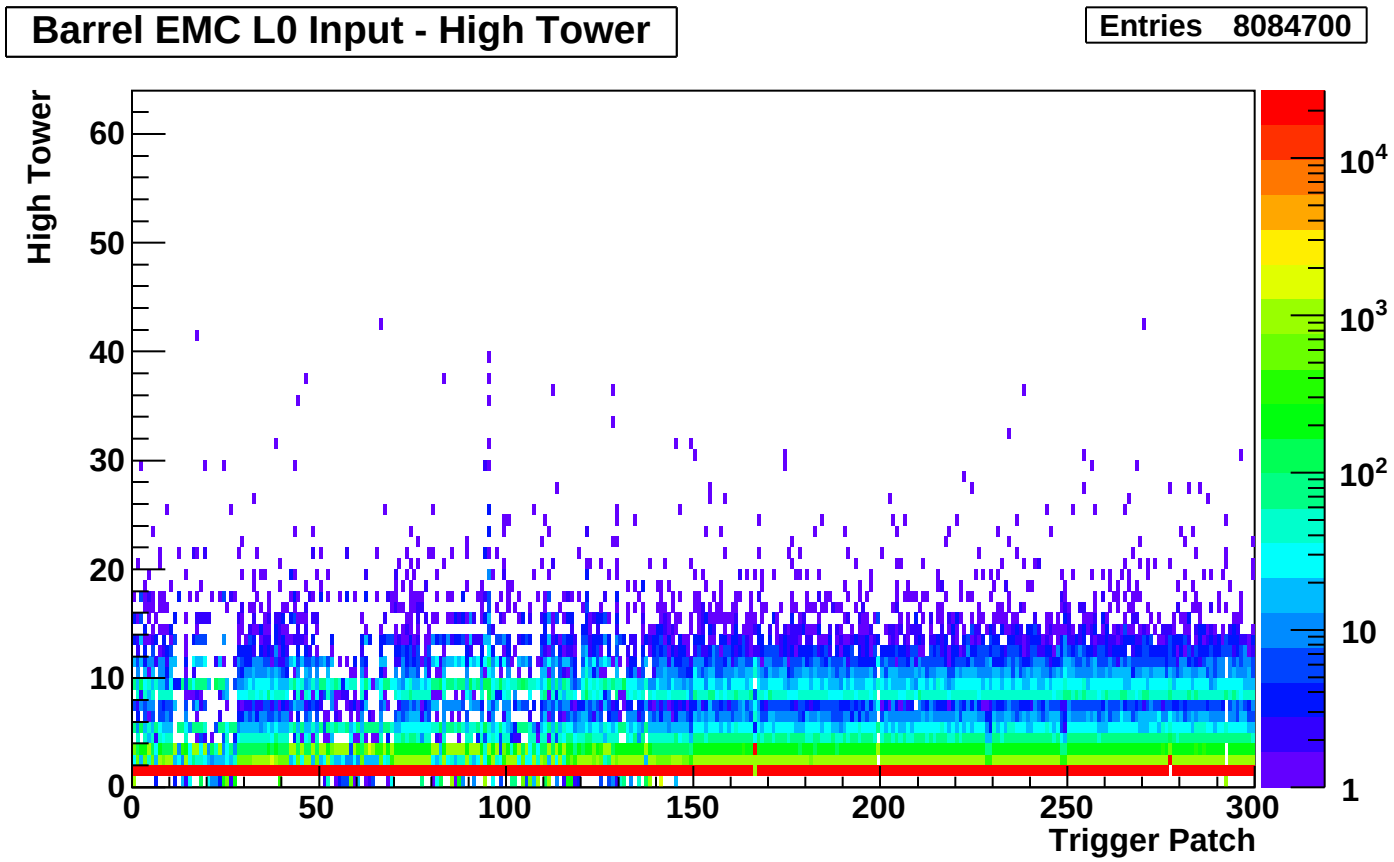
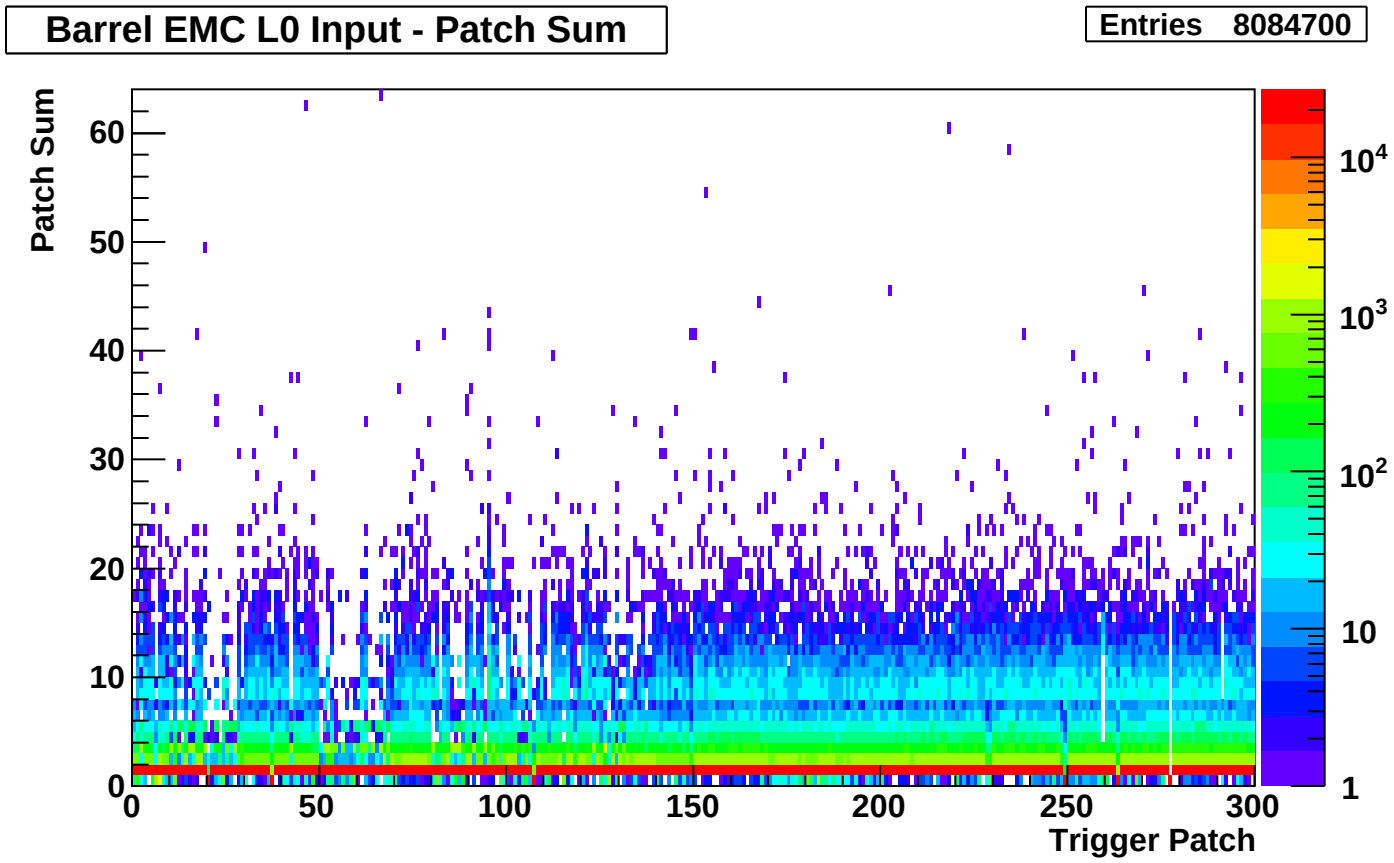
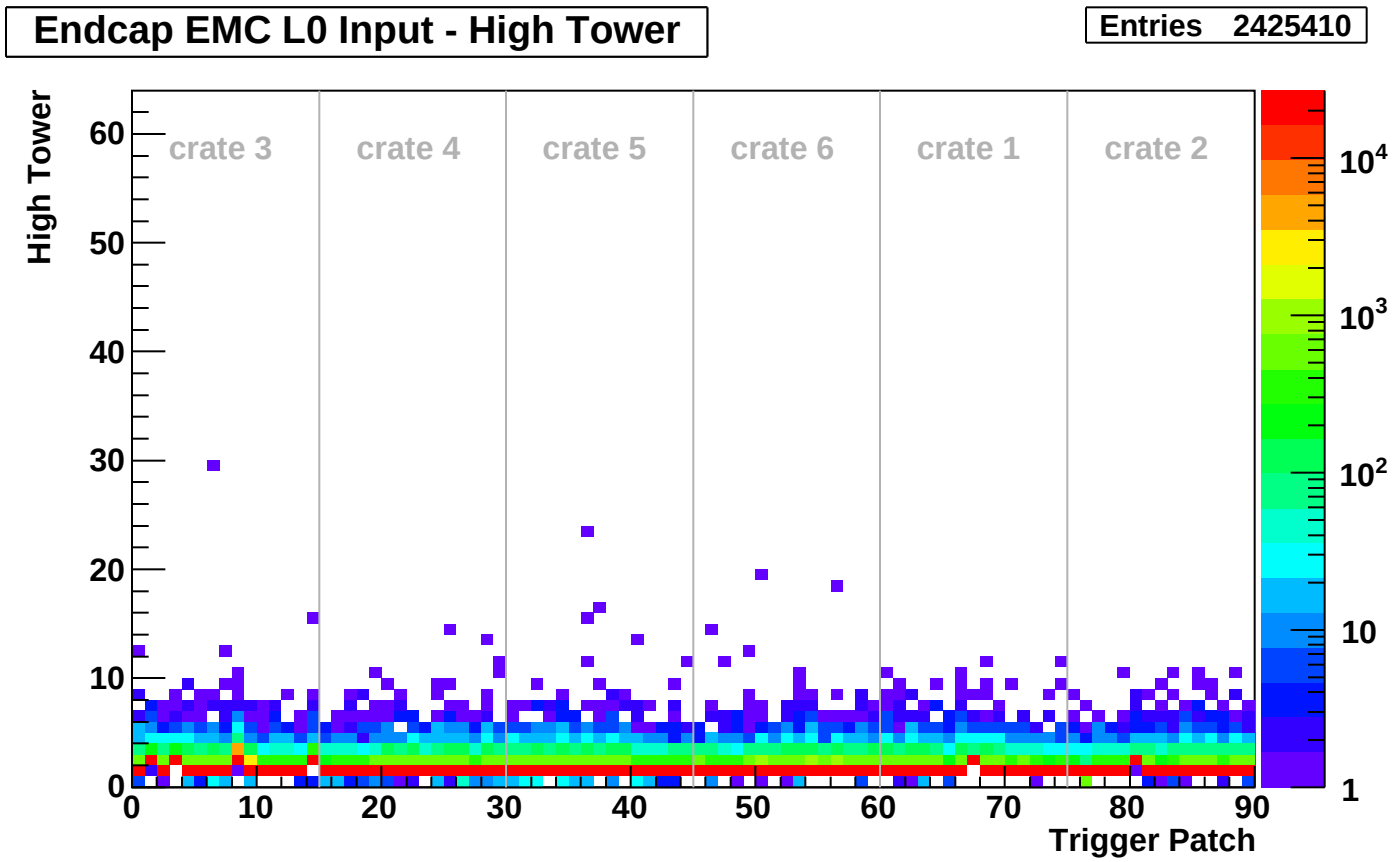
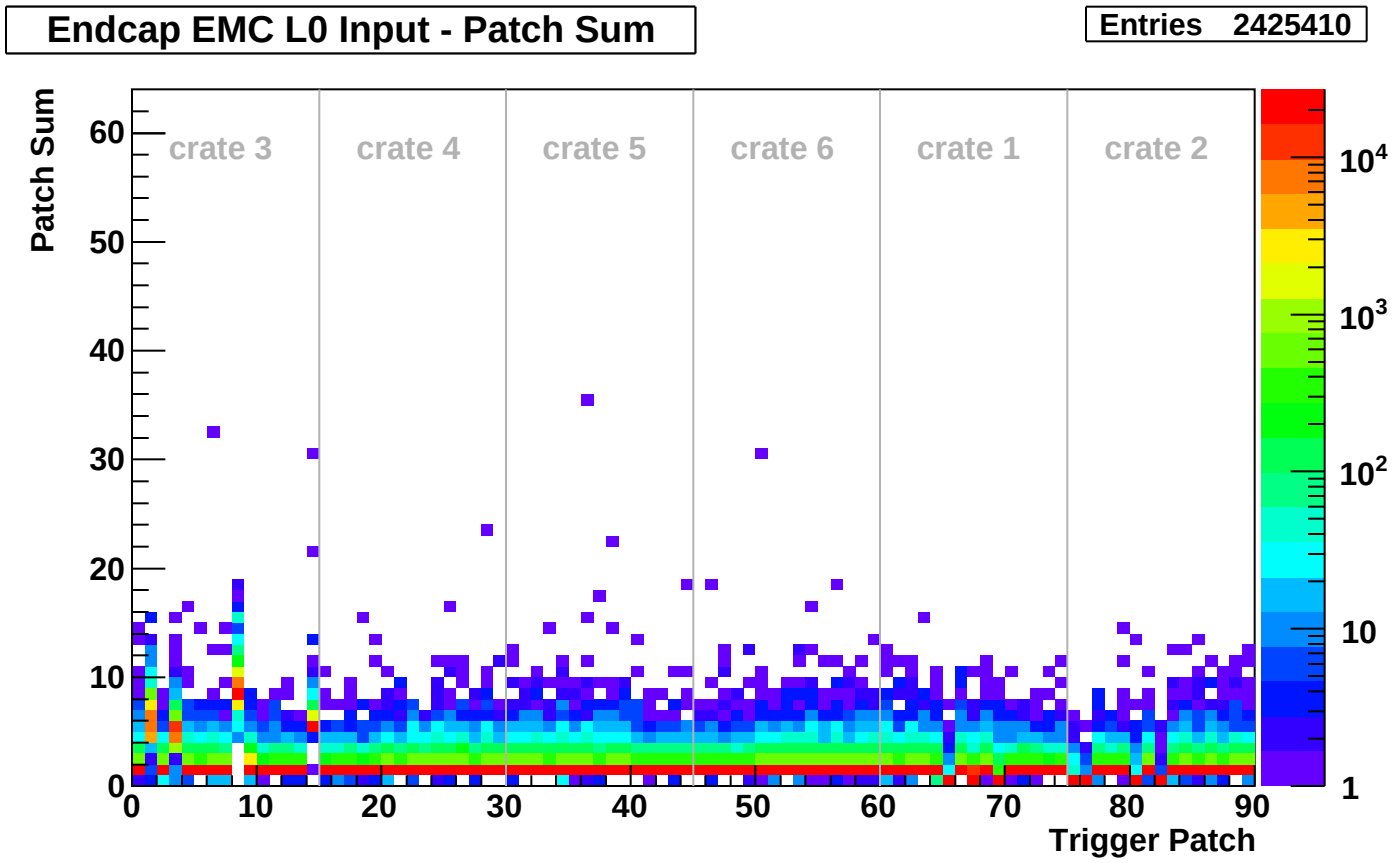
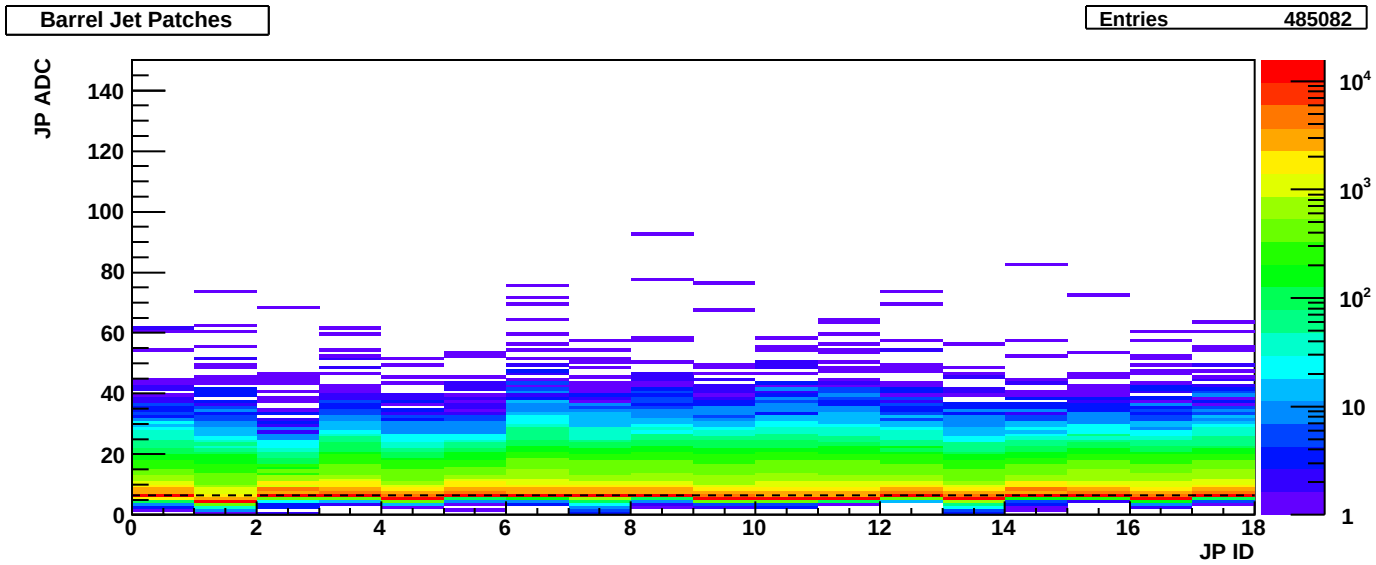
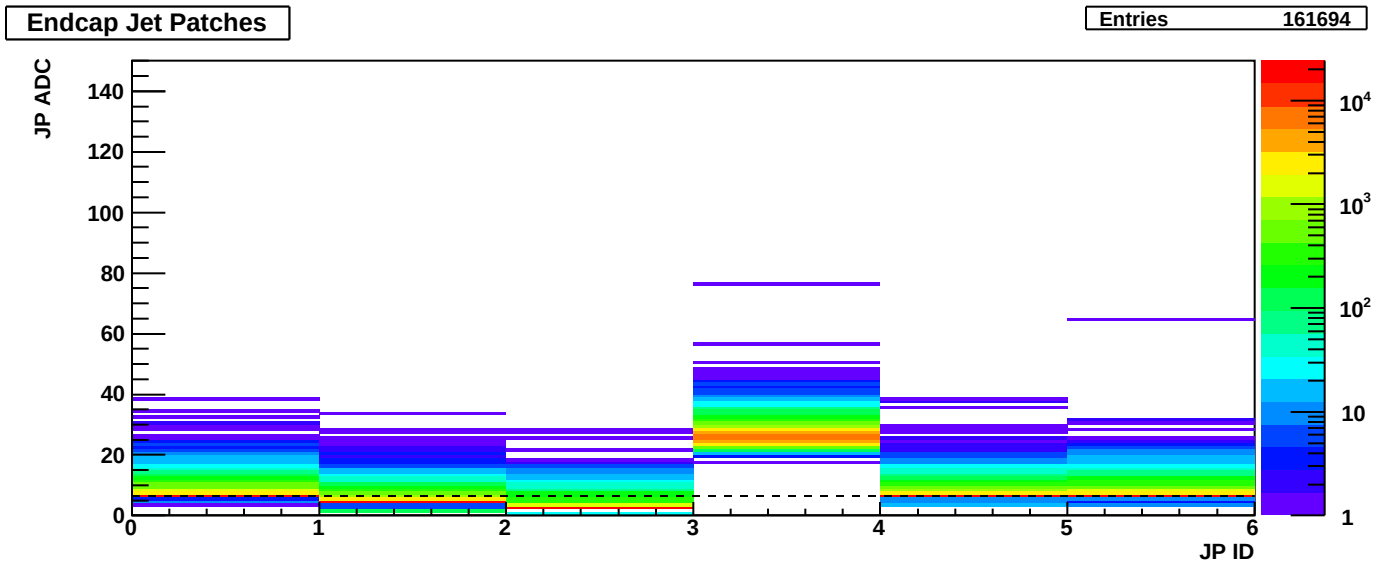

Barrel EMC L0 Input - High Tower
Entries 8084700
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

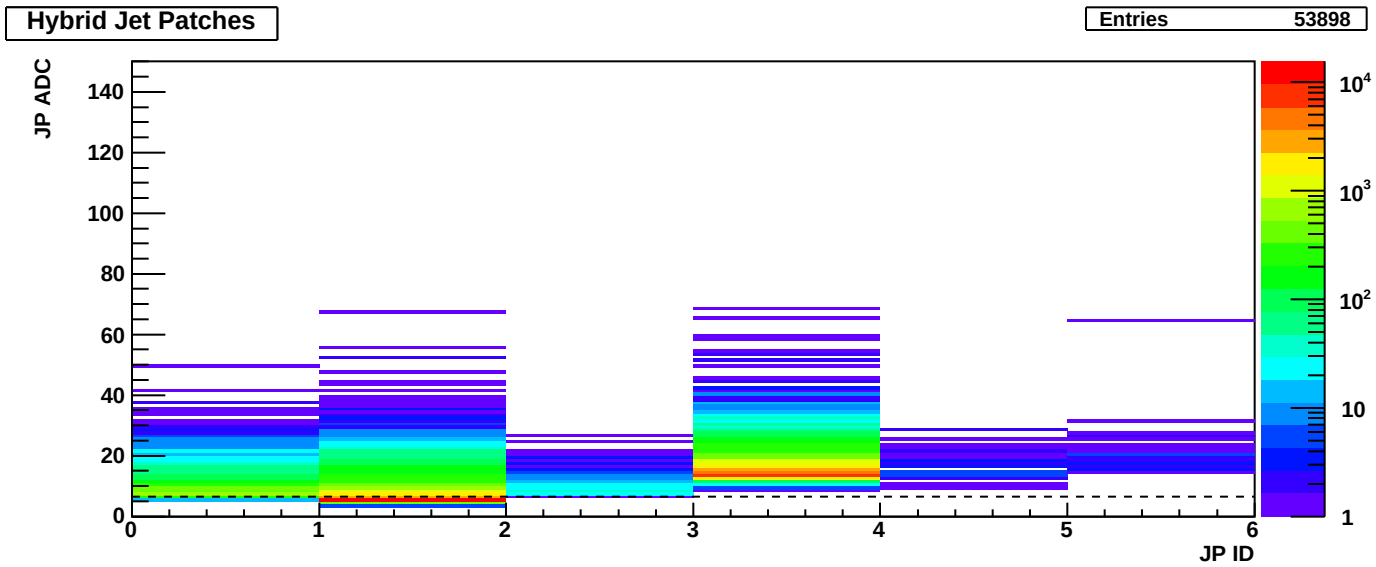

Barrel EMC L0 Input - Patch Sum
Entries 8084700
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

