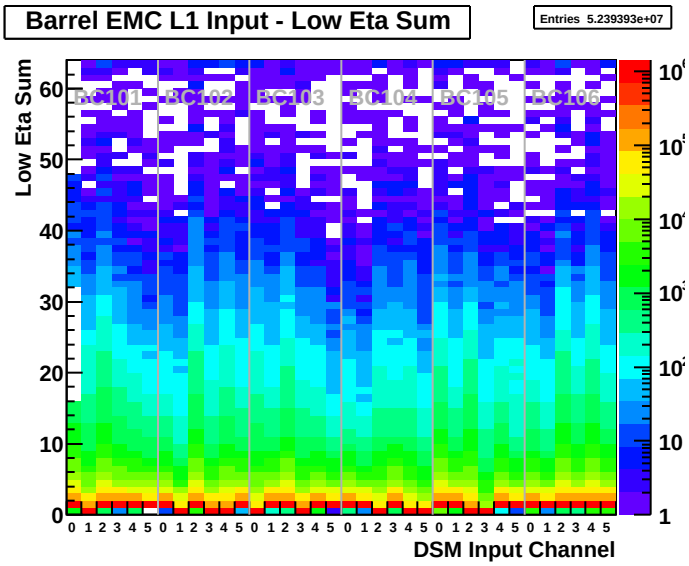
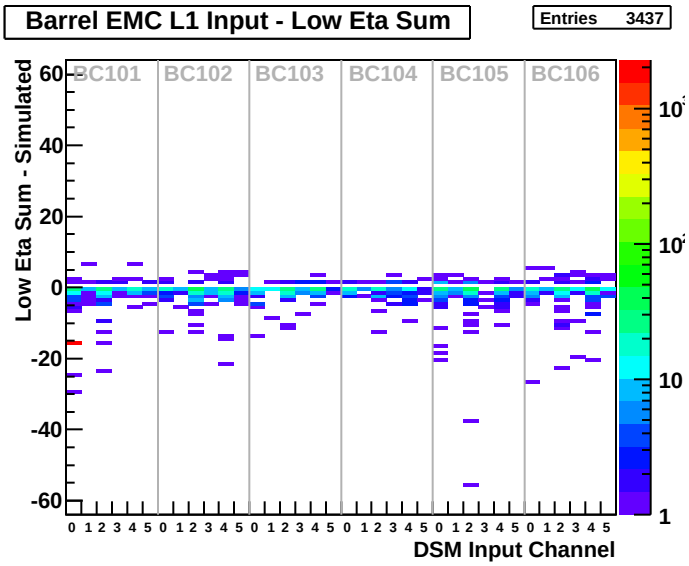
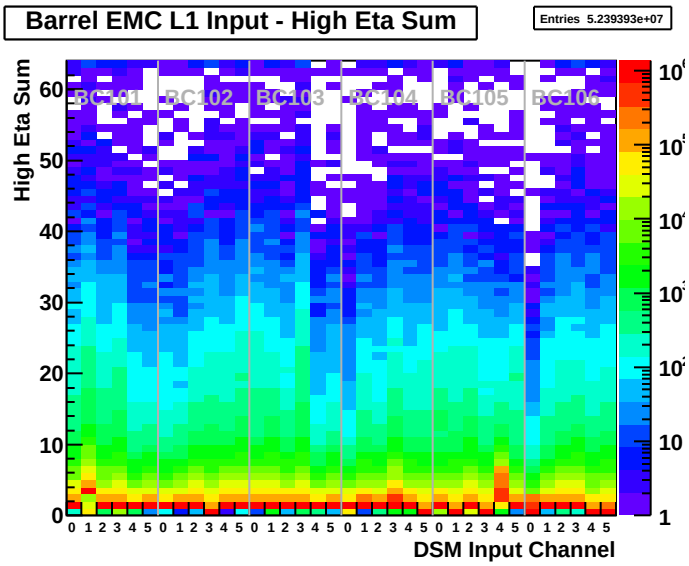
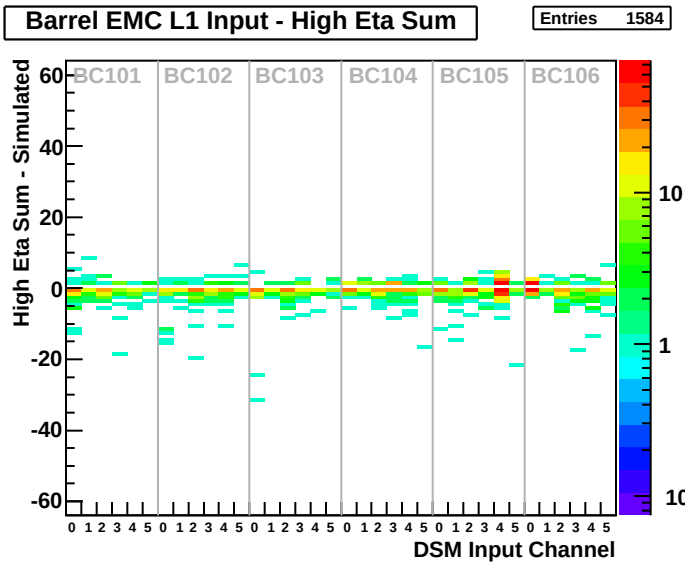
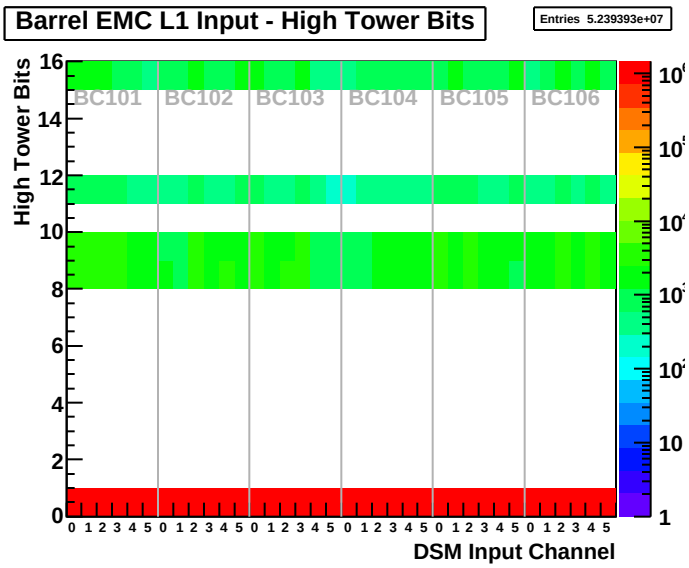
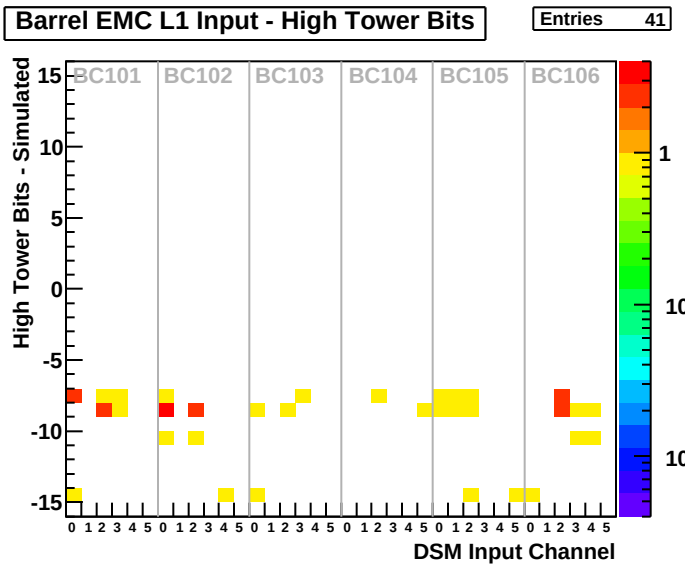

Barrel EMC L1 Input - Low Eta Sum
Entries 5.239393e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

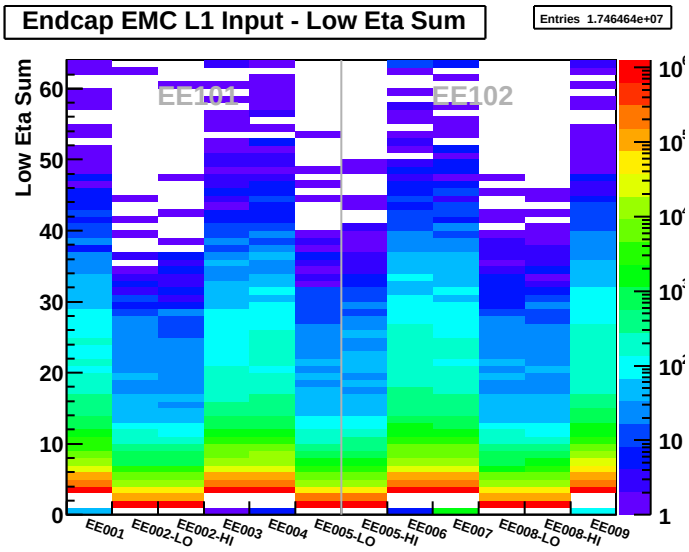

Barrel EMC L1 Input - Low Eta Sum
Entries 3437
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

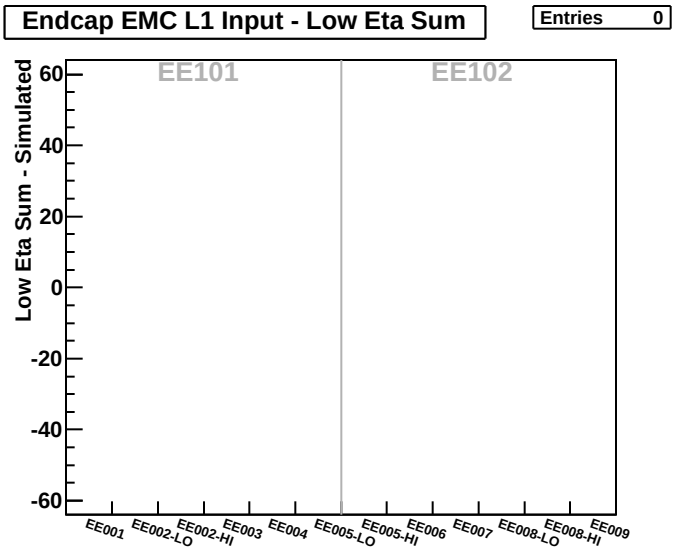

Barrel EMC L1 Input - High Eta Sum
Entries 5.239393e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

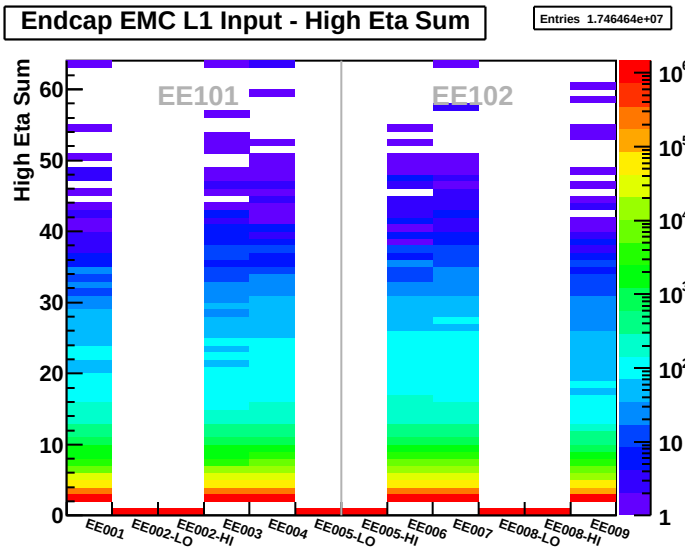

Barrel EMC L1 Input - High Eta Sum
Entries 1584
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

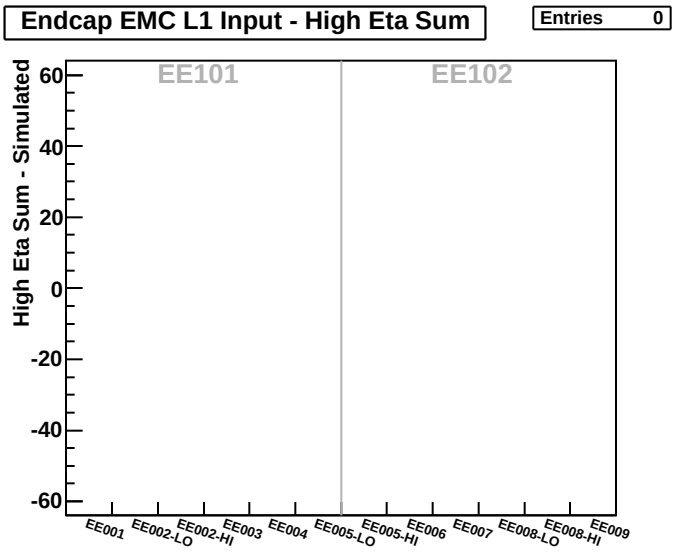

Barrel EMC L1 Input - High Tower Bits
Entries 5.239393e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

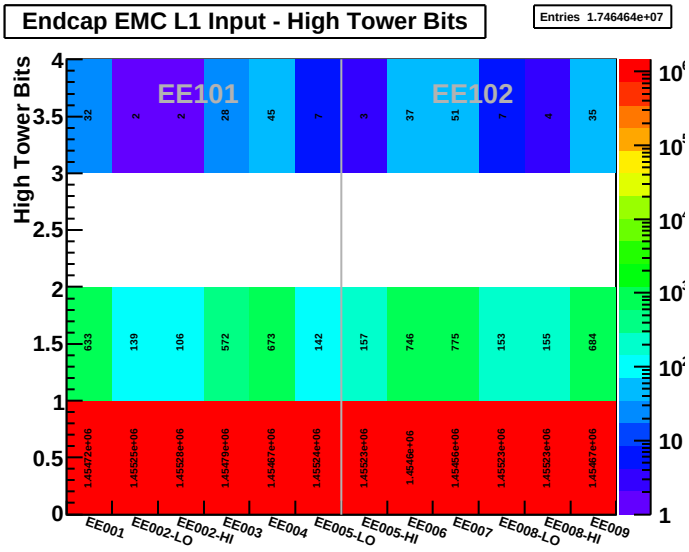

Barrel EMC L1 Input - High Tower Bits
Entries 41
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

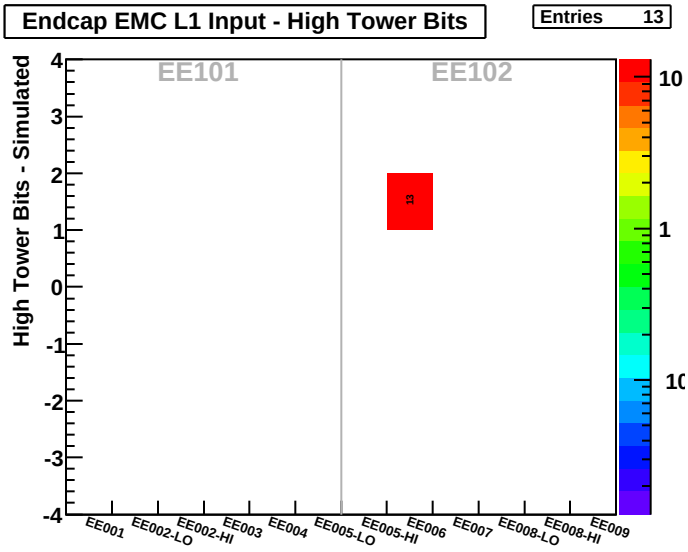

Endcap EMC L1 Input - Low Eta Sum
Entries 1.746464e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

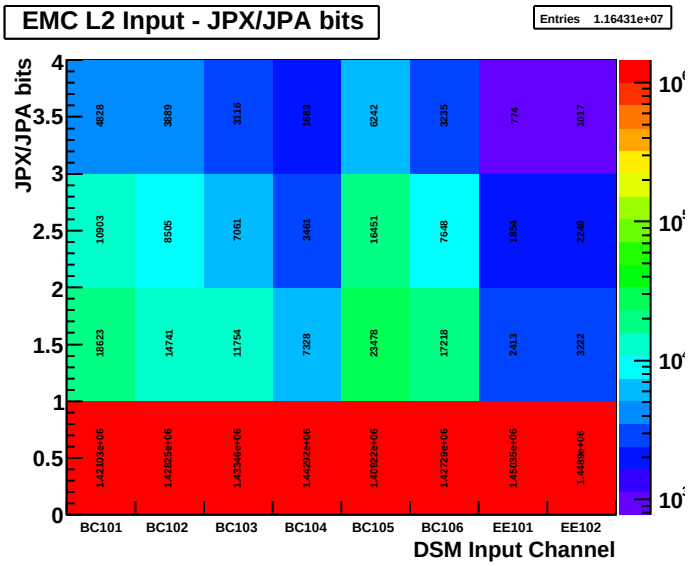

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

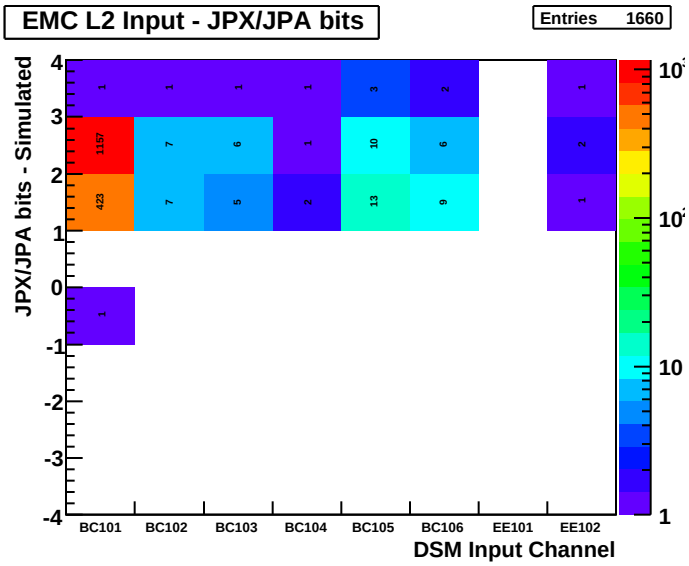

Endcap EMC L1 Input - High Eta Sum
Entries 1.746464e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

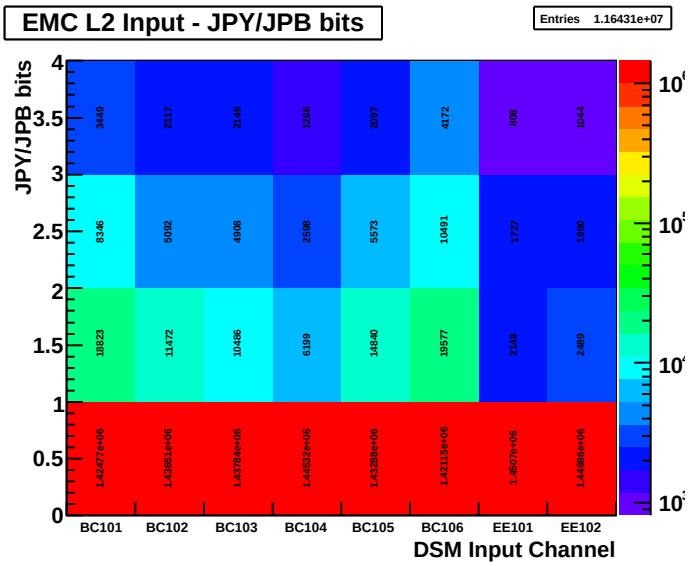

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

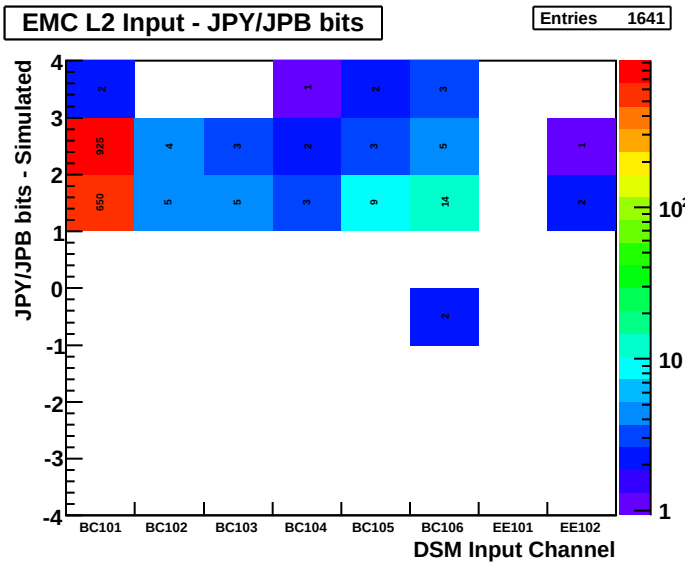

Endcap EMC L1 Input - High Tower Bits
Entries 1.746464e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

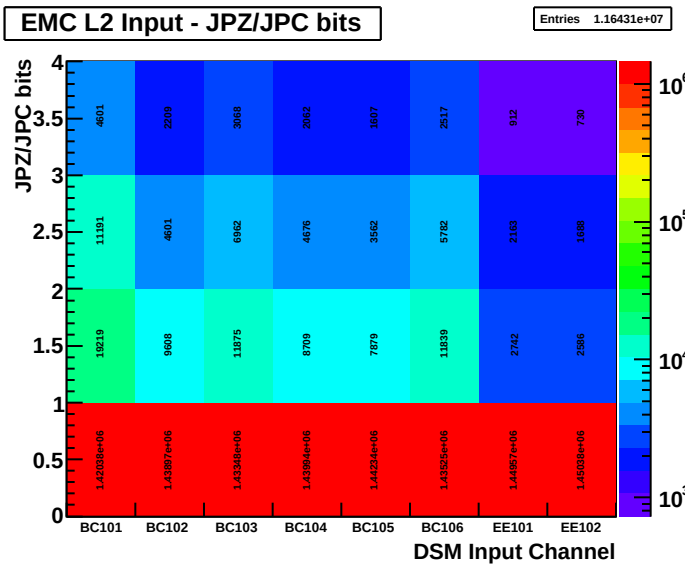

Endcap EMC L1 Input - High Tower Bits
Entries 13
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

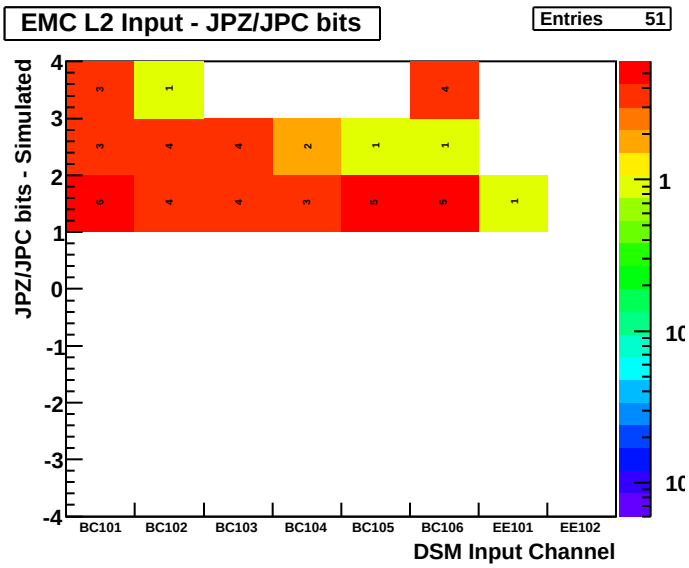

EMC L2 Input - JPX/JPA bits
Entries 1.16431e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4828 3889 3116 1683 6242 3235 774 1017
10903 8505 7061 3461 16451 7648 1854 2249
18623 14741 11754 7328 23478 17218 2413 3222
1.42103e+06 1.42825e+06 1.43346e+06 1.44232e+06 1.40922e+06 1.42729e+06 1.45035e+06 1.4489e+06

