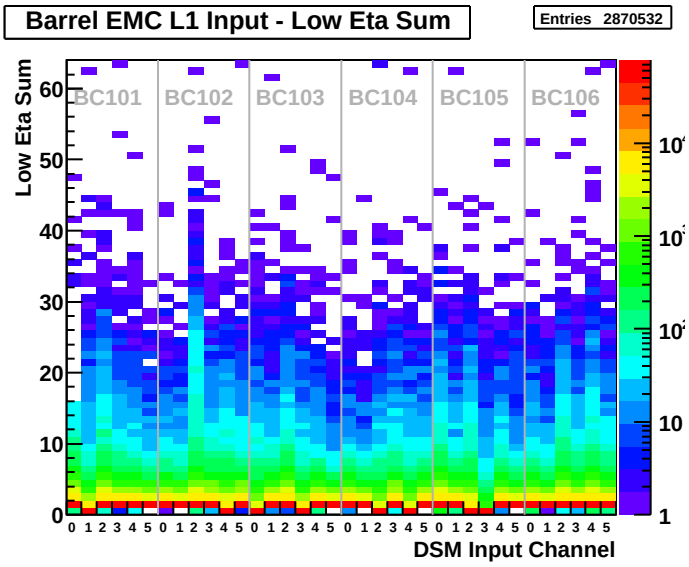
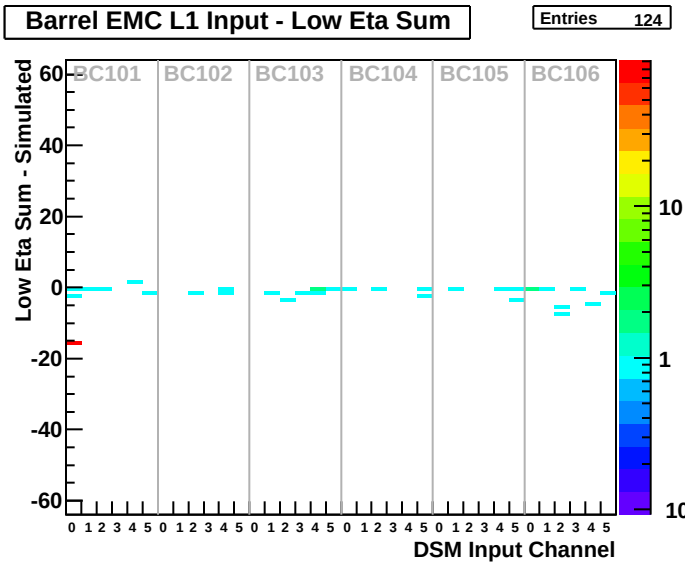
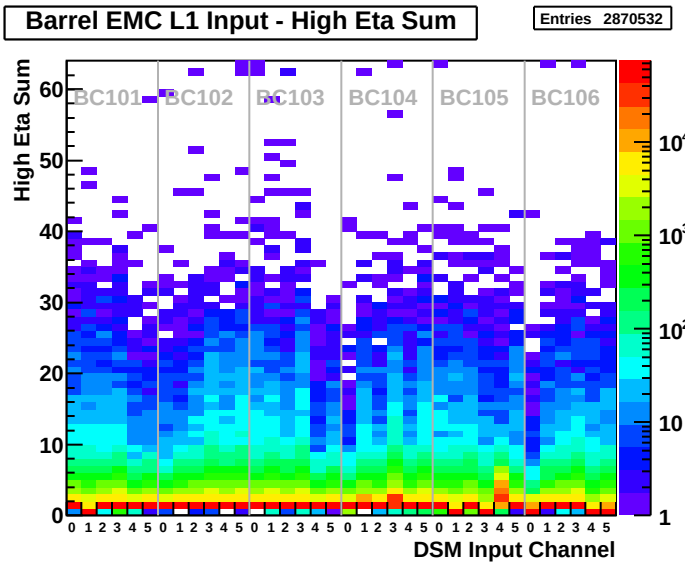
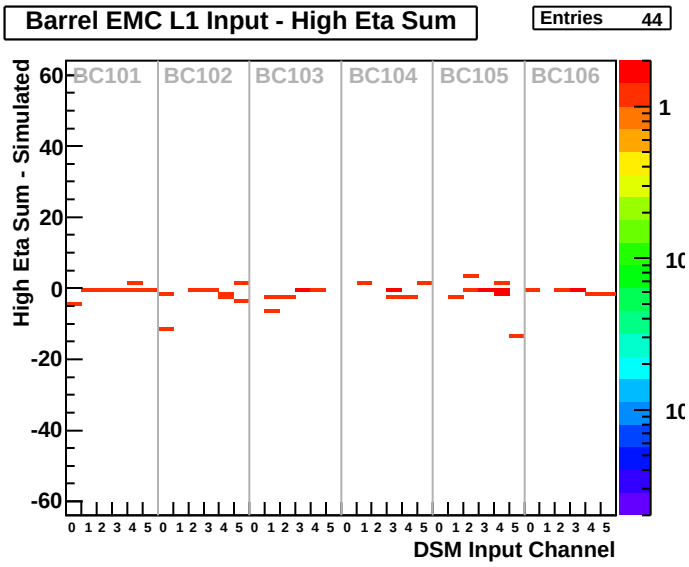
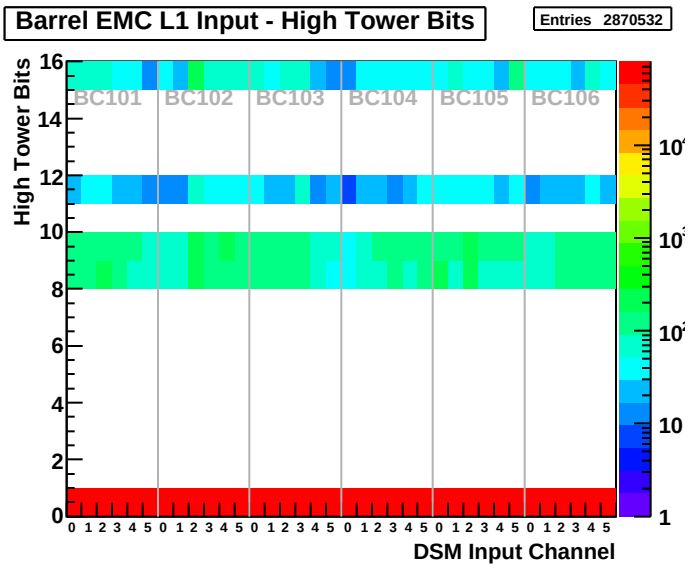
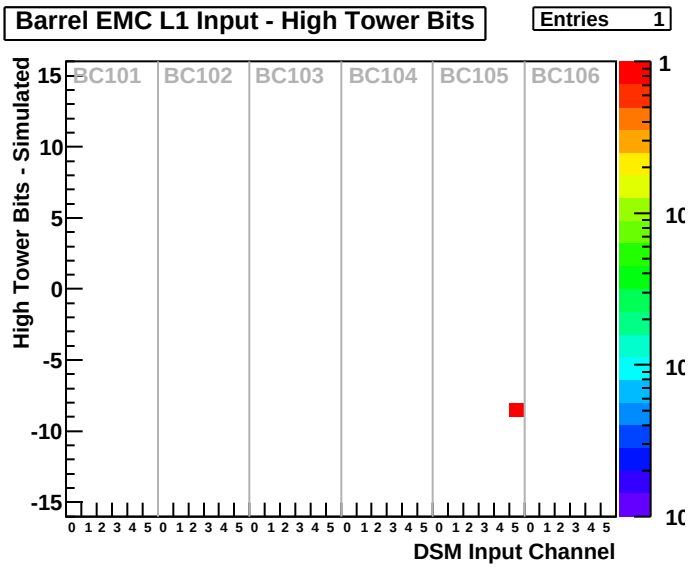

Barrel EMC L1 Input - Low Eta Sum
Entries 2870532
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

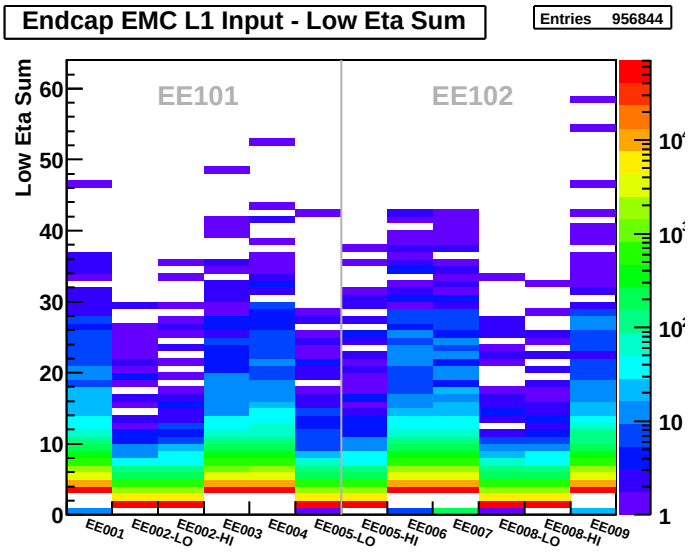

Barrel EMC L1 Input - Low Eta Sum
Entries 124
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

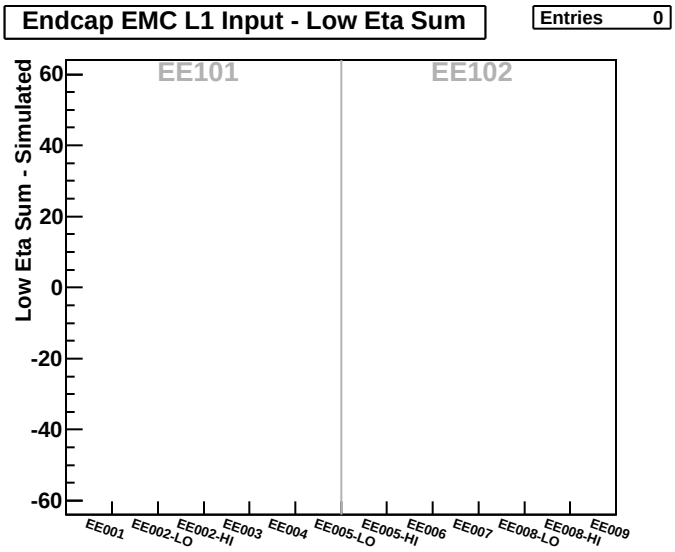

Barrel EMC L1 Input - High Eta Sum
Entries 2870532
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

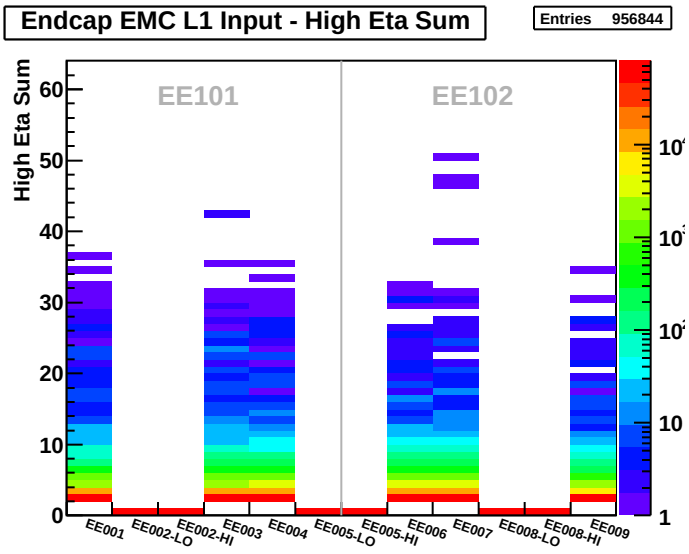

Barrel EMC L1 Input - High Eta Sum
Entries 44
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

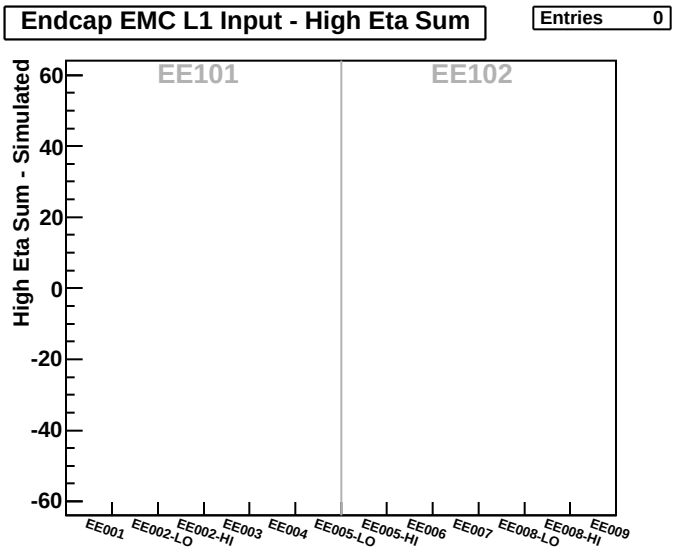

Barrel EMC L1 Input - High Tower Bits
Entries 2870532
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

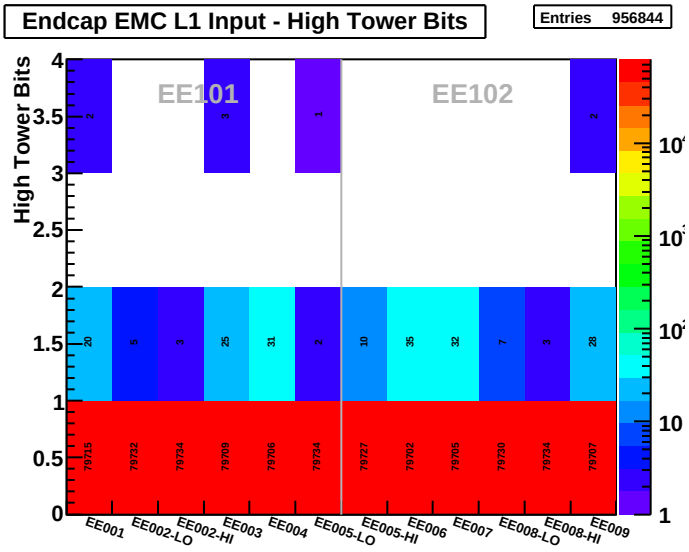

Barrel EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

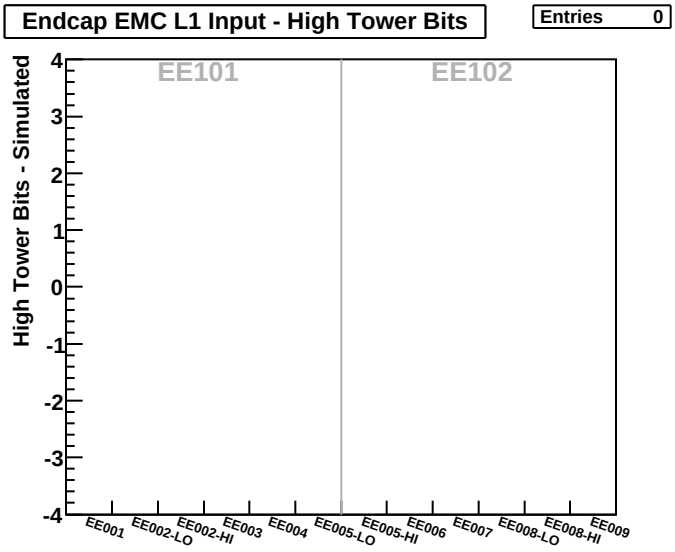

Endcap EMC L1 Input - Low Eta Sum
Entries 956844
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

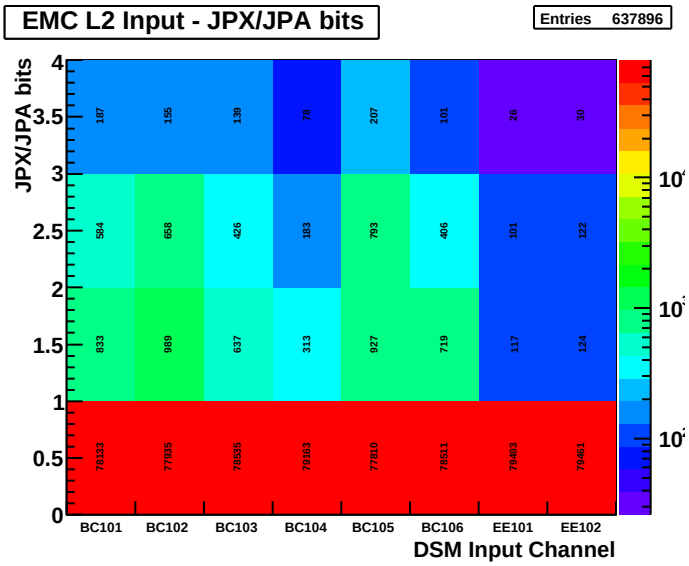

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

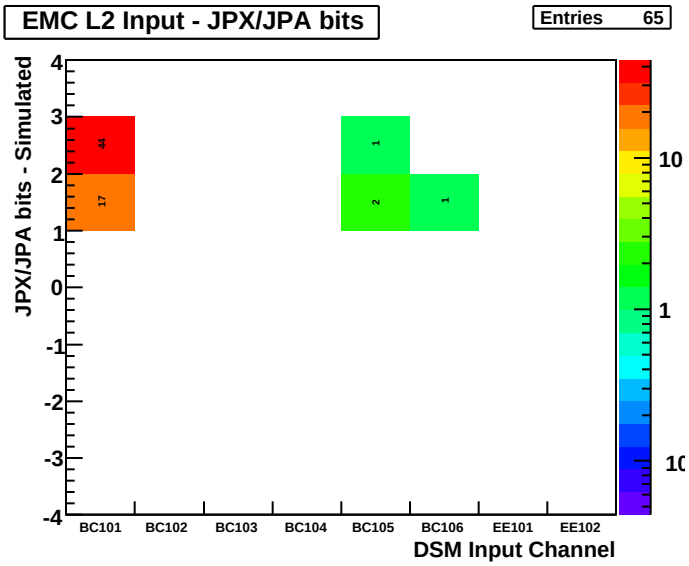

Endcap EMC L1 Input - High Eta Sum
Entries 956844
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

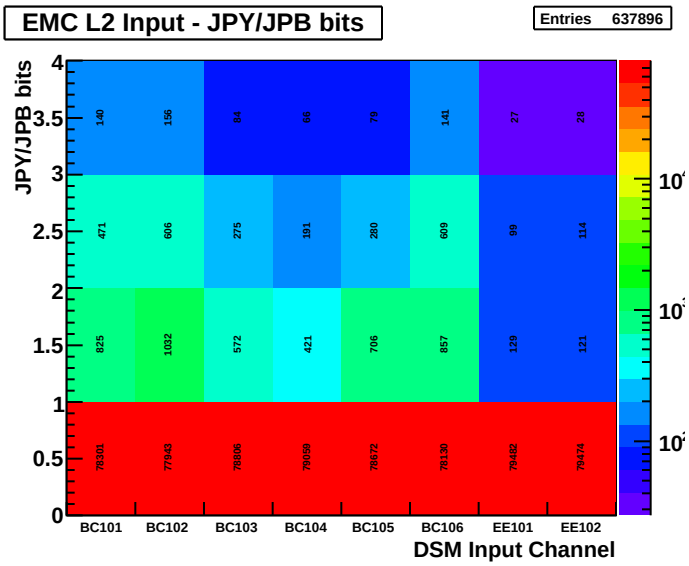

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

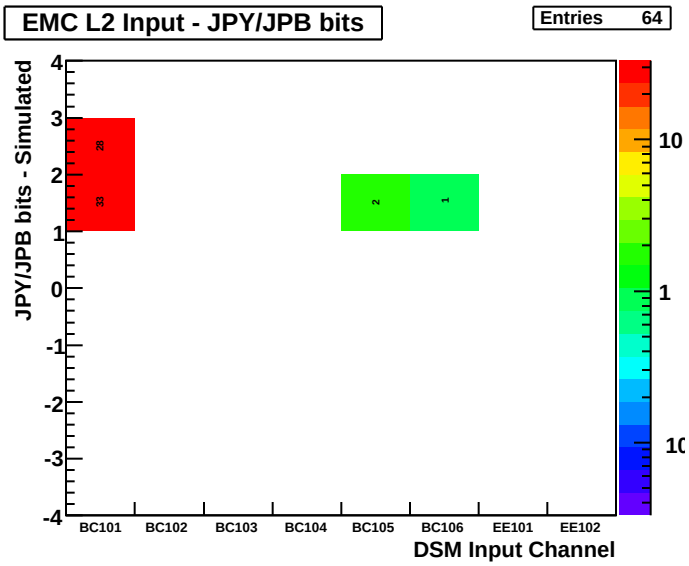

Endcap EMC L1 Input - High Tower Bits
Entries 956844
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

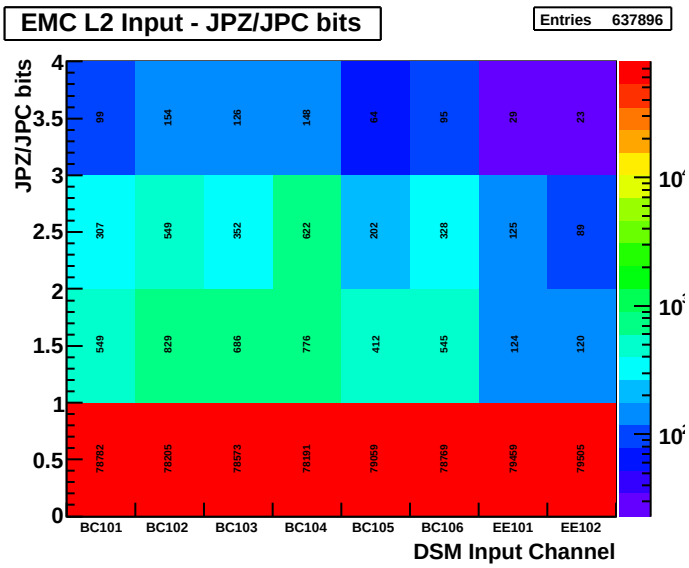

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

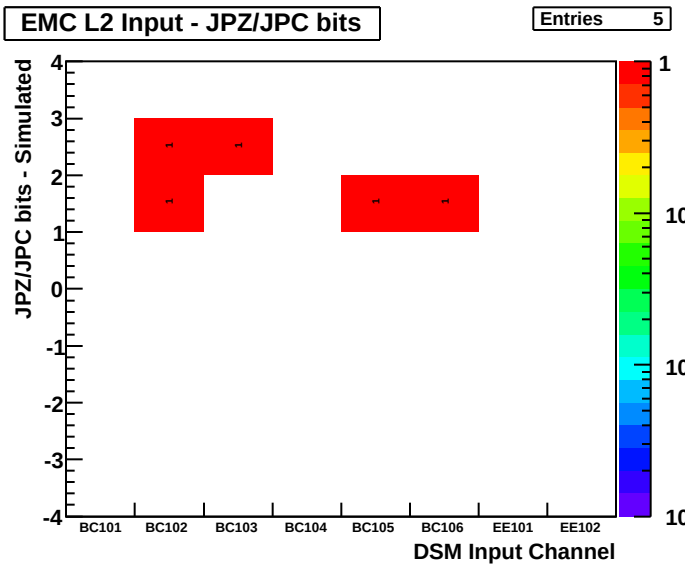

EMC L2 Input - JPX/JPA bits
Entries 637896
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
187 155 139 76 207 101 26 30
584 658 426 183 793 406 101 122
833 989 637 313 927 719 117 124
78133 77935 78535 79163 77810 78511 79493 79461

