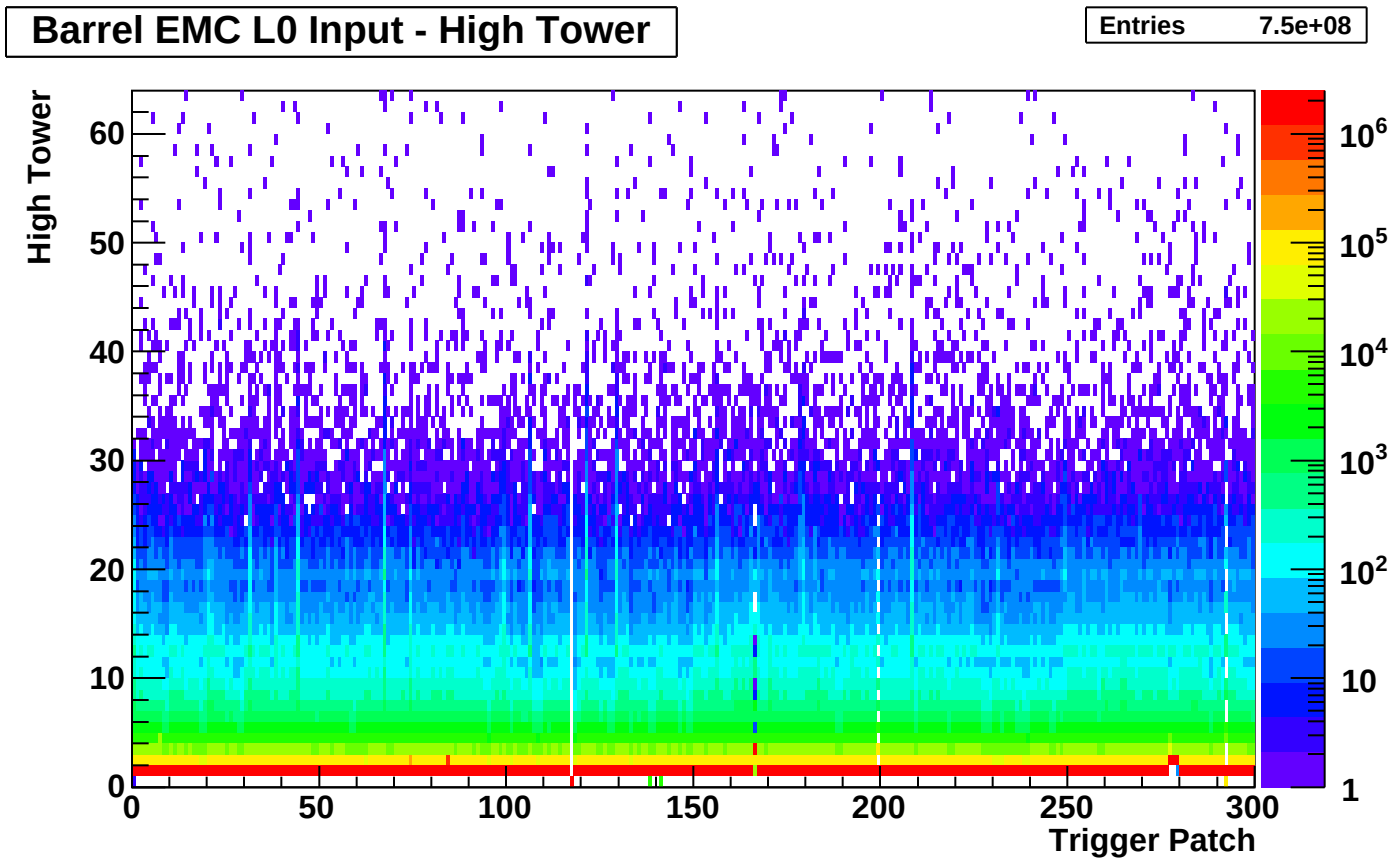
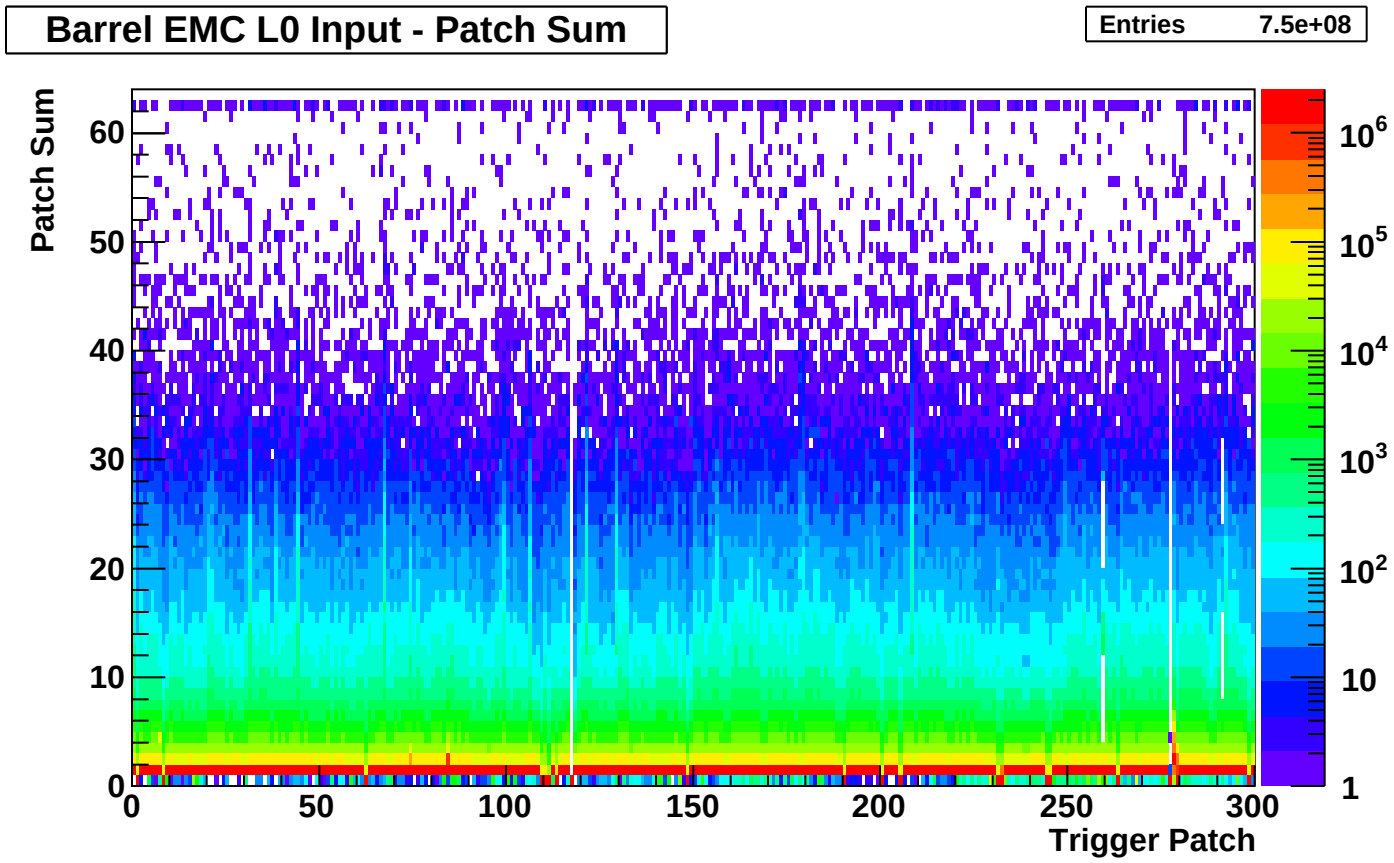
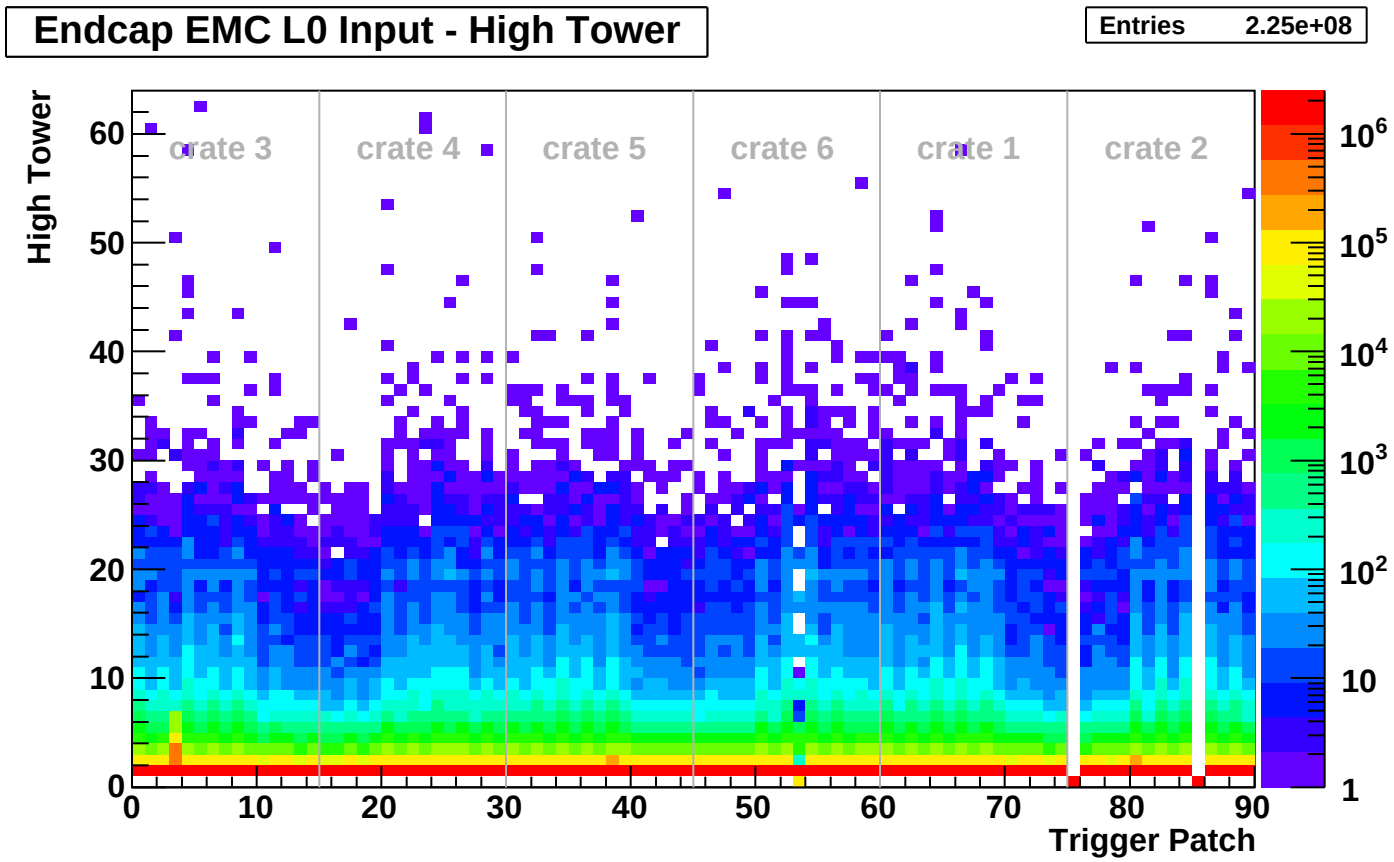
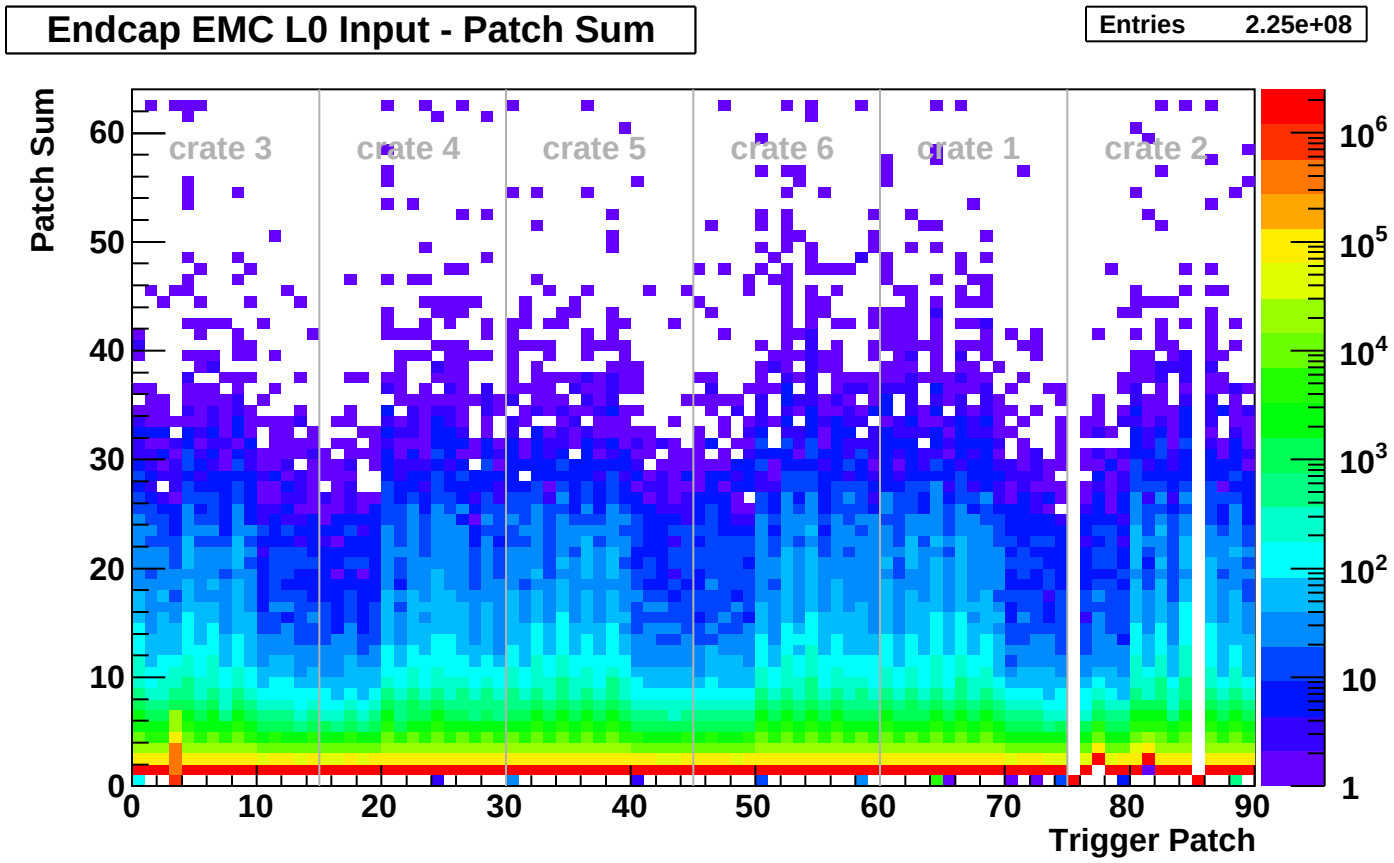
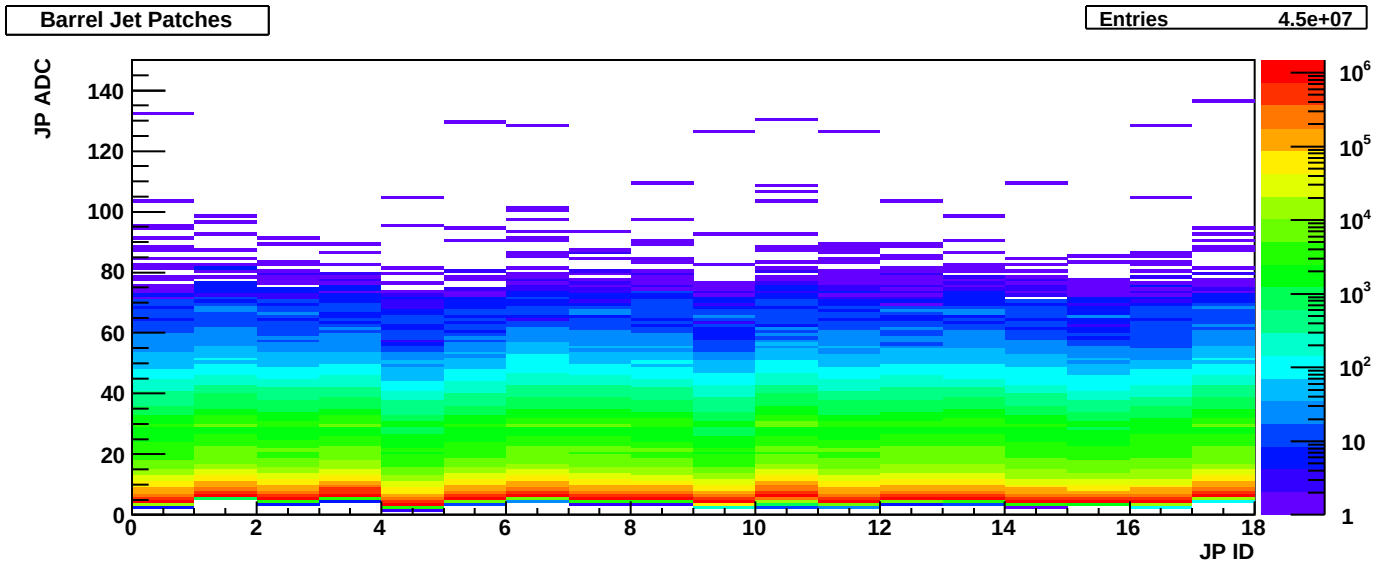
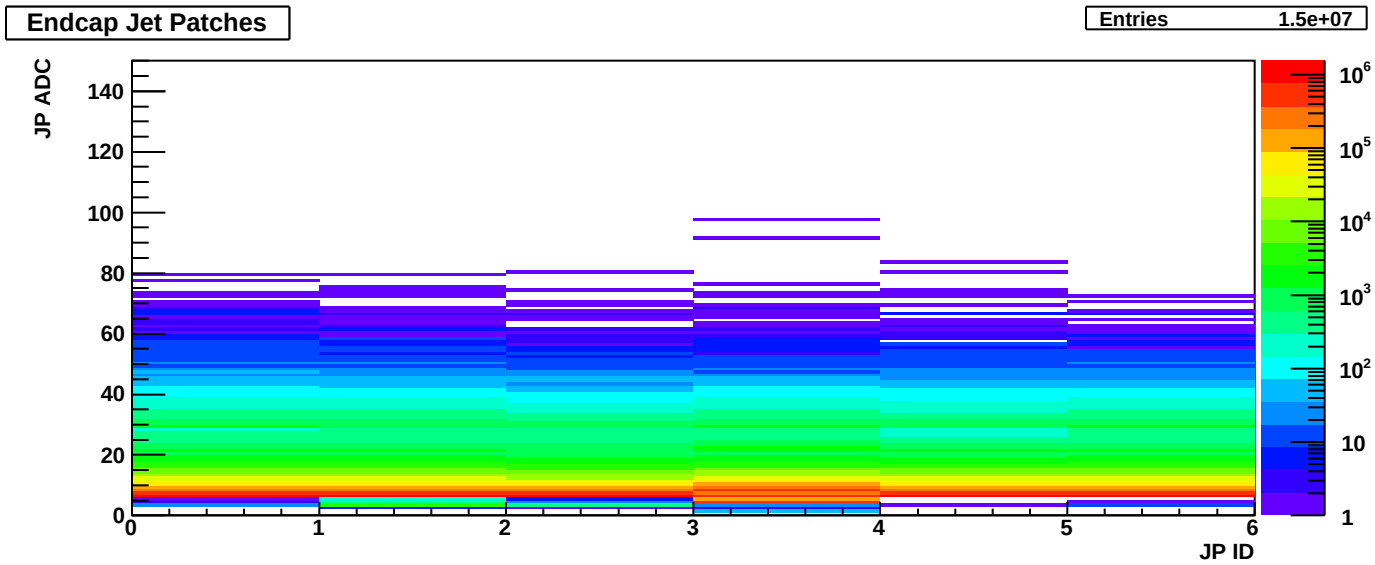

Barrel EMC L0 Input - High Tower
Entries 7.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

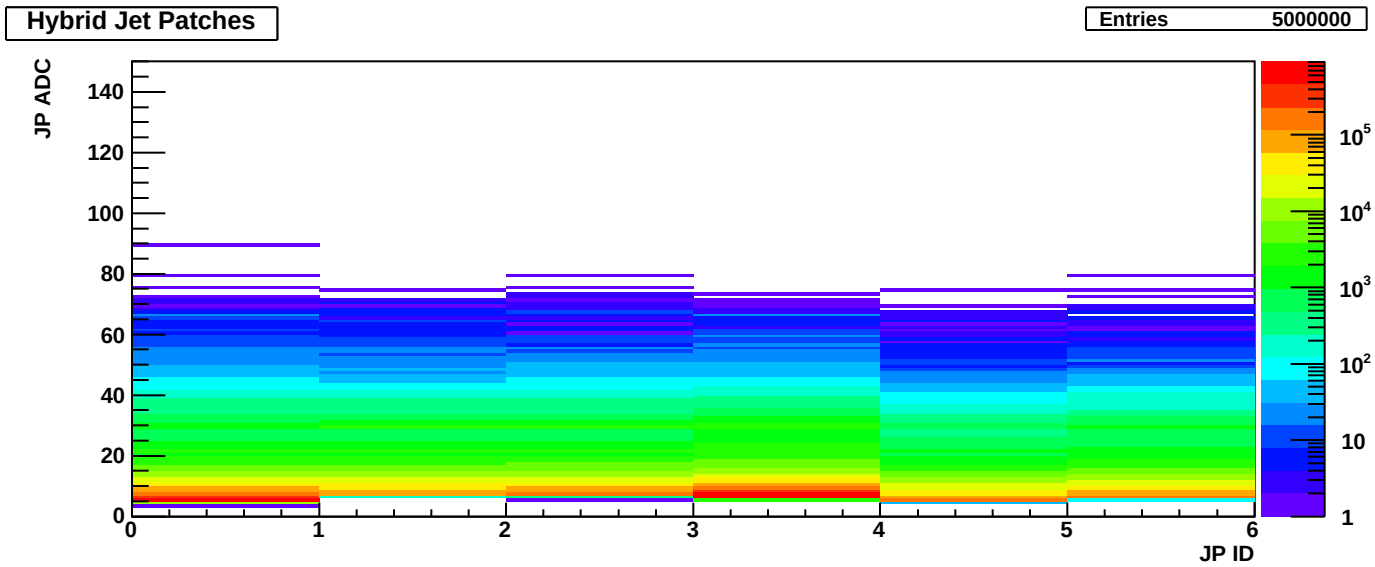

Barrel EMC L0 Input - Patch Sum
Entries 7.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

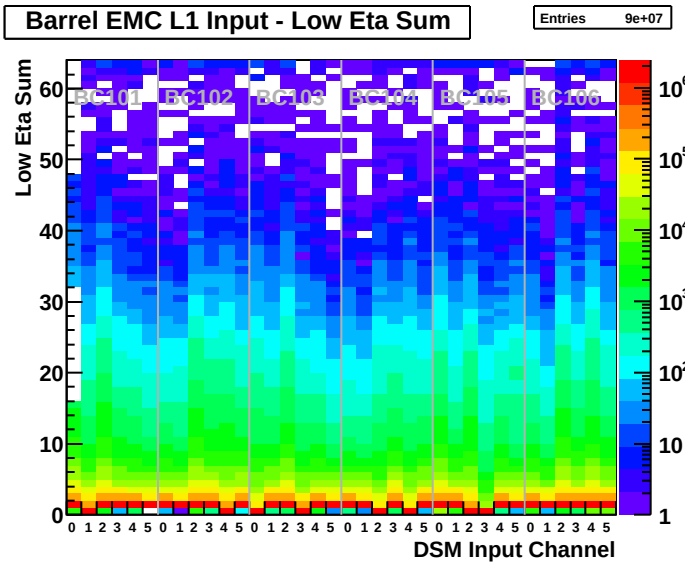

Endcap EMC L0 Input - High Tower
Entries 2.25e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

