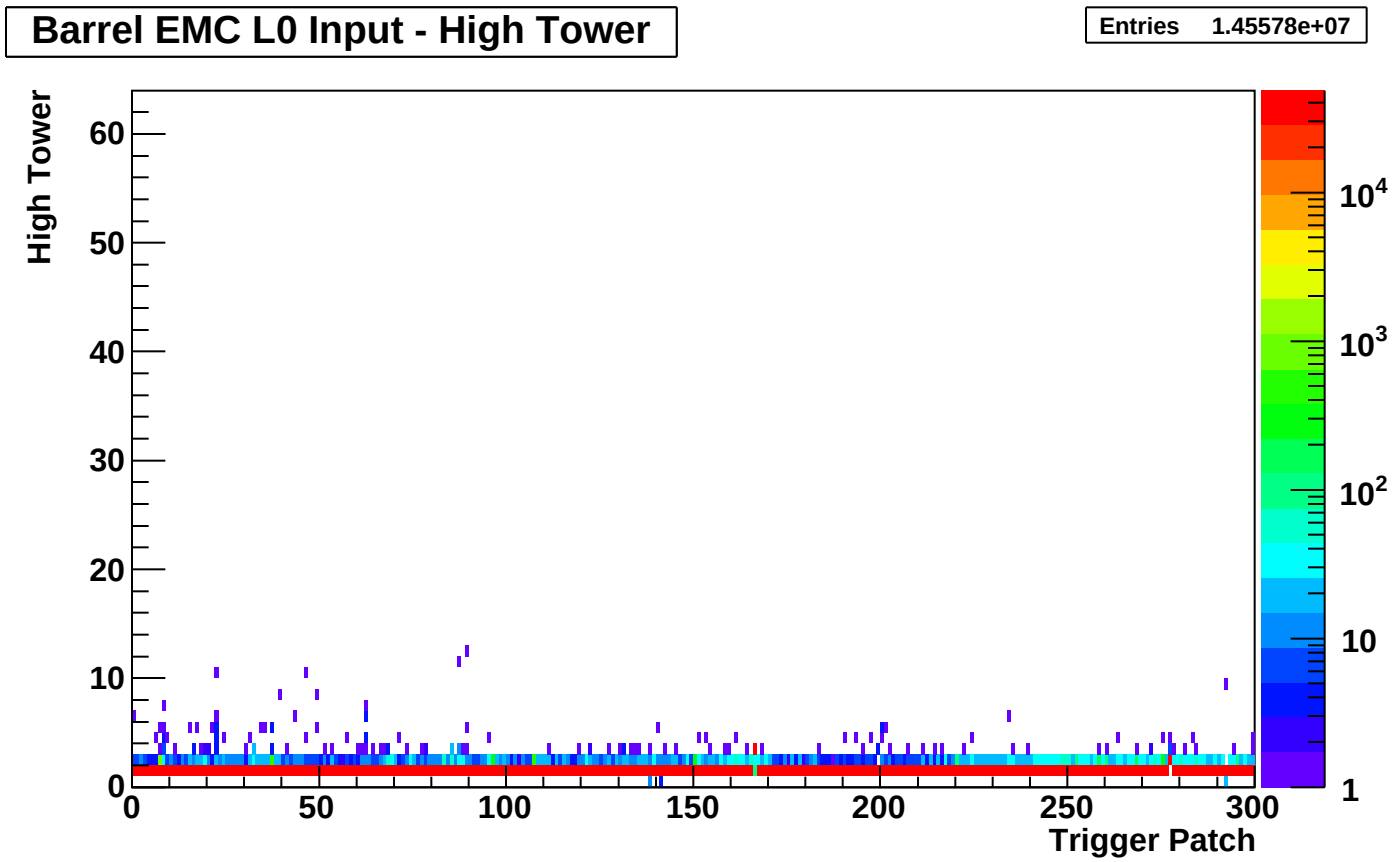
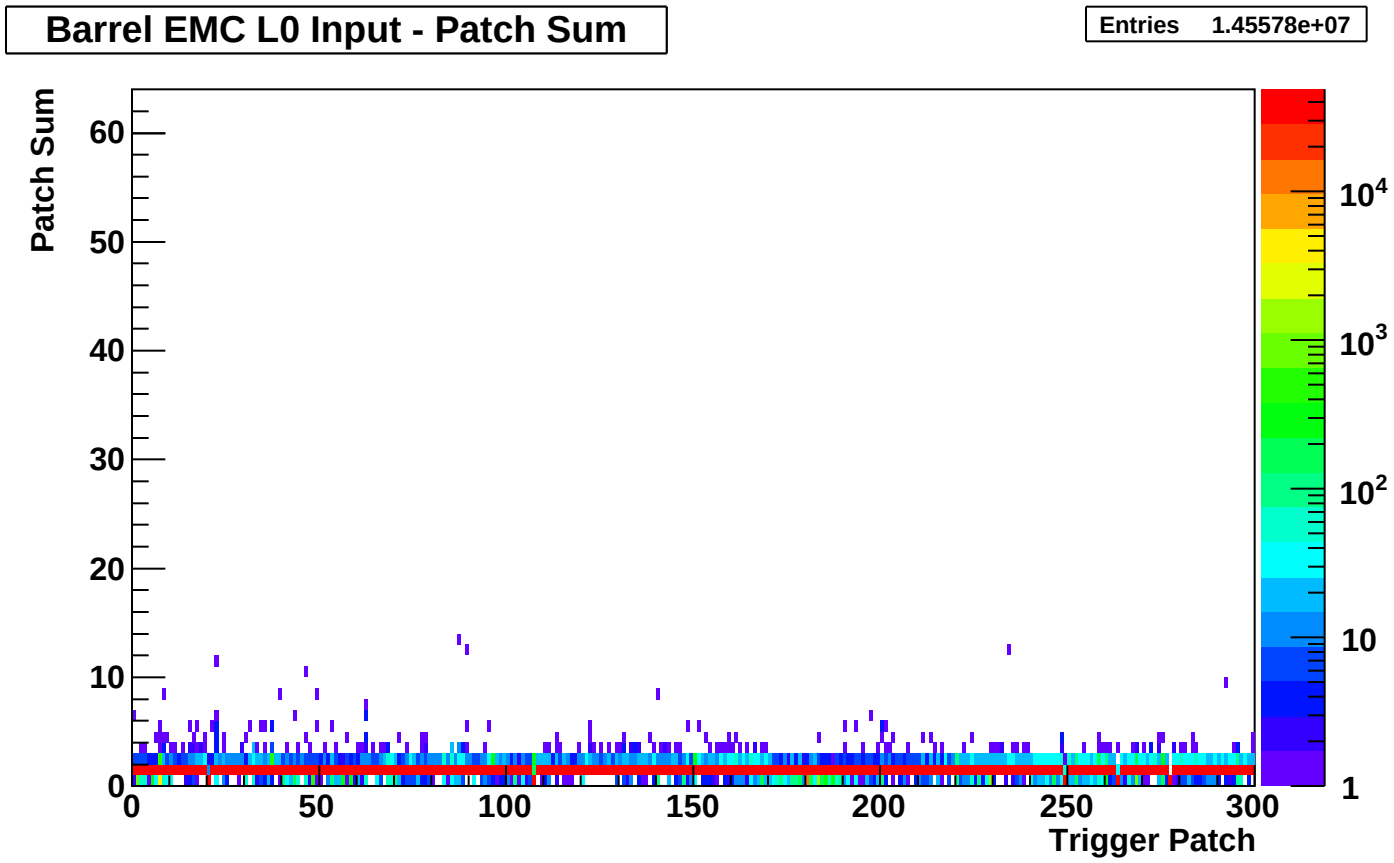
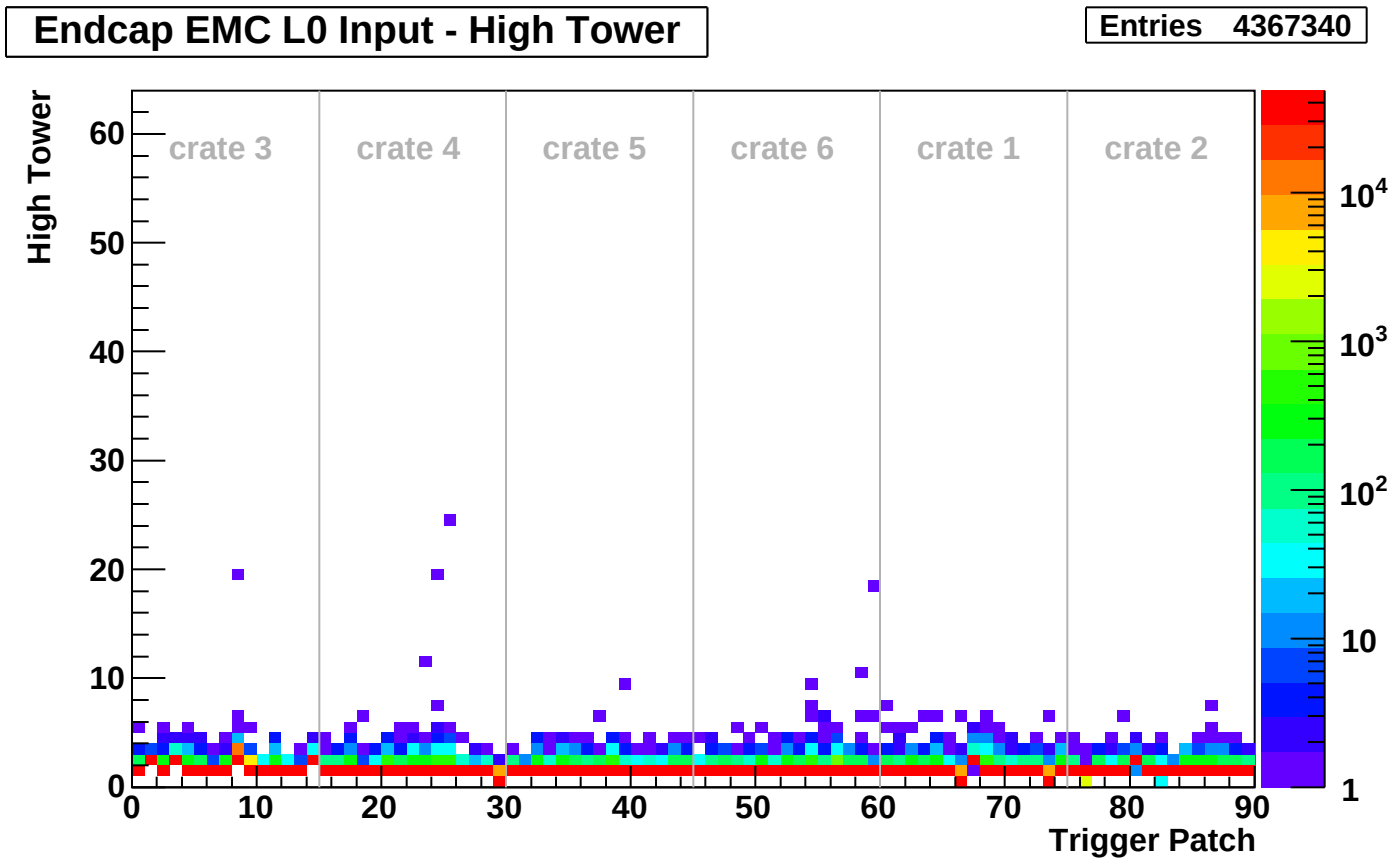
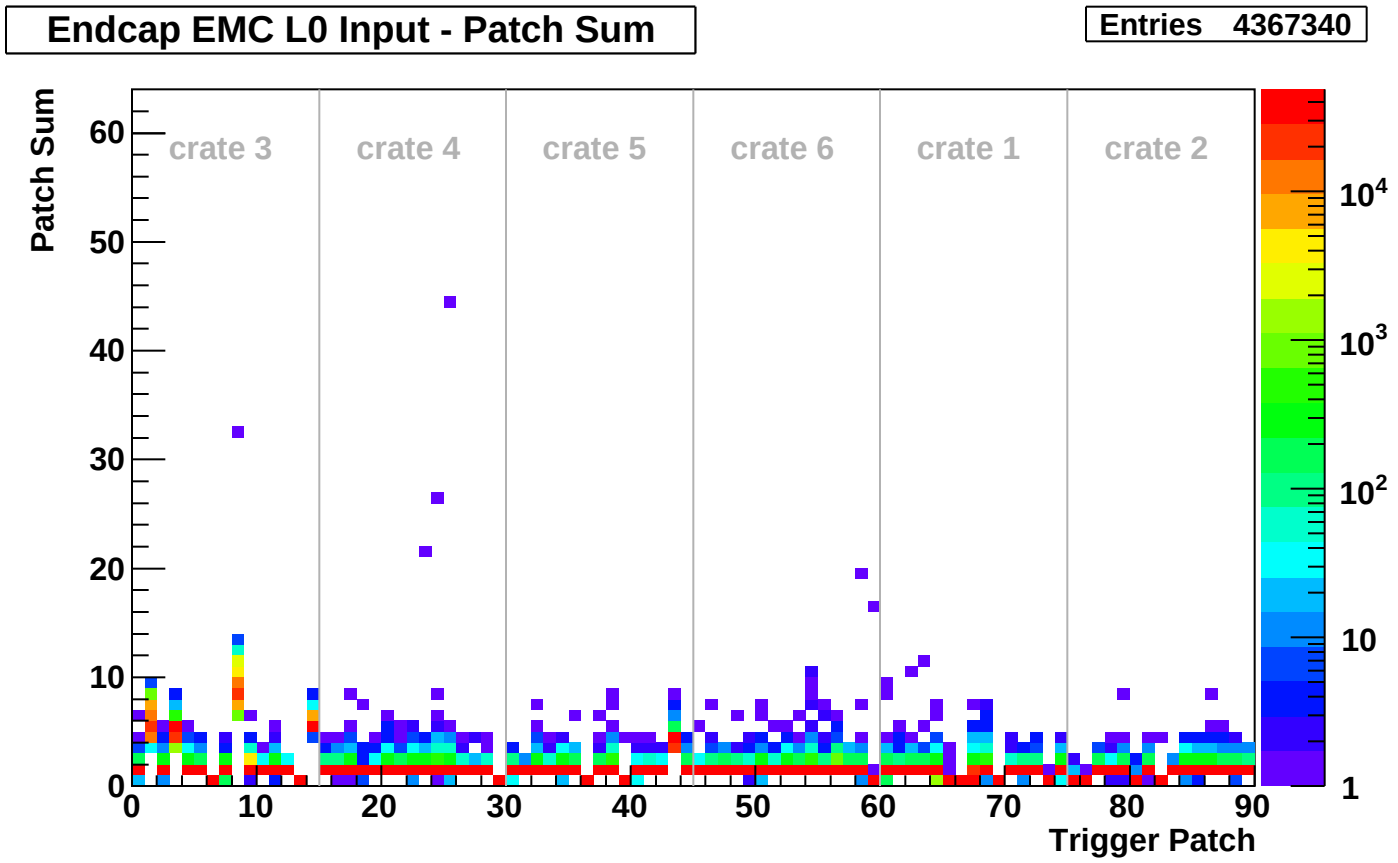
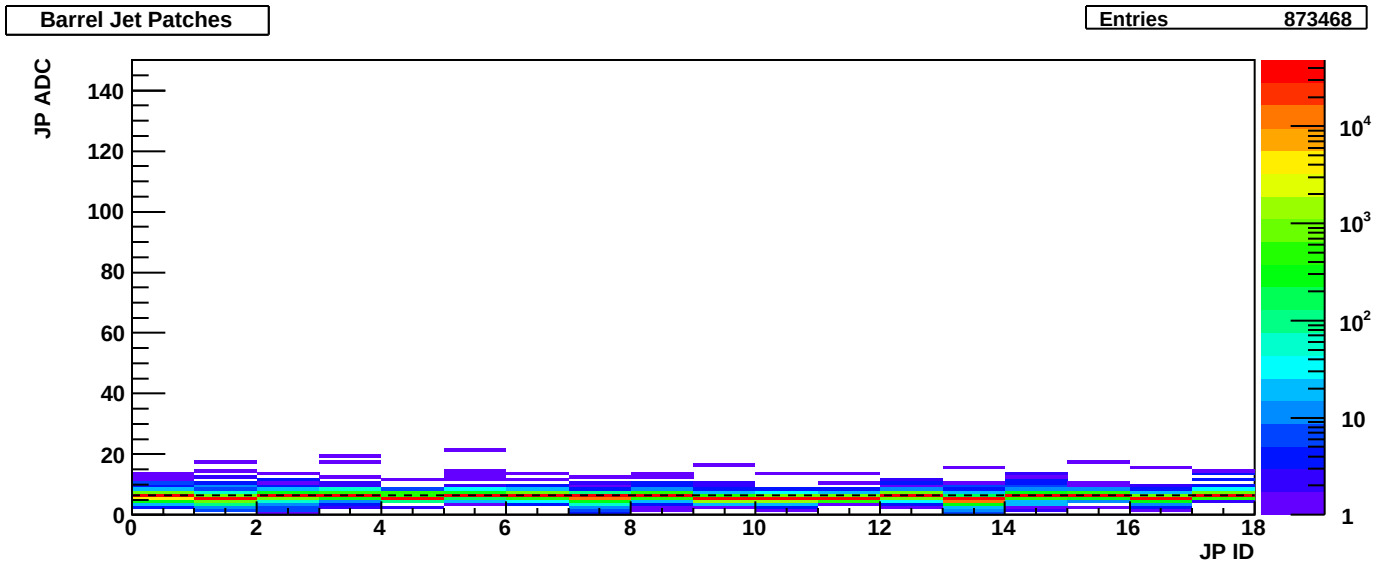
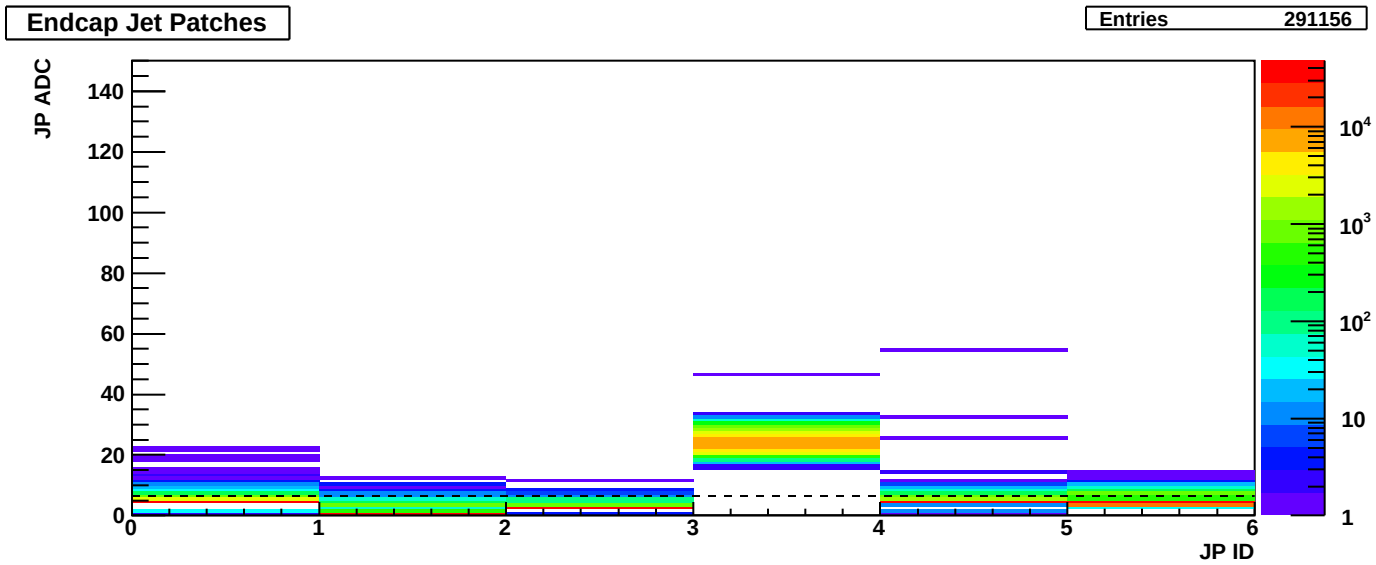

Barrel EMC L0 Input - High Tower
Entries 1.45578e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

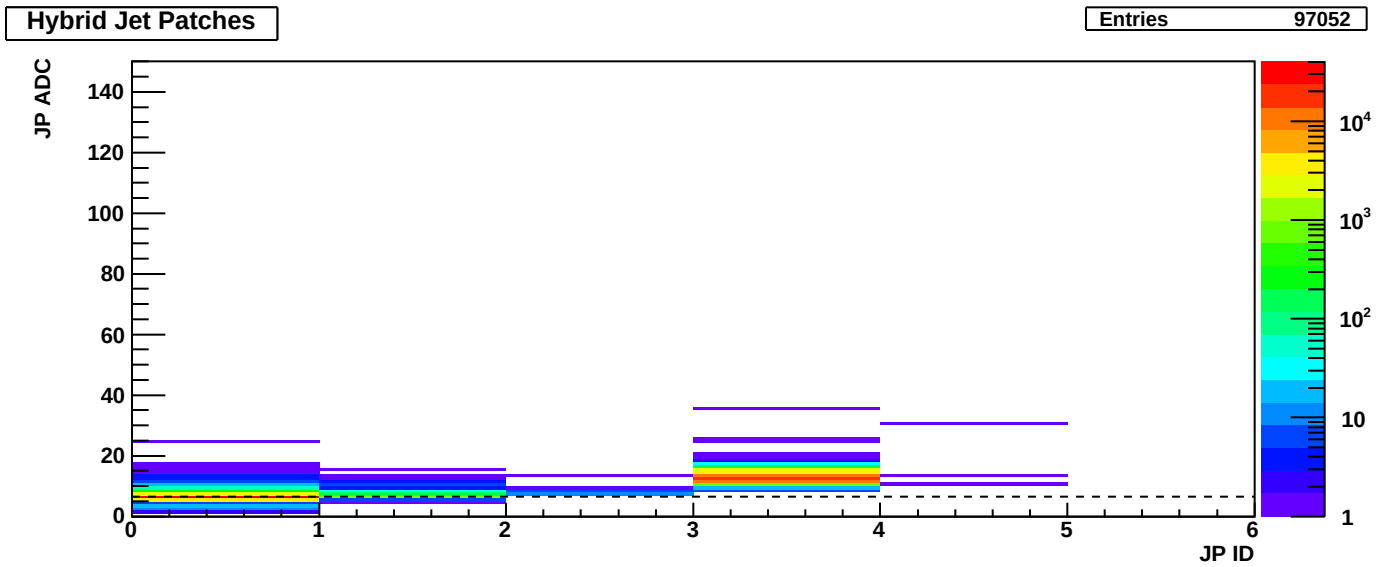

Barrel EMC L0 Input - Patch Sum
Entries 1.45578e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