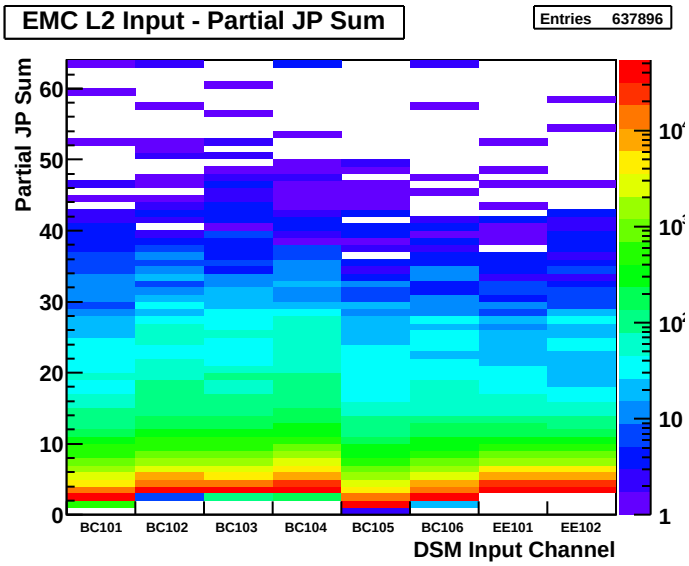

EMC L2 Input - JPX/JPA bits
Entries 65
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
44
17
1
2
1

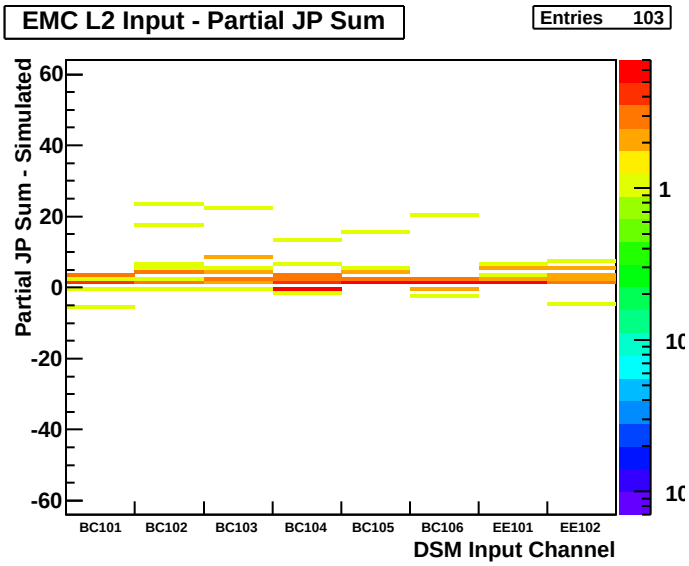

EMC L2 Input - JPY/JPB bits
Entries 637896
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
140 156 84 66 79 141 27 28
471 606 275 191 280 609 99 114
825 1032 572 421 706 857 129 121
78301 77943 78806 79059 78672 78130 79482 79474

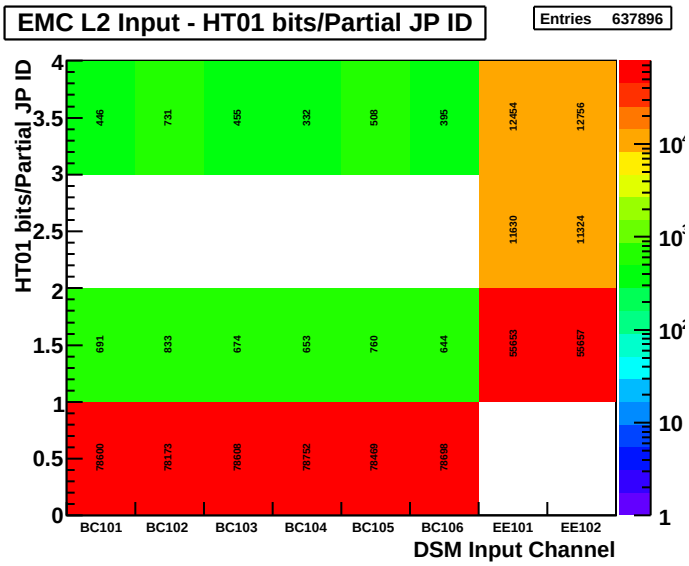

EMC L2 Input - JPY/JPB bits
Entries 64
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
28
33
2
1

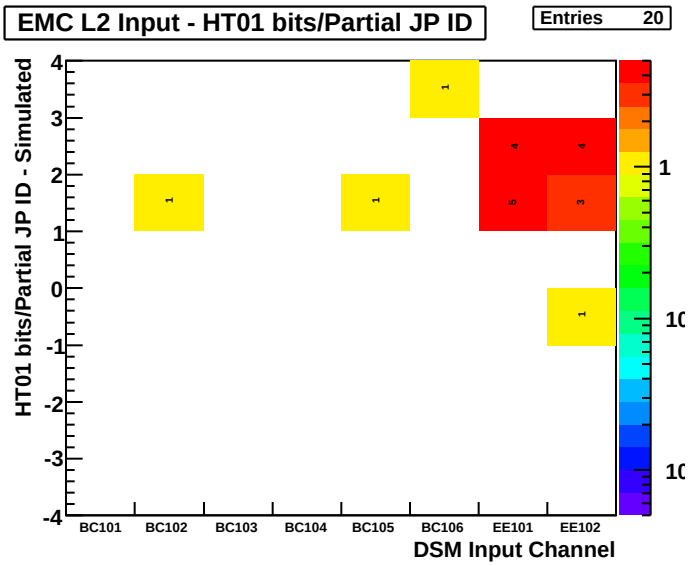

EMC L2 Input - JPZ/JPC bits
Entries 637896
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
99 154 126 148 64 95 29 23
307 549 352 622 202 328 125 89
549 829 686 776 412 545 124 120
78762 78205 78573 78191 79059 78769 79459 79505

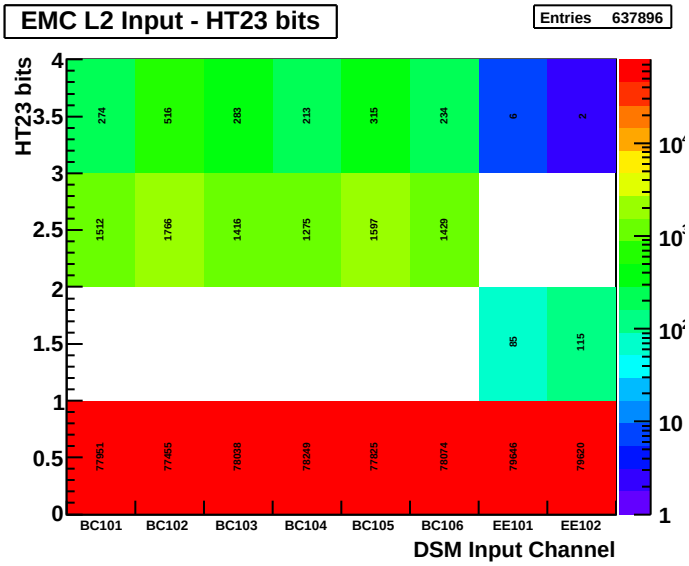

EMC L2 Input - JPZ/JPC bits
Entries 5
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1
1
1
1

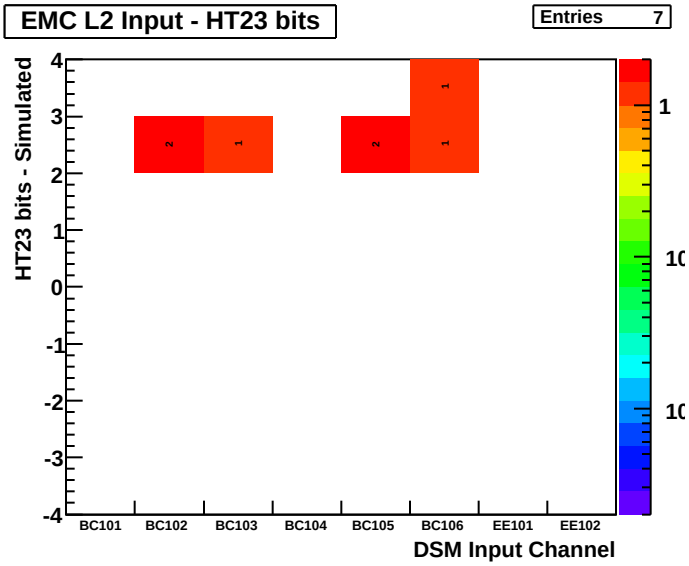

EMC L2 Input - Partial JP Sum
Entries 637896
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

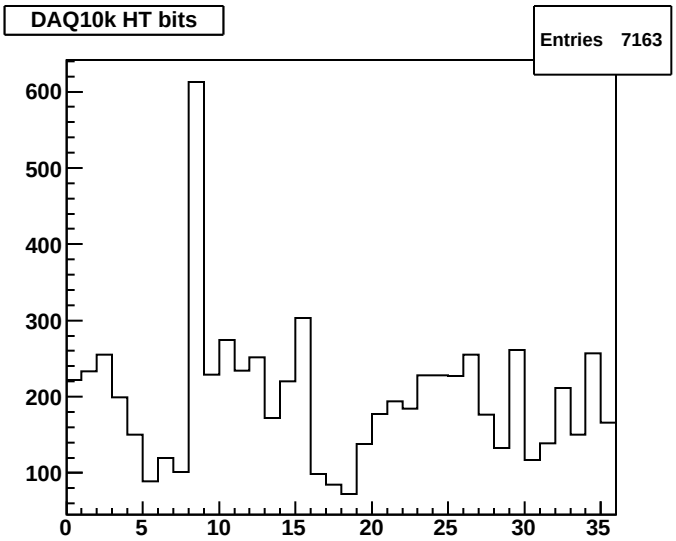

EMC L2 Input - Partial JP Sum
Entries 103
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

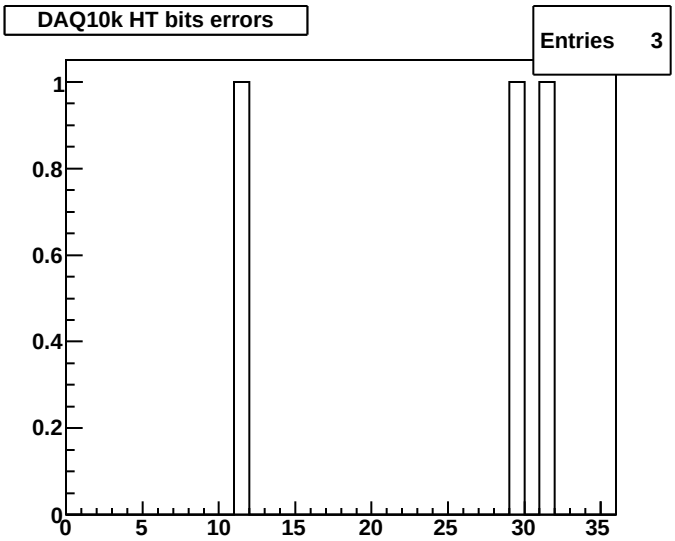

EMC L2 Input - HT01 bits/Partial JP ID
Entries 637896
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

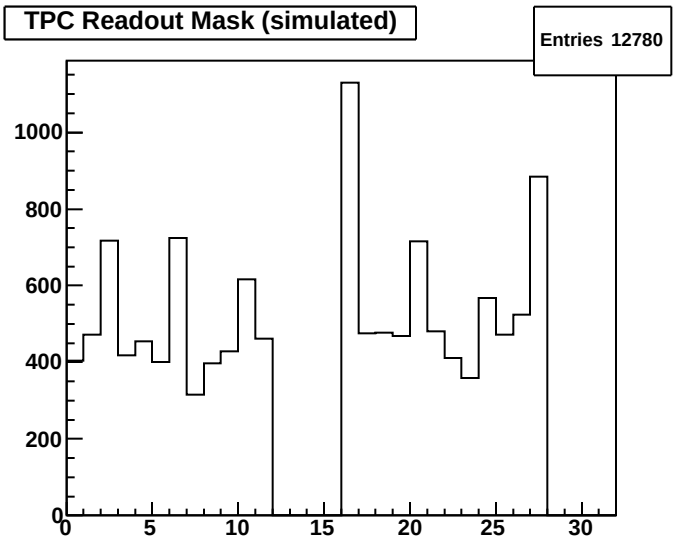

EMC L2 Input - HT01 bits/Partial JP ID
Entries 20
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

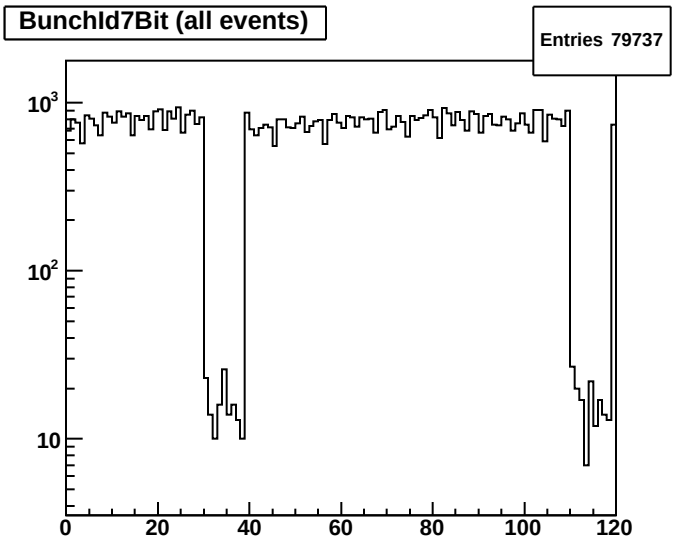

EMC L2 Input - HT23 bits
Entries 637896
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

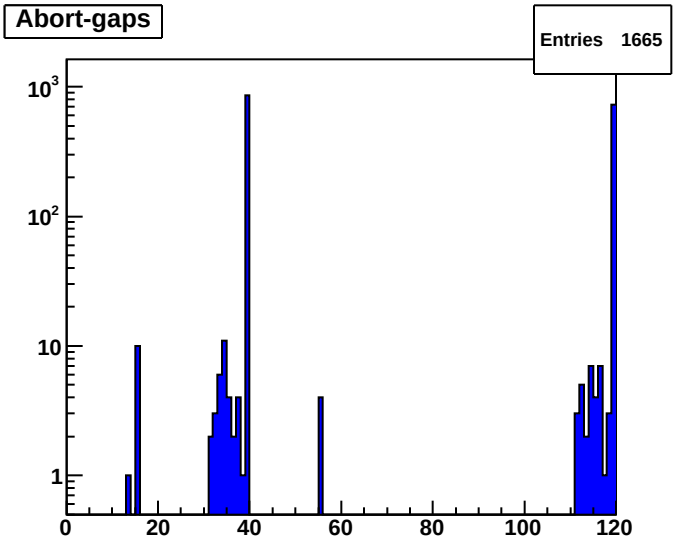

EMC L2 Input - HT23 bits
Entries 7
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

