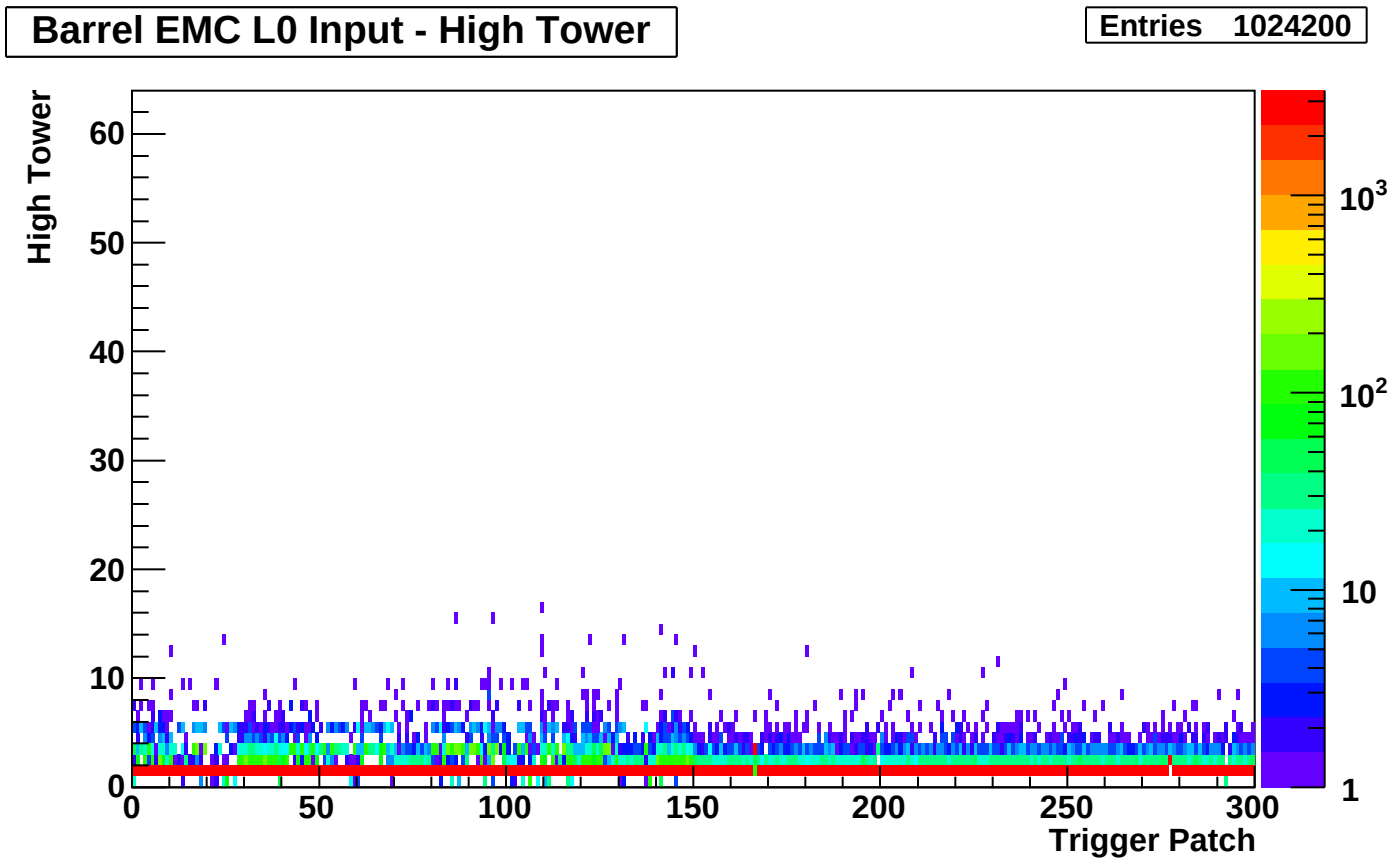
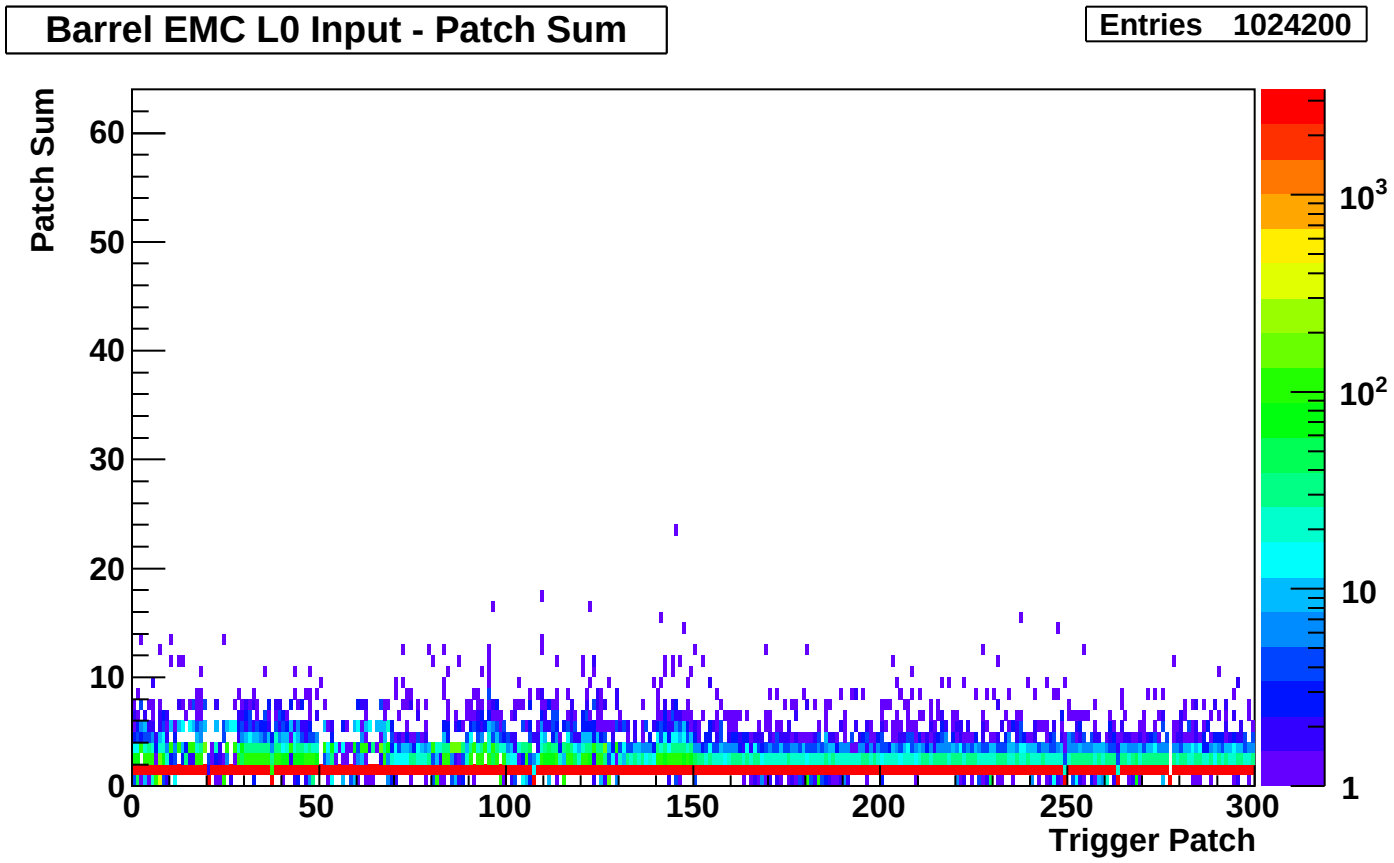
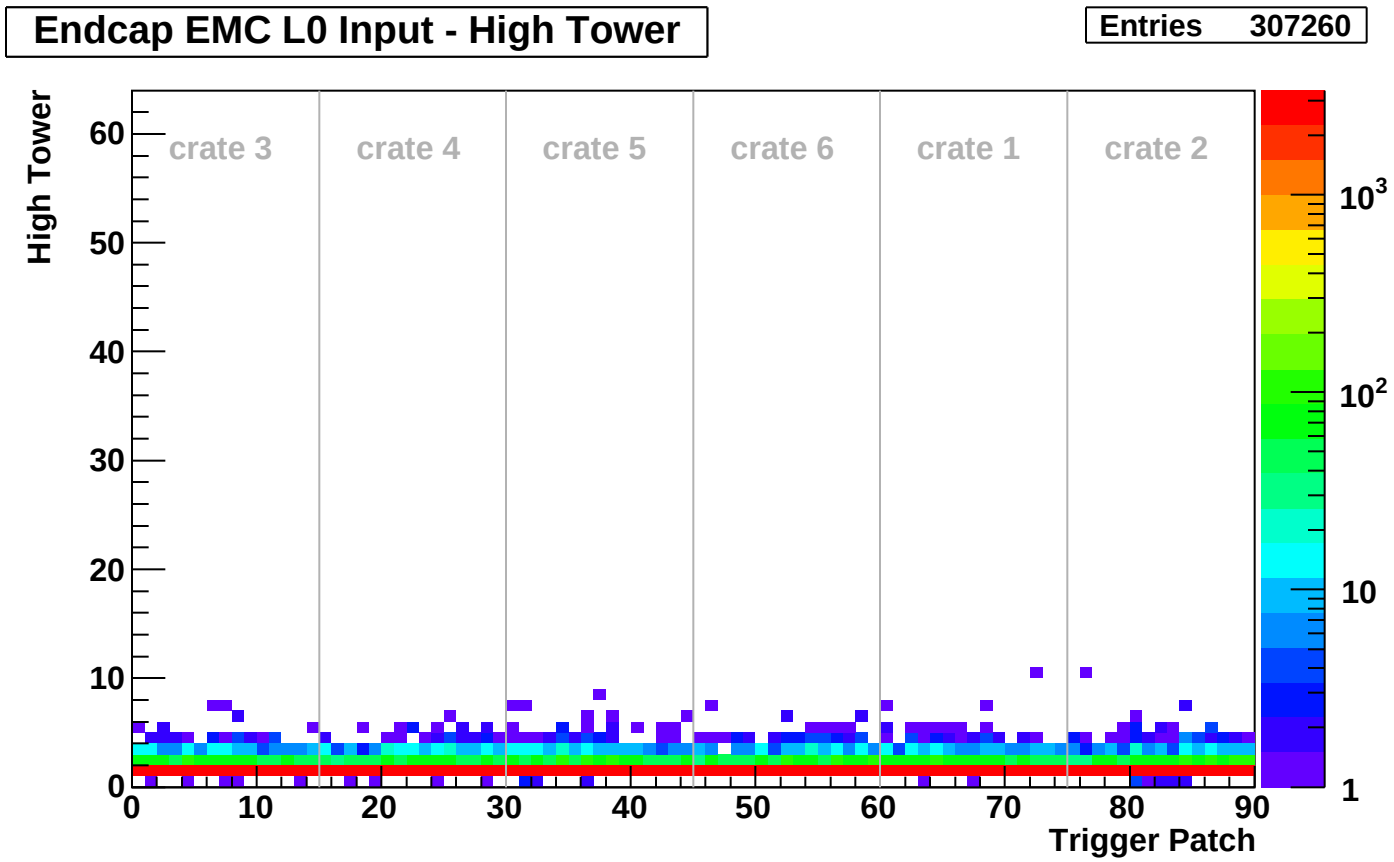
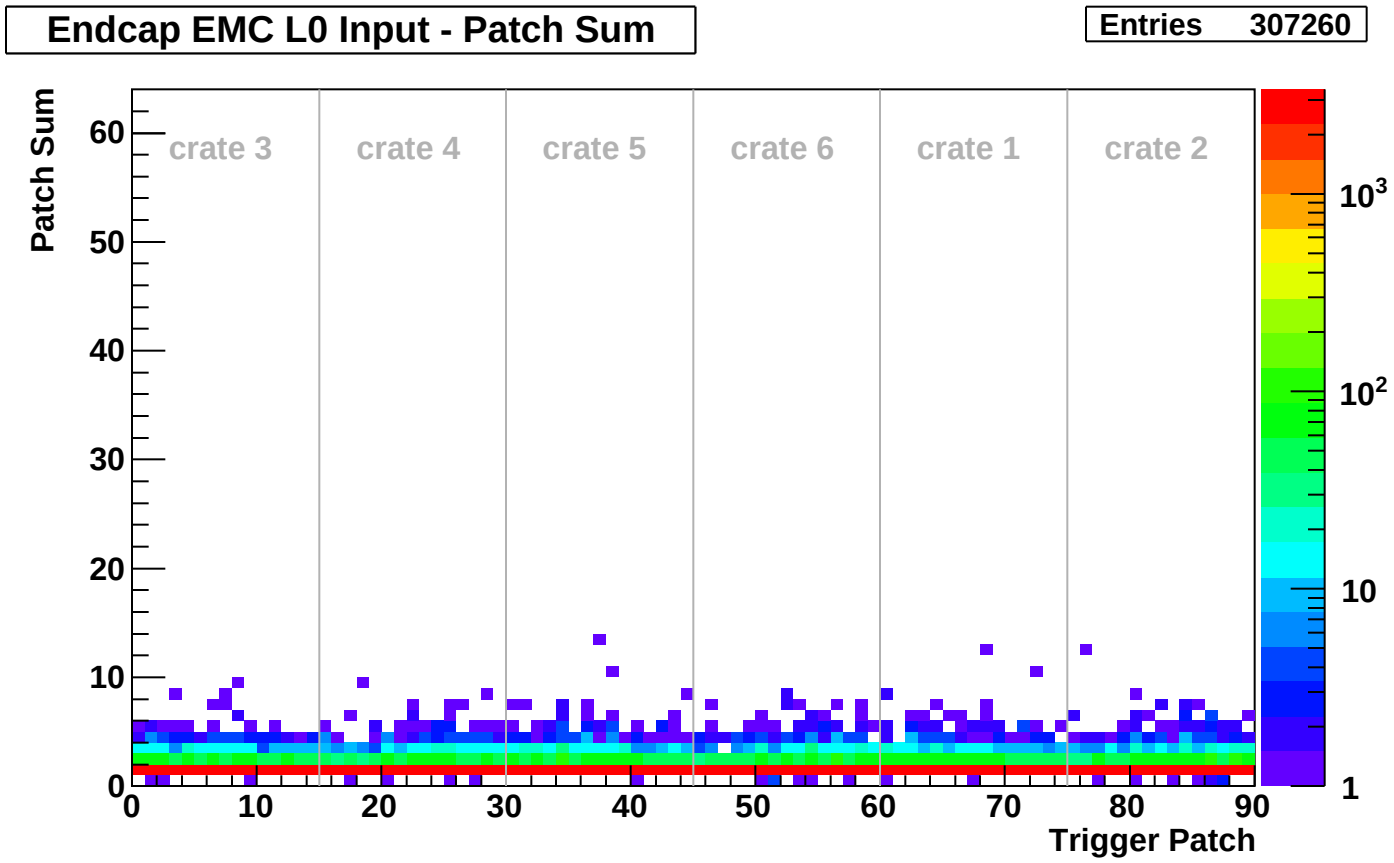
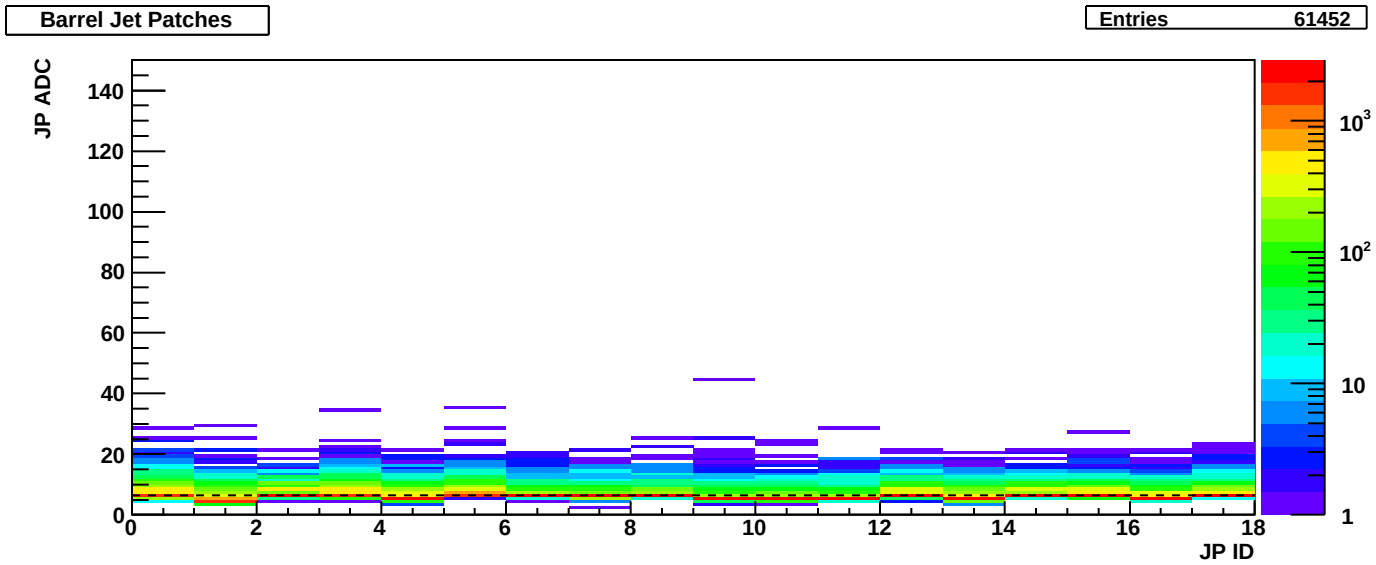
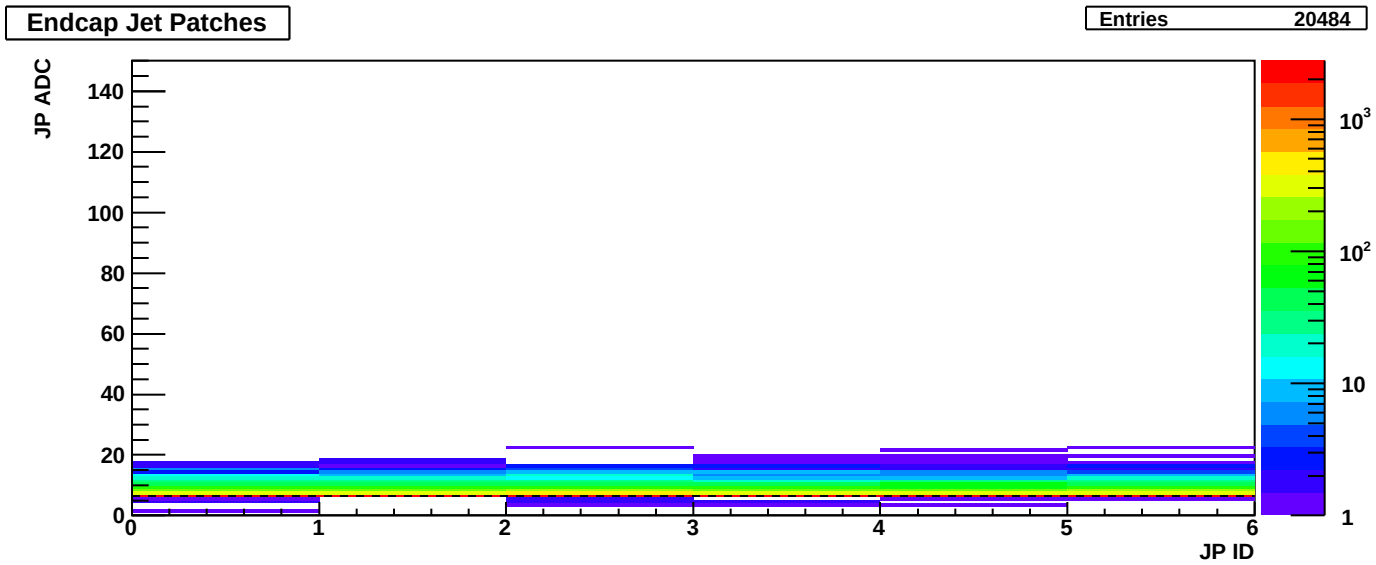

Barrel EMC L0 Input - High Tower
Entries 1024200
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

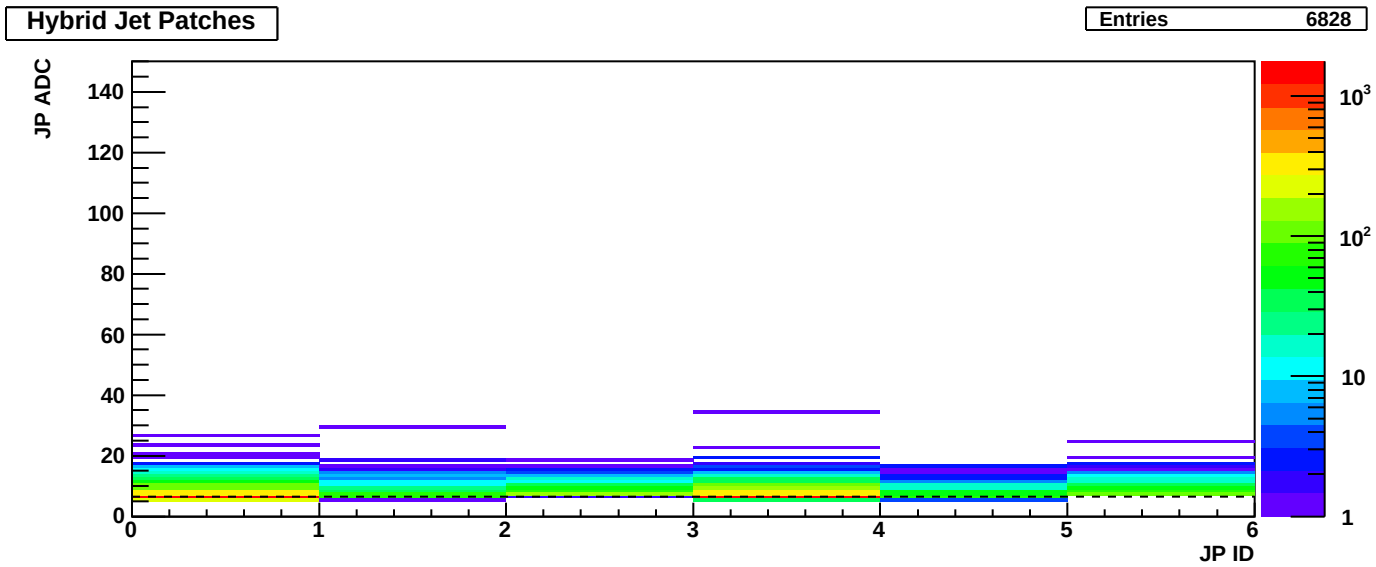

Barrel EMC L0 Input - Patch Sum
Entries 1024200
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

