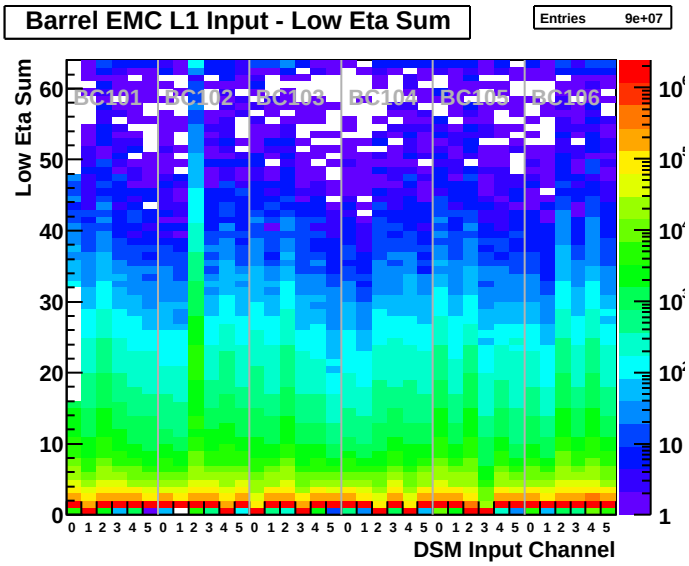
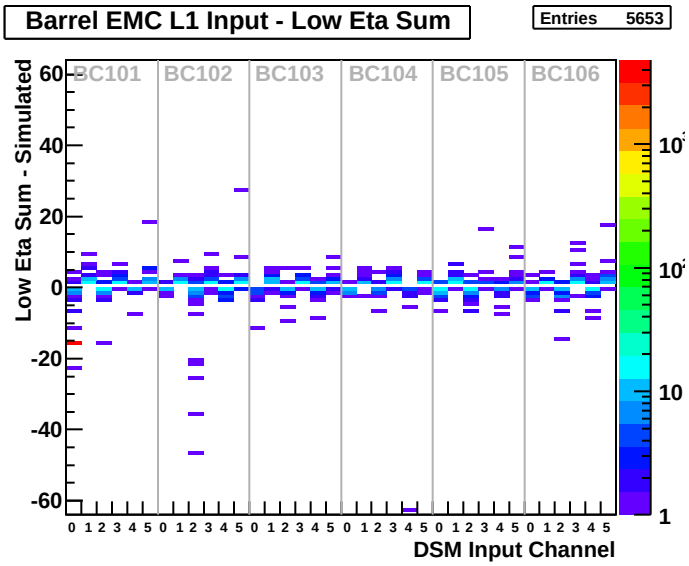
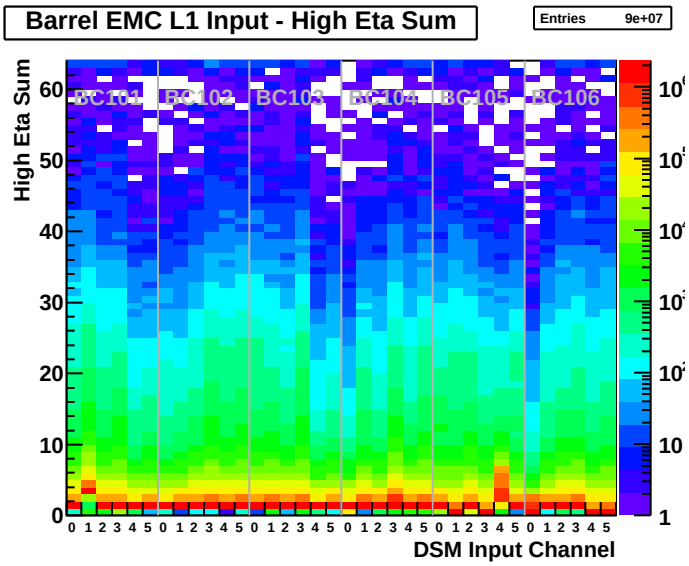
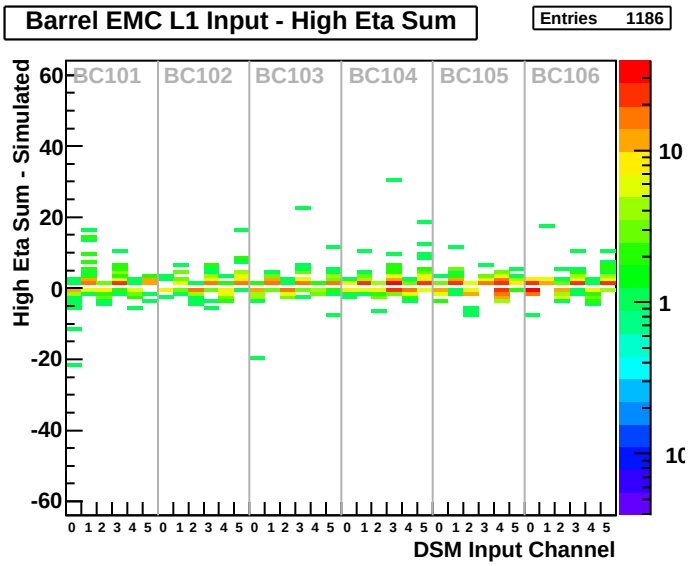
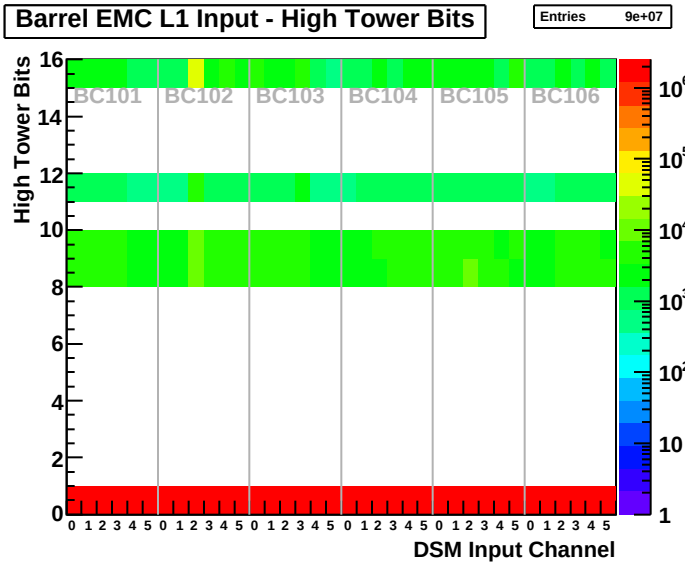
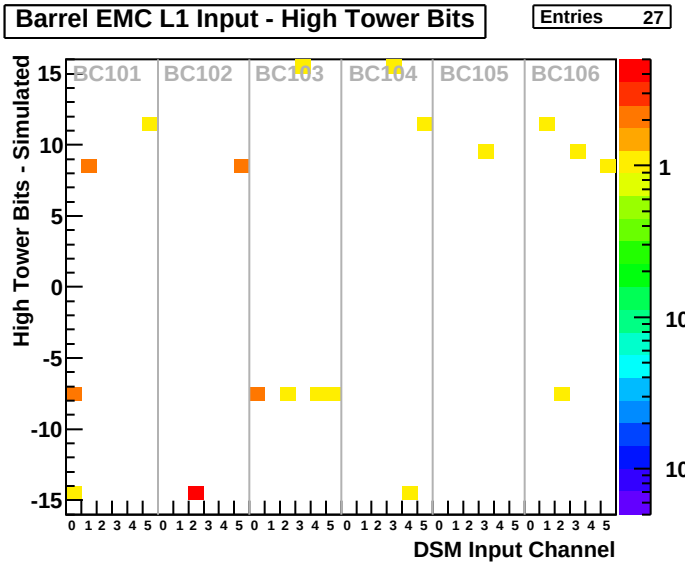

Barrel EMC L1 Input - Low Eta Sum
Entries 9e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

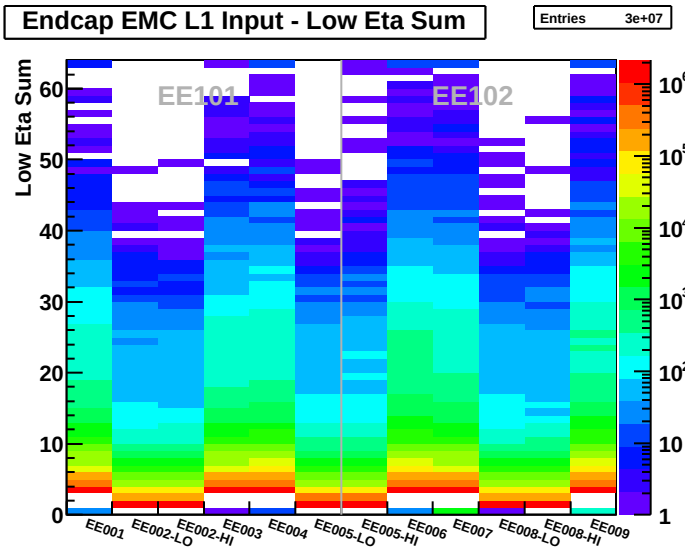

Barrel EMC L1 Input - Low Eta Sum
Entries 5653
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

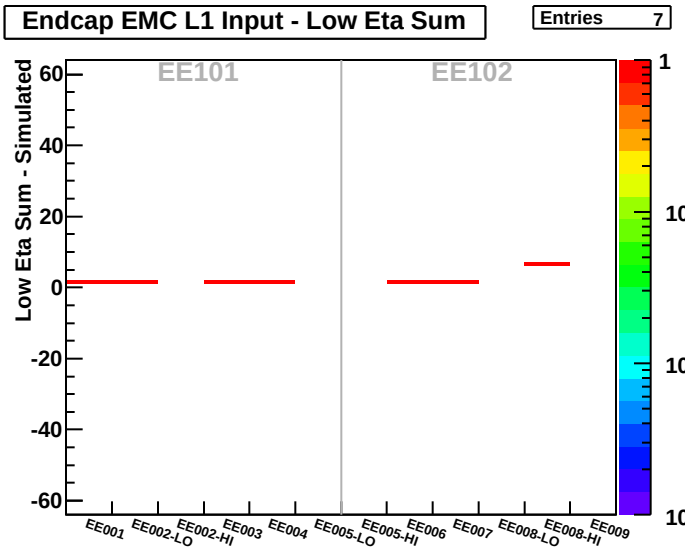

Barrel EMC L1 Input - High Eta Sum
Entries 9e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

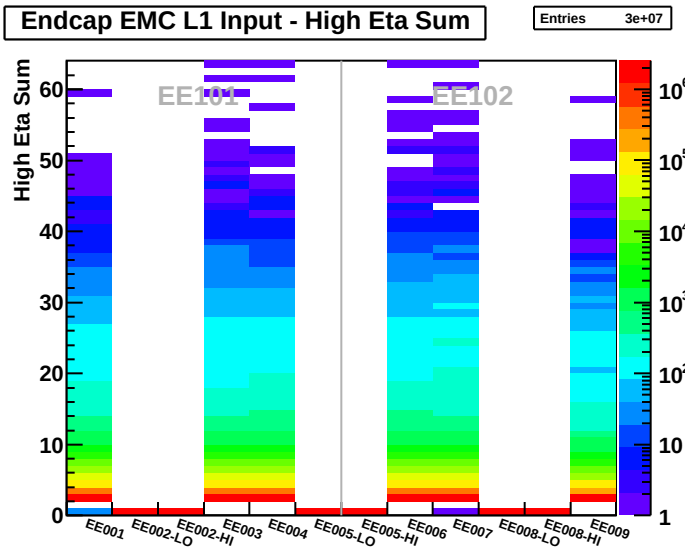

Barrel EMC L1 Input - High Eta Sum
Entries 1186
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

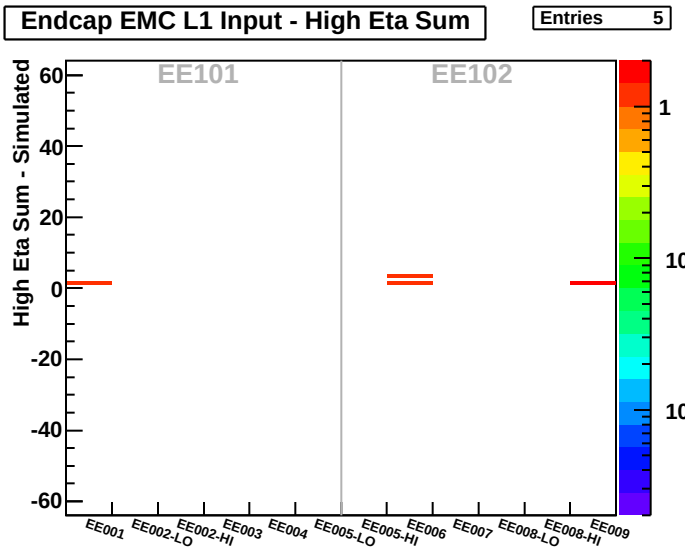

Barrel EMC L1 Input - High Tower Bits
Entries 9e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

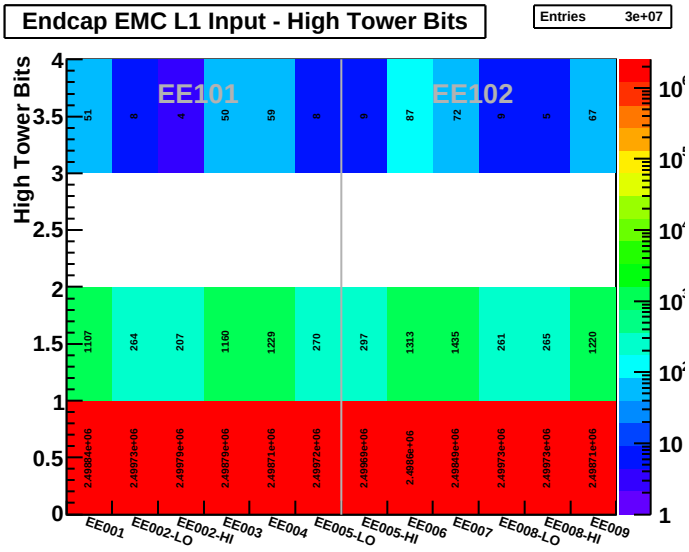

Barrel EMC L1 Input - High Tower Bits
Entries 27
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

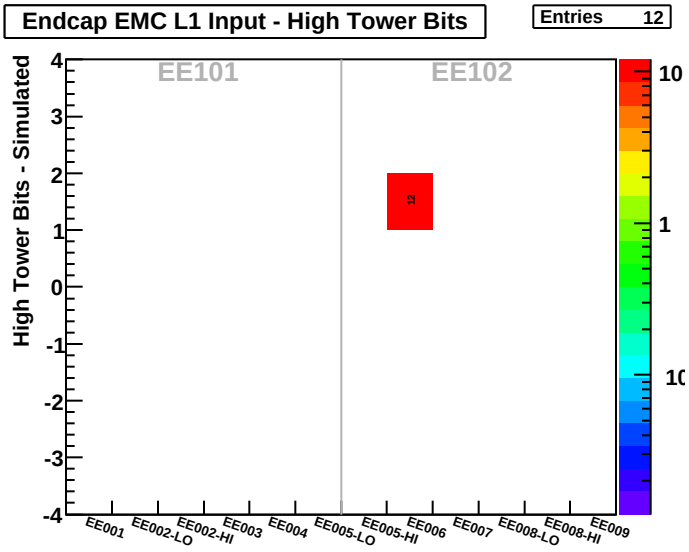

Endcap EMC L1 Input - Low Eta Sum
Entries 3e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

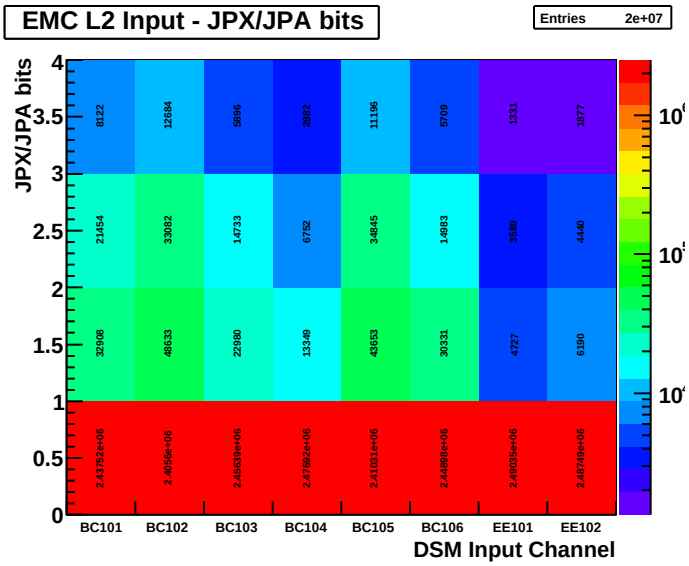

Endcap EMC L1 Input - Low Eta Sum
Entries 7
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

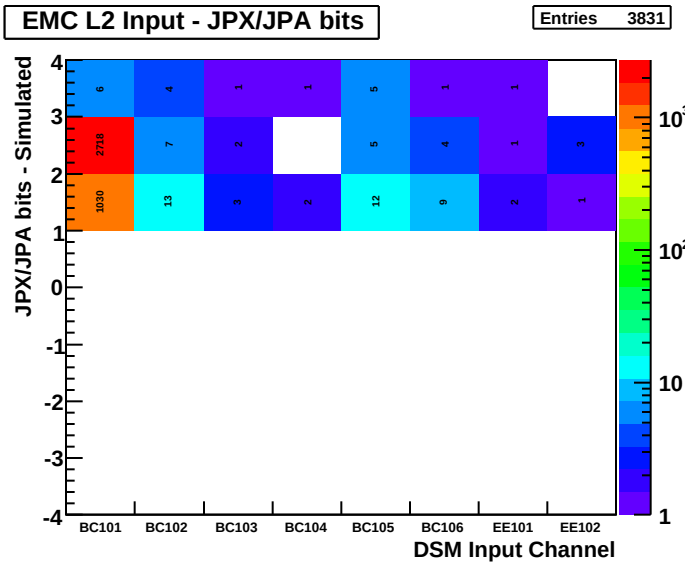

Endcap EMC L1 Input - High Eta Sum
Entries 3e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

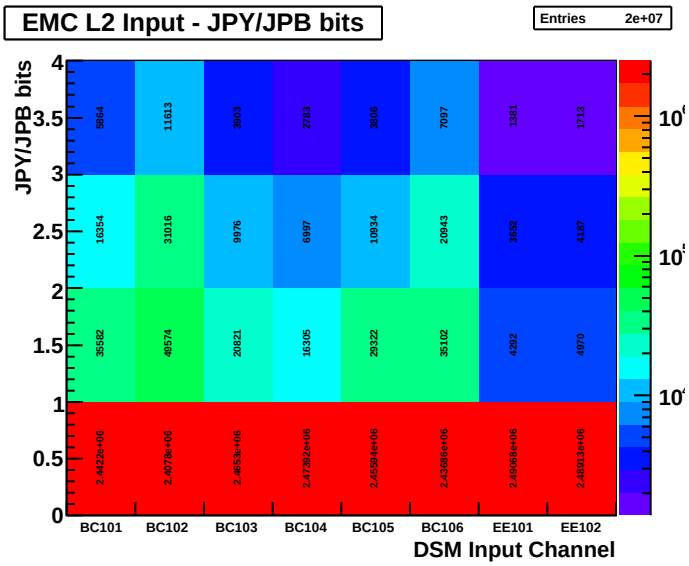

Endcap EMC L1 Input - High Eta Sum
Entries 5
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

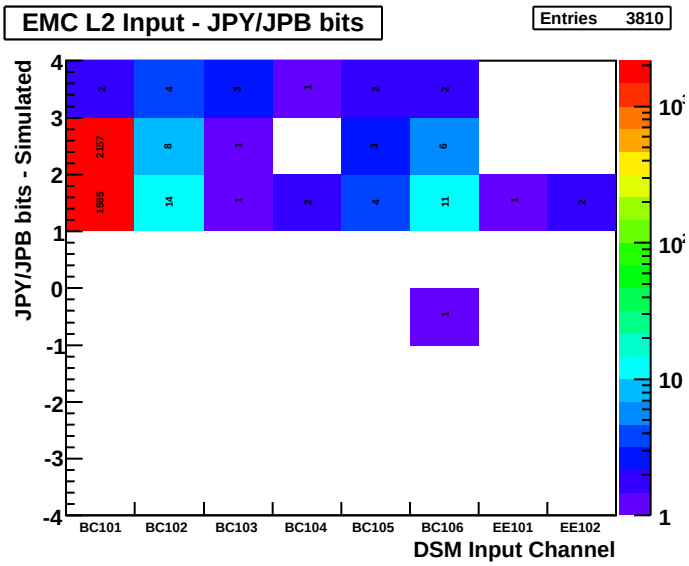

Endcap EMC L1 Input - High Tower Bits
Entries 3e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

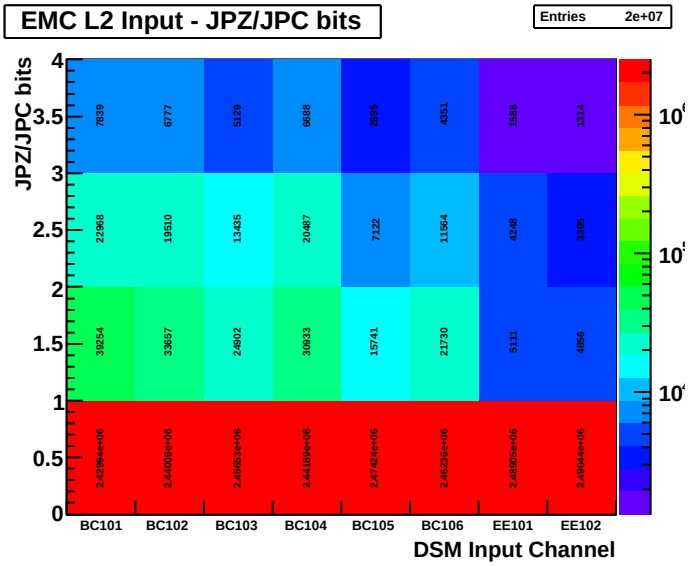

Endcap EMC L1 Input - High Tower Bits
Entries 12
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

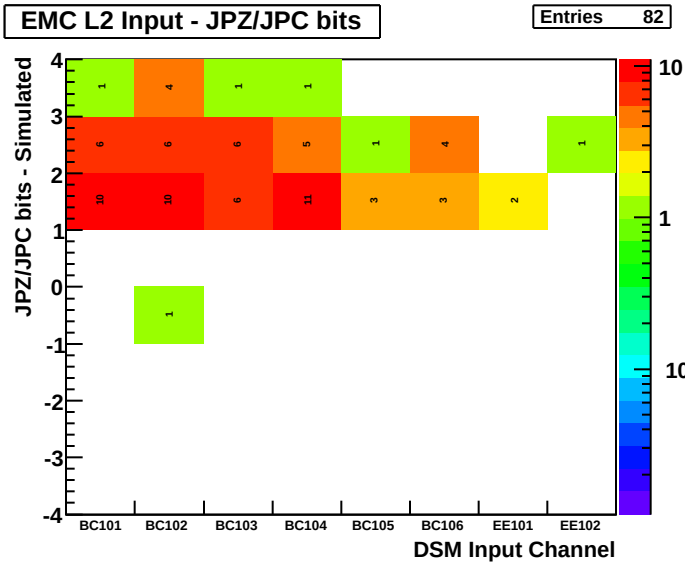

EMC L2 Input - JPX/JPA bits
Entries 2e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