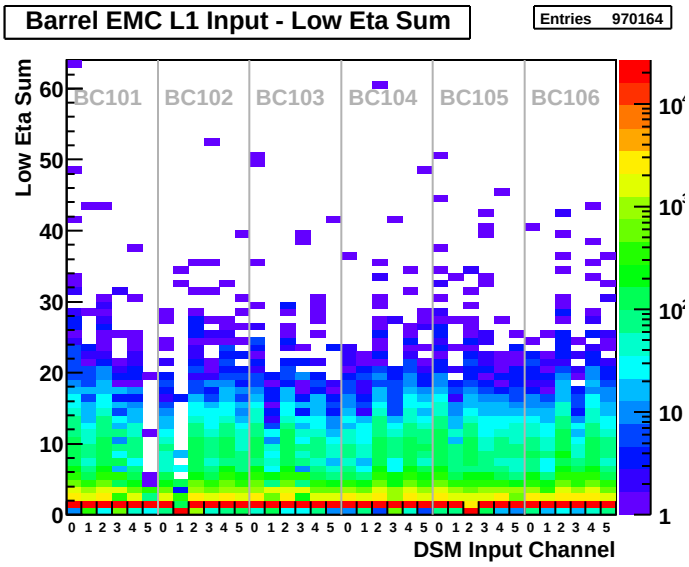

Endcap EMC L0 Input - High Tower
Entries 2425410
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

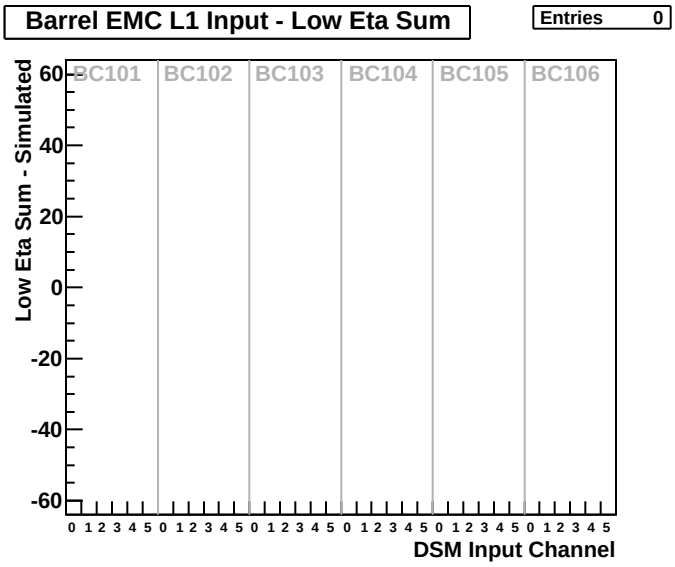

Endcap EMC L0 Input - Patch Sum
Entries 2425410
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

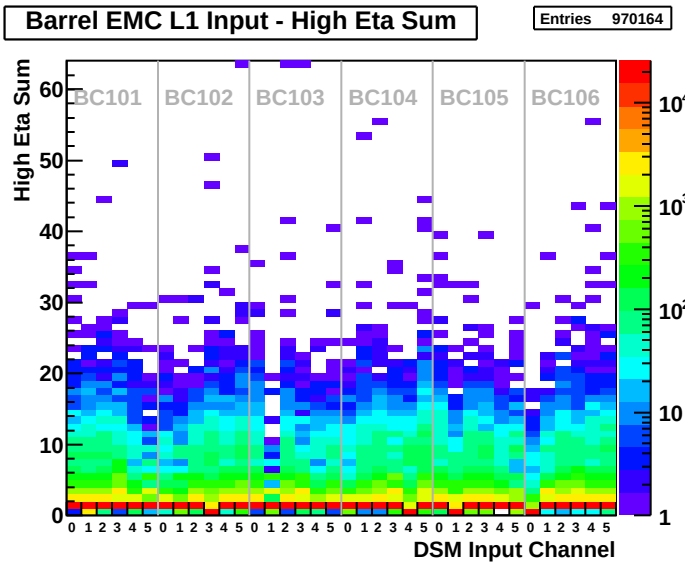

Barrel Jet Patches
Entries 485082
JP ADC
JP ID

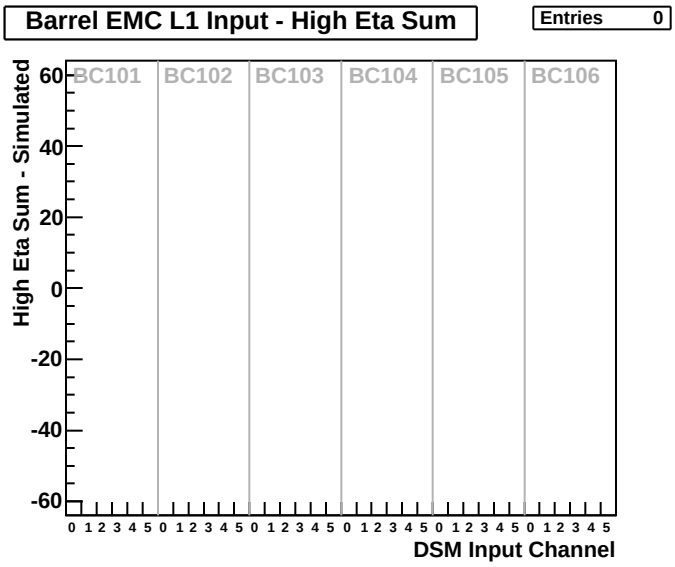

Endcap Jet Patches
Entries 161694
JP ADC
JP ID

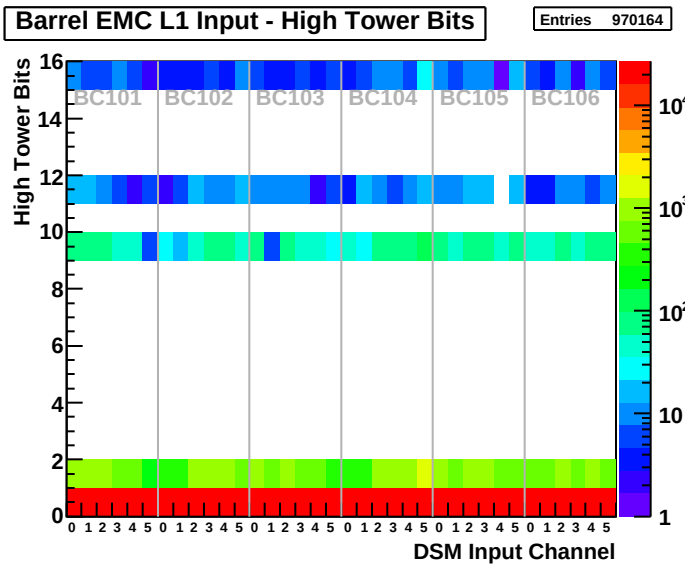

Hybrid Jet Patches
Entries 53898
JP ADC
JP ID

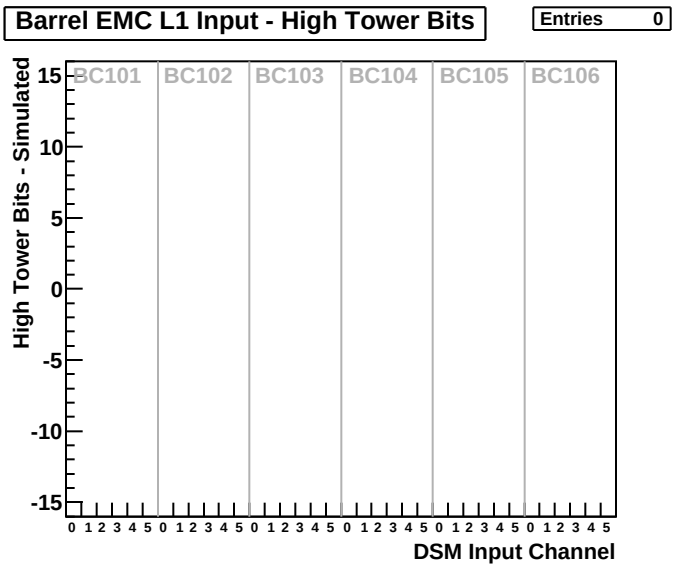

Barrel EMC L1 Input - Low Eta Sum
Entries 970164
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

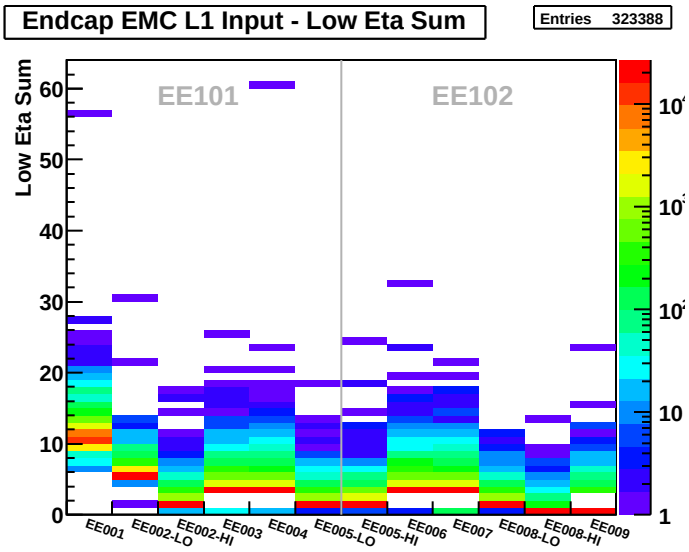

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

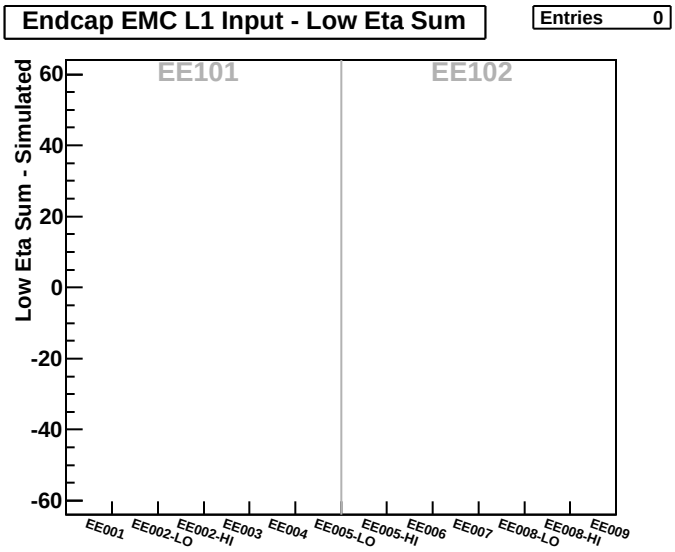

Barrel EMC L1 Input - High Eta Sum
Entries 970164
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

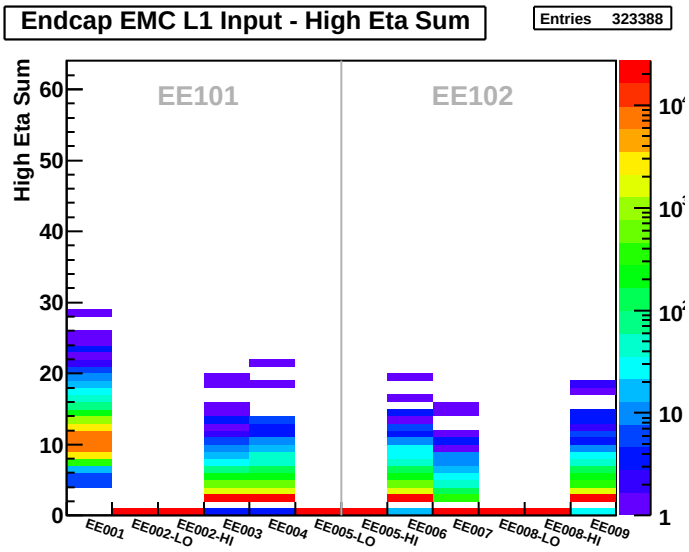

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

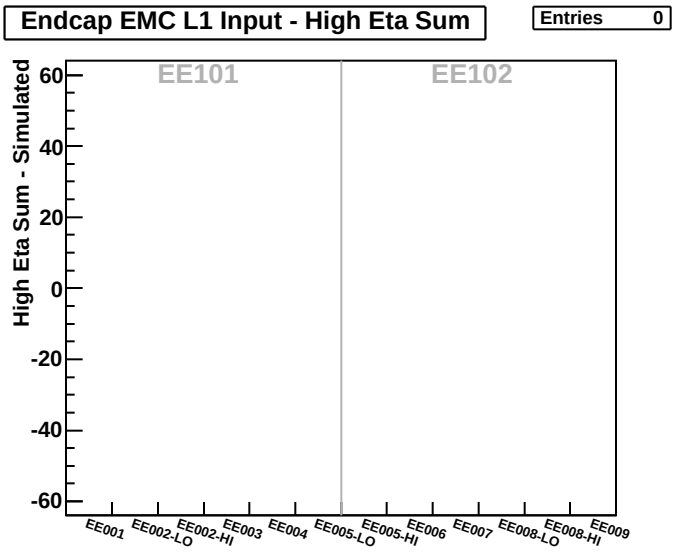

Barrel EMC L1 Input - High Tower Bits
Entries 970164
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

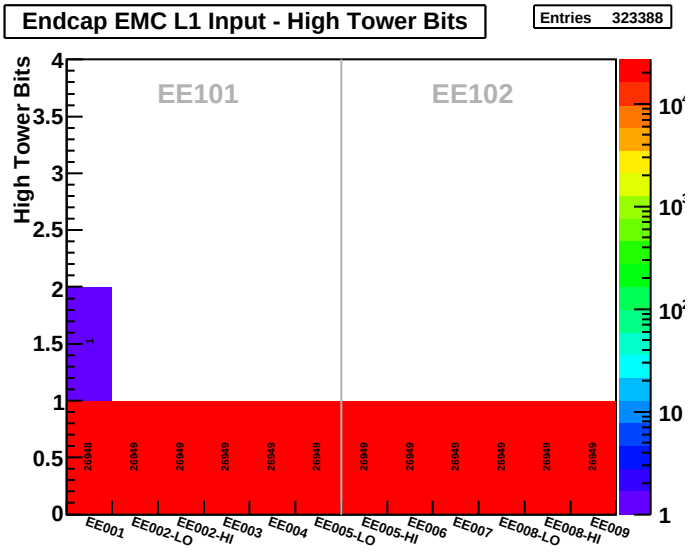

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

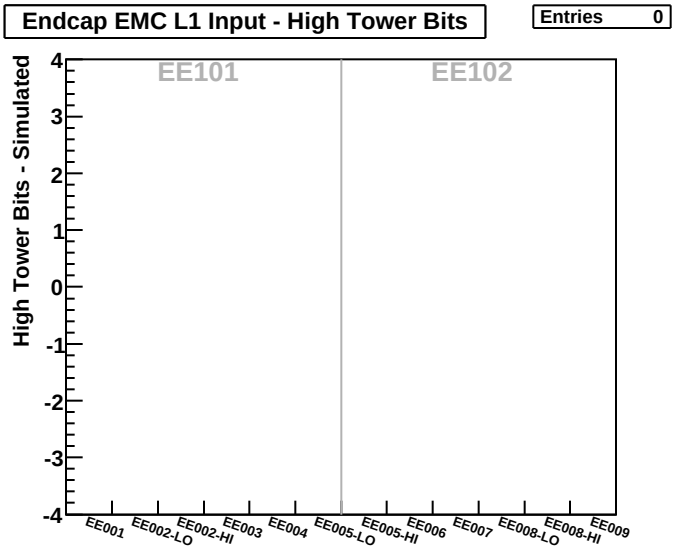

Endcap EMC L1 Input - Low Eta Sum
Entries 323388
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

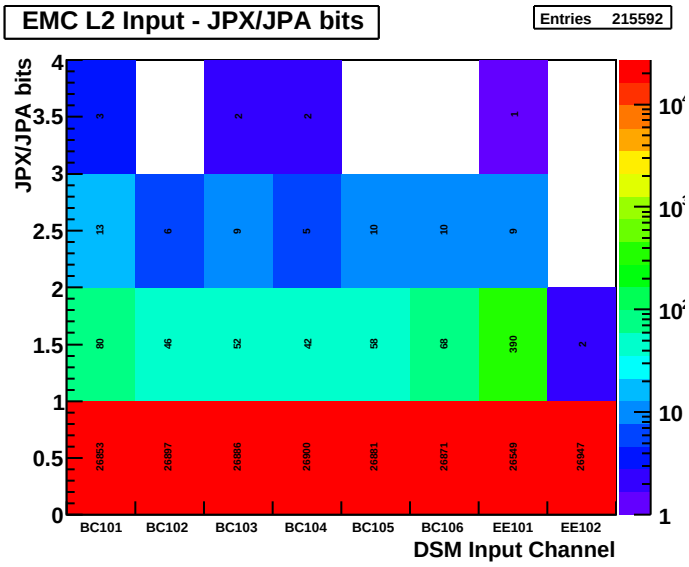

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

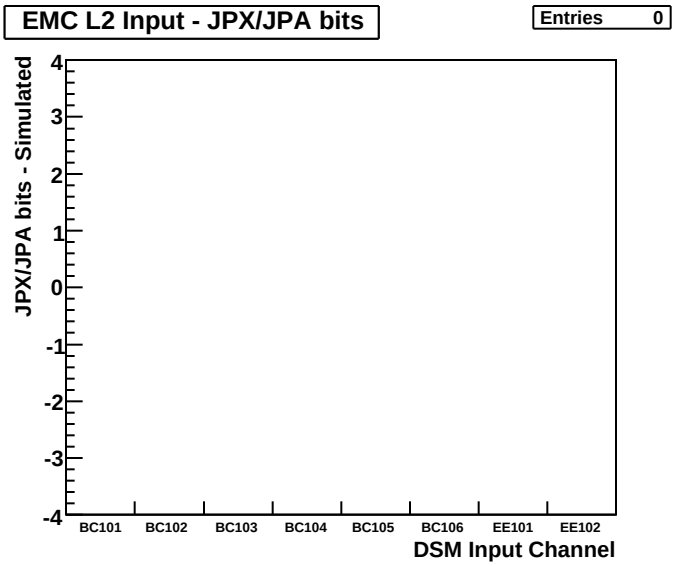

Endcap EMC L1 Input - High Eta Sum
Entries 323388
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

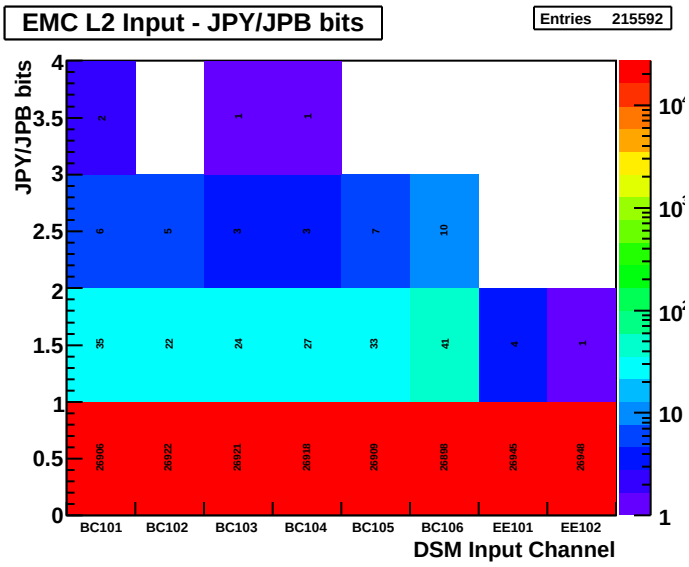

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

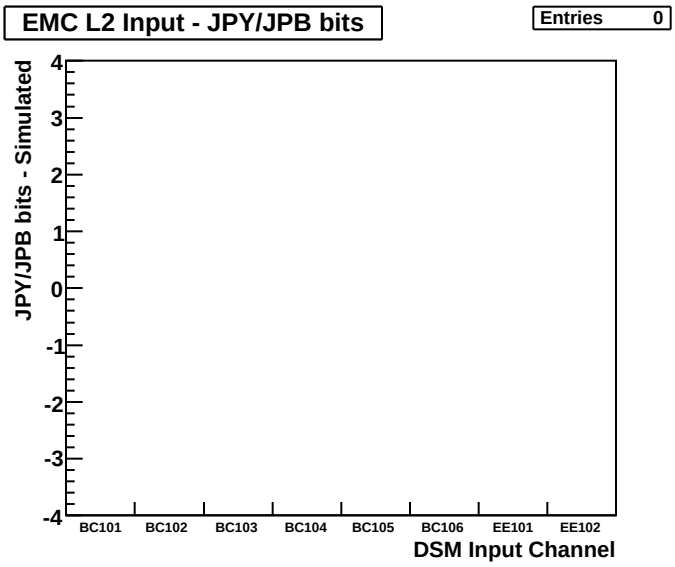

Endcap EMC L1 Input - High Tower Bits
Entries 323388
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

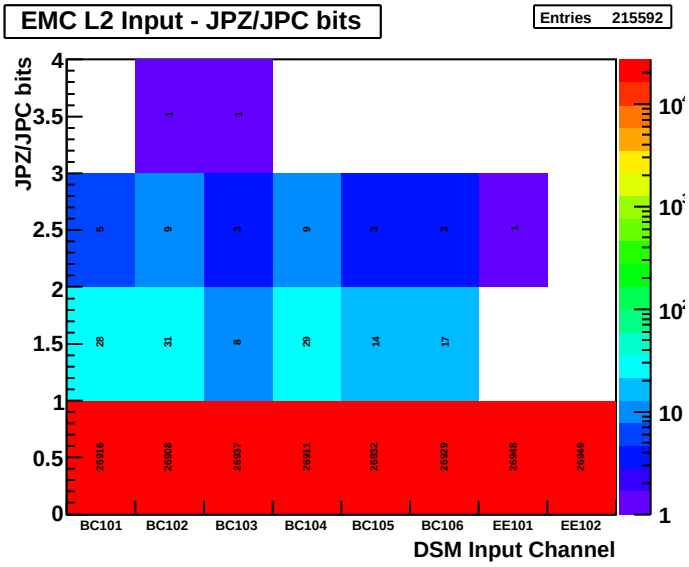

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

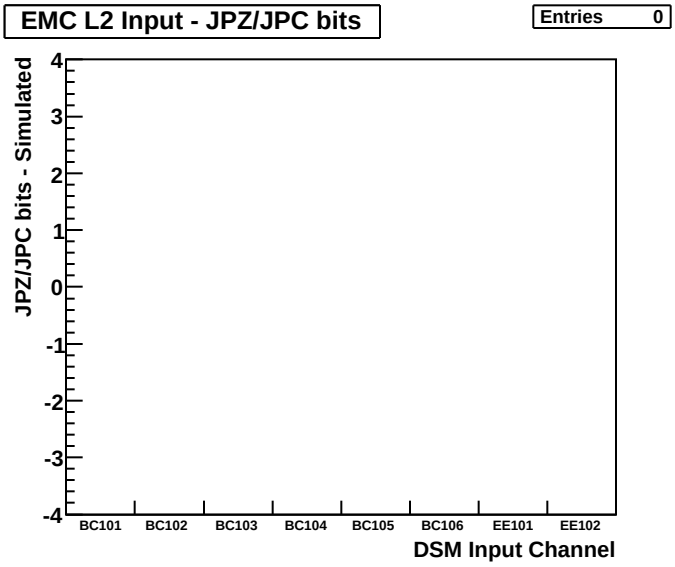

EMC L2 Input - JPX/JPA bits
Entries 215592
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

