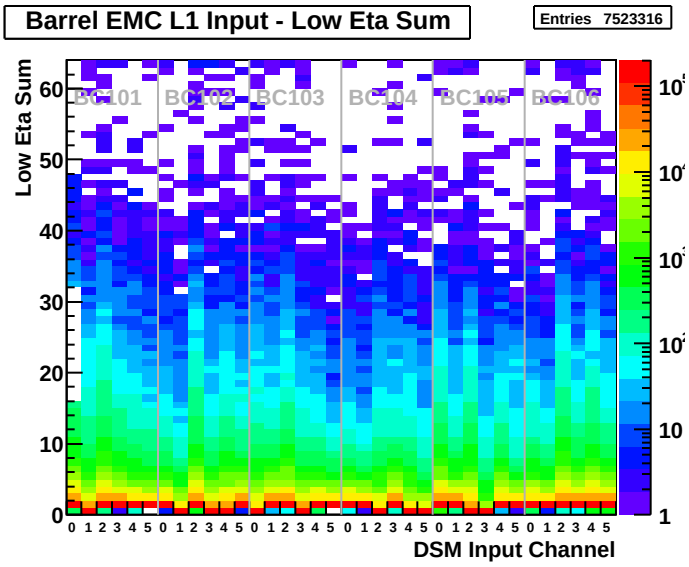
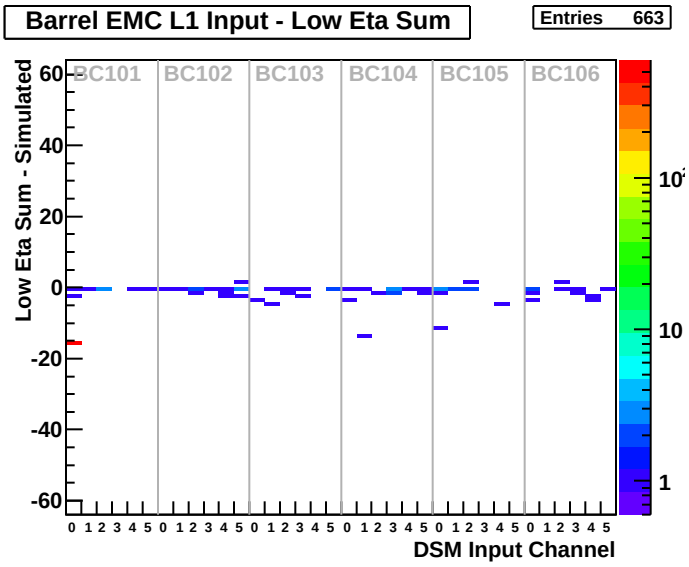
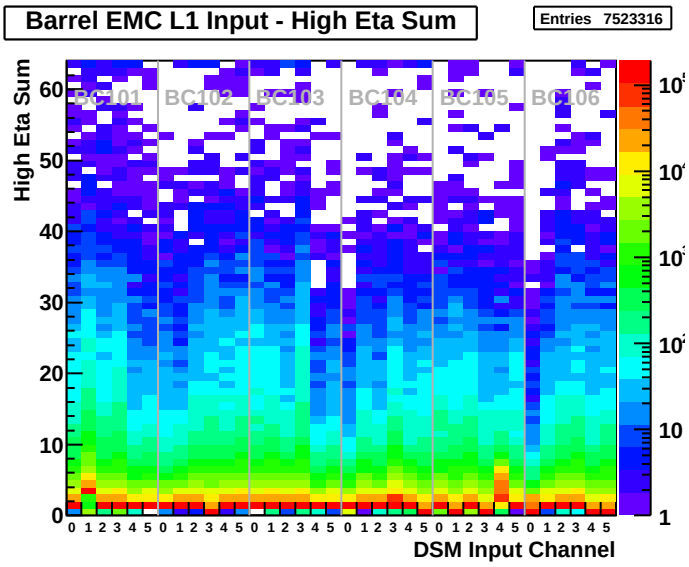
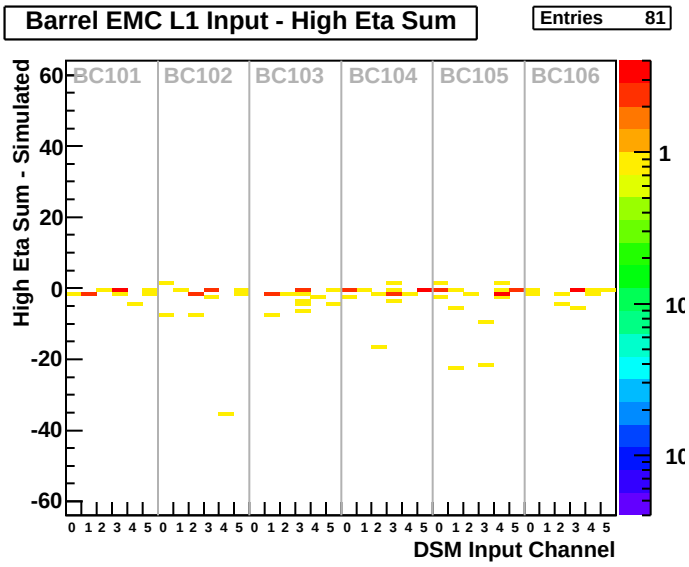
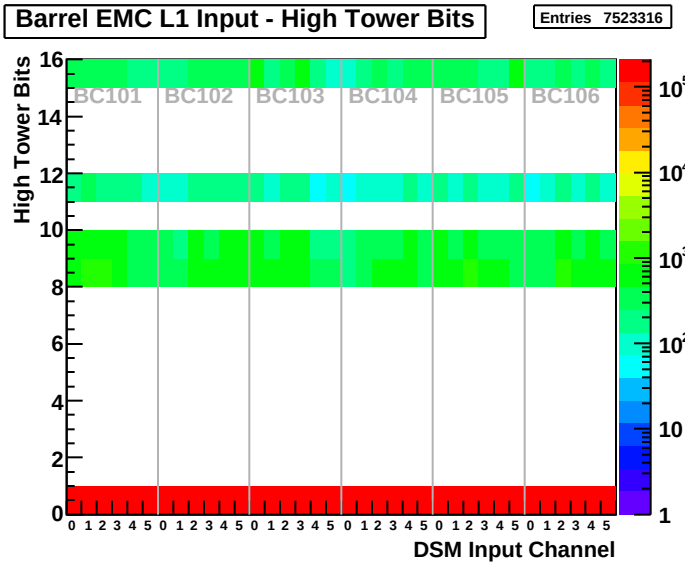
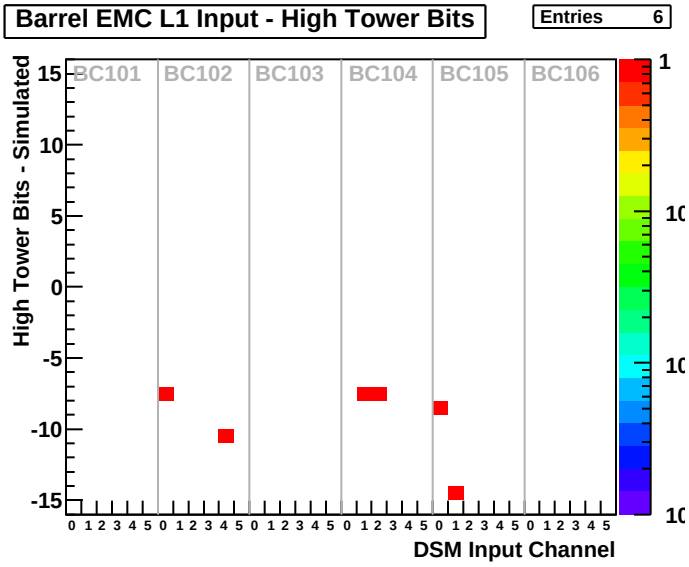

Barrel EMC L1 Input - Low Eta Sum
Entries 7523316
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

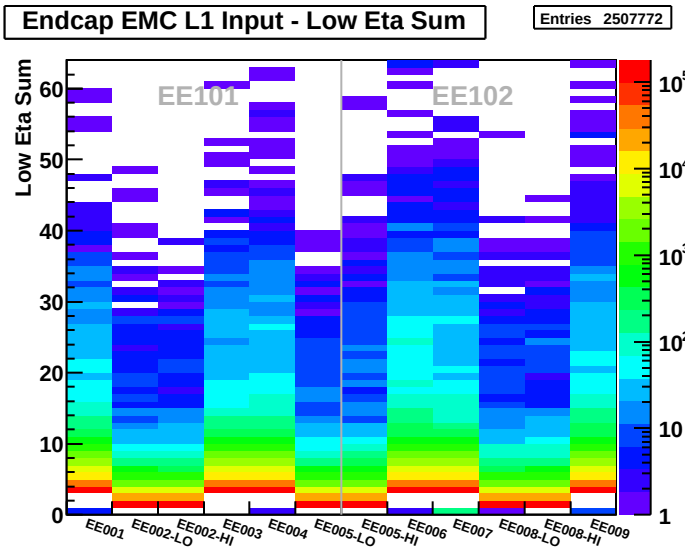

Barrel EMC L1 Input - Low Eta Sum
Entries 663
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

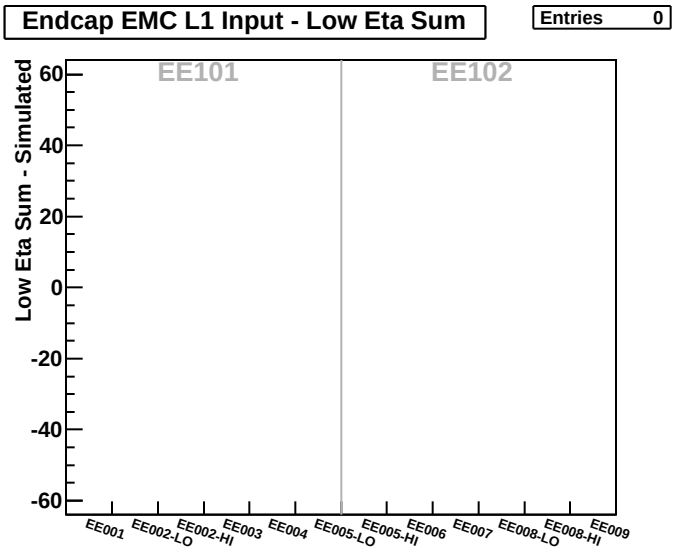

Barrel EMC L1 Input - High Eta Sum
Entries 7523316
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

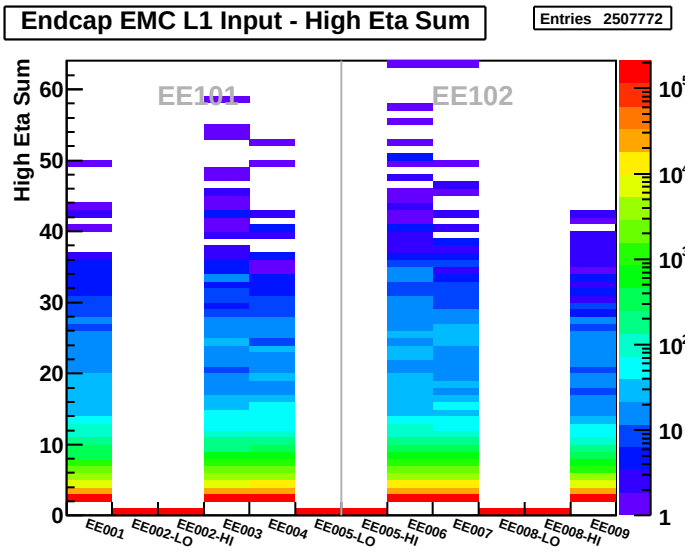

Barrel EMC L1 Input - High Eta Sum
Entries 81
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

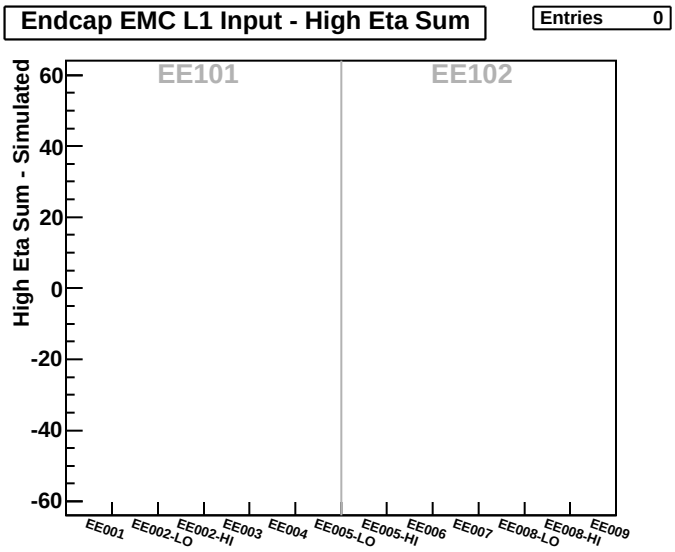

Barrel EMC L1 Input - High Tower Bits
Entries 7523316
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

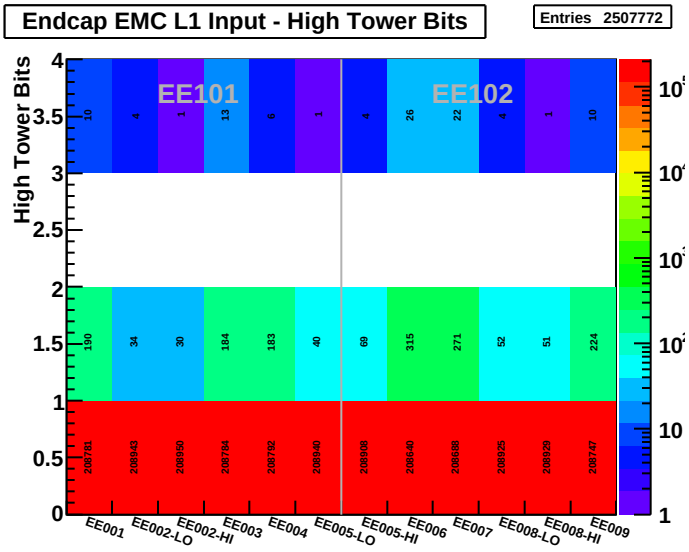

Barrel EMC L1 Input - High Tower Bits
Entries 6
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

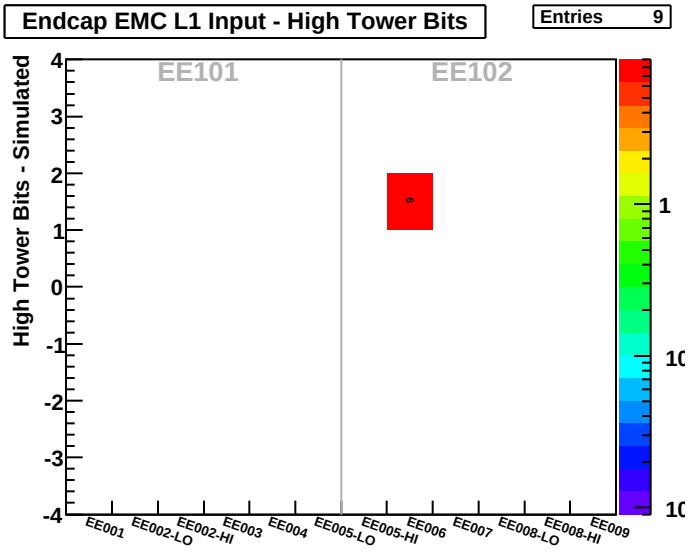

Endcap EMC L1 Input - Low Eta Sum
Entries 2507772
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

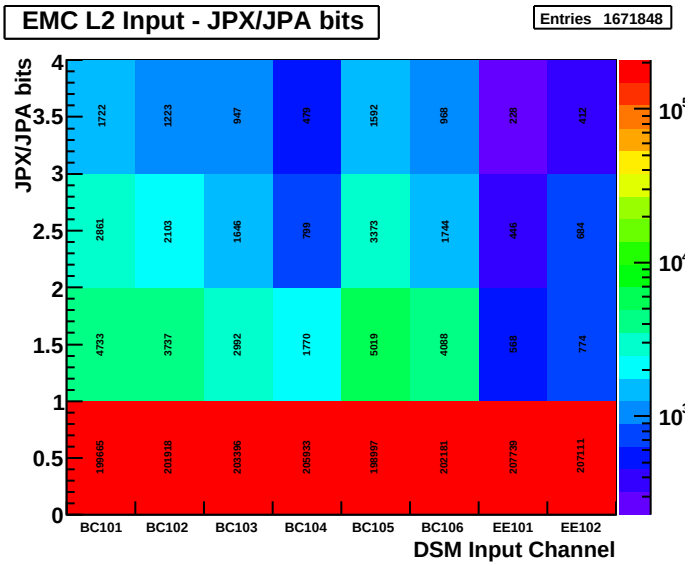

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

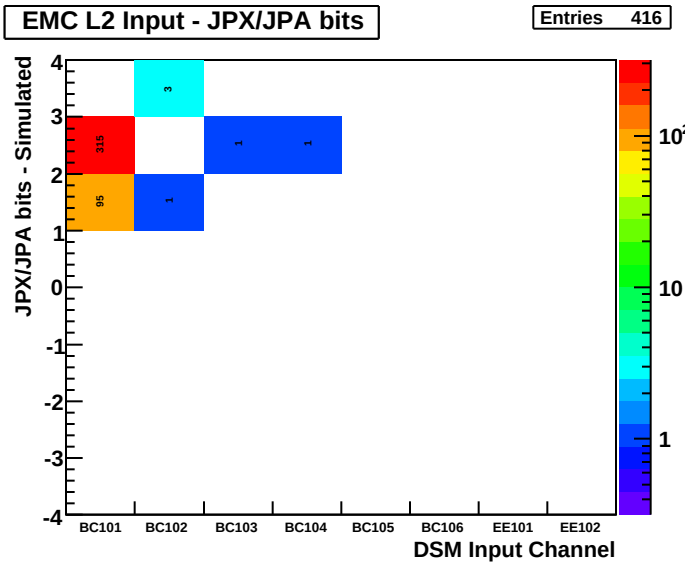

Endcap EMC L1 Input - High Eta Sum
Entries 2507772
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

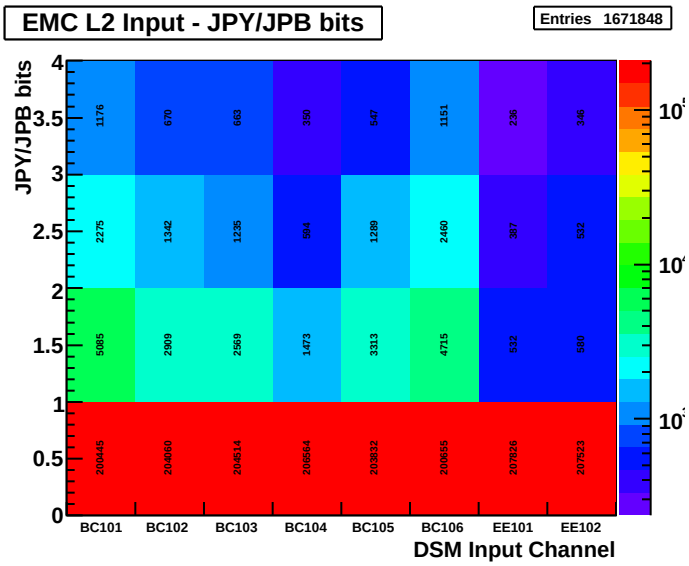

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

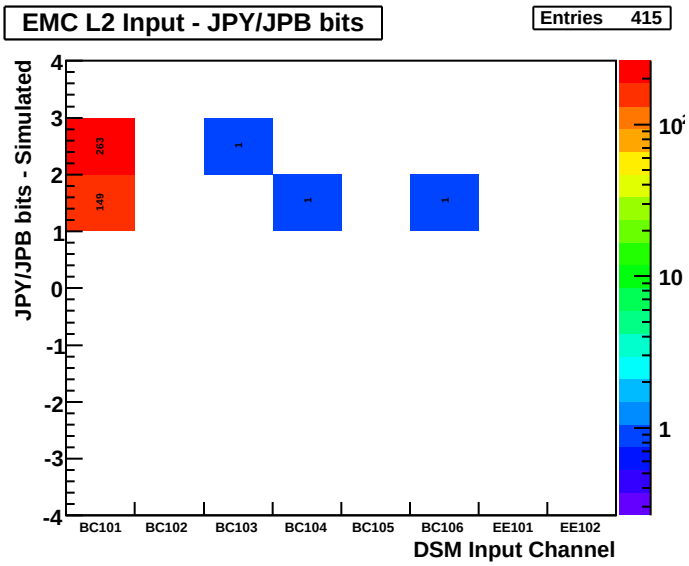

Endcap EMC L1 Input - High Tower Bits
Entries 2507772
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

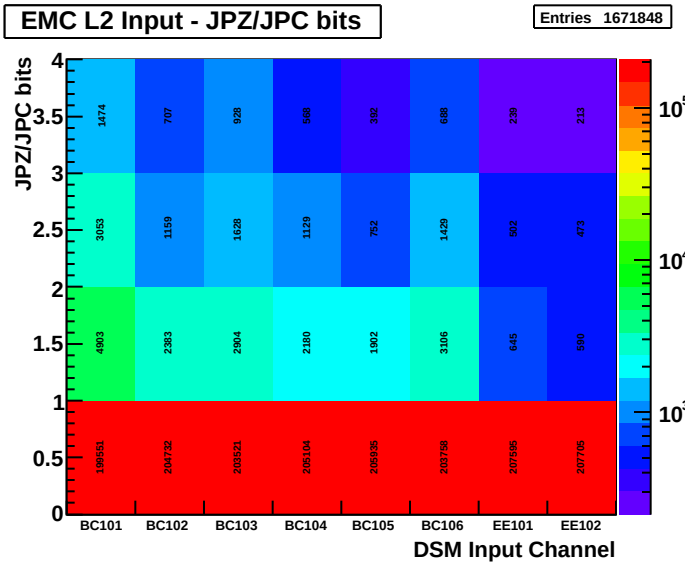

Endcap EMC L1 Input - High Tower Bits
Entries 9
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

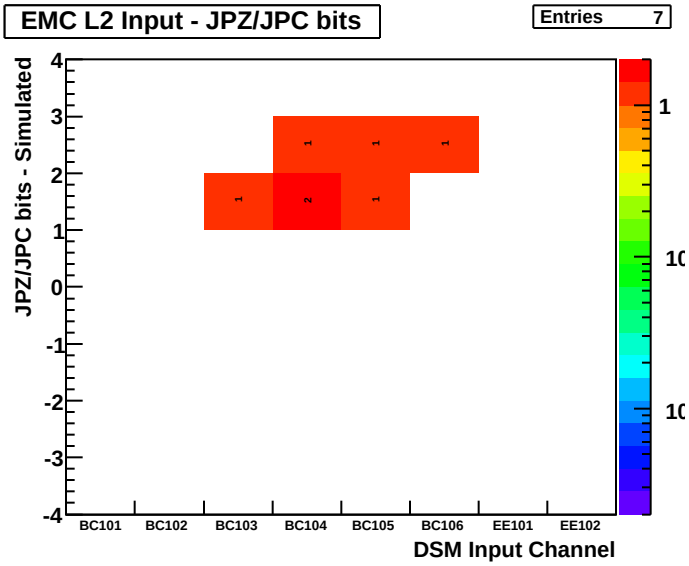

EMC L2 Input - JPX/JPA bits
Entries 1671848
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1722 1223 947 479 1592 968 228 412
2861 2103 1646 799 3373 1744 446 684
4733 3737 2992 1770 5019 4088 568 774
199665 201918 203396 205933 198997 202181 207739 207111

