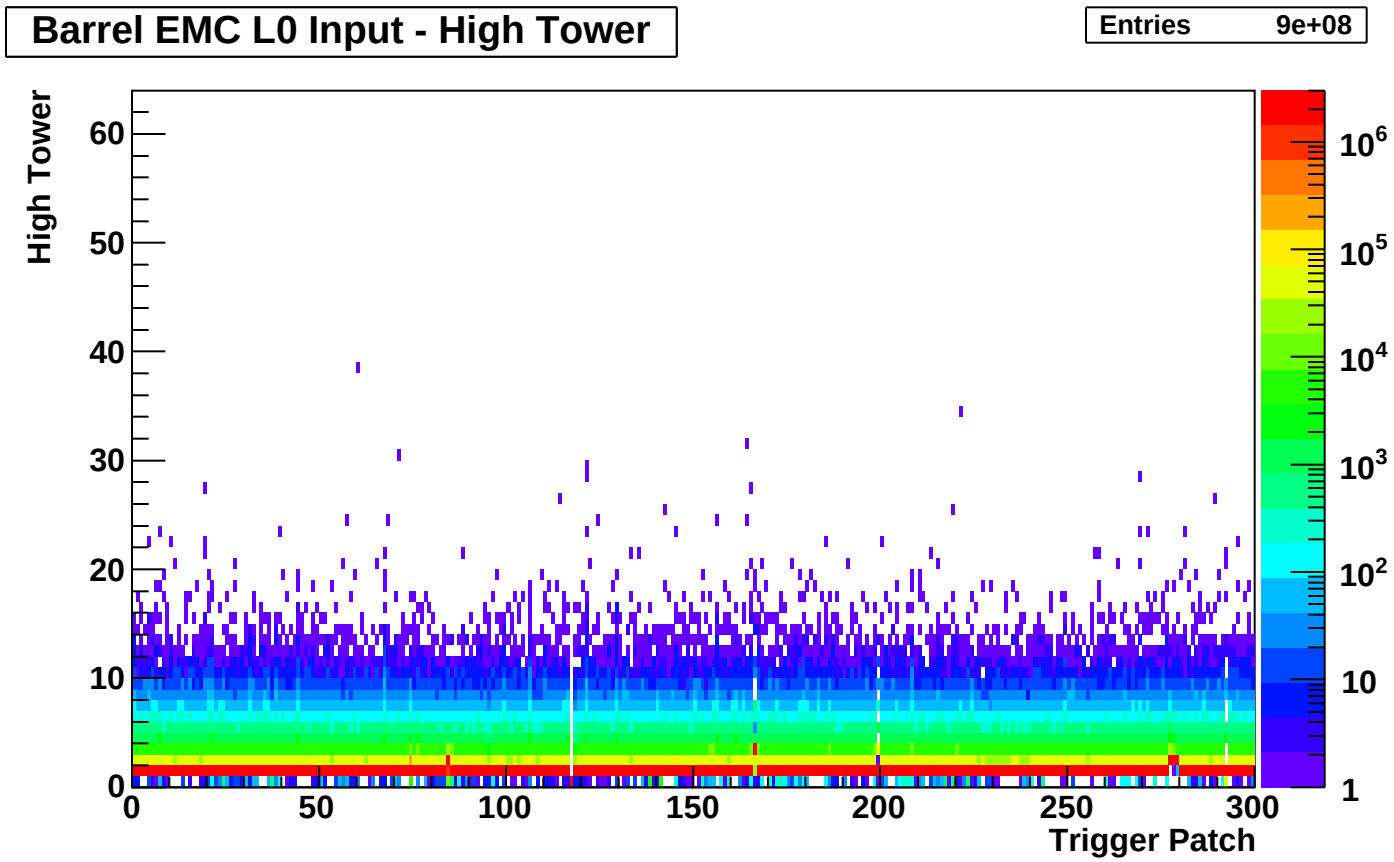
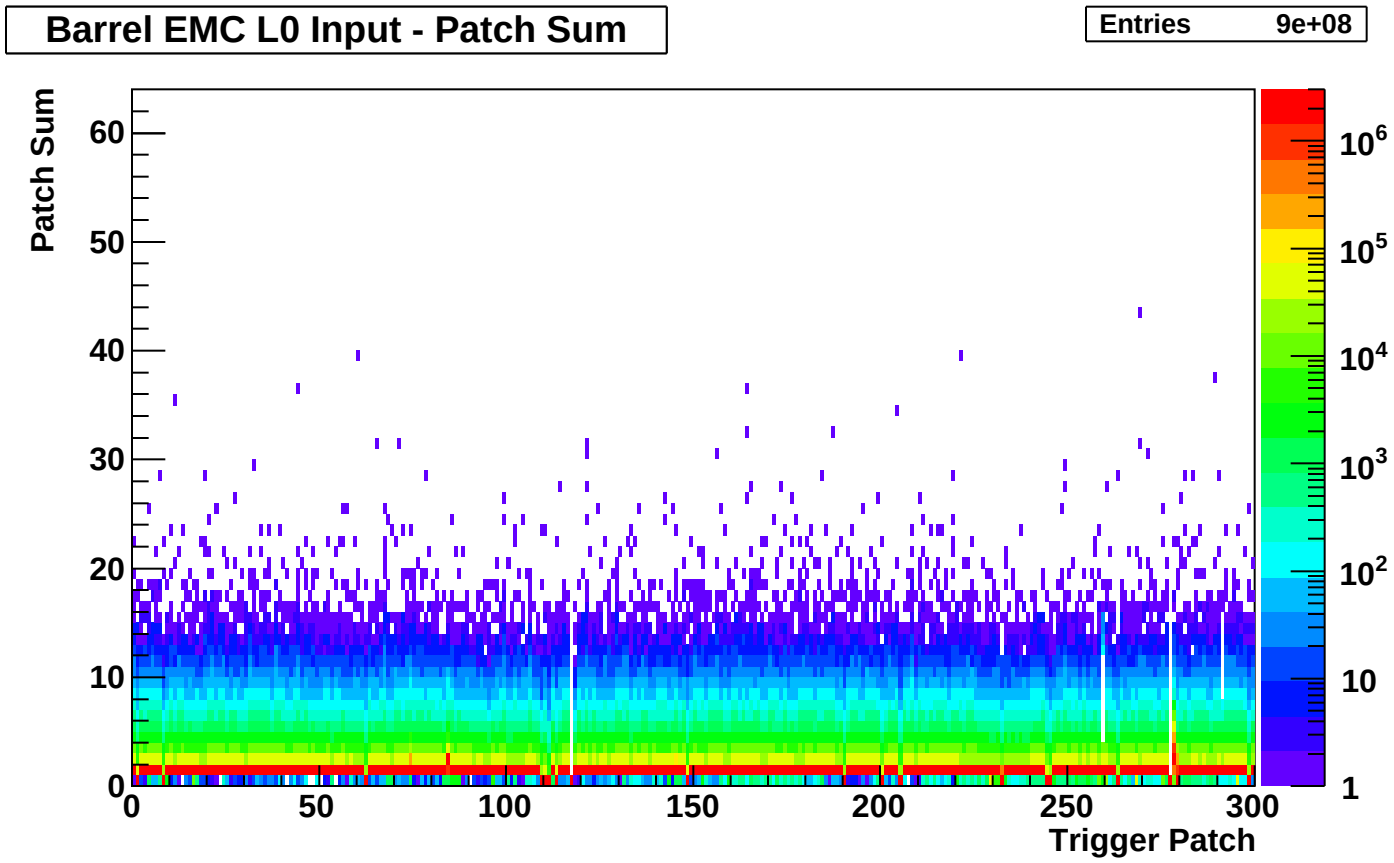
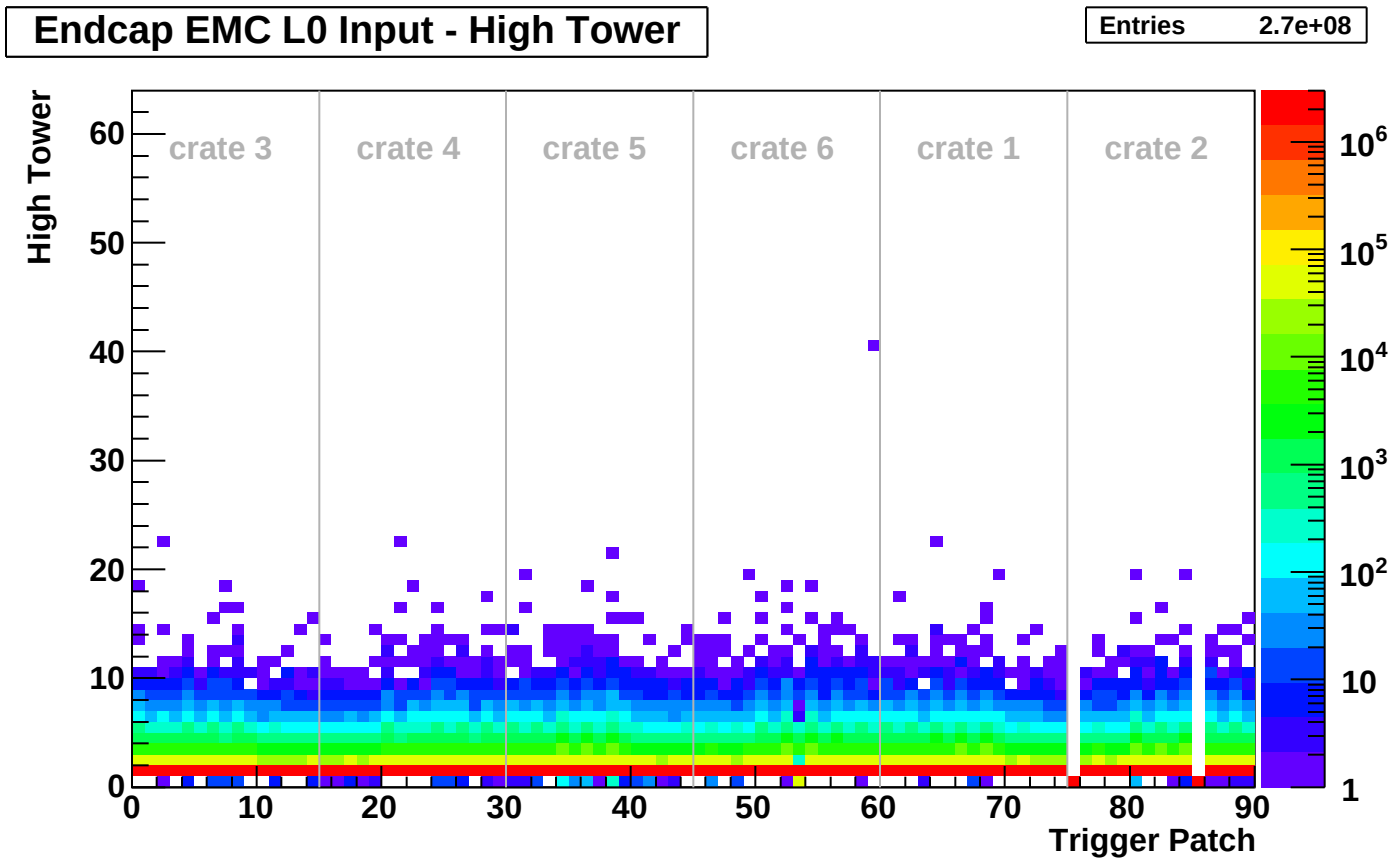
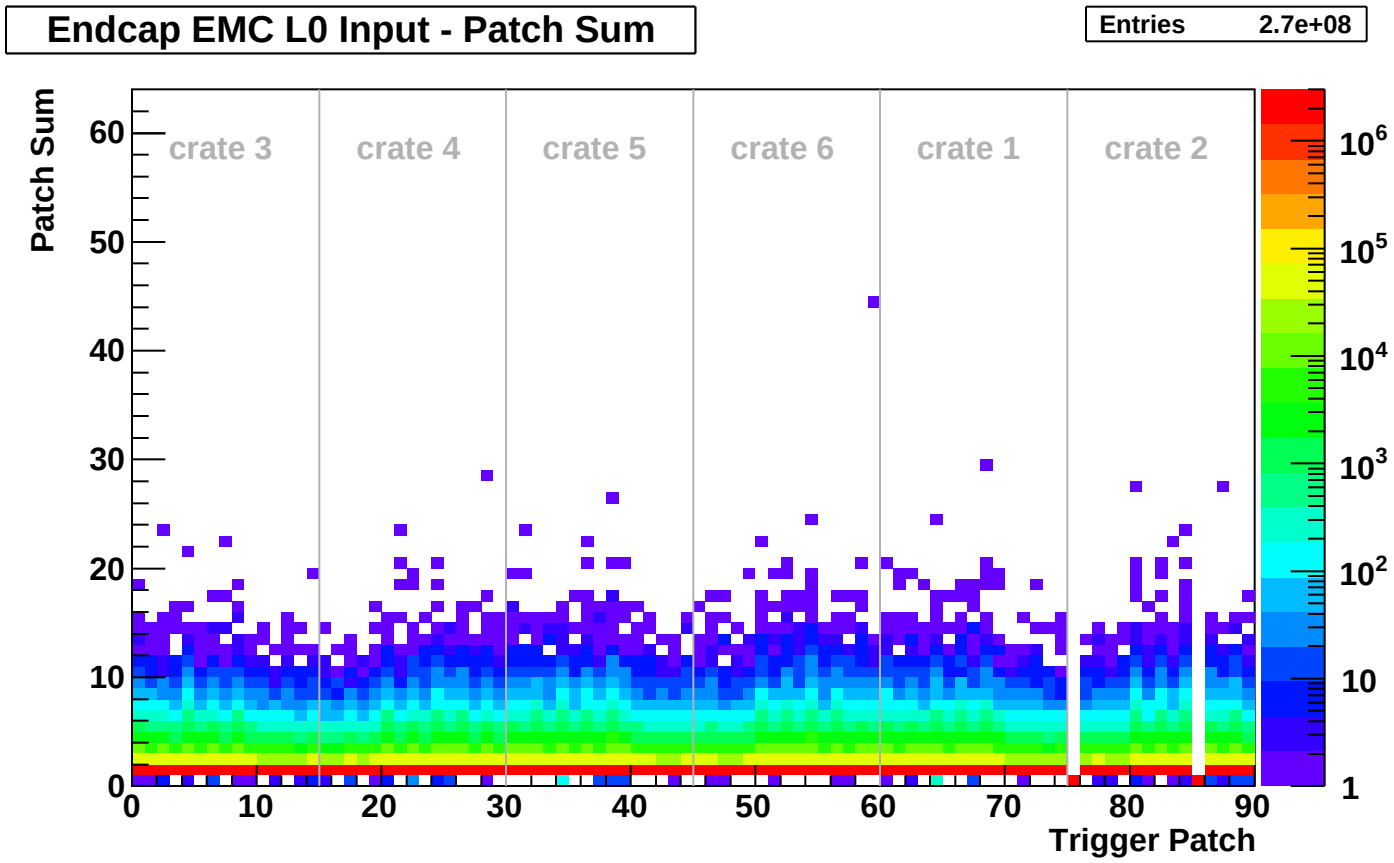
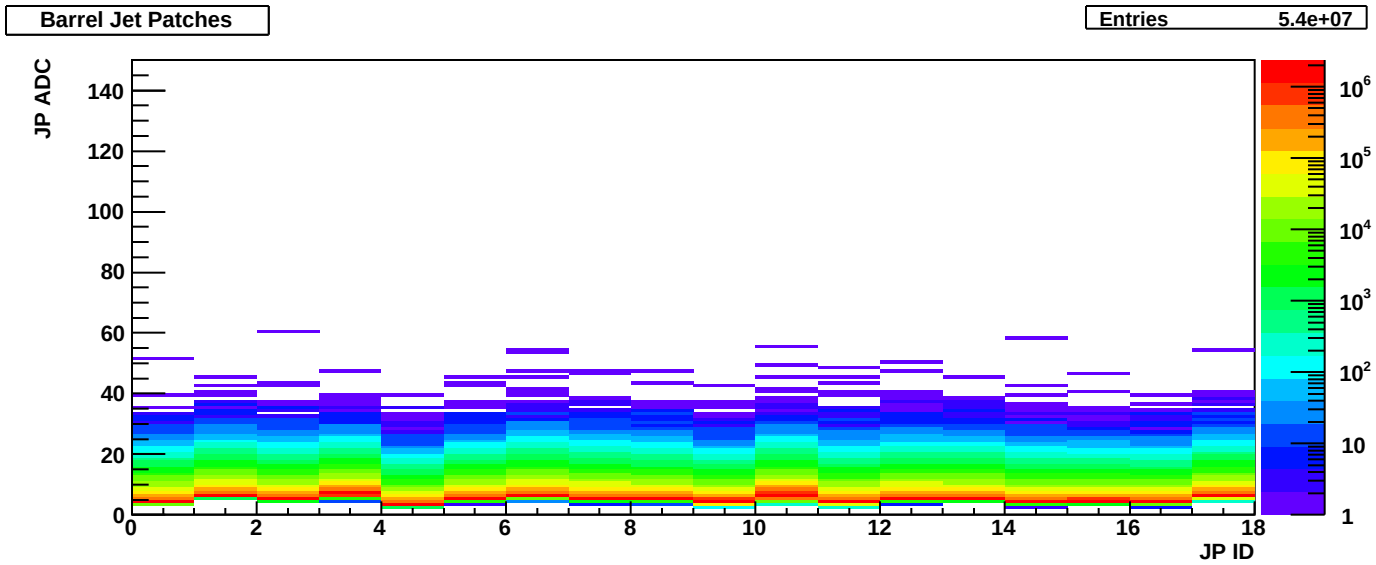
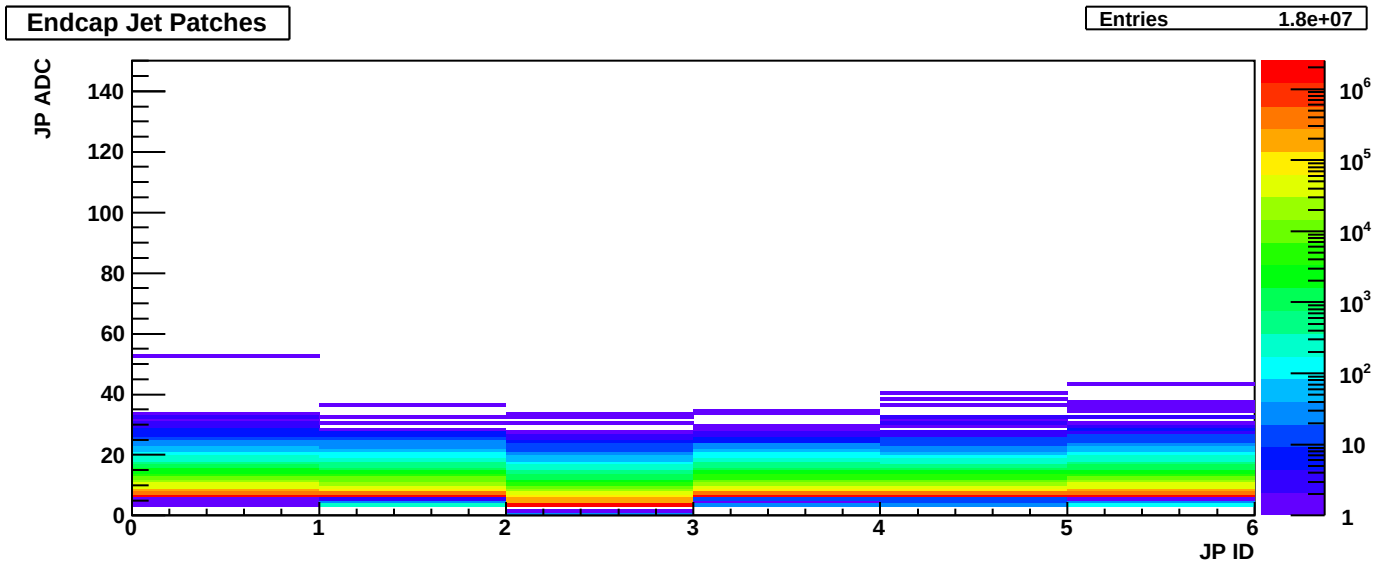

Barrel EMC L0 Input - High Tower
Entries 9e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

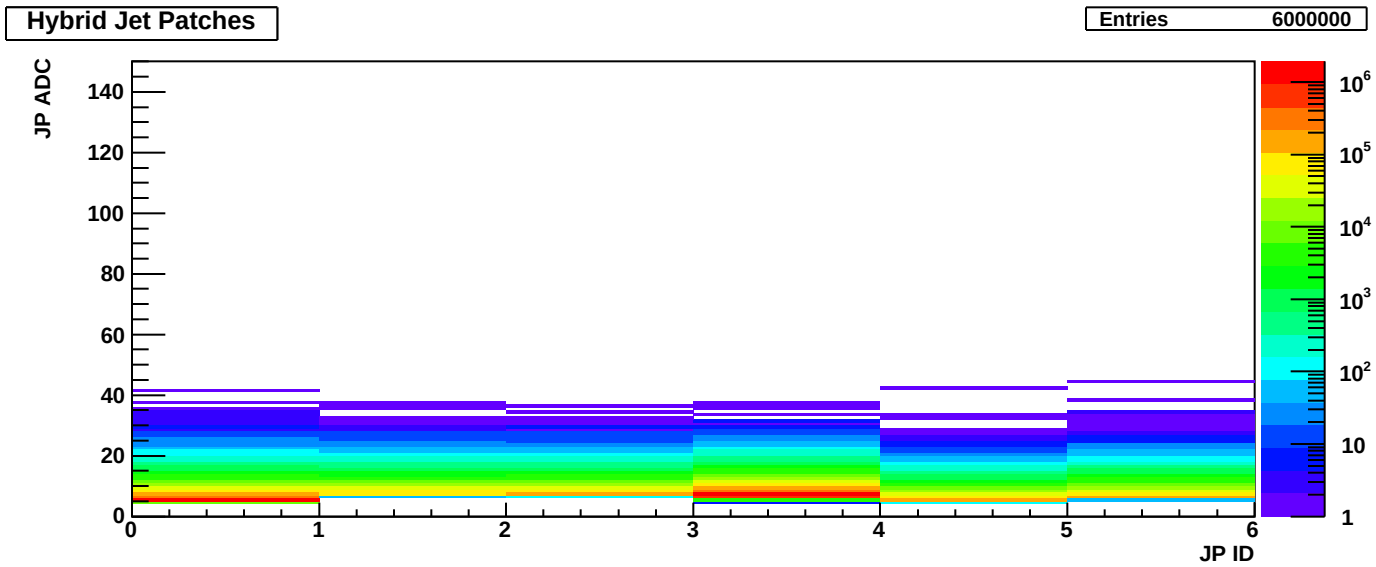

Barrel EMC L0 Input - Patch Sum
Entries 9e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

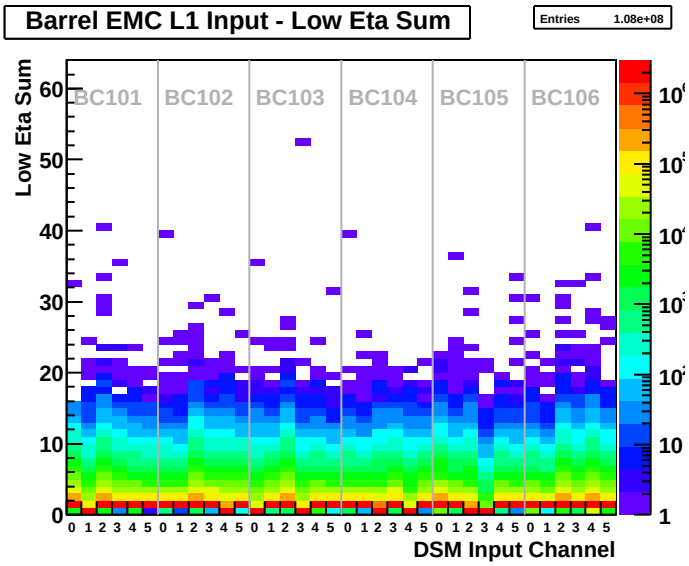

Endcap EMC L0 Input - High Tower
Entries 2.7e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

