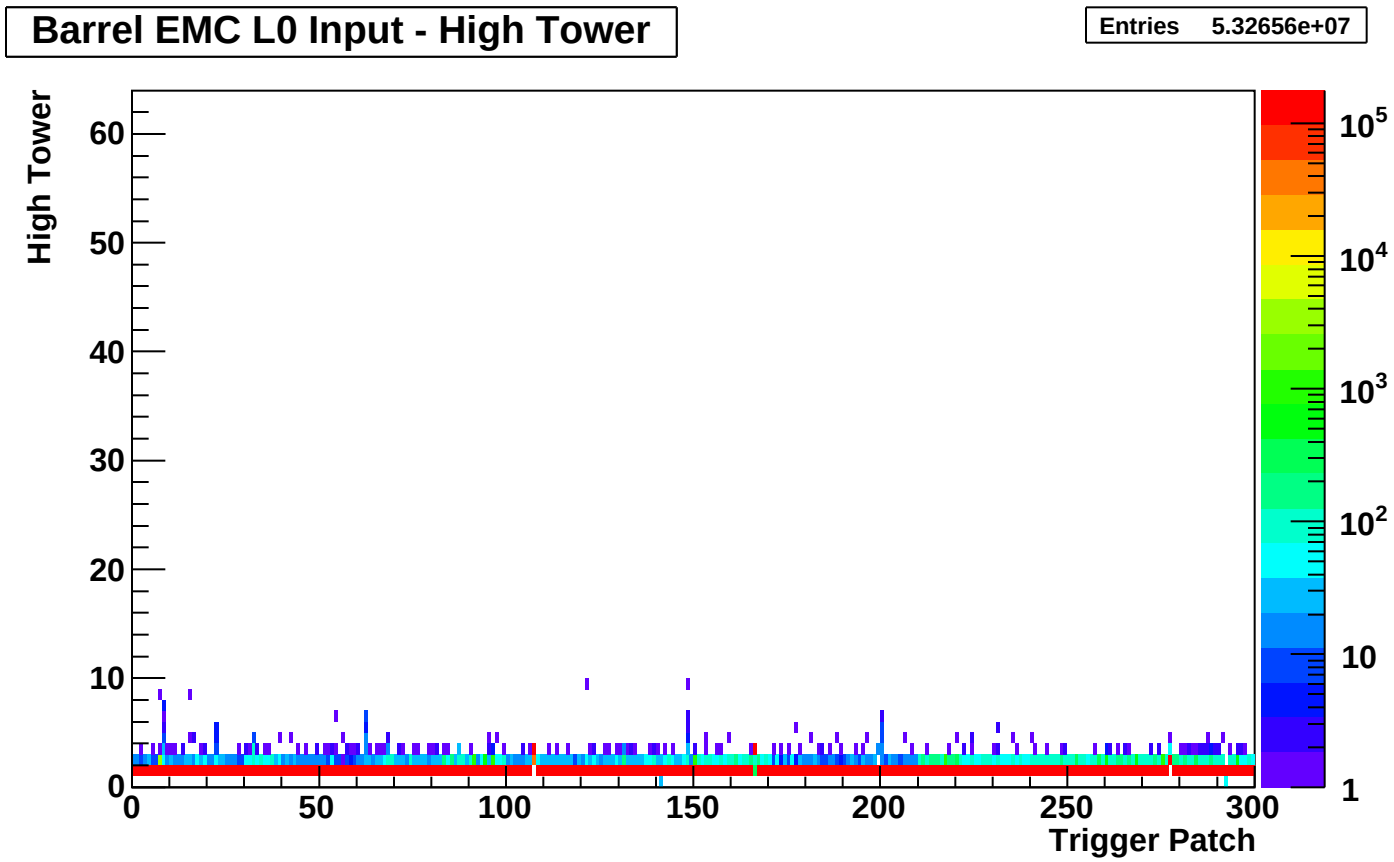
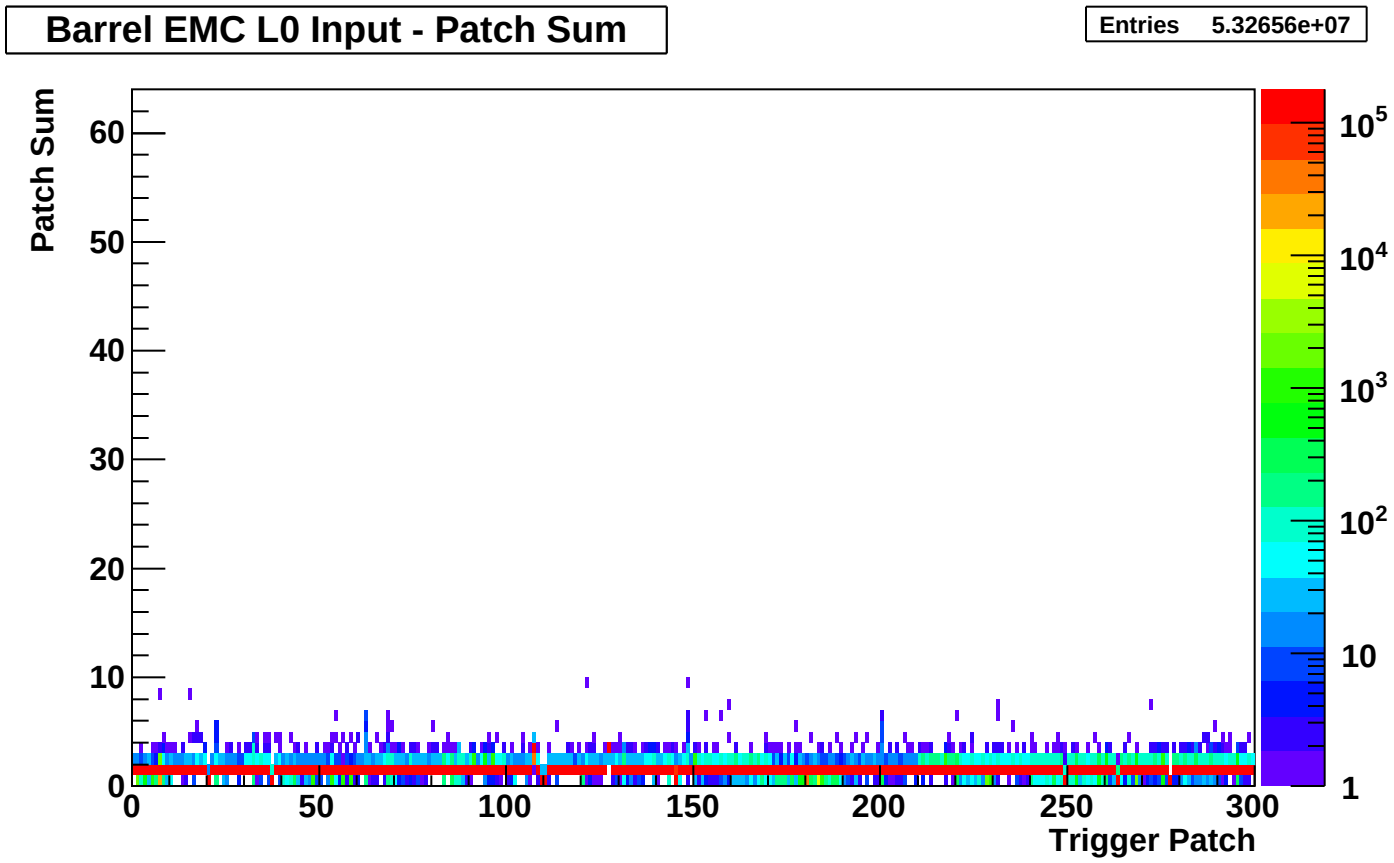
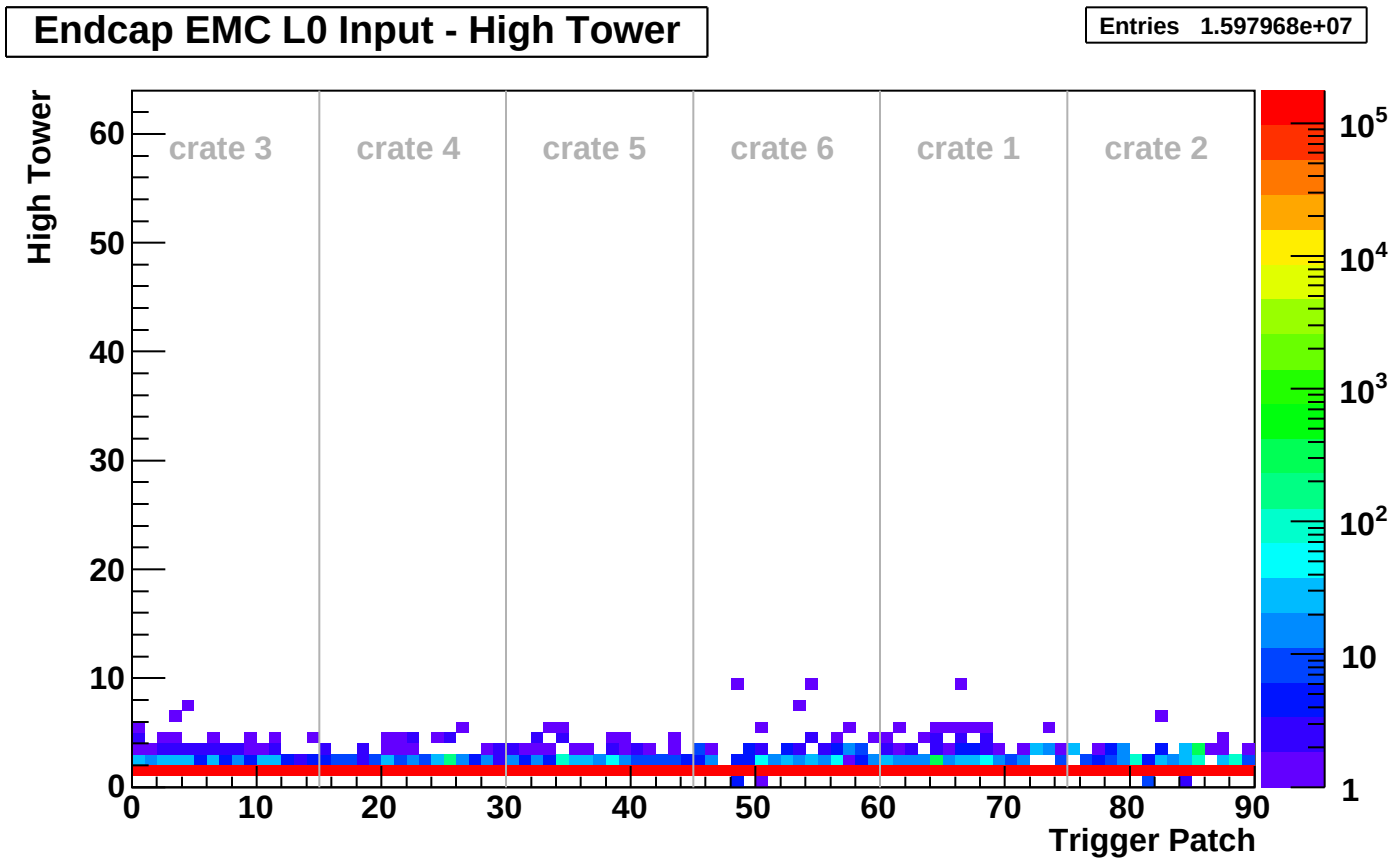
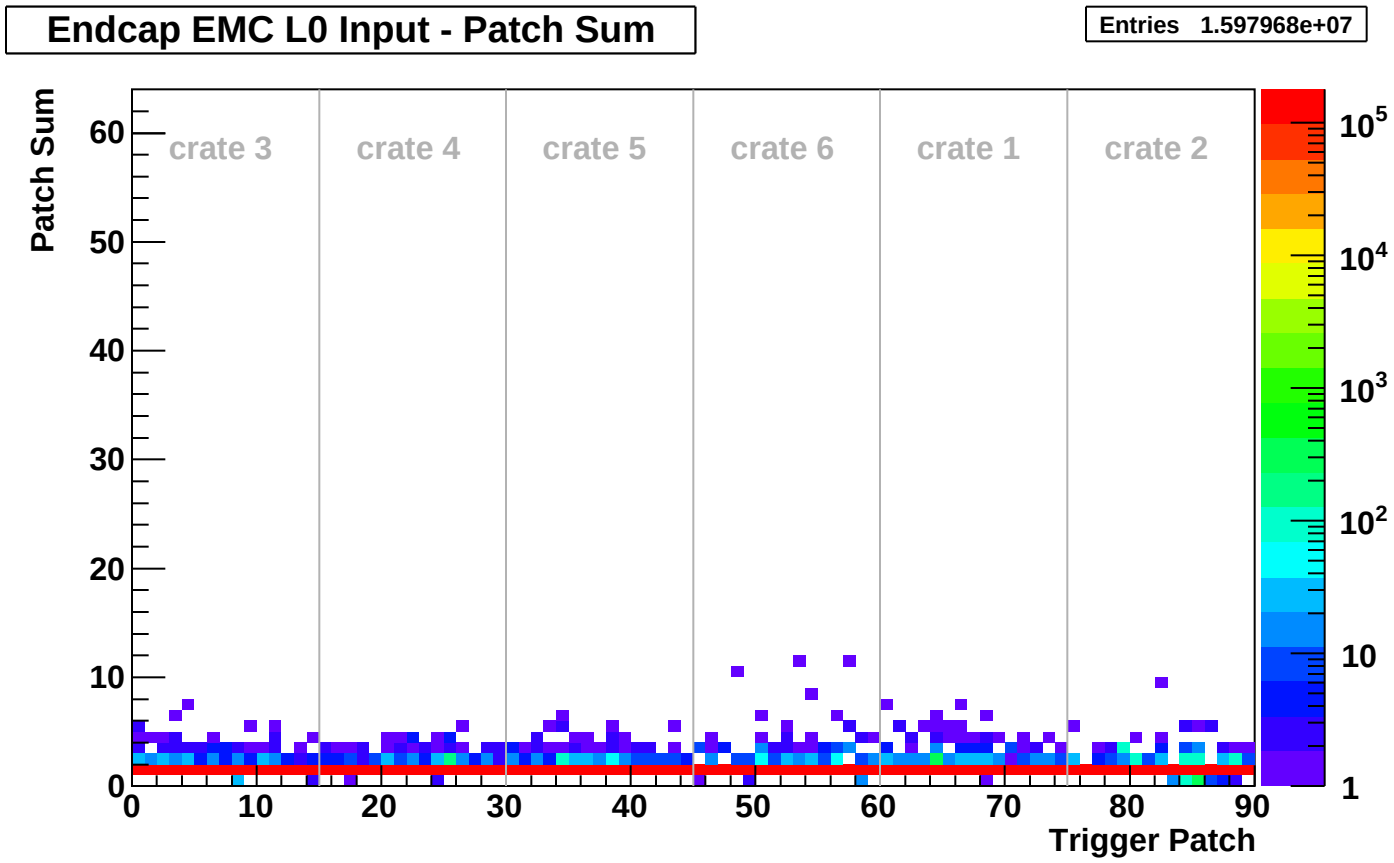
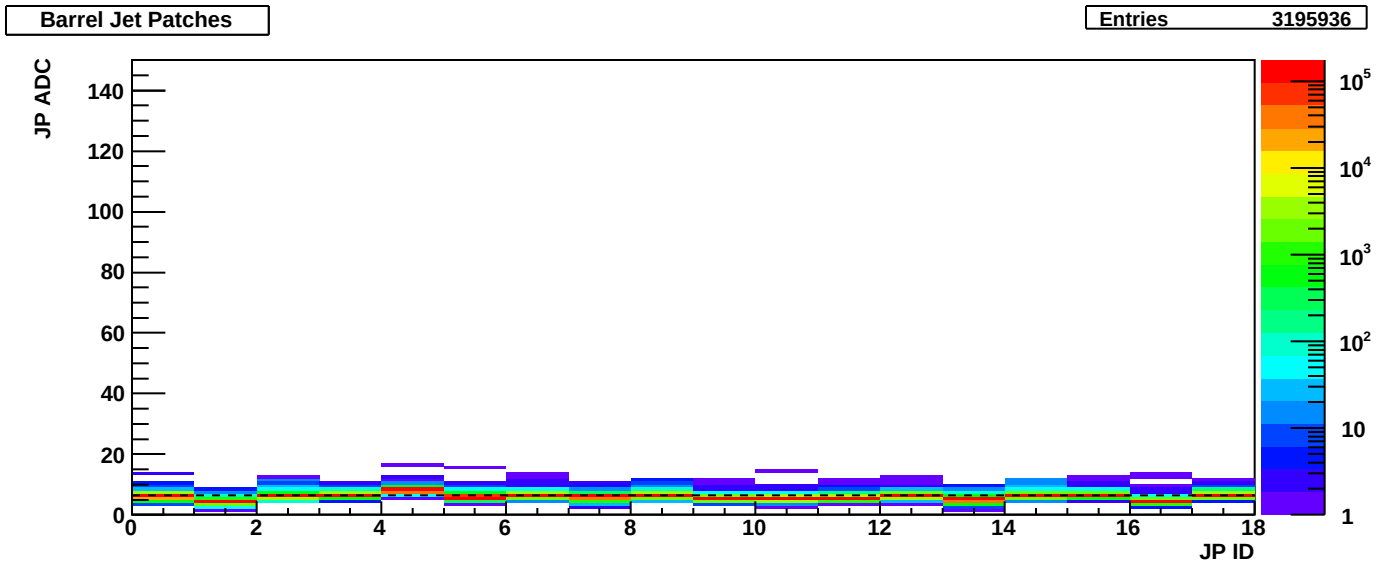
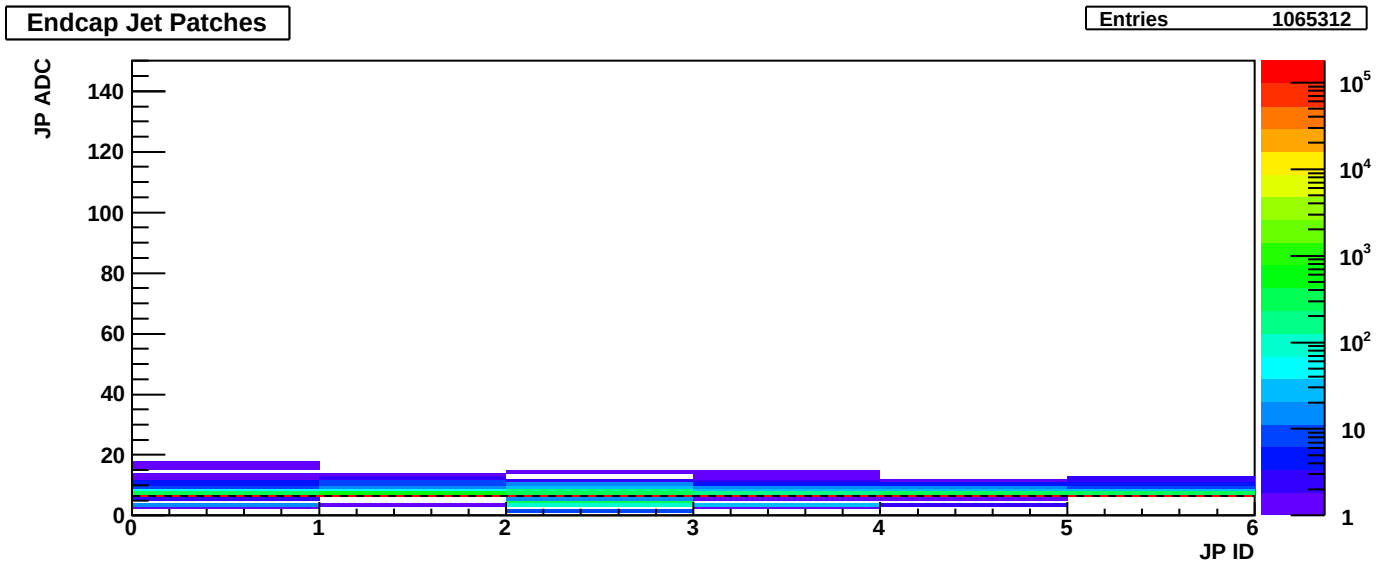

Barrel EMC L0 Input - High Tower
Entries 5.32656e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

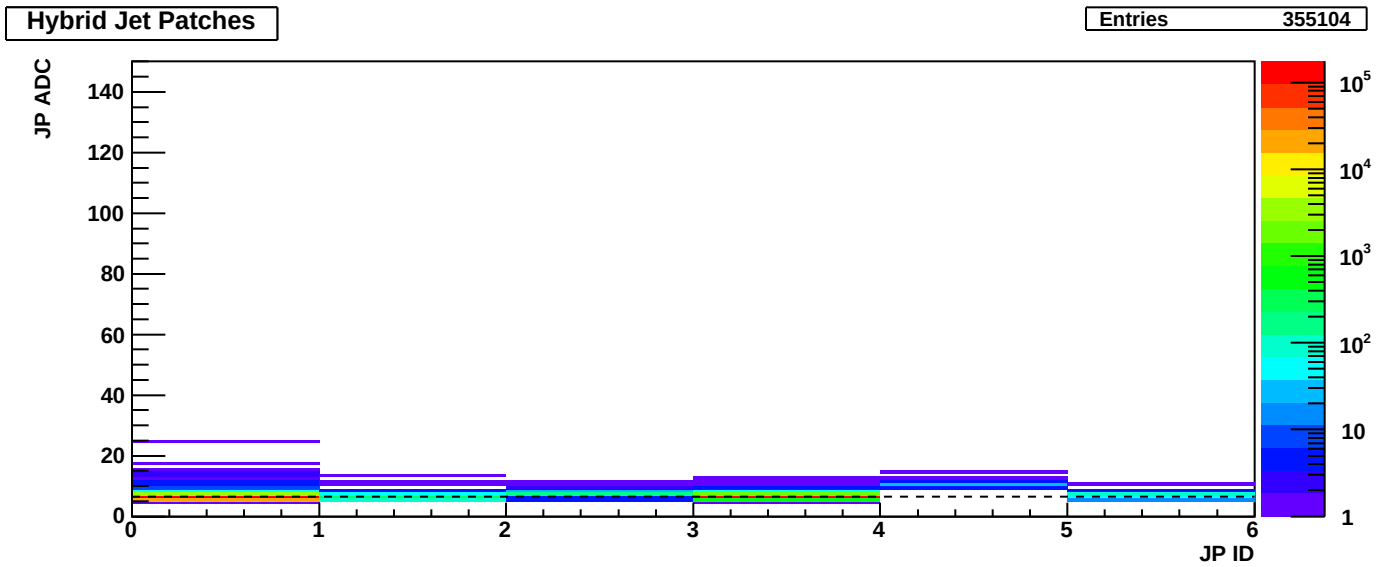

Barrel EMC L0 Input - Patch Sum
Entries 5.32656e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

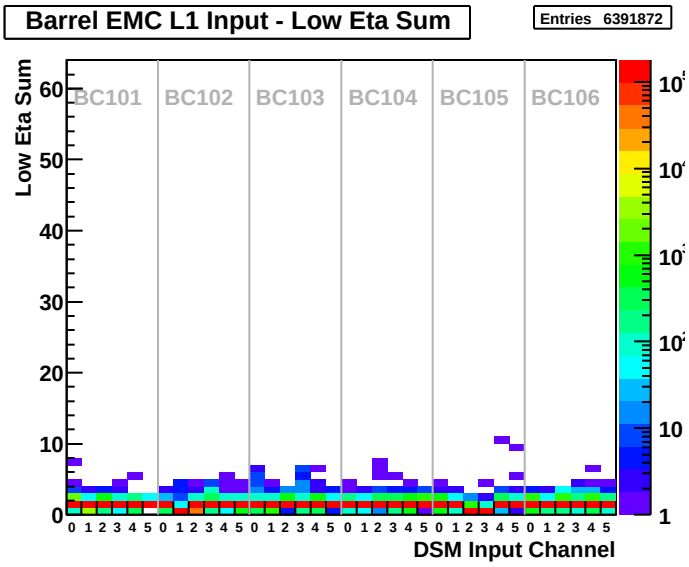

Endcap EMC L0 Input - High Tower
Entries 1.597968e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

