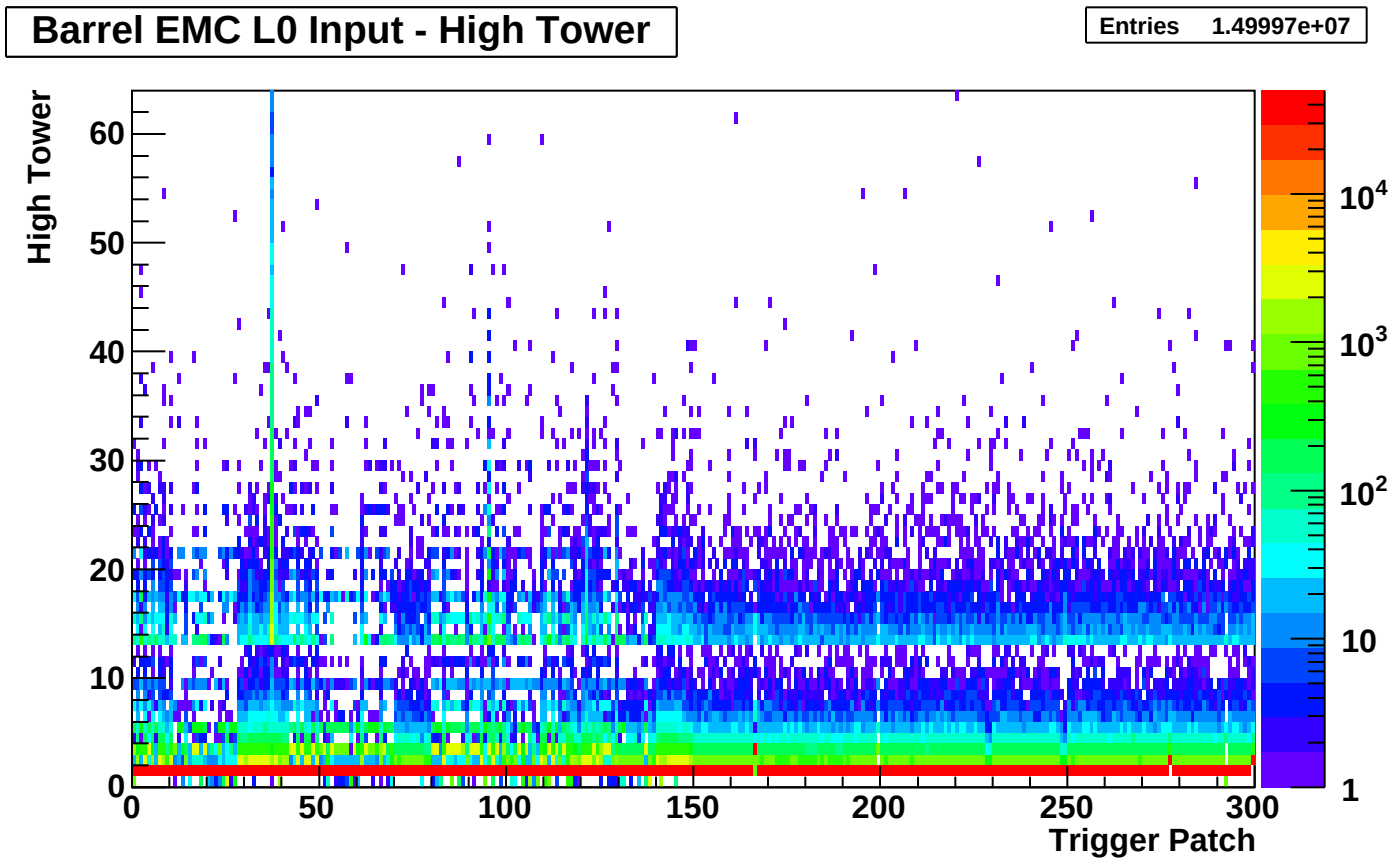
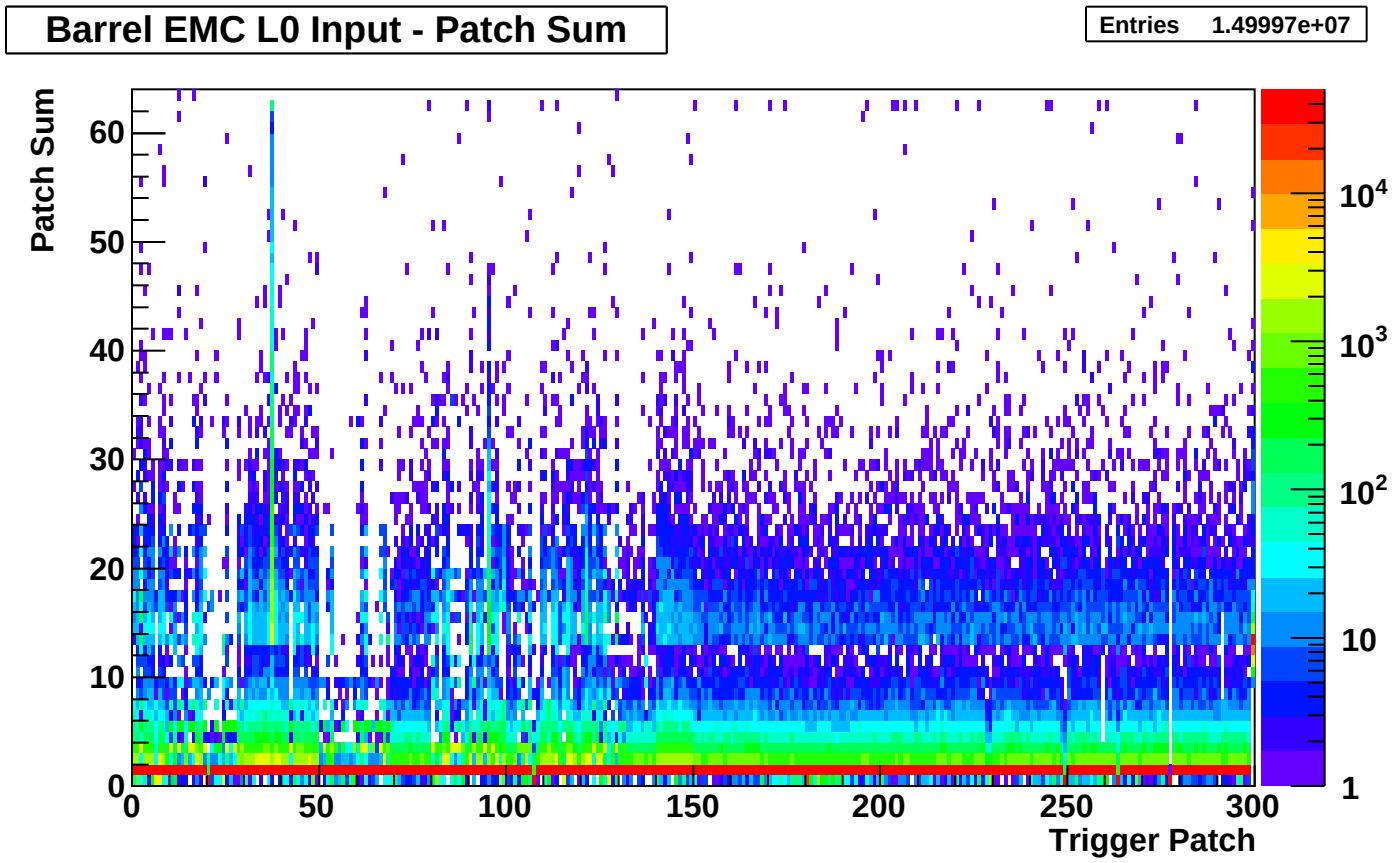
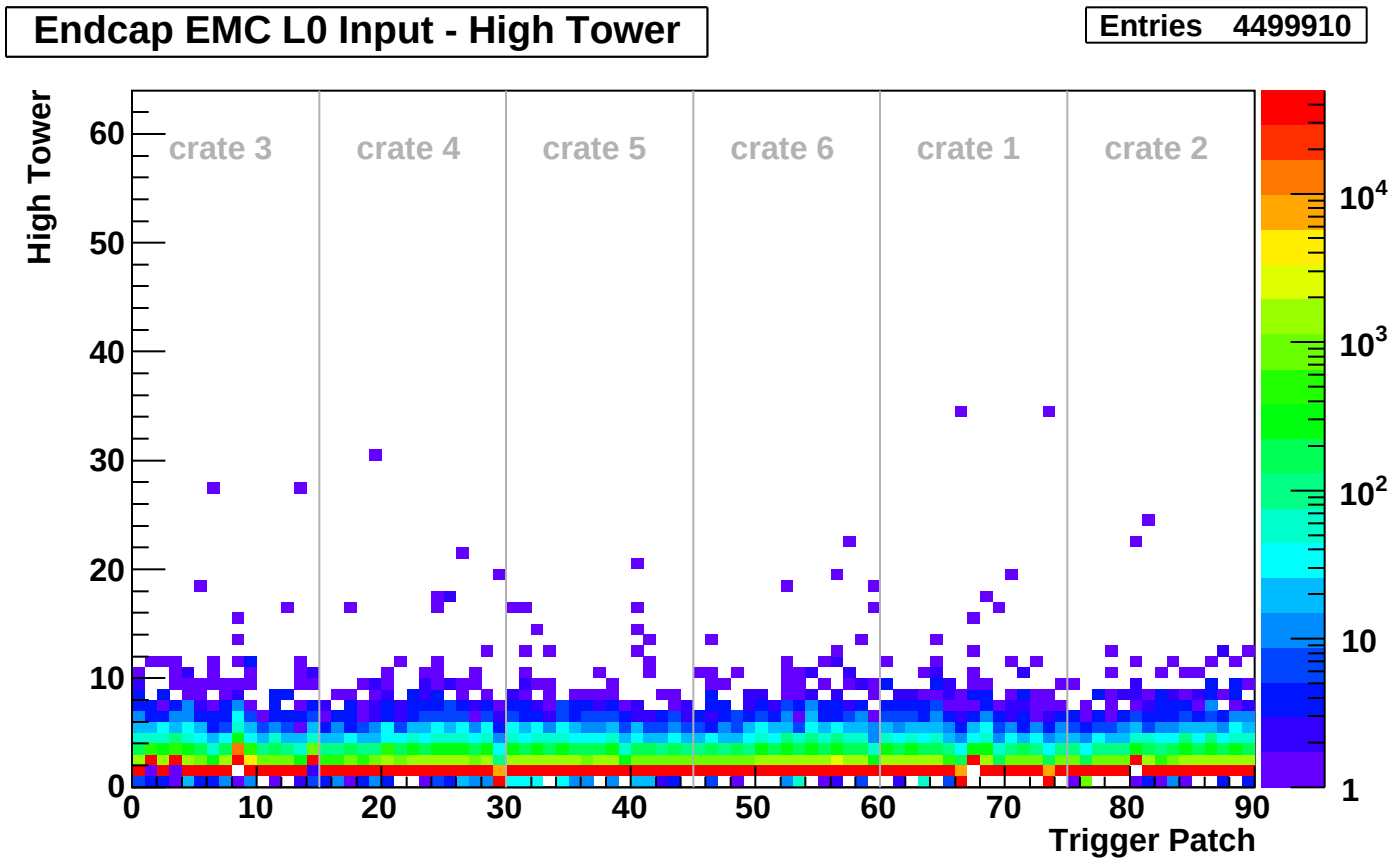
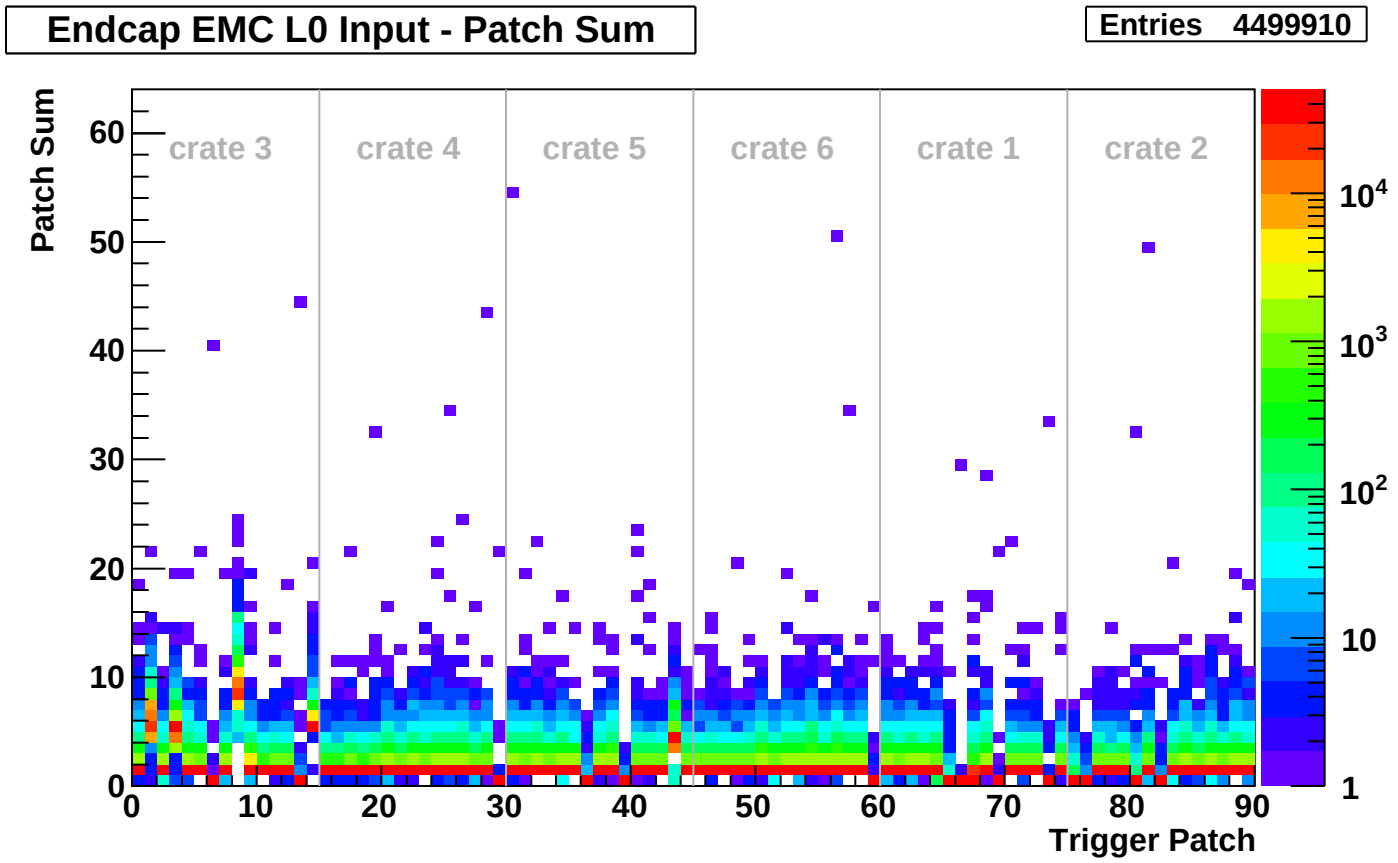
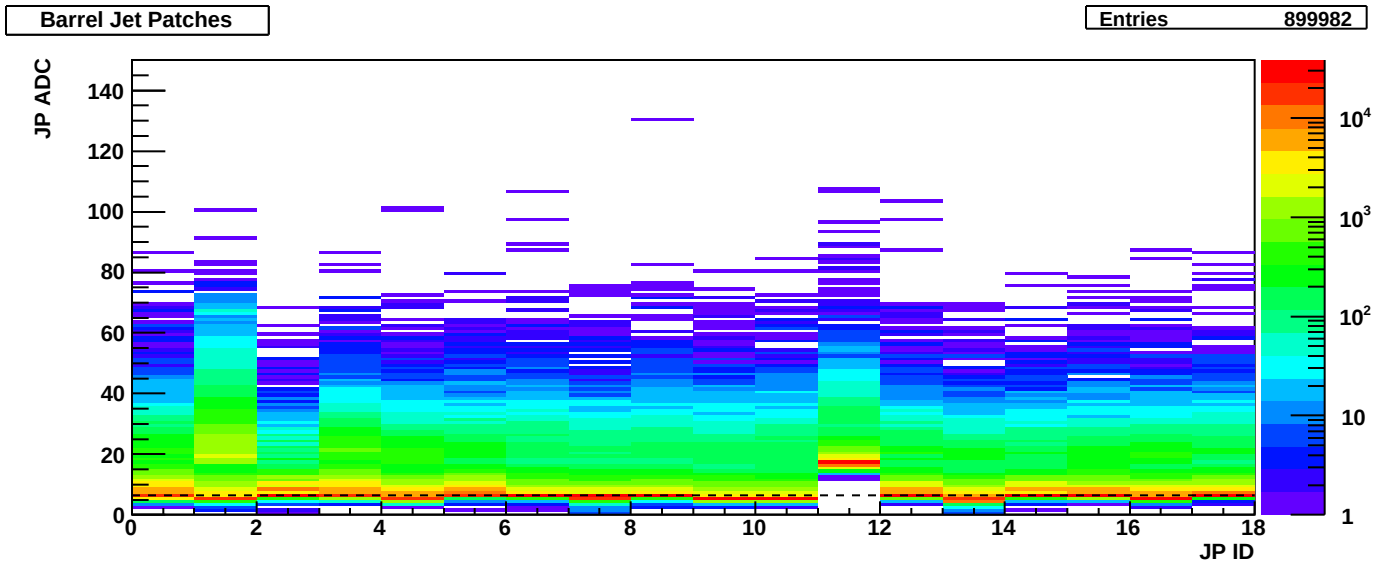
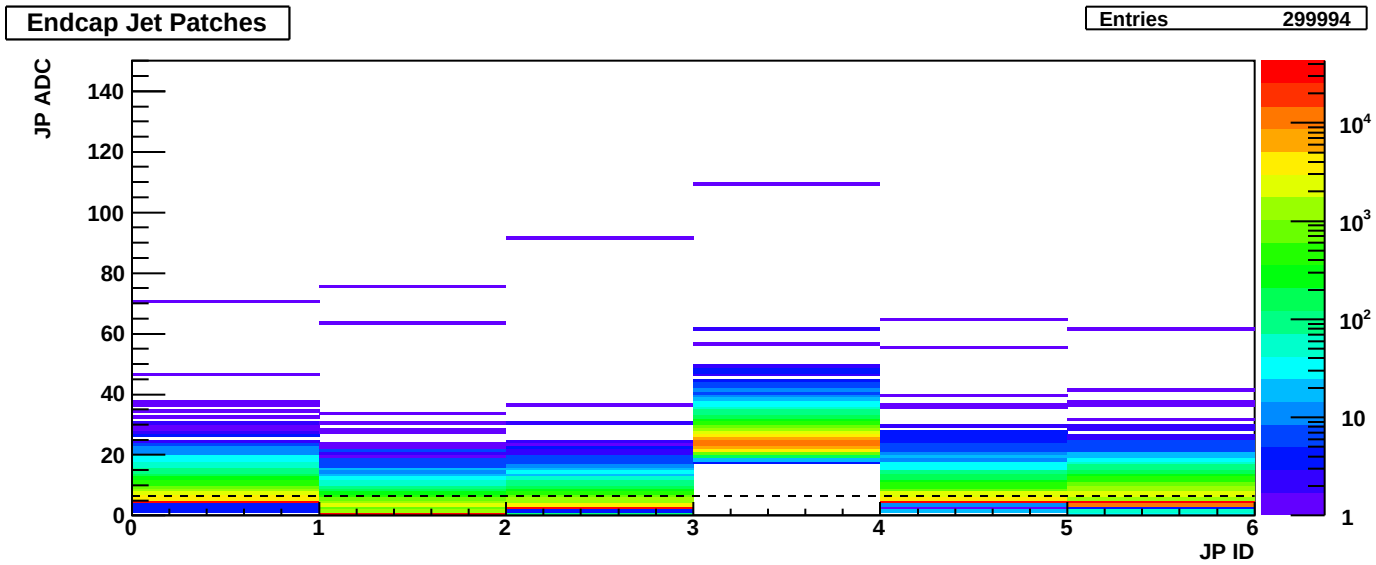

Barrel EMC L0 Input - High Tower
Entries 1.49997e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

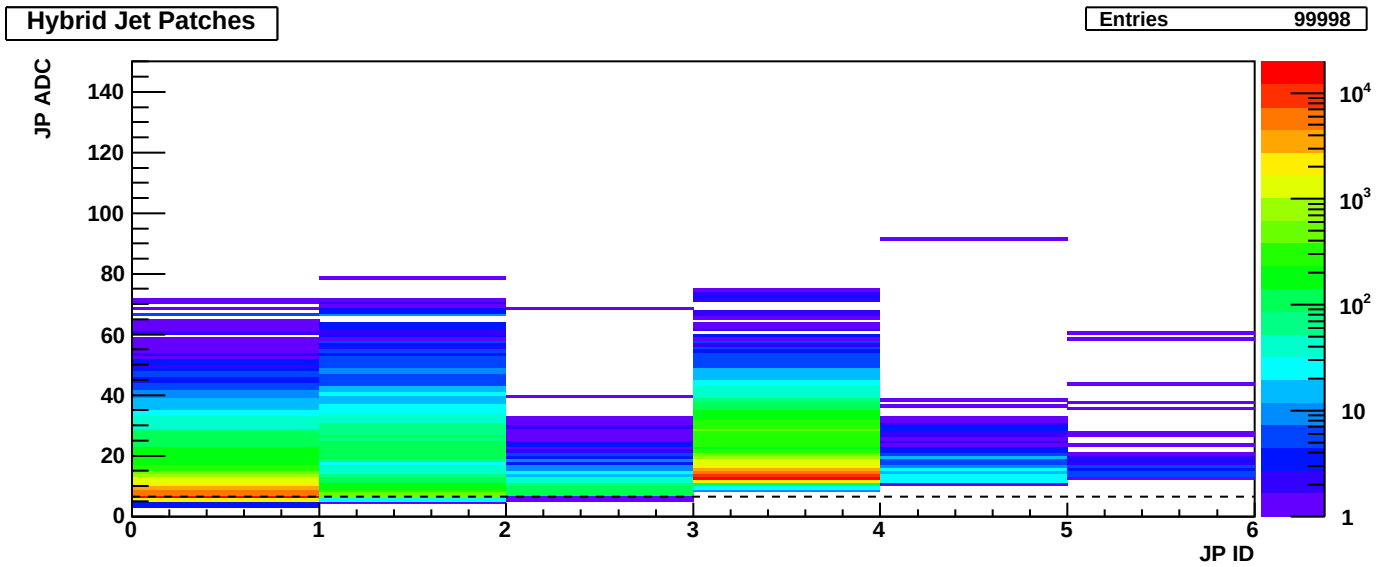

Barrel EMC L0 Input - Patch Sum
Entries 1.49997e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