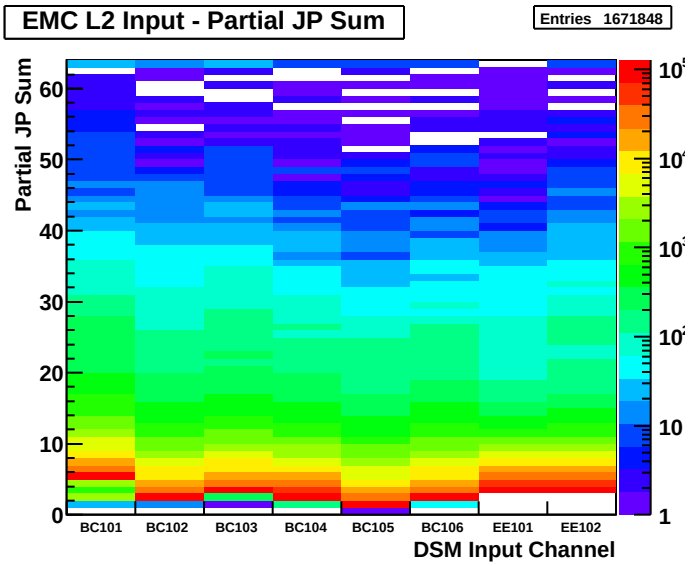

EMC L2 Input - JPX/JPA bits
Entries 416
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3
315 1 1
95 1

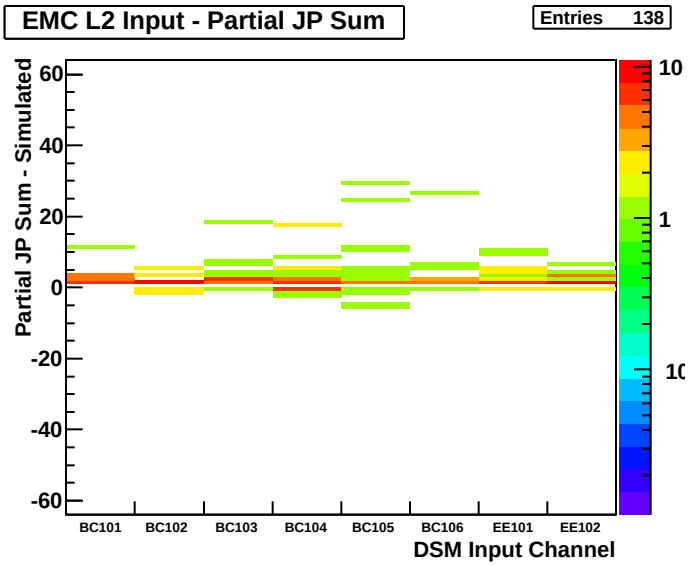

EMC L2 Input - JPY/JPB bits
Entries 1671848
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1176 670 668 350 547 1151 236 346
2275 1342 1235 594 1289 2460 387 532
5085 2909 2569 1473 3313 4715 532 580
200445 204060 204514 206564 203932 206655 207826 207523

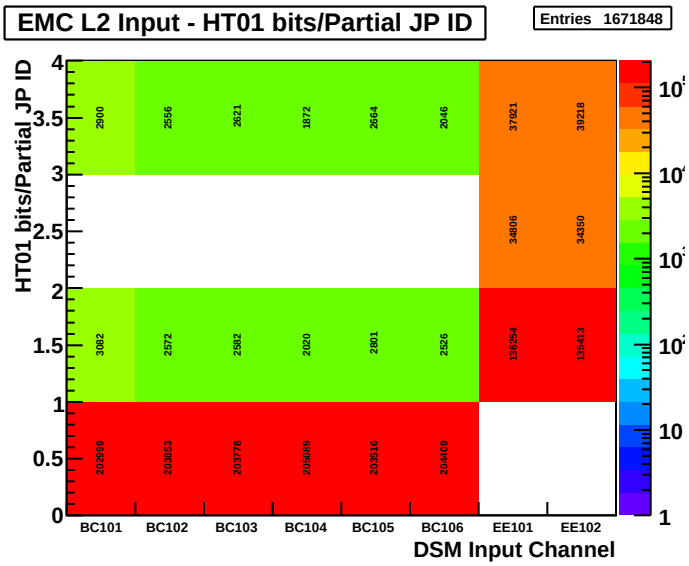

EMC L2 Input - JPY/JPB bits
Entries 415
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
263 1
149 1 1

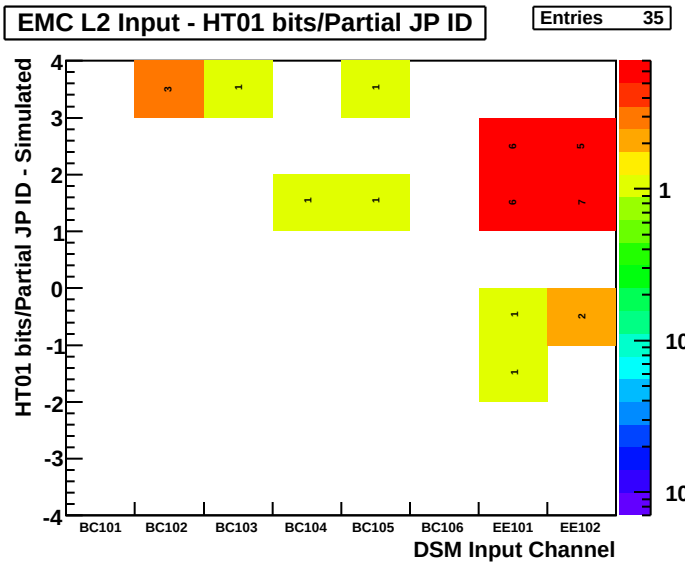

EMC L2 Input - JPZ/JPC bits
Entries 1671848
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1474 707 928 568 392 688 239 213
3053 1159 1628 1129 752 1429 502 473
4903 2383 2904 2180 1902 3106 645 590
199551 204732 203521 205104 205935 203758 207595 207705

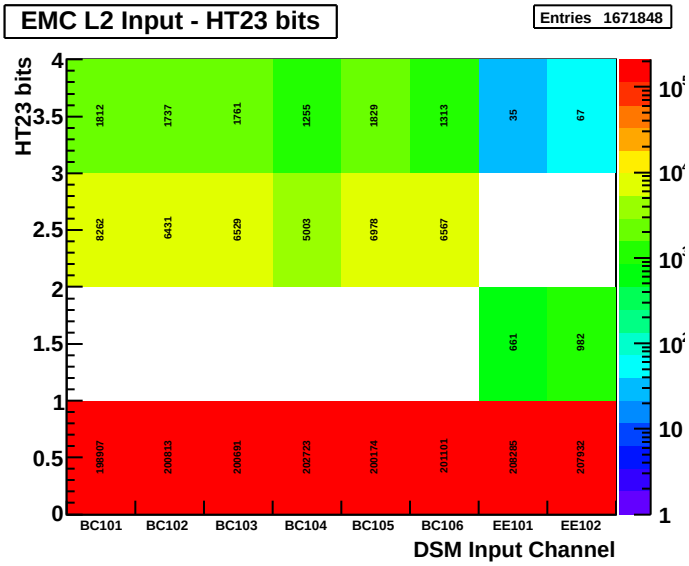

EMC L2 Input - JPZ/JPC bits
Entries 7
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1
1 2 1

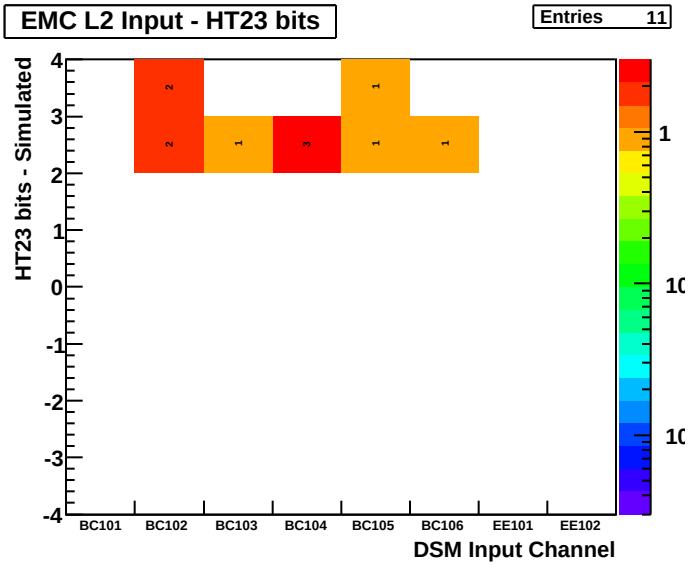

EMC L2 Input - Partial JP Sum
Entries 1671848
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

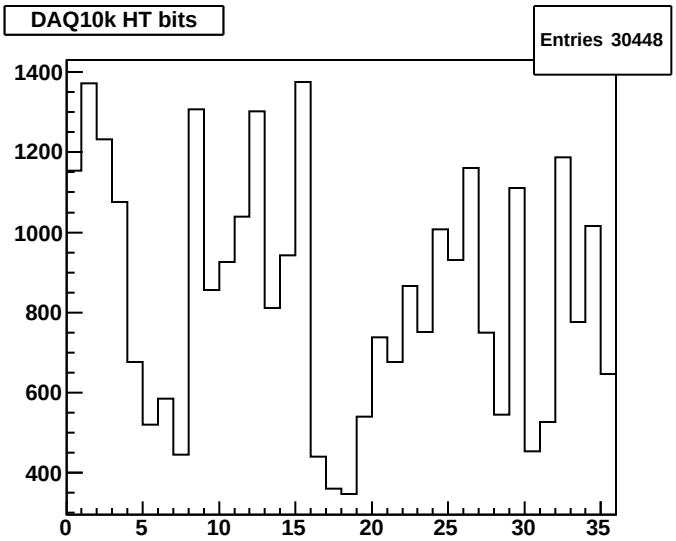

EMC L2 Input - Partial JP Sum
Entries 138
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

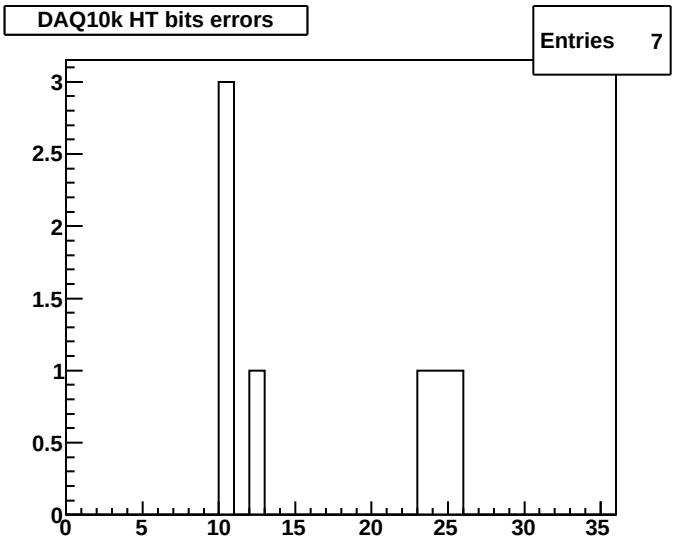

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1671848
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

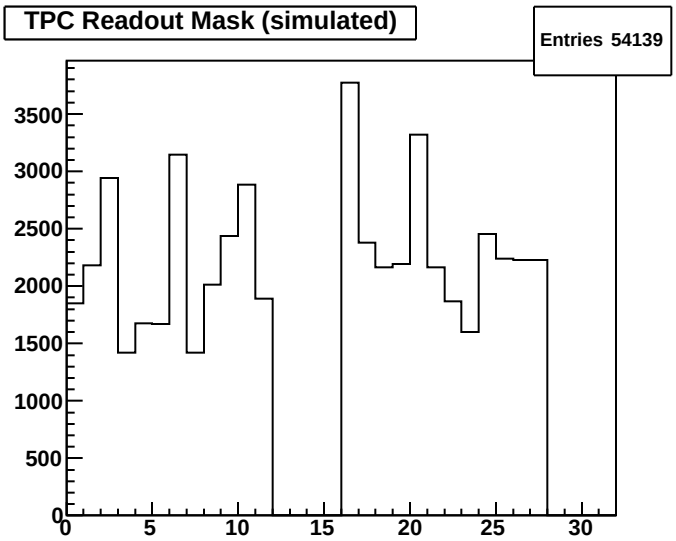

EMC L2 Input - HT01 bits/Partial JP ID
Entries 35
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

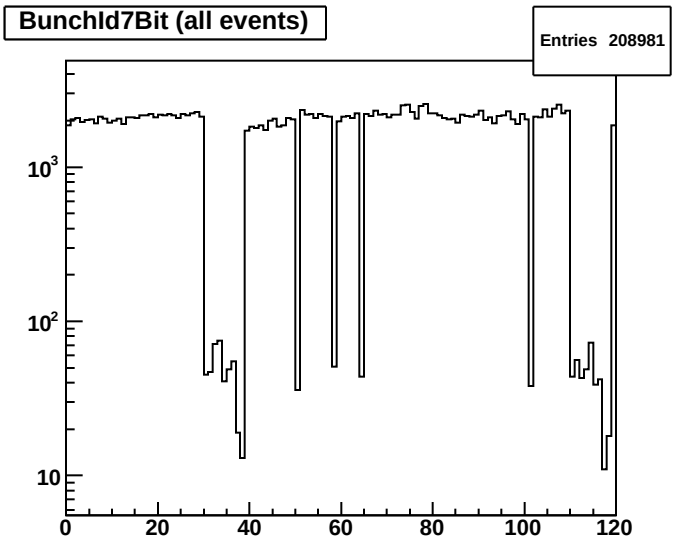

EMC L2 Input - HT23 bits
Entries 1671848
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

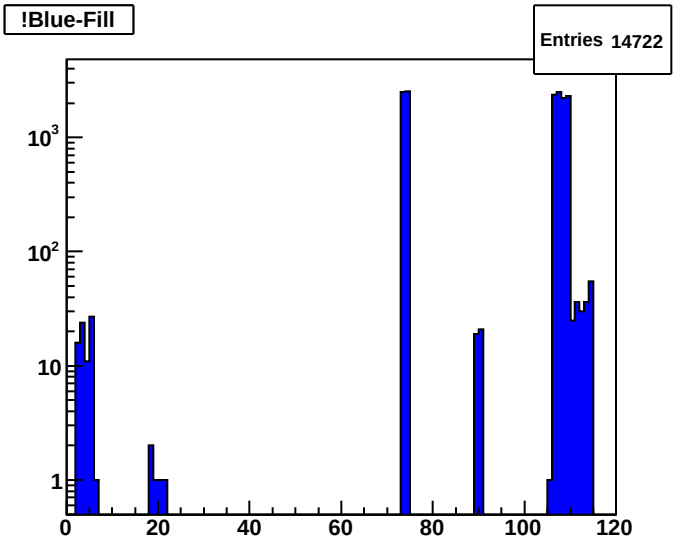

EMC L2 Input - HT23 bits
Entries 11
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

