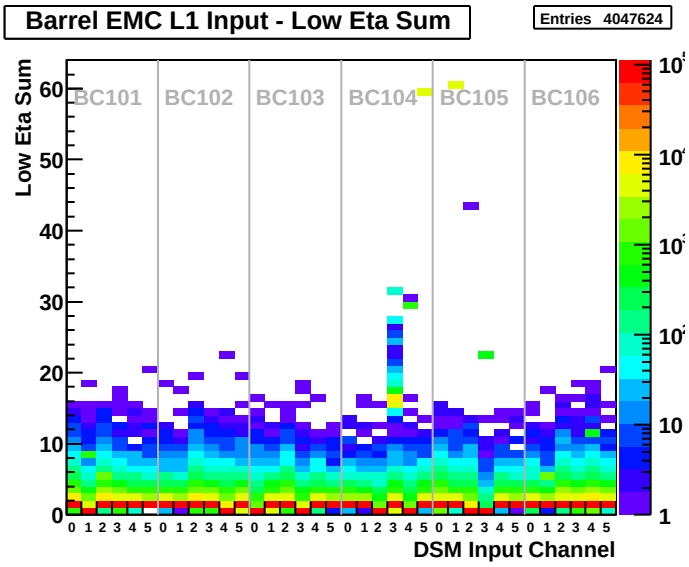
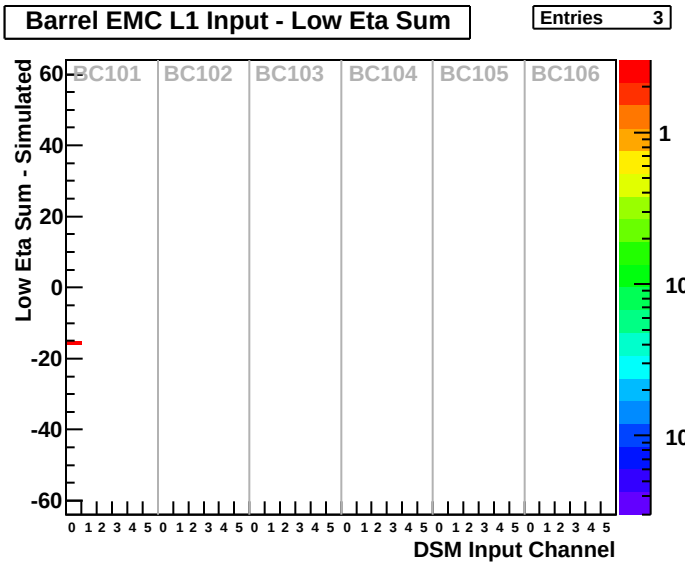
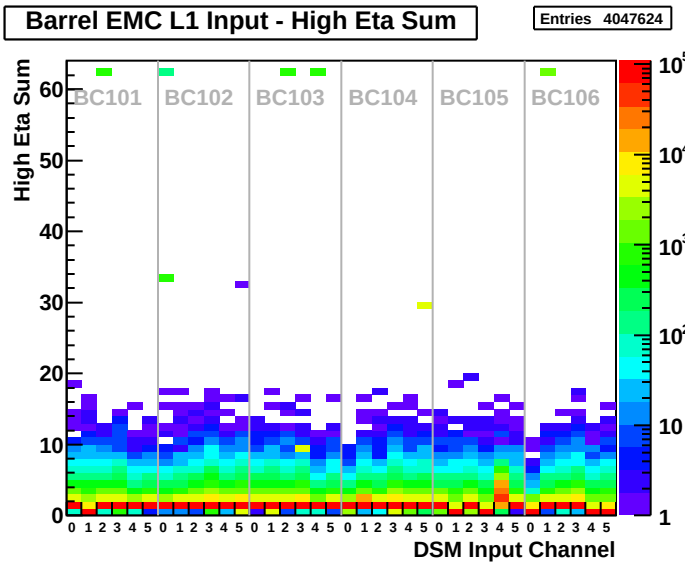
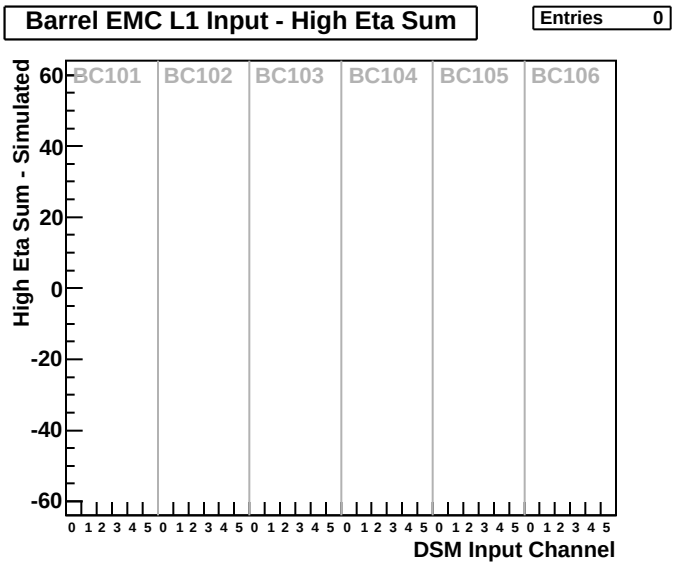
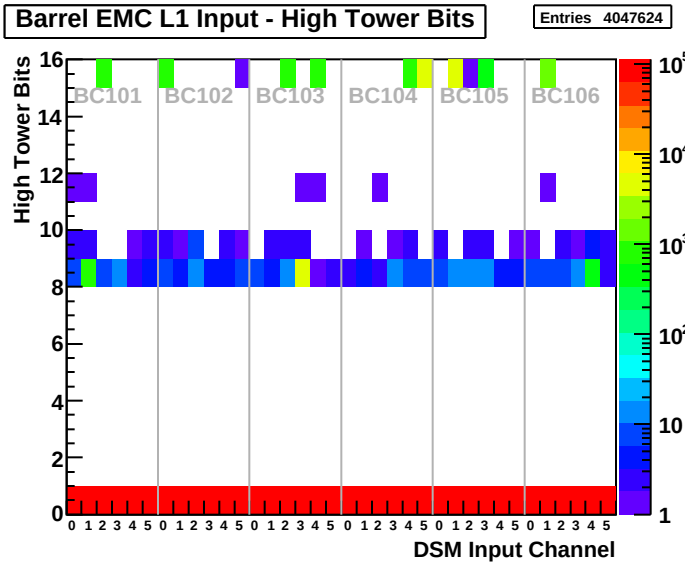
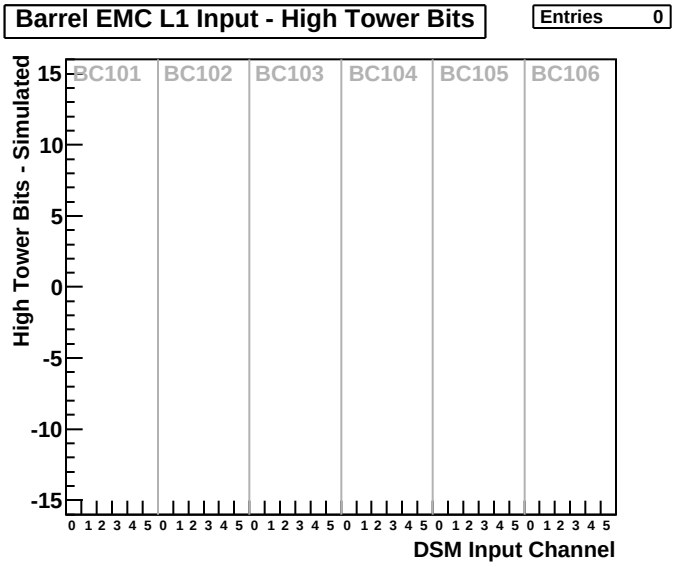

Barrel EMC L1 Input - Low Eta Sum
Entries 4047624
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

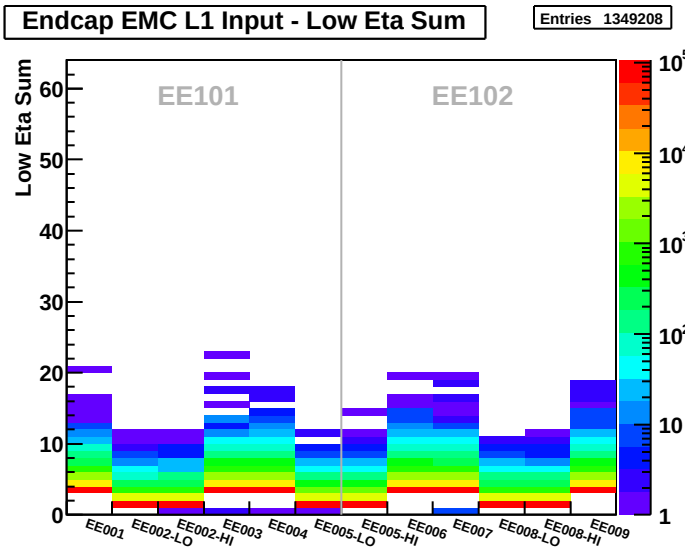

Barrel EMC L1 Input - Low Eta Sum
Entries 3
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

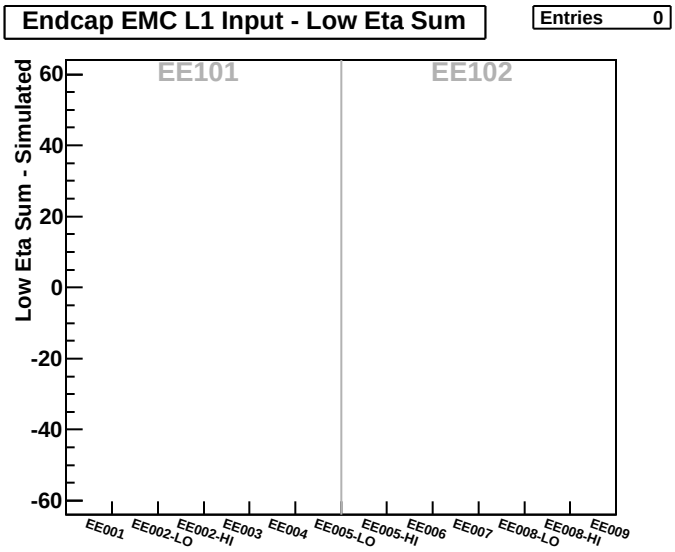

Barrel EMC L1 Input - High Eta Sum
Entries 4047624
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

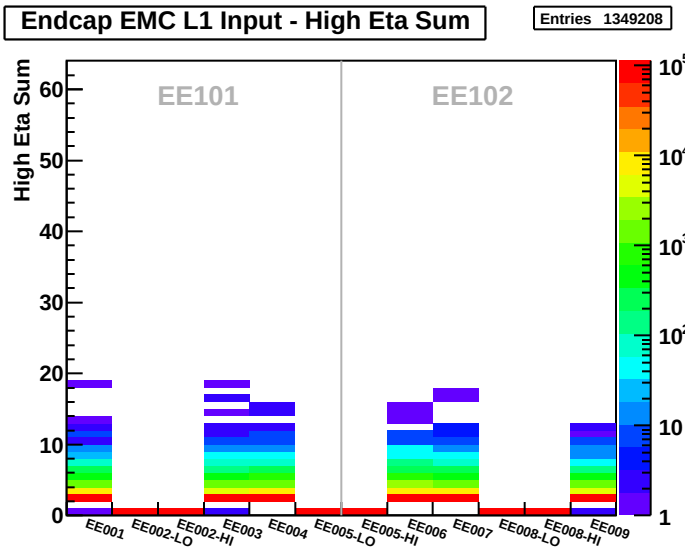

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

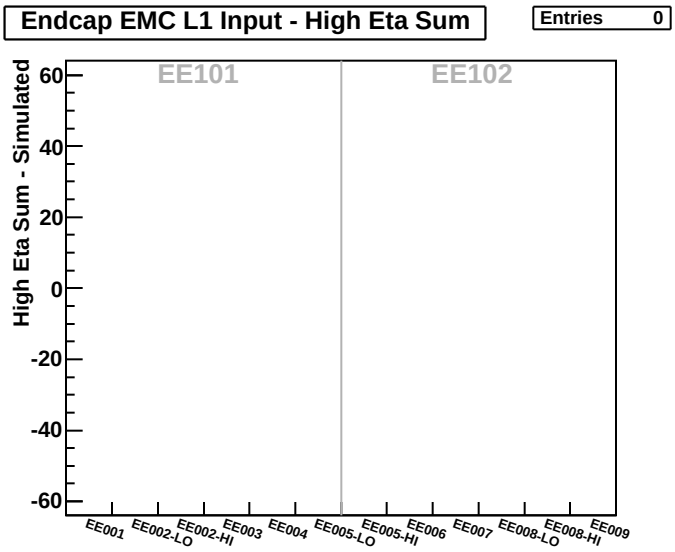

Barrel EMC L1 Input - High Tower Bits
Entries 4047624
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

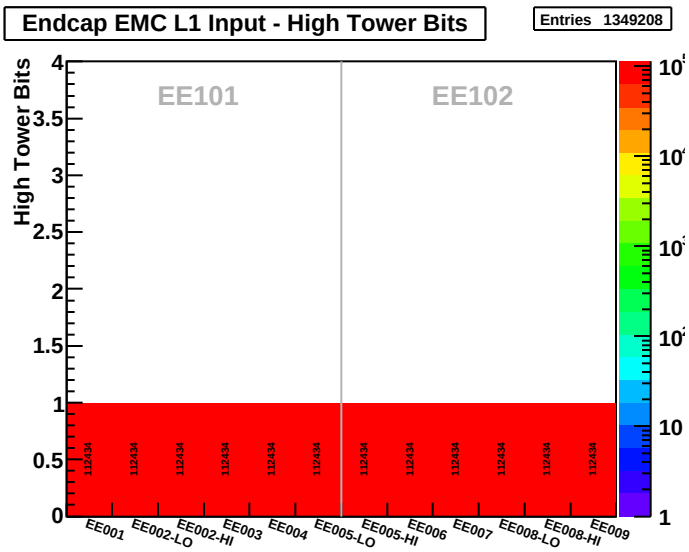

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

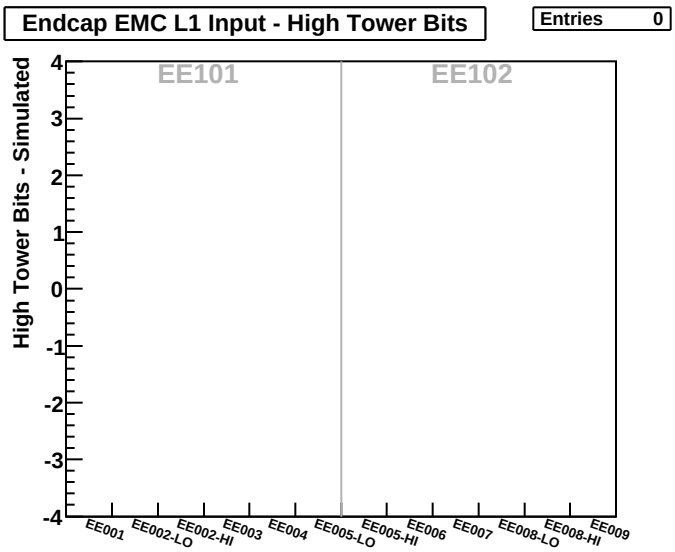

Endcap EMC L1 Input - Low Eta Sum
Entries 1349208
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

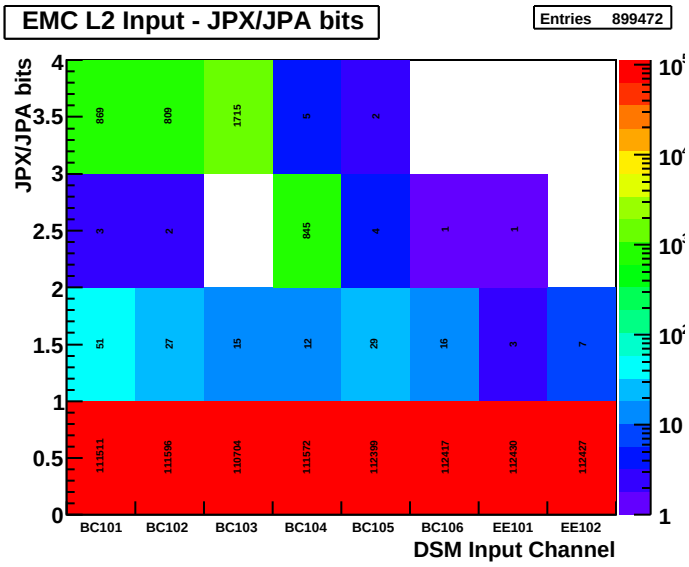

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

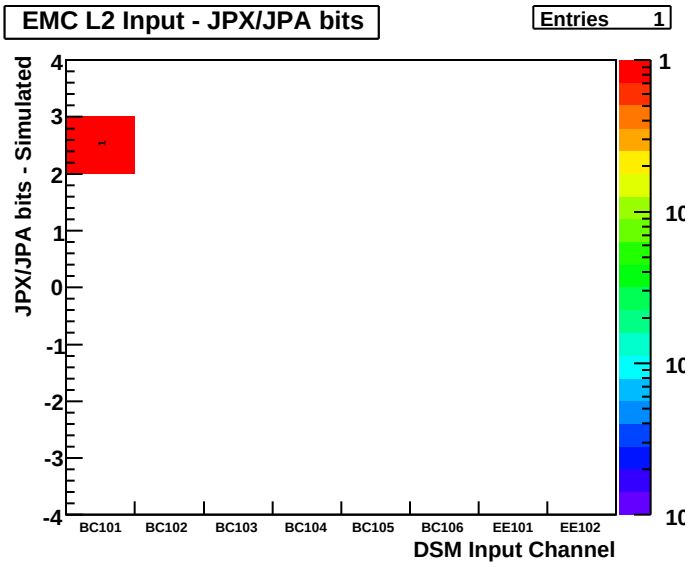

Endcap EMC L1 Input - High Eta Sum
Entries 1349208
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

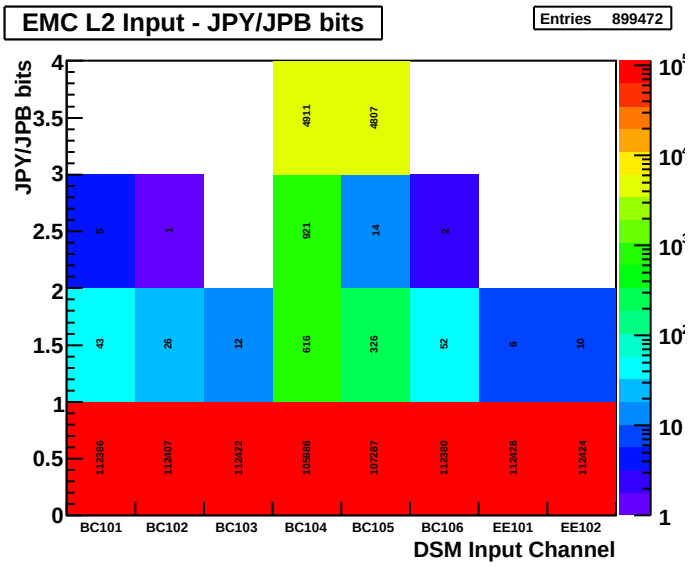

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

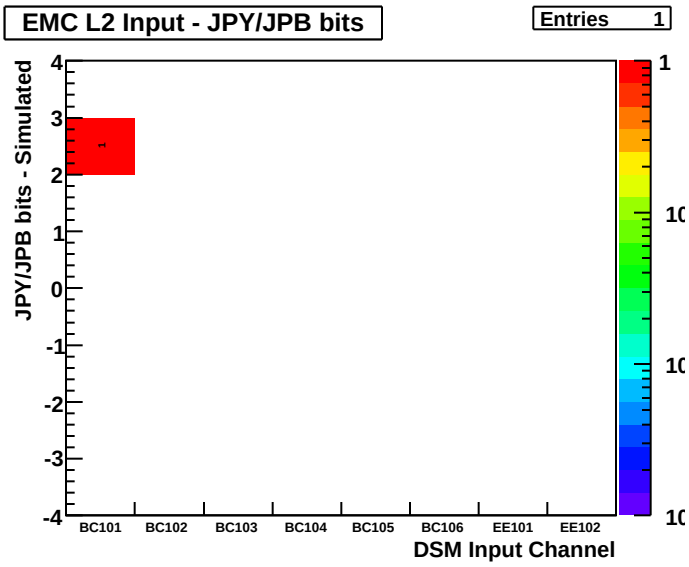

Endcap EMC L1 Input - High Tower Bits
Entries 1349208
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

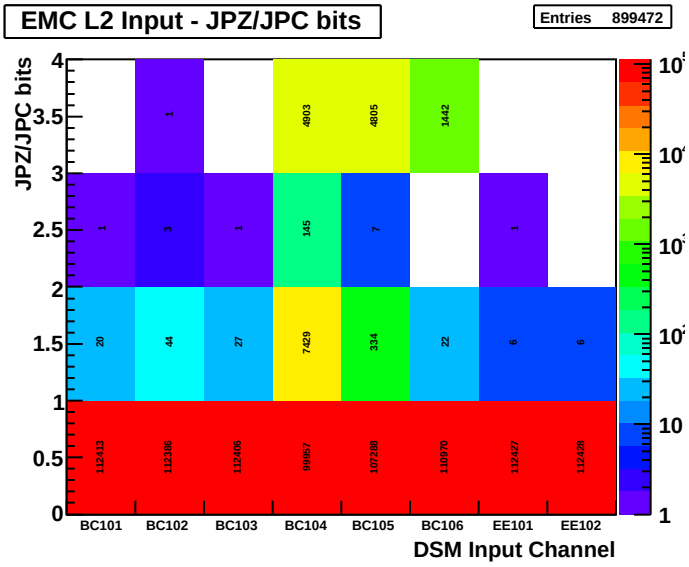

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

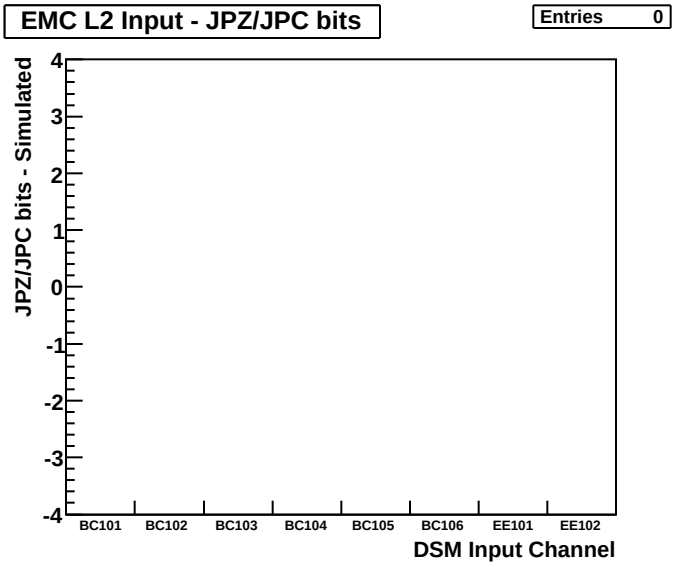

EMC L2 Input - JPX/JPA bits
Entries 899472
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

