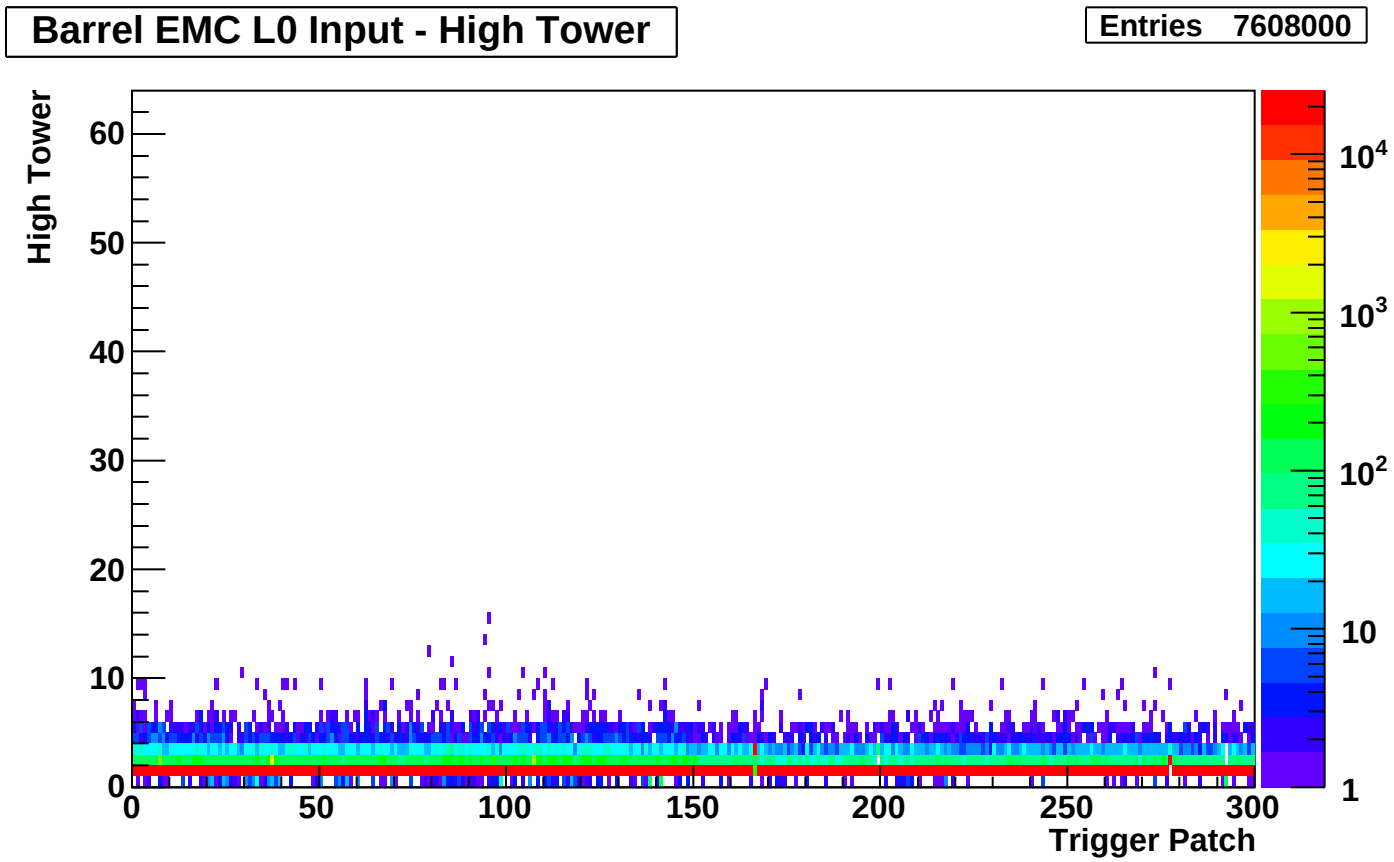
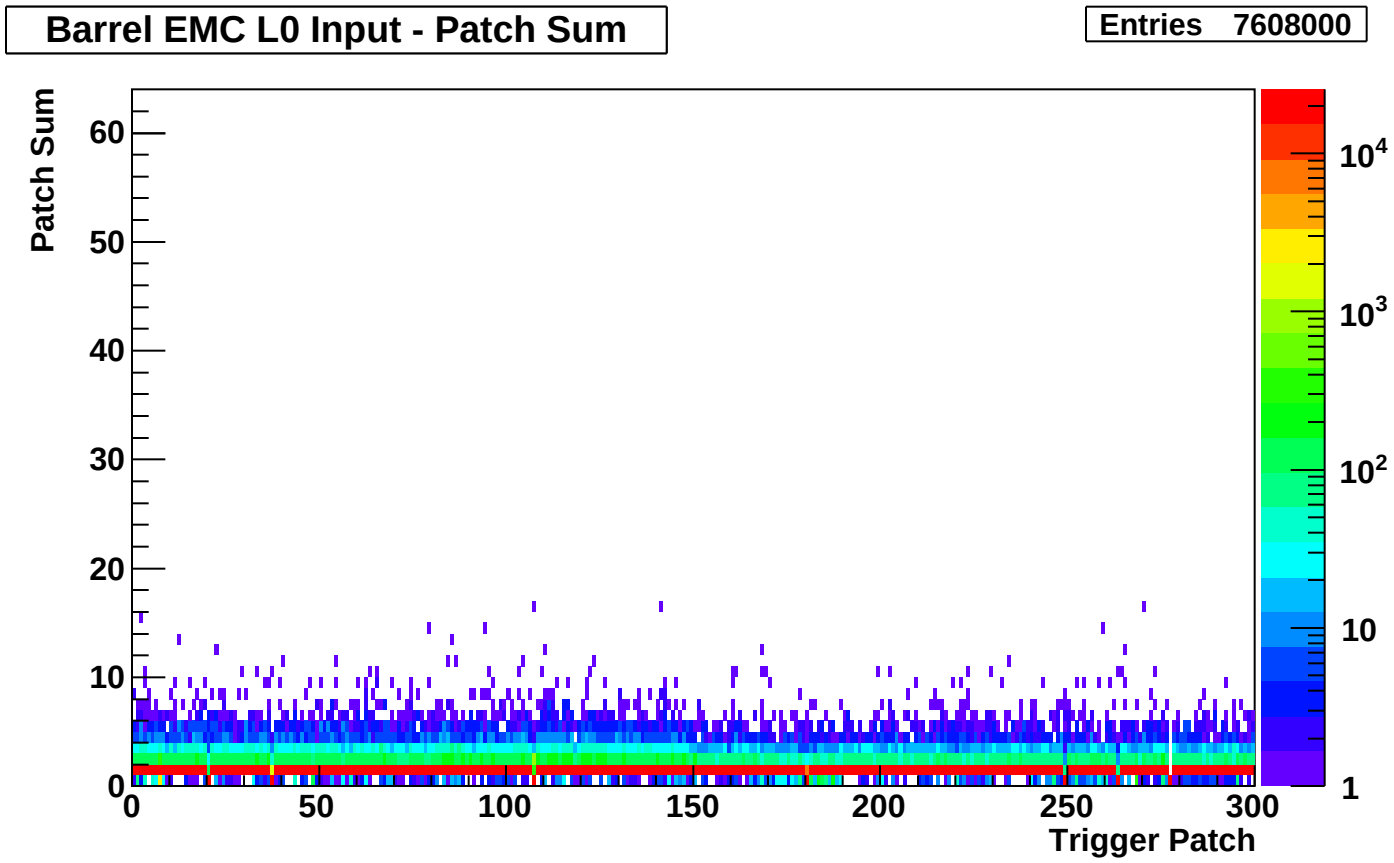
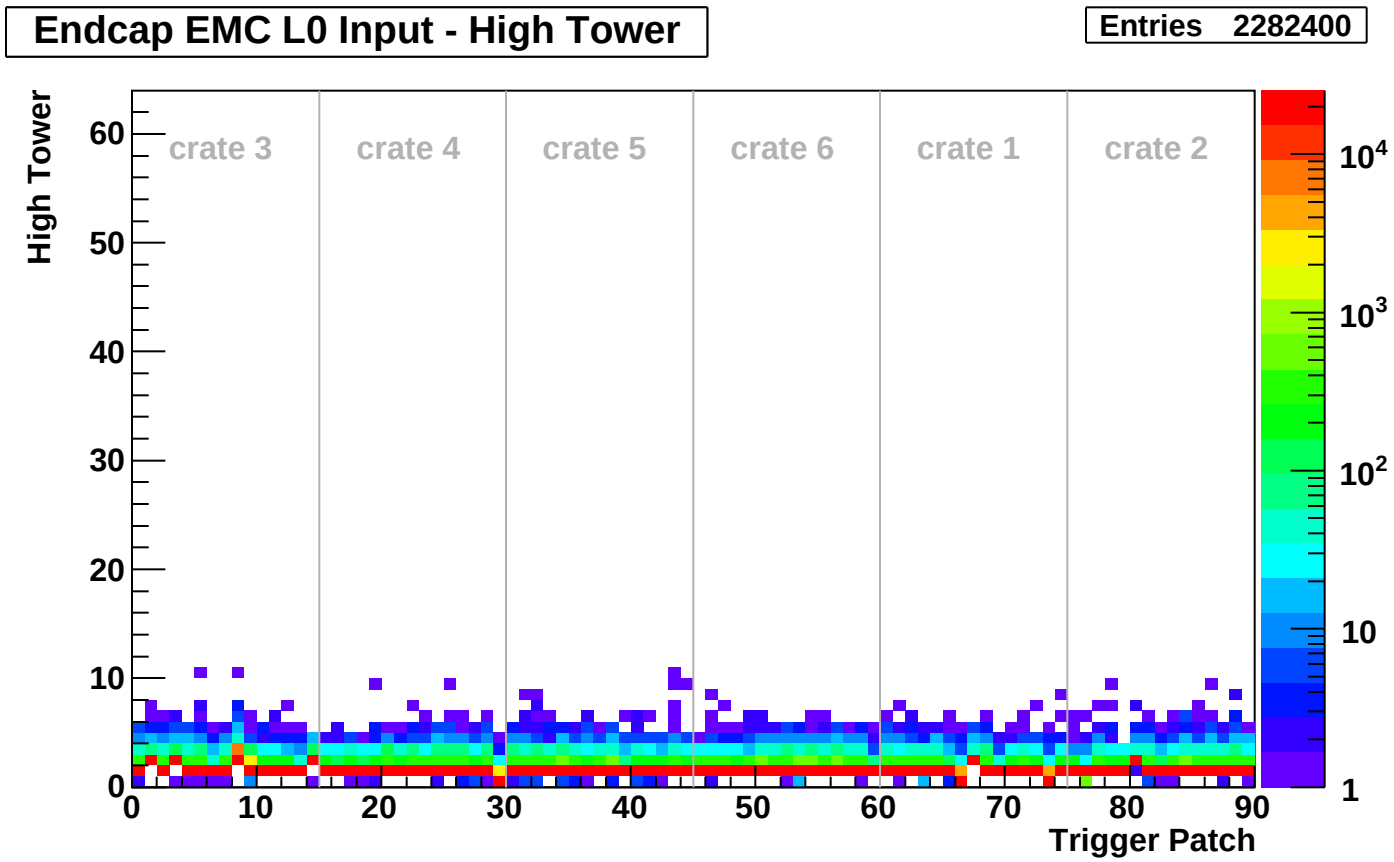
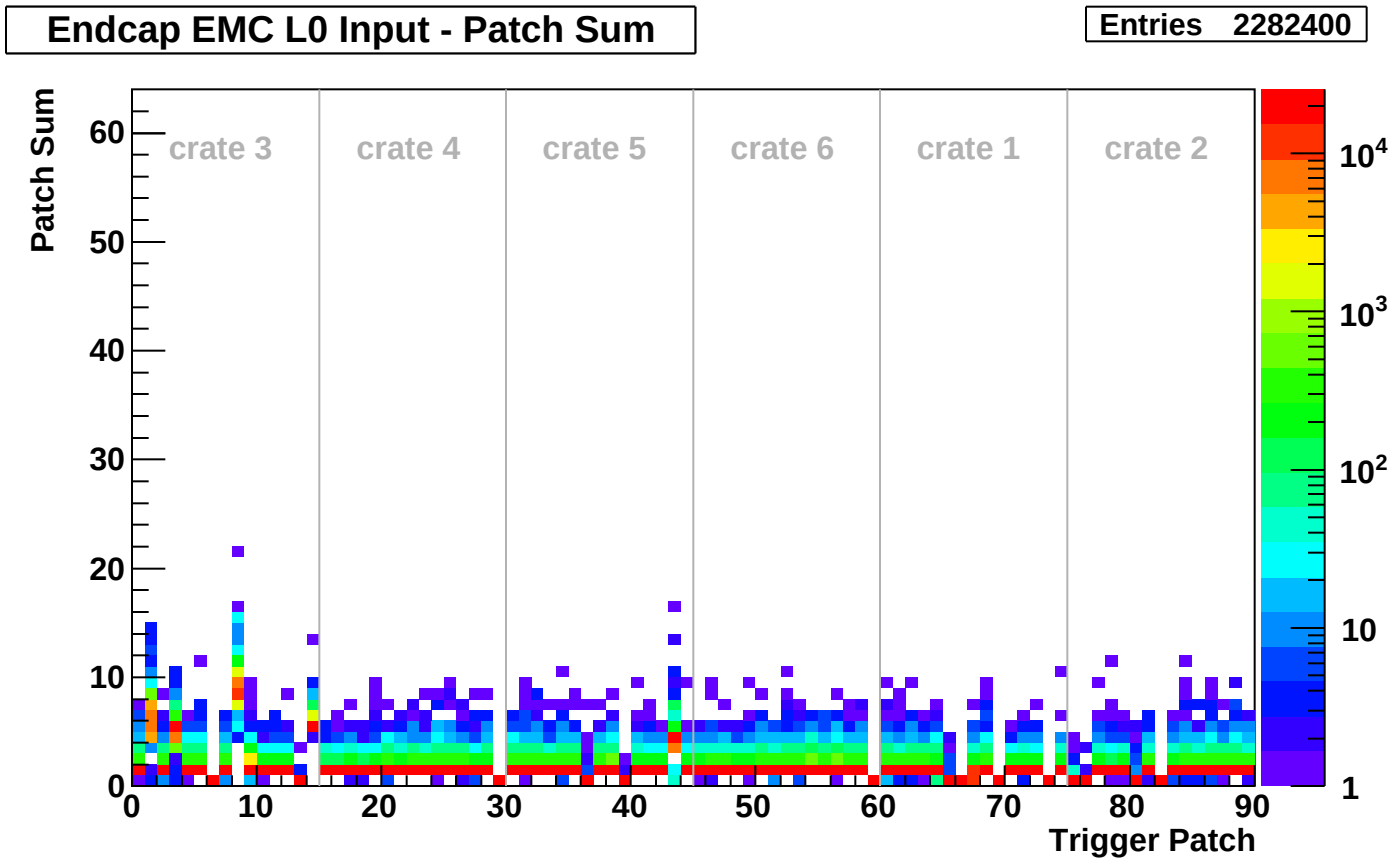
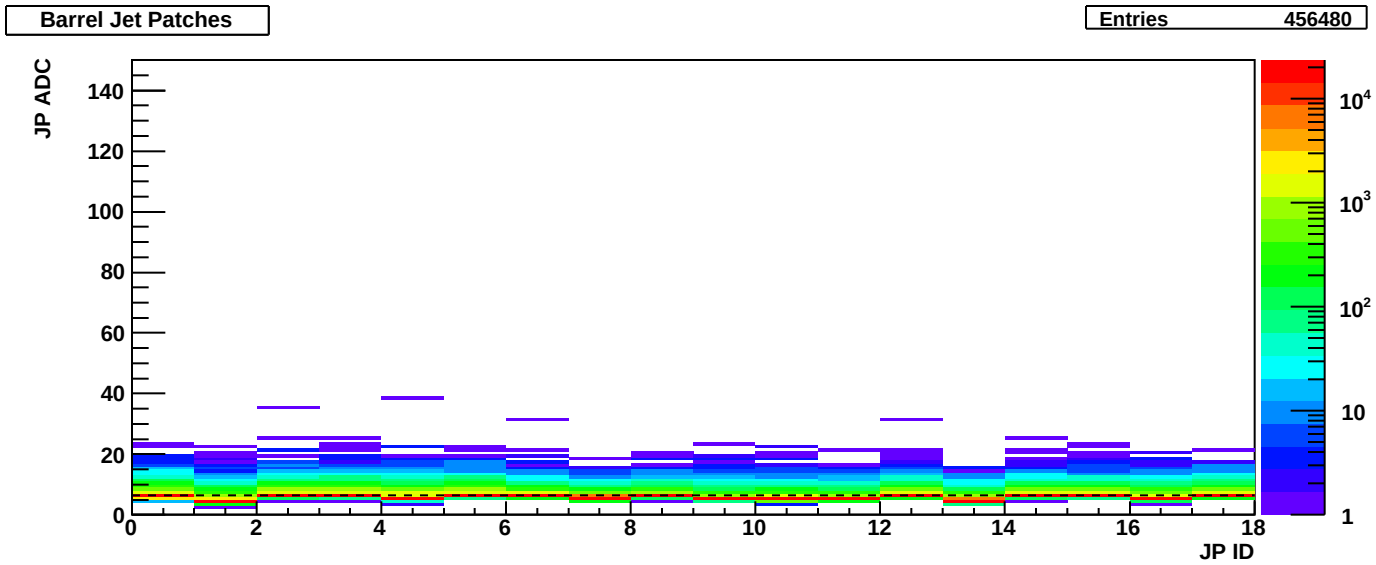
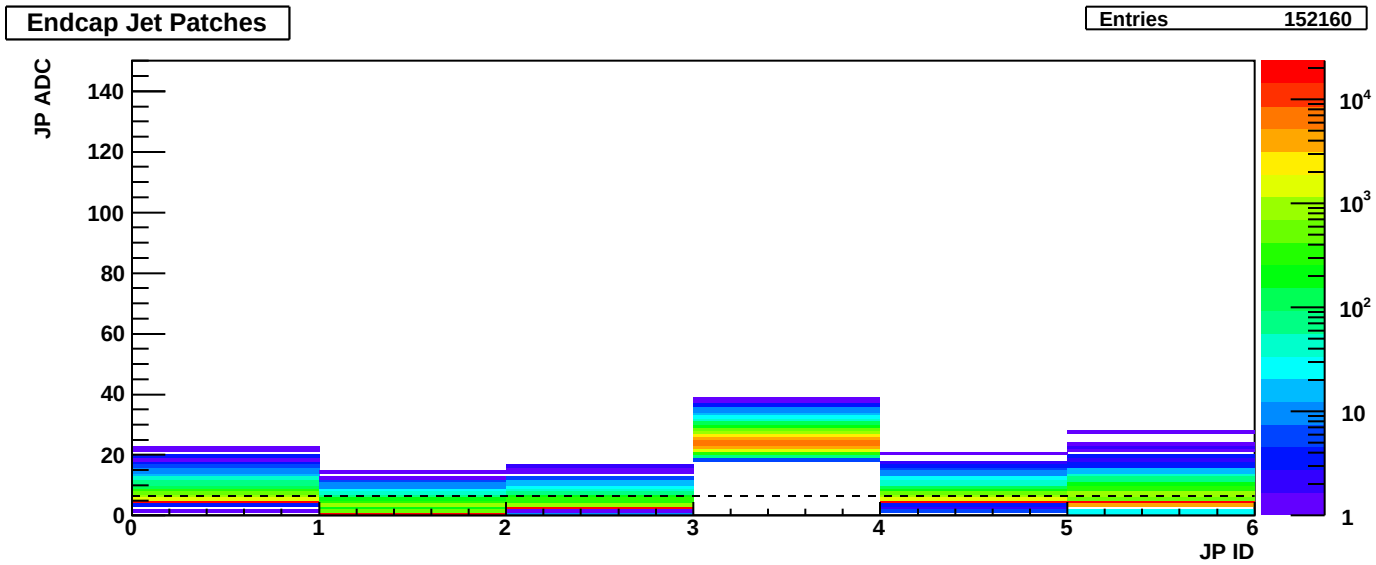

Barrel EMC L0 Input - High Tower
Entries 7608000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

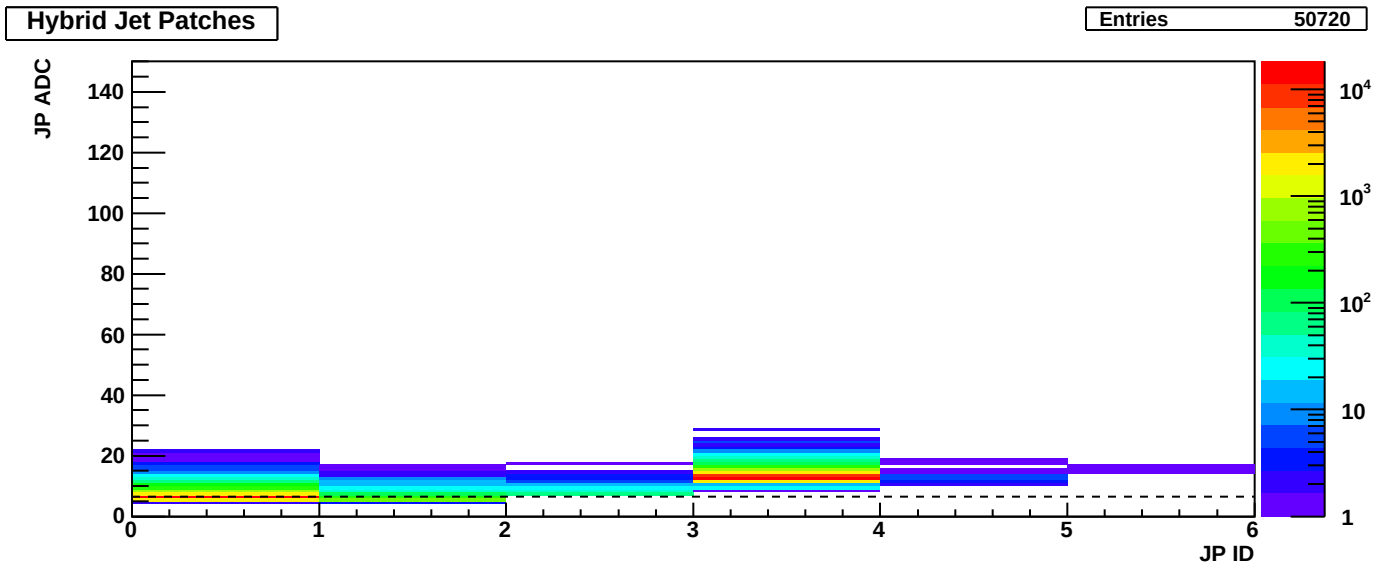

Barrel EMC L0 Input - Patch Sum
Entries 7608000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

