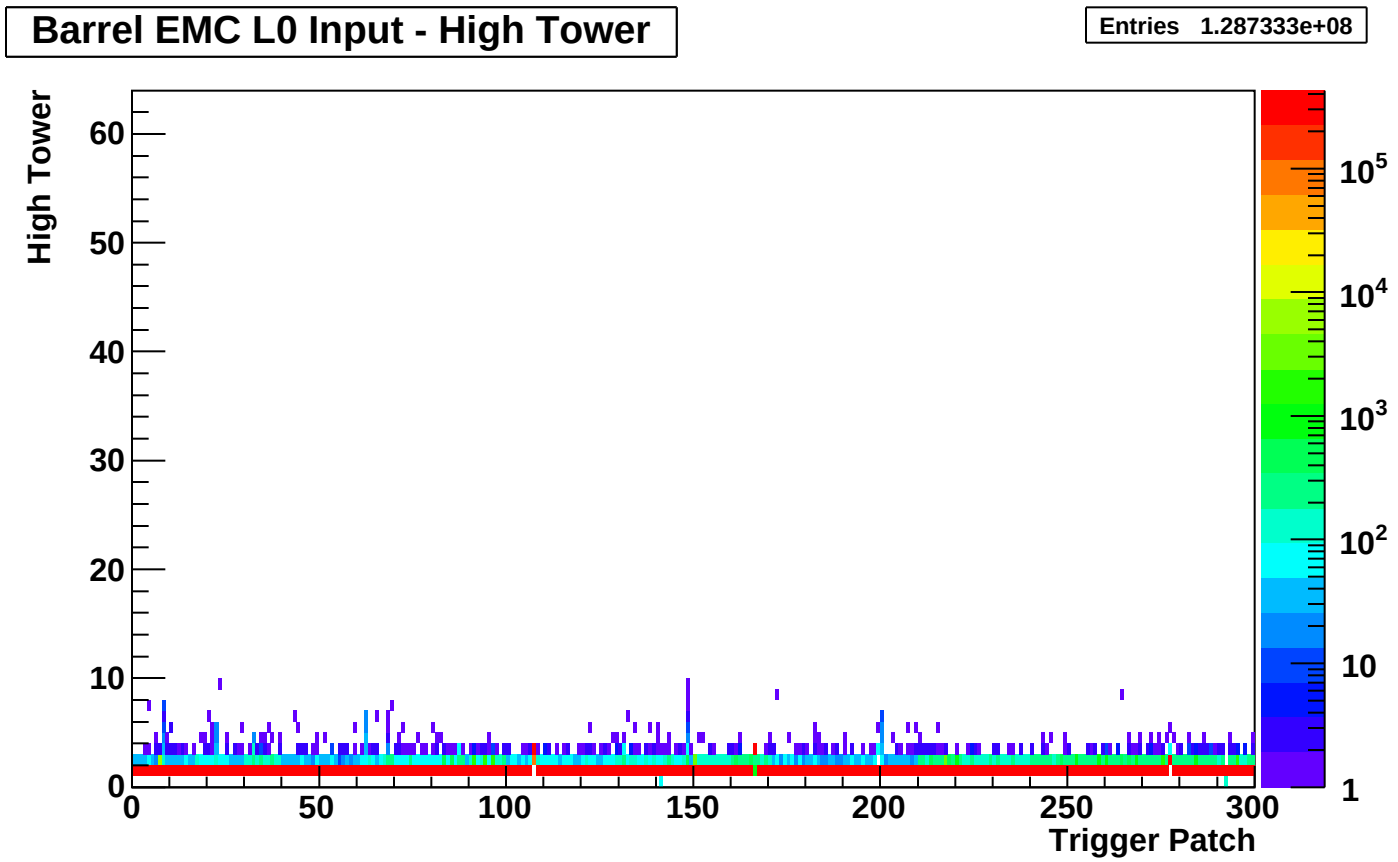
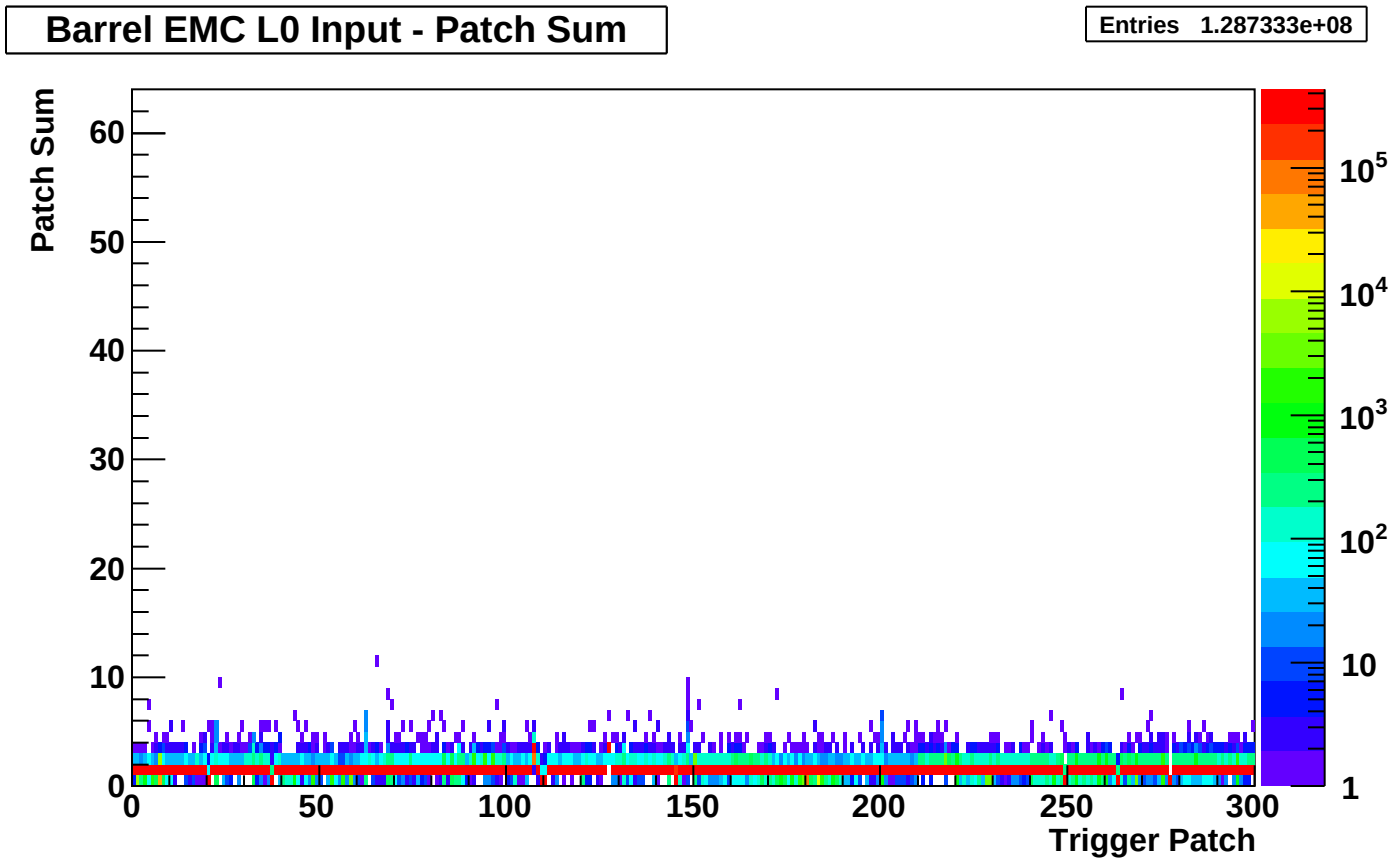
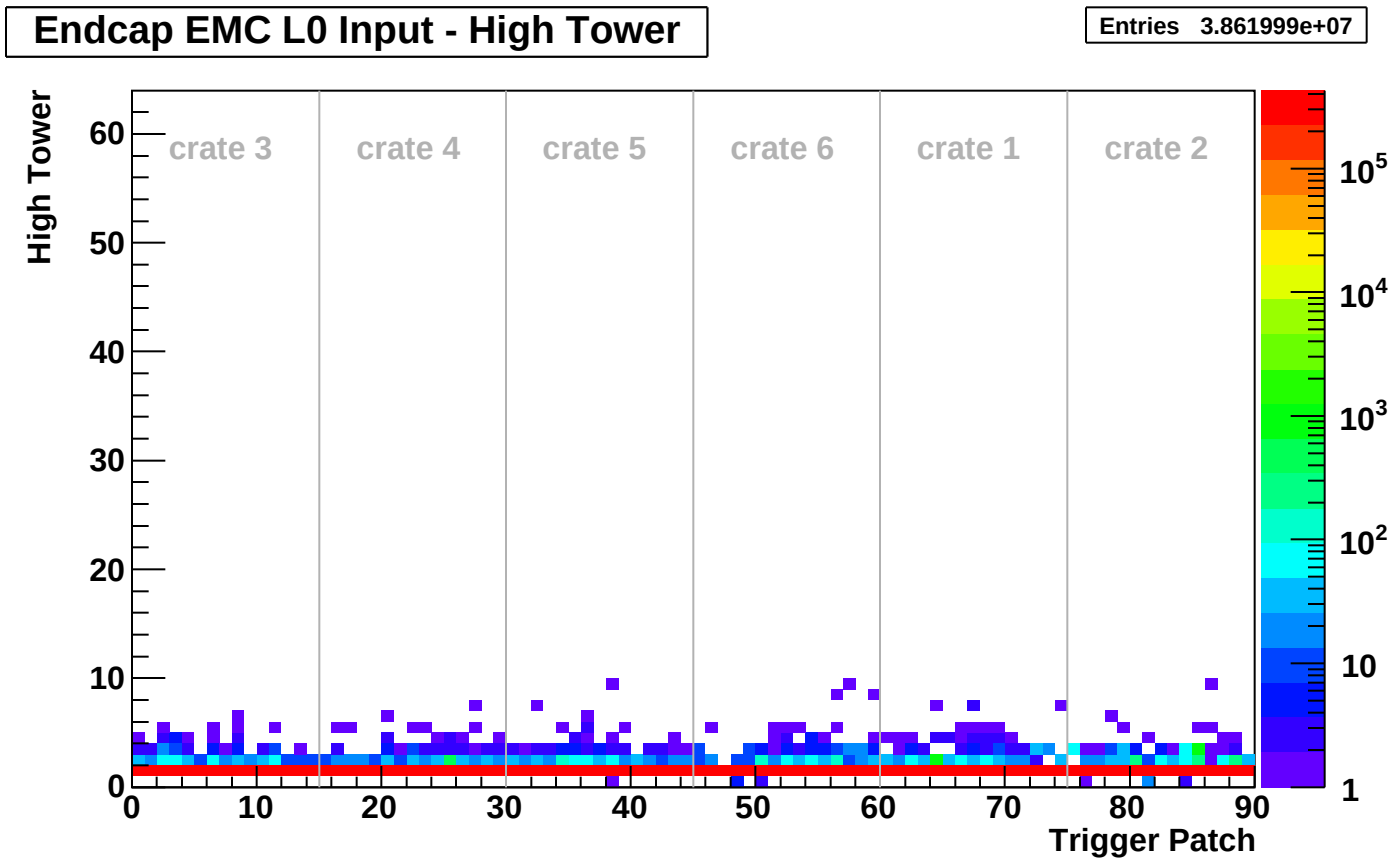
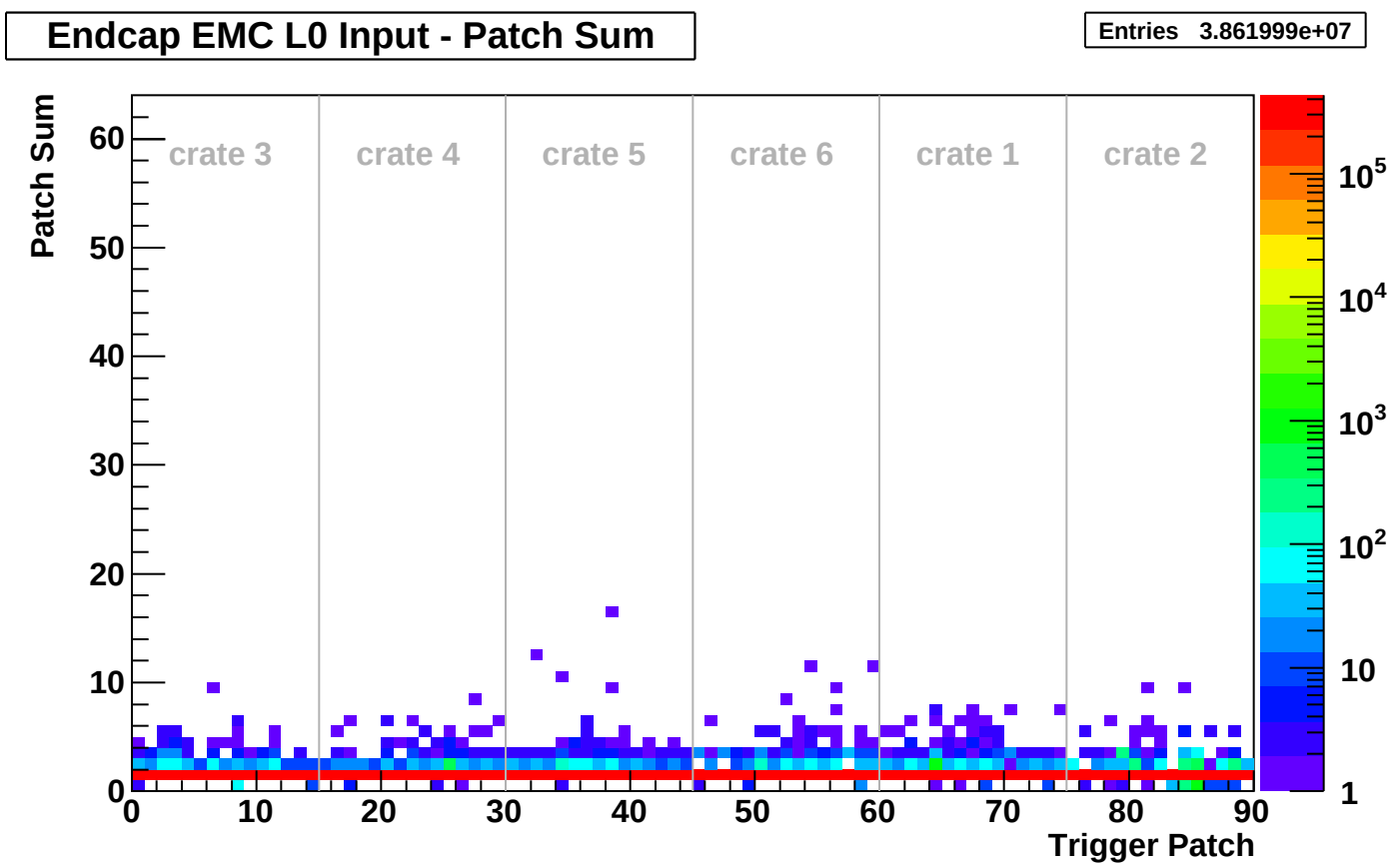
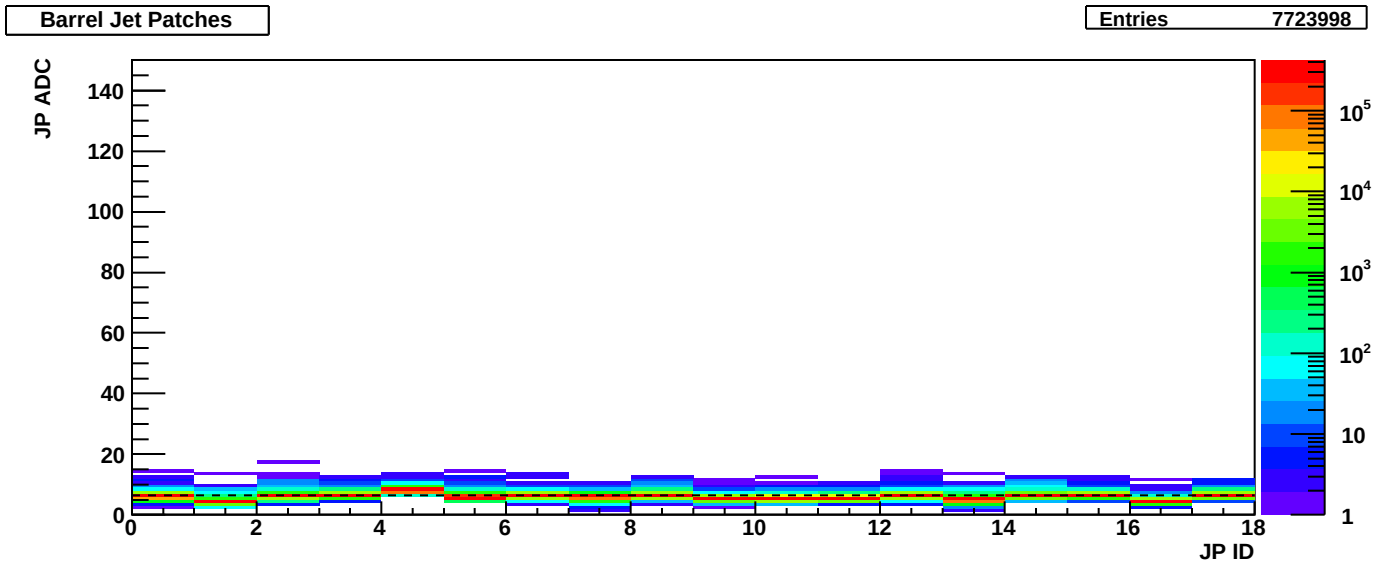
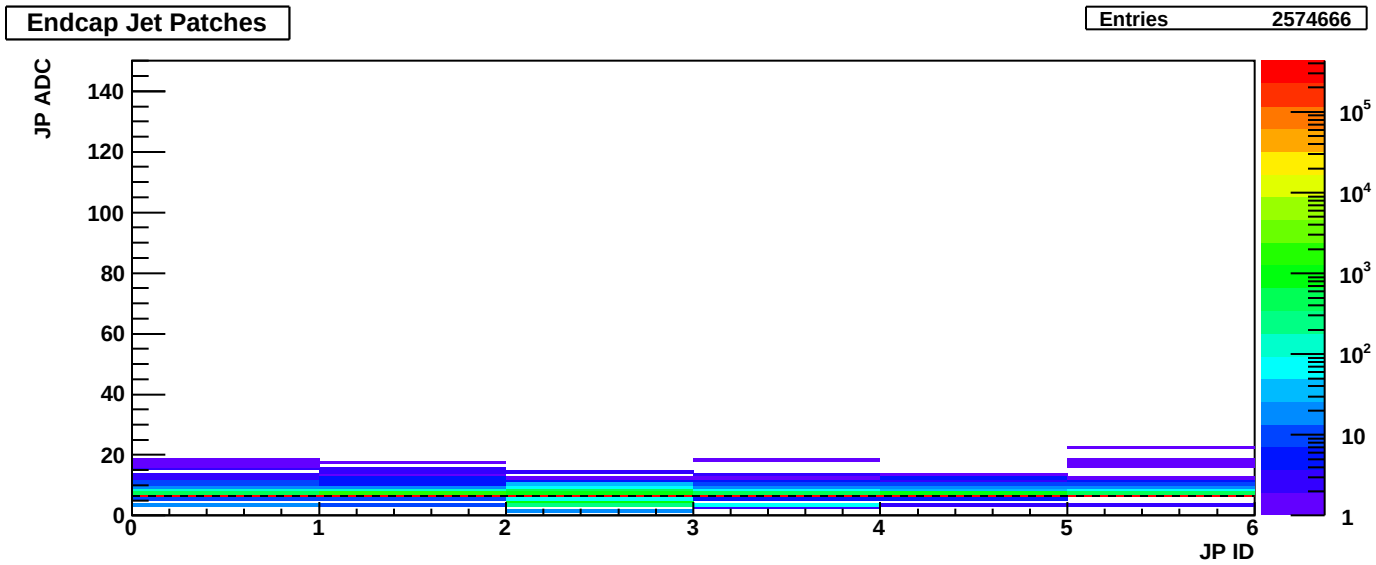

Barrel EMC L0 Input - High Tower
Entries 1.287333e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

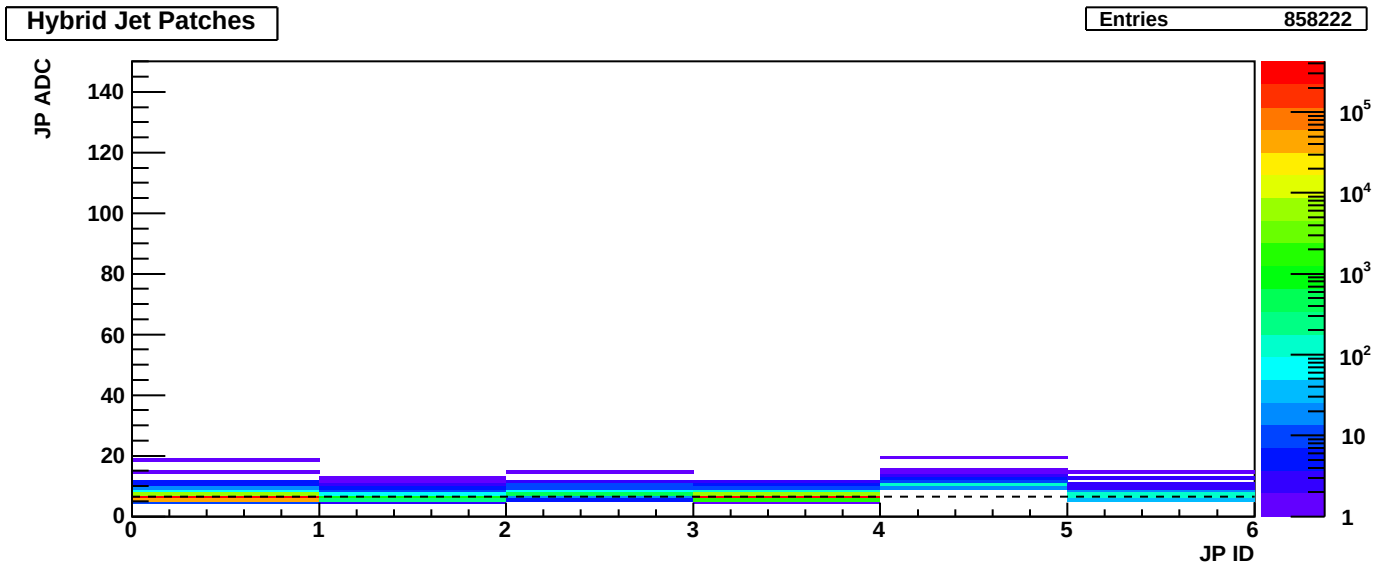

Barrel EMC L0 Input - Patch Sum
Entries 1.287333e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

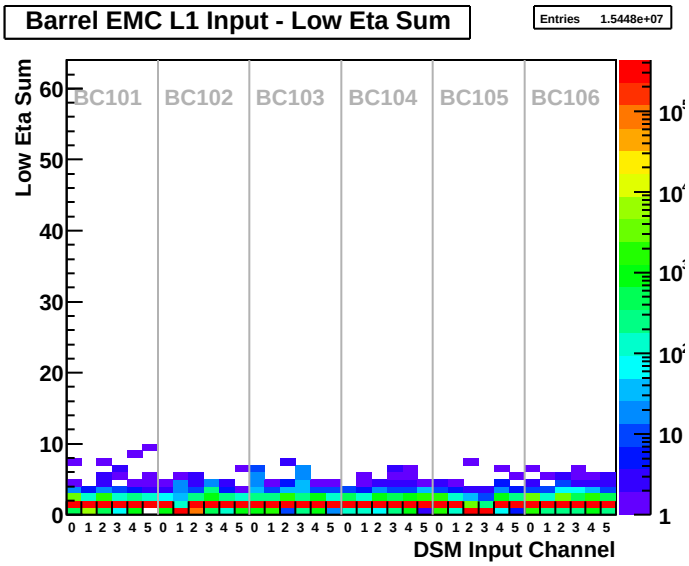

Endcap EMC L0 Input - High Tower
Entries 3.861999e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