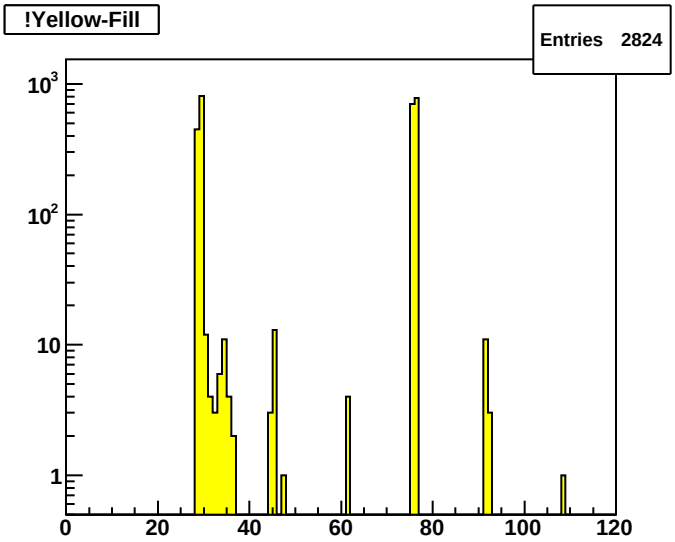

DAQ10k HT bits
Entries 7163

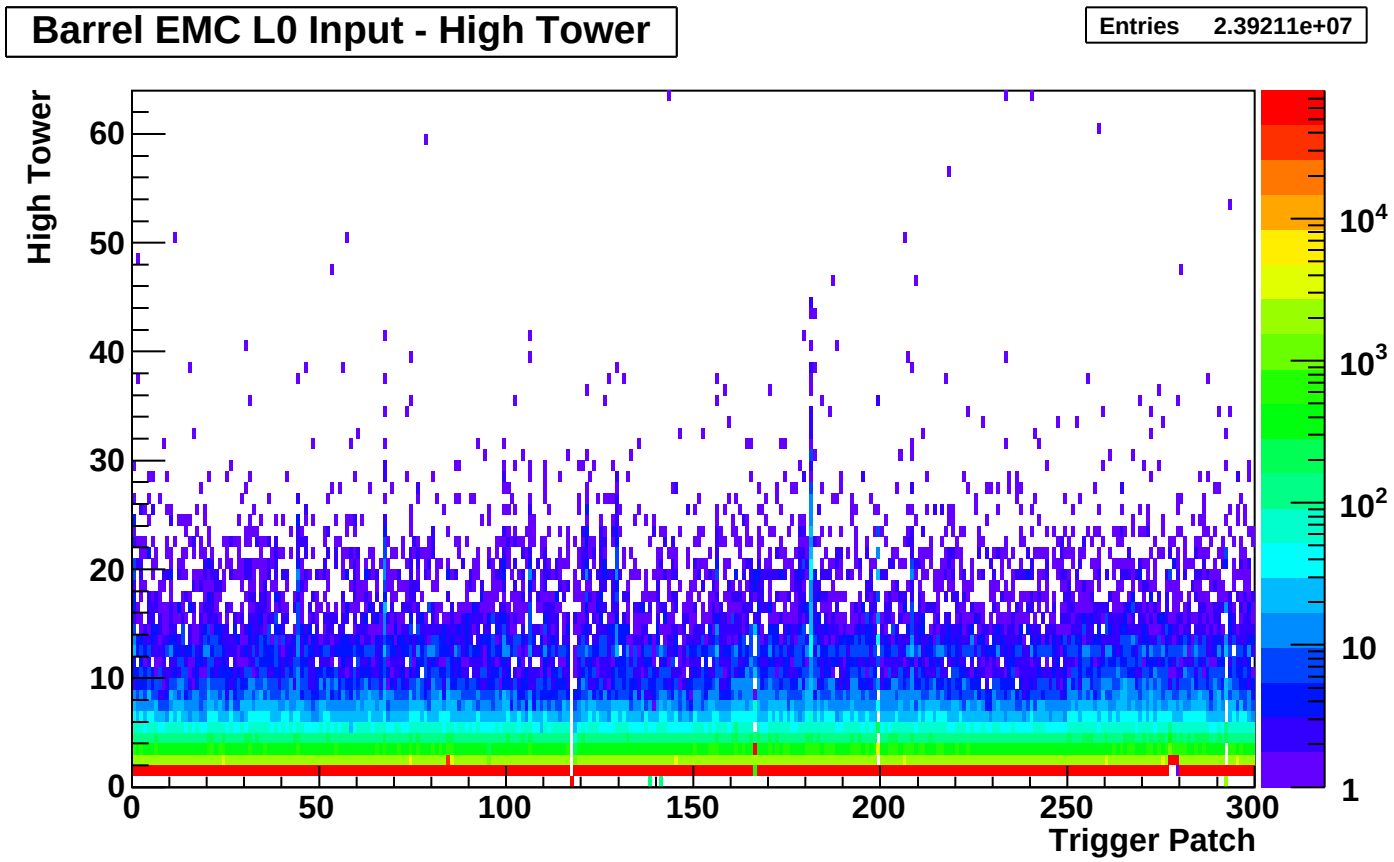

DAQ10k HT bits errors
Entries 3

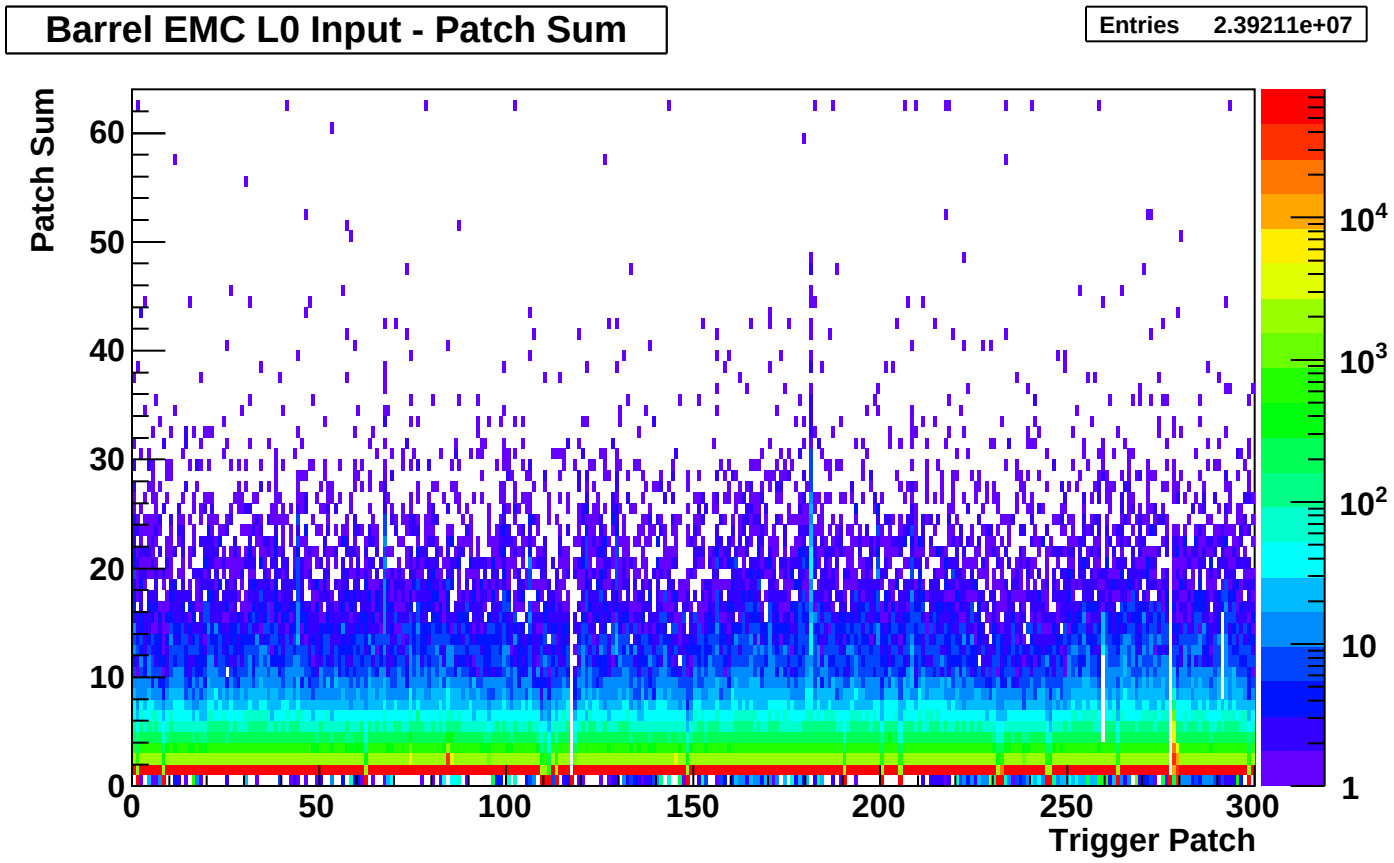

TPC Readout Mask (simulated)
Entries 12780

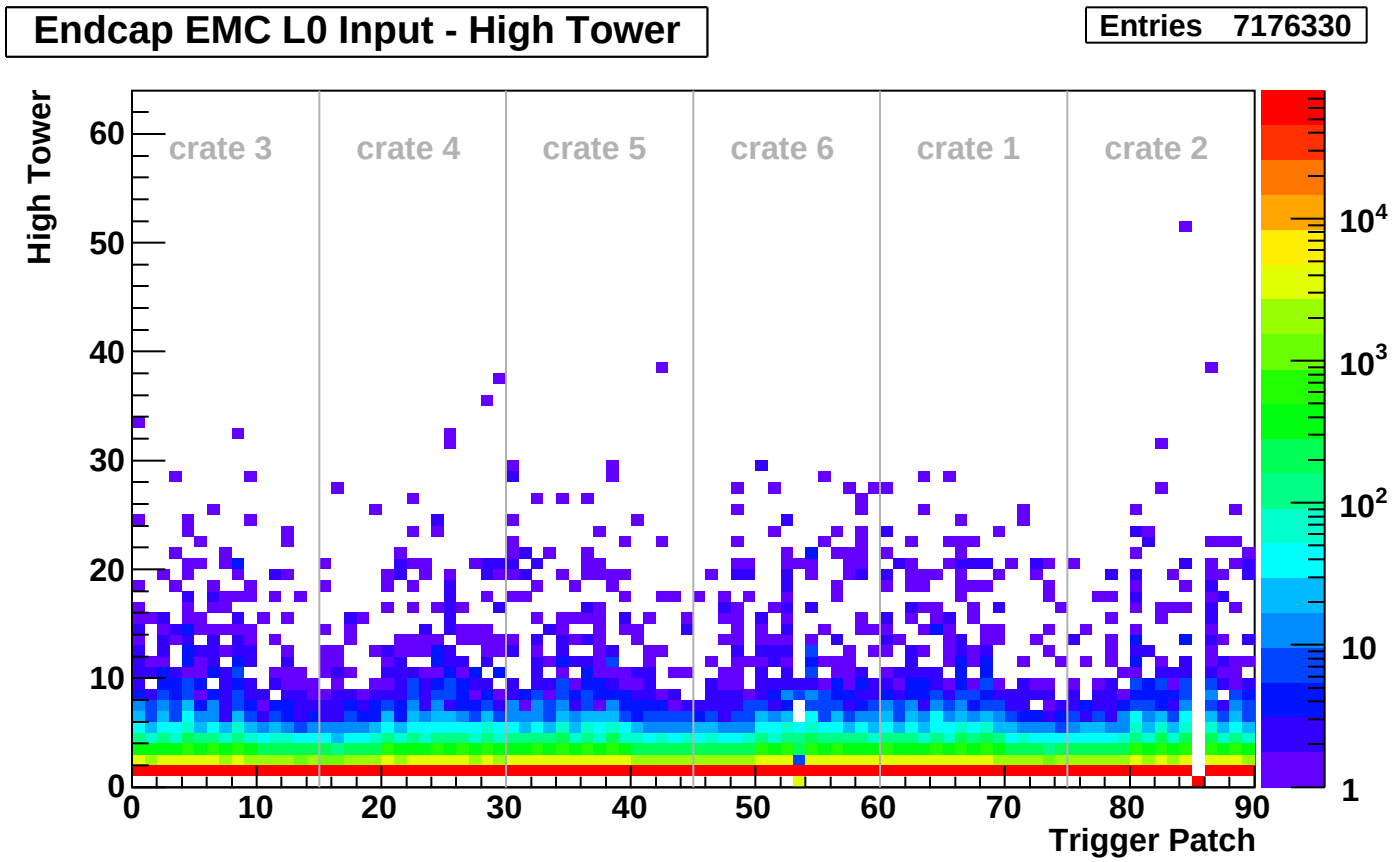

BunchId7Bit (all events)
Entries 79737

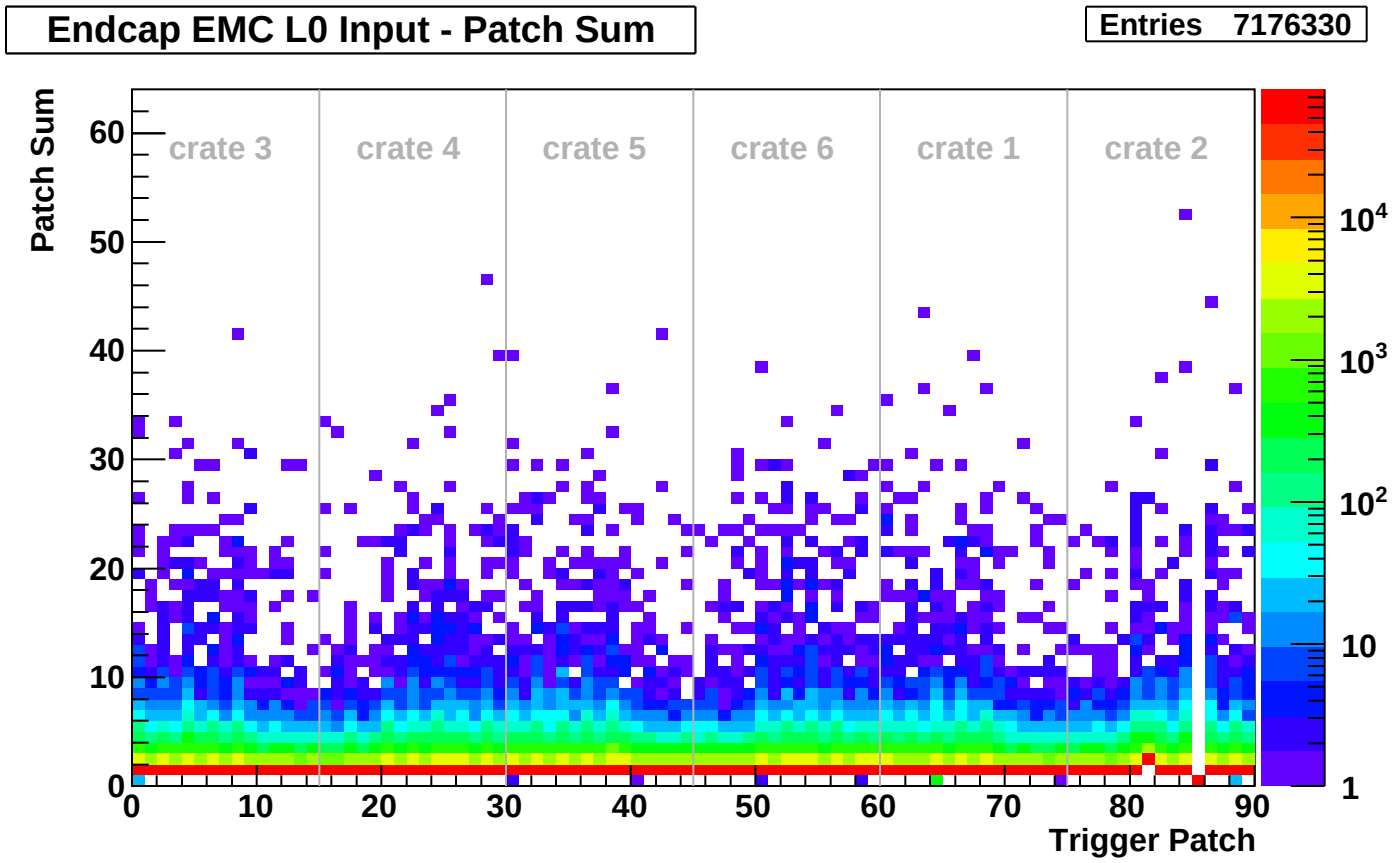

Abort-gaps
Entries 1665

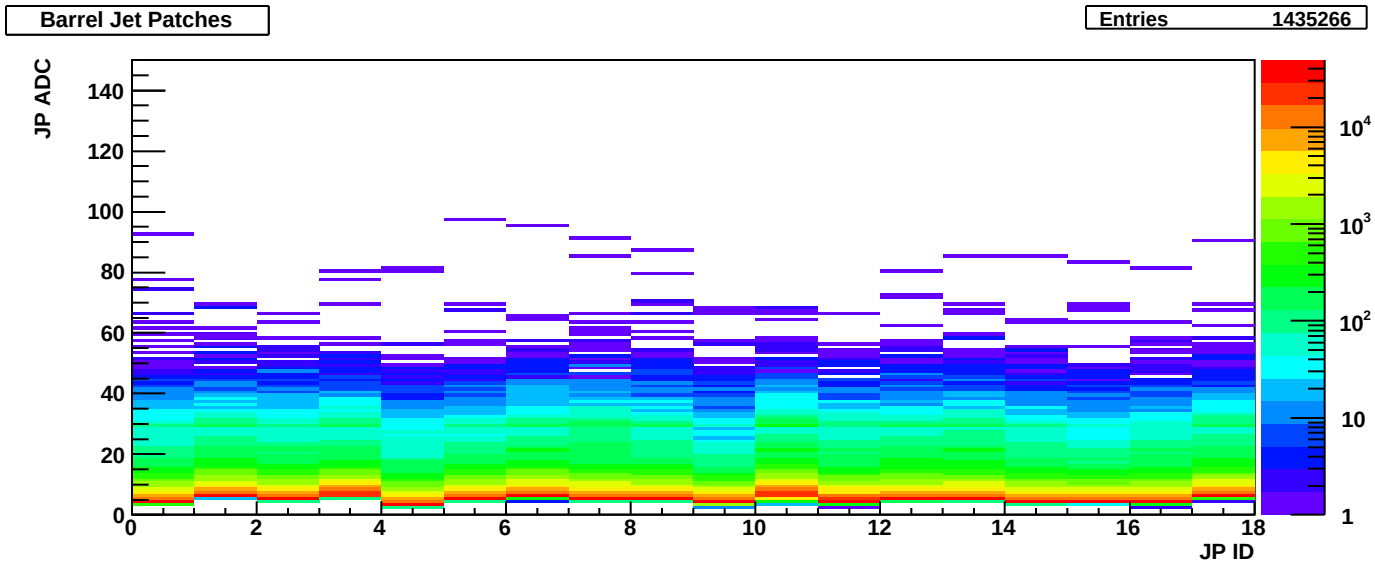

!Yellow-Fill
Entries 2824

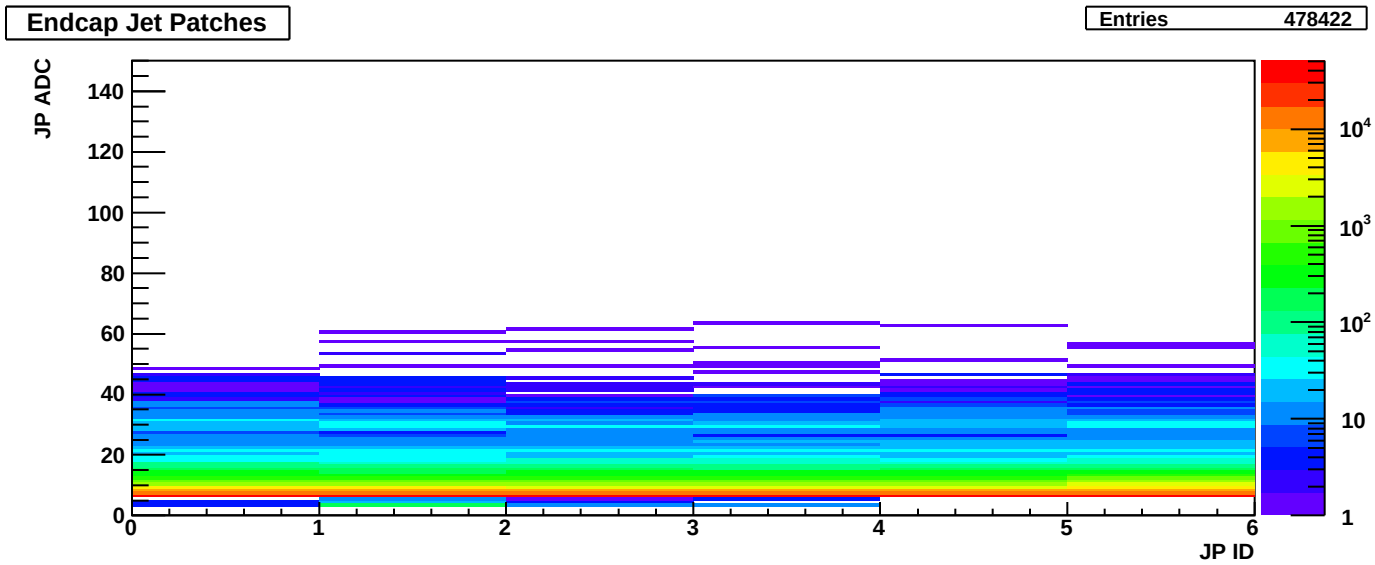

Barrel EMC L0 Input - High Tower
Entries 2.39211e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

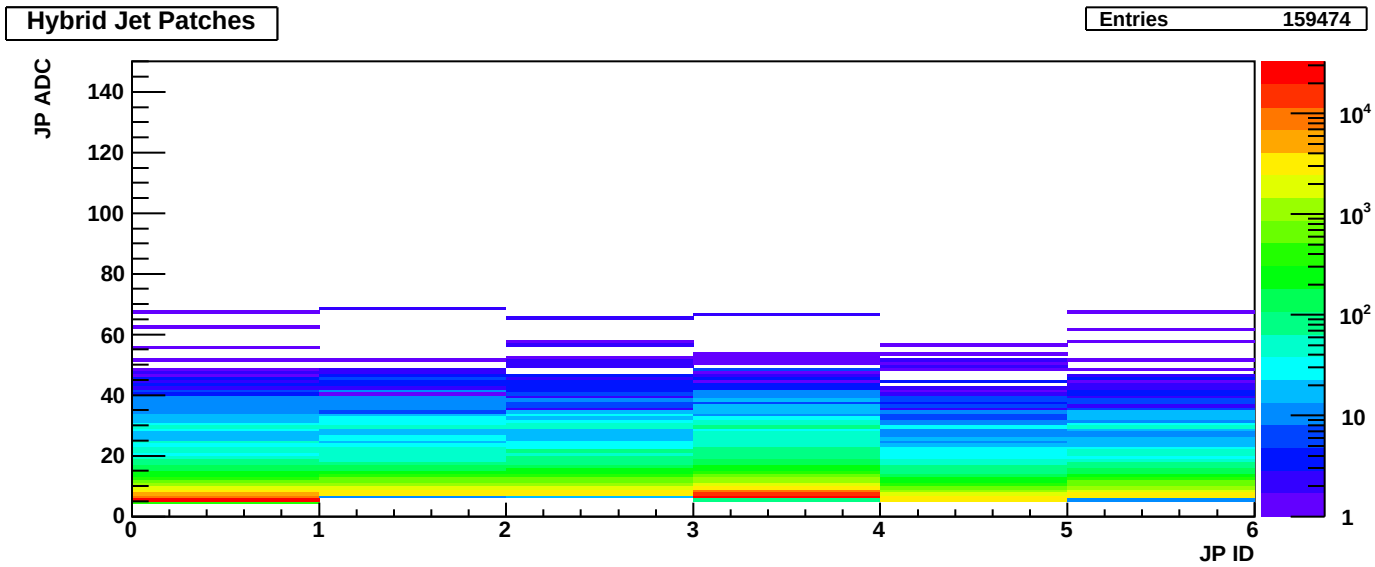

Barrel EMC L0 Input - Patch Sum
Entries 2.39211e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

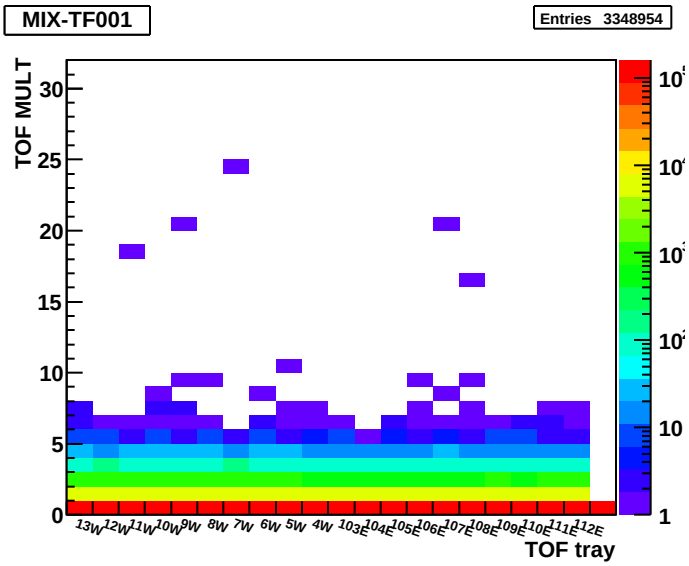

Endcap EMC L0 Input - High Tower
Entries 7176330
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

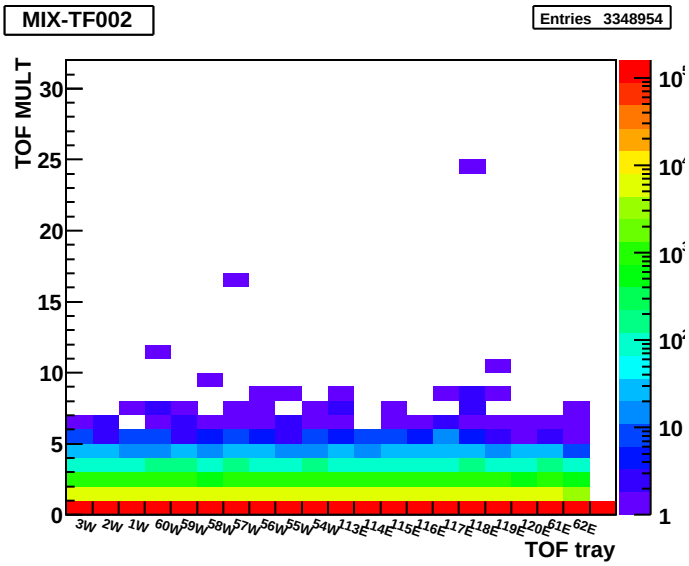

Endcap EMC L0 Input - Patch Sum
Entries 7176330
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