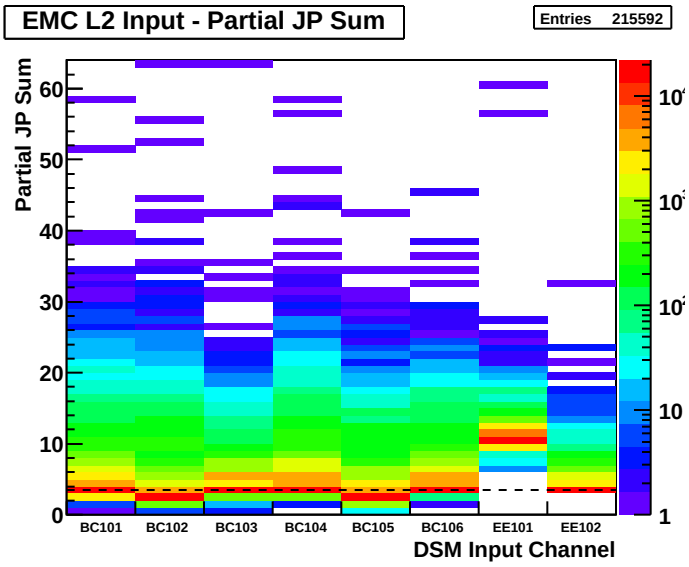

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

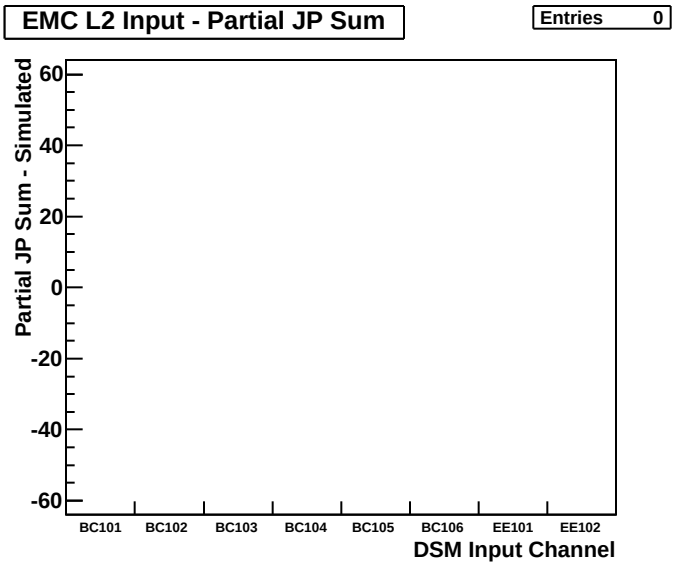

EMC L2 Input - JPY/JPB bits
Entries 215592
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

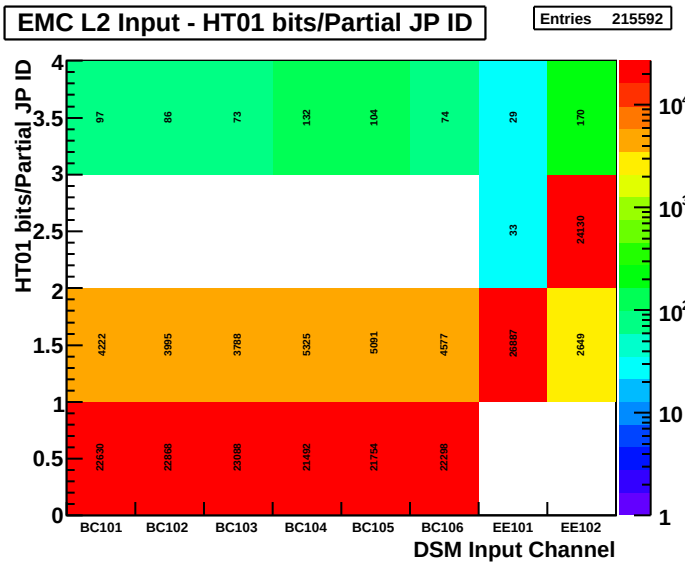

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

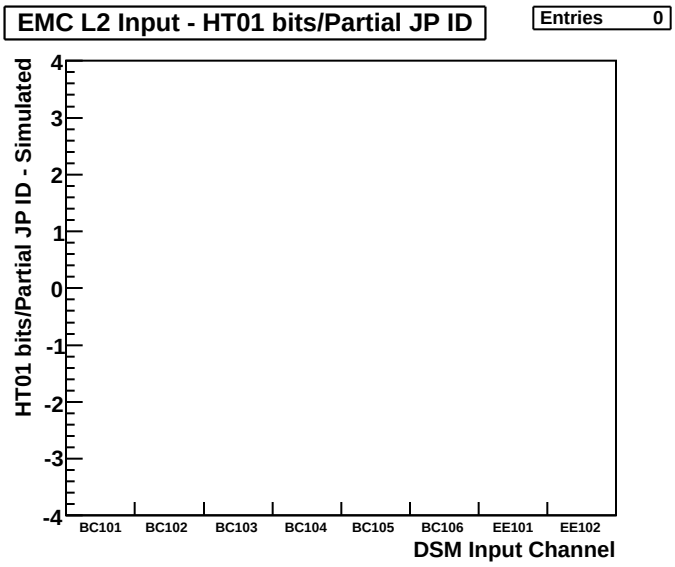

EMC L2 Input - JPZ/JPC bits
Entries 215592
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

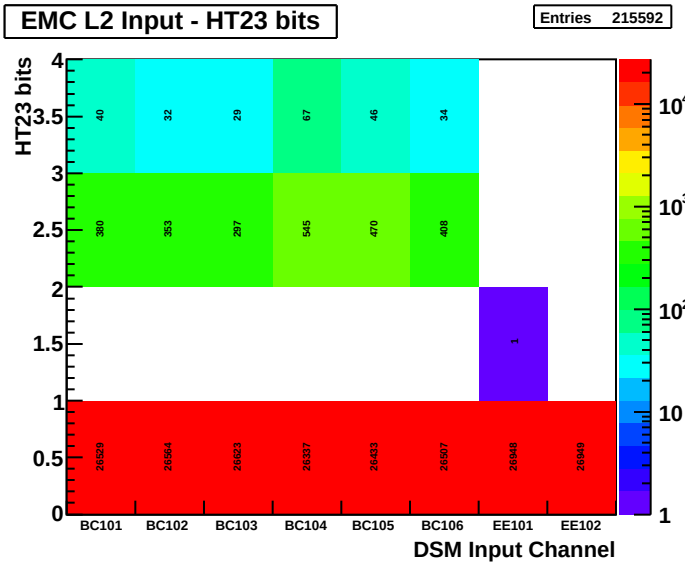

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

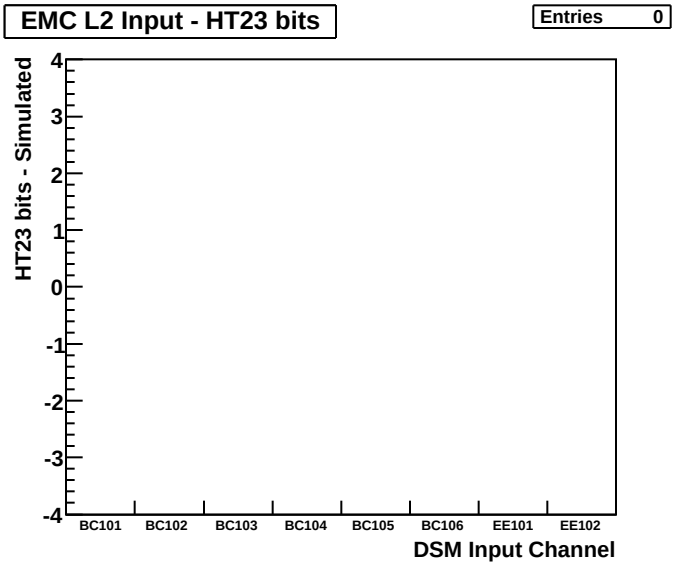

EMC L2 Input - Partial JP Sum
Entries 215592
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

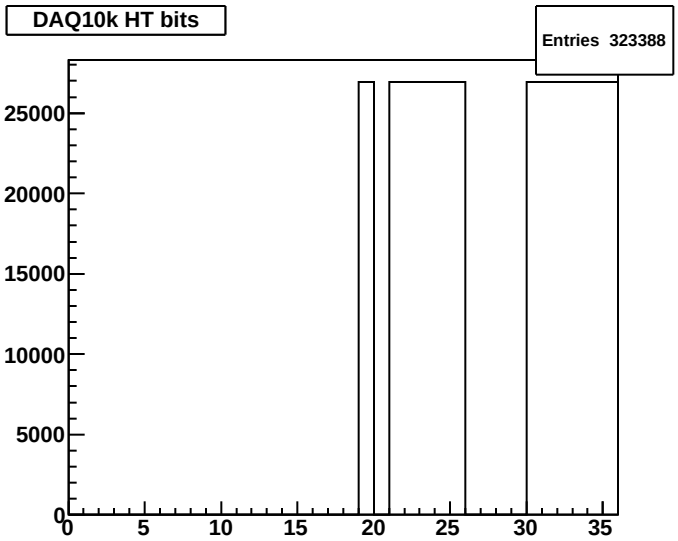

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

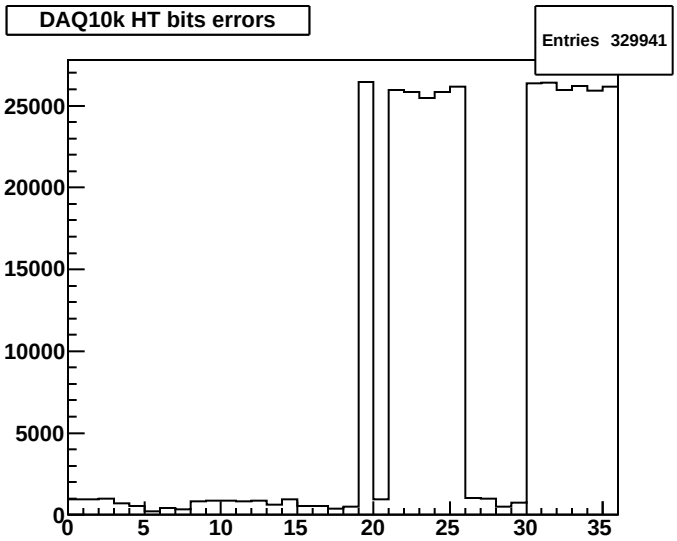

EMC L2 Input - HT01 bits/Partial JP ID
Entries 215592
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

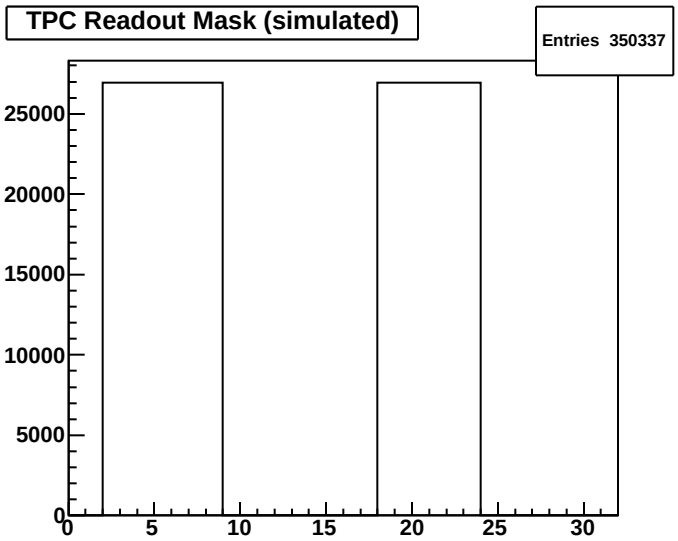

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

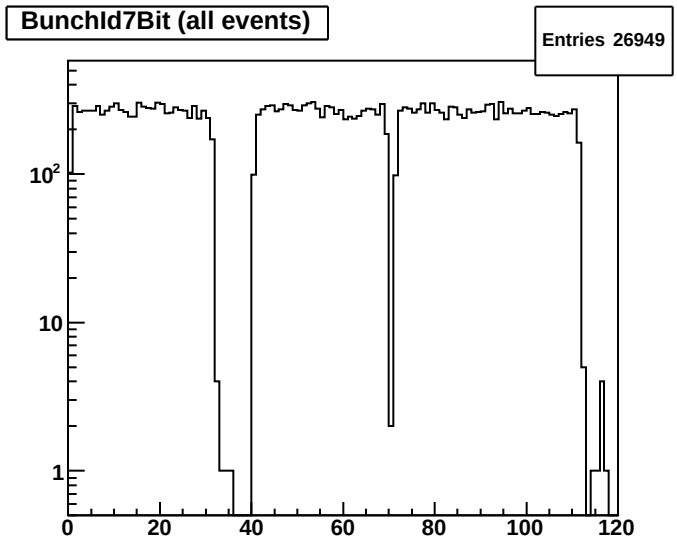

EMC L2 Input - HT23 bits
Entries 215592
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

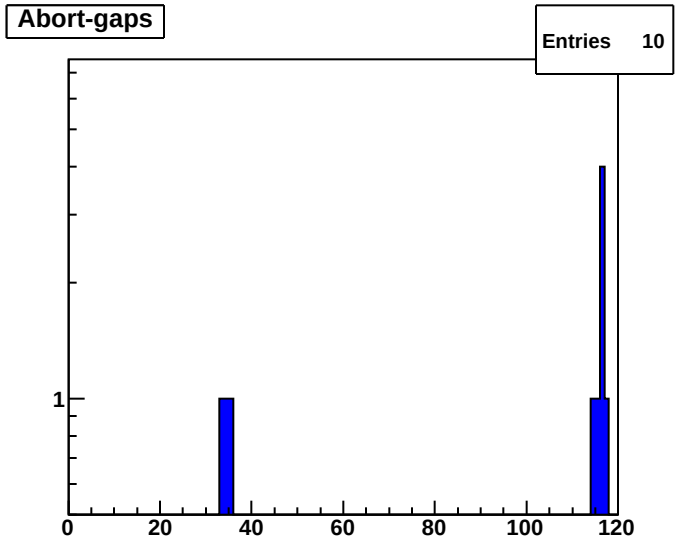

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

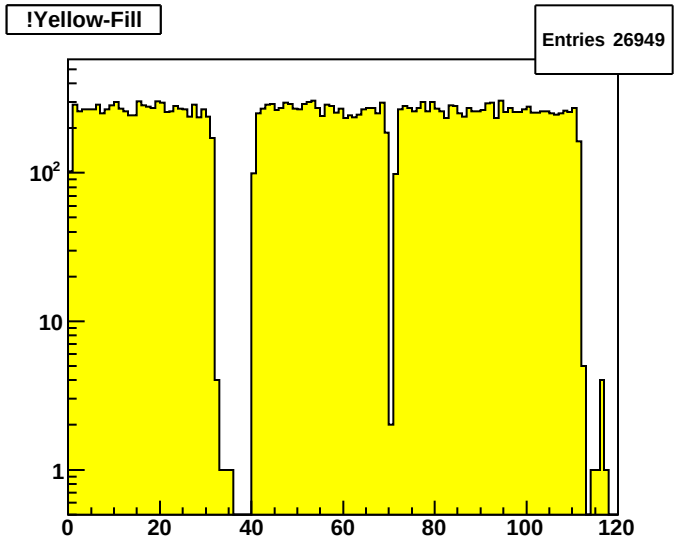

DAQ10k HT bits
Entries 323388
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

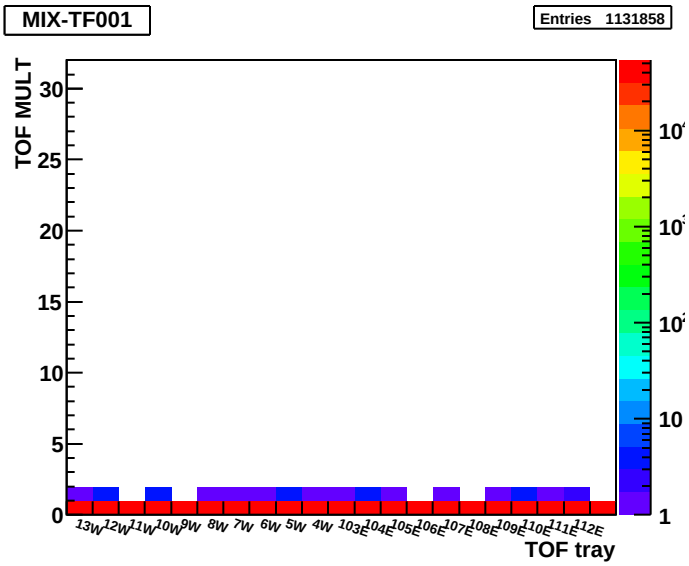

DAQ10k HT bits errors
Entries 329941
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

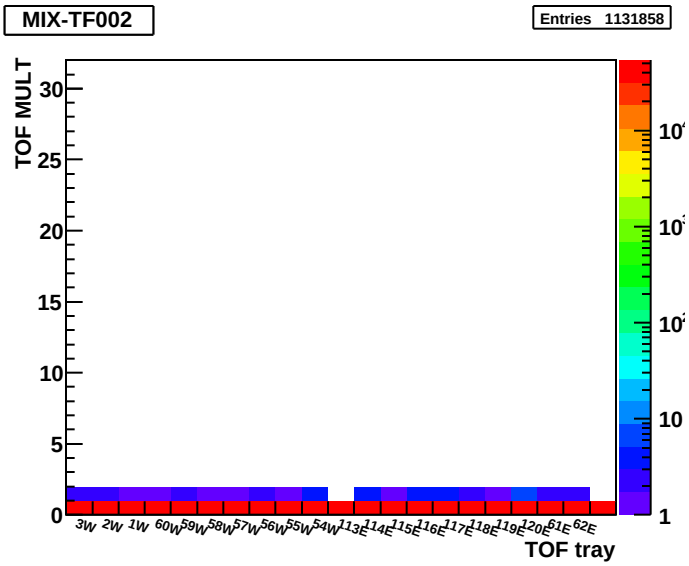

TPC Readout Mask (simulated)
Entries 350337
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30