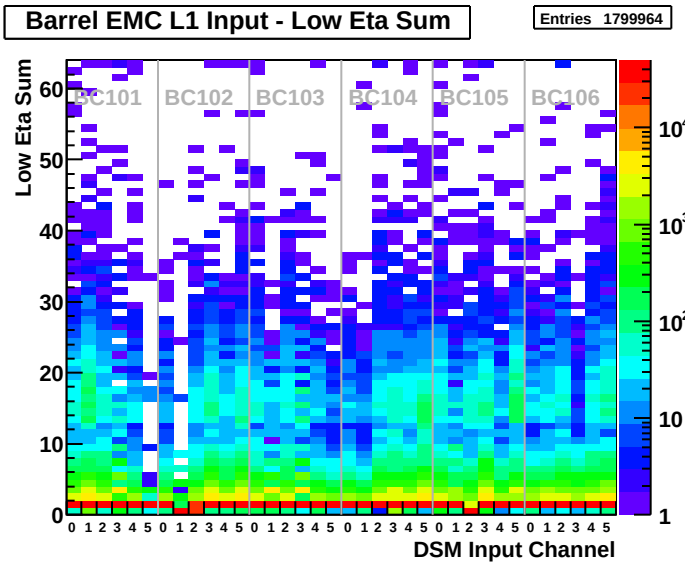

Endcap EMC L0 Input - High Tower
Entries 4499910
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

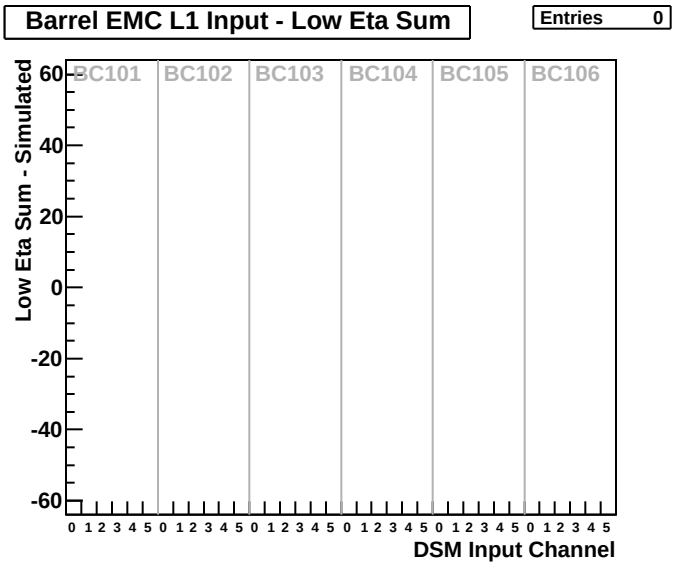

Endcap EMC L0 Input - Patch Sum
Entries 4499910
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

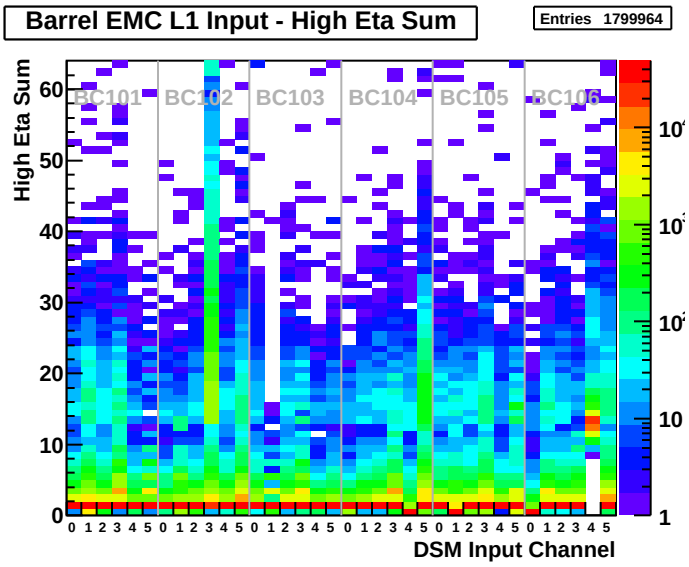

Barrel Jet Patches
Entries 899982
JP ADC
JP ID

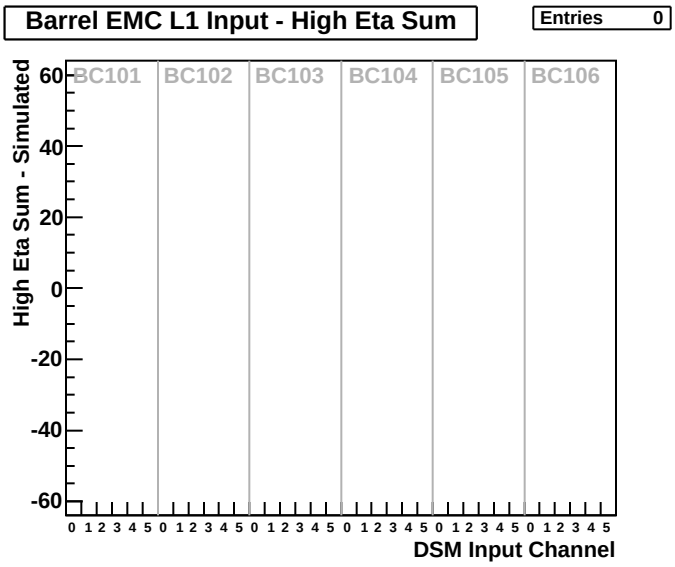

Endcap Jet Patches
Entries 299994
JP ADC
JP ID

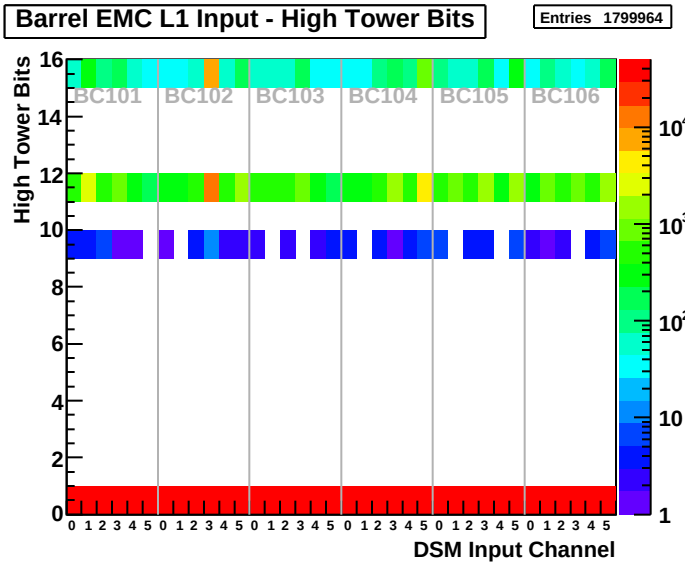

Hybrid Jet Patches
Entries 99998
JP ADC
JP ID

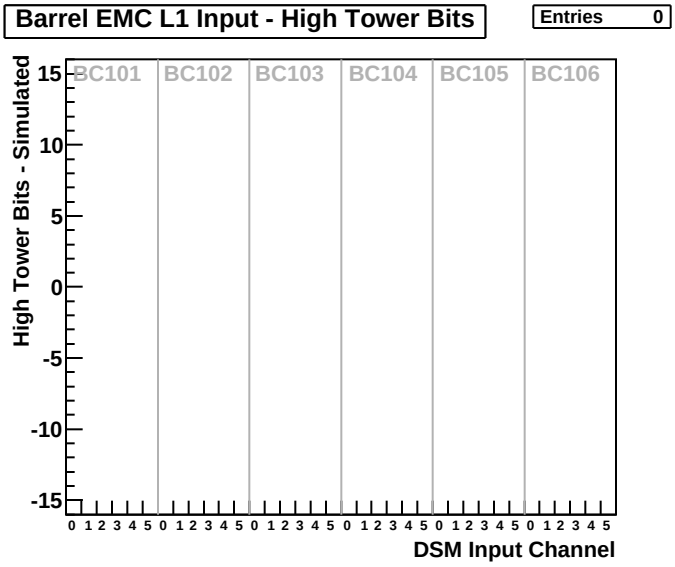

Barrel EMC L1 Input - Low Eta Sum
Entries 1799964
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

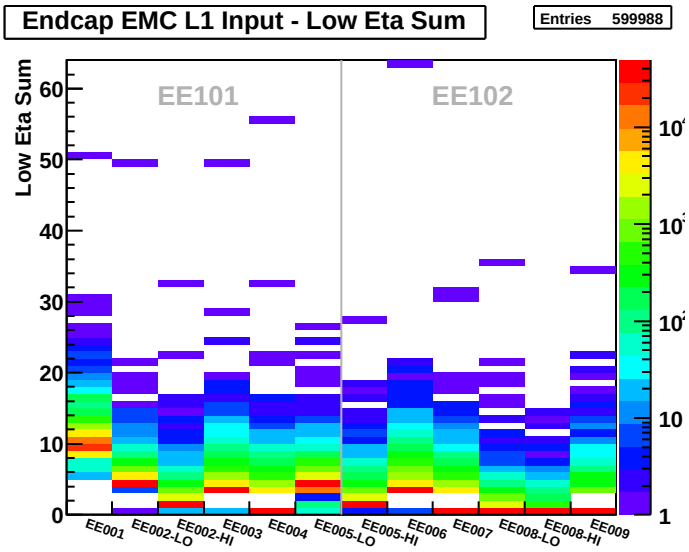

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

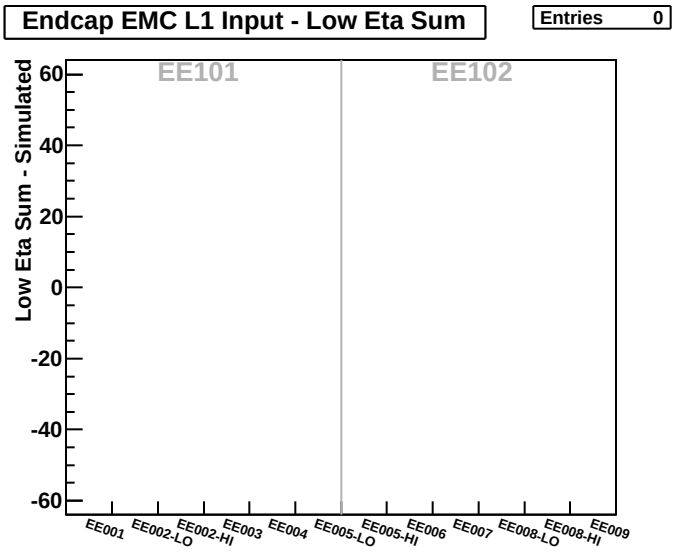

Barrel EMC L1 Input - High Eta Sum
Entries 1799964
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

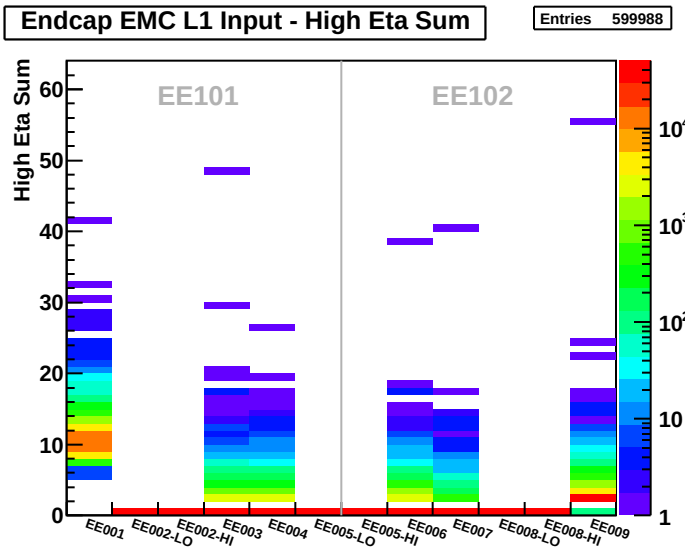

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

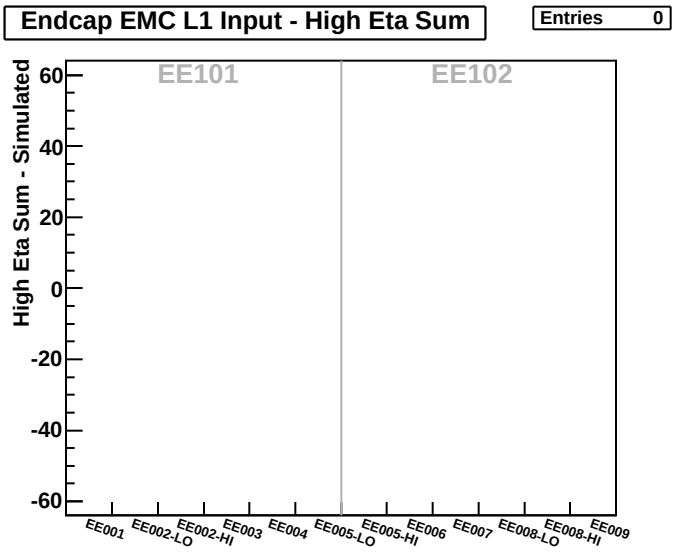

Barrel EMC L1 Input - High Tower Bits
Entries 1799964
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

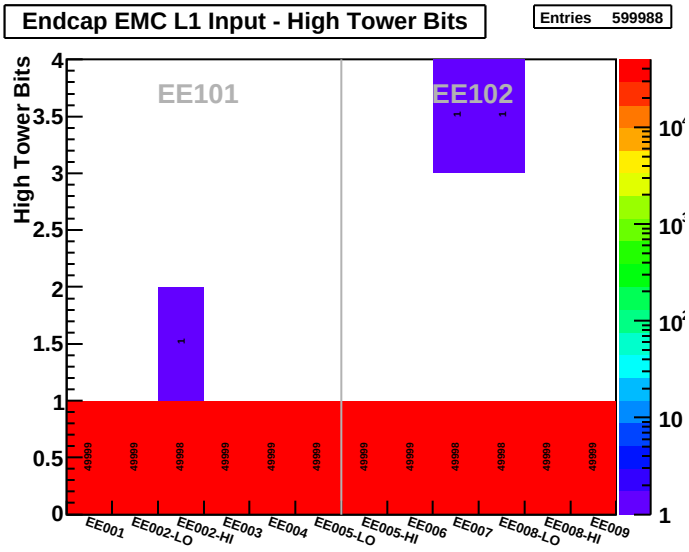

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

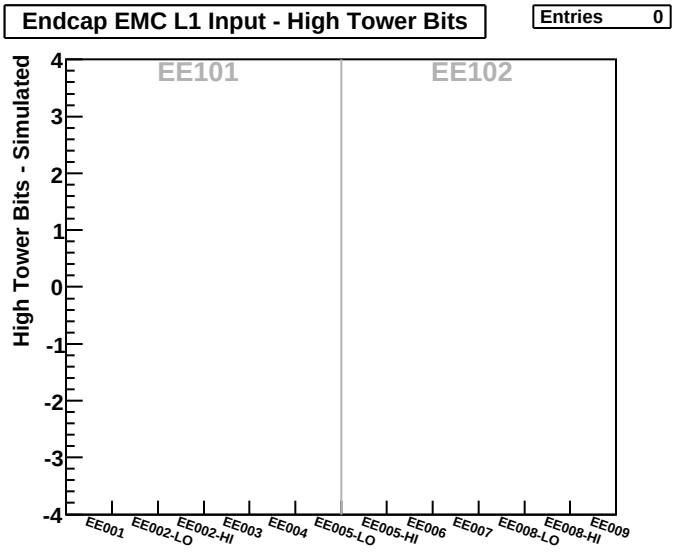

Endcap EMC L1 Input - Low Eta Sum
Entries 599988
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

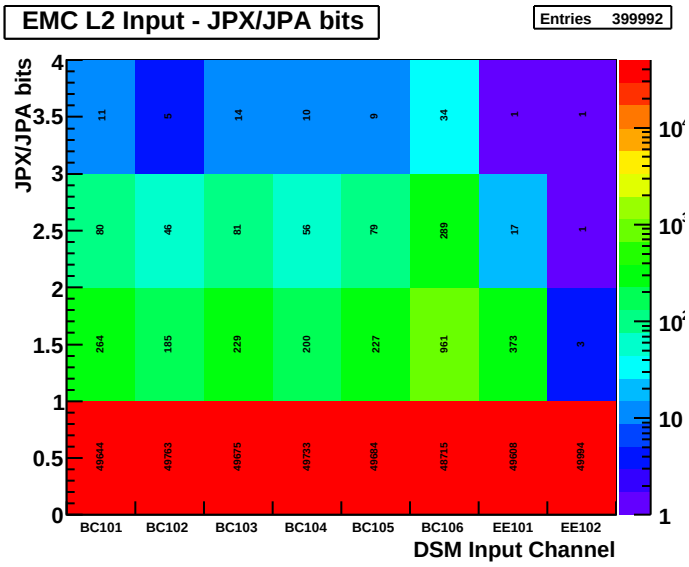

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

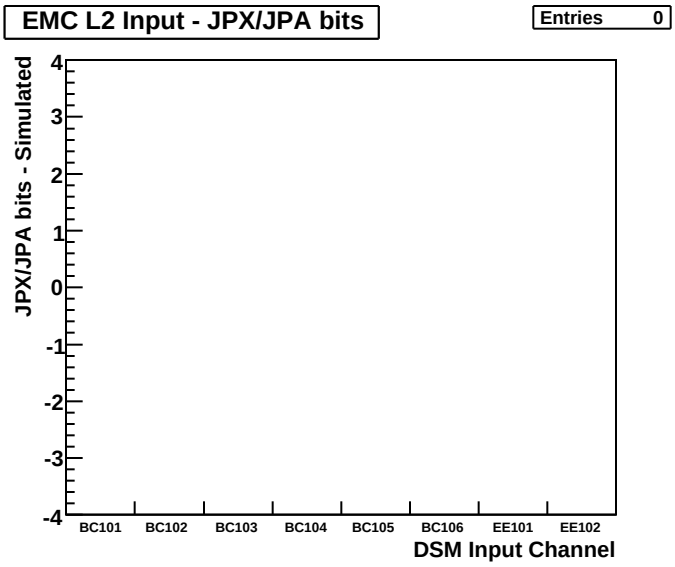

Endcap EMC L1 Input - High Eta Sum
Entries 599988
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

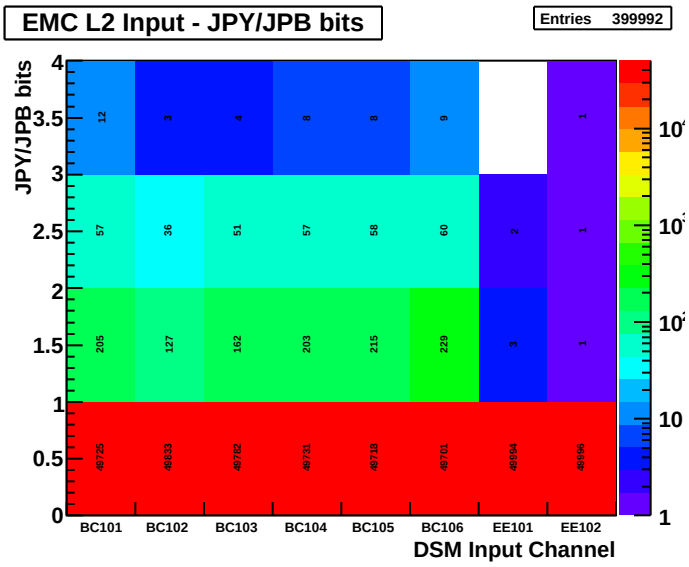

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

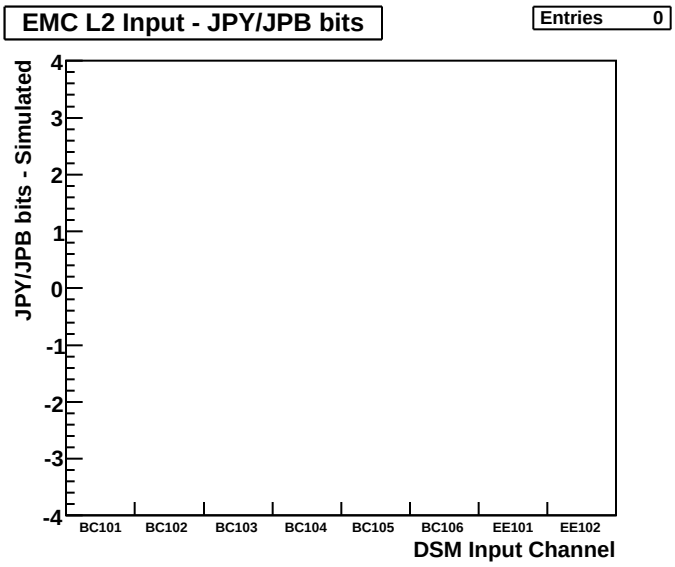

Endcap EMC L1 Input - High Tower Bits
Entries 599988
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

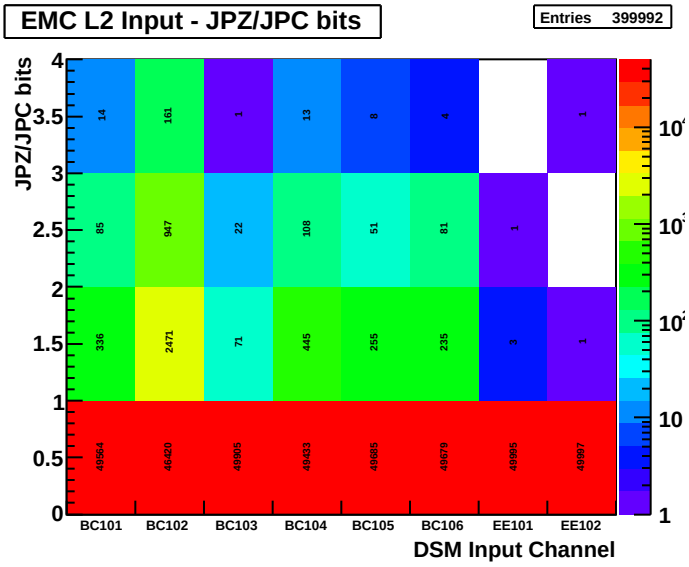

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

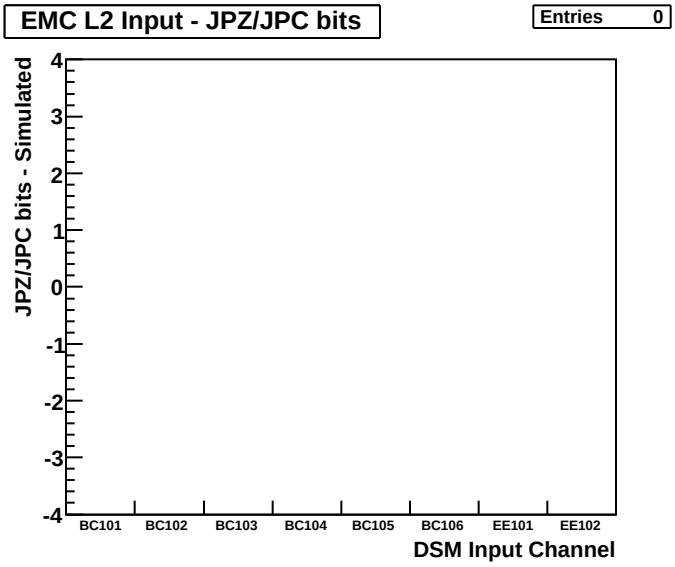

EMC L2 Input - JPX/JPA bits
Entries 399992
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
11 5 14 10 9 34 1 1
80 46 81 56 79 289 17 1
264 185 229 200 227 961 373 3
49644 49763 49675 49733 49684 49715 49608 49994