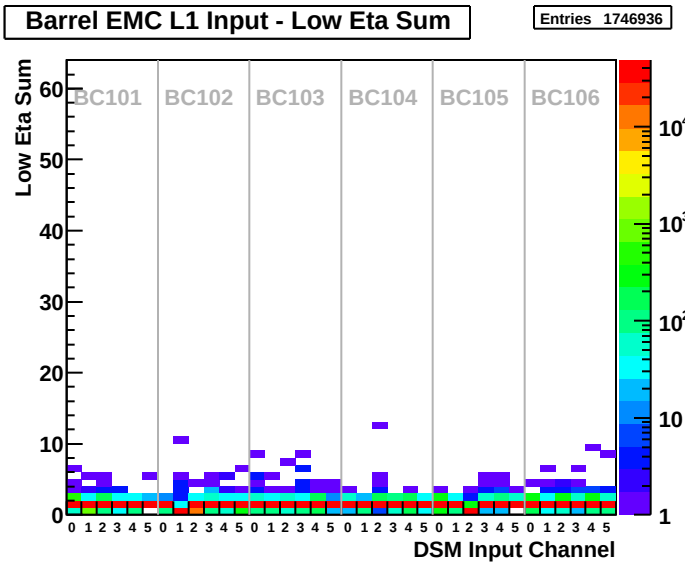

Endcap EMC L0 Input - High Tower
Entries 4367340
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

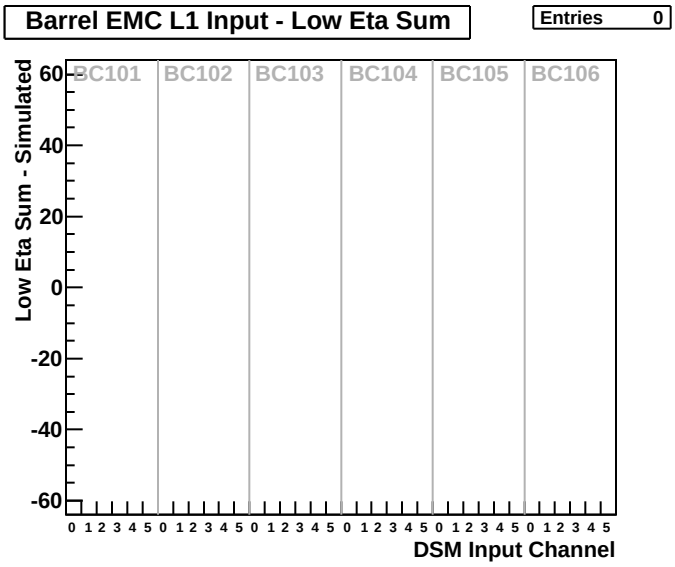

Endcap EMC L0 Input - Patch Sum
Entries 4367340
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

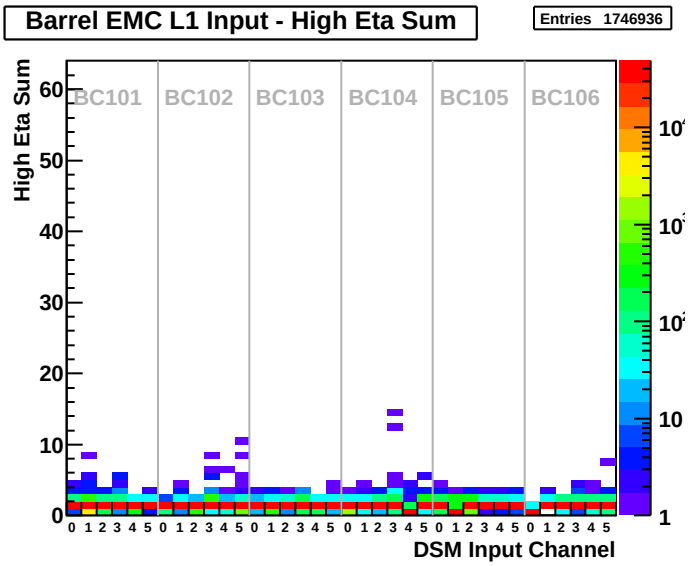

Barrel Jet Patches
Entries 873468
JP ADC
JP ID

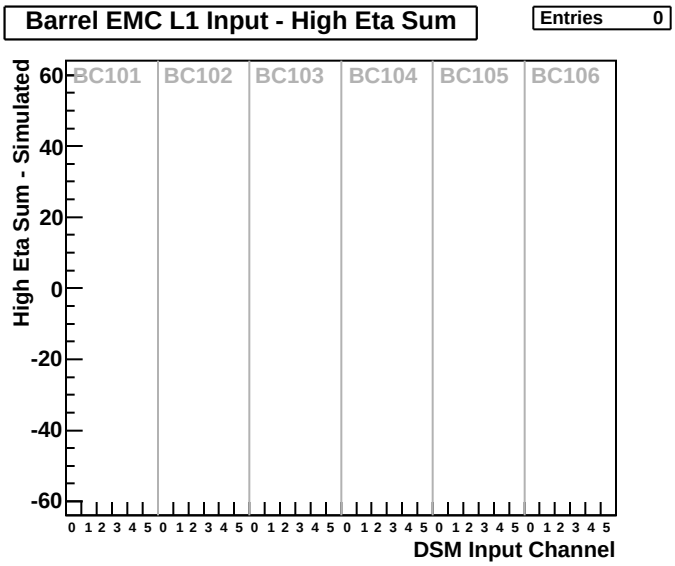

Endcap Jet Patches
Entries 291156
JP ADC
JP ID

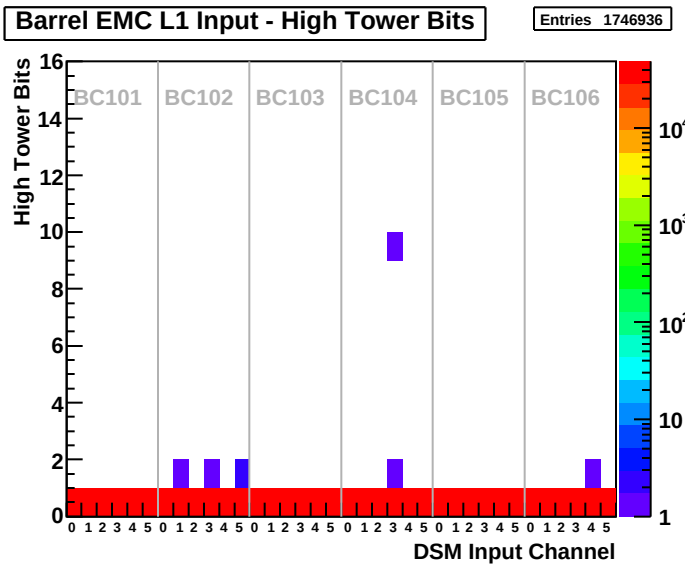

Hybrid Jet Patches
Entries 97052
JP ADC
JP ID

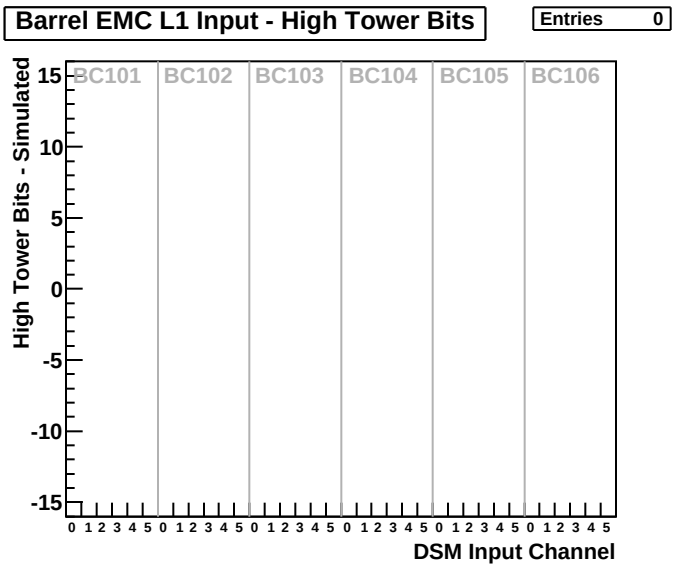

Barrel EMC L1 Input - Low Eta Sum
Entries 1746936
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

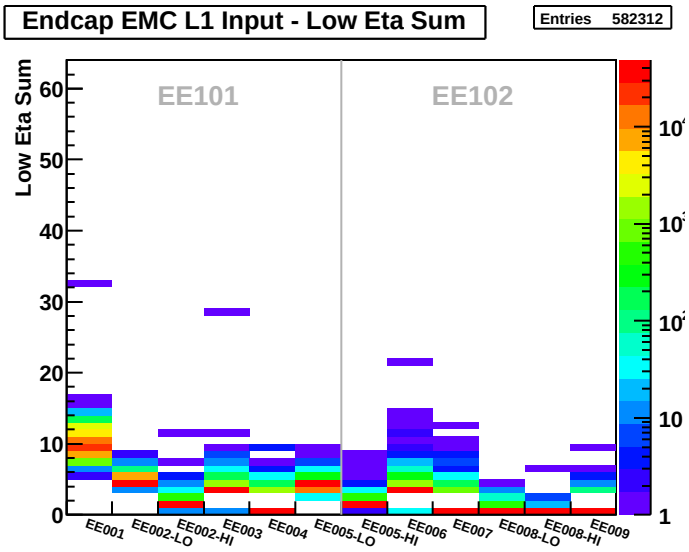

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

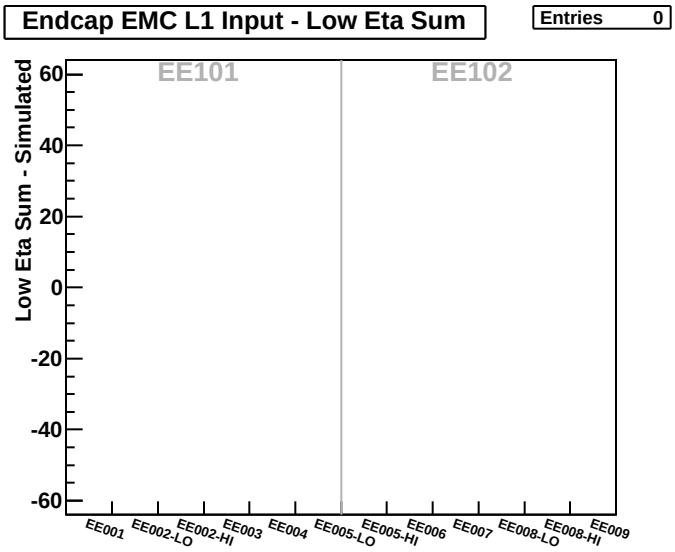

Barrel EMC L1 Input - High Eta Sum
Entries 1746936
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

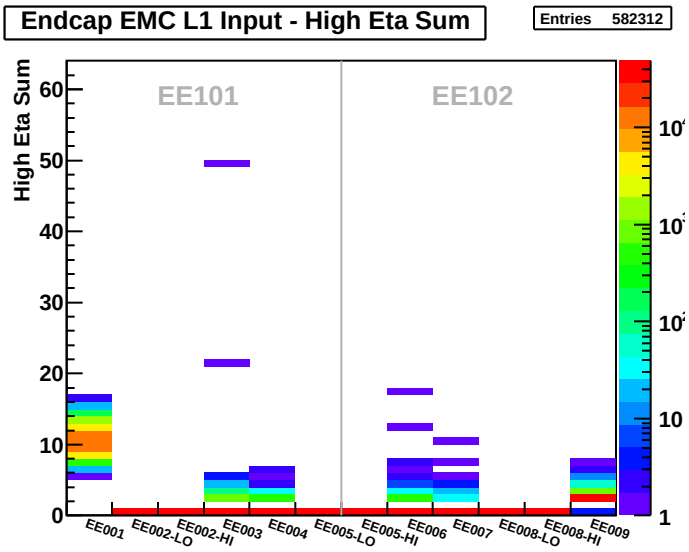

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

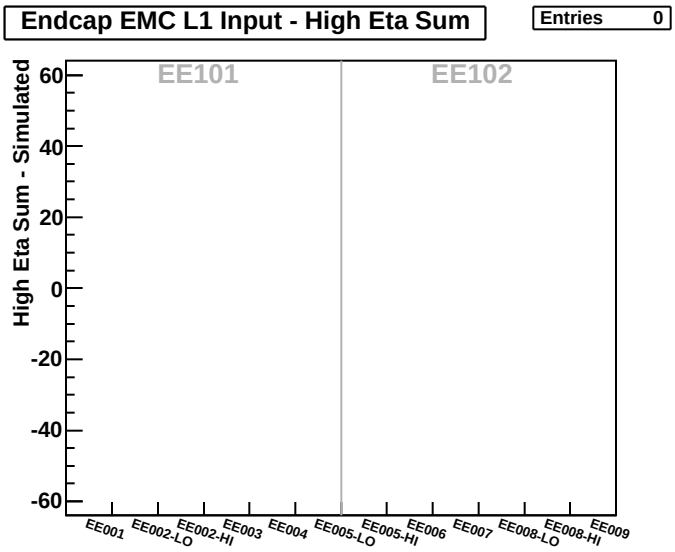

Barrel EMC L1 Input - High Tower Bits
Entries 1746936
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

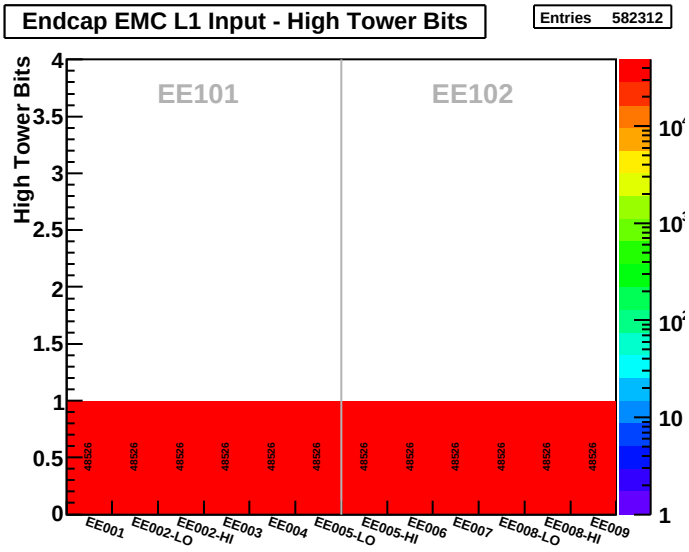

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

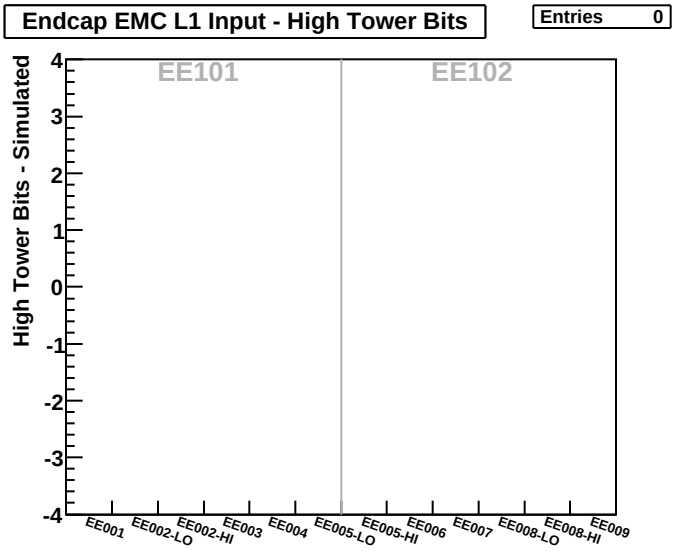

Endcap EMC L1 Input - Low Eta Sum
Entries 582312
Low Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

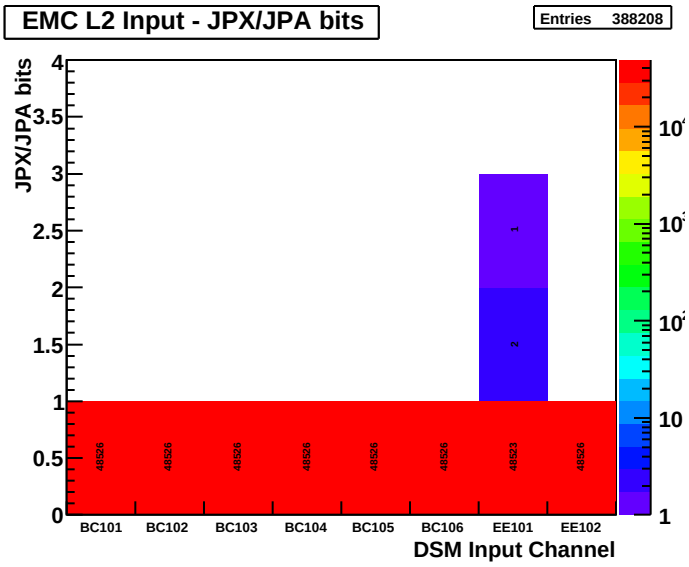

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

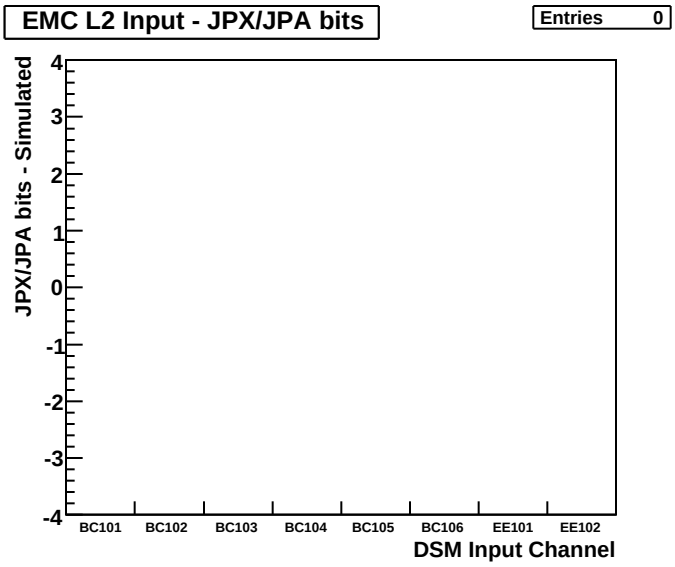

Endcap EMC L1 Input - High Eta Sum
Entries 582312
High Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

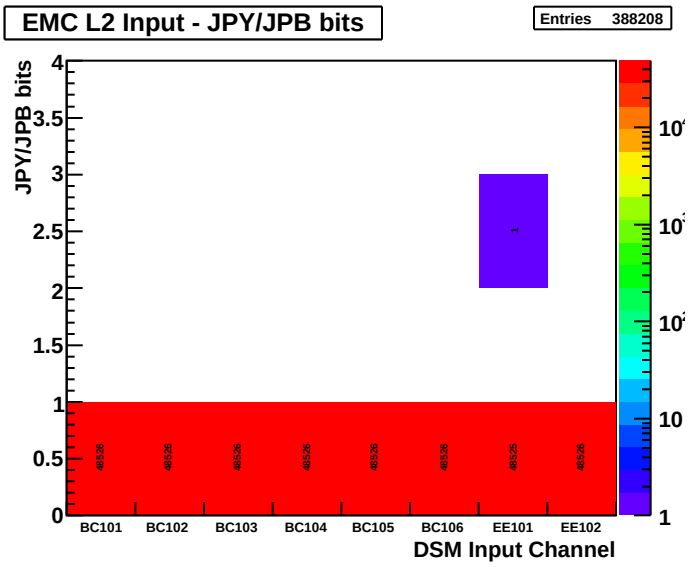

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

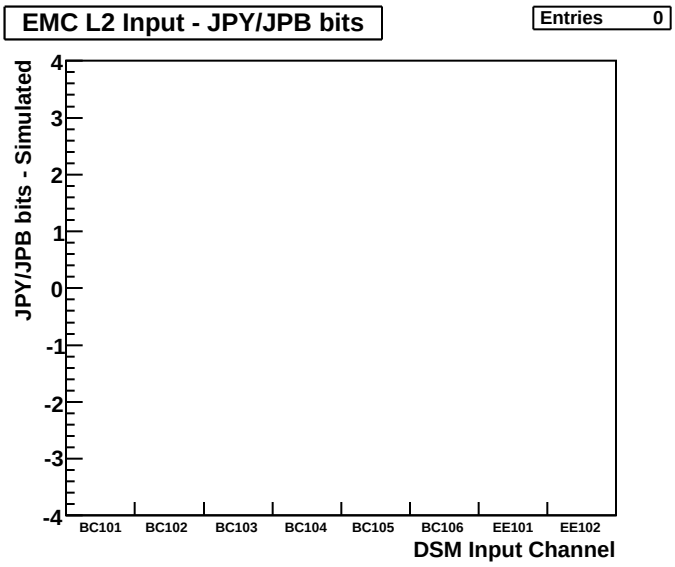

Endcap EMC L1 Input - High Tower Bits
Entries 582312
High Tower Bits
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

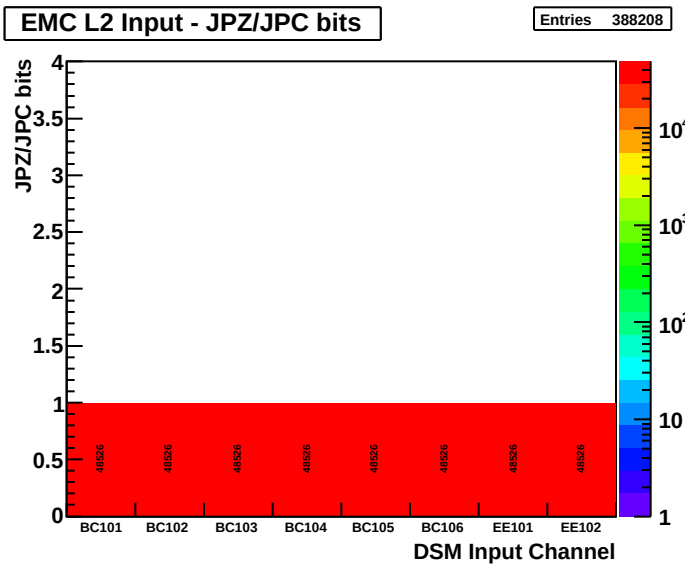

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

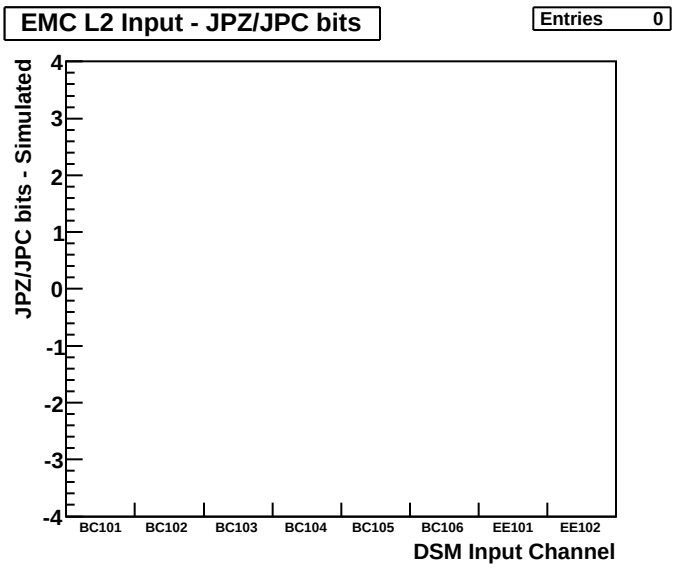

EMC L2 Input - JPX/JPA bits
Entries 388208
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