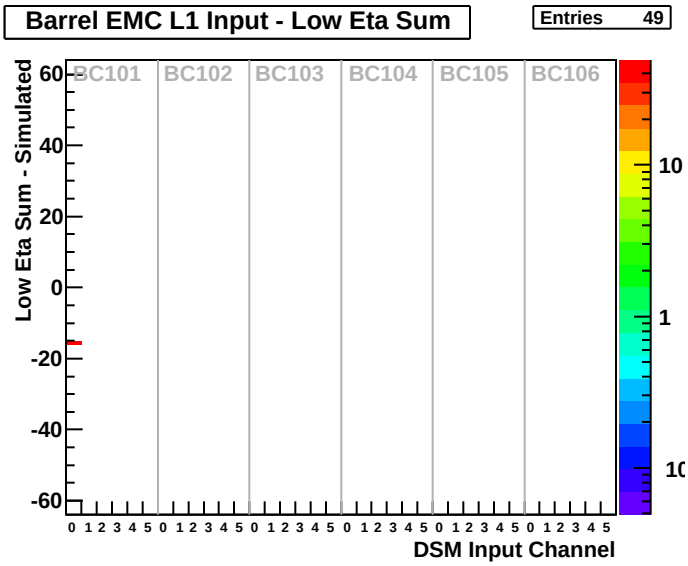

Endcap EMC L0 Input - Patch Sum
Entries 2.7e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

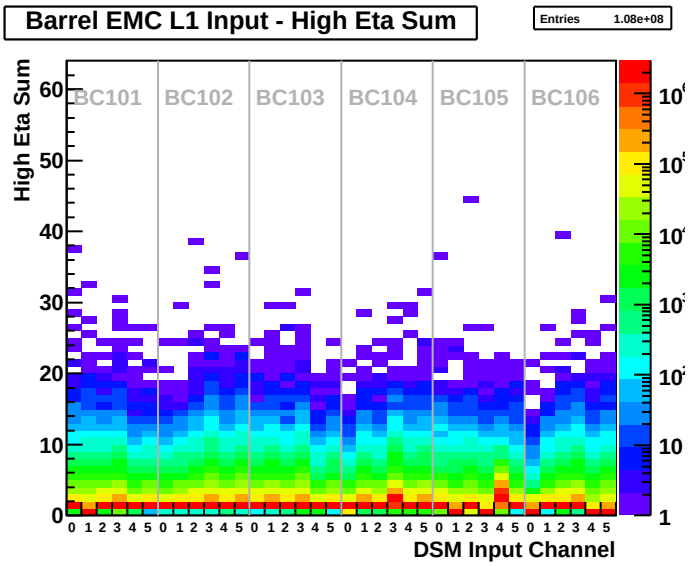

Barrel Jet Patches
Entries 5.4e+07
JP ADC
JP ID

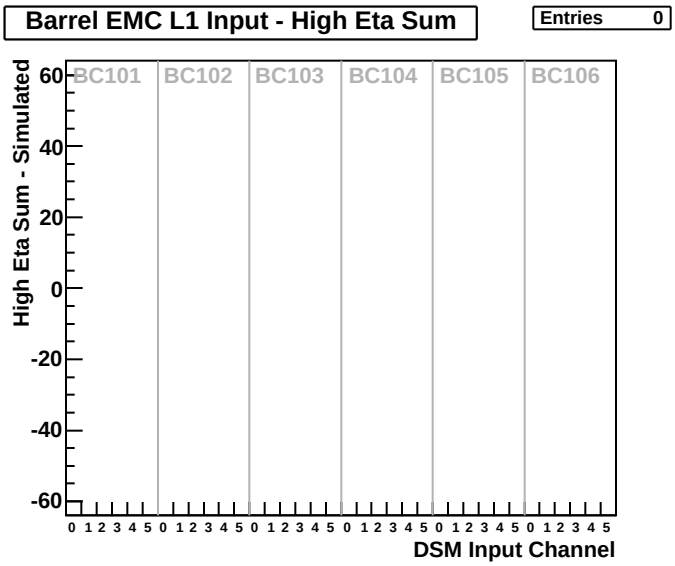

Endcap Jet Patches
Entries 1.8e+07
JP ADC
JP ID

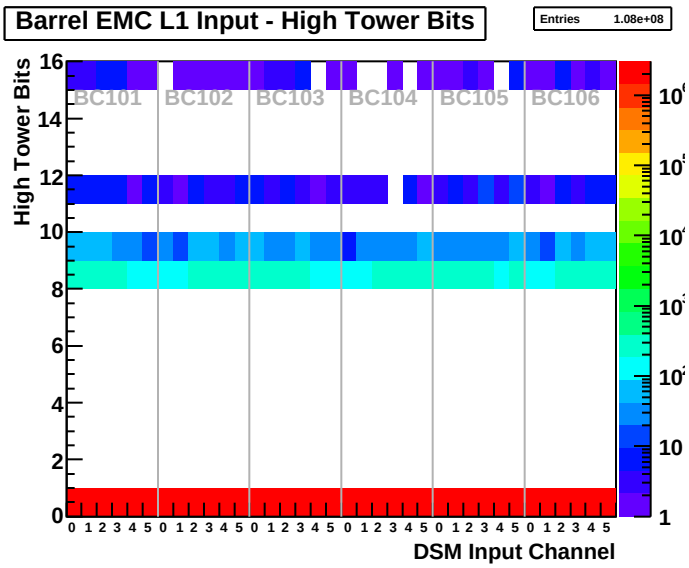

Hybrid Jet Patches
Entries 6000000
JP ADC
JP ID

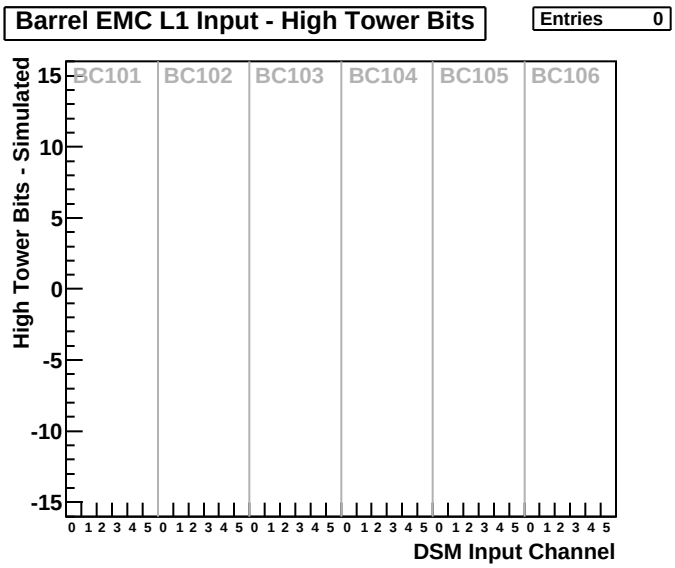

Barrel EMC L1 Input - Low Eta Sum
Entries 1.08e+08
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

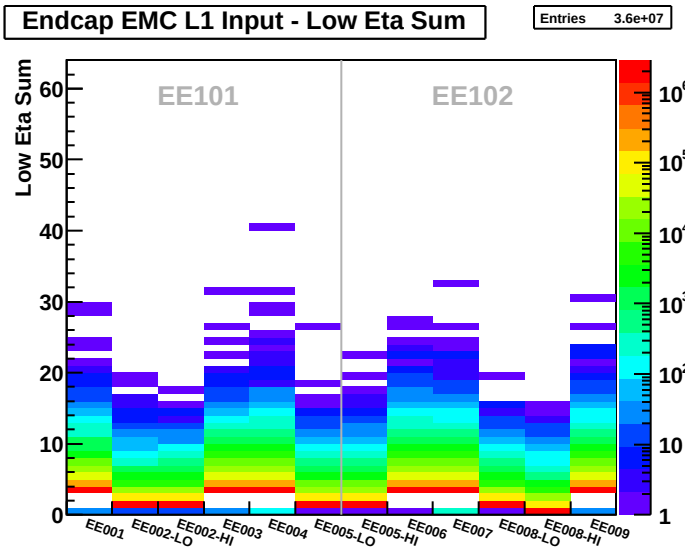

Barrel EMC L1 Input - Low Eta Sum
Entries 49
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

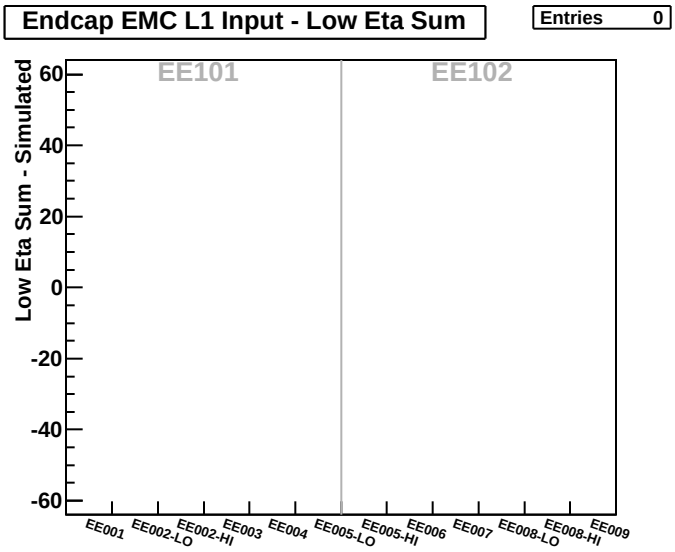

Barrel EMC L1 Input - High Eta Sum
Entries 1.08e+08
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

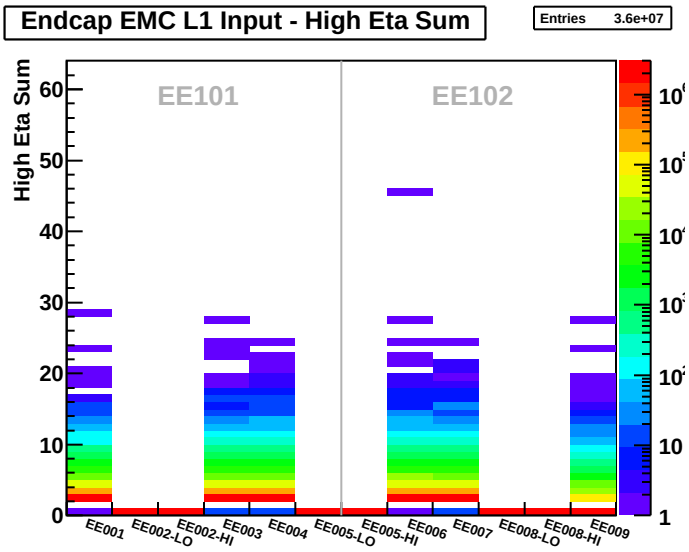

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

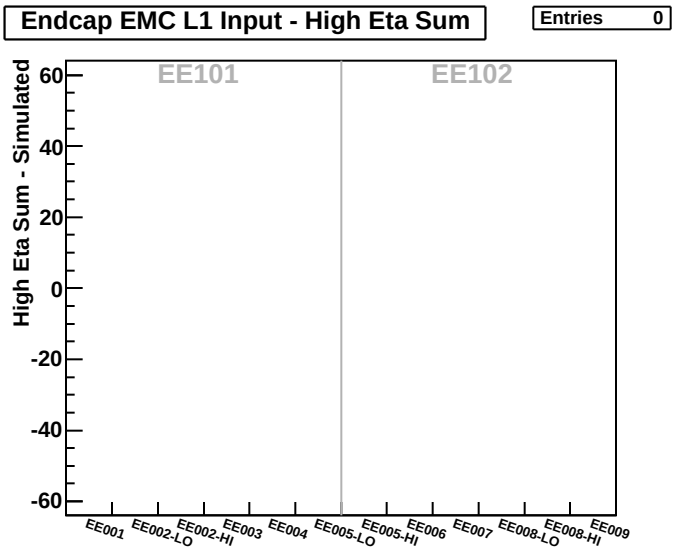

Barrel EMC L1 Input - High Tower Bits
Entries 1.08e+08
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

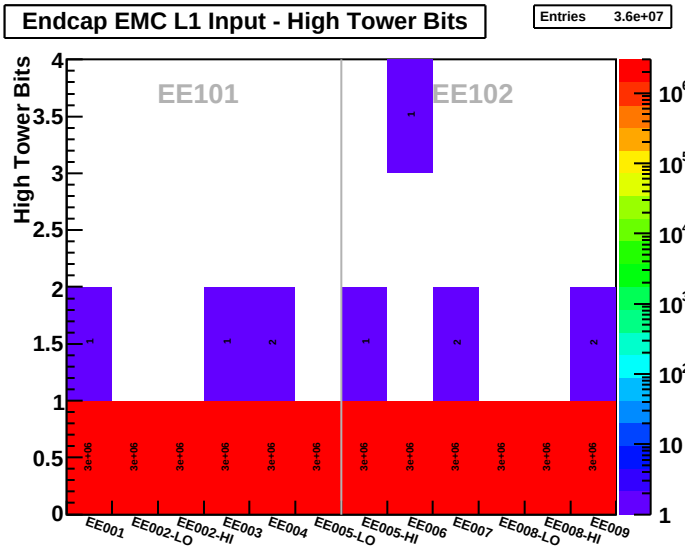

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

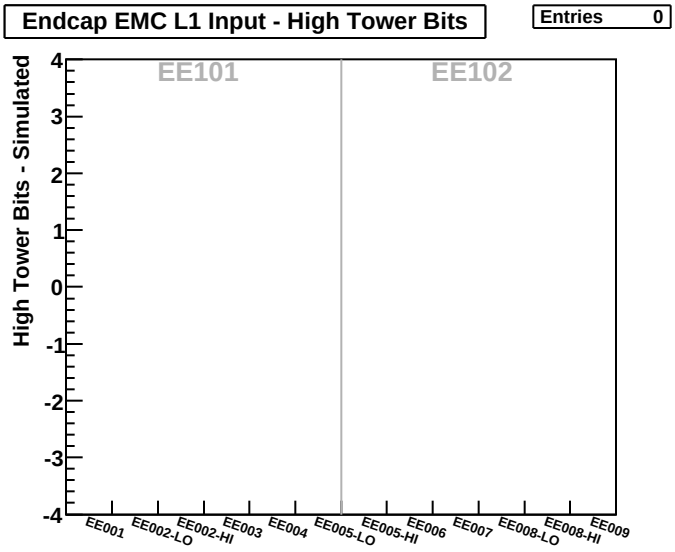

Endcap EMC L1 Input - Low Eta Sum
Entries 3.6e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

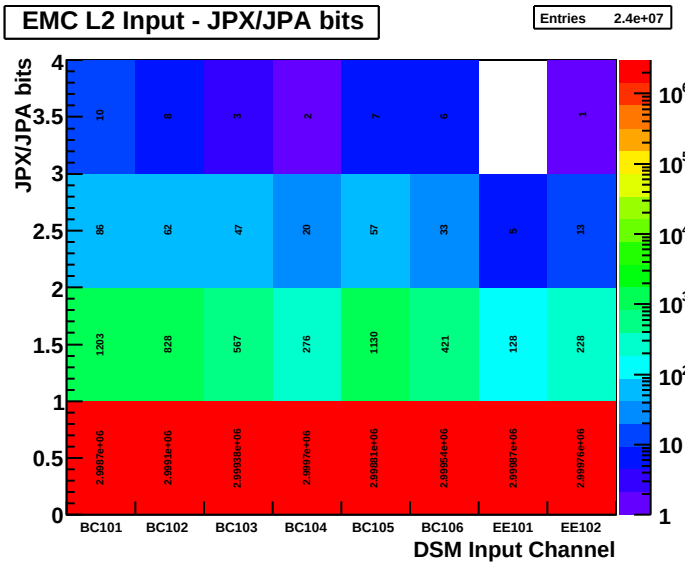

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

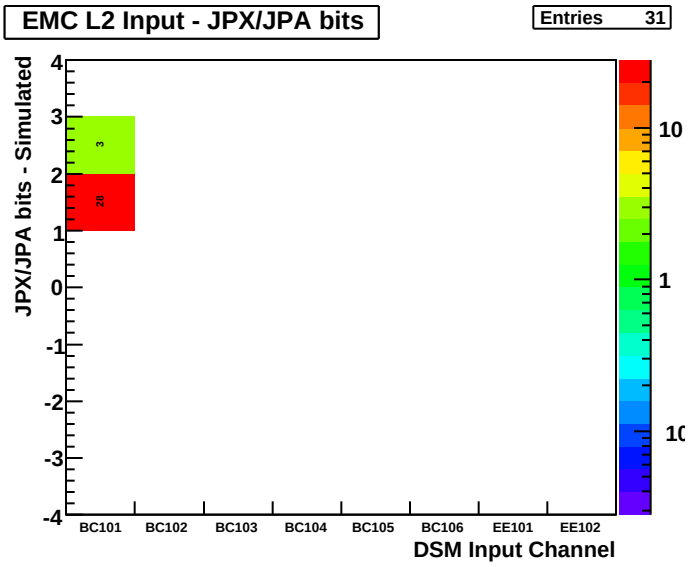

Endcap EMC L1 Input - High Eta Sum
Entries 3.6e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

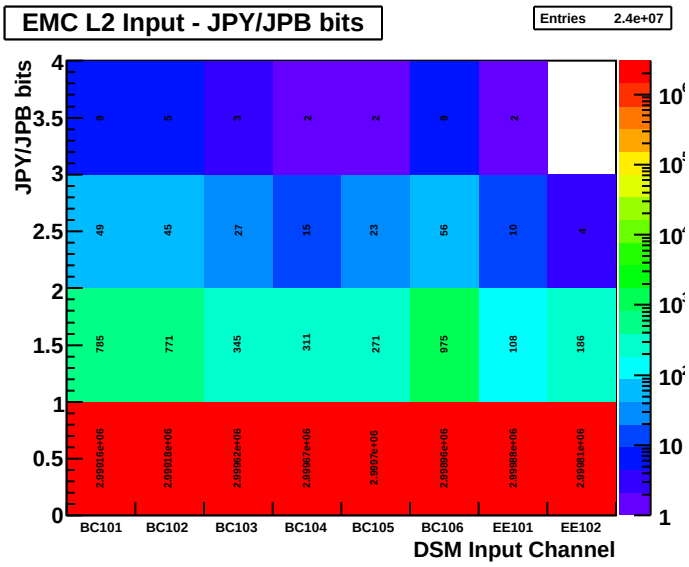

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

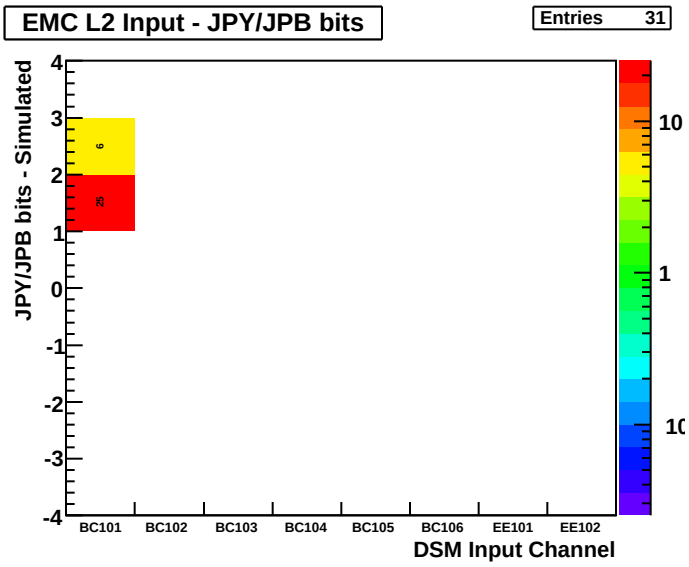

Endcap EMC L1 Input - High Tower Bits
Entries 3.6e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

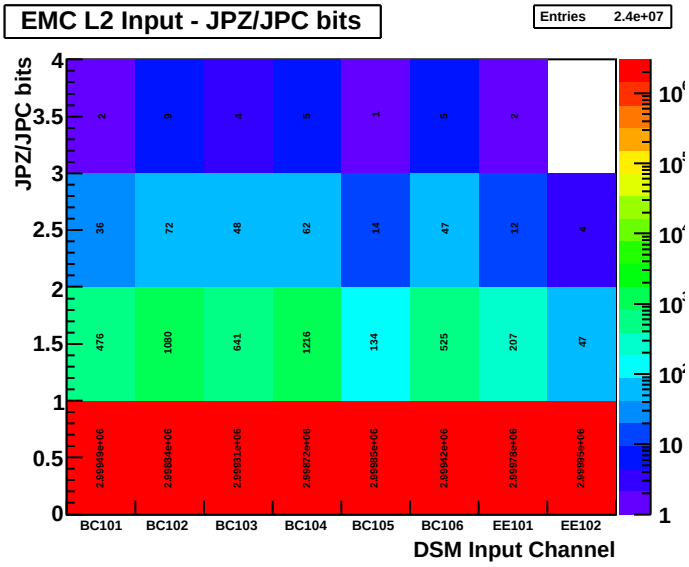

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

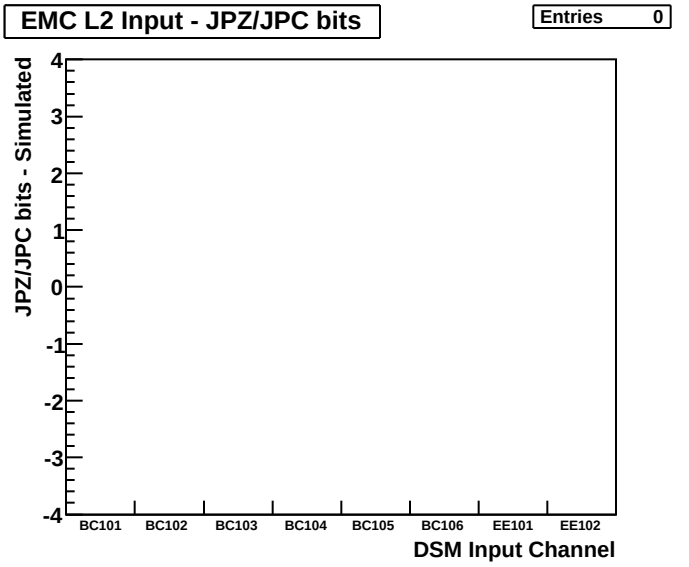

EMC L2 Input - JPX/JPA bits
Entries 2.4e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
10 8 3 2 7 6 1
86 62 47 20 57 33 5 13
1203 828 567 276 1130 421 128 228
2.9997e+06 2.9991e+06 2.99938e+06 2.9997e+06 2.99981e+06 2.99954e+06 2.99987e+06 2.99976e+06

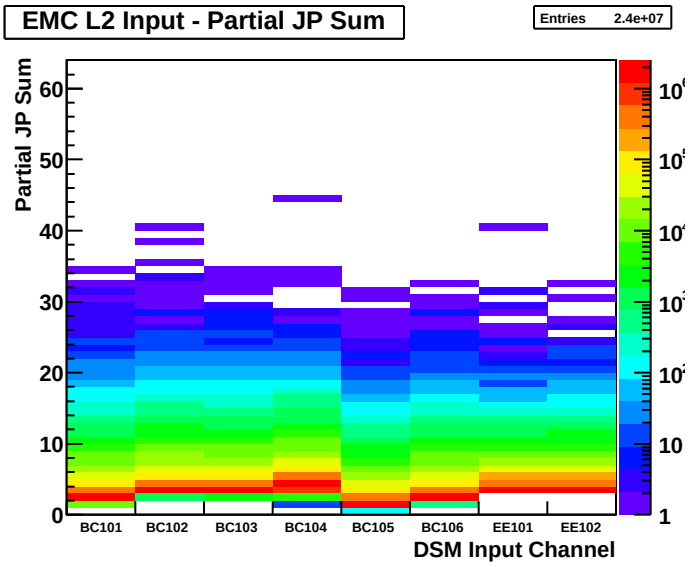

EMC L2 Input - JPX/JPA bits
Entries 31
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3
28