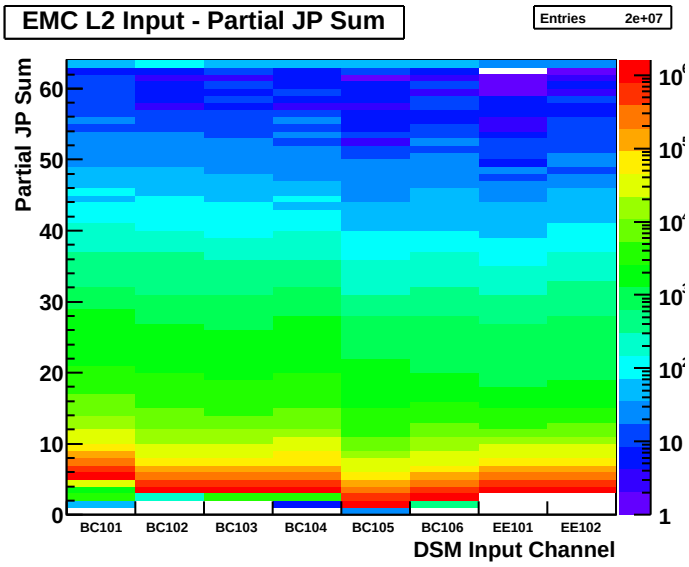

EMC L2 Input - JPX/JPA bits
Entries 3831
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

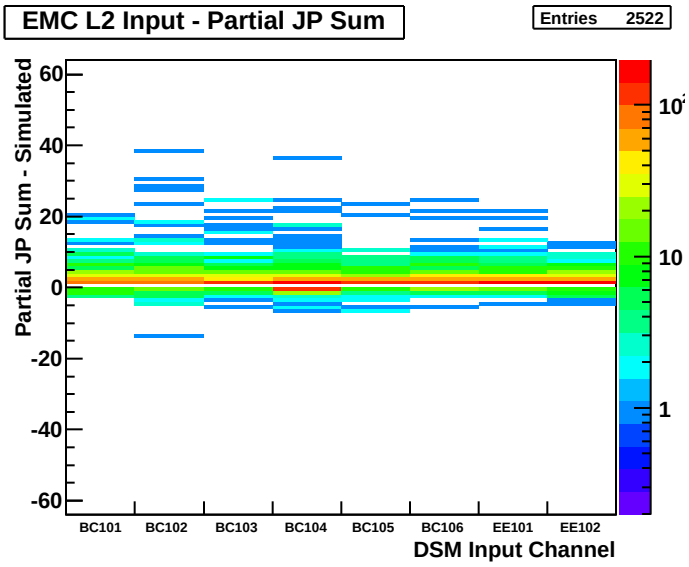

EMC L2 Input - JPY/JPB bits
Entries 2e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

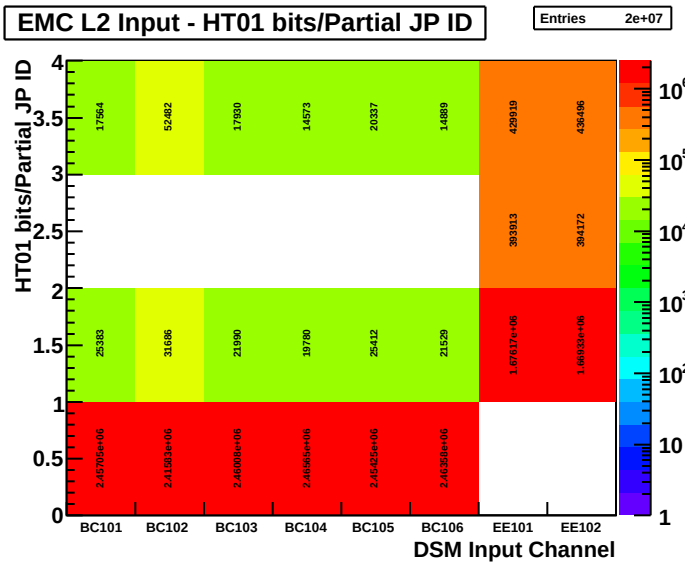

EMC L2 Input - JPY/JPB bits
Entries 3810
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

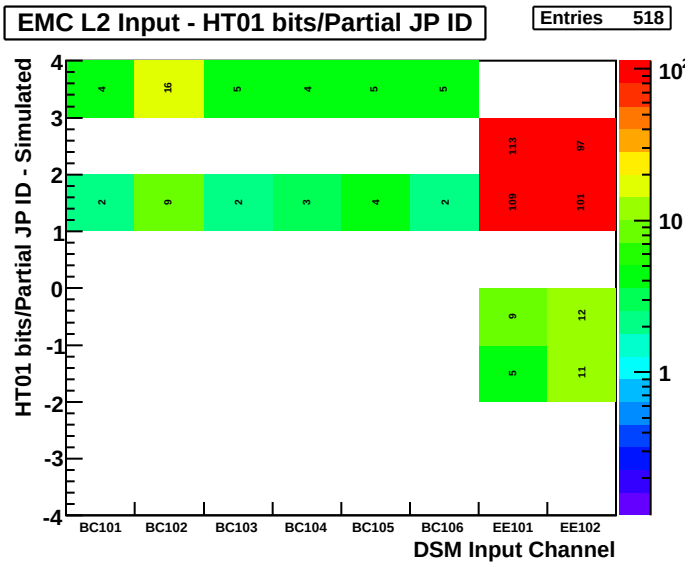

EMC L2 Input - JPZ/JPC bits
Entries 2e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

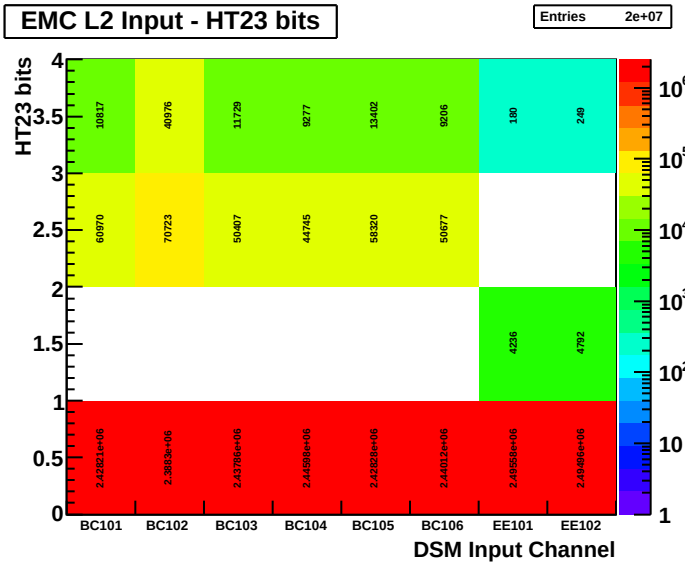

EMC L2 Input - JPZ/JPC bits
Entries 82
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

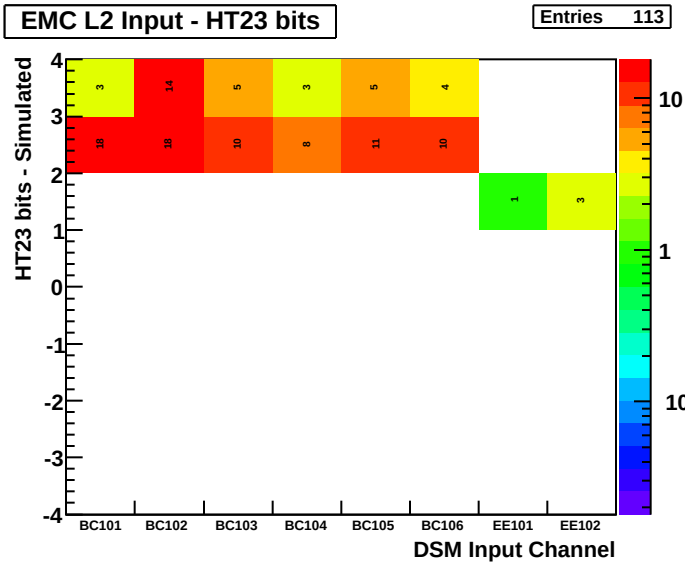

EMC L2 Input - Partial JP Sum
Entries 2e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

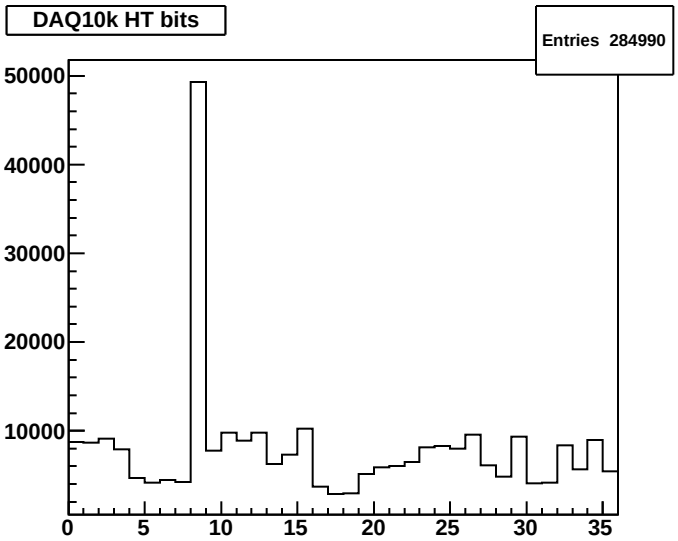

EMC L2 Input - Partial JP Sum
Entries 2522
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

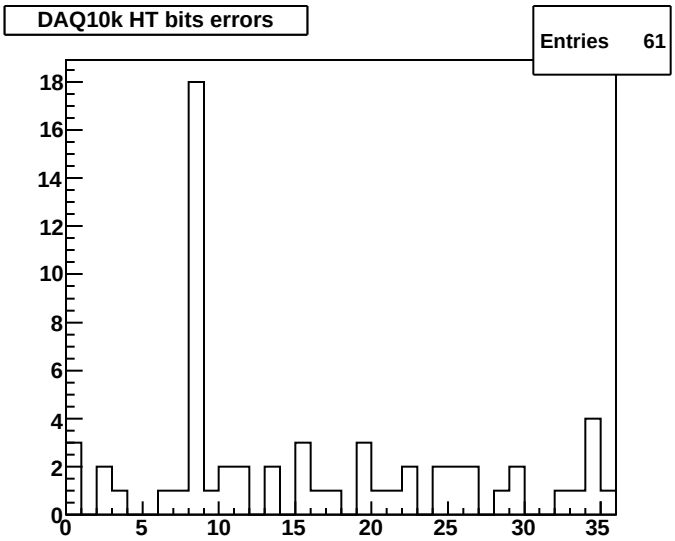

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

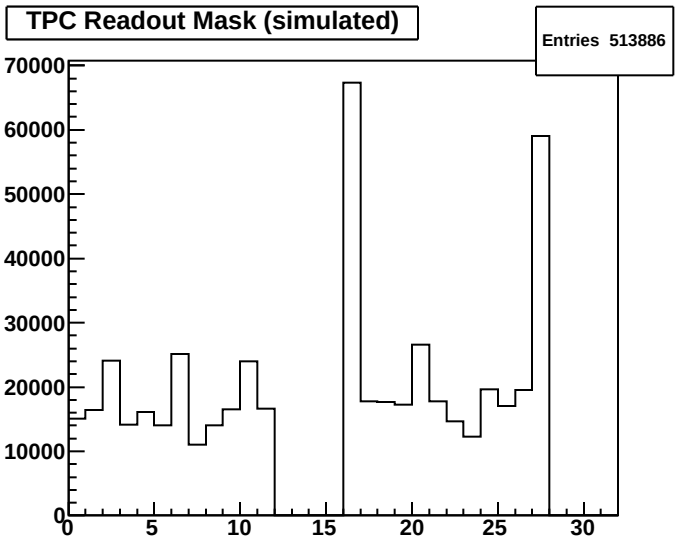

EMC L2 Input - HT01 bits/Partial JP ID
Entries 518
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

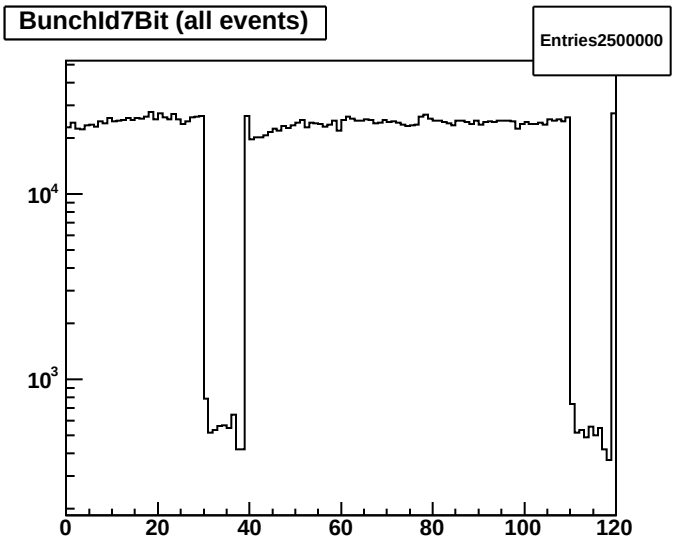

EMC L2 Input - HT23 bits
Entries 2e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

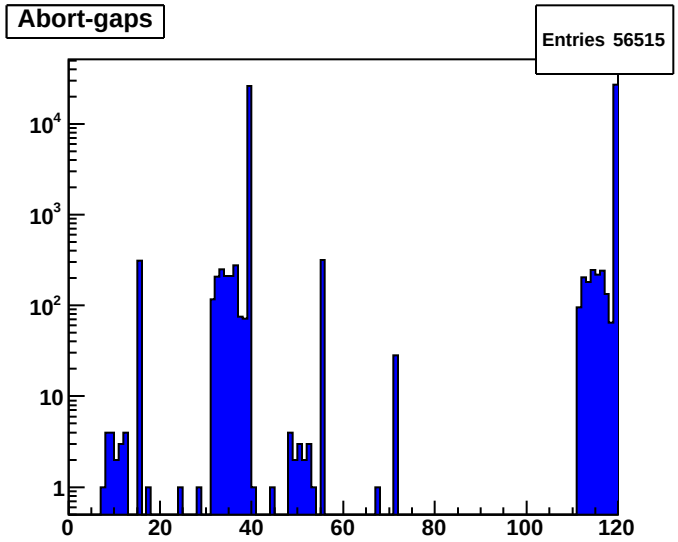

EMC L2 Input - HT23 bits
Entries 113
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

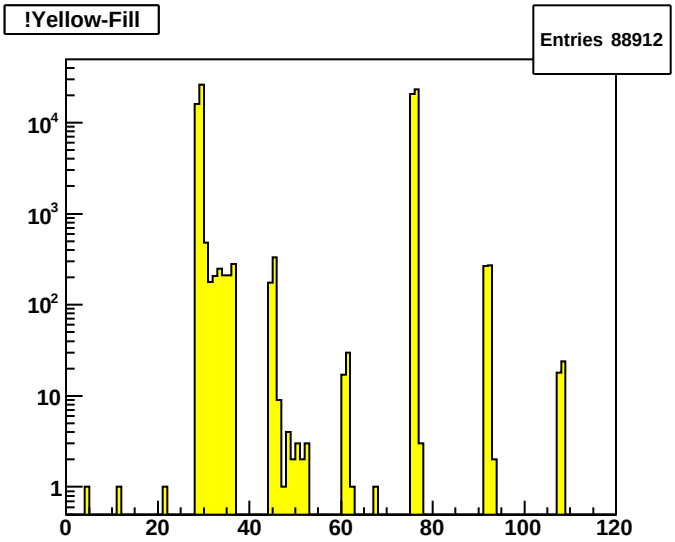

DAQ10k HT bits
Entries 284990
50000
40000
30000
20000
10000
0
5
10
15
20
25
30
35

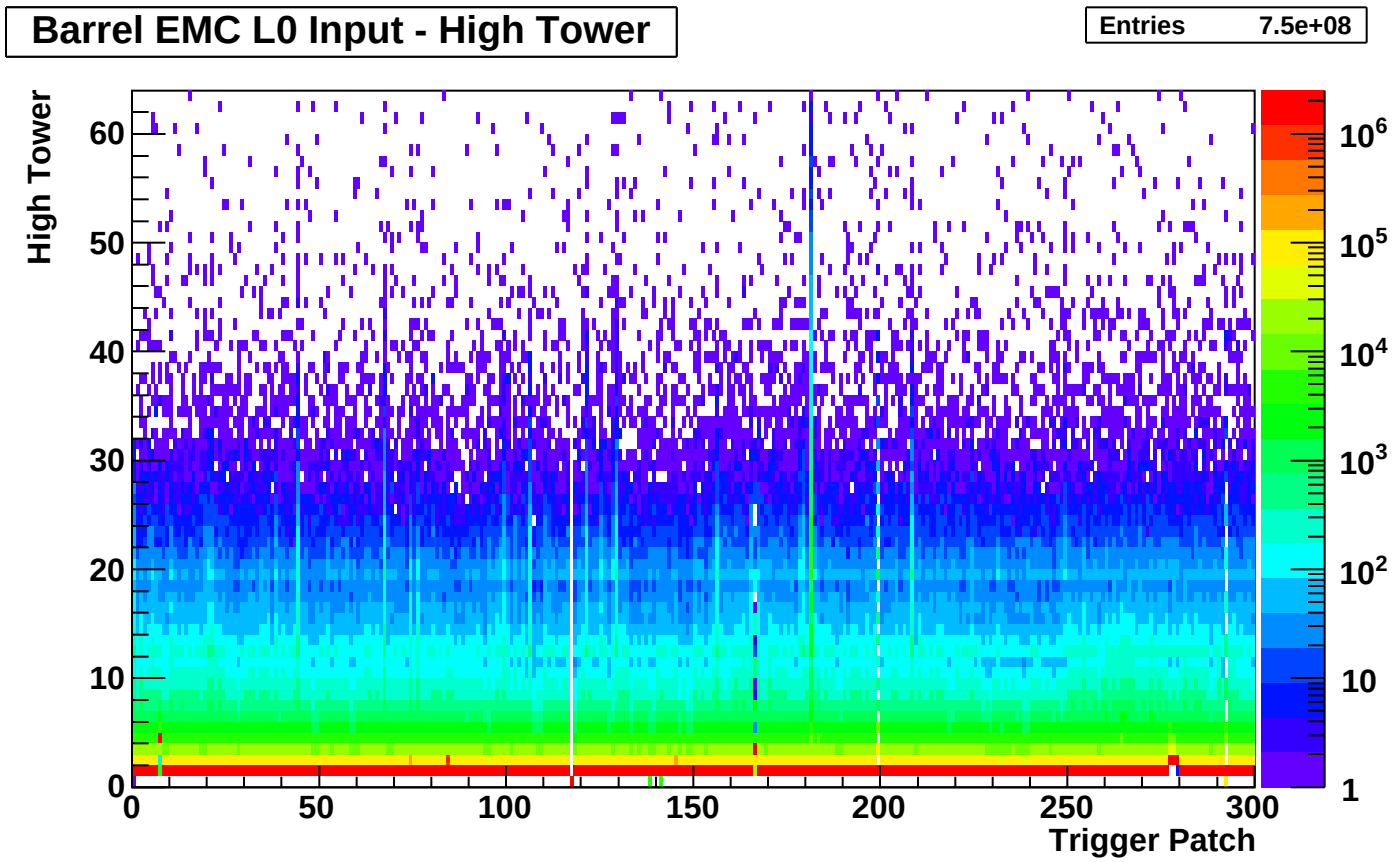

DAQ10k HT bits errors
Entries 61
18
16
14
12
10
8
6
4
2
0
5
10
15
20
25
30
35

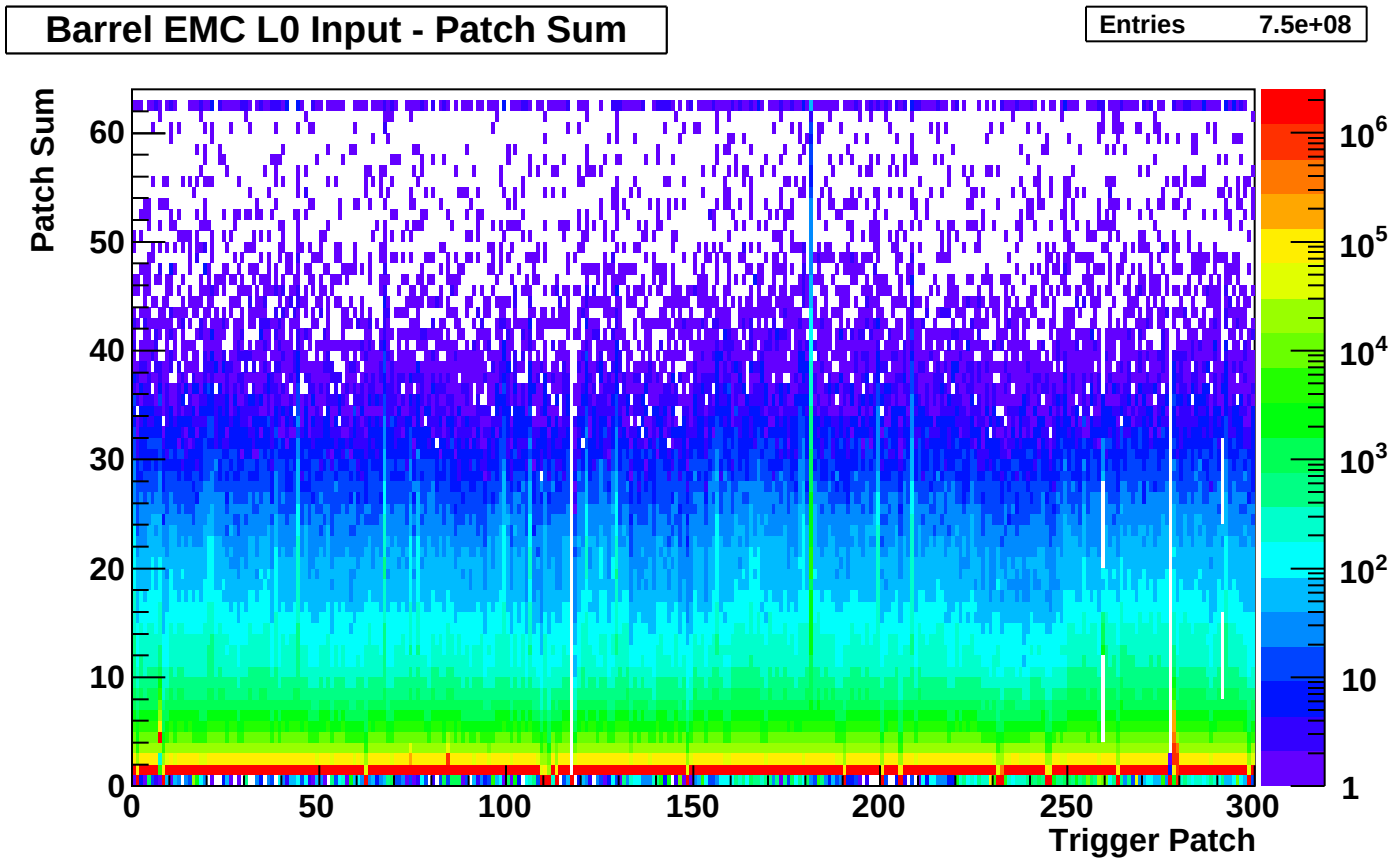

TPC Readout Mask (simulated)
Entries 513886
70000
60000
50000
40000
30000
20000
10000
0
5
10
15
20
25
30