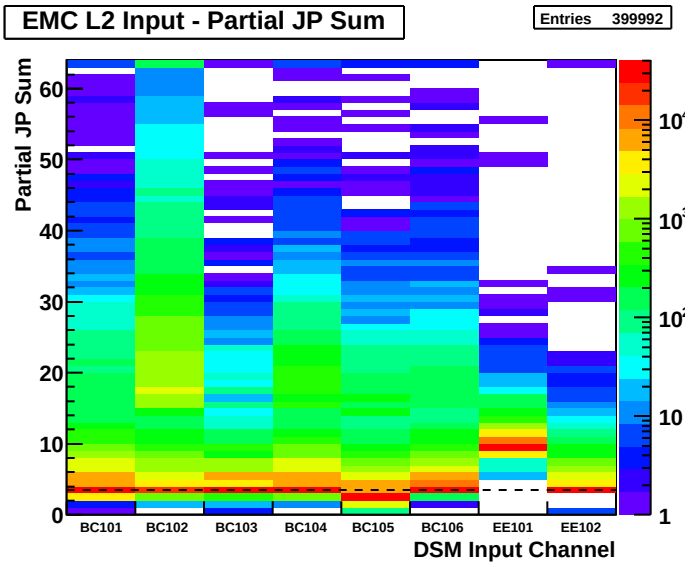

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

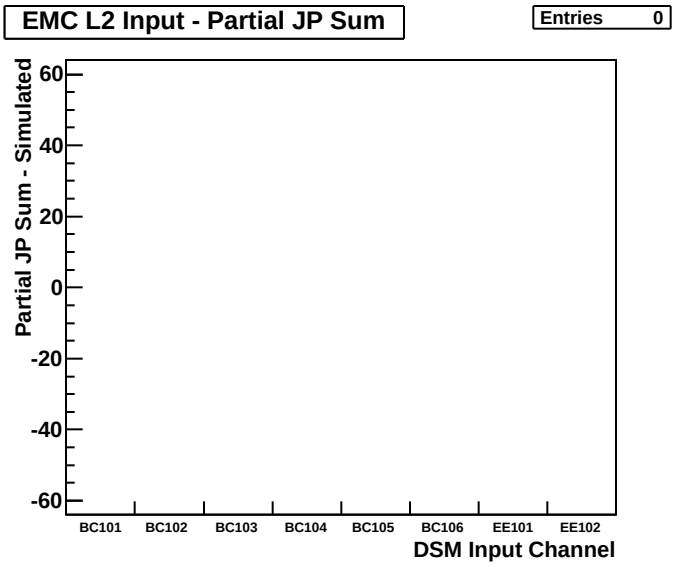

EMC L2 Input - JPY/JPB bits
Entries 399992
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
12 3 4 8 8 9 1
57 36 51 57 58 60 2 1
205 127 162 203 215 229 3 1
49725 49833 49782 49731 49718 49701 49994 49996

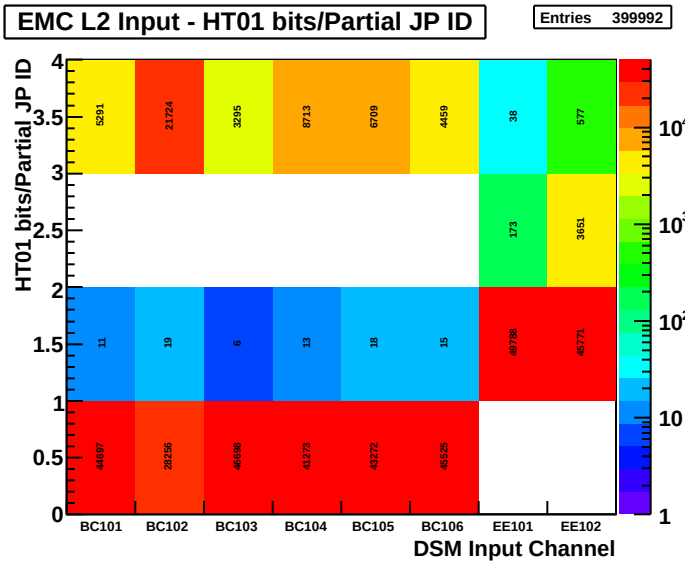

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

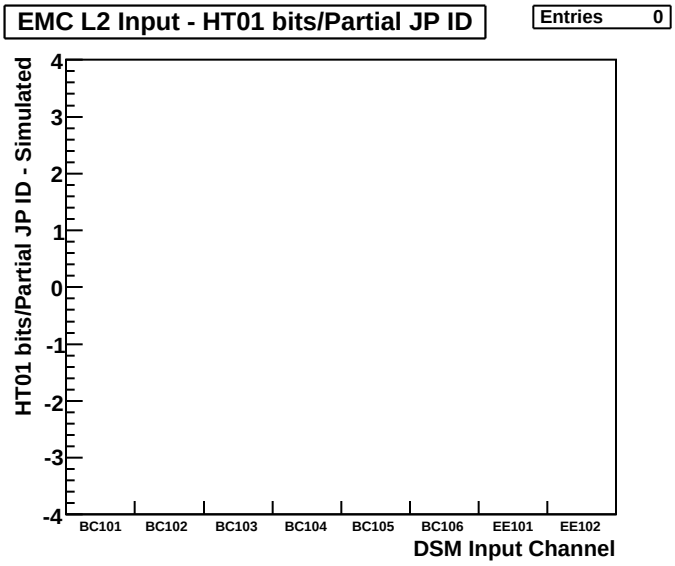

EMC L2 Input - JPZ/JPC bits
Entries 399992
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
14 161 1 13 8 4 1
85 947 22 108 51 81 1
336 2471 71 445 255 235 3 1
49564 46420 49905 49433 49885 49679 49995 49997

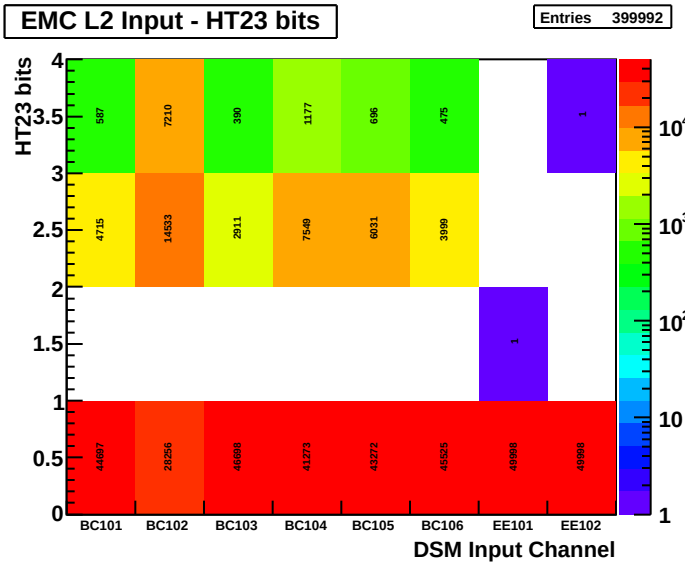

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

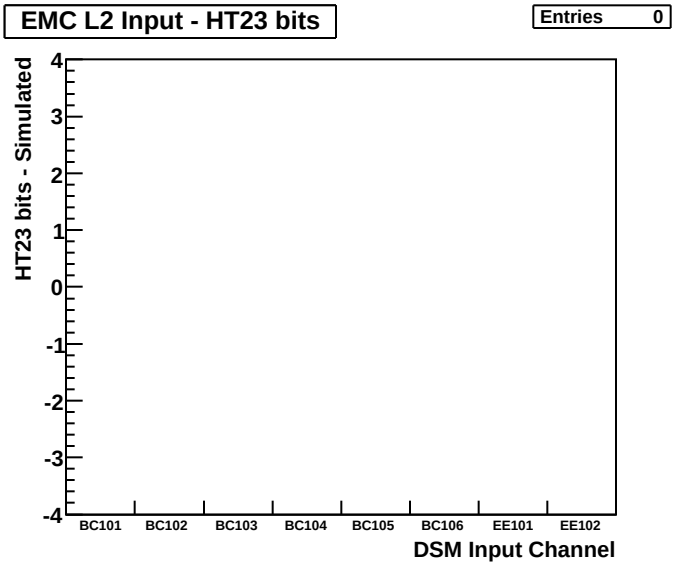

EMC L2 Input - Partial JP Sum
Entries 399992
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

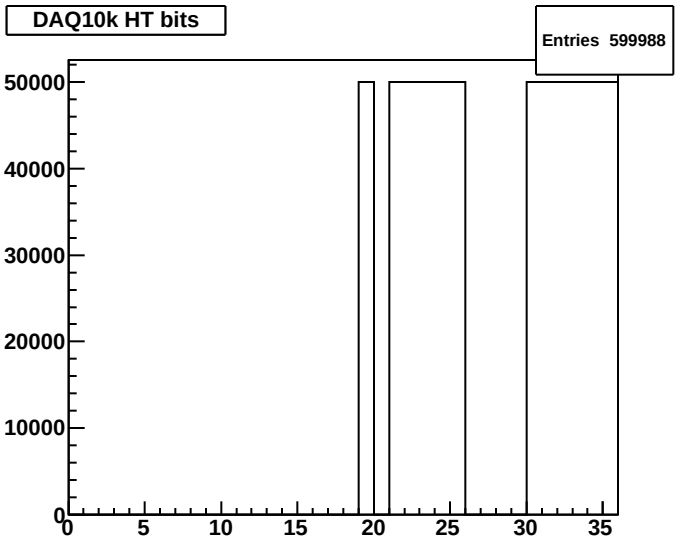

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

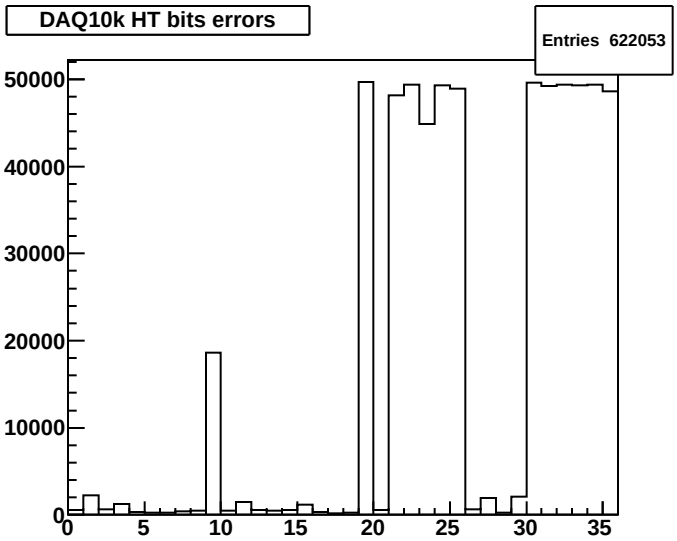

EMC L2 Input - HT01 bits/Partial JP ID
Entries 399992
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

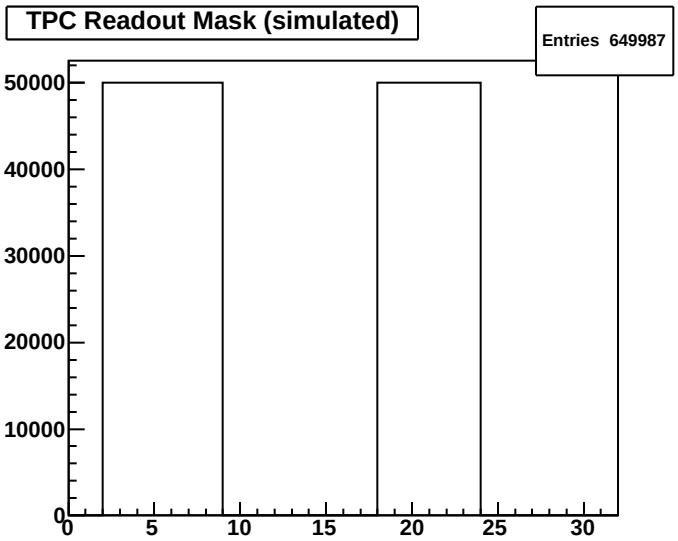

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

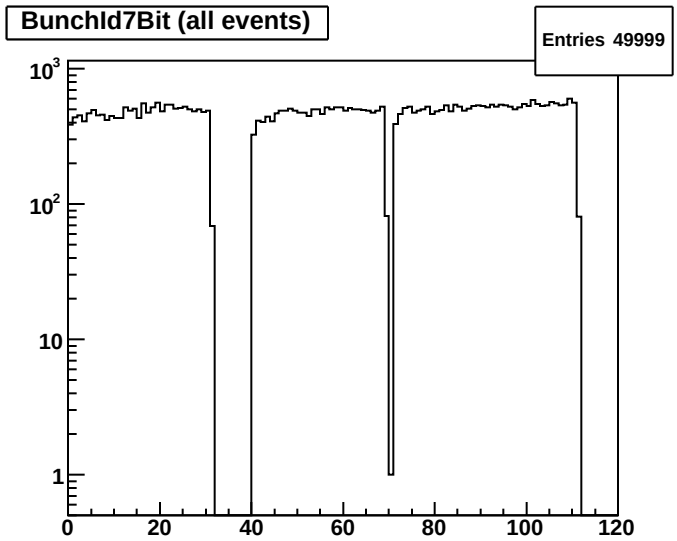

EMC L2 Input - HT23 bits
Entries 399992
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

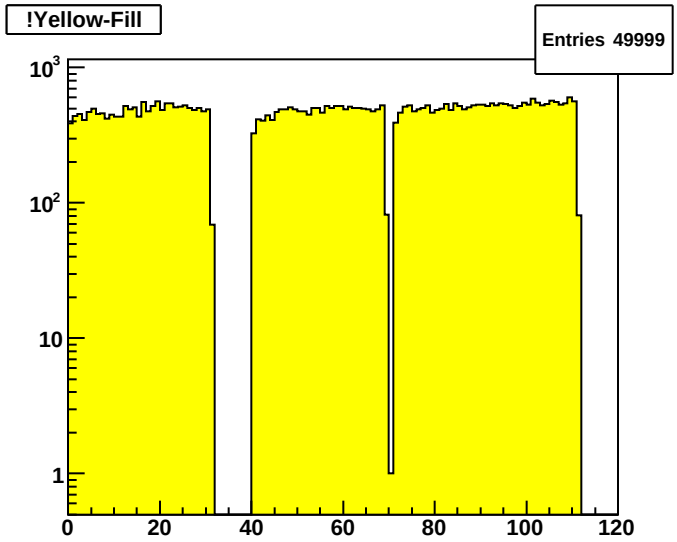

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

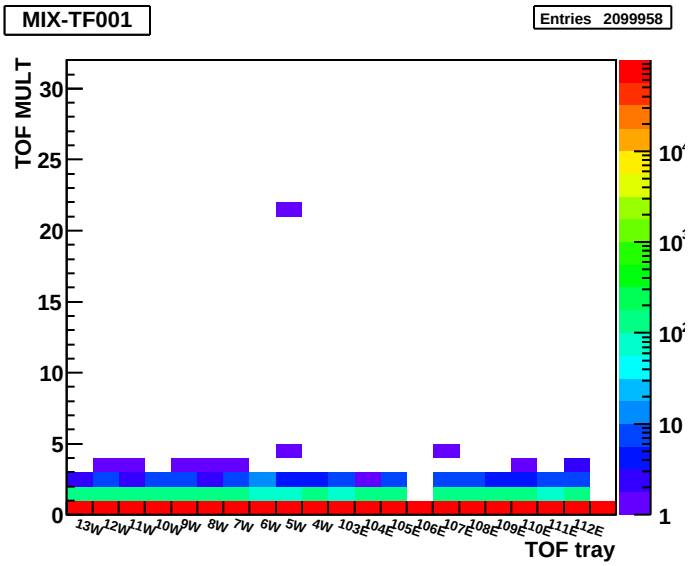

DAQ10k HT bits
Entries 599988
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

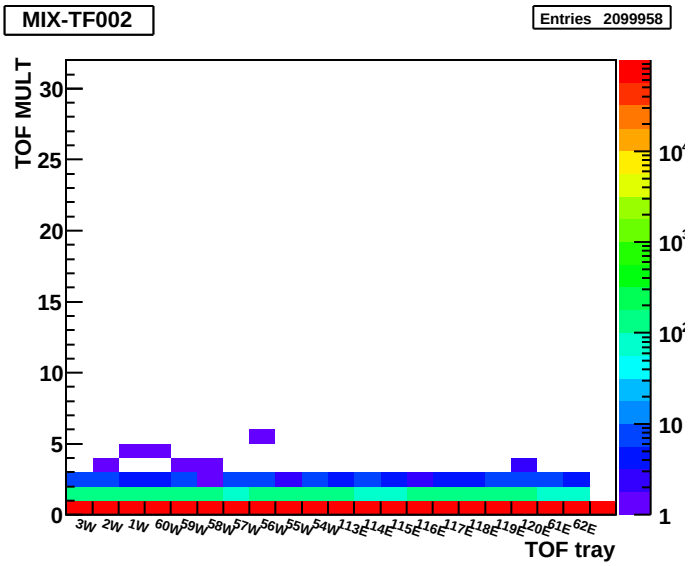

DAQ10k HT bits errors
Entries 622053
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

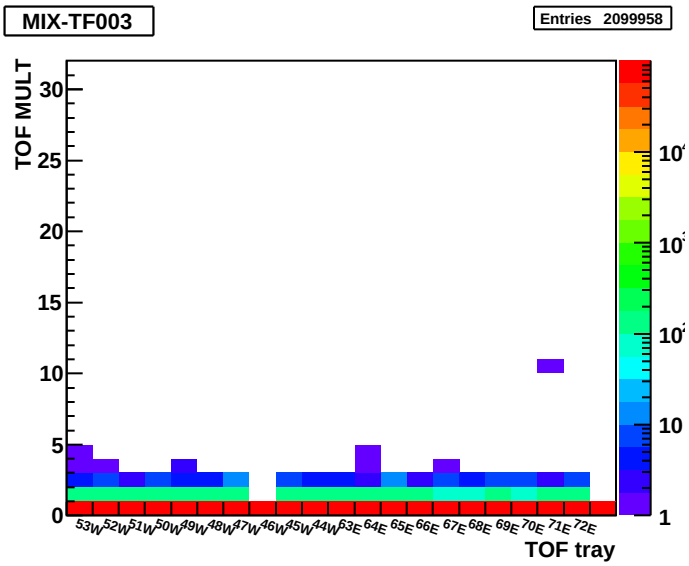

TPC Readout Mask (simulated)
Entries 649987
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30