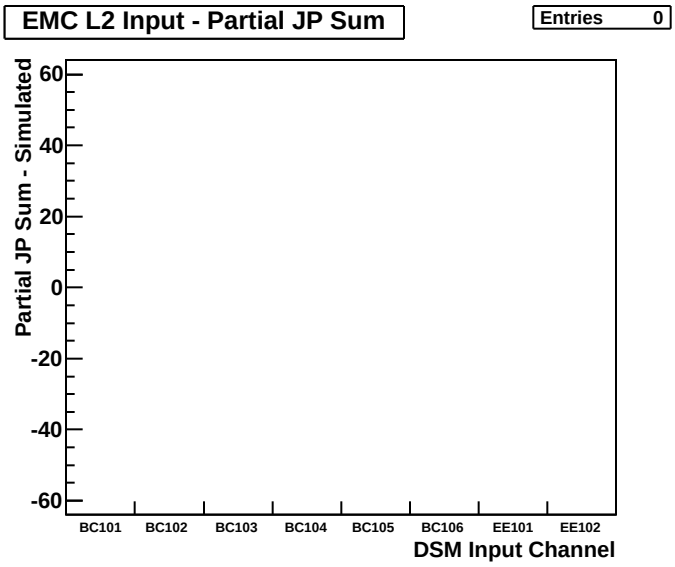

EMC L2 Input - JPY/JPB bits
Entries 2.4e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
9 5 3 2 2 9 2
49 45 27 15 23 56 10 4
785 771 345 311 271 975 108 186
2.99916e+06 2.99918e+06 2.99962e+06 2.99967e+06 2.9997e+06 2.99986e+06 2.99988e+06 2.99981e+06

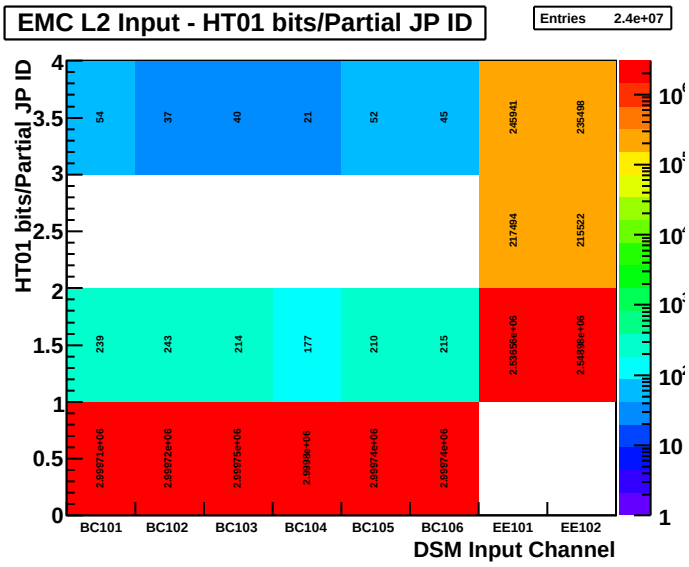

EMC L2 Input - JPY/JPB bits
Entries 31
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
6
25

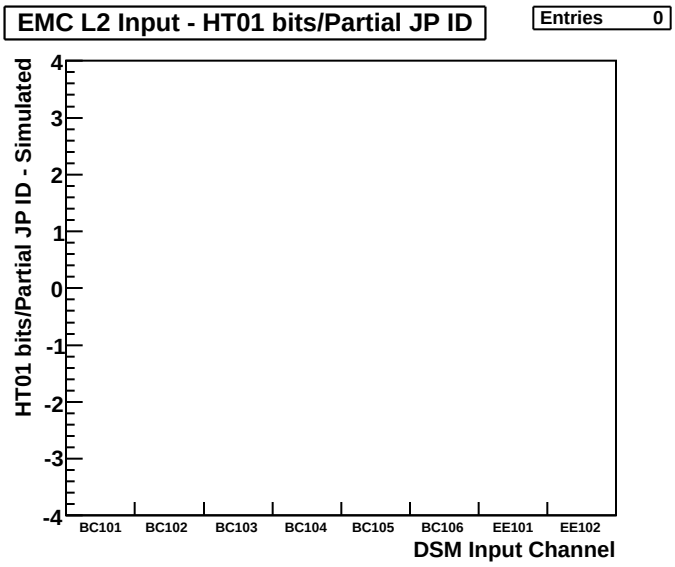

EMC L2 Input - JPZ/JPC bits
Entries 2.4e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 9 4 5 1 5 2
36 72 48 62 14 47 12 4
476 1080 641 1216 134 525 207 47
2.99949e+06 2.99984e+06 2.99931e+06 2.99972e+06 2.99985e+06 2.99942e+06 2.99978e+06 2.99995e+06

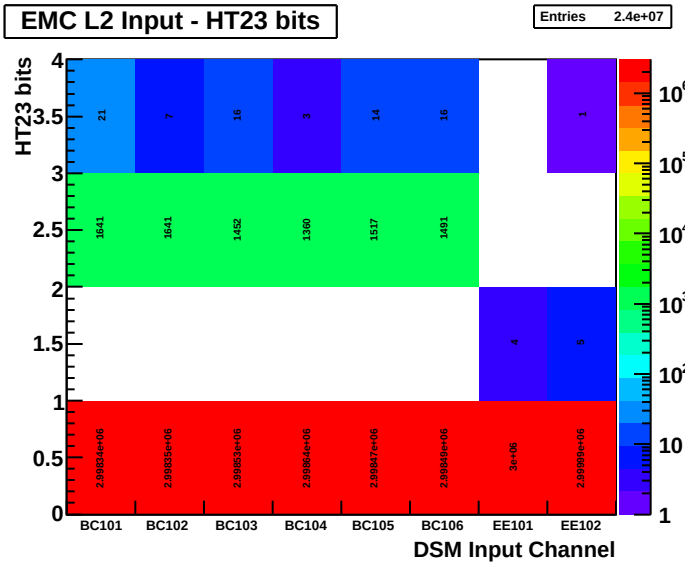

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

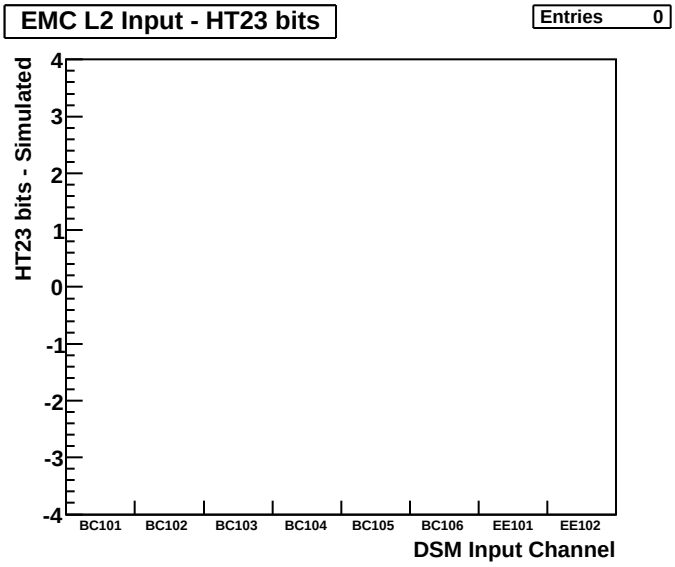

EMC L2 Input - Partial JP Sum
Entries 2.4e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

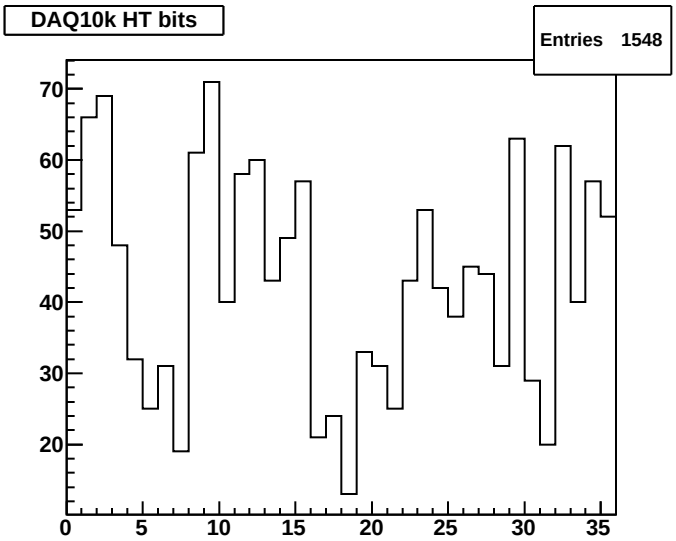

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

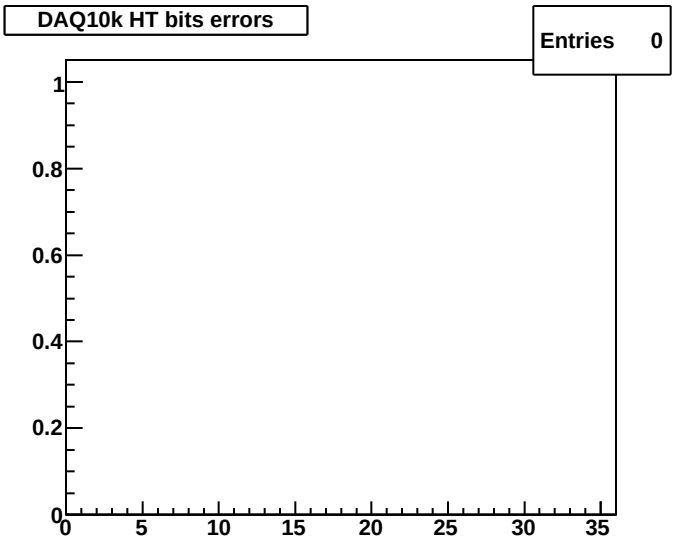

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2.4e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

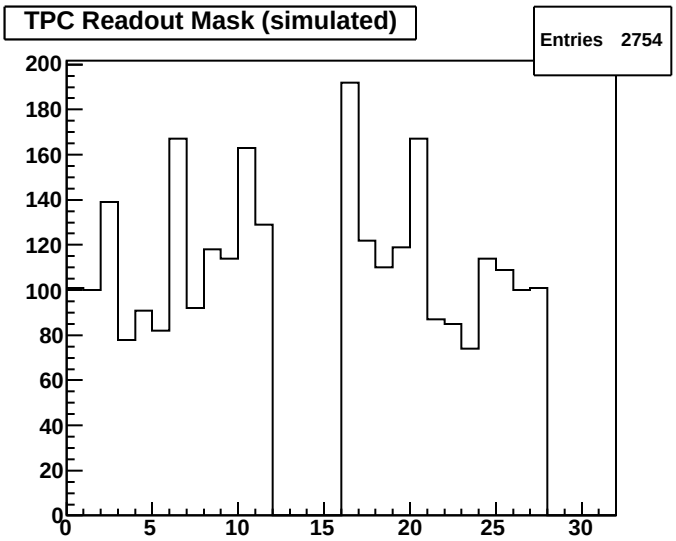

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

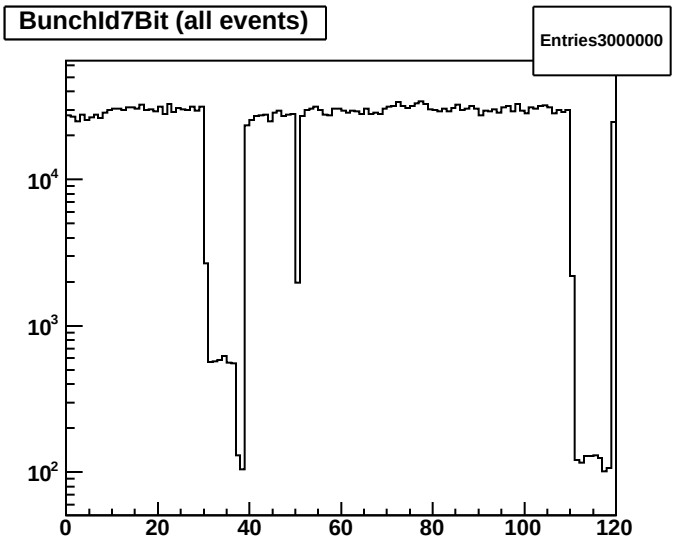

EMC L2 Input - HT23 bits
Entries 2.4e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

