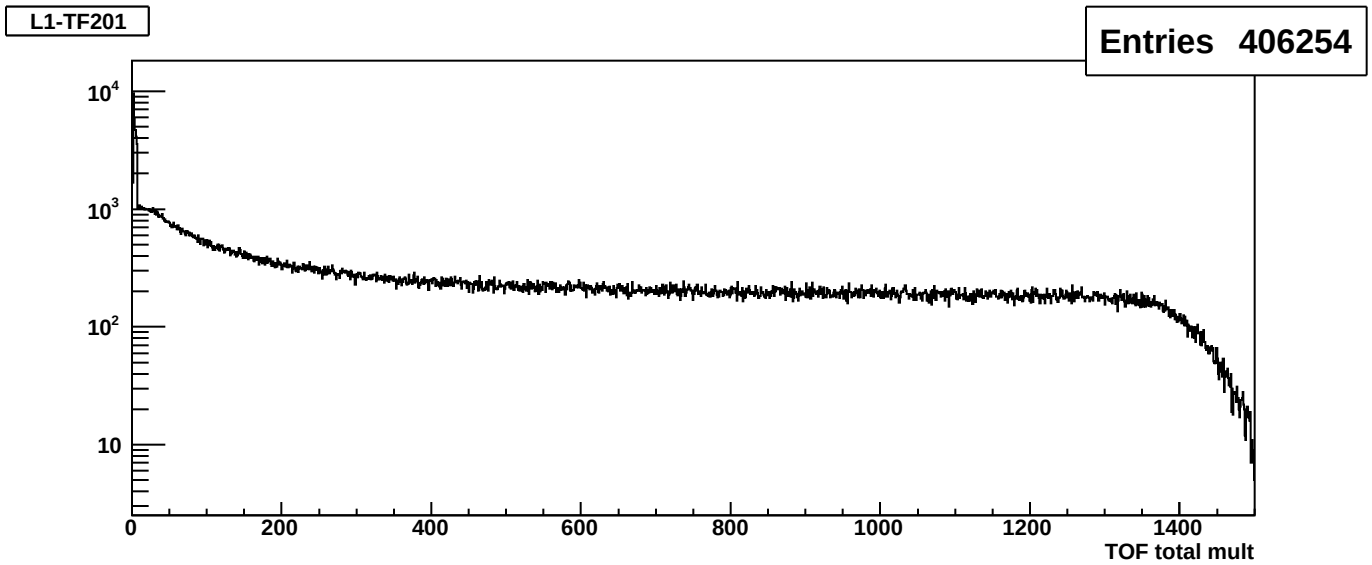

MIX-TF003
Entries 1.706267e+07
TOF MULT
TOF tray

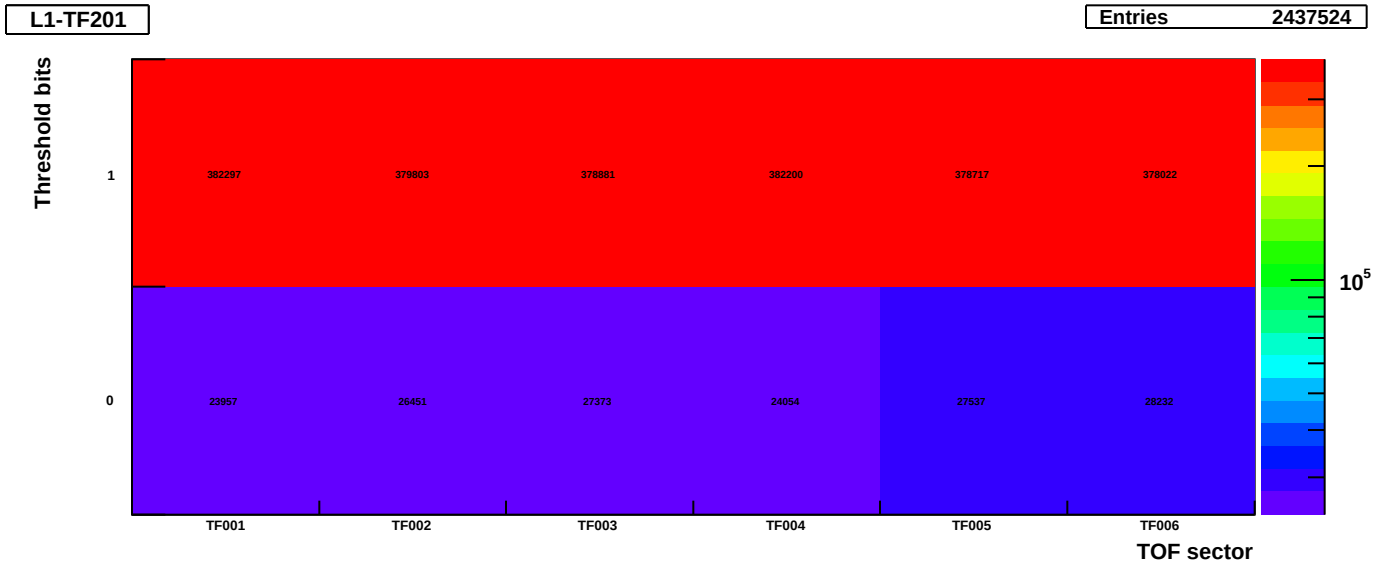

MIX-TF004
Entries 1.706267e+07
TOF MULT
TOF tray

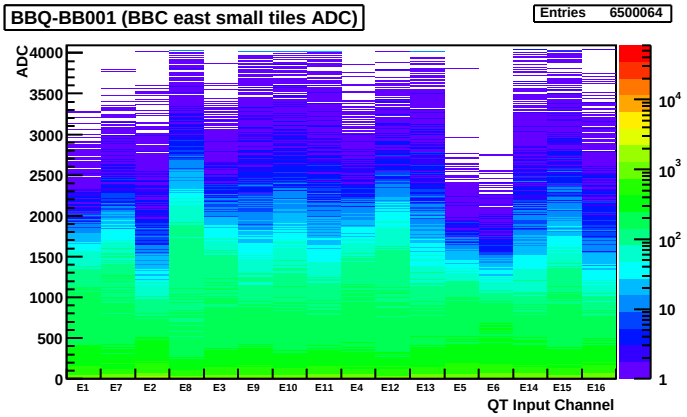

MIX-TF005
Entries 1.706267e+07
TOF MULT
TOF tray

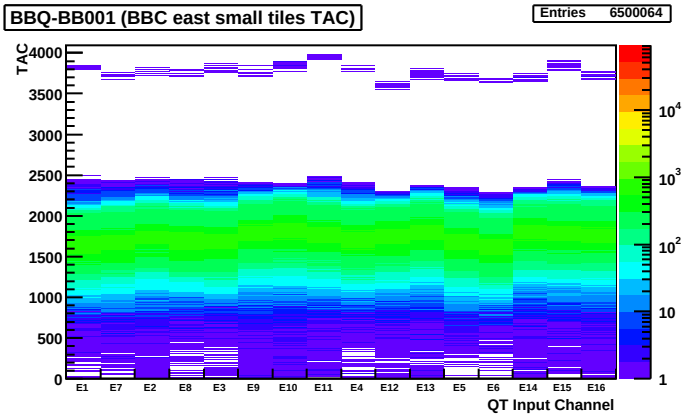

MIX-TF006
Entries 1.706267e+07
TOF MULT
TOF tray

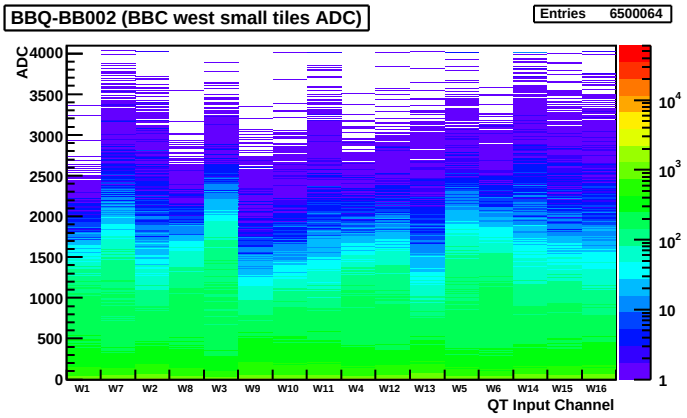

MIX-TF101
Entries 2437524
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4

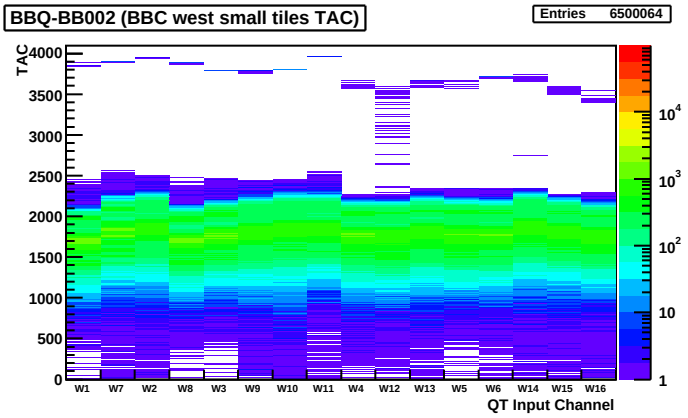

L1-TF201
Entries 406254
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
TOF total mult

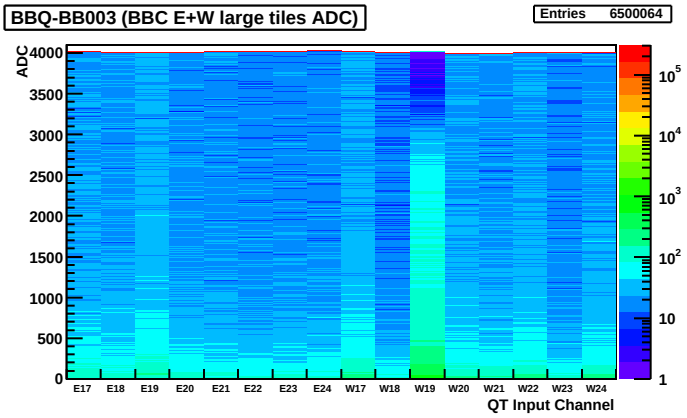

L1-TF201
Entries 2437524
Threshold bits
1
0
382297
379803
378881
382200
378717
378022
23957
26451
27373
24054
27537
28232
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