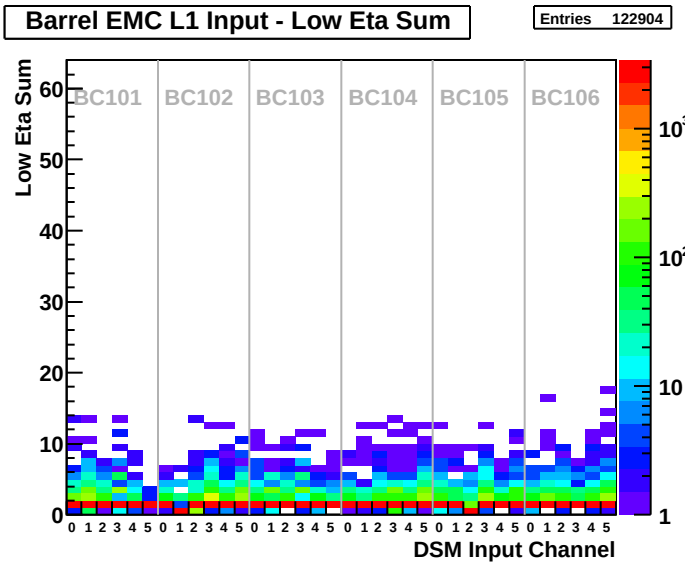

Endcap EMC L0 Input - High Tower
Entries 307260
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

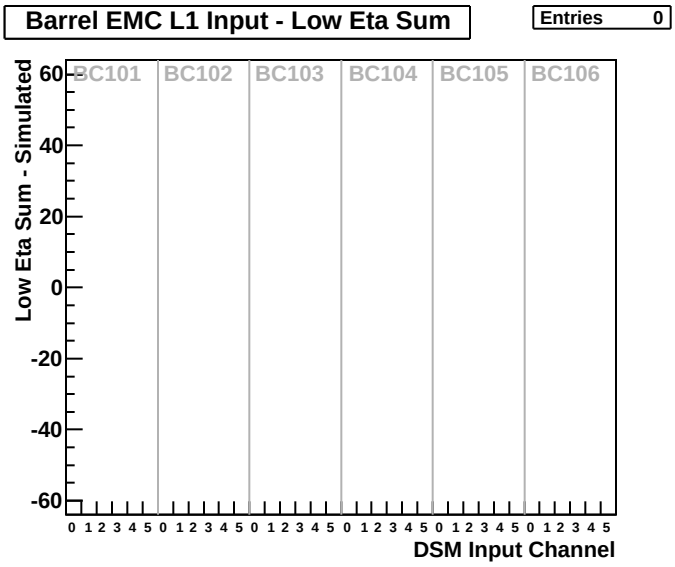

Endcap EMC L0 Input - Patch Sum
Entries 307260
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

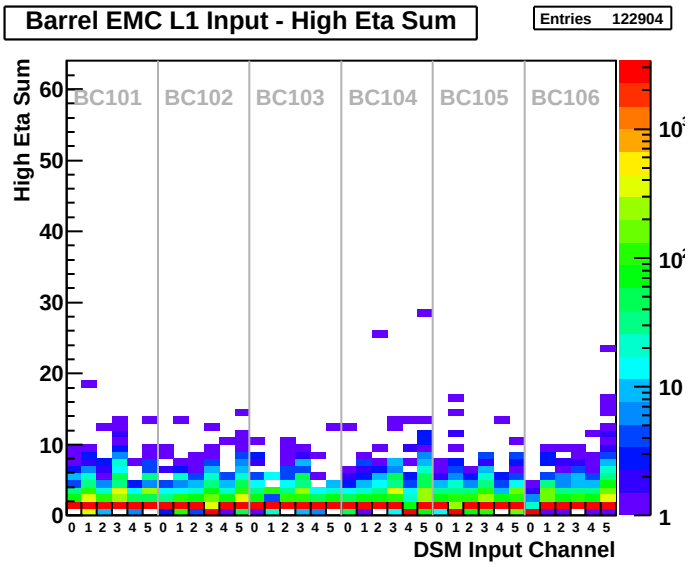

Barrel Jet Patches
Entries 61452
JP ADC
JP ID

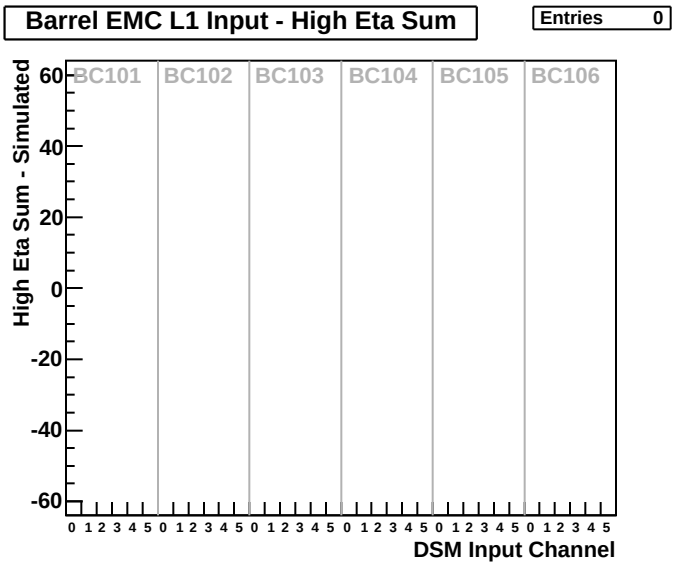

Endcap Jet Patches
Entries 20484
JP ADC
JP ID

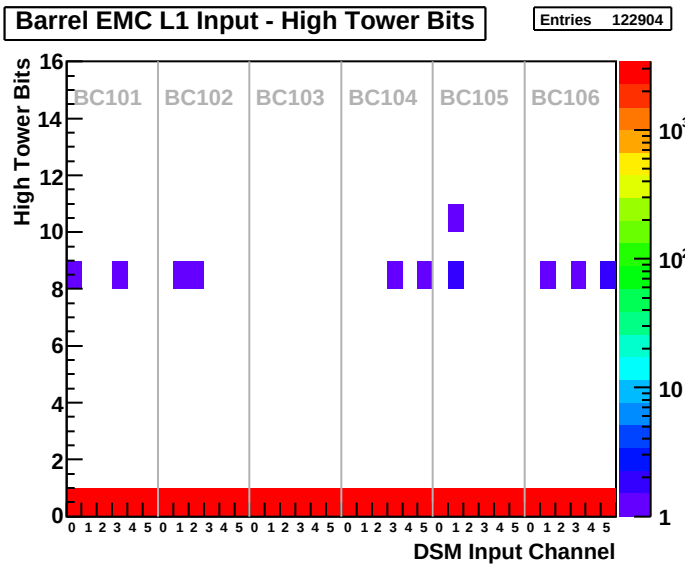

Hybrid Jet Patches
Entries 6828
JP ADC
JP ID

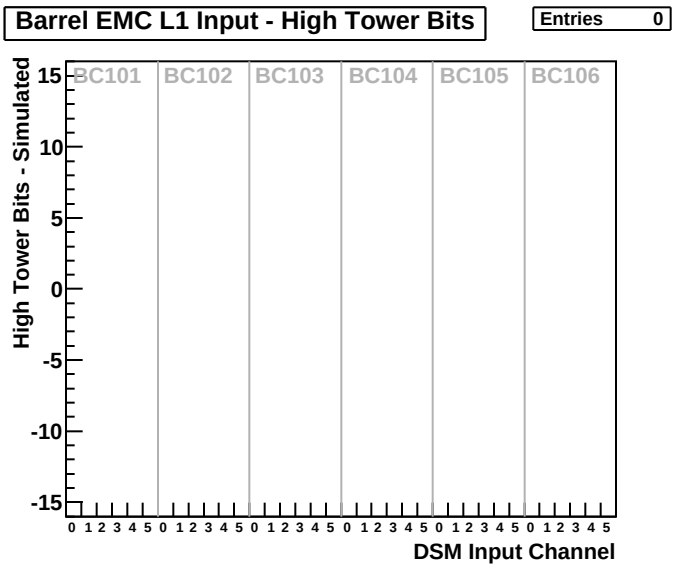

Barrel EMC L1 Input - Low Eta Sum
Entries 122904
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

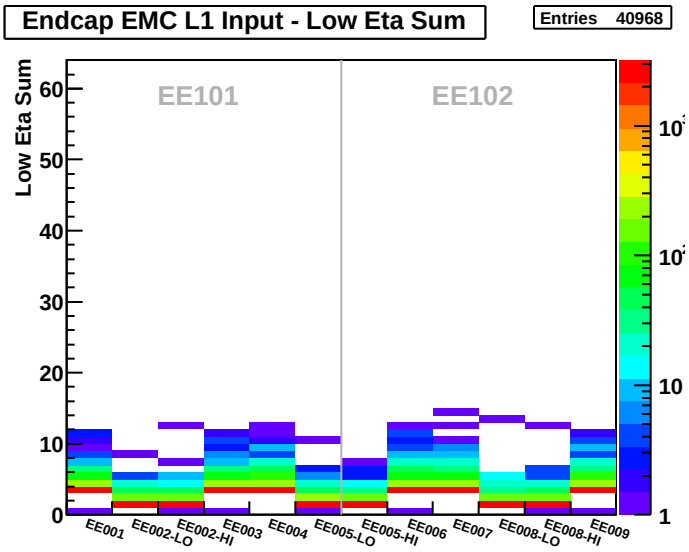

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

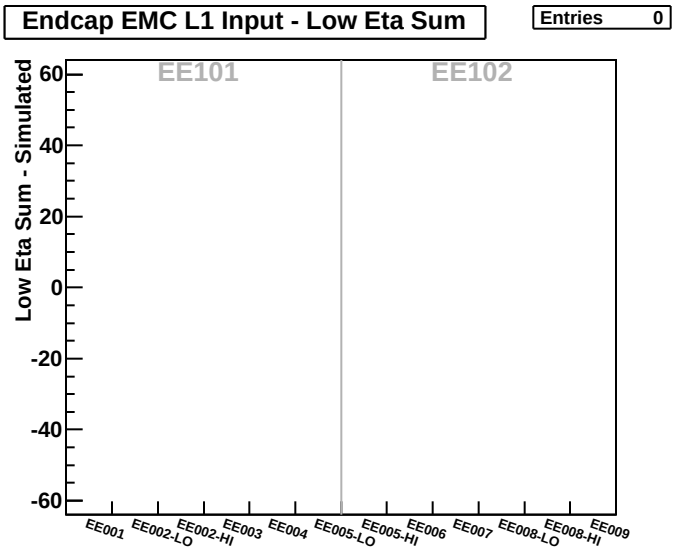

Barrel EMC L1 Input - High Eta Sum
Entries 122904
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

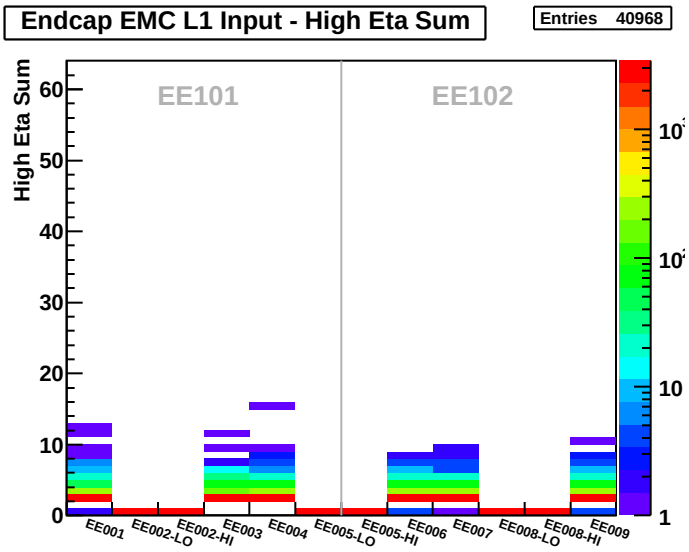

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

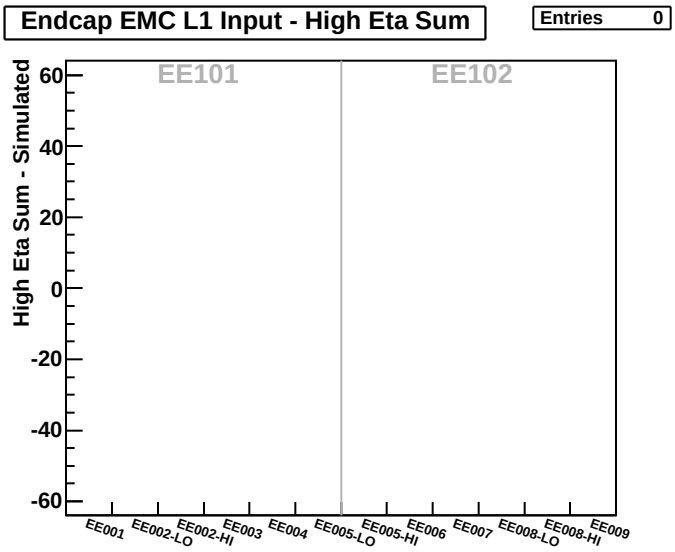

Barrel EMC L1 Input - High Tower Bits
Entries 122904
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

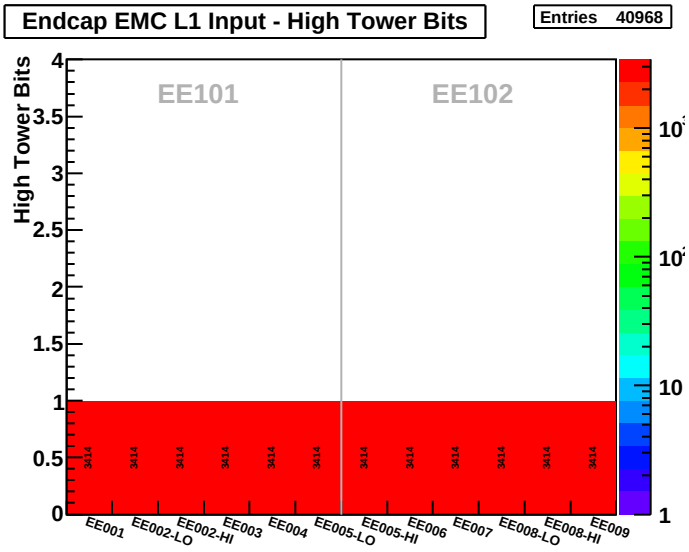

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

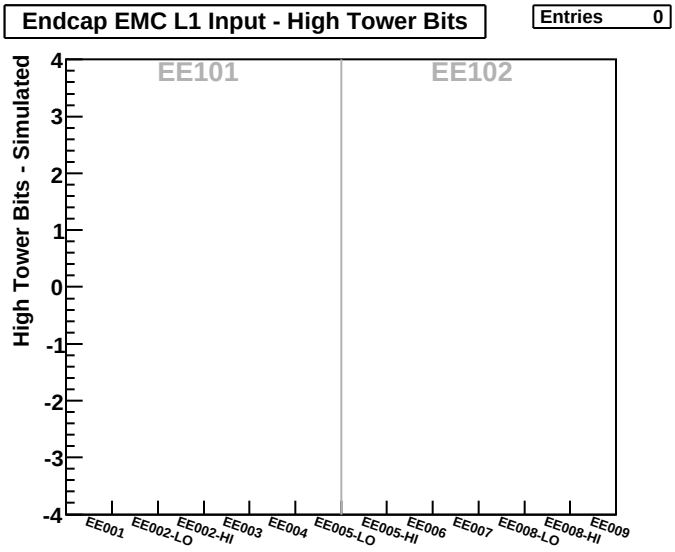

Endcap EMC L1 Input - Low Eta Sum
Entries 40968
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

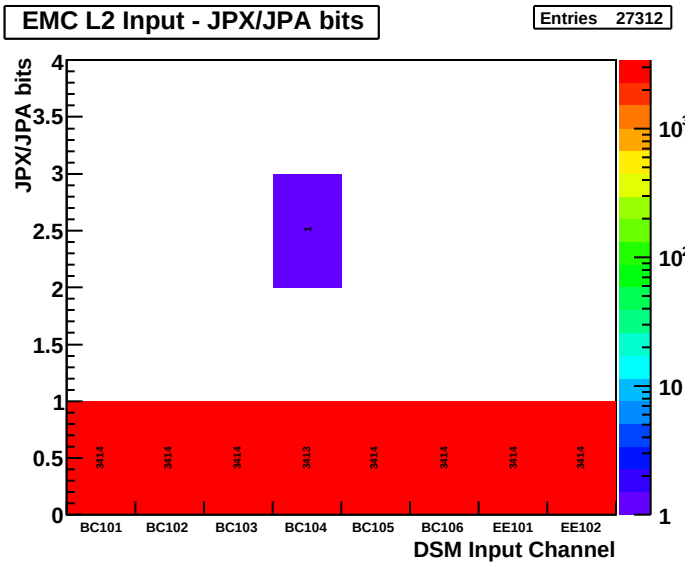

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

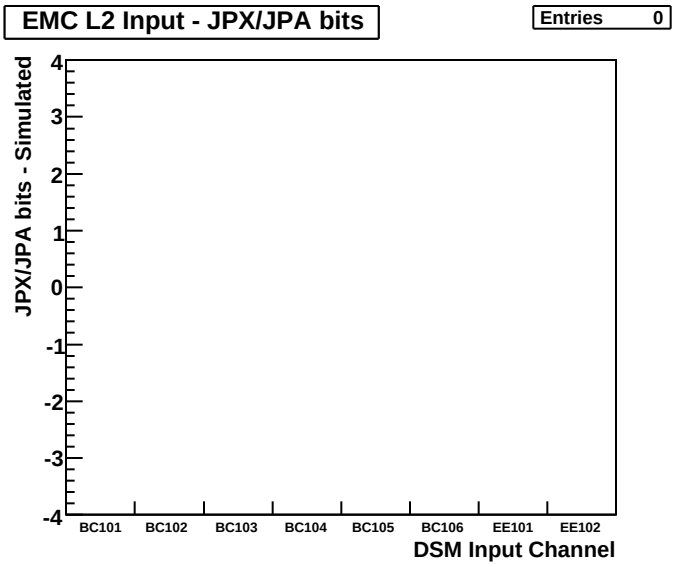

Endcap EMC L1 Input - High Eta Sum
Entries 40968
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

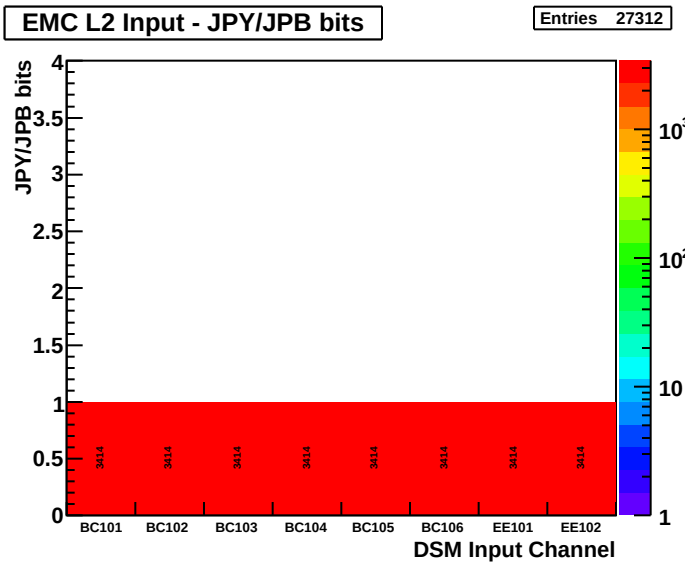

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

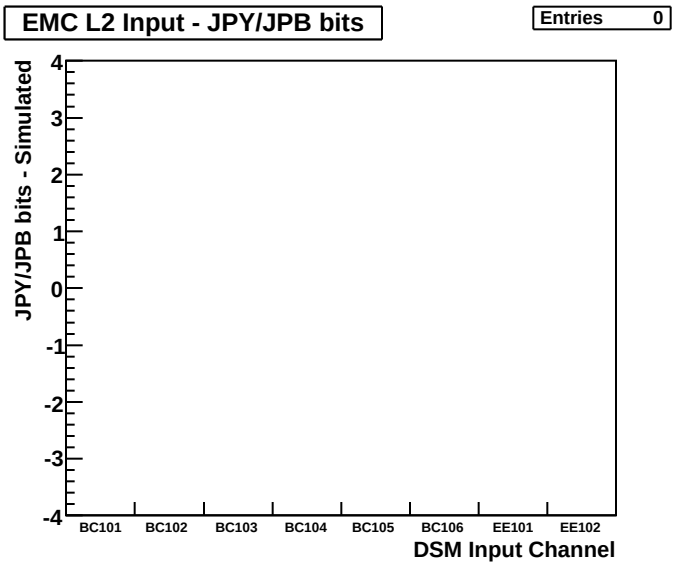

Endcap EMC L1 Input - High Tower Bits
Entries 40968
High Tower Bits
EE101
EE102
3414
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

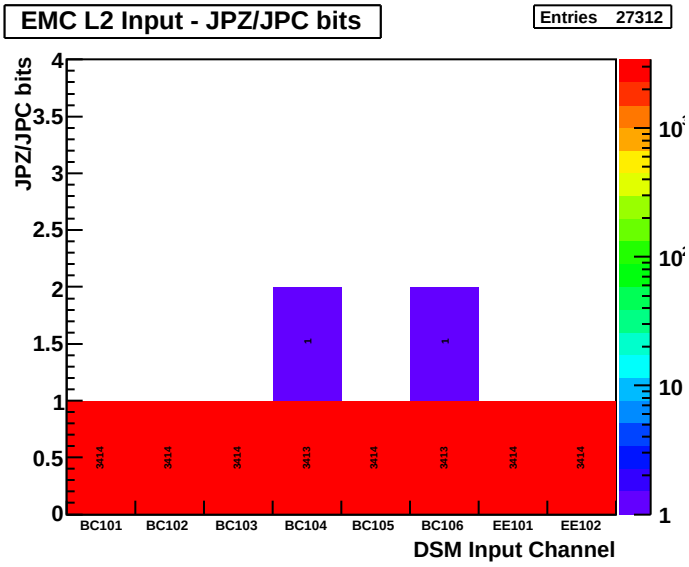

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

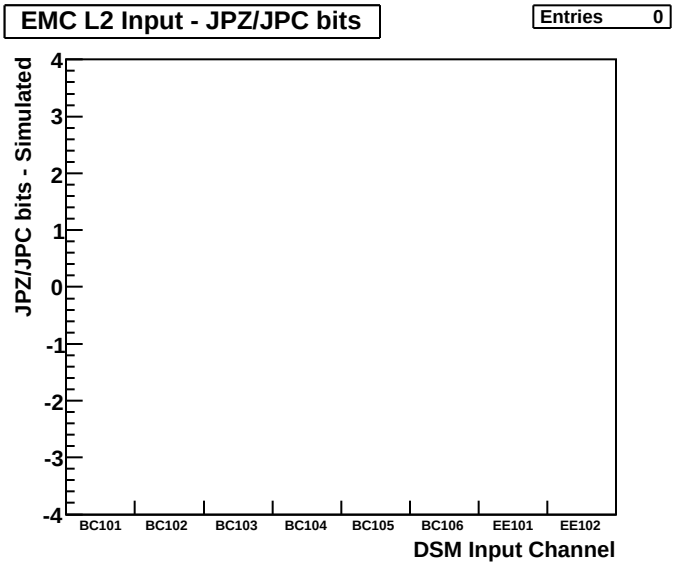

EMC L2 Input - JPX/JPA bits
Entries 27312
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