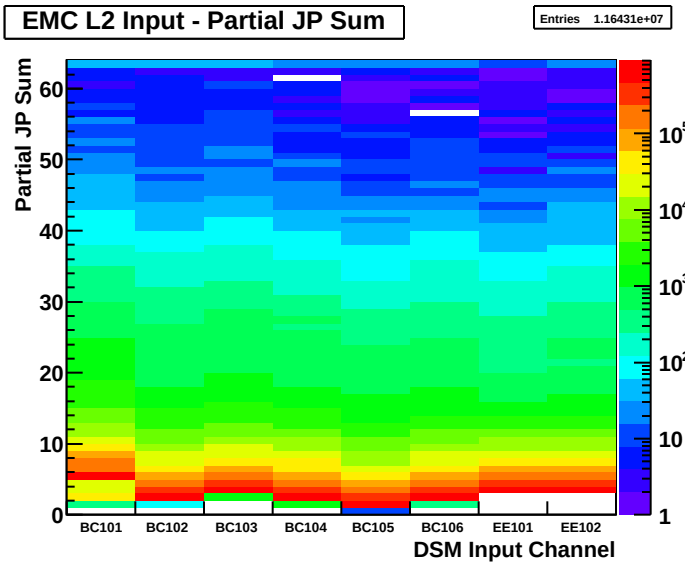

EMC L2 Input - JPX/JPA bits
Entries 1660
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1 1 3 2 1
1157 7 6 1 10 6 2
423 7 5 2 13 9 1
1

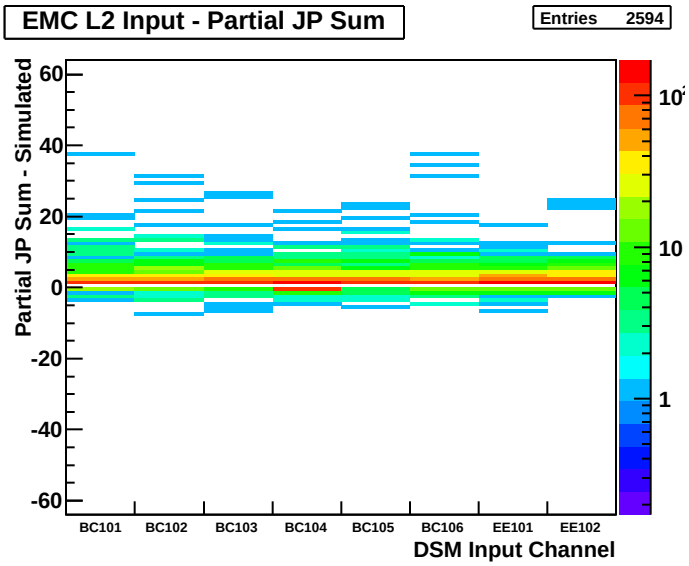

EMC L2 Input - JPY/JPB bits
Entries 1.16431e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3449 2317 2149 1266 2097 4172 808 1044
8346 5092 4908 2598 5573 10491 1727 1990
18823 11472 10486 6199 14840 19577 2148 2489
1.42477e+06 1.43651e+06 1.43784e+06 1.44532e+06 1.43288e+06 1.42115e+06 1.4507e+06 1.44986e+06

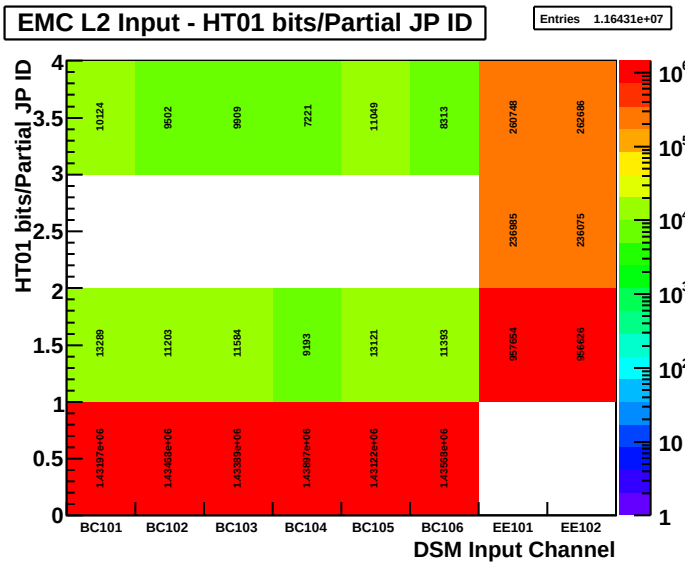

EMC L2 Input - JPY/JPB bits
Entries 1641
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 1 2 3
925 4 3 2 3 5 1
650 5 5 3 9 14 2
2

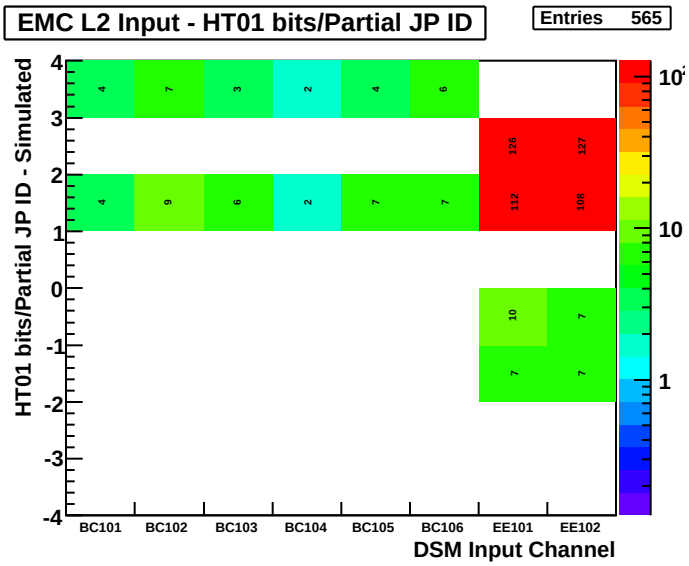

EMC L2 Input - JPZ/JPC bits
Entries 1.16431e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4601 2209 3068 2062 1607 2517 912 730
11191 4601 6962 4676 3562 5782 2163 1688
19219 9608 11875 8709 7879 11839 2742 2586
1.42038e+06 1.43897e+06 1.43348e+06 1.43994e+06 1.44234e+06 1.43525e+06 1.44957e+06 1.45038e+06

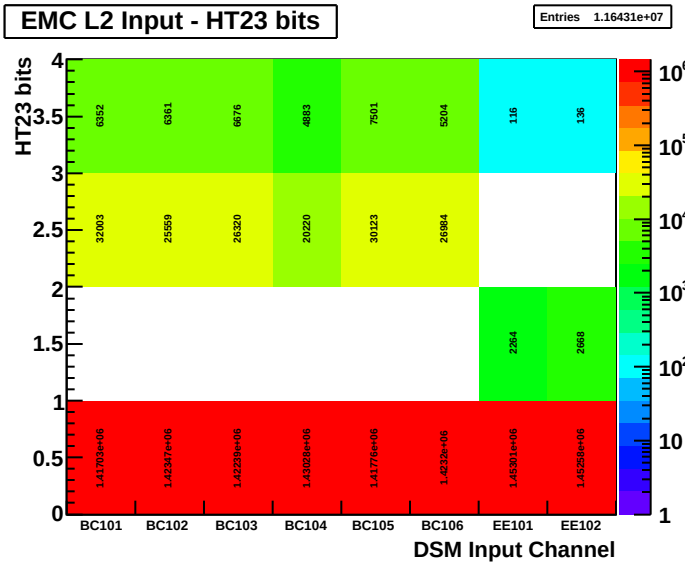

EMC L2 Input - JPZ/JPC bits
Entries 51
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3 1 4
3 4 4 2 1 1
6 4 4 3 5 5 1
1

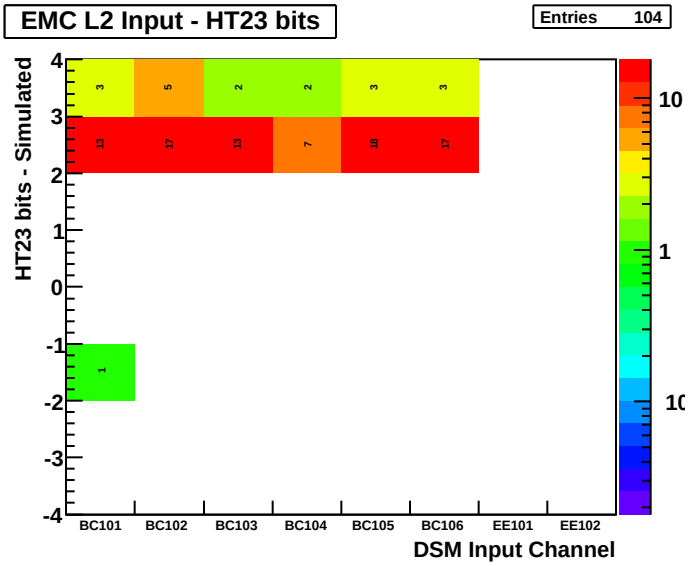

EMC L2 Input - Partial JP Sum
Entries 1.16431e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

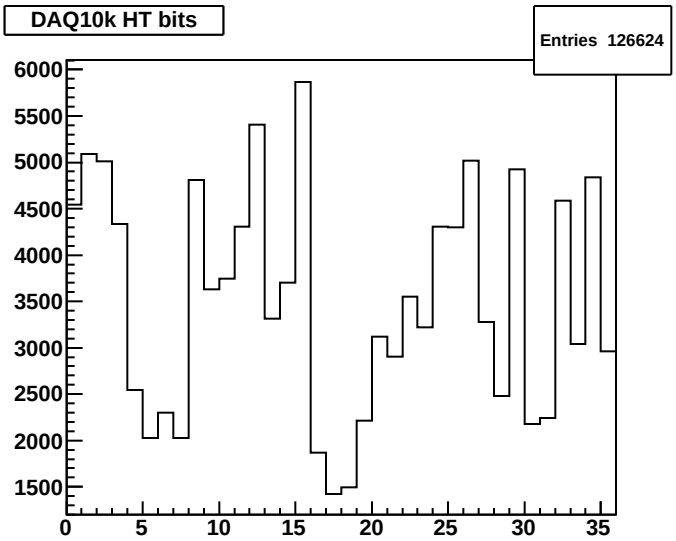

EMC L2 Input - Partial JP Sum
Entries 2594
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

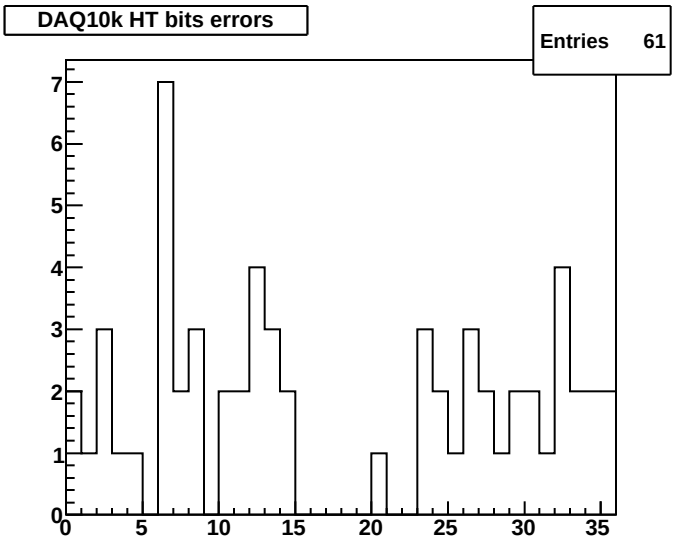

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.16431e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

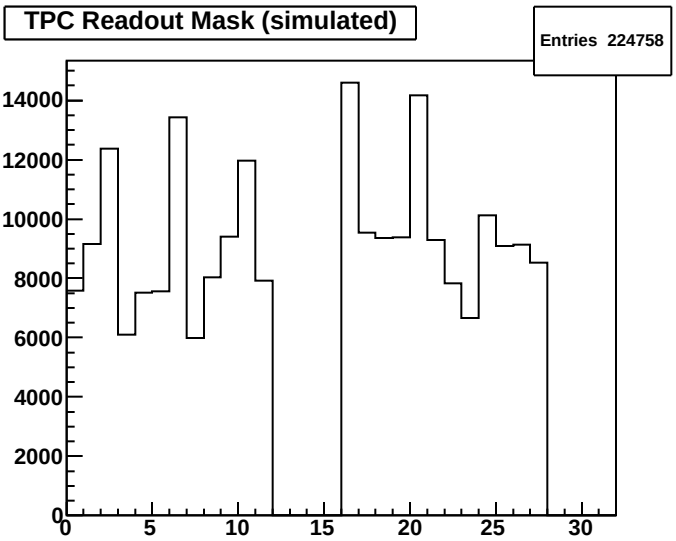

EMC L2 Input - HT01 bits/Partial JP ID
Entries 565
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

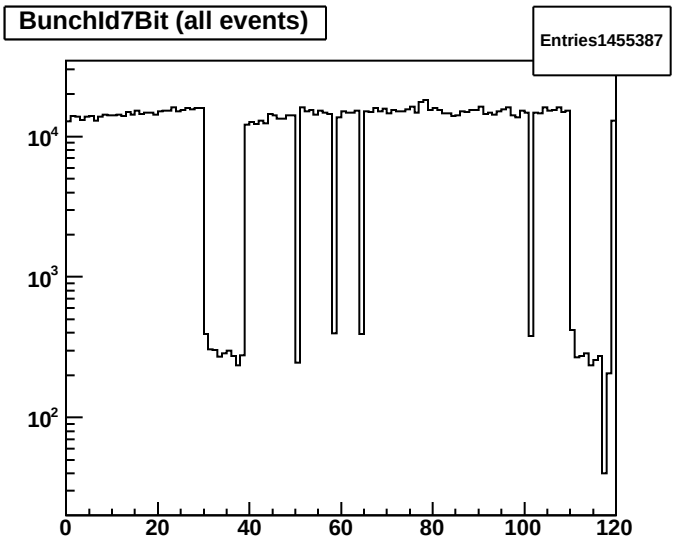

EMC L2 Input - HT23 bits
Entries 1.16431e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

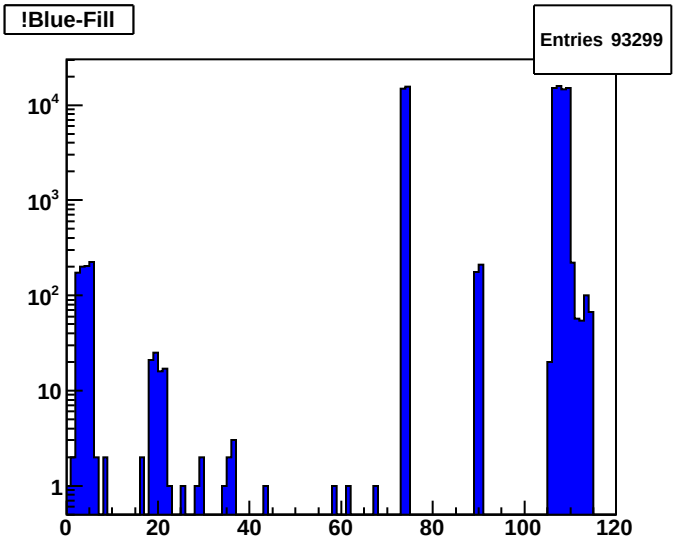

EMC L2 Input - HT23 bits
Entries 104
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