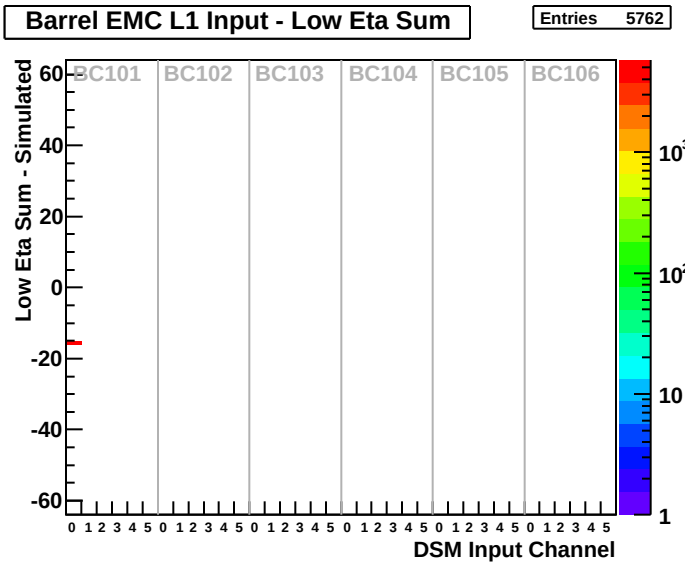

Endcap EMC L0 Input - Patch Sum
Entries 2.25e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

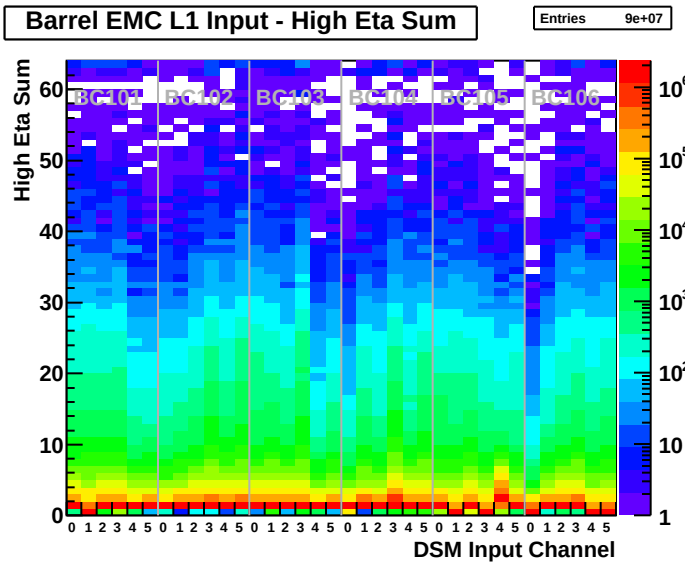

Barrel Jet Patches
Entries 4.5e+07
JP ADC
JP ID

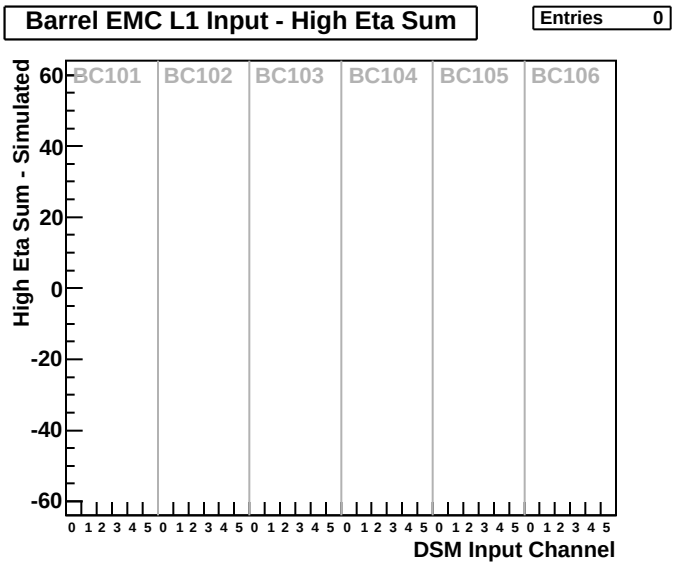

Endcap Jet Patches
Entries 1.5e+07
JP ADC
JP ID

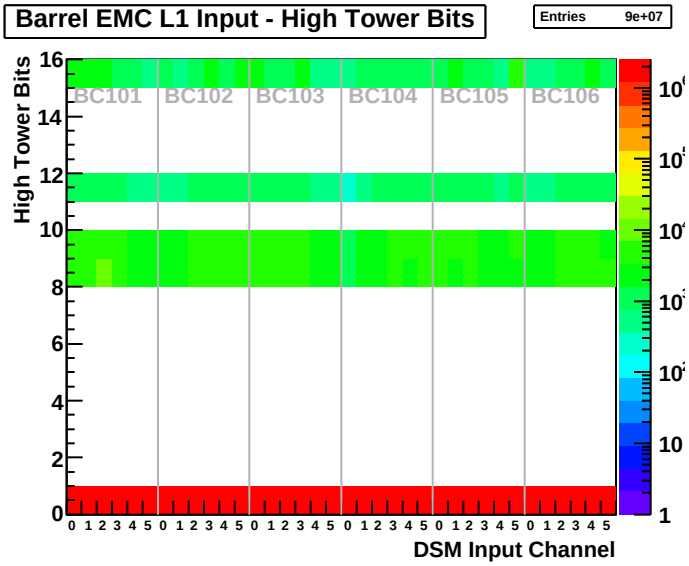

Hybrid Jet Patches
Entries 5000000
JP ADC
JP ID

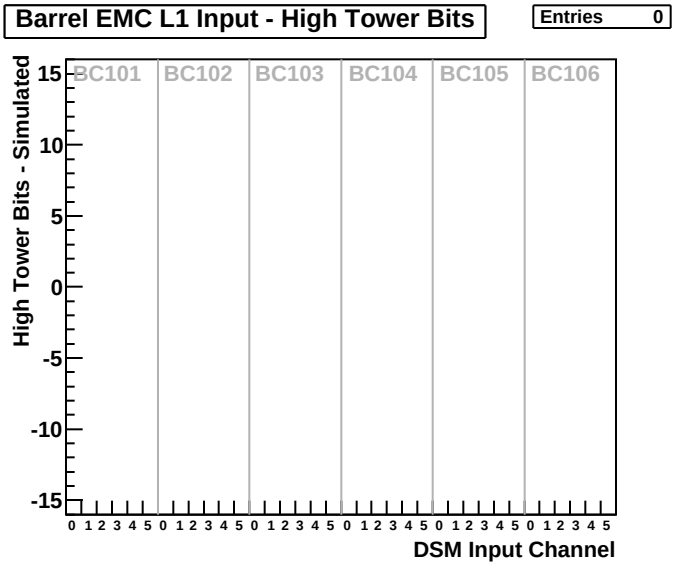

Barrel EMC L1 Input - Low Eta Sum
Entries 9e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

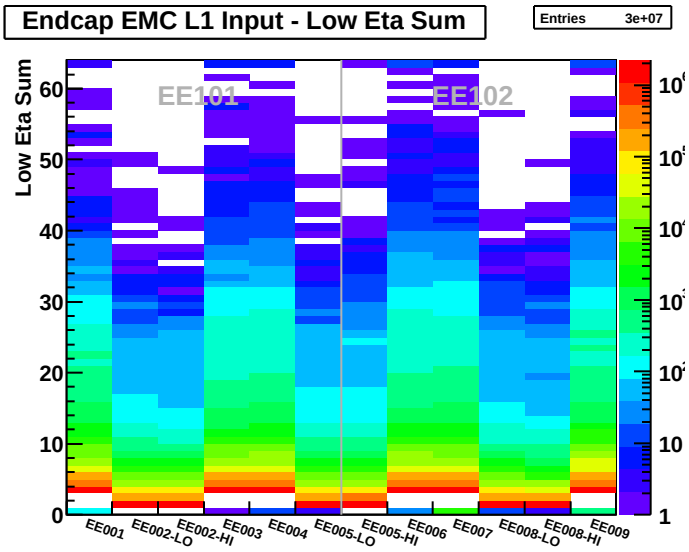

Barrel EMC L1 Input - Low Eta Sum
Entries 5762
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

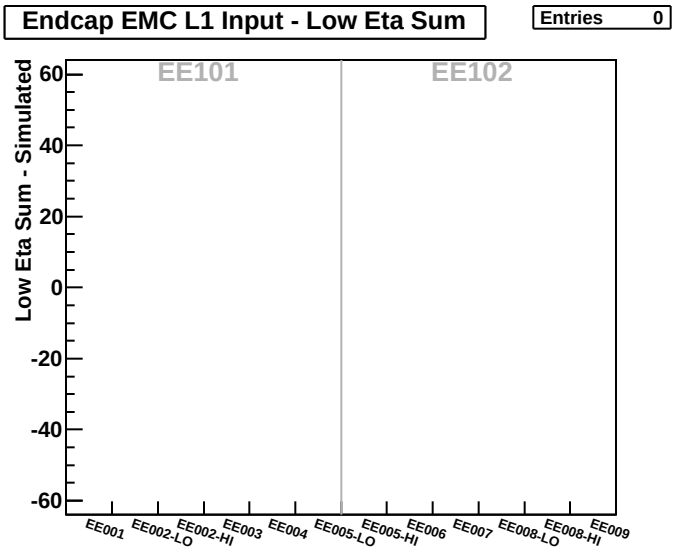

Barrel EMC L1 Input - High Eta Sum
Entries 9e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

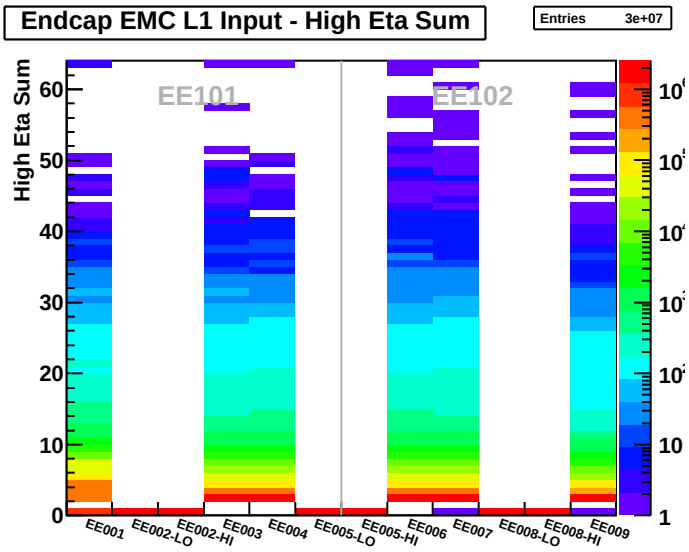

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

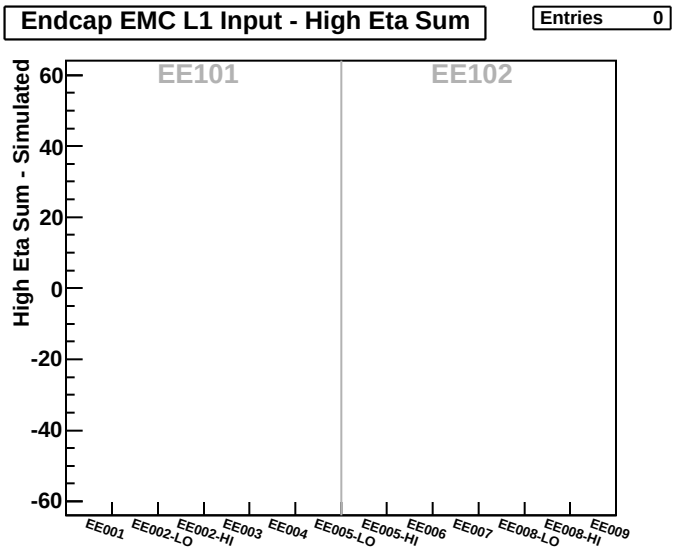

Barrel EMC L1 Input - High Tower Bits
Entries 9e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

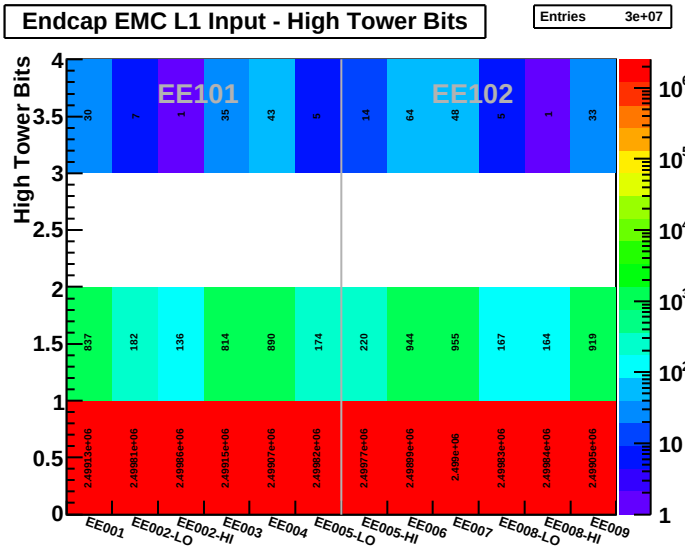

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

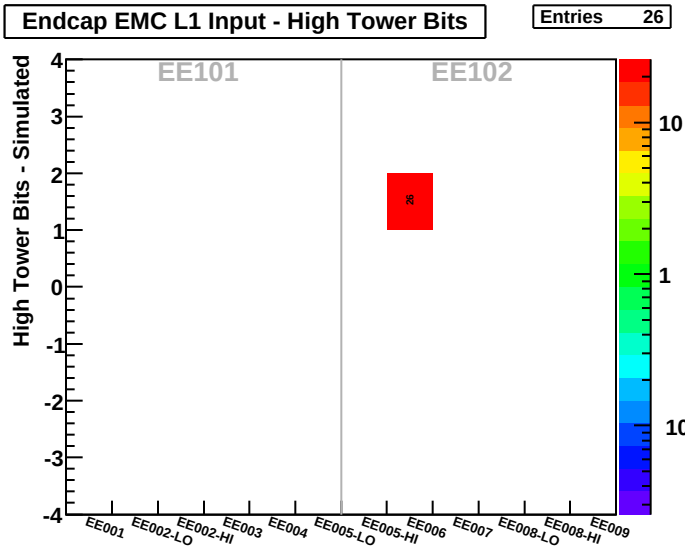

Endcap EMC L1 Input - Low Eta Sum
Entries 3e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

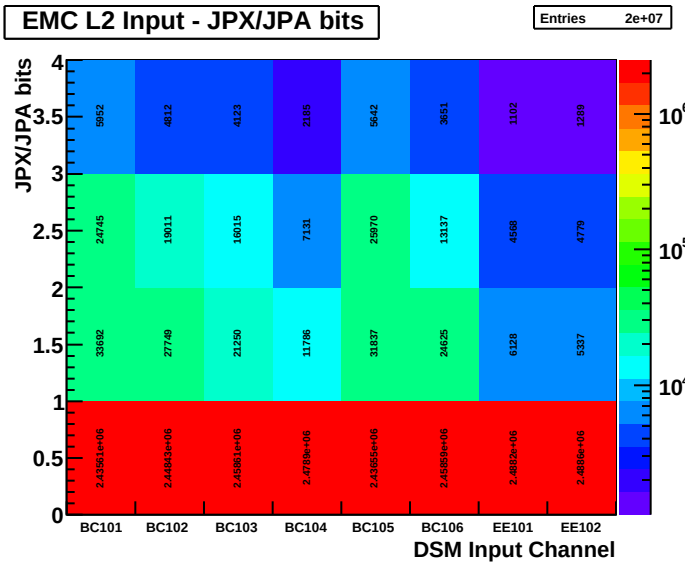

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

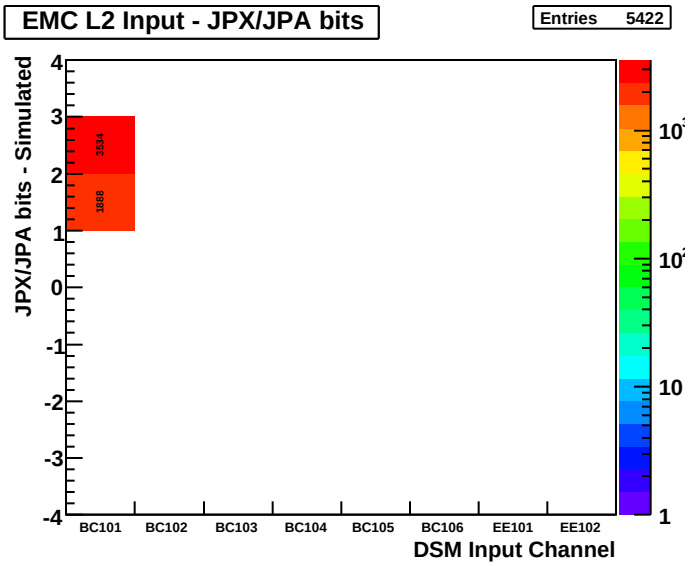

Endcap EMC L1 Input - High Eta Sum
Entries 3e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

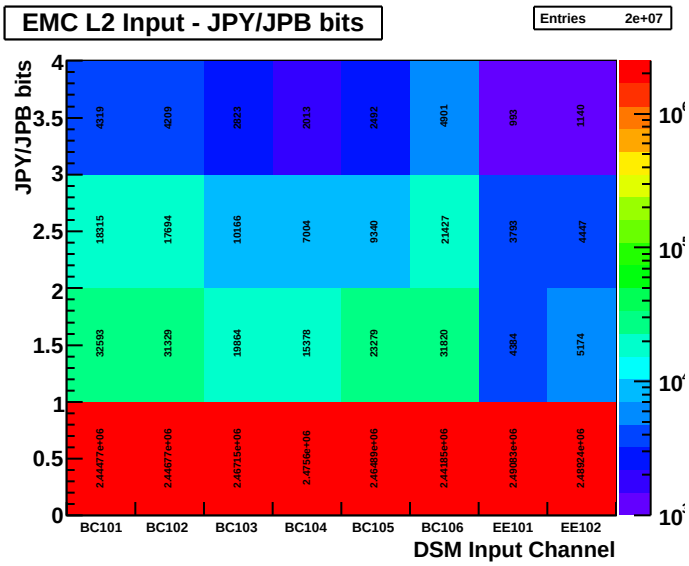

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

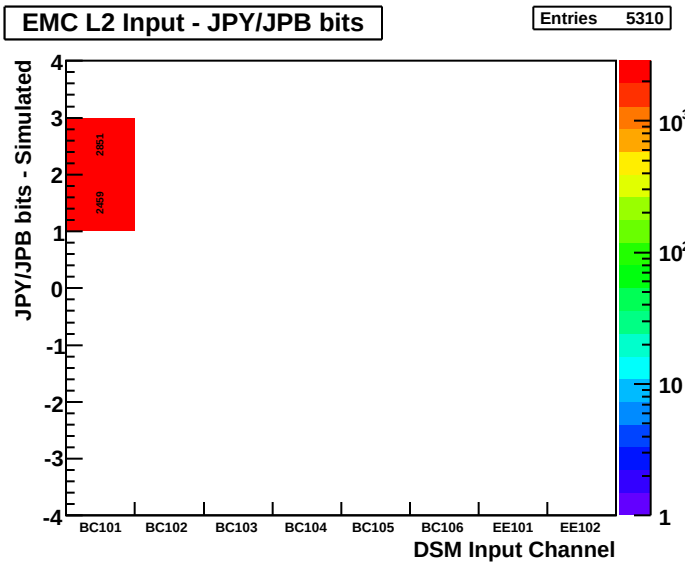

Endcap EMC L1 Input - High Tower Bits
Entries 3e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

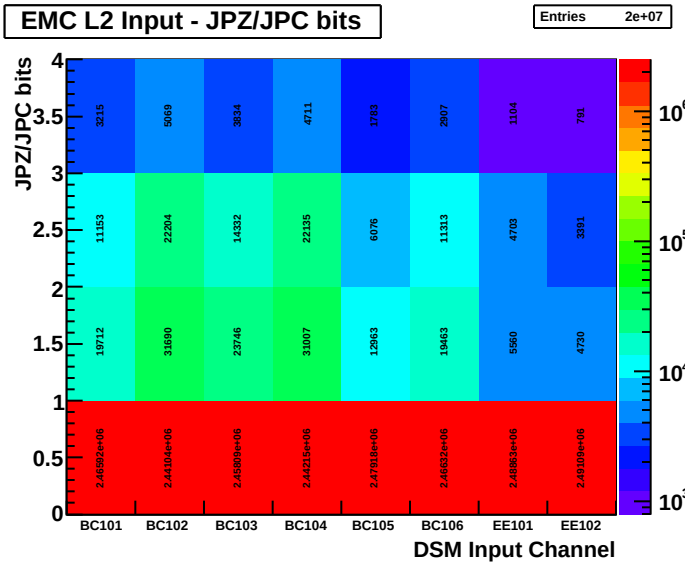

Endcap EMC L1 Input - High Tower Bits
Entries 26
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

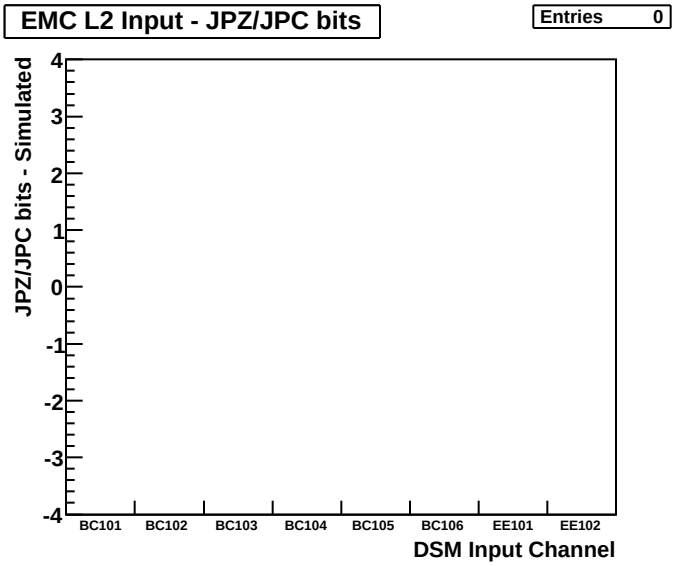

EMC L2 Input - JPX/JPA bits
Entries 2e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5952 4812 4123 2185 5642 3651 1102 1289
24745 19011 16015 7131 25970 13137 4568 4779
33692 27749 21250 11786 31837 24625 6128 5337
2.43561e+06 2.44943e+06 2.45861e+06 2.47839e+06 2.43655e+06 2.45859e+06 2.4892e+06 2.4896e+06

