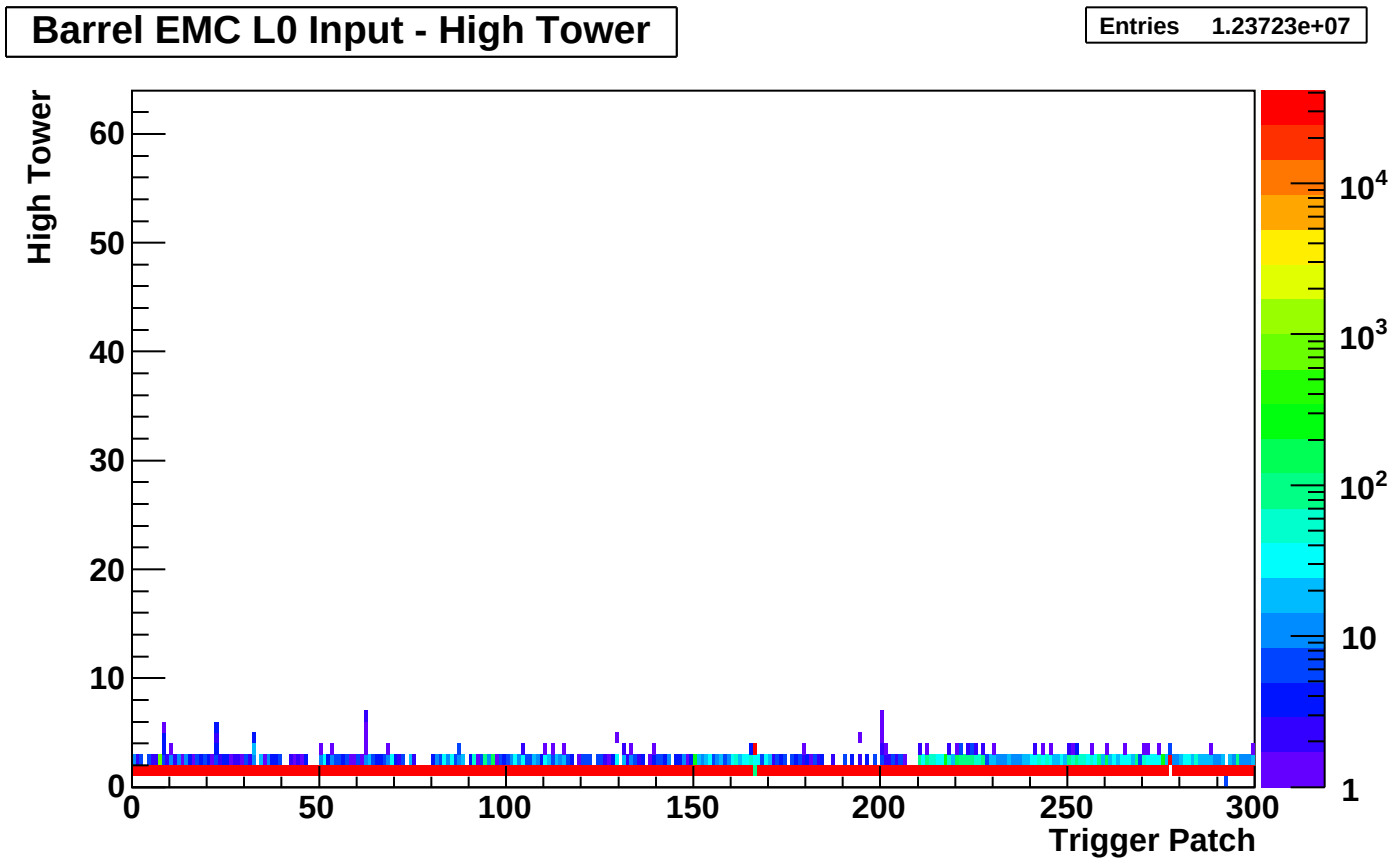
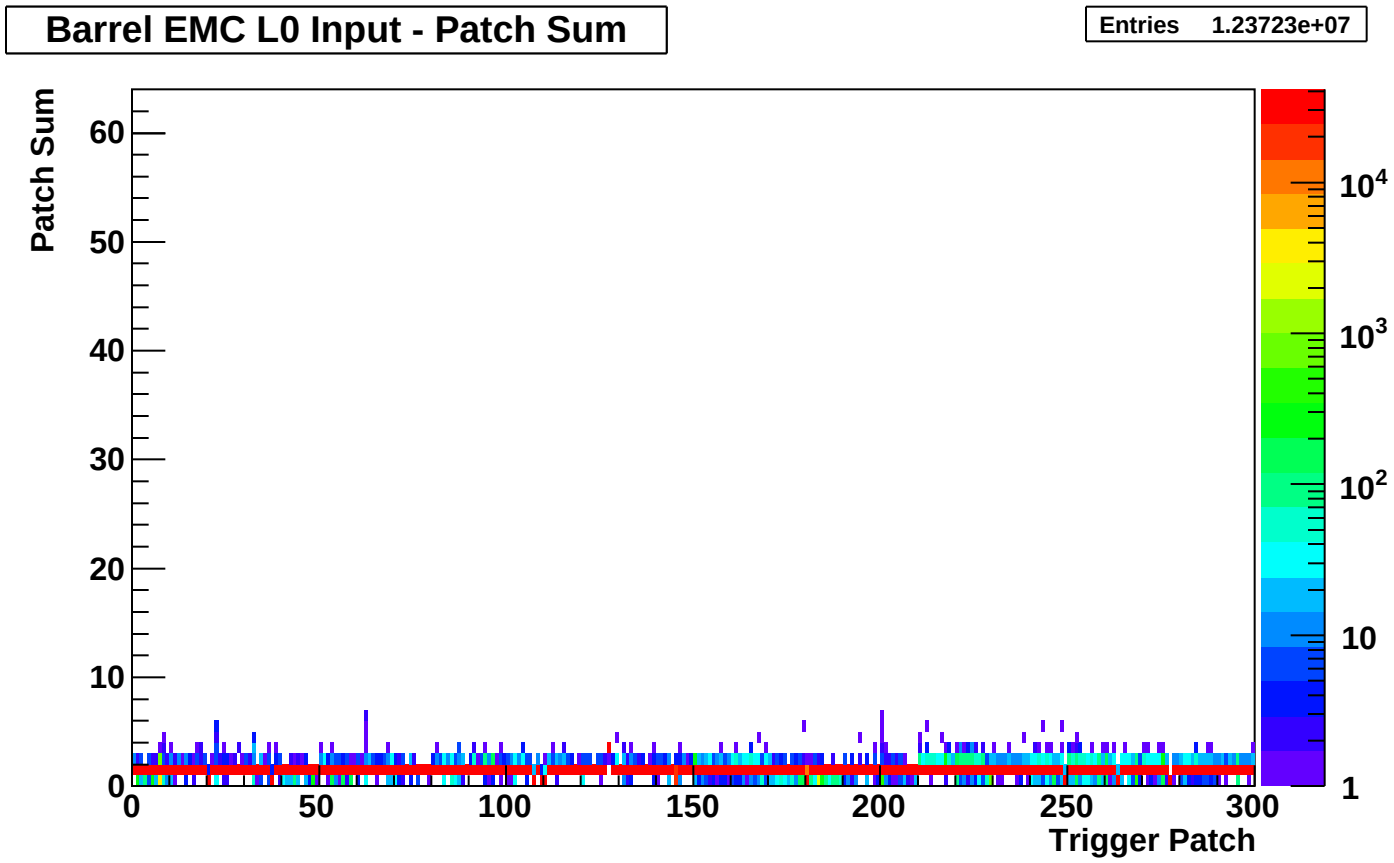
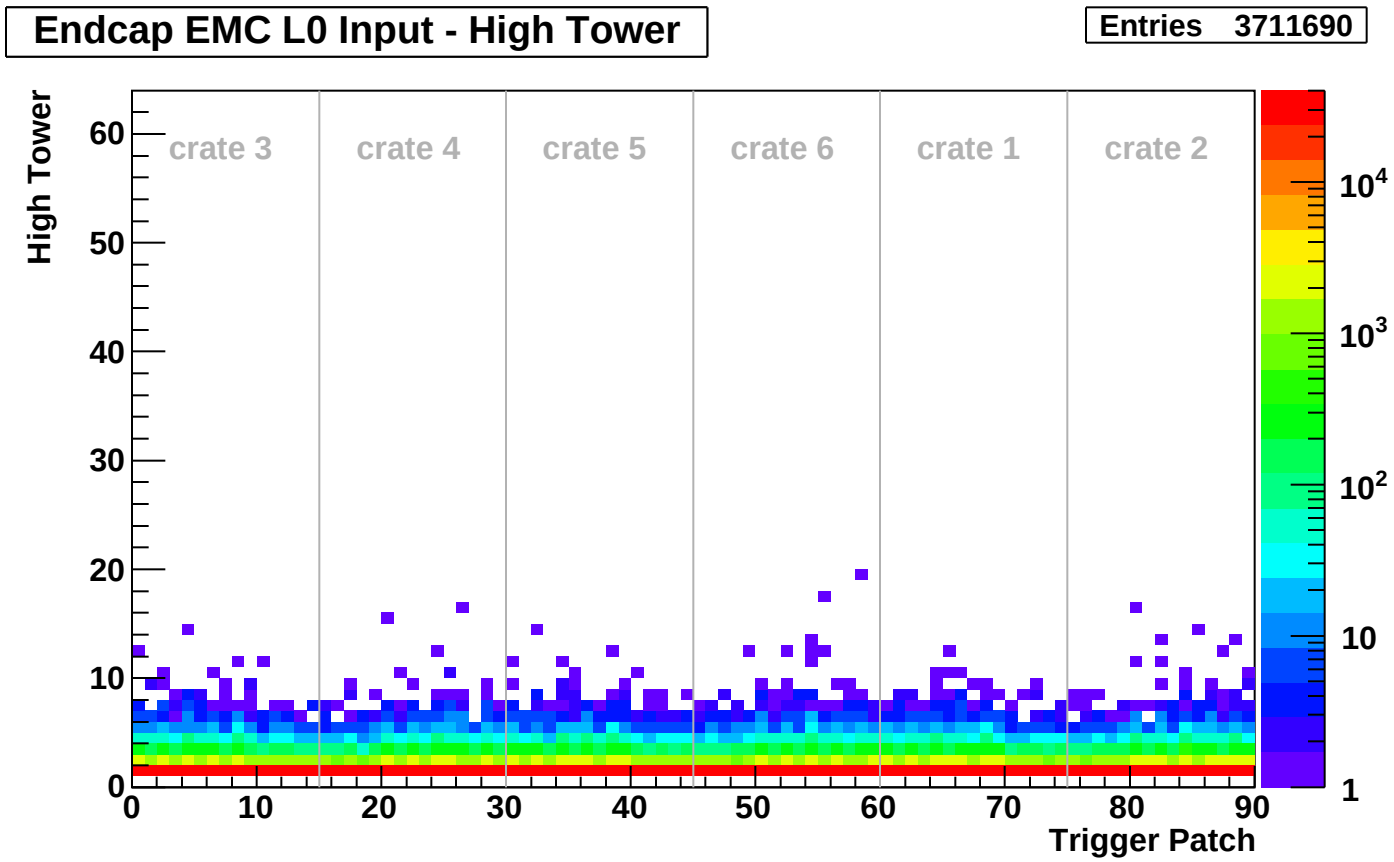
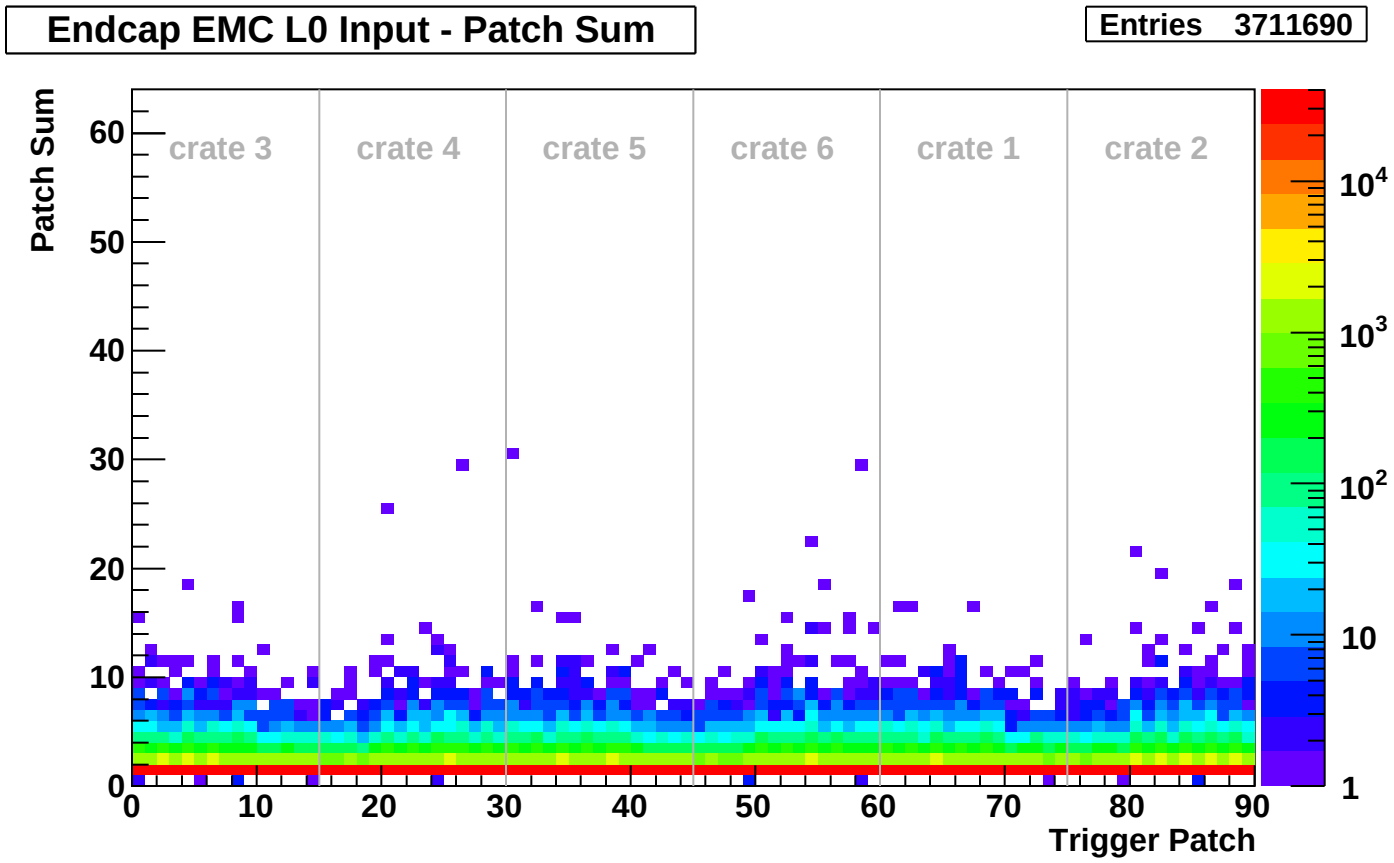
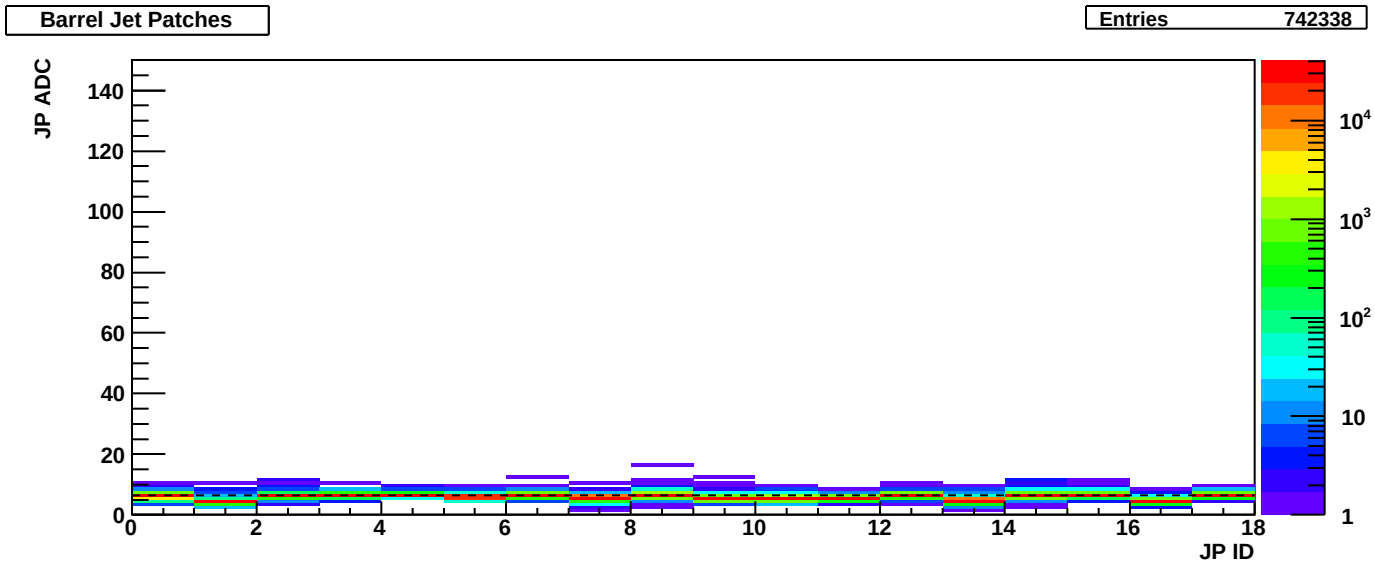
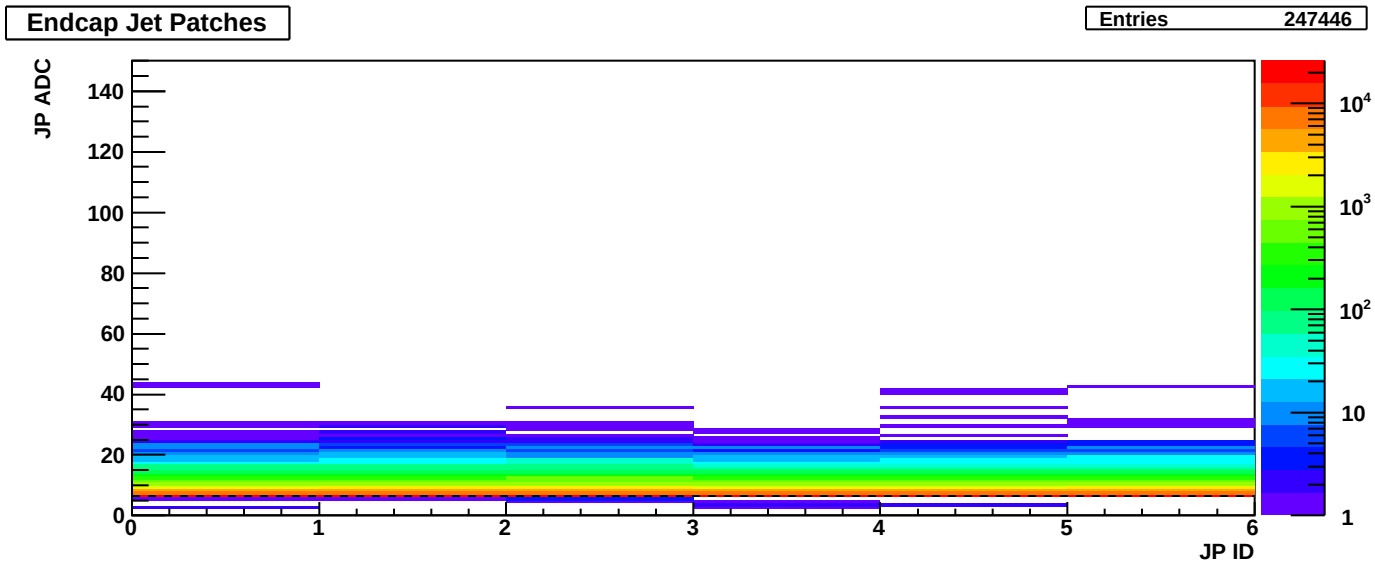

Barrel EMC L0 Input - High Tower
Entries 1.23723e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

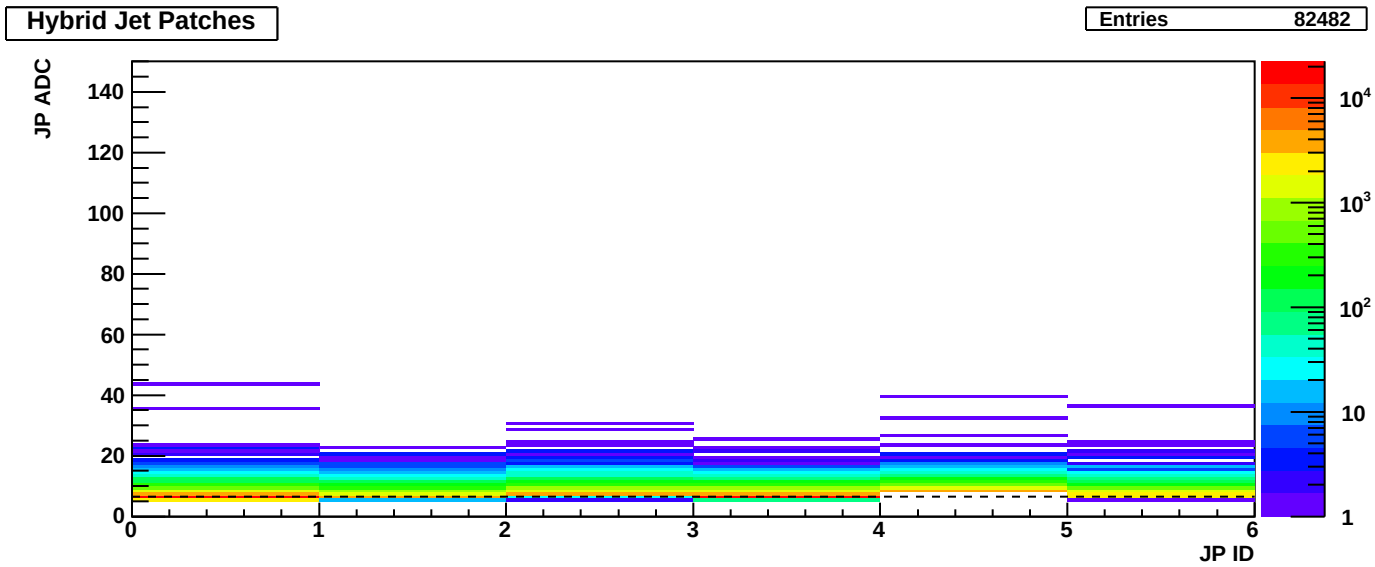

Barrel EMC L0 Input - Patch Sum
Entries 1.23723e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