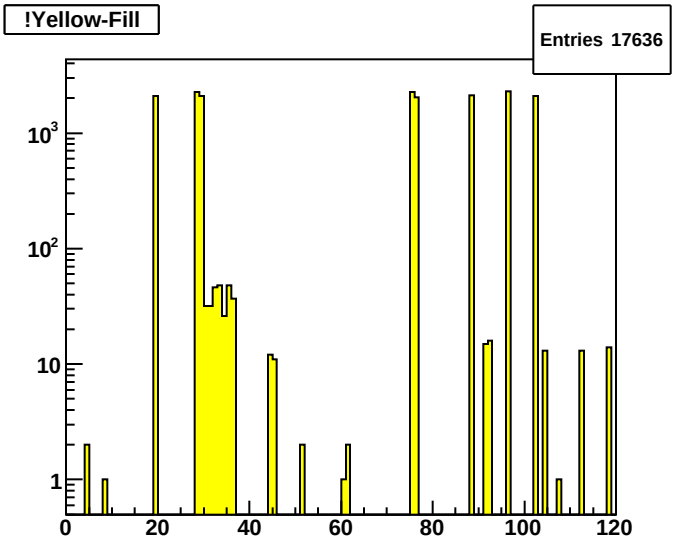

DAQ10k HT bits
Entries 30448

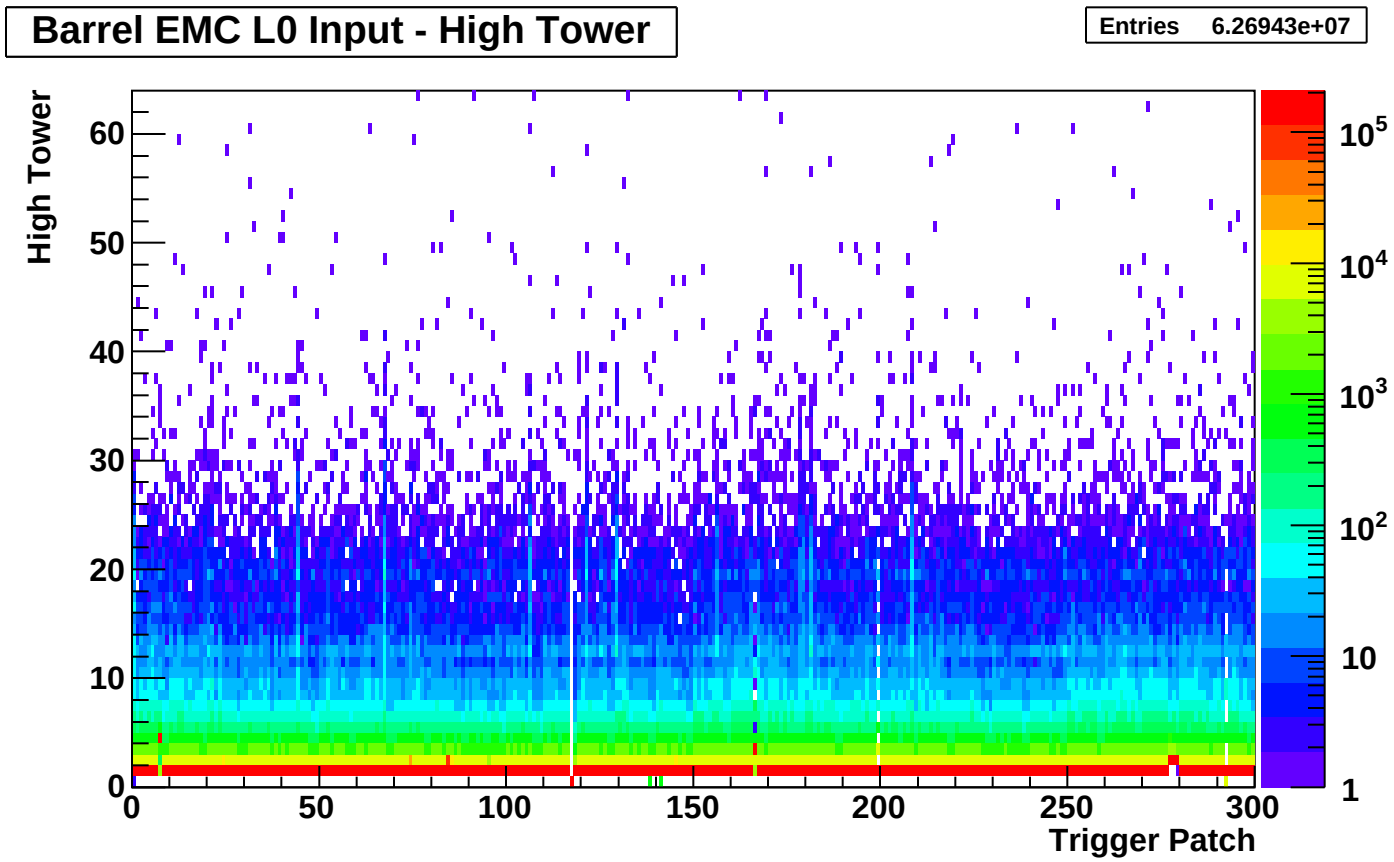

DAQ10k HT bits errors
Entries 7

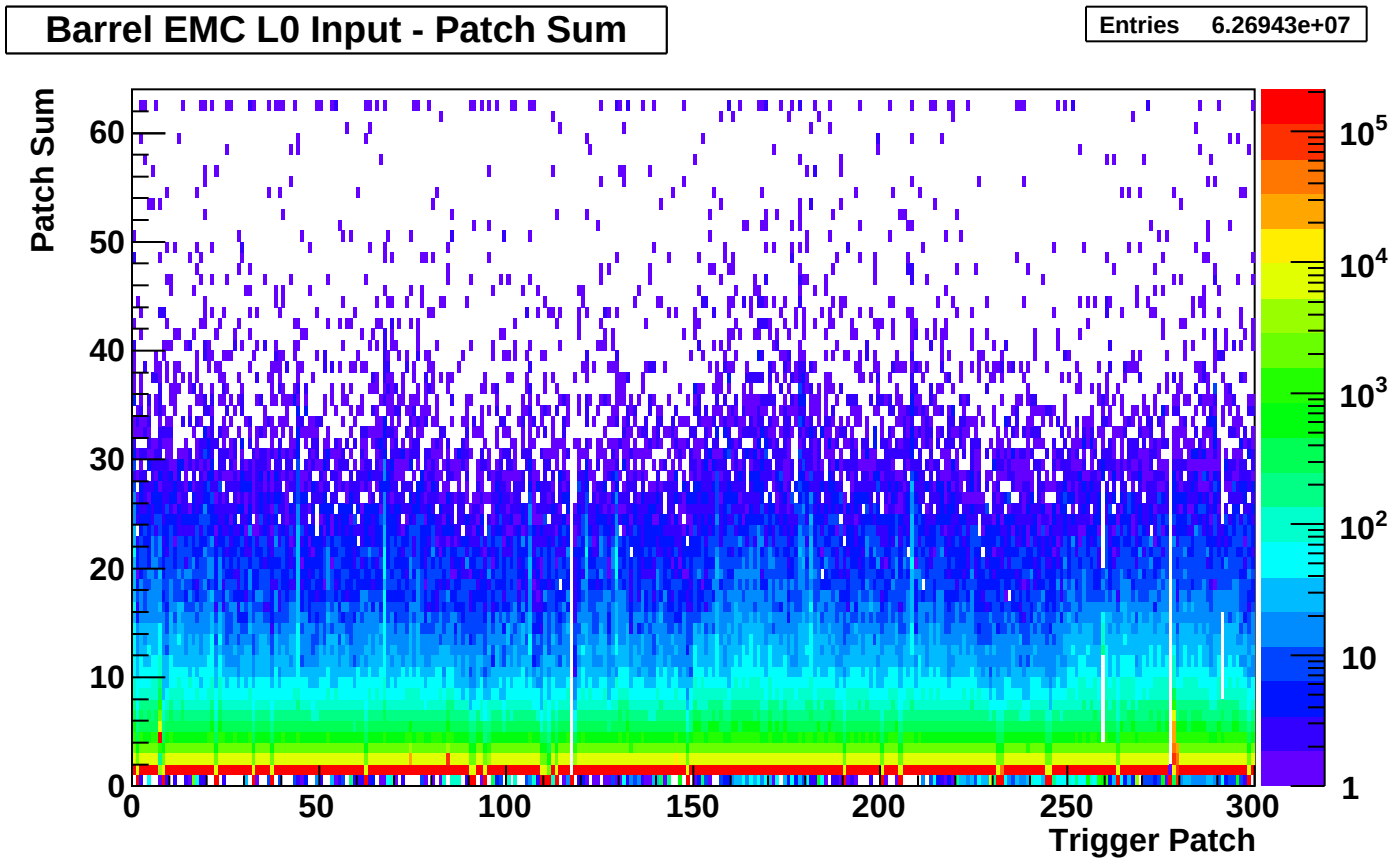

TPC Readout Mask (simulated)
Entries 54139

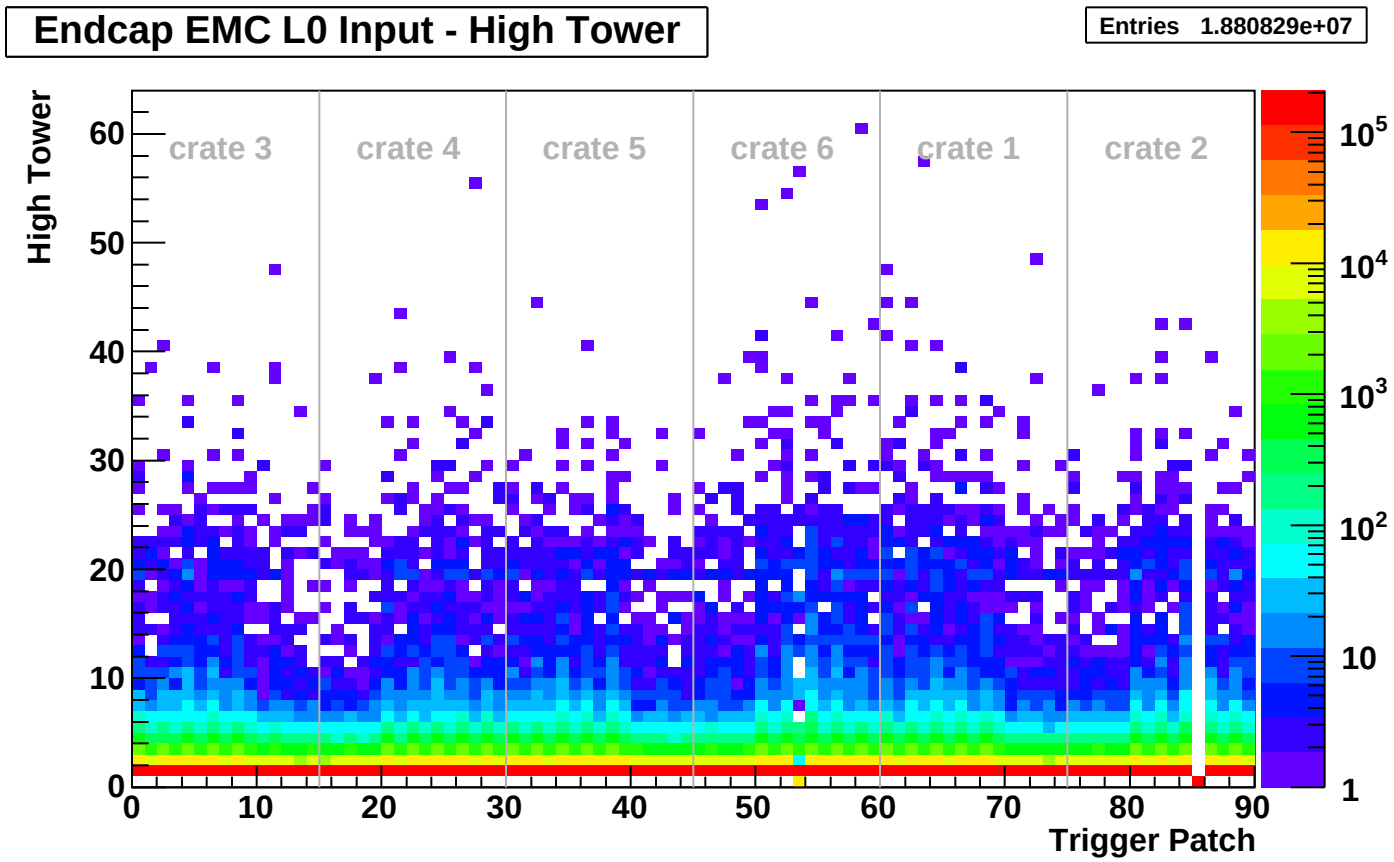

BunchId7Bit (all events)
Entries 208981

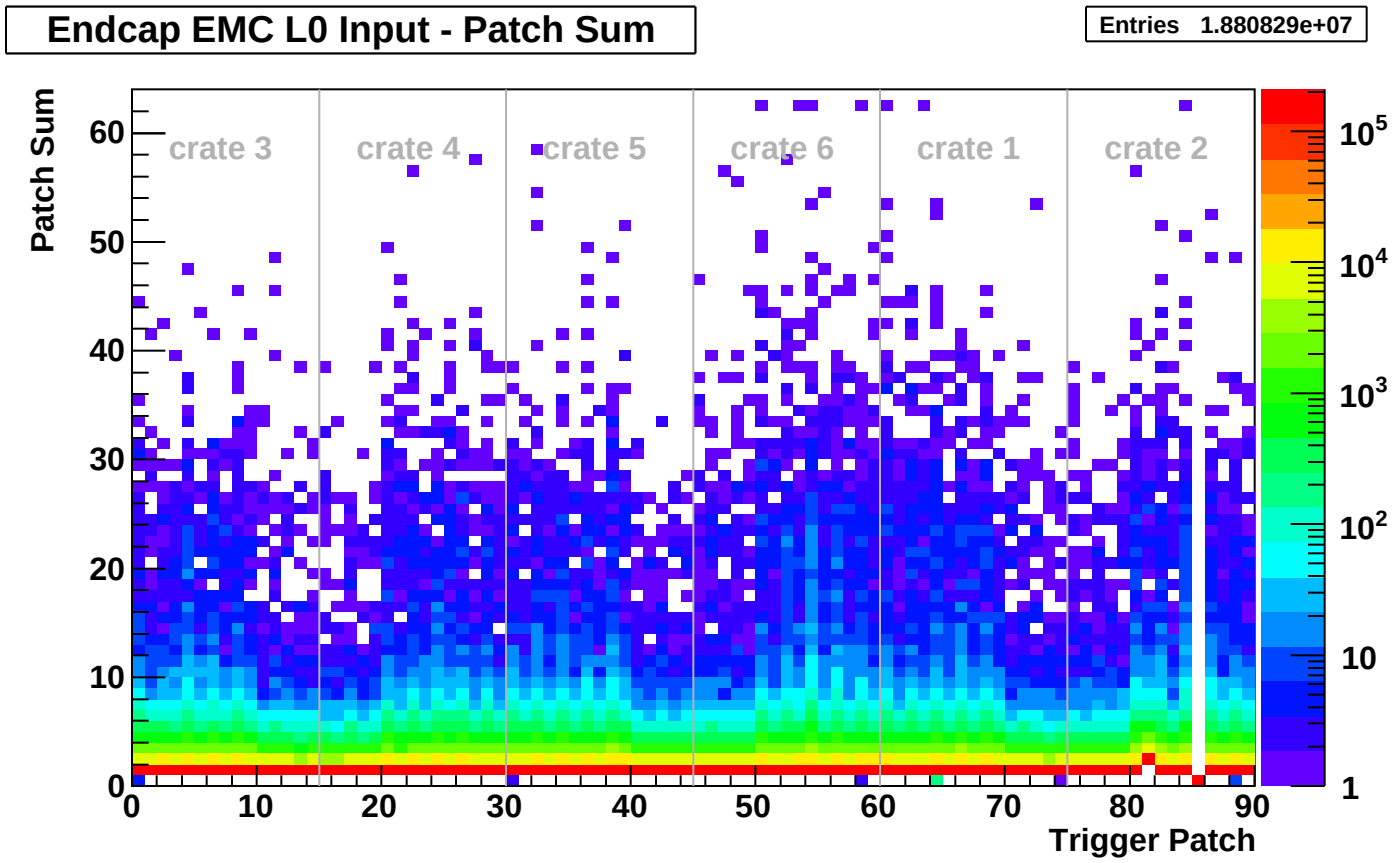

!Blue-Fill
Entries 14722

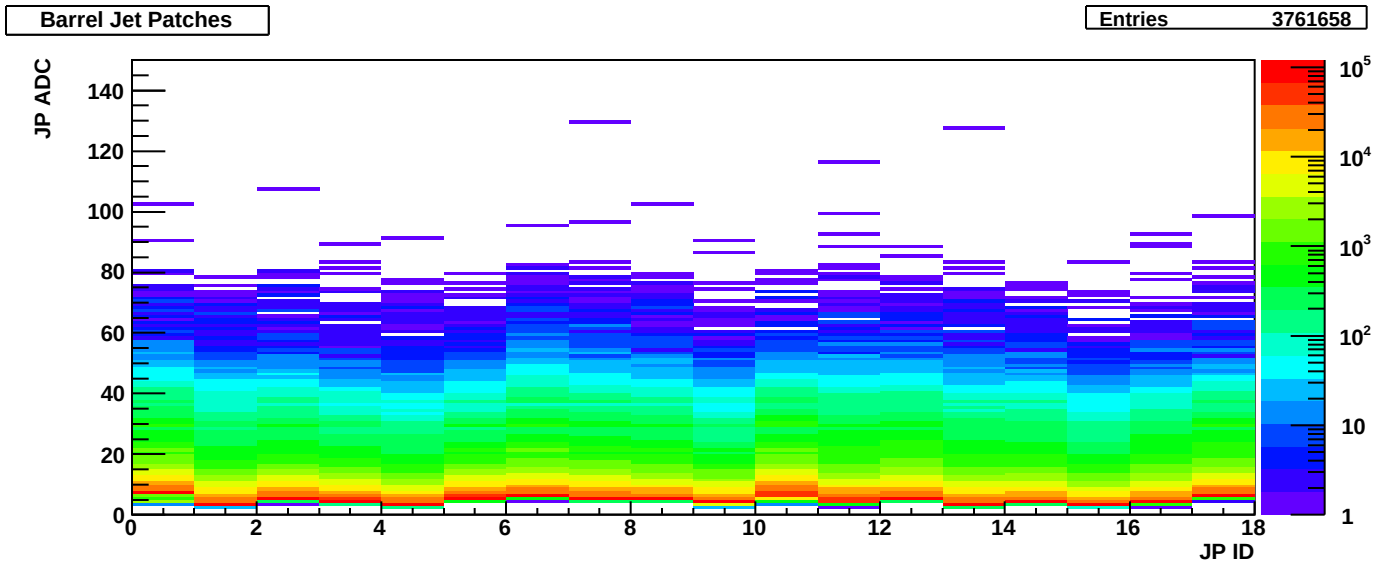

!Yellow-Fill
Entries 17636

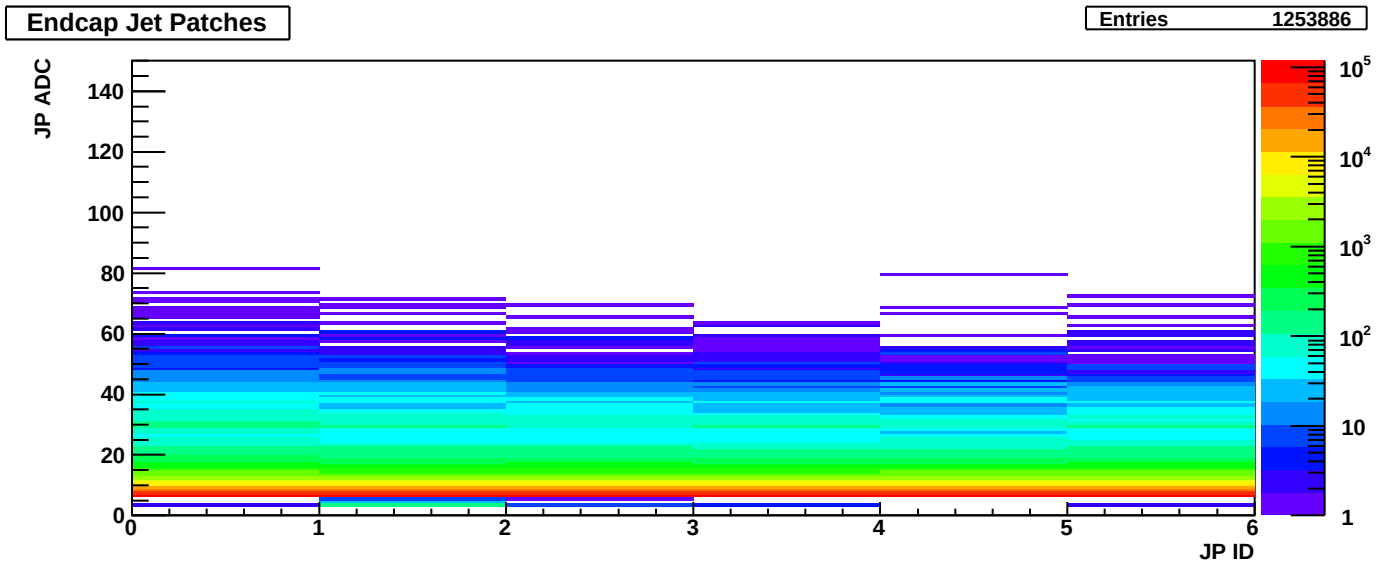

Barrel EMC L0 Input - High Tower
Entries 6.26943e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

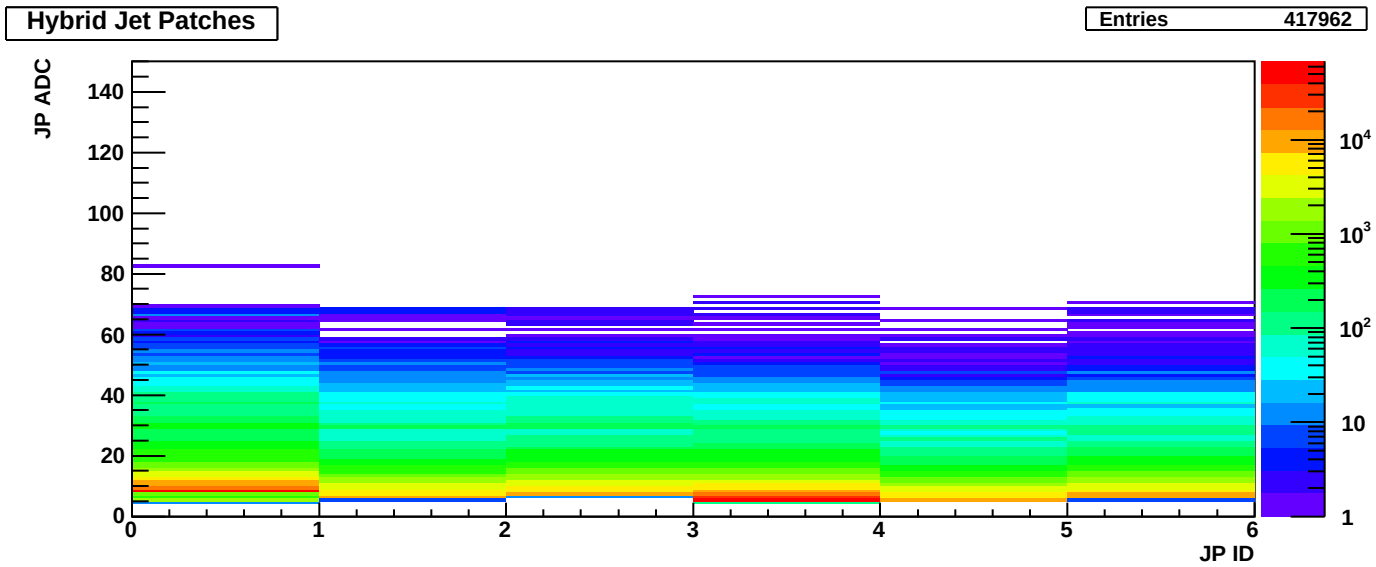

Barrel EMC L0 Input - Patch Sum
Entries 6.26943e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

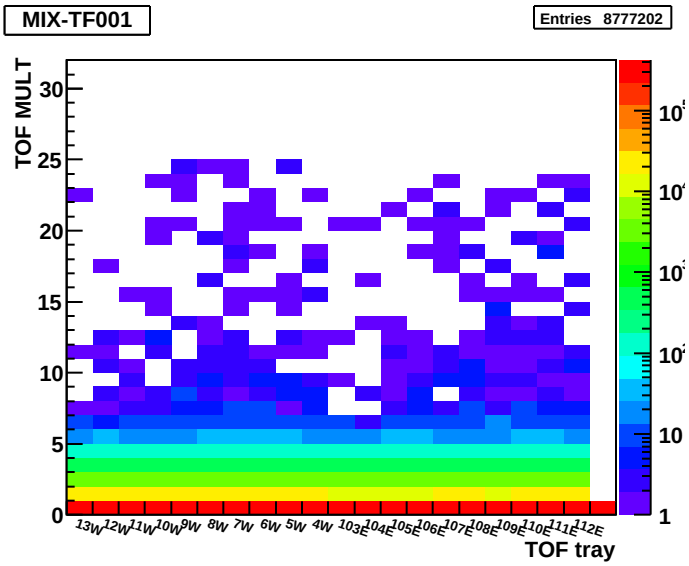

Endcap EMC L0 Input - High Tower
Entries 1.880829e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

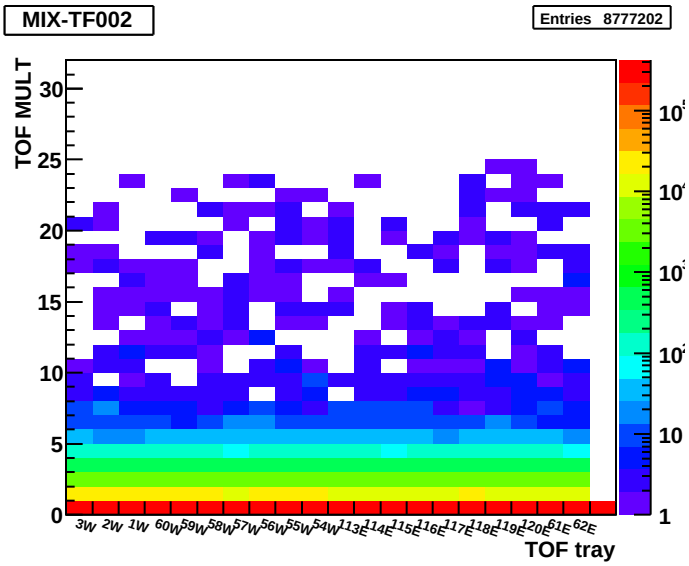

Endcap EMC L0 Input - Patch Sum
Entries 1.880829e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