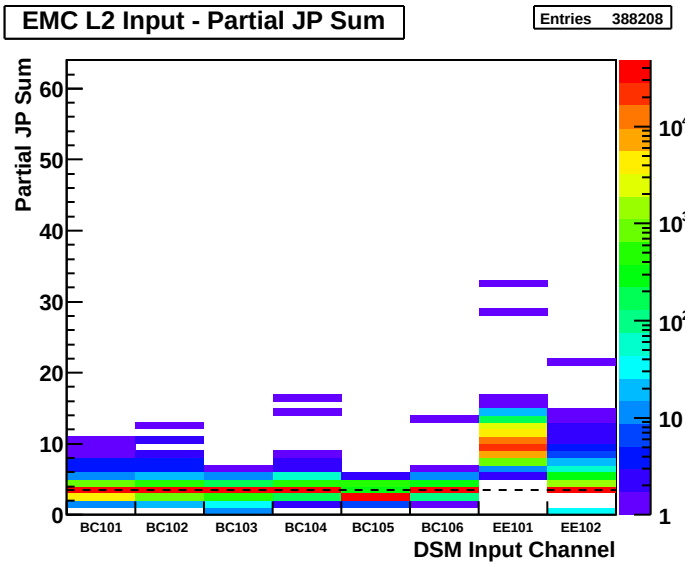

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

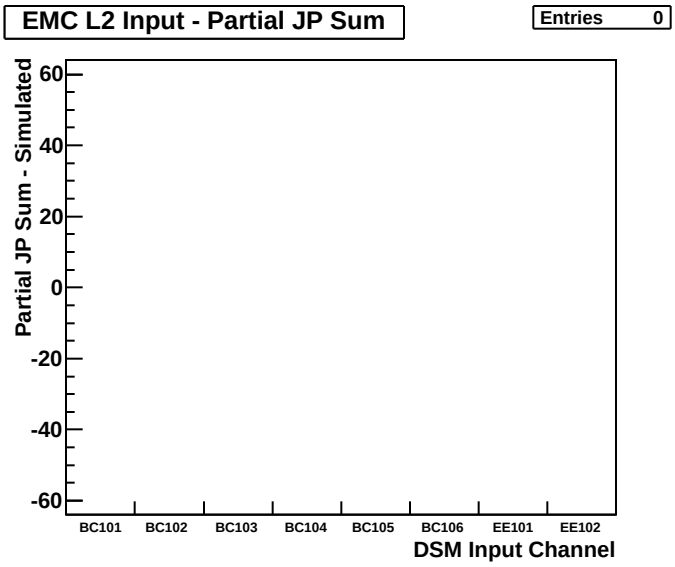

EMC L2 Input - JPY/JPB bits
Entries 388208
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

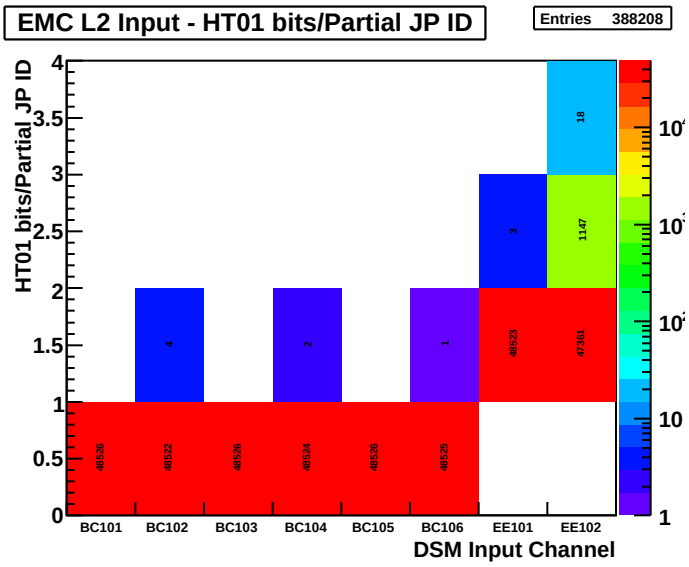

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

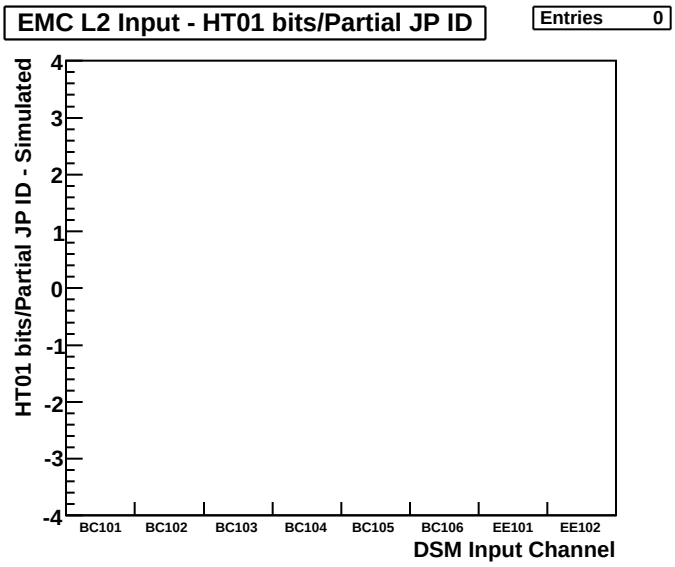

EMC L2 Input - JPZ/JPC bits
Entries 388208
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

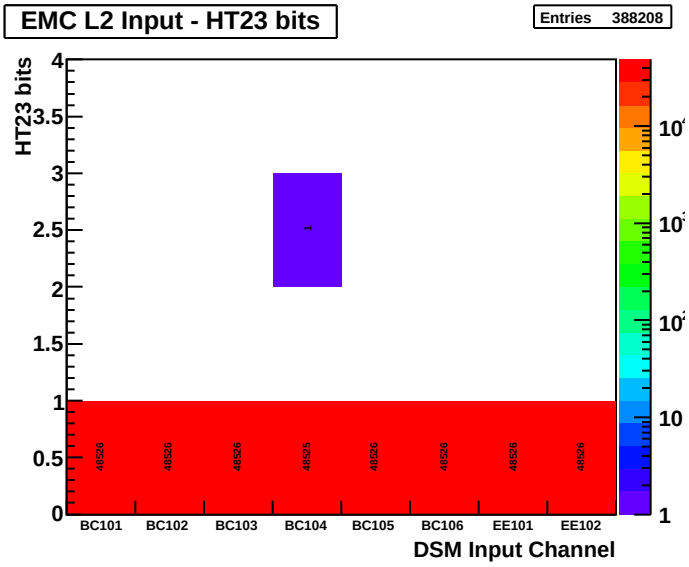

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

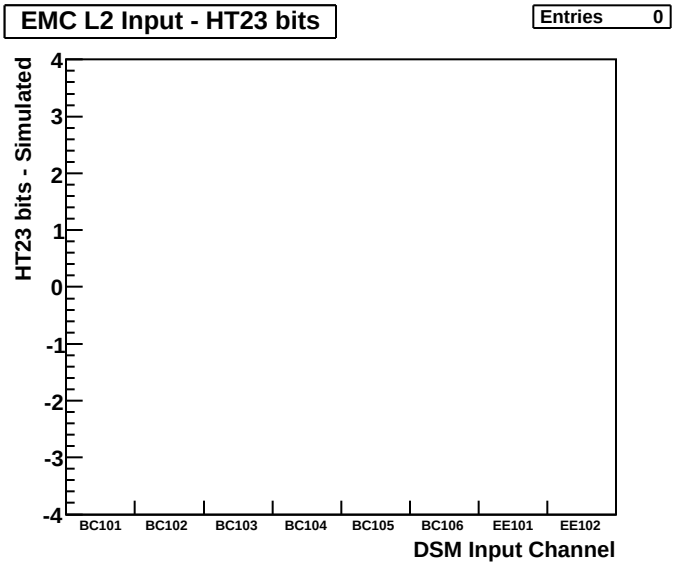

EMC L2 Input - Partial JP Sum
Entries 388208
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

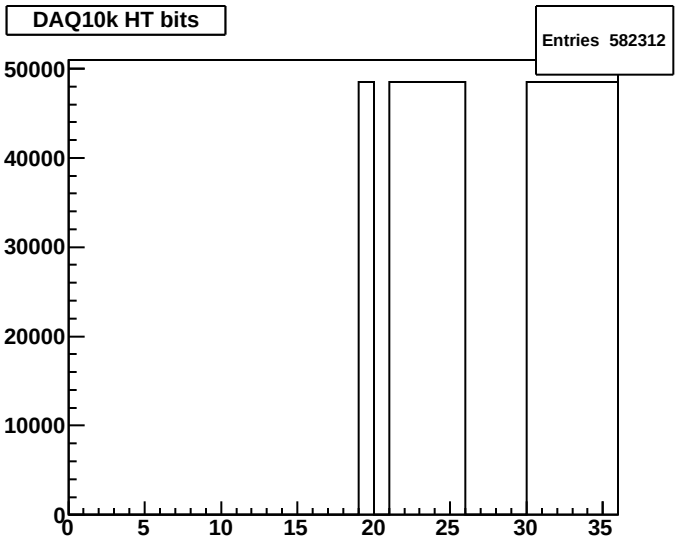

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

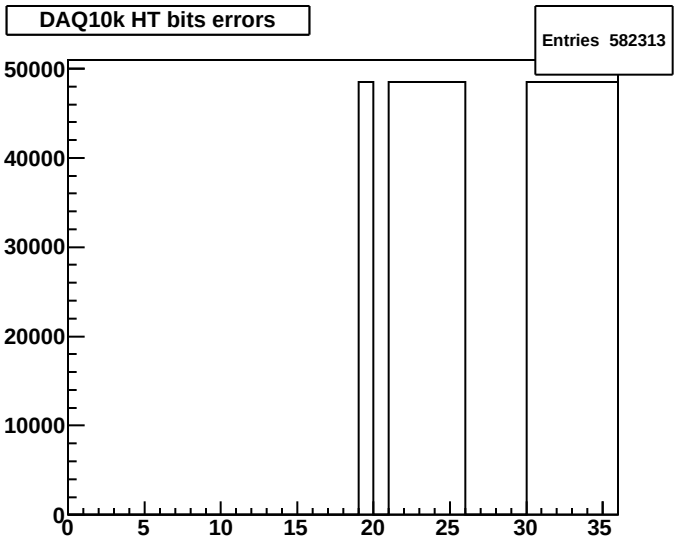

EMC L2 Input - HT01 bits/Partial JP ID
Entries 388208
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

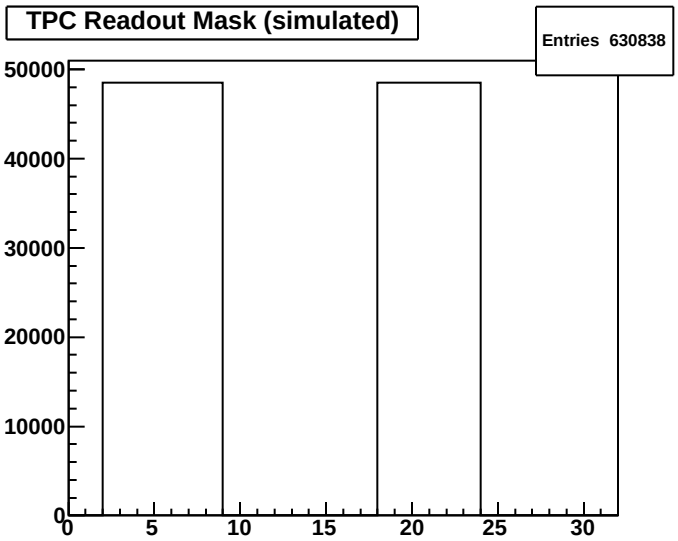

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

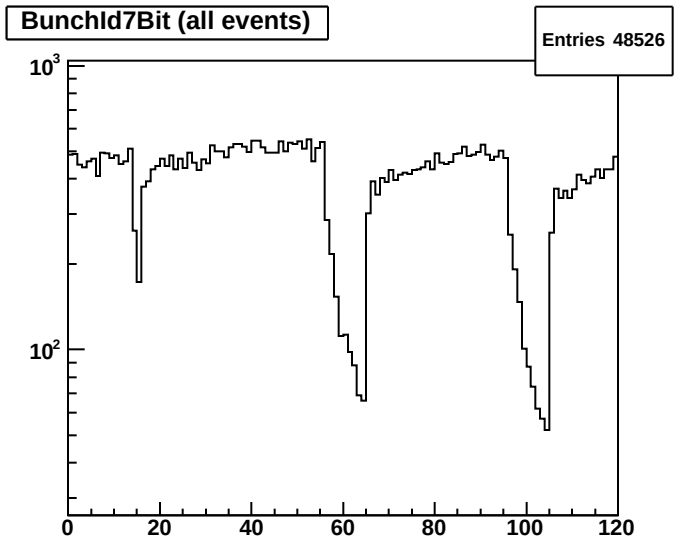

EMC L2 Input - HT23 bits
Entries 388208
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

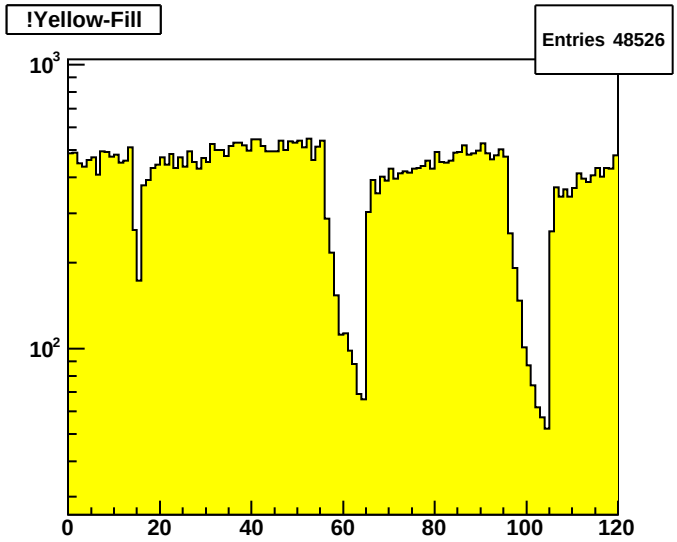

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

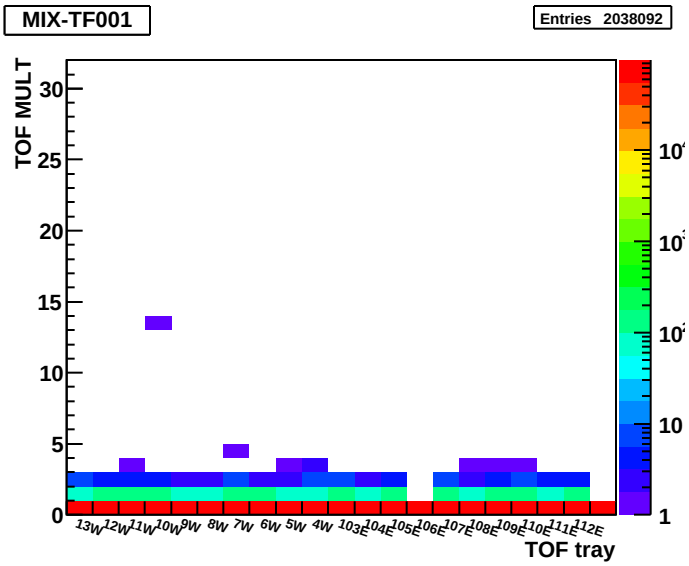

DAQ10k HT bits
Entries 582312
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

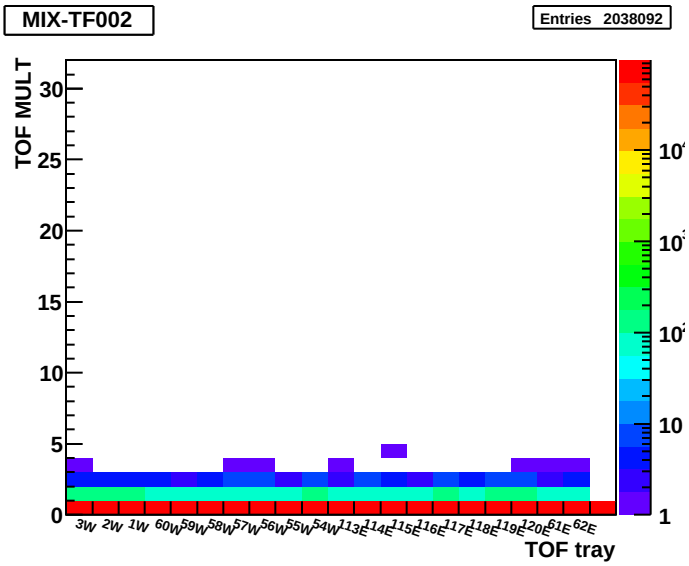

DAQ10k HT bits errors
Entries 582313
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

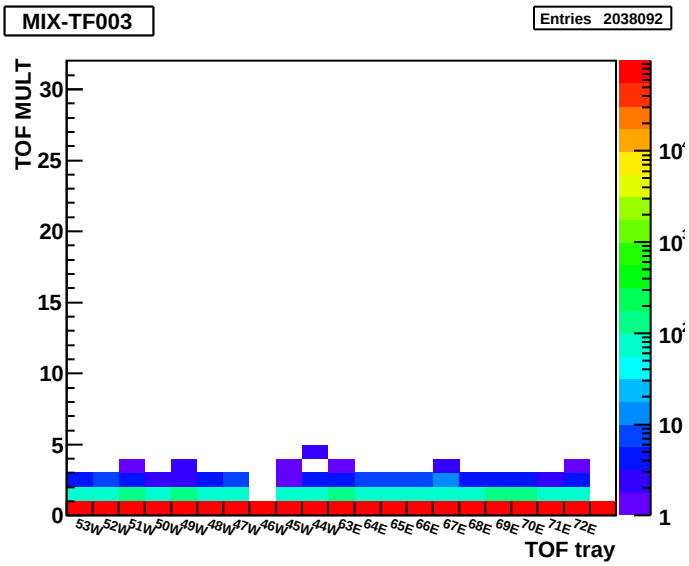

TPC Readout Mask (simulated)
Entries 630838
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30