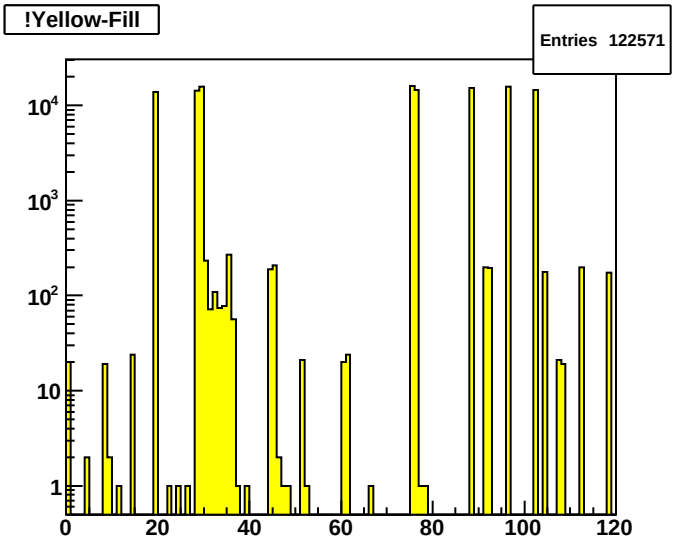

DAQ10k HT bits
Entries 126624

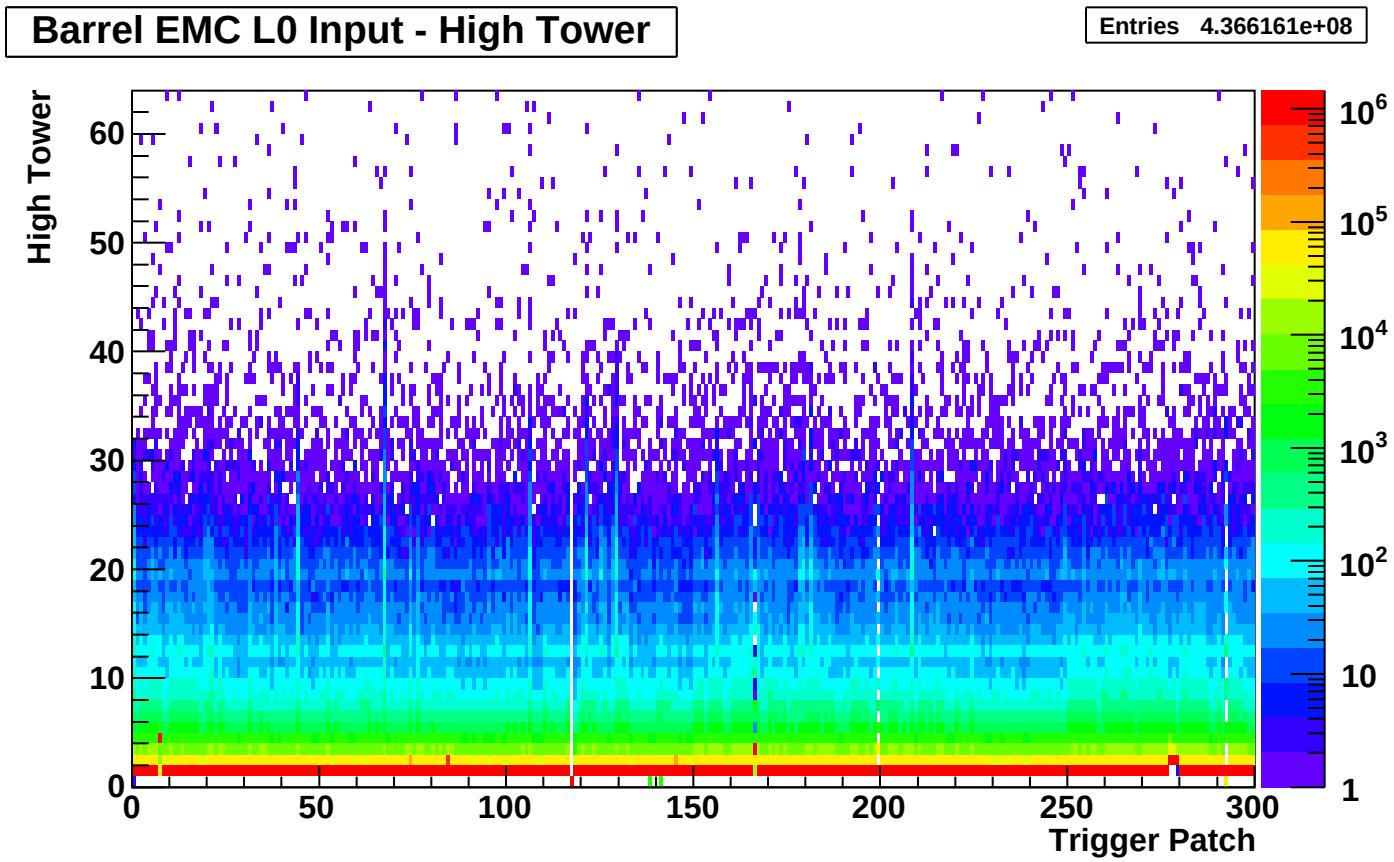

DAQ10k HT bits errors
Entries 61

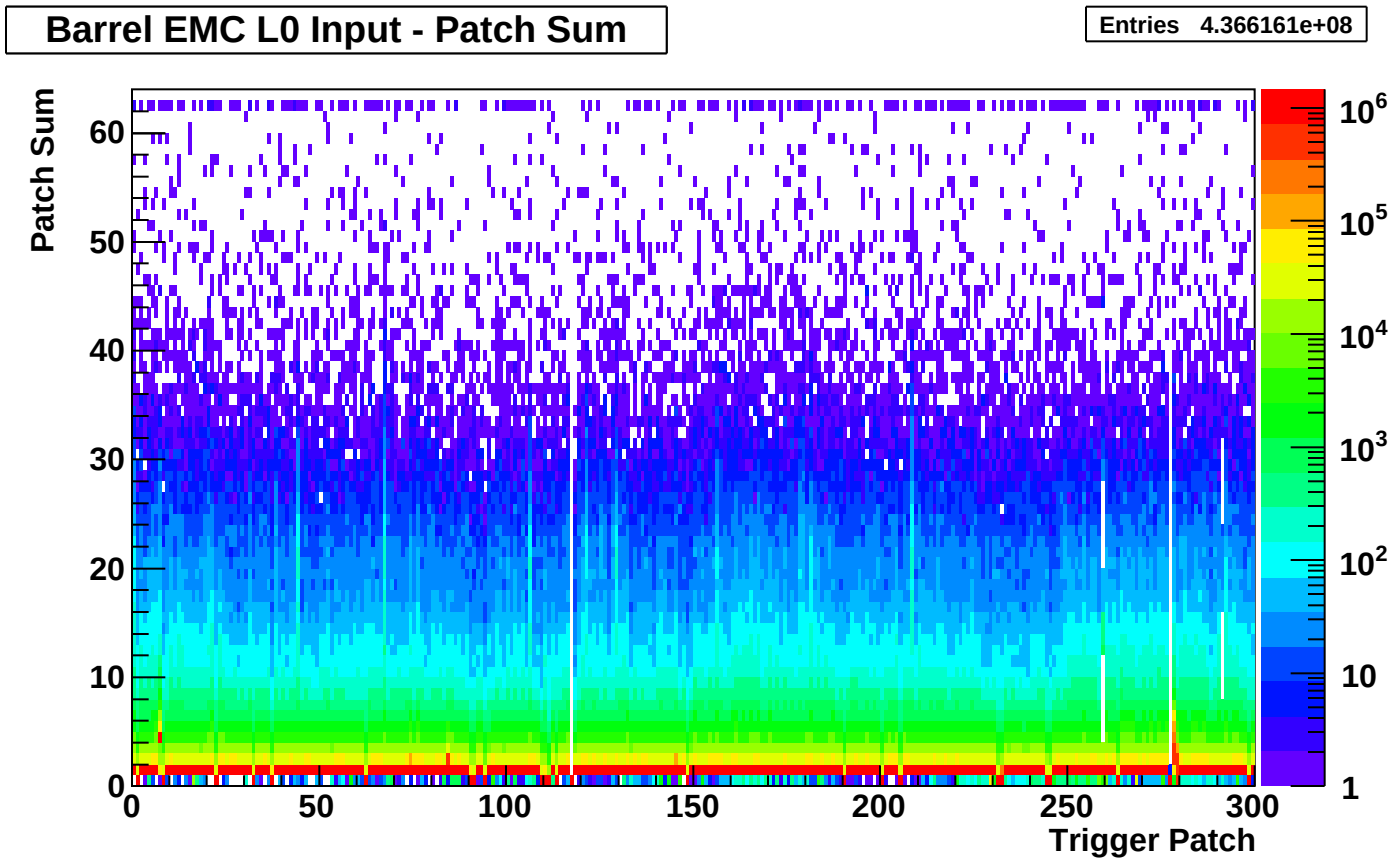

TPC Readout Mask (simulated)
Entries 224758

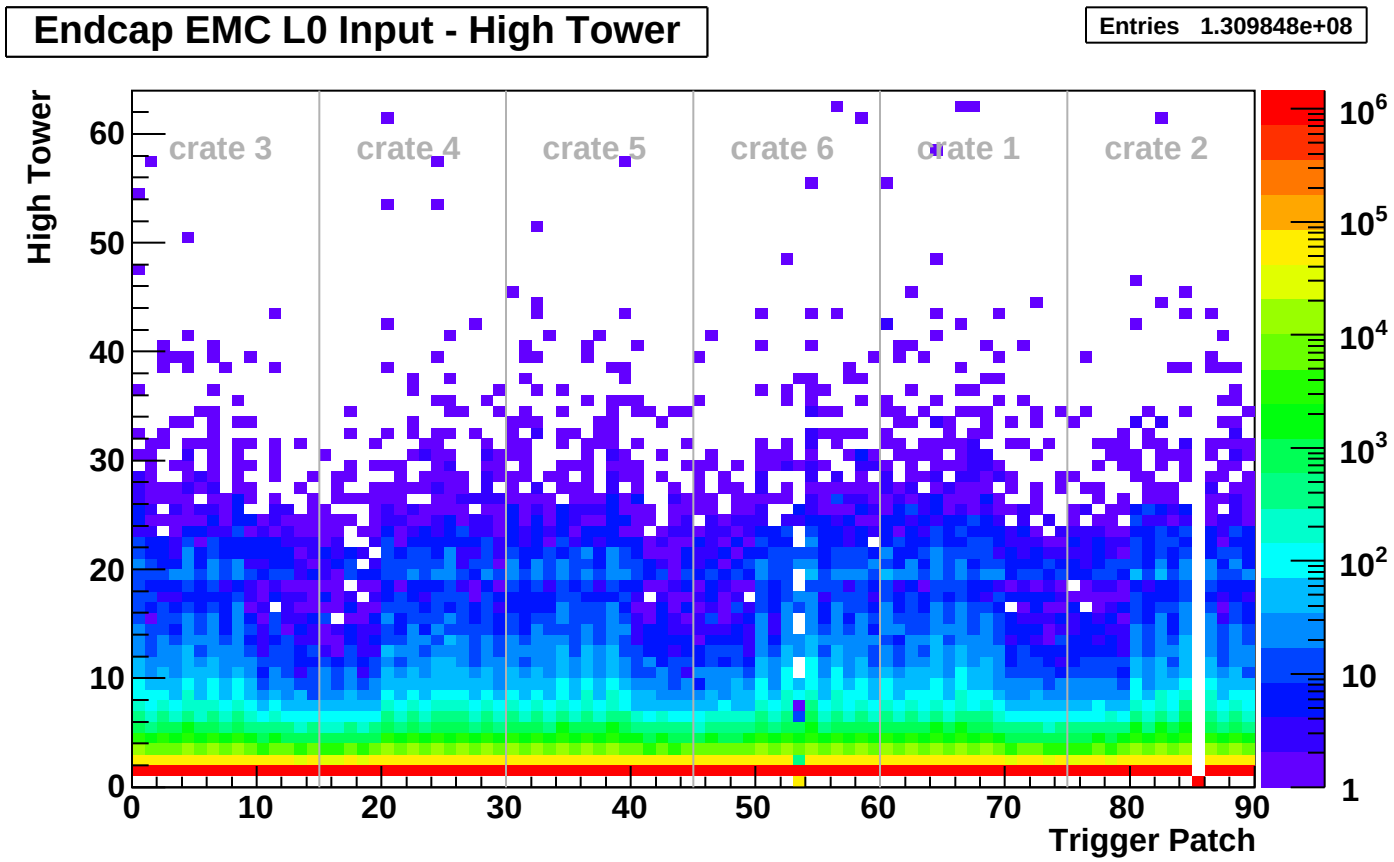

BunchId7Bit (all events)
Entries1455387

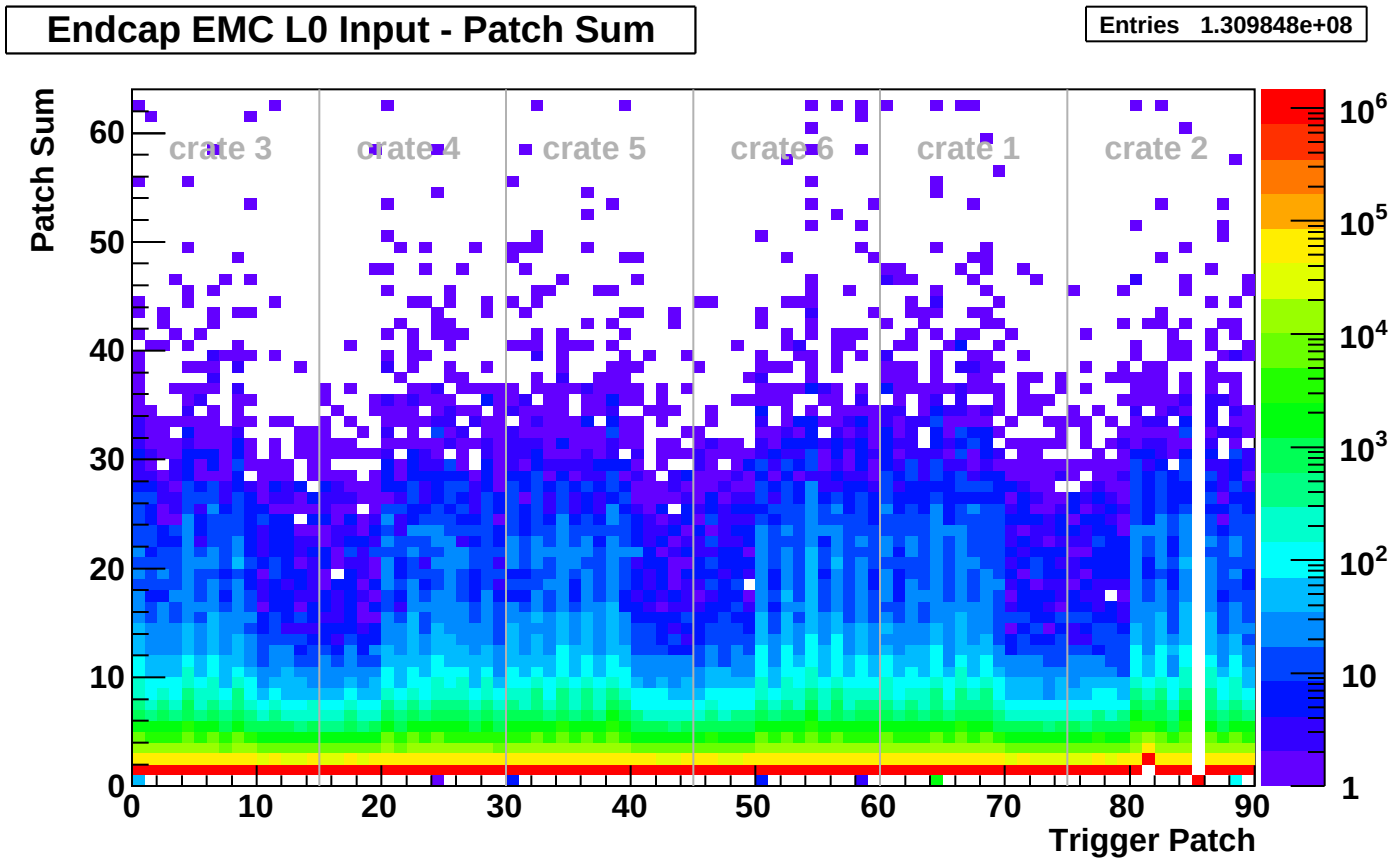

!Blue-Fill
Entries 93299

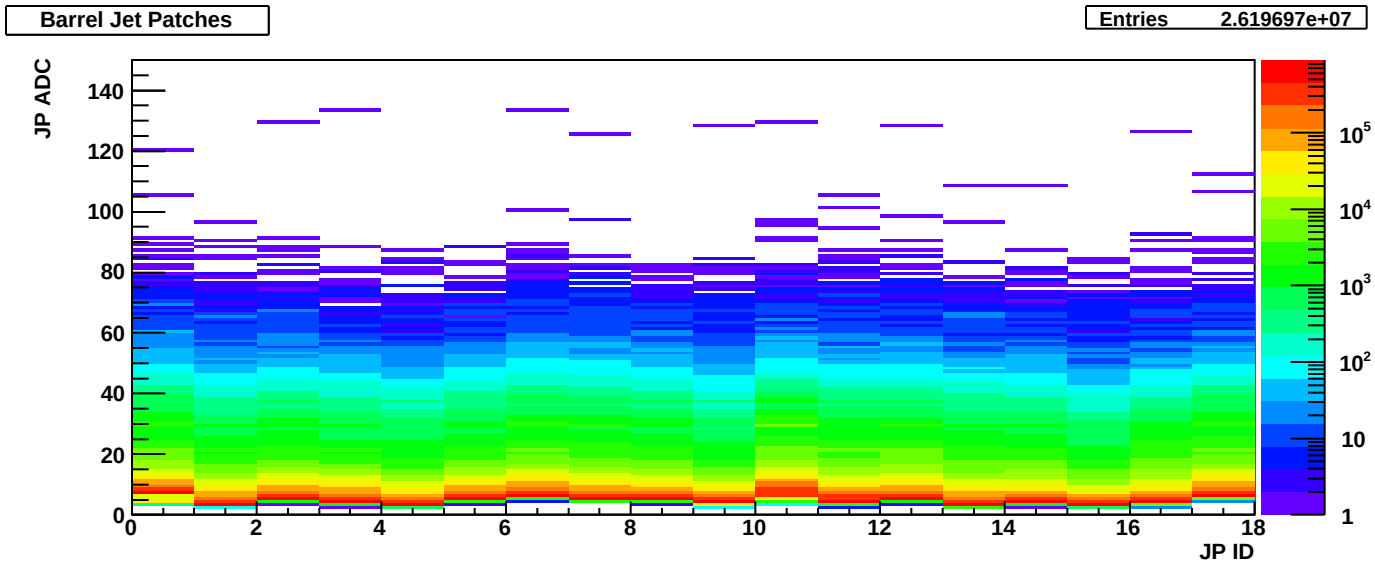

!Yellow-Fill
Entries 122571

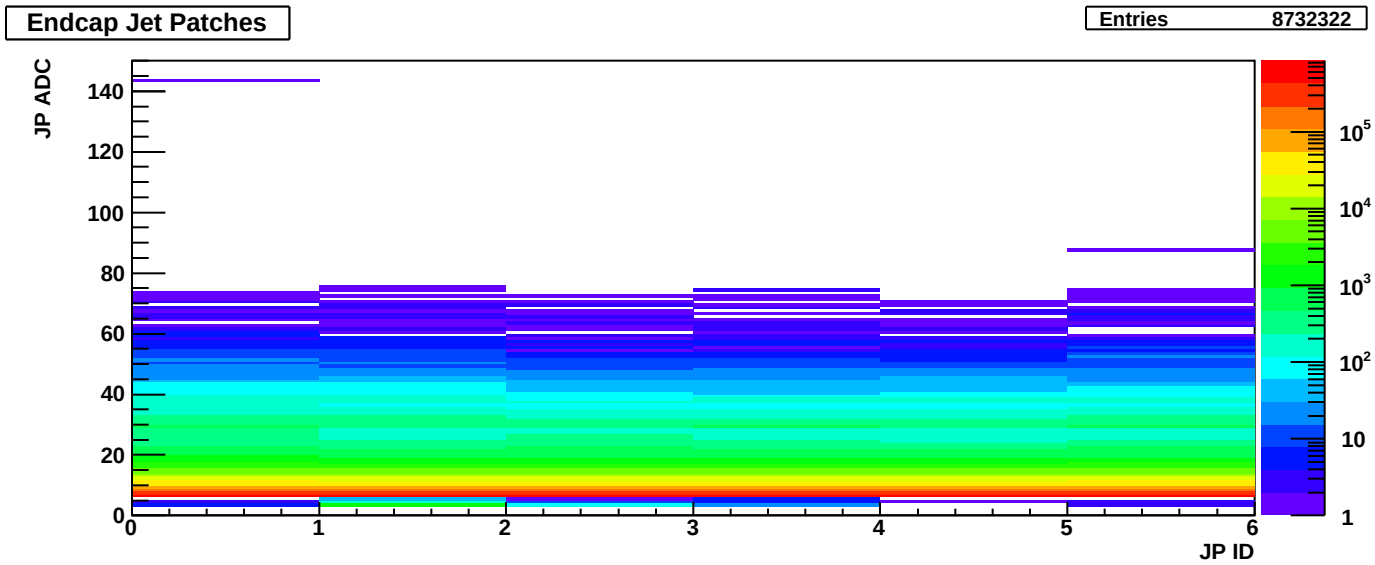

Barrel EMC L0 Input - High Tower
Entries 4.366161e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

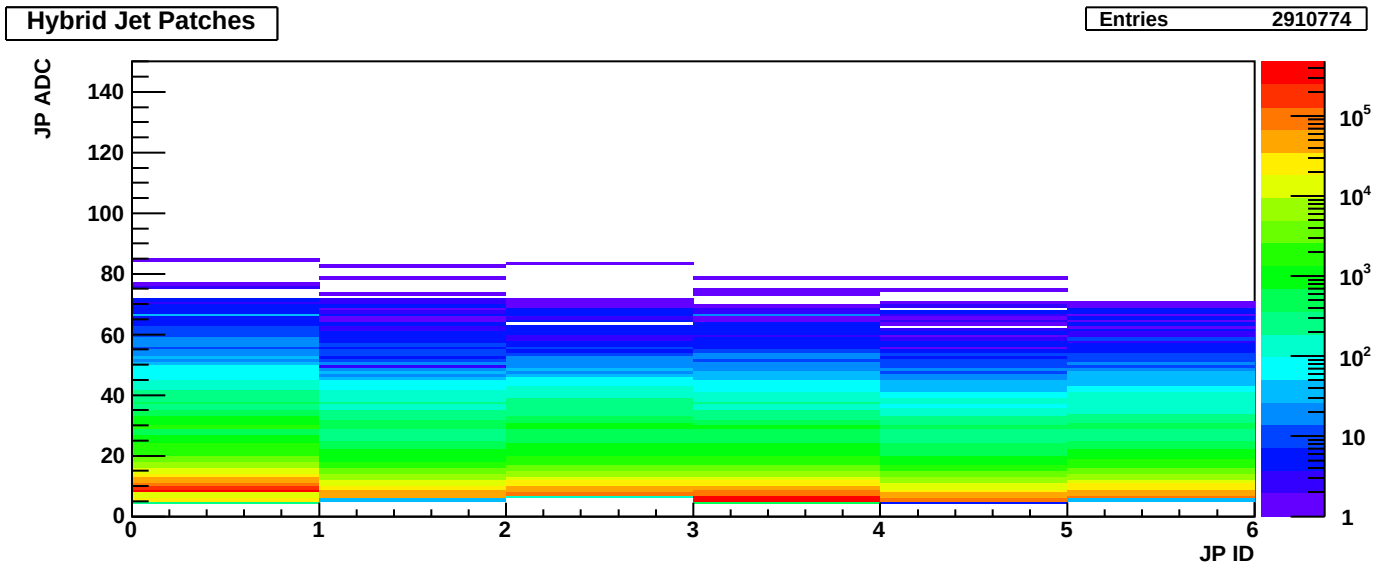

Barrel EMC L0 Input - Patch Sum
Entries 4.366161e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

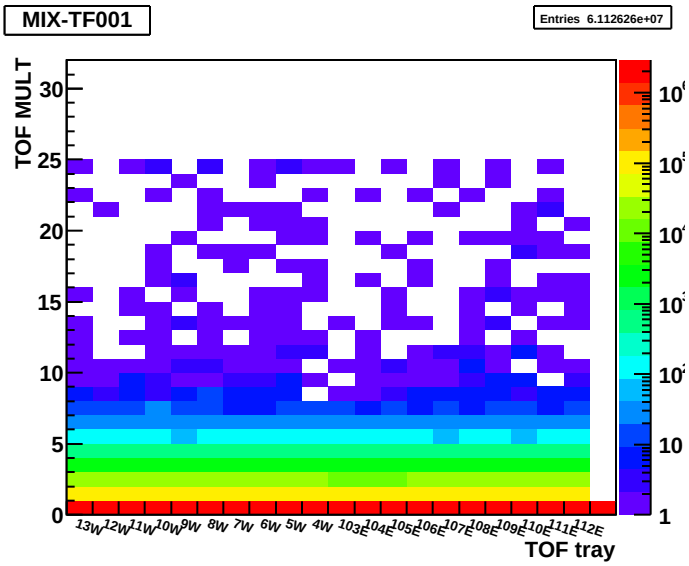

Endcap EMC L0 Input - High Tower
Entries 1.309848e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

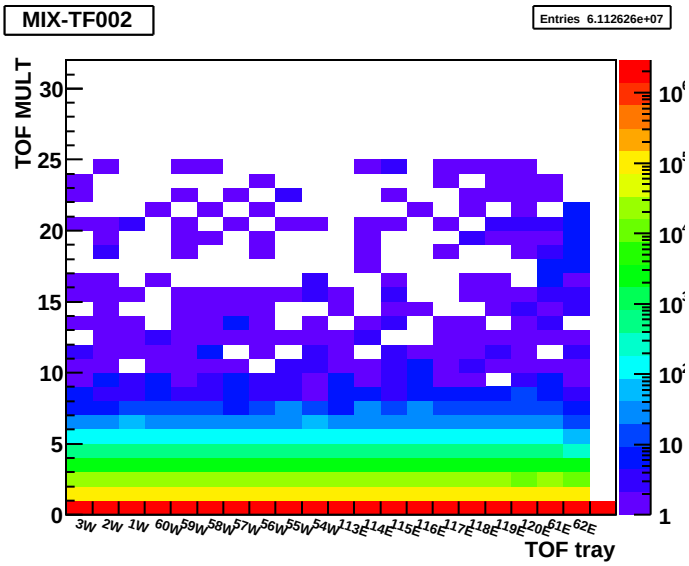

Endcap EMC L0 Input - Patch Sum
Entries 1.309848e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

