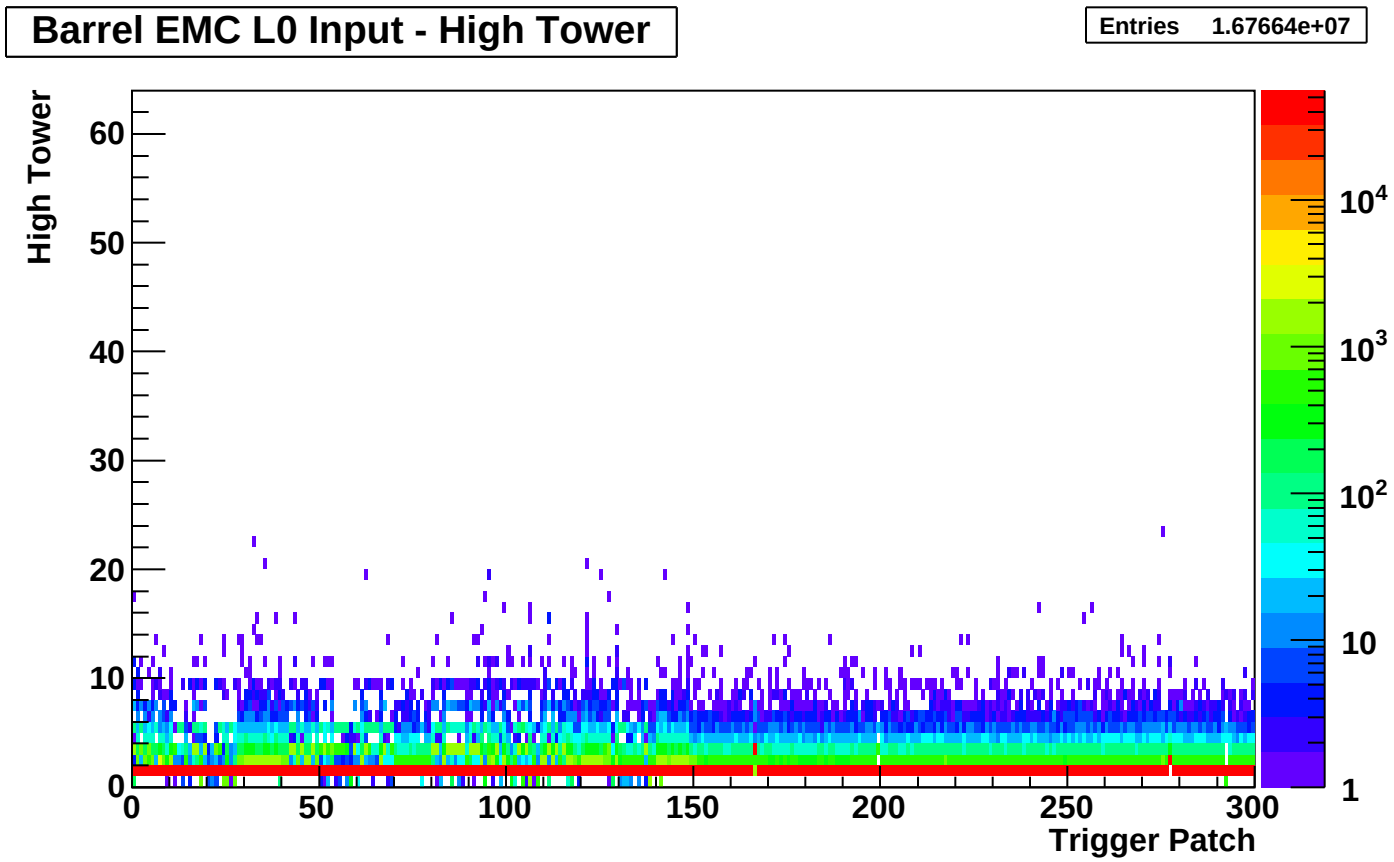
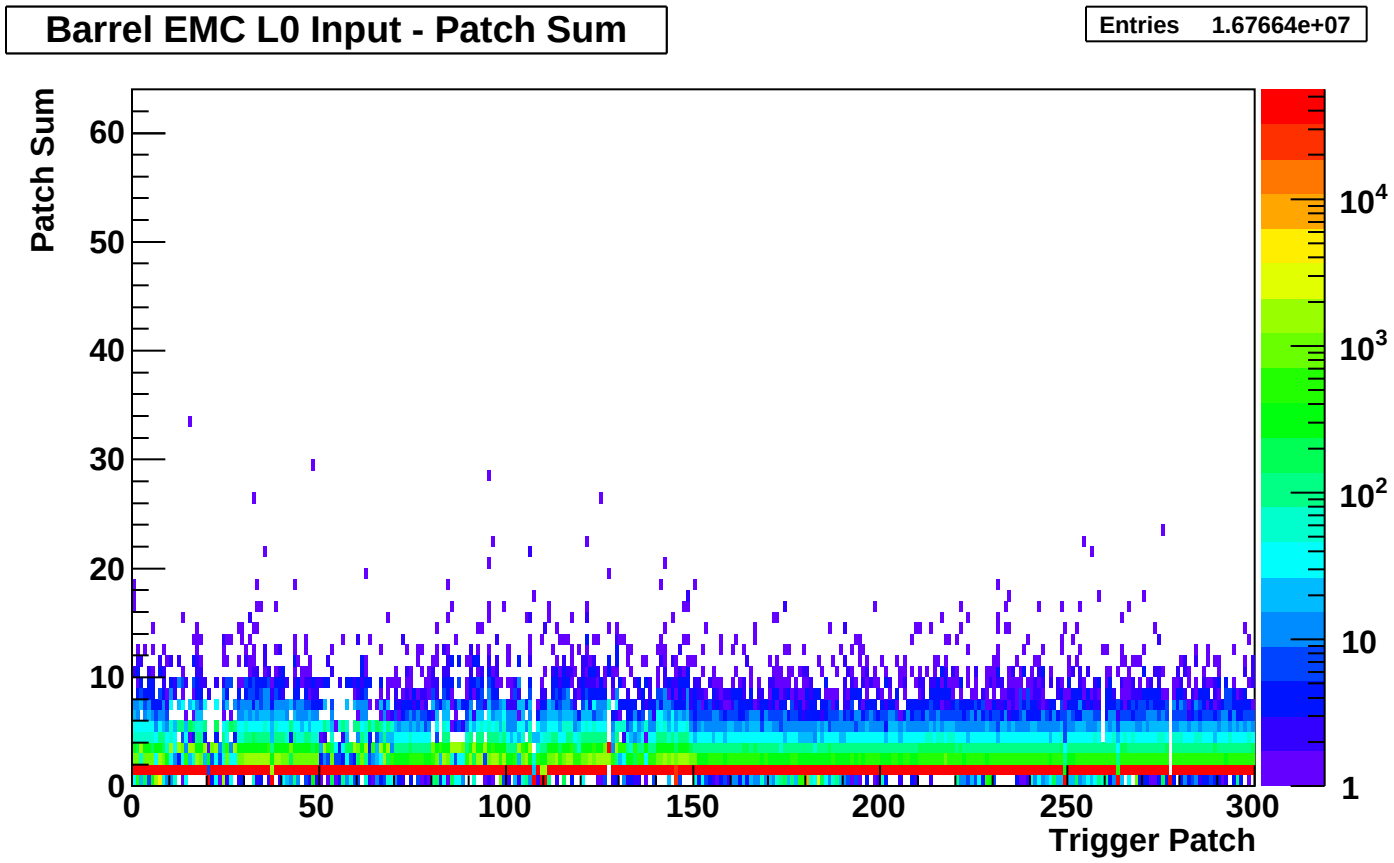
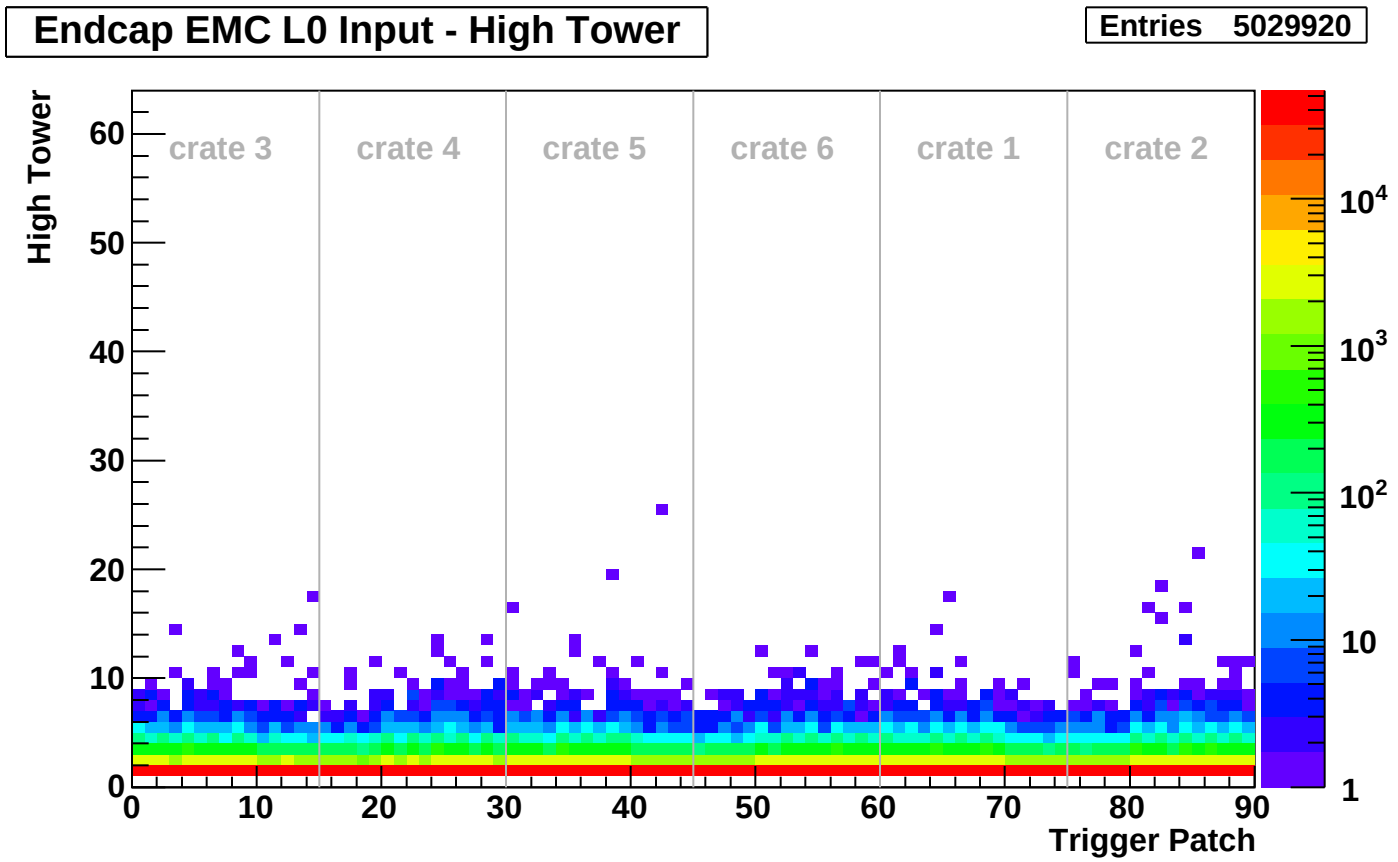
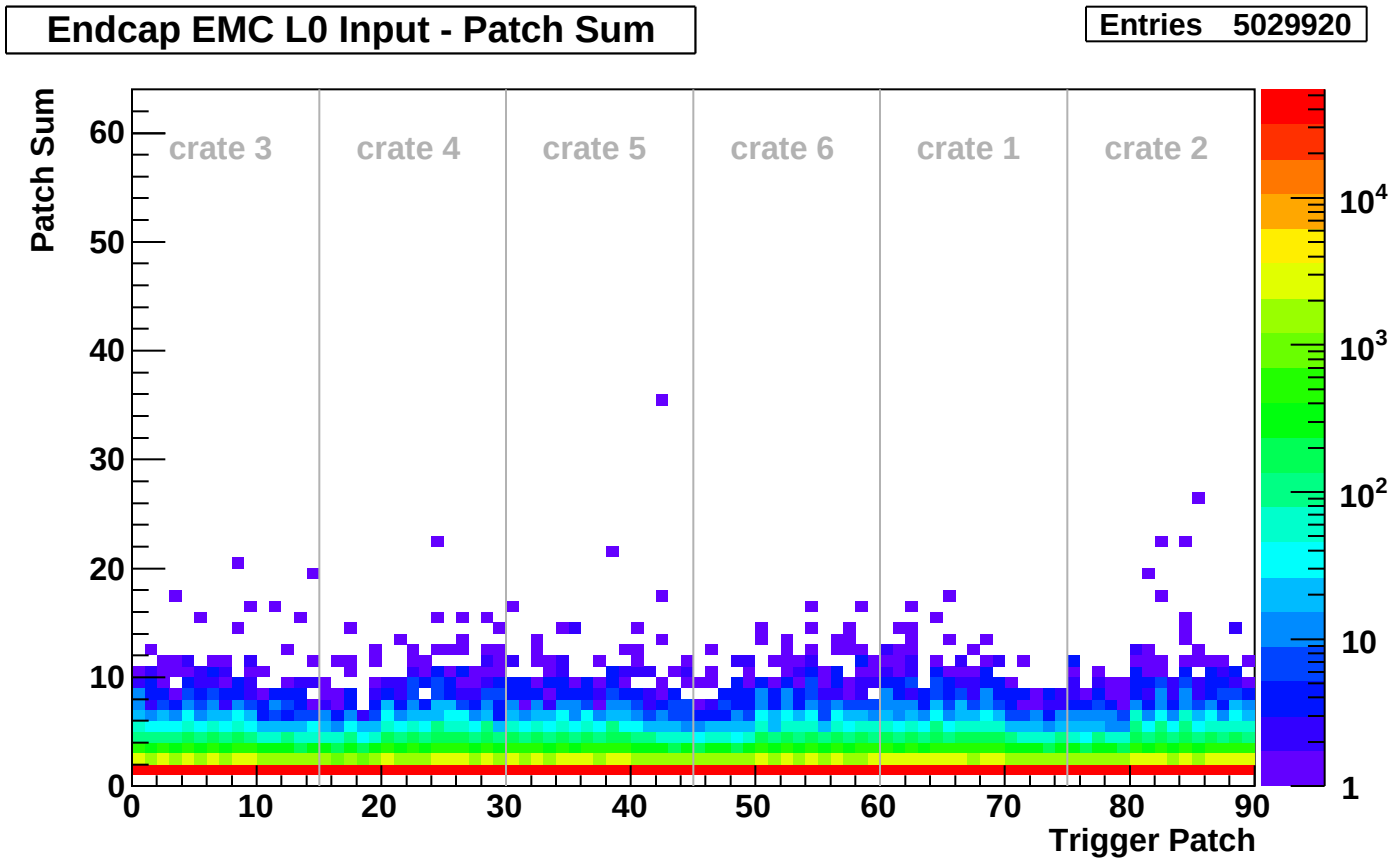
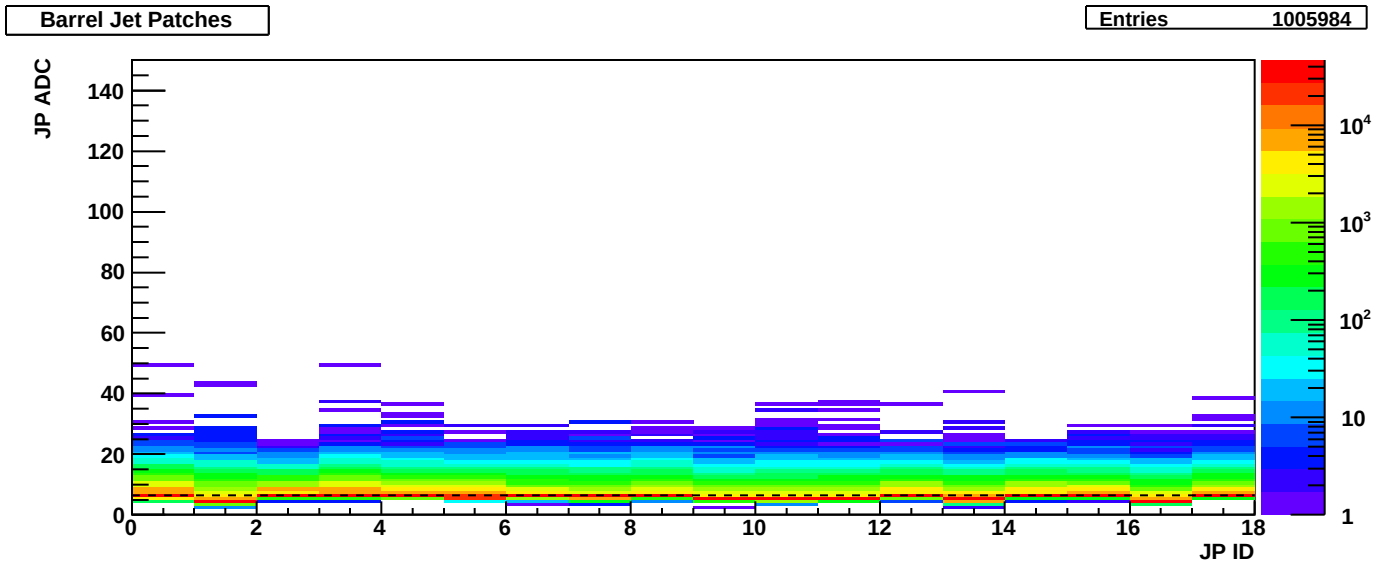
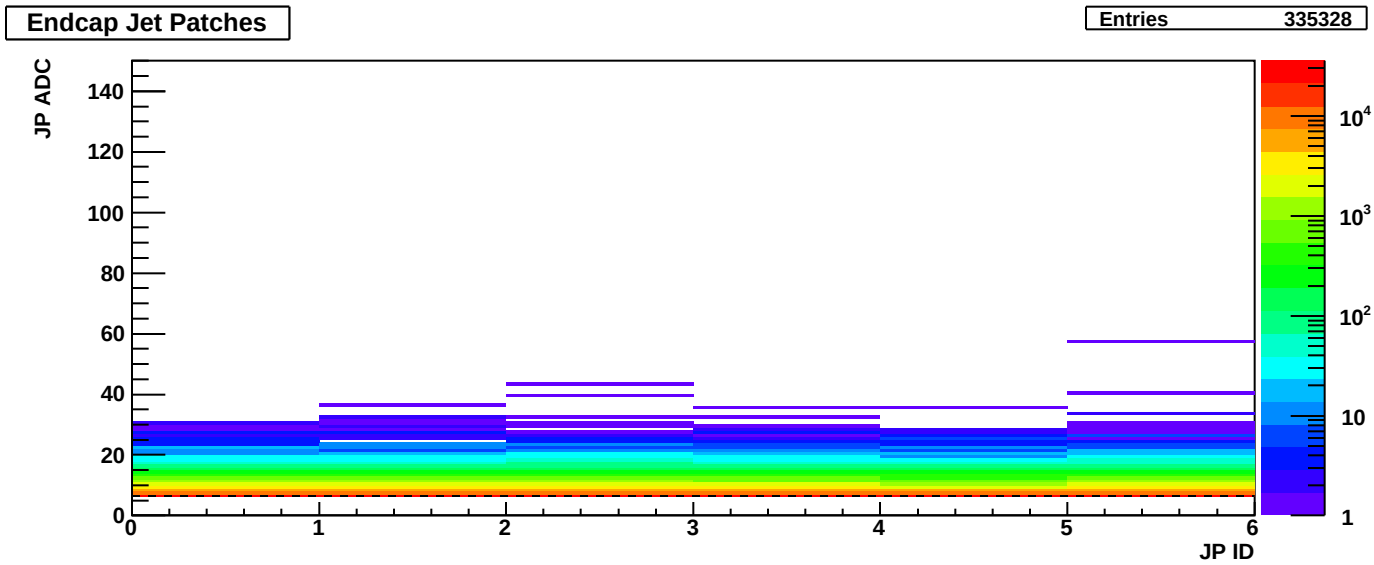

Barrel EMC L0 Input - High Tower
Entries 1.67664e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

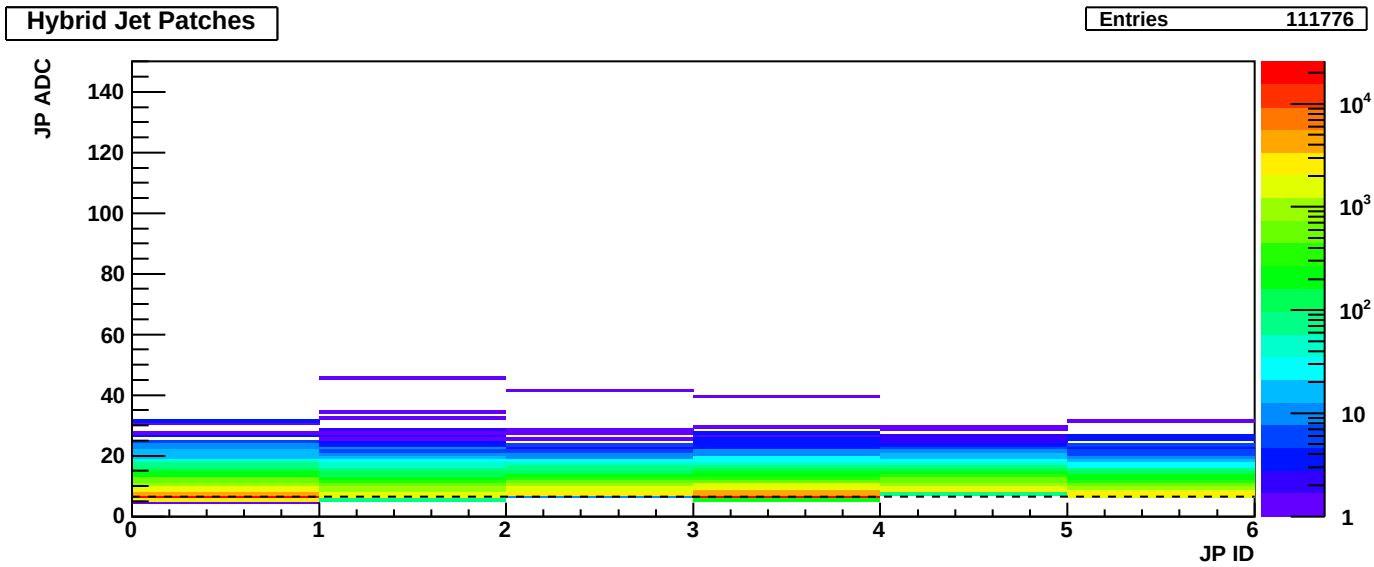

Barrel EMC L0 Input - Patch Sum
Entries 1.67664e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

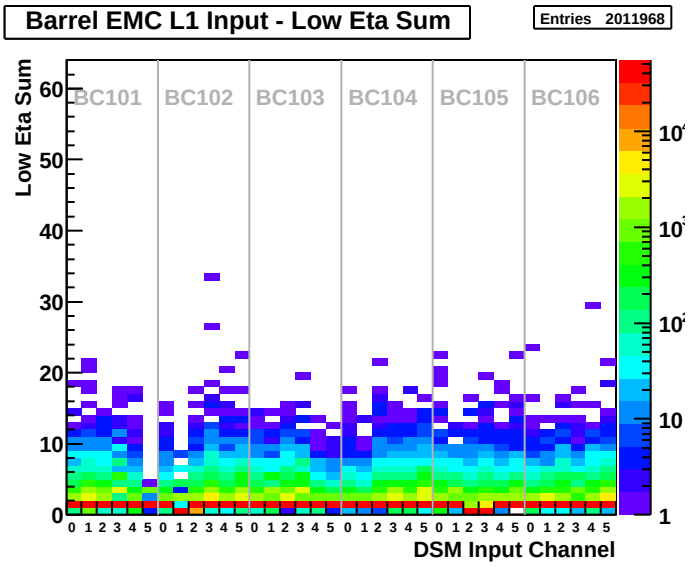

Endcap EMC L0 Input - High Tower
Entries 5029920
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

