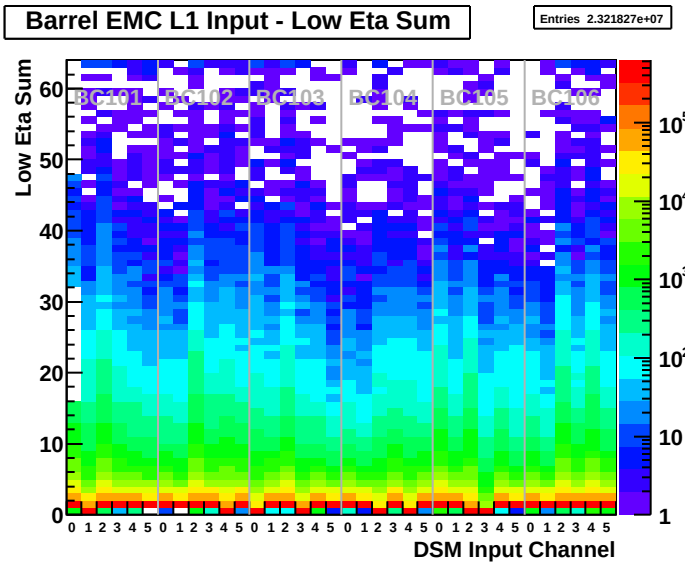
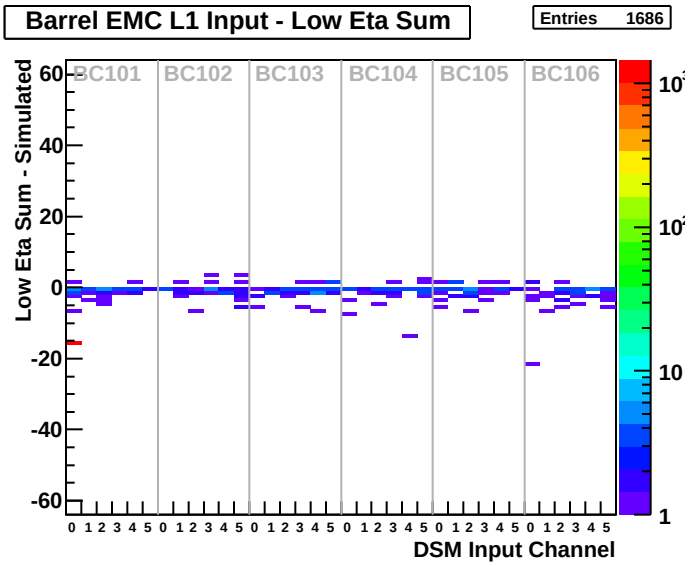
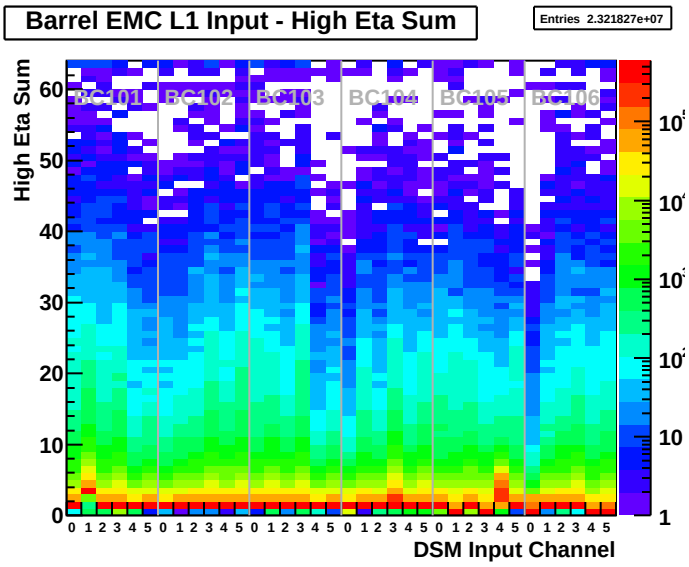
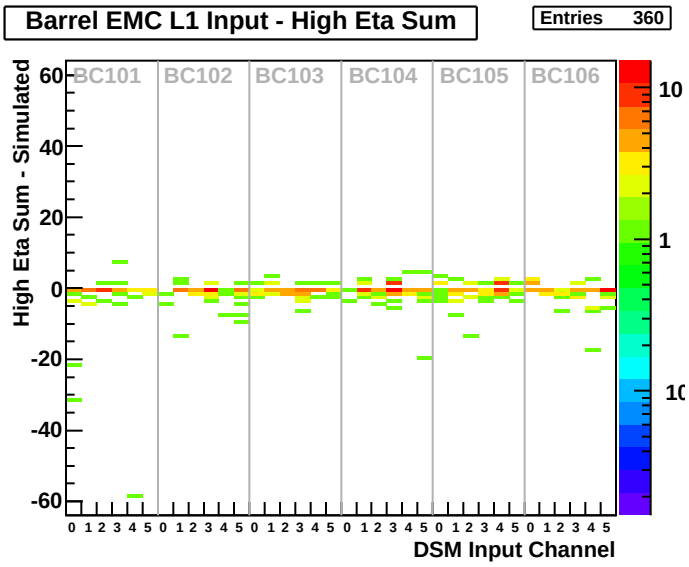
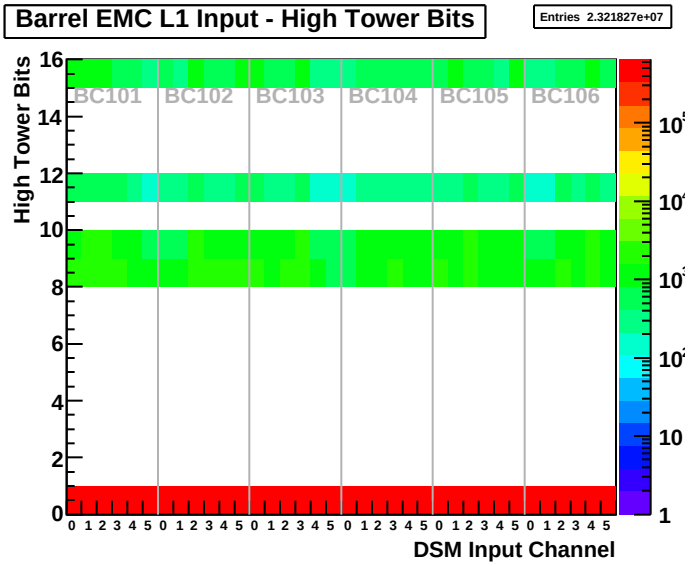
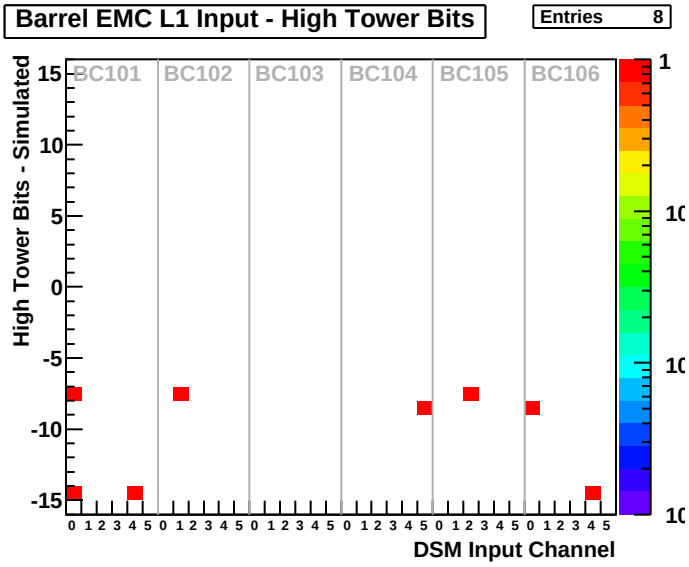

Barrel EMC L1 Input - Low Eta Sum
Entries 2.321827e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

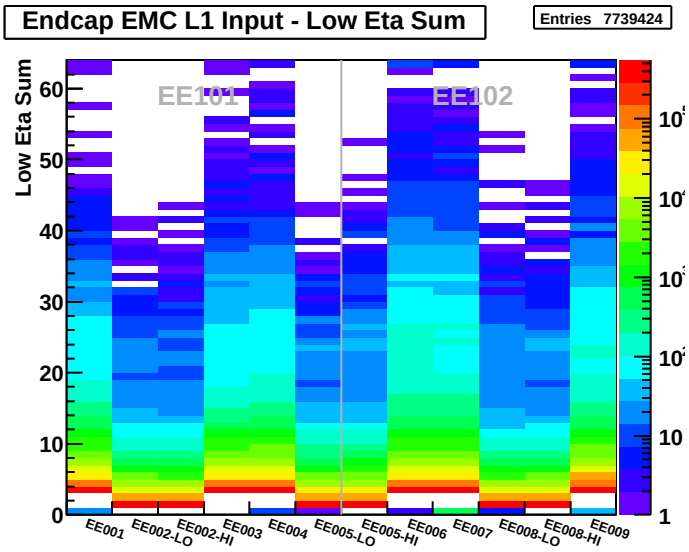

Barrel EMC L1 Input - Low Eta Sum
Entries 1686
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

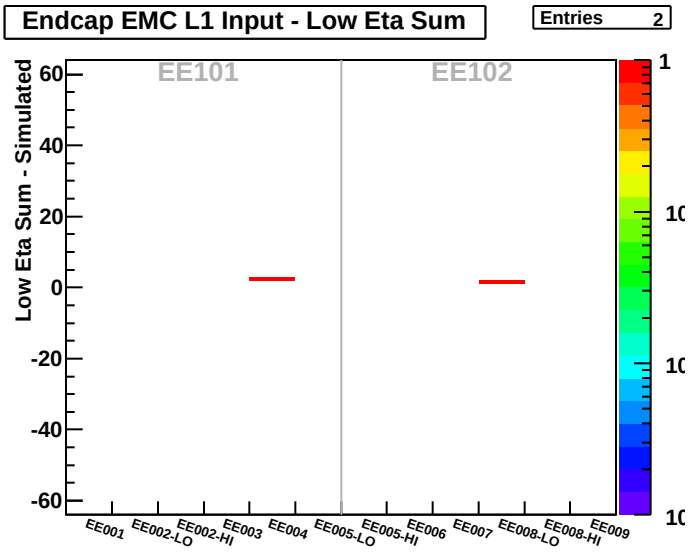

Barrel EMC L1 Input - High Eta Sum
Entries 2.321827e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

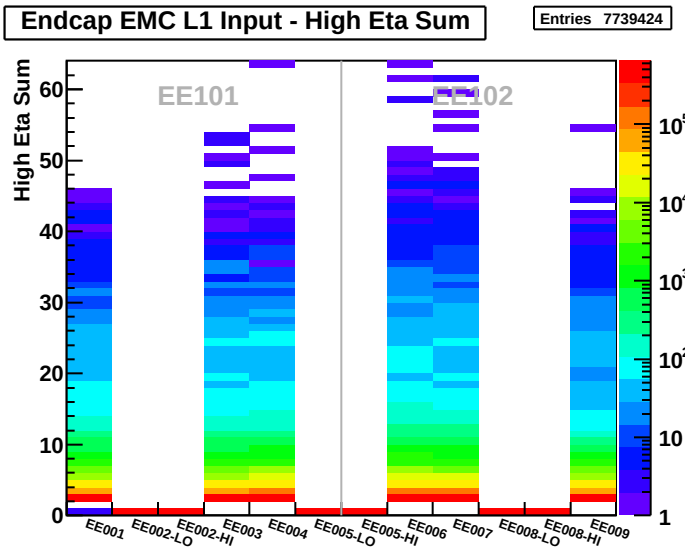

Barrel EMC L1 Input - High Eta Sum
Entries 360
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

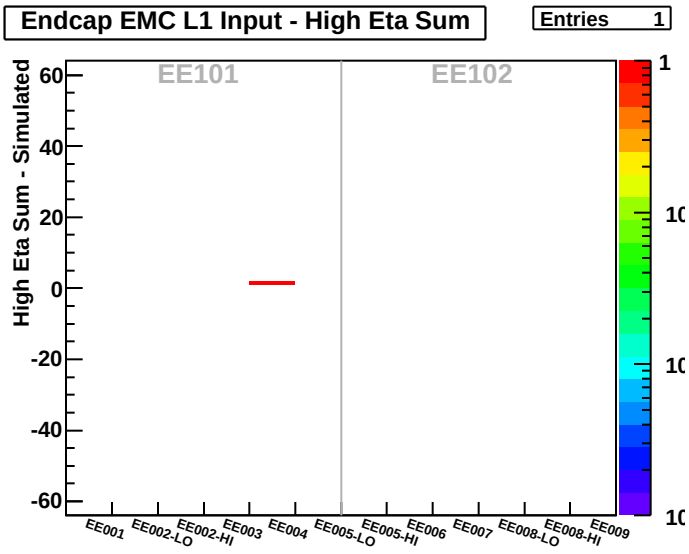

Barrel EMC L1 Input - High Tower Bits
Entries 2.321827e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

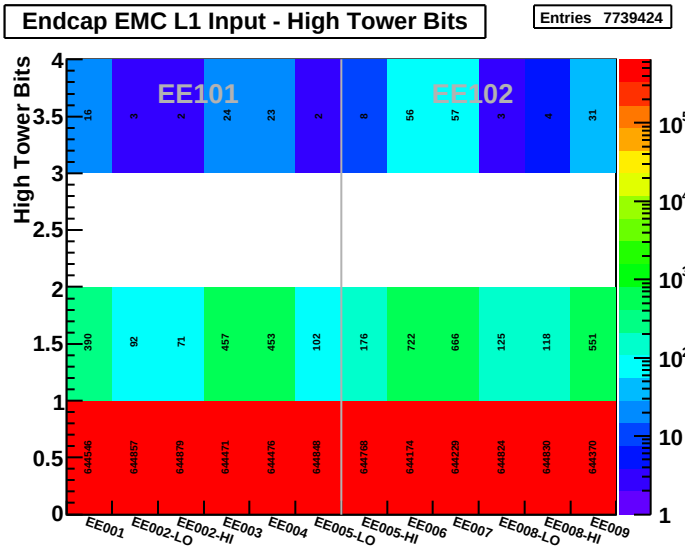

Barrel EMC L1 Input - High Tower Bits
Entries 8
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

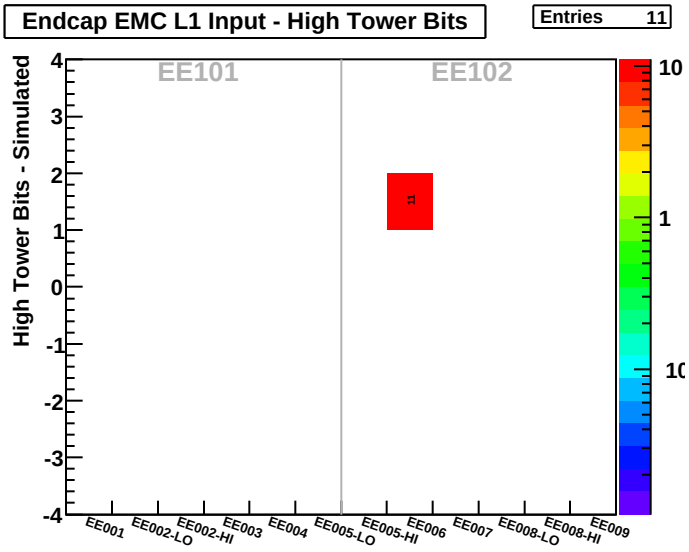

Endcap EMC L1 Input - Low Eta Sum
Entries 7739424
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

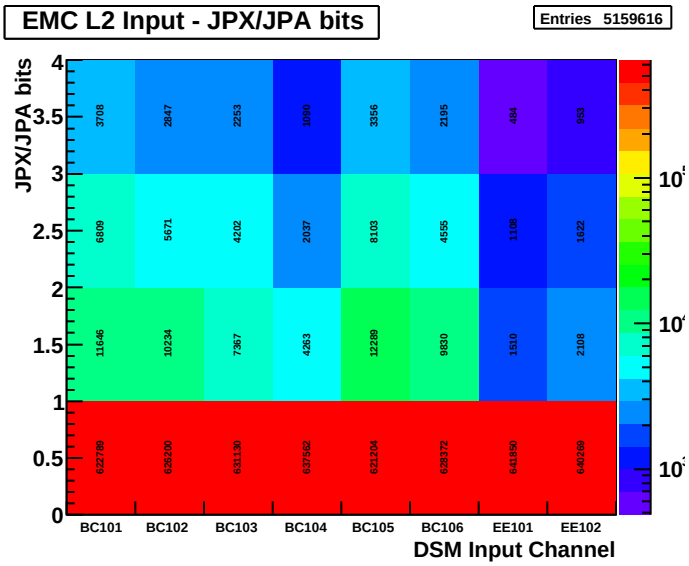

Endcap EMC L1 Input - Low Eta Sum
Entries 2
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

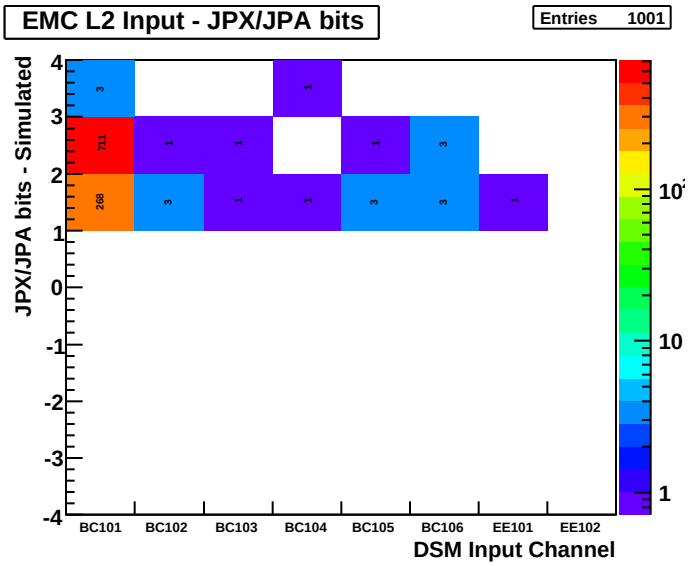

Endcap EMC L1 Input - High Eta Sum
Entries 7739424
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

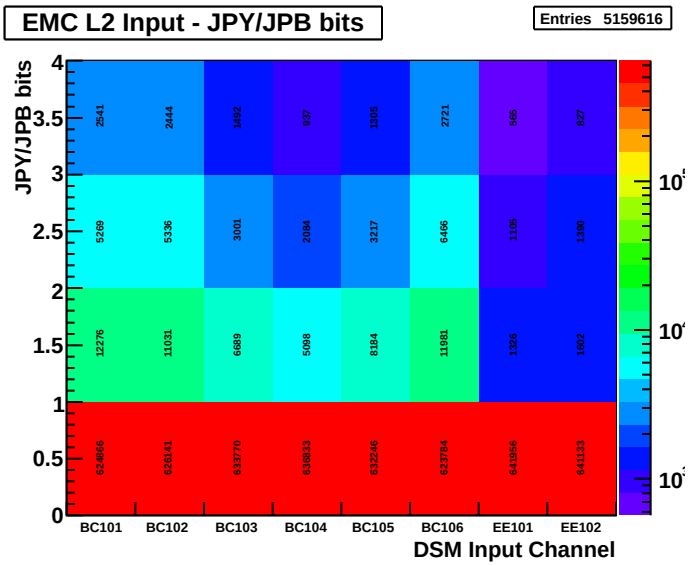

Endcap EMC L1 Input - High Eta Sum
Entries 1
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

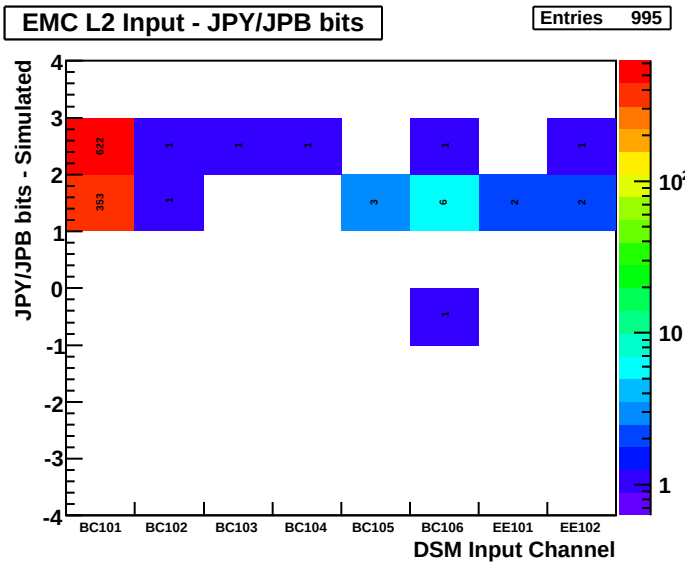

Endcap EMC L1 Input - High Tower Bits
Entries 7739424
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

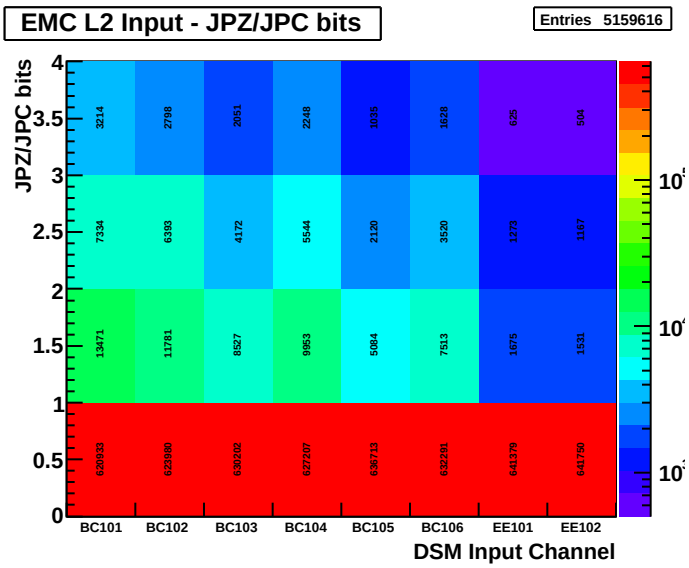

Endcap EMC L1 Input - High Tower Bits
Entries 11
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

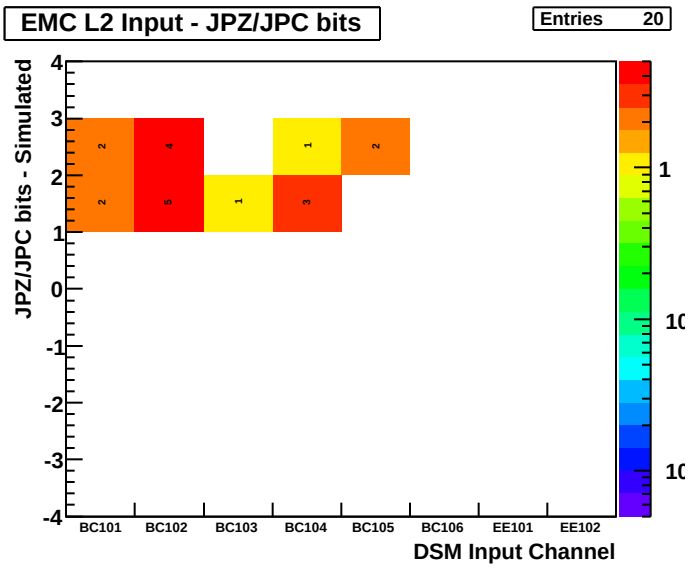

EMC L2 Input - JPX/JPA bits
Entries 5159616
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3708 2847 2253 1090 3356 2195 494 953
6809 5671 4202 2037 8103 4555 1108 1622
11646 10234 7367 4263 12289 9830 1510 2108
622769 626200 631130 637562 621204 629372 641850 640269