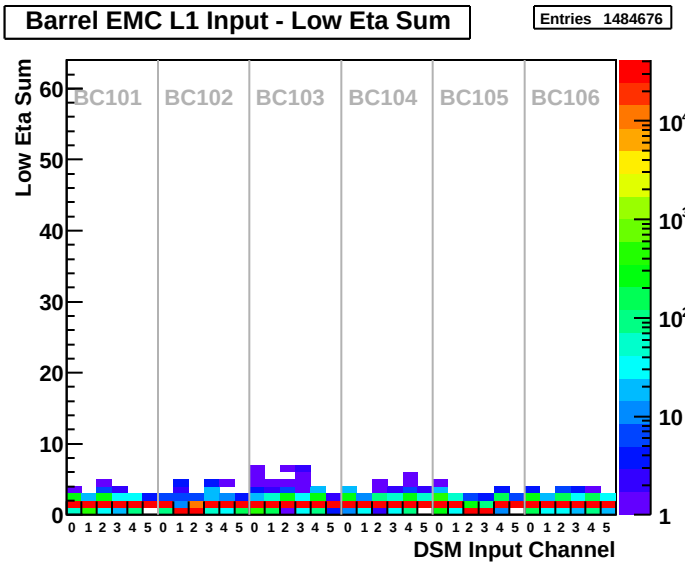

Endcap EMC L0 Input - High Tower
Entries 3711690
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

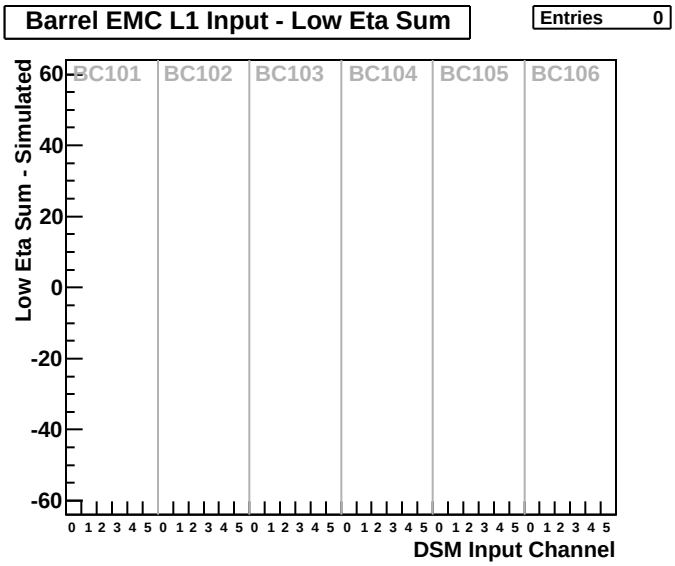

Endcap EMC L0 Input - Patch Sum
Entries 3711690
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

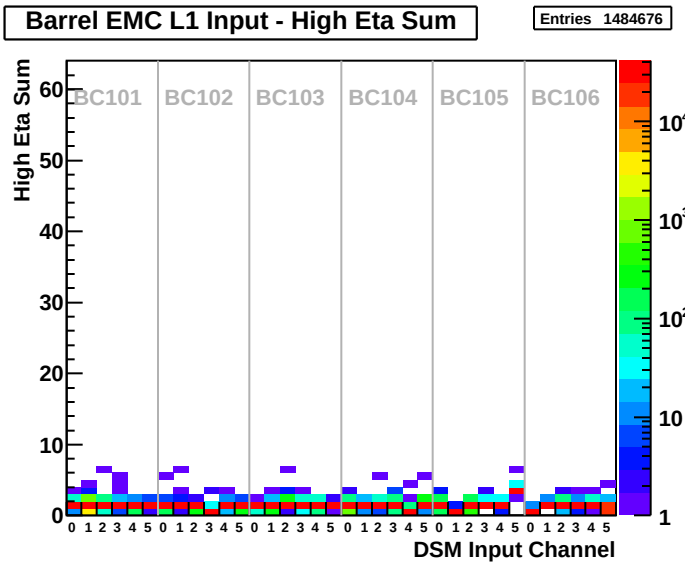

Barrel Jet Patches
Entries 742338
JP ADC
JP ID

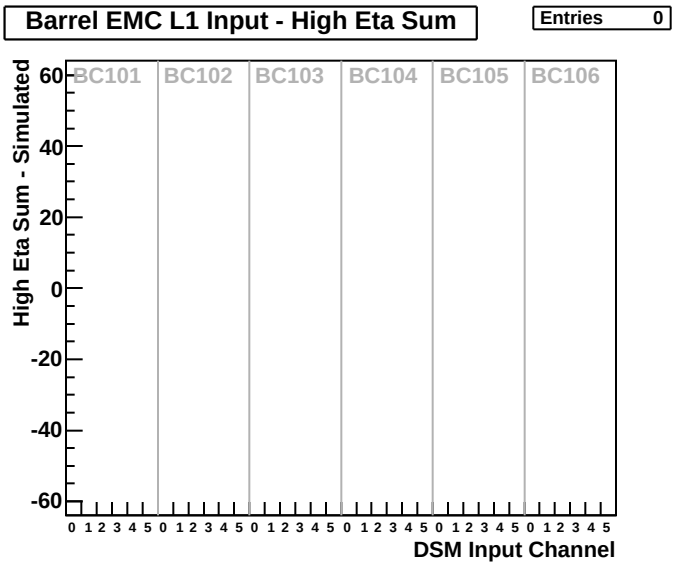

Endcap Jet Patches
Entries 247446
JP ADC
JP ID

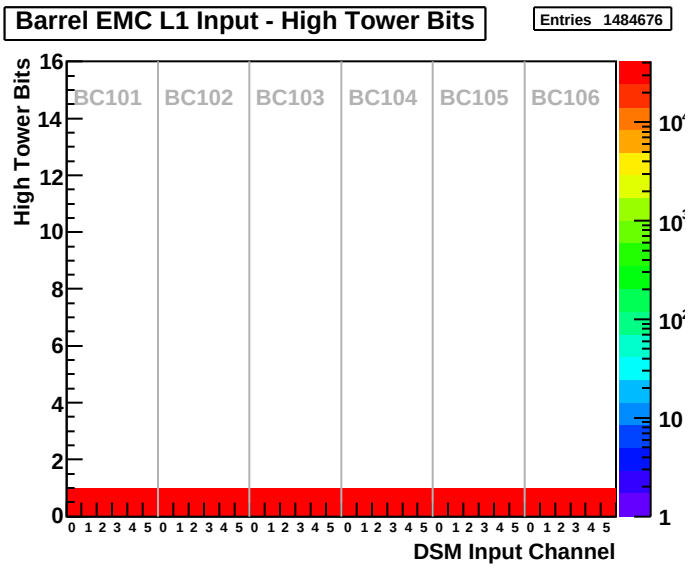

Hybrid Jet Patches
Entries 82482
JP ADC
JP ID

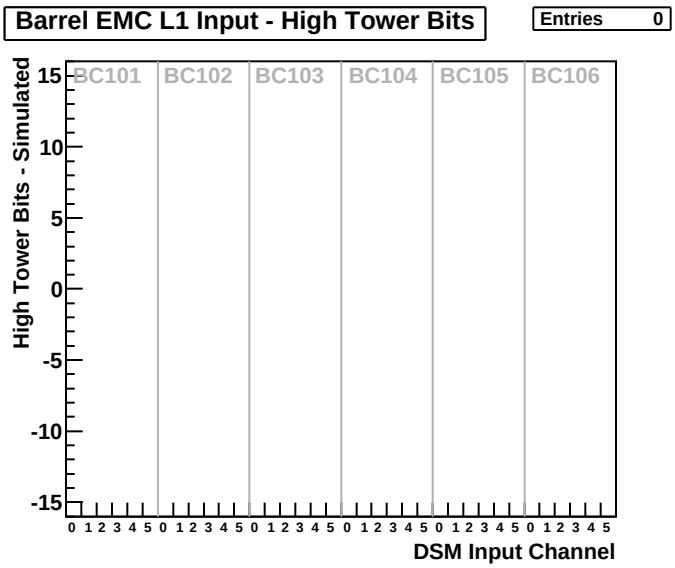

Barrel EMC L1 Input - Low Eta Sum
Entries 1484676
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

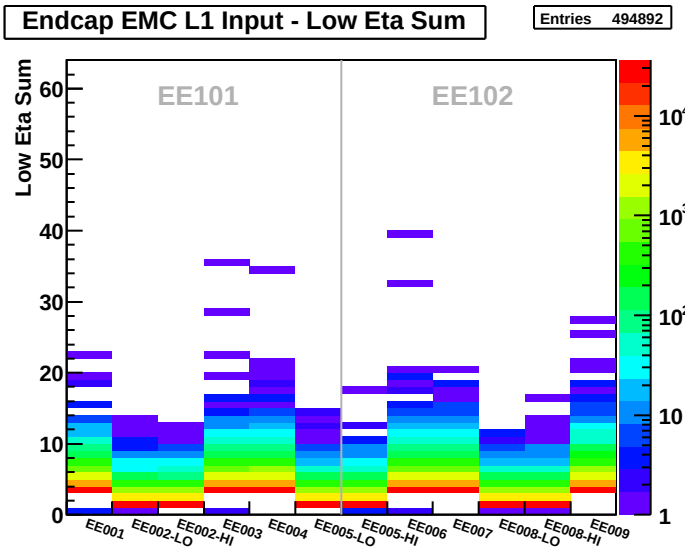

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

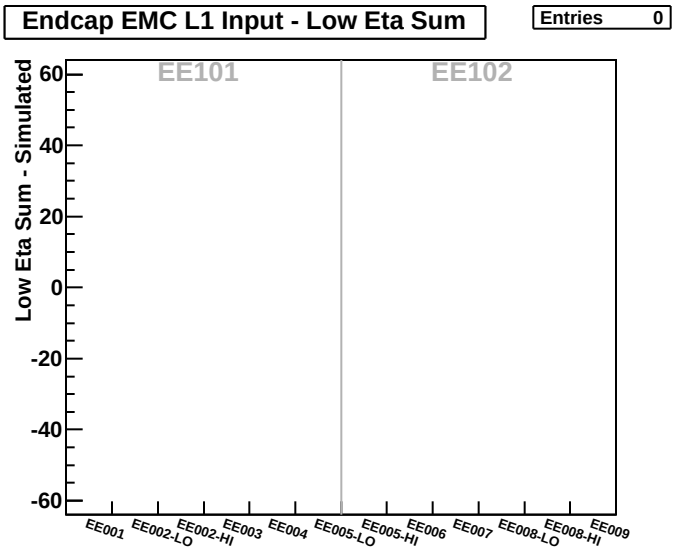

Barrel EMC L1 Input - High Eta Sum
Entries 1484676
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

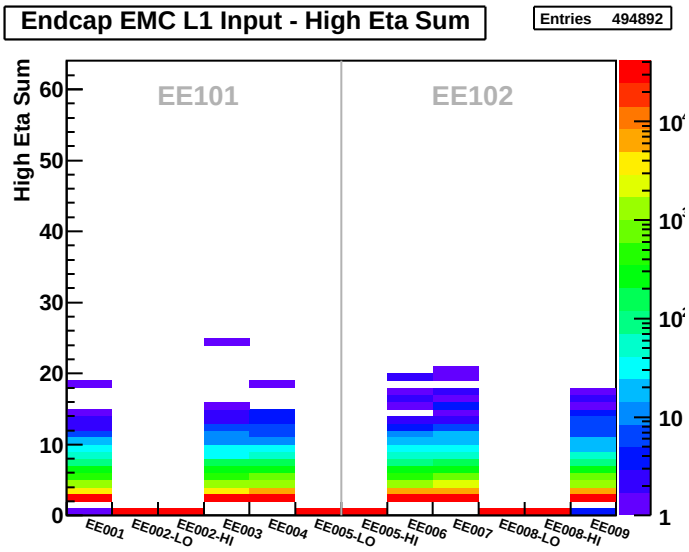

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

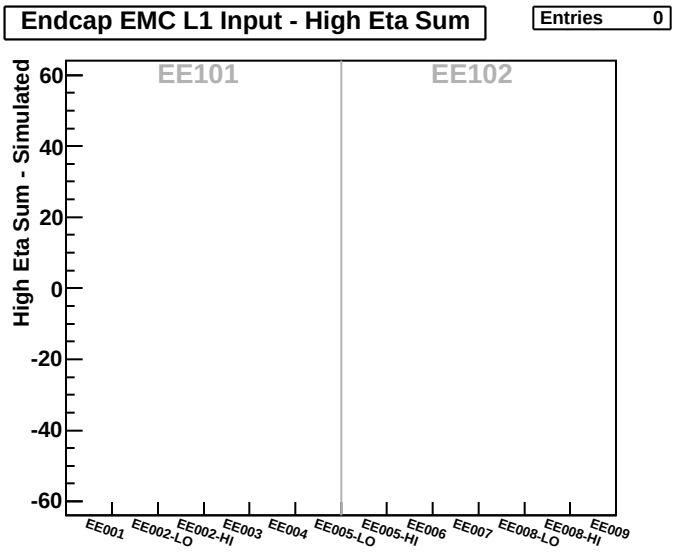

Barrel EMC L1 Input - High Tower Bits
Entries 1484676
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

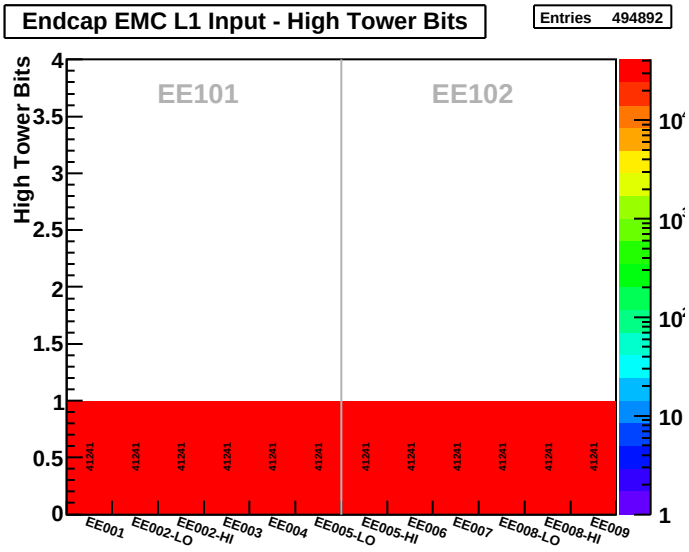

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

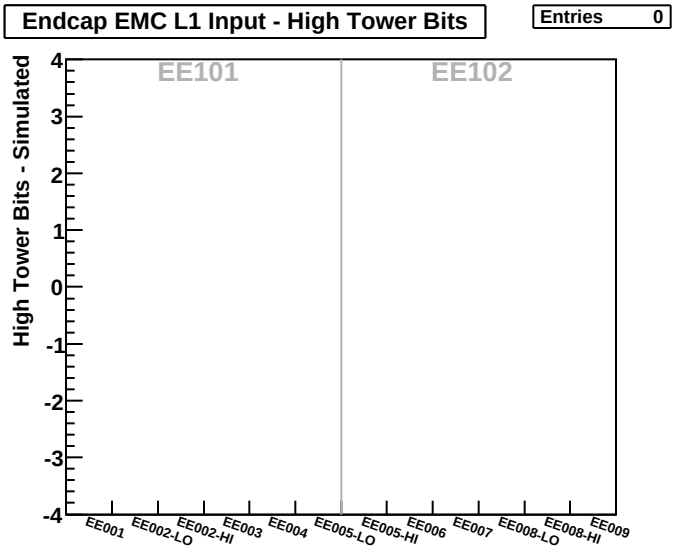

Endcap EMC L1 Input - Low Eta Sum
Entries 494892
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

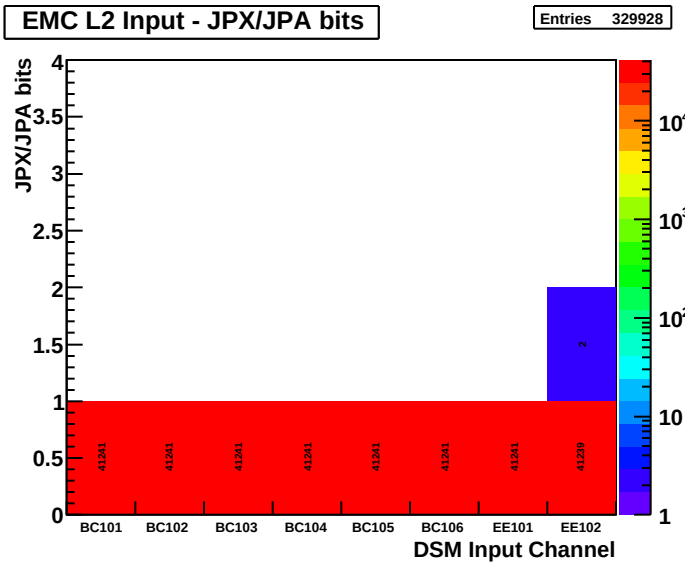

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

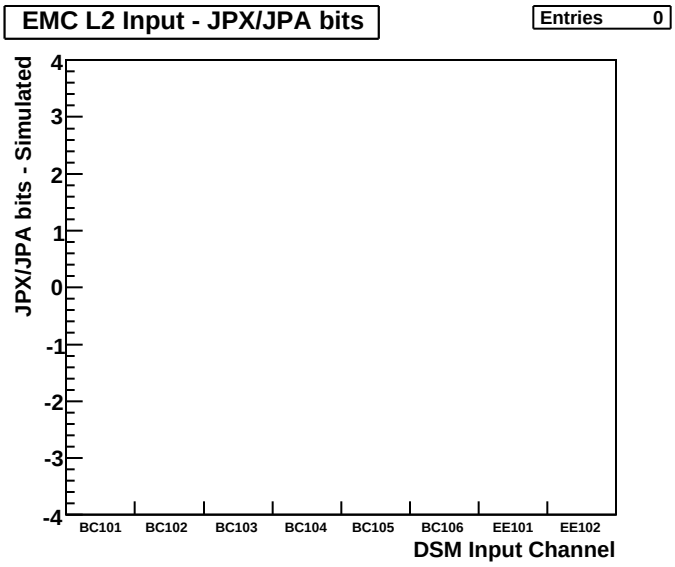

Endcap EMC L1 Input - High Eta Sum
Entries 494892
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

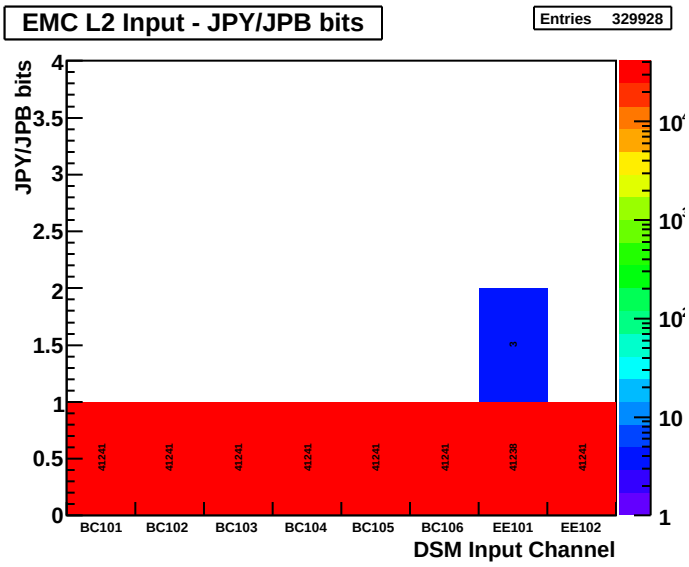

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

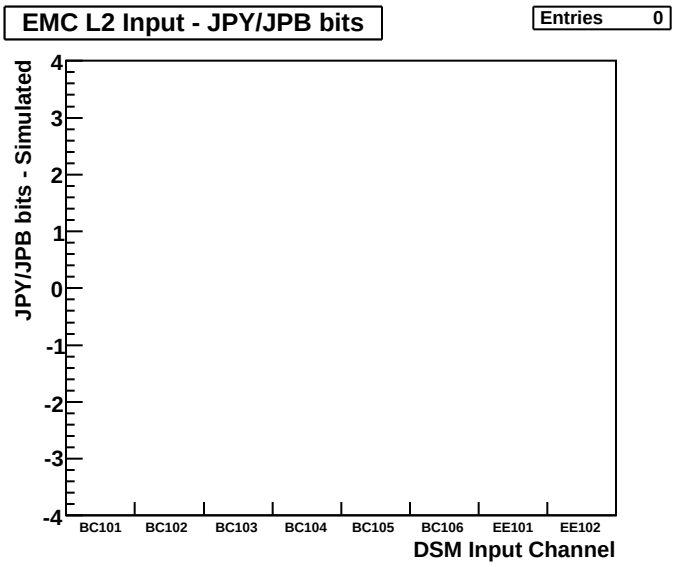

Endcap EMC L1 Input - High Tower Bits
Entries 494892
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

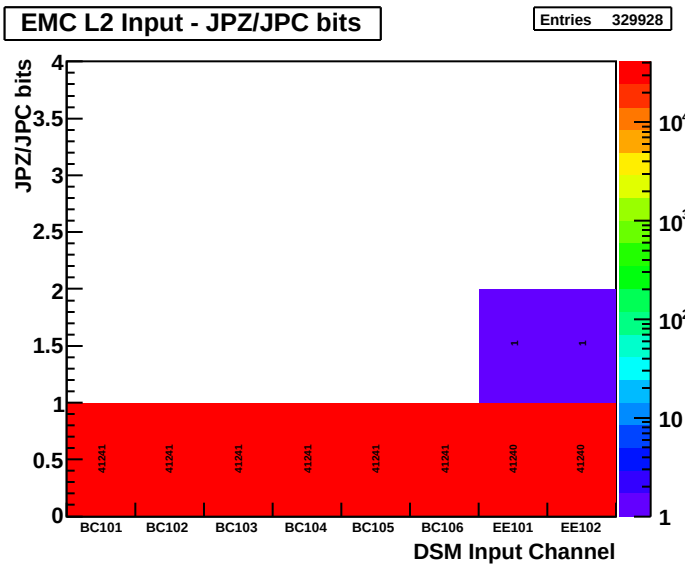

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

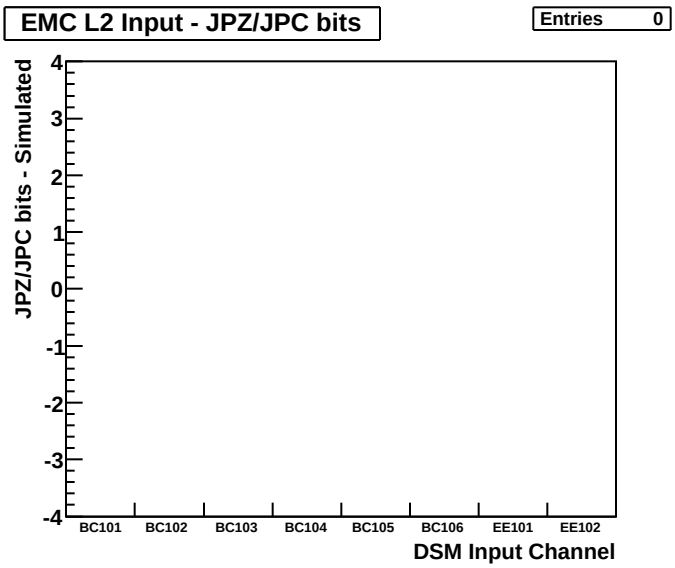

EMC L2 Input - JPX/JPA bits
Entries 329928
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