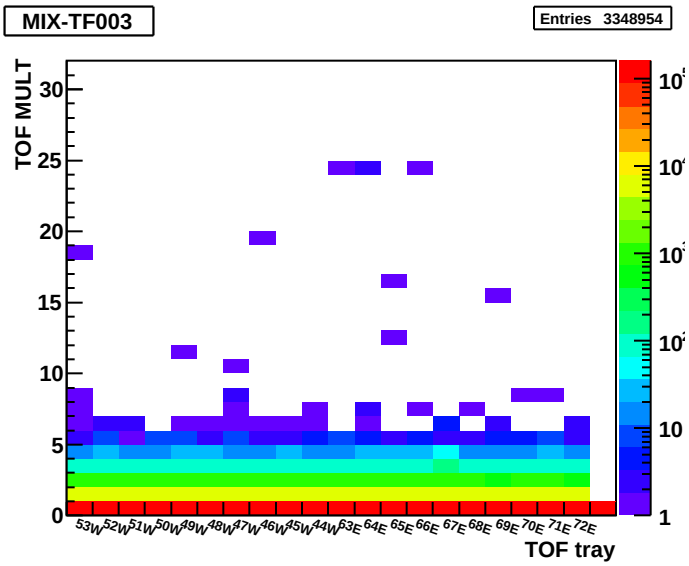

Barrel Jet Patches
Entries 1435266
JP ADC
JP ID

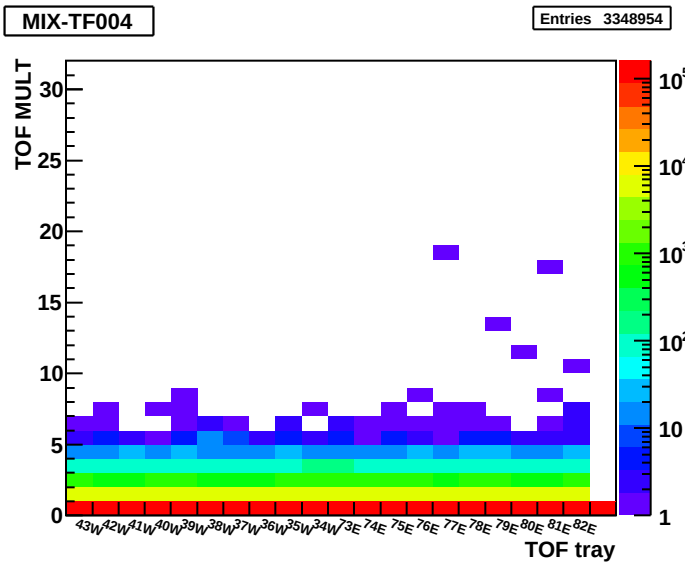

Endcap Jet Patches
Entries 478422
JP ADC
JP ID

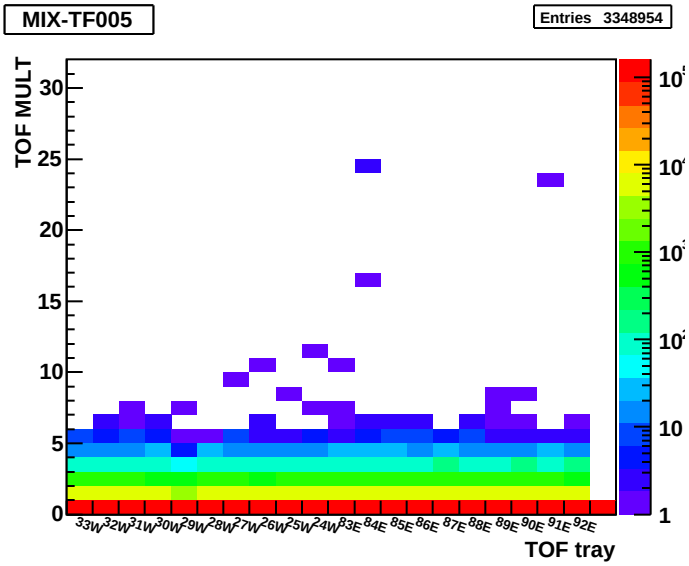

Hybrid Jet Patches
Entries 159474
JP ADC
JP ID

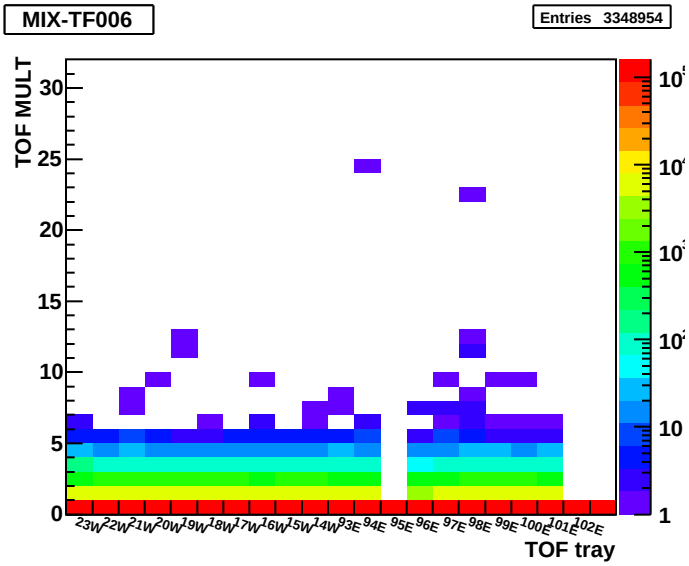

MIX-TF001
Entries 3348954
TOF MULT
TOF tray

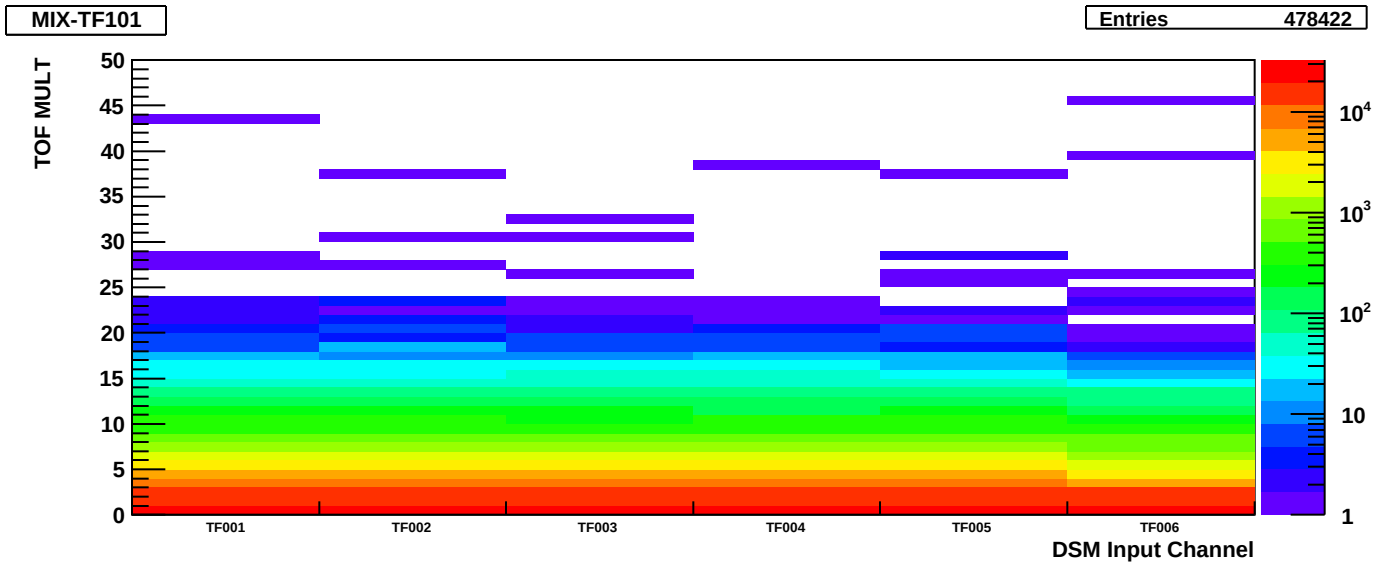

MIX-TF002
Entries 3348954
TOF MULT
TOF tray

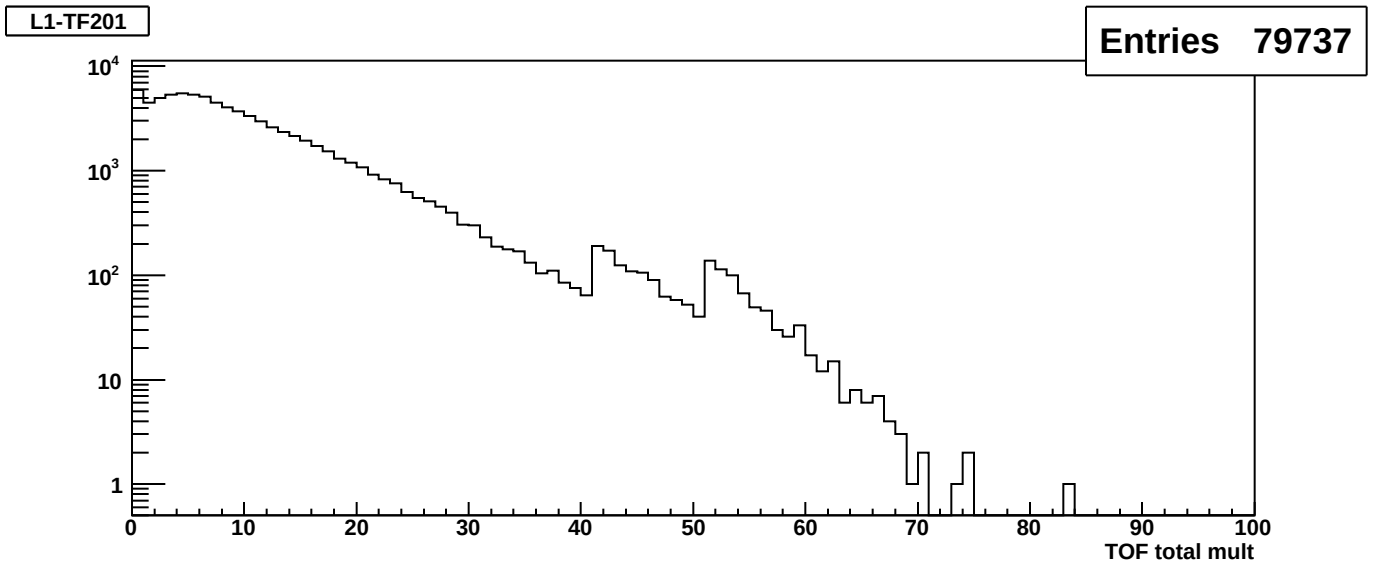

MIX-TF003
Entries 3348954
TOF MULT
TOF tray

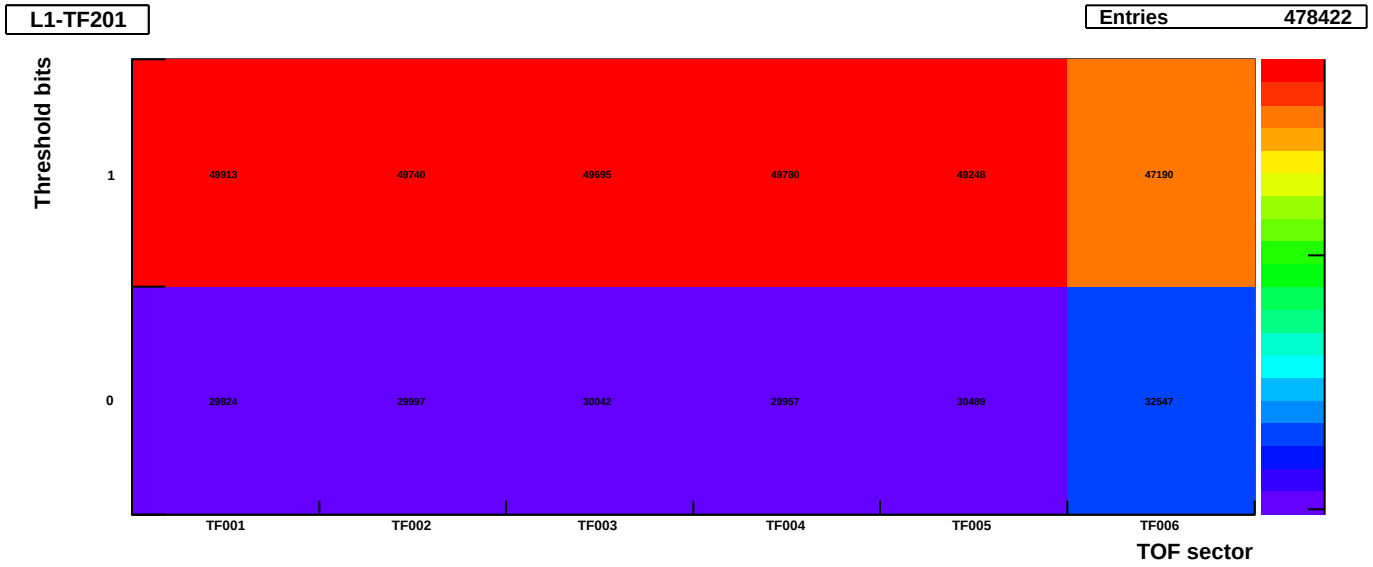

MIX-TF004
Entries 3348954
TOF MULT
TOF tray

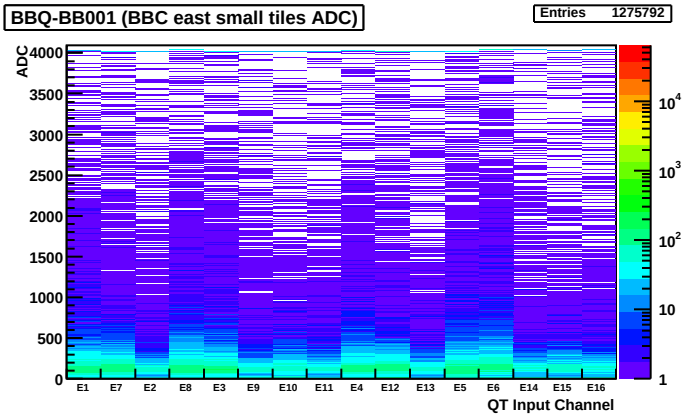

MIX-TF005
Entries 3348954
TOF MULT
TOF tray

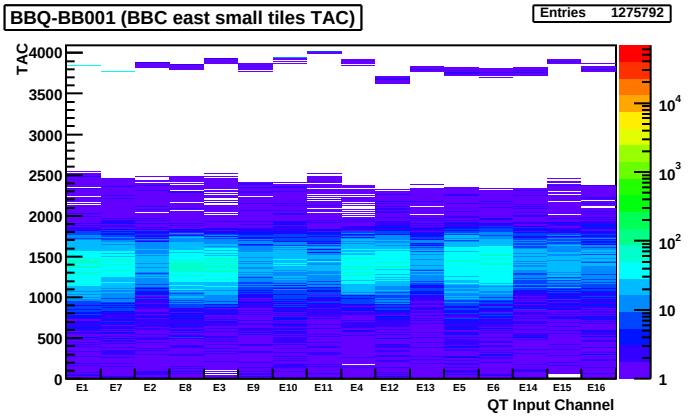

MIX-TF006
Entries 3348954
TOF MULT
TOF tray

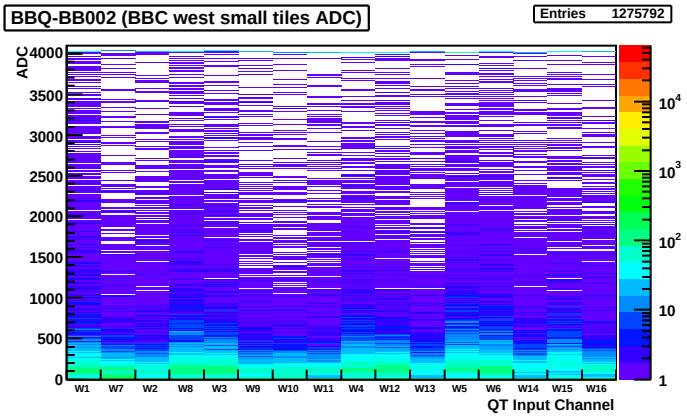

MIX-TF101
Entries 478422
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

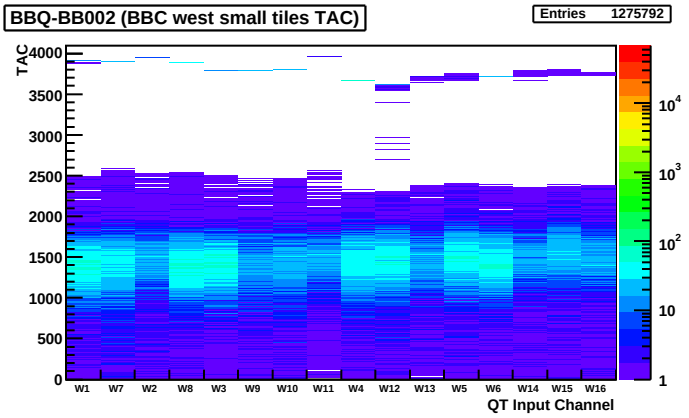

L1-TF201
Entries 79737
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

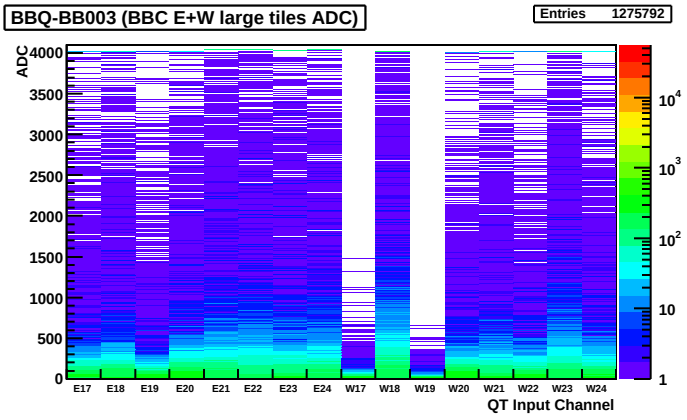

L1-TF201
Entries 478422
Threshold bits
1
0
49913
49740
49695
49780
49248
47190
29824
29997
30042
29957
30489
32547
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

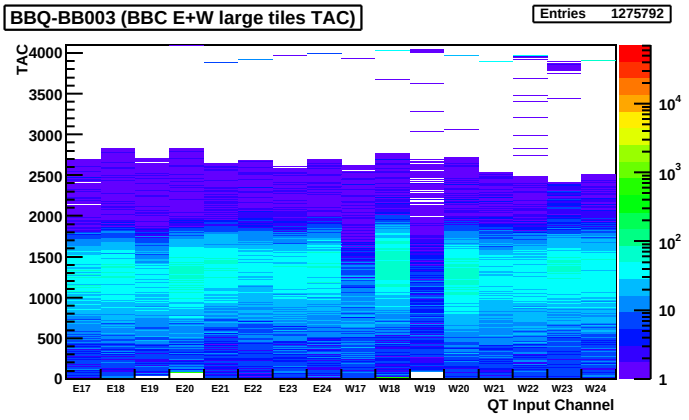

BBQ-BB001 (BBC east small tiles ADC)
Entries 1275792
ADC
QT Input Channel

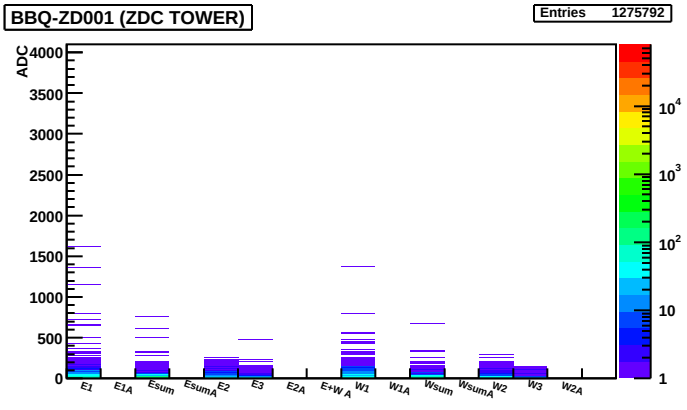

BBQ-BB001 (BBC east small tiles TAC)
Entries 1275792
TAC
QT Input Channel

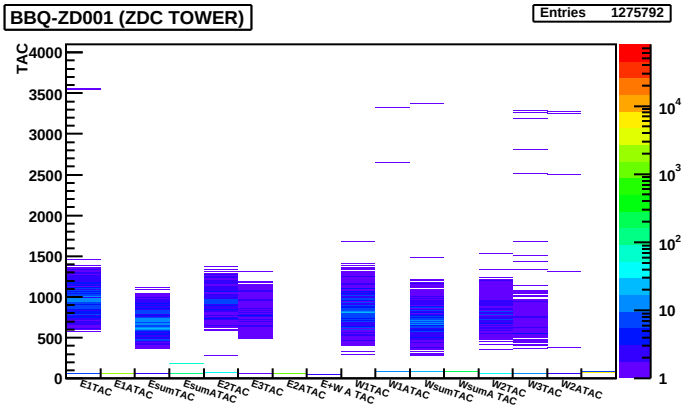

BBQ-BB002 (BBC west small tiles ADC)
Entries 1275792
ADC
QT Input Channel

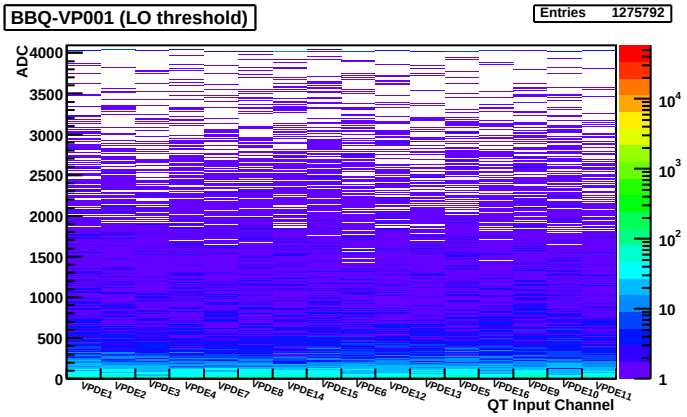

BBQ-BB002 (BBC west small tiles TAC)
Entries 1275792
TAC
QT Input Channel

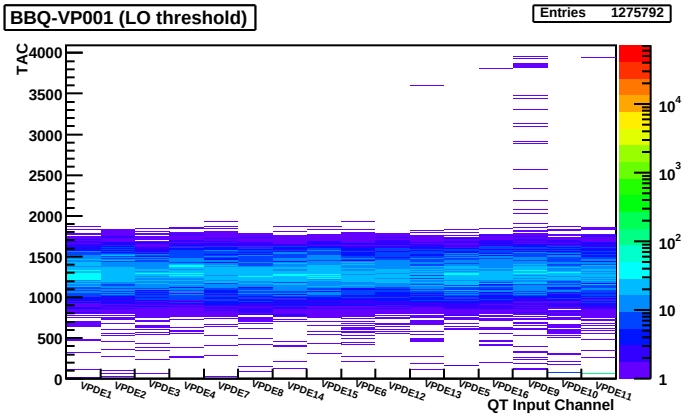

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1275792
ADC
QT Input Channel

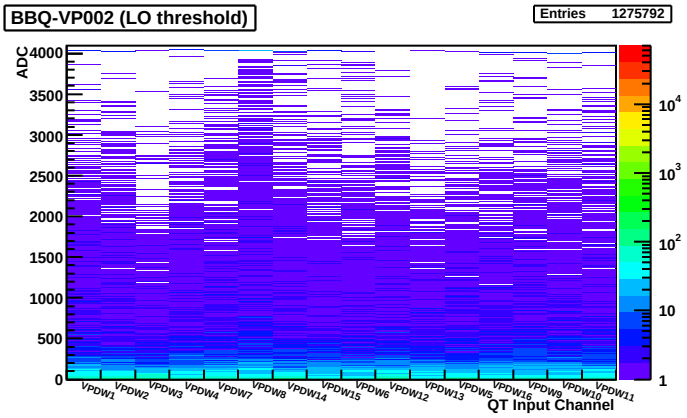

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1275792
TAC
QT Input Channel