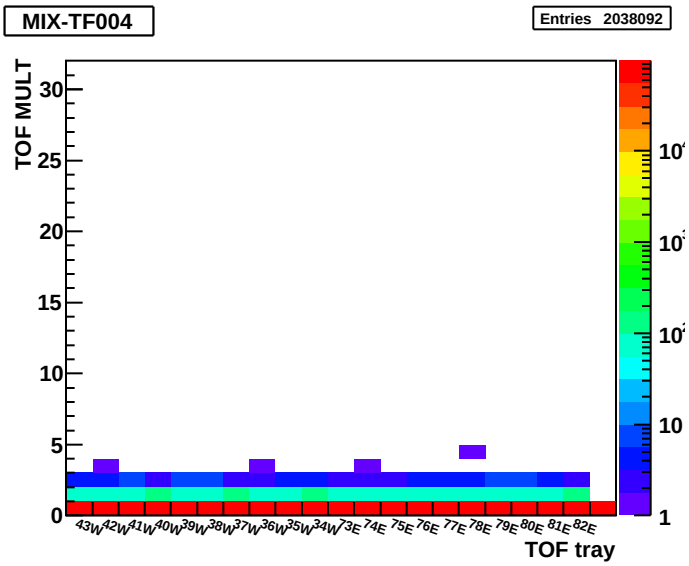

BunchId7Bit (all events)
Entries 48526
10^3
10^2
0 20 40 60 80 100 120

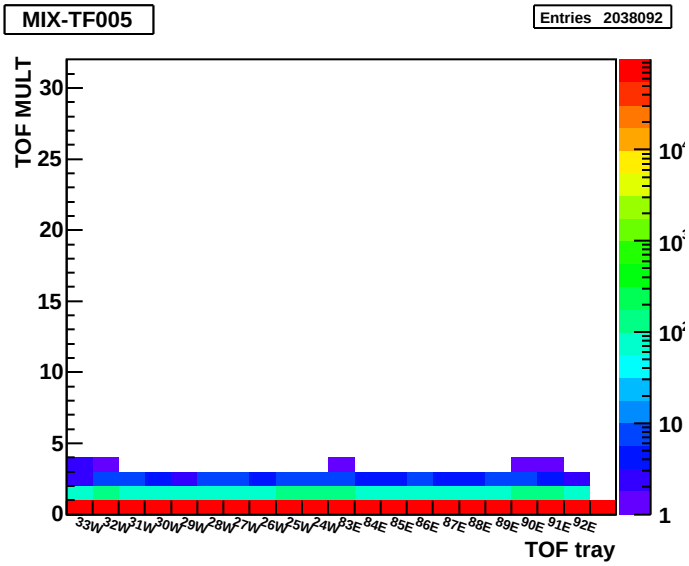

!Yellow-Fill
Entries 48526
10^3
10^2
0 20 40 60 80 100 120

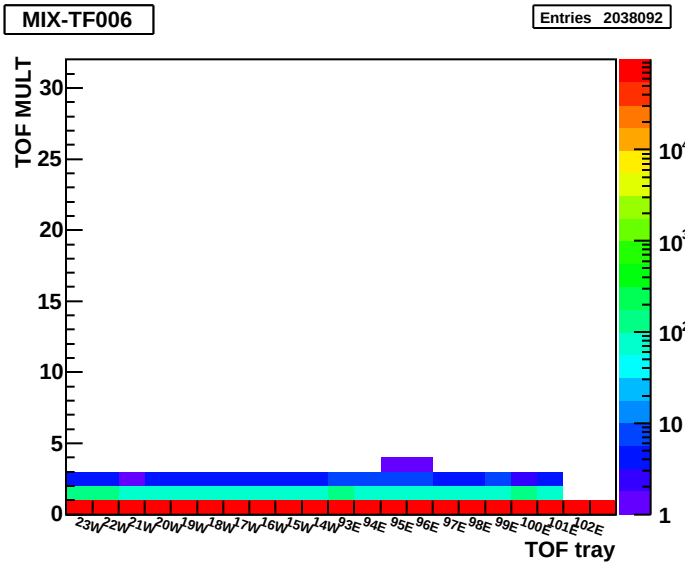

MIX-TF001
Entries 2038092
TOF MULT
TOF tray

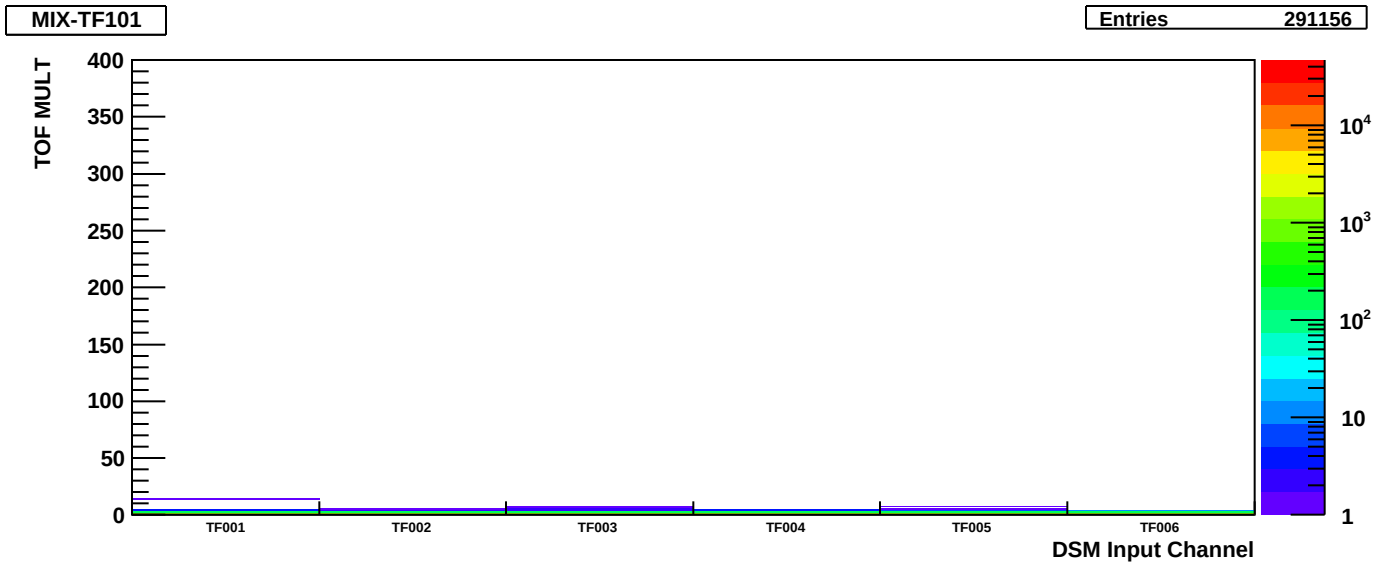

MIX-TF002
Entries 2038092
TOF MULT
TOF tray

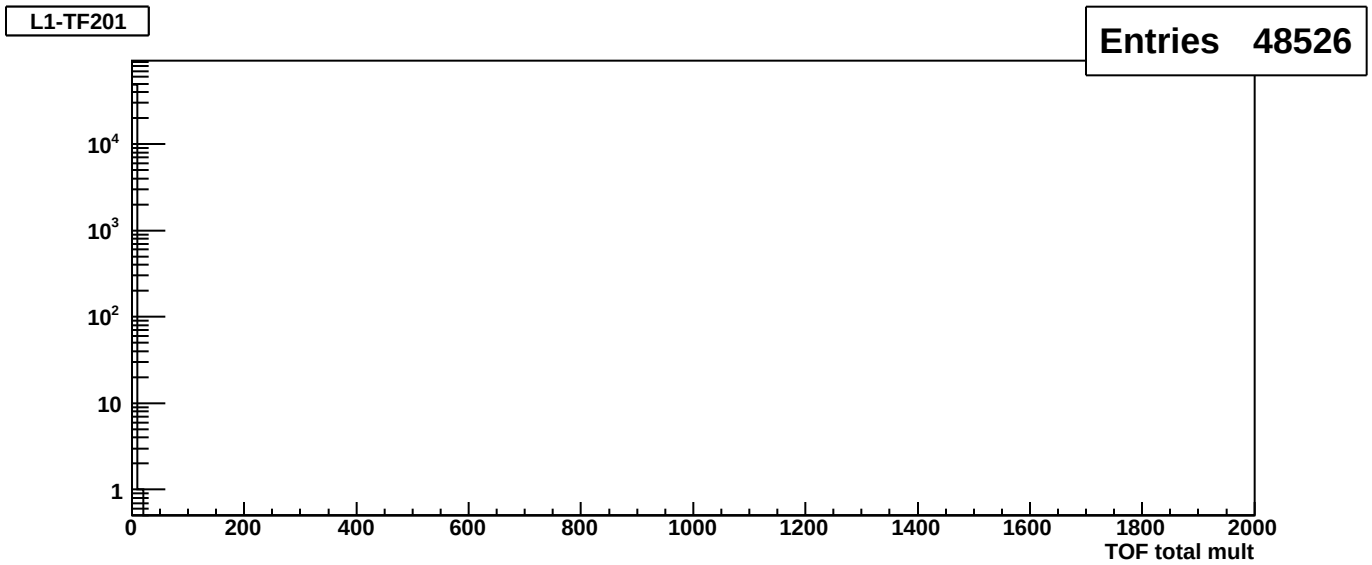

MIX-TF003
Entries 2038092
TOF MULT
TOF tray

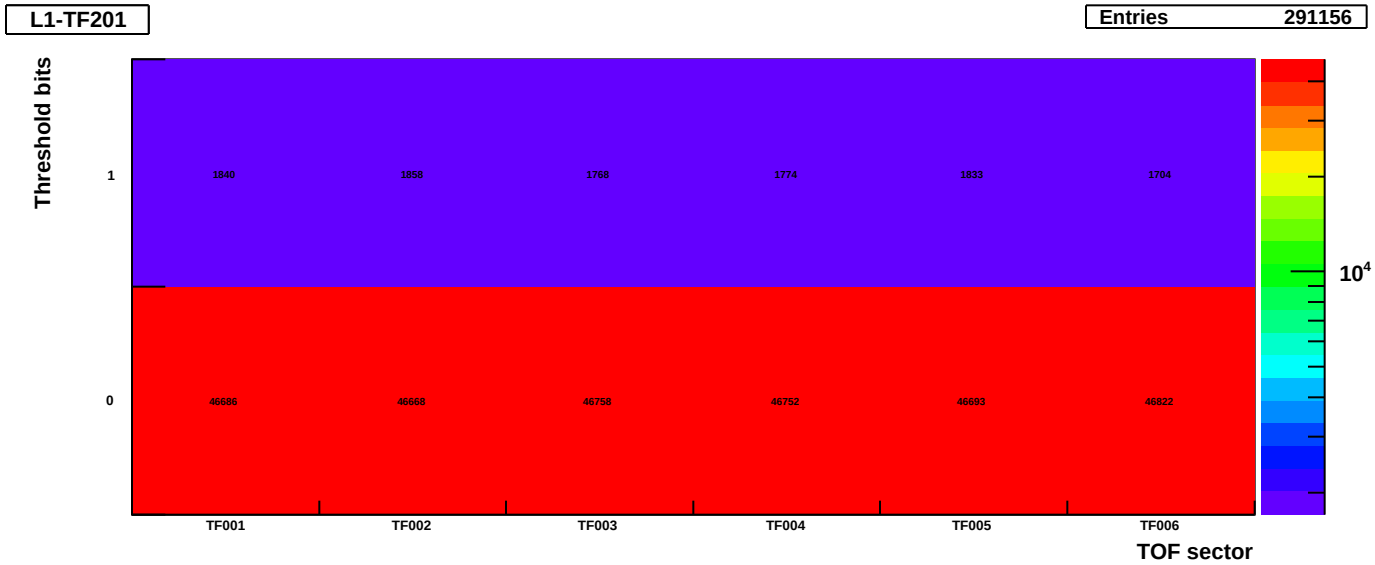

MIX-TF004
Entries 2038092
TOF MULT
TOF tray

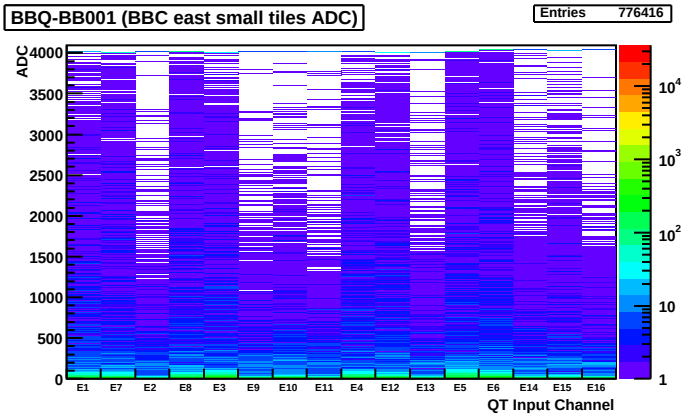

MIX-TF005
Entries 2038092
TOF MULT
TOF tray

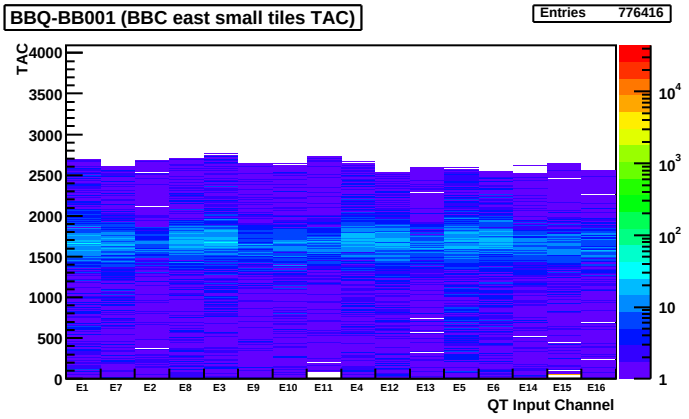

MIX-TF006
Entries 2038092
TOF MULT
TOF tray

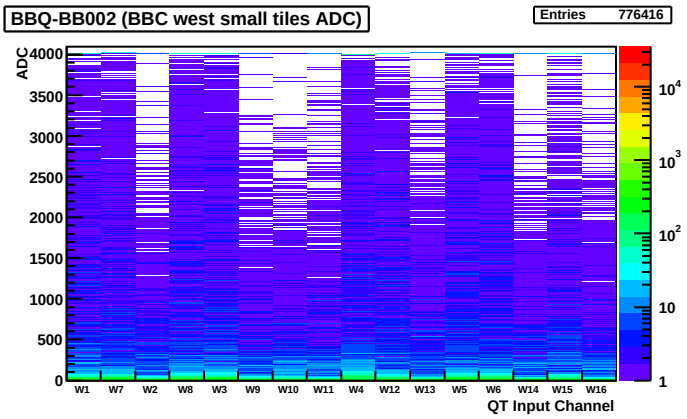

MIX-TF101
Entries 291156
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

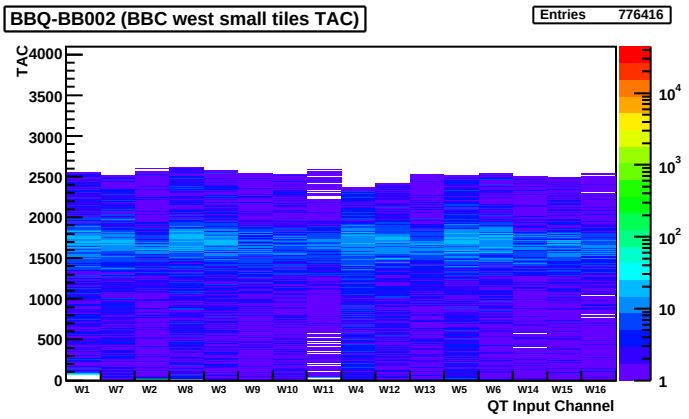

L1-TF201
Entries 48526
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

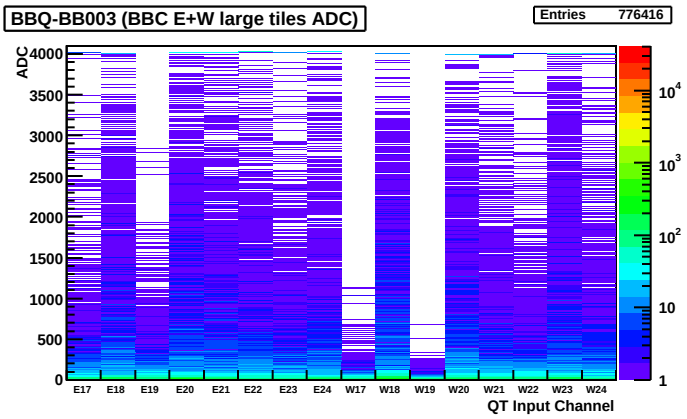

L1-TF201
Entries 291156
Threshold bits
1
0
1840
1858
1768
1774
1833
1704
46686
46668
46758
46752
46693
46822
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4

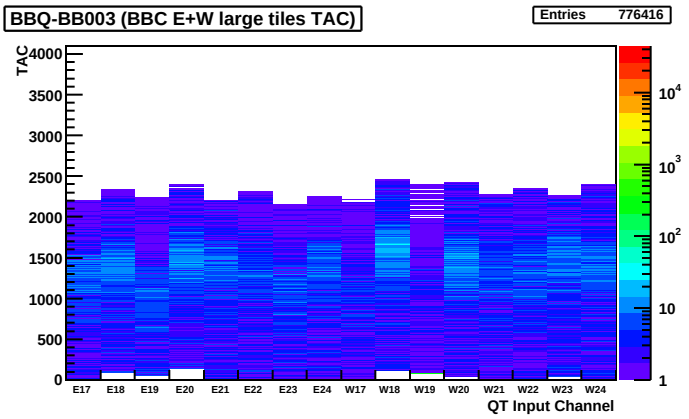

BBQ-BB001 (BBC east small tiles ADC)
Entries 776416
ADC
QT Input Channel

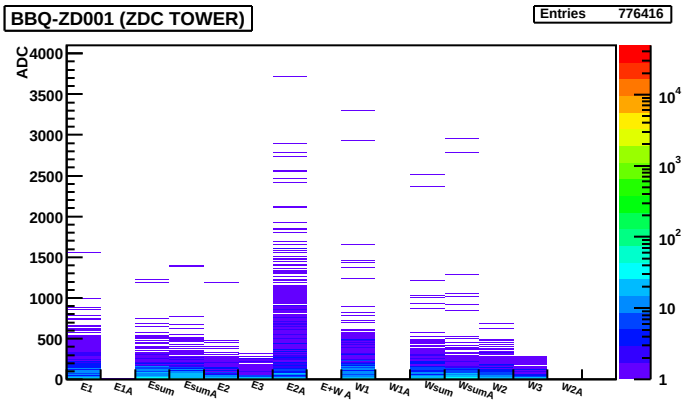

BBQ-BB001 (BBC east small tiles TAC)
Entries 776416
TAC
QT Input Channel

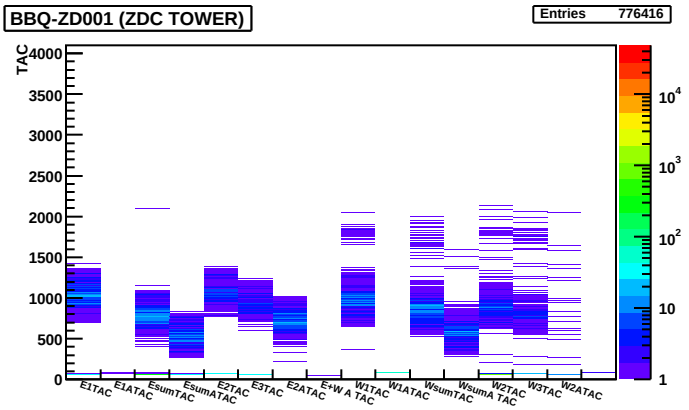

BBQ-BB002 (BBC west small tiles ADC)
Entries 776416
ADC
QT Input Channel

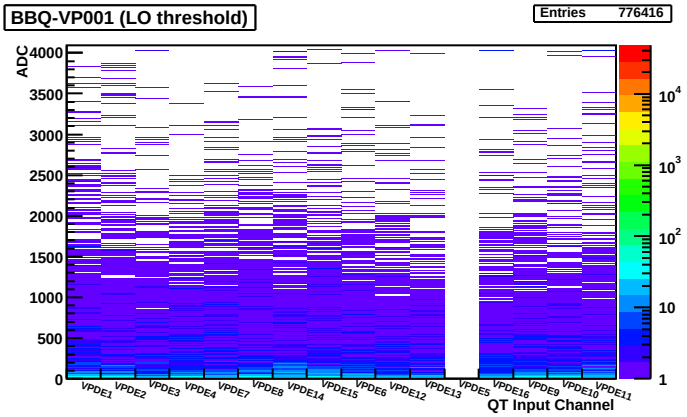

BBQ-BB002 (BBC west small tiles TAC)
Entries 776416
TAC
QT Input Channel

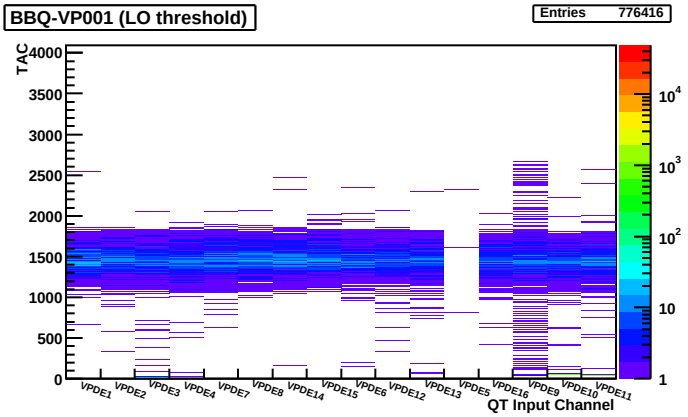

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 776416
ADC
QT Input Channel

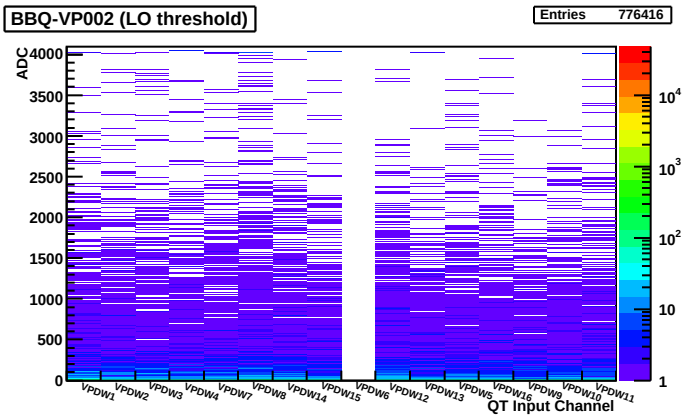

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 776416
TAC
QT Input Channel