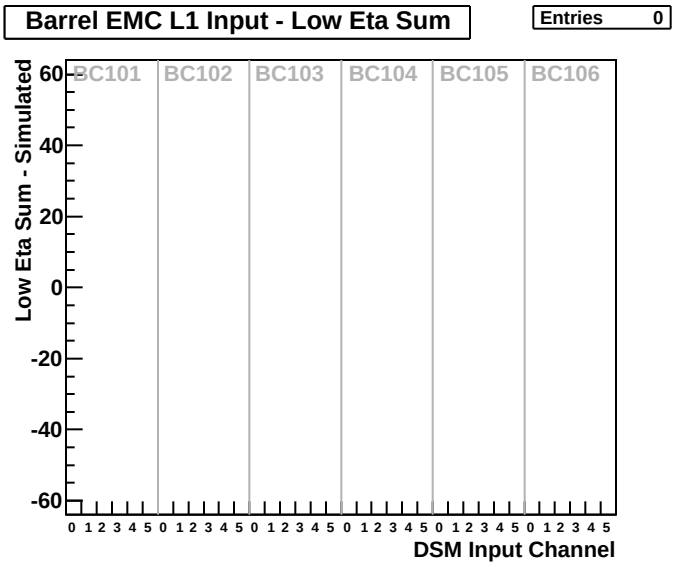

Endcap EMC L0 Input - Patch Sum
Entries 1.597968e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

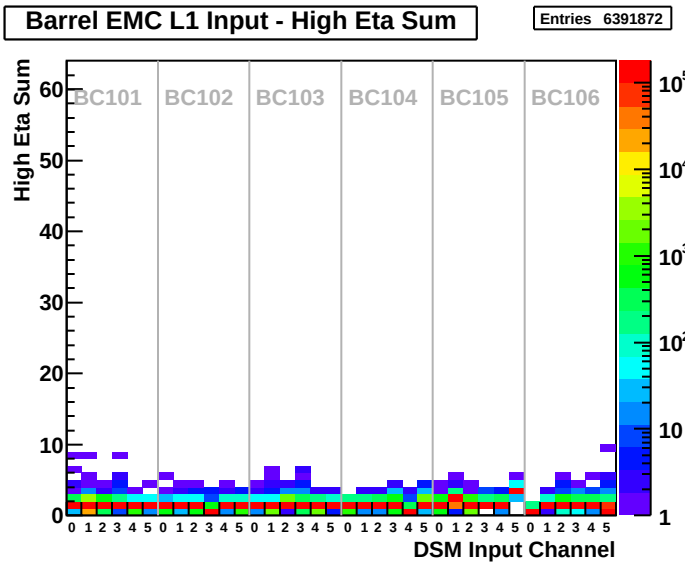

Barrel Jet Patches
Entries 3195936
JP ADC
JP ID

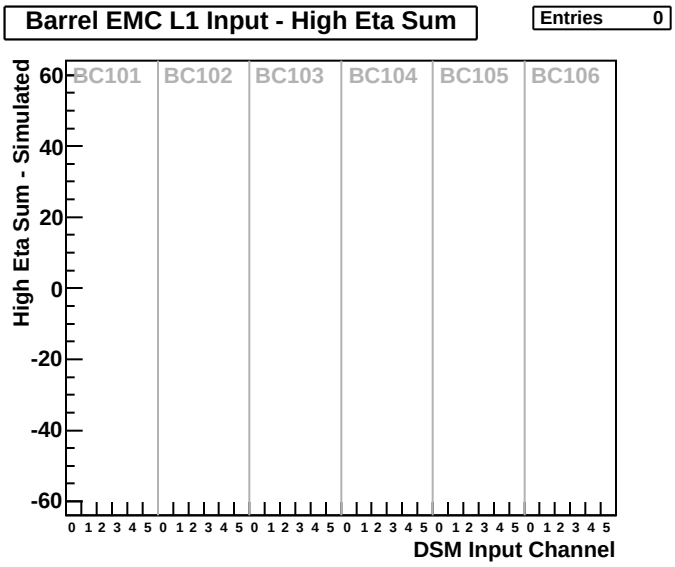

Endcap Jet Patches
Entries 1065312
JP ADC
JP ID

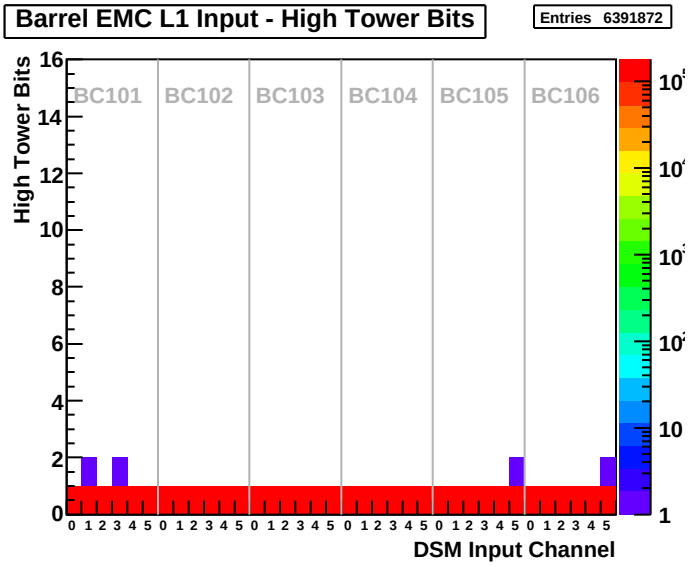

Hybrid Jet Patches
Entries 355104
JP ADC
JP ID

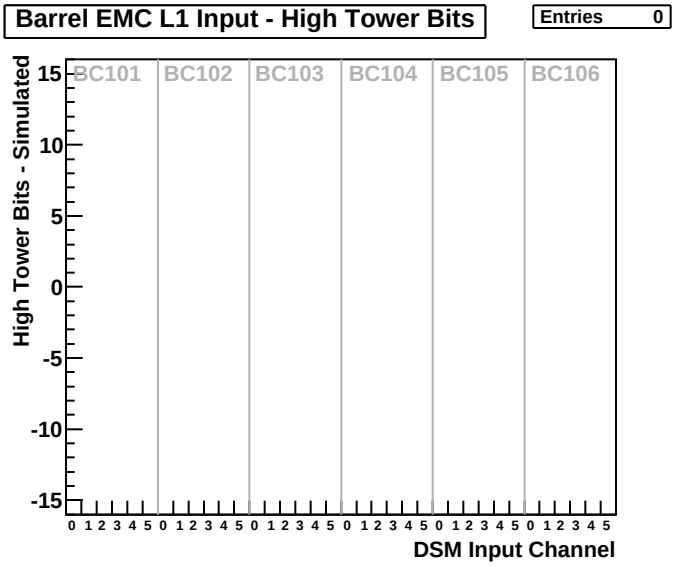

Barrel EMC L1 Input - Low Eta Sum
Entries 6391872
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

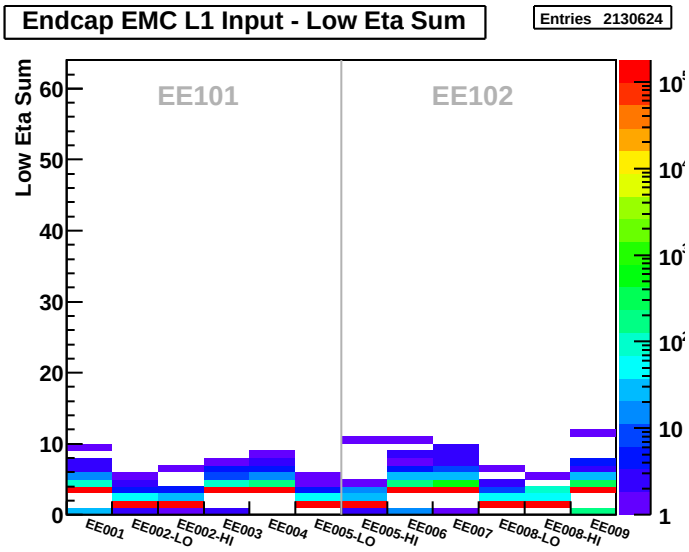

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

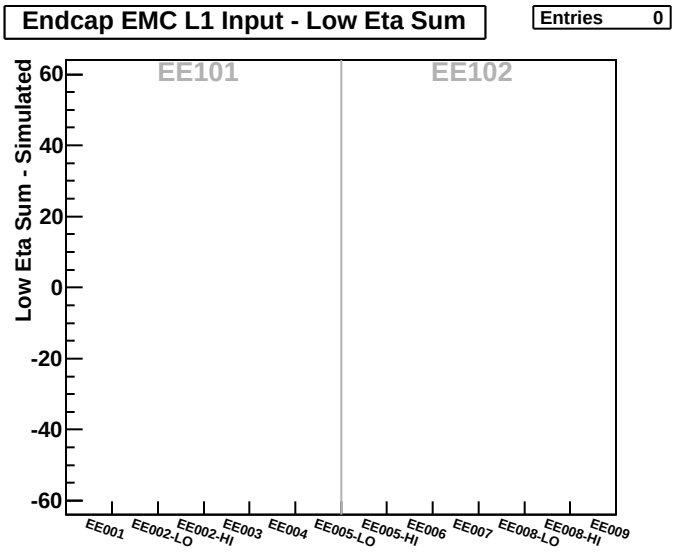

Barrel EMC L1 Input - High Eta Sum
Entries 6391872
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

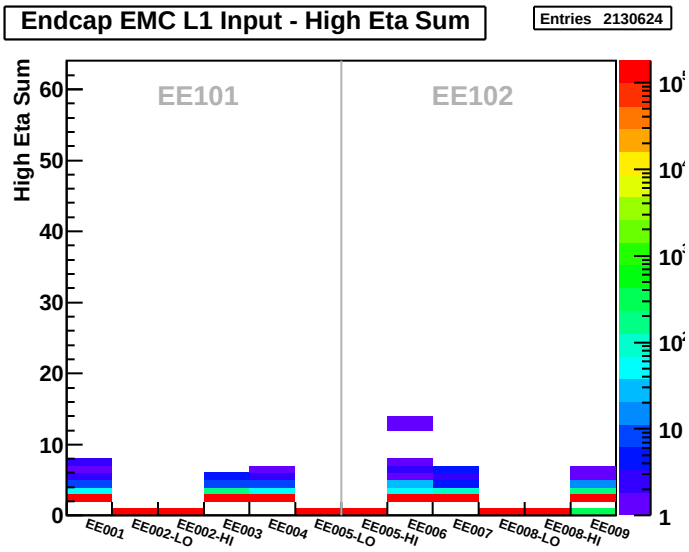

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

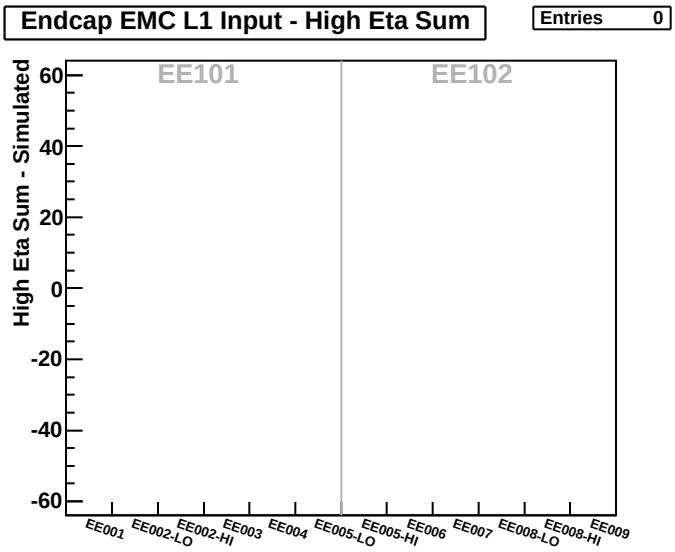

Barrel EMC L1 Input - High Tower Bits
Entries 6391872
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

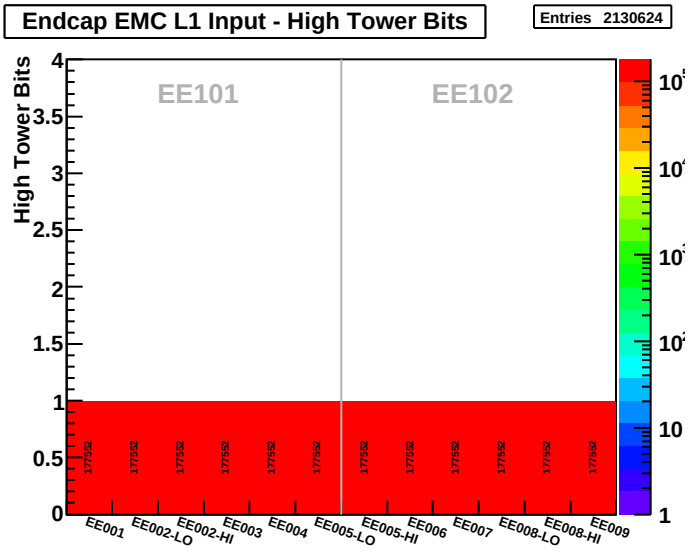

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

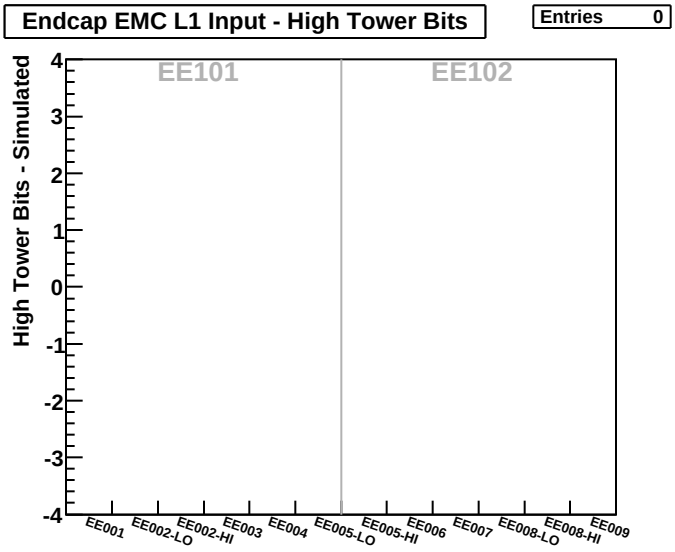

Endcap EMC L1 Input - Low Eta Sum
Entries 2130624
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

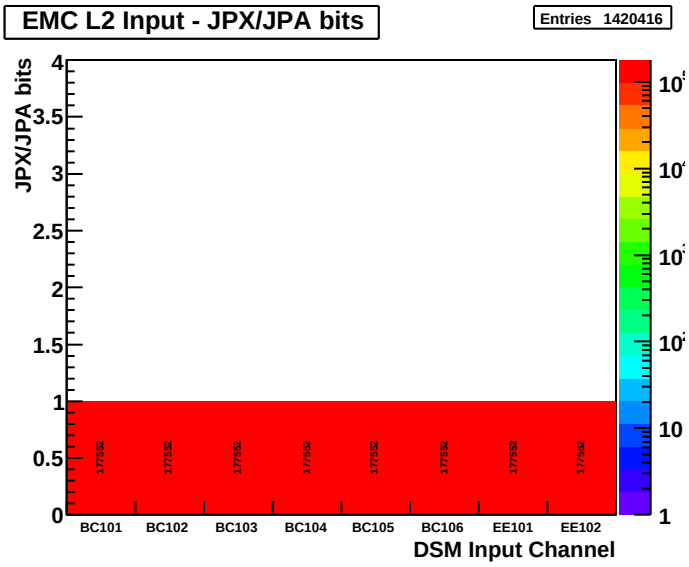

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

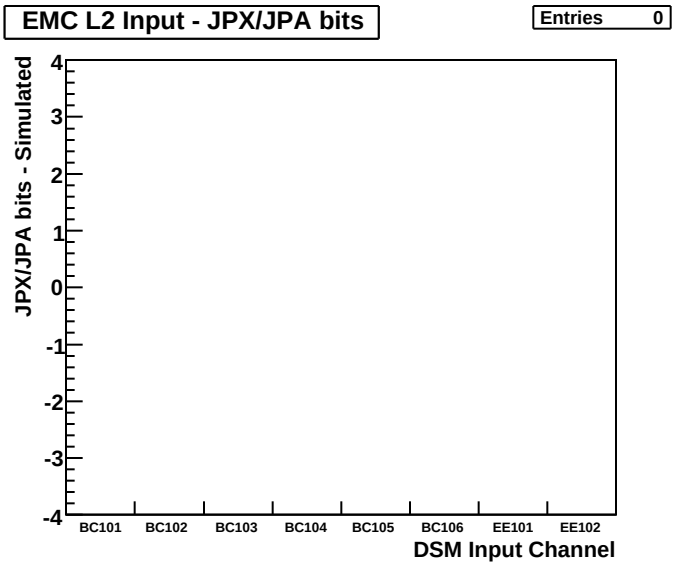

Endcap EMC L1 Input - High Eta Sum
Entries 2130624
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

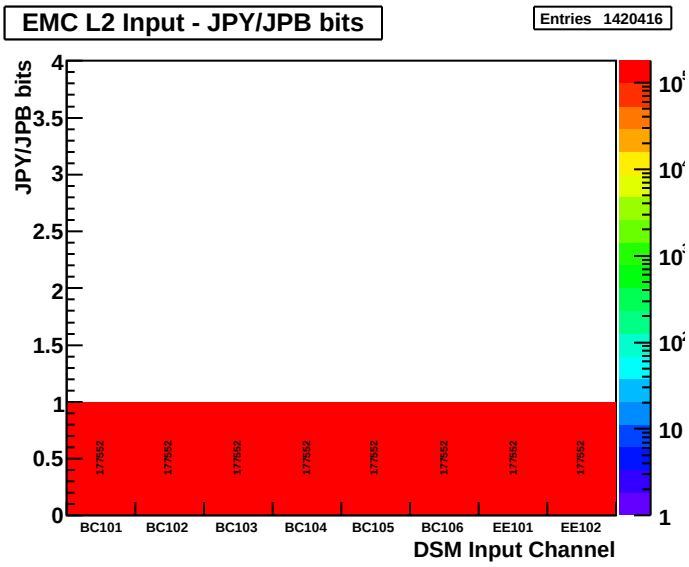

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

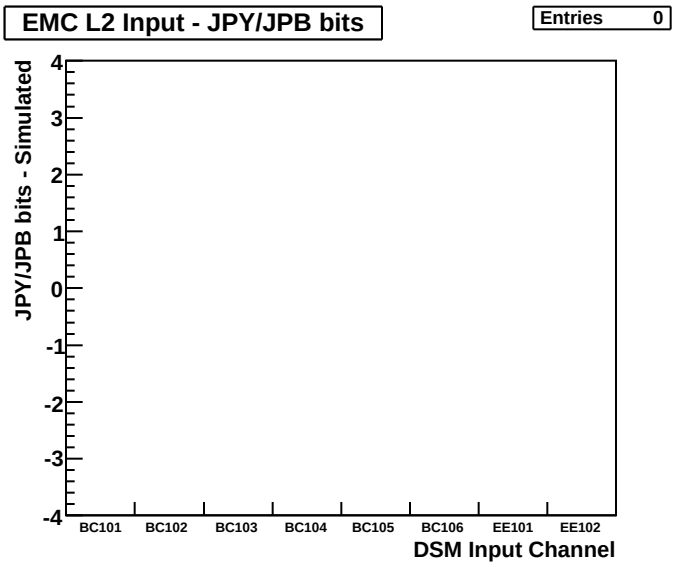

Endcap EMC L1 Input - High Tower Bits
Entries 2130624
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

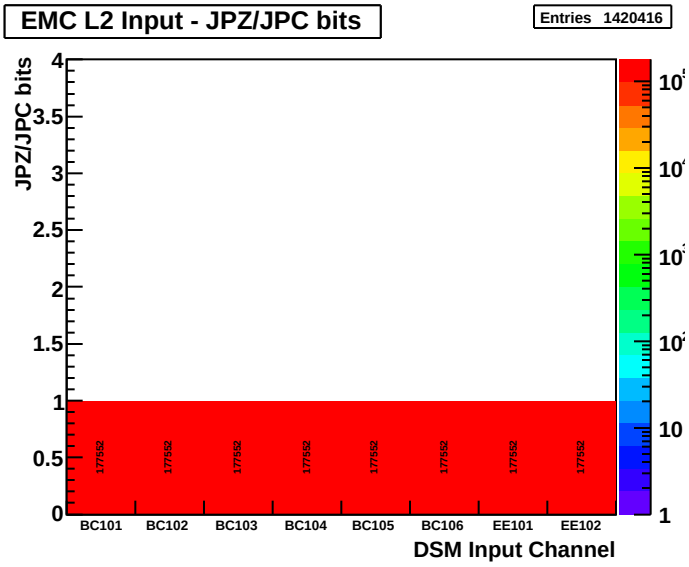

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

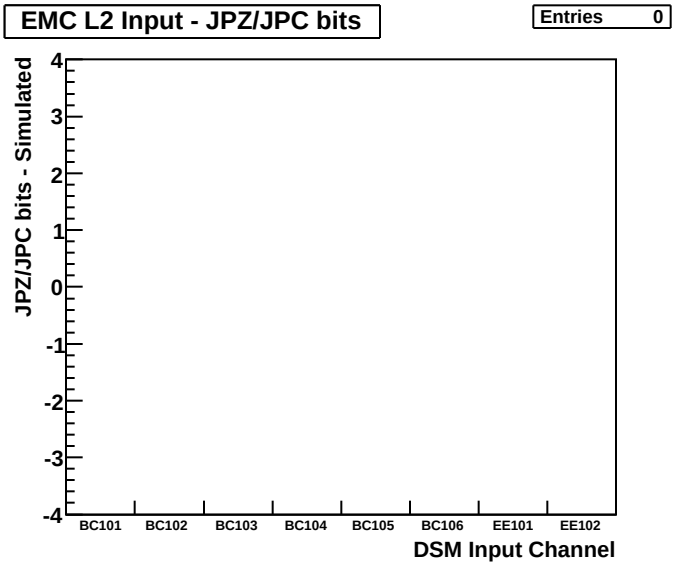

EMC L2 Input - JPX/JPA bits
Entries 1420416
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
177552