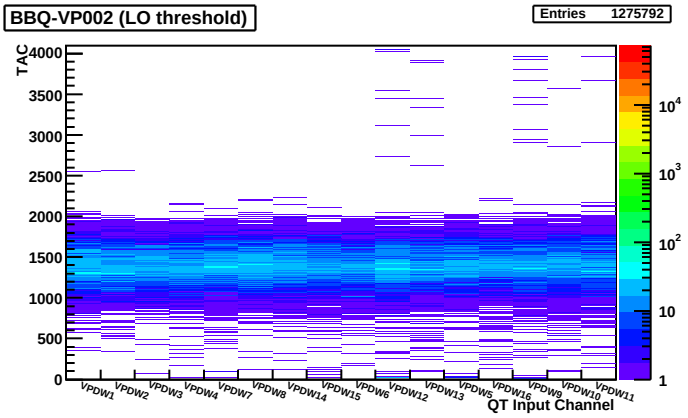

BBQ-ZD001 (ZDC TOWER)
Entries 1275792
ADC

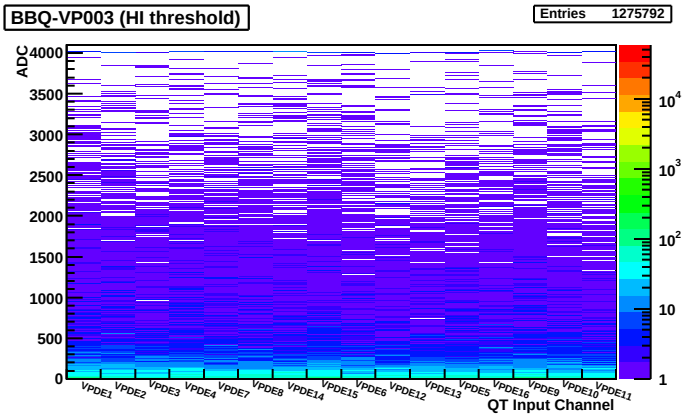

BBQ-ZD001 (ZDC TOWER)
Entries 1275792
TAC

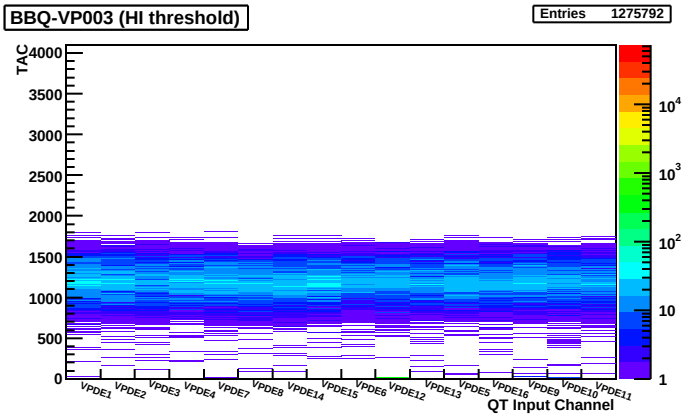

BBQ-VP001 (LO threshold)
Entries 1275792
ADC
QT Input Channel

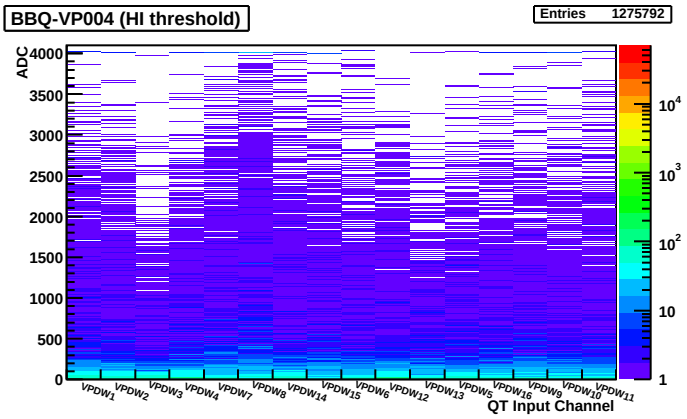

BBQ-VP001 (LO threshold)
Entries 1275792
TAC
QT Input Channel

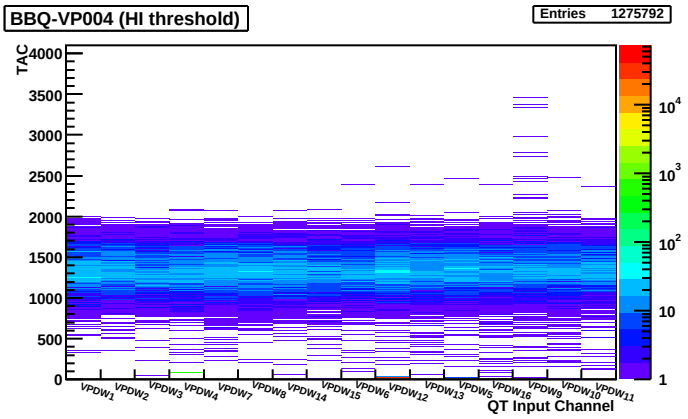

BBQ-VP002 (LO threshold)
Entries 1275792
ADC
QT Input Channel

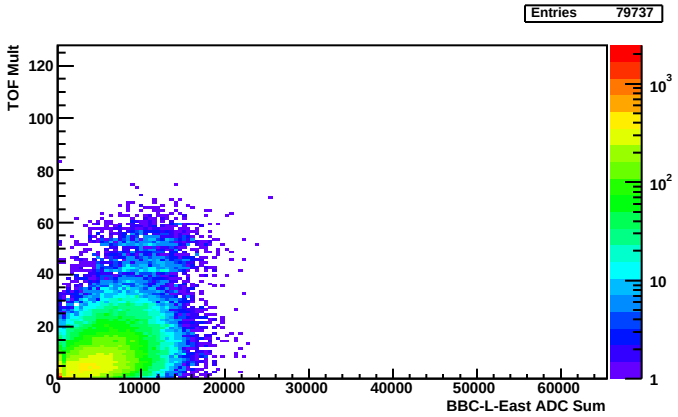

BBQ-VP002 (LO threshold)
Entries 1275792
TAC
QT Input Channel

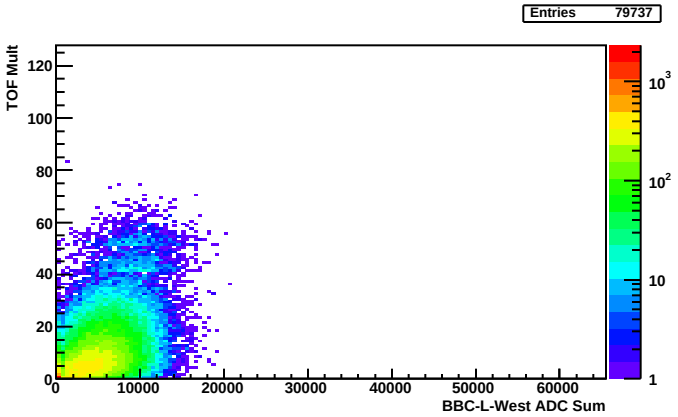

BBQ-VP003 (HI threshold)
Entries 1275792
ADC
QT Input Channel

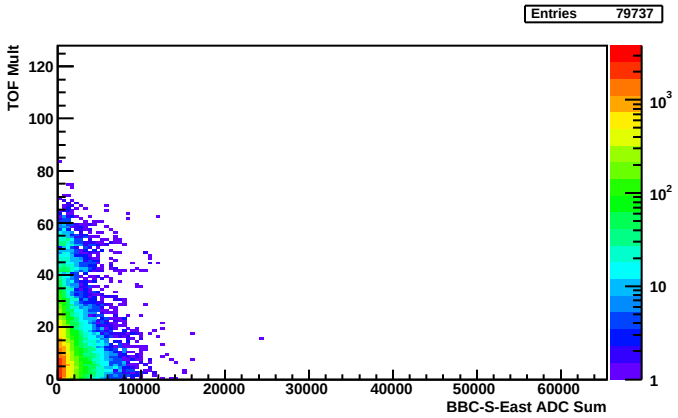

BBQ-VP003 (HI threshold)
Entries 1275792
TAC
QT Input Channel

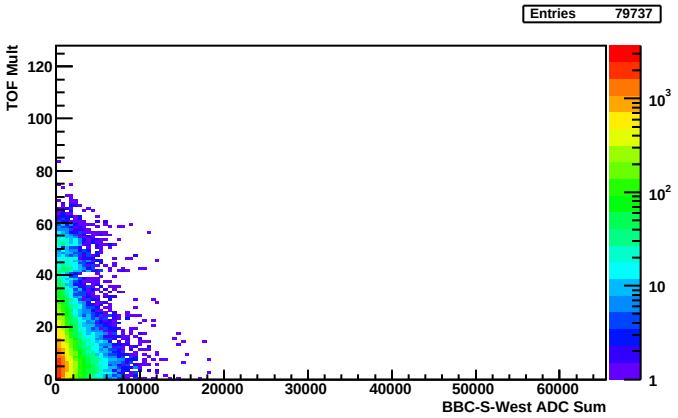

BBQ-VP004 (HI threshold)
Entries 1275792
ADC
QT Input Channel

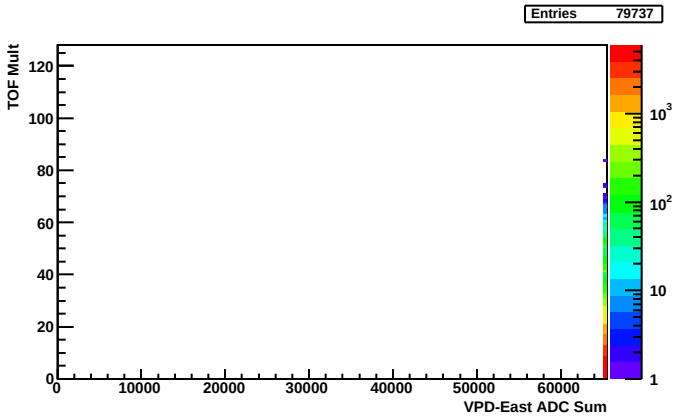

BBQ-VP004 (HI threshold)
Entries 1275792
TAC
QT Input Channel

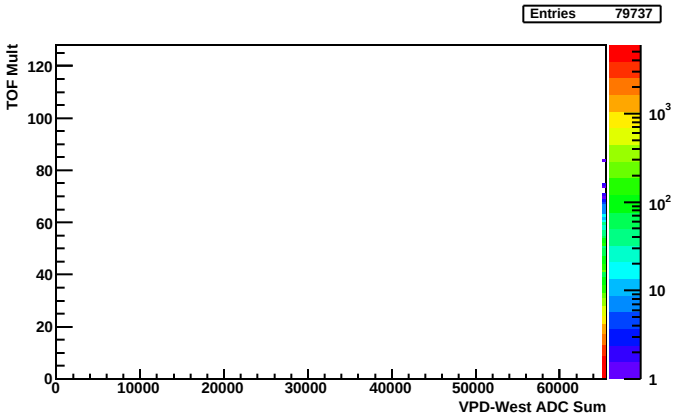

Entries 79737
TOF Mult
BBC-L-East ADC Sum

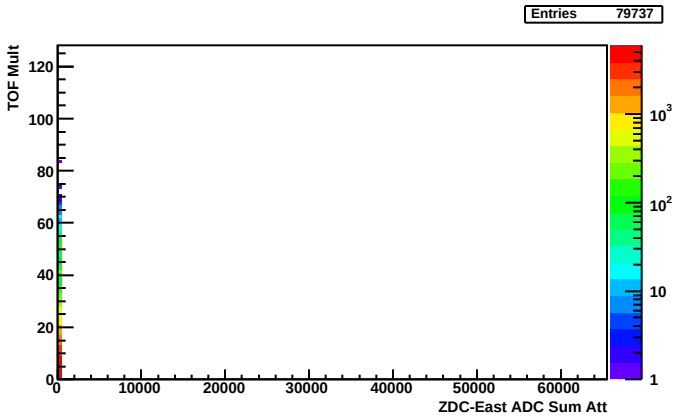

Entries 79737
TOF Mult
BBC-L-West ADC Sum

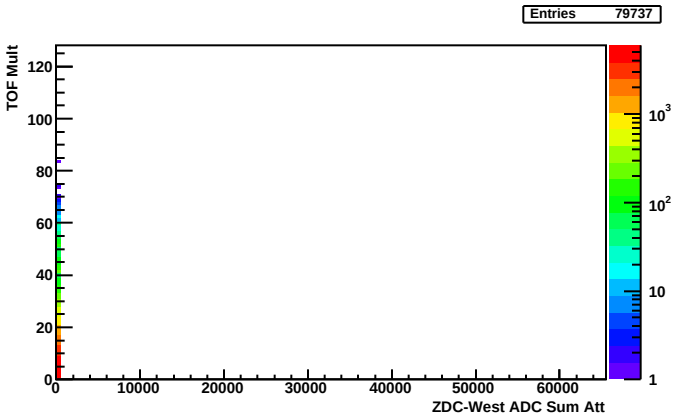

Entries 79737
TOF Mult
BBC-S-East ADC Sum

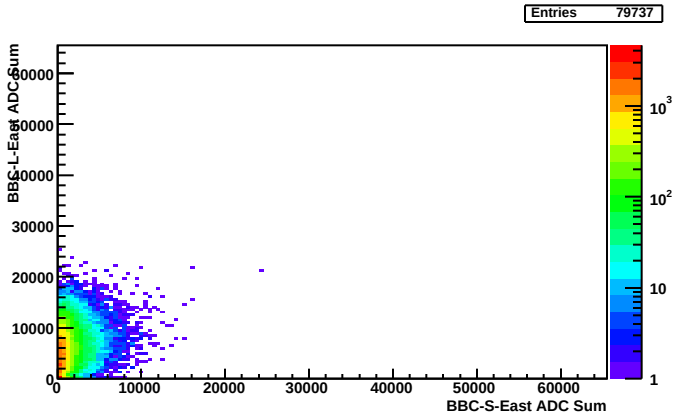

Entries 79737
TOF Mult
BBC-S-West ADC Sum

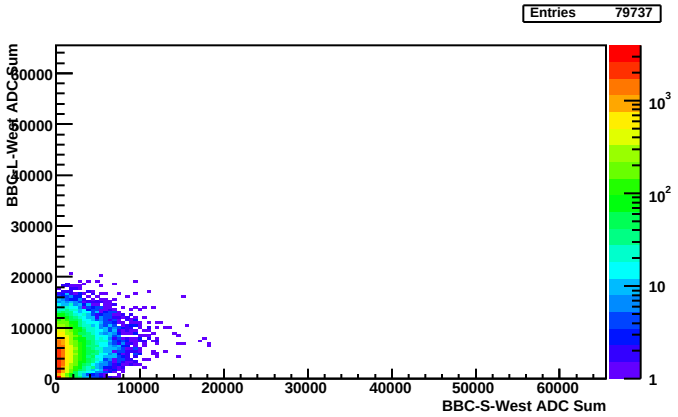

Entries 79737
TOF Mult
VPD-East ADC Sum

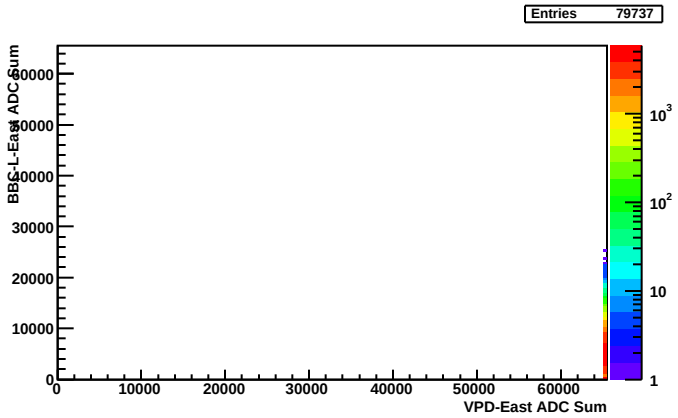

Entries 79737
TOF Mult
VPD-West ADC Sum

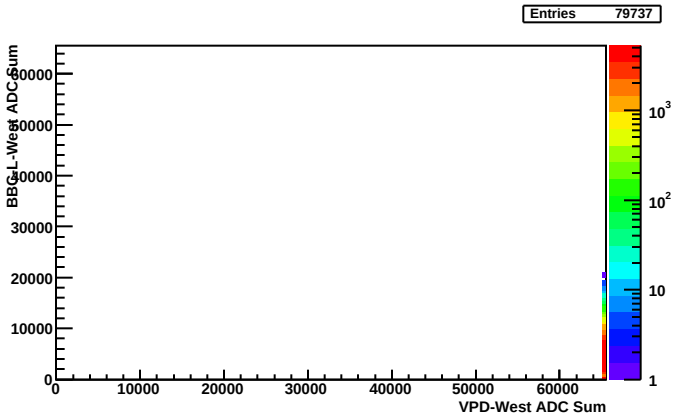

Entries 79737
TOF Mult
ZDC-East ADC Sum Att

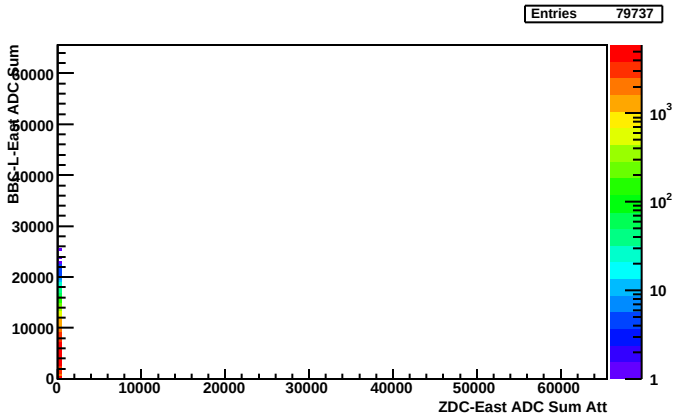

Entries 79737
TOF Mult
ZDC-West ADC Sum Att

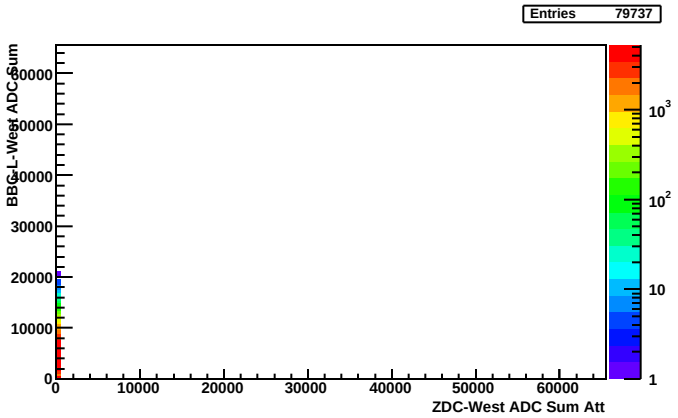

Entries 79737
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 79737
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 79737
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 79737
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 79737
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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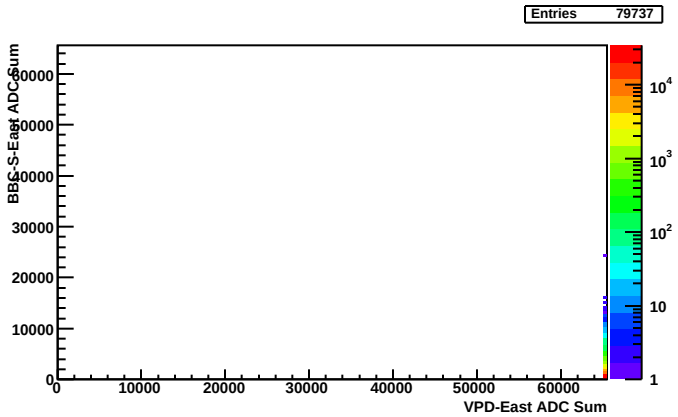
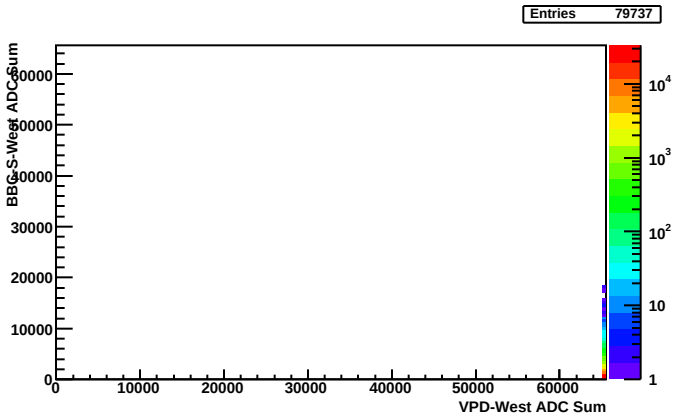
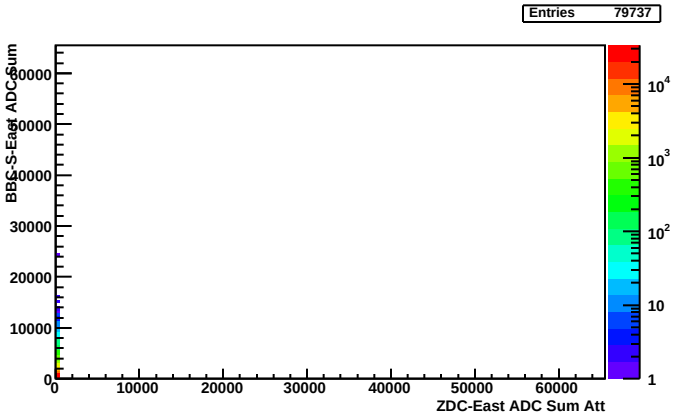
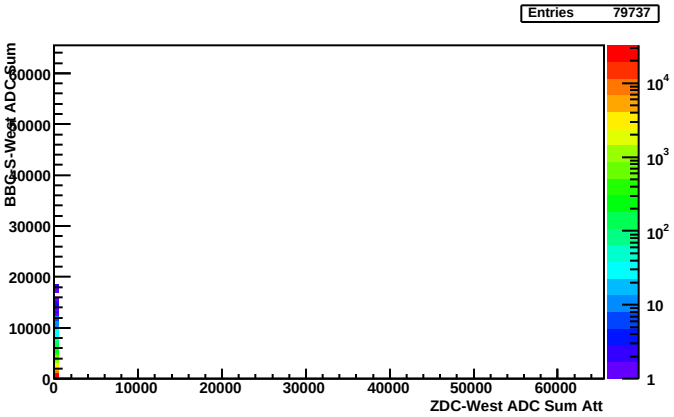
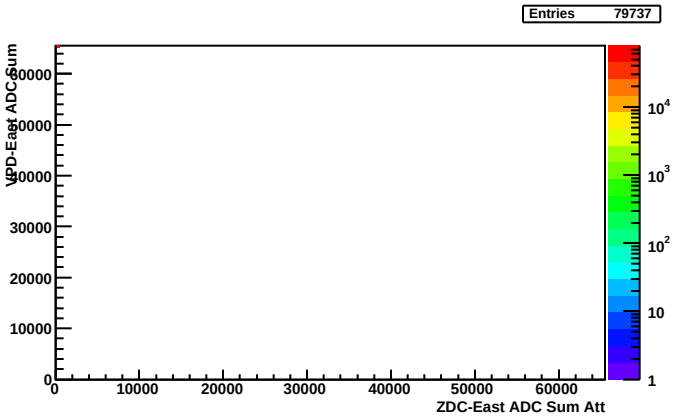
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