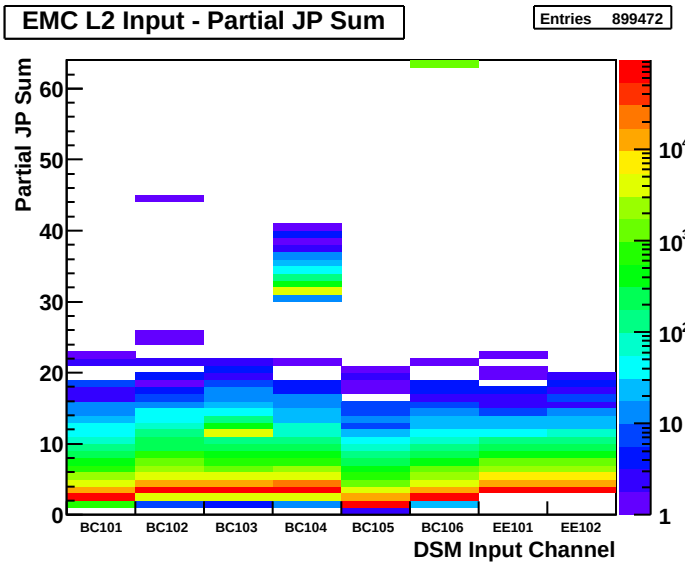

EMC L2 Input - JPX/JPA bits
Entries 1
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

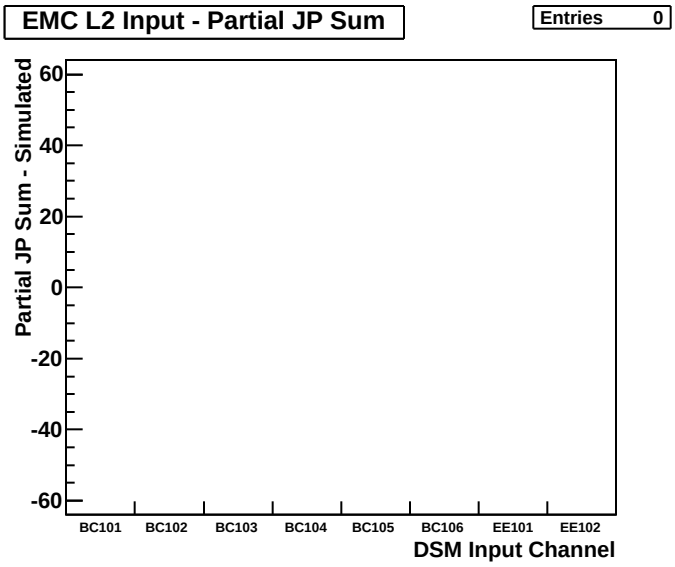

EMC L2 Input - JPY/JPB bits
Entries 899472
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

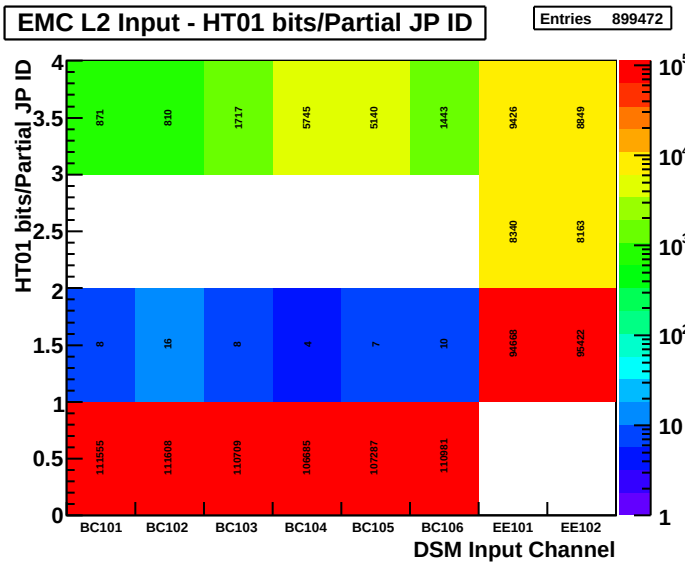

EMC L2 Input - JPY/JPB bits
Entries 1
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

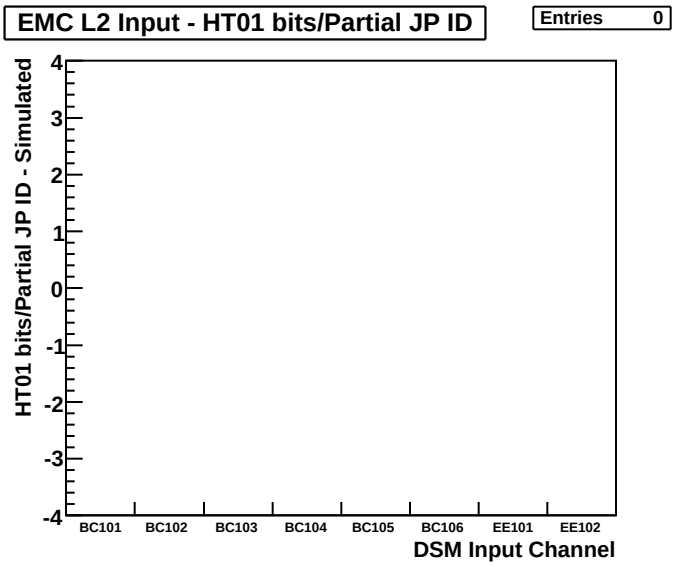

EMC L2 Input - JPZ/JPC bits
Entries 899472
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

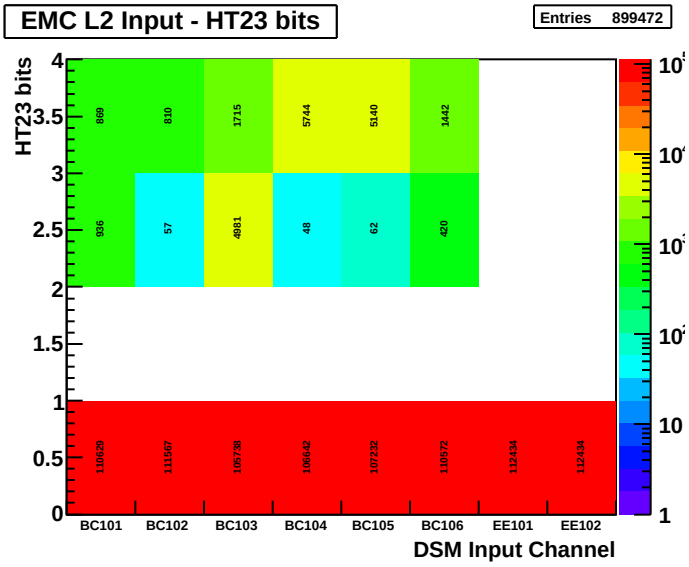

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

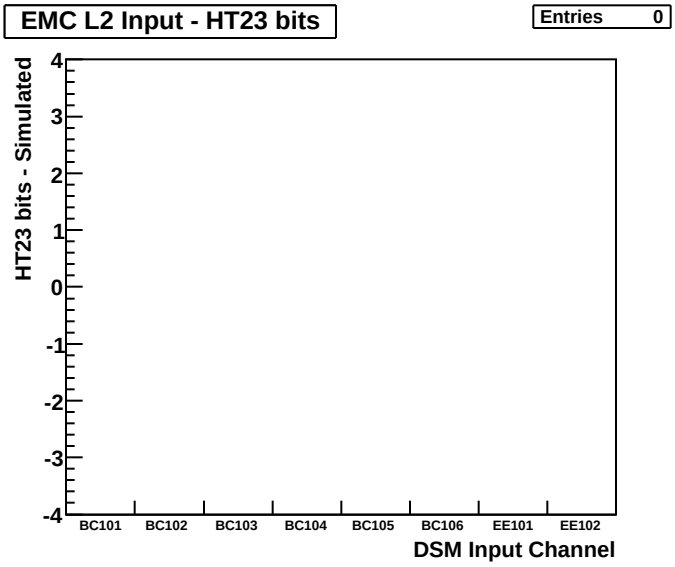

EMC L2 Input - Partial JP Sum
Entries 899472
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

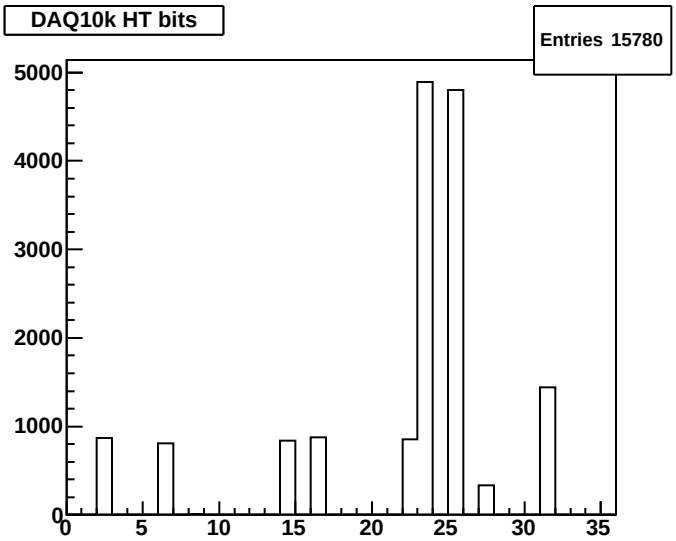

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

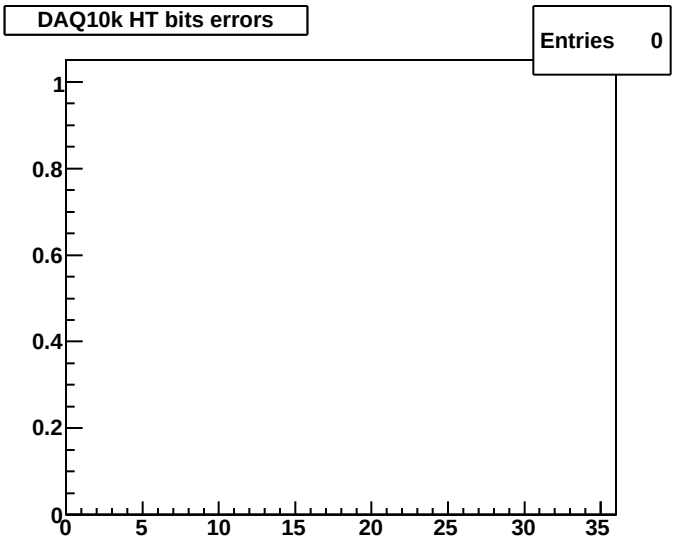

EMC L2 Input - HT01 bits/Partial JP ID
Entries 899472
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

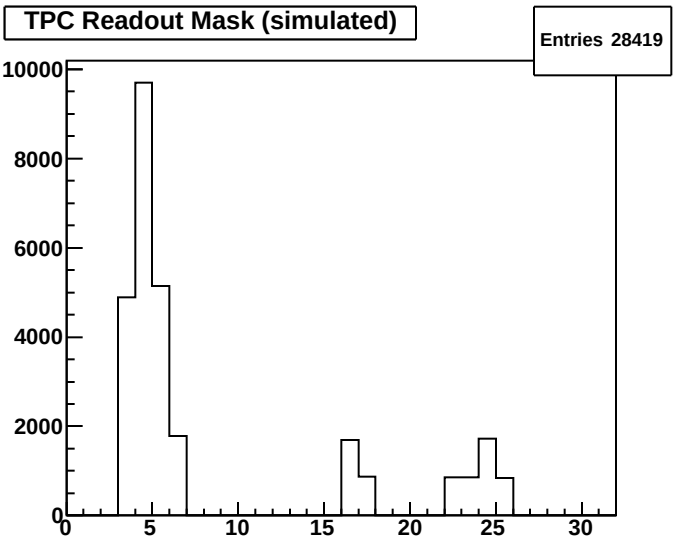

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

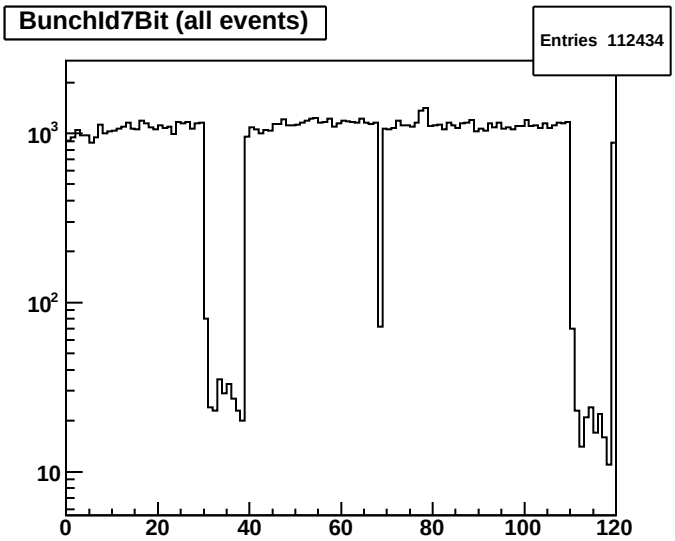

EMC L2 Input - HT23 bits
Entries 899472
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

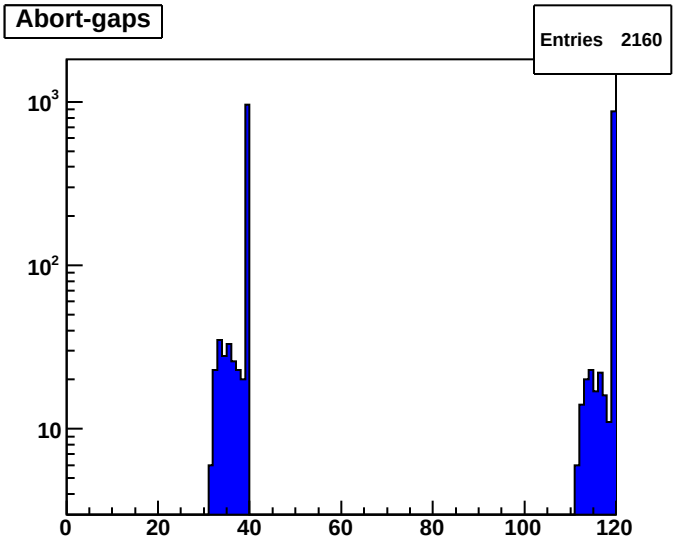

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

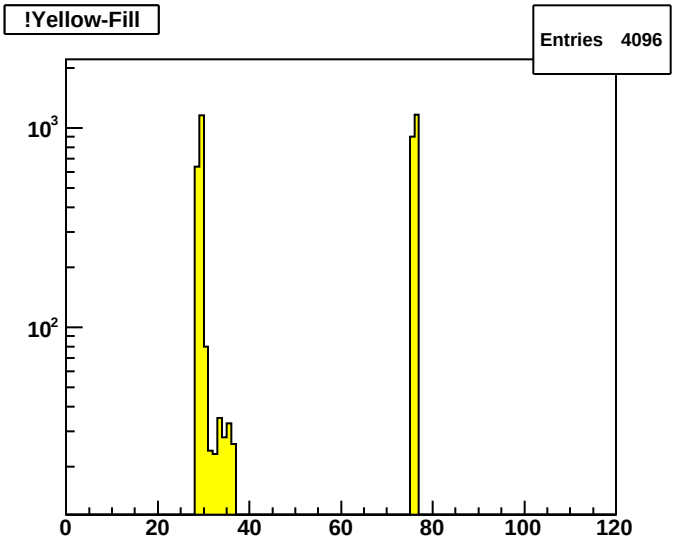

DAQ10k HT bits
Entries 15780
5000
4000
3000
2000
1000
0
0 5 10 15 20 25 30 35

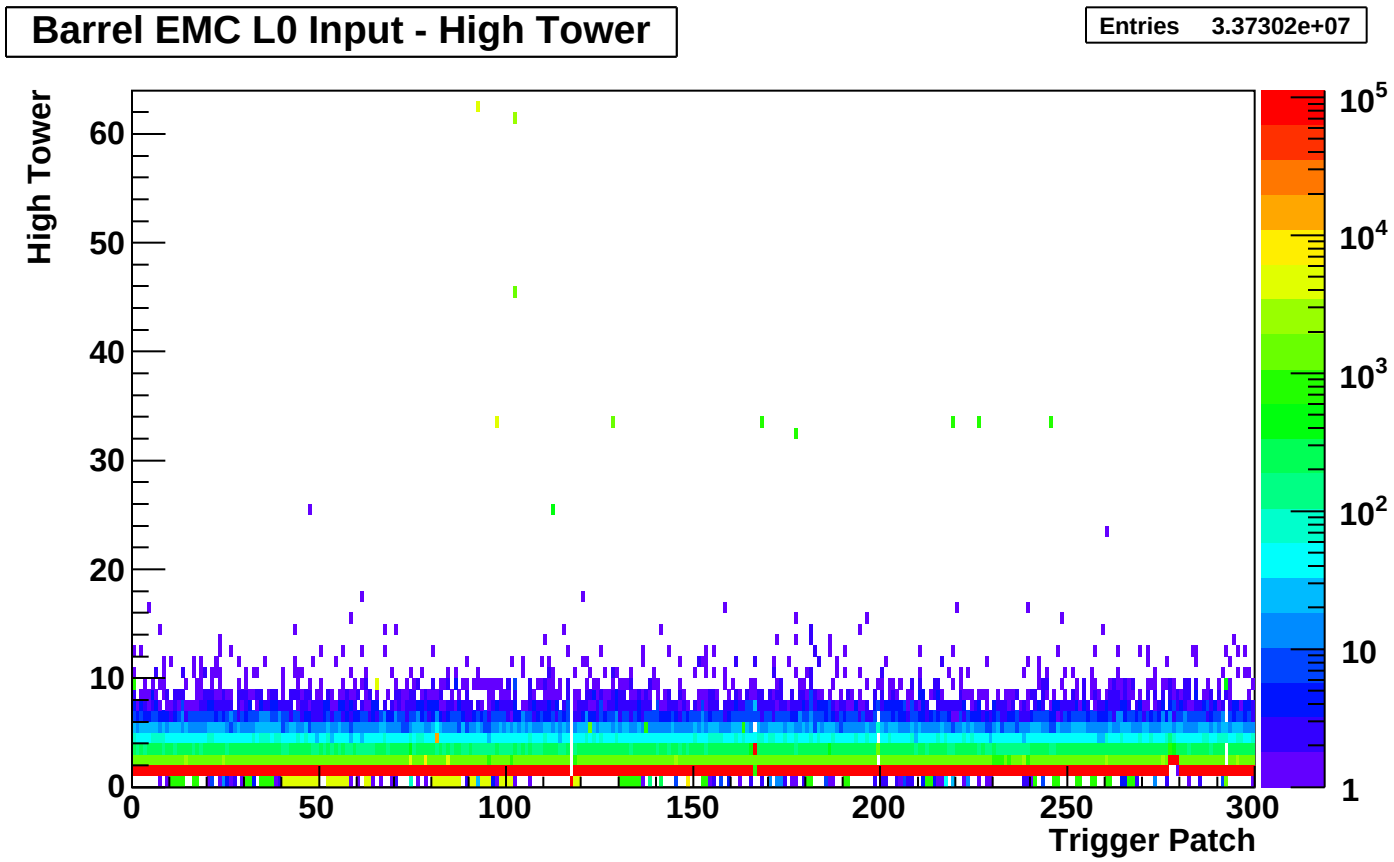

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

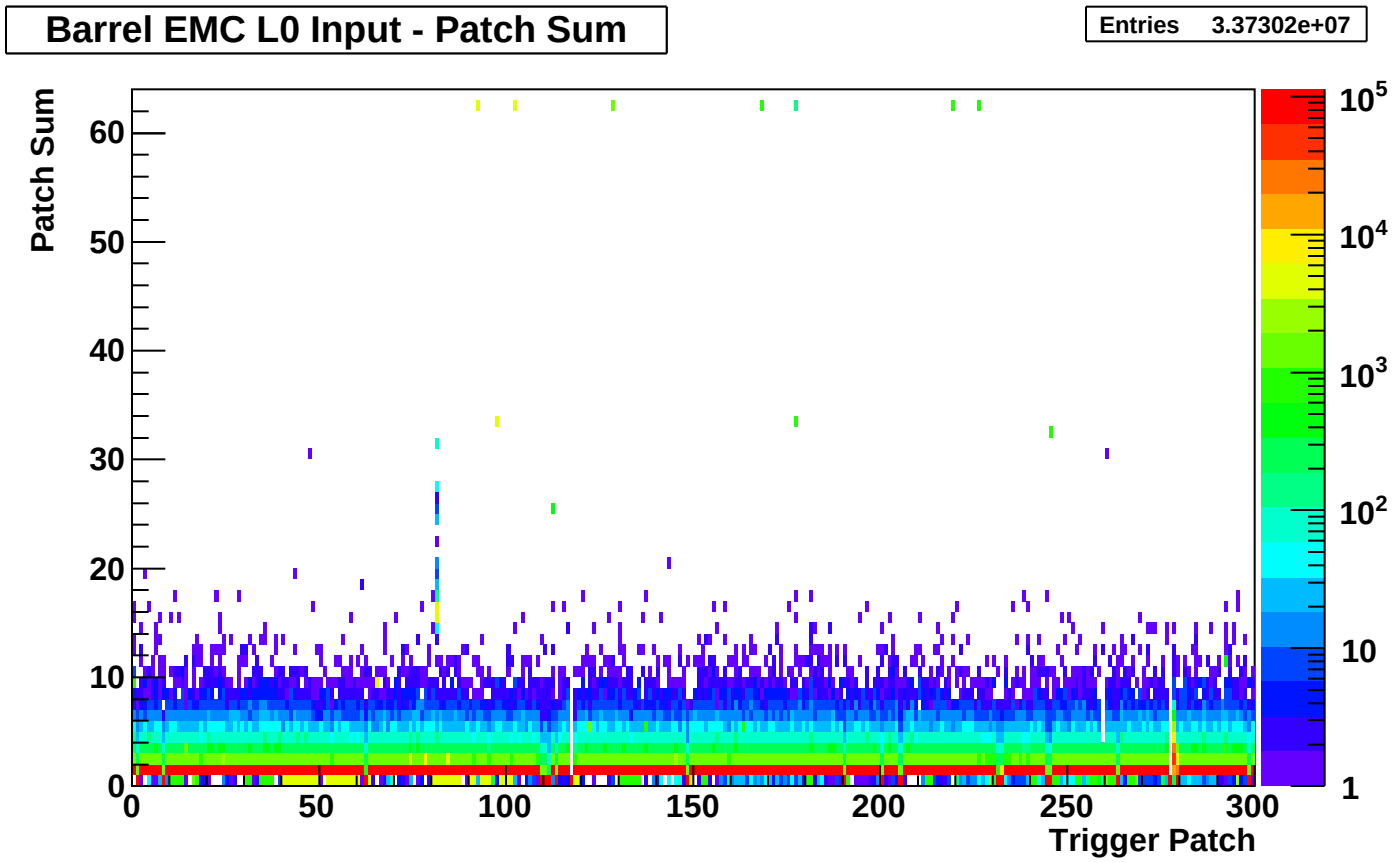

TPC Readout Mask (simulated)
Entries 28419
10000
8000
6000
4000
2000
0
0 5 10 15 20 25 30