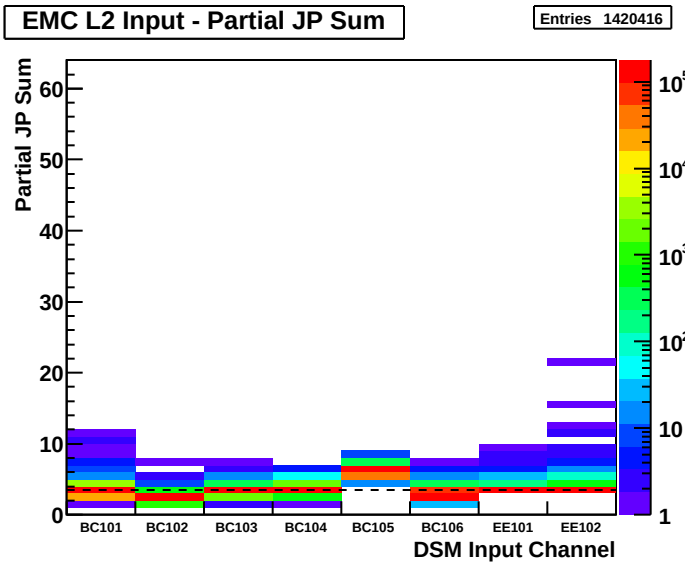

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

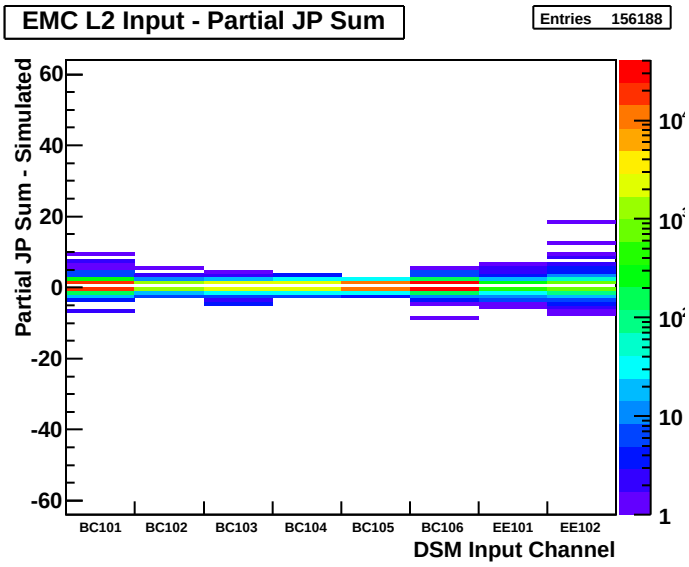

EMC L2 Input - JPY/JPB bits
Entries 1420416
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
177552

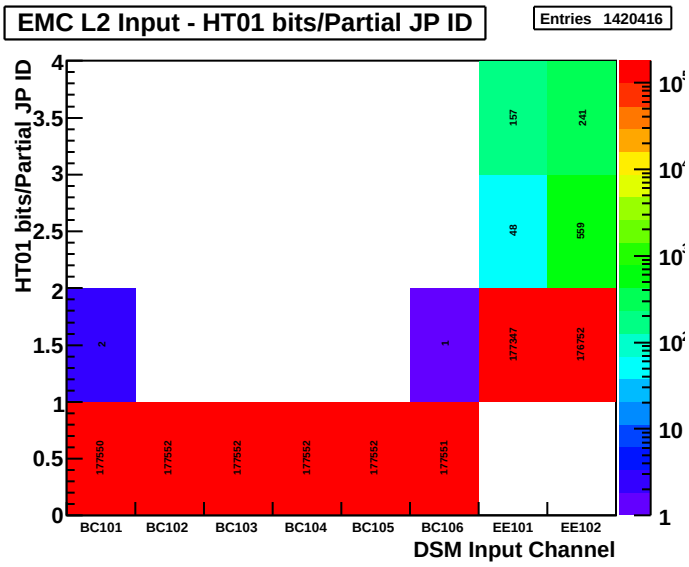

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

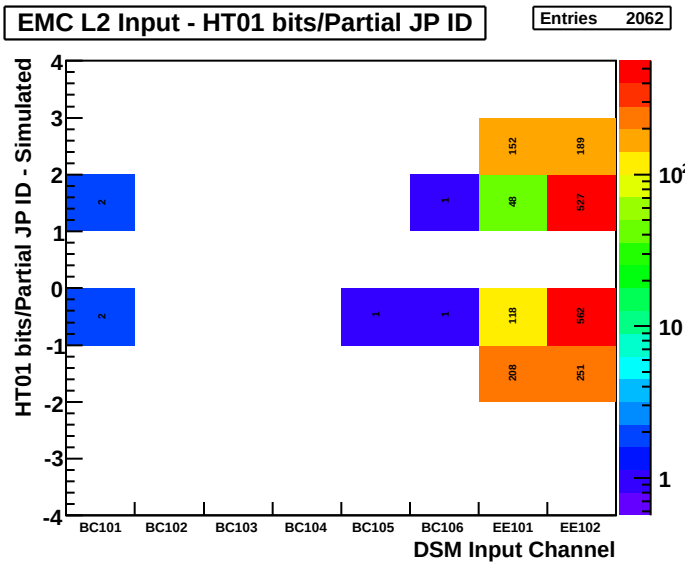

EMC L2 Input - JPZ/JPC bits
Entries 1420416
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
177552

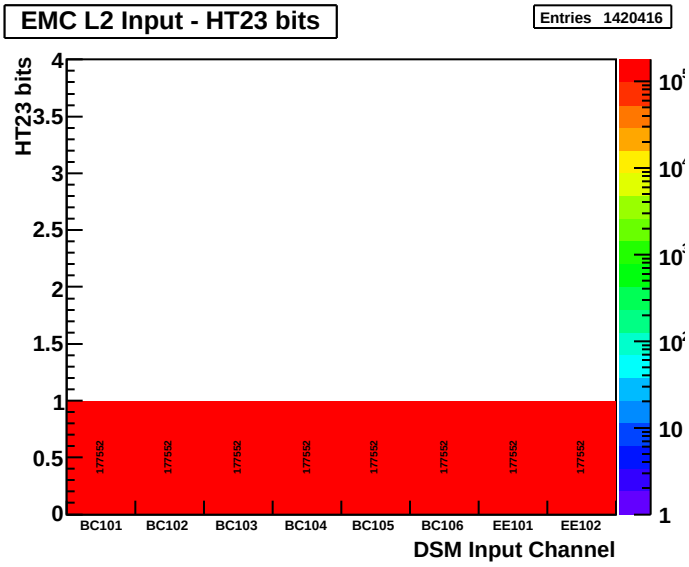

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

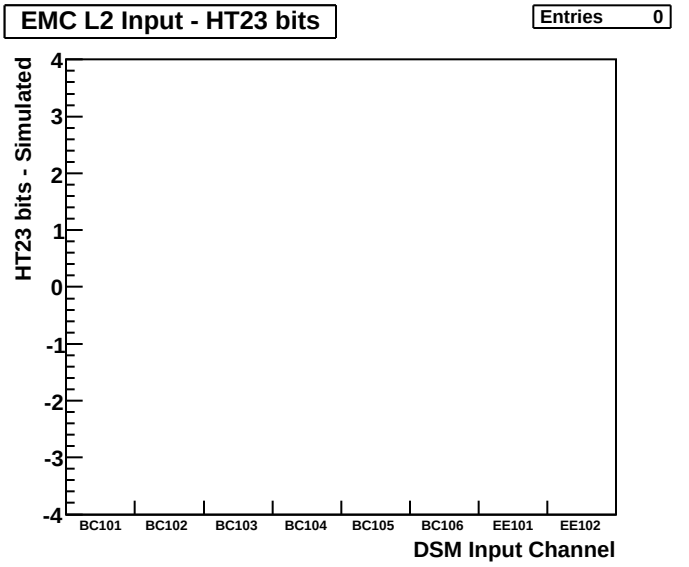

EMC L2 Input - Partial JP Sum
Entries 1420416
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

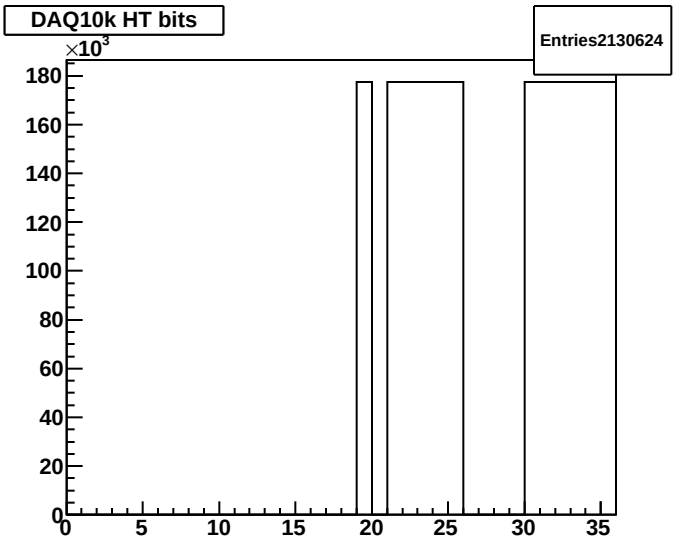

EMC L2 Input - Partial JP Sum
Entries 156188
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

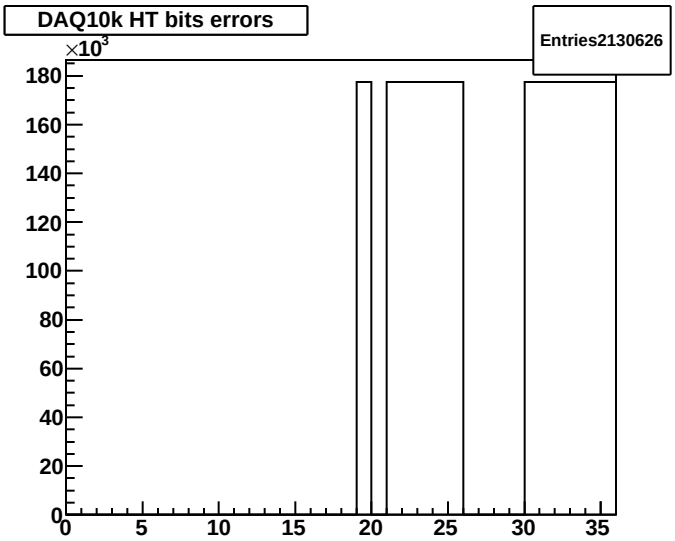

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1420416
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

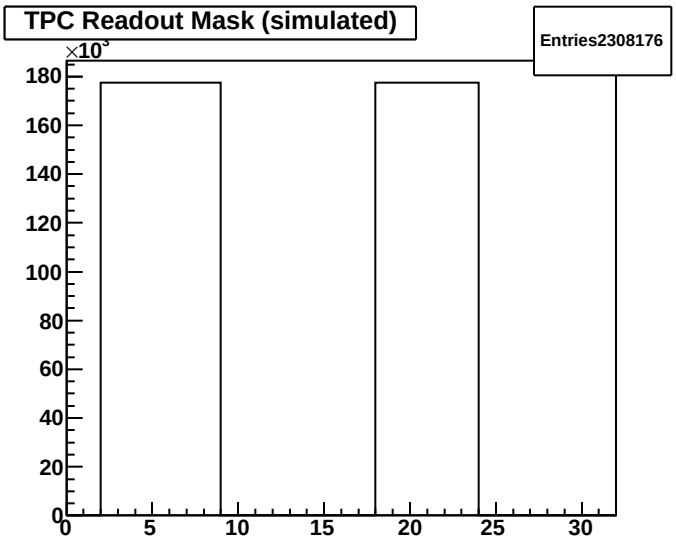

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2062
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

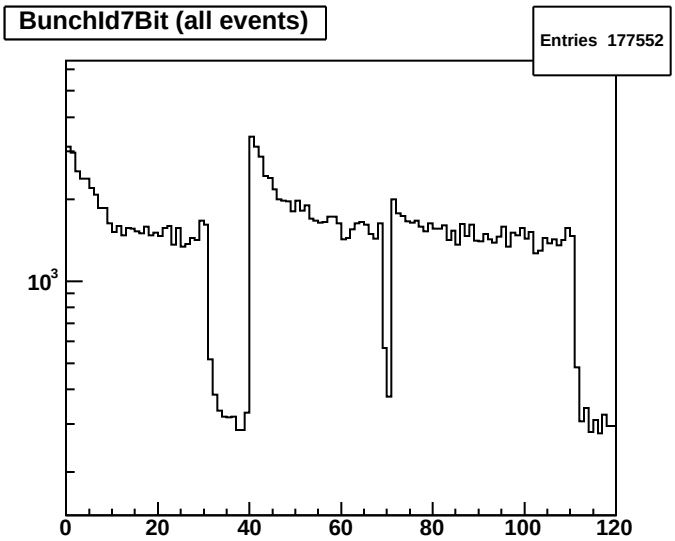

EMC L2 Input - HT23 bits
Entries 1420416
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

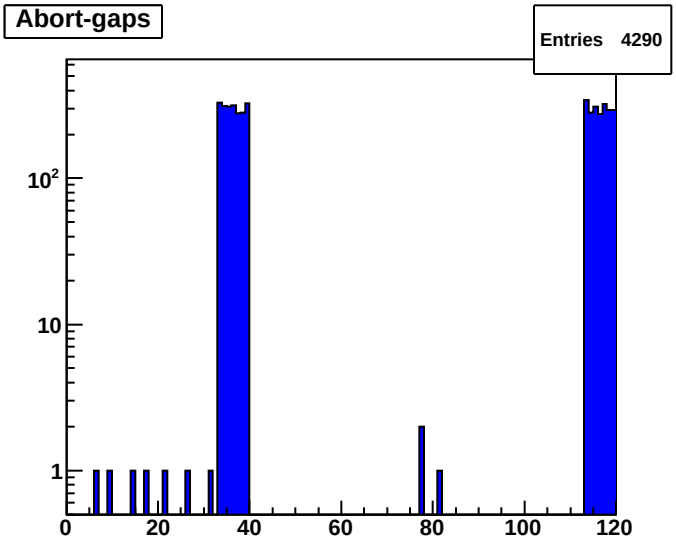

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

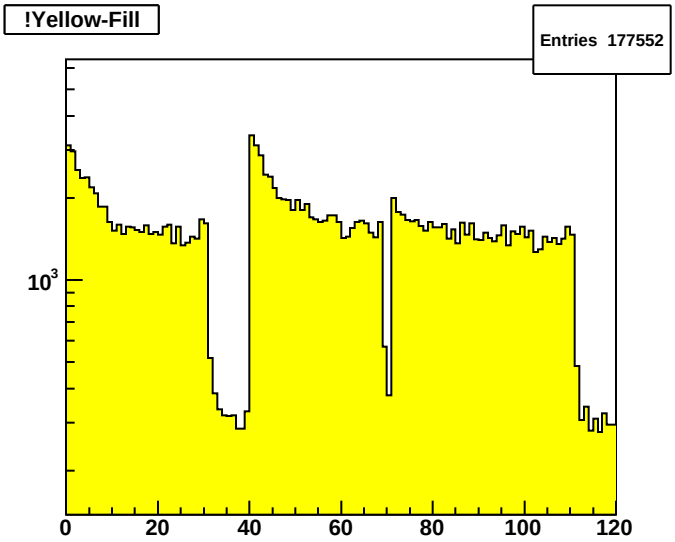

DAQ10k HT bits
Entries2130624
×10^3
180
160
140
120
100
80
60
40
20
0
0 5 10 15 20 25 30 35

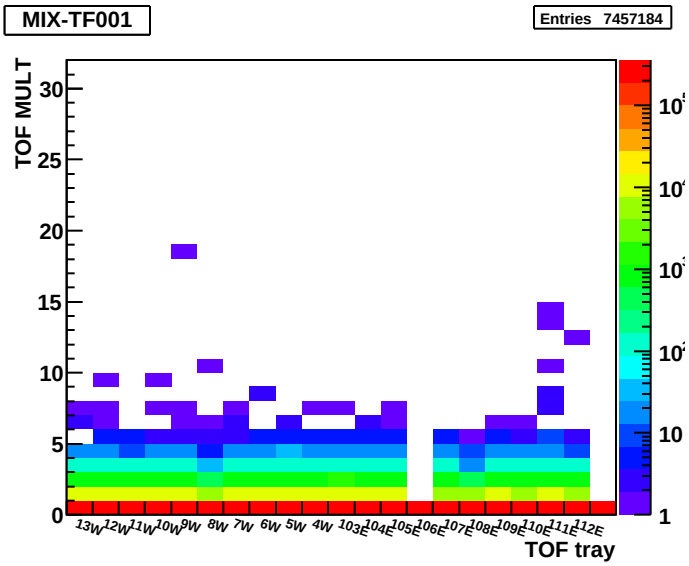

DAQ10k HT bits errors
Entries2130626
×10^3
180
160
140
120
100
80
60
40
20
0
0 5 10 15 20 25 30 35

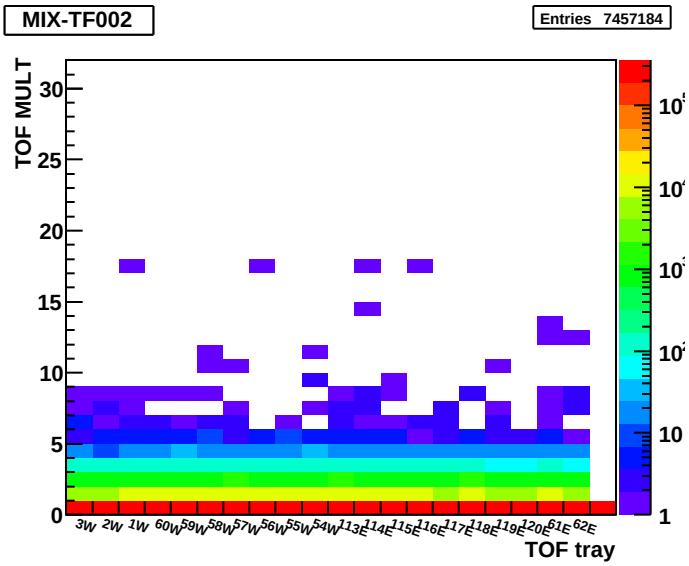

TPC Readout Mask (simulated)
Entries2308176
×10^3
180
160
140
120
100
80
60
40
20
0
0 5 10 15 20 25 30