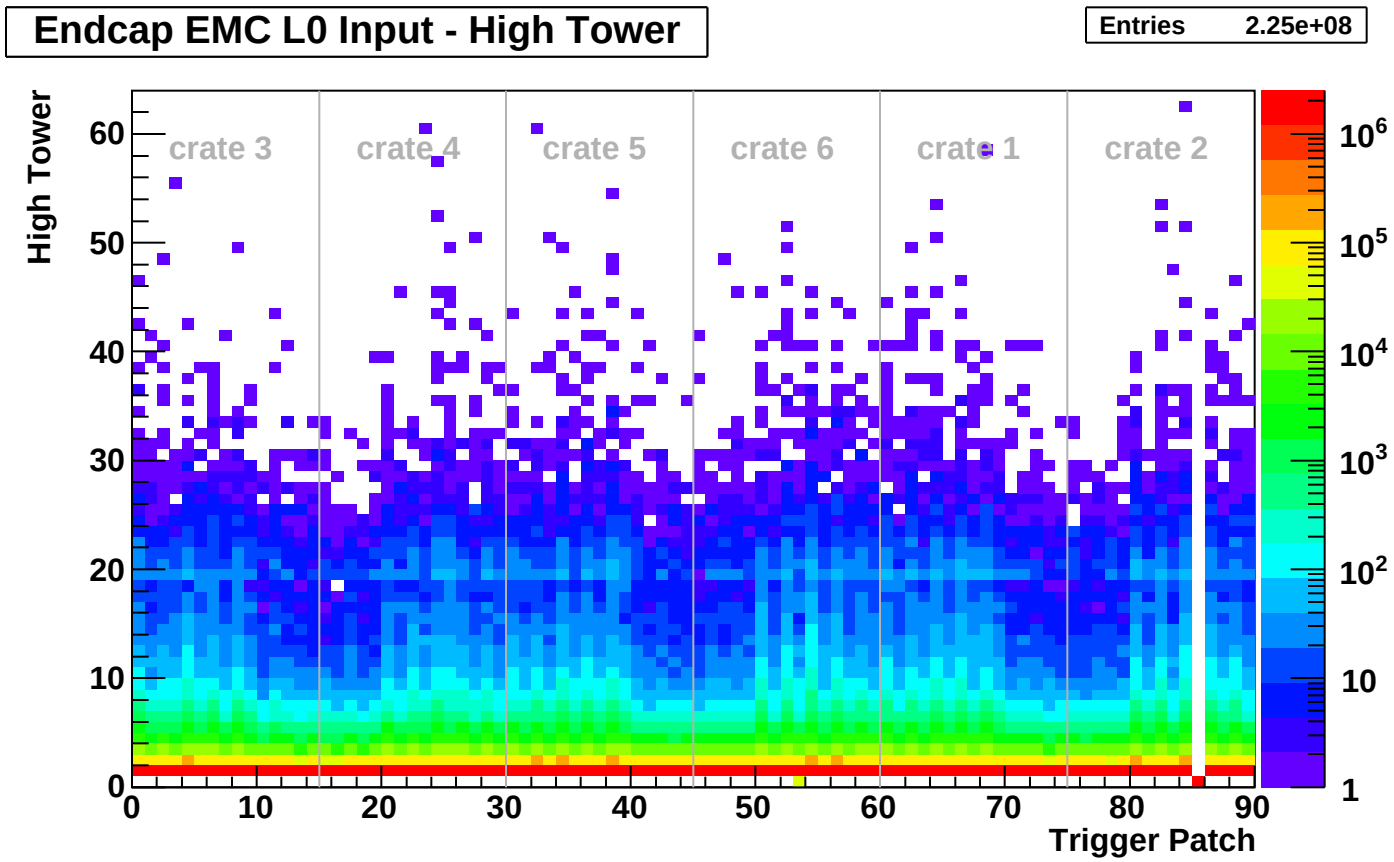

BunchId7Bit (all events)
Entries2500000
10^4
10^3
0
20
40
60
80
100
120

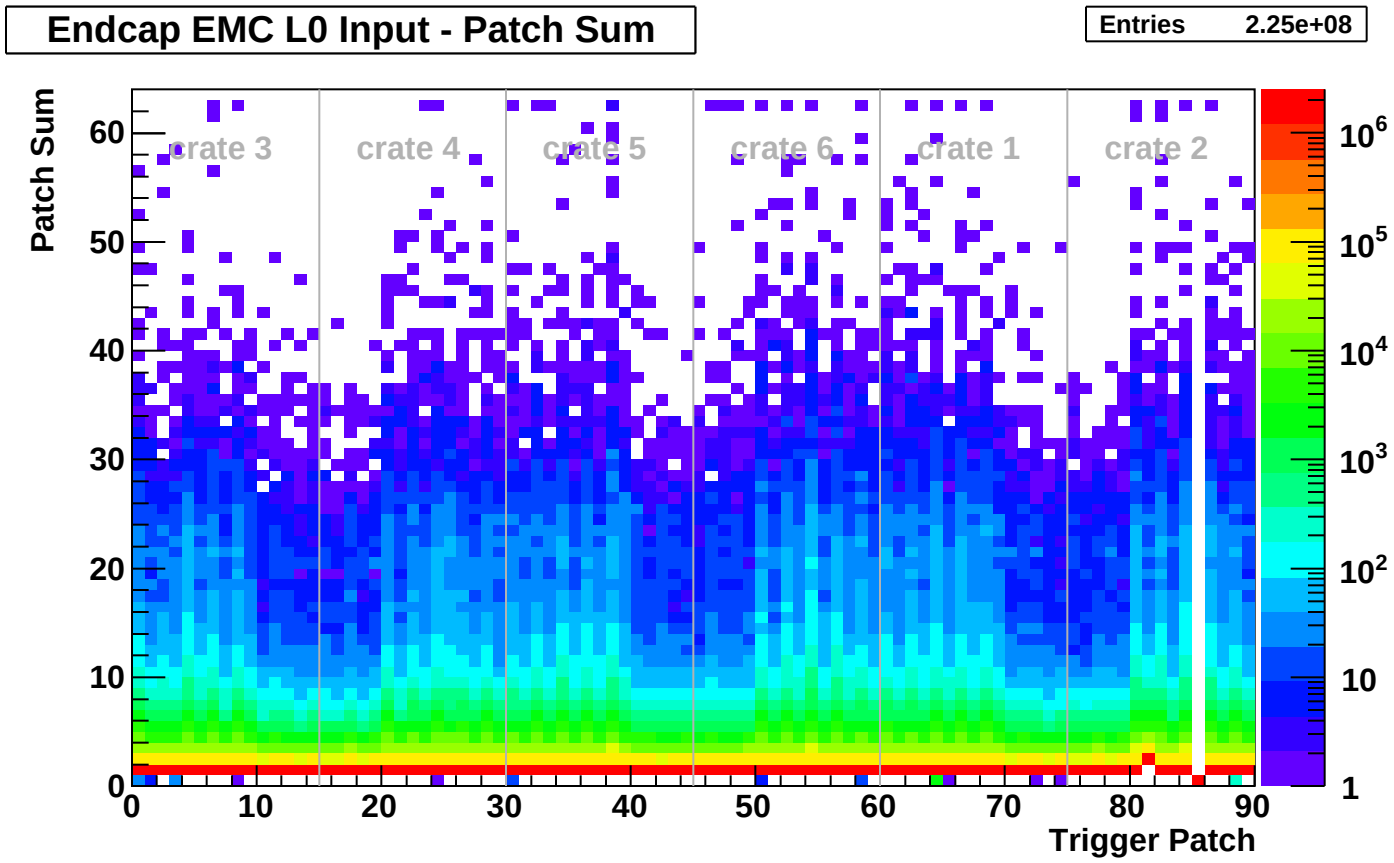

Abort-gaps
Entries 56515
10^4
10^3
10^2
10
1
0
20
40
60
80
100
120

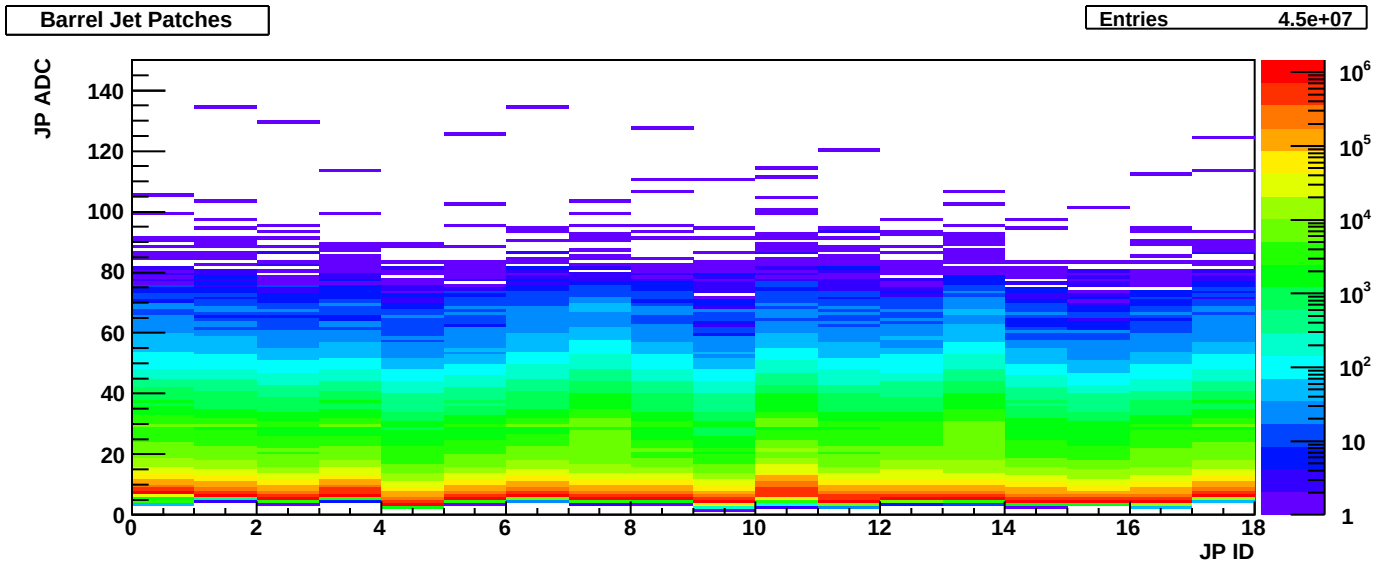

!Yellow-Fill
Entries 88912
10^4
10^3
10^2
10
1
0
20
40
60
80
100
120

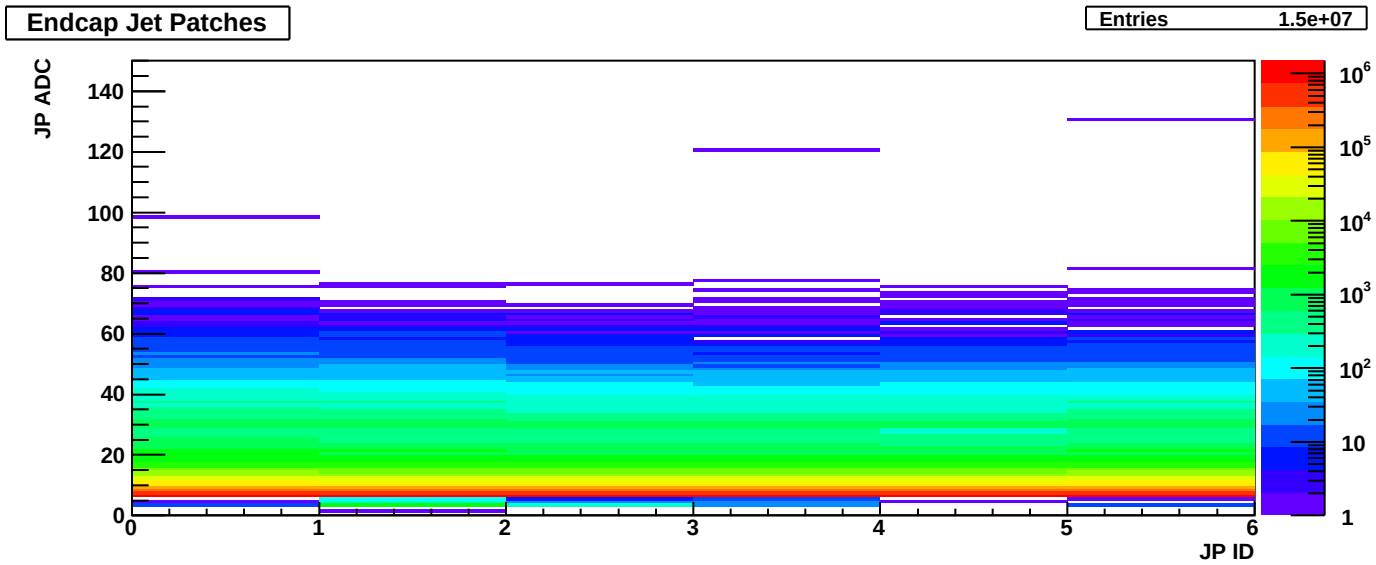

Barrel EMC L0 Input - High Tower
Entries 7.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

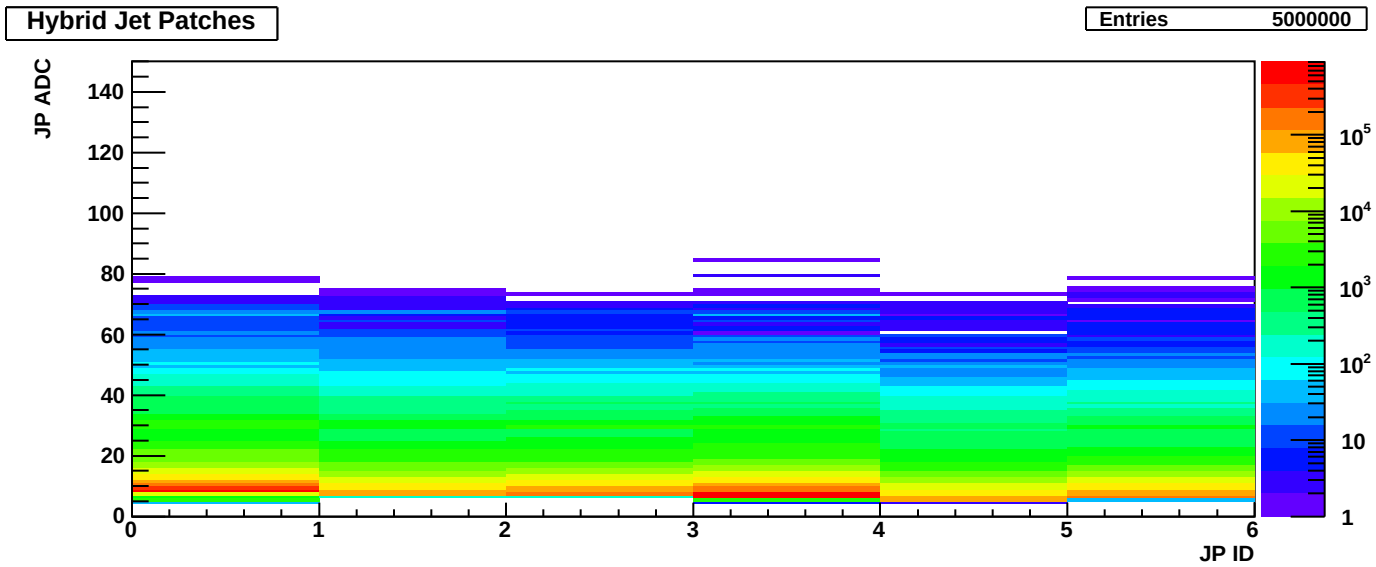

Barrel EMC L0 Input - Patch Sum
Entries 7.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

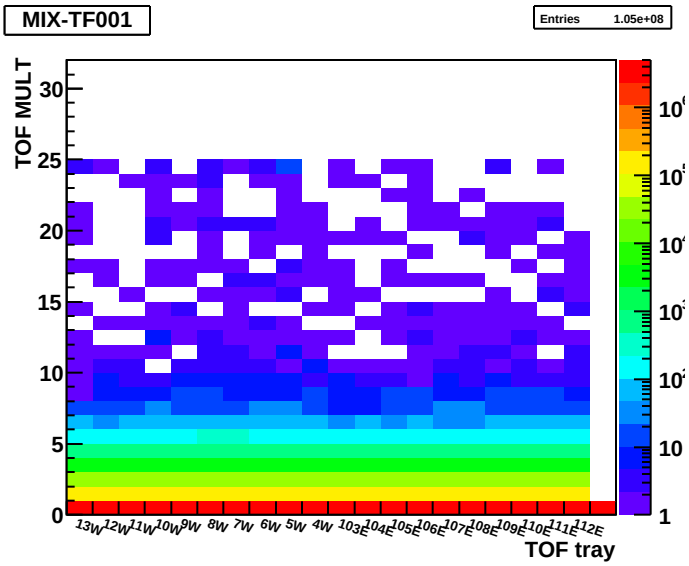

Endcap EMC L0 Input - High Tower
Entries 2.25e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

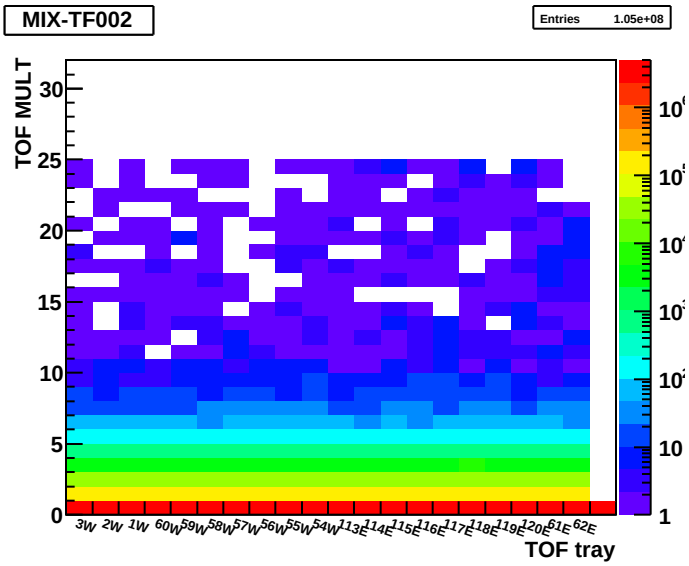

Endcap EMC L0 Input - Patch Sum
Entries 2.25e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