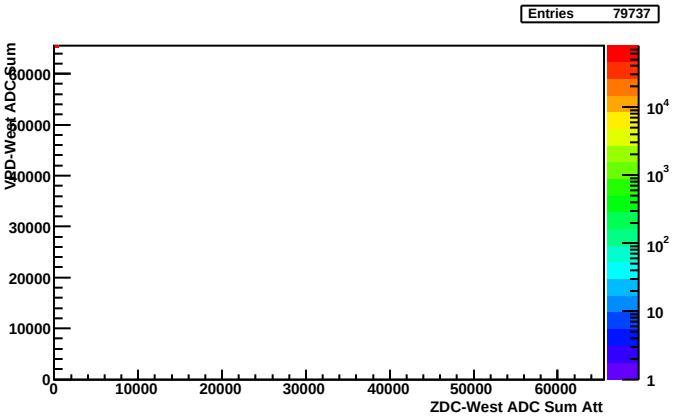

Entries 79737
BBC-S-East ADC Sum
VPD-East ADC Sum

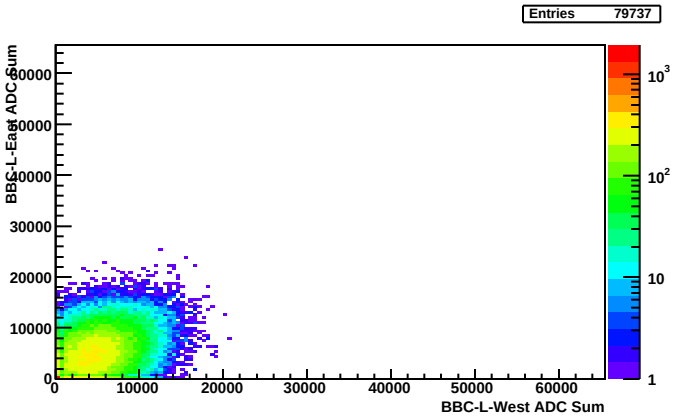

Entries 79737
BBC-S-West ADC Sum
VPD-West ADC Sum

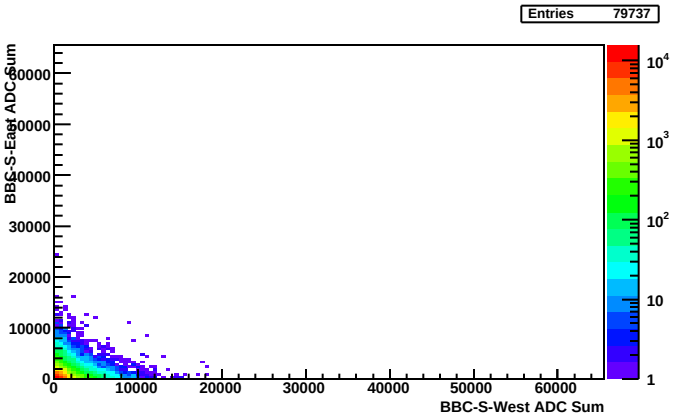

Entries 79737
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

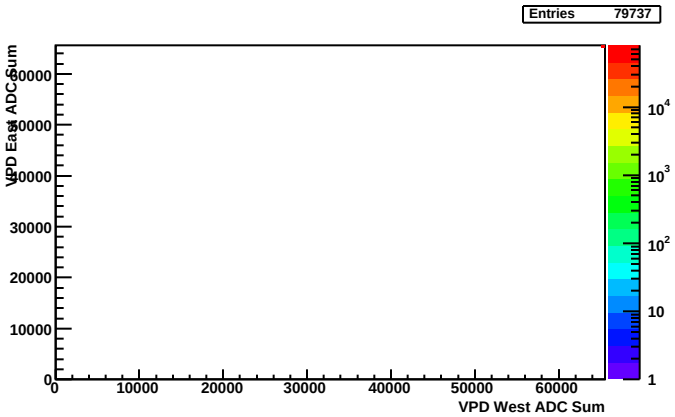

Entries 79737
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

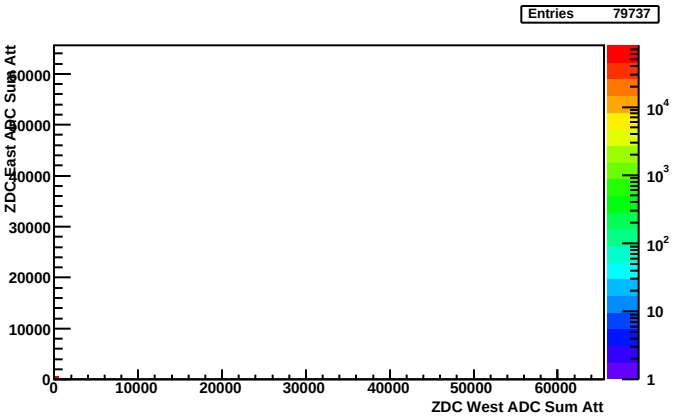

Entries 79737
VPD-East ADC Sum
ZDC-East ADC Sum Att

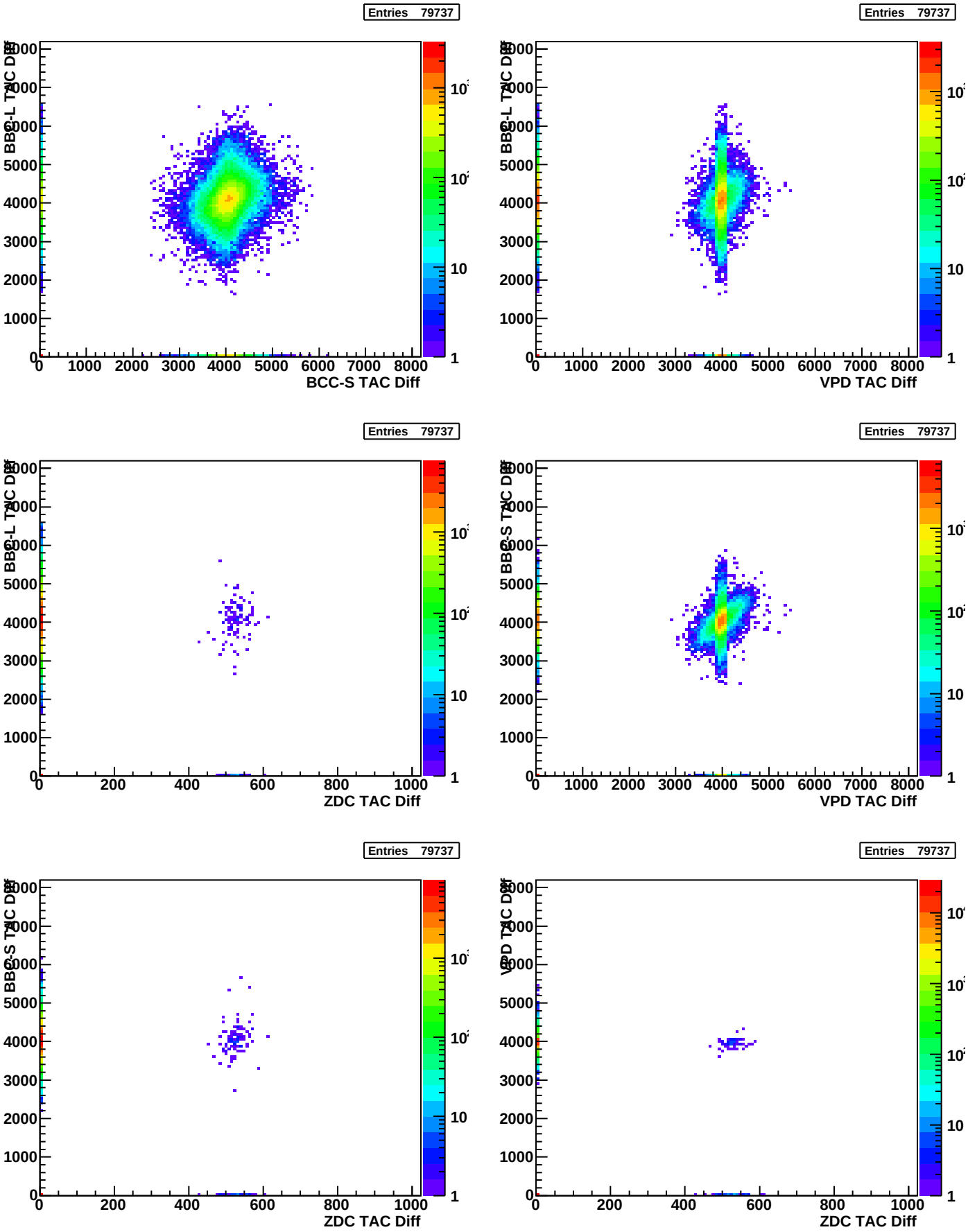

Entries 79737
VPD-West ADC Sum
ZDC-West ADC Sum Att

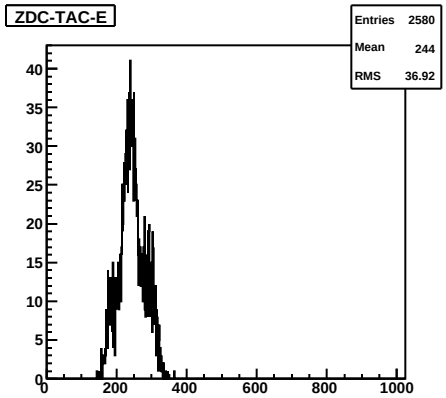

Entries 79737
BBC-L-East ADC Sum
BBC-L-West ADC Sum

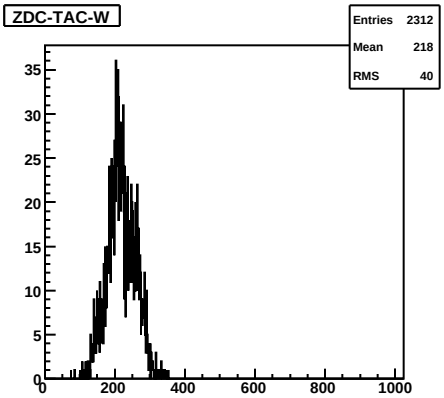

Entries 79737
BBC-S-East ADC Sum
BBC-S-West ADC Sum

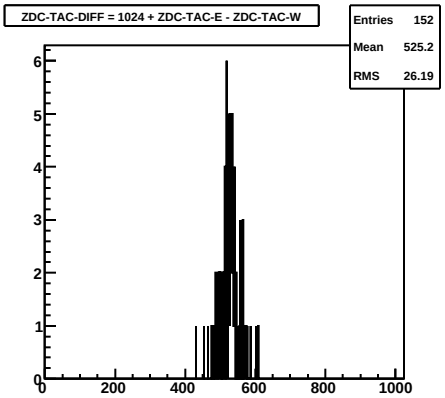

Entries 79737
VPD East ADC Sum
VPD West ADC Sum

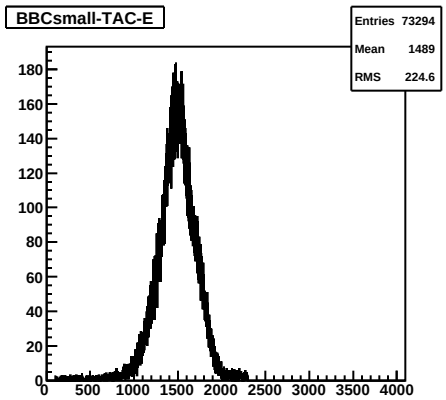

Entries 79737
ZDC East ADC Sum Att
ZDC West ADC Sum Att

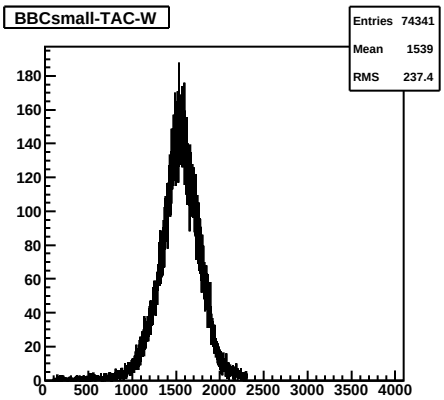

Entries 79737
BBC-L TAC Diff
BCC-S TAC Diff
Entries 79737
BBC-L TAC Diff
VPD TAC Diff
Entries 79737
BBC-L TAC Diff
ZDC TAC Diff
Entries 79737
BBC-S TAC Diff
VPD TAC Diff
Entries 79737
BBC-S TAC Diff
ZDC TAC Diff
Entries 79737
VPD TAC Diff
ZDC TAC Diff