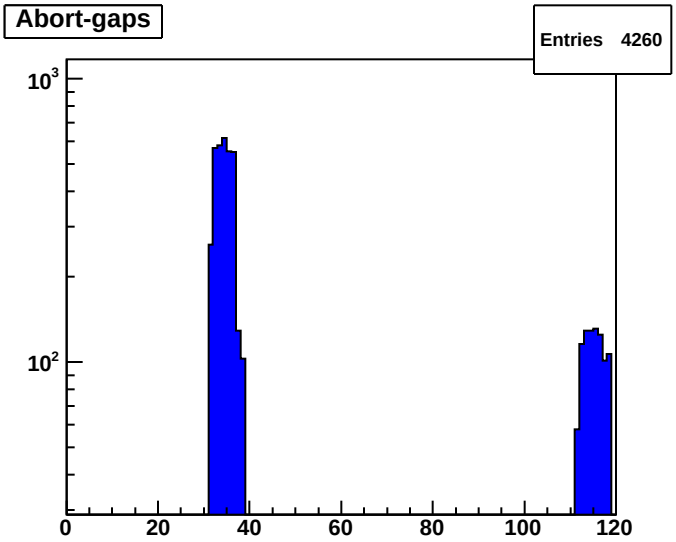

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

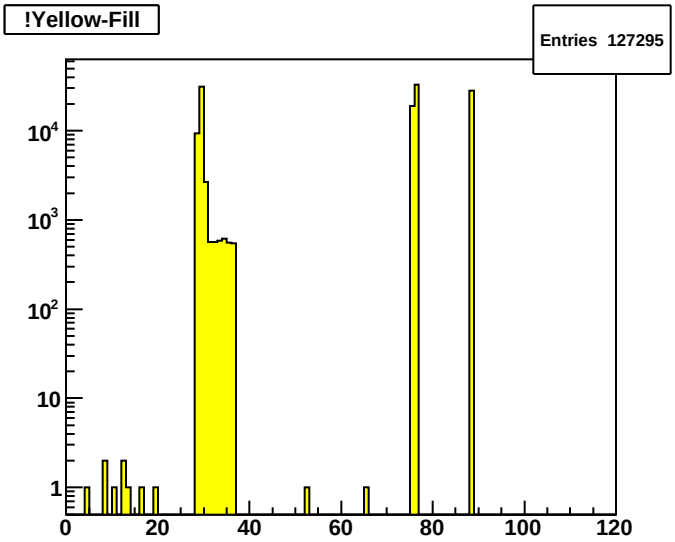

DAQ10k HT bits
Entries 1548

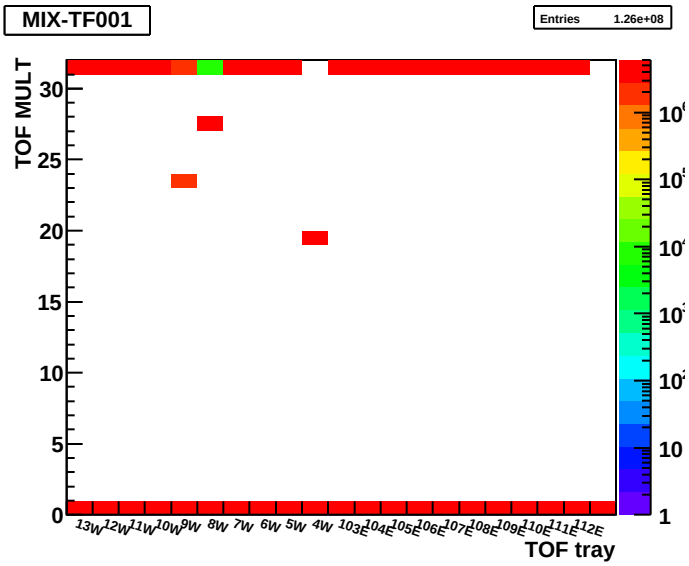

DAQ10k HT bits errors
Entries 0

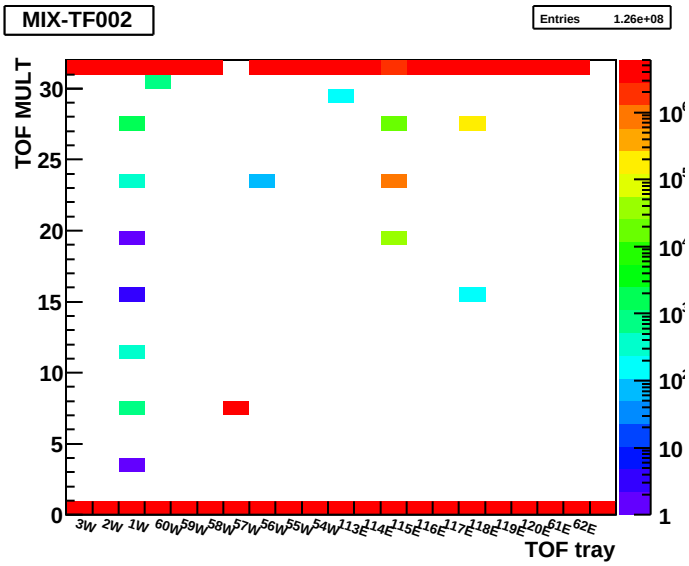

TPC Readout Mask (simulated)
Entries 2754

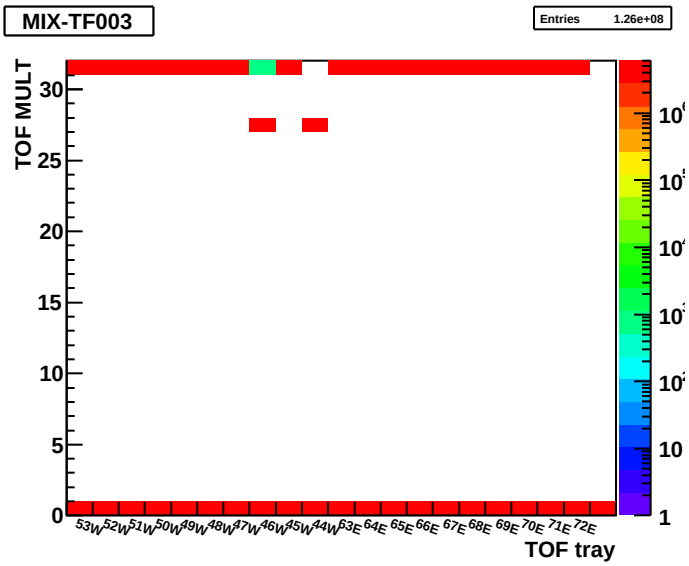

BunchId7Bit (all events)
Entries3000000

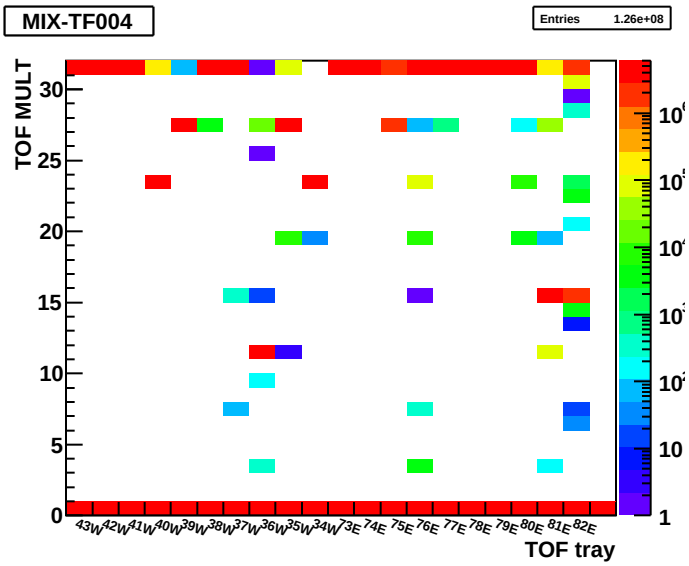

Abort-gaps
Entries 4260

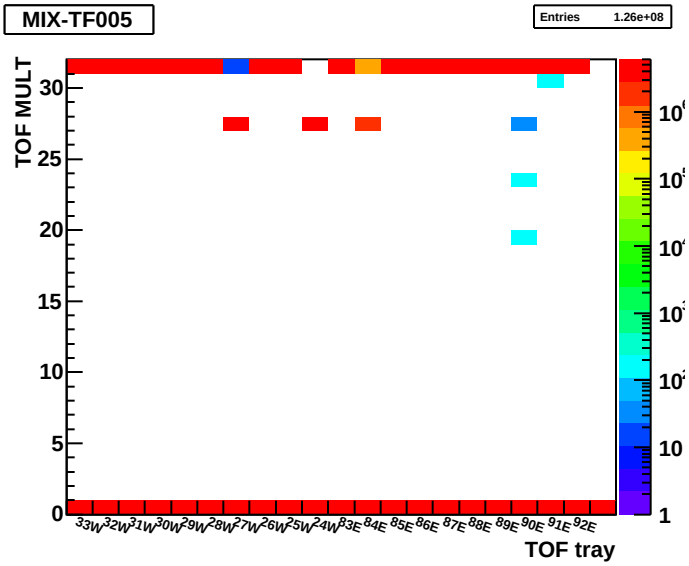

!Yellow-Fill
Entries 127295

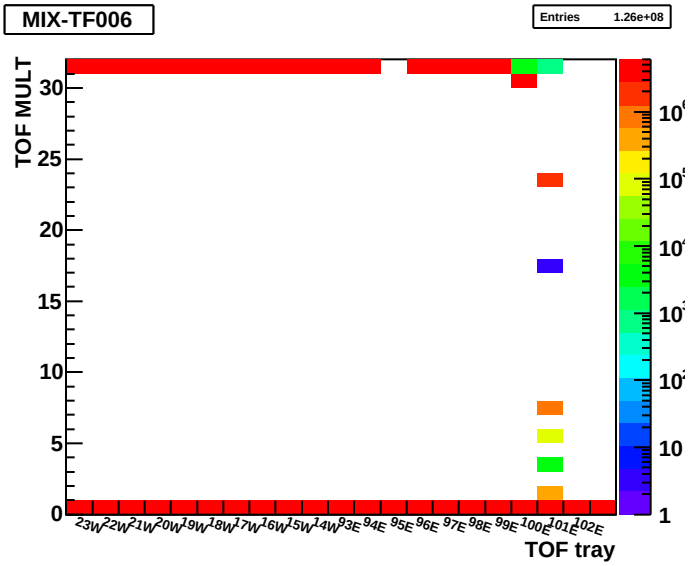

MIX-TF001
Entries 1.26e+08
TOF MULT
TOF tray

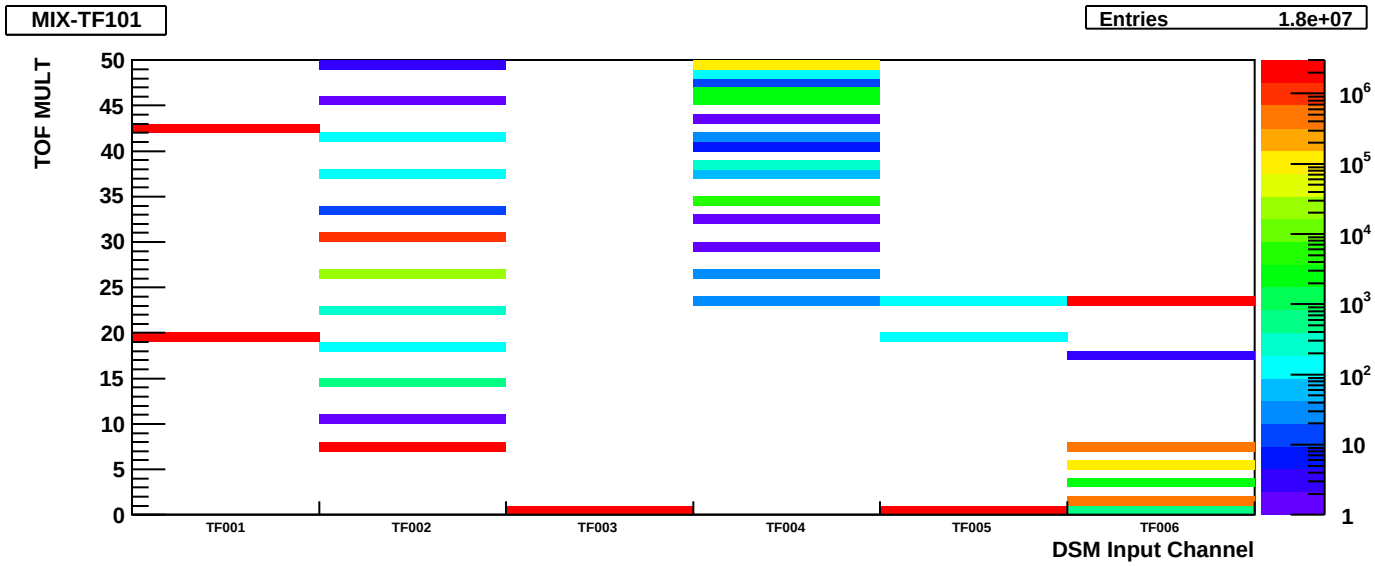

MIX-TF002
Entries 1.26e+08
TOF MULT
TOF tray

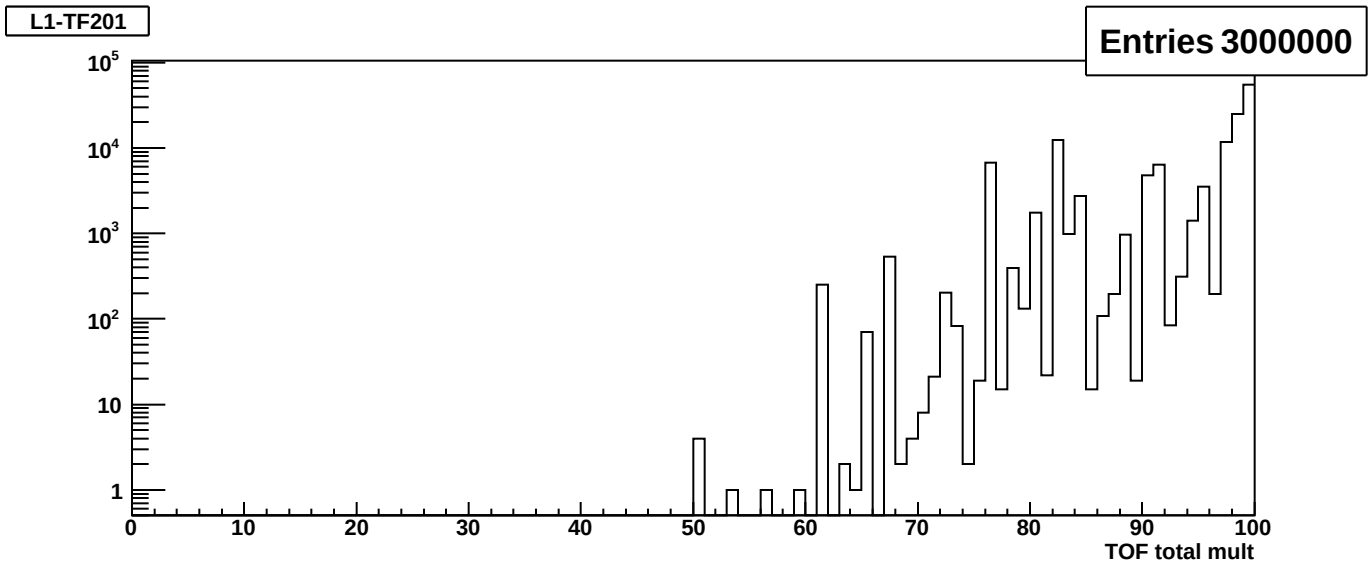

MIX-TF003
Entries 1.26e+08
TOF MULT
TOF tray

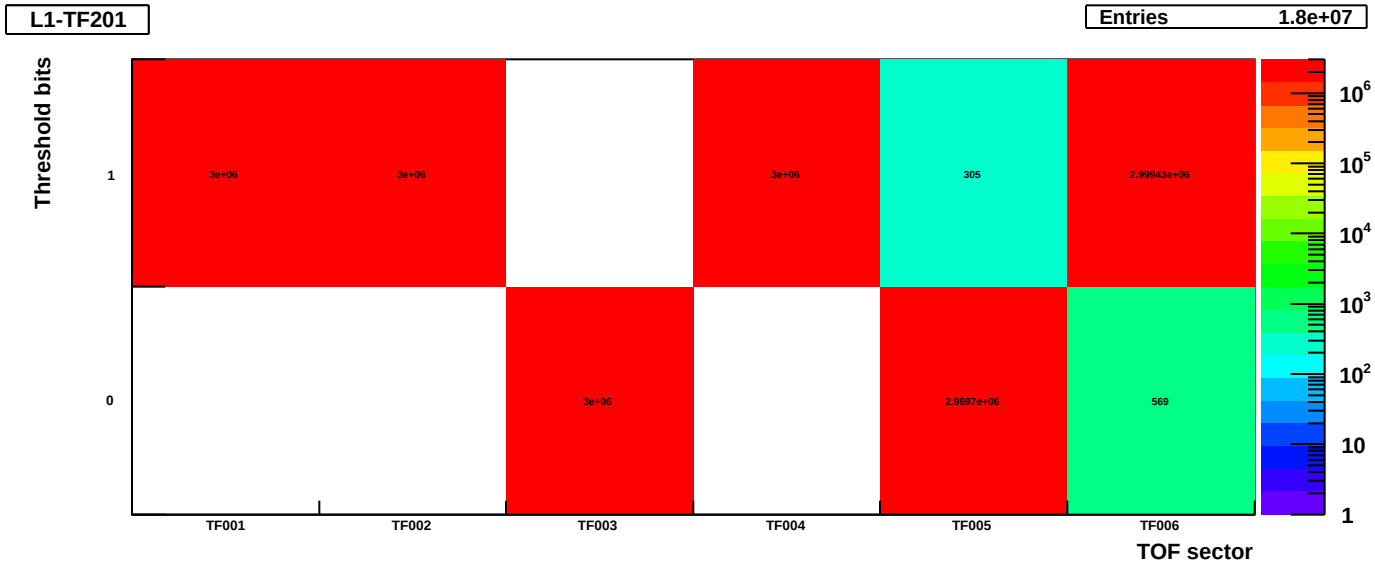

MIX-TF004
Entries 1.26e+08
TOF MULT
TOF tray

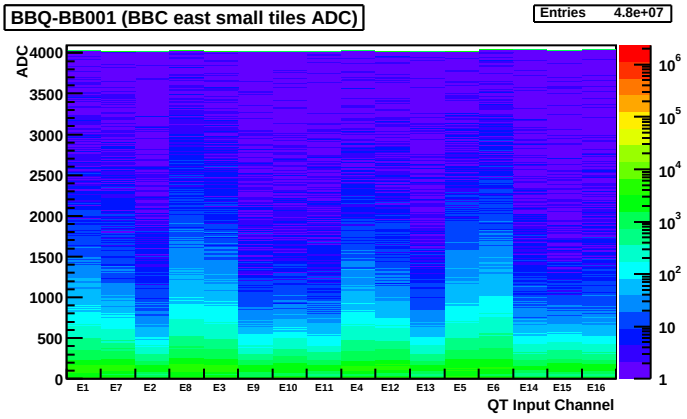

MIX-TF005
Entries 1.26e+08
TOF MULT
TOF tray

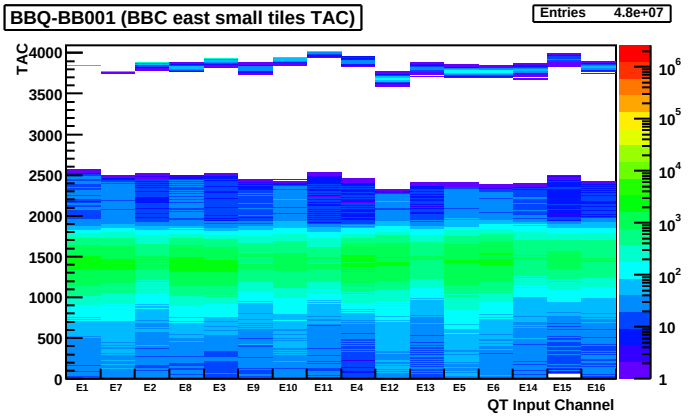

MIX-TF006
Entries 1.26e+08
TOF MULT
TOF tray

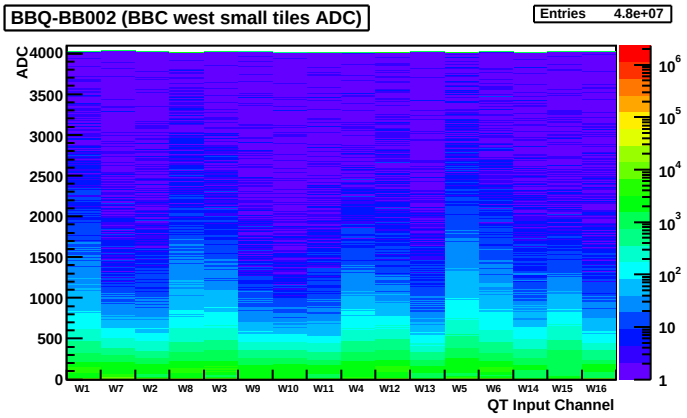

MIX-TF101
Entries 1.8e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

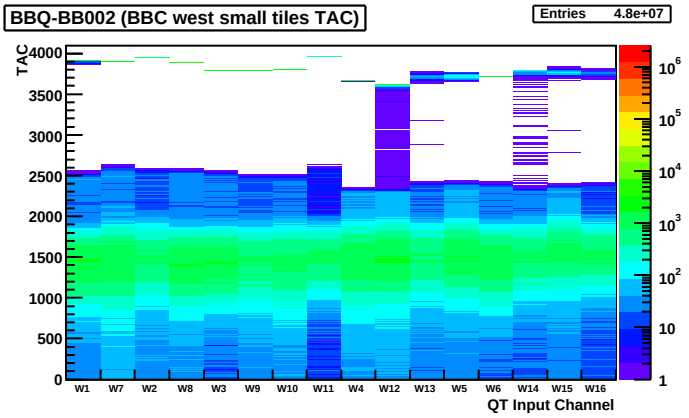

L1-TF201
Entries 3000000
TOF total mult

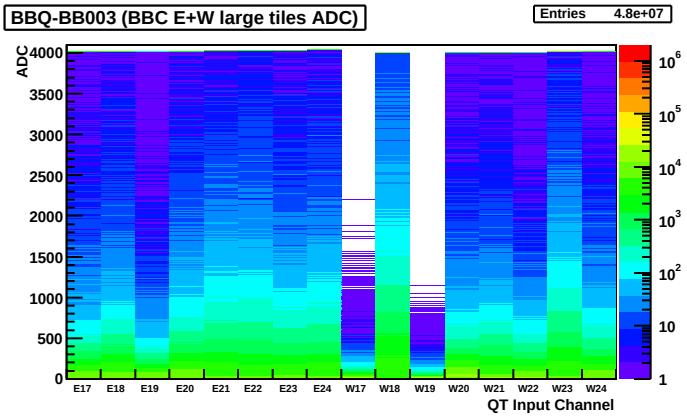

L1-TF201
Entries 1.8e+07
Threshold bits
3e+06
3e+06
3e+06
305
2.99943e+06
3e+06
2.9997e+06
569
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

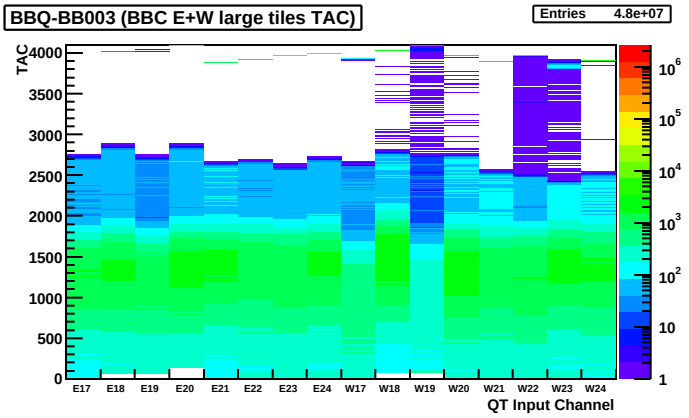

BBQ-BB001 (BBC east small tiles ADC)
Entries 4.8e+07
ADC
QT Input Channel

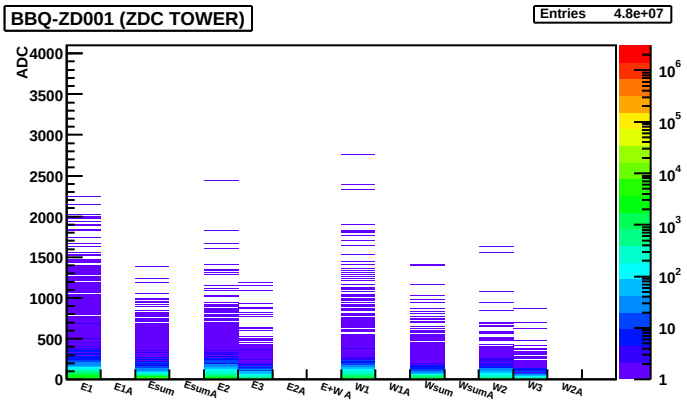

BBQ-BB001 (BBC east small tiles TAC)
Entries 4.8e+07
TAC
QT Input Channel

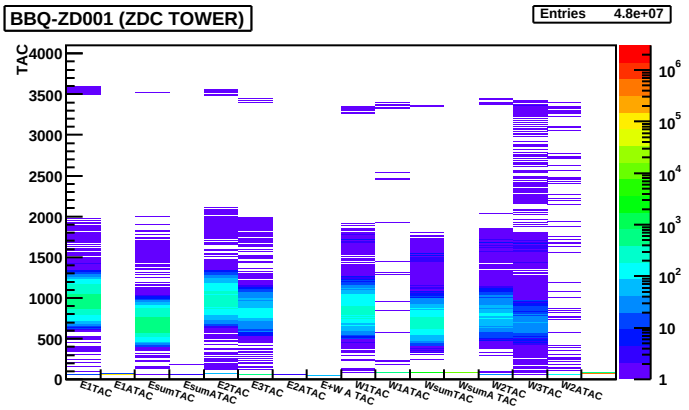

BBQ-BB002 (BBC west small tiles ADC)
Entries 4.8e+07
ADC
QT Input Channel

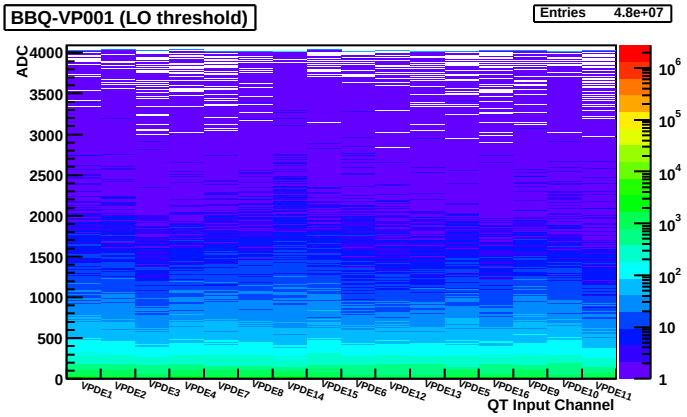

BBQ-BB002 (BBC west small tiles TAC)
Entries 4.8e+07
TAC
QT Input Channel

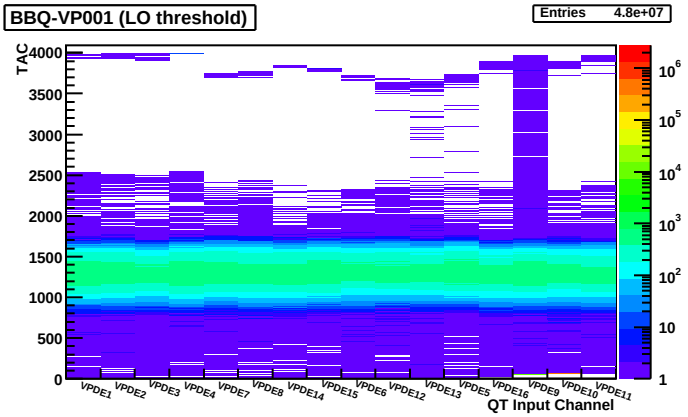

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4.8e+07
ADC
QT Input Channel

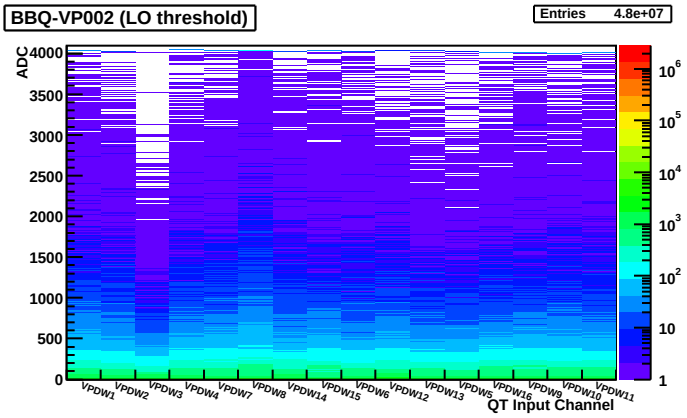

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4.8e+07
TAC
QT Input Channel