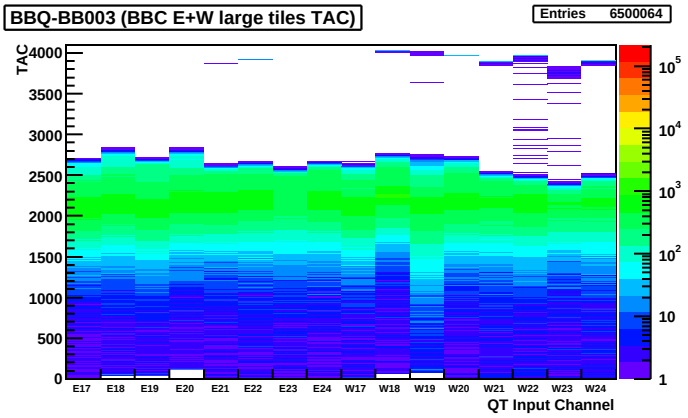

BBQ-BB001 (BBC east small tiles ADC)
Entries 6500064
ADC
QT Input Channel

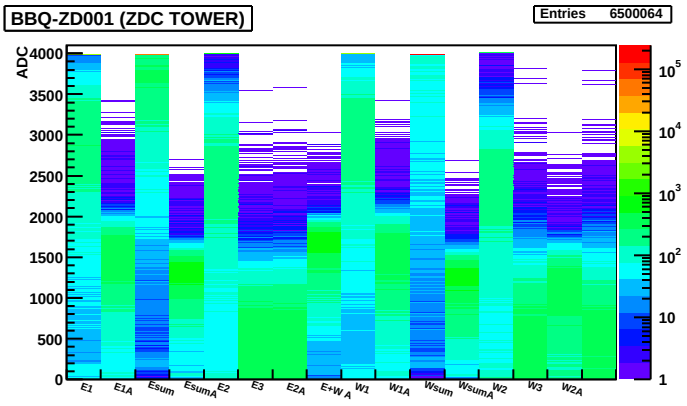

BBQ-BB001 (BBC east small tiles TAC)
Entries 6500064
TAC
QT Input Channel

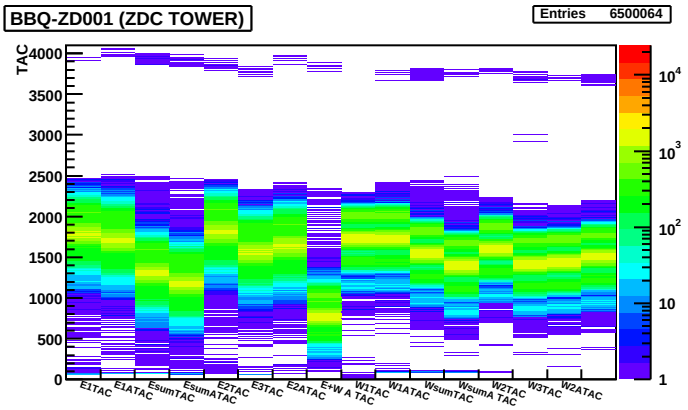

BBQ-BB002 (BBC west small tiles ADC)
Entries 6500064
ADC
QT Input Channel

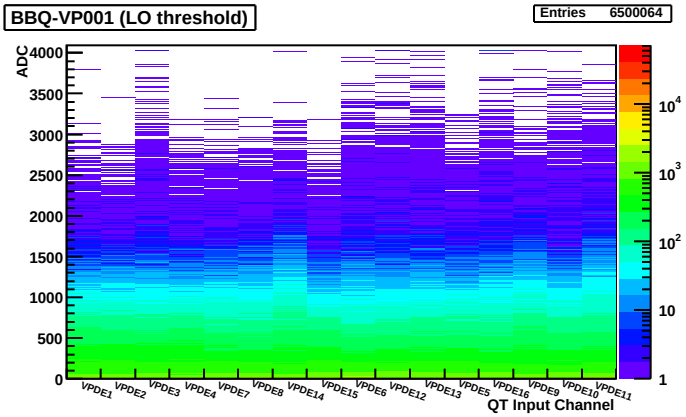

BBQ-BB002 (BBC west small tiles TAC)
Entries 6500064
TAC
QT Input Channel

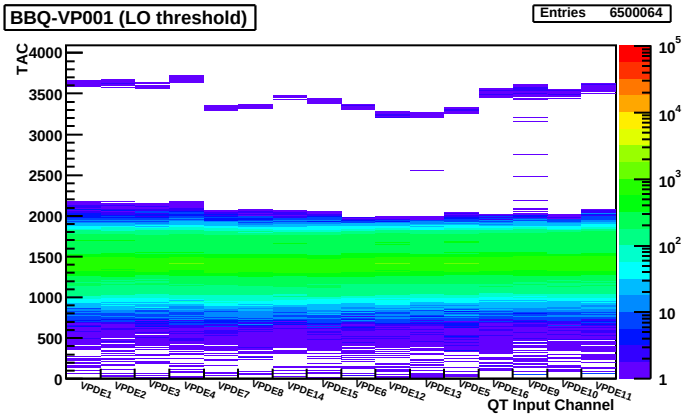

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6500064
ADC
QT Input Channel

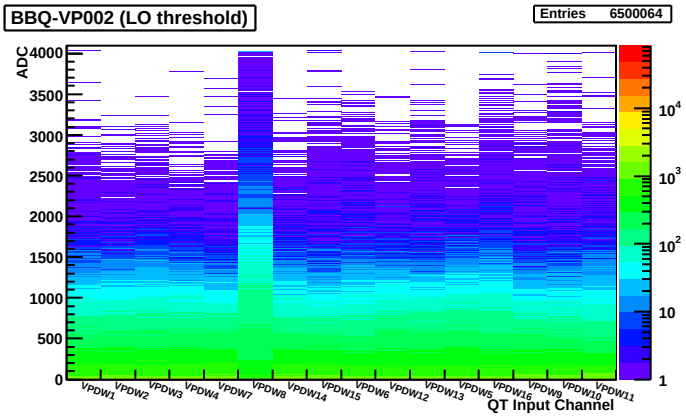

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6500064
TAC
QT Input Channel