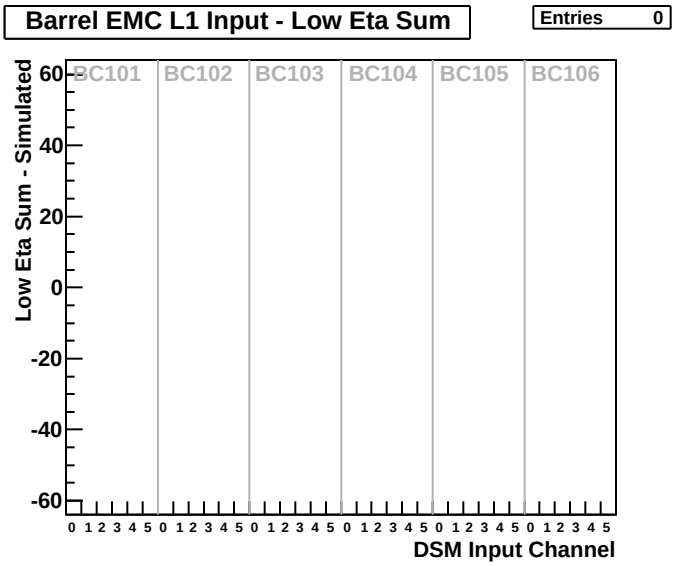

Endcap EMC L0 Input - Patch Sum
Entries 3.861999e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

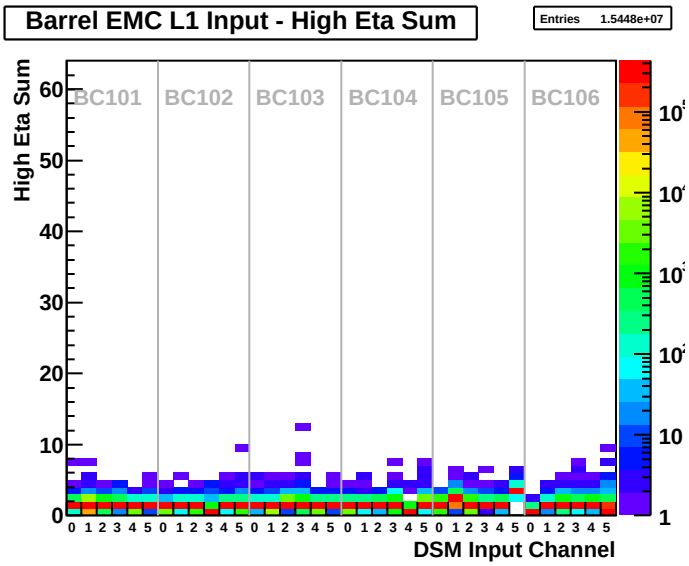

Barrel Jet Patches
Entries 7723998
JP ADC
JP ID

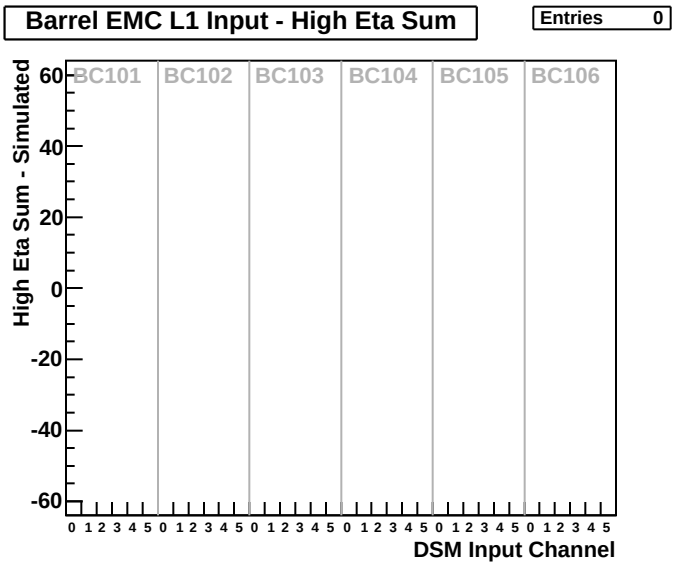

Endcap Jet Patches
Entries 2574666
JP ADC
JP ID

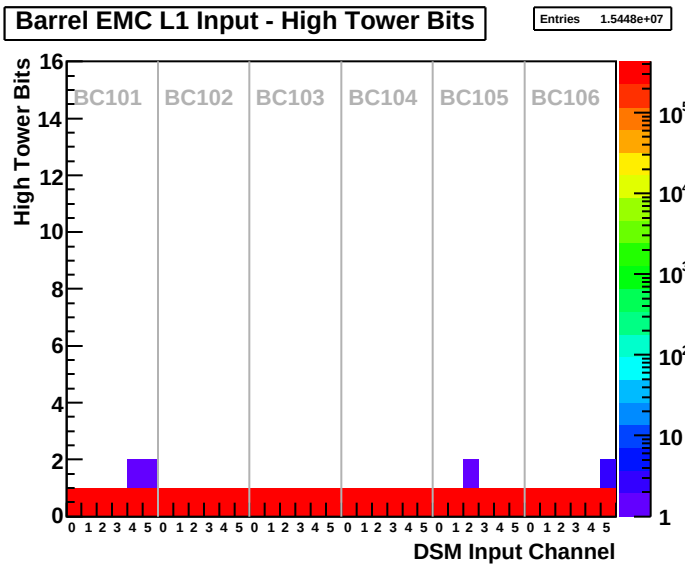

Hybrid Jet Patches
Entries 858222
JP ADC
JP ID

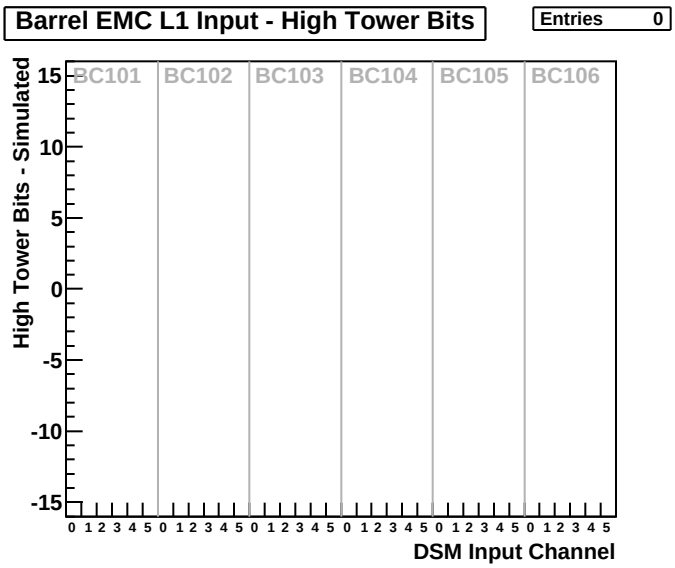

Barrel EMC L1 Input - Low Eta Sum
Entries 1.5448e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

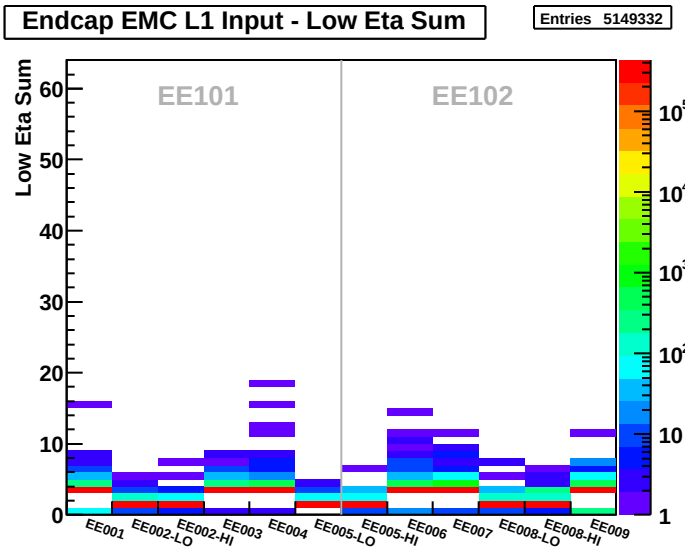

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

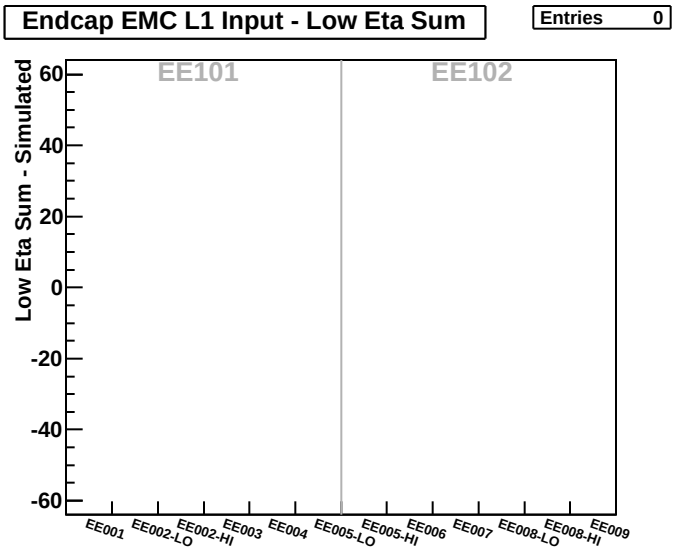

Barrel EMC L1 Input - High Eta Sum
Entries 1.5448e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

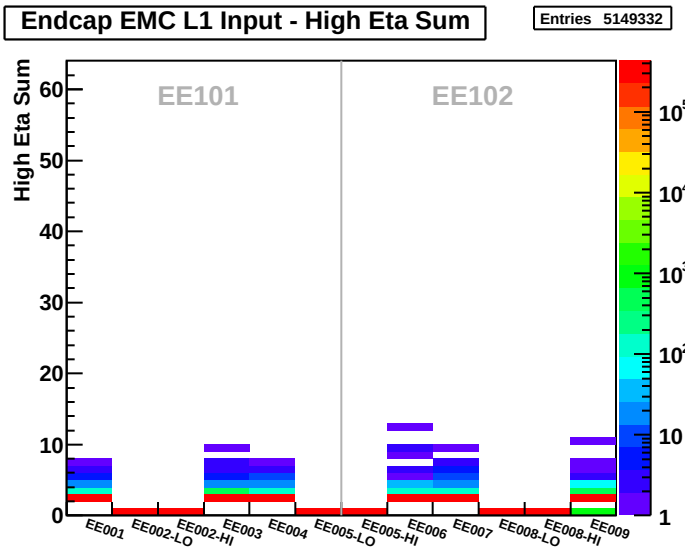

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

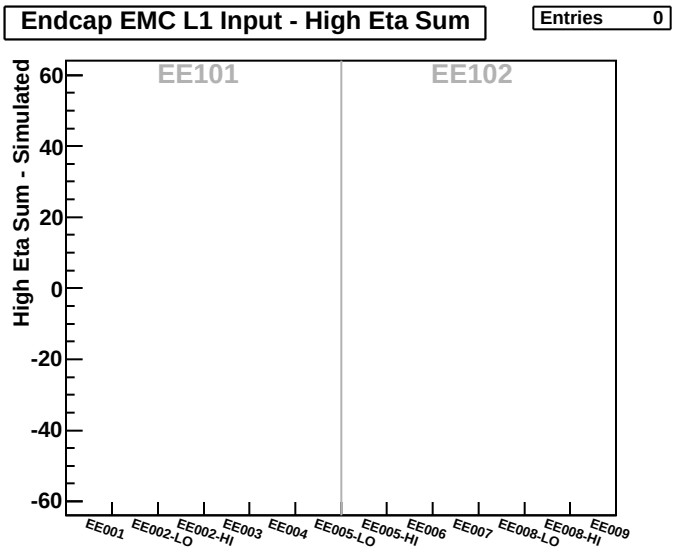

Barrel EMC L1 Input - High Tower Bits
Entries 1.5448e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

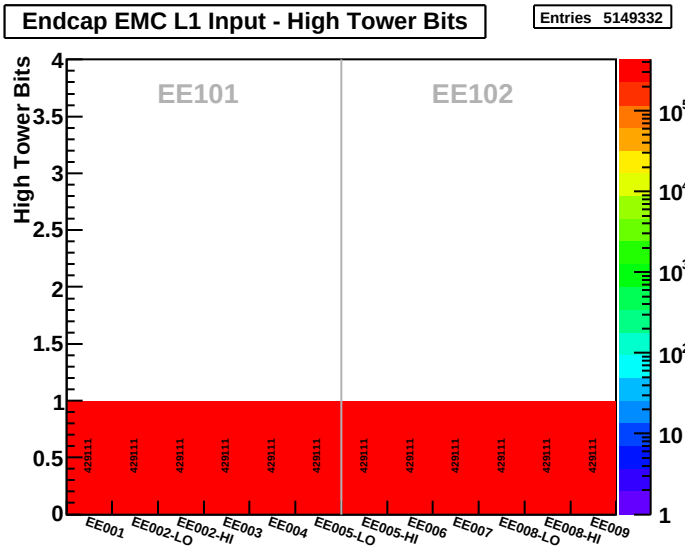

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

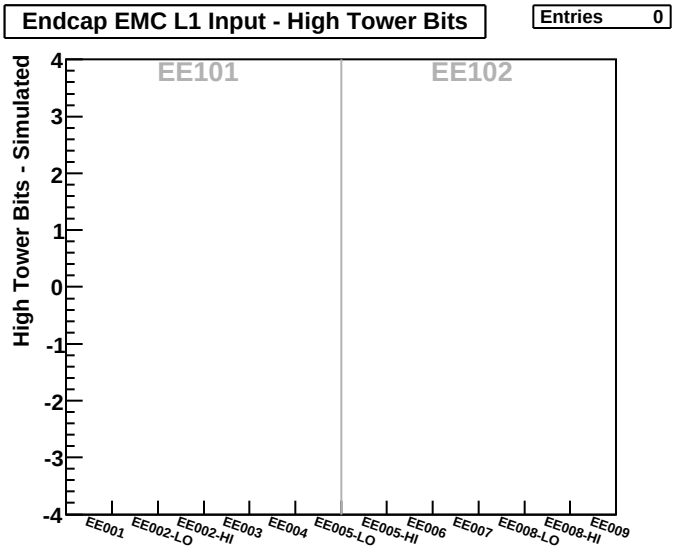

Endcap EMC L1 Input - Low Eta Sum
Entries 5149332
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

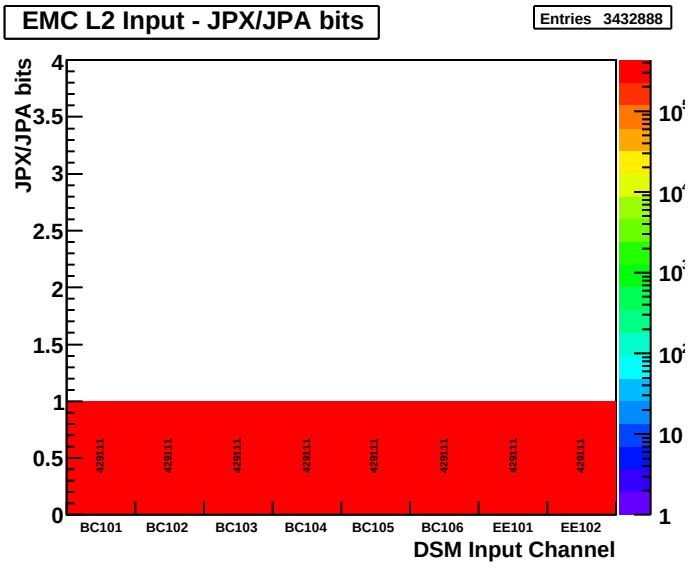

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

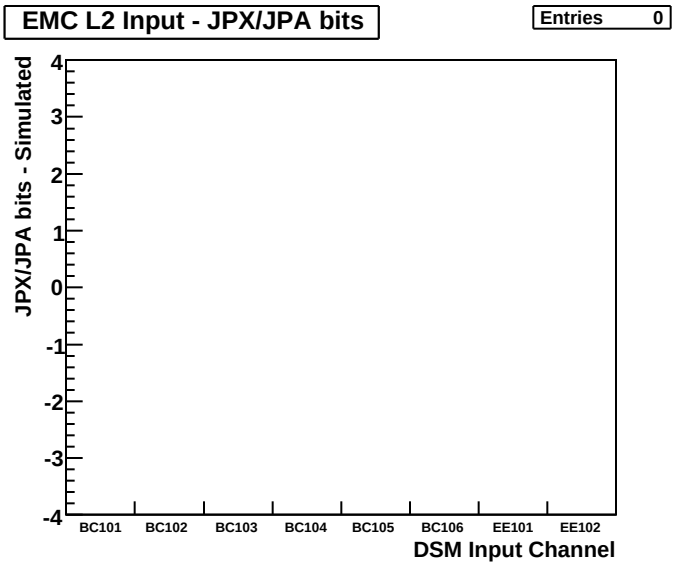

Endcap EMC L1 Input - High Eta Sum
Entries 5149332
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

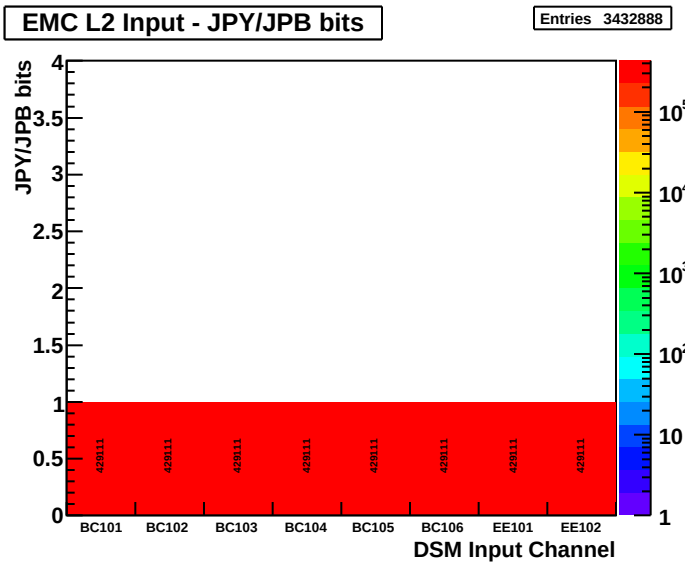

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

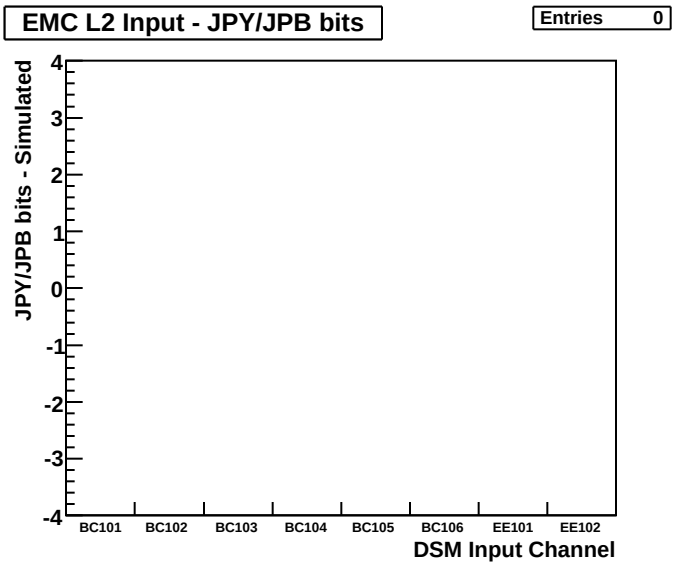

Endcap EMC L1 Input - High Tower Bits
Entries 5149332
High Tower Bits
EE101
EE102
429111
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

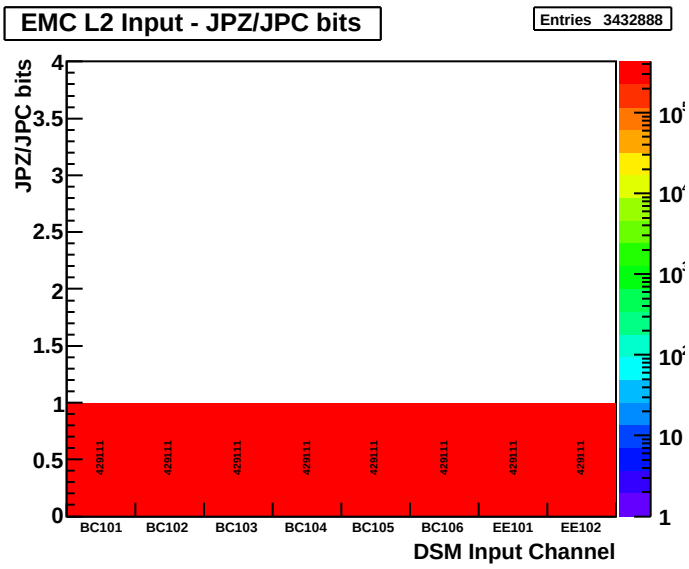

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

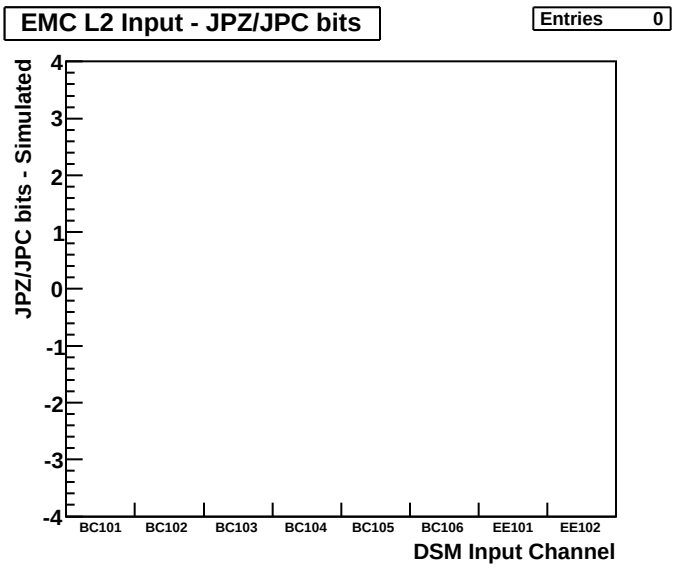

EMC L2 Input - JPX/JPA bits
Entries 3432888
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
429111