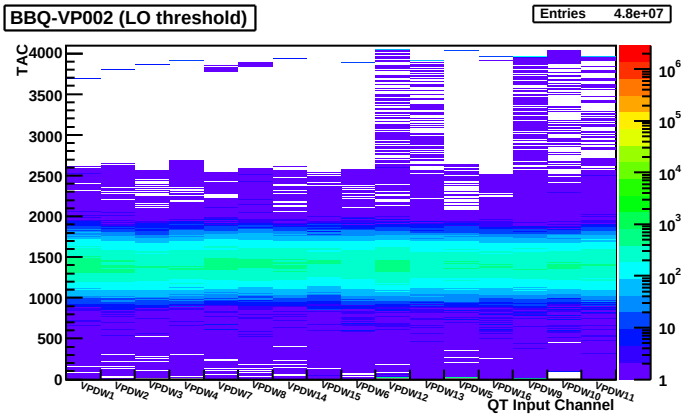

BBQ-ZD001 (ZDC TOWER)
Entries 4.8e+07
ADC

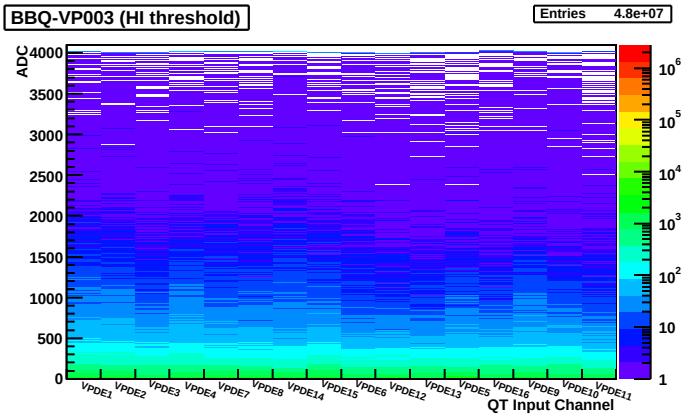

BBQ-ZD001 (ZDC TOWER)
Entries 4.8e+07
TAC

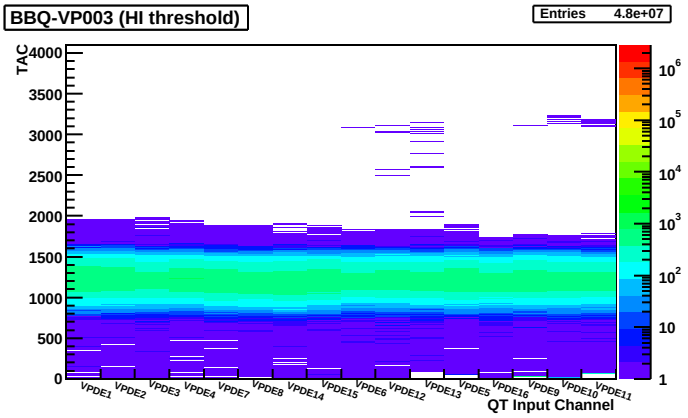

BBQ-VP001 (LO threshold)
Entries 4.8e+07
ADC
QT Input Channel

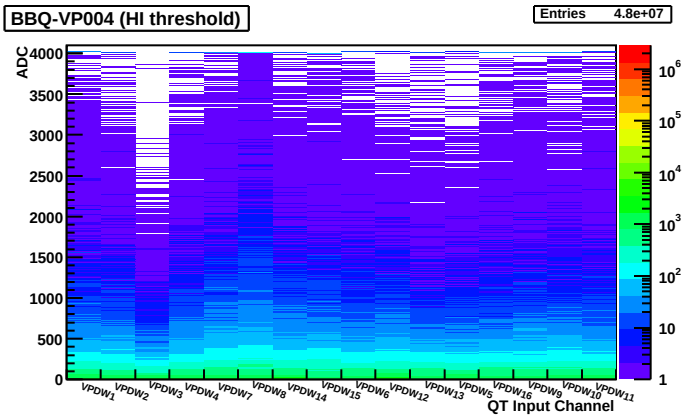

BBQ-VP001 (LO threshold)
Entries 4.8e+07
TAC
QT Input Channel

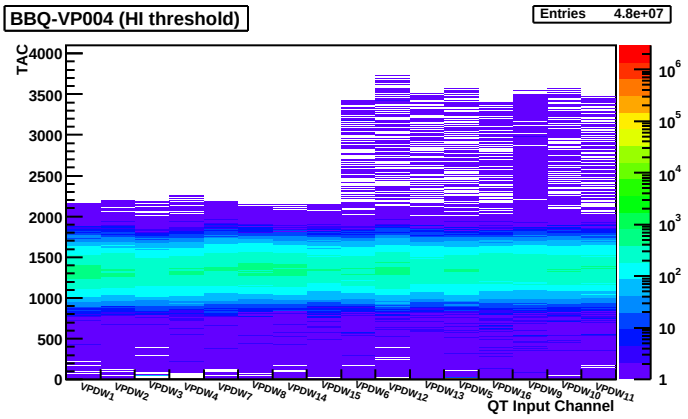

BBQ-VP002 (LO threshold)
Entries 4.8e+07
ADC
QT Input Channel

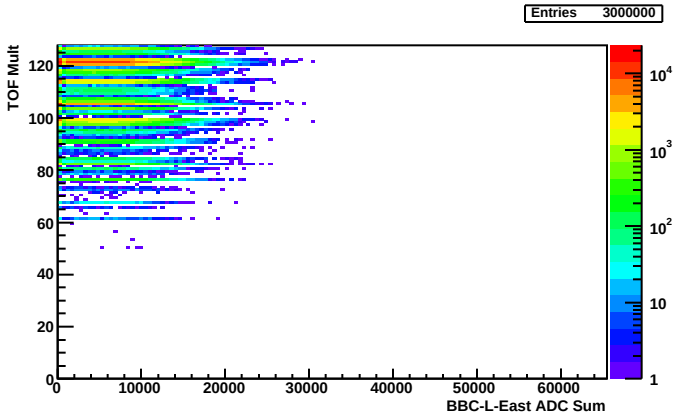

BBQ-VP002 (LO threshold)
Entries 4.8e+07
TAC
QT Input Channel

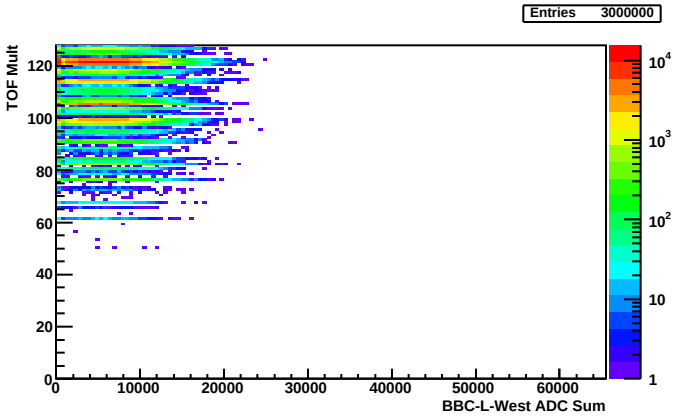

BBQ-VP003 (HI threshold)
Entries 4.8e+07
ADC
QT Input Channel

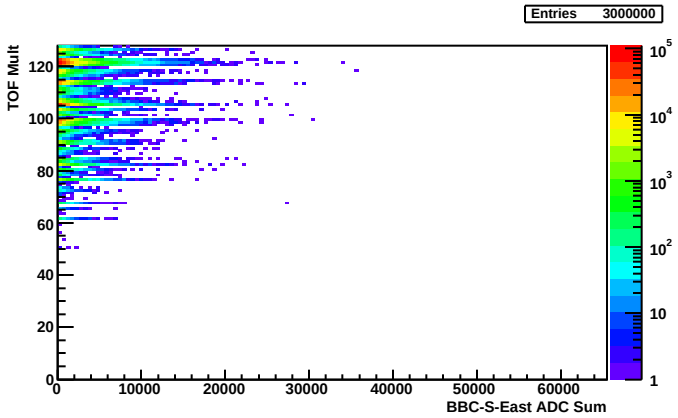

BBQ-VP003 (HI threshold)
Entries 4.8e+07
TAC
QT Input Channel

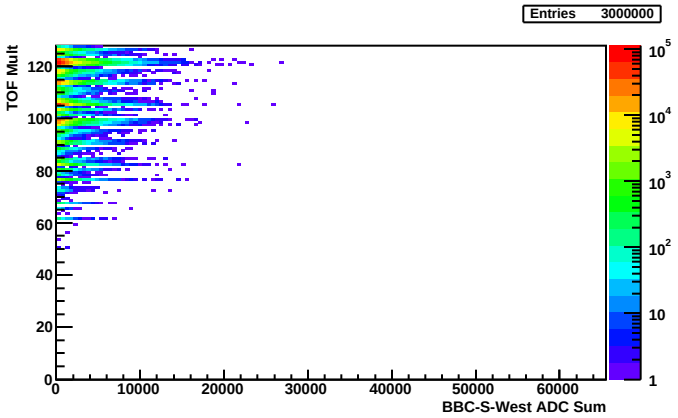

BBQ-VP004 (HI threshold)
Entries 4.8e+07
ADC
QT Input Channel

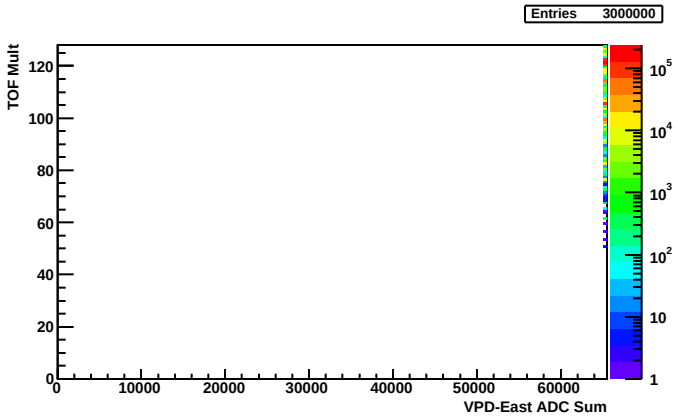

BBQ-VP004 (HI threshold)
Entries 4.8e+07
TAC
QT Input Channel

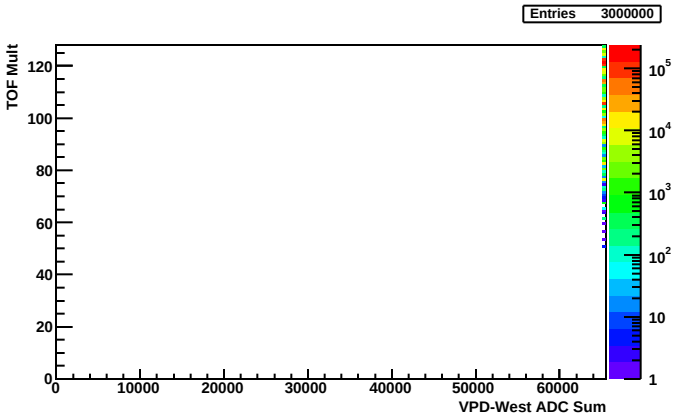

Entries 3000000
TOF Mult
BBC-L-East ADC Sum

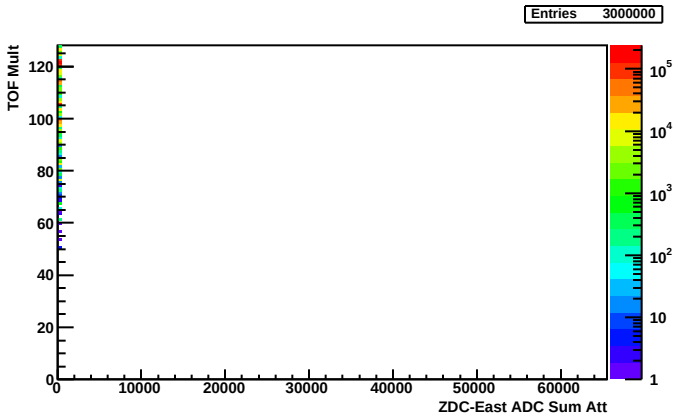

Entries 3000000
TOF Mult
BBC-L-West ADC Sum

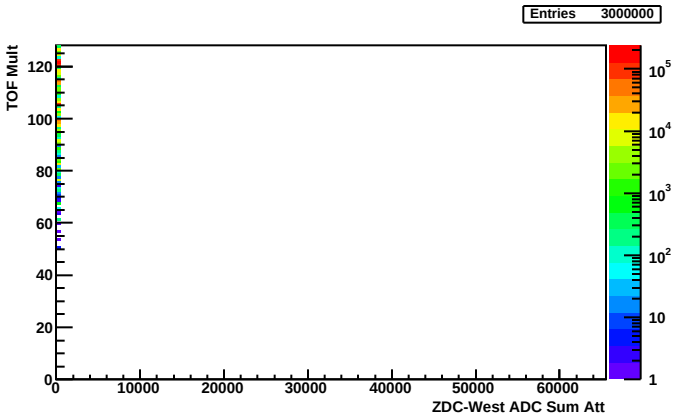

Entries 3000000
TOF Mult
BBC-S-East ADC Sum

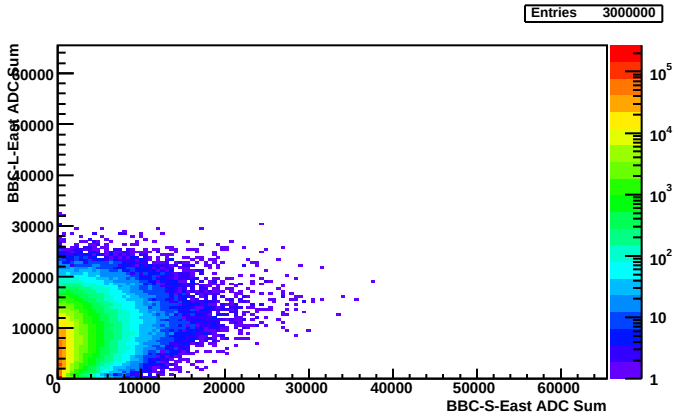

Entries 3000000
TOF Mult
BBC-S-West ADC Sum

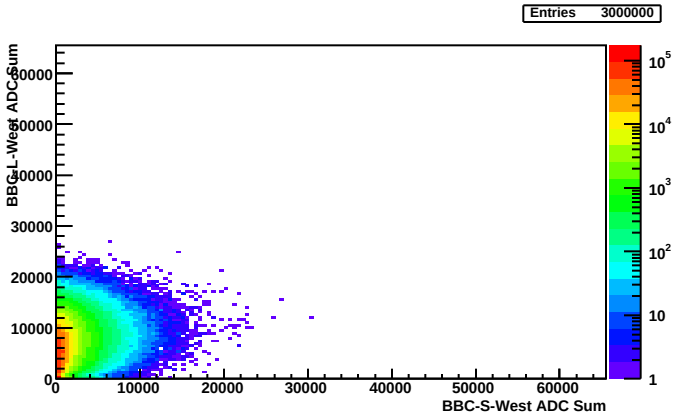

Entries 3000000
TOF Mult
VPD-East ADC Sum

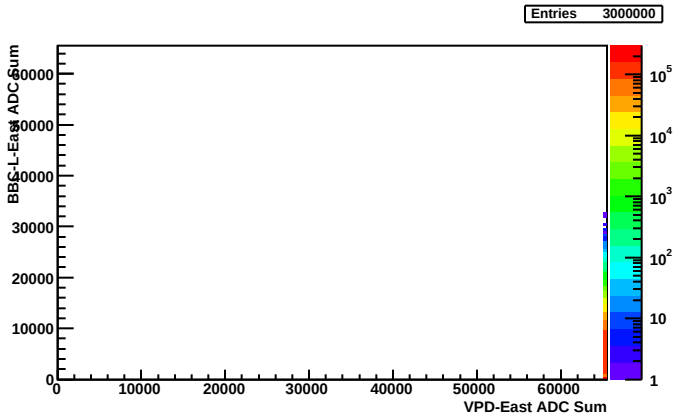

Entries 3000000
TOF Mult
VPD-West ADC Sum

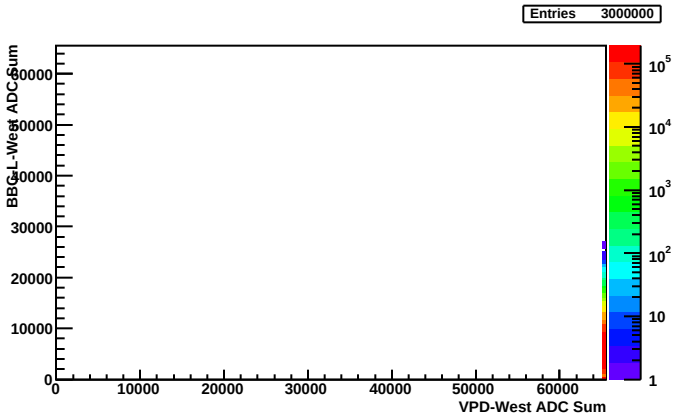

Entries 3000000
TOF Mult
ZDC-East ADC Sum Att

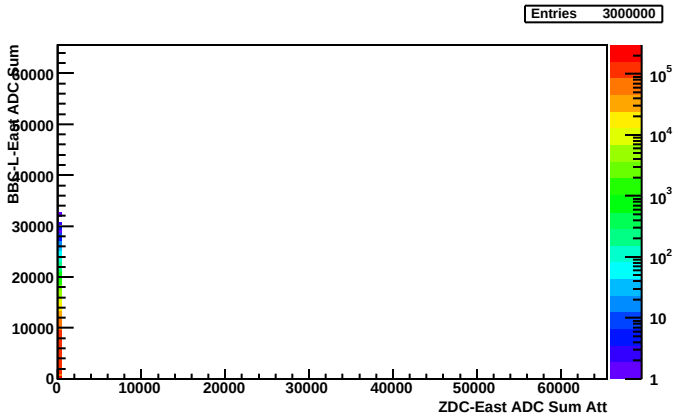

Entries 3000000
TOF Mult
ZDC-West ADC Sum Att

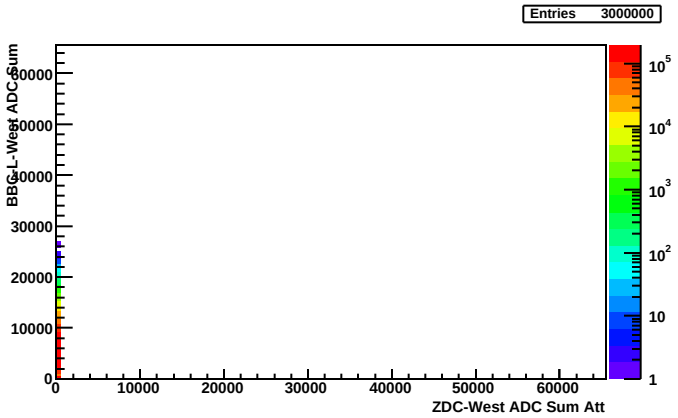

Entries 3000000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

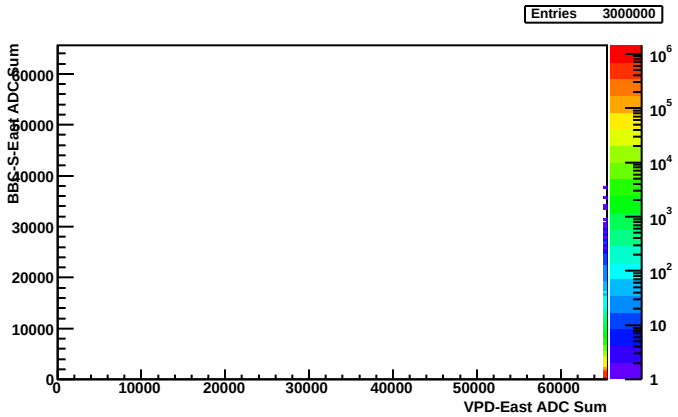

Entries 3000000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

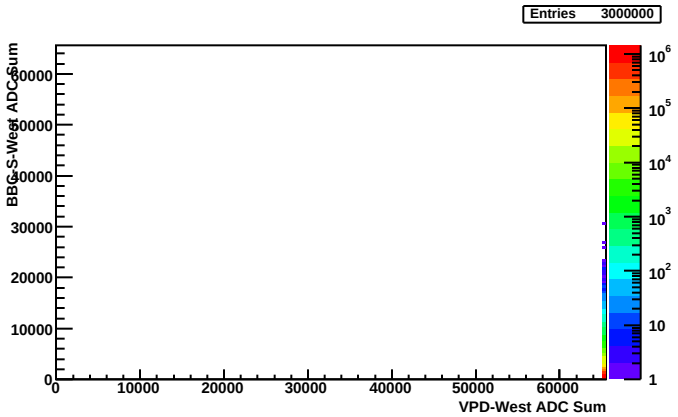

Entries 3000000
BBC-L-East ADC Sum
VPD-East ADC Sum

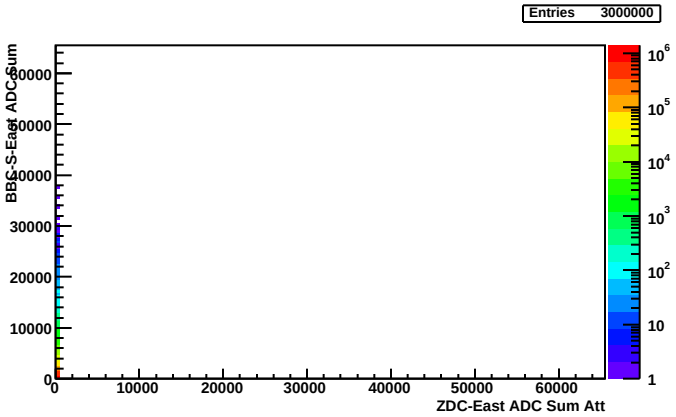

Entries 3000000
BBC-L-West ADC Sum
VPD-West ADC Sum

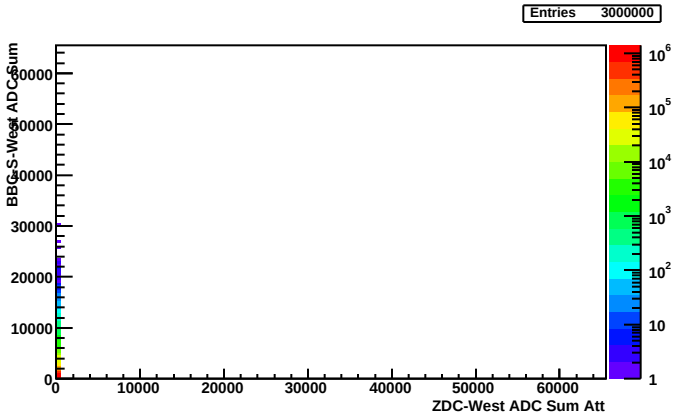

Entries 3000000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

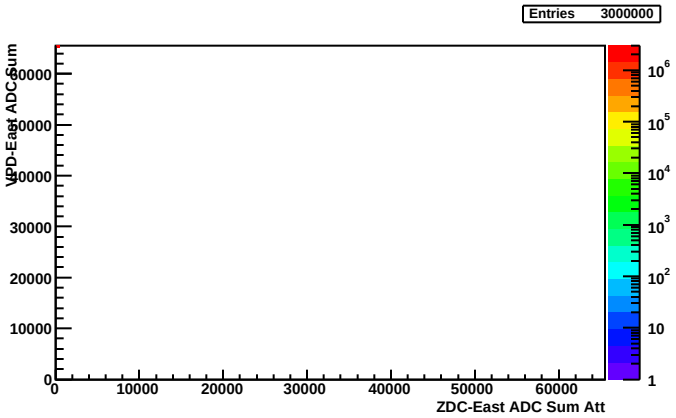

Entries 3000000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

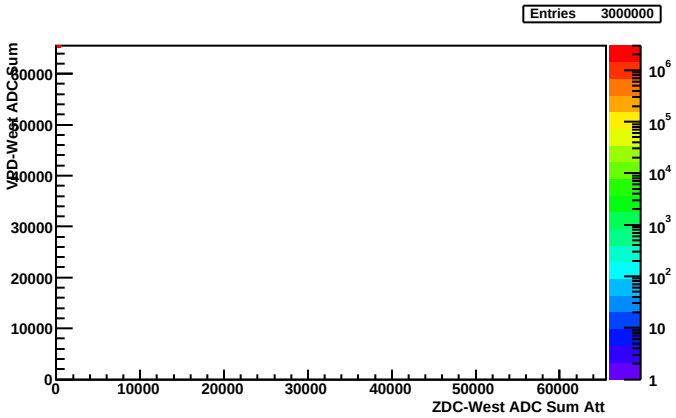

Entries 3000000
BBC-S-East ADC Sum
VPD-East ADC Sum

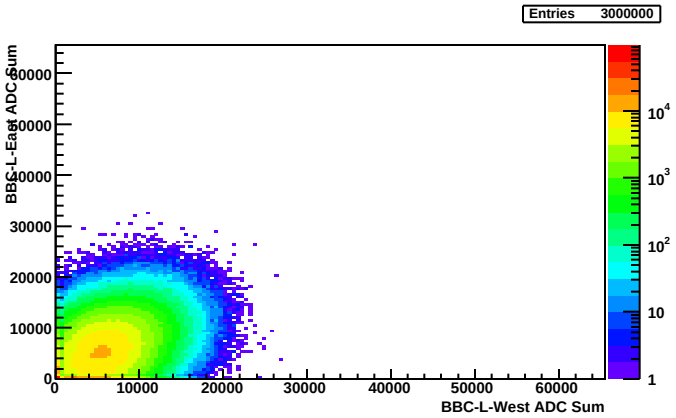

Entries 3000000
BBC-S-West ADC Sum
VPD-West ADC Sum

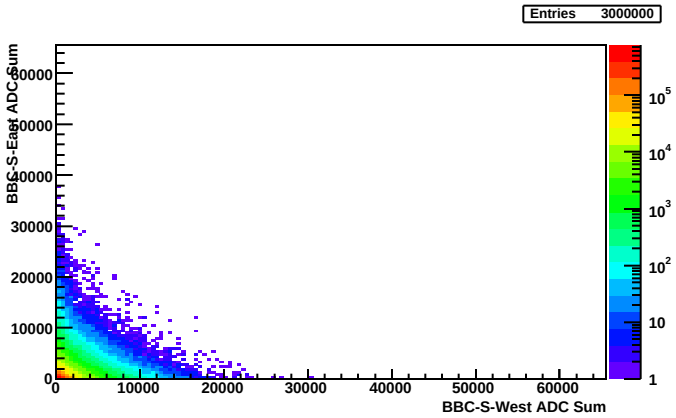

Entries 3000000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 3000000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 3000000
VPD-East ADC Sum
ZDC-East ADC Sum Att