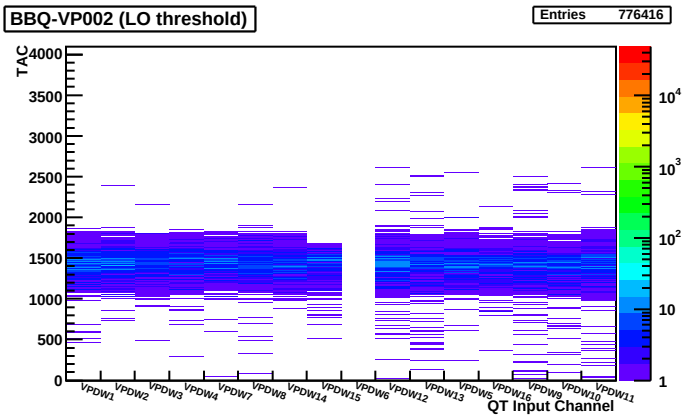

BBQ-ZD001 (ZDC TOWER)
Entries 776416
ADC

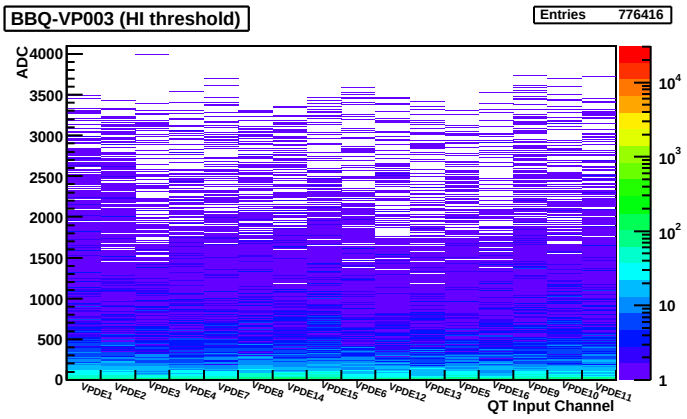

BBQ-ZD001 (ZDC TOWER)
Entries 776416
TAC

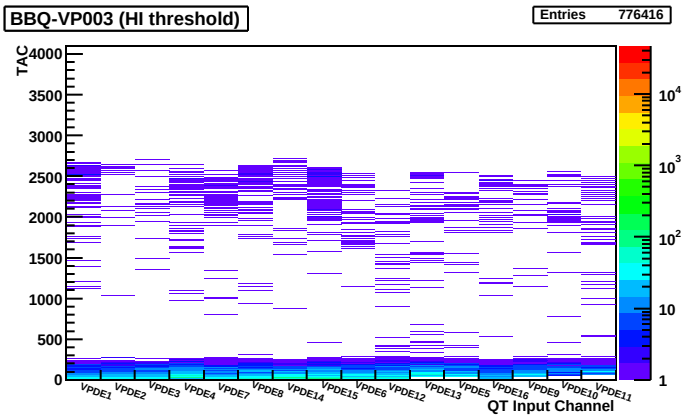

BBQ-VP001 (LO threshold)
Entries 776416
ADC
QT Input Channel

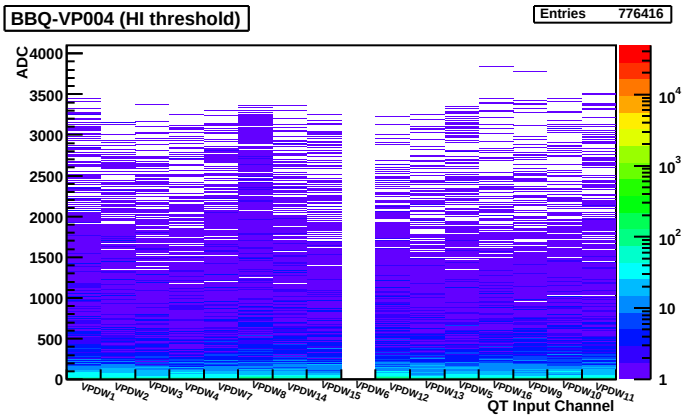

BBQ-VP001 (LO threshold)
Entries 776416
TAC
QT Input Channel

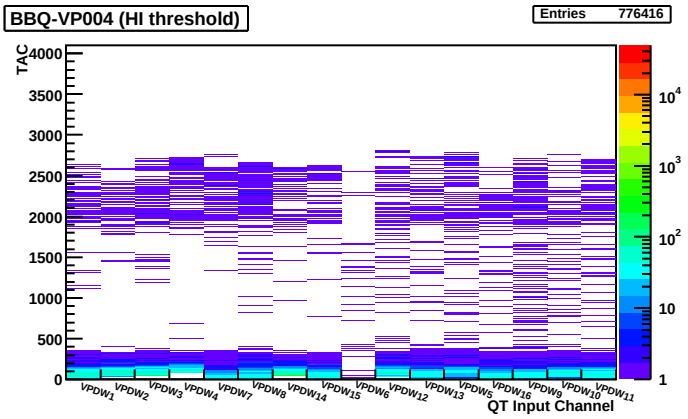

BBQ-VP002 (LO threshold)
Entries 776416
ADC
QT Input Channel

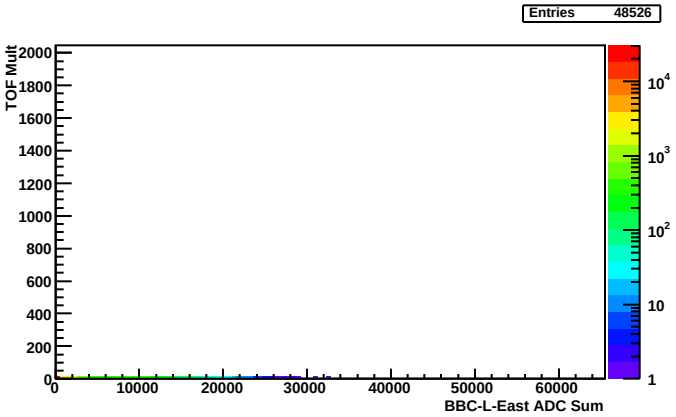

BBQ-VP002 (LO threshold)
Entries 776416
TAC
QT Input Channel

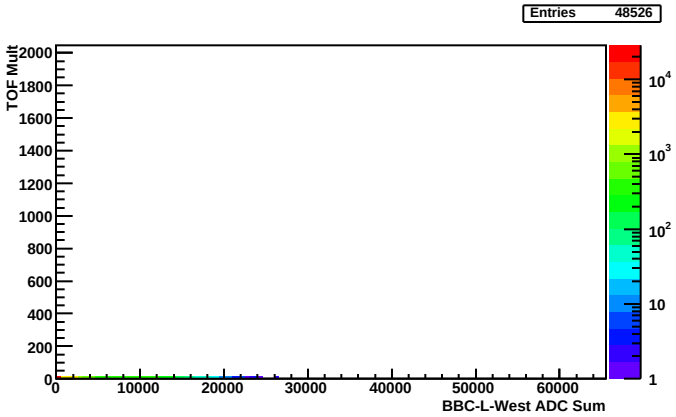

BBQ-VP003 (HI threshold)
Entries 776416
ADC
QT Input Channel

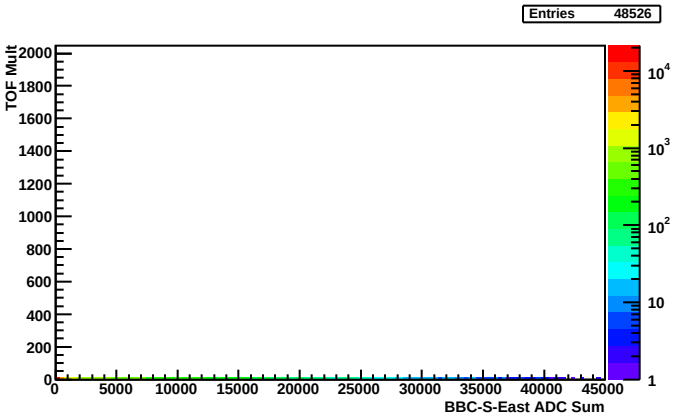

BBQ-VP003 (HI threshold)
Entries 776416
TAC
QT Input Channel

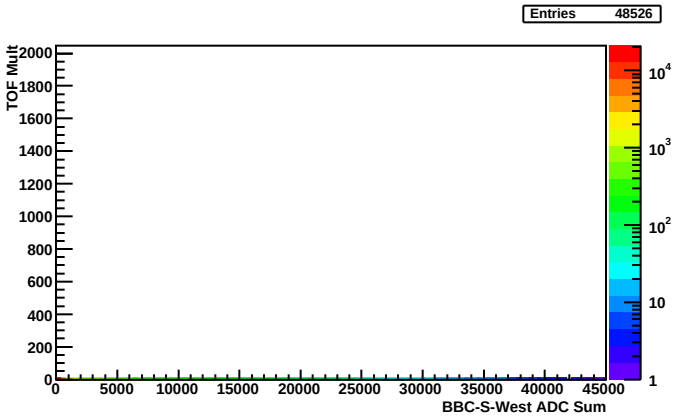

BBQ-VP004 (HI threshold)
Entries 776416
ADC
QT Input Channel

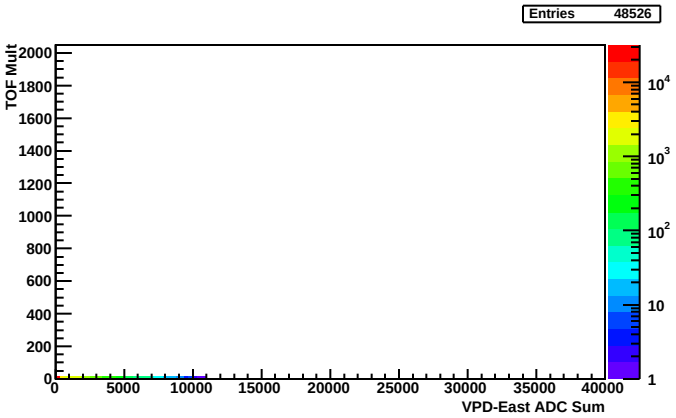

BBQ-VP004 (HI threshold)
Entries 776416
TAC
QT Input Channel

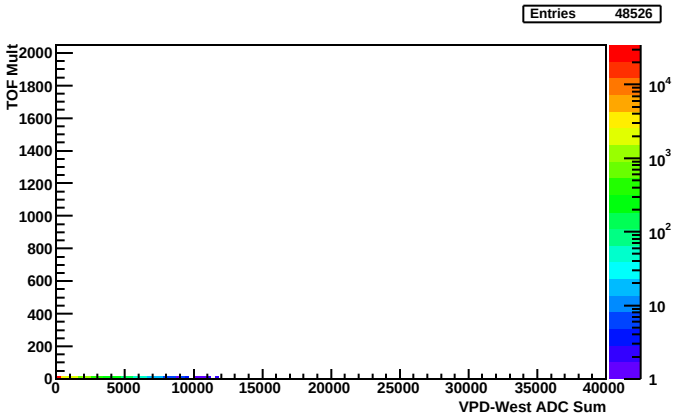

Entries 48526
TOF Mult
BBC-L-East ADC Sum

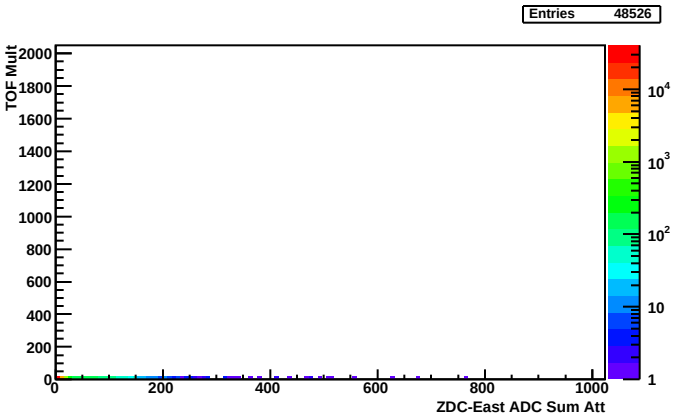

Entries 48526
TOF Mult
BBC-L-West ADC Sum

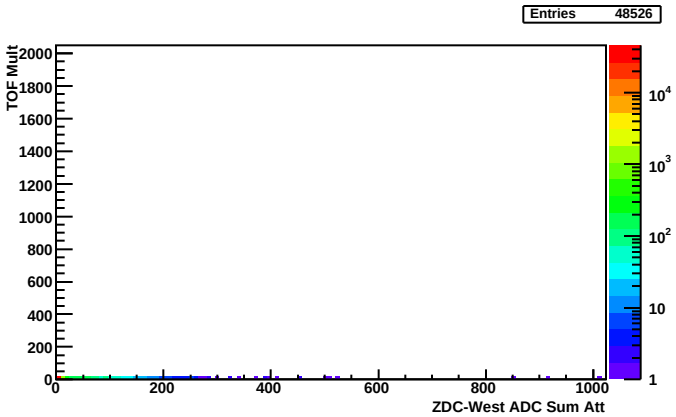

Entries 48526
TOF Mult
BBC-S-East ADC Sum

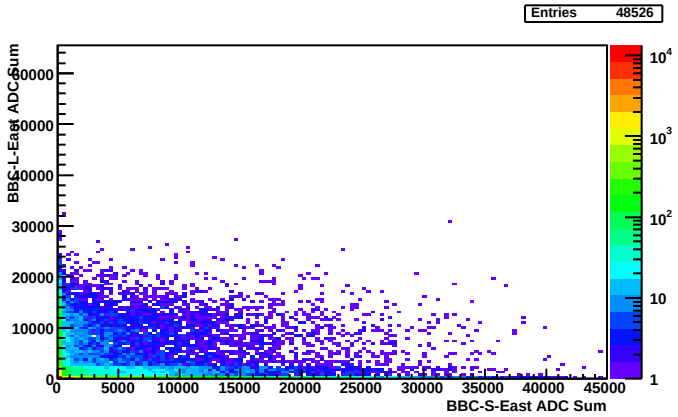

Entries 48526
TOF Mult
BBC-S-West ADC Sum

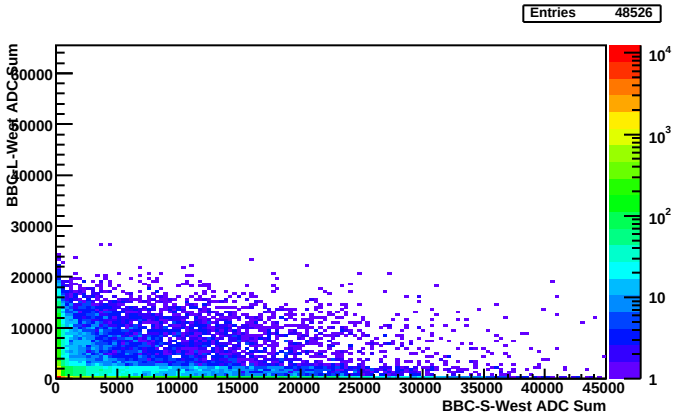

Entries 48526
TOF Mult
VPD-East ADC Sum

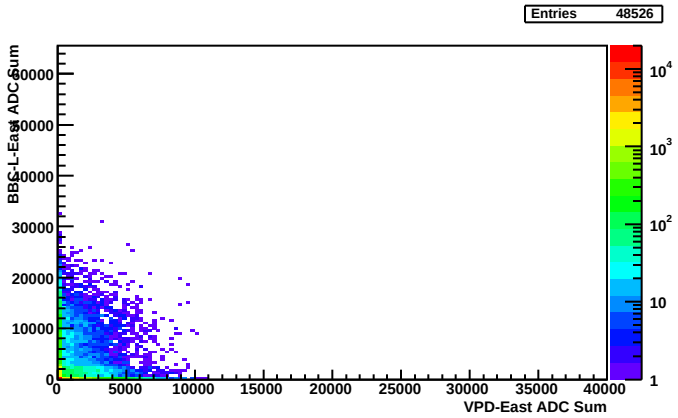

Entries 48526
TOF Mult
VPD-West ADC Sum

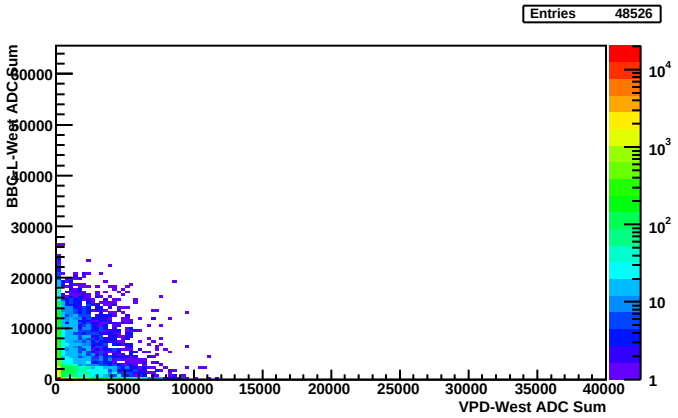

Entries 48526
TOF Mult
ZDC-East ADC Sum Att

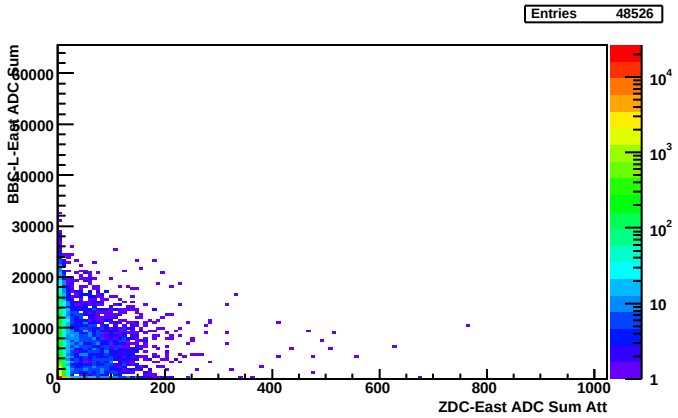

Entries 48526
TOF Mult
ZDC-West ADC Sum Att

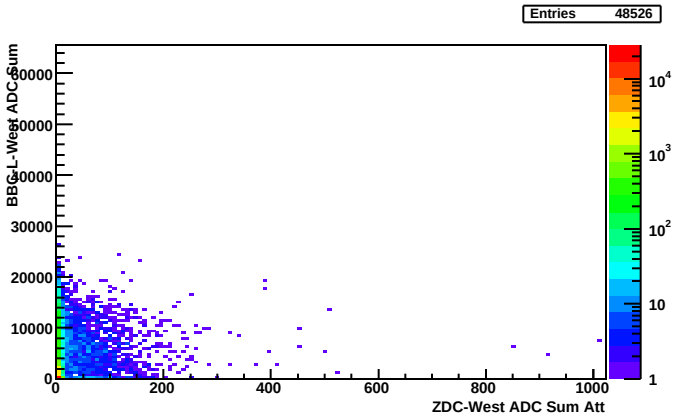

Entries 48526
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 48526
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 48526
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 48526
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 48526
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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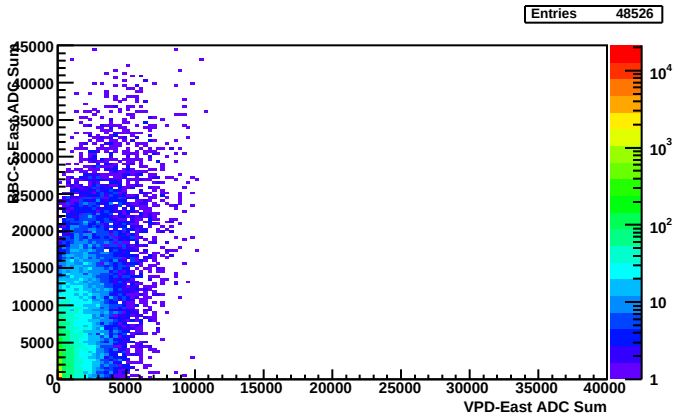
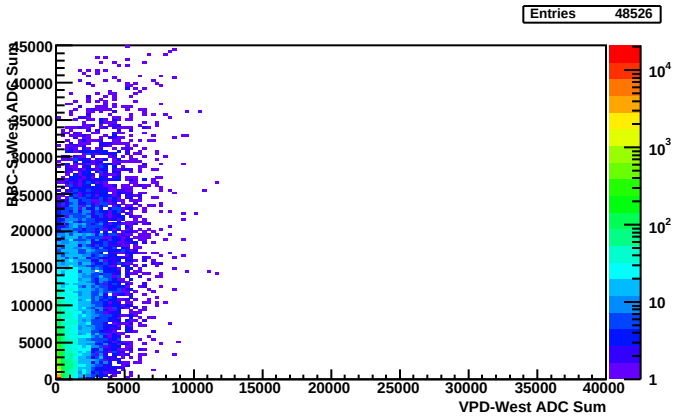
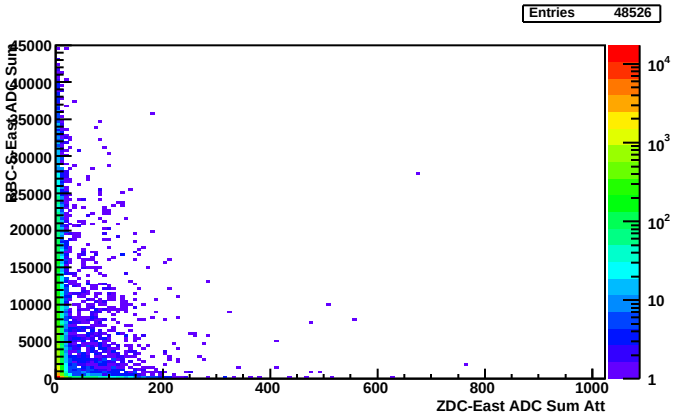
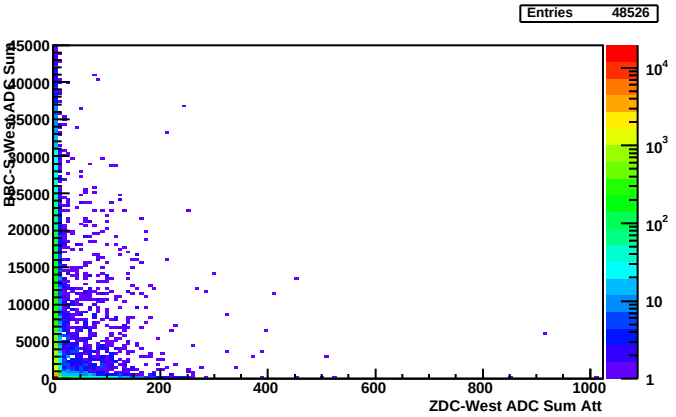
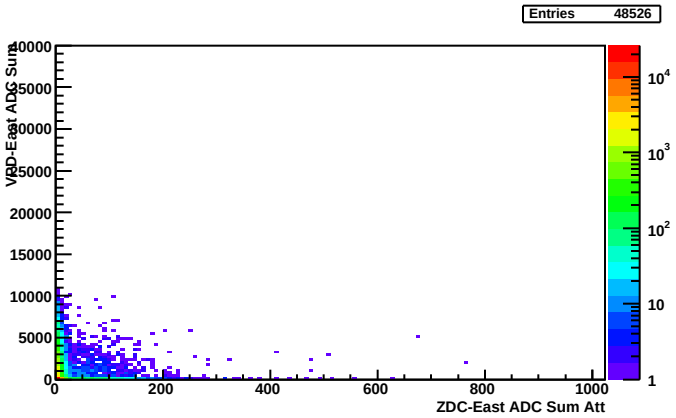
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