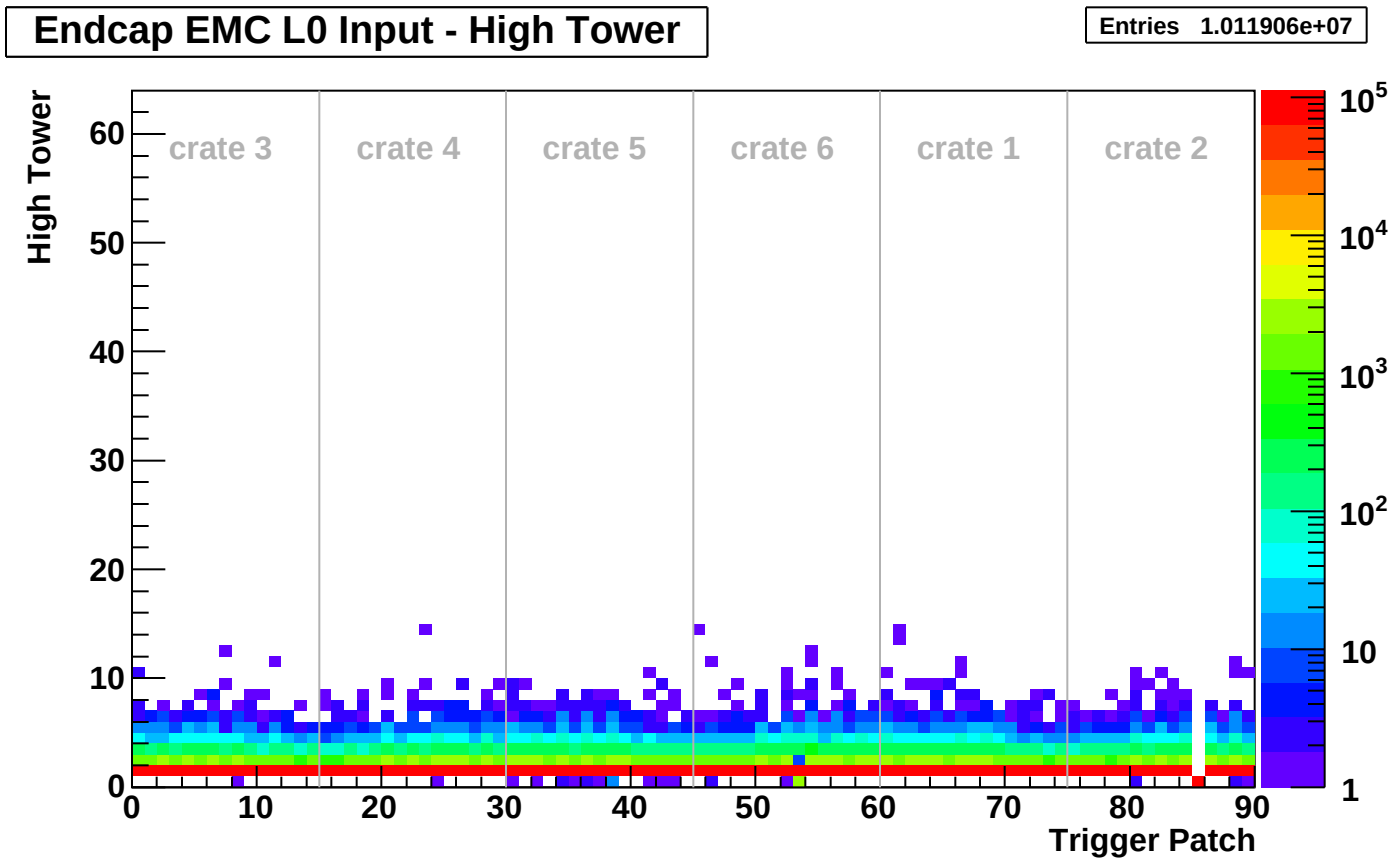

BunchId7Bit (all events)
Entries 112434
10^3
10^2
10
0 20 40 60 80 100 120

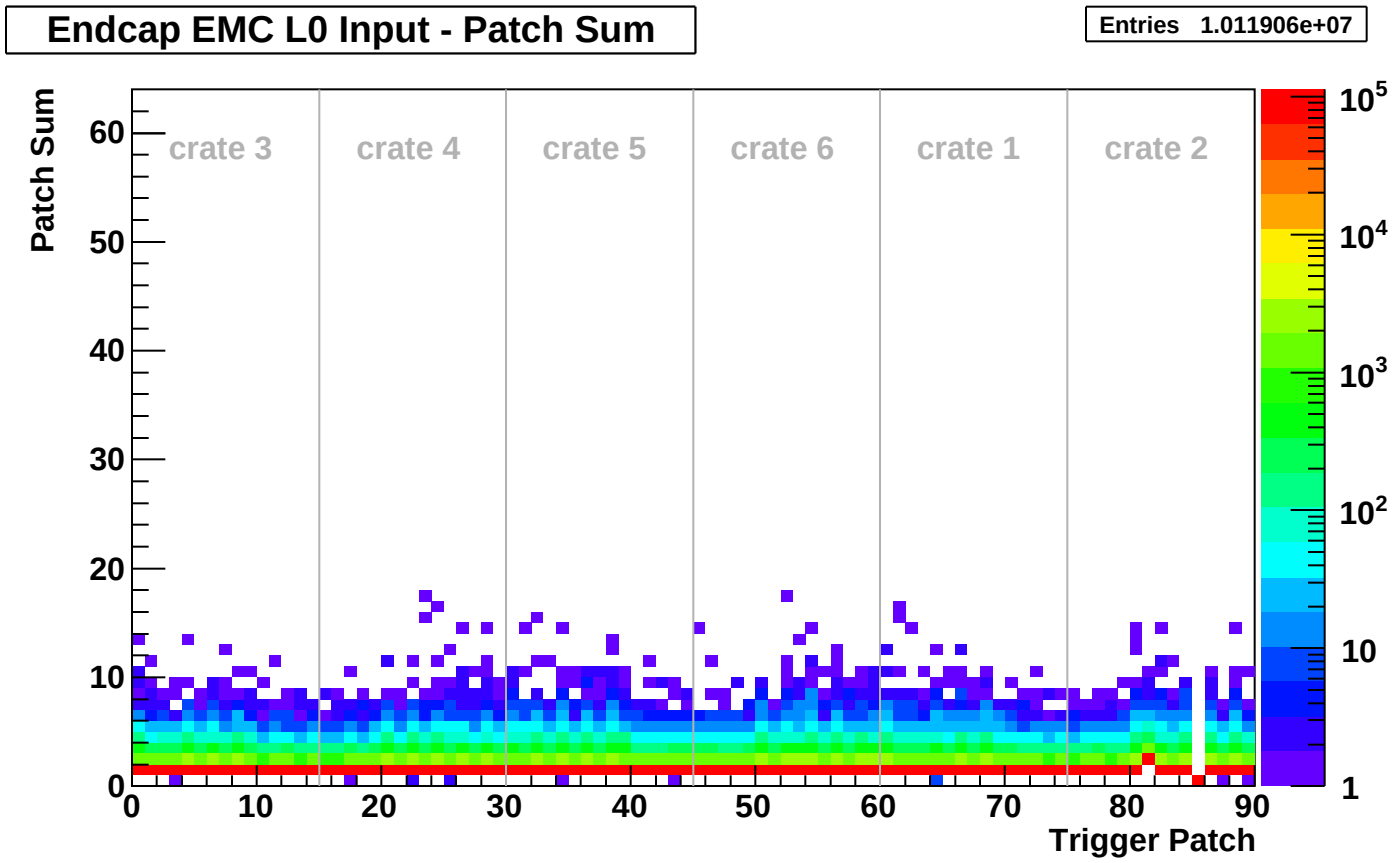

Abort-gaps
Entries 2160
10^3
10^2
10
0 20 40 60 80 100 120

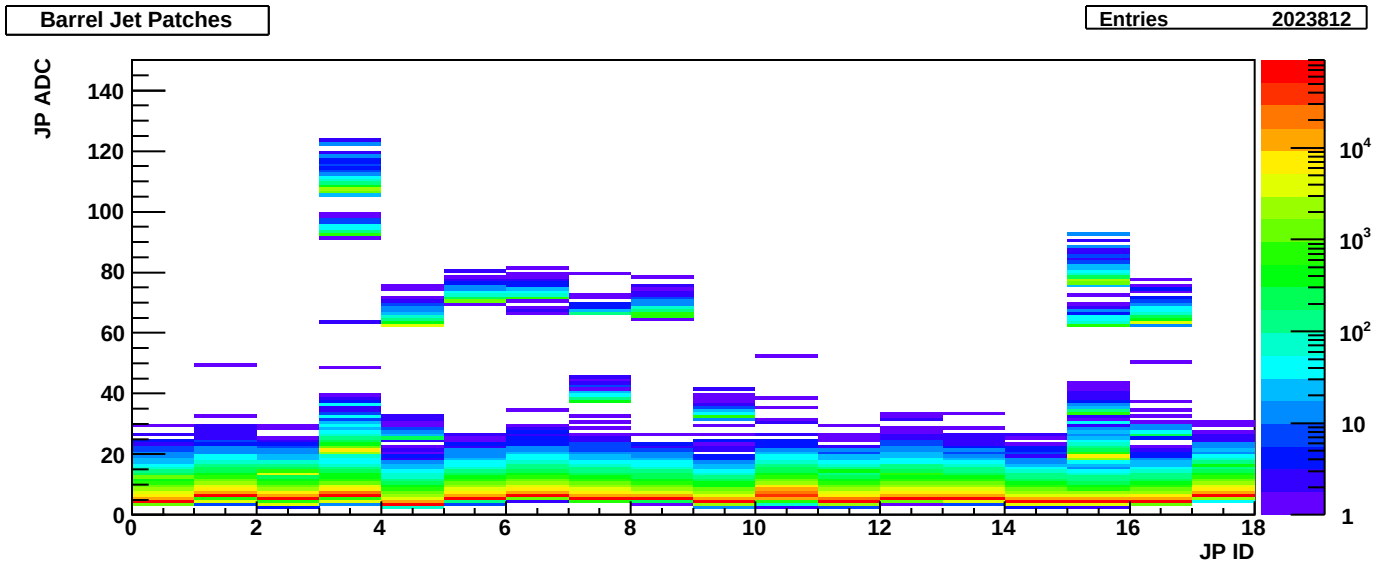

!Yellow-Fill
Entries 4096
10^3
10^2
0 20 40 60 80 100 120

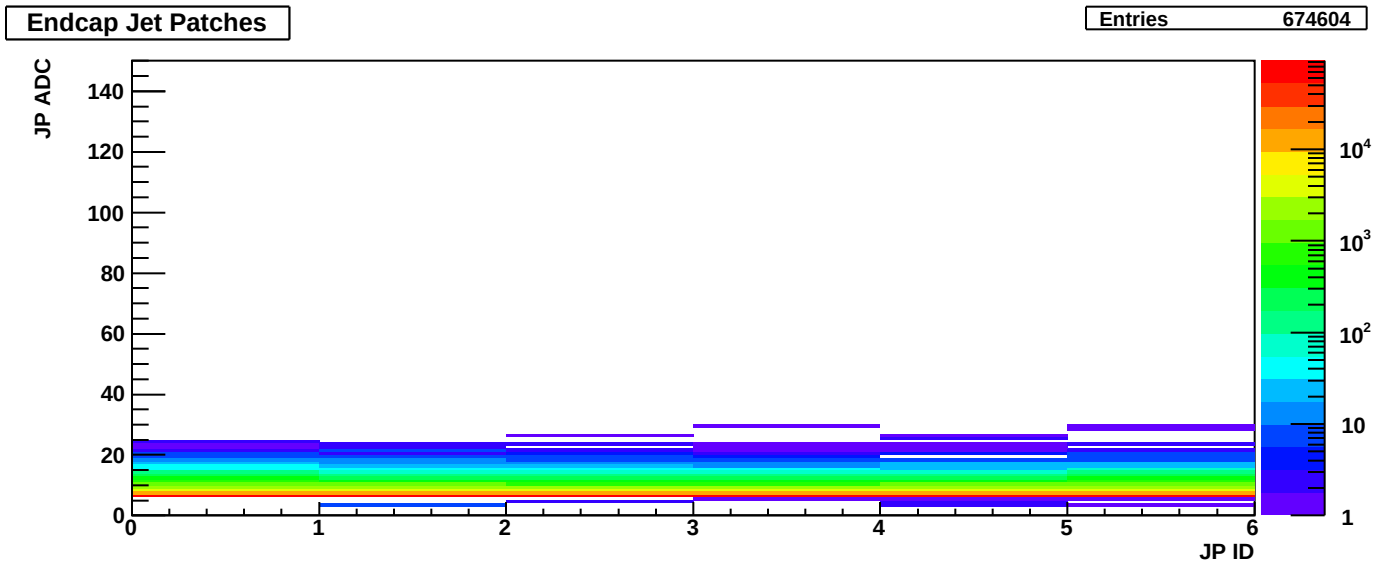

Barrel EMC L0 Input - High Tower
Entries 3.37302e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

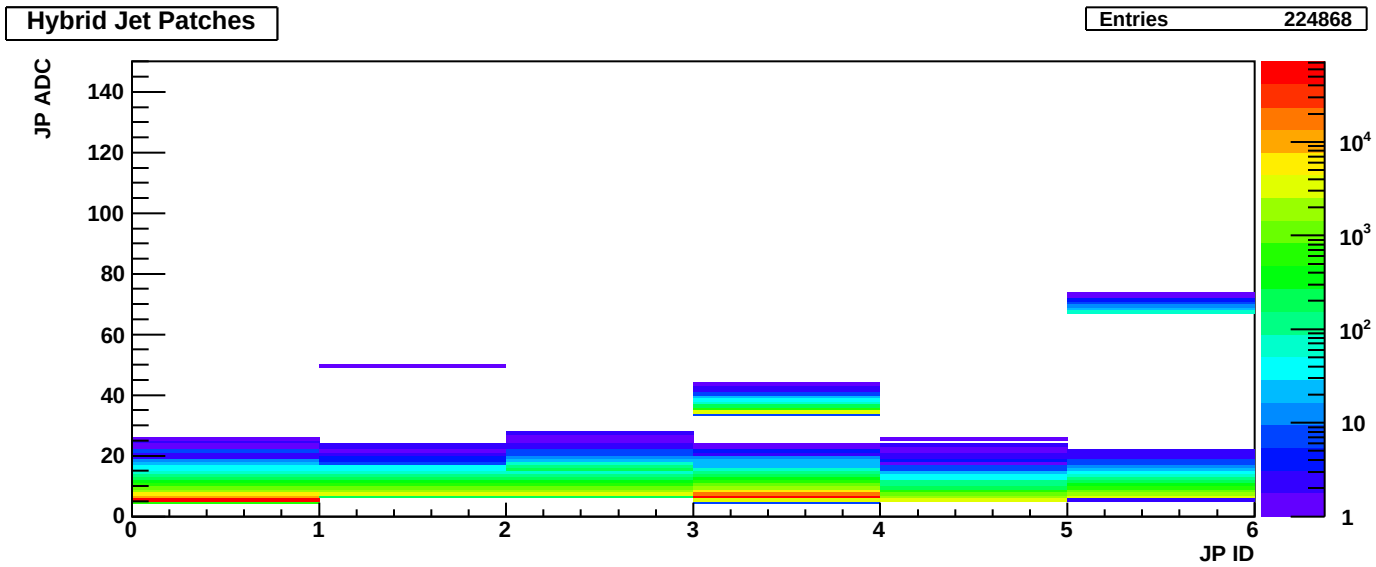

Barrel EMC L0 Input - Patch Sum
Entries 3.37302e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

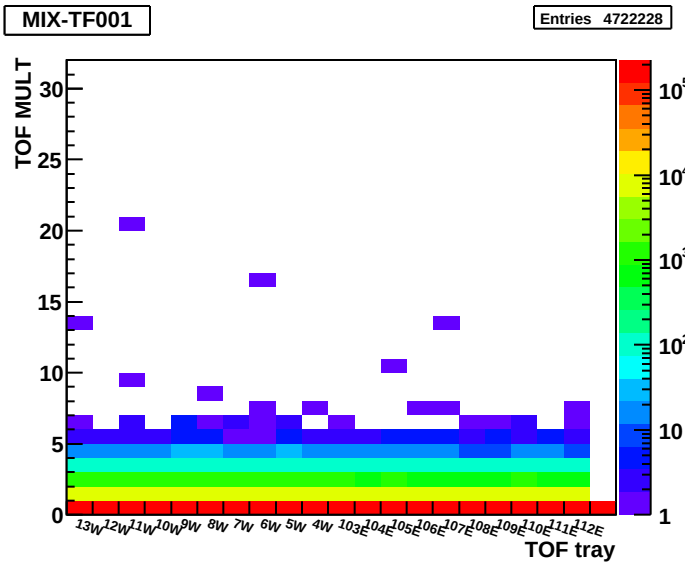

Endcap EMC L0 Input - High Tower
Entries 1.011906e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

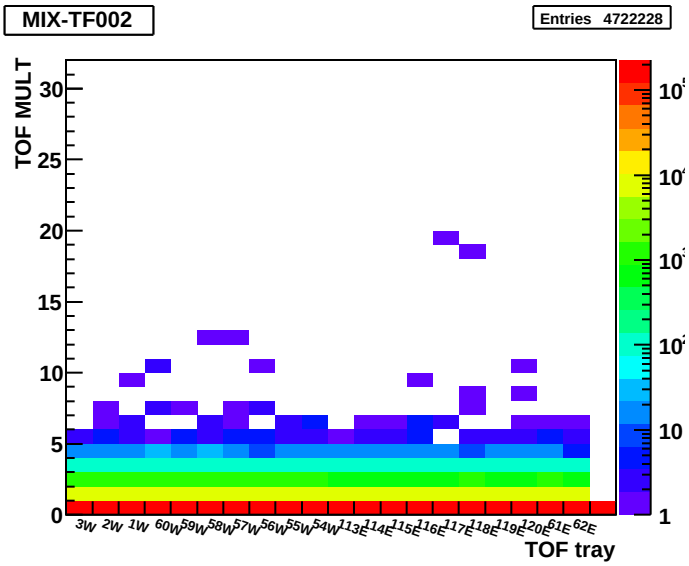

Endcap EMC L0 Input - Patch Sum
Entries 1.011906e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