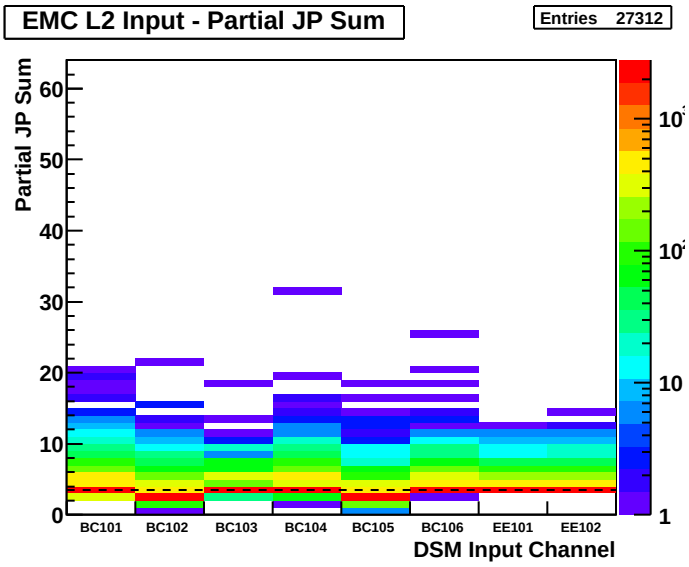

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

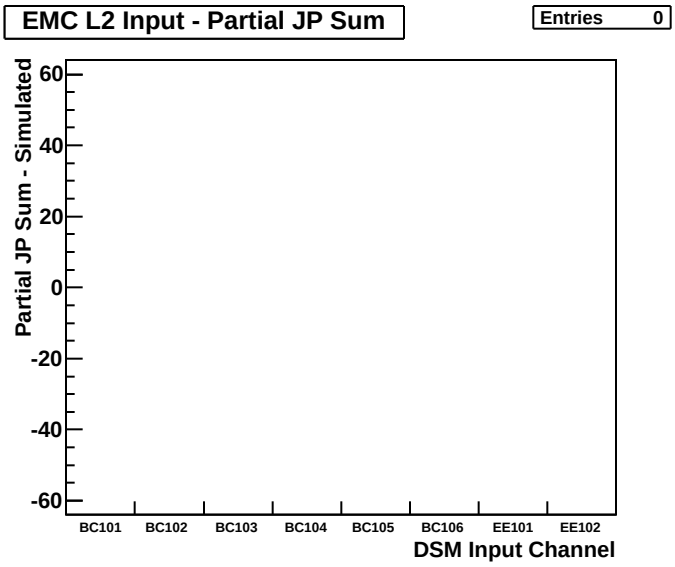

EMC L2 Input - JPY/JPB bits
Entries 27312
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

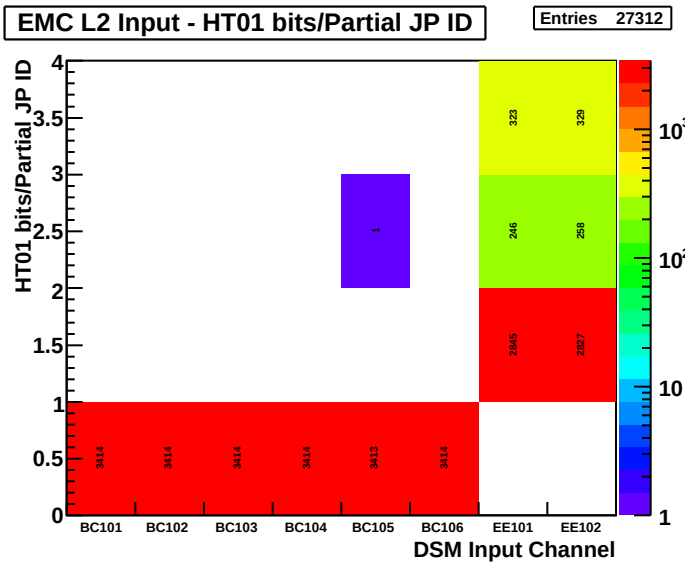

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

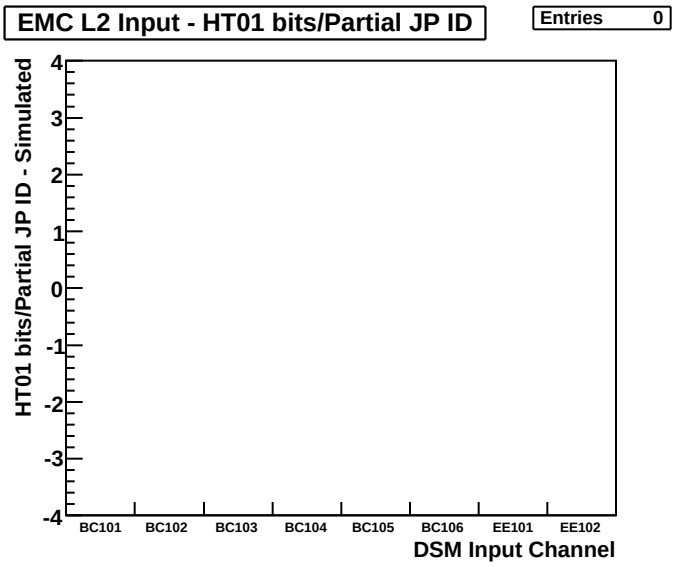

EMC L2 Input - JPZ/JPC bits
Entries 27312
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

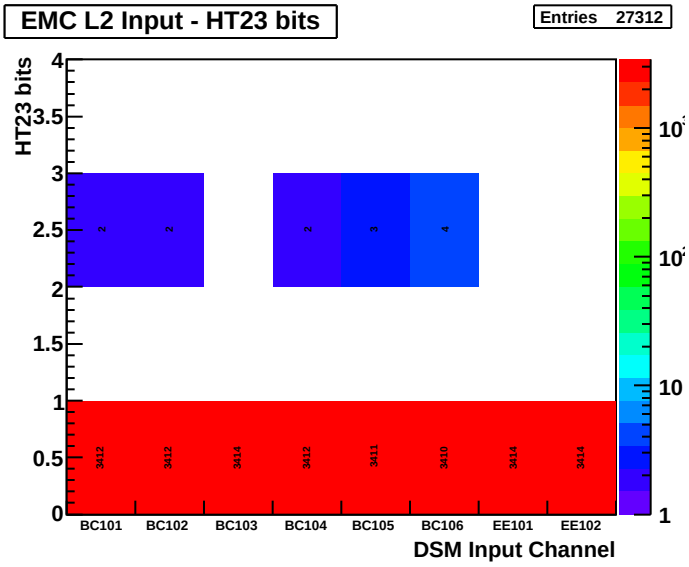

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

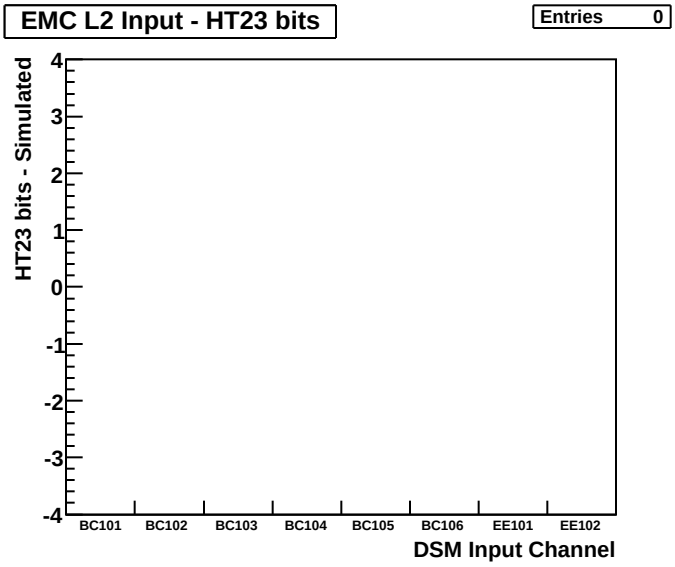

EMC L2 Input - Partial JP Sum
Entries 27312
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

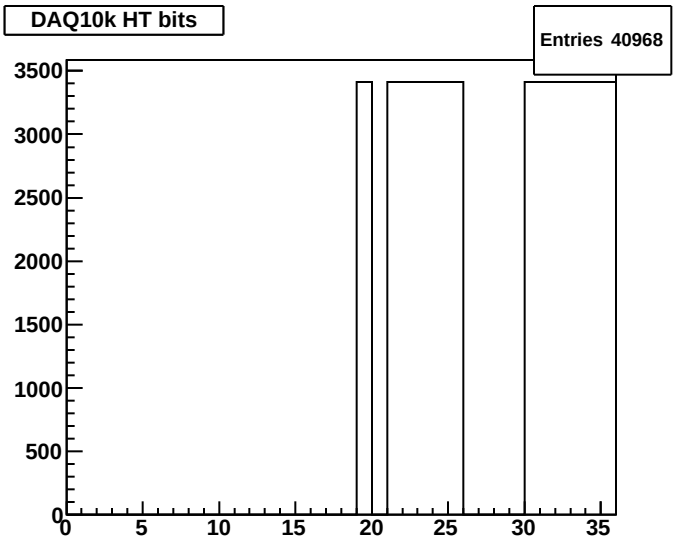

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

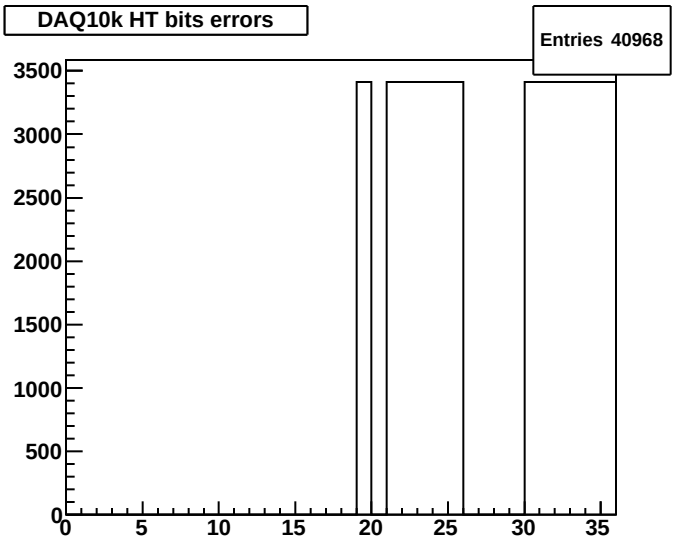

EMC L2 Input - HT01 bits/Partial JP ID
Entries 27312
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

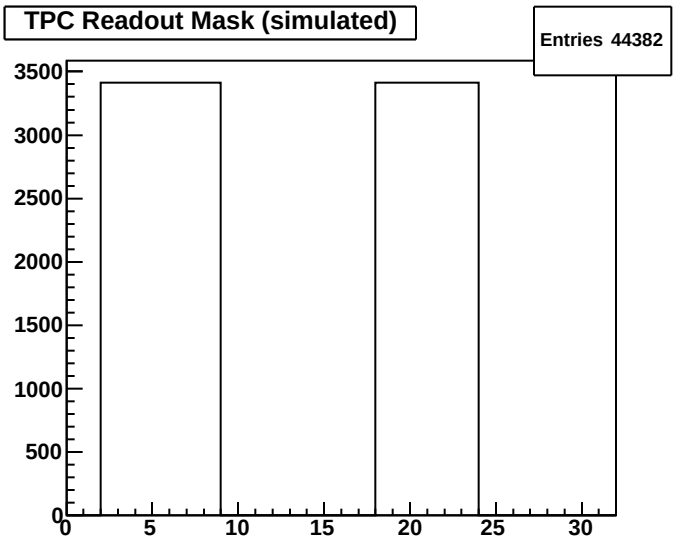

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

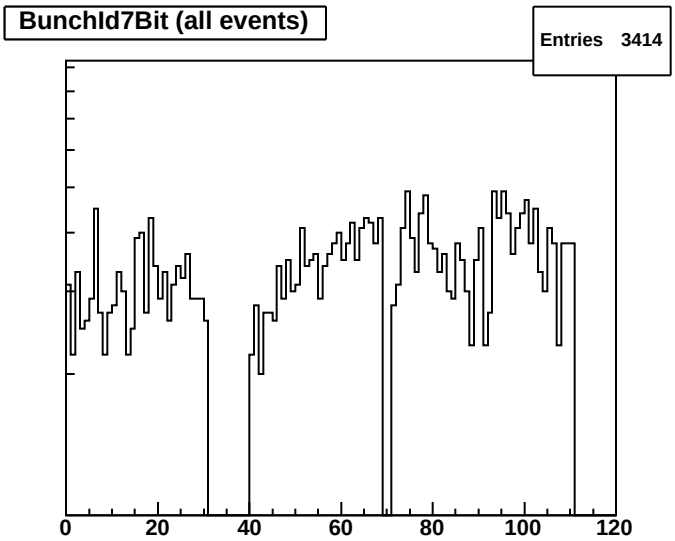

EMC L2 Input - HT23 bits
Entries 27312
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

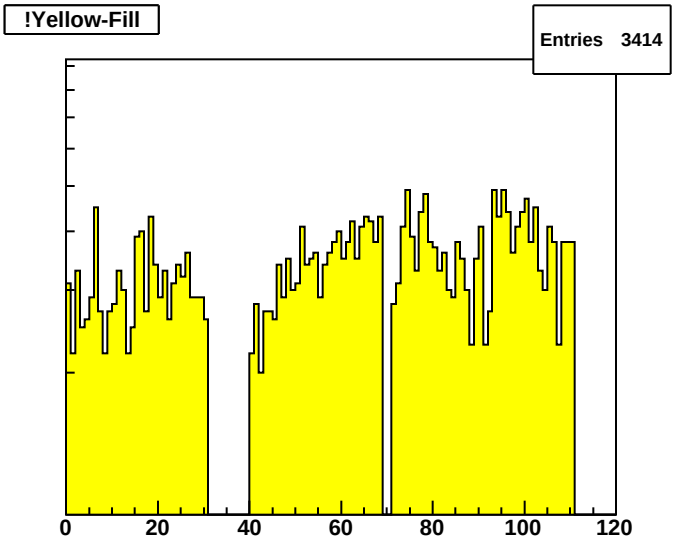

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

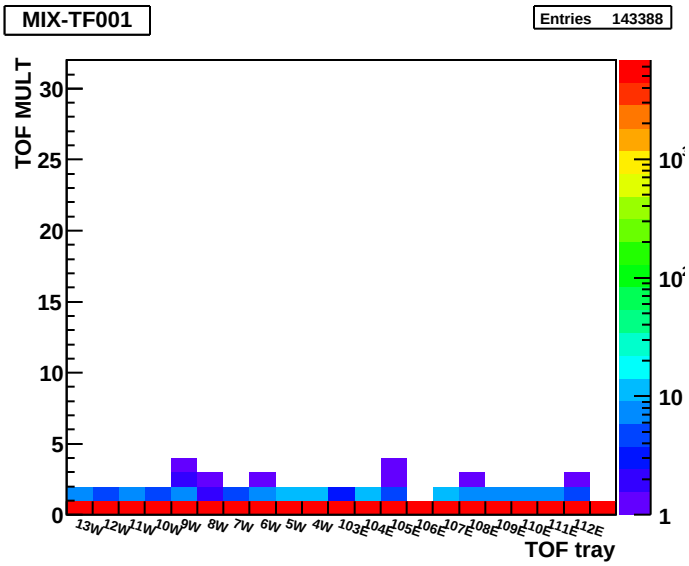

DAQ10k HT bits
Entries 40968
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35

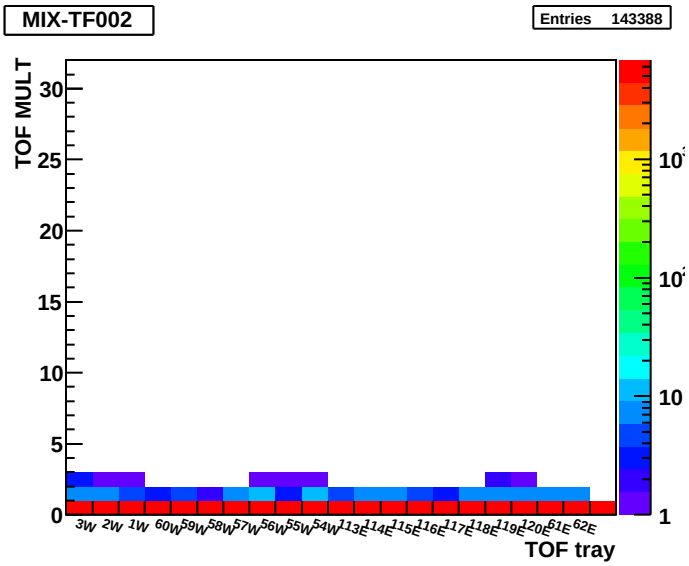

DAQ10k HT bits errors
Entries 40968
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35

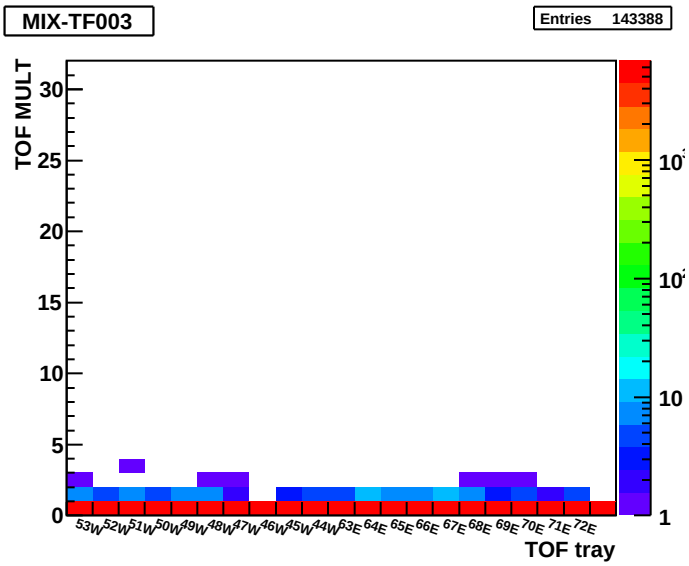

TPC Readout Mask (simulated)
Entries 44382
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30