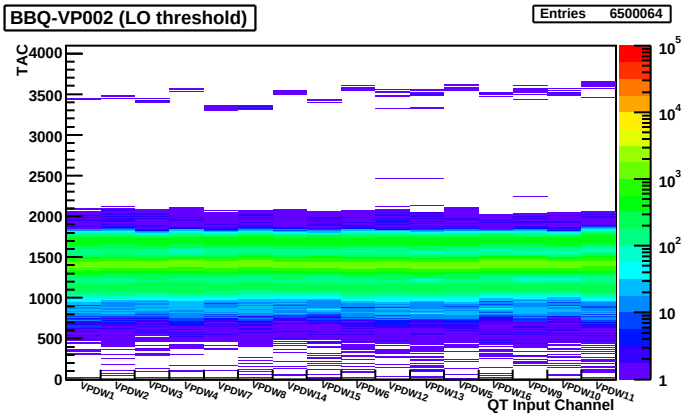

BBQ-ZD001 (ZDC TOWER)
Entries 6500064
ADC

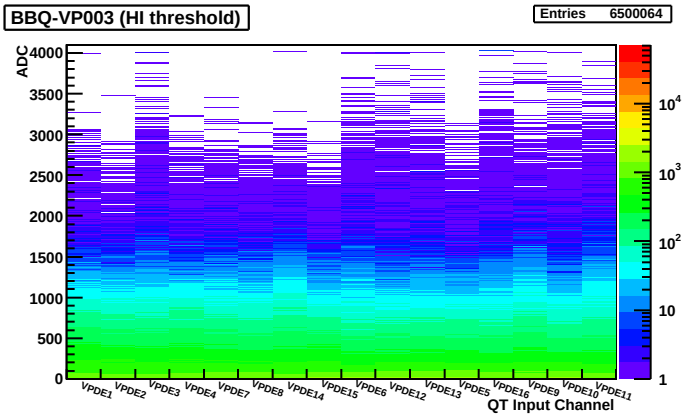

BBQ-ZD001 (ZDC TOWER)
Entries 6500064
TAC

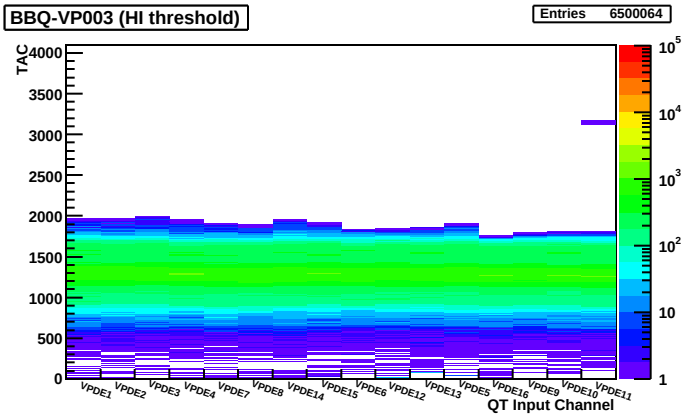

BBQ-VP001 (LO threshold)
Entries 6500064
ADC
QT Input Channel

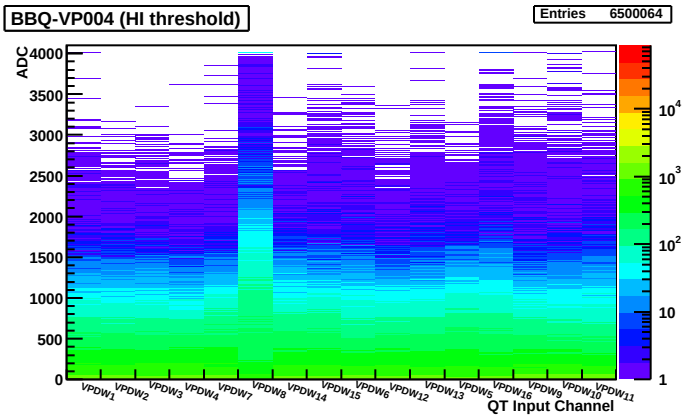

BBQ-VP001 (LO threshold)
Entries 6500064
TAC
QT Input Channel

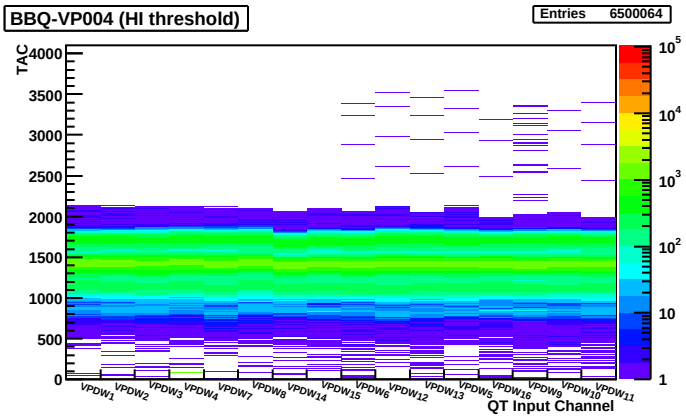

BBQ-VP002 (LO threshold)
Entries 6500064
ADC
QT Input Channel

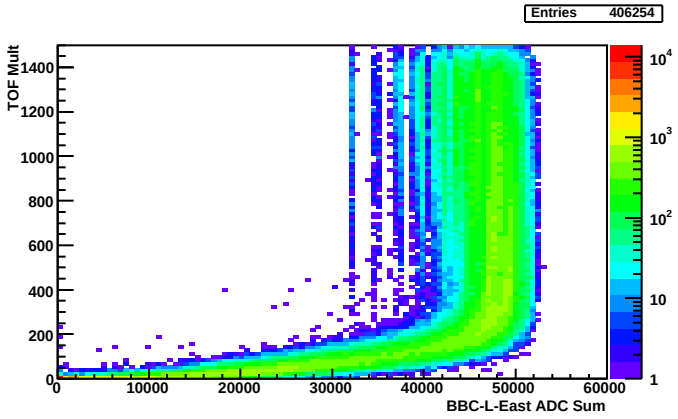

BBQ-VP002 (LO threshold)
Entries 6500064
TAC
QT Input Channel

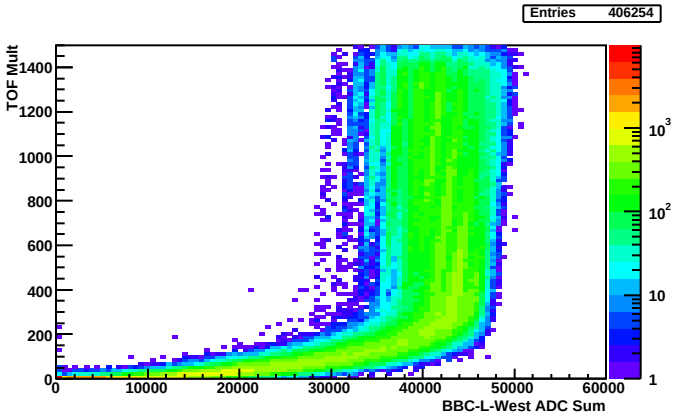

BBQ-VP003 (HI threshold)
Entries 6500064
ADC
QT Input Channel

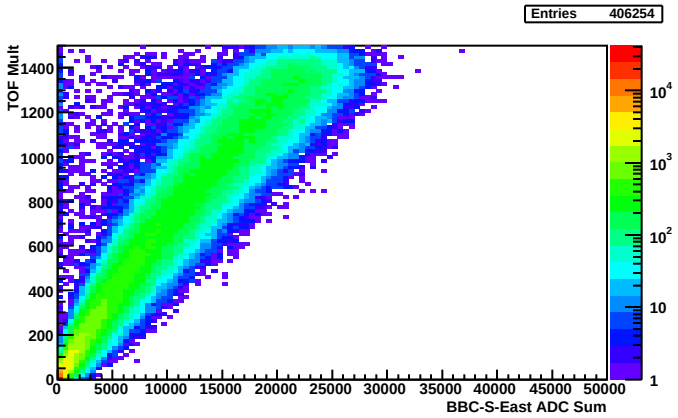

BBQ-VP003 (HI threshold)
Entries 6500064
TAC
QT Input Channel

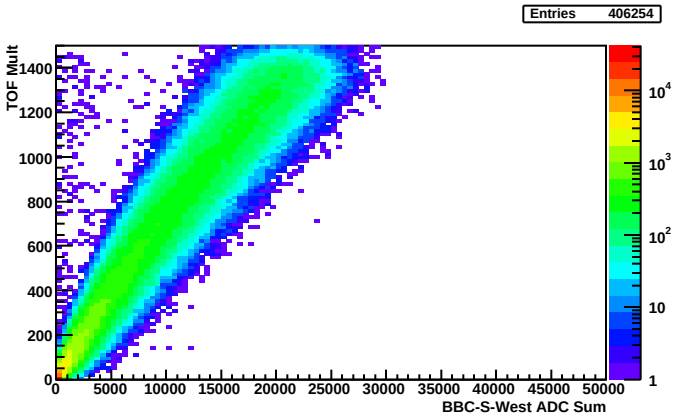

BBQ-VP004 (HI threshold)
Entries 6500064
ADC
QT Input Channel

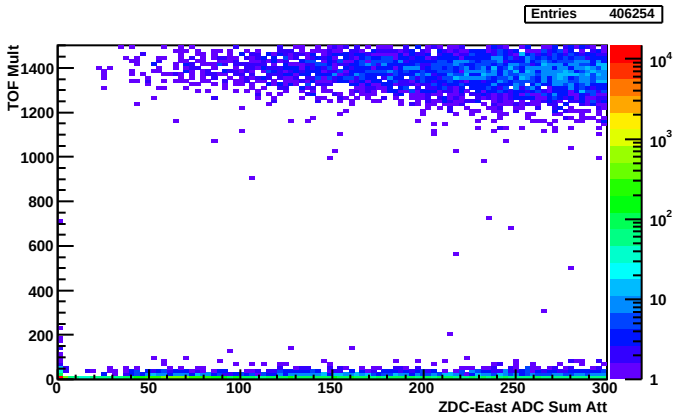

BBQ-VP004 (HI threshold)
Entries 6500064
TAC
QT Input Channel

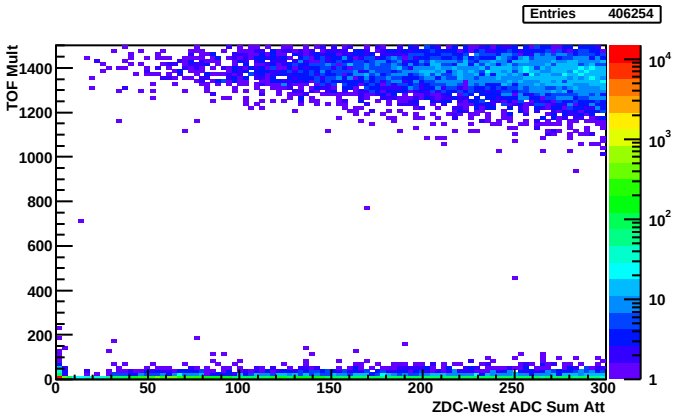

Entries 406254
TOF Mult
BBC-L-East ADC Sum

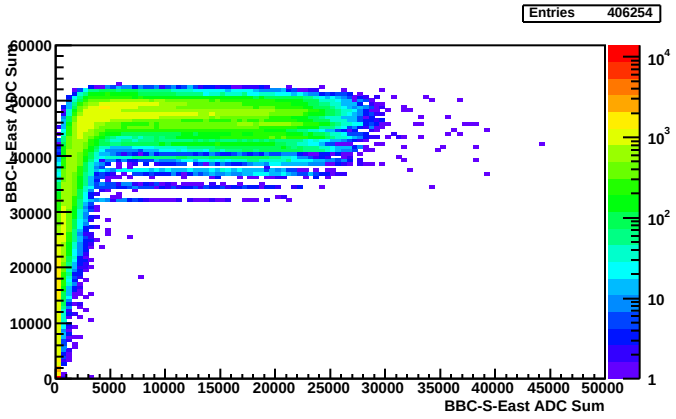

Entries 406254
TOF Mult
BBC-L-West ADC Sum

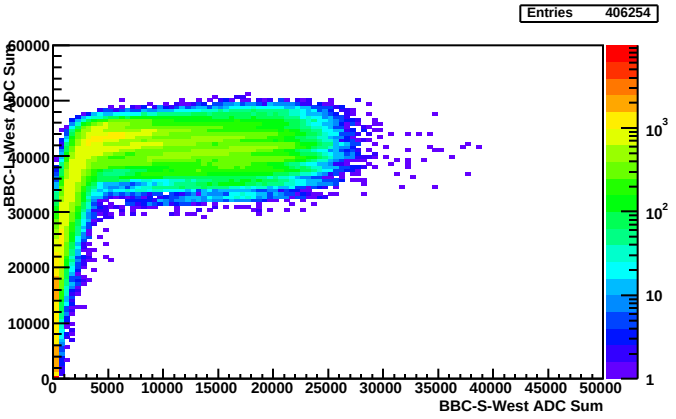

Entries 406254
TOF Mult
BBC-S-East ADC Sum

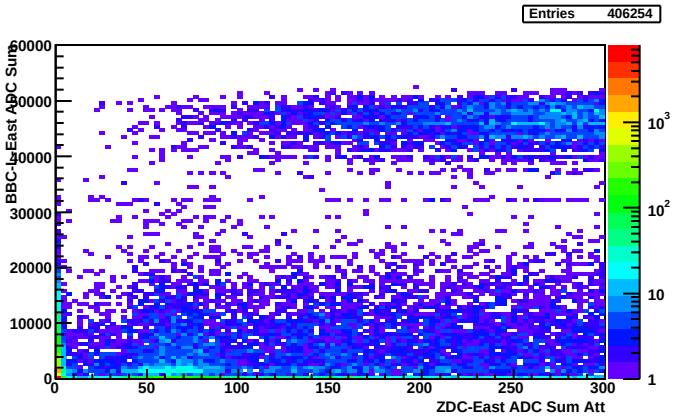

Entries 406254
TOF Mult
BBC-S-West ADC Sum

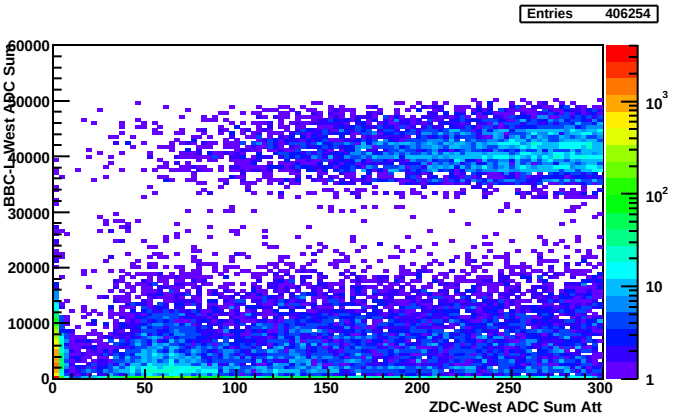

Entries 406254
TOF Mult
ZDC-East ADC Sum Att

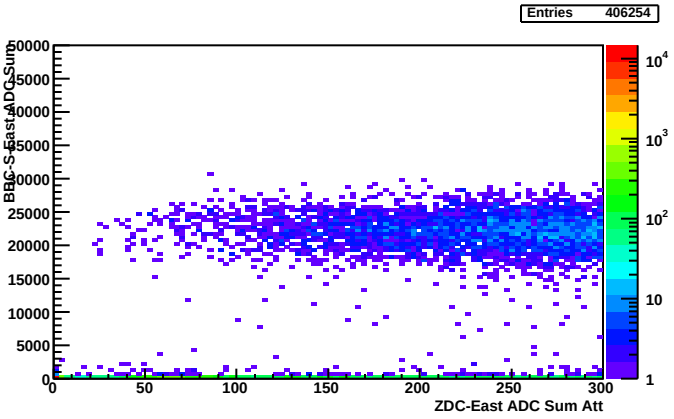

Entries 406254
TOF Mult
ZDC-West ADC Sum Att


Entries 406254
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 406254
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 406254
BBC-L-East ADC Sum
ZDC-East ADC Sum Att