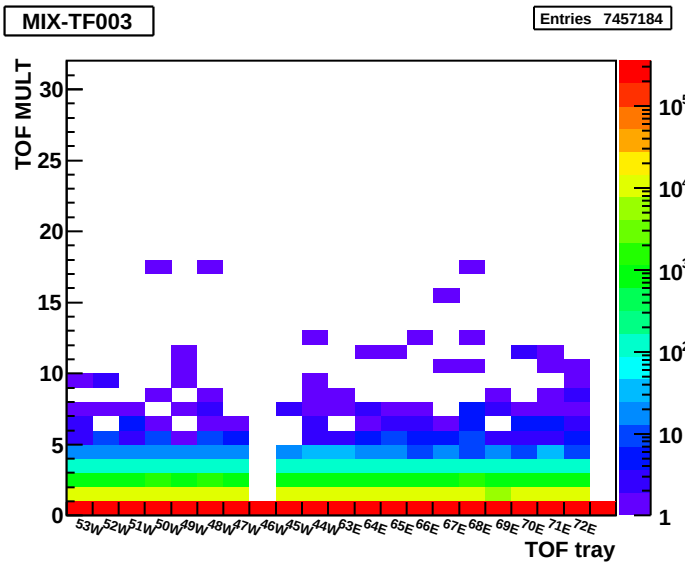

BunchId7Bit (all events)
Entries 177552
10^3
0 20 40 60 80 100 120

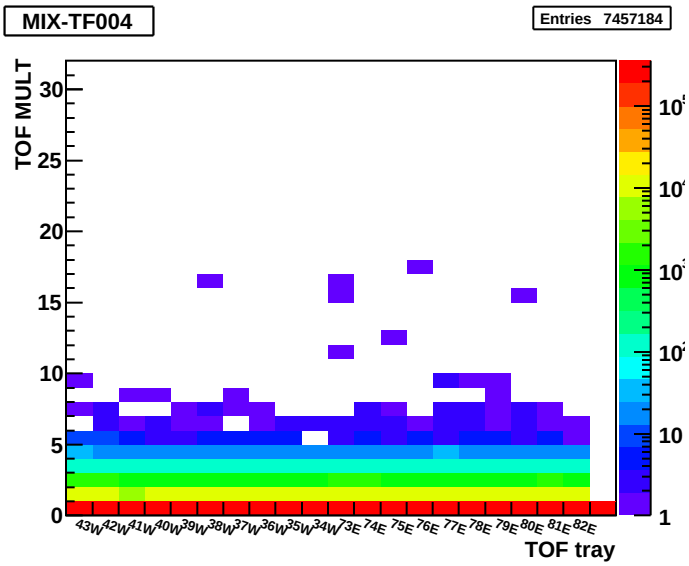

Abort-gaps
Entries 4290
10^2
10
1
0 20 40 60 80 100 120

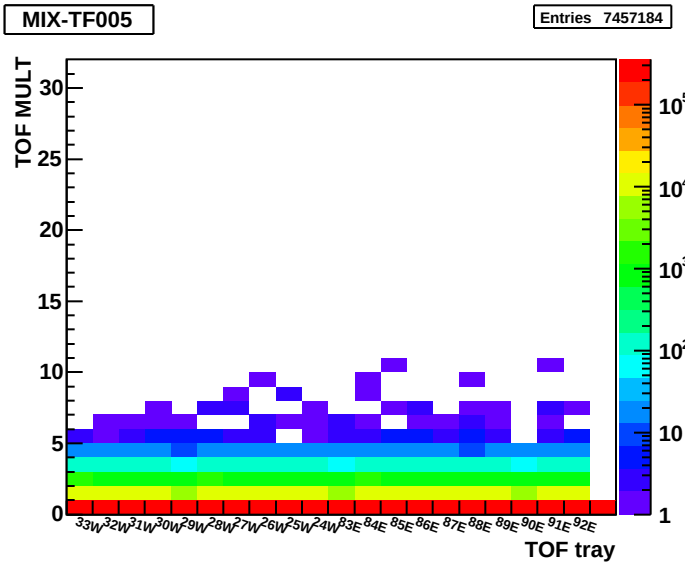

!Yellow-Fill
Entries 177552
10^3
0 20 40 60 80 100 120

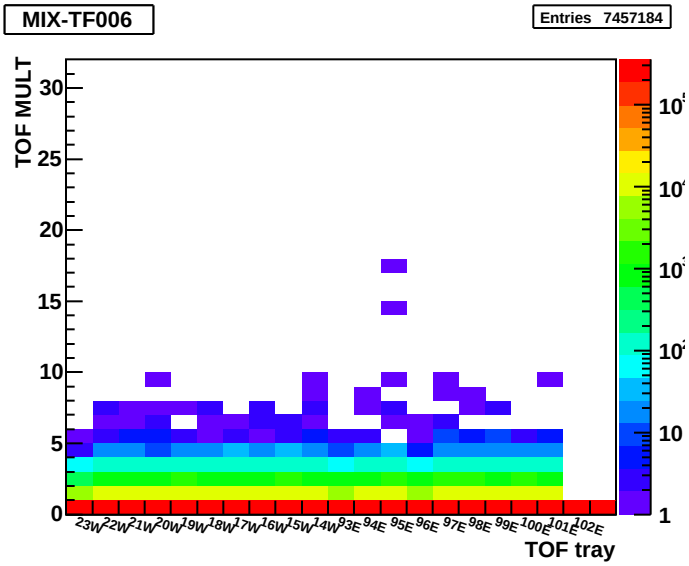

MIX-TF001
Entries 7457184
TOF MULT
TOF tray

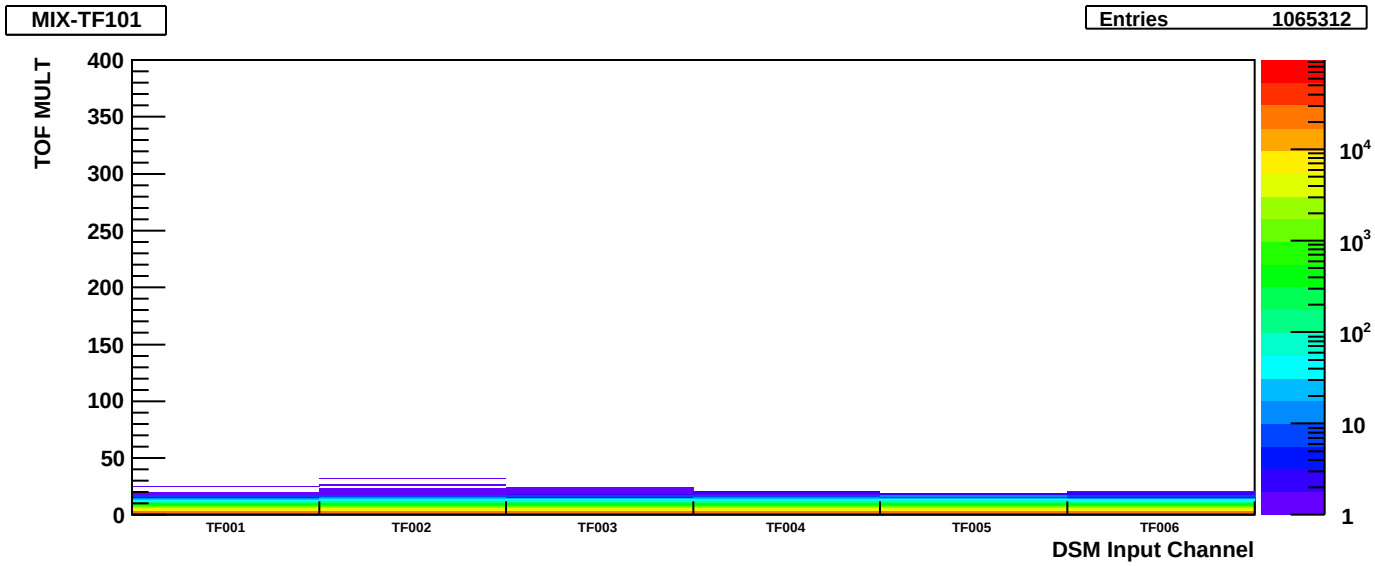

MIX-TF002
Entries 7457184
TOF MULT
TOF tray

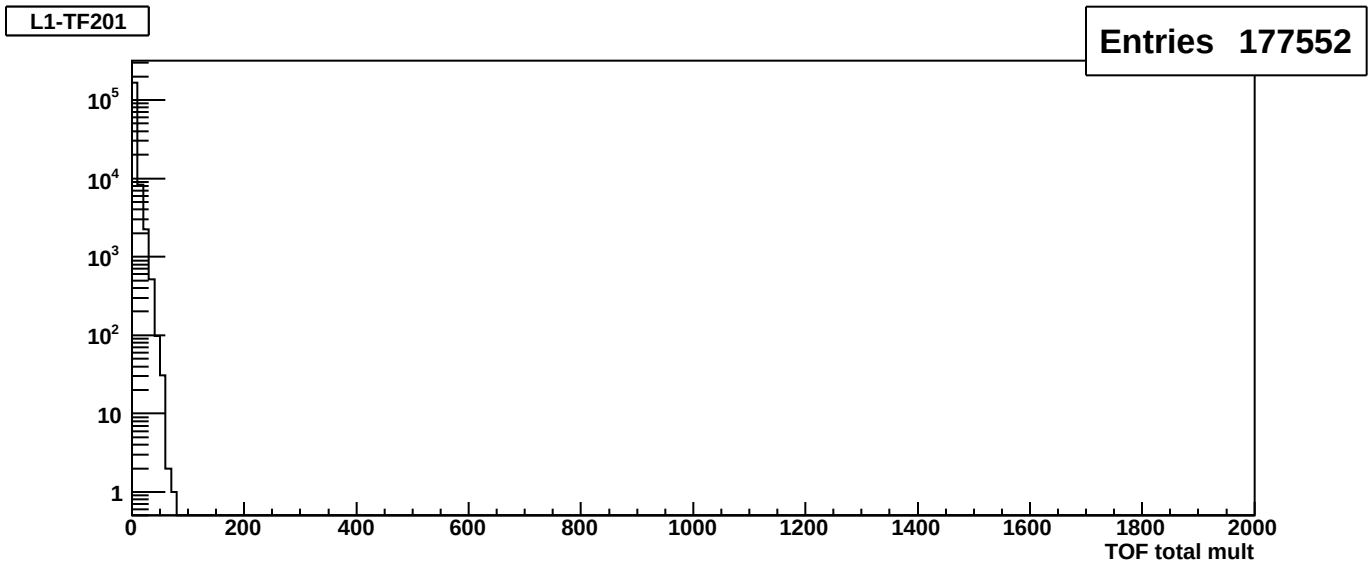

MIX-TF003
Entries 7457184
TOF MULT
TOF tray

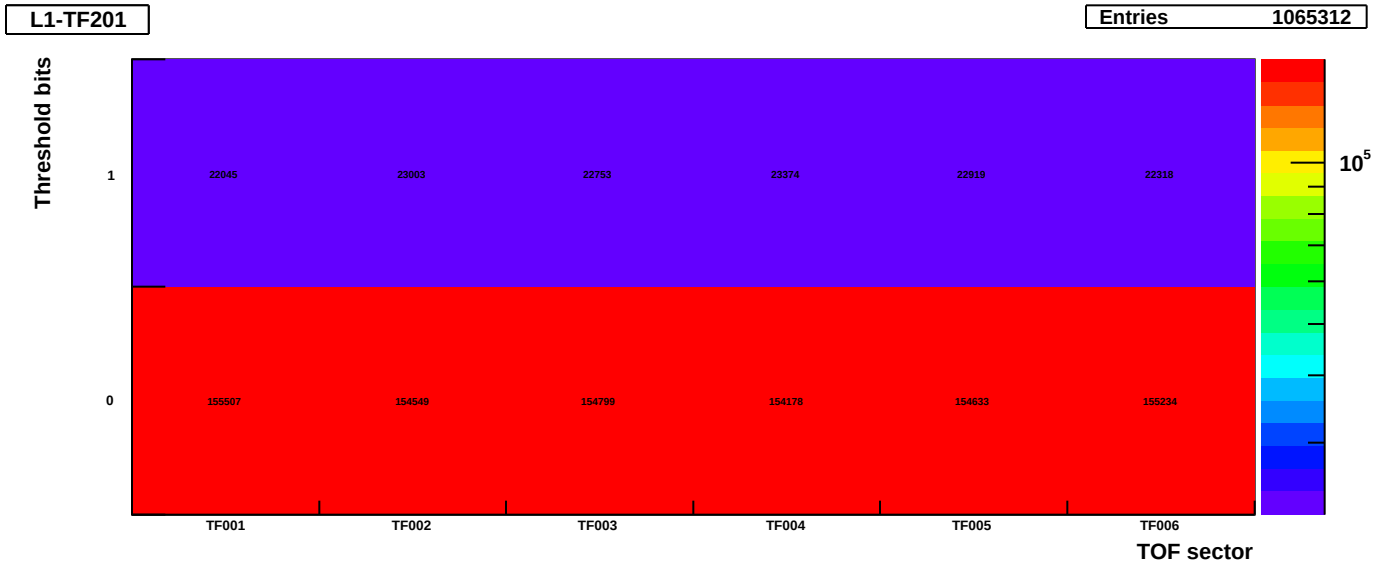

MIX-TF004
Entries 7457184
TOF MULT
TOF tray

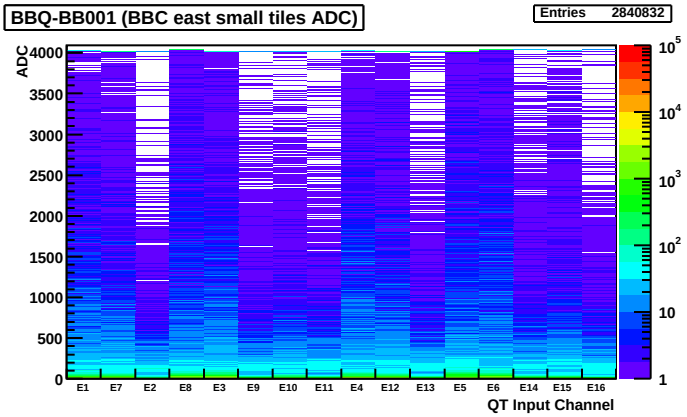

MIX-TF005
Entries 7457184
TOF MULT
TOF tray

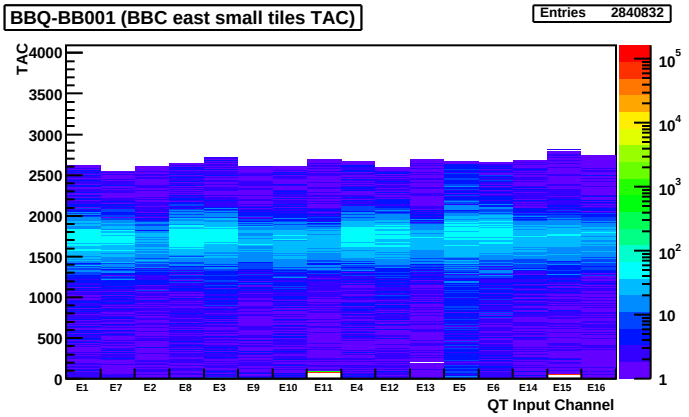

MIX-TF006
Entries 7457184
TOF MULT
TOF tray

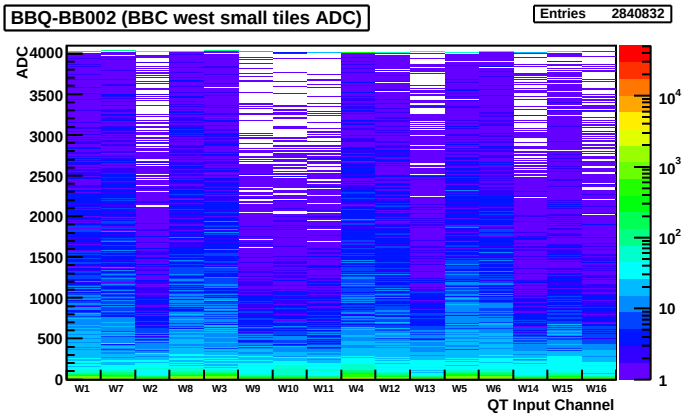

MIX-TF101
Entries 1065312
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

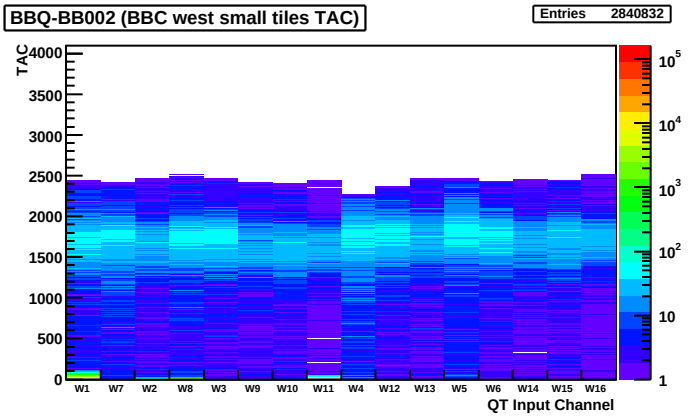

L1-TF201
Entries 177552
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

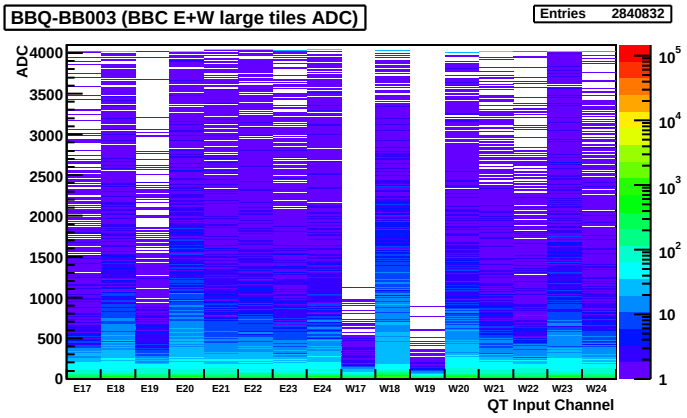

L1-TF201
Entries 1065312
Threshold bits
1
0
22045
23003
22753
23374
22919
22318
155507
154549
154799
154178
154633
155234
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

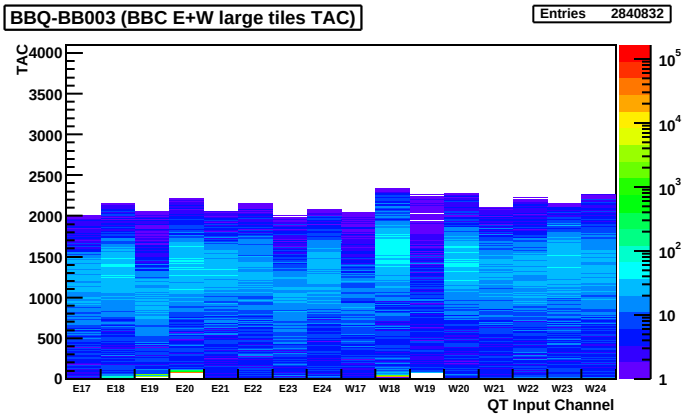

BBQ-BB001 (BBC east small tiles ADC)
Entries 2840832
ADC
QT Input Channel

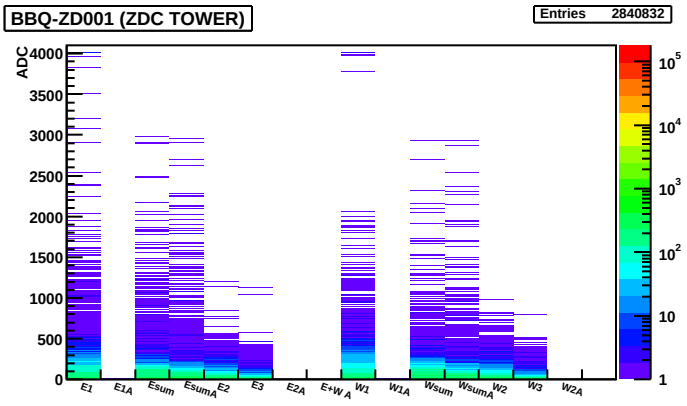

BBQ-BB001 (BBC east small tiles TAC)
Entries 2840832
TAC
QT Input Channel

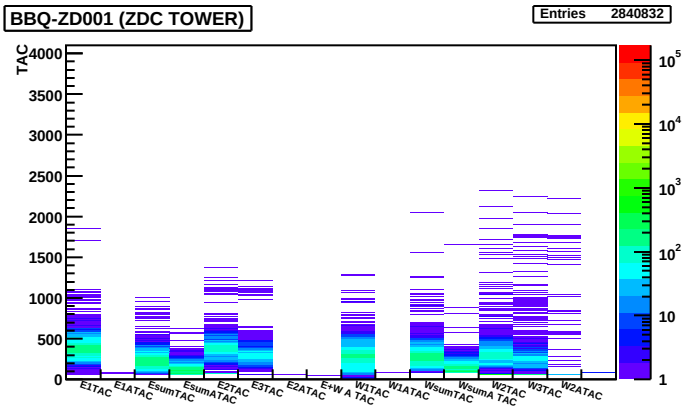

BBQ-BB002 (BBC west small tiles ADC)
Entries 2840832
ADC
QT Input Channel

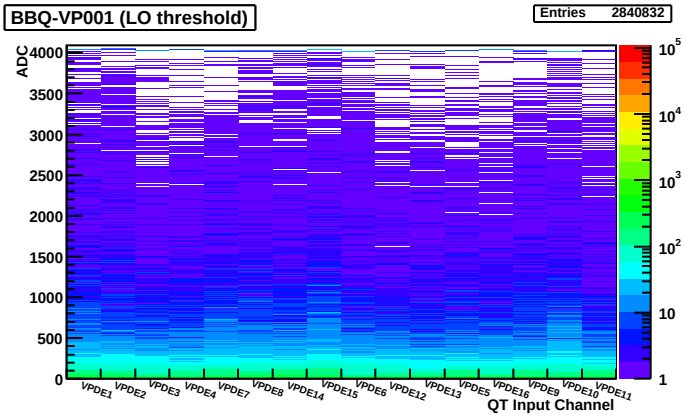

BBQ-BB002 (BBC west small tiles TAC)
Entries 2840832
TAC
QT Input Channel

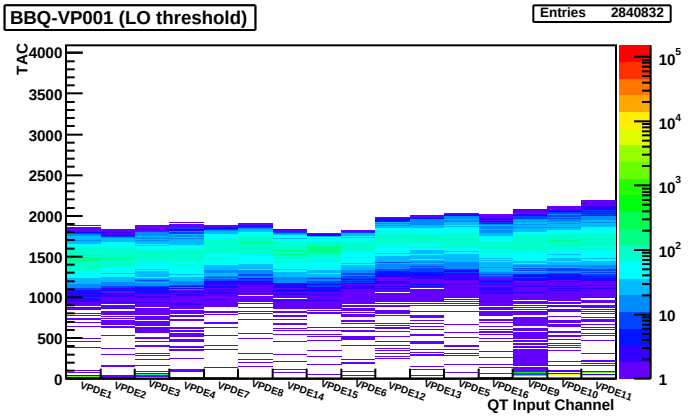

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2840832
ADC
QT Input Channel

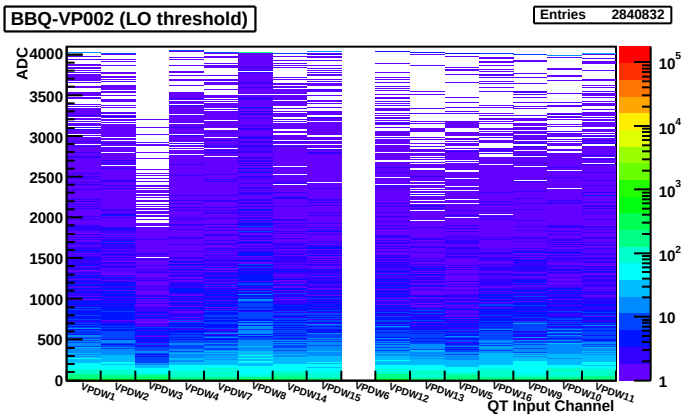

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2840832
TAC
QT Input Channel