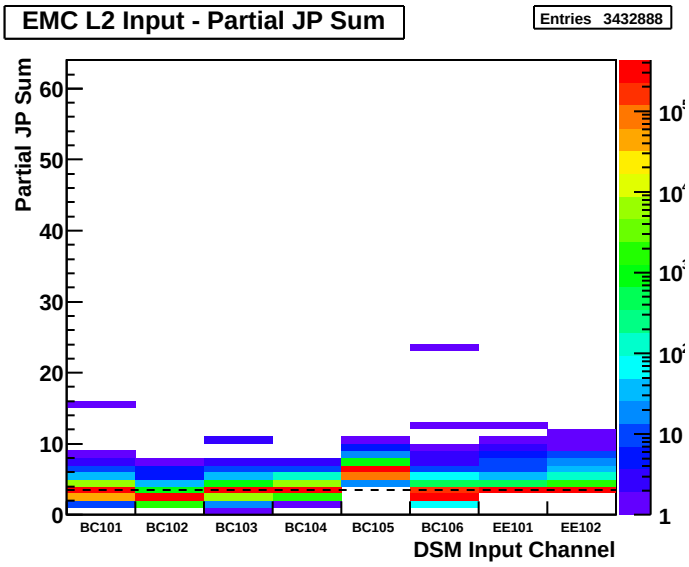

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

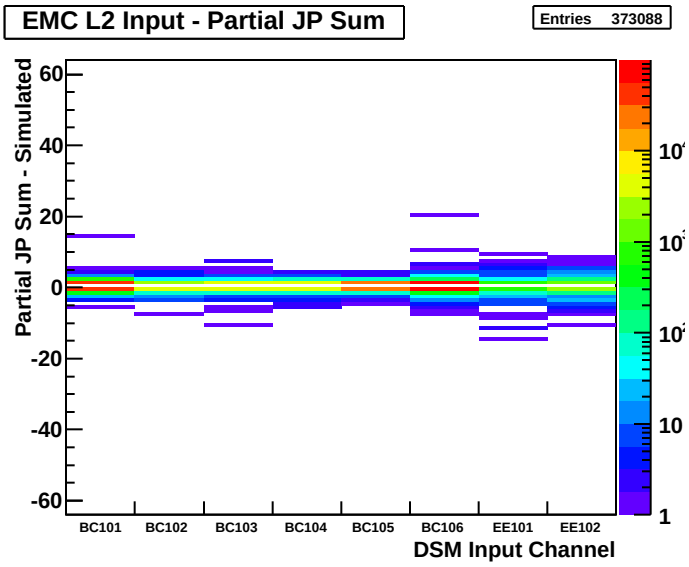

EMC L2 Input - JPY/JPB bits
Entries 3432888
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
429111

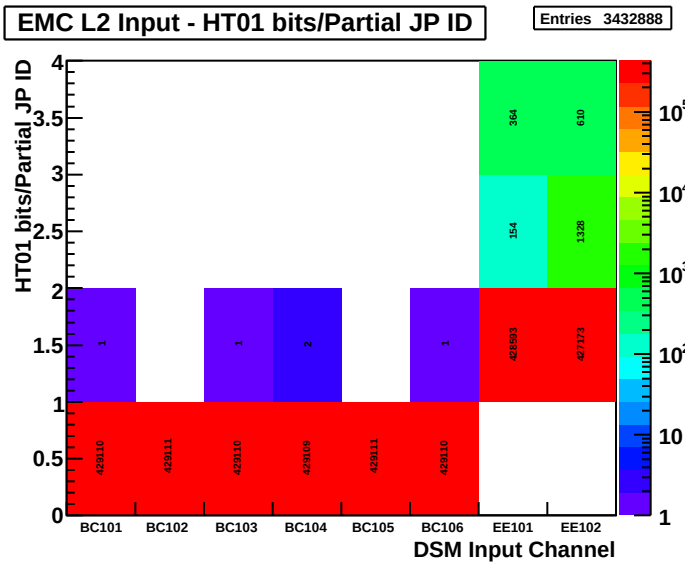

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

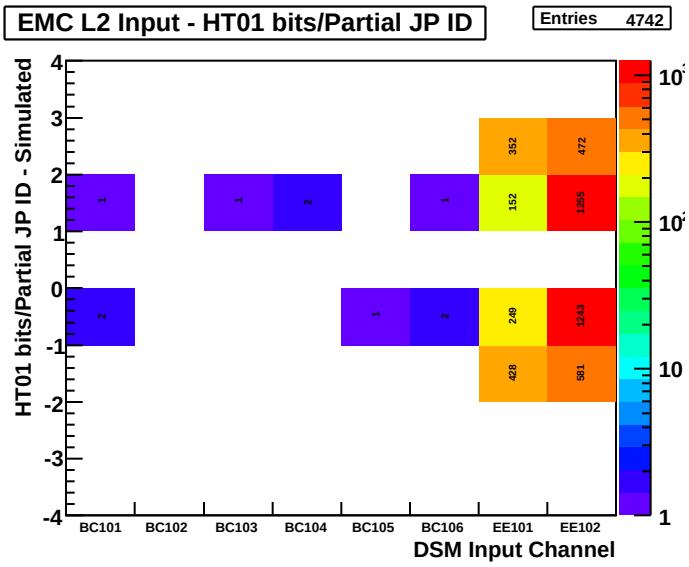

EMC L2 Input - JPZ/JPC bits
Entries 3432888
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
429111

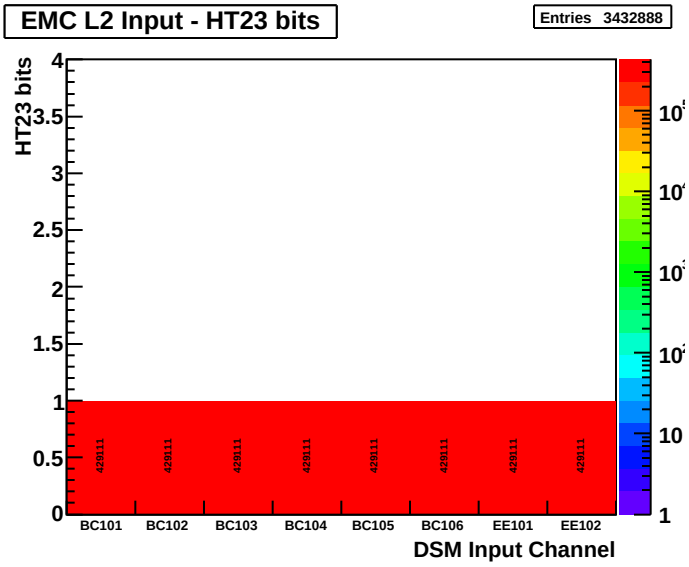

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

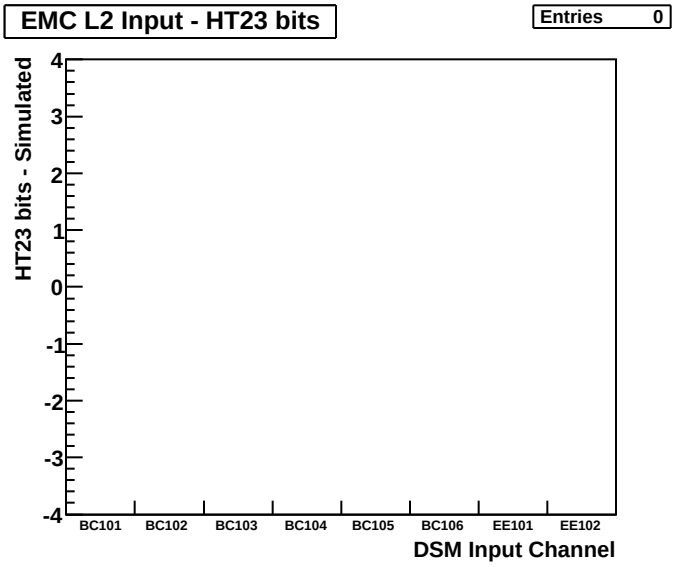

EMC L2 Input - Partial JP Sum
Entries 3432888
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

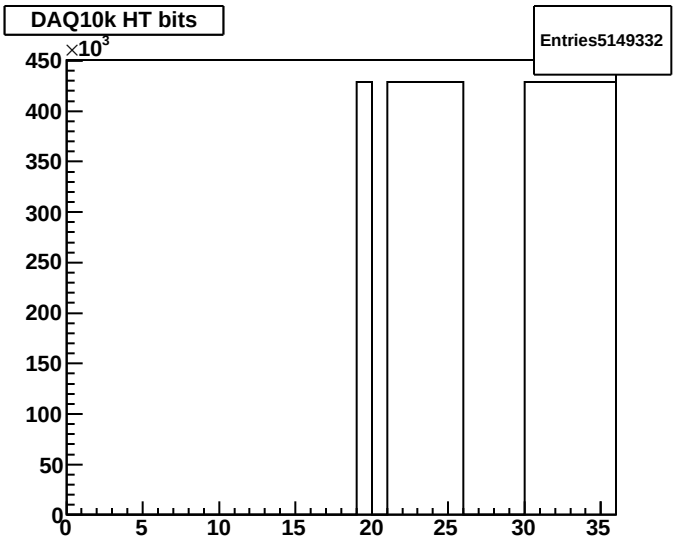

EMC L2 Input - Partial JP Sum
Entries 373088
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

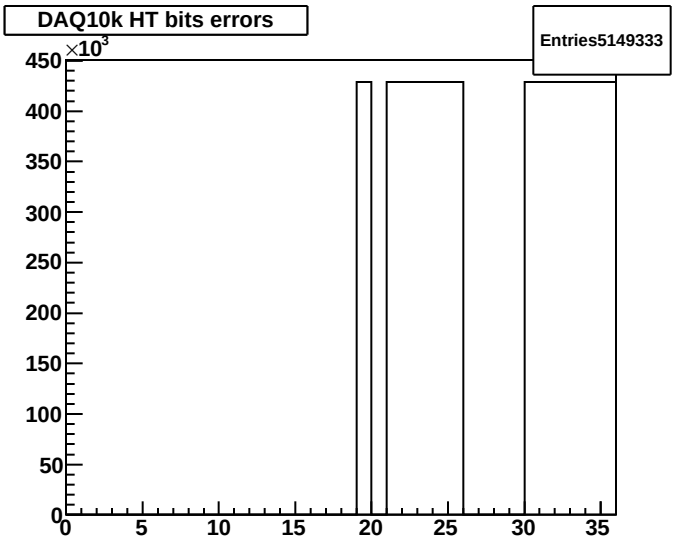

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3432888
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

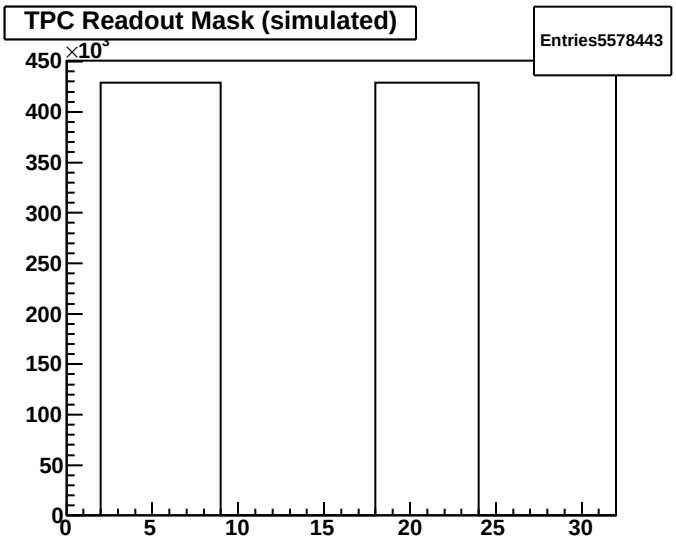

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4742
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

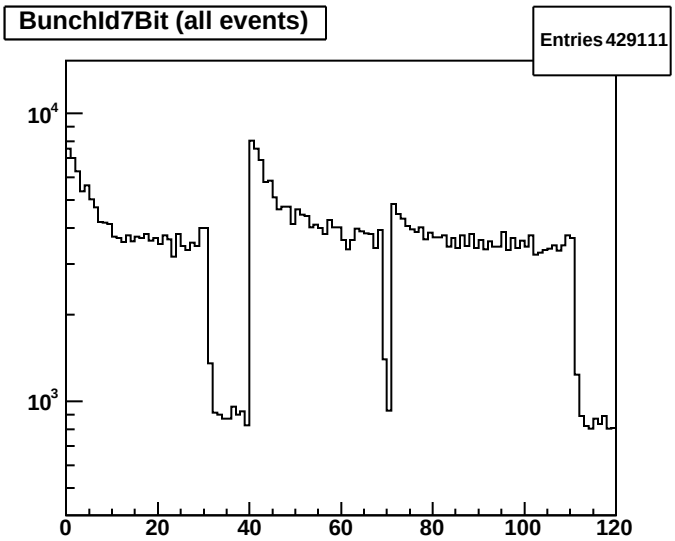

EMC L2 Input - HT23 bits
Entries 3432888
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

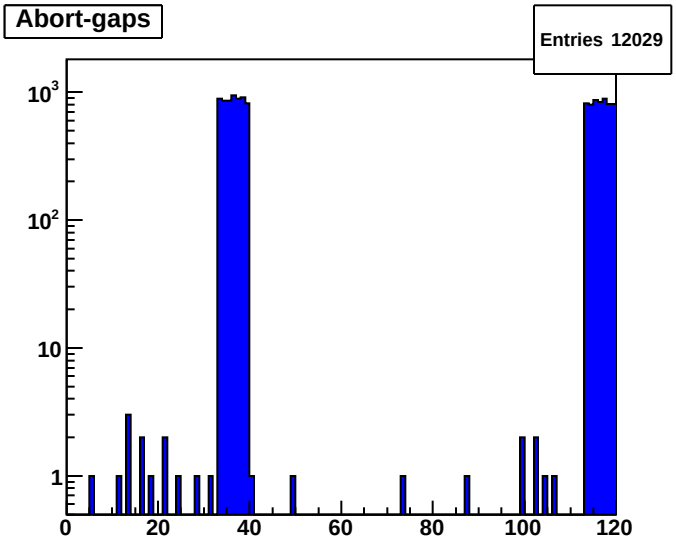

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

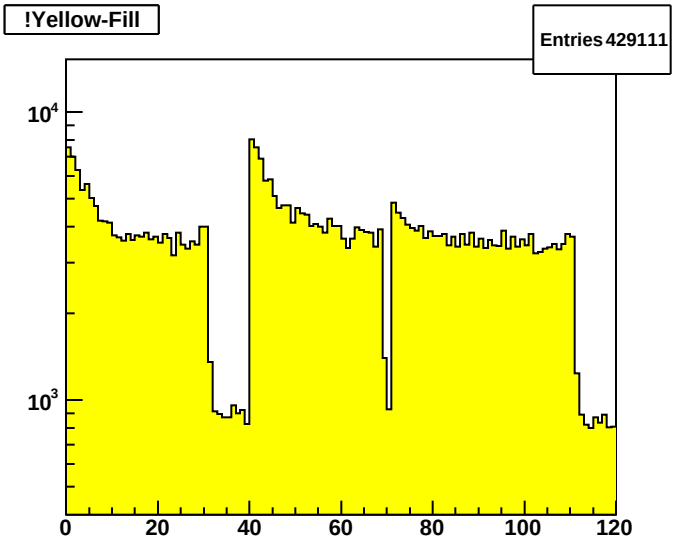

DAQ10k HT bits
Entries5149332
×10^3
450
400
350
300
250
200
150
100
50
0
0
5
10
15
20
25
30
35

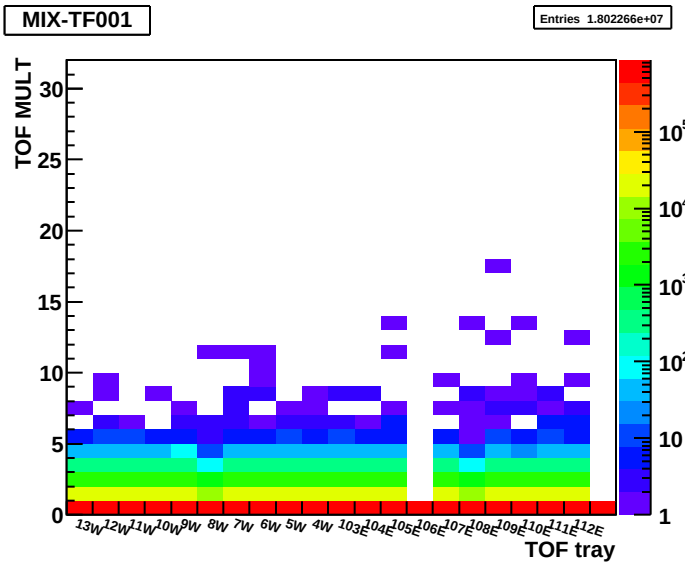

DAQ10k HT bits errors
Entries5149333
×10^3
450
400
350
300
250
200
150
100
50
0
0
5
10
15
20
25
30
35

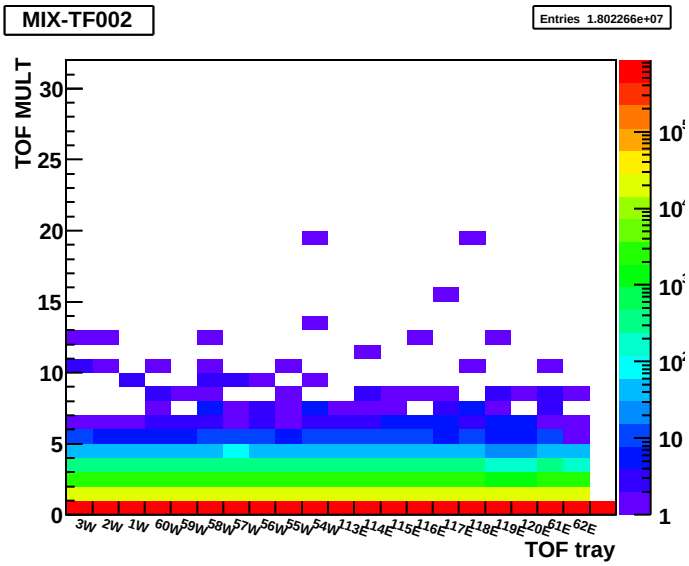

TPC Readout Mask (simulated)
Entries5578443
×10^3
450
400
350
300
250
200
150
100
50
0
0
5
10
15
20
25
30