Entries 406254
BBC-L-West ADC Sum
ZDC-West ADC Sum Att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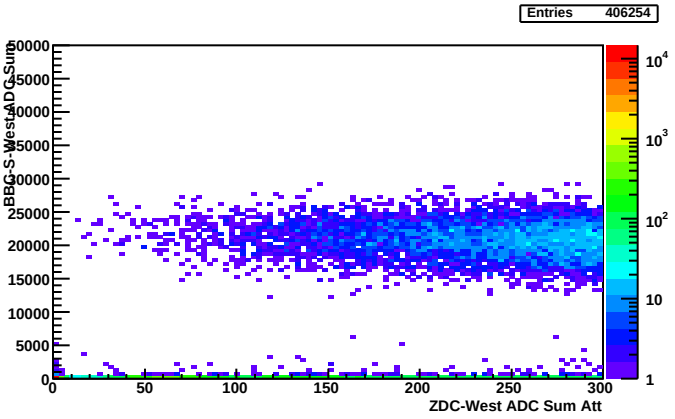
BBC-S-East ADC Sum
ZDC-East ADC Sum Att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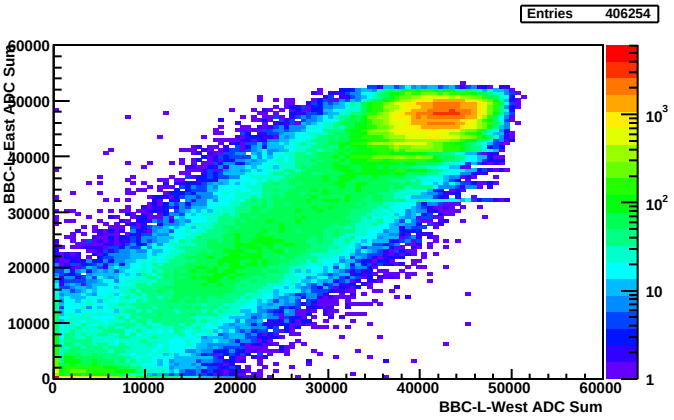
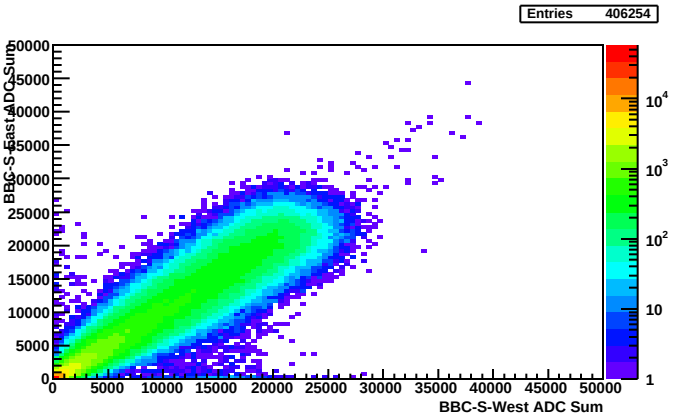
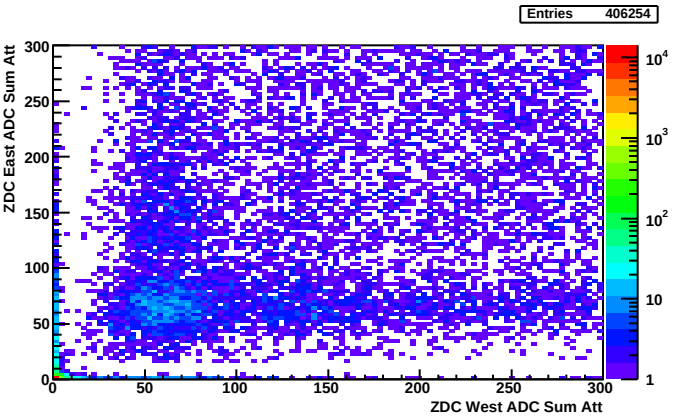
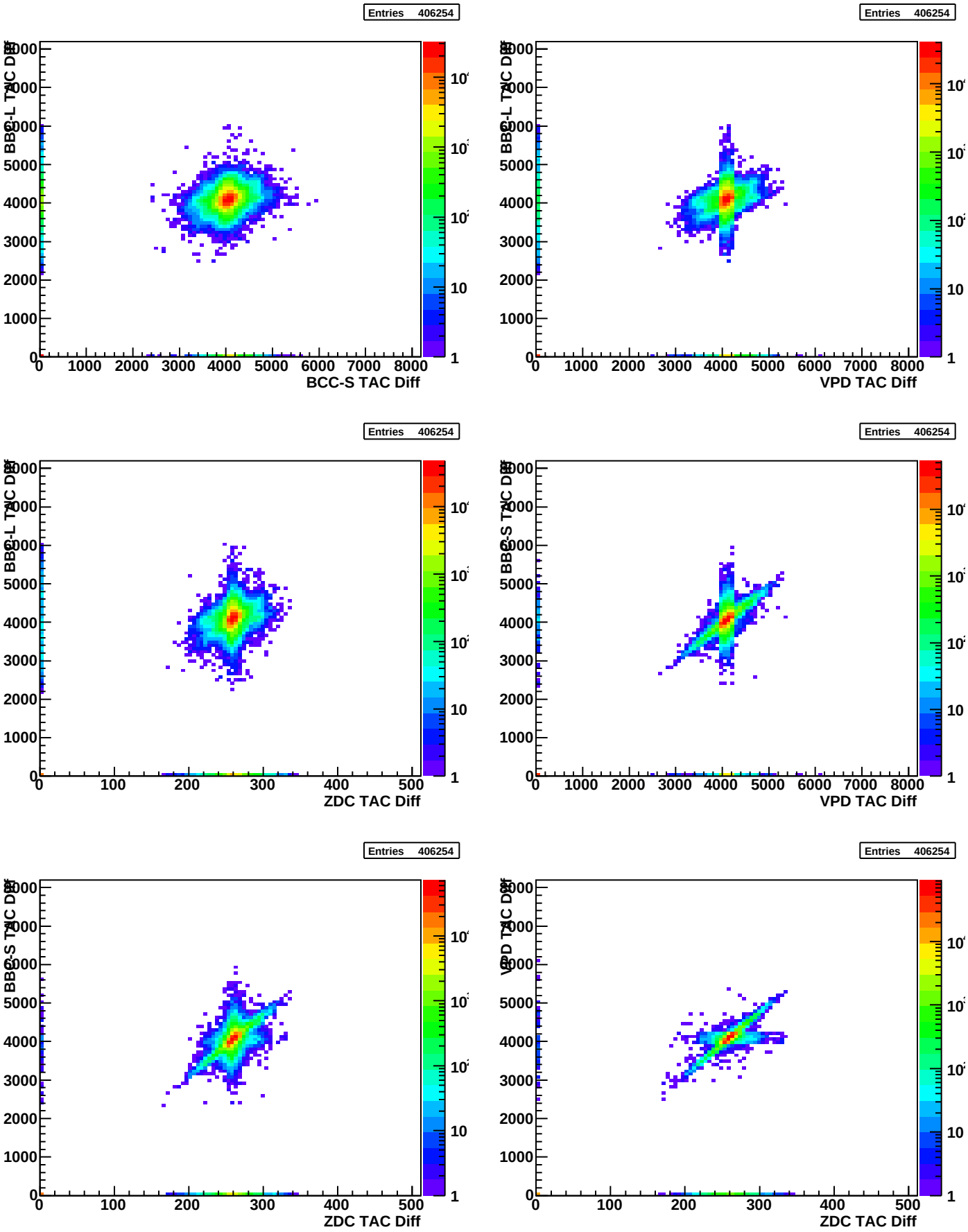
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 406254
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 406254
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 406254
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 406254
BBC-L TAC Diff
BCC-S TAC Diff
Entries 406254
BBC-L TAC Diff
VPD TAC Diff
Entries 406254
BBC-L TAC Diff
ZDC TAC Diff
Entries 406254
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VPD TAC Diff
Entries 406254
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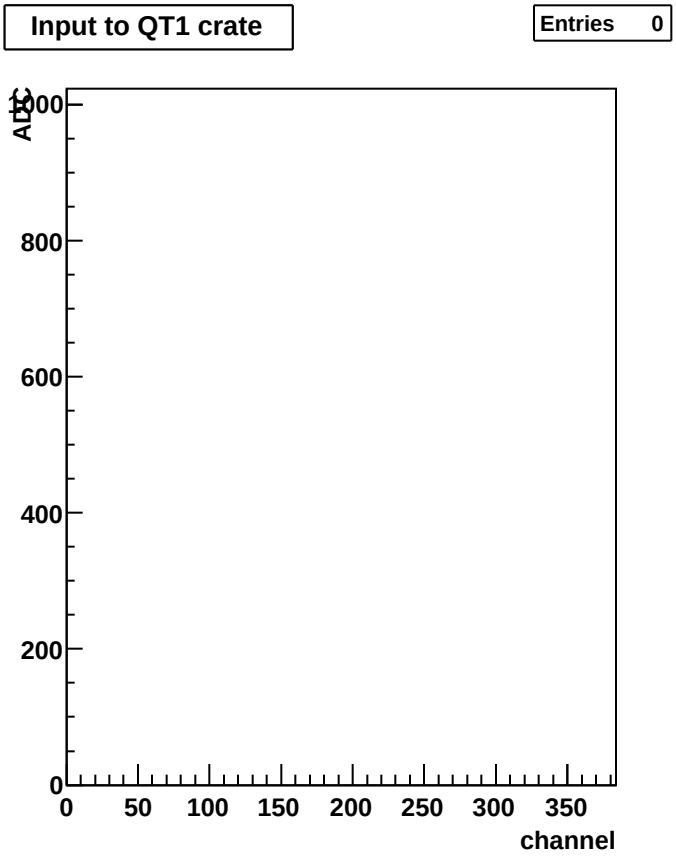
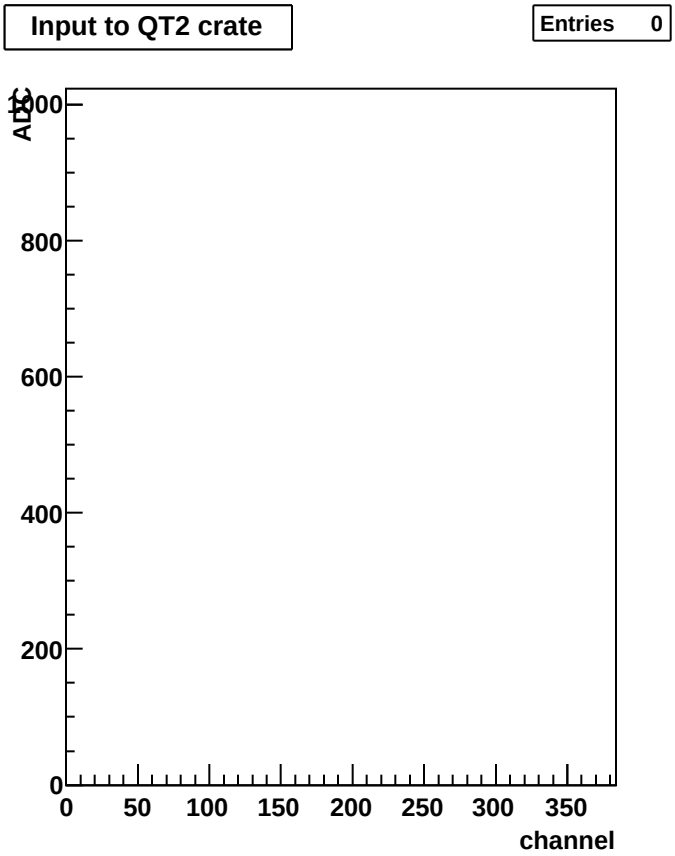
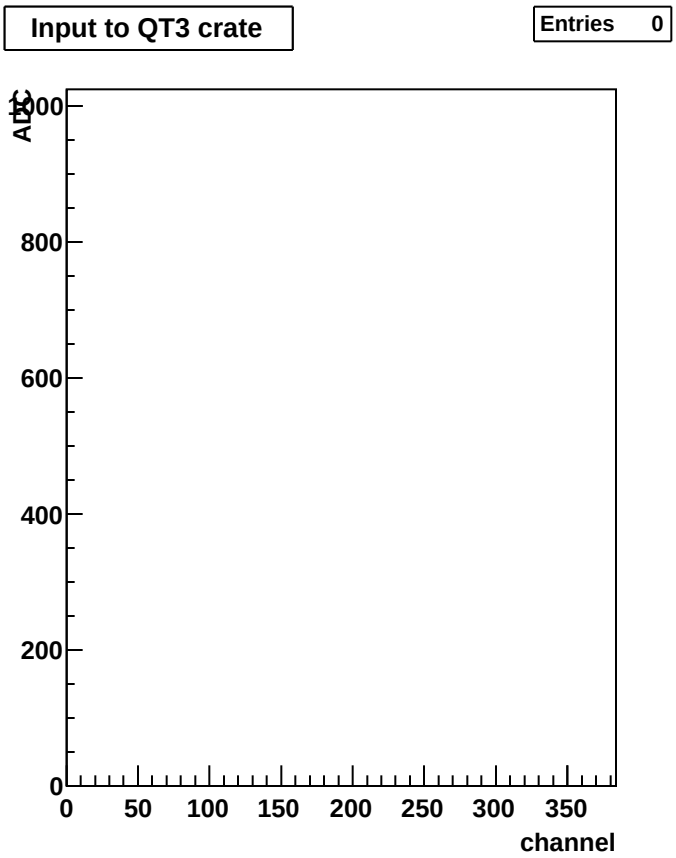
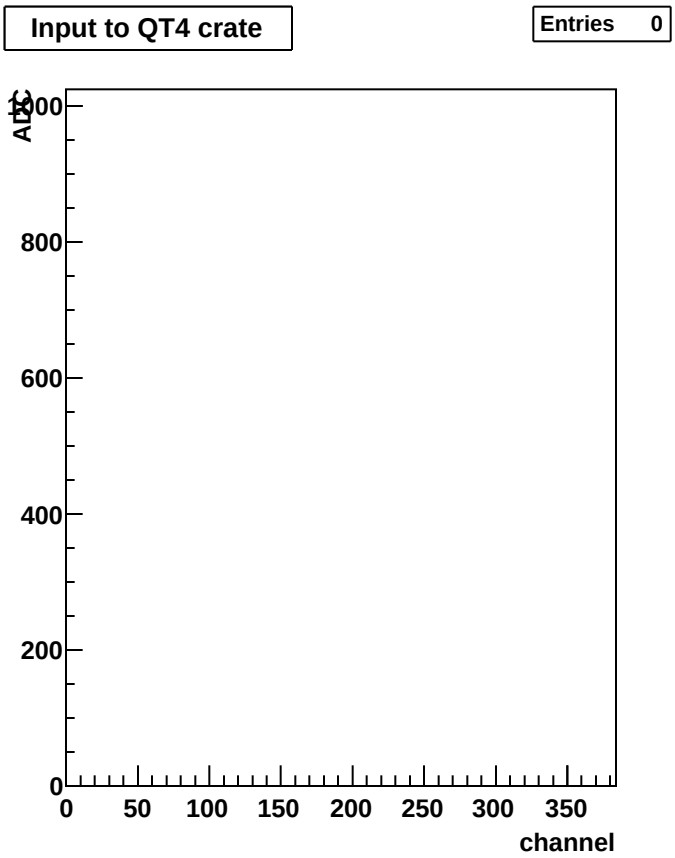
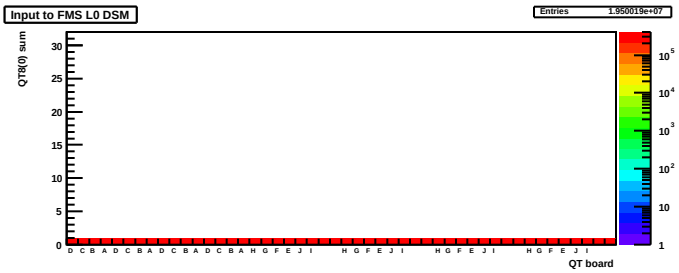
ZDC TAC Diff
Entries 406254
VPD TAC Diff
ZDC TAC Diff