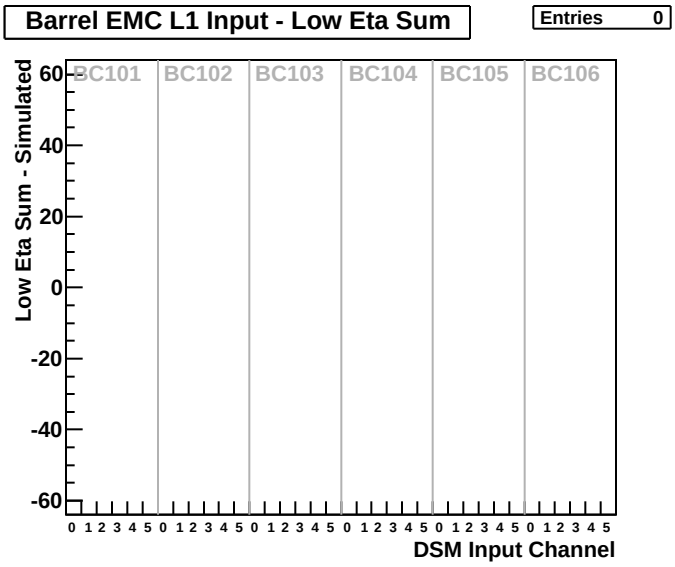

Endcap EMC L0 Input - Patch Sum
Entries 5029920
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

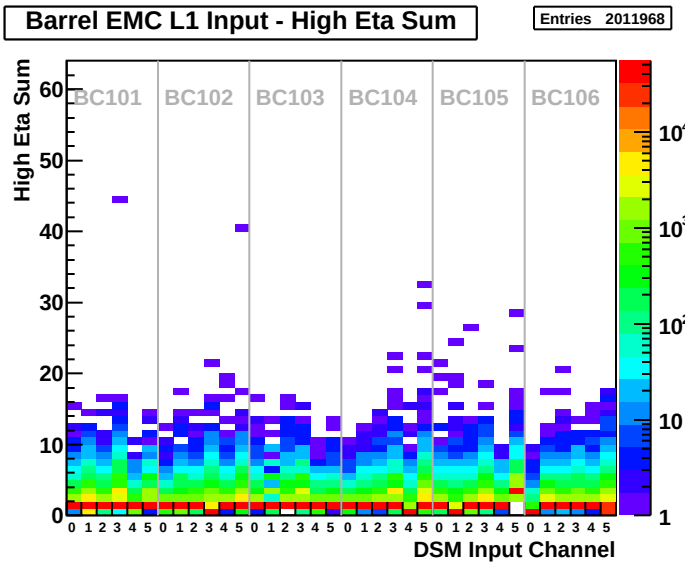

Barrel Jet Patches
Entries 1005984
JP ADC
JP ID

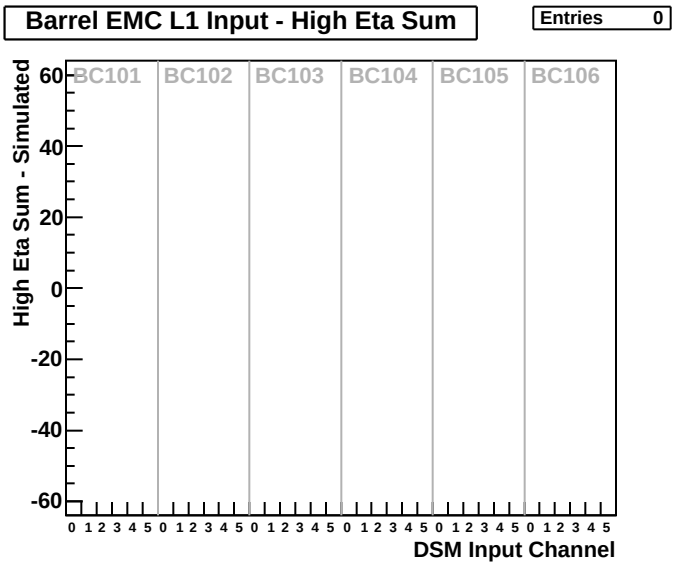

Endcap Jet Patches
Entries 335328
JP ADC
JP ID

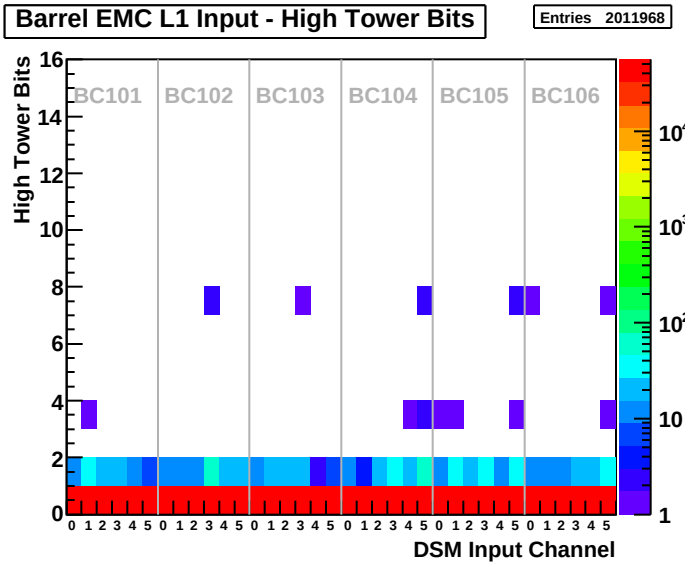

Hybrid Jet Patches
Entries 111776
JP ADC
JP ID

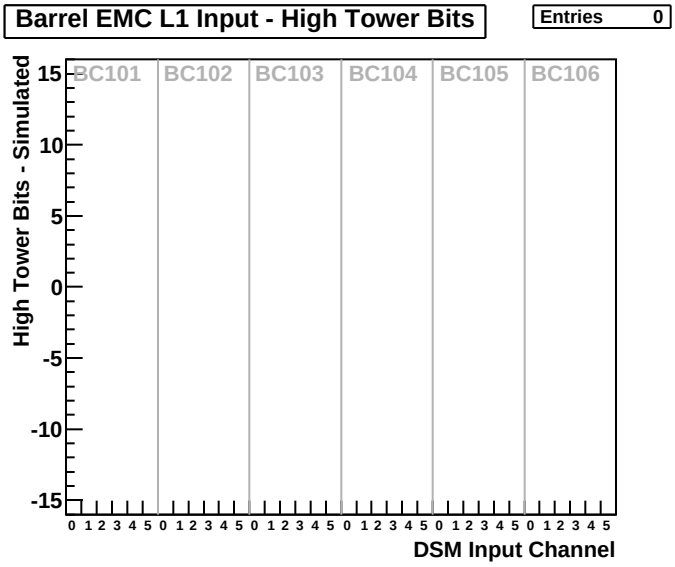

Barrel EMC L1 Input - Low Eta Sum
Entries 2011968
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

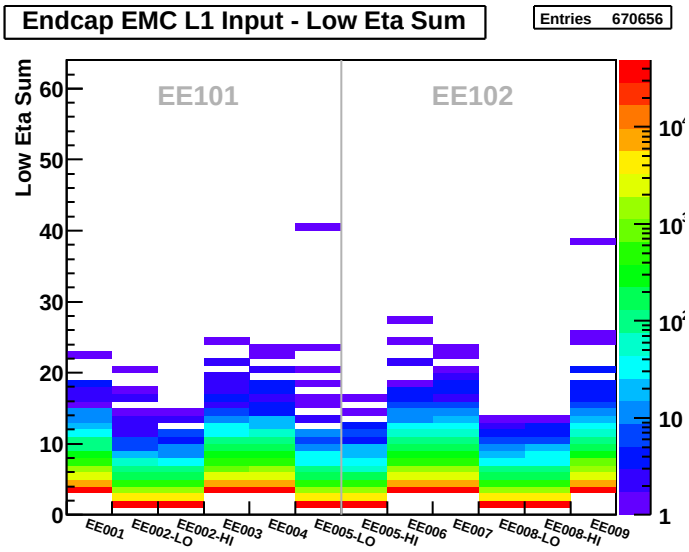

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

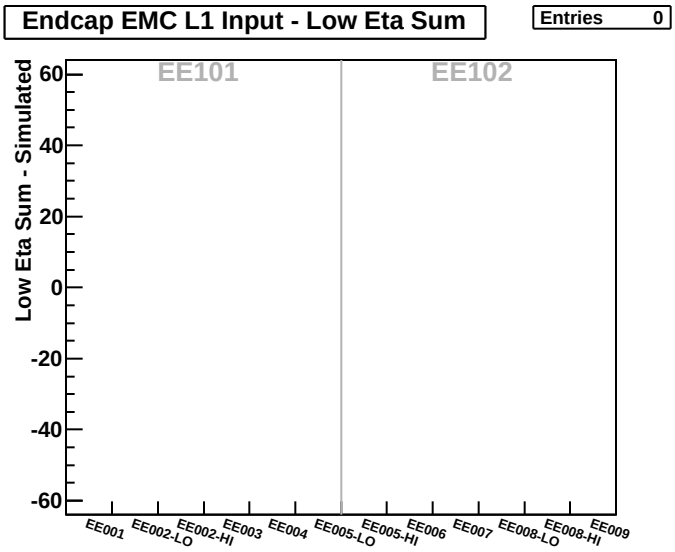

Barrel EMC L1 Input - High Eta Sum
Entries 2011968
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

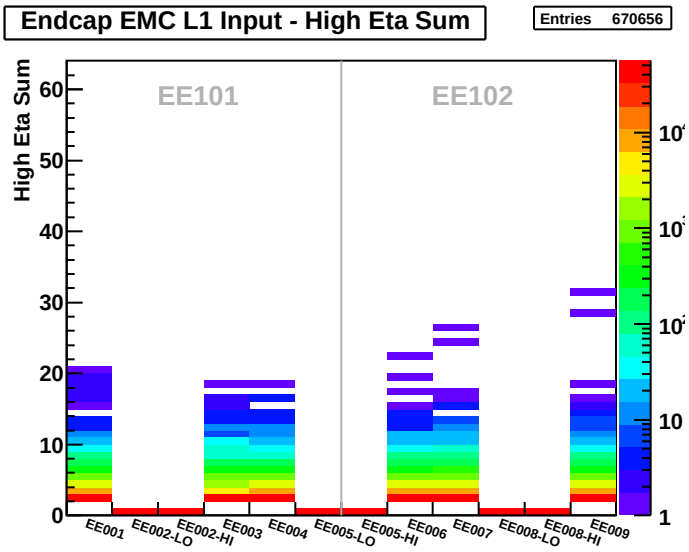

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

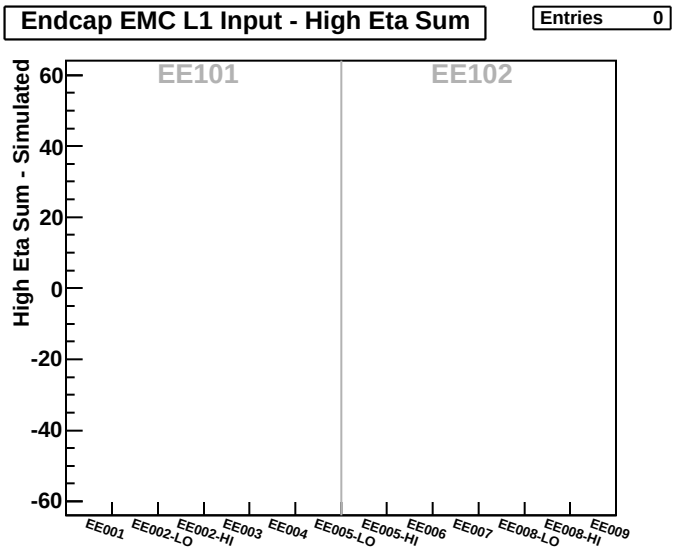

Barrel EMC L1 Input - High Tower Bits
Entries 2011968
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

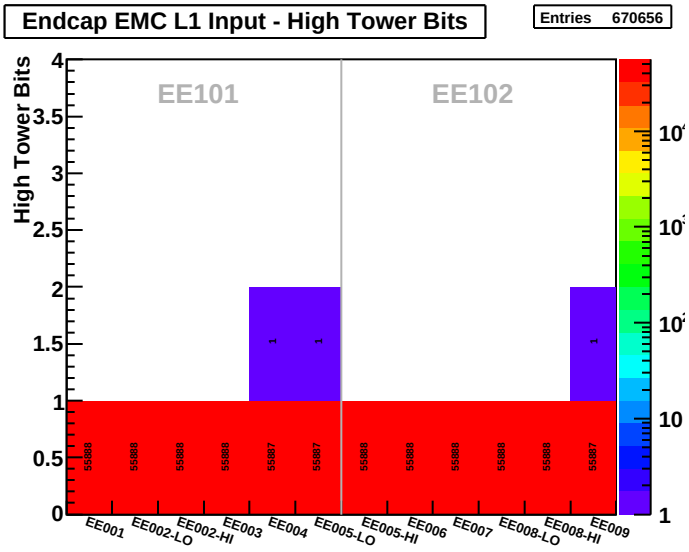

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

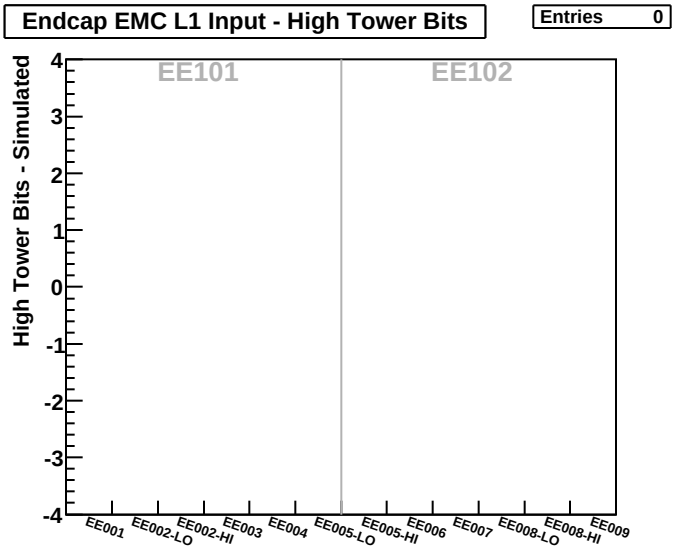

Endcap EMC L1 Input - Low Eta Sum
Entries 670656
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

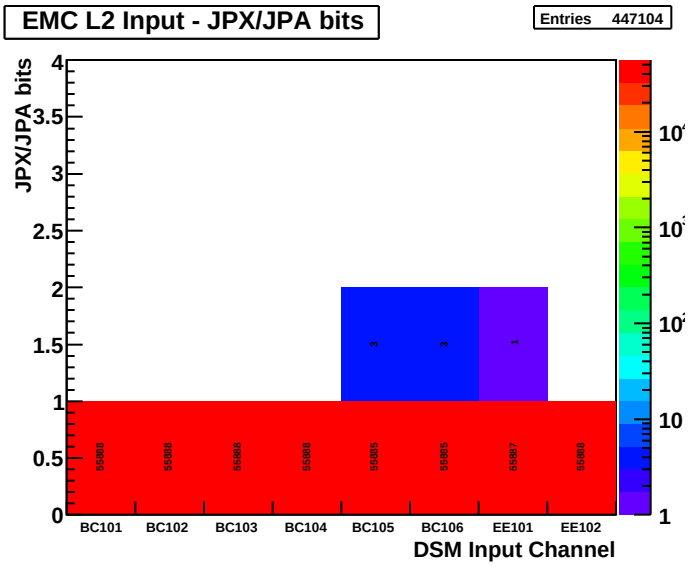

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

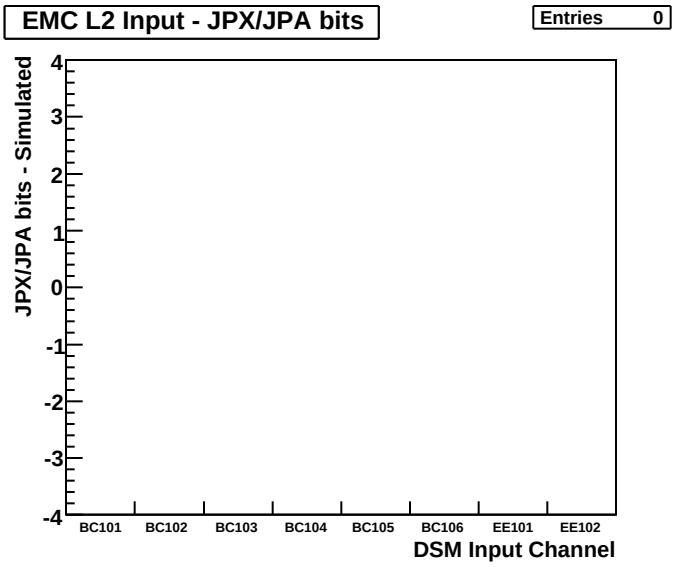

Endcap EMC L1 Input - High Eta Sum
Entries 670656
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

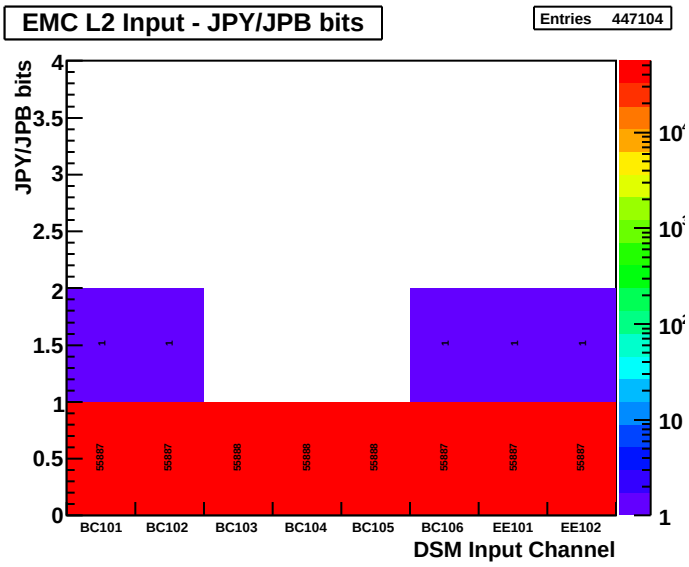

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

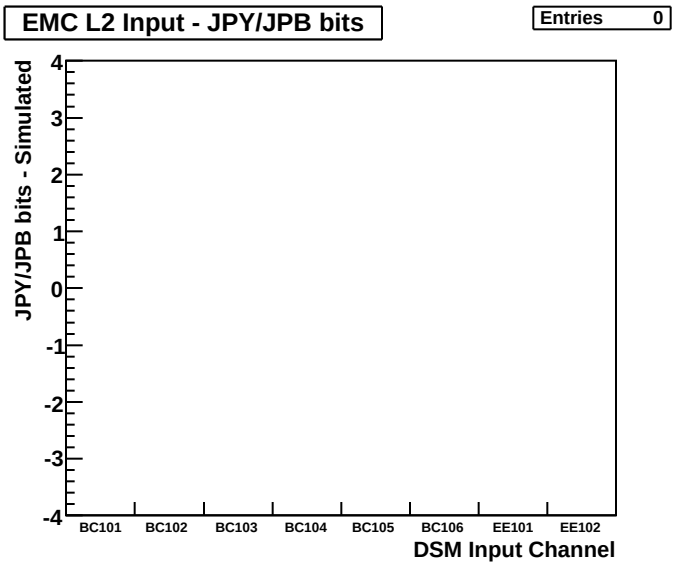

Endcap EMC L1 Input - High Tower Bits
Entries 670656
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

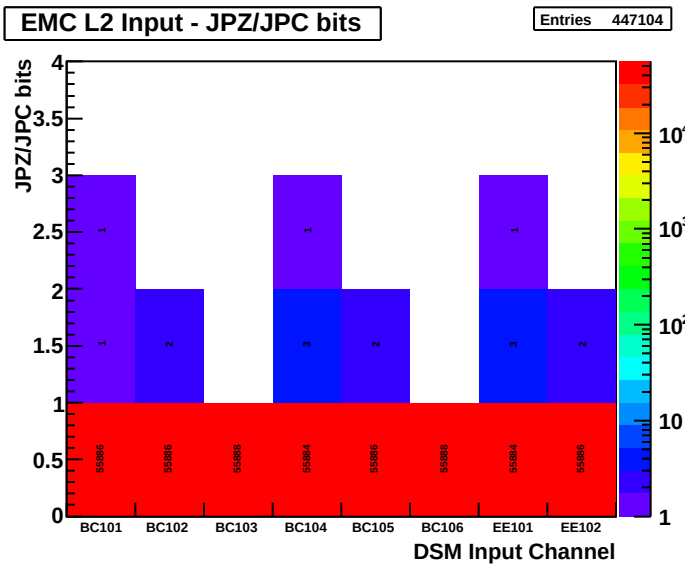

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

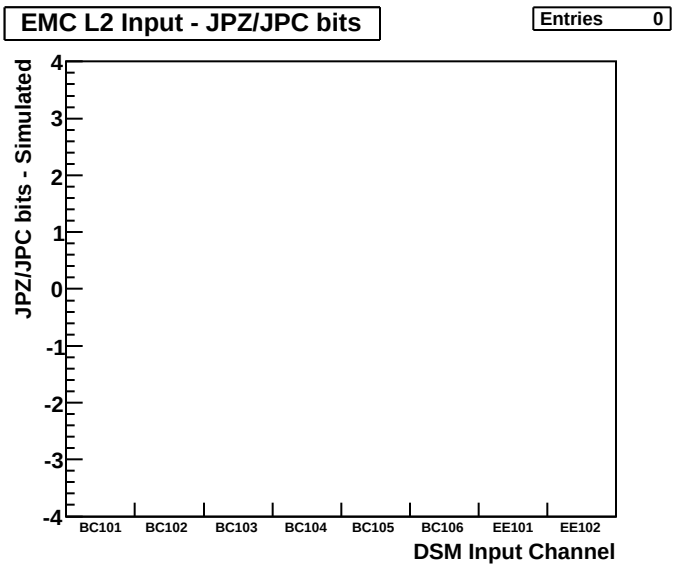

EMC L2 Input - JPX/JPA bits
Entries 447104
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