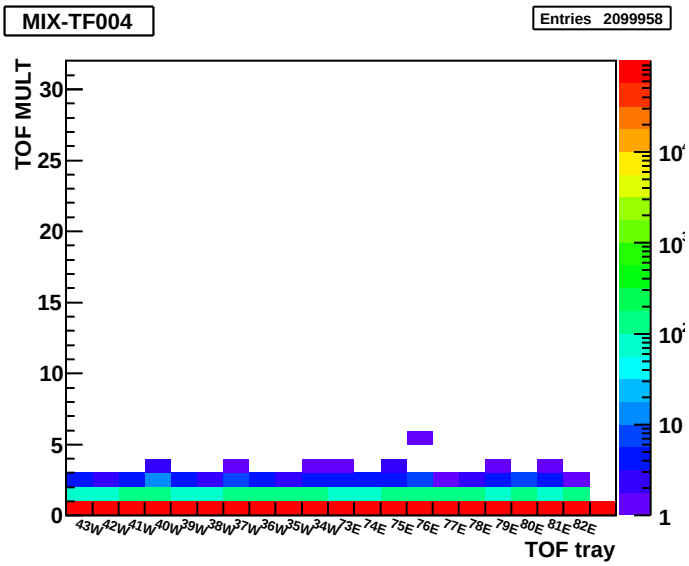

BunchId7Bit (all events)
Entries 49999
10^3
10^2
10
1
0 20 40 60 80 100 120

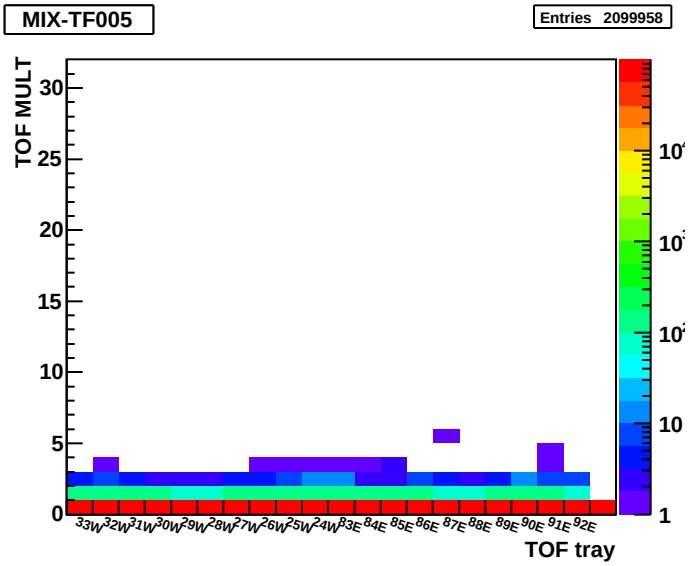

!Yellow-Fill
Entries 49999
10^3
10^2
10
1
0 20 40 60 80 100 120

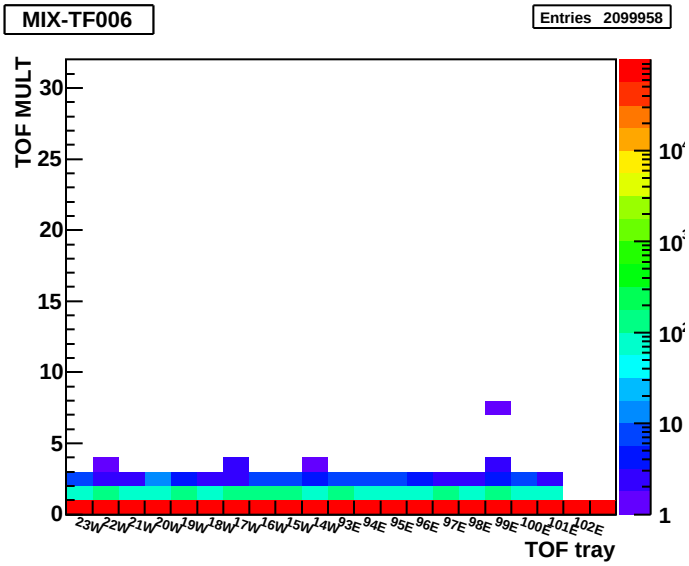

MIX-TF001
Entries 2099958
TOF MULT
TOF tray

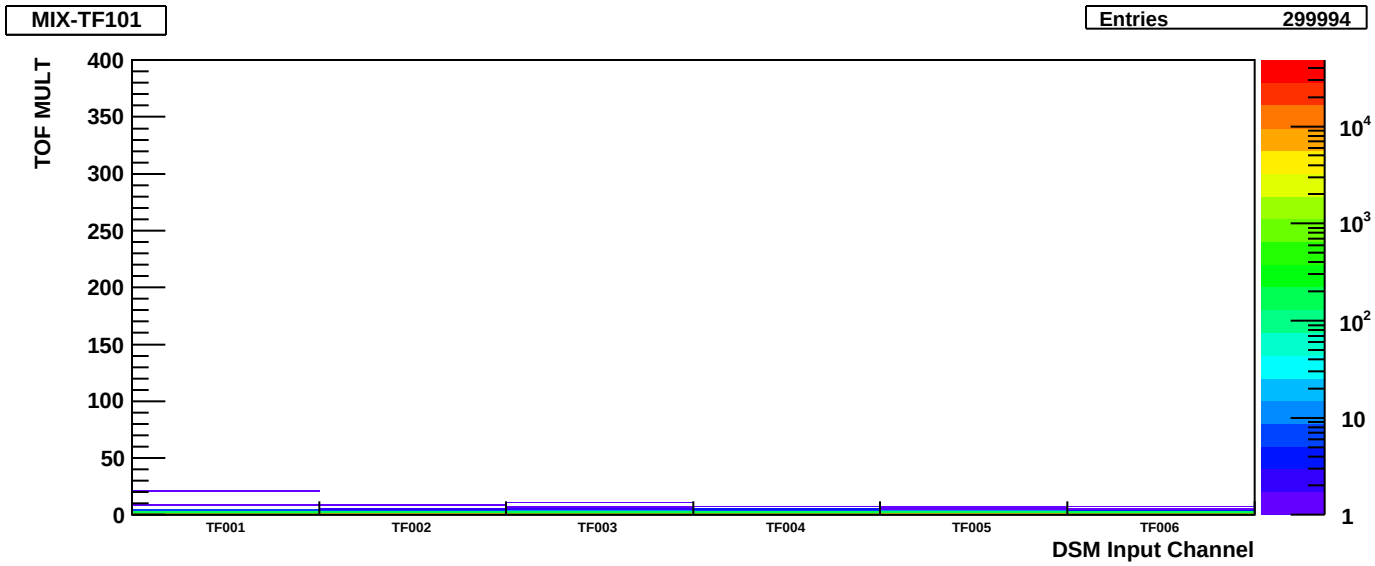

MIX-TF002
Entries 2099958
TOF MULT
TOF tray

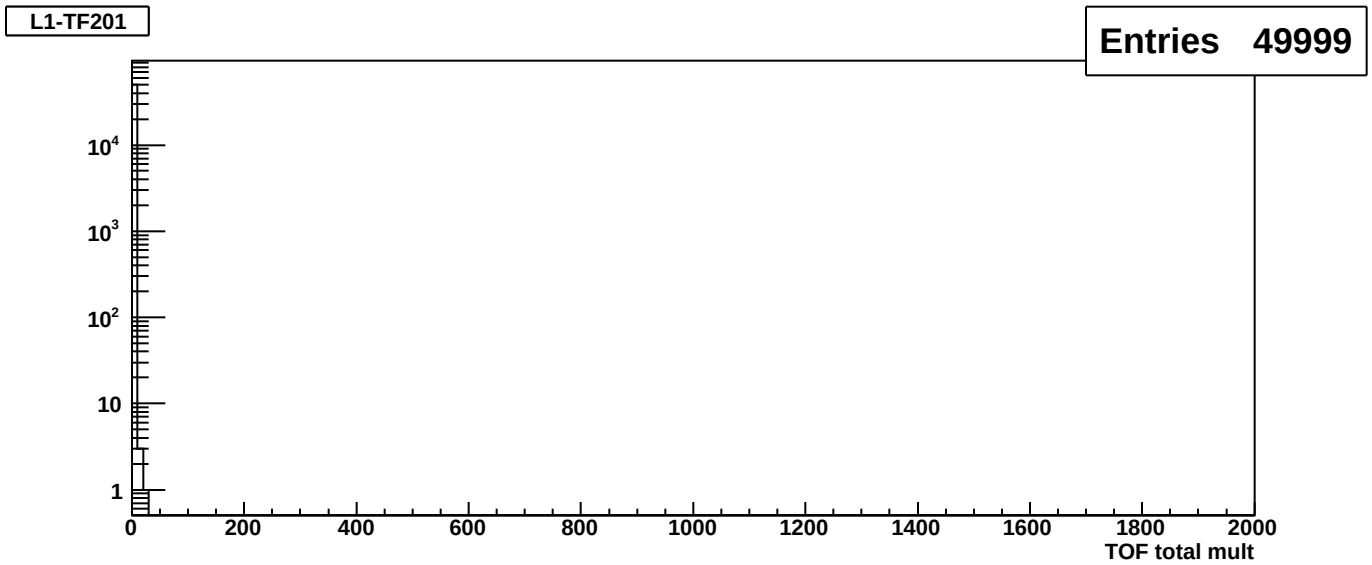

MIX-TF003
Entries 2099958
TOF MULT
TOF tray

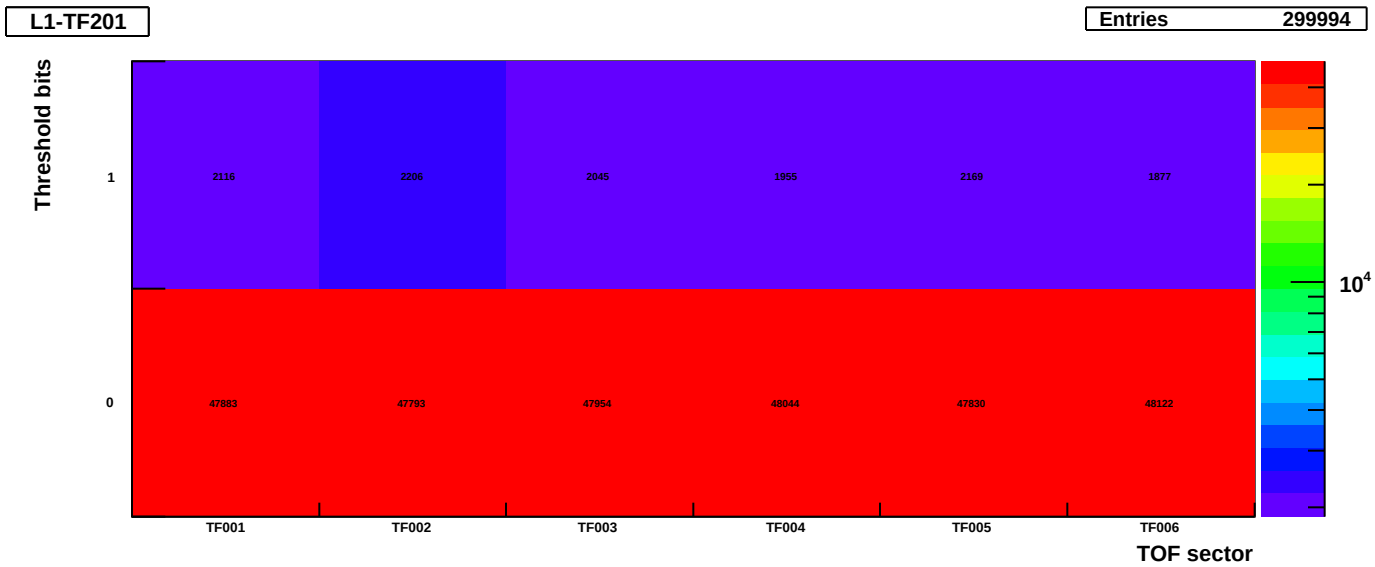

MIX-TF004
Entries 2099958
TOF MULT
TOF tray

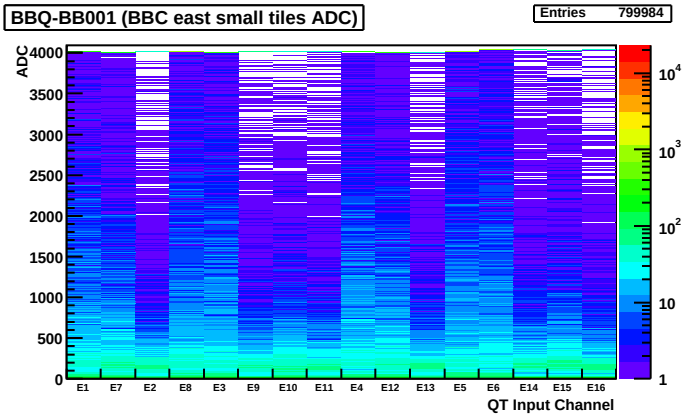

MIX-TF005
Entries 2099958
TOF MULT
TOF tray

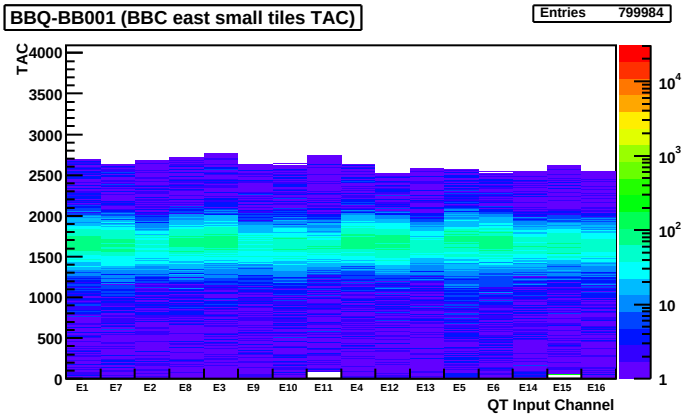

MIX-TF006
Entries 2099958
TOF MULT
TOF tray

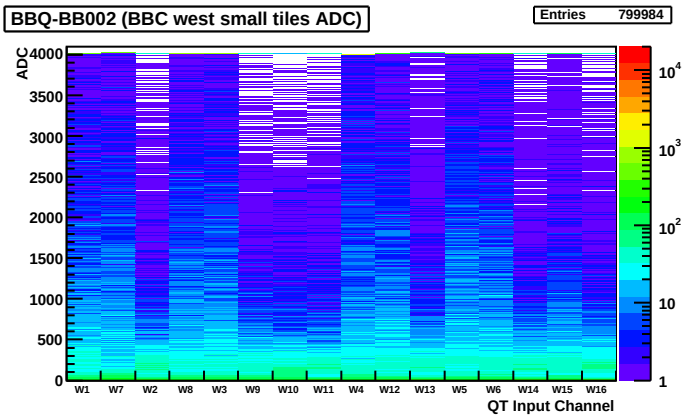

MIX-TF101
Entries 299994
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

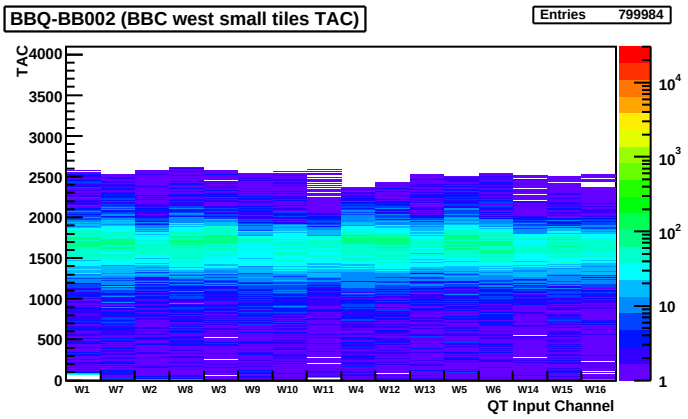

L1-TF201
Entries 49999
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

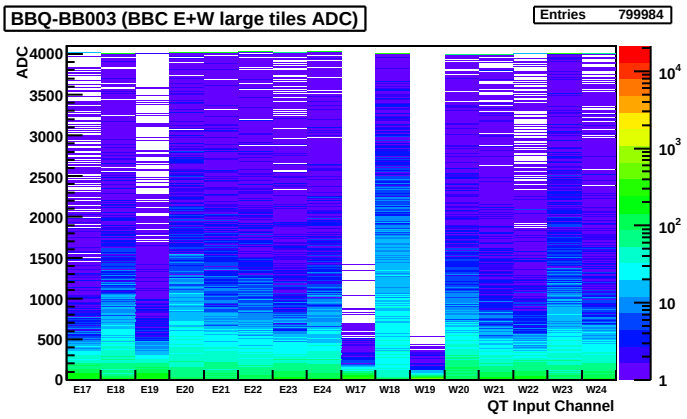

L1-TF201
Entries 299994
Threshold bits
1
0
2116
2206
2045
1955
2169
1877
47883
47793
47954
48044
47830
48122
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4

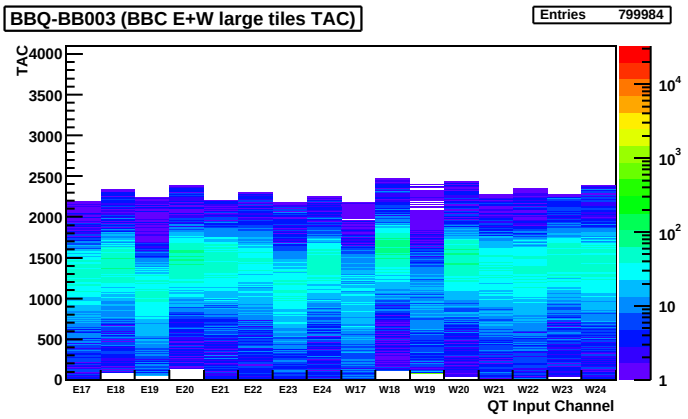

BBQ-BB001 (BBC east small tiles ADC)
Entries 799984
ADC
QT Input Channel

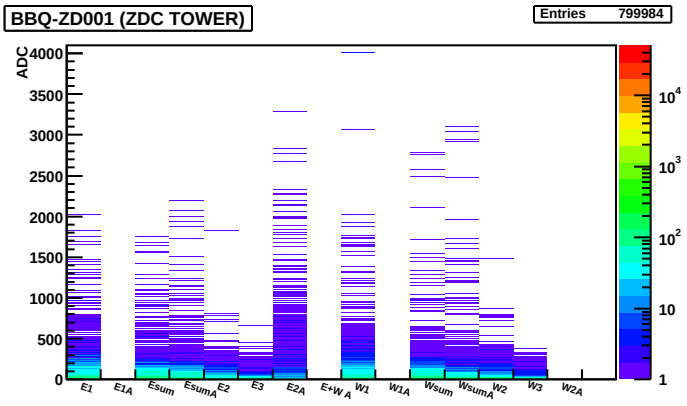

BBQ-BB001 (BBC east small tiles TAC)
Entries 799984
TAC
QT Input Channel

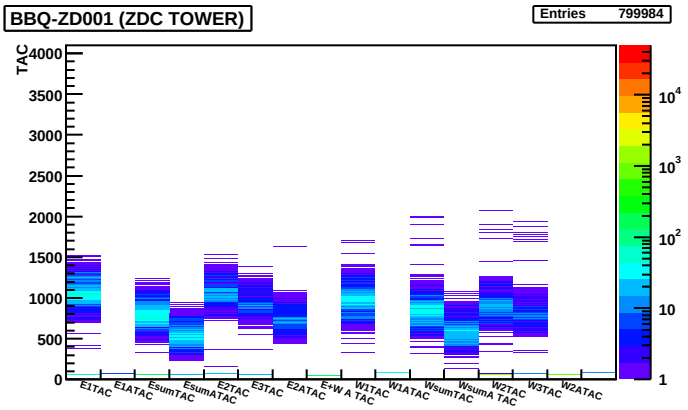

BBQ-BB002 (BBC west small tiles ADC)
Entries 799984
ADC
QT Input Channel

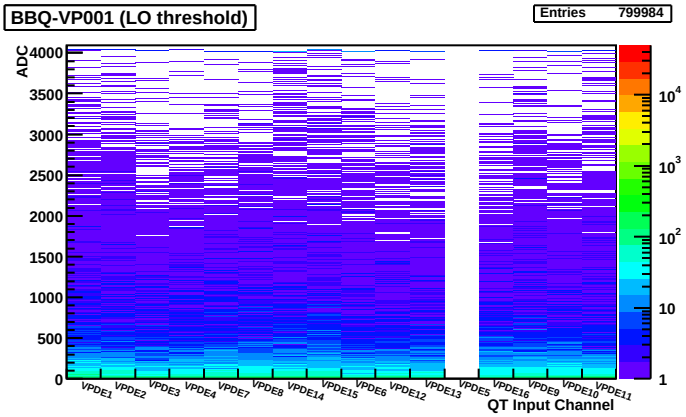

BBQ-BB002 (BBC west small tiles TAC)
Entries 799984
TAC
QT Input Channel

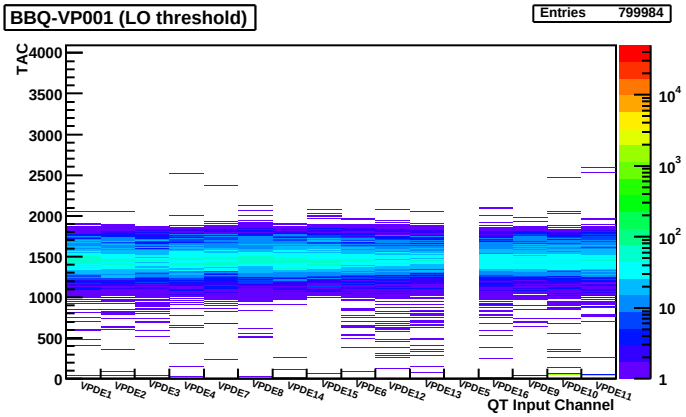

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 799984
ADC
QT Input Channel

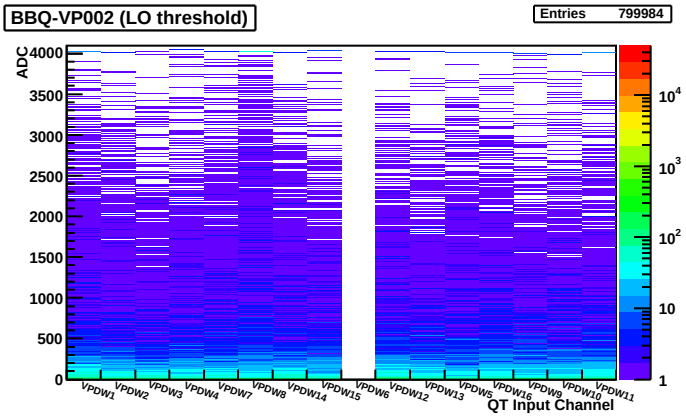

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 799984
TAC
QT Input Channel