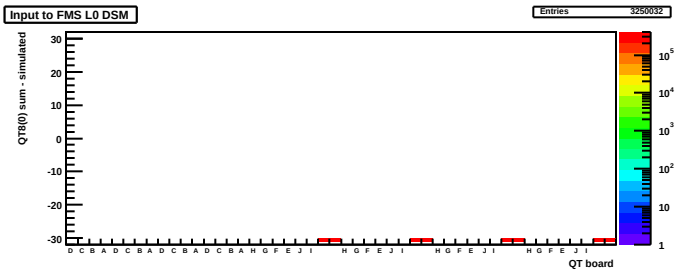

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

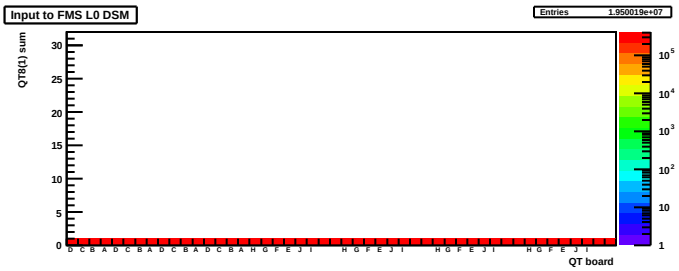

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

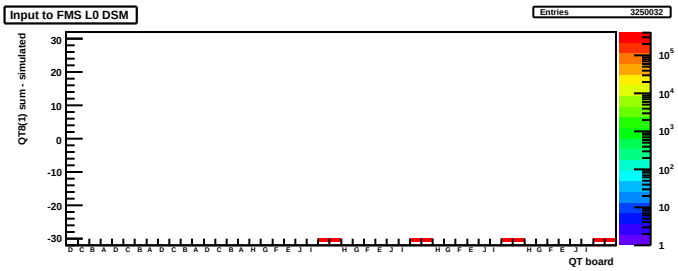

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

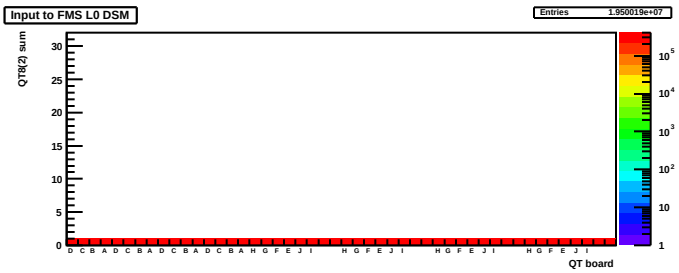

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

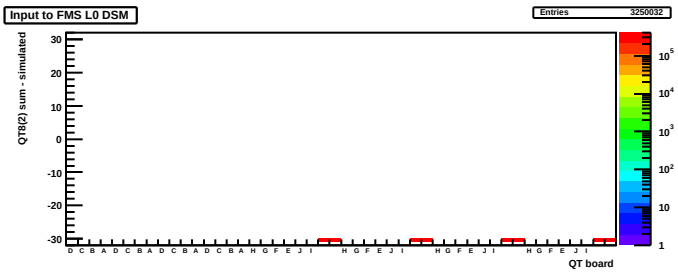

Input to FMS L0 DSM
Entries 1.950019e+07
QT8(0) sum
QT board

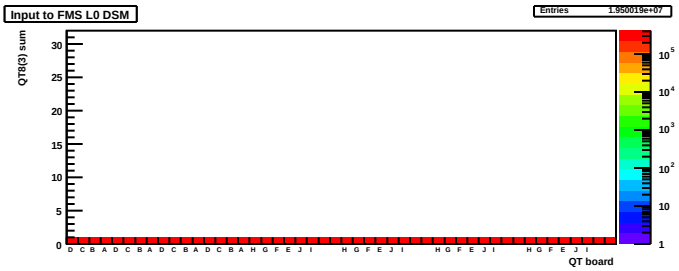

Input to FMS L0 DSM
Entries 3250032
QT8(0) sum - simulated
QT board

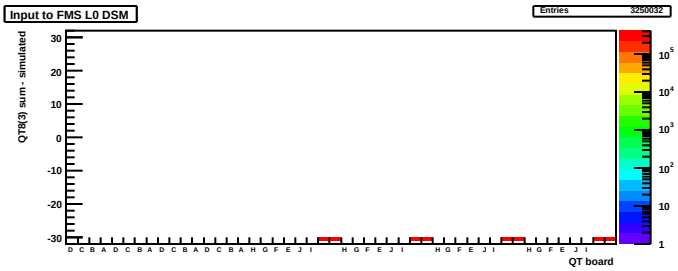

Input to FMS L0 DSM
Entries 1.950019e+07
QT8(1) sum
QT board

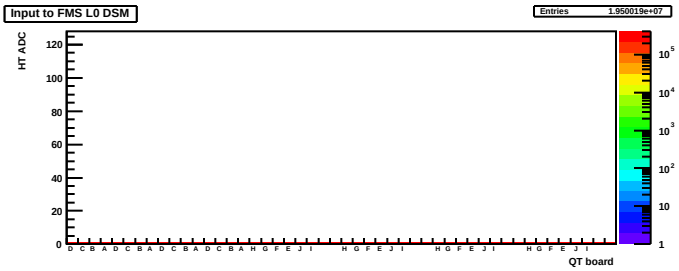

Input to FMS L0 DSM
Entries 3250032
QT8(1) sum - simulated
QT board

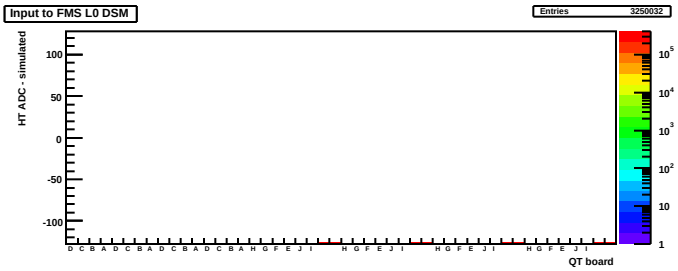

Input to FMS L0 DSM
Entries 1.950019e+07
QT8(2) sum
QT board

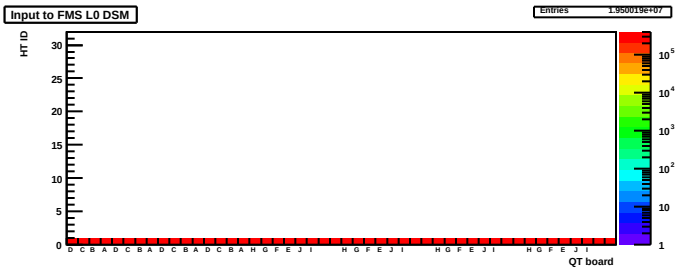

Input to FMS L0 DSM
Entries 3250032
QT8(2) sum - simulated
QT board

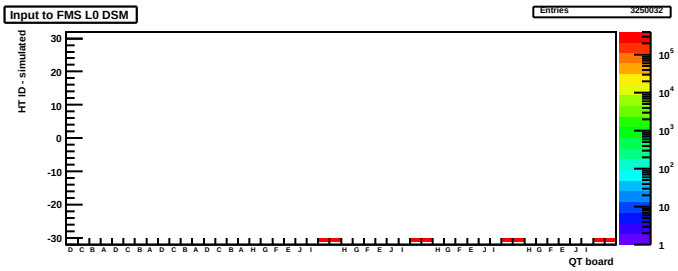

Input to FMS L0 DSM
Entries 1.950019e+07
QT8(3) sum
QT board

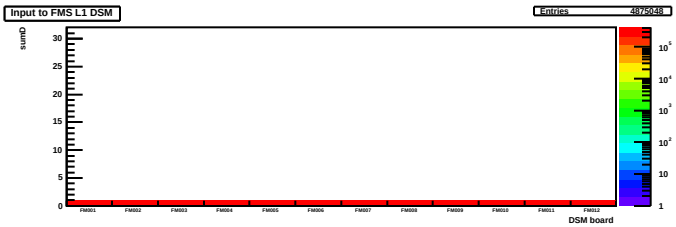

Input to FMS L0 DSM
Entries 3250032
QT8(3) sum - simulated
QT board

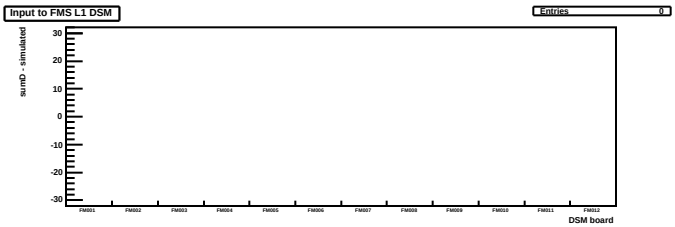

Input to FMS L0 DSM
Entries 1.950019e+07
HT ADC
QT board

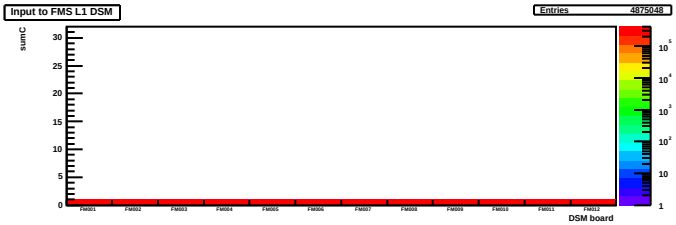

Input to FMS L0 DSM
Entries 3250032
HT ADC - simulated
QT board

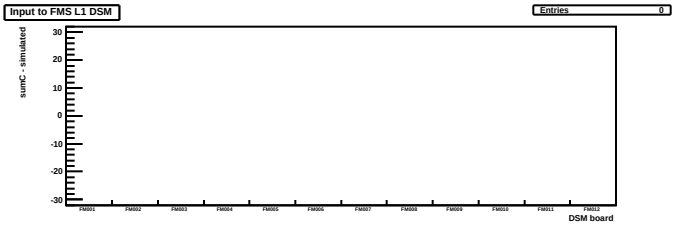

Input to FMS L0 DSM
Entries 1.950019e+07
HT ID
QT board

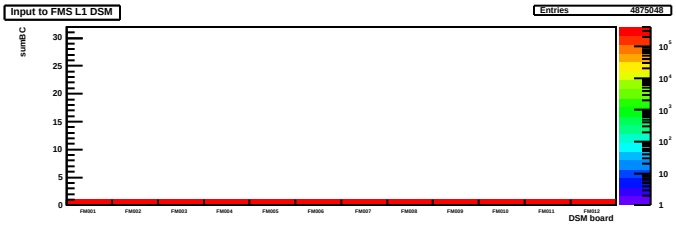

Input to FMS L0 DSM
Entries 3250032