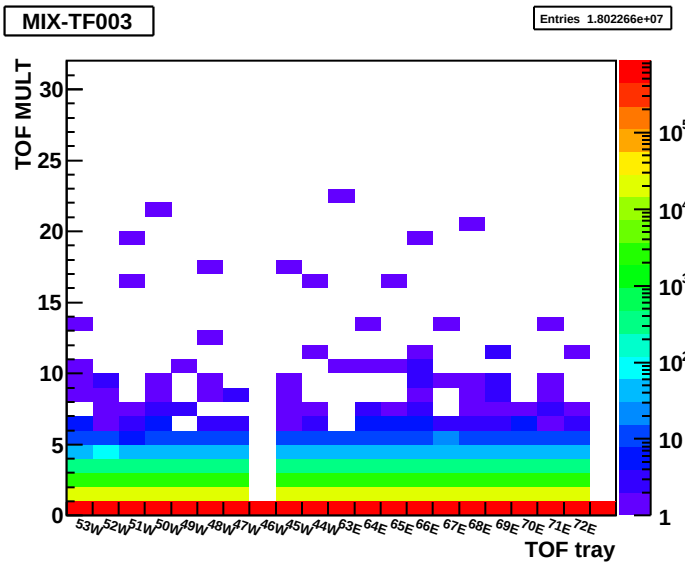

BunchId7Bit (all events)
Entries 429111
10^4
10^3
0
20
40
60
80
100
120

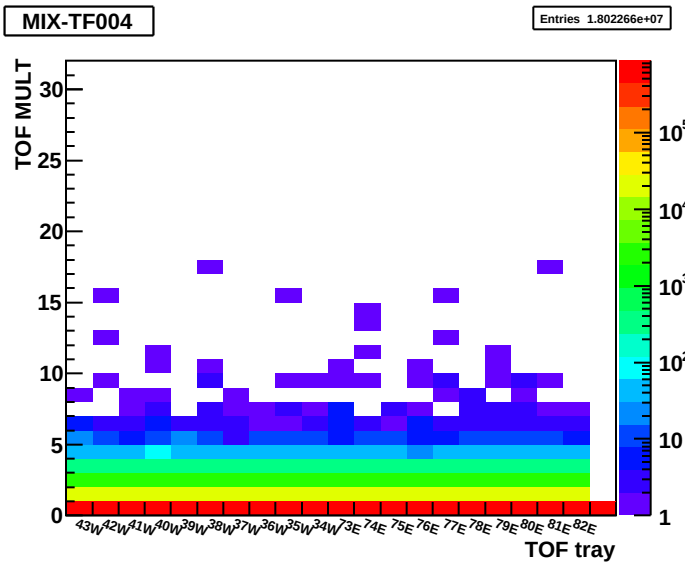

Abort-gaps
Entries 12029
10^3
10^2
10
1
0
20
40
60
80
100
120

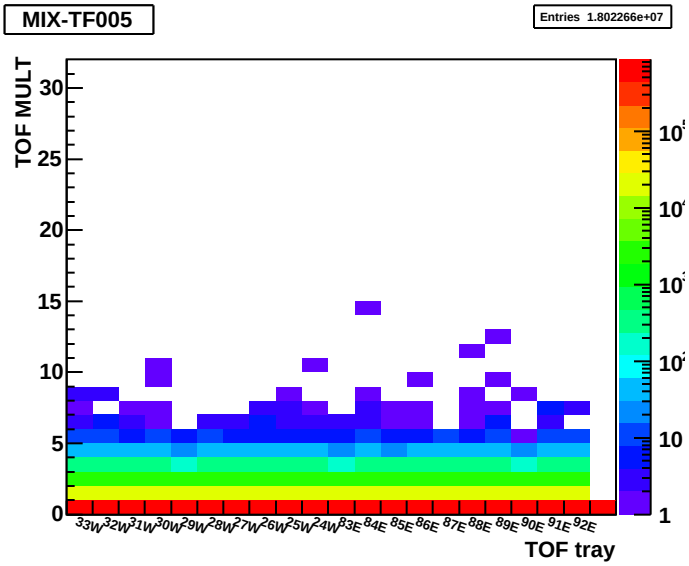

!Yellow-Fill
Entries 429111
10^4
10^3
0
20
40
60
80
100
120

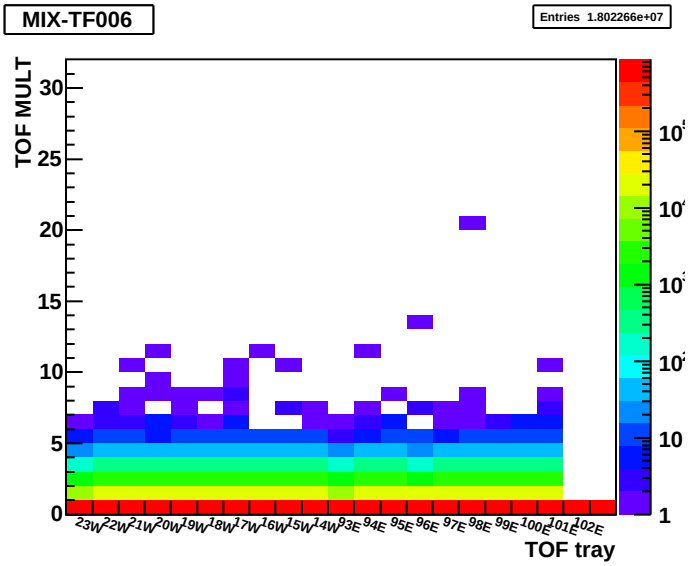

MIX-TF001
Entries 1.802266e+07
TOF MULT
TOF tray

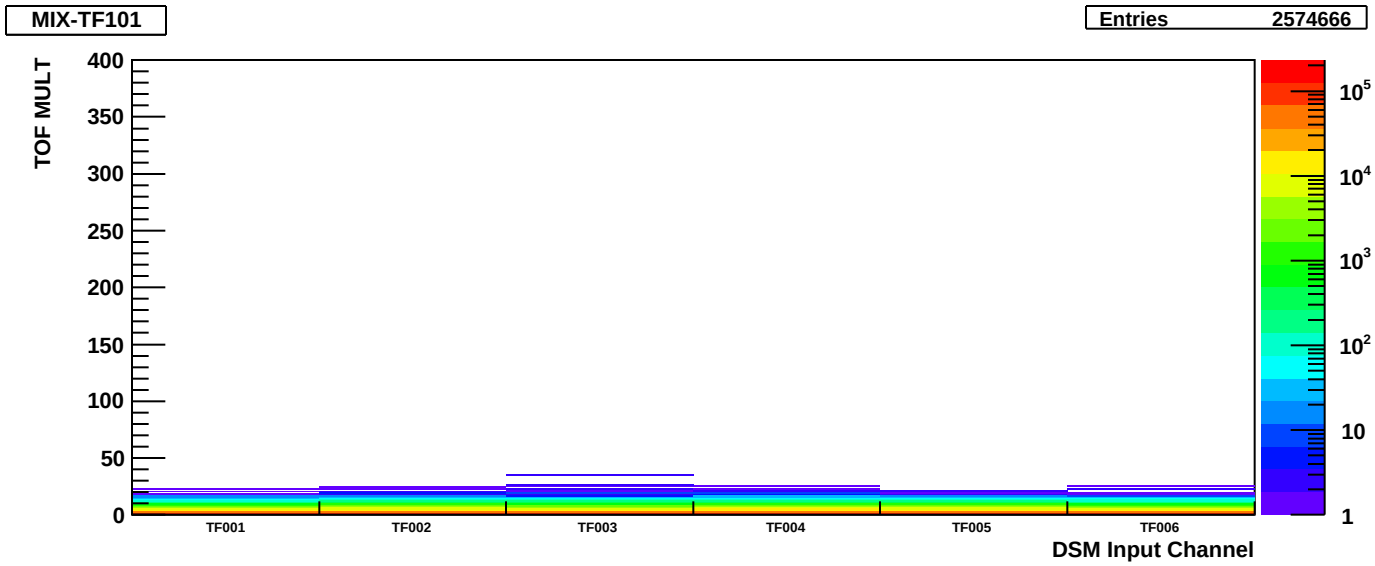

MIX-TF002
Entries 1.802266e+07
TOF MULT
TOF tray

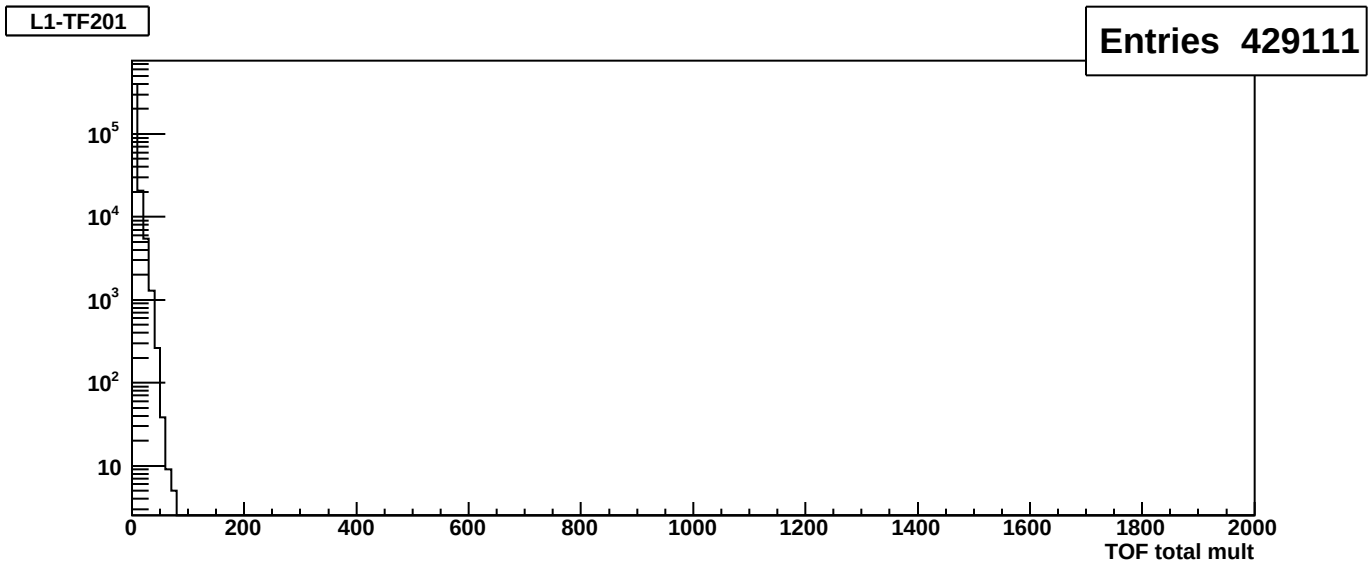

MIX-TF003
Entries 1.802266e+07
TOF MULT
TOF tray

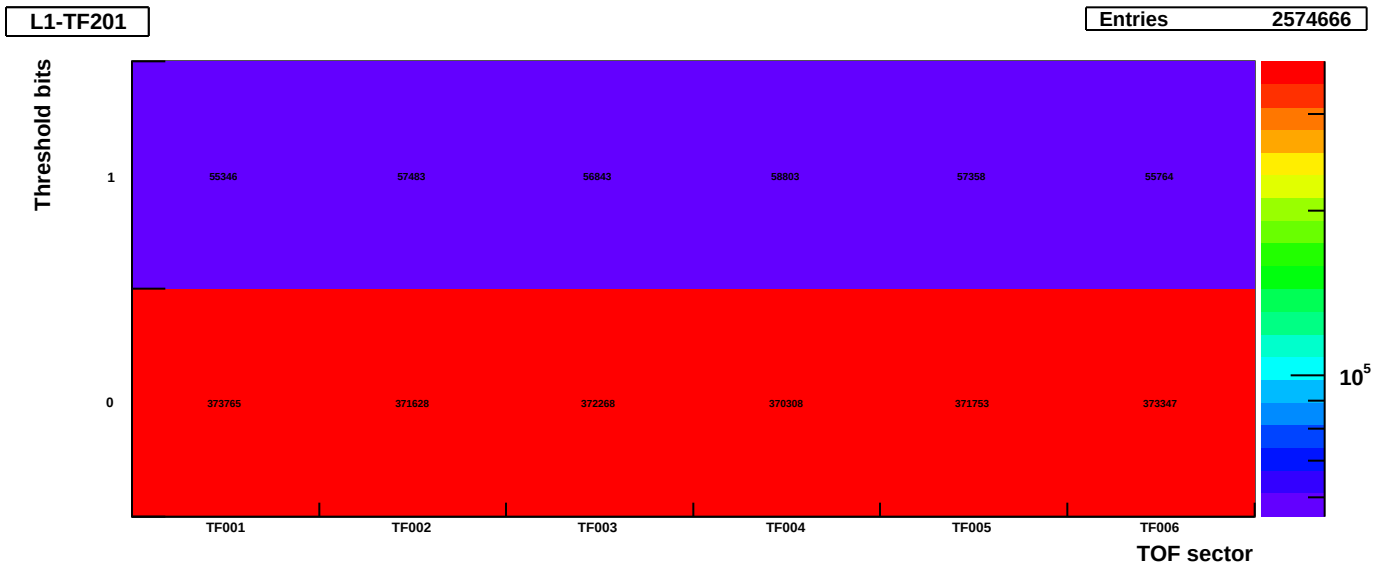

MIX-TF004
Entries 1.802266e+07
TOF MULT
TOF tray

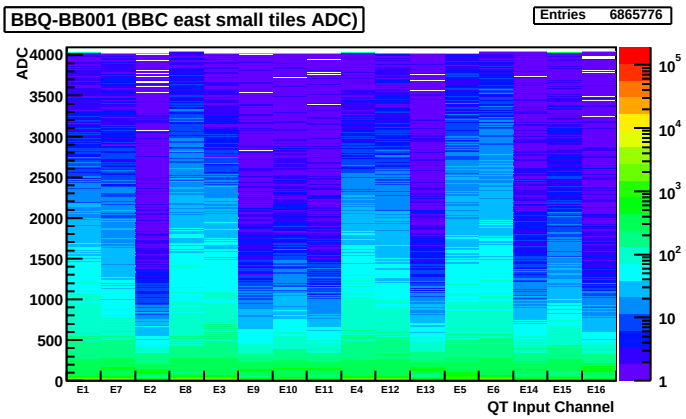

MIX-TF005
Entries 1.802266e+07
TOF MULT
TOF tray

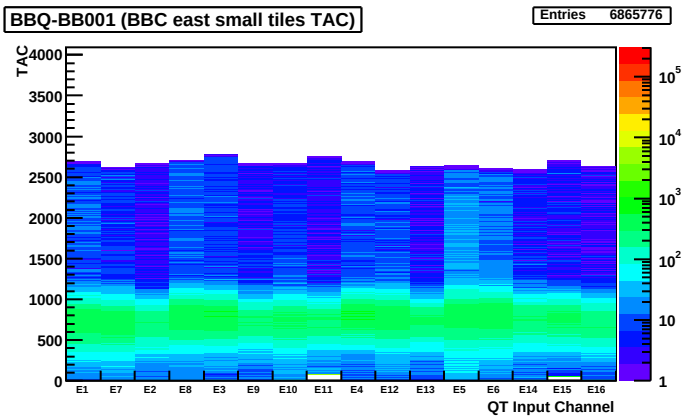

MIX-TF006
Entries 1.802266e+07
TOF MULT
TOF tray

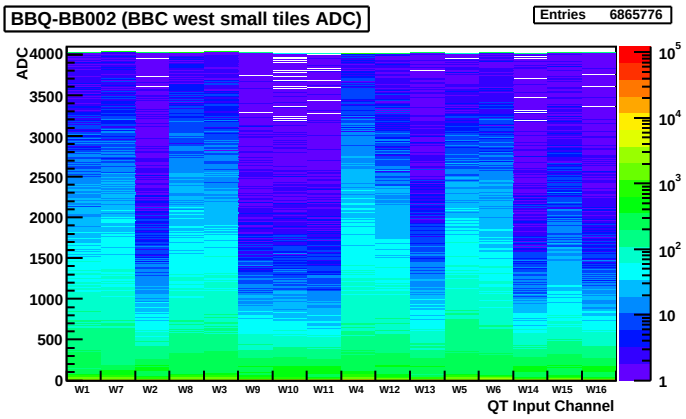

MIX-TF101
Entries 2574666
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

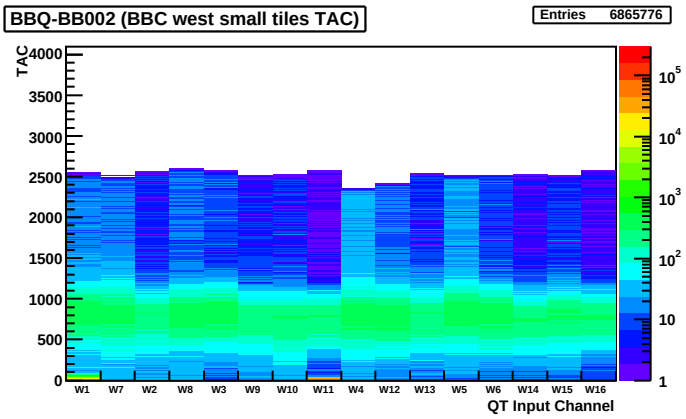

L1-TF201
Entries 429111
10^5
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

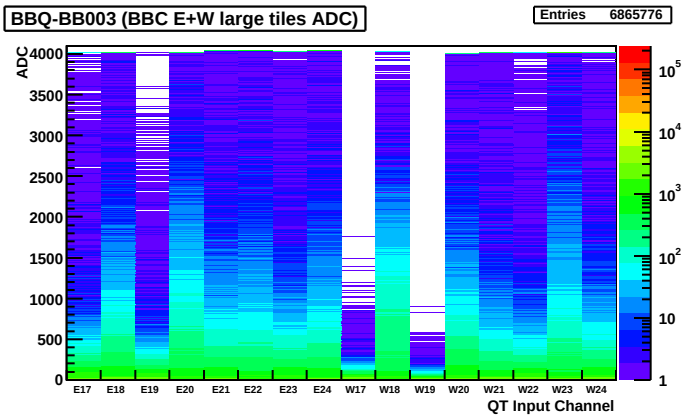

L1-TF201
Entries 2574666
Threshold bits
1
0
55346
57483
56843
58803
57358
55764
373765
371628
372268
370308
371753
373347
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

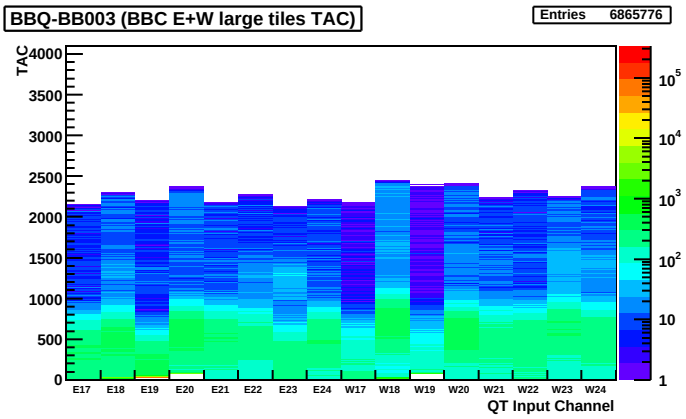

BBQ-BB001 (BBC east small tiles ADC)
Entries 6865776
ADC
QT Input Channel

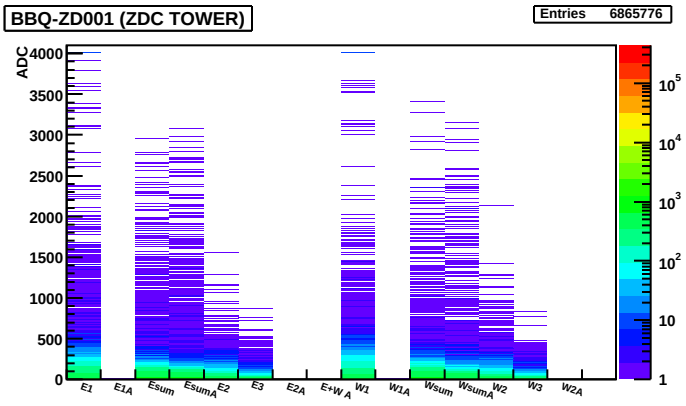

BBQ-BB001 (BBC east small tiles TAC)
Entries 6865776
TAC
QT Input Channel

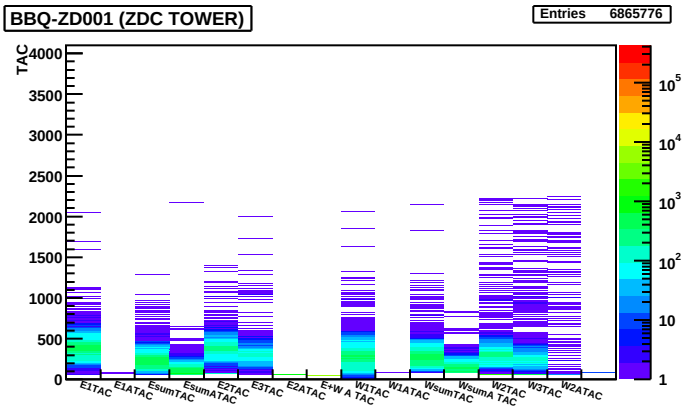

BBQ-BB002 (BBC west small tiles ADC)
Entries 6865776
ADC
QT Input Channel

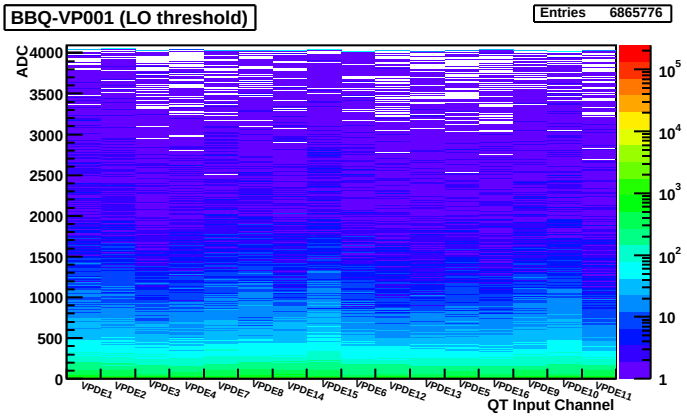

BBQ-BB002 (BBC west small tiles TAC)
Entries 6865776
TAC
QT Input Channel

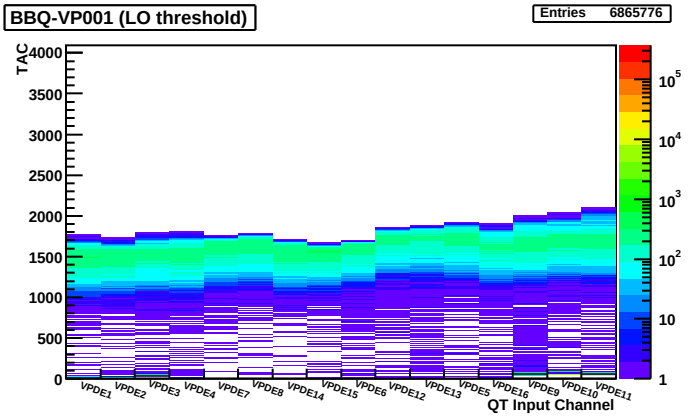

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6865776
ADC
QT Input Channel

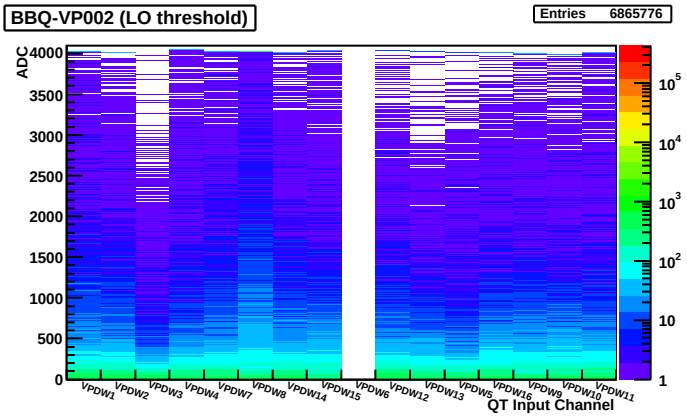

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6865776
TAC
QT Input Channel