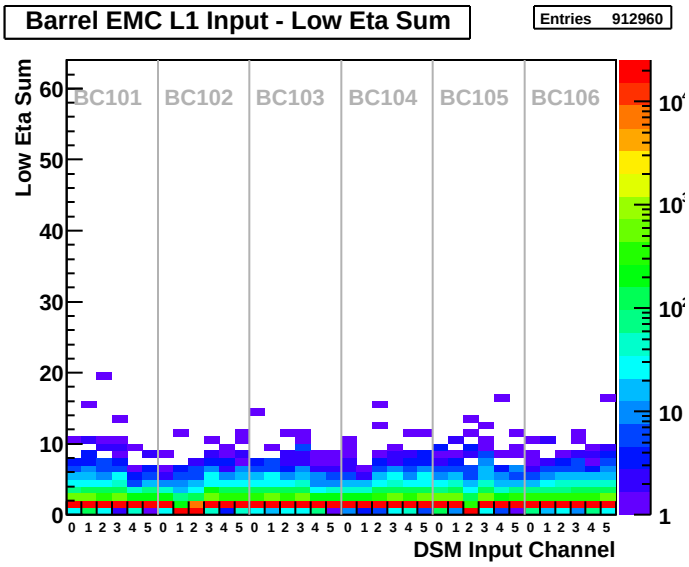

Endcap EMC L0 Input - High Tower
Entries 2282400
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

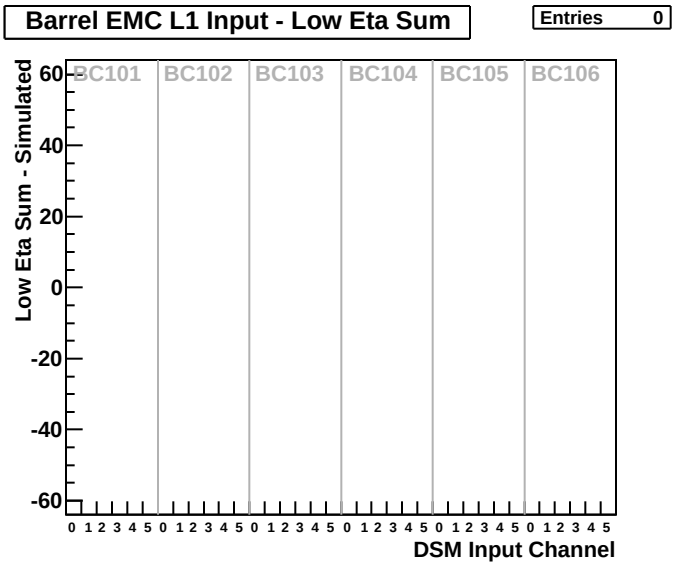

Endcap EMC L0 Input - Patch Sum
Entries 2282400
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

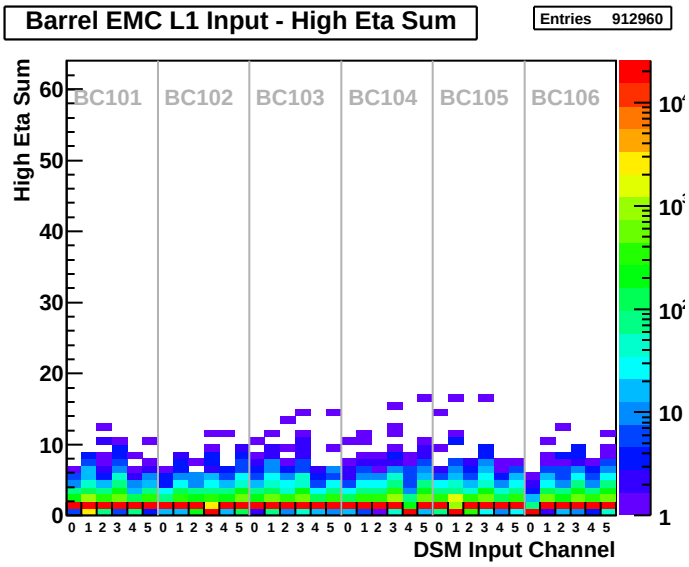

Barrel Jet Patches
Entries 456480
JP ADC
JP ID

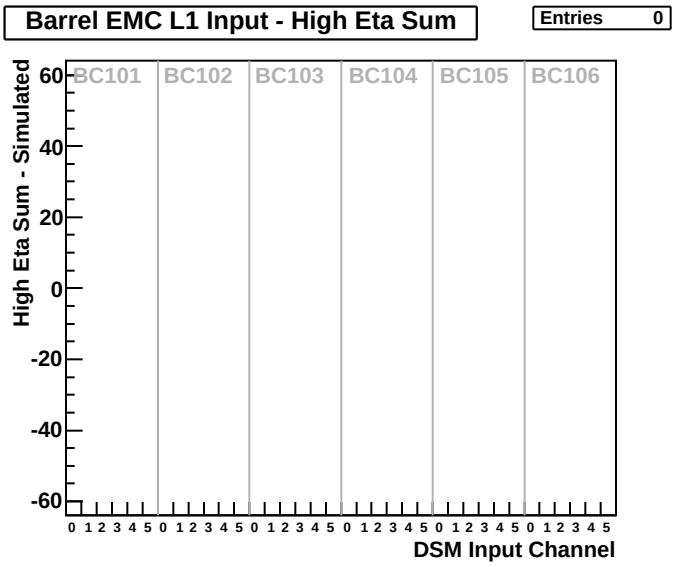

Endcap Jet Patches
Entries 152160
JP ADC
JP ID

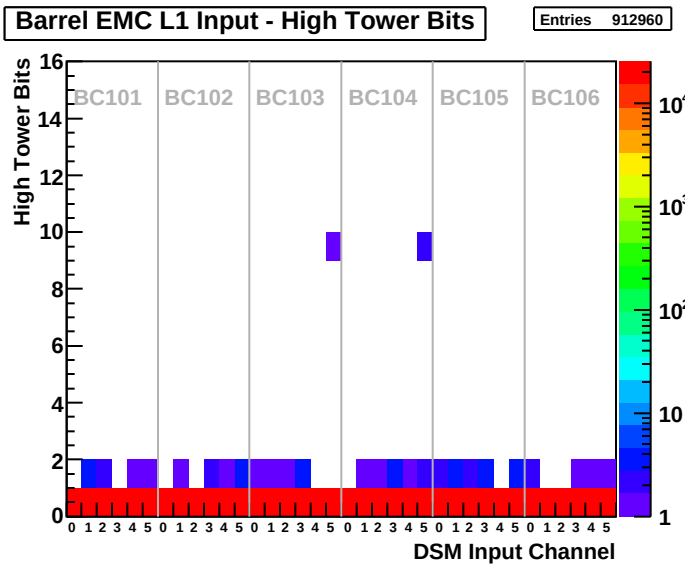

Hybrid Jet Patches
Entries 50720
JP ADC
JP ID

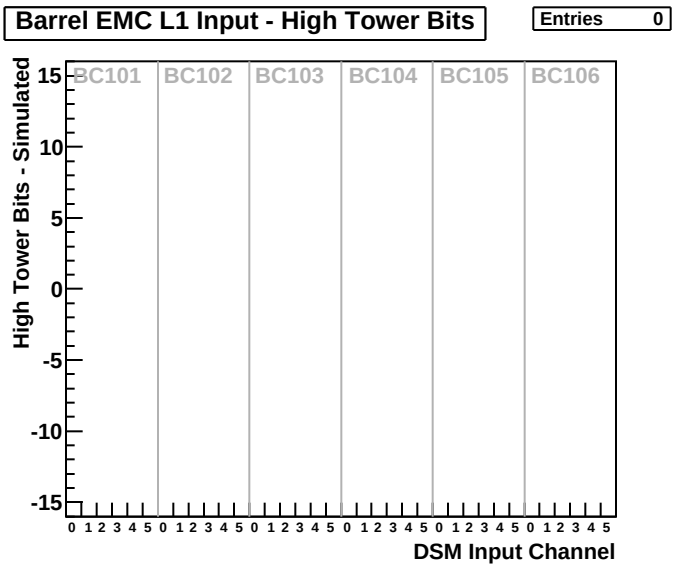

Barrel EMC L1 Input - Low Eta Sum
Entries 912960
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

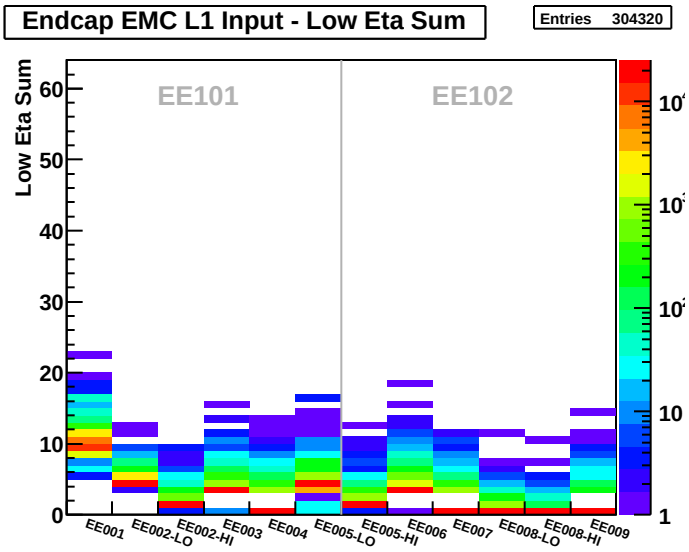

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

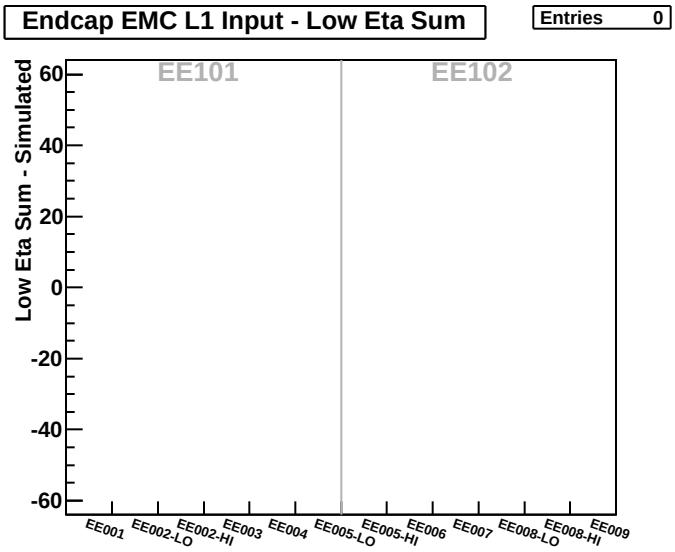

Barrel EMC L1 Input - High Eta Sum
Entries 912960
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

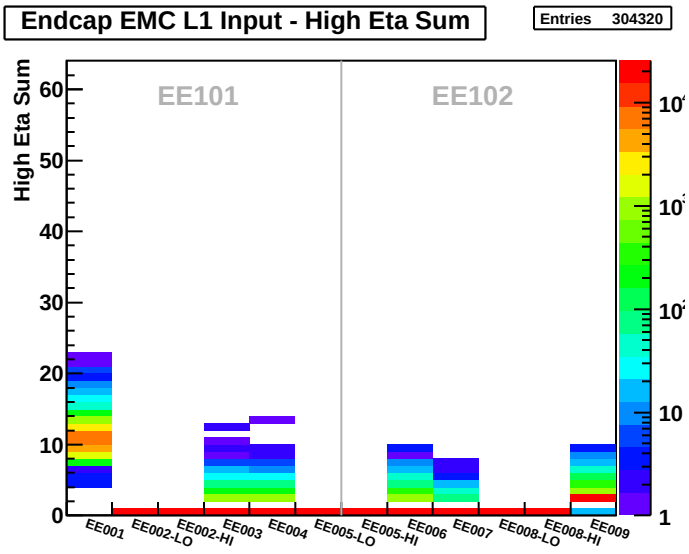

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

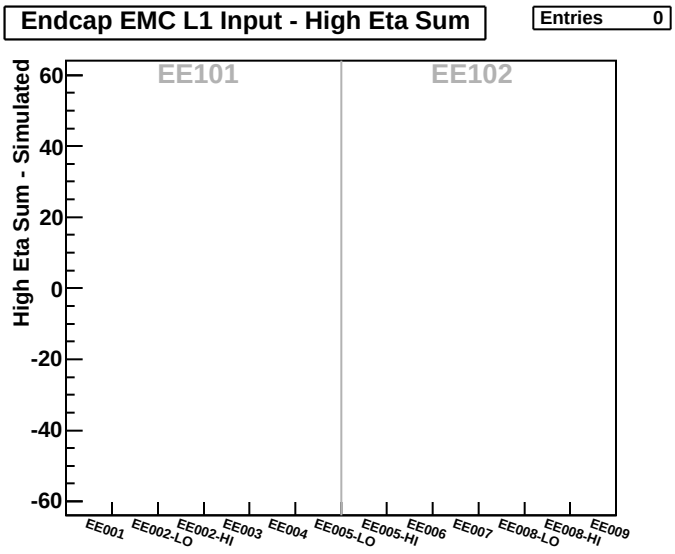

Barrel EMC L1 Input - High Tower Bits
Entries 912960
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

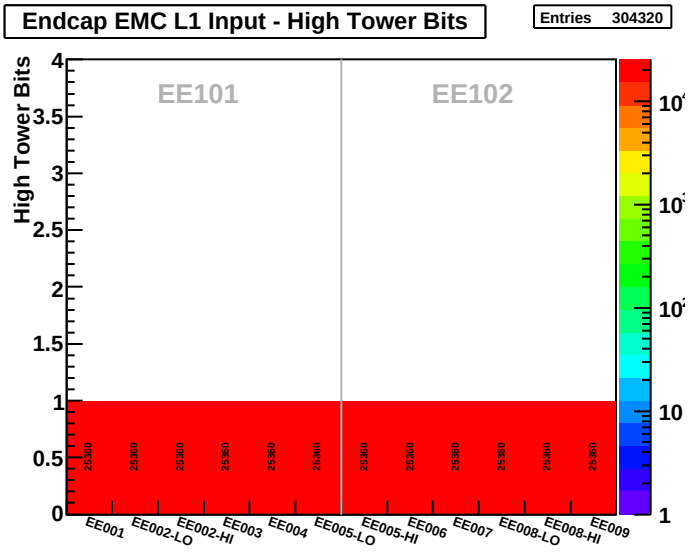

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

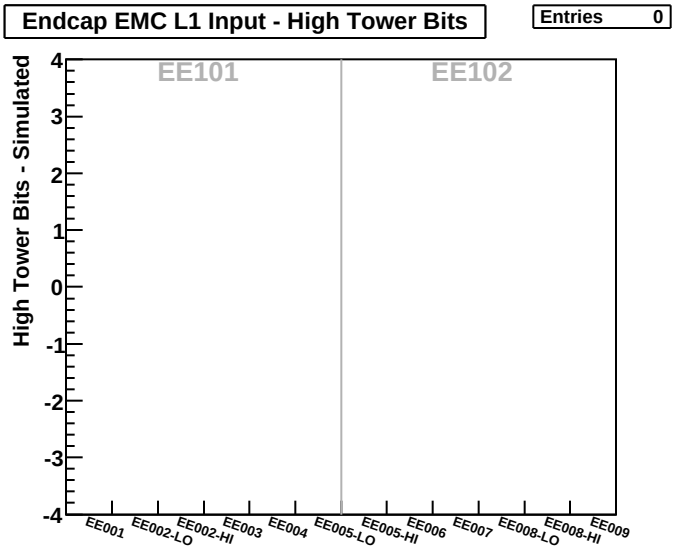

Endcap EMC L1 Input - Low Eta Sum
Entries 304320
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

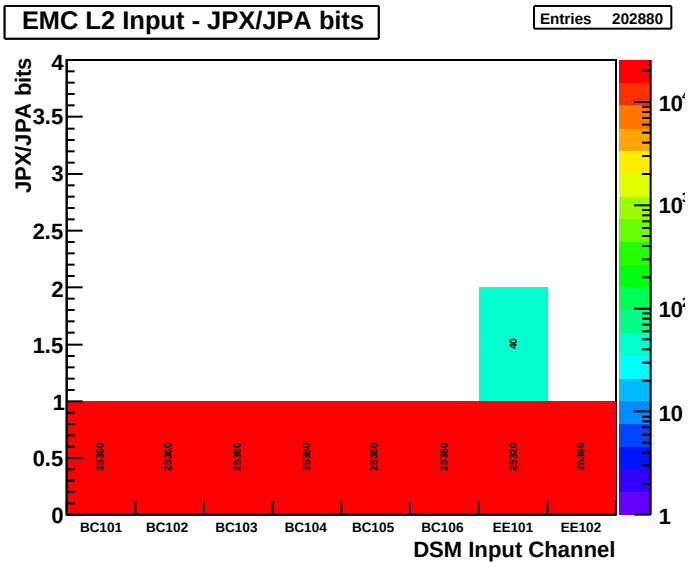

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

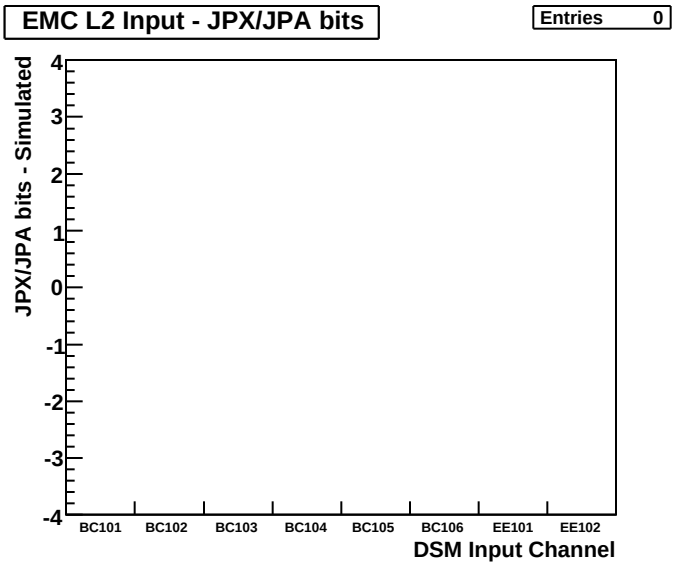

Endcap EMC L1 Input - High Eta Sum
Entries 304320
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

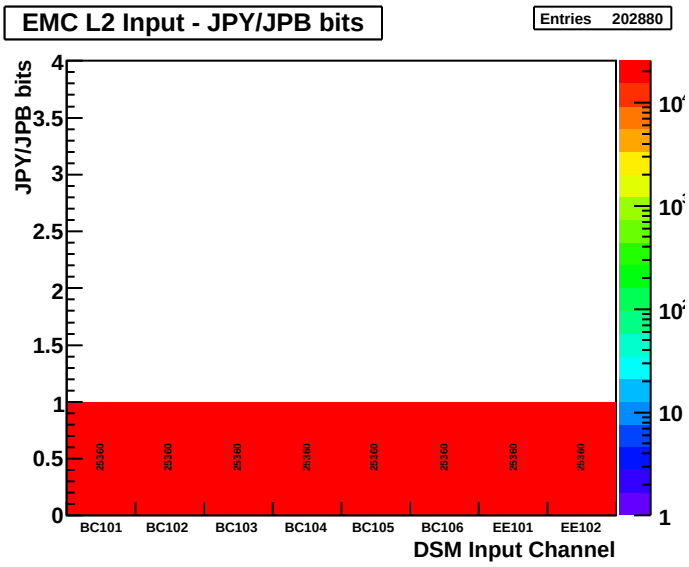

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

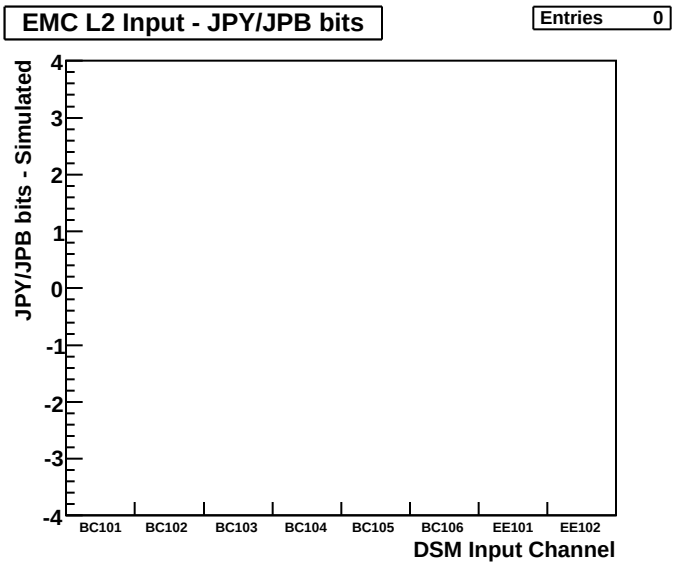

Endcap EMC L1 Input - High Tower Bits
Entries 304320
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

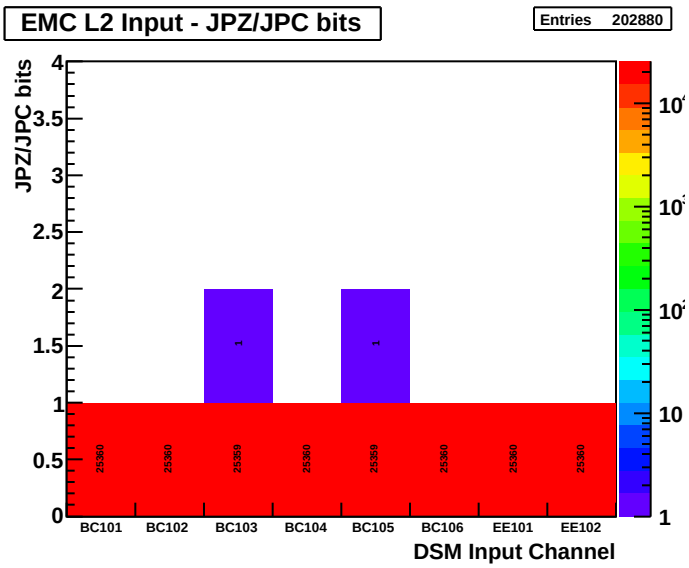

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

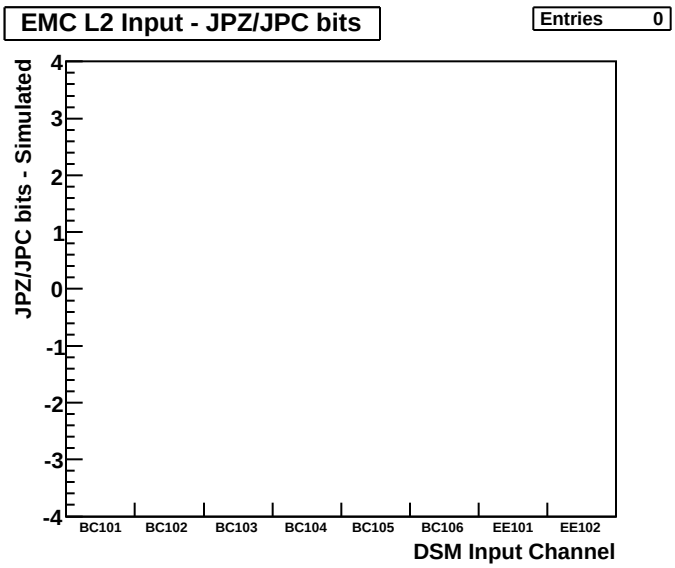

EMC L2 Input - JPX/JPA bits
Entries 202880
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