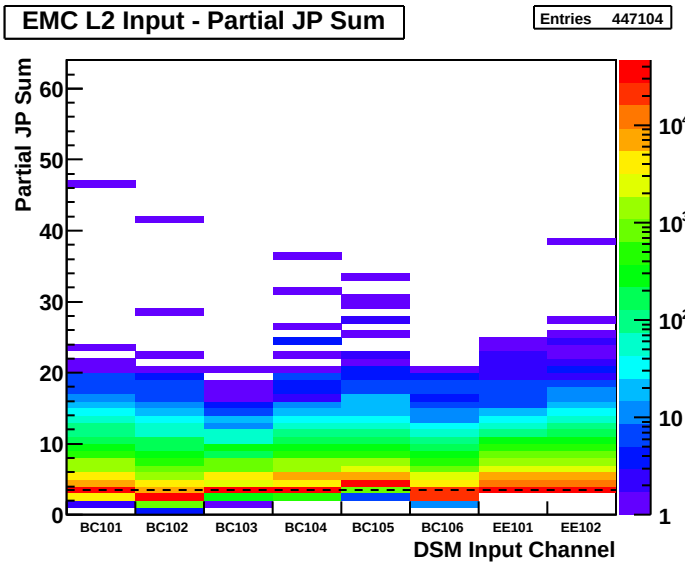

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

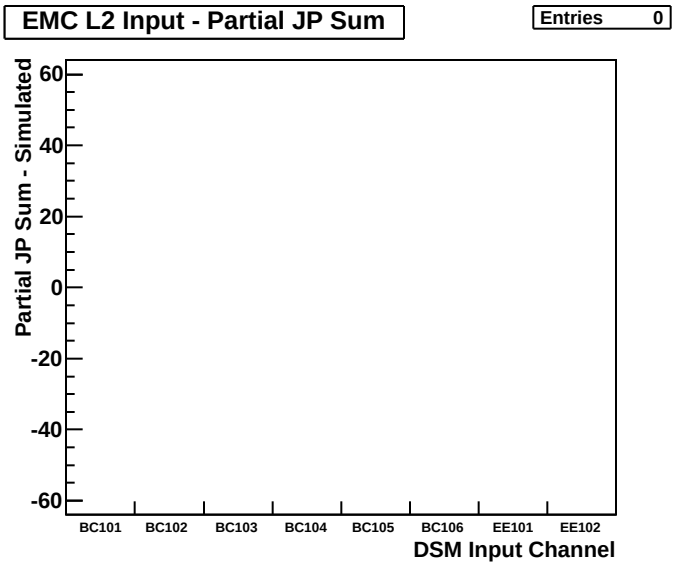

EMC L2 Input - JPY/JPB bits
Entries 447104
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

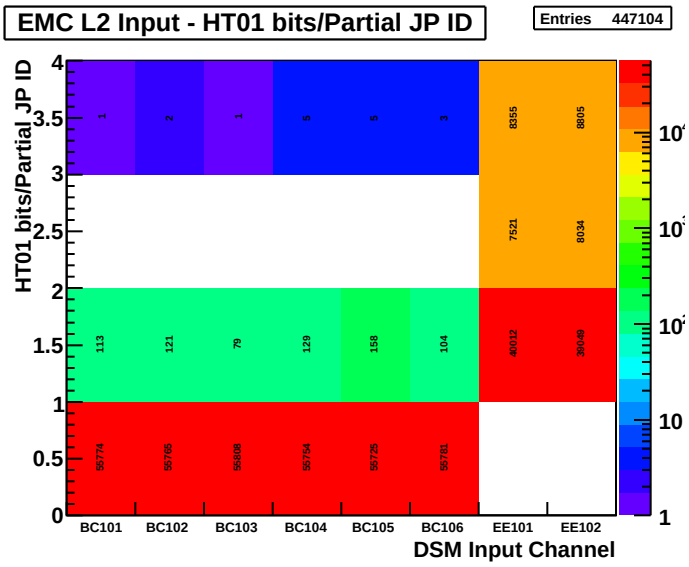

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

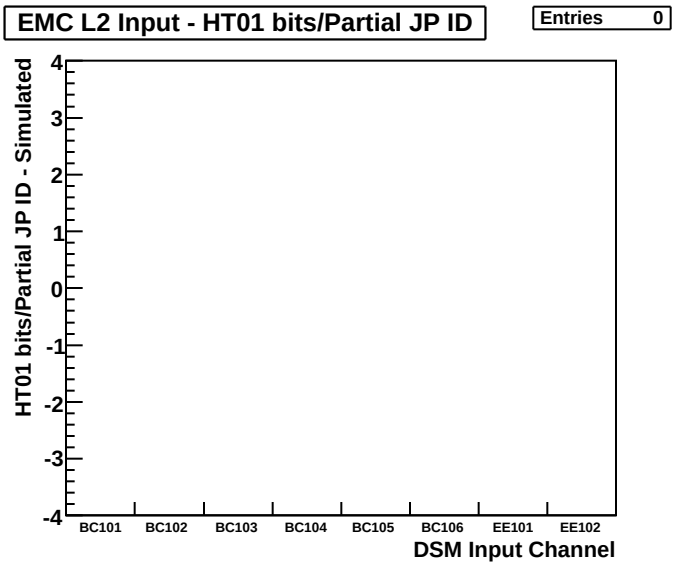

EMC L2 Input - JPZ/JPC bits
Entries 447104
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

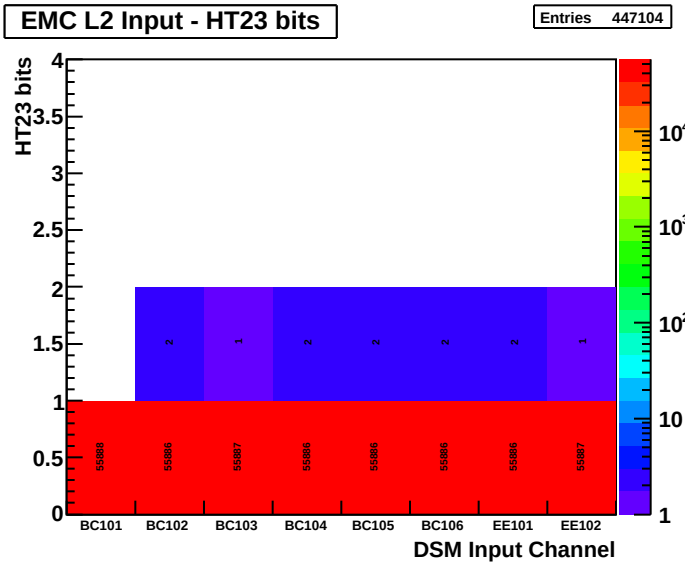

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

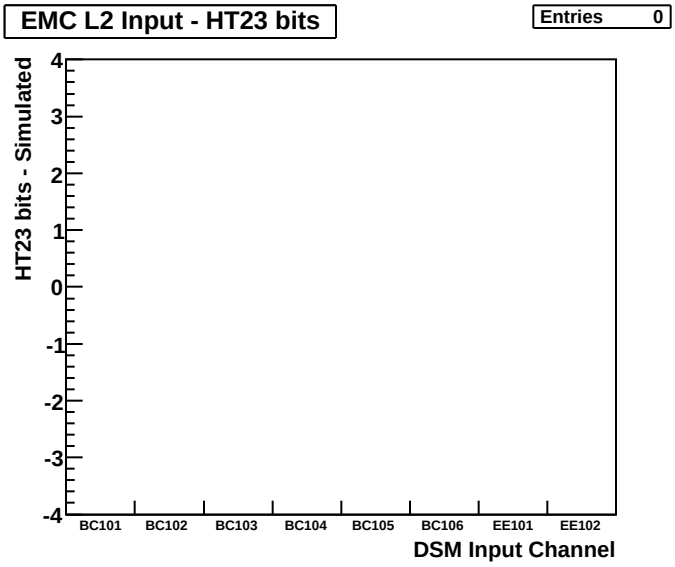

EMC L2 Input - Partial JP Sum
Entries 447104
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

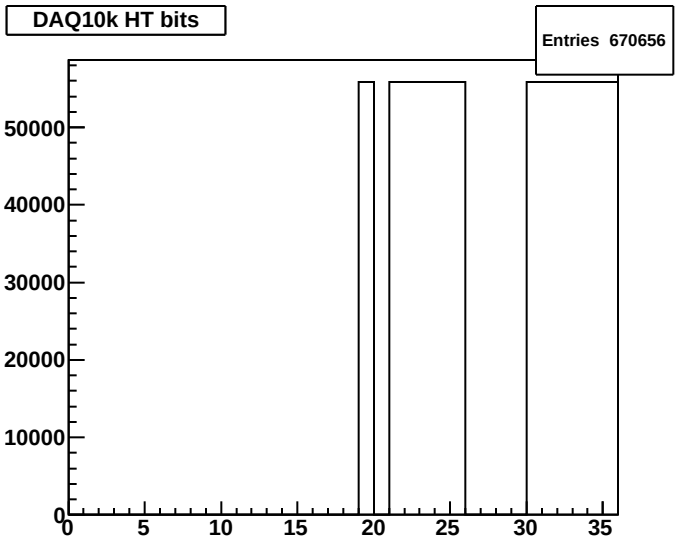

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

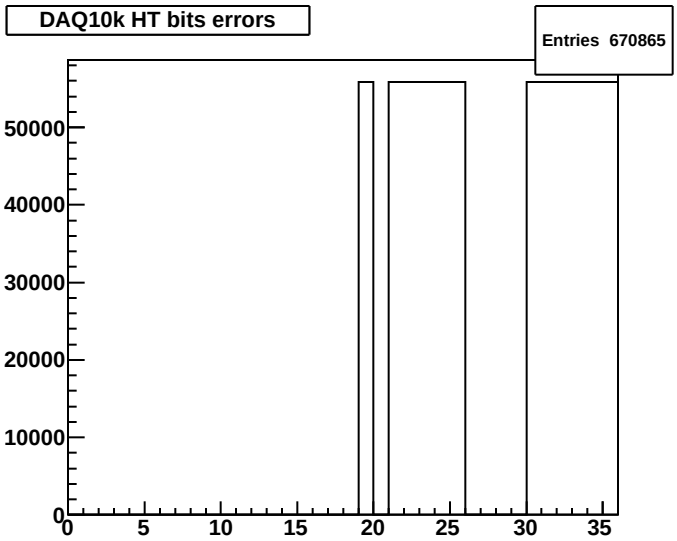

EMC L2 Input - HT01 bits/Partial JP ID
Entries 447104
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

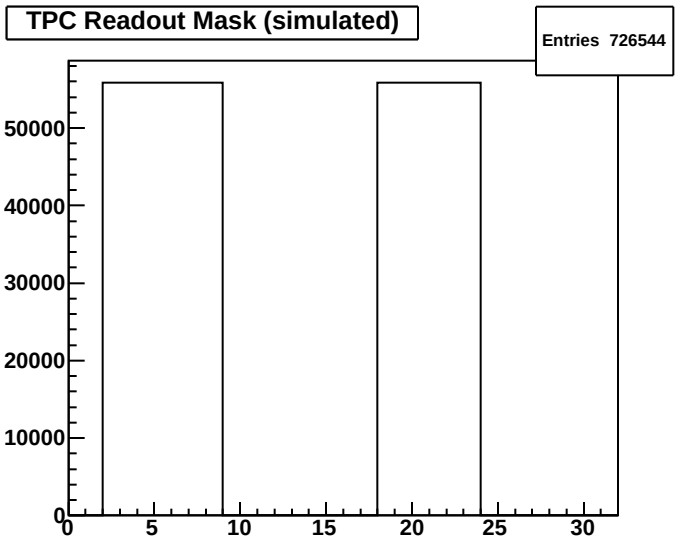

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

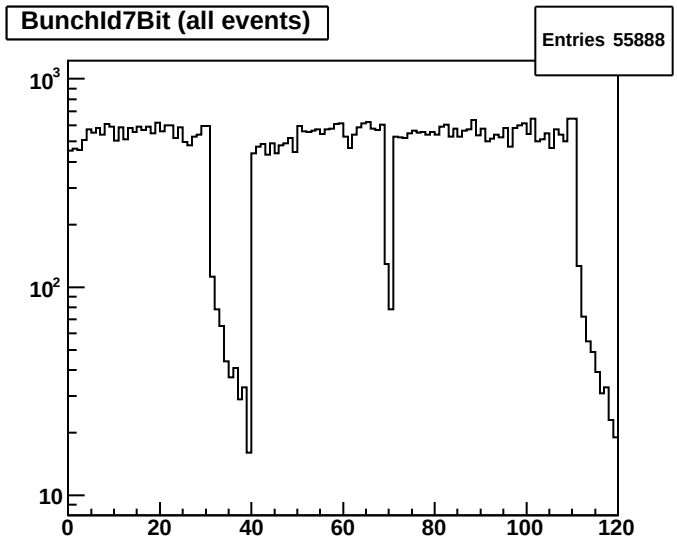

EMC L2 Input - HT23 bits
Entries 447104
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

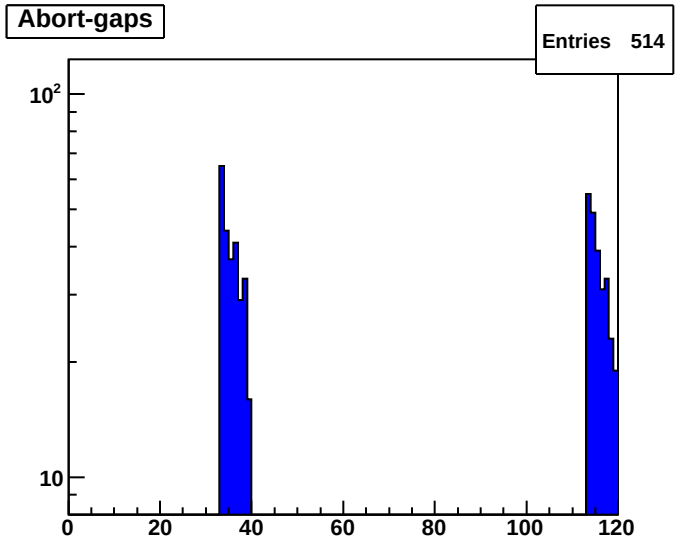

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

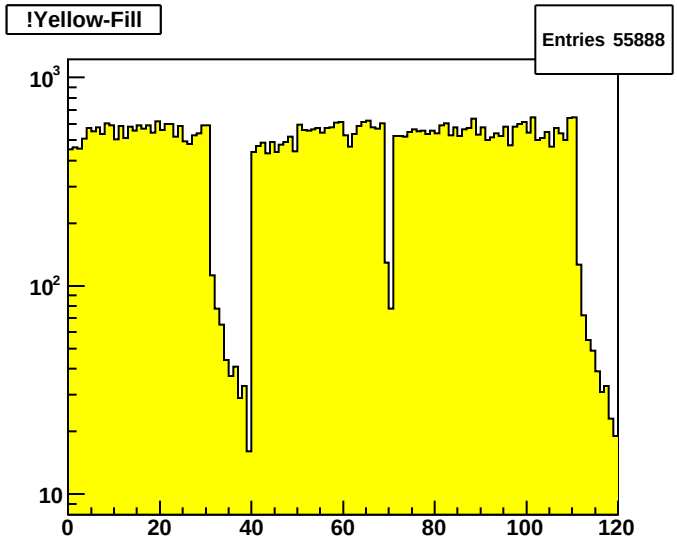

DAQ10k HT bits
Entries 670656
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

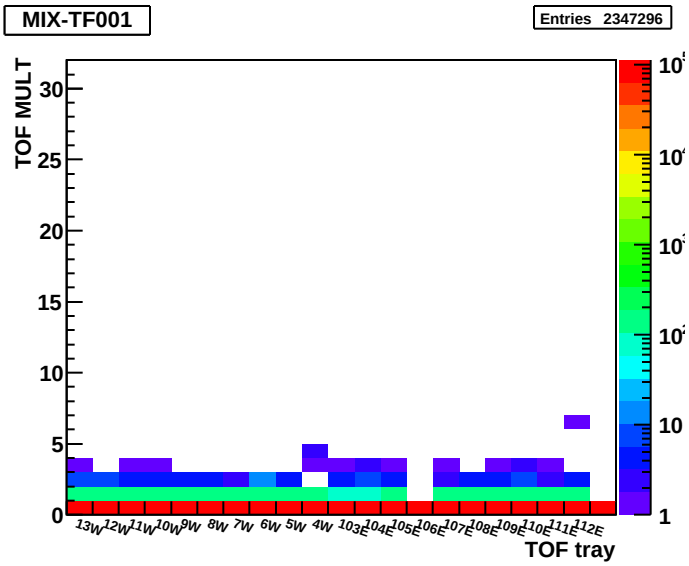

DAQ10k HT bits errors
Entries 670865
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

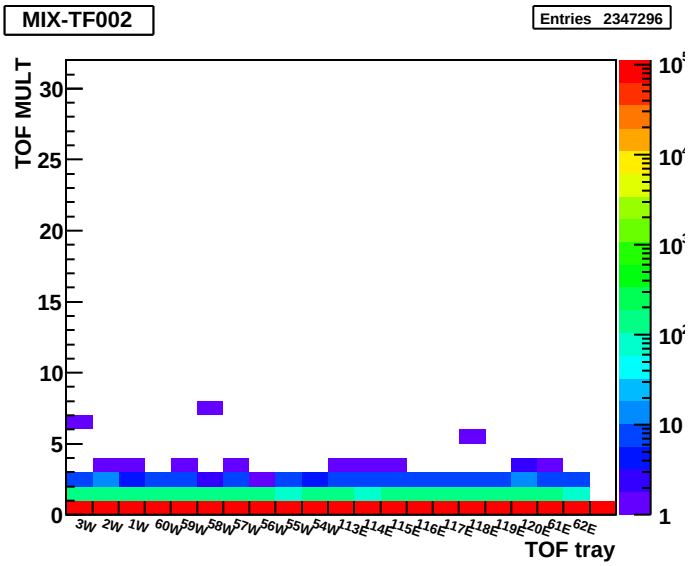

TPC Readout Mask (simulated)
Entries 726544
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30