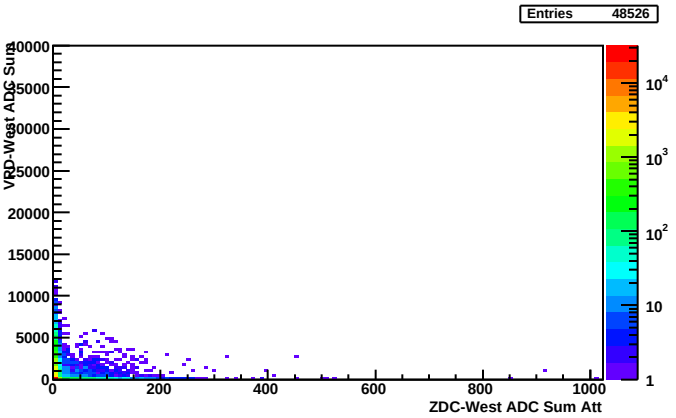

Entries 48526
BBC-S-East ADC Sum
VPD-East ADC Sum

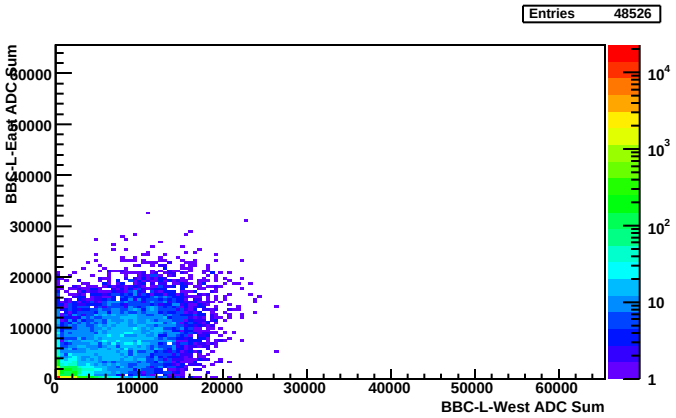

Entries 48526
BBC-S-West ADC Sum
VPD-West ADC Sum

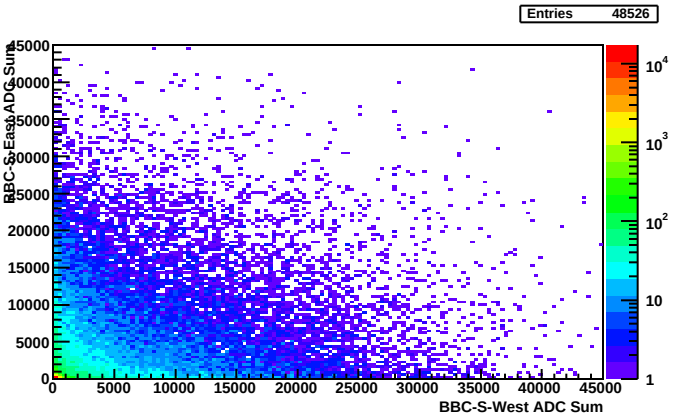

Entries 48526
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

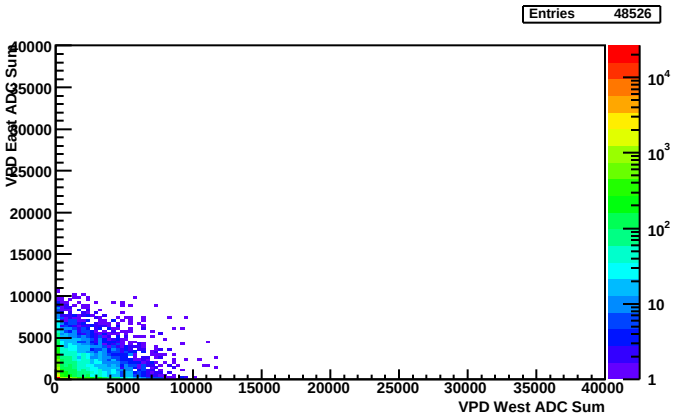

Entries 48526
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

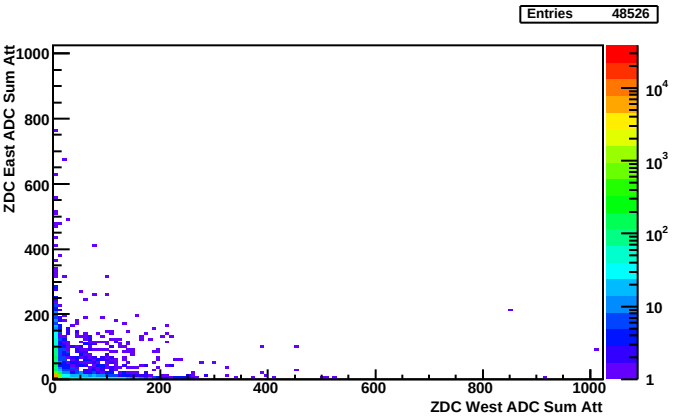

Entries 48526
VPD-East ADC Sum
ZDC-East ADC Sum Att

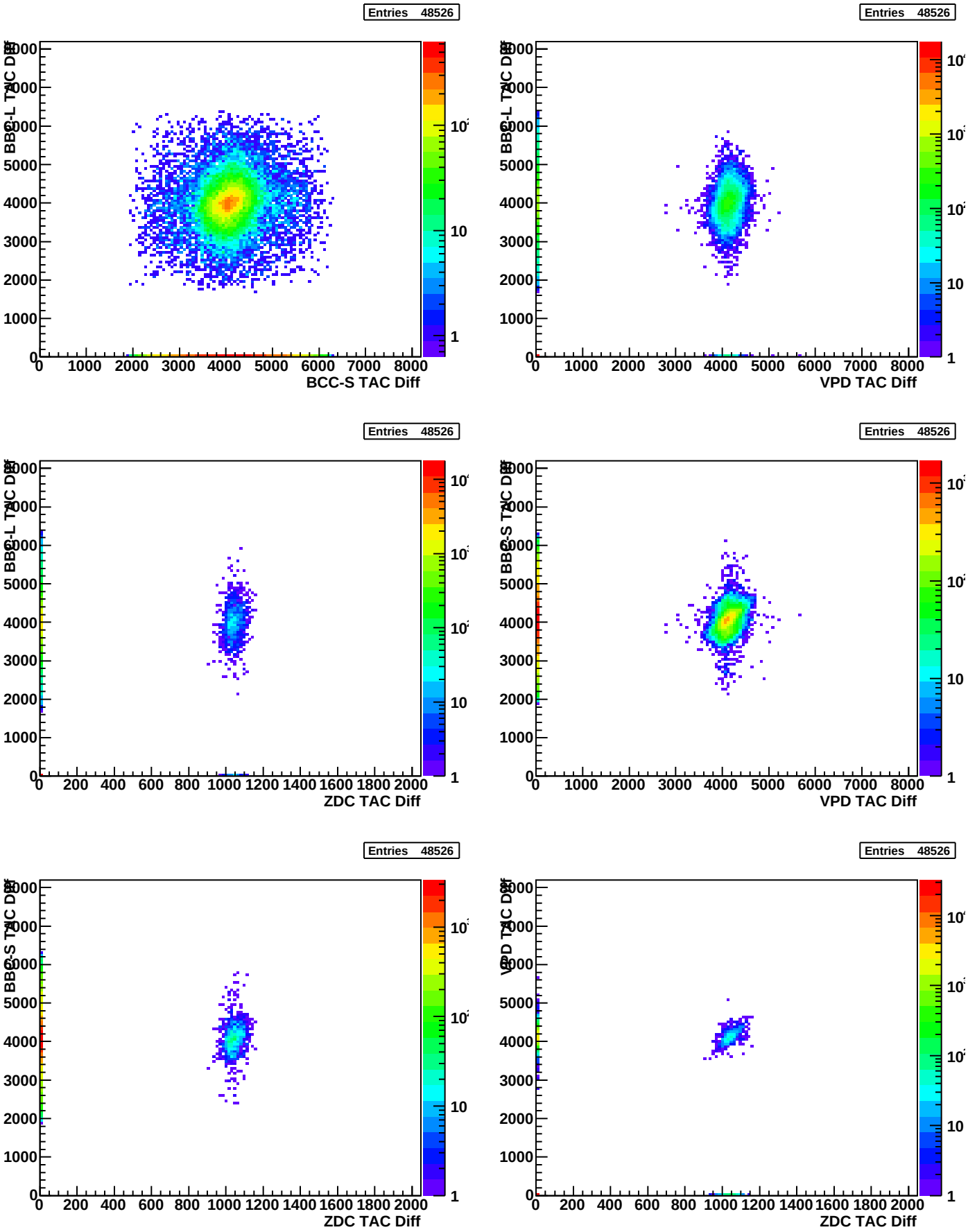

Entries 48526
VPD-West ADC Sum
ZDC-West ADC Sum Att

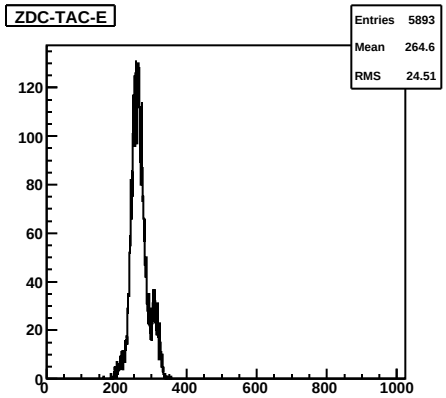

Entries 48526
BBC-L-East ADC Sum
BBC-L-West ADC Sum

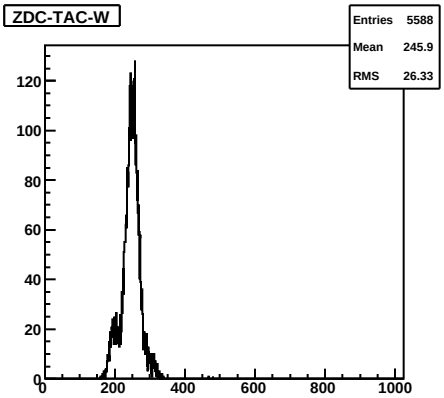

Entries 48526
BBC-S-East ADC Sum
BBC-S-West ADC Sum

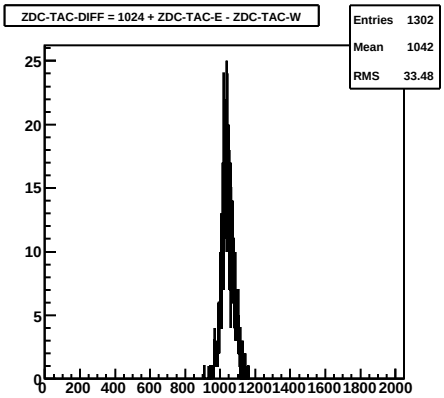

Entries 48526
VPD East ADC Sum
VPD West ADC Sum

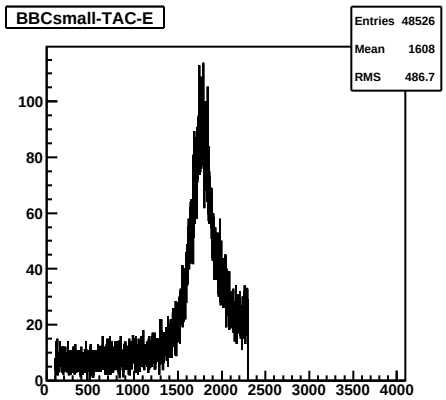

Entries 48526
ZDC East ADC Sum Att
ZDC West ADC Sum Att

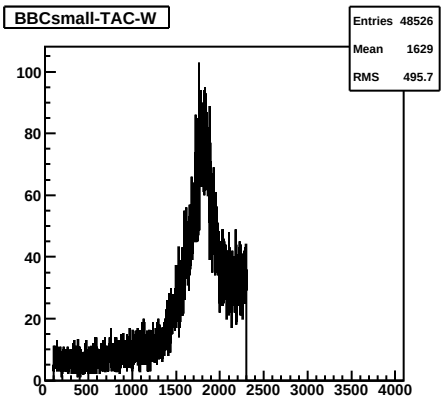

Entries 48526
BBC-L TAC Diff
BCC-S TAC Diff
Entries 48526
BBC-L TAC Diff
VPD TAC Diff
Entries 48526
BBC-L TAC Diff
ZDC TAC Diff
Entries 48526
BBC-S TAC Diff
VPD TAC Diff
Entries 48526
BBC-S TAC Diff
ZDC TAC Diff
Entries 48526
VPD TAC Diff
ZDC TAC Diff

