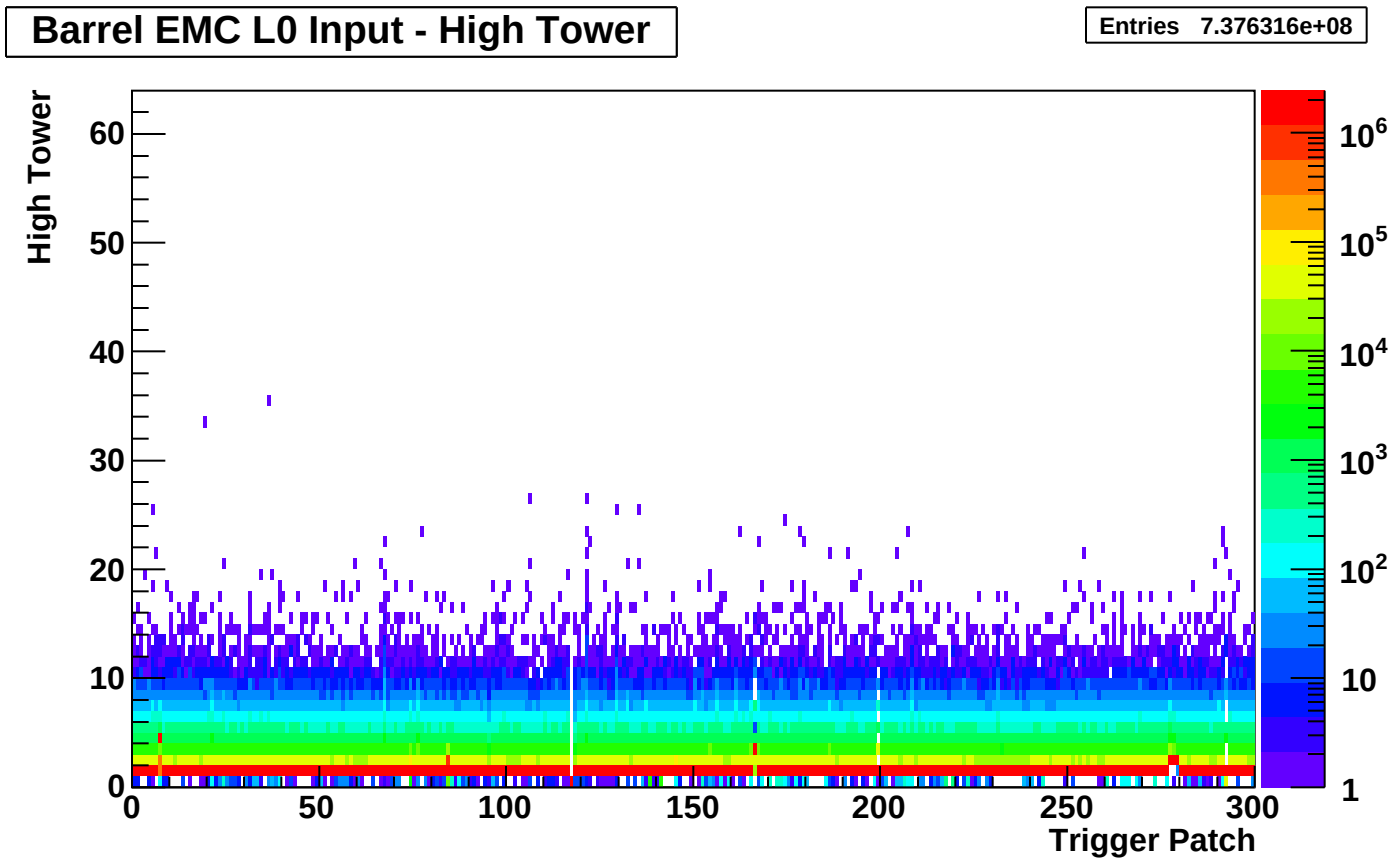
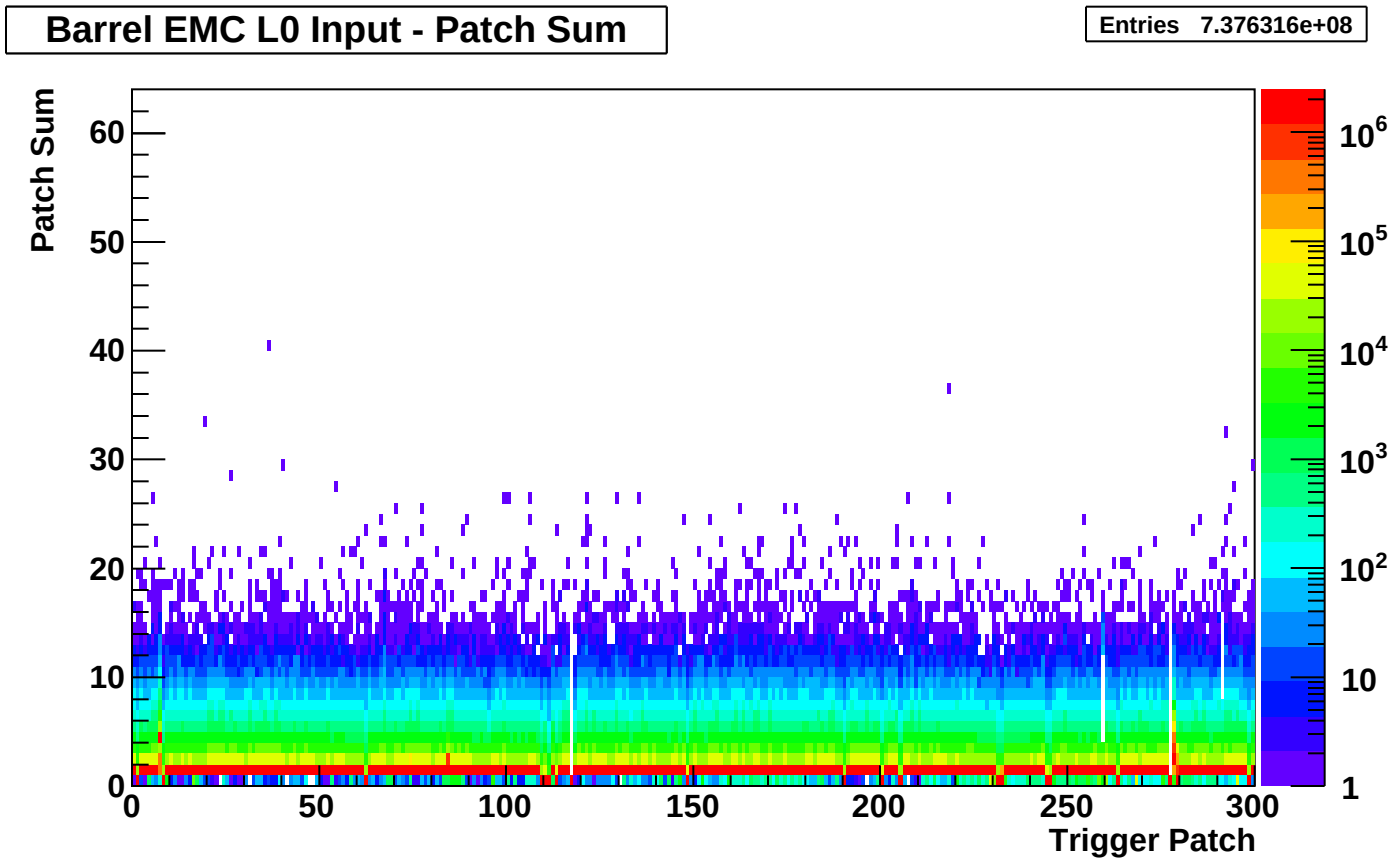
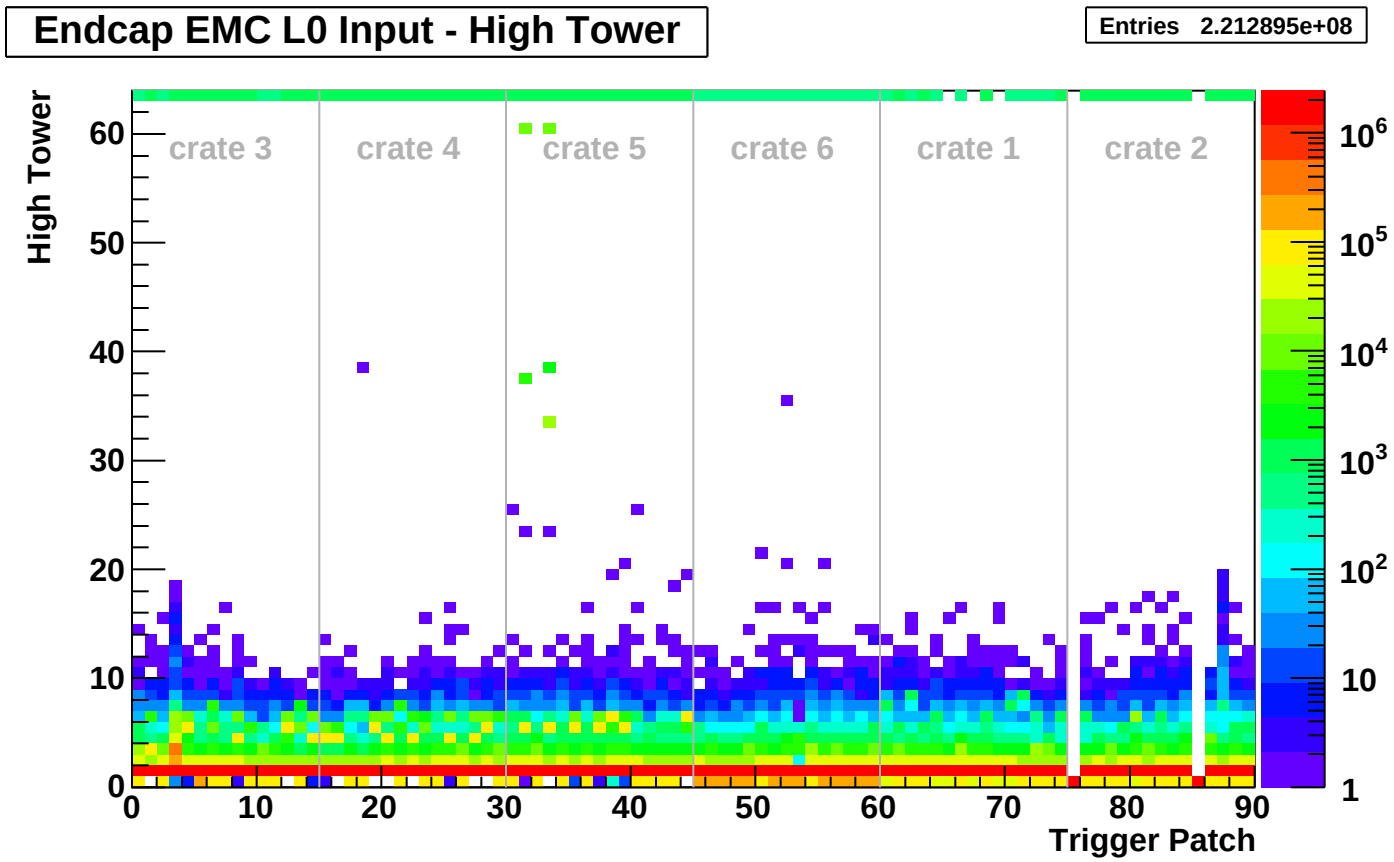
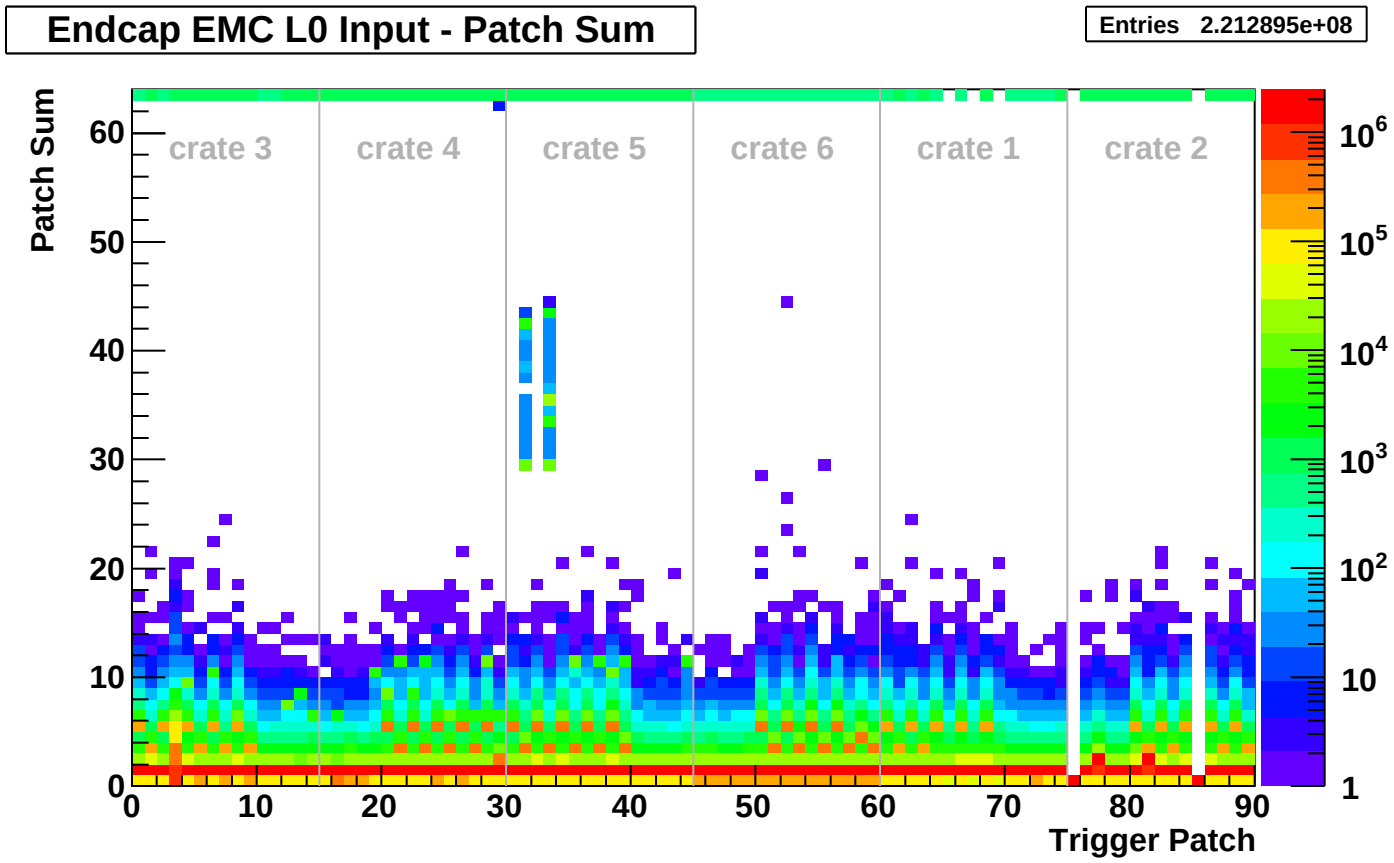
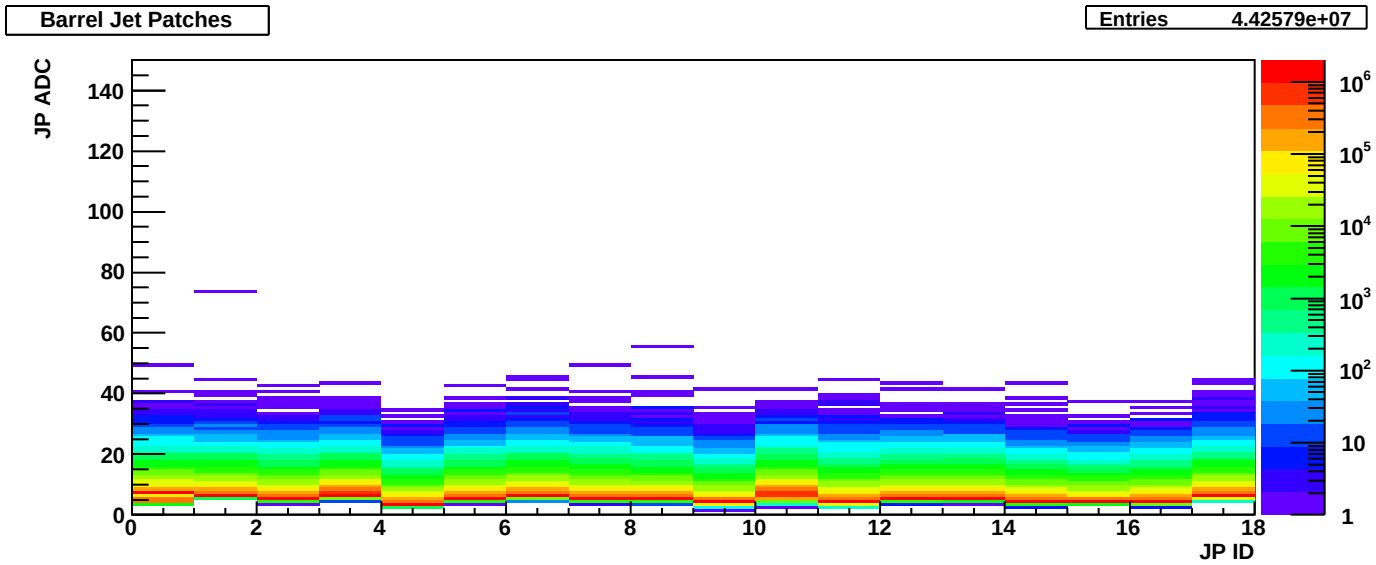
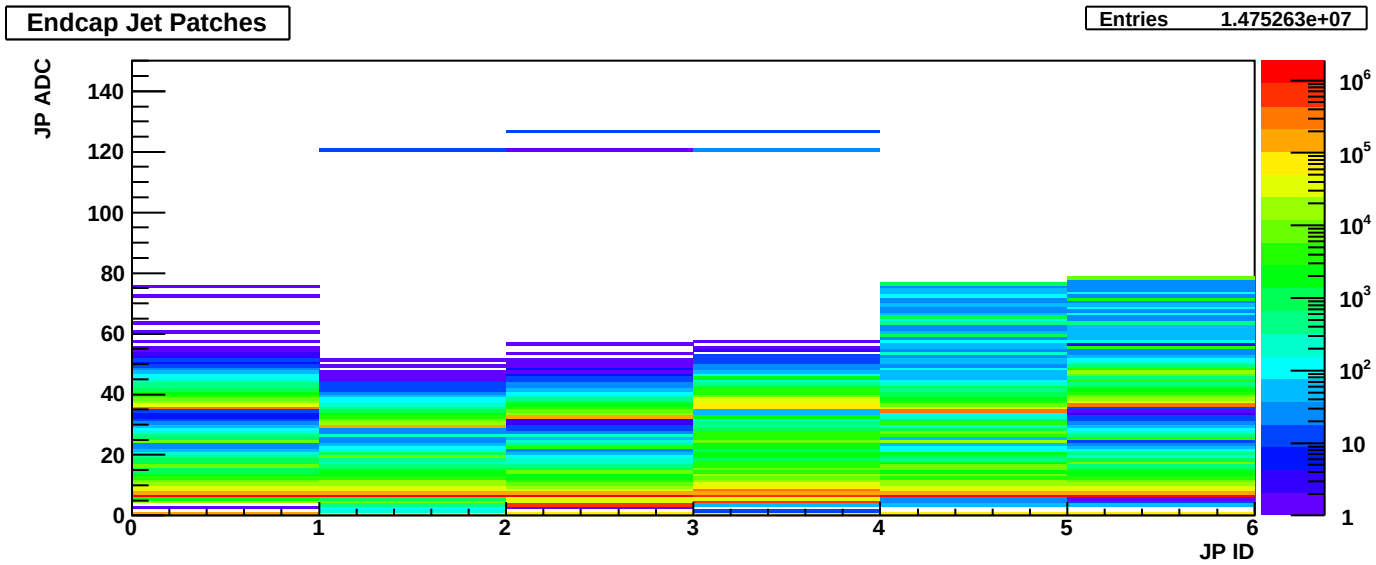

Barrel EMC L0 Input - High Tower
Entries 7.376316e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

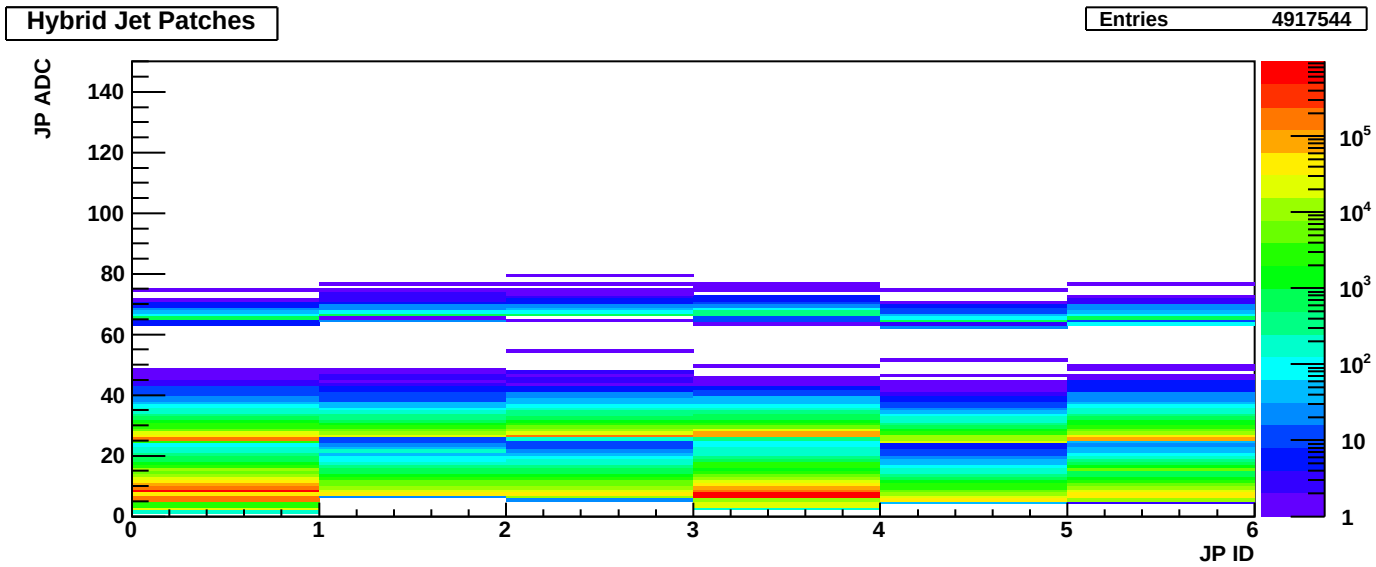

Barrel EMC L0 Input - Patch Sum
Entries 7.376316e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

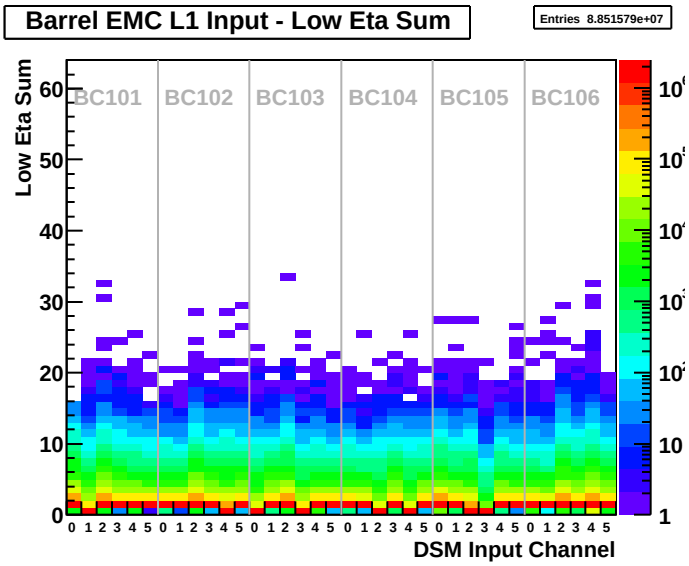

Endcap EMC L0 Input - High Tower
Entries 2.212895e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