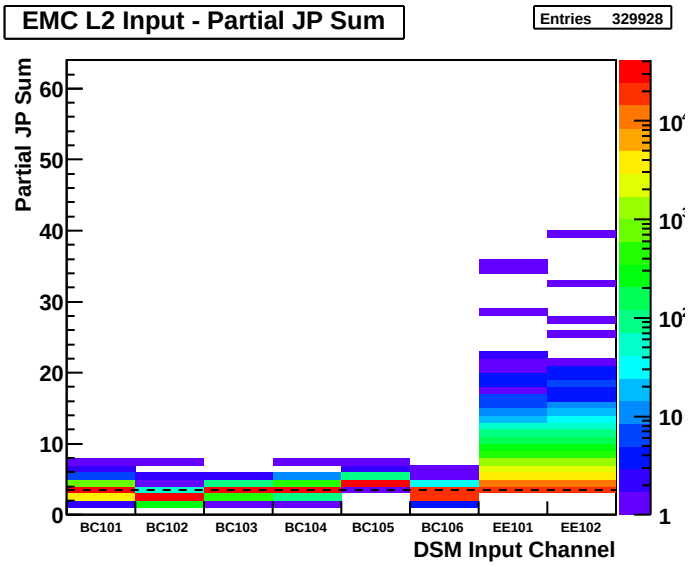

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

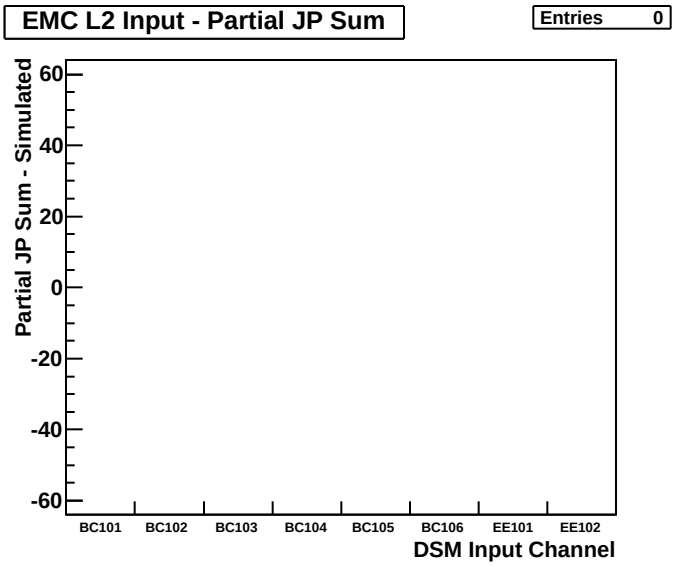

EMC L2 Input - JPY/JPB bits
Entries 329928
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

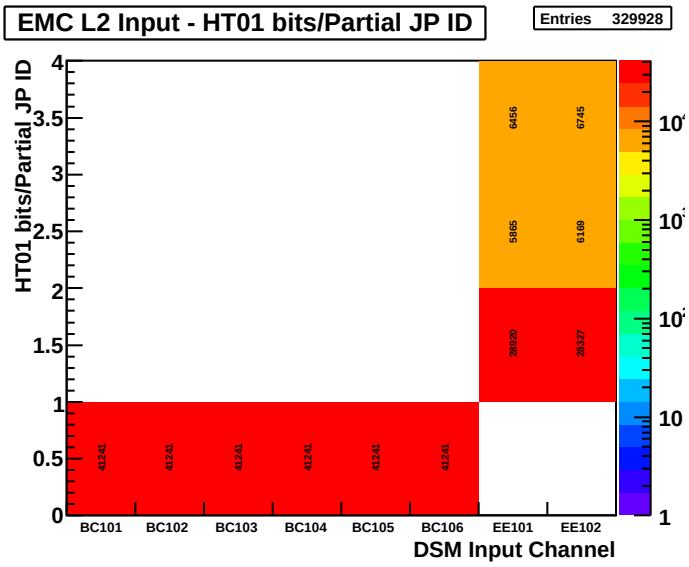

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

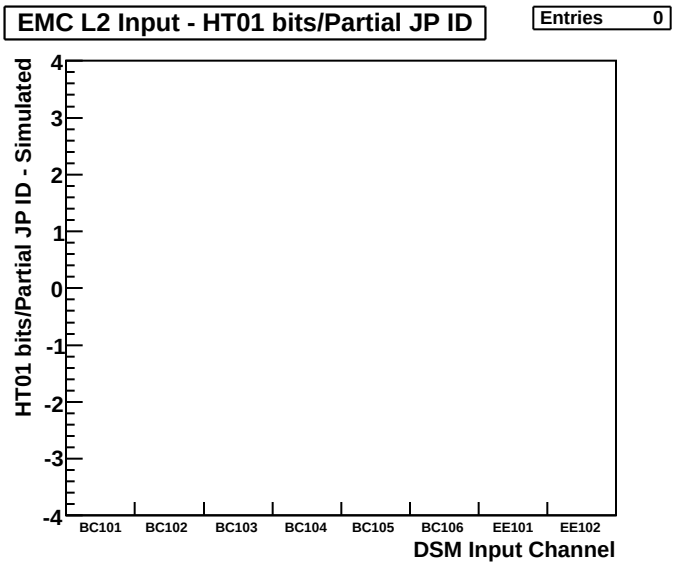

EMC L2 Input - JPZ/JPC bits
Entries 329928
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

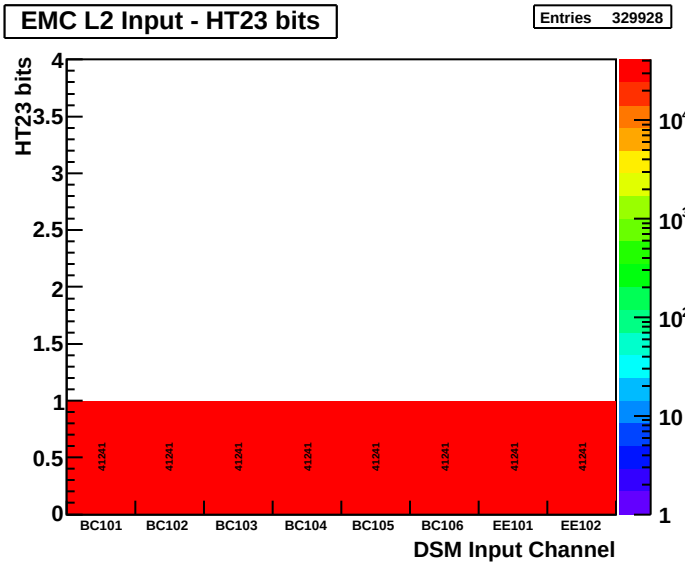

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

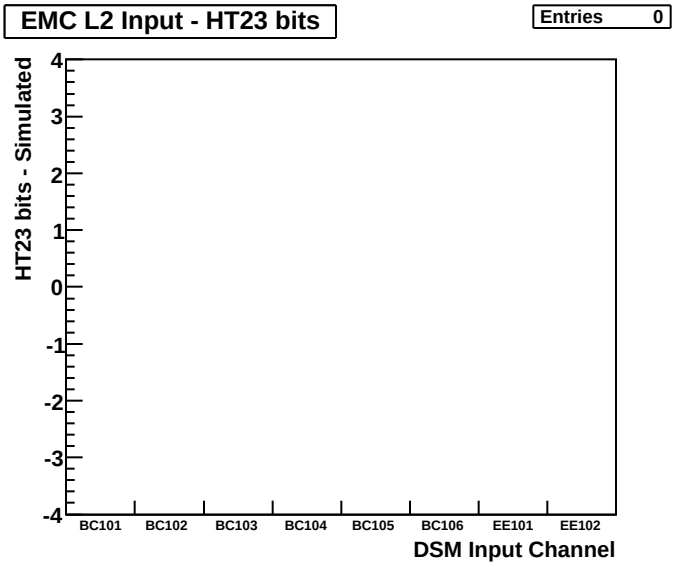

EMC L2 Input - Partial JP Sum
Entries 329928
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

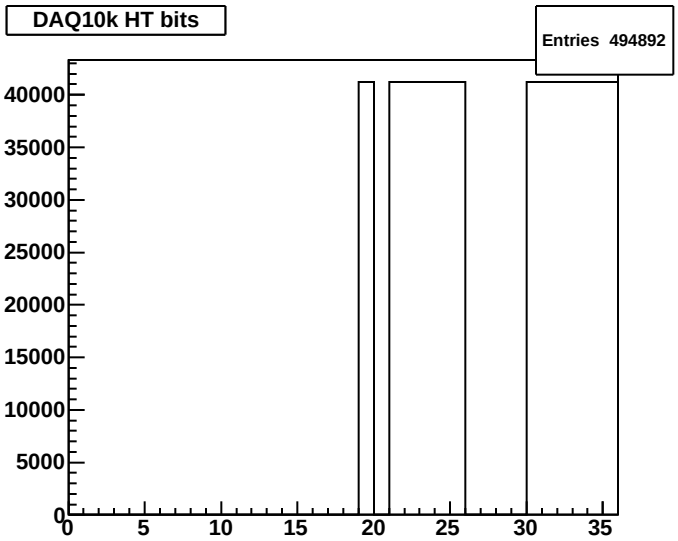

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

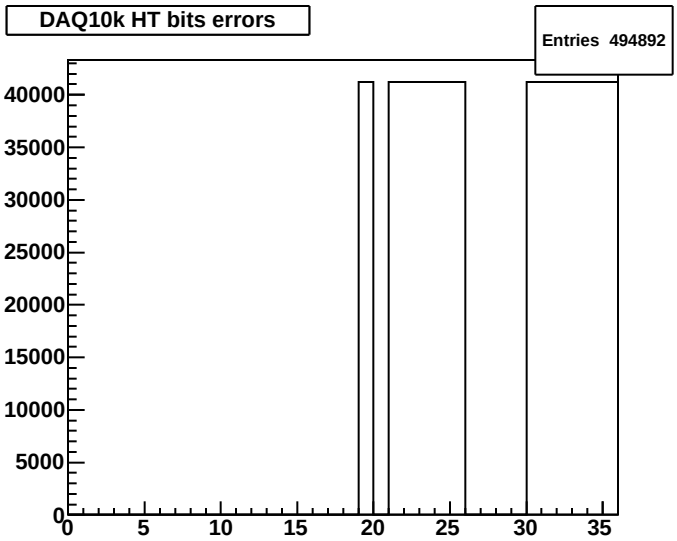

EMC L2 Input - HT01 bits/Partial JP ID
Entries 329928
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

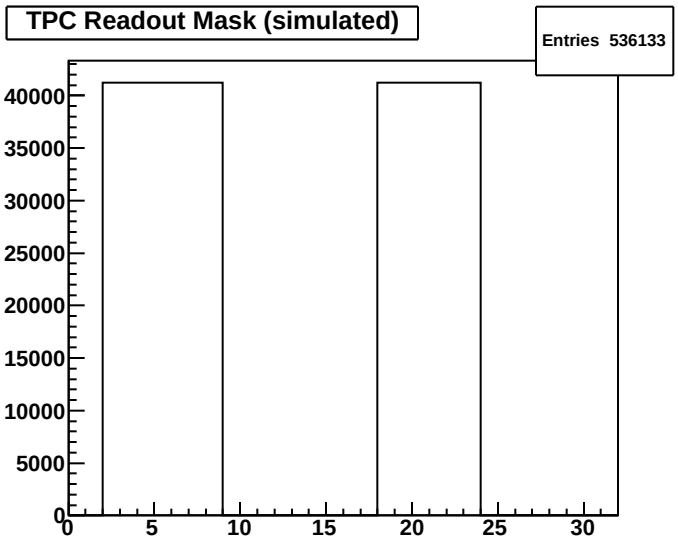

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

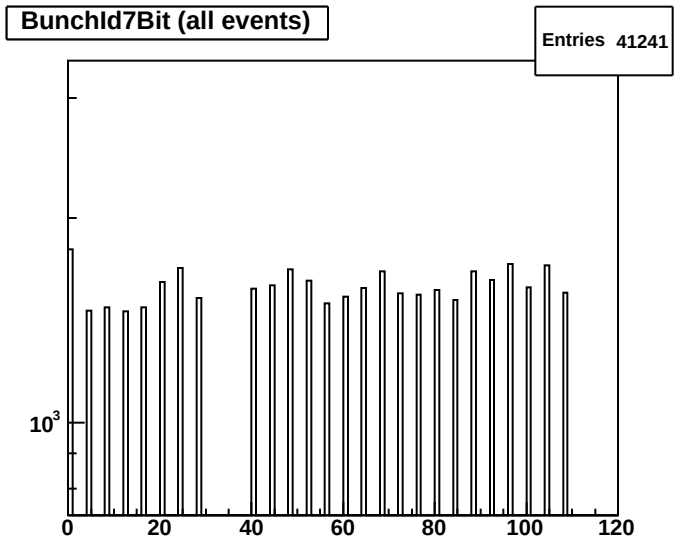

EMC L2 Input - HT23 bits
Entries 329928
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

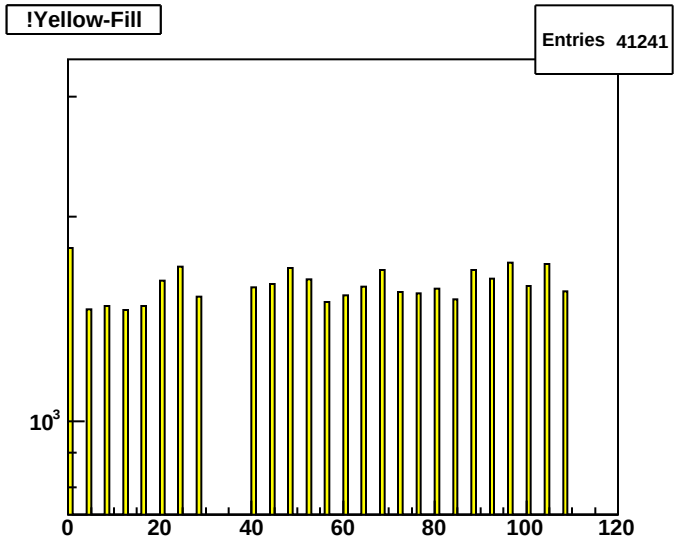

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

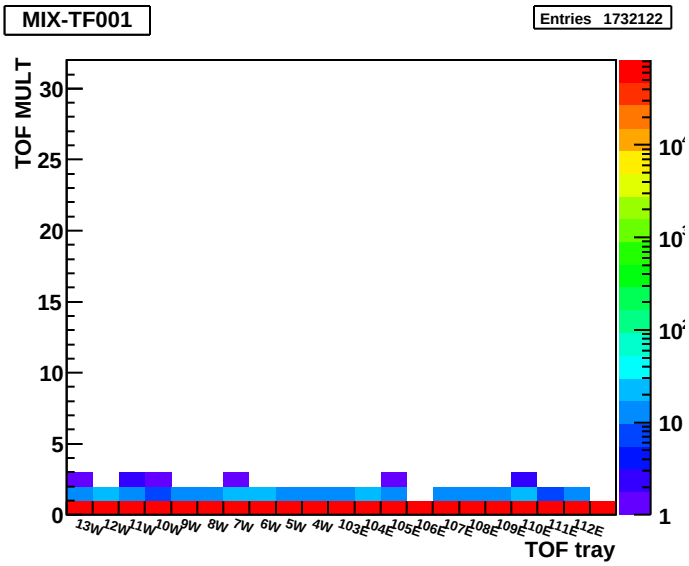

DAQ10k HT bits
Entries 494892
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

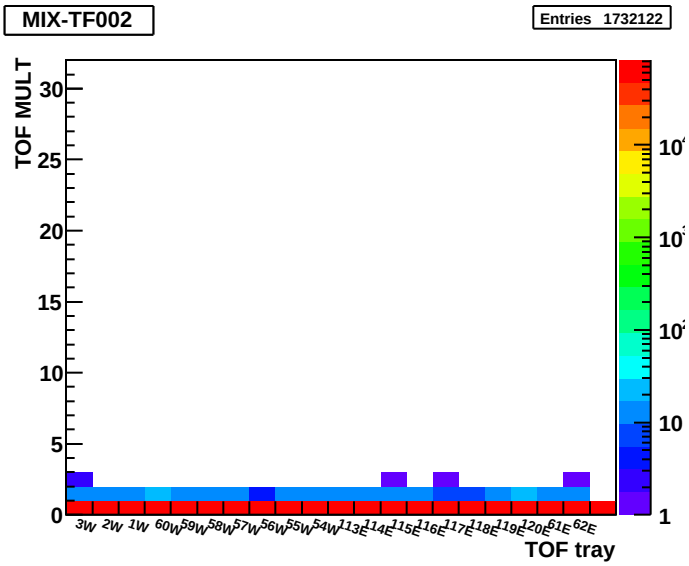

DAQ10k HT bits errors
Entries 494892
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

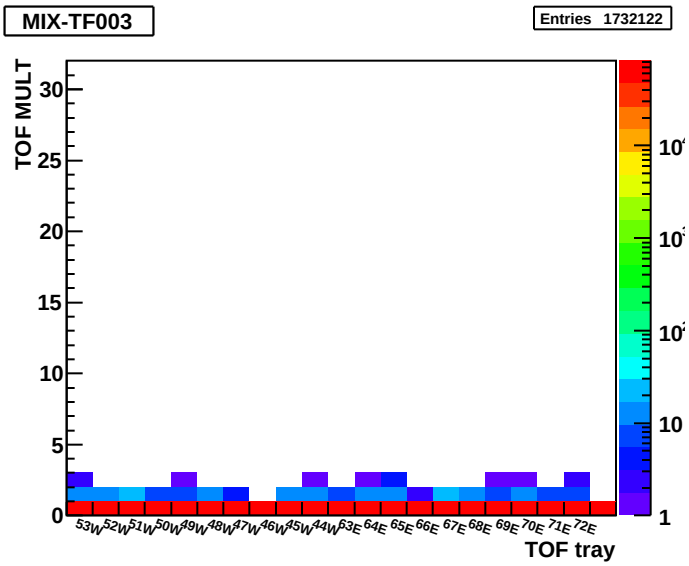

TPC Readout Mask (simulated)
Entries 536133
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30