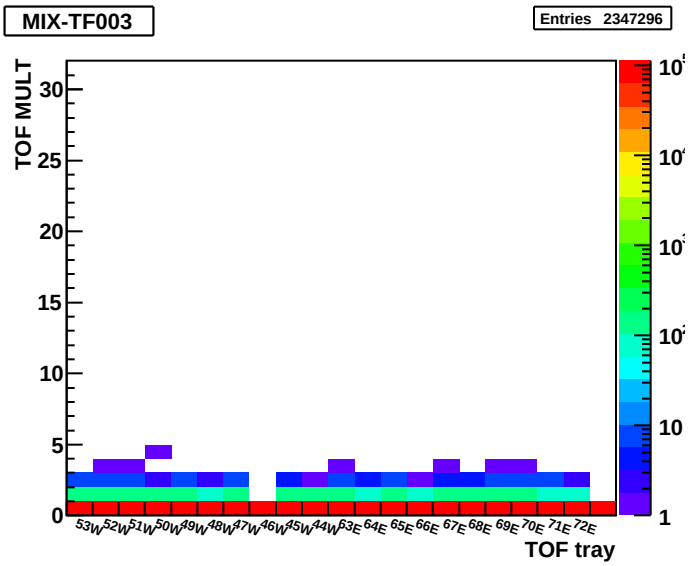

BunchId7Bit (all events)
Entries 55888
10^3
10^2
10
0 20 40 60 80 100 120

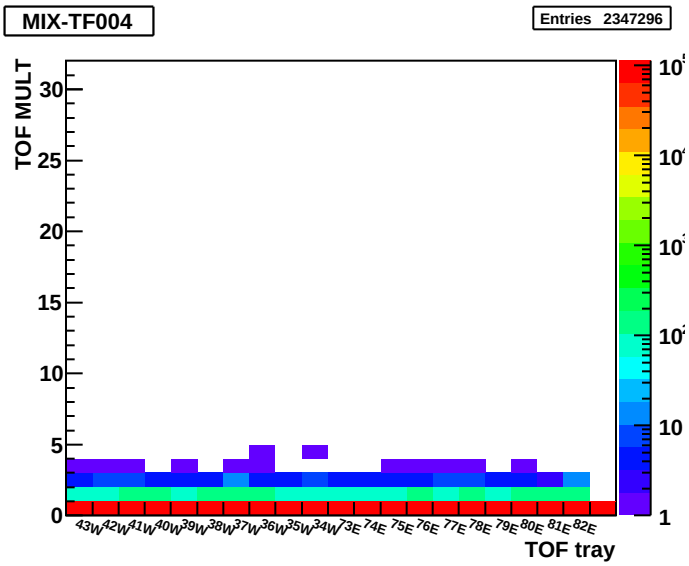

Abort-gaps
Entries 514
10^2
10
0 20 40 60 80 100 120

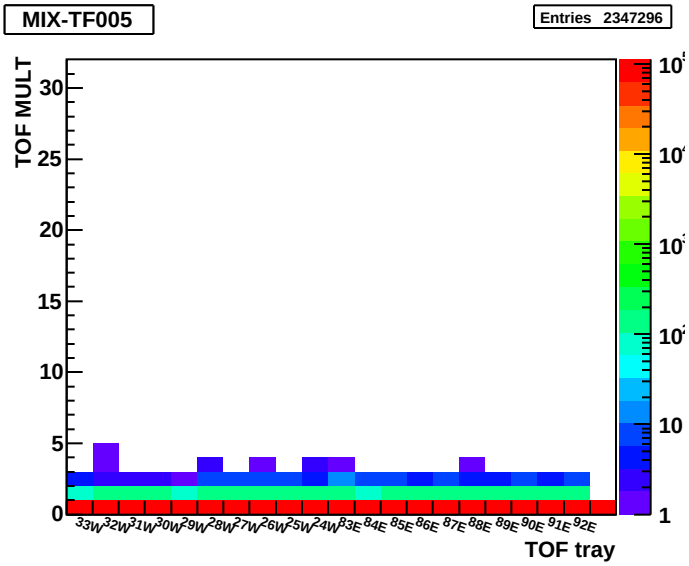

!Yellow-Fill
Entries 55888
10^3
10^2
10
0 20 40 60 80 100 120

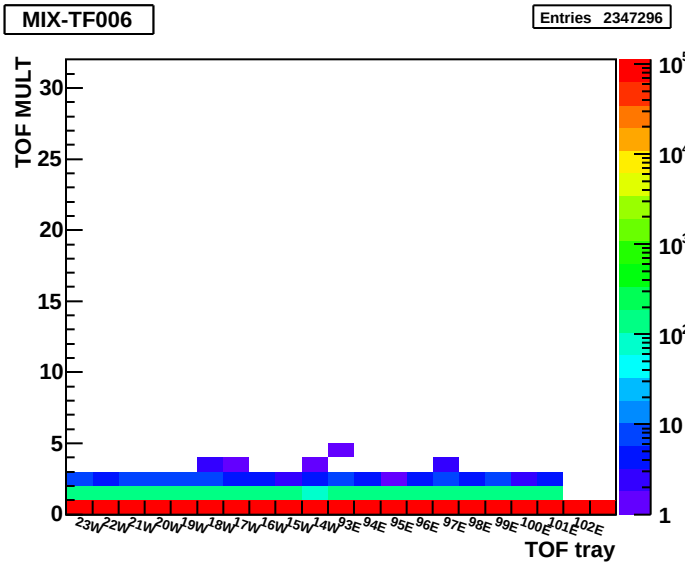

MIX-TF001
Entries 2347296
TOF MULT
TOF tray

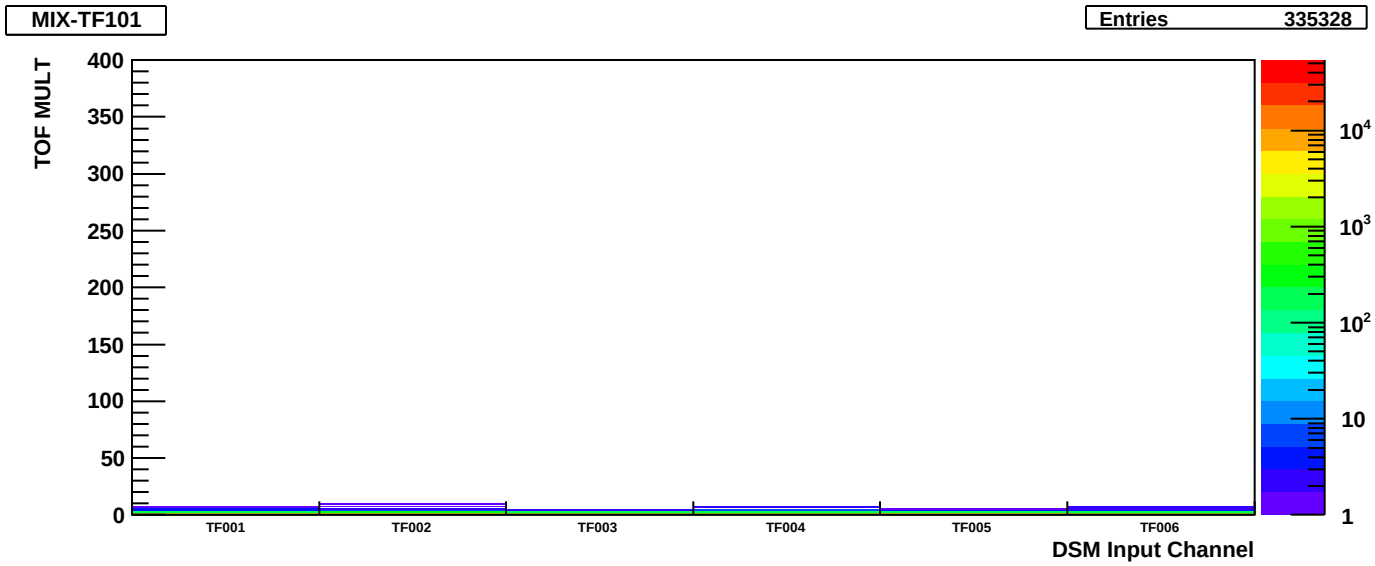

MIX-TF002
Entries 2347296
TOF MULT
TOF tray

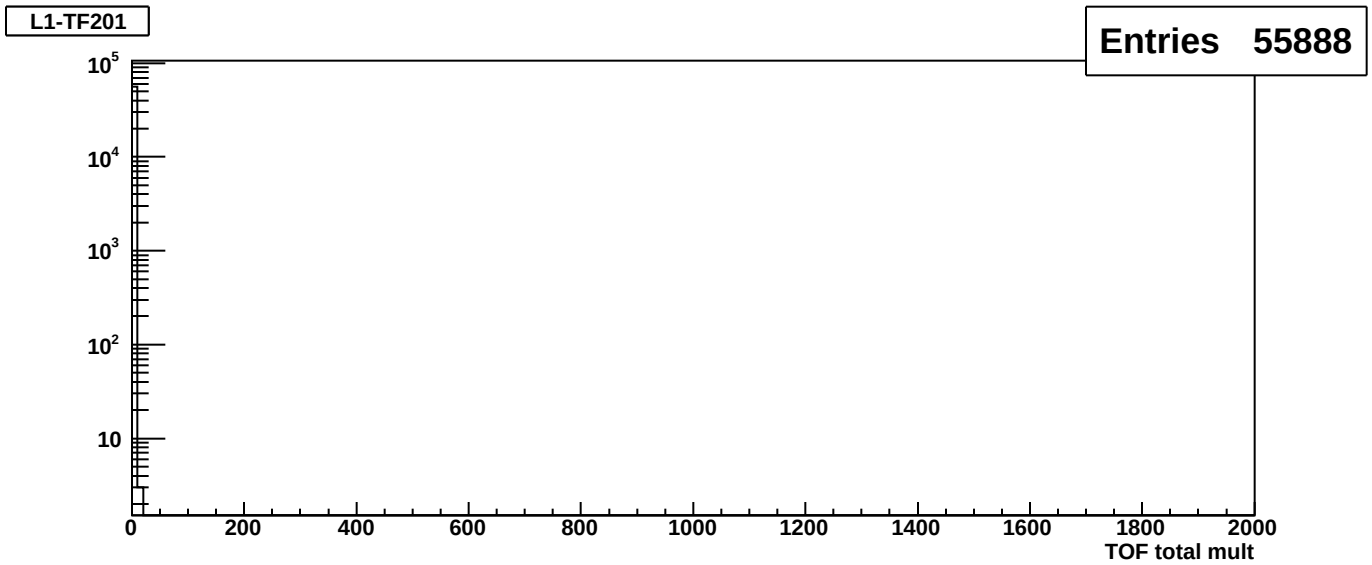

MIX-TF003
Entries 2347296
TOF MULT
TOF tray

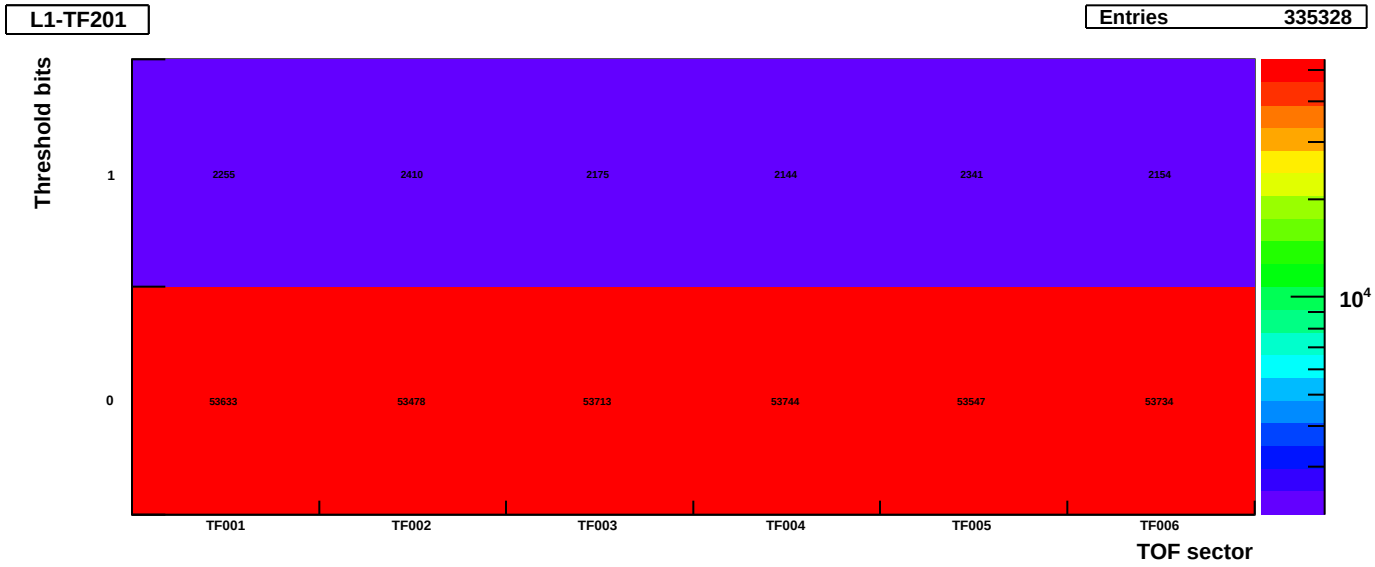

MIX-TF004
Entries 2347296
TOF MULT
TOF tray

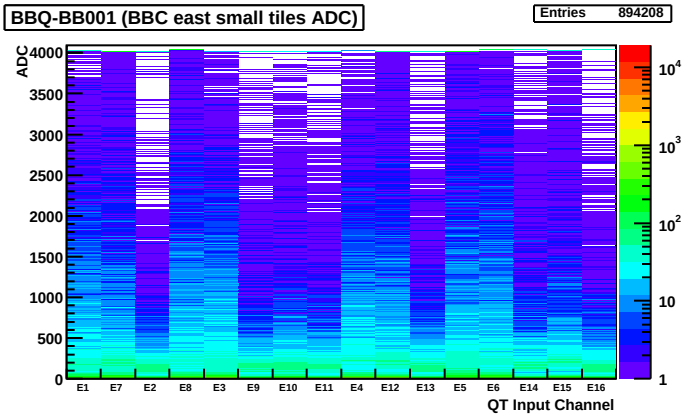

MIX-TF005
Entries 2347296
TOF MULT
TOF tray

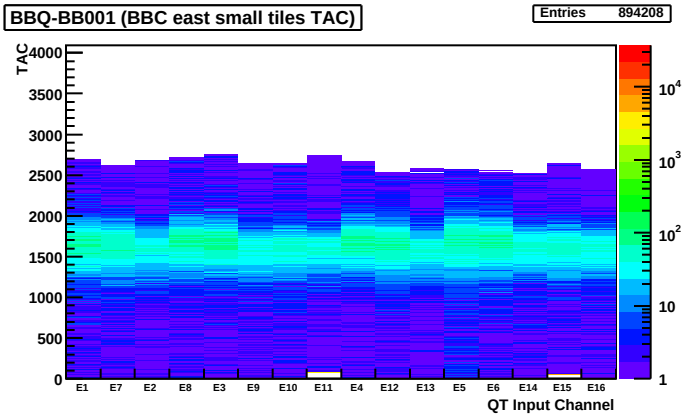

MIX-TF006
Entries 2347296
TOF MULT
TOF tray

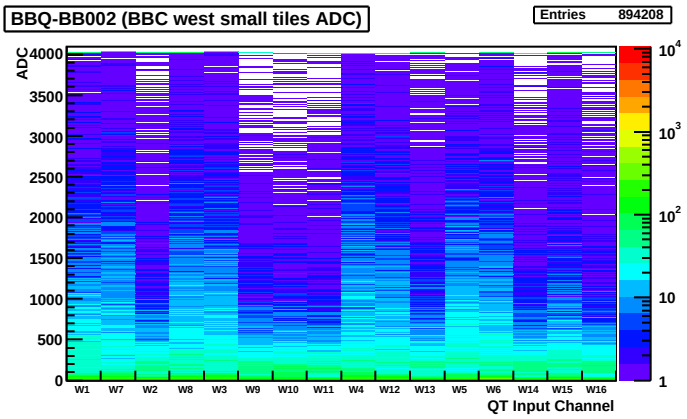

MIX-TF101
Entries 335328
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

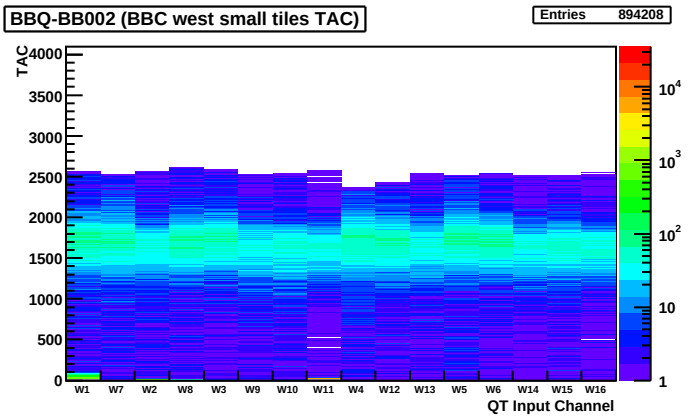

L1-TF201
Entries 55888
10^5
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

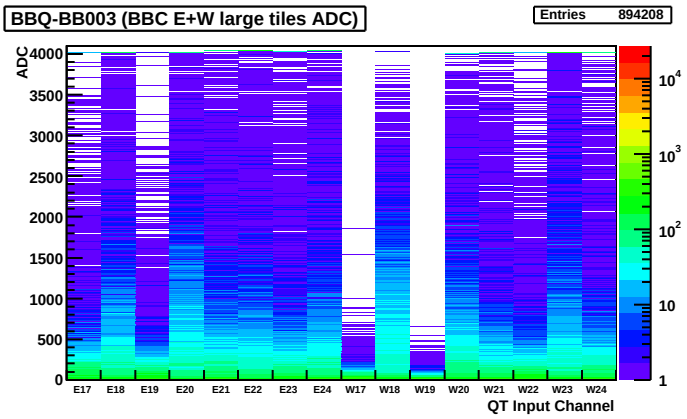

L1-TF201
Entries 335328
Threshold bits
1
0
2255
2410
2175
2144
2341
2154
53633
53478
53713
53744
53547
53734
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4

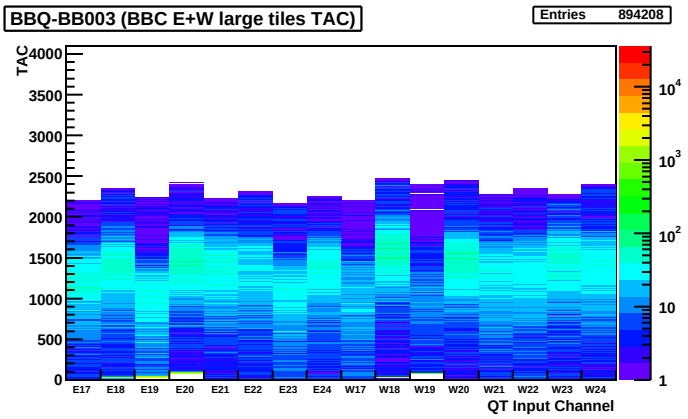

BBQ-BB001 (BBC east small tiles ADC)
Entries 894208
ADC
QT Input Channel

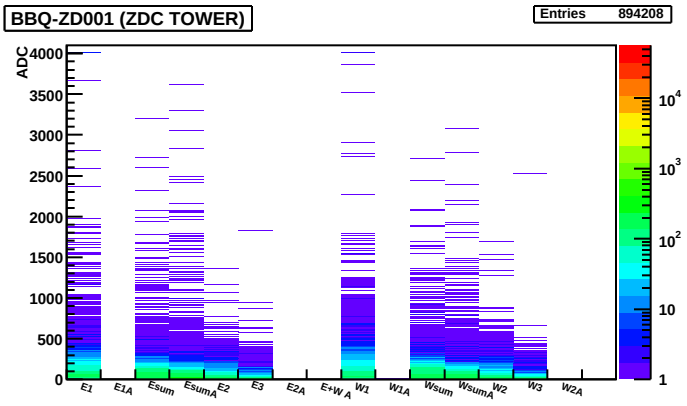

BBQ-BB001 (BBC east small tiles TAC)
Entries 894208
TAC
QT Input Channel

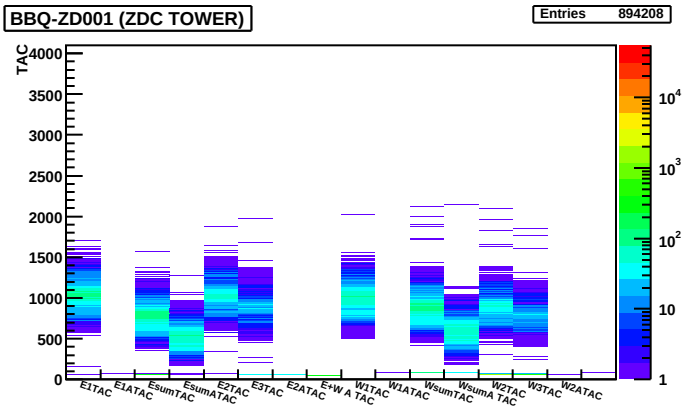

BBQ-BB002 (BBC west small tiles ADC)
Entries 894208
ADC
QT Input Channel

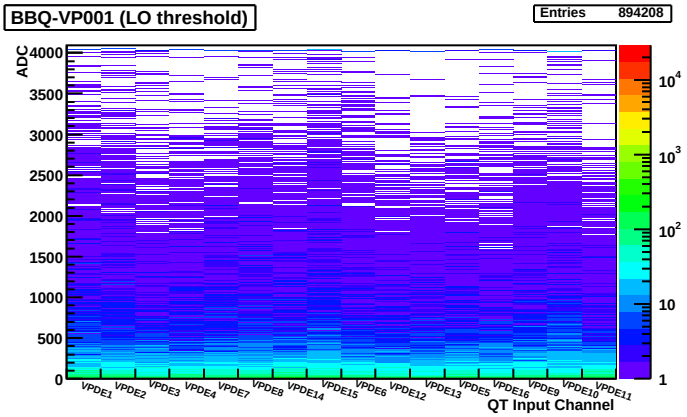

BBQ-BB002 (BBC west small tiles TAC)
Entries 894208
TAC
QT Input Channel

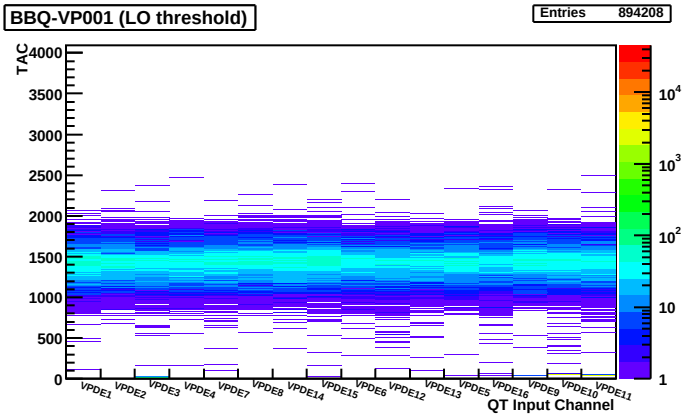

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 894208
ADC
QT Input Channel

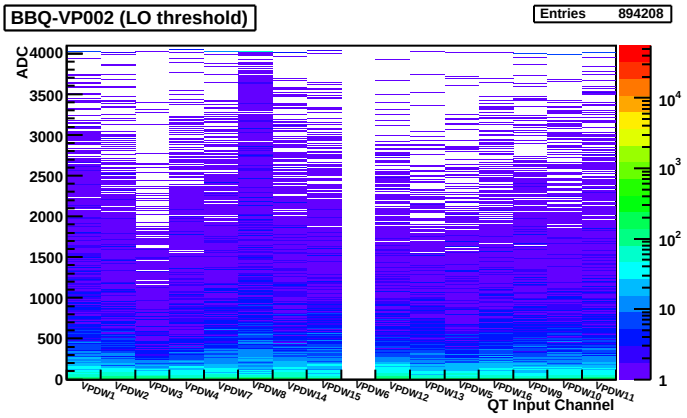

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 894208
TAC
QT Input Channel