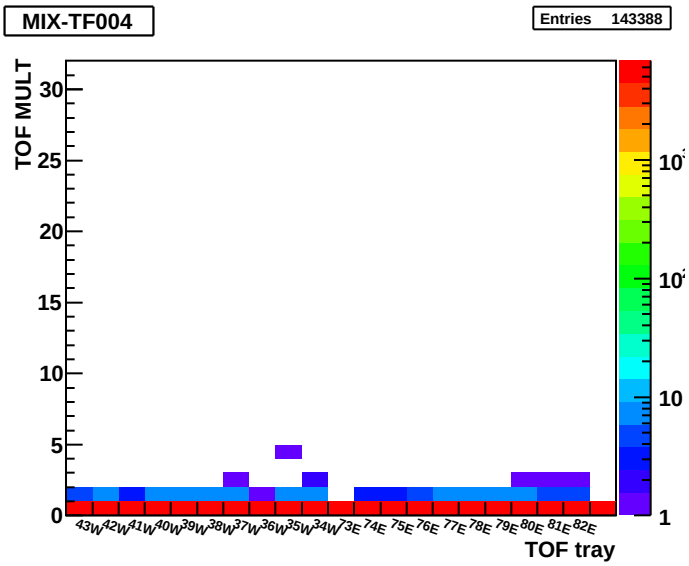

BunchId7Bit (all events)
Entries 3414
0 20 40 60 80 100 120

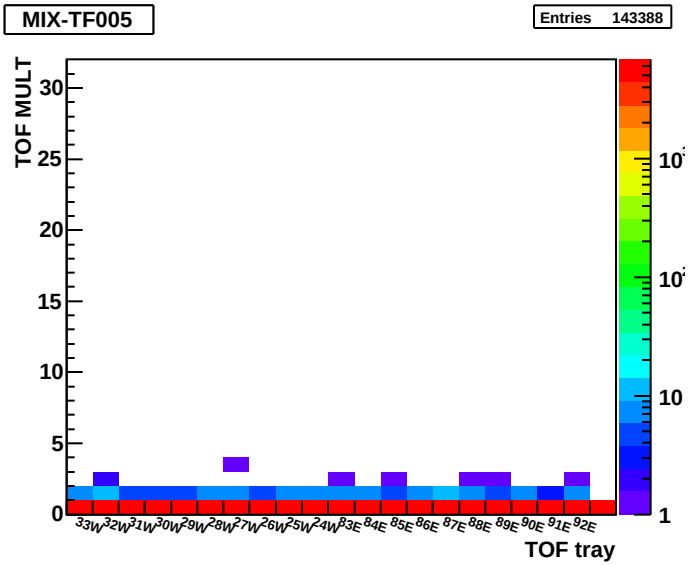

!Yellow-Fill
Entries 3414
0 20 40 60 80 100 120

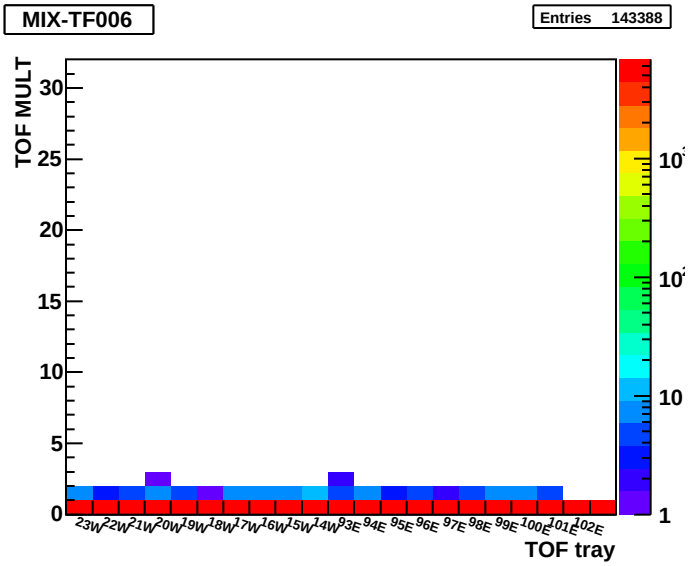

MIX-TF001
Entries 143388
TOF MULT
TOF tray

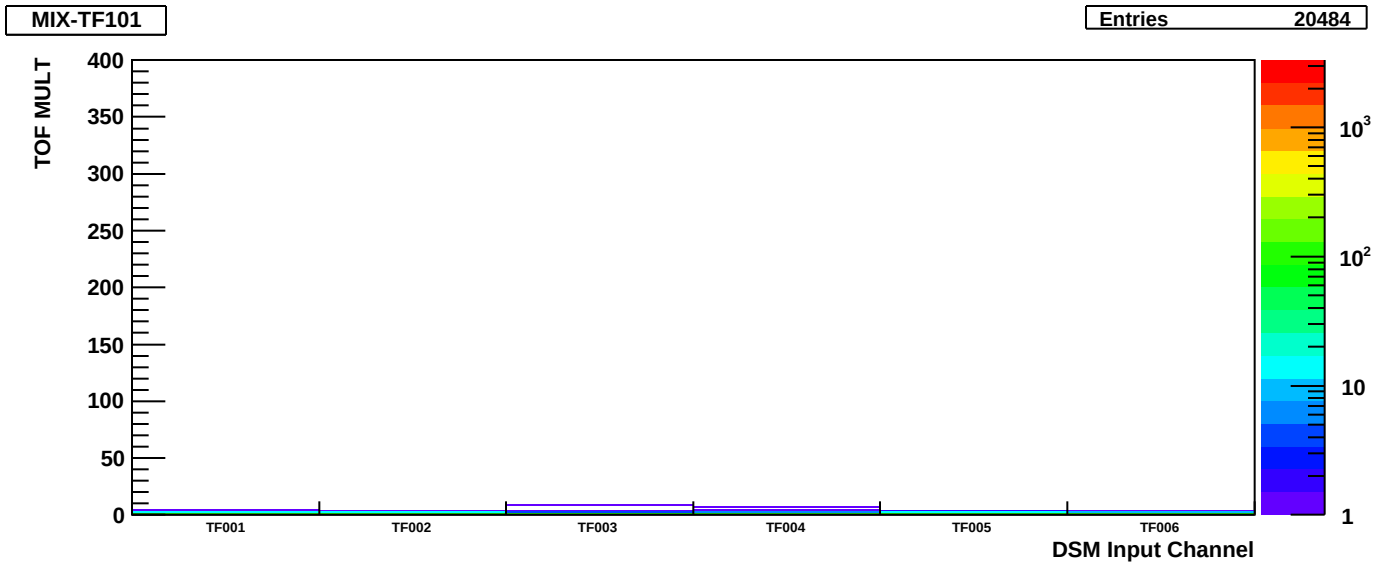

MIX-TF002
Entries 143388
TOF MULT
TOF tray

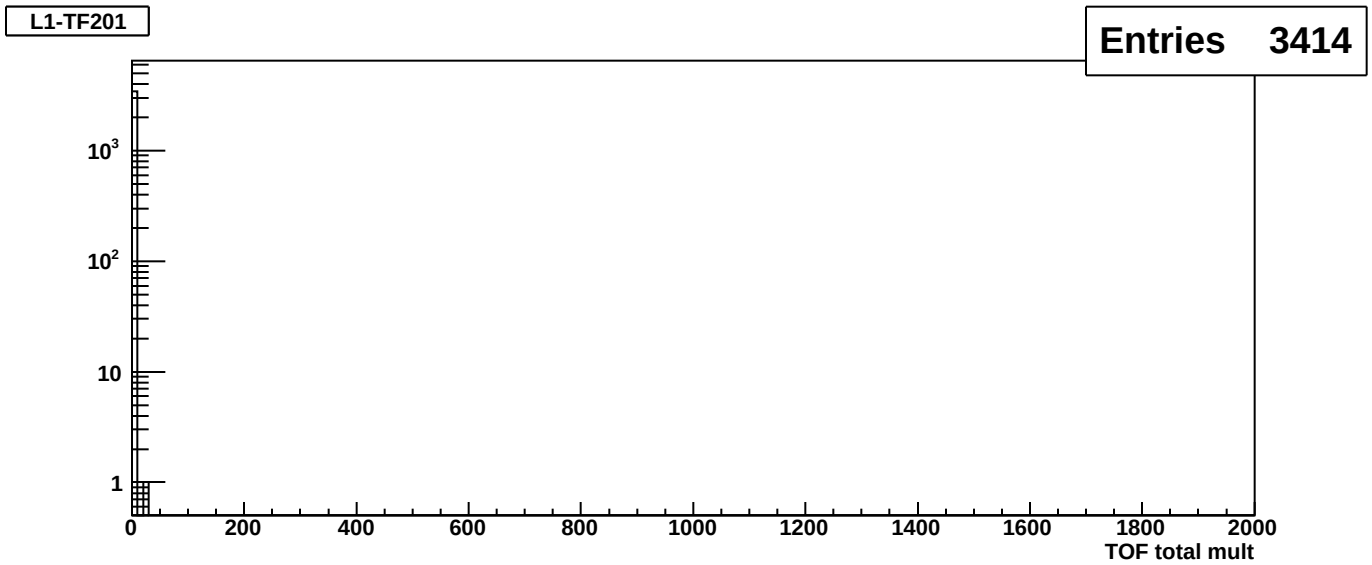

MIX-TF003
Entries 143388
TOF MULT
TOF tray

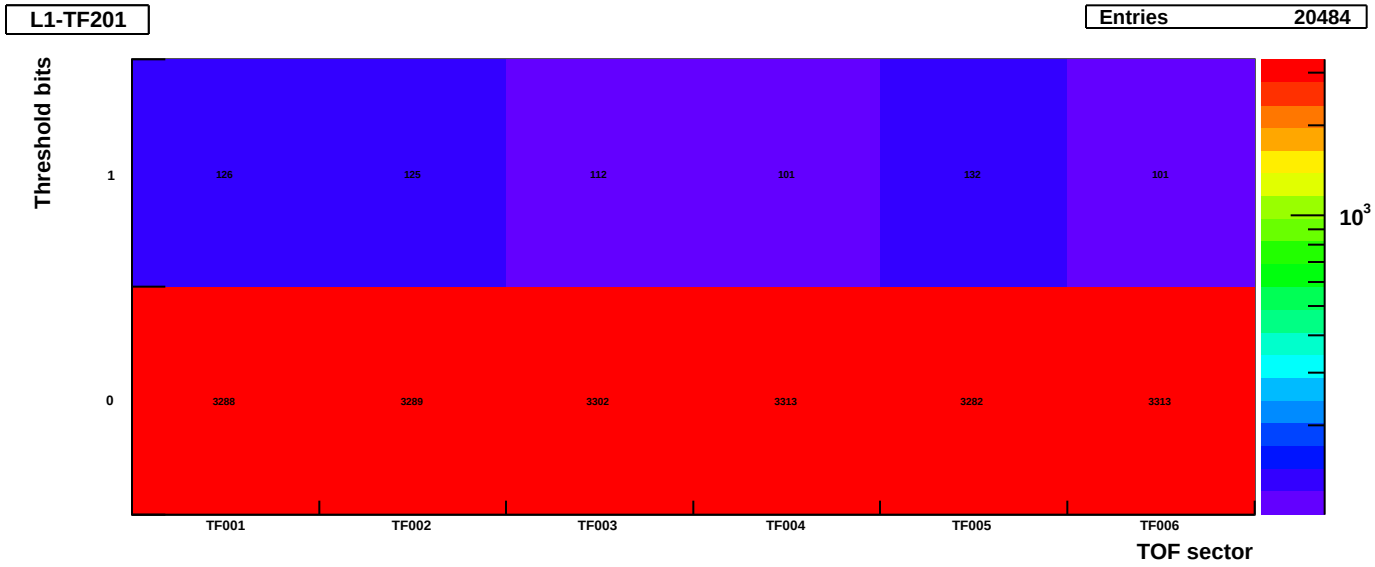

MIX-TF004
Entries 143388
TOF MULT
TOF tray

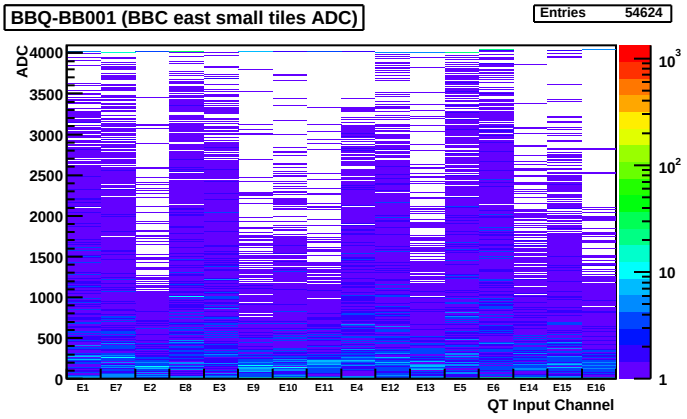

MIX-TF005
Entries 143388
TOF MULT
TOF tray

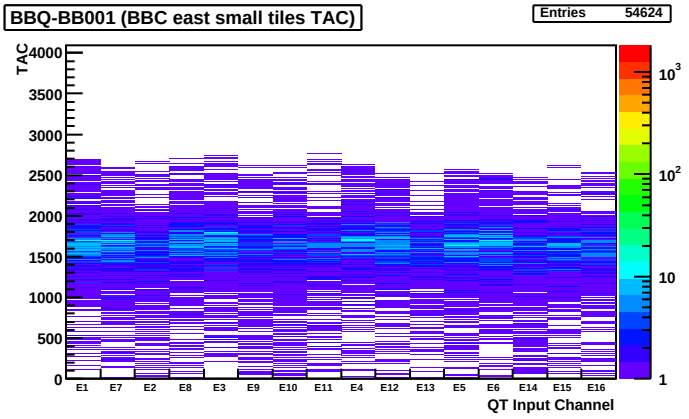

MIX-TF006
Entries 143388
TOF MULT
TOF tray

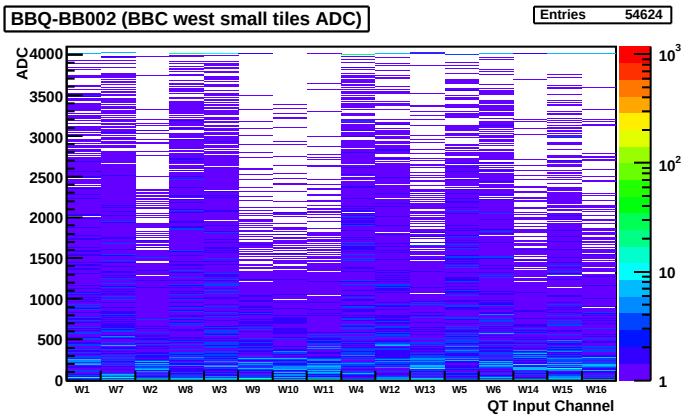

MIX-TF101
Entries 20484
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

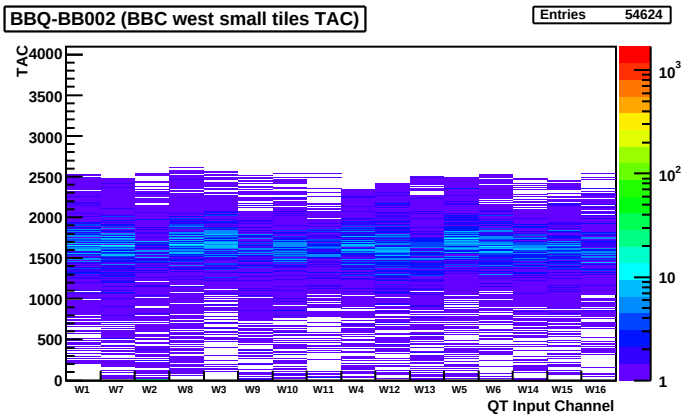

L1-TF201
Entries 3414
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

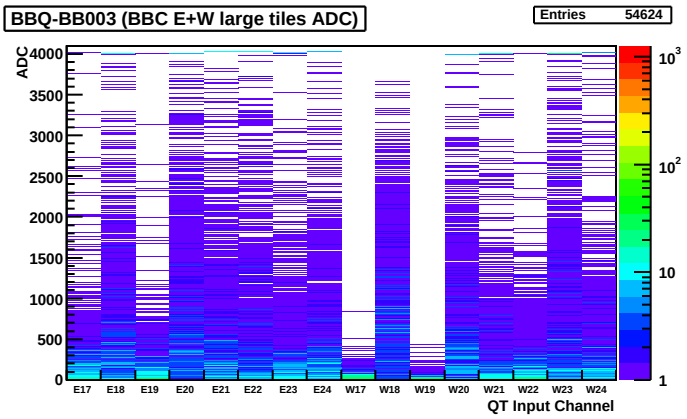

L1-TF201
Entries 20484
Threshold bits
1
0
126
125
112
101
132
101
3288
3289
3302
3313
3282
3313
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3