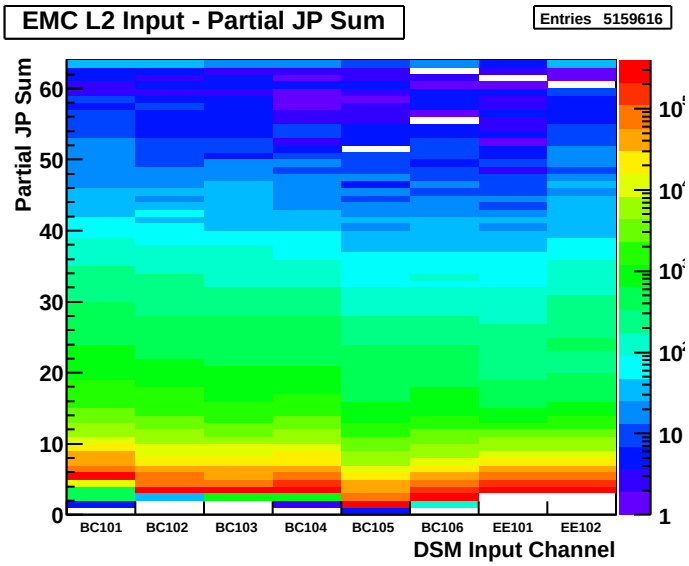

EMC L2 Input - JPX/JPA bits
Entries 1001
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3 1
711 1 1 1 3
268 3 1 1 3 3 1

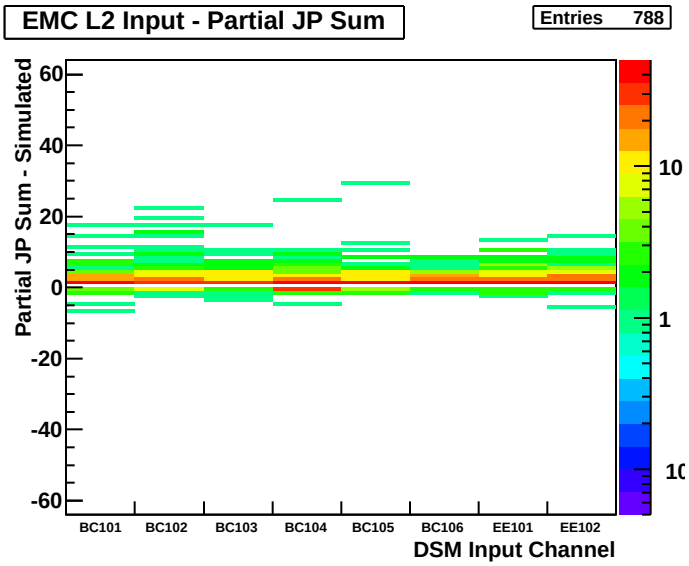

EMC L2 Input - JPY/JPB bits
Entries 5159616
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2541 2444 1492 937 1305 2721 565 827
5269 5336 3001 2084 3217 6466 1105 1390
12276 11031 6689 5098 8184 11981 1326 1602
624866 626141 633770 636833 633246 623784 641956 641133

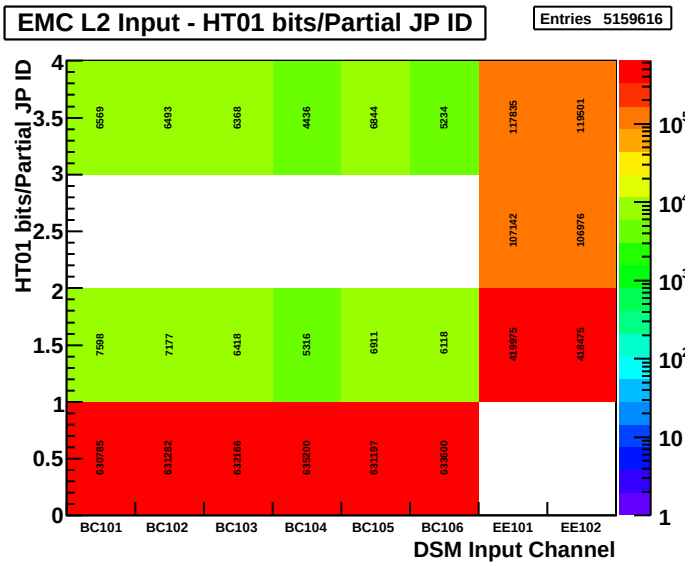

EMC L2 Input - JPY/JPB bits
Entries 995
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
622 1 1 1 1 1
353 1 3 6 2 2
1

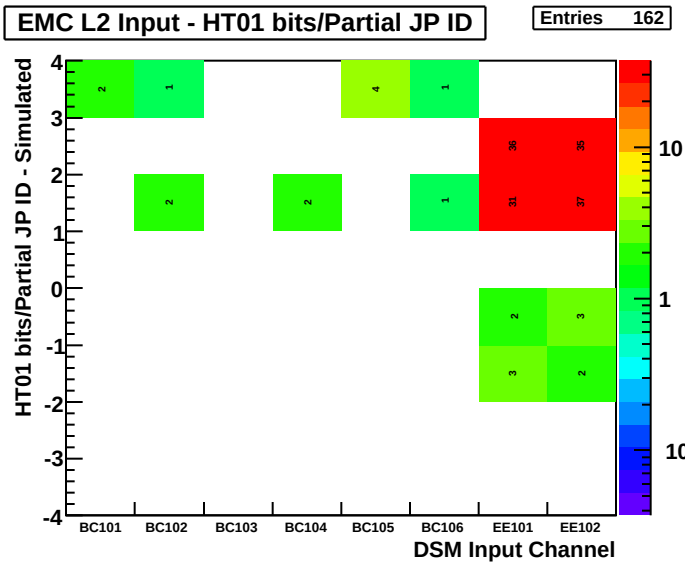

EMC L2 Input - JPZ/JPC bits
Entries 5159616
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3214 2798 2051 2248 1035 1628 625 504
7334 6393 4172 5544 2120 3520 1273 1167
13471 11781 8527 9953 5084 7513 1675 1531
620933 623380 630202 627207 636713 632291 641379 641750

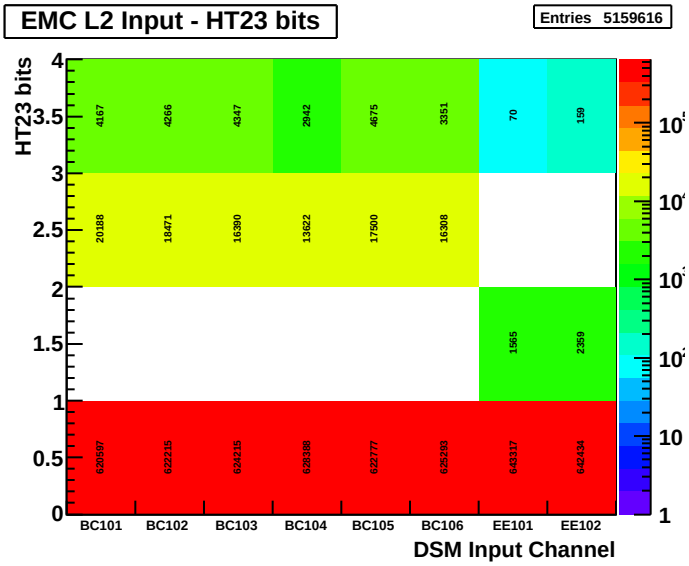

EMC L2 Input - JPZ/JPC bits
Entries 20
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 4 1 2
2 5 1 3

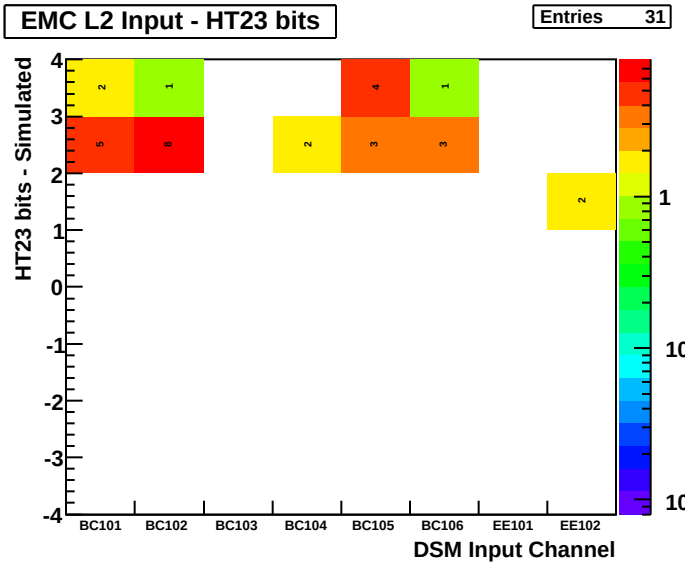

EMC L2 Input - Partial JP Sum
Entries 5159616
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

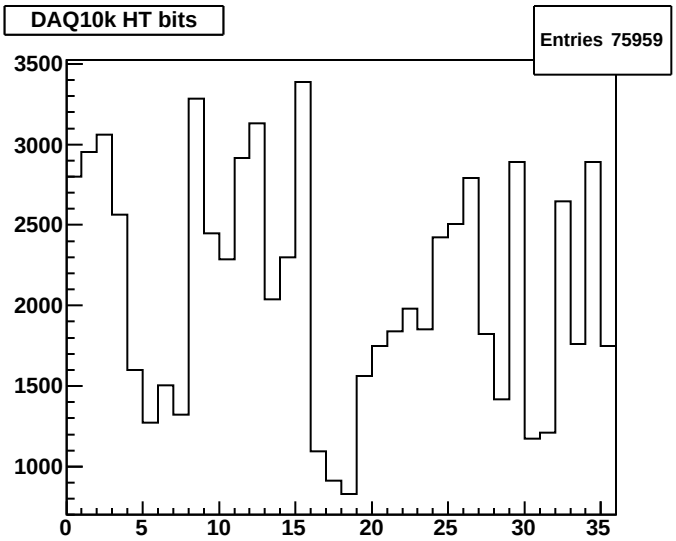

EMC L2 Input - Partial JP Sum
Entries 788
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

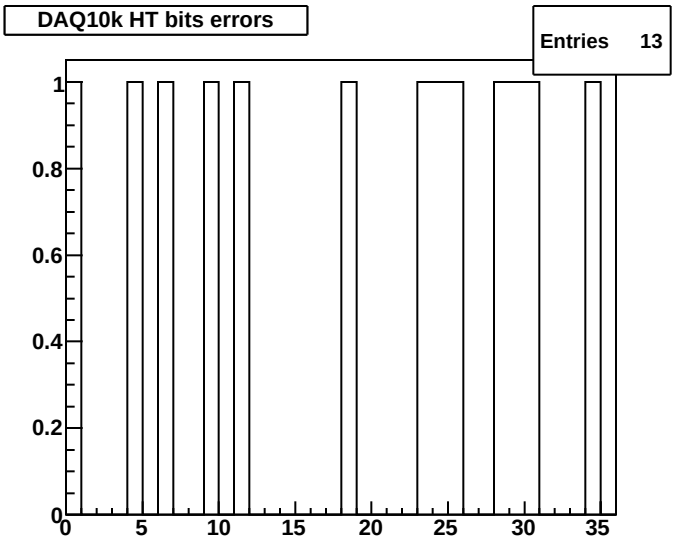

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5159616
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

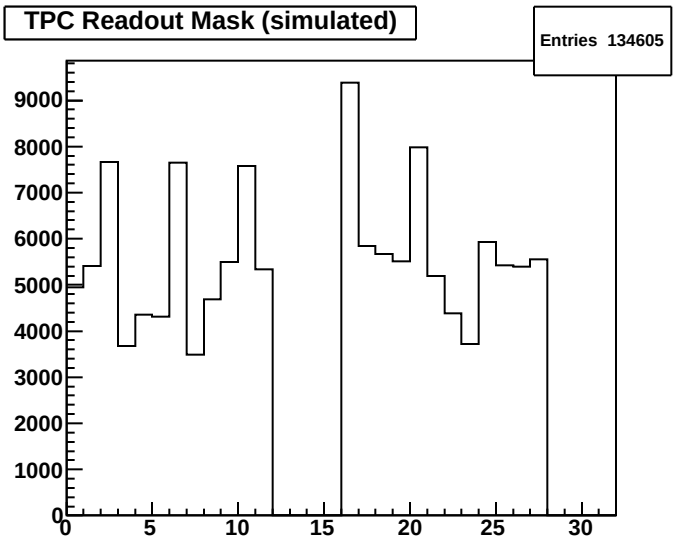

EMC L2 Input - HT01 bits/Partial JP ID
Entries 162
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

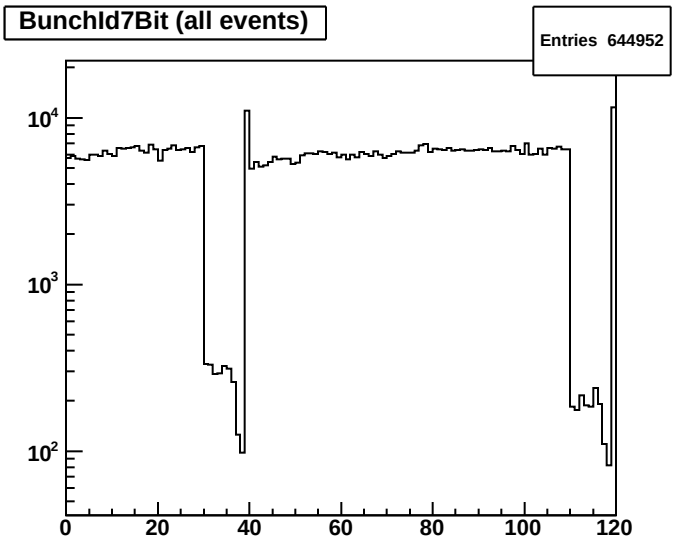

EMC L2 Input - HT23 bits
Entries 5159616
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

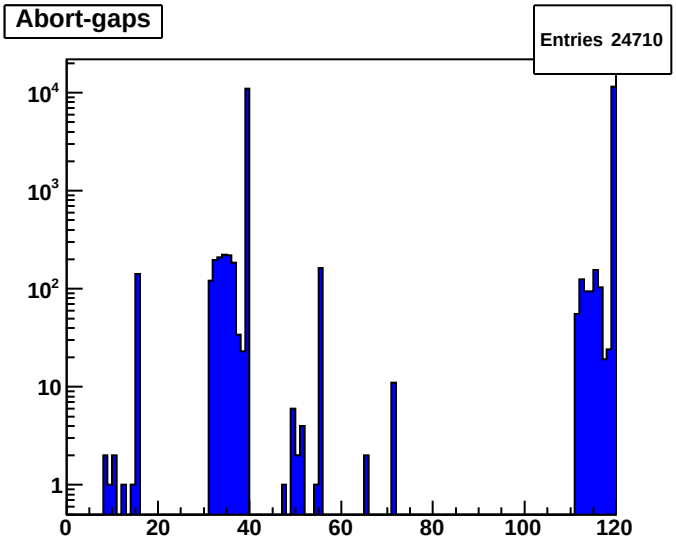

EMC L2 Input - HT23 bits
Entries 31
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