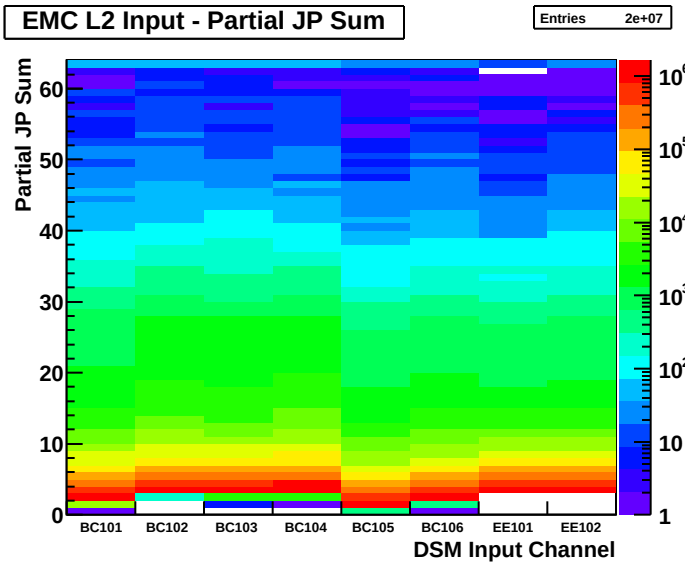

EMC L2 Input - JPX/JPA bits
Entries 5422
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3534
1888

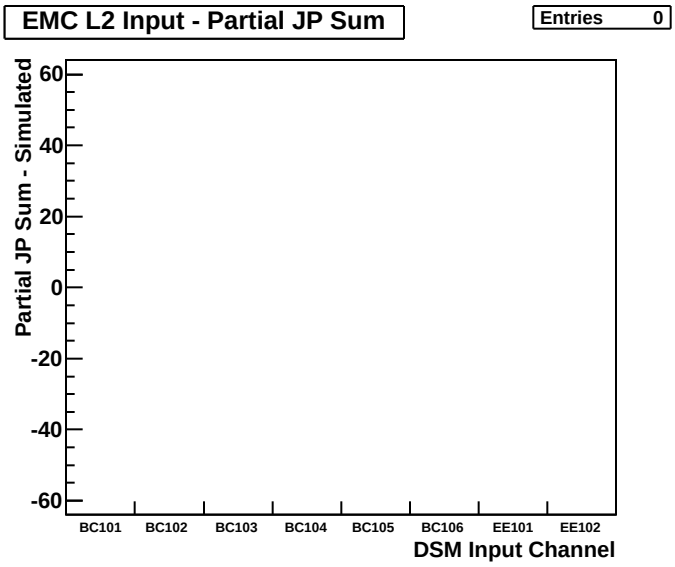

EMC L2 Input - JPY/JPB bits
Entries 2e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4319 4209 2823 2013 2492 4901 993 1140
18315 17694 10166 7004 9340 21427 3783 4447
32593 31329 19864 15378 23279 31820 4384 5174
2.44477e+06 2.44677e+06 2.46715e+06 2.4756e+06 2.46489e+06 2.44185e+06 2.49083e+06 2.46924e+06

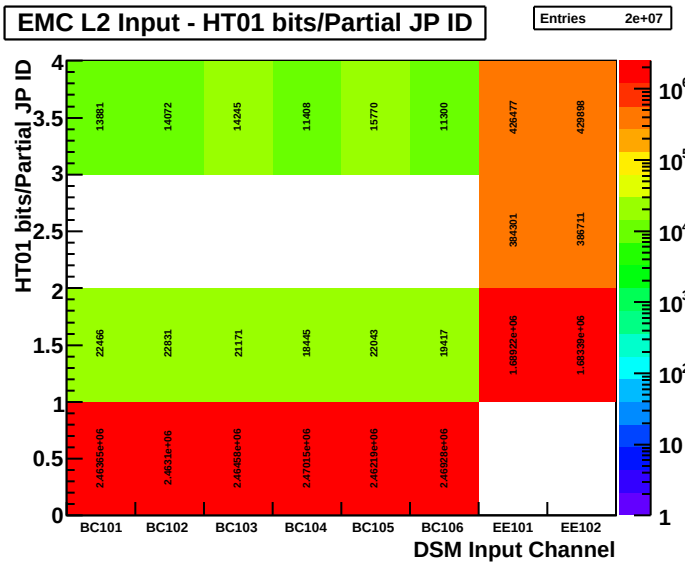

EMC L2 Input - JPY/JPB bits
Entries 5310
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2861
2459

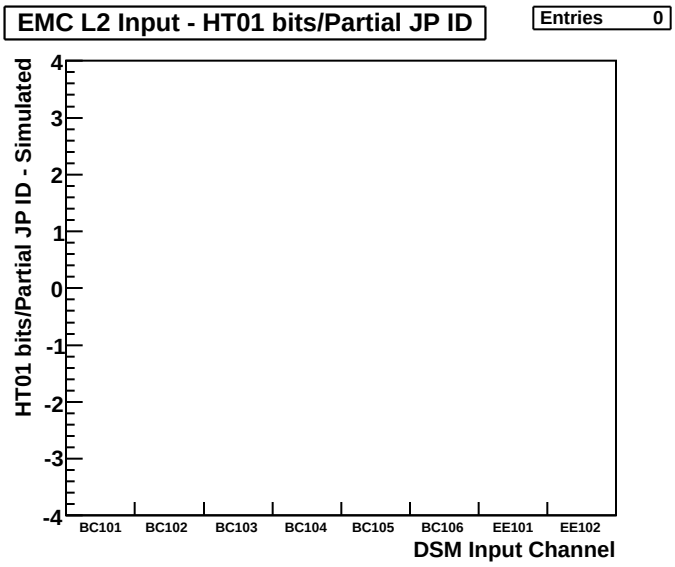

EMC L2 Input - JPZ/JPC bits
Entries 2e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3215 5069 3824 4711 1783 2907 1104 791
11153 22204 14332 22135 6076 11313 4703 3391
19712 31690 23746 31007 12963 19463 5560 4730
2.46592e+06 2.44104e+06 2.45809e+06 2.44215e+06 2.47918e+06 2.46632e+06 2.48863e+06 2.49109e+06

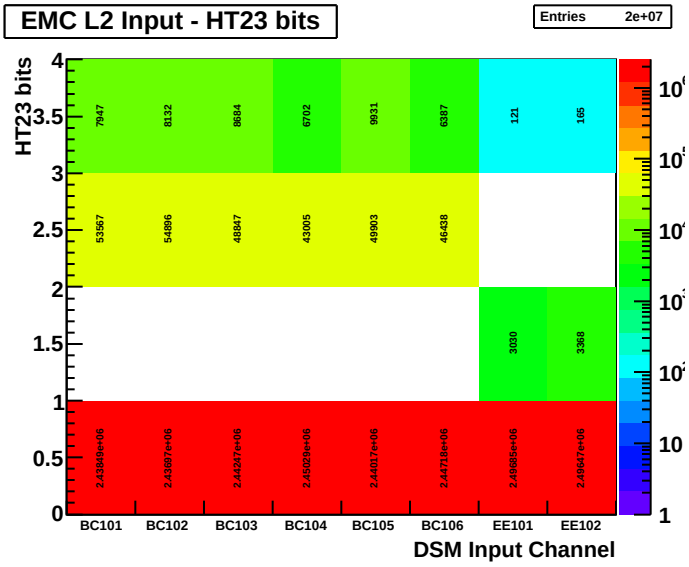

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

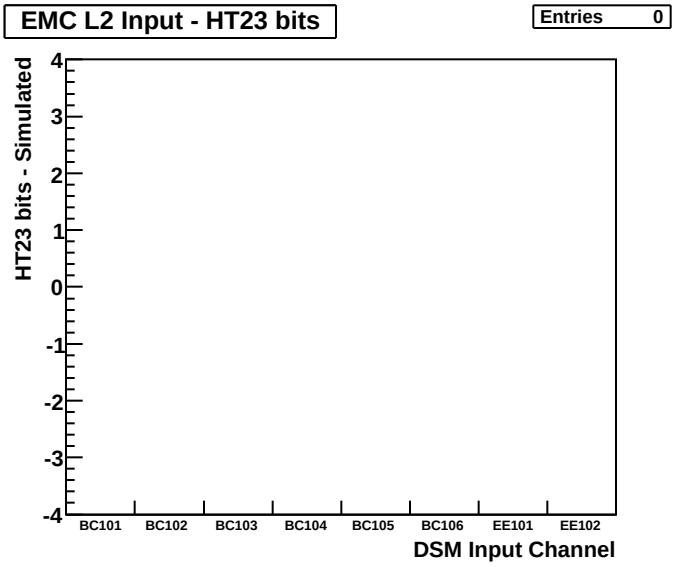

EMC L2 Input - Partial JP Sum
Entries 2e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

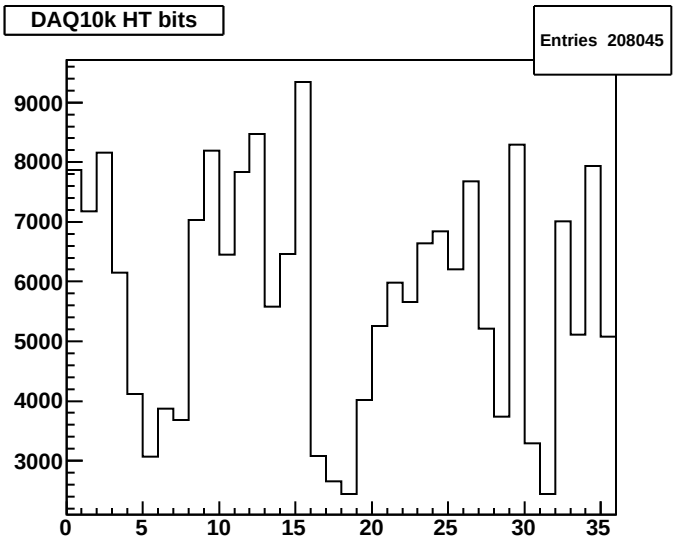

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

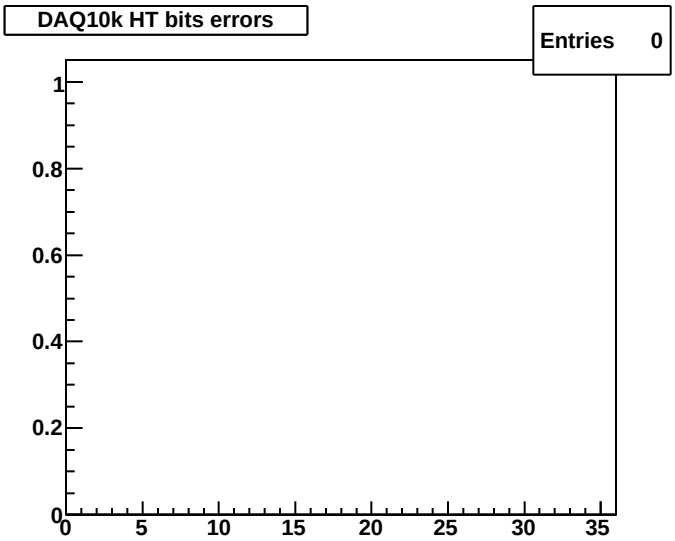

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

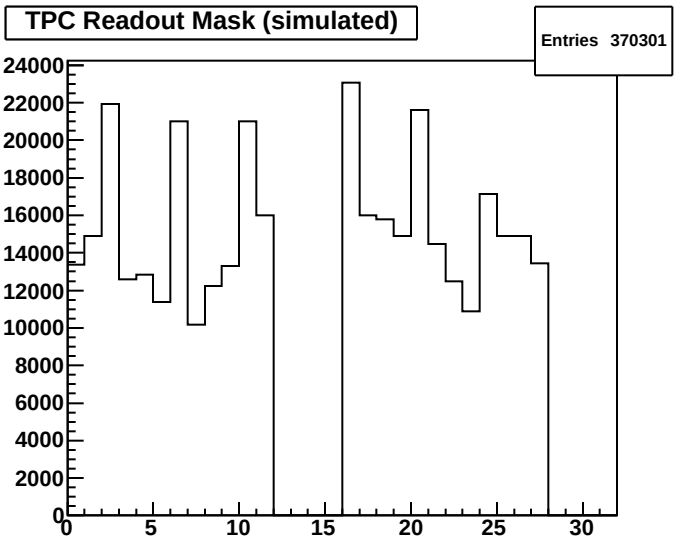

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

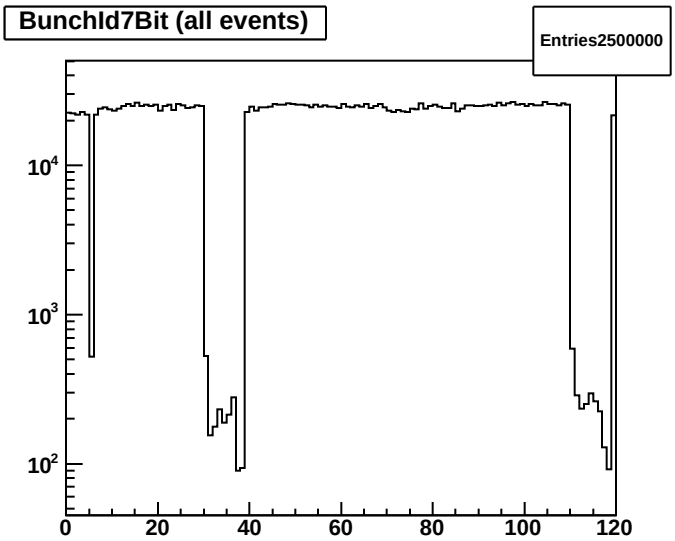

EMC L2 Input - HT23 bits
Entries 2e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