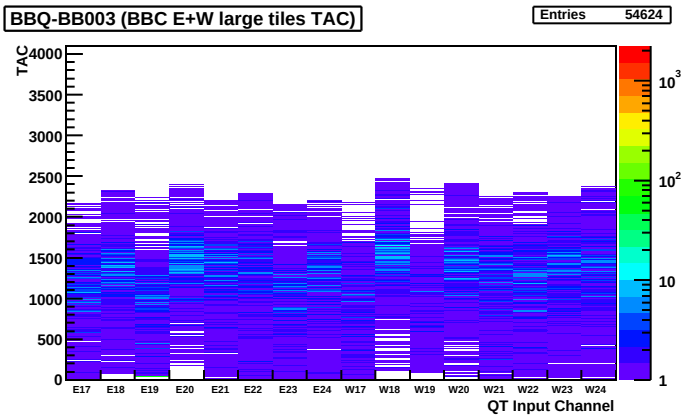

BBQ-BB001 (BBC east small tiles ADC)
Entries 54624
ADC
QT Input Channel

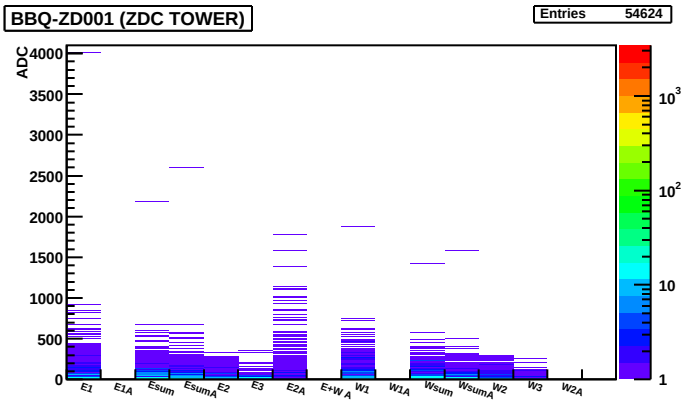

BBQ-BB001 (BBC east small tiles TAC)
Entries 54624
TAC
QT Input Channel

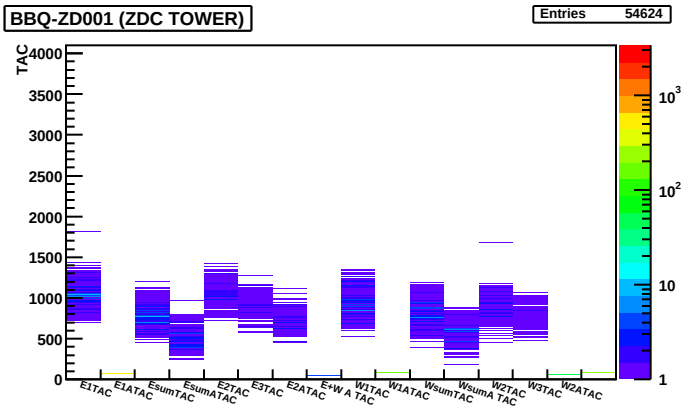

BBQ-BB002 (BBC west small tiles ADC)
Entries 54624
ADC
QT Input Channel

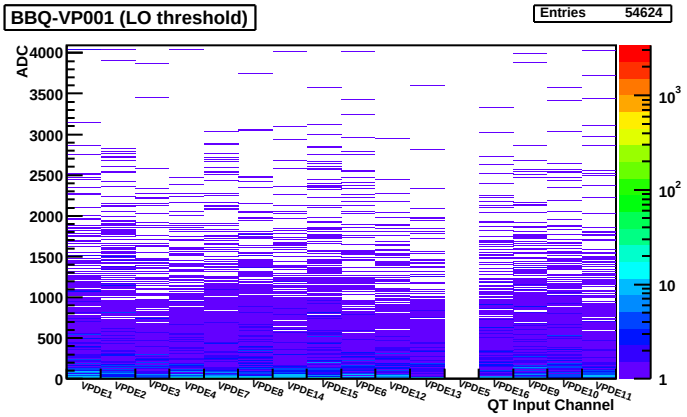

BBQ-BB002 (BBC west small tiles TAC)
Entries 54624
TAC
QT Input Channel

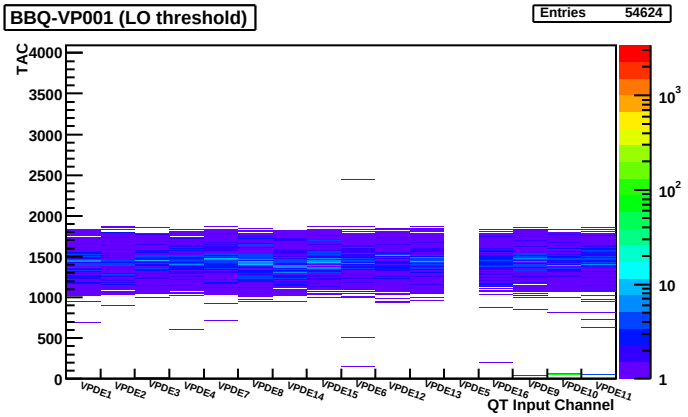

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 54624
ADC
QT Input Channel

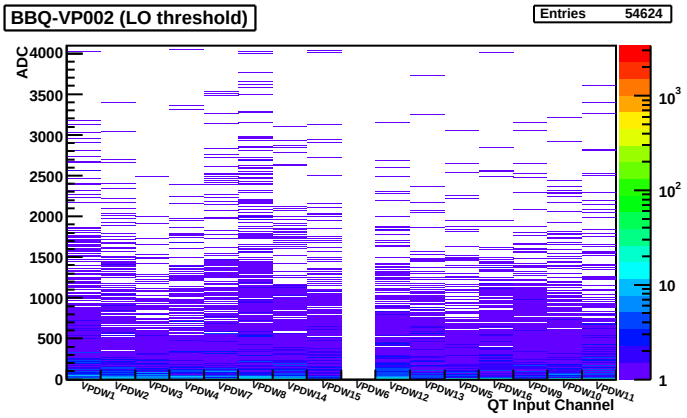

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 54624
TAC
QT Input Channel

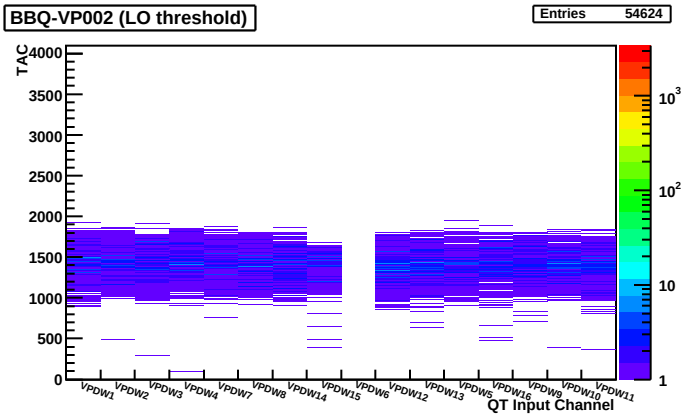

BBQ-ZD001 (ZDC TOWER)
Entries 54624
ADC

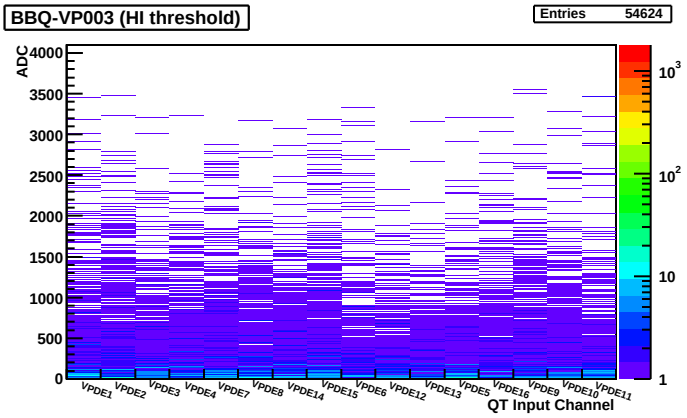

BBQ-ZD001 (ZDC TOWER)
Entries 54624
TAC

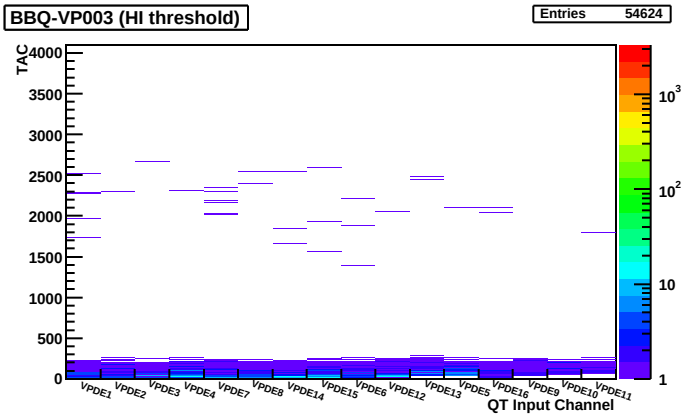

BBQ-VP001 (LO threshold)
Entries 54624
ADC
QT Input Channel

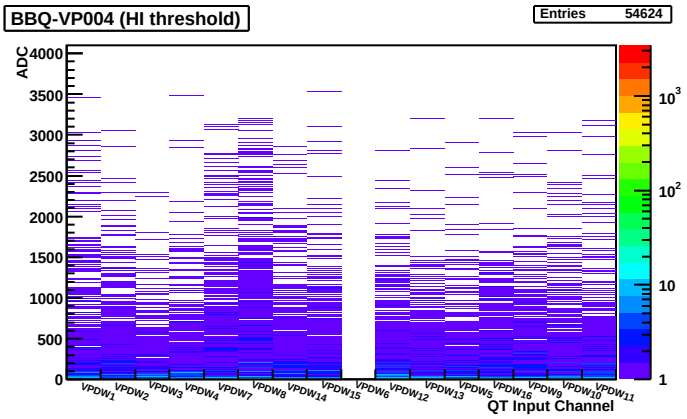

BBQ-VP001 (LO threshold)
Entries 54624
TAC
QT Input Channel

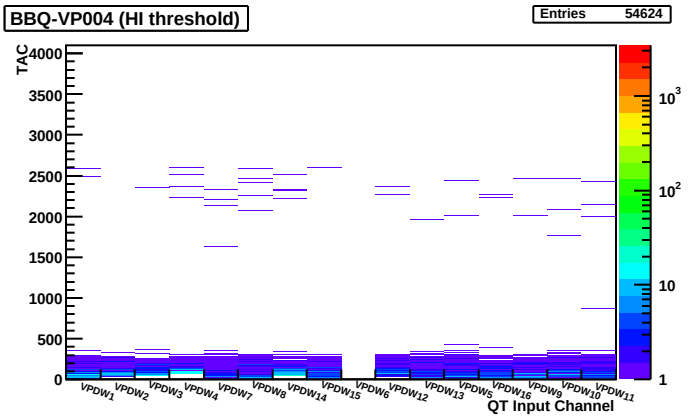

BBQ-VP002 (LO threshold)
Entries 54624
ADC
QT Input Channel

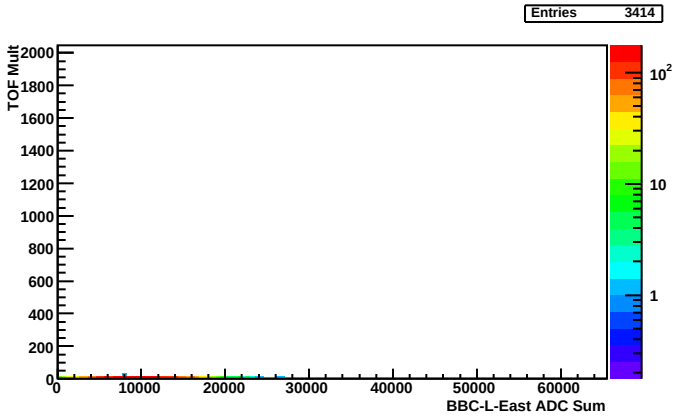

BBQ-VP002 (LO threshold)
Entries 54624
TAC
QT Input Channel

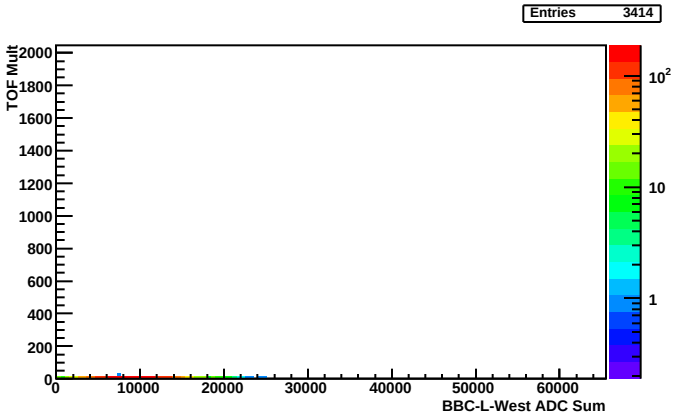

BBQ-VP003 (HI threshold)
Entries 54624
ADC
QT Input Channel

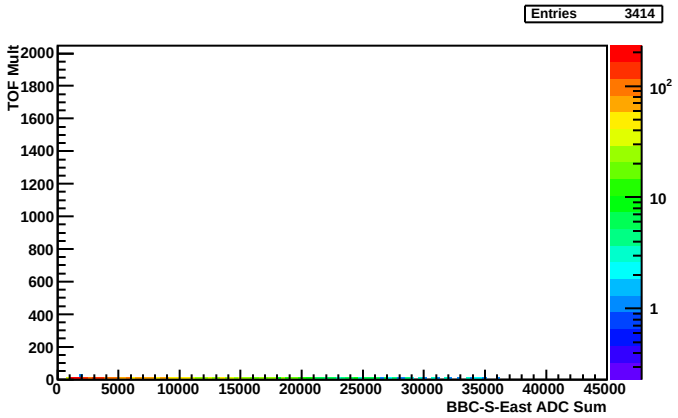

BBQ-VP003 (HI threshold)
Entries 54624
TAC
QT Input Channel

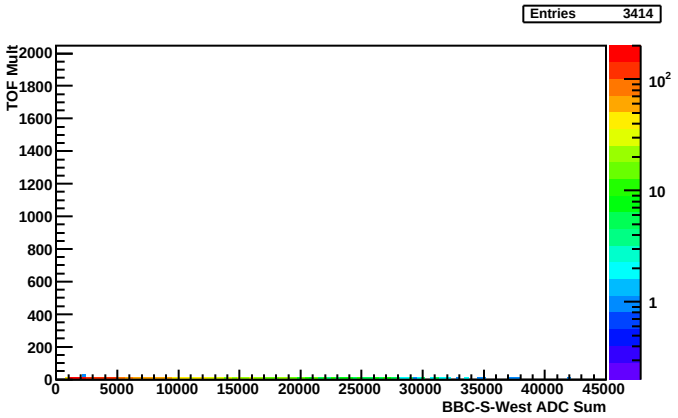

BBQ-VP004 (HI threshold)
Entries 54624
ADC
QT Input Channel

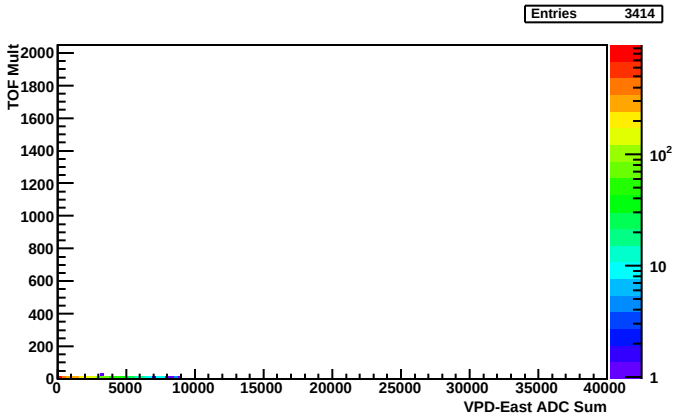

BBQ-VP004 (HI threshold)
Entries 54624
TAC
QT Input Channel

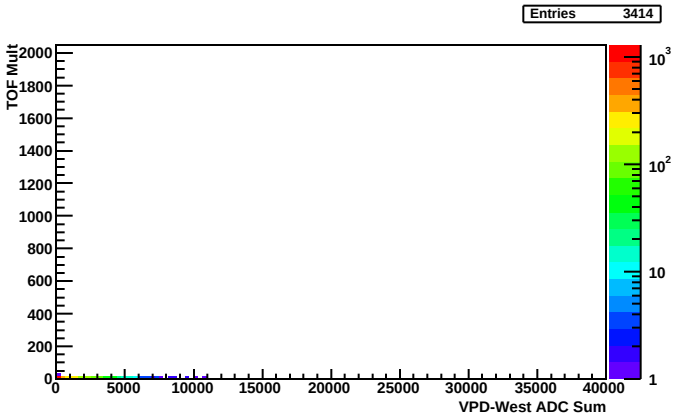

Entries 3414
TOF Mult
BBC-L-East ADC Sum

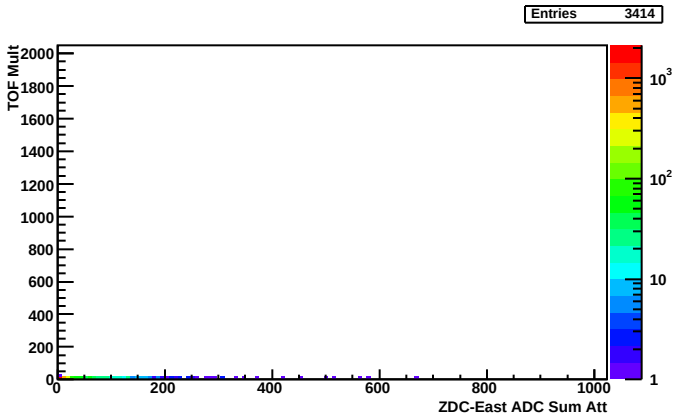

Entries 3414
TOF Mult
BBC-L-West ADC Sum

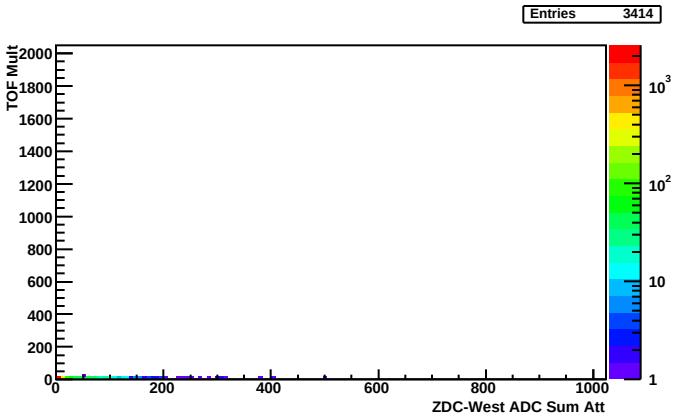

Entries 3414
TOF Mult
BBC-S-East ADC Sum

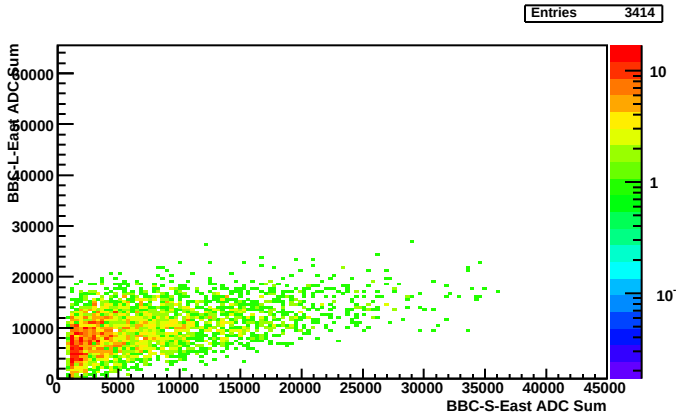

Entries 3414
TOF Mult
BBC-S-West ADC Sum

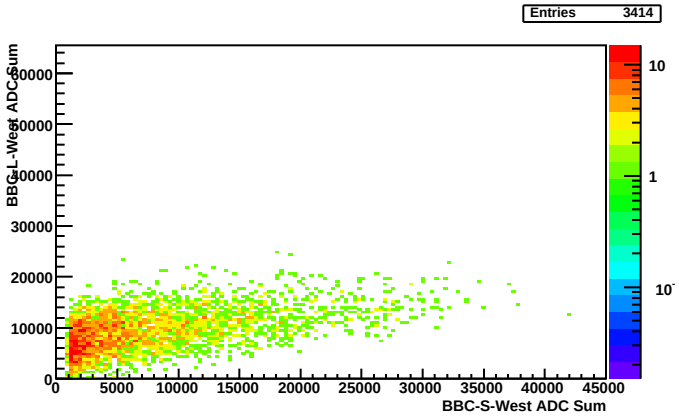

Entries 3414
TOF Mult
VPD-East ADC Sum