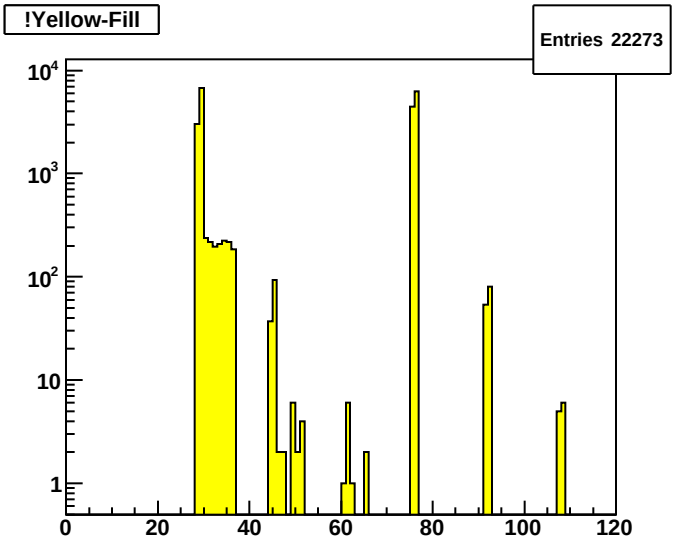

DAQ10k HT bits
Entries 75959

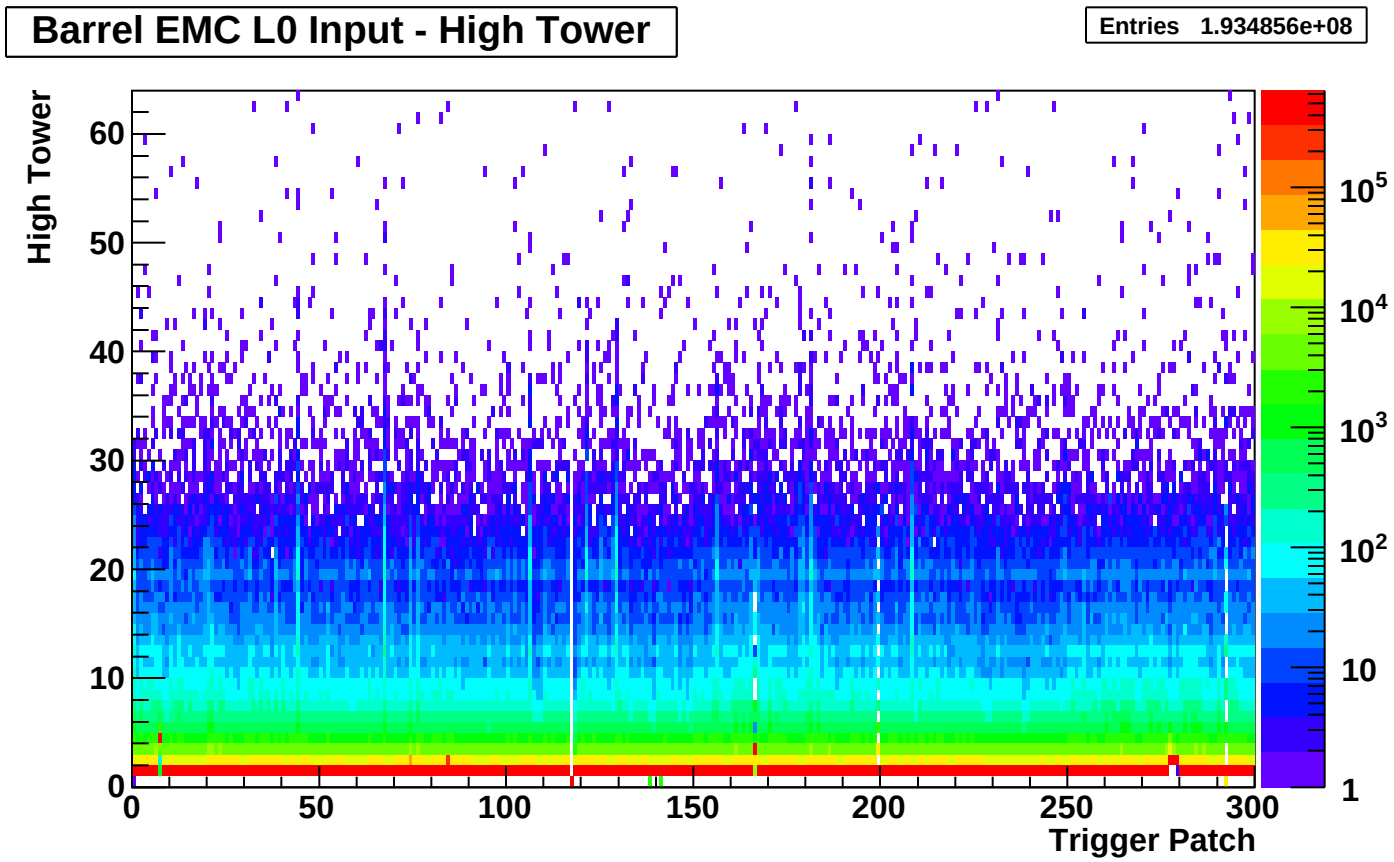

DAQ10k HT bits errors
Entries 13

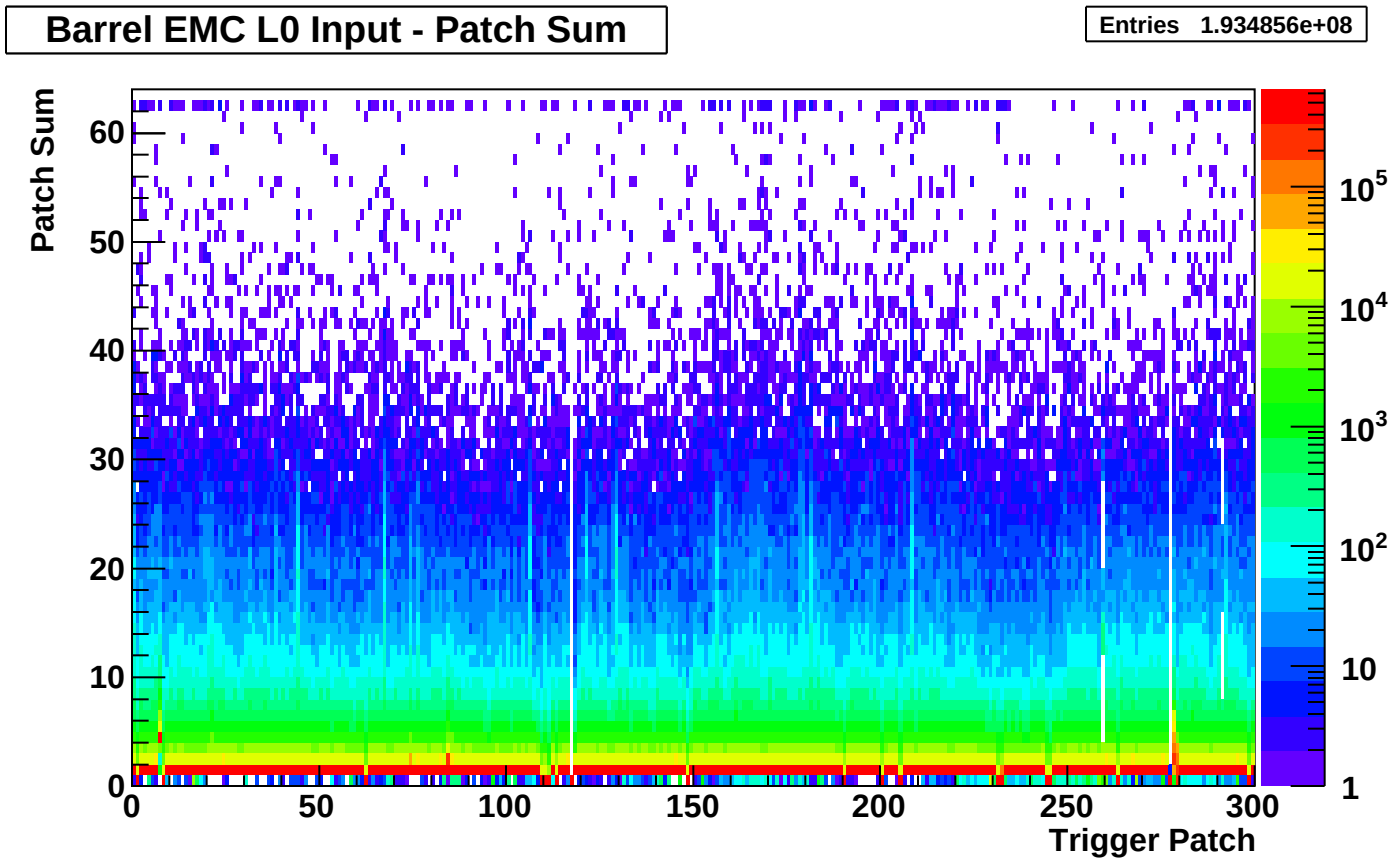

TPC Readout Mask (simulated)
Entries 134605

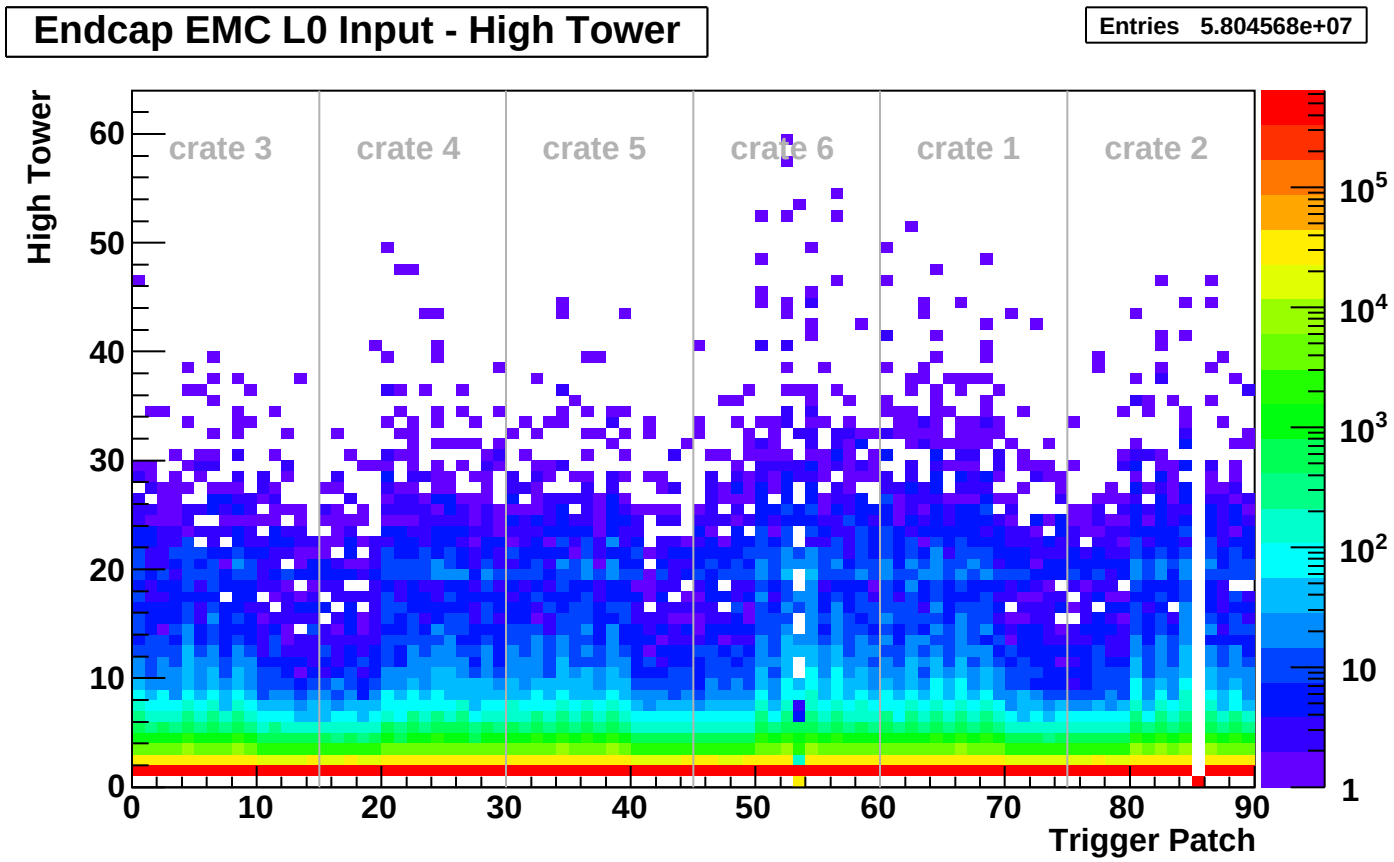

BunchId7Bit (all events)
Entries 644952

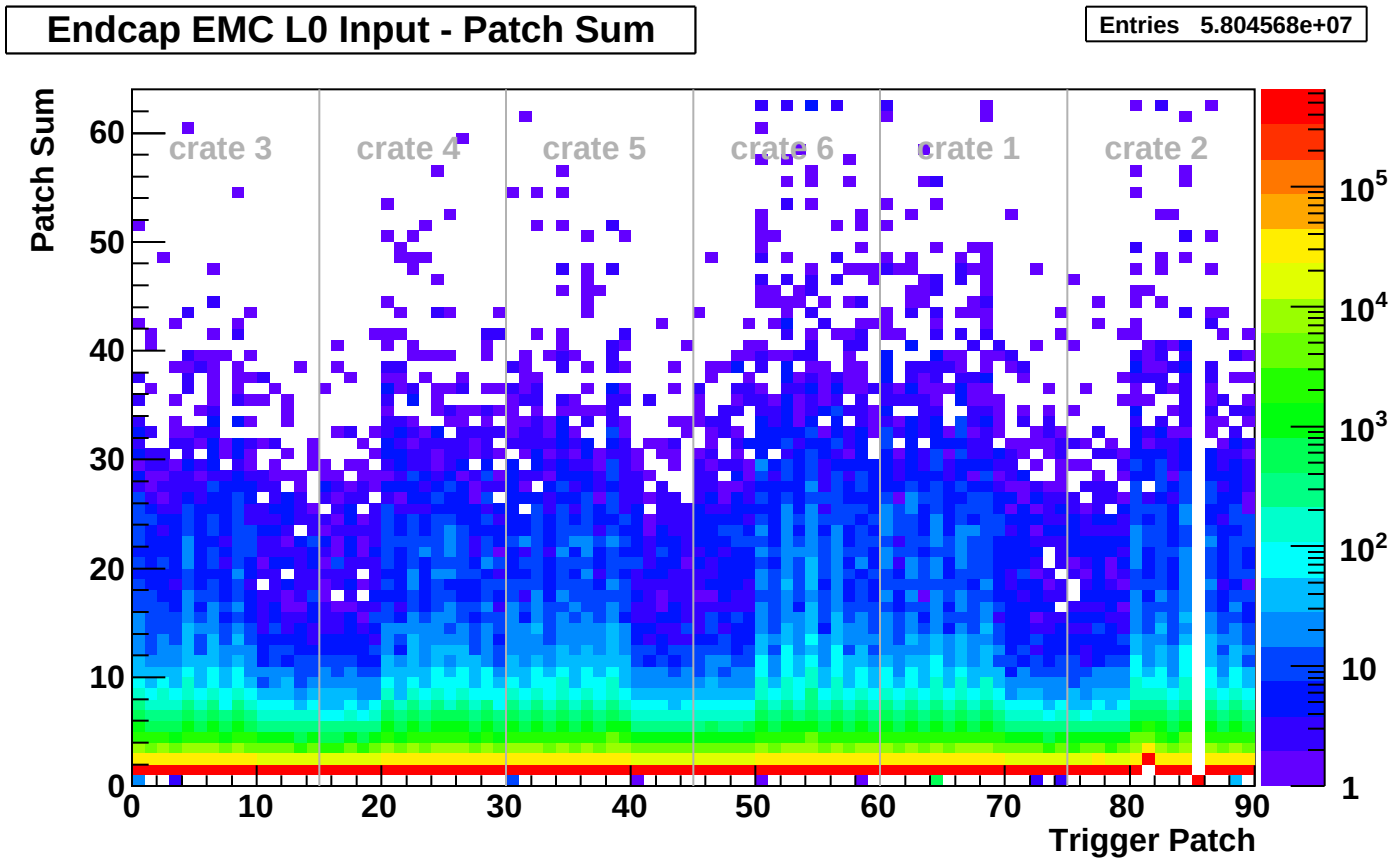

Abort-gaps
Entries 24710

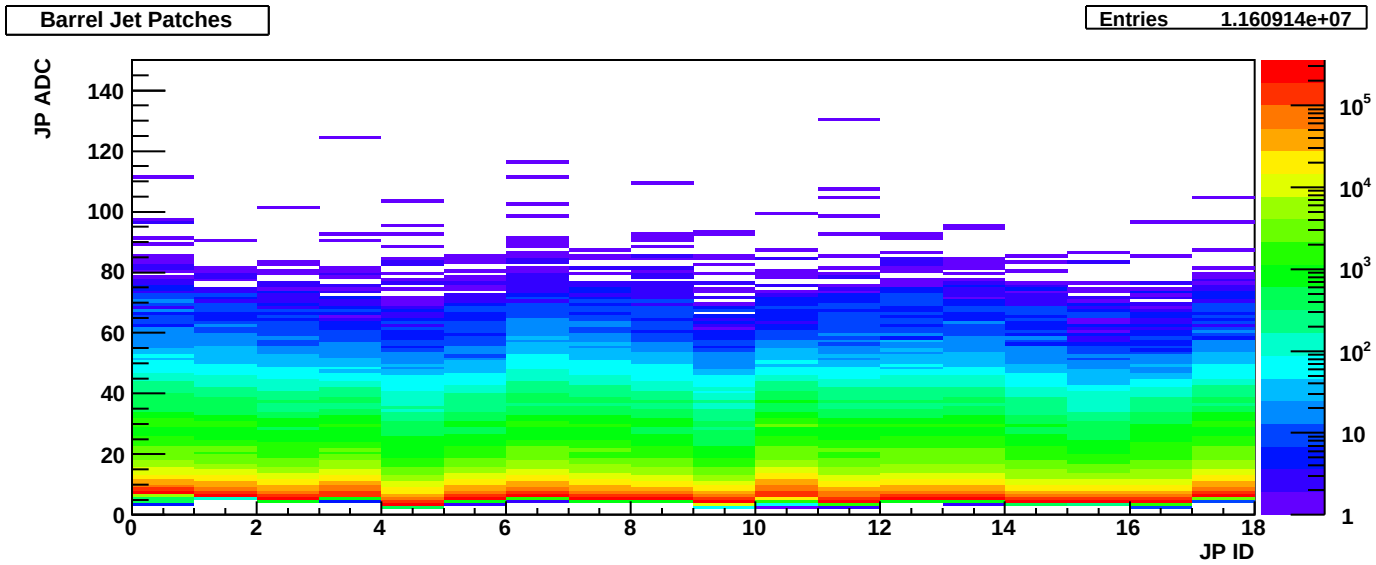

!Yellow-Fill
Entries 22273

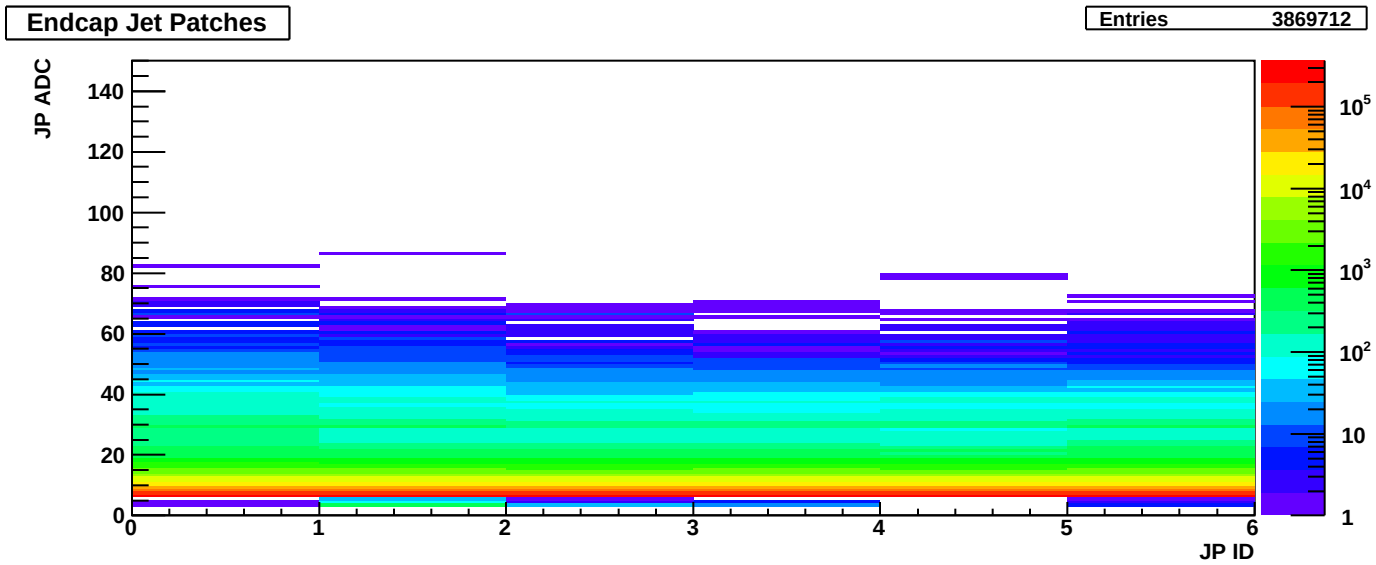

Barrel EMC L0 Input - High Tower
Entries 1.934856e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

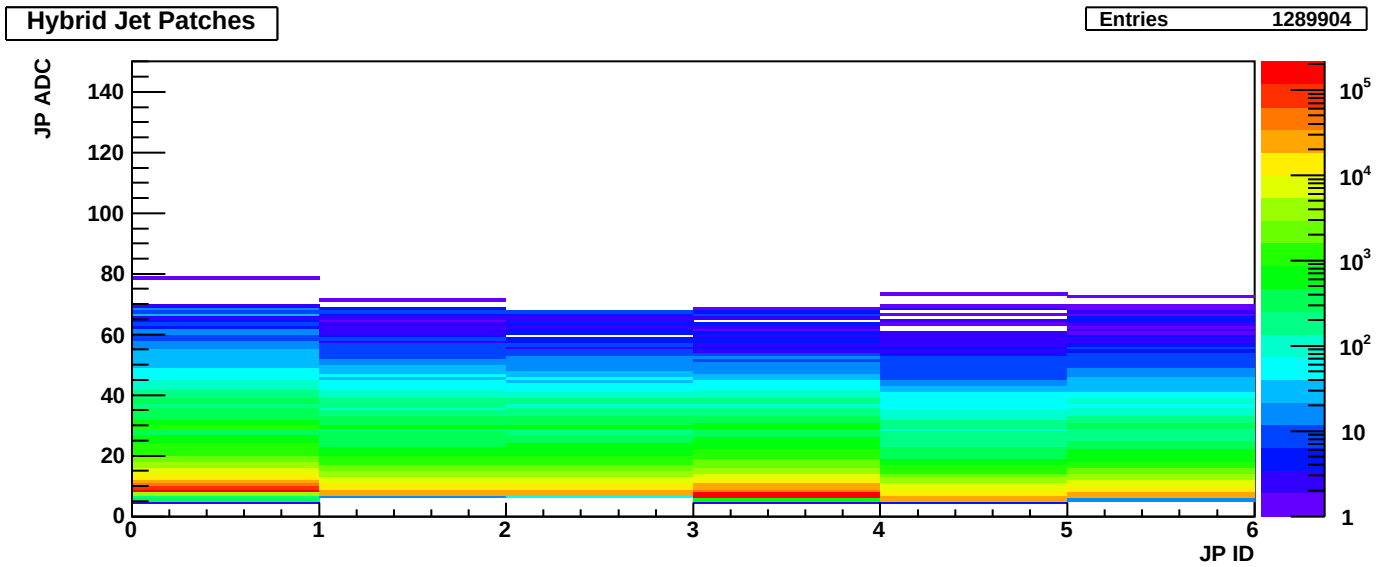

Barrel EMC L0 Input - Patch Sum
Entries 1.934856e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

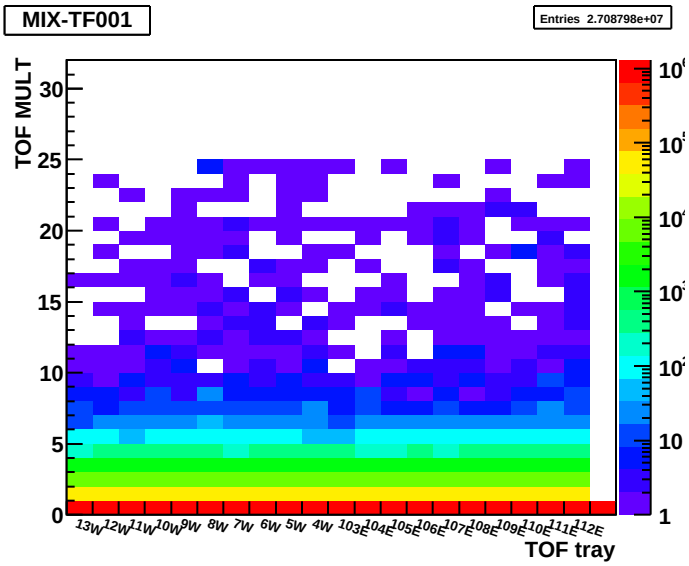

Endcap EMC L0 Input - High Tower
Entries 5.804568e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

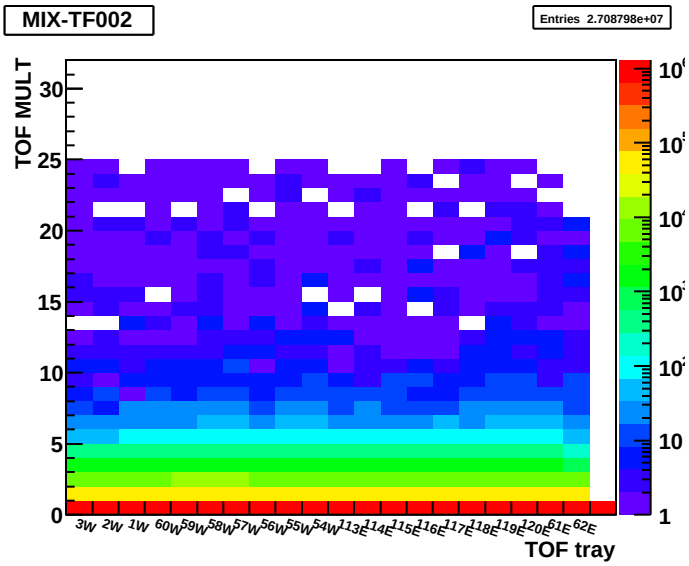

Endcap EMC L0 Input - Patch Sum
Entries 5.804568e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