Entries 3000000
VPD-West ADC Sum
ZDC-West ADC Sum Att


Entries 3000000
BBC-L-East ADC Sum
BBC-L-West ADC Sum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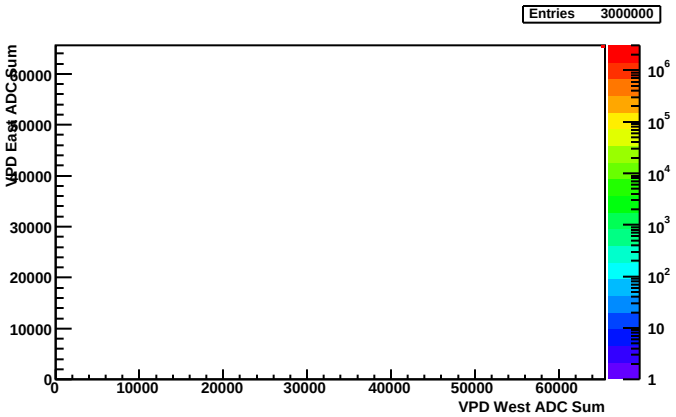
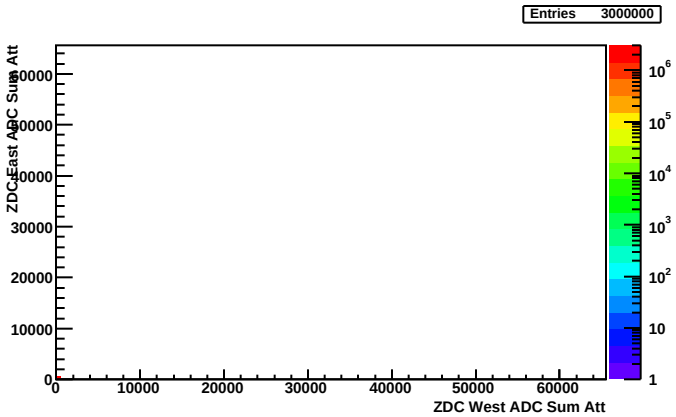
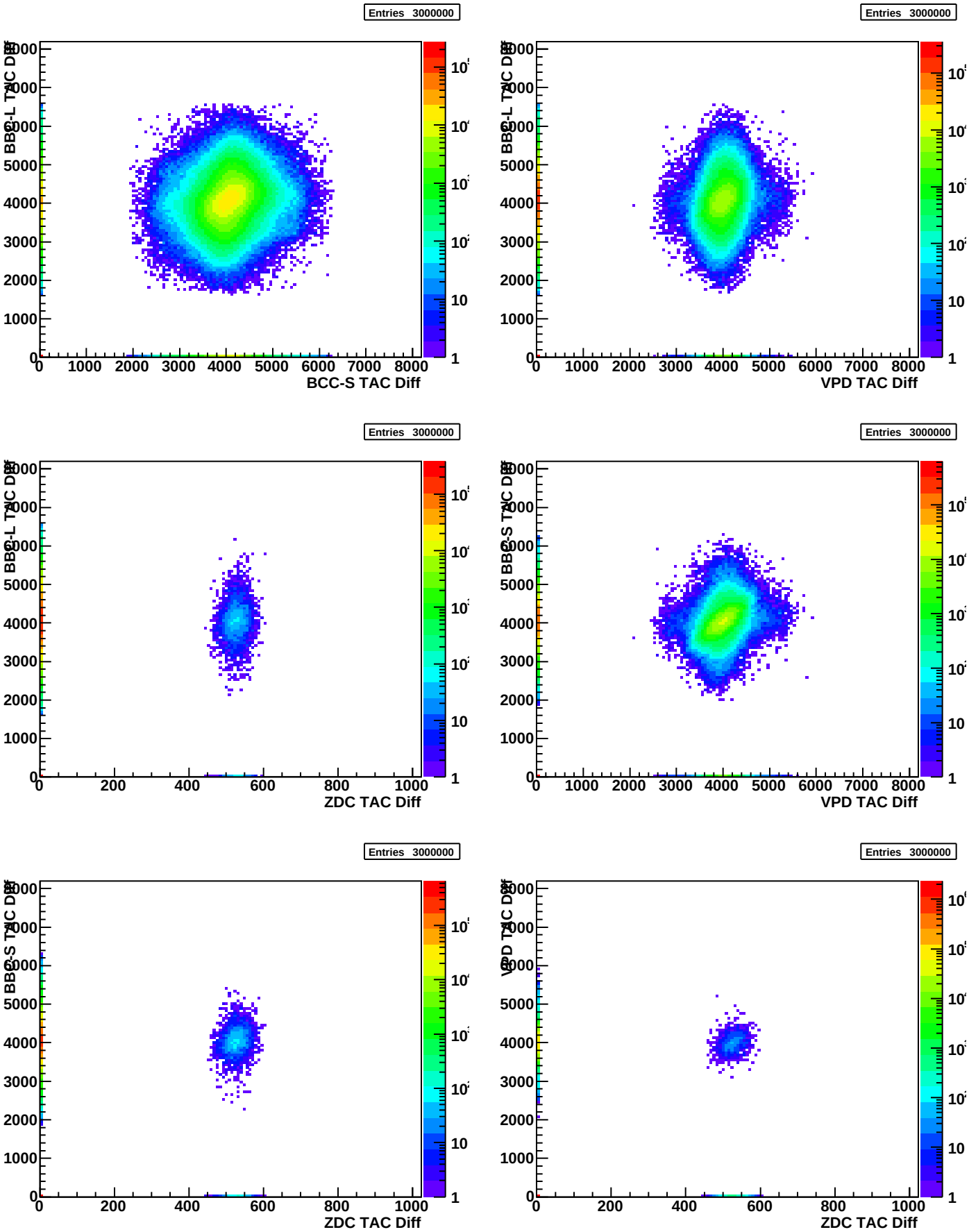
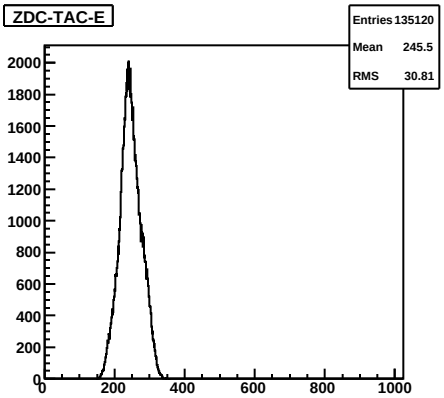
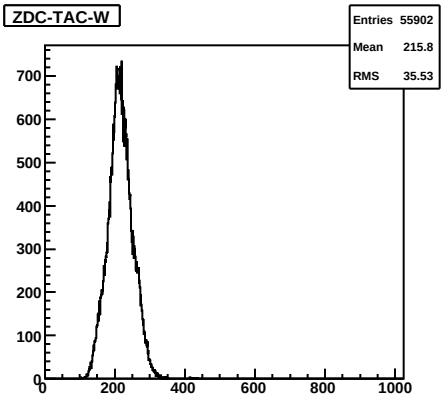
BBC-S-East ADC Sum
BBC-S-West ADC Sum

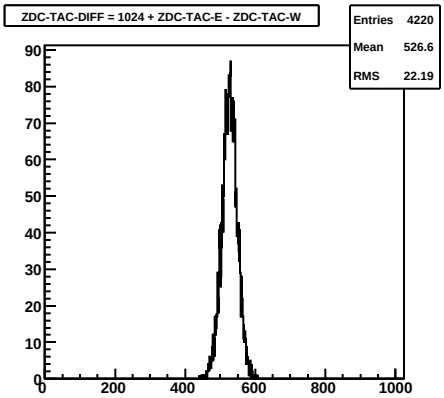

Entries 3000000
VPD East ADC Sum
VPD West ADC Sum

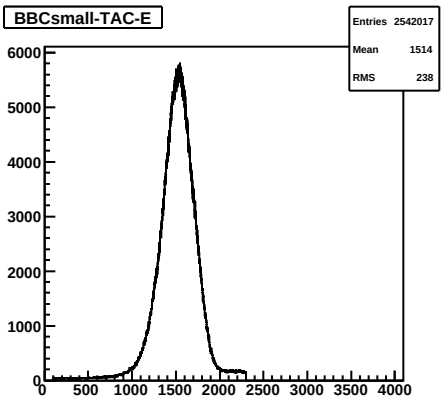

Entries 3000000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

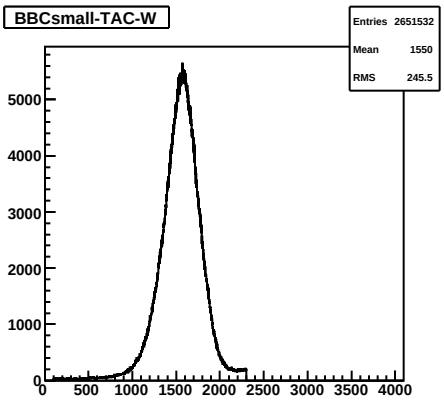

Entries 3000000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 3000000
BBC-L TAC Diff
VPD TAC Diff
Entries 3000000
BBC-L TAC Diff
ZDC TAC Diff
Entries 3000000
BBC-S TAC Diff
VPD TAC Diff
Entries 3000000
BBC-S TAC Diff
ZDC TAC Diff
Entries 3000000
VPD TAC Diff
ZDC TAC Diff

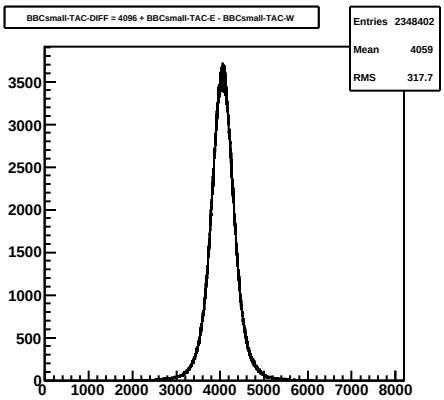

ZDC-TAC-E
Entries 135120
Mean 245.5
RMS 30.81

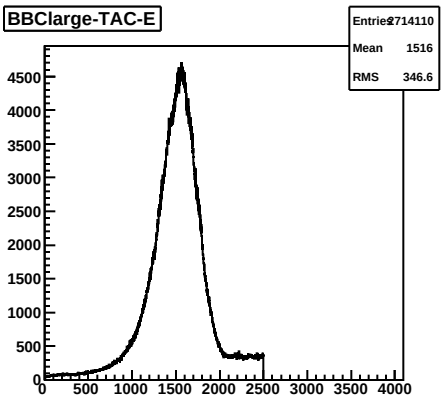

ZDC-TAC-W
Entries 55902
Mean 215.8
RMS 35.53

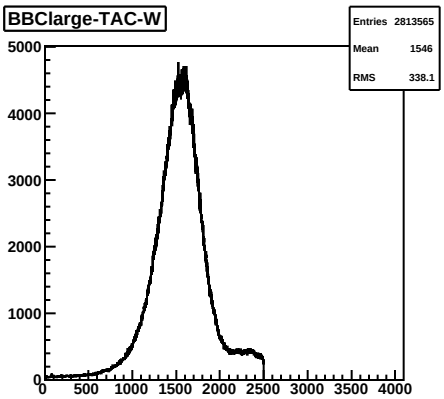

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 4220
Mean 526.6
RMS 22.19

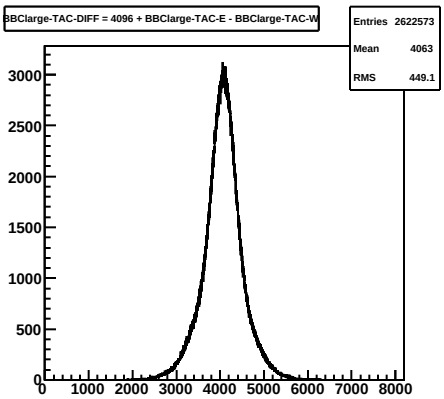

BBCsmall-TAC-E
Entries 2542017
Mean 1514
RMS 238

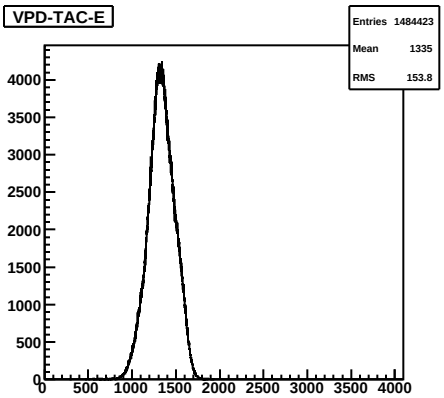

BBCsmall-TAC-W
Entries 2651532
Mean 1550
RMS 245.5

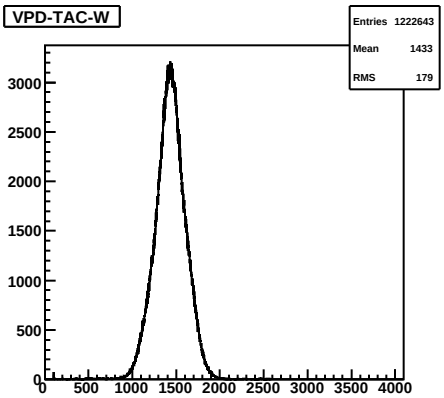

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 2348402
Mean 4059
RMS 317.7