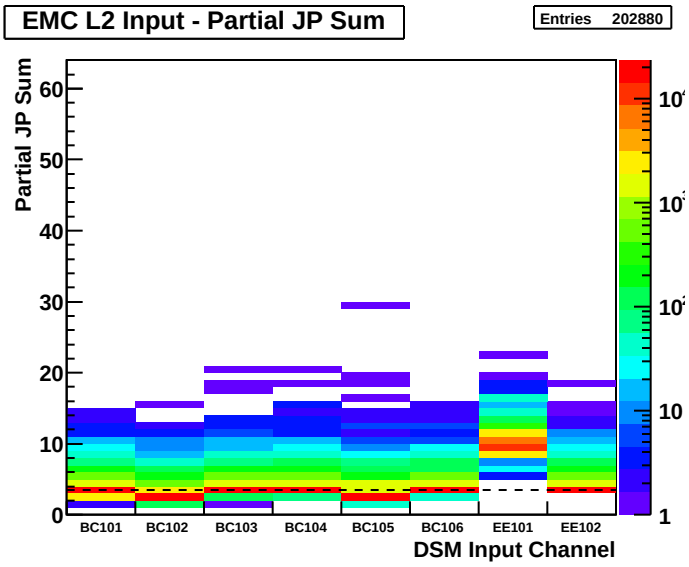

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

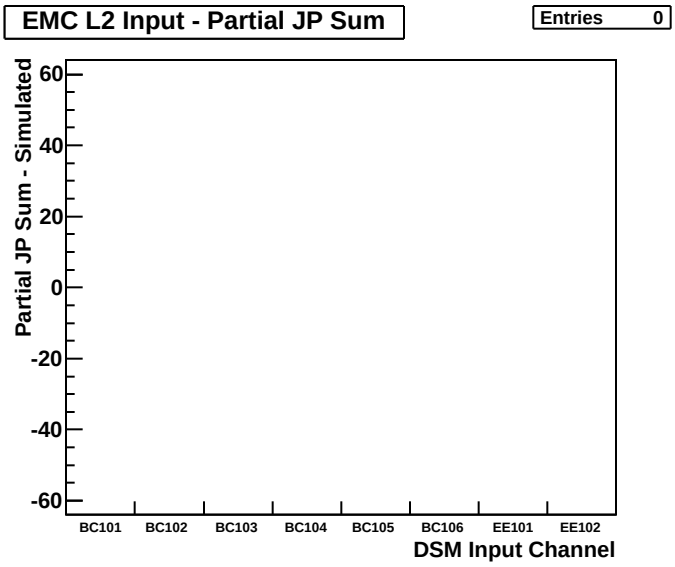

EMC L2 Input - JPY/JPB bits
Entries 202880
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

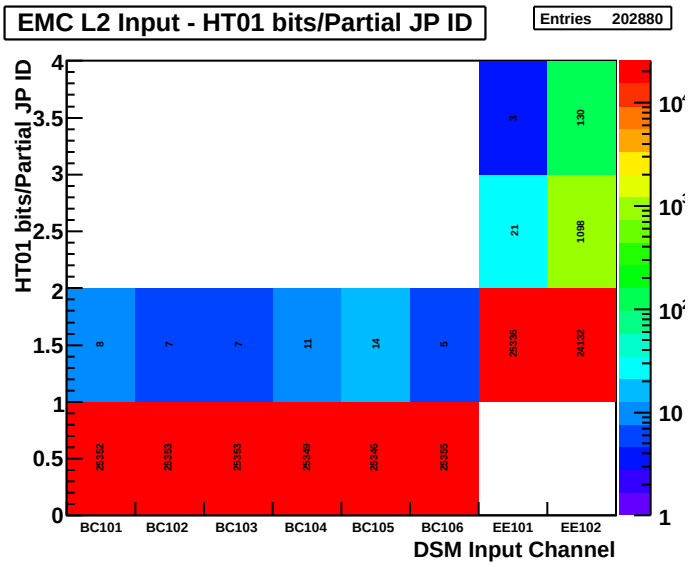

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

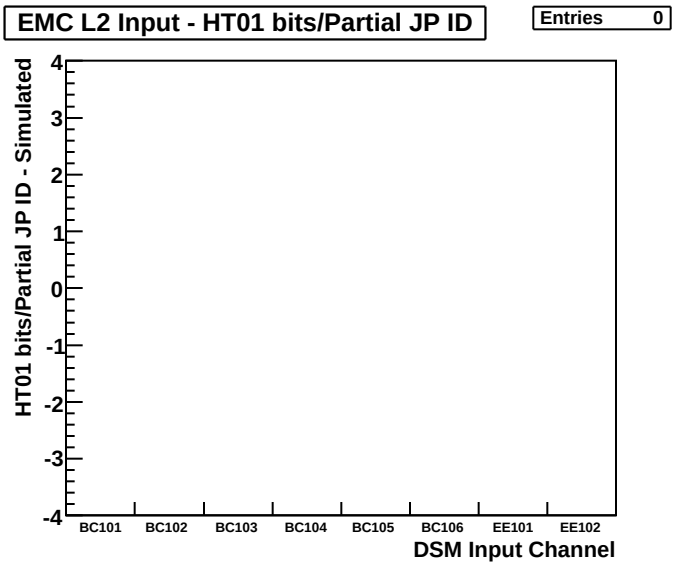

EMC L2 Input - JPZ/JPC bits
Entries 202880
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

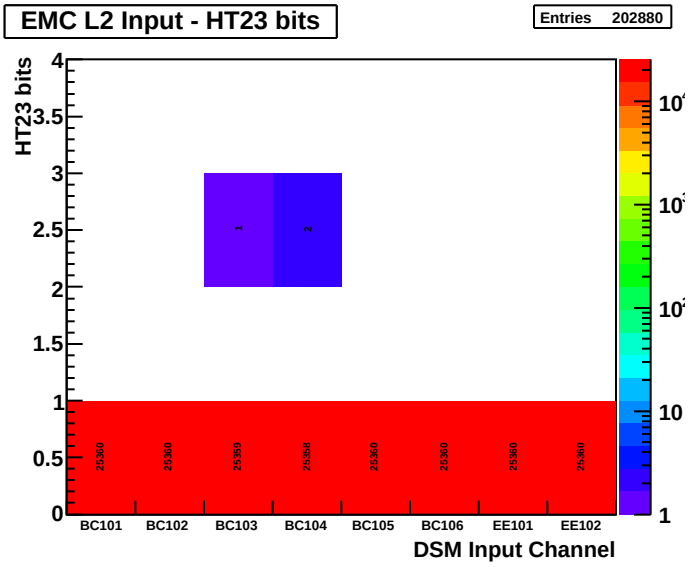

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

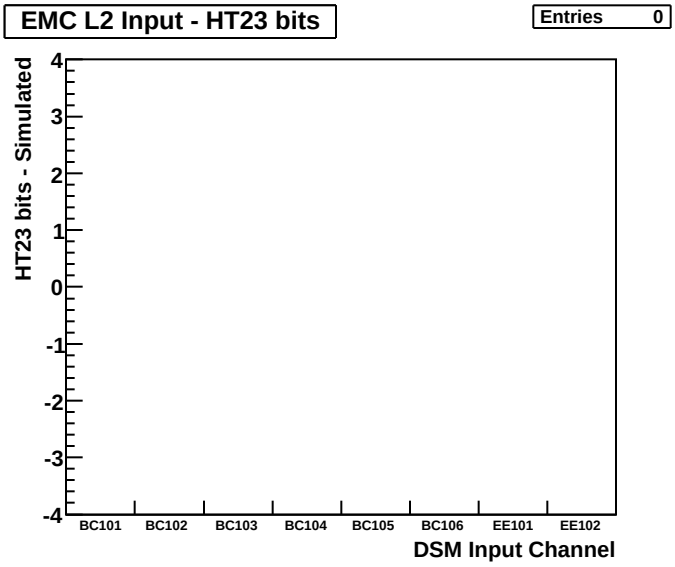

EMC L2 Input - Partial JP Sum
Entries 202880
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

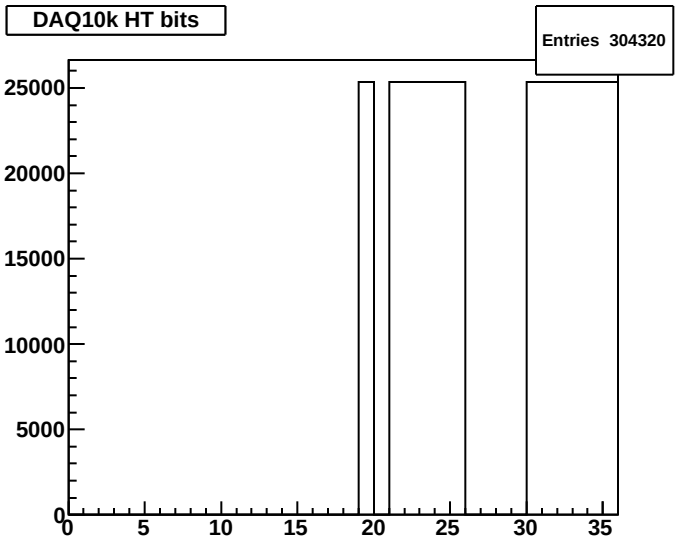

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

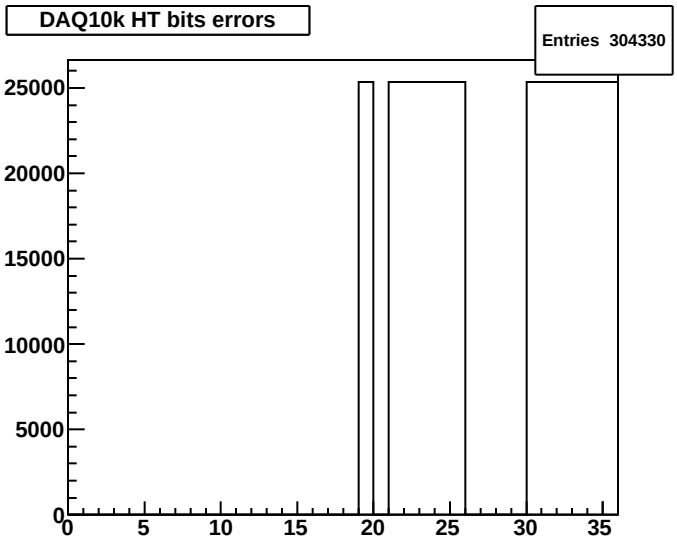

EMC L2 Input - HT01 bits/Partial JP ID
Entries 202880
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

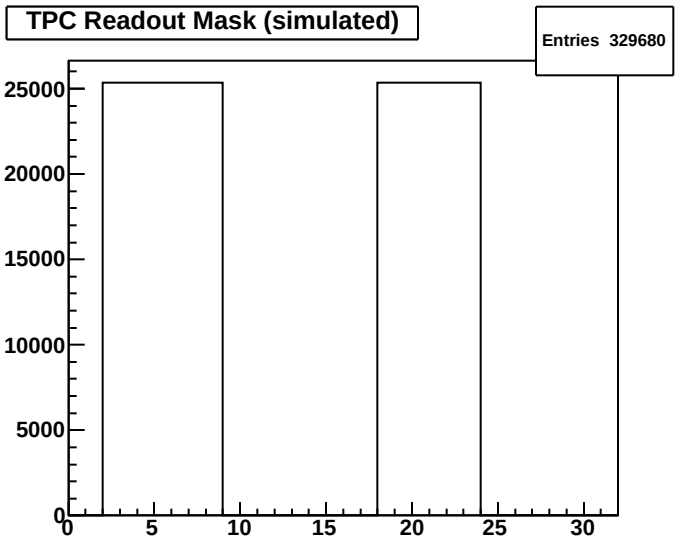

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

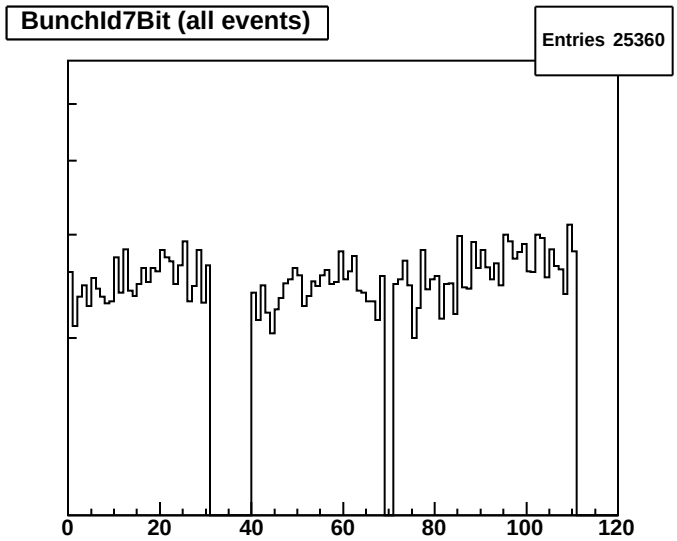

EMC L2 Input - HT23 bits
Entries 202880
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

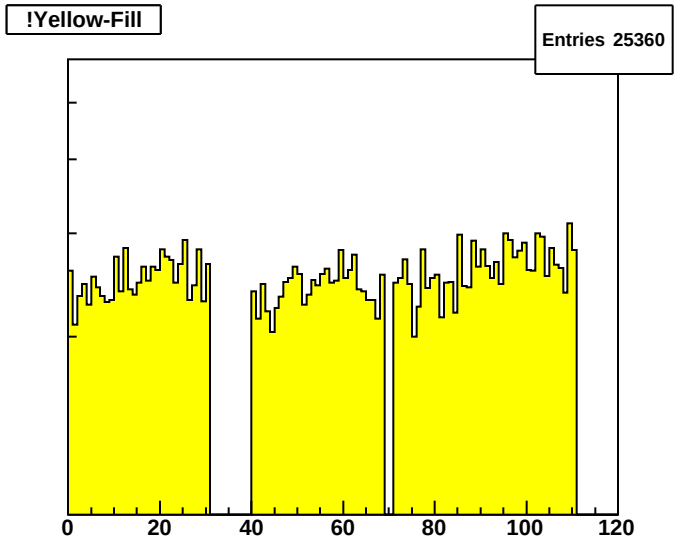

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

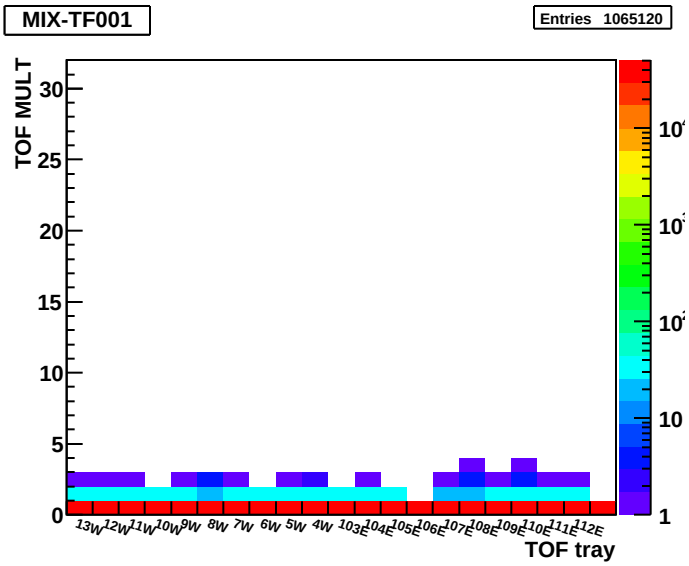

DAQ10k HT bits
Entries 304320
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

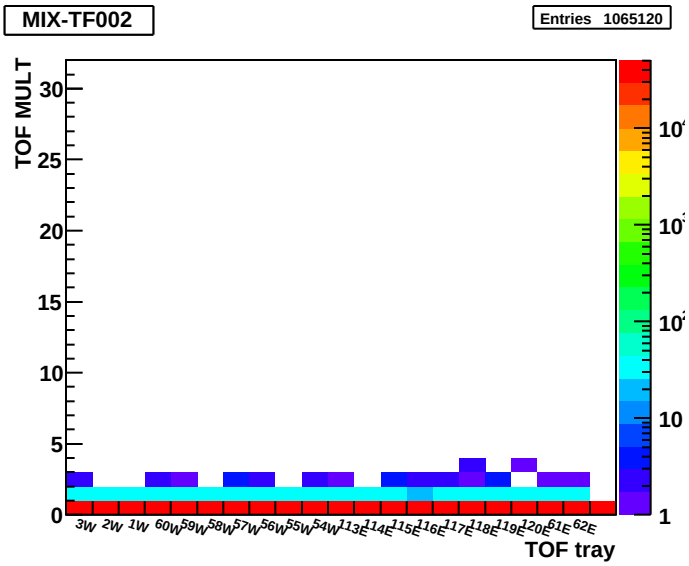

DAQ10k HT bits errors
Entries 304330
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

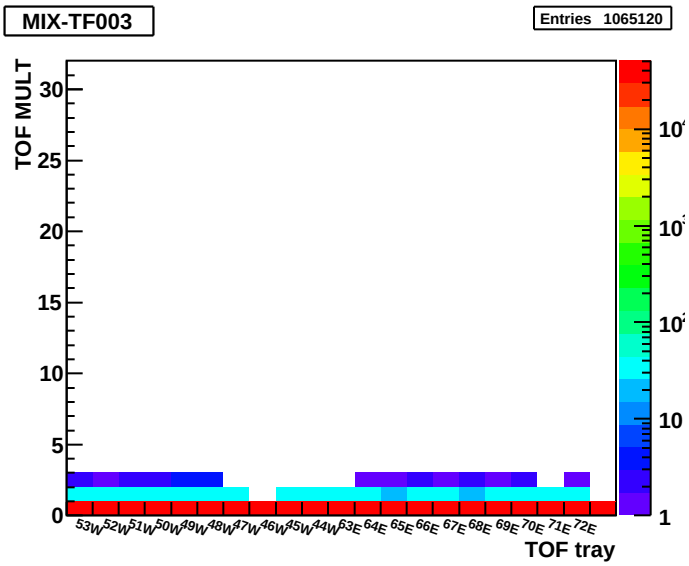

TPC Readout Mask (simulated)
Entries 329680
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30