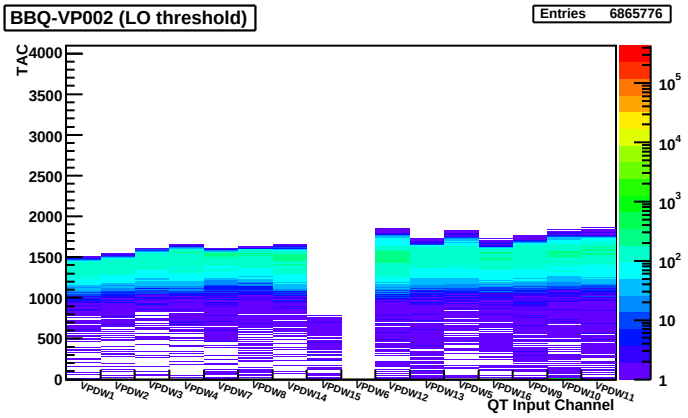

BBQ-ZD001 (ZDC TOWER)
Entries 6865776
ADC

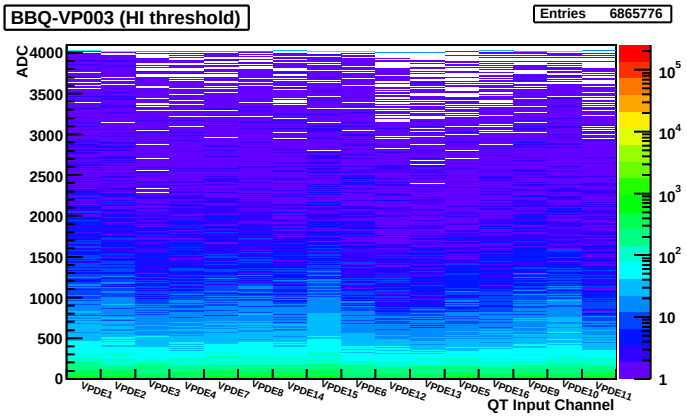

BBQ-ZD001 (ZDC TOWER)
Entries 6865776
TAC

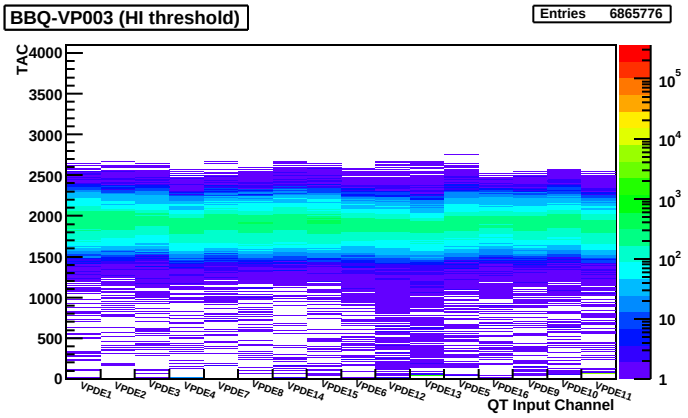

BBQ-VP001 (LO threshold)
Entries 6865776
ADC
QT Input Channel

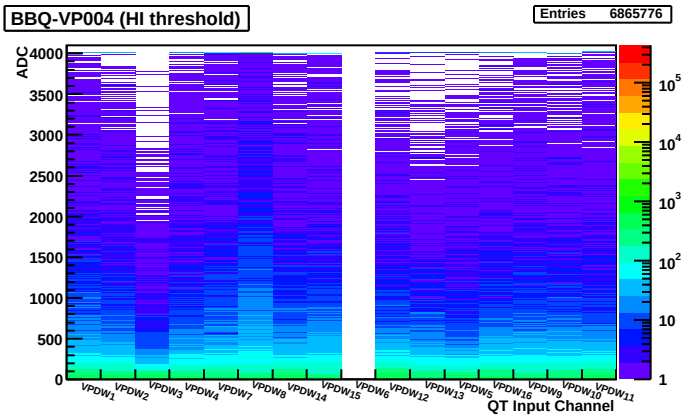

BBQ-VP001 (LO threshold)
Entries 6865776
TAC
QT Input Channel

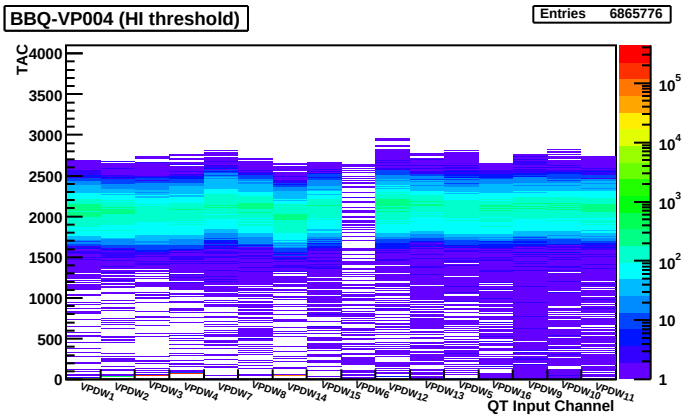

BBQ-VP002 (LO threshold)
Entries 6865776
ADC
QT Input Channel

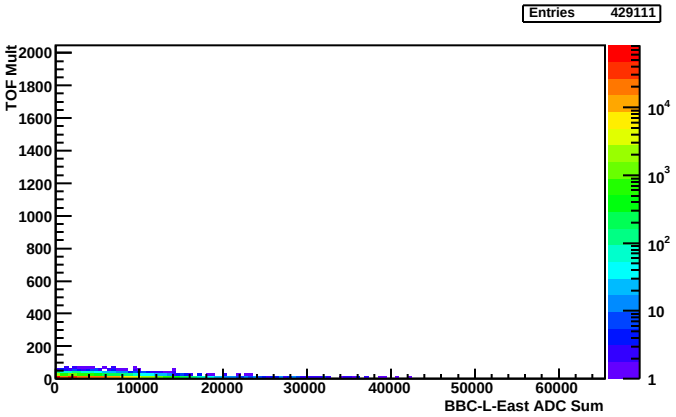

BBQ-VP002 (LO threshold)
Entries 6865776
TAC
QT Input Channel

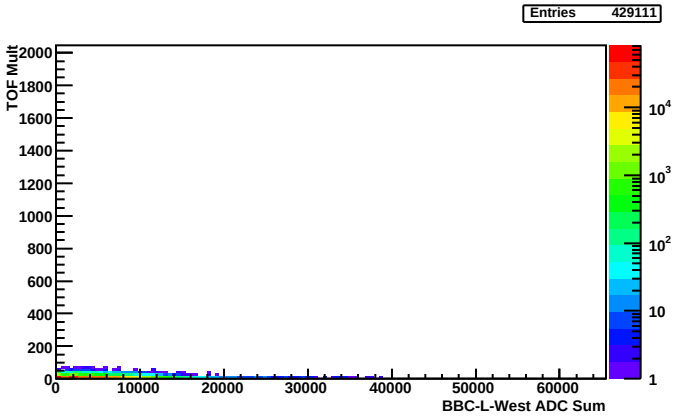

BBQ-VP003 (HI threshold)
Entries 6865776
ADC
QT Input Channel

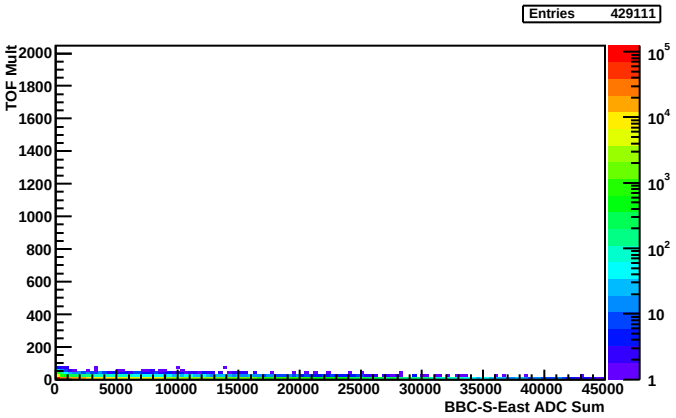

BBQ-VP003 (HI threshold)
Entries 6865776
TAC
QT Input Channel

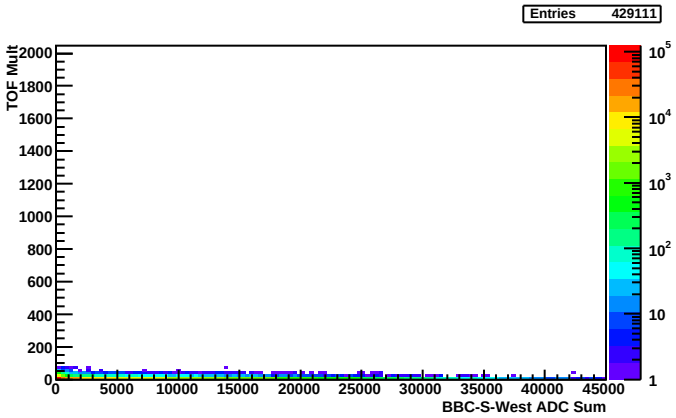

BBQ-VP004 (HI threshold)
Entries 6865776
ADC
QT Input Channel

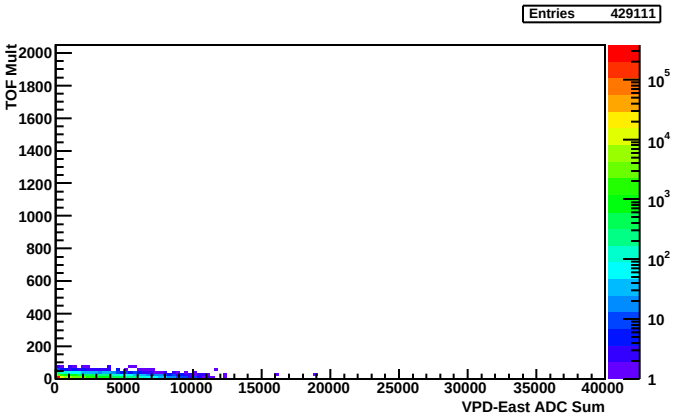

BBQ-VP004 (HI threshold)
Entries 6865776
TAC
QT Input Channel

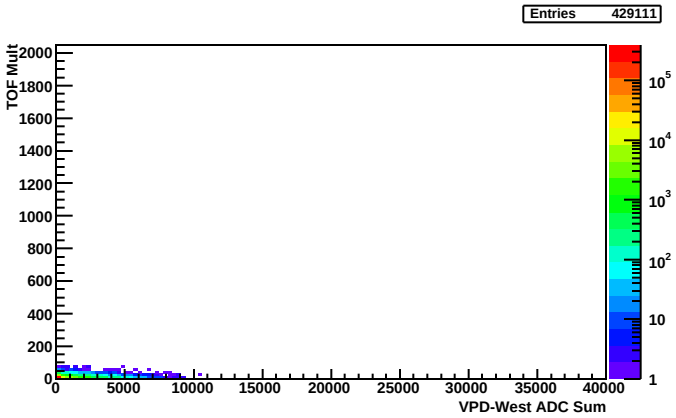

Entries 429111
TOF Mult
BBC-L-East ADC Sum

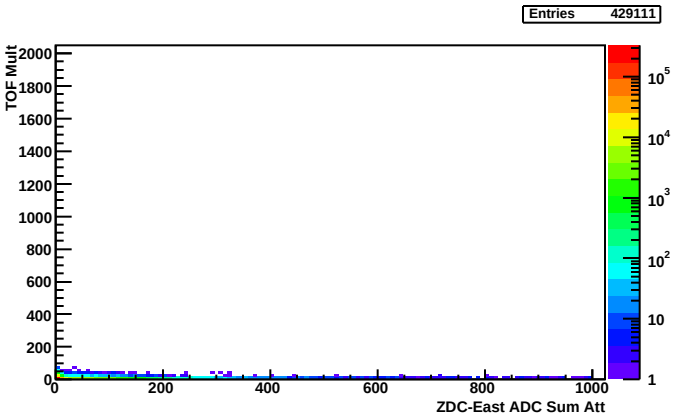

Entries 429111
TOF Mult
BBC-L-West ADC Sum

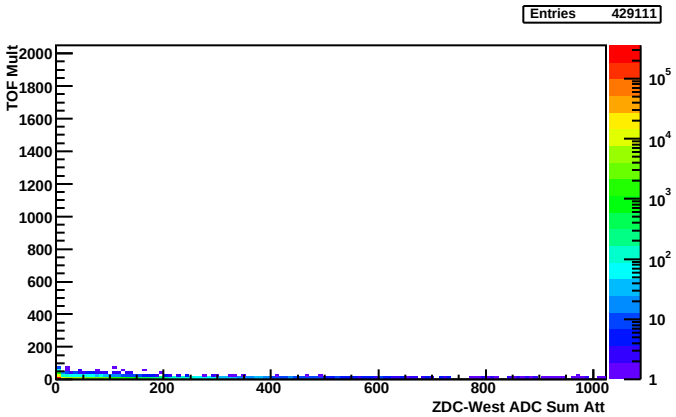

Entries 429111
TOF Mult
BBC-S-East ADC Sum

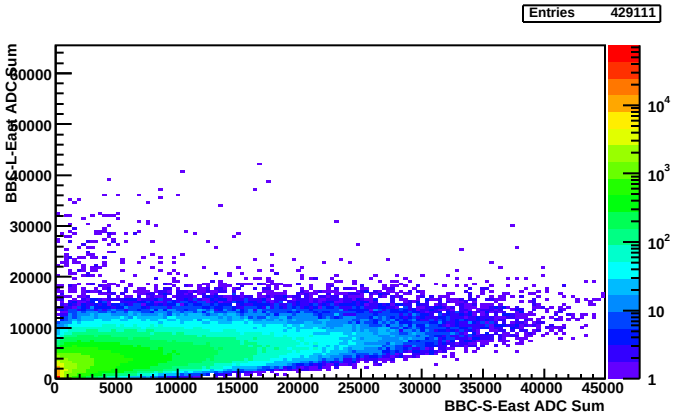

Entries 429111
TOF Mult
BBC-S-West ADC Sum

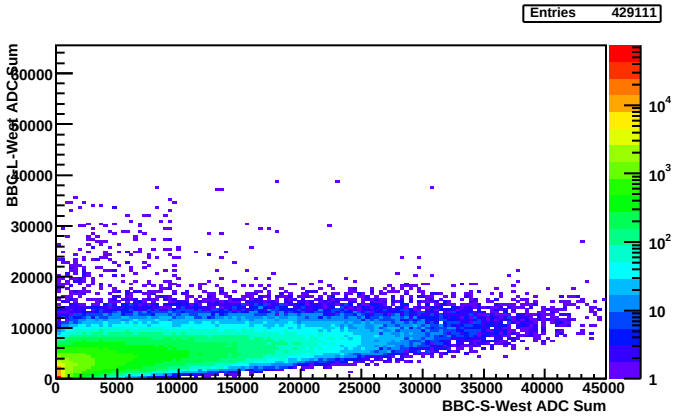

Entries 429111
TOF Mult
VPD-East ADC Sum

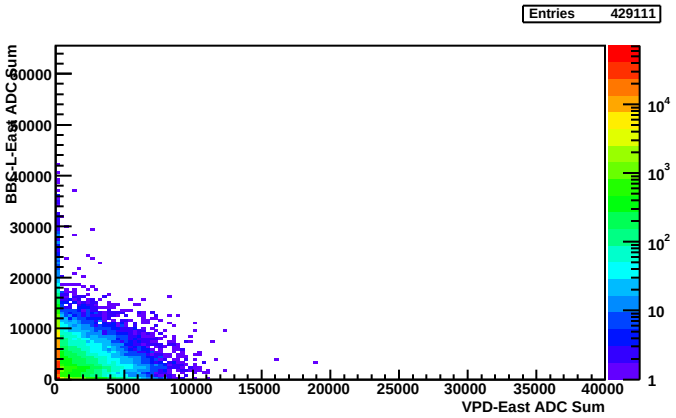

Entries 429111
TOF Mult
VPD-West ADC Sum

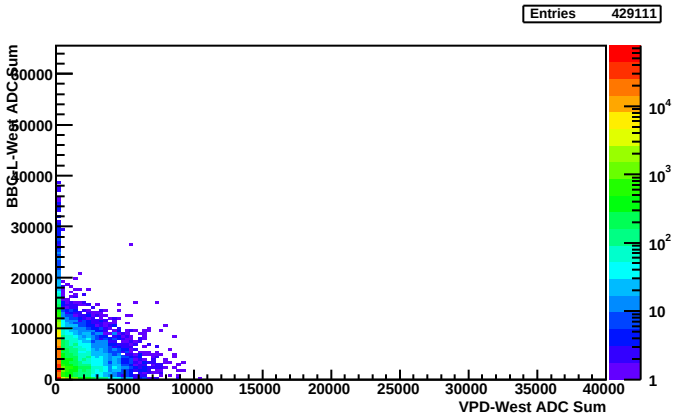

Entries 429111
TOF Mult
ZDC-East ADC Sum Att

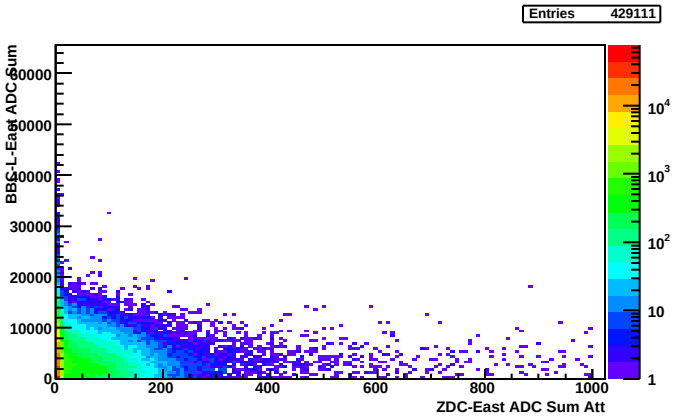

Entries 429111
TOF Mult
ZDC-West ADC Sum Att

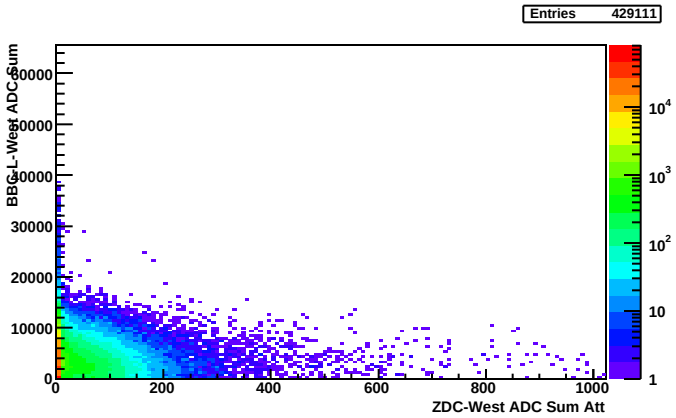

Entries 429111
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 429111
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 429111
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 429111
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 429111
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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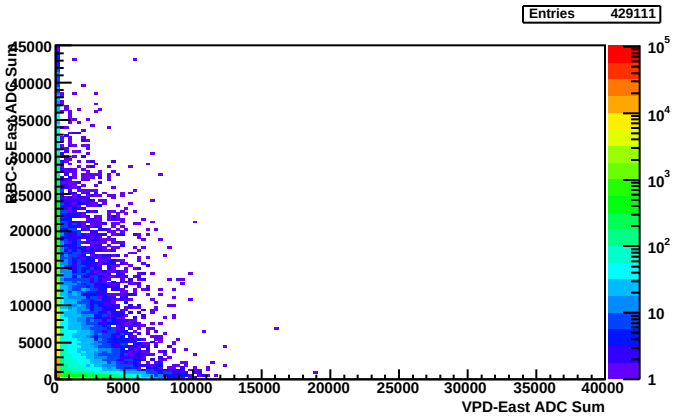
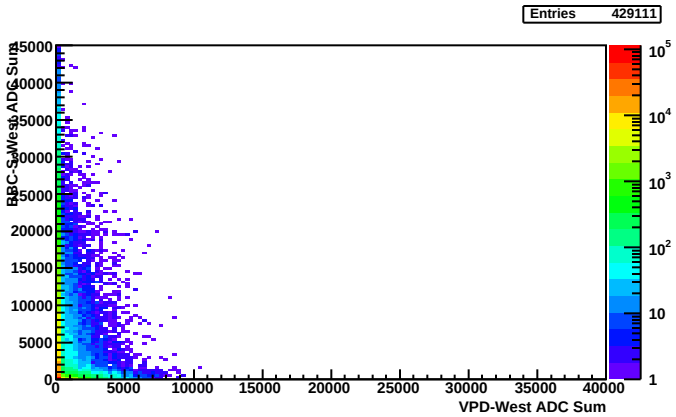
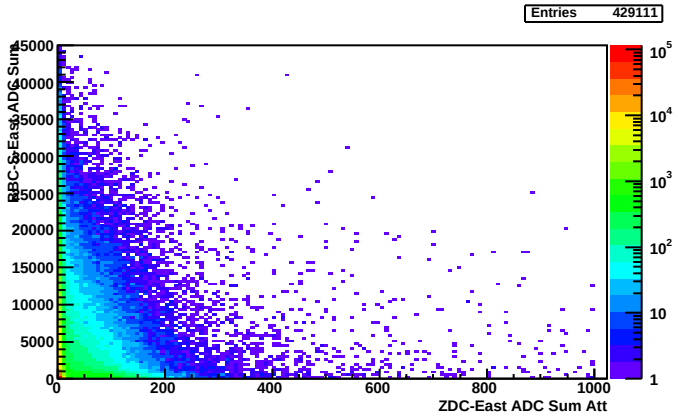
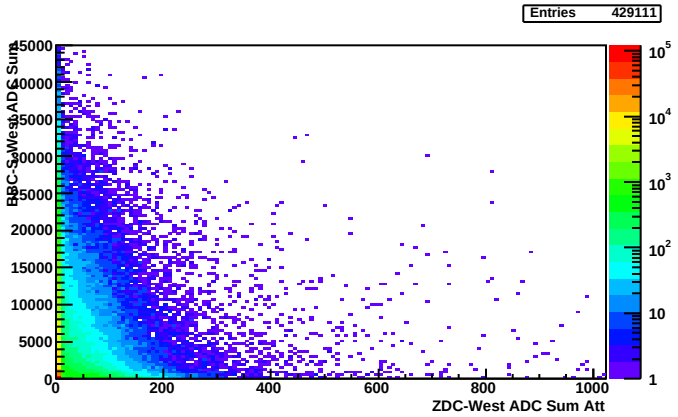
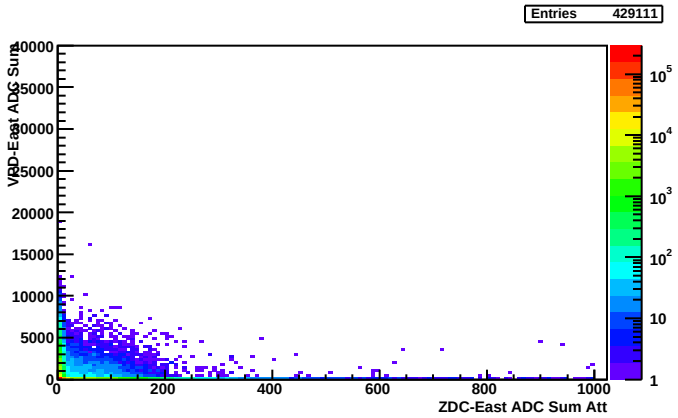
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

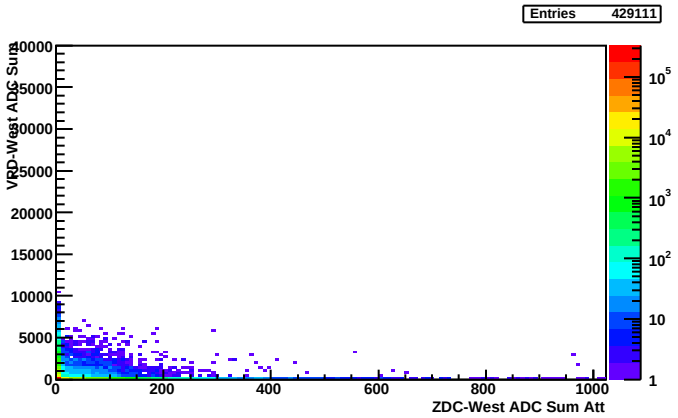

Entries 429111
BBC-S-East ADC Sum
VPD-East ADC Sum

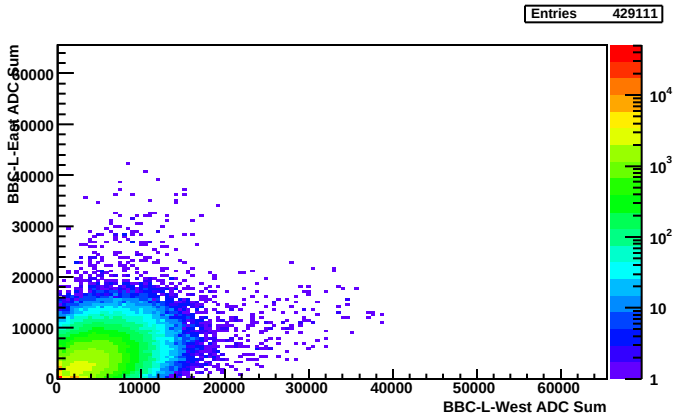

Entries 429111
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 429111
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 429111
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 429111
VPD-East ADC Sum
ZDC-East ADC Sum Att


Entries 429111
VPD-West ADC Sum
ZDC-West ADC Sum Att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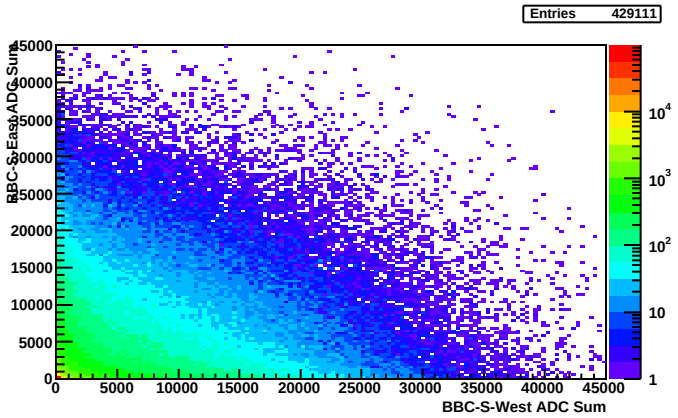
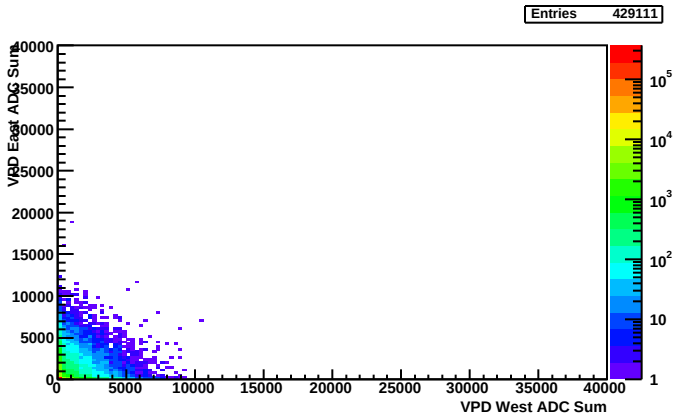
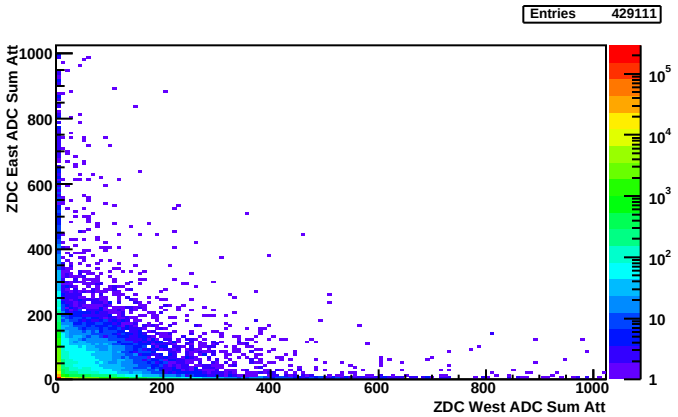
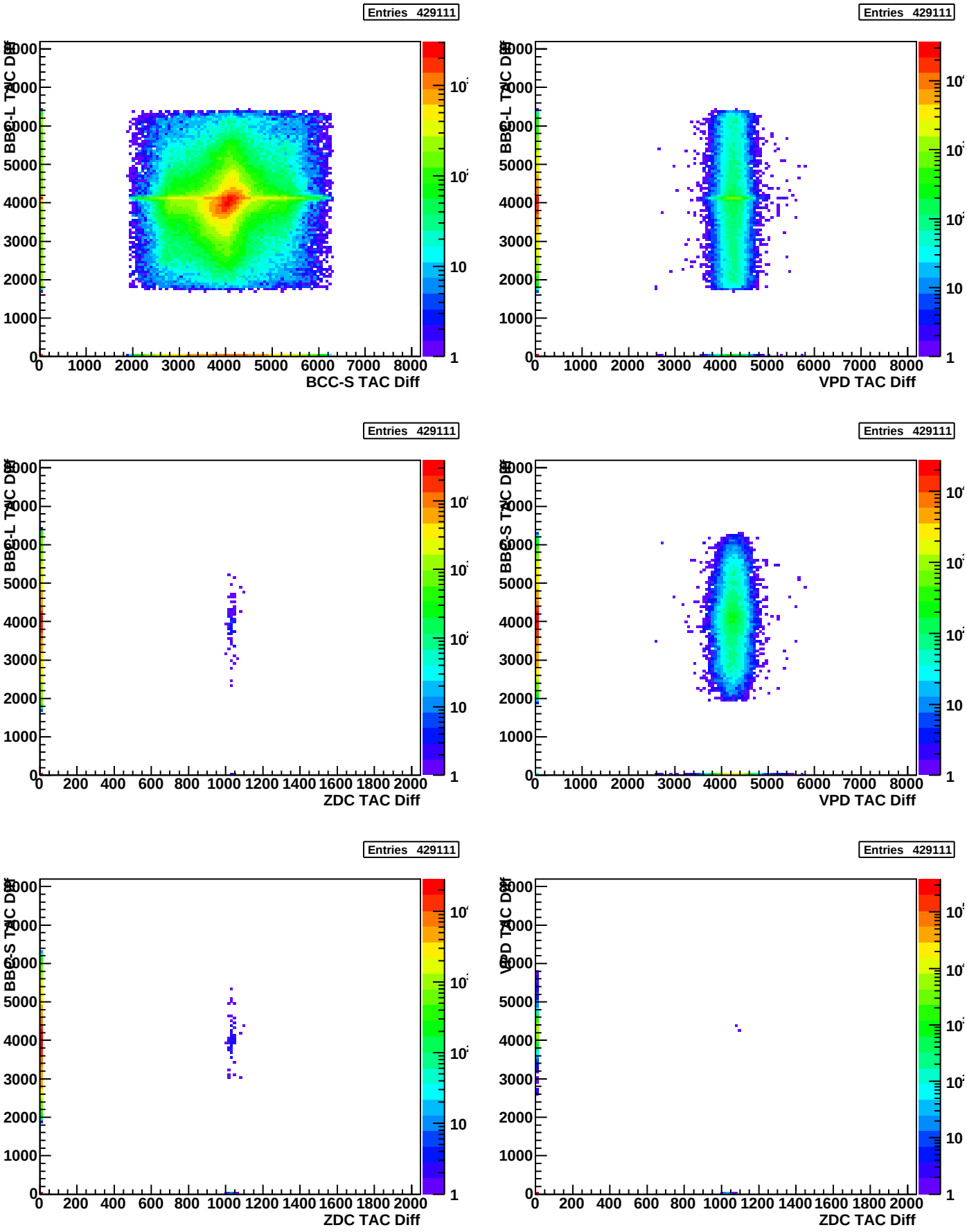
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 429111
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 429111
VPD East ADC Sum
VPD West ADC Sum