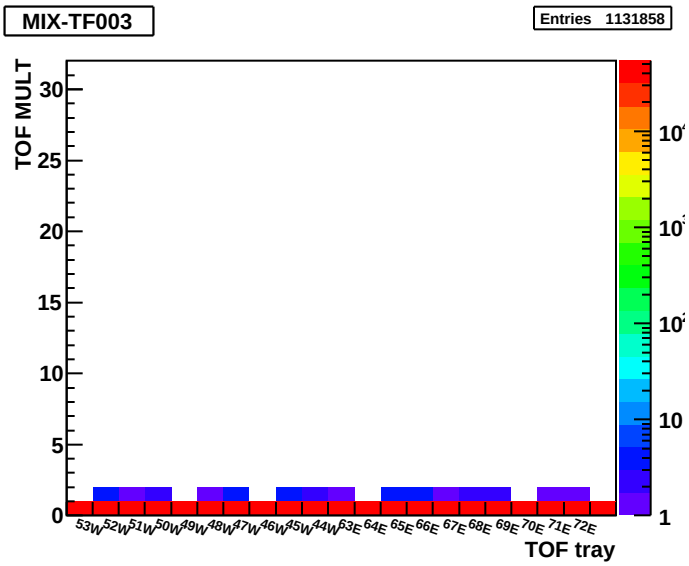

BunchId7Bit (all events)
Entries 26949
10^2
10
1
0 20 40 60 80 100 120

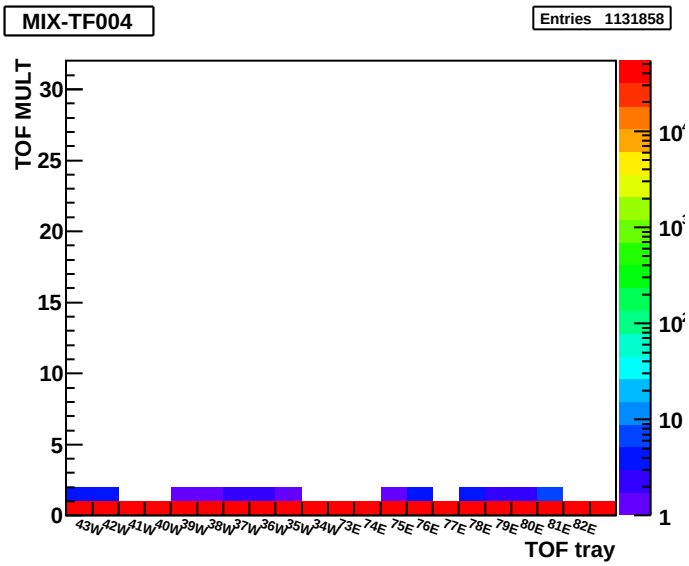

Abort-gaps
Entries 10
1
0 20 40 60 80 100 120

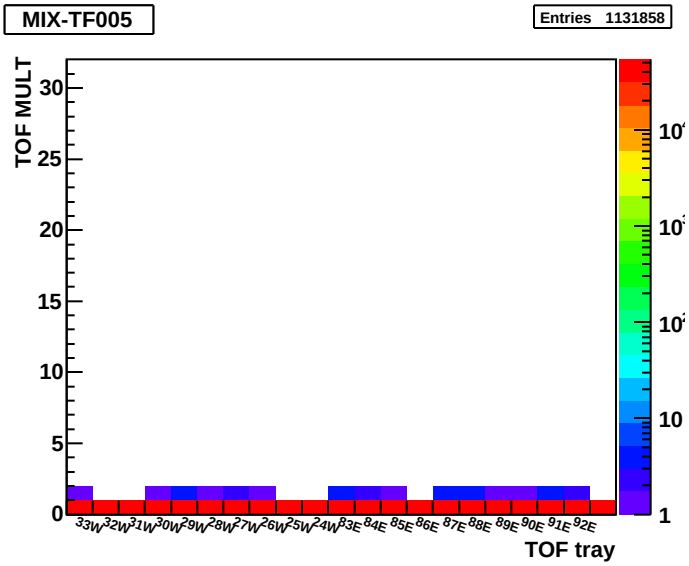

!Yellow-Fill
Entries 26949
10^2
10
1
0 20 40 60 80 100 120

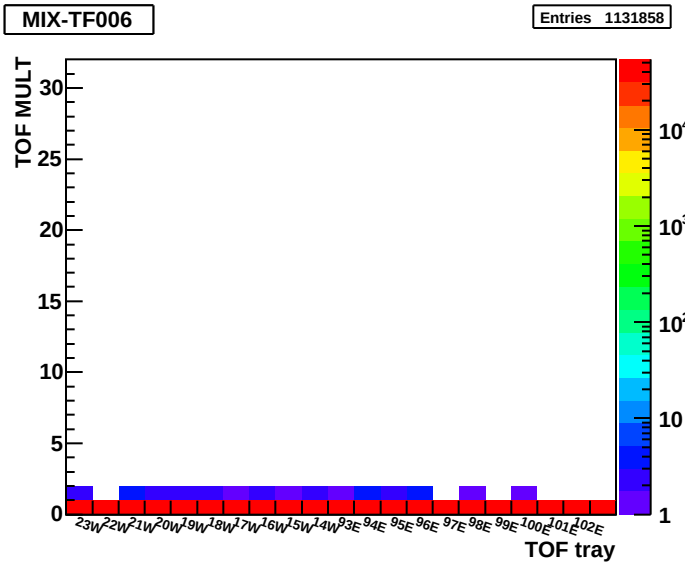

MIX-TF001
Entries 1131858
TOF MULT
TOF tray

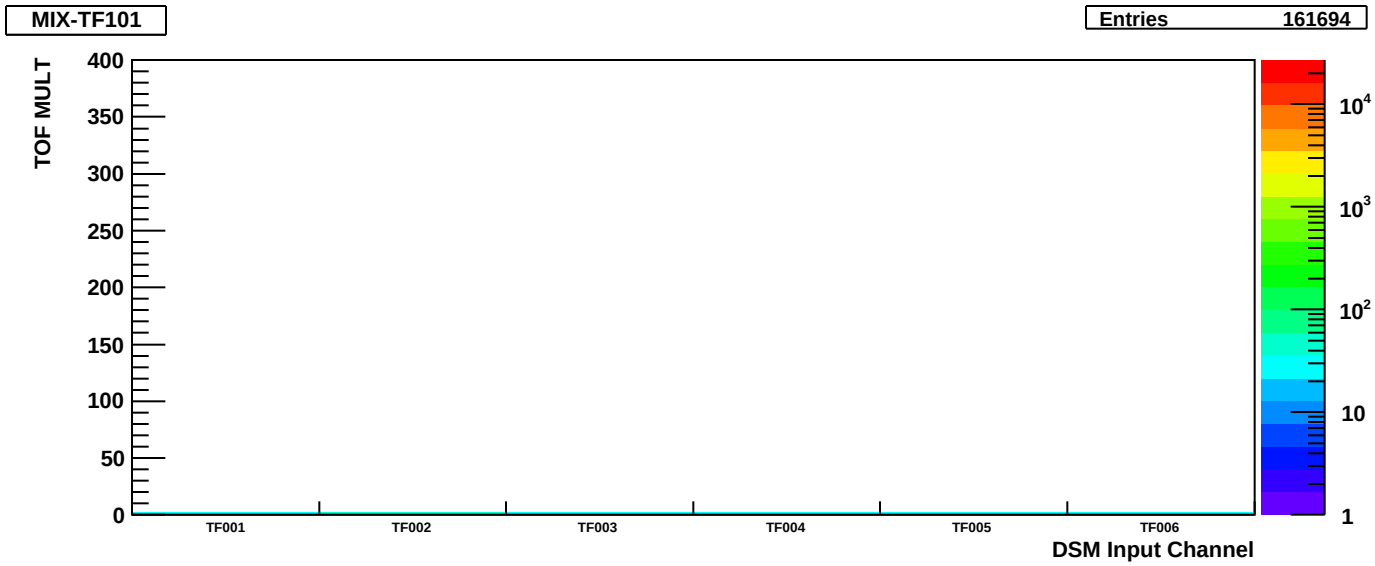

MIX-TF002
Entries 1131858
TOF MULT
TOF tray

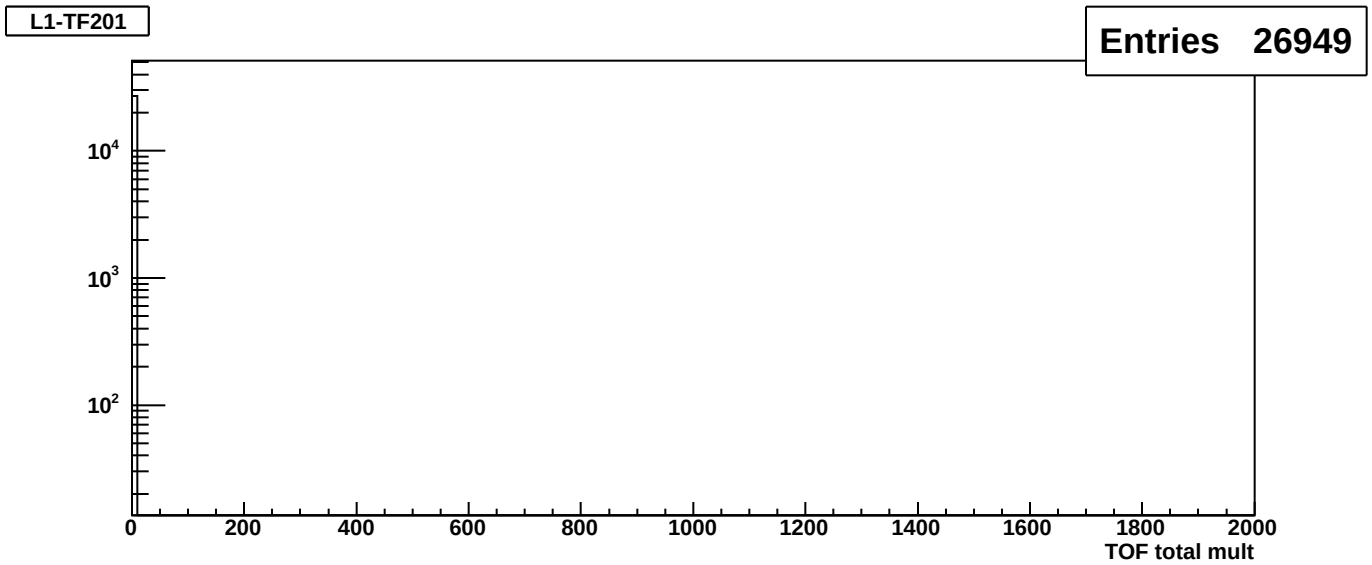

MIX-TF003
Entries 1131858
TOF MULT
TOF tray

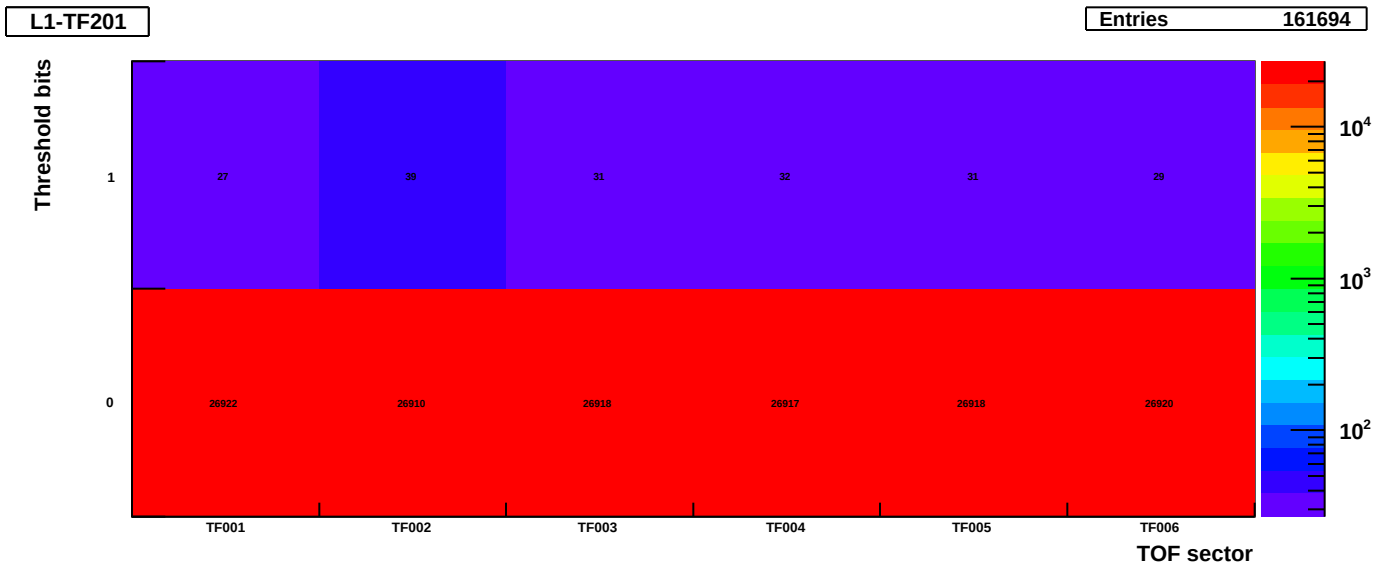

MIX-TF004
Entries 1131858
TOF MULT
TOF tray

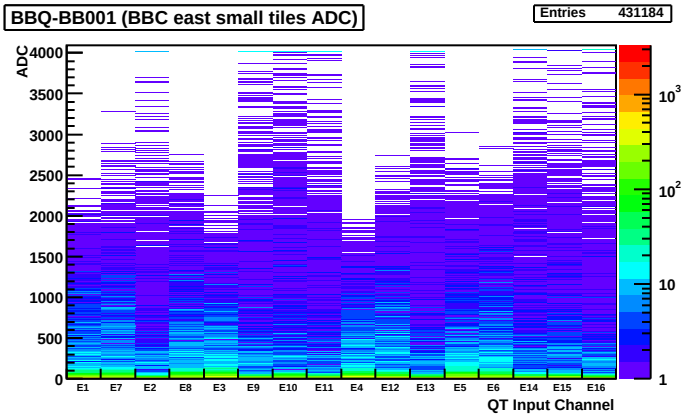

MIX-TF005
Entries 1131858
TOF MULT
TOF tray

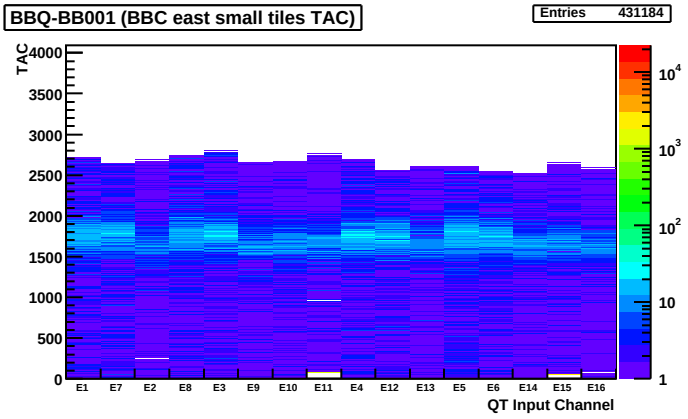

MIX-TF006
Entries 1131858
TOF MULT
TOF tray

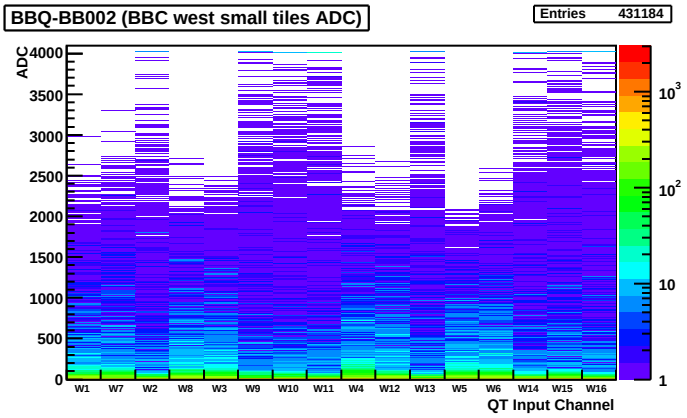

MIX-TF101
Entries 161694
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

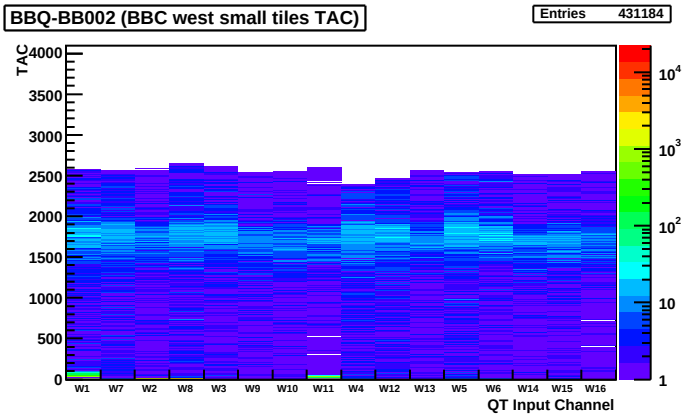

L1-TF201
Entries 26949
10^4
10^3
10^2
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

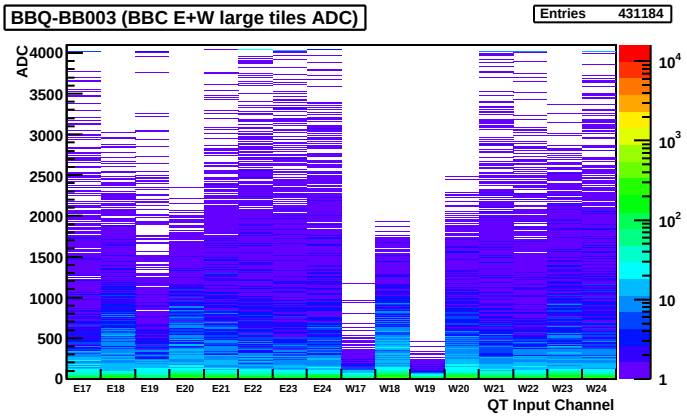

L1-TF201
Entries 161694
Threshold bits
1
0
27
39
31
32
31
29
26922
26910
26918
26917
26918
26920
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2

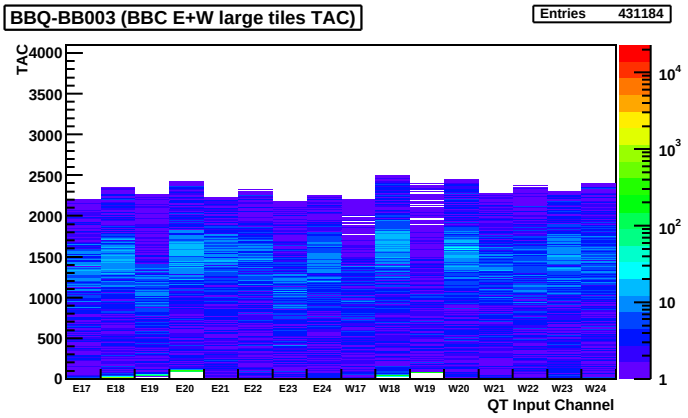

BBQ-BB001 (BBC east small tiles ADC)
Entries 431184
ADC
QT Input Channel

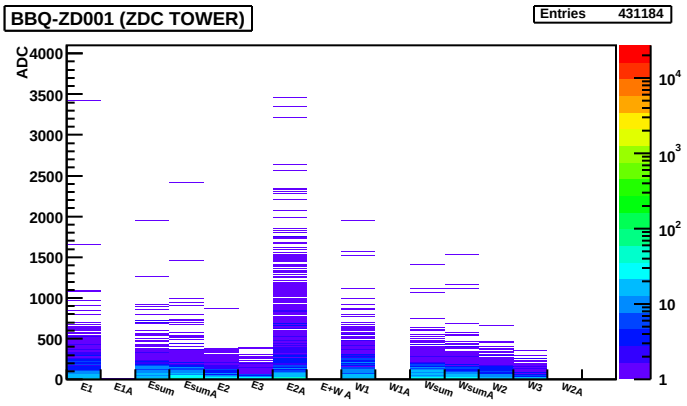

BBQ-BB001 (BBC east small tiles TAC)
Entries 431184
TAC
QT Input Channel

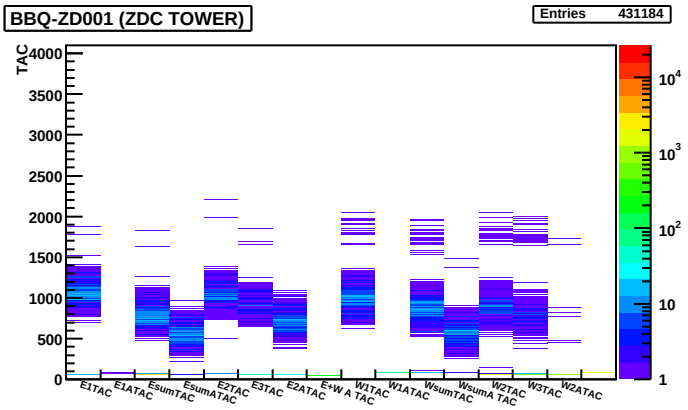

BBQ-BB002 (BBC west small tiles ADC)
Entries 431184
ADC
QT Input Channel

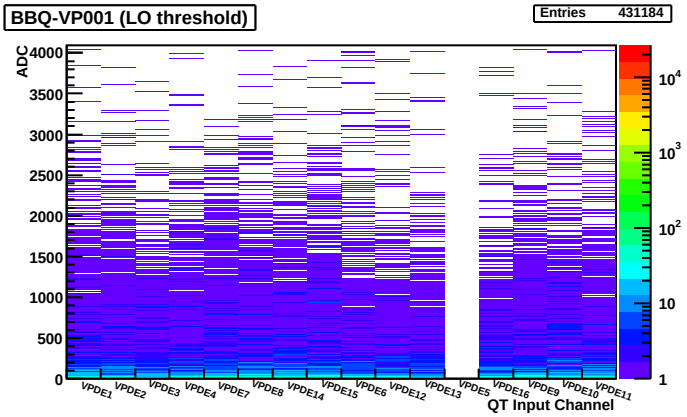

BBQ-BB002 (BBC west small tiles TAC)
Entries 431184
TAC
QT Input Channel

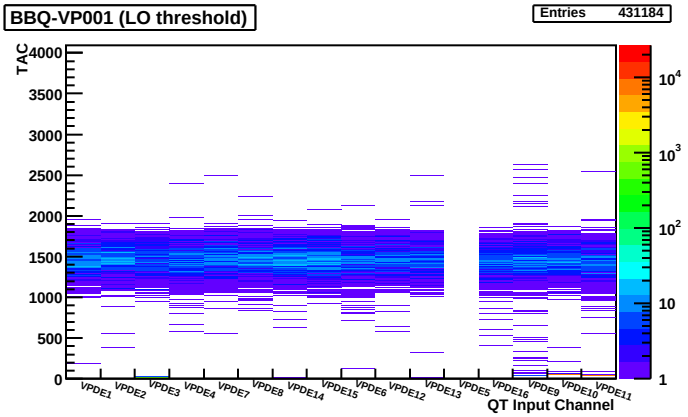

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 431184
ADC
QT Input Channel

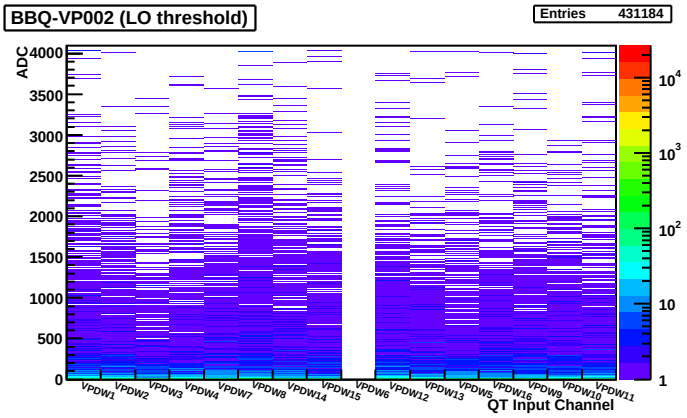

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 431184
TAC
QT Input Channel