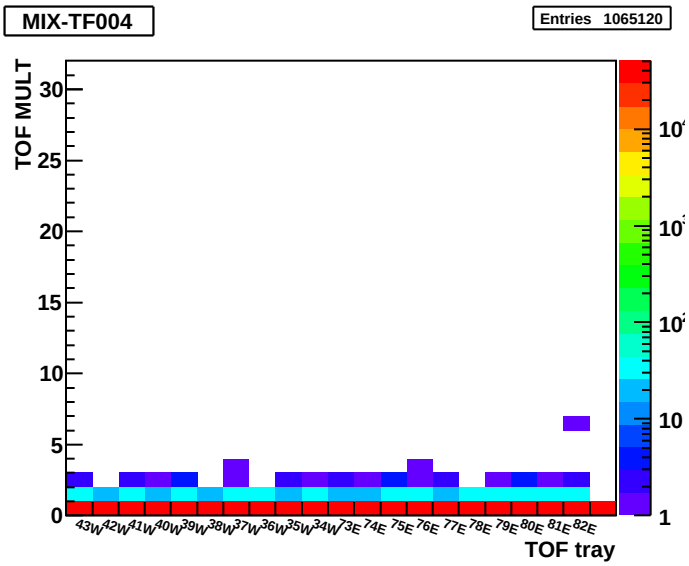

BunchId7Bit (all events)
Entries 25360
0 20 40 60 80 100 120

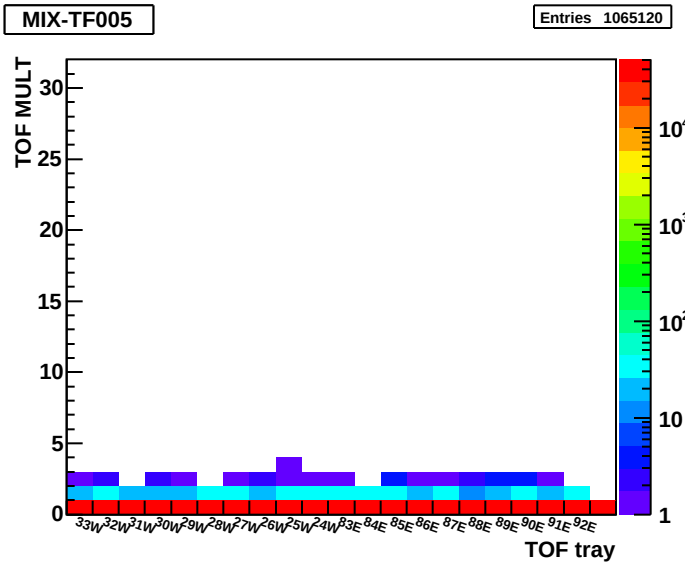

!Yellow-Fill
Entries 25360
0 20 40 60 80 100 120

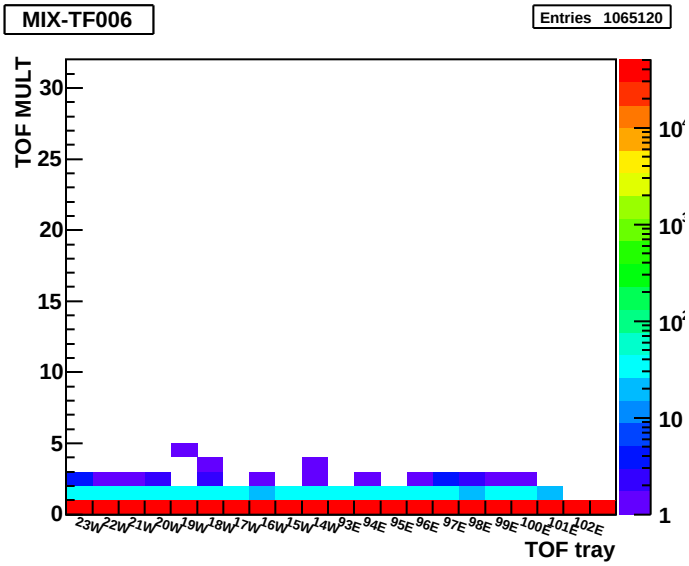

MIX-TF001
Entries 1065120
TOF MULT
TOF tray

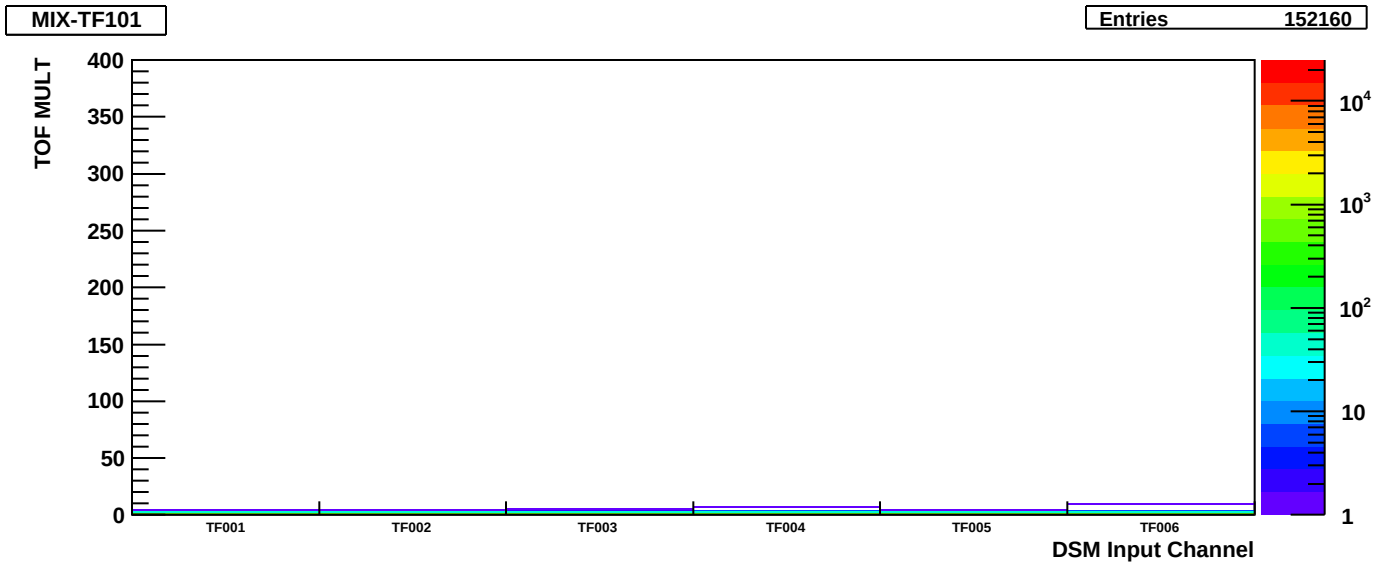

MIX-TF002
Entries 1065120
TOF MULT
TOF tray

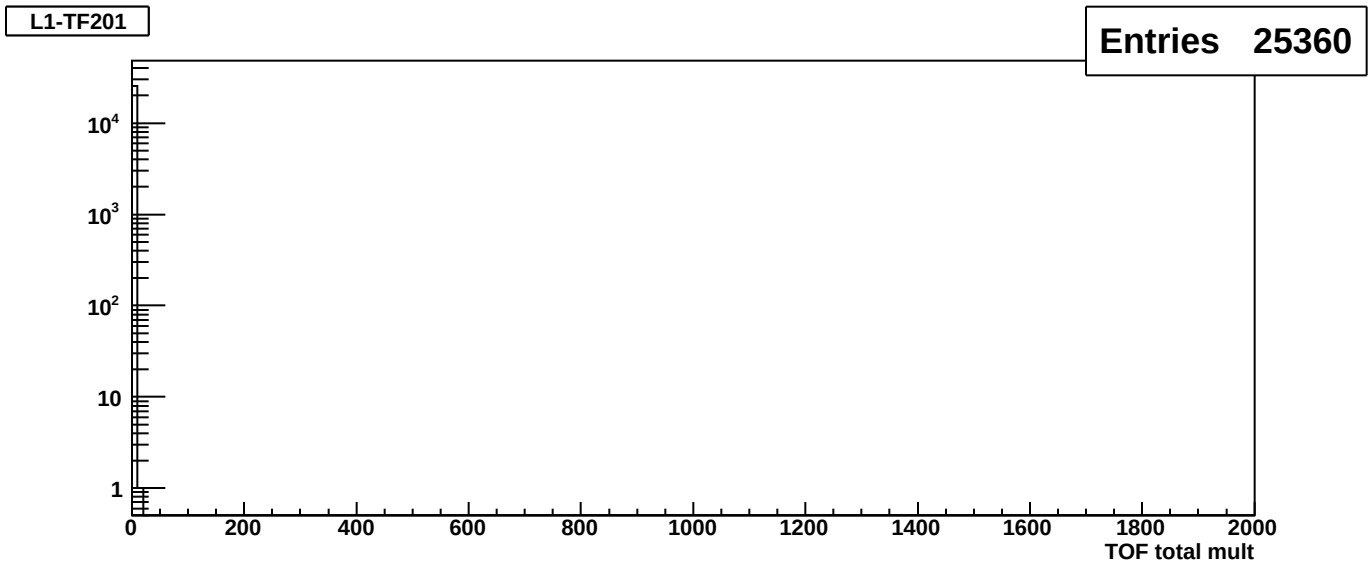

MIX-TF003
Entries 1065120
TOF MULT
TOF tray

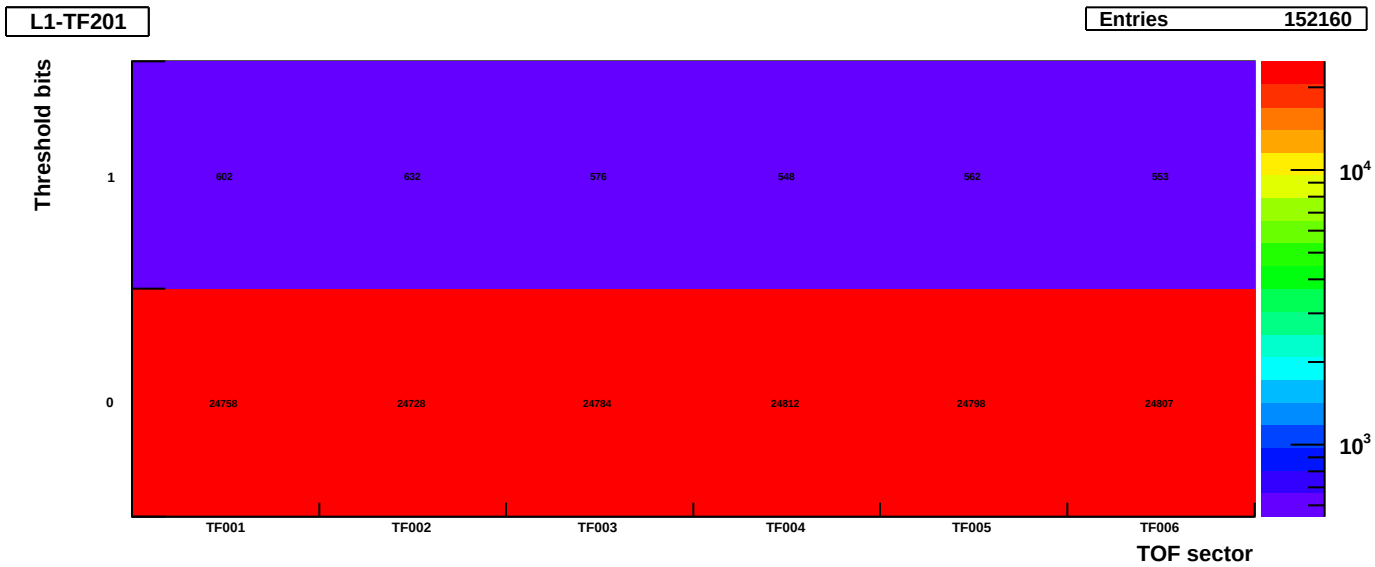

MIX-TF004
Entries 1065120
TOF MULT
TOF tray

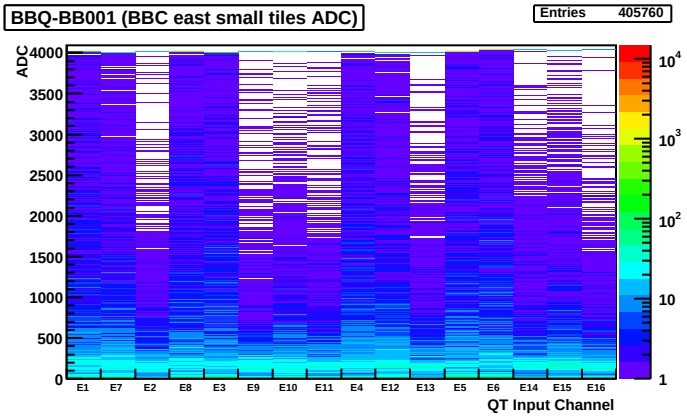

MIX-TF005
Entries 1065120
TOF MULT
TOF tray

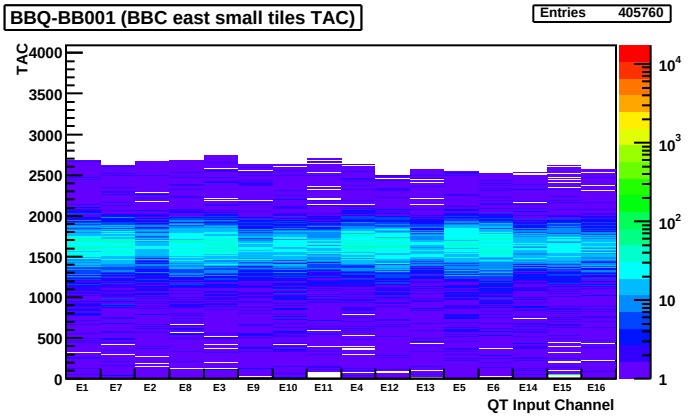

MIX-TF006
Entries 1065120
TOF MULT
TOF tray

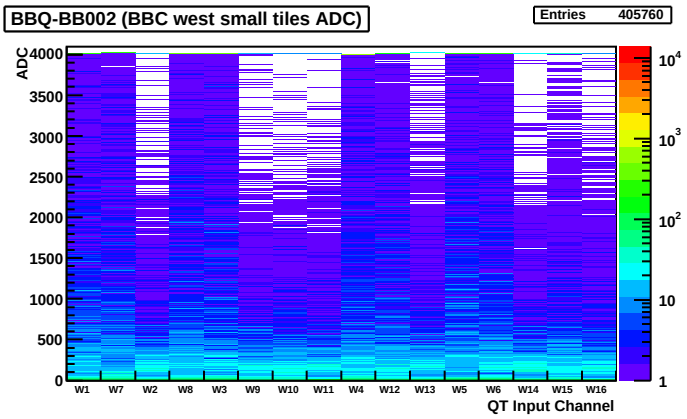

MIX-TF101
Entries 152160
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

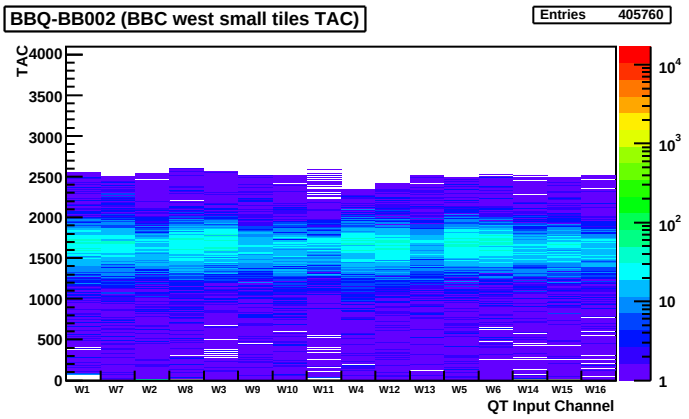

L1-TF201
Entries 25360
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

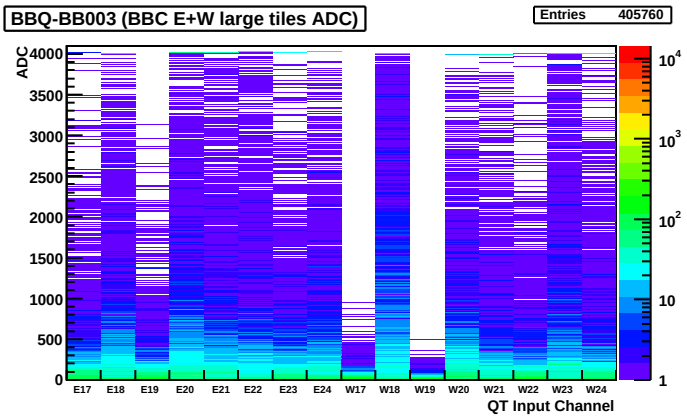

L1-TF201
Entries 152160
Threshold bits
1
0
602
632
576
548
562
553
24758
24728
24784
24812
24798
24807
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3

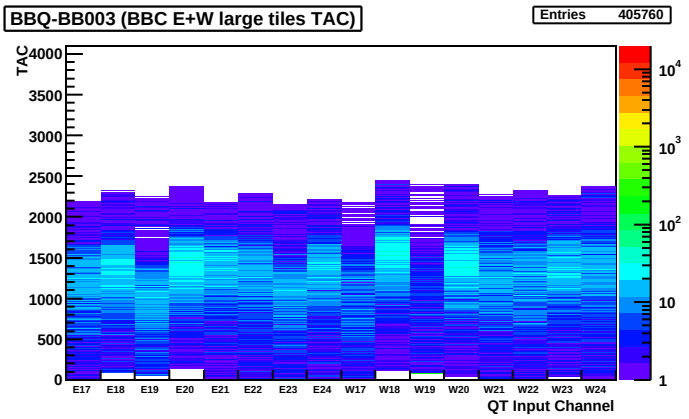

BBQ-BB001 (BBC east small tiles ADC)
Entries 405760
ADC
QT Input Channel

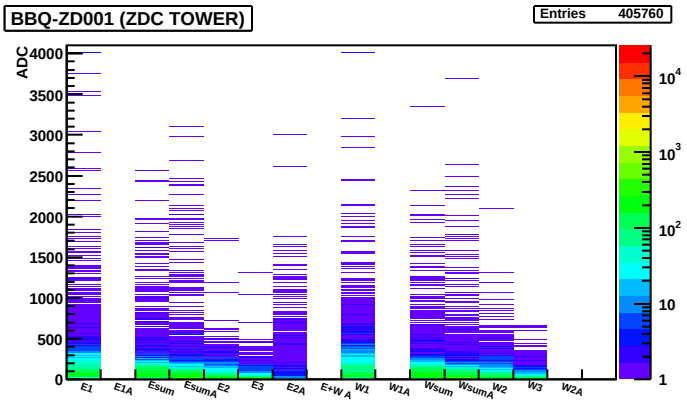

BBQ-BB001 (BBC east small tiles TAC)
Entries 405760
TAC
QT Input Channel

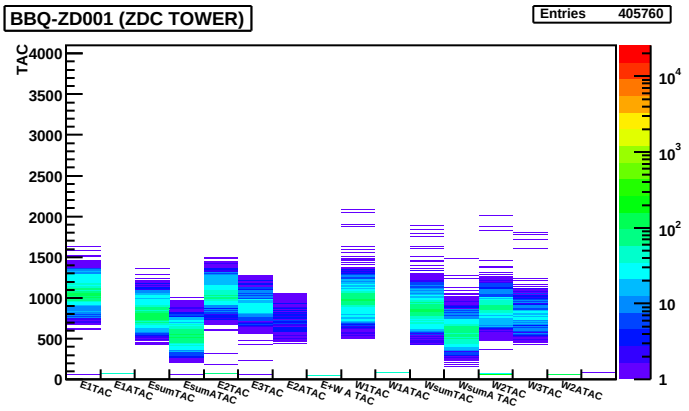

BBQ-BB002 (BBC west small tiles ADC)
Entries 405760
ADC
QT Input Channel

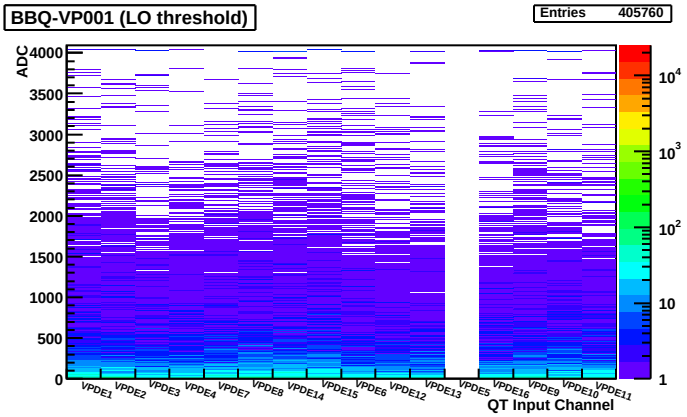

BBQ-BB002 (BBC west small tiles TAC)
Entries 405760
TAC
QT Input Channel

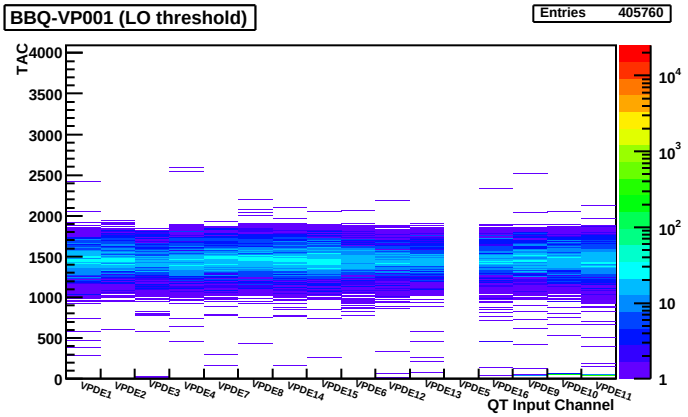

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 405760
ADC
QT Input Channel

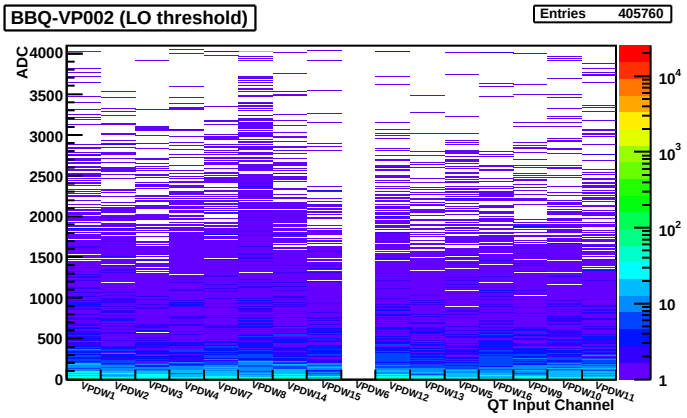

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 405760
TAC
QT Input Channel