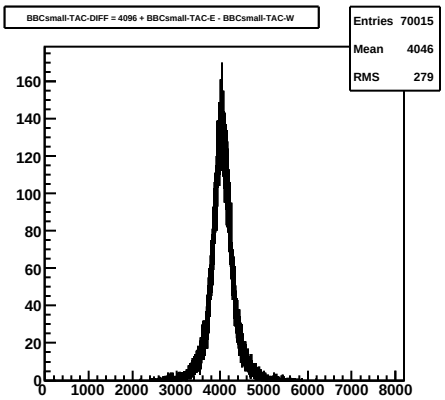

ZDC-TAC-E
Entries 2580
Mean 244
RMS 36.92

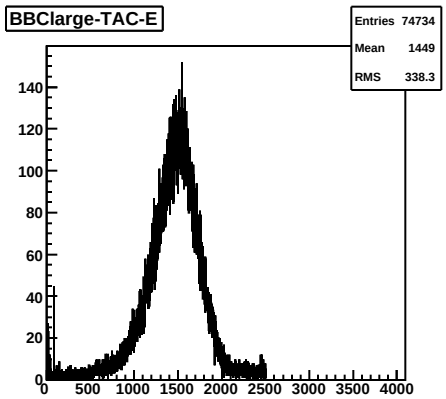

ZDC-TAC-W
Entries 2312
Mean 218
RMS 40

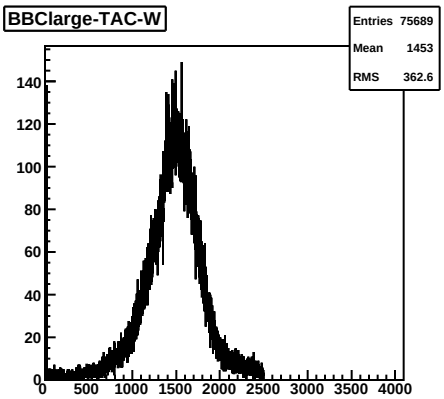

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 152
Mean 525.2
RMS 26.19

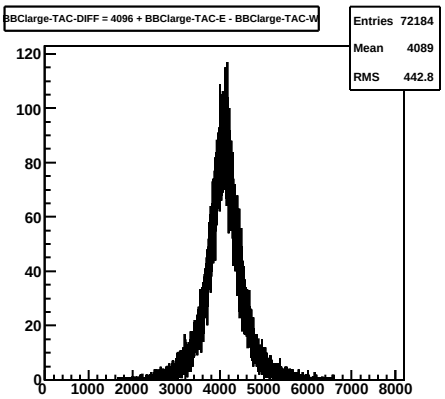

BBCsmall-TAC-E
Entries 73294
Mean 1489
RMS 224.6

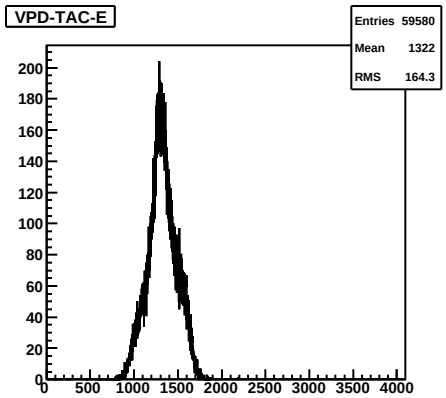

BBCsmall-TAC-W
Entries 74341
Mean 1539
RMS 237.4

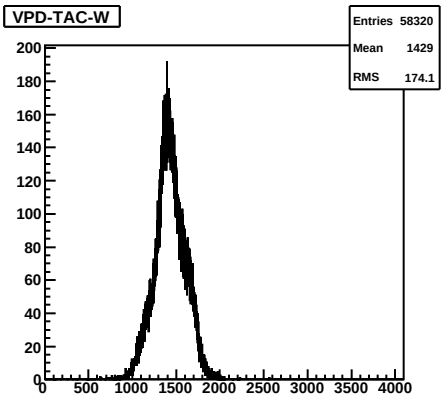

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 70015
Mean 4046
RMS 279

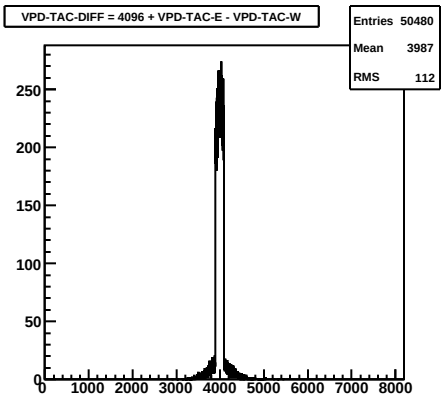

BBClarge-TAC-E
Entries 74734
Mean 1449
RMS 338.3

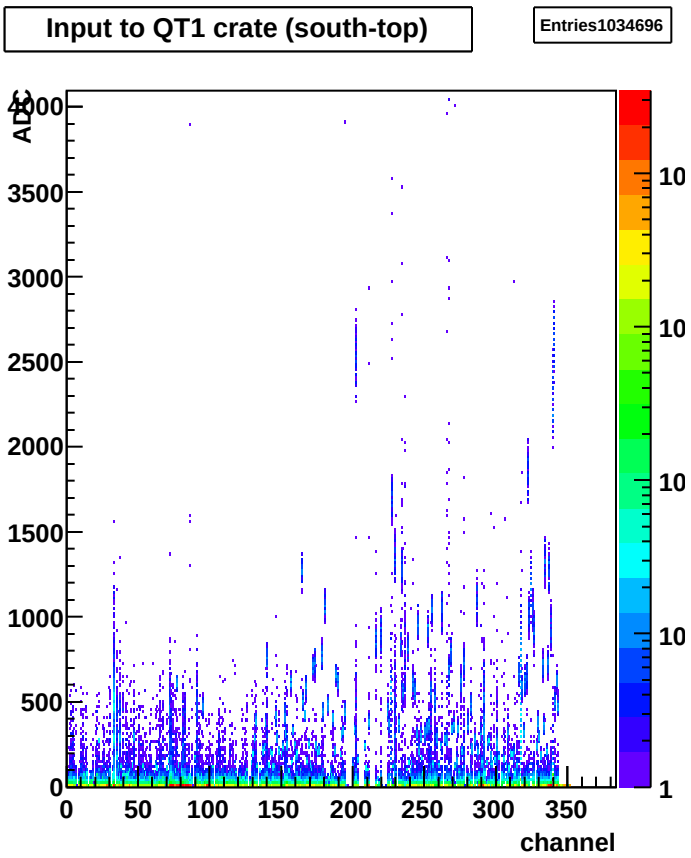

BBClarge-TAC-W
Entries 75689
Mean 1453
RMS 362.6

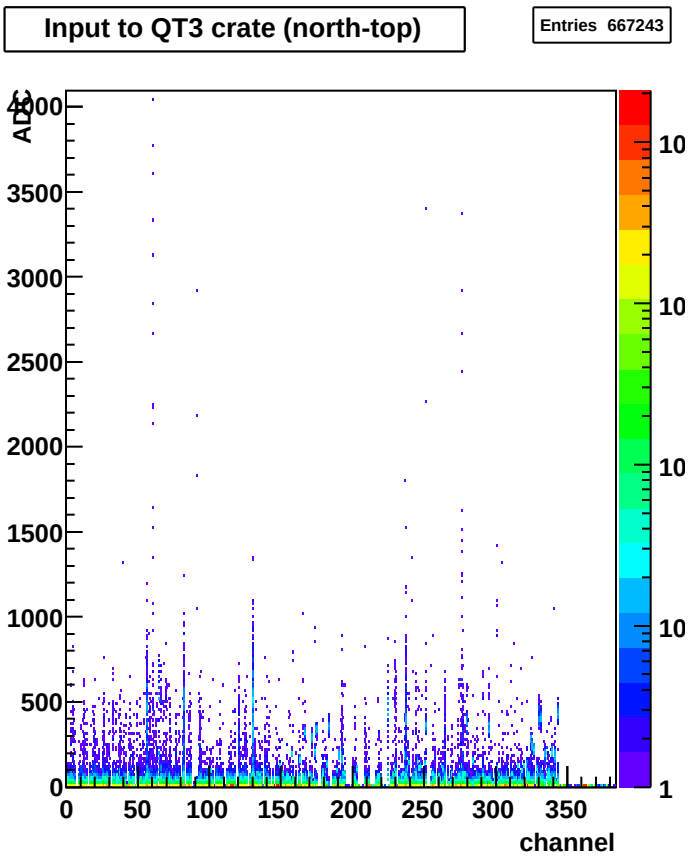

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 72184
Mean 4089
RMS 442.8

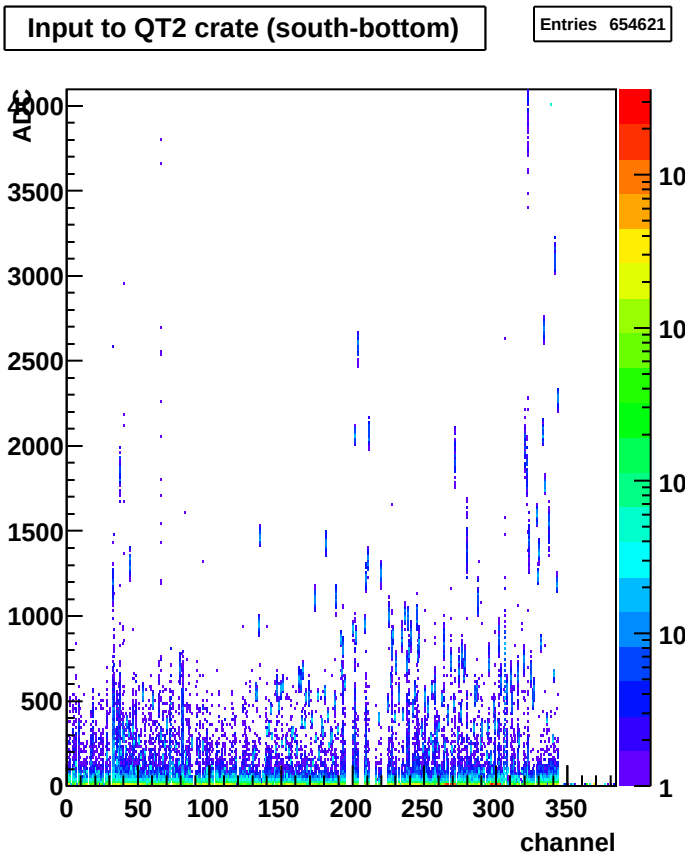

VPD-TAC-E
Entries 59580
Mean 1322
RMS 164.3

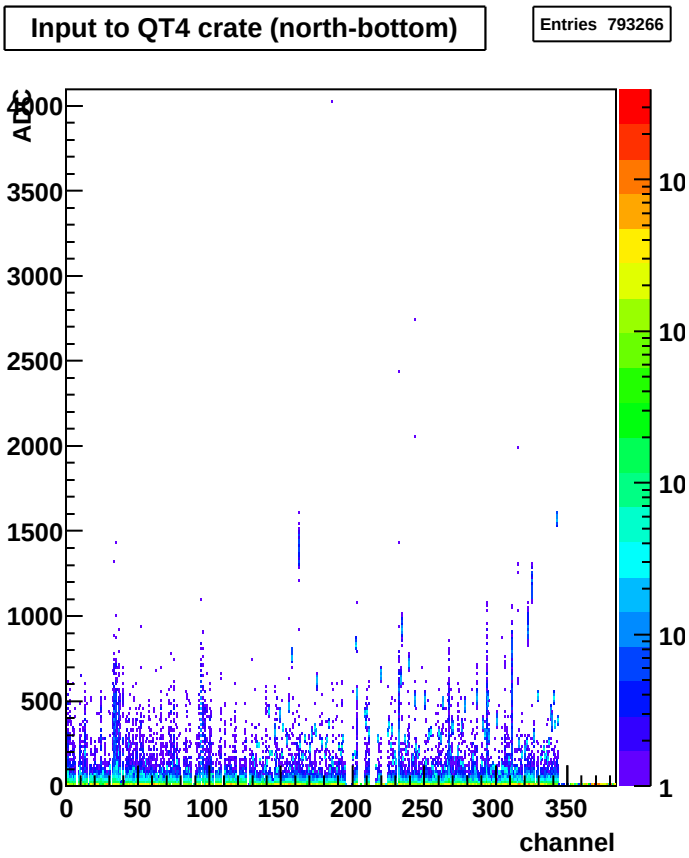

VPD-TAC-W
Entries 58320
Mean 1429
RMS 174.1

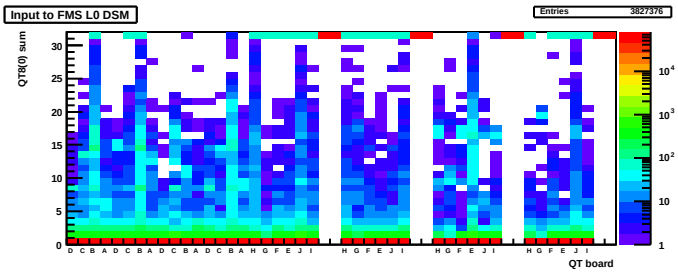

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 50480
Mean 3987
RMS 112

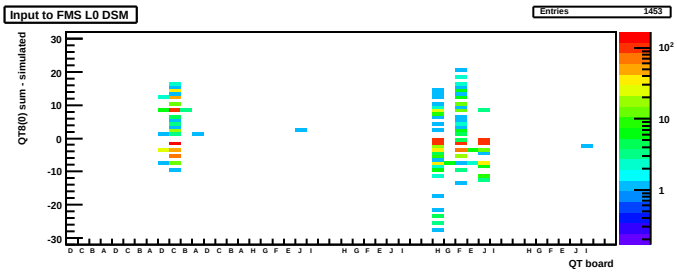

Input to QT1 crate (south-top)
Entries1034696
ADC
channel

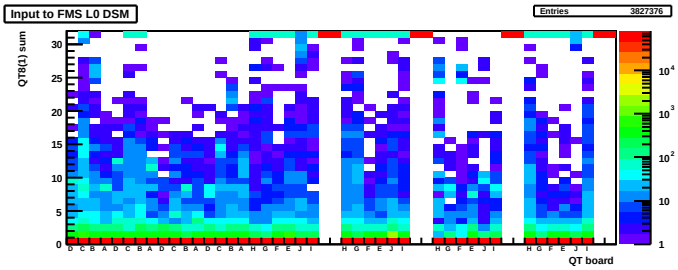

Input to QT3 crate (north-top)
Entries 667243
ADC
channel

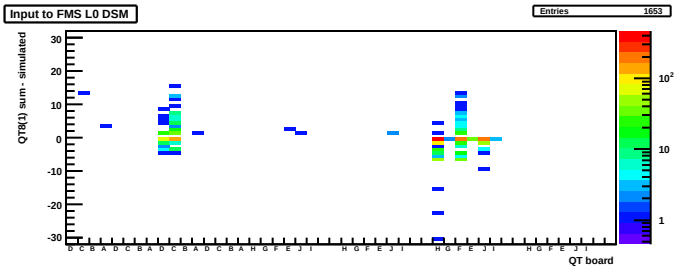

Input to QT2 crate (south-bottom)
Entries 654621
ADC
channel

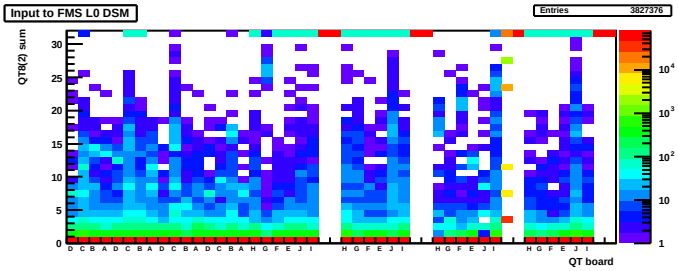

Input to QT4 crate (north-bottom)
Entries 793266
ADC
channel

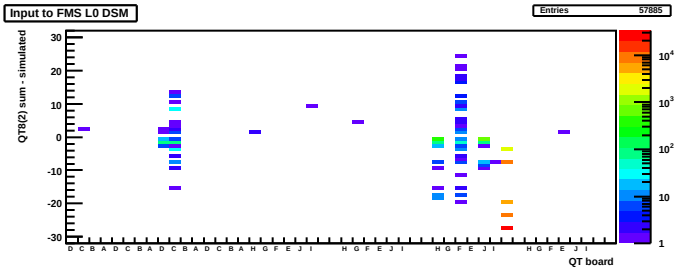

Input to FMS L0 DSM
Entries 3827376
QT8(0) sum
QT board

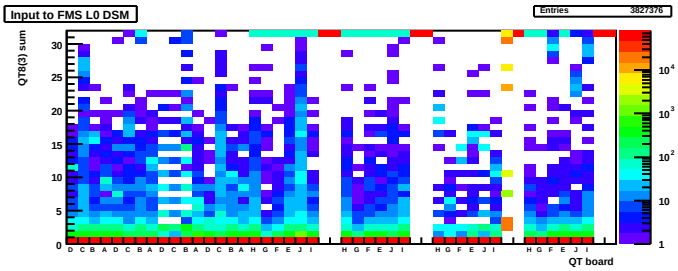

Input to FMS L0 DSM
Entries 1453
QT8(0) sum - simulated
QT board

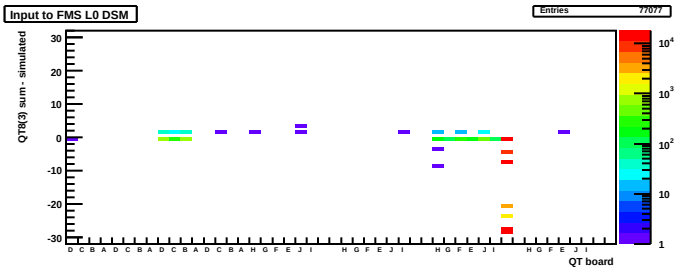

Input to FMS L0 DSM
Entries 3827376
QT8(1) sum
QT board

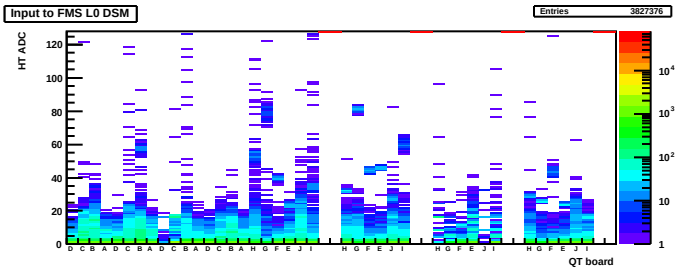

Input to FMS L0 DSM
Entries 1653
QT8(1) sum - simulated
QT board

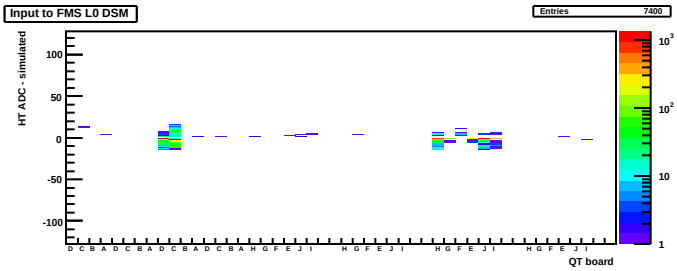

Input to FMS L0 DSM
Entries 3827376
QT8(2) sum
QT board

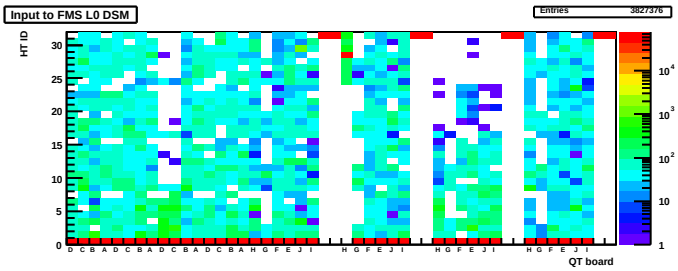

Input to FMS L0 DSM
Entries 57885
QT8(2) sum - simulated
QT board

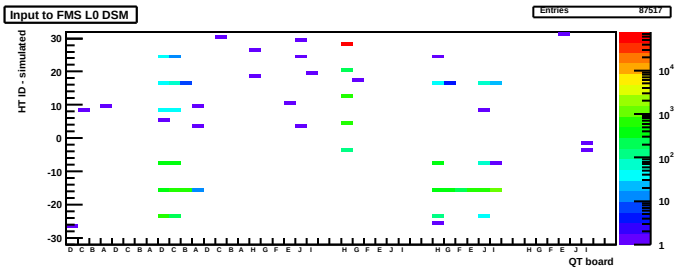

Input to FMS L0 DSM
Entries 3827376
QT8(3) sum
QT board

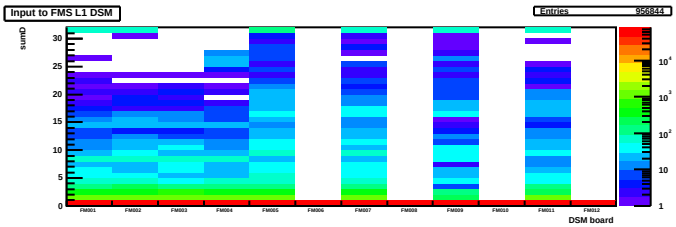

Input to FMS L0 DSM
Entries 77077
QT8(3) sum - simulated
QT board

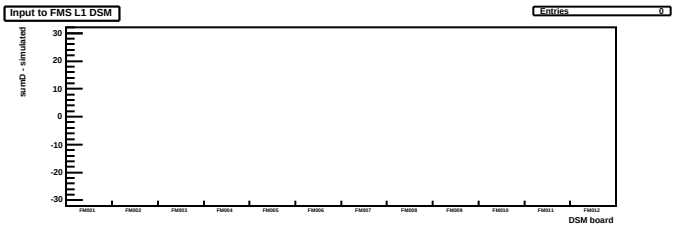

Input to FMS L0 DSM
Entries 3827376
HT ADC
QT board

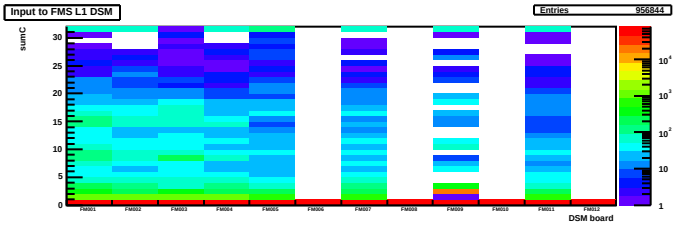

Input to FMS L0 DSM
Entries 7400
HT ADC - simulated
QT board

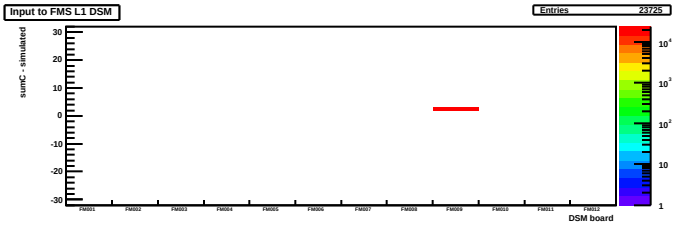

Input to FMS L0 DSM
Entries 3827376
HT ID
QT board

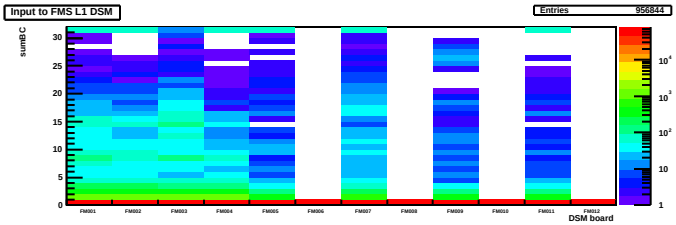

Input to FMS L0 DSM
Entries 87517
HT ID - simulated
QT board

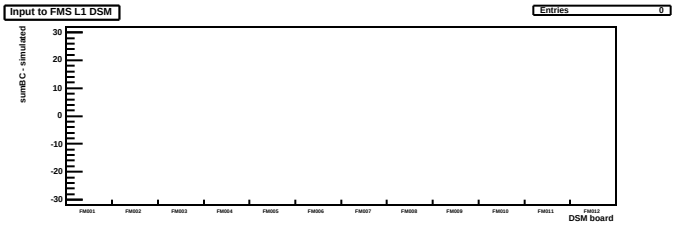

Input to FMS L1 DSM
Entries 956844
sumD
DSM board

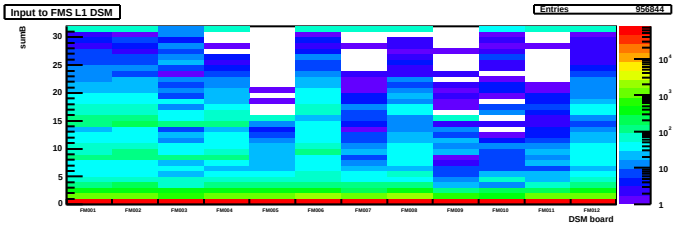

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

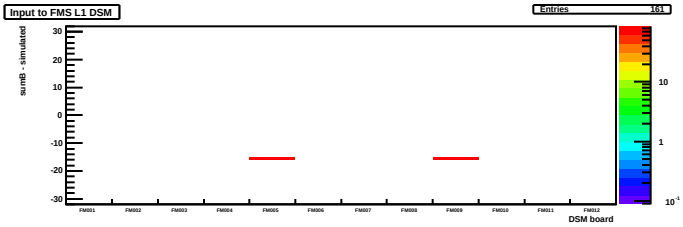

Input to FMS L1 DSM
Entries 956844
sumC
DSM board

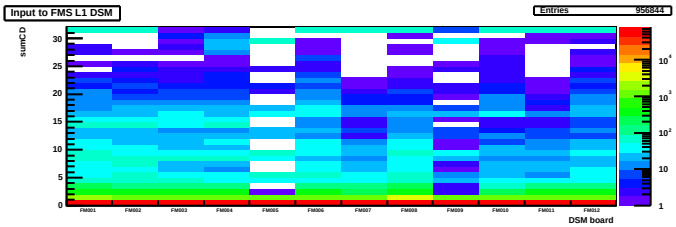

Input to FMS L1 DSM
Entries 23725
sumC - simulated
DSM board

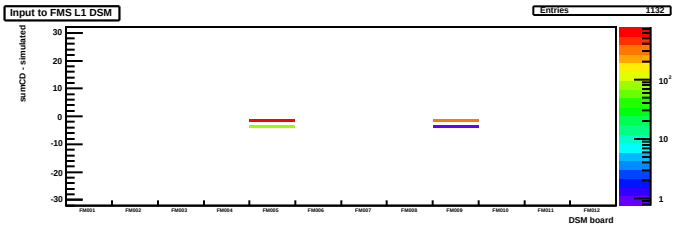

Input to FMS L1 DSM
Entries 956844
sumBC
DSM board

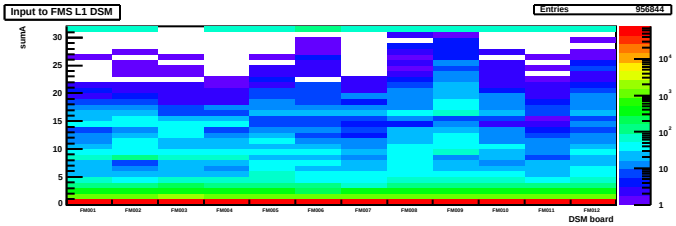

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

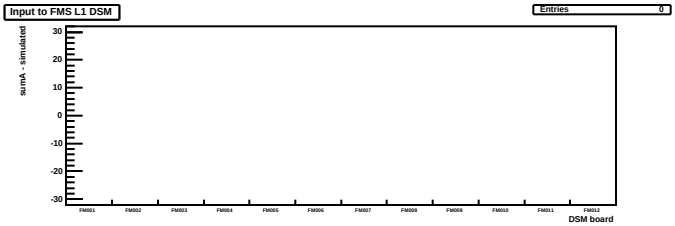

Input to FMS L1 DSM
Entries 956844
sumB
DSM board

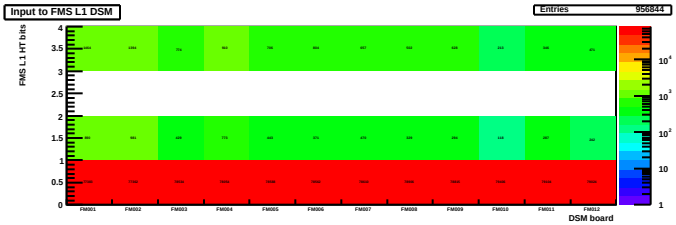

Input to FMS L1 DSM
Entries 161
sumB - simulated
DSM board

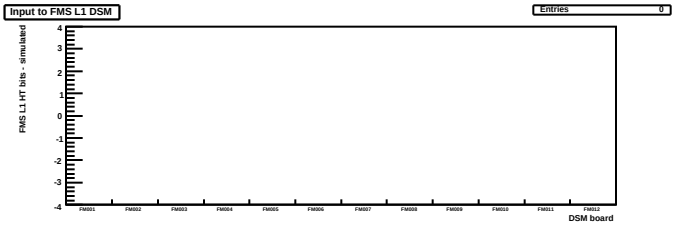

Input to FMS L1 DSM
Entries 956844
sumCD
DSM board

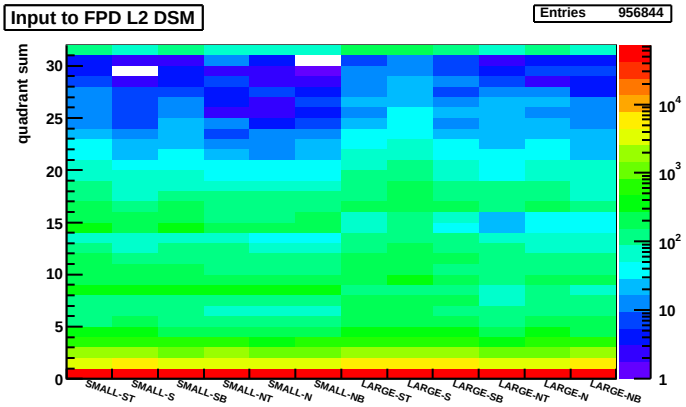

Input to FMS L1 DSM
Entries 1132
sumCD - simulated
DSM board

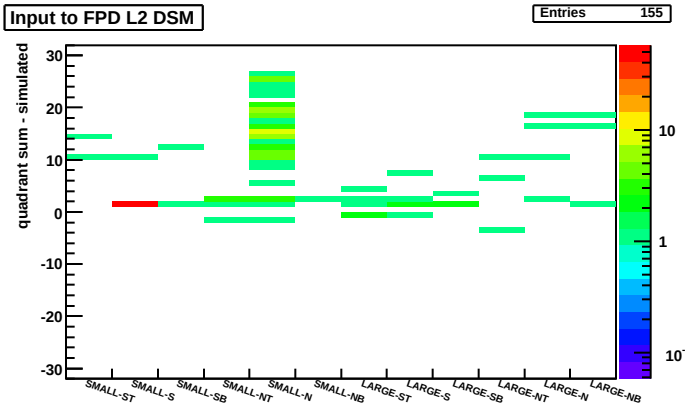

Input to FMS L1 DSM
Entries 956844
sumA
DSM board

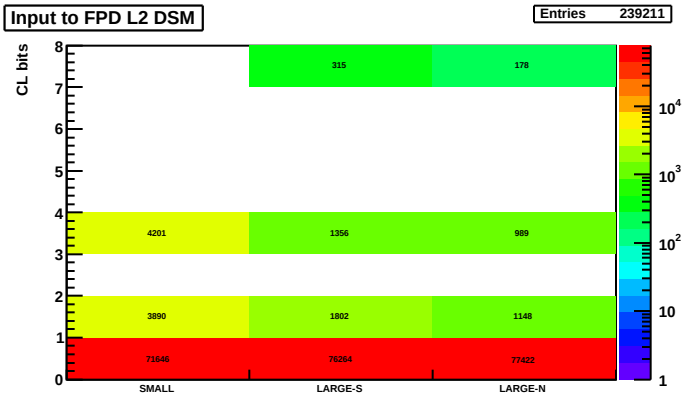

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

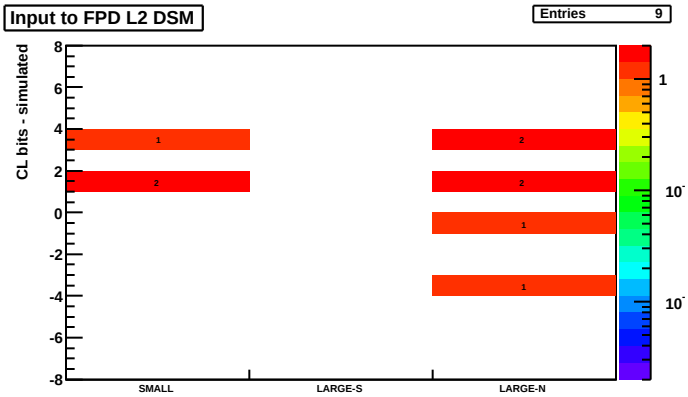

Input to FMS L1 DSM
Entries 956844
FMS L1 HT bits
DSM board

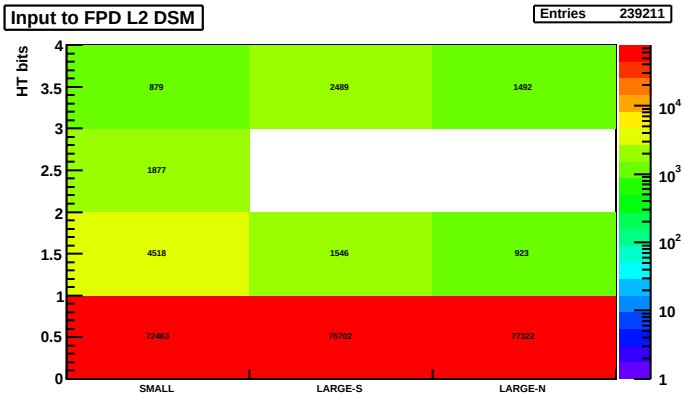

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

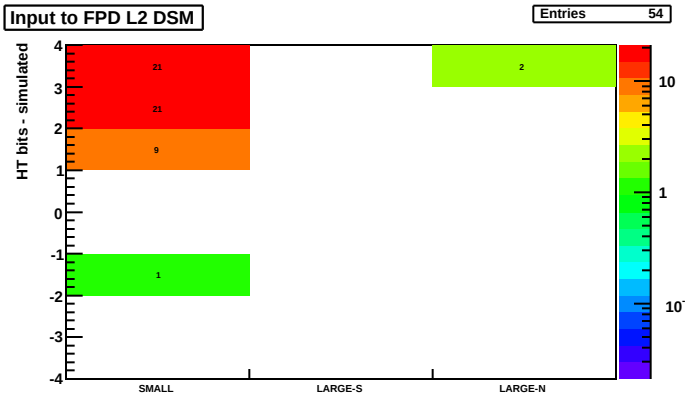

Input to FPD L2 DSM
Entries 956844
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

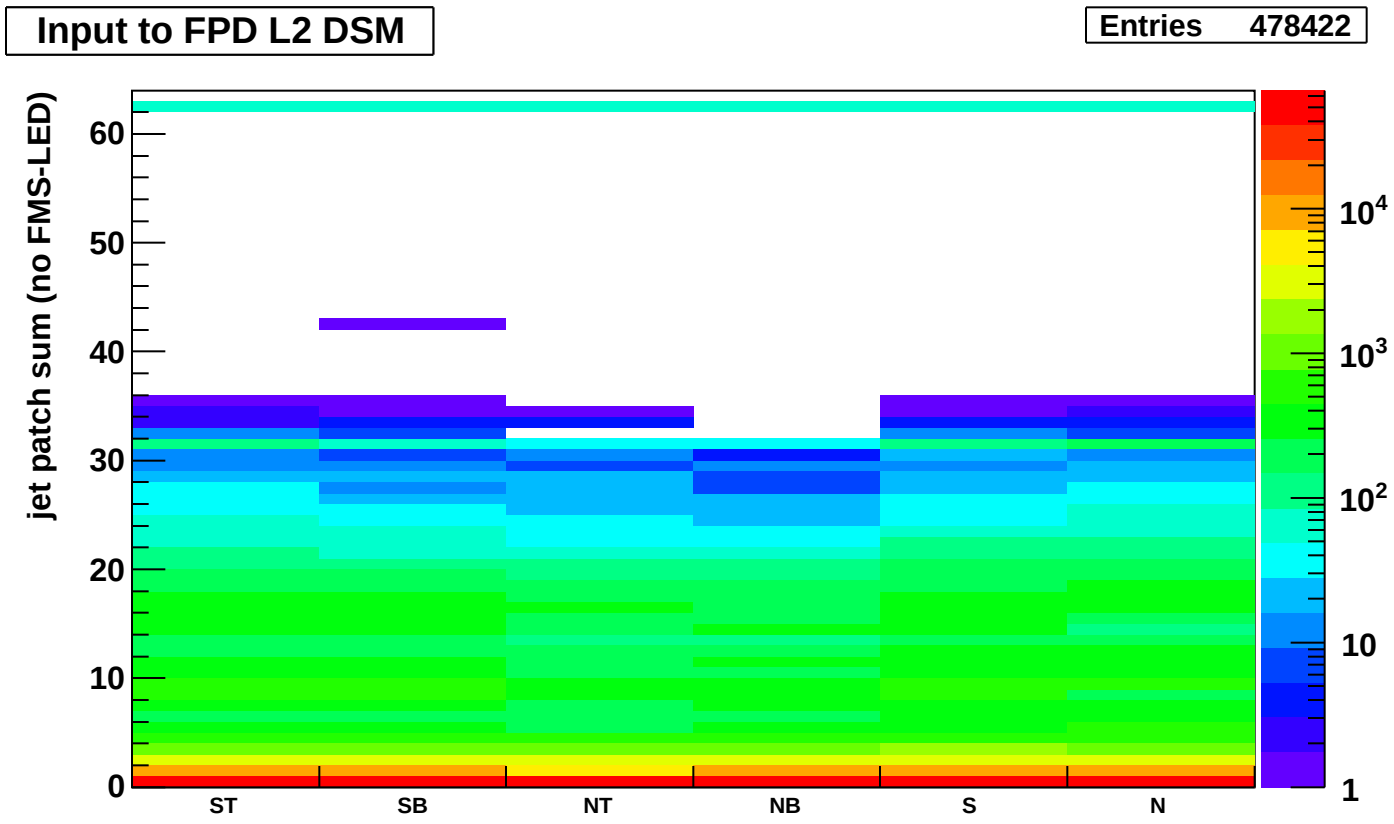

Input to FPD L2 DSM
Entries 155
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

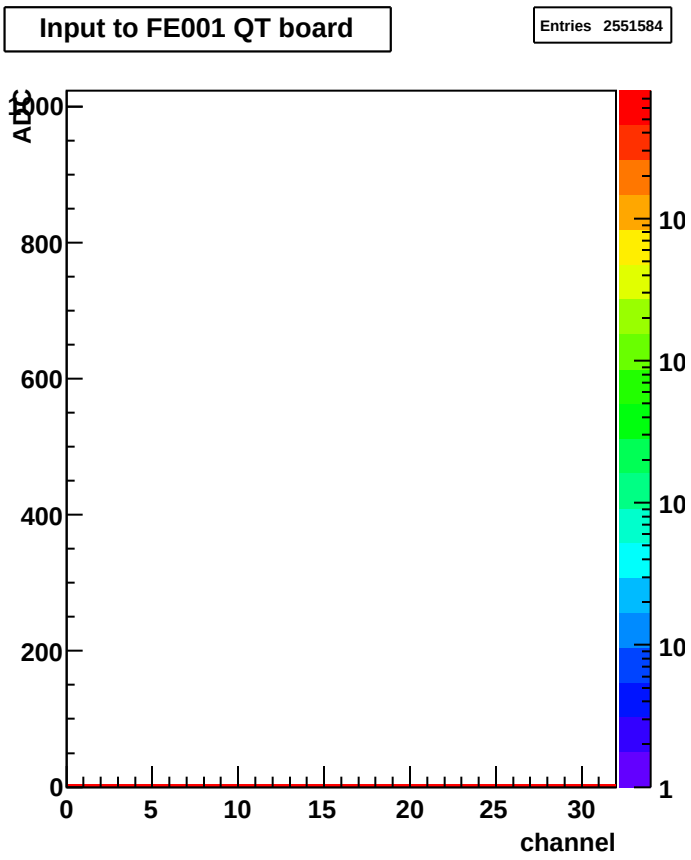

Input to FPD L2 DSM
Entries 239211
CL bits
315
178
4201
1356
989
3890
1802
1148
71646
76264
77422
SMALL
LARGE-S
LARGE-N