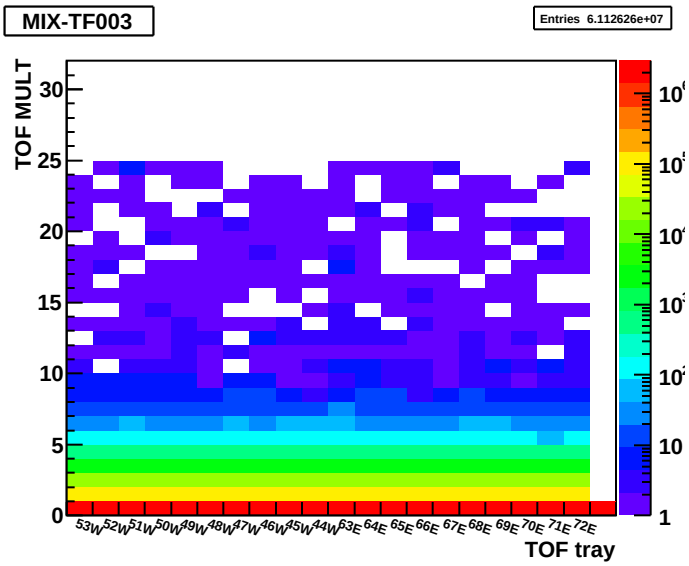

Barrel Jet Patches
Entries 2.619697e+07
JP ADC
JP ID

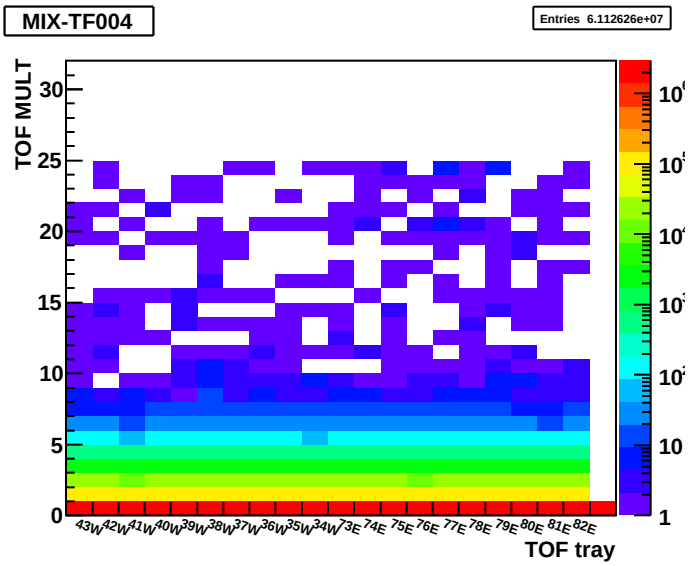

Endcap Jet Patches
Entries 8732322
JP ADC
JP ID

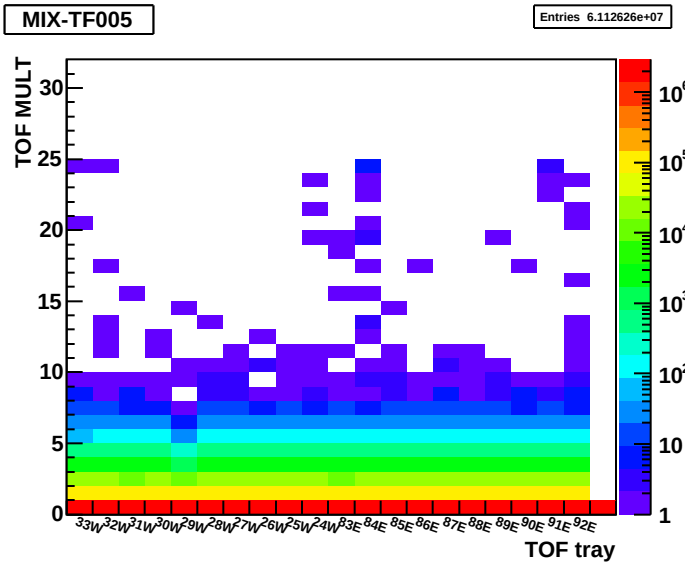

Hybrid Jet Patches
Entries 2910774
JP ADC
JP ID

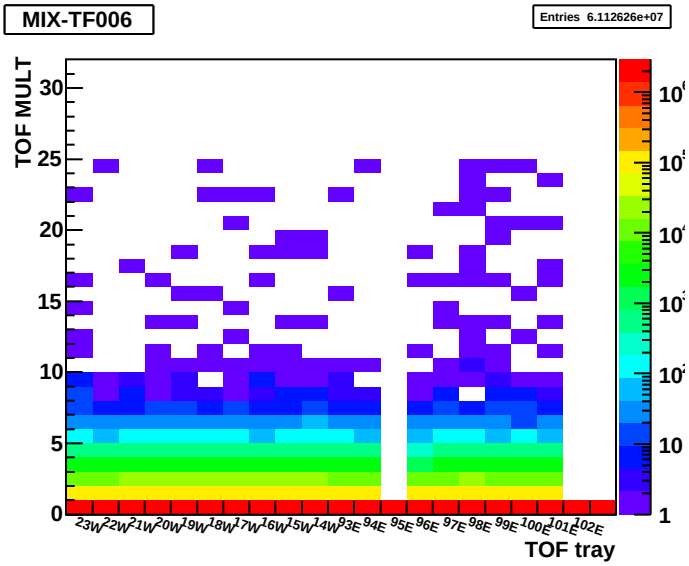

MIX-TF001
Entries 6.112626e+07
TOF MULT
TOF tray

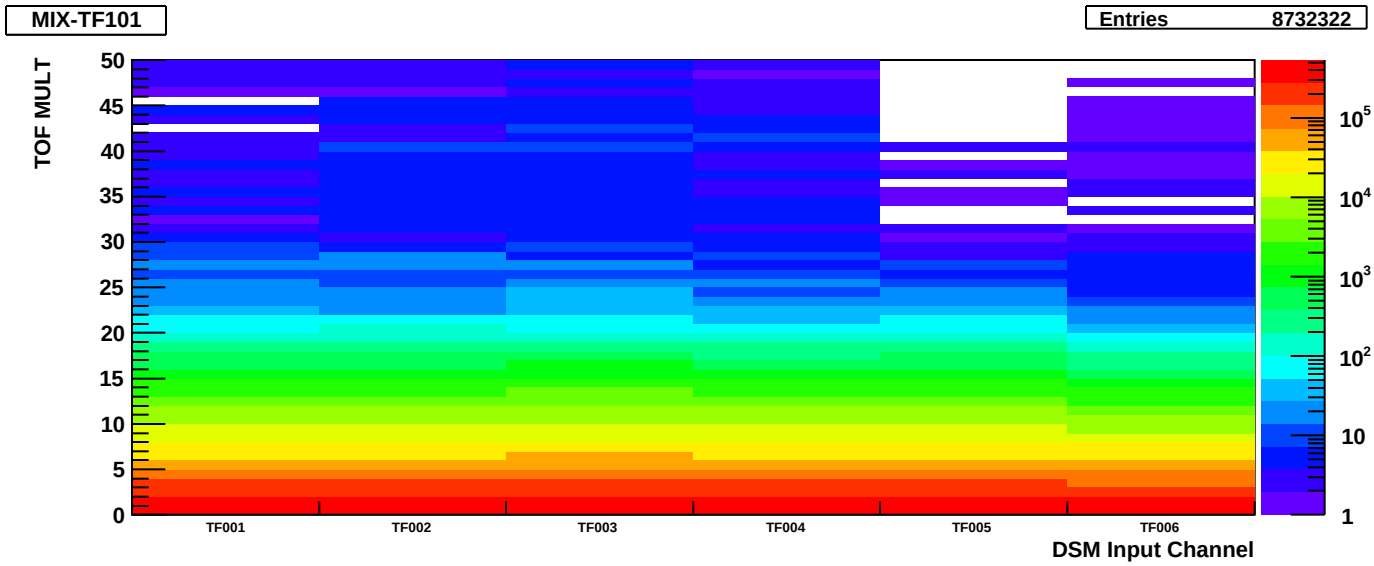

MIX-TF002
Entries 6.112626e+07
TOF MULT
TOF tray

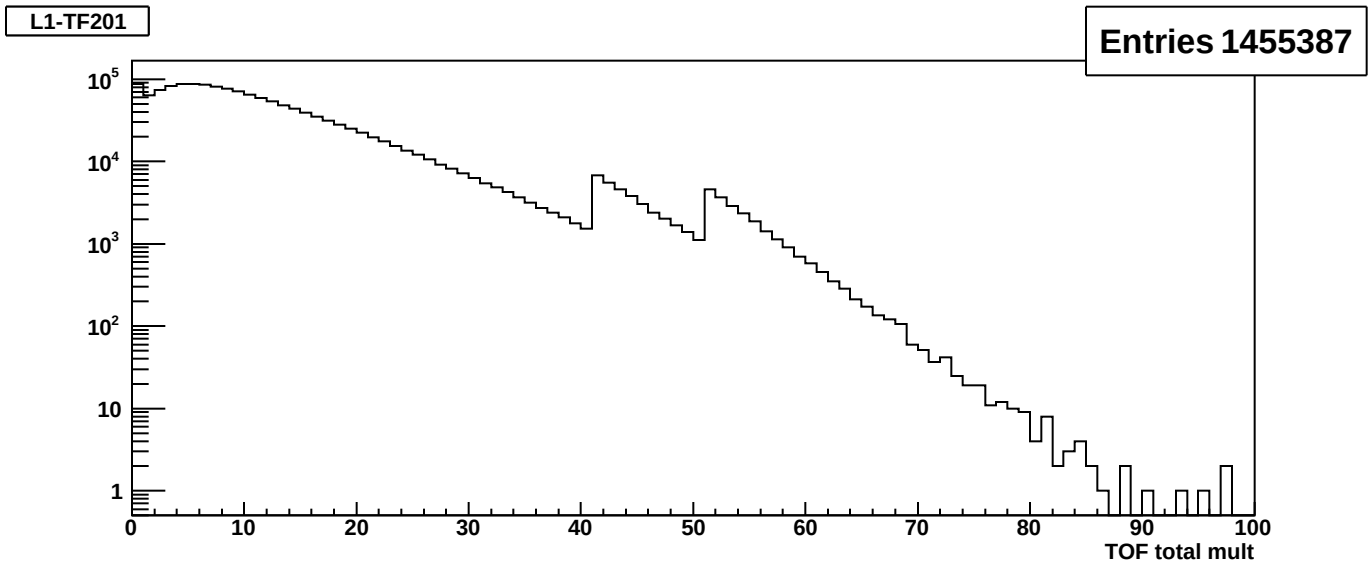

MIX-TF003
Entries 6.112626e+07
TOF MULT
TOF tray

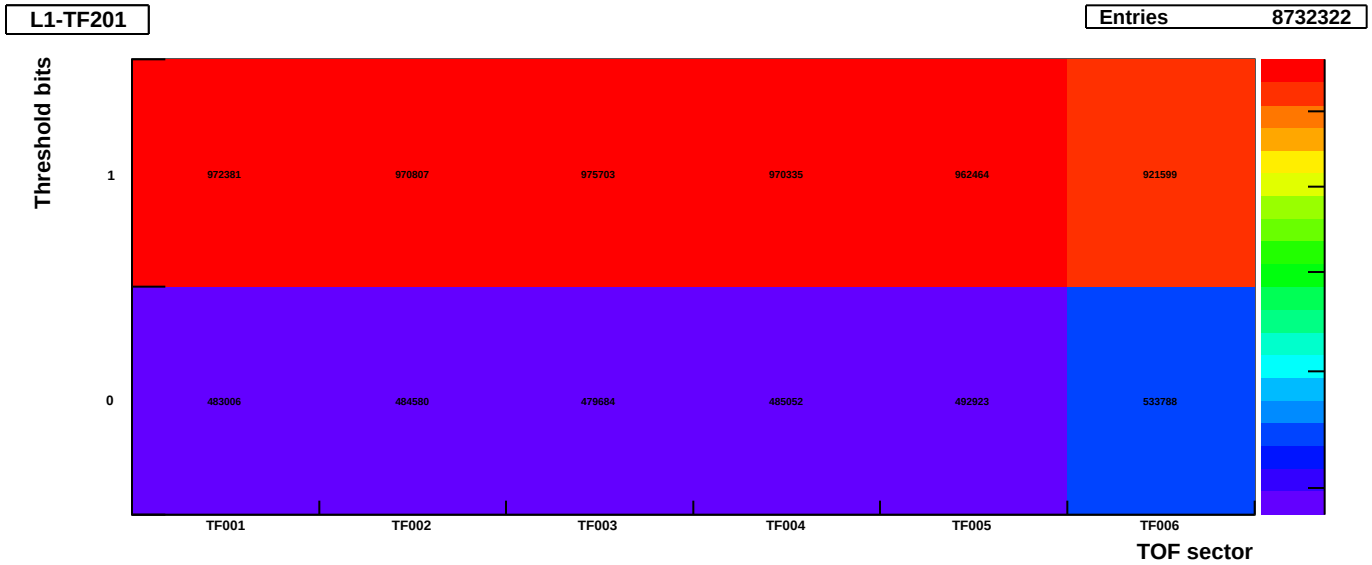

MIX-TF004
Entries 6.112626e+07
TOF MULT
TOF tray

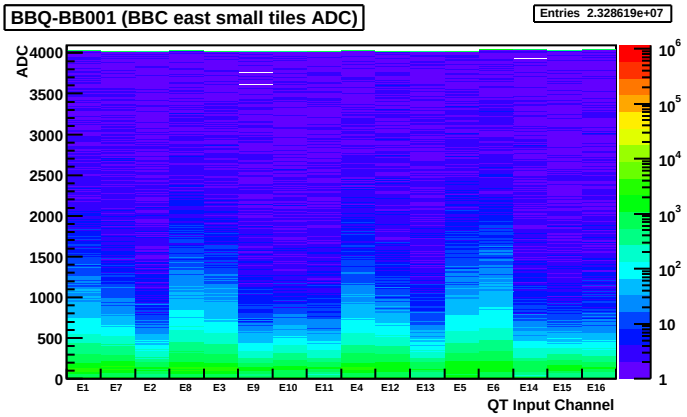

MIX-TF005
Entries 6.112626e+07
TOF MULT
TOF tray

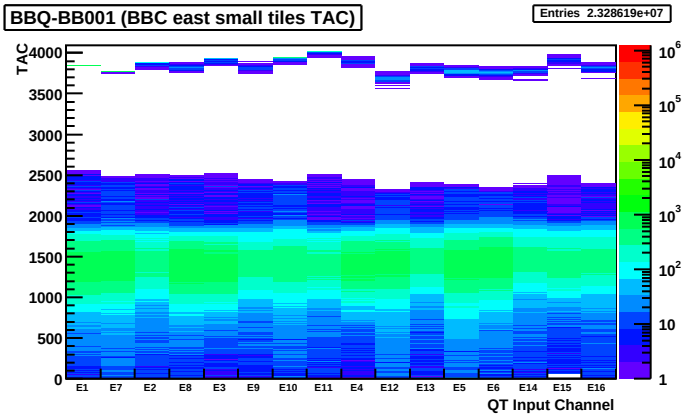

MIX-TF006
Entries 6.112626e+07
TOF MULT
TOF tray

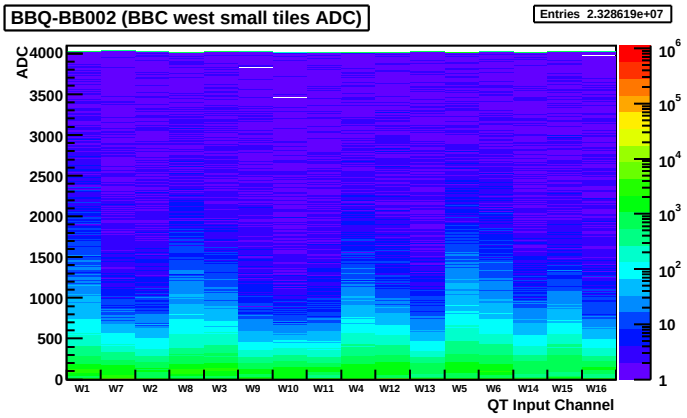

MIX-TF101
Entries 8732322
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

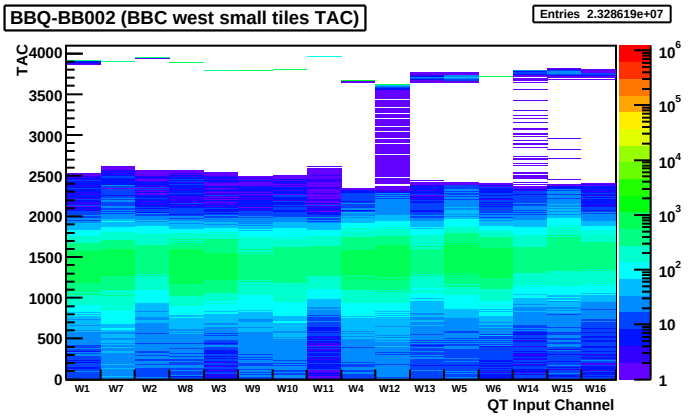

L1-TF201
Entries 1455387
TOF total mult

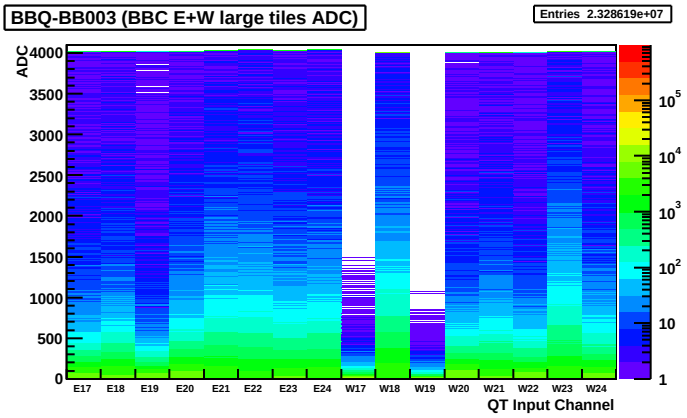

L1-TF201
Entries 8732322
Threshold bits
972381
970807
975703
970335
962464
921599
483006
484580
479684
485052
492923
533788
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

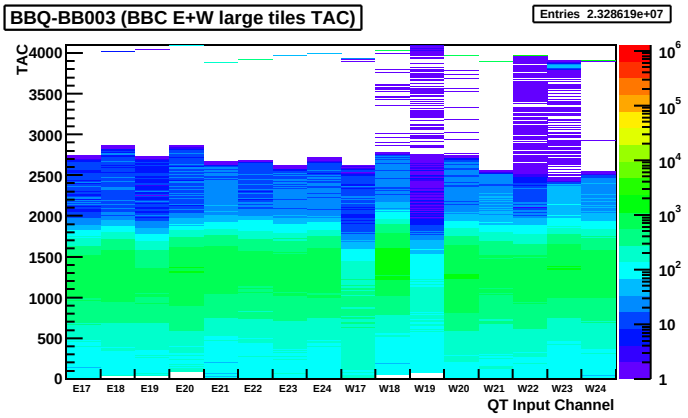

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.328619e+07
ADC
QT Input Channel

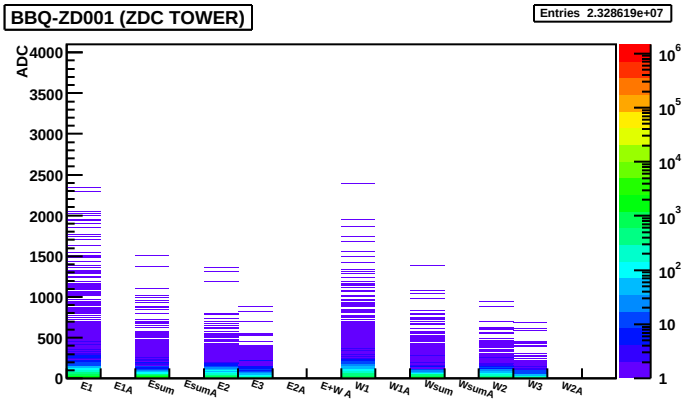

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.328619e+07
TAC
QT Input Channel

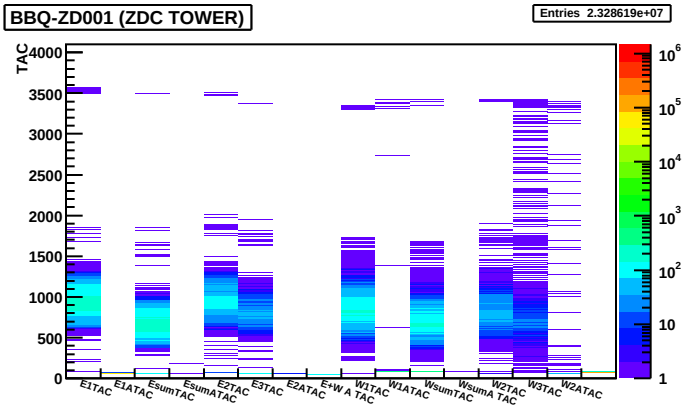

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.328619e+07
ADC
QT Input Channel

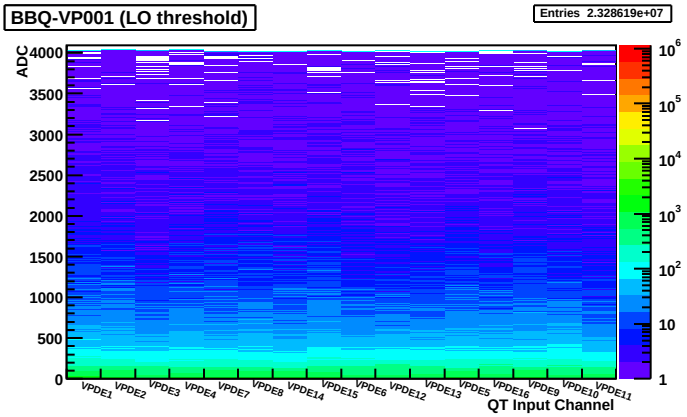

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.328619e+07
TAC
QT Input Channel

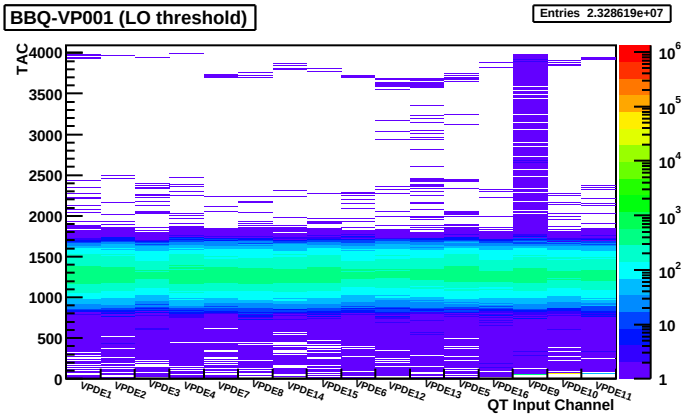

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.328619e+07
ADC
QT Input Channel

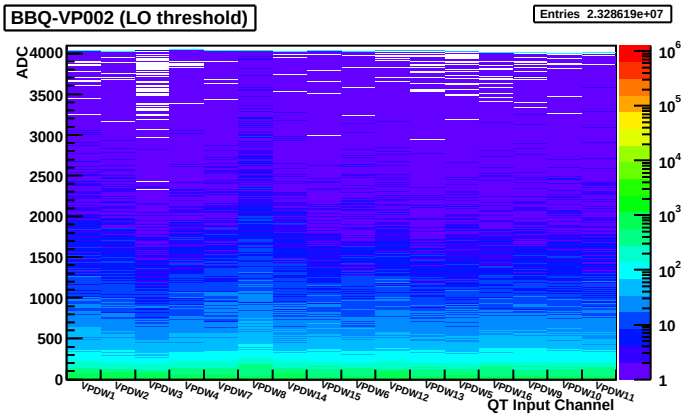

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.328619e+07
TAC
QT Input Channel