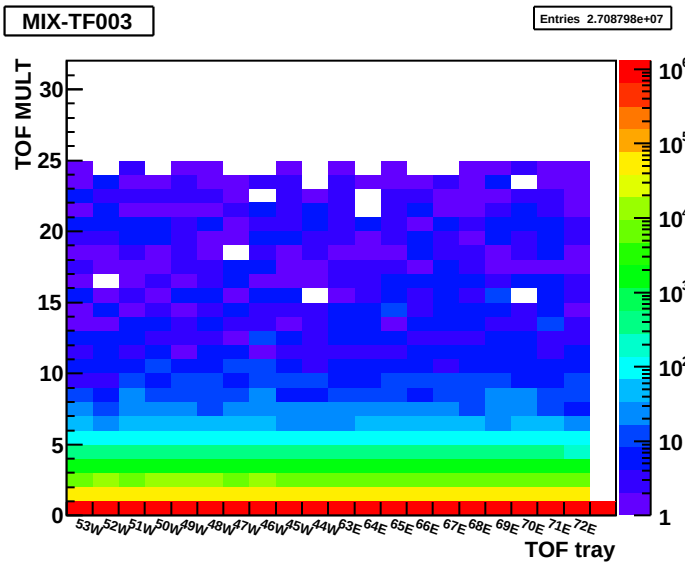

Barrel Jet Patches
Entries 1.160914e+07
JP ADC
JP ID

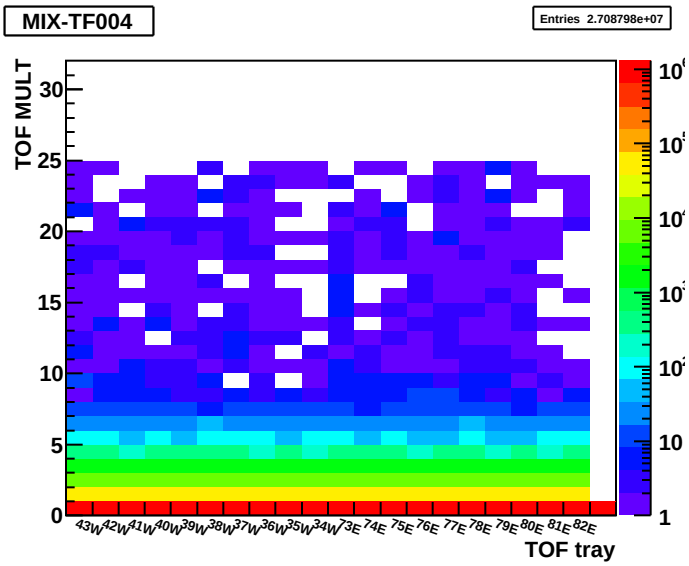

Endcap Jet Patches
Entries 3869712
JP ADC
JP ID

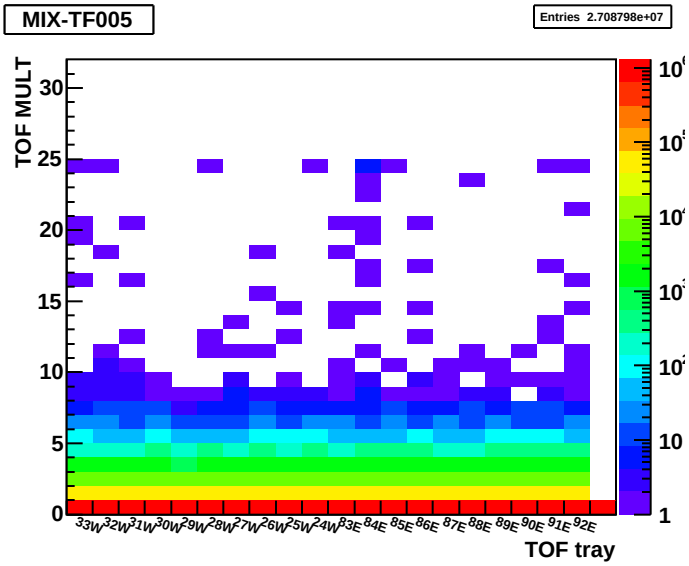

Hybrid Jet Patches
Entries 1289904
JP ADC
JP ID

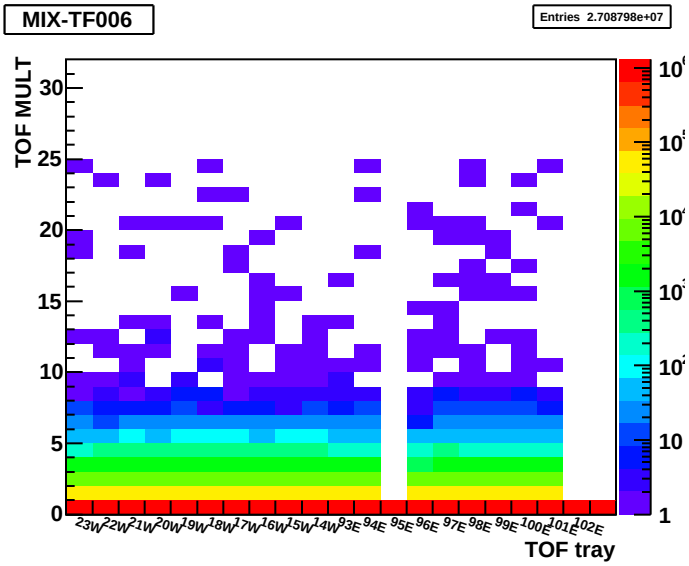

MIX-TF001
Entries 2.708798e+07
TOF MULT
TOF tray

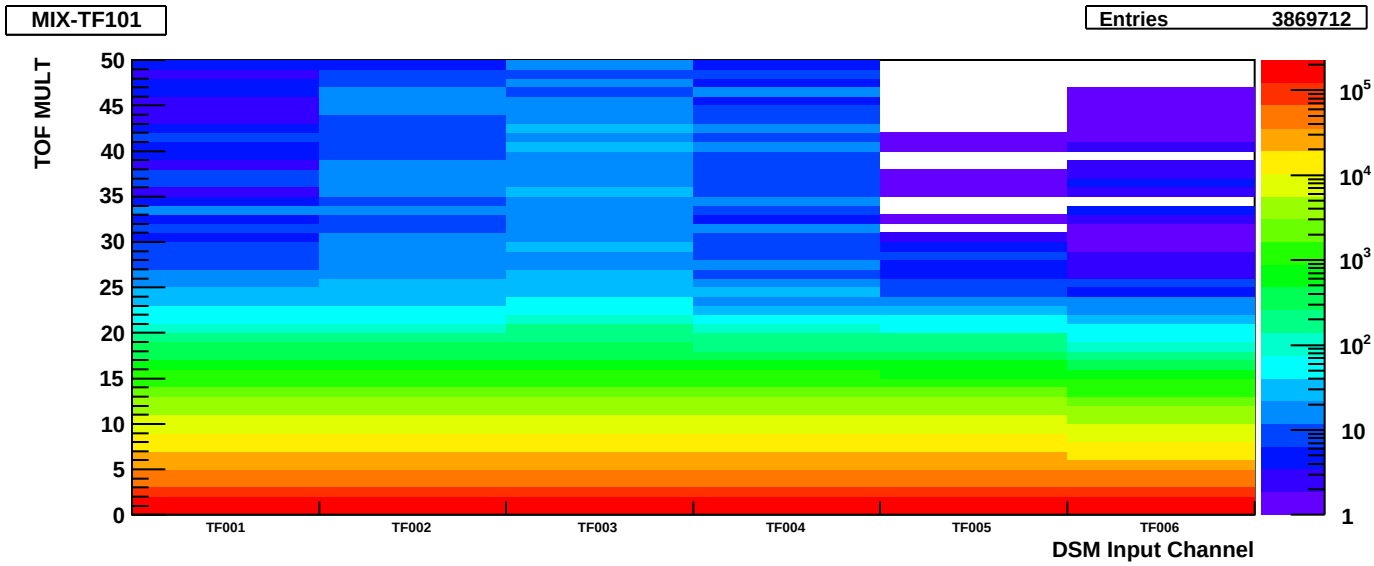

MIX-TF002
Entries 2.708798e+07
TOF MULT
TOF tray

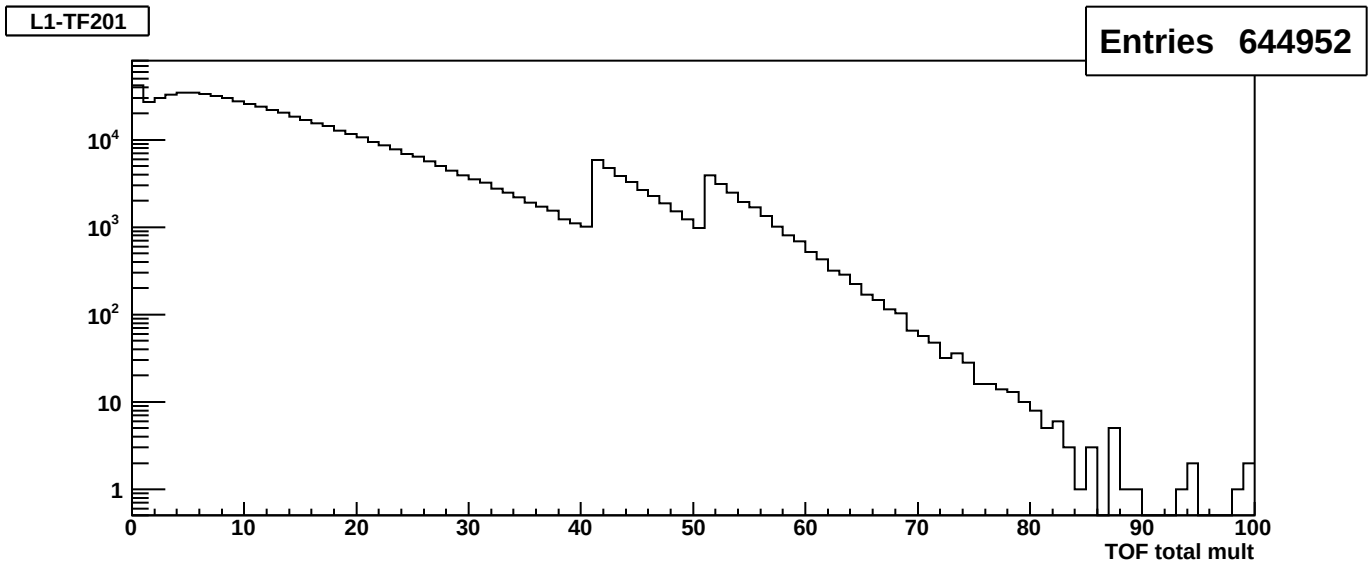

MIX-TF003
Entries 2.708798e+07
TOF MULT
TOF tray

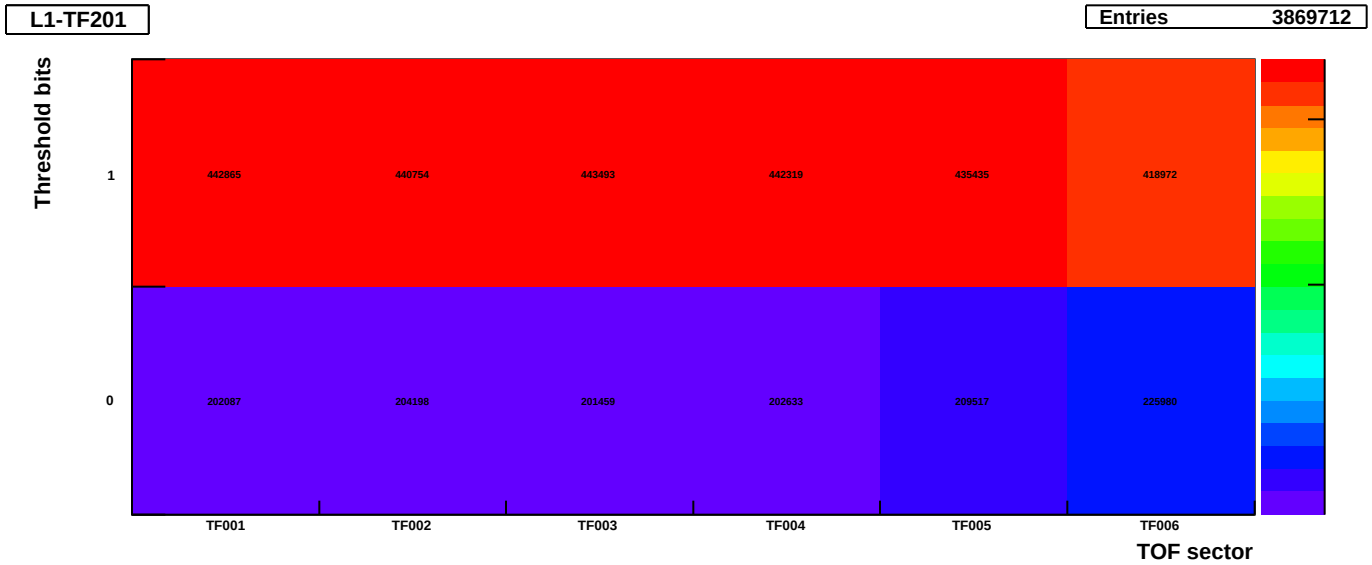

MIX-TF004
Entries 2.708798e+07
TOF MULT
TOF tray

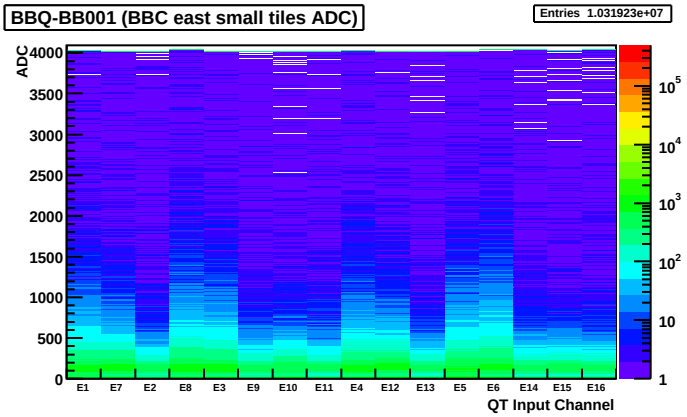

MIX-TF005
Entries 2.708798e+07
TOF MULT
TOF tray

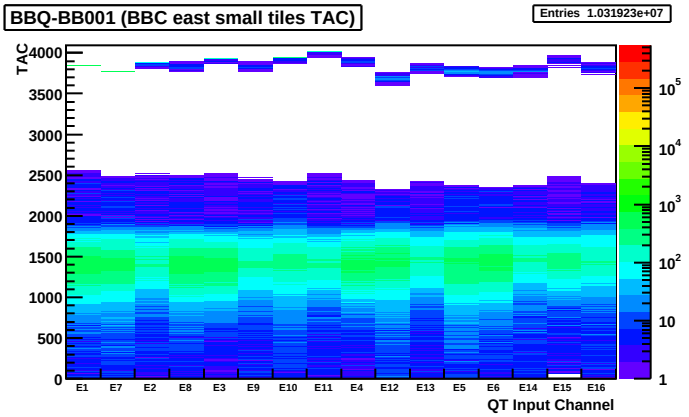

MIX-TF006
Entries 2.708798e+07
TOF MULT
TOF tray

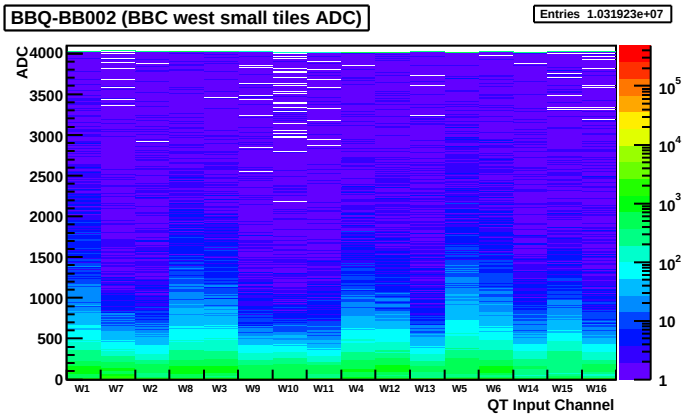

MIX-TF101
Entries 3869712
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

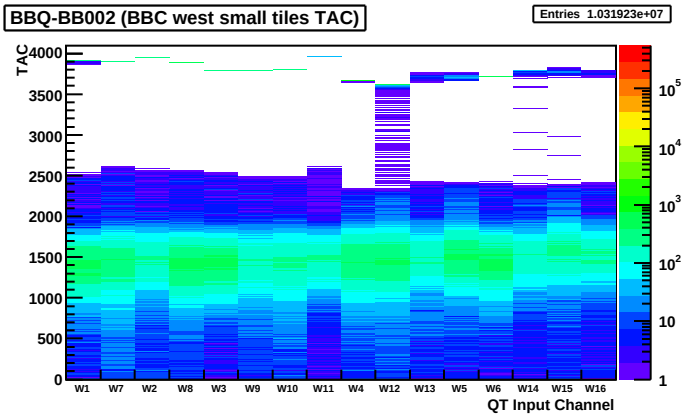

L1-TF201
Entries 644952
TOF total mult

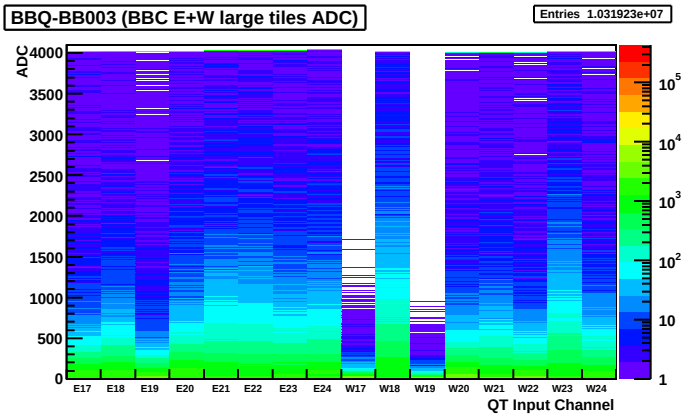

L1-TF201
Entries 3869712
Threshold bits
442865
440754
443493
442319
435435
418972
202087
204198
201459
202633
209517
225980
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

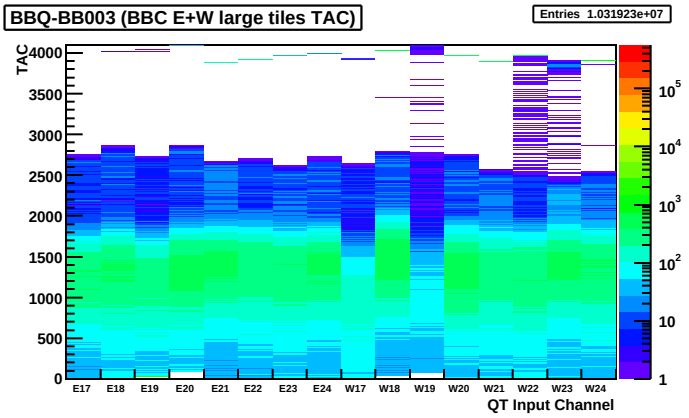

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.031923e+07
ADC
QT Input Channel

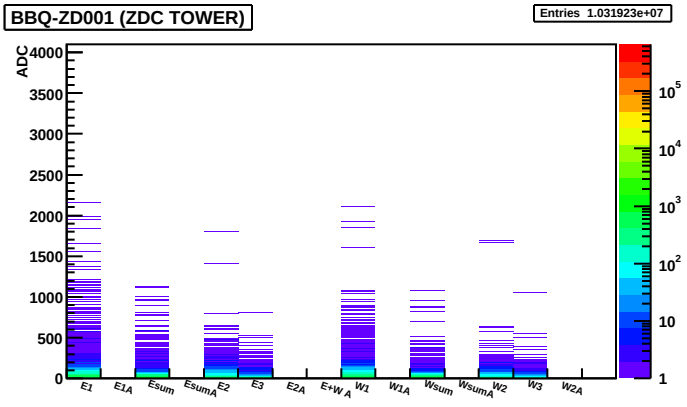

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.031923e+07
TAC
QT Input Channel

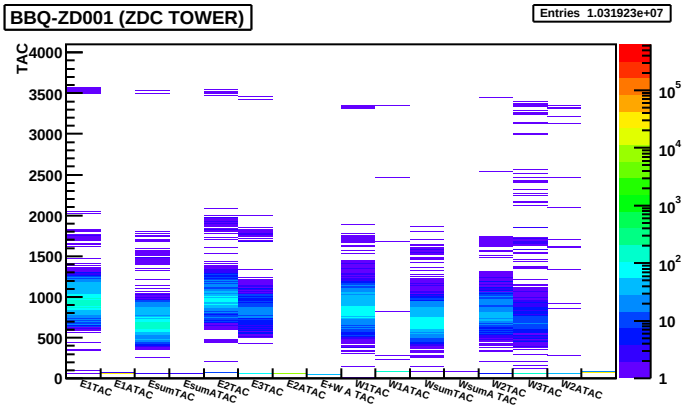

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.031923e+07
ADC
QT Input Channel

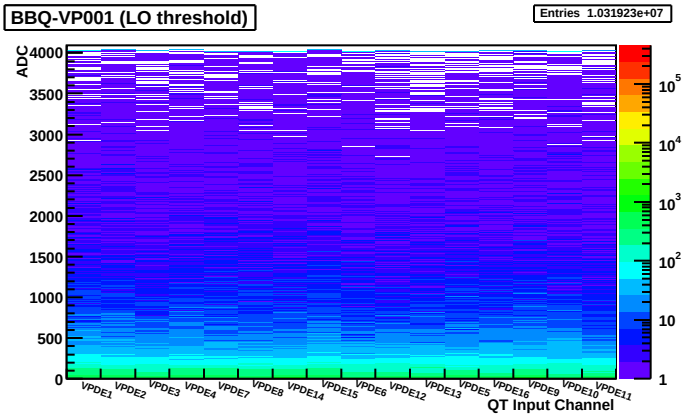

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.031923e+07
TAC
QT Input Channel

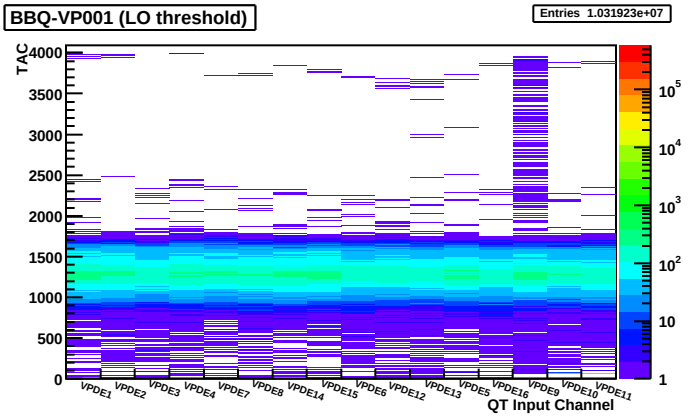

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.031923e+07
ADC
QT Input Channel

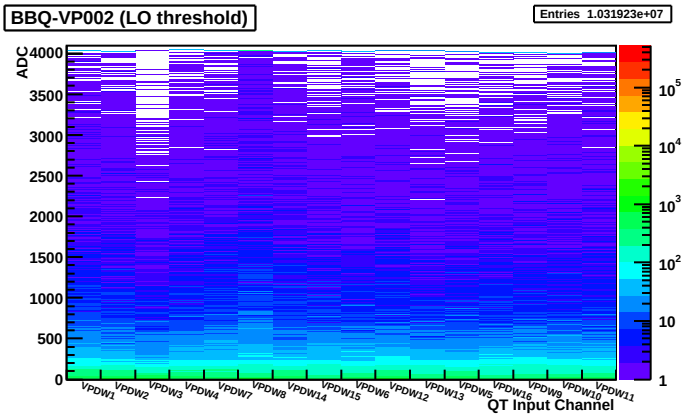

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.031923e+07
TAC
QT Input Channel