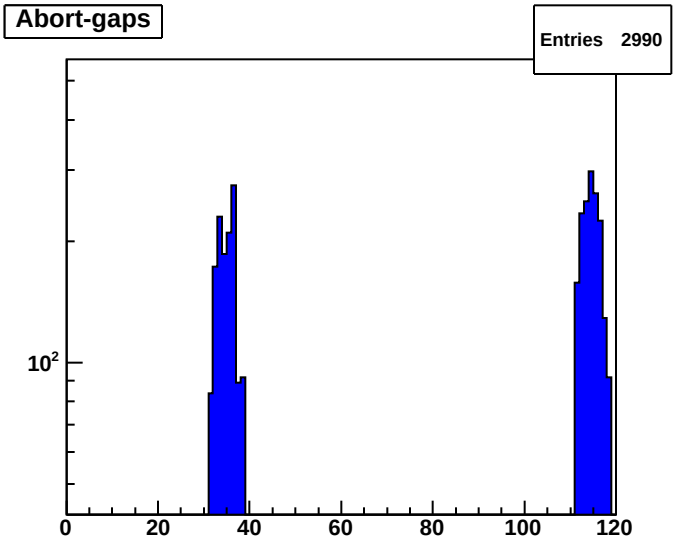

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

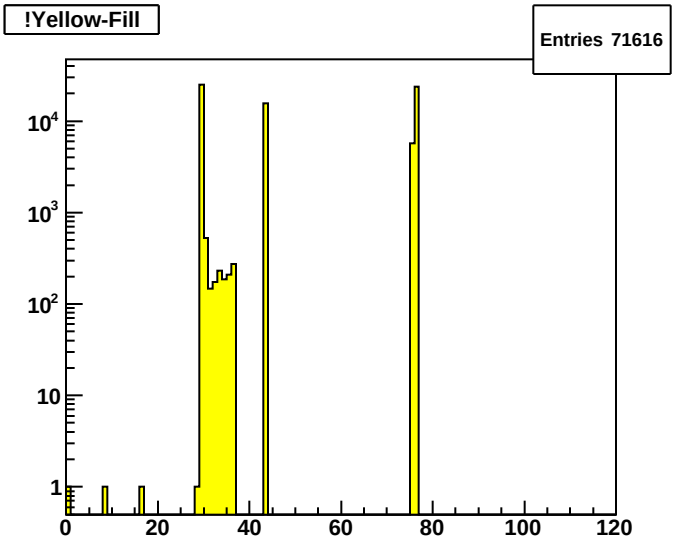

DAQ10k HT bits
Entries 208045

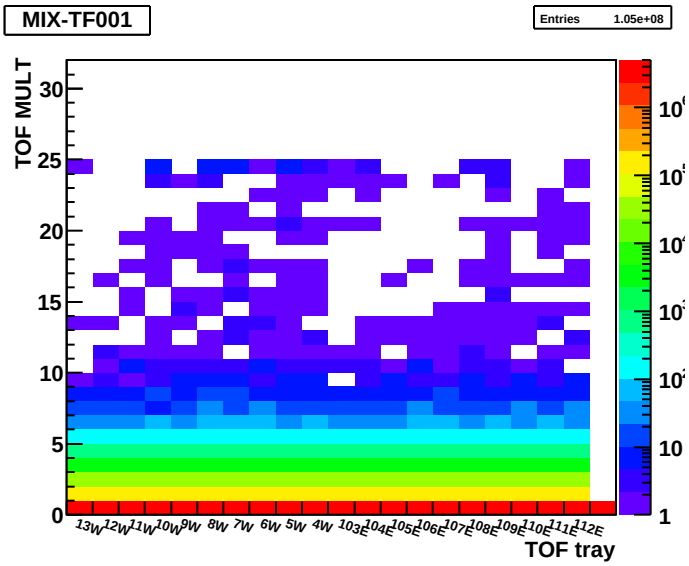

DAQ10k HT bits errors
Entries 0

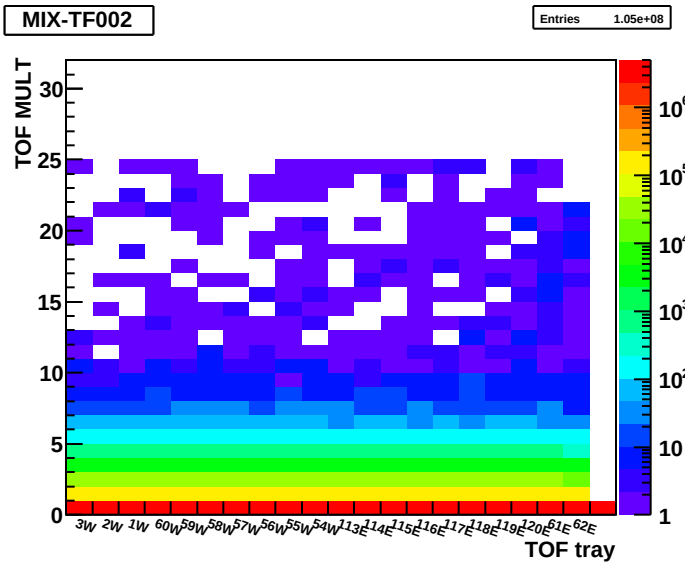

TPC Readout Mask (simulated)
Entries 370301

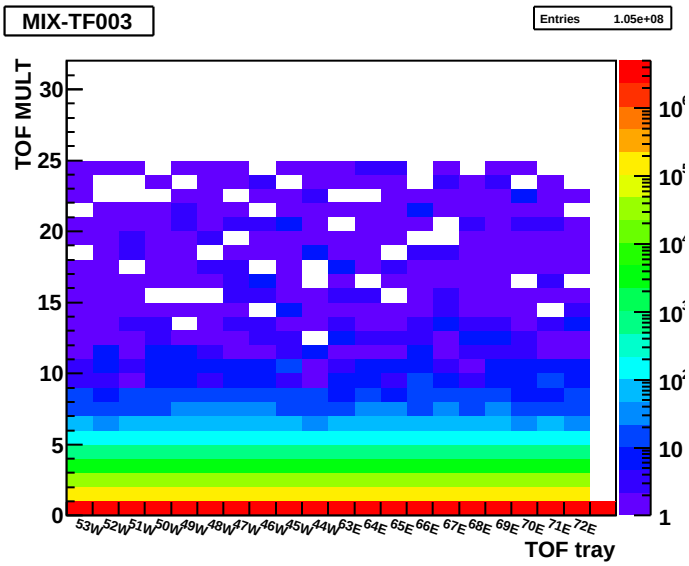

BunchId7Bit (all events)
Entries2500000

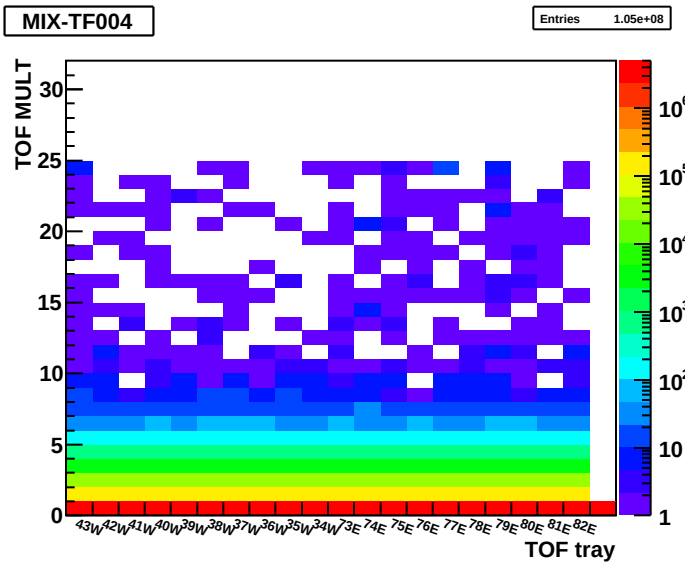

Abort-gaps
Entries 2990

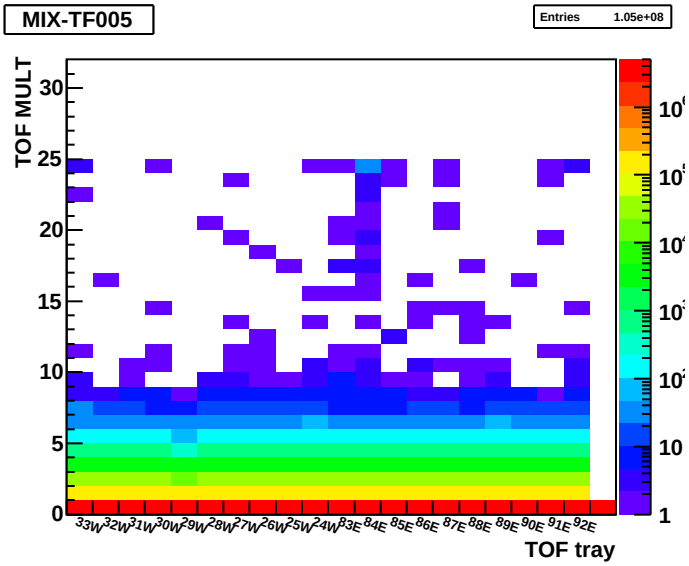

!Yellow-Fill
Entries 71616

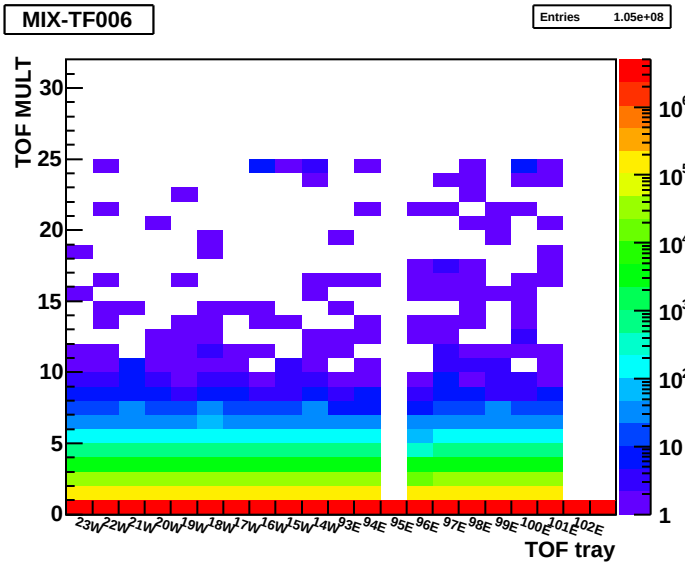

MIX-TF001
Entries 1.05e+08
TOF MULT
TOF tray

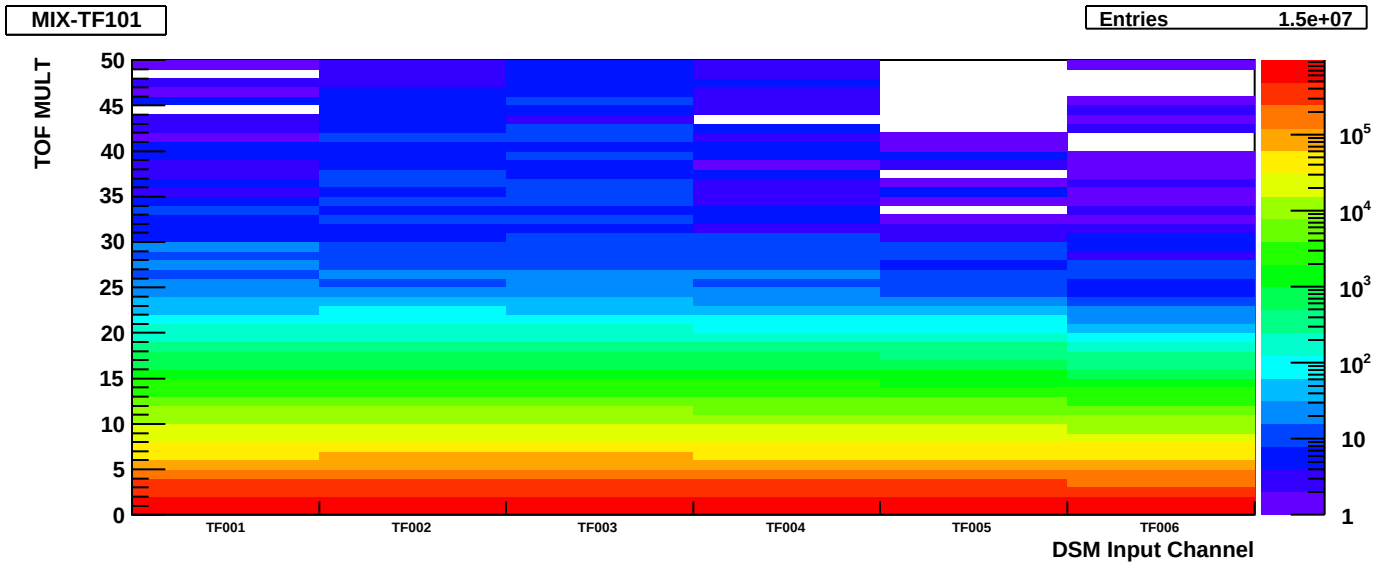

MIX-TF002
Entries 1.05e+08
TOF MULT
TOF tray

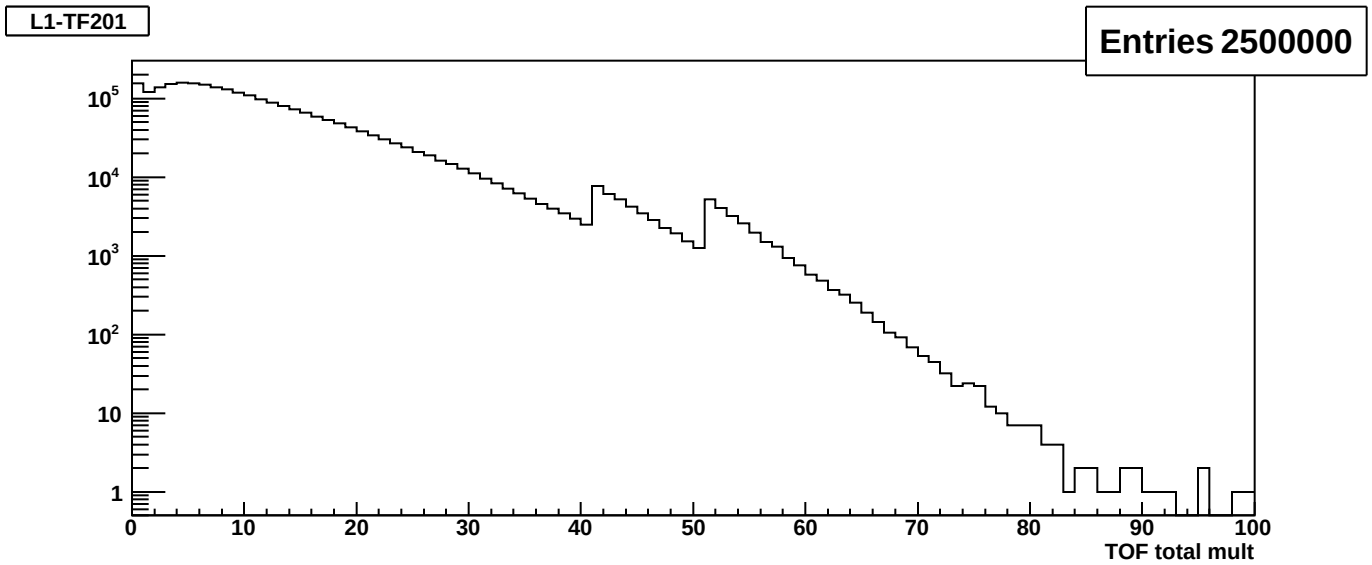

MIX-TF003
Entries 1.05e+08
TOF MULT
TOF tray

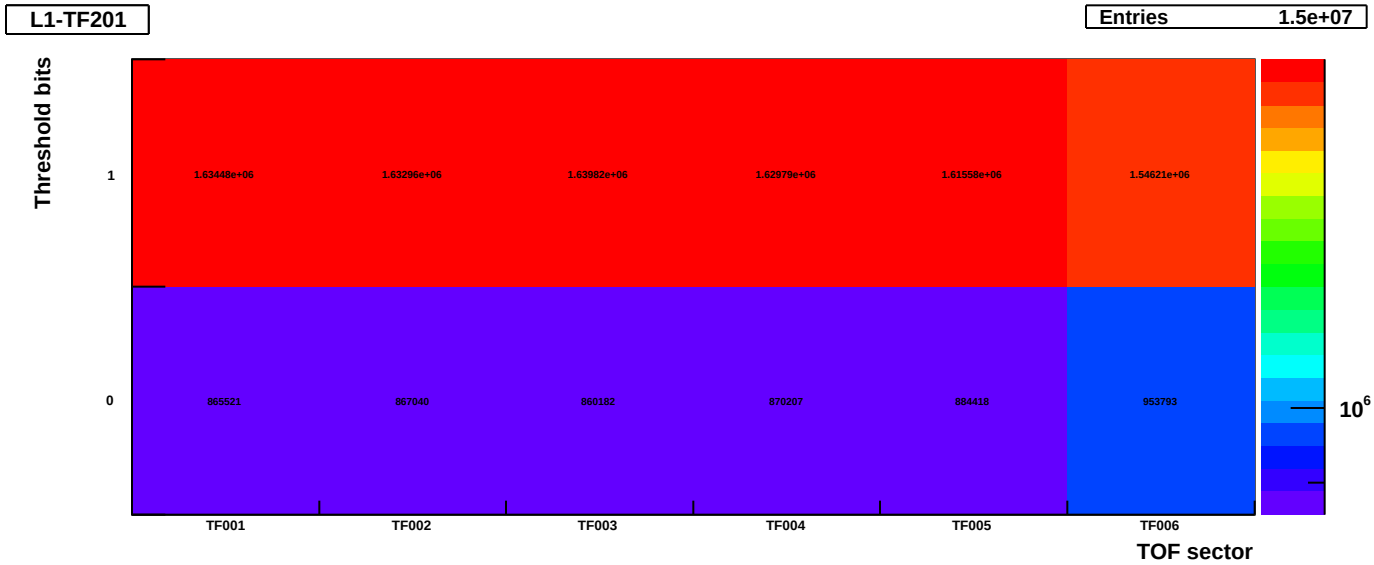

MIX-TF004
Entries 1.05e+08
TOF MULT
TOF tray

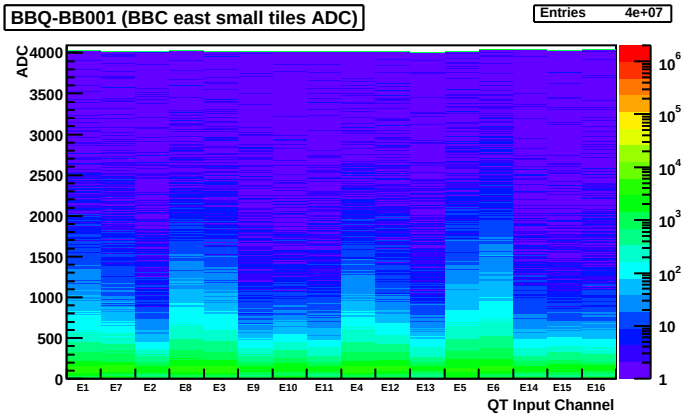

MIX-TF005
Entries 1.05e+08
TOF MULT
TOF tray

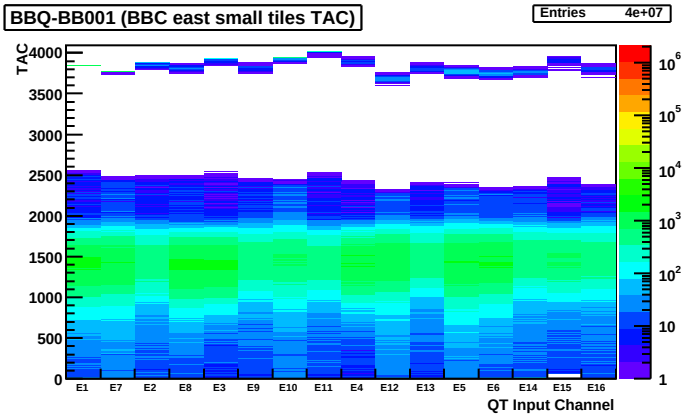

MIX-TF006
Entries 1.05e+08
TOF MULT
TOF tray

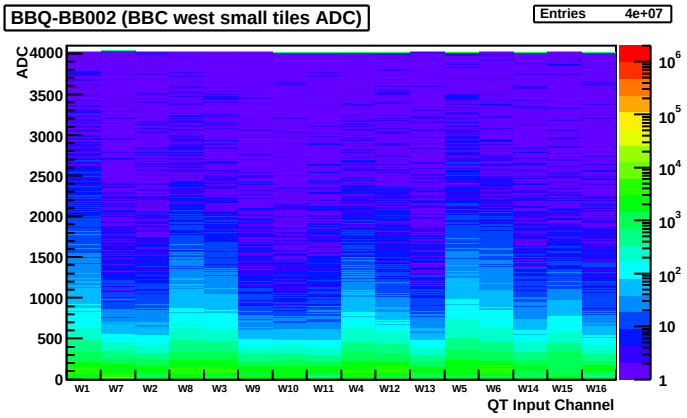

MIX-TF101
Entries 1.5e+07
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

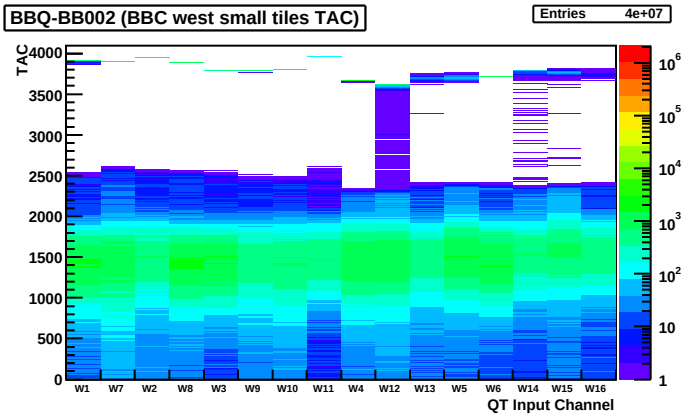

L1-TF201
Entries 2500000
10^5
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

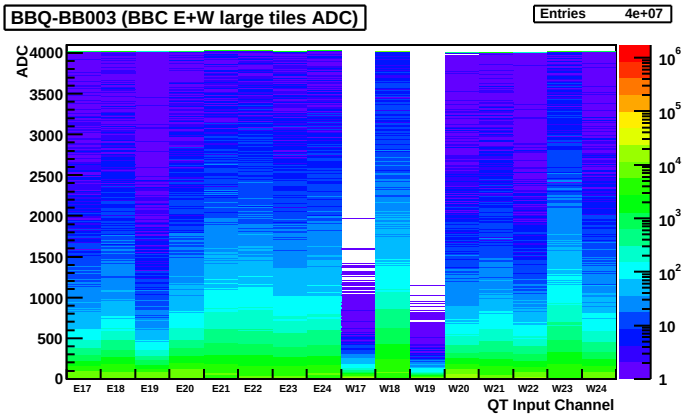

L1-TF201
Entries 1.5e+07
Threshold bits
1
0
1.63448e+06
1.63296e+06
1.63982e+06
1.62979e+06
1.61558e+06
1.54621e+06
865521
867040
860182
870207
884418
953793
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6

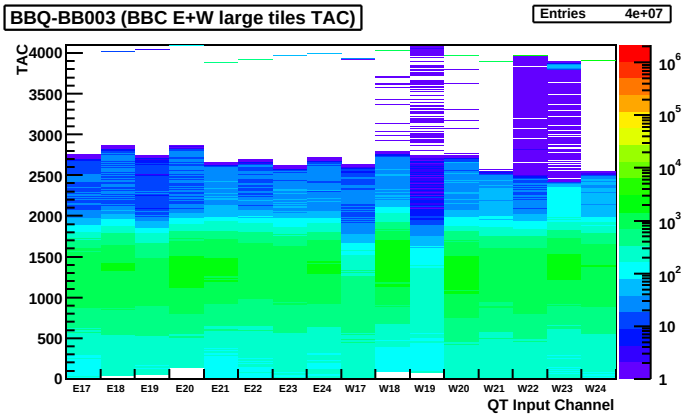

BBQ-BB001 (BBC east small tiles ADC)
Entries 4e+07
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

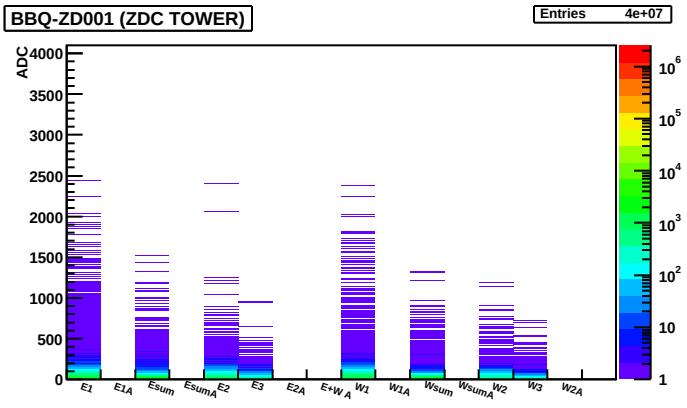

BBQ-BB001 (BBC east small tiles TAC)
Entries 4e+07
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

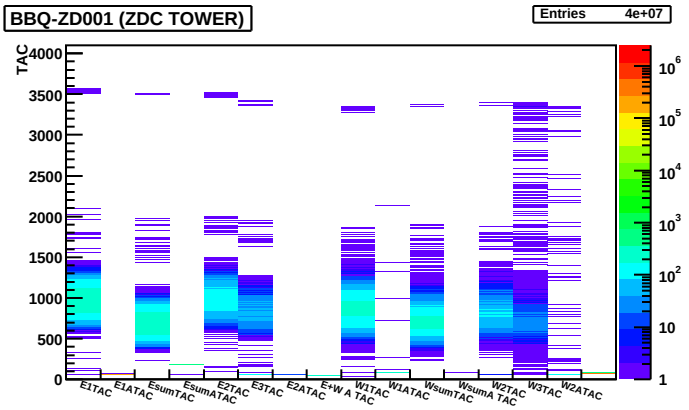

BBQ-BB002 (BBC west small tiles ADC)
Entries 4e+07
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

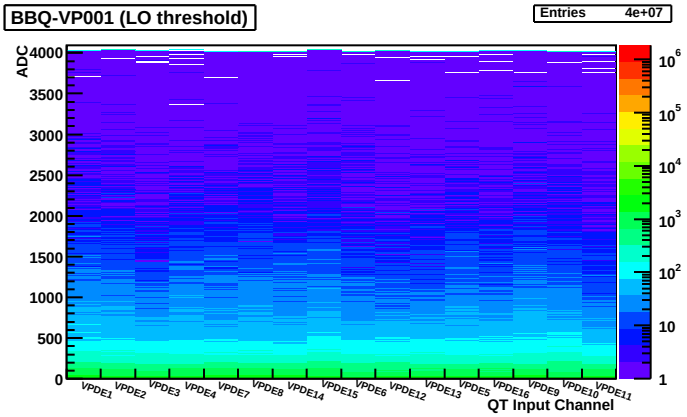

BBQ-BB002 (BBC west small tiles TAC)
Entries 4e+07
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

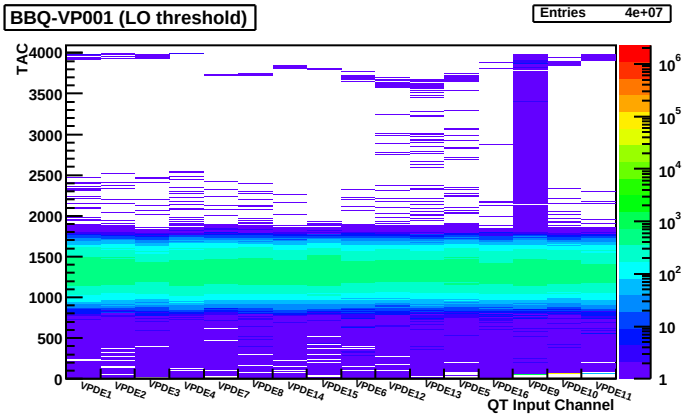

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4e+07
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

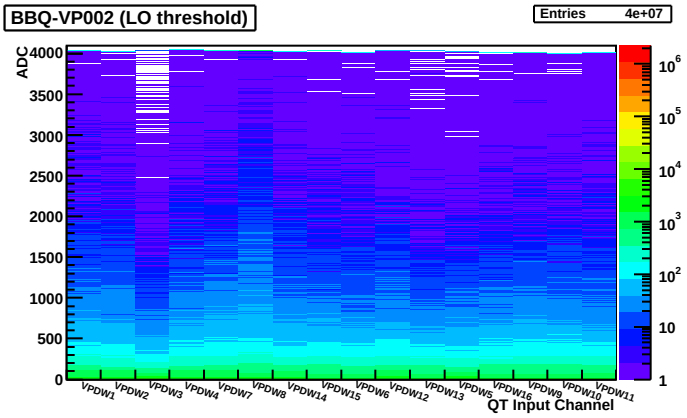

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4e+07
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

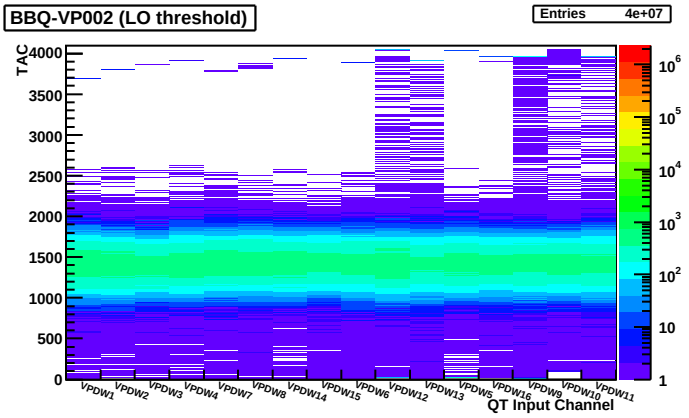

BBQ-ZD001 (ZDC TOWER)
Entries 4e+07
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

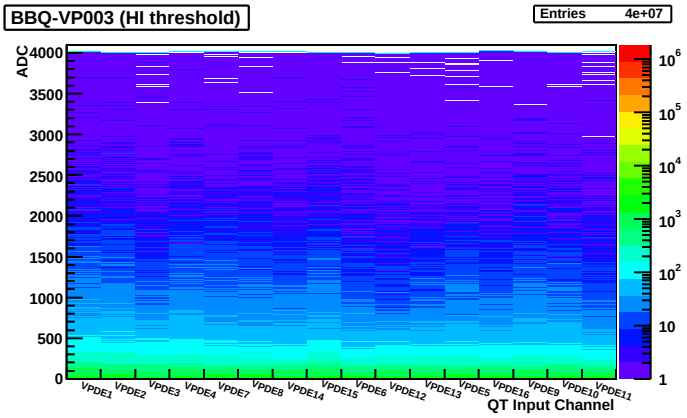

BBQ-ZD001 (ZDC TOWER)
Entries 4e+07
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