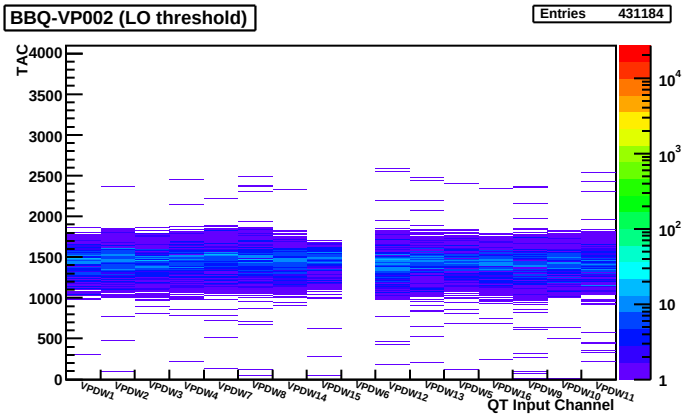

BBQ-ZD001 (ZDC TOWER)
Entries 431184
ADC

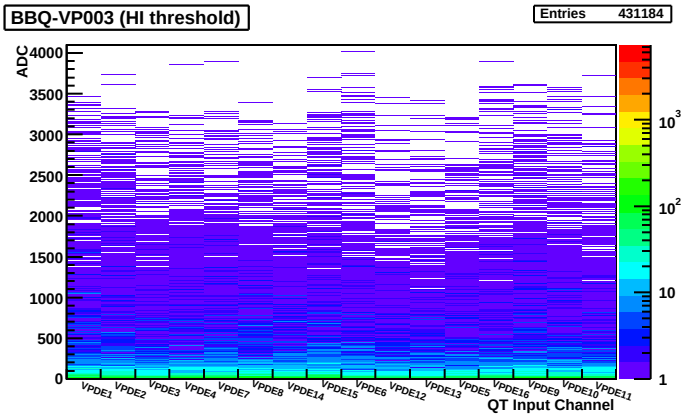

BBQ-ZD001 (ZDC TOWER)
Entries 431184
TAC

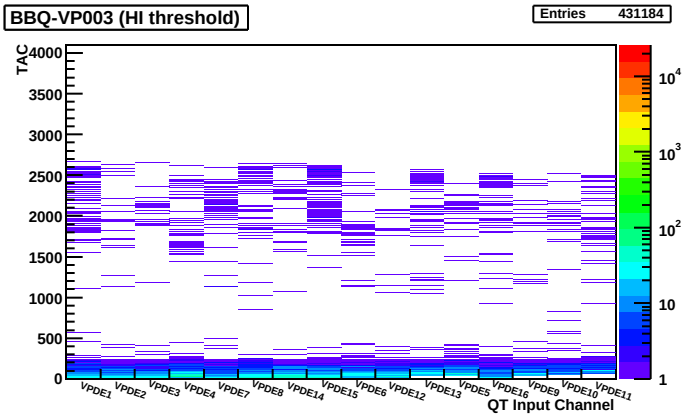

BBQ-VP001 (LO threshold)
Entries 431184
ADC
QT Input Channel

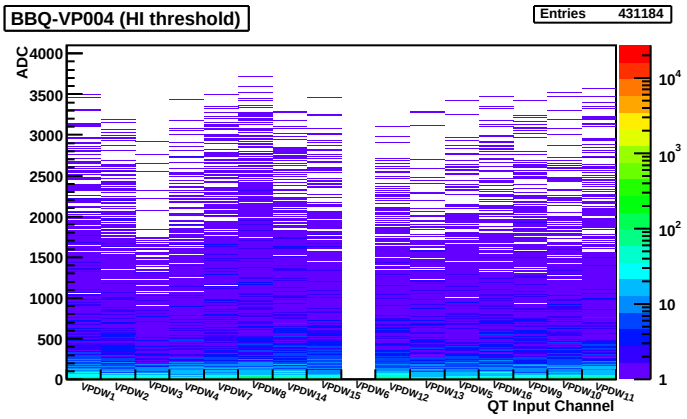

BBQ-VP001 (LO threshold)
Entries 431184
TAC
QT Input Channel

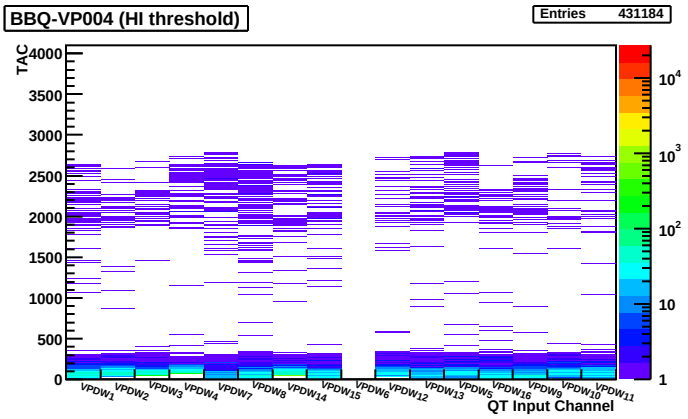

BBQ-VP002 (LO threshold)
Entries 431184
ADC
QT Input Channel

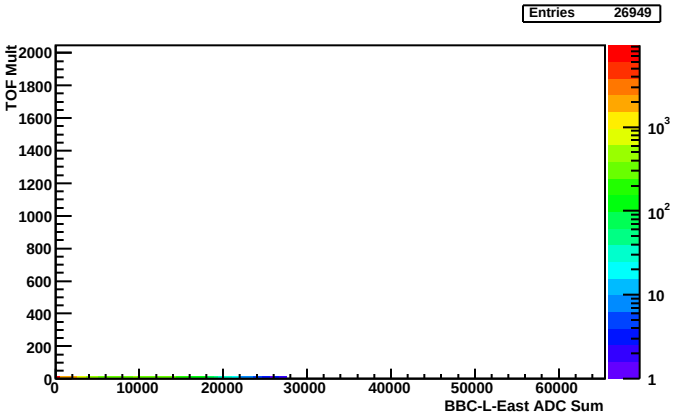

BBQ-VP002 (LO threshold)
Entries 431184
TAC
QT Input Channel

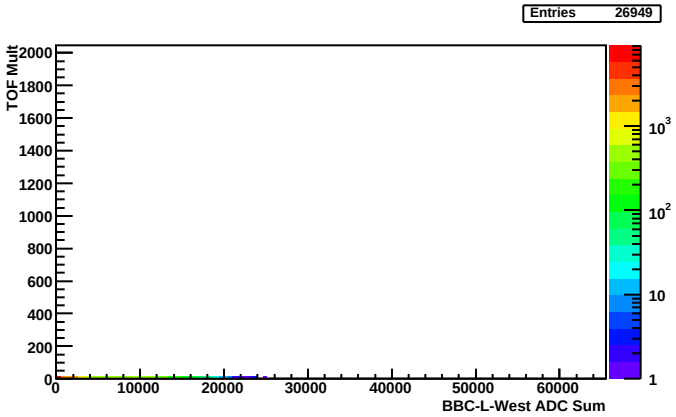

BBQ-VP003 (HI threshold)
Entries 431184
ADC
QT Input Channel

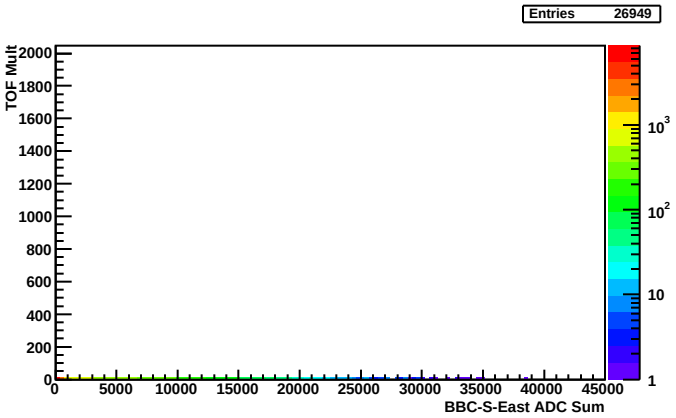

BBQ-VP003 (HI threshold)
Entries 431184
TAC
QT Input Channel

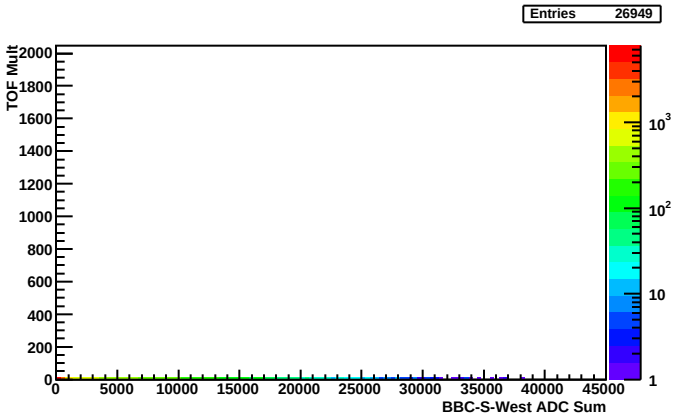

BBQ-VP004 (HI threshold)
Entries 431184
ADC
QT Input Channel

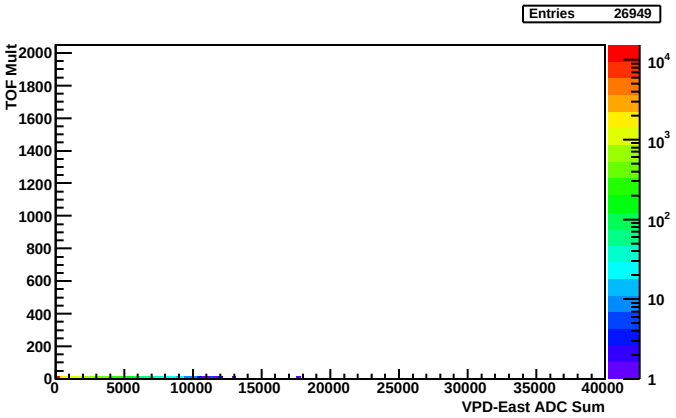

BBQ-VP004 (HI threshold)
Entries 431184
TAC
QT Input Channel

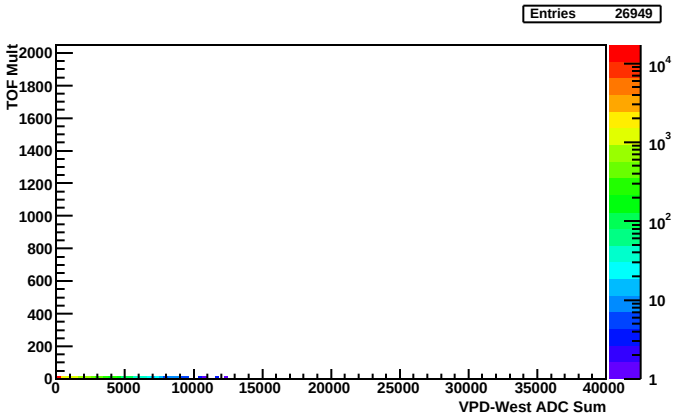

Entries 26949
TOF Mult
BBC-L-East ADC Sum

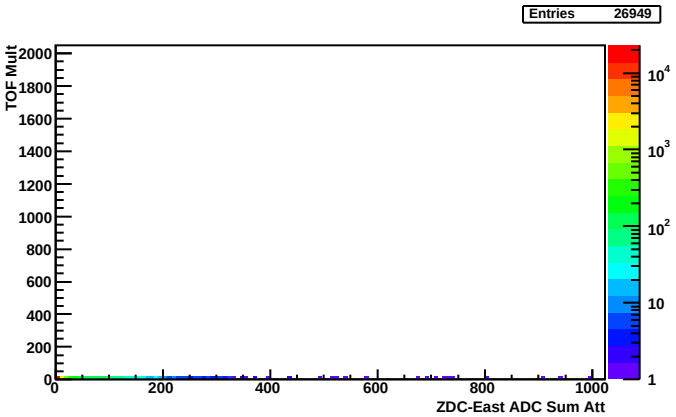

Entries 26949
TOF Mult
BBC-L-West ADC Sum

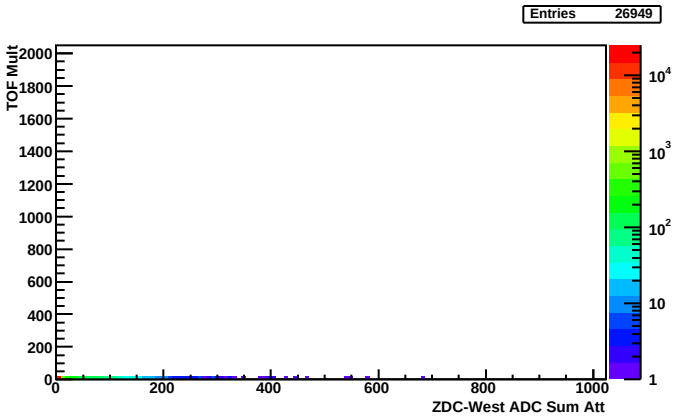

Entries 26949
TOF Mult
BBC-S-East ADC Sum

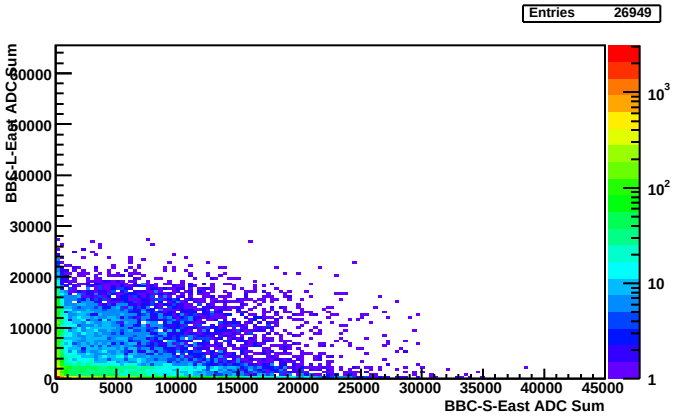

Entries 26949
TOF Mult
BBC-S-West ADC Sum

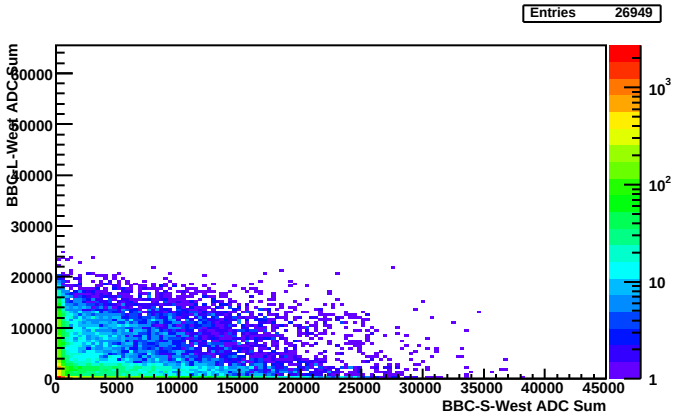

Entries 26949
TOF Mult
VPD-East ADC Sum

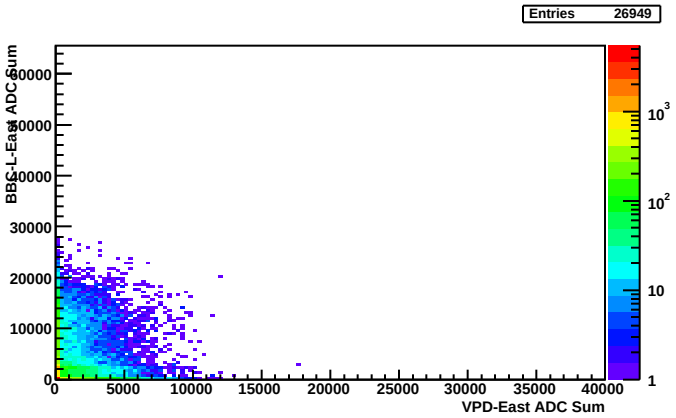

Entries 26949
TOF Mult
VPD-West ADC Sum

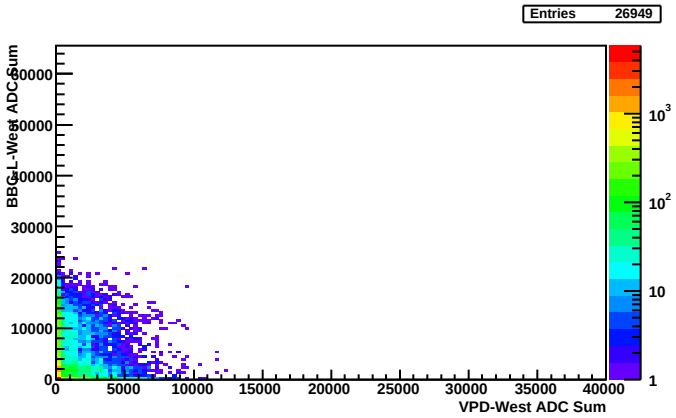

Entries 26949
TOF Mult
ZDC-East ADC Sum Att

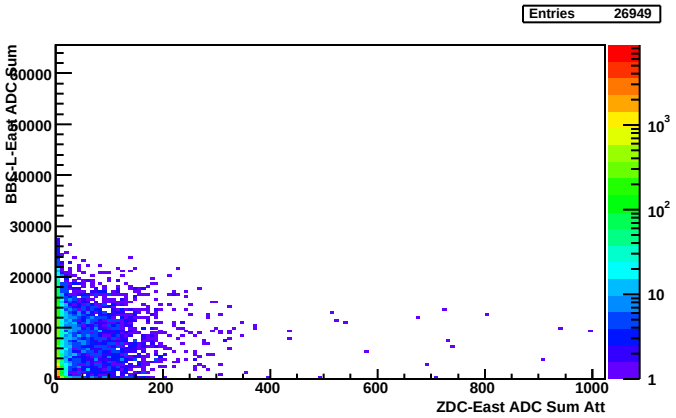

Entries 26949
TOF Mult
ZDC-West ADC Sum Att

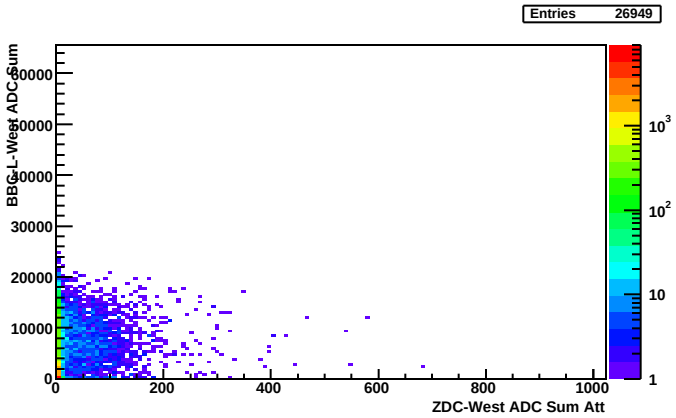

Entries 26949
BBC-L-East ADC Sum
BBC-S-East ADC Sum

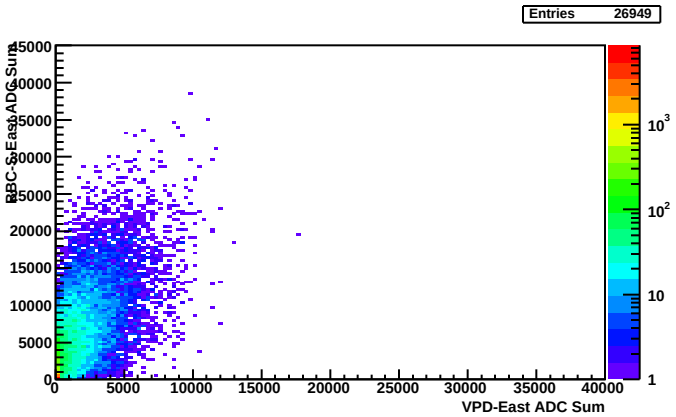

Entries 26949
BBC-L-West ADC Sum
BBC-S-West ADC Sum

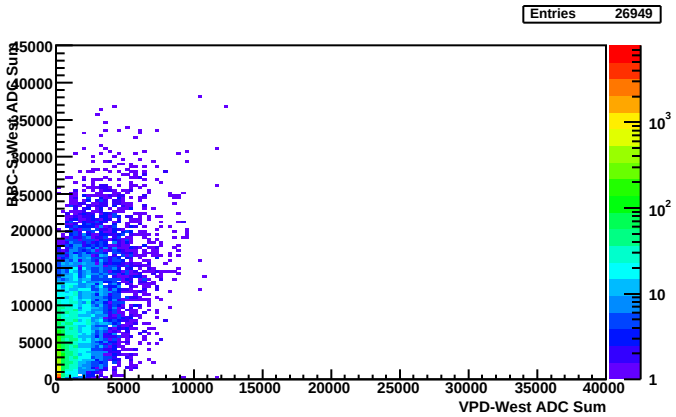

Entries 26949
BBC-L-East ADC Sum
VPD-East ADC Sum

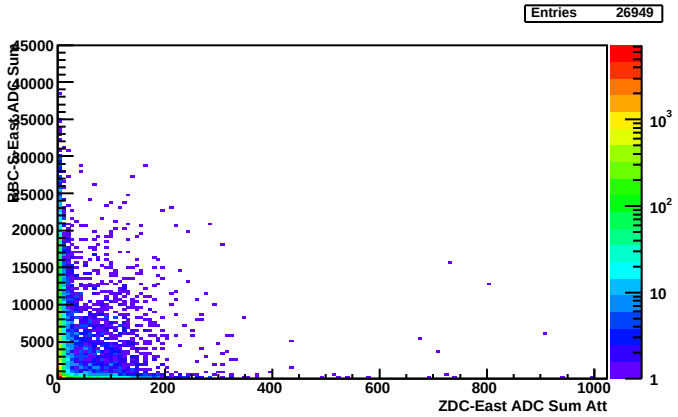

Entries 26949
BBC-L-West ADC Sum
VPD-West ADC Sum

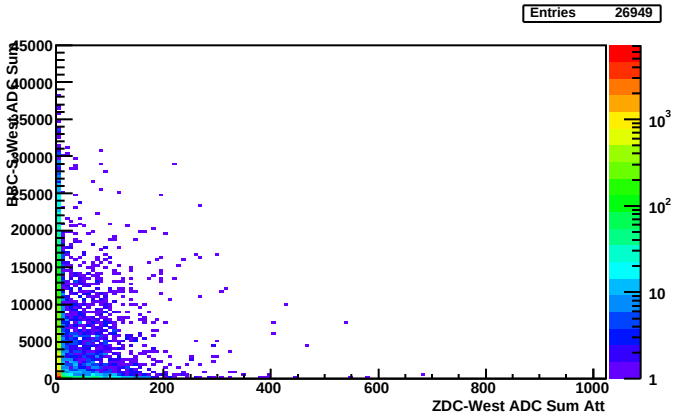

Entries 26949
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

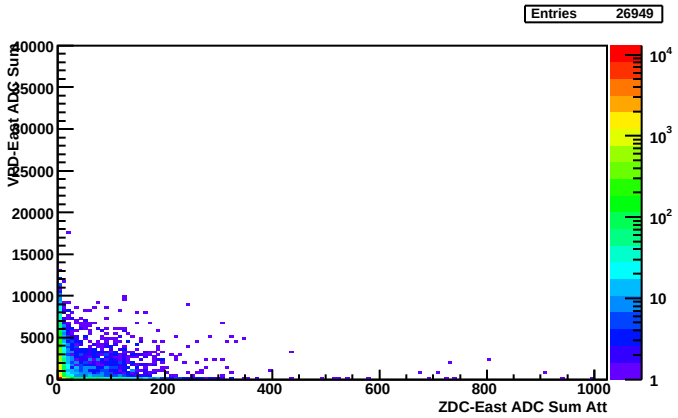

Entries 26949
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

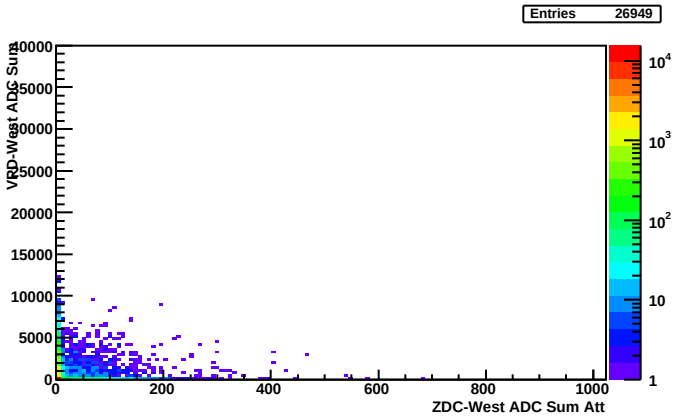

Entries 26949
BBC-S-East ADC Sum
VPD-East ADC Sum

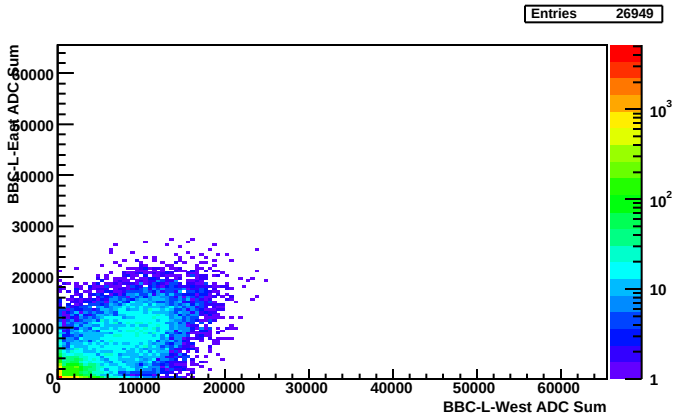

Entries 26949
BBC-S-West ADC Sum
VPD-West ADC Sum

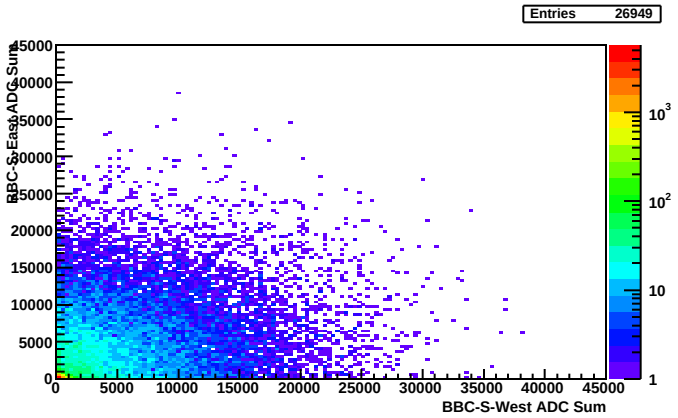

Entries 26949
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

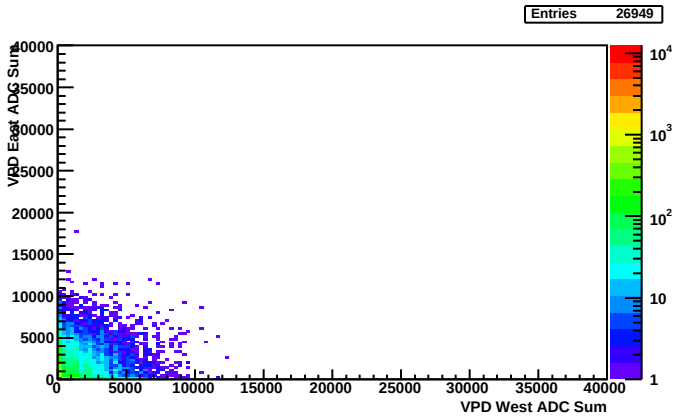

Entries 26949
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

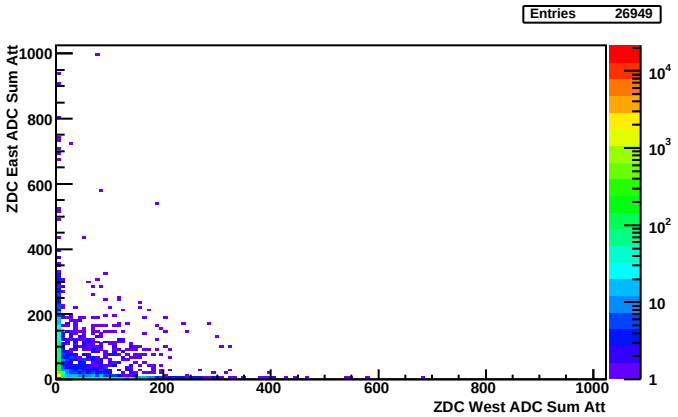

Entries 26949
VPD-East ADC Sum
ZDC-East ADC Sum Att

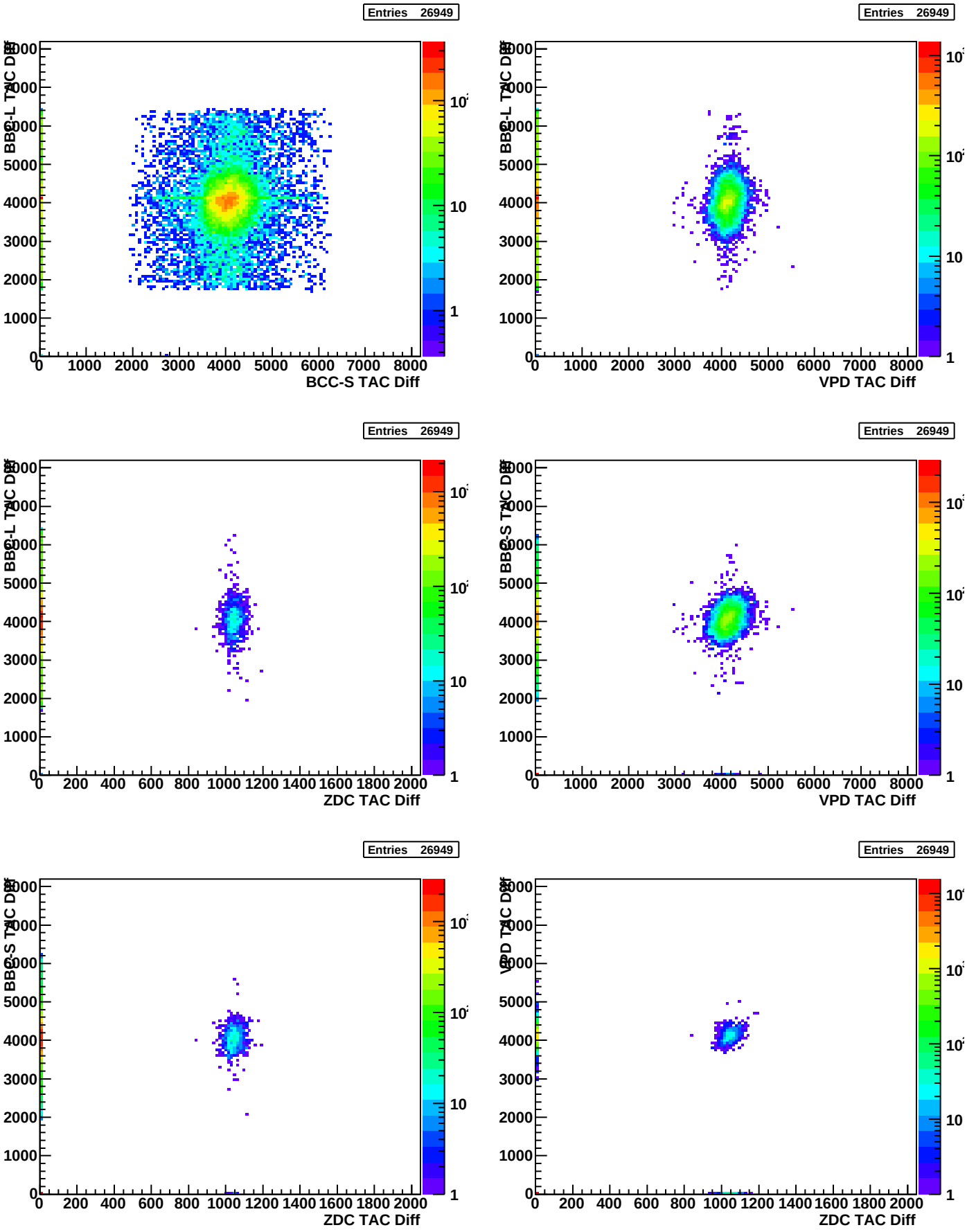

Entries 26949
VPD-West ADC Sum
ZDC-West ADC Sum Att

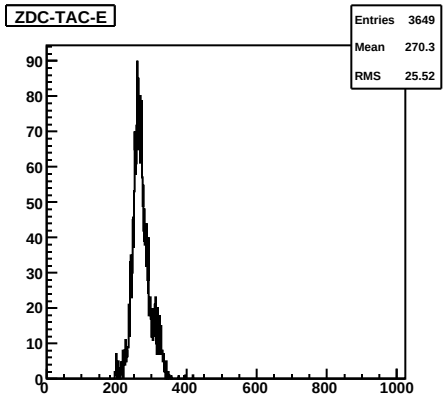

Entries 26949
BBC-L-East ADC Sum
BBC-L-West ADC Sum

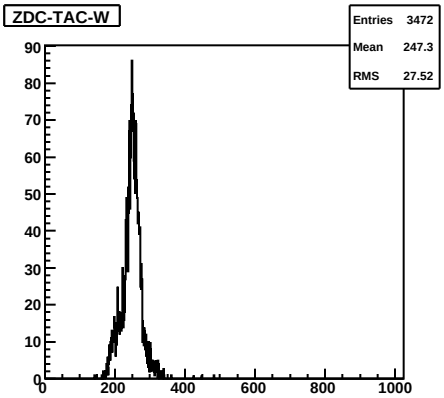

Entries 26949
BBC-S-East ADC Sum
BBC-S-West ADC Sum

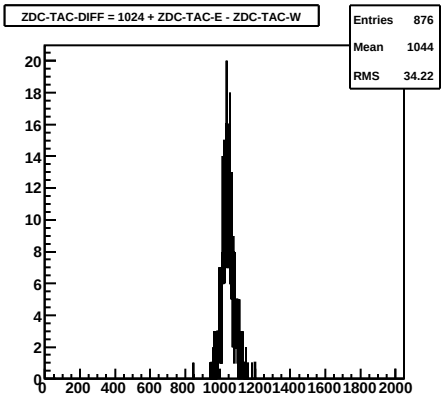

Entries 26949
VPD East ADC Sum
VPD West ADC Sum

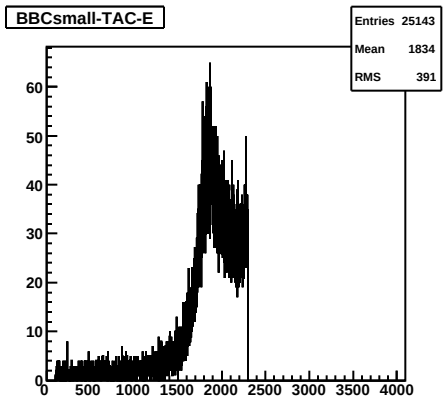

Entries 26949
ZDC East ADC Sum Att
ZDC West ADC Sum Att

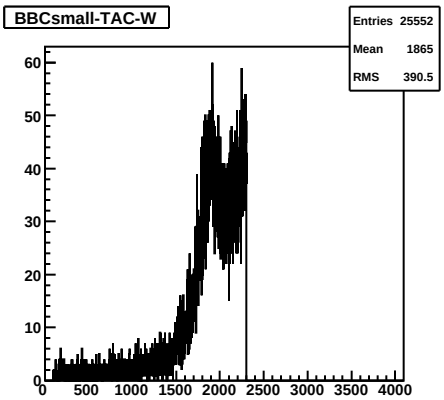

Entries 26949
BBC-L TAC Diff
BCC-S TAC Diff
Entries 26949
BBC-L TAC Diff
VPD TAC Diff
Entries 26949
BBC-L TAC Diff
ZDC TAC Diff
Entries 26949
BBC-S TAC Diff
VPD TAC Diff
Entries 26949
BBC-S TAC Diff
ZDC TAC Diff
Entries 26949
VPD TAC Diff
ZDC TAC Diff