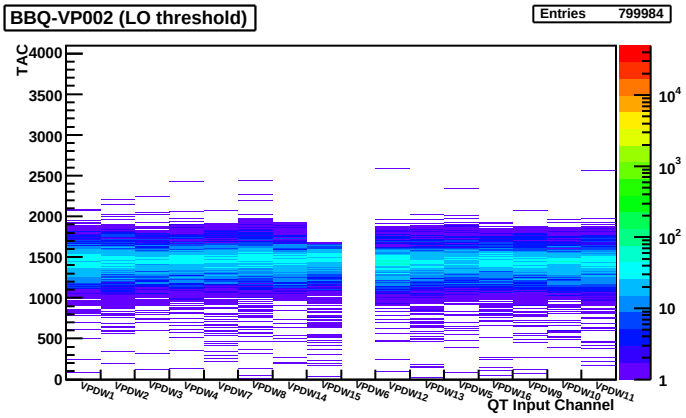

BBQ-ZD001 (ZDC TOWER)
Entries 799984
ADC

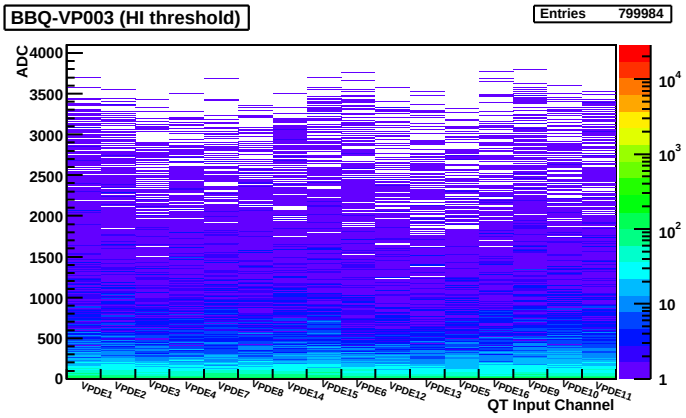

BBQ-ZD001 (ZDC TOWER)
Entries 799984
TAC

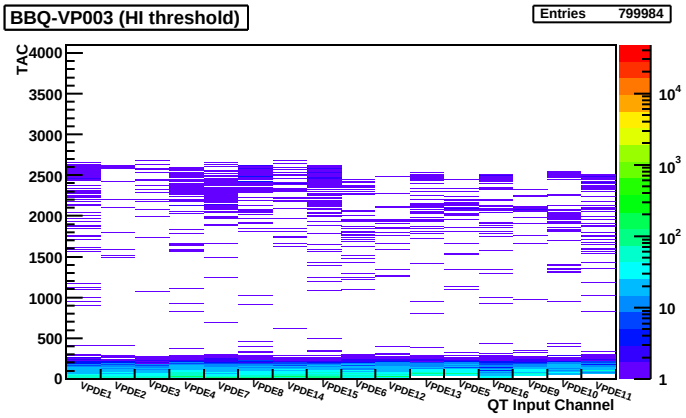

BBQ-VP001 (LO threshold)
Entries 799984
ADC
QT Input Channel

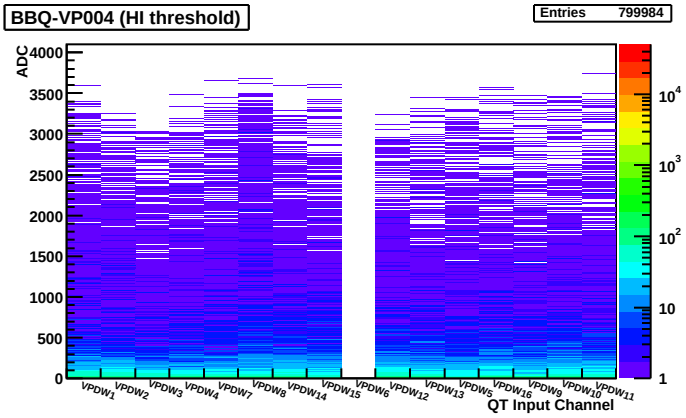

BBQ-VP001 (LO threshold)
Entries 799984
TAC
QT Input Channel

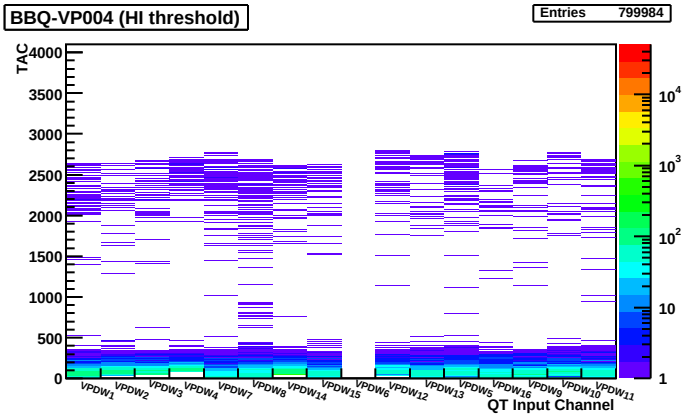

BBQ-VP002 (LO threshold)
Entries 799984
ADC
QT Input Channel

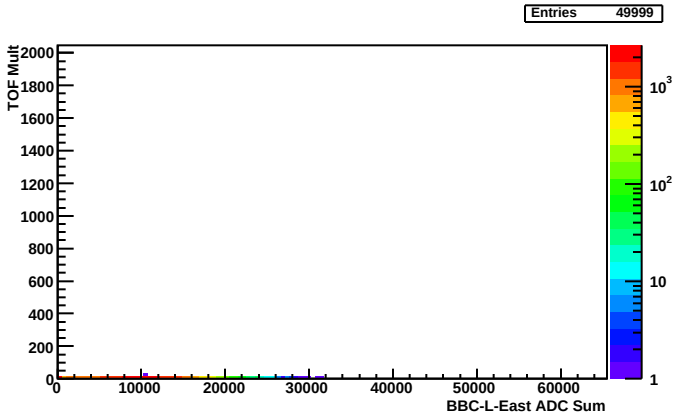

BBQ-VP002 (LO threshold)
Entries 799984
TAC
QT Input Channel

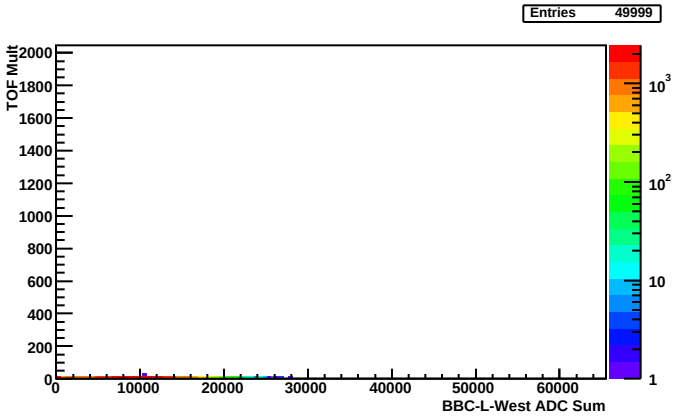

BBQ-VP003 (HI threshold)
Entries 799984
ADC
QT Input Channel

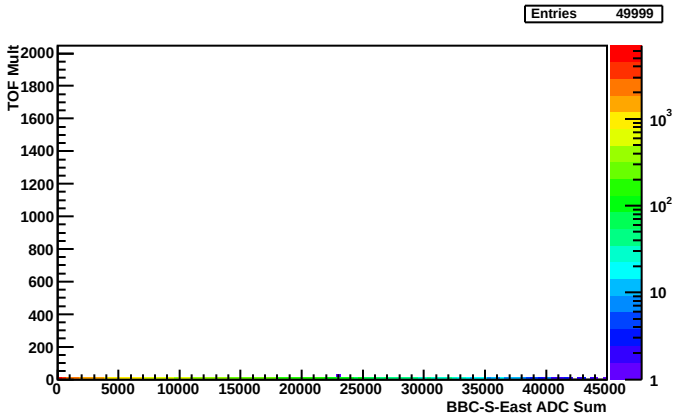

BBQ-VP003 (HI threshold)
Entries 799984
TAC
QT Input Channel

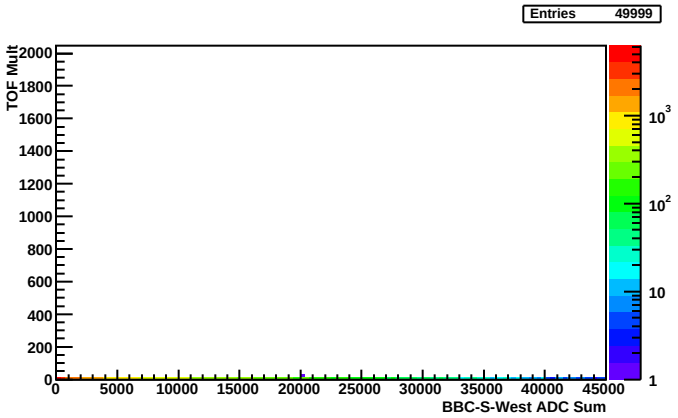

BBQ-VP004 (HI threshold)
Entries 799984
ADC
QT Input Channel

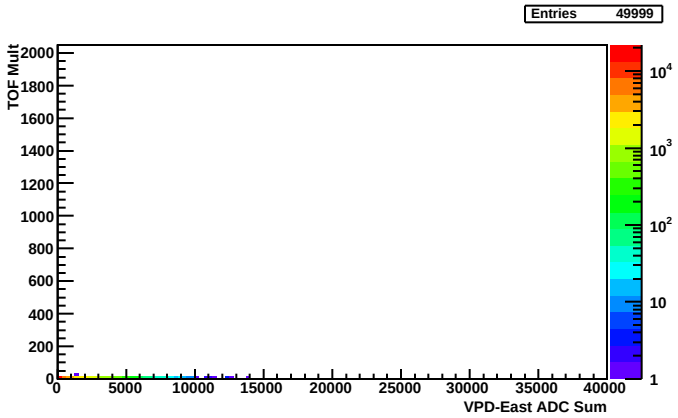

BBQ-VP004 (HI threshold)
Entries 799984
TAC
QT Input Channel

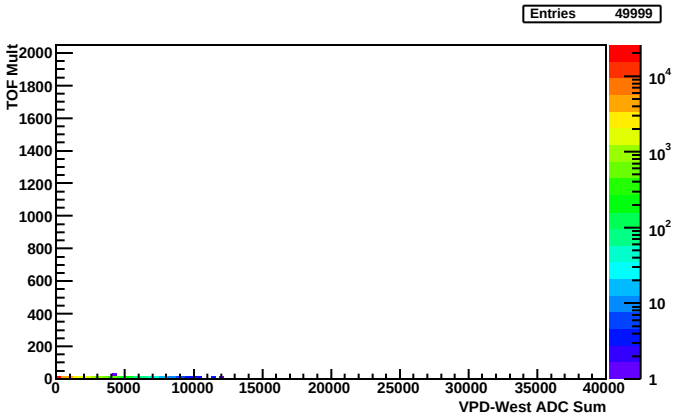

Entries 49999
TOF Mult
BBC-L-East ADC Sum

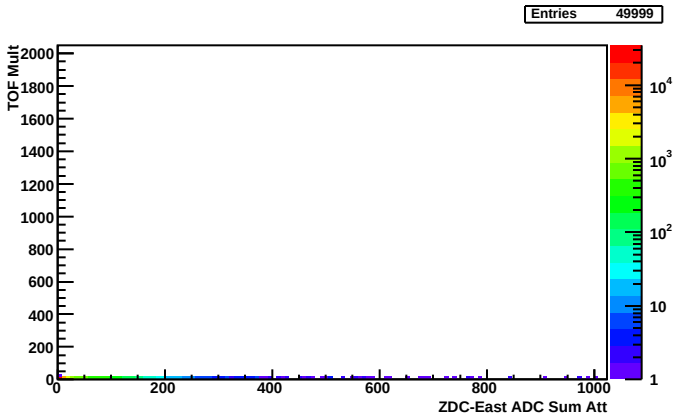

Entries 49999
TOF Mult
BBC-L-West ADC Sum

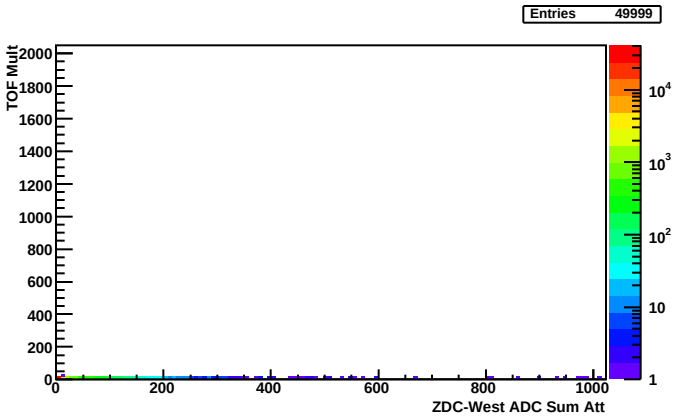

Entries 49999
TOF Mult
BBC-S-East ADC Sum

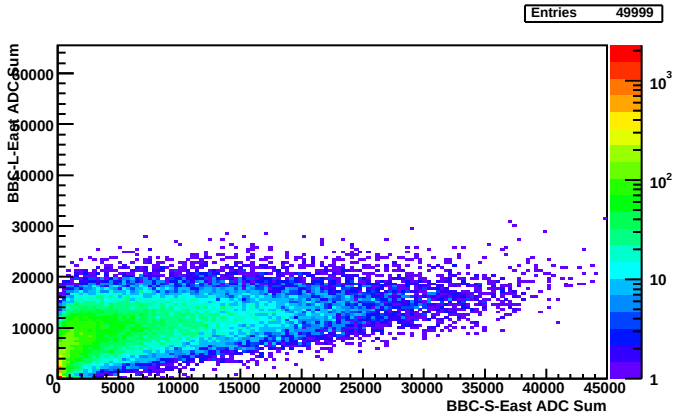

Entries 49999
TOF Mult
BBC-S-West ADC Sum

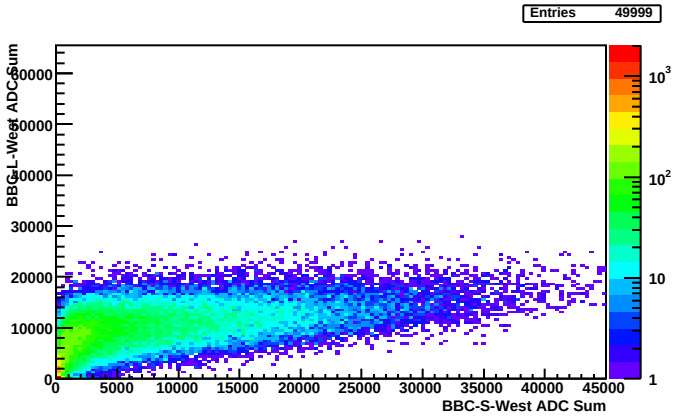

Entries 49999
TOF Mult
VPD-East ADC Sum

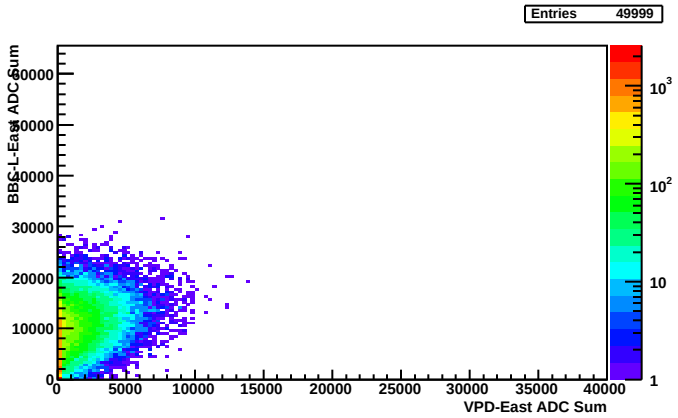

Entries 49999
TOF Mult
VPD-West ADC Sum

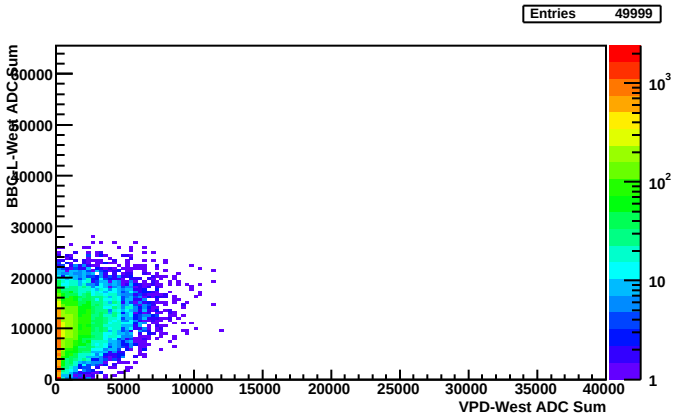

Entries 49999
TOF Mult
ZDC-East ADC Sum Att

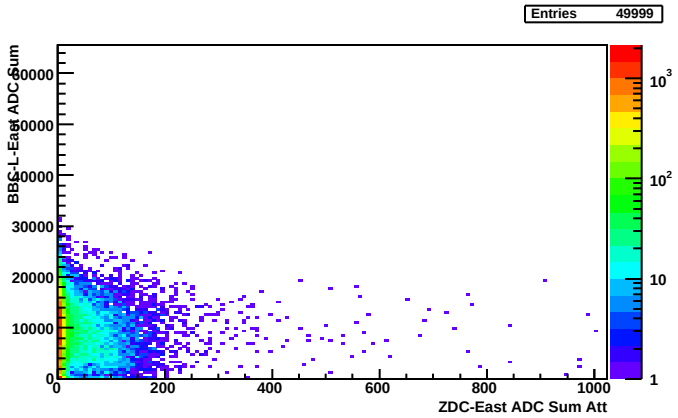

Entries 49999
TOF Mult
ZDC-West ADC Sum Att

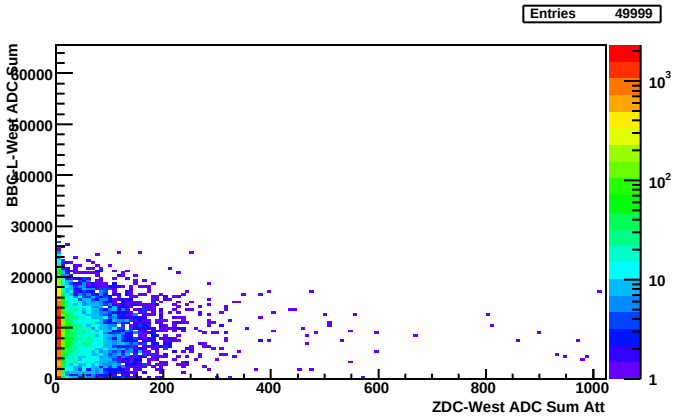

Entries 49999
BBC-L-East ADC Sum
BBC-S-East ADC Sum

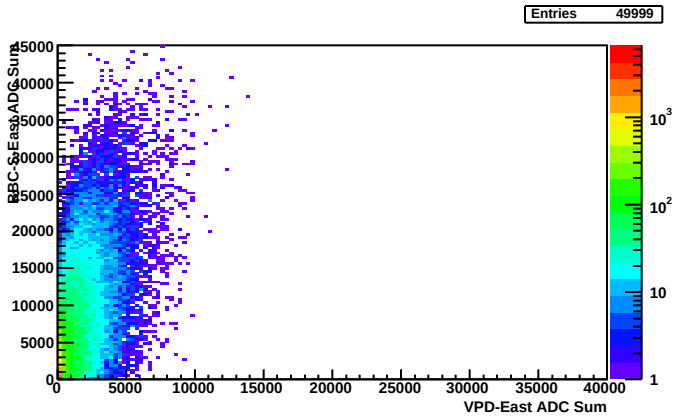

Entries 49999
BBC-L-West ADC Sum
BBC-S-West ADC Sum

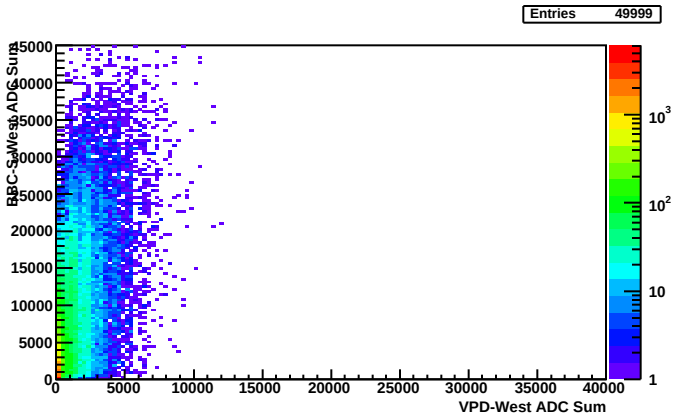

Entries 49999
BBC-L-East ADC Sum
VPD-East ADC Sum

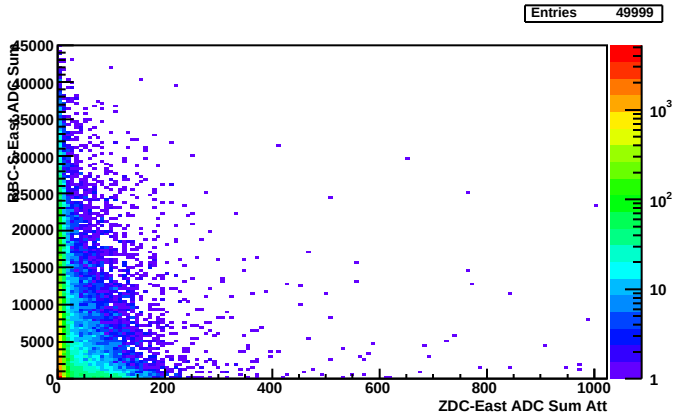

Entries 49999
BBC-L-West ADC Sum
VPD-West ADC Sum

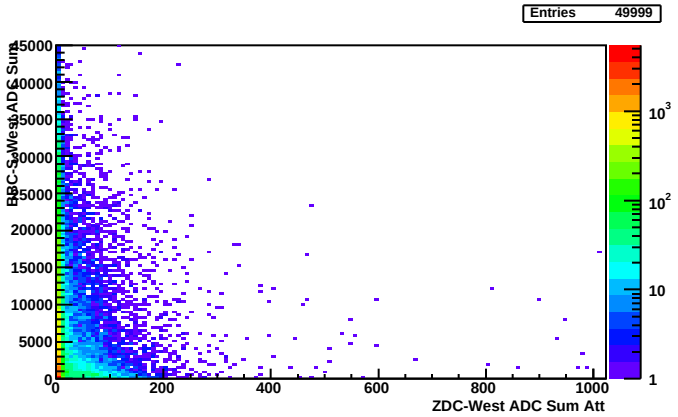

Entries 49999
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

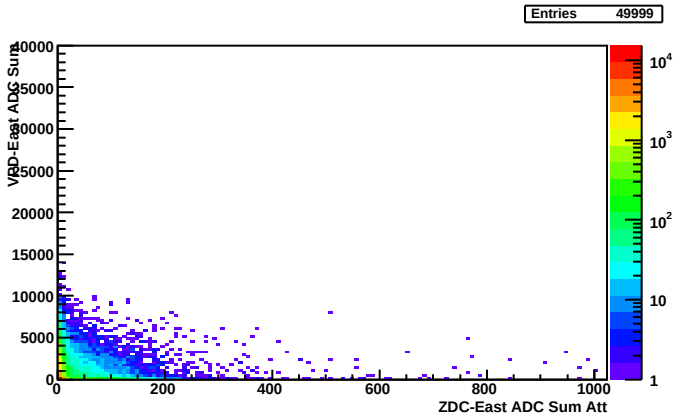

Entries 49999
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

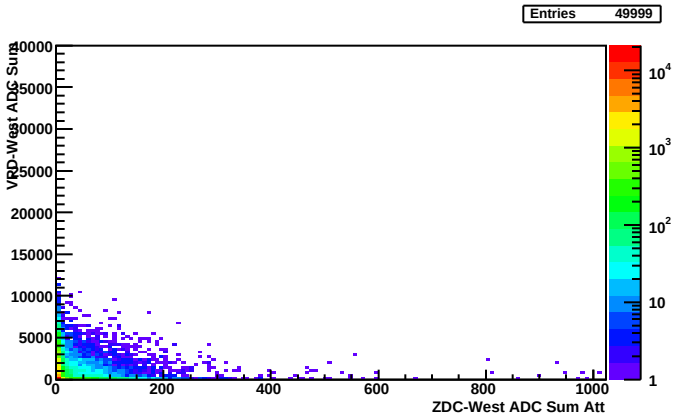

Entries 49999
BBC-S-East ADC Sum
VPD-East ADC Sum

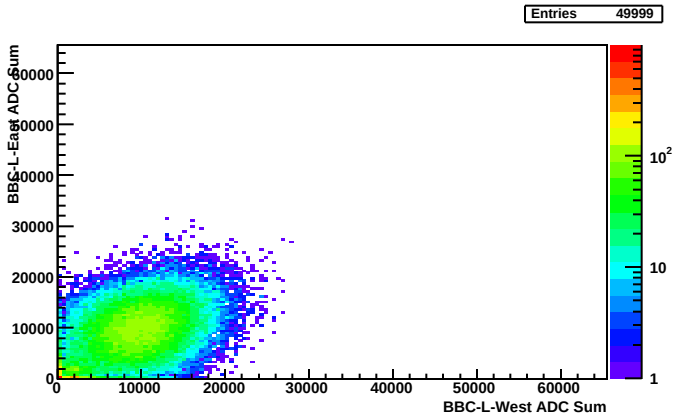

Entries 49999
BBC-S-West ADC Sum
VPD-West ADC Sum

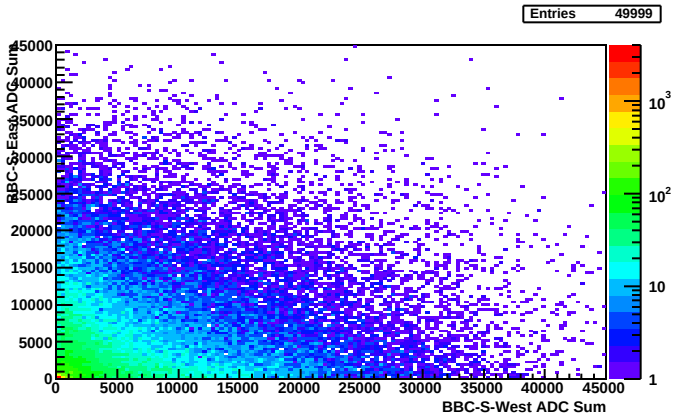

Entries 49999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

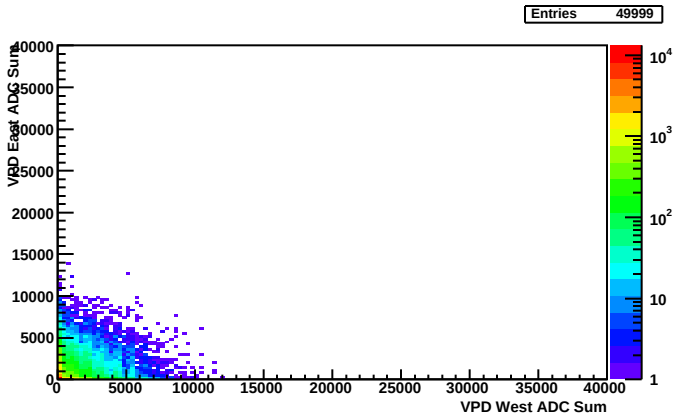

Entries 49999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

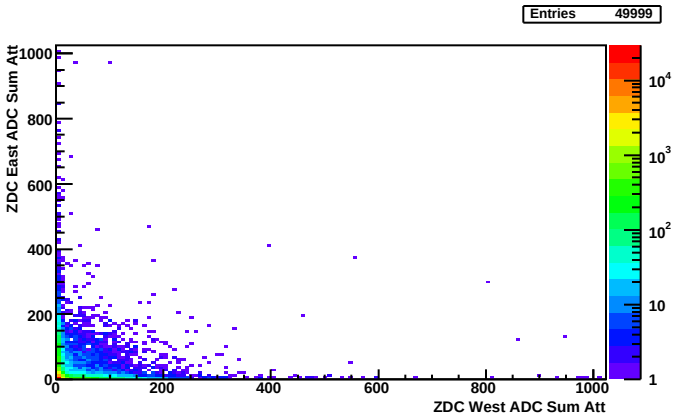

Entries 49999
VPD-East ADC Sum
ZDC-East ADC Sum Att

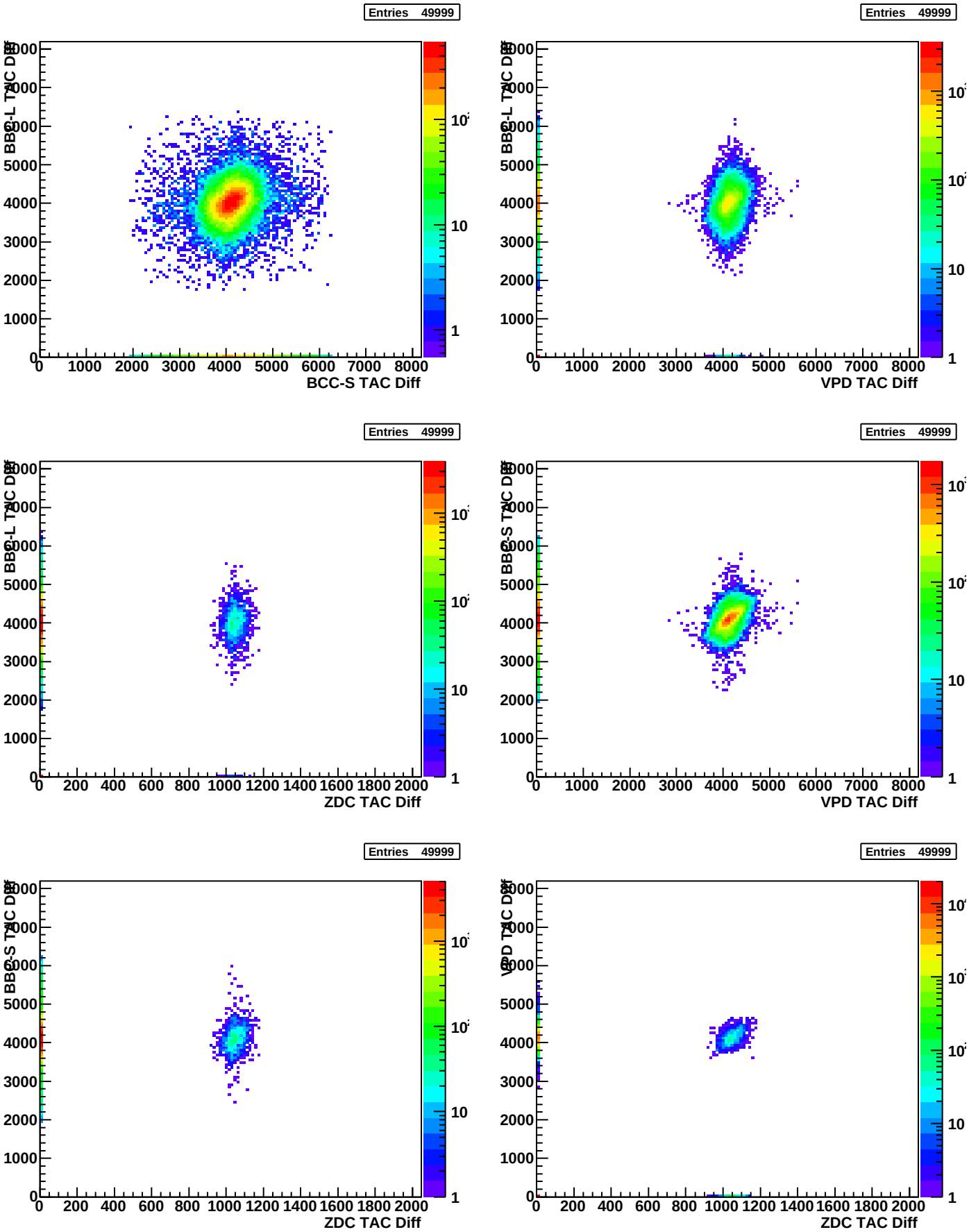

Entries 49999
VPD-West ADC Sum
ZDC-West ADC Sum Att

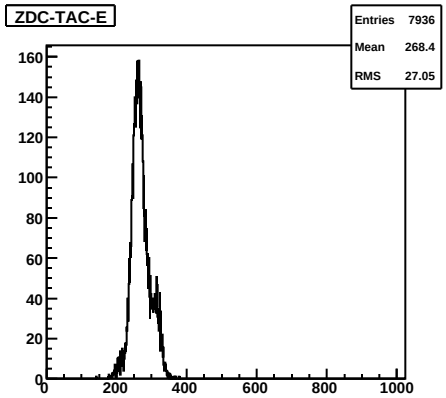

Entries 49999
BBC-L-East ADC Sum
BBC-L-West ADC Sum

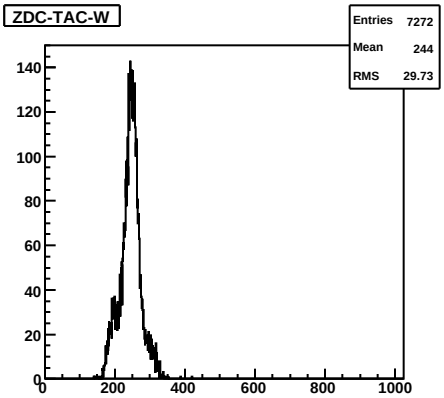

Entries 49999
BBC-S-East ADC Sum
BBC-S-West ADC Sum

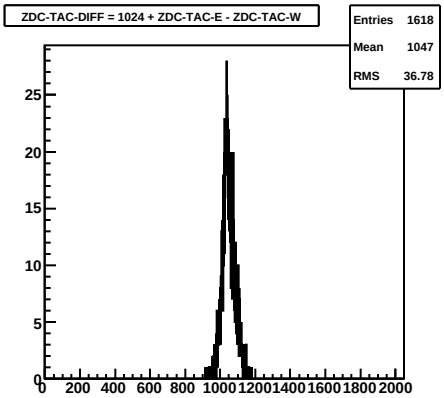

Entries 49999
VPD East ADC Sum
VPD West ADC Sum

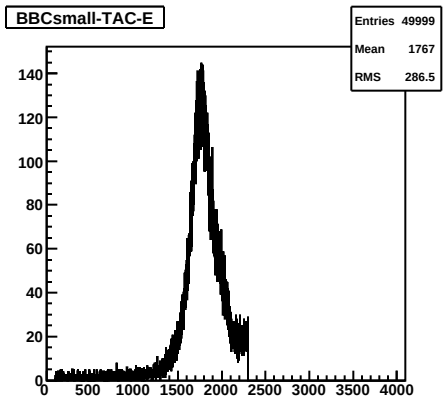

Entries 49999
ZDC East ADC Sum Att
ZDC West ADC Sum Att

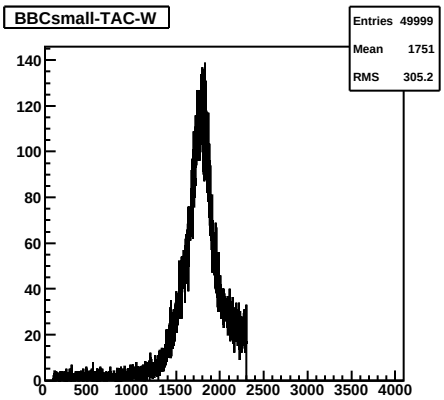

Entries 49999
BBC-L TAC Diff
BCC-S TAC Diff
Entries 49999
BBC-L TAC Diff
VPD TAC Diff
Entries 49999
BBC-L TAC Diff
ZDC TAC Diff
Entries 49999
BBC-S TAC Diff
VPD TAC Diff
Entries 49999
BBC-S TAC Diff
ZDC TAC Diff
Entries 49999
VPD TAC Diff
ZDC TAC Diff