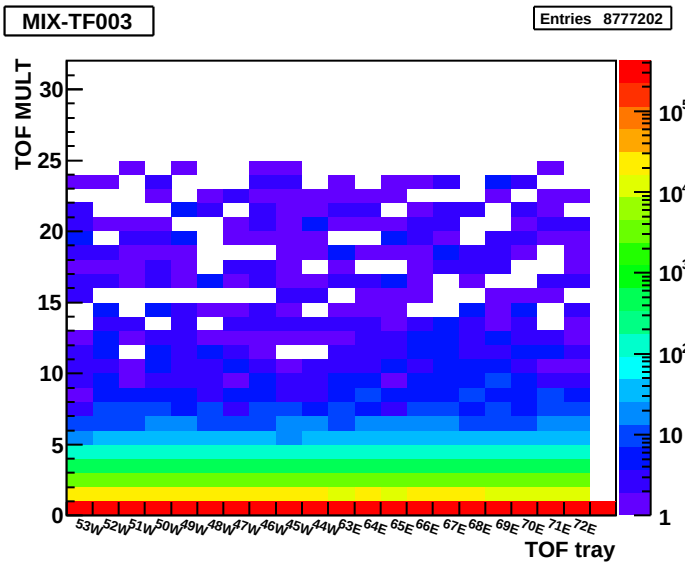

Barrel Jet Patches
Entries 3761658
JP ADC
JP ID

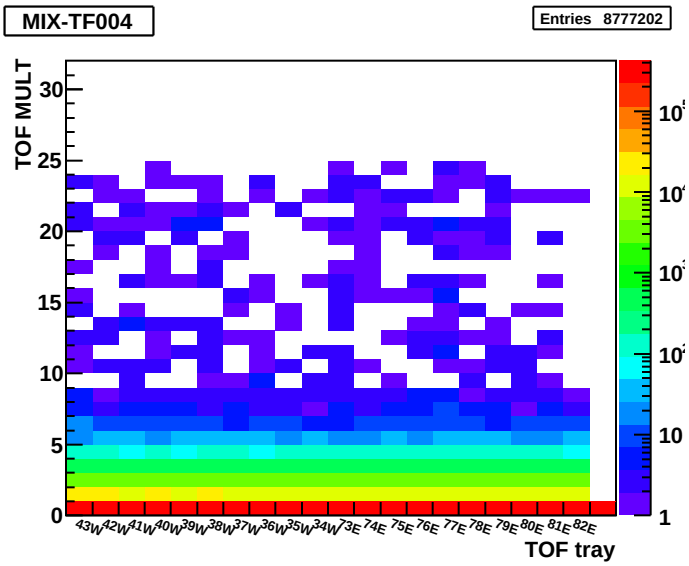

Endcap Jet Patches
Entries 1253886
JP ADC
JP ID

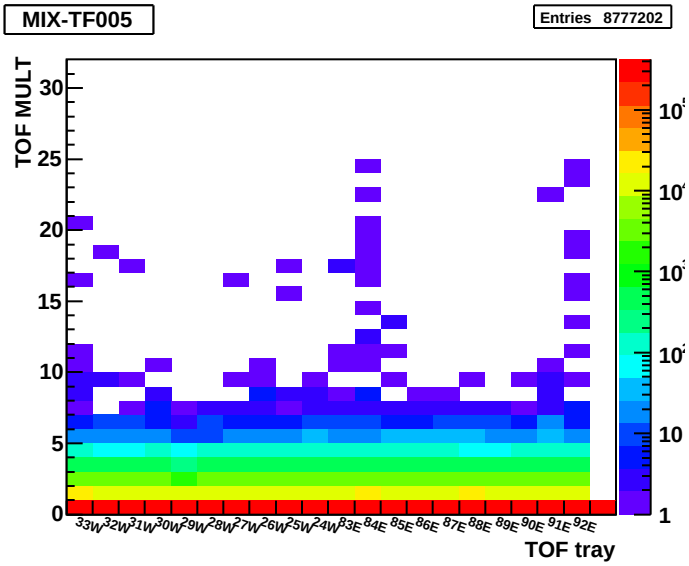

Hybrid Jet Patches
Entries 417962
JP ADC
JP ID

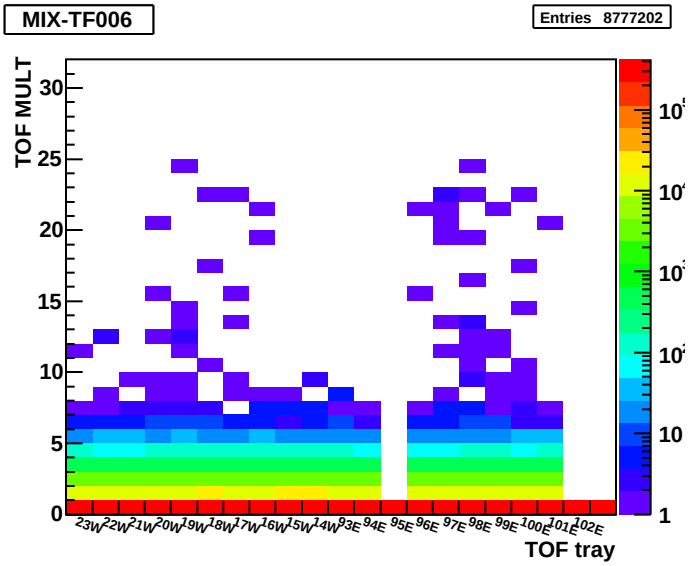

MIX-TF001
Entries 8777202
TOF MULT
TOF tray

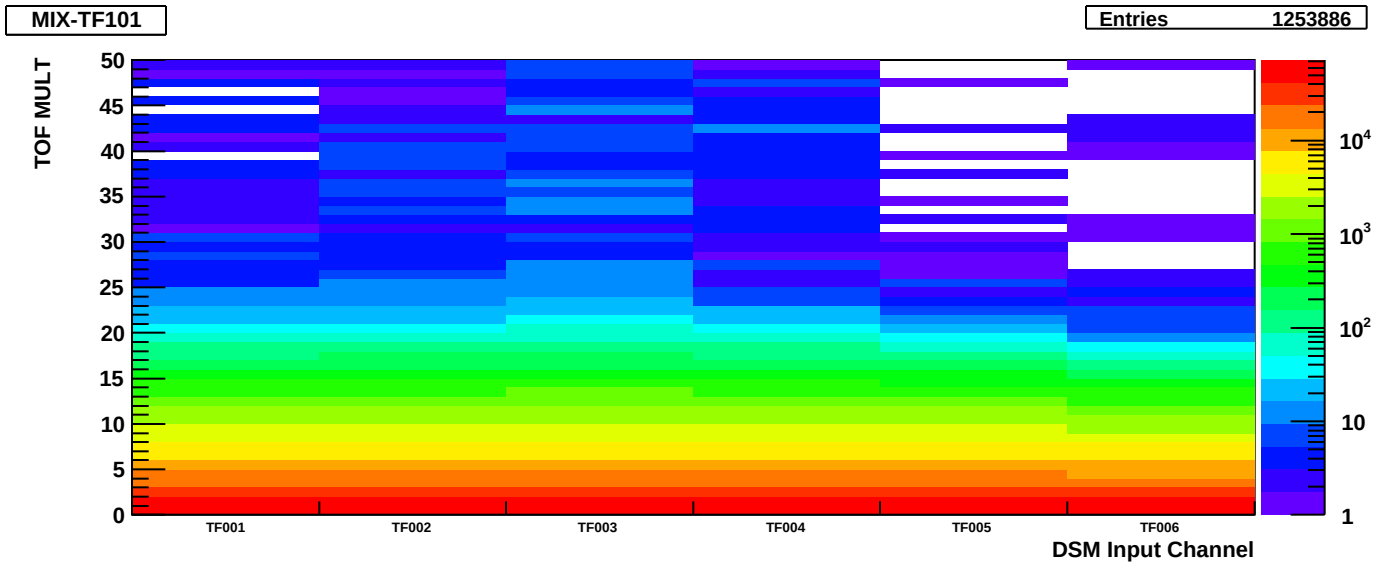

MIX-TF002
Entries 8777202
TOF MULT
TOF tray

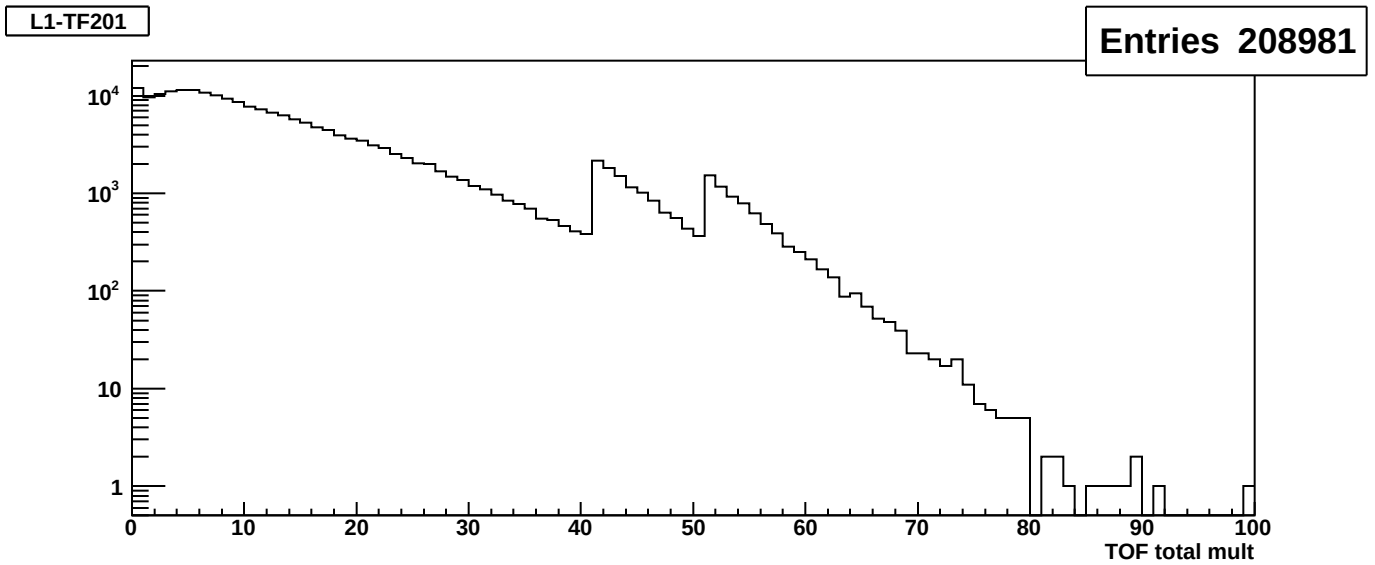

MIX-TF003
Entries 8777202
TOF MULT
TOF tray

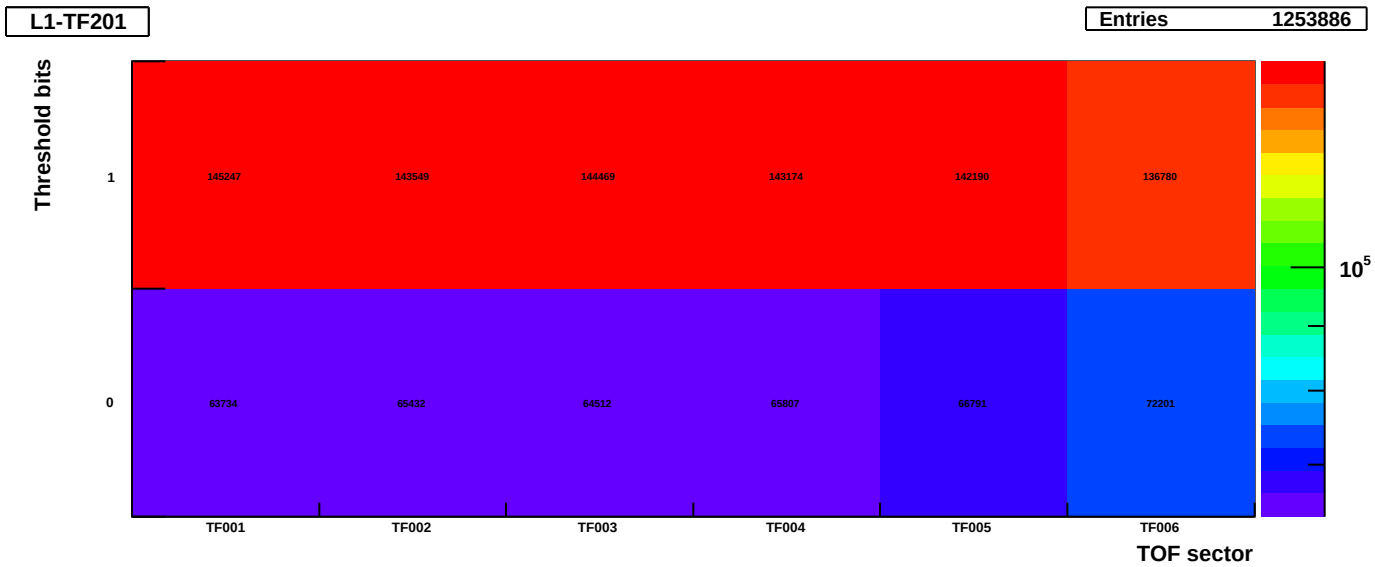

MIX-TF004
Entries 8777202
TOF MULT
TOF tray

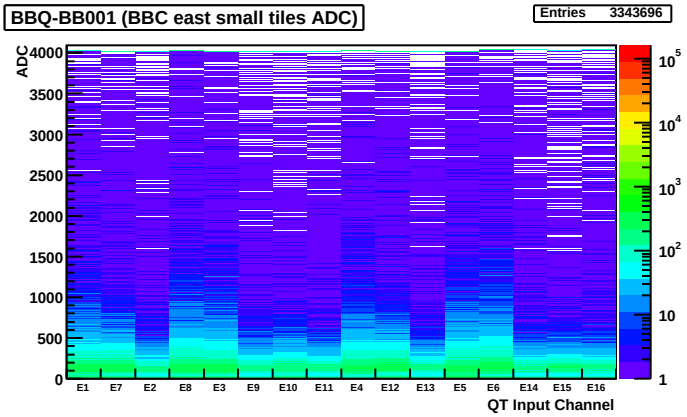

MIX-TF005
Entries 8777202
TOF MULT
TOF tray

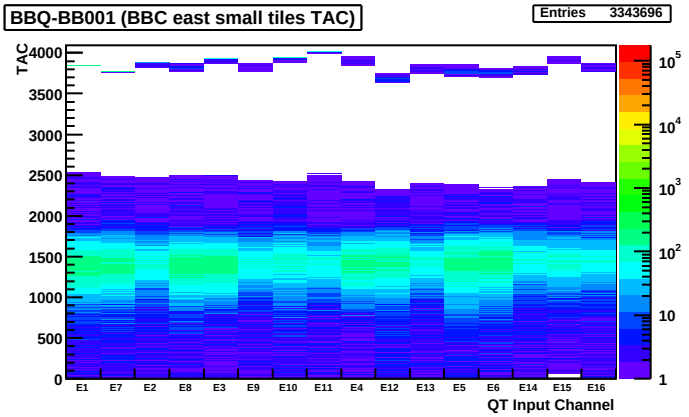

MIX-TF006
Entries 8777202
TOF MULT
TOF tray

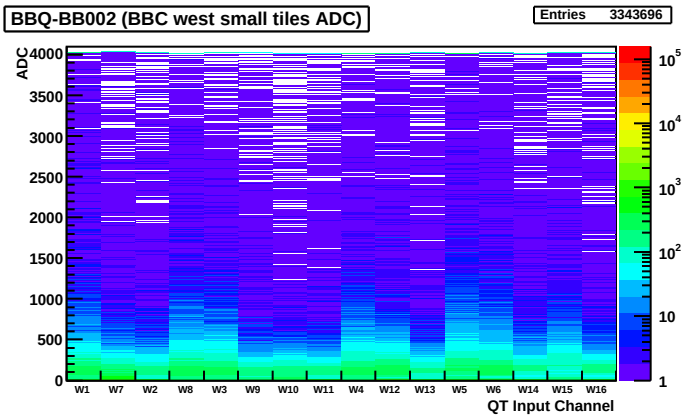

MIX-TF101
Entries 1253886
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

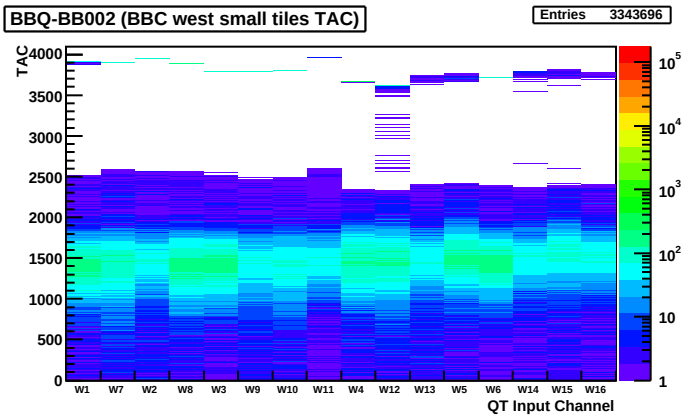

L1-TF201
Entries 208981
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

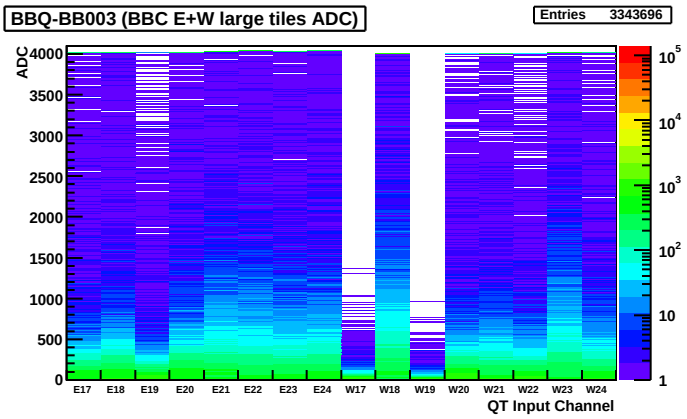

L1-TF201
Entries 1253886
Threshold bits
1
0
145247
143549
144469
143174
142190
136780
63734
65432
64512
65807
66791
72201
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

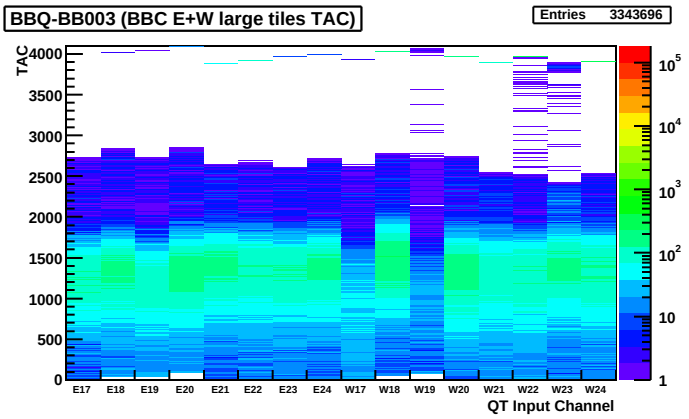

BBQ-BB001 (BBC east small tiles ADC)
Entries 3343696
ADC
QT Input Channel

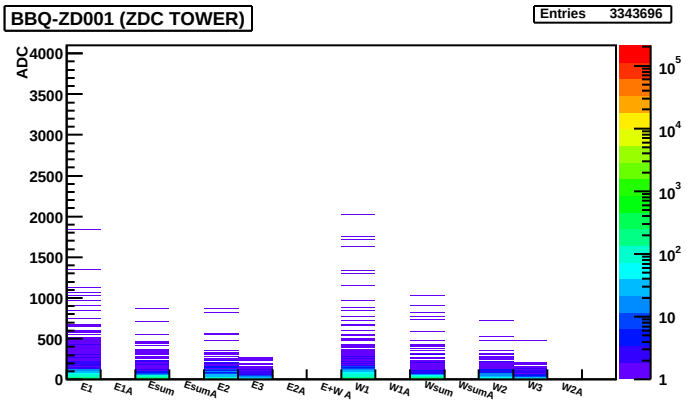

BBQ-BB001 (BBC east small tiles TAC)
Entries 3343696
TAC
QT Input Channel

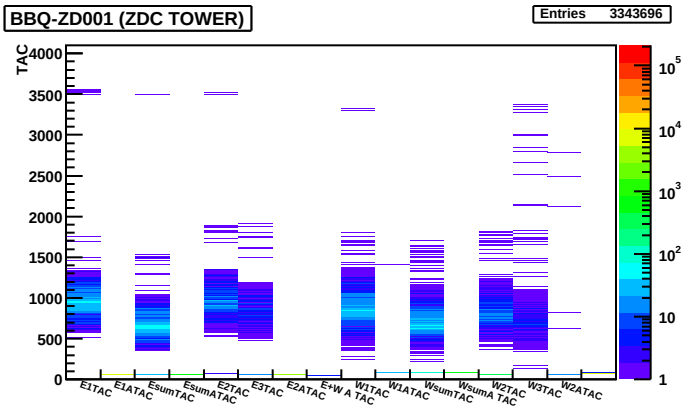

BBQ-BB002 (BBC west small tiles ADC)
Entries 3343696
ADC
QT Input Channel

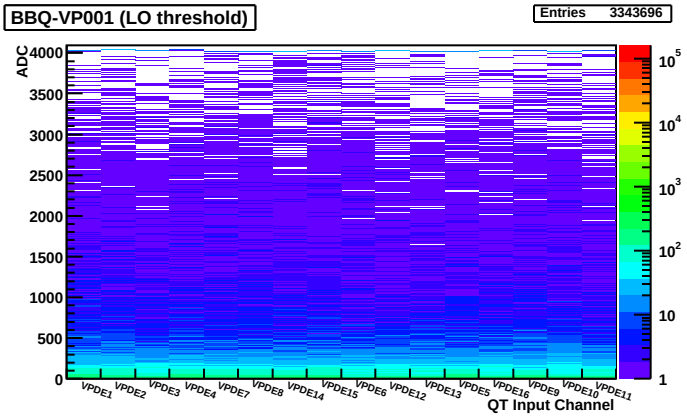

BBQ-BB002 (BBC west small tiles TAC)
Entries 3343696
TAC
QT Input Channel

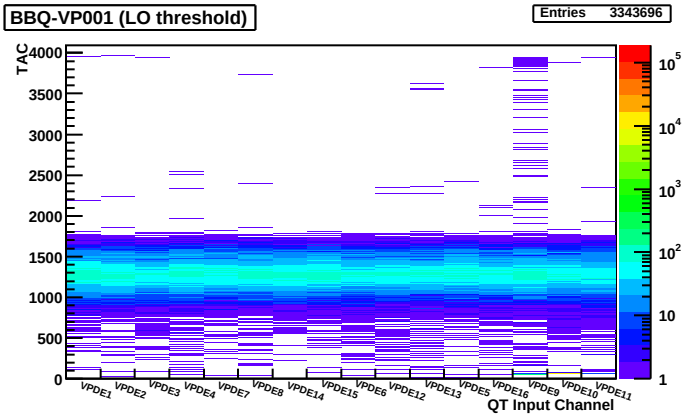

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3343696
ADC
QT Input Channel

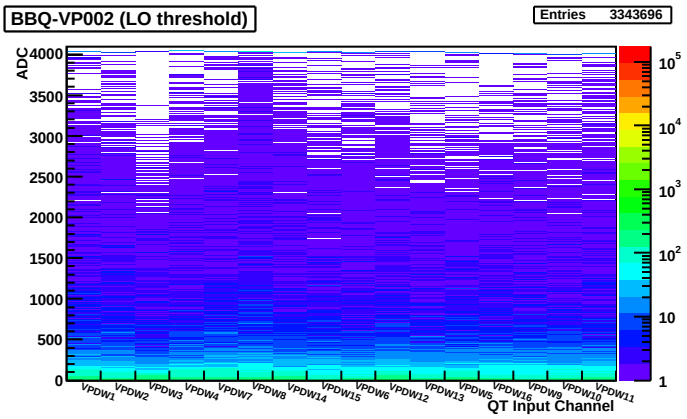

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3343696
TAC
QT Input Channel