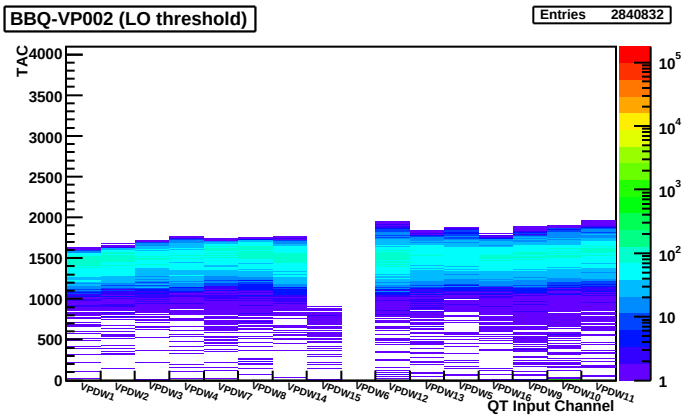

BBQ-ZD001 (ZDC TOWER)
Entries 2840832
ADC

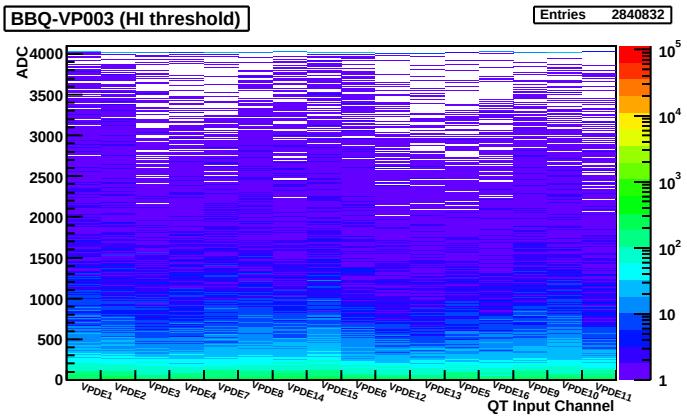

BBQ-ZD001 (ZDC TOWER)
Entries 2840832
TAC

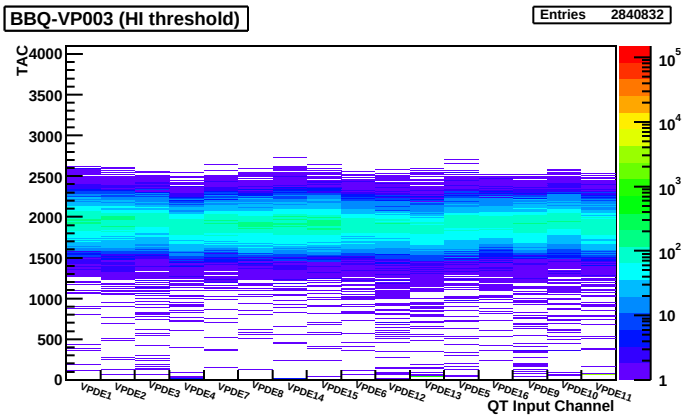

BBQ-VP001 (LO threshold)
Entries 2840832
ADC
QT Input Channel

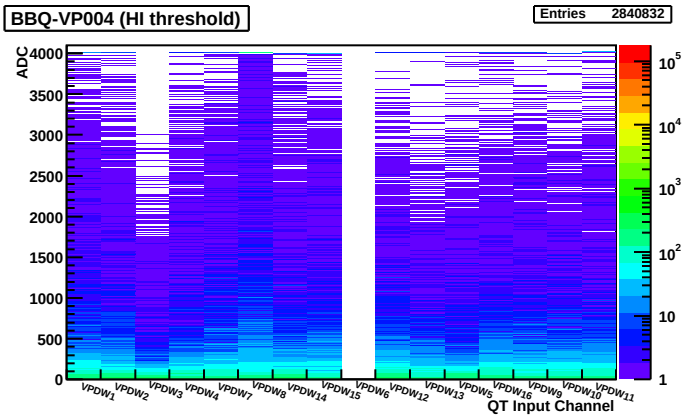

BBQ-VP001 (LO threshold)
Entries 2840832
TAC
QT Input Channel

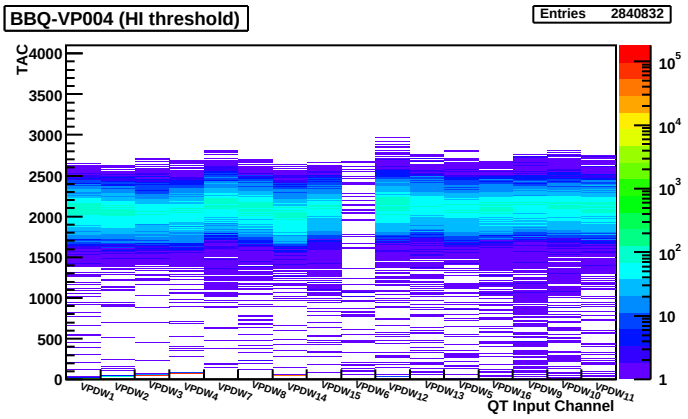

BBQ-VP002 (LO threshold)
Entries 2840832
ADC
QT Input Channel

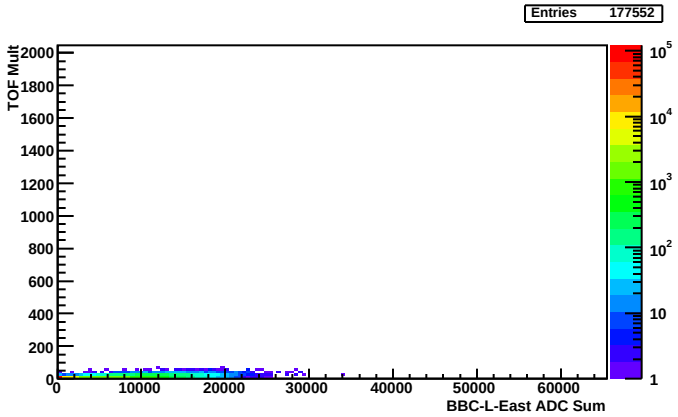

BBQ-VP002 (LO threshold)
Entries 2840832
TAC
QT Input Channel

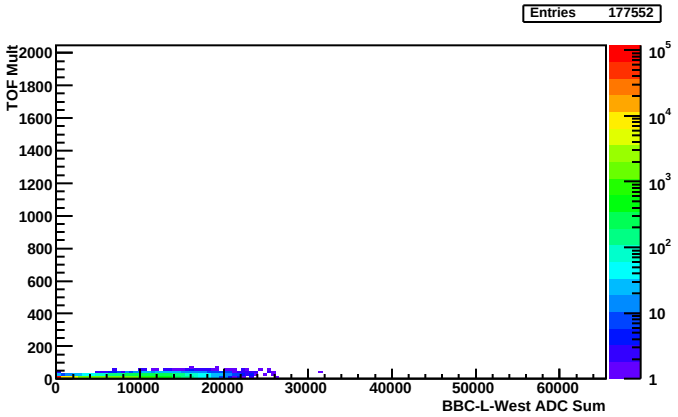

BBQ-VP003 (HI threshold)
Entries 2840832
ADC
QT Input Channel

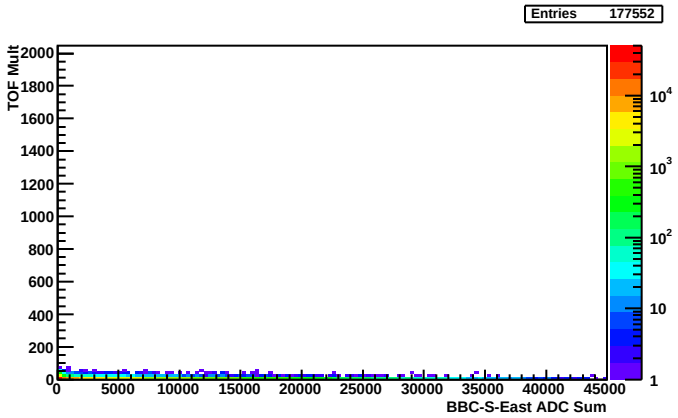

BBQ-VP003 (HI threshold)
Entries 2840832
TAC
QT Input Channel

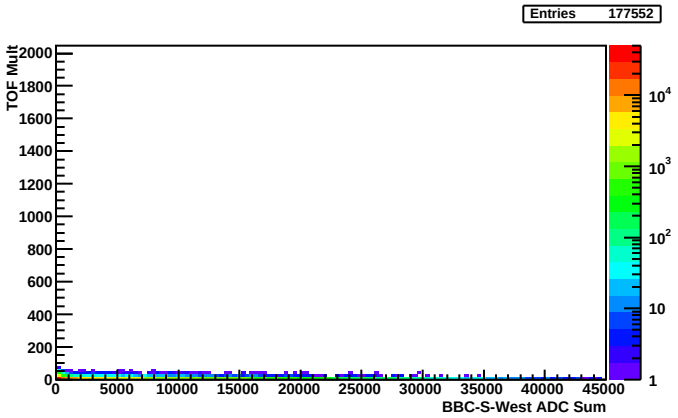

BBQ-VP004 (HI threshold)
Entries 2840832
ADC
QT Input Channel

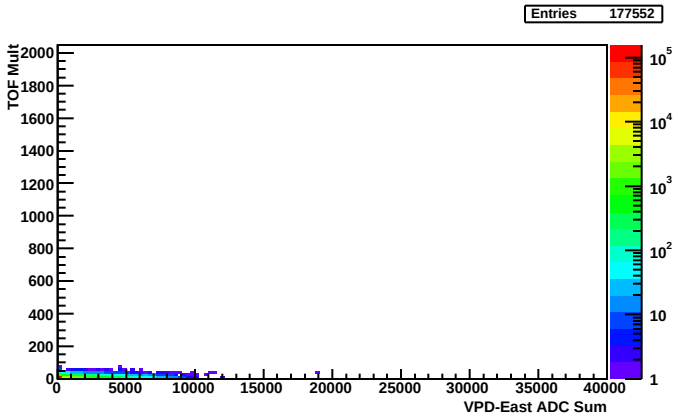

BBQ-VP004 (HI threshold)
Entries 2840832
TAC
QT Input Channel

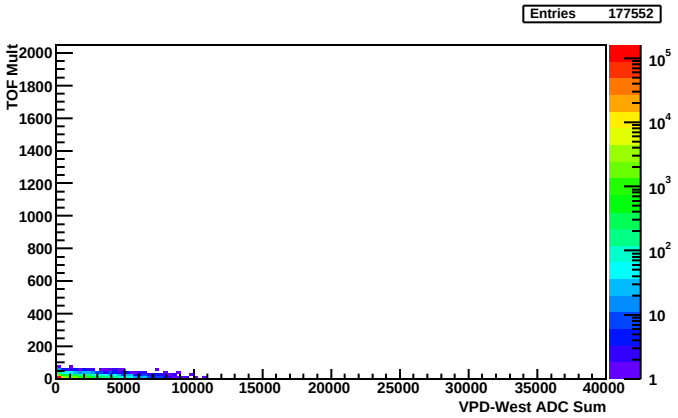

Entries 177552
TOF Mult
BBC-L-East ADC Sum

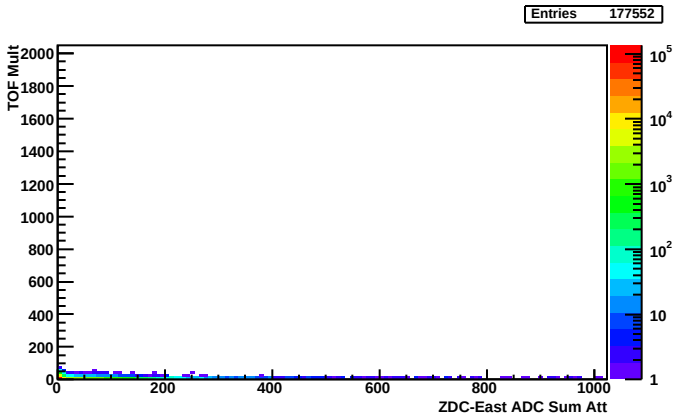

Entries 177552
TOF Mult
BBC-L-West ADC Sum

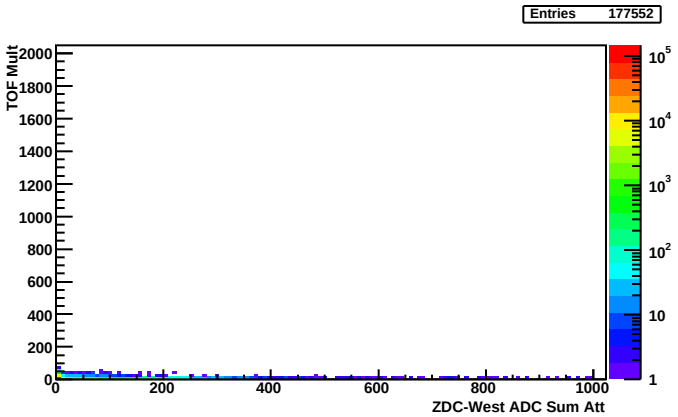

Entries 177552
TOF Mult
BBC-S-East ADC Sum

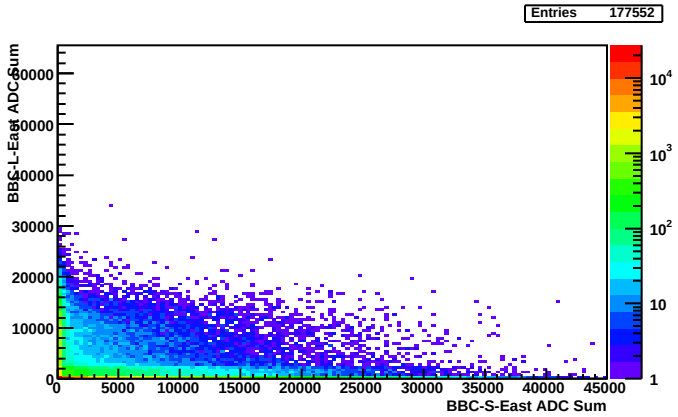

Entries 177552
TOF Mult
BBC-S-West ADC Sum

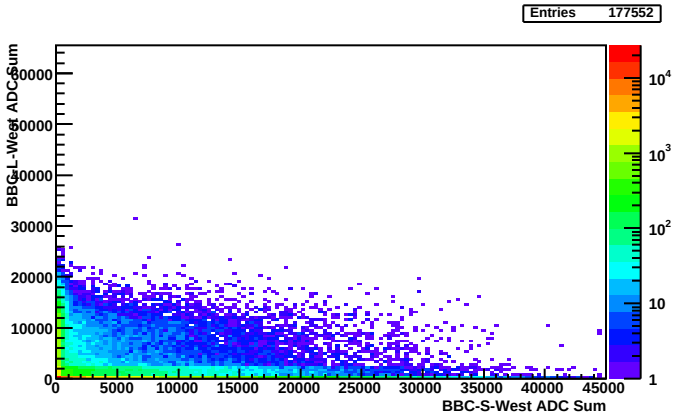

Entries 177552
TOF Mult
VPD-East ADC Sum

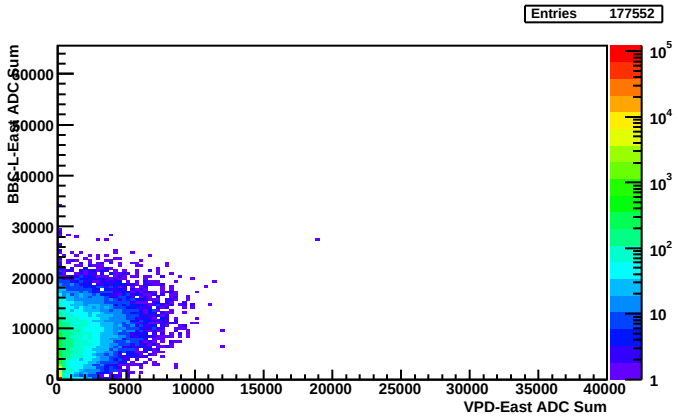

Entries 177552
TOF Mult
VPD-West ADC Sum

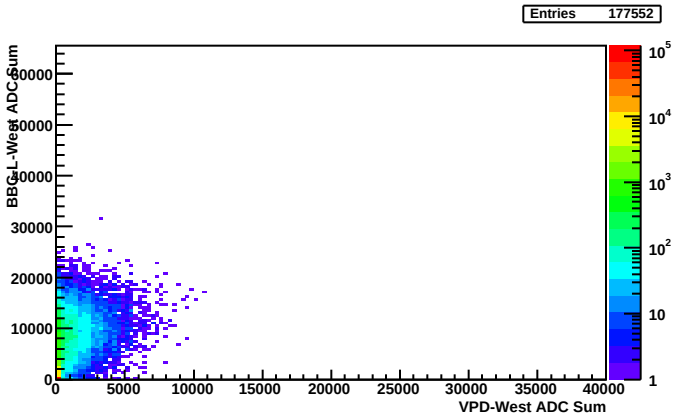

Entries 177552
TOF Mult
ZDC-East ADC Sum Att

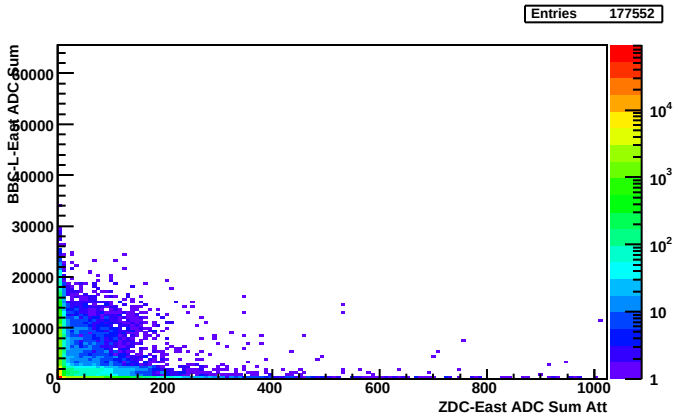

Entries 177552
TOF Mult
ZDC-West ADC Sum Att

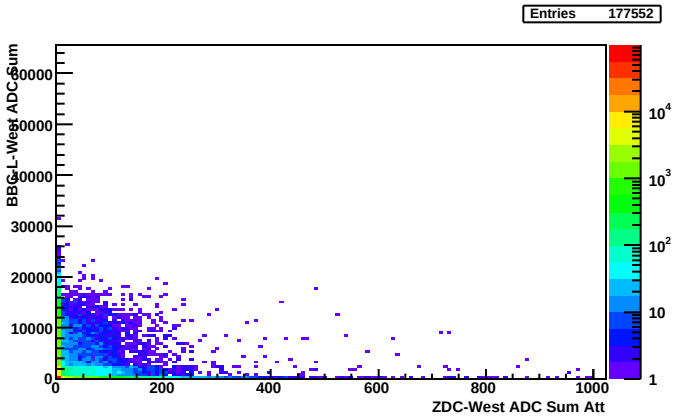

Entries 177552
BBC-L-East ADC Sum
BBC-S-East ADC Sum

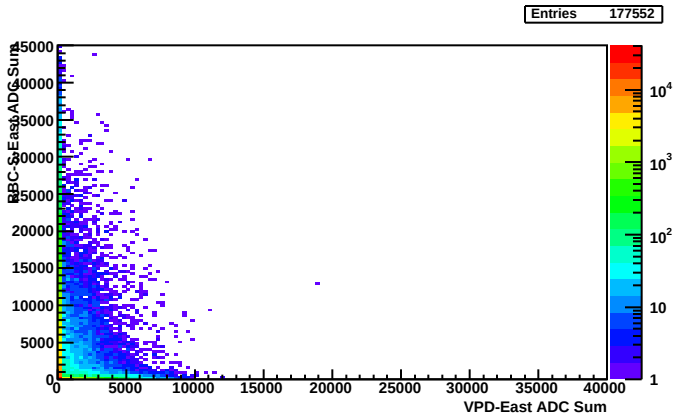

Entries 177552
BBC-L-West ADC Sum
BBC-S-West ADC Sum

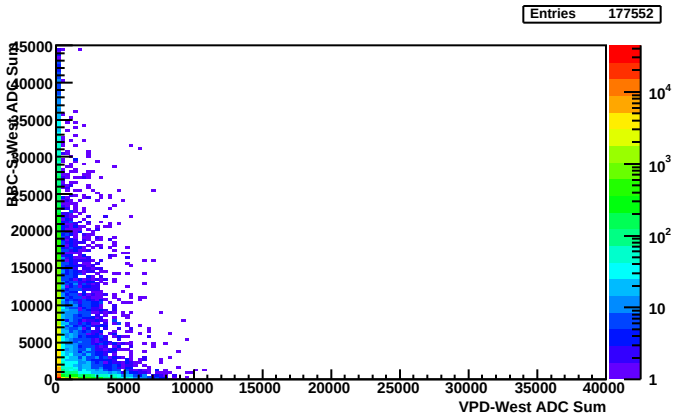

Entries 177552
BBC-L-East ADC Sum
VPD-East ADC Sum

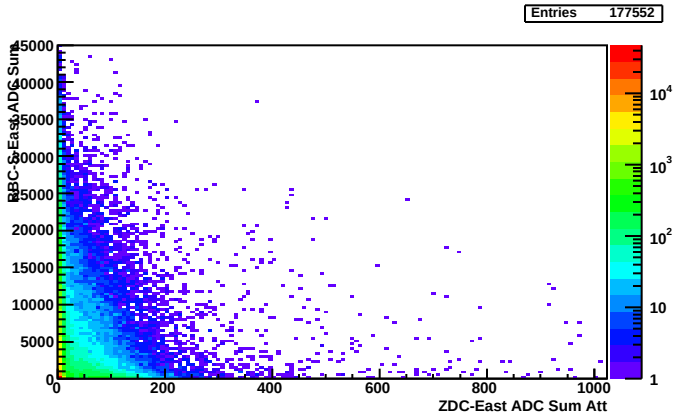

Entries 177552
BBC-L-West ADC Sum
VPD-West ADC Sum

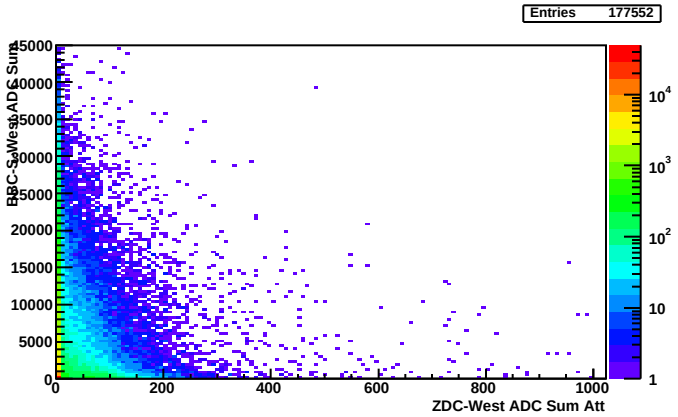

Entries 177552
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

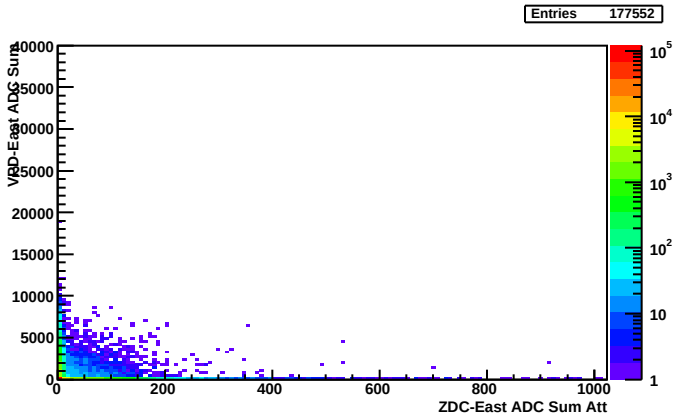

Entries 177552
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

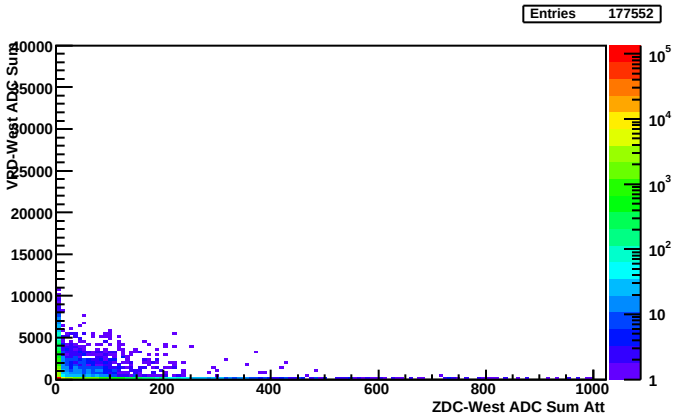

Entries 177552
BBC-S-East ADC Sum
VPD-East ADC Sum

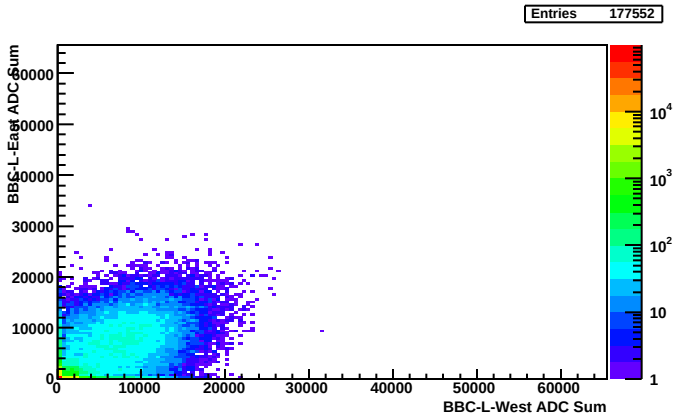

Entries 177552
BBC-S-West ADC Sum
VPD-West ADC Sum

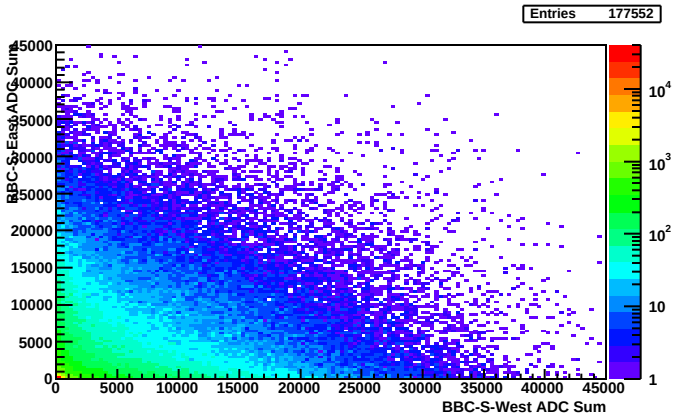

Entries 177552
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

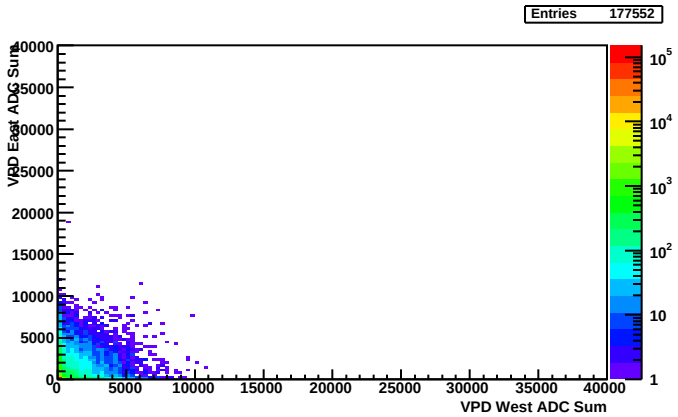

Entries 177552
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

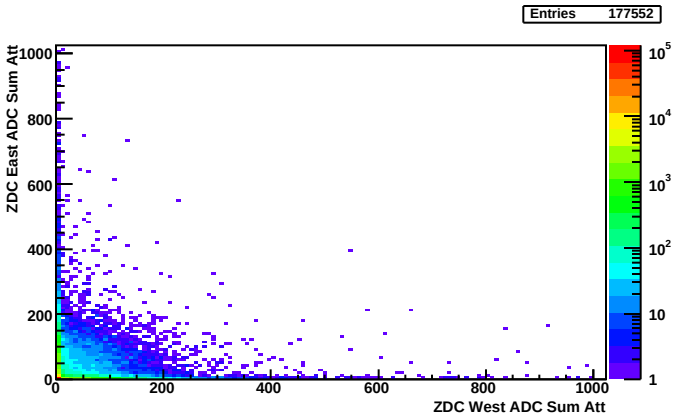

Entries 177552
VPD-East ADC Sum
ZDC-East ADC Sum Att

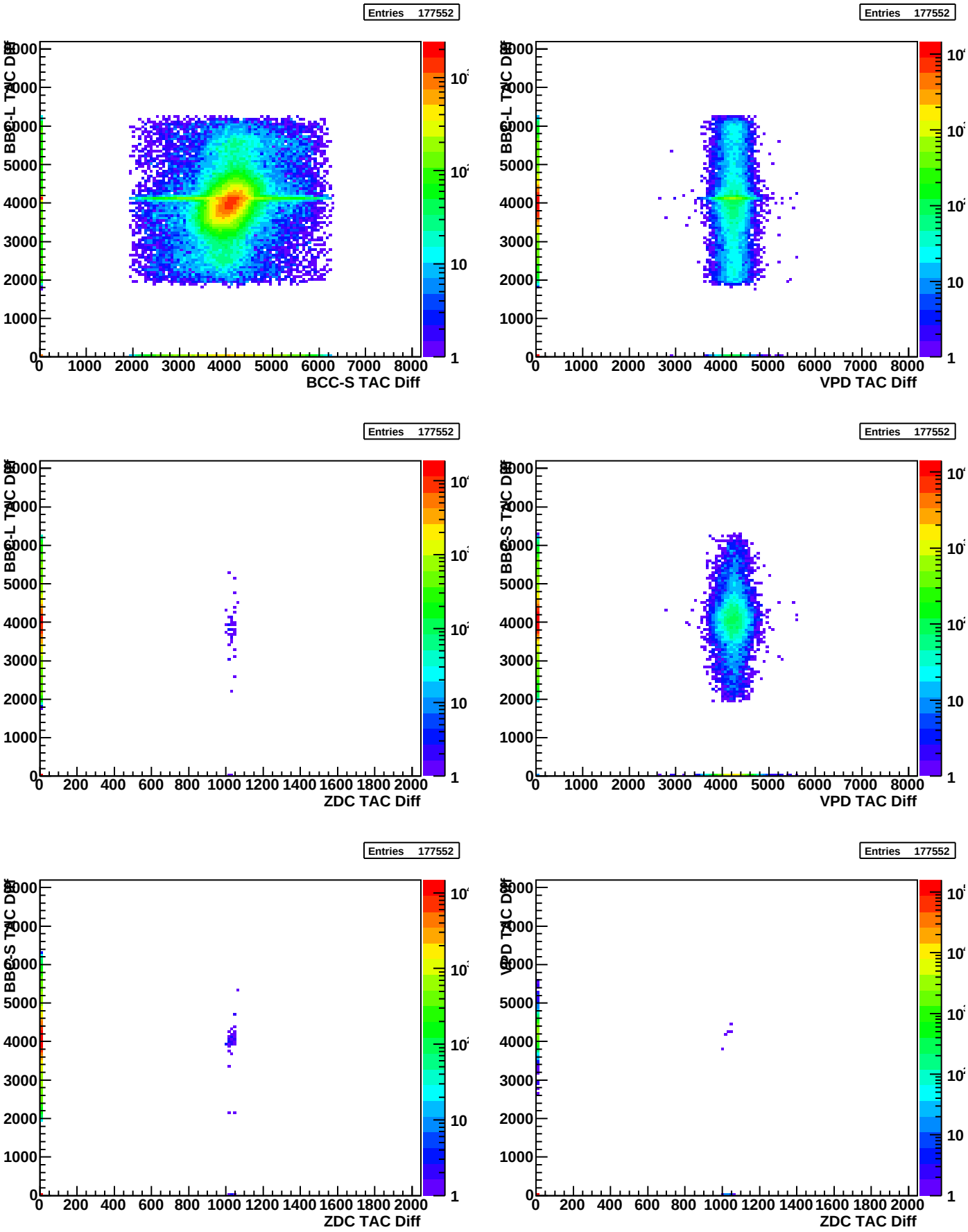

Entries 177552
VPD-West ADC Sum
ZDC-West ADC Sum Att

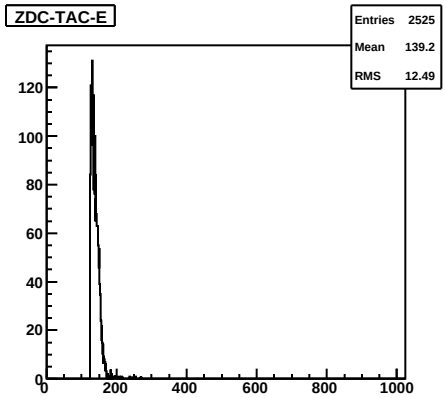

Entries 177552
BBC-L-East ADC Sum
BBC-L-West ADC Sum

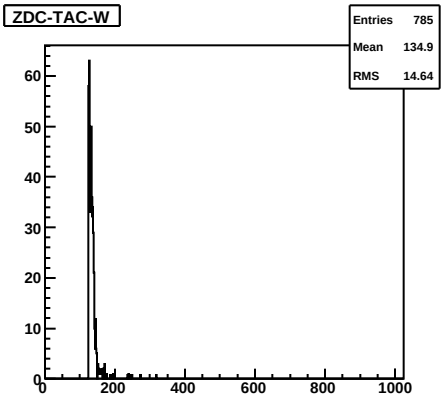

Entries 177552
BBC-S-East ADC Sum
BBC-S-West ADC Sum

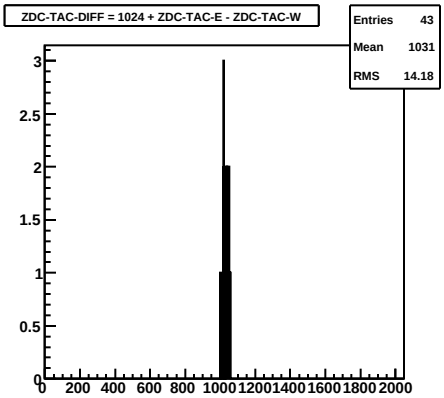

Entries 177552
VPD East ADC Sum
VPD West ADC Sum

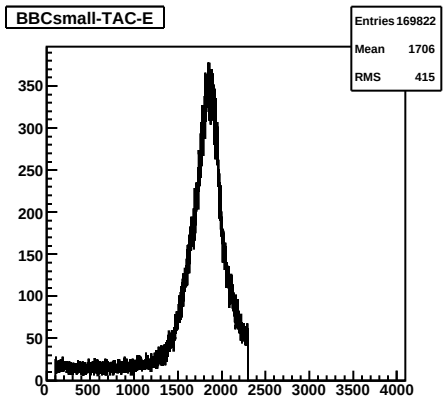

Entries 177552
ZDC East ADC Sum Att
ZDC West ADC Sum Att

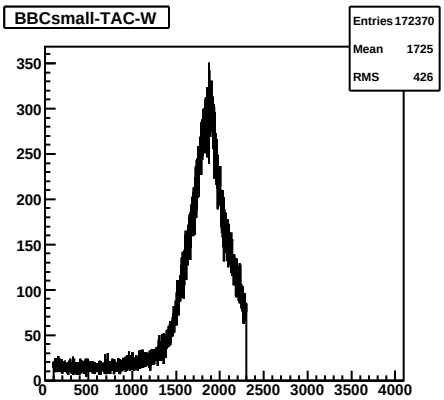

Entries 177552
BBC-L TAC Diff
BCC-S TAC Diff
Entries 177552
BBC-L TAC Diff
VPD TAC Diff
Entries 177552
BBC-L TAC Diff
ZDC TAC Diff
Entries 177552
BBC-S TAC Diff
VPD TAC Diff
Entries 177552
BBC-S TAC Diff
ZDC TAC Diff
Entries 177552
VPD TAC Diff
ZDC TAC Diff