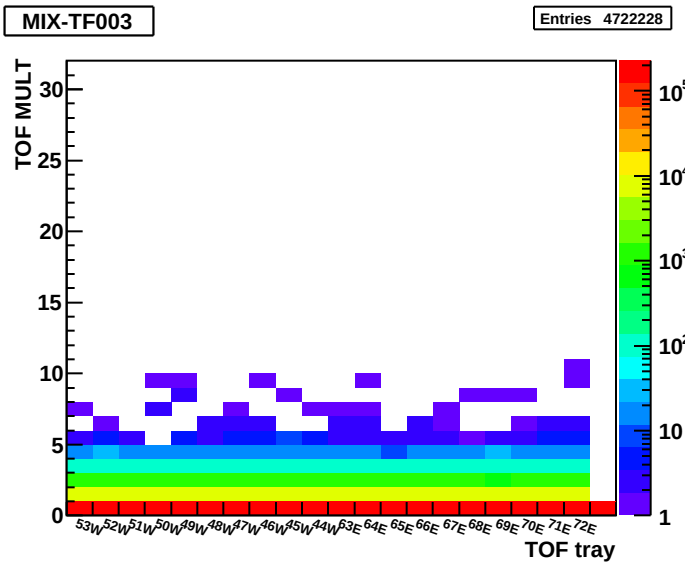

Barrel Jet Patches
Entries 2023812
JP ADC
JP ID

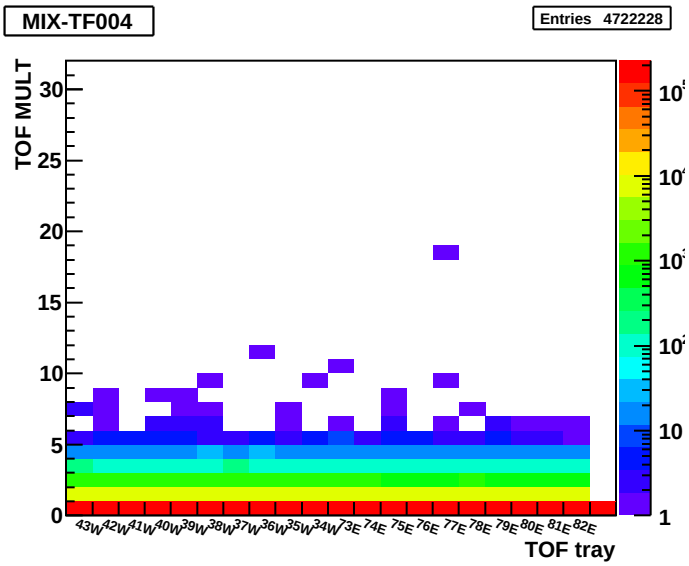

Endcap Jet Patches
Entries 674604
JP ADC
JP ID

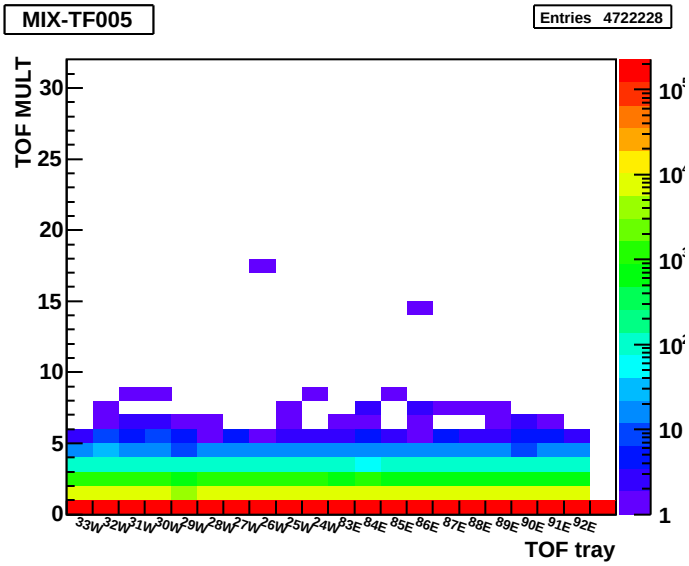

Hybrid Jet Patches
Entries 224868
JP ADC
JP ID

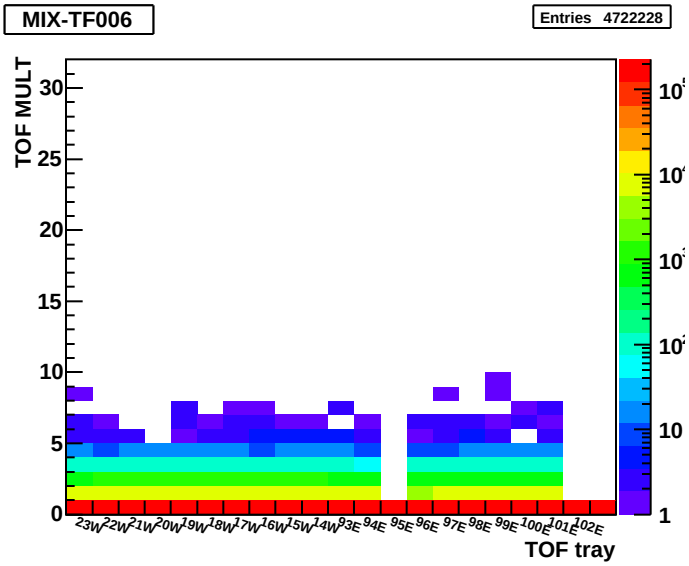

MIX-TF001
Entries 4722228
TOF MULT
TOF tray

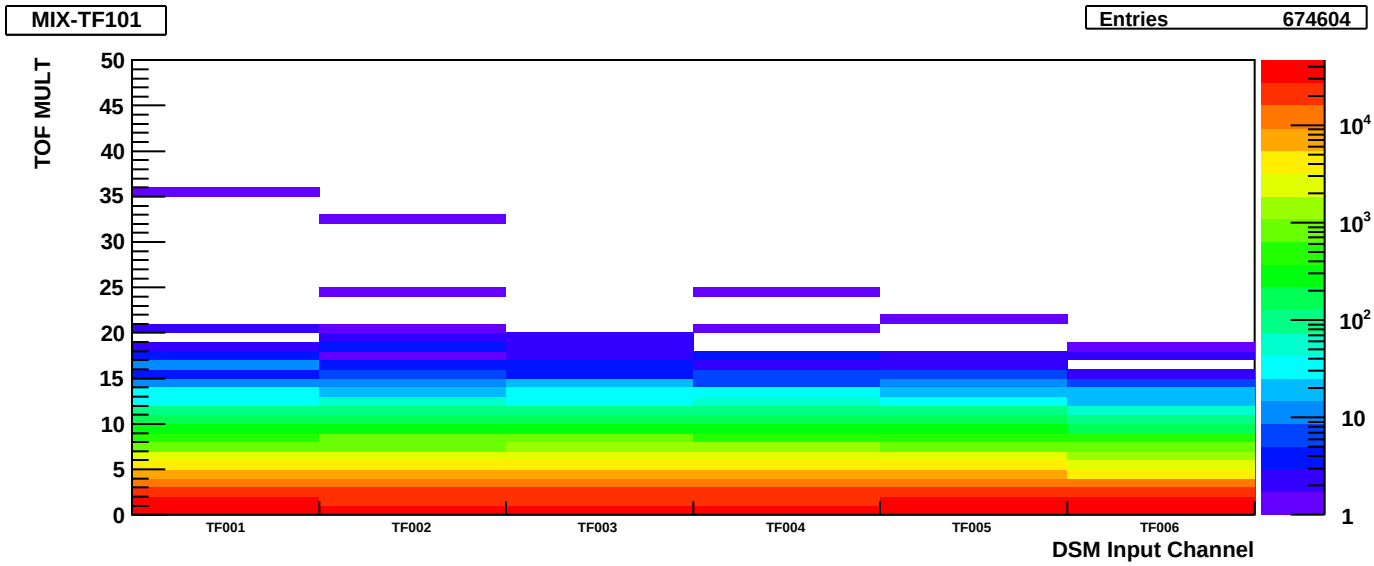

MIX-TF002
Entries 4722228
TOF MULT
TOF tray

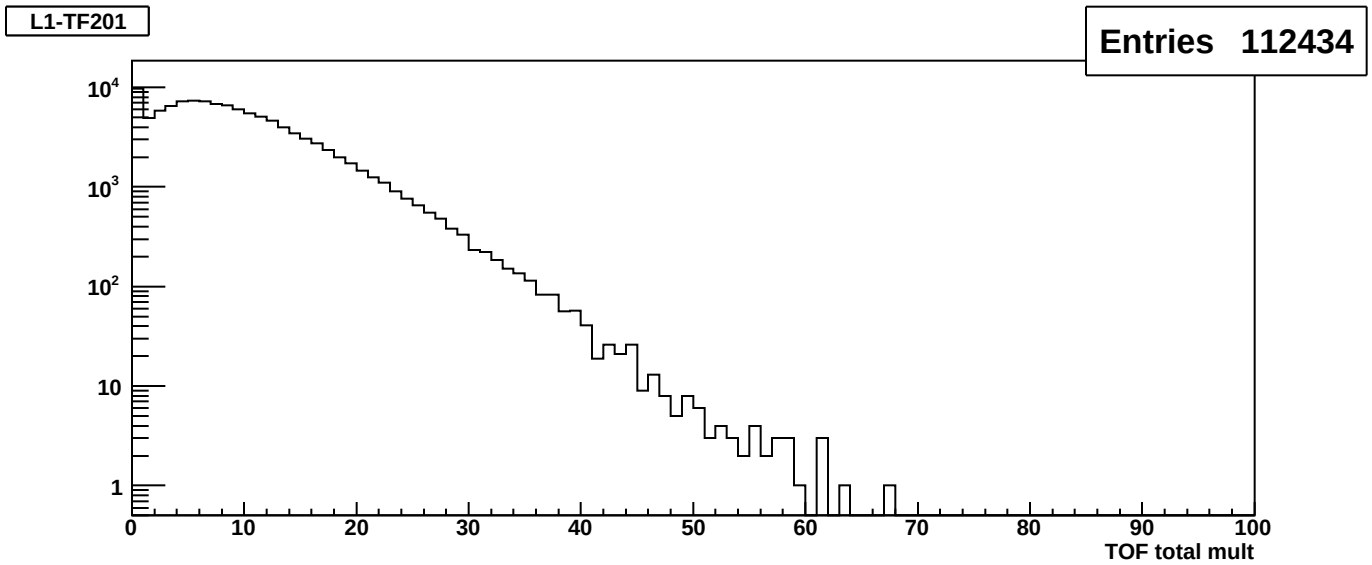

MIX-TF003
Entries 4722228
TOF MULT
TOF tray

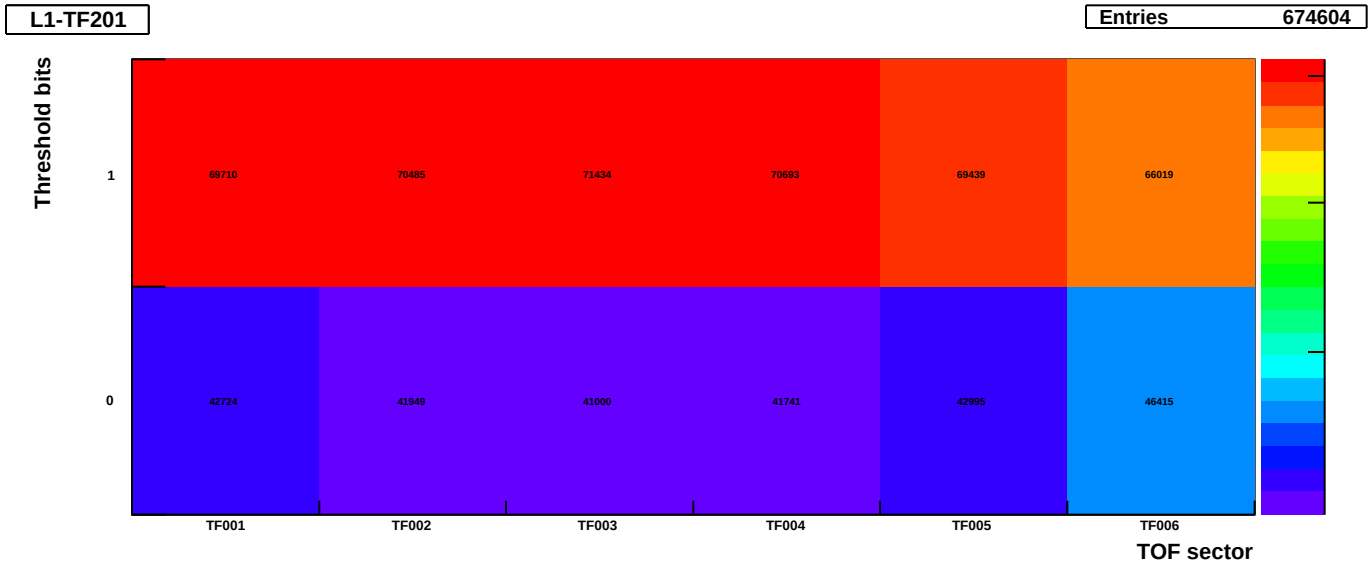

MIX-TF004
Entries 4722228
TOF MULT
TOF tray

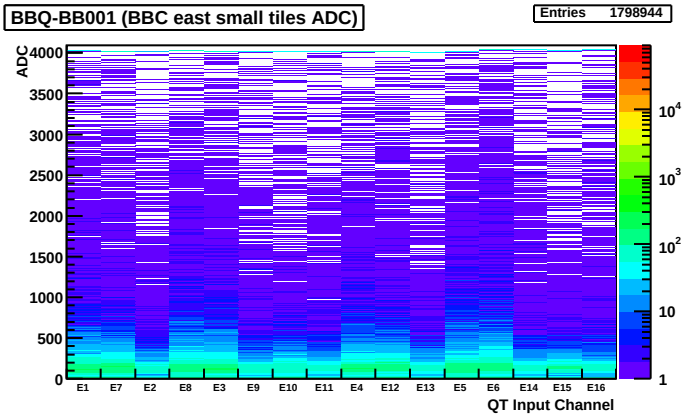

MIX-TF005
Entries 4722228
TOF MULT
TOF tray

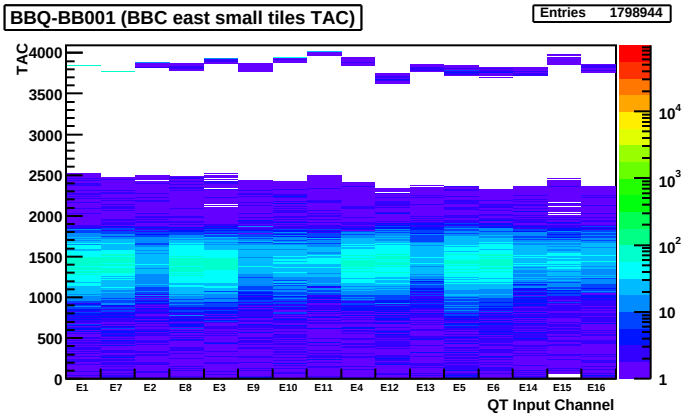

MIX-TF006
Entries 4722228
TOF MULT
TOF tray

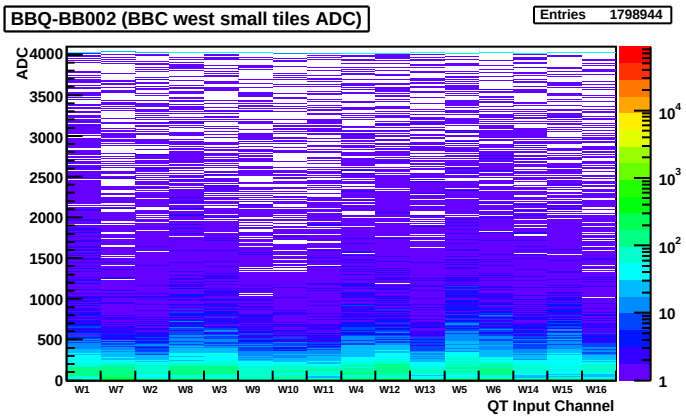

MIX-TF101
Entries 674604
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

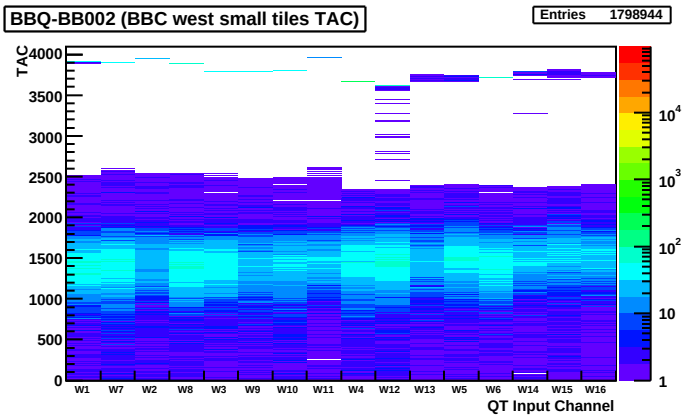

L1-TF201
Entries 112434
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

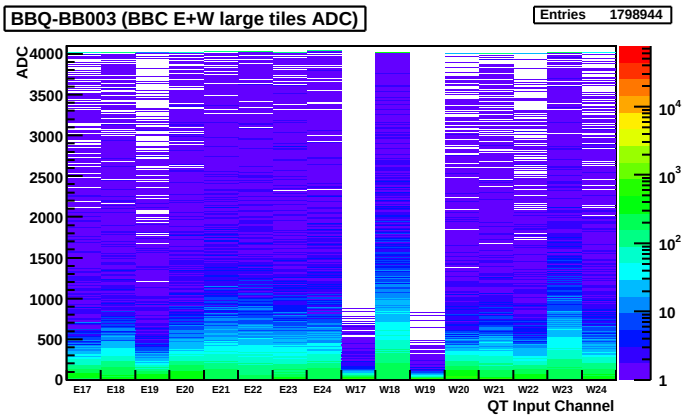

L1-TF201
Entries 674604
Threshold bits
1
0
69710
70485
71434
70693
69439
66019
42724
41949
41000
41741
42995
46415
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

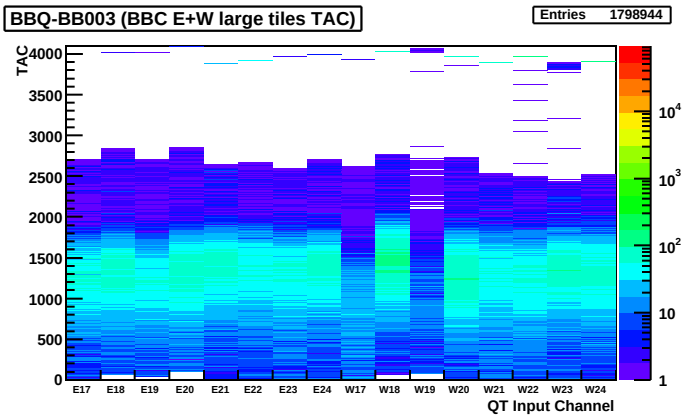

BBQ-BB001 (BBC east small tiles ADC)
Entries 1798944
ADC
QT Input Channel

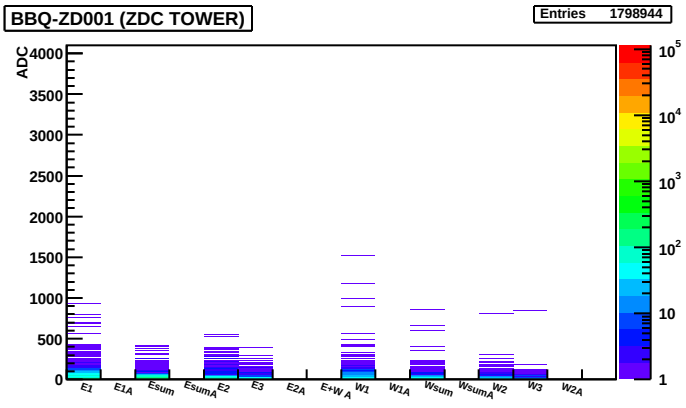

BBQ-BB001 (BBC east small tiles TAC)
Entries 1798944
TAC
QT Input Channel

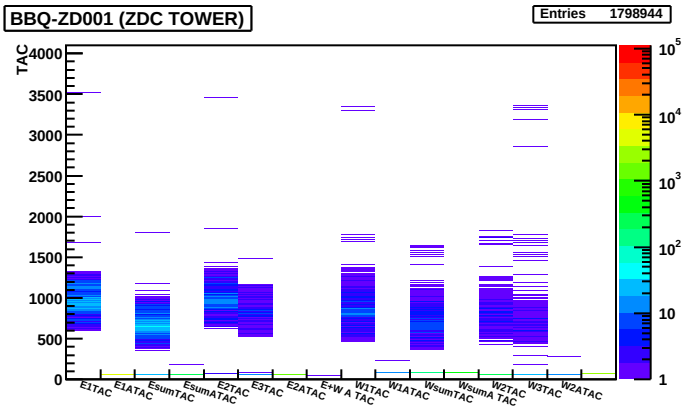

BBQ-BB002 (BBC west small tiles ADC)
Entries 1798944
ADC
QT Input Channel

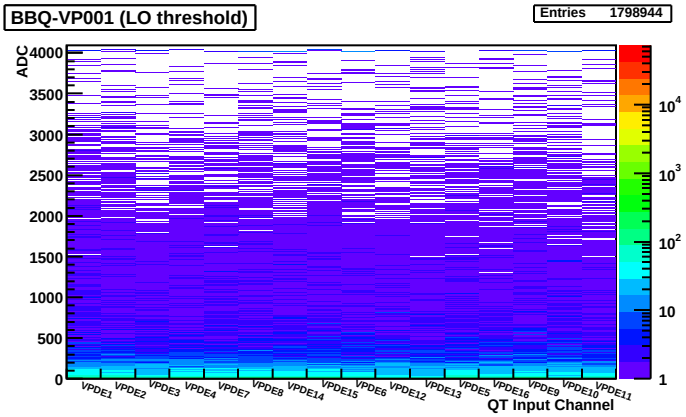

BBQ-BB002 (BBC west small tiles TAC)
Entries 1798944
TAC
QT Input Channel

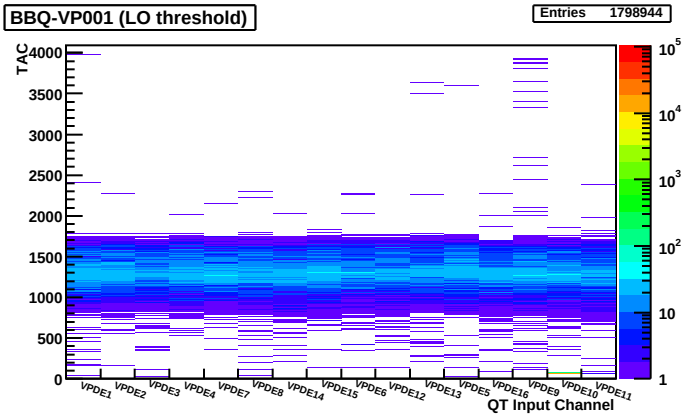

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1798944
ADC
QT Input Channel

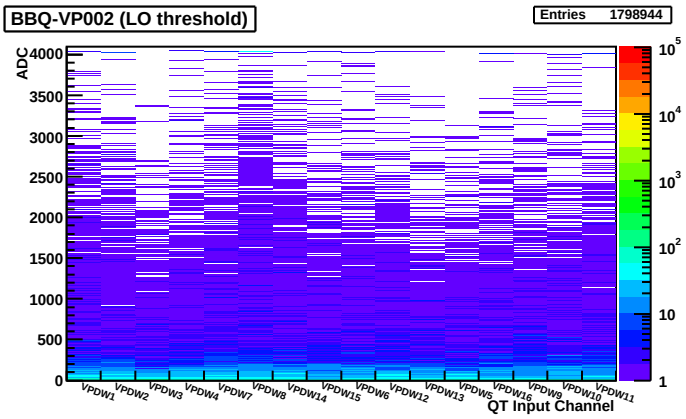

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1798944
TAC
QT Input Channel