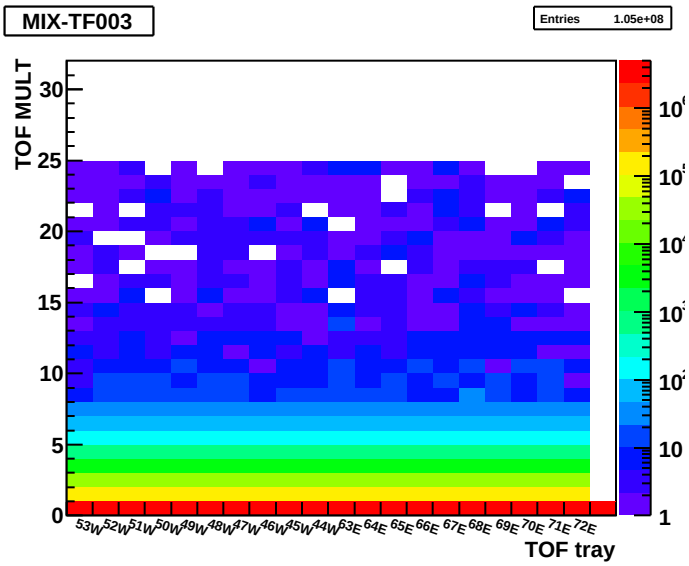

Barrel Jet Patches
Entries 4.5e+07
JP ADC
JP ID

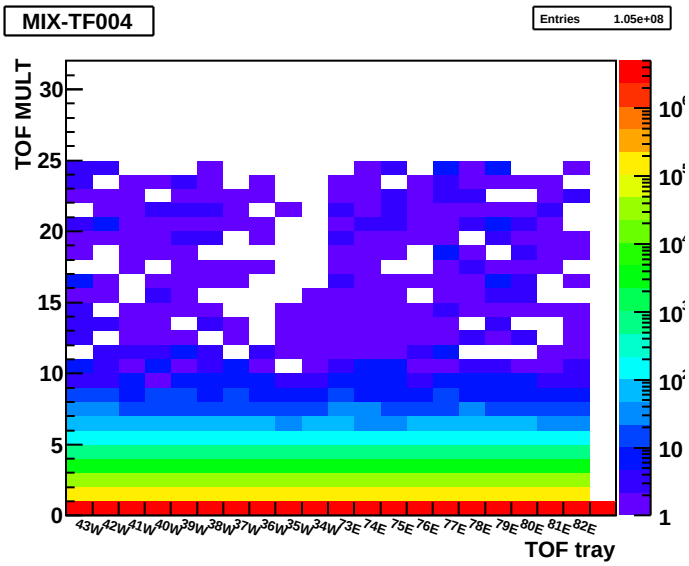

Endcap Jet Patches
Entries 1.5e+07
JP ADC
JP ID

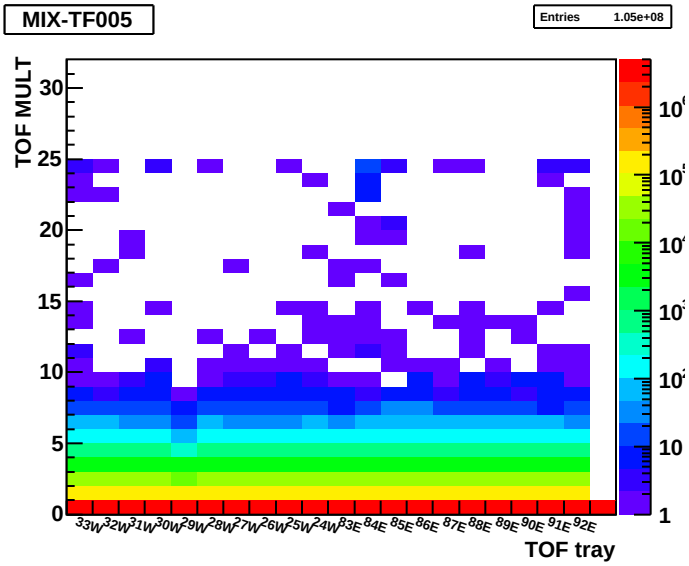

Hybrid Jet Patches
Entries 5000000
JP ADC
JP ID

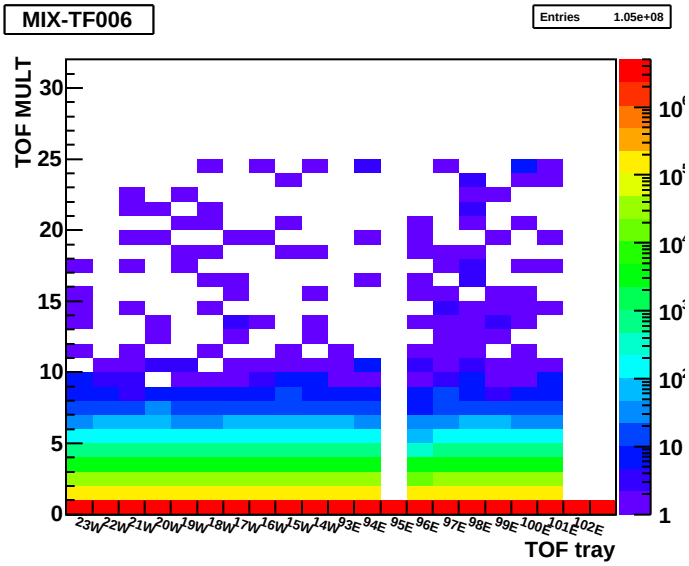

MIX-TF001
Entries 1.05e+08
TOF MULT
TOF tray

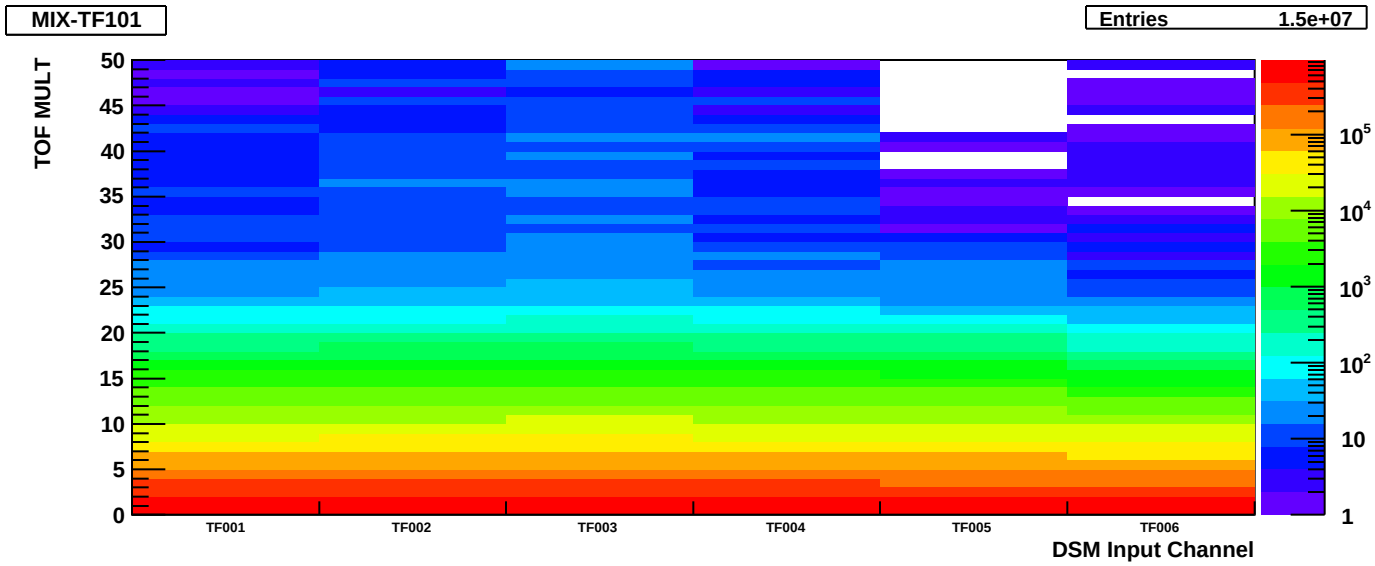

MIX-TF002
Entries 1.05e+08
TOF MULT
TOF tray

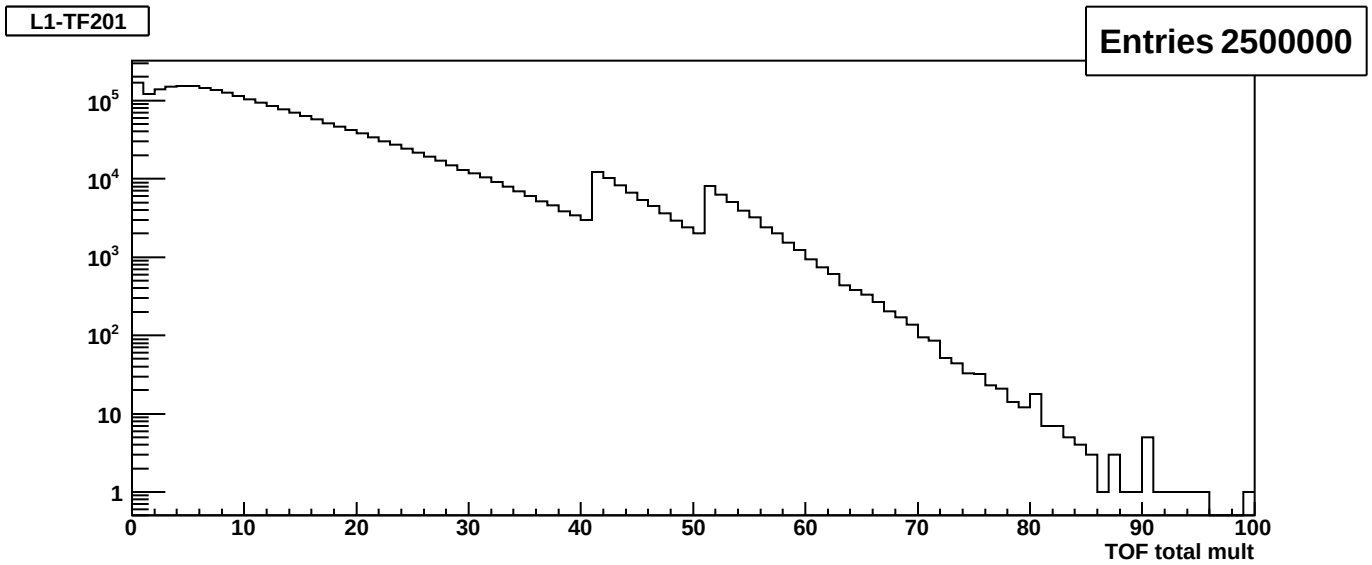

MIX-TF003
Entries 1.05e+08
TOF MULT
TOF tray

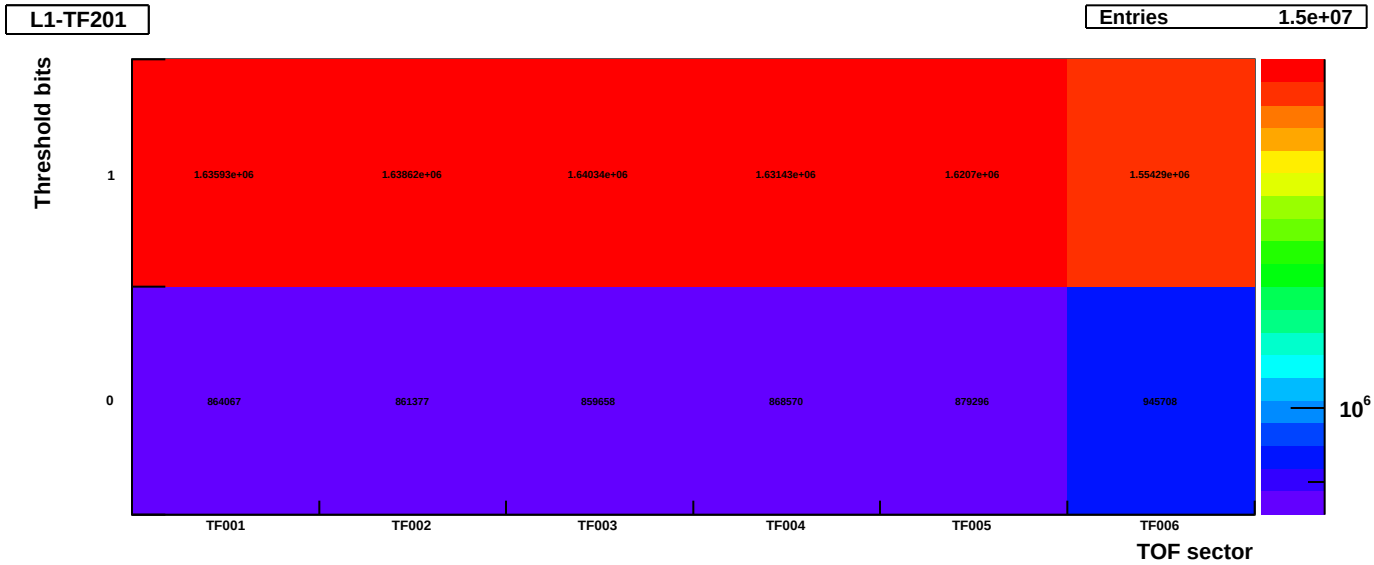

MIX-TF004
Entries 1.05e+08
TOF MULT
TOF tray

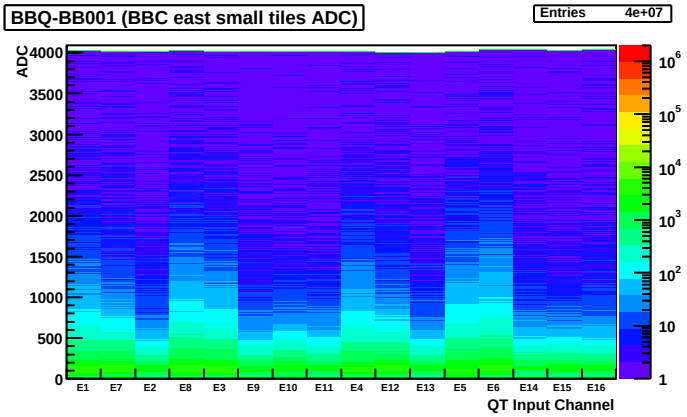

MIX-TF005
Entries 1.05e+08
TOF MULT
TOF tray

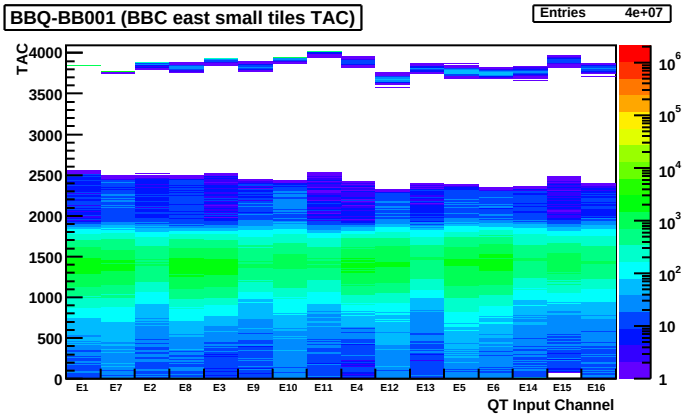

MIX-TF006
Entries 1.05e+08
TOF MULT
TOF tray

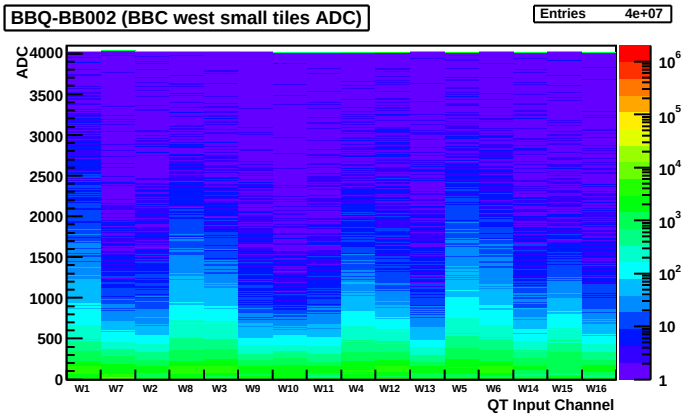

MIX-TF101
Entries 1.5e+07
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

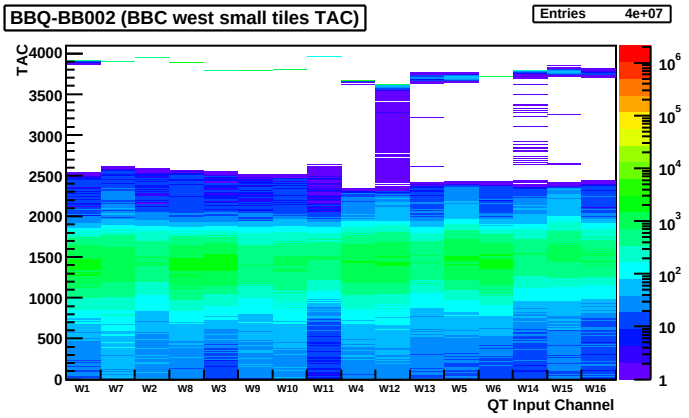

L1-TF201
Entries 2500000
10^5
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

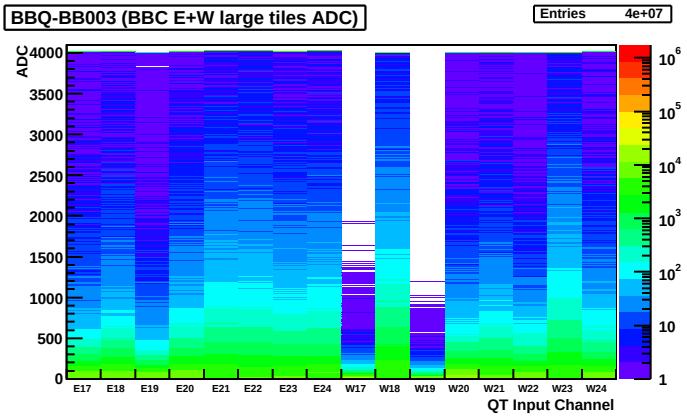

L1-TF201
Entries 1.5e+07
Threshold bits
1
0
1.63593e+06
1.63862e+06
1.64034e+06
1.63143e+06
1.6207e+06
1.55429e+06
864067
861377
859658
868570
879296
945708
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6