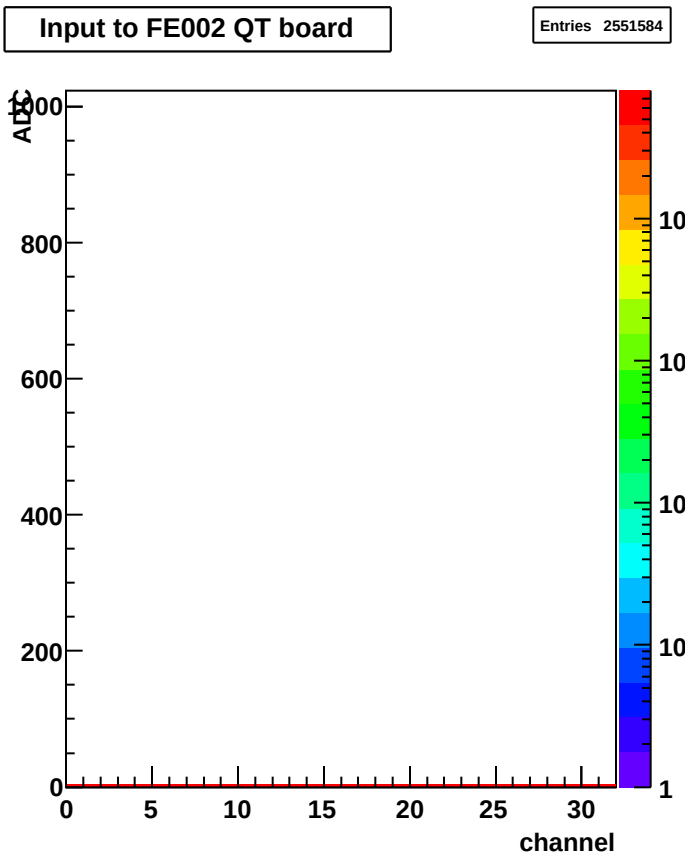

Input to FPD L2 DSM
Entries 9
CL bits - simulated
SMALL
LARGE-S
LARGE-N

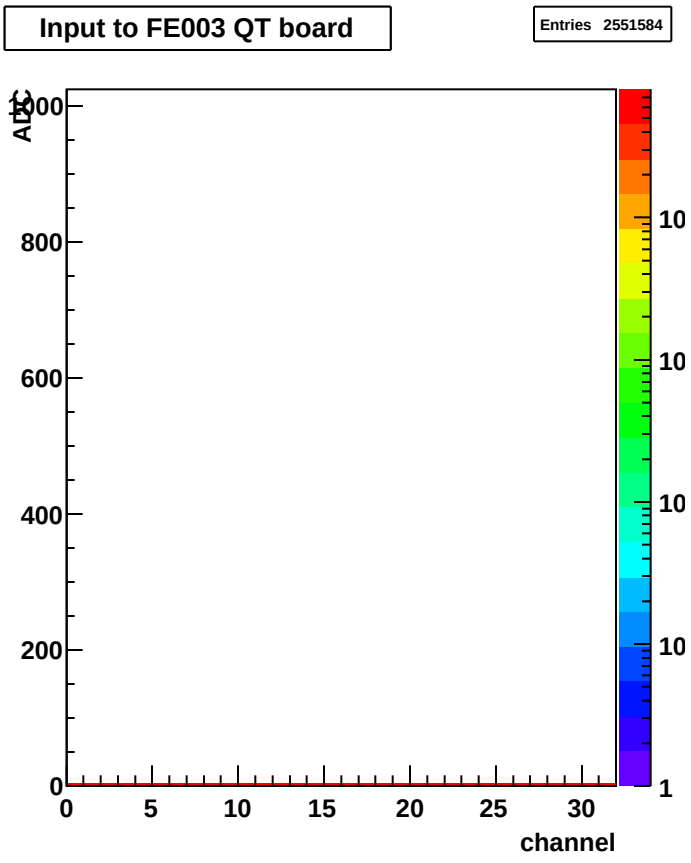

Input to FPD L2 DSM
Entries 239211
HT bits
879
2489
1492
1877
4518
1546
923
72463
75702
77322
SMALL
LARGE-S
LARGE-N

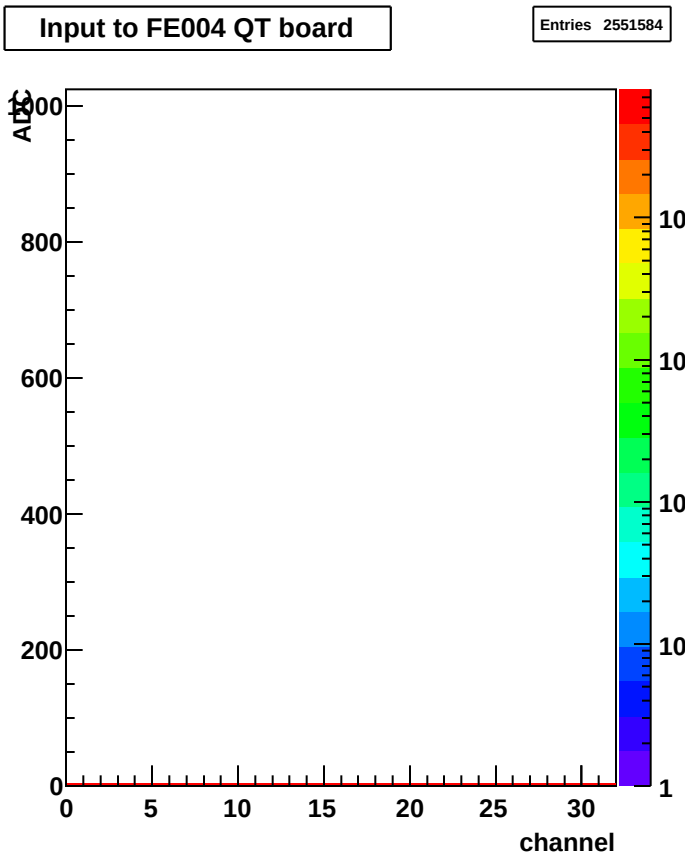

Input to FPD L2 DSM
Entries 54
HT bits - simulated
21
21
9
1
2
SMALL
LARGE-S
LARGE-N

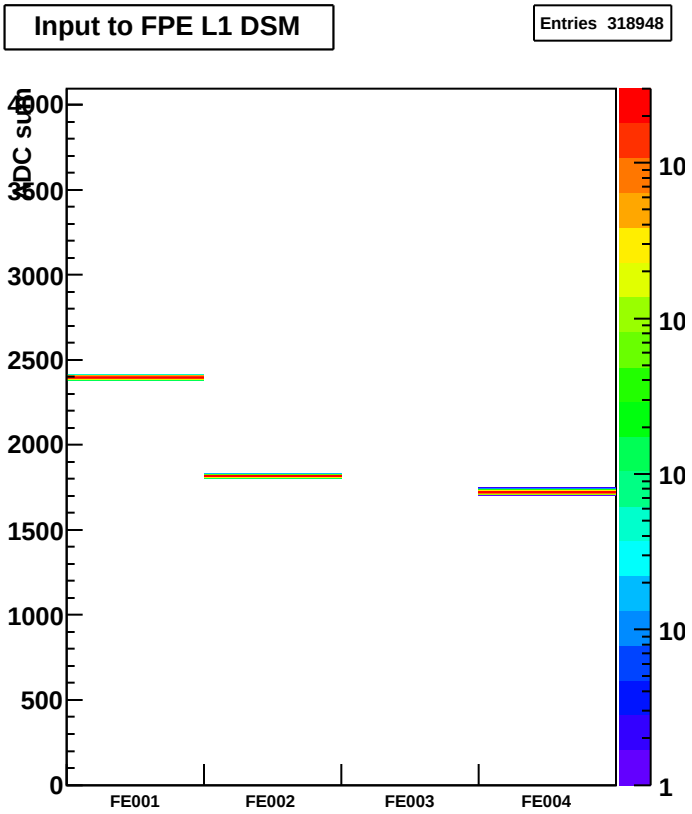

Input to FPD L2 DSM
Entries 478422
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

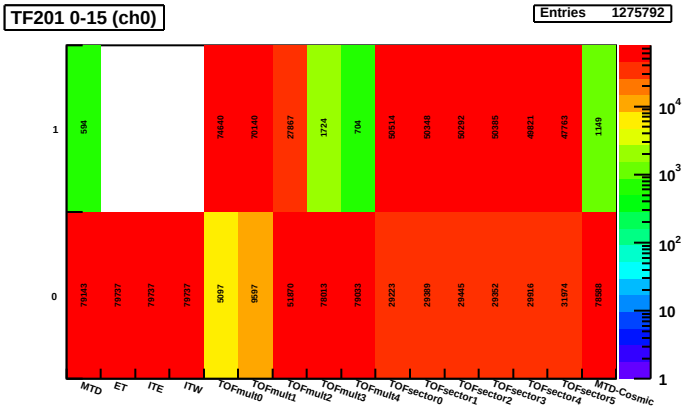

Input to FE001 QT board
Entries 2551584
ADC
channel

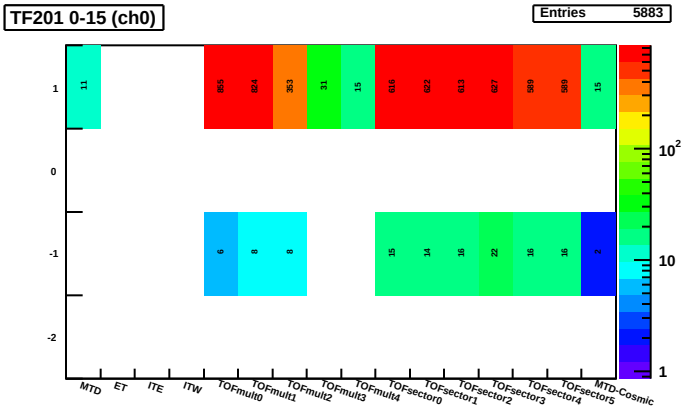

Input to FE002 QT board
Entries 2551584
ADC
channel

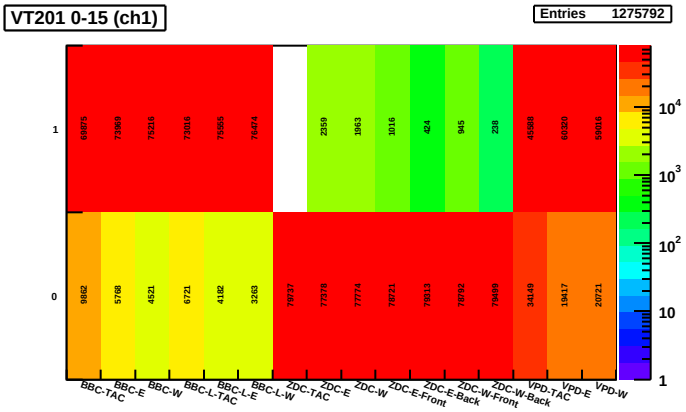

Input to FE003 QT board
Entries 2551584
ADC
channel

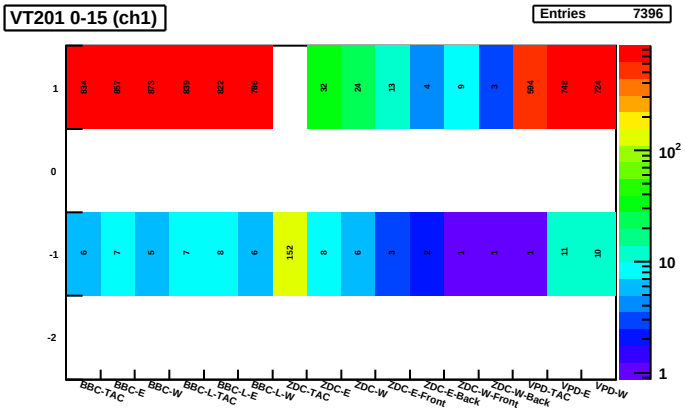

Input to FE004 QT board
Entries 2551584
ADC
channel

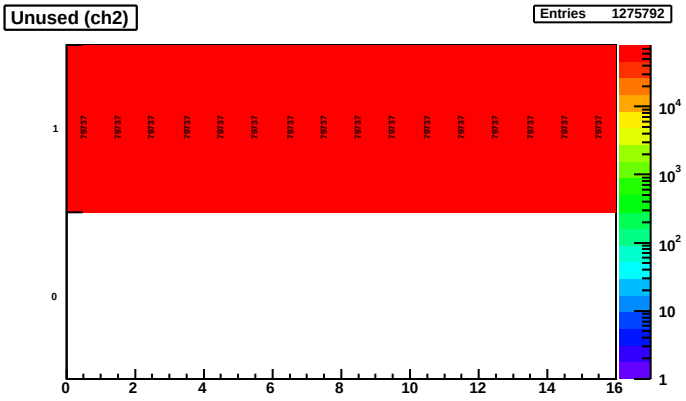

Input to FPE L1 DSM
Entries 318948
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1


TF201 0-15 (ch0)
Entries 1275792
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 5883
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1275792
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 7396
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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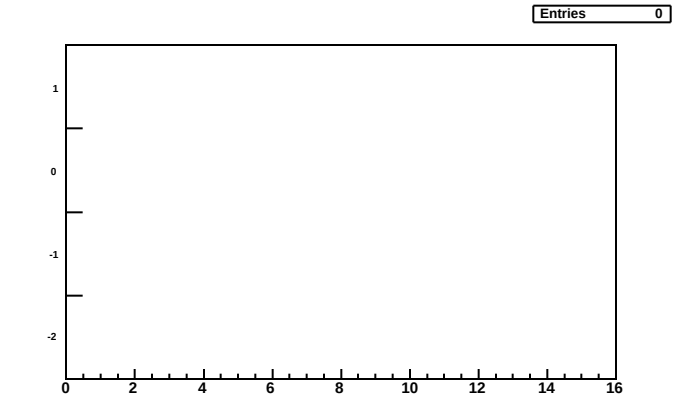
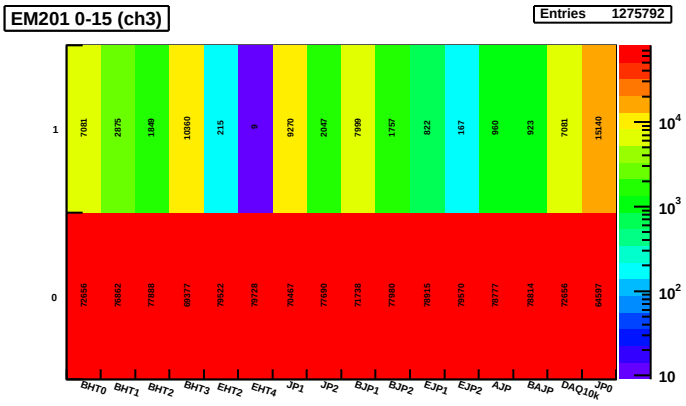
Entries 1275792


Entries 0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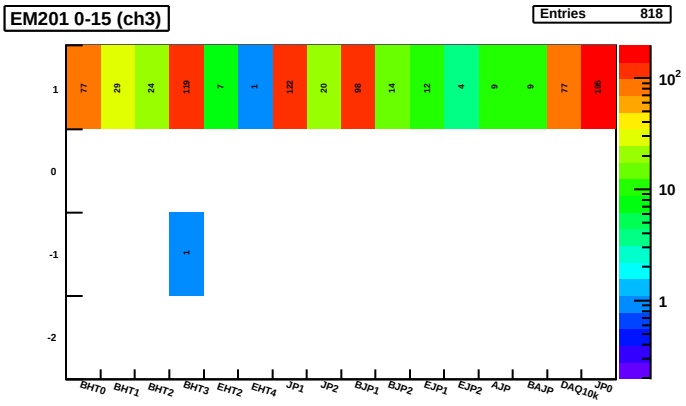
EM201 0-15 (ch3)
Entries 818
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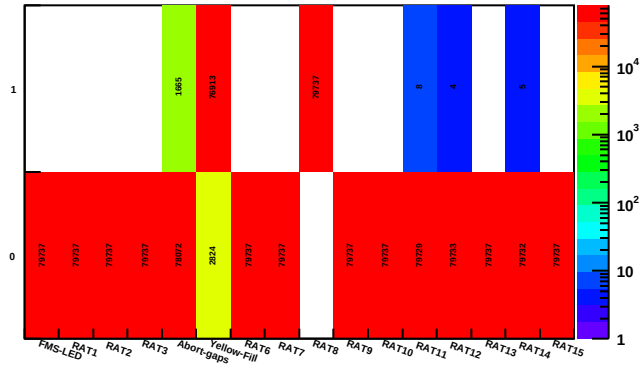
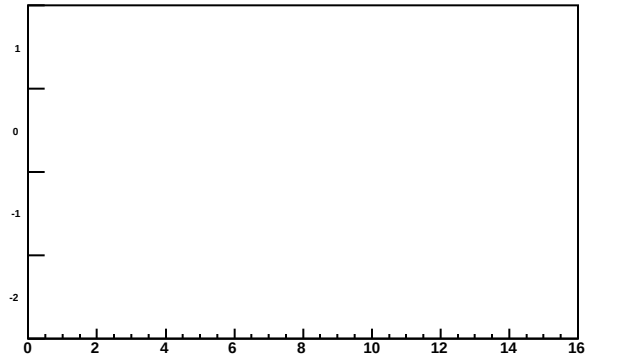
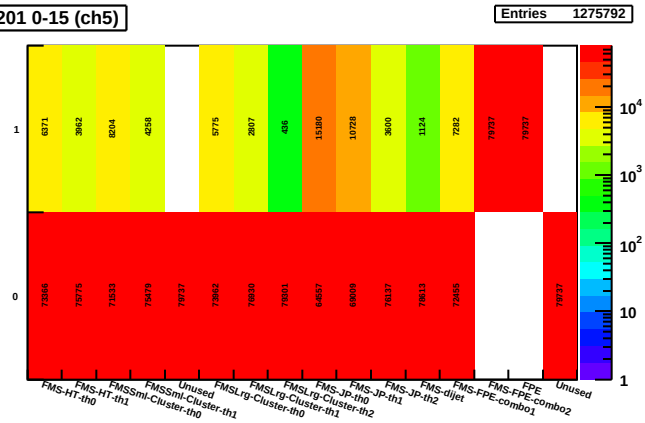
RAT board (ch4)





FP201 0-15 (ch5)



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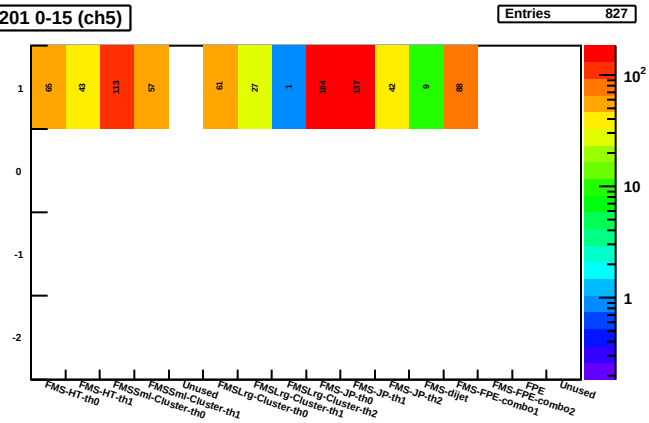
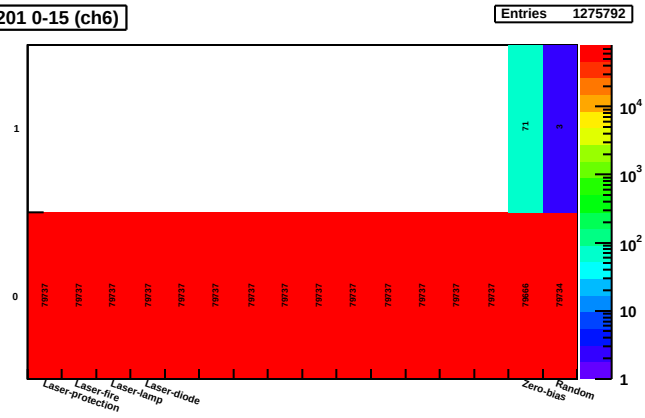
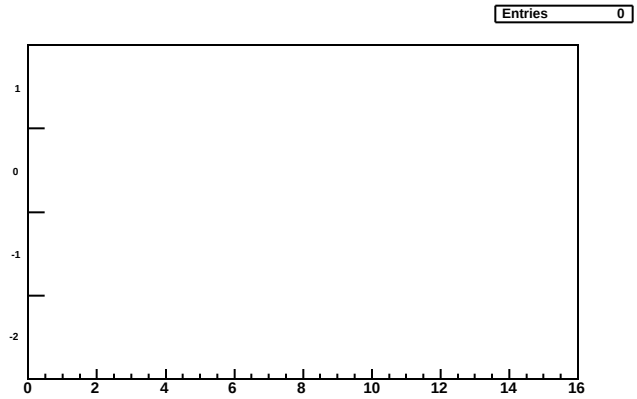
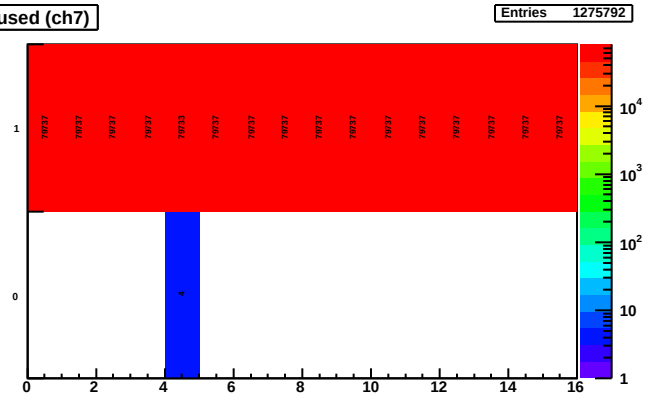
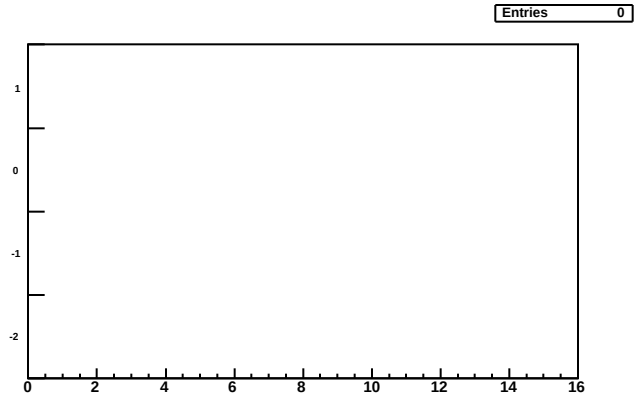


ST201 0-15 (ch6)





Unused (ch7)