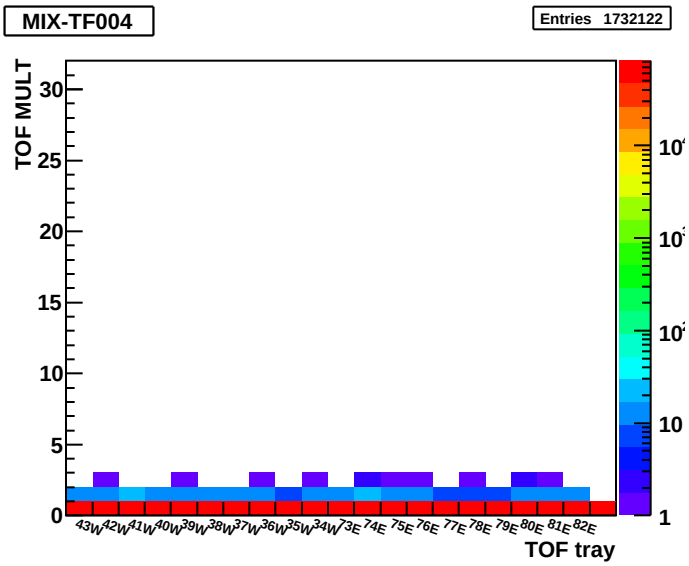

BunchId7Bit (all events)
Entries 41241
10^3
0 20 40 60 80 100 120

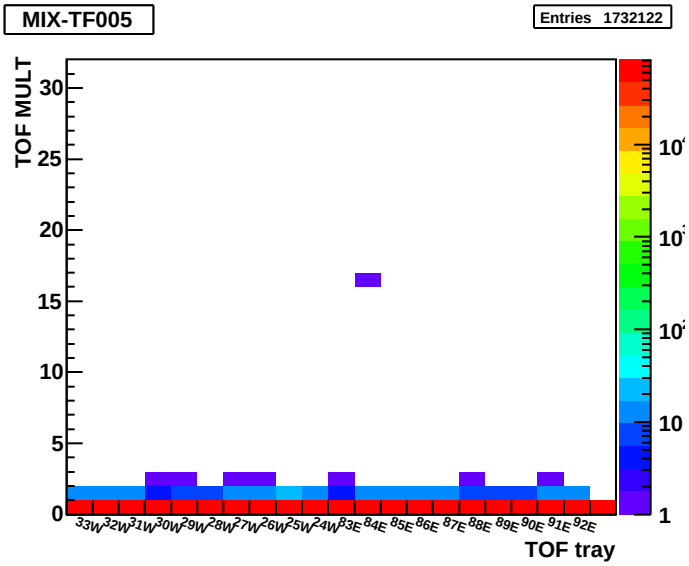

!Yellow-Fill
Entries 41241
10^3
0 20 40 60 80 100 120

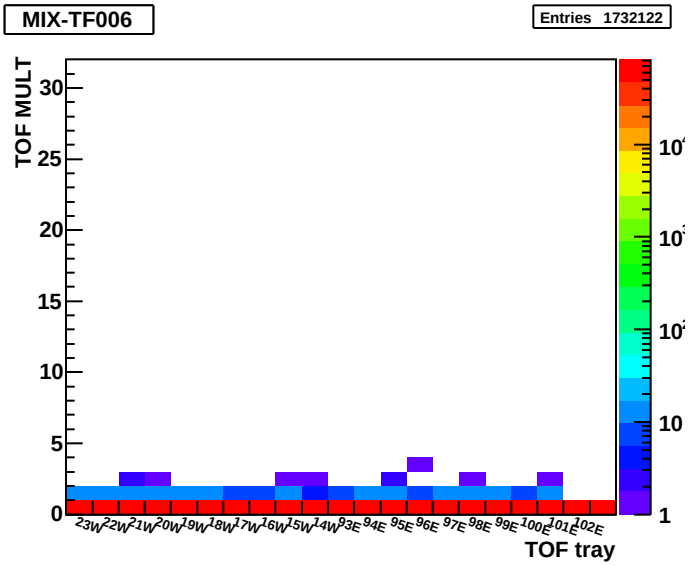

MIX-TF001
Entries 1732122
TOF MULT
TOF tray

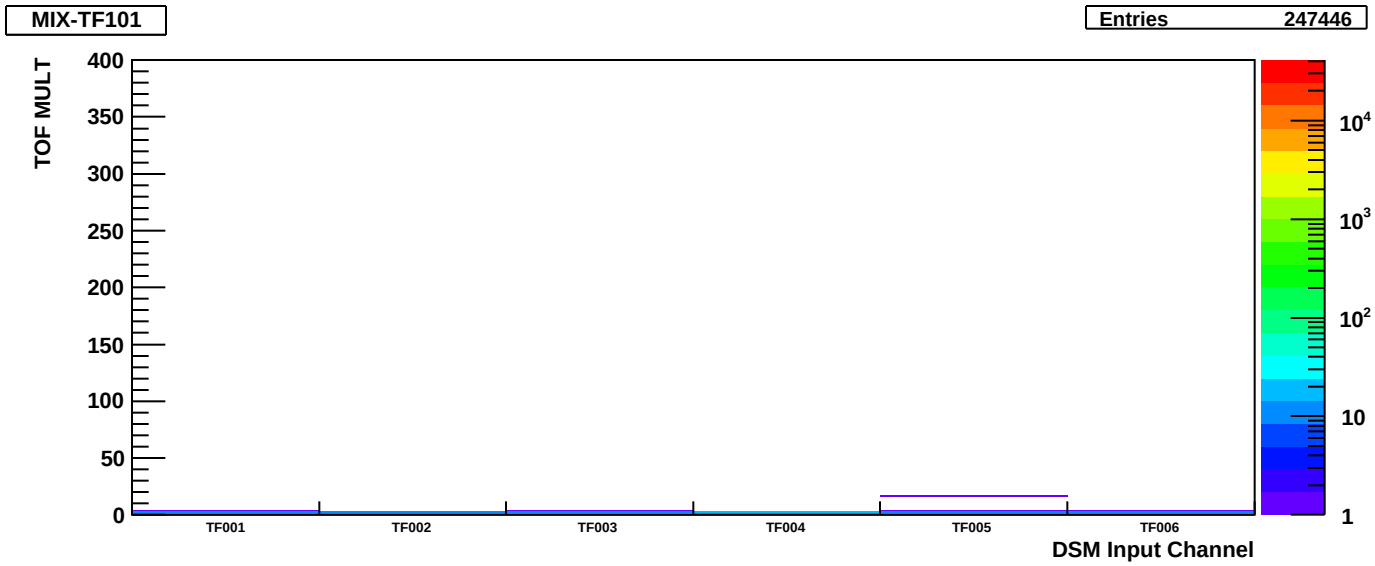

MIX-TF002
Entries 1732122
TOF MULT
TOF tray

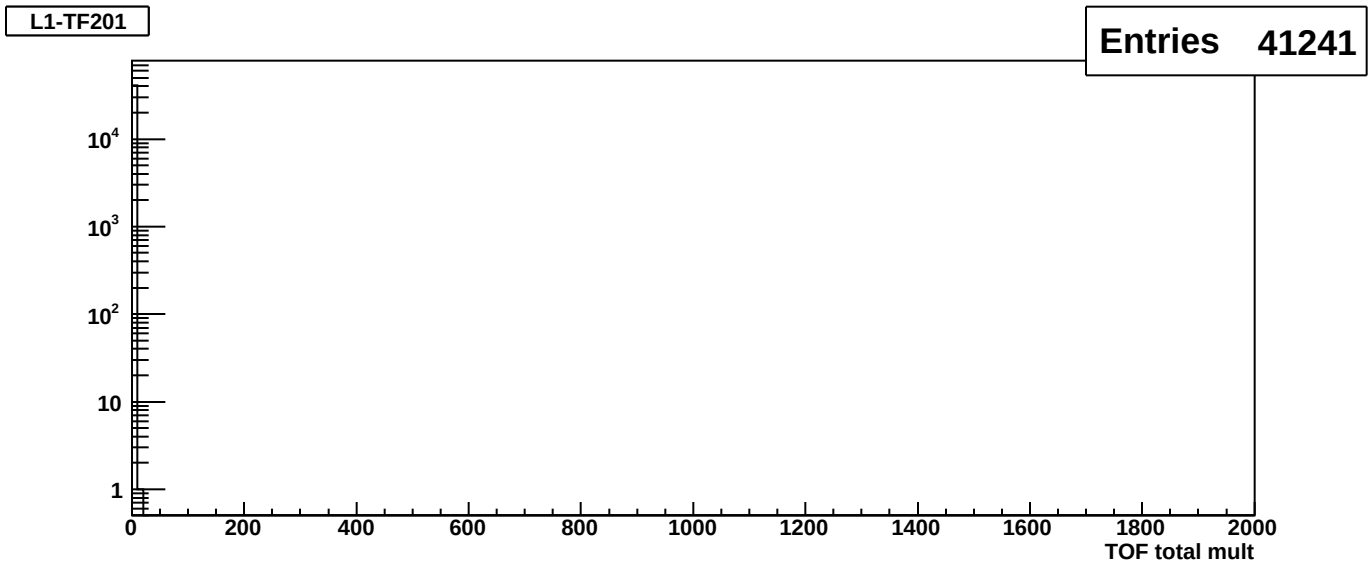

MIX-TF003
Entries 1732122
TOF MULT
TOF tray

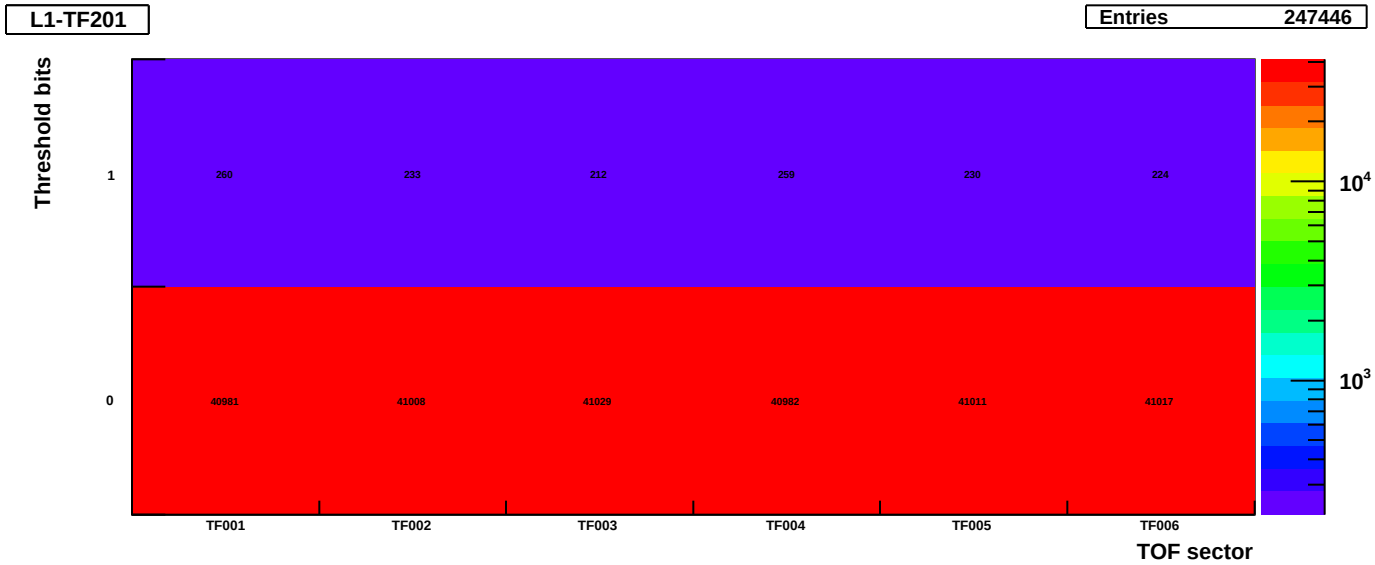

MIX-TF004
Entries 1732122
TOF MULT
TOF tray

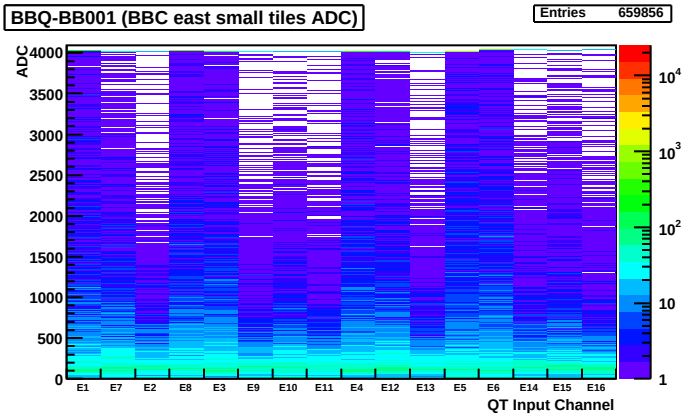

MIX-TF005
Entries 1732122
TOF MULT
TOF tray

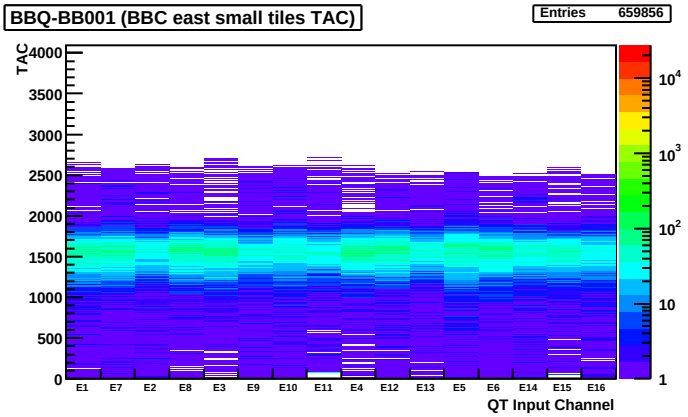

MIX-TF006
Entries 1732122
TOF MULT
TOF tray

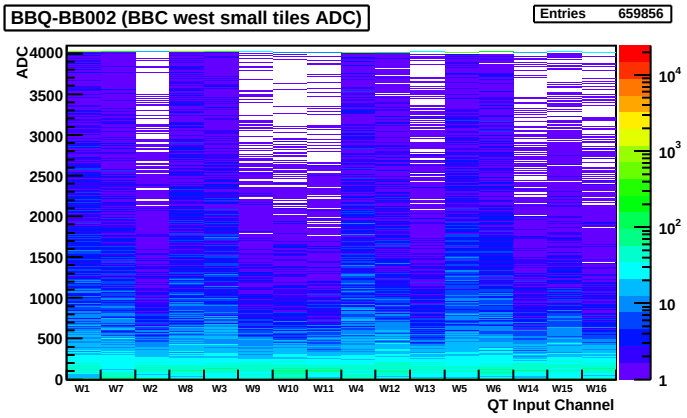

MIX-TF101
Entries 247446
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

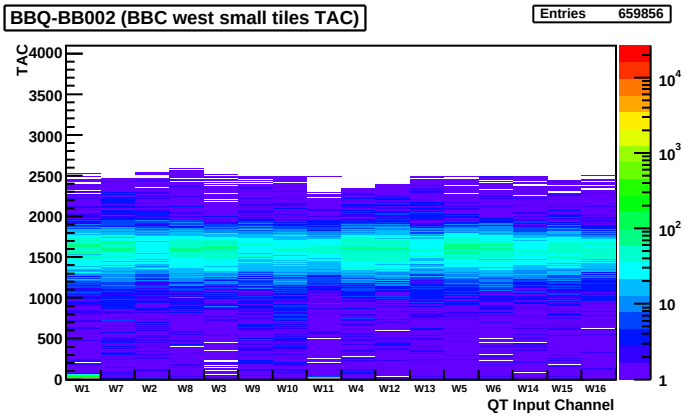

L1-TF201
Entries 41241
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

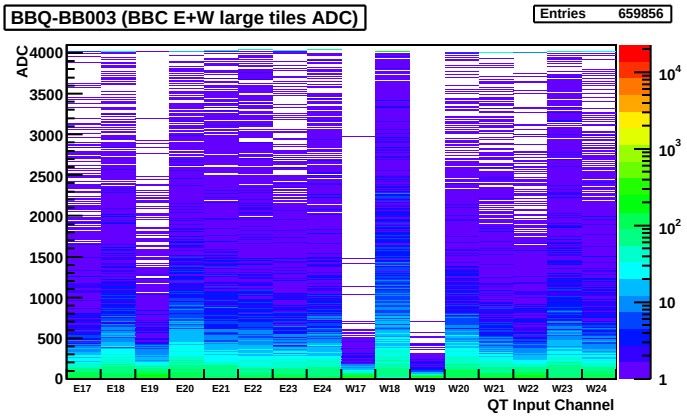

L1-TF201
Entries 247446
Threshold bits
1
0
260
233
212
259
230
224
40981
41008
41029
40982
41011
41017
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3

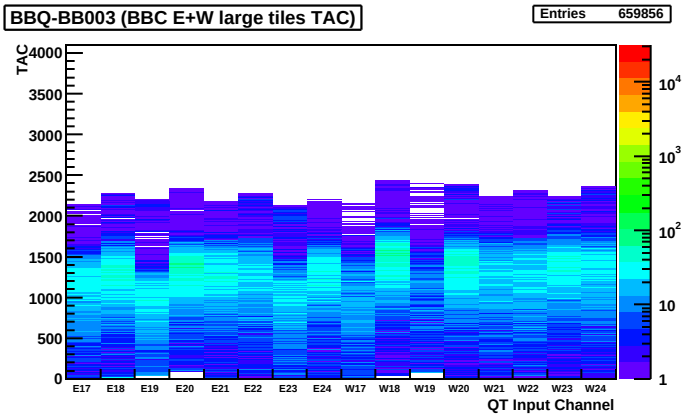

BBQ-BB001 (BBC east small tiles ADC)
Entries 659856
ADC
QT Input Channel

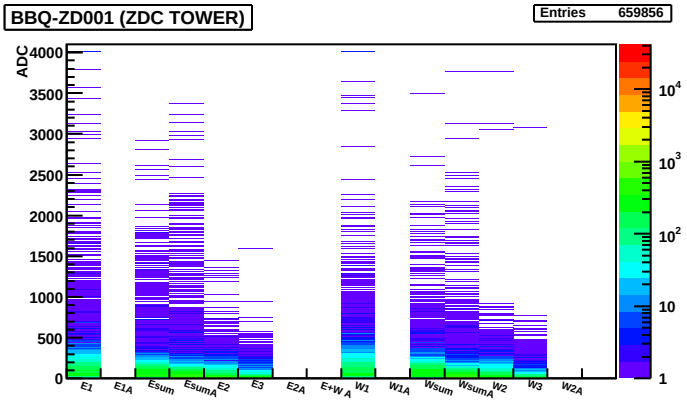

BBQ-BB001 (BBC east small tiles TAC)
Entries 659856
TAC
QT Input Channel

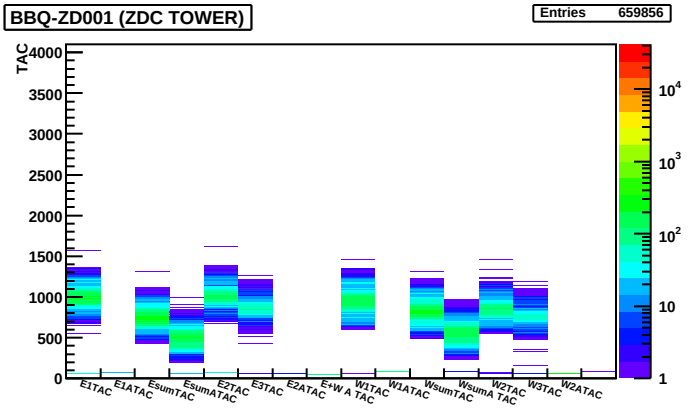

BBQ-BB002 (BBC west small tiles ADC)
Entries 659856
ADC
QT Input Channel

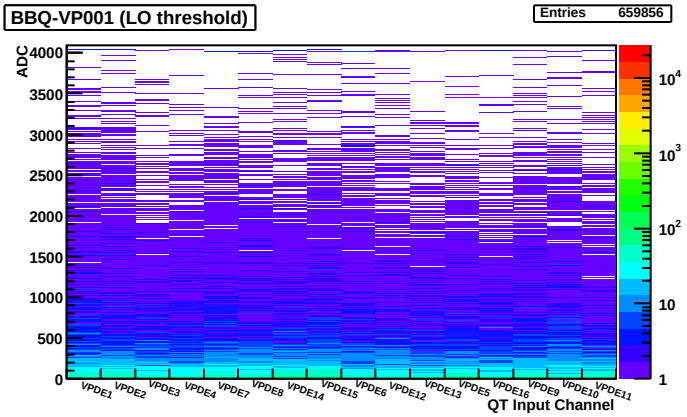

BBQ-BB002 (BBC west small tiles TAC)
Entries 659856
TAC
QT Input Channel

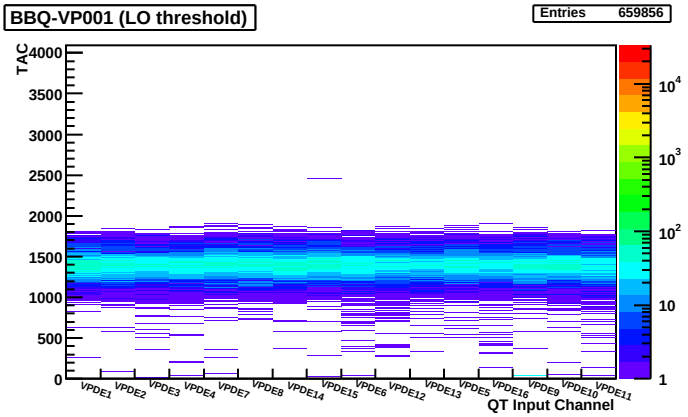

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 659856
ADC
QT Input Channel

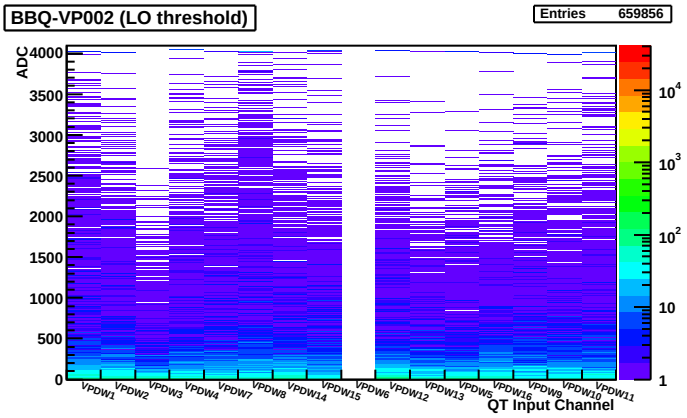

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 659856
TAC
QT Input Channel