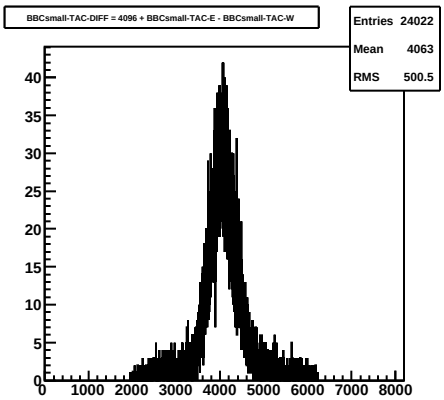

ZDC-TAC-E
Entries 3649
Mean 270.3
RMS 25.52

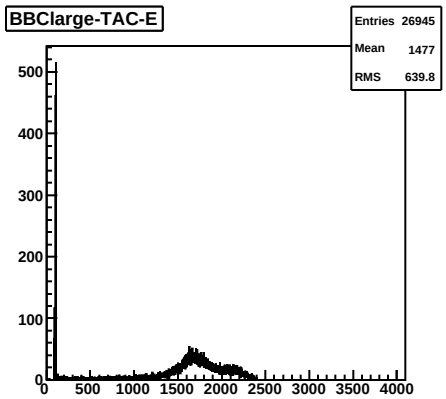

ZDC-TAC-W
Entries 3472
Mean 247.3
RMS 27.52

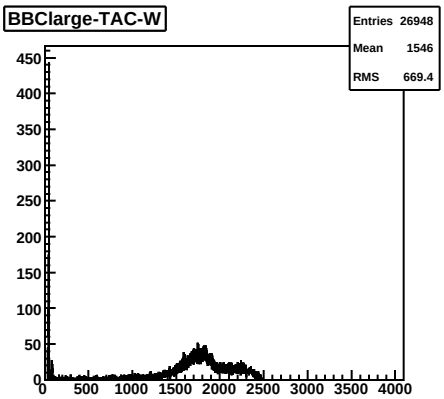

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 876
Mean 1044
RMS 34.22

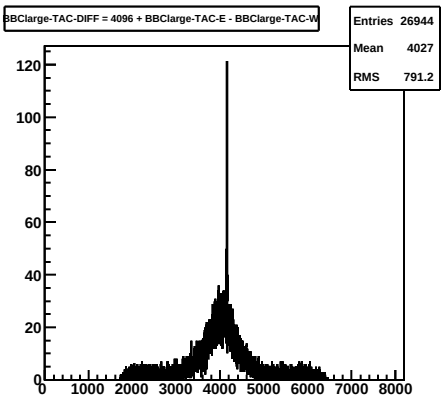

BBCsmall-TAC-E
Entries 25143
Mean 1834
RMS 391

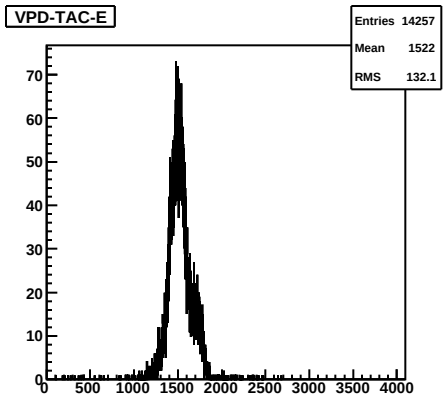

BBCsmall-TAC-W
Entries 25552
Mean 1865
RMS 390.5

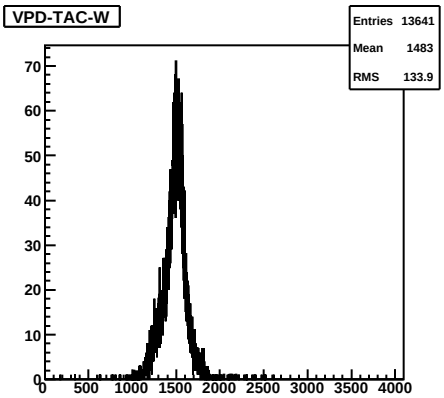

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 24022
Mean 4063
RMS 500.5

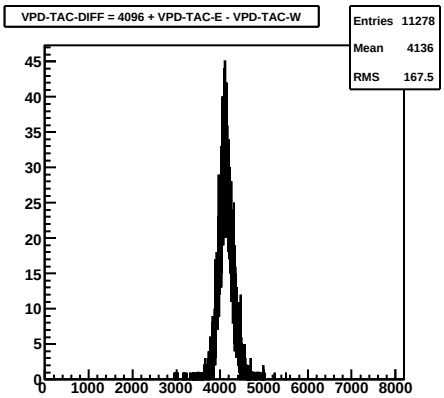

BBClarge-TAC-E
Entries 26945
Mean 1477
RMS 639.8

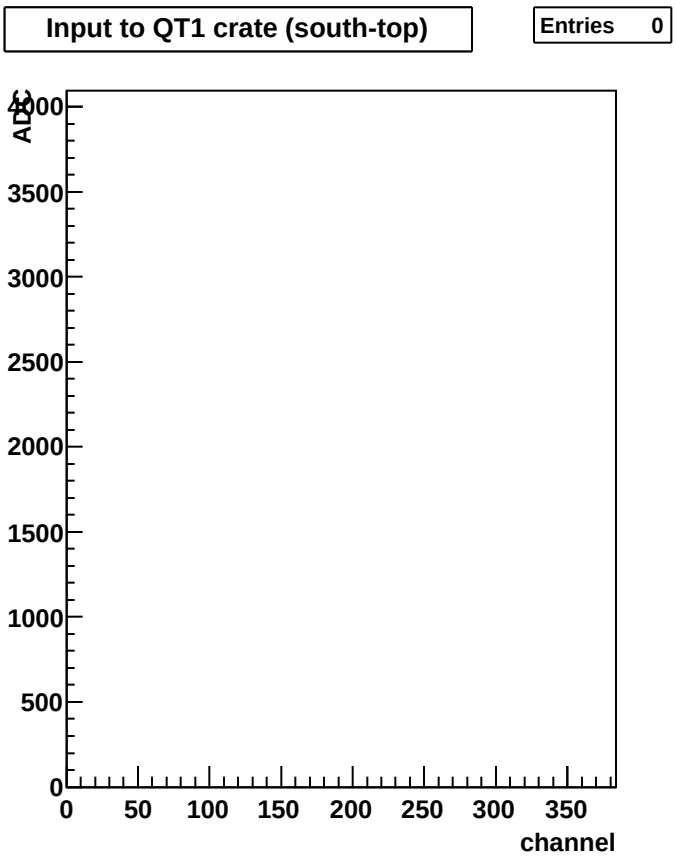

BBClarge-TAC-W
Entries 26948
Mean 1546
RMS 669.4

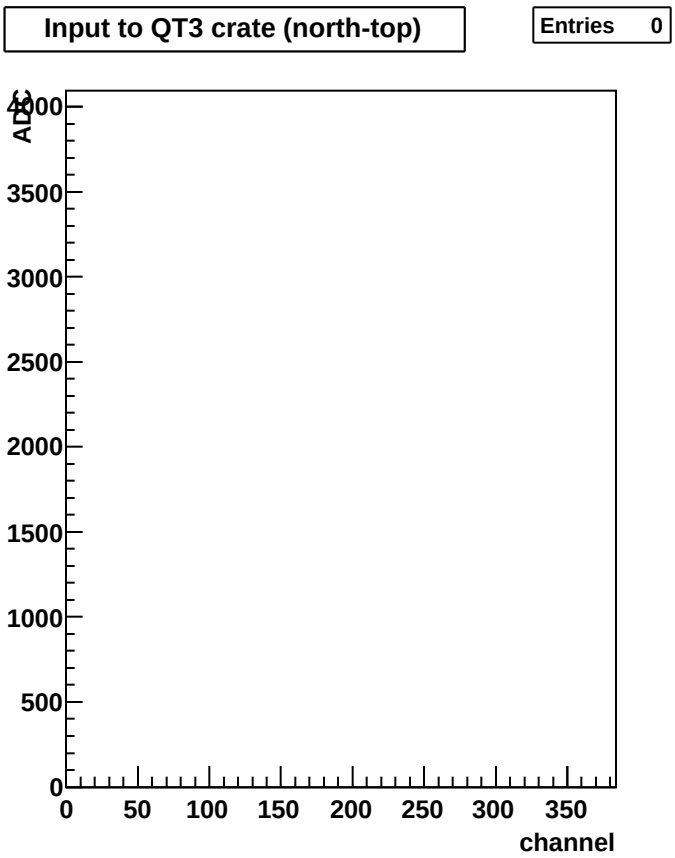

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 26944
Mean 4027
RMS 791.2

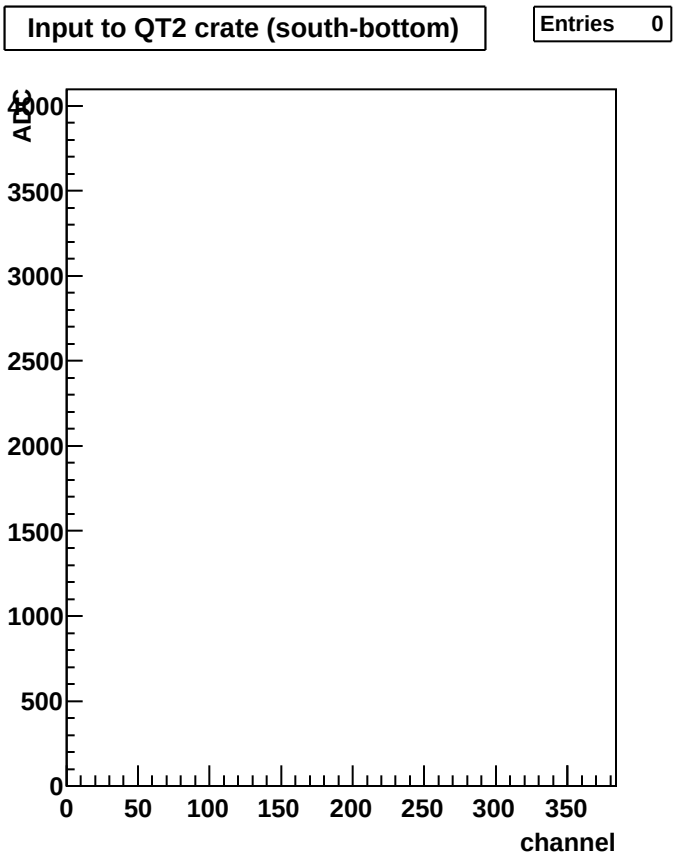

VPD-TAC-E
Entries 14257
Mean 1522
RMS 132.1

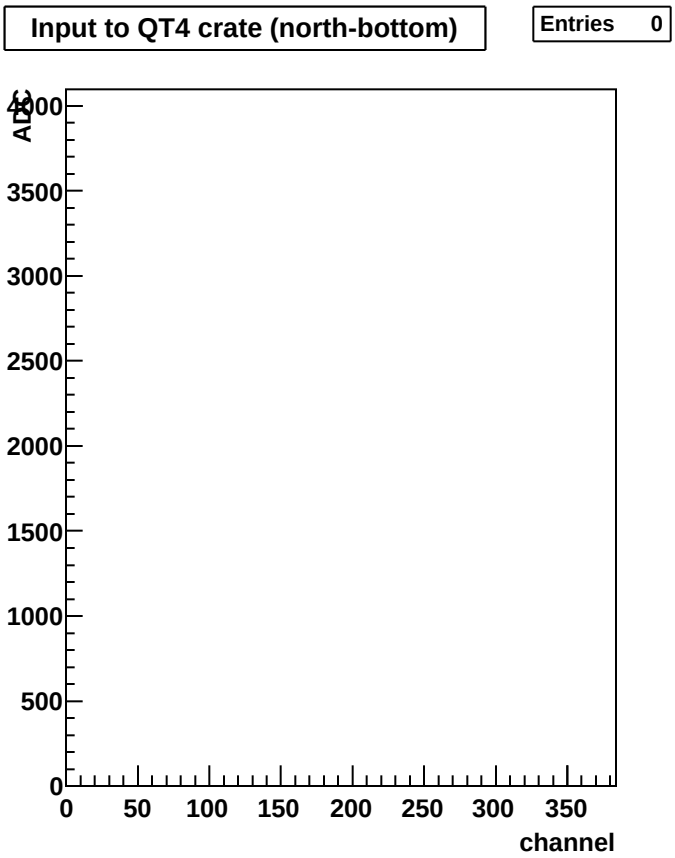

VPD-TAC-W
Entries 13641
Mean 1483
RMS 133.9

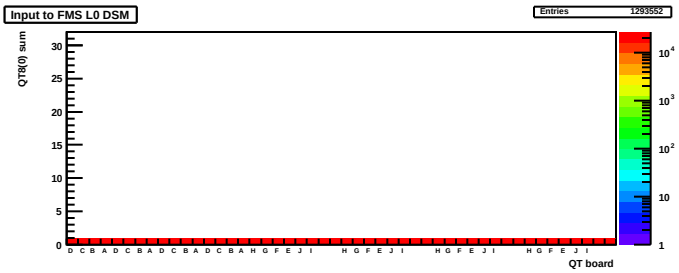

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 11278
Mean 4136
RMS 167.5

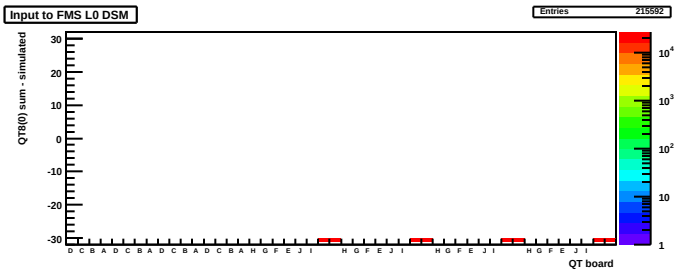

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

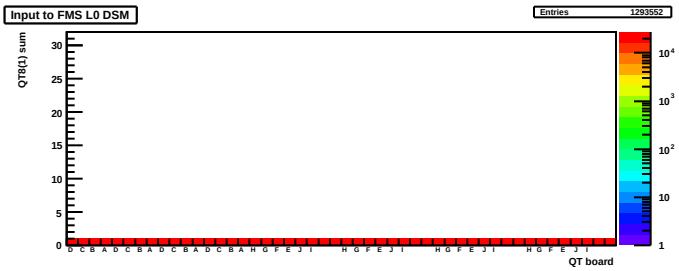

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

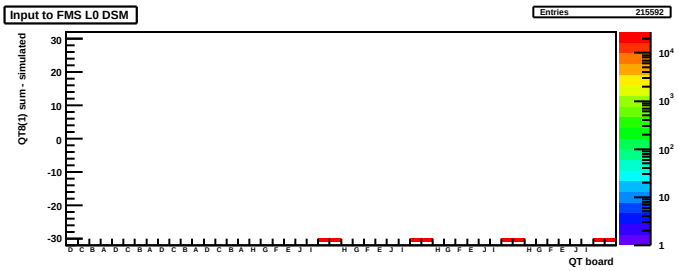

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

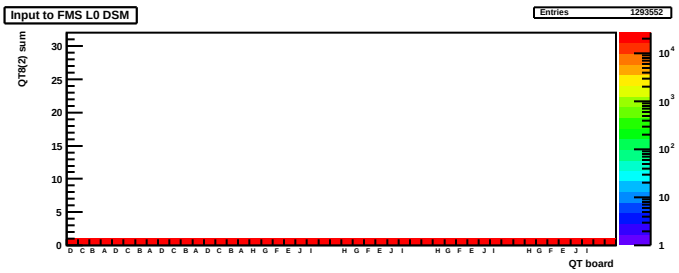

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

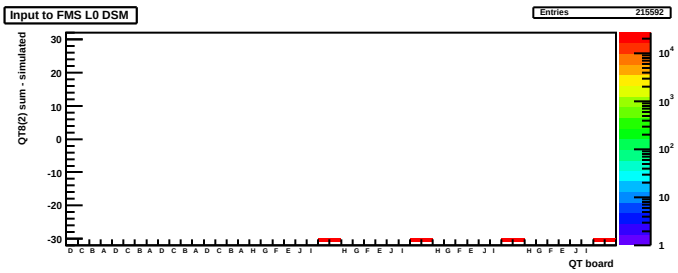

Input to FMS L0 DSM
Entries 1293552
QT8(0) sum
QT board

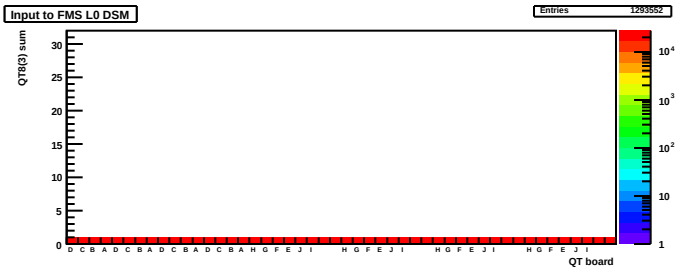

Input to FMS L0 DSM
Entries 215592
QT8(0) sum - simulated
QT board

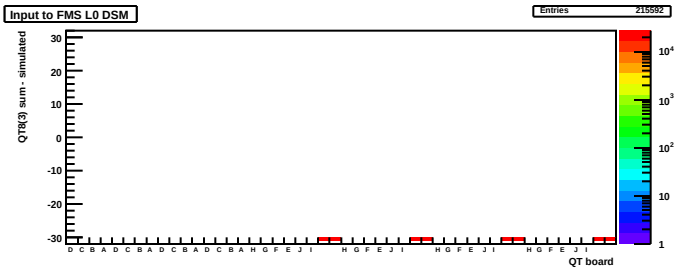

Input to FMS L0 DSM
Entries 1293552
QT8(1) sum
QT board

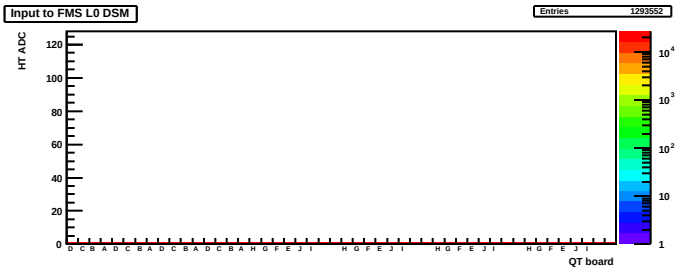

Input to FMS L0 DSM
Entries 215592
QT8(1) sum - simulated
QT board

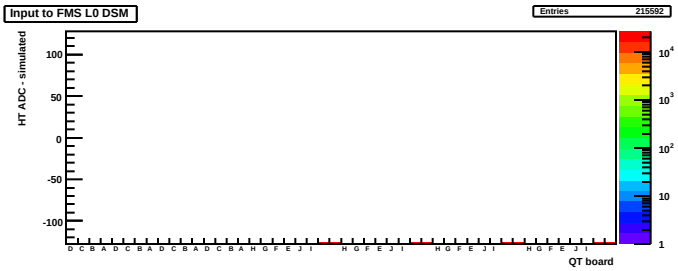

Input to FMS L0 DSM
Entries 1293552
QT8(2) sum
QT board

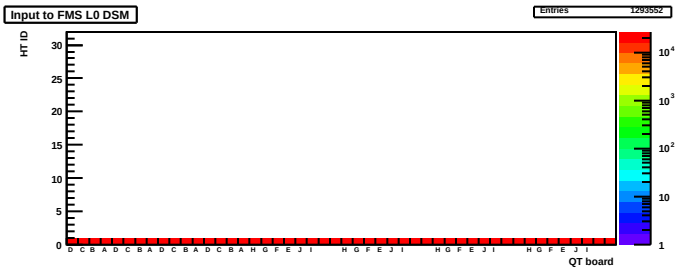

Input to FMS L0 DSM
Entries 215592
QT8(2) sum - simulated
QT board