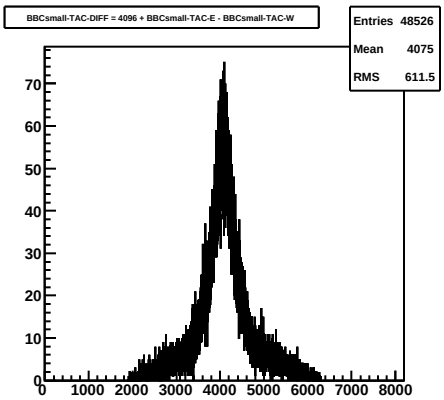

ZDC-TAC-E
Entries 5893
Mean 264.6
RMS 24.51

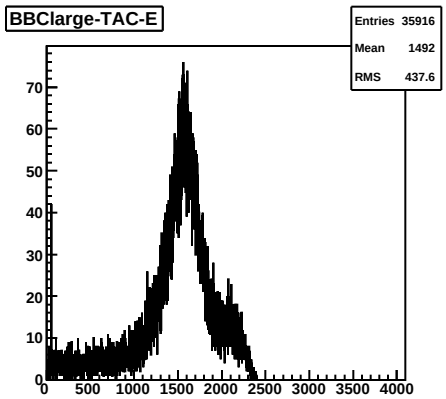

ZDC-TAC-W
Entries 5588
Mean 245.9
RMS 26.33

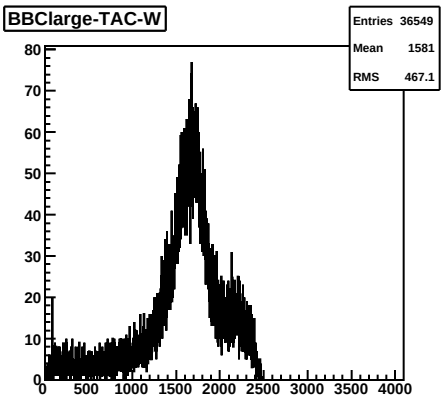

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 1302
Mean 1042
RMS 33.48

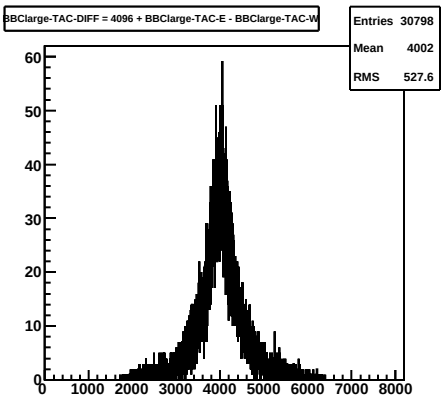

BBCsmall-TAC-E
Entries 48526
Mean 1608
RMS 486.7

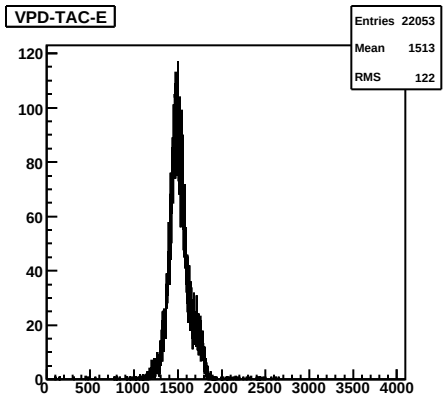

BBCsmall-TAC-W
Entries 48526
Mean 1629
RMS 495.7

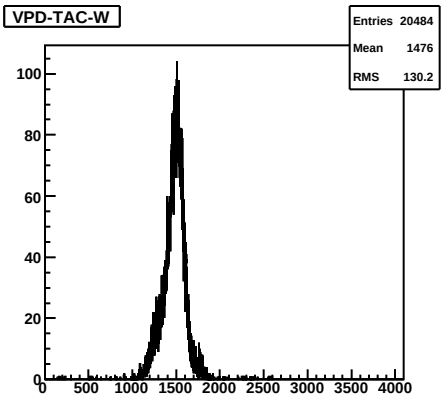

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 48526
Mean 4075
RMS 611.5

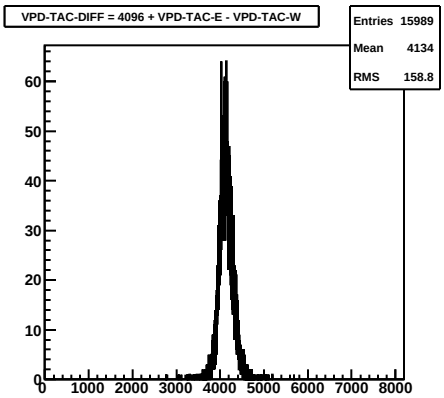

BBClarge-TAC-E
Entries 35916
Mean 1492
RMS 437.6

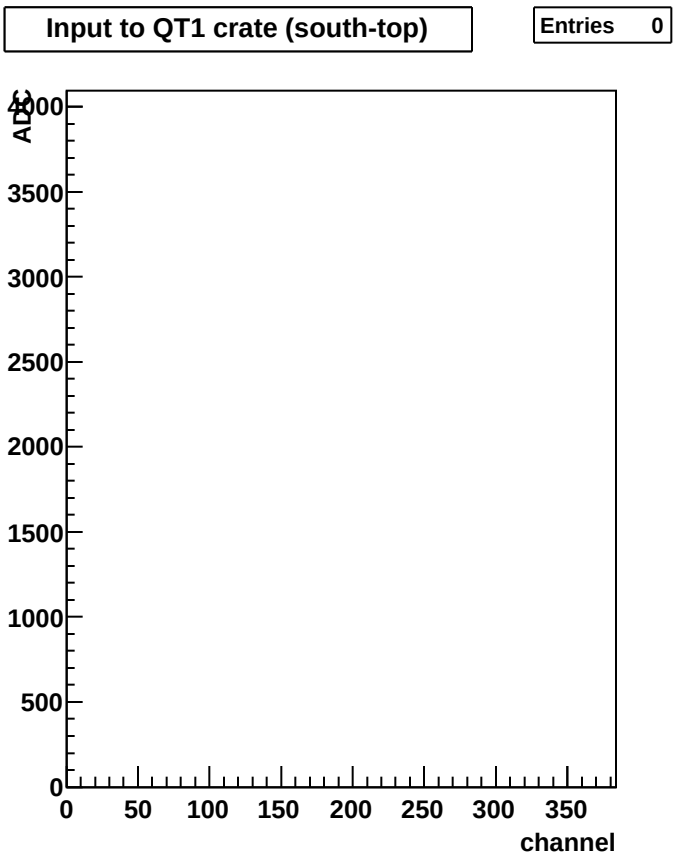

BBClarge-TAC-W
Entries 36549
Mean 1581
RMS 467.1

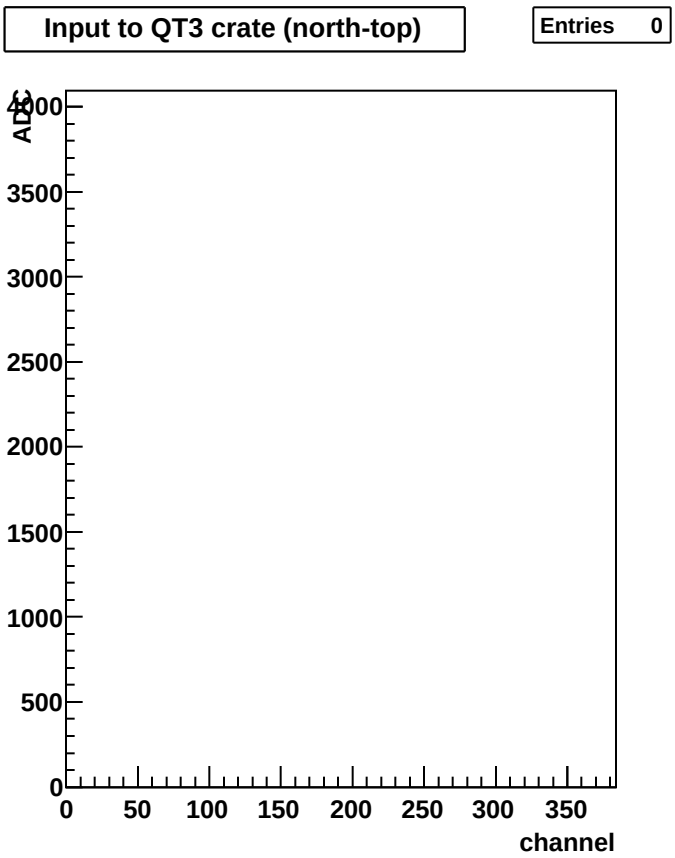

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 30798
Mean 4002
RMS 527.6

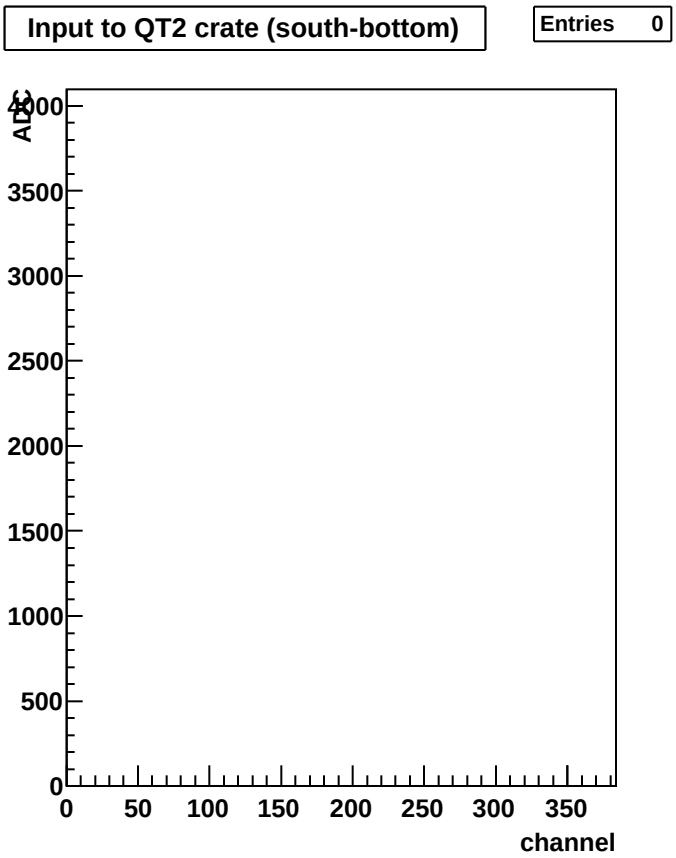

VPD-TAC-E
Entries 22053
Mean 1513
RMS 122

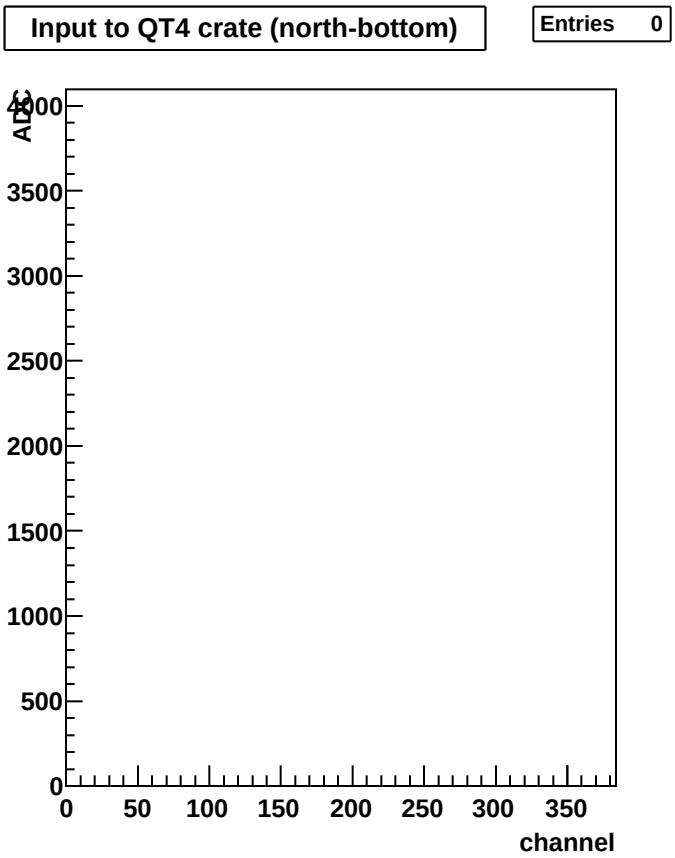

VPD-TAC-W
Entries 20484
Mean 1476
RMS 130.2

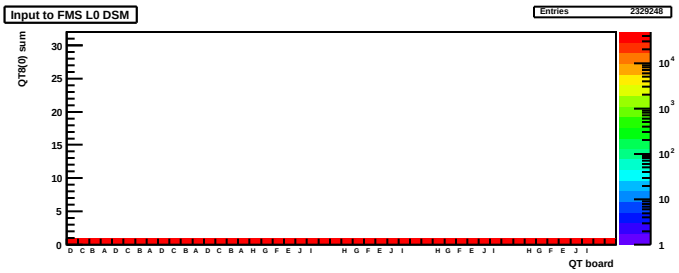

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 15989
Mean 4134
RMS 158.8

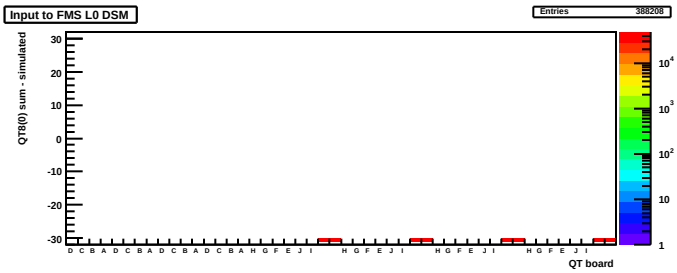

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

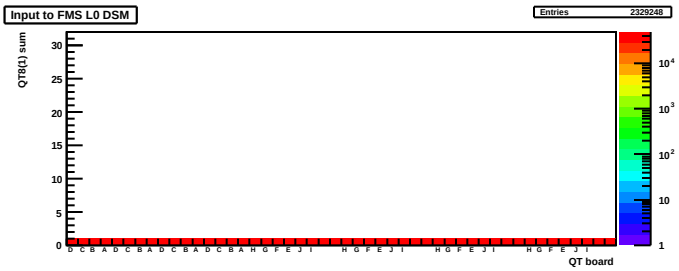

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

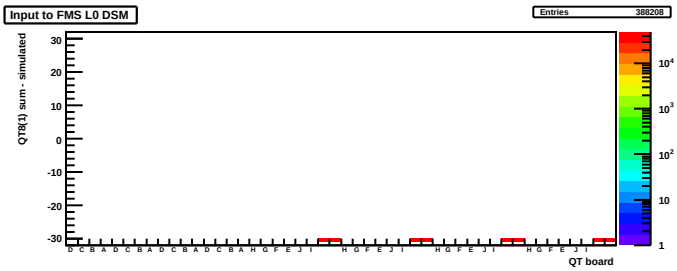

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

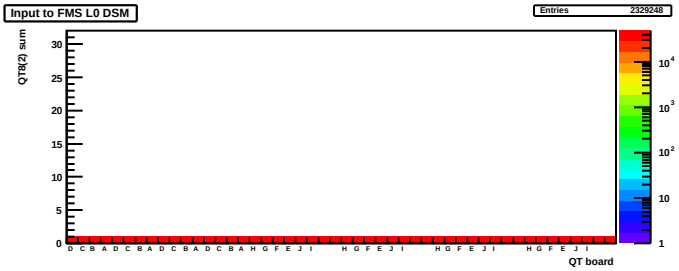

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

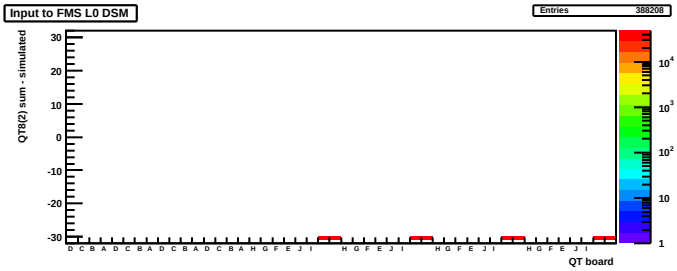

Input to FMS L0 DSM
Entries 2329248
QT8(0) sum
QT board

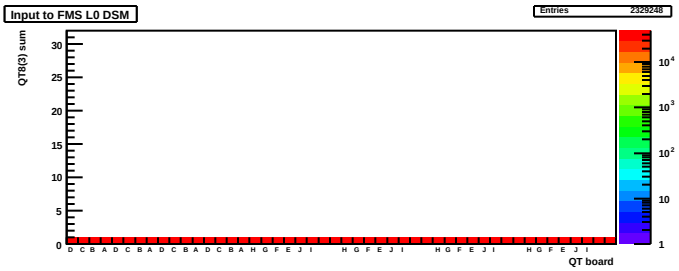

Input to FMS L0 DSM
Entries 388208
QT8(0) sum - simulated
QT board

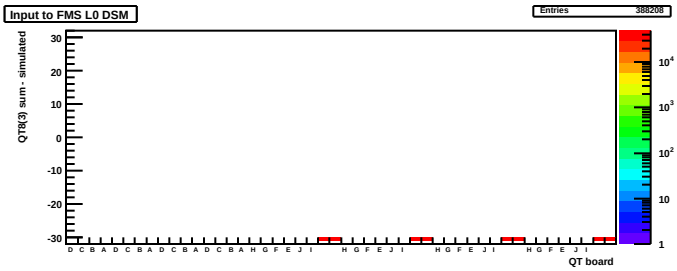

Input to FMS L0 DSM
Entries 2329248
QT8(1) sum
QT board

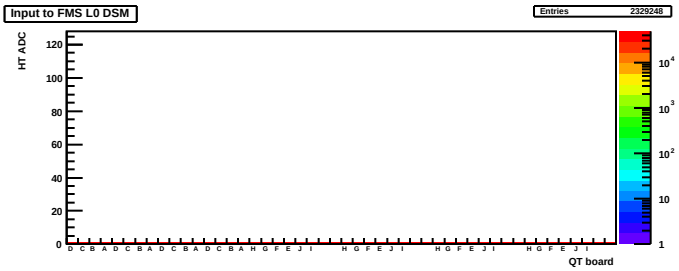

Input to FMS L0 DSM
Entries 388208
QT8(1) sum - simulated
QT board

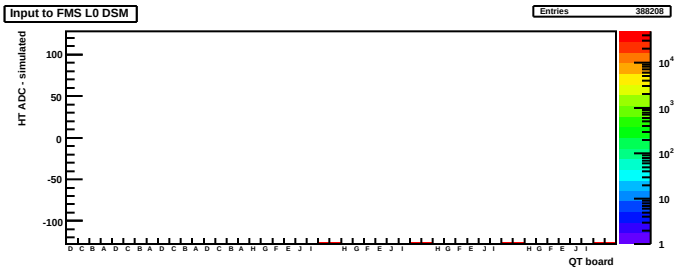

Input to FMS L0 DSM
Entries 2329248
QT8(2) sum
QT board

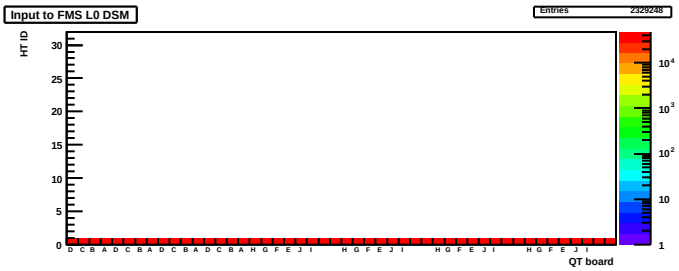

Input to FMS L0 DSM
Entries 388208
QT8(2) sum - simulated
QT board

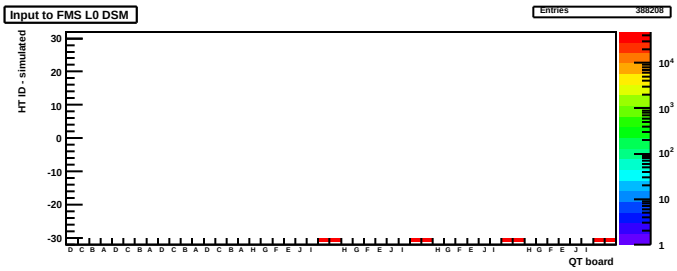

Input to FMS L0 DSM
Entries 2329248
QT8(3) sum
QT board

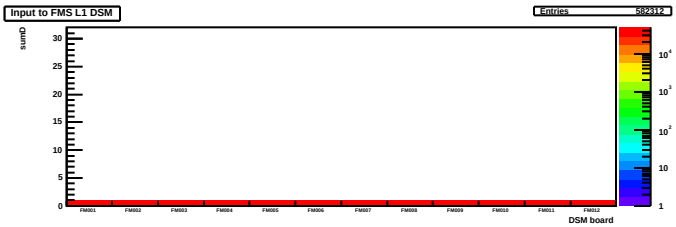

Input to FMS L0 DSM
Entries 388208
QT8(3) sum - simulated
QT board

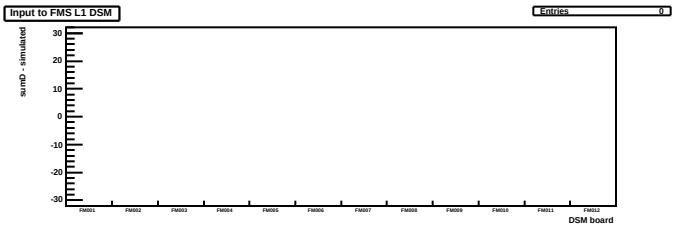

Input to FMS L0 DSM
Entries 2329248
HT ADC
QT board

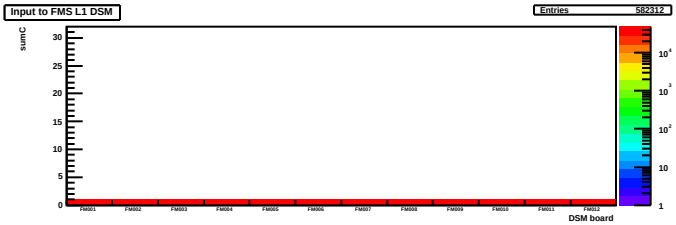

Input to FMS L0 DSM
Entries 388208
HT ADC - simulated
QT board

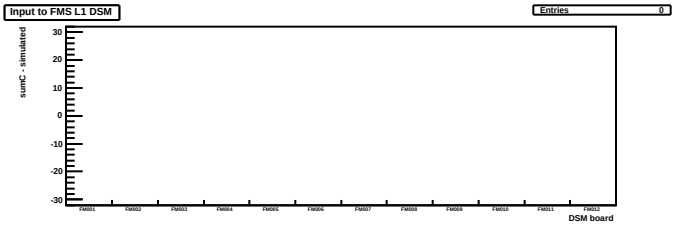

Input to FMS L0 DSM
Entries 2329248
HT ID
QT board

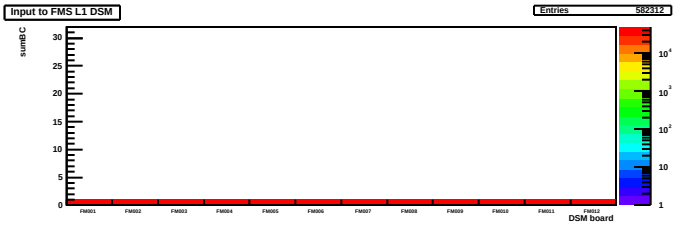

Input to FMS L0 DSM
Entries 388208
HT ID - simulated
QT board

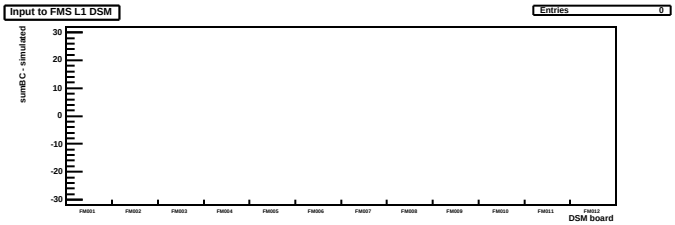

Input to FMS L1 DSM
Entries 582312
sumD
DSM board

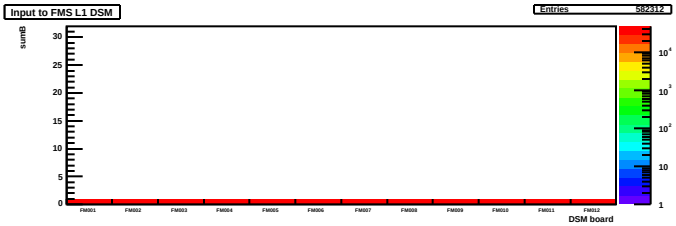

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

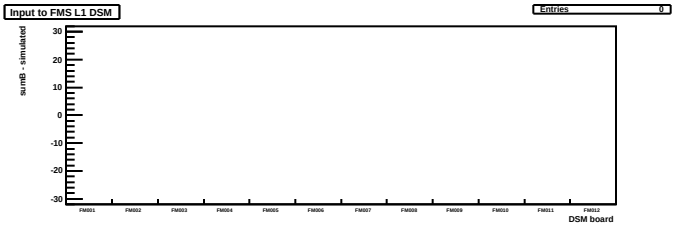

Input to FMS L1 DSM
Entries 582312
sumC
DSM board

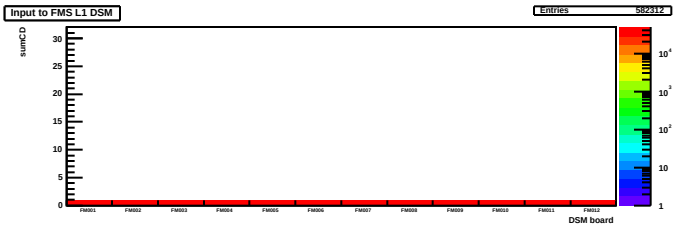

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

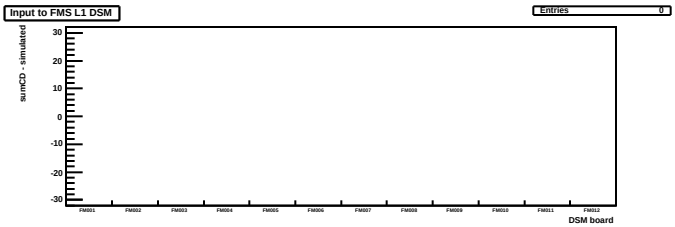

Input to FMS L1 DSM
Entries 582312
sumBC
DSM board

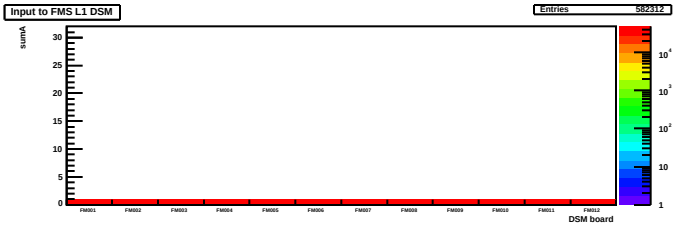

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

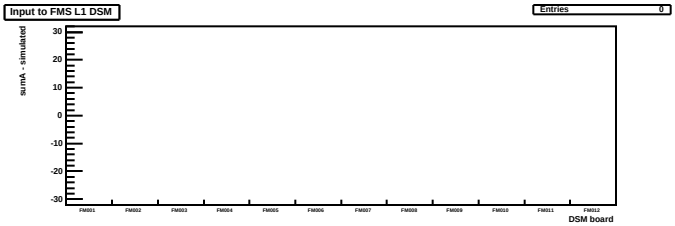

Input to FMS L1 DSM
Entries 582312
sumB
DSM board

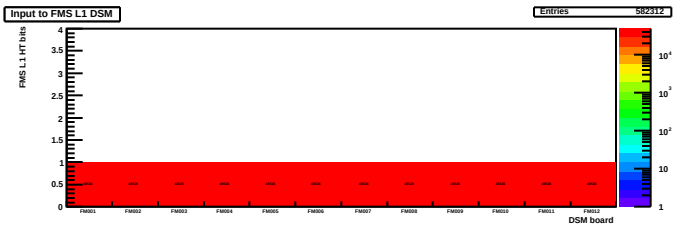

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

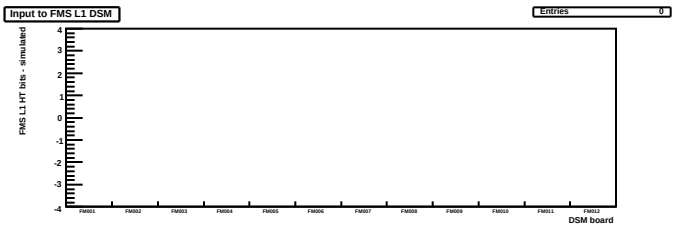

Input to FMS L1 DSM
Entries 582312
sumCD
DSM board

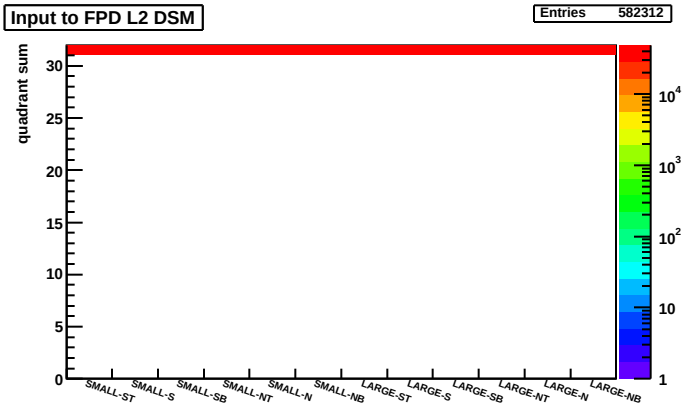

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

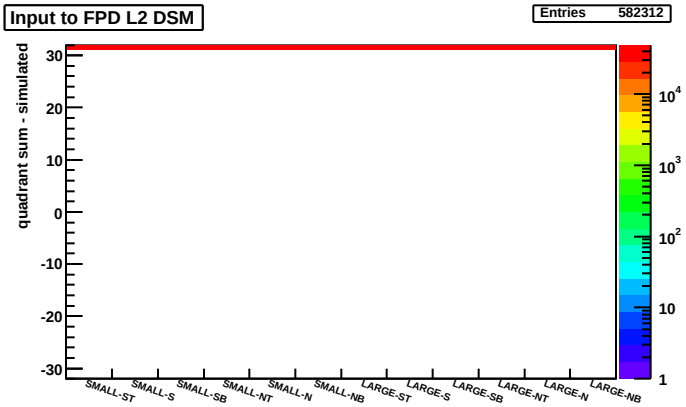

Input to FMS L1 DSM
Entries 582312
sumA
DSM board

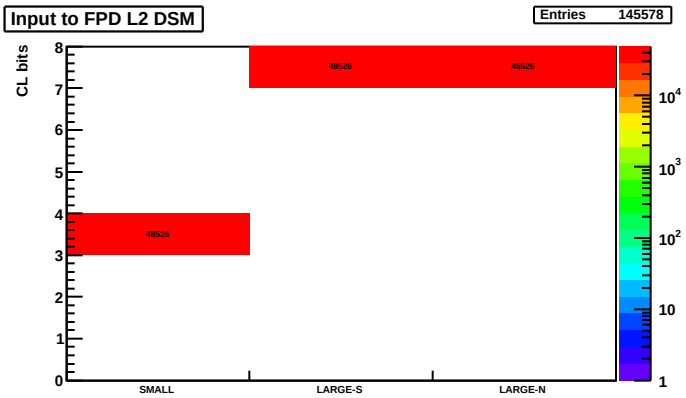

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

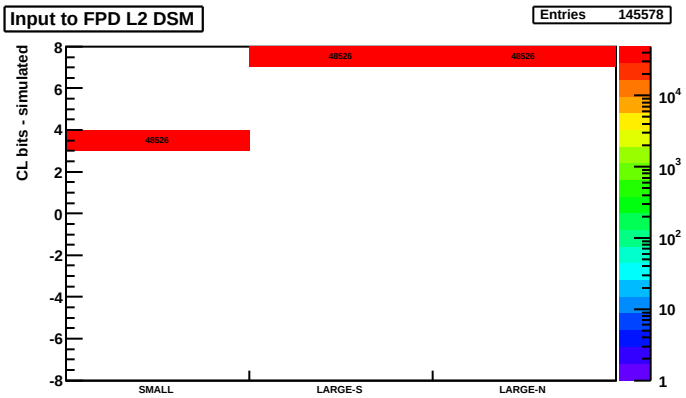

Input to FMS L1 DSM
Entries 582312
FMS L1 HT bits
DSM board

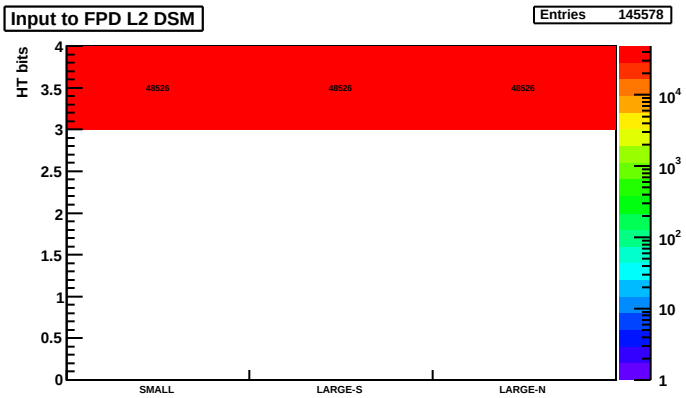

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

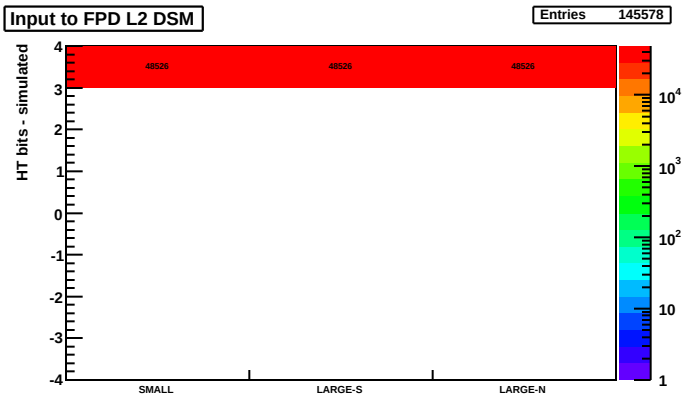

Input to FPD L2 DSM
Entries 582312
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

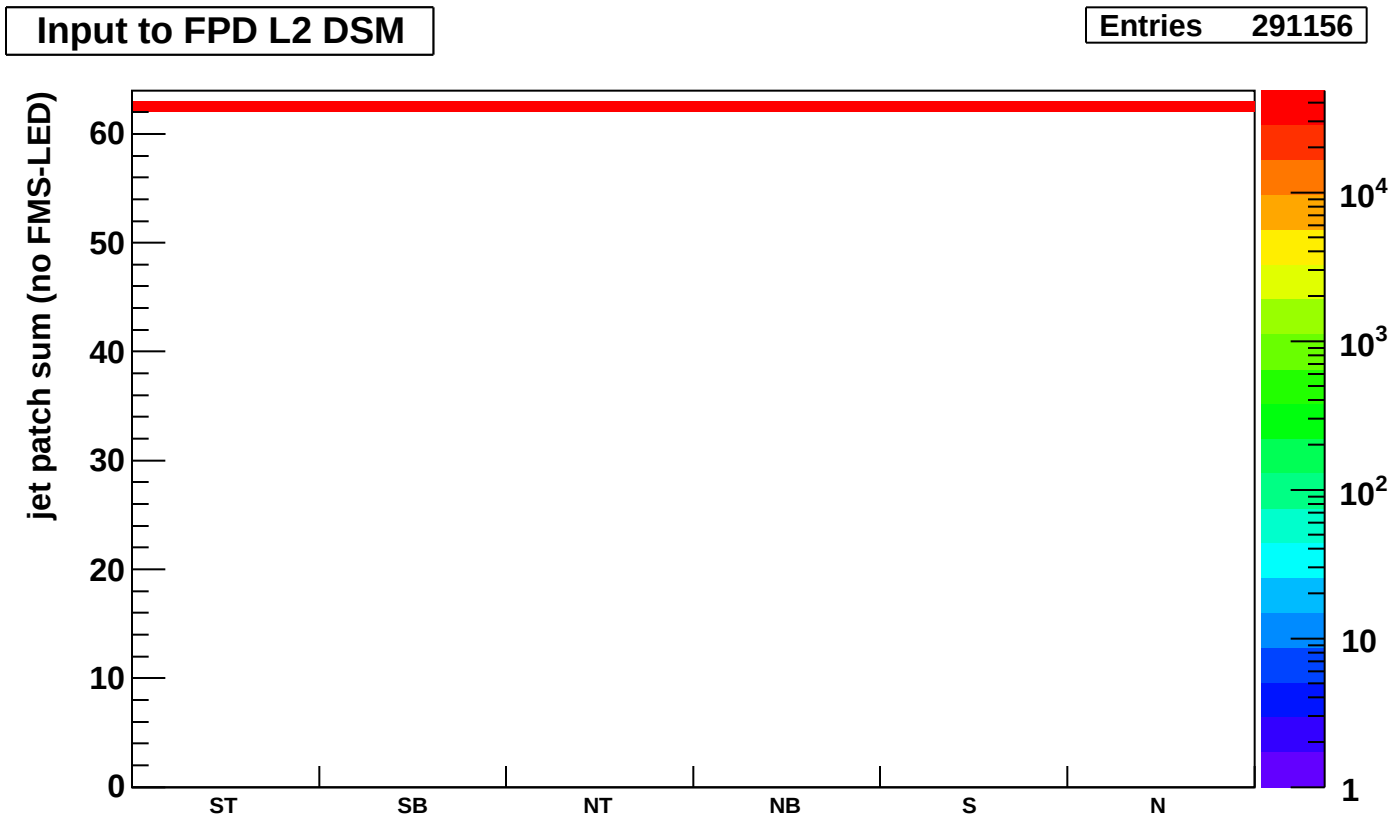

Input to FPD L2 DSM
Entries 582312
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