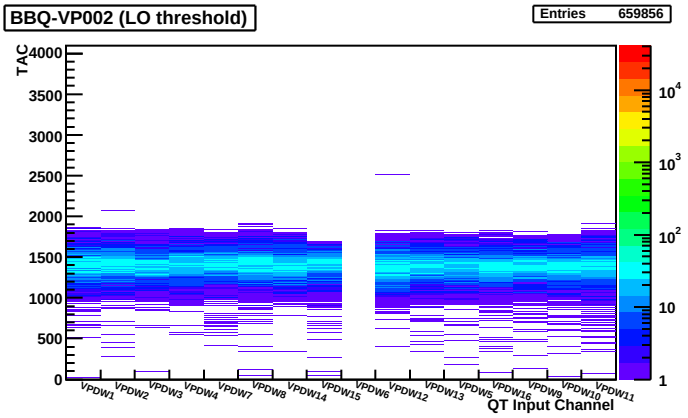

BBQ-ZD001 (ZDC TOWER)
Entries 659856
ADC

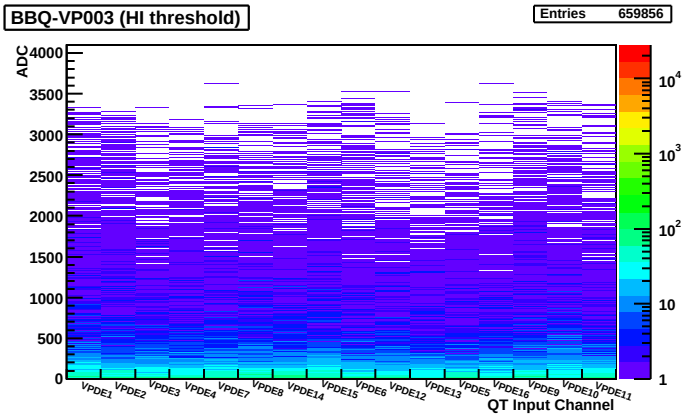

BBQ-ZD001 (ZDC TOWER)
Entries 659856
TAC

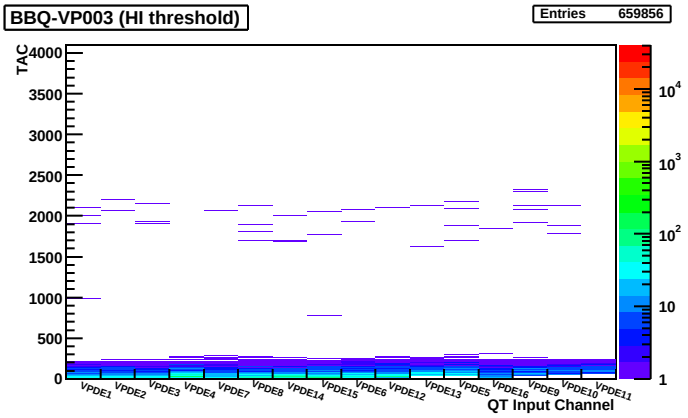

BBQ-VP001 (LO threshold)
Entries 659856
ADC
QT Input Channel

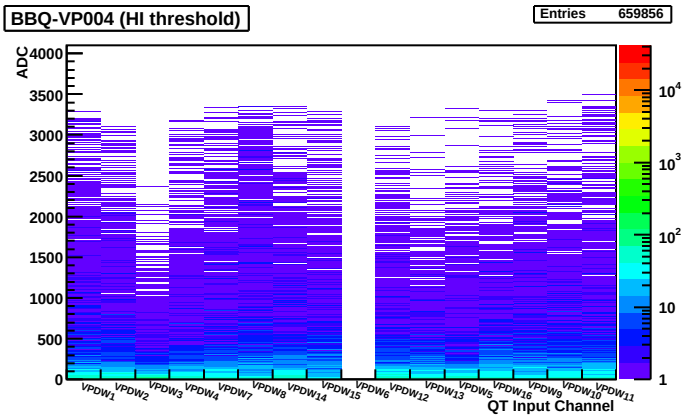

BBQ-VP001 (LO threshold)
Entries 659856
TAC
QT Input Channel

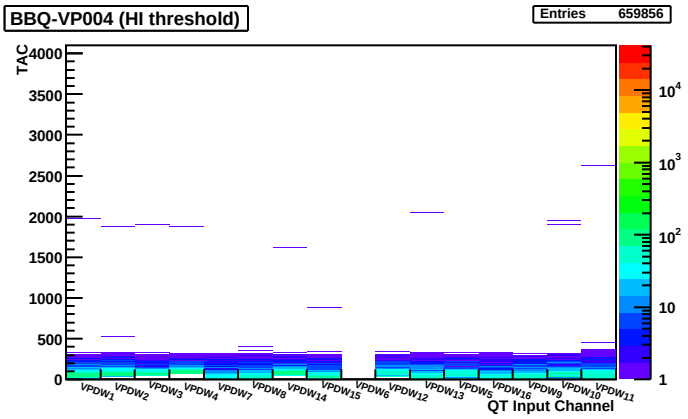

BBQ-VP002 (LO threshold)
Entries 659856
ADC
QT Input Channel

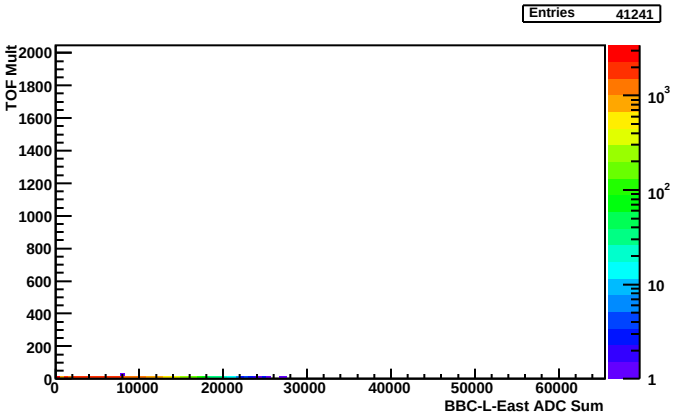

BBQ-VP002 (LO threshold)
Entries 659856
TAC
QT Input Channel

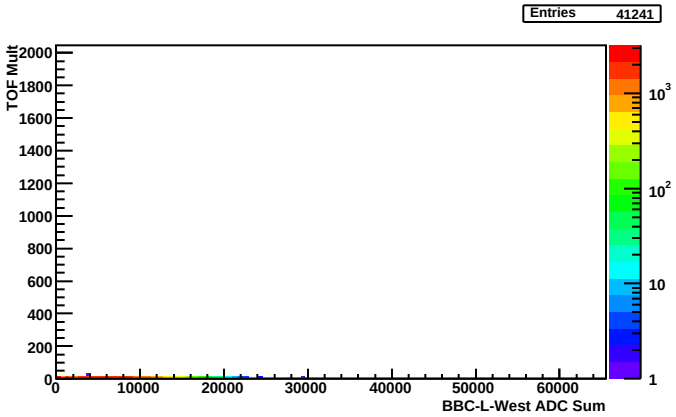

BBQ-VP003 (HI threshold)
Entries 659856
ADC
QT Input Channel

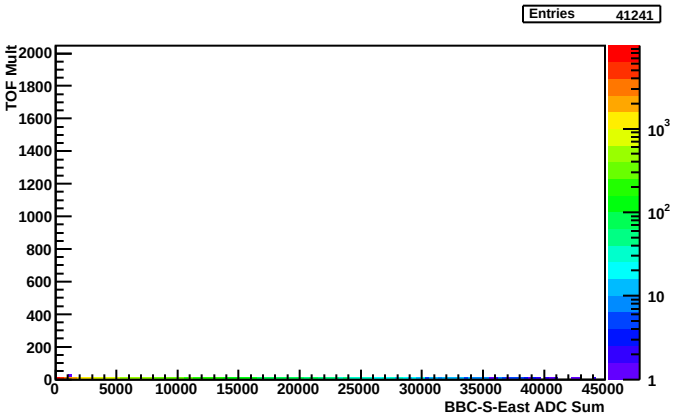

BBQ-VP003 (HI threshold)
Entries 659856
TAC
QT Input Channel

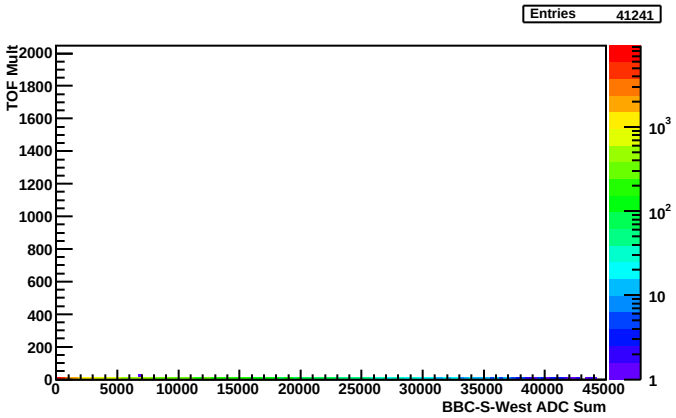

BBQ-VP004 (HI threshold)
Entries 659856
ADC
QT Input Channel

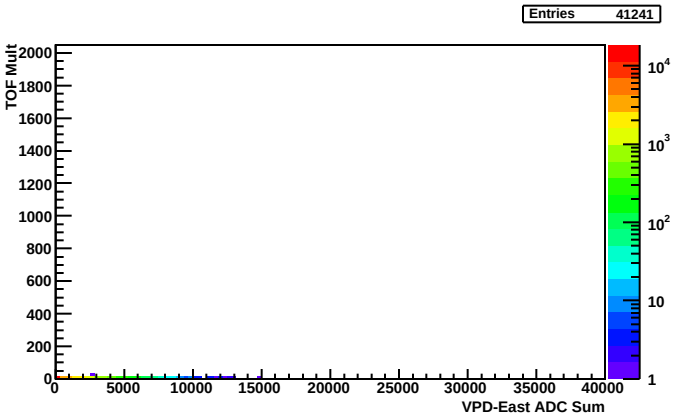

BBQ-VP004 (HI threshold)
Entries 659856
TAC
QT Input Channel

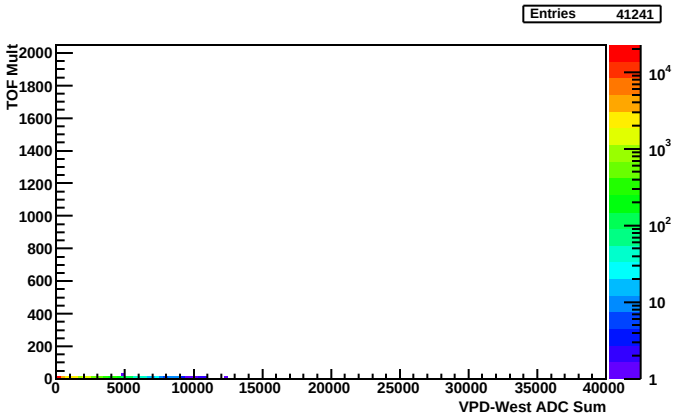

Entries 41241
TOF Mult
BBC-L-East ADC Sum

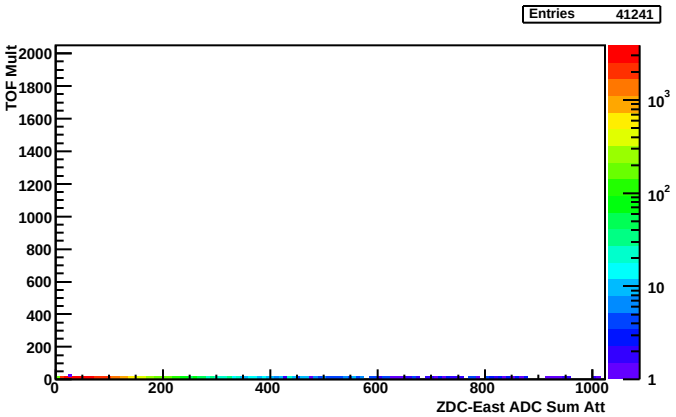

Entries 41241
TOF Mult
BBC-L-West ADC Sum

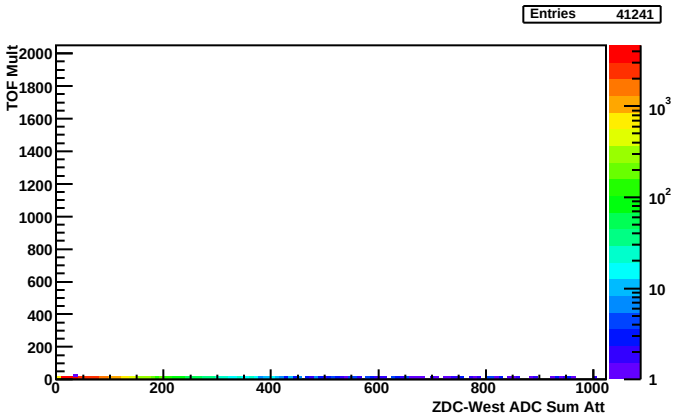

Entries 41241
TOF Mult
BBC-S-East ADC Sum

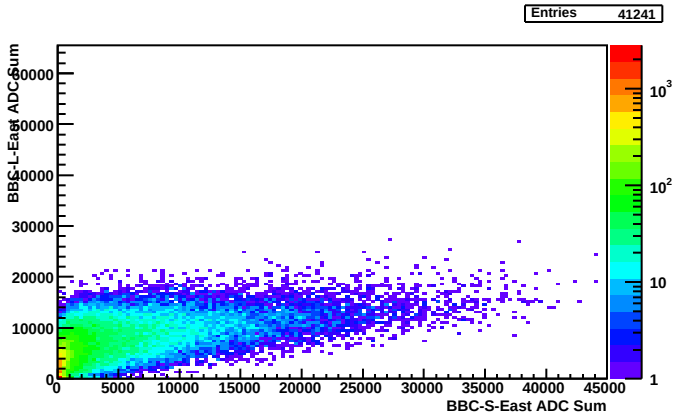

Entries 41241
TOF Mult
BBC-S-West ADC Sum

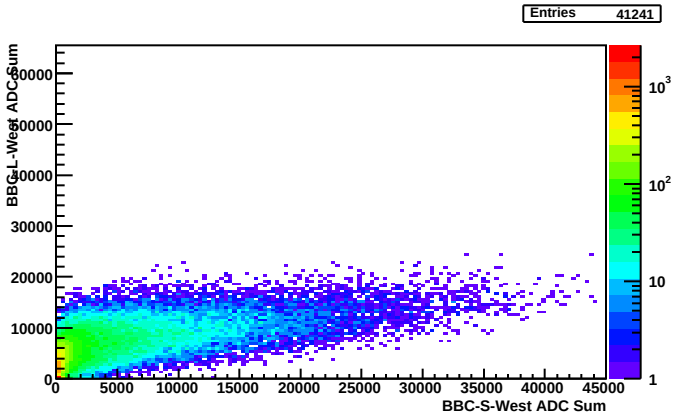

Entries 41241
TOF Mult
VPD-East ADC Sum

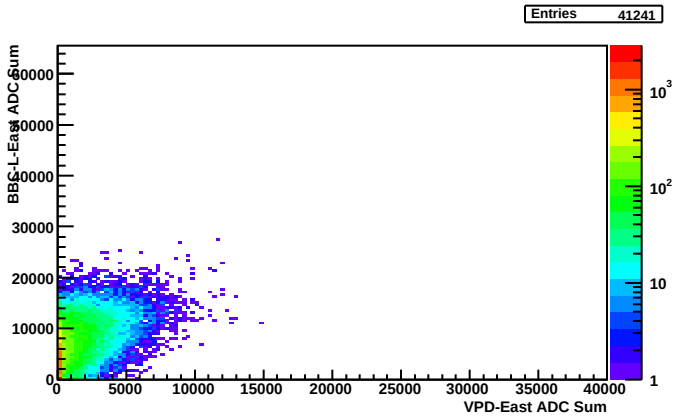

Entries 41241
TOF Mult
VPD-West ADC Sum

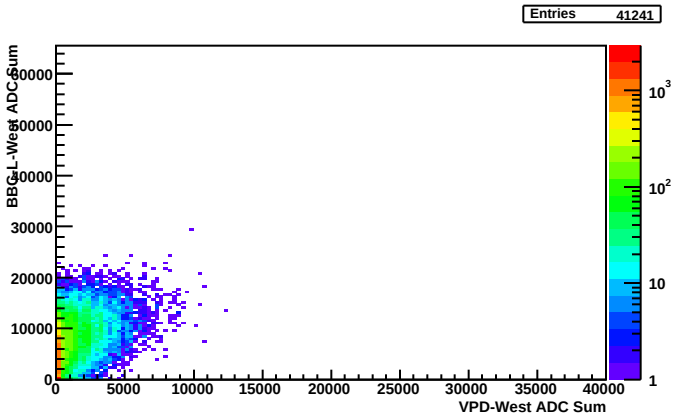

Entries 41241
TOF Mult
ZDC-East ADC Sum Att

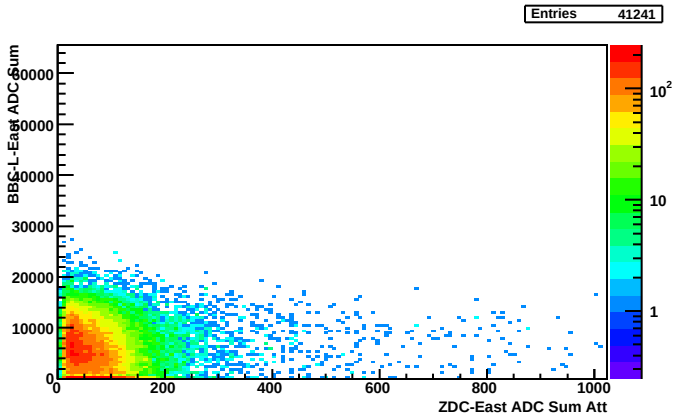

Entries 41241
TOF Mult
ZDC-West ADC Sum Att

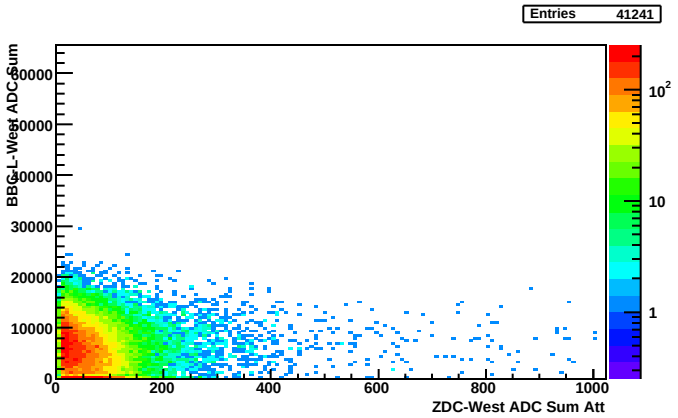

Entries 41241
BBC-L-East ADC Sum
BBC-S-East ADC Sum

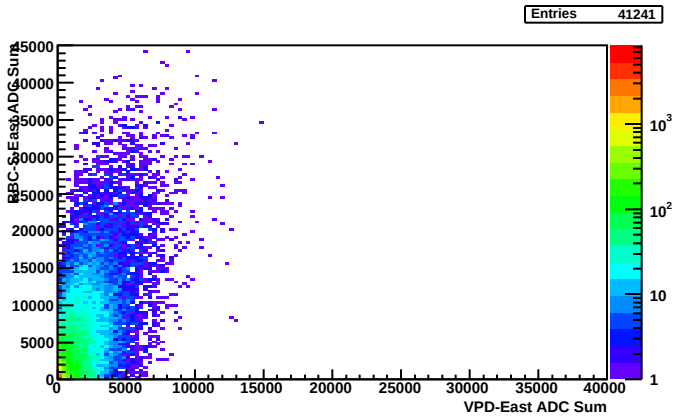

Entries 41241
BBC-L-West ADC Sum
BBC-S-West ADC Sum

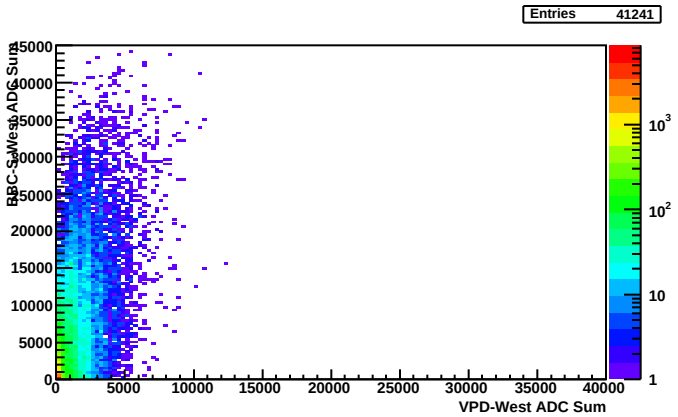

Entries 41241
BBC-L-East ADC Sum
VPD-East ADC Sum

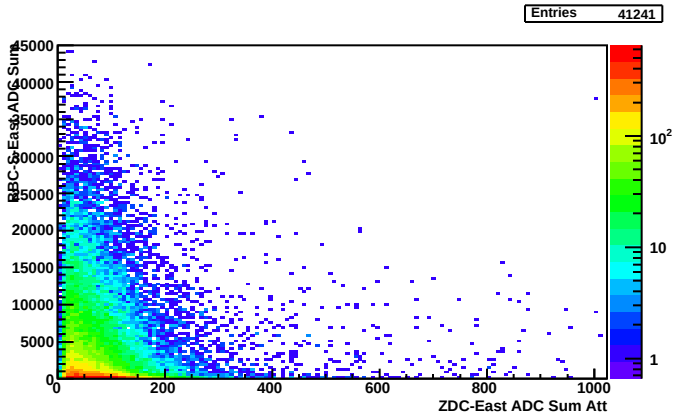

Entries 41241
BBC-L-West ADC Sum
VPD-West ADC Sum

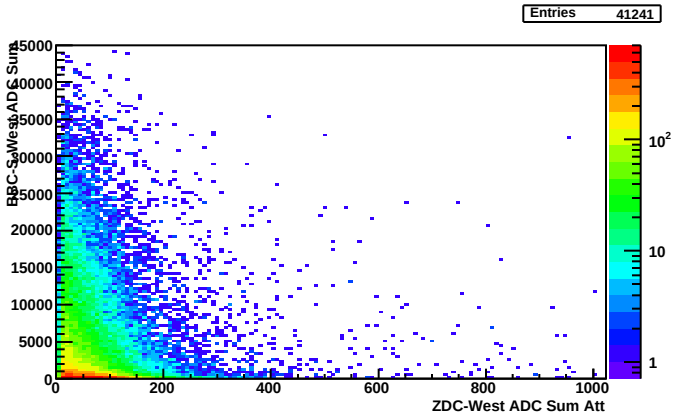

Entries 41241
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

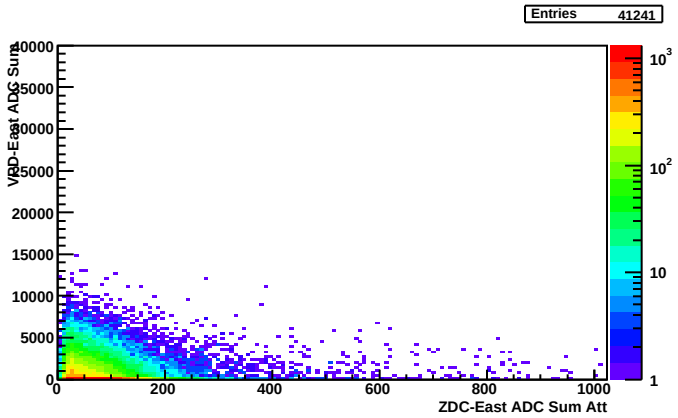

Entries 41241
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

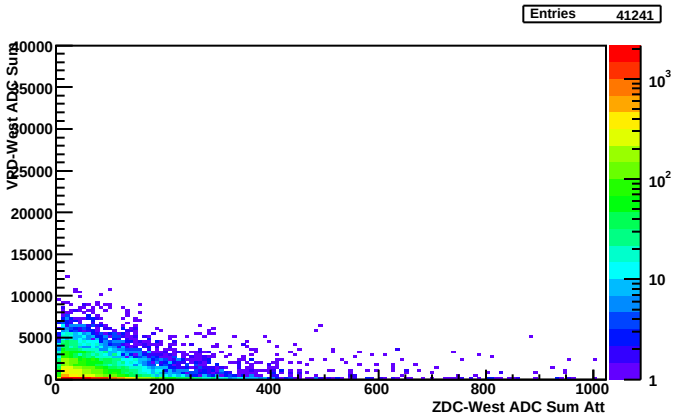

Entries 41241
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 41241
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 41241
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 41241
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 41241
VPD-East ADC Sum
ZDC-East ADC Sum Att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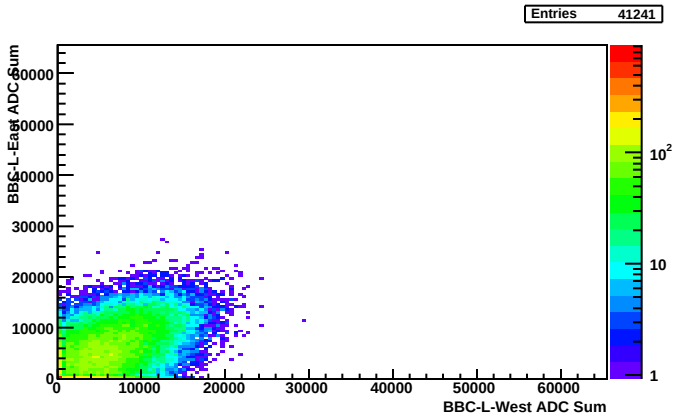
ZDC-West ADC Sum Att


Entries 41241
BBC-L-East ADC Sum
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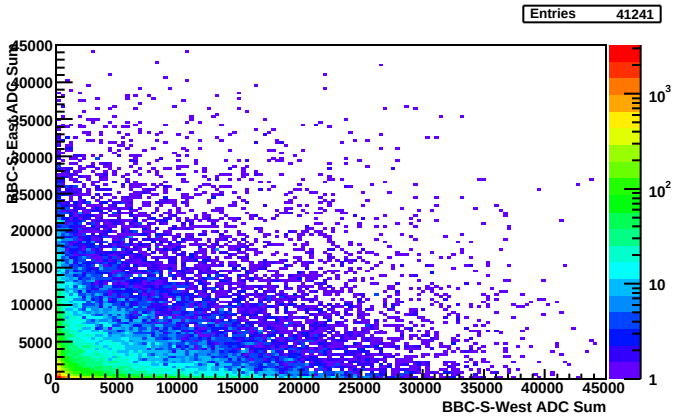
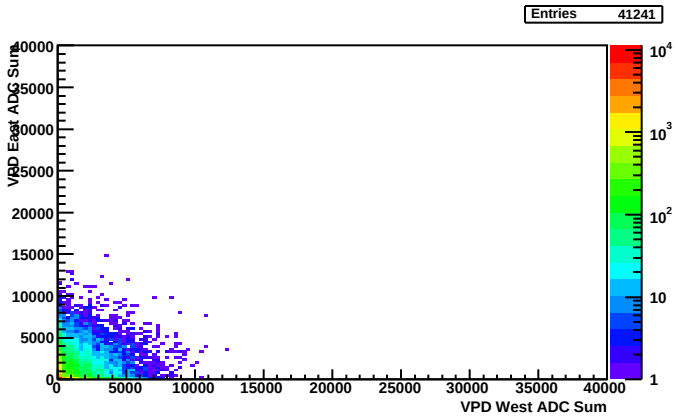
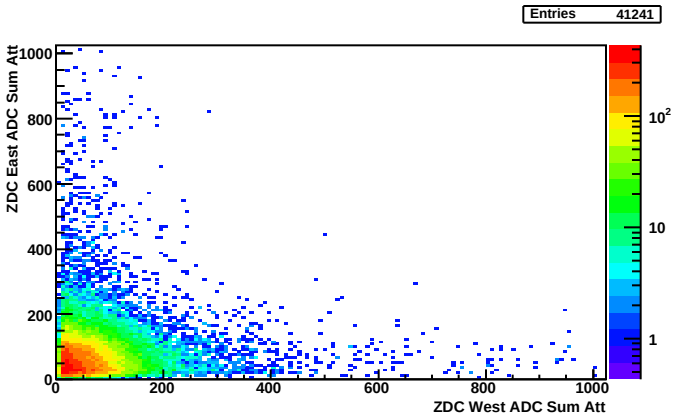
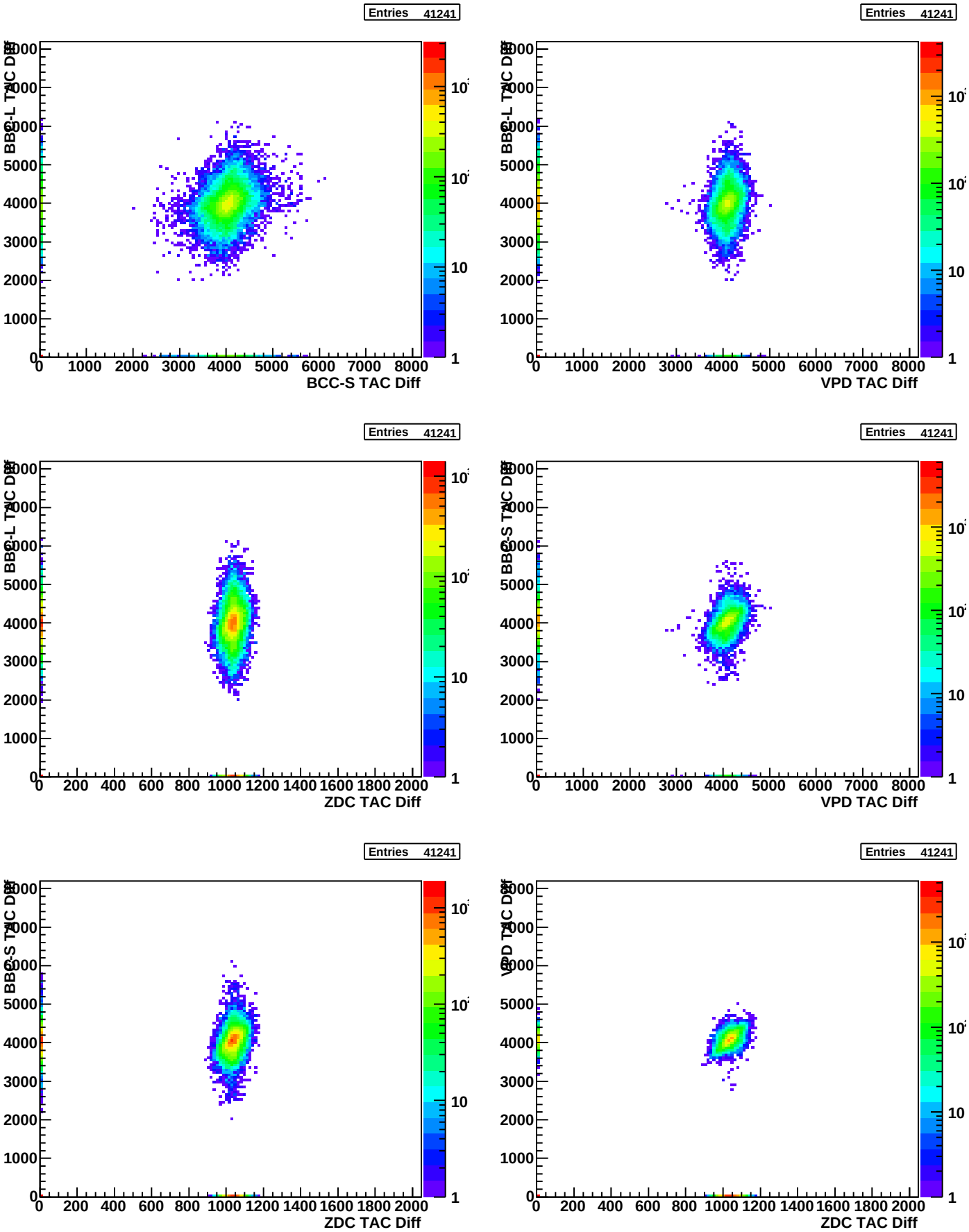