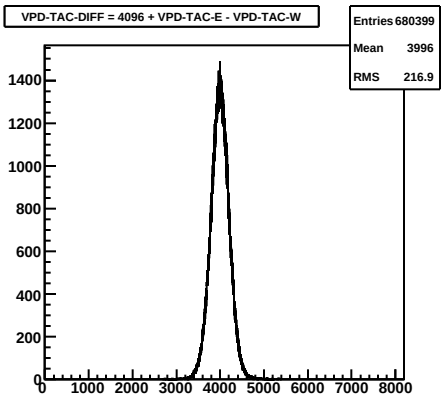

BBClarge-TAC-E
Entries 2714110
Mean 1516
RMS 346.6

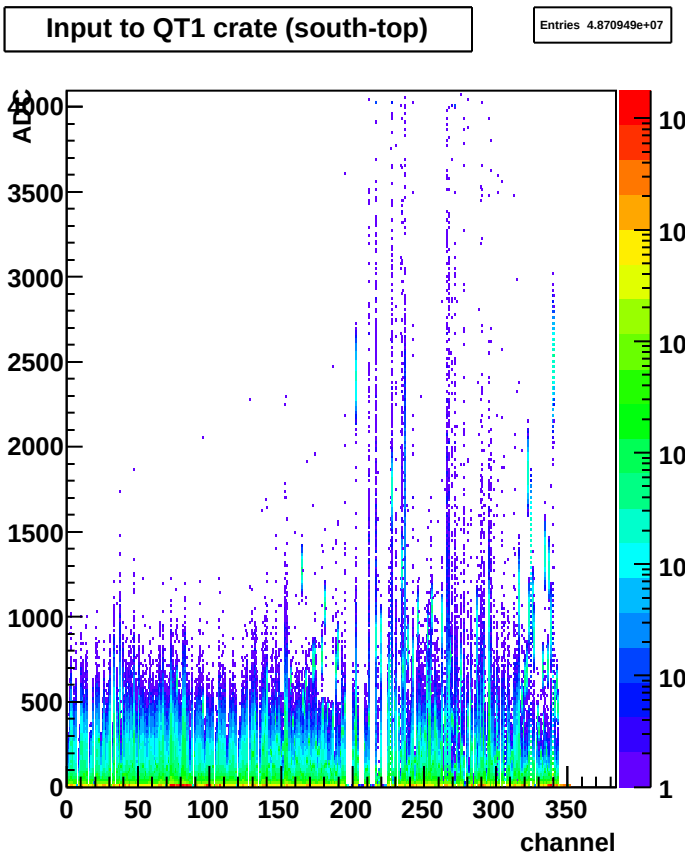

BBClarge-TAC-W
Entries 2813565
Mean 1546
RMS 338.1

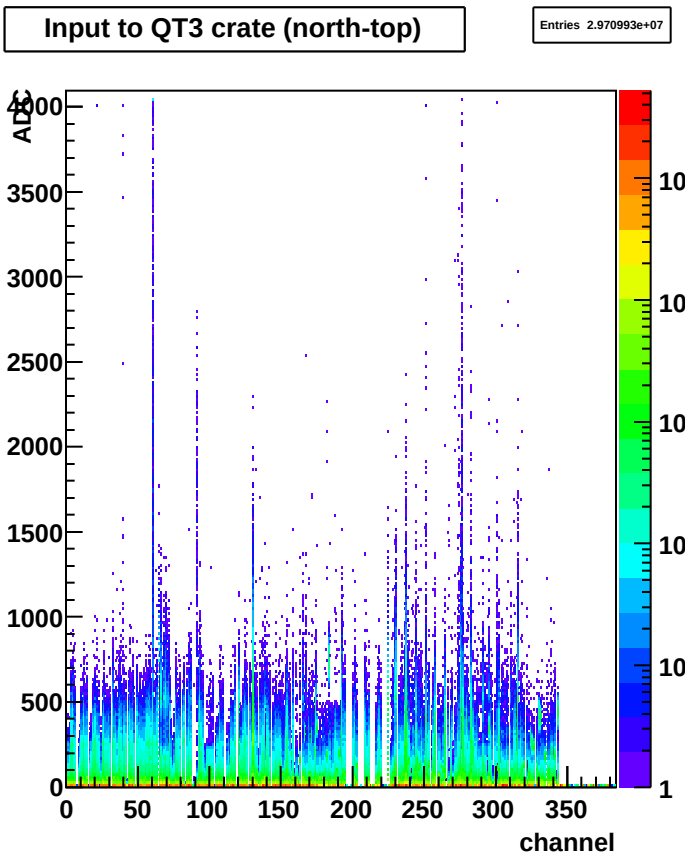

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2622573
Mean 4063
RMS 449.1

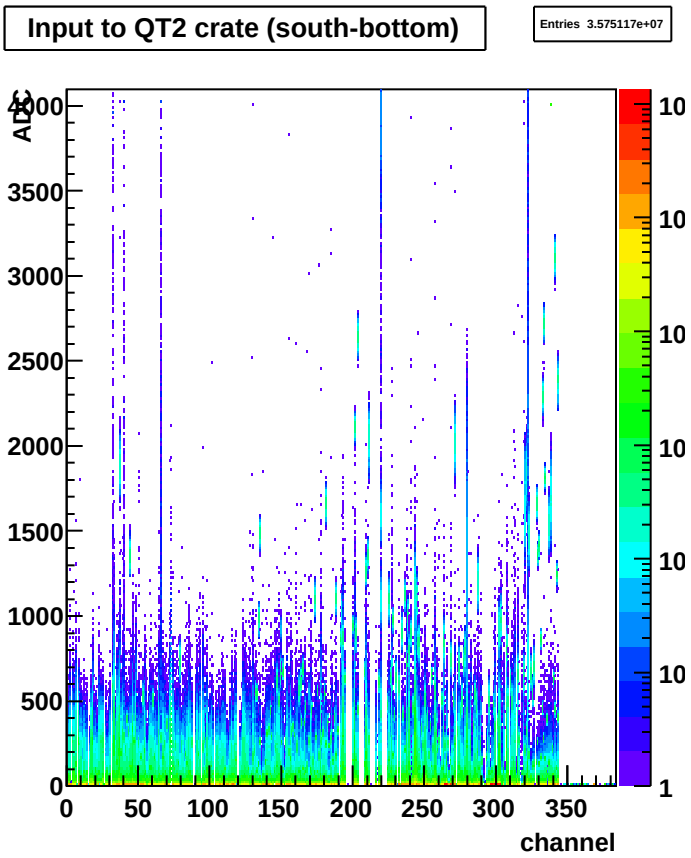

VPD-TAC-E
Entries 1484423
Mean 1335
RMS 153.8

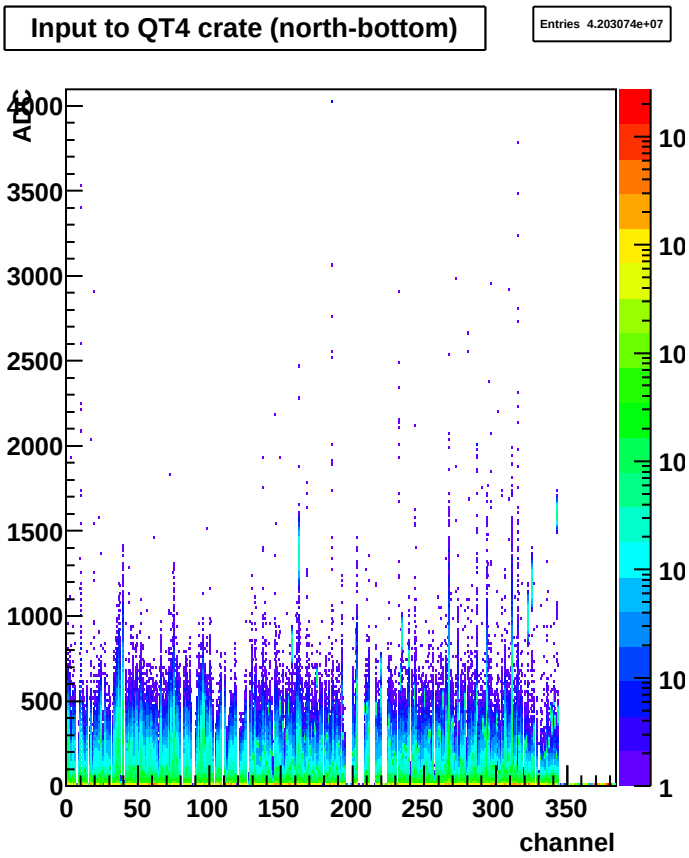

VPD-TAC-W
Entries 1222643
Mean 1433
RMS 179

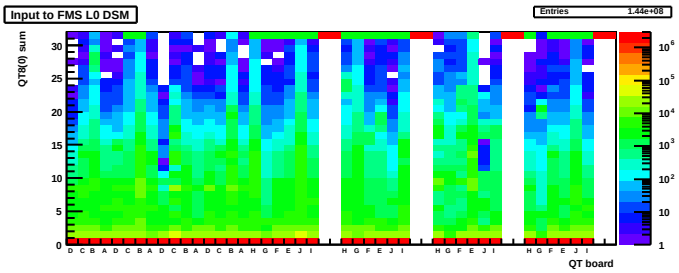

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 680399
Mean 3996
RMS 216.9

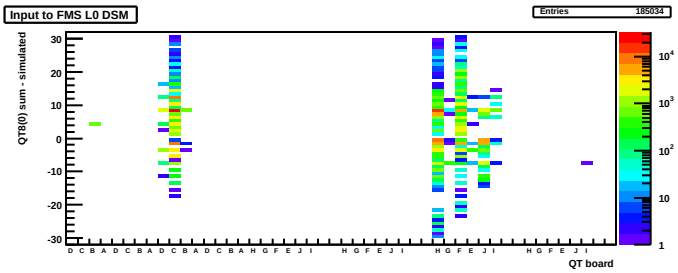

Input to QT1 crate (south-top)
Entries 4.870949e+07
ADC
channel

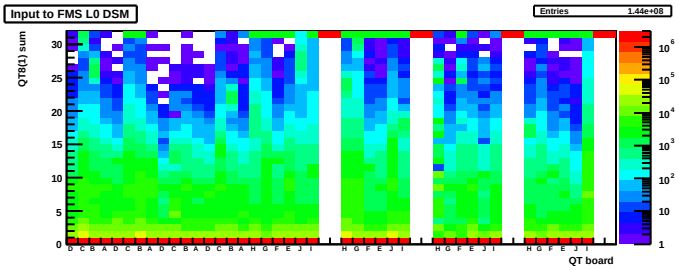

Input to QT3 crate (north-top)
Entries 2.970993e+07
ADC
channel

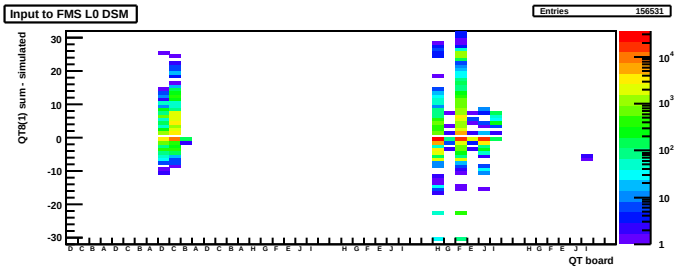

Input to QT2 crate (south-bottom)
Entries 3.575117e+07
ADC
channel

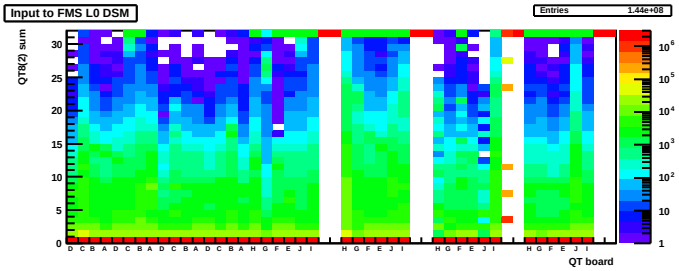

Input to QT4 crate (north-bottom)
Entries 4.203074e+07
ADC
channel

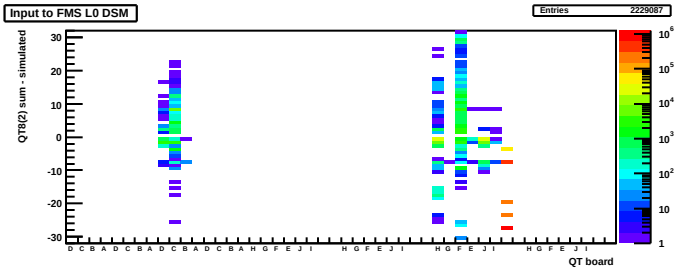

Input to FMS L0 DSM
Entries 1.44e+08
QT8(0) sum
QT board

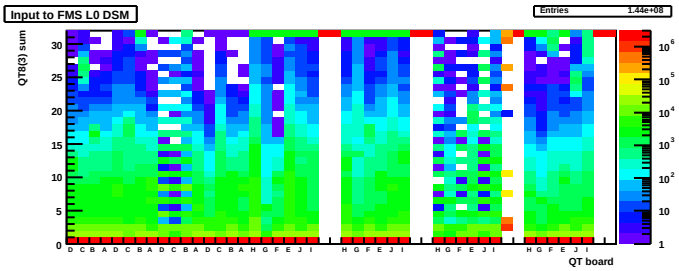

Input to FMS L0 DSM
Entries 185034
QT8(0) sum - simulated
QT board

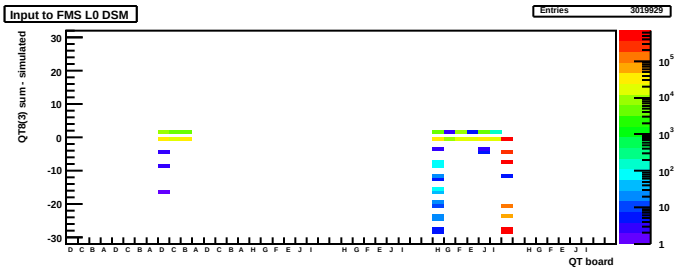

Input to FMS L0 DSM
Entries 1.44e+08
QT8(1) sum
QT board

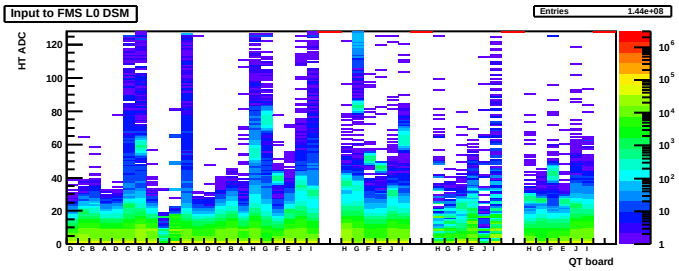

Input to FMS L0 DSM
Entries 156531
QT8(1) sum - simulated
QT board

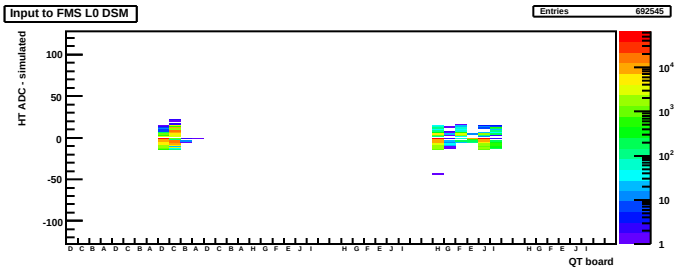

Input to FMS L0 DSM
Entries 1.44e+08
QT8(2) sum
QT board

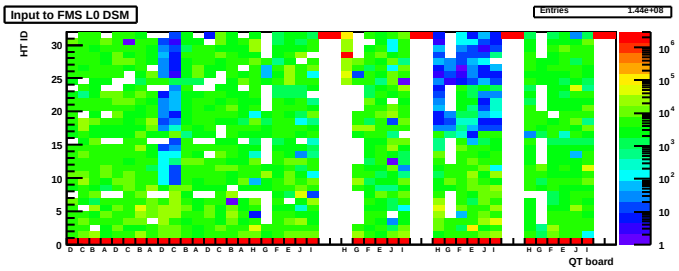

Input to FMS L0 DSM
Entries 2229087
QT8(2) sum - simulated
QT board

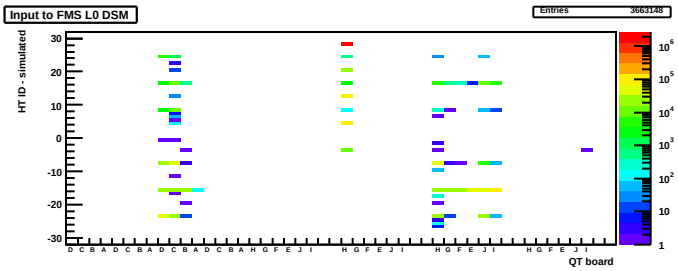

Input to FMS L0 DSM
Entries 1.44e+08
QT8(3) sum
QT board

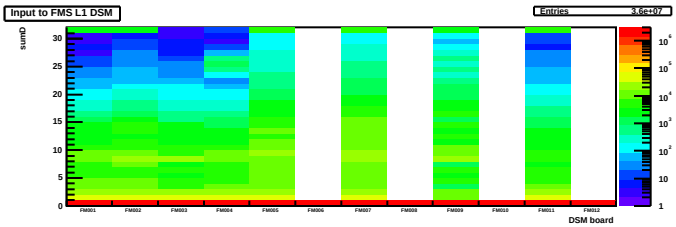

Input to FMS L0 DSM
Entries 3019929
QT8(3) sum - simulated
QT board

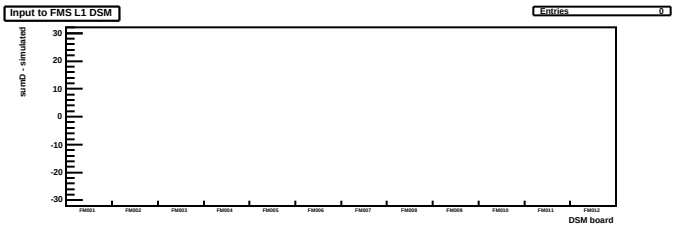

Input to FMS L0 DSM
Entries 1.44e+08
HT ADC
QT board

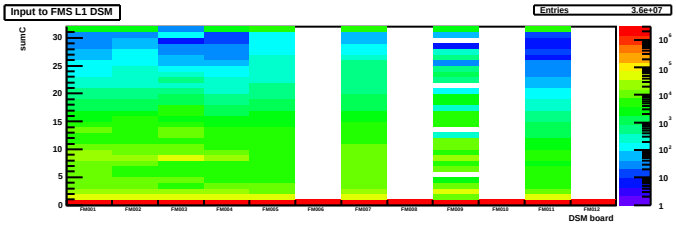

Input to FMS L0 DSM
Entries 692545
HT ADC - simulated
QT board

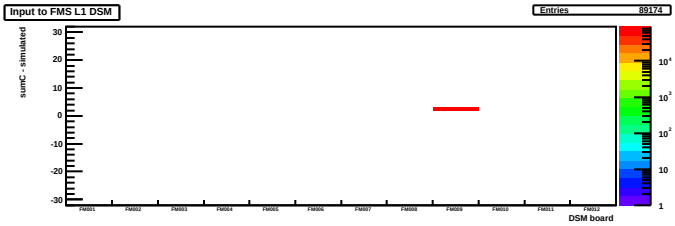

Input to FMS L0 DSM
Entries 1.44e+08
HT ID
QT board

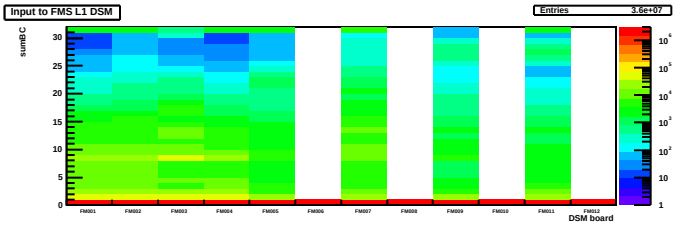

Input to FMS L0 DSM
Entries 3663148
HT ID - simulated
QT board

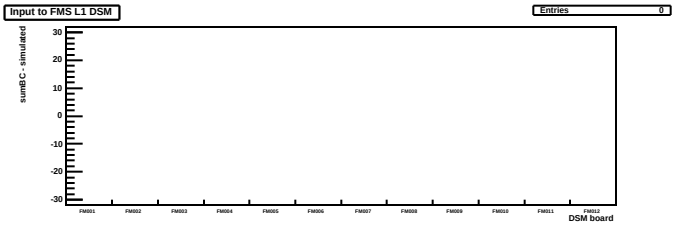

Input to FMS L1 DSM
Entries 3.6e+07
sumD
DSM board

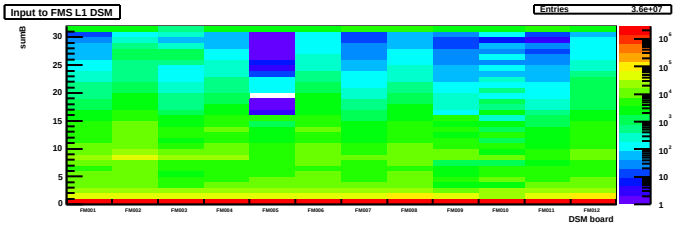

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

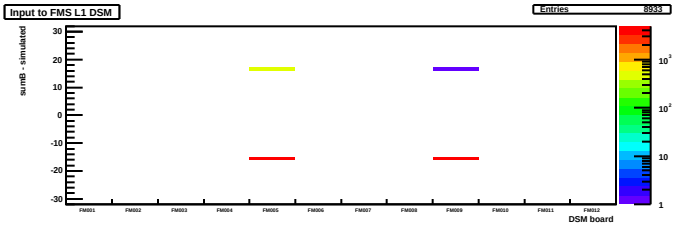

Input to FMS L1 DSM
Entries 3.6e+07
sumC
DSM board

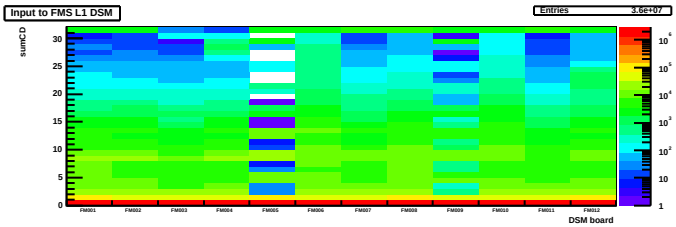

Input to FMS L1 DSM
Entries 89174
sumC - simulated
DSM board

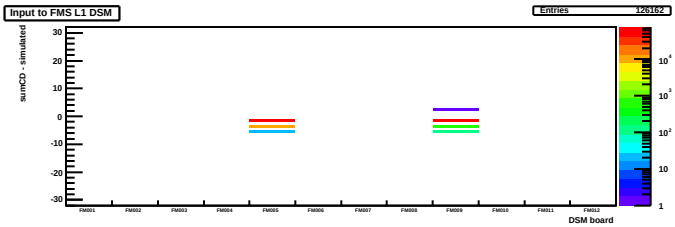

Input to FMS L1 DSM
Entries 3.6e+07
sumBC
DSM board

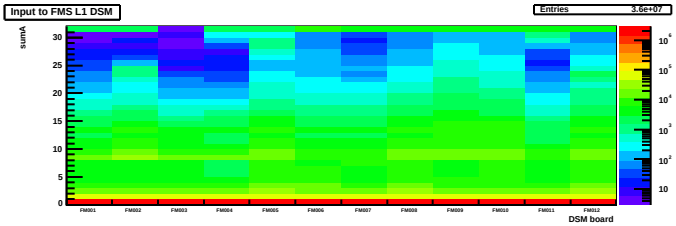

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

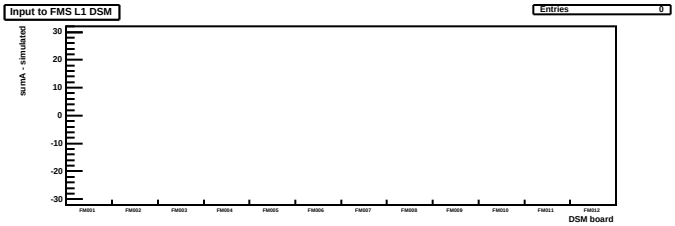

Input to FMS L1 DSM
Entries 3.6e+07
sumB
DSM board

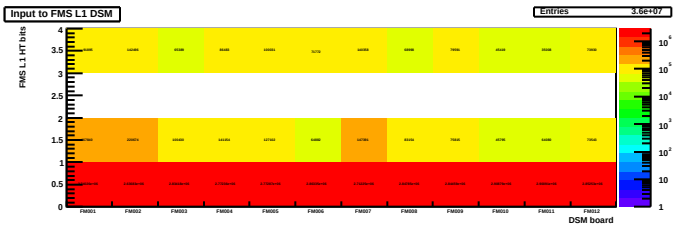

Input to FMS L1 DSM
Entries 8933
sumB - simulated
DSM board

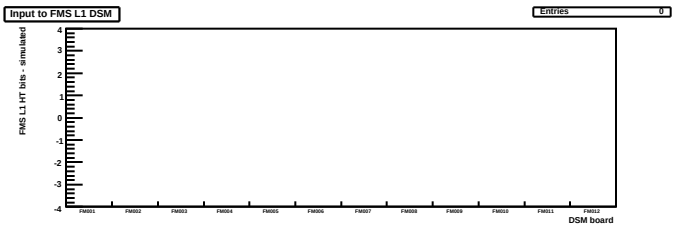

Input to FMS L1 DSM
Entries 3.6e+07
sumCD
DSM board

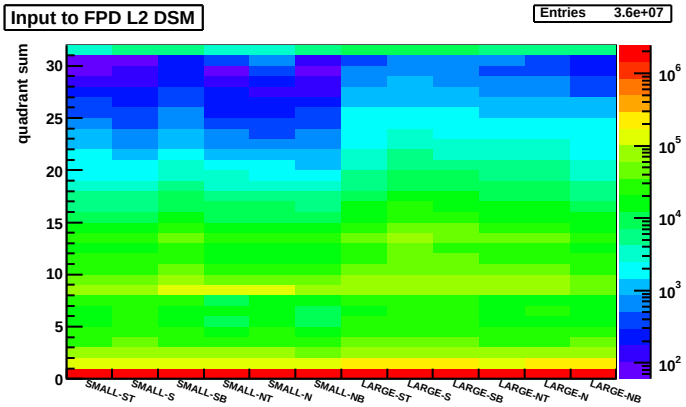

Input to FMS L1 DSM
Entries 126162
sumCD - simulated
DSM board

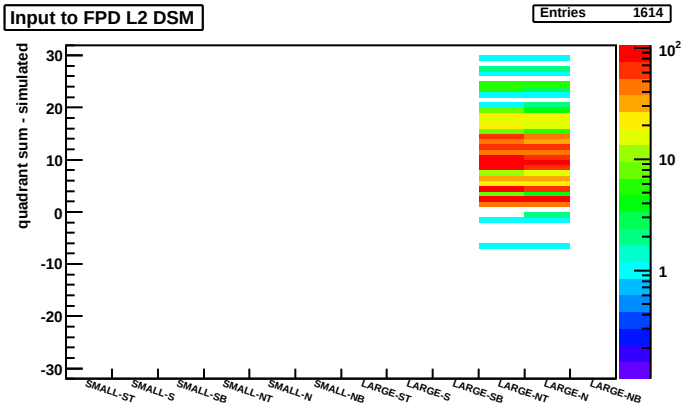

Input to FMS L1 DSM
Entries 3.6e+07
sumA
DSM board

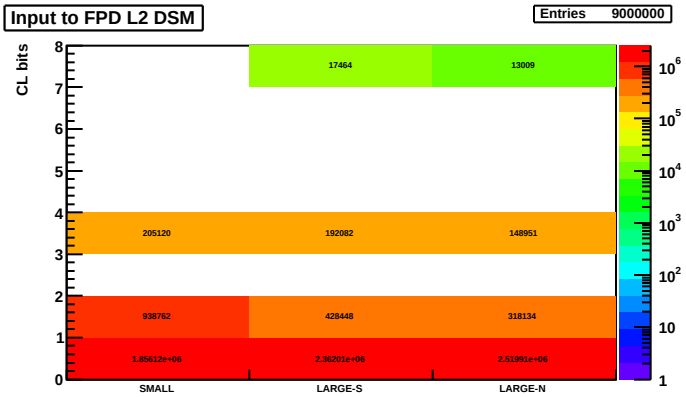

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

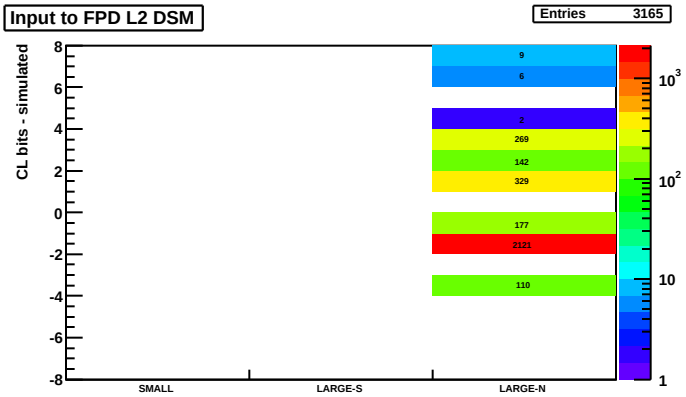

Input to FMS L1 DSM
Entries 3.6e+07
FMS L1 HT bits
DSM board

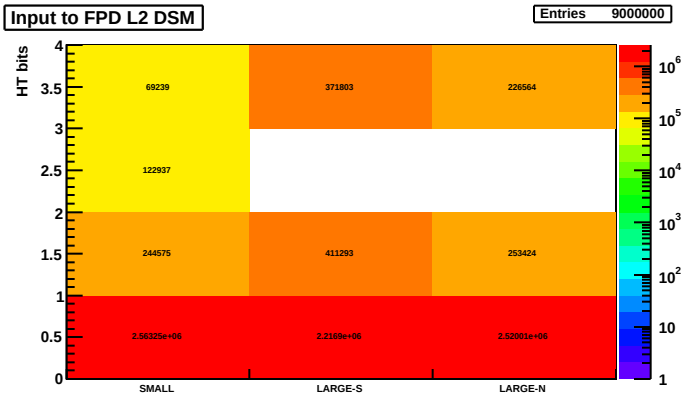

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

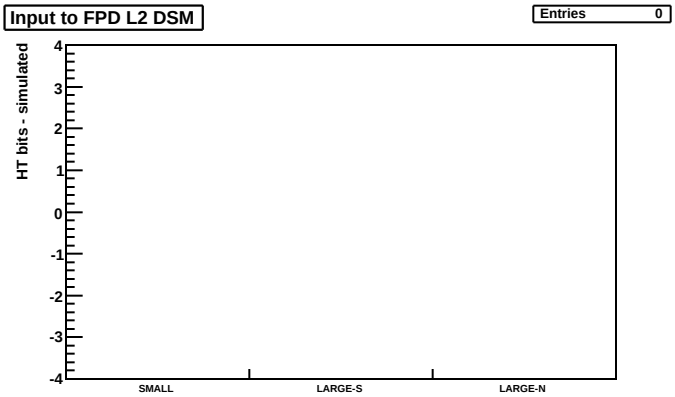

Input to FPD L2 DSM
Entries 3.6e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

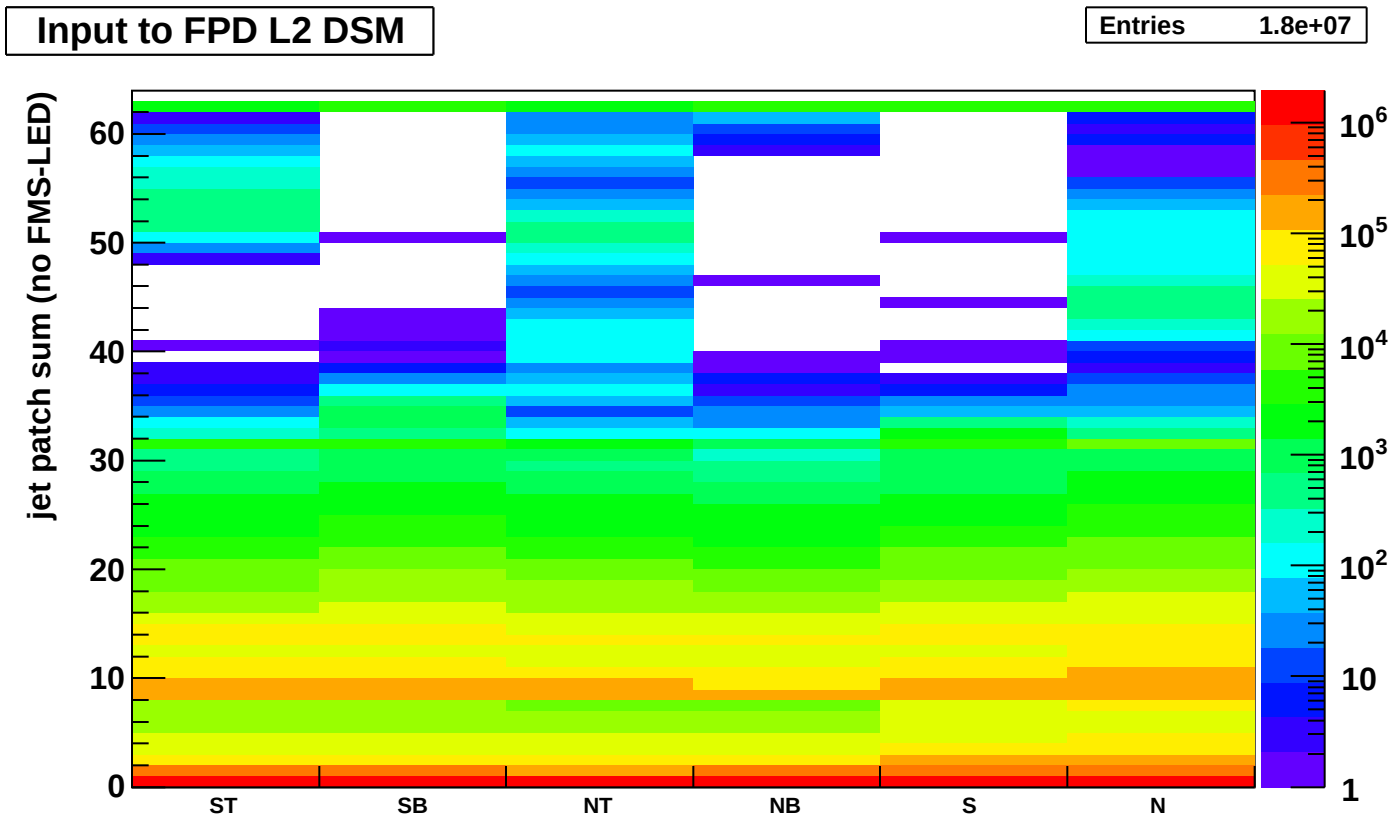

Input to FPD L2 DSM
Entries 1614
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

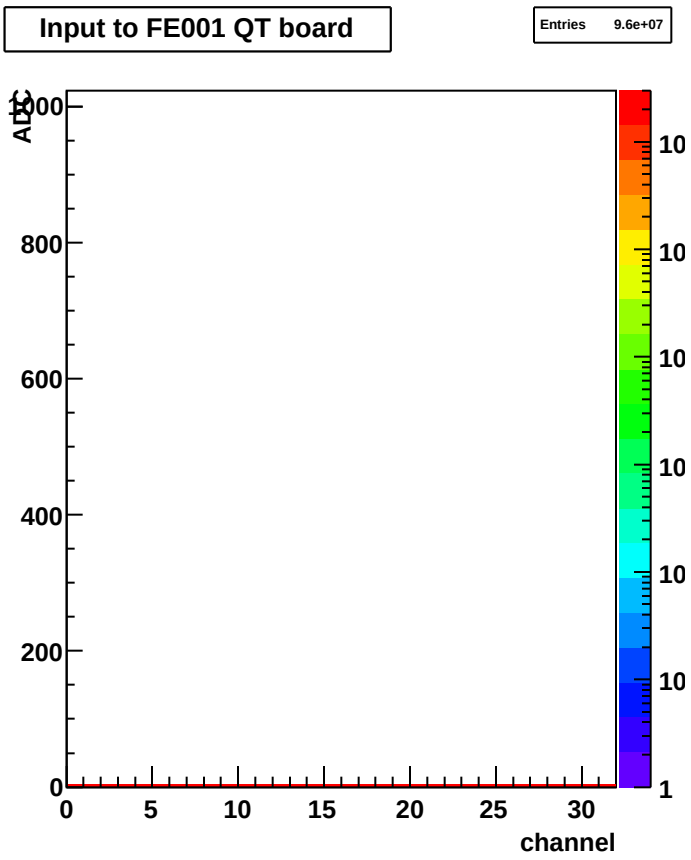

Input to FPD L2 DSM
Entries 9000000
CL bits
17464
13009
205120
192082
148951
938762
428448
318134
1.85612e+06
2.36201e+06
2.51991e+06
SMALL
LARGE-S
LARGE-N