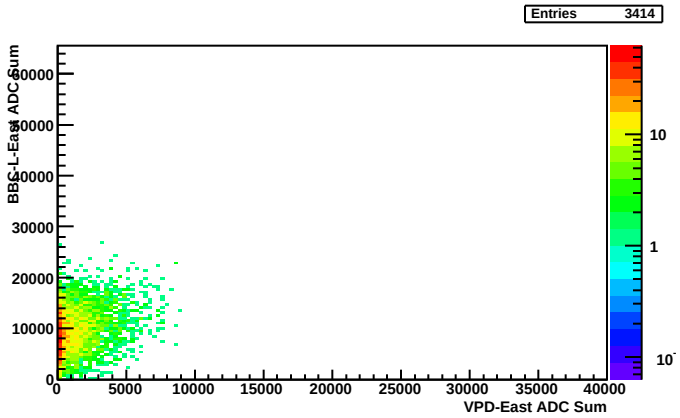

Entries 3414
TOF Mult
VPD-West ADC Sum

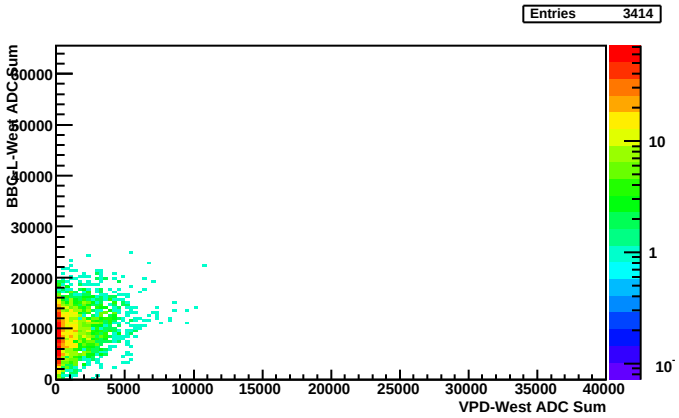

Entries 3414
TOF Mult
ZDC-East ADC Sum Att

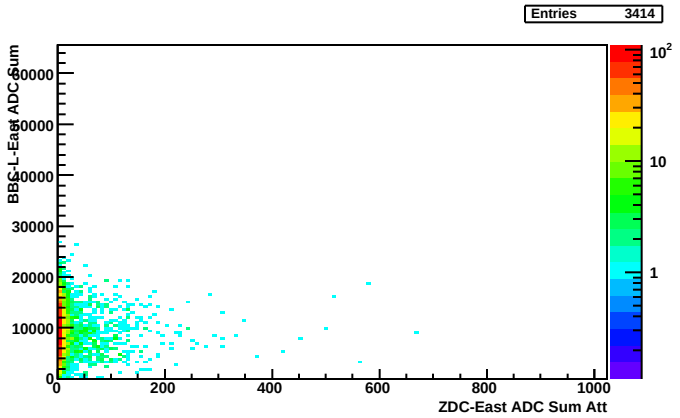

Entries 3414
TOF Mult
ZDC-West ADC Sum Att

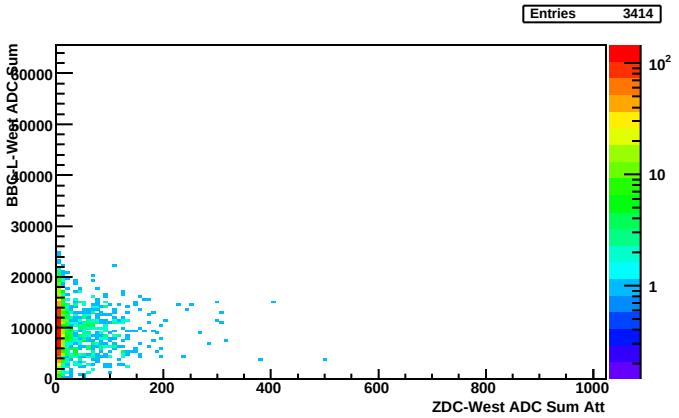

Entries 3414
BBC-L-East ADC Sum
BBC-S-East ADC Sum

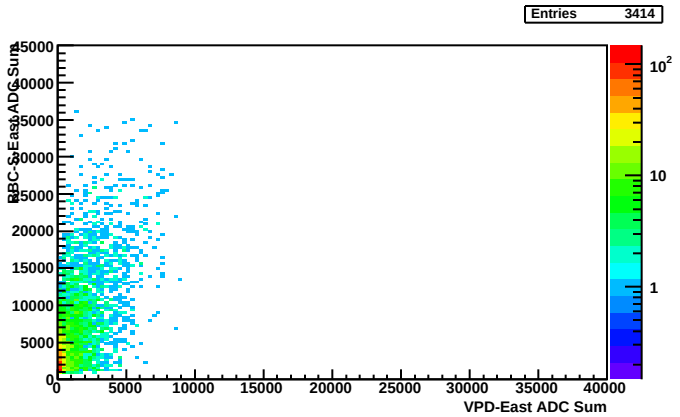

Entries 3414
BBC-L-West ADC Sum
BBC-S-West ADC Sum

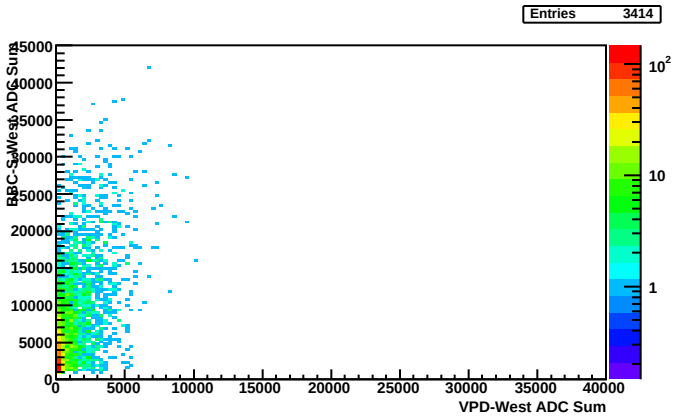

Entries 3414
BBC-L-East ADC Sum
VPD-East ADC Sum

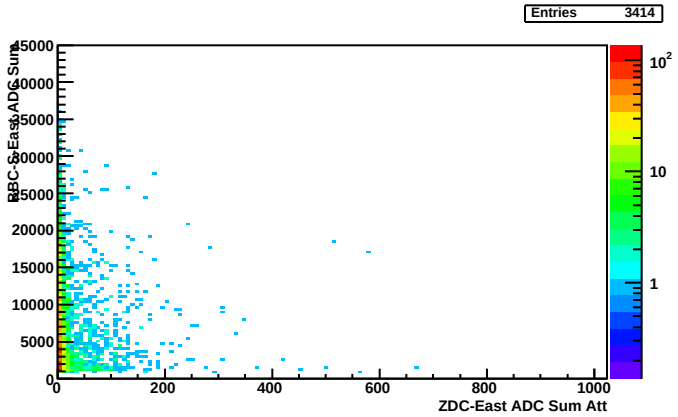

Entries 3414
BBC-L-West ADC Sum
VPD-West ADC Sum

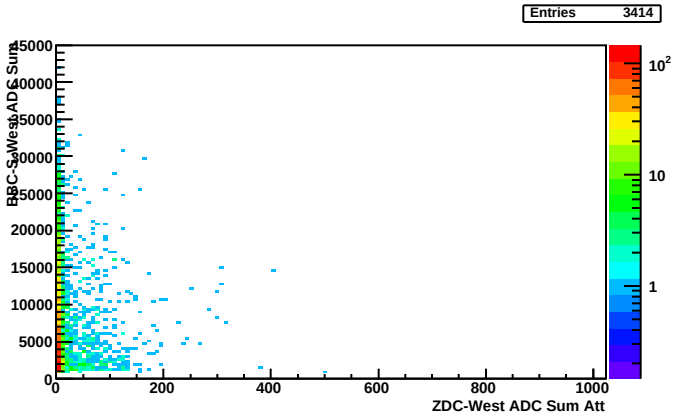

Entries 3414
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

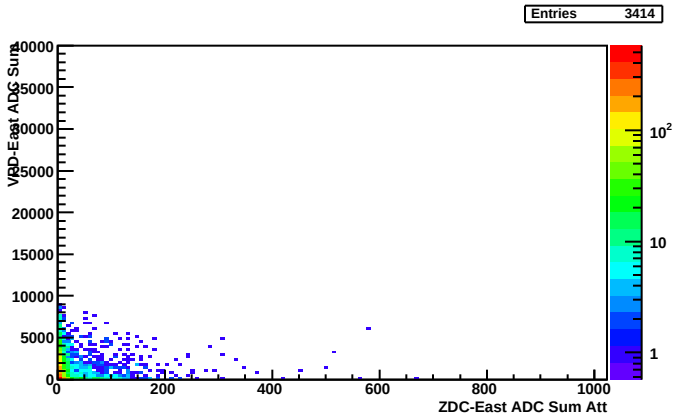

Entries 3414
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

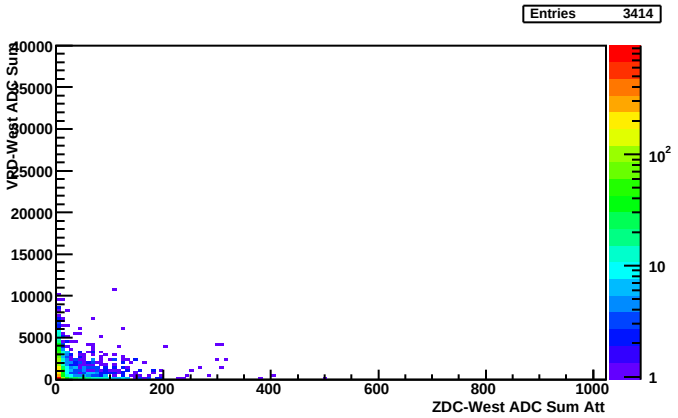

Entries 3414
BBC-S-East ADC Sum
VPD-East ADC Sum

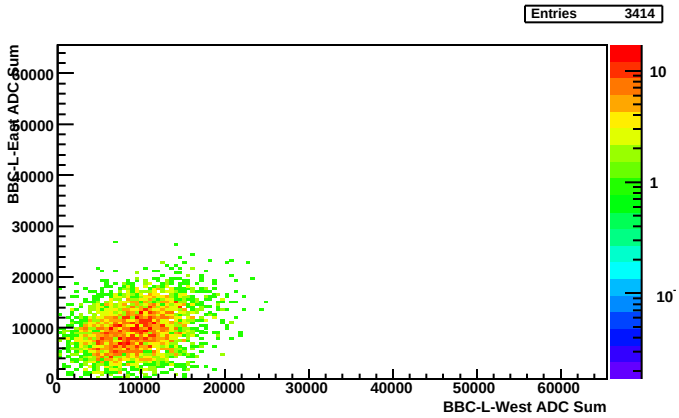

Entries 3414
BBC-S-West ADC Sum
VPD-West ADC Sum

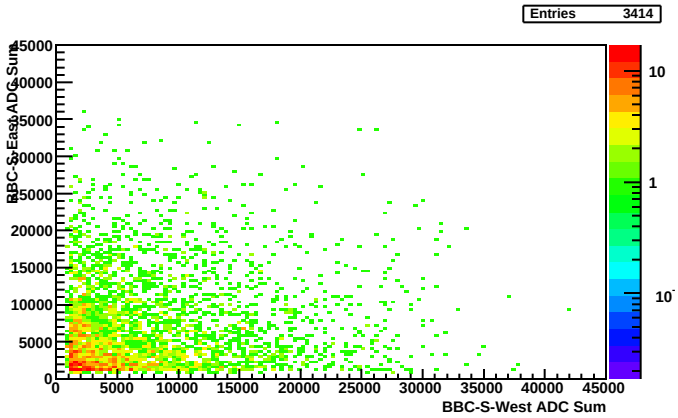

Entries 3414
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

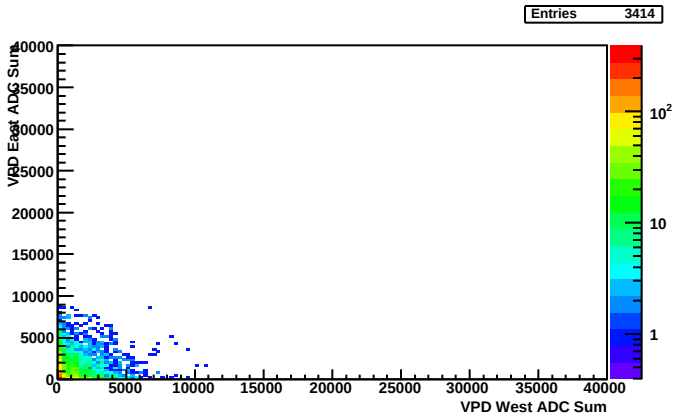

Entries 3414
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

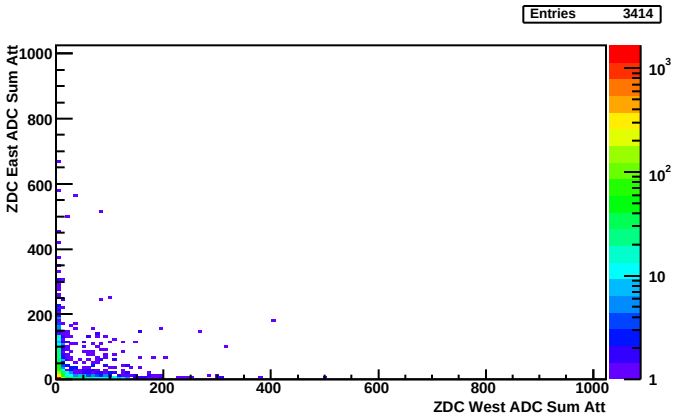

Entries 3414
VPD-East ADC Sum
ZDC-East ADC Sum Att

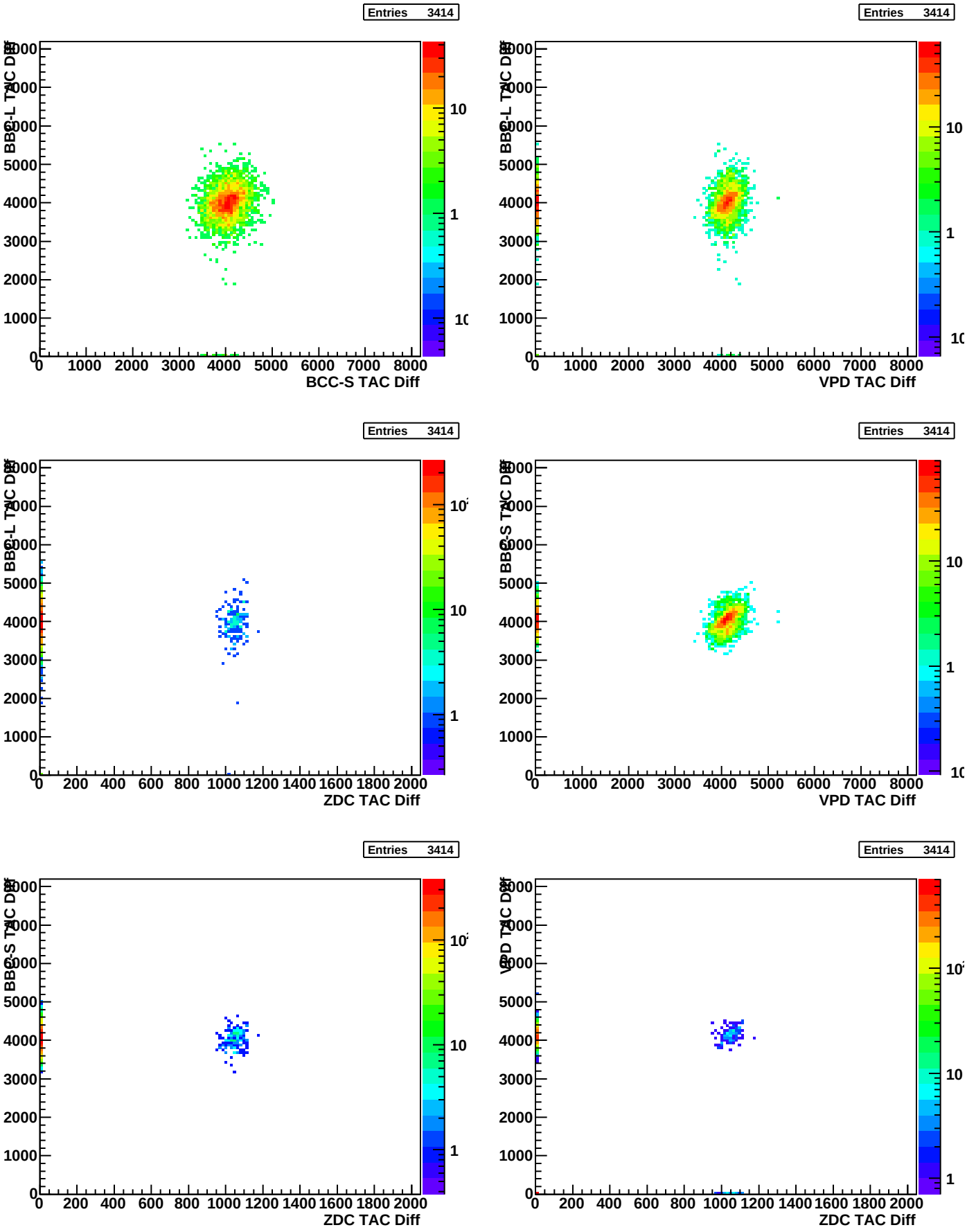

Entries 3414
VPD-West ADC Sum
ZDC-West ADC Sum Att

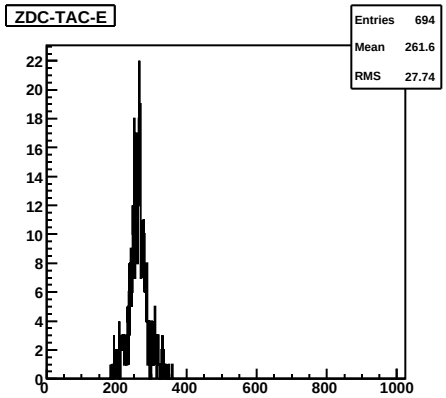

Entries 3414
BBC-L-East ADC Sum
BBC-L-West ADC Sum

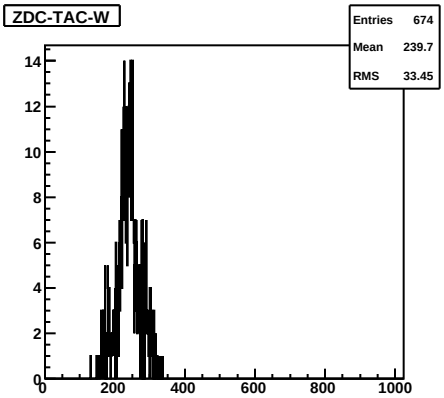

Entries 3414
BBC-S-East ADC Sum
BBC-S-West ADC Sum

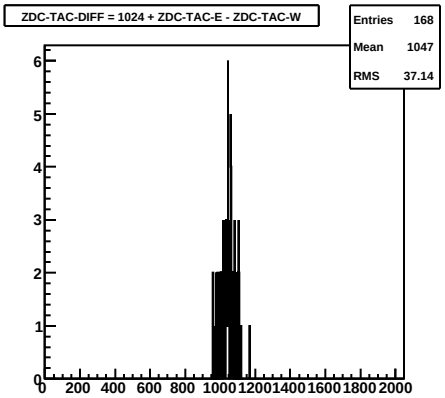

Entries 3414
VPD East ADC Sum
VPD West ADC Sum

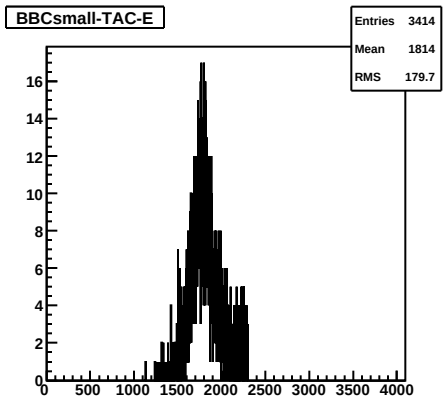

Entries 3414
ZDC East ADC Sum Att
ZDC West ADC Sum Att

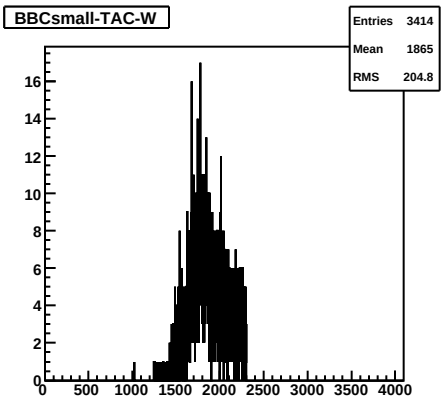

Entries 3414
BBC-L TAC Diff
BCC-S TAC Diff
Entries 3414
BBC-L TAC Diff
VPD TAC Diff
Entries 3414
BBC-L TAC Diff
ZDC TAC Diff
Entries 3414
BBC-S TAC Diff
VPD TAC Diff
Entries 3414
BBC-S TAC Diff
ZDC TAC Diff
Entries 3414
VPD TAC Diff
ZDC TAC Diff