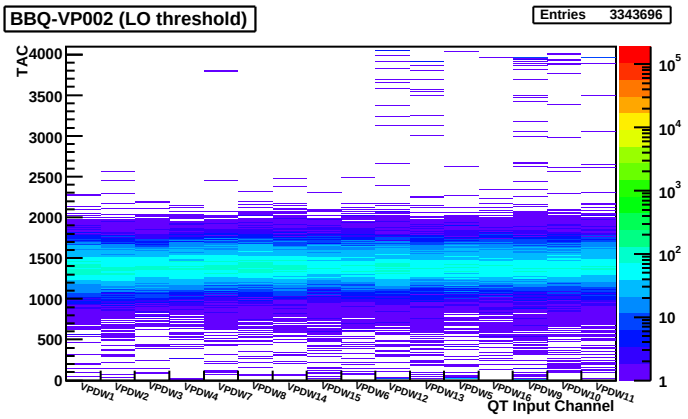

BBQ-ZD001 (ZDC TOWER)
Entries 3343696
ADC

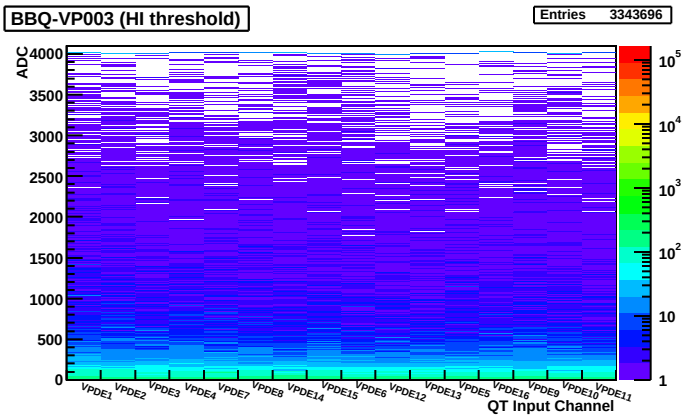

BBQ-ZD001 (ZDC TOWER)
Entries 3343696
TAC

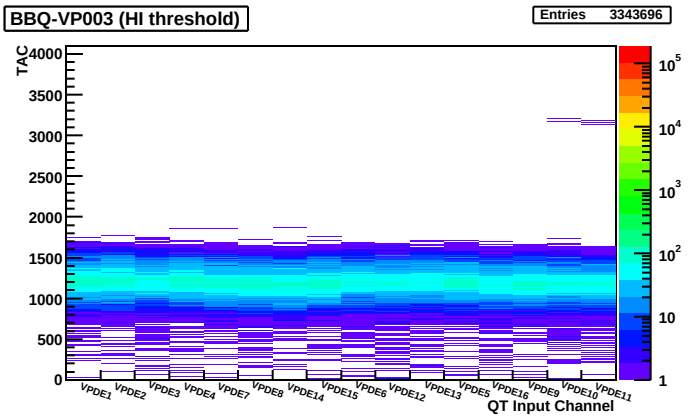

BBQ-VP001 (LO threshold)
Entries 3343696
ADC
QT Input Channel

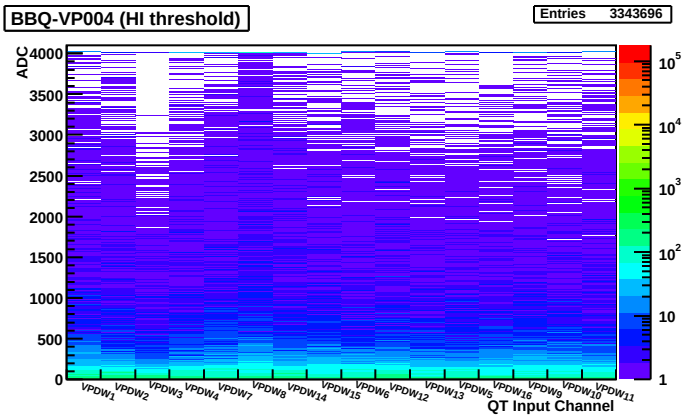

BBQ-VP001 (LO threshold)
Entries 3343696
TAC
QT Input Channel

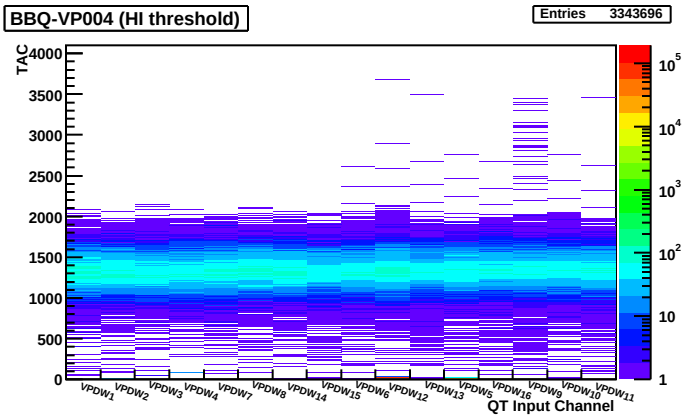

BBQ-VP002 (LO threshold)
Entries 3343696
ADC
QT Input Channel

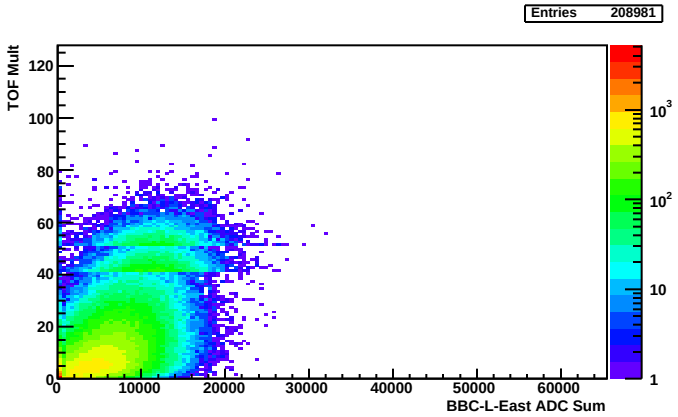

BBQ-VP002 (LO threshold)
Entries 3343696
TAC
QT Input Channel

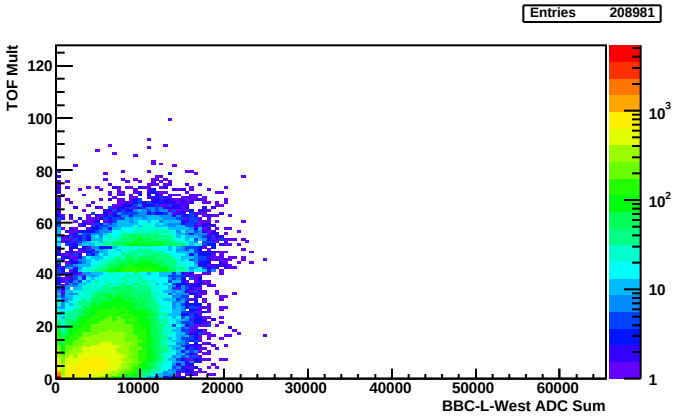

BBQ-VP003 (HI threshold)
Entries 3343696
ADC
QT Input Channel

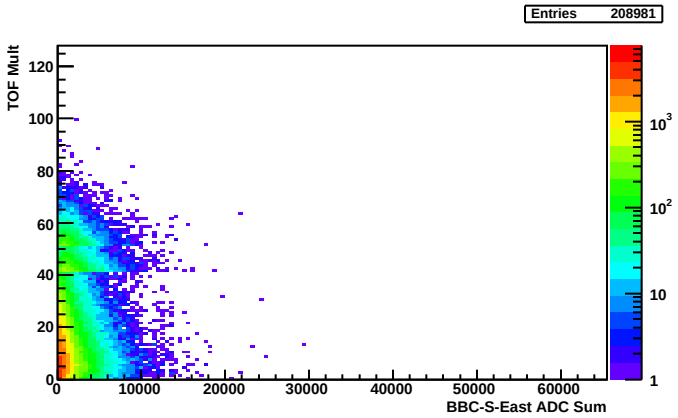

BBQ-VP003 (HI threshold)
Entries 3343696
TAC
QT Input Channel

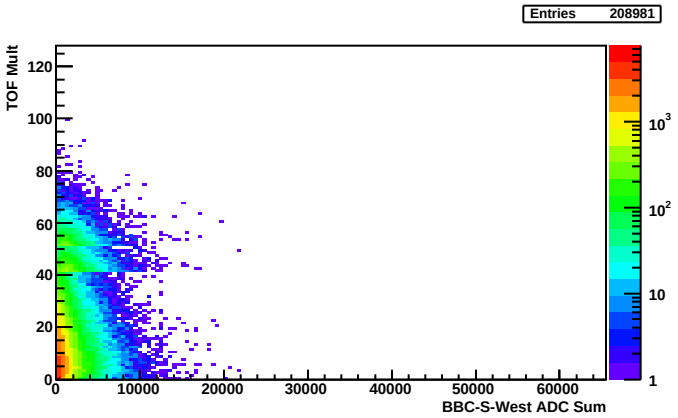

BBQ-VP004 (HI threshold)
Entries 3343696
ADC
QT Input Channel

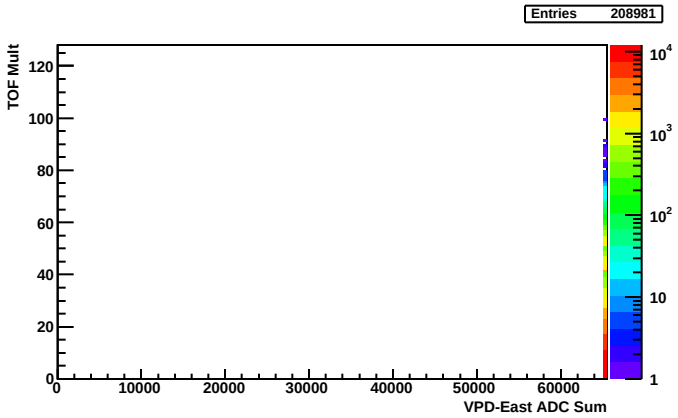

BBQ-VP004 (HI threshold)
Entries 3343696
TAC
QT Input Channel

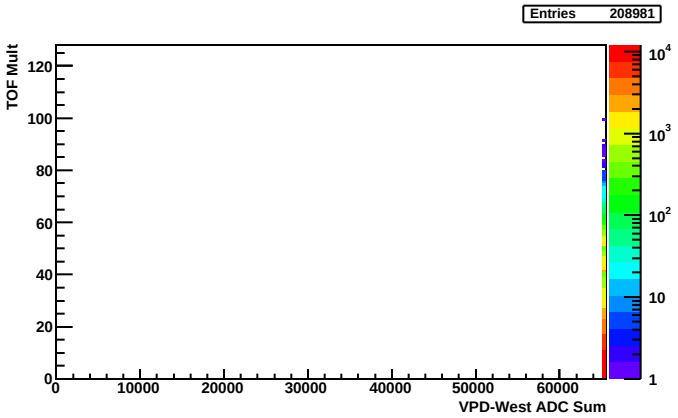

Entries 208981
TOF Mult
BBC-L-East ADC Sum

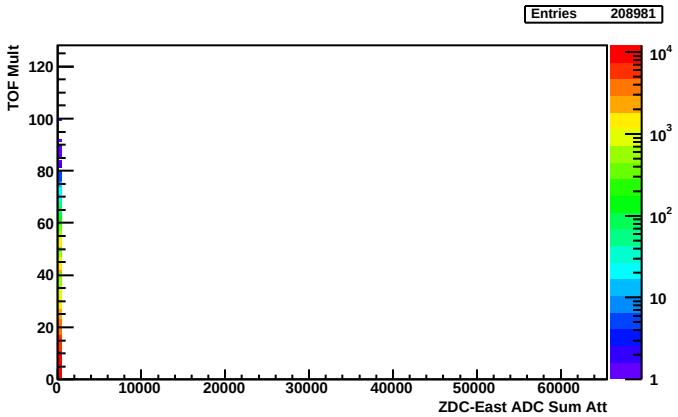

Entries 208981
TOF Mult
BBC-L-West ADC Sum

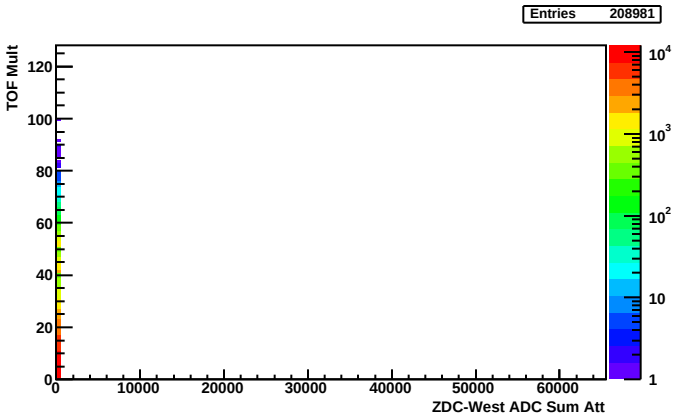

Entries 208981
TOF Mult
BBC-S-East ADC Sum

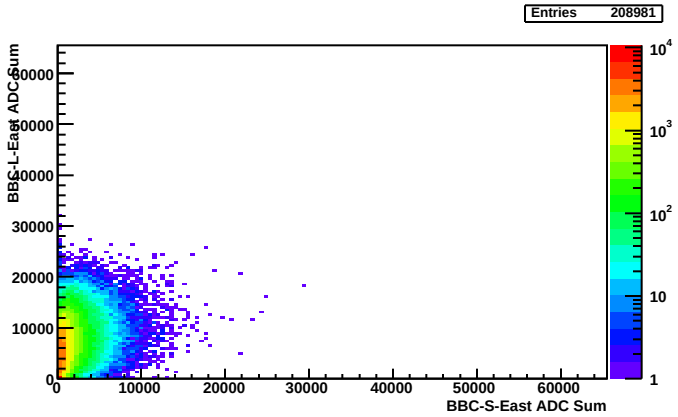

Entries 208981
TOF Mult
BBC-S-West ADC Sum

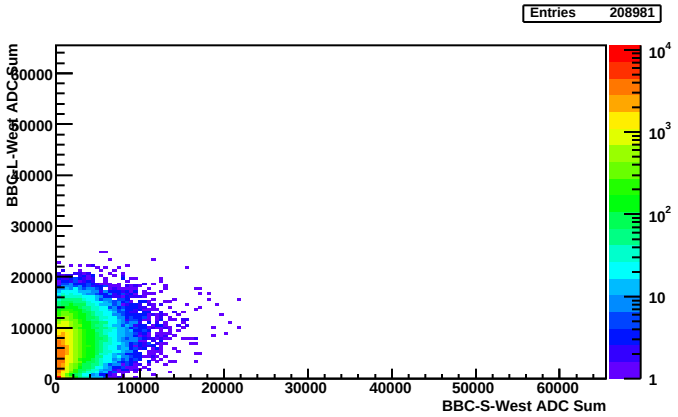

Entries 208981
TOF Mult
VPD-East ADC Sum

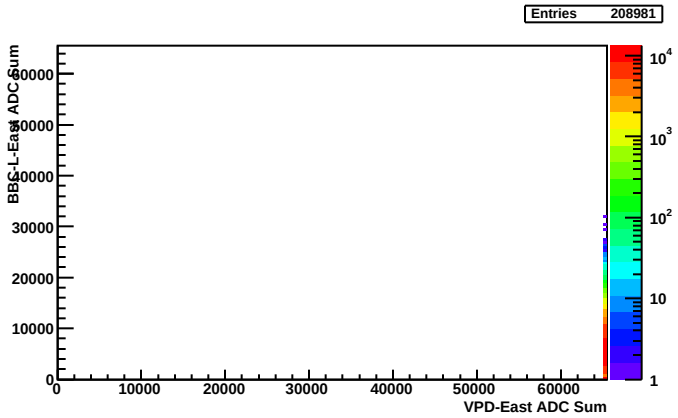

Entries 208981
TOF Mult
VPD-West ADC Sum

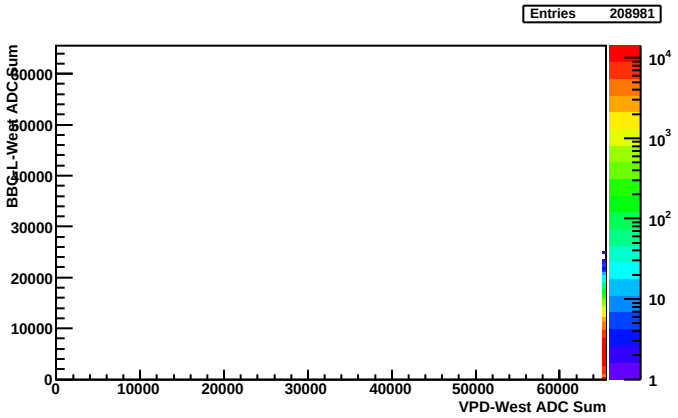

Entries 208981
TOF Mult
ZDC-East ADC Sum Att

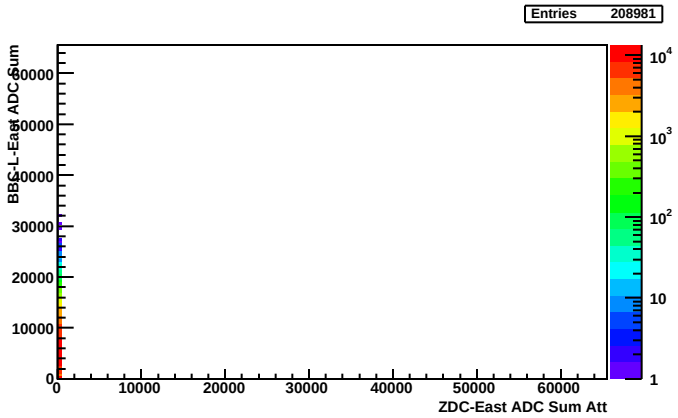

Entries 208981
TOF Mult
ZDC-West ADC Sum Att

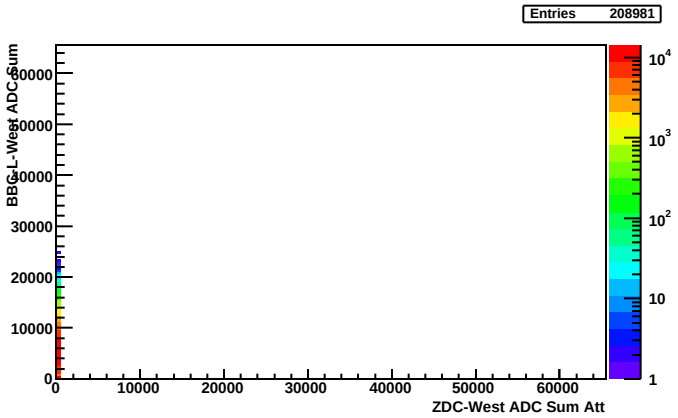

Entries 208981
BBC-L-East ADC Sum
BBC-S-East ADC Sum

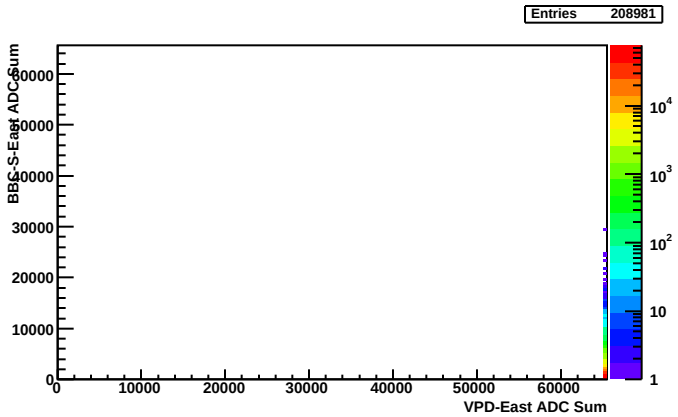

Entries 208981
BBC-L-West ADC Sum
BBC-S-West ADC Sum

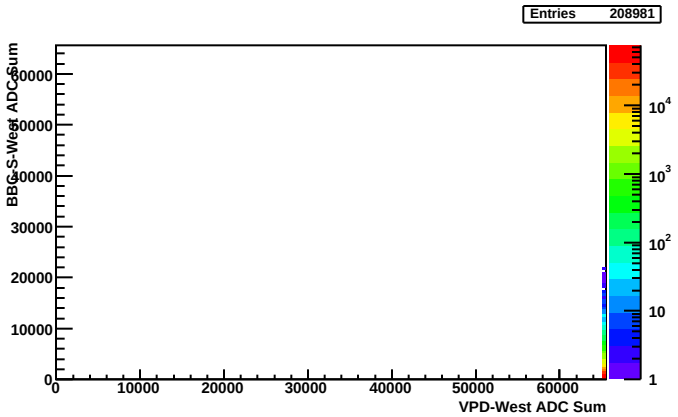

Entries 208981
BBC-L-East ADC Sum
VPD-East ADC Sum

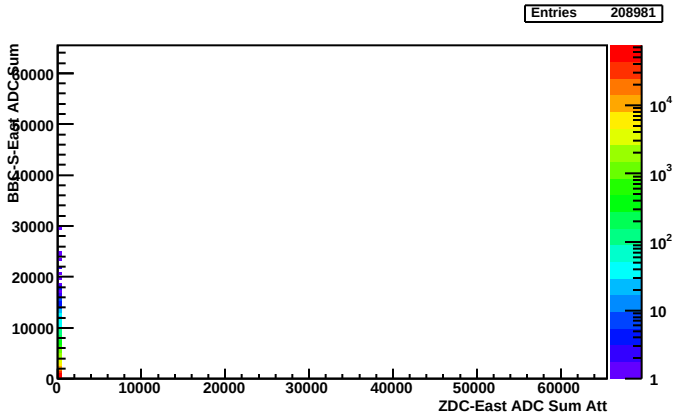

Entries 208981
BBC-L-West ADC Sum
VPD-West ADC Sum

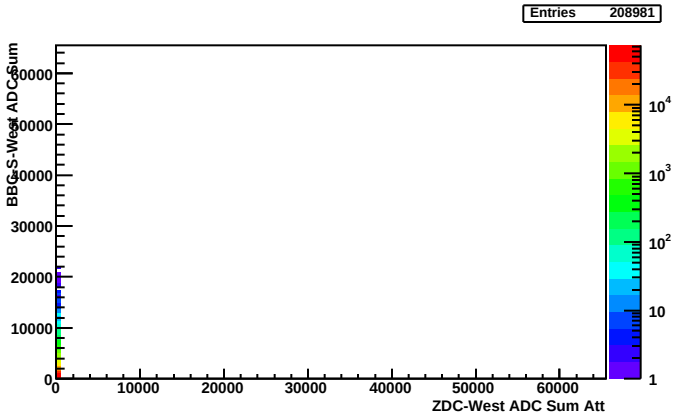

Entries 208981
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

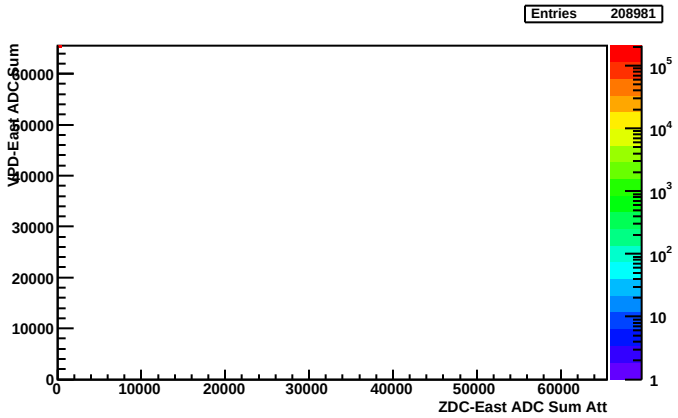

Entries 208981
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

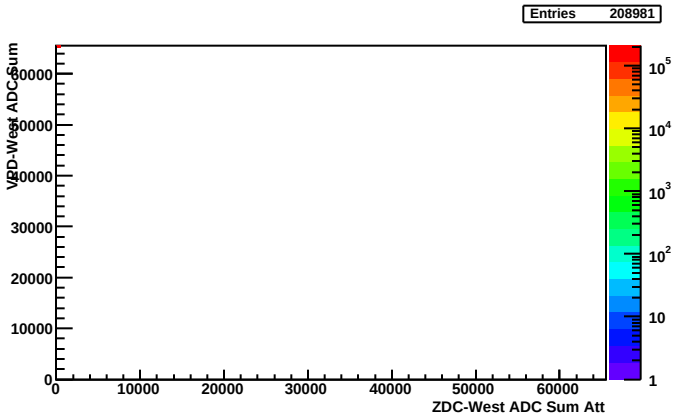

Entries 208981
BBC-S-East ADC Sum
VPD-East ADC Sum

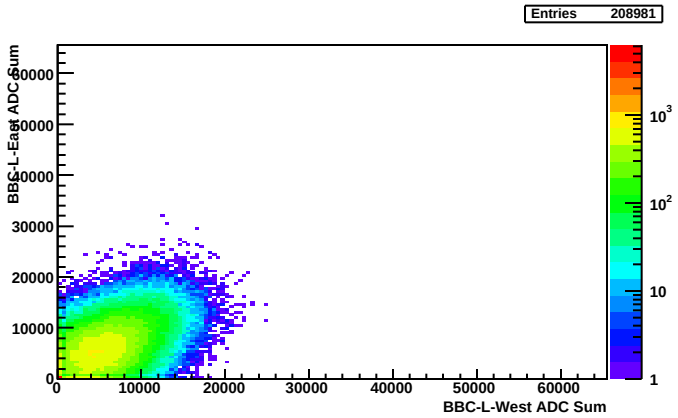

Entries 208981
BBC-S-West ADC Sum
VPD-West ADC Sum

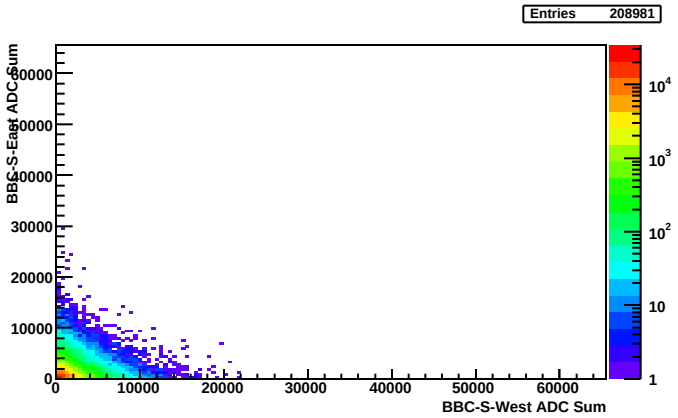

Entries 208981
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

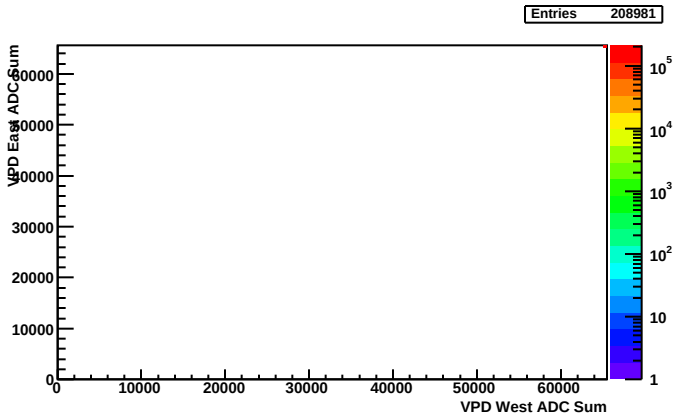

Entries 208981
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

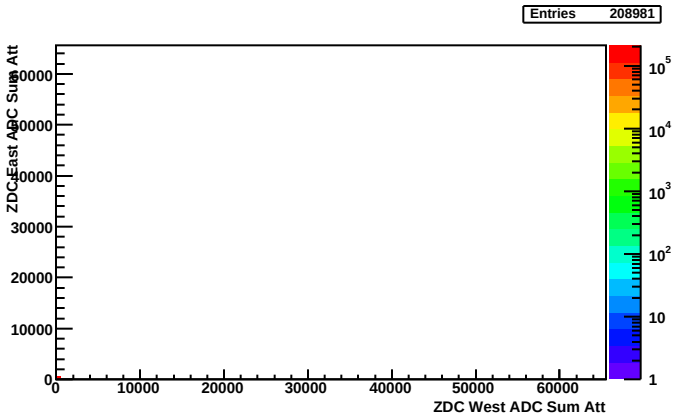

Entries 208981
VPD-East ADC Sum
ZDC-East ADC Sum Att

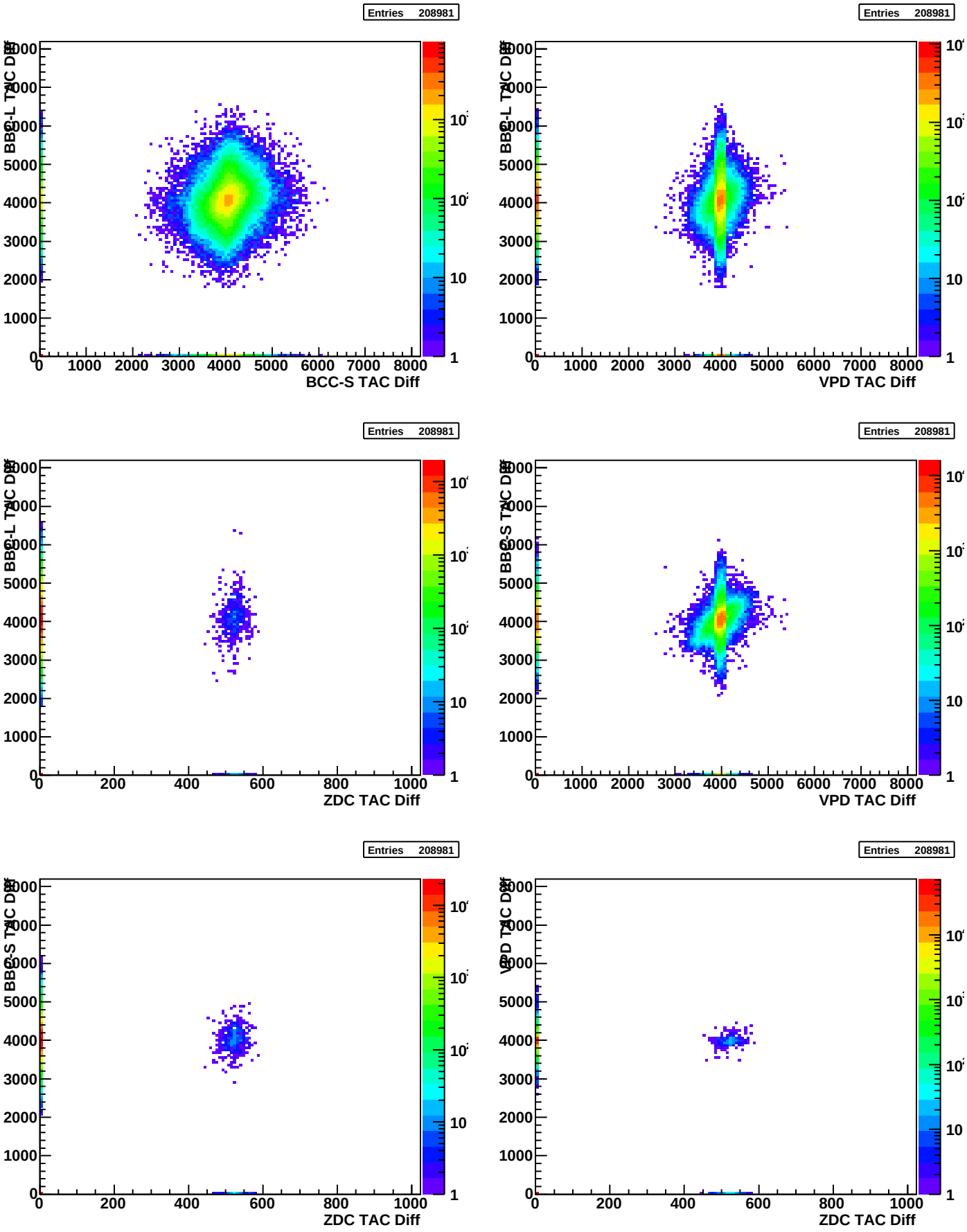

Entries 208981
VPD-West ADC Sum
ZDC-West ADC Sum Att

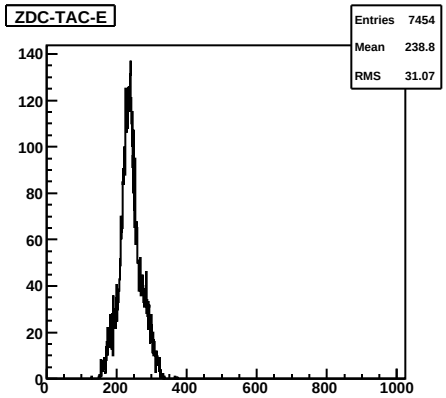

Entries 208981
BBC-L-East ADC Sum
BBC-L-West ADC Sum

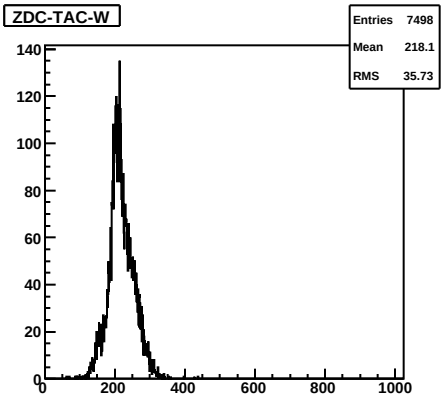

Entries 208981
BBC-S-East ADC Sum
BBC-S-West ADC Sum

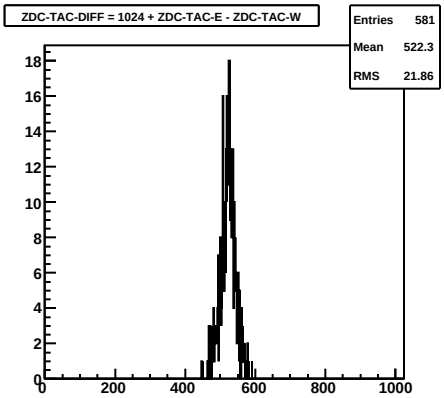

Entries 208981
VPD East ADC Sum
VPD West ADC Sum

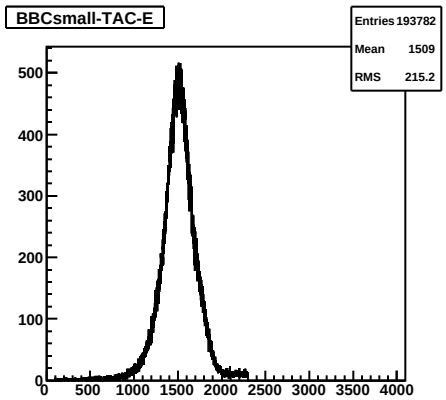

Entries 208981
ZDC East ADC Sum Att
ZDC West ADC Sum Att

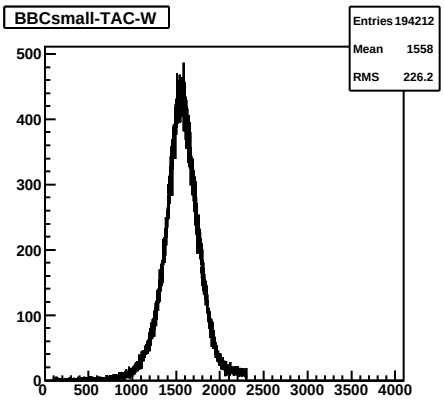

Entries 208981
BBC-L TAC Diff
BCC-S TAC Diff
Entries 208981
BBC-L TAC Diff
VPD TAC Diff
Entries 208981
BBC-L TAC Diff
ZDC TAC Diff
Entries 208981
BBC-S TAC Diff
VPD TAC Diff
Entries 208981
BBC-S TAC Diff
ZDC TAC Diff
Entries 208981
VPD TAC Diff
ZDC TAC Diff