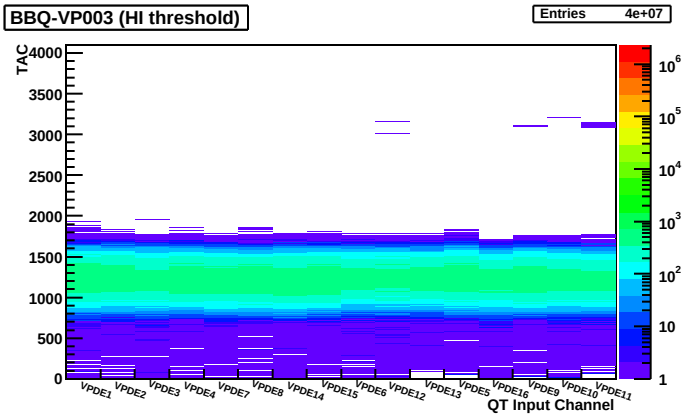

BBQ-VP001 (LO threshold)
Entries 4e+07
ADC
QT Input Channel

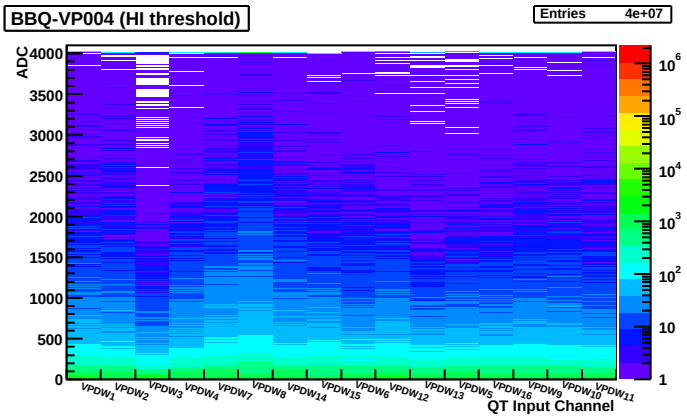

BBQ-VP001 (LO threshold)
Entries 4e+07
TAC
QT Input Channel

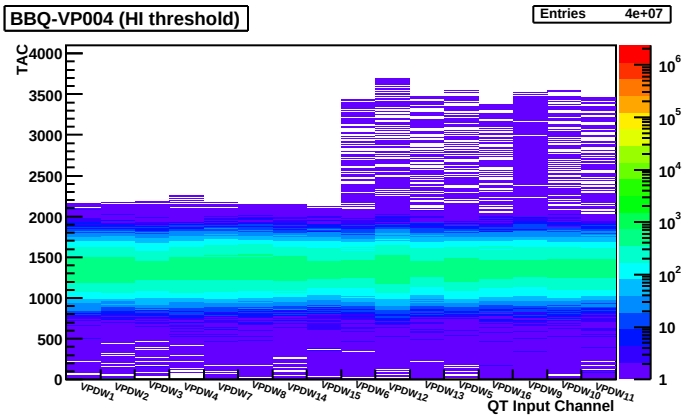

BBQ-VP002 (LO threshold)
Entries 4e+07
ADC
QT Input Channel

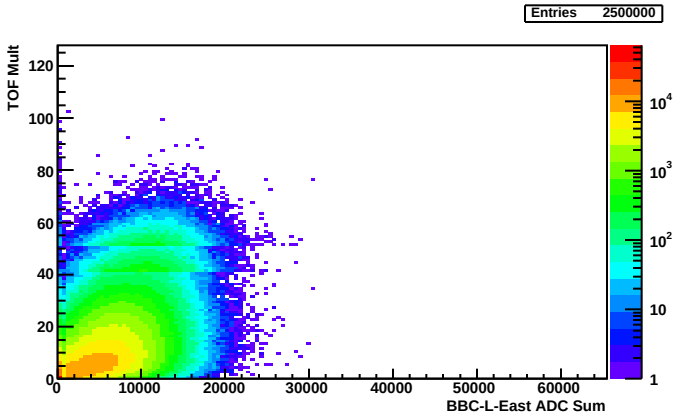

BBQ-VP002 (LO threshold)
Entries 4e+07
TAC
QT Input Channel

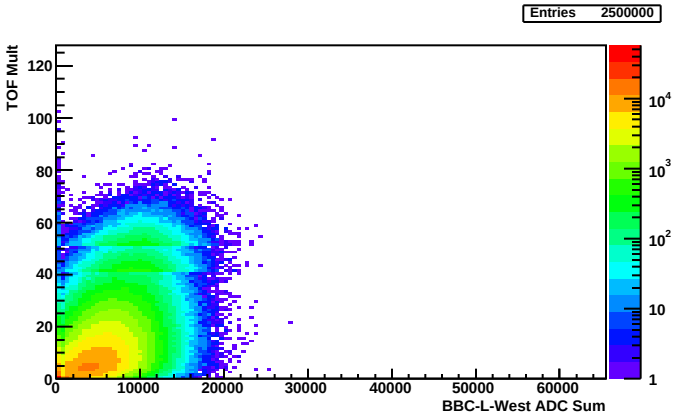

BBQ-VP003 (HI threshold)
Entries 4e+07
ADC
QT Input Channel

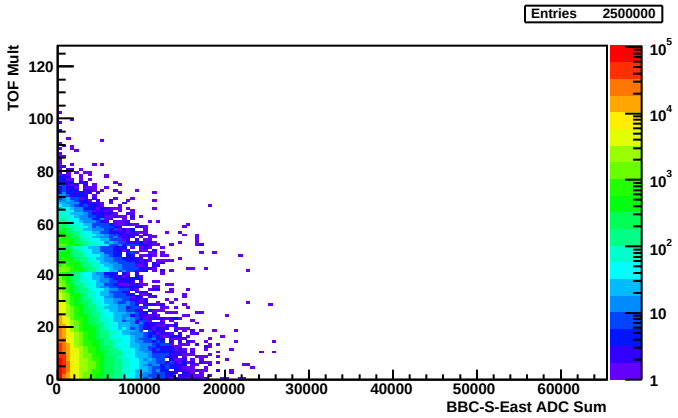

BBQ-VP003 (HI threshold)
Entries 4e+07
TAC
QT Input Channel

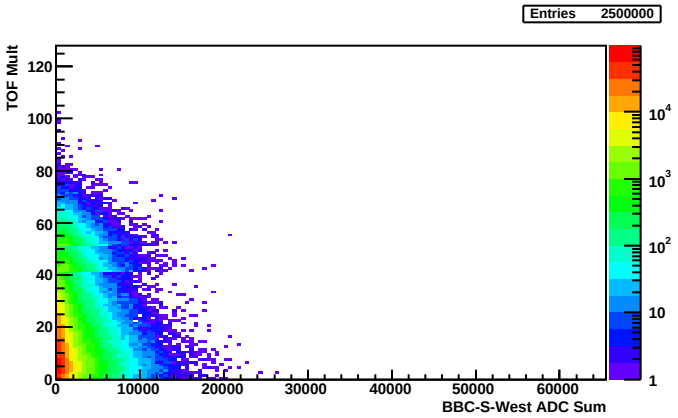

BBQ-VP004 (HI threshold)
Entries 4e+07
ADC
QT Input Channel

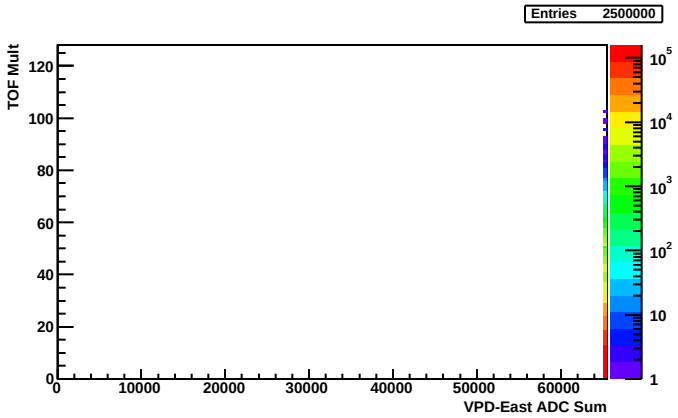

BBQ-VP004 (HI threshold)
Entries 4e+07
TAC
QT Input Channel

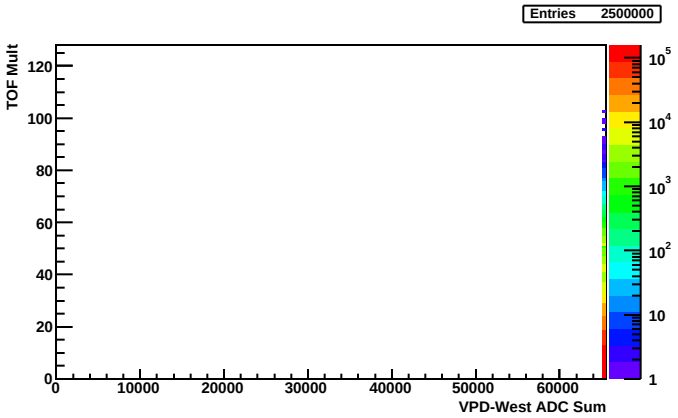

Entries 2500000
TOF Mult
BBC-L-East ADC Sum

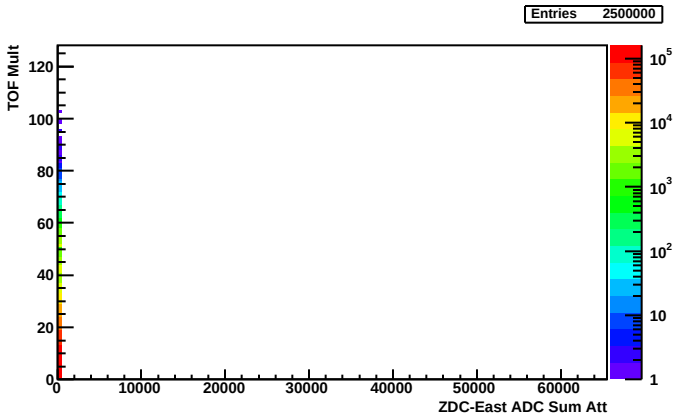

Entries 2500000
TOF Mult
BBC-L-West ADC Sum

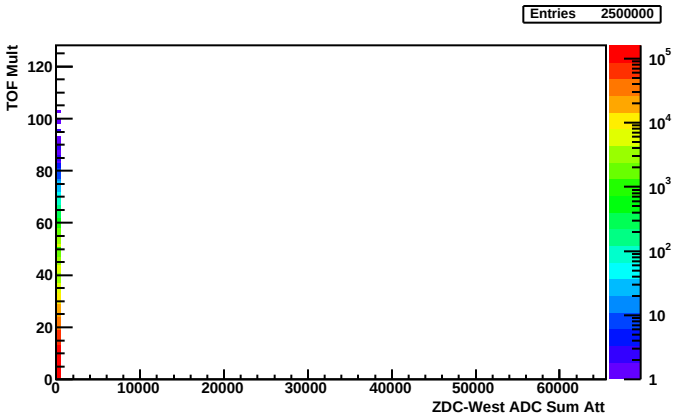

Entries 2500000
TOF Mult
BBC-S-East ADC Sum

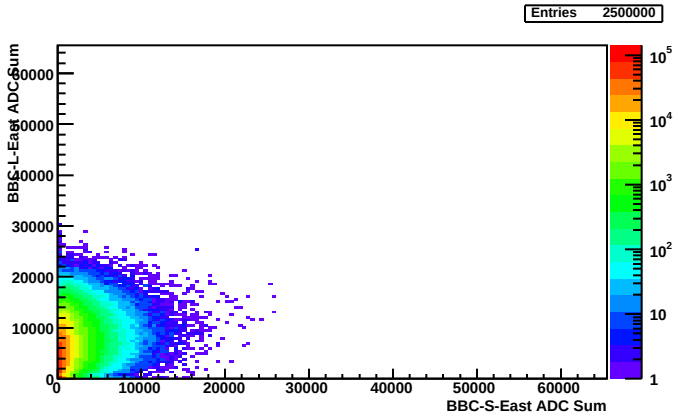

Entries 2500000
TOF Mult
BBC-S-West ADC Sum

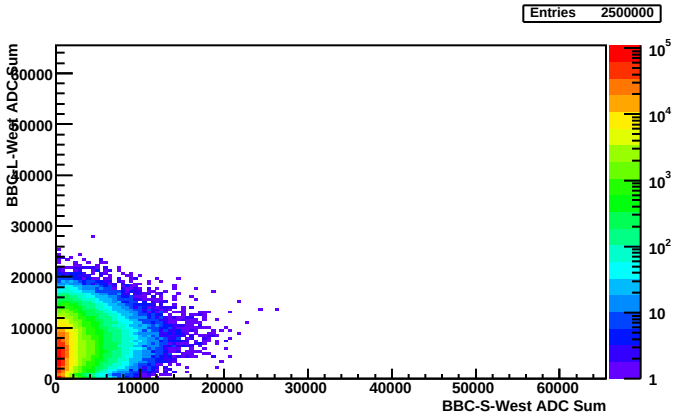

Entries 2500000
TOF Mult
VPD-East ADC Sum

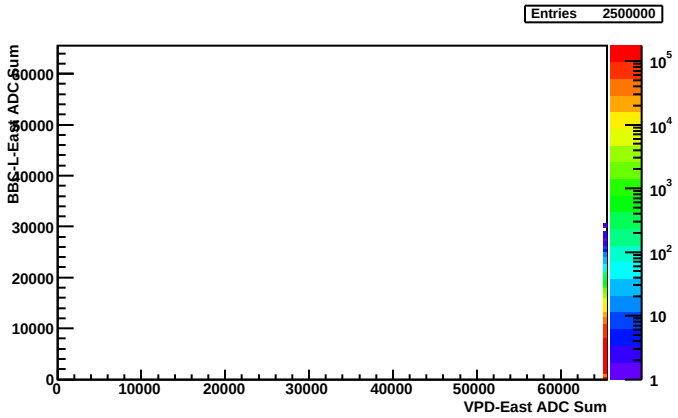

Entries 2500000
TOF Mult
VPD-West ADC Sum

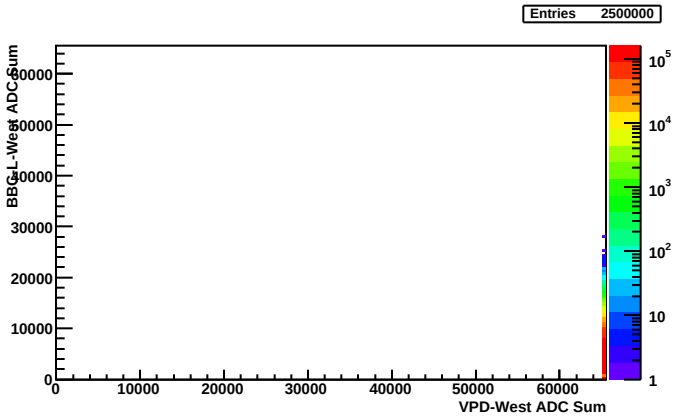

Entries 2500000
TOF Mult
ZDC-East ADC Sum Att

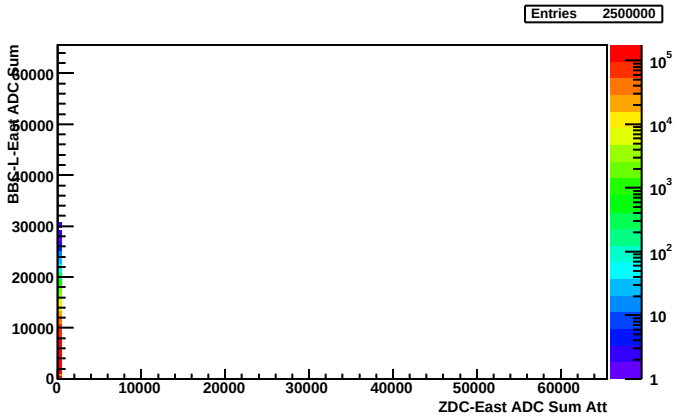

Entries 2500000
TOF Mult
ZDC-West ADC Sum Att

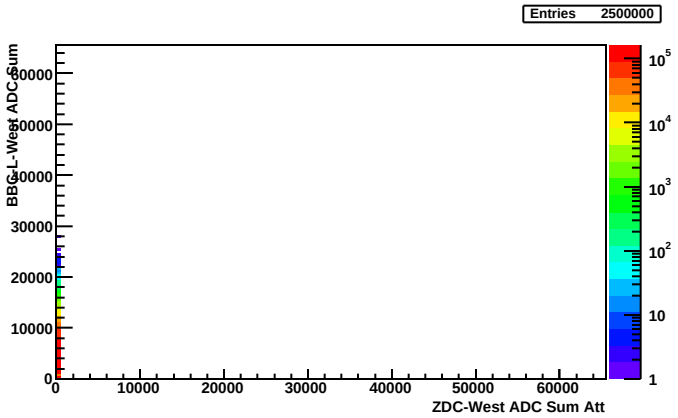

Entries 2500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

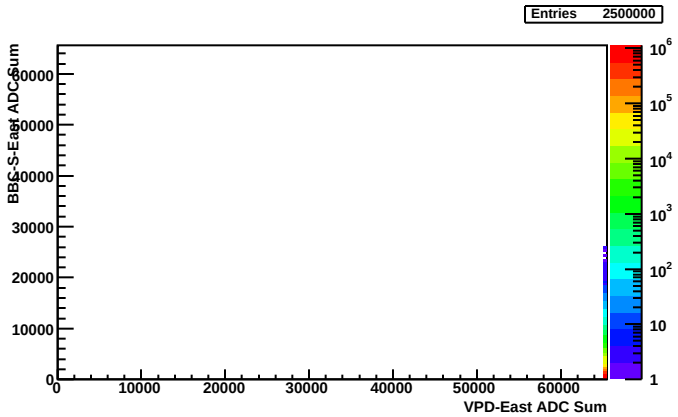

Entries 2500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

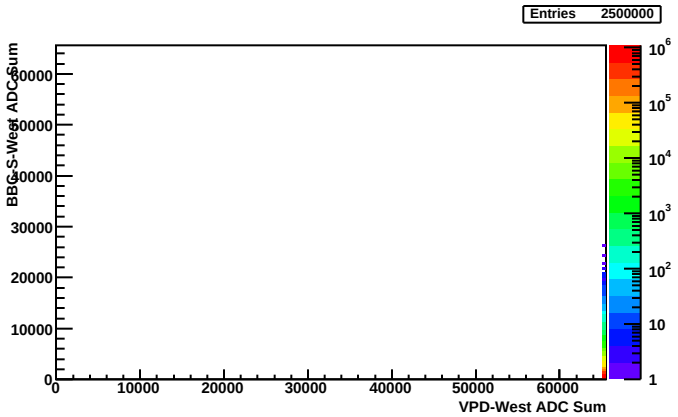

Entries 2500000
BBC-L-East ADC Sum
VPD-East ADC Sum

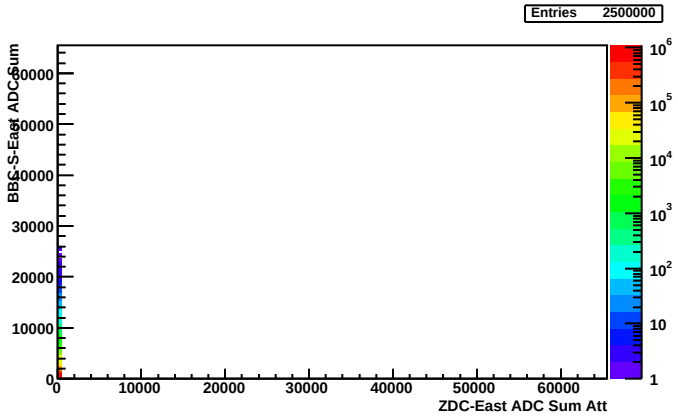

Entries 2500000
BBC-L-West ADC Sum
VPD-West ADC Sum

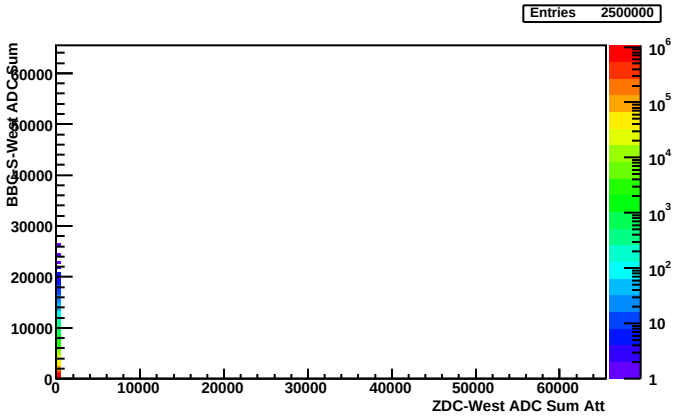

Entries 2500000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

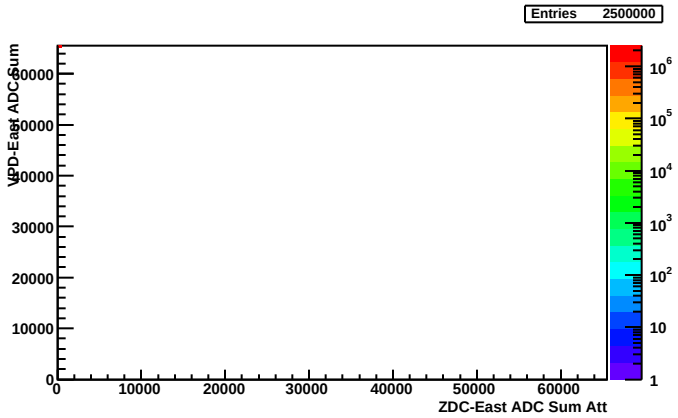