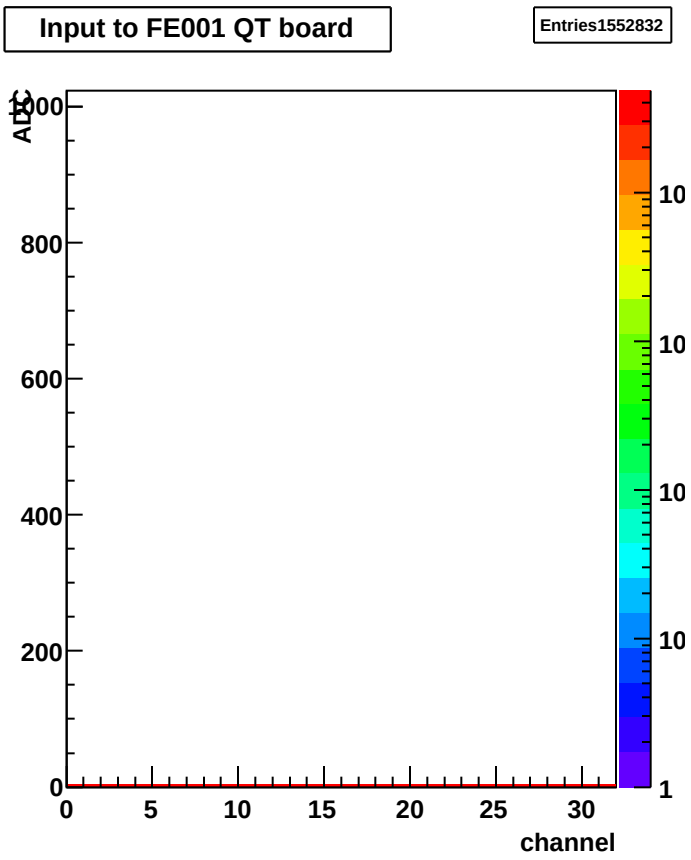

Input to FPD L2 DSM
Entries 145578
CL bits
48526
48526
48526
SMALL
LARGE-S
LARGE-N

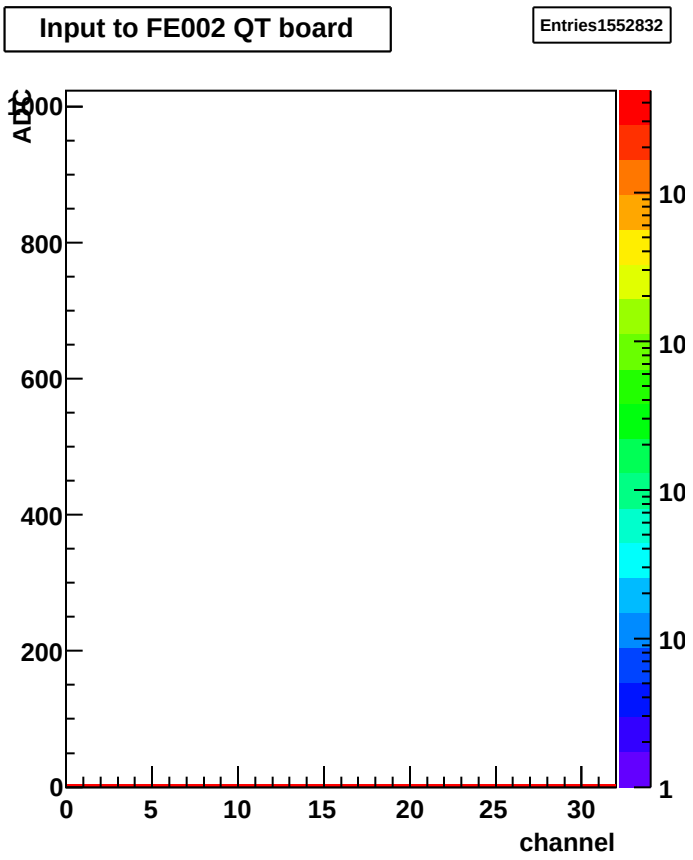

Input to FPD L2 DSM
Entries 145578
CL bits - simulated
48526
48526
48526
SMALL
LARGE-S
LARGE-N

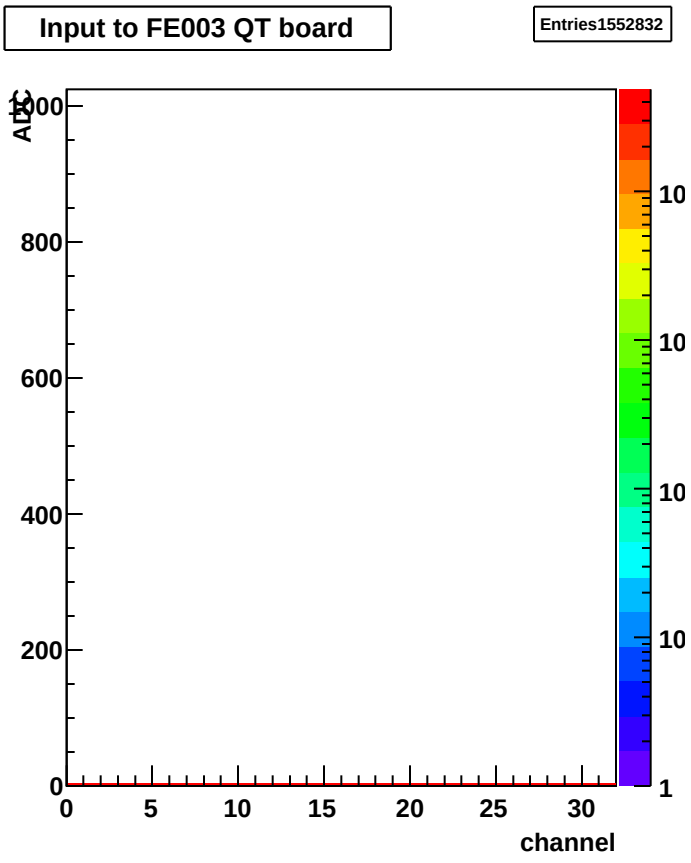

Input to FPD L2 DSM
Entries 145578
HT bits
48526
48526
48526
SMALL
LARGE-S
LARGE-N

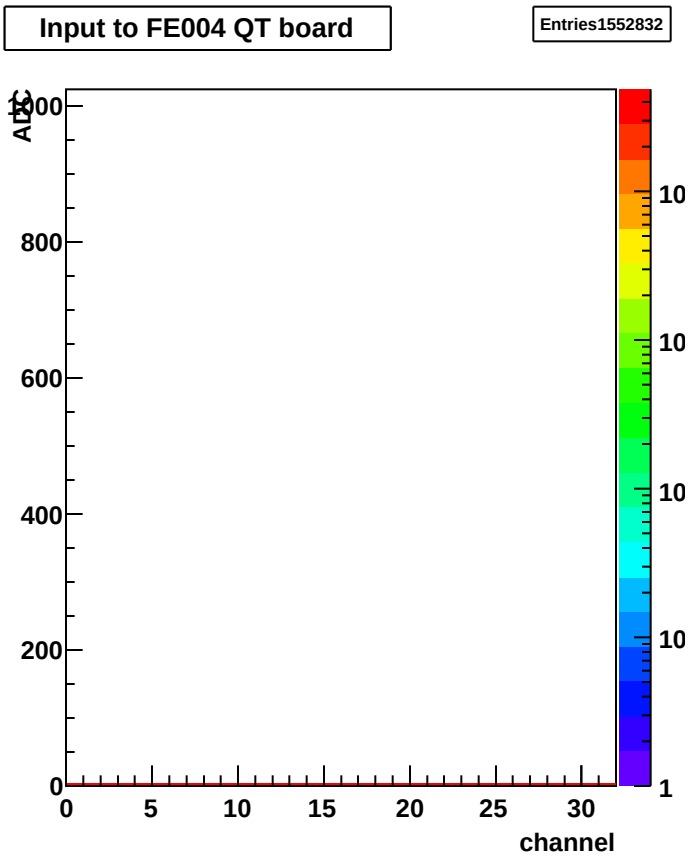

Input to FPD L2 DSM
Entries 145578
HT bits - simulated
48526
48526
48526
SMALL
LARGE-S
LARGE-N

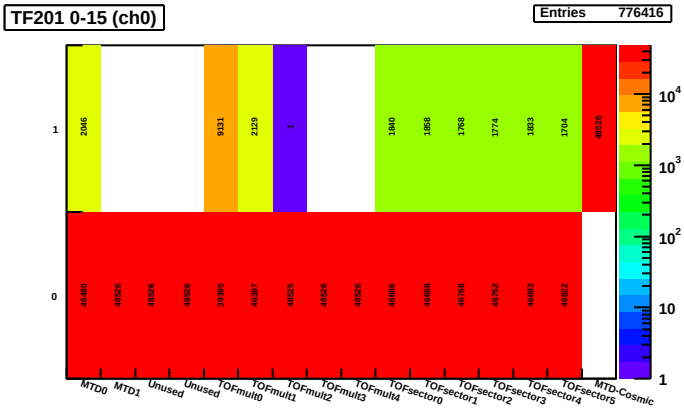

Input to FPD L2 DSM
Entries 291156
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

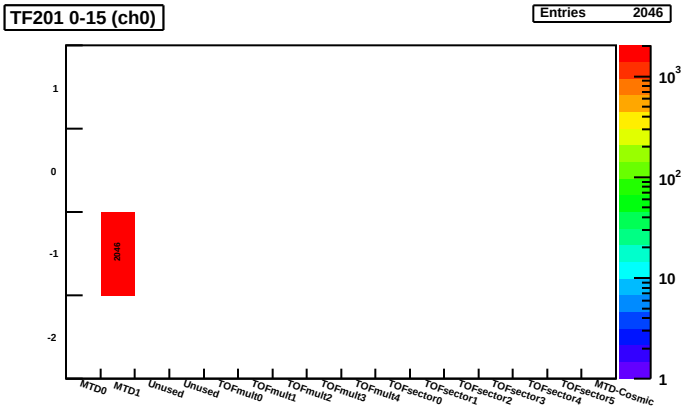

Input to FE001 QT board
Entries1552832
ADC
channel

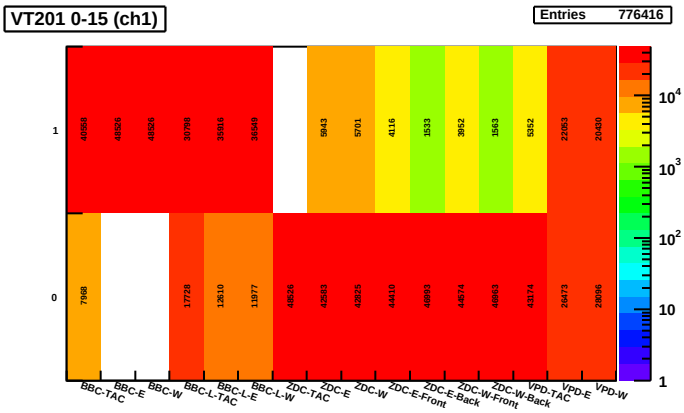

Input to FE002 QT board
Entries1552832
ADC
channel

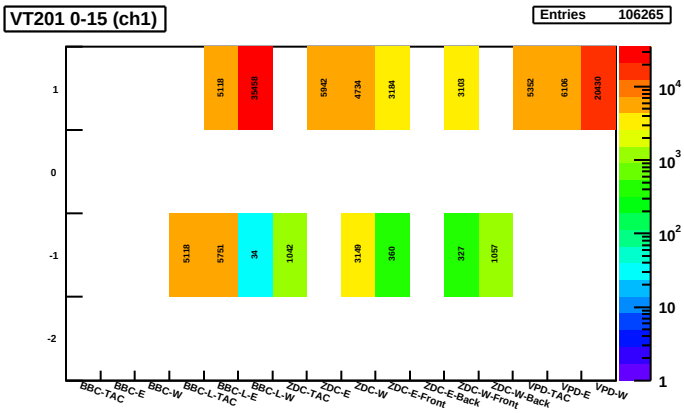

Input to FE003 QT board
Entries1552832
ADC
channel

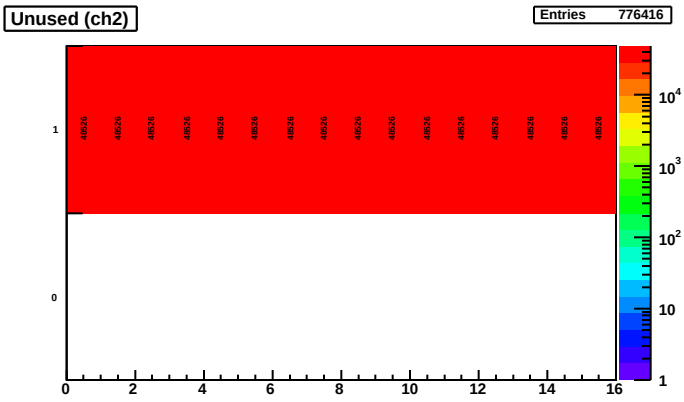

Input to FE004 QT board
Entries1552832
ADC
channel

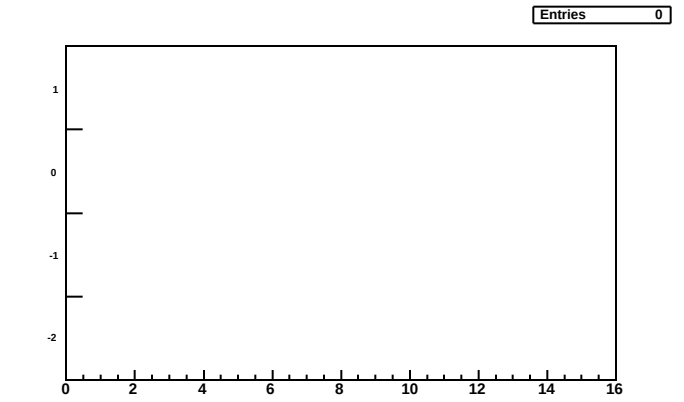

TF201 0-15 (ch0)
Entries 776416
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

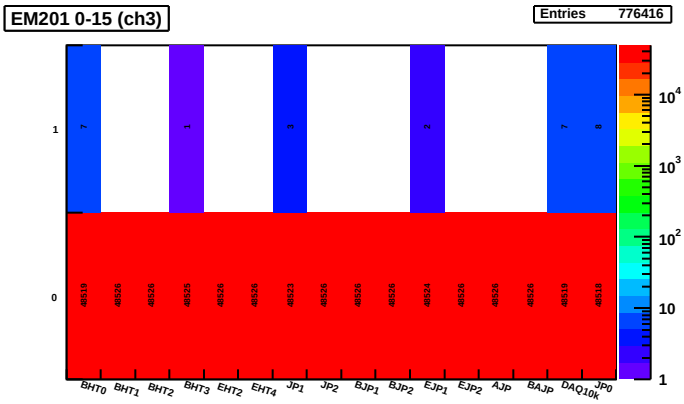

TF201 0-15 (ch0)
Entries 2046
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 776416
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 106265
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 776416


Entries 0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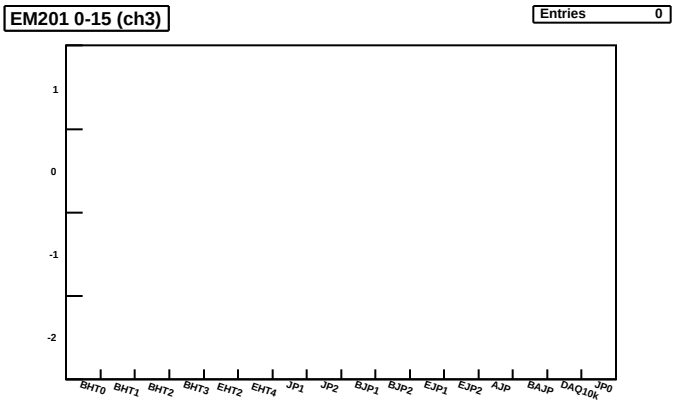
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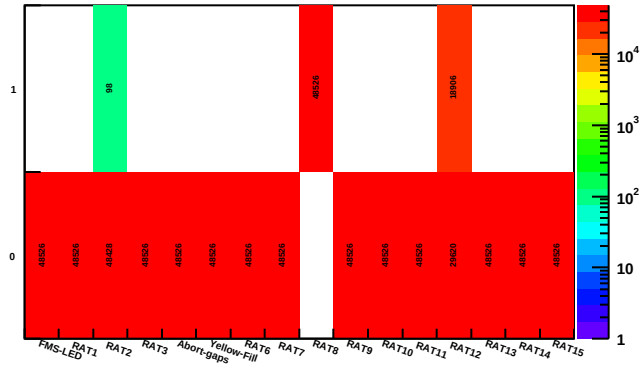
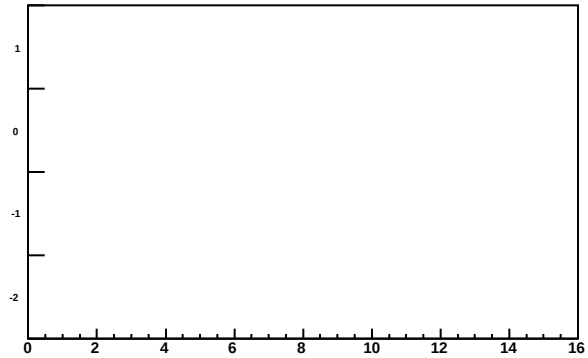
RAT board (ch4)





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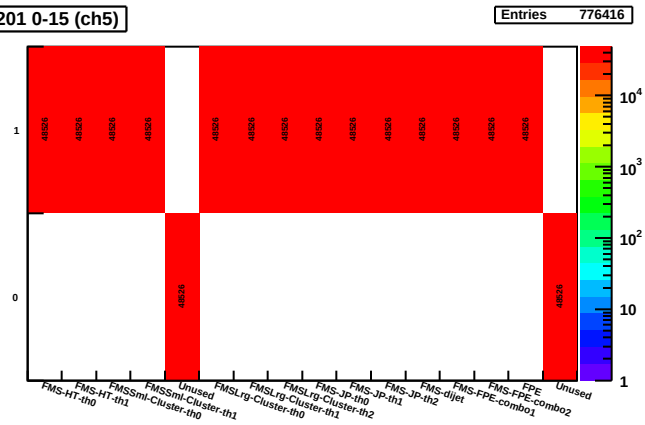

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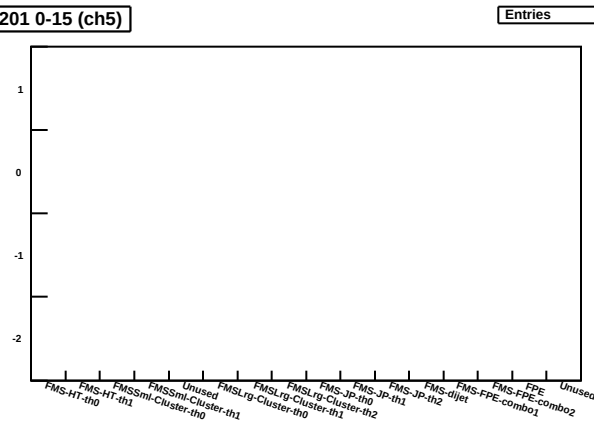

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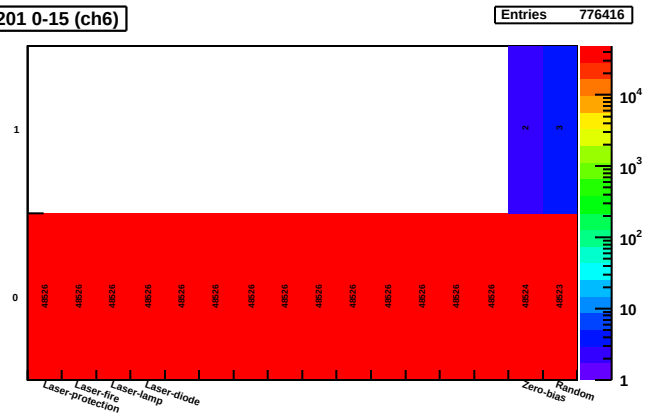

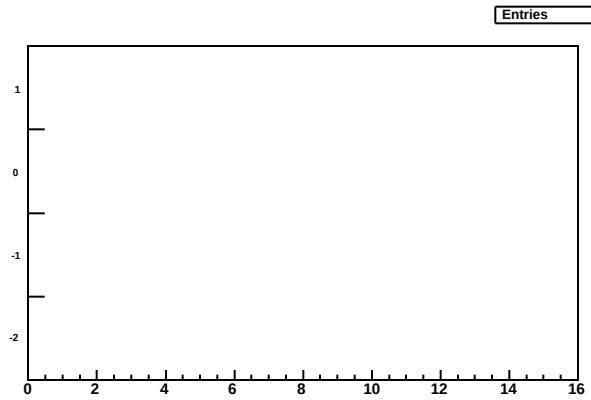
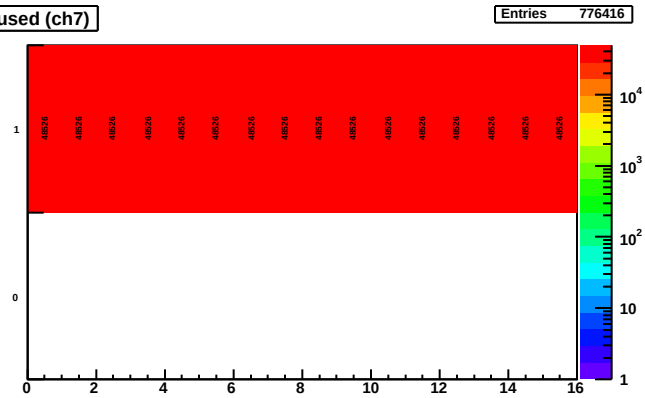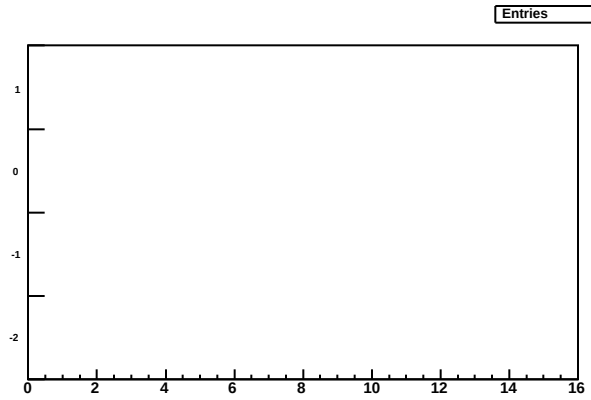
Unused (ch7)