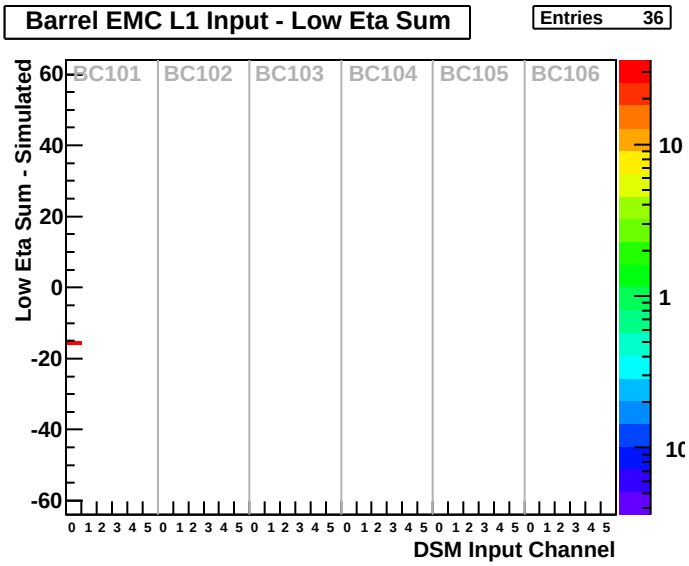

Endcap EMC L0 Input - Patch Sum
Entries 2.212895e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

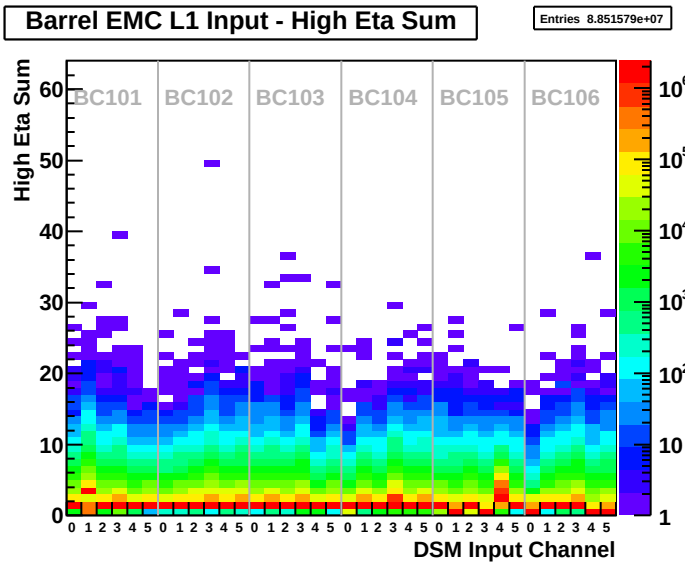

Barrel Jet Patches
Entries 4.42579e+07
JP ADC
JP ID

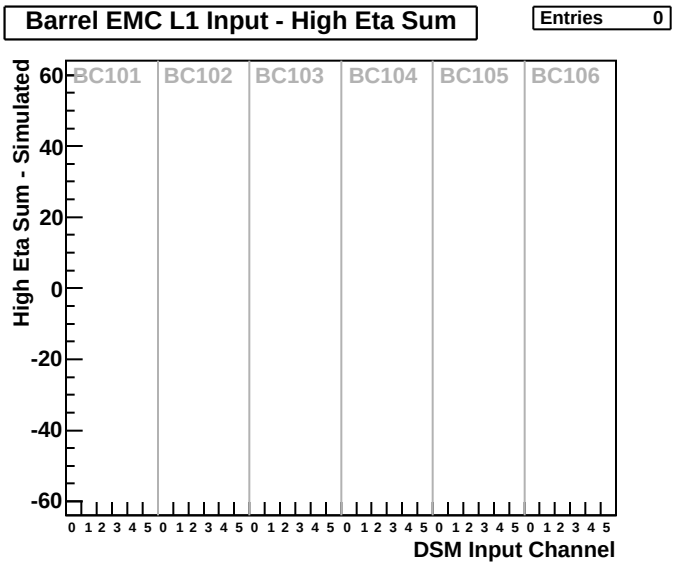

Endcap Jet Patches
Entries 1.475263e+07
JP ADC
JP ID

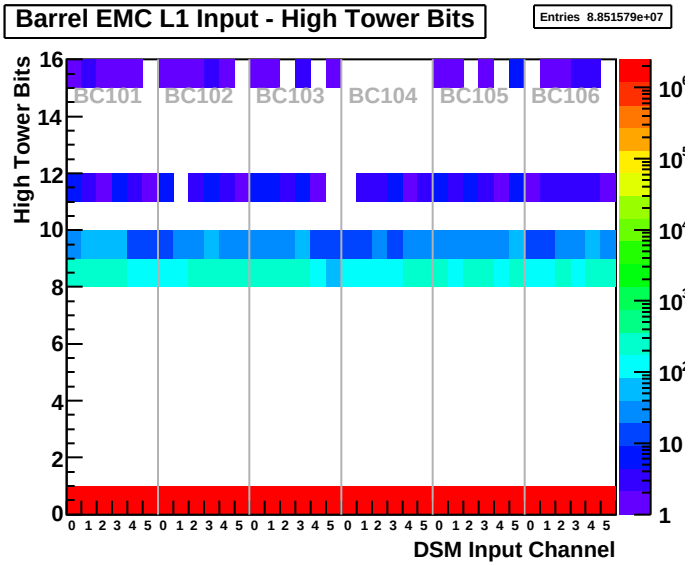

Hybrid Jet Patches
Entries 4917544
JP ADC
JP ID

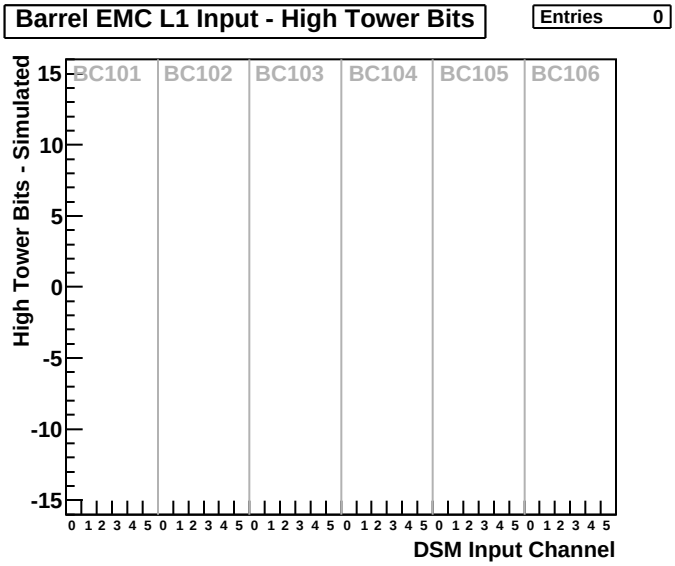

Barrel EMC L1 Input - Low Eta Sum
Entries 8.851579e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

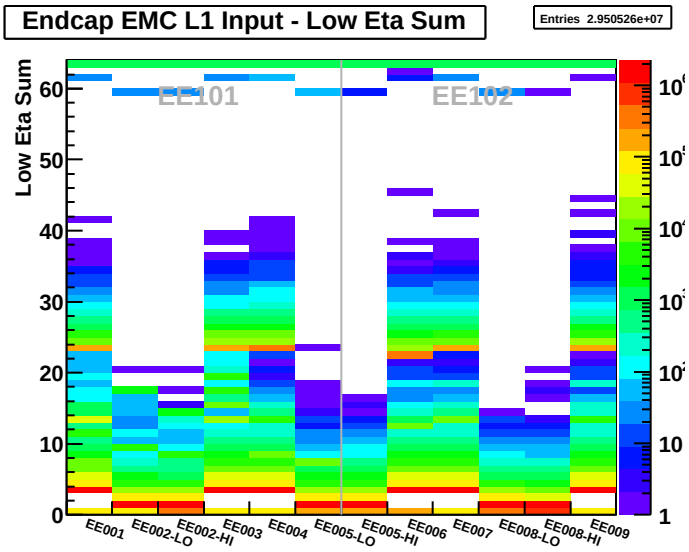

Barrel EMC L1 Input - Low Eta Sum
Entries 36
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

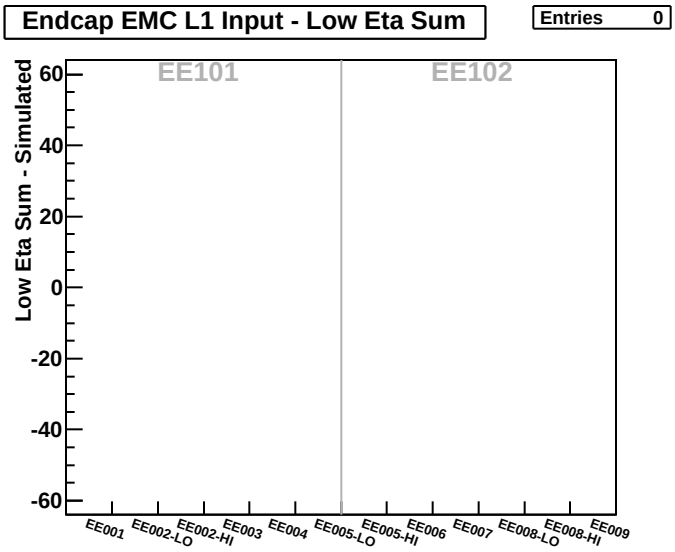

Barrel EMC L1 Input - High Eta Sum
Entries 8.851579e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

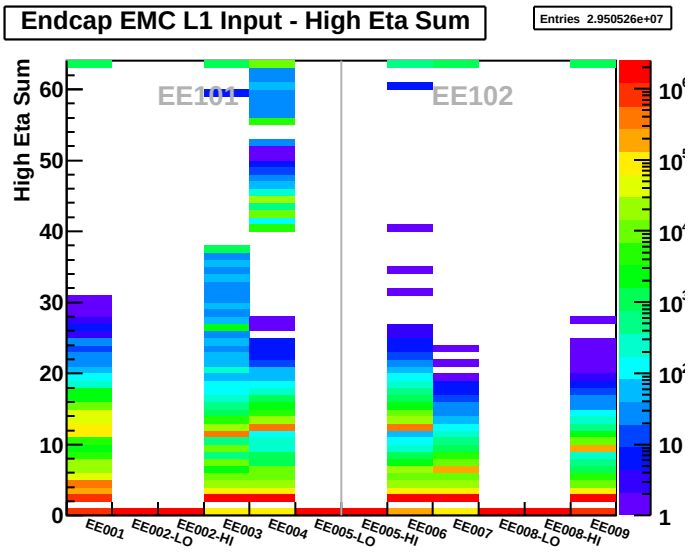

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

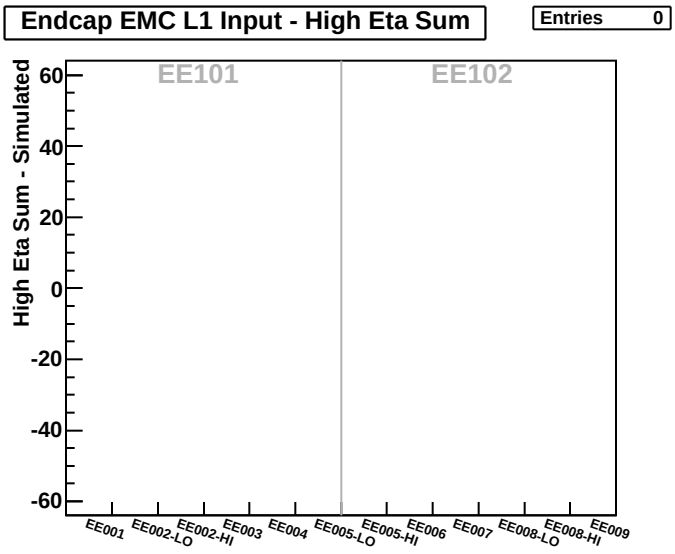

Barrel EMC L1 Input - High Tower Bits
Entries 8.851579e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

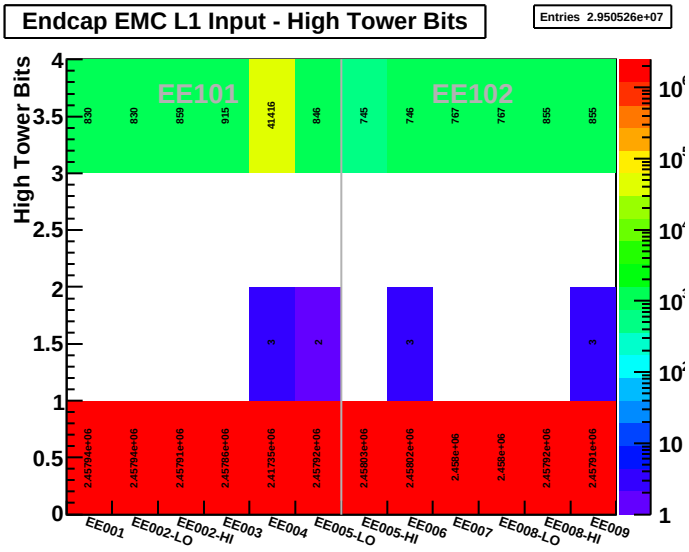

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

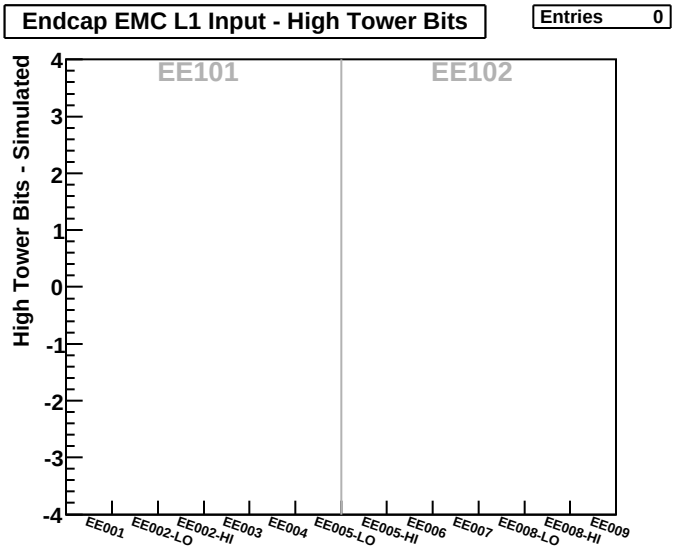

Endcap EMC L1 Input - Low Eta Sum
Entries 2.950526e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

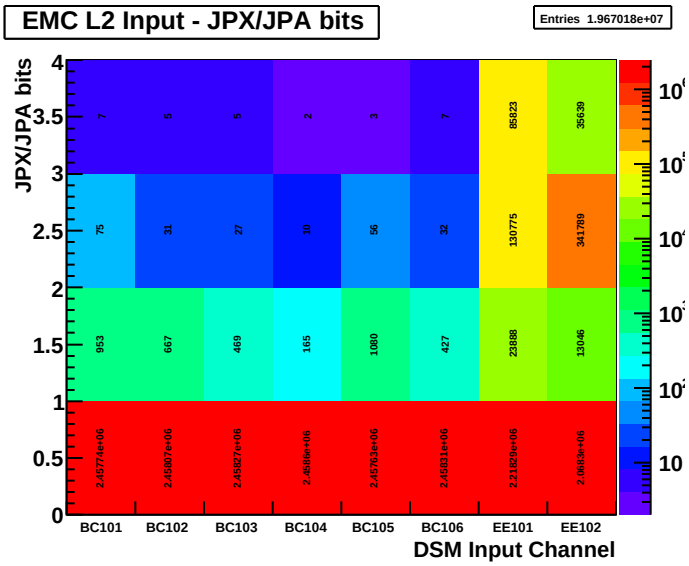

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

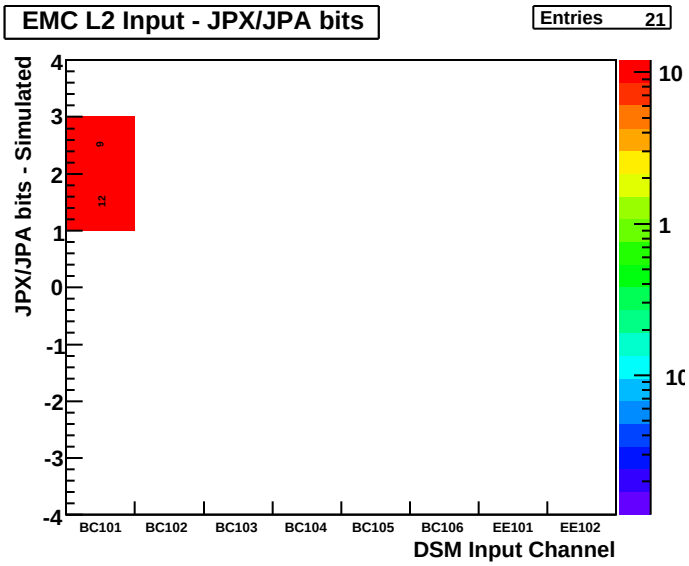

Endcap EMC L1 Input - High Eta Sum
Entries 2.950526e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

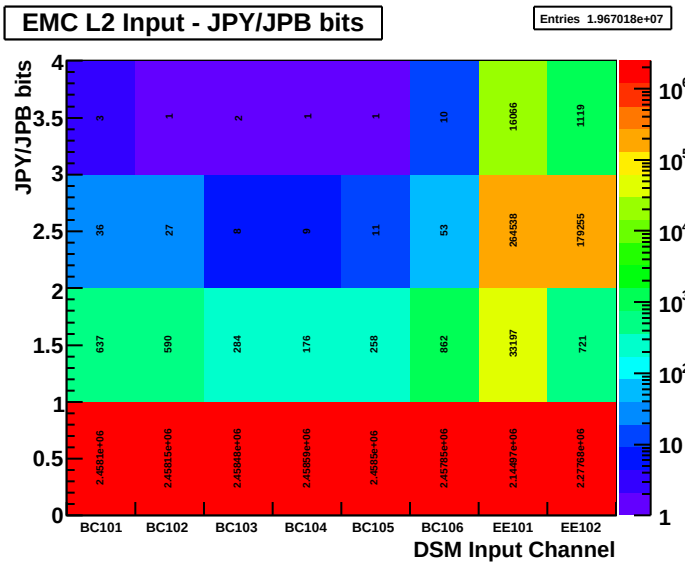

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

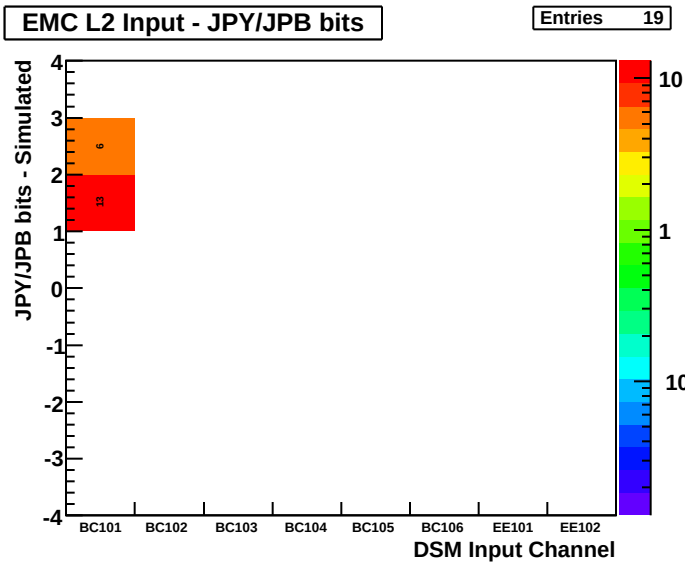

Endcap EMC L1 Input - High Tower Bits
Entries 2.950526e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

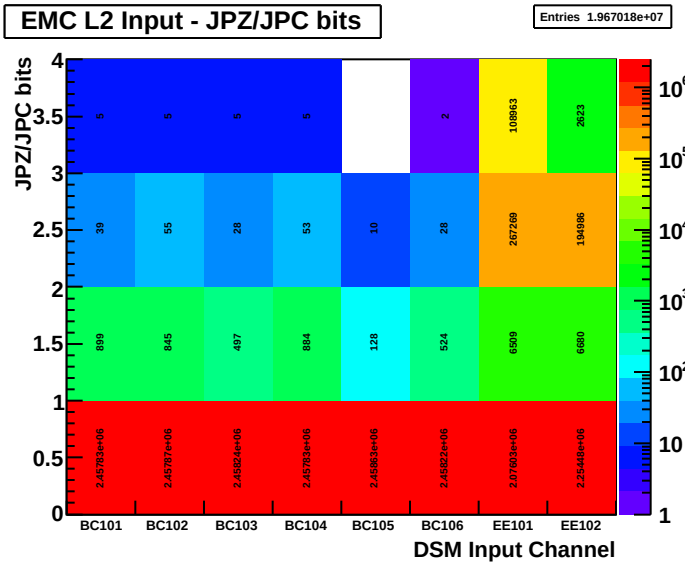

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

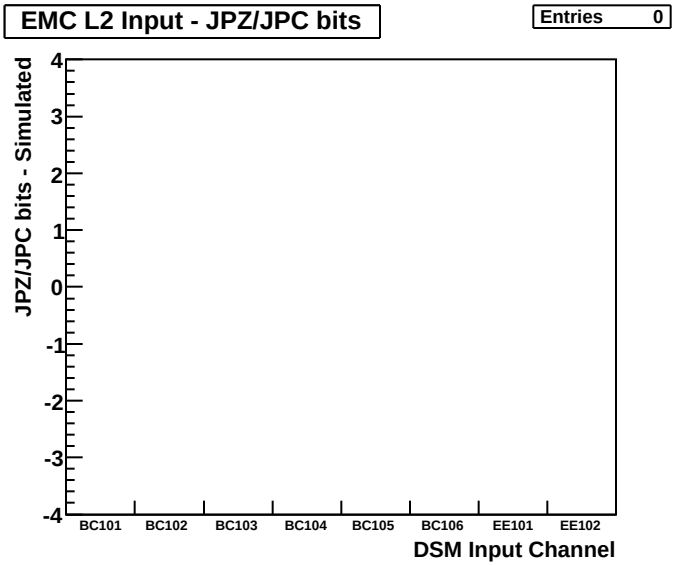

EMC L2 Input - JPX/JPA bits
Entries 1.967018e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7 5 5 2 3 7 85823 35639
75 31 27 10 56 32 130775 341789
953 667 469 165 1080 427 23888 13046
2.45774e+06 2.45807e+06 2.45827e+06 2.4586e+06 2.45763e+06 2.45831e+06 2.21829e+06 2.0693e+06

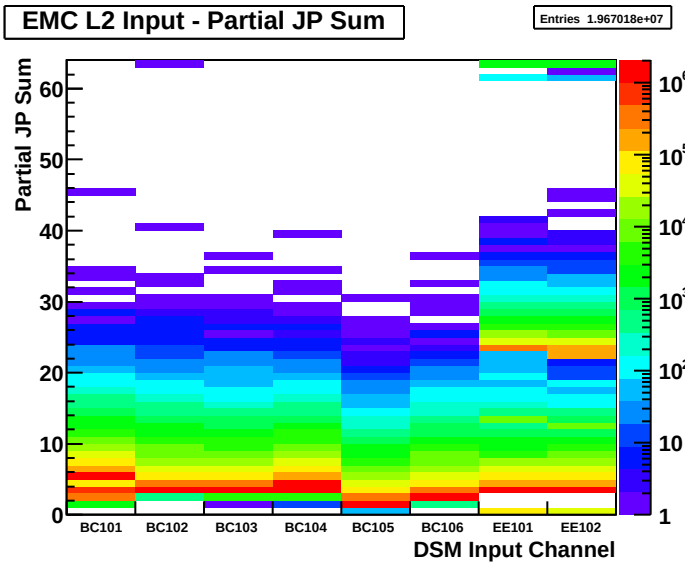

EMC L2 Input - JPX/JPA bits
Entries 21
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
9
12