Entries 429111
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 429111
BBC-L TAC Diff
BCC-S TAC Diff
Entries 429111
BBC-L TAC Diff
VPD TAC Diff
Entries 429111
BBC-L TAC Diff
ZDC TAC Diff
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VPD TAC Diff
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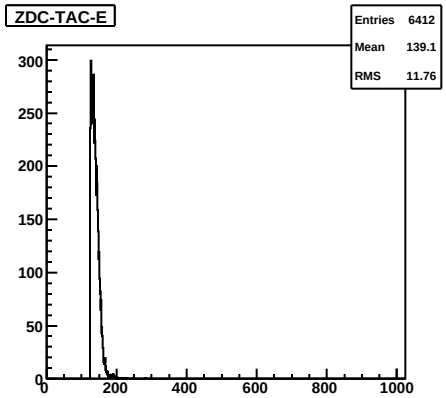
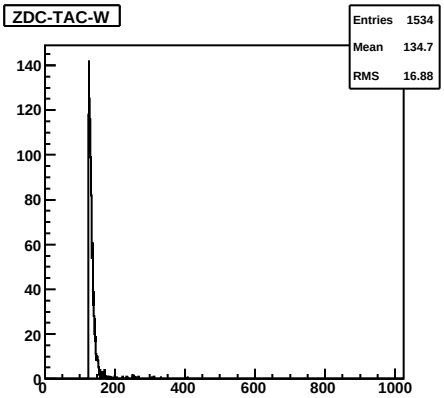
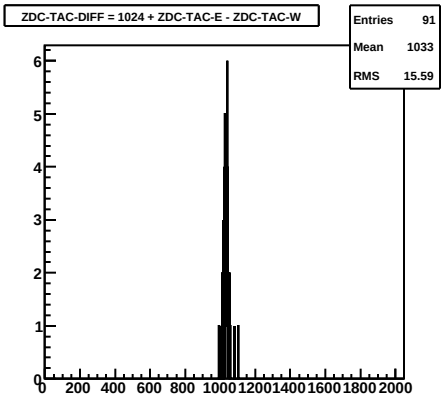
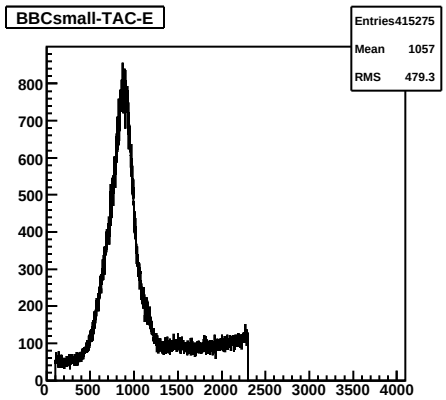
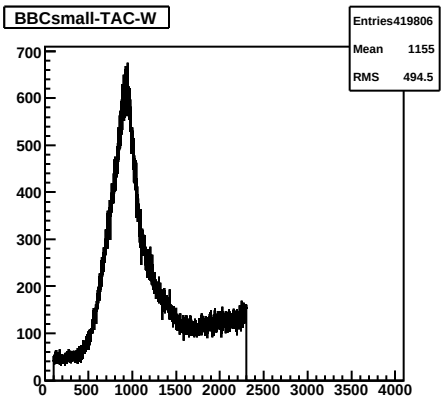
BBC-S TAC Diff
ZDC TAC Diff
Entries 429111
VPD TAC Diff
ZDC TAC Diff