Entries 41241
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 41241
VPD East ADC Sum
VPD West ADC Sum


Entries 41241
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 41241
BBC-L TAC Diff
BCC-S TAC Diff
Entries 41241
BBC-L TAC Diff
VPD TAC Diff
Entries 41241
BBC-L TAC Diff
ZDC TAC Diff
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VPD TAC Diff
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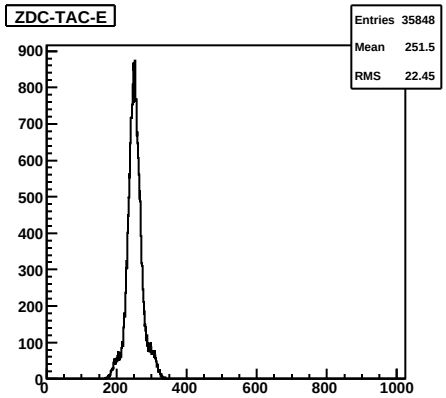
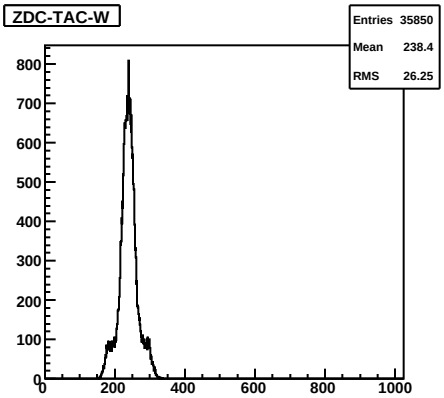
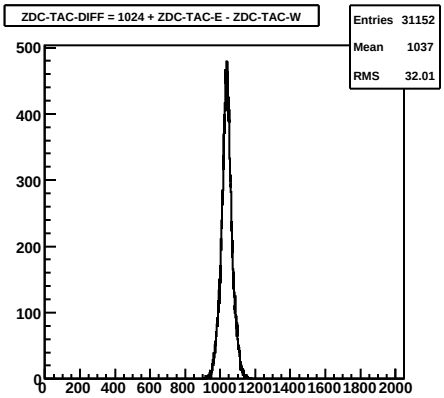
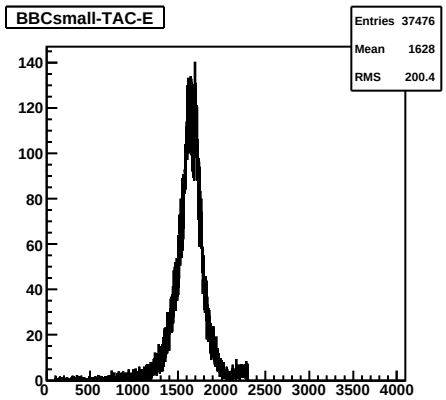
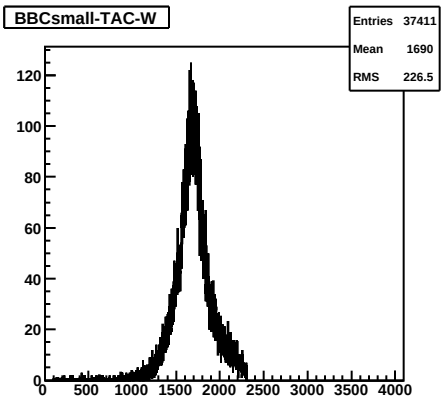
BBC-S TAC Diff
ZDC TAC Diff
Entries 41241
VPD TAC Diff
ZDC TAC Diff