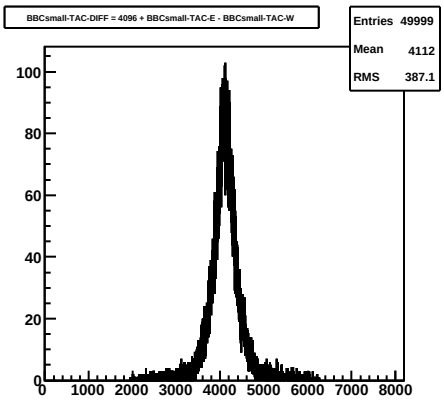

ZDC-TAC-E
Entries 7936
Mean 268.4
RMS 27.05

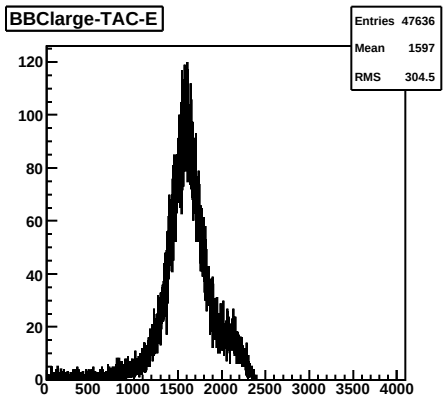

ZDC-TAC-W
Entries 7272
Mean 244
RMS 29.73

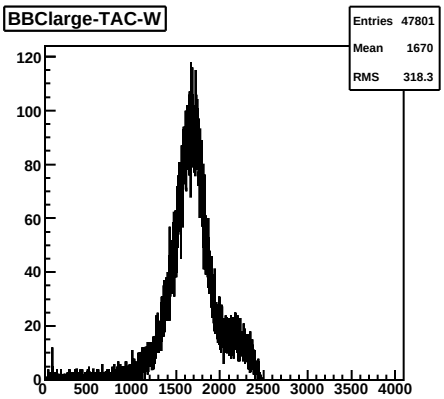

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 1618
Mean 1047
RMS 36.78

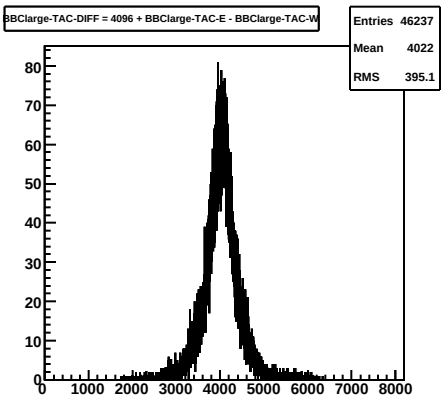

BBCsmall-TAC-E
Entries 49999
Mean 1767
RMS 286.5

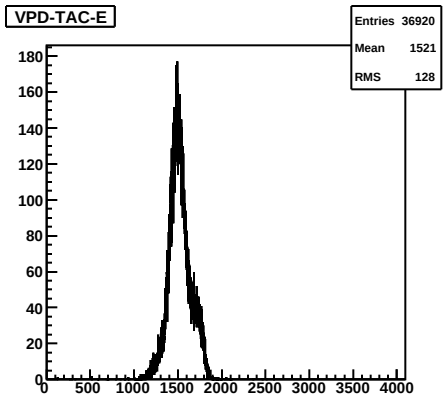

BBCsmall-TAC-W
Entries 49999
Mean 1751
RMS 305.2

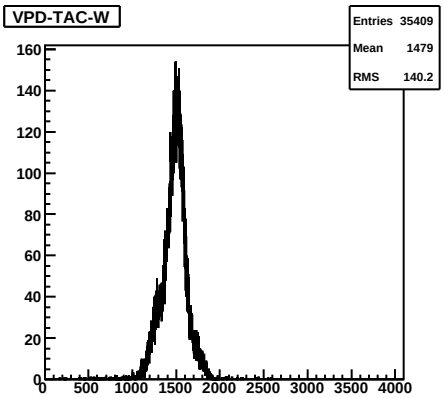

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 49999
Mean 4112
RMS 387.1

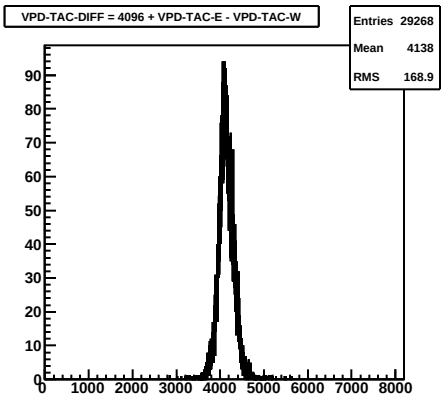

BBClarge-TAC-E
Entries 47636
Mean 1597
RMS 304.5

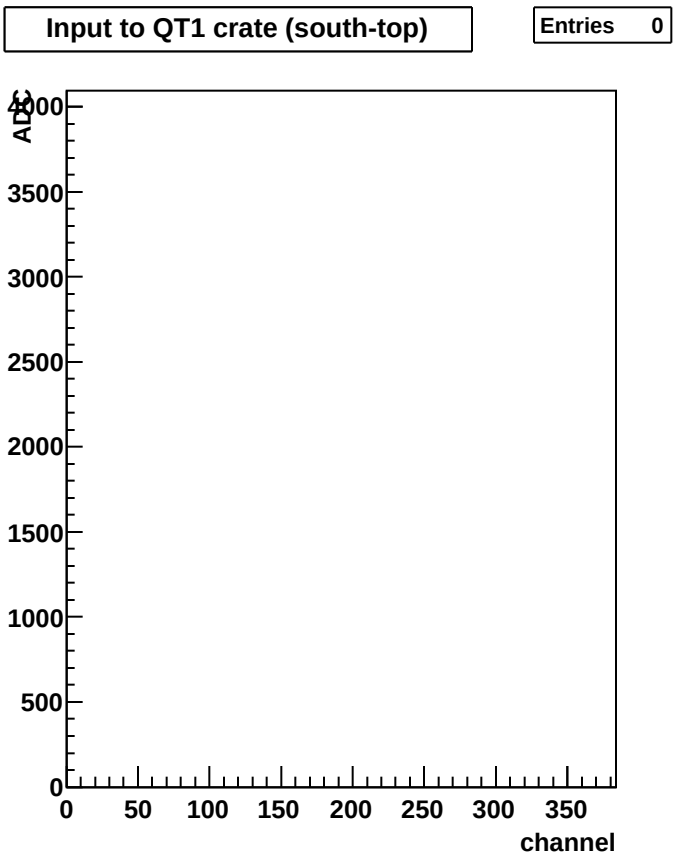

BBClarge-TAC-W
Entries 47801
Mean 1670
RMS 318.3

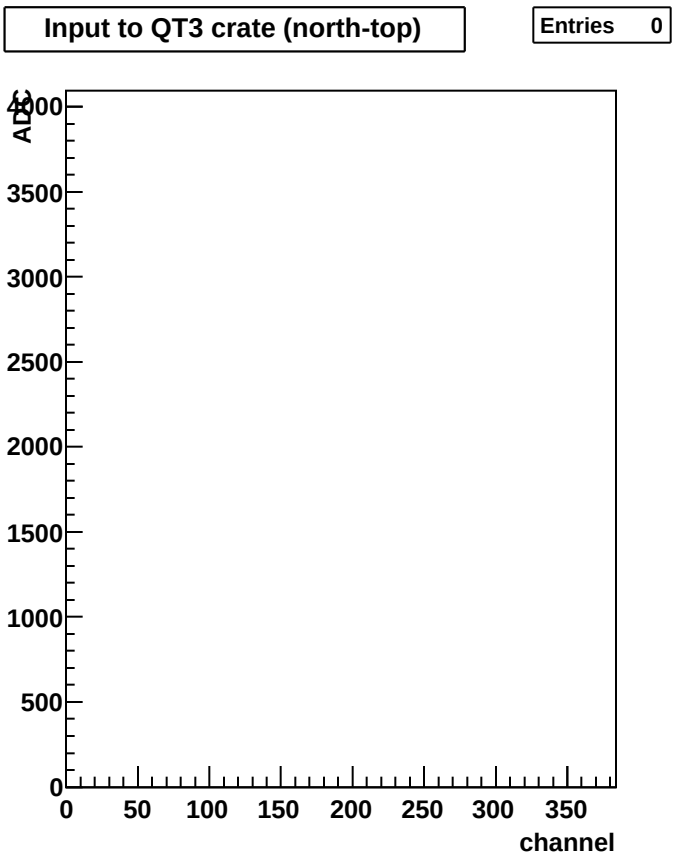

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 46237
Mean 4022
RMS 395.1

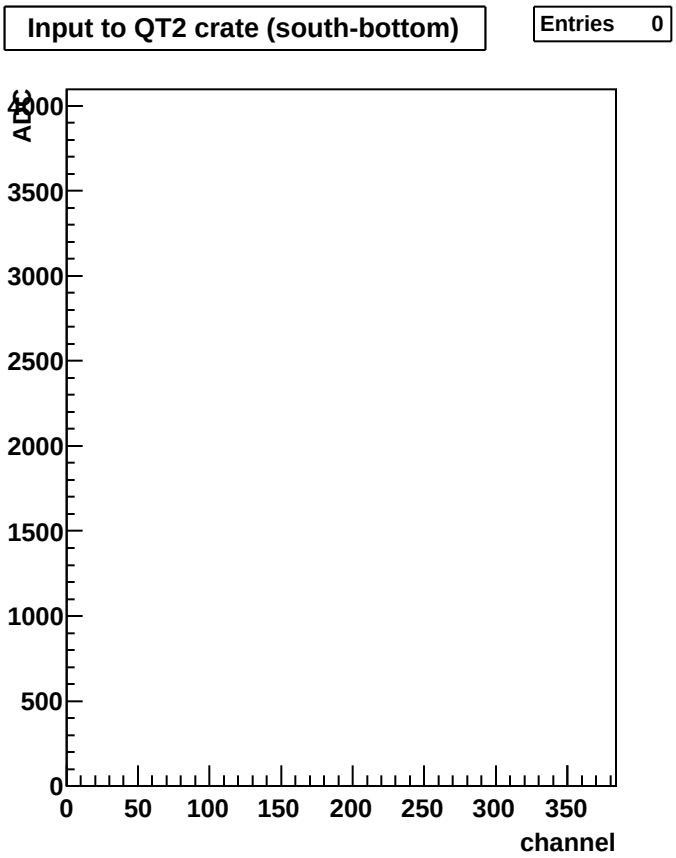

VPD-TAC-E
Entries 36920
Mean 1521
RMS 128

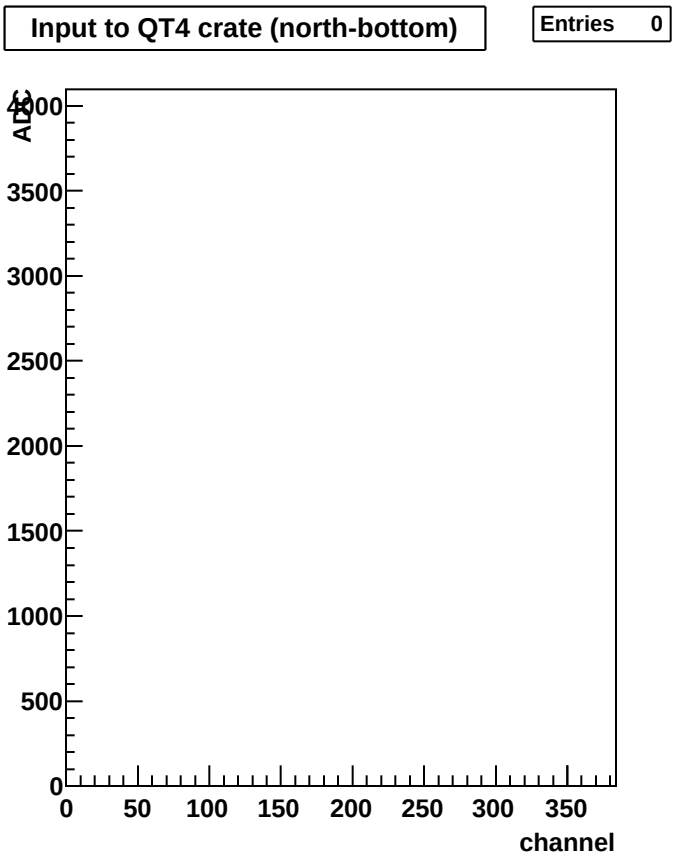

VPD-TAC-W
Entries 35409
Mean 1479
RMS 140.2

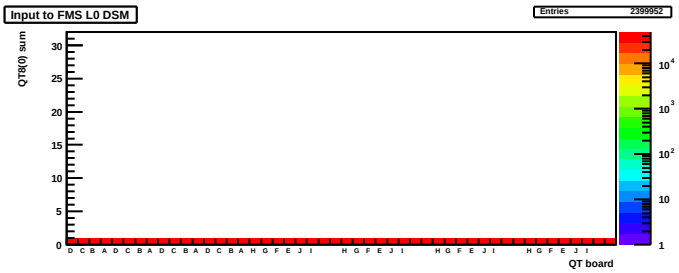

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 29268
Mean 4138
RMS 168.9

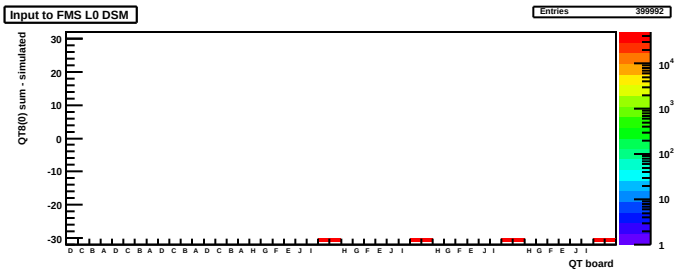

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

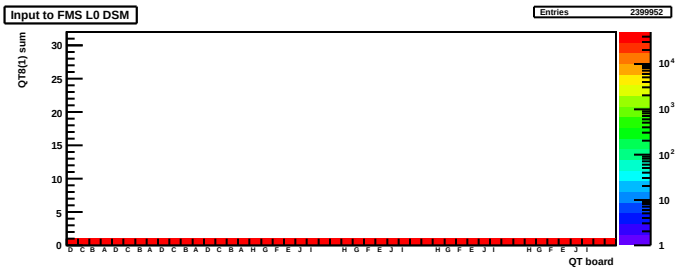

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

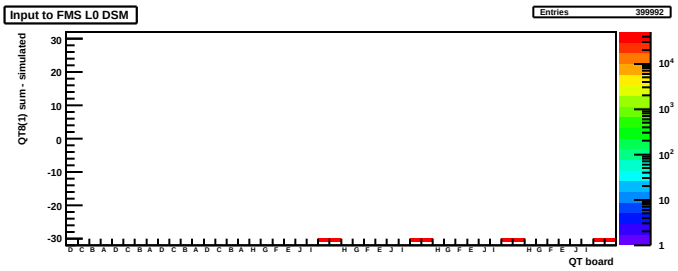

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

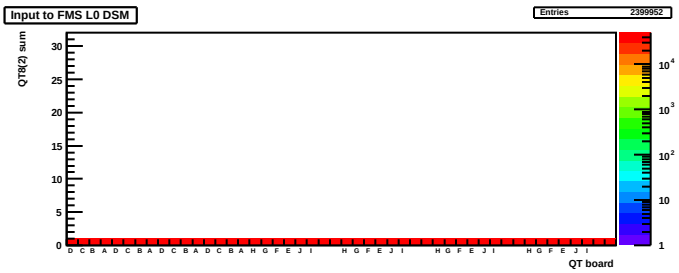

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

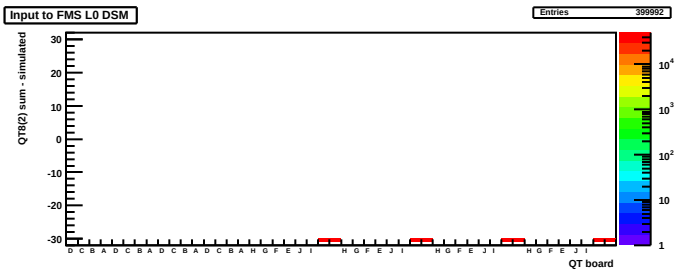

Input to FMS L0 DSM
Entries 2399952
QT8(0) sum
QT board

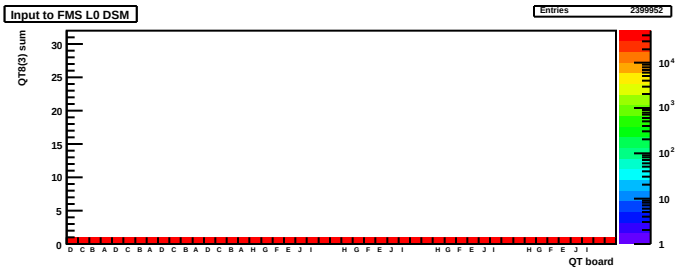

Input to FMS L0 DSM
Entries 399992
QT8(0) sum - simulated
QT board

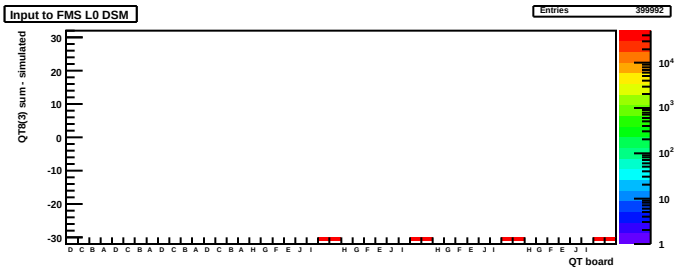

Input to FMS L0 DSM
Entries 2399952
QT8(1) sum
QT board

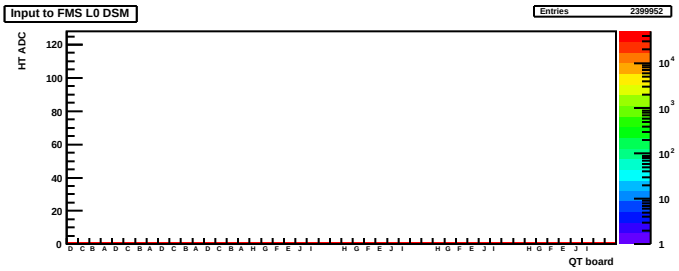

Input to FMS L0 DSM
Entries 399992
QT8(1) sum - simulated
QT board

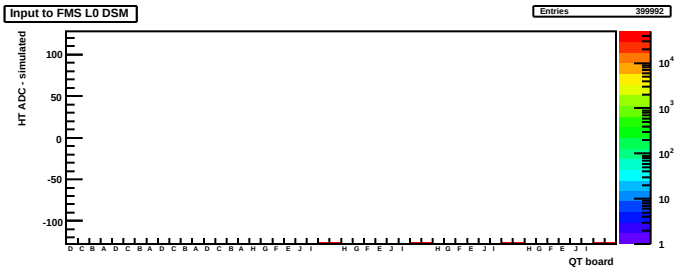

Input to FMS L0 DSM
Entries 2399952
QT8(2) sum
QT board

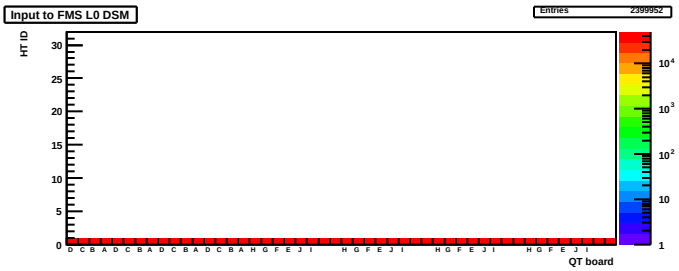

Input to FMS L0 DSM
Entries 399992
QT8(2) sum - simulated
QT board