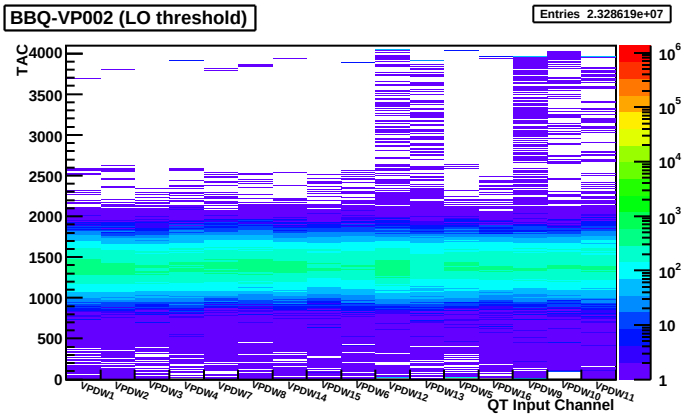

BBQ-ZD001 (ZDC TOWER)
Entries 2.328619e+07
ADC

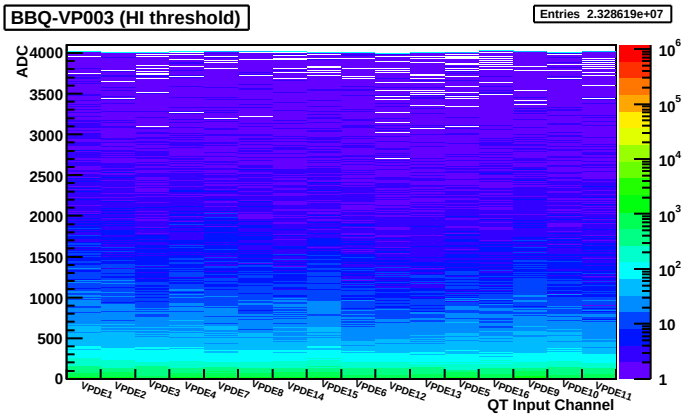

BBQ-ZD001 (ZDC TOWER)
Entries 2.328619e+07
TAC

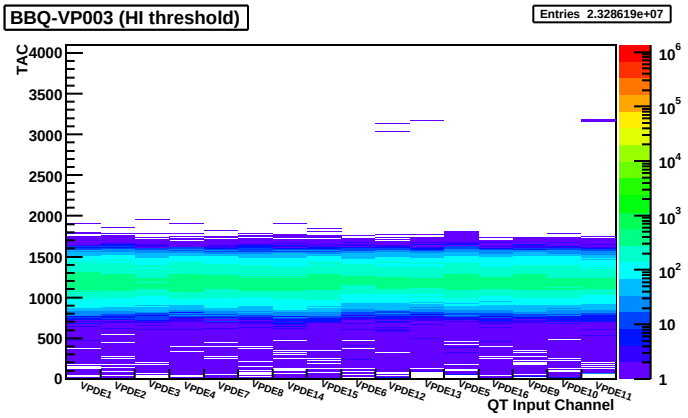

BBQ-VP001 (LO threshold)
Entries 2.328619e+07
ADC
QT Input Channel

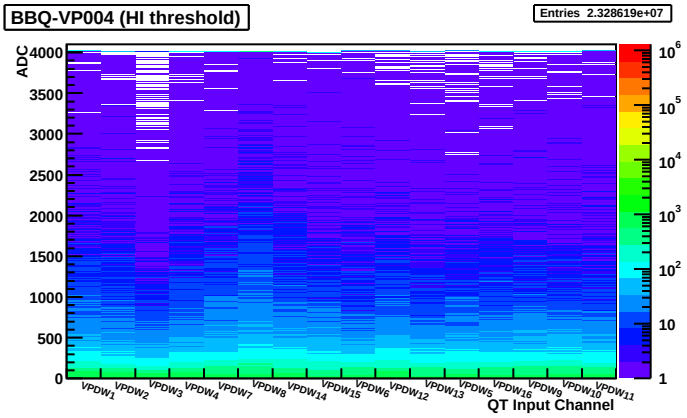

BBQ-VP001 (LO threshold)
Entries 2.328619e+07
TAC
QT Input Channel

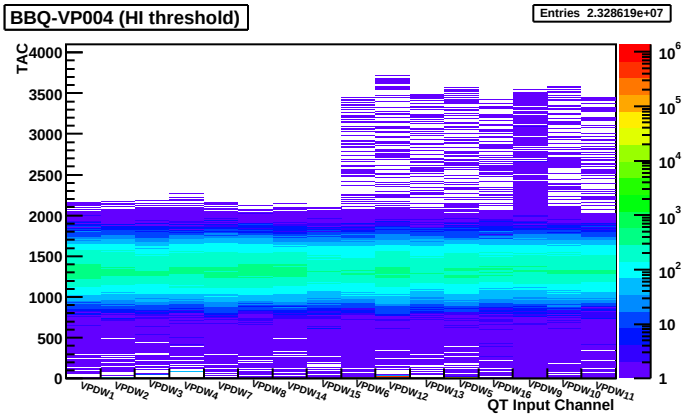

BBQ-VP002 (LO threshold)
Entries 2.328619e+07
ADC
QT Input Channel

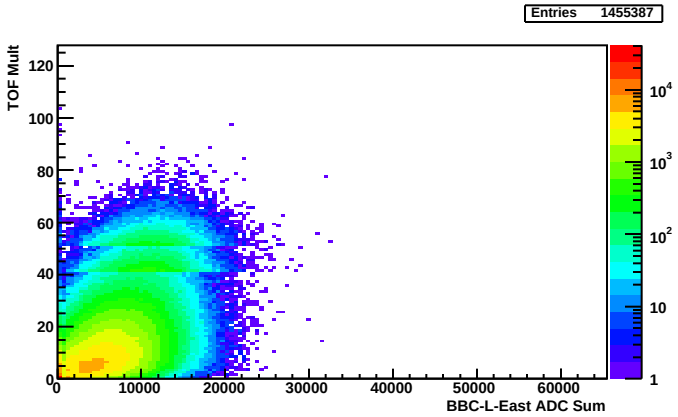

BBQ-VP002 (LO threshold)
Entries 2.328619e+07
TAC
QT Input Channel

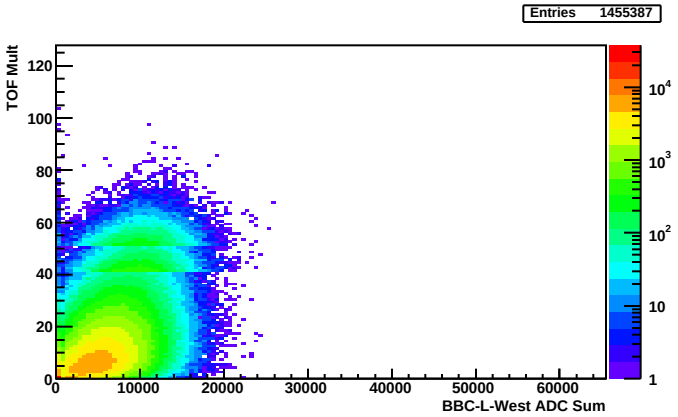

BBQ-VP003 (HI threshold)
Entries 2.328619e+07
ADC
QT Input Channel

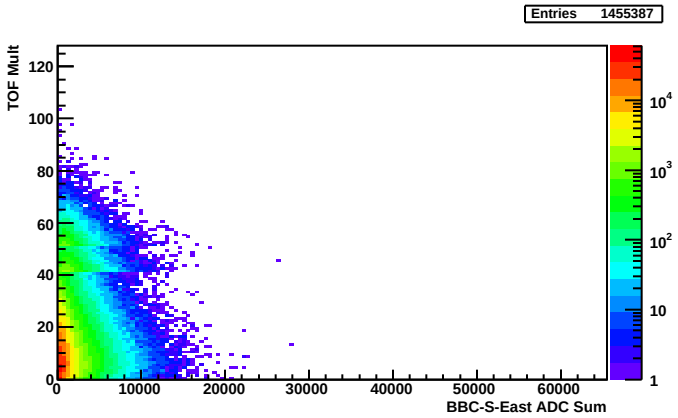

BBQ-VP003 (HI threshold)
Entries 2.328619e+07
TAC
QT Input Channel

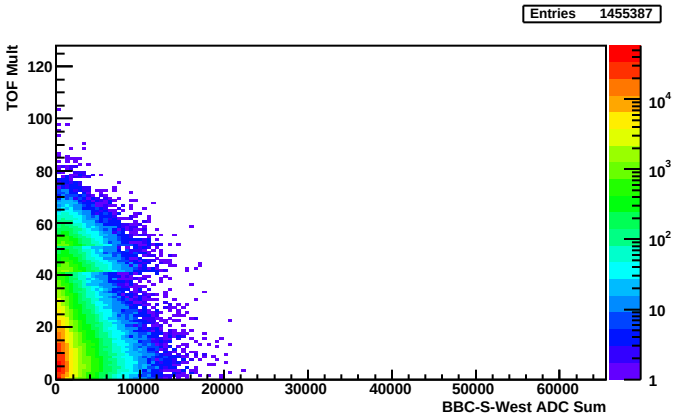

BBQ-VP004 (HI threshold)
Entries 2.328619e+07
ADC
QT Input Channel

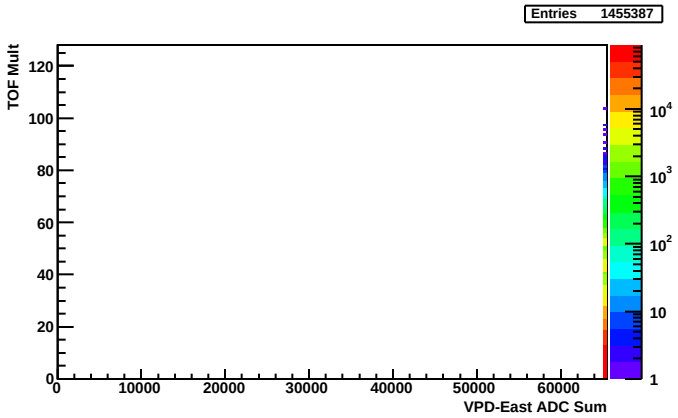

BBQ-VP004 (HI threshold)
Entries 2.328619e+07
TAC
QT Input Channel

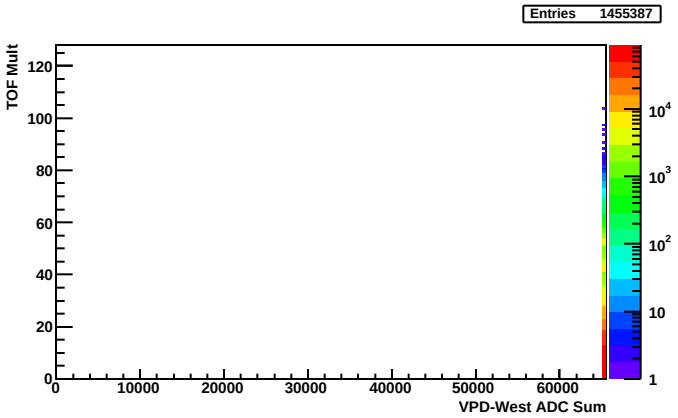

Entries 1455387
TOF Mult
BBC-L-East ADC Sum

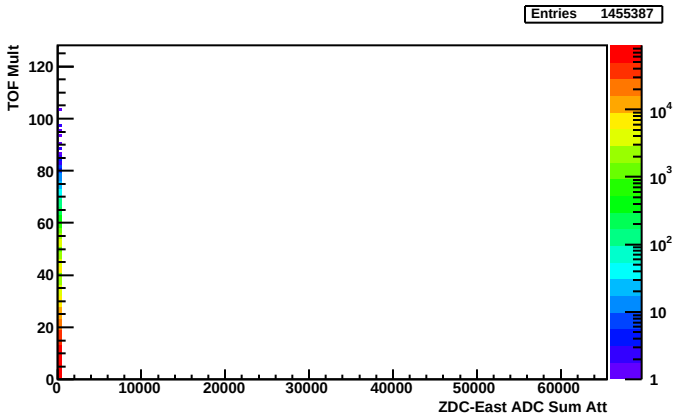

Entries 1455387
TOF Mult
BBC-L-West ADC Sum

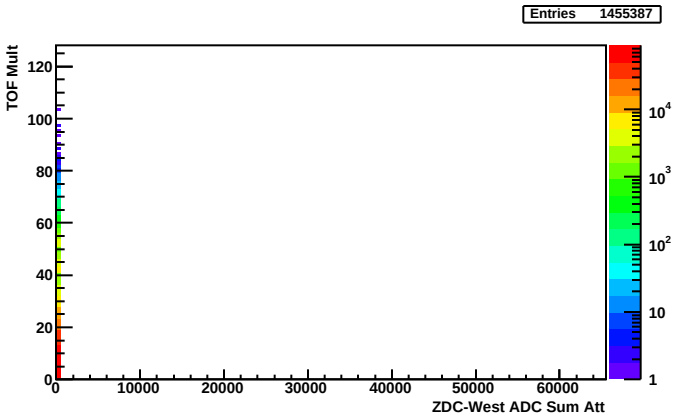

Entries 1455387
TOF Mult
BBC-S-East ADC Sum

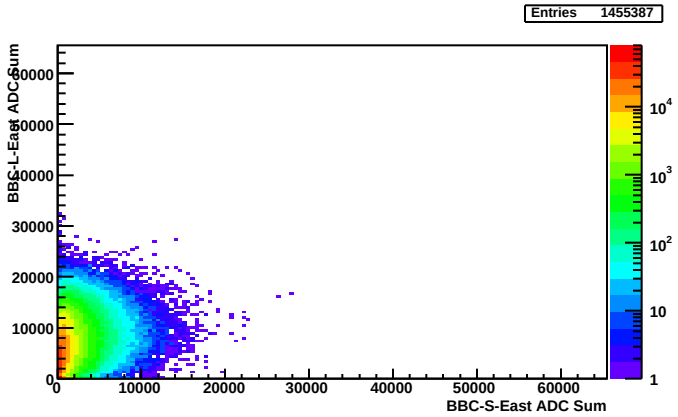

Entries 1455387
TOF Mult
BBC-S-West ADC Sum

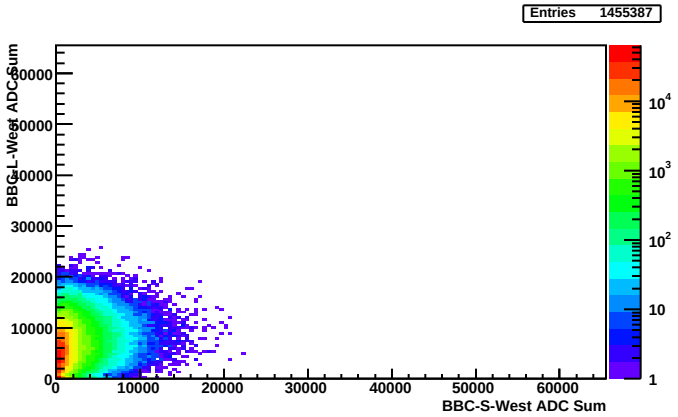

Entries 1455387
TOF Mult
VPD-East ADC Sum

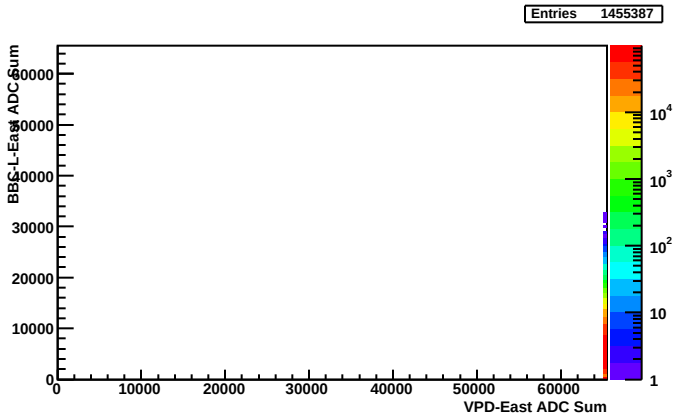

Entries 1455387
TOF Mult
VPD-West ADC Sum

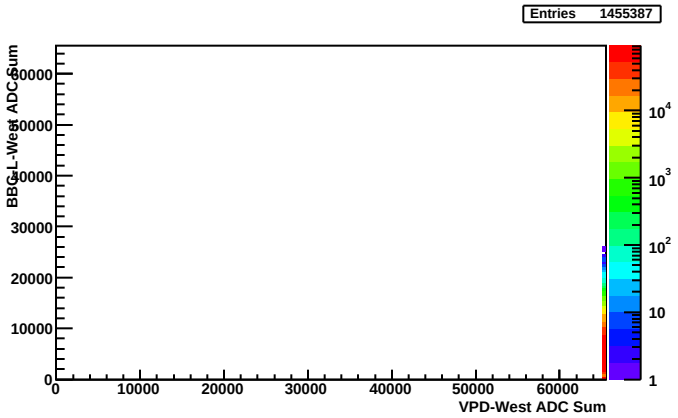

Entries 1455387
TOF Mult
ZDC-East ADC Sum Att

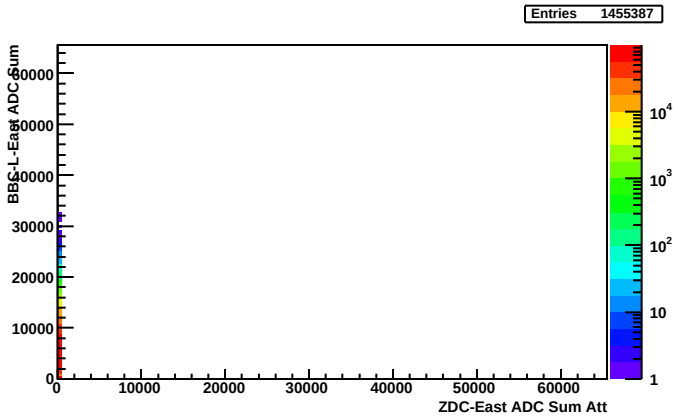

Entries 1455387
TOF Mult
ZDC-West ADC Sum Att

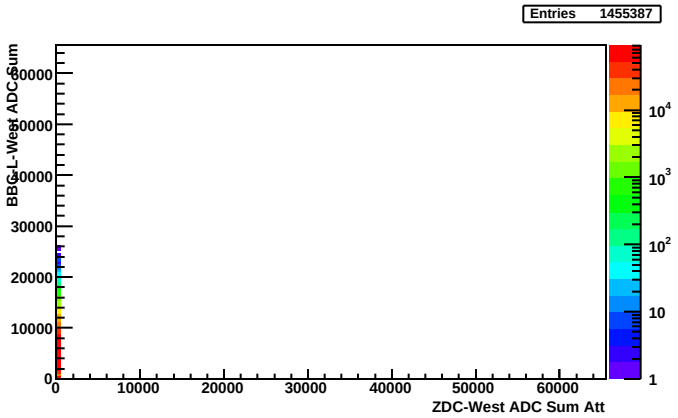

Entries 1455387
BBC-L-East ADC Sum
BBC-S-East ADC Sum

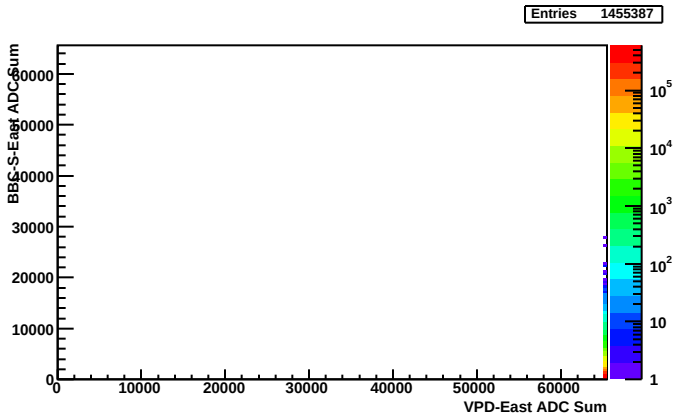

Entries 1455387
BBC-L-West ADC Sum
BBC-S-West ADC Sum

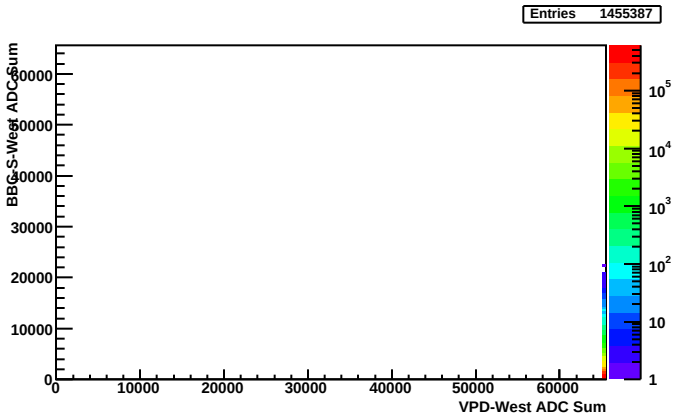

Entries 1455387
BBC-L-East ADC Sum
VPD-East ADC Sum

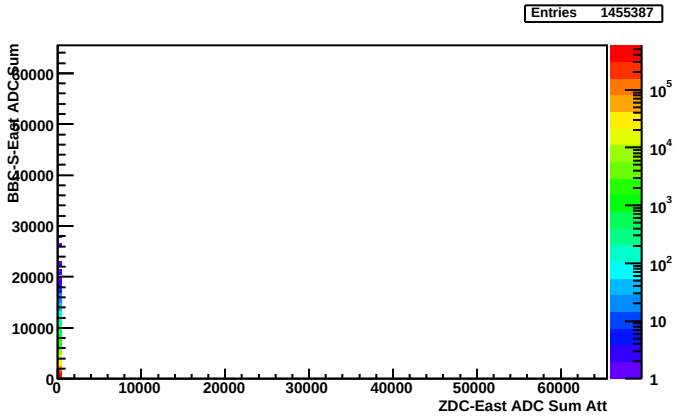

Entries 1455387
BBC-L-West ADC Sum
VPD-West ADC Sum

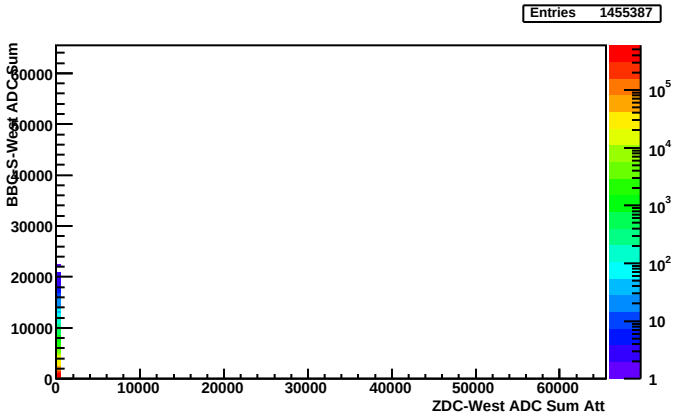

Entries 1455387
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

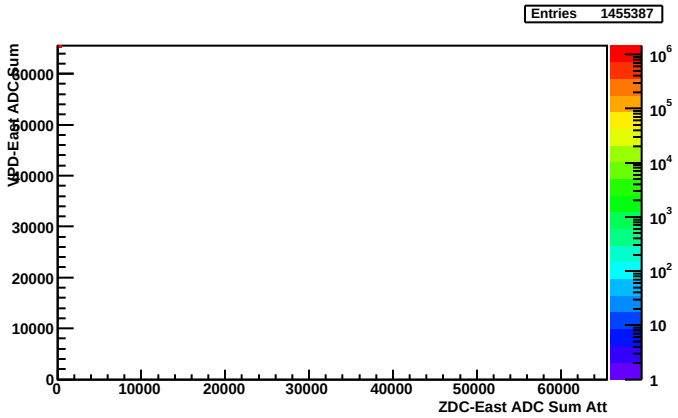

Entries 1455387
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

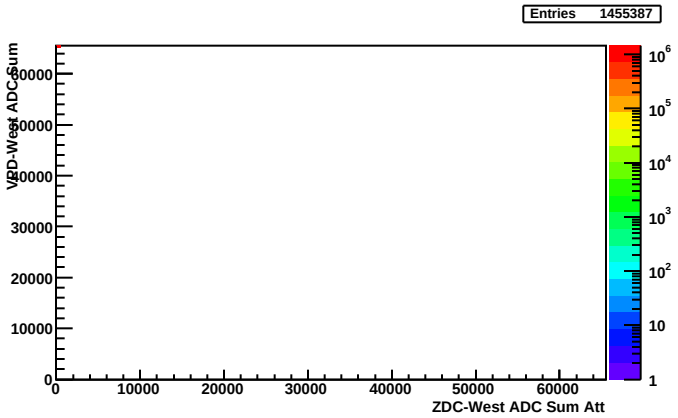

Entries 1455387
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 1455387
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 1455387
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 1455387
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 1455387
VPD-East ADC Sum
ZDC-East ADC Sum Att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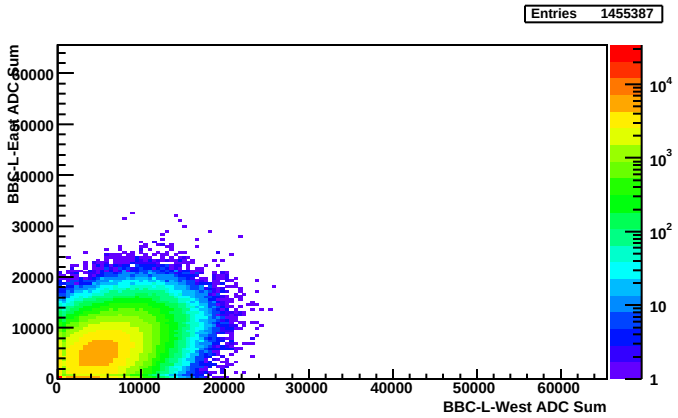
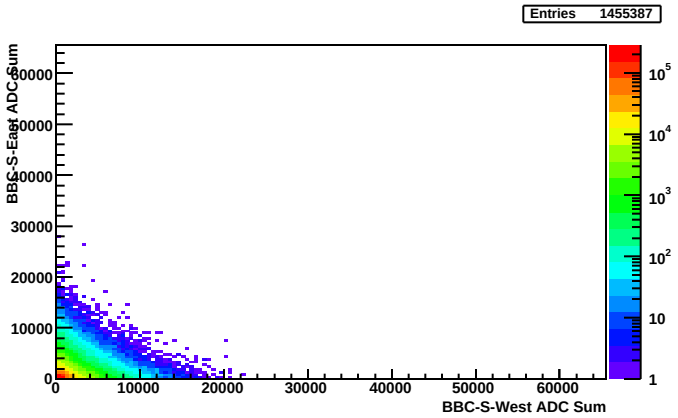
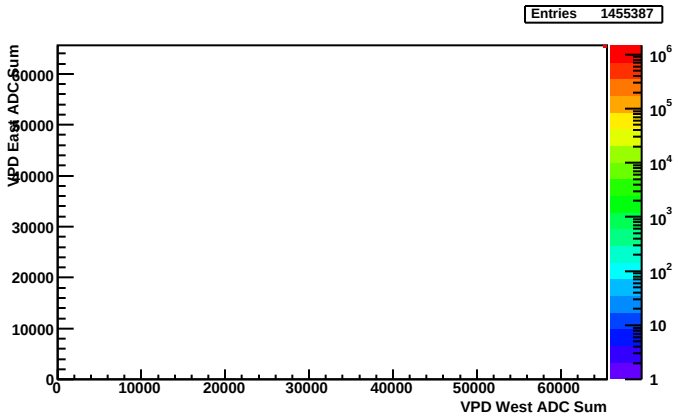
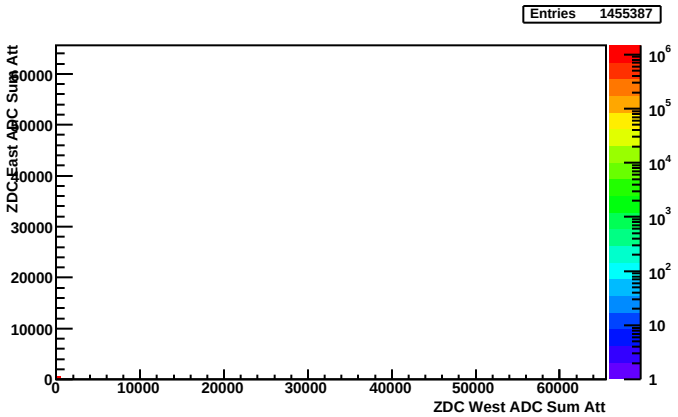
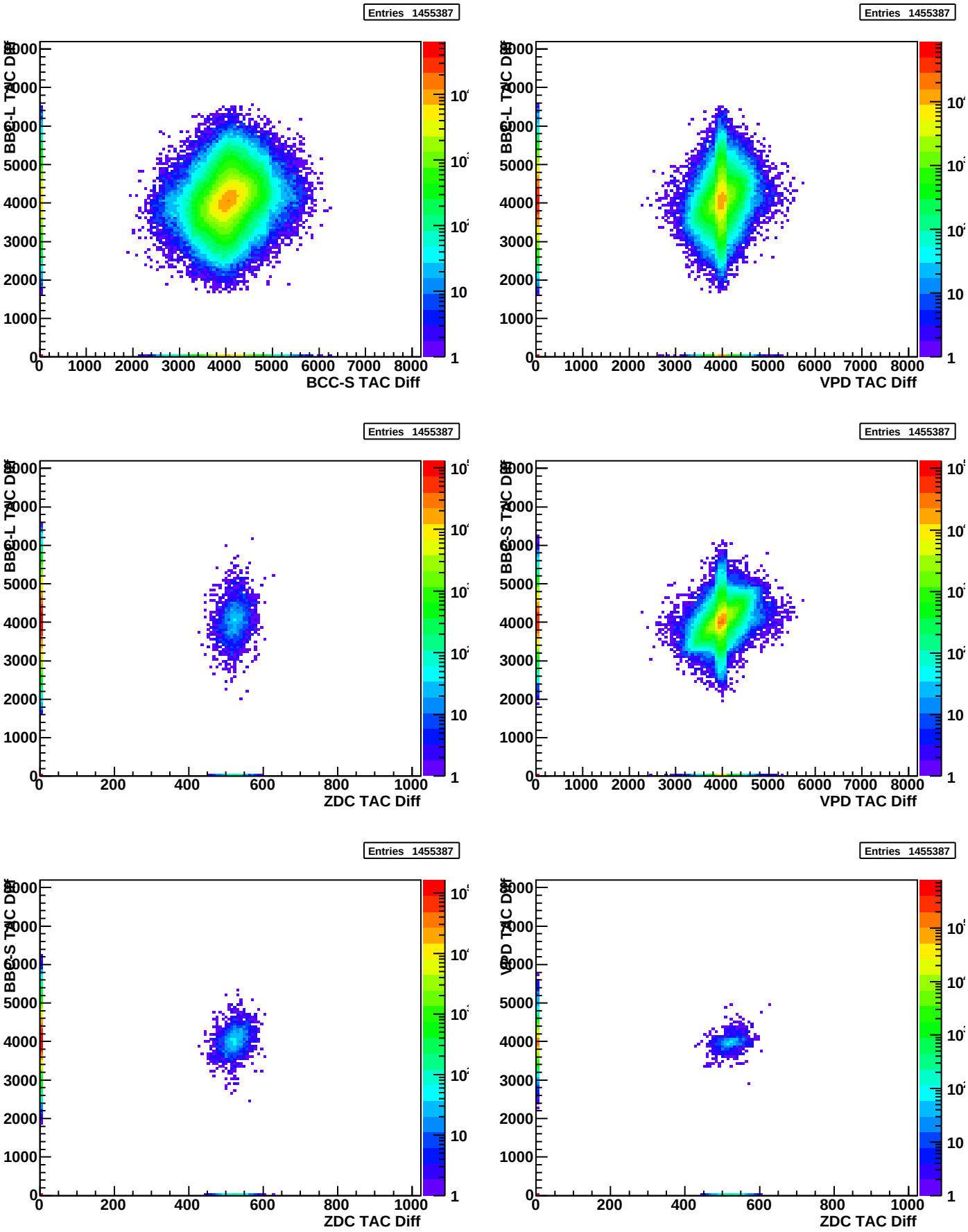
VPD-West ADC Sum
ZDC-West ADC Sum Att