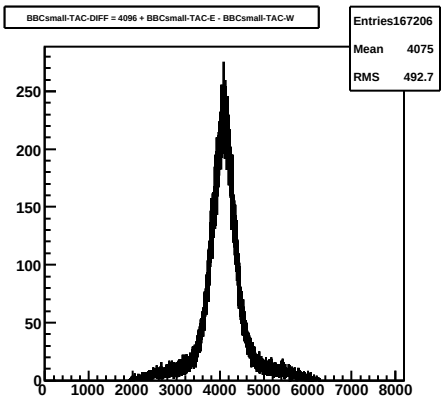

ZDC-TAC-E
Entries 2525
Mean 139.2
RMS 12.49

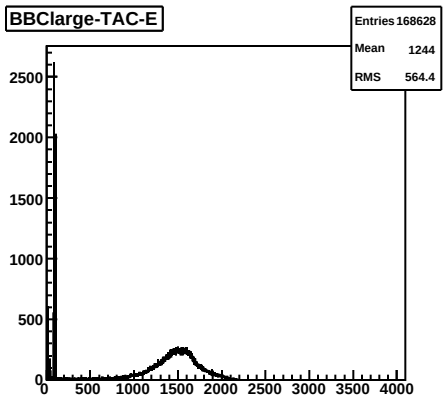

ZDC-TAC-W
Entries 785
Mean 134.9
RMS 14.64

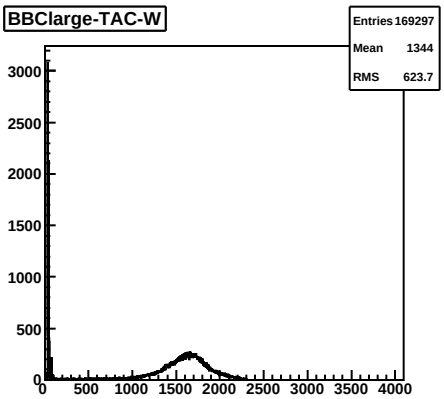

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 43
Mean 1031
RMS 14.18

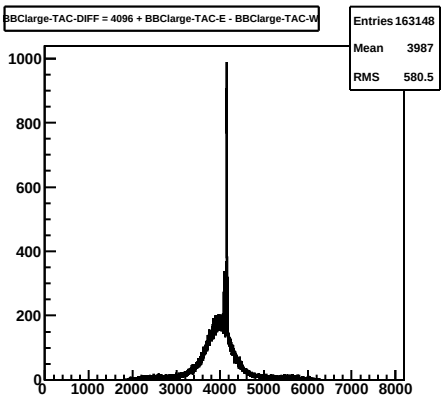

BBCsmall-TAC-E
Entries 169822
Mean 1706
RMS 415

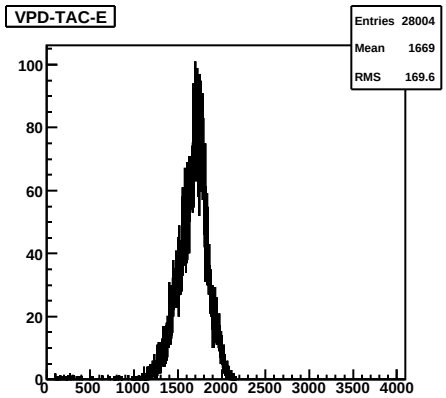

BBCsmall-TAC-W
Entries 172370
Mean 1725
RMS 426

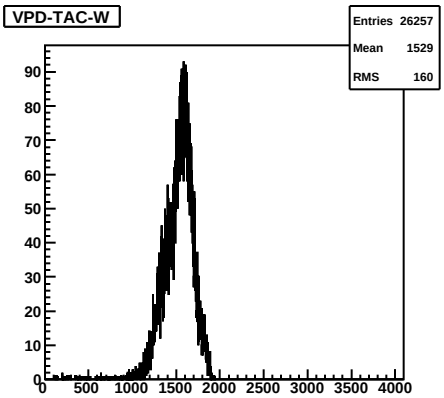

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 167206
Mean 4075
RMS 492.7

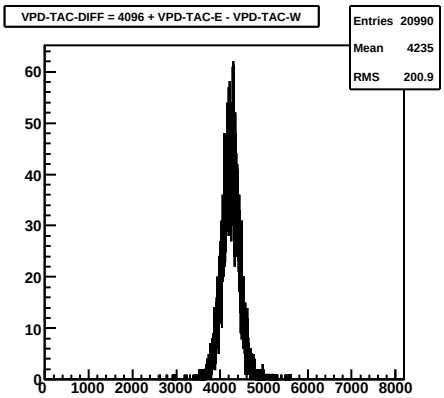

BBClarge-TAC-E
Entries 168628
Mean 1244
RMS 564.4

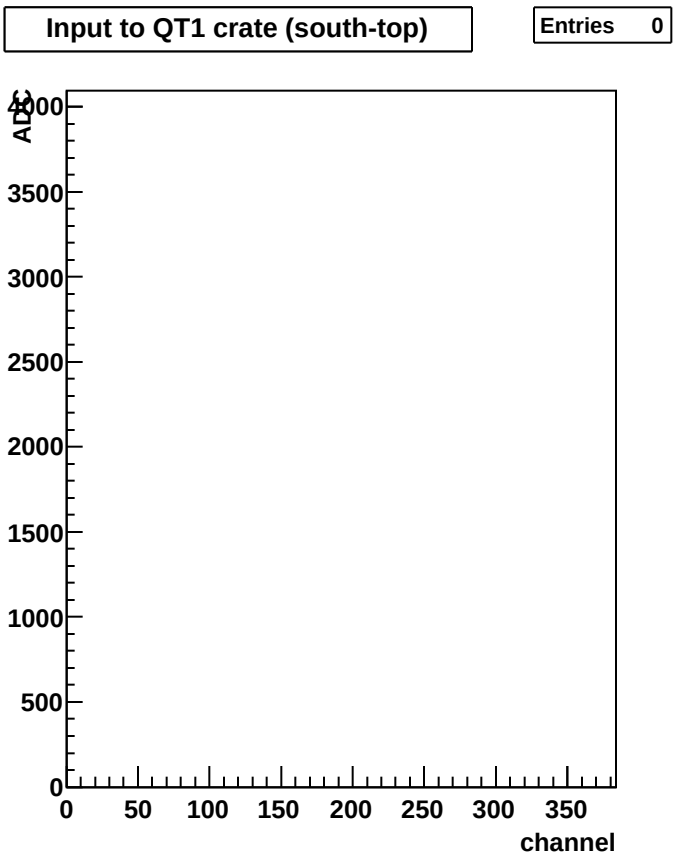

BBClarge-TAC-W
Entries 169297
Mean 1344
RMS 623.7

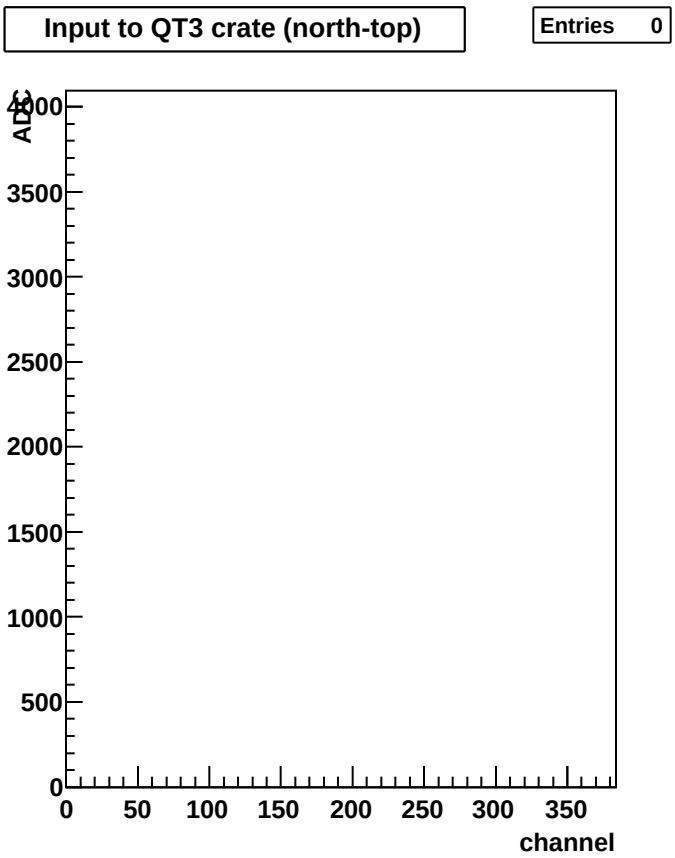

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 163148
Mean 3987
RMS 580.5

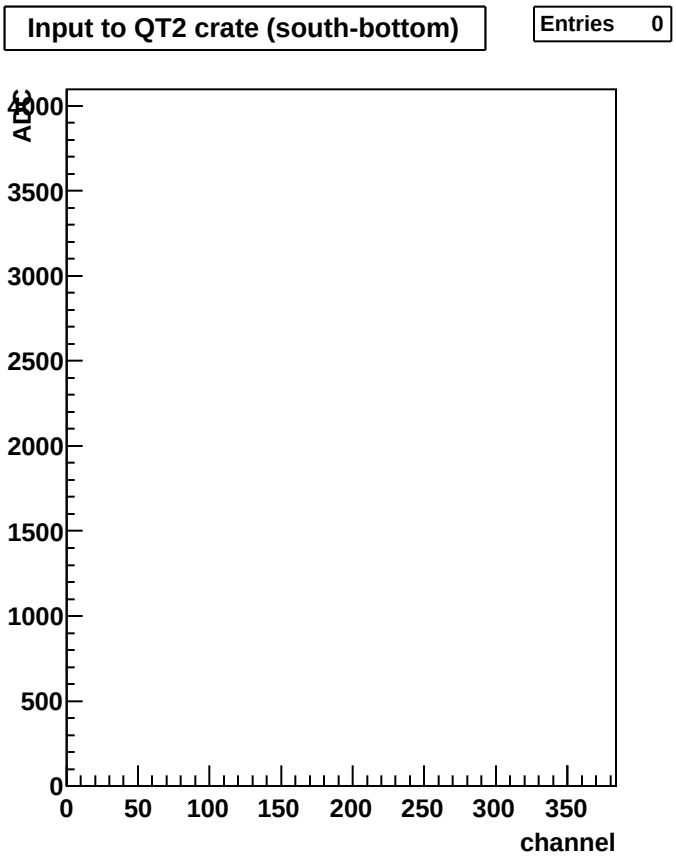

VPD-TAC-E
Entries 28004
Mean 1669
RMS 169.6

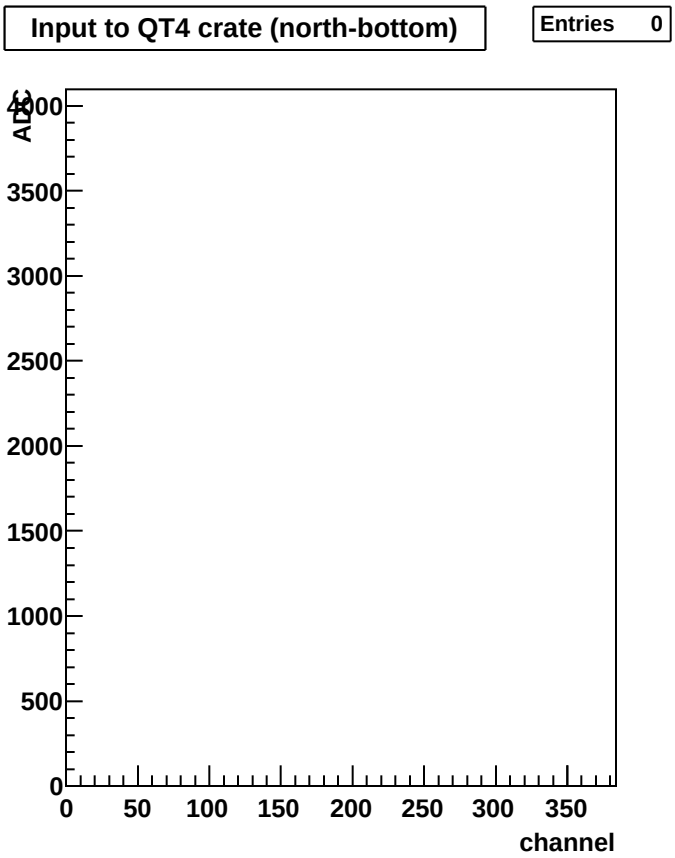

VPD-TAC-W
Entries 26257
Mean 1529
RMS 160

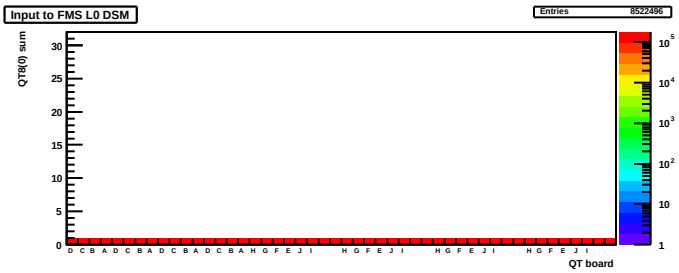

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 20990
Mean 4235
RMS 200.9

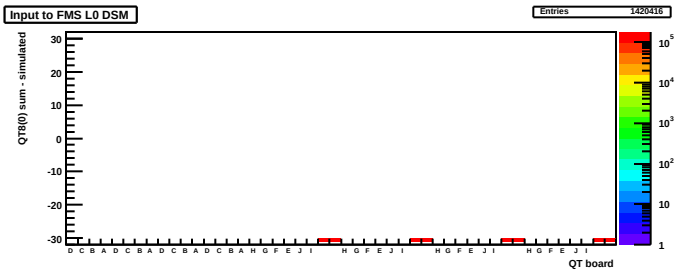

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

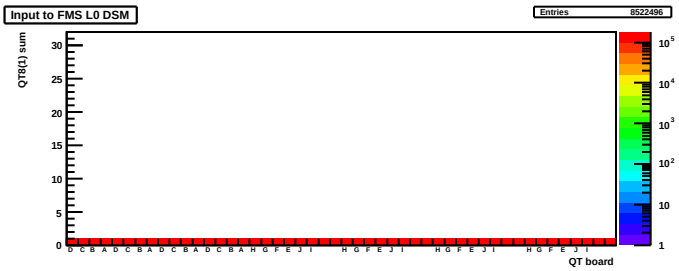

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

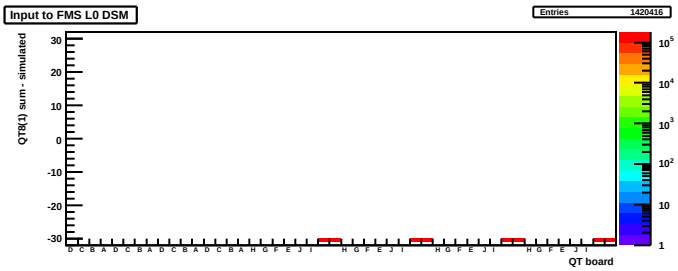

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

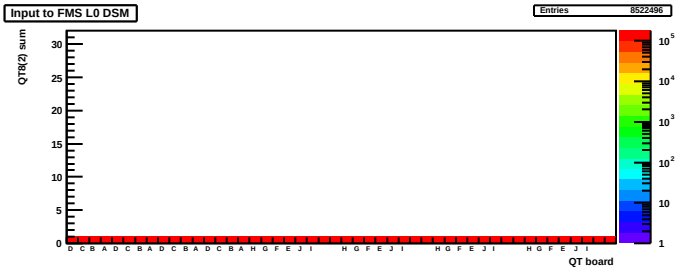

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

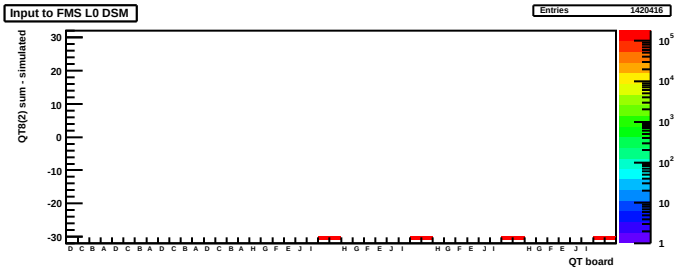

Input to FMS L0 DSM
Entries 8522496
QT8(0) sum
QT board

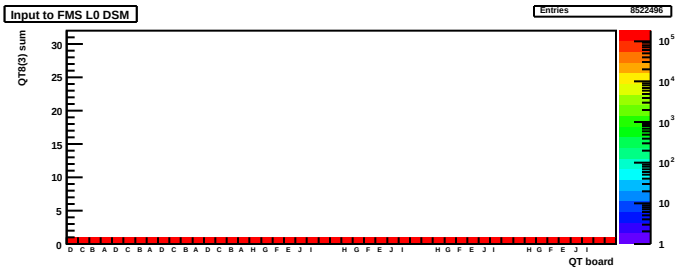

Input to FMS L0 DSM
Entries 1420416
QT8(0) sum - simulated
QT board

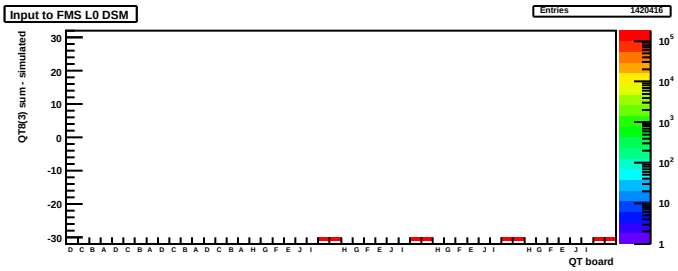

Input to FMS L0 DSM
Entries 8522496
QT8(1) sum
QT board

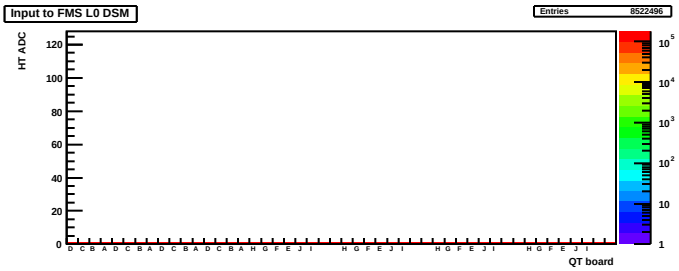

Input to FMS L0 DSM
Entries 1420416
QT8(1) sum - simulated
QT board

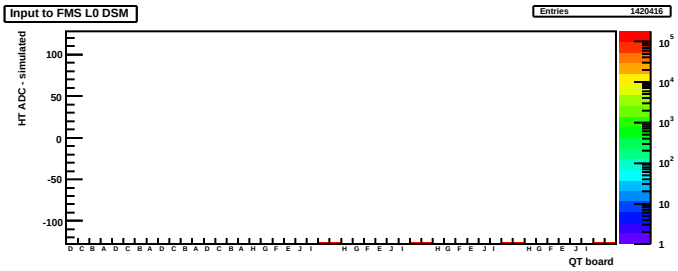

Input to FMS L0 DSM
Entries 8522496
QT8(2) sum
QT board

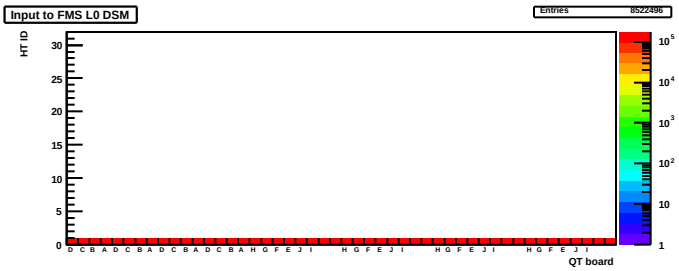

Input to FMS L0 DSM
Entries 1420416
QT8(2) sum - simulated
QT board

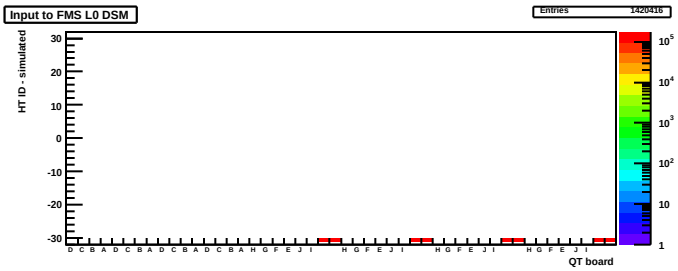

Input to FMS L0 DSM