Entries 2500000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

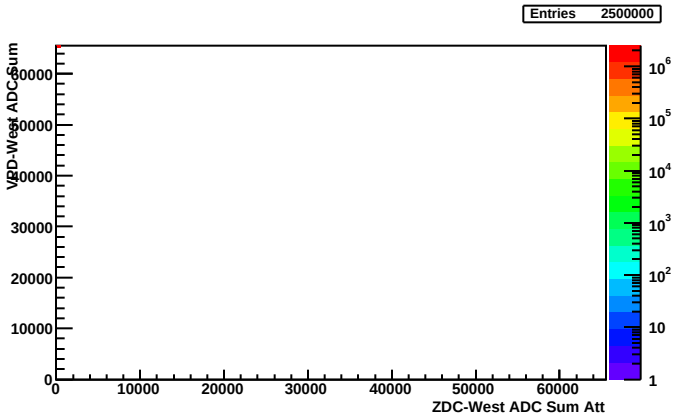

Entries 2500000
BBC-S-East ADC Sum
VPD-East ADC Sum

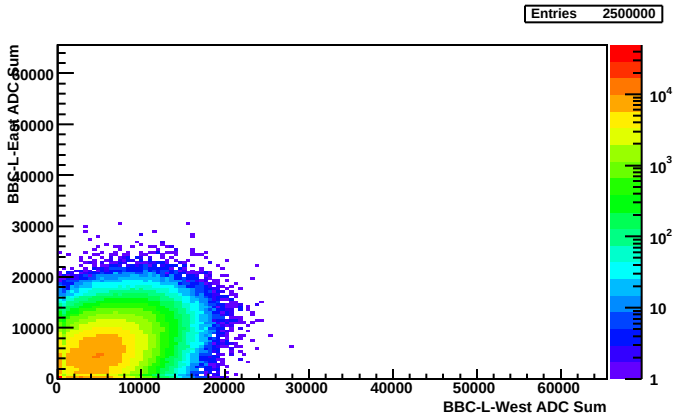

Entries 2500000
BBC-S-West ADC Sum
VPD-West ADC Sum

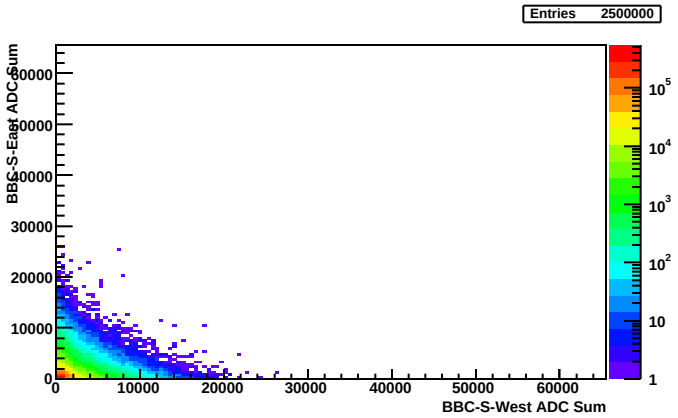

Entries 2500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

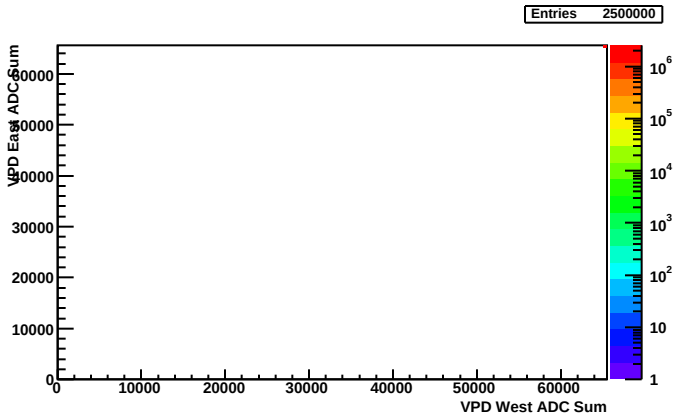

Entries 2500000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

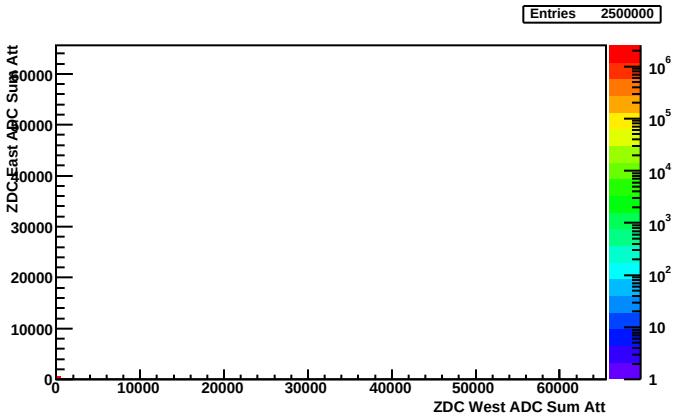

Entries 2500000
VPD-East ADC Sum
ZDC-East ADC Sum Att

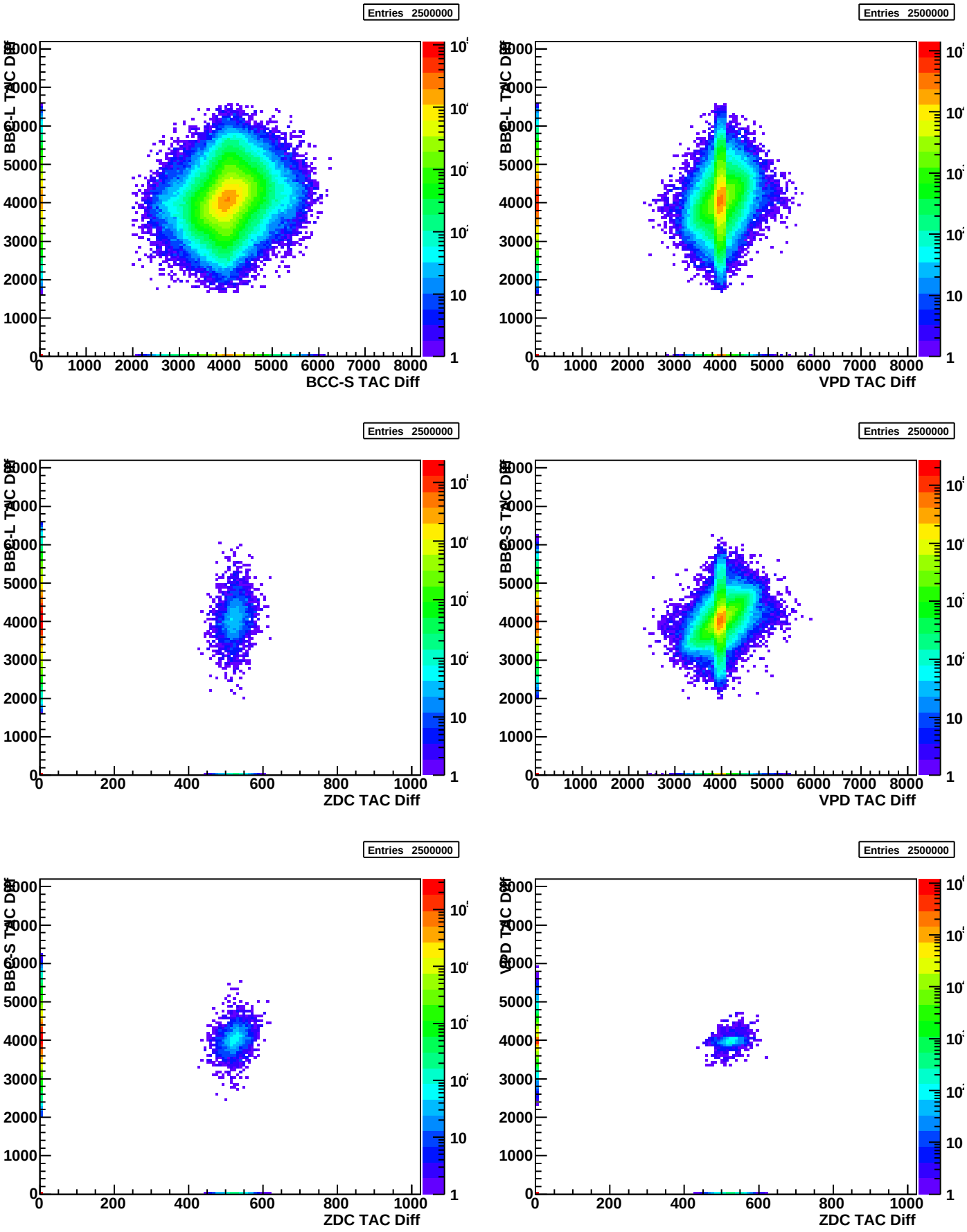

Entries 2500000
VPD-West ADC Sum
ZDC-West ADC Sum Att

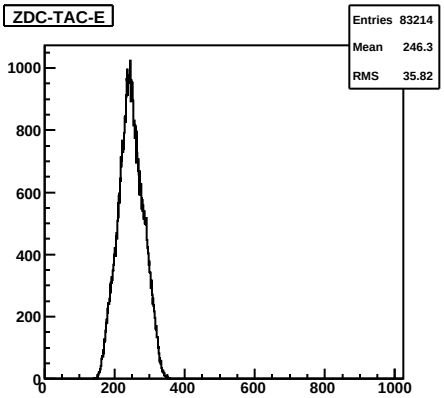

Entries 2500000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

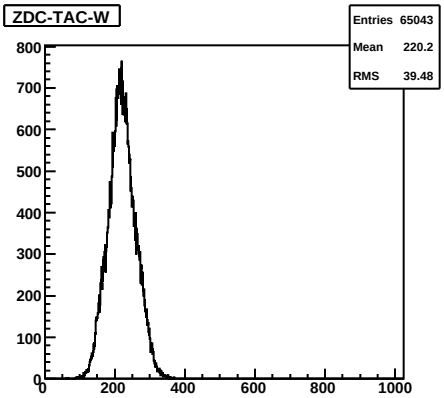

Entries 2500000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

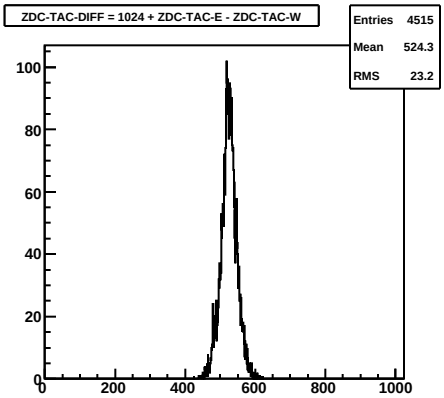

Entries 2500000
VPD East ADC Sum
VPD West ADC Sum

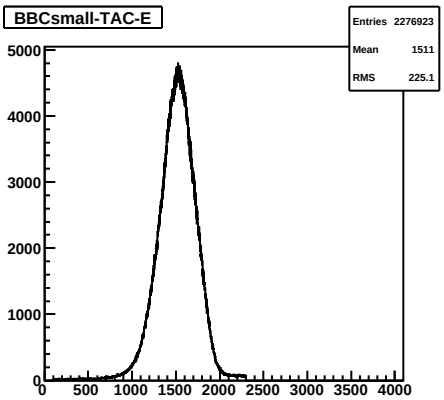

Entries 2500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

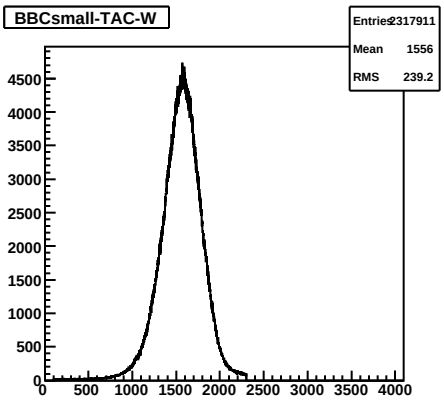

Entries 2500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2500000
BBC-L TAC Diff
VPD TAC Diff
Entries 2500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 2500000
BBC-S TAC Diff
VPD TAC Diff
Entries 2500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 2500000
VPD TAC Diff
ZDC TAC Diff

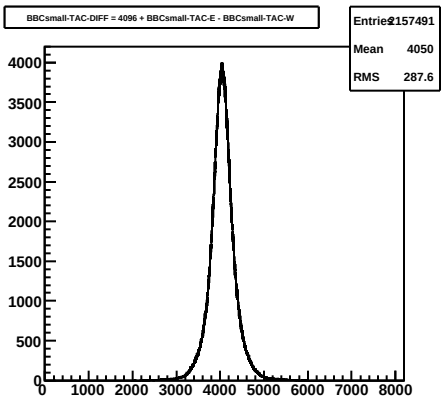

ZDC-TAC-E
Entries 83214
Mean 246.3
RMS 35.82

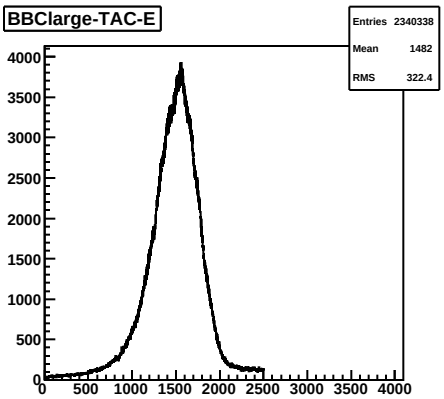

ZDC-TAC-W
Entries 65043
Mean 220.2
RMS 39.48

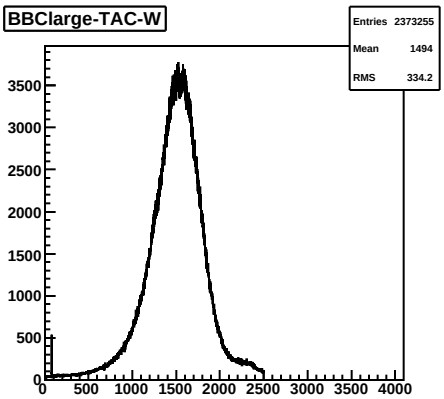

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 4515
Mean 524.3
RMS 23.2

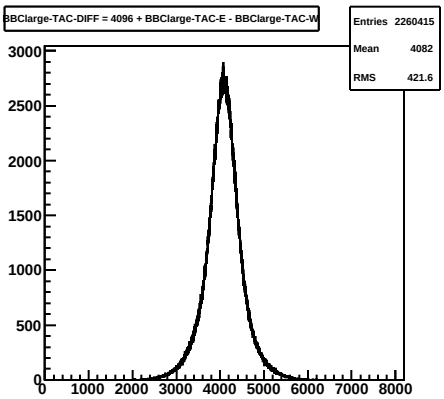

BBCsmall-TAC-E
Entries 2276923
Mean 1511
RMS 225.1

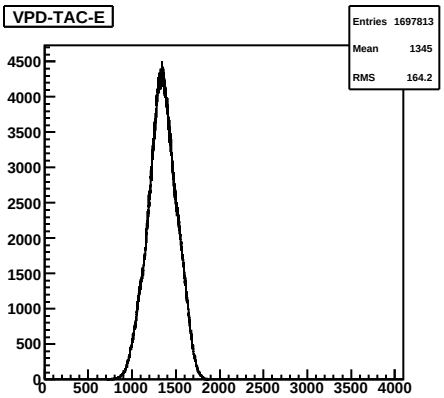

BBCsmall-TAC-W
Entries 2317911
Mean 1556
RMS 239.2

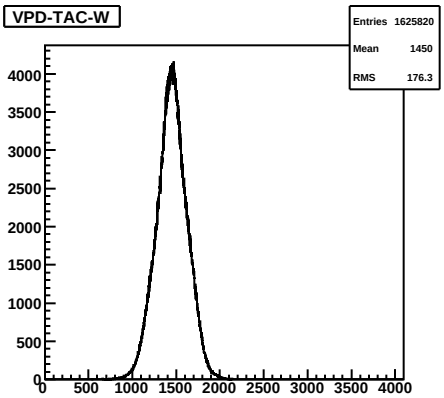

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 2157491
Mean 4050
RMS 287.6