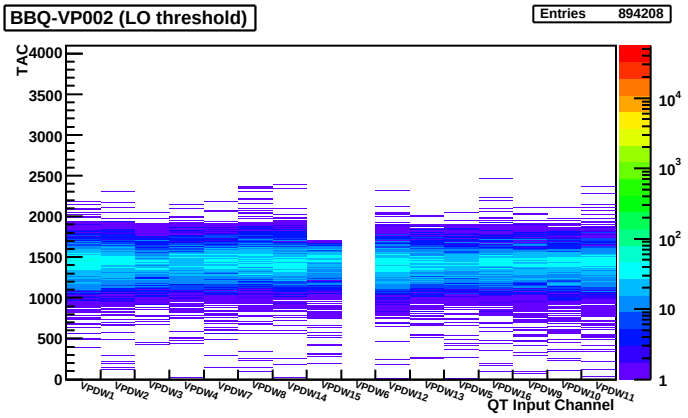

BBQ-ZD001 (ZDC TOWER)
Entries 894208
ADC

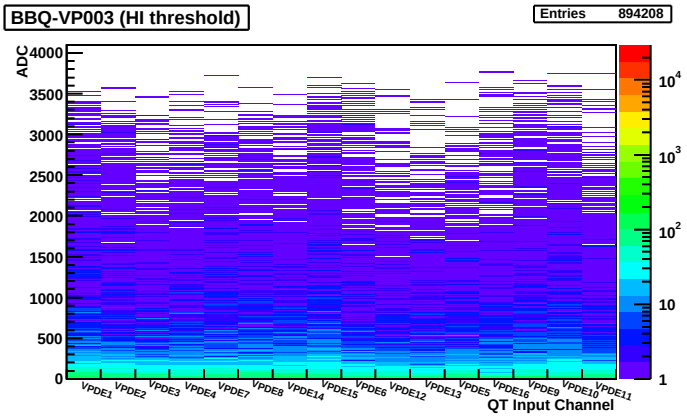

BBQ-ZD001 (ZDC TOWER)
Entries 894208
TAC

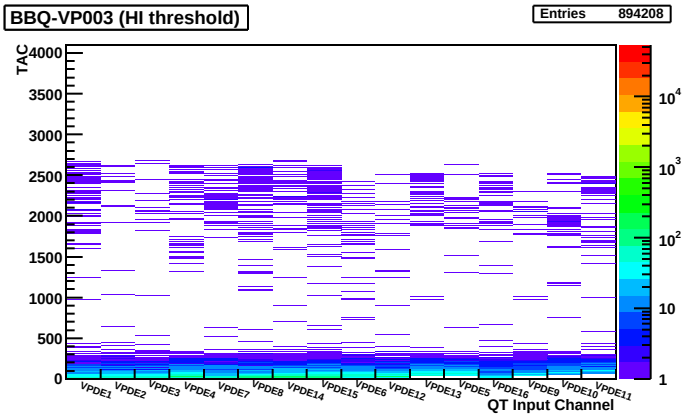

BBQ-VP001 (LO threshold)
Entries 894208
ADC
QT Input Channel

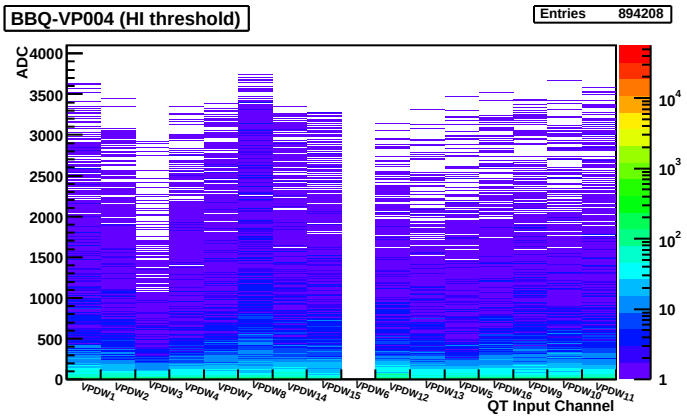

BBQ-VP001 (LO threshold)
Entries 894208
TAC
QT Input Channel

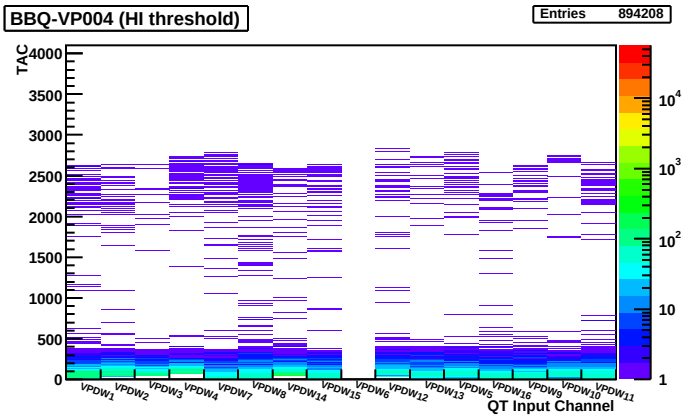

BBQ-VP002 (LO threshold)
Entries 894208
ADC
QT Input Channel

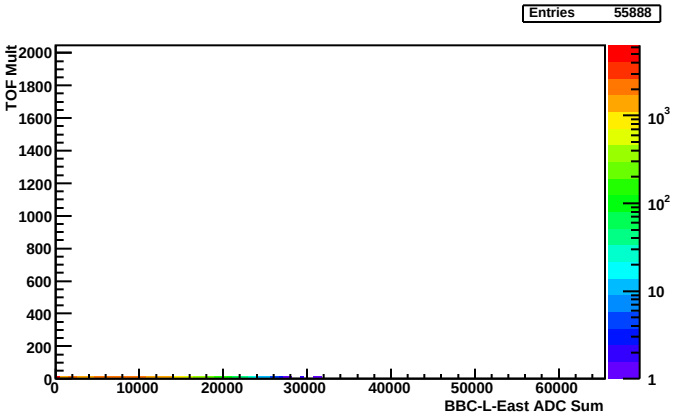

BBQ-VP002 (LO threshold)
Entries 894208
TAC
QT Input Channel

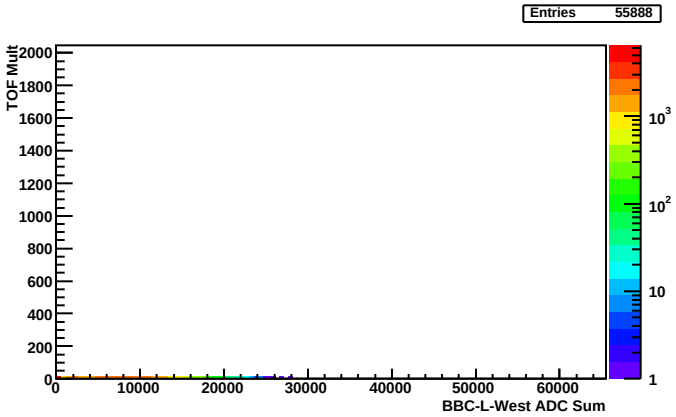

BBQ-VP003 (HI threshold)
Entries 894208
ADC
QT Input Channel

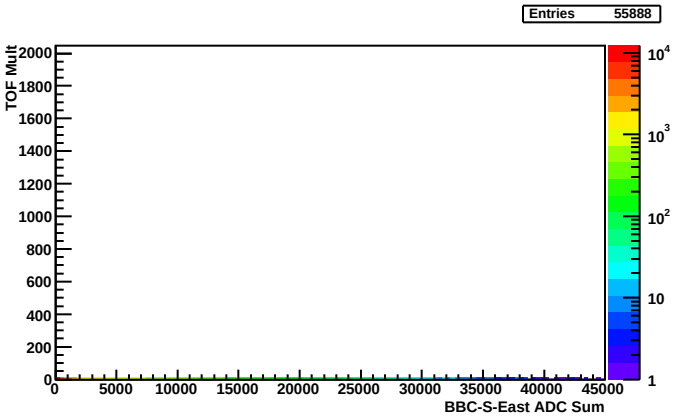

BBQ-VP003 (HI threshold)
Entries 894208
TAC
QT Input Channel

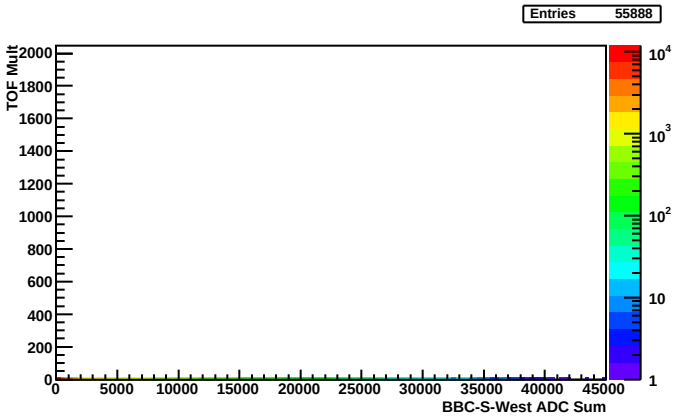

BBQ-VP004 (HI threshold)
Entries 894208
ADC
QT Input Channel

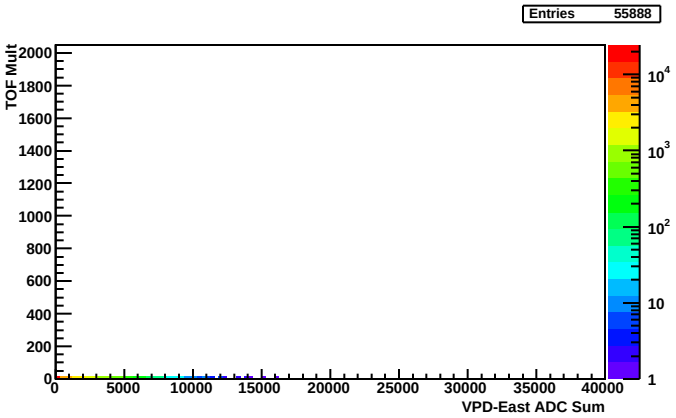

BBQ-VP004 (HI threshold)
Entries 894208
TAC
QT Input Channel

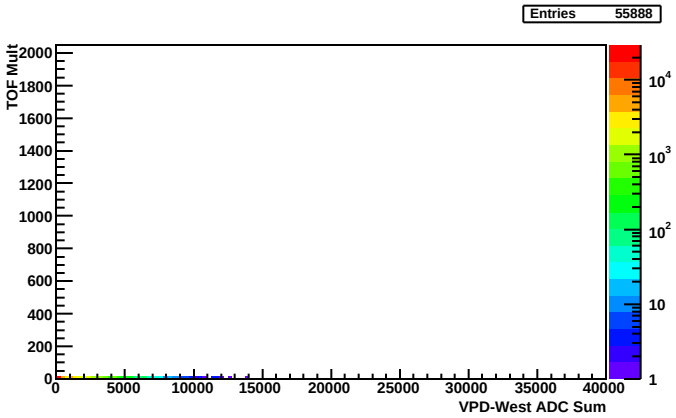

Entries 55888
TOF Mult
BBC-L-East ADC Sum

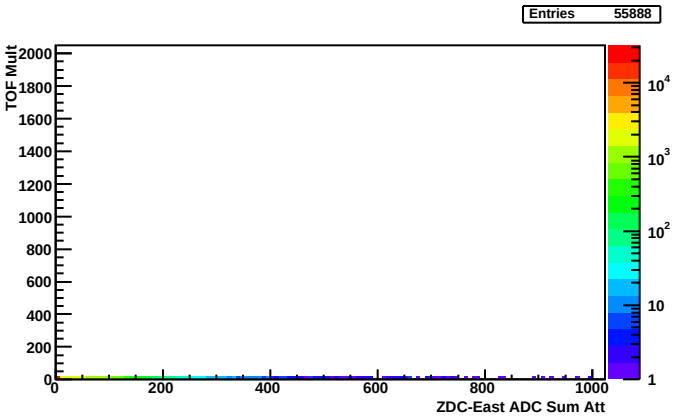

Entries 55888
TOF Mult
BBC-L-West ADC Sum

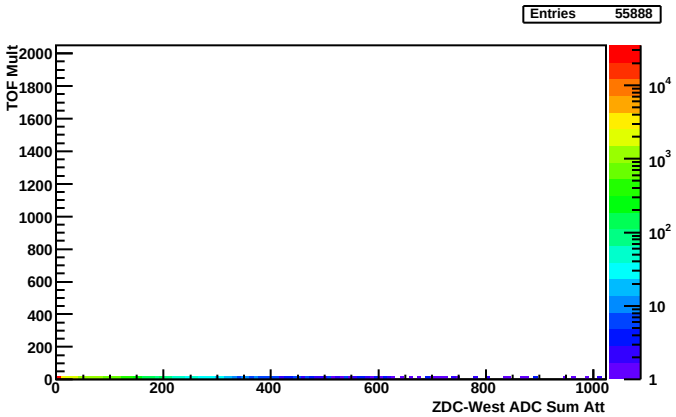

Entries 55888
TOF Mult
BBC-S-East ADC Sum

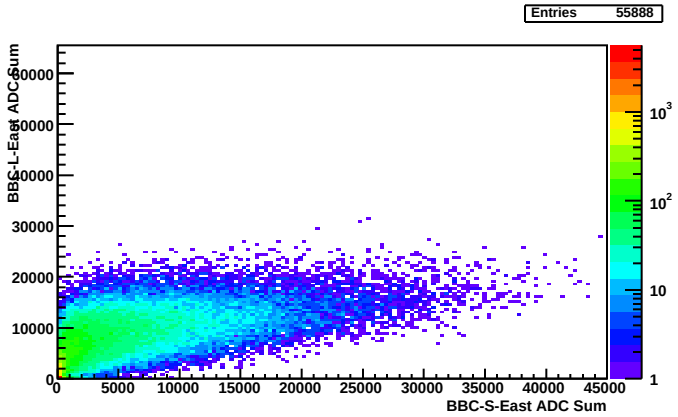

Entries 55888
TOF Mult
BBC-S-West ADC Sum

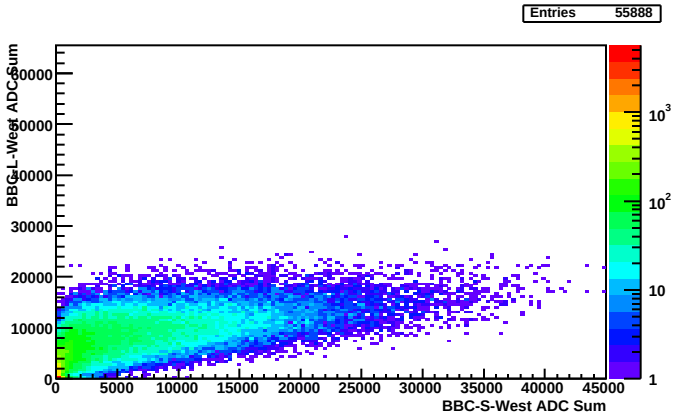

Entries 55888
TOF Mult
VPD-East ADC Sum

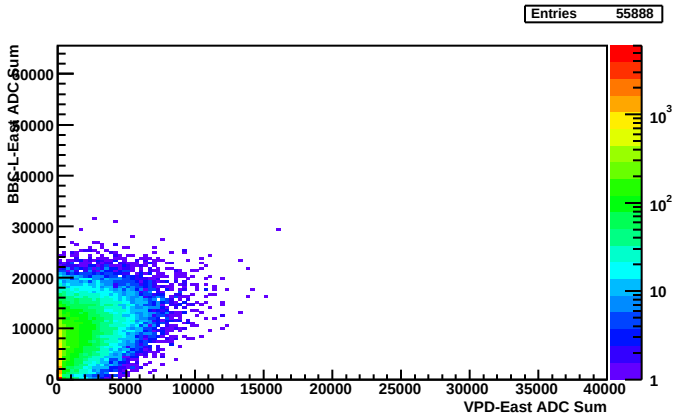

Entries 55888
TOF Mult
VPD-West ADC Sum

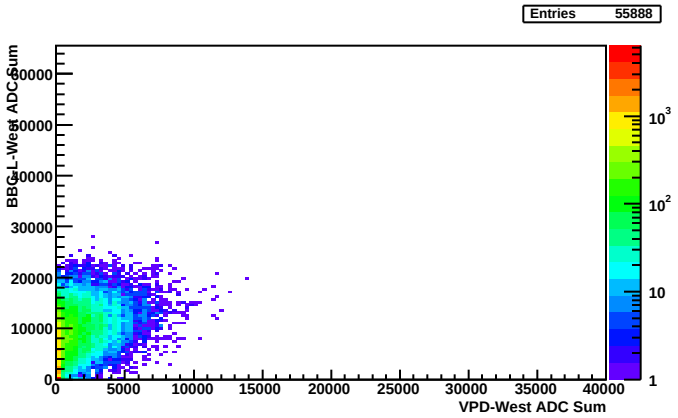

Entries 55888
TOF Mult
ZDC-East ADC Sum Att

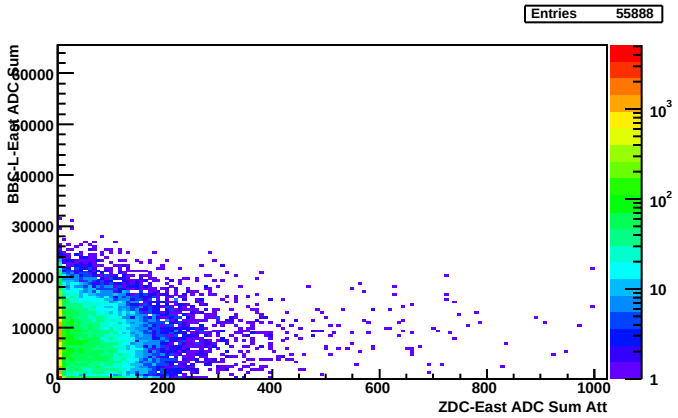

Entries 55888
TOF Mult
ZDC-West ADC Sum Att

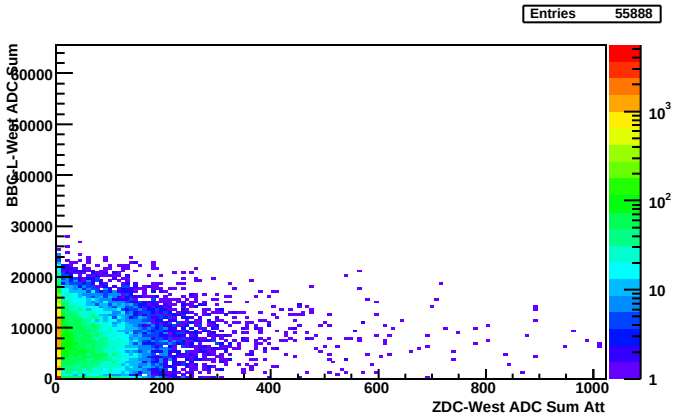

Entries 55888
BBC-L-East ADC Sum
BBC-S-East ADC Sum

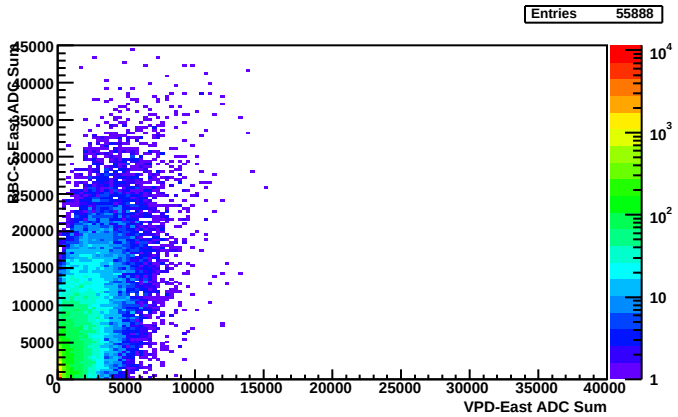

Entries 55888
BBC-L-West ADC Sum
BBC-S-West ADC Sum

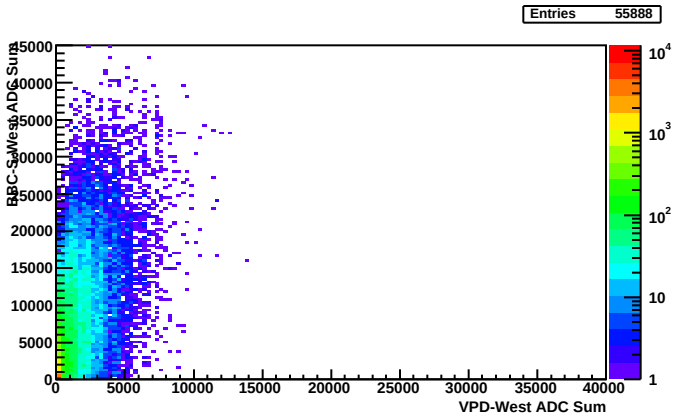

Entries 55888
BBC-L-East ADC Sum
VPD-East ADC Sum

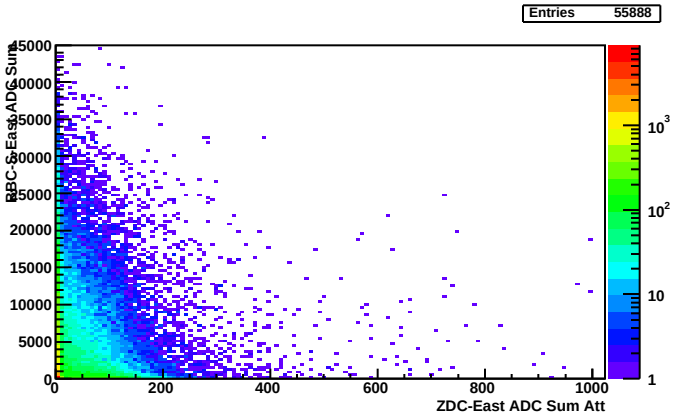

Entries 55888
BBC-L-West ADC Sum
VPD-West ADC Sum

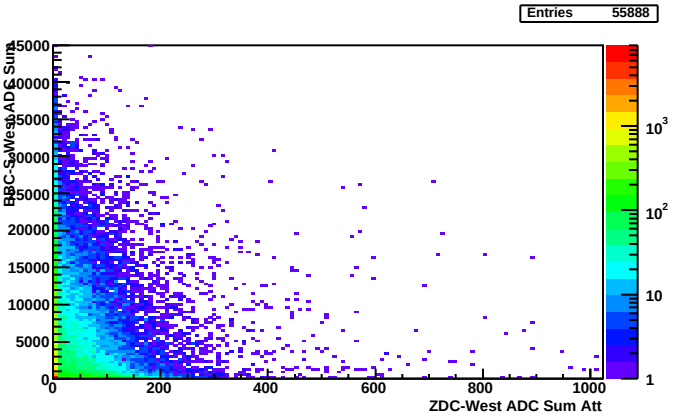

Entries 55888
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

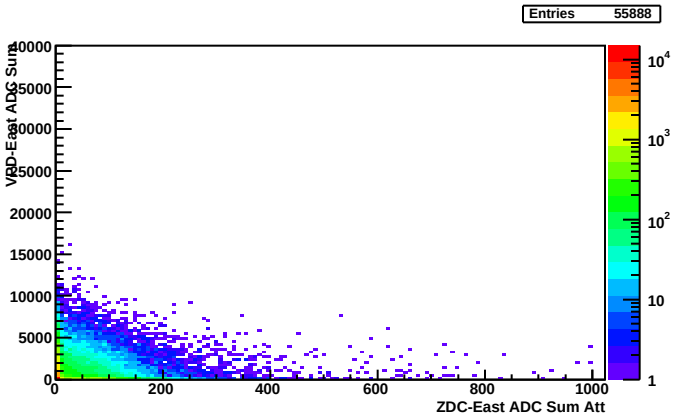

Entries 55888
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

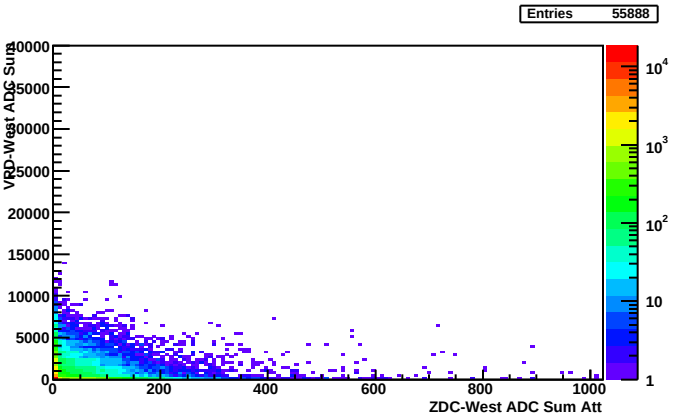

Entries 55888
BBC-S-East ADC Sum
VPD-East ADC Sum

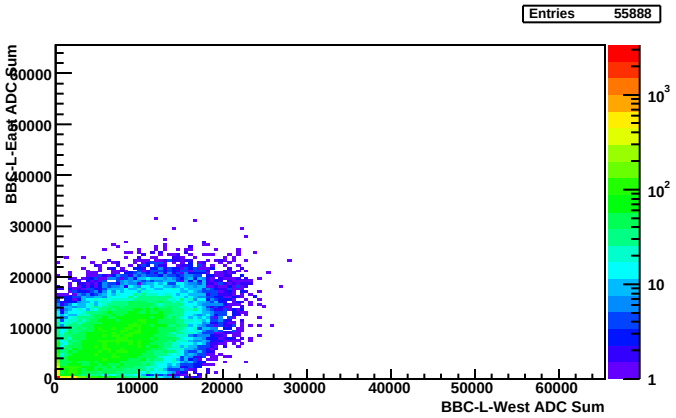

Entries 55888
BBC-S-West ADC Sum
VPD-West ADC Sum

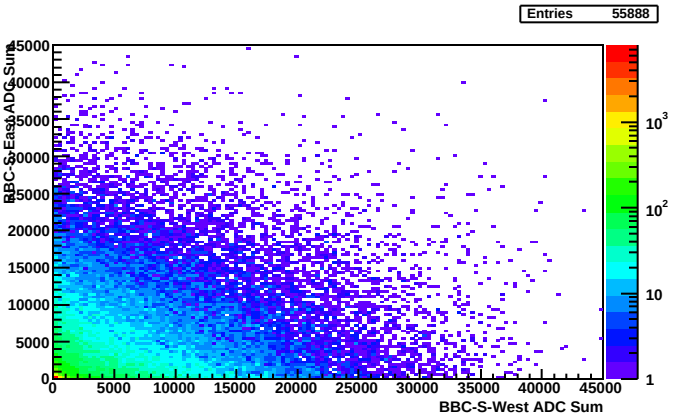

Entries 55888
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

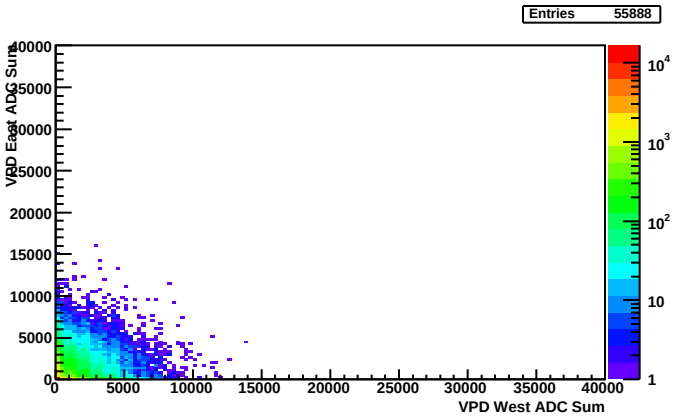

Entries 55888
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

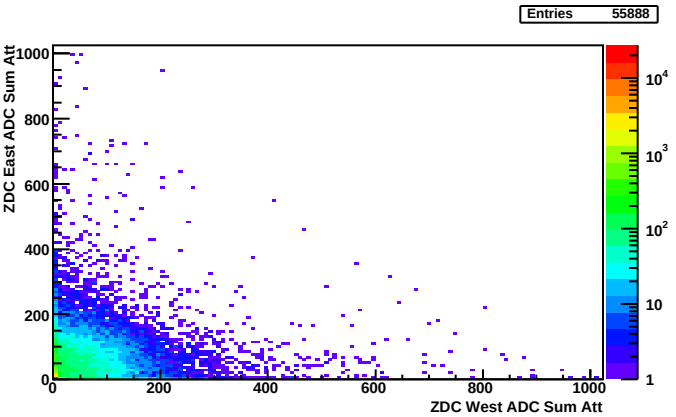

Entries 55888
VPD-East ADC Sum
ZDC-East ADC Sum Att

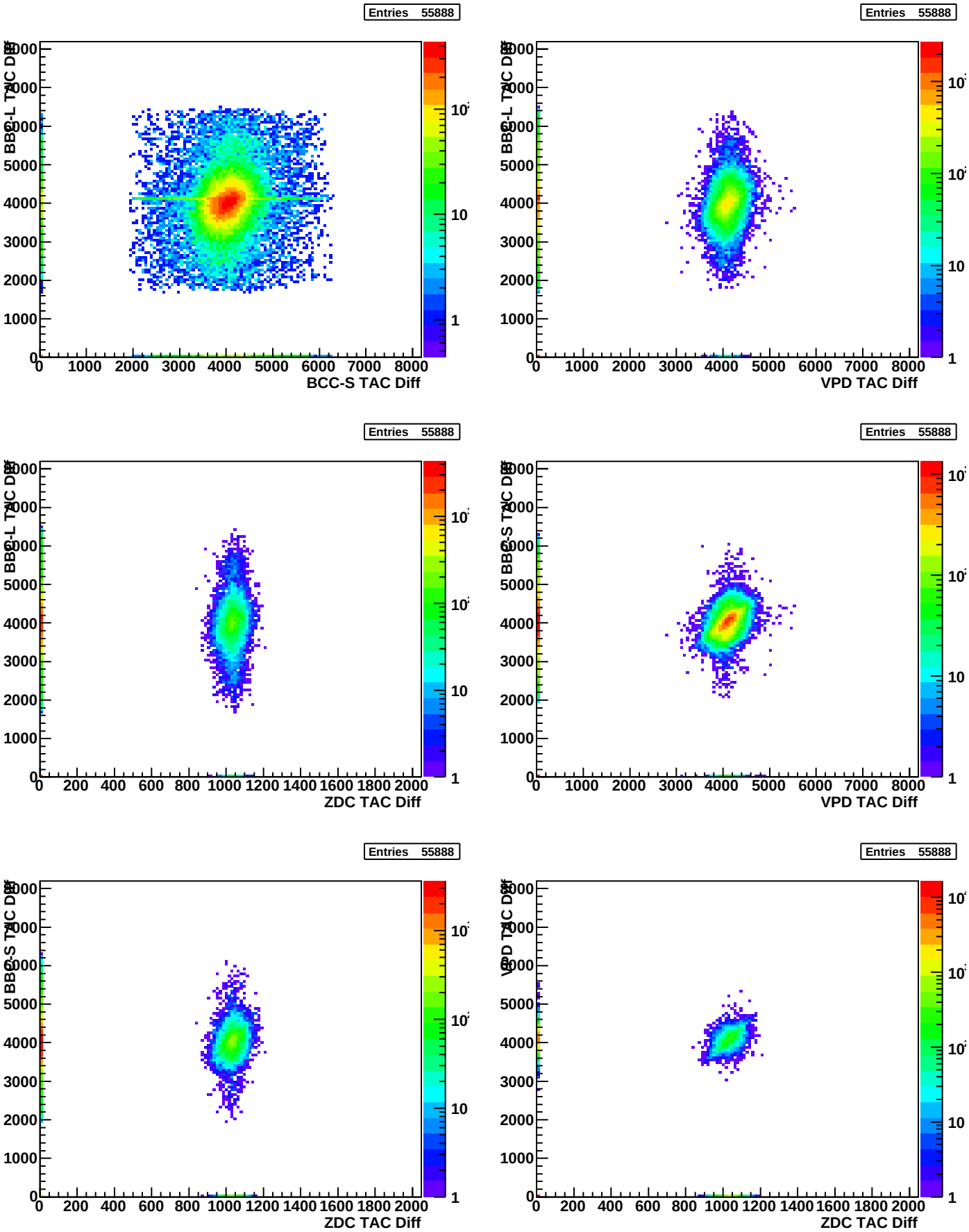

Entries 55888
VPD-West ADC Sum
ZDC-West ADC Sum Att

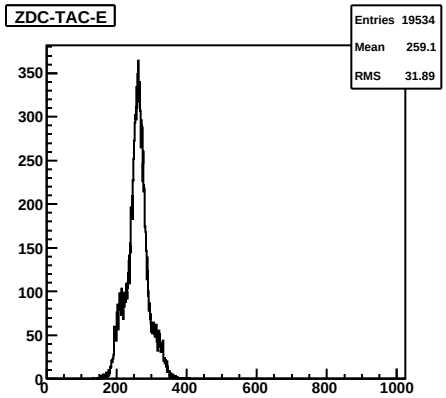

Entries 55888
BBC-L-East ADC Sum
BBC-L-West ADC Sum

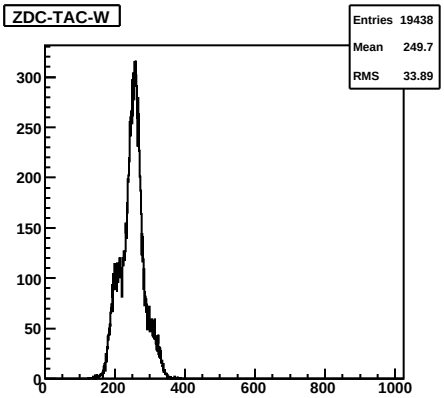

Entries 55888
BBC-S-East ADC Sum
BBC-S-West ADC Sum

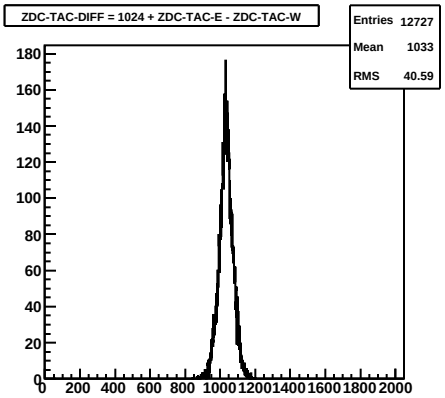

Entries 55888
VPD East ADC Sum
VPD West ADC Sum

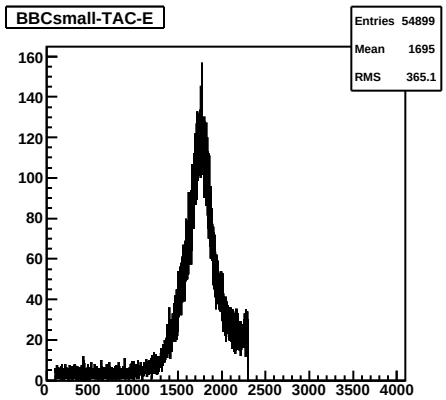

Entries 55888
ZDC East ADC Sum Att
ZDC West ADC Sum Att

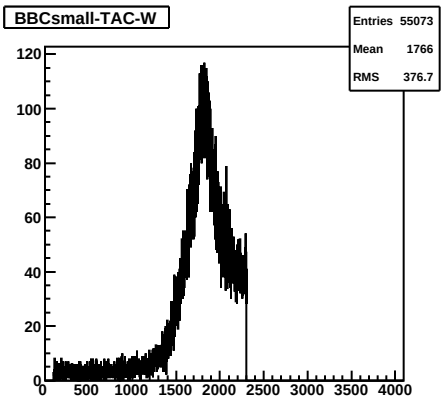

Entries 55888
BBC-L TAC Diff
BCC-S TAC Diff
Entries 55888
BBC-L TAC Diff
VPD TAC Diff
Entries 55888
BBC-L TAC Diff
ZDC TAC Diff
Entries 55888
BBC-S TAC Diff
VPD TAC Diff
Entries 55888
BBC-S TAC Diff
ZDC TAC Diff
Entries 55888
VPD TAC Diff
ZDC TAC Diff