HT ID - simulated
QT board

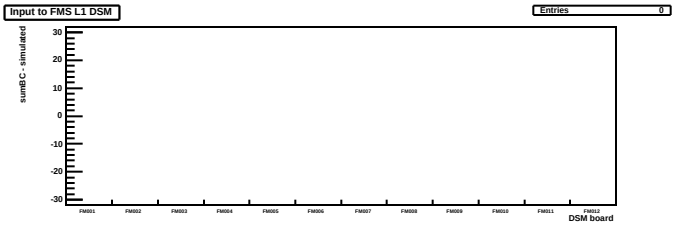

Input to FMS L1 DSM
Entries 4875048
sumD
DSM board

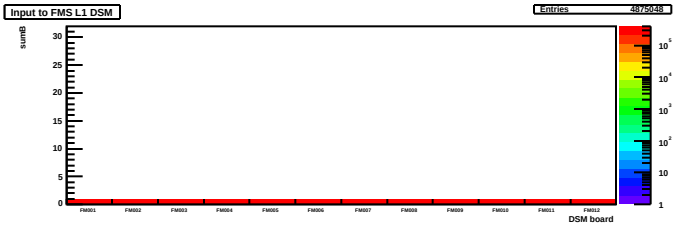

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

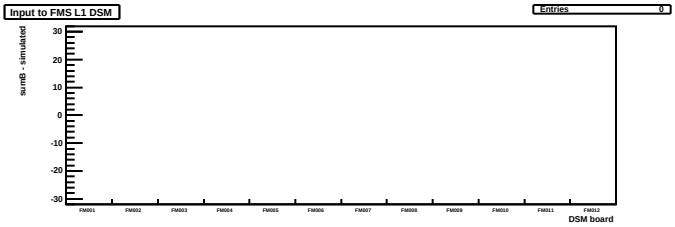

Input to FMS L1 DSM
Entries 4875048
sumC
DSM board

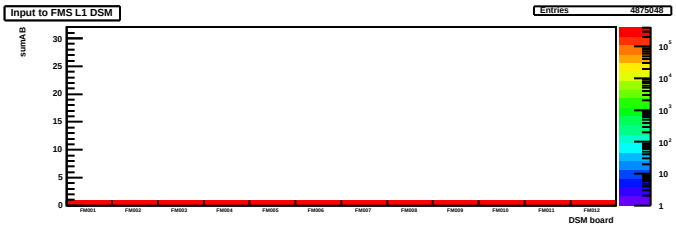

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

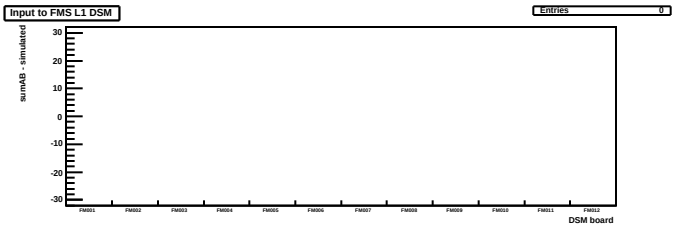

Input to FMS L1 DSM
Entries 4875048
sumBC
DSM board

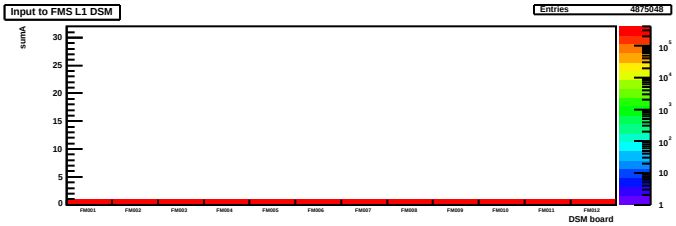

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

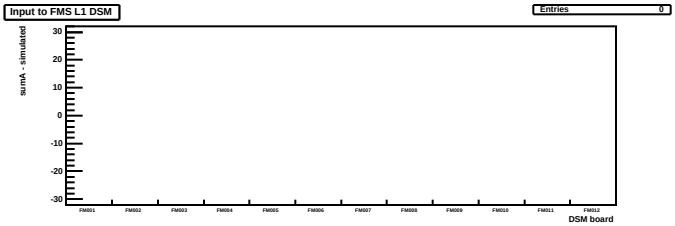

Input to FMS L1 DSM
Entries 4875048
sumB
DSM board

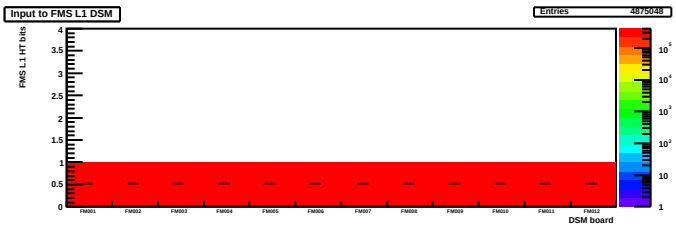

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

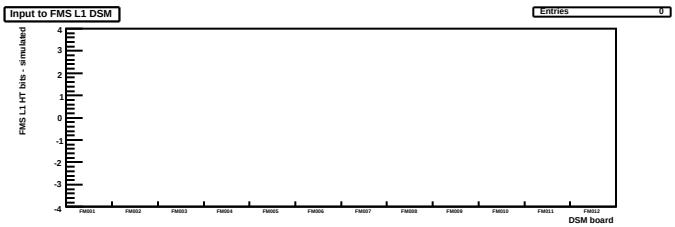

Input to FMS L1 DSM
Entries 4875048
sumAB
DSM board

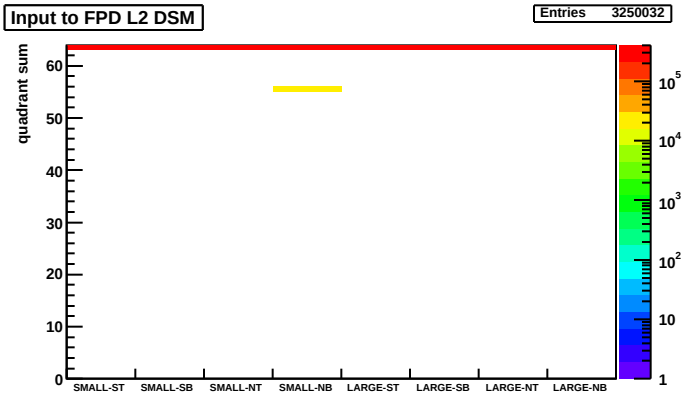

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

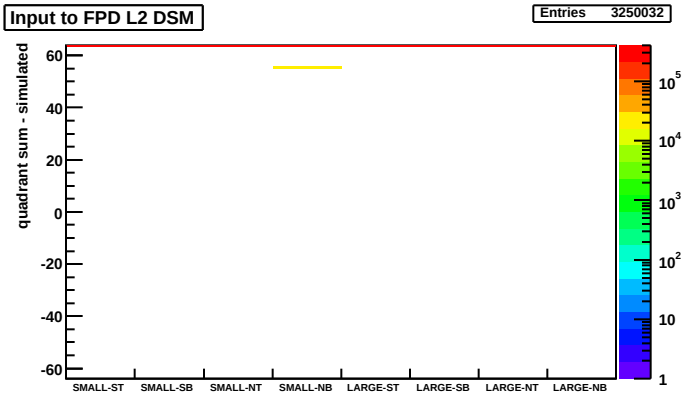

Input to FMS L1 DSM
Entries 4875048
sumA
DSM board

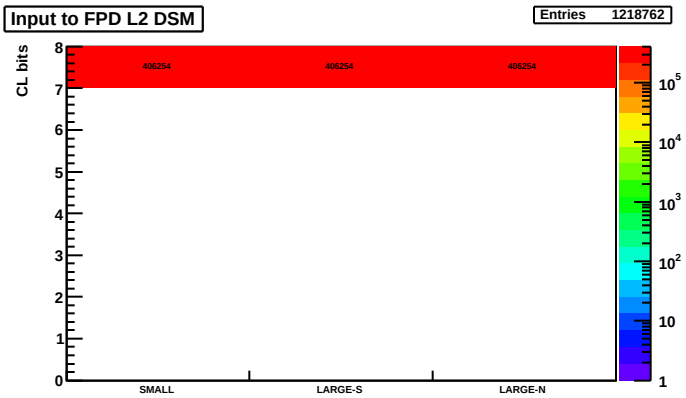

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

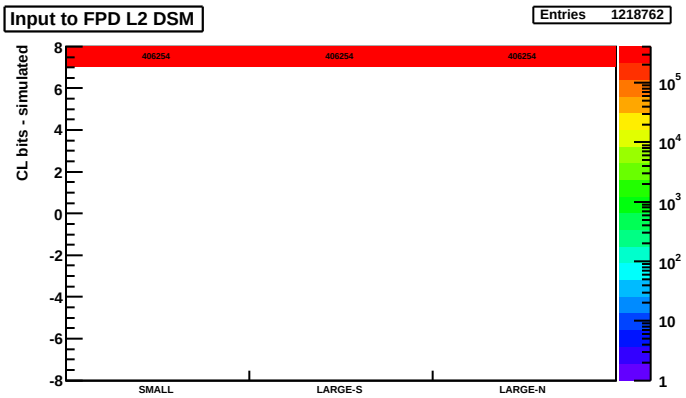

Input to FMS L1 DSM
Entries 4875048
FMS L1 HT bits
DSM board

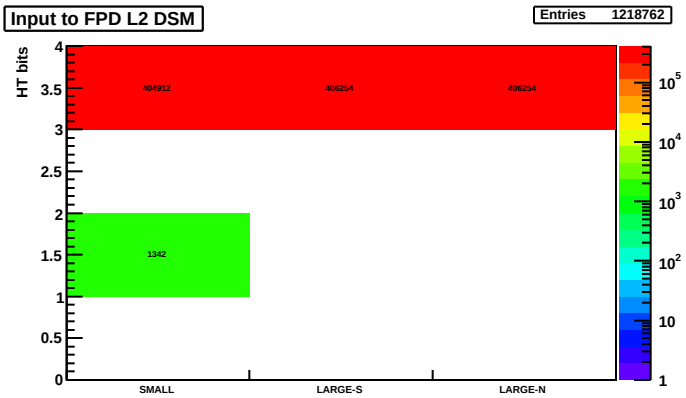

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

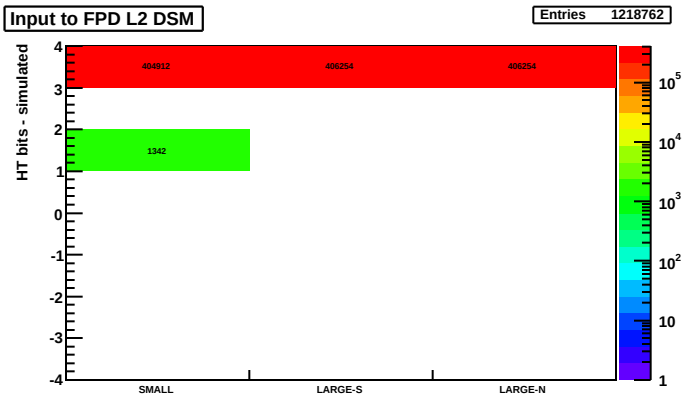

Input to FPD L2 DSM
Entries 3250032
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

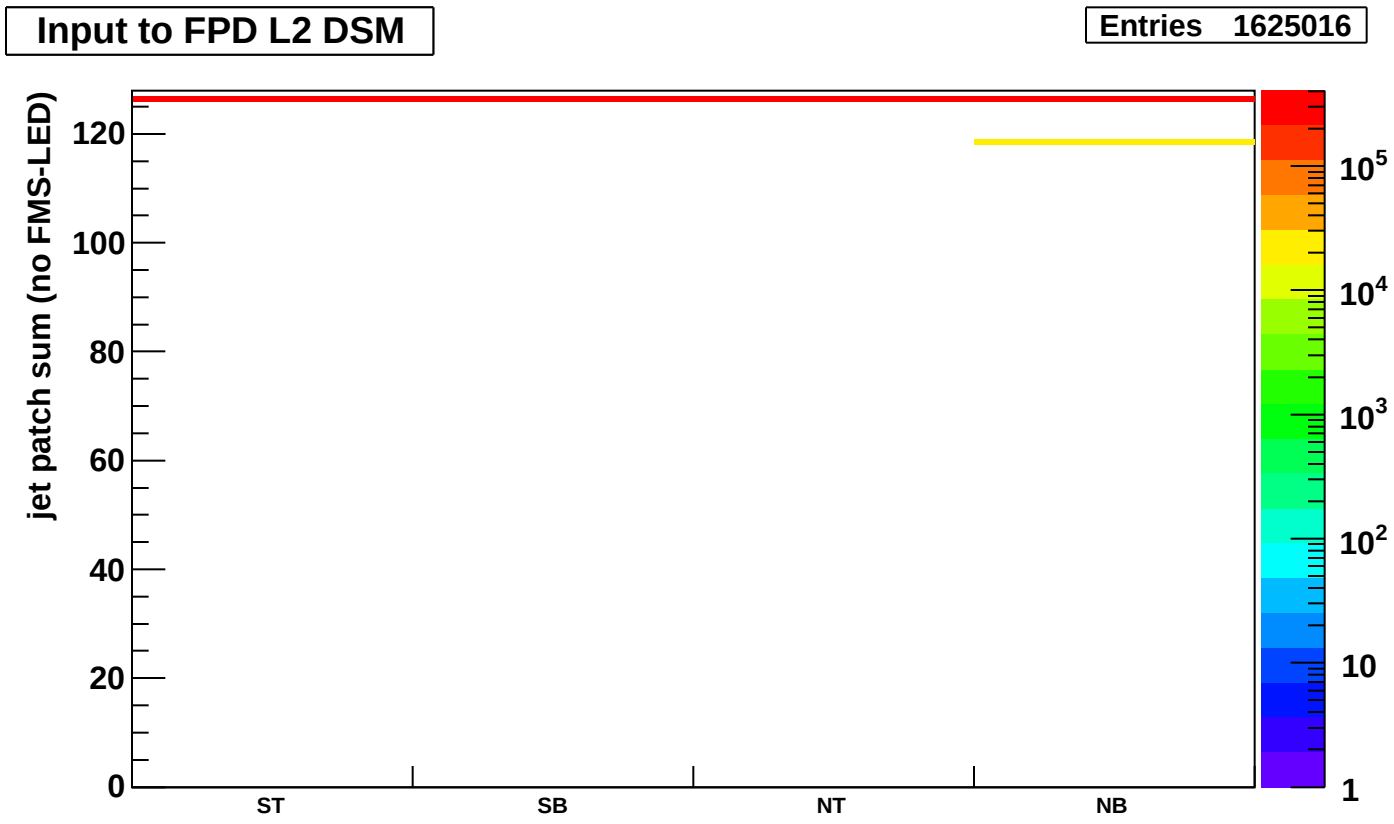

Input to FPD L2 DSM
Entries 3250032
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