Entries 8522496
QT8(3) sum
QT board

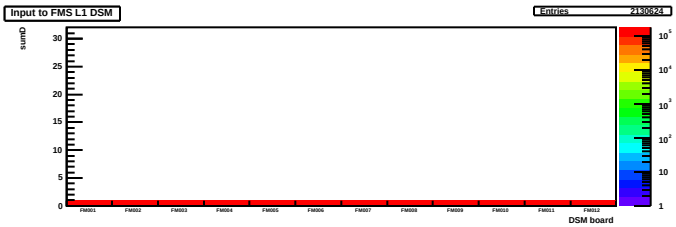

Input to FMS L0 DSM
Entries 1420416
QT8(3) sum - simulated
QT board

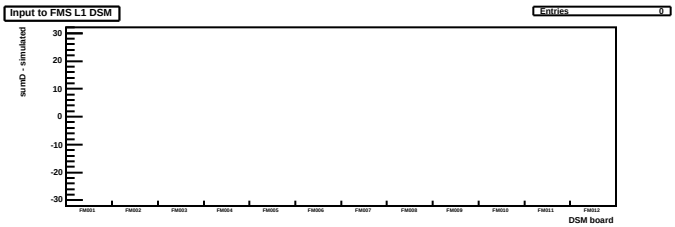

Input to FMS L0 DSM
Entries 8522496
HT ADC
QT board

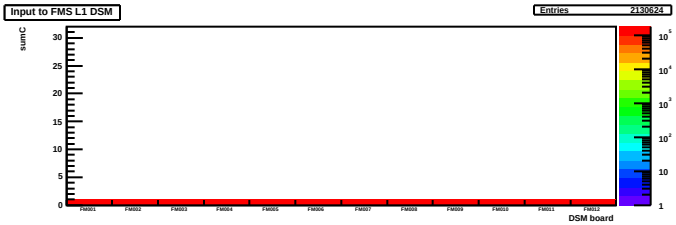

Input to FMS L0 DSM
Entries 1420416
HT ADC - simulated
QT board

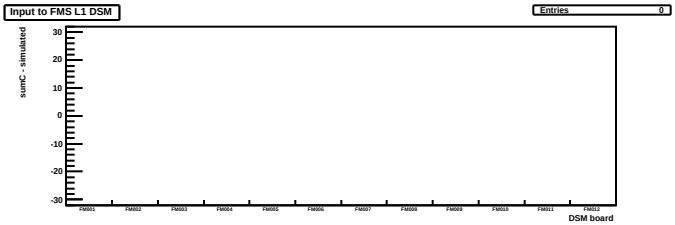

Input to FMS L0 DSM
Entries 8522496
HT ID
QT board

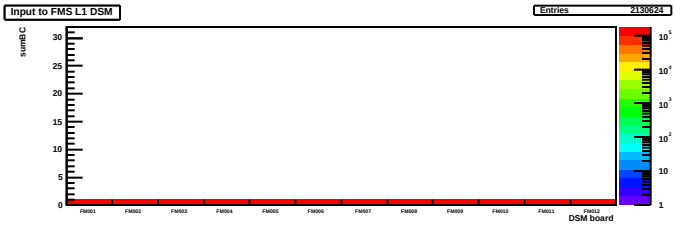

Input to FMS L0 DSM
Entries 1420416
HT ID - simulated
QT board

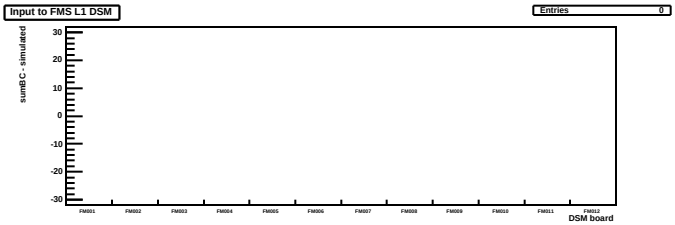

Input to FMS L1 DSM
Entries 2130624
sumD
DSM board

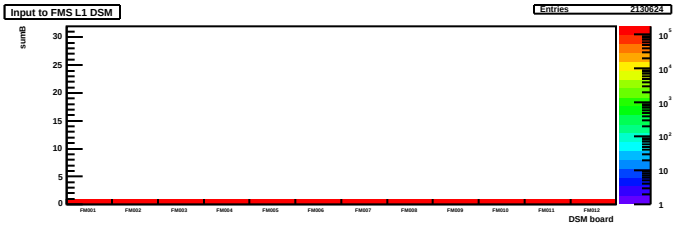

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

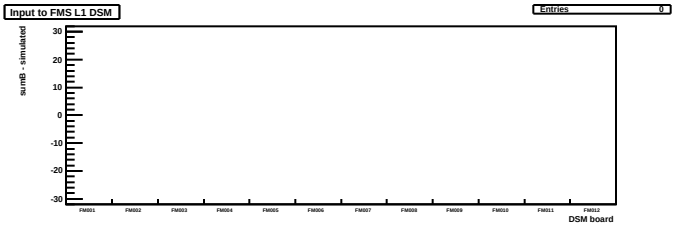

Input to FMS L1 DSM
Entries 2130624
sumC
DSM board

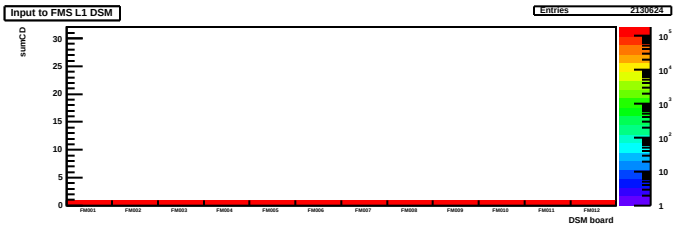

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

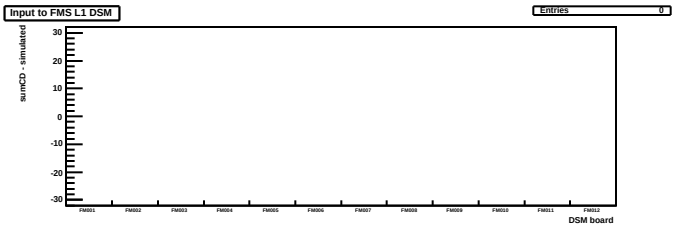

Input to FMS L1 DSM
Entries 2130624
sumBC
DSM board

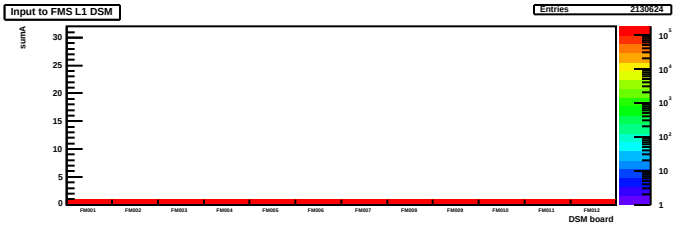

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

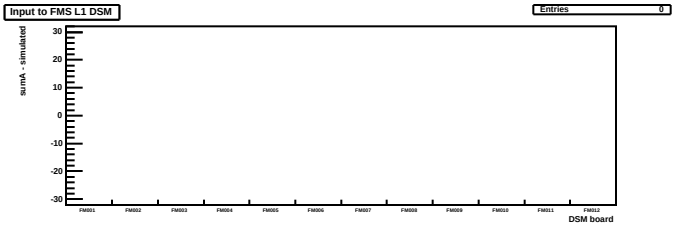

Input to FMS L1 DSM
Entries 2130624
sumB
DSM board

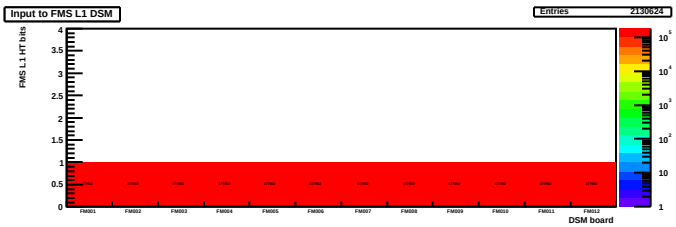

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

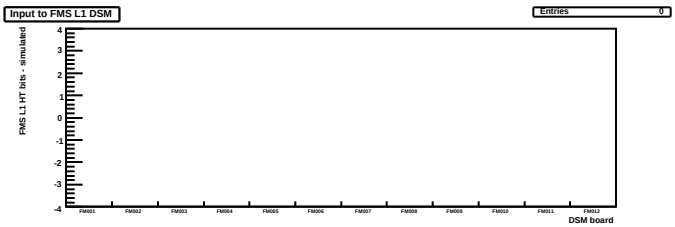

Input to FMS L1 DSM
Entries 2130624
sumCD
DSM board

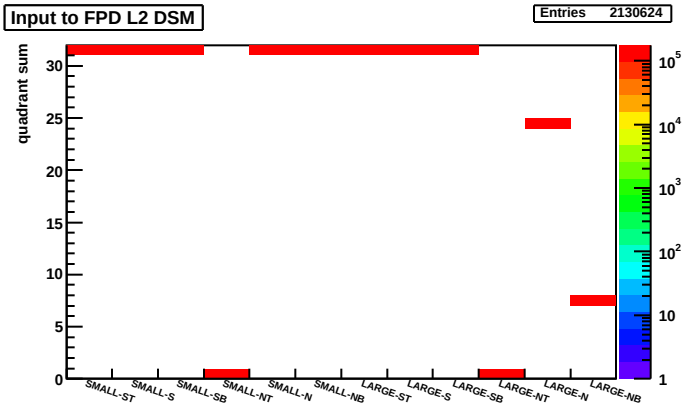

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

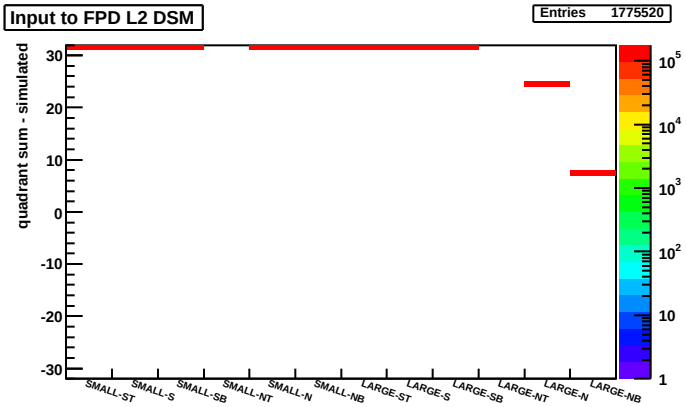

Input to FMS L1 DSM
Entries 2130624
sumA
DSM board

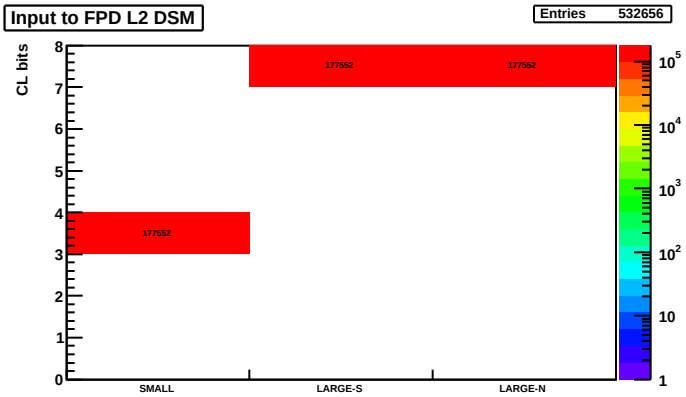

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

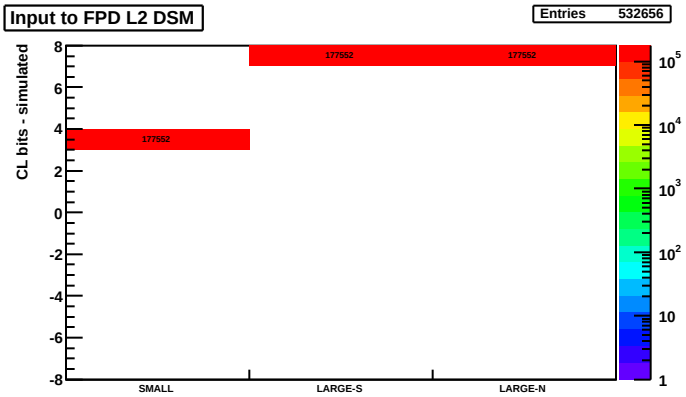

Input to FMS L1 DSM
Entries 2130624
FMS L1 HT bits
DSM board

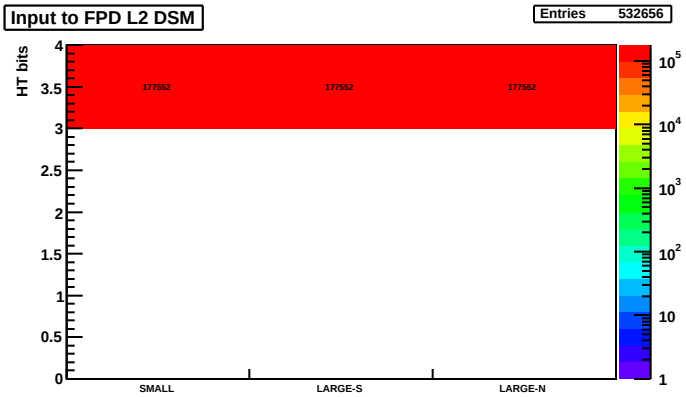

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

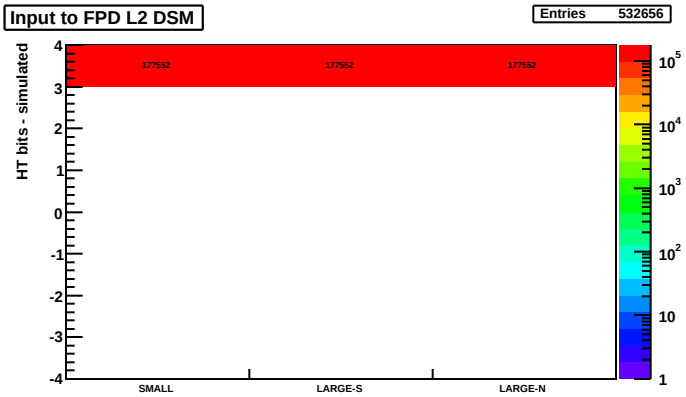

Input to FPD L2 DSM
Entries 2130624
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

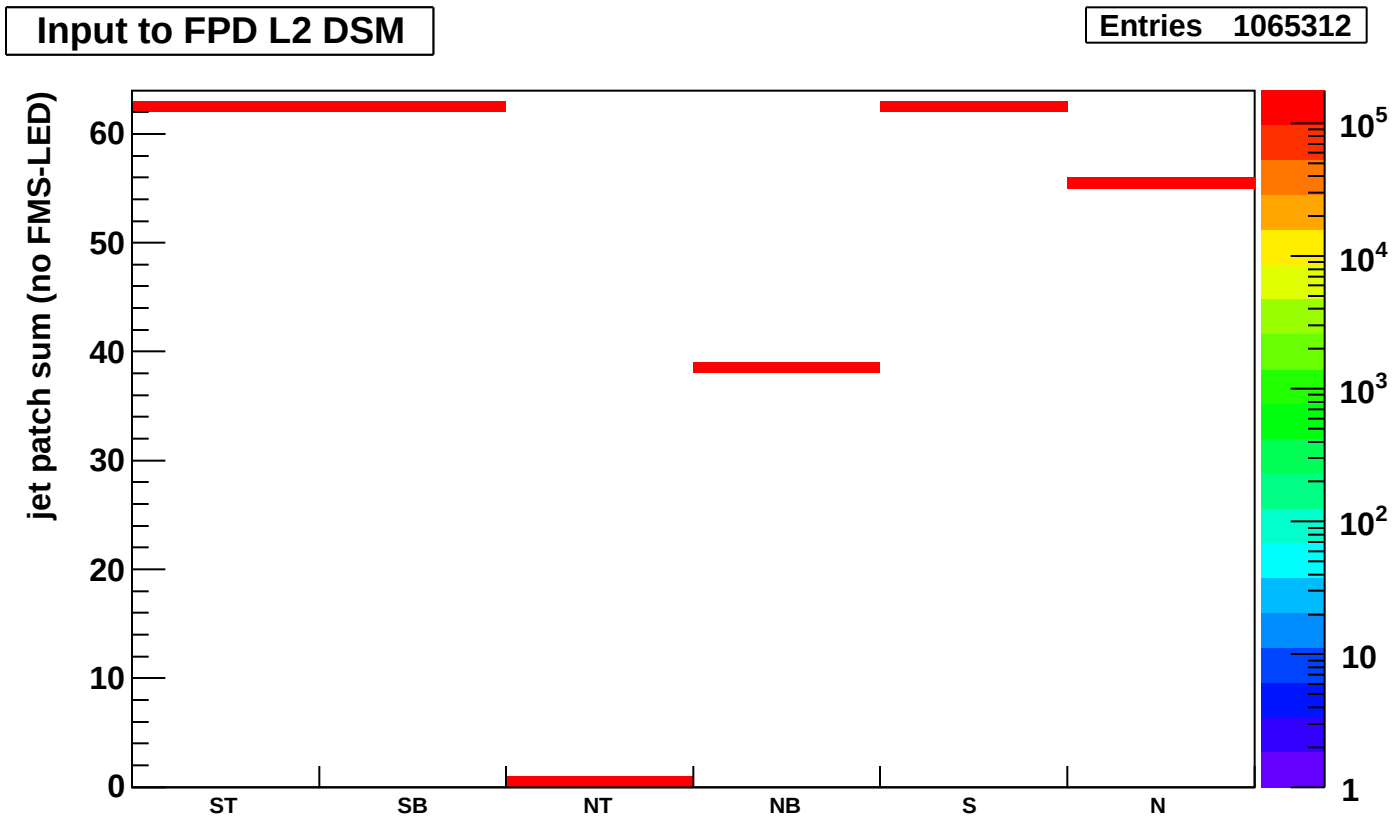

Input to FPD L2 DSM
Entries 1775520
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

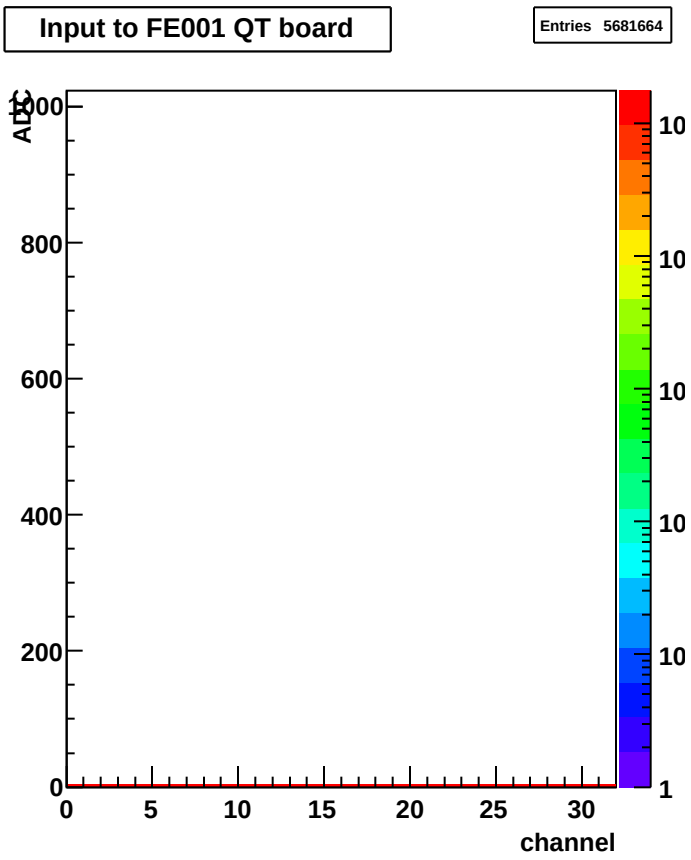

Input to FPD L2 DSM
Entries 532656
CL bits
177552
177552
177552
SMALL
LARGE-S
LARGE-N