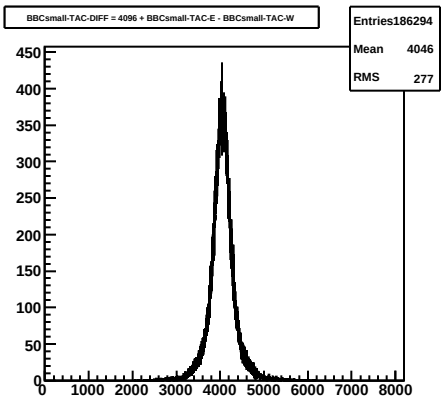

ZDC-TAC-E
Entries 7454
Mean 238.8
RMS 31.07

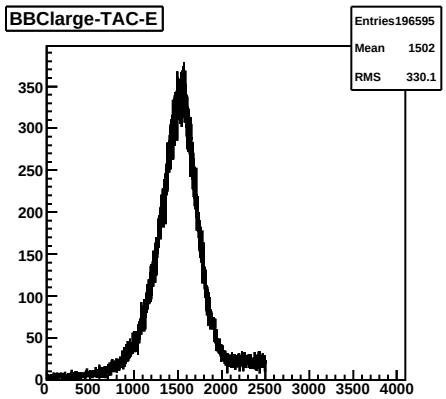

ZDC-TAC-W
Entries 7498
Mean 218.1
RMS 35.73

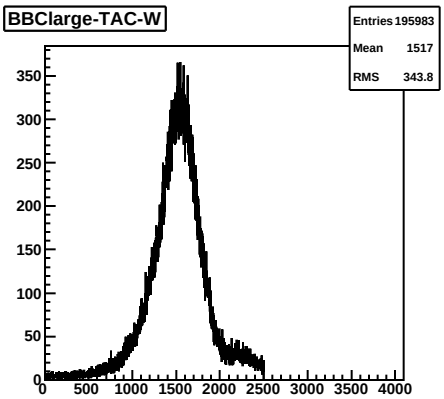

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 581
Mean 522.3
RMS 21.86

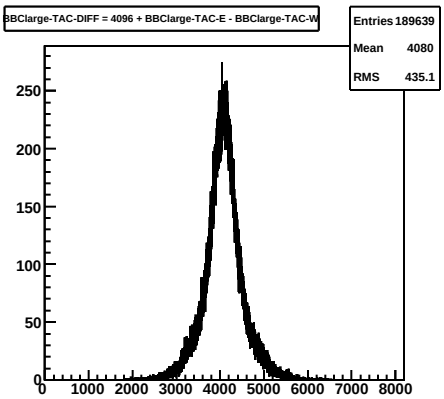

BBCsmall-TAC-E
Entries 193782
Mean 1509
RMS 215.2

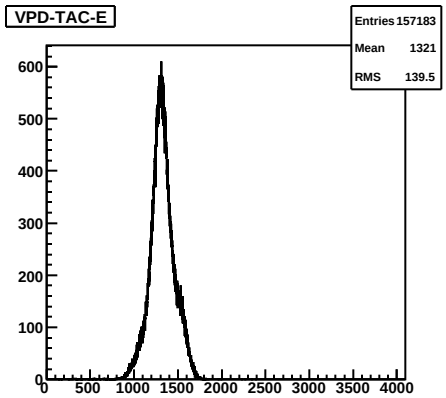

BBCsmall-TAC-W
Entries 194212
Mean 1558
RMS 226.2

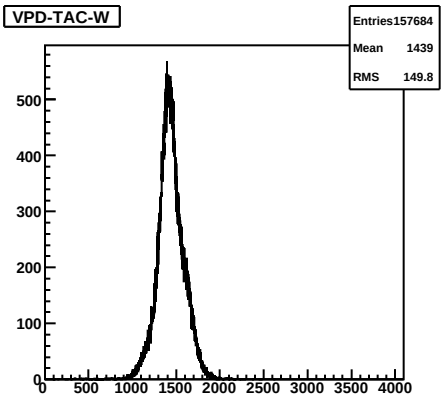

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 186294
Mean 4046
RMS 277

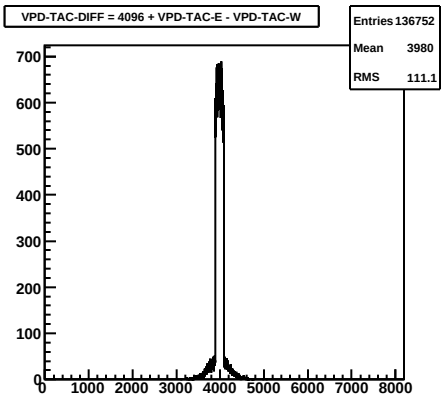

BBClarge-TAC-E
Entries 196595
Mean 1502
RMS 330.1

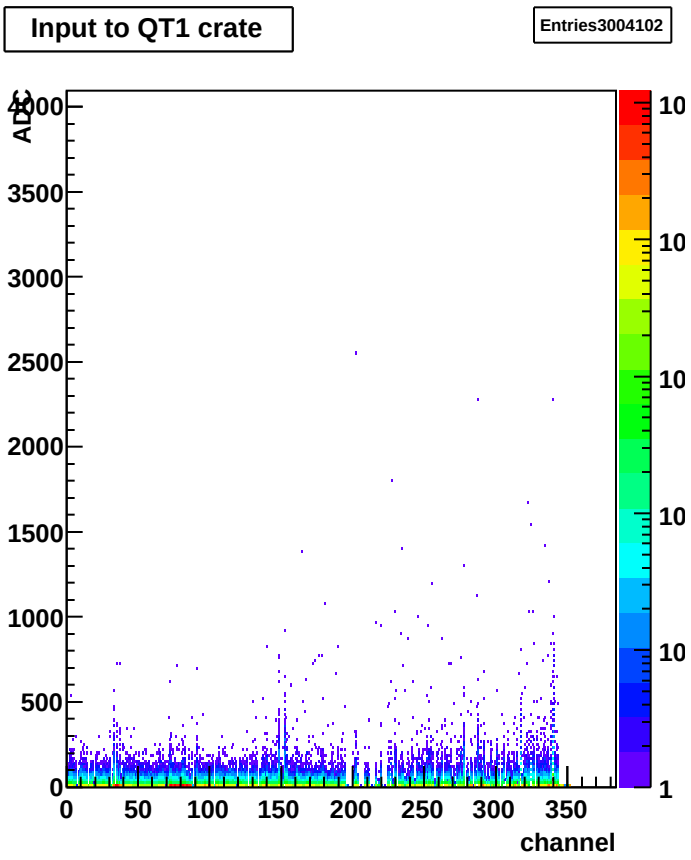

BBClarge-TAC-W
Entries 195983
Mean 1517
RMS 343.8

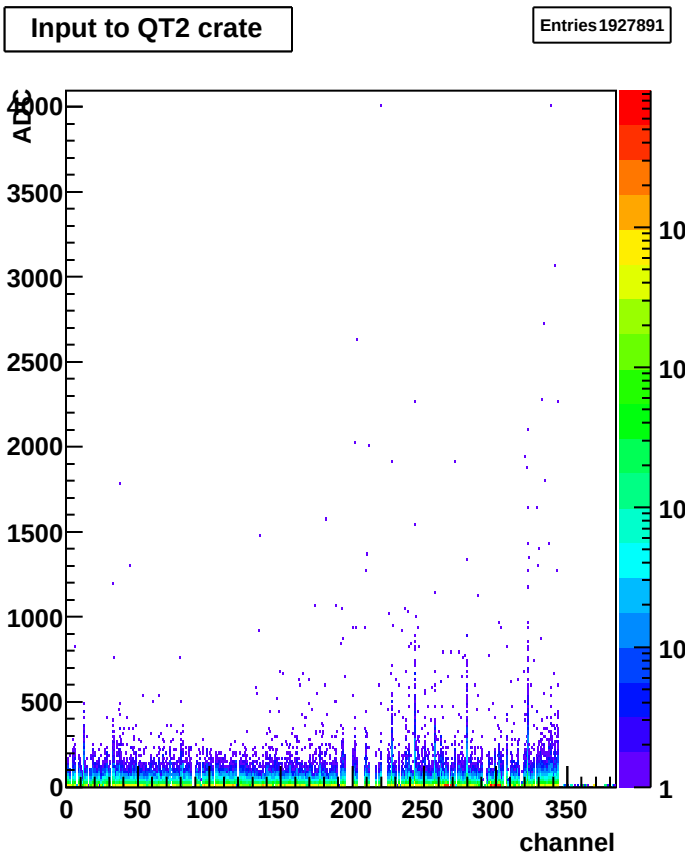

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 189639
Mean 4080
RMS 435.1

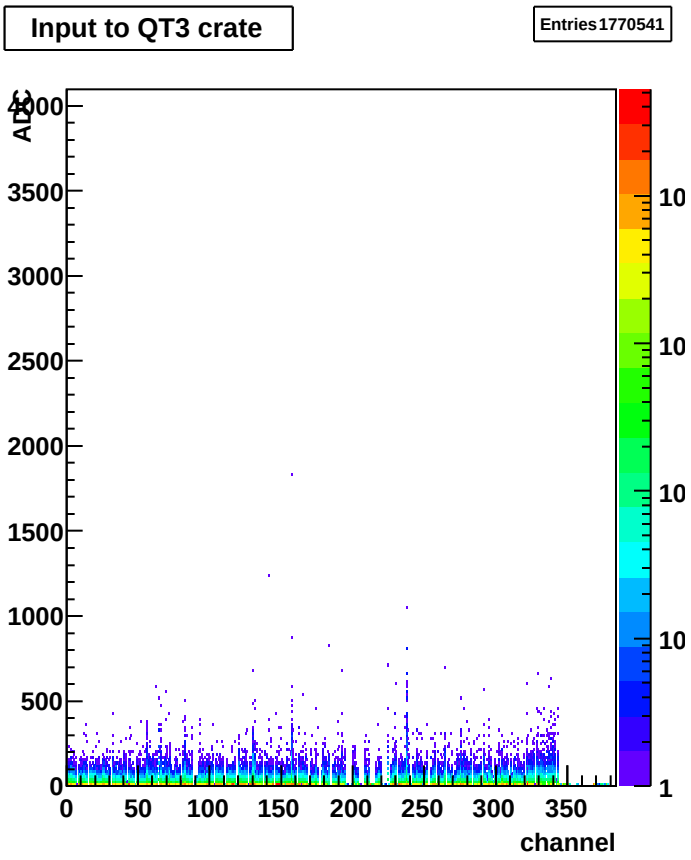

VPD-TAC-E
Entries 157183
Mean 1321
RMS 139.5

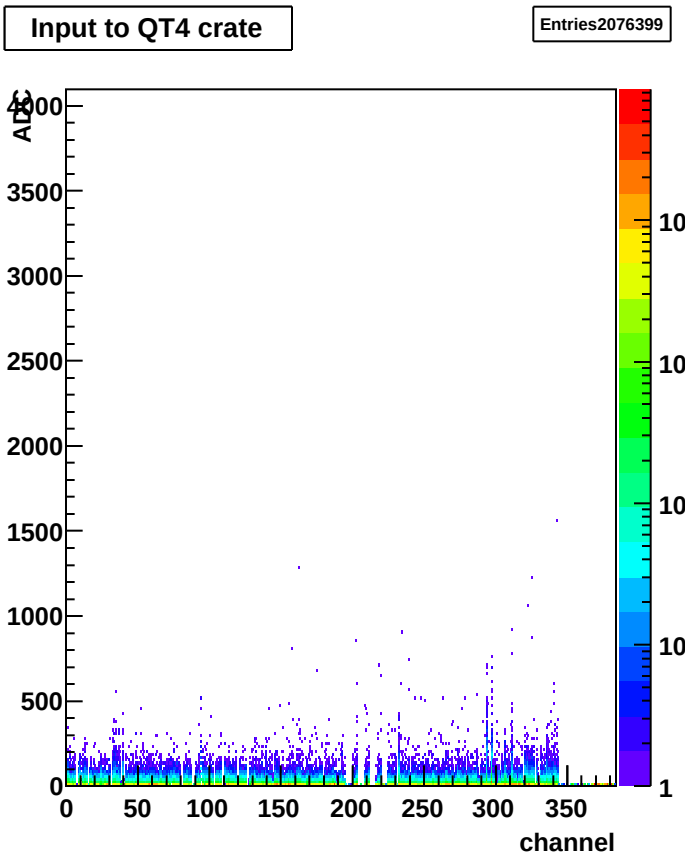

VPD-TAC-W
Entries 157684
Mean 1439
RMS 149.8

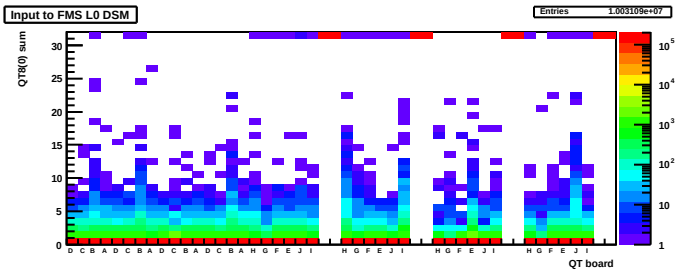

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 136752
Mean 3980
RMS 111.1

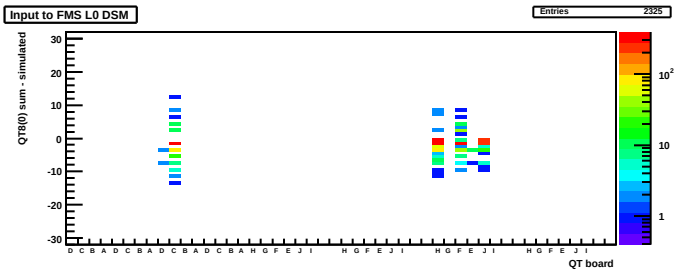

Input to QT1 crate
Entries3004102
ADC
channel

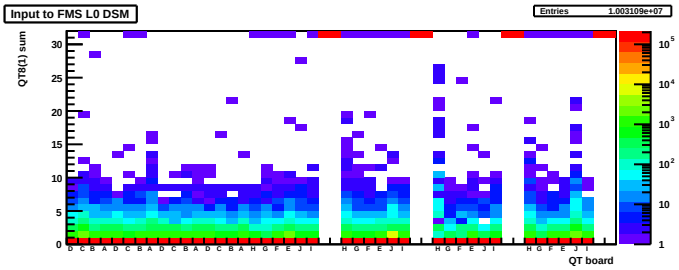

Input to QT2 crate
Entries1927891
ADC
channel

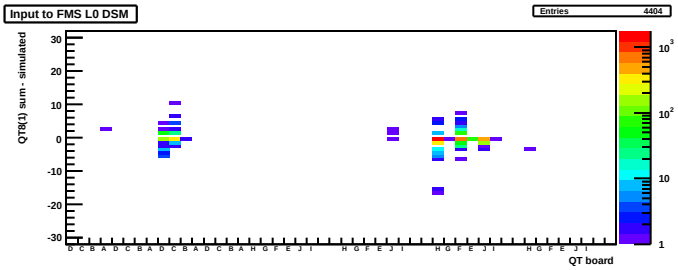

Input to QT3 crate
Entries1770541
ADC
channel

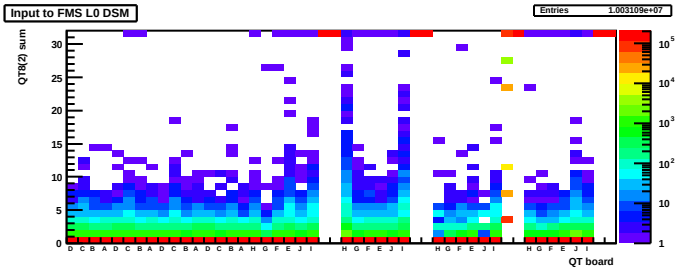

Input to QT4 crate
Entries2076399
ADC
channel

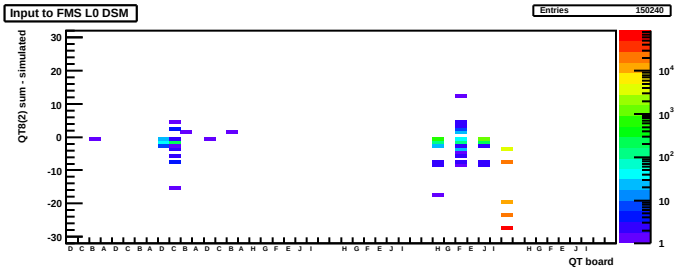

Input to FMS L0 DSM
Entries 1.003109e+07
QT8(0) sum
QT board

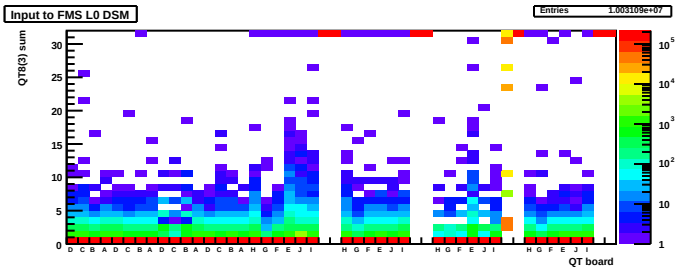

Input to FMS L0 DSM
Entries 2325
QT8(0) sum - simulated
QT board

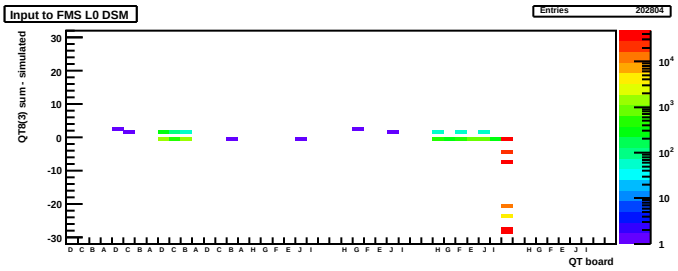

Input to FMS L0 DSM
Entries 1.003109e+07
QT8(1) sum
QT board

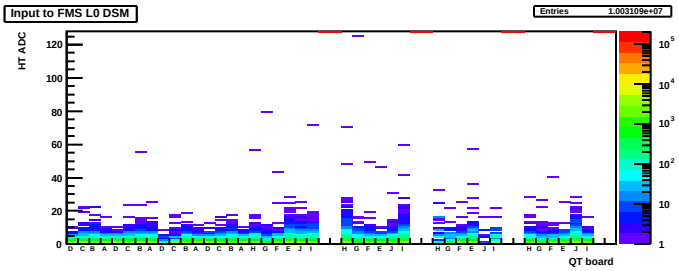

Input to FMS L0 DSM
Entries 4404
QT8(1) sum - simulated
QT board

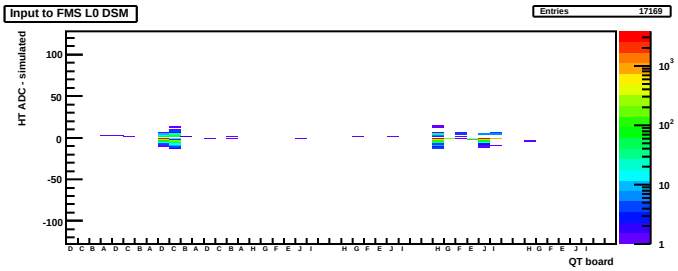

Input to FMS L0 DSM
Entries 1.003109e+07
QT8(2) sum
QT board

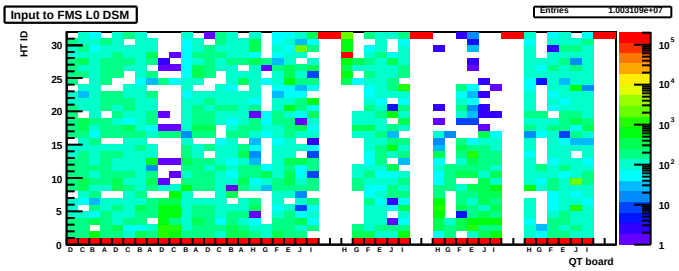

Input to FMS L0 DSM
Entries 150240
QT8(2) sum - simulated
QT board

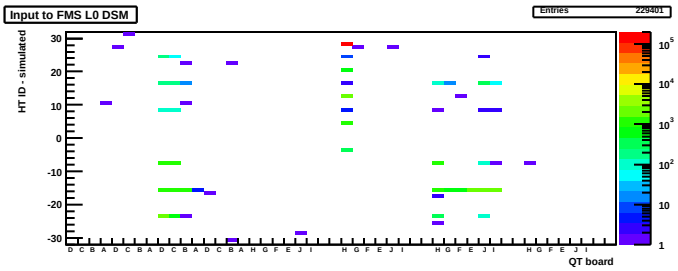

Input to FMS L0 DSM
Entries 1.003109e+07
QT8(3) sum
QT board