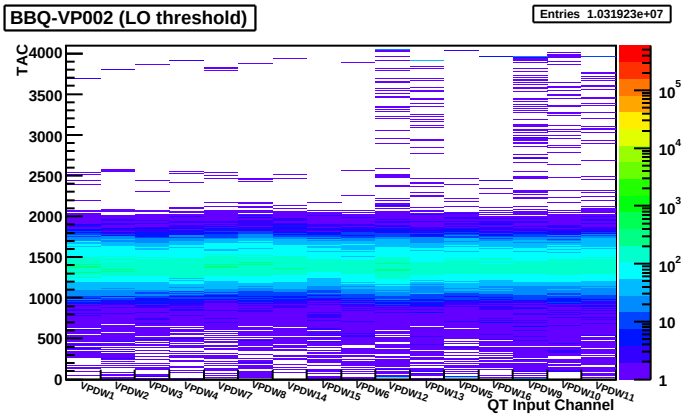

BBQ-ZD001 (ZDC TOWER)
Entries 1.031923e+07
ADC

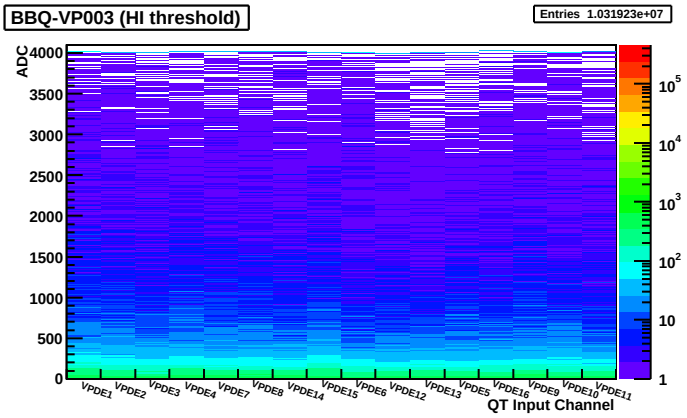

BBQ-ZD001 (ZDC TOWER)
Entries 1.031923e+07
TAC

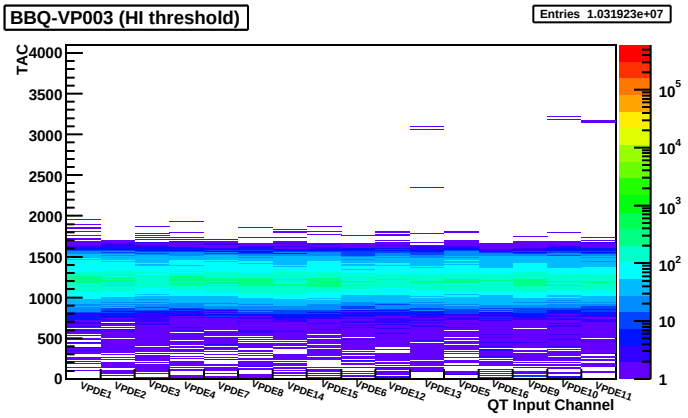

BBQ-VP001 (LO threshold)
Entries 1.031923e+07
ADC
QT Input Channel

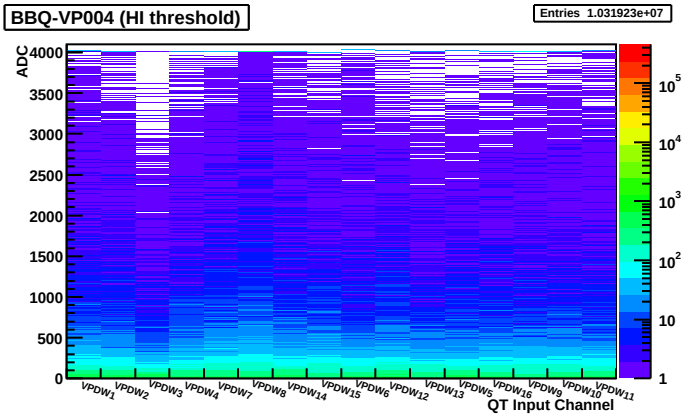

BBQ-VP001 (LO threshold)
Entries 1.031923e+07
TAC
QT Input Channel

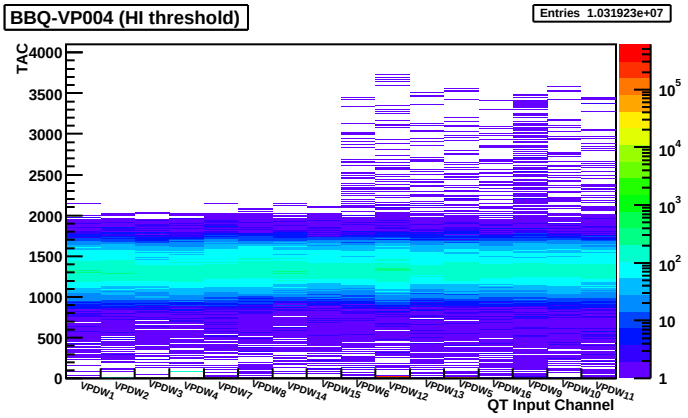

BBQ-VP002 (LO threshold)
Entries 1.031923e+07
ADC
QT Input Channel

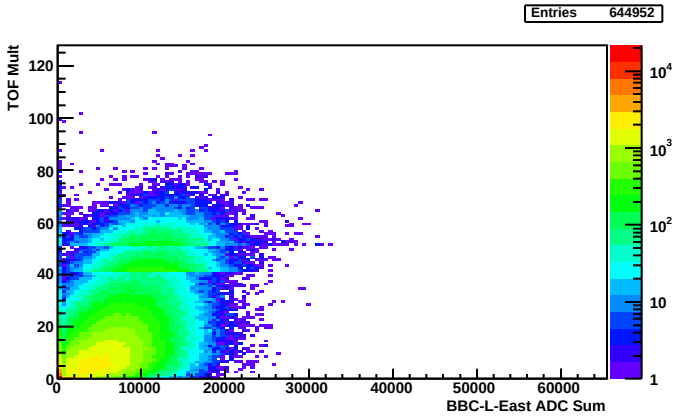

BBQ-VP002 (LO threshold)
Entries 1.031923e+07
TAC
QT Input Channel

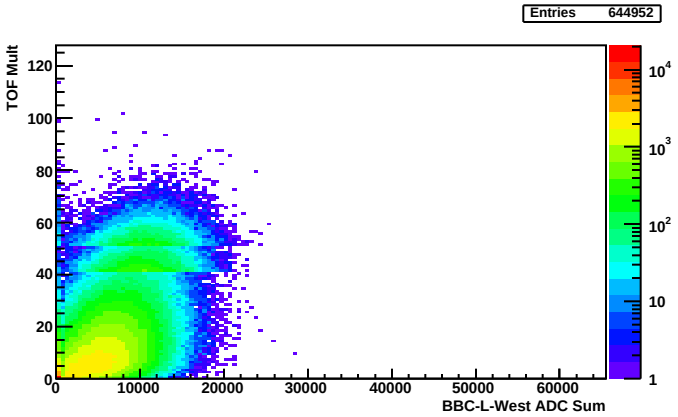

BBQ-VP003 (HI threshold)
Entries 1.031923e+07
ADC
QT Input Channel

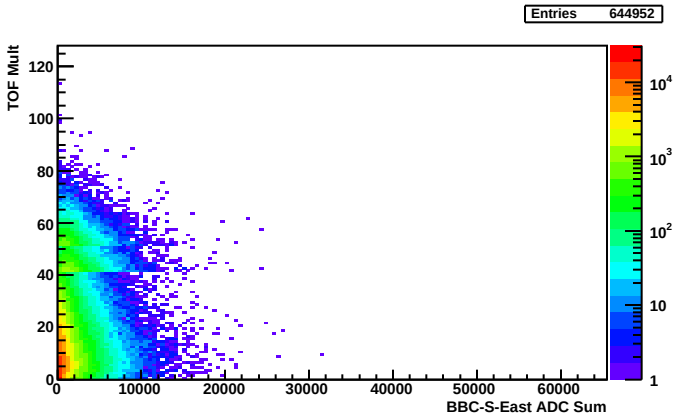

BBQ-VP003 (HI threshold)
Entries 1.031923e+07
TAC
QT Input Channel

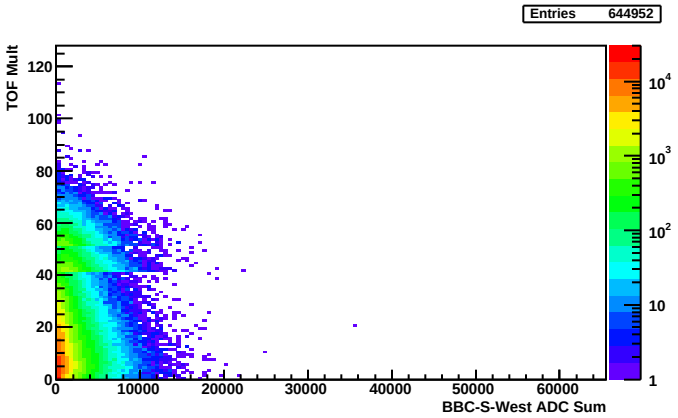

BBQ-VP004 (HI threshold)
Entries 1.031923e+07
ADC
QT Input Channel

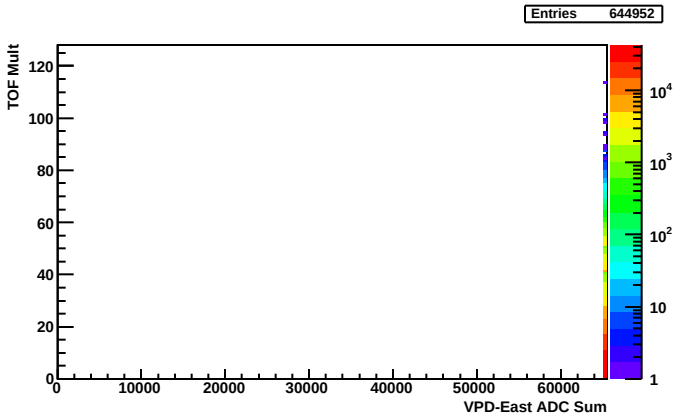

BBQ-VP004 (HI threshold)
Entries 1.031923e+07
TAC
QT Input Channel

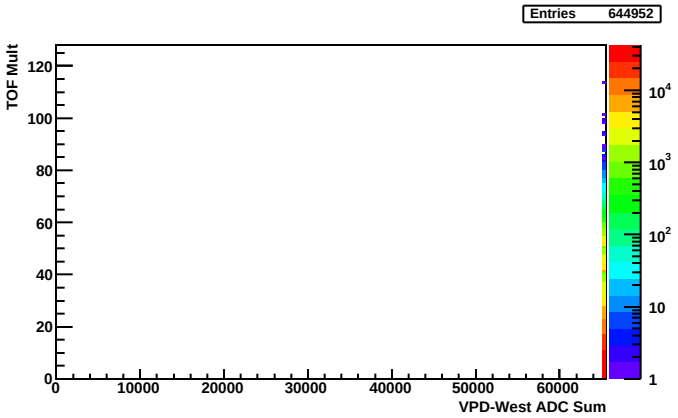

Entries 644952
TOF Mult
BBC-L-East ADC Sum

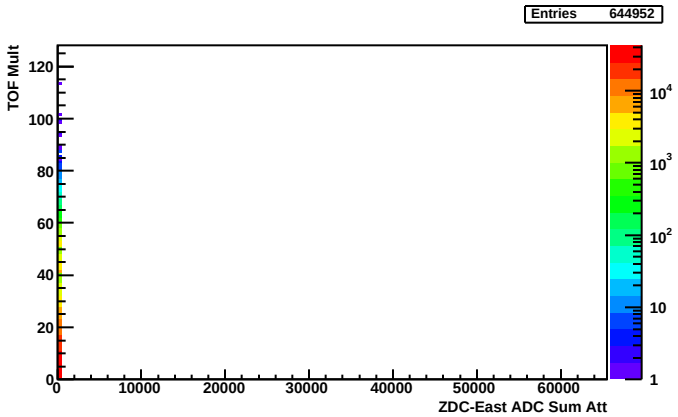

Entries 644952
TOF Mult
BBC-L-West ADC Sum

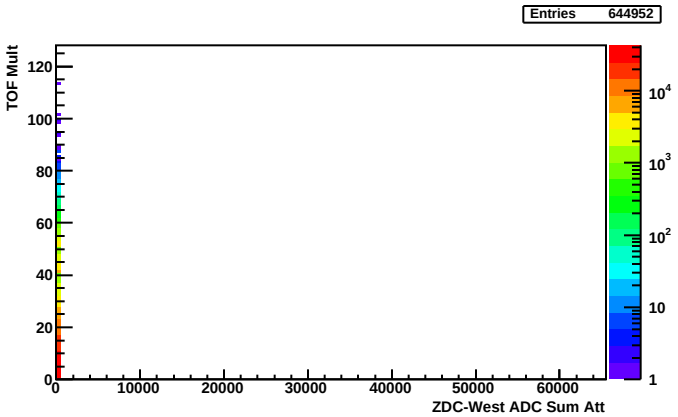

Entries 644952
TOF Mult
BBC-S-East ADC Sum

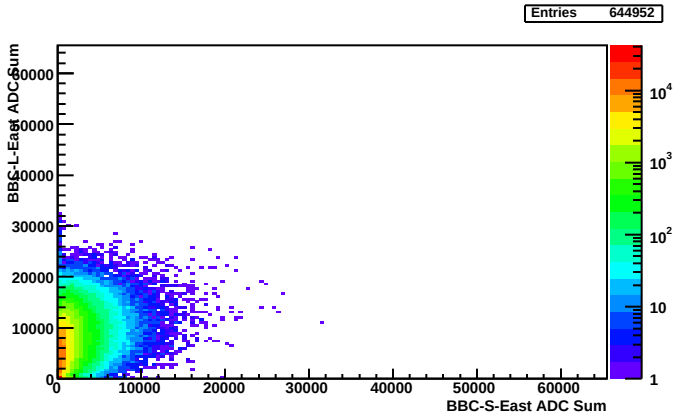

Entries 644952
TOF Mult
BBC-S-West ADC Sum

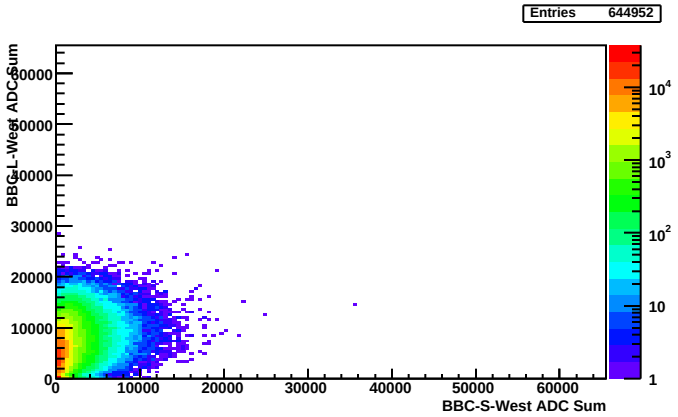

Entries 644952
TOF Mult
VPD-East ADC Sum

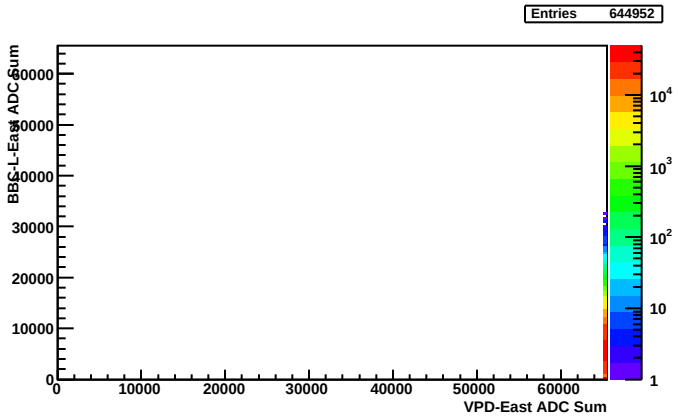

Entries 644952
TOF Mult
VPD-West ADC Sum

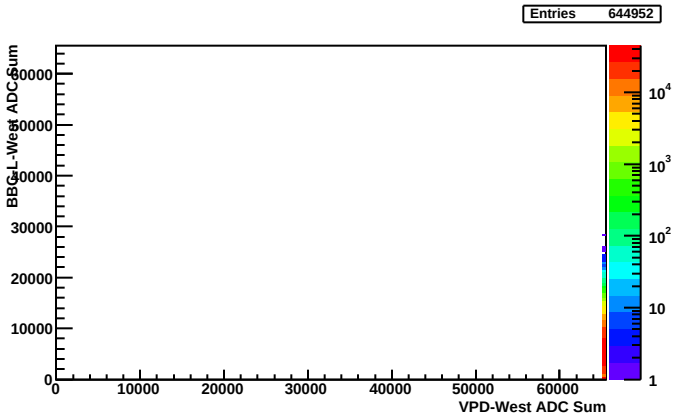

Entries 644952
TOF Mult
ZDC-East ADC Sum Att

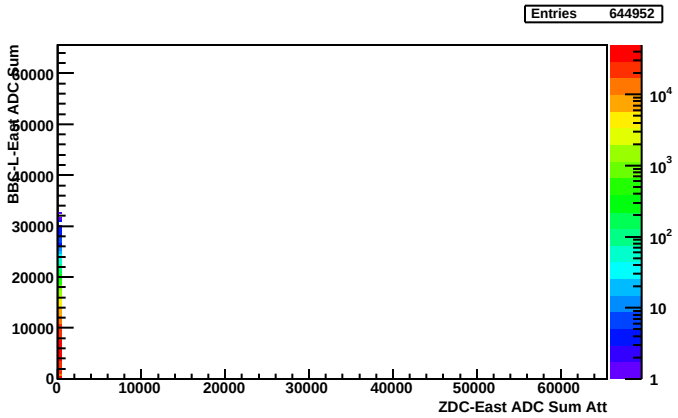

Entries 644952
TOF Mult
ZDC-West ADC Sum Att

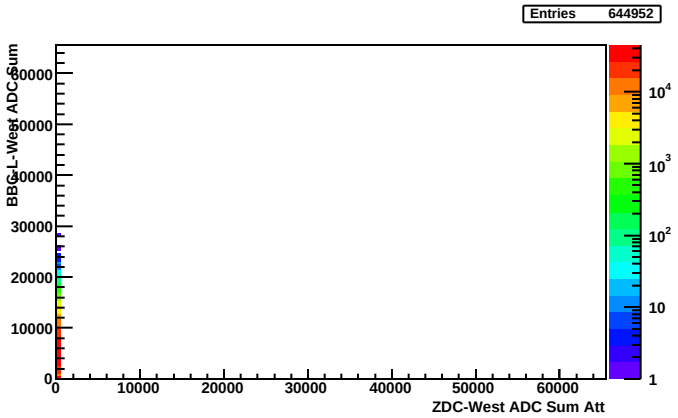

Entries 644952
BBC-L-East ADC Sum
BBC-S-East ADC Sum

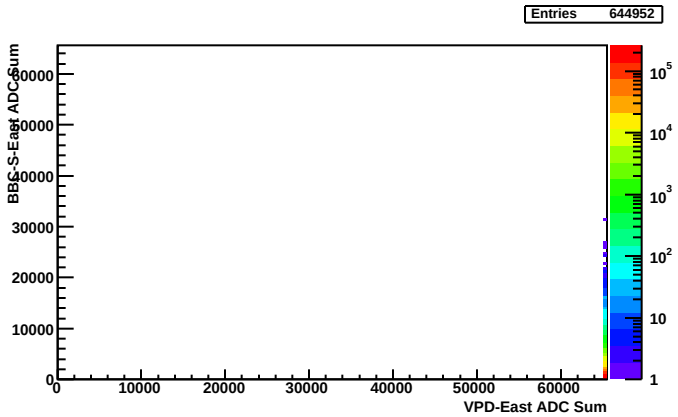

Entries 644952
BBC-L-West ADC Sum
BBC-S-West ADC Sum

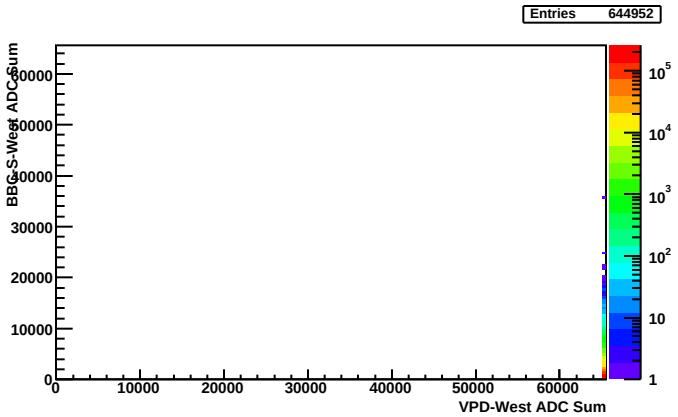

Entries 644952
BBC-L-East ADC Sum
VPD-East ADC Sum

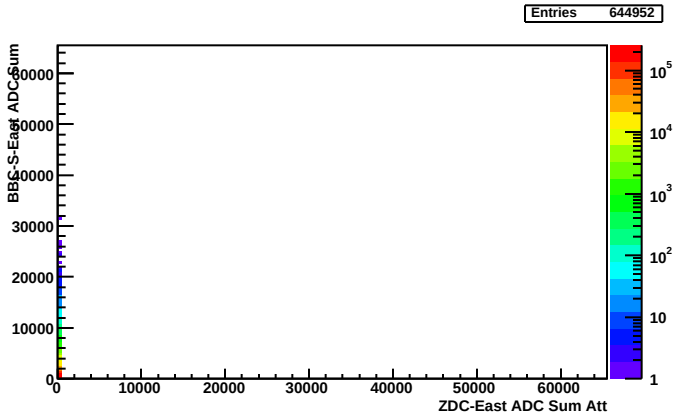

Entries 644952
BBC-L-West ADC Sum
VPD-West ADC Sum

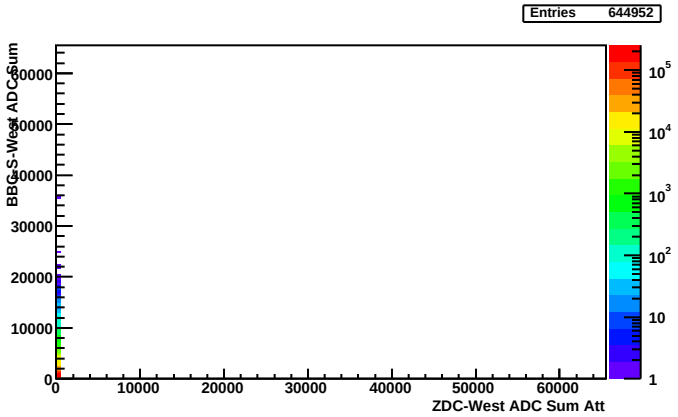

Entries 644952
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

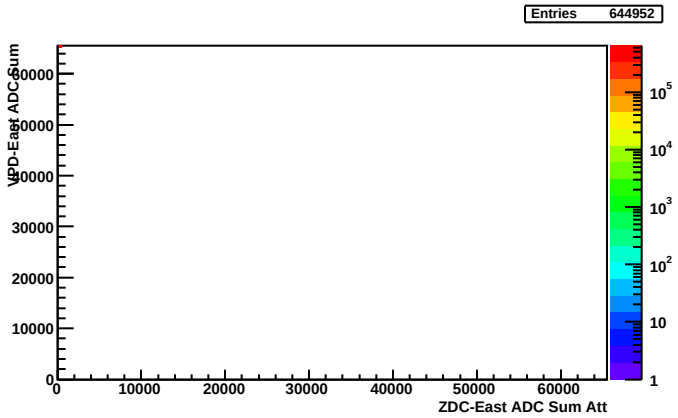

Entries 644952
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

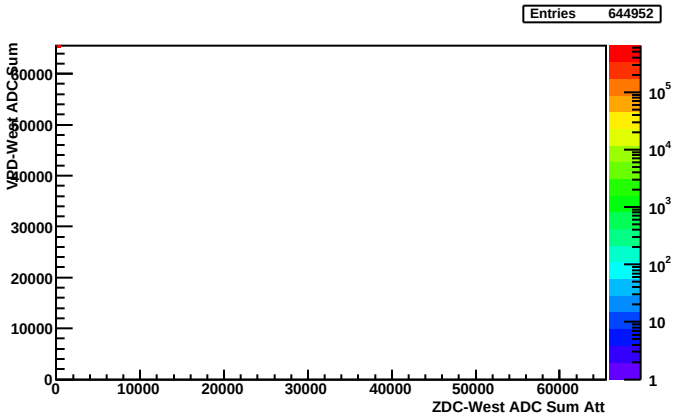

Entries 644952
BBC-S-East ADC Sum
VPD-East ADC Sum

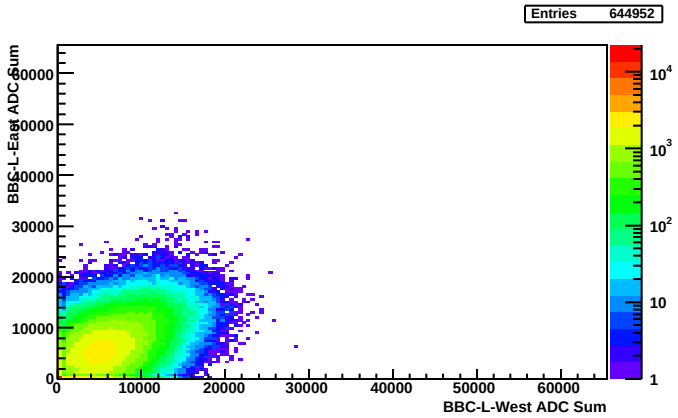

Entries 644952
BBC-S-West ADC Sum
VPD-West ADC Sum

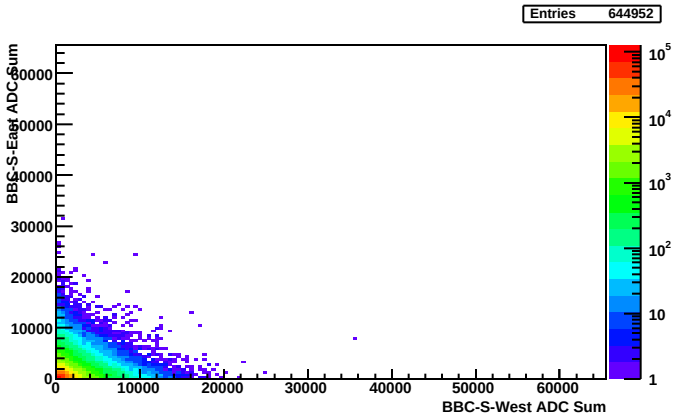

Entries 644952
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

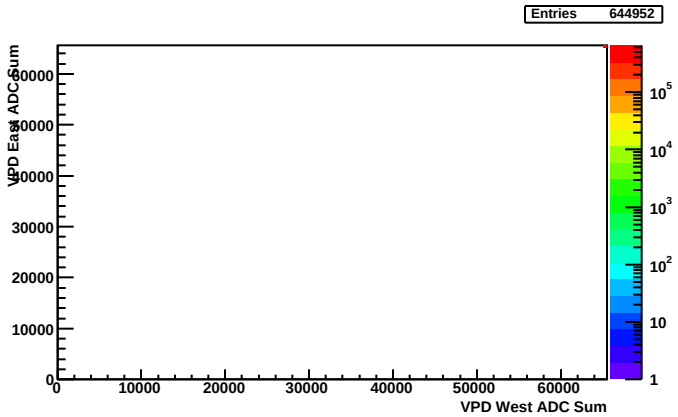

Entries 644952
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

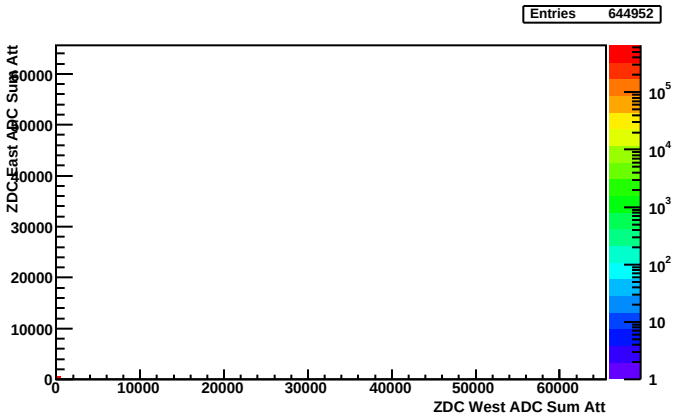

Entries 644952
VPD-East ADC Sum
ZDC-East ADC Sum Att

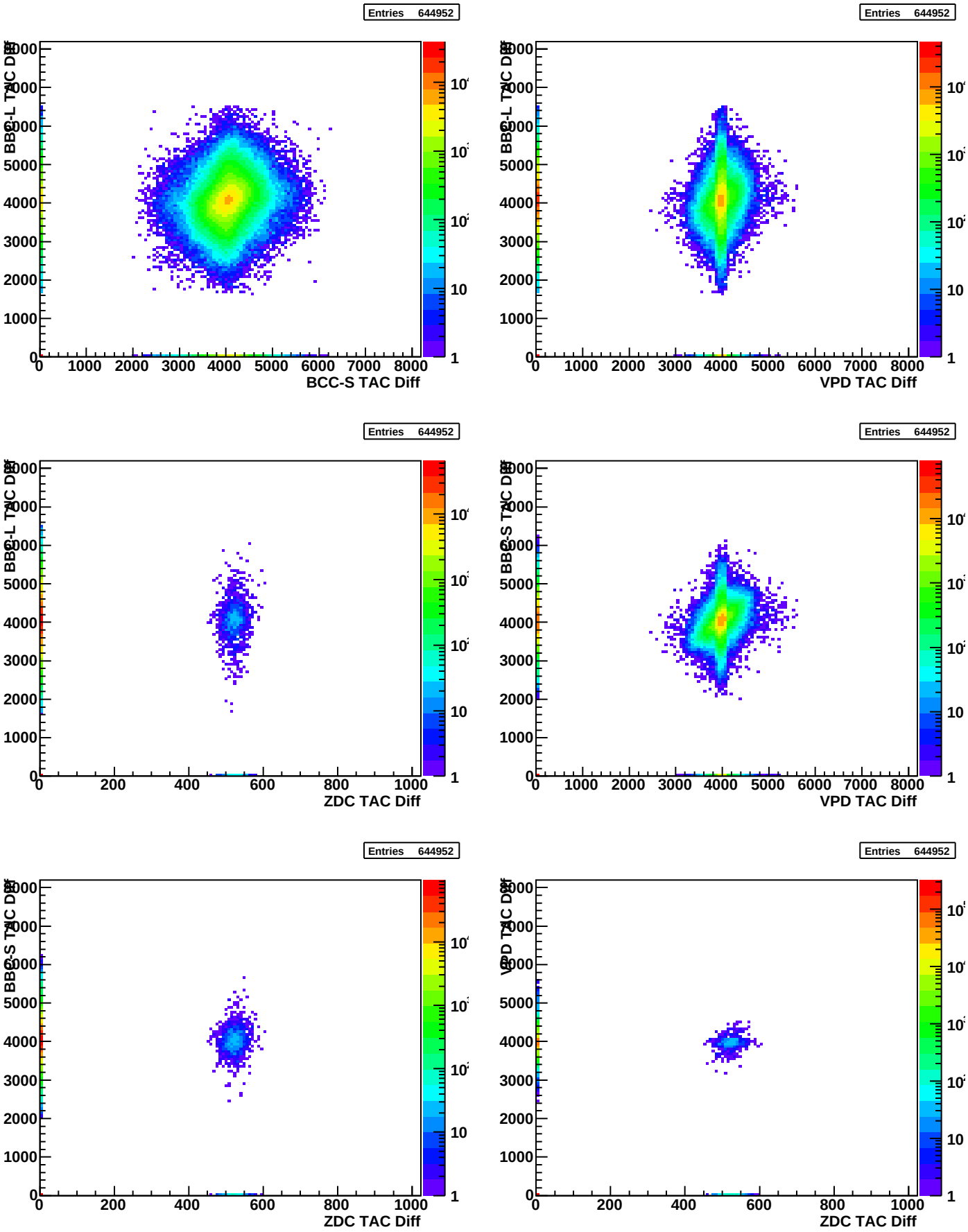

Entries 644952
VPD-West ADC Sum
ZDC-West ADC Sum Att

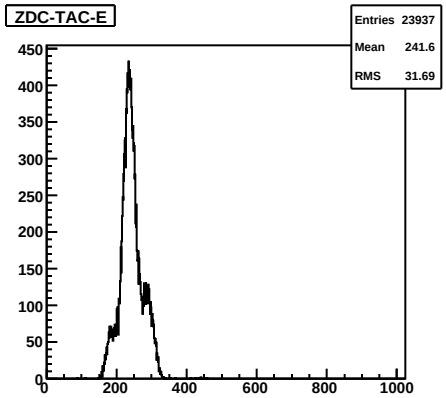

Entries 644952
BBC-L-East ADC Sum
BBC-L-West ADC Sum

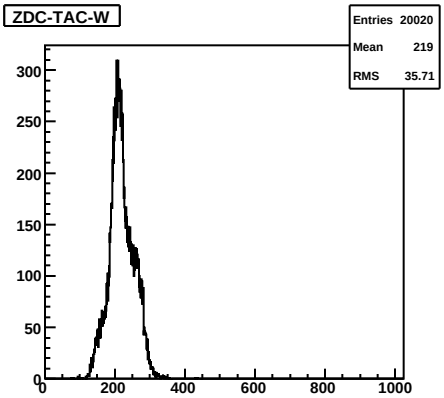

Entries 644952
BBC-S-East ADC Sum
BBC-S-West ADC Sum

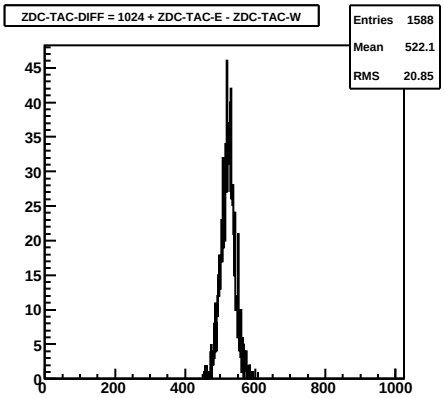

Entries 644952
VPD East ADC Sum
VPD West ADC Sum

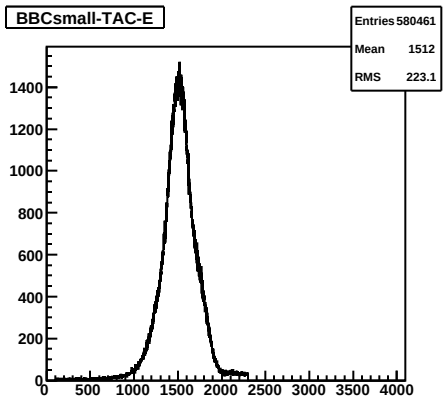

Entries 644952
ZDC East ADC Sum Att
ZDC West ADC Sum Att

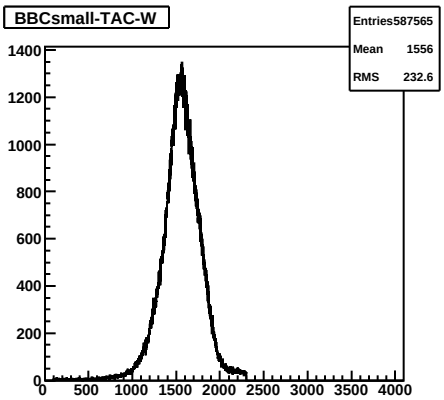

Entries 644952
BBC-L TAC Diff
BCC-S TAC Diff
Entries 644952
BBC-L TAC Diff
VPD TAC Diff
Entries 644952
BBC-L TAC Diff
ZDC TAC Diff
Entries 644952
BBC-S TAC Diff
VPD TAC Diff
Entries 644952
BBC-S TAC Diff
ZDC TAC Diff
Entries 644952
VPD TAC Diff
ZDC TAC Diff