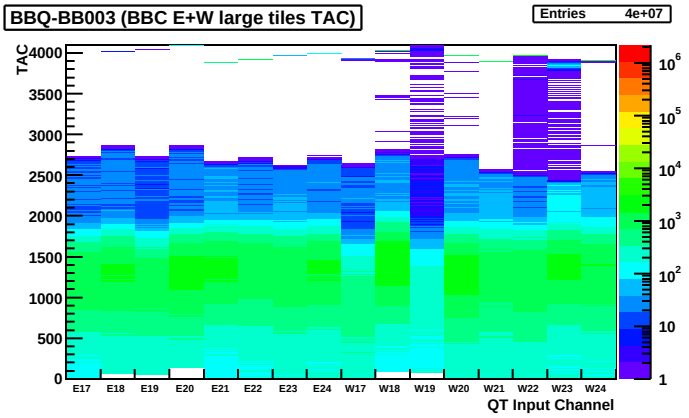

BBQ-BB001 (BBC east small tiles ADC)
Entries 4e+07
ADC
QT Input Channel

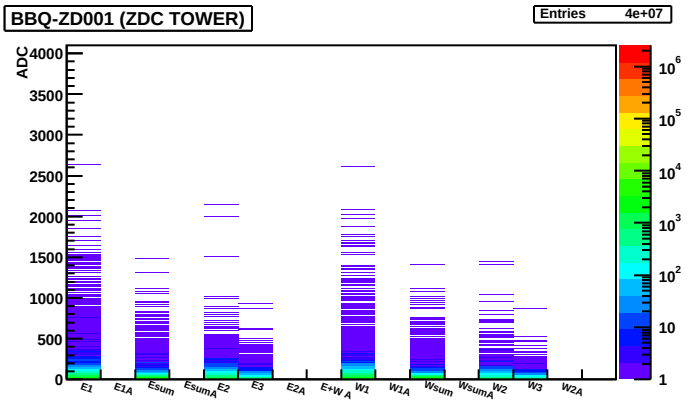

BBQ-BB001 (BBC east small tiles TAC)
Entries 4e+07
TAC
QT Input Channel

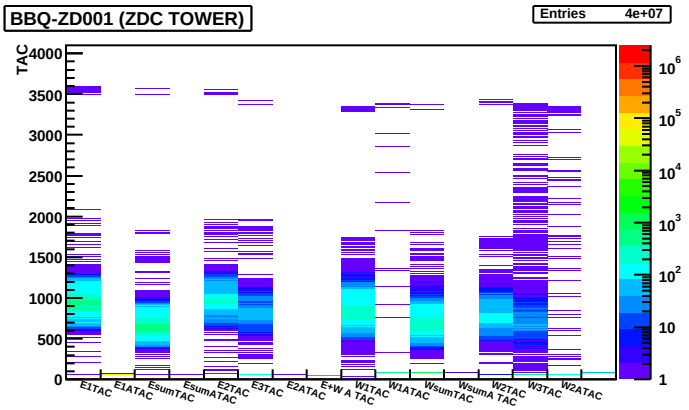

BBQ-BB002 (BBC west small tiles ADC)
Entries 4e+07
ADC
QT Input Channel

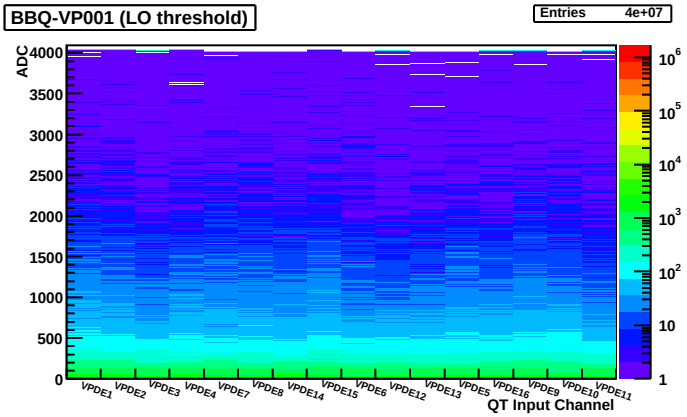

BBQ-BB002 (BBC west small tiles TAC)
Entries 4e+07
TAC
QT Input Channel

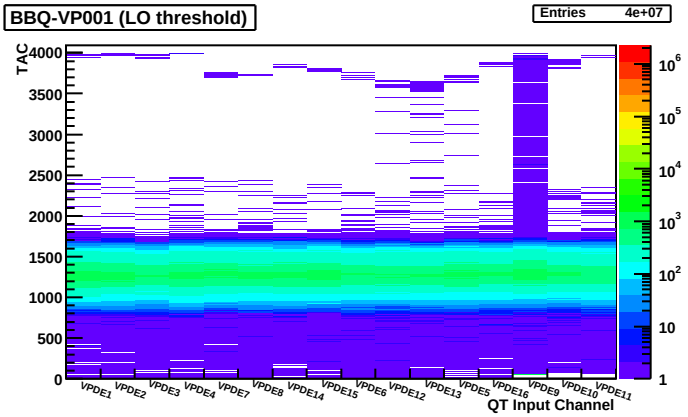

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4e+07
ADC
QT Input Channel

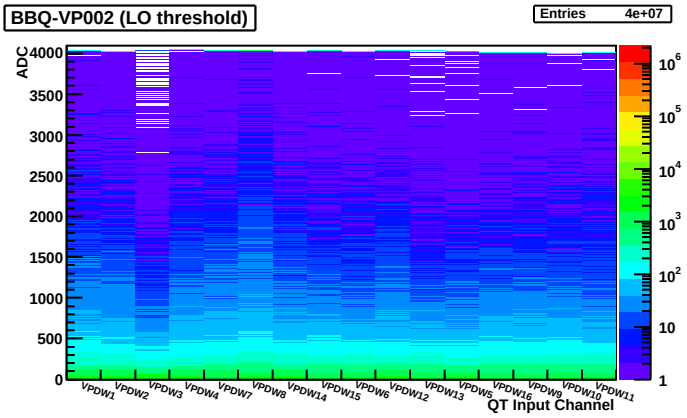

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4e+07
TAC
QT Input Channel

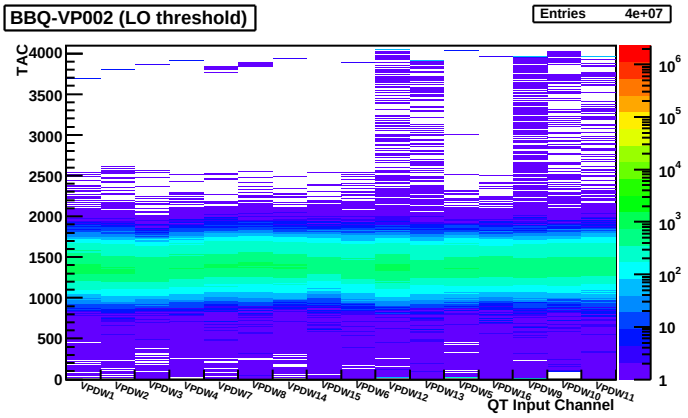

BBQ-ZD001 (ZDC TOWER)
Entries 4e+07
ADC

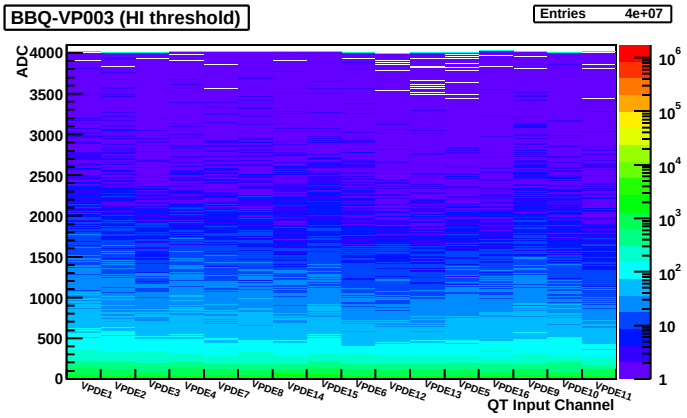

BBQ-ZD001 (ZDC TOWER)
Entries 4e+07
TAC

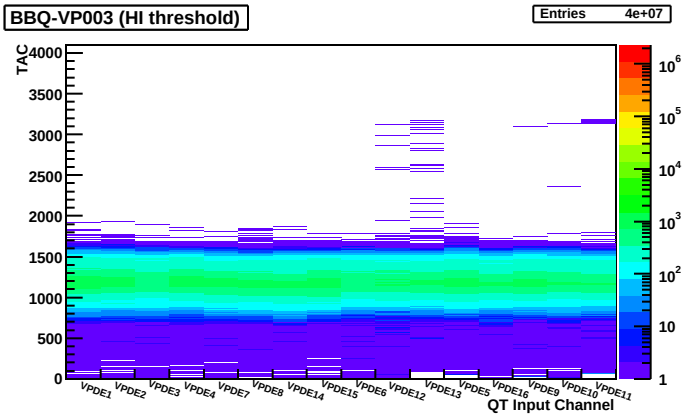

BBQ-VP001 (LO threshold)
Entries 4e+07
ADC
QT Input Channel

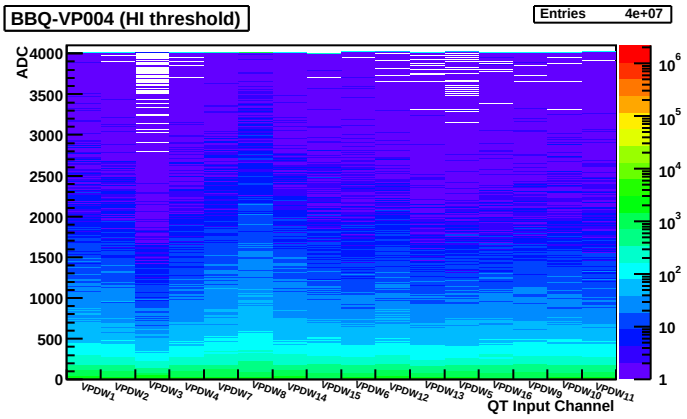

BBQ-VP001 (LO threshold)
Entries 4e+07
TAC
QT Input Channel

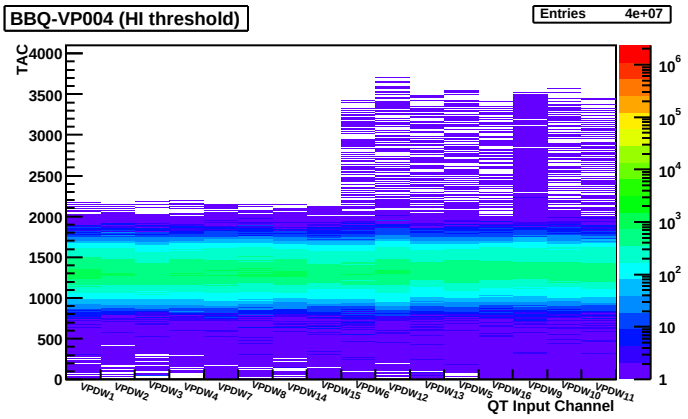

BBQ-VP002 (LO threshold)
Entries 4e+07
ADC
QT Input Channel

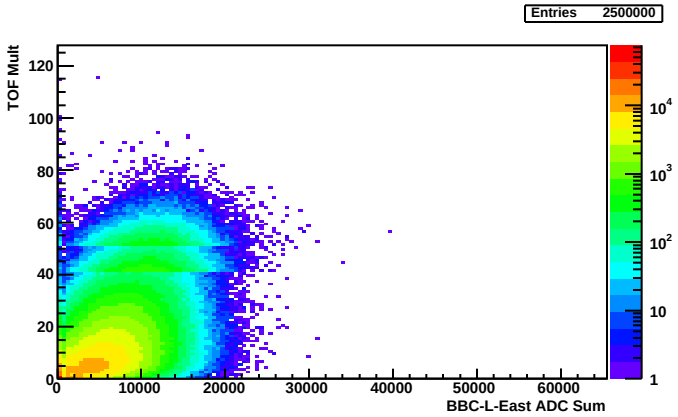

BBQ-VP002 (LO threshold)
Entries 4e+07
TAC
QT Input Channel

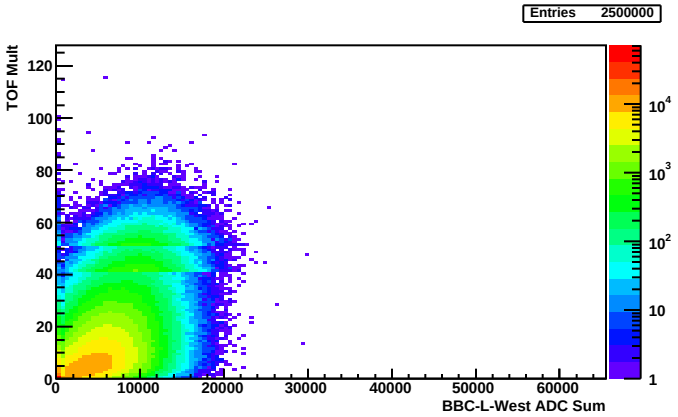

BBQ-VP003 (HI threshold)
Entries 4e+07
ADC
QT Input Channel

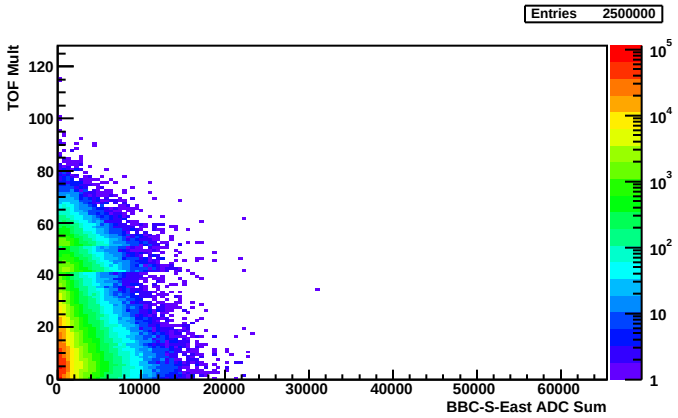

BBQ-VP003 (HI threshold)
Entries 4e+07
TAC
QT Input Channel

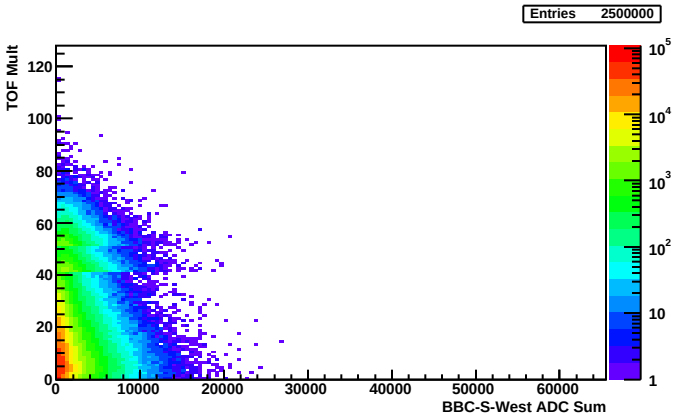

BBQ-VP004 (HI threshold)
Entries 4e+07
ADC
QT Input Channel

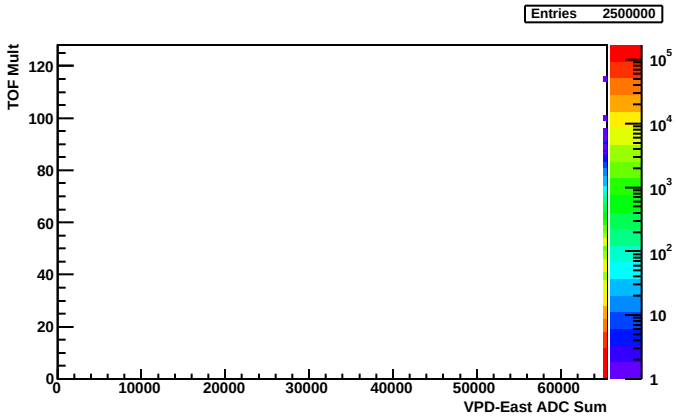

BBQ-VP004 (HI threshold)
Entries 4e+07
TAC
QT Input Channel

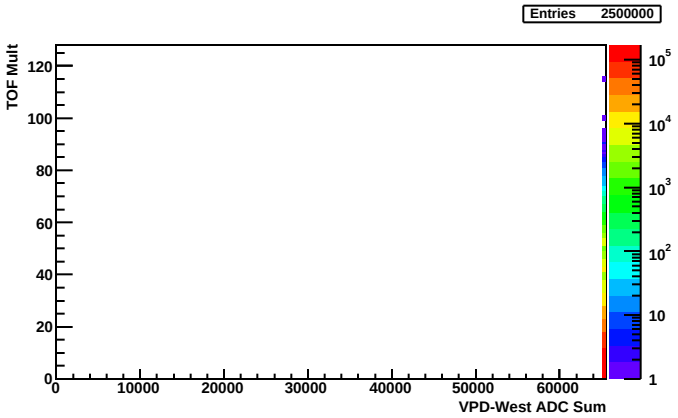

Entries 2500000
TOF Mult
BBC-L-East ADC Sum

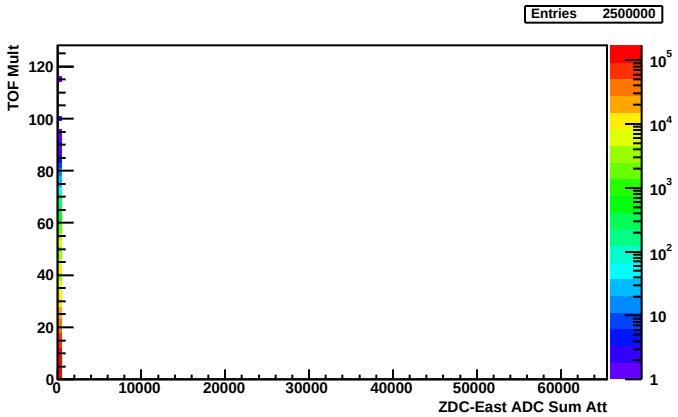

Entries 2500000
TOF Mult
BBC-L-West ADC Sum

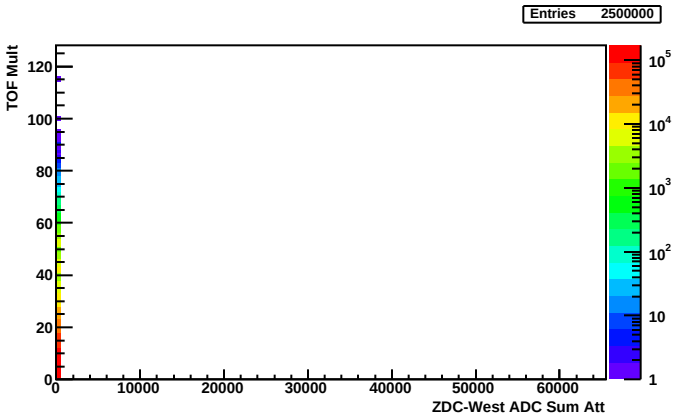

Entries 2500000
TOF Mult
BBC-S-East ADC Sum

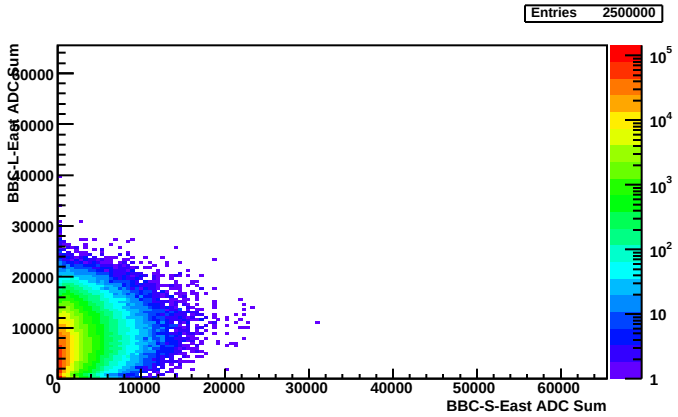

Entries 2500000
TOF Mult
BBC-S-West ADC Sum

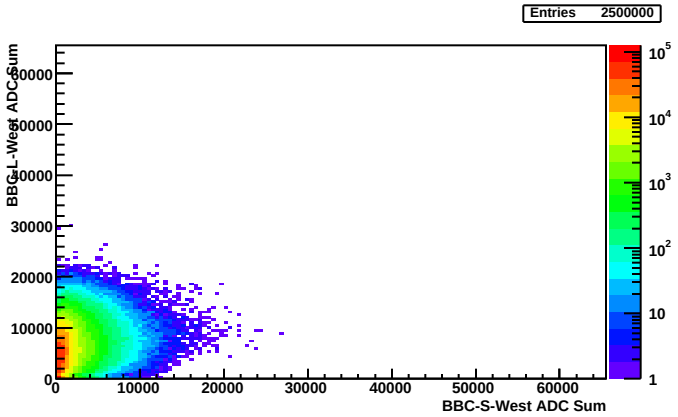

Entries 2500000
TOF Mult
VPD-East ADC Sum

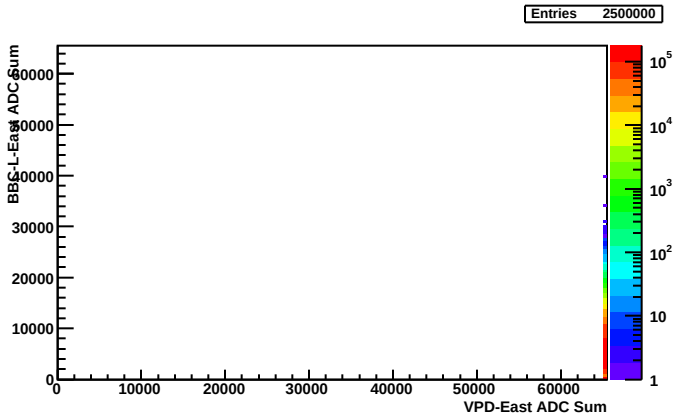

Entries 2500000
TOF Mult
VPD-West ADC Sum

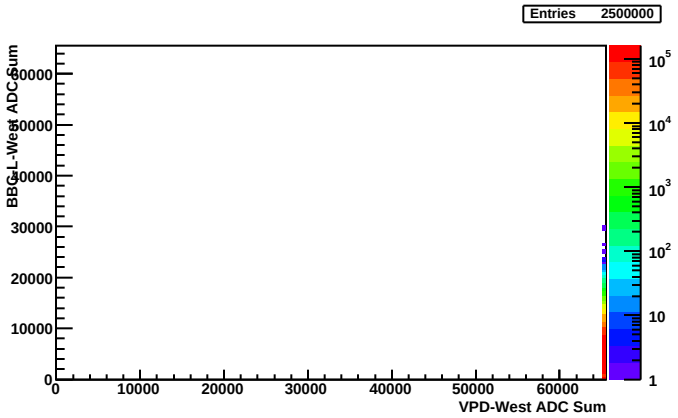

Entries 2500000
TOF Mult
ZDC-East ADC Sum Att

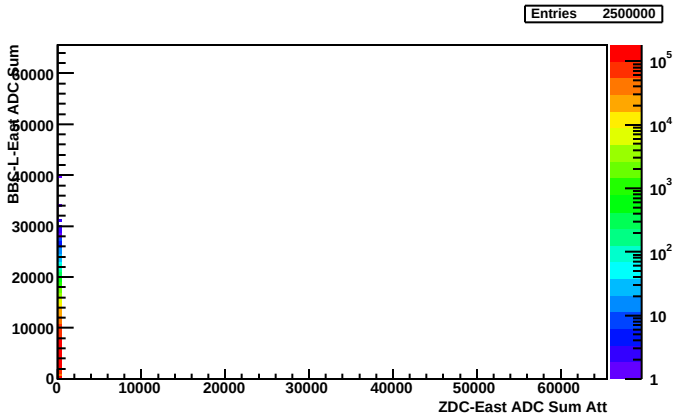

Entries 2500000
TOF Mult
ZDC-West ADC Sum Att

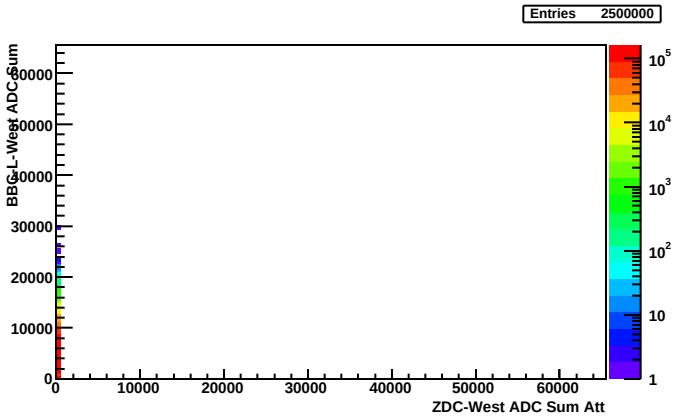

Entries 2500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