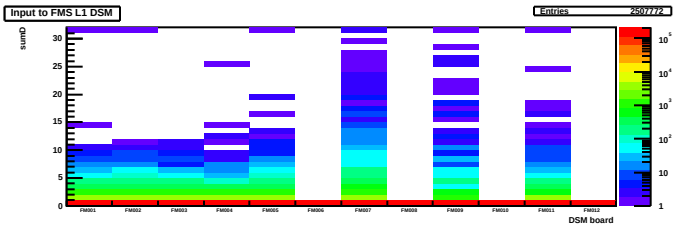

Input to FMS L0 DSM
Entries 202804
QT8(3) sum - simulated
QT board

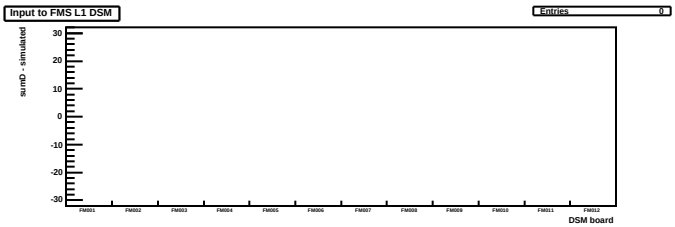

Input to FMS L0 DSM
Entries 1.003109e+07
HT ADC
QT board

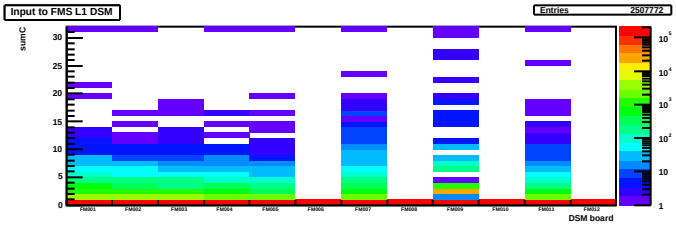

Input to FMS L0 DSM
Entries 17169
HT ADC - simulated
QT board

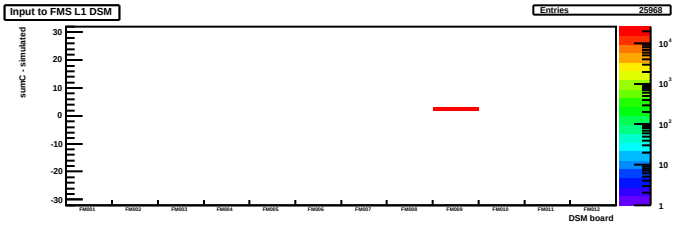

Input to FMS L0 DSM
Entries 1.003109e+07
HT ID
QT board

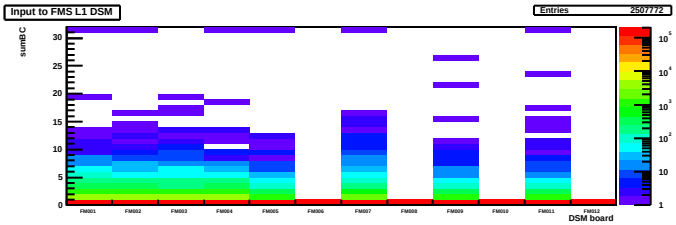

Input to FMS L0 DSM
Entries 229401
HT ID - simulated
QT board

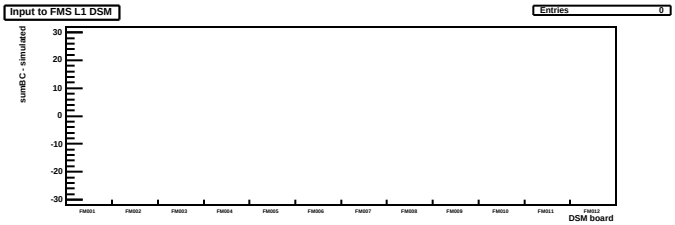

Input to FMS L1 DSM
Entries 2507772
sumD
DSM board

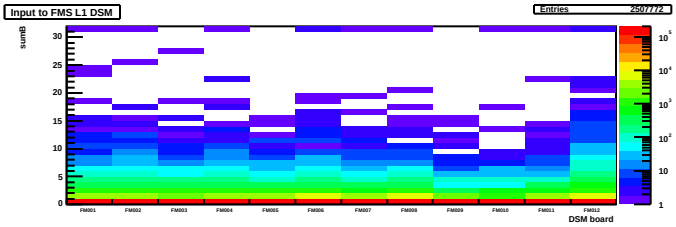

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

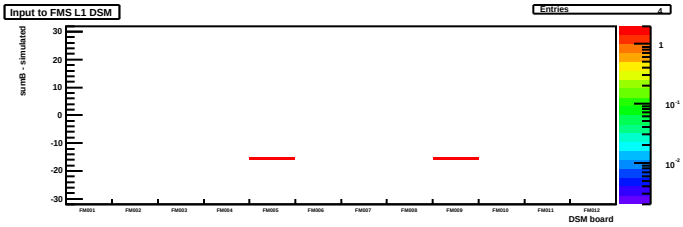

Input to FMS L1 DSM
Entries 2507772
sumC
DSM board

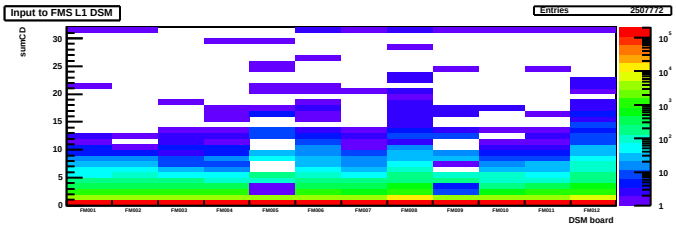

Input to FMS L1 DSM
Entries 25968
sumC - simulated
DSM board

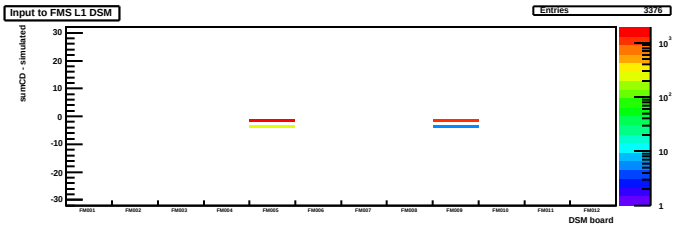

Input to FMS L1 DSM
Entries 2507772
sumBC
DSM board

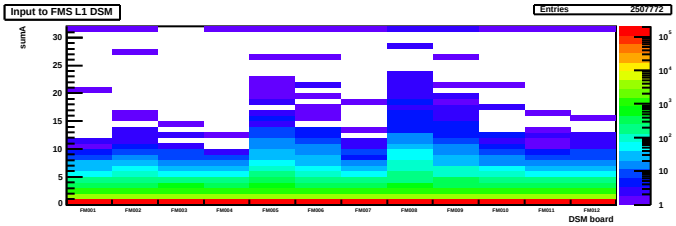

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

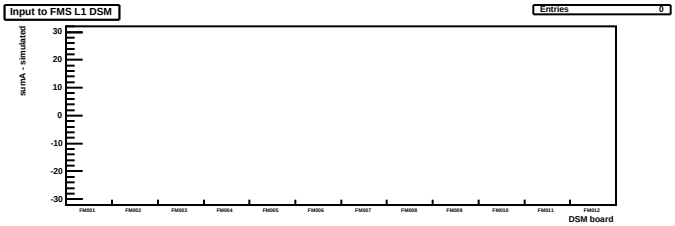

Input to FMS L1 DSM
Entries 2507772
sumB
DSM board

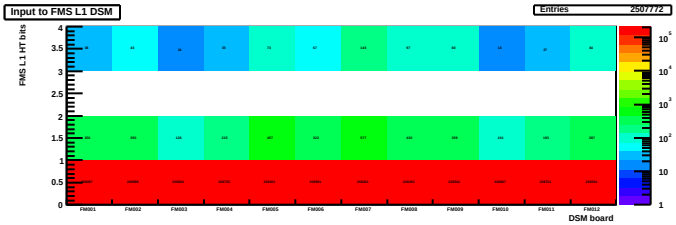

Input to FMS L1 DSM
Entries 4
sumB - simulated
DSM board

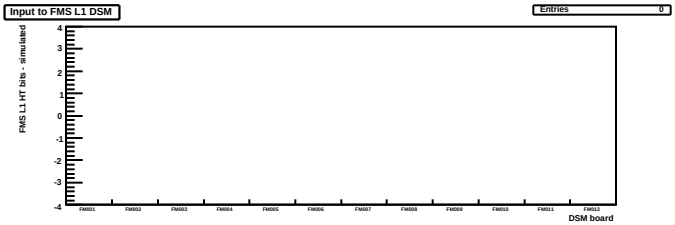

Input to FMS L1 DSM
Entries 2507772
sumCD
DSM board

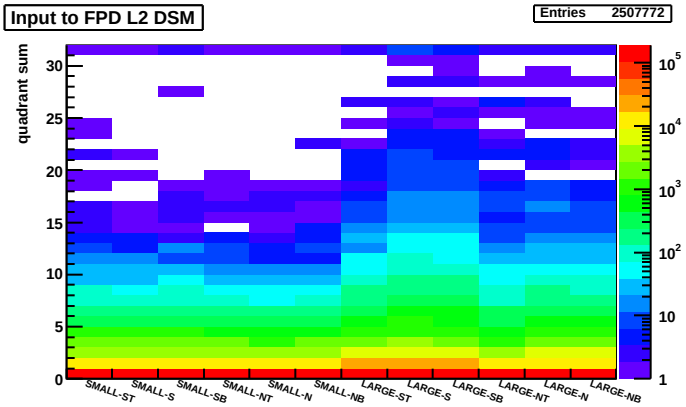

Input to FMS L1 DSM
Entries 3376
sumCD - simulated
DSM board

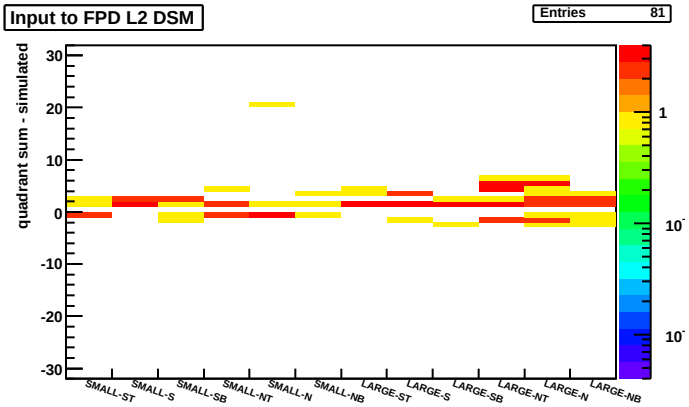

Input to FMS L1 DSM
Entries 2507772
sumA
DSM board

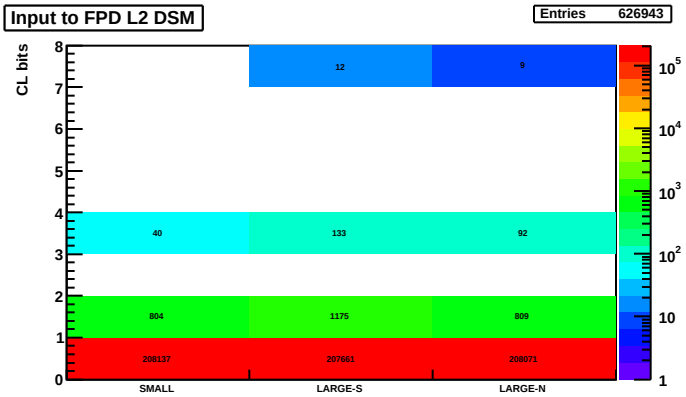

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

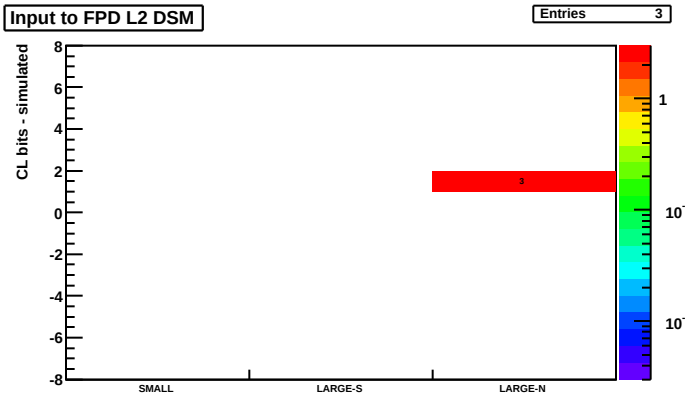

Input to FMS L1 DSM
Entries 2507772
FMS L1 HT bits
DSM board

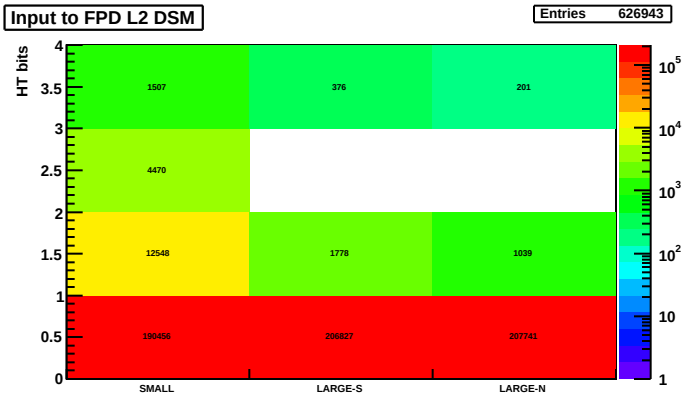

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

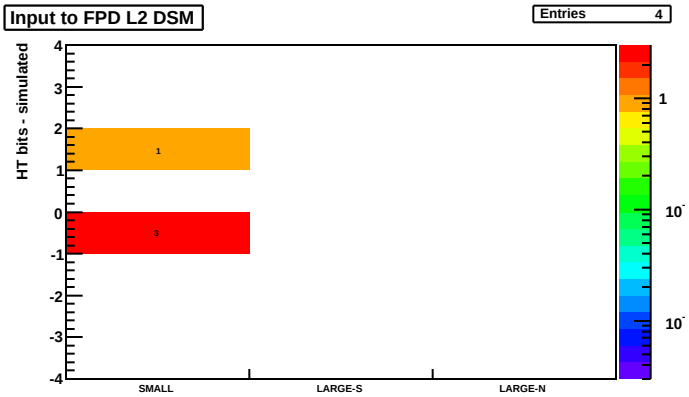

Input to FPD L2 DSM
Entries 2507772
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

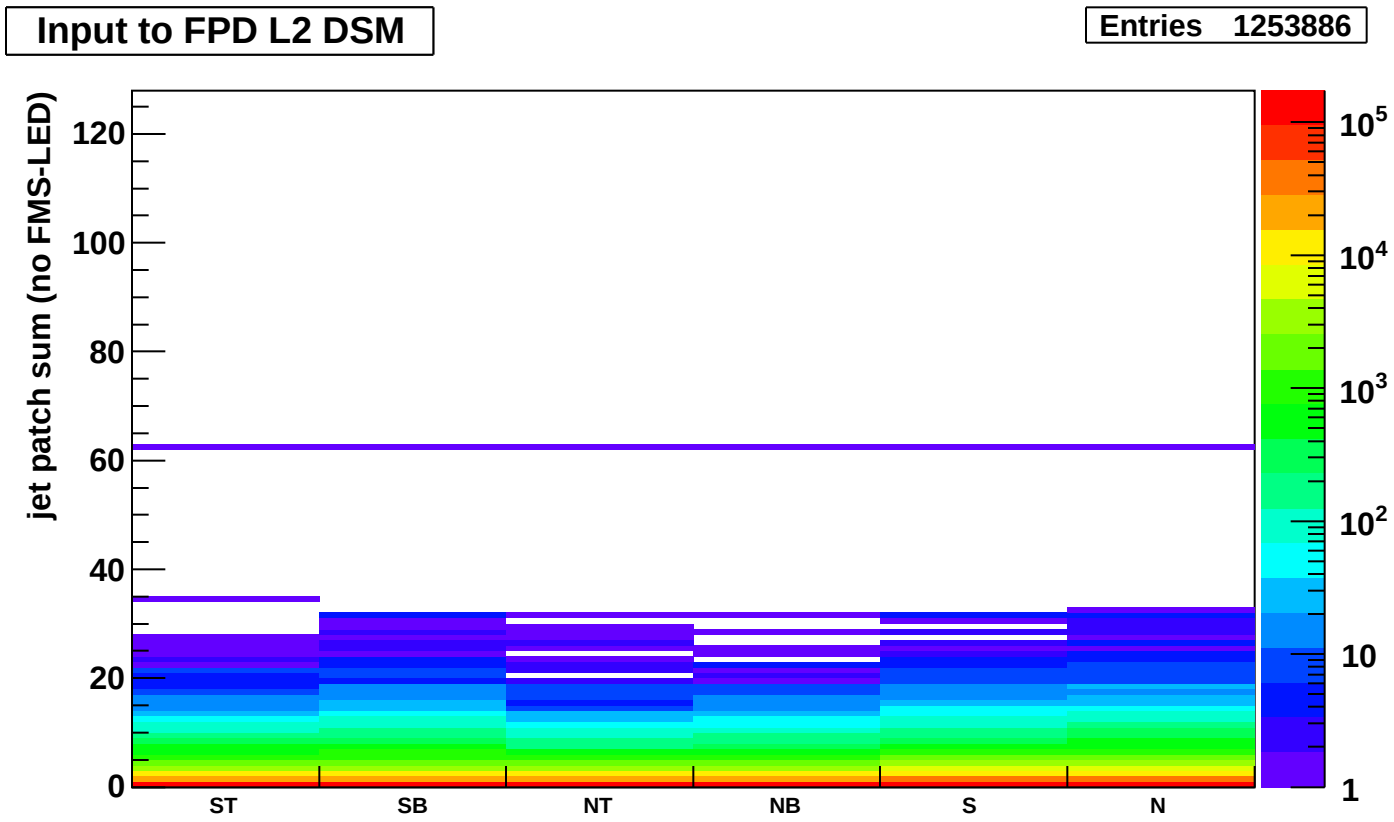

Input to FPD L2 DSM
Entries 81
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

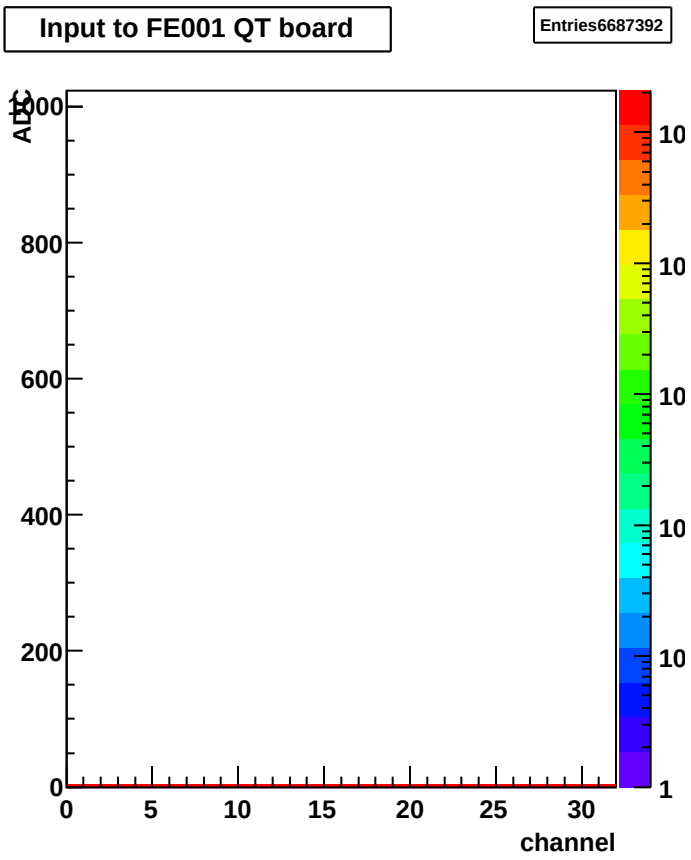

Input to FPD L2 DSM
Entries 626943
CL bits
12
9
40
133
92
804
1175
809
208137
207661
208071
SMALL
LARGE-S
LARGE-N