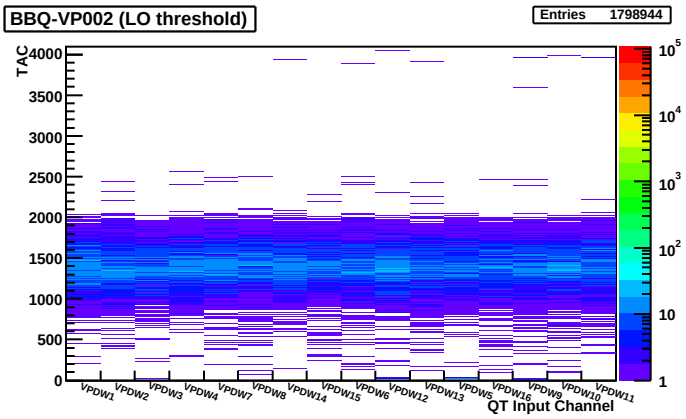

BBQ-ZD001 (ZDC TOWER)
Entries 1798944
ADC

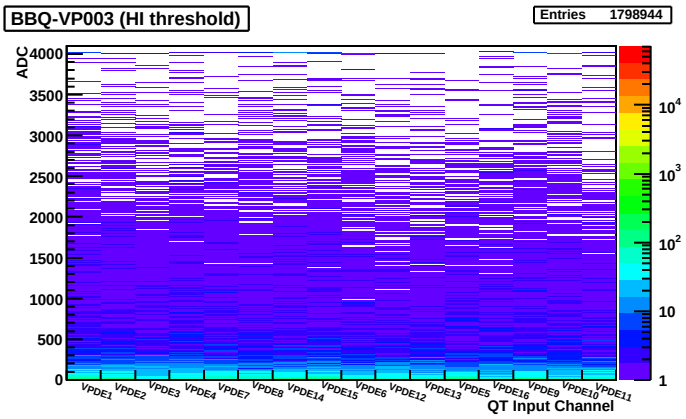

BBQ-ZD001 (ZDC TOWER)
Entries 1798944
TAC

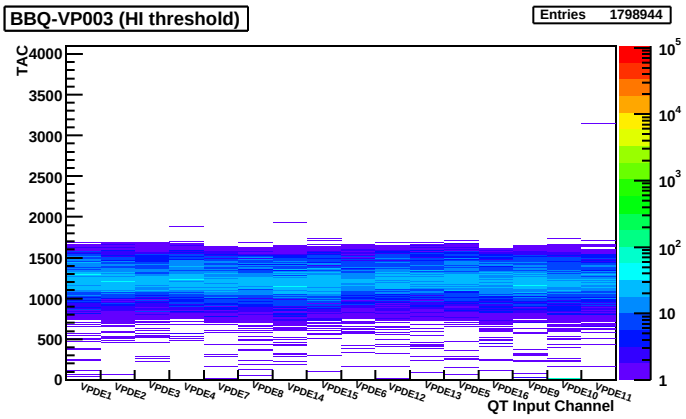

BBQ-VP001 (LO threshold)
Entries 1798944
ADC
QT Input Channel

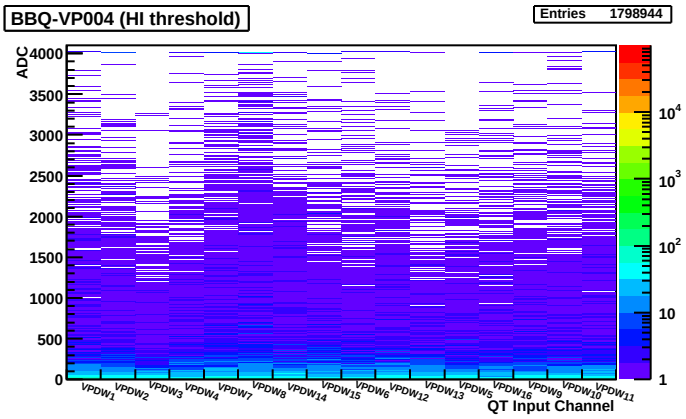

BBQ-VP001 (LO threshold)
Entries 1798944
TAC
QT Input Channel

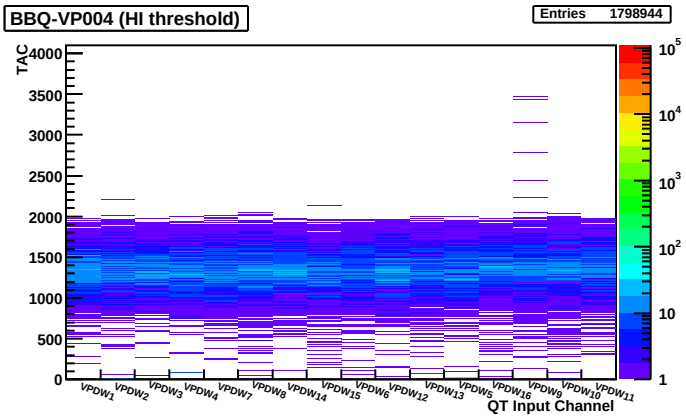

BBQ-VP002 (LO threshold)
Entries 1798944
ADC
QT Input Channel

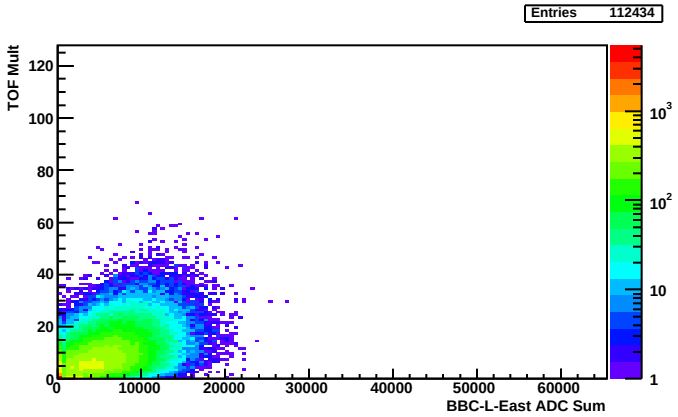

BBQ-VP002 (LO threshold)
Entries 1798944
TAC
QT Input Channel

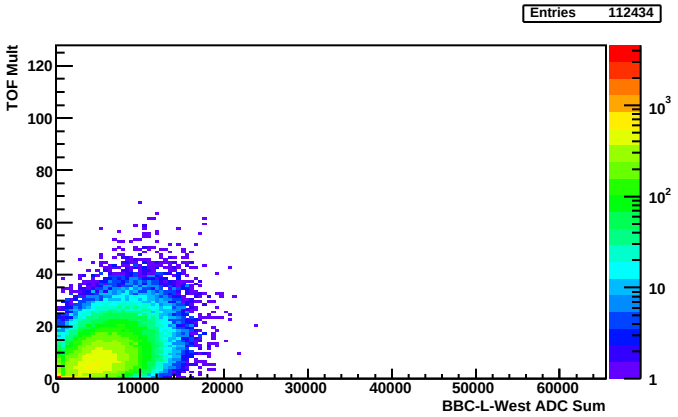

BBQ-VP003 (HI threshold)
Entries 1798944
ADC
QT Input Channel

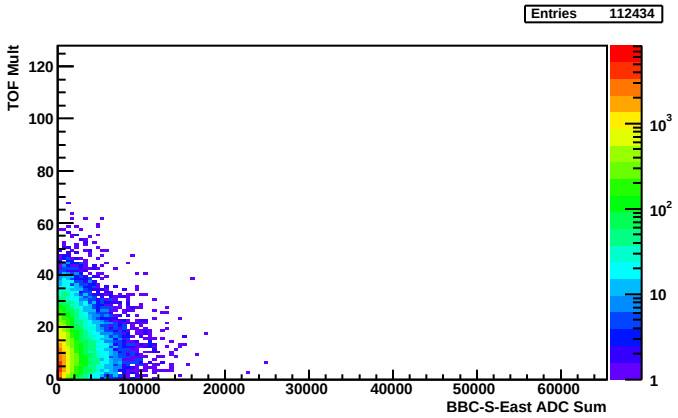

BBQ-VP003 (HI threshold)
Entries 1798944
TAC
QT Input Channel

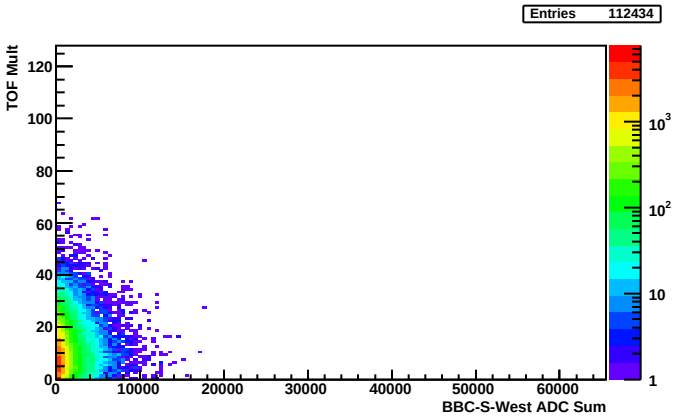

BBQ-VP004 (HI threshold)
Entries 1798944
ADC
QT Input Channel

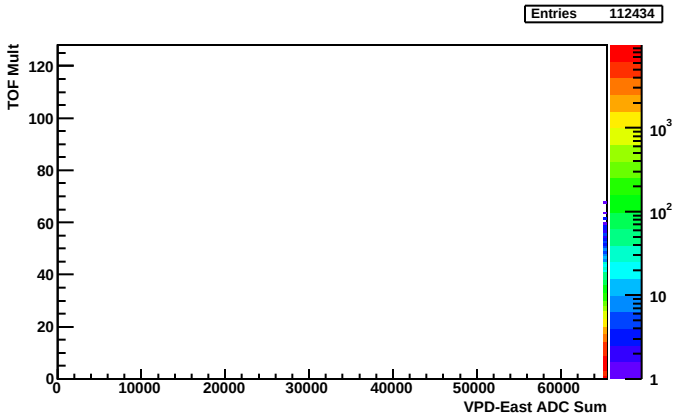

BBQ-VP004 (HI threshold)
Entries 1798944
TAC
QT Input Channel

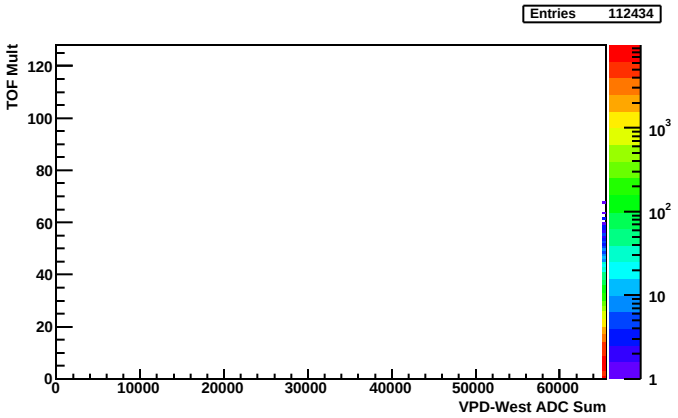

Entries 112434
TOF Mult
BBC-L-East ADC Sum

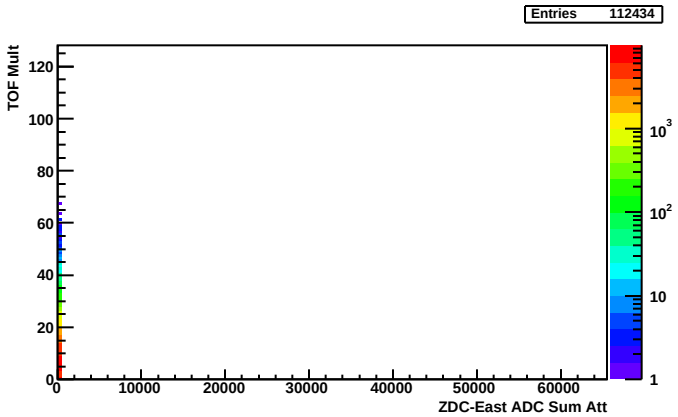

Entries 112434
TOF Mult
BBC-L-West ADC Sum

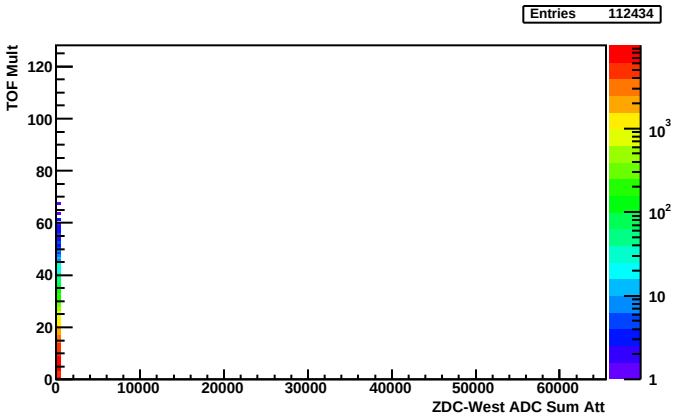

Entries 112434
TOF Mult
BBC-S-East ADC Sum

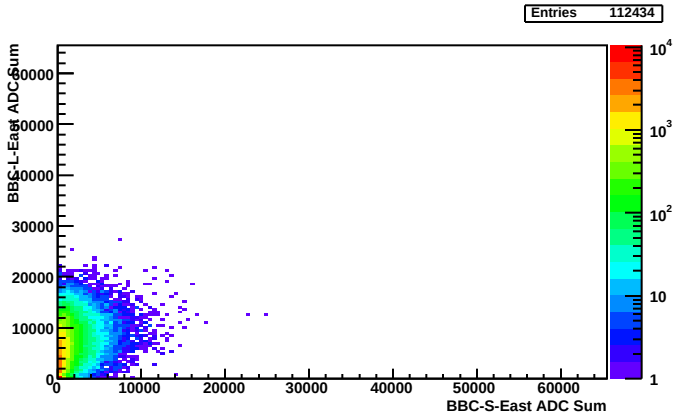

Entries 112434
TOF Mult
BBC-S-West ADC Sum

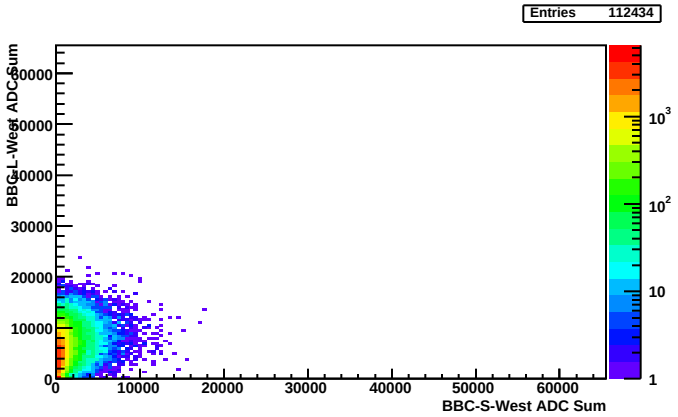

Entries 112434
TOF Mult
VPD-East ADC Sum

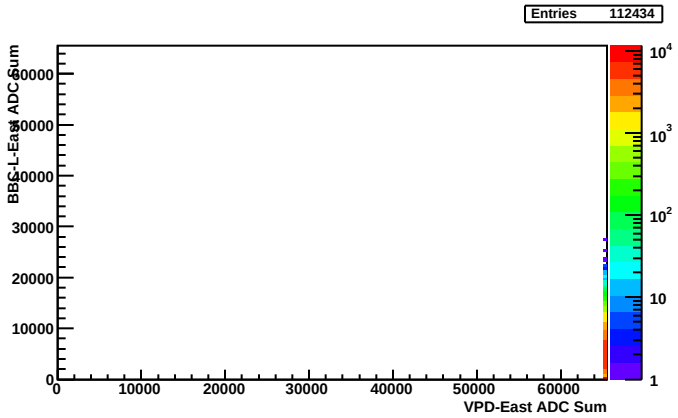

Entries 112434
TOF Mult
VPD-West ADC Sum

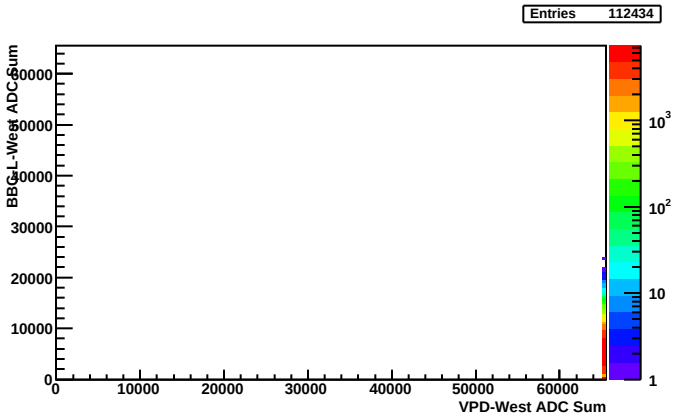

Entries 112434
TOF Mult
ZDC-East ADC Sum Att

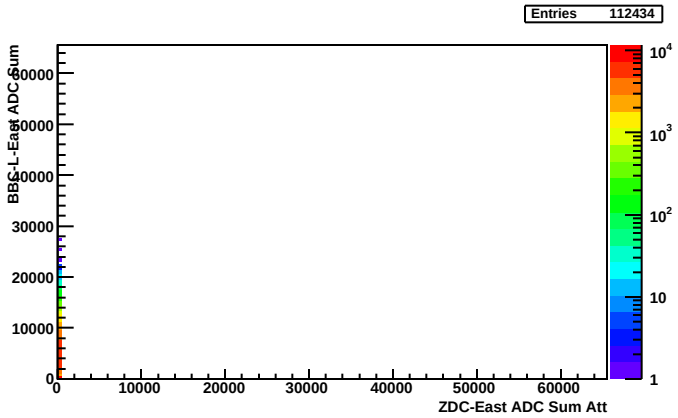

Entries 112434
TOF Mult
ZDC-West ADC Sum Att

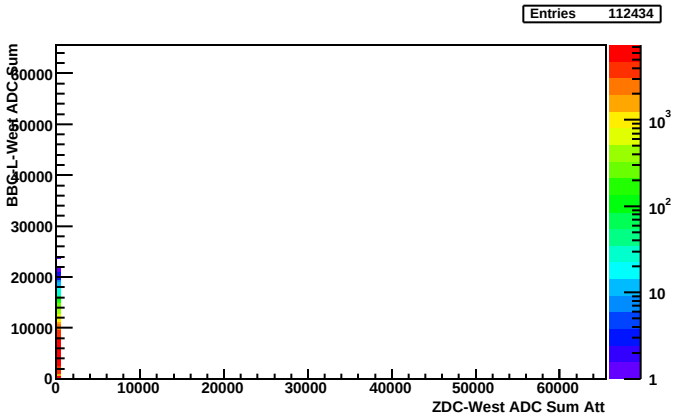

Entries 112434
BBC-L-East ADC Sum
BBC-S-East ADC Sum

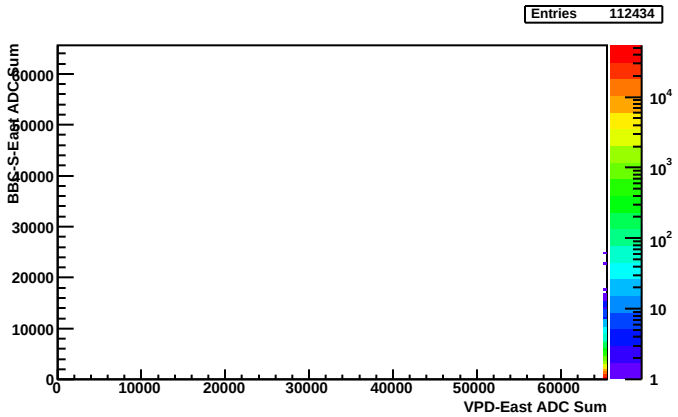

Entries 112434
BBC-L-West ADC Sum
BBC-S-West ADC Sum

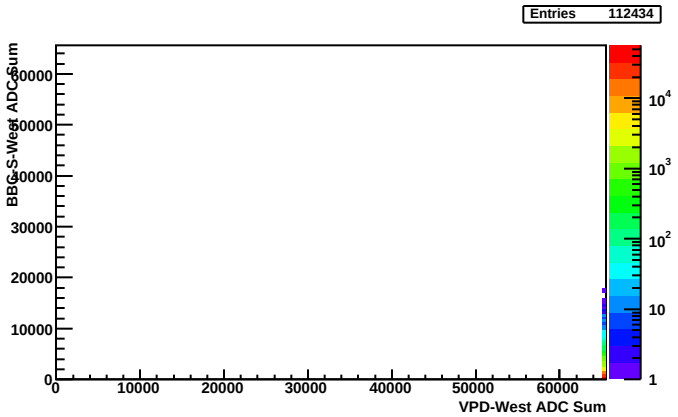

Entries 112434
BBC-L-East ADC Sum
VPD-East ADC Sum

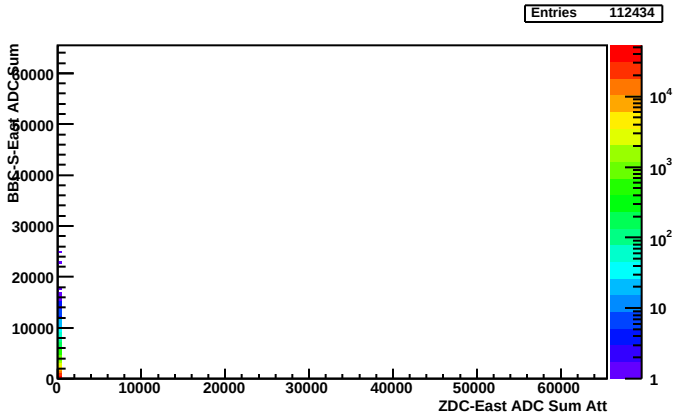

Entries 112434
BBC-L-West ADC Sum
VPD-West ADC Sum

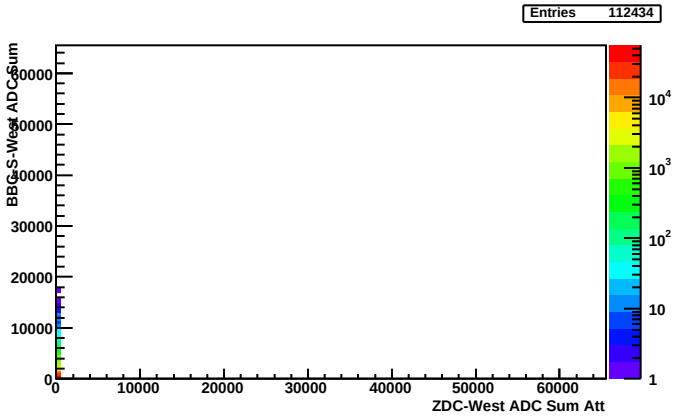

Entries 112434
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

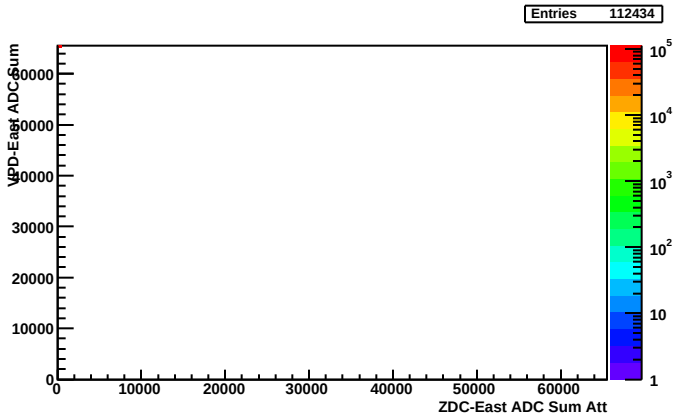

Entries 112434
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

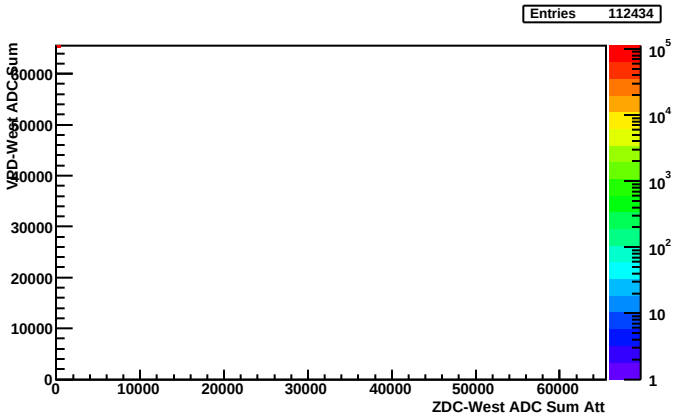

Entries 112434
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 112434
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 112434
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 112434
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 112434
VPD-East ADC Sum
ZDC-East ADC Sum Att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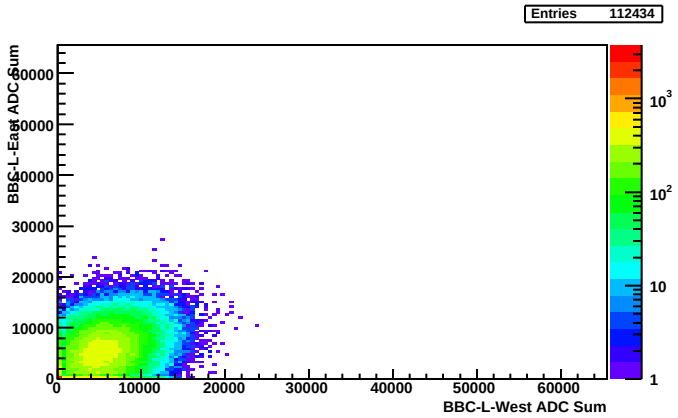
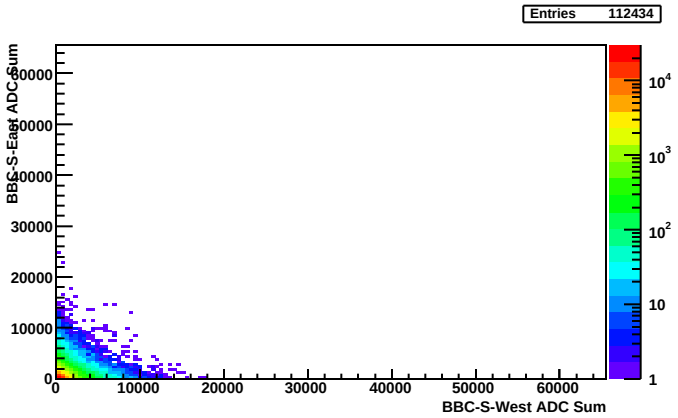
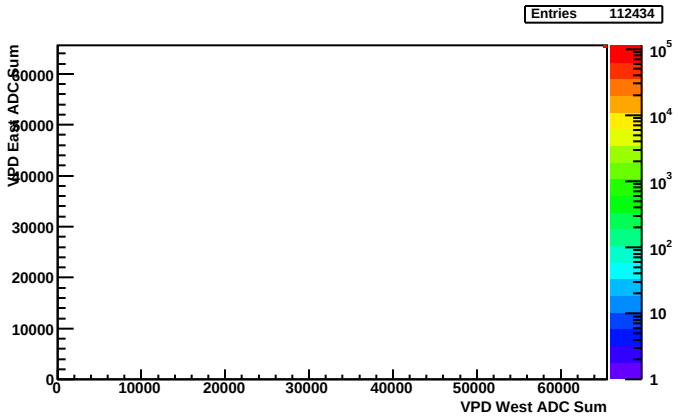
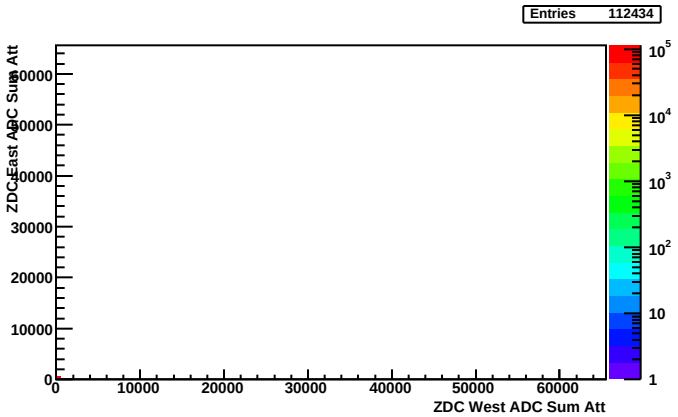
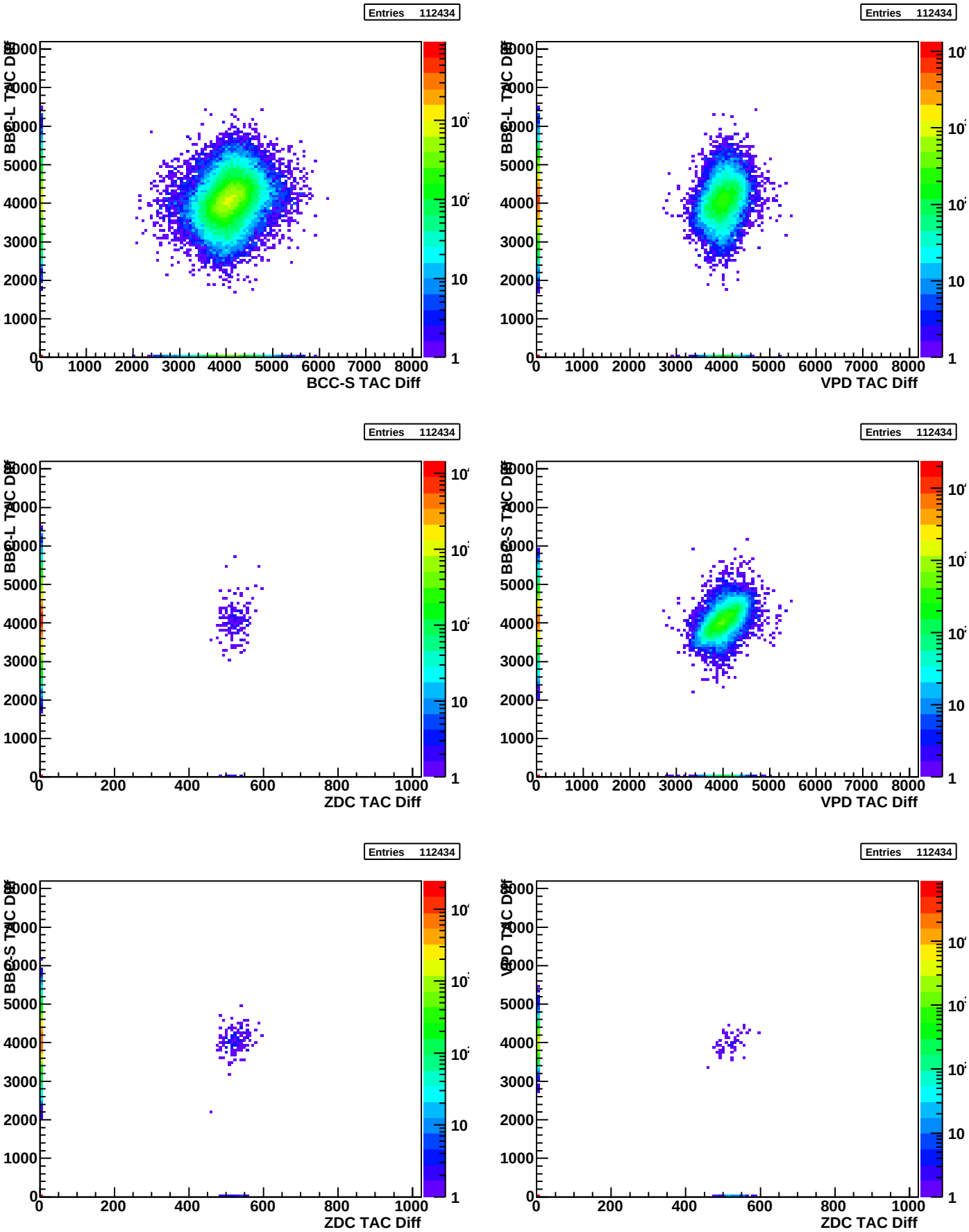
VPD-West ADC Sum
ZDC-West ADC Sum Att