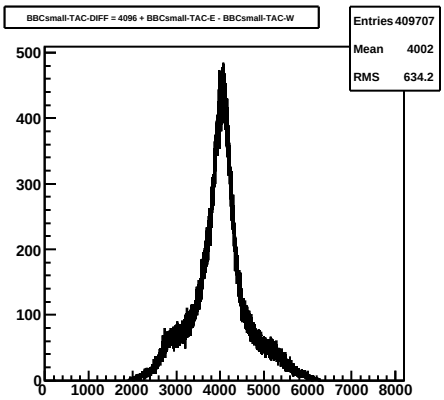

ZDC-TAC-E
Entries 6412
Mean 139.1
RMS 11.76

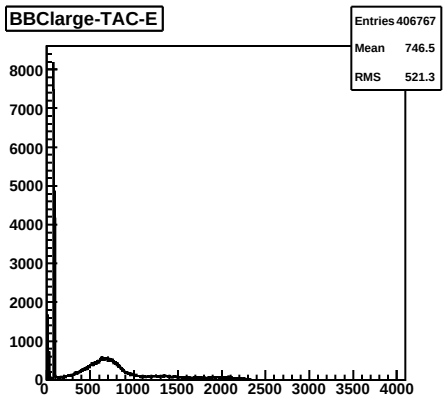

ZDC-TAC-W
Entries 1534
Mean 134.7
RMS 16.88

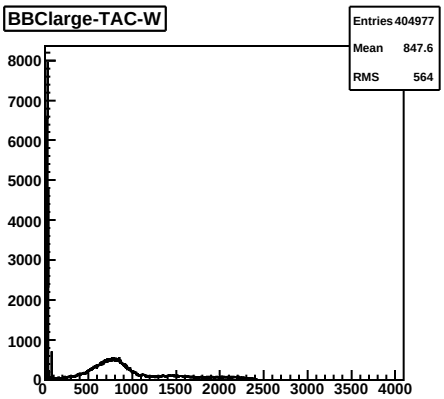

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 91
Mean 1033
RMS 15.59

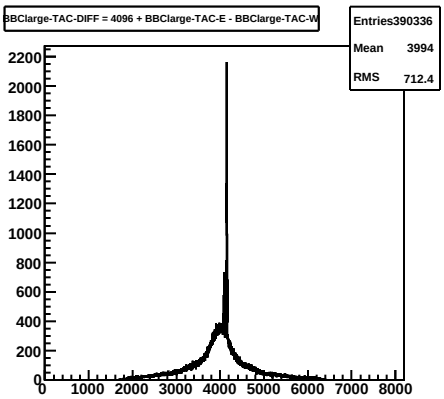

BBCsmall-TAC-E
Entries 415275
Mean 1057
RMS 479.3

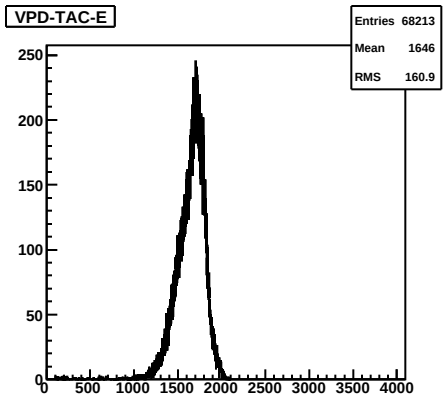

BBCsmall-TAC-W
Entries 419806
Mean 1155
RMS 494.5

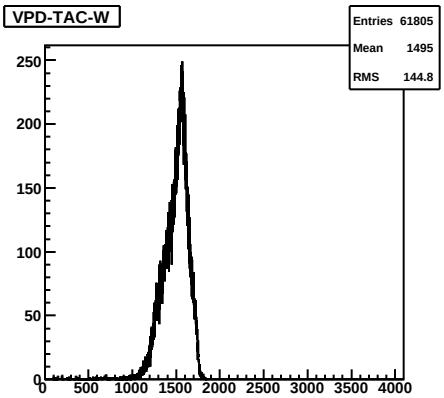

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 409707
Mean 4002
RMS 634.2

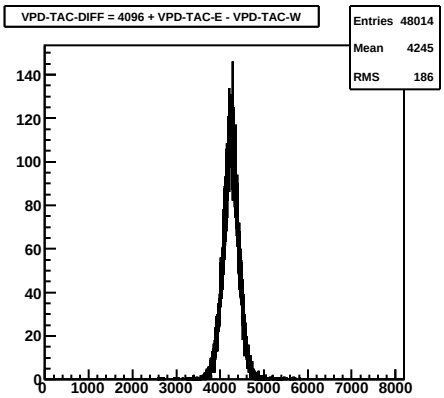

BBClarge-TAC-E
Entries 406767
Mean 746.5
RMS 521.3

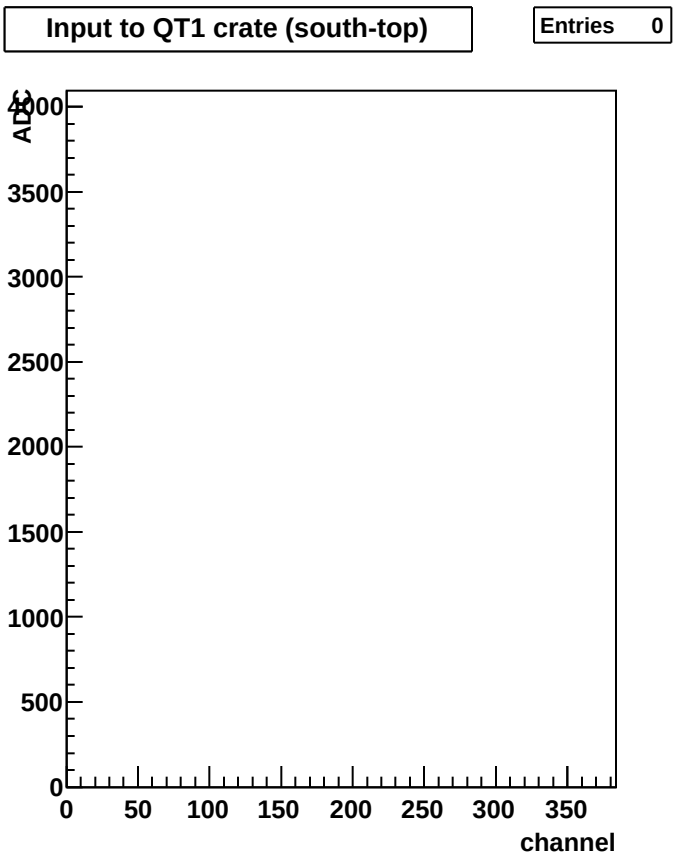

BBClarge-TAC-W
Entries 404977
Mean 847.6
RMS 564

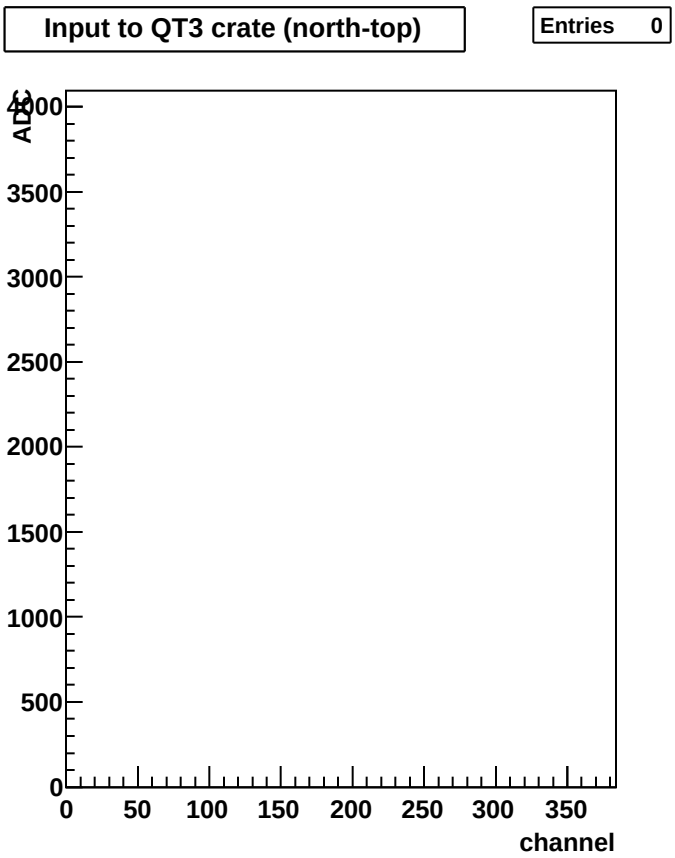

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 390336
Mean 3994
RMS 712.4

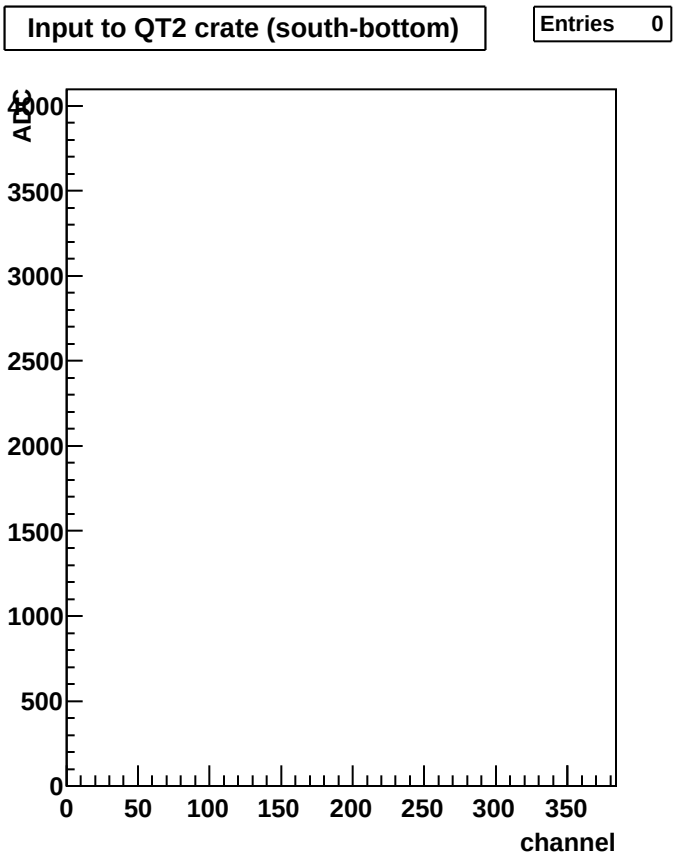

VPD-TAC-E
Entries 68213
Mean 1646
RMS 160.9

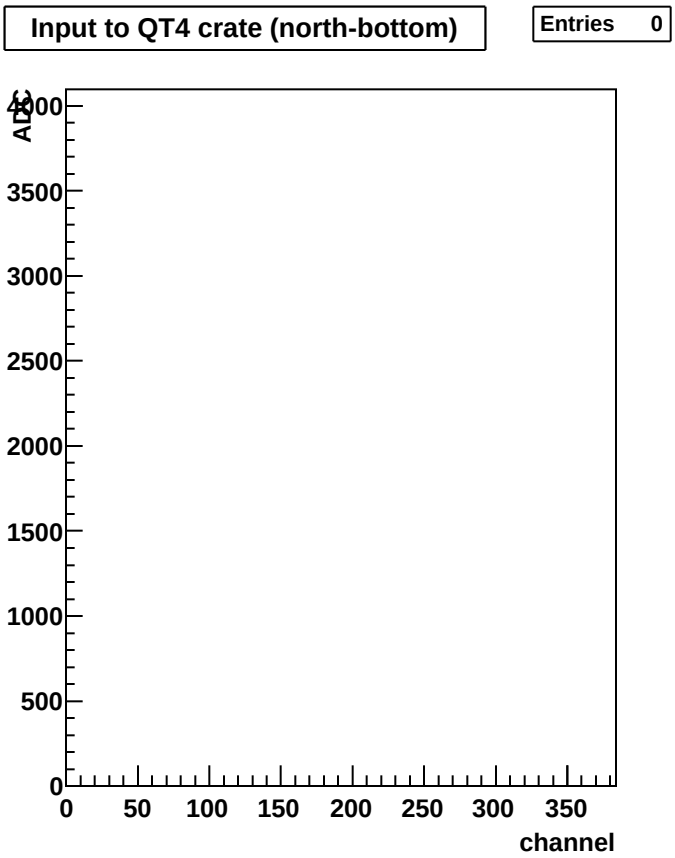

VPD-TAC-W
Entries 61805
Mean 1495
RMS 144.8

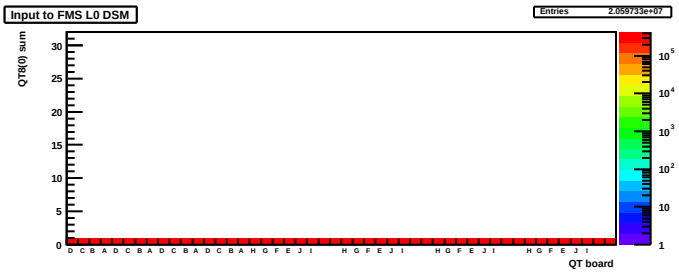

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 48014
Mean 4245
RMS 186

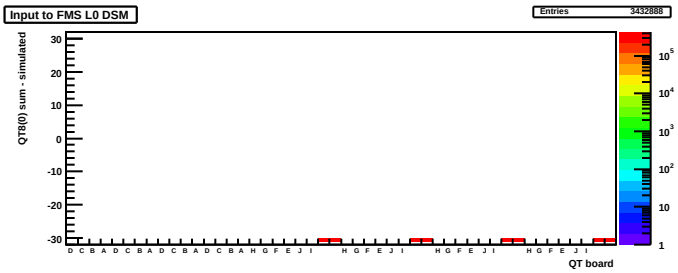

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

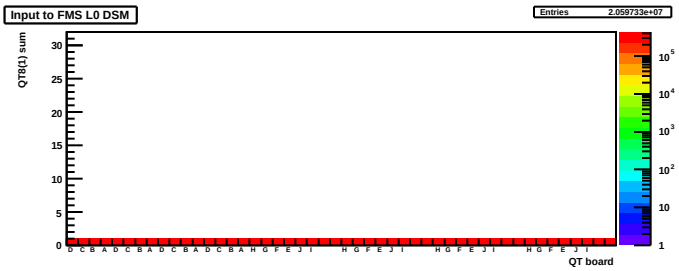

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

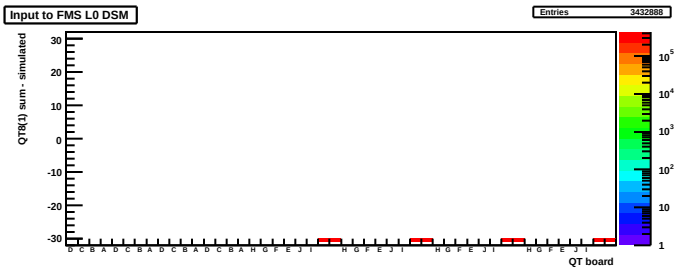

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

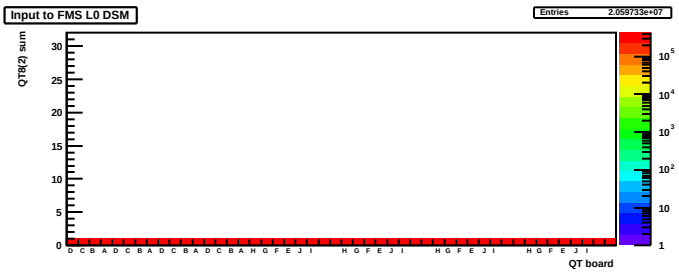

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

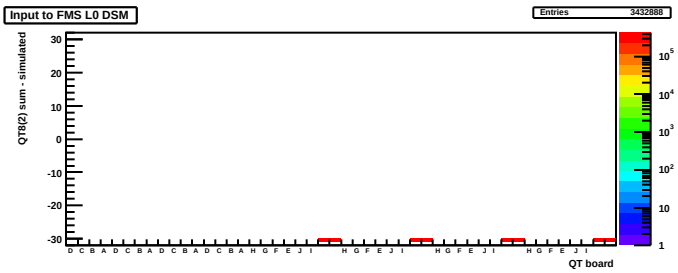

Input to FMS L0 DSM
Entries 2.059733e+07
QT8(0) sum
QT board

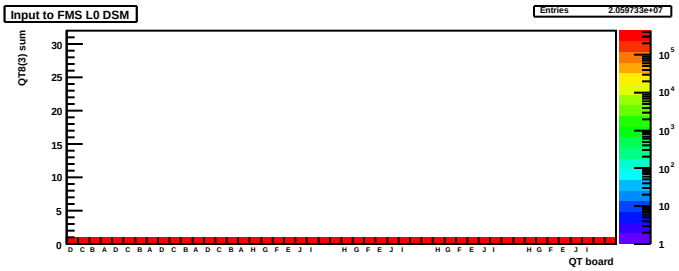

Input to FMS L0 DSM
Entries 3432888
QT8(0) sum - simulated
QT board

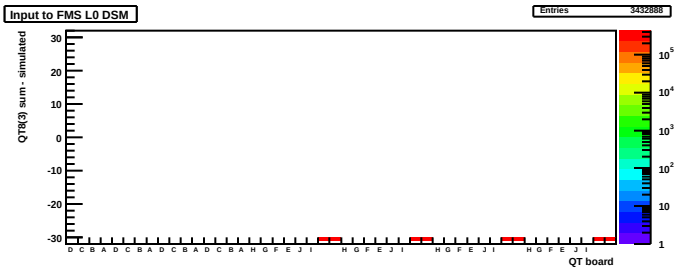

Input to FMS L0 DSM
Entries 2.059733e+07
QT8(1) sum
QT board

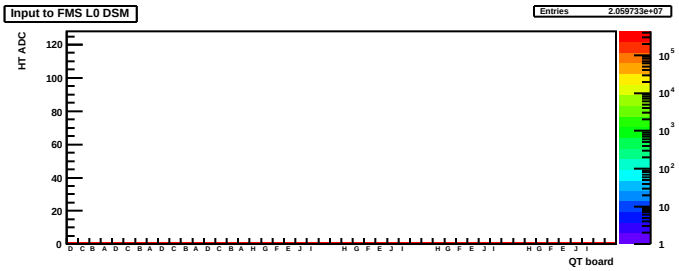

Input to FMS L0 DSM
Entries 3432888
QT8(1) sum - simulated
QT board

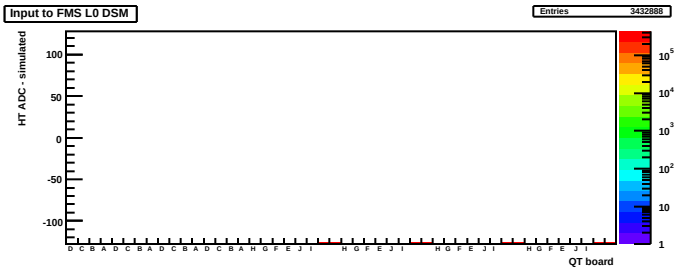

Input to FMS L0 DSM
Entries 2.059733e+07
QT8(2) sum
QT board

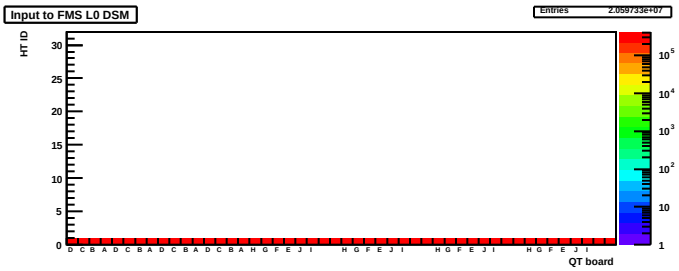

Input to FMS L0 DSM
Entries 3432888
QT8(2) sum - simulated
QT board

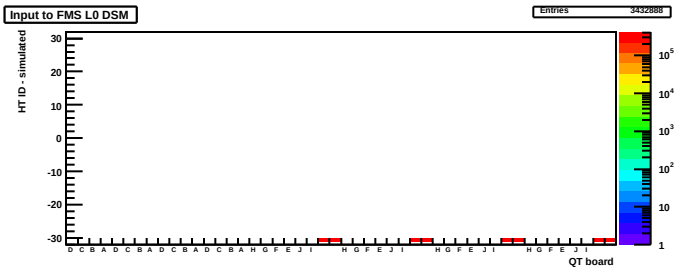

Input to FMS L0 DSM
Entries 2.059733e+07
QT8(3) sum
QT board

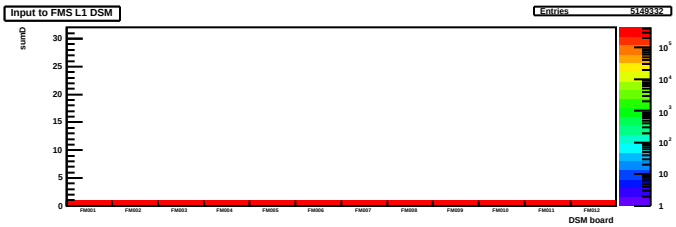

Input to FMS L0 DSM
Entries 3432888
QT8(3) sum - simulated
QT board

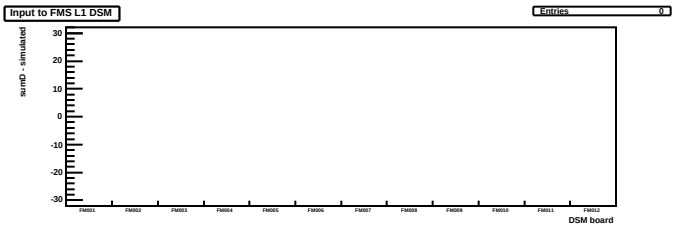

Input to FMS L0 DSM
Entries 2.059733e+07
HT ADC
QT board

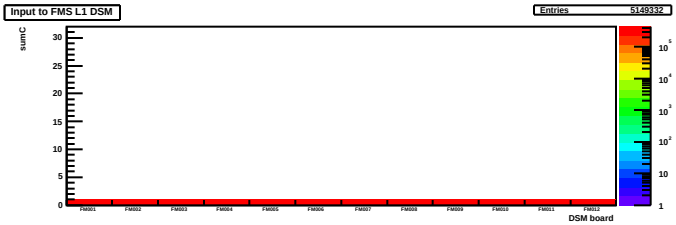

Input to FMS L0 DSM
Entries 3432888
HT ADC - simulated
QT board

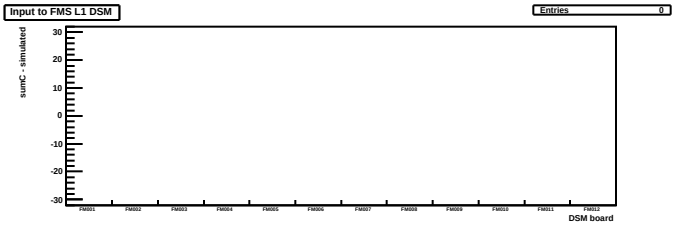

Input to FMS L0 DSM
Entries 2.059733e+07
HT ID
QT board

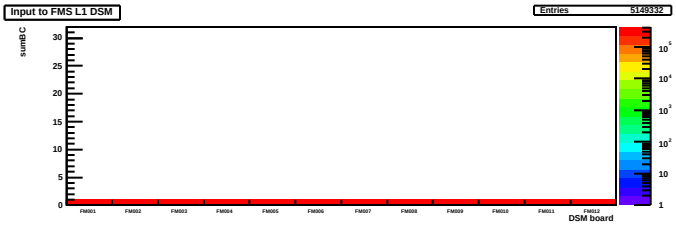

Input to FMS L0 DSM
Entries 3432888
HT ID - simulated
QT board

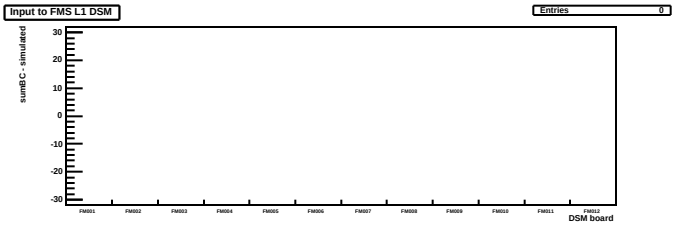

Input to FMS L1 DSM
Entries 5149332
sumD
DSM board

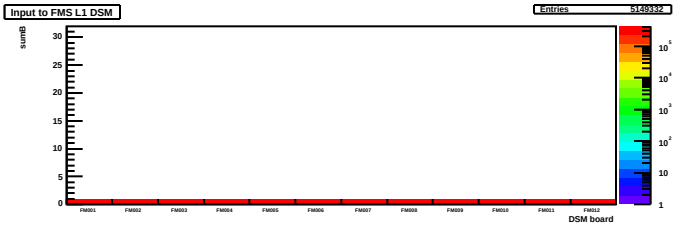

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

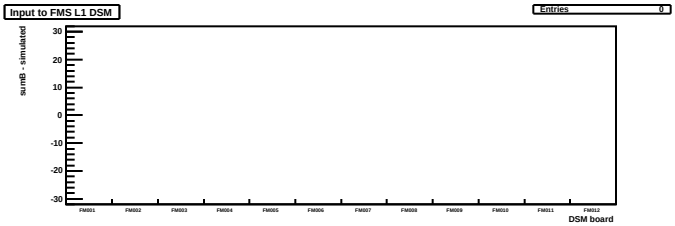

Input to FMS L1 DSM
Entries 5149332
sumC
DSM board

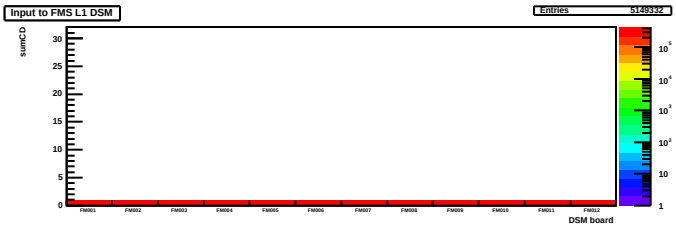

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

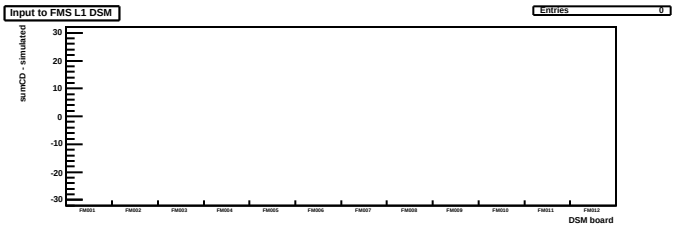

Input to FMS L1 DSM
Entries 5149332
sumBC
DSM board

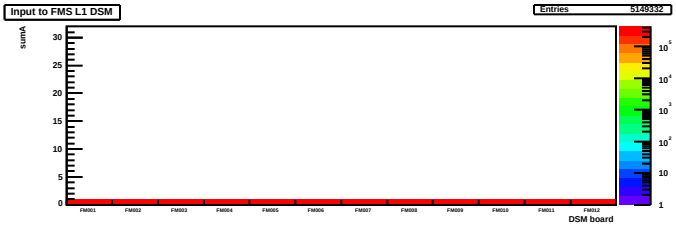

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

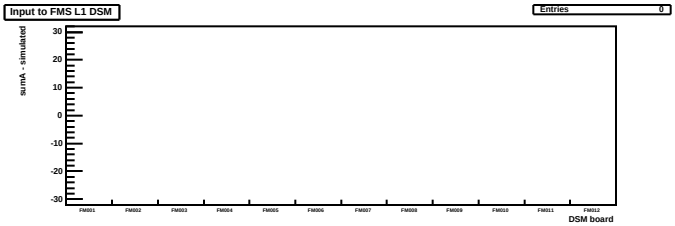

Input to FMS L1 DSM
Entries 5149332
sumB
DSM board

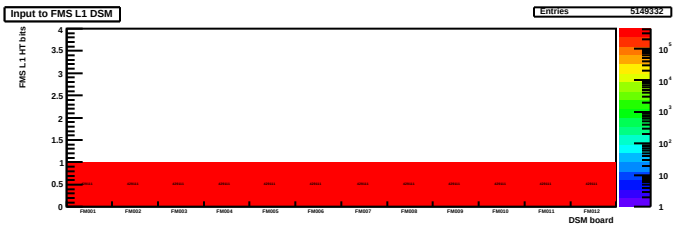

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

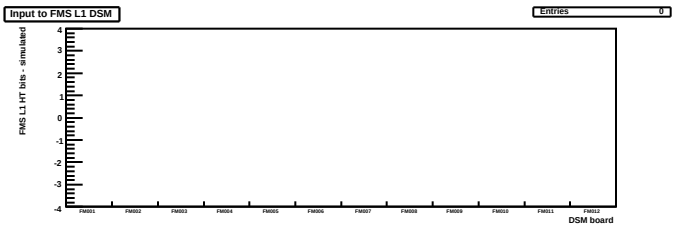

Input to FMS L1 DSM
Entries 5149332
sumCD
DSM board

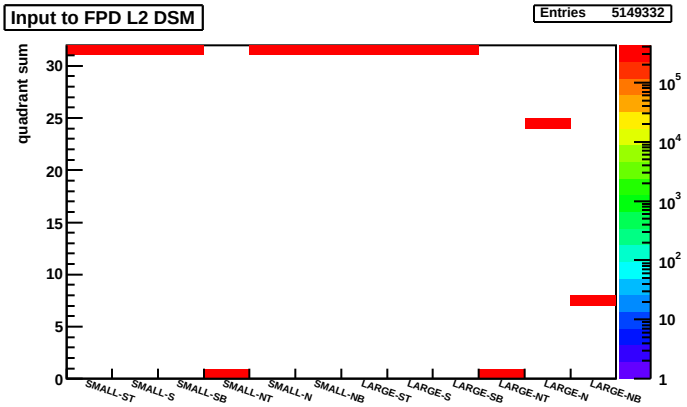

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

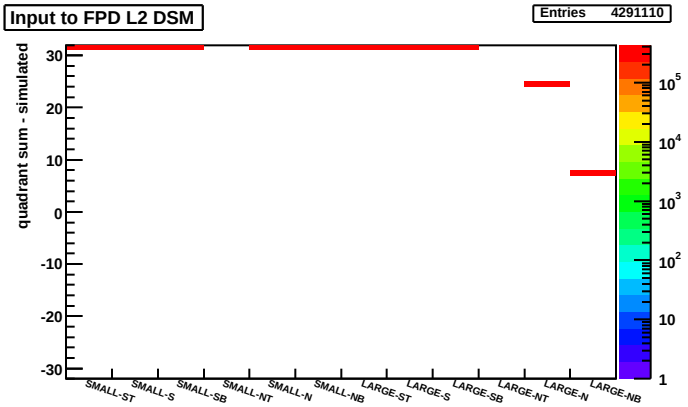

Input to FMS L1 DSM
Entries 5149332
sumA
DSM board

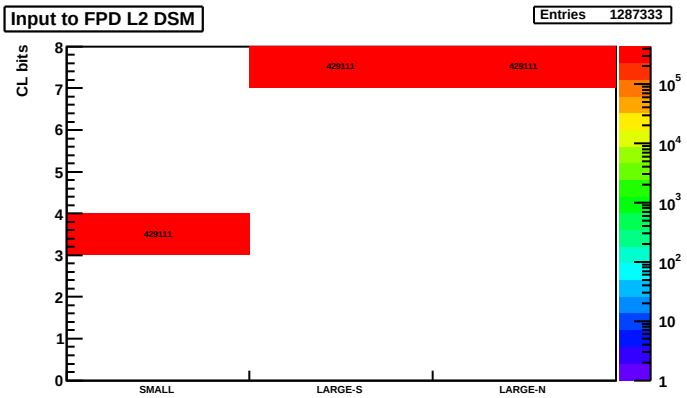

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

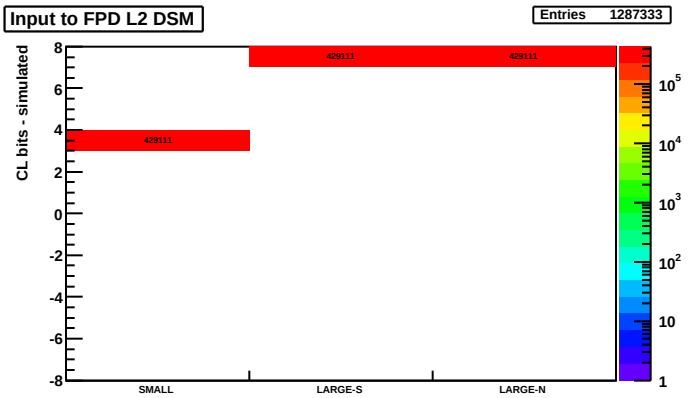

Input to FMS L1 DSM
Entries 5149332
FMS L1 HT bits
DSM board

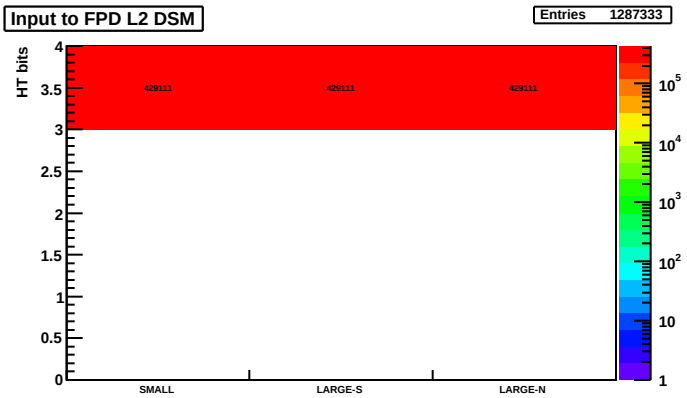

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

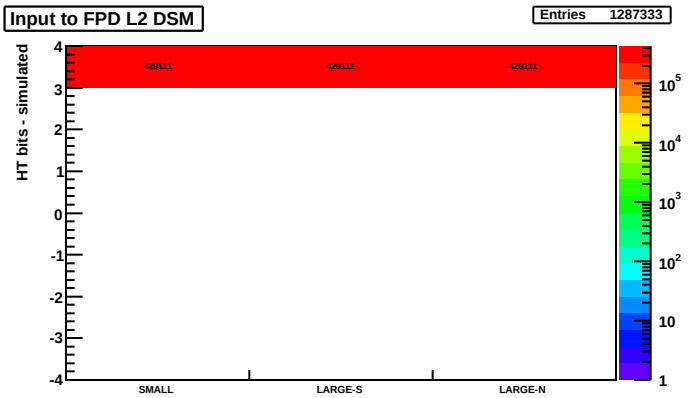

Input to FPD L2 DSM
Entries 5149332
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

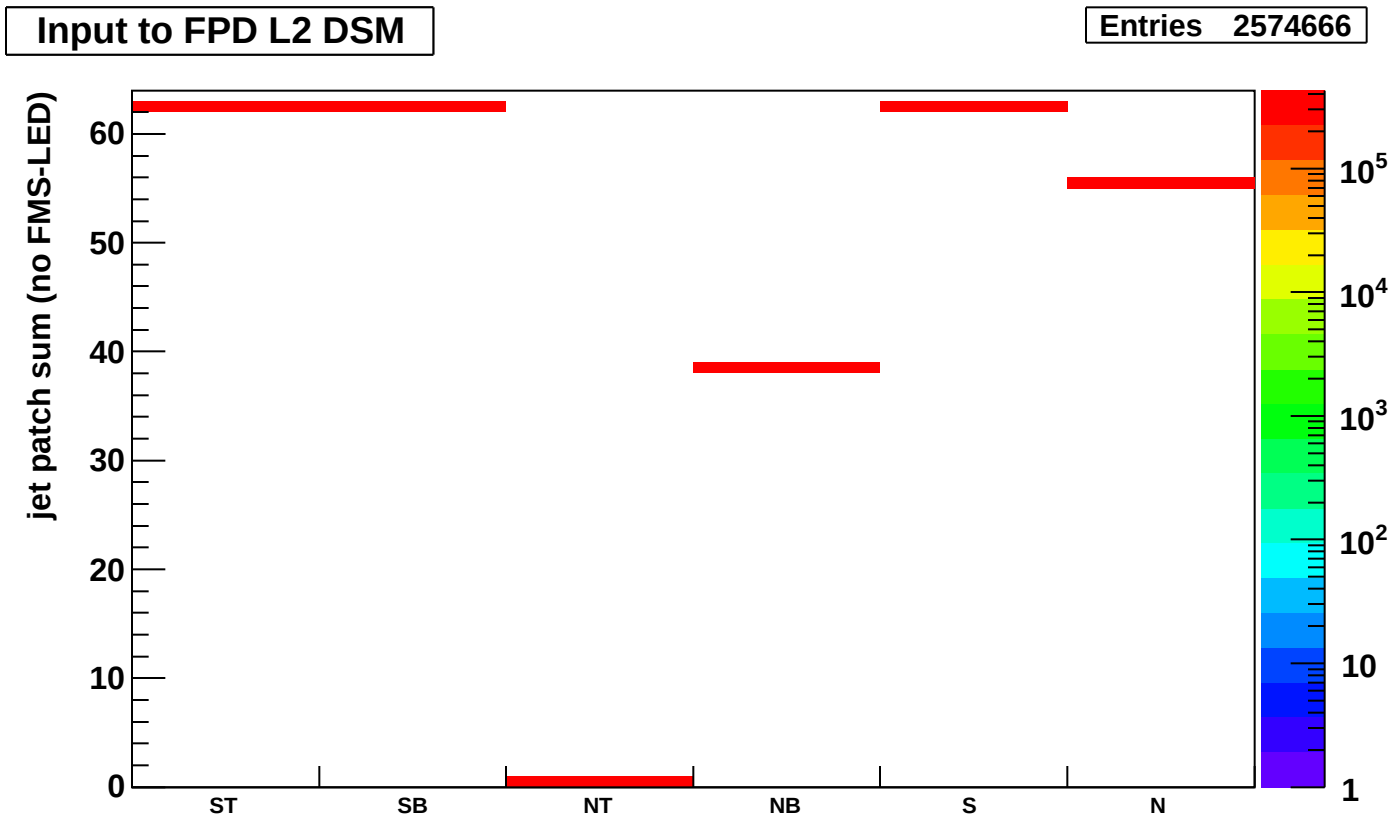

Input to FPD L2 DSM
Entries 4291110
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

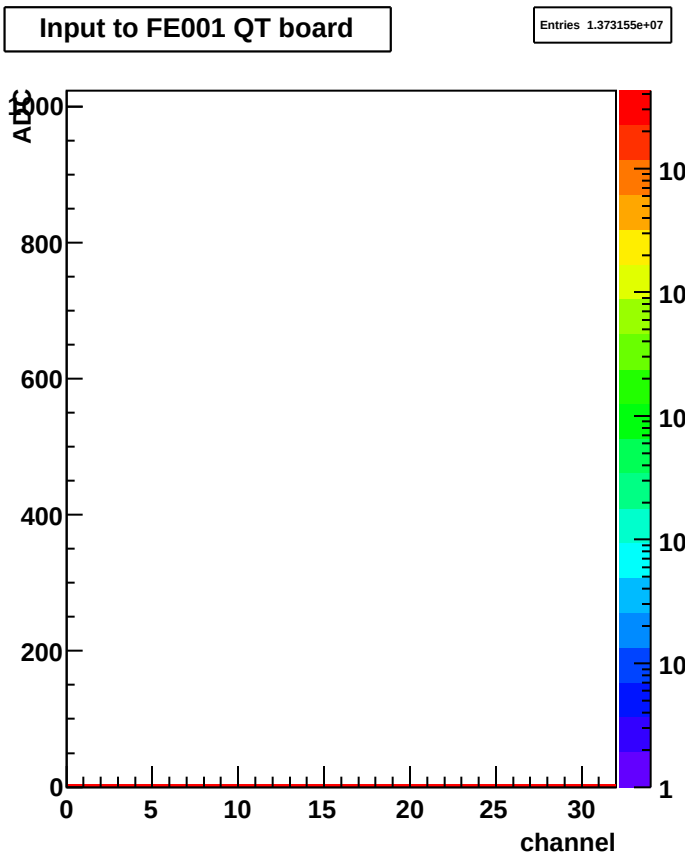

Input to FPD L2 DSM
Entries 1287333
CL bits
429111
429111
429111
SMALL
LARGE-S
LARGE-N

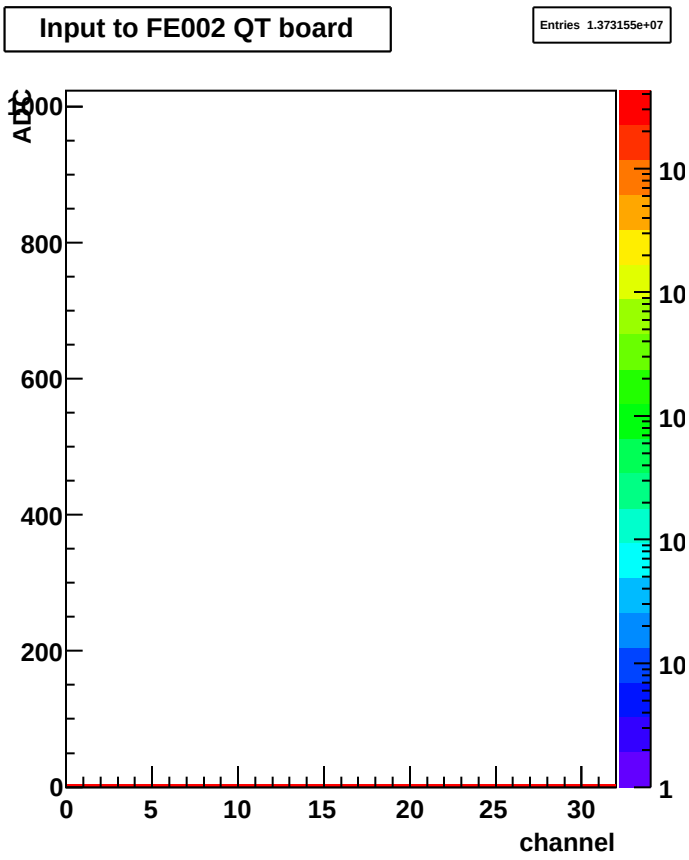

Input to FPD L2 DSM
Entries 1287333
CL bits - simulated
429111
429111
429111
SMALL
LARGE-S
LARGE-N