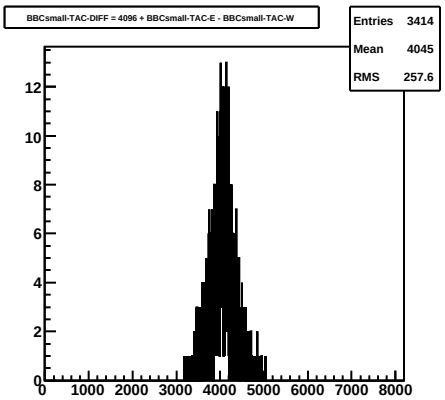

ZDC-TAC-E
Entries 694
Mean 261.6
RMS 27.74

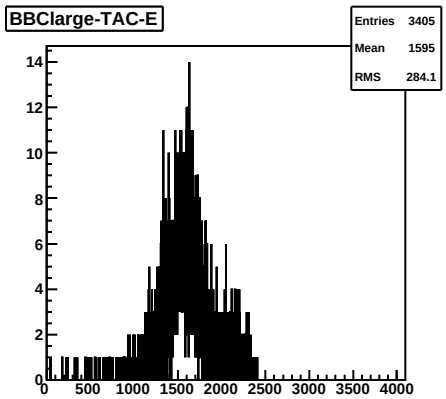

ZDC-TAC-W
Entries 674
Mean 239.7
RMS 33.45

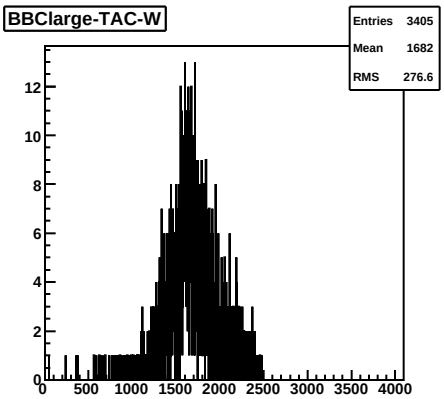

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 168
Mean 1047
RMS 37.14

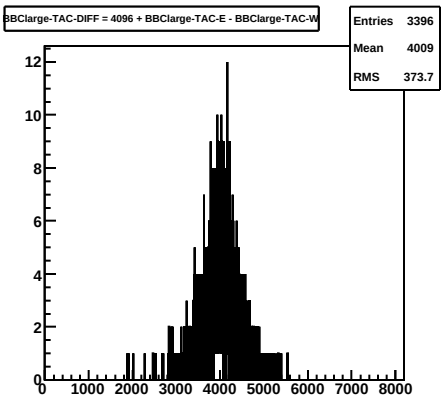

BBCsmall-TAC-E
Entries 3414
Mean 1814
RMS 179.7

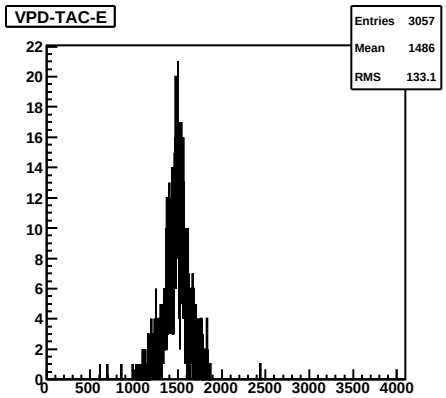

BBCsmall-TAC-W
Entries 3414
Mean 1865
RMS 204.8

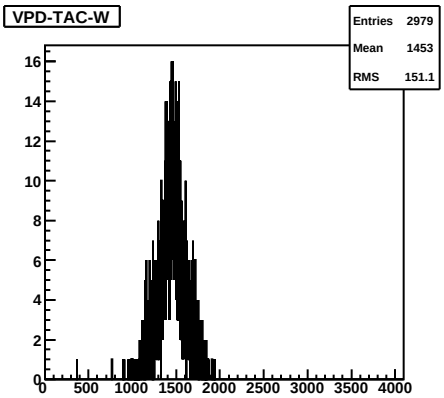

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 3414
Mean 4045
RMS 257.6

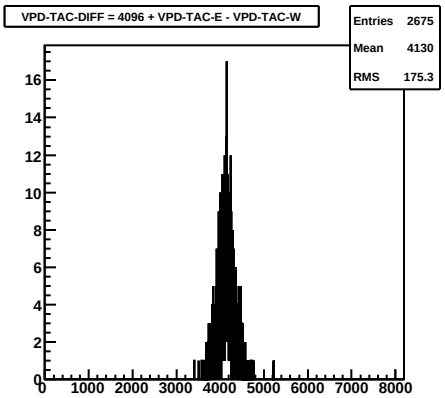

BBClarge-TAC-E
Entries 3405
Mean 1595
RMS 284.1

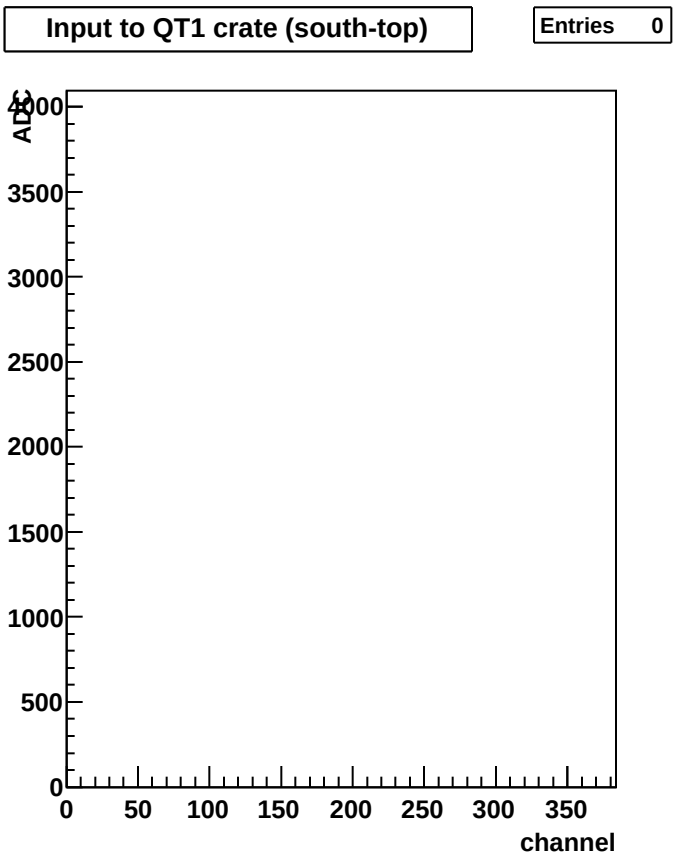

BBClarge-TAC-W
Entries 3405
Mean 1682
RMS 276.6

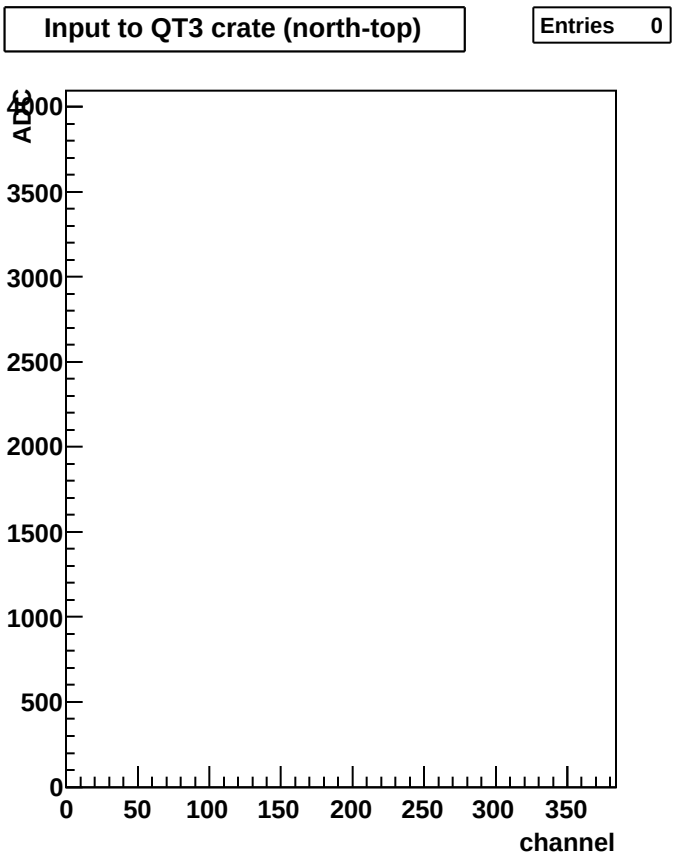

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 3396
Mean 4009
RMS 373.7

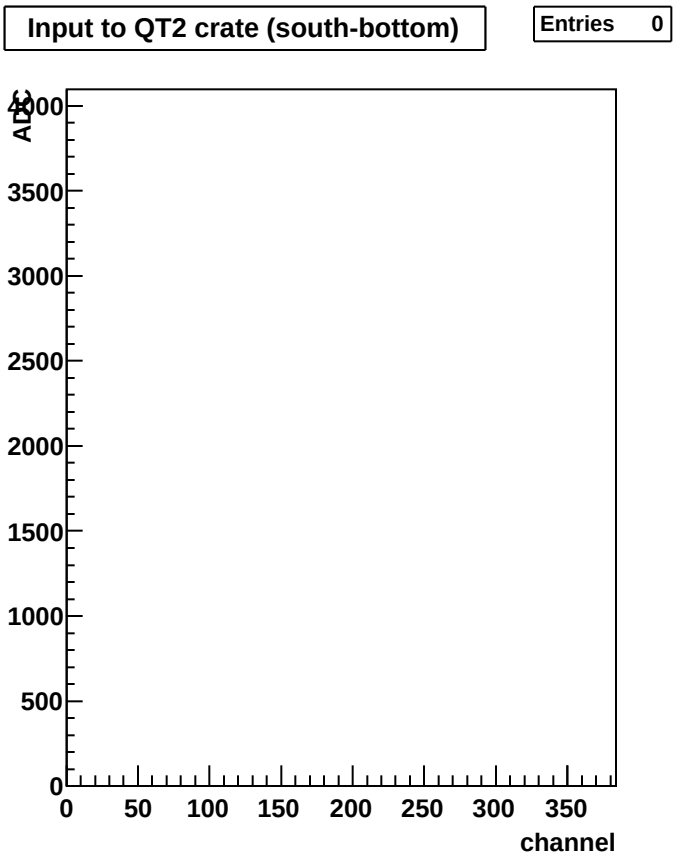

VPD-TAC-E
Entries 3057
Mean 1486
RMS 133.1

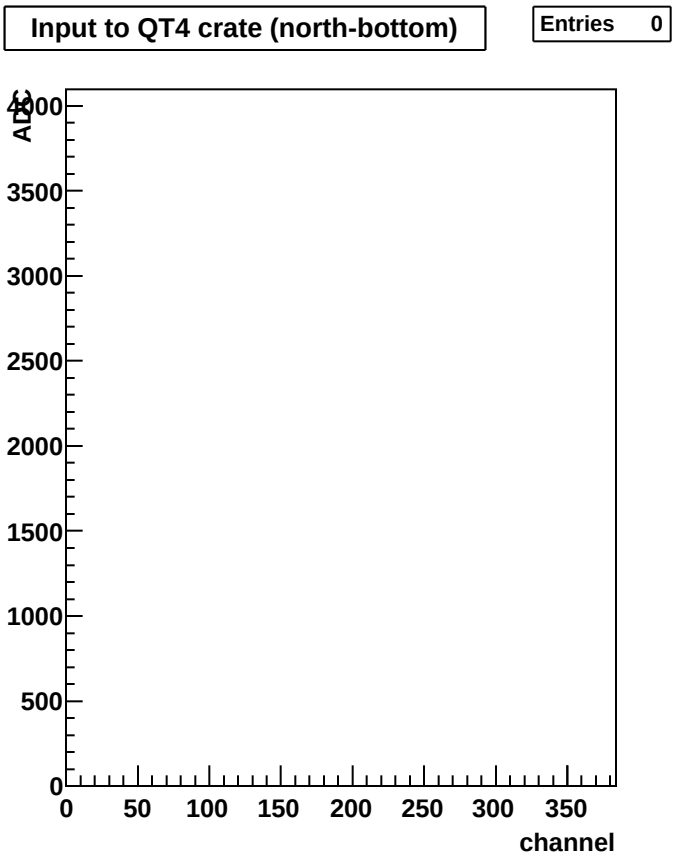

VPD-TAC-W
Entries 2979
Mean 1453
RMS 151.1

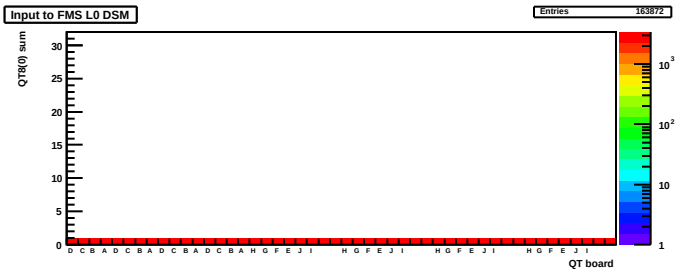

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 2675
Mean 4130
RMS 175.3

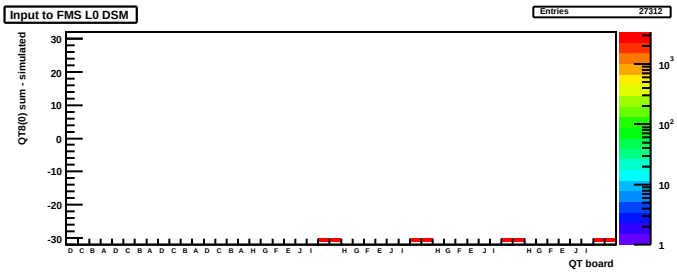

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

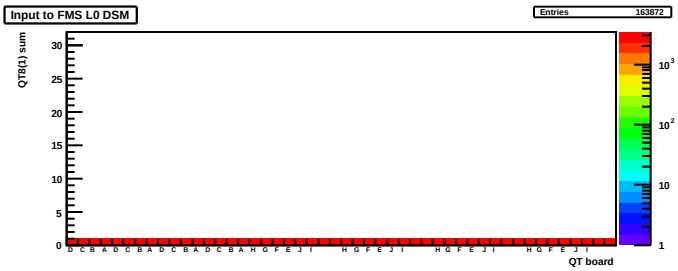

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

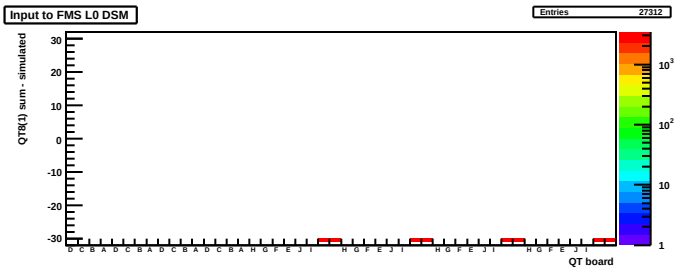

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

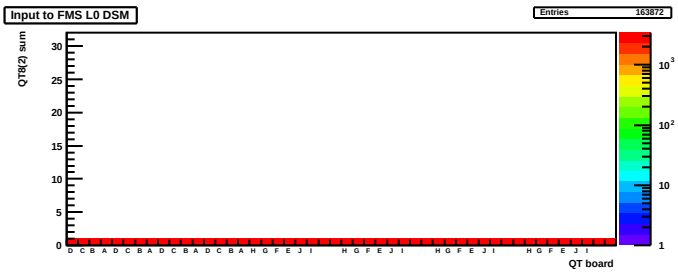

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

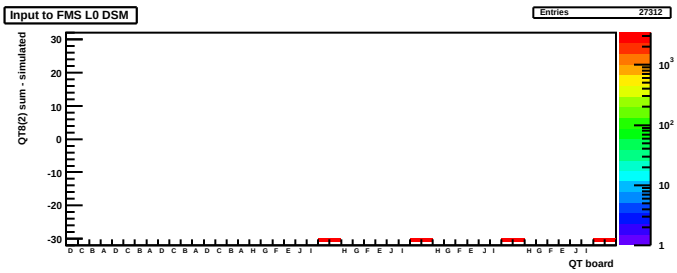

Input to FMS L0 DSM
Entries 163872
QT8(0) sum
QT board

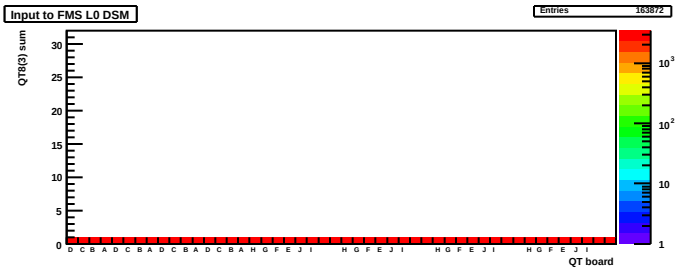

Input to FMS L0 DSM
Entries 27312
QT8(0) sum - simulated
QT board

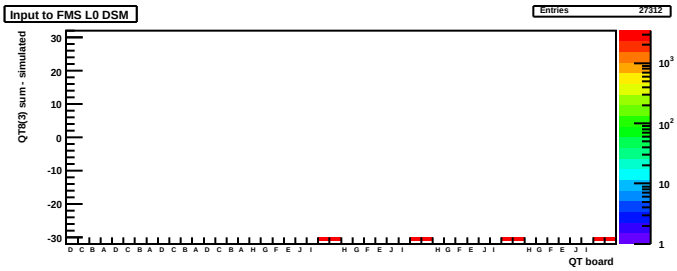

Input to FMS L0 DSM
Entries 163872
QT8(1) sum
QT board

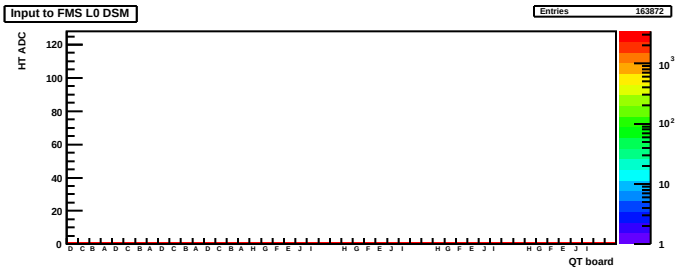

Input to FMS L0 DSM
Entries 27312
QT8(1) sum - simulated
QT board

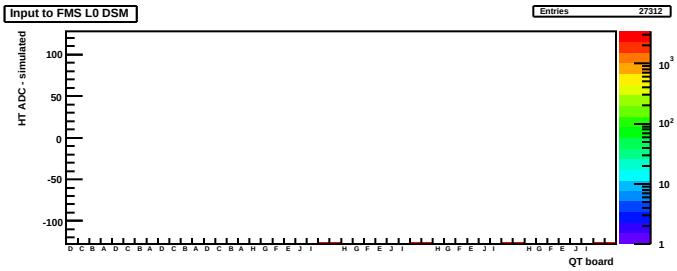

Input to FMS L0 DSM
Entries 163872
QT8(2) sum
QT board

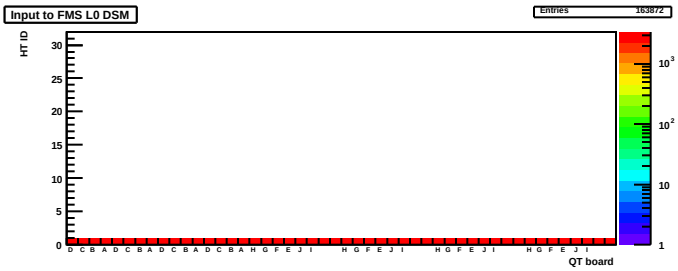

Input to FMS L0 DSM
Entries 27312
QT8(2) sum - simulated
QT board

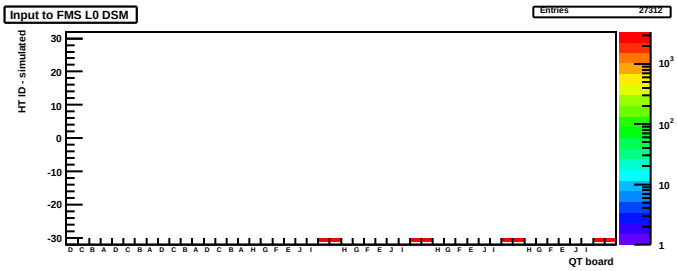

Input to FMS L0 DSM
Entries 163872
QT8(3) sum
QT board

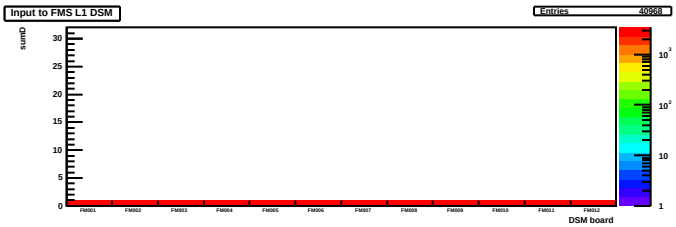

Input to FMS L0 DSM
Entries 27312
QT8(3) sum - simulated
QT board

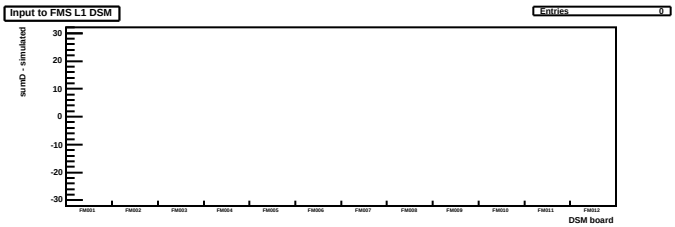

Input to FMS L0 DSM
Entries 163872
HT ADC
QT board

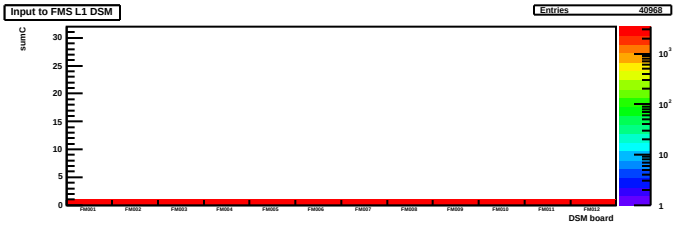

Input to FMS L0 DSM
Entries 27312
HT ADC - simulated
QT board

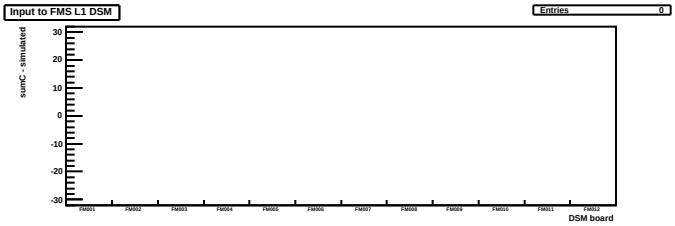

Input to FMS L0 DSM
Entries 163872
HT ID
QT board

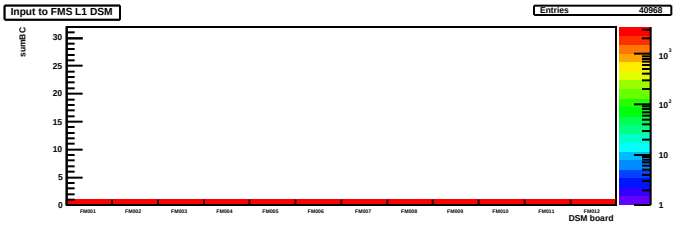

Input to FMS L0 DSM
Entries 27312
HT ID - simulated
QT board

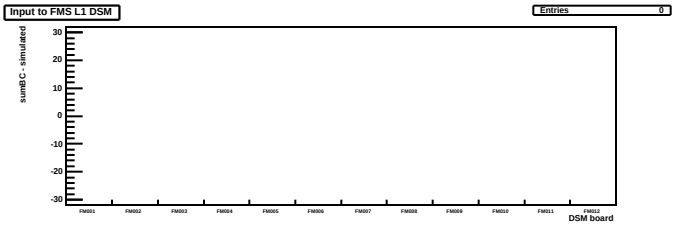

Input to FMS L1 DSM
Entries 40968
sumD
DSM board

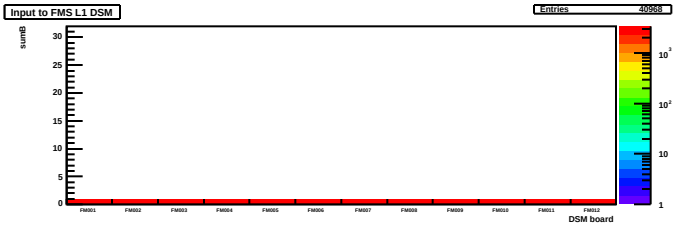

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

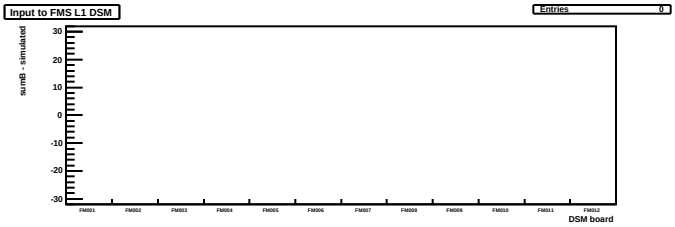

Input to FMS L1 DSM
Entries 40968
sumC
DSM board

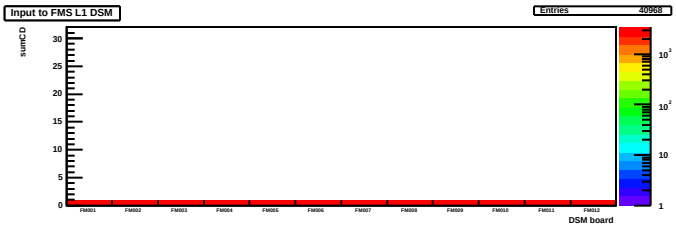

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

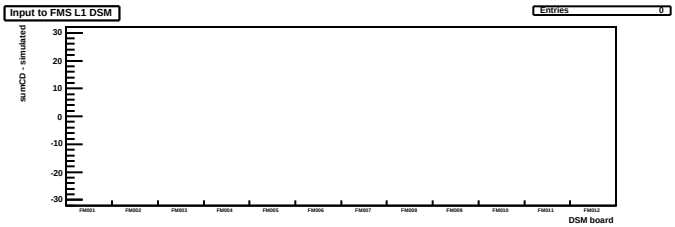

Input to FMS L1 DSM
Entries 40968
sumBC
DSM board

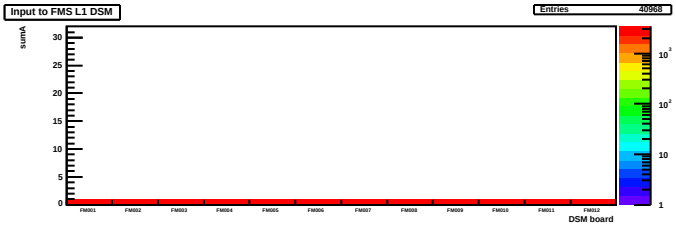

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

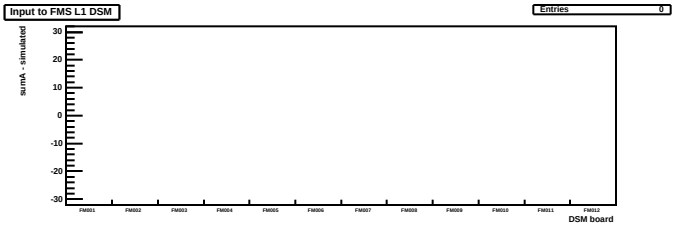

Input to FMS L1 DSM
Entries 40968
sumB
DSM board

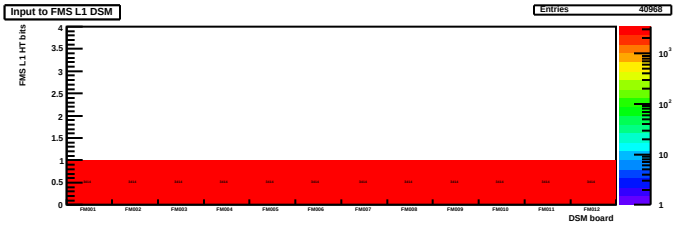

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

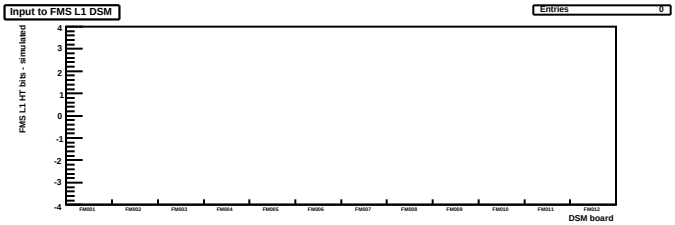

Input to FMS L1 DSM
Entries 40968
sumCD
DSM board

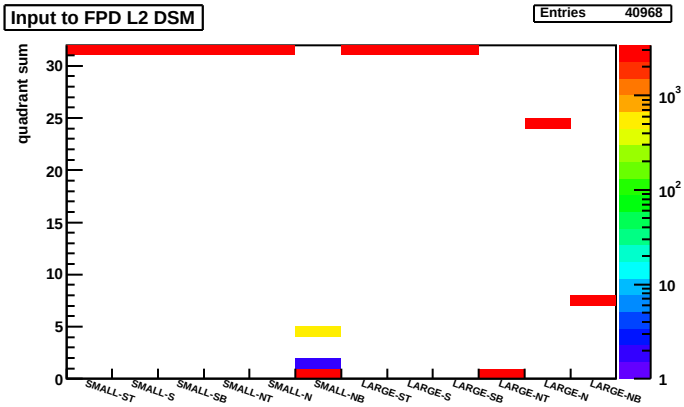

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

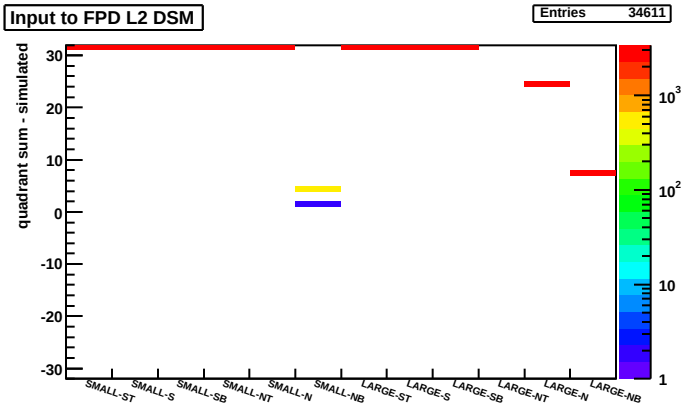

Input to FMS L1 DSM
Entries 40968
sumA
DSM board

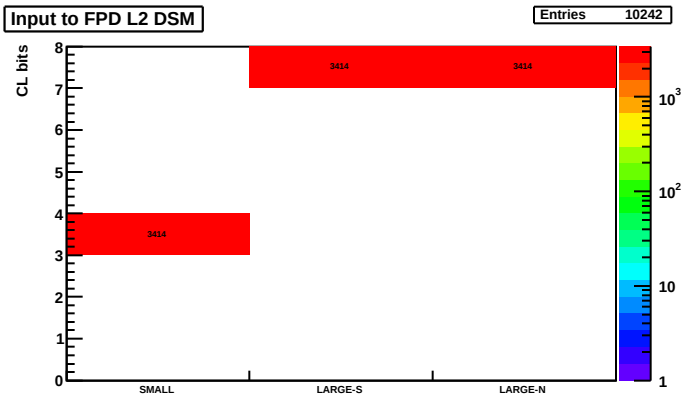

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

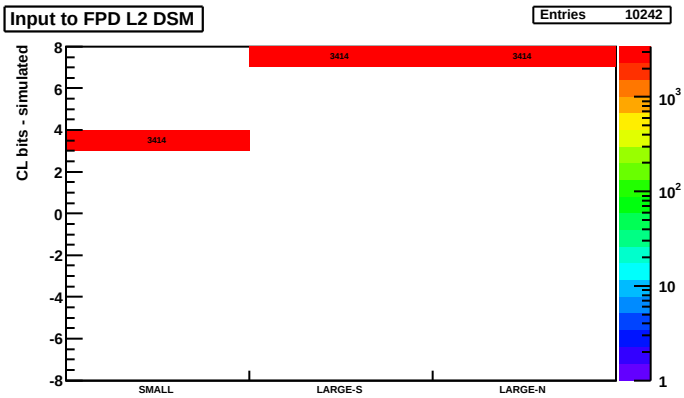

Input to FMS L1 DSM
Entries 40968
FMS L1 HT bits
DSM board

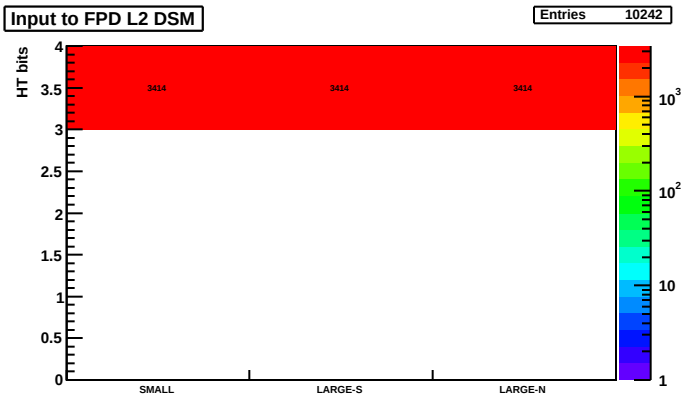

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

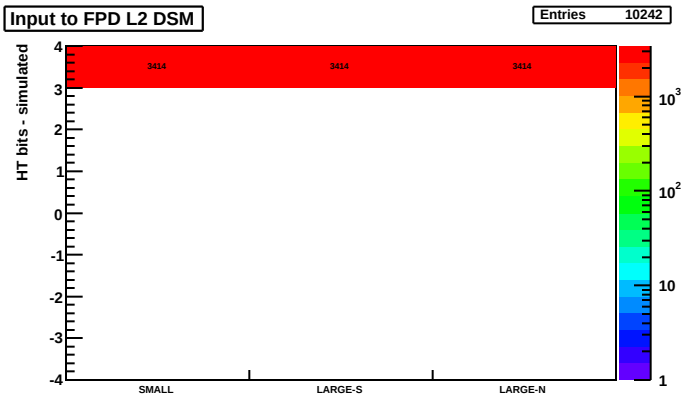

Input to FPD L2 DSM
Entries 40968
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

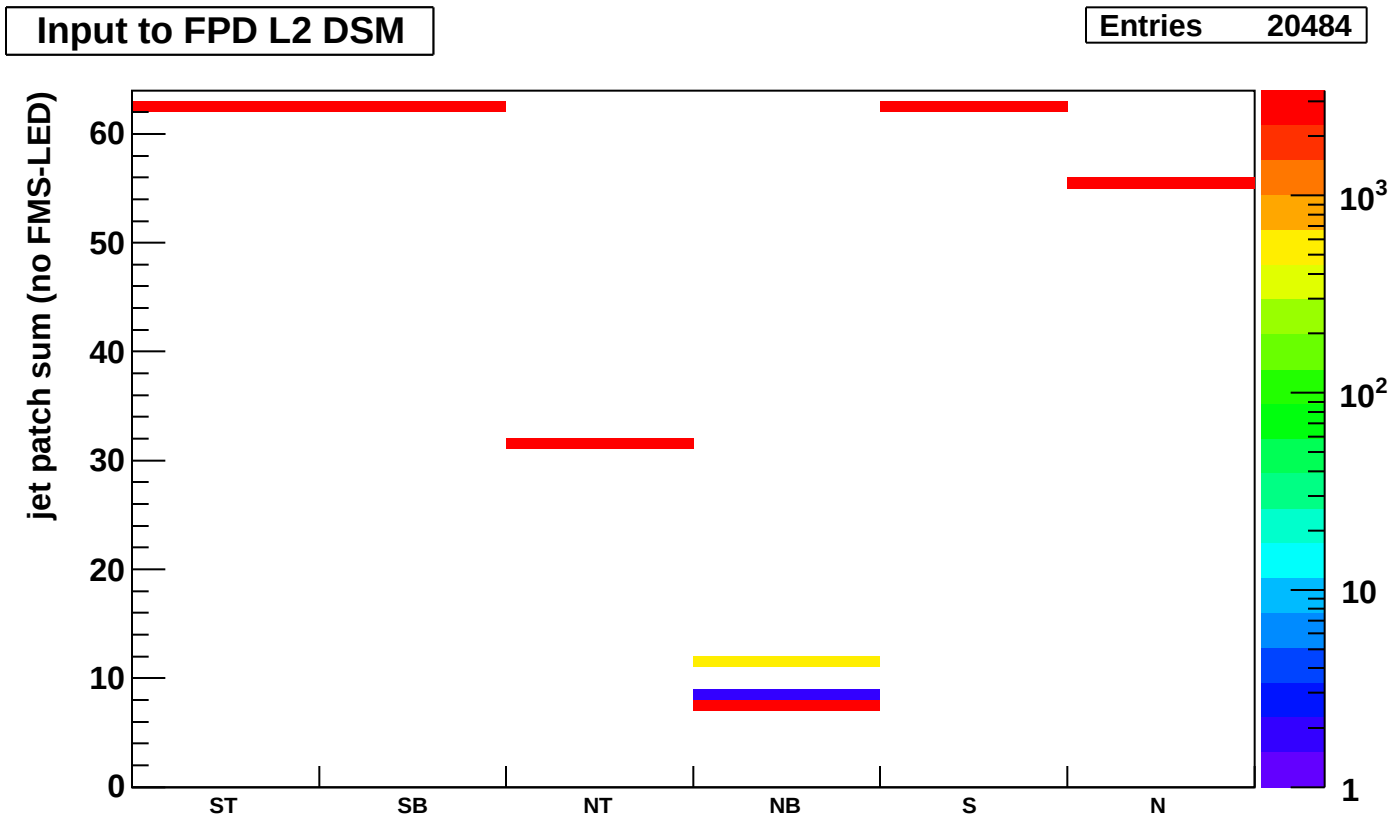

Input to FPD L2 DSM
Entries 34611
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