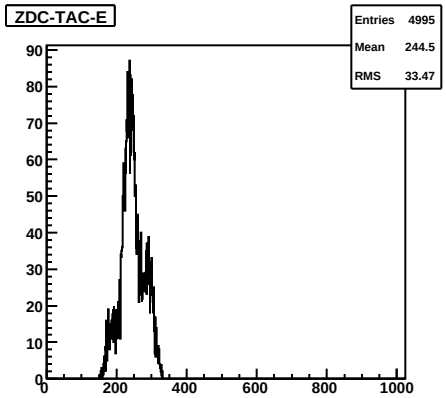

Entries 112434
BBC-L-East ADC Sum
BBC-L-West ADC Sum

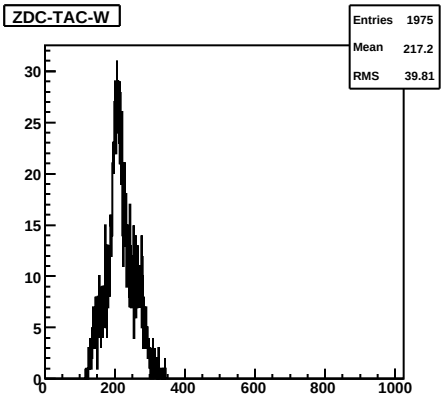

Entries 112434
BBC-S-East ADC Sum
BBC-S-West ADC Sum

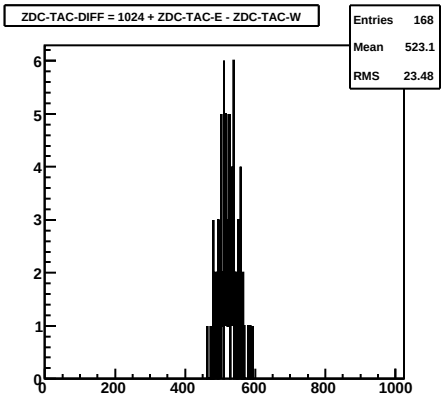

Entries 112434
VPD East ADC Sum
VPD West ADC Sum

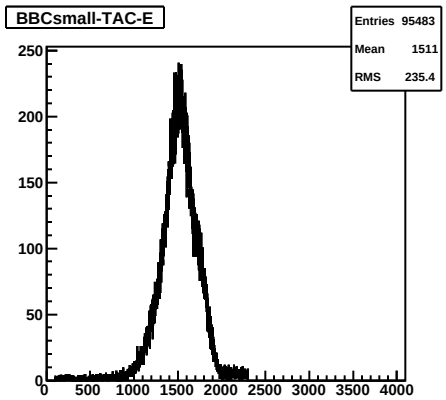

Entries 112434
ZDC East ADC Sum Att
ZDC West ADC Sum Att

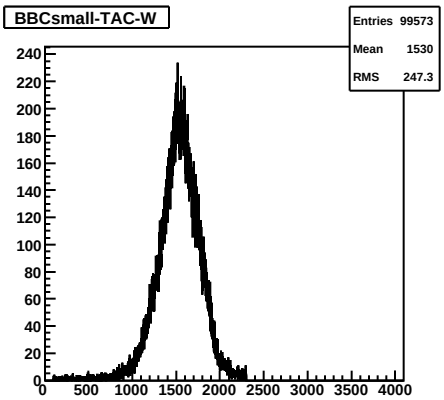

Entries 112434
BBC-L TAC Diff
BCC-S TAC Diff
Entries 112434
BBC-L TAC Diff
VPD TAC Diff
Entries 112434
BBC-L TAC Diff
ZDC TAC Diff
Entries 112434
BBC-S TAC Diff
VPD TAC Diff
Entries 112434
BBC-S TAC Diff
ZDC TAC Diff
Entries 112434
VPD TAC Diff
ZDC TAC Diff