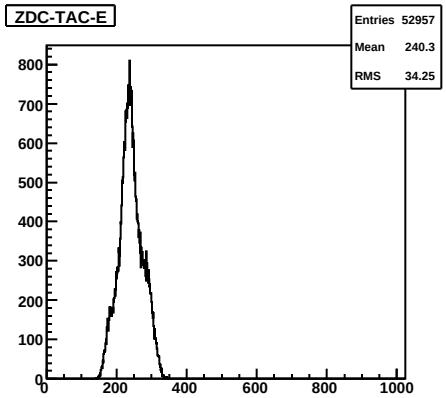

Entries 1455387
BBC-L-East ADC Sum
BBC-L-West ADC Sum

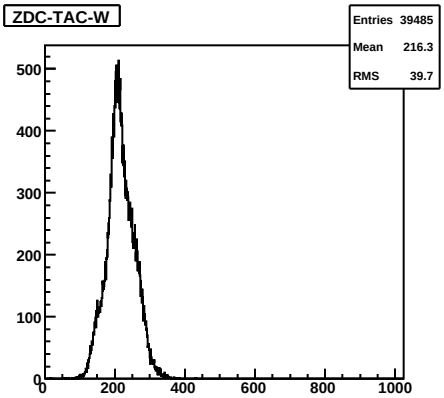

Entries 1455387
BBC-S-East ADC Sum
BBC-S-West ADC Sum

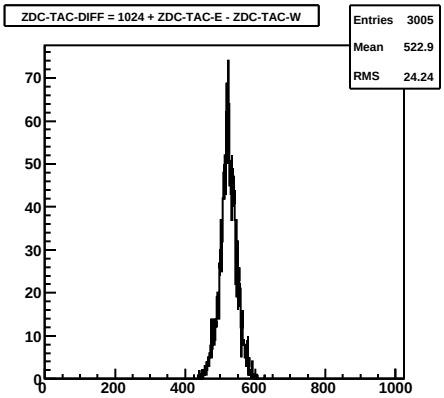

Entries 1455387
VPD East ADC Sum
VPD West ADC Sum

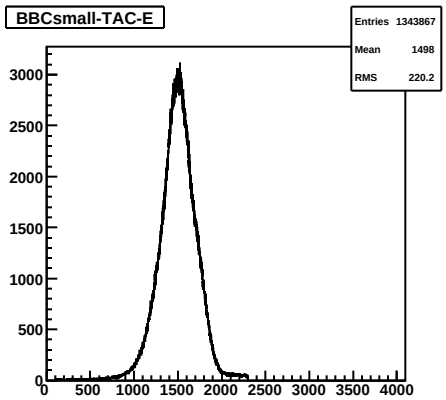

Entries 1455387
ZDC-East ADC Sum Att
ZDC West ADC Sum Att

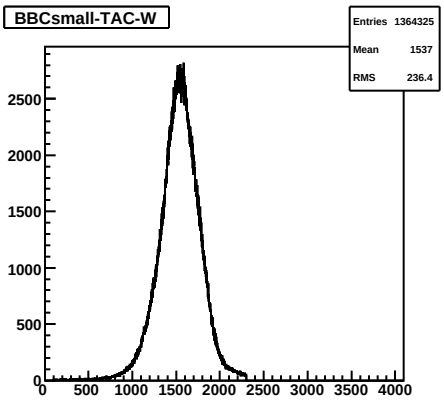

Entries 1455387
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1455387
BBC-L TAC Diff
VPD TAC Diff
Entries 1455387
BBC-L TAC Diff
ZDC TAC Diff
Entries 1455387
BBC-S TAC Diff
VPD TAC Diff
Entries 1455387
BBC-S TAC Diff
ZDC TAC Diff
Entries 1455387
VPD TAC Diff
ZDC TAC Diff