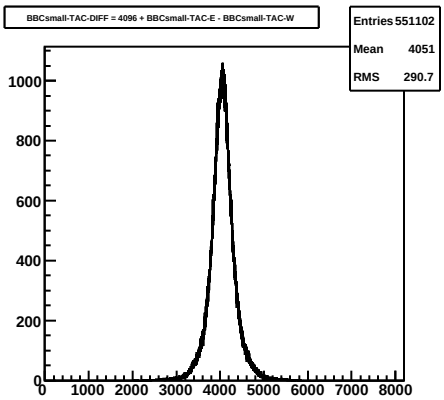

ZDC-TAC-E
Entries 23937
Mean 241.6
RMS 31.69

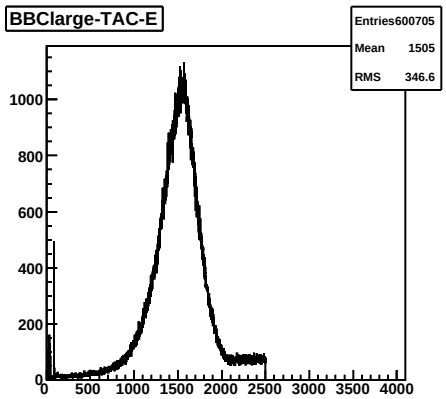

ZDC-TAC-W
Entries 20020
Mean 219
RMS 35.71

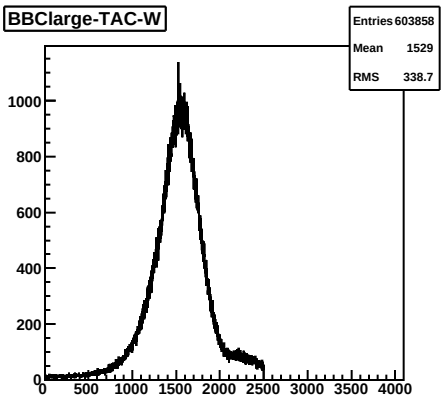

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 1588
Mean 522.1
RMS 20.85

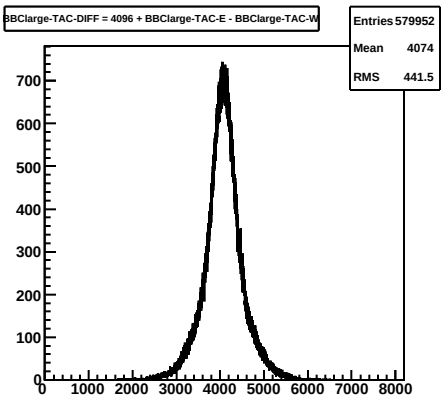

BBCsmall-TAC-E
Entries 580461
Mean 1512
RMS 223.1

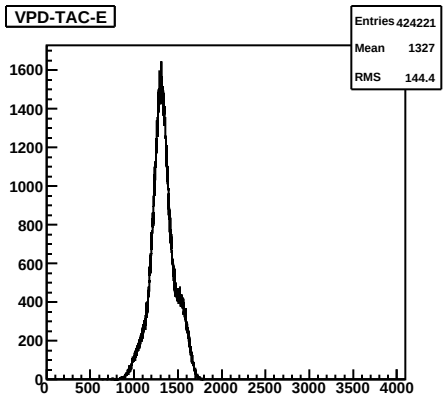

BBCsmall-TAC-W
Entries 587565
Mean 1556
RMS 232.6

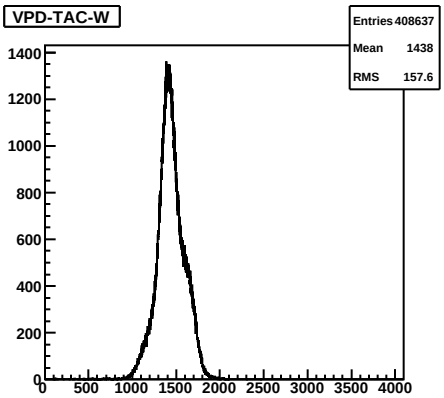

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 551102
Mean 4051
RMS 290.7

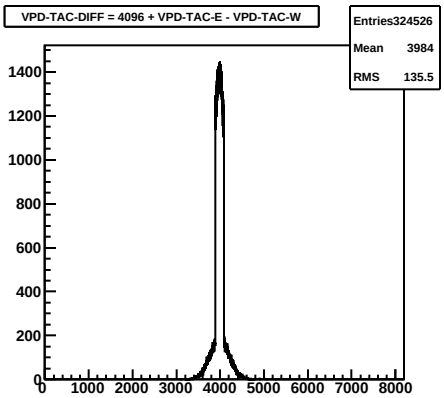

BBClarge-TAC-E
Entries 600705
Mean 1505
RMS 346.6

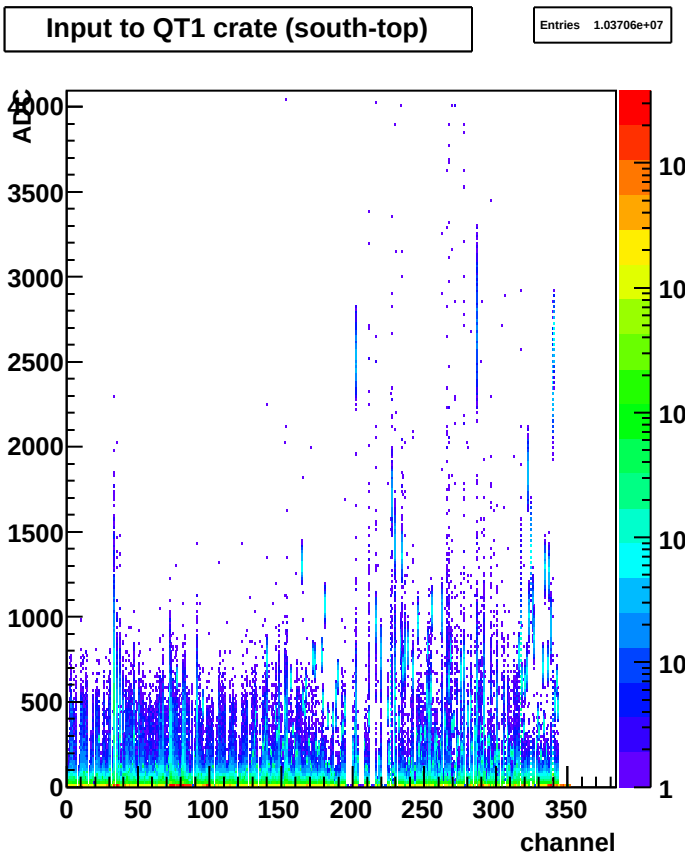

BBClarge-TAC-W
Entries 603858
Mean 1529
RMS 338.7

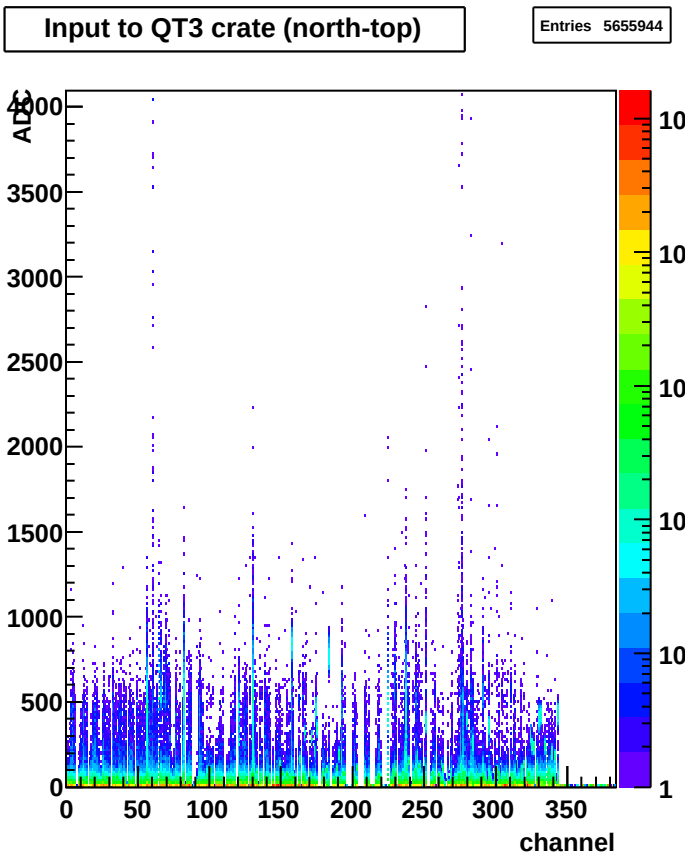

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 579952
Mean 4074
RMS 441.5

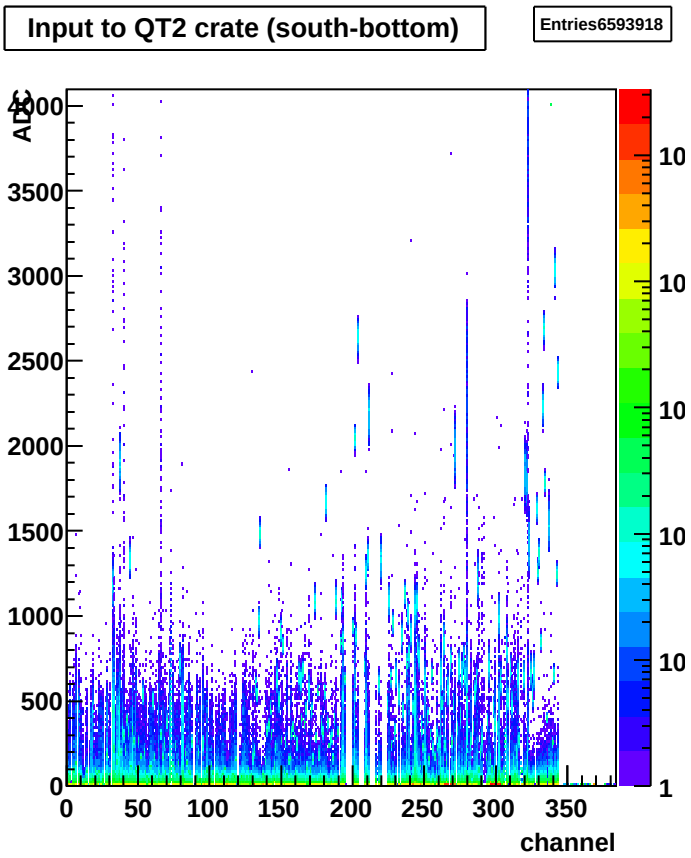

VPD-TAC-E
Entries 424221
Mean 1327
RMS 144.4

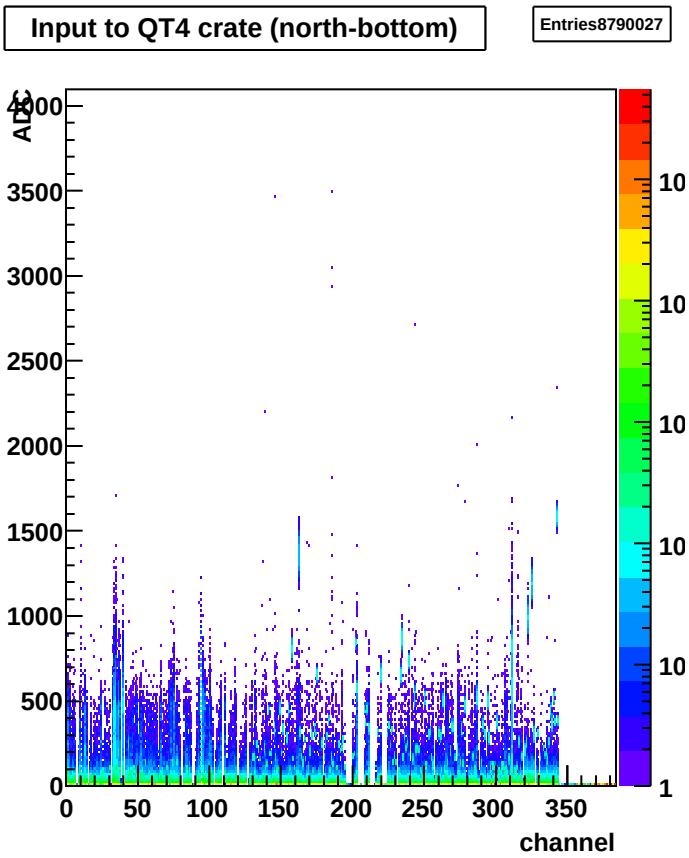

VPD-TAC-W
Entries 408637
Mean 1438
RMS 157.6

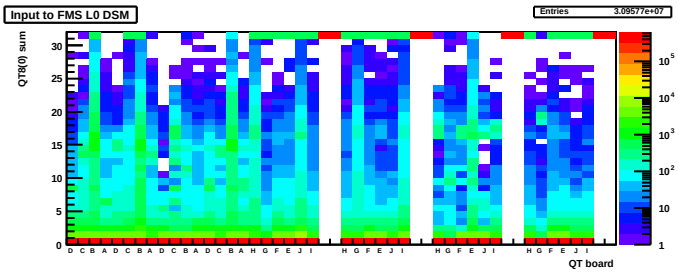

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 324526
Mean 3984
RMS 135.5

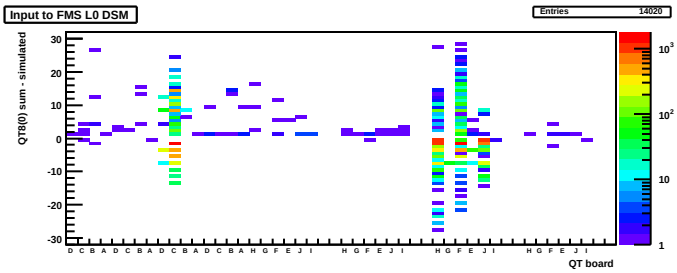

Input to QT1 crate (south-top)
Entries 1.03706e+07
ADC
channel

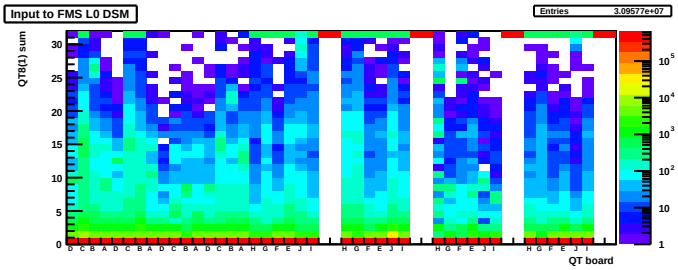

Input to QT3 crate (north-top)
Entries 5655944
ADC
channel

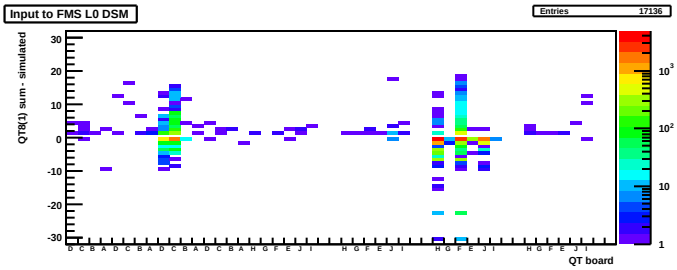

Input to QT2 crate (south-bottom)
Entries6593918
ADC
channel

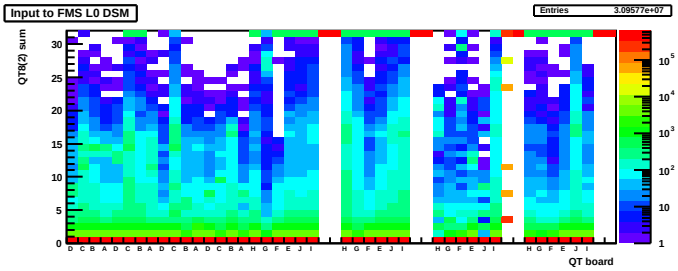

Input to QT4 crate (north-bottom)
Entries8790027
ADC
channel

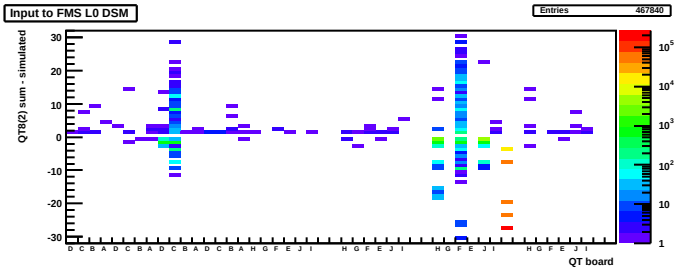

Input to FMS L0 DSM
Entries 3.09577e+07
QT8(0) sum
QT board

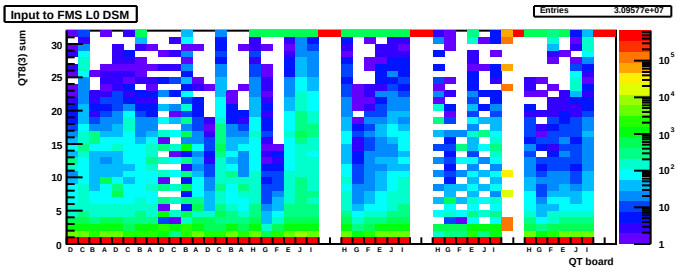

Input to FMS L0 DSM
Entries 14020
QT8(0) sum - simulated
QT board

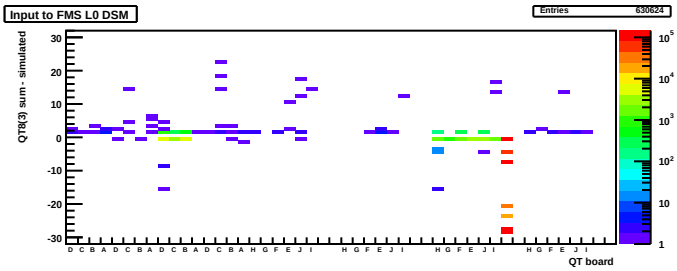

Input to FMS L0 DSM
Entries 3.09577e+07
QT8(1) sum
QT board

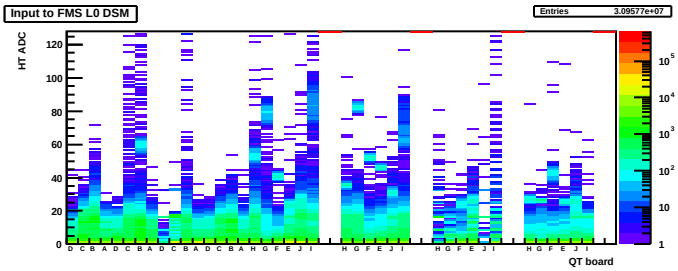

Input to FMS L0 DSM
Entries 17136
QT8(1) sum - simulated
QT board

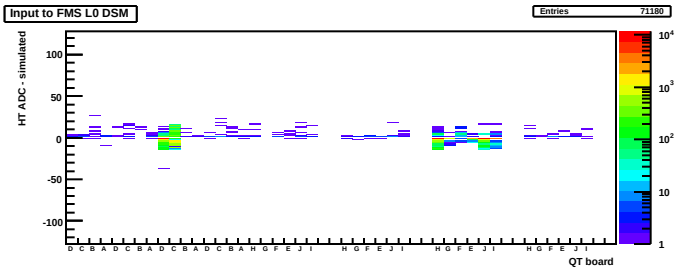

Input to FMS L0 DSM
Entries 3.09577e+07
QT8(2) sum
QT board

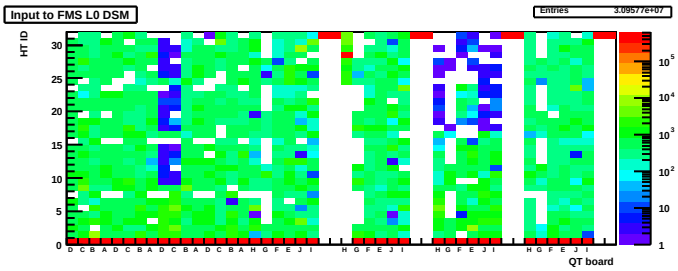

Input to FMS L0 DSM
Entries 467840
QT8(2) sum - simulated
QT board

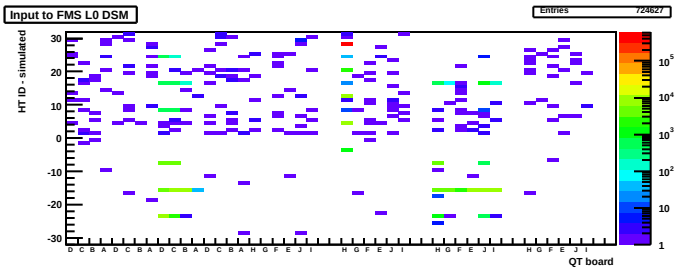

Input to FMS L0 DSM
Entries 3.09577e+07