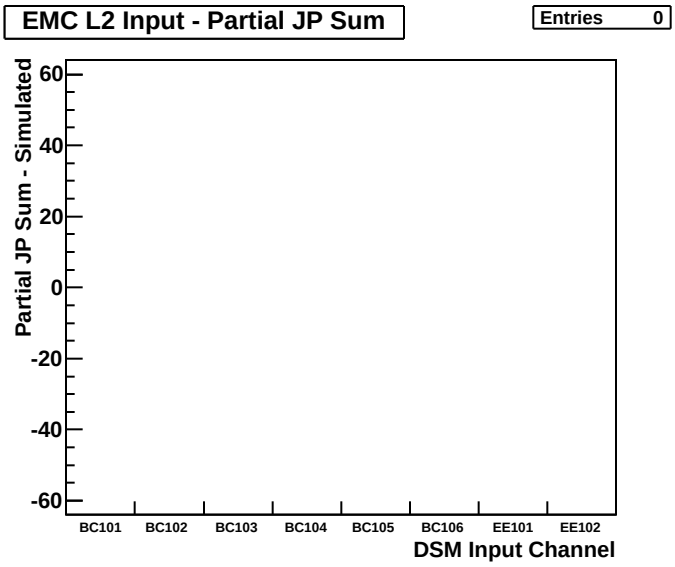

EMC L2 Input - JPY/JPB bits
Entries 1.967018e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3 1 2 1 1 10 16066 1119
36 27 8 9 11 53 264538 179255
637 590 284 176 258 862 33197 721
2.4581e+06 2.45815e+06 2.45848e+06 2.45859e+06 2.4585e+06 2.45785e+06 2.14497e+06 2.27768e+06

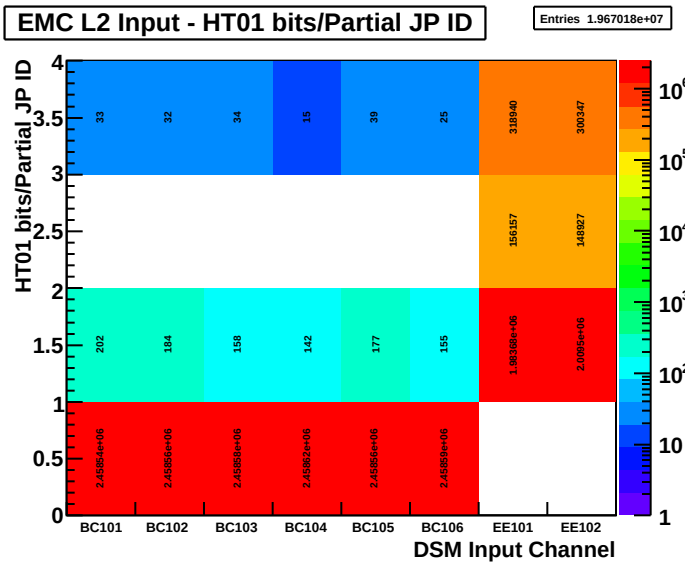

EMC L2 Input - JPY/JPB bits
Entries 19
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
6
13

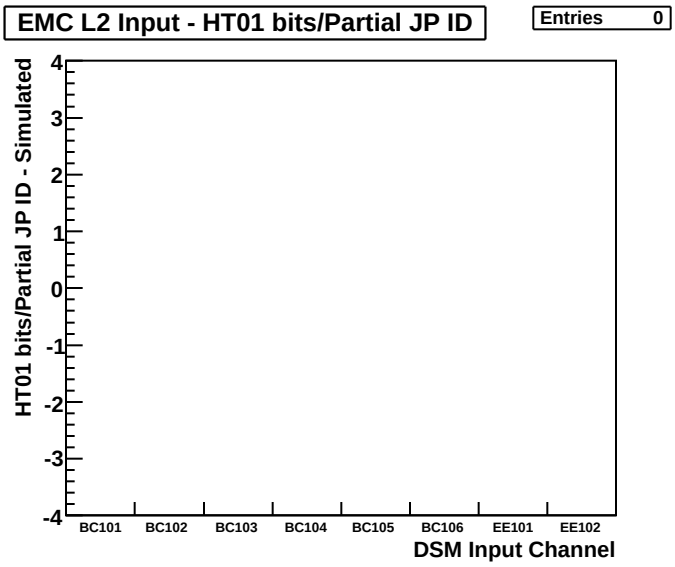

EMC L2 Input - JPZ/JPC bits
Entries 1.967018e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5 5 5 5 2 108863 2623
39 55 28 53 10 28 267269 194986
899 845 497 884 128 524 6509 6680
2.45783e+06 2.45787e+06 2.45824e+06 2.45783e+06 2.45863e+06 2.45822e+06 2.07603e+06 2.25448e+06

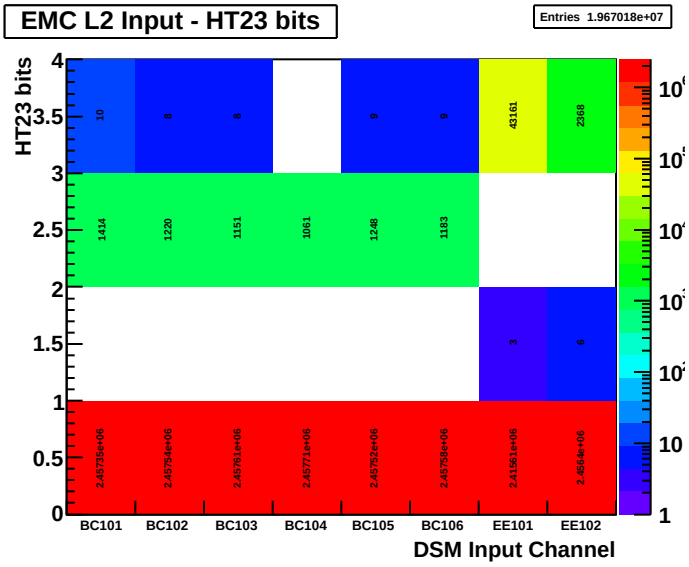

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

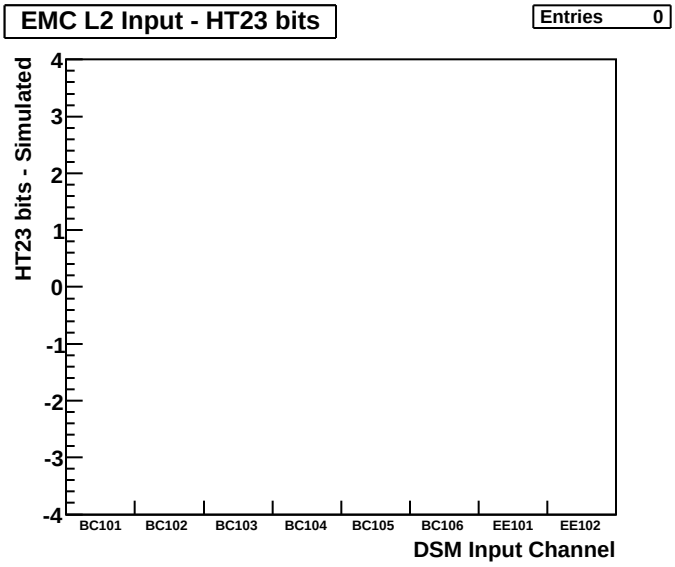

EMC L2 Input - Partial JP Sum
Entries 1.967018e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

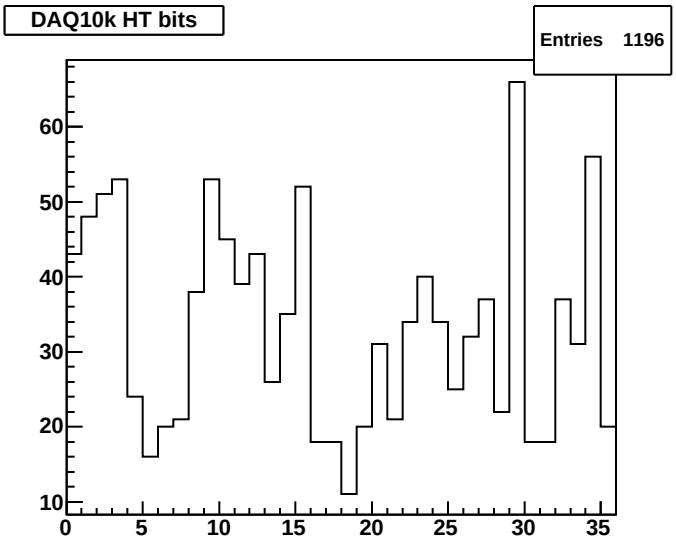

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

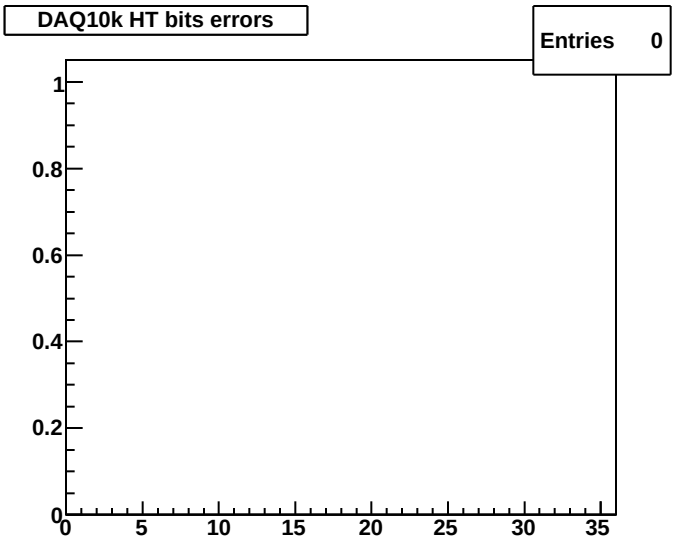

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.967018e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

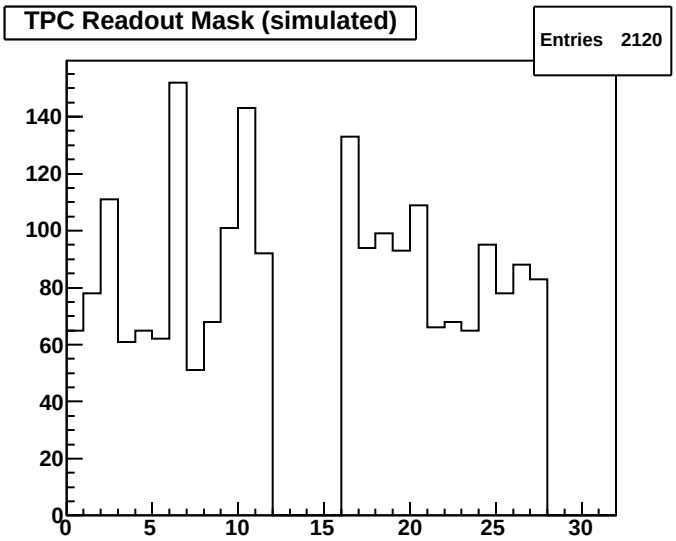

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

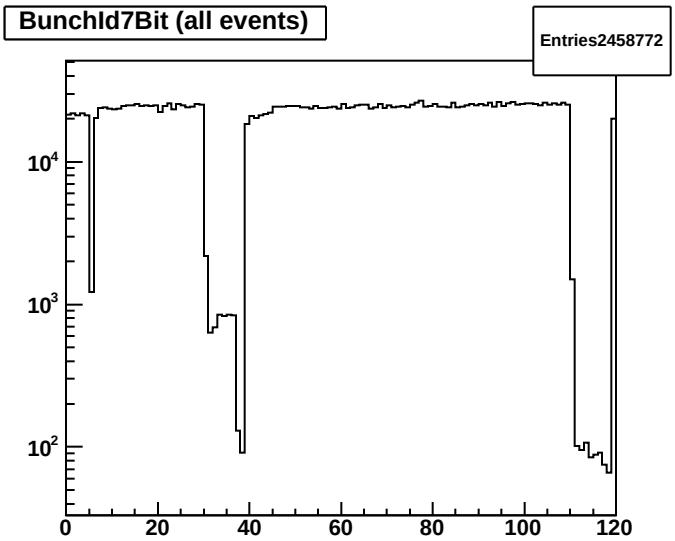

EMC L2 Input - HT23 bits
Entries 1.967018e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