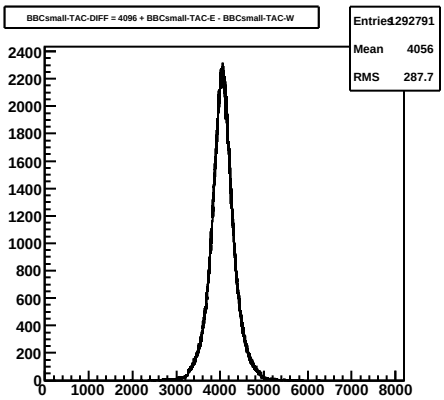

ZDC-TAC-E
Entries 52957
Mean 240.3
RMS 34.25

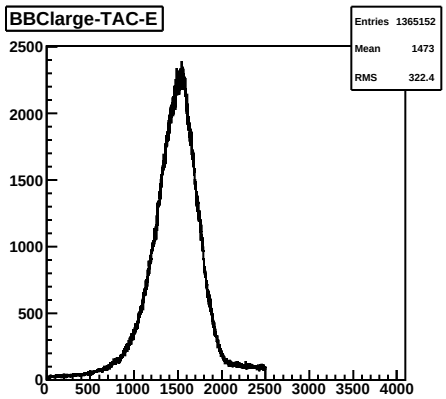

ZDC-TAC-W
Entries 39485
Mean 216.3
RMS 39.7

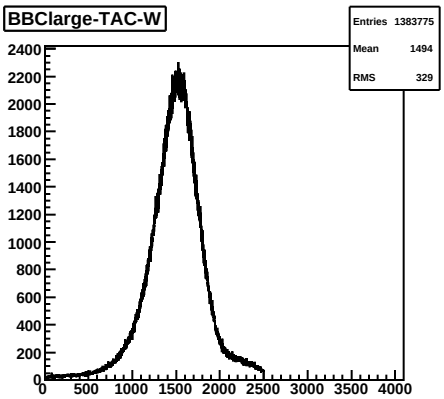

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 3005
Mean 522.9
RMS 24.24

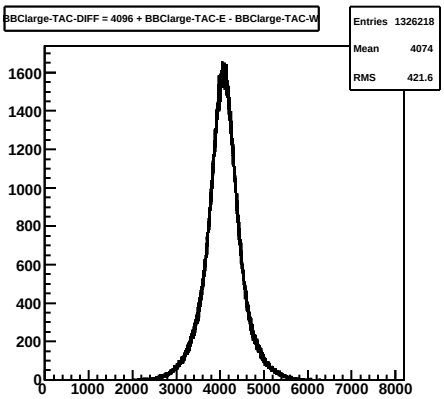

BBCsmall-TAC-E
Entries 1343867
Mean 1498
RMS 220.2

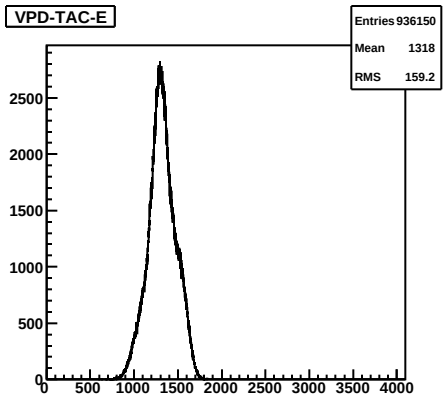

BBCsmall-TAC-W
Entries 1364325
Mean 1537
RMS 236.4

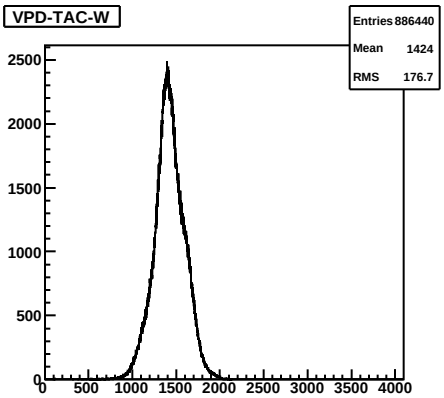

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1292791
Mean 4056
RMS 287.7

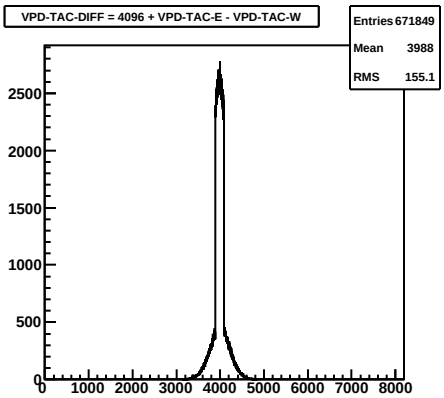

BBClarge-TAC-E
Entries 1365152
Mean 1473
RMS 322.4

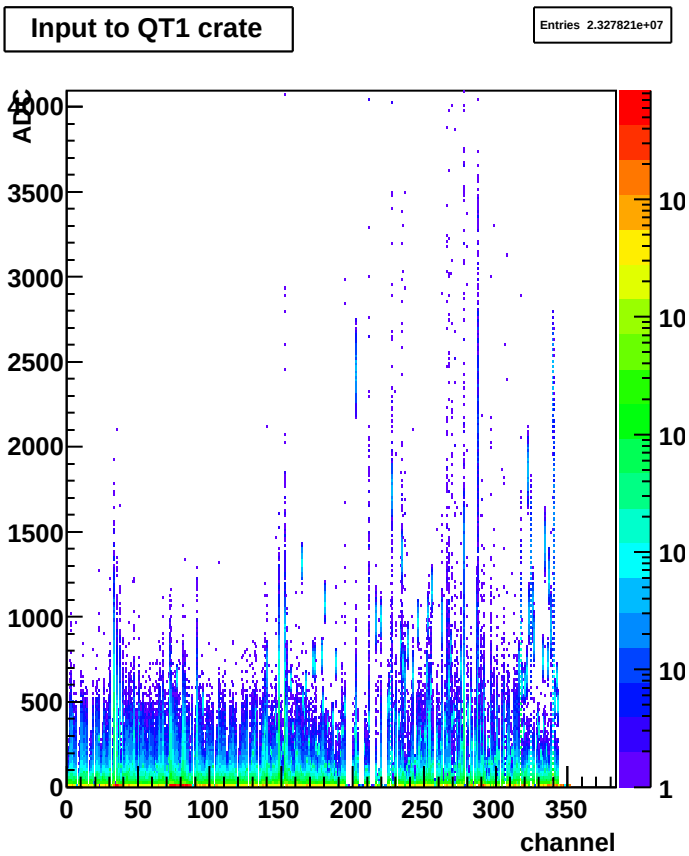

BBClarge-TAC-W
Entries 1383775
Mean 1494
RMS 329

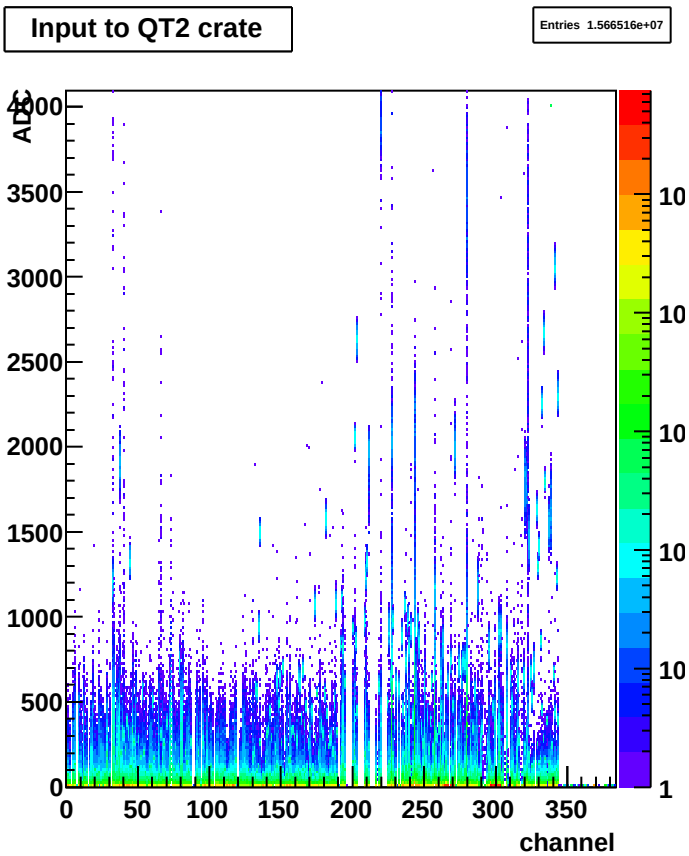

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1326218
Mean 4074
RMS 421.6

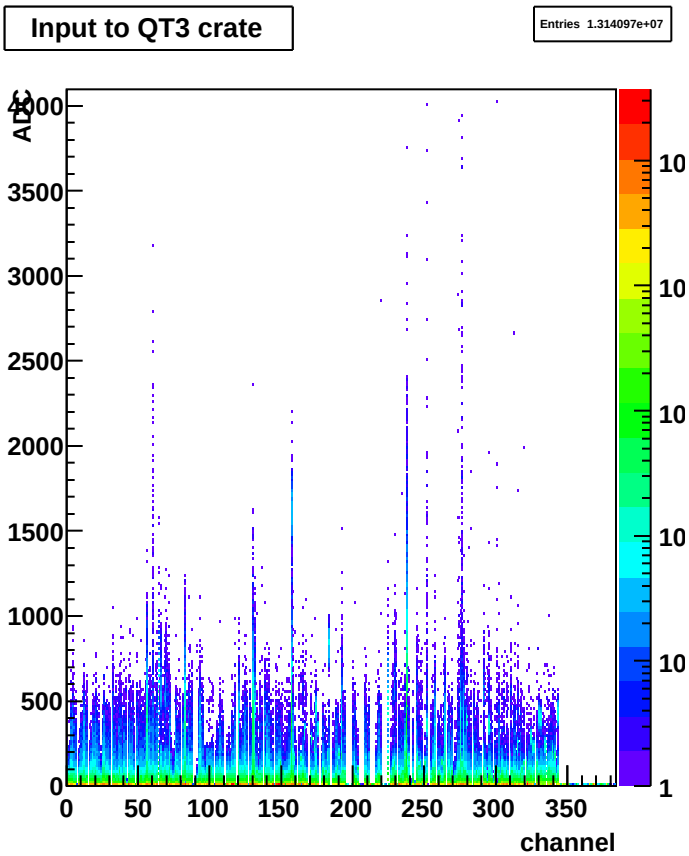

VPD-TAC-E
Entries 936150
Mean 1318
RMS 159.2

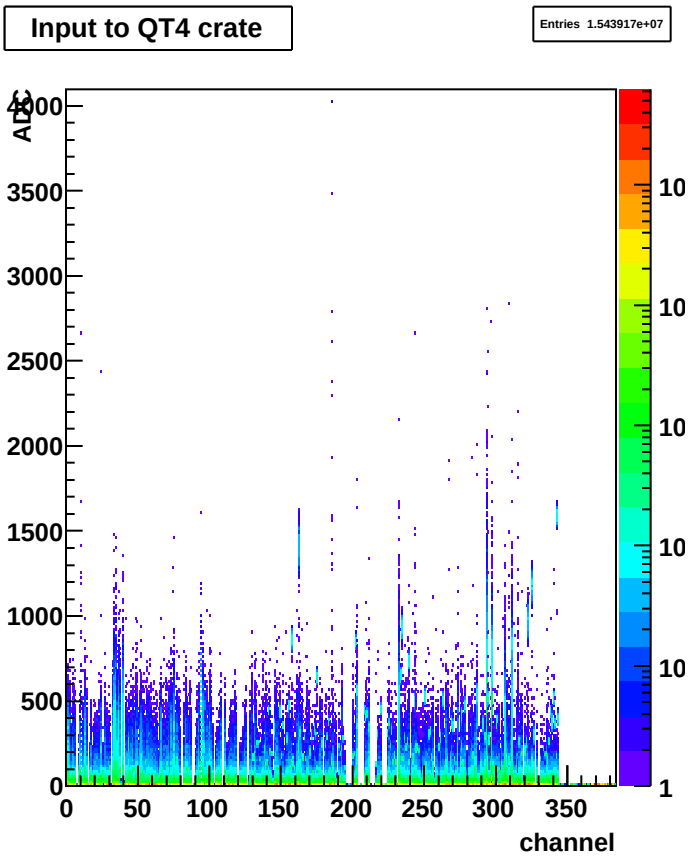

VPD-TAC-W
Entries 886440
Mean 1424
RMS 176.7

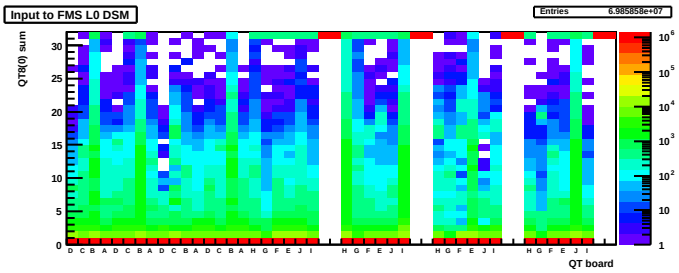

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 671849
Mean 3988
RMS 155.1

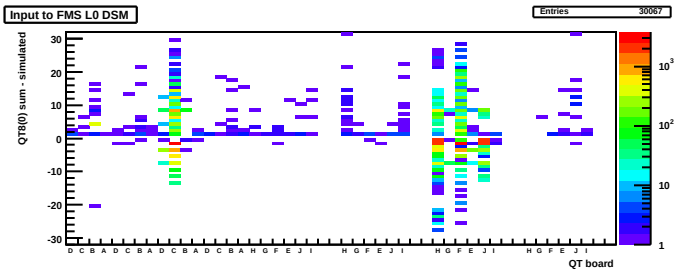

Input to QT1 crate
Entries 2.327821e+07
ADC
channel

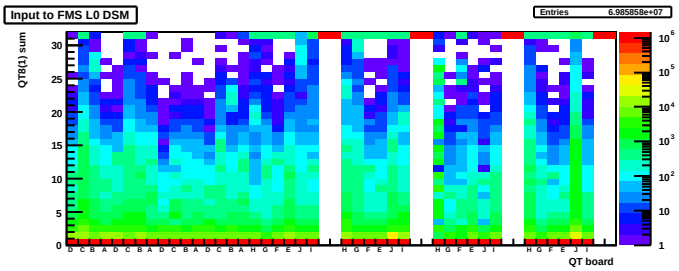

Input to QT2 crate
Entries 1.566516e+07
ADC
channel

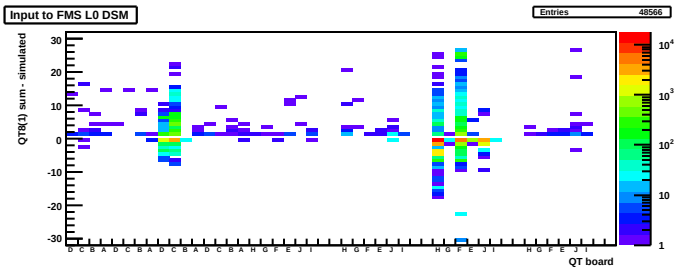

Input to QT3 crate
Entries 1.314097e+07
ADC
channel

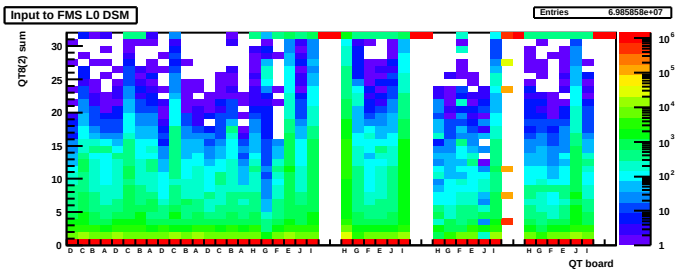

Input to QT4 crate
Entries 1.543917e+07
ADC
channel

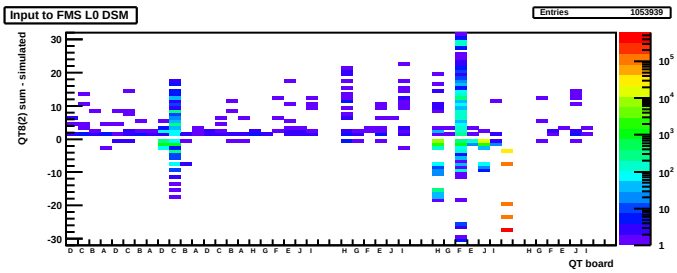

Input to FMS L0 DSM
Entries 6.985858e+07
QT8(0) sum
QT board

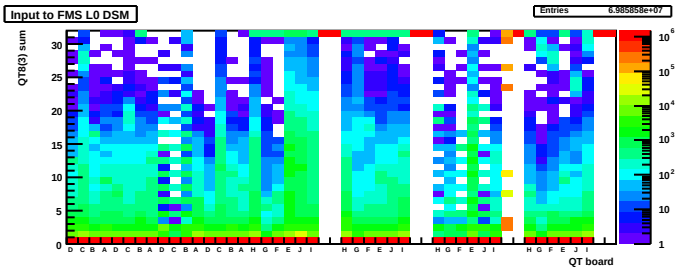

Input to FMS L0 DSM
Entries 30067
QT8(0) sum - simulated
QT board

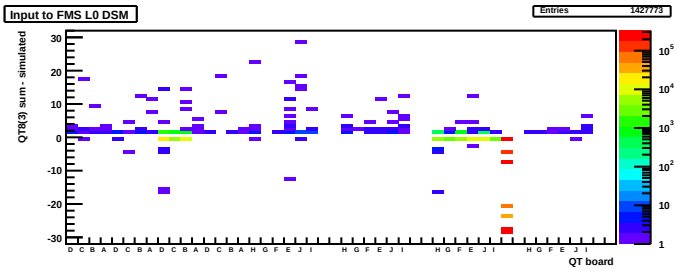

Input to FMS L0 DSM
Entries 6.985858e+07
QT8(1) sum
QT board

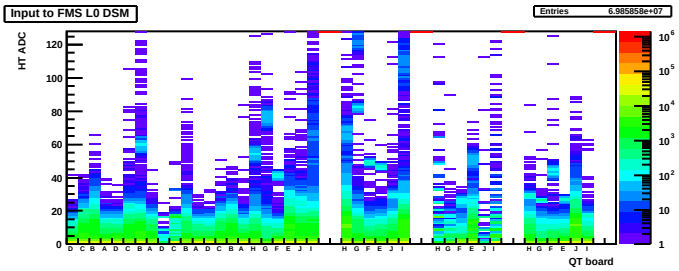

Input to FMS L0 DSM
Entries 48566
QT8(1) sum - simulated
QT board

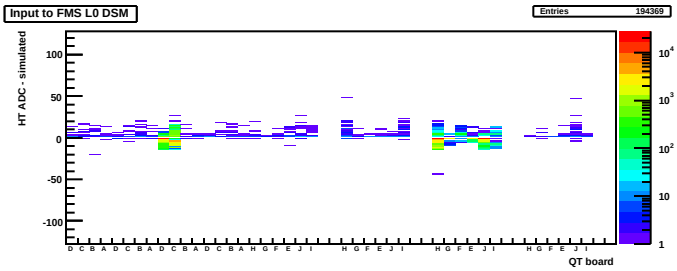

Input to FMS L0 DSM
Entries 6.985858e+07
QT8(2) sum
QT board

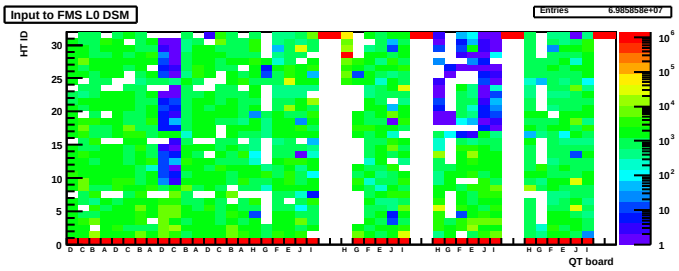

Input to FMS L0 DSM
Entries 1053939
QT8(2) sum - simulated
QT board

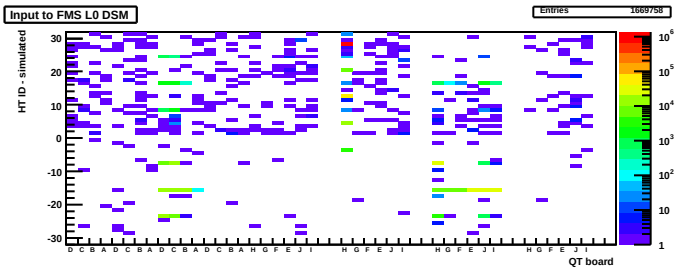

Input to FMS L0 DSM
Entries 6.985858e+07
QT8(3) sum
QT board

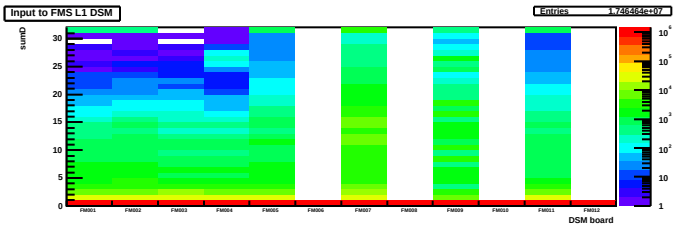

Input to FMS L0 DSM
Entries 1427773
QT8(3) sum - simulated
QT board

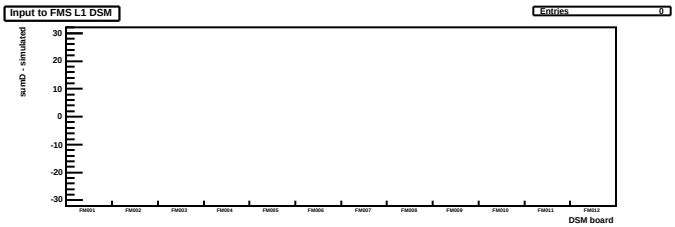

Input to FMS L0 DSM
Entries 6.985858e+07
HT ADC
QT board

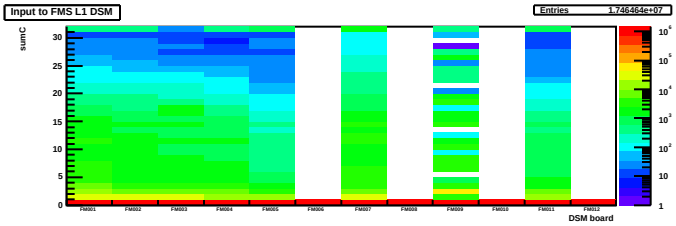

Input to FMS L0 DSM
Entries 194369
HT ADC - simulated
QT board

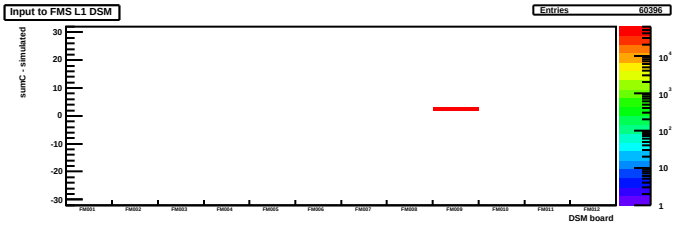

Input to FMS L0 DSM
Entries 6.985858e+07
HT ID
QT board

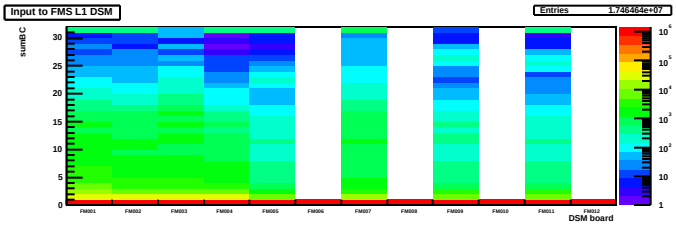

Input to FMS L0 DSM
Entries 1669758
HT ID - simulated
QT board

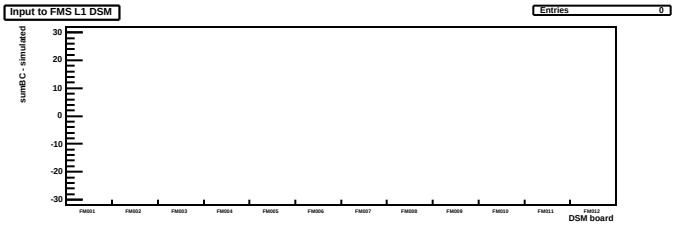

Input to FMS L1 DSM
Entries 1.746464e+07
sumD
DSM board

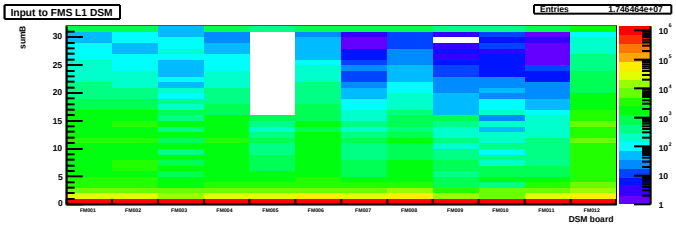

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

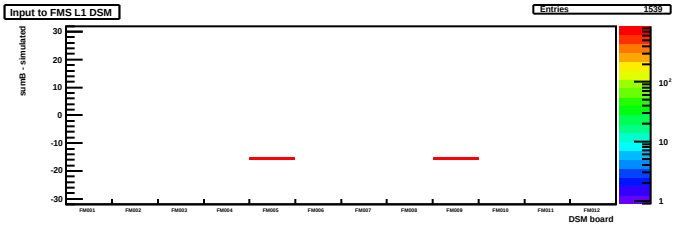

Input to FMS L1 DSM
Entries 1.746464e+07
sumC
DSM board

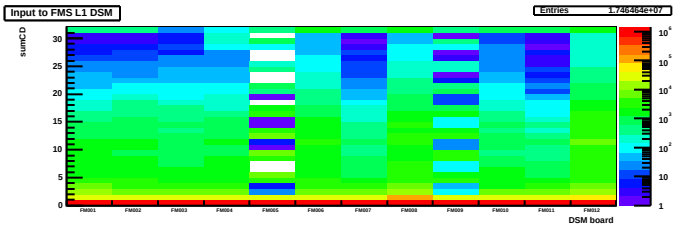

Input to FMS L1 DSM
Entries 60396
sumC - simulated
DSM board

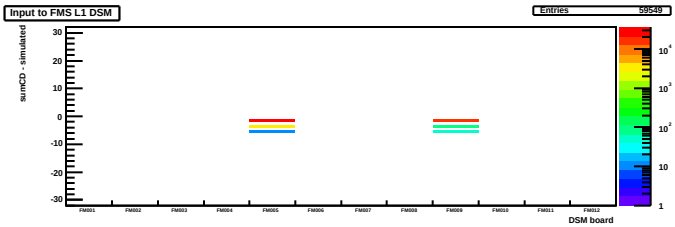

Input to FMS L1 DSM
Entries 1.746464e+07
sumBC
DSM board

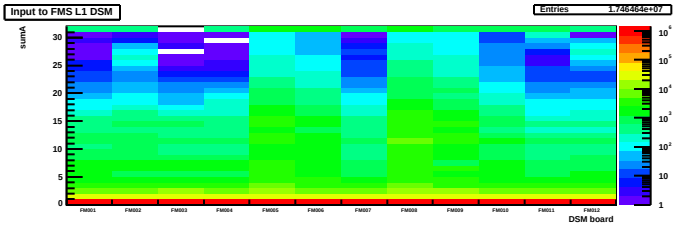

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

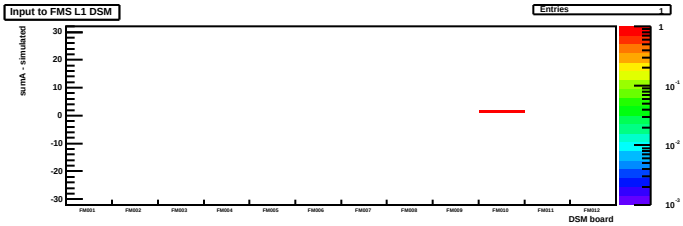

Input to FMS L1 DSM
Entries 1.746464e+07
sumB
DSM board

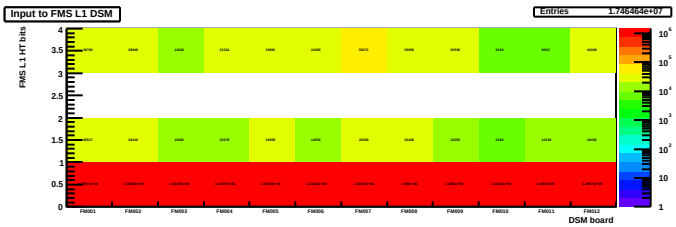

Input to FMS L1 DSM
Entries 1539
sumB - simulated
DSM board

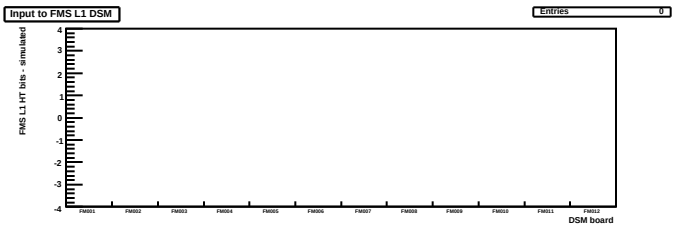

Input to FMS L1 DSM
Entries 1.746464e+07
sumCD
DSM board

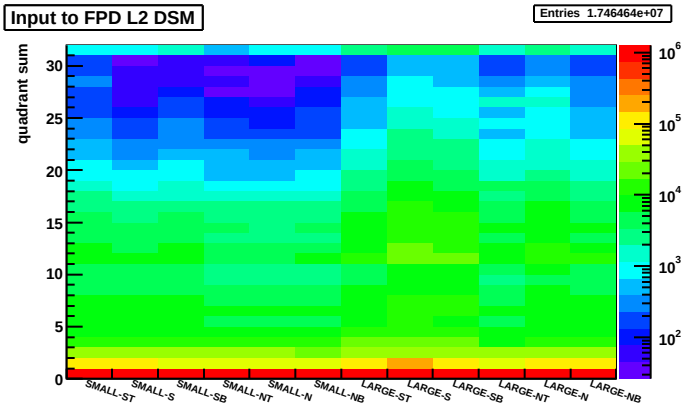

Input to FMS L1 DSM
Entries 59549
sumCD - simulated
DSM board

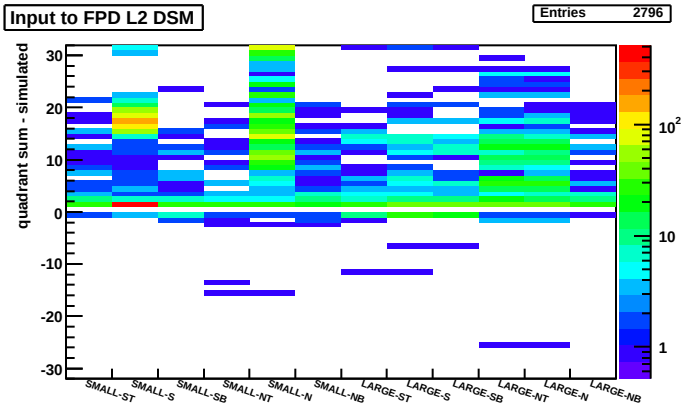

Input to FMS L1 DSM
Entries 1.746464e+07
sumA
DSM board

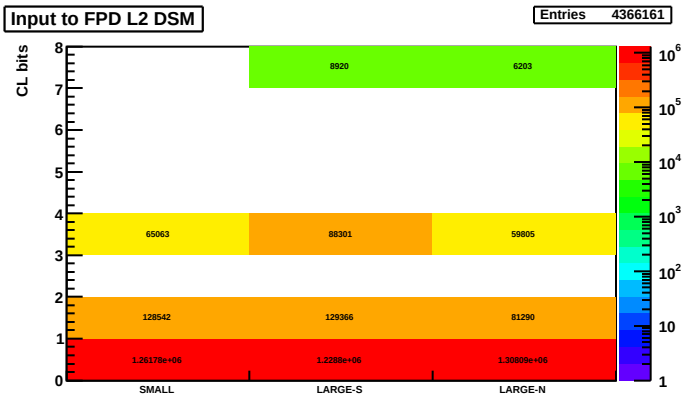

Input to FMS L1 DSM
Entries 1
sumA - simulated
DSM board

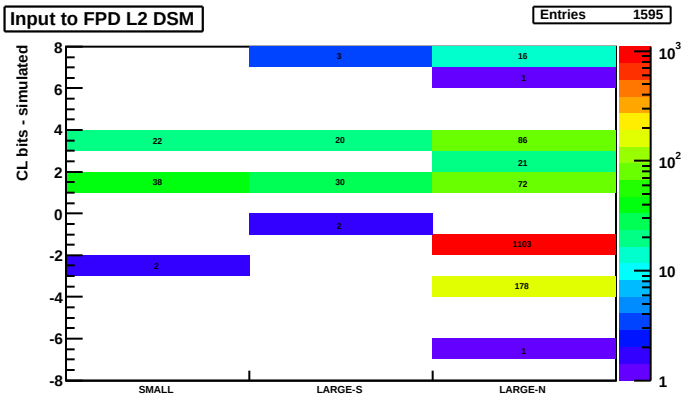

Input to FMS L1 DSM
Entries 1.746464e+07
FMS L1 HT bits
DSM board

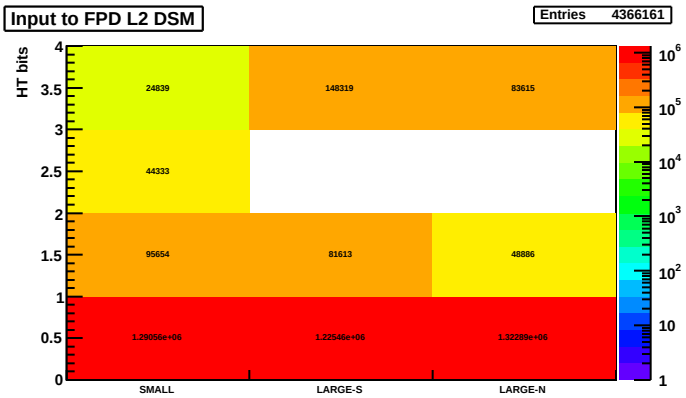

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

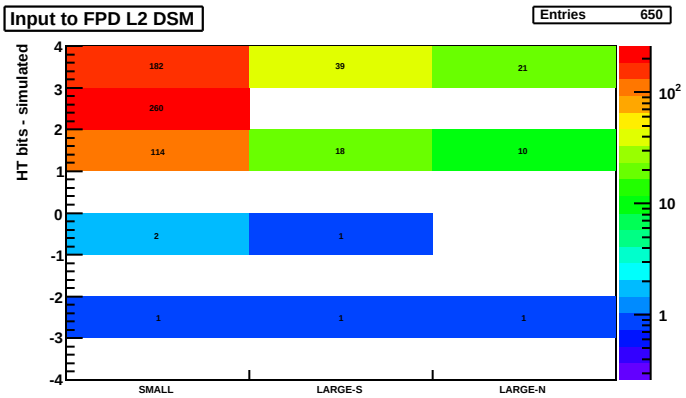

Input to FPD L2 DSM
Entries 1.746464e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

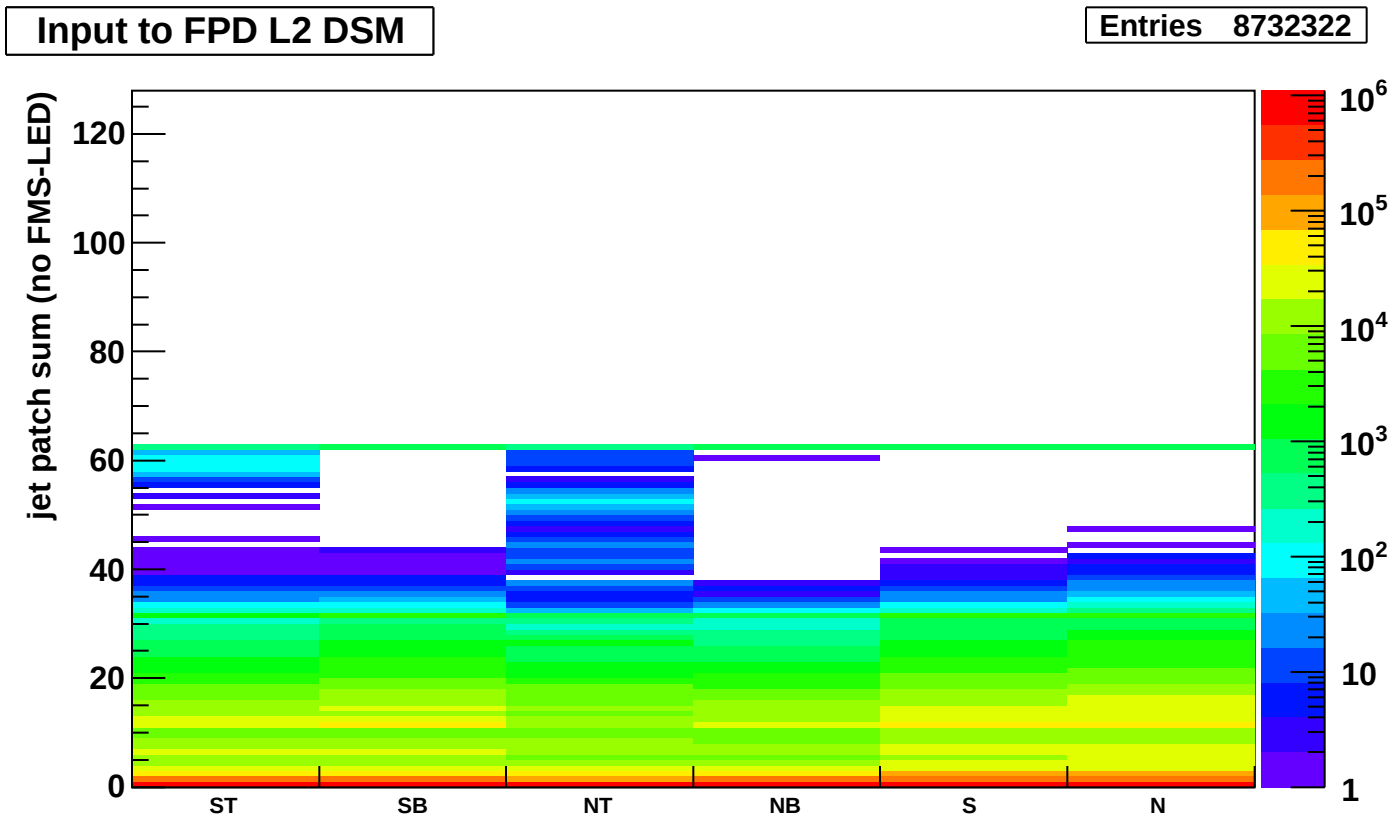

Input to FPD L2 DSM
Entries 2796
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

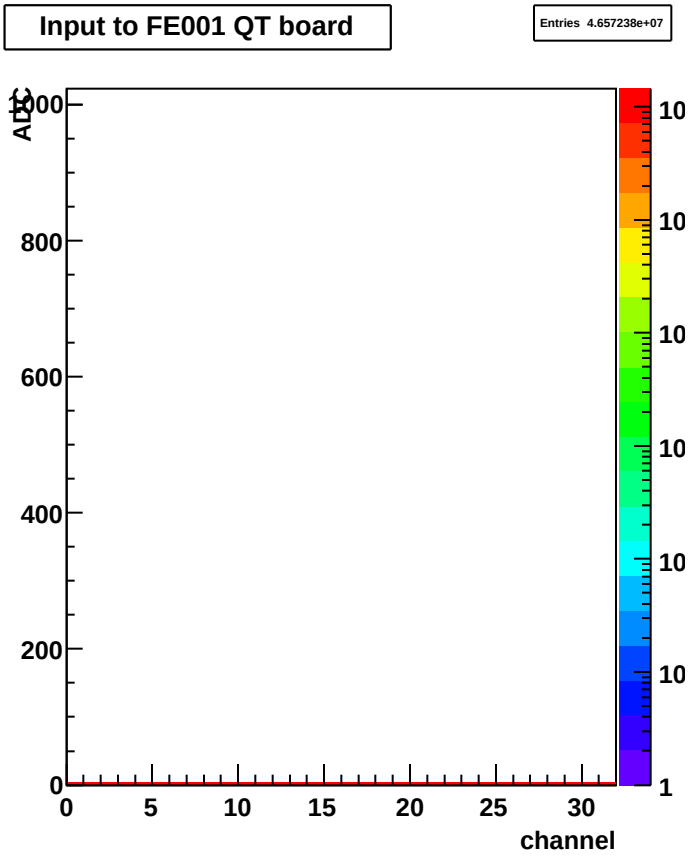

Input to FPD L2 DSM
Entries 4366161
CL bits
8920
6203
65063
88301
59805
128542
129366
81290
1.26178e+06
1.2288e+06
1.30809e+06
SMALL
LARGE-S
LARGE-N