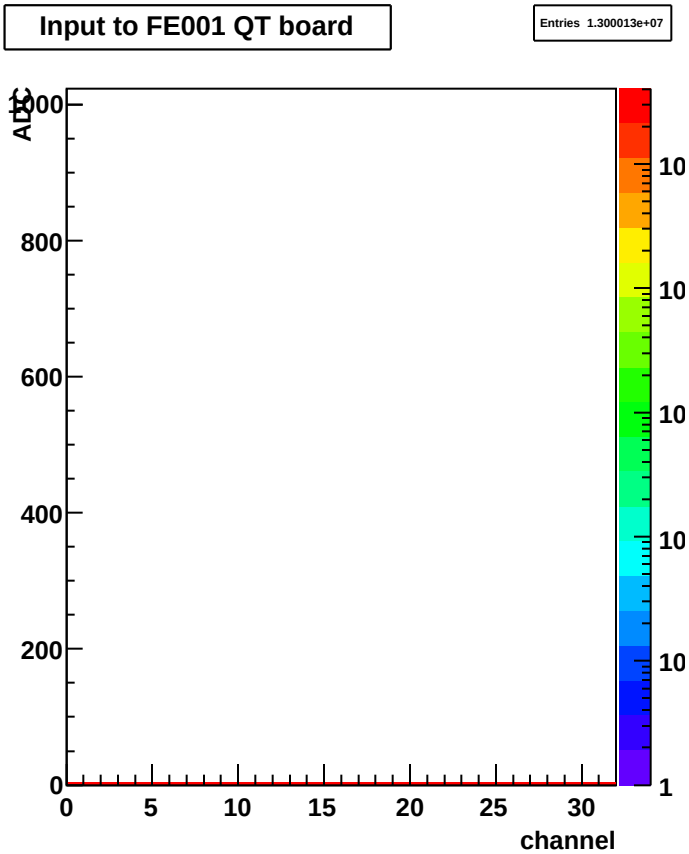

Input to FPD L2 DSM
Entries 1218762
CL bits
406254
406254
406254
SMALL
LARGE-S
LARGE-N

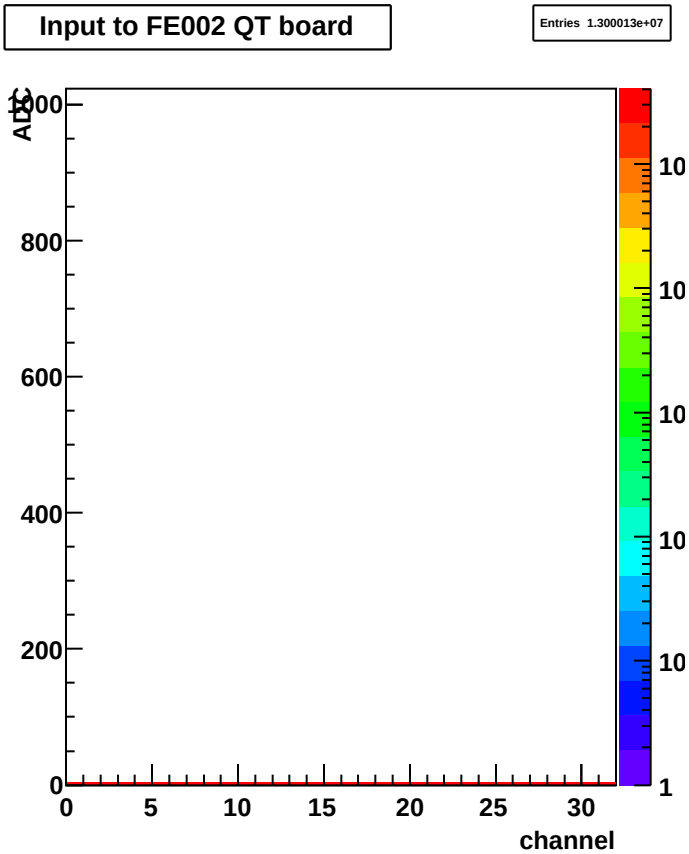

Input to FPD L2 DSM
Entries 1218762
CL bits - simulated
406254
406254
406254
SMALL
LARGE-S
LARGE-N

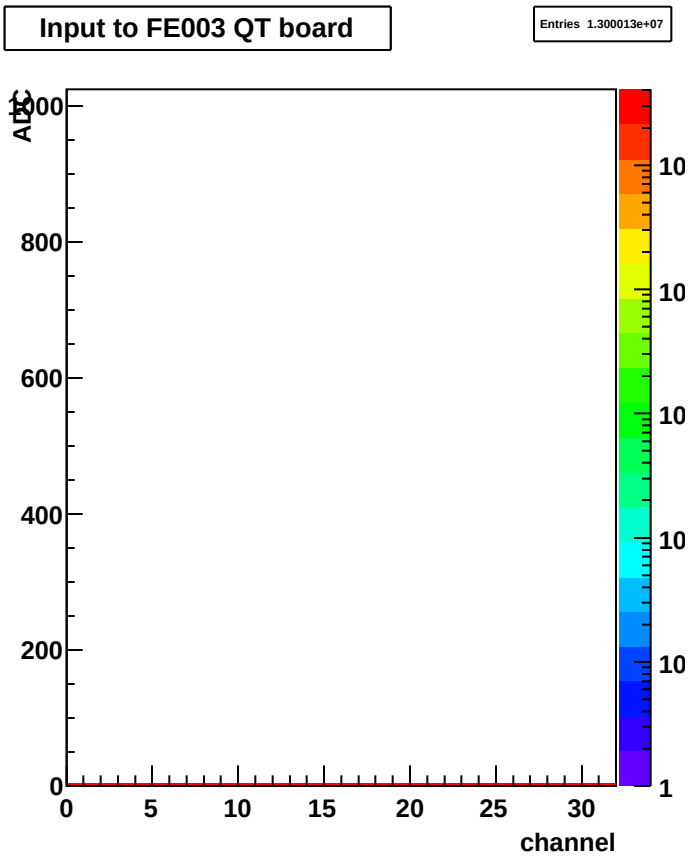

Input to FPD L2 DSM
Entries 1218762
HT bits
404912
406254
406254
1342
SMALL
LARGE-S
LARGE-N

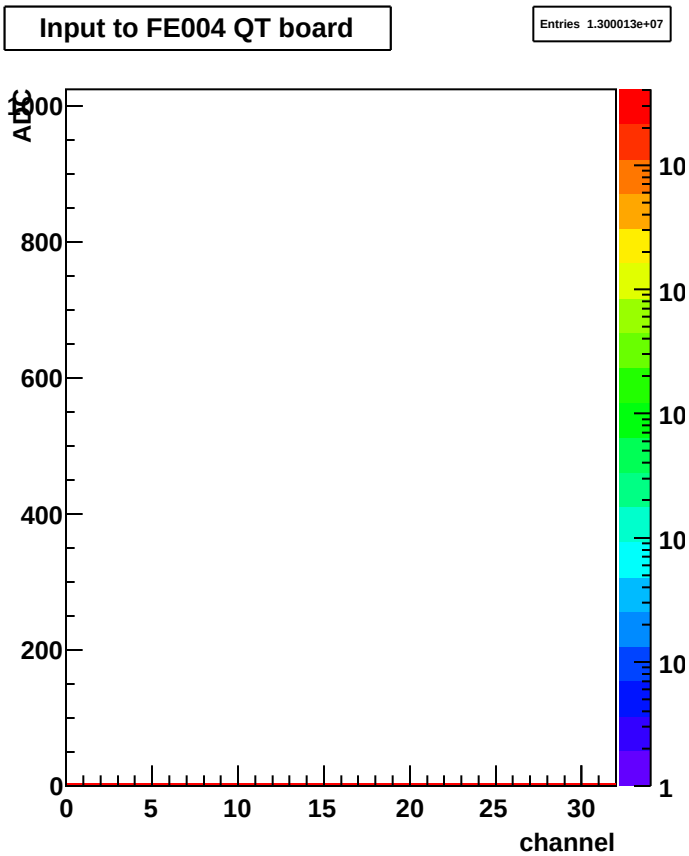

Input to FPD L2 DSM
Entries 1218762
HT bits - simulated
404912
406254
406254
1342
SMALL
LARGE-S
LARGE-N

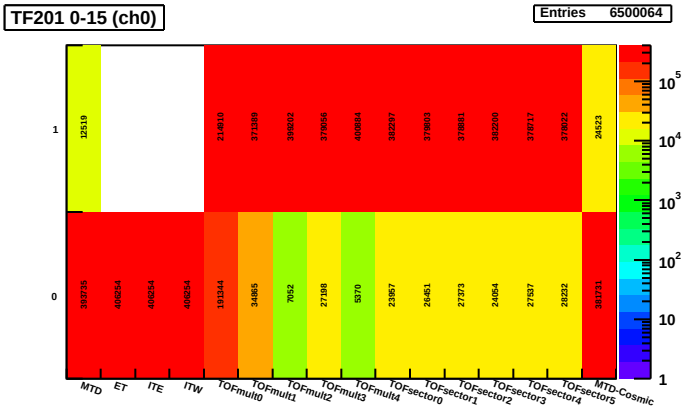

Input to FPD L2 DSM
Entries 1625016
jet patch sum (no FMS-LED)
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