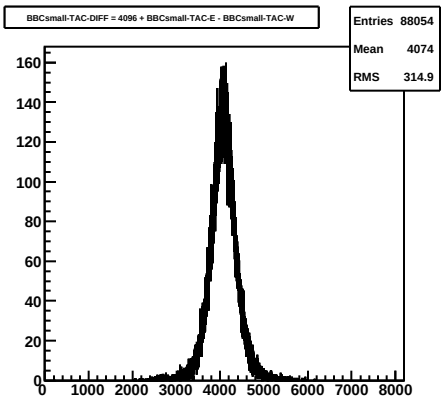

ZDC-TAC-E
Entries 4995
Mean 244.5
RMS 33.47

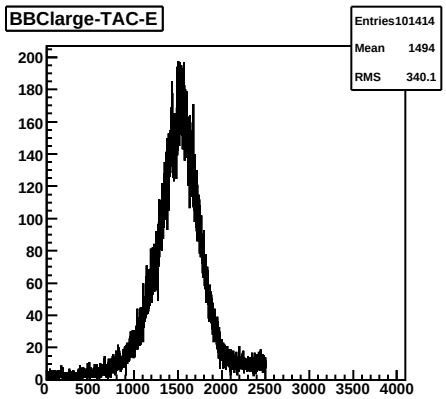

ZDC-TAC-W
Entries 1975
Mean 217.2
RMS 39.81

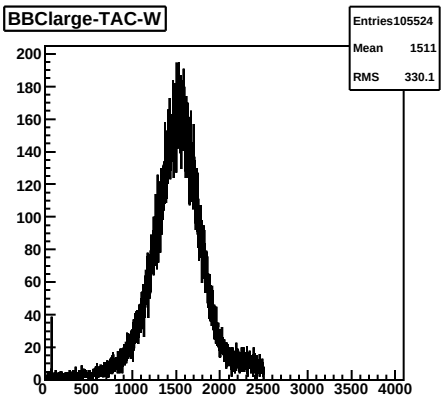

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 168
Mean 523.1
RMS 23.48

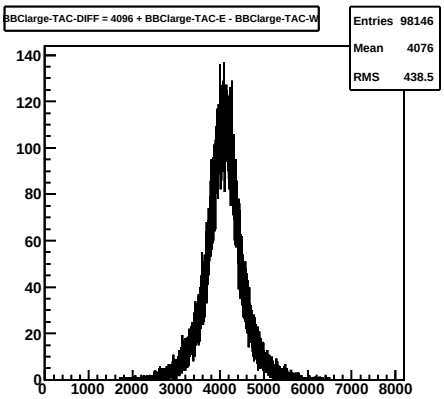

BBCsmall-TAC-E
Entries 95483
Mean 1511
RMS 235.4

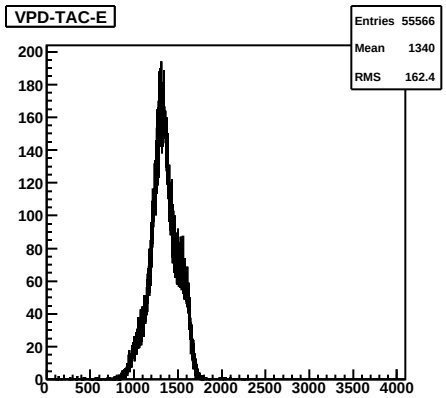

BBCsmall-TAC-W
Entries 99573
Mean 1530
RMS 247.3

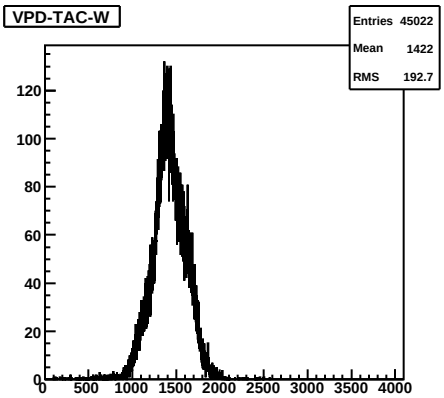

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 88054
Mean 4074
RMS 314.9

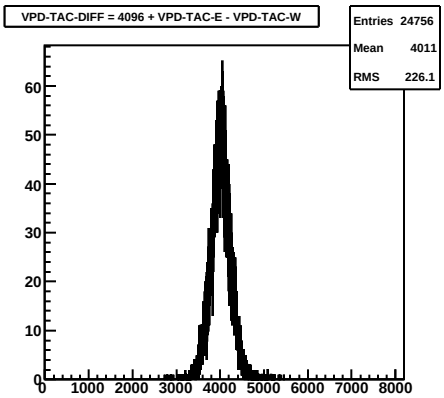

BBClarge-TAC-E
Entries101414
Mean 1494
RMS 340.1

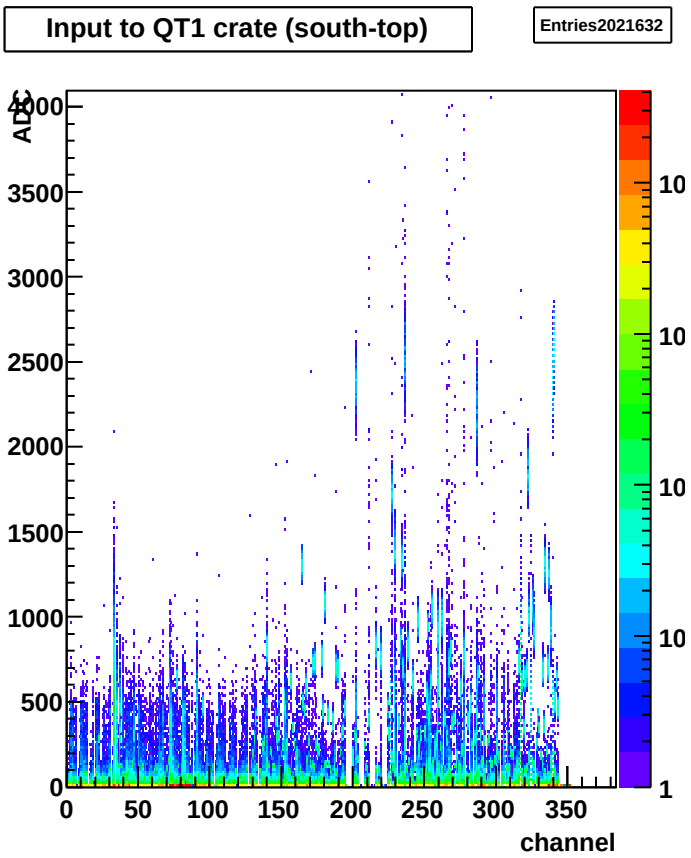

BBClarge-TAC-W
Entries105524
Mean 1511
RMS 330.1

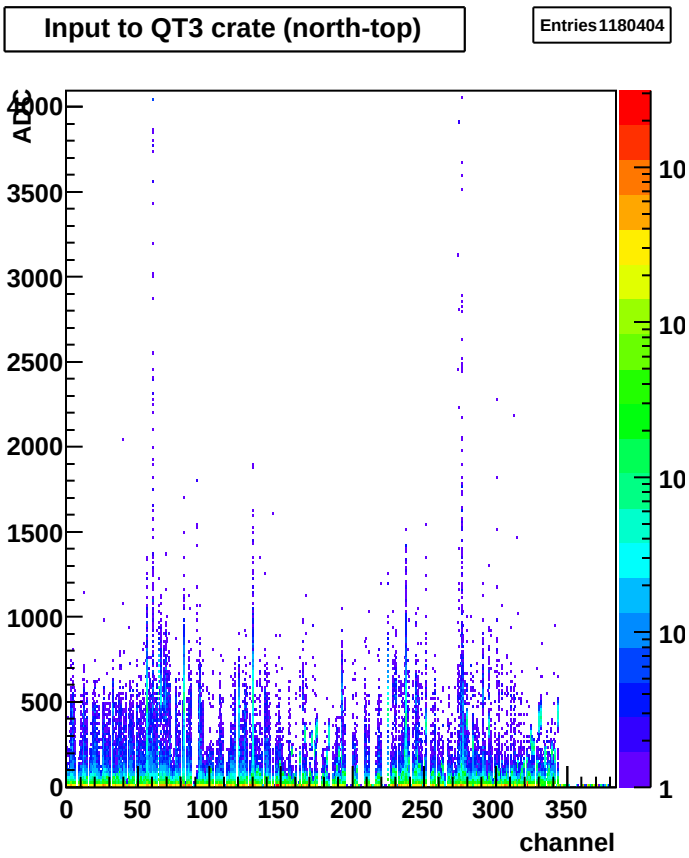

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 98146
Mean 4076
RMS 438.5

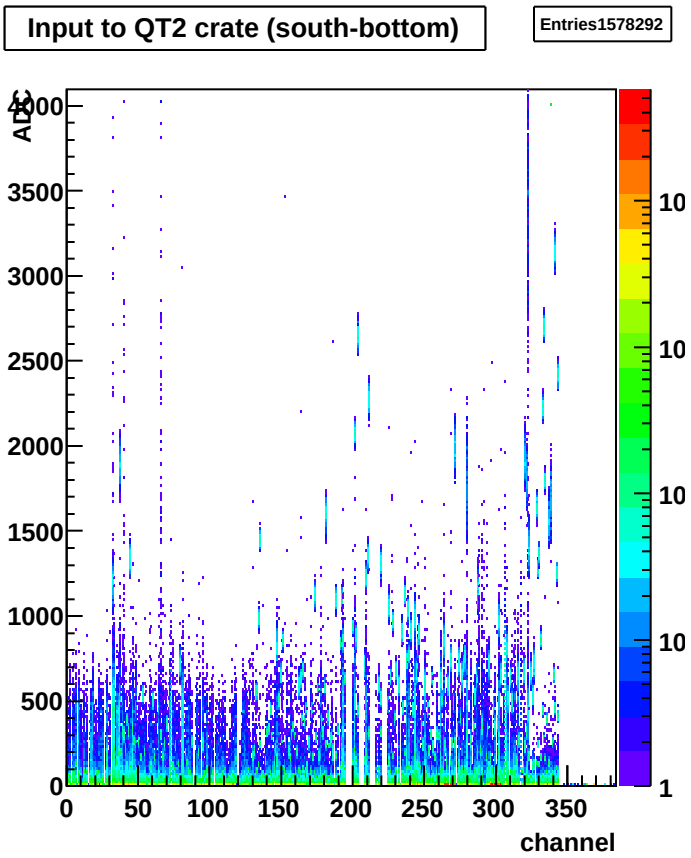

VPD-TAC-E
Entries 55566
Mean 1340
RMS 162.4

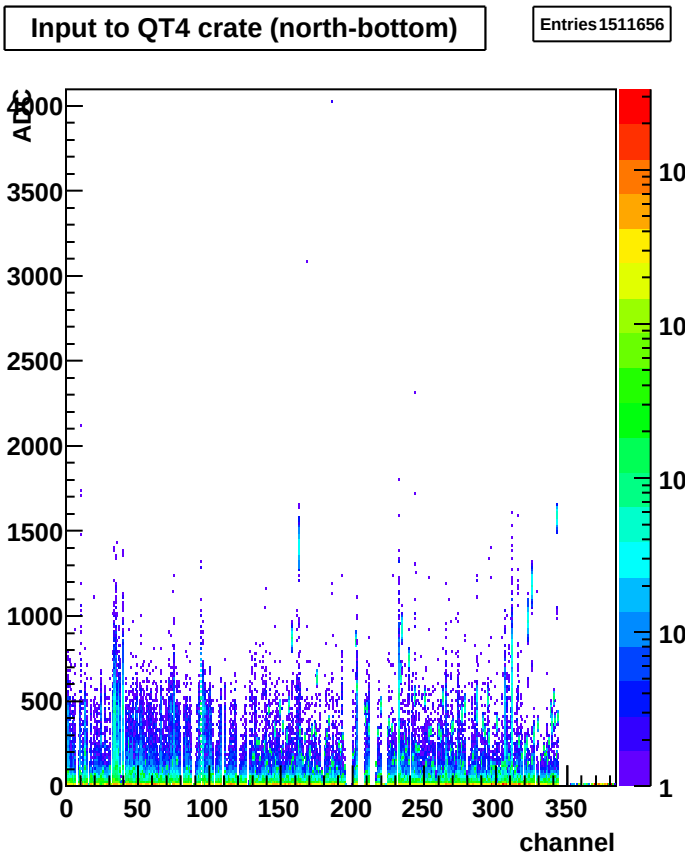

VPD-TAC-W
Entries 45022
Mean 1422
RMS 192.7

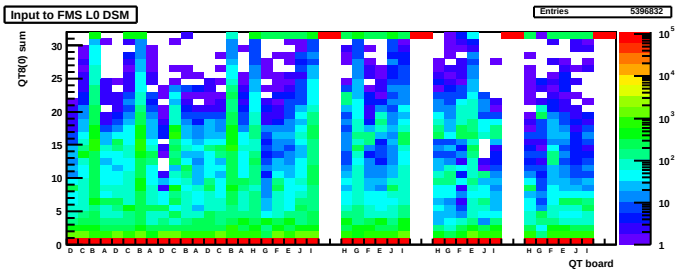

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 24756
Mean 4011
RMS 226.1

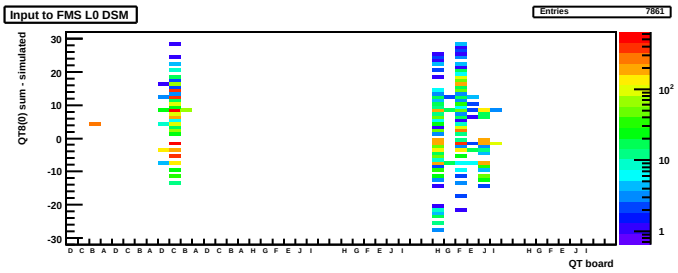

Input to QT1 crate (south-top)
Entries2021632
ADC
channel

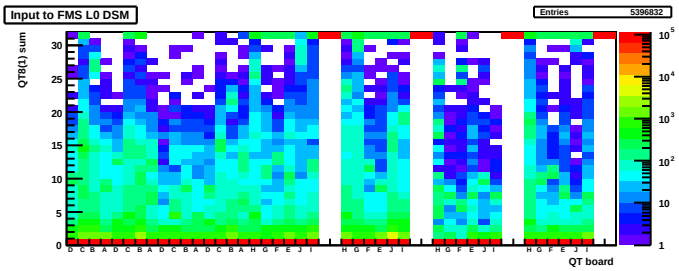

Input to QT3 crate (north-top)
Entries1180404
ADC
channel

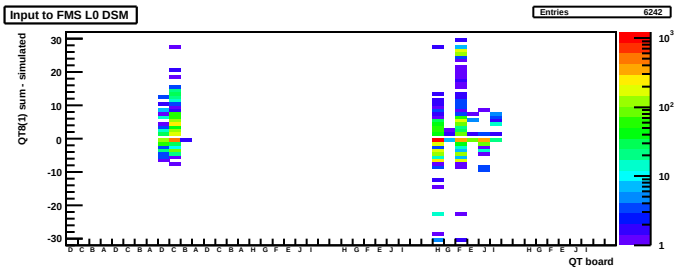

Input to QT2 crate (south-bottom)
Entries1578292
ADC
channel

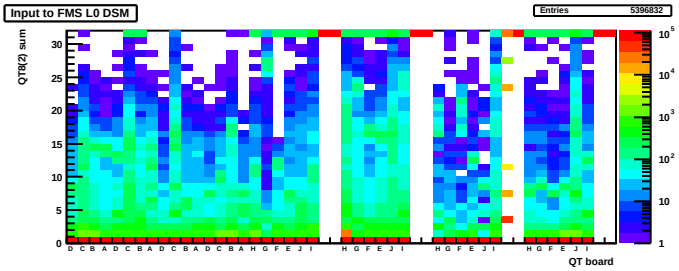

Input to QT4 crate (north-bottom)
Entries1511656
ADC
channel

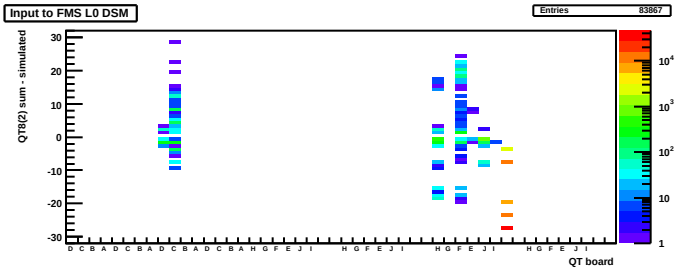

Input to FMS L0 DSM
Entries 5396832
QT8(0) sum
QT board

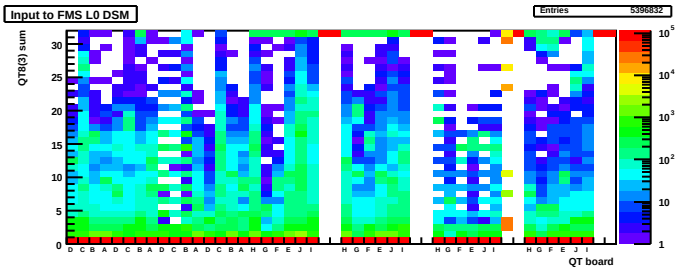

Input to FMS L0 DSM
Entries 7861
QT8(0) sum - simulated
QT board

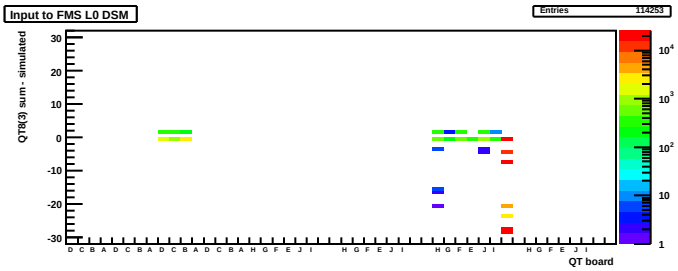

Input to FMS L0 DSM
Entries 5396832
QT8(1) sum
QT board

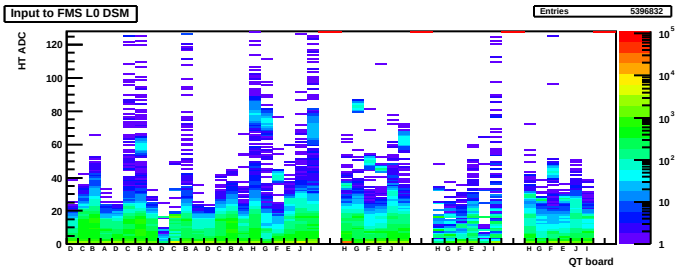

Input to FMS L0 DSM
Entries 6242
QT8(1) sum - simulated
QT board

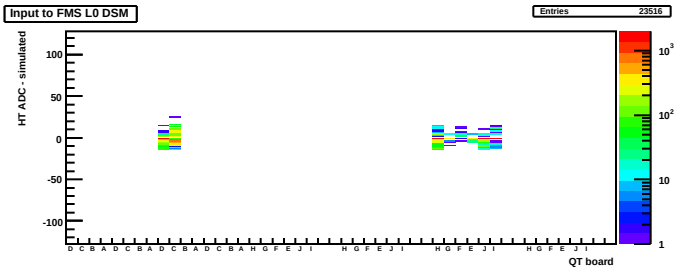

Input to FMS L0 DSM
Entries 5396832
QT8(2) sum
QT board

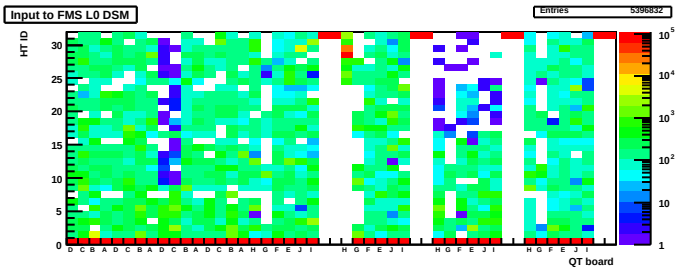

Input to FMS L0 DSM
Entries 83867
QT8(2) sum - simulated
QT board

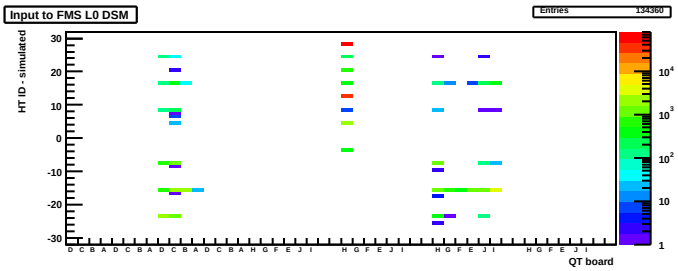

Input to FMS L0 DSM
Entries 5396832
QT8(3) sum
QT board

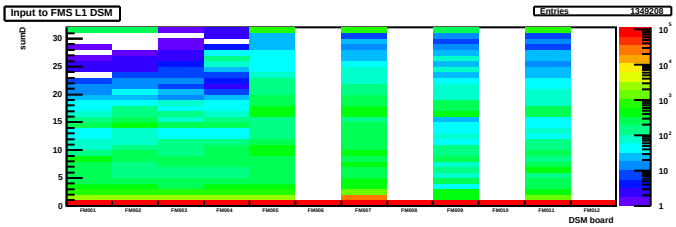

Input to FMS L0 DSM
Entries 114253
QT8(3) sum - simulated
QT board

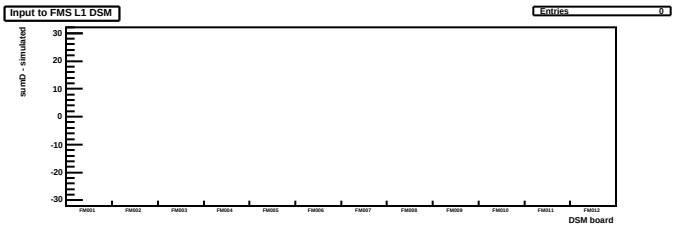

Input to FMS L0 DSM
Entries 5396832
HT ADC
QT board

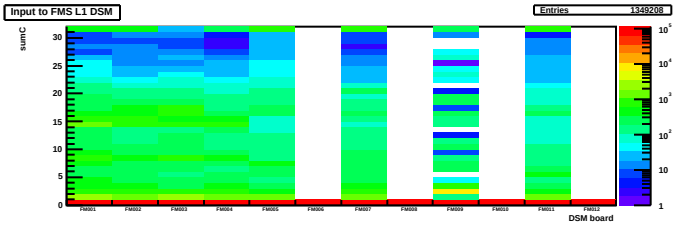

Input to FMS L0 DSM
Entries 23516
HT ADC - simulated
QT board

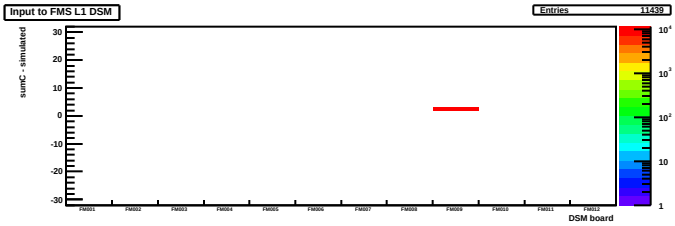

Input to FMS L0 DSM
Entries 5396832
HT ID
QT board

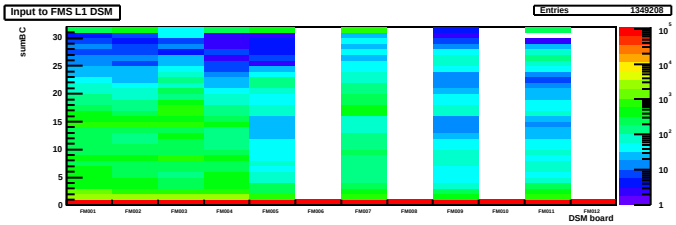

Input to FMS L0 DSM
Entries 134360
HT ID - simulated
QT board

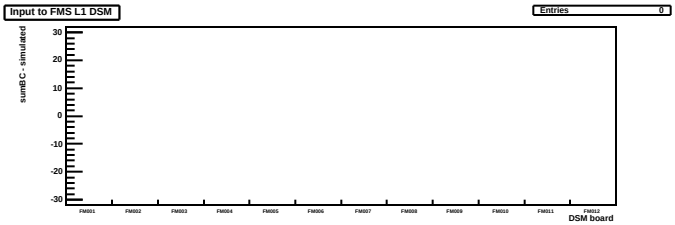

Input to FMS L1 DSM
Entries 1349208
sumD
DSM board

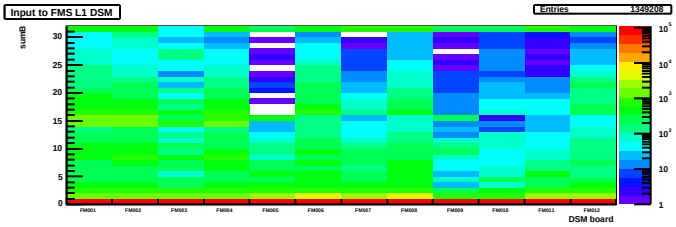

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

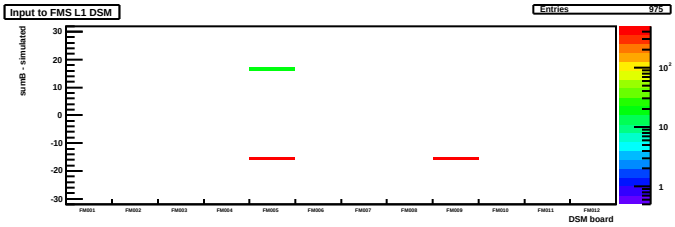

Input to FMS L1 DSM
Entries 1349208
sumC
DSM board

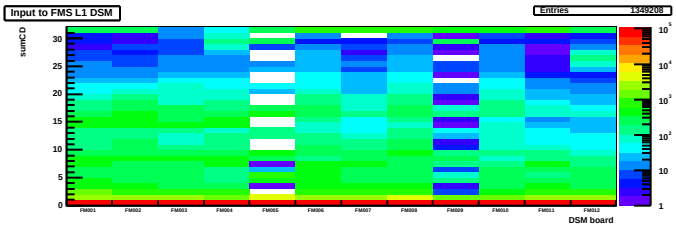

Input to FMS L1 DSM
Entries 11439
sumC - simulated
DSM board

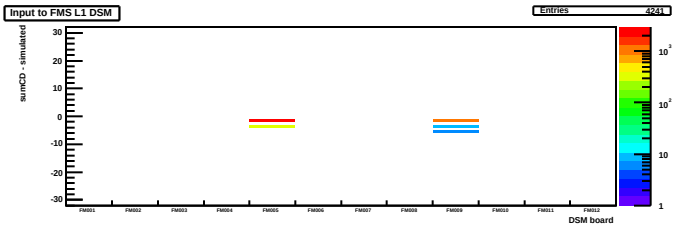

Input to FMS L1 DSM
Entries 1349208
sumBC
DSM board

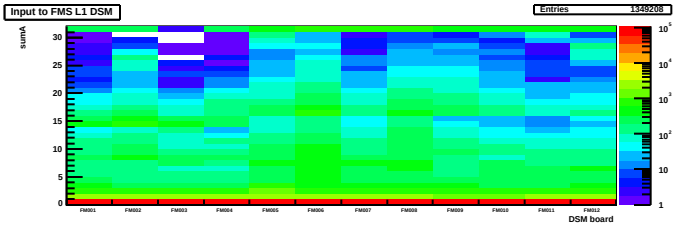

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

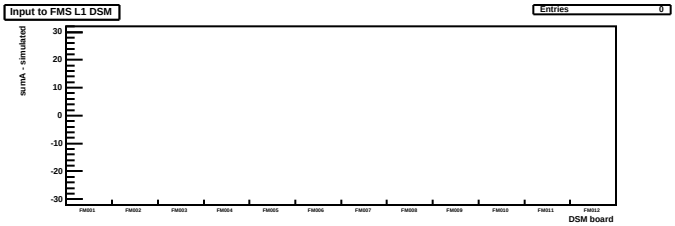

Input to FMS L1 DSM
Entries 1349208
sumB
DSM board

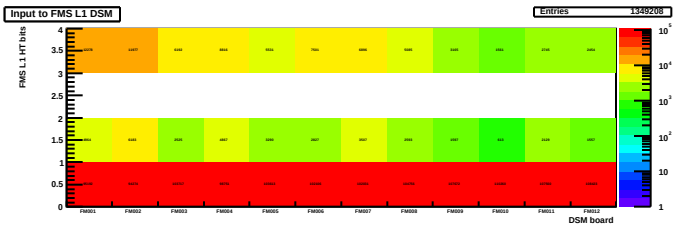

Input to FMS L1 DSM
Entries 975
sumB - simulated
DSM board

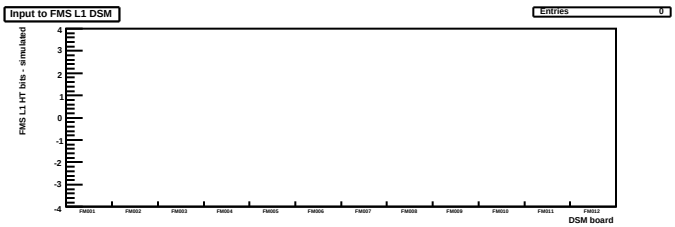

Input to FMS L1 DSM
Entries 1349208
sumCD
DSM board

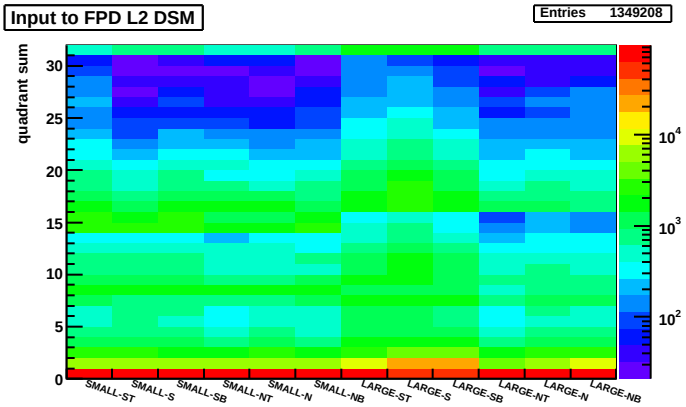

Input to FMS L1 DSM
Entries 4241
sumCD - simulated
DSM board

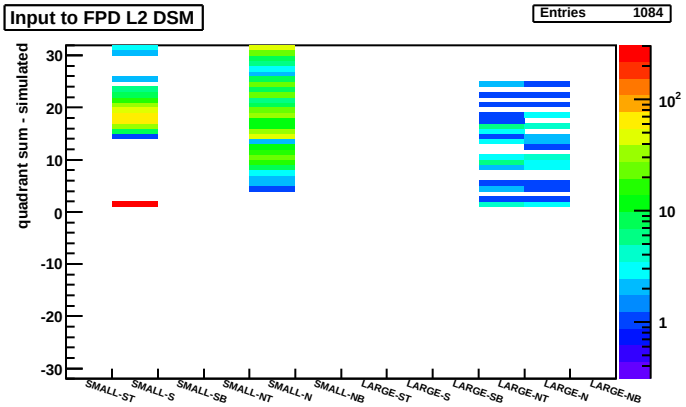

Input to FMS L1 DSM
Entries 1349208
sumA
DSM board

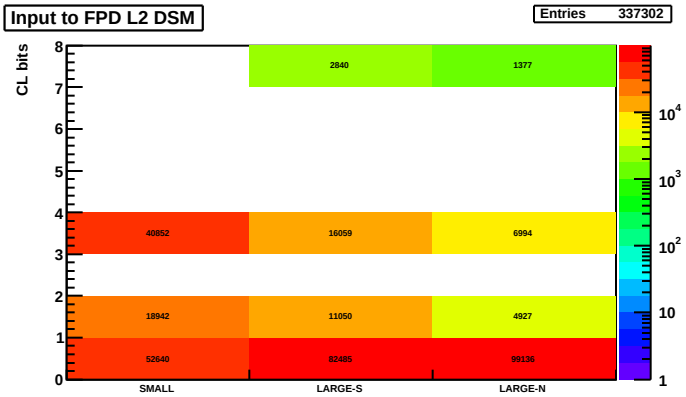

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

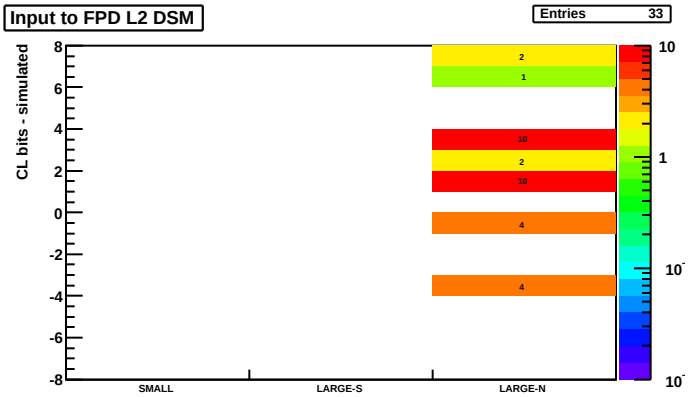

Input to FMS L1 DSM
Entries 1349208
FMS L1 HT bits
DSM board

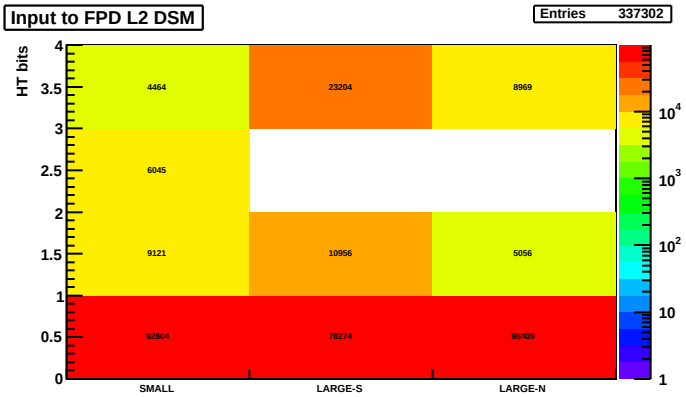

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

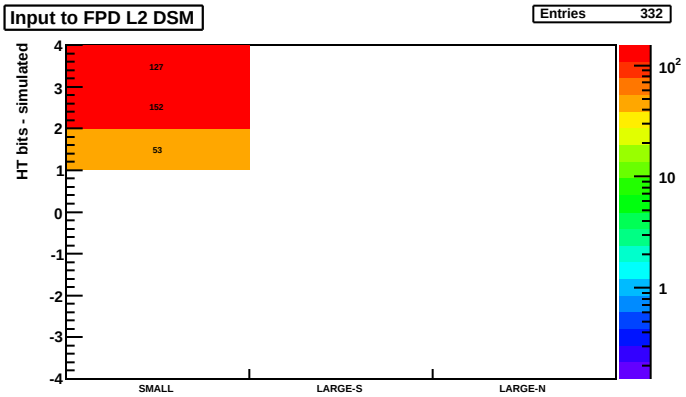

Input to FPD L2 DSM
Entries 1349208
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

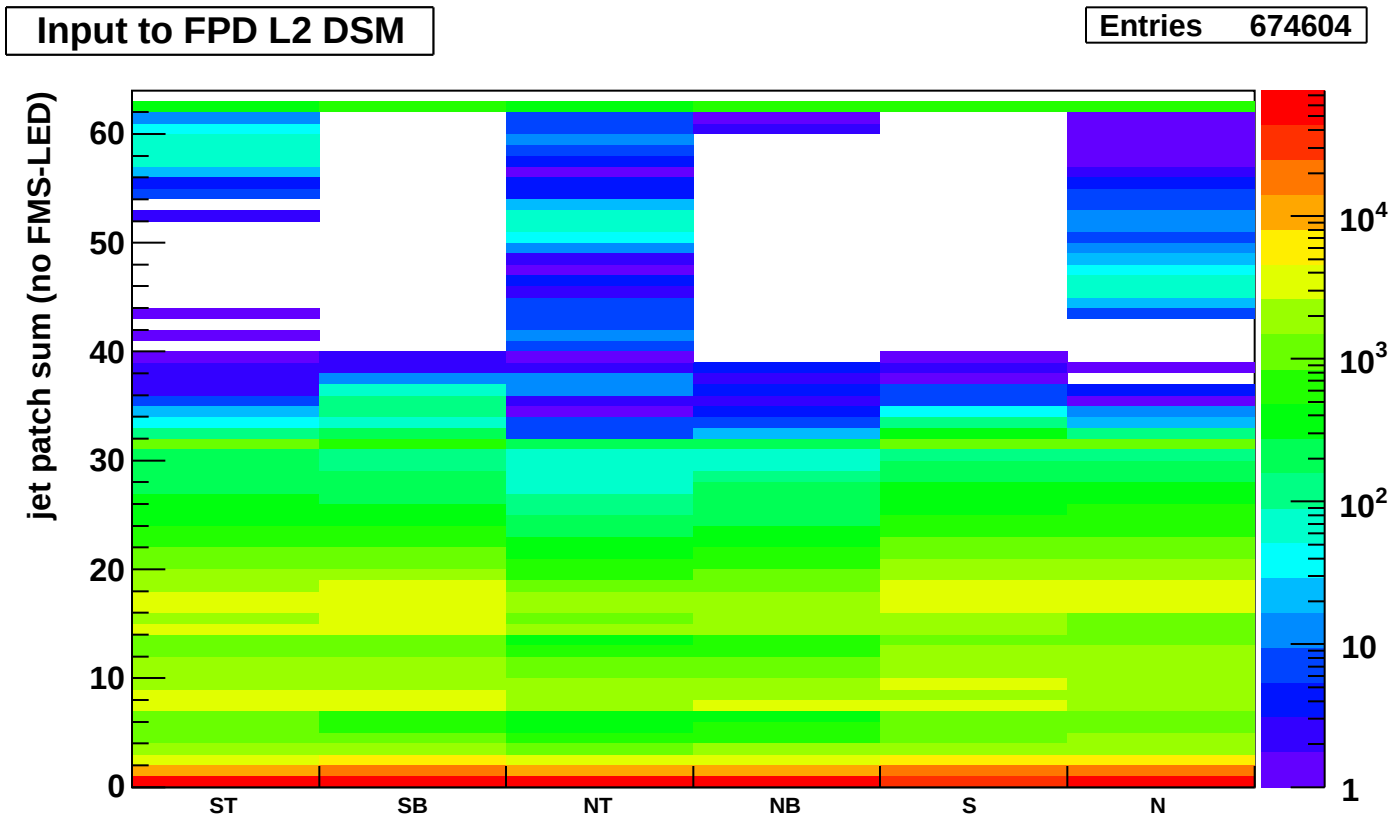

Input to FPD L2 DSM
Entries 1084
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

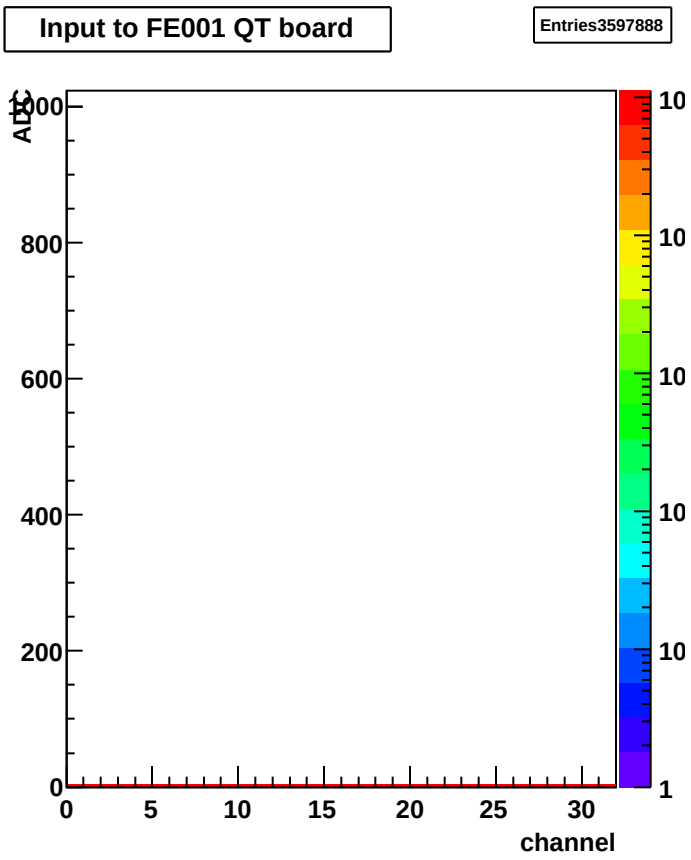

Input to FPD L2 DSM
Entries 337302
CL bits
2840
1377
40852
16059
6994
18942
11050
4927
52640
82485
99136
SMALL
LARGE-S
LARGE-N