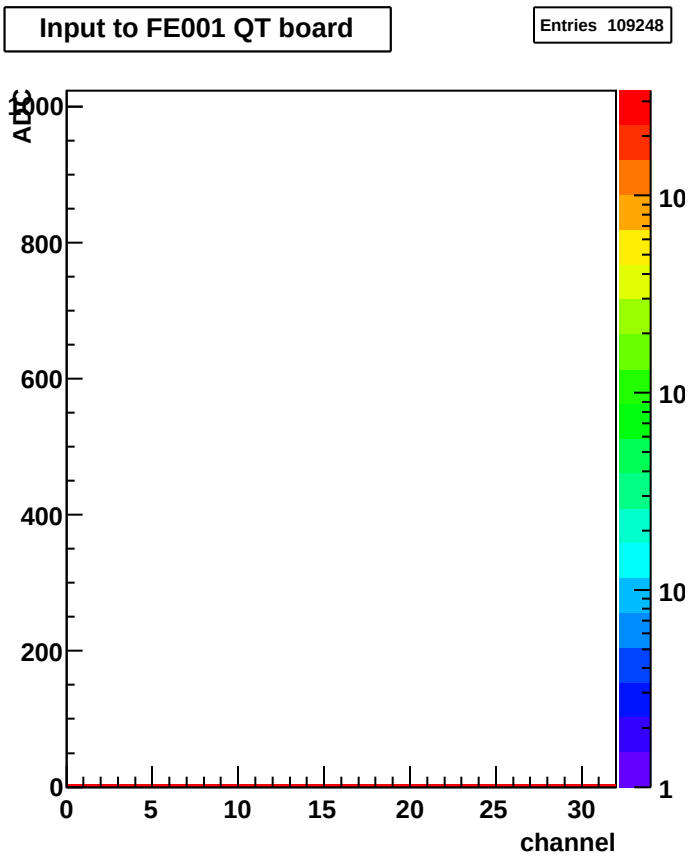

Input to FPD L2 DSM
Entries 10242
CL bits
3414
3414
3414
SMALL
LARGE-S
LARGE-N

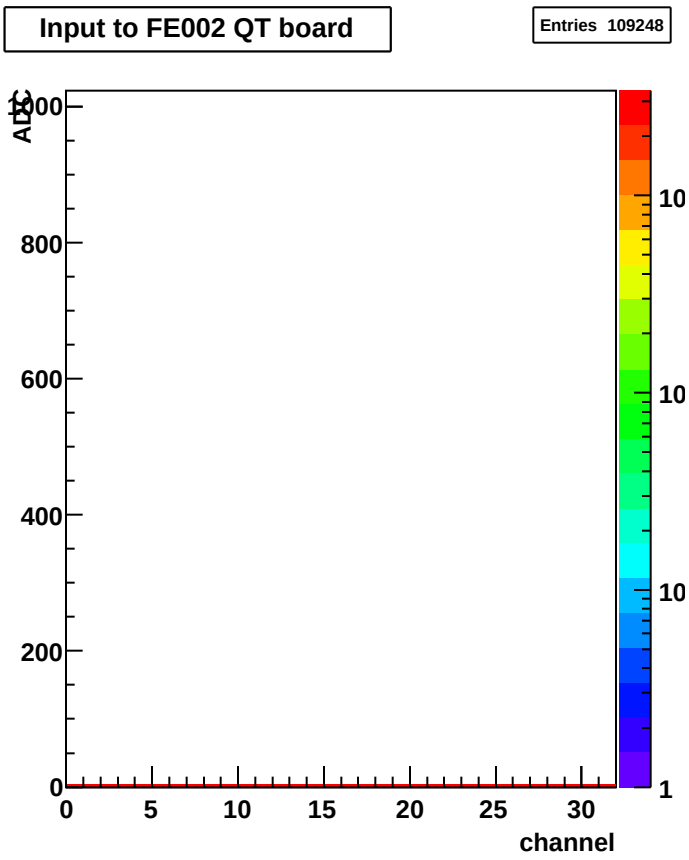

Input to FPD L2 DSM
Entries 10242
CL bits - simulated
3414
3414
3414
SMALL
LARGE-S
LARGE-N

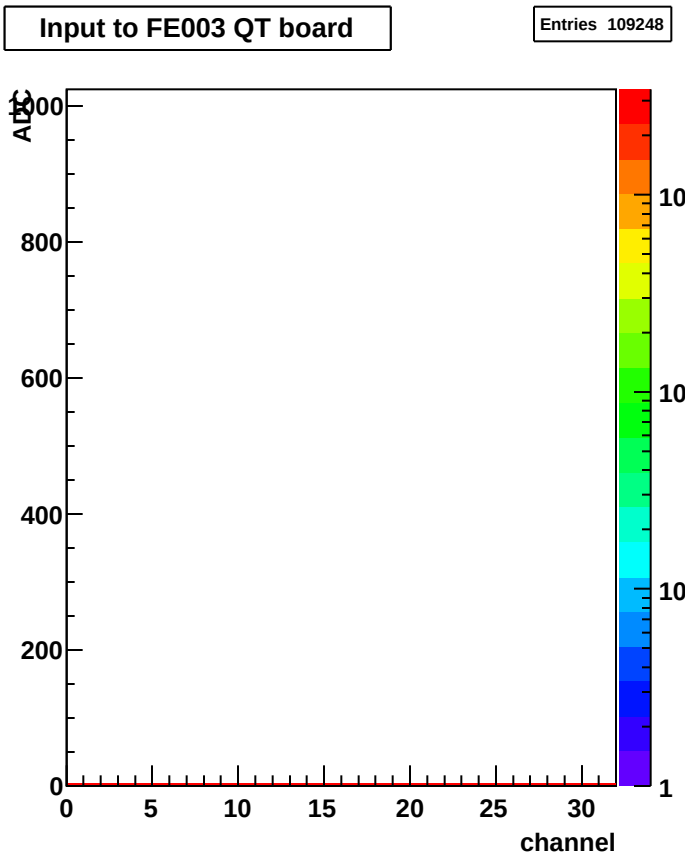

Input to FPD L2 DSM
Entries 10242
HT bits
3414
3414
3414
SMALL
LARGE-S
LARGE-N

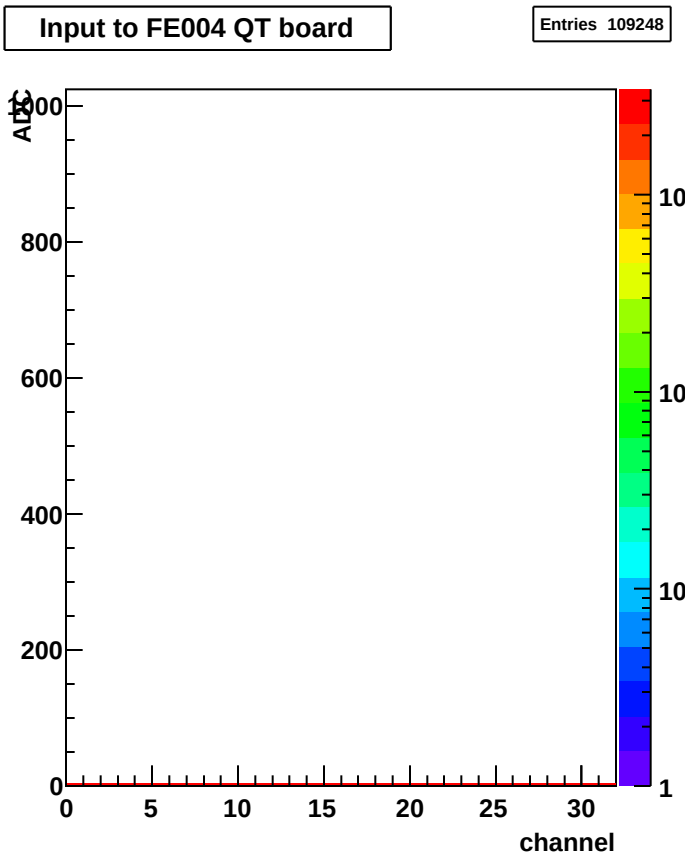

Input to FPD L2 DSM
Entries 10242
HT bits - simulated
3414
3414
3414
SMALL
LARGE-S
LARGE-N

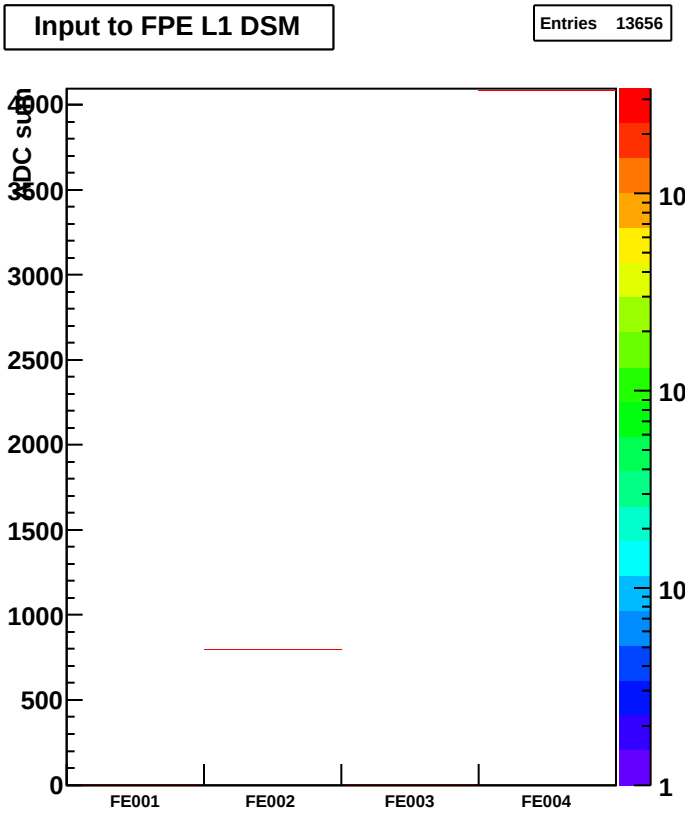

Input to FPD L2 DSM
Entries 20484
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3

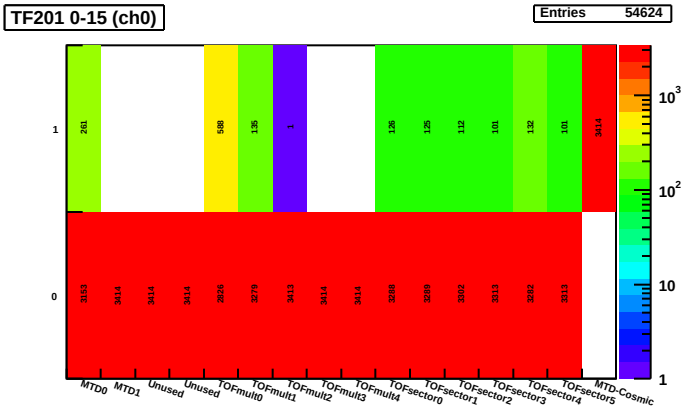

Input to FE001 QT board
Entries 109248
ADC
channel

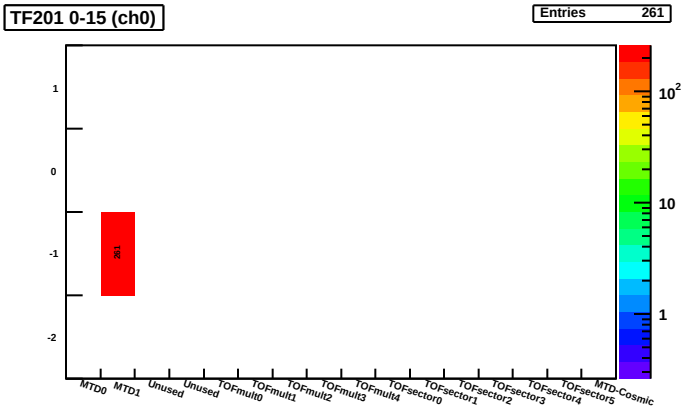

Input to FE002 QT board
Entries 109248
ADC
channel

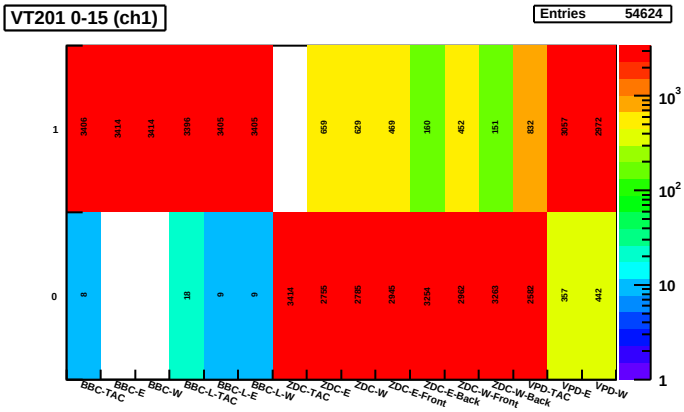

Input to FE003 QT board
Entries 109248
ADC
channel

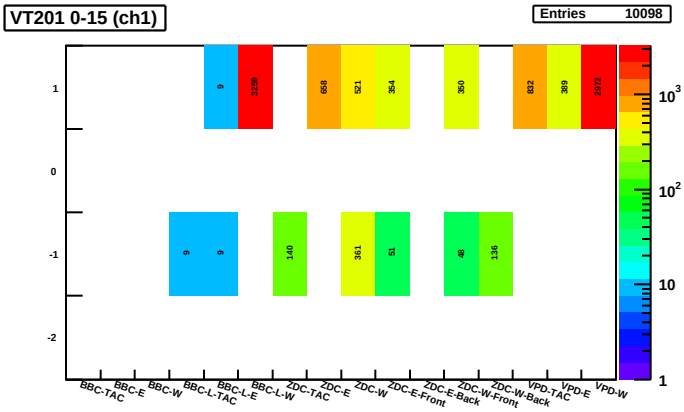

Input to FE004 QT board
Entries 109248
ADC
channel

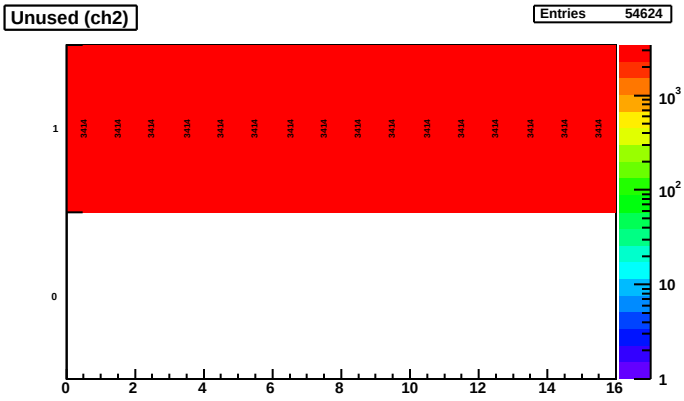

Input to FPE L1 DSM
Entries 13656
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

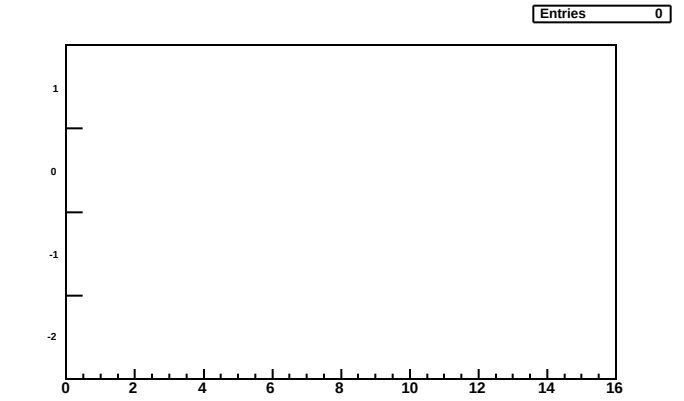

TF201 0-15 (ch0)
Entries 54624
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

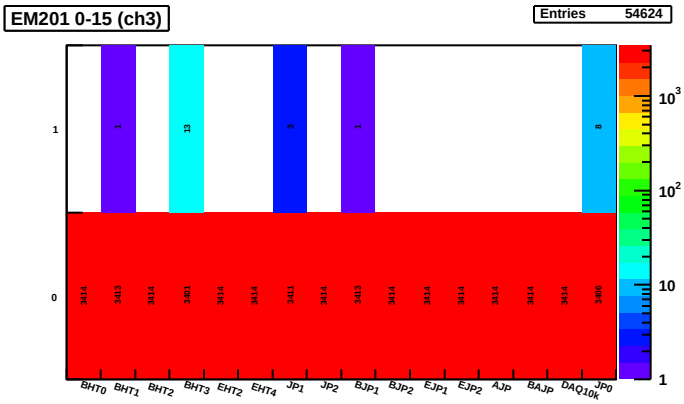

TF201 0-15 (ch0)
Entries 261
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 54624
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 10098
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 54624


Entries 0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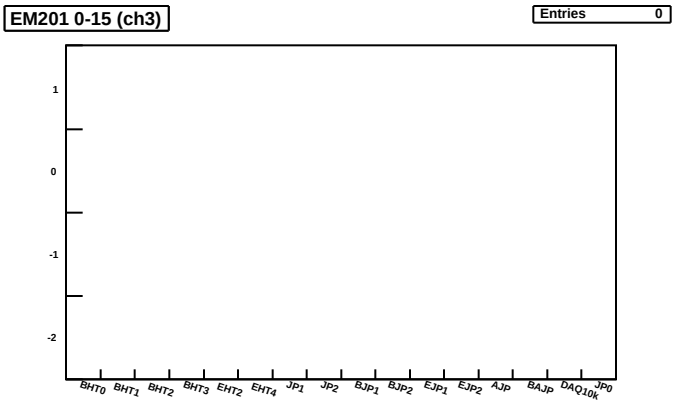
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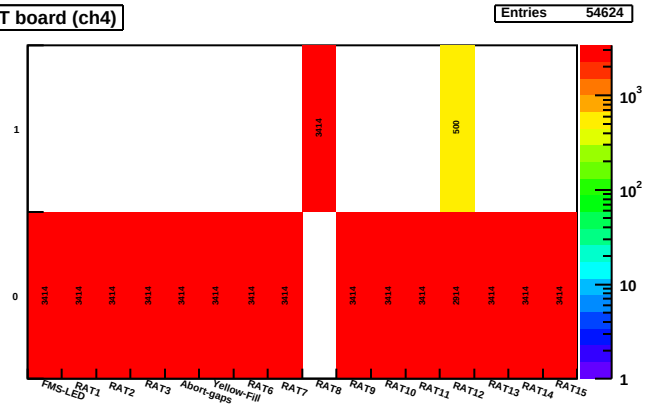
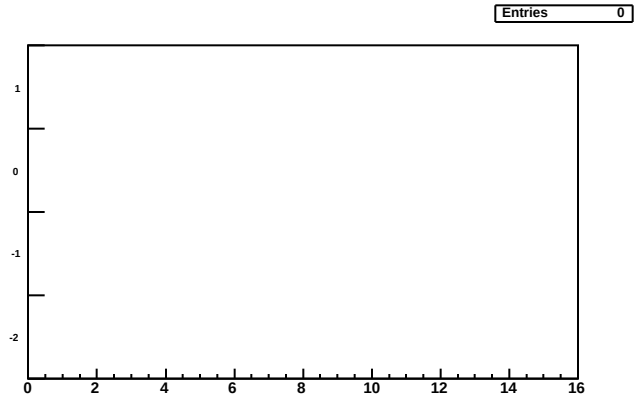
RAT board (ch4)





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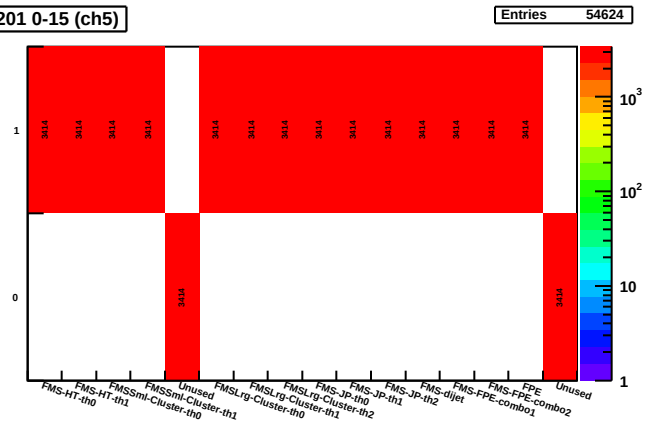

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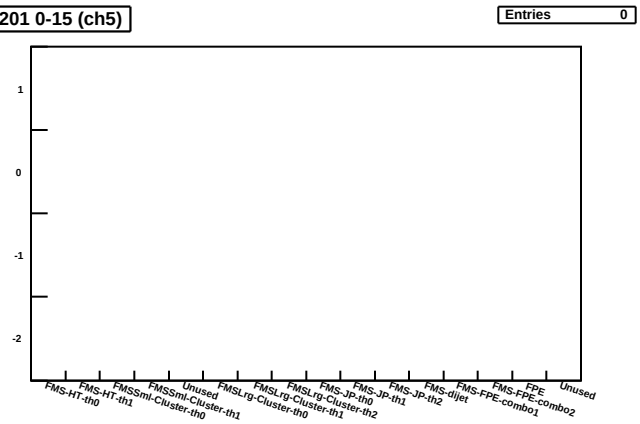

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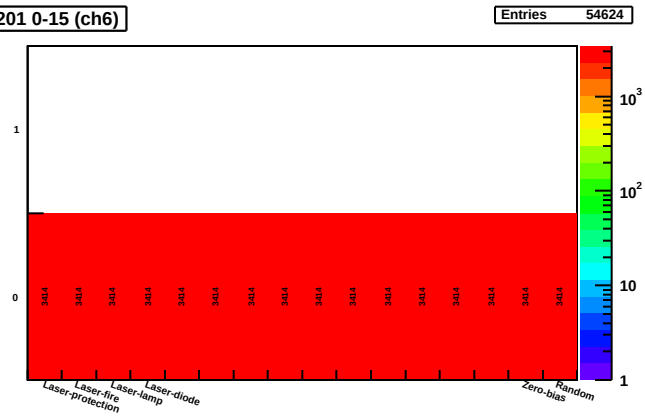

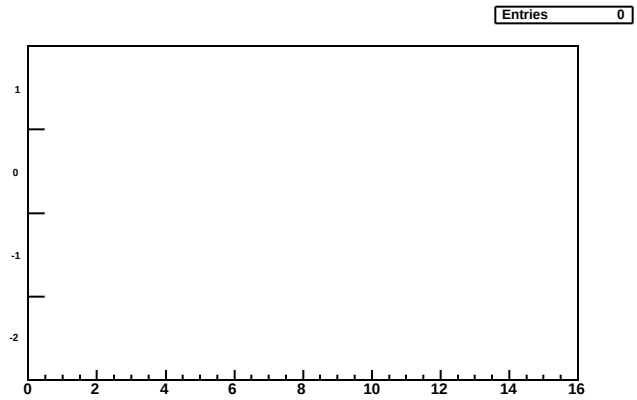
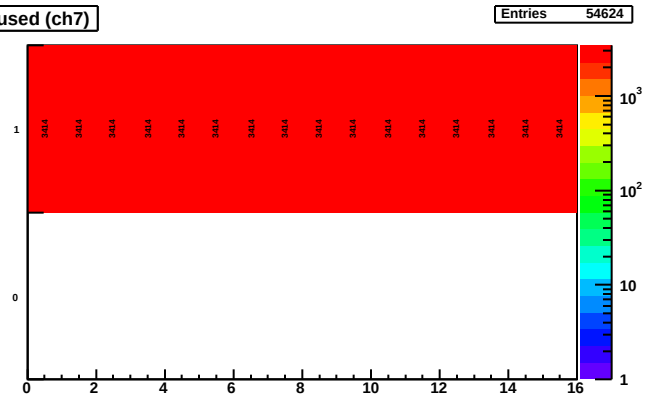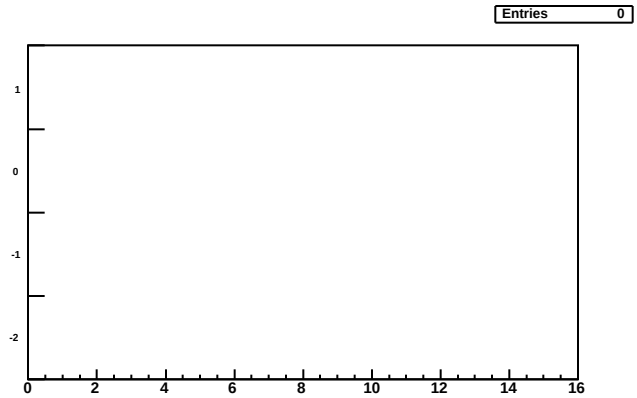
Unused (ch7)