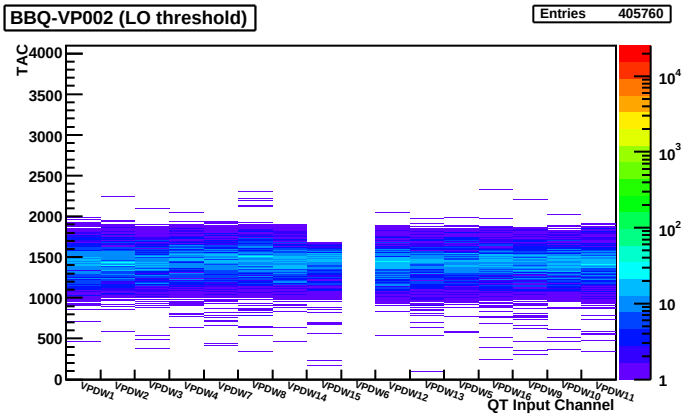

BBQ-ZD001 (ZDC TOWER)
Entries 405760
ADC

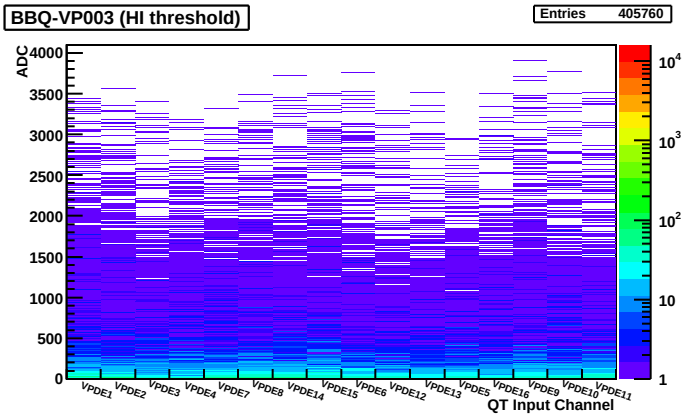

BBQ-ZD001 (ZDC TOWER)
Entries 405760
TAC

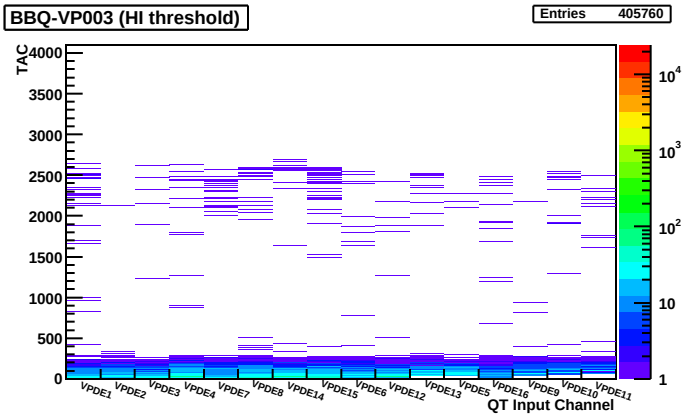

BBQ-VP001 (LO threshold)
Entries 405760
ADC
QT Input Channel

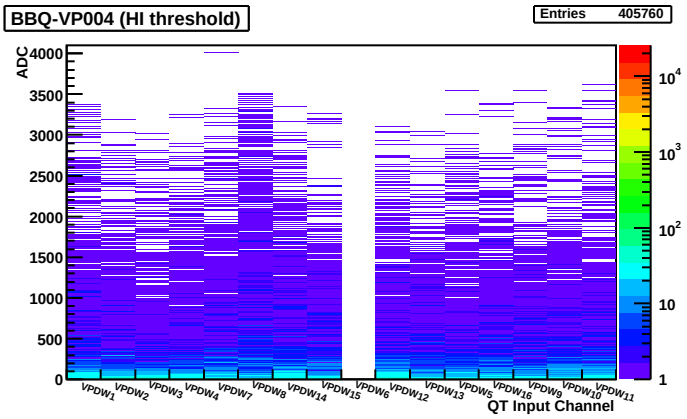

BBQ-VP001 (LO threshold)
Entries 405760
TAC
QT Input Channel

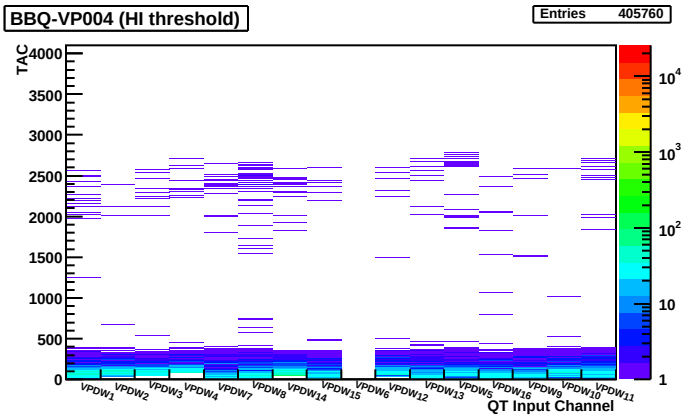

BBQ-VP002 (LO threshold)
Entries 405760
ADC
QT Input Channel

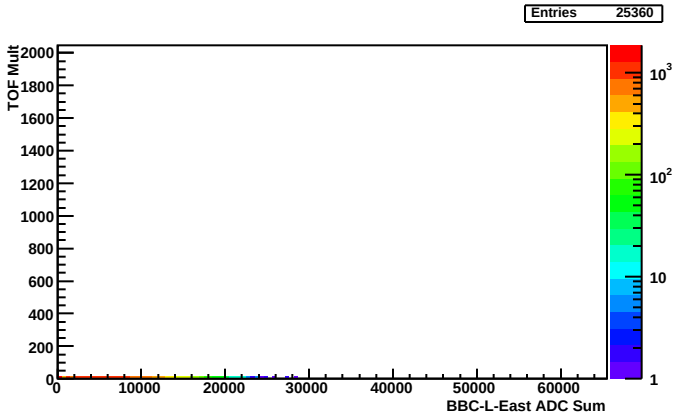

BBQ-VP002 (LO threshold)
Entries 405760
TAC
QT Input Channel

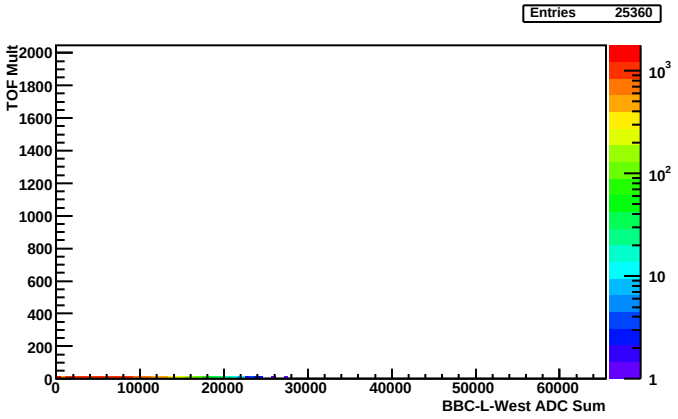

BBQ-VP003 (HI threshold)
Entries 405760
ADC
QT Input Channel

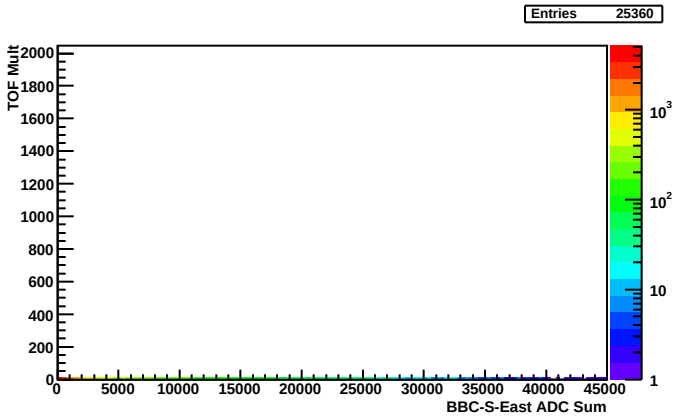

BBQ-VP003 (HI threshold)
Entries 405760
TAC
QT Input Channel

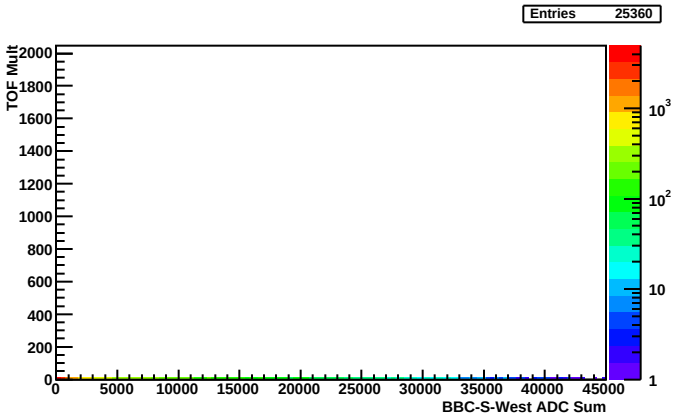

BBQ-VP004 (HI threshold)
Entries 405760
ADC
QT Input Channel

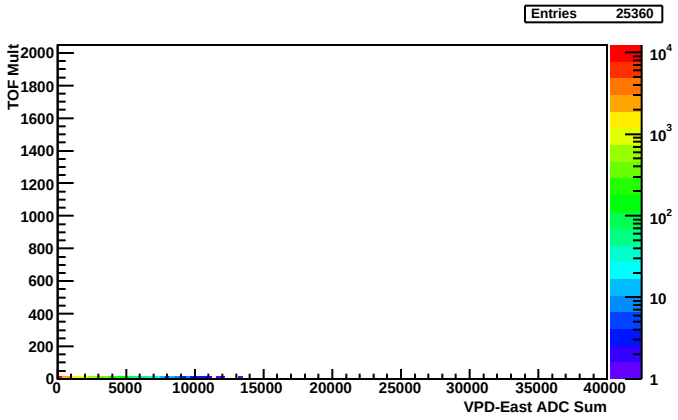

BBQ-VP004 (HI threshold)
Entries 405760
TAC
QT Input Channel

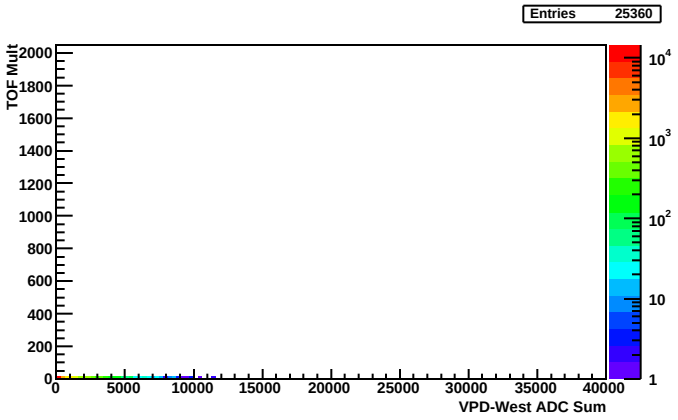

Entries 25360
TOF Mult
BBC-L-East ADC Sum

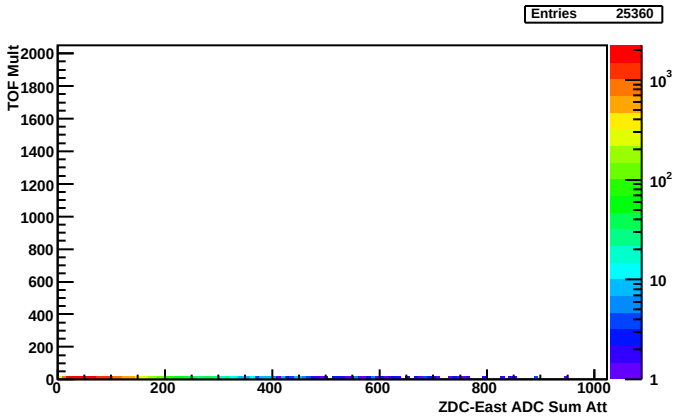

Entries 25360
TOF Mult
BBC-L-West ADC Sum

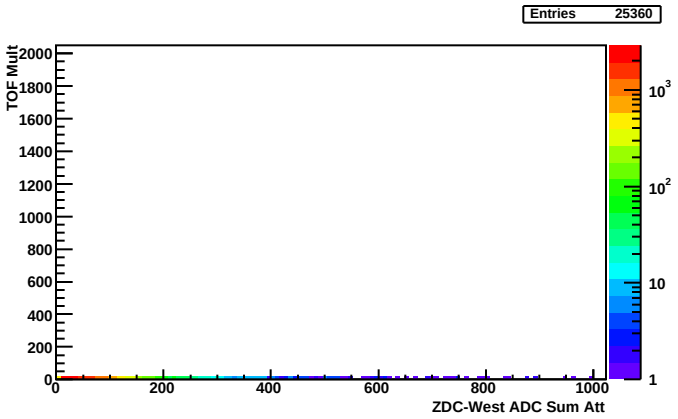

Entries 25360
TOF Mult
BBC-S-East ADC Sum

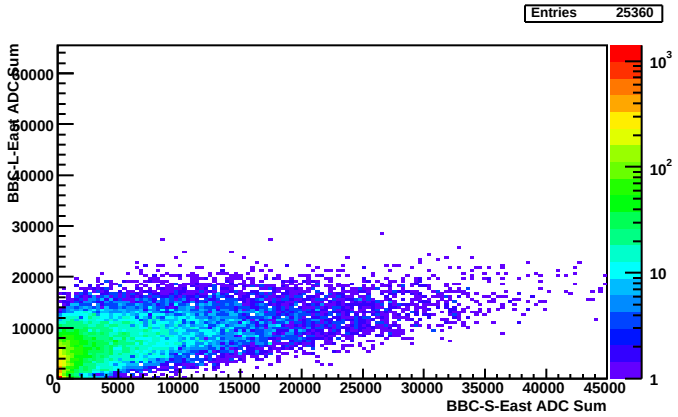

Entries 25360
TOF Mult
BBC-S-West ADC Sum

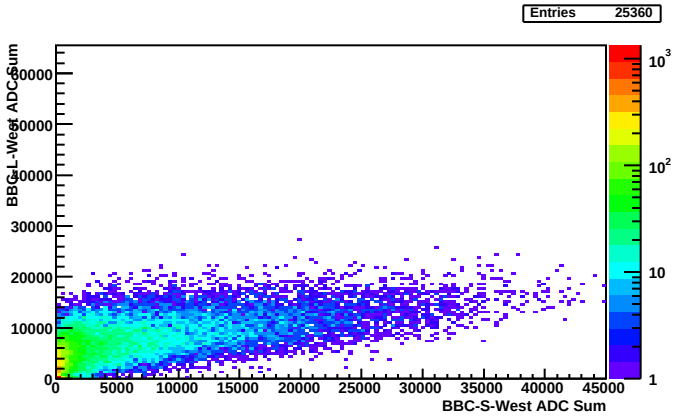

Entries 25360
TOF Mult
VPD-East ADC Sum

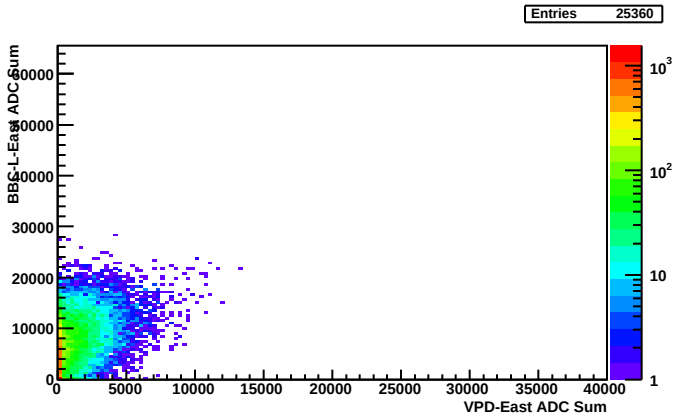

Entries 25360
TOF Mult
VPD-West ADC Sum

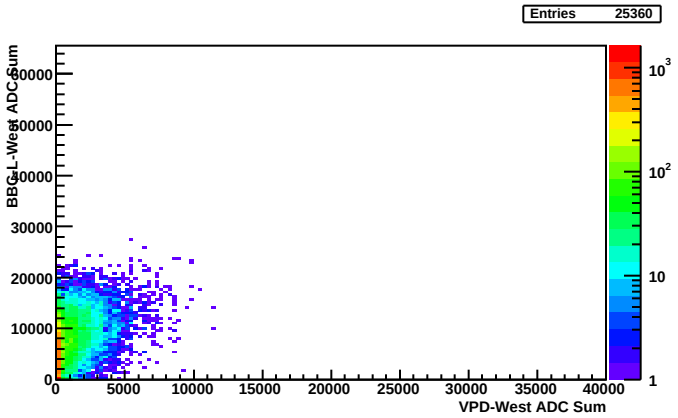

Entries 25360
TOF Mult
ZDC-East ADC Sum Att

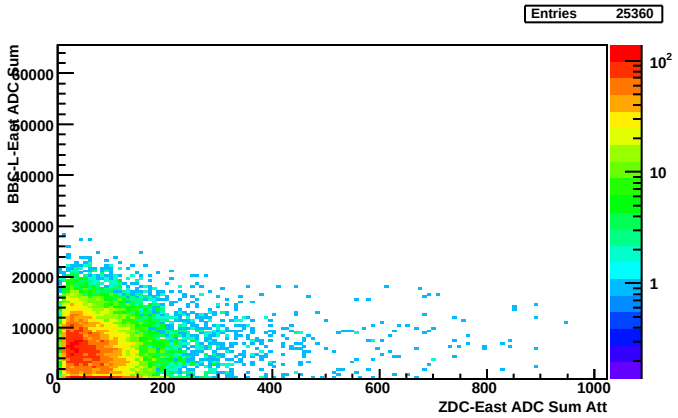

Entries 25360
TOF Mult
ZDC-West ADC Sum Att

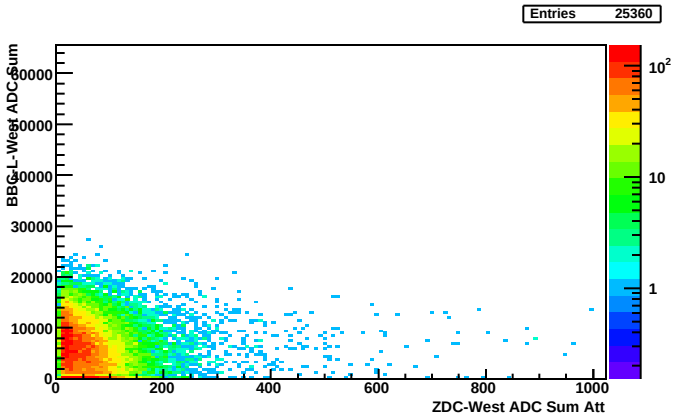

Entries 25360
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 25360
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 25360
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 25360
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 25360
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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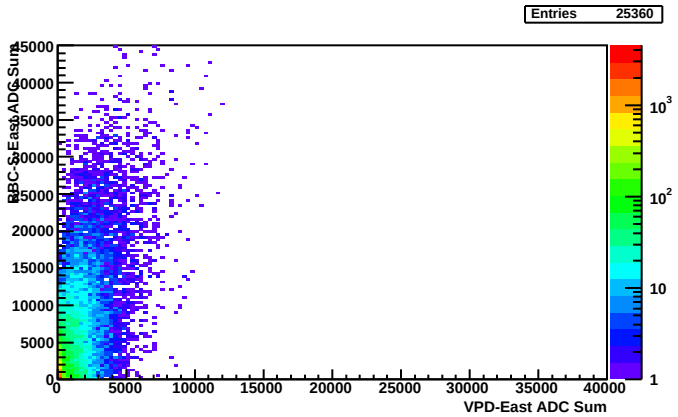
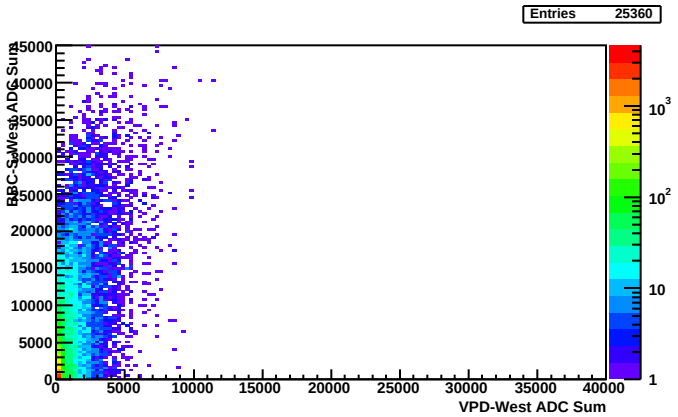
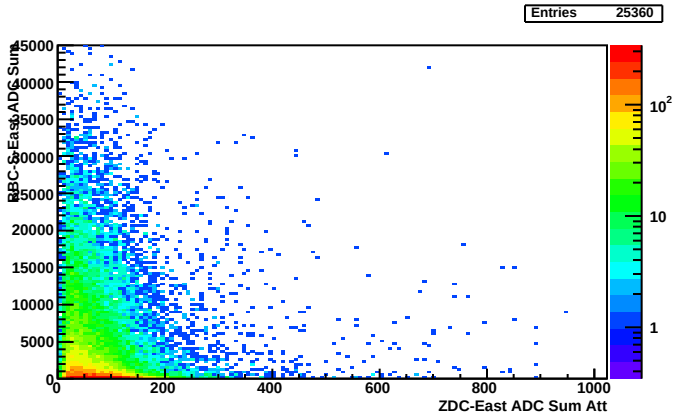
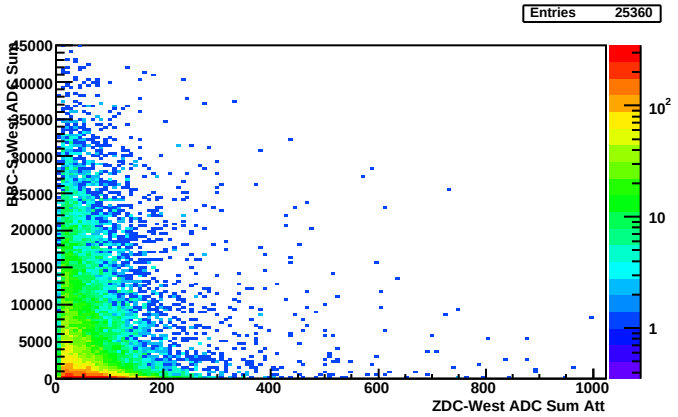
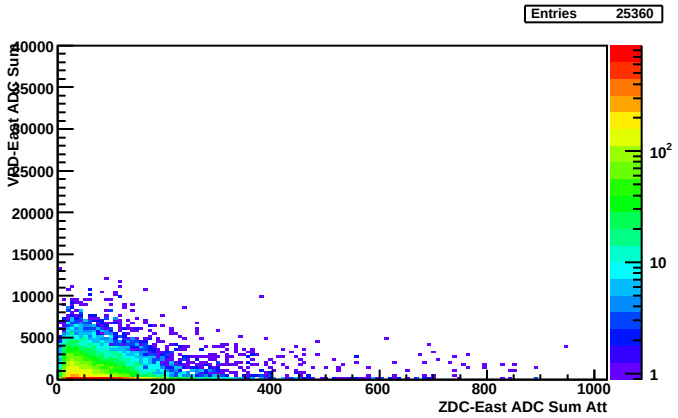
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