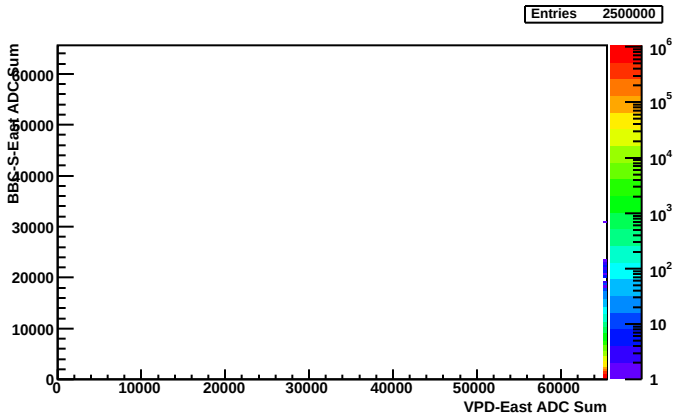

Entries 2500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

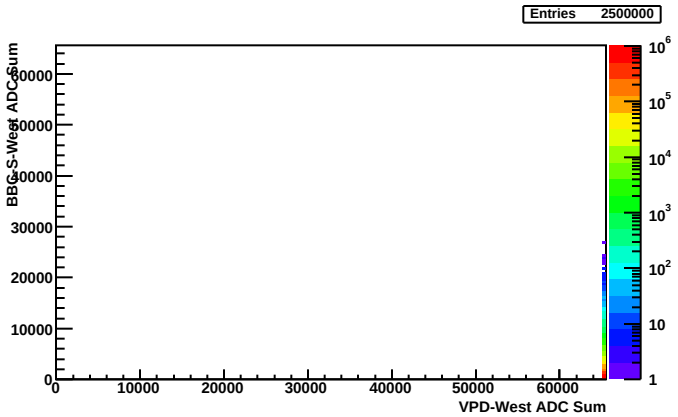

Entries 2500000
BBC-L-East ADC Sum
VPD-East ADC Sum

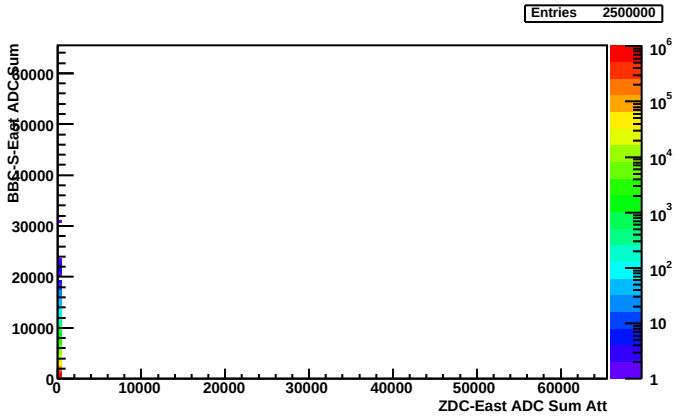

Entries 2500000
BBC-L-West ADC Sum
VPD-West ADC Sum

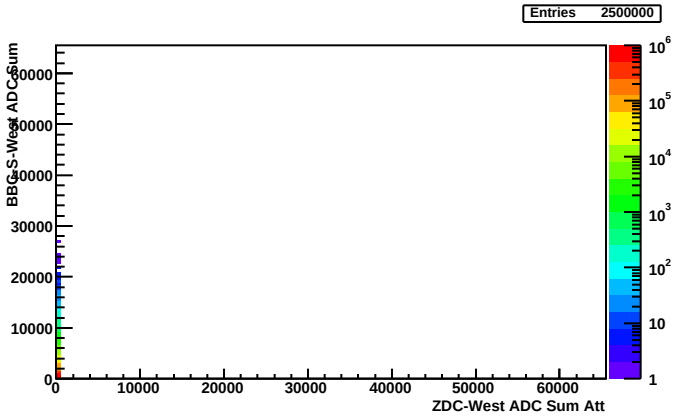

Entries 2500000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

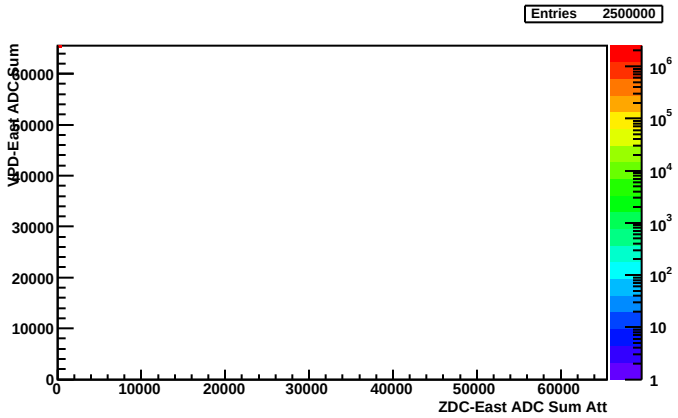

Entries 2500000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

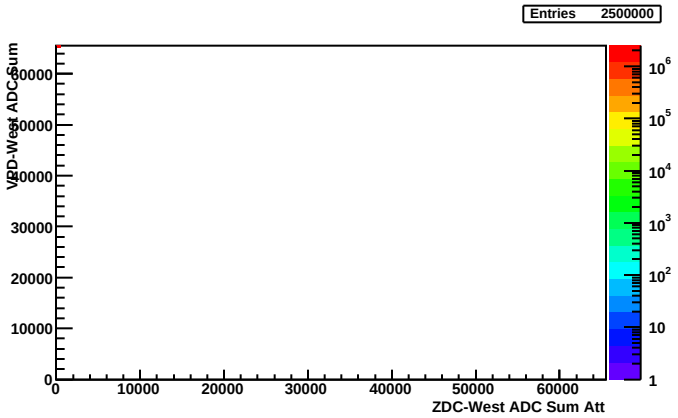

Entries 2500000
BBC-S-East ADC Sum
VPD-East ADC Sum

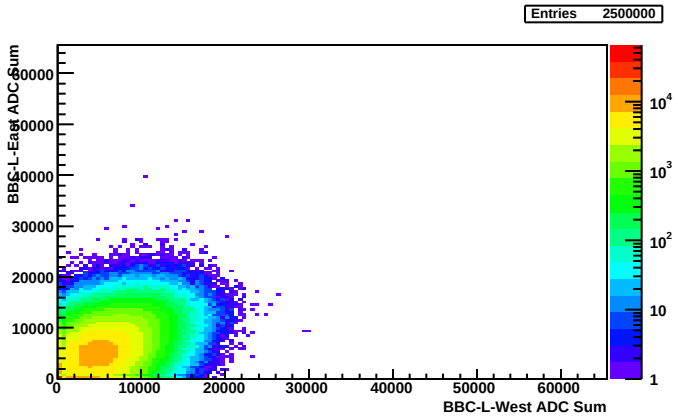

Entries 2500000
BBC-S-West ADC Sum
VPD-West ADC Sum

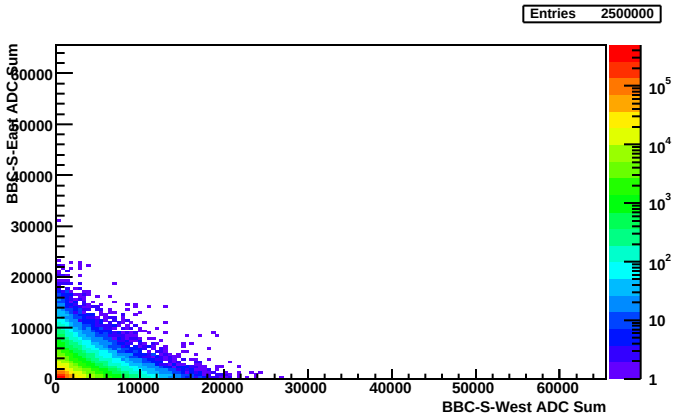

Entries 2500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

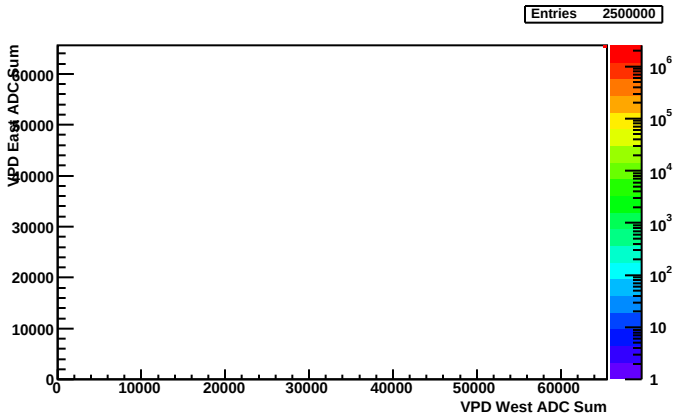

Entries 2500000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

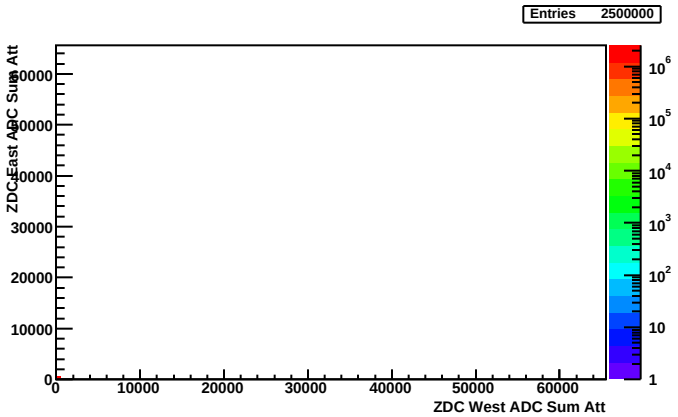

Entries 2500000
VPD-East ADC Sum
ZDC-East ADC Sum Att

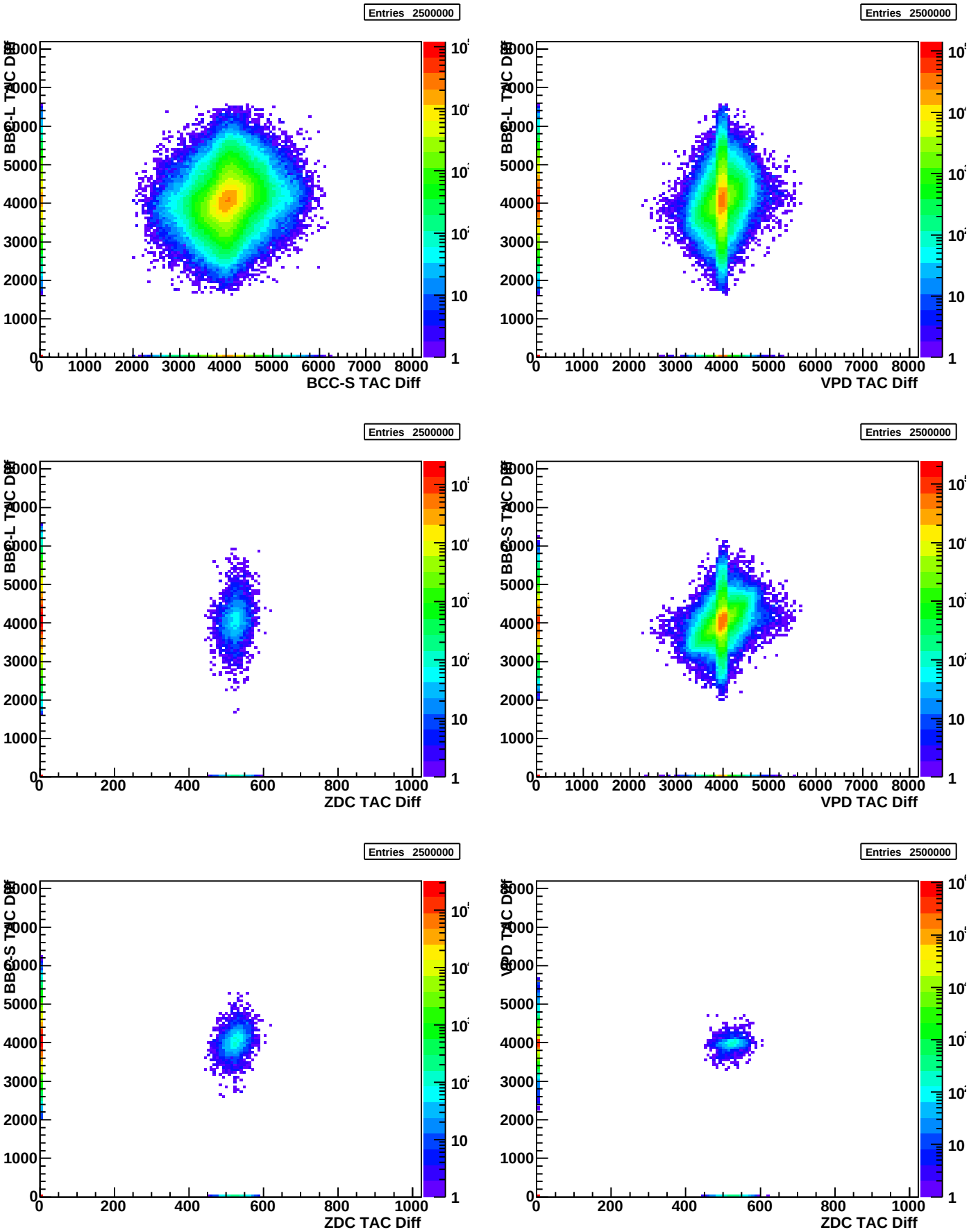

Entries 2500000
VPD-West ADC Sum
ZDC-West ADC Sum Att

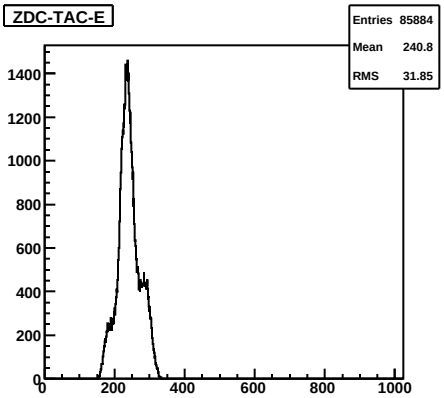

Entries 2500000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

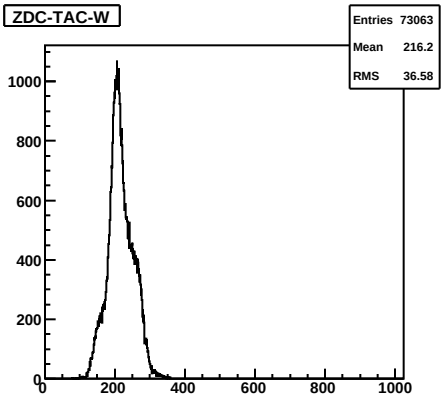

Entries 2500000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

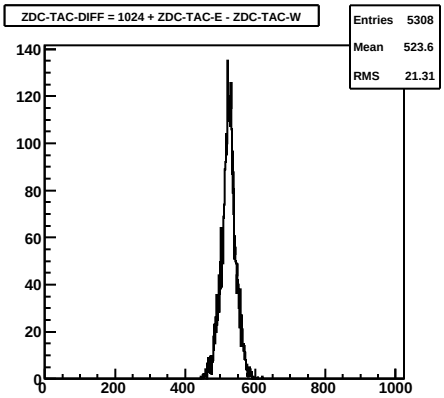

Entries 2500000
VPD East ADC Sum
VPD West ADC Sum

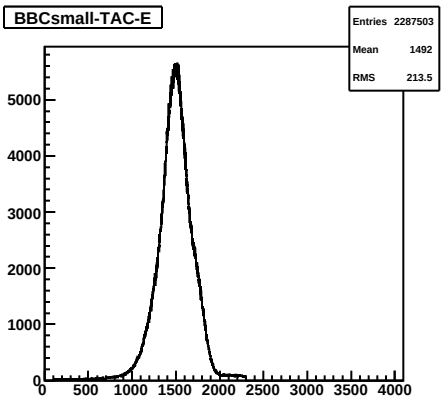

Entries 2500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

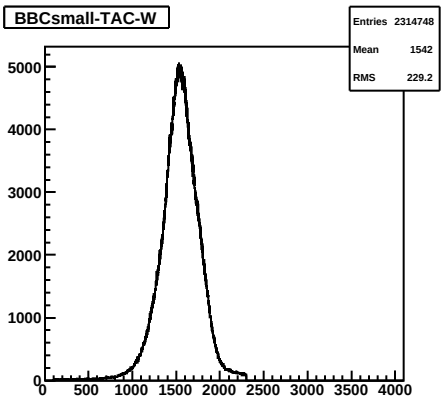

Entries 2500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2500000
BBC-L TAC Diff
VPD TAC Diff
Entries 2500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 2500000
BBC-S TAC Diff
VPD TAC Diff
Entries 2500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 2500000
VPD TAC Diff
ZDC TAC Diff

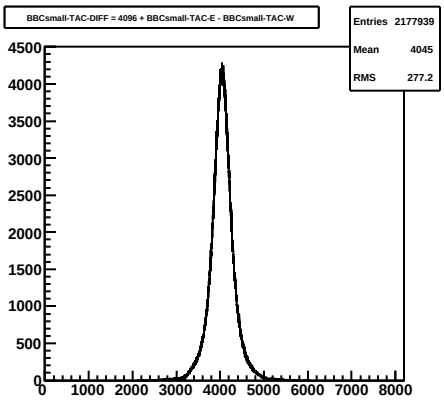

ZDC-TAC-E
Entries 85884
Mean 240.8
RMS 31.85

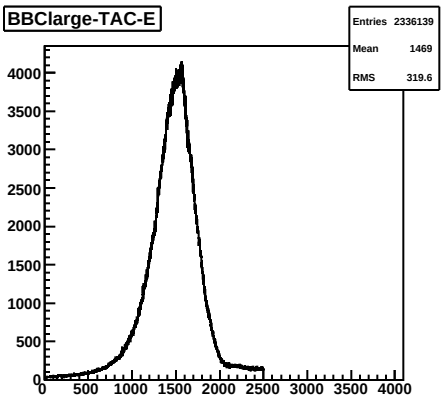

ZDC-TAC-W
Entries 73063
Mean 216.2
RMS 36.58

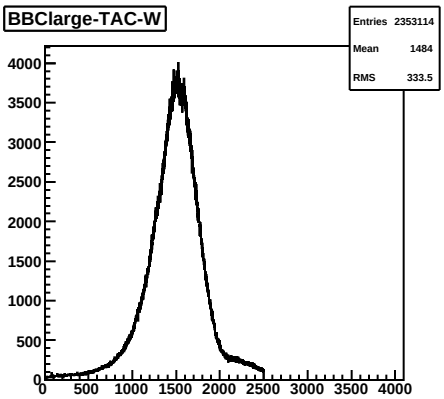

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 5308
Mean 523.6
RMS 21.31

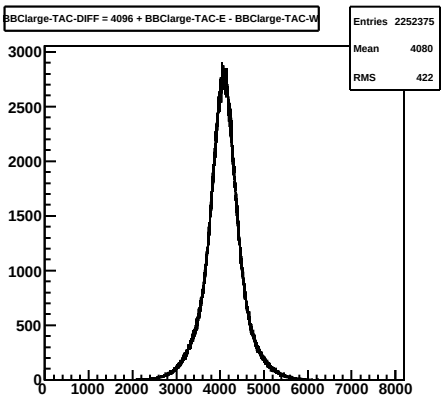

BBCsmall-TAC-E
Entries 2287503
Mean 1492
RMS 213.5

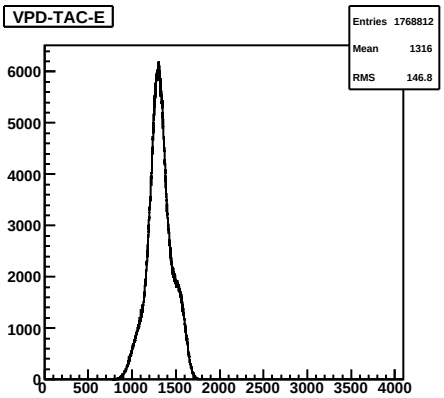

BBCsmall-TAC-W
Entries 2314748
Mean 1542
RMS 229.2

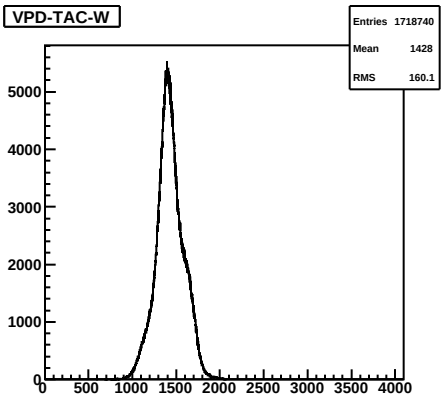

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 2177939
Mean 4045
RMS 277.2