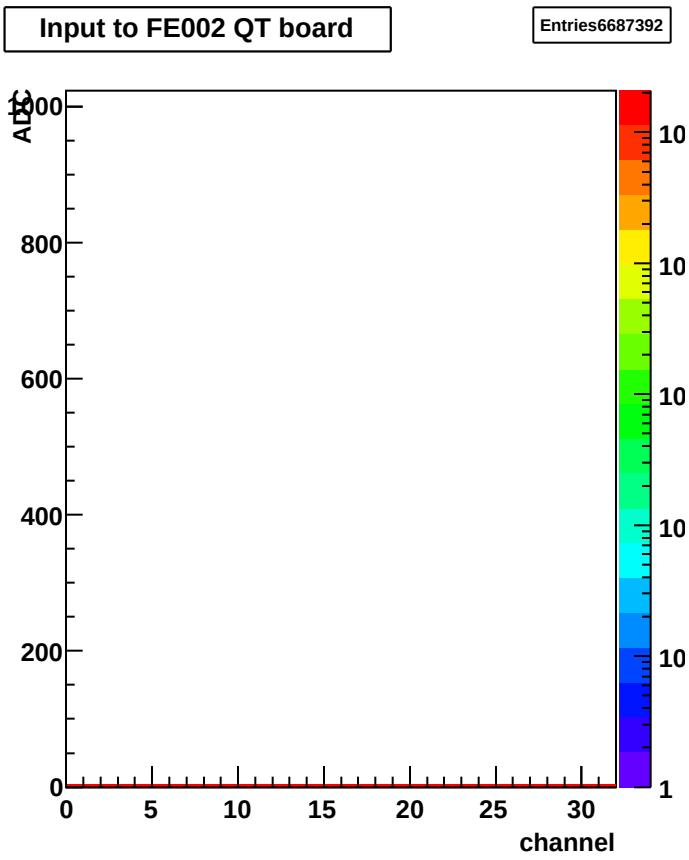

Input to FPD L2 DSM
Entries 3
CL bits - simulated
3
SMALL
LARGE-S
LARGE-N

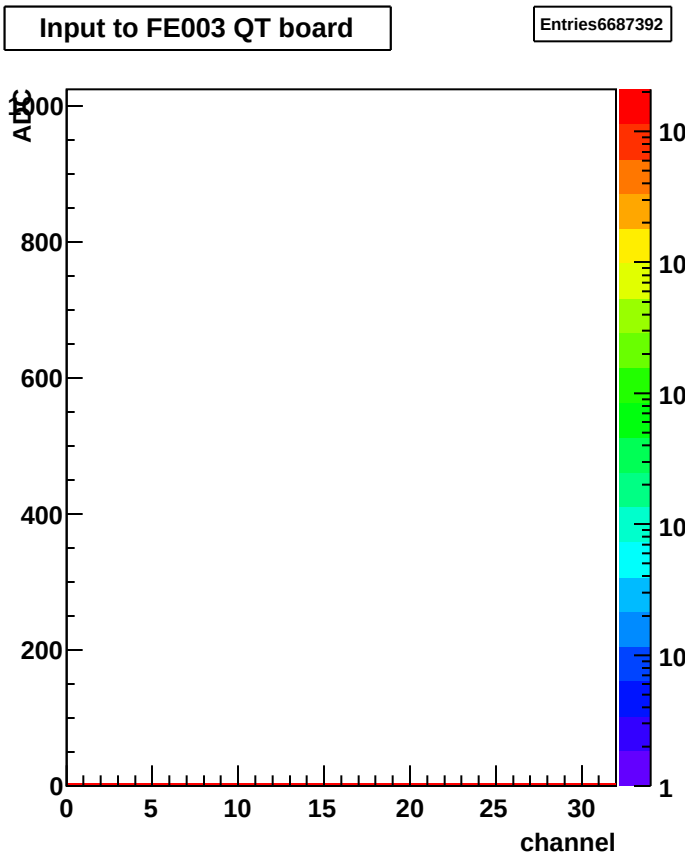

Input to FPD L2 DSM
Entries 626943
HT bits
1507
376
201
4470
12548
1778
1039
190456
206827
207741
SMALL
LARGE-S
LARGE-N

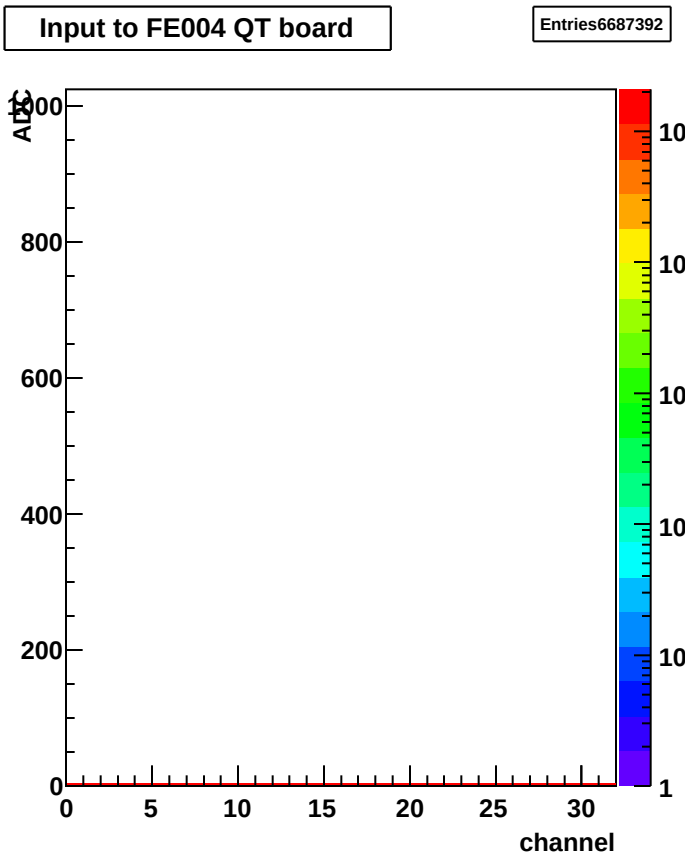

Input to FPD L2 DSM
Entries 4
HT bits - simulated
1
3
SMALL
LARGE-S
LARGE-N

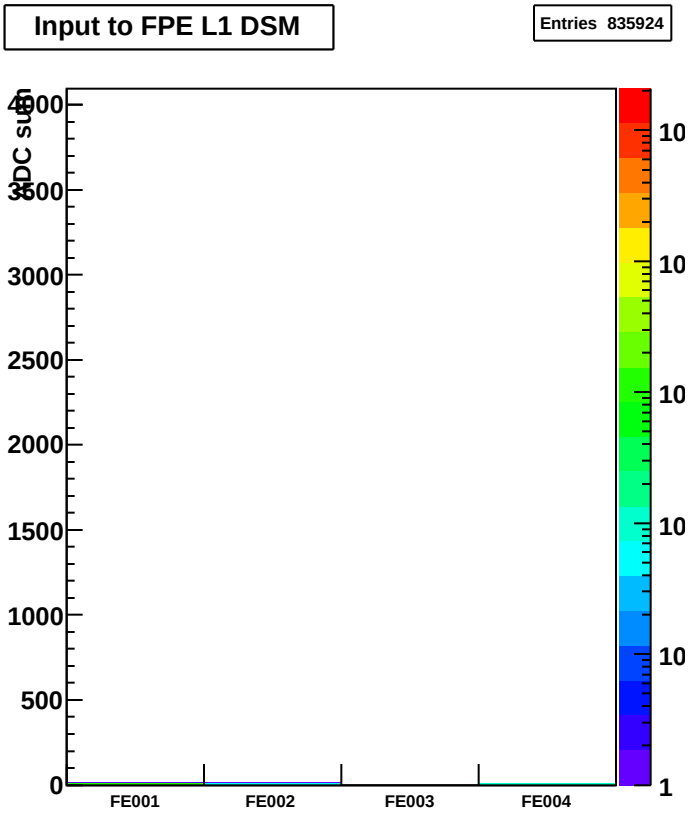

Input to FPD L2 DSM
Entries 1253886
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

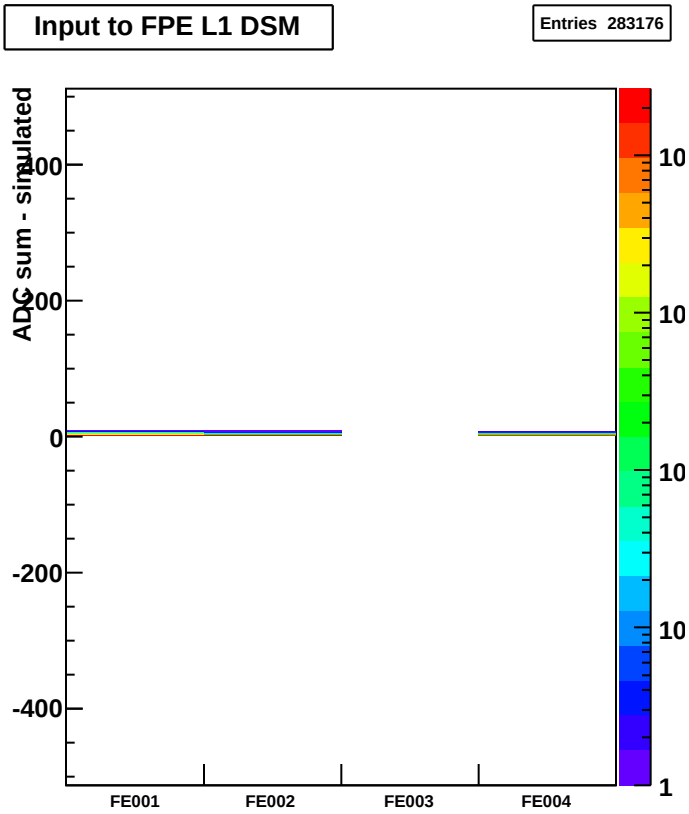

Input to FE001 QT board
Entries6687392
ADC
channel

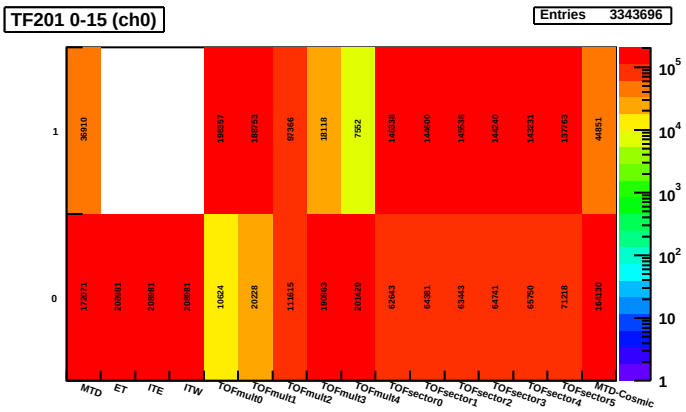

Input to FE002 QT board
Entries6687392
ADC
channel

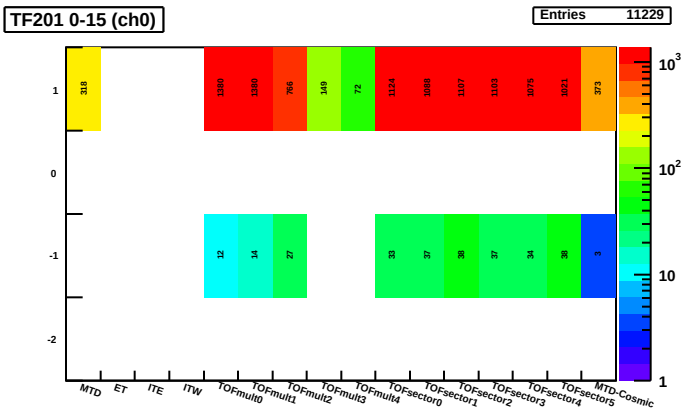

Input to FE003 QT board
Entries6687392
ADC
channel

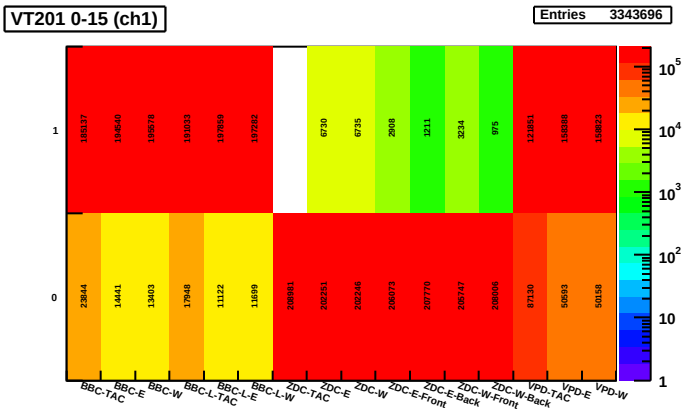

Input to FE004 QT board
Entries6687392
ADC
channel

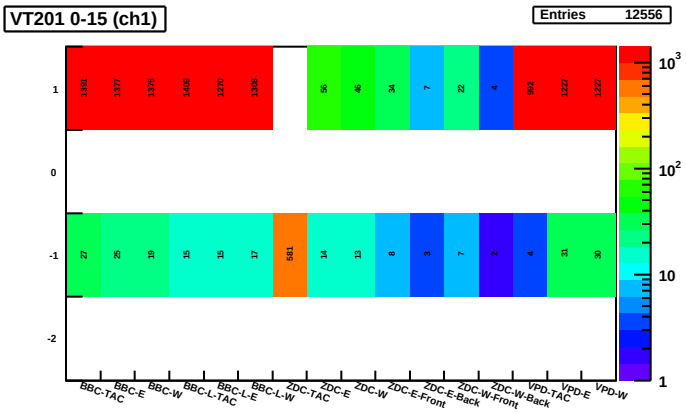

Input to FPE L1 DSM
Entries 835924
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 283176
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 3343696
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 11229
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 3343696
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
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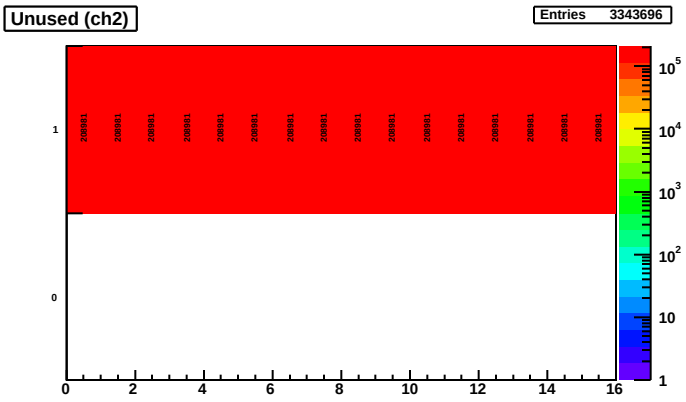
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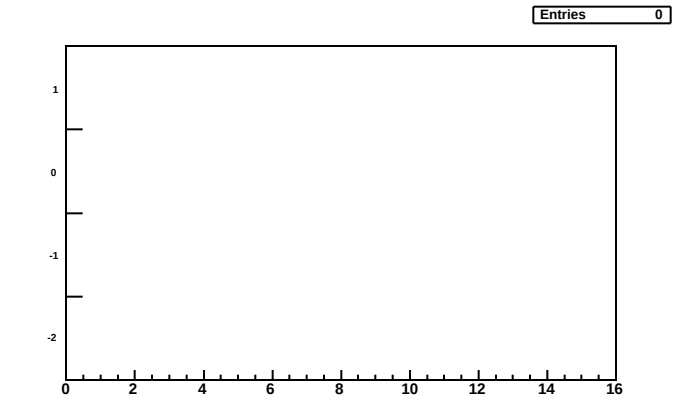
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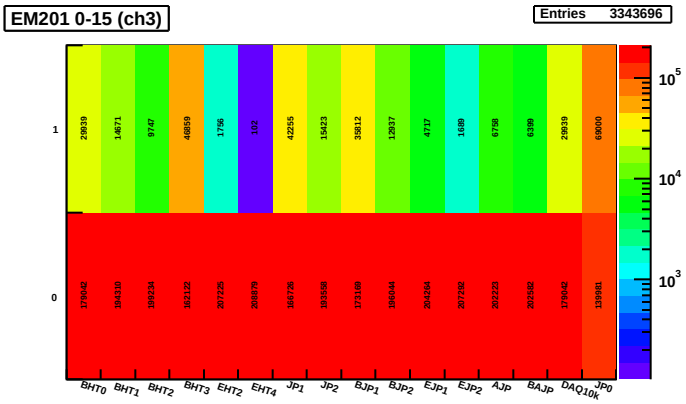
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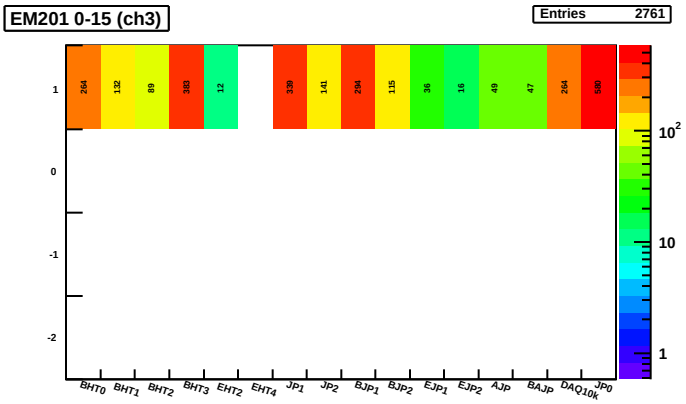
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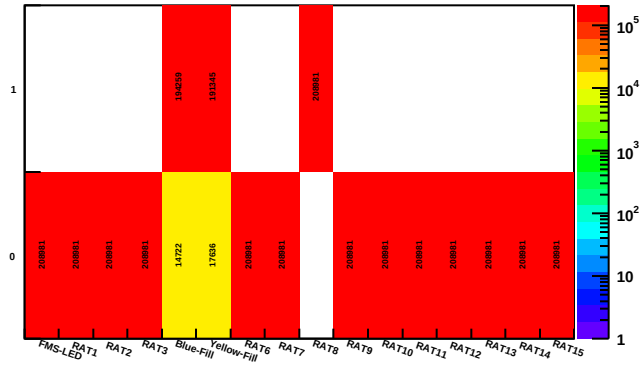
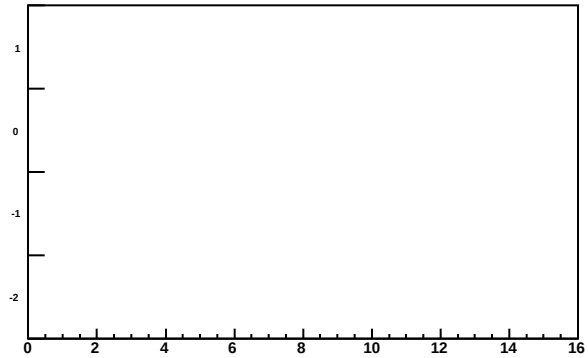
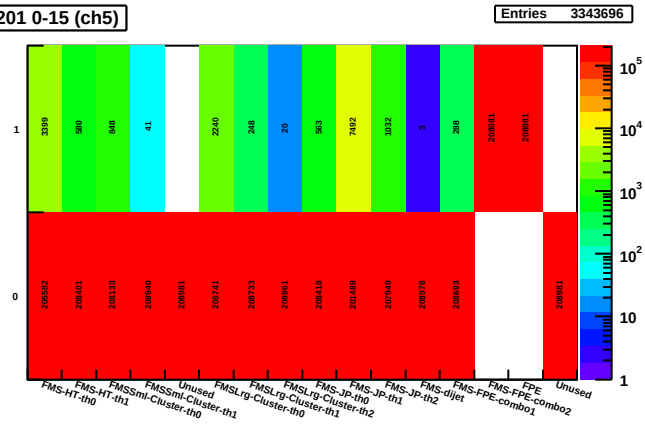
RAT board (ch4)

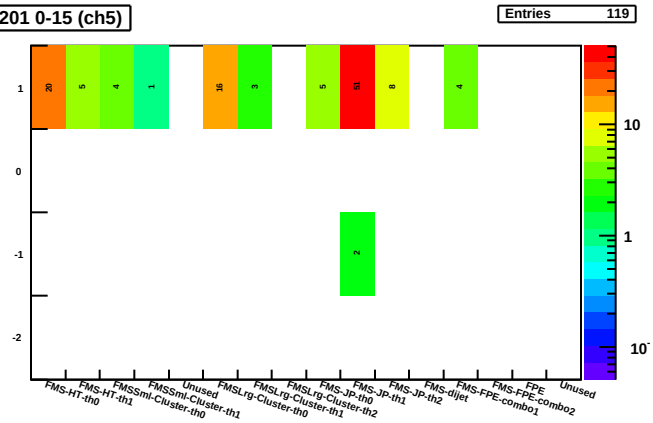




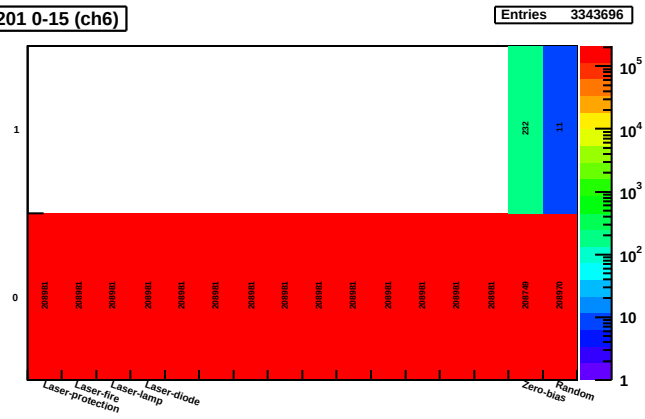
FP201 0-15 (ch5)

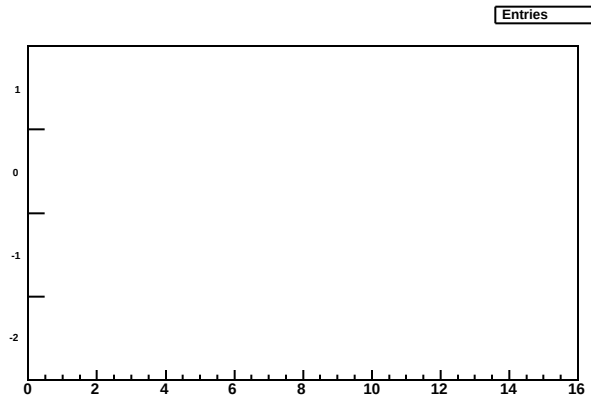
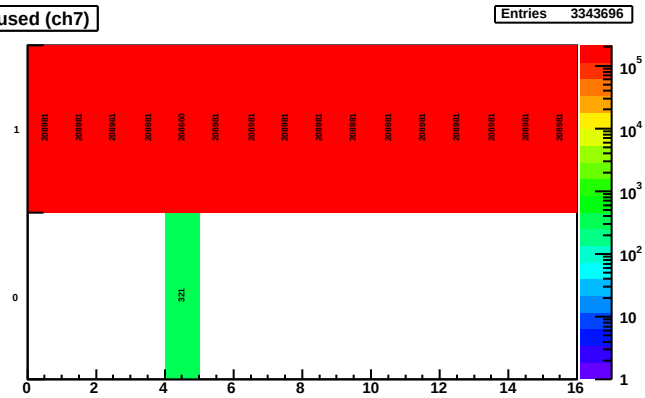
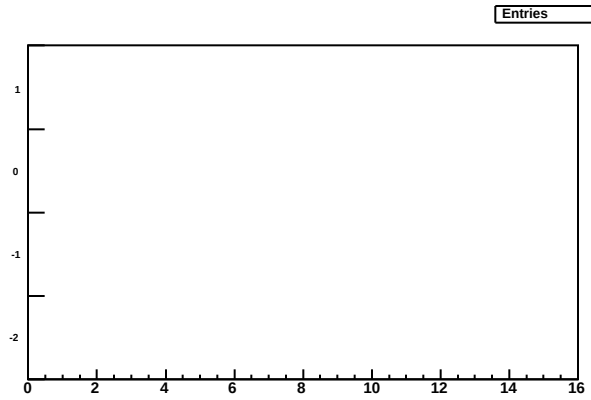


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)