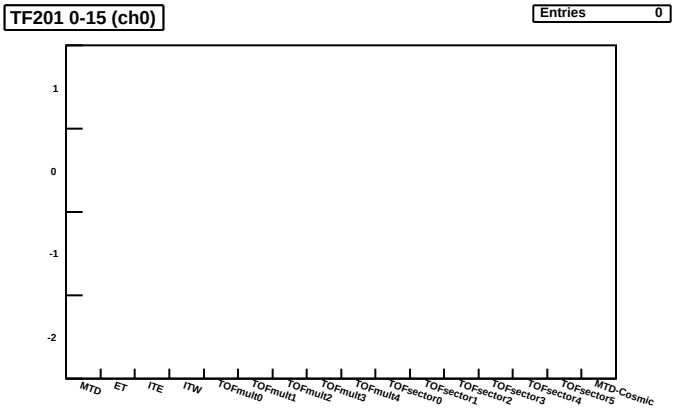

Input to FE001 QT board
Entries 1.300013e+07
ADC
channel

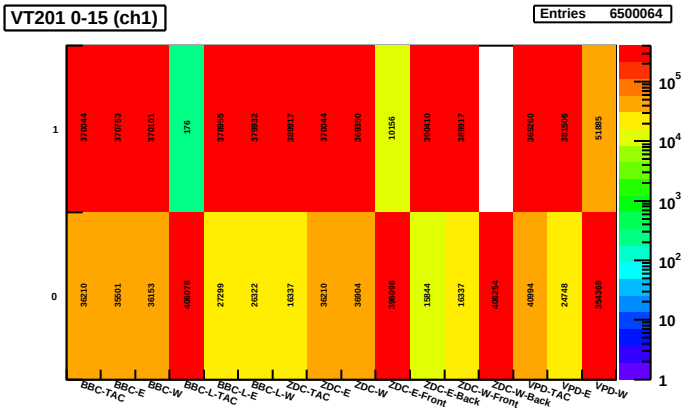

Input to FE002 QT board
Entries 1.300013e+07
ADC
channel

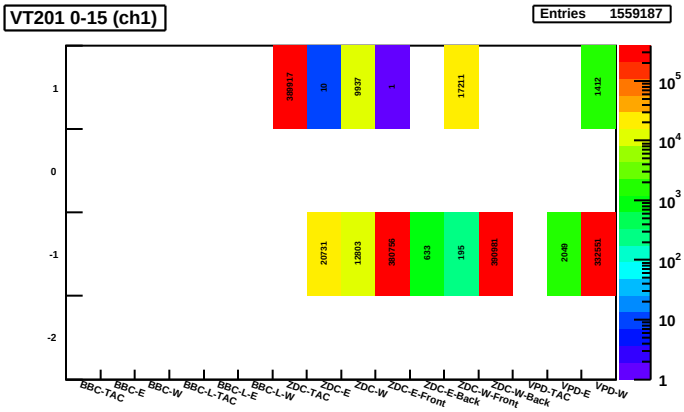

Input to FE003 QT board
Entries 1.300013e+07
ADC
channel

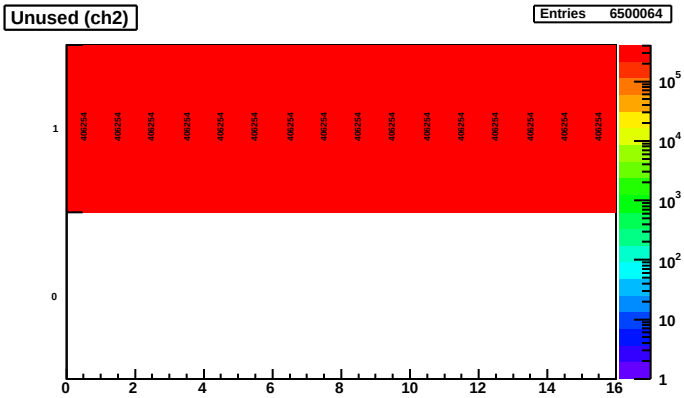

Input to FE004 QT board
Entries 1.300013e+07
ADC
channel

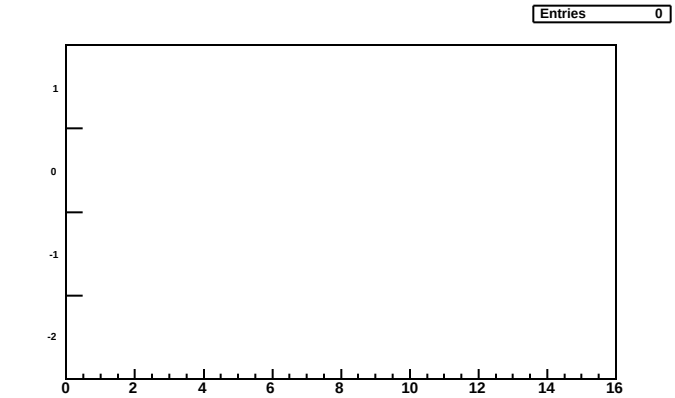

TF201 0-15 (ch0)
Entries 6500064
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

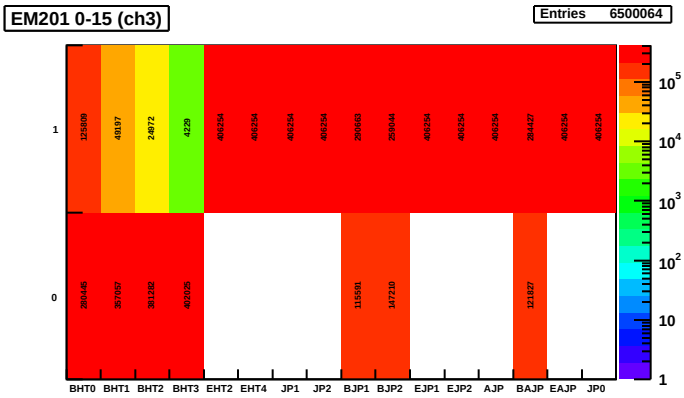

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

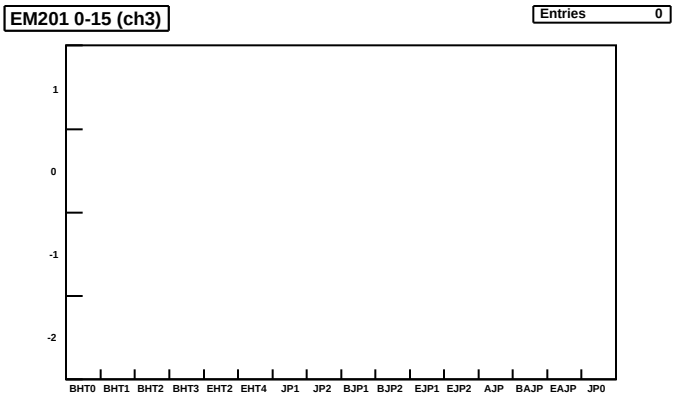

VT201 0-15 (ch1)
Entries 6500064
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 1559187
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

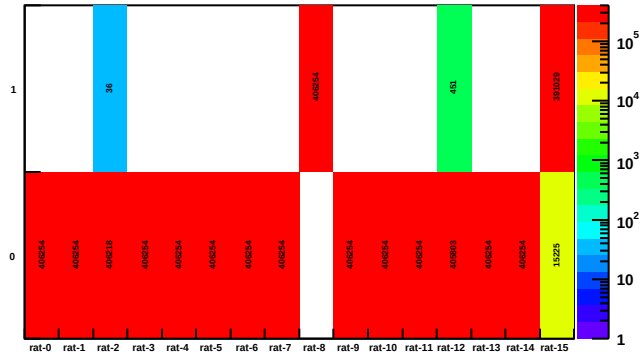

Unused (ch2)
Entries 6500064

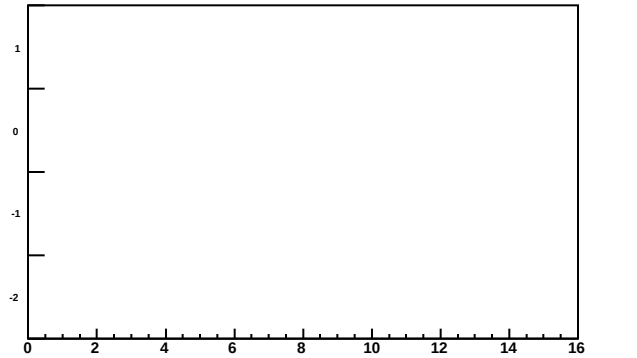

Entries 0


EM201 0-15 (ch3)
Entries 6500064
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

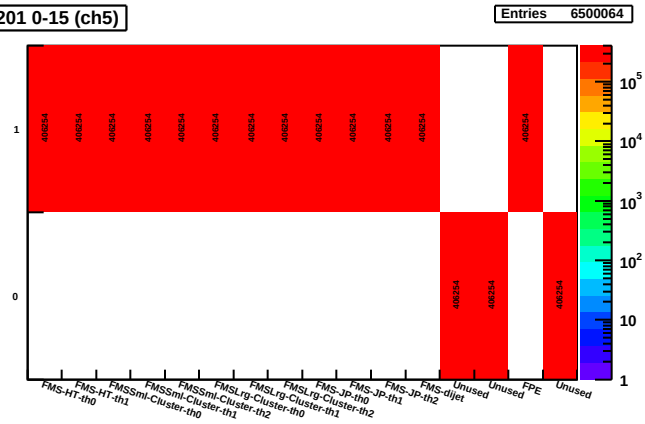

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

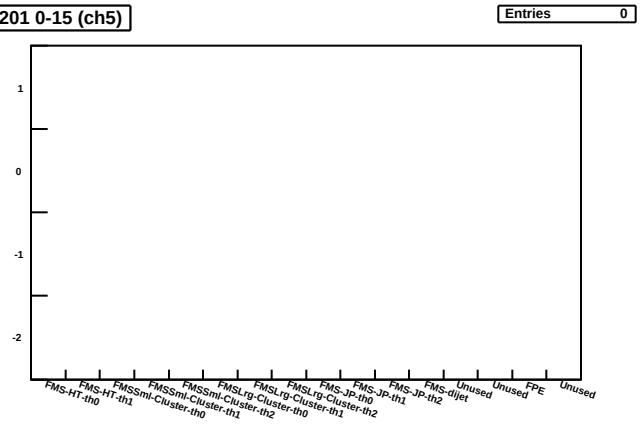




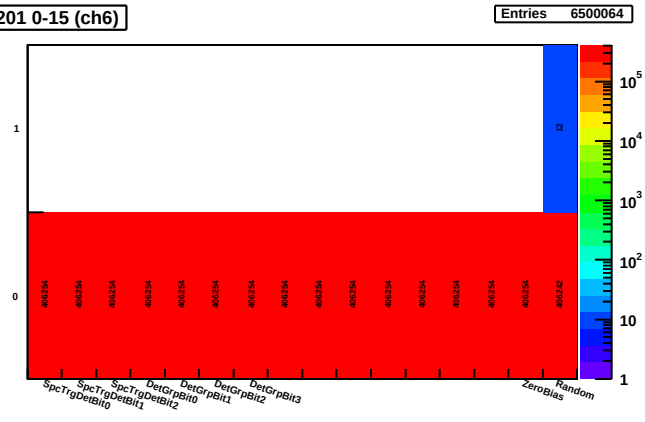
FP201 0-15 (ch5)

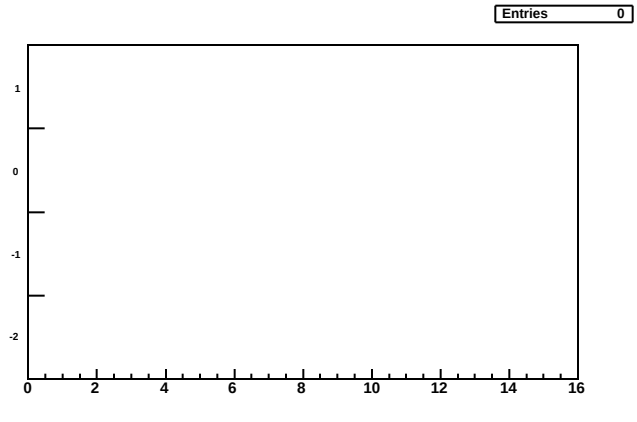
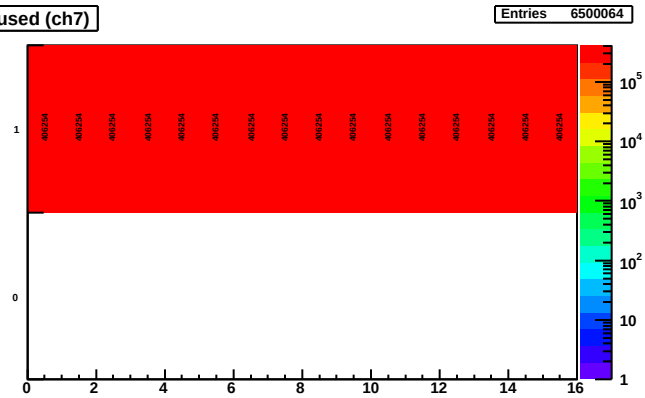
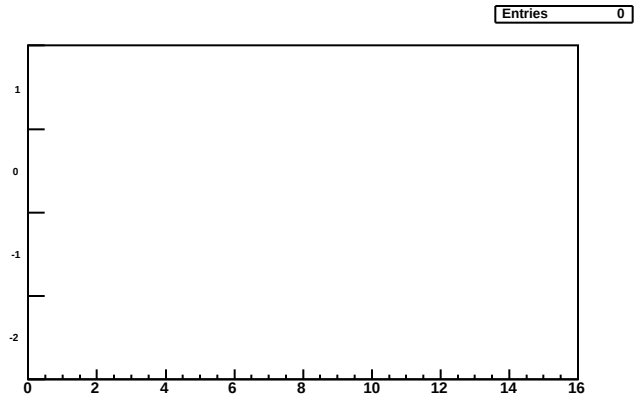


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)