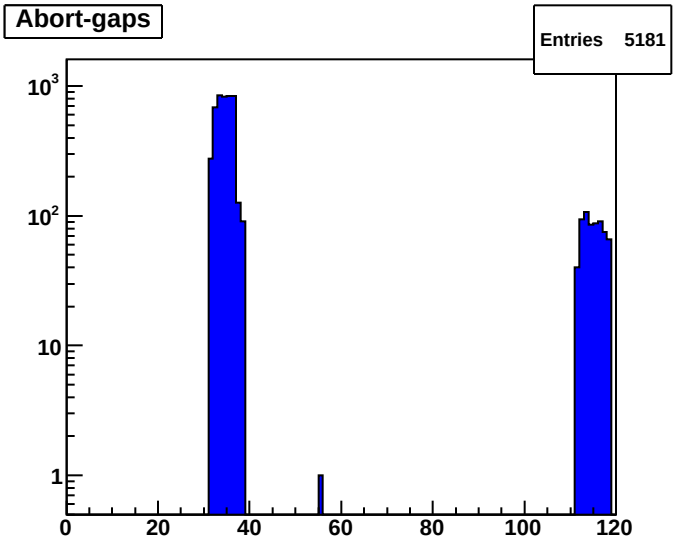

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

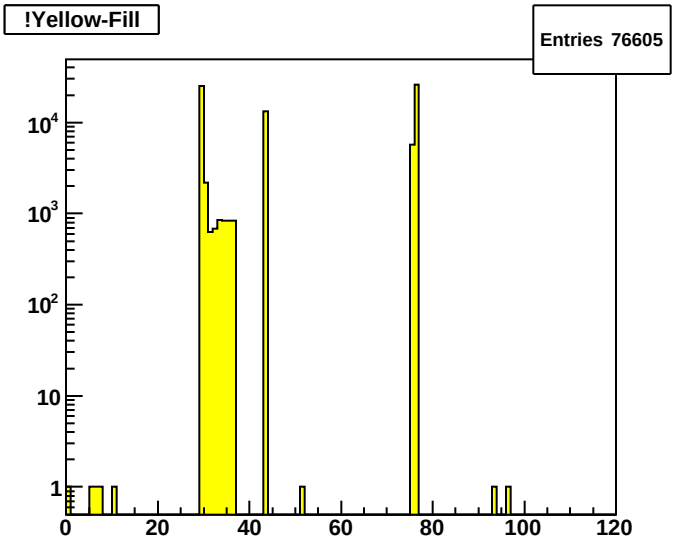

DAQ10k HT bits
Entries 1196

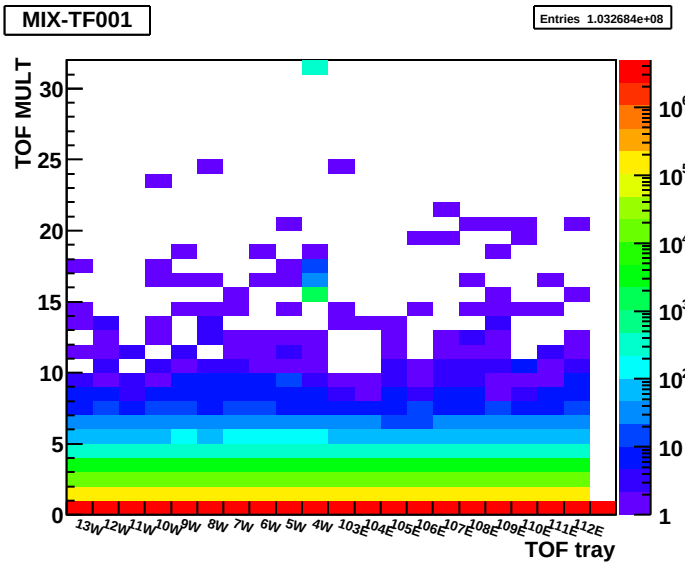

DAQ10k HT bits errors
Entries 0

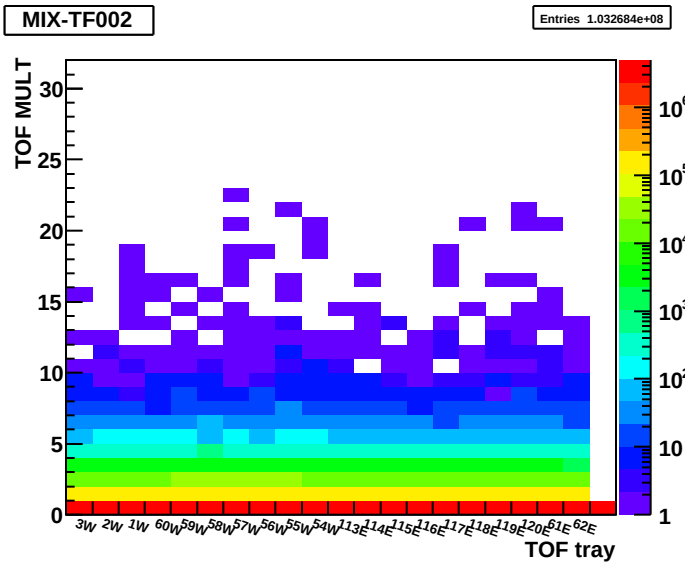

TPC Readout Mask (simulated)
Entries 2120

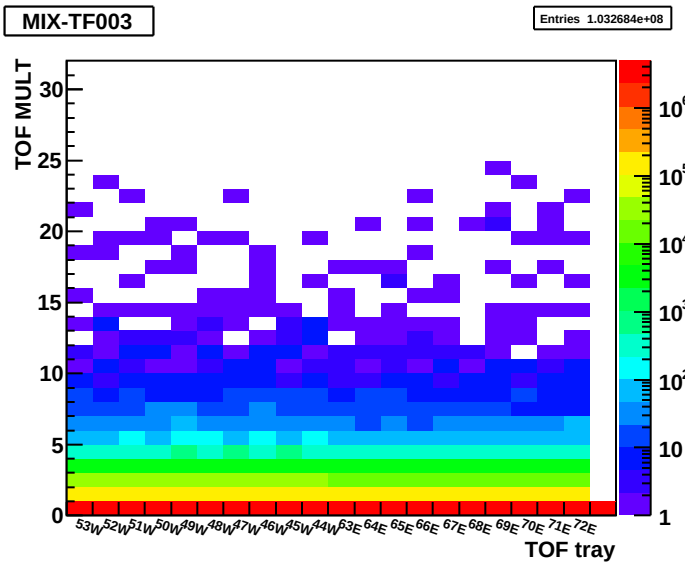

BunchId7Bit (all events)
Entries2458772

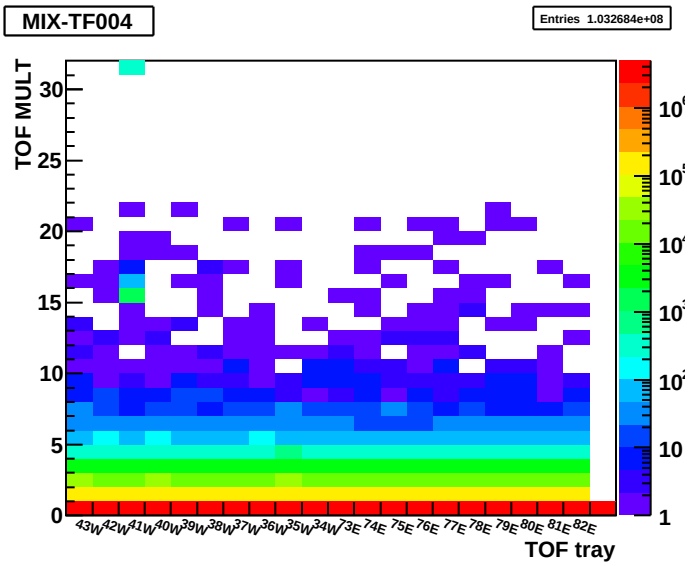

Abort-gaps
Entries 5181

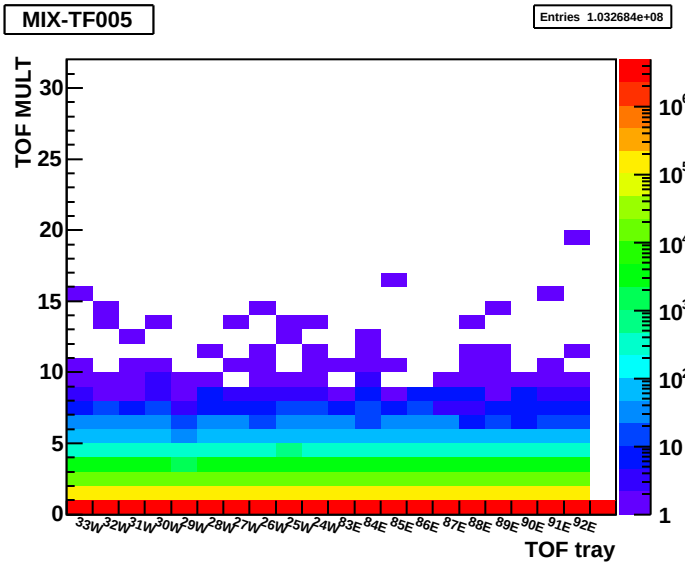

!Yellow-Fill
Entries 76605

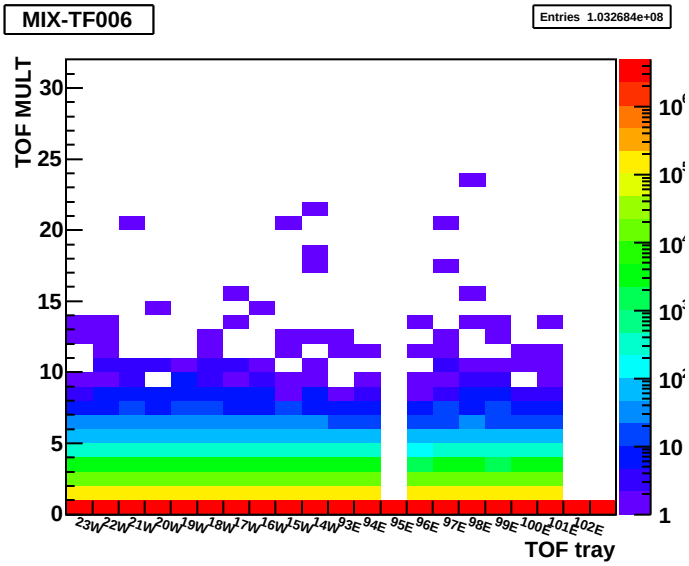

MIX-TF001
Entries 1.032684e+08
TOF MULT
TOF tray

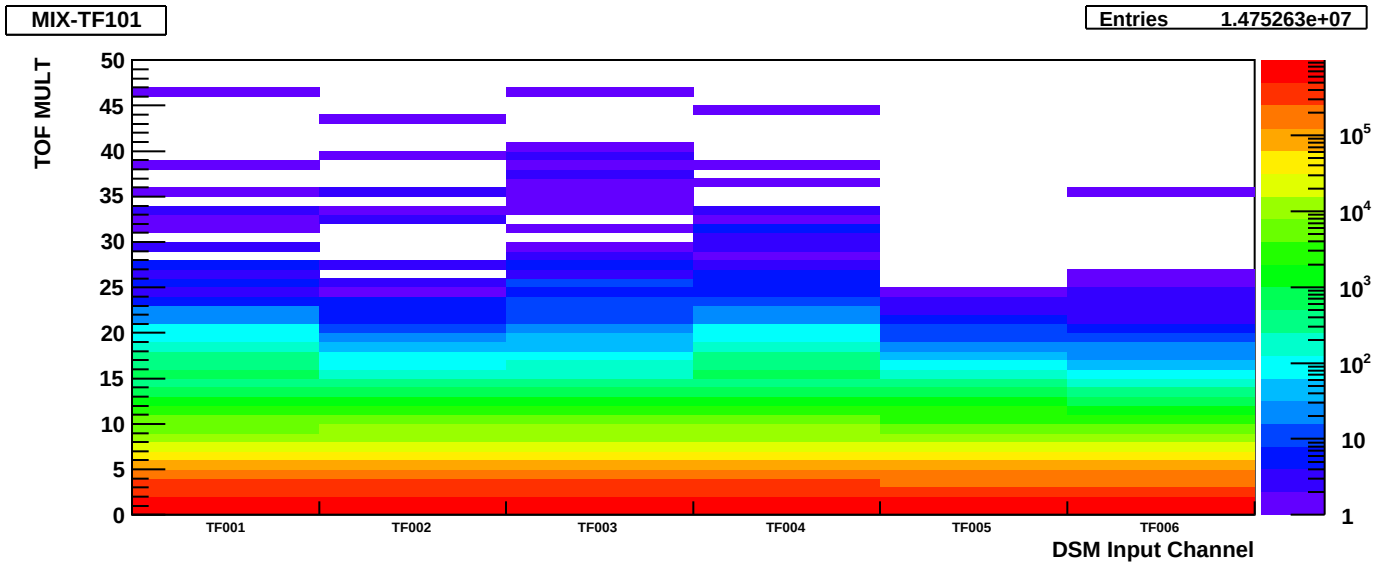

MIX-TF002
Entries 1.032684e+08
TOF MULT
TOF tray

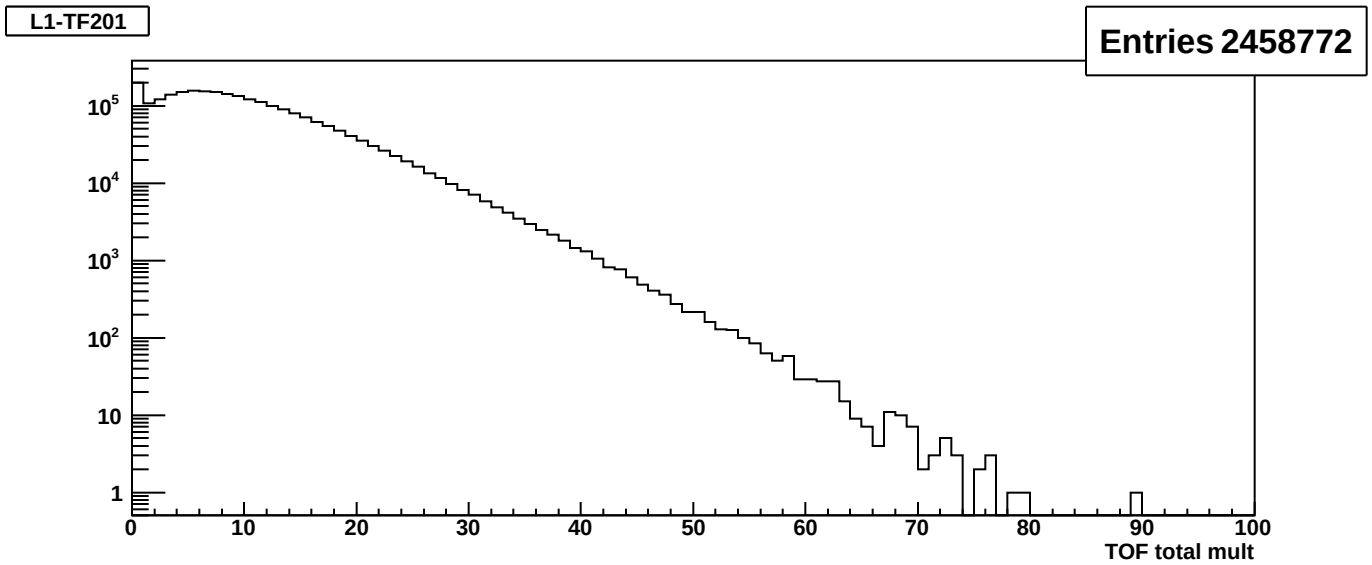

MIX-TF003
Entries 1.032684e+08
TOF MULT
TOF tray

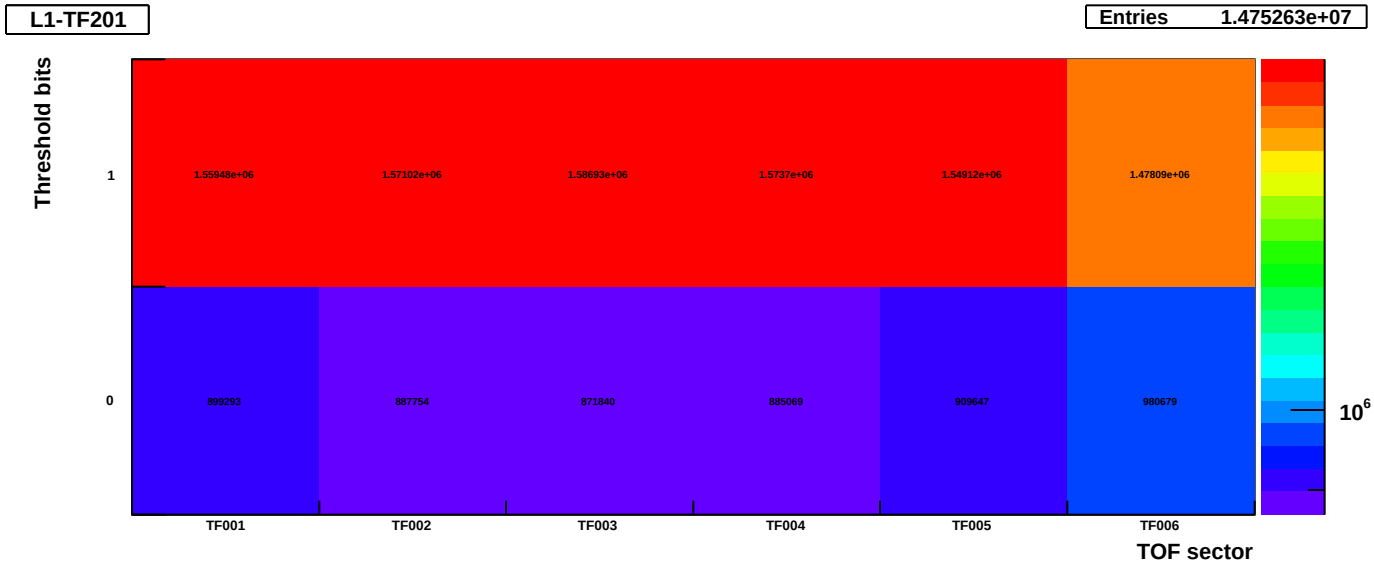

MIX-TF004
Entries 1.032684e+08
TOF MULT
TOF tray

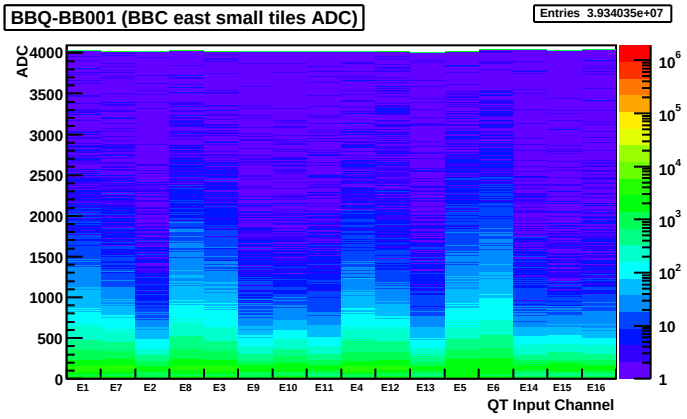

MIX-TF005
Entries 1.032684e+08
TOF MULT
TOF tray

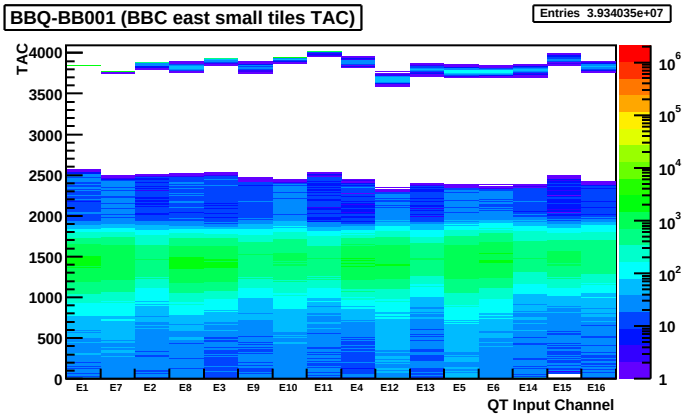

MIX-TF006
Entries 1.032684e+08
TOF MULT
TOF tray

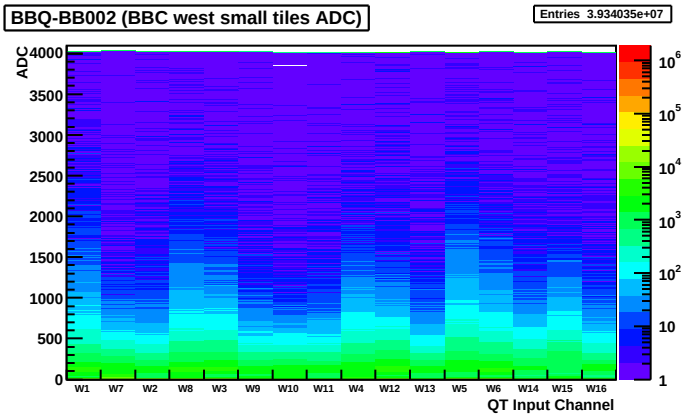

MIX-TF101
Entries 1.475263e+07
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^5$
$10^4$
$10^3$
$10^2$
10
1

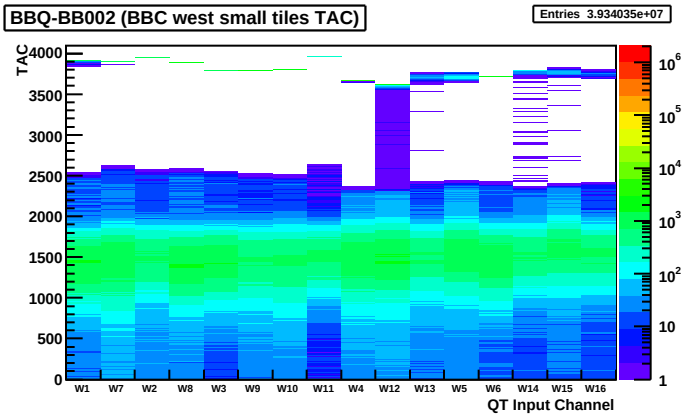

L1-TF201
Entries 2458772
$10^5$
$10^4$
$10^3$
$10^2$
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

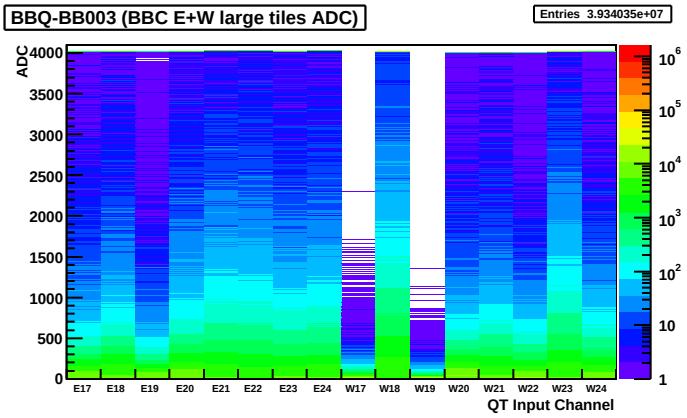

L1-TF201
Entries 1.475263e+07
Threshold bits
1
0
1.55948e+06
1.57102e+06
1.58693e+06
1.5737e+06
1.54912e+06
1.47809e+06
899293
887754
871840
885069
909647
980679
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
$10^6$

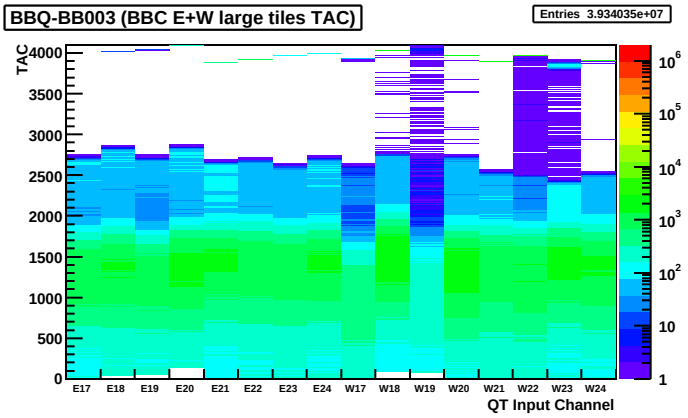

BBQ-BB001 (BBC east small tiles ADC)
Entries 3.934035e+07
ADC
QT Input Channel

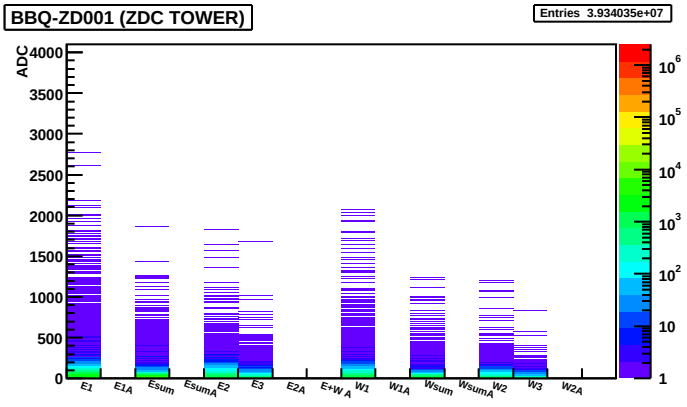

BBQ-BB001 (BBC east small tiles TAC)
Entries 3.934035e+07
TAC
QT Input Channel

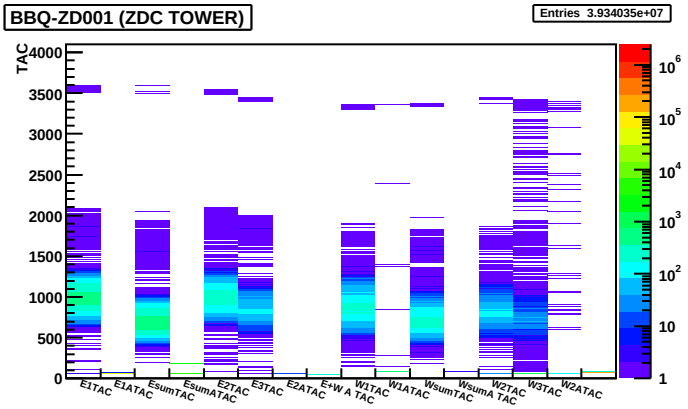

BBQ-BB002 (BBC west small tiles ADC)
Entries 3.934035e+07
ADC
QT Input Channel

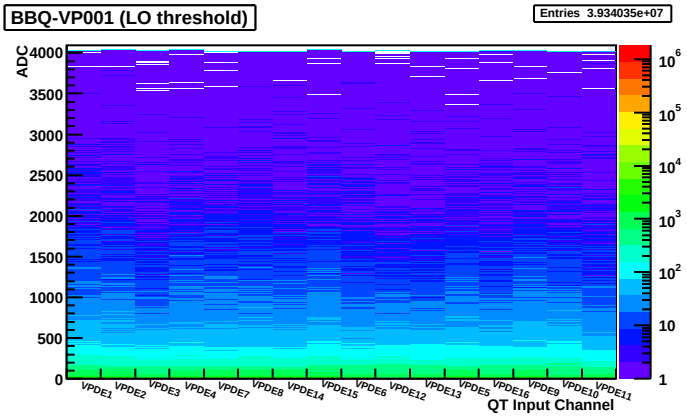

BBQ-BB002 (BBC west small tiles TAC)
Entries 3.934035e+07
TAC
QT Input Channel

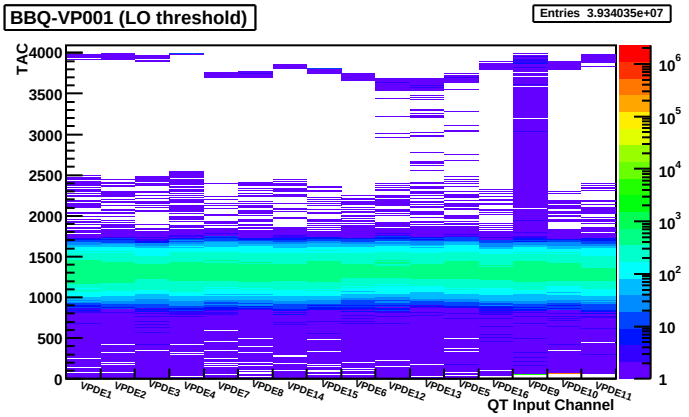

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3.934035e+07
ADC
QT Input Channel

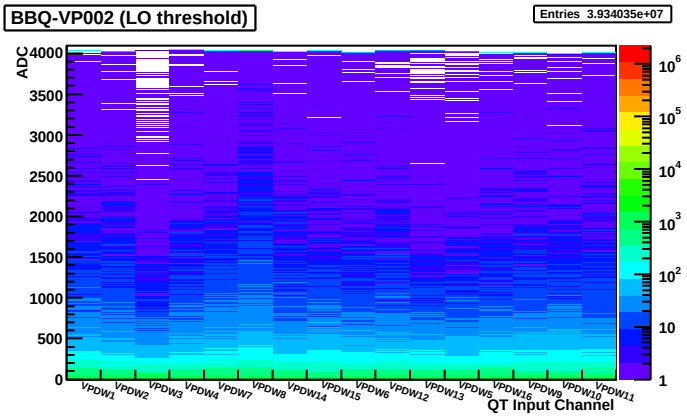

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3.934035e+07
TAC
QT Input Channel