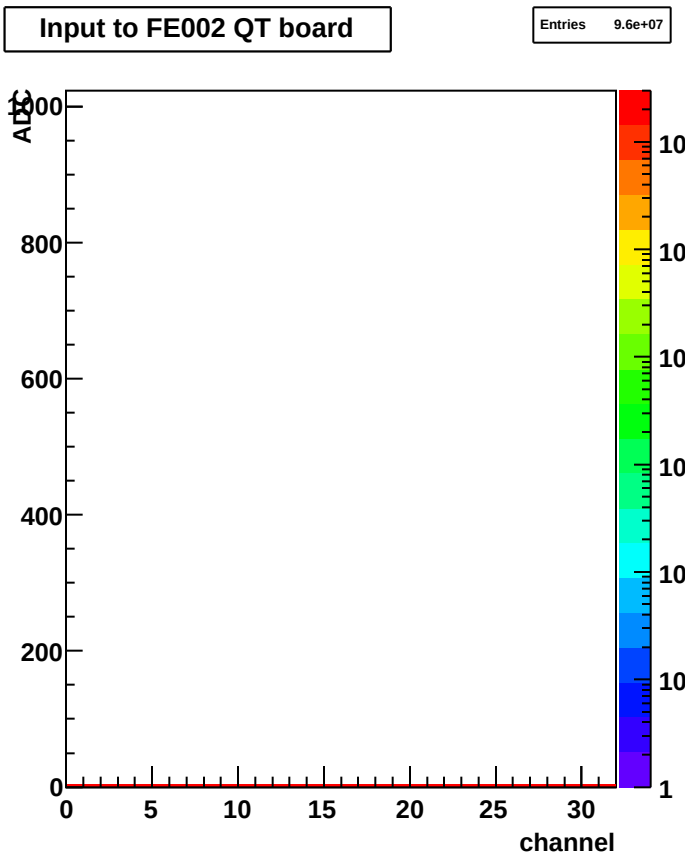

Input to FPD L2 DSM
Entries 3165
CL bits - simulated
9
6
2
269
142
329
177
2121
110
SMALL
LARGE-S
LARGE-N

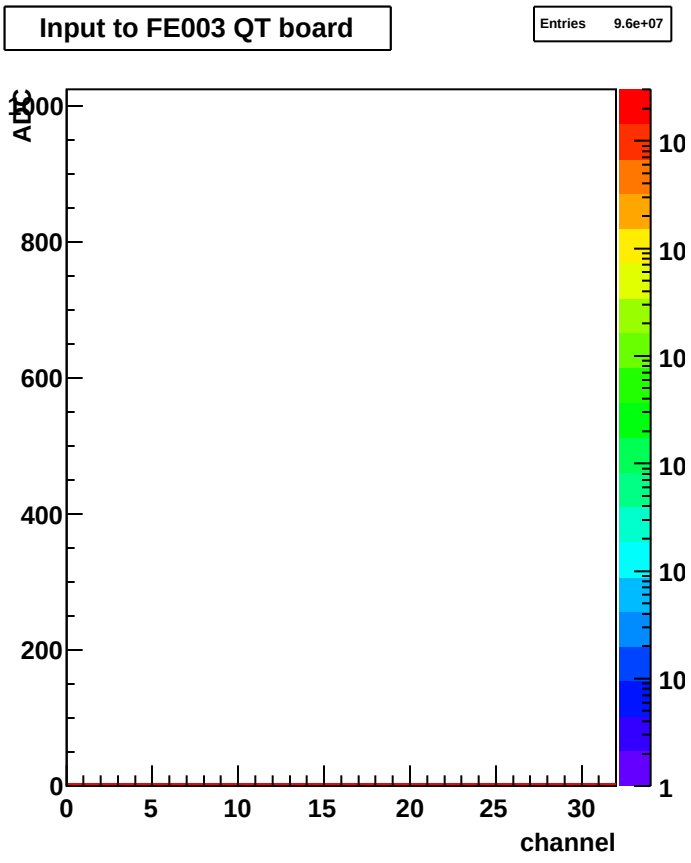

Input to FPD L2 DSM
Entries 9000000
HT bits
69239
371803
226564
122937
244575
411293
253424
2.56325e+06
2.2169e+06
2.52001e+06
SMALL
LARGE-S
LARGE-N

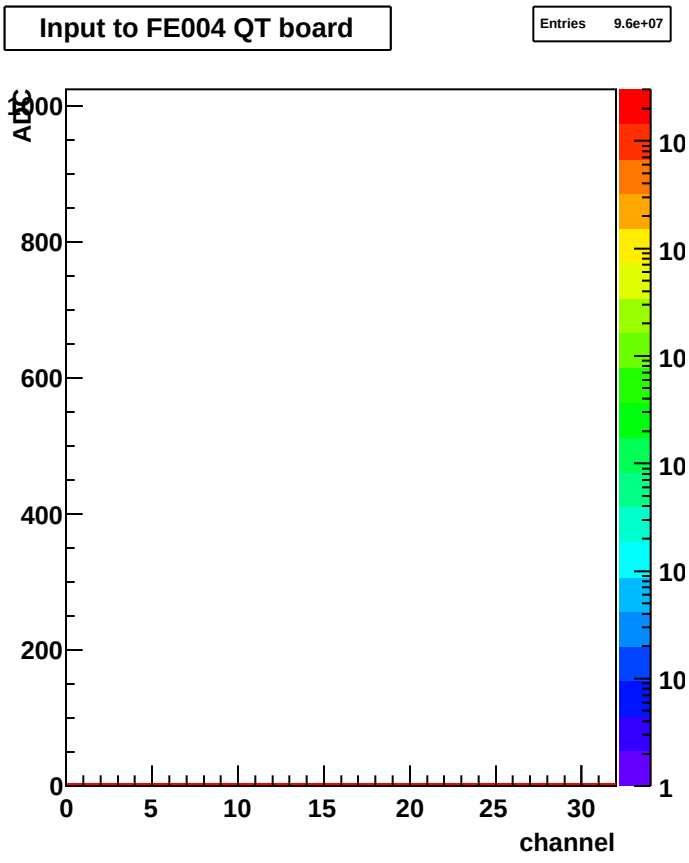

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

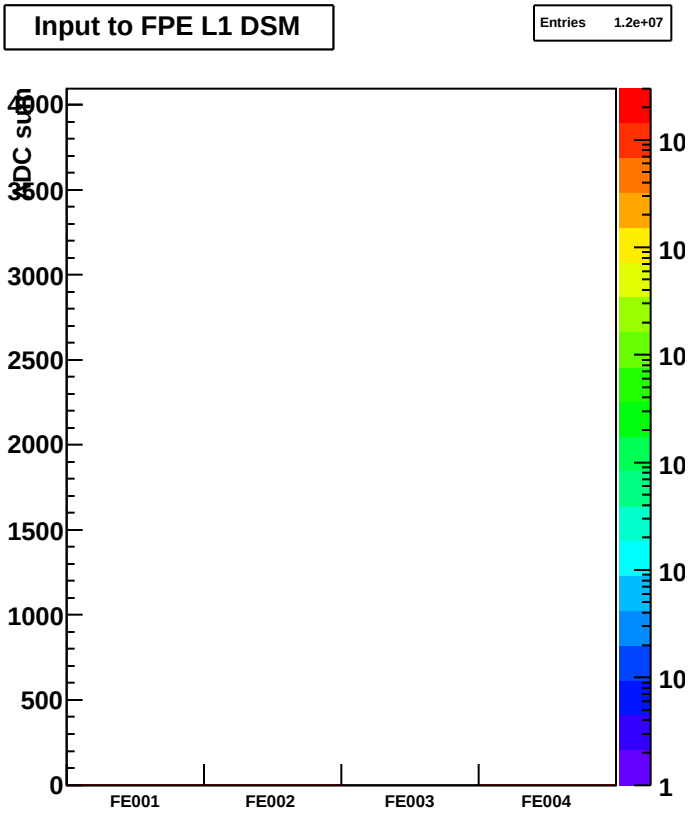

Input to FPD L2 DSM
Entries 1.8e+07
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

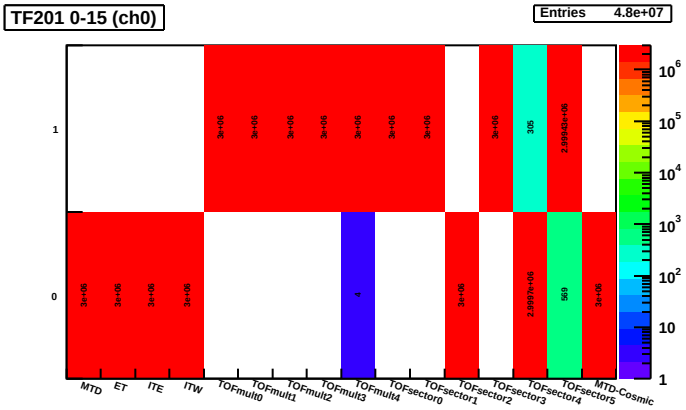

Input to FE001 QT board
Entries 9.6e+07
ADC
channel

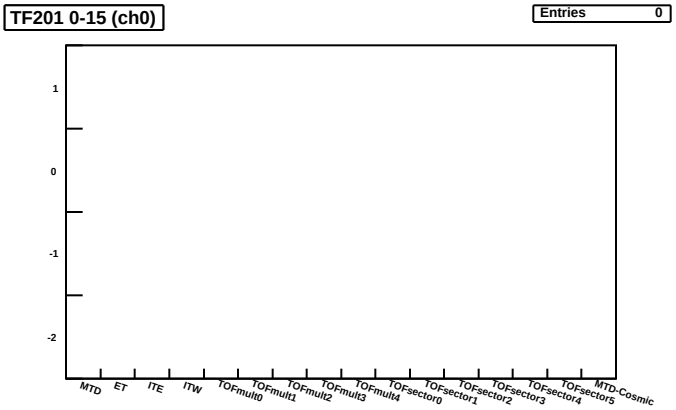

Input to FE002 QT board
Entries 9.6e+07
ADC
channel

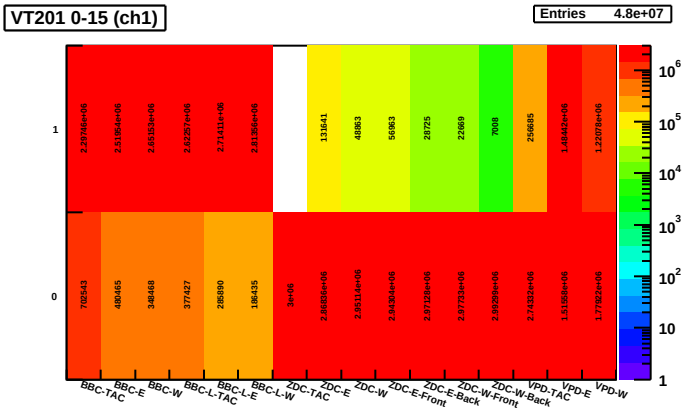

Input to FE003 QT board
Entries 9.6e+07
ADC
channel

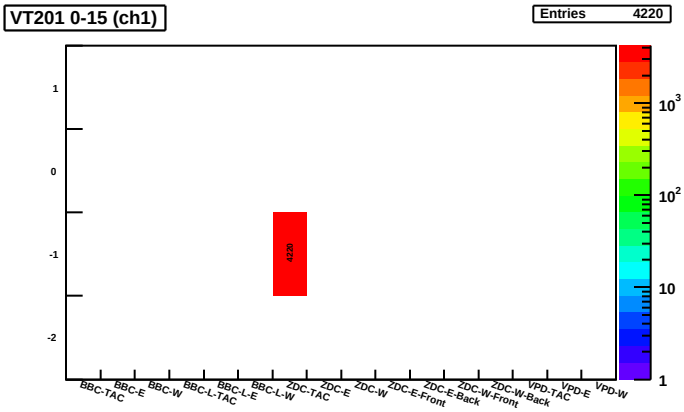

Input to FE004 QT board
Entries 9.6e+07
ADC
channel

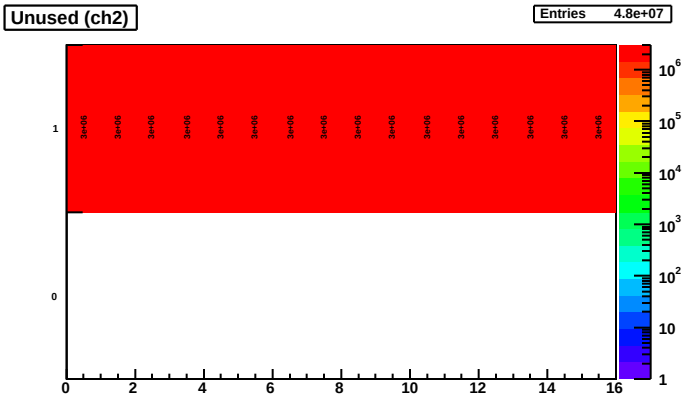

Input to FPE L1 DSM
Entries 1.2e+07
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1

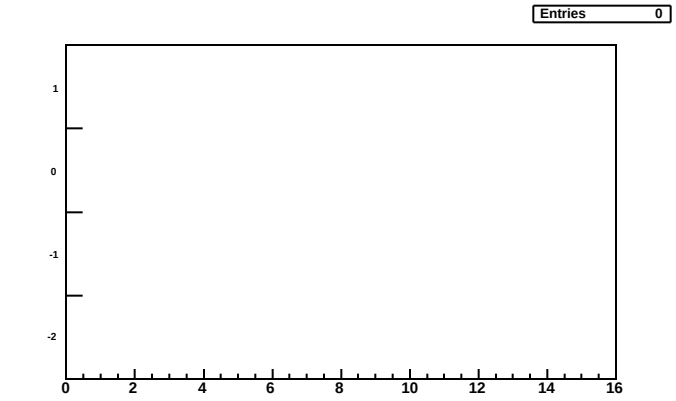

TF201 0-15 (ch0)
Entries 4.8e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

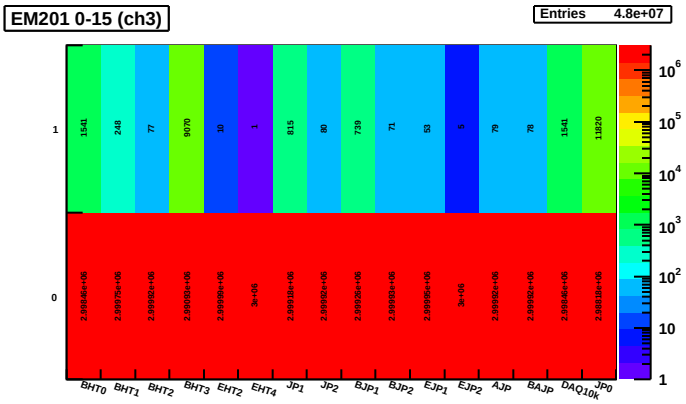

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

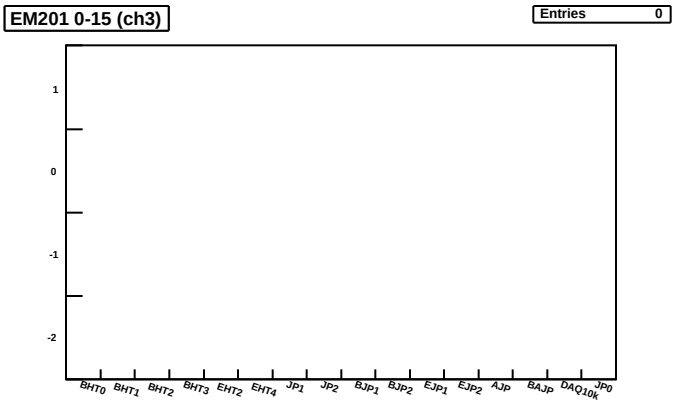

VT201 0-15 (ch1)
Entries 4.8e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

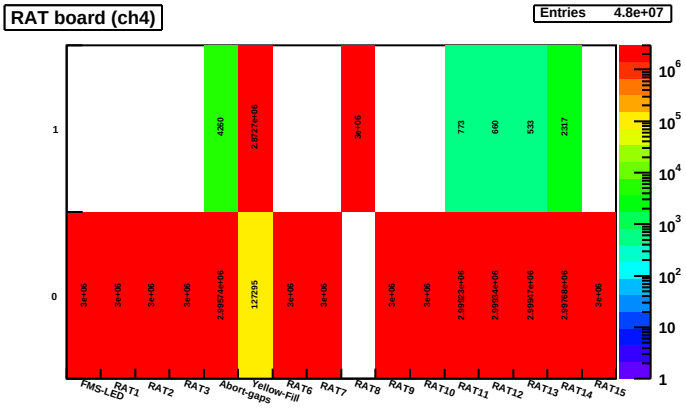

VT201 0-15 (ch1)
Entries 4220
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

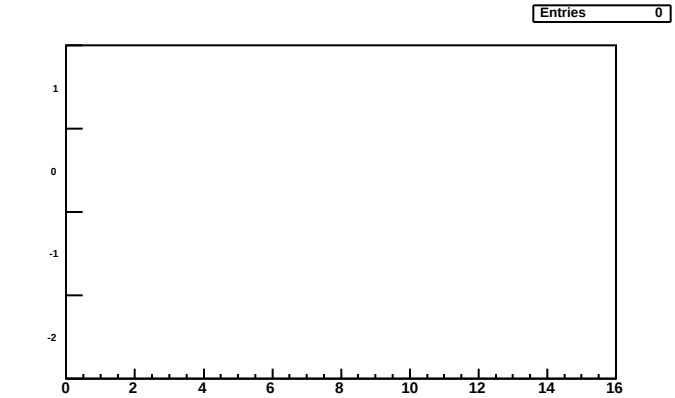

Unused (ch2)
Entries 4.8e+07

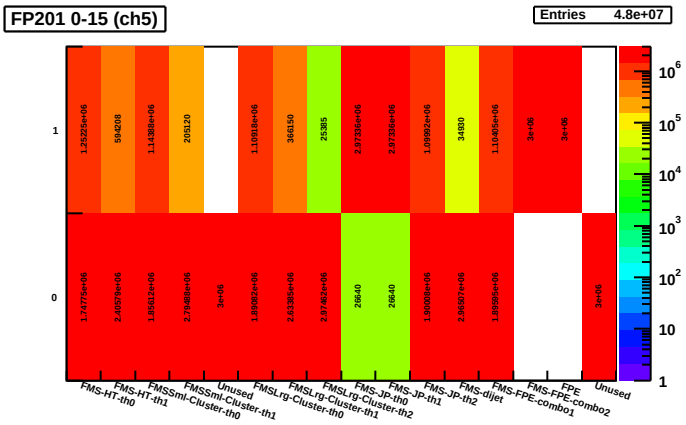

Entries 0

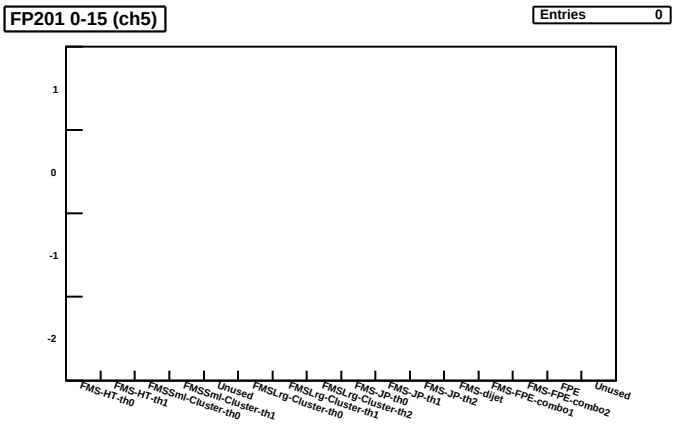

EM201 0-15 (ch3)
Entries 4.8e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

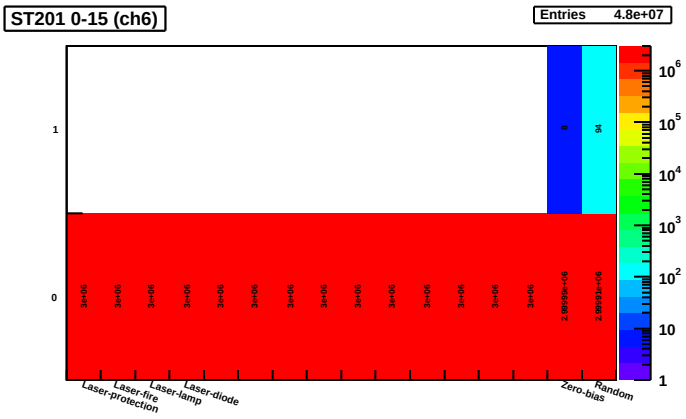

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

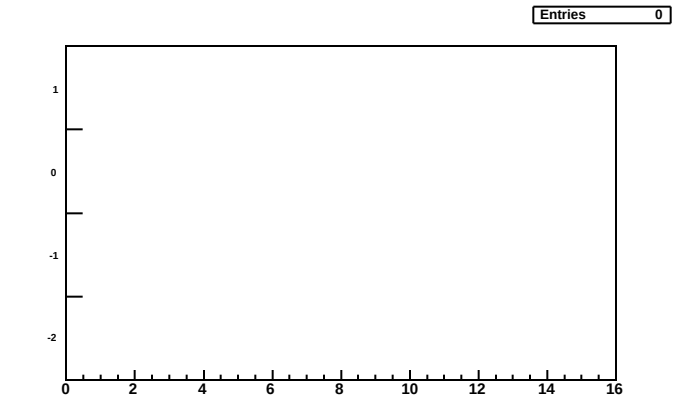

RAT board (ch4)
Entries 4.8e+07
FMS-LED
RAT1
RAT2
RAT3
Abort-gaps
Yellow-Fill
RAT6
RAT7
RAT8
RAT9
RAT10
RAT11
RAT12
RAT13
RAT14
RAT15

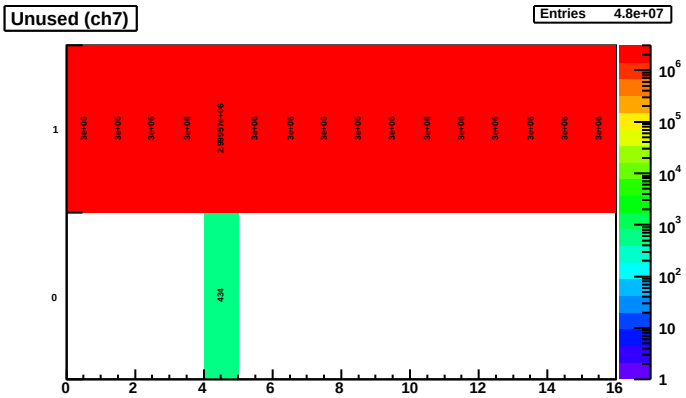

Entries 0

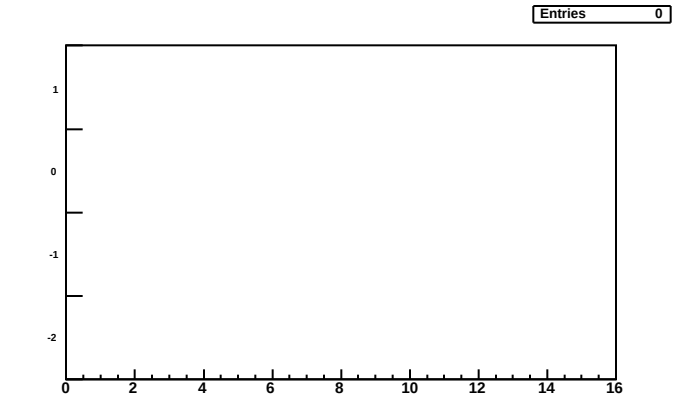

FP201 0-15 (ch5)
Entries 4.8e+07
FMS-HT-th0
FMS-HT-th1
FMSSml-Cluster-th0
FMSSml-Cluster-th1
Unused
FMSLrg-Cluster-th0
FMSLrg-Cluster-th1
FMSLrg-Cluster-th2
FMS-JP-th0
FMS-JP-th1
FMS-JP-th2
FMS-diijet
FMS-FPE-combo1
FPE
FMS-FPE-combo2
Unused


FP201 0-15 (ch5)
Entries 0
FMS-HT-th0
FMS-HT-th1
FMSSml-Cluster-th0
FMSSml-Cluster-th1
Unused
FMSLrg-Cluster-th0
FMSLrg-Cluster-th1
FMSLrg-Cluster-th2
FMS-JP-th0
FMS-JP-th1
FMS-JP-th2
FMS-diijet
FMS-FPE-combo1
FPE
FMS-FPE-combo2
Unused


ST201 0-15 (ch6)
Entries 4.8e+07
Laser-protection
Laser-fire
Laser-lamp
Laser-diode
Zero-bias
Random


Entries 0


Unused (ch7)
Entries 4.8e+07


Entries 0