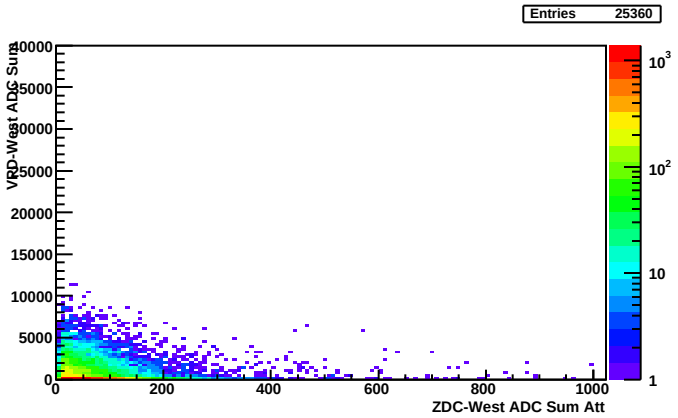

Entries 25360
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 25360
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 25360
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 25360
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 25360
VPD-East ADC Sum
ZDC-East ADC Sum Att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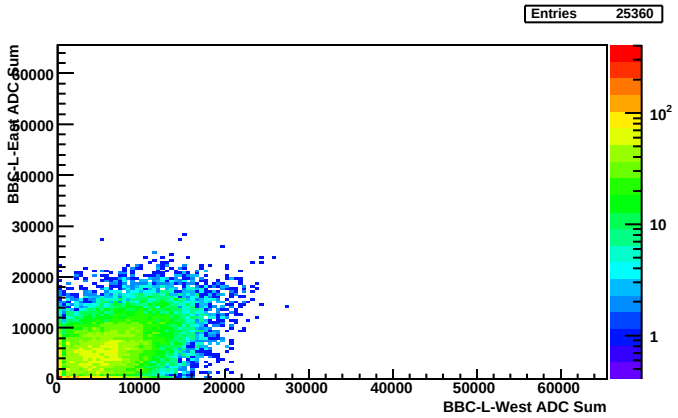
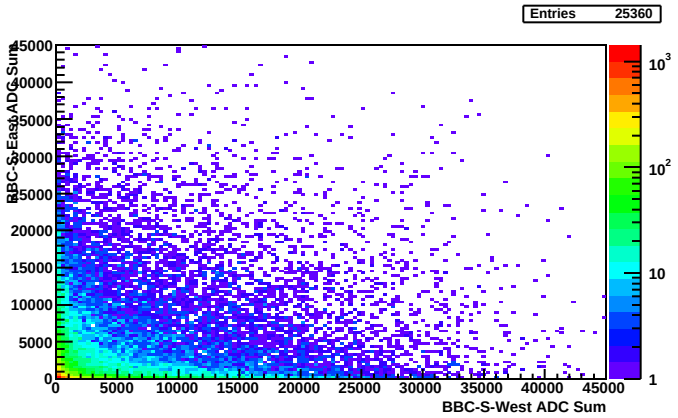
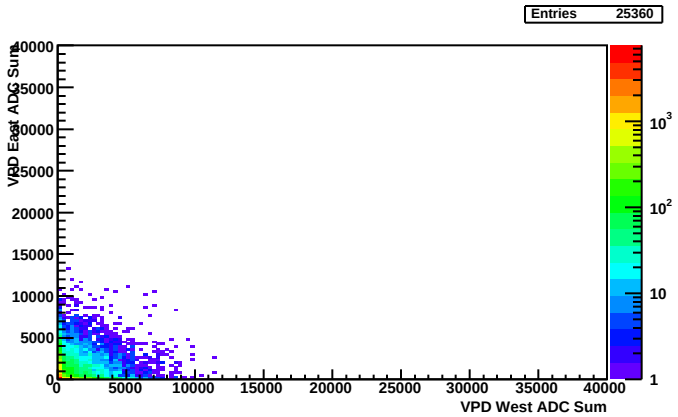
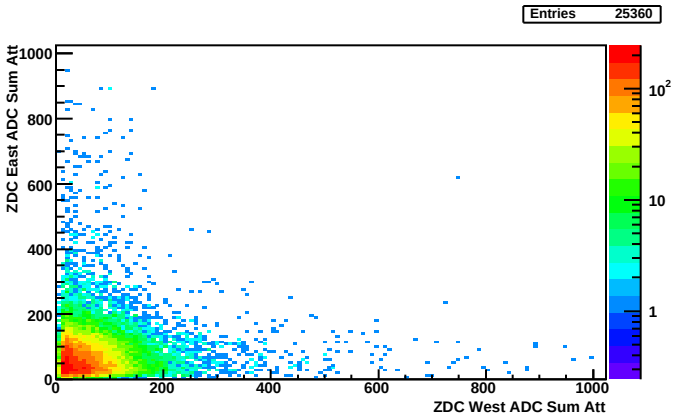
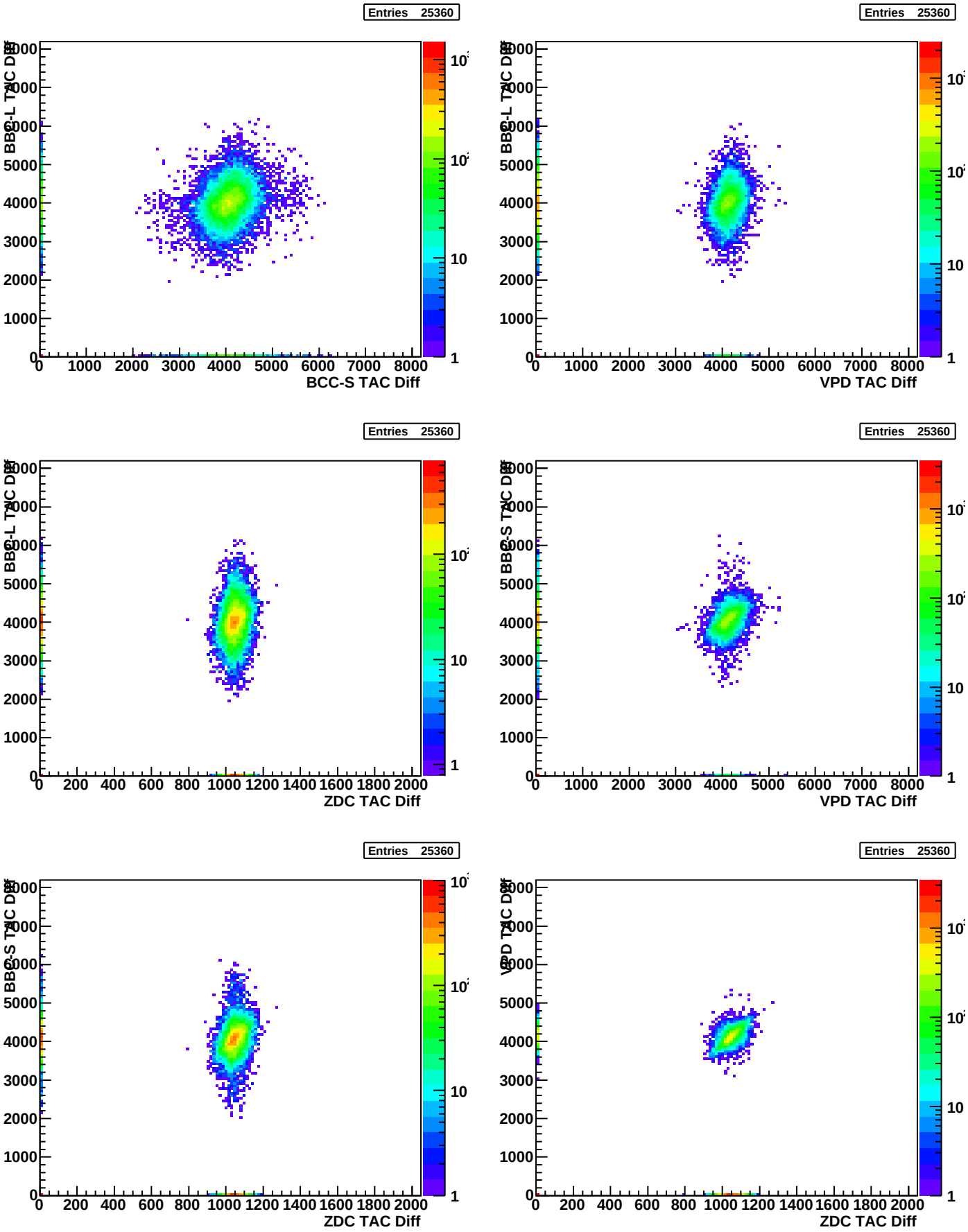
VPD-West ADC Sum
ZDC-West ADC Sum Att

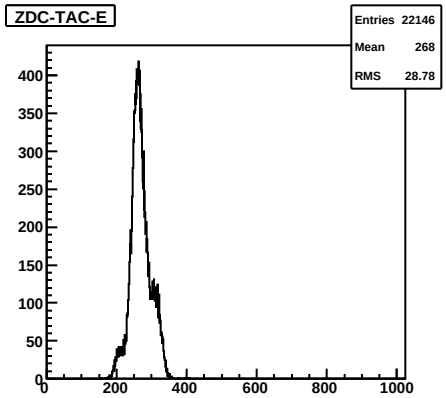

Entries 25360
BBC-L-East ADC Sum
BBC-L-West ADC Sum

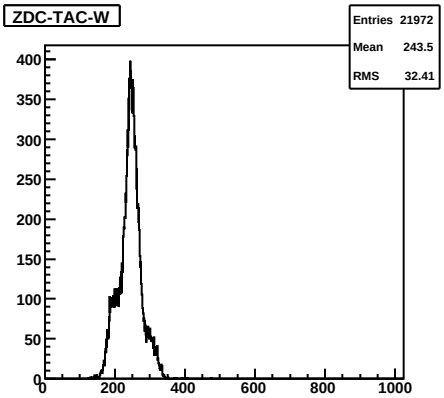

Entries 25360
BBC-S-East ADC Sum
BBC-S-West ADC Sum

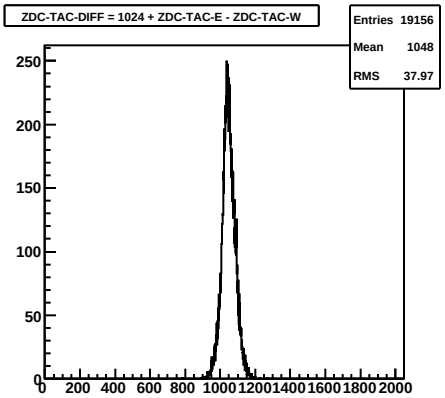

Entries 25360
VPD East ADC Sum
VPD West ADC Sum

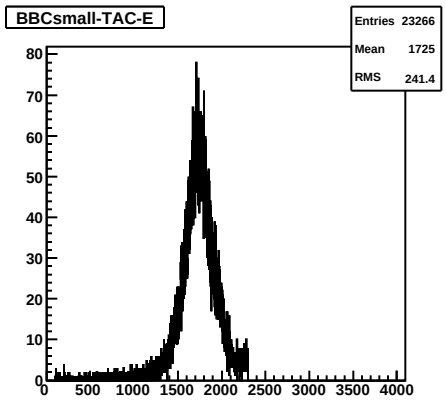

Entries 25360
ZDC East ADC Sum Att
ZDC West ADC Sum Att

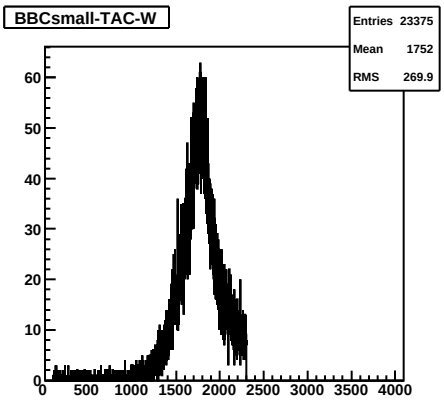

Entries 25360
BBC-L TAC Diff
BCC-S TAC Diff
Entries 25360
BBC-L TAC Diff
VPD TAC Diff
Entries 25360
BBC-L TAC Diff
ZDC TAC Diff
Entries 25360
BBC-S TAC Diff
VPD TAC Diff
Entries 25360
BBC-S TAC Diff
ZDC TAC Diff
Entries 25360
VPD TAC Diff
ZDC TAC Diff