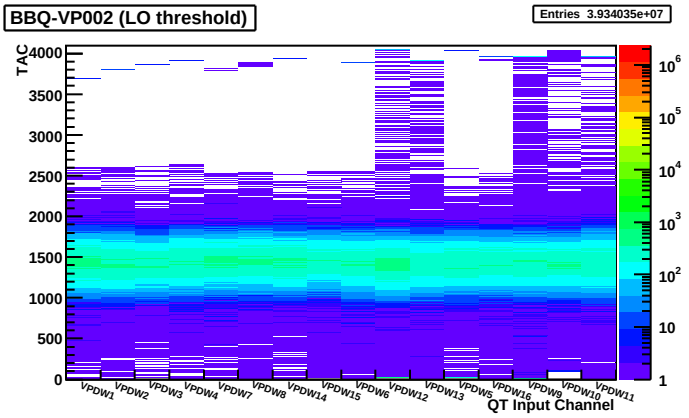

BBQ-ZD001 (ZDC TOWER)
Entries 3.934035e+07
ADC

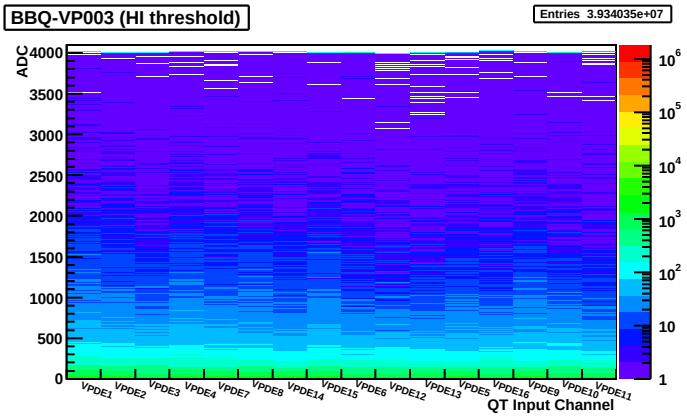

BBQ-ZD001 (ZDC TOWER)
Entries 3.934035e+07
TAC

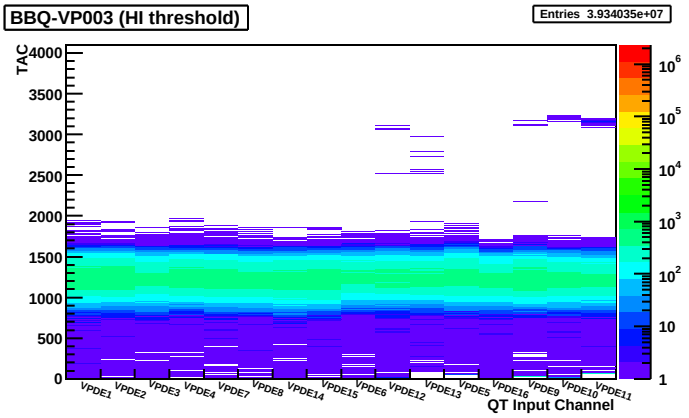

BBQ-VP001 (LO threshold)
Entries 3.934035e+07
ADC
QT Input Channel

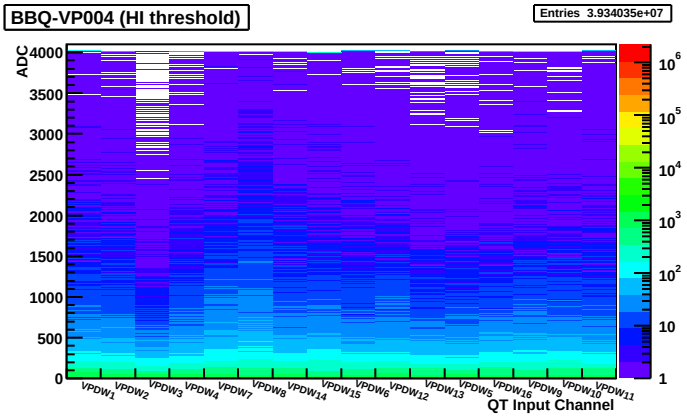

BBQ-VP001 (LO threshold)
Entries 3.934035e+07
TAC
QT Input Channel

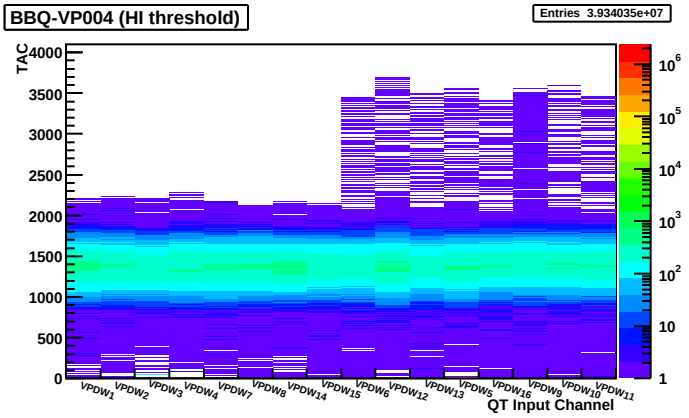

BBQ-VP002 (LO threshold)
Entries 3.934035e+07
ADC
QT Input Channel

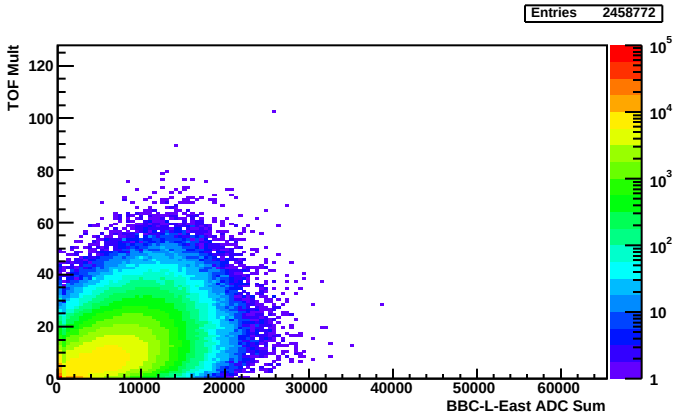

BBQ-VP002 (LO threshold)
Entries 3.934035e+07
TAC
QT Input Channel

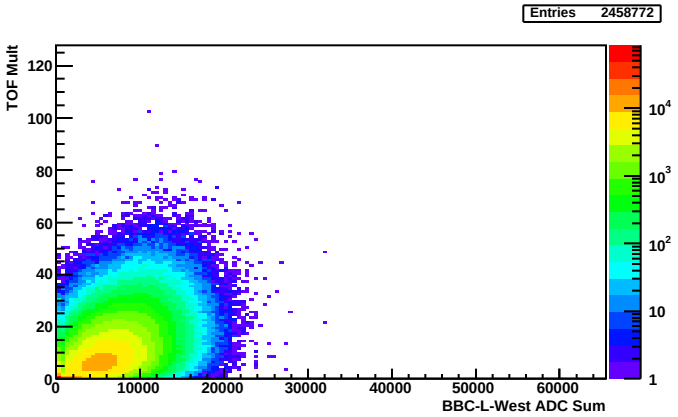

BBQ-VP003 (HI threshold)
Entries 3.934035e+07
ADC
QT Input Channel

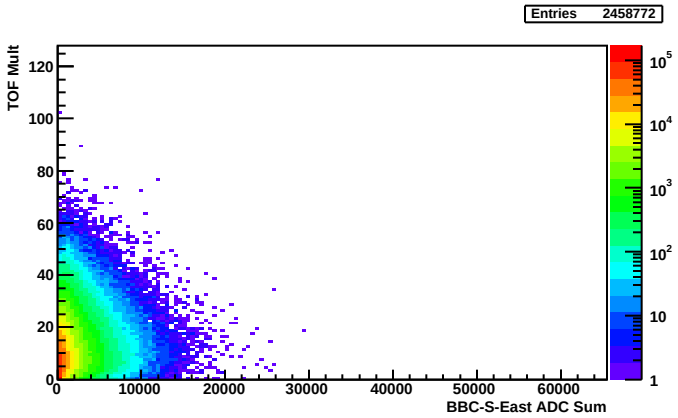

BBQ-VP003 (HI threshold)
Entries 3.934035e+07
TAC
QT Input Channel

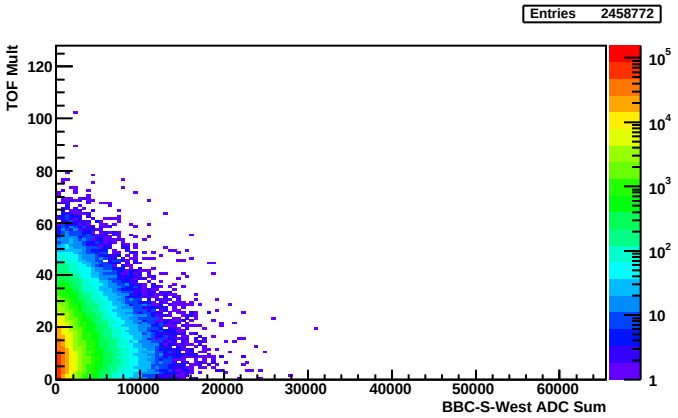

BBQ-VP004 (HI threshold)
Entries 3.934035e+07
ADC
QT Input Channel

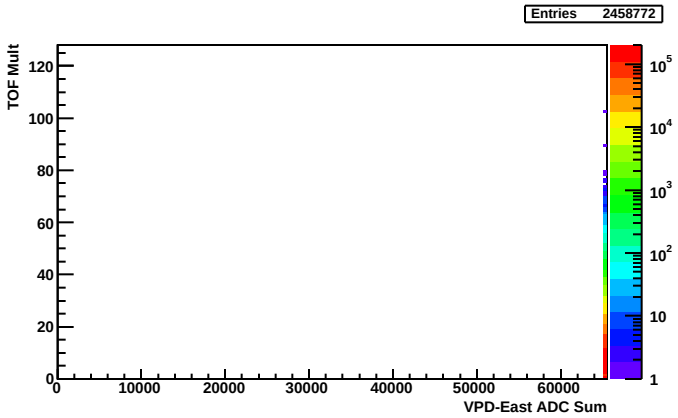

BBQ-VP004 (HI threshold)
Entries 3.934035e+07
TAC
QT Input Channel

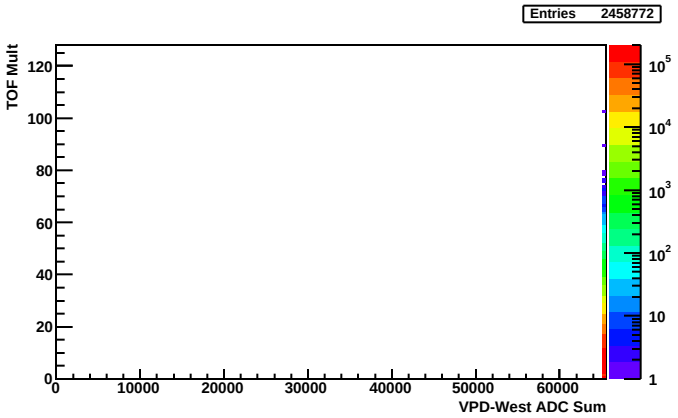

Entries 2458772
TOF Mult
BBC-L-East ADC Sum

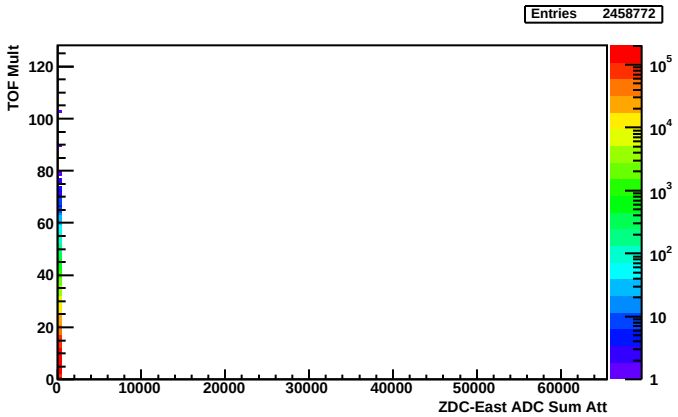

Entries 2458772
TOF Mult
BBC-L-West ADC Sum

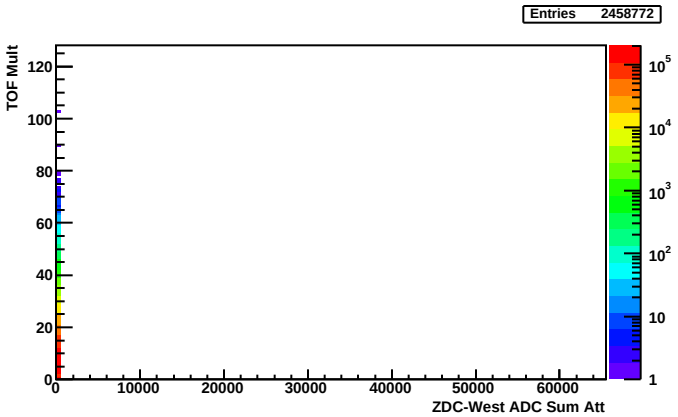

Entries 2458772
TOF Mult
BBC-S-East ADC Sum

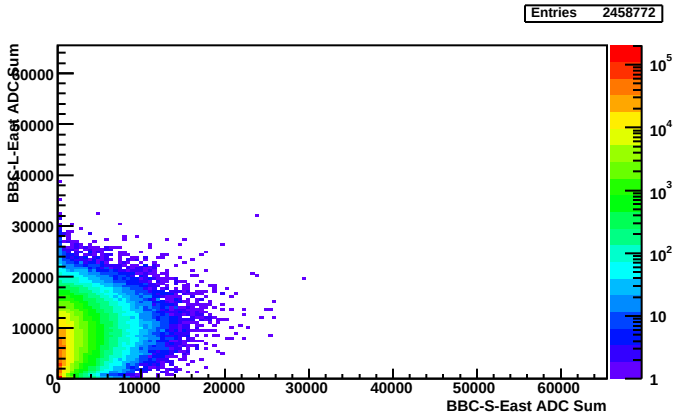

Entries 2458772
TOF Mult
BBC-S-West ADC Sum

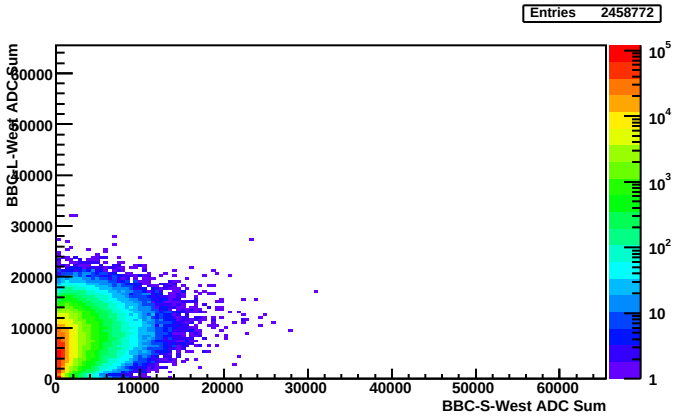

Entries 2458772
TOF Mult
VPD-East ADC Sum

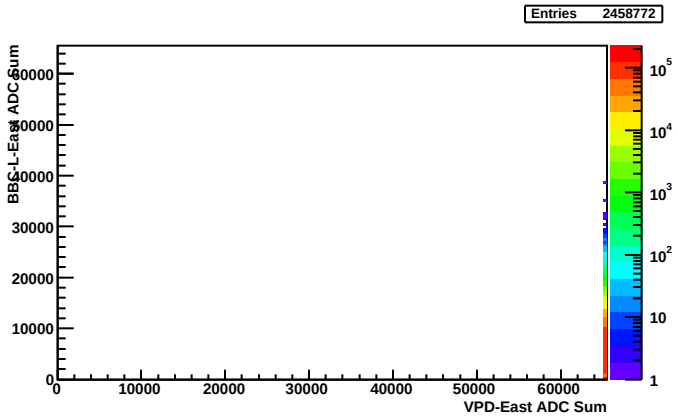

Entries 2458772
TOF Mult
VPD-West ADC Sum

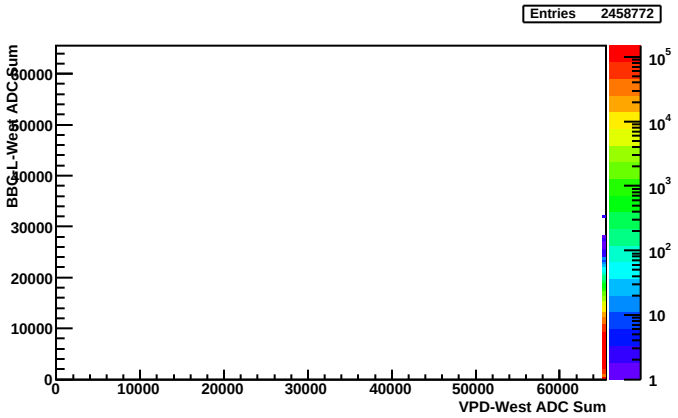

Entries 2458772
TOF Mult
ZDC-East ADC Sum Att

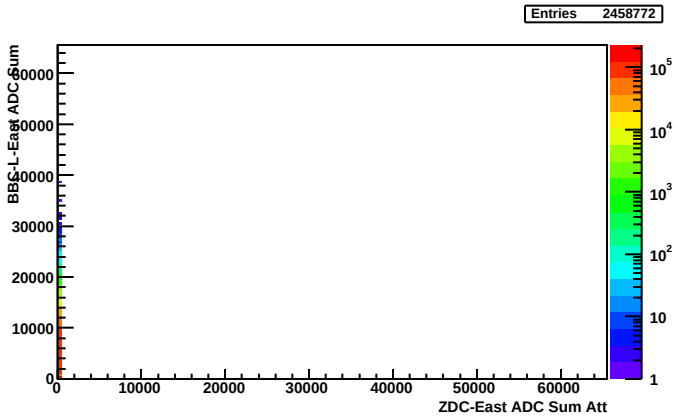

Entries 2458772
TOF Mult
ZDC-West ADC Sum Att

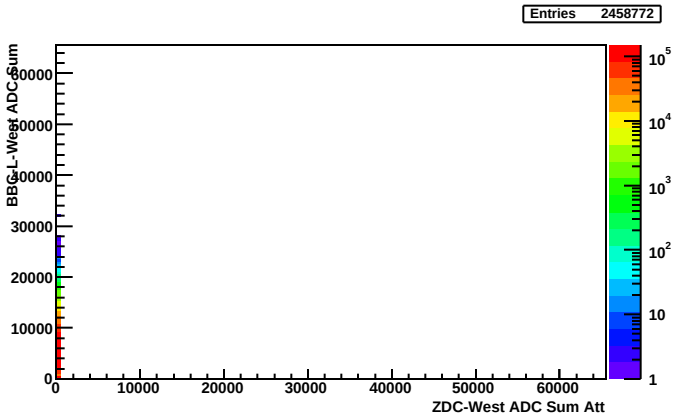

Entries 2458772
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 2458772
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 2458772
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 2458772
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 2458772
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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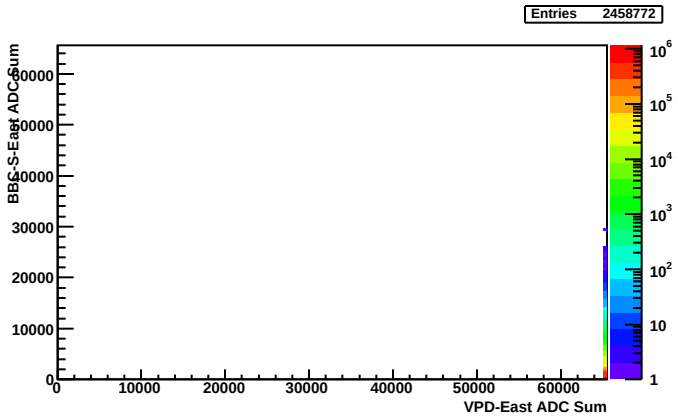
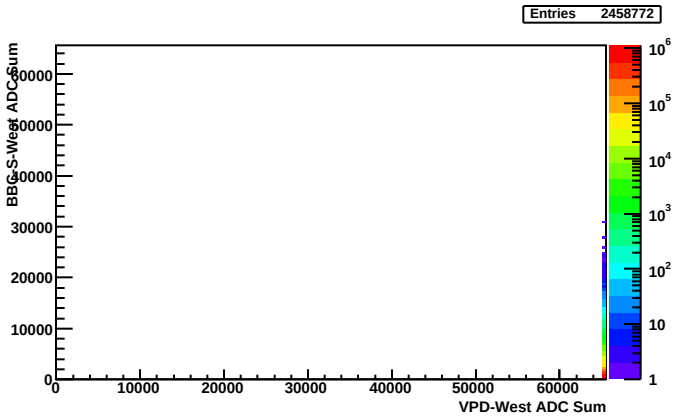
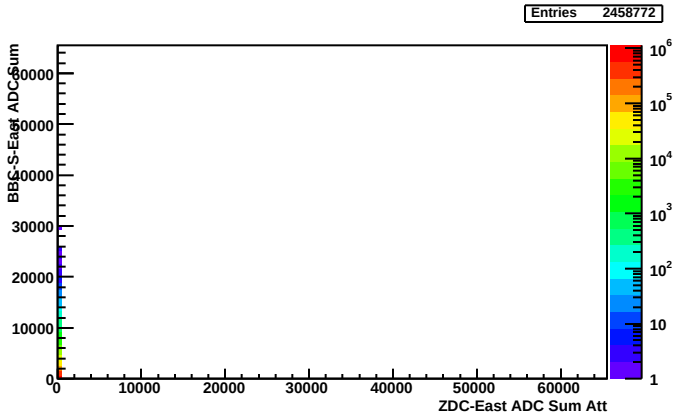
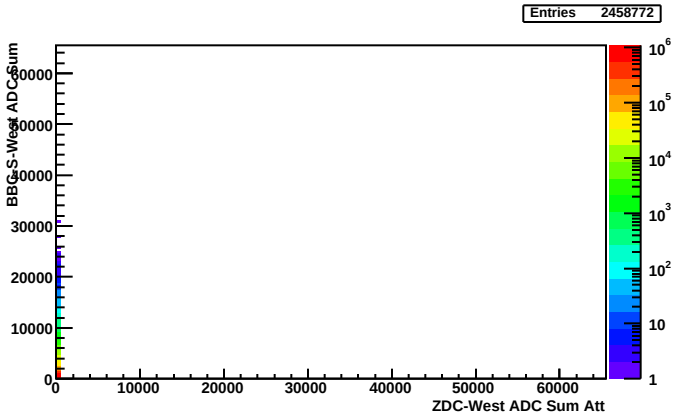
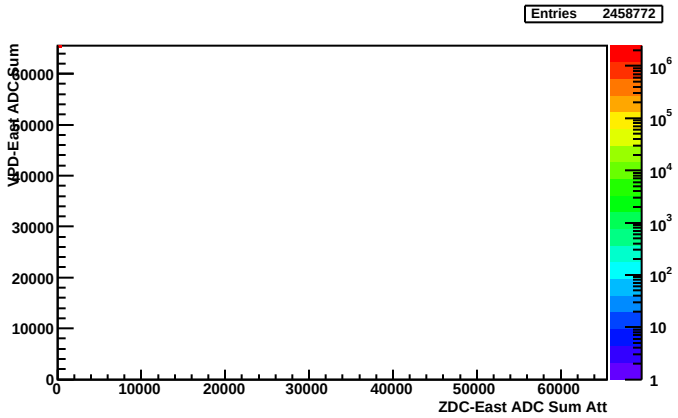
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