QT8(3) sum
QT board

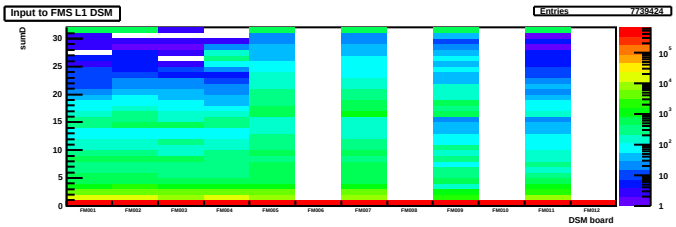

Input to FMS L0 DSM
Entries 630624
QT8(3) sum - simulated
QT board

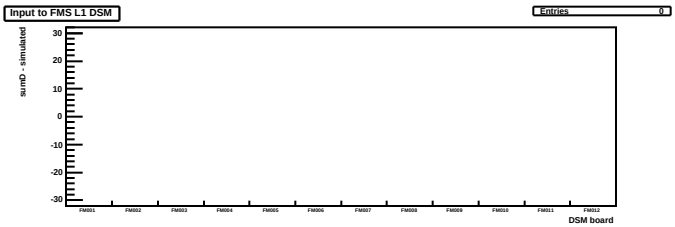

Input to FMS L0 DSM
Entries 3.09577e+07
HT ADC
QT board

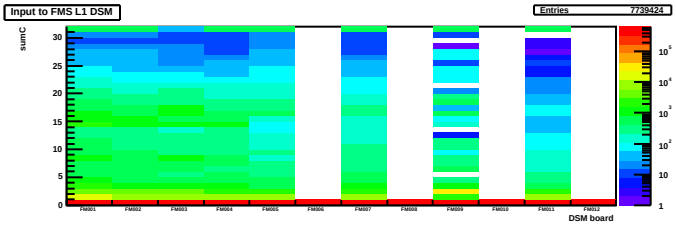

Input to FMS L0 DSM
Entries 71180
HT ADC - simulated
QT board

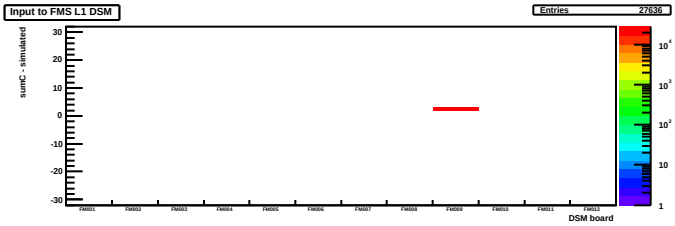

Input to FMS L0 DSM
Entries 3.09577e+07
HT ID
QT board

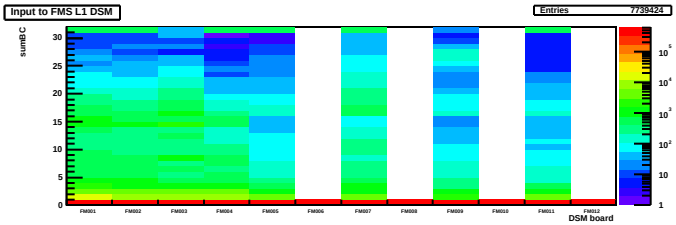

Input to FMS L0 DSM
Entries 724627
HT ID - simulated
QT board

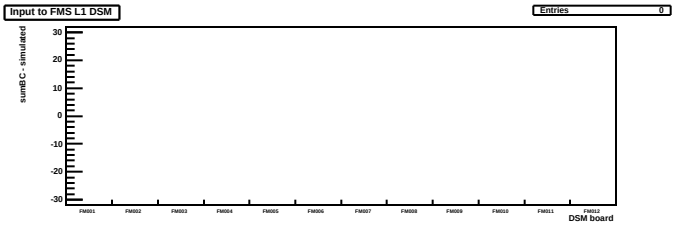

Input to FMS L1 DSM
Entries 7739424
sumD
DSM board

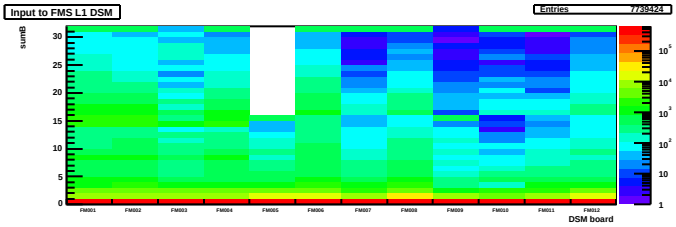

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

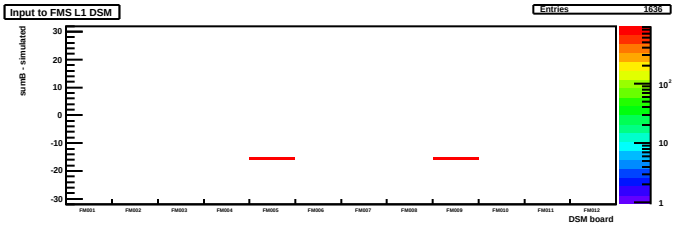

Input to FMS L1 DSM
Entries 7739424
sumC
DSM board

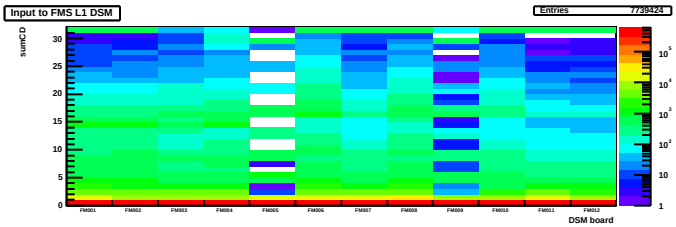

Input to FMS L1 DSM
Entries 27636
sumC - simulated
DSM board

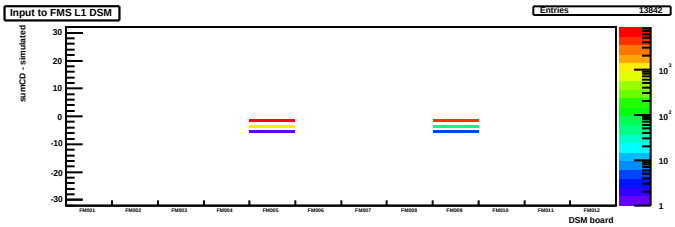

Input to FMS L1 DSM
Entries 7739424
sumBC
DSM board

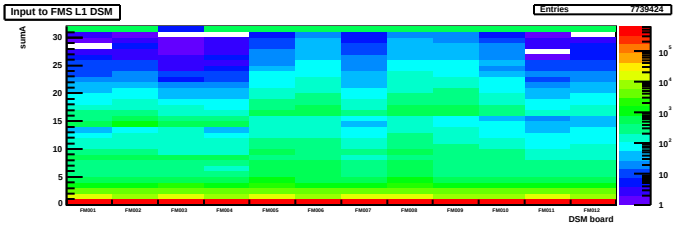

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

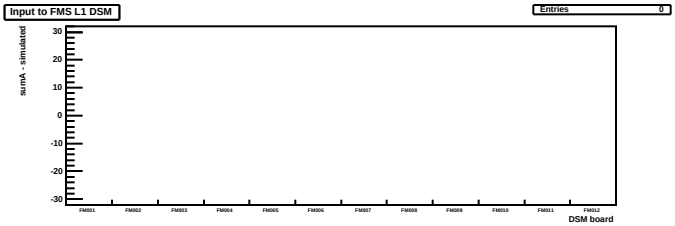

Input to FMS L1 DSM
Entries 7739424
sumB
DSM board

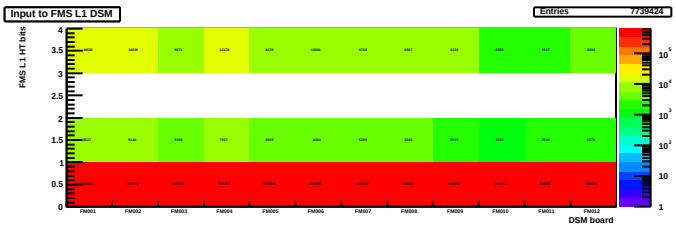

Input to FMS L1 DSM
Entries 1636
sumB - simulated
DSM board

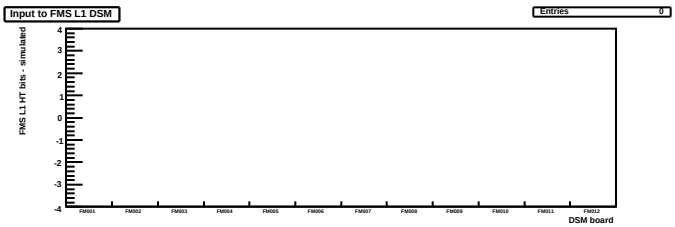

Input to FMS L1 DSM
Entries 7739424
sumCD
DSM board

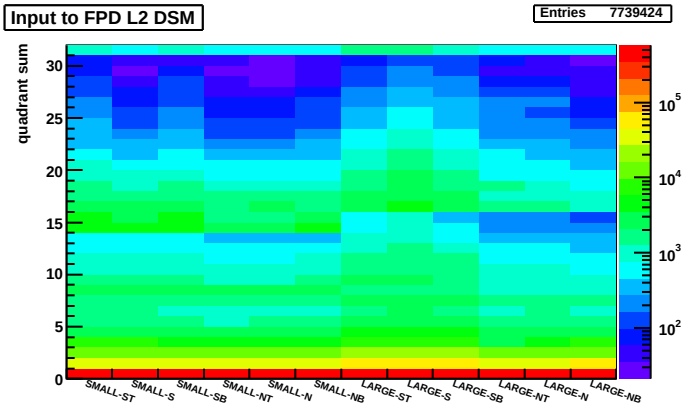

Input to FMS L1 DSM
Entries 13842
sumCD - simulated
DSM board

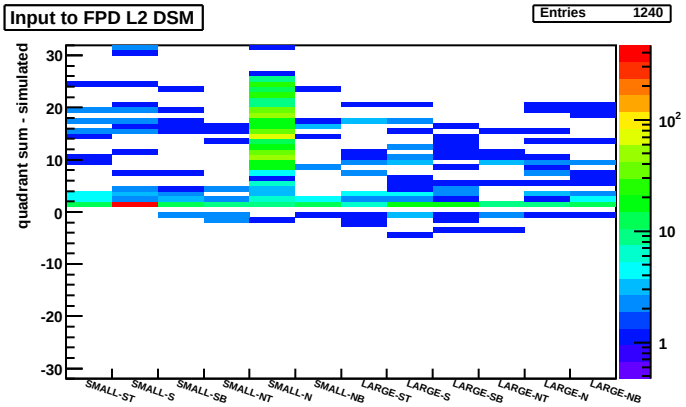

Input to FMS L1 DSM
Entries 7739424
sumA
DSM board

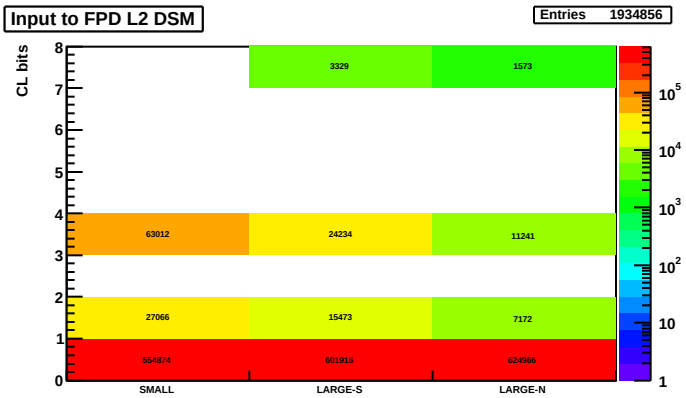

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

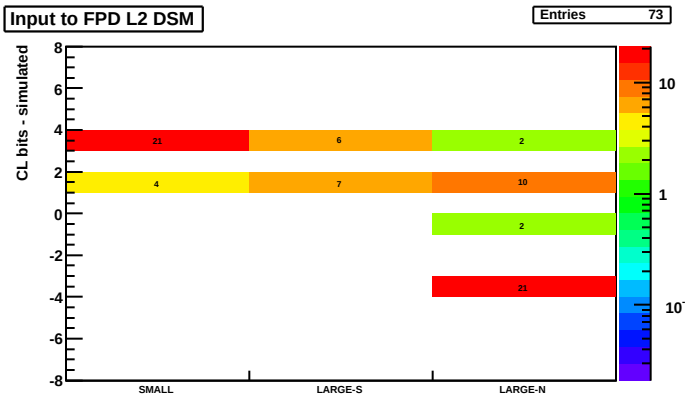

Input to FMS L1 DSM
Entries 7739424
FMS L1 HT bits
DSM board

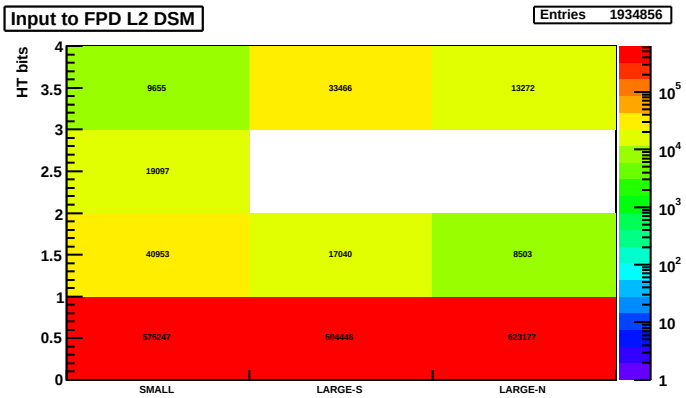

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

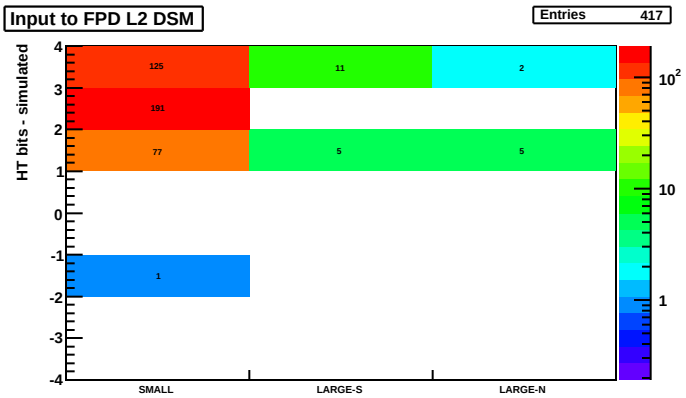

Input to FPD L2 DSM
Entries 7739424
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

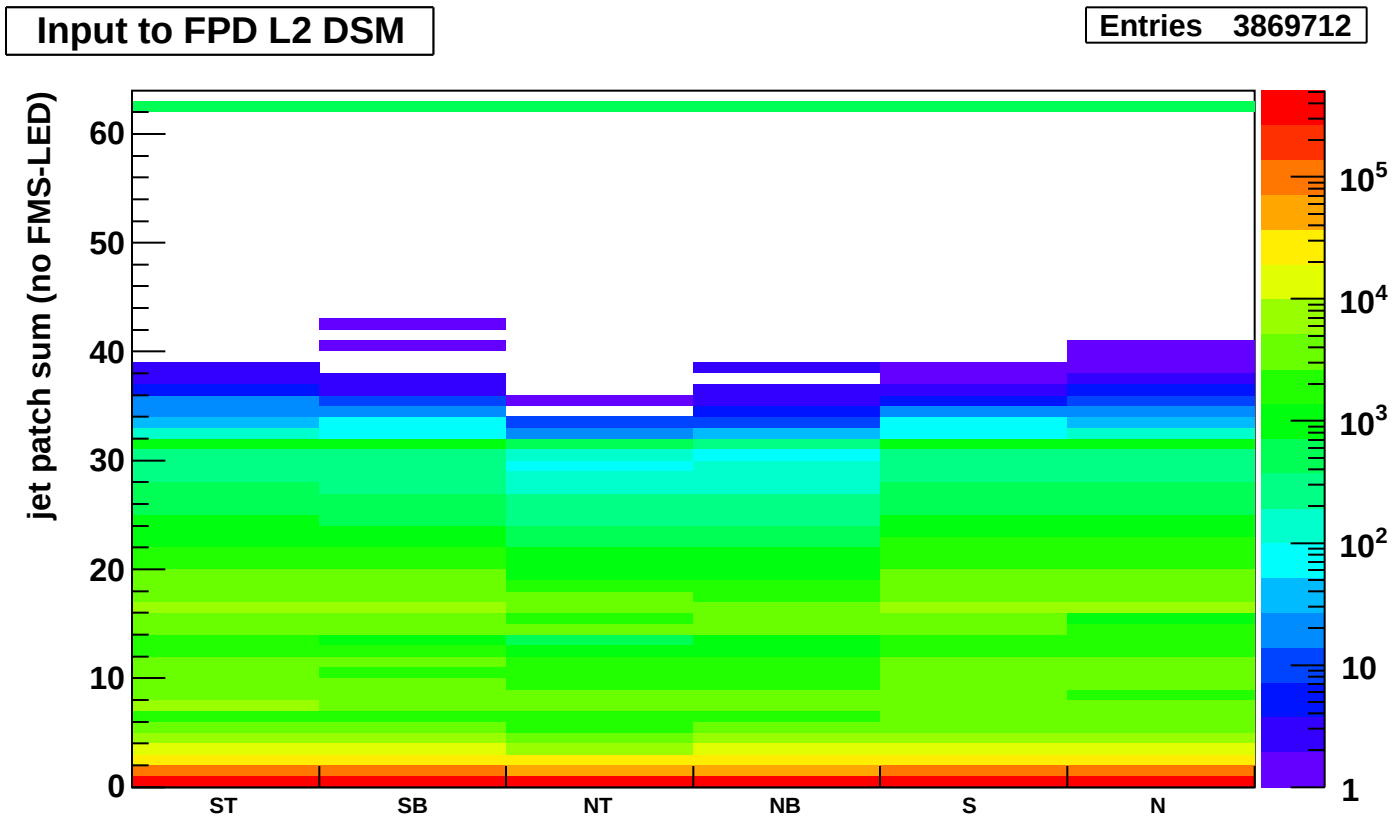

Input to FPD L2 DSM
Entries 1240
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

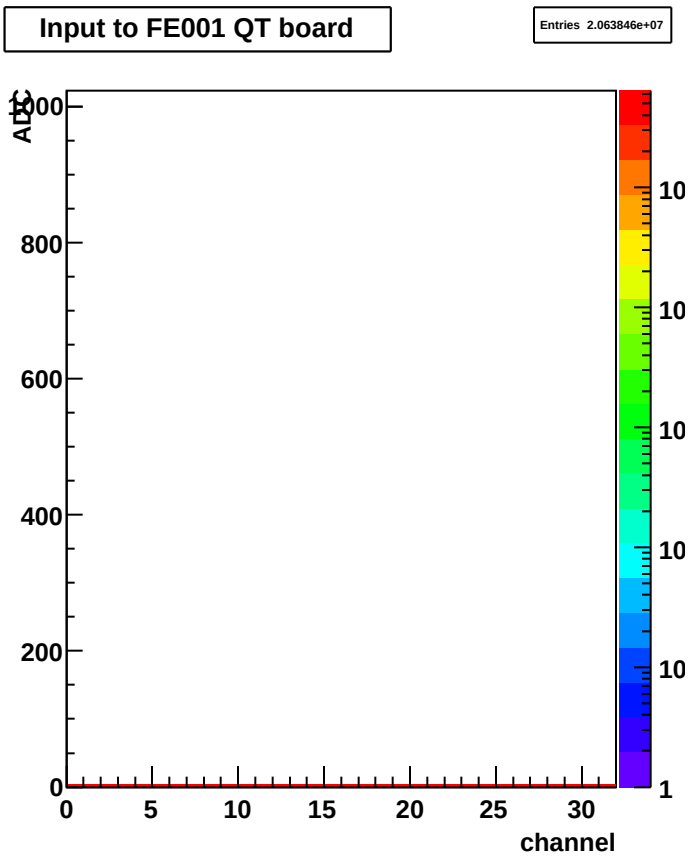

Input to FPD L2 DSM
Entries 1934856
CL bits
3329
1573
63012
24234
11241
27066
15473
7172
554874
601916
624966
SMALL
LARGE-S
LARGE-N