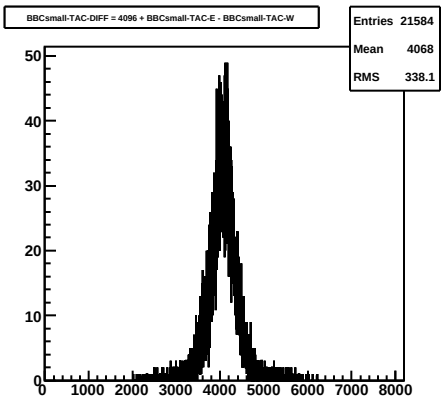

ZDC-TAC-E
Entries 22146
Mean 268
RMS 28.78

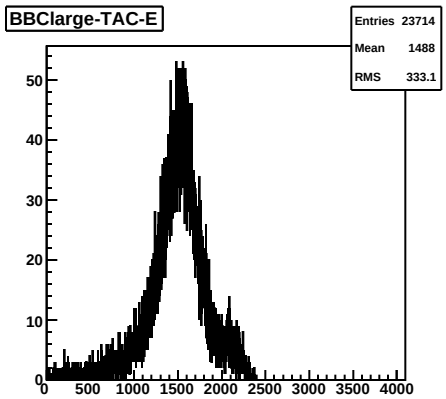

ZDC-TAC-W
Entries 21972
Mean 243.5
RMS 32.41

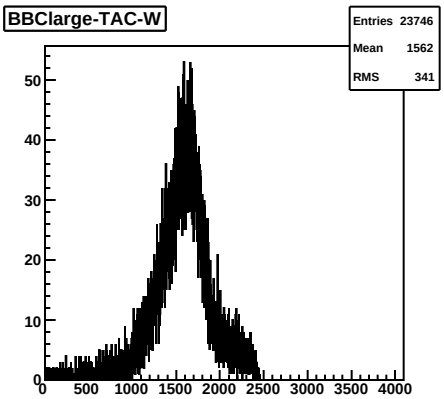

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 19156
Mean 1048
RMS 37.97

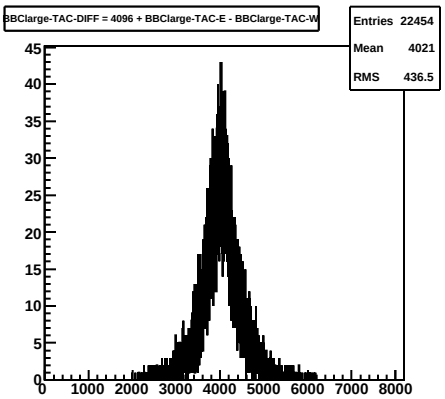

BBCsmall-TAC-E
Entries 23266
Mean 1725
RMS 241.4

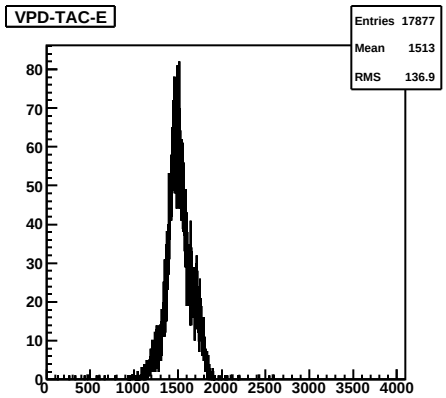

BBCsmall-TAC-W
Entries 23375
Mean 1752
RMS 269.9

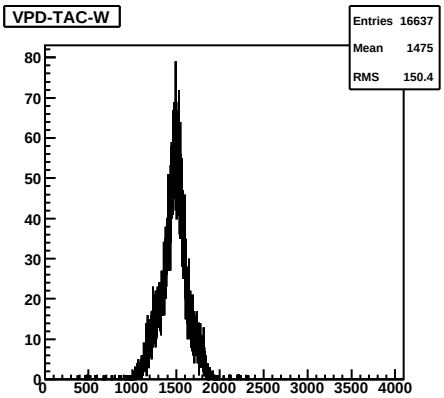

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 21584
Mean 4068
RMS 338.1

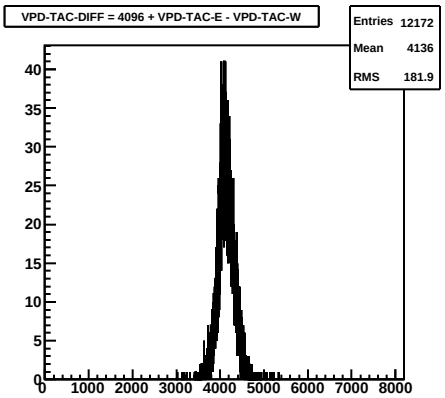

BBClarge-TAC-E
Entries 23714
Mean 1488
RMS 333.1

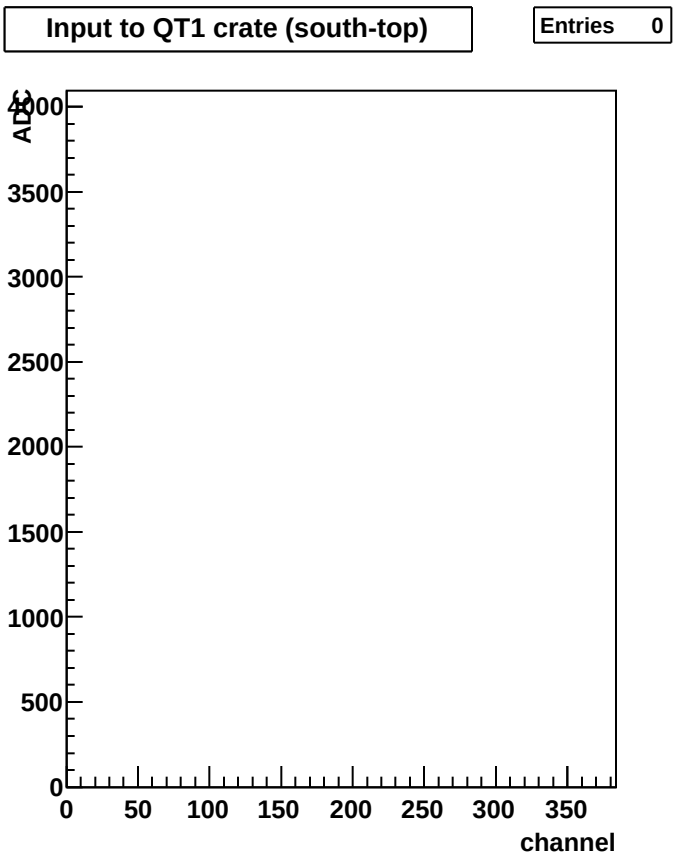

BBClarge-TAC-W
Entries 23746
Mean 1562
RMS 341

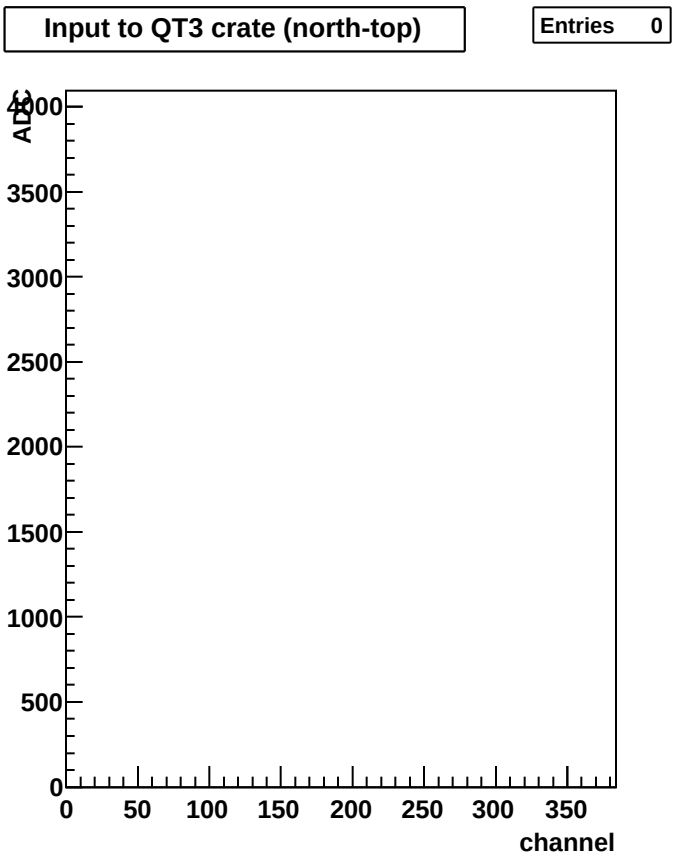

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 22454
Mean 4021
RMS 436.5

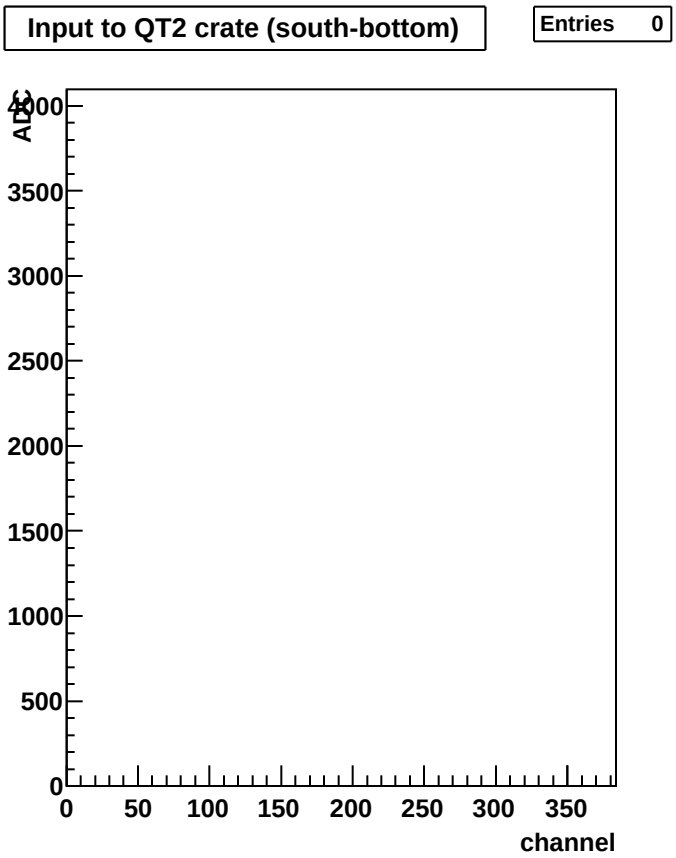

VPD-TAC-E
Entries 17877
Mean 1513
RMS 136.9

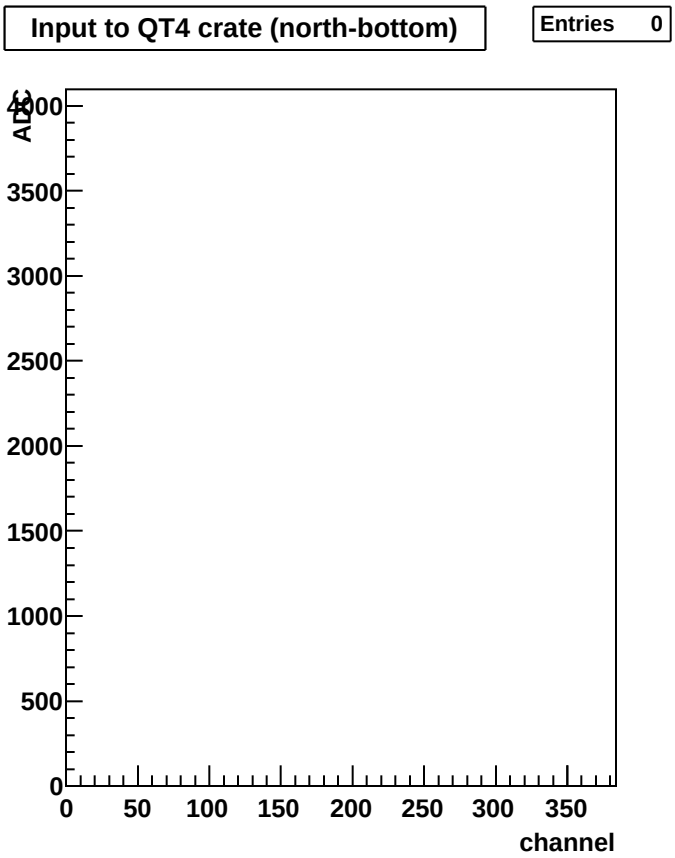

VPD-TAC-W
Entries 16637
Mean 1475
RMS 150.4

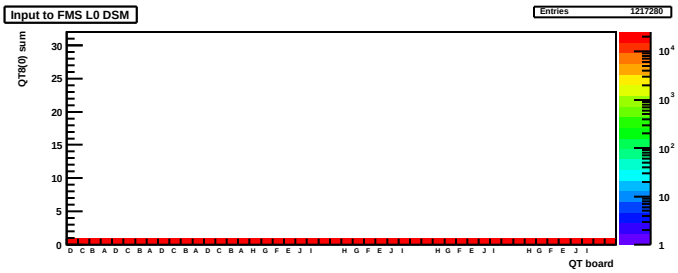

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 12172
Mean 4136
RMS 181.9

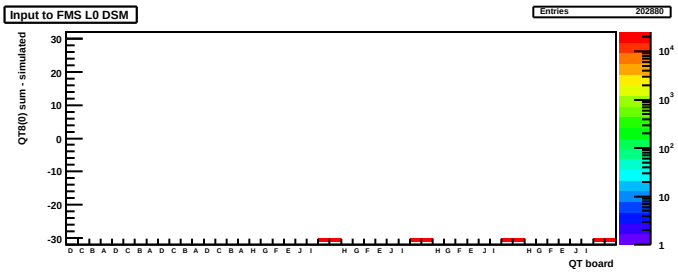

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

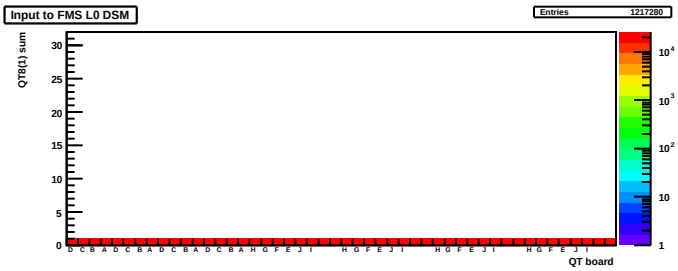

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

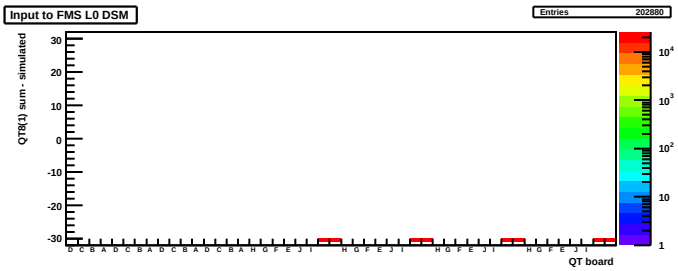

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

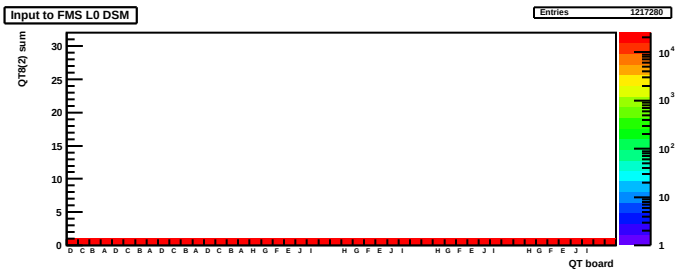

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

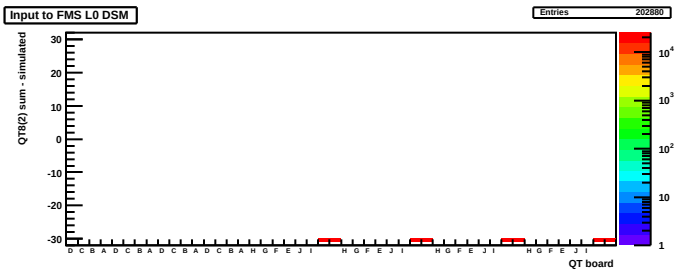

Input to FMS L0 DSM
Entries 1217280
QT8(0) sum
QT board

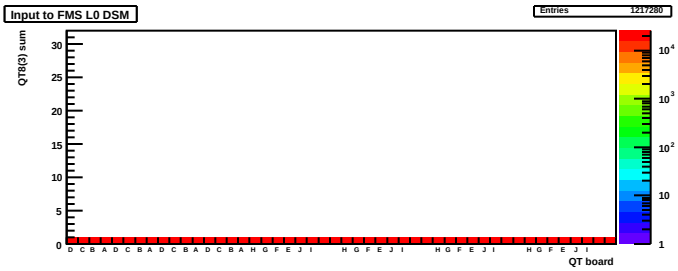

Input to FMS L0 DSM
Entries 202880
QT8(0) sum - simulated
QT board

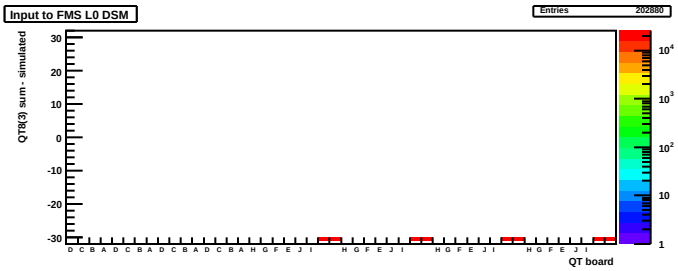

Input to FMS L0 DSM
Entries 1217280
QT8(1) sum
QT board

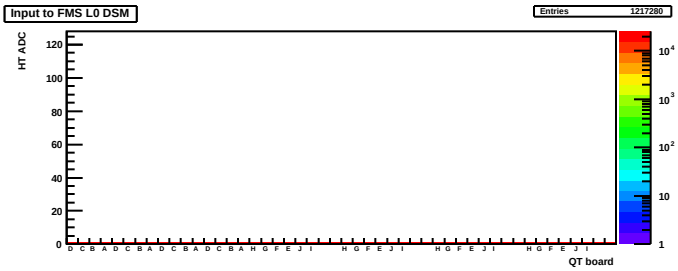

Input to FMS L0 DSM
Entries 202880
QT8(1) sum - simulated
QT board

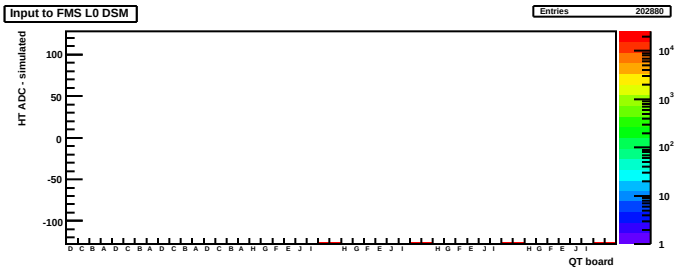

Input to FMS L0 DSM
Entries 1217280
QT8(2) sum
QT board

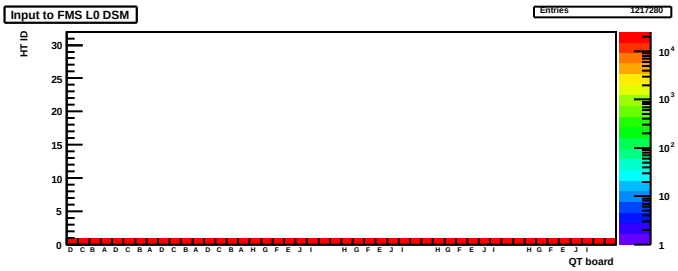

Input to FMS L0 DSM
Entries 202880
QT8(2) sum - simulated
QT board

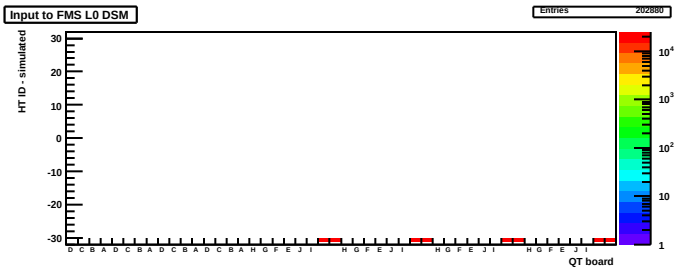

Input to FMS L0 DSM
Entries 1217280
QT8(3) sum
QT board

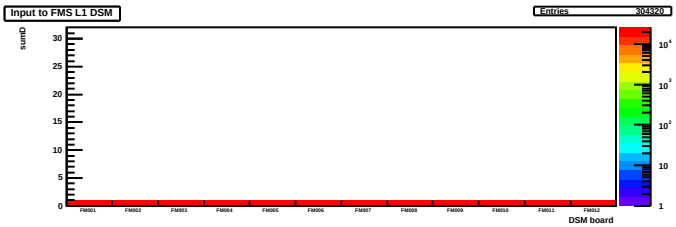

Input to FMS L0 DSM
Entries 202880
QT8(3) sum - simulated
QT board

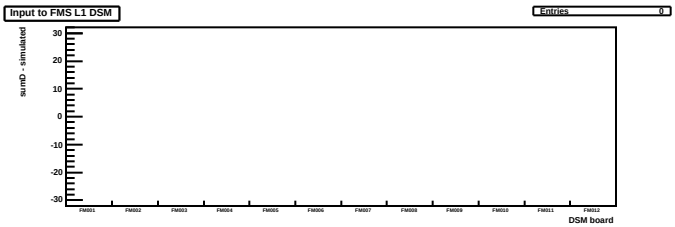

Input to FMS L0 DSM
Entries 1217280
HT ADC
QT board

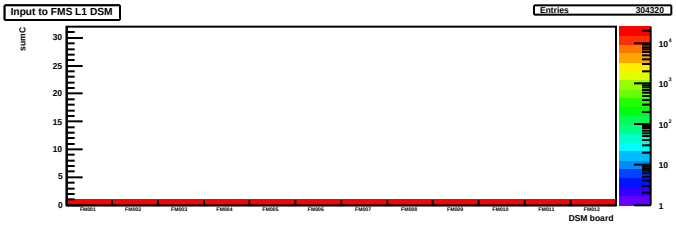

Input to FMS L0 DSM
Entries 202880
HT ADC - simulated
QT board

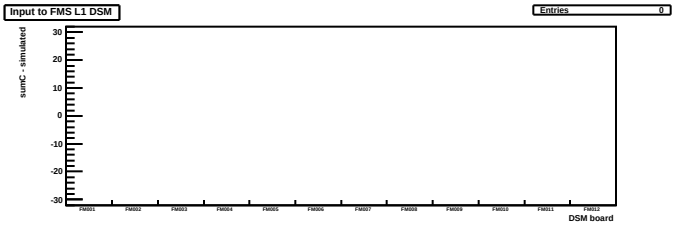

Input to FMS L0 DSM
Entries 1217280
HT ID
QT board

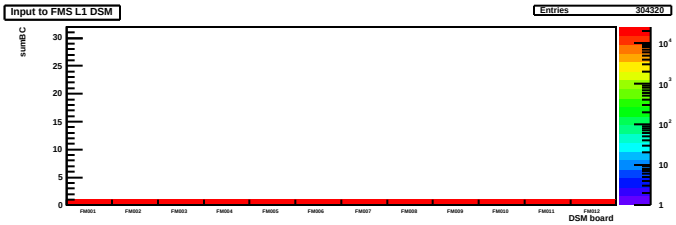

Input to FMS L0 DSM
Entries 202880
HT ID - simulated
QT board

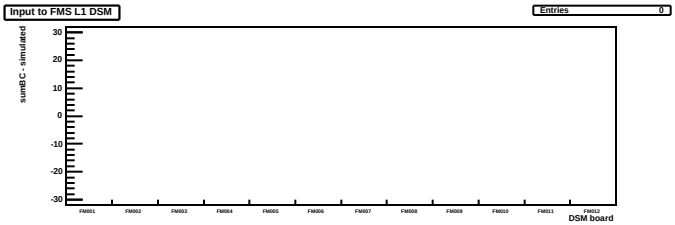

Input to FMS L1 DSM
Entries 304320
sumD
DSM board

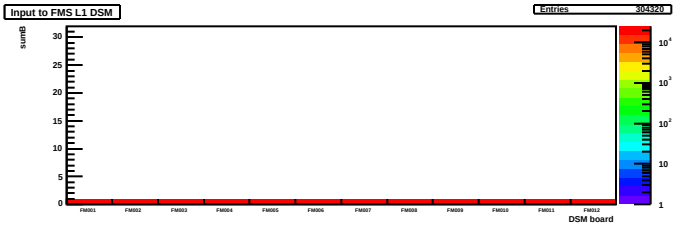

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

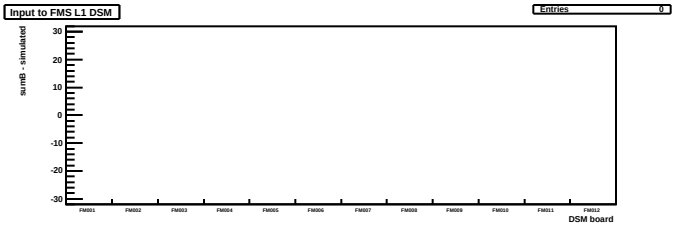

Input to FMS L1 DSM
Entries 304320
sumC
DSM board

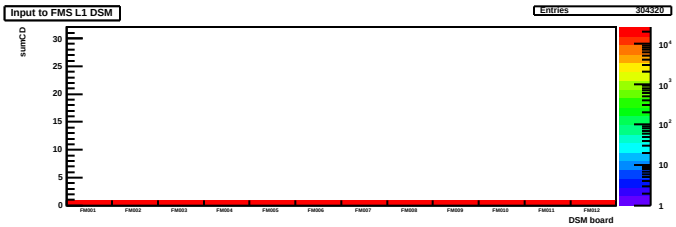

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

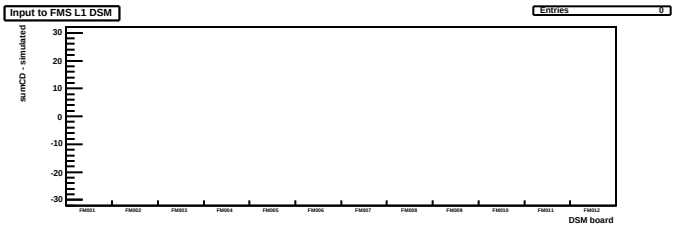

Input to FMS L1 DSM
Entries 304320
sumBC
DSM board

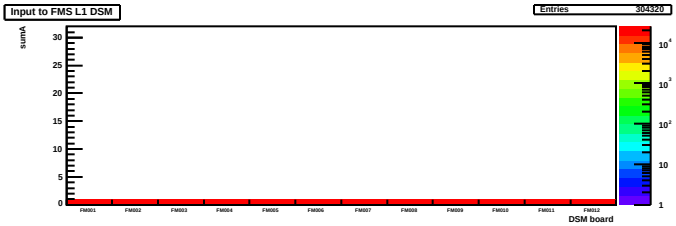

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

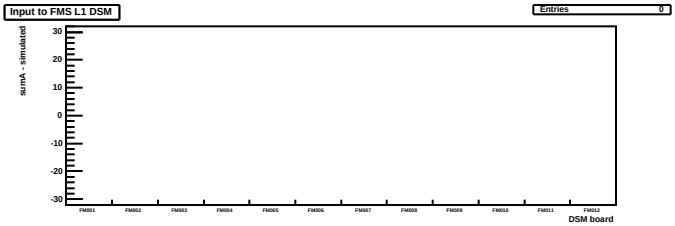

Input to FMS L1 DSM
Entries 304320
sumB
DSM board

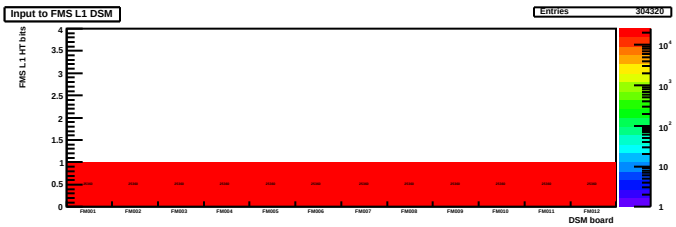

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

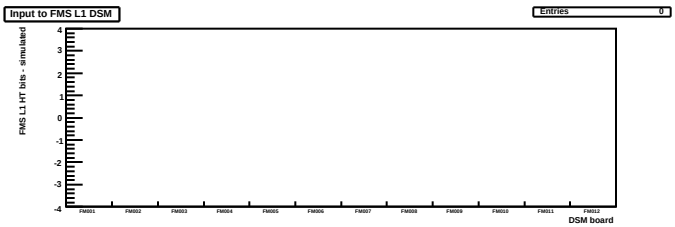

Input to FMS L1 DSM
Entries 304320
sumCD
DSM board

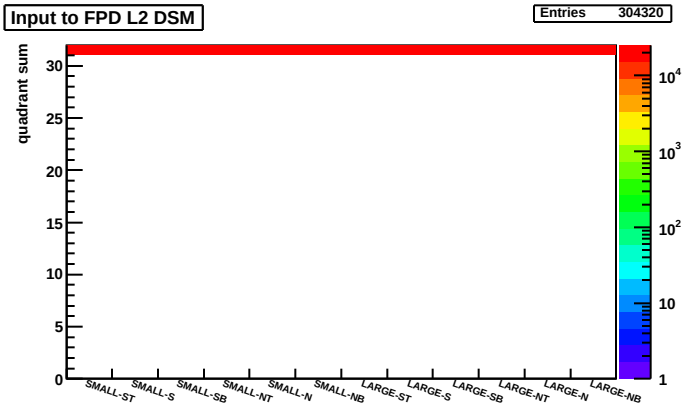

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

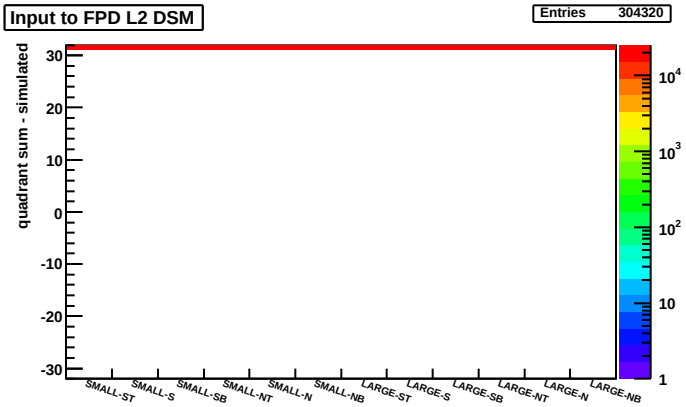

Input to FMS L1 DSM
Entries 304320
sumA
DSM board

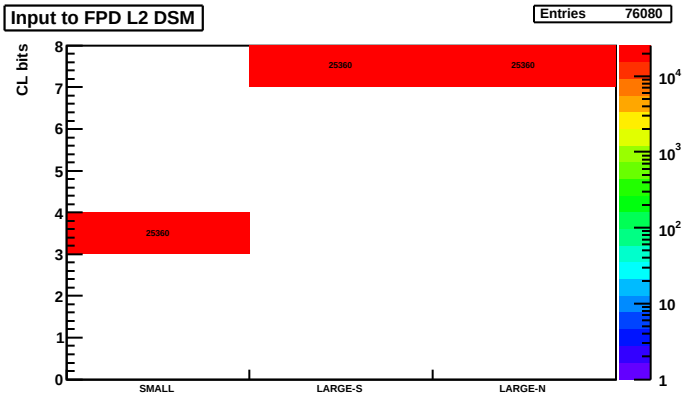

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

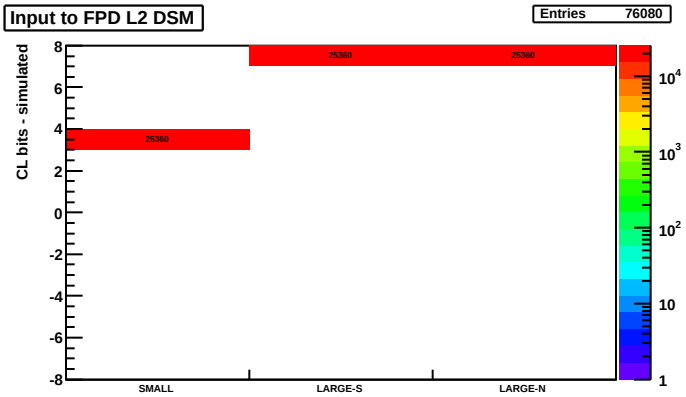

Input to FMS L1 DSM
Entries 304320
FMS L1 HT bits
DSM board

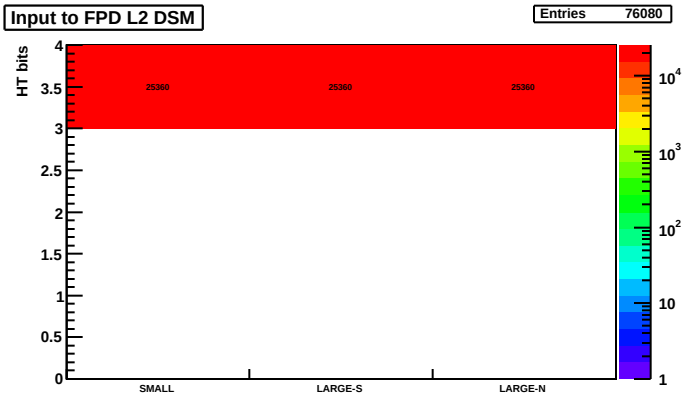

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

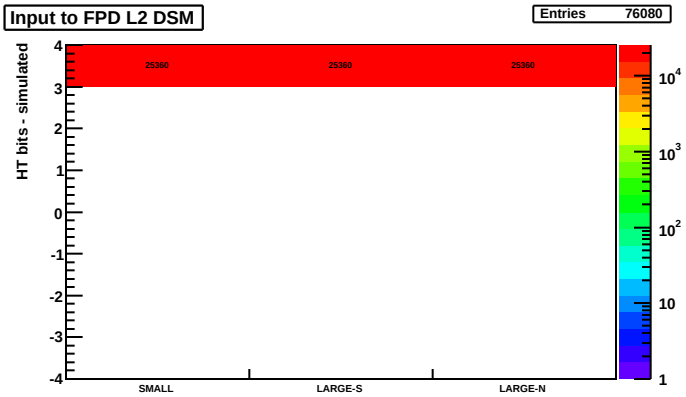

Input to FPD L2 DSM
Entries 304320
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

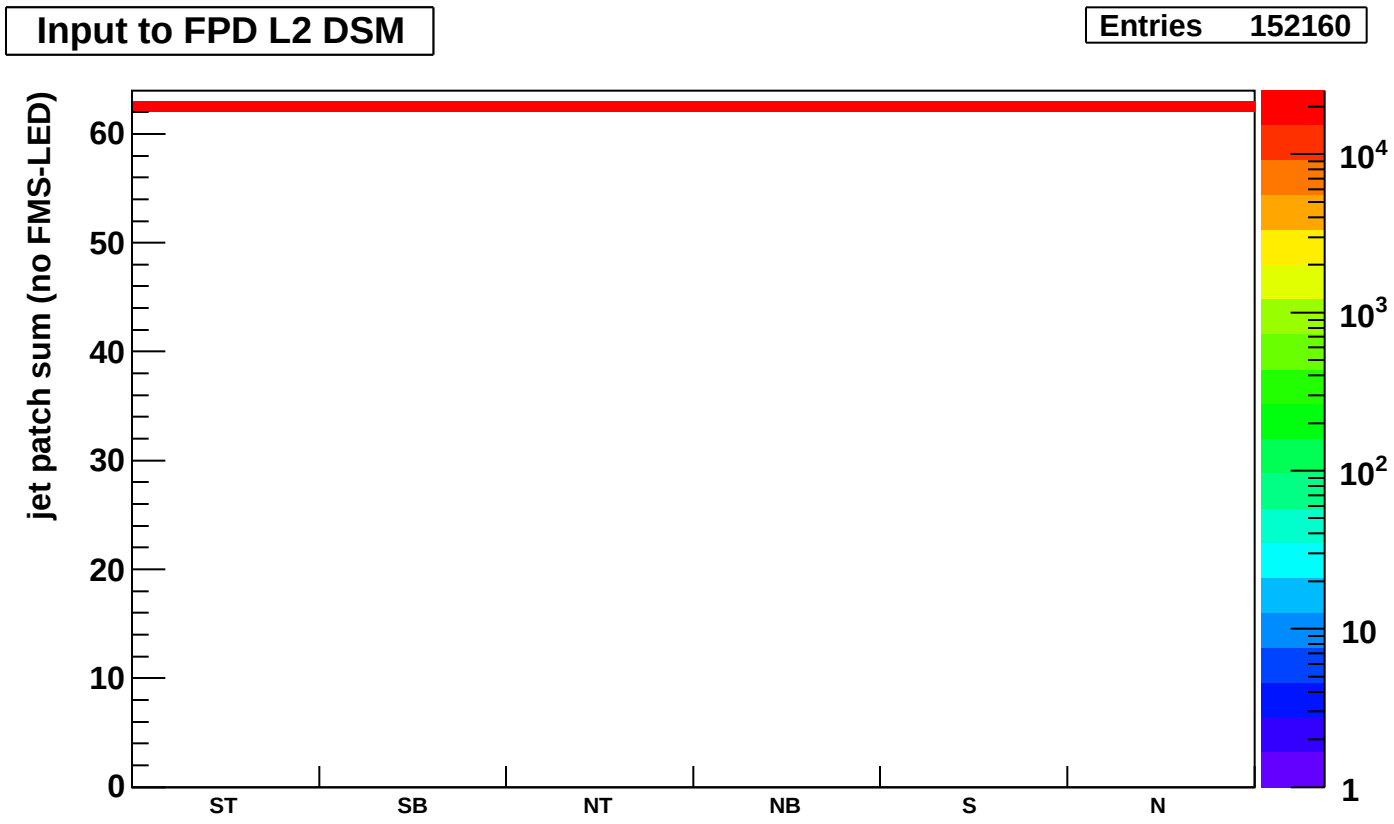

Input to FPD L2 DSM
Entries 304320
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