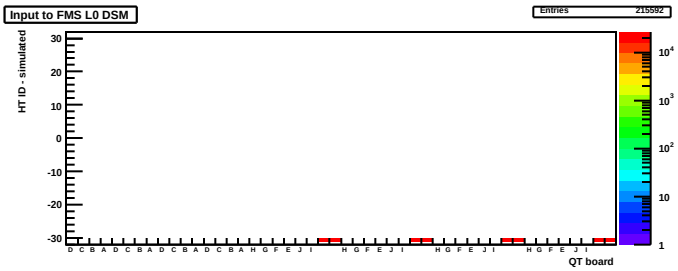

Input to FMS L0 DSM
Entries 1293552
QT8(3) sum
QT board

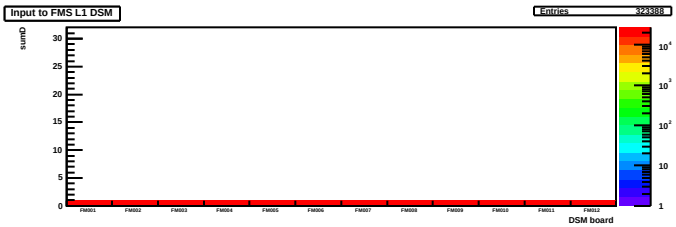

Input to FMS L0 DSM
Entries 215592
QT8(3) sum - simulated
QT board

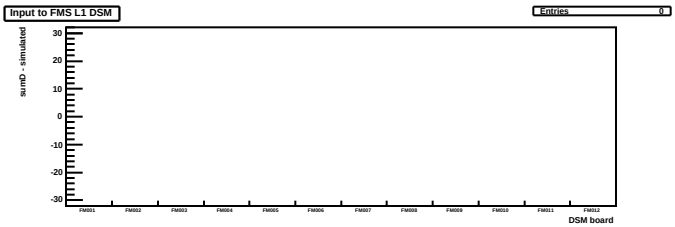

Input to FMS L0 DSM
Entries 1293552
HT ADC
QT board

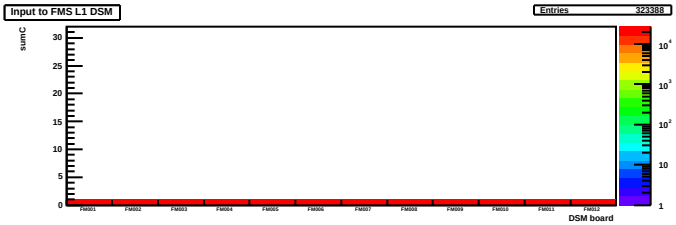

Input to FMS L0 DSM
Entries 215592
HT ADC - simulated
QT board

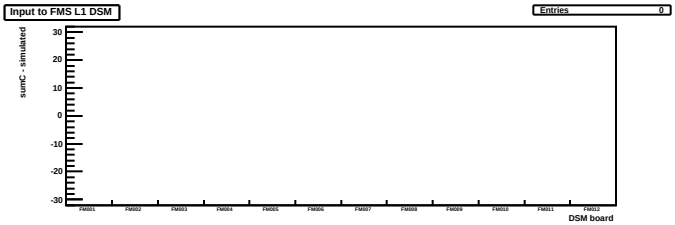

Input to FMS L0 DSM
Entries 1293552
HT ID
QT board

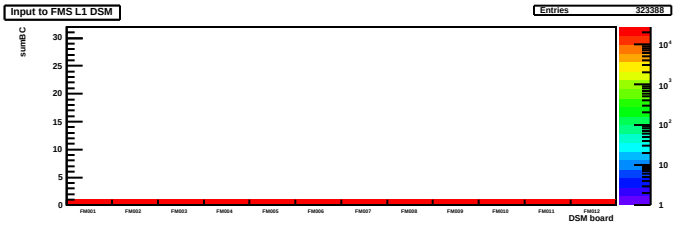

Input to FMS L0 DSM
Entries 215592
HT ID - simulated
QT board

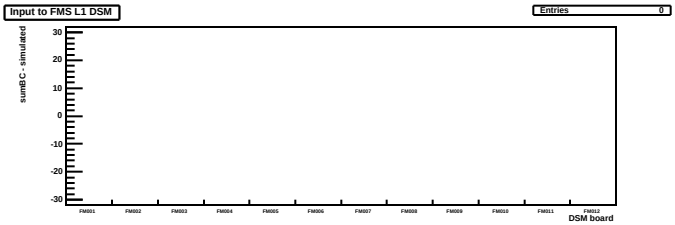

Input to FMS L1 DSM
Entries 323388
sumD
DSM board

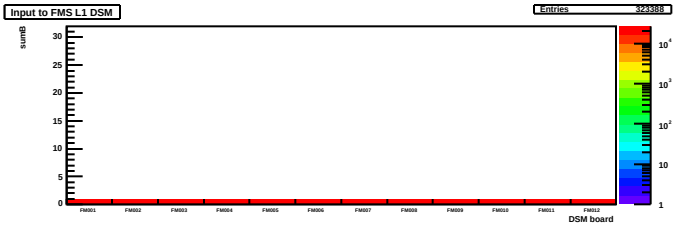

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

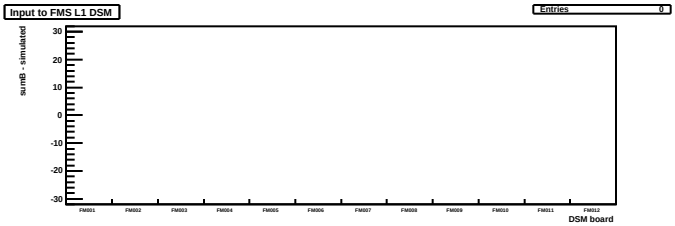

Input to FMS L1 DSM
Entries 323388
sumC
DSM board

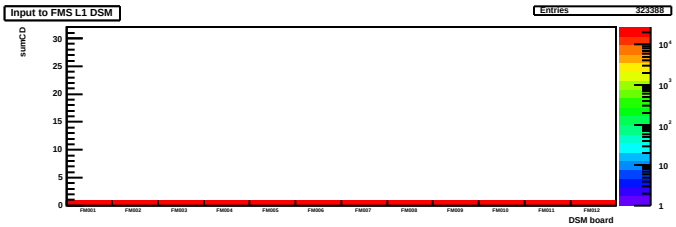

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

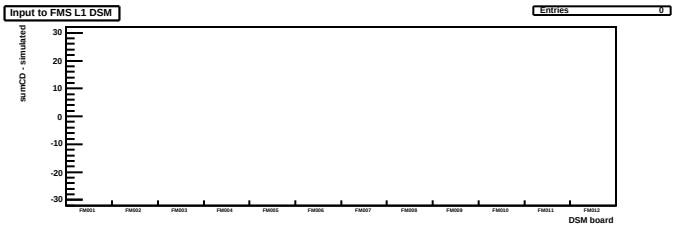

Input to FMS L1 DSM
Entries 323388
sumBC
DSM board

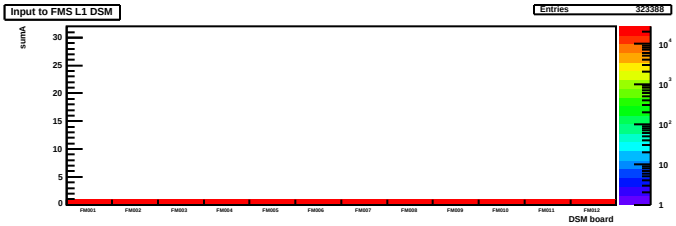

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

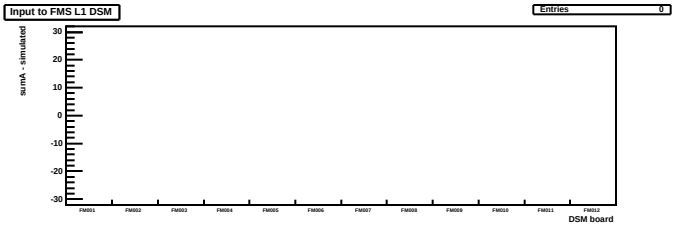

Input to FMS L1 DSM
Entries 323388
sumB
DSM board

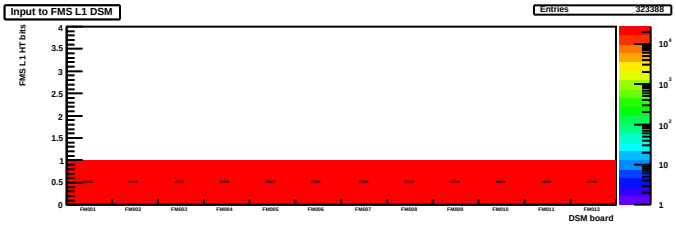

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

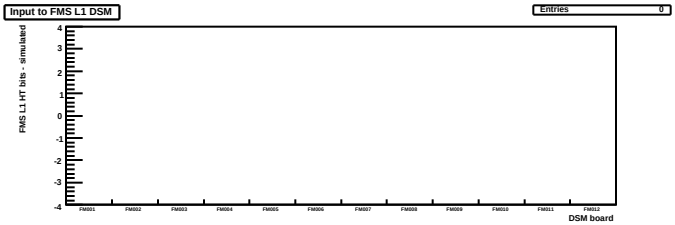

Input to FMS L1 DSM
Entries 323388
sumCD
DSM board

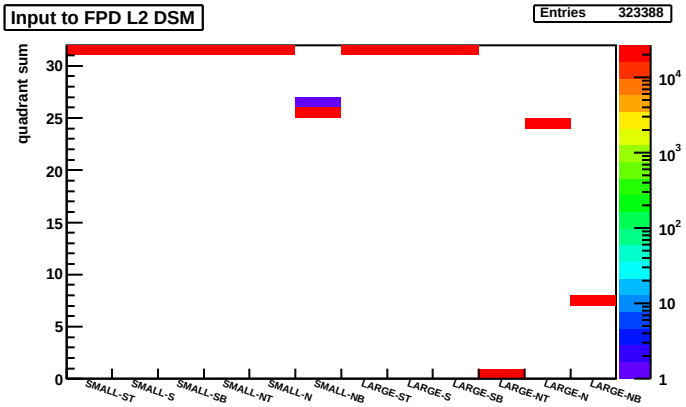

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

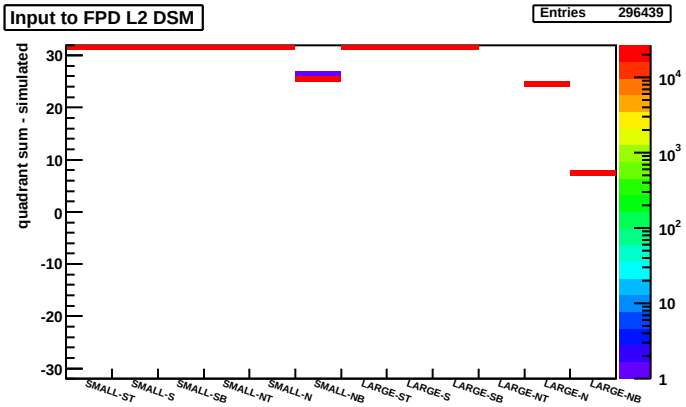

Input to FMS L1 DSM
Entries 323388
sumA
DSM board

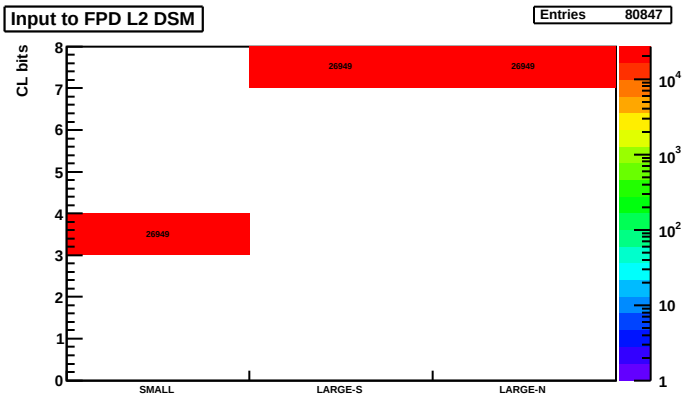

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

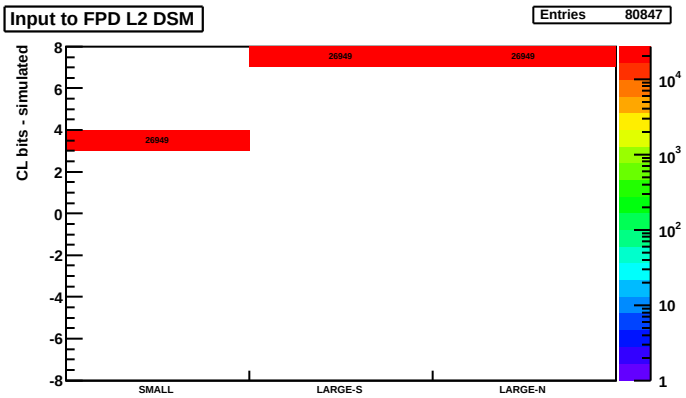

Input to FMS L1 DSM
Entries 323388
FMS L1 HT bits
DSM board

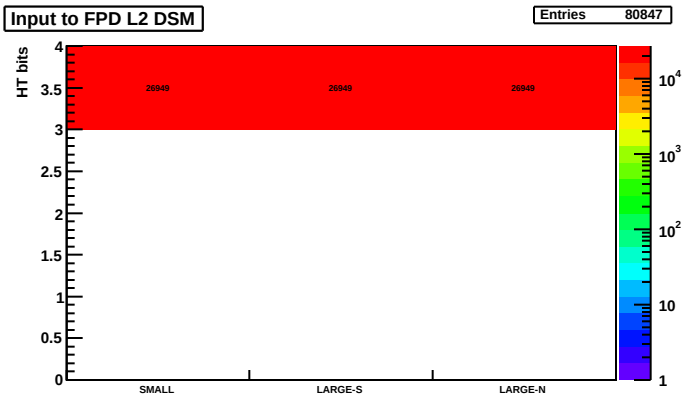

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

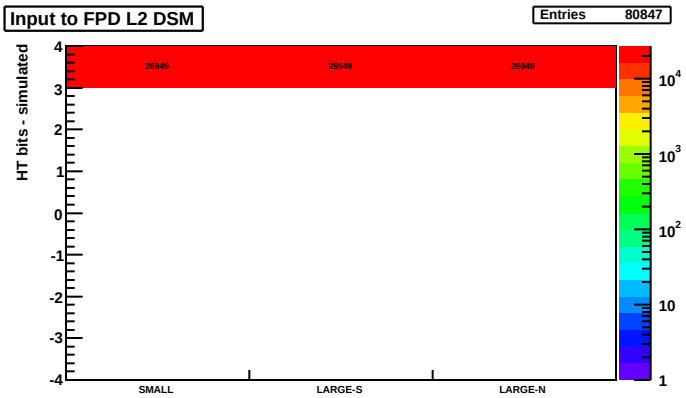

Input to FPD L2 DSM
Entries 323388
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

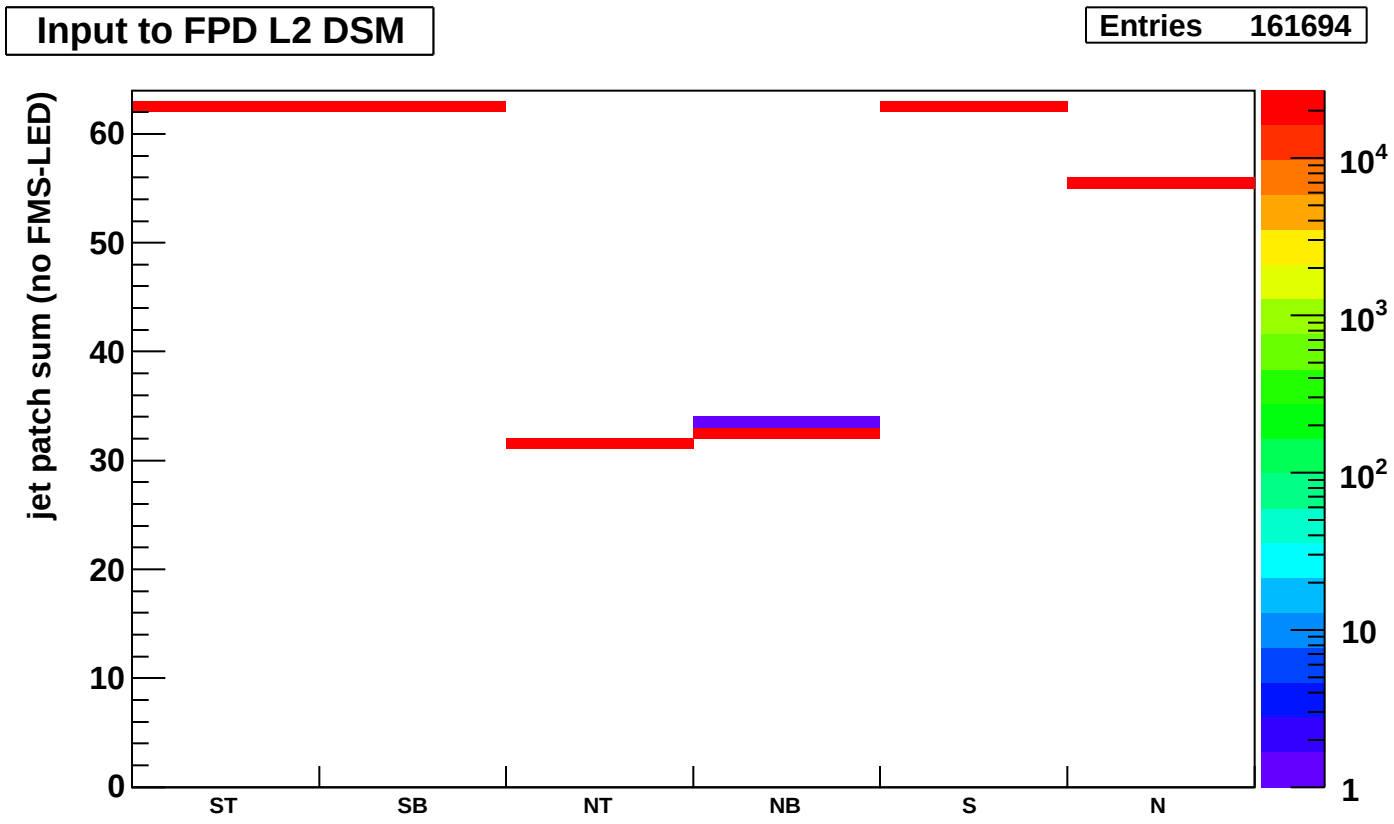

Input to FPD L2 DSM
Entries 296439
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