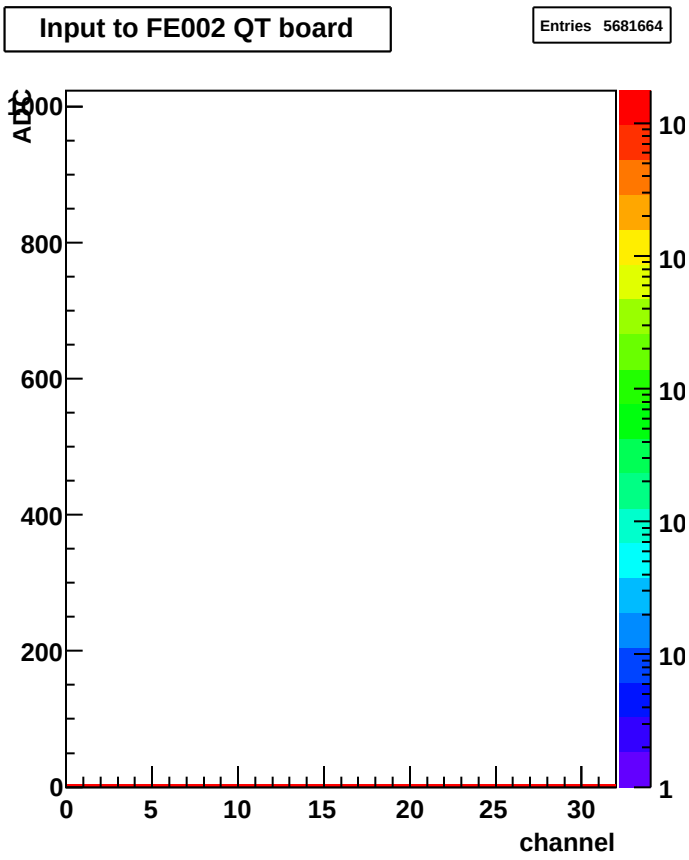

Input to FPD L2 DSM
Entries 532656
CL bits - simulated
177552
177552
177552
SMALL
LARGE-S
LARGE-N

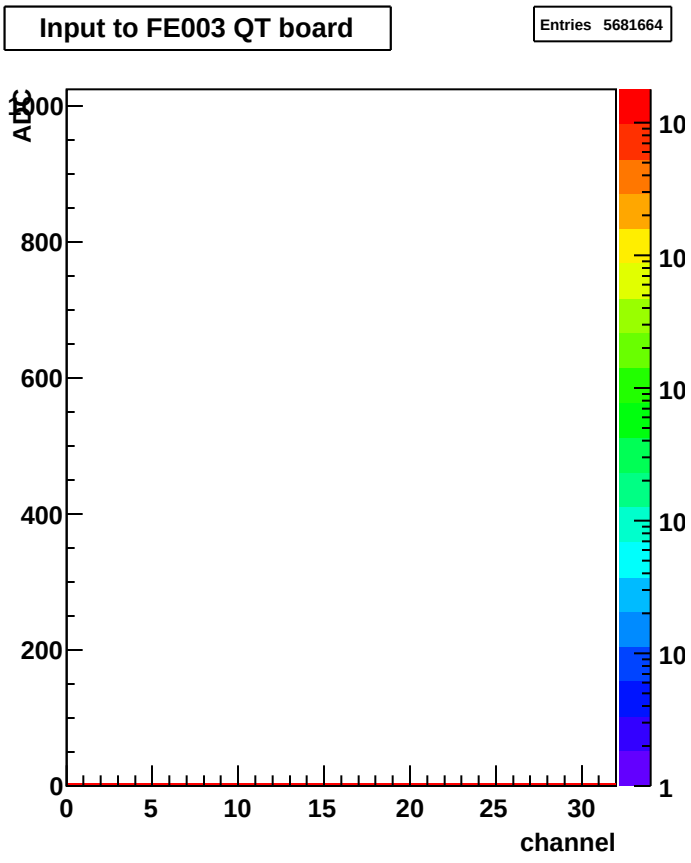

Input to FPD L2 DSM
Entries 532656
HT bits
177552
177552
177552
SMALL
LARGE-S
LARGE-N

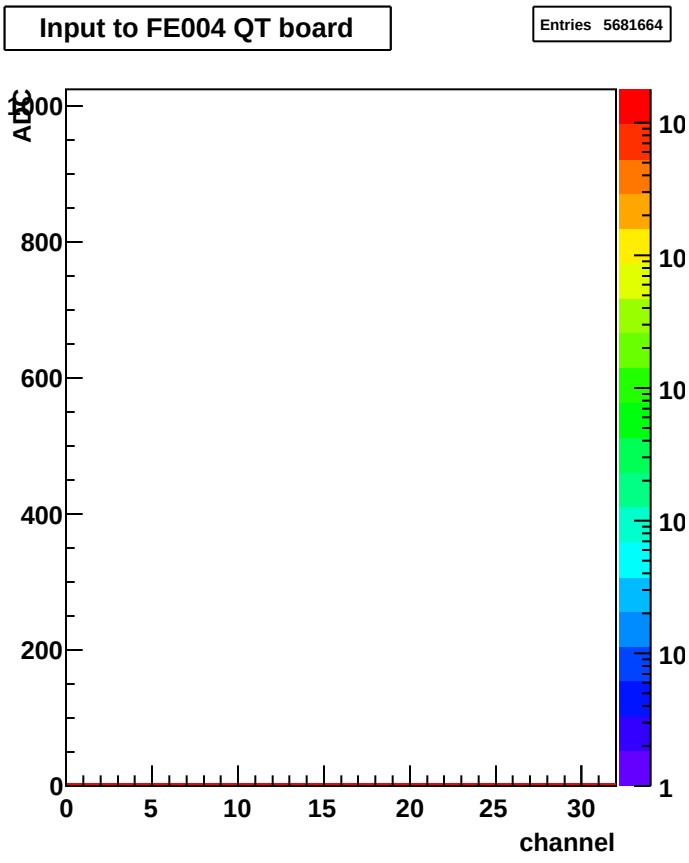

Input to FPD L2 DSM
Entries 532656
HT bits - simulated
177552
177552
177552
SMALL
LARGE-S
LARGE-N

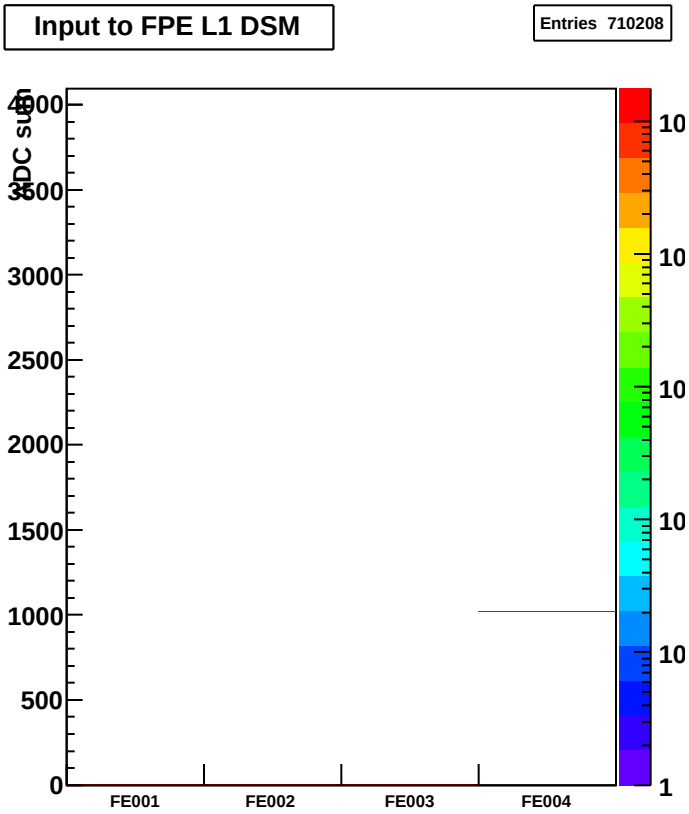

Input to FPD L2 DSM
Entries 1065312
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

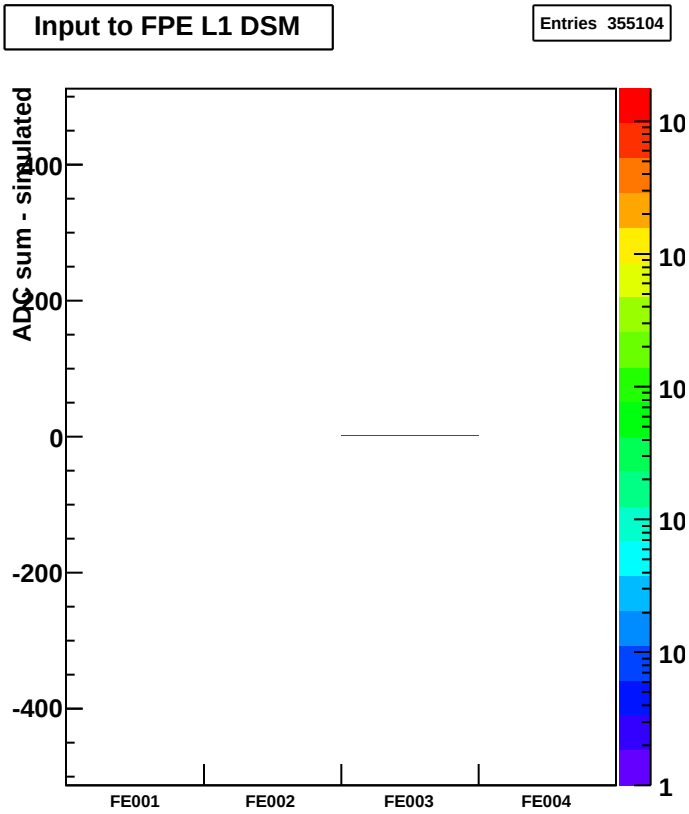

Input to FE001 QT board
Entries 5681664
ADC
channel

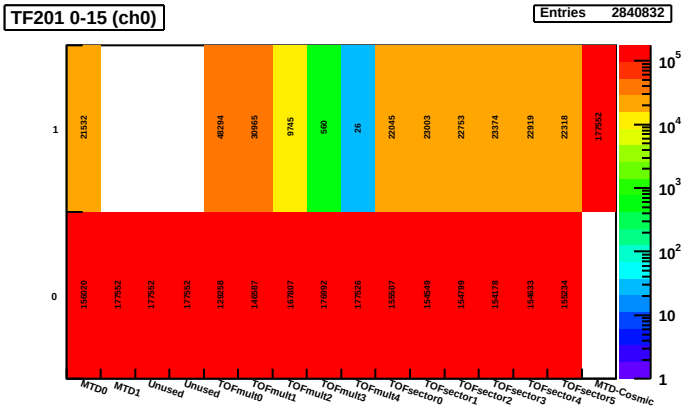

Input to FE002 QT board
Entries 5681664
ADC
channel

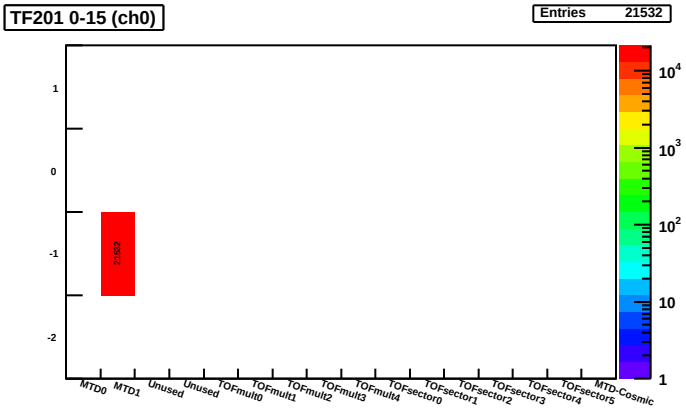

Input to FE003 QT board
Entries 5681664
ADC
channel

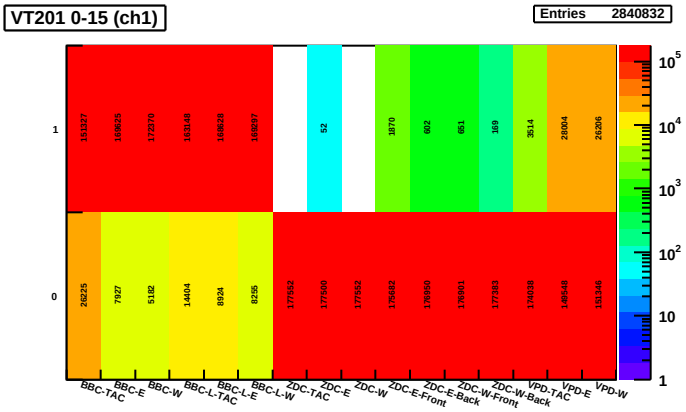

Input to FE004 QT board
Entries 5681664
ADC
channel

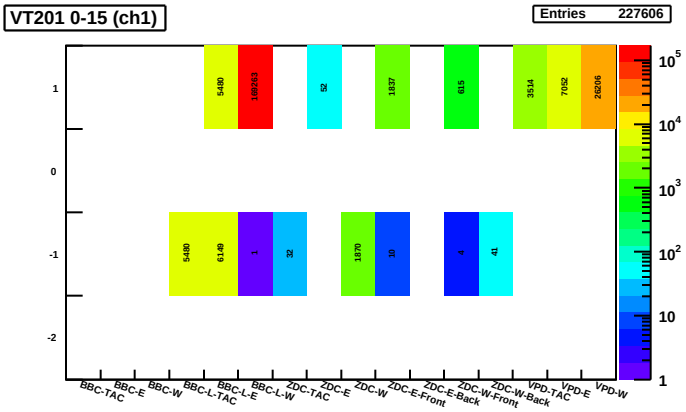

Input to FPE L1 DSM
Entries 710208
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 355104
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 2840832
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 21532
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 2840832
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W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Entries 227606
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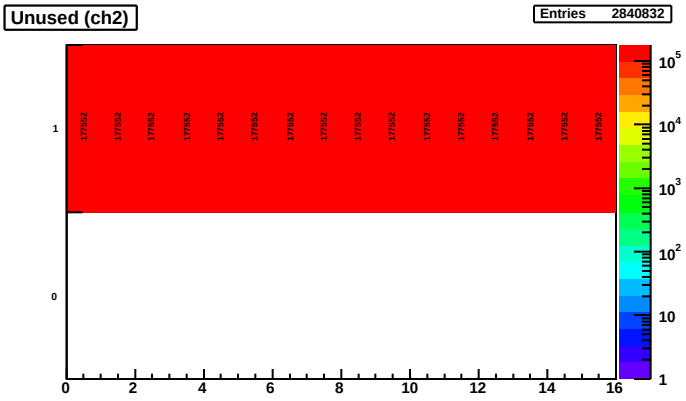
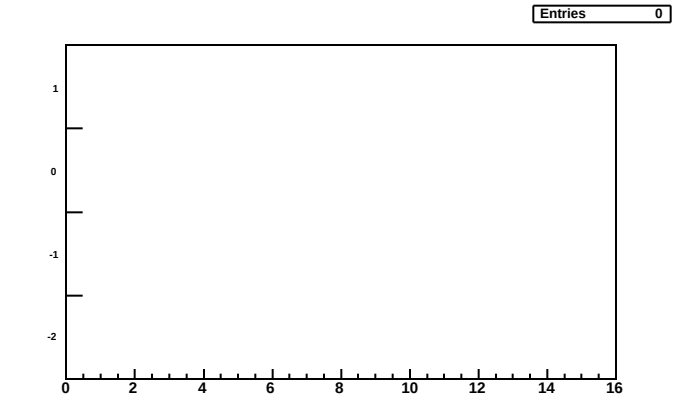
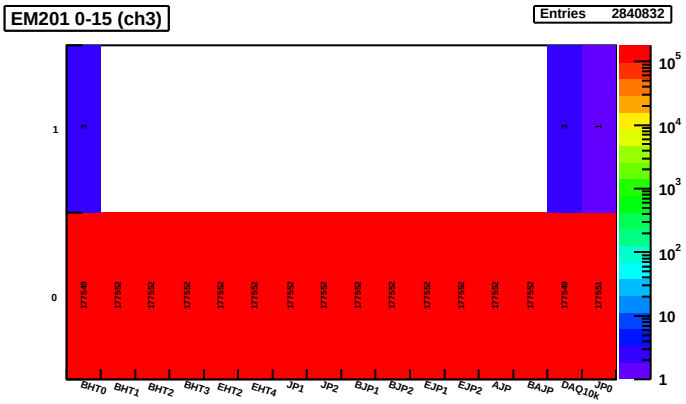

Unused (ch2)
Entries 2840832


Entries 0


EM201 0-15 (ch3)
Entries 2840832
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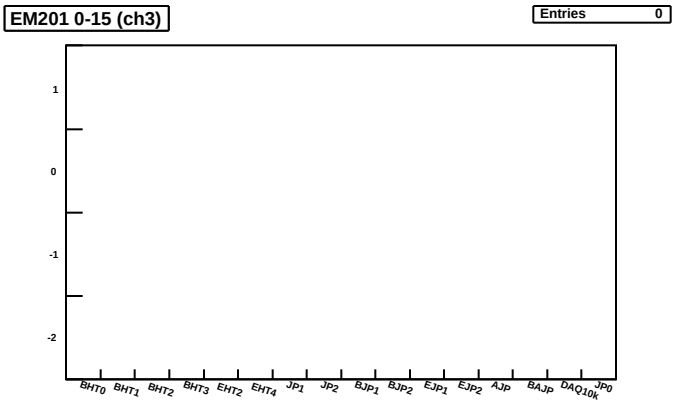
EM201 0-15 (ch3)
Entries 0
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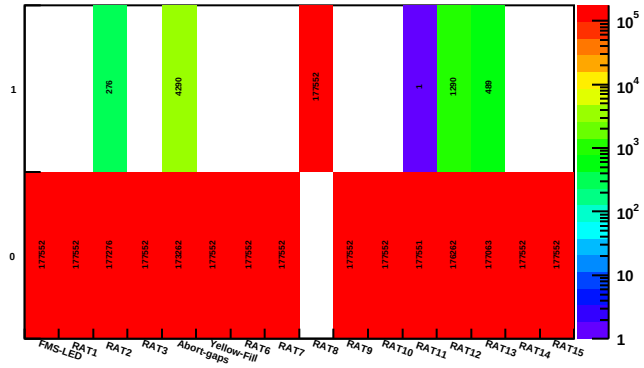
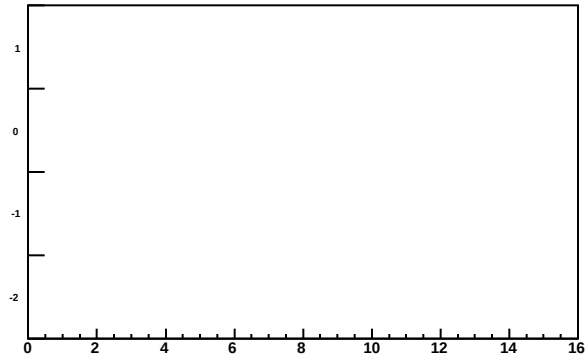
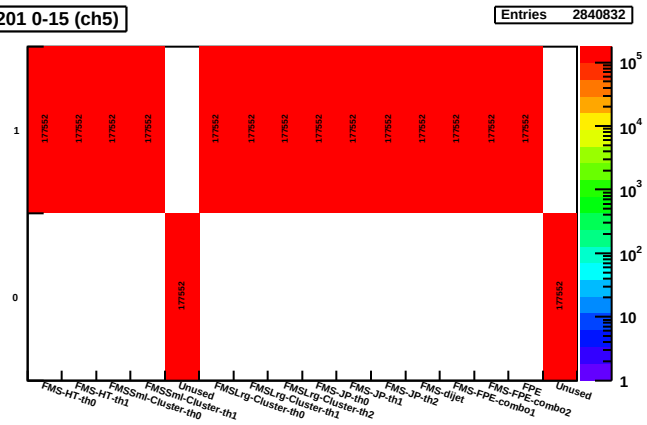
RAT board (ch4)





FP201 0-15 (ch5)



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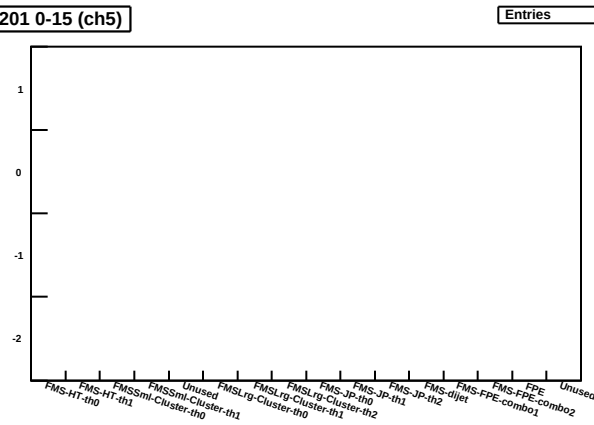
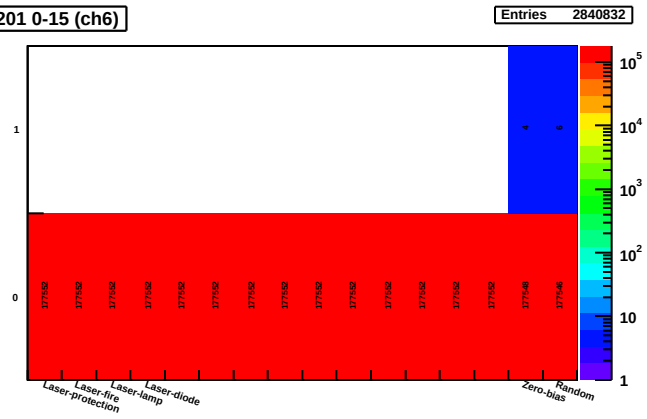
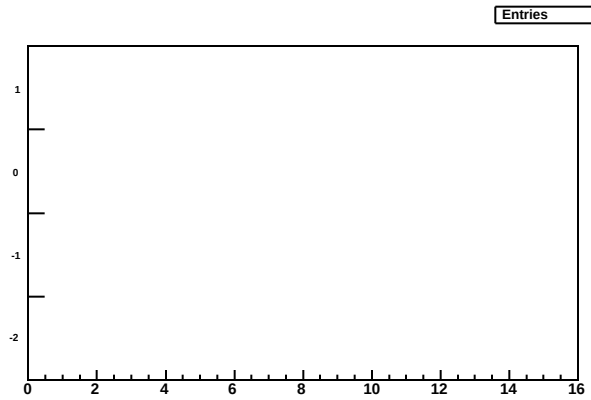
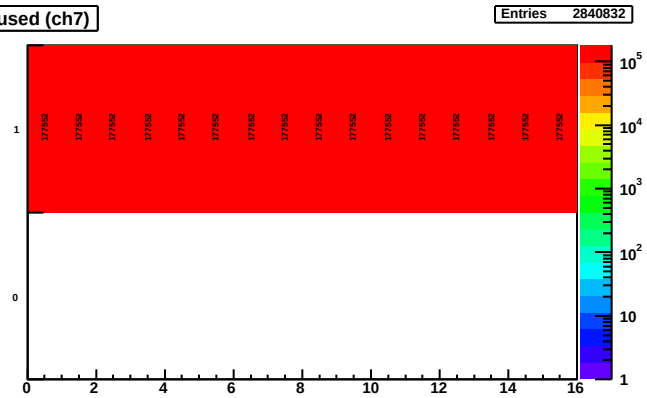
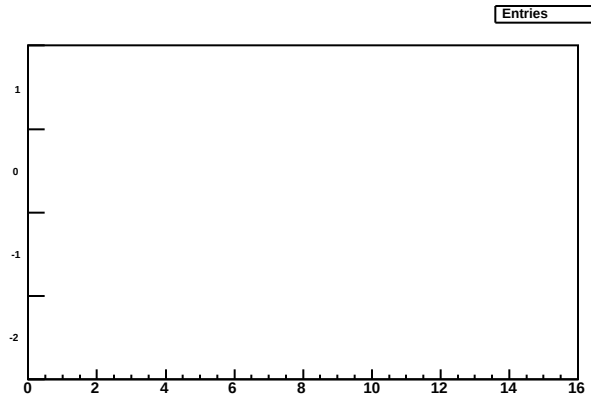


ST201 0-15 (ch6)





Unused (ch7)