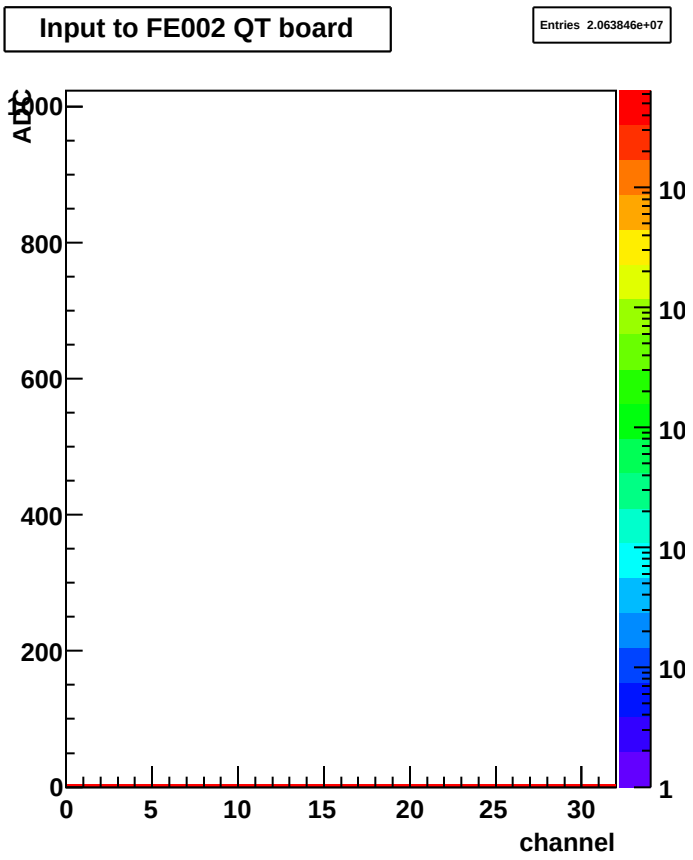

Input to FPD L2 DSM
Entries 73
CL bits - simulated
21
6
2
4
7
10
2
21
SMALL
LARGE-S
LARGE-N

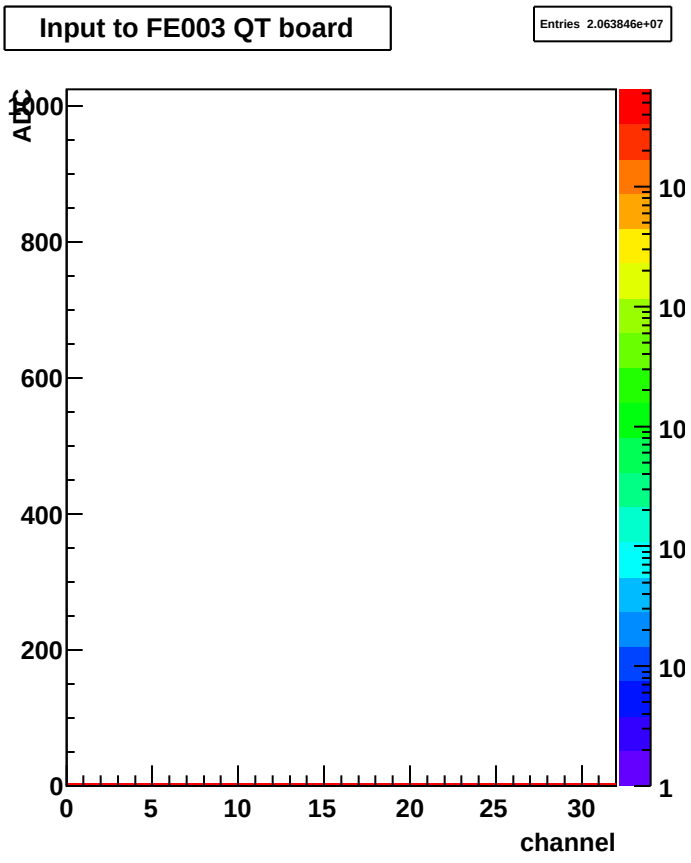

Input to FPD L2 DSM
Entries 1934856
HT bits
9655
33466
13272
19097
40953
17040
8503
575247
594446
623177
SMALL
LARGE-S
LARGE-N

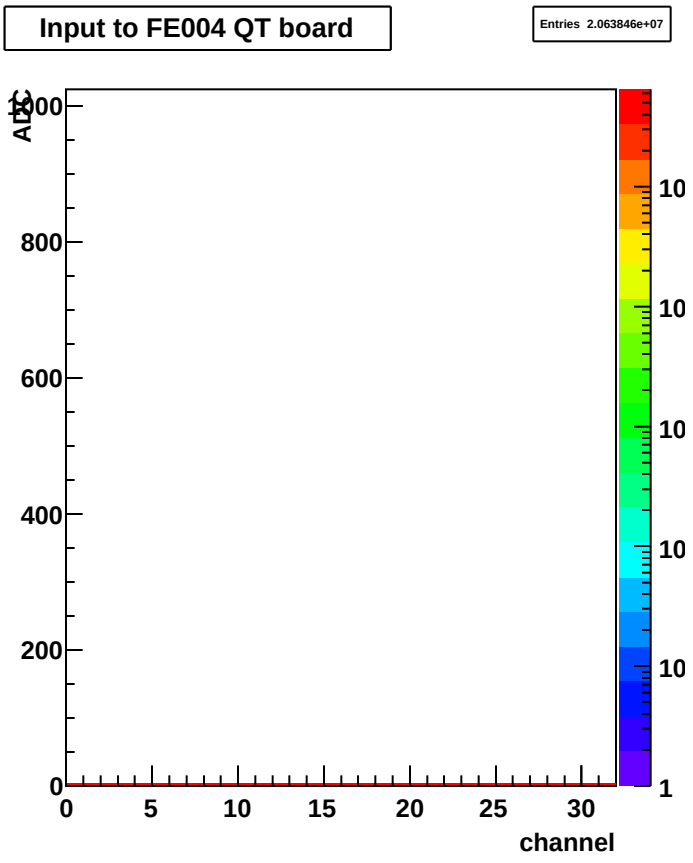

Input to FPD L2 DSM
Entries 417
HT bits - simulated
125
11
2
191
77
5
5
1
SMALL
LARGE-S
LARGE-N

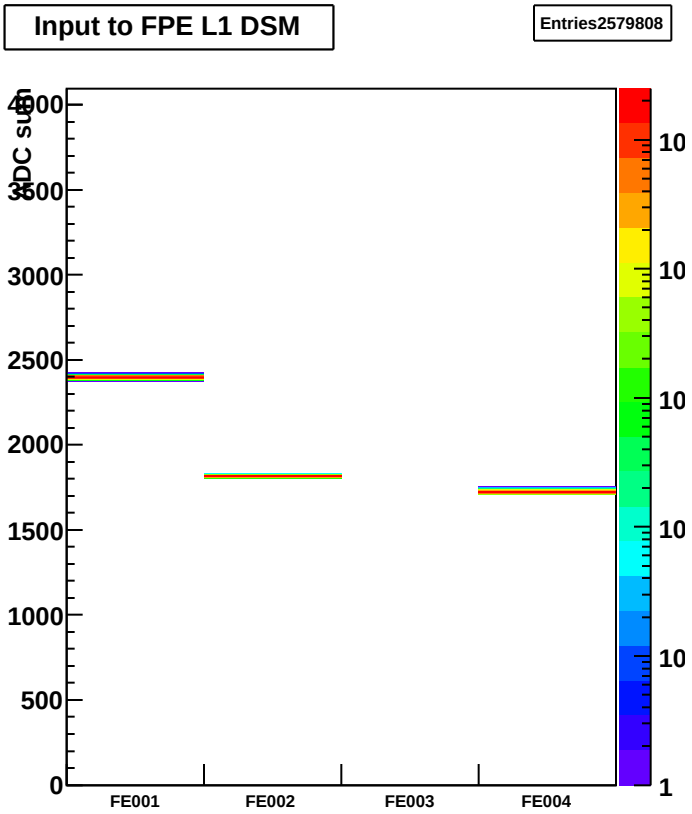

Input to FPD L2 DSM
Entries 3869712
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5


Input to FE001 QT board
Entries 2.063846e+07
ADC
channel

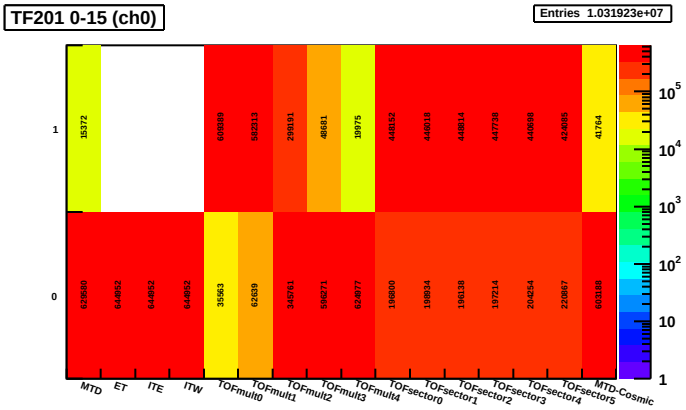

Input to FE002 QT board
Entries 2.063846e+07
ADC
channel


Input to FE003 QT board
Entries 2.063846e+07
ADC
channel

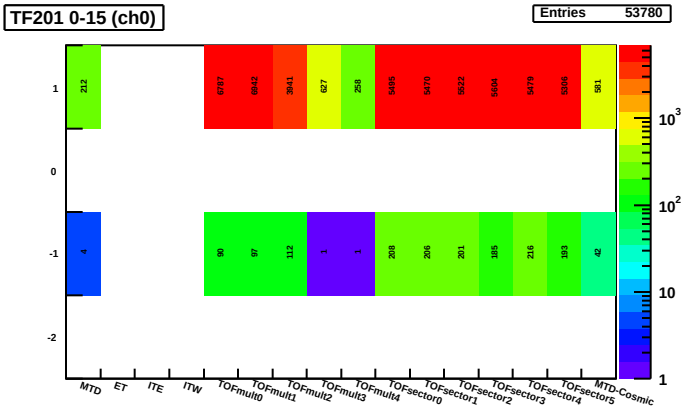

Input to FE004 QT board
Entries 2.063846e+07
ADC
channel


Input to FPE L1 DSM
Entries2579808
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

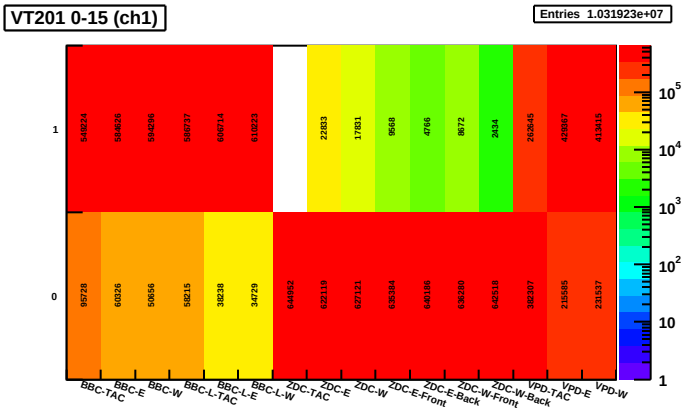
TF201 0-15 (ch0)



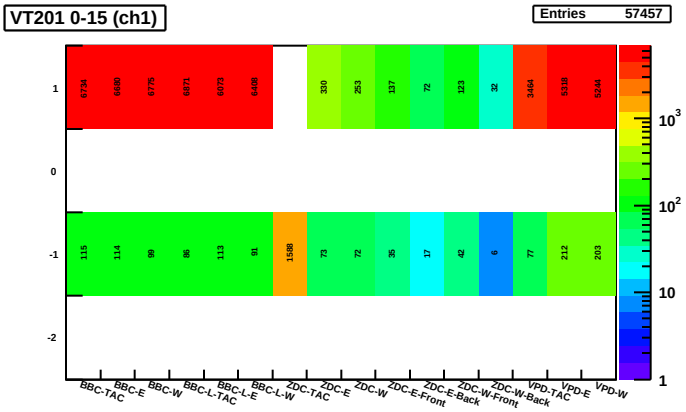
TF201 0-15 (ch0)



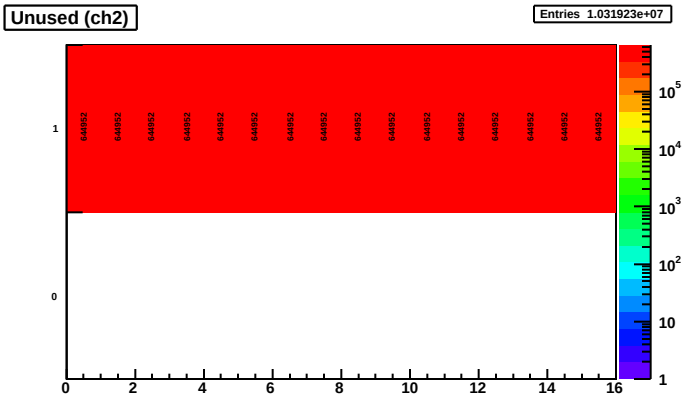
VT201 0-15 (ch1)

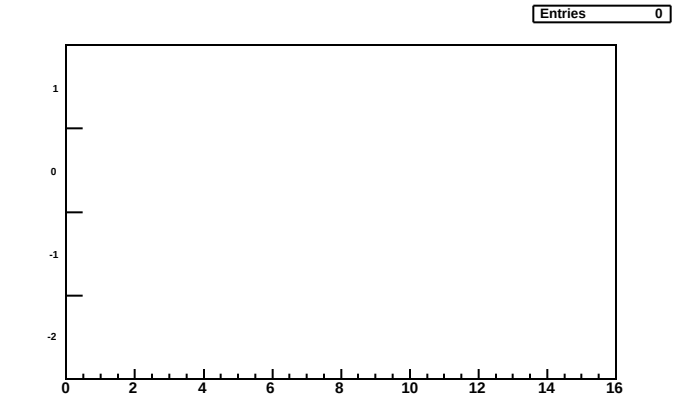


VT201 0-15 (ch1)

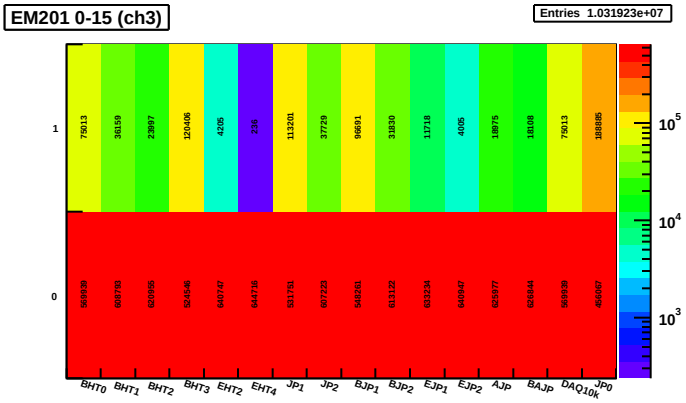


Unused (ch2)





EM201 0-15 (ch3)



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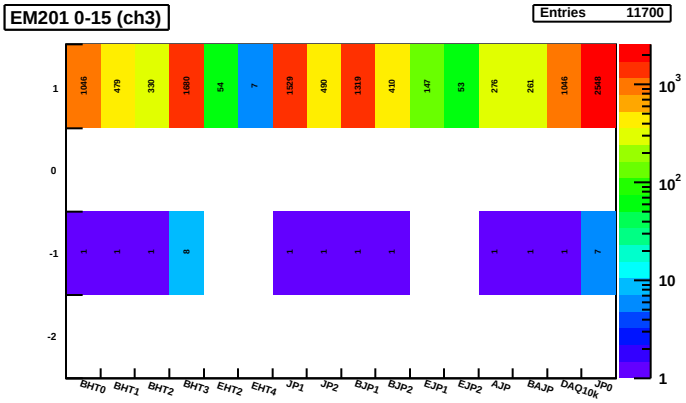
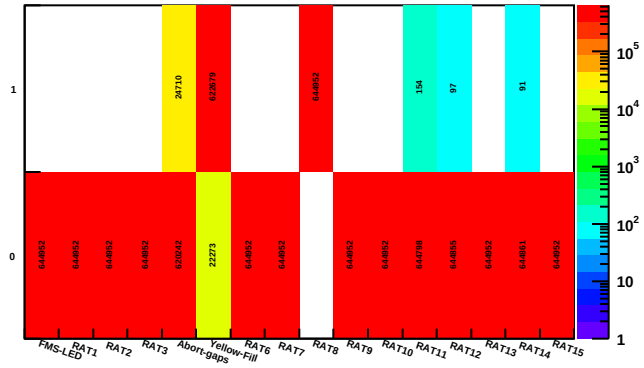
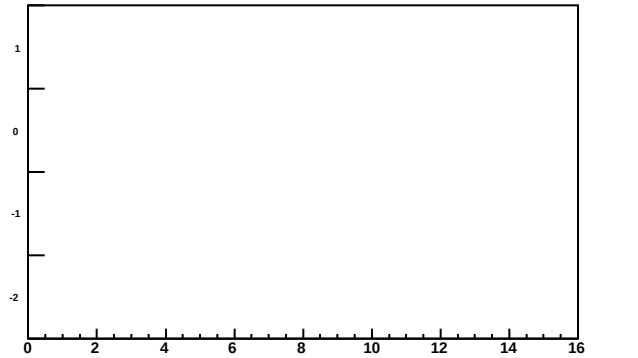


RAT board (ch4)





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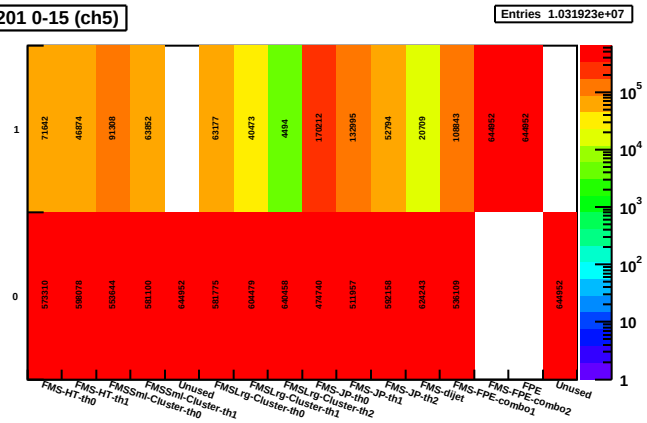

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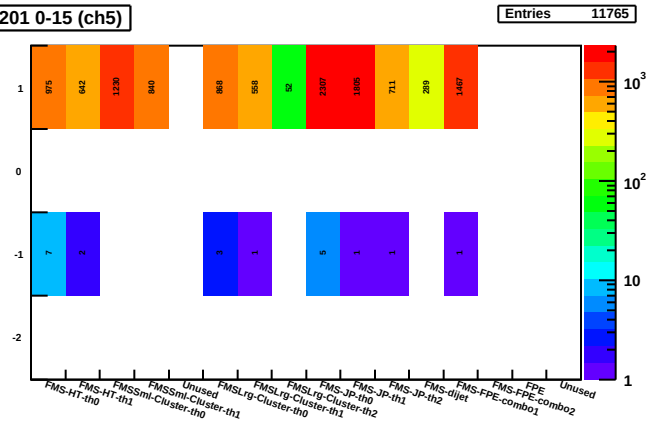

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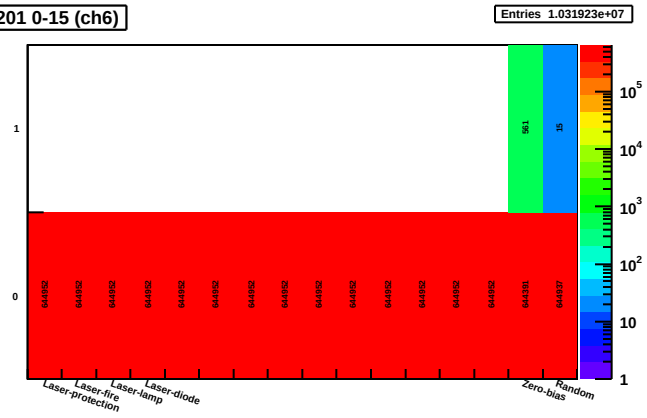

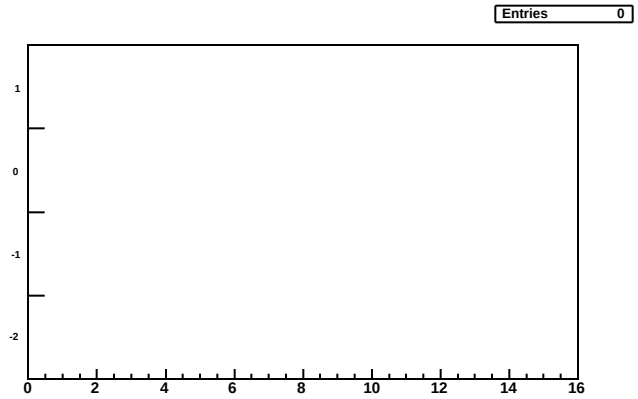
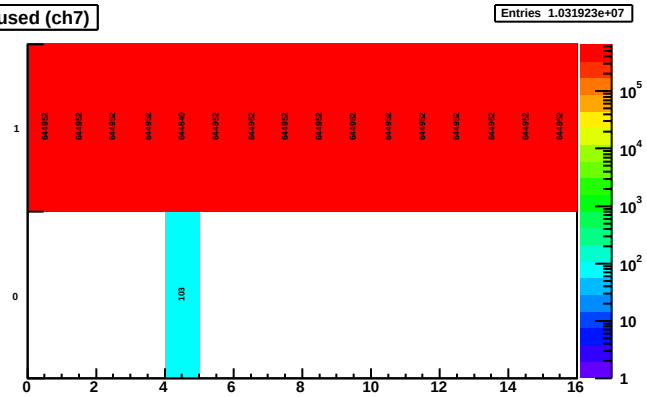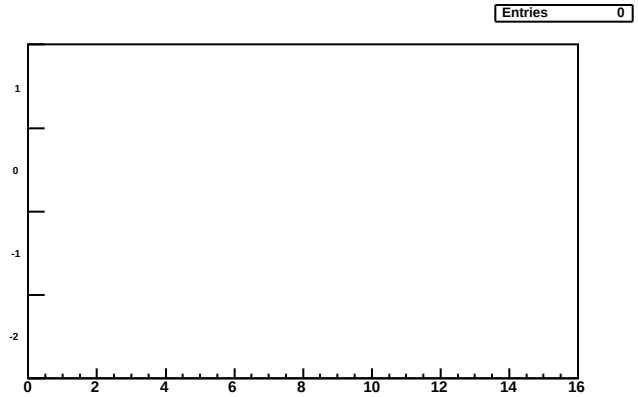
Unused (ch7)