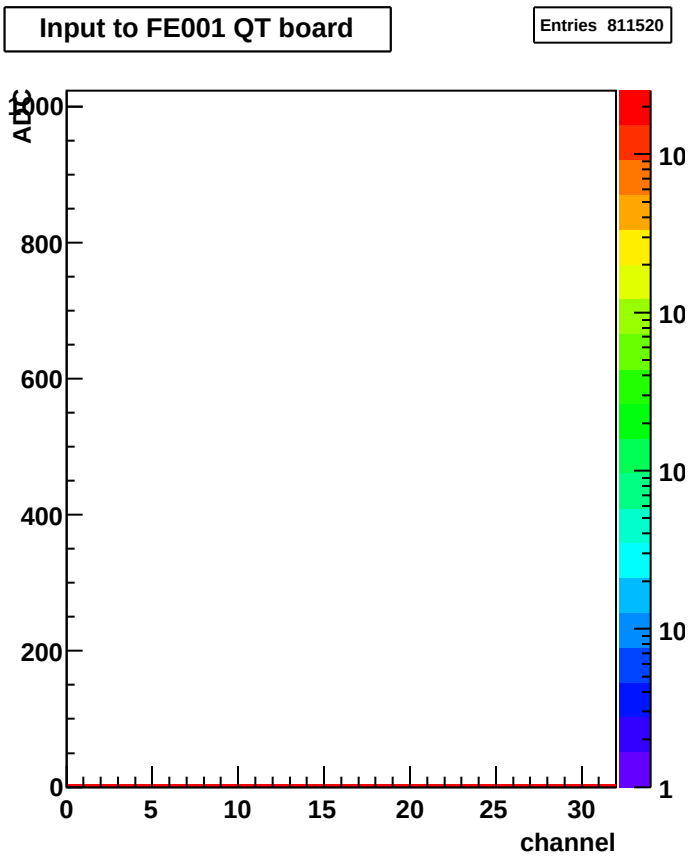

Input to FPD L2 DSM
Entries 76080
CL bits
25360
25360
25360
SMALL
LARGE-S
LARGE-N

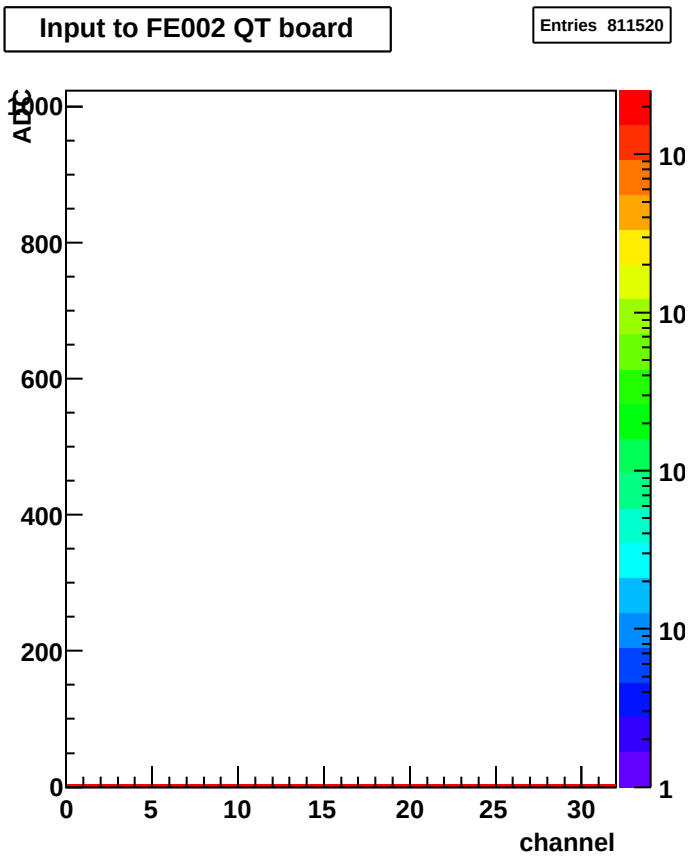

Input to FPD L2 DSM
Entries 76080
CL bits - simulated
25360
25360
25360
SMALL
LARGE-S
LARGE-N

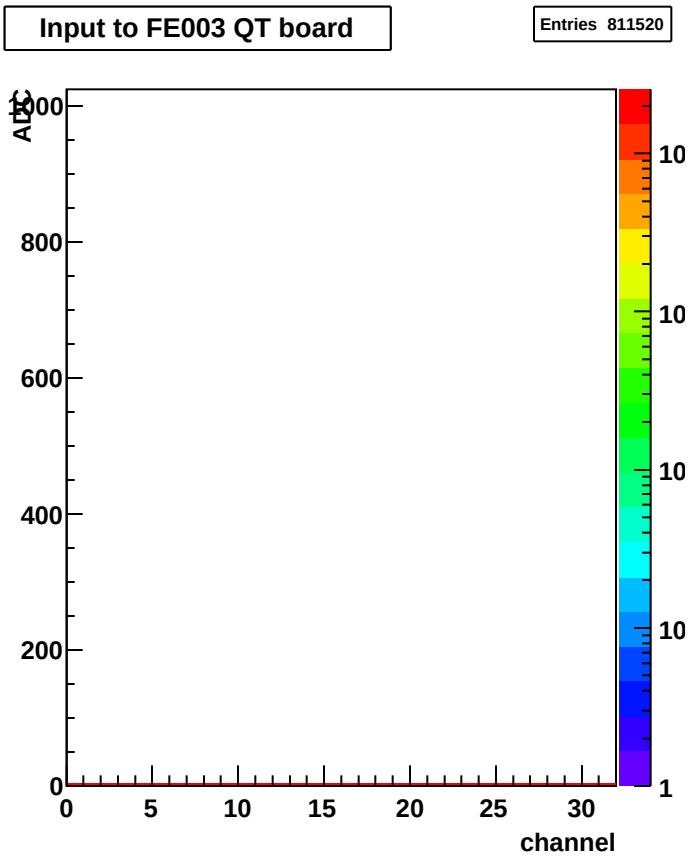

Input to FPD L2 DSM
Entries 76080
HT bits
25360
25360
25360
SMALL
LARGE-S
LARGE-N

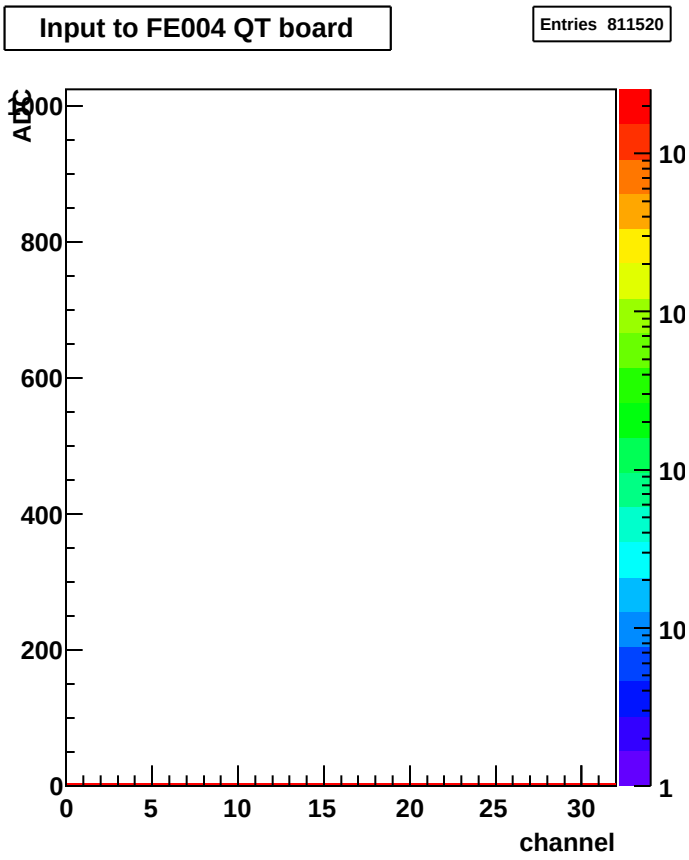

Input to FPD L2 DSM
Entries 76080
HT bits - simulated
25360
25360
25360
SMALL
LARGE-S
LARGE-N

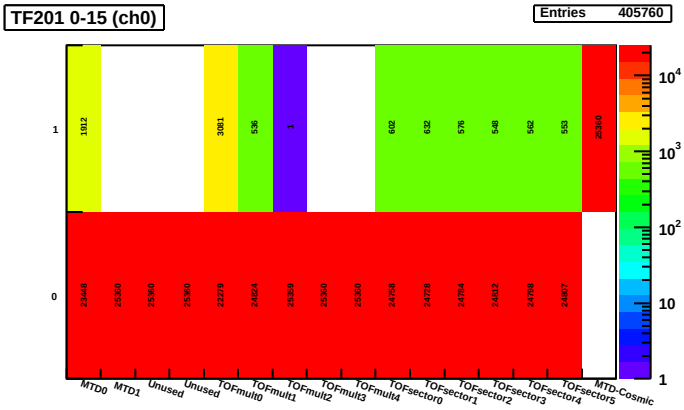

Input to FPD L2 DSM
Entries 152160
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

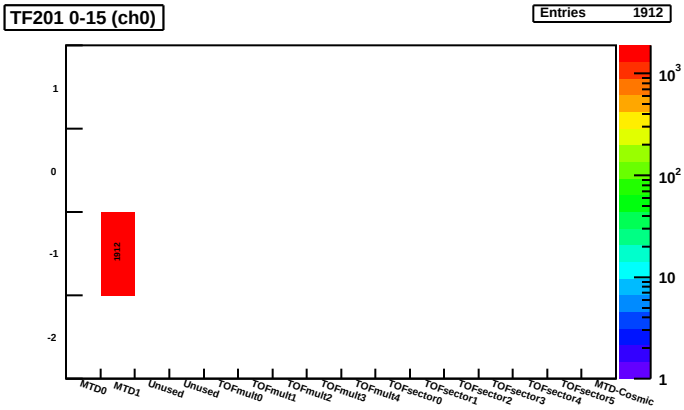

Input to FE001 QT board
Entries 811520
ADC
channel

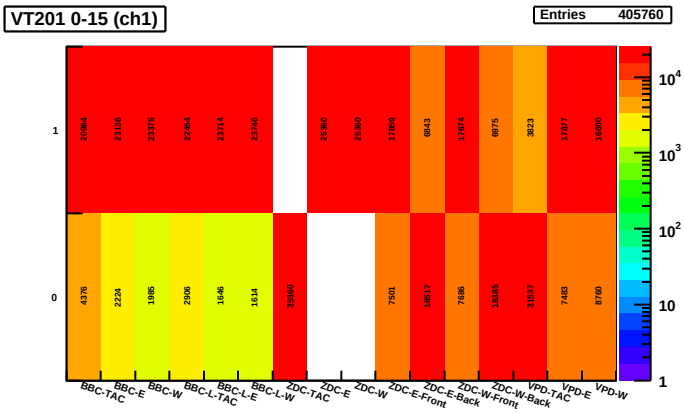

Input to FE002 QT board
Entries 811520
ADC
channel

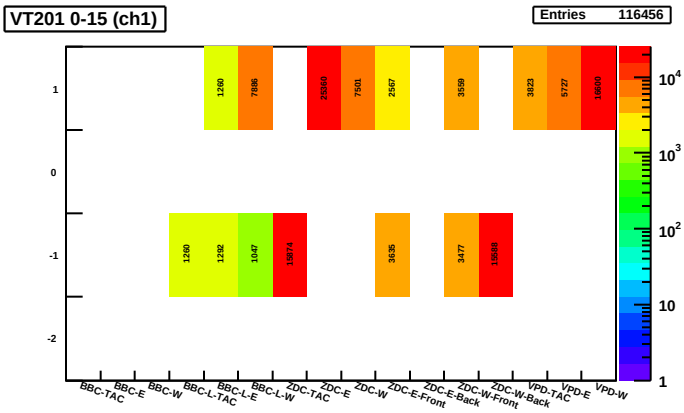

Input to FE003 QT board
Entries 811520
ADC
channel

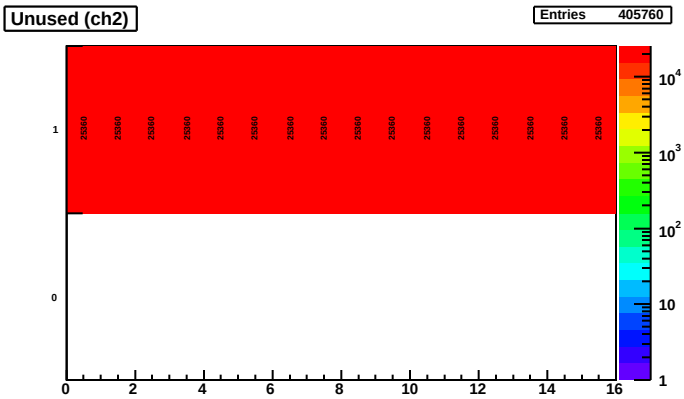

Input to FE004 QT board
Entries 811520
ADC
channel

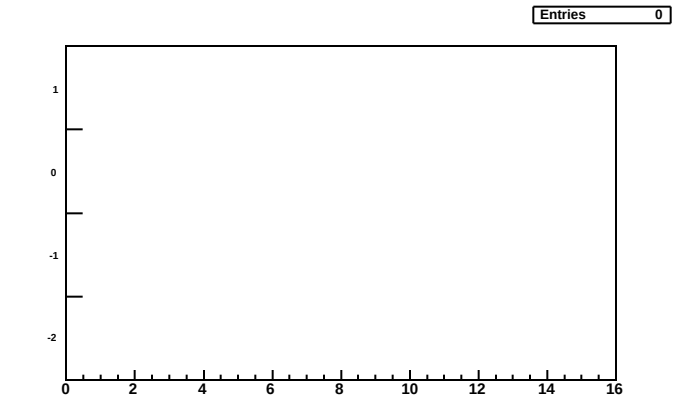

TF201 0-15 (ch0)
Entries 405760
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

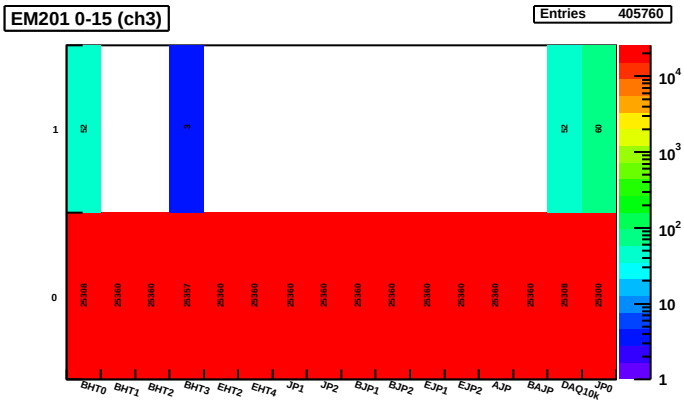

TF201 0-15 (ch0)
Entries 1912
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 405760
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 116456
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 405760


Entries 0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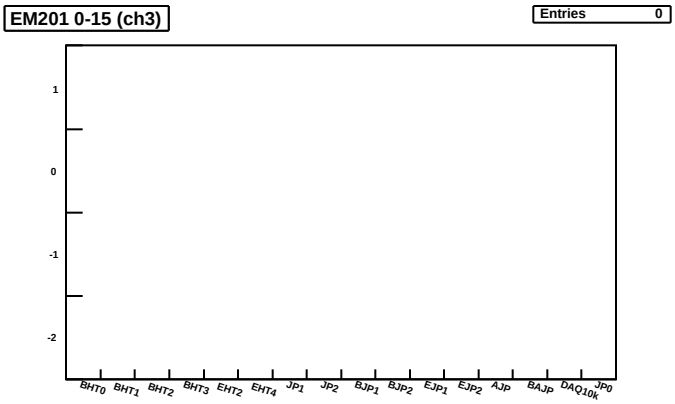
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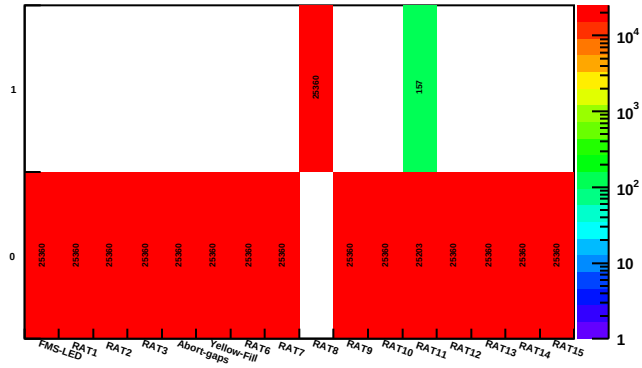
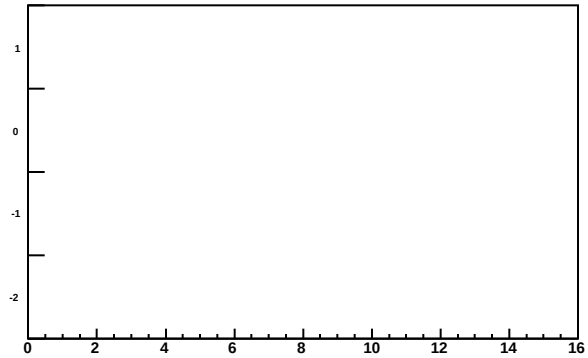
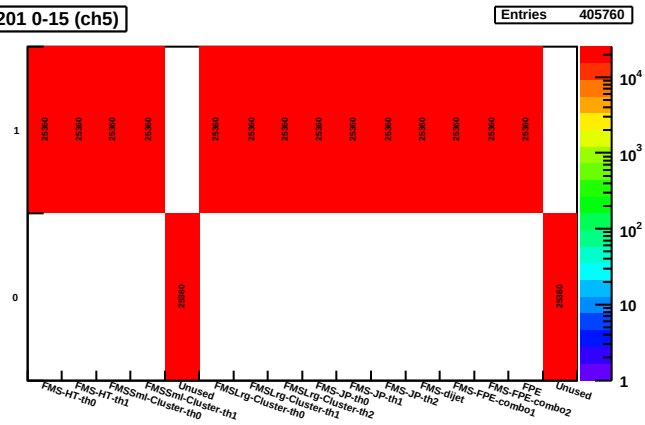
RAT board (ch4)





FP201 0-15 (ch5)



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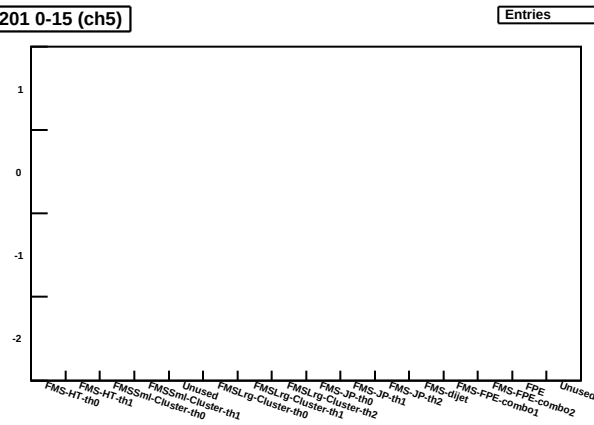

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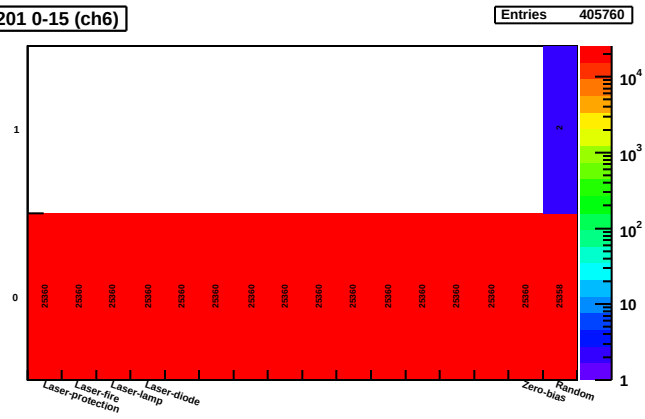

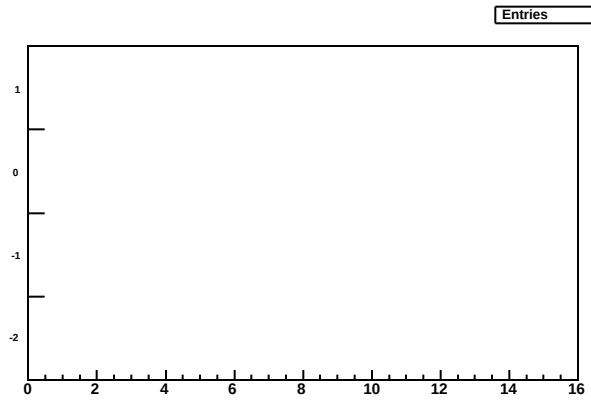
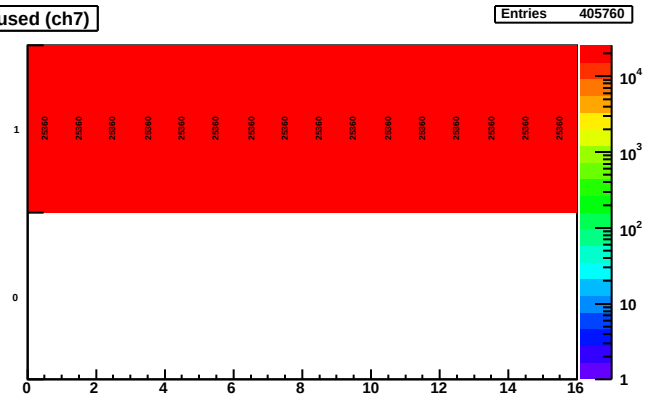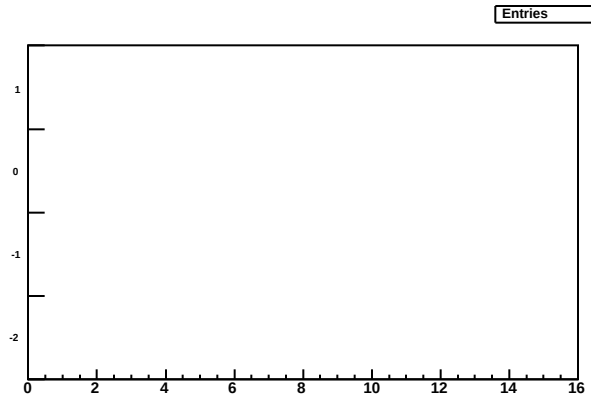
Unused (ch7)