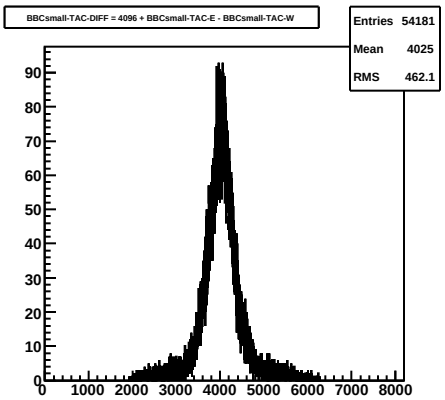

ZDC-TAC-E
Entries 19534
Mean 259.1
RMS 31.89

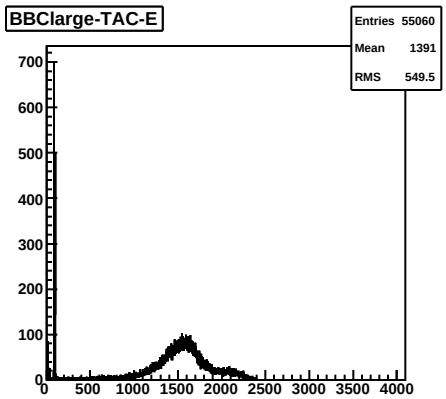

ZDC-TAC-W
Entries 19438
Mean 249.7
RMS 33.89

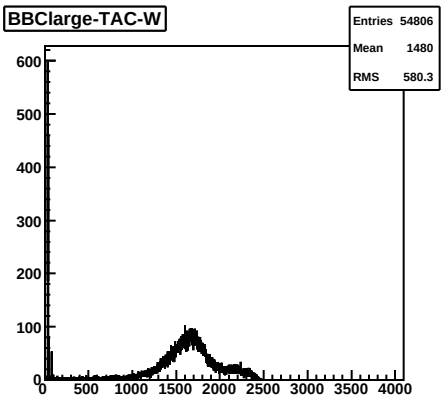

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 12727
Mean 1033
RMS 40.59

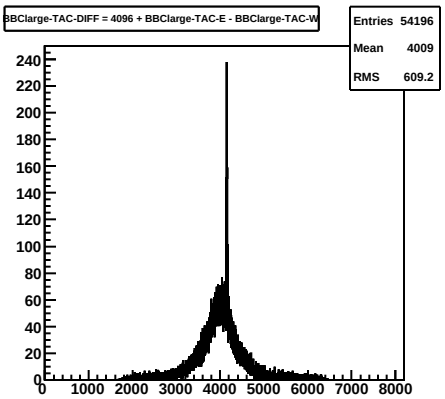

BBCsmall-TAC-E
Entries 54899
Mean 1695
RMS 365.1

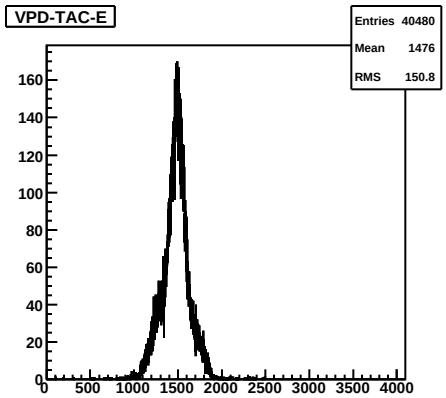

BBCsmall-TAC-W
Entries 55073
Mean 1766
RMS 376.7

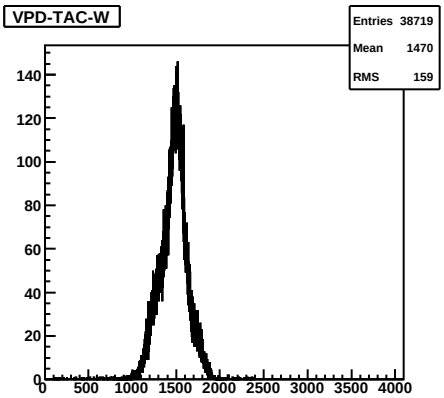

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 54181
Mean 4025
RMS 462.1

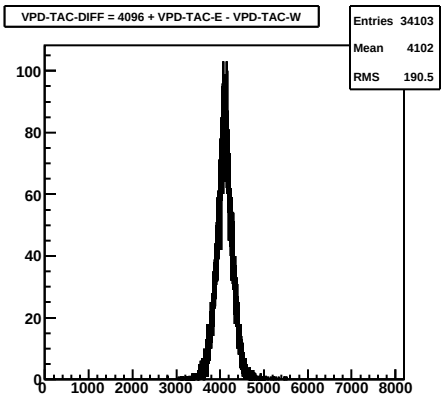

BBClarge-TAC-E
Entries 55060
Mean 1391
RMS 549.5

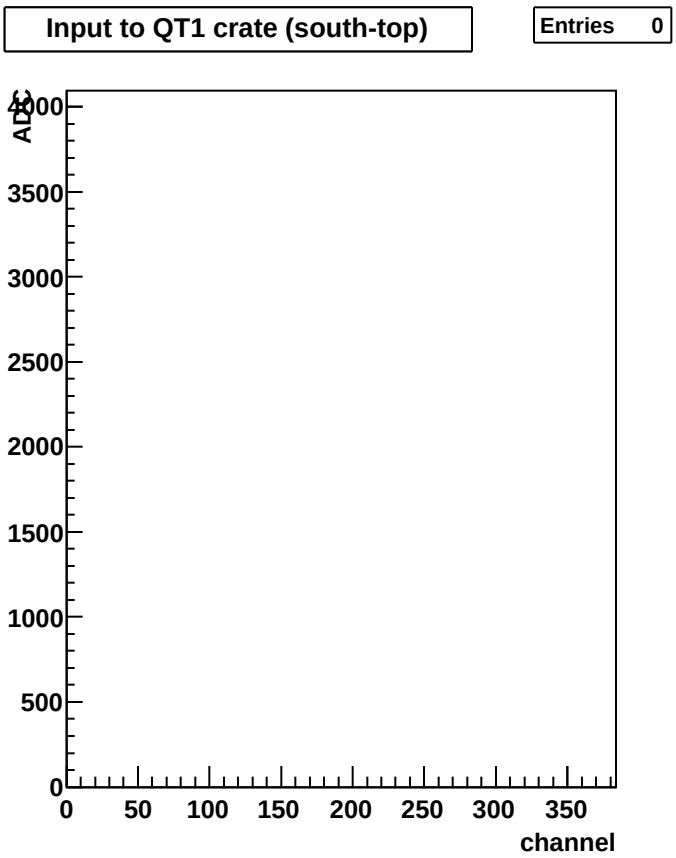

BBClarge-TAC-W
Entries 54806
Mean 1480
RMS 580.3

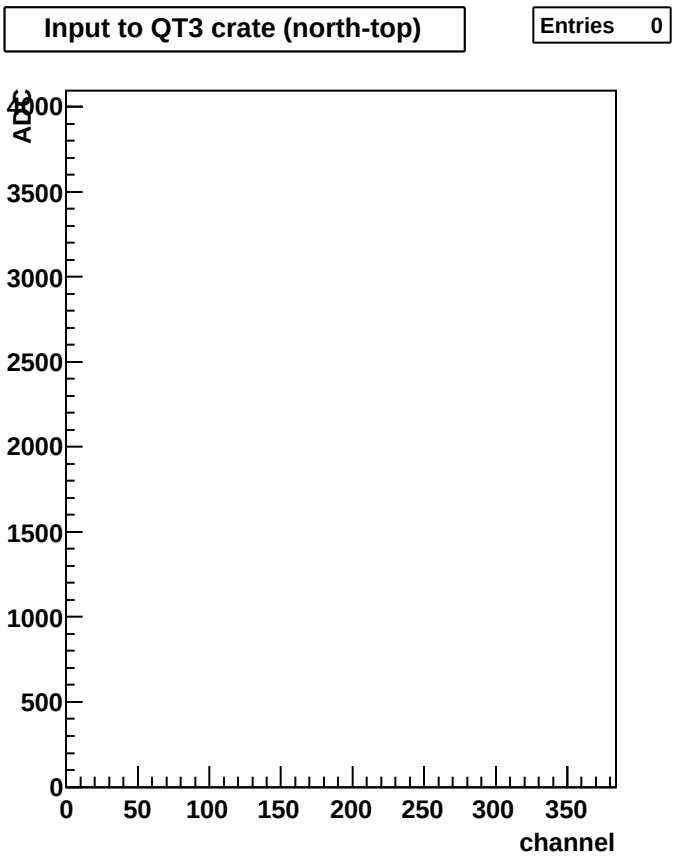

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 54196
Mean 4009
RMS 609.2

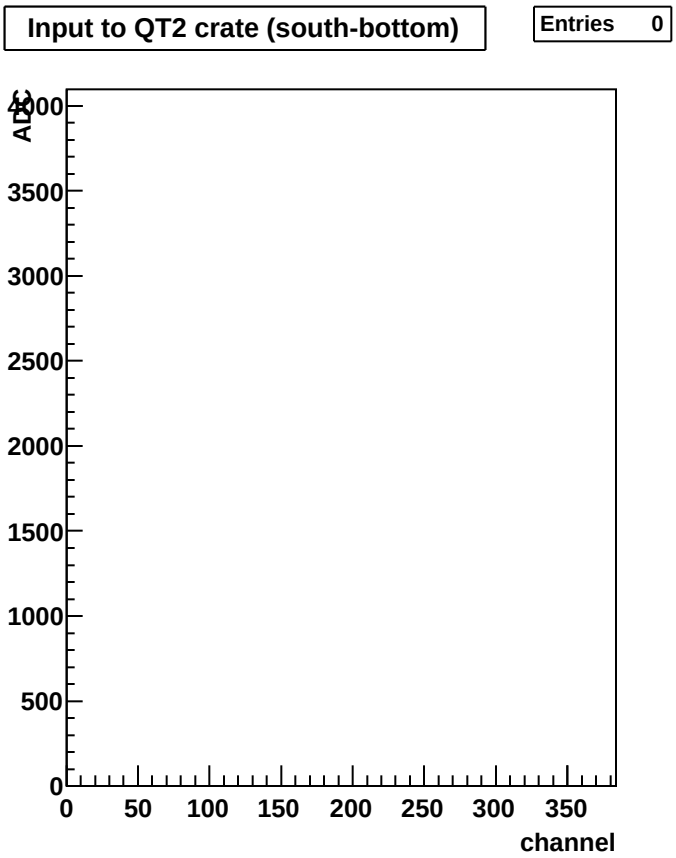

VPD-TAC-E
Entries 40480
Mean 1476
RMS 150.8

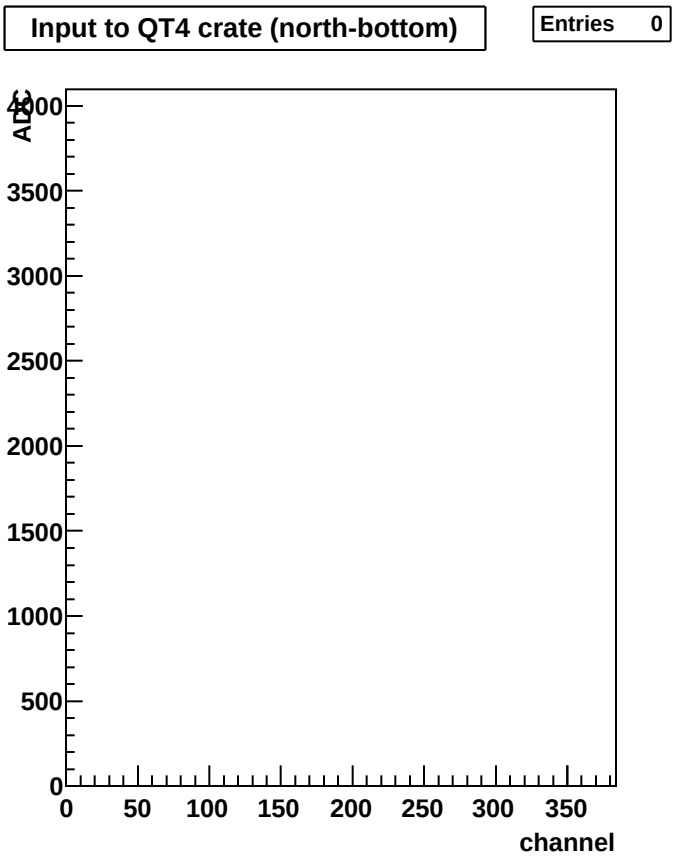

VPD-TAC-W
Entries 38719
Mean 1470
RMS 159

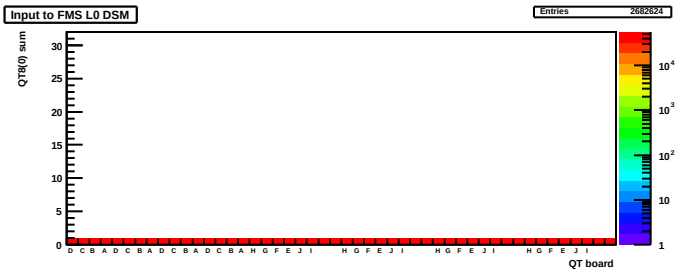

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 34103
Mean 4102
RMS 190.5

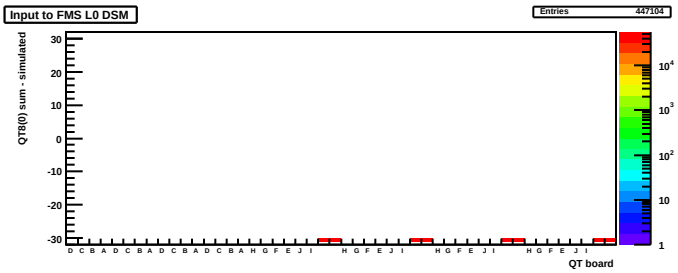

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

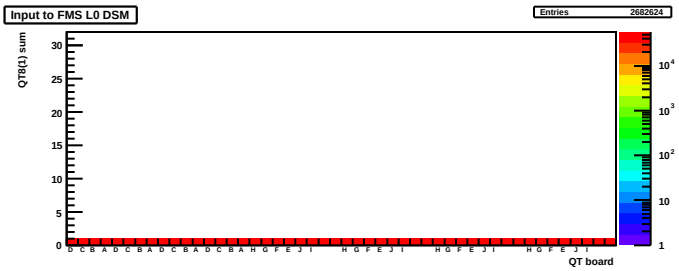

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

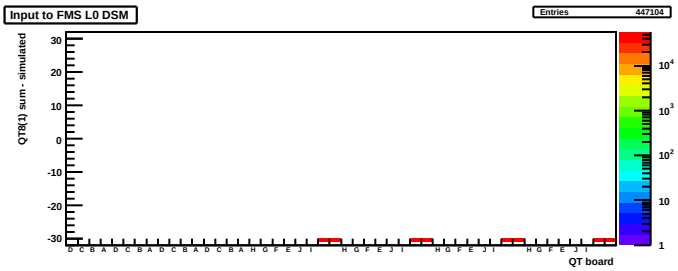

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

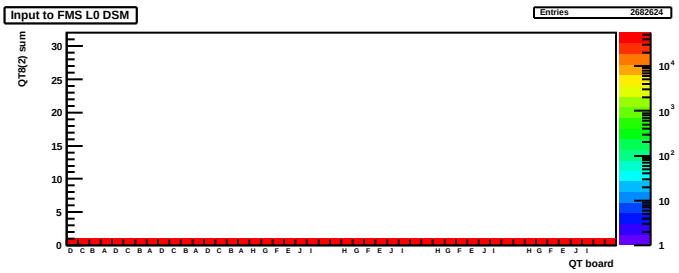

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

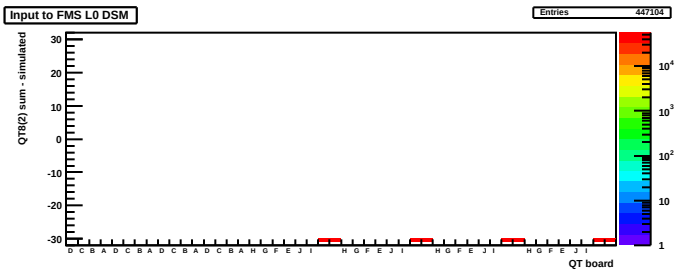

Input to FMS L0 DSM
Entries 2682624
QT8(0) sum
QT board

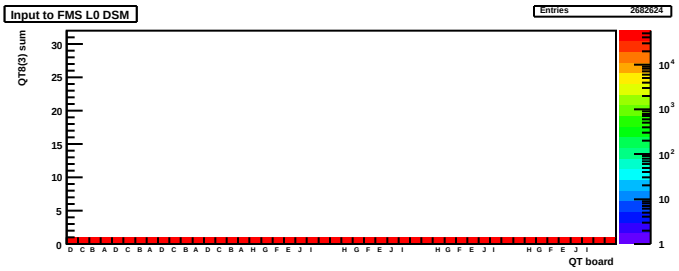

Input to FMS L0 DSM
Entries 447104
QT8(0) sum - simulated
QT board

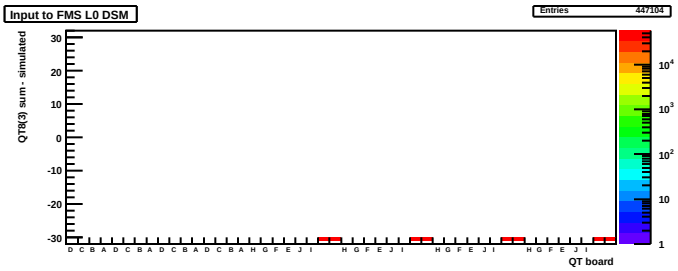

Input to FMS L0 DSM
Entries 2682624
QT8(1) sum
QT board

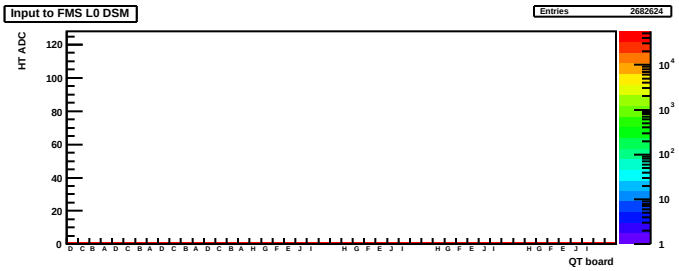

Input to FMS L0 DSM
Entries 447104
QT8(1) sum - simulated
QT board

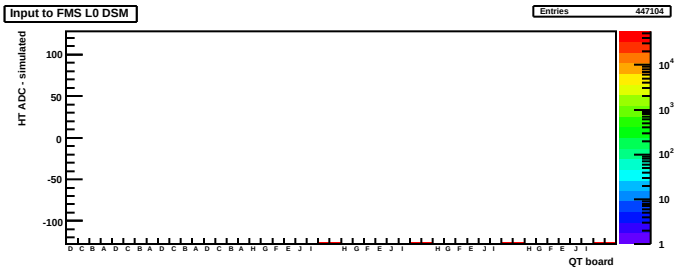

Input to FMS L0 DSM
Entries 2682624
QT8(2) sum
QT board

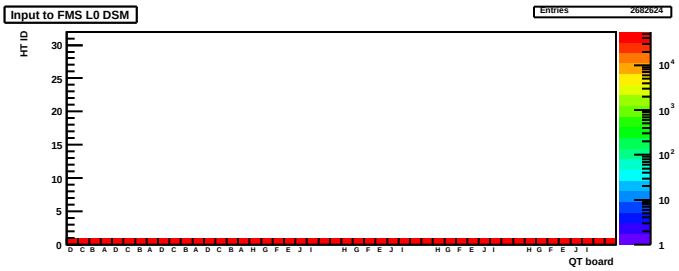

Input to FMS L0 DSM
Entries 447104
QT8(2) sum - simulated
QT board

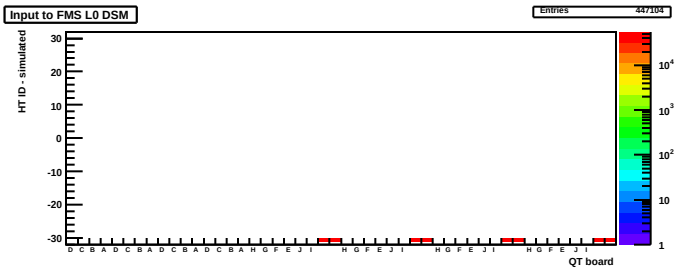

Input to FMS L0 DSM