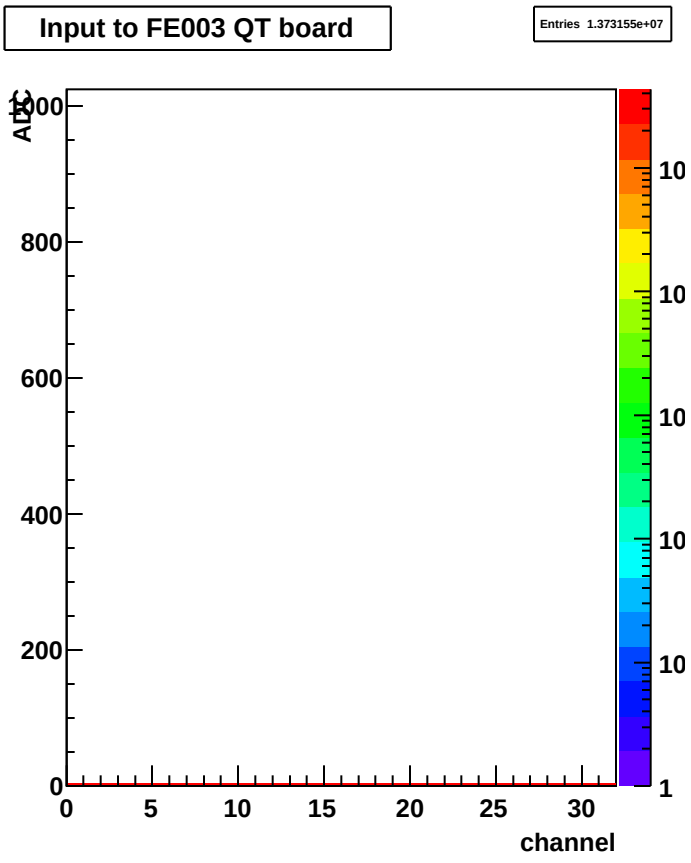

Input to FPD L2 DSM
Entries 1287333
HT bits
429111
429111
429111
SMALL
LARGE-S
LARGE-N

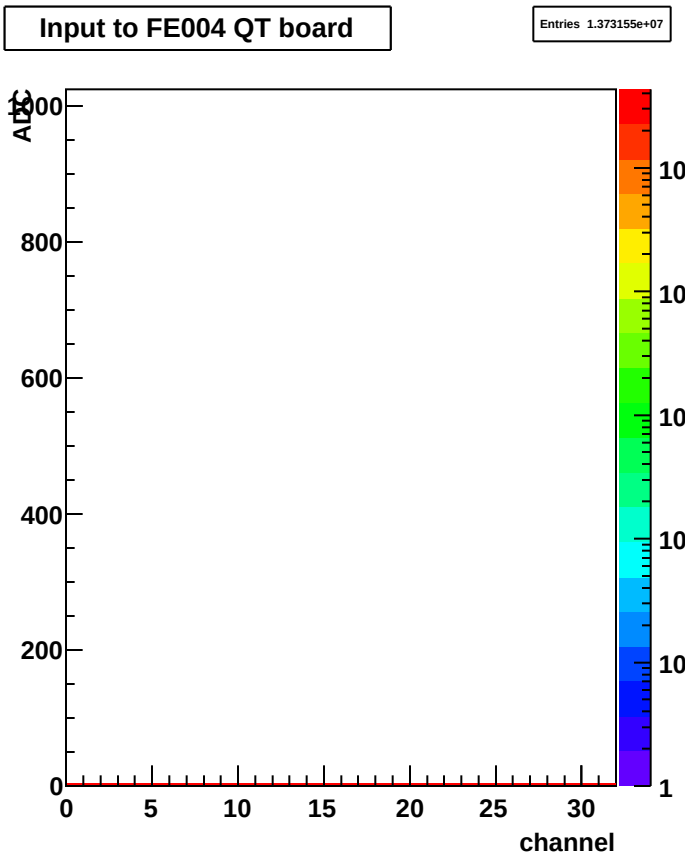

Input to FPD L2 DSM
Entries 1287333
HT bits - simulated
429111
429111
429111
SMALL
LARGE-S
LARGE-N

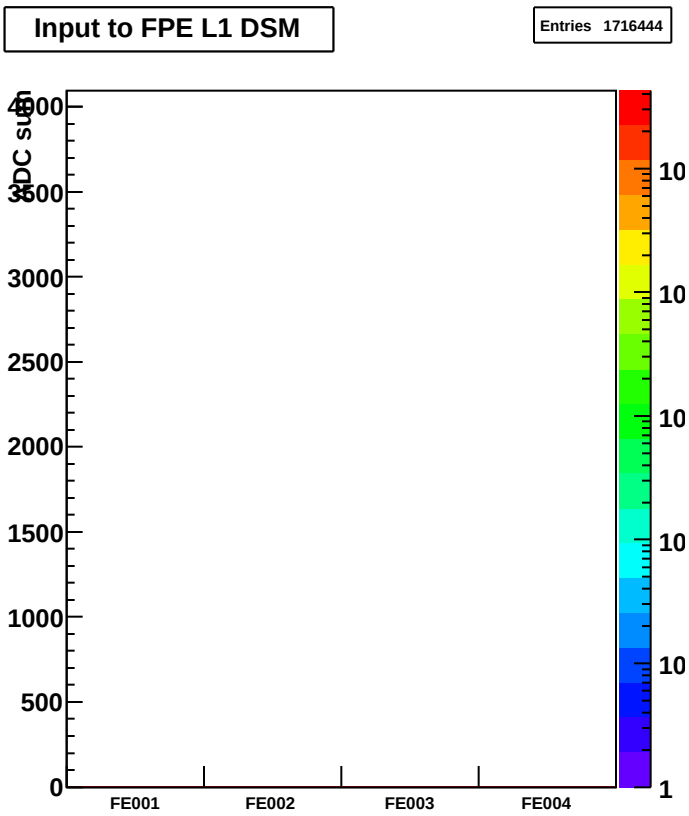

Input to FPD L2 DSM
Entries 2574666
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

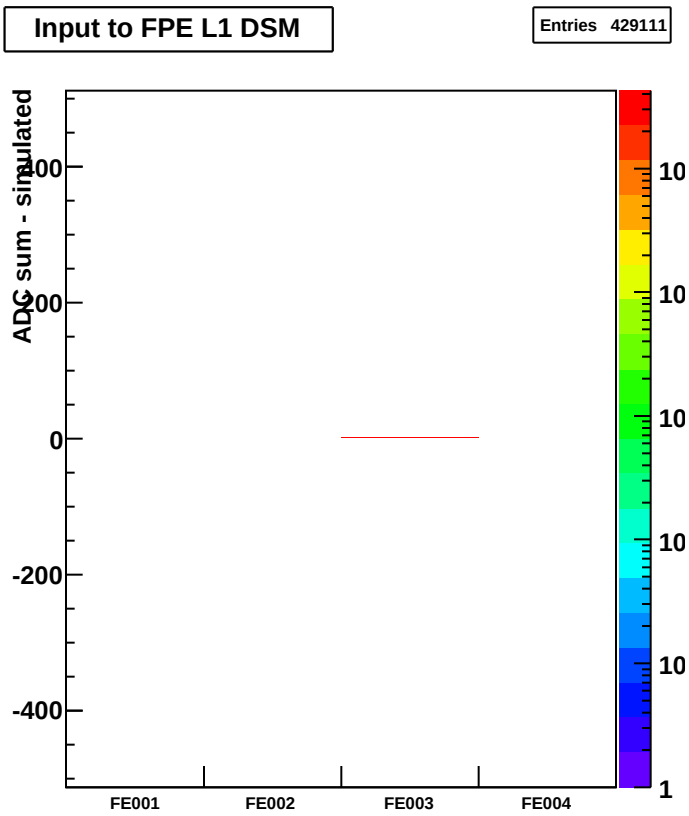

Input to FE001 QT board
Entries 1.373155e+07
ADC
channel

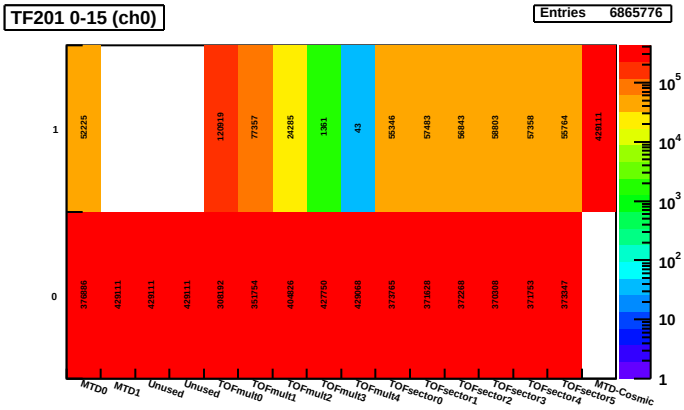

Input to FE002 QT board
Entries 1.373155e+07
ADC
channel

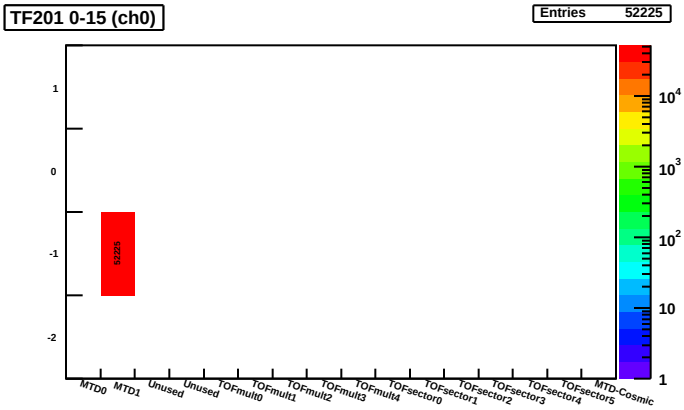

Input to FE003 QT board
Entries 1.373155e+07
ADC
channel

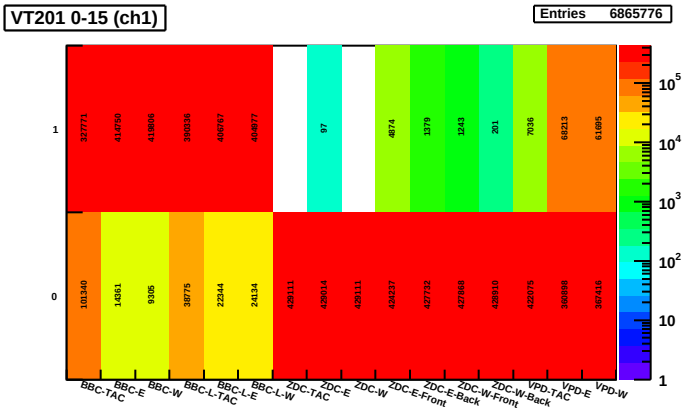

Input to FE004 QT board
Entries 1.373155e+07
ADC
channel

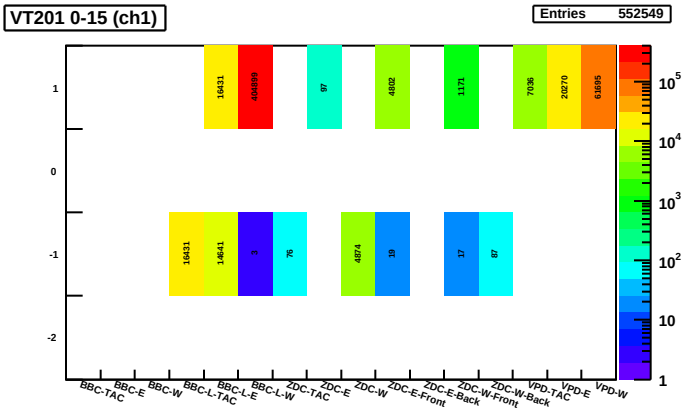

Input to FPE L1 DSM
Entries 1716444
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 429111
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 6865776
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 52225
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 6865776
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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Entries 552549
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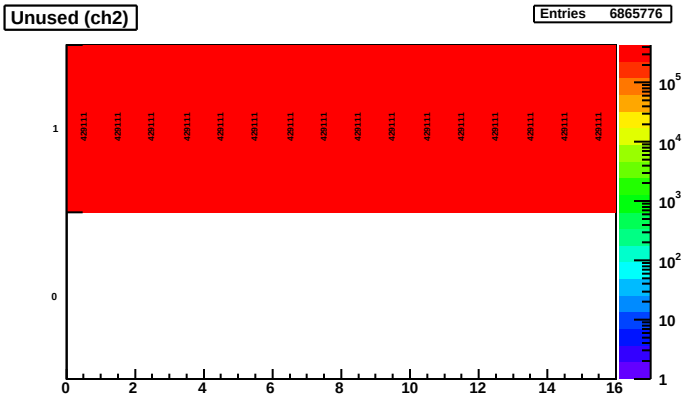
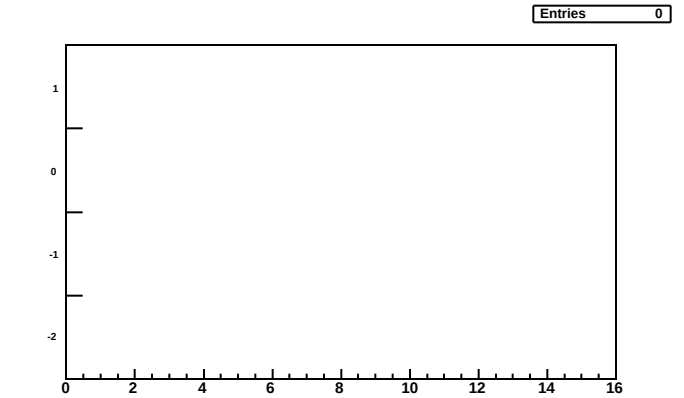
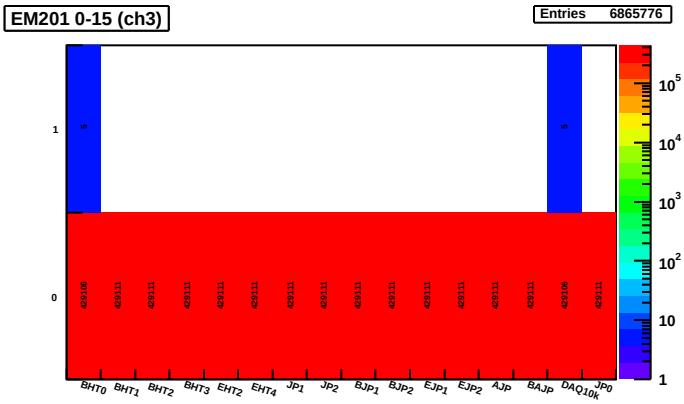

Unused (ch2)
Entries 6865776


Entries 0


EM201 0-15 (ch3)
Entries 6865776
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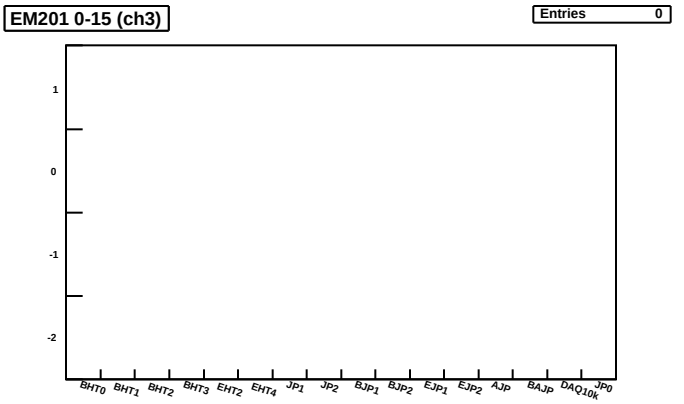
EM201 0-15 (ch3)
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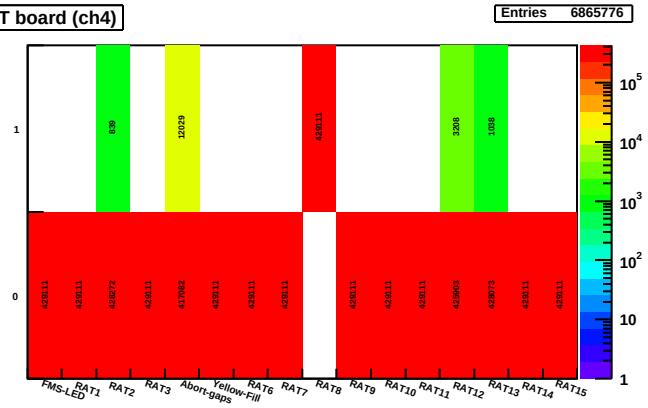
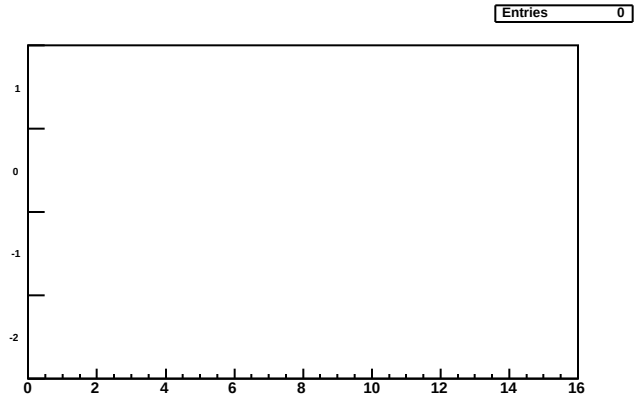
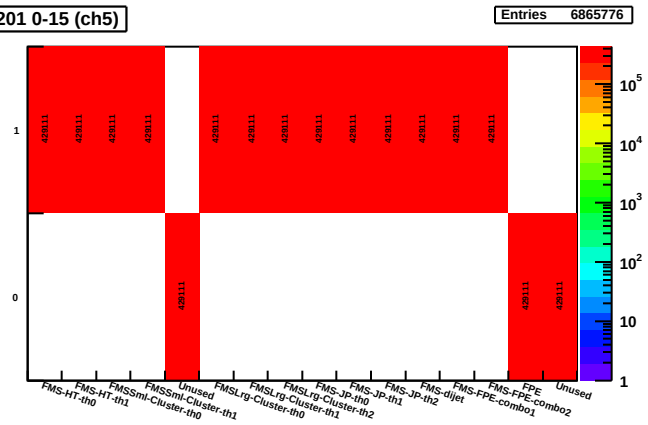
RAT board (ch4)





FP201 0-15 (ch5)



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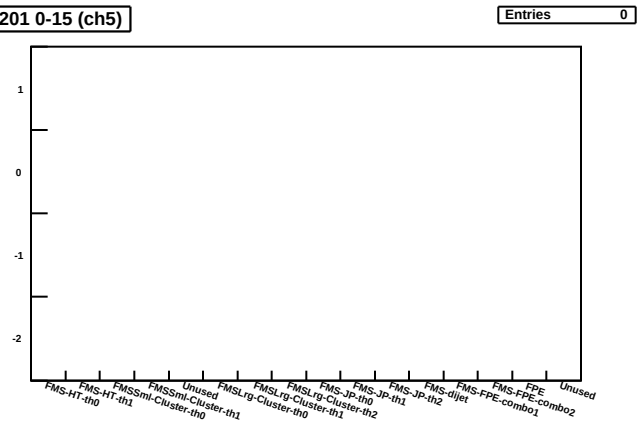
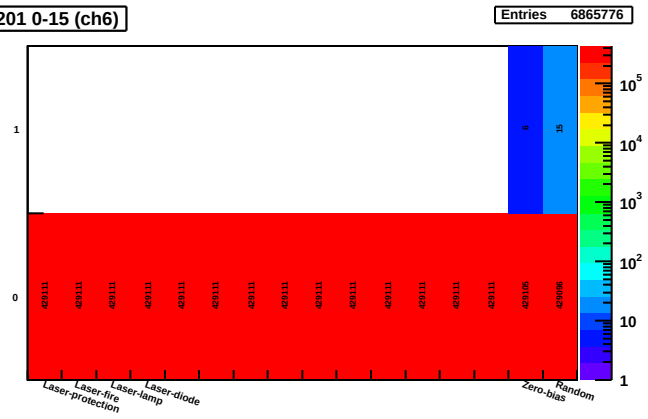
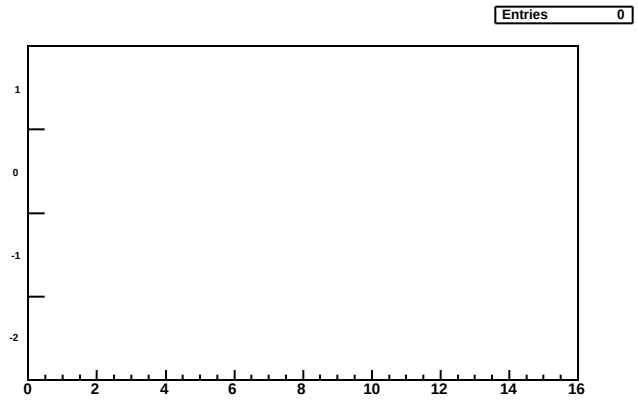
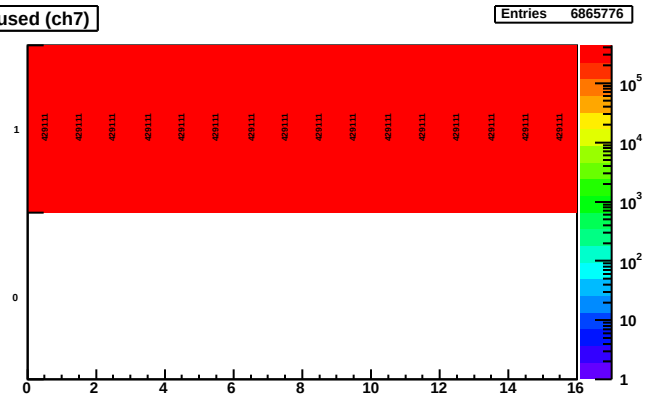
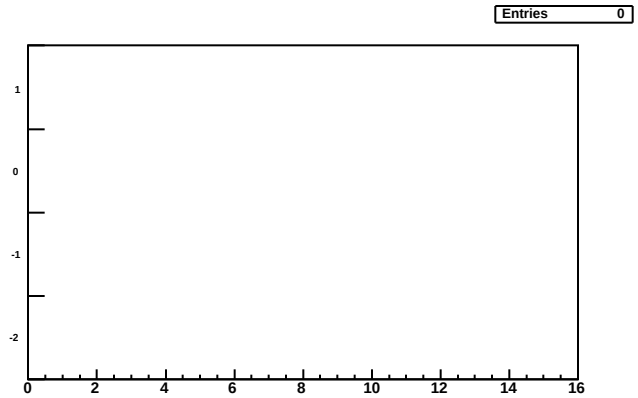


ST201 0-15 (ch6)





Unused (ch7)