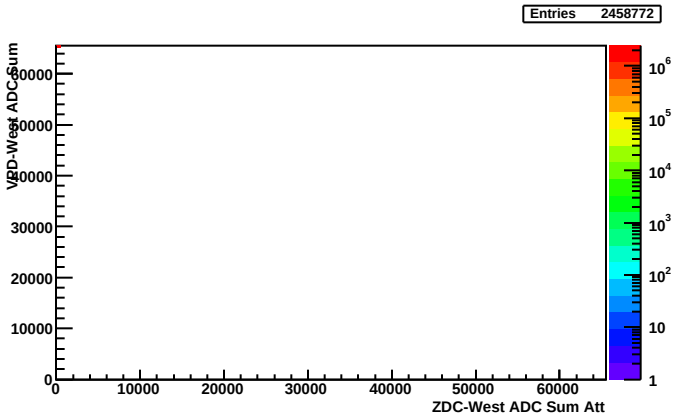

Entries 2458772
BBC-S-East ADC Sum
VPD-East ADC Sum

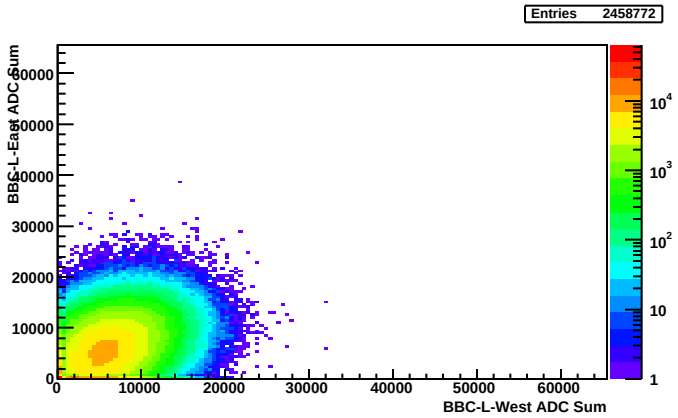

Entries 2458772
BBC-S-West ADC Sum
VPD-West ADC Sum

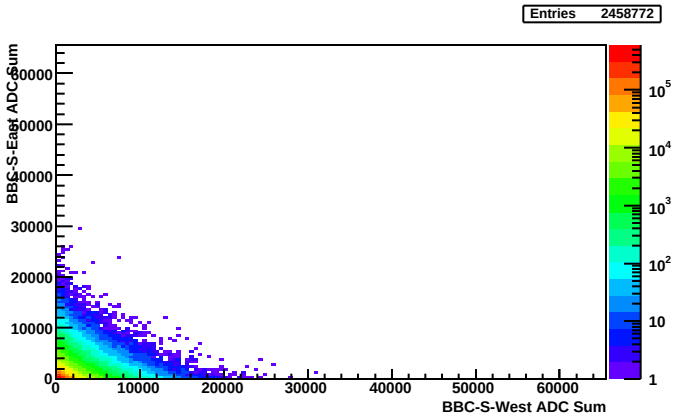

Entries 2458772
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

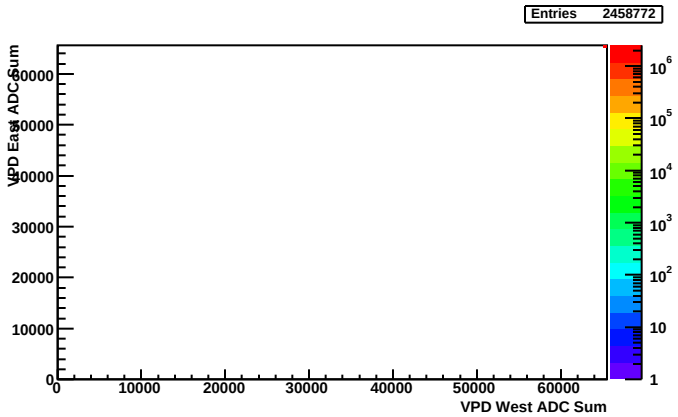

Entries 2458772
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

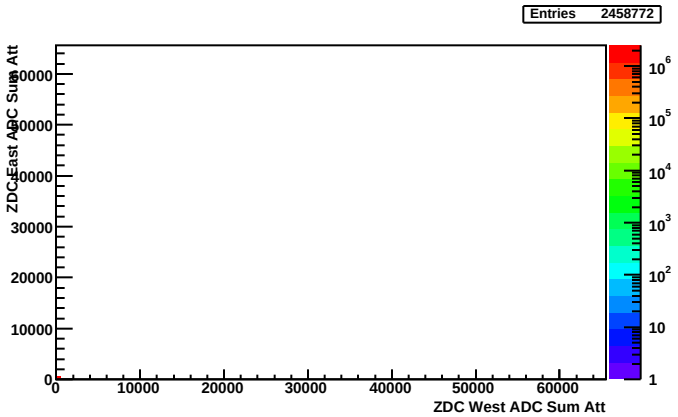

Entries 2458772
VPD-East ADC Sum
ZDC-East ADC Sum Att

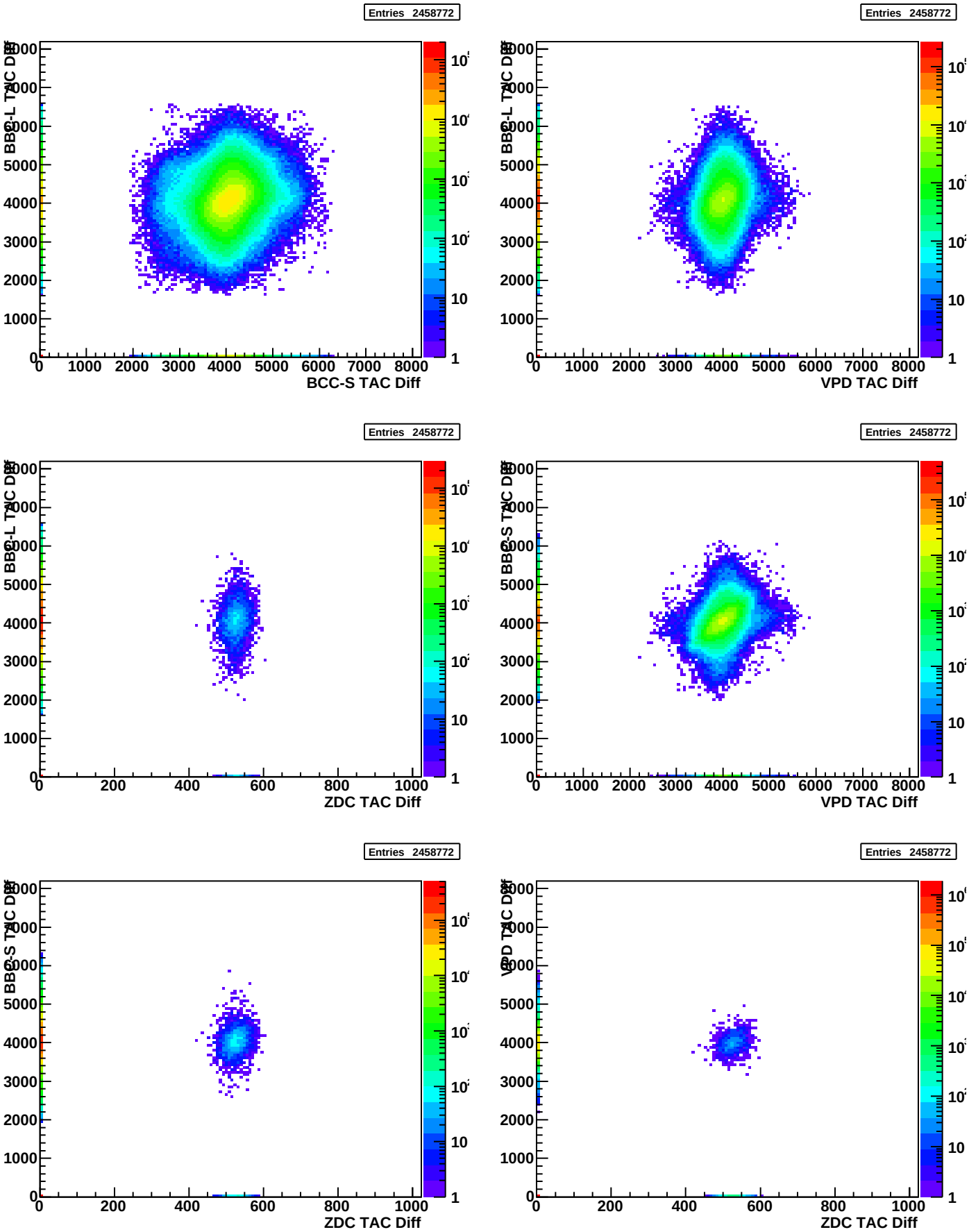

Entries 2458772
VPD-West ADC Sum
ZDC-West ADC Sum Att

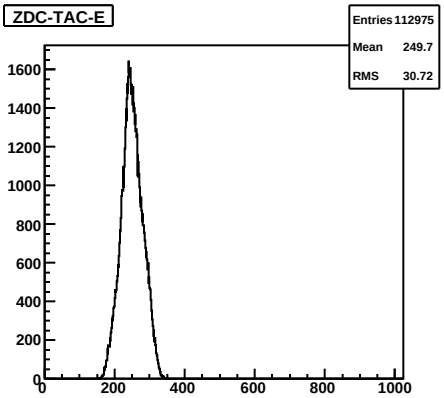

Entries 2458772
BBC-L-East ADC Sum
BBC-L-West ADC Sum

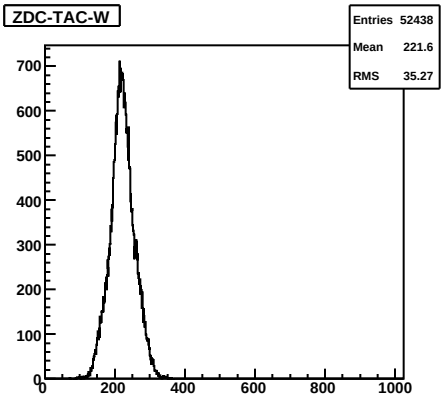

Entries 2458772
BBC-S-East ADC Sum
BBC-S-West ADC Sum

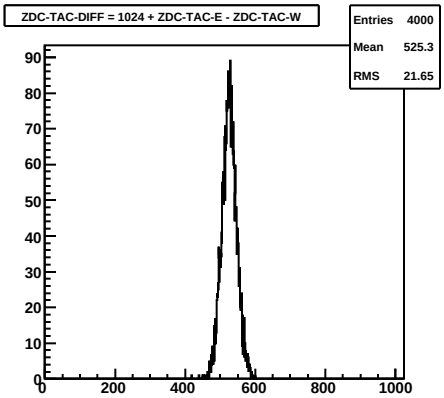

Entries 2458772
VPD East ADC Sum
VPD West ADC Sum

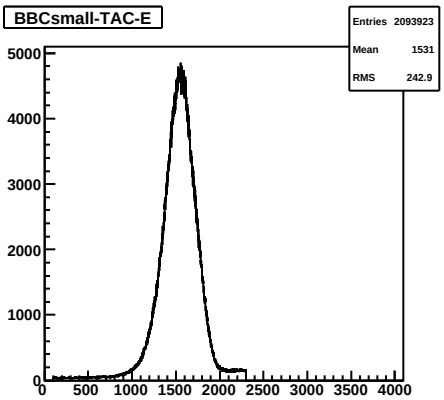

Entries 2458772
ZDC East ADC Sum Att
ZDC West ADC Sum Att

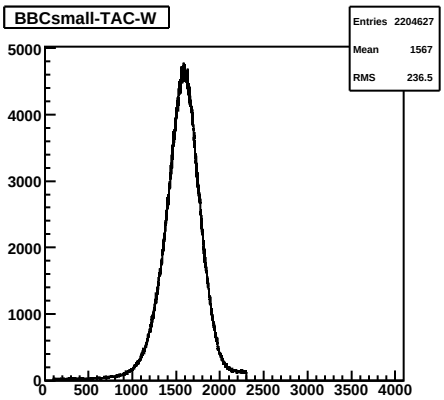

Entries 2458772
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2458772
BBC-L TAC Diff
VPD TAC Diff
Entries 2458772
BBC-L TAC Diff
ZDC TAC Diff
Entries 2458772
BBC-S TAC Diff
VPD TAC Diff
Entries 2458772
BBC-S TAC Diff
ZDC TAC Diff
Entries 2458772
VPD TAC Diff
ZDC TAC Diff