Entries 2682624
QT8(3) sum
QT board

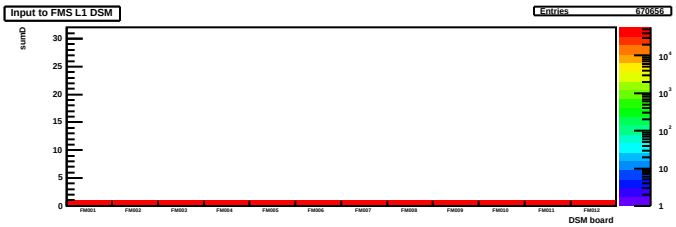

Input to FMS L0 DSM
Entries 447104
QT8(3) sum - simulated
QT board

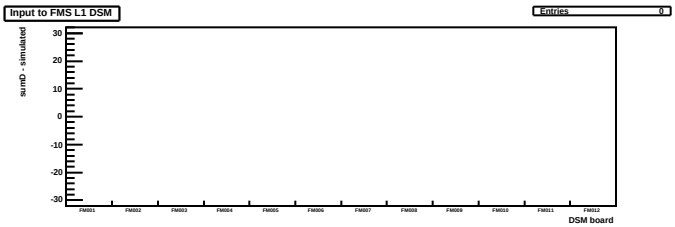

Input to FMS L0 DSM
Entries 2682624
HT ADC
QT board

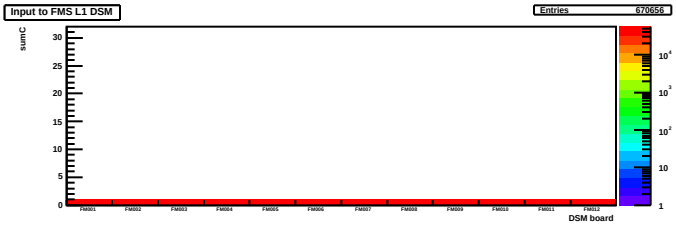

Input to FMS L0 DSM
Entries 447104
HT ADC - simulated
QT board

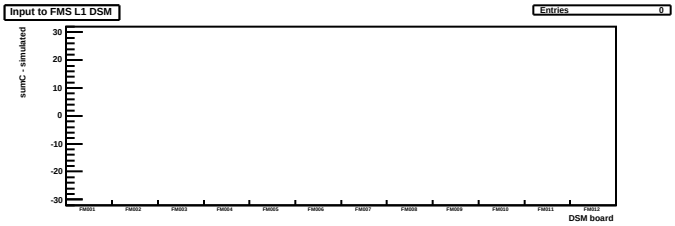

Input to FMS L0 DSM
Entries 2682624
HT ID
QT board

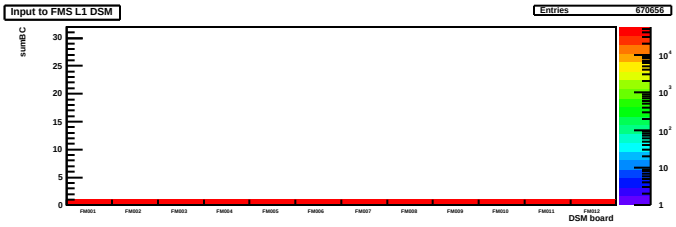

Input to FMS L0 DSM
Entries 447104
HT ID - simulated
QT board

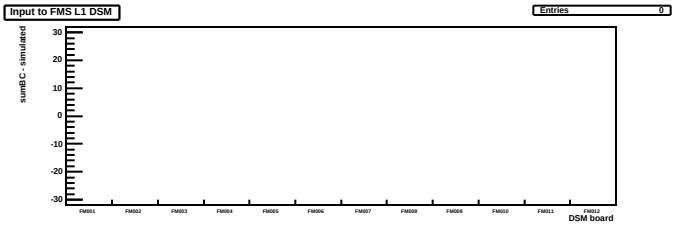

Input to FMS L1 DSM
Entries 670656
sumD
DSM board

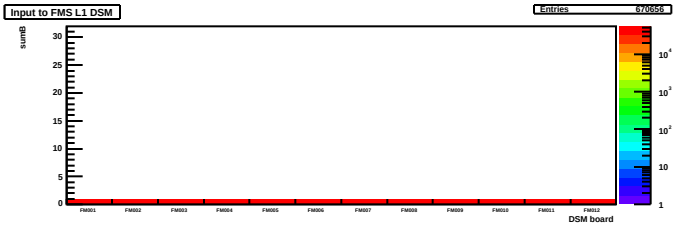

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

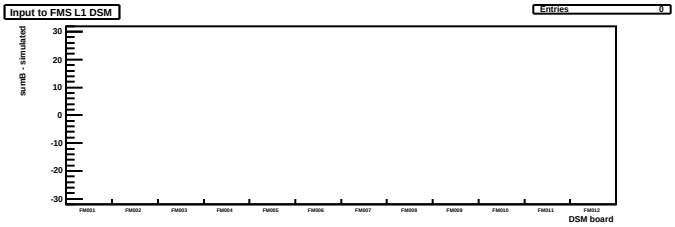

Input to FMS L1 DSM
Entries 670656
sumC
DSM board

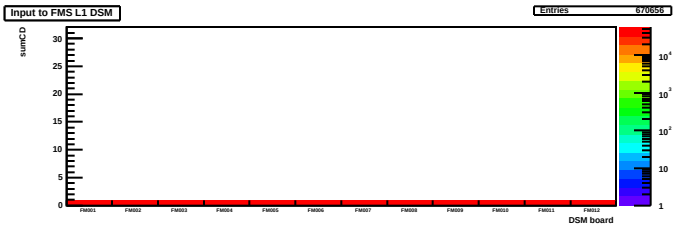

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

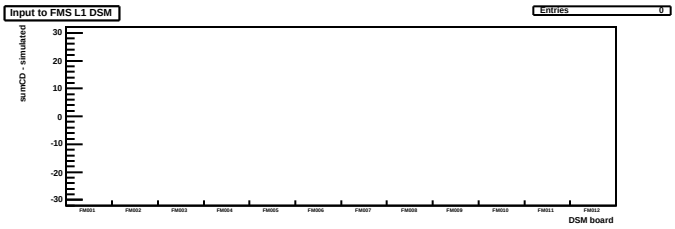

Input to FMS L1 DSM
Entries 670656
sumBC
DSM board

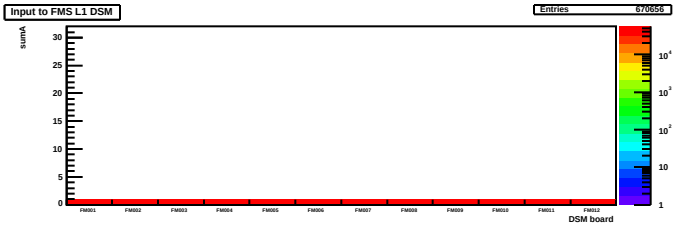

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

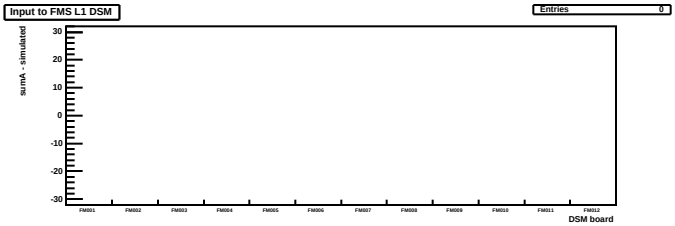

Input to FMS L1 DSM
Entries 670656
sumB
DSM board

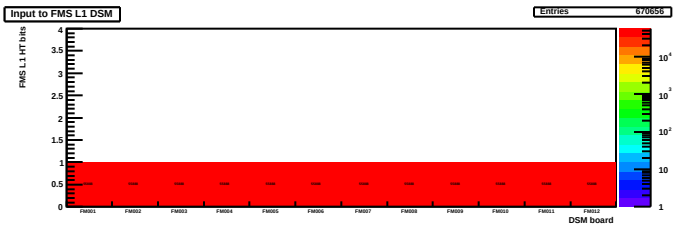

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

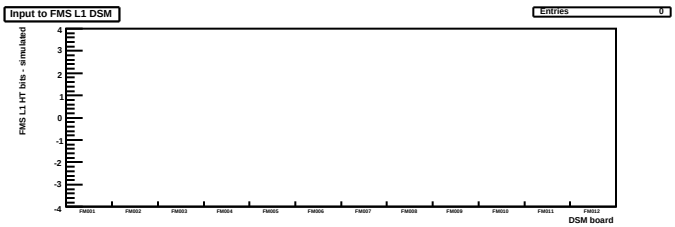

Input to FMS L1 DSM
Entries 670656
sumCD
DSM board

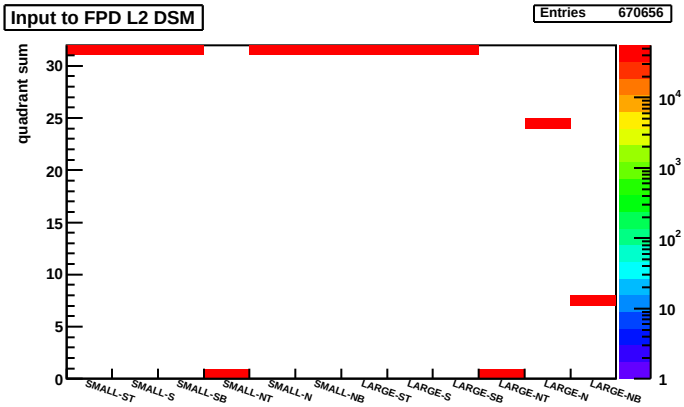

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

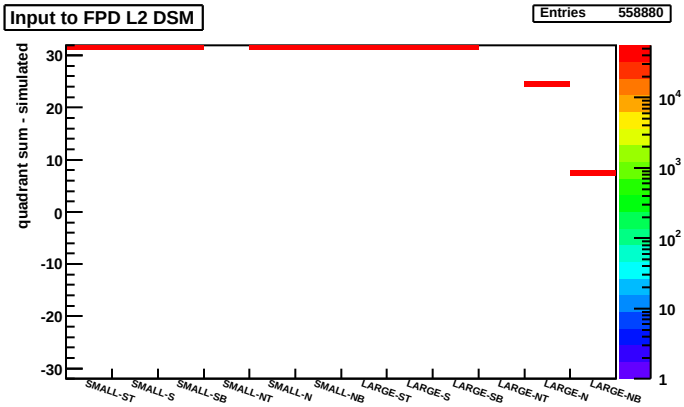

Input to FMS L1 DSM
Entries 670656
sumA
DSM board

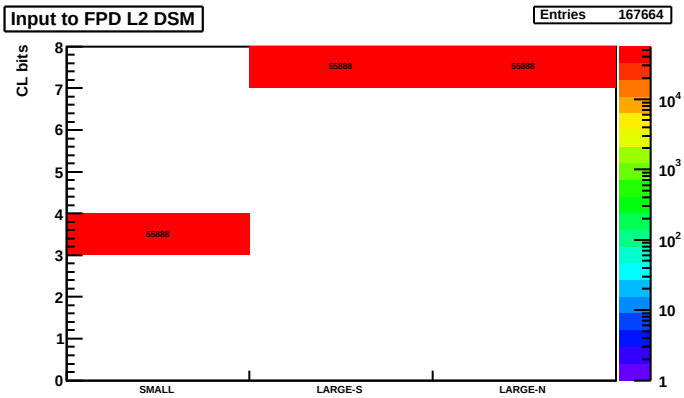

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

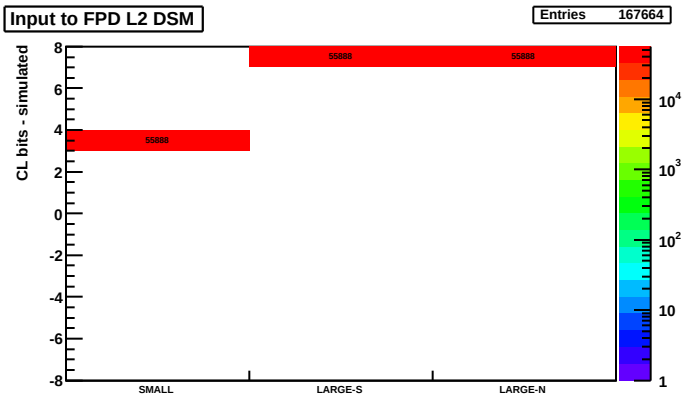

Input to FMS L1 DSM
Entries 670656
FMS L1 HT bits
DSM board

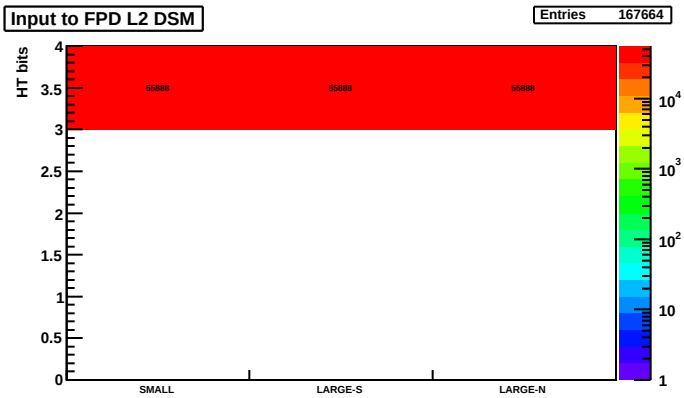

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

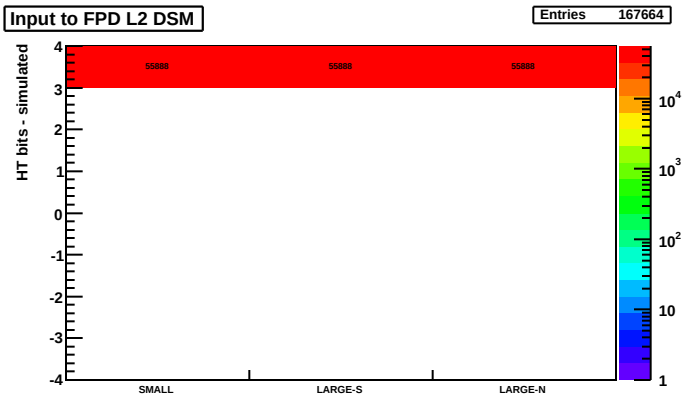

Input to FPD L2 DSM
Entries 670656
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

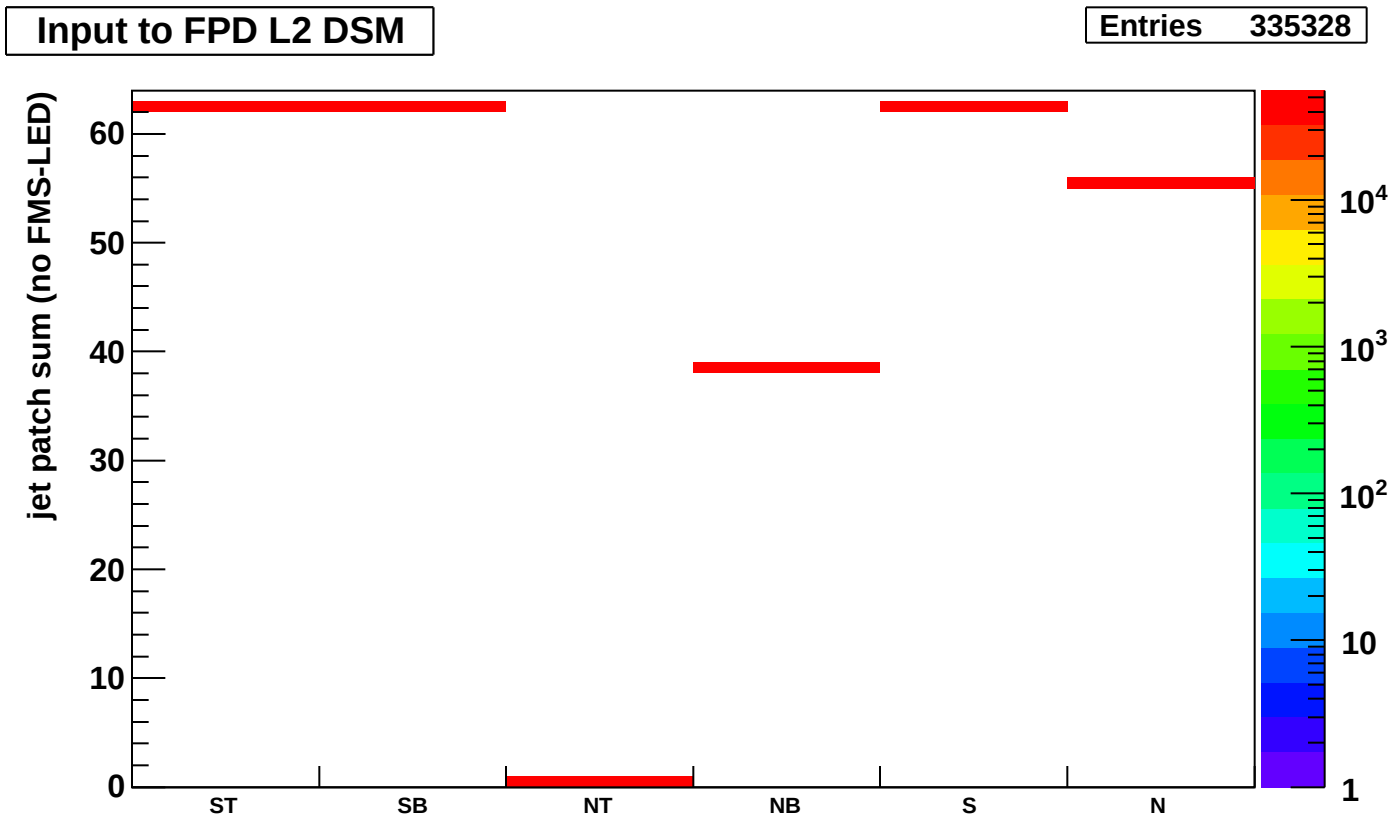

Input to FPD L2 DSM
Entries 558880
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

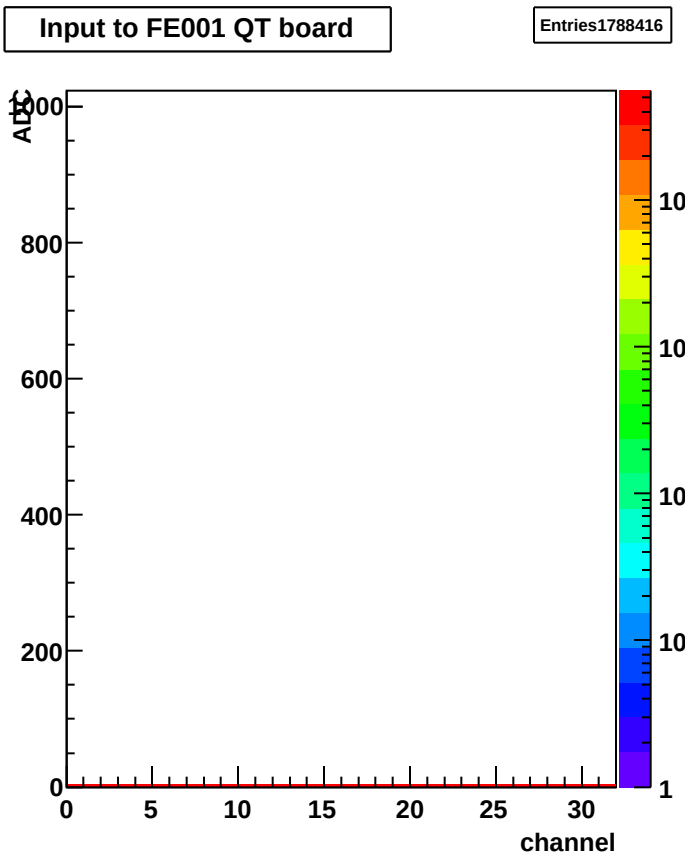

Input to FPD L2 DSM
Entries 167664
CL bits
55888
55888
55888
SMALL
LARGE-S
LARGE-N