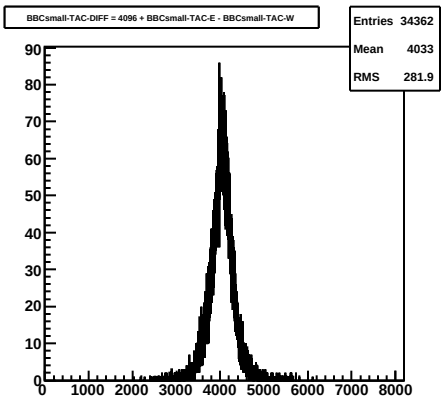

ZDC-TAC-E
Entries 35848
Mean 251.5
RMS 22.45

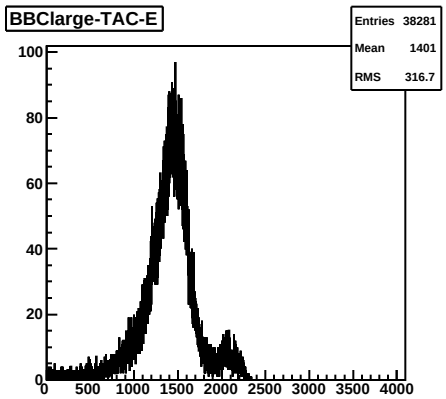

ZDC-TAC-W
Entries 35850
Mean 238.4
RMS 26.25

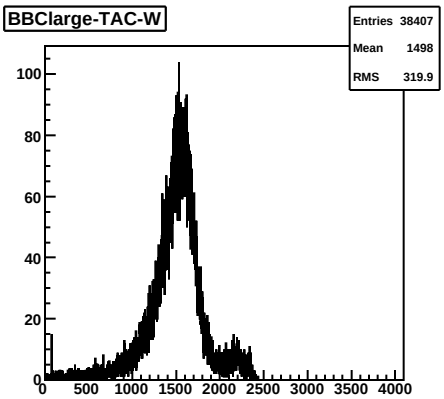

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 31152
Mean 1037
RMS 32.01

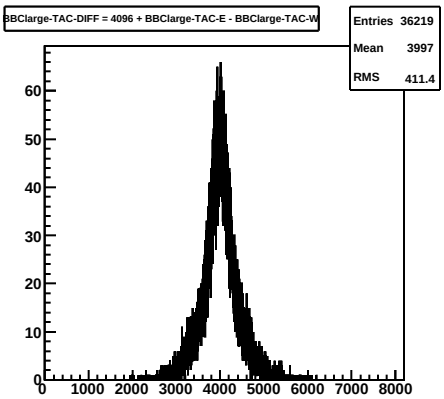

BBCsmall-TAC-E
Entries 37476
Mean 1628
RMS 200.4

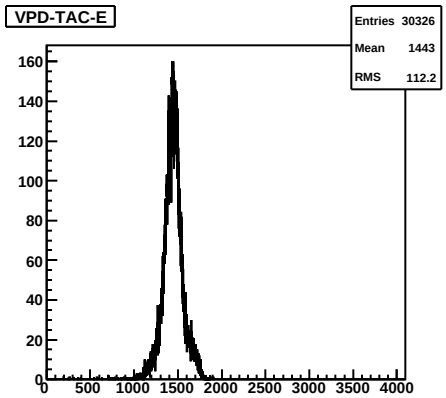

BBCsmall-TAC-W
Entries 37411
Mean 1690
RMS 226.5

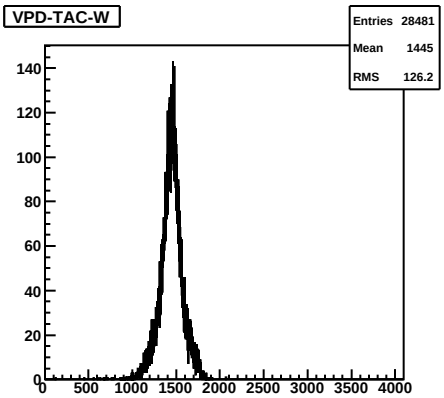

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 34362
Mean 4033
RMS 281.9

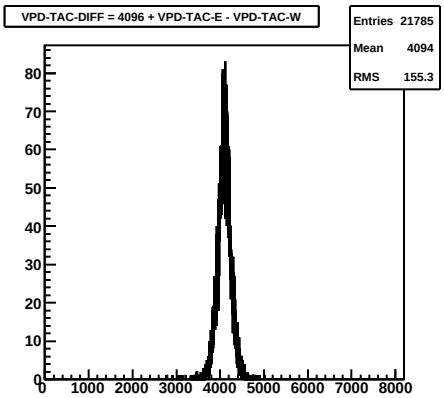

BBClarge-TAC-E
Entries 38281
Mean 1401
RMS 316.7

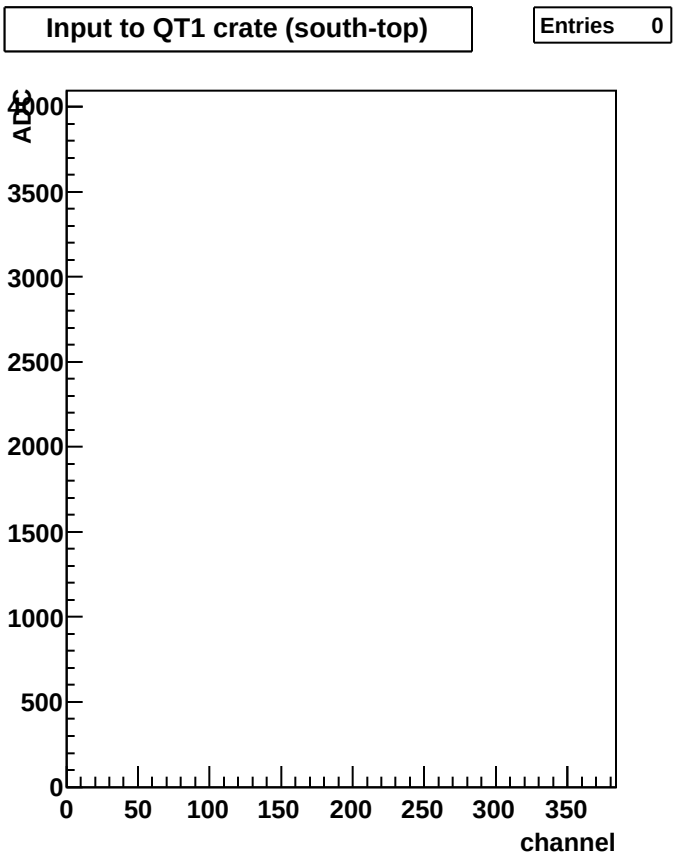

BBClarge-TAC-W
Entries 38407
Mean 1498
RMS 319.9

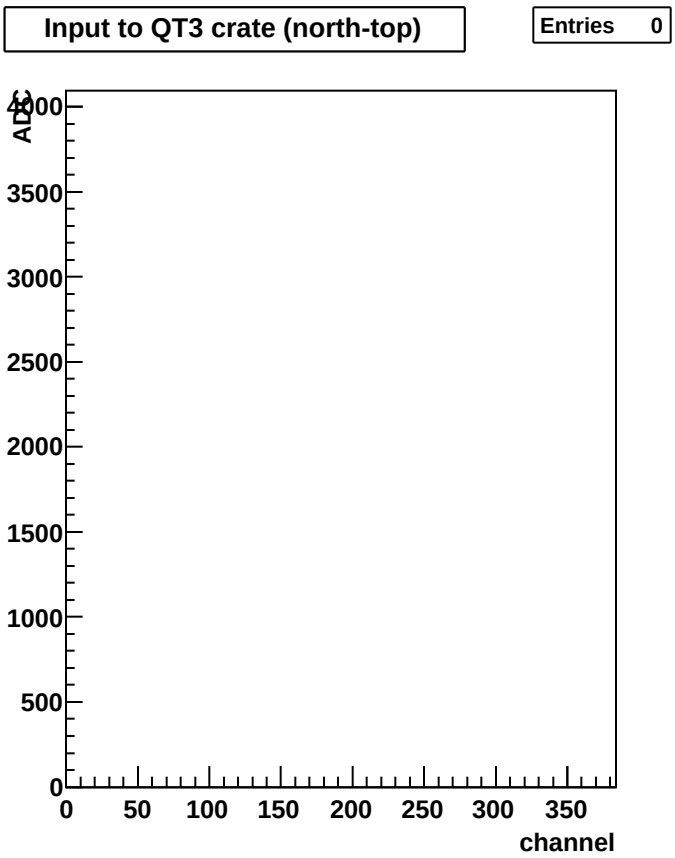

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 36219
Mean 3997
RMS 411.4

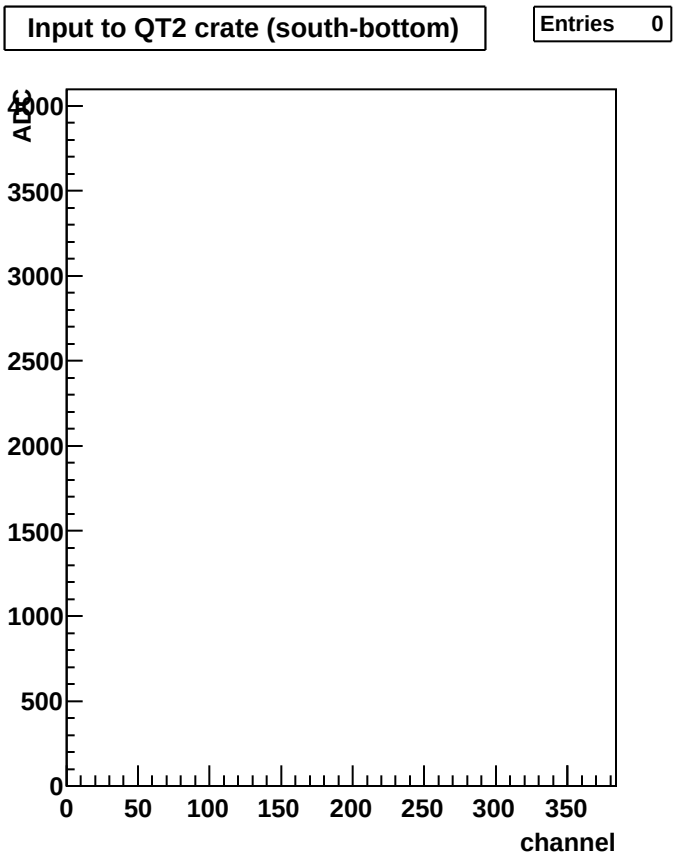

VPD-TAC-E
Entries 30326
Mean 1443
RMS 112.2

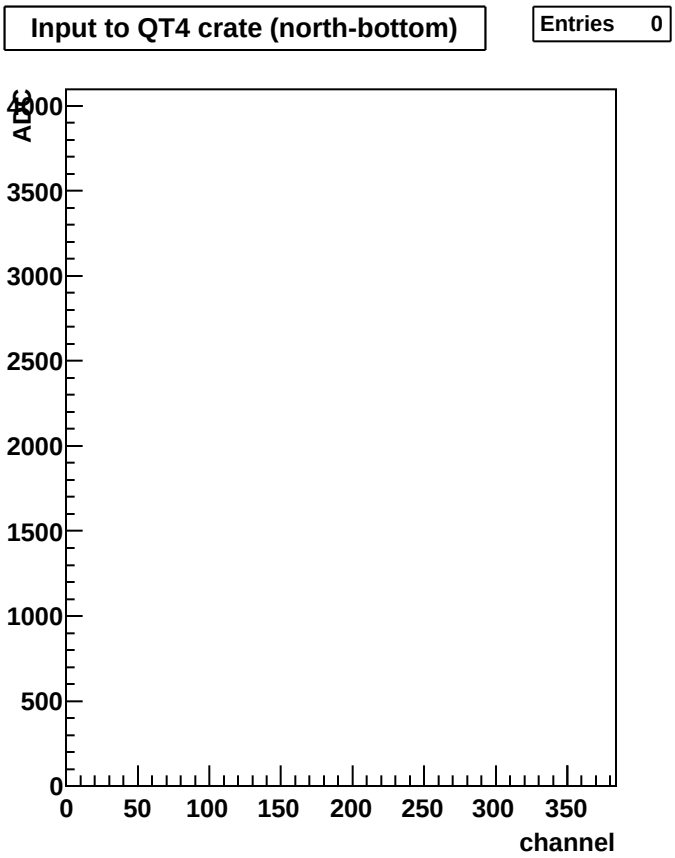

VPD-TAC-W
Entries 28481
Mean 1445
RMS 126.2

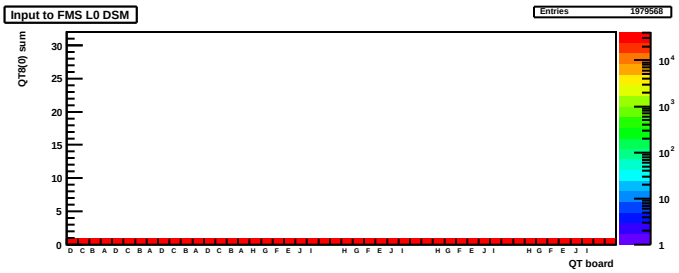

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 21785
Mean 4094
RMS 155.3

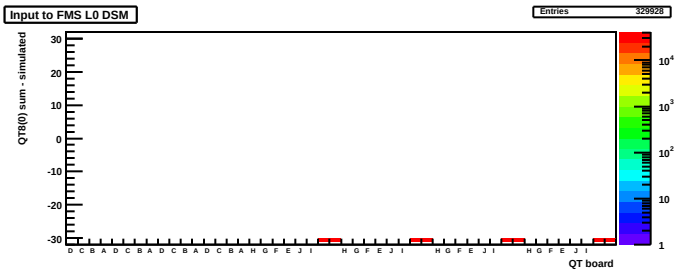

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

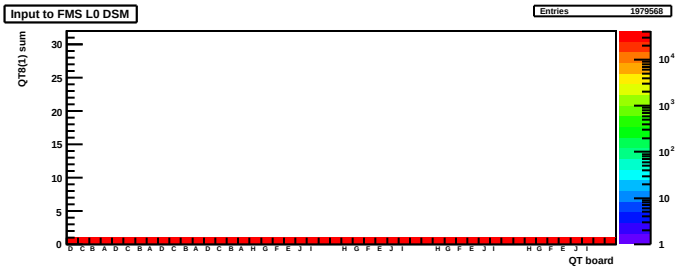

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

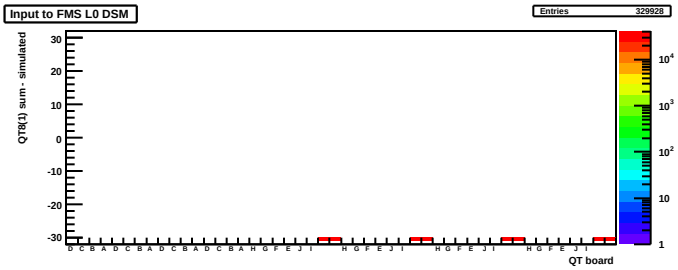

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

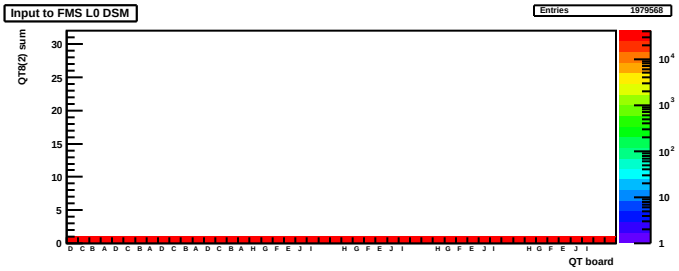

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

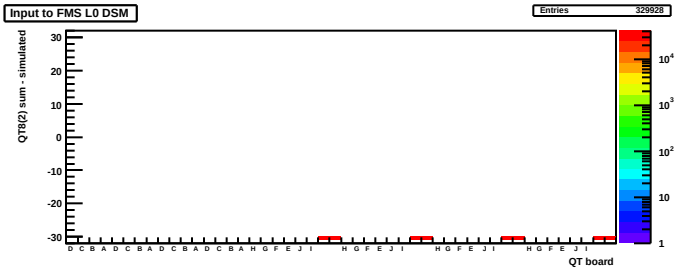

Input to FMS L0 DSM
Entries 1979568
QT8(0) sum
QT board

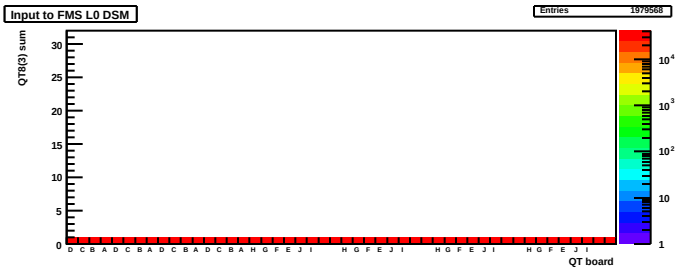

Input to FMS L0 DSM
Entries 329928
QT8(0) sum - simulated
QT board

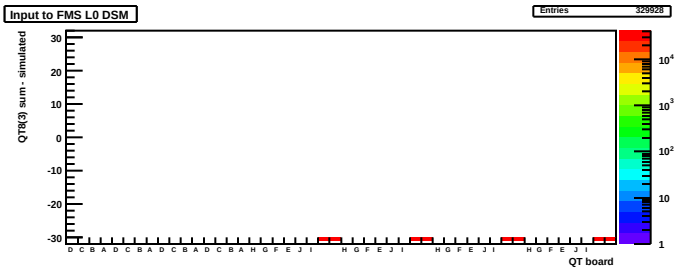

Input to FMS L0 DSM
Entries 1979568
QT8(1) sum
QT board

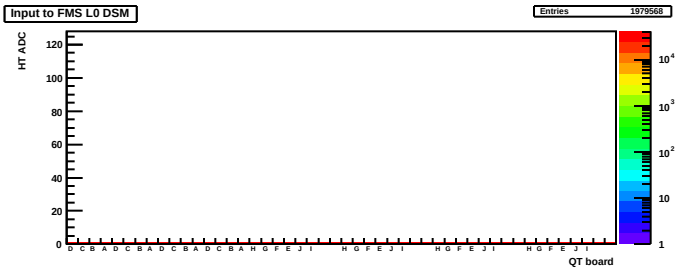

Input to FMS L0 DSM
Entries 329928
QT8(1) sum - simulated
QT board

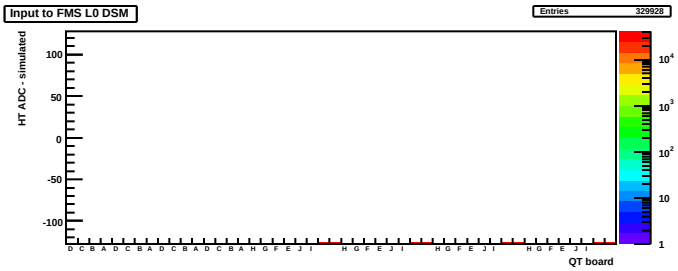

Input to FMS L0 DSM
Entries 1979568
QT8(2) sum
QT board

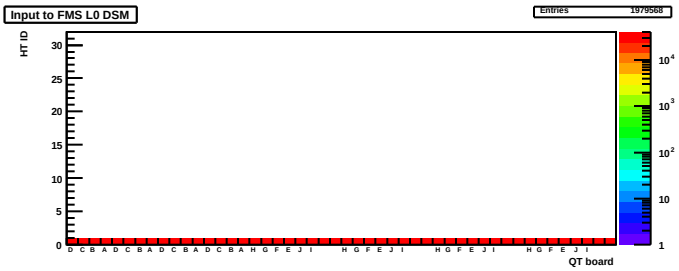

Input to FMS L0 DSM
Entries 329928
QT8(2) sum - simulated
QT board

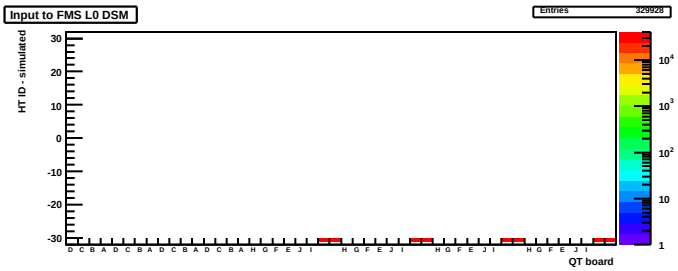

Input to FMS L0 DSM
Entries 1979568
QT8(3) sum
QT board

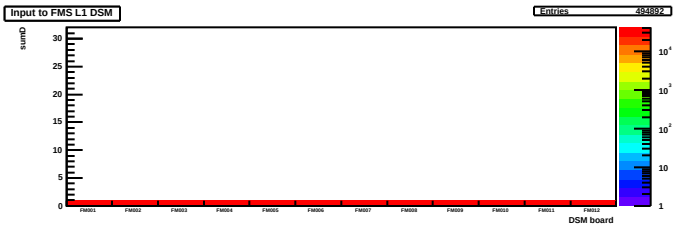

Input to FMS L0 DSM
Entries 329928
QT8(3) sum - simulated
QT board

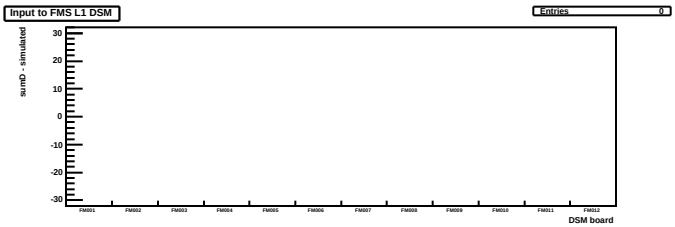

Input to FMS L0 DSM
Entries 1979568
HT ADC
QT board

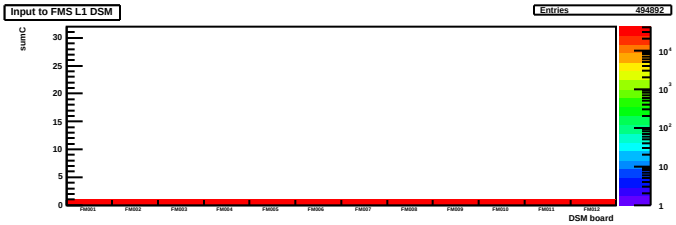

Input to FMS L0 DSM
Entries 329928
HT ADC - simulated
QT board

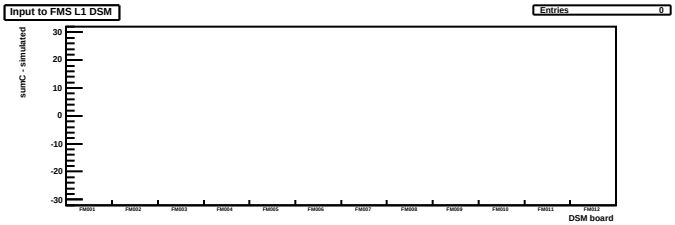

Input to FMS L0 DSM
Entries 1979568
HT ID
QT board

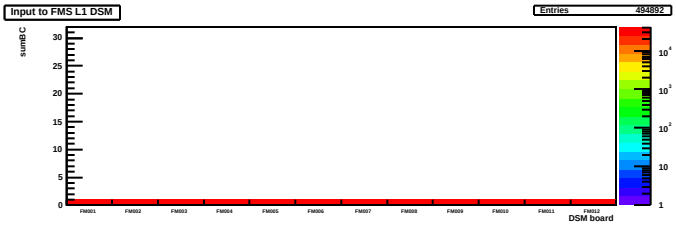

Input to FMS L0 DSM
Entries 329928
HT ID - simulated
QT board

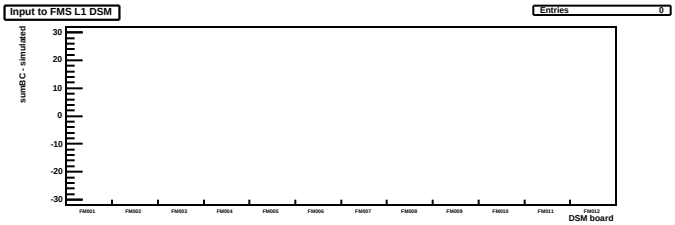

Input to FMS L1 DSM
Entries 494892
sumD
DSM board

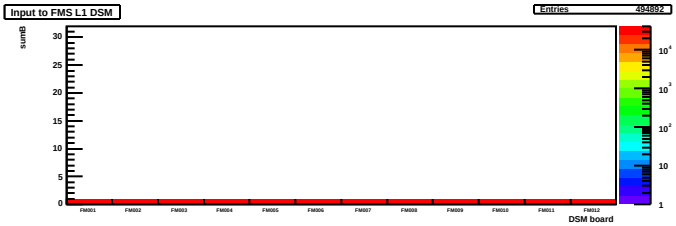

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

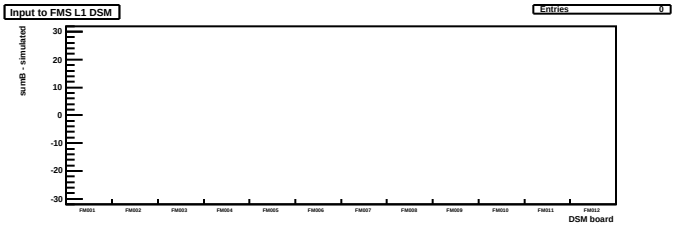

Input to FMS L1 DSM
Entries 494892
sumC
DSM board

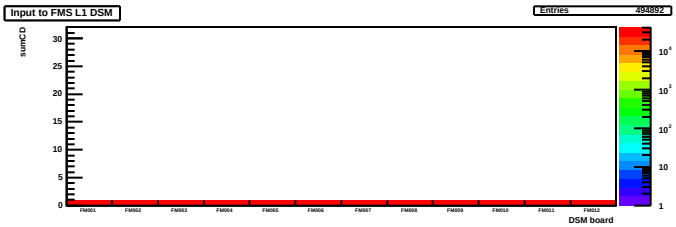

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

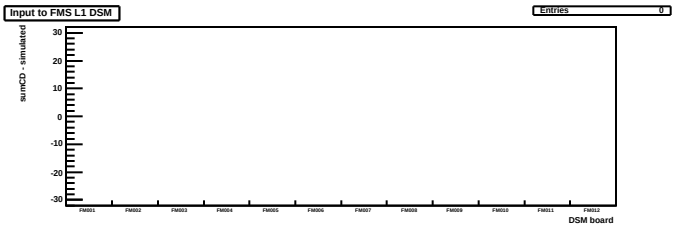

Input to FMS L1 DSM
Entries 494892
sumBC
DSM board

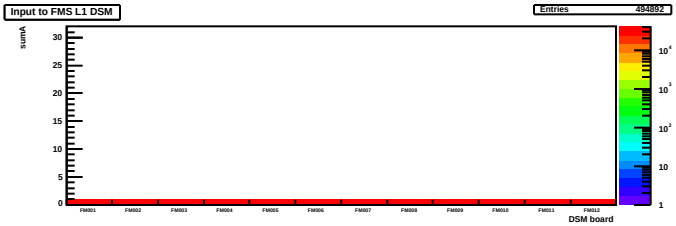

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

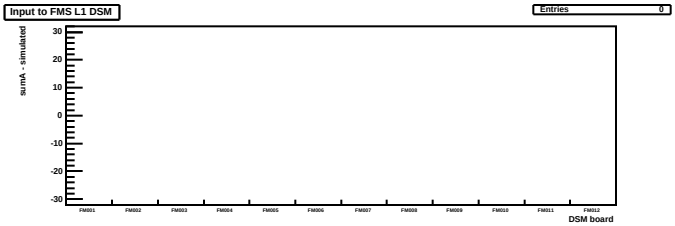

Input to FMS L1 DSM
Entries 494892
sumB
DSM board

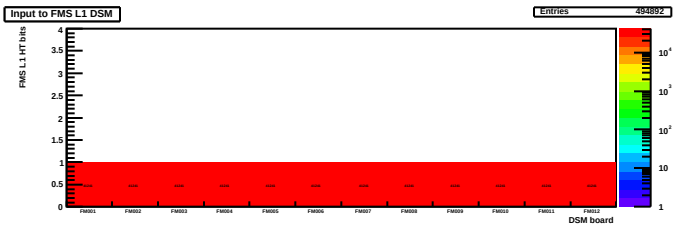

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

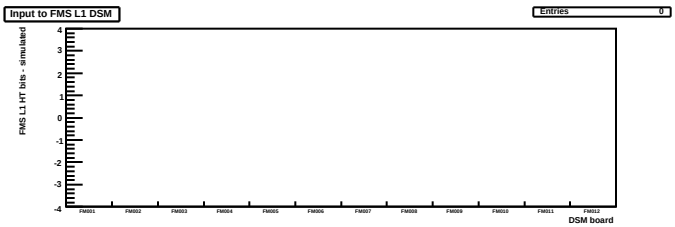

Input to FMS L1 DSM
Entries 494892
sumCD
DSM board

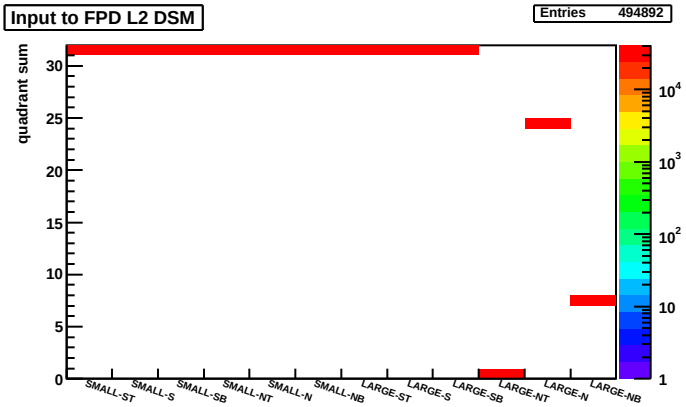

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

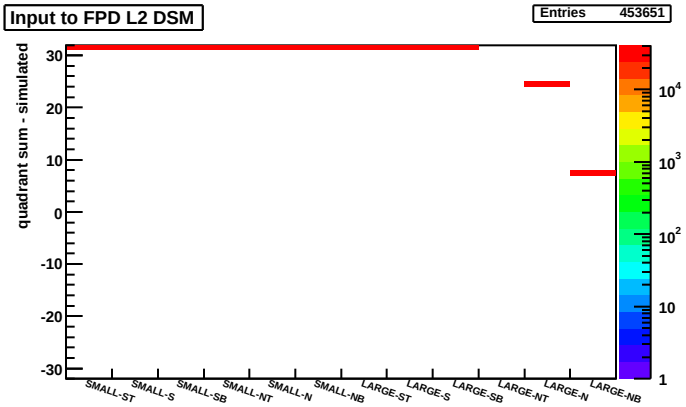

Input to FMS L1 DSM
Entries 494892
sumA
DSM board

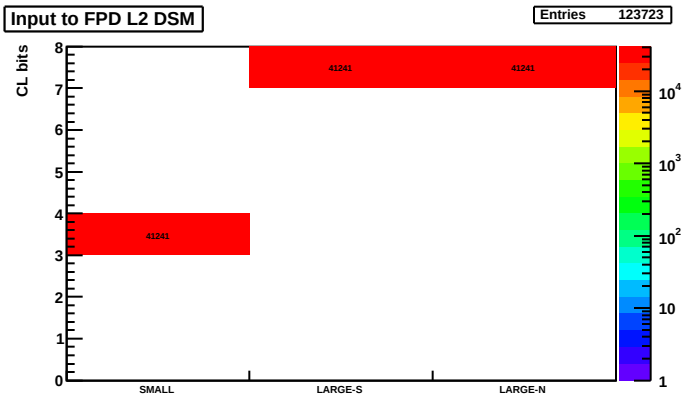

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

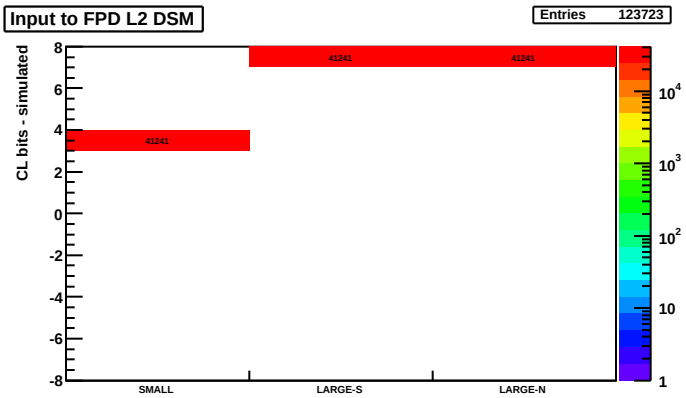

Input to FMS L1 DSM
Entries 494892
FMS L1 HT bits
DSM board

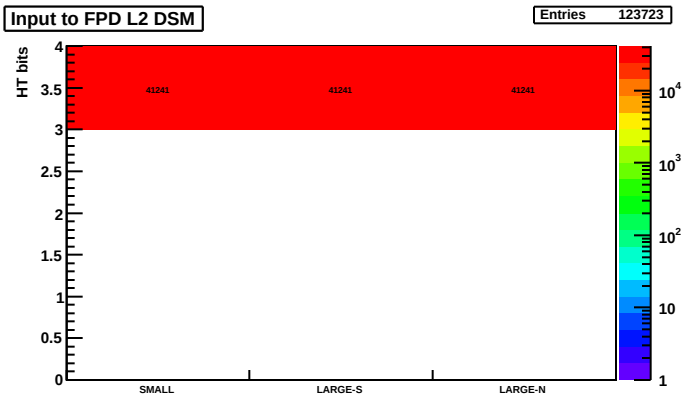

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

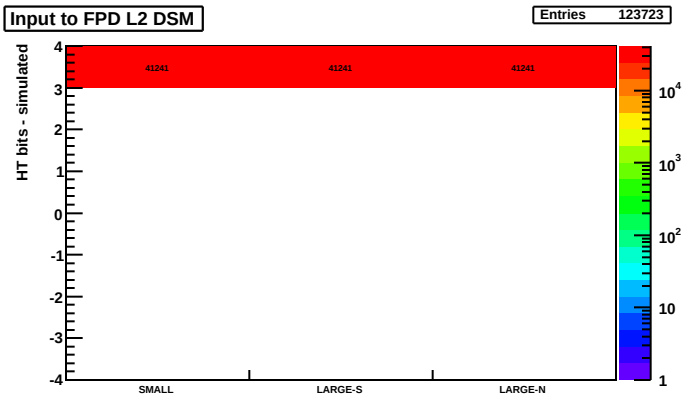

Input to FPD L2 DSM
Entries 494892
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

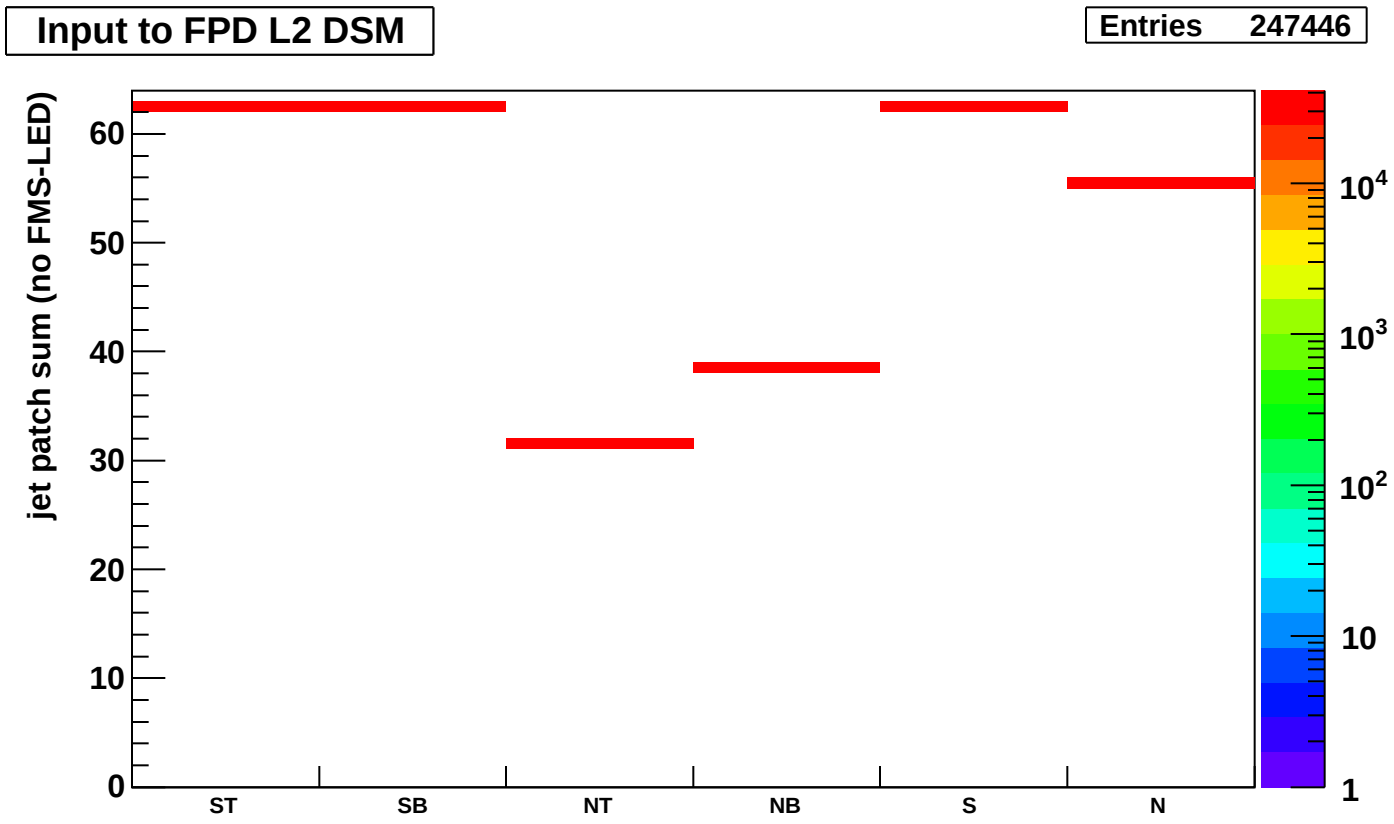

Input to FPD L2 DSM
Entries 453651
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

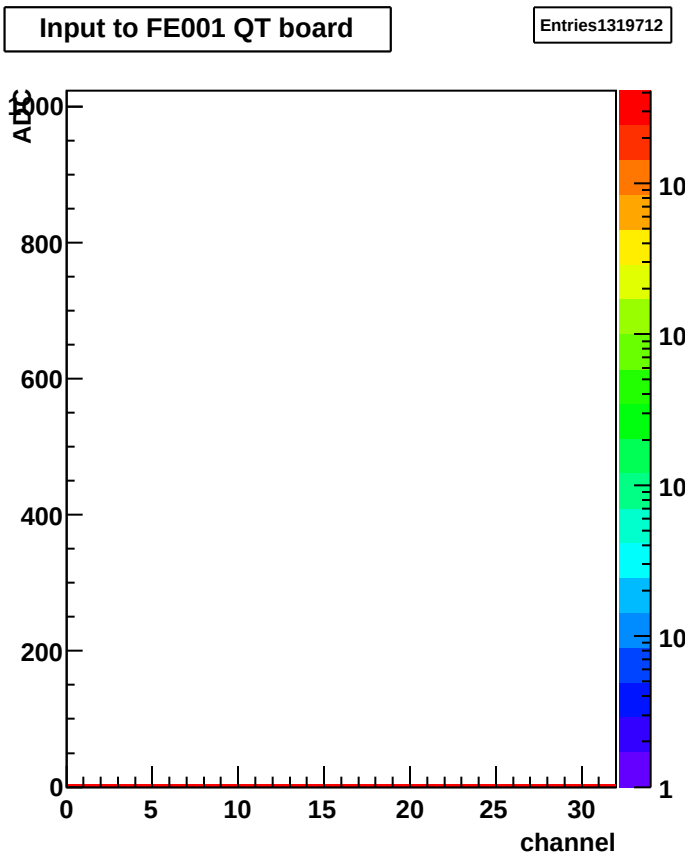

Input to FPD L2 DSM
Entries 123723
CL bits
41241
41241
41241
SMALL
LARGE-S
LARGE-N