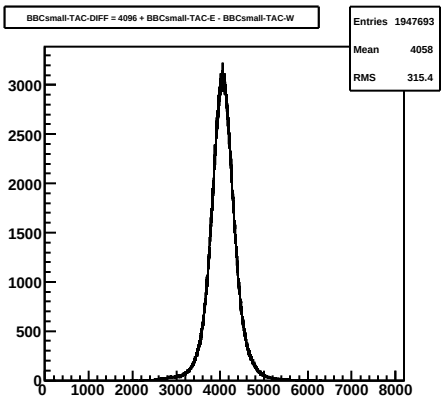

ZDC-TAC-E
Entries 112975
Mean 249.7
RMS 30.72

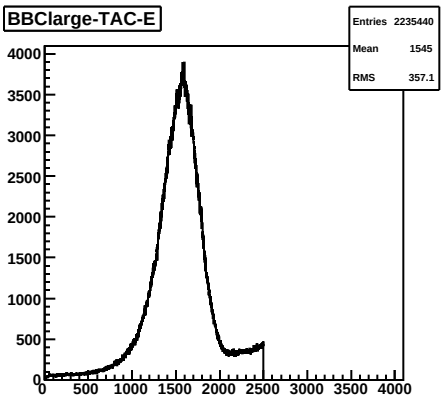

ZDC-TAC-W
Entries 52438
Mean 221.6
RMS 35.27

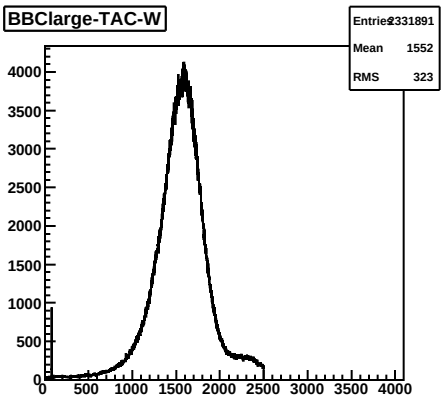

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 4000
Mean 525.3
RMS 21.65

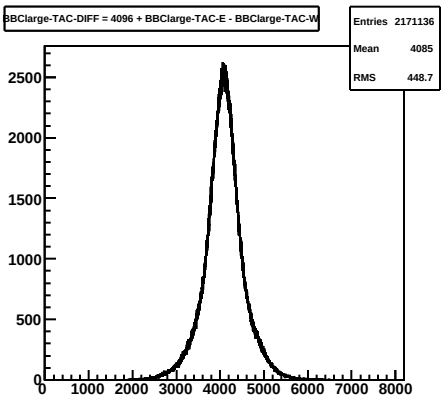

BBCsmall-TAC-E
Entries 2093923
Mean 1531
RMS 242.9

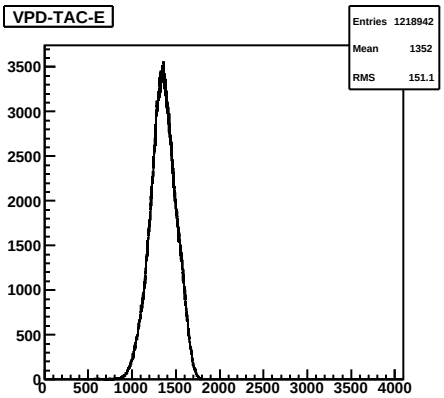

BBCsmall-TAC-W
Entries 2204627
Mean 1567
RMS 236.5

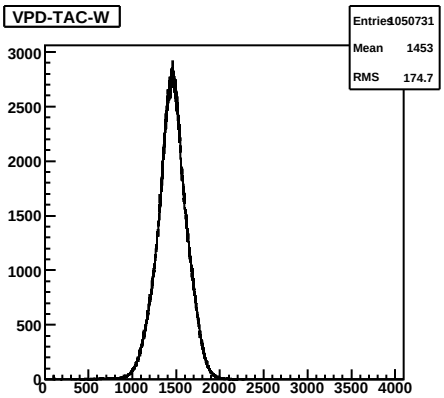

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1947693
Mean 4058
RMS 315.4

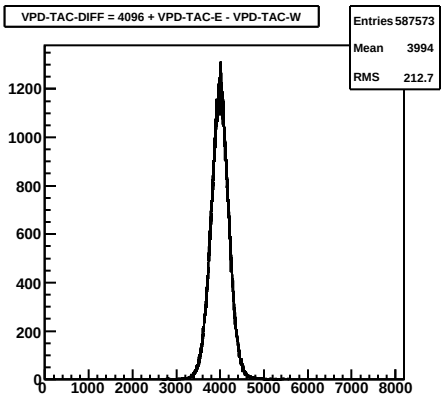

BBClarge-TAC-E
Entries 2235440
Mean 1545
RMS 357.1

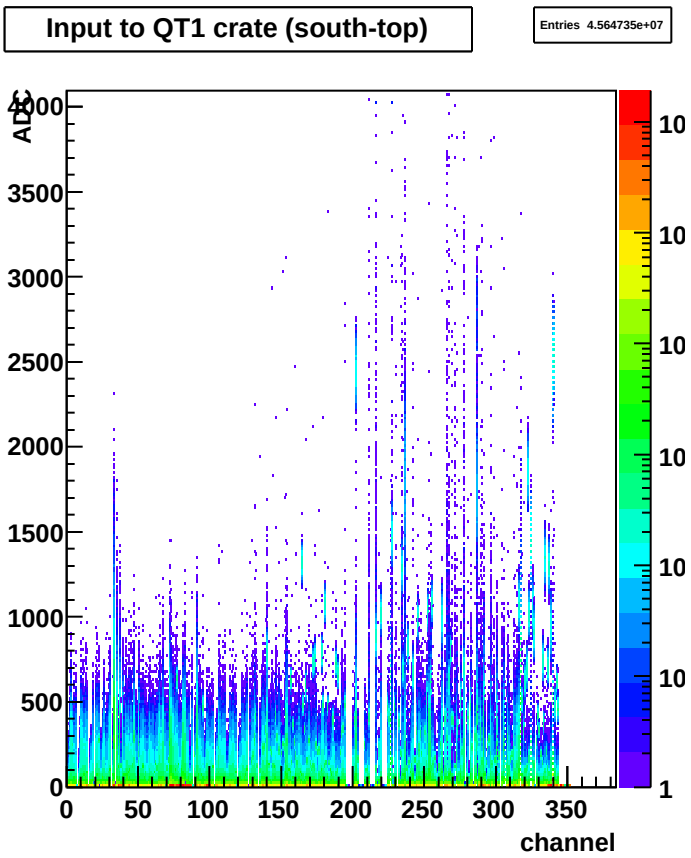

BBClarge-TAC-W
Entries 2331891
Mean 1552
RMS 323

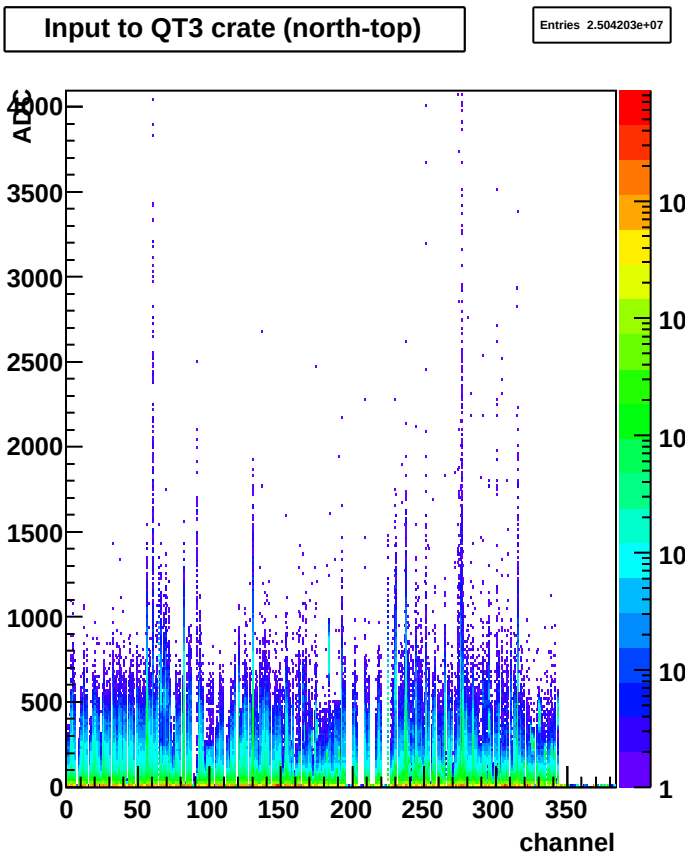

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2171136
Mean 4085
RMS 448.7

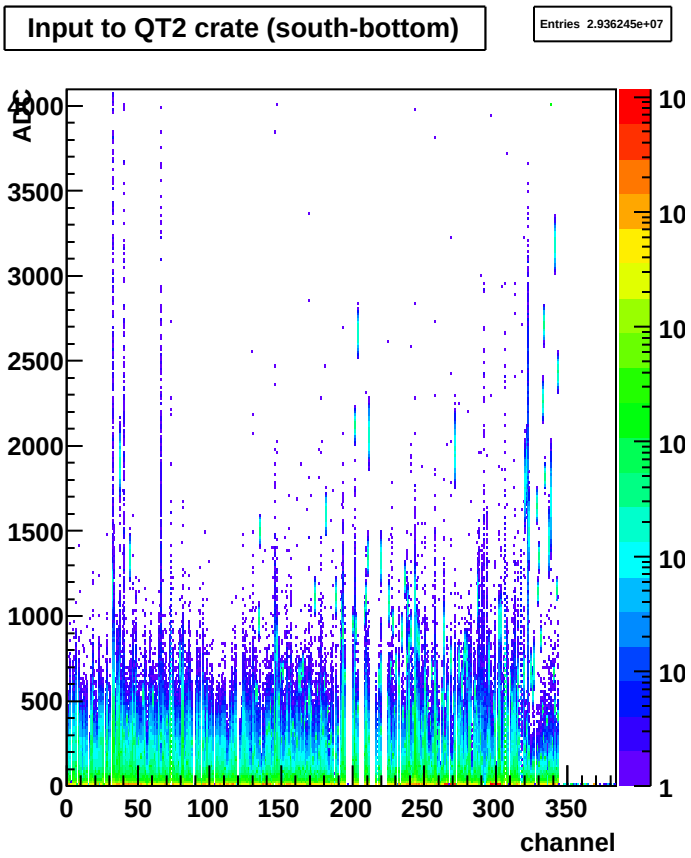

VPD-TAC-E
Entries 1218942
Mean 1352
RMS 151.1

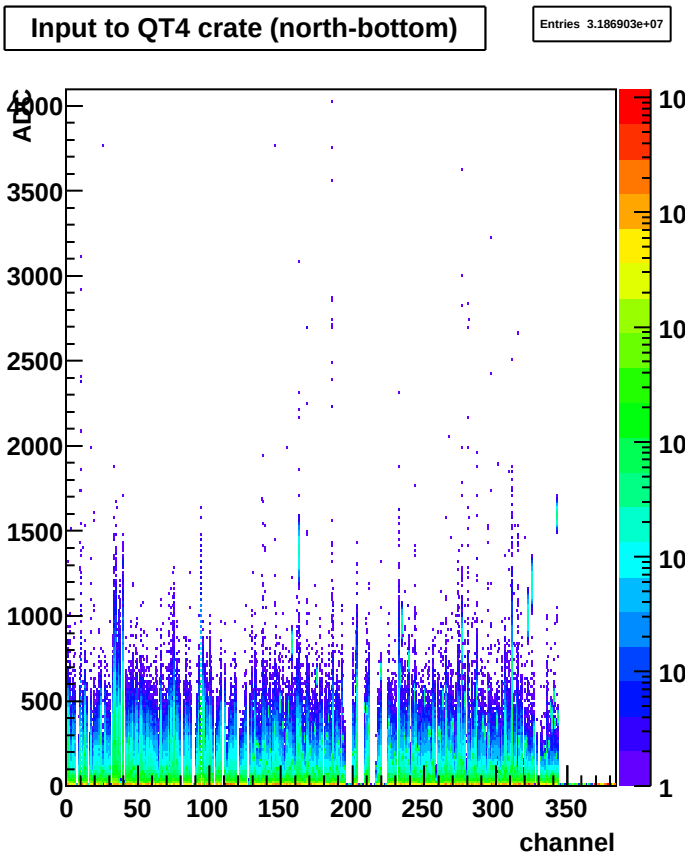

VPD-TAC-W
Entries 1050731
Mean 1453
RMS 174.7

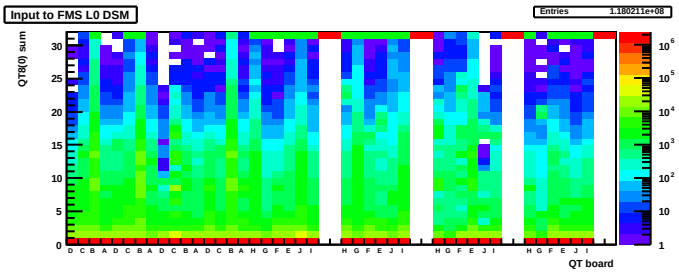

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 587573
Mean 3994
RMS 212.7

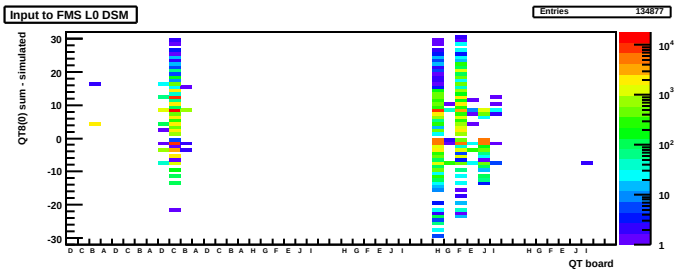

Input to QT1 crate (south-top)
Entries 4.564735e+07
ADC
channel

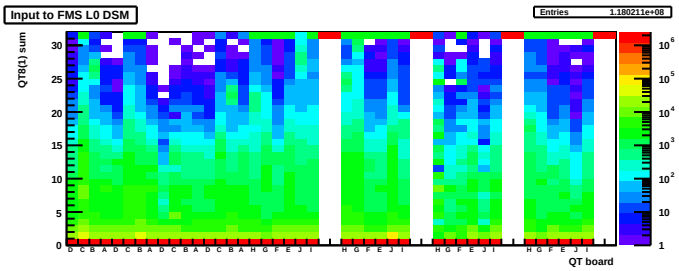

Input to QT3 crate (north-top)
Entries 2.504203e+07
ADC
channel

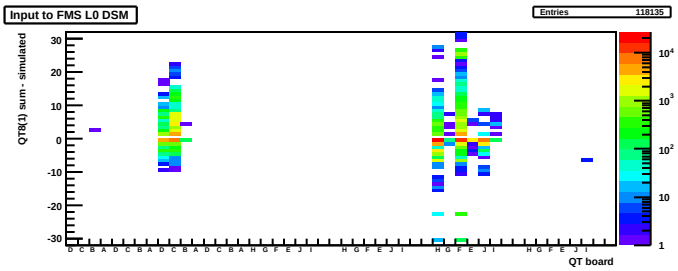

Input to QT2 crate (south-bottom)
Entries 2.936245e+07
ADC
channel

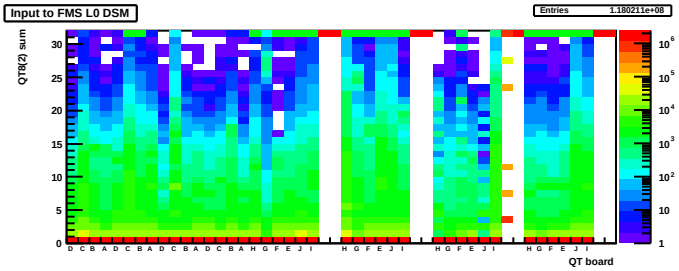

Input to QT4 crate (north-bottom)
Entries 3.186903e+07
ADC
channel

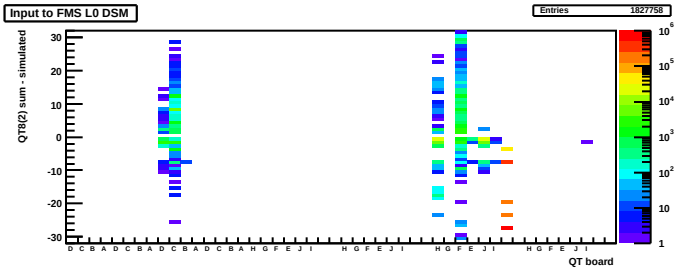

Input to FMS L0 DSM
Entries 1.180211e+08
QT8(0) sum
QT board

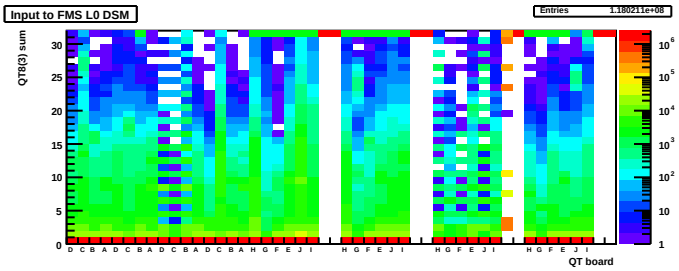

Input to FMS L0 DSM
Entries 134877
QT8(0) sum - simulated
QT board

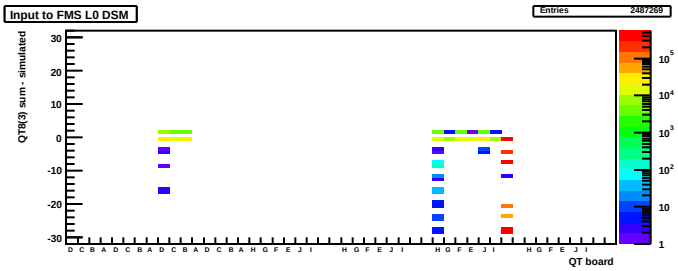

Input to FMS L0 DSM
Entries 1.180211e+08
QT8(1) sum
QT board

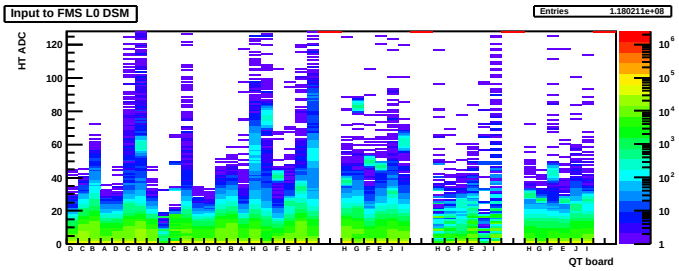

Input to FMS L0 DSM
Entries 118135
QT8(1) sum - simulated
QT board

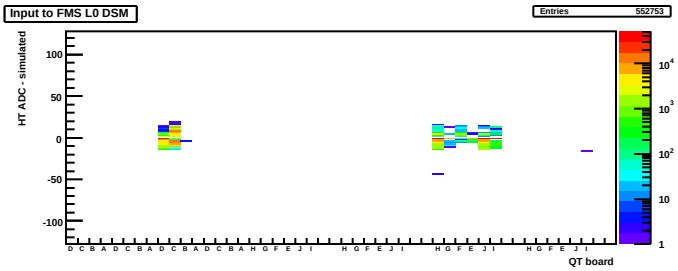

Input to FMS L0 DSM
Entries 1.180211e+08
QT8(2) sum
QT board

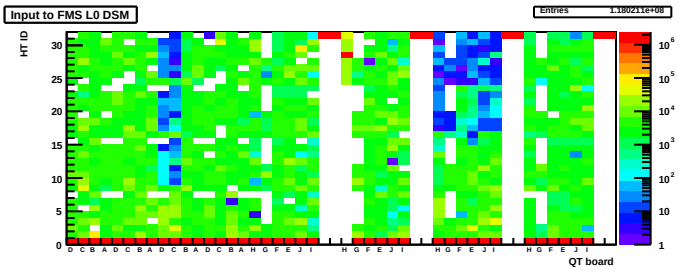

Input to FMS L0 DSM
Entries 1827758
QT8(2) sum - simulated
QT board

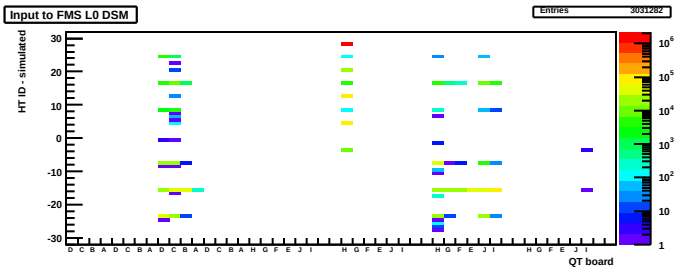

Input to FMS L0 DSM
Entries 1.180211e+08
QT8(3) sum
QT board

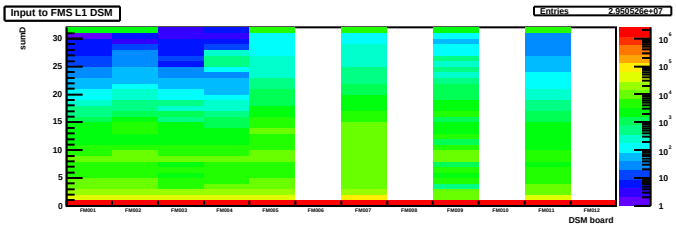

Input to FMS L0 DSM
Entries 2487269
QT8(3) sum - simulated
QT board

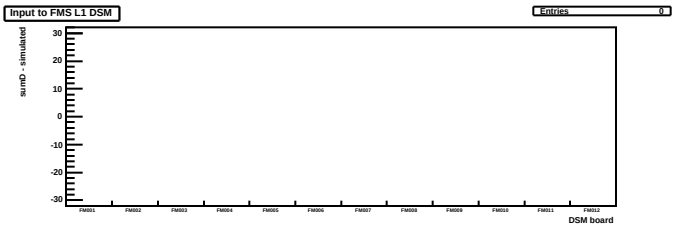

Input to FMS L0 DSM
Entries 1.180211e+08
HT ADC
QT board

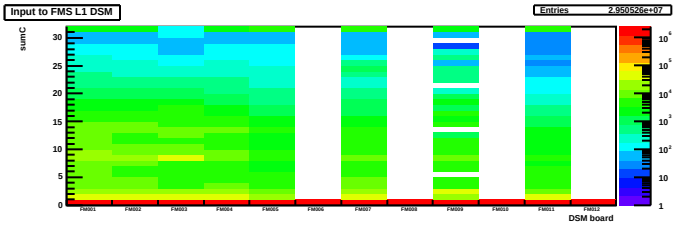

Input to FMS L0 DSM
Entries 552753
HT ADC - simulated
QT board

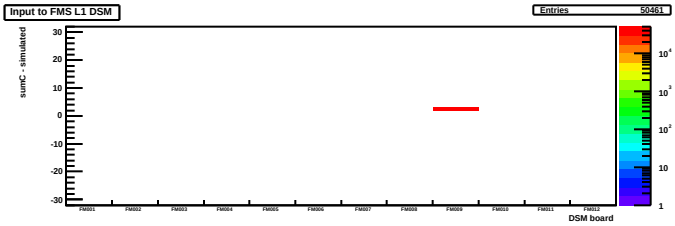

Input to FMS L0 DSM
Entries 1.180211e+08
HT ID
QT board

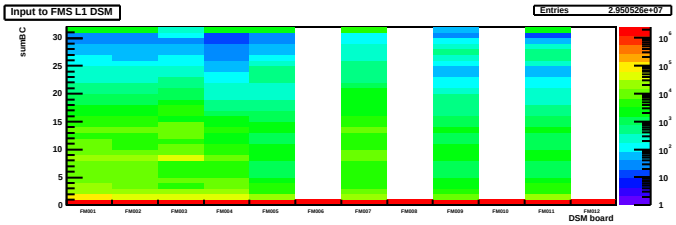

Input to FMS L0 DSM
Entries 3031282
HT ID - simulated
QT board

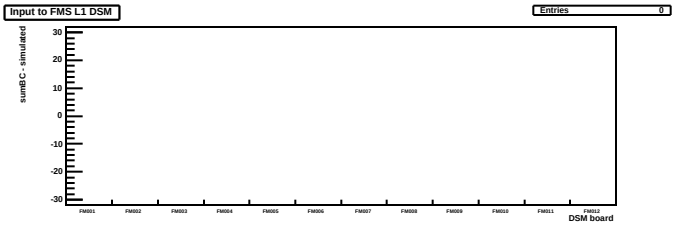

Input to FMS L1 DSM
Entries 2.950526e+07
sumD
DSM board

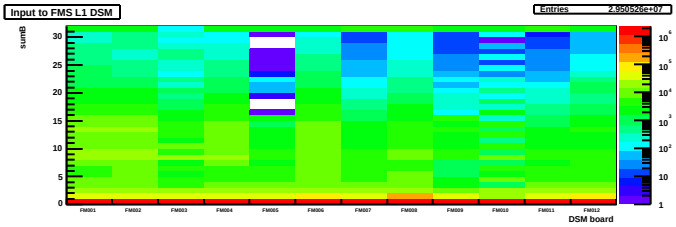

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

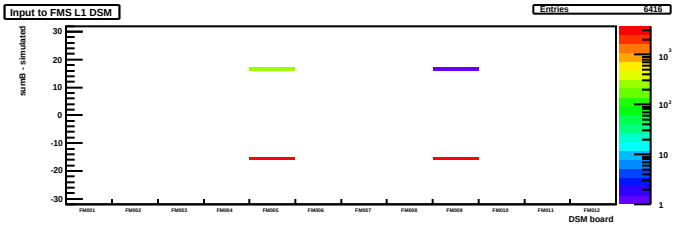

Input to FMS L1 DSM
Entries 2.950526e+07
sumC
DSM board

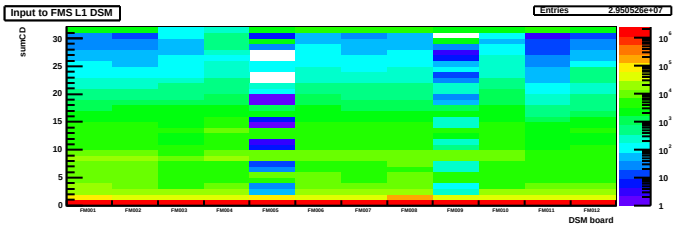

Input to FMS L1 DSM
Entries 50461
sumC - simulated
DSM board

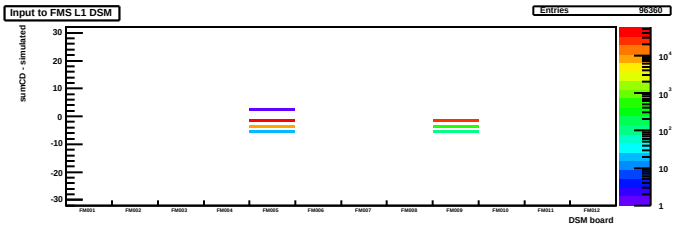

Input to FMS L1 DSM
Entries 2.950526e+07
sumBC
DSM board

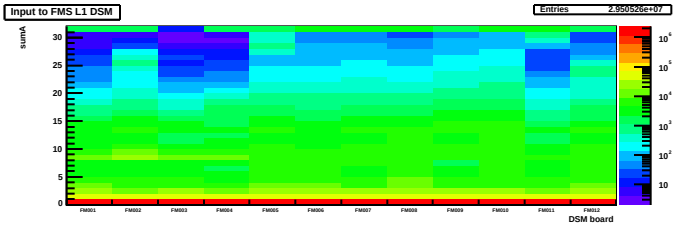

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

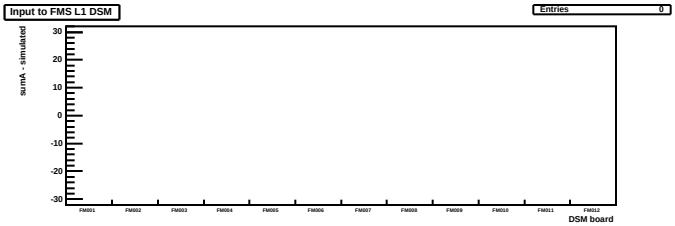

Input to FMS L1 DSM
Entries 2.950526e+07
sumB
DSM board

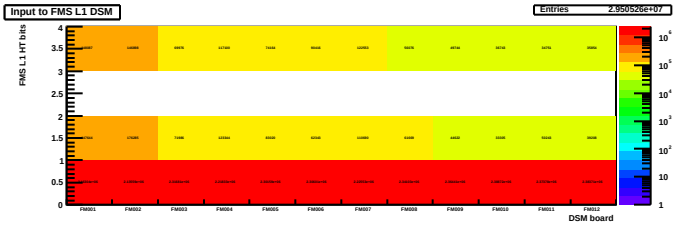

Input to FMS L1 DSM
Entries 6416
sumB - simulated
DSM board

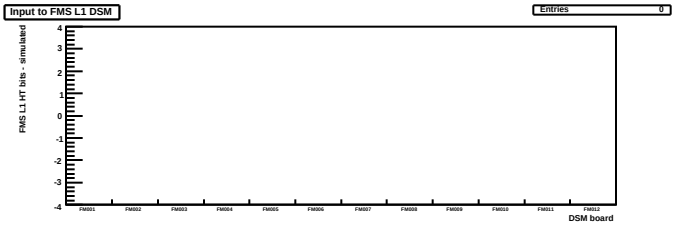

Input to FMS L1 DSM
Entries 2.950526e+07
sumCD
DSM board

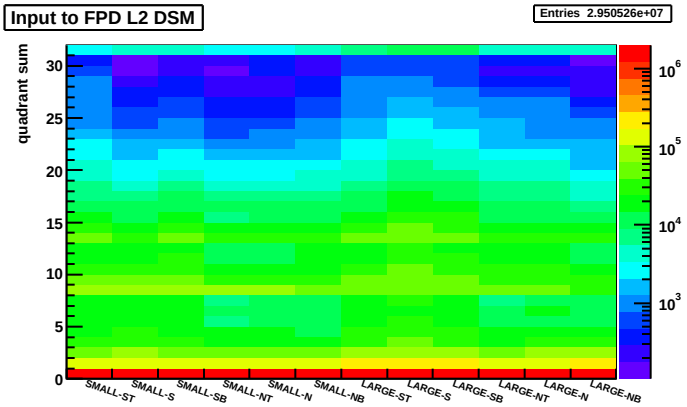

Input to FMS L1 DSM
Entries 96360
sumCD - simulated
DSM board

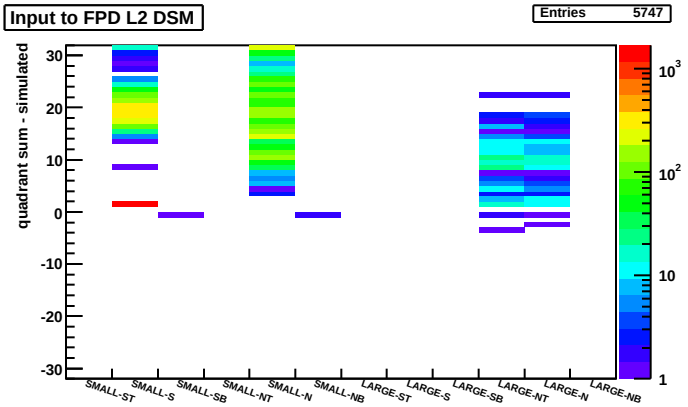

Input to FMS L1 DSM
Entries 2.950526e+07
sumA
DSM board

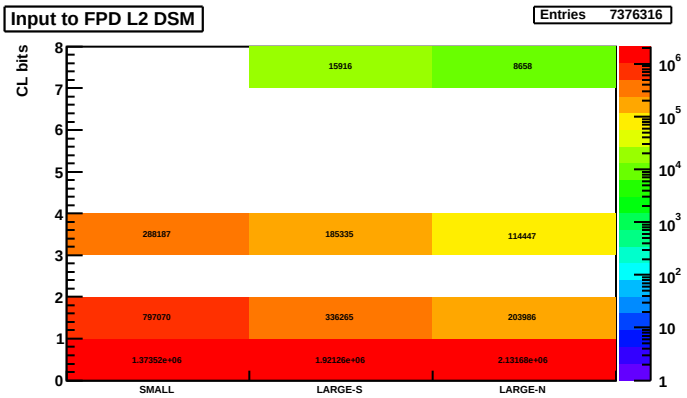

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

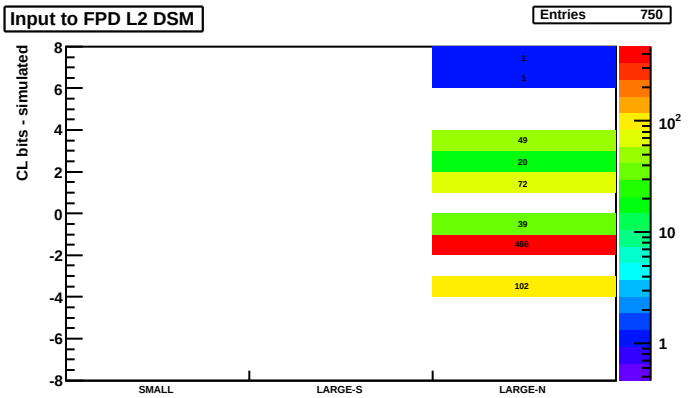

Input to FMS L1 DSM
Entries 2.950526e+07
FMS L1 HT bits
DSM board

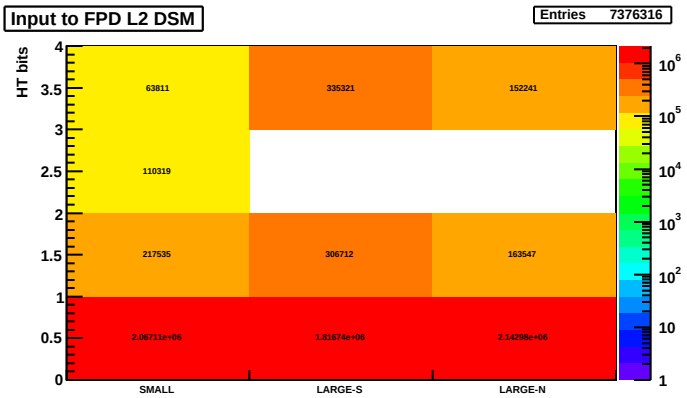

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

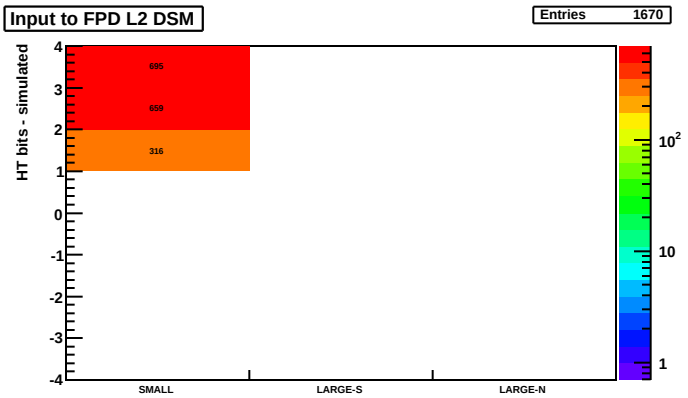

Input to FPD L2 DSM
Entries 2.950526e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

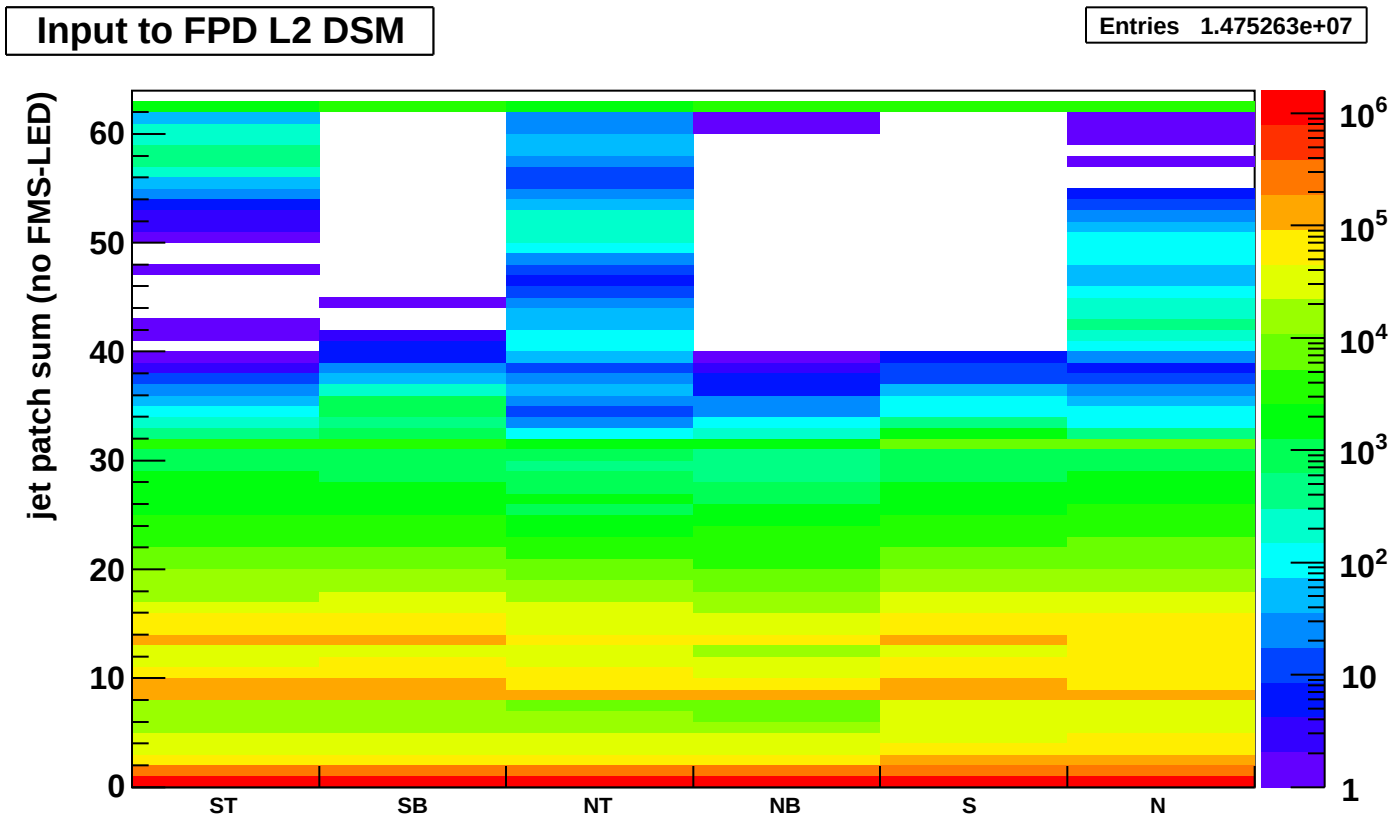

Input to FPD L2 DSM
Entries 5747
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

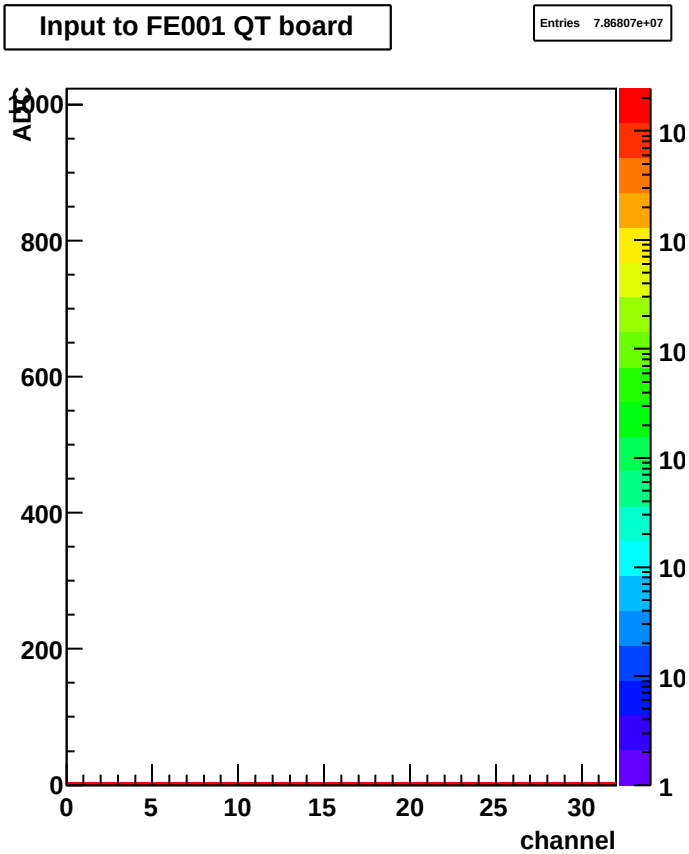

Input to FPD L2 DSM
Entries 7376316
CL bits
15916
8658
288187
185335
114447
797070
336265
203986
1.37352e+06
1.92126e+06
2.13168e+06
SMALL
LARGE-S
LARGE-N