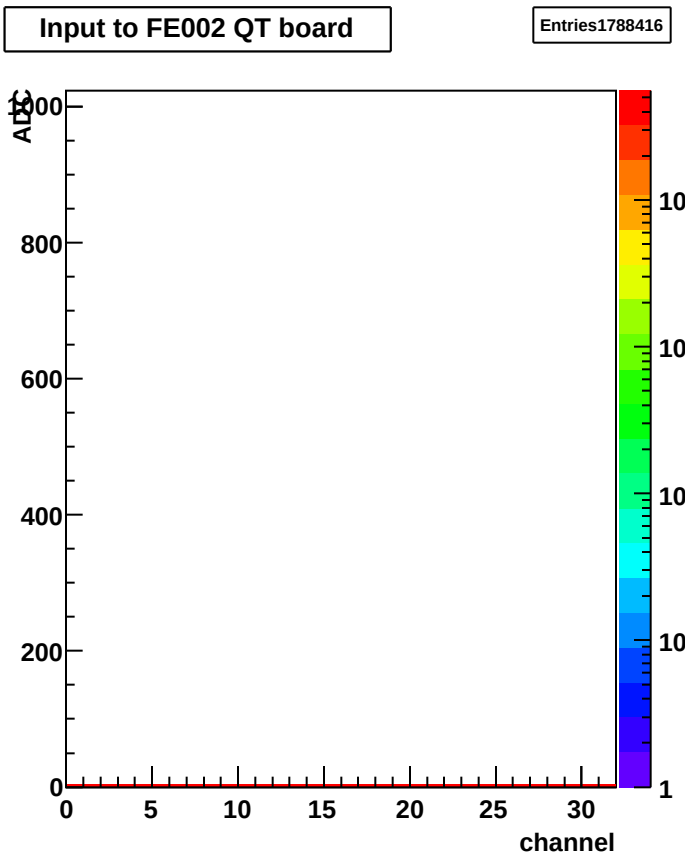

Input to FPD L2 DSM
Entries 167664
CL bits - simulated
55888
55888
55888
SMALL
LARGE-S
LARGE-N

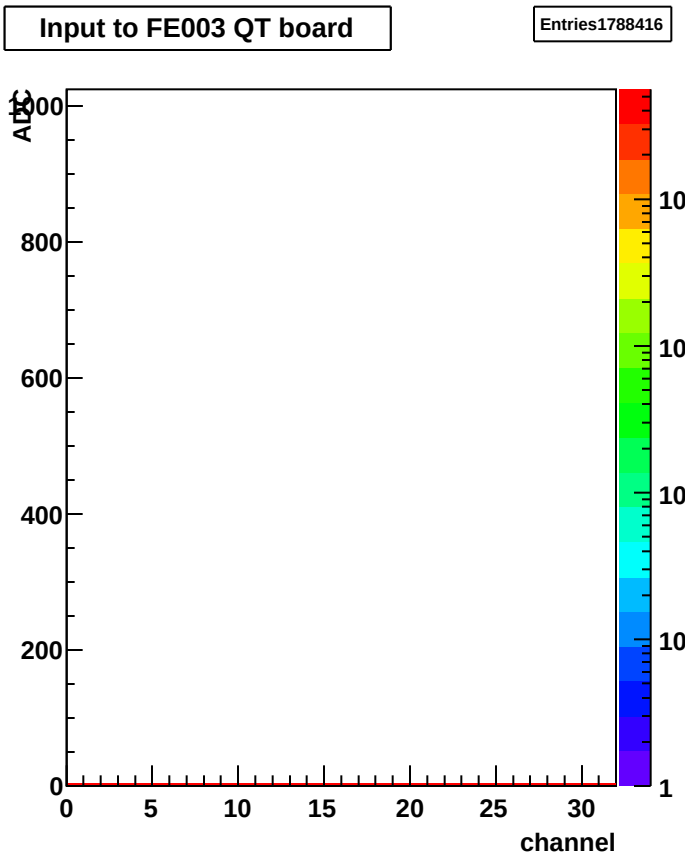

Input to FPD L2 DSM
Entries 167664
HT bits
55888
55888
55888
SMALL
LARGE-S
LARGE-N

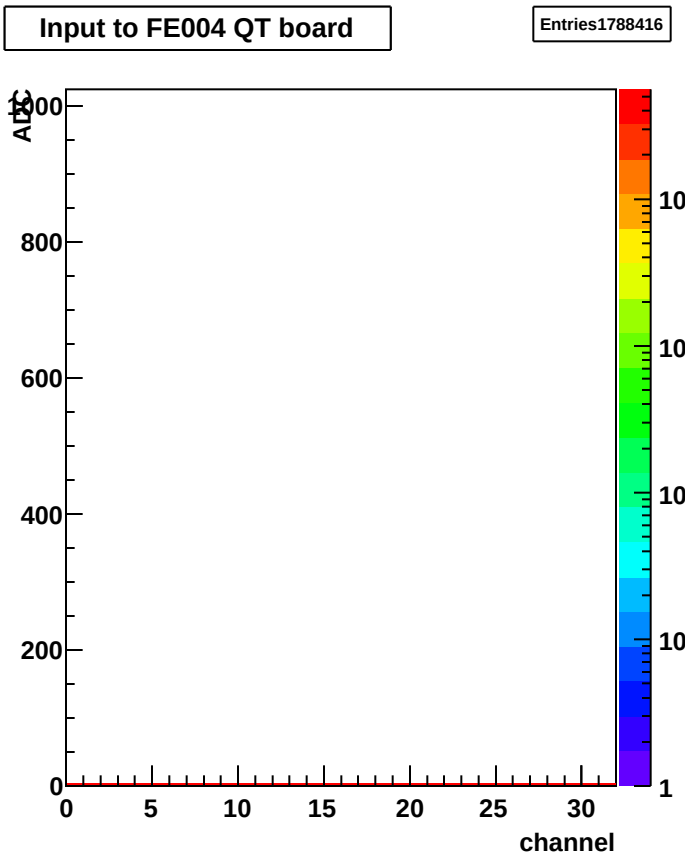

Input to FPD L2 DSM
Entries 167664
HT bits - simulated
55888
55888
55888
SMALL
LARGE-S
LARGE-N

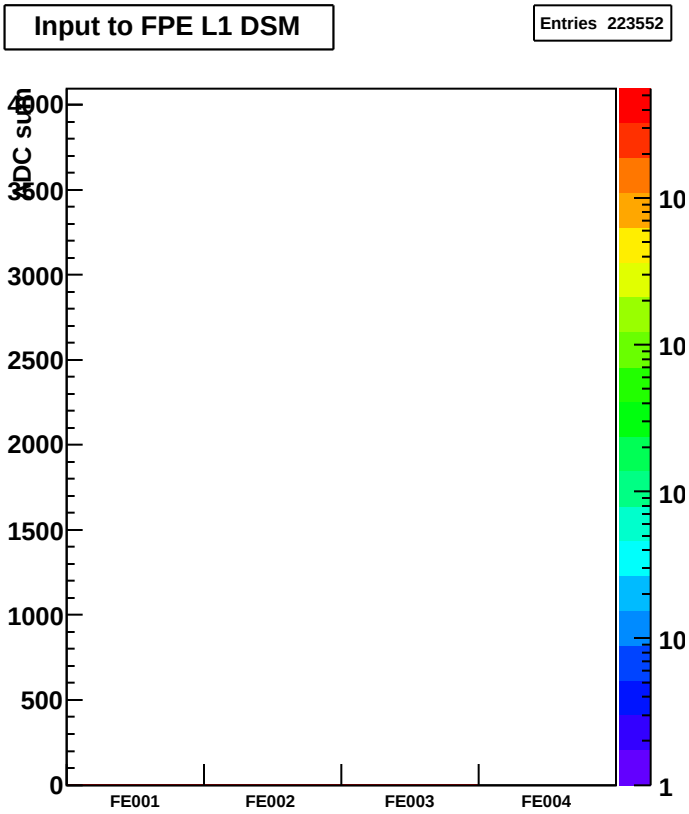

Input to FPD L2 DSM
Entries 335328
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

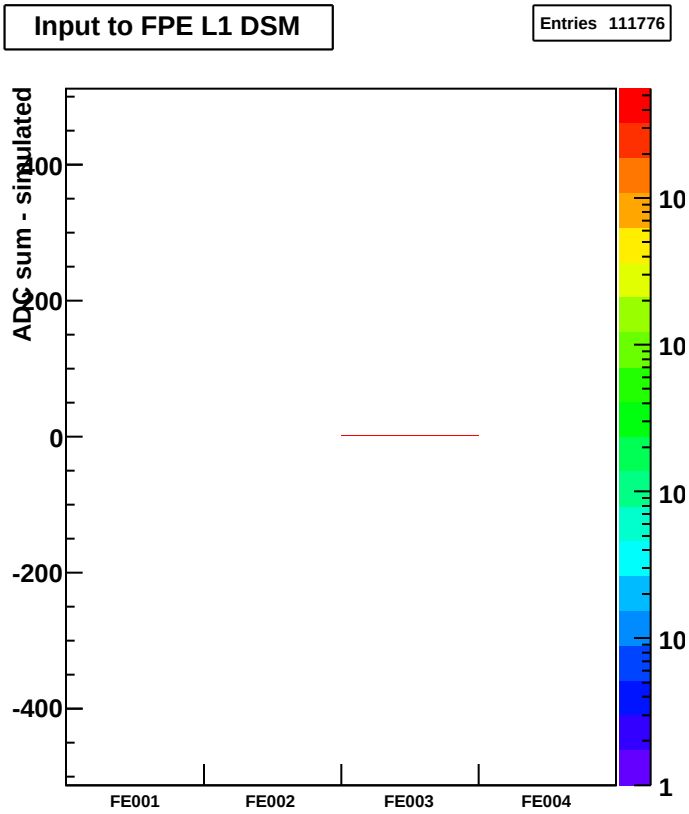

Input to FE001 QT board
Entries1788416
ADC
channel

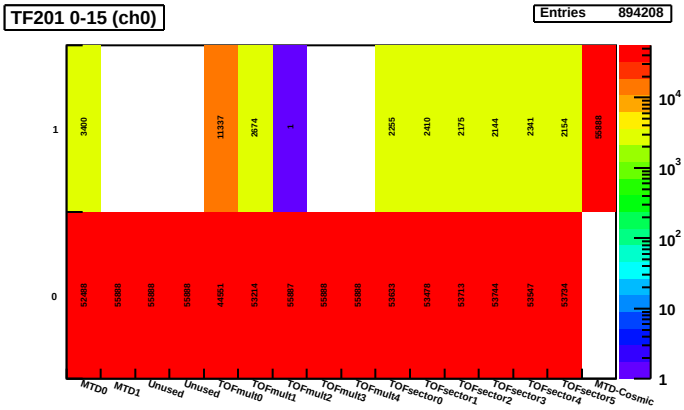

Input to FE002 QT board
Entries1788416
ADC
channel

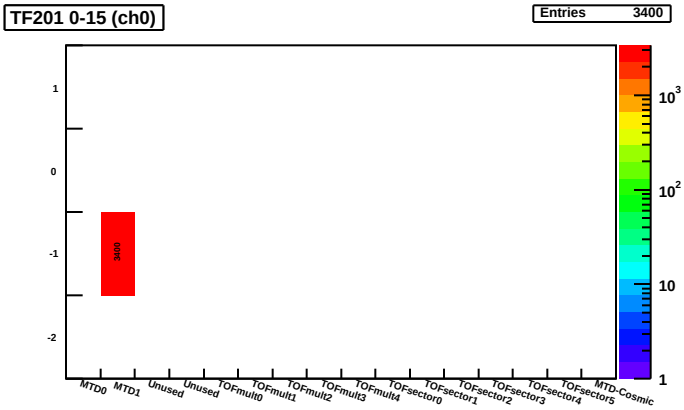

Input to FE003 QT board
Entries1788416
ADC
channel

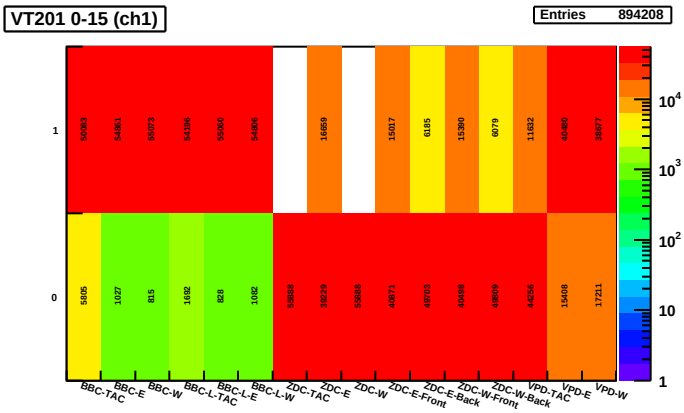

Input to FE004 QT board
Entries1788416
ADC
channel

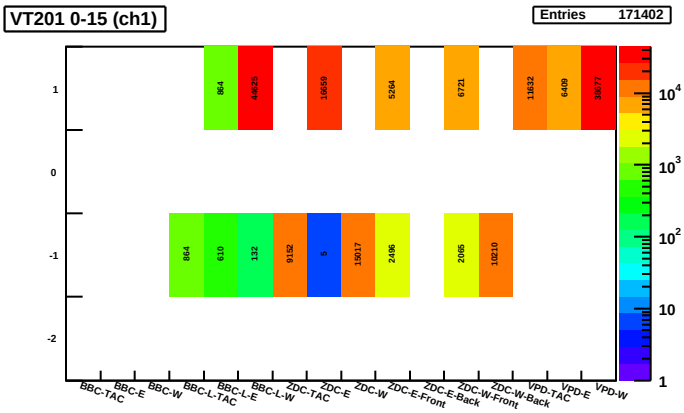

Input to FPE L1 DSM
Entries 223552
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 111776
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


TF201 0-15 (ch0)
Entries 894208
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 3400
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 894208
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 171402
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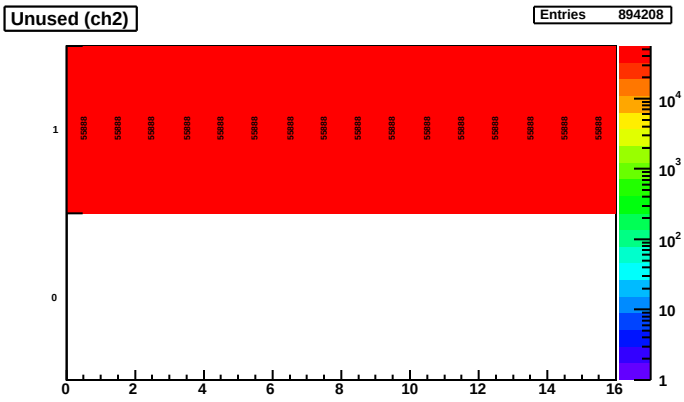
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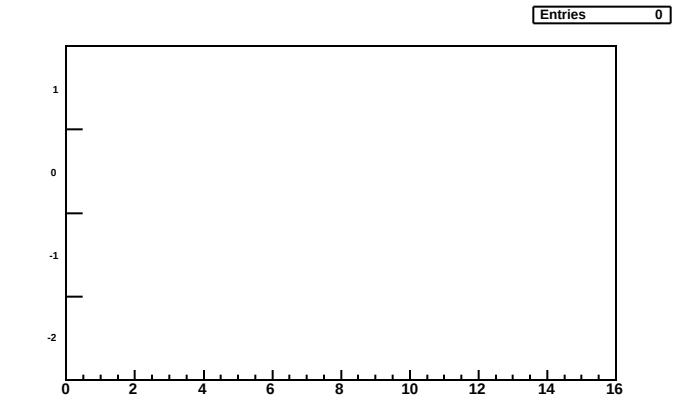
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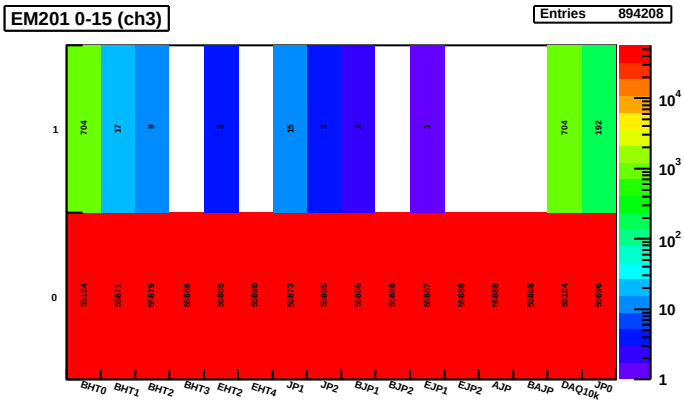
EM201 0-15 (ch3)
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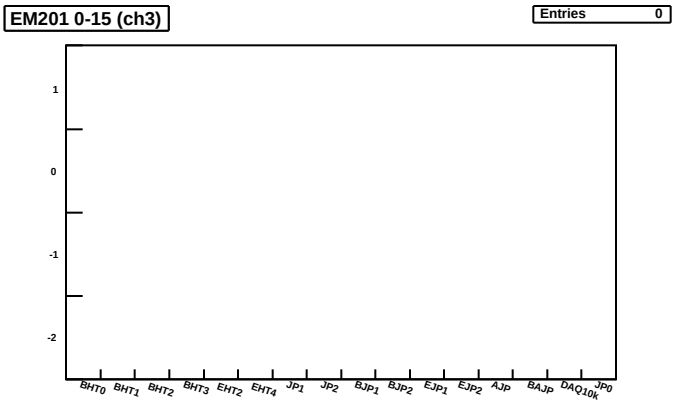
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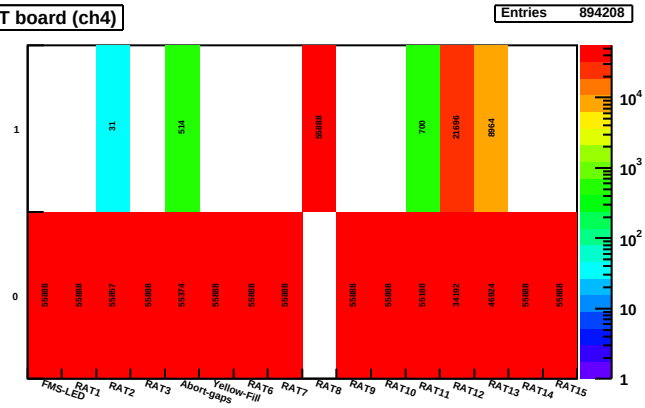
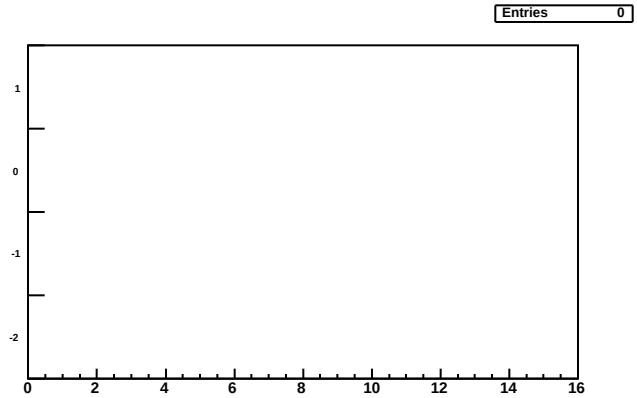
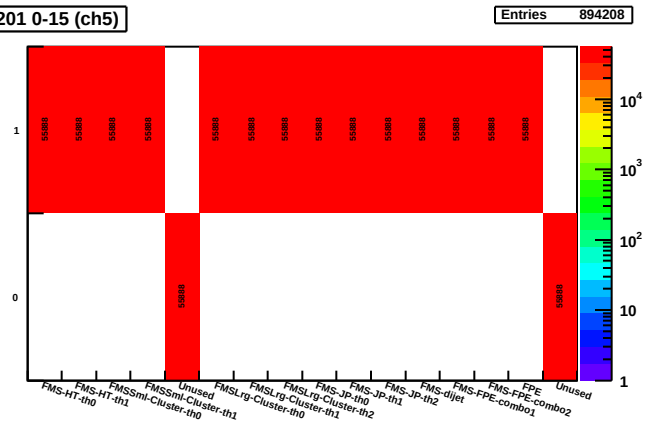
RAT board (ch4)

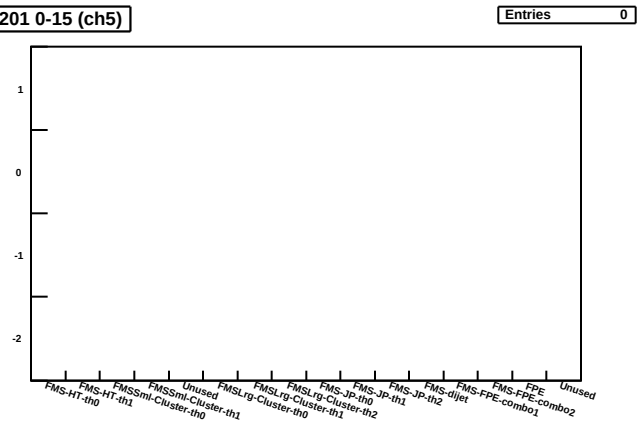




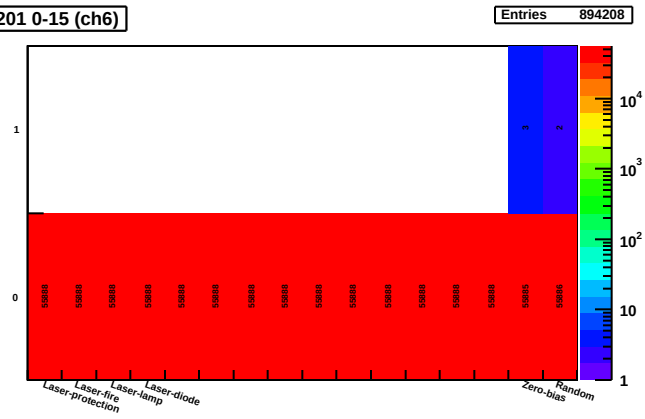
FP201 0-15 (ch5)

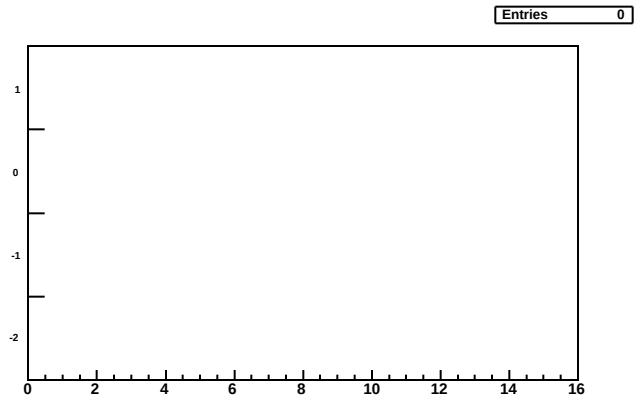
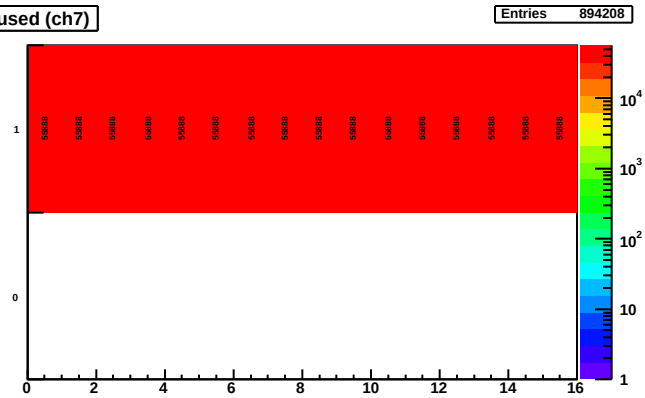
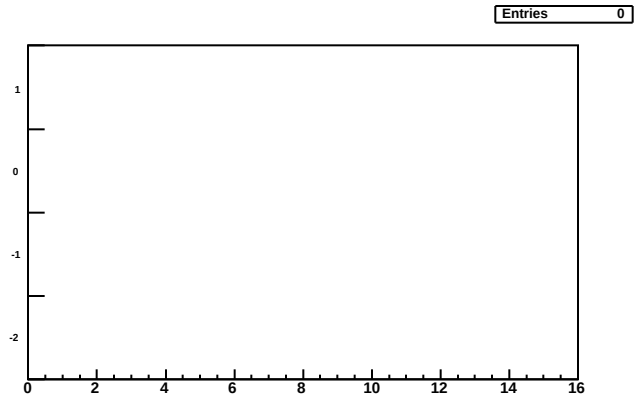


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)