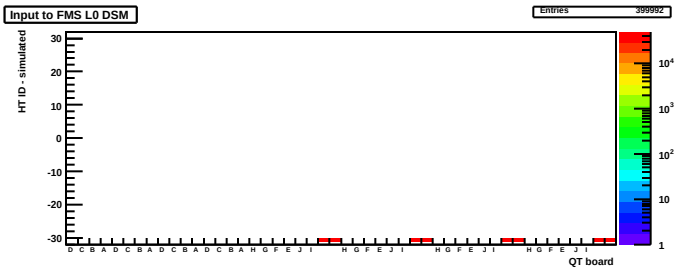

Input to FMS L0 DSM
Entries 2399952
QT8(3) sum
QT board

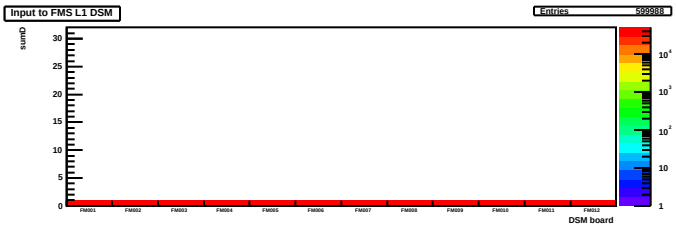

Input to FMS L0 DSM
Entries 399992
QT8(3) sum - simulated
QT board

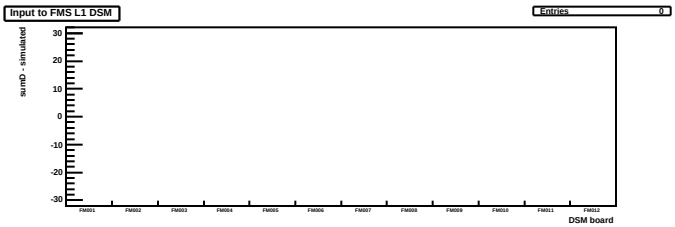

Input to FMS L0 DSM
Entries 2399952
HT ADC
QT board

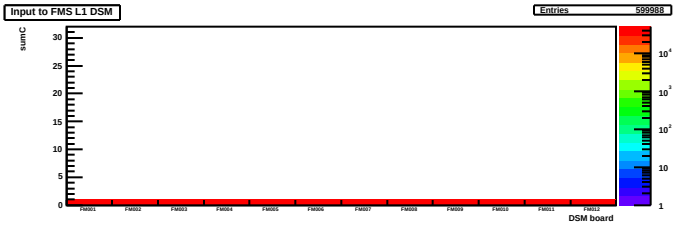

Input to FMS L0 DSM
Entries 399992
HT ADC - simulated
QT board

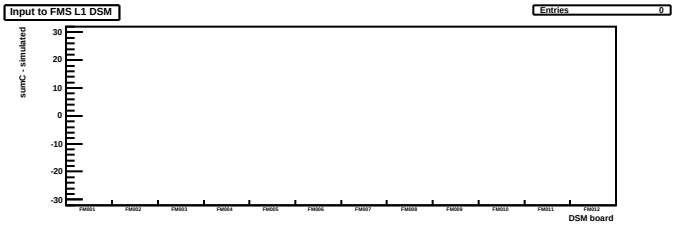

Input to FMS L0 DSM
Entries 2399952
HT ID
QT board

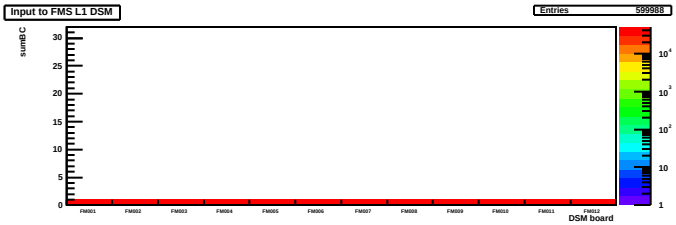

Input to FMS L0 DSM
Entries 399992
HT ID - simulated
QT board

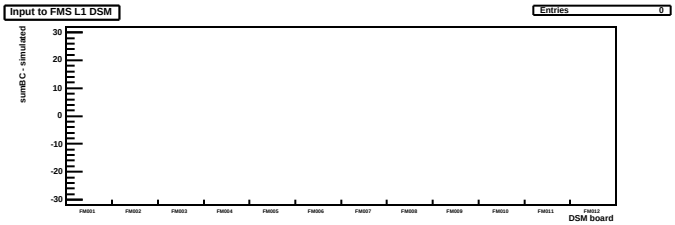

Input to FMS L1 DSM
Entries 599988
sumD
DSM board

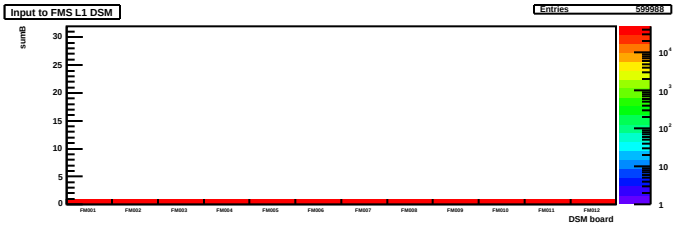

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

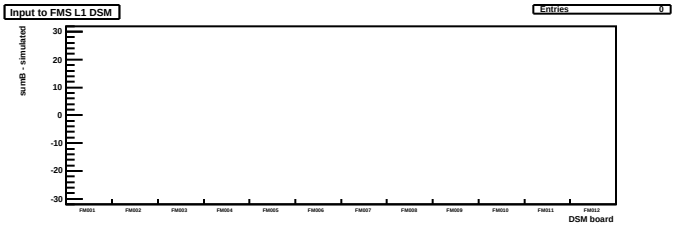

Input to FMS L1 DSM
Entries 599988
sumC
DSM board

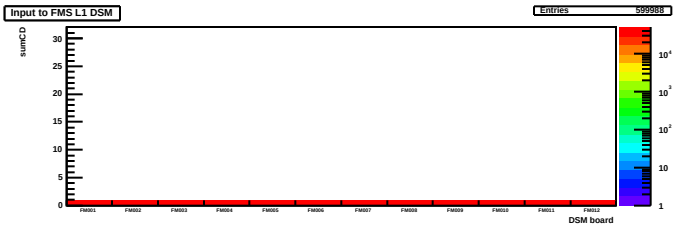

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

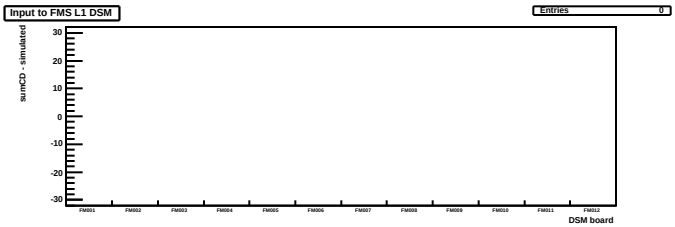

Input to FMS L1 DSM
Entries 599988
sumBC
DSM board

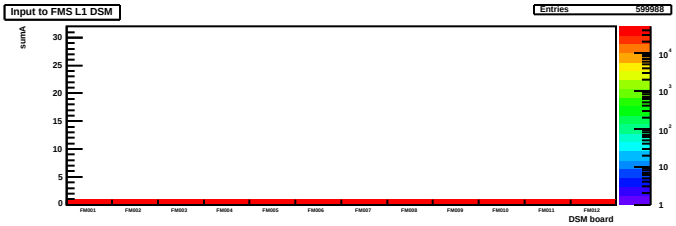

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

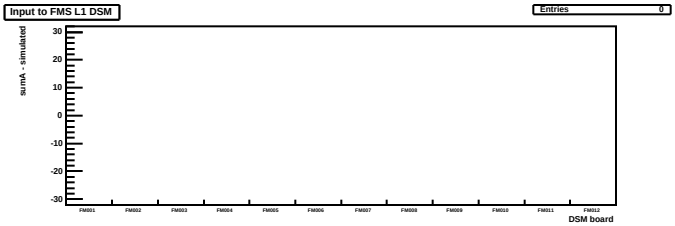

Input to FMS L1 DSM
Entries 599988
sumB
DSM board

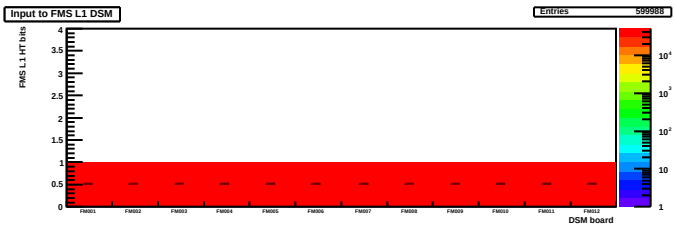

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

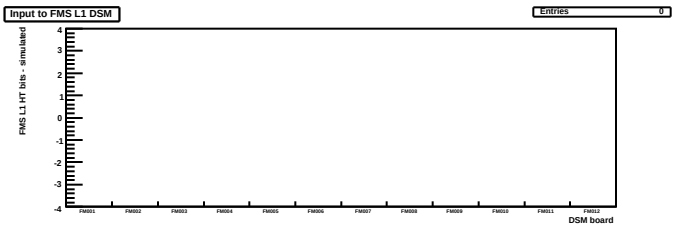

Input to FMS L1 DSM
Entries 599988
sumCD
DSM board

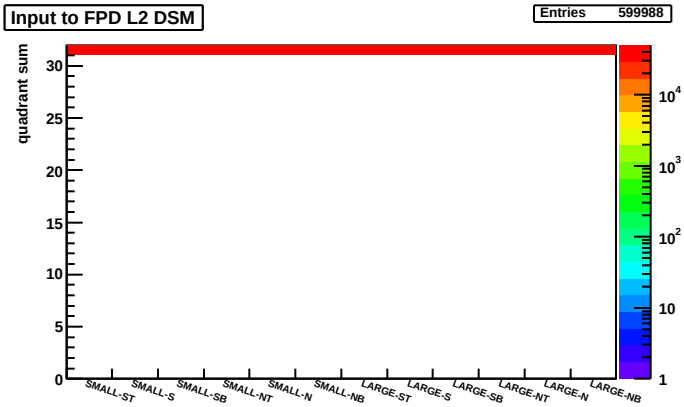

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

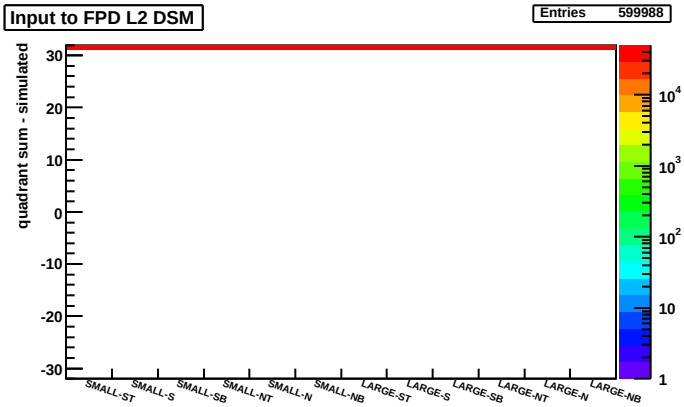

Input to FMS L1 DSM
Entries 599988
sumA
DSM board

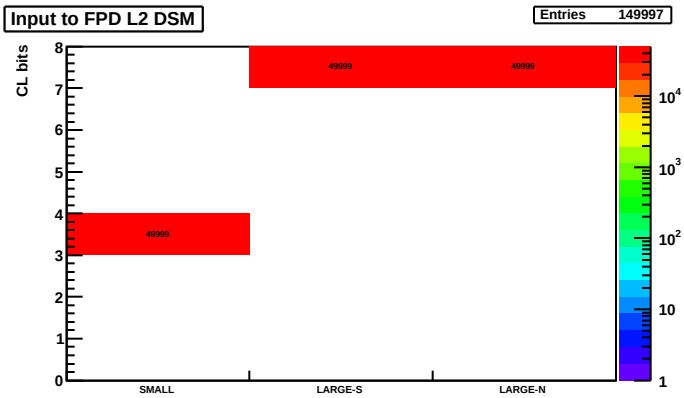

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

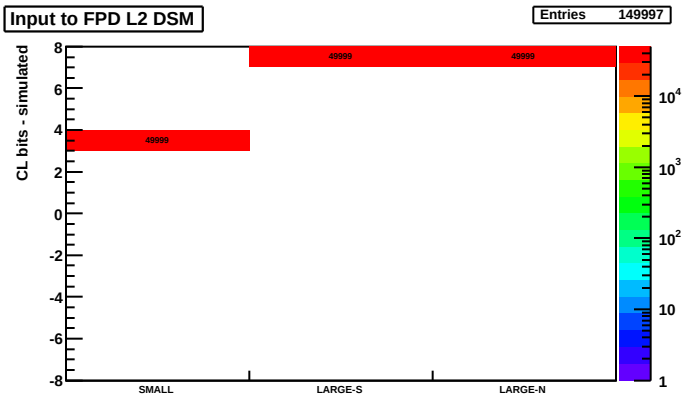

Input to FMS L1 DSM
Entries 599988
FMS L1 HT bits
DSM board

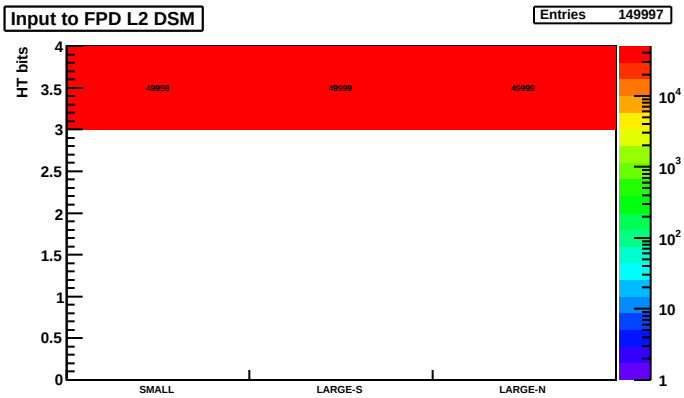

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

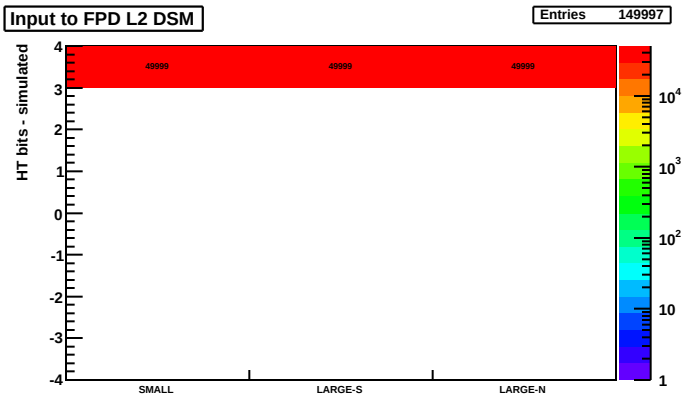

Input to FPD L2 DSM
Entries 599988
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

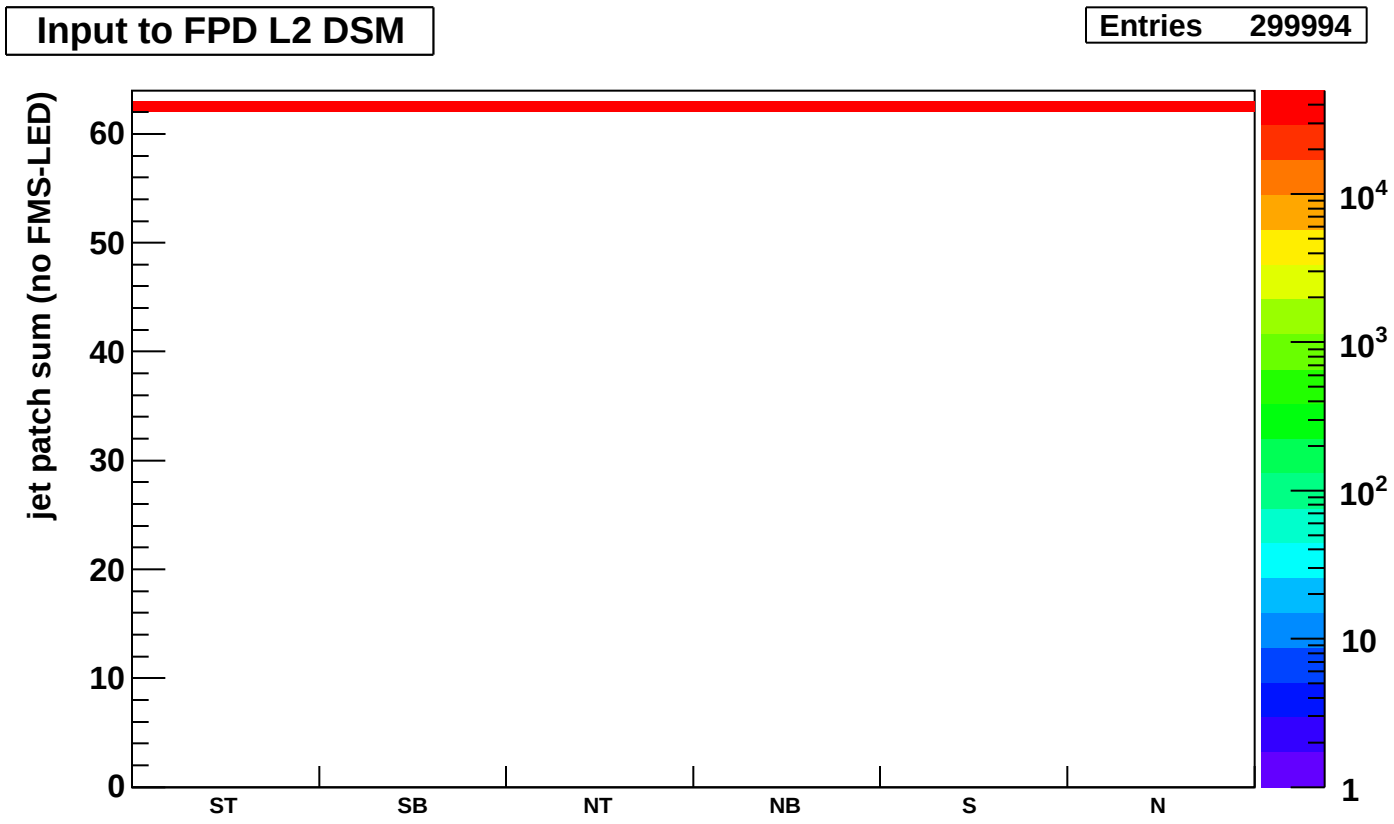

Input to FPD L2 DSM
Entries 599988
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