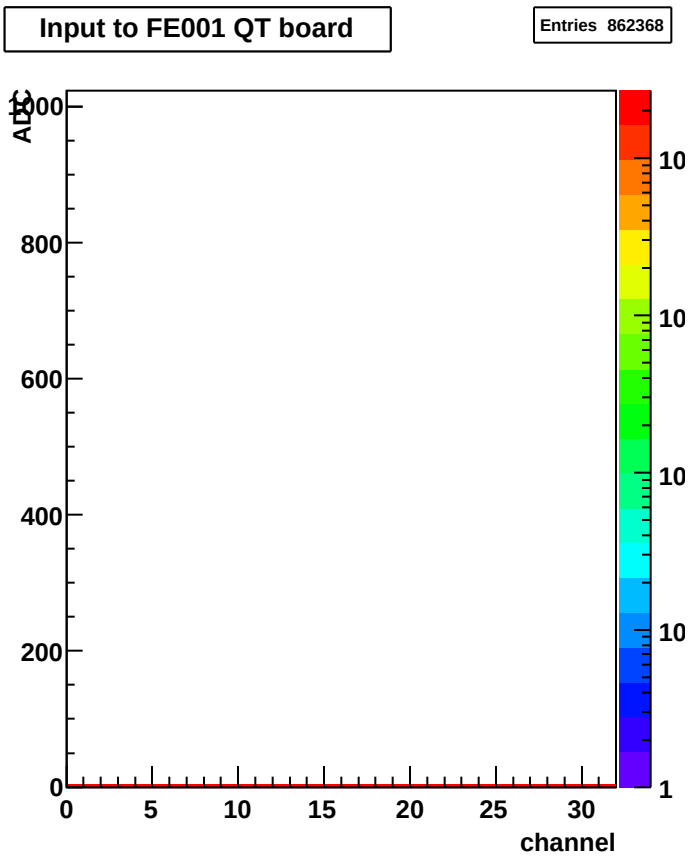

Input to FPD L2 DSM
Entries 80847
CL bits
26949
26949
26949
SMALL
LARGE-S
LARGE-N

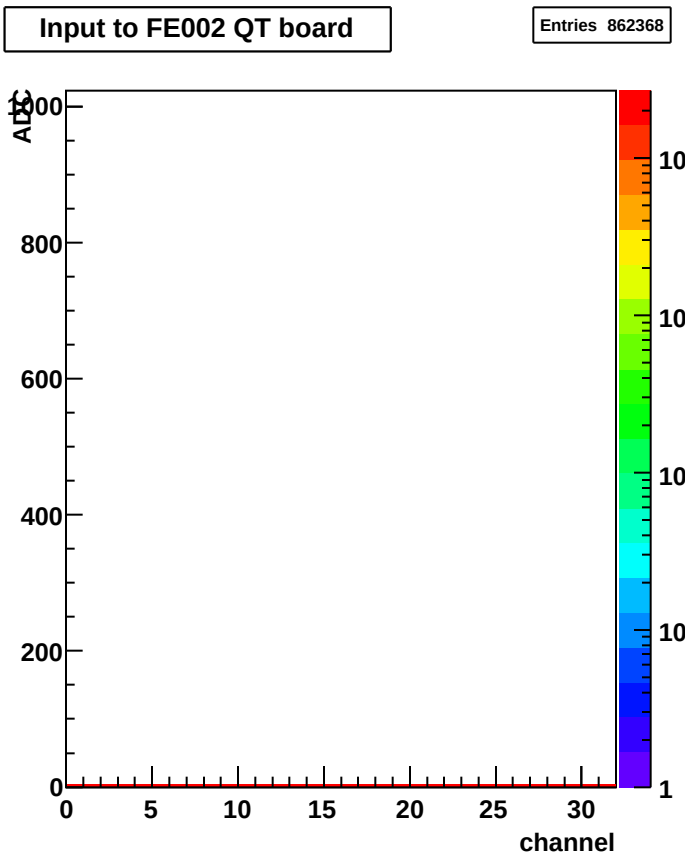

Input to FPD L2 DSM
Entries 80847
CL bits - simulated
26949
26949
26949
SMALL
LARGE-S
LARGE-N

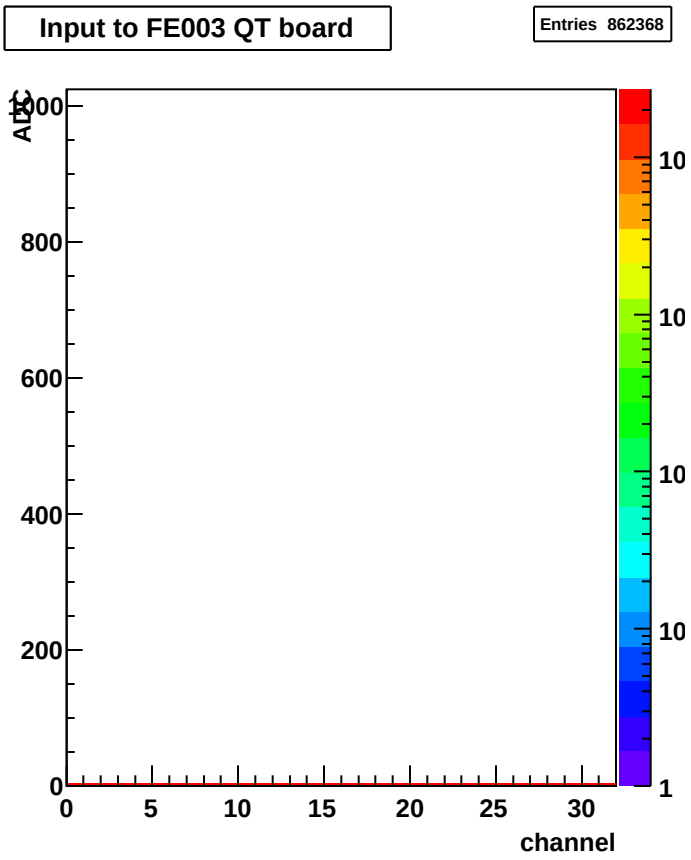

Input to FPD L2 DSM
Entries 80847
HT bits
26949
26949
26949
SMALL
LARGE-S
LARGE-N

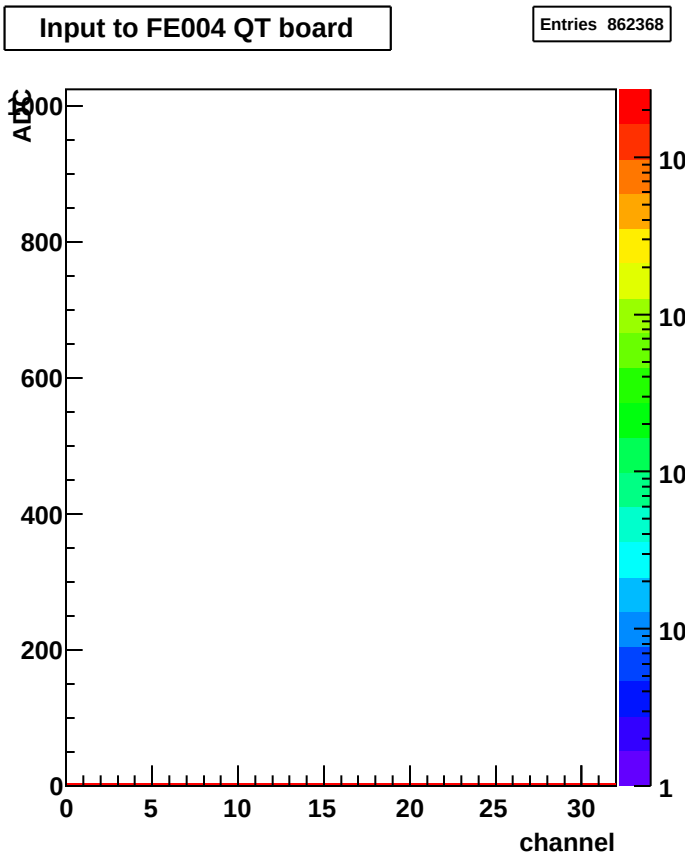

Input to FPD L2 DSM
Entries 80847
HT bits - simulated
26949
26949
26949
SMALL
LARGE-S
LARGE-N


Input to FPD L2 DSM
Entries 161694
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

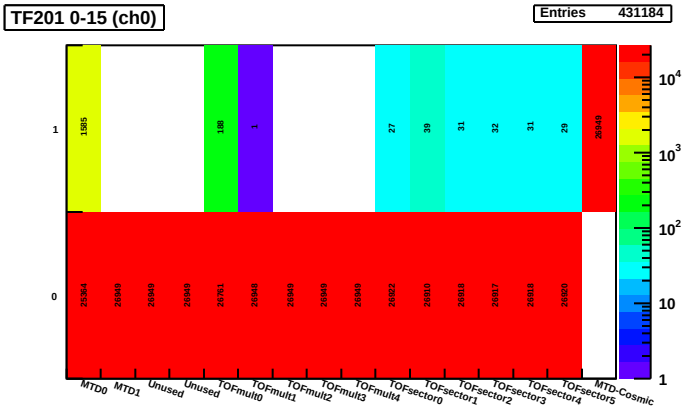

Input to FE001 QT board
Entries 862368
ADC
channel


Input to FE002 QT board
Entries 862368
ADC
channel

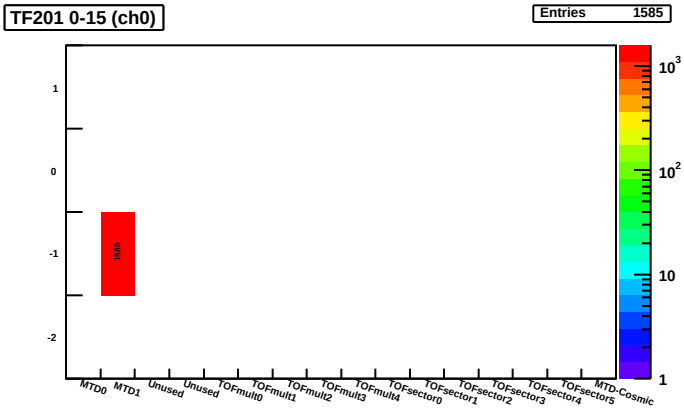

Input to FE003 QT board
Entries 862368
ADC
channel


Input to FE004 QT board
Entries 862368
ADC
channel

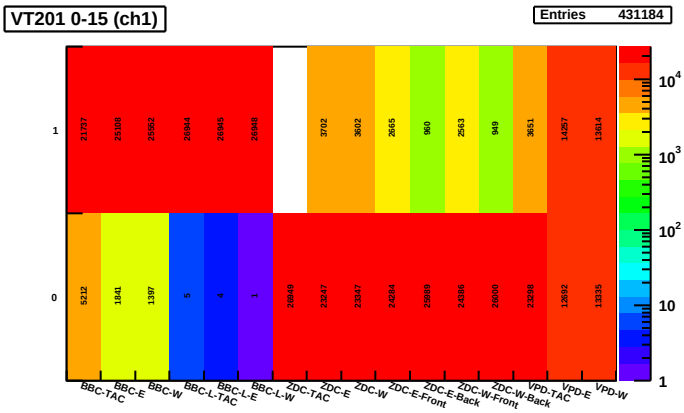
TF201 0-15 (ch0)



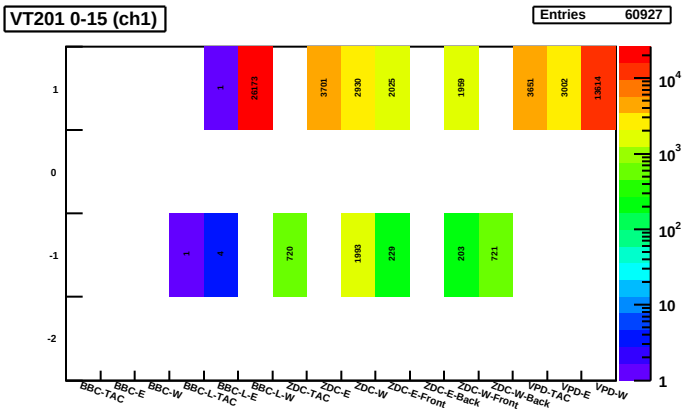
TF201 0-15 (ch0)



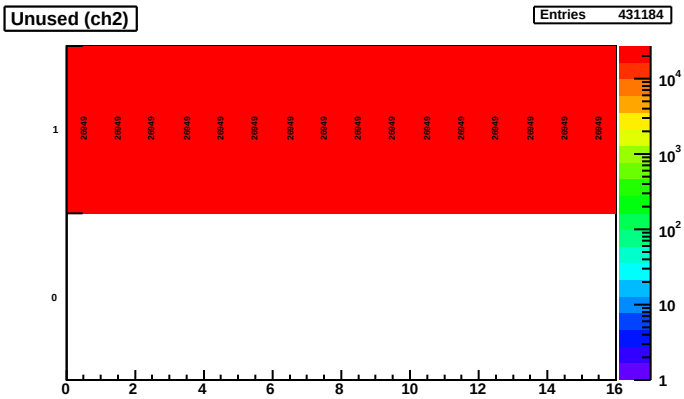
VT201 0-15 (ch1)

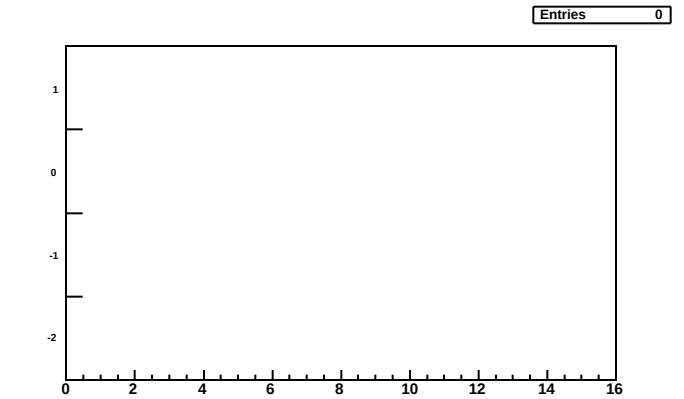


VT201 0-15 (ch1)

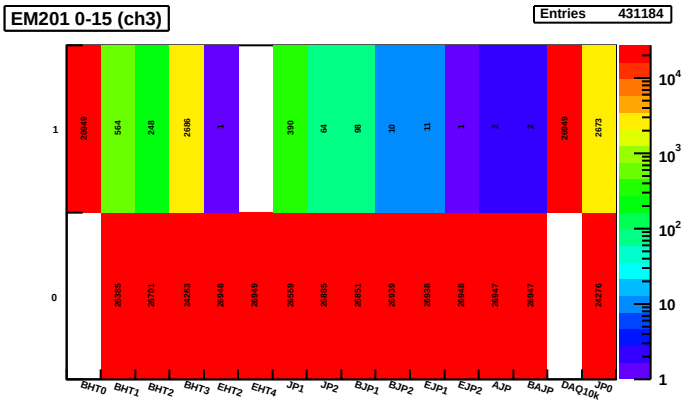


Unused (ch2)

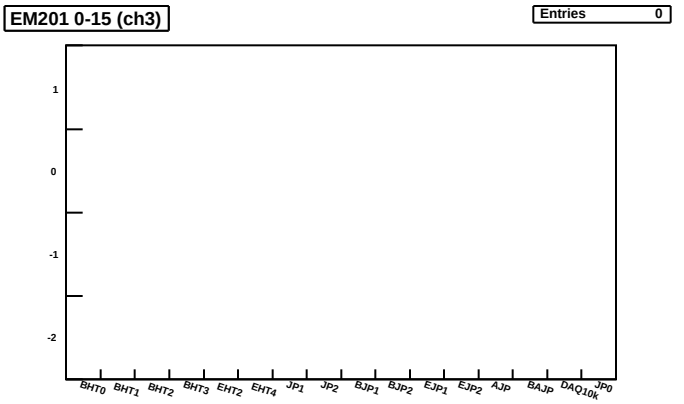




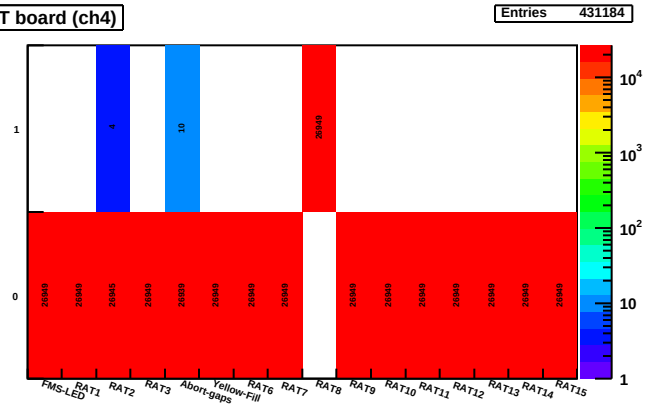
EM201 0-15 (ch3)

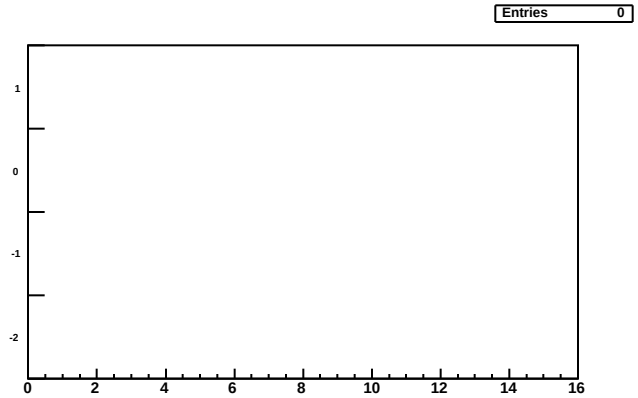


EM201 0-15 (ch3)

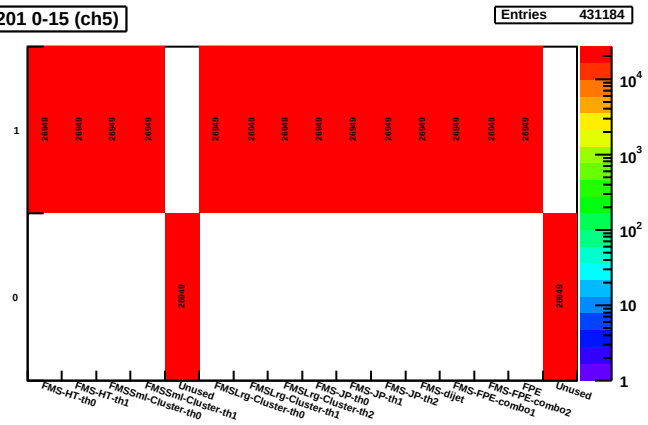


RAT board (ch4)

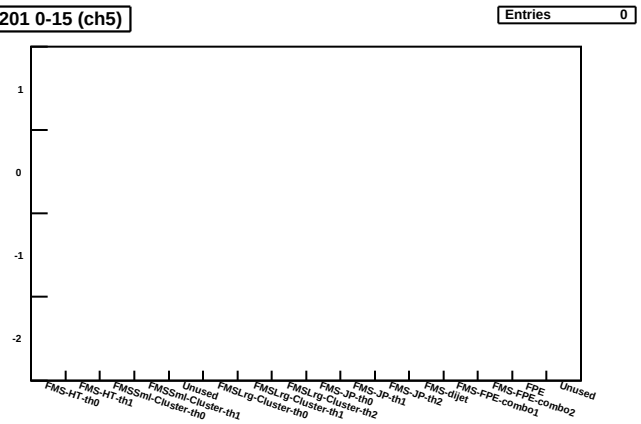




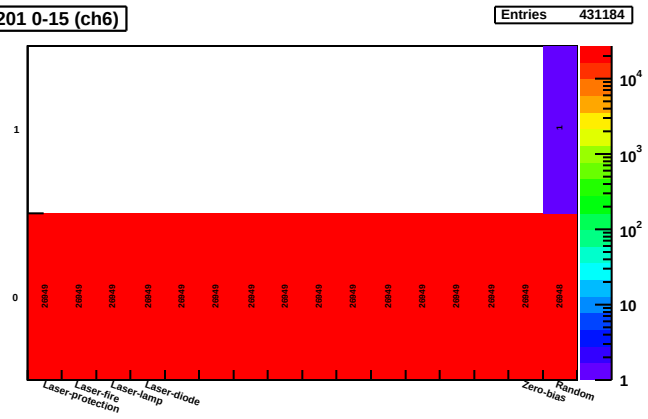
FP201 0-15 (ch5)

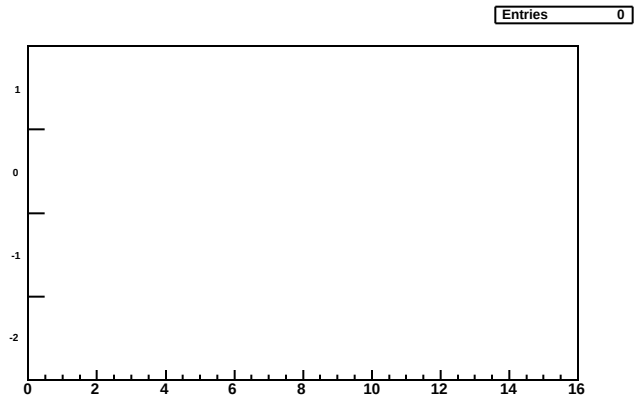
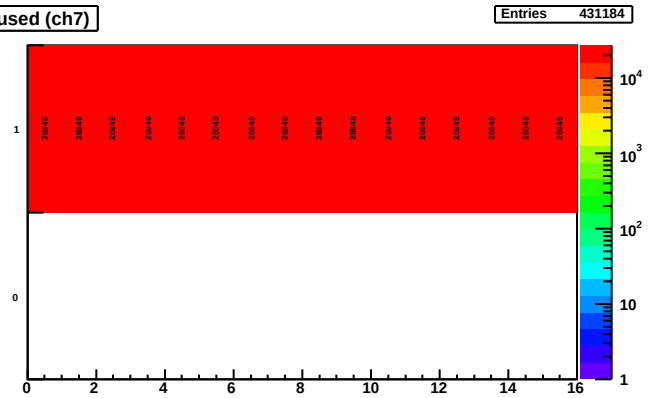
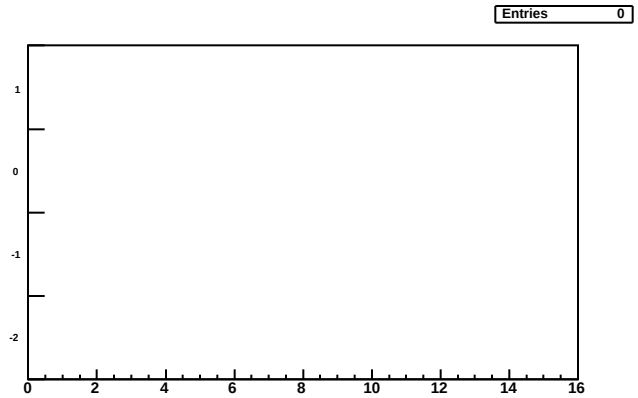


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)