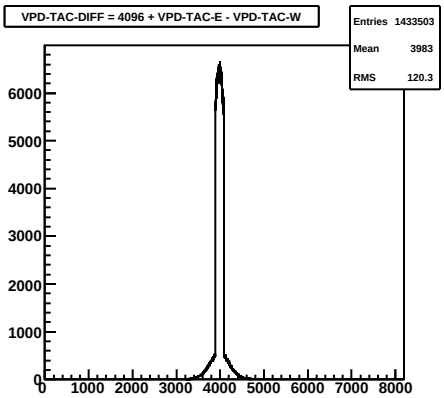

BBClarge-TAC-E
Entries 2336139
Mean 1469
RMS 319.6

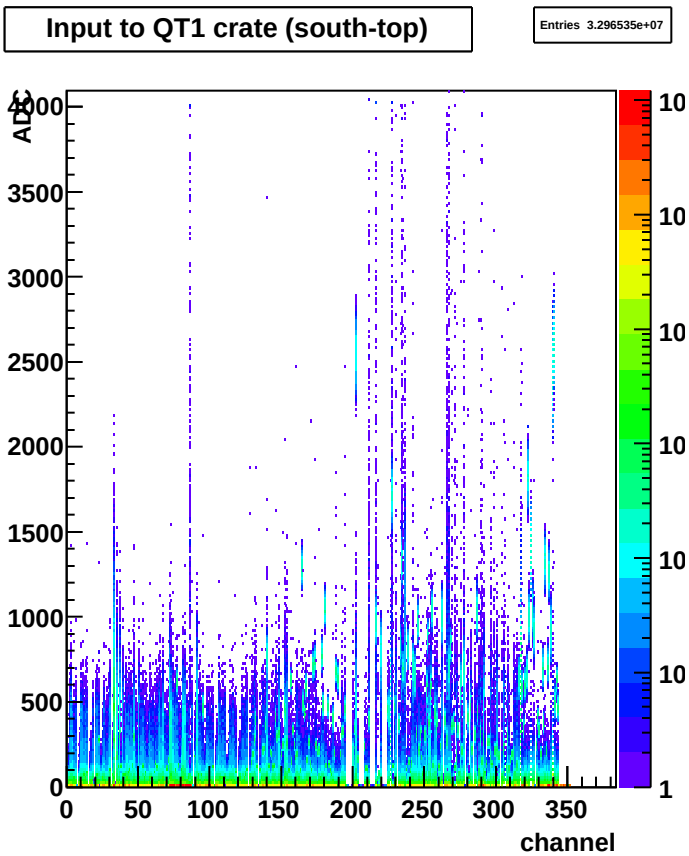

BBClarge-TAC-W
Entries 2353114
Mean 1484
RMS 333.5

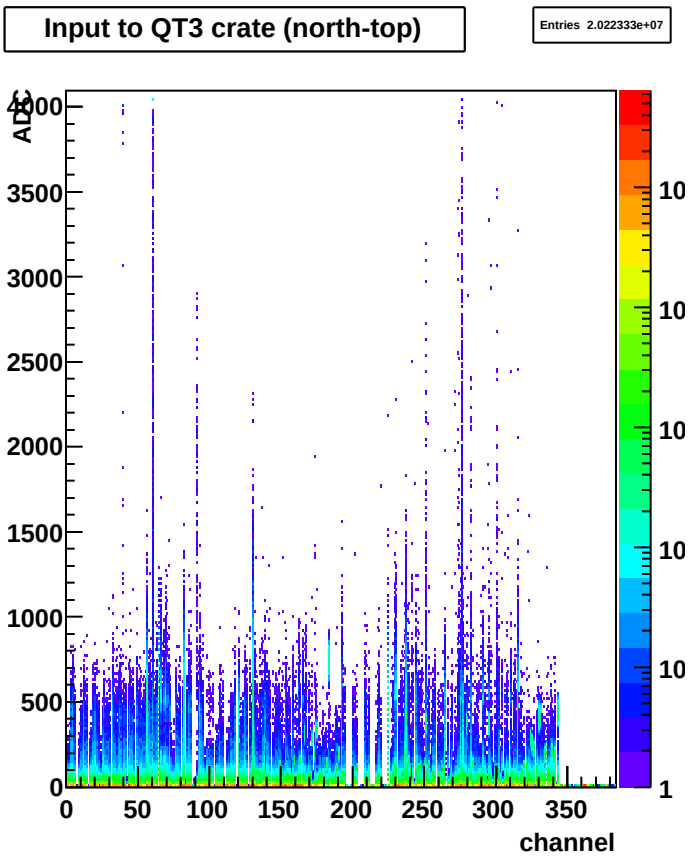

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2252375
Mean 4080
RMS 422

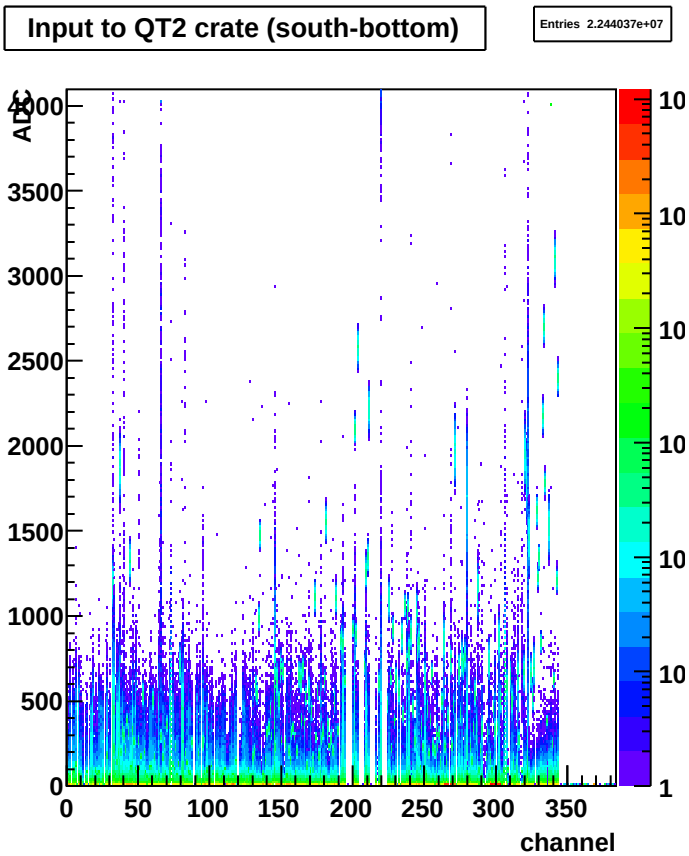

VPD-TAC-E
Entries 1768812
Mean 1316
RMS 146.8

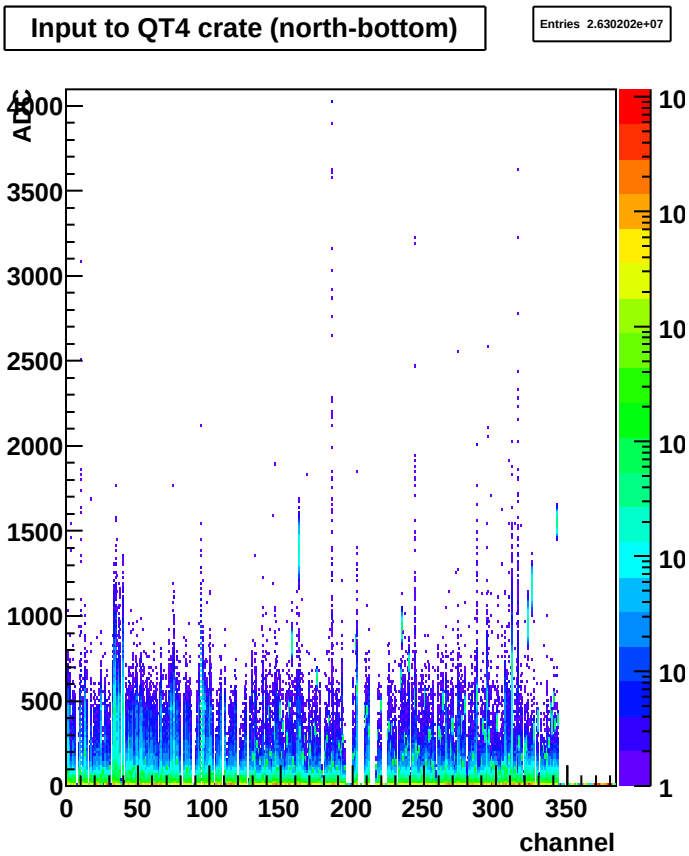

VPD-TAC-W
Entries 1718740
Mean 1428
RMS 160.1

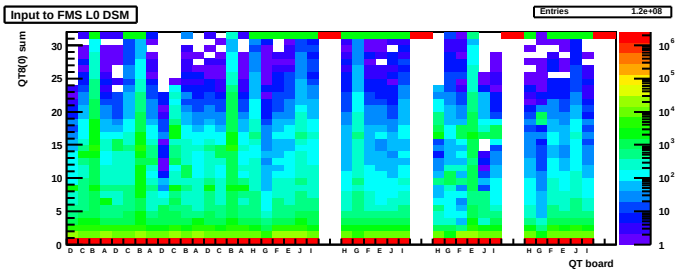

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1433503
Mean 3983
RMS 120.3

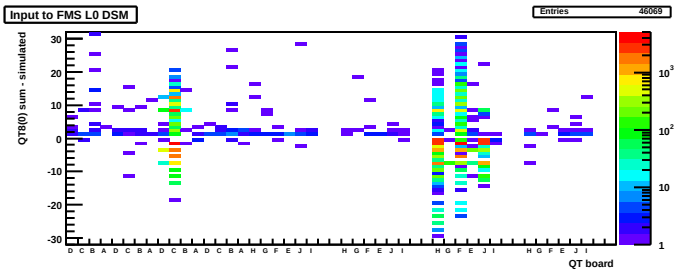

Input to QT1 crate (south-top)
Entries 3.296535e+07
ADC
channel

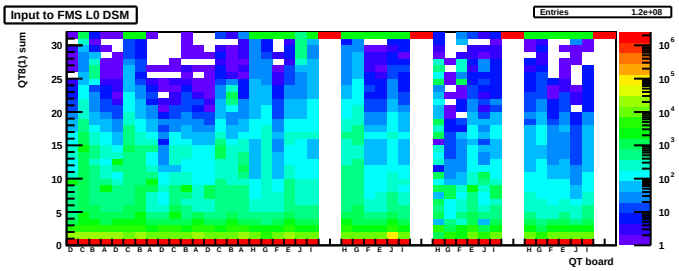

Input to QT3 crate (north-top)
Entries 2.022333e+07
ADC
channel

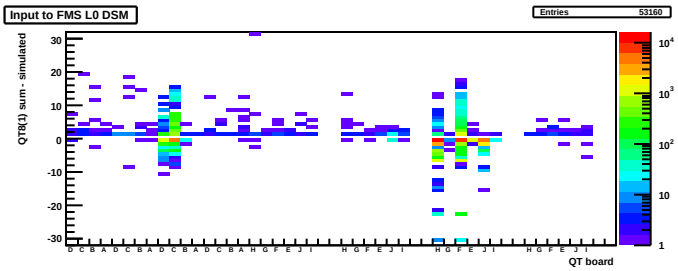

Input to QT2 crate (south-bottom)
Entries 2.244037e+07
ADC
channel

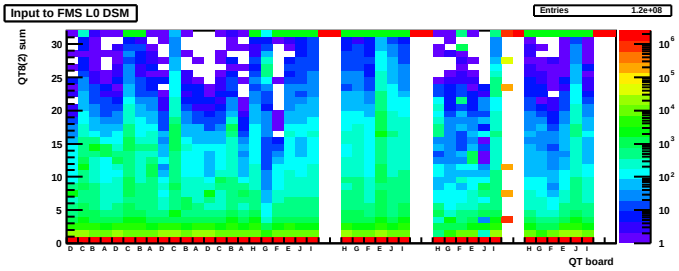

Input to QT4 crate (north-bottom)
Entries 2.630202e+07
ADC
channel

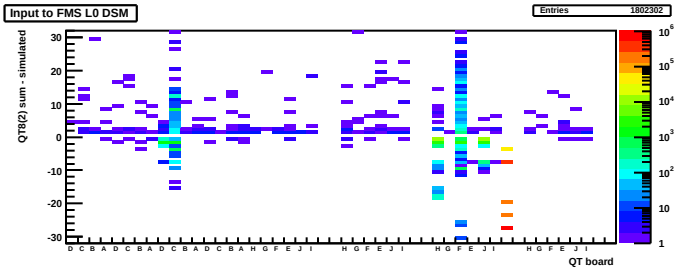

Input to FMS L0 DSM
Entries 1.2e+08
QT8(0) sum
QT board

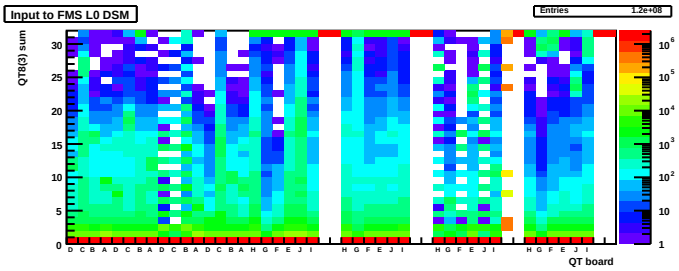

Input to FMS L0 DSM
Entries 46069
QT8(0) sum - simulated
QT board

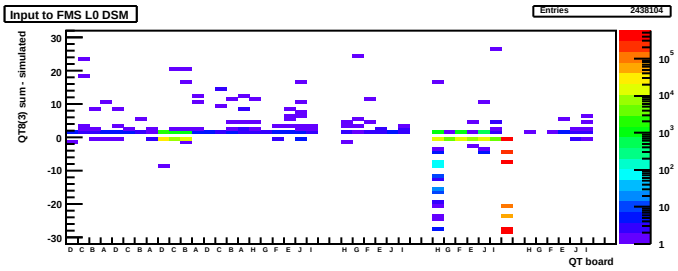

Input to FMS L0 DSM
Entries 1.2e+08
QT8(1) sum
QT board

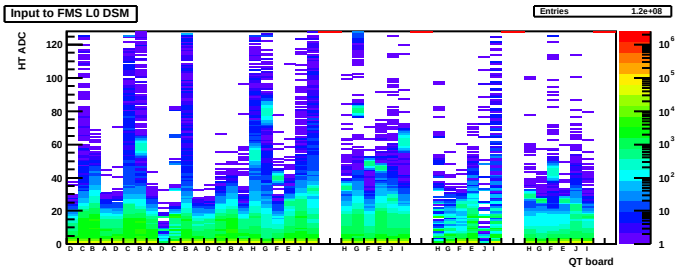

Input to FMS L0 DSM
Entries 53160
QT8(1) sum - simulated
QT board

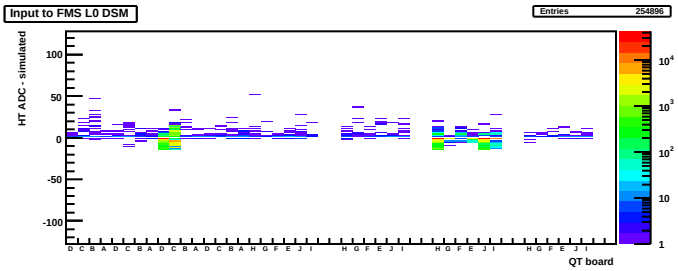

Input to FMS L0 DSM
Entries 1.2e+08
QT8(2) sum
QT board

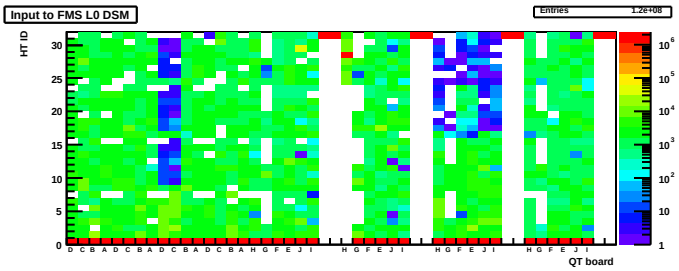

Input to FMS L0 DSM
Entries 1802302
QT8(2) sum - simulated
QT board

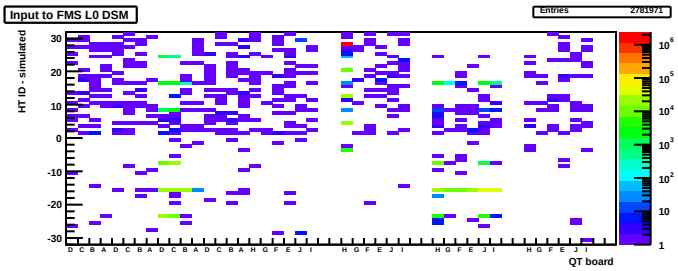

Input to FMS L0 DSM
Entries 1.2e+08
QT8(3) sum
QT board

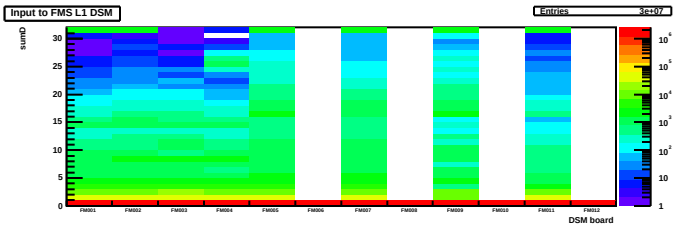

Input to FMS L0 DSM
Entries 2438104
QT8(3) sum - simulated
QT board

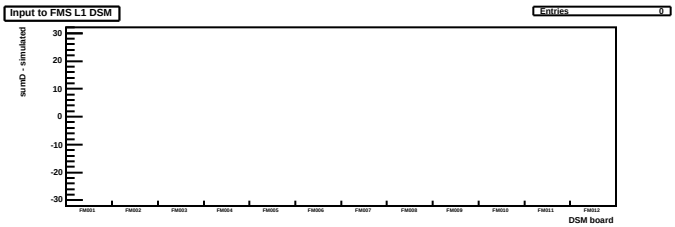

Input to FMS L0 DSM
Entries 1.2e+08
HT ADC
QT board

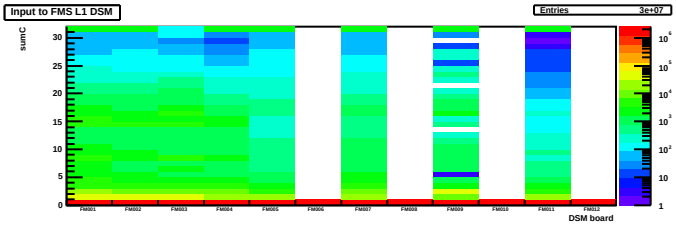

Input to FMS L0 DSM
Entries 254896
HT ADC - simulated
QT board

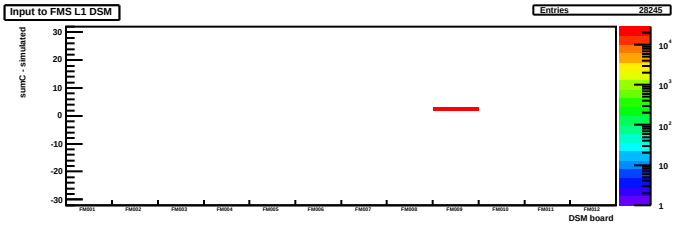

Input to FMS L0 DSM
Entries 1.2e+08
HT ID
QT board

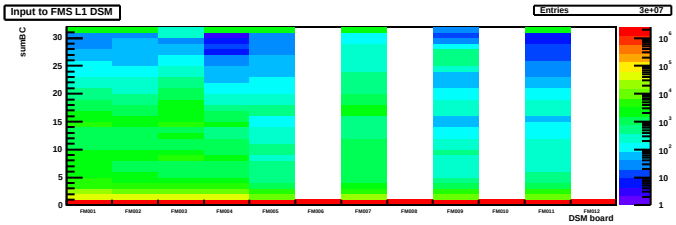

Input to FMS L0 DSM
Entries 2781971
HT ID - simulated
QT board

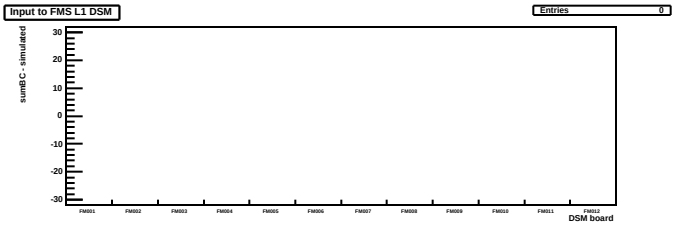

Input to FMS L1 DSM
Entries 3e+07
sumD
DSM board

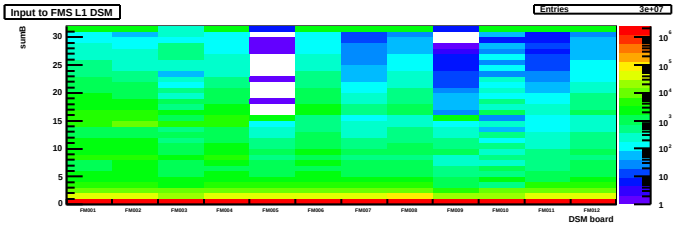

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

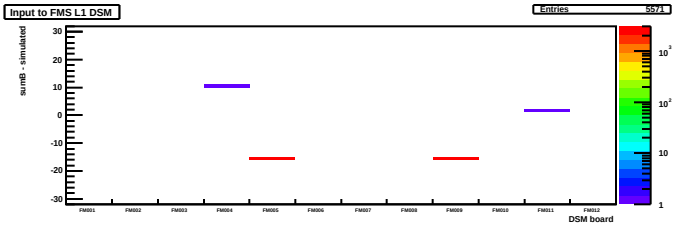

Input to FMS L1 DSM
Entries 3e+07
sumC
DSM board

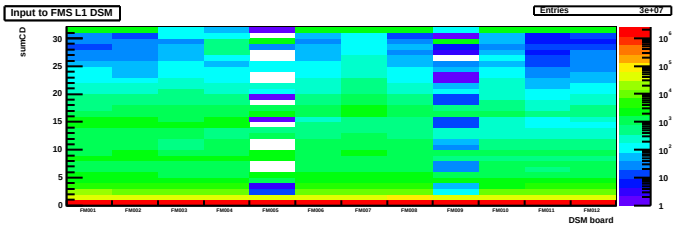

Input to FMS L1 DSM
Entries 28245
sumC - simulated
DSM board

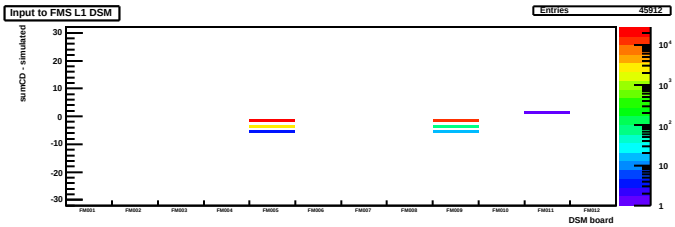

Input to FMS L1 DSM
Entries 3e+07
sumBC
DSM board

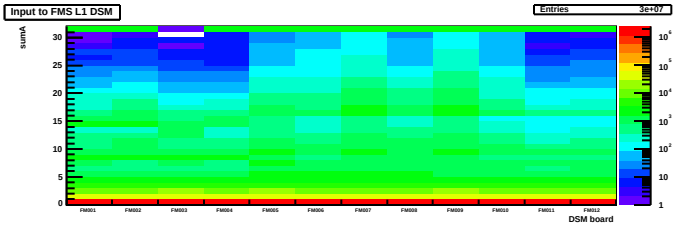

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

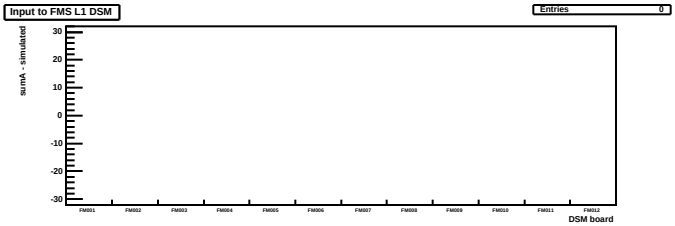

Input to FMS L1 DSM
Entries 3e+07
sumB
DSM board

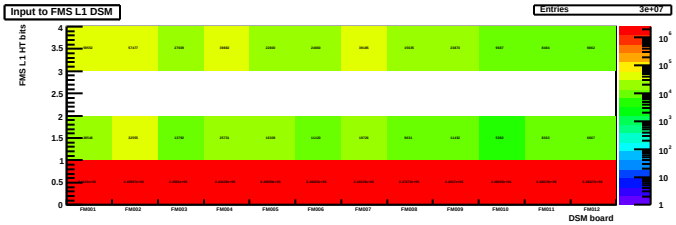

Input to FMS L1 DSM
Entries 5571
sumB - simulated
DSM board

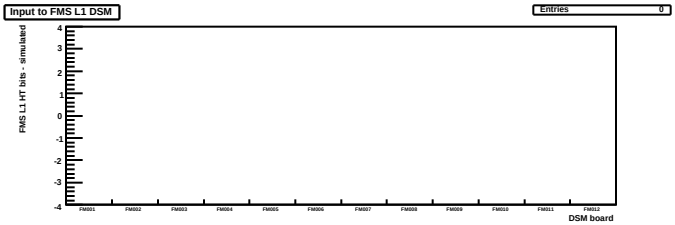

Input to FMS L1 DSM
Entries 3e+07
sumCD
DSM board

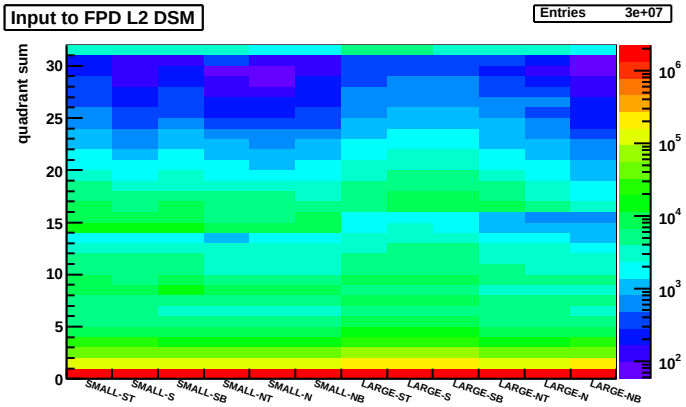

Input to FMS L1 DSM
Entries 45912
sumCD - simulated
DSM board

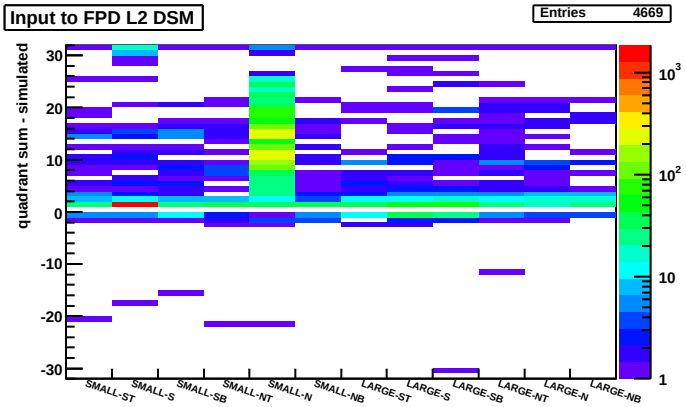

Input to FMS L1 DSM
Entries 3e+07
sumA
DSM board

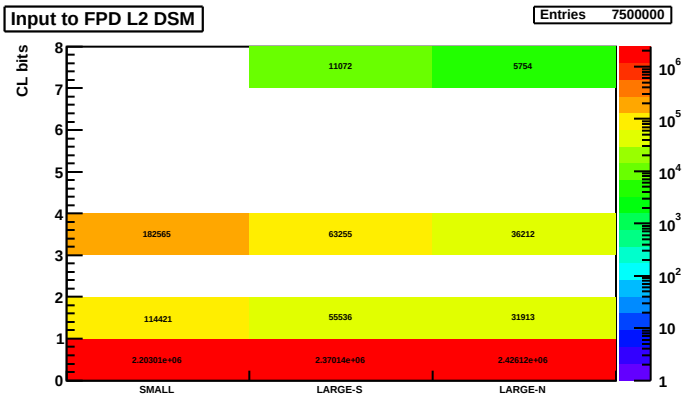

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

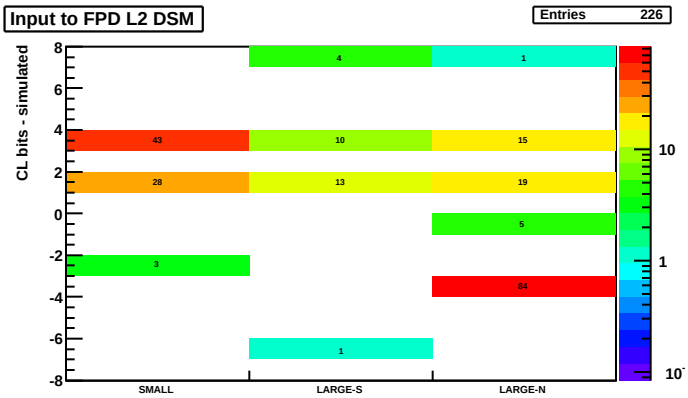

Input to FMS L1 DSM
Entries 3e+07
FMS L1 HT bits
DSM board

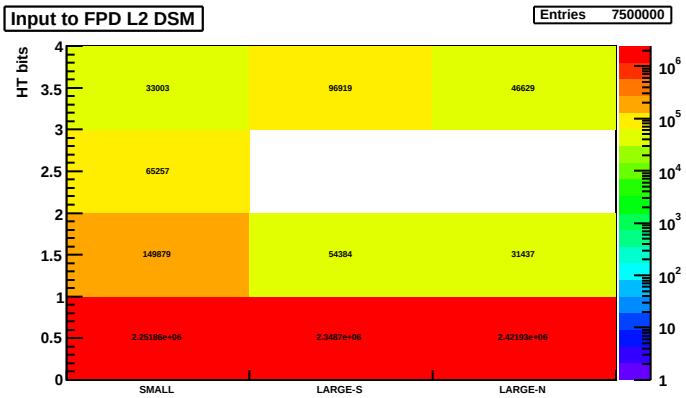

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

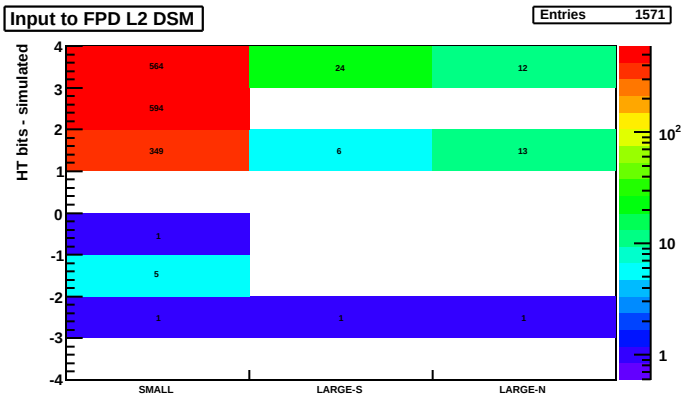

Input to FPD L2 DSM
Entries 3e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

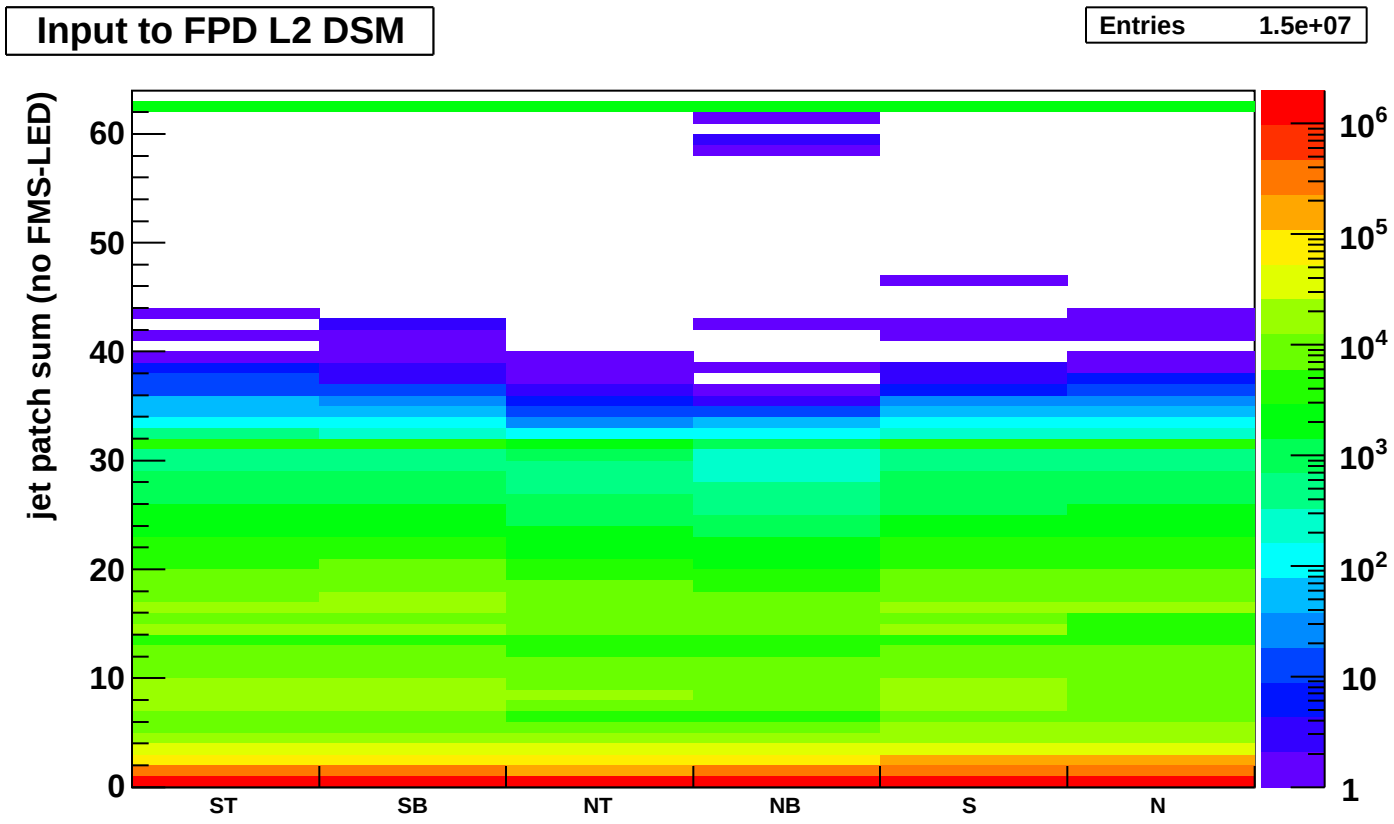

Input to FPD L2 DSM
Entries 4669
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

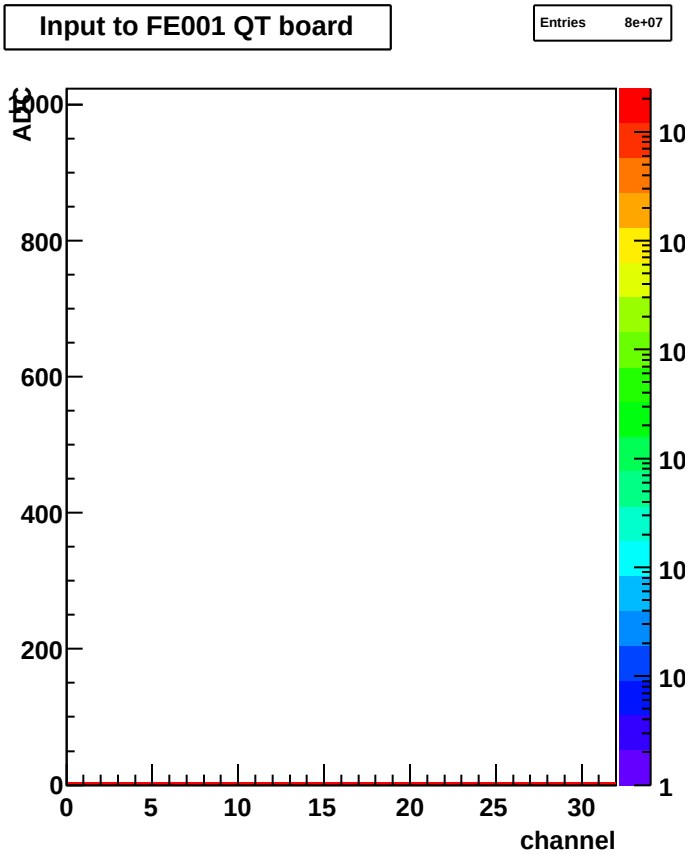

Input to FPD L2 DSM
Entries 7500000
CL bits
11072
5754
182565
63255
36212
114421
55536
31913
2.20301e+06
2.37014e+06
2.42612e+06
SMALL
LARGE-S
LARGE-N