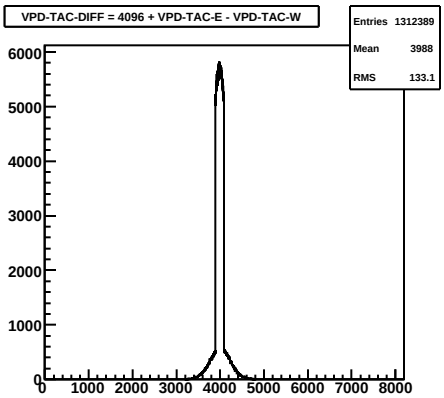

BBClarge-TAC-E
Entries 2340338
Mean 1482
RMS 322.4

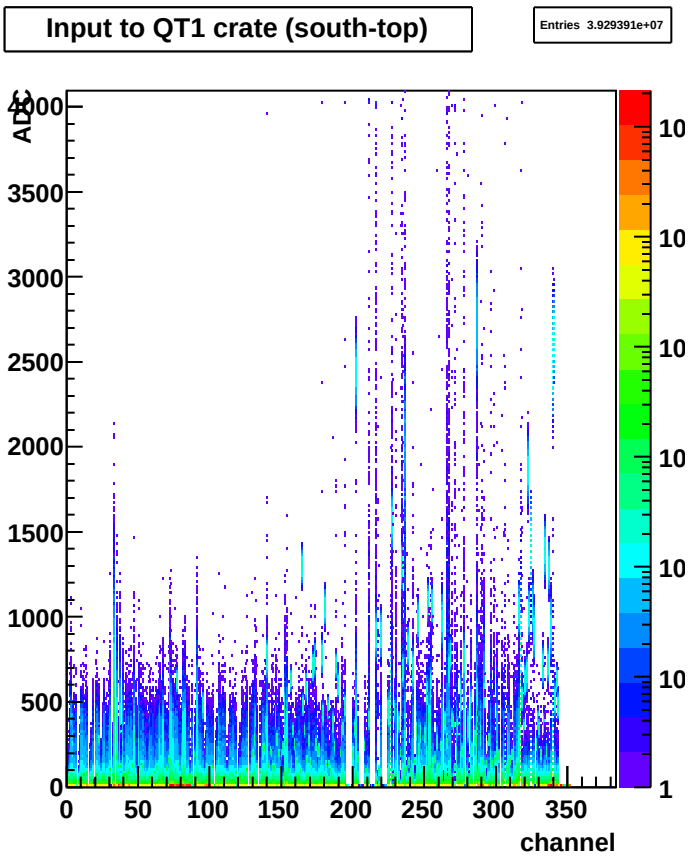

BBClarge-TAC-W
Entries 2373255
Mean 1494
RMS 334.2

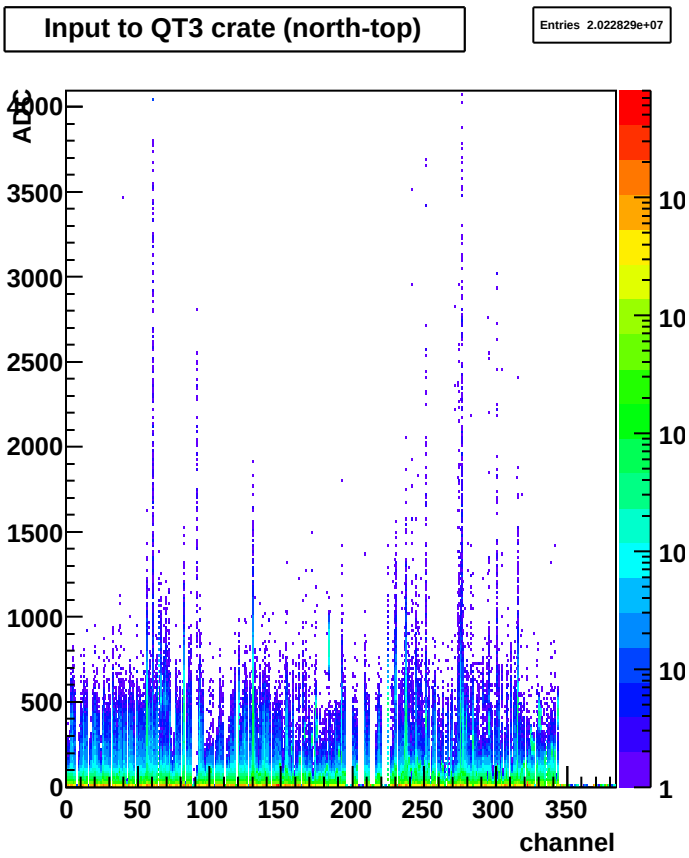

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2260415
Mean 4082
RMS 421.6

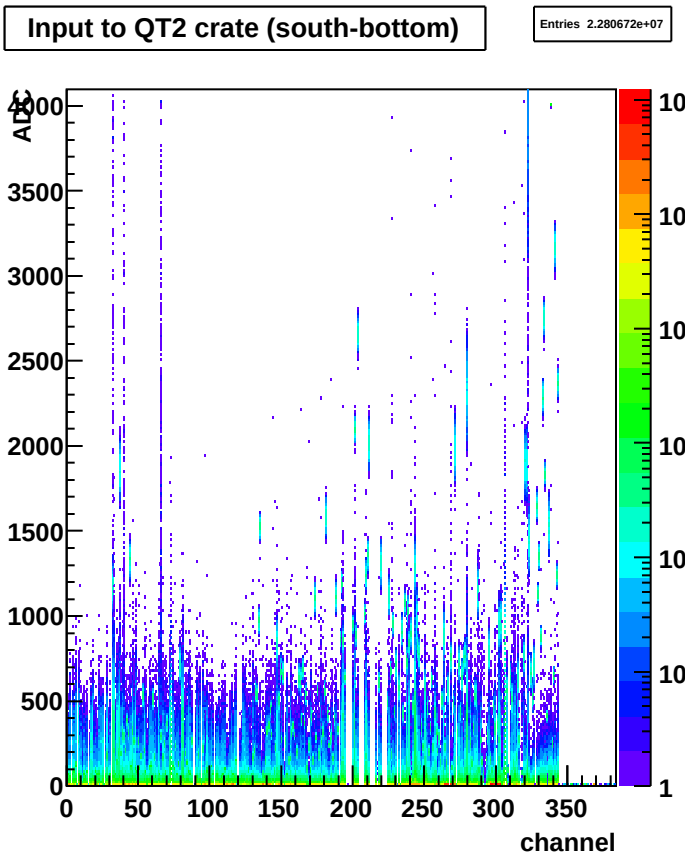

VPD-TAC-E
Entries 1697813
Mean 1345
RMS 164.2

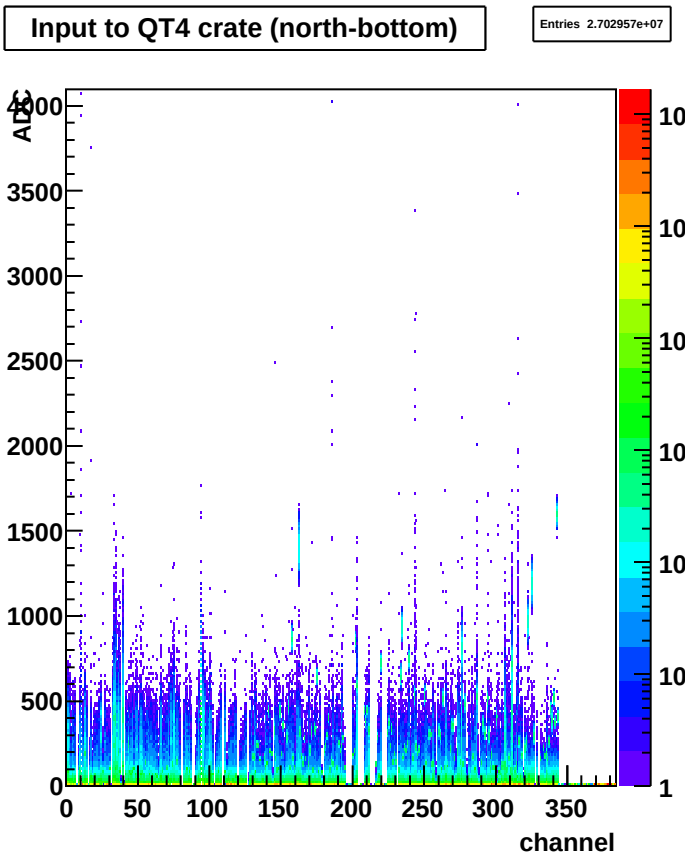

VPD-TAC-W
Entries 1625820
Mean 1450
RMS 176.3

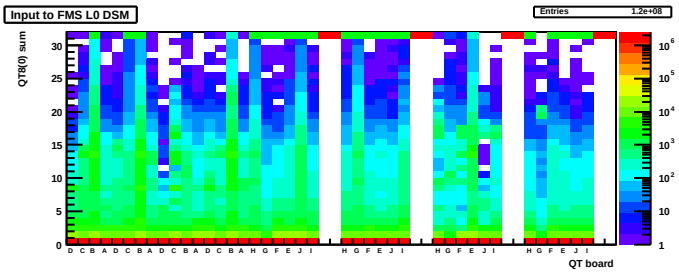

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1312389
Mean 3988
RMS 133.1

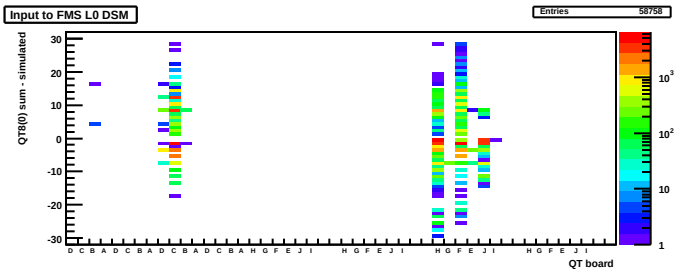

Input to QT1 crate (south-top)
Entries 3.929391e+07
ADC
channel

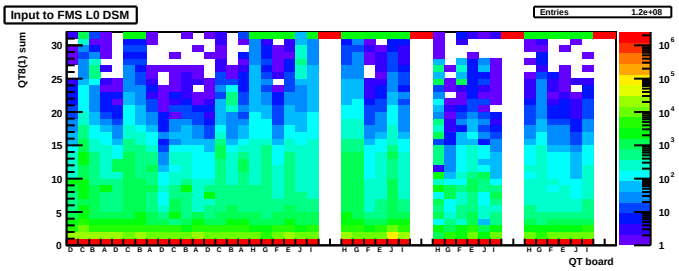

Input to QT3 crate (north-top)
Entries 2.022829e+07
ADC
channel

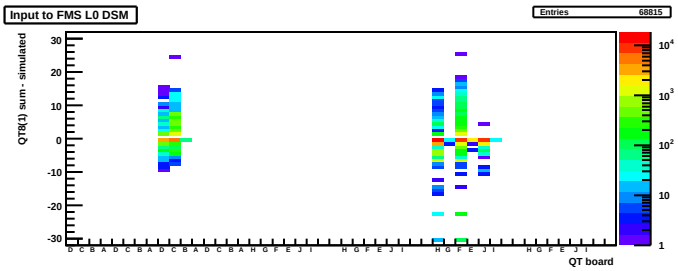

Input to QT2 crate (south-bottom)
Entries 2.280672e+07
ADC
channel

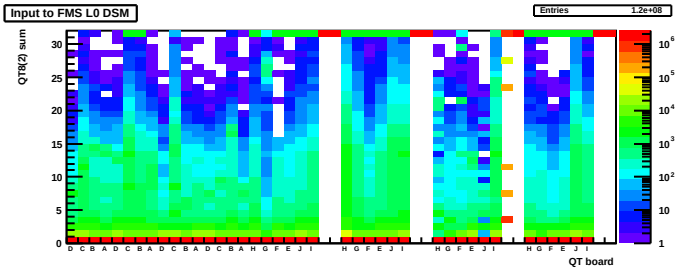

Input to QT4 crate (north-bottom)
Entries 2.702957e+07
ADC
channel

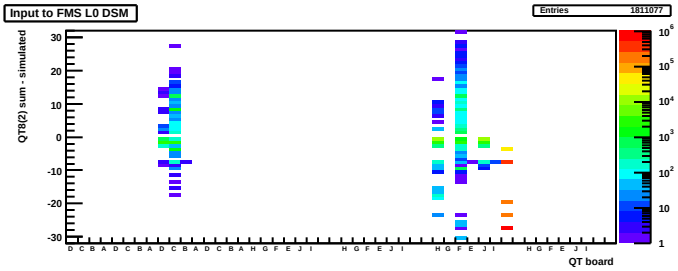

Input to FMS L0 DSM
Entries 1.2e+08
QT8(0) sum
QT board

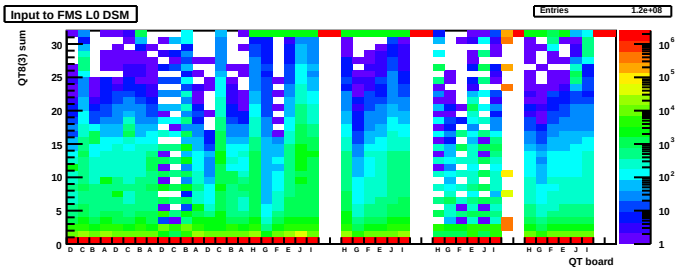

Input to FMS L0 DSM
Entries 58758
QT8(0) sum - simulated
QT board

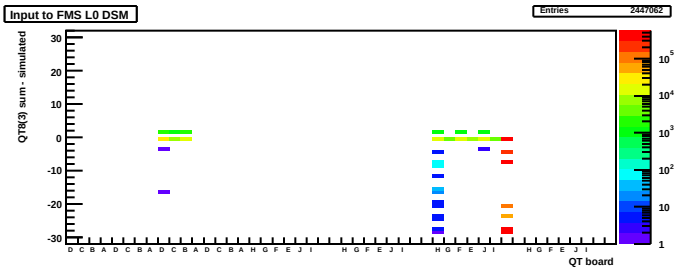

Input to FMS L0 DSM
Entries 1.2e+08
QT8(1) sum
QT board

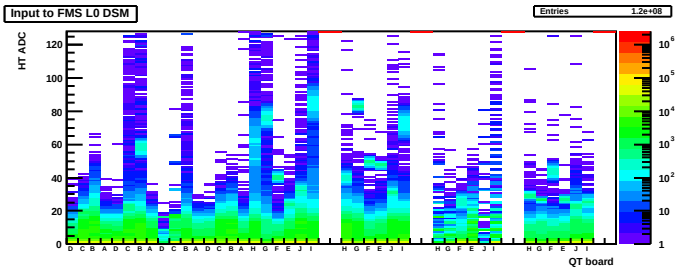

Input to FMS L0 DSM
Entries 68815
QT8(1) sum - simulated
QT board

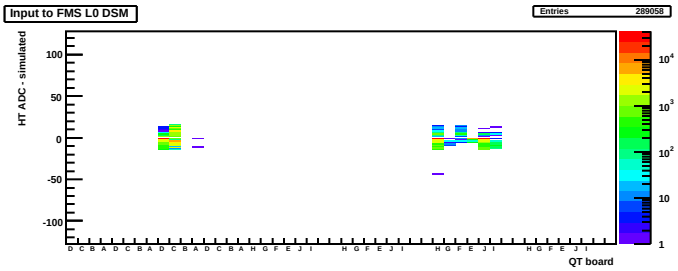

Input to FMS L0 DSM
Entries 1.2e+08
QT8(2) sum
QT board

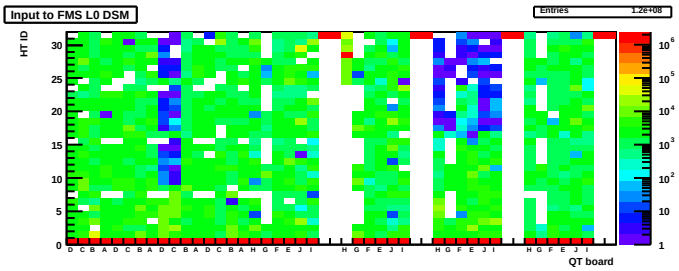

Input to FMS L0 DSM
Entries 1811077
QT8(2) sum - simulated
QT board

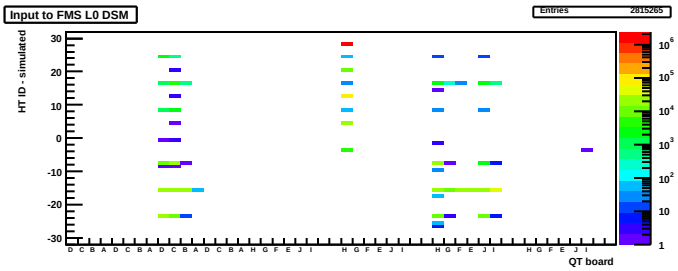

Input to FMS L0 DSM
Entries 1.2e+08
QT8(3) sum
QT board

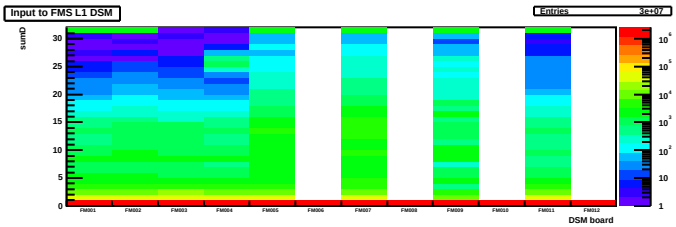

Input to FMS L0 DSM
Entries 2447062
QT8(3) sum - simulated
QT board

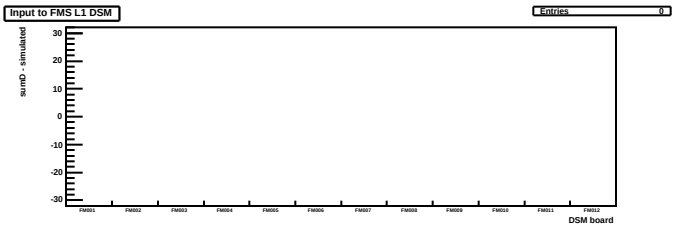

Input to FMS L0 DSM
Entries 1.2e+08
HT ADC
QT board

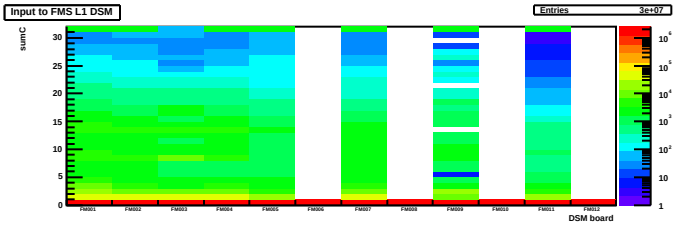

Input to FMS L0 DSM
Entries 289058
HT ADC - simulated
QT board

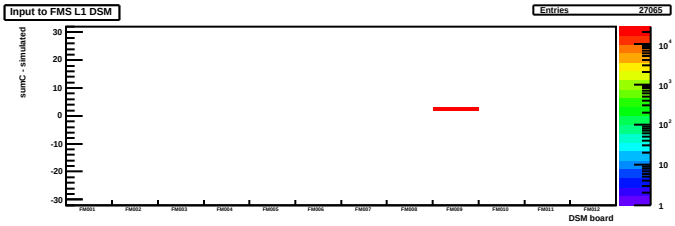

Input to FMS L0 DSM
Entries 1.2e+08
HT ID
QT board

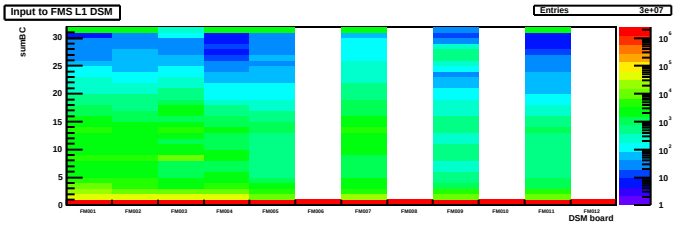

Input to FMS L0 DSM
Entries 2815265
HT ID - simulated
QT board

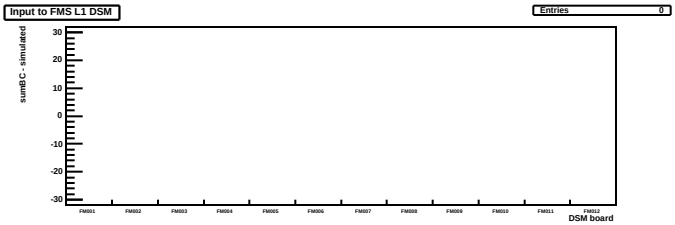

Input to FMS L1 DSM
Entries 3e+07
sumD
DSM board

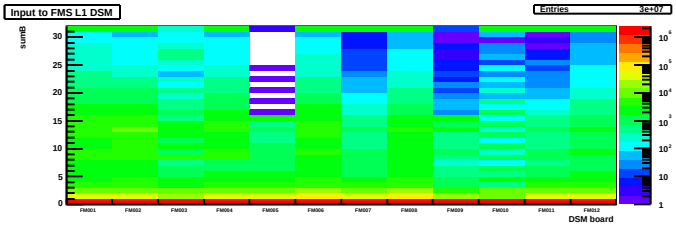

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

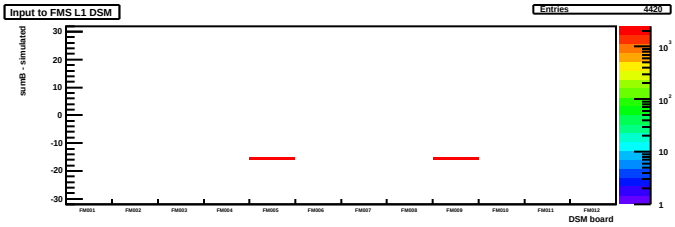

Input to FMS L1 DSM
Entries 3e+07
sumC
DSM board

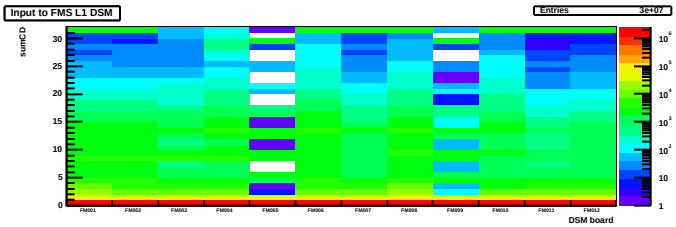

Input to FMS L1 DSM
Entries 27065
sumC - simulated
DSM board

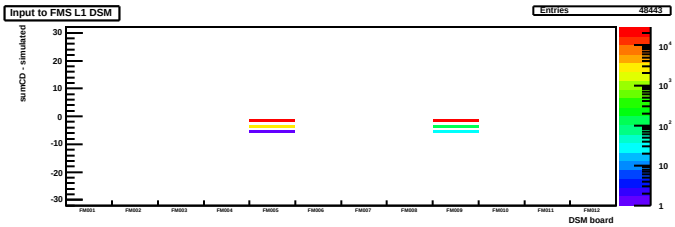

Input to FMS L1 DSM
Entries 3e+07
sumBC
DSM board

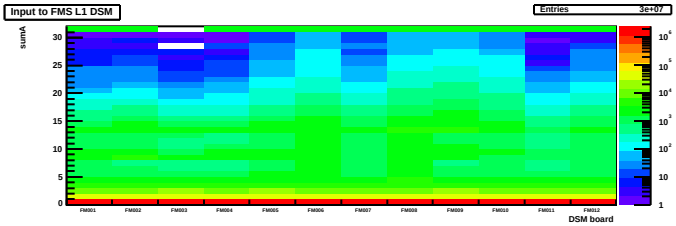

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

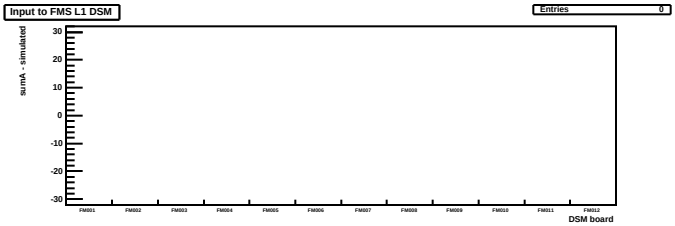

Input to FMS L1 DSM
Entries 3e+07
sumB
DSM board

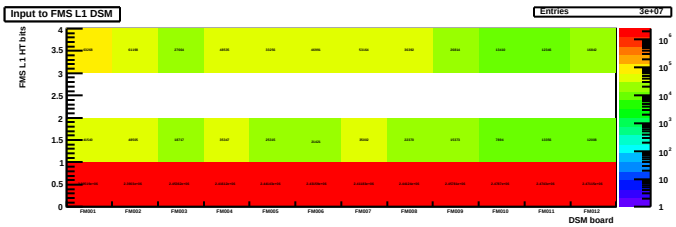

Input to FMS L1 DSM
Entries 4420
sumB - simulated
DSM board

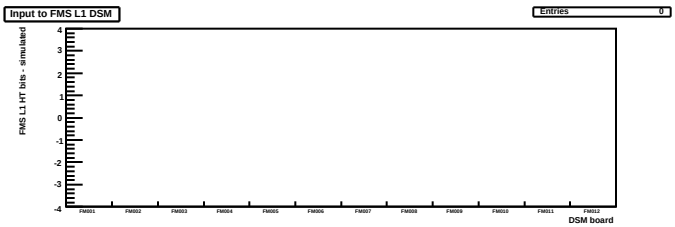

Input to FMS L1 DSM
Entries 3e+07
sumCD
DSM board

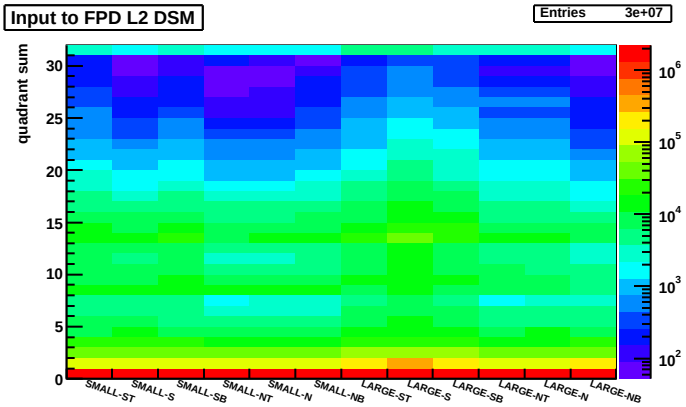

Input to FMS L1 DSM
Entries 48443
sumCD - simulated
DSM board

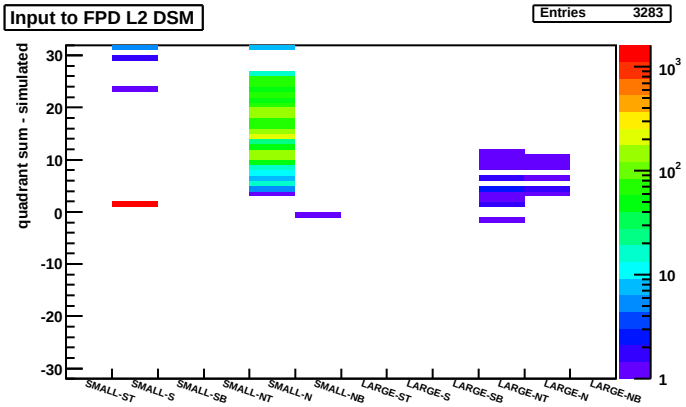

Input to FMS L1 DSM
Entries 3e+07
sumA
DSM board

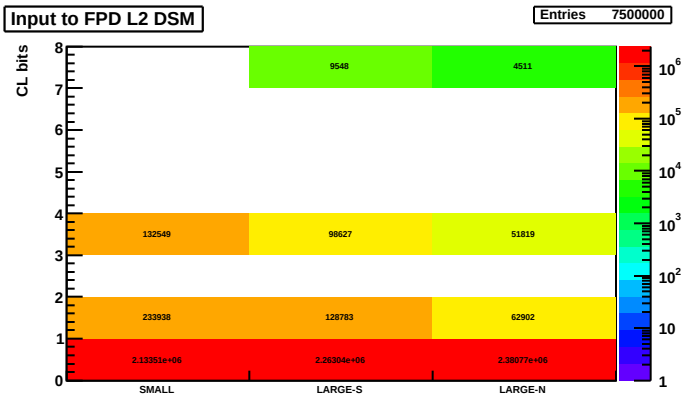

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

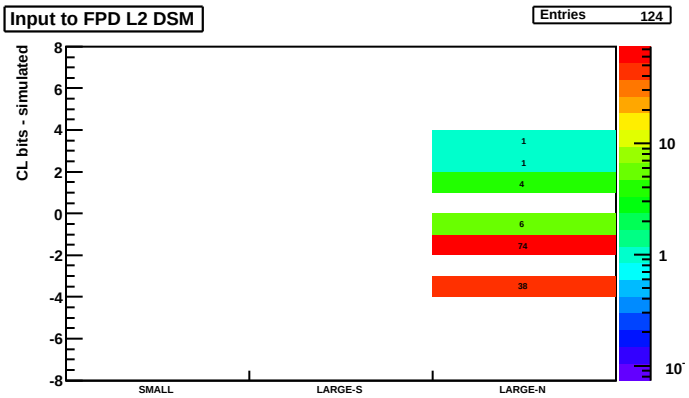

Input to FMS L1 DSM
Entries 3e+07
FMS L1 HT bits
DSM board

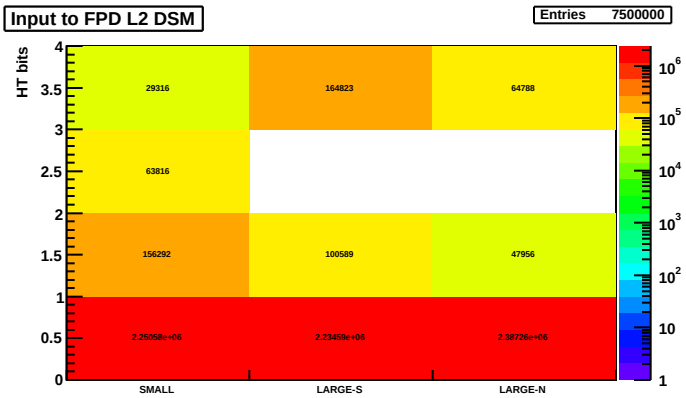

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

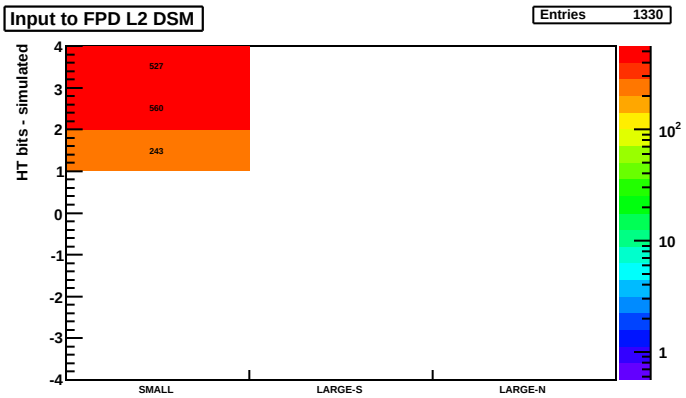

Input to FPD L2 DSM
Entries 3e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

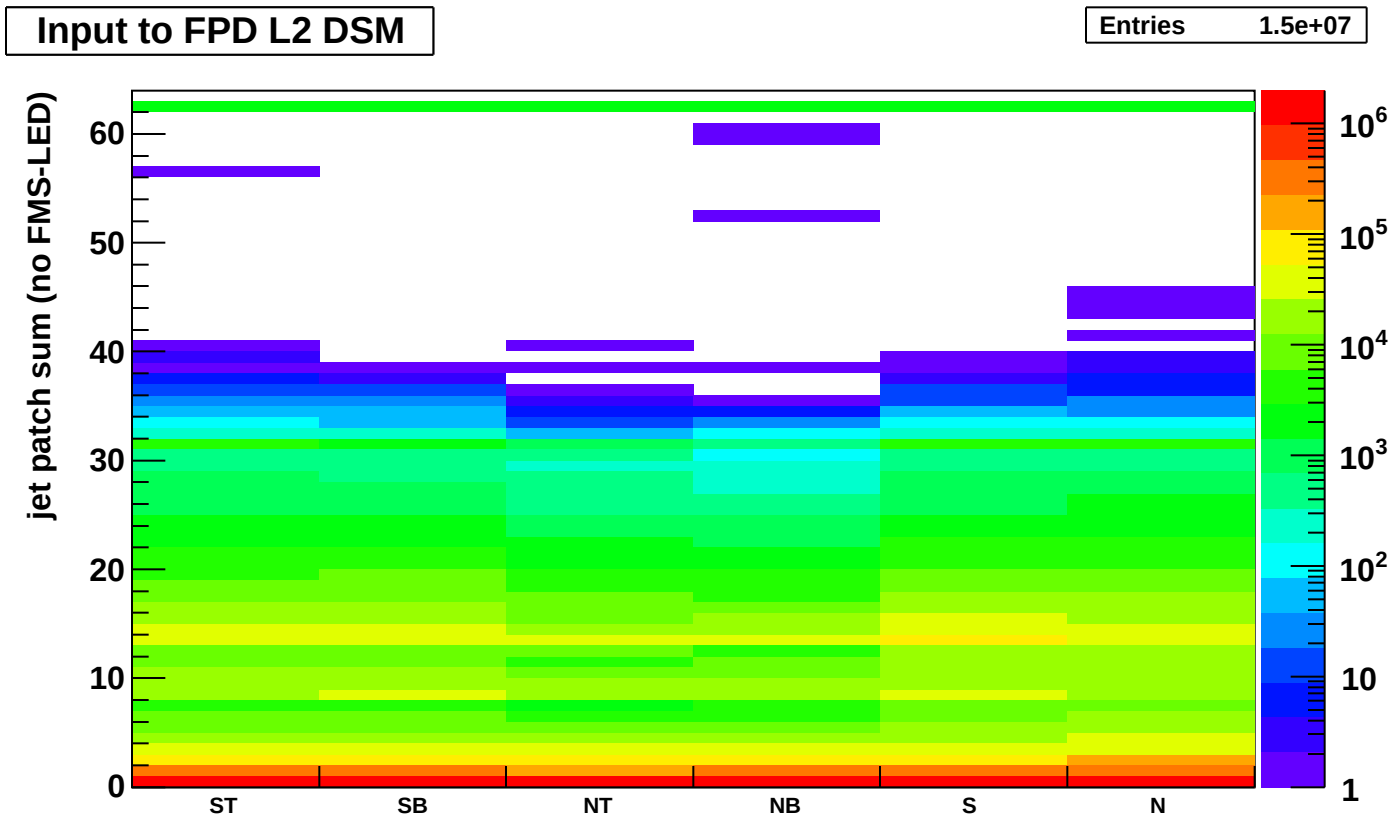

Input to FPD L2 DSM
Entries 3283
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

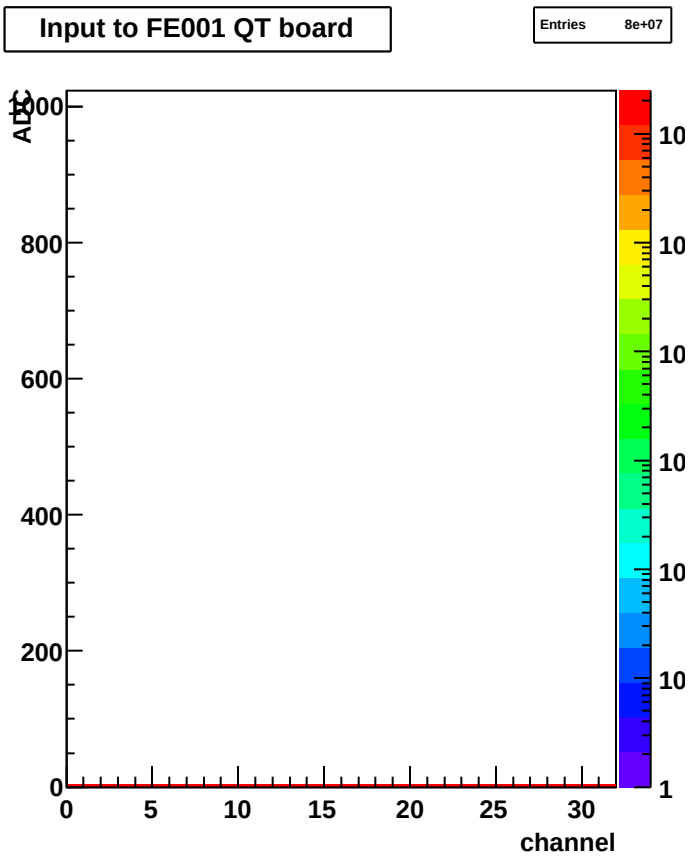

Input to FPD L2 DSM
Entries 7500000
CL bits
9548
4511
132549
98627
51819
233938
128783
62902
2.13351e+06
2.26304e+06
2.38077e+06
SMALL
LARGE-S
LARGE-N