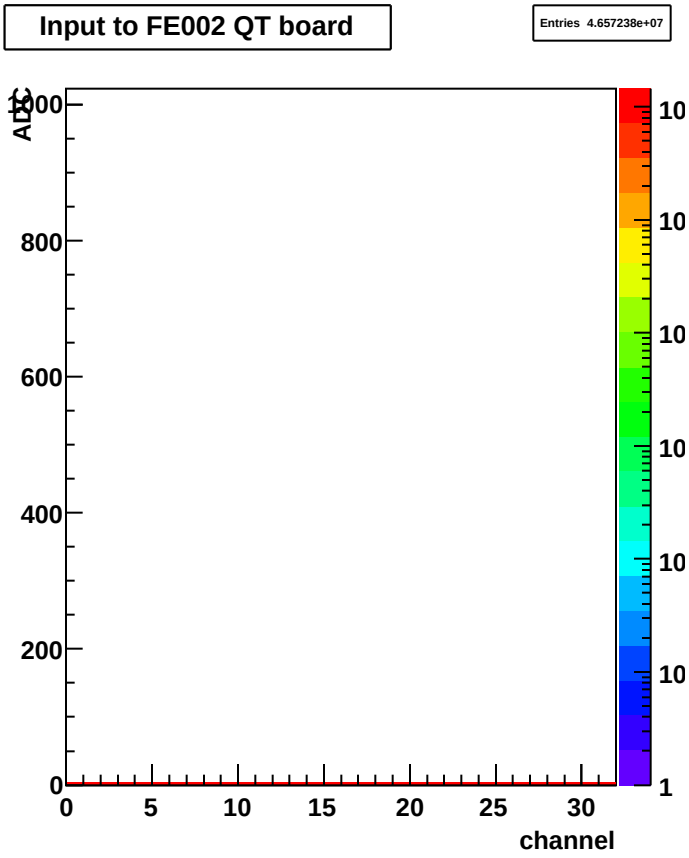

Input to FPD L2 DSM
Entries 1595
CL bits - simulated
3
16
1
22
20
86
21
38
30
72
2
1103
2
178
1
SMALL
LARGE-S
LARGE-N

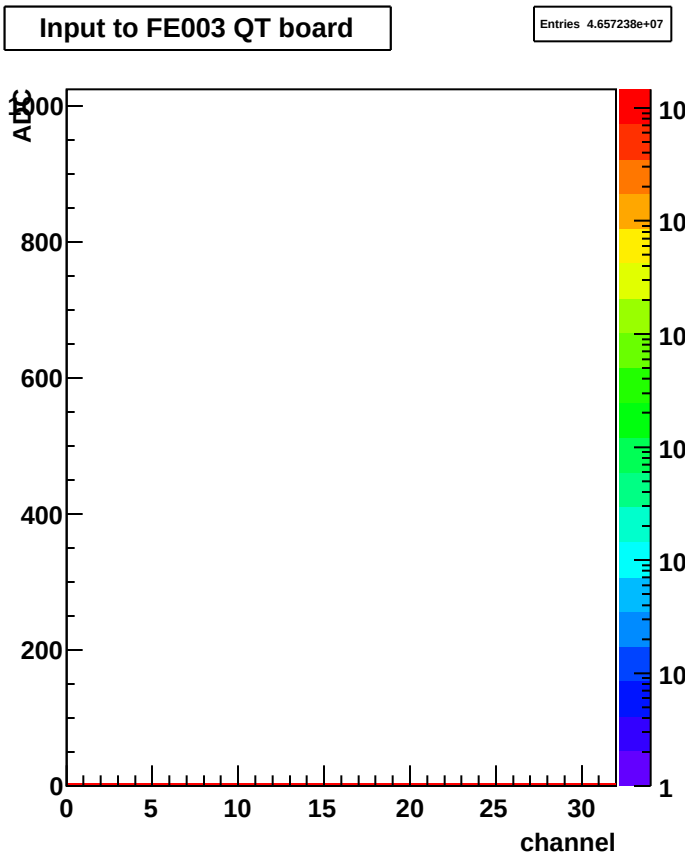

Input to FPD L2 DSM
Entries 4366161
HT bits
24839
148319
83615
44333
95654
81613
48886
1.29056e+06
1.22546e+06
1.32289e+06
SMALL
LARGE-S
LARGE-N

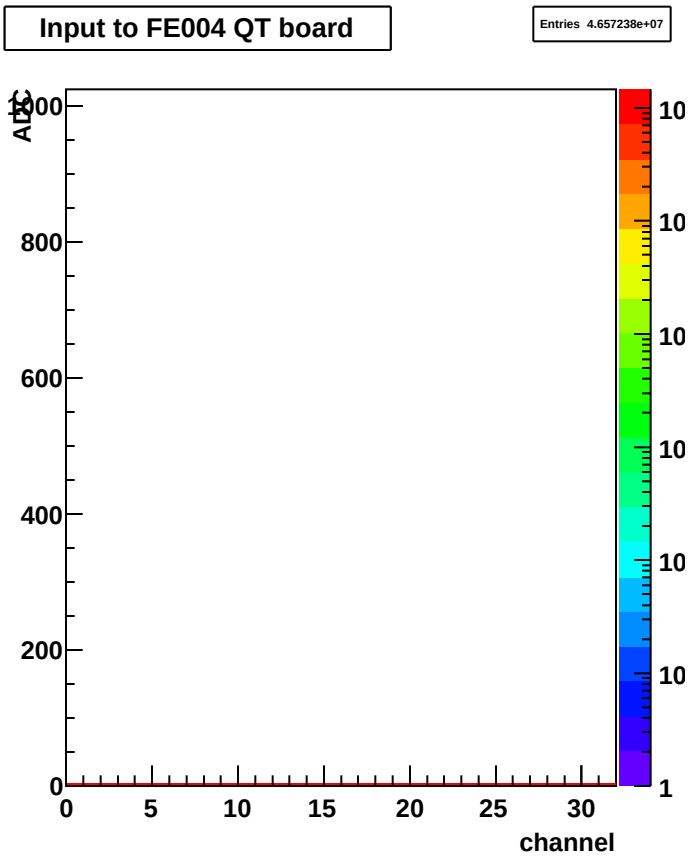

Input to FPD L2 DSM
Entries 650
HT bits - simulated
182
39
21
260
114
18
10
2
1
1
1
1
SMALL
LARGE-S
LARGE-N

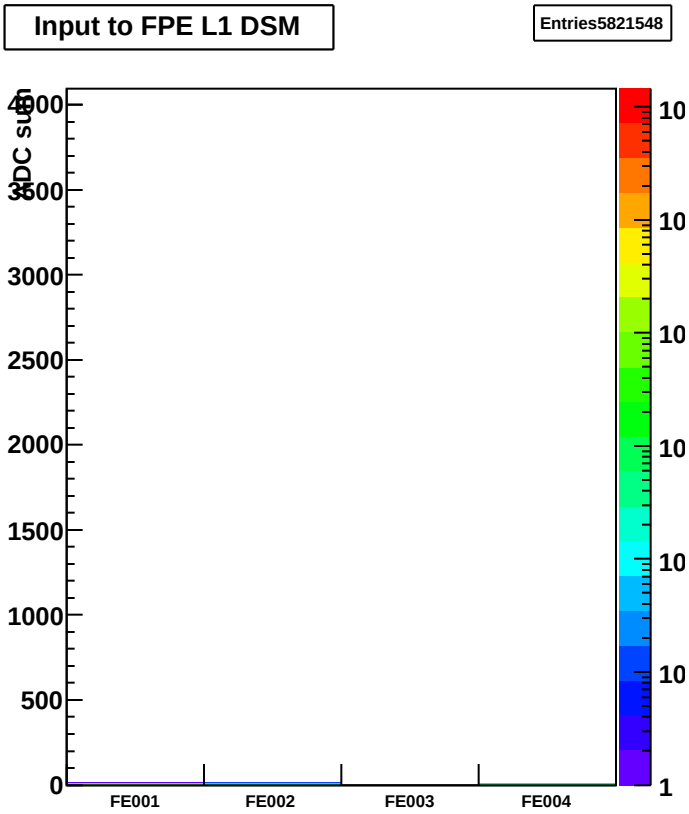

Input to FPD L2 DSM
Entries 8732322
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

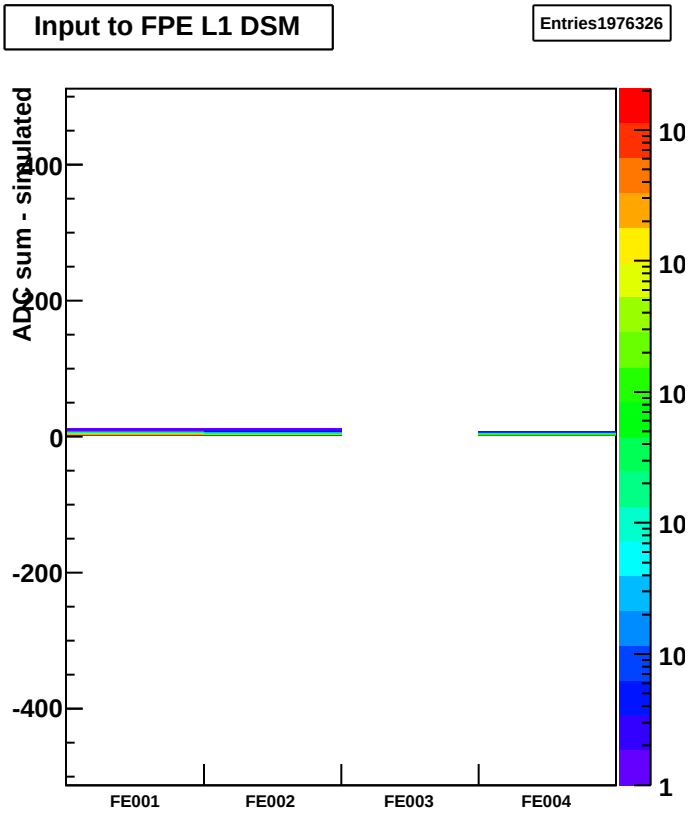

Input to FE001 QT board
Entries 4.657238e+07
ADC
channel


Input to FE002 QT board
Entries 4.657238e+07
ADC
channel

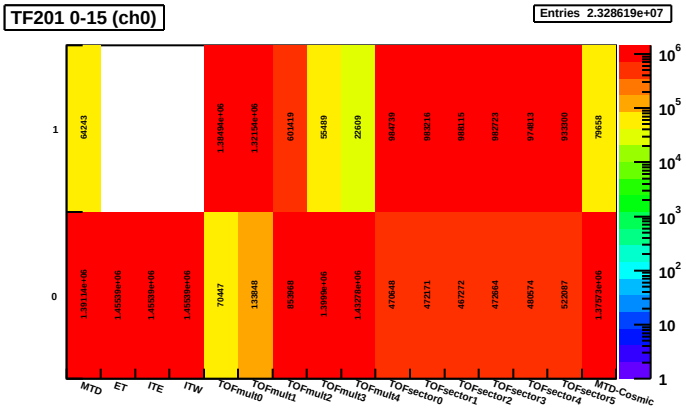

Input to FE003 QT board
Entries 4.657238e+07
ADC
channel


Input to FE004 QT board
Entries 4.657238e+07
ADC
channel

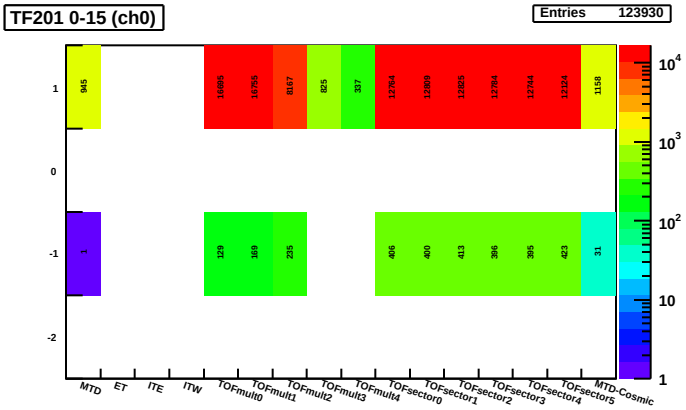

Input to FPE L1 DSM
Entries5821548
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


Input to FPE L1 DSM
Entries1976326
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1

TF201 0-15 (ch0)



TF201 0-15 (ch0)



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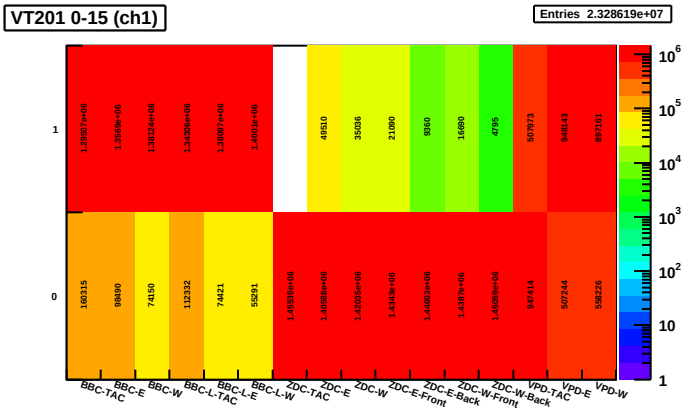

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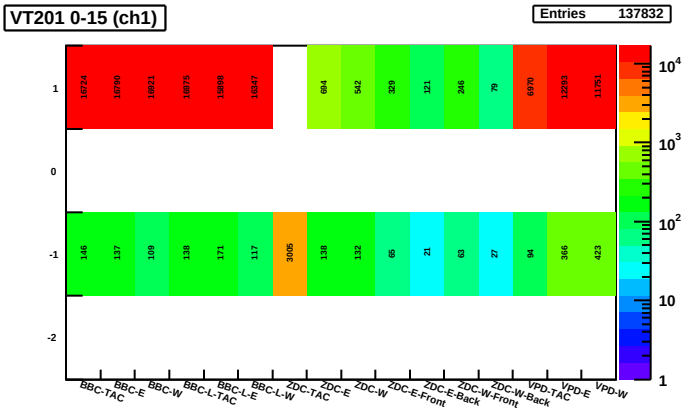

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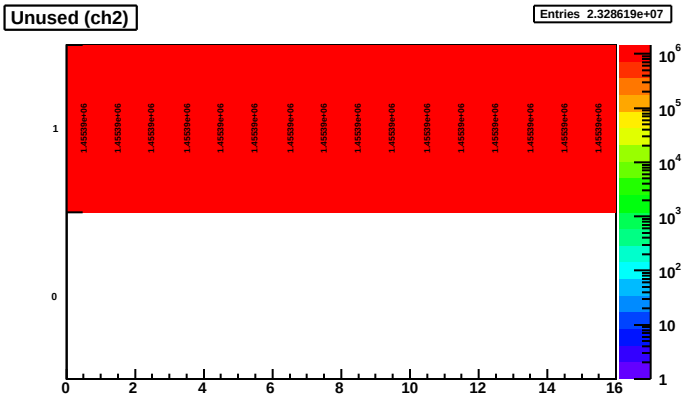

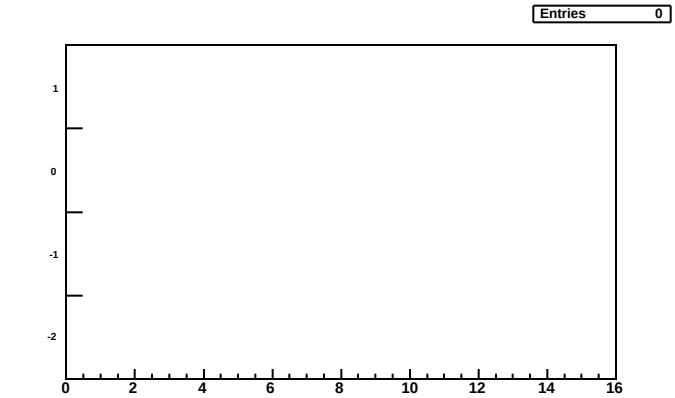

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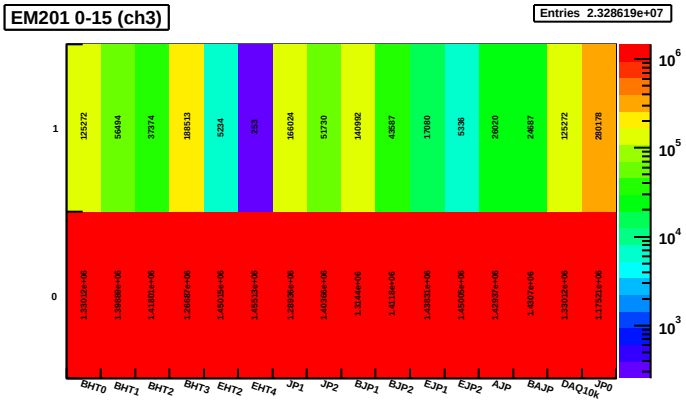

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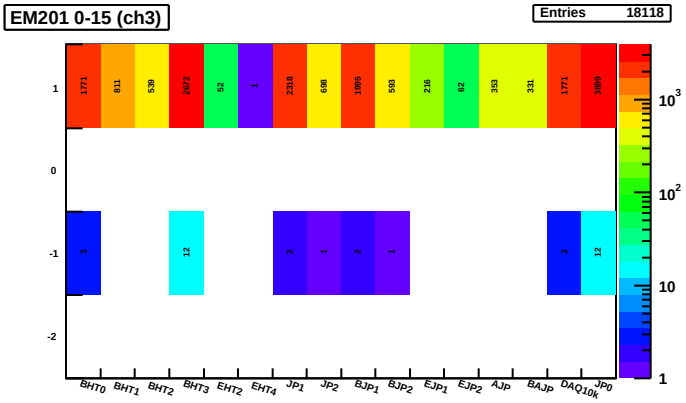
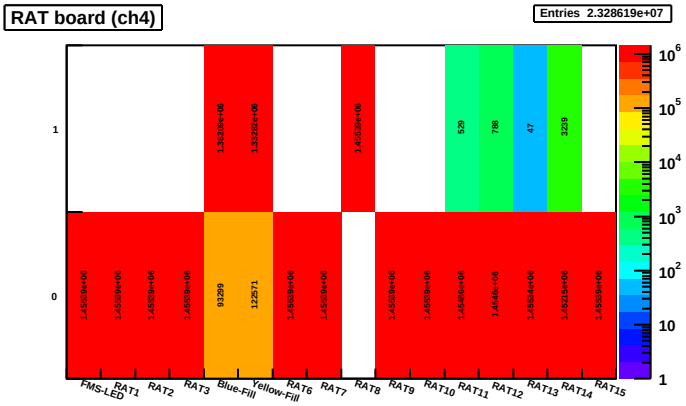
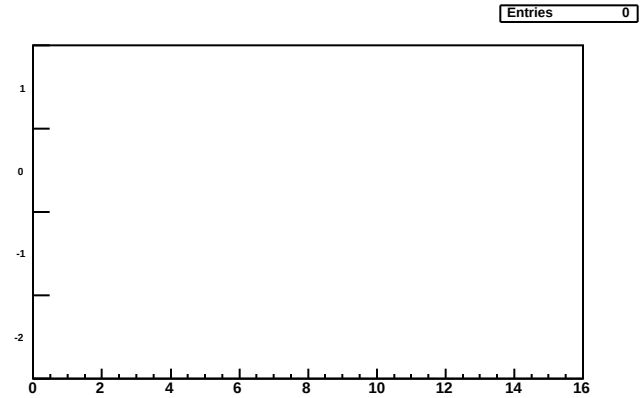
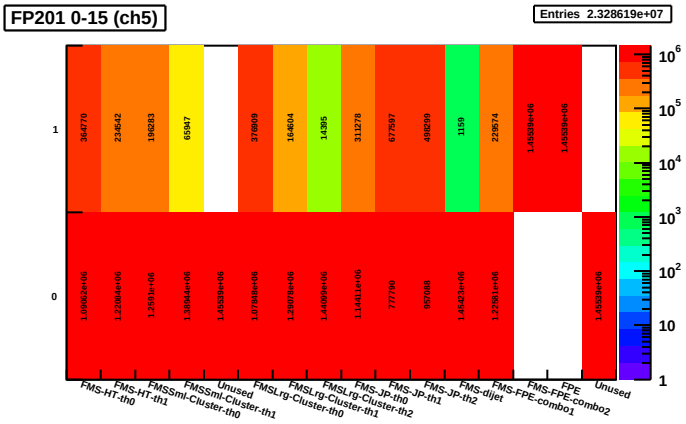


RAT board (ch4)

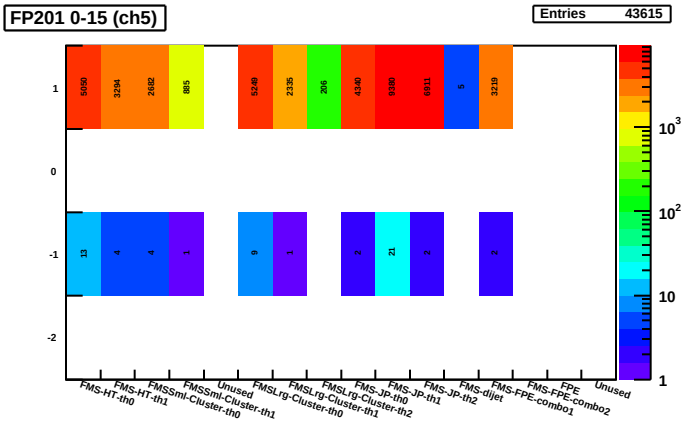




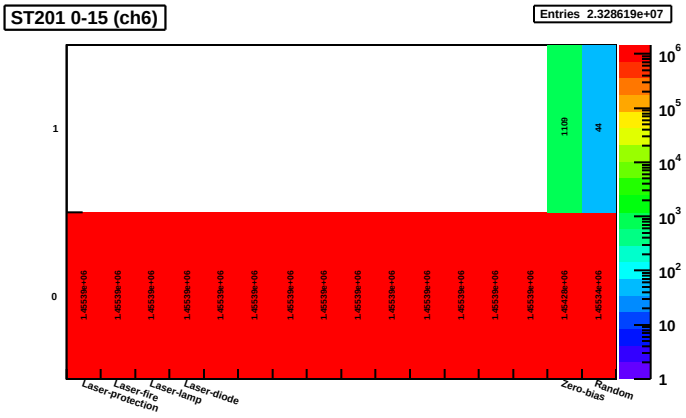
FP201 0-15 (ch5)

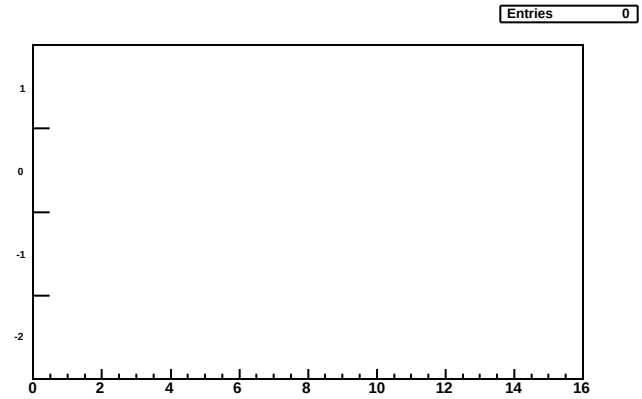
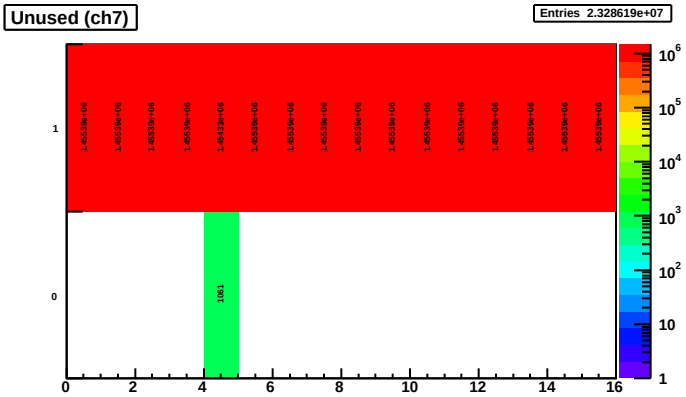
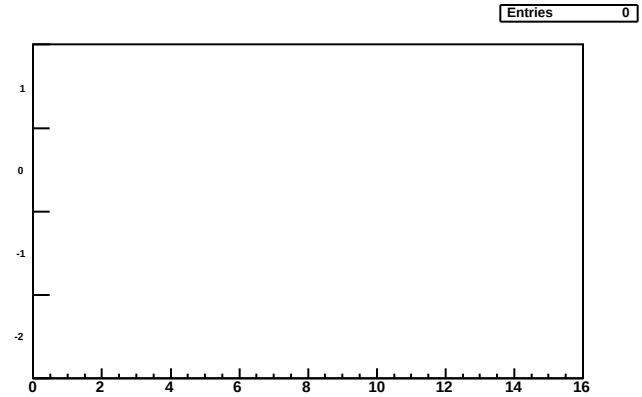


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)