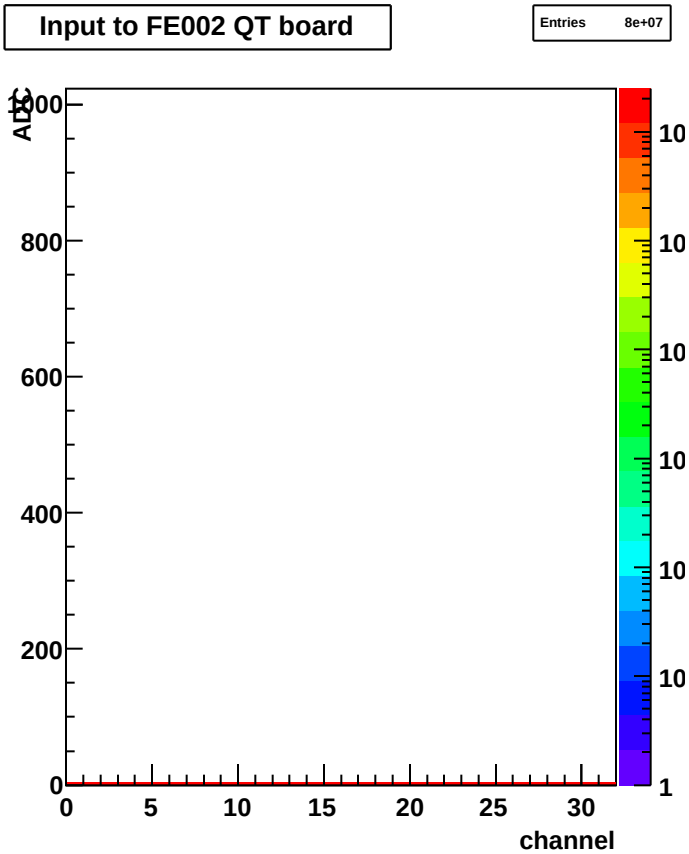

Input to FPD L2 DSM
Entries 226
CL bits - simulated
4
1
43
10
15
28
13
19
5
3
84
1
SMALL
LARGE-S
LARGE-N

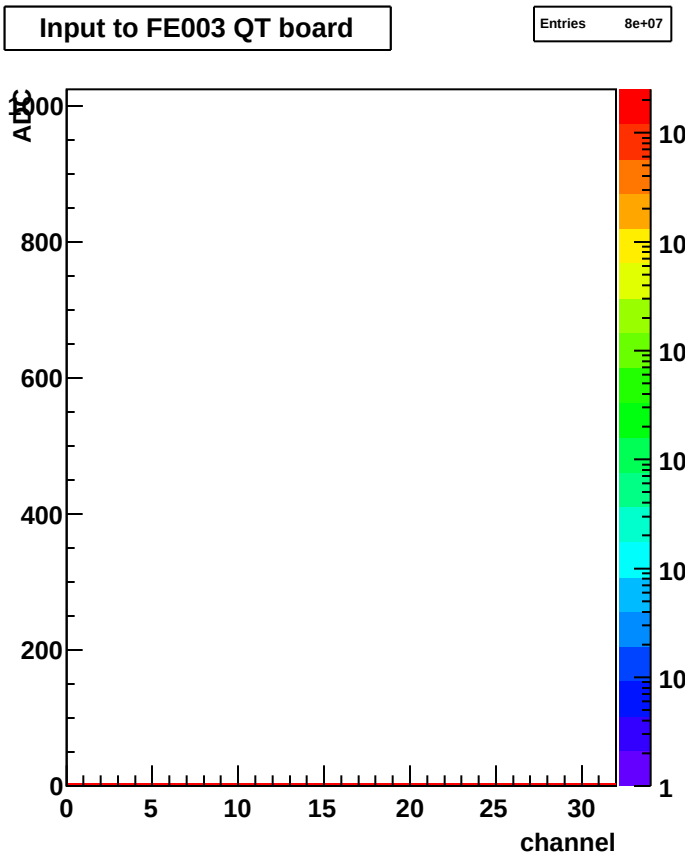

Input to FPD L2 DSM
Entries 7500000
HT bits
33003
96919
46629
65257
149879
54384
31437
2.25186e+06
2.3487e+06
2.42193e+06
SMALL
LARGE-S
LARGE-N

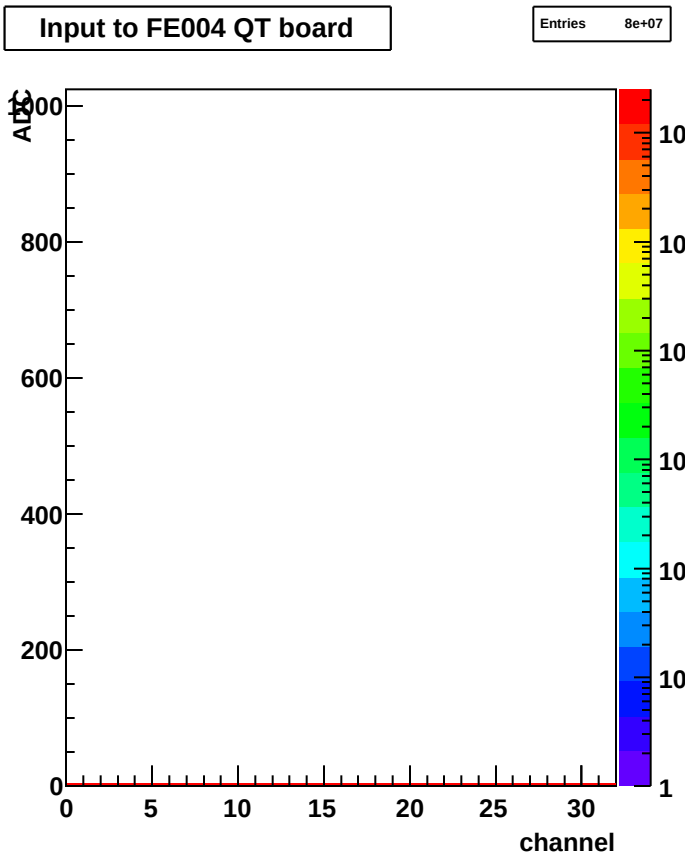

Input to FPD L2 DSM
Entries 1571
HT bits - simulated
564
24
12
594
349
6
13
1
5
1
1
1
SMALL
LARGE-S
LARGE-N

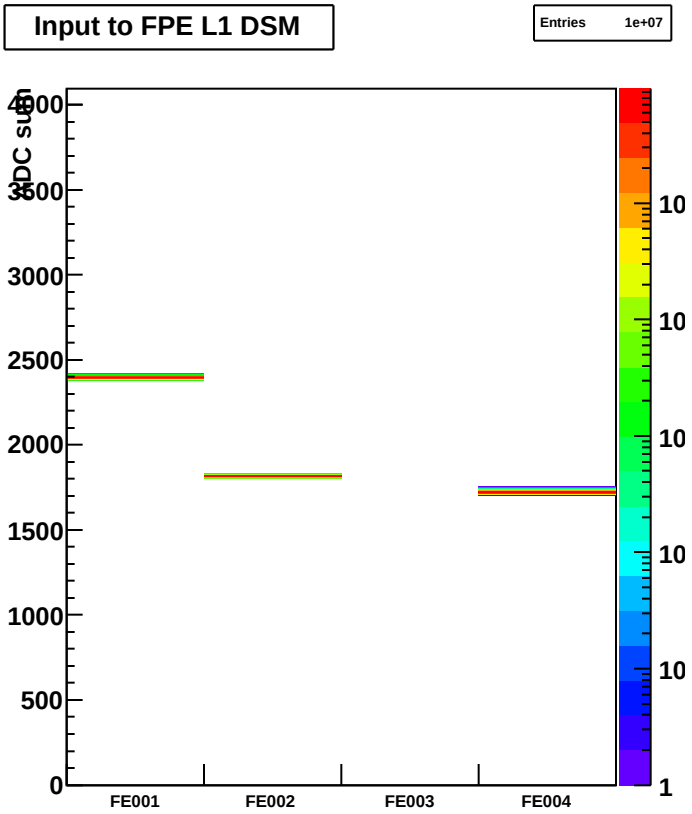

Input to FPD L2 DSM
Entries 1.5e+07
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

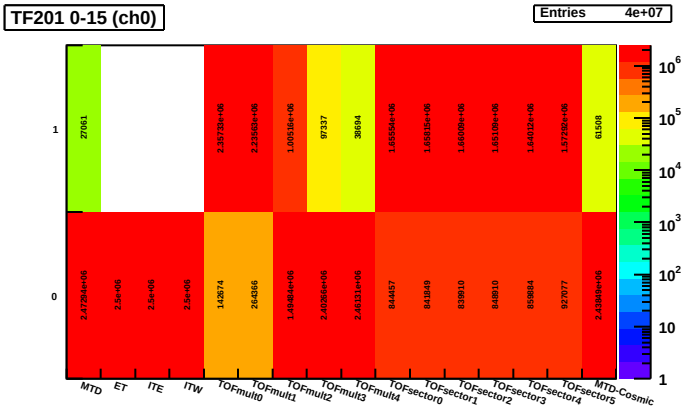

Input to FE001 QT board
Entries 8e+07
ADC
channel

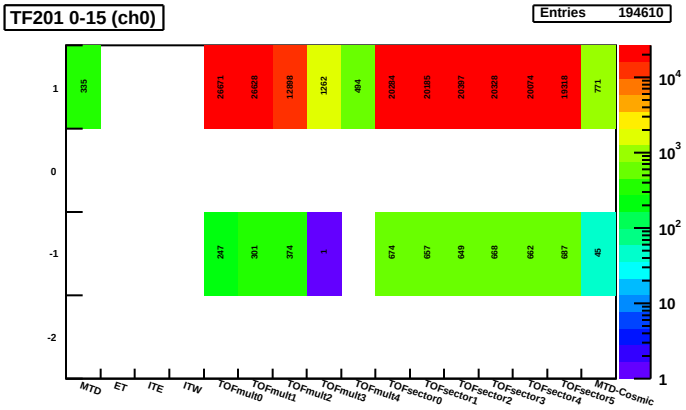

Input to FE002 QT board
Entries 8e+07
ADC
channel

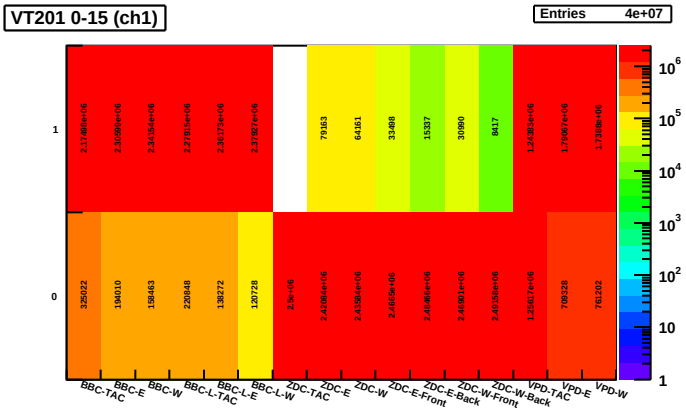

Input to FE003 QT board
Entries 8e+07
ADC
channel

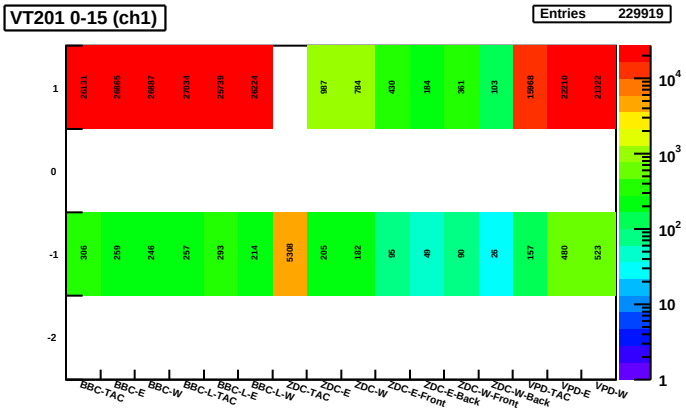

Input to FE004 QT board
Entries 8e+07
ADC
channel


Input to FPE L1 DSM
Entries 1e+07
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 4e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 194610
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 4e+07
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 229919
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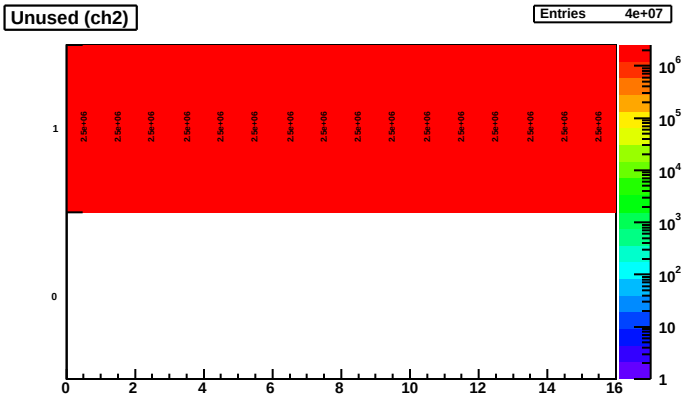
Unused (ch2)
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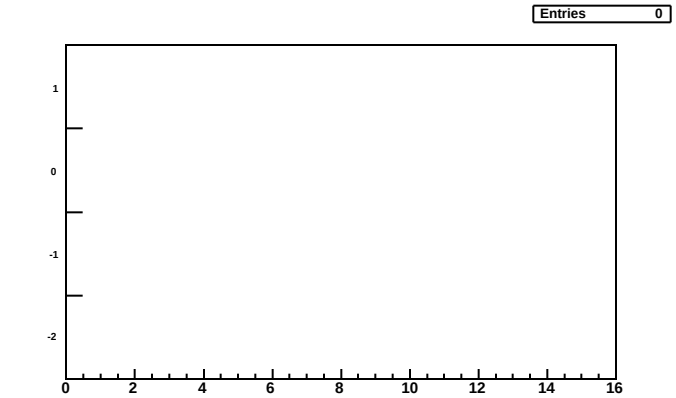
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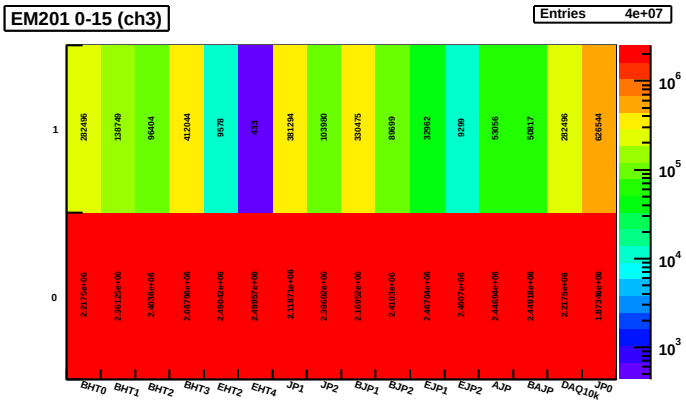
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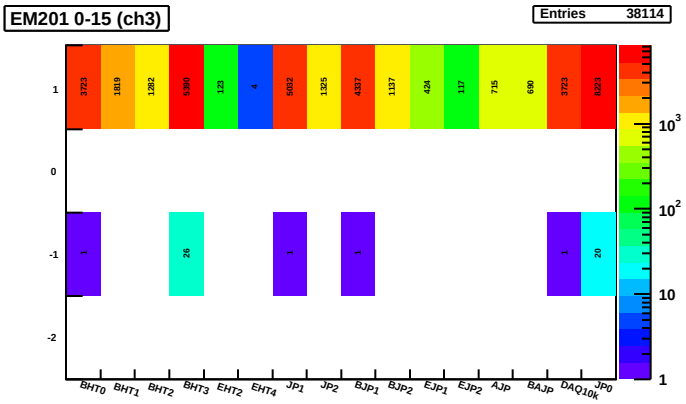
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Entries 38114
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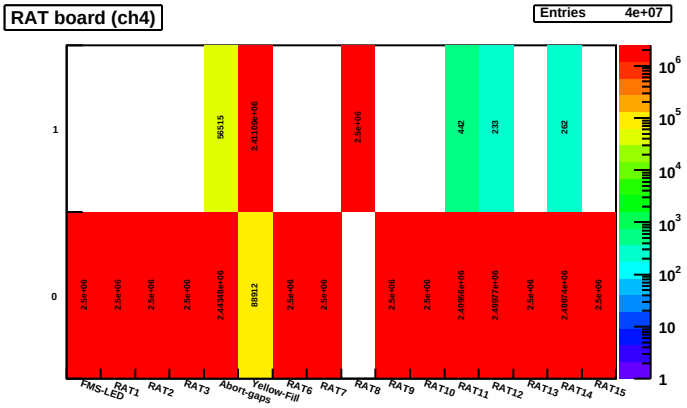
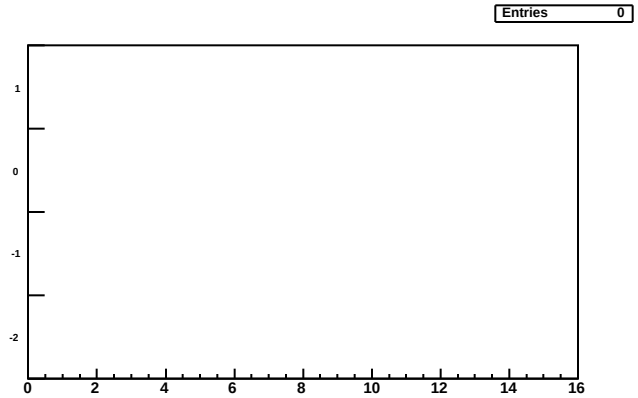
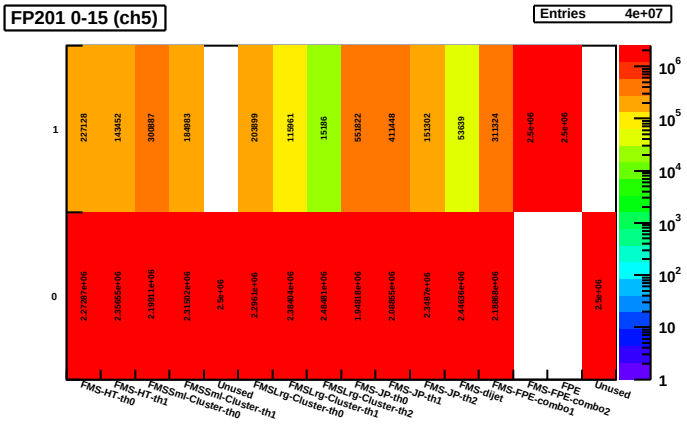
RAT board (ch4)

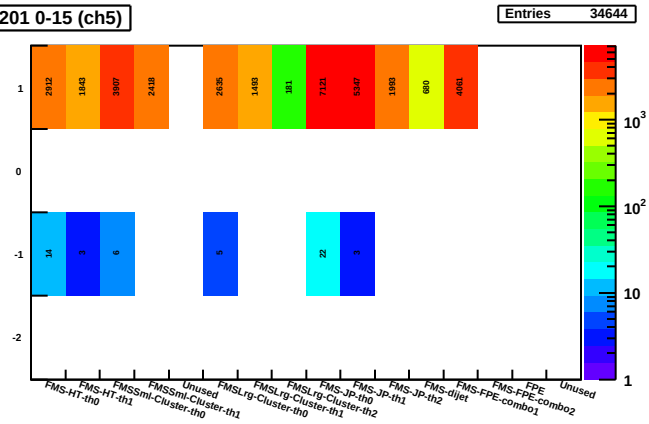




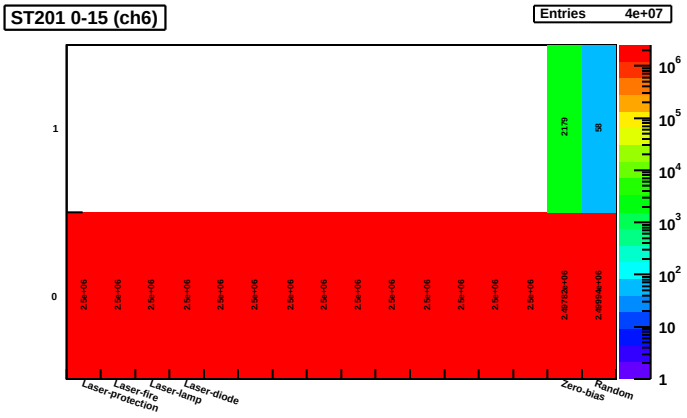
FP201 0-15 (ch5)

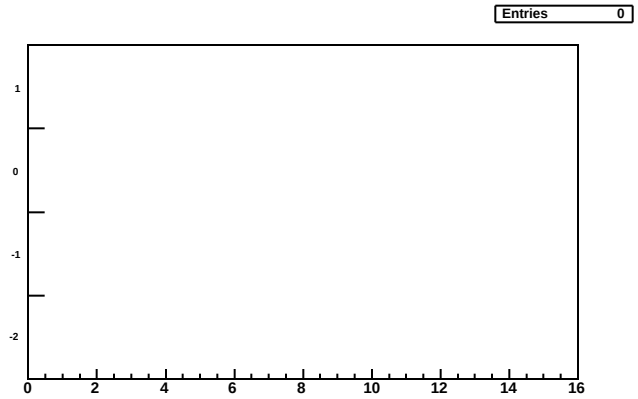
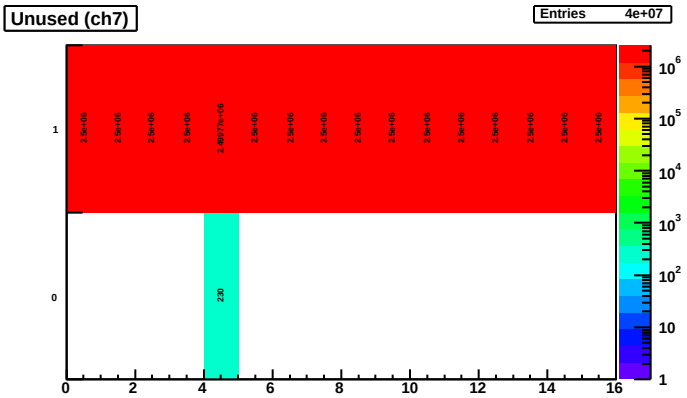
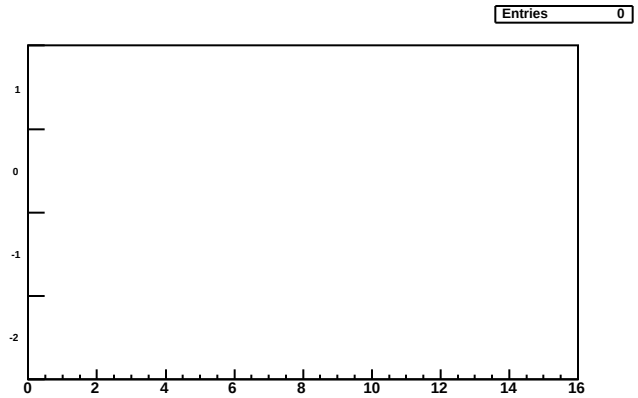


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)