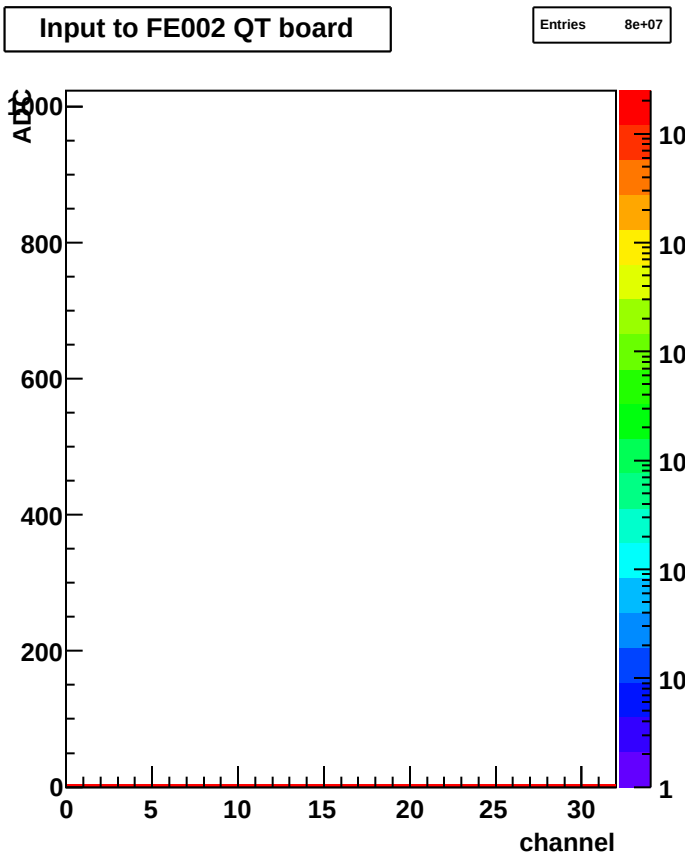

Input to FPD L2 DSM
Entries 124
CL bits - simulated
1
1
4
6
74
38
SMALL
LARGE-S
LARGE-N

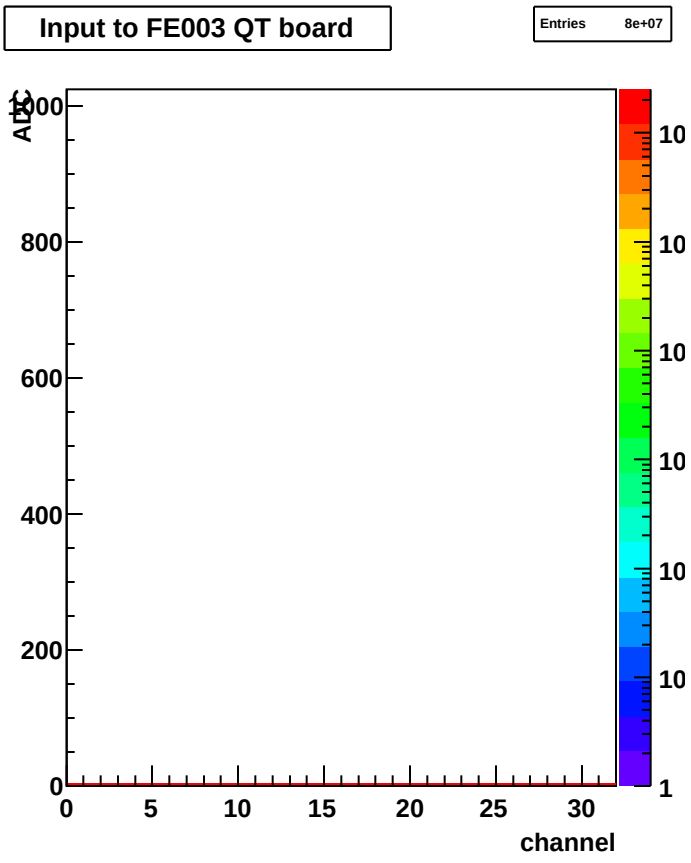

Input to FPD L2 DSM
Entries 7500000
HT bits
29316
164823
64788
63816
156292
100589
47956
2.25058e+06
2.23459e+06
2.38726e+06
SMALL
LARGE-S
LARGE-N

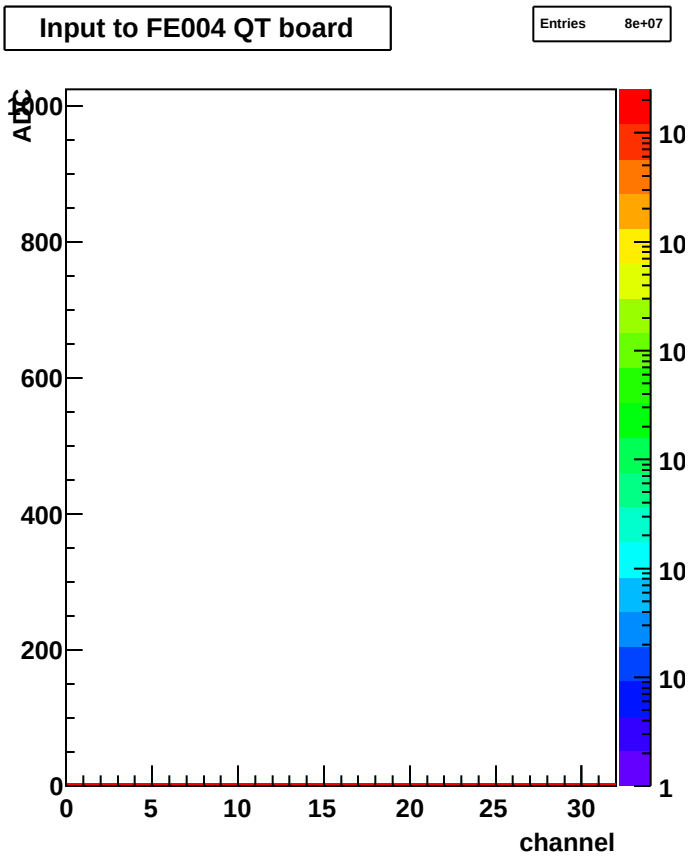

Input to FPD L2 DSM
Entries 1330
HT bits - simulated
527
560
243
SMALL
LARGE-S
LARGE-N

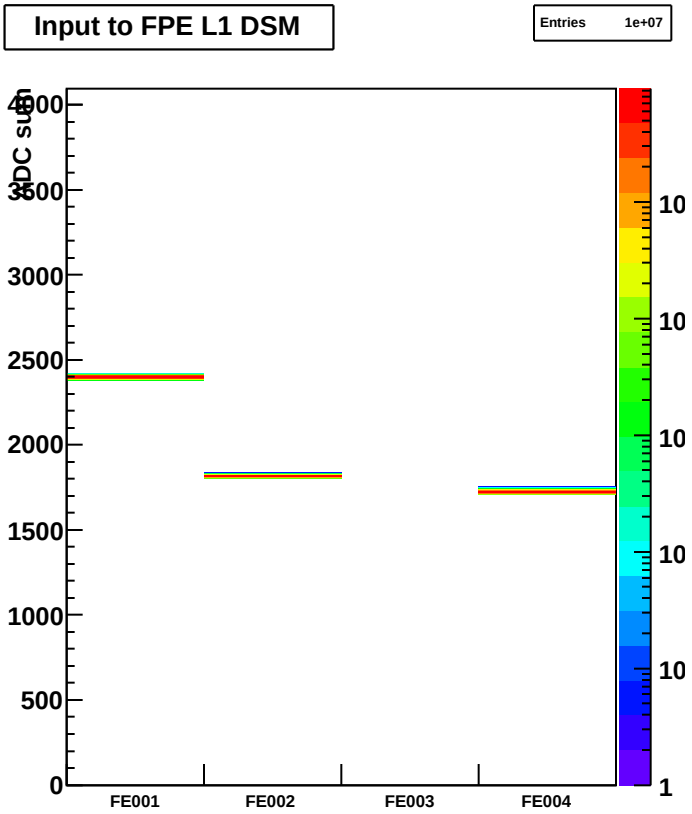

Input to FPD L2 DSM
Entries 1.5e+07
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

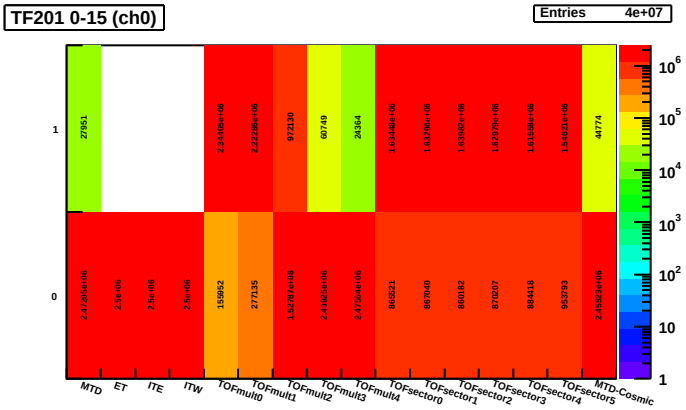

Input to FE001 QT board
Entries 8e+07
ADC
channel

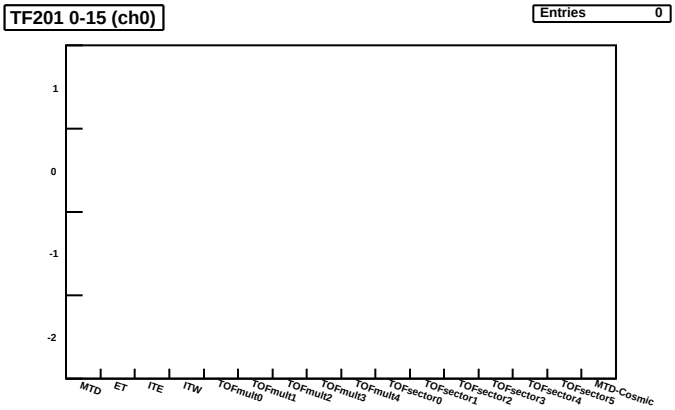

Input to FE002 QT board
Entries 8e+07
ADC
channel

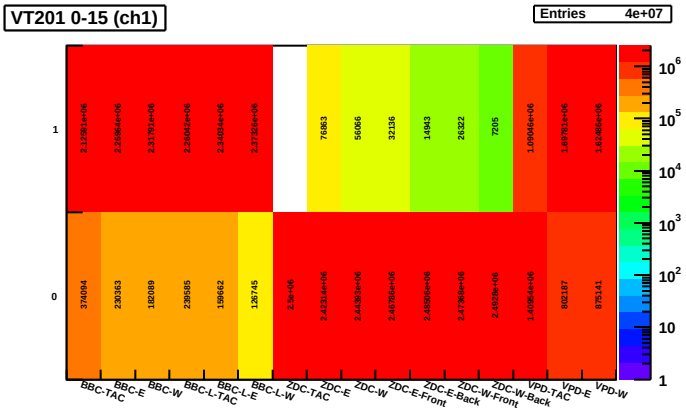

Input to FE003 QT board
Entries 8e+07
ADC
channel

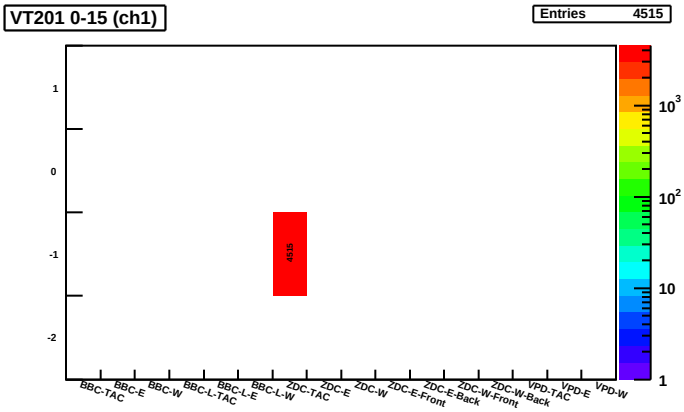

Input to FE004 QT board
Entries 8e+07
ADC
channel

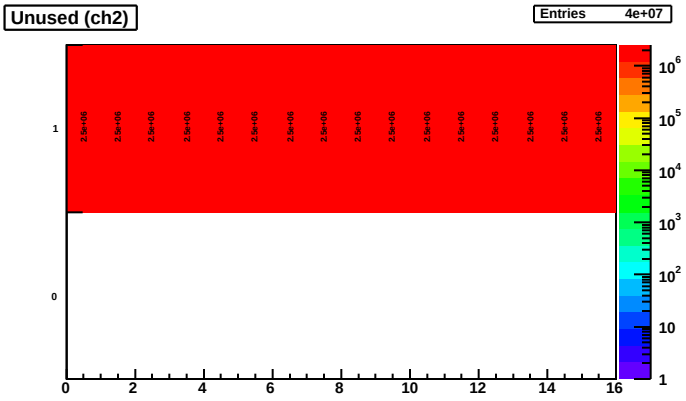

Input to FPE L1 DSM
Entries 1e+07
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

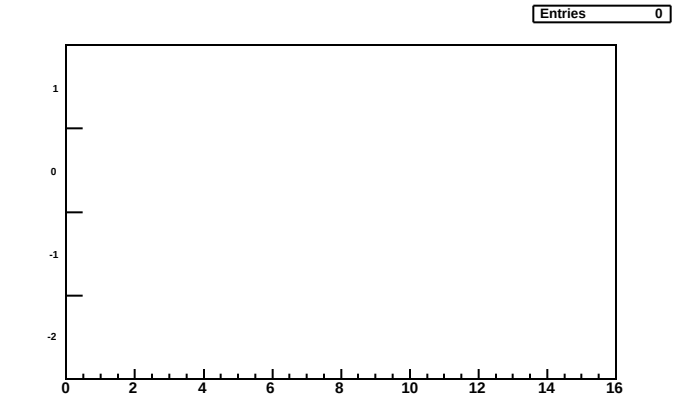

TF201 0-15 (ch0)
Entries 4e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

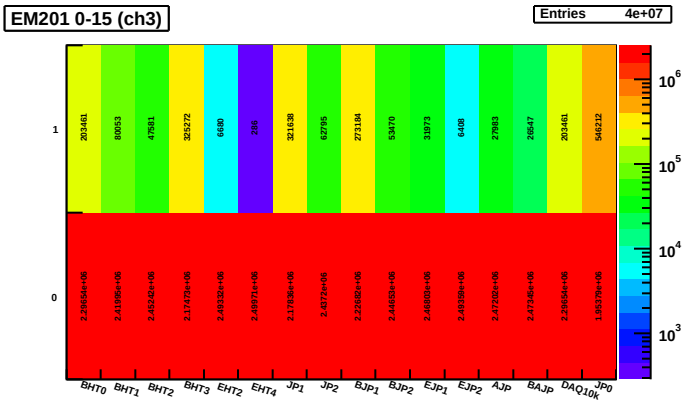

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

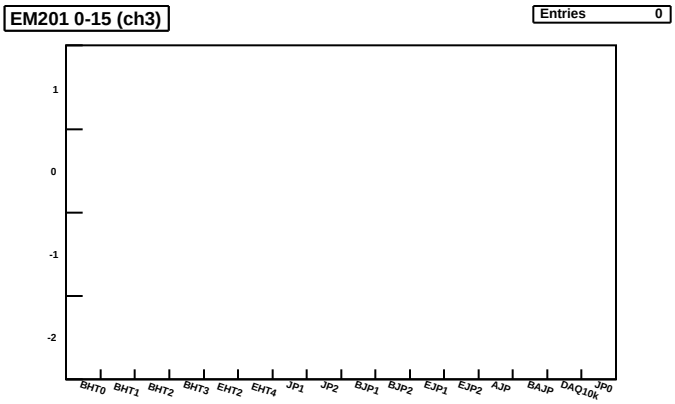

VT201 0-15 (ch1)
Entries 4e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 4515
4515
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

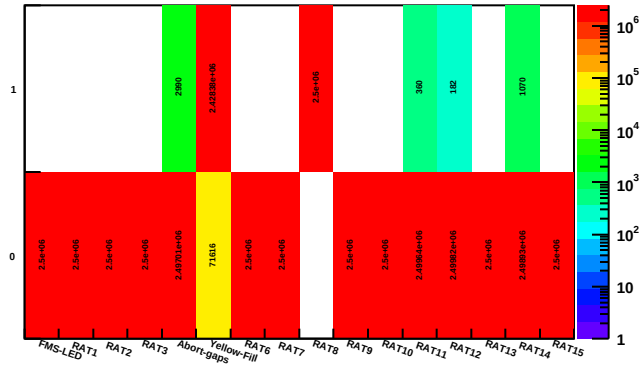

Unused (ch2)
Entries 4e+07

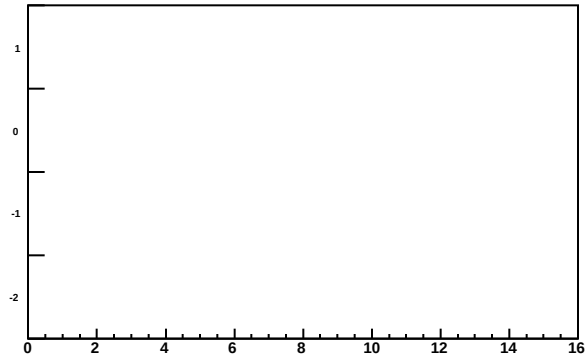

Entries 0


EM201 0-15 (ch3)
Entries 4e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

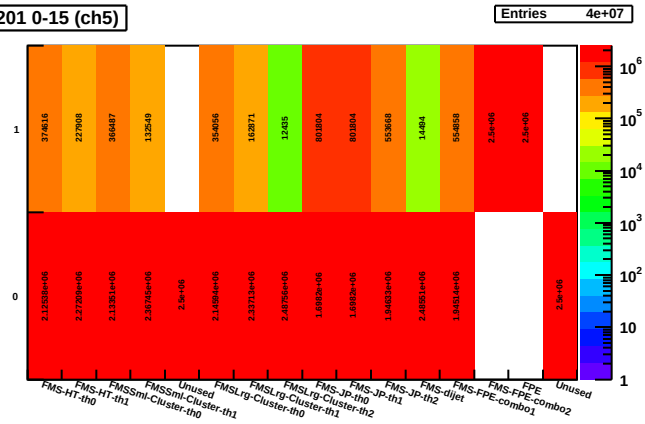

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)





FP201 0-15 (ch5)



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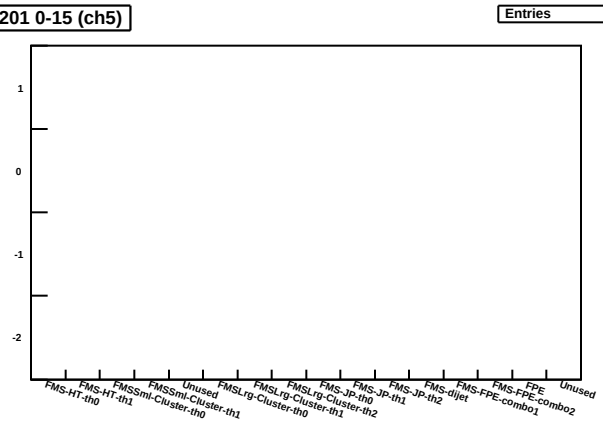
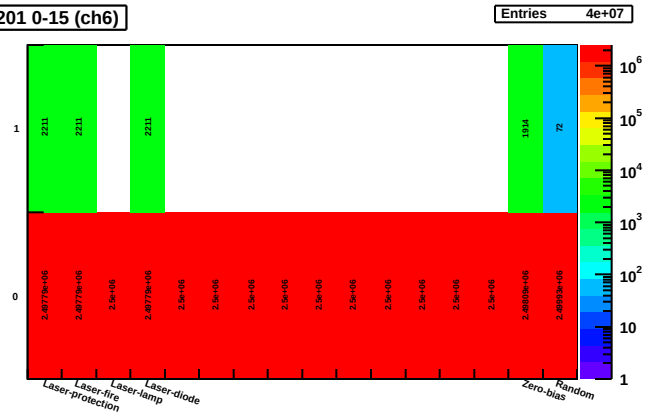
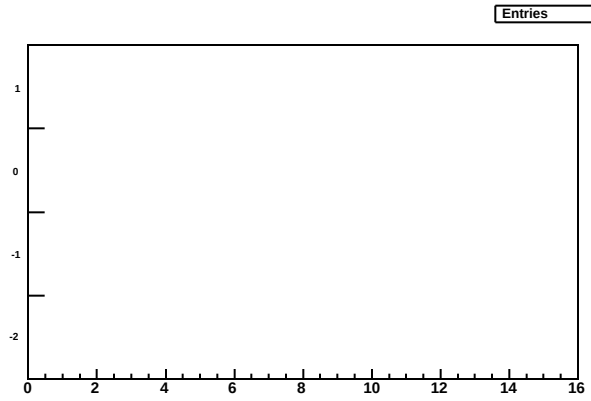
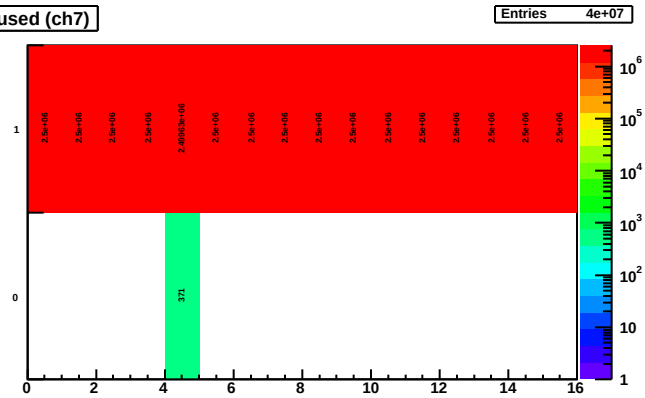
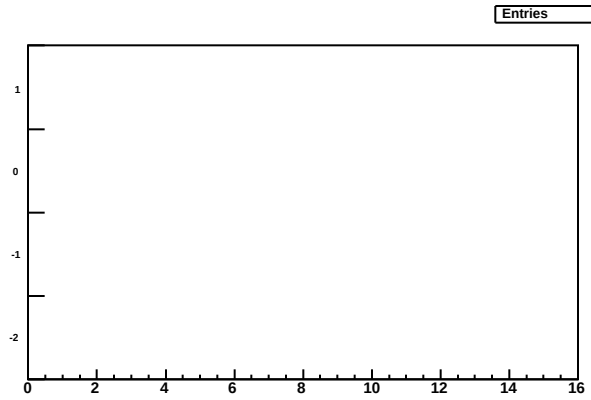


ST201 0-15 (ch6)





Unused (ch7)