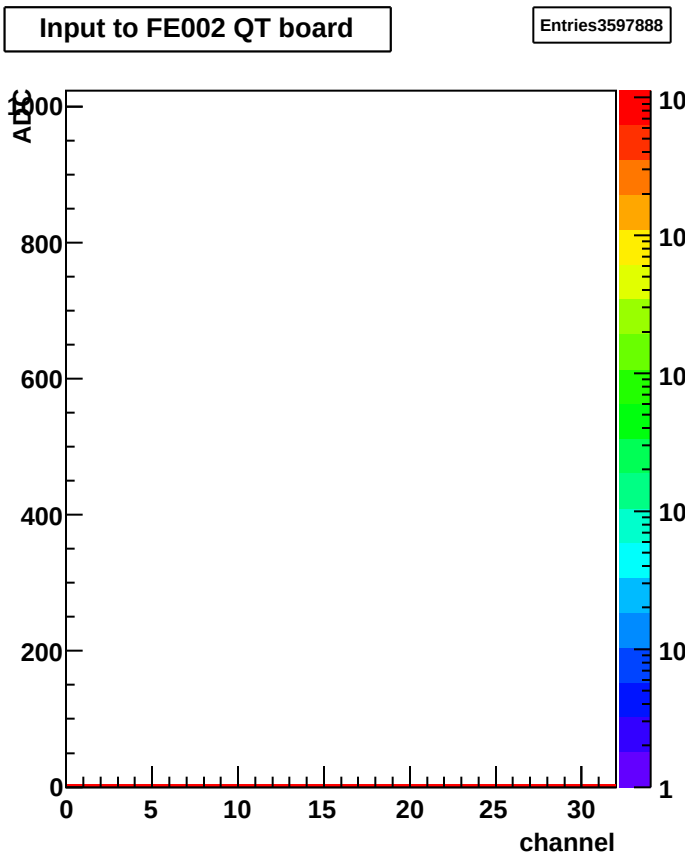

Input to FPD L2 DSM
Entries 33
CL bits - simulated
2
1
10
2
10
4
4
SMALL
LARGE-S
LARGE-N

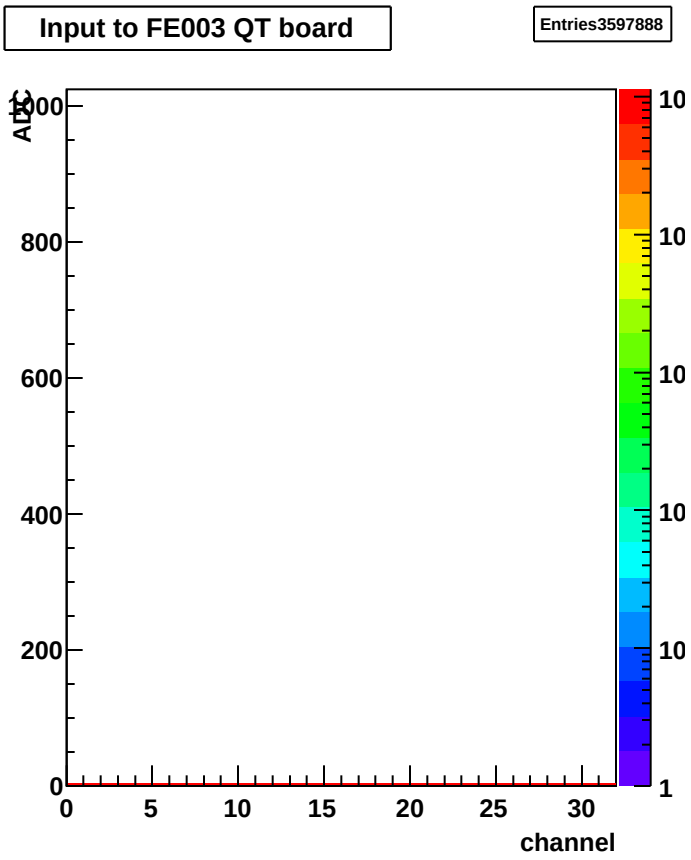

Input to FPD L2 DSM
Entries 337302
HT bits
4464
23204
8969
6045
9121
10956
5056
92804
78274
98409
SMALL
LARGE-S
LARGE-N

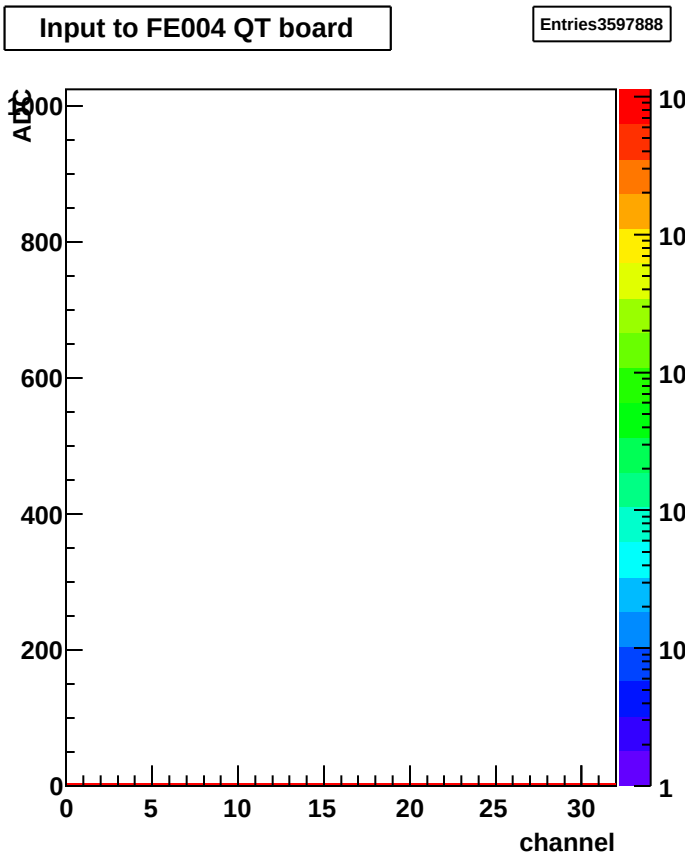

Input to FPD L2 DSM
Entries 332
HT bits - simulated
127
152
53
SMALL
LARGE-S
LARGE-N

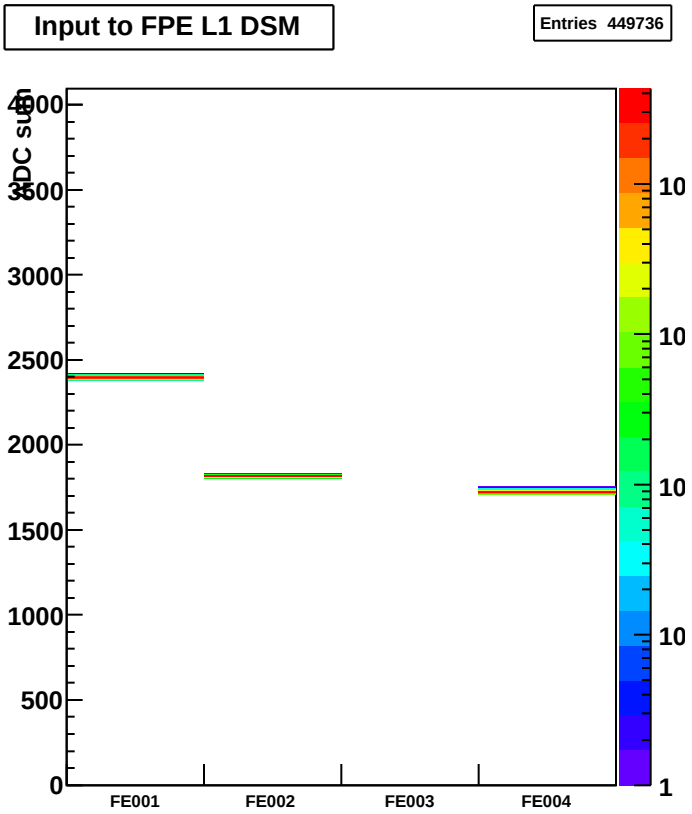

Input to FPD L2 DSM
Entries 674604
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

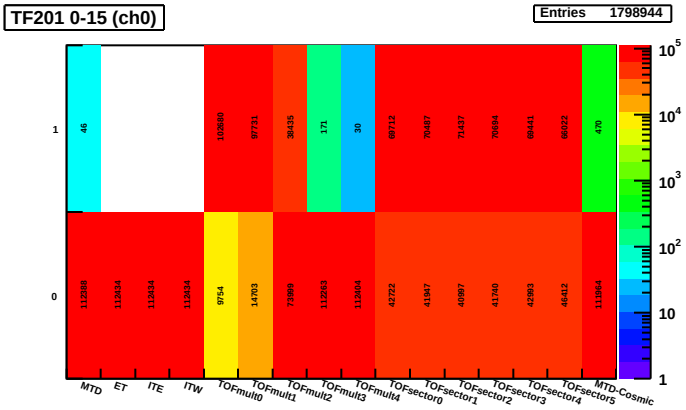

Input to FE001 QT board
Entries3597888
ADC
channel

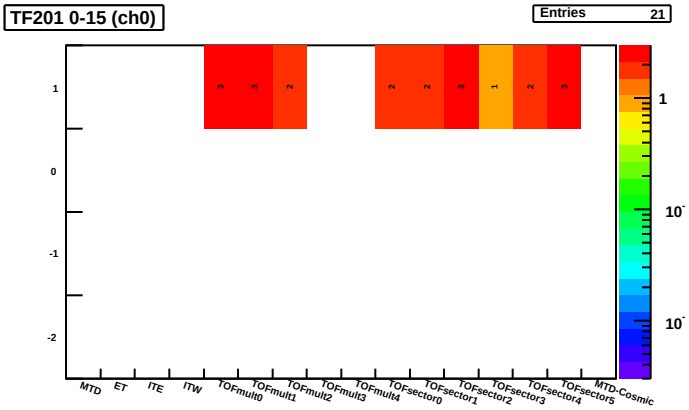

Input to FE002 QT board
Entries3597888
ADC
channel

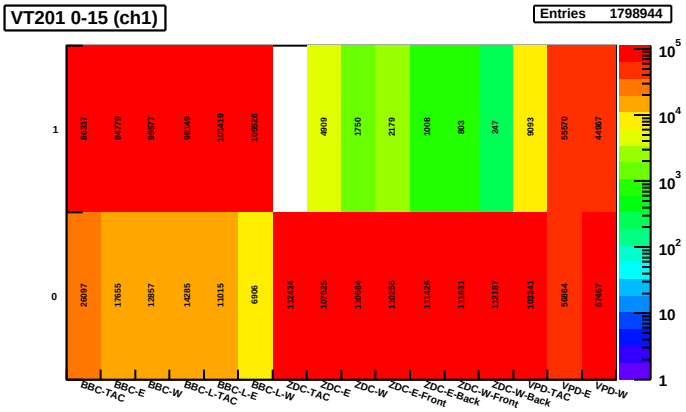

Input to FE003 QT board
Entries3597888
ADC
channel

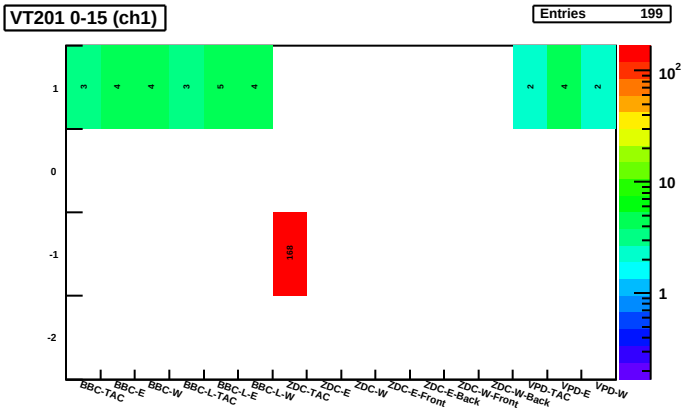

Input to FE004 QT board
Entries3597888
ADC
channel

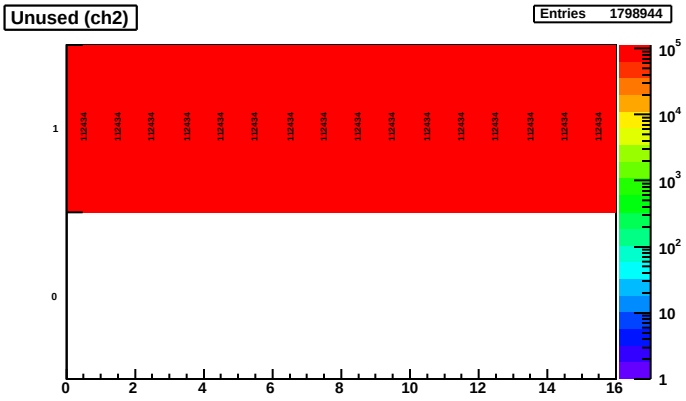

Input to FPE L1 DSM
Entries 449736
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1


TF201 0-15 (ch0)
Entries 1798944
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 21
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1798944
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 199
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W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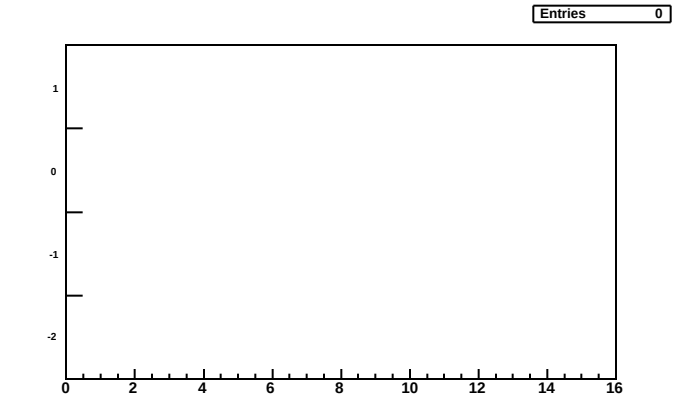
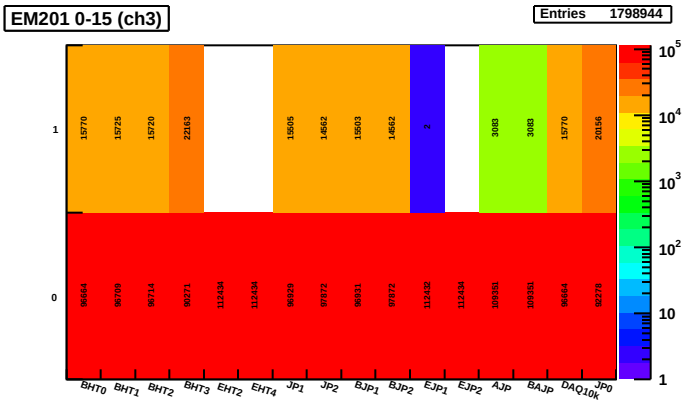
Entries 1798944


Entries 0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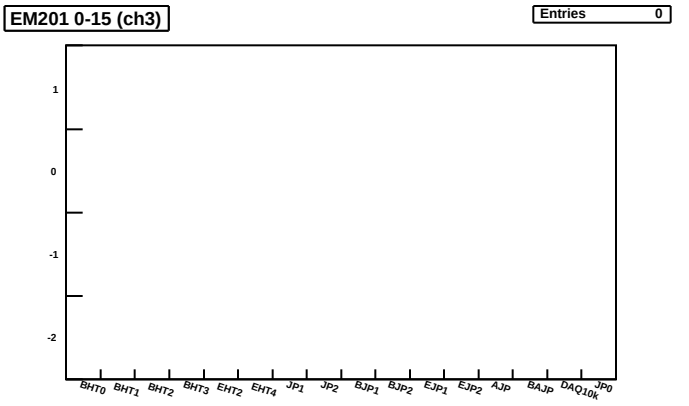
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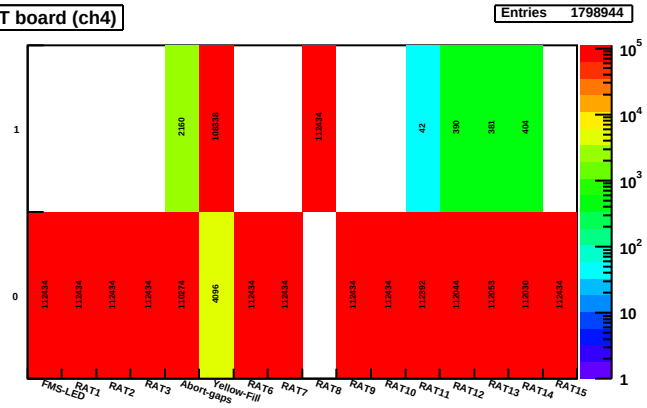
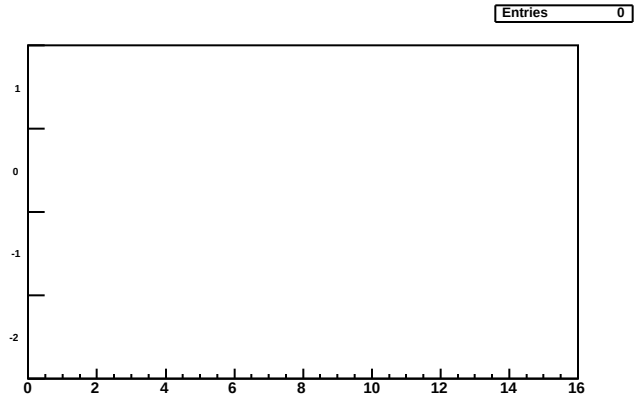
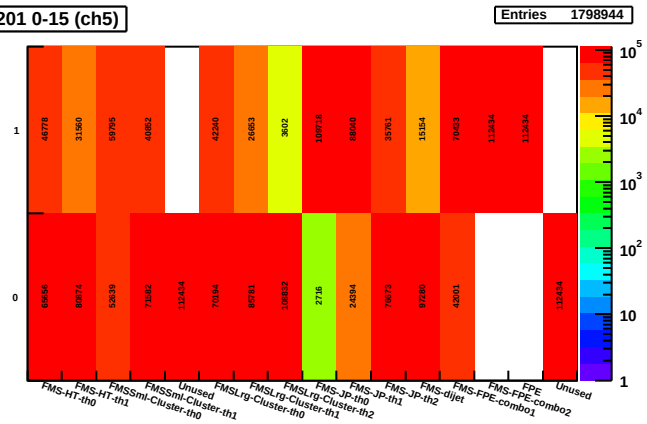
RAT board (ch4)





FP201 0-15 (ch5)



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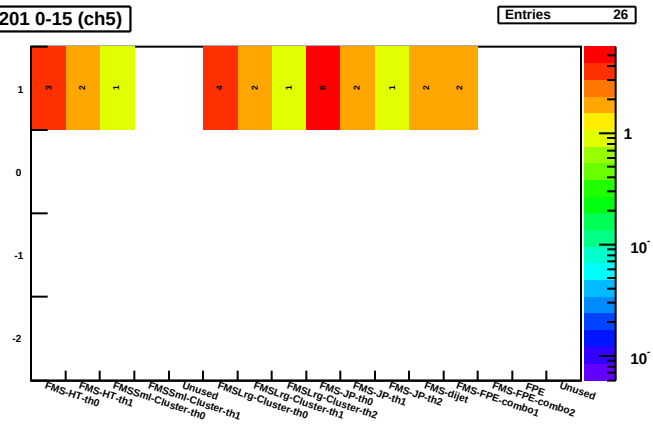
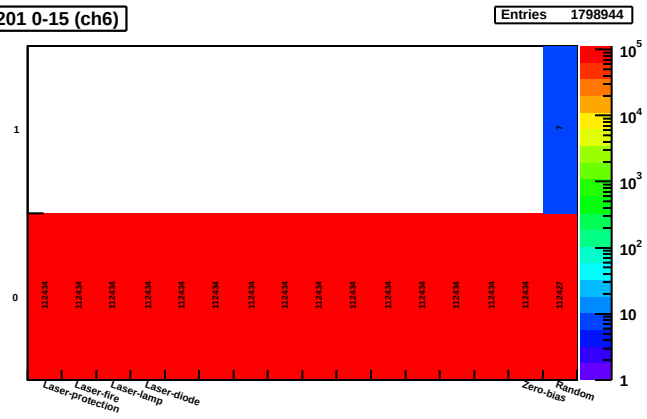
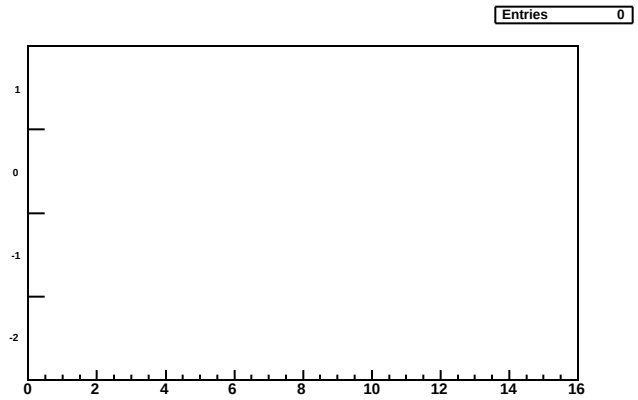
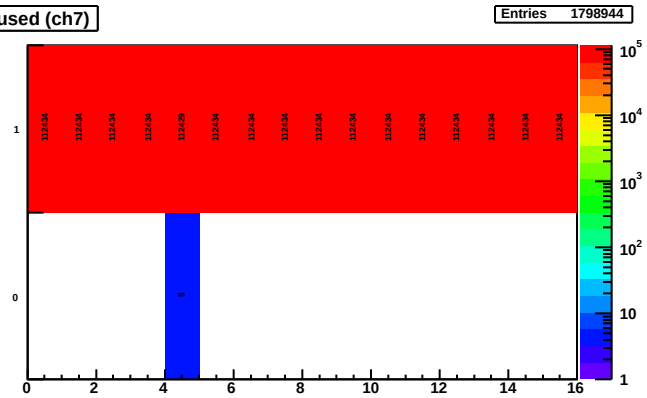
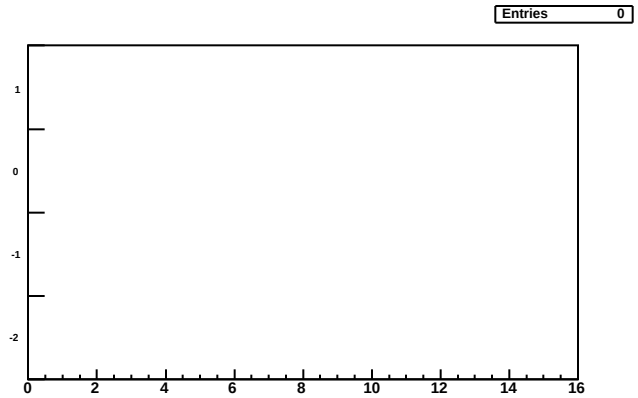


ST201 0-15 (ch6)





Unused (ch7)