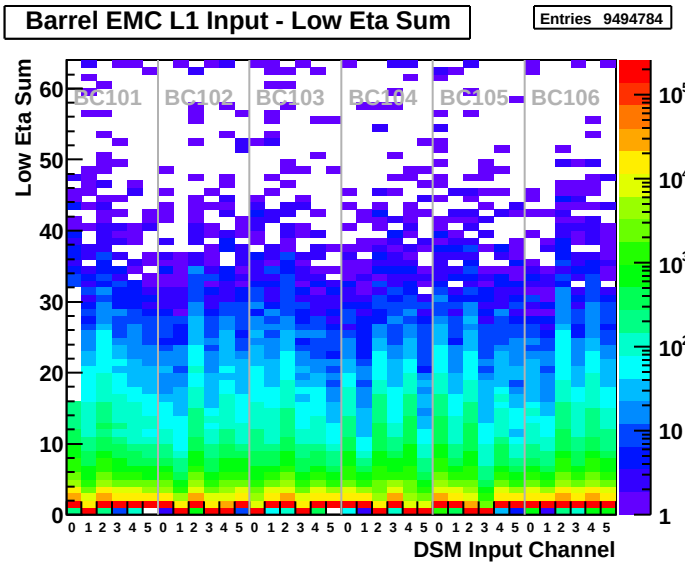
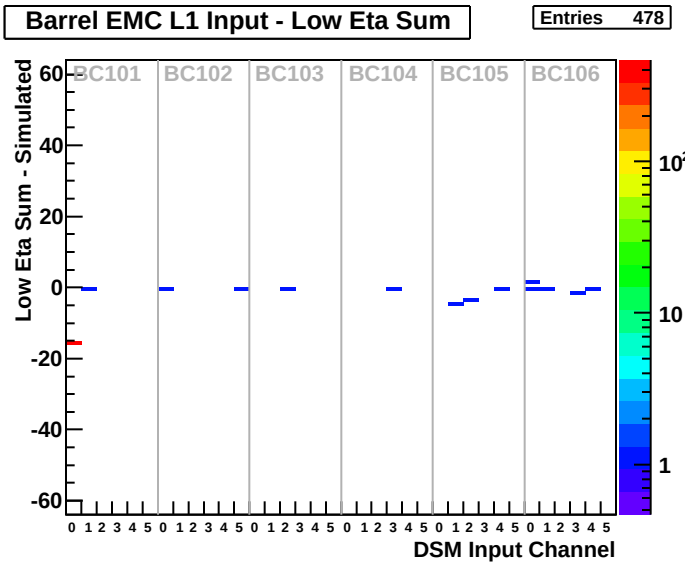
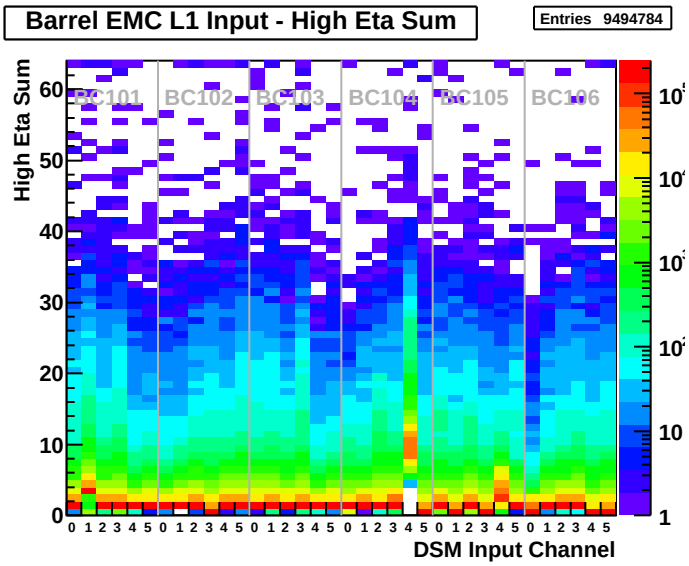
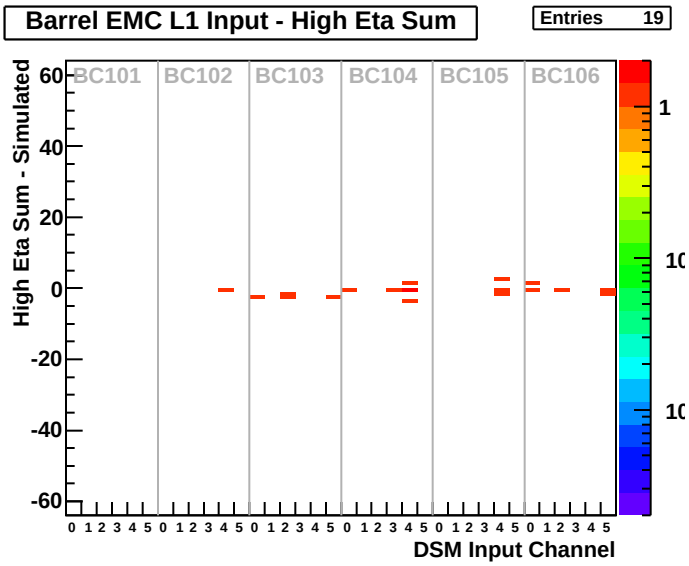
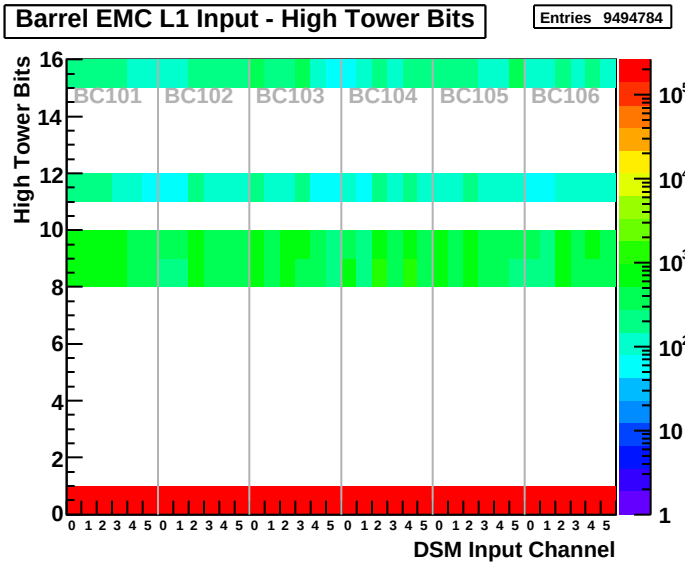
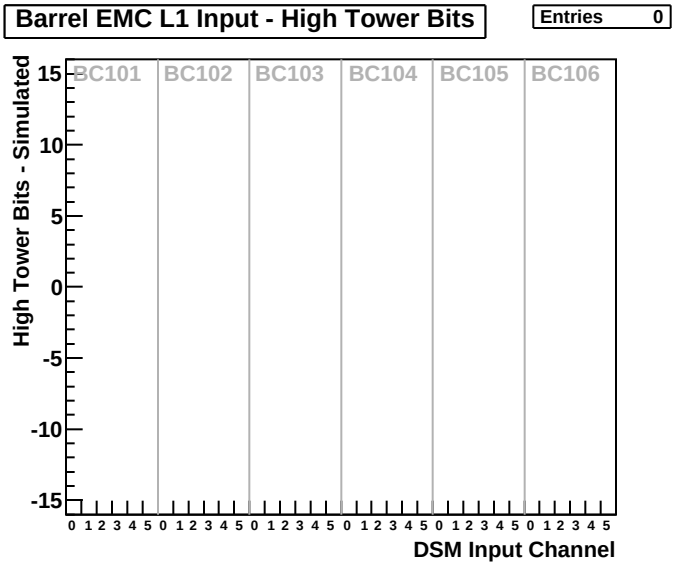