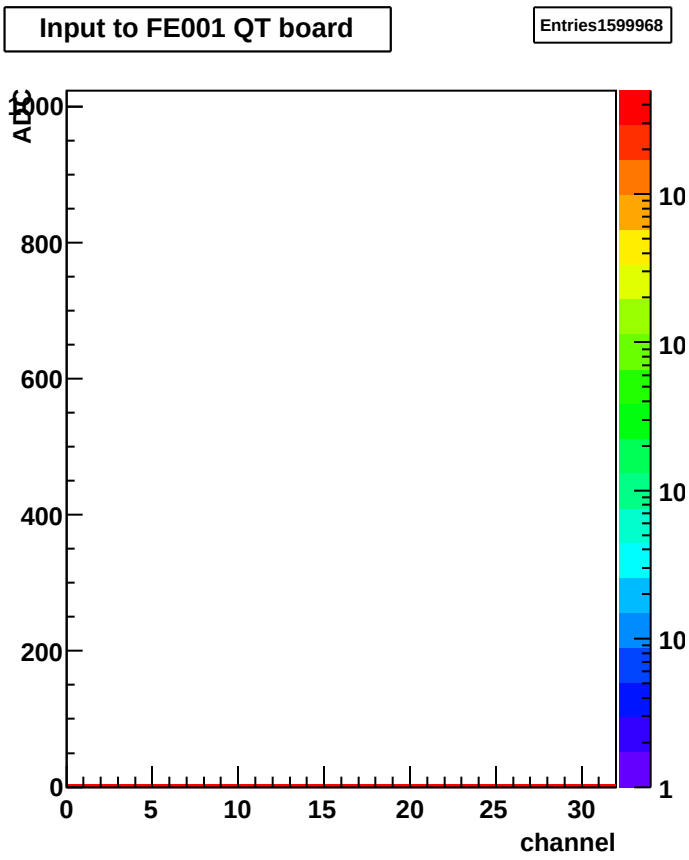

Input to FPD L2 DSM
Entries 149997
CL bits
49999
49999
49999
SMALL
LARGE-S
LARGE-N

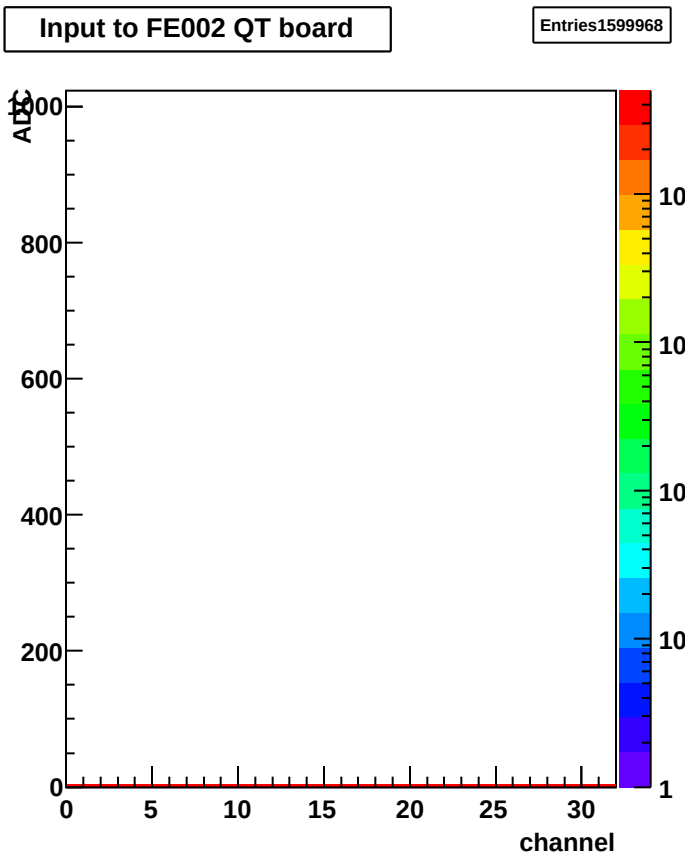

Input to FPD L2 DSM
Entries 149997
CL bits - simulated
49999
49999
49999
SMALL
LARGE-S
LARGE-N

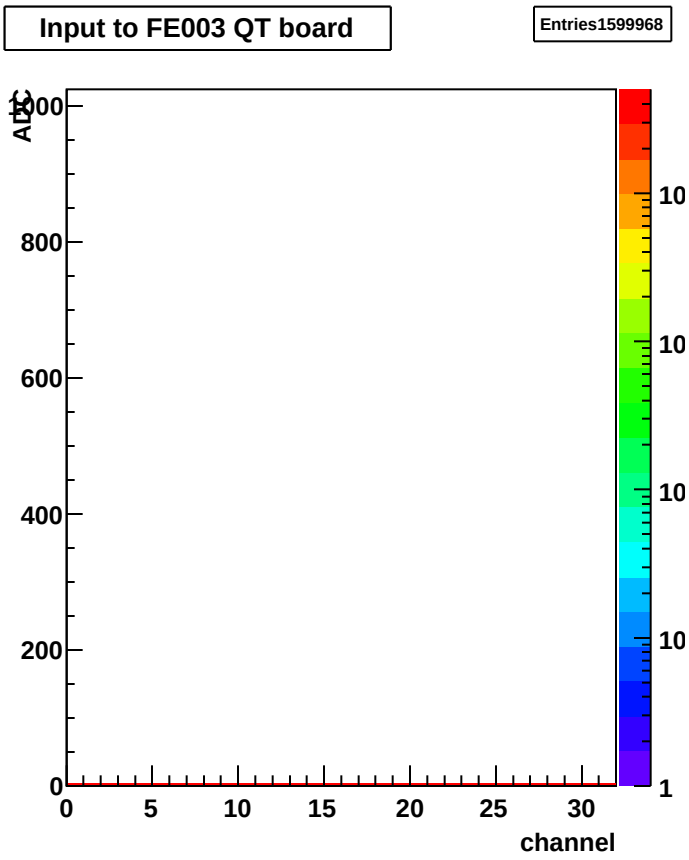

Input to FPD L2 DSM
Entries 149997
HT bits
49999
49999
49999
SMALL
LARGE-S
LARGE-N

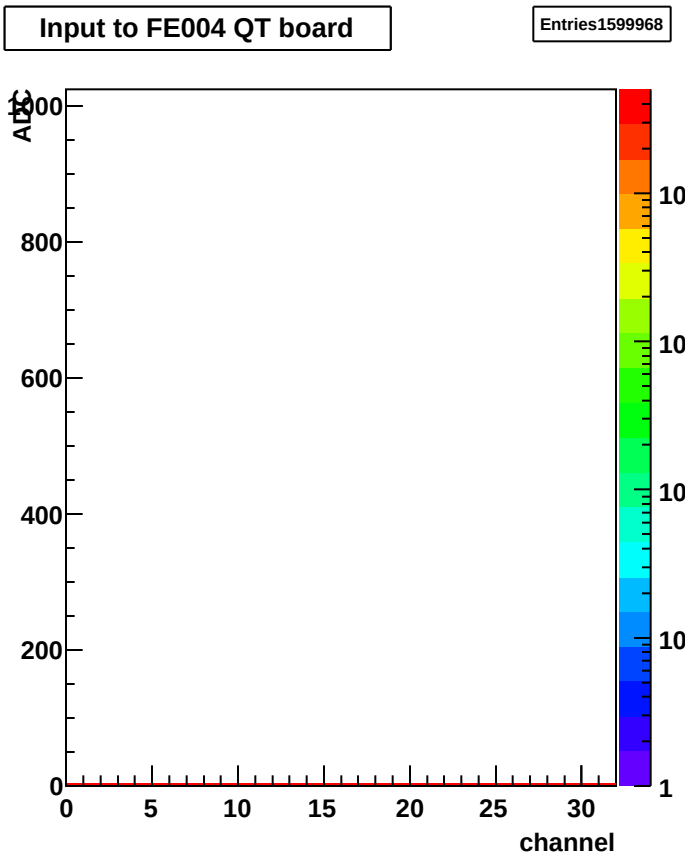

Input to FPD L2 DSM
Entries 149997
HT bits - simulated
49999
49999
49999
SMALL
LARGE-S
LARGE-N


Input to FPD L2 DSM
Entries 299994
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

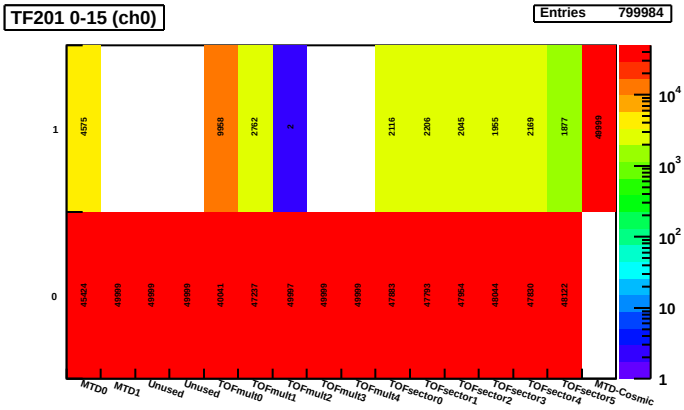

Input to FE001 QT board
Entries1599968
ADC
channel


Input to FE002 QT board
Entries1599968
ADC
channel

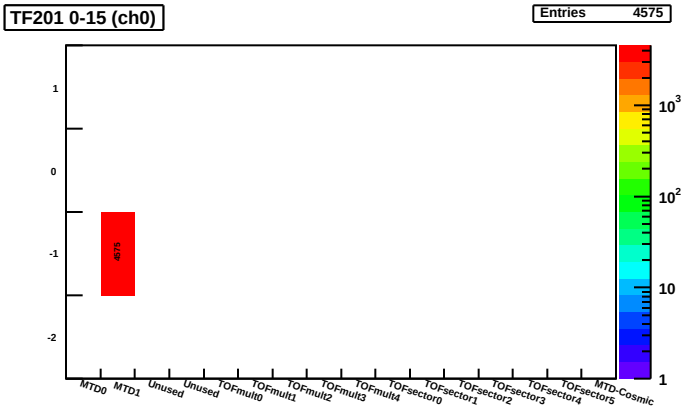

Input to FE003 QT board
Entries1599968
ADC
channel


Input to FE004 QT board
Entries1599968
ADC
channel

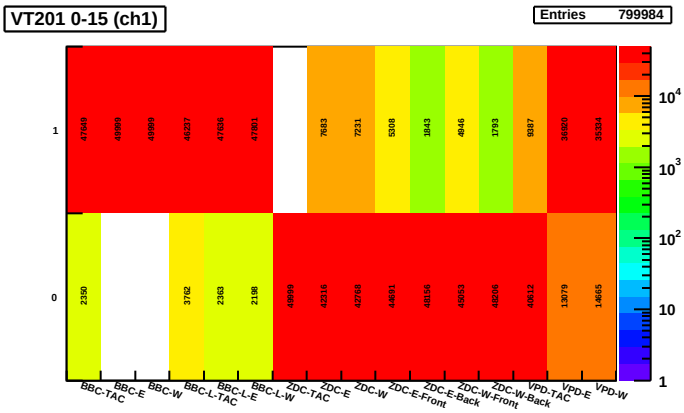
TF201 0-15 (ch0)



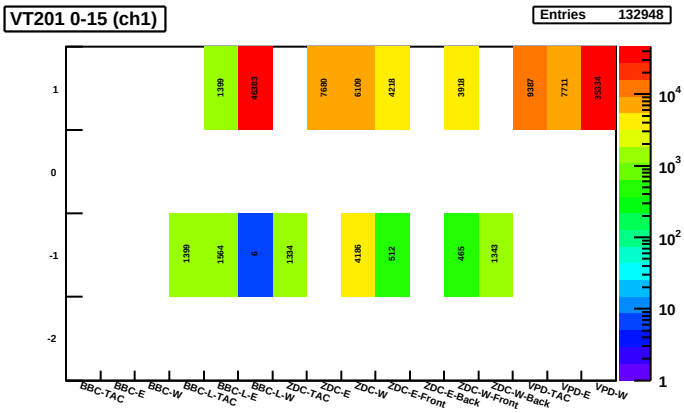
TF201 0-15 (ch0)



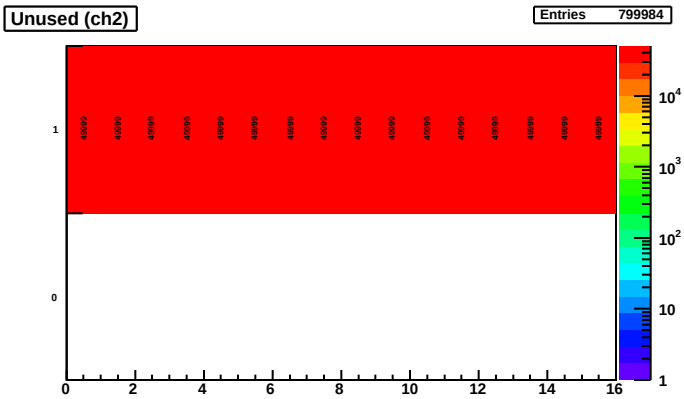
VT201 0-15 (ch1)

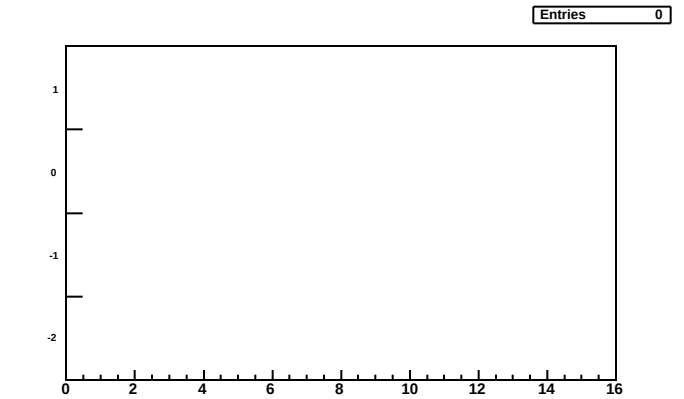


VT201 0-15 (ch1)

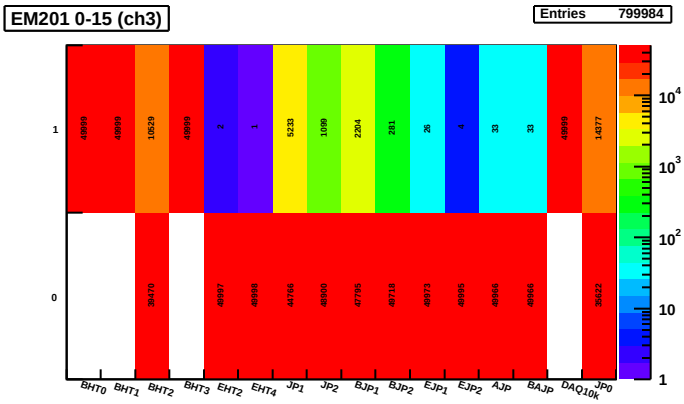


Unused (ch2)

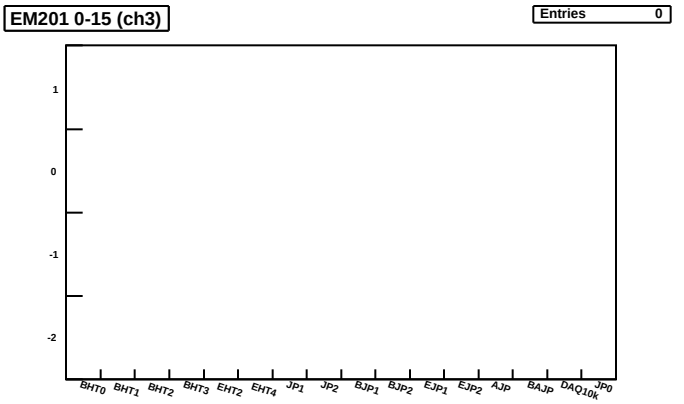




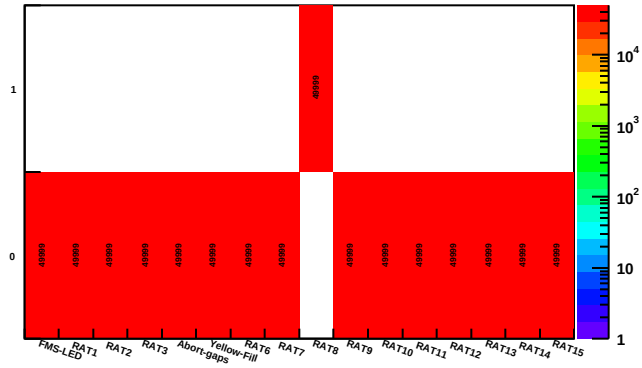
EM201 0-15 (ch3)

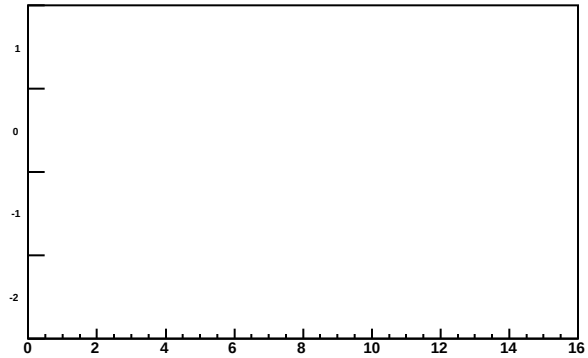


EM201 0-15 (ch3)

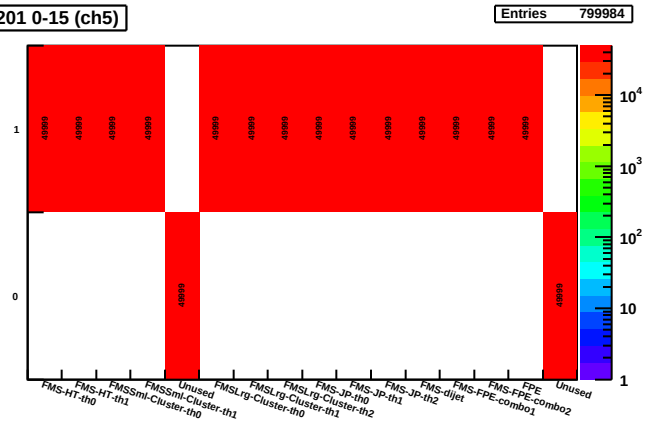


RAT board (ch4)





FP201 0-15 (ch5)



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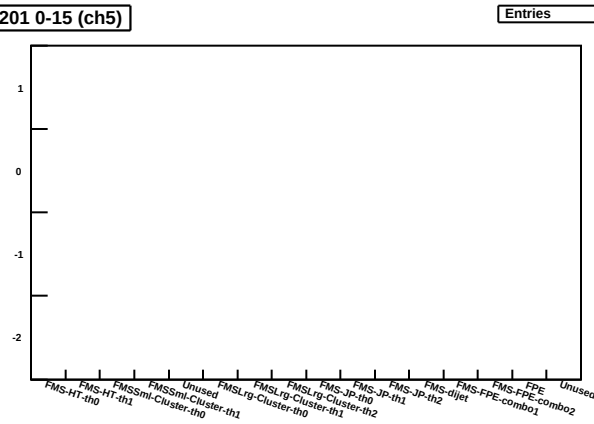
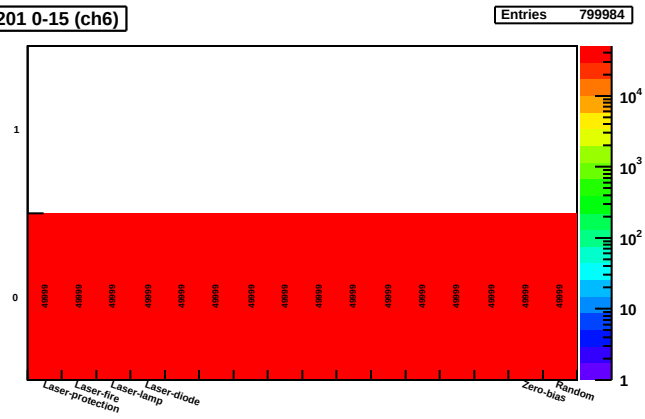
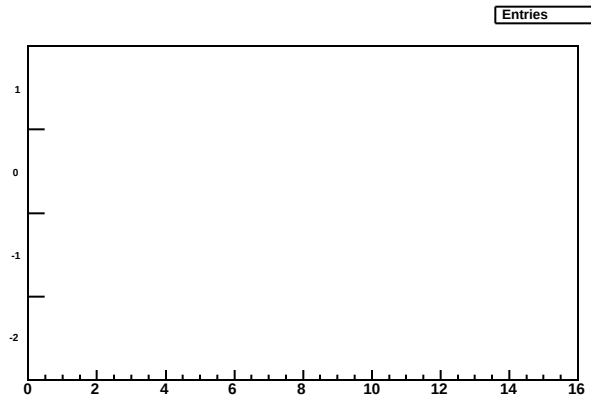
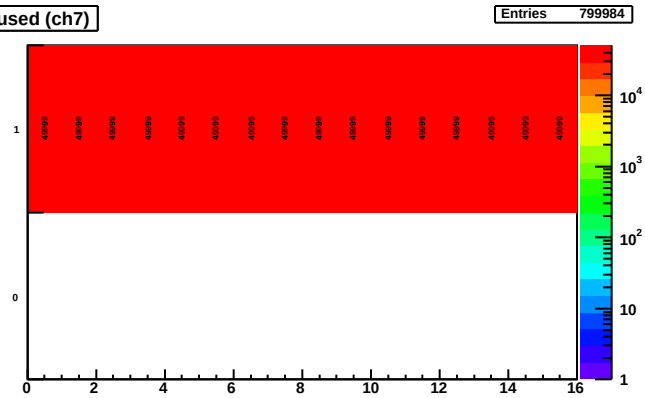
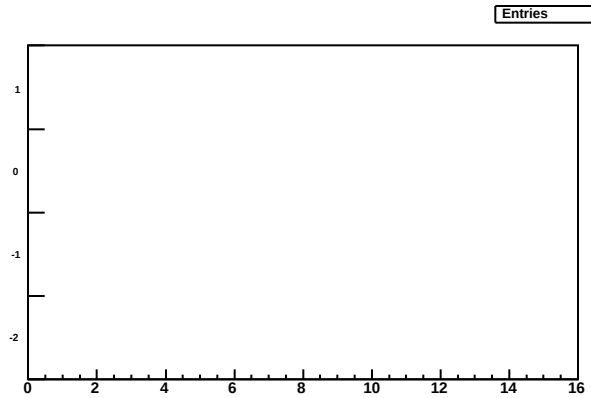


ST201 0-15 (ch6)





Unused (ch7)