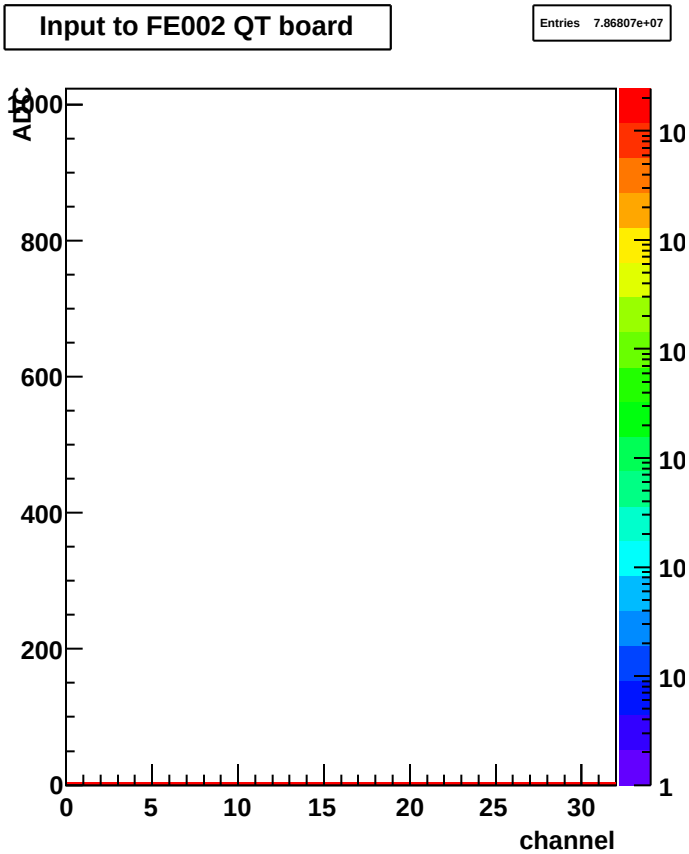

Input to FPD L2 DSM
Entries 750
CL bits - simulated
1
1
49
20
72
39
466
102
SMALL
LARGE-S
LARGE-N

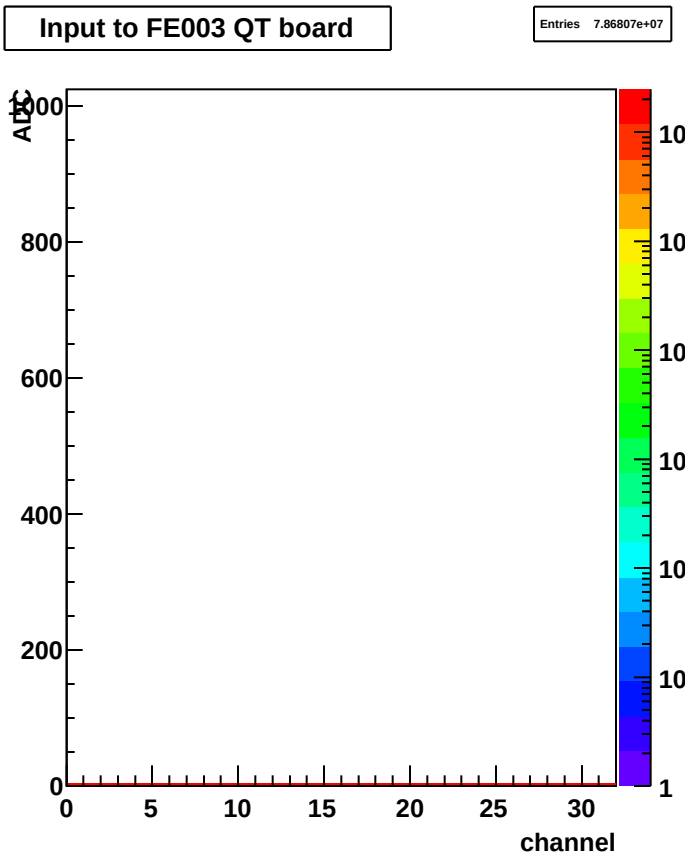

Input to FPD L2 DSM
Entries 7376316
HT bits
63811
335321
152241
110319
217535
306712
163547
2.06711e+06
1.81674e+06
2.14298e+06
SMALL
LARGE-S
LARGE-N

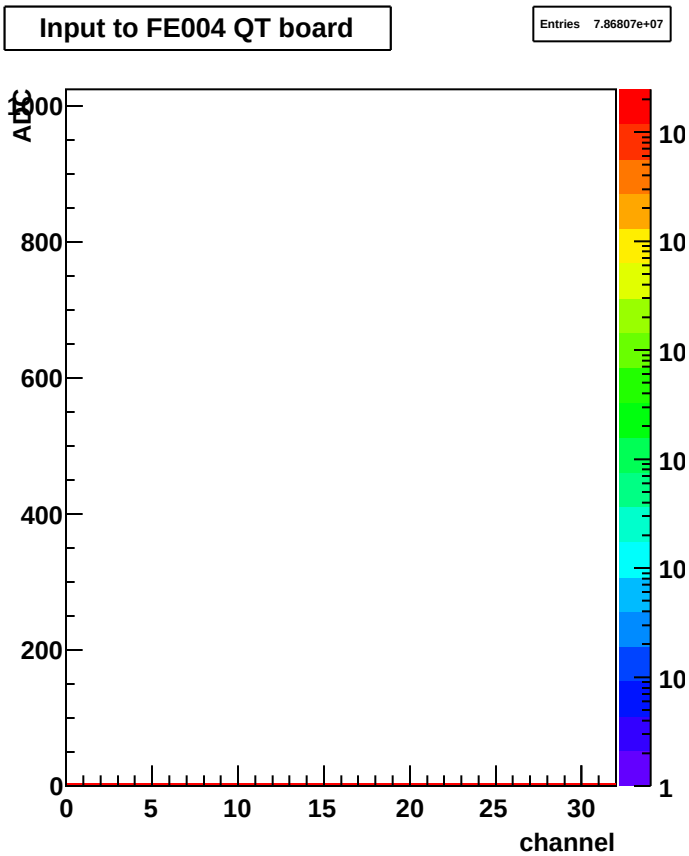

Input to FPD L2 DSM
Entries 1670
HT bits - simulated
695
659
316
SMALL
LARGE-S
LARGE-N

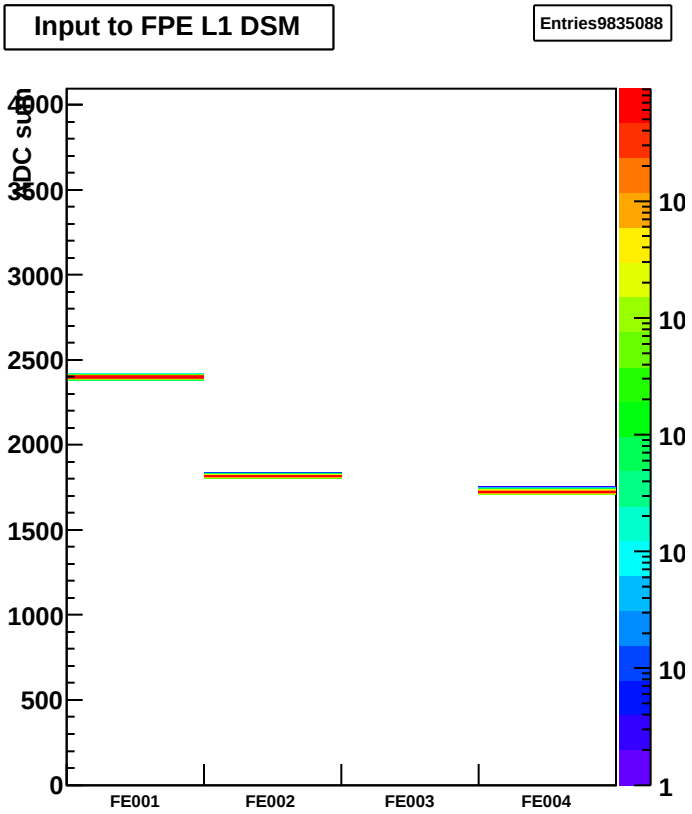

Input to FPD L2 DSM
Entries 1.475263e+07
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
$10^2$
$10^3$
$10^4$
$10^5$
$10^6$

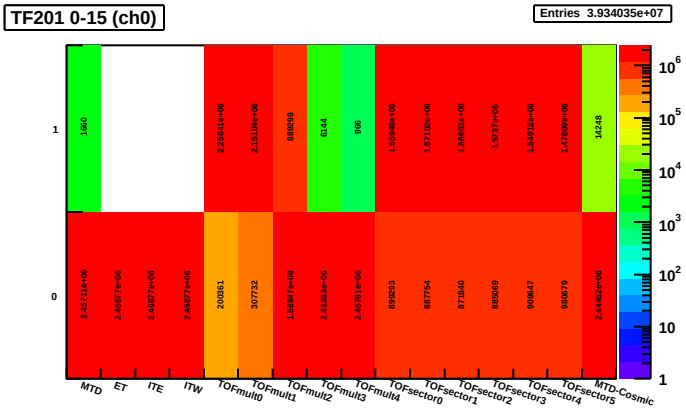

Input to FE001 QT board
Entries 7.86807e+07
ADC
channel

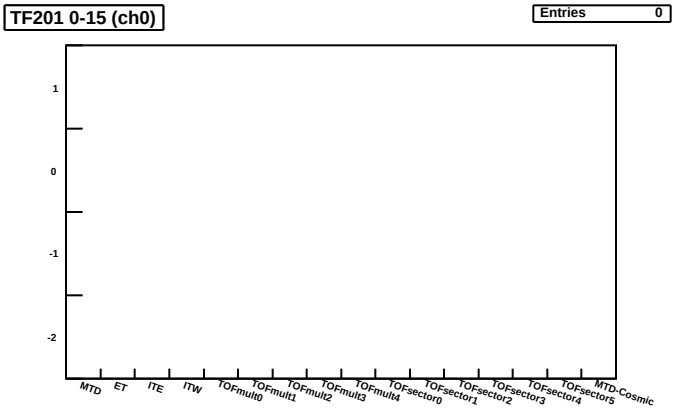

Input to FE002 QT board
Entries 7.86807e+07
ADC
channel

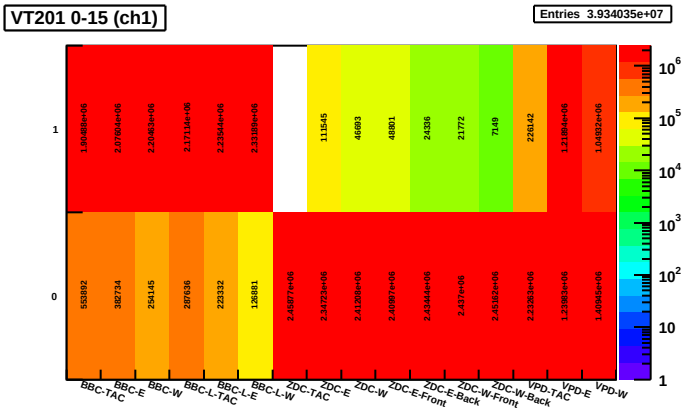

Input to FE003 QT board
Entries 7.86807e+07
ADC
channel

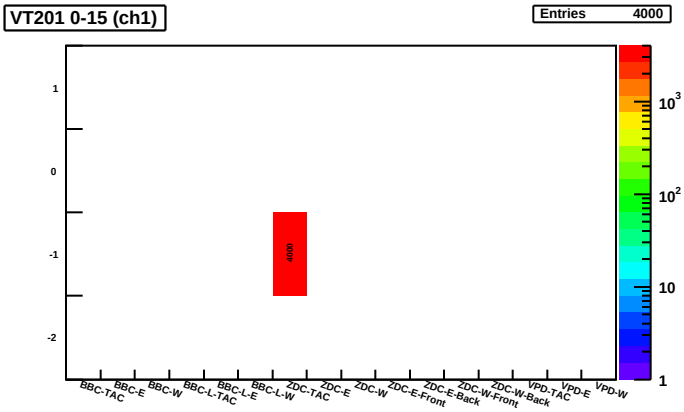

Input to FE004 QT board
Entries 7.86807e+07
ADC
channel

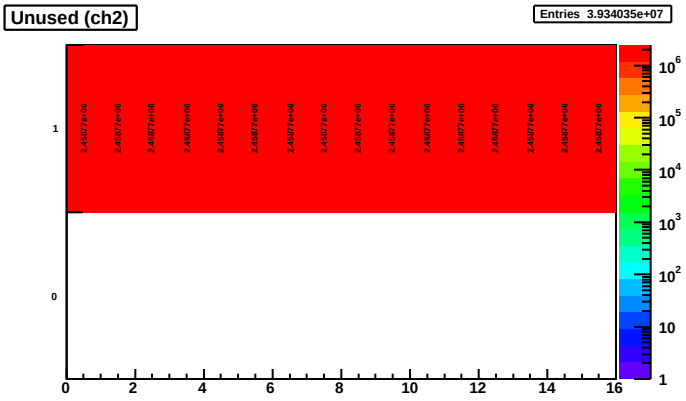

Input to FPE L1 DSM
Entries9835088
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

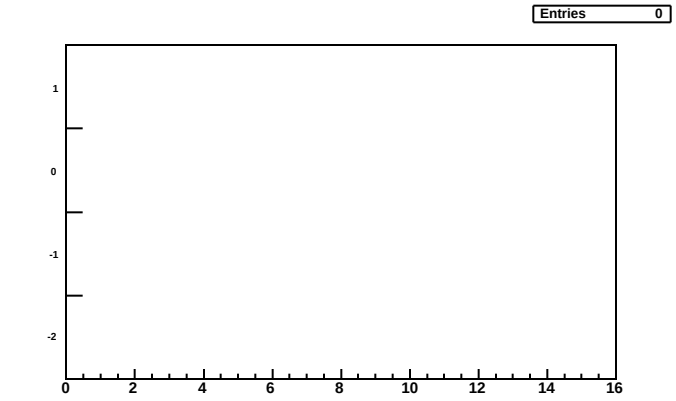

TF201 0-15 (ch0)
Entries 3.934035e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

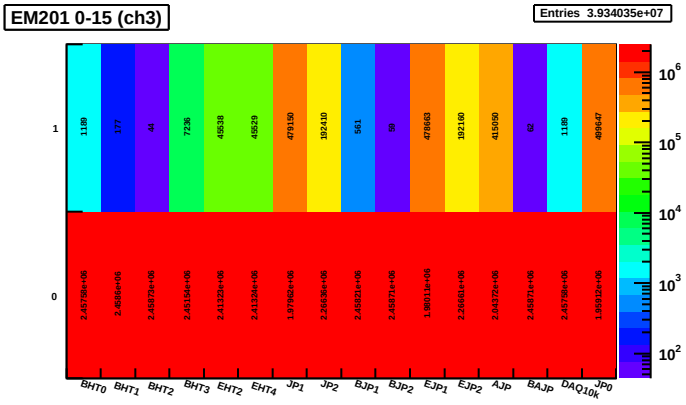

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

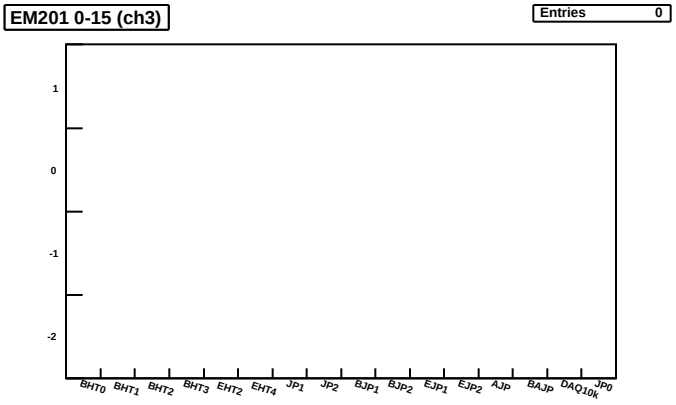

VT201 0-15 (ch1)
Entries 3.934035e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 4000
4000
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

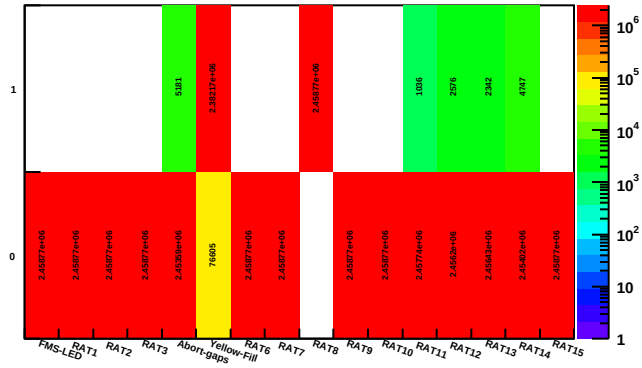

Unused (ch2)
Entries 3.934035e+07

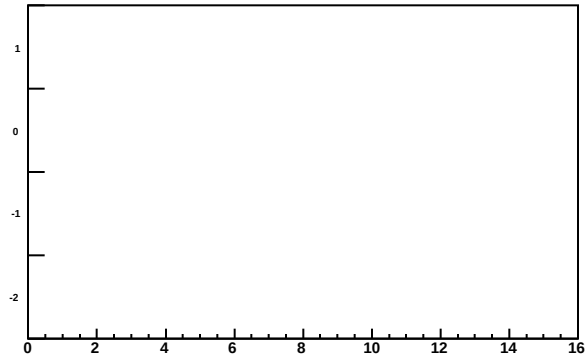

Entries 0


EM201 0-15 (ch3)
Entries 3.934035e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

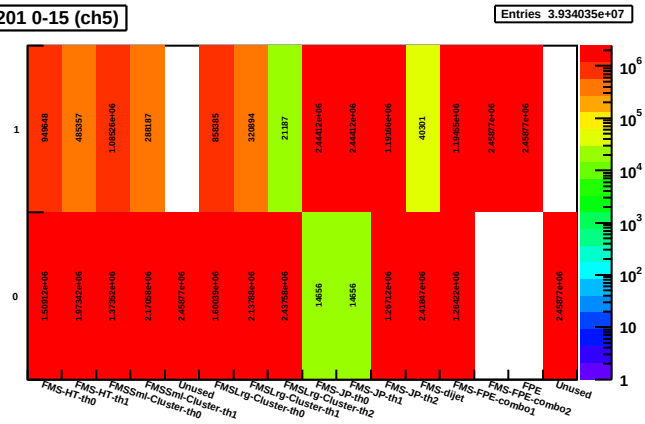

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

**RAT board (ch4)**

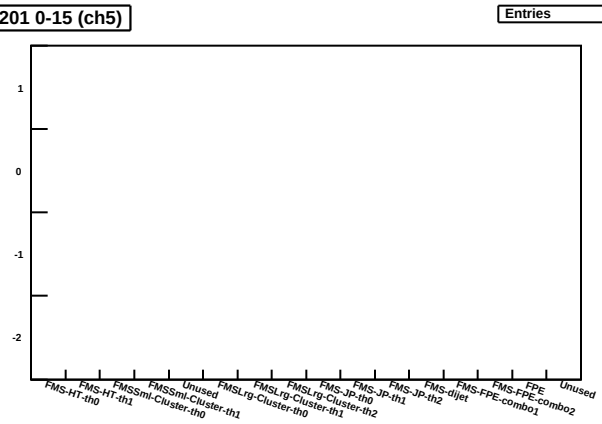


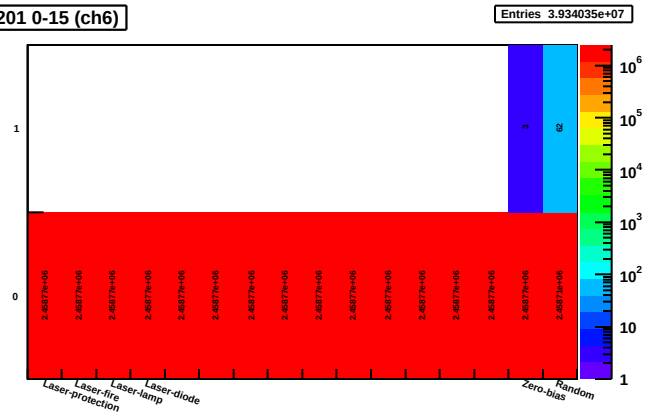

**FP201 0-15 (ch5)**

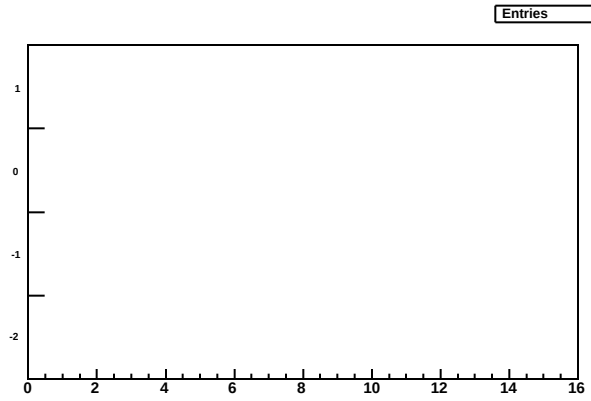


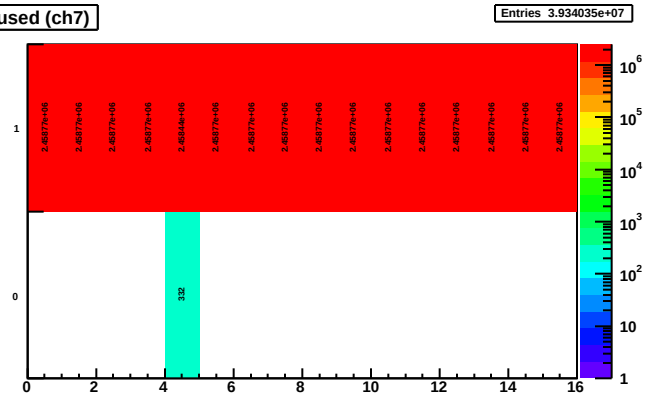
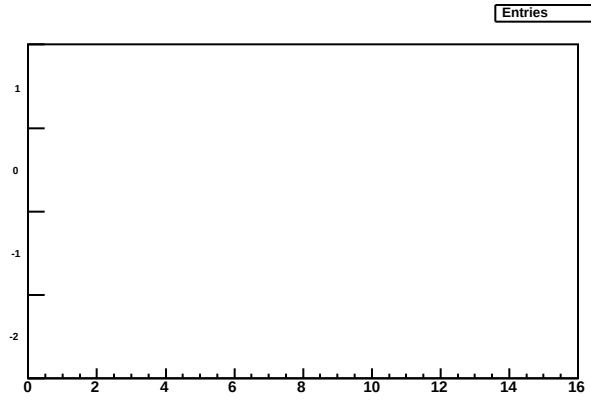

**FP201 0-15 (ch5)**




**ST201 0-15 (ch6)**




**Unused (ch7)**