Barrel EMC L1 Input - Low Eta Sum
Entries 9494784
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

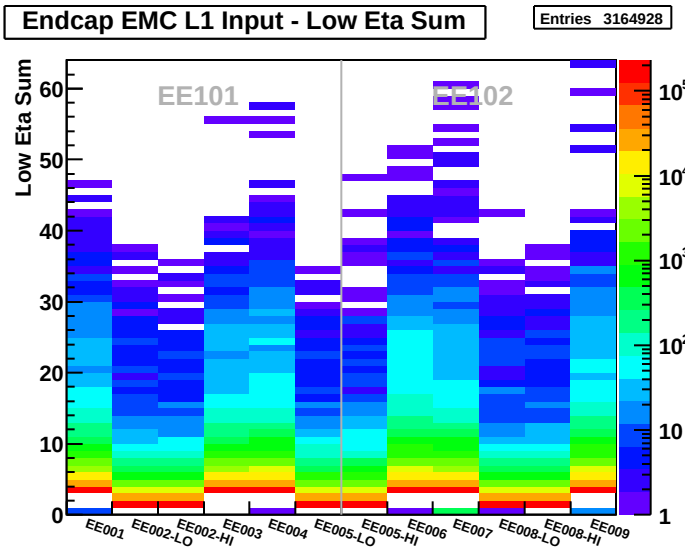

Barrel EMC L1 Input - Low Eta Sum
Entries 478
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

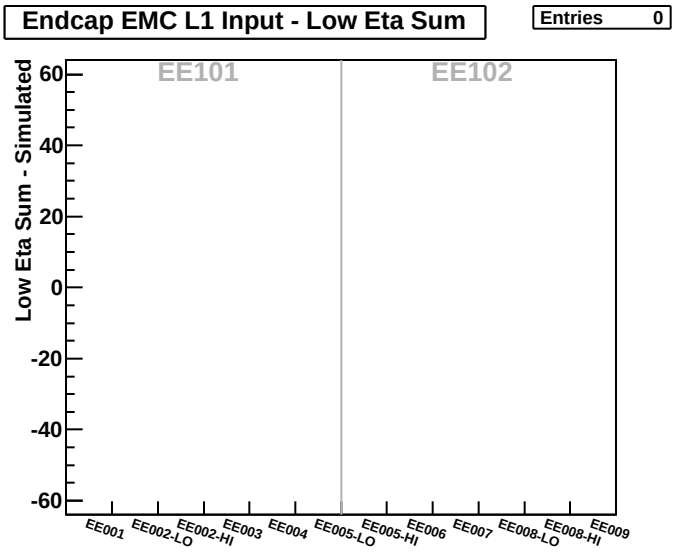

Barrel EMC L1 Input - High Eta Sum
Entries 9494784
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