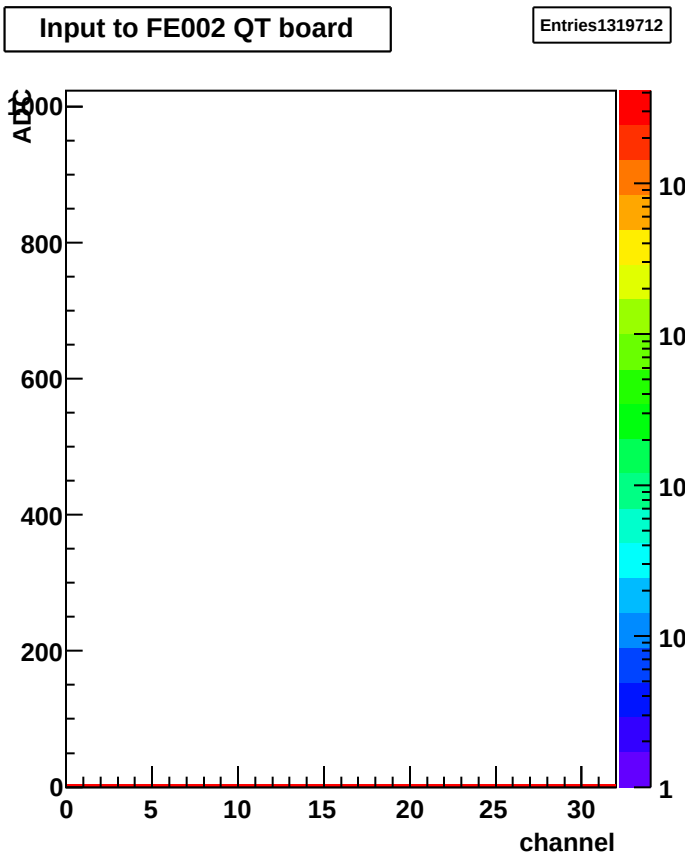

Input to FPD L2 DSM
Entries 123723
CL bits - simulated
41241
41241
41241
SMALL
LARGE-S
LARGE-N

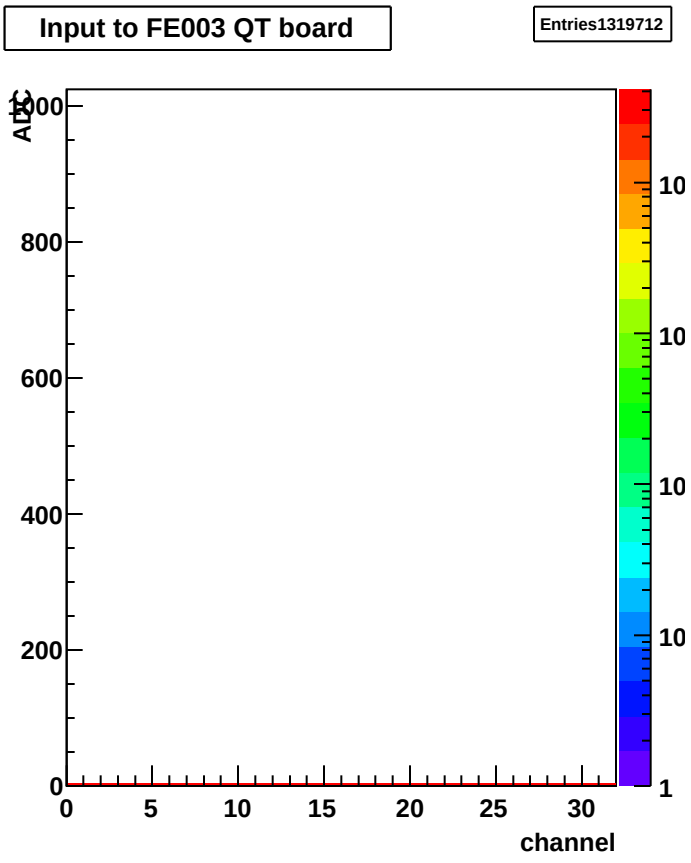

Input to FPD L2 DSM
Entries 123723
HT bits
41241
41241
41241
SMALL
LARGE-S
LARGE-N

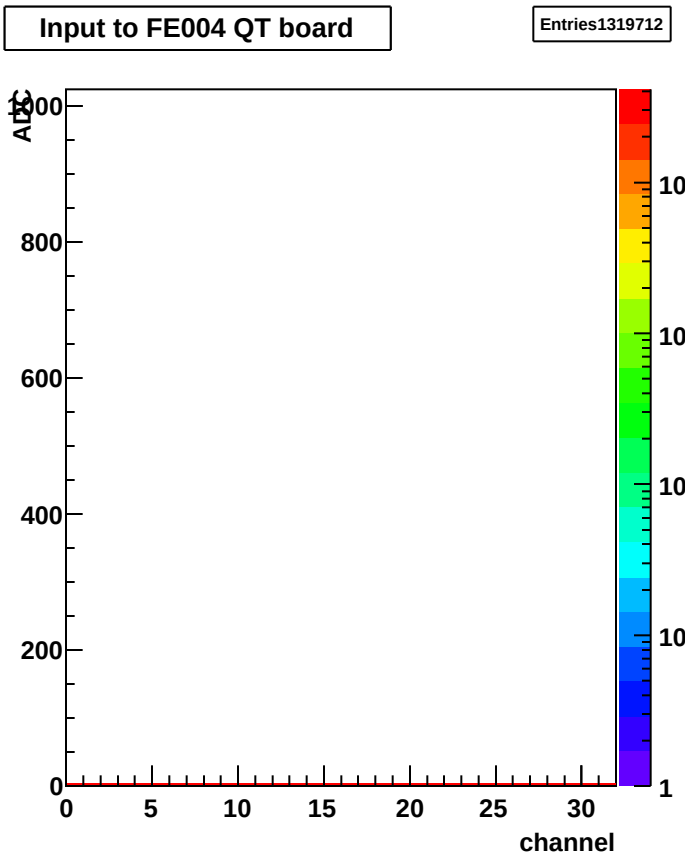

Input to FPD L2 DSM
Entries 123723
HT bits - simulated
41241
41241
41241
SMALL
LARGE-S
LARGE-N

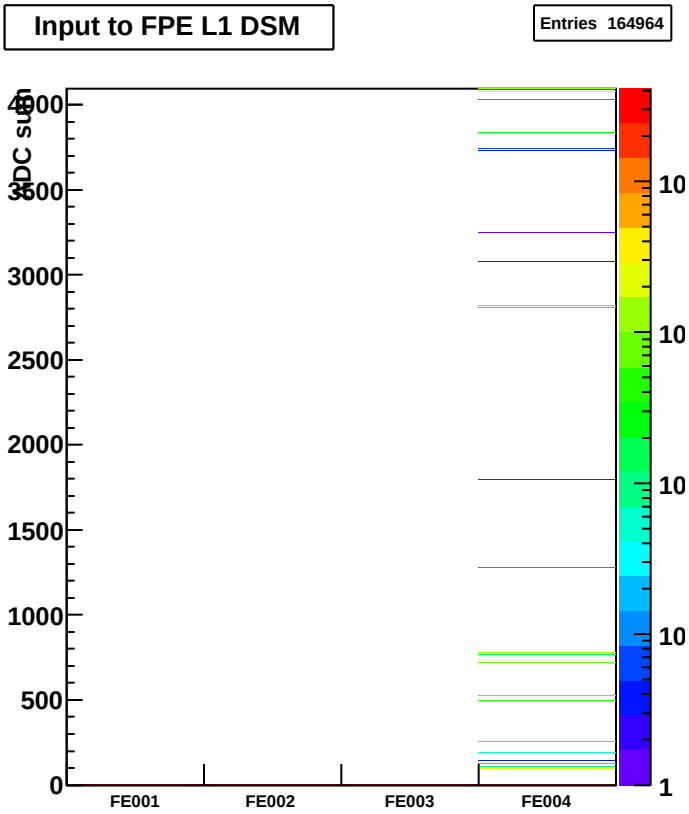

Input to FPD L2 DSM
Entries 247446
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

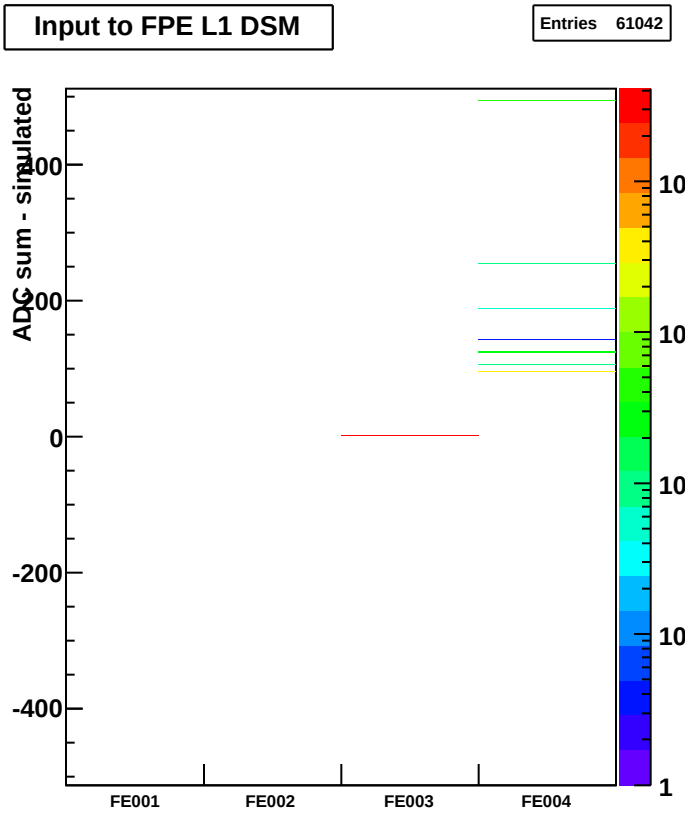

Input to FE001 QT board
Entries1319712
ADC
channel

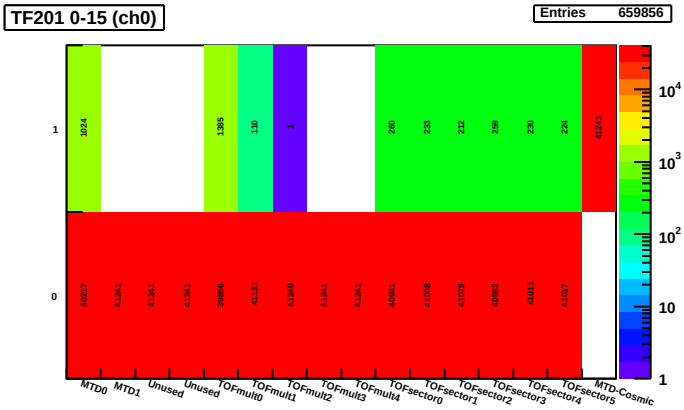

Input to FE002 QT board
Entries1319712
ADC
channel

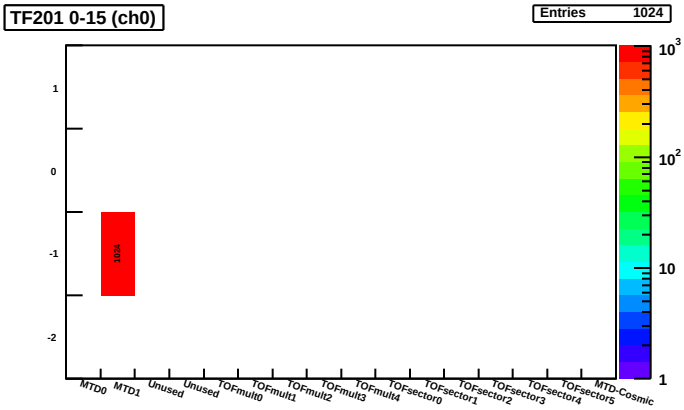

Input to FE003 QT board
Entries1319712
ADC
channel

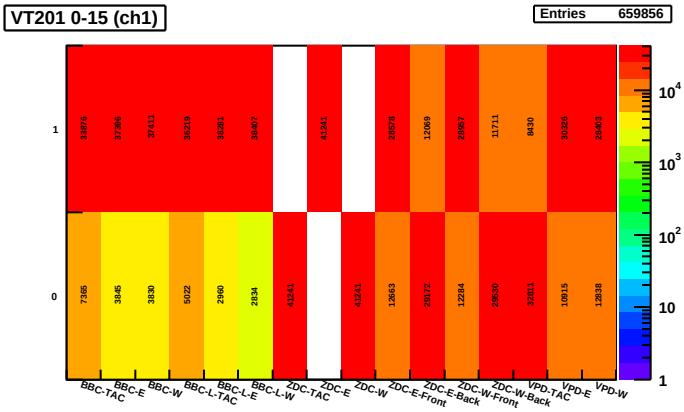

Input to FE004 QT board
Entries1319712
ADC
channel

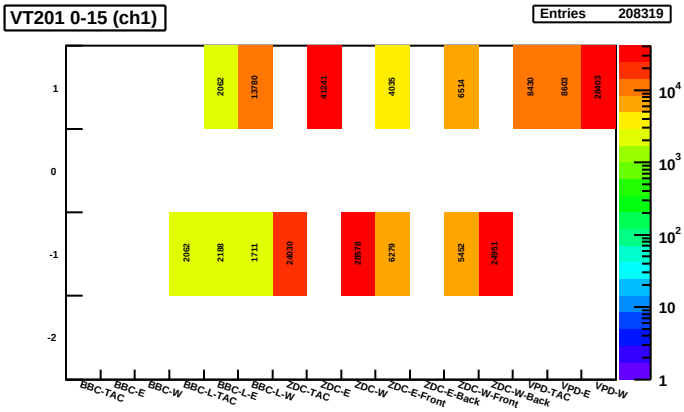

Input to FPE L1 DSM
Entries 164964
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

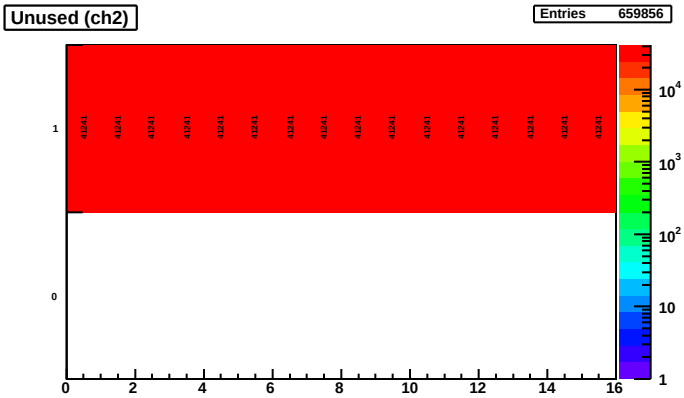

Input to FPE L1 DSM
Entries 61042
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1

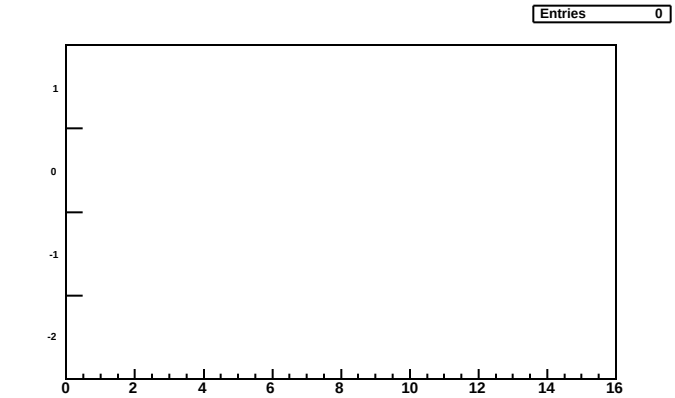

TF201 0-15 (ch0)
Entries 659856
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

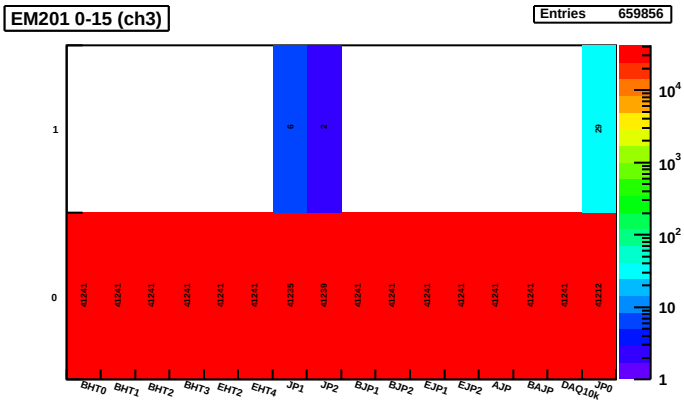

TF201 0-15 (ch0)
Entries 1024
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 659856
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 208319
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 659856


Entries 0


EM201 0-15 (ch3)
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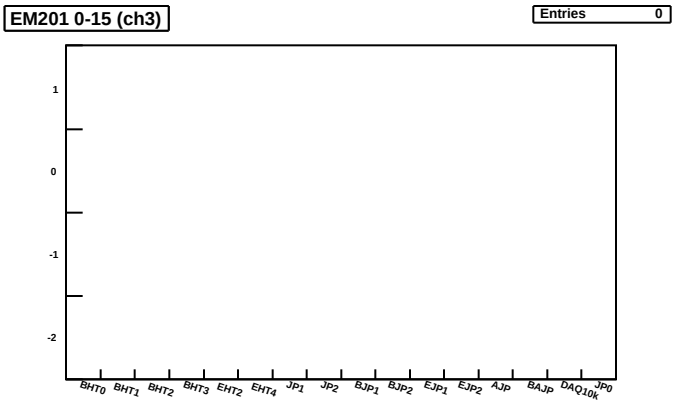
EM201 0-15 (ch3)
Entries 0
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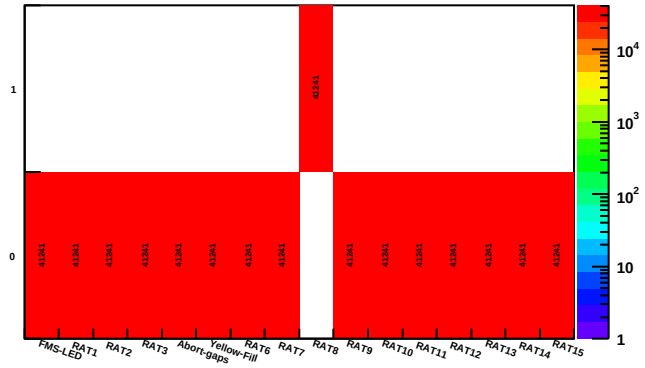
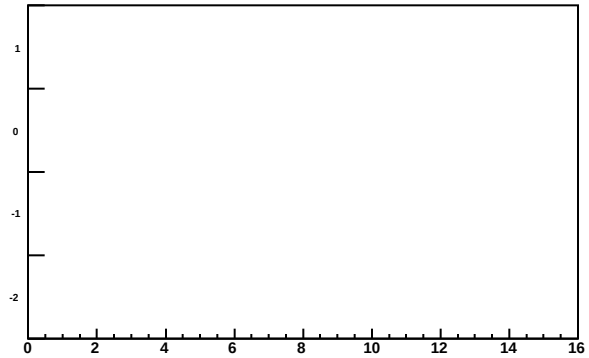
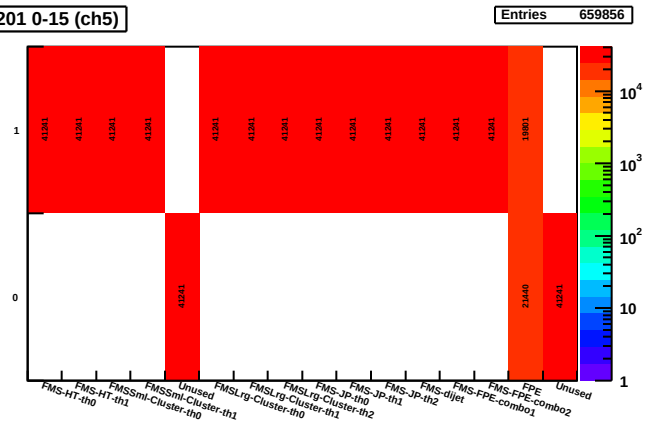
RAT board (ch4)





FP201 0-15 (ch5)



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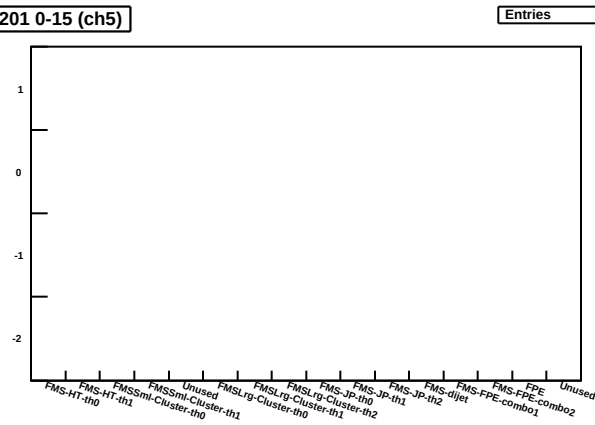
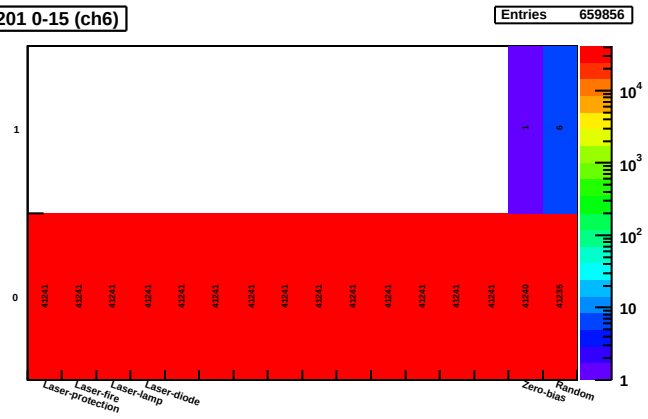
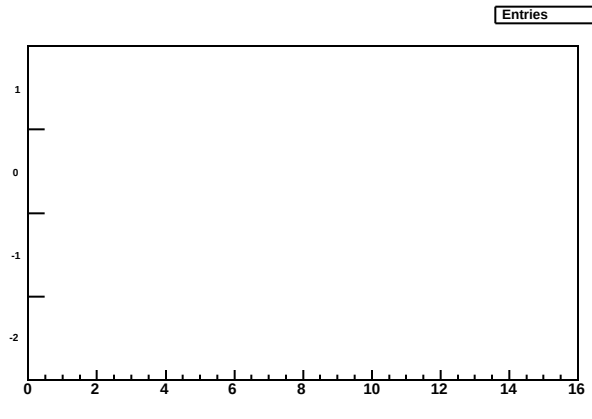
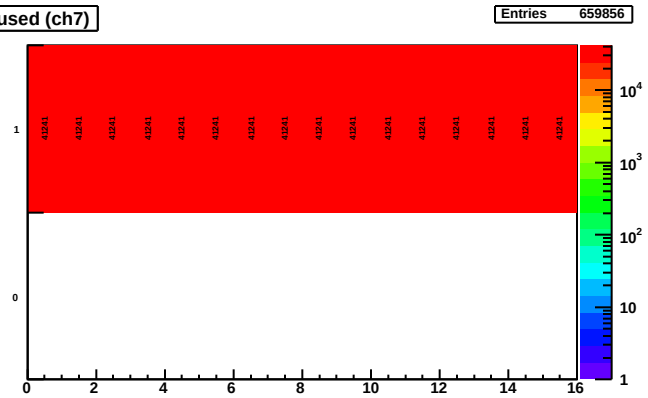
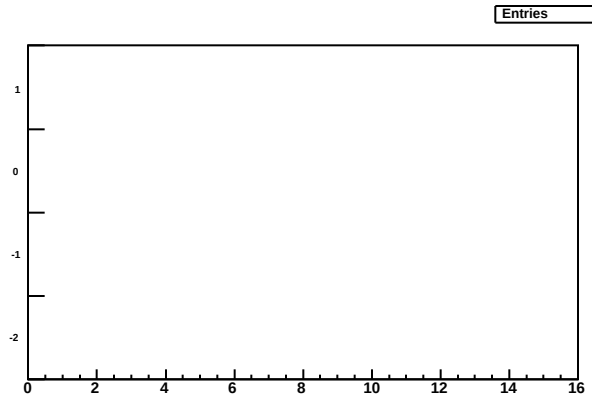


ST201 0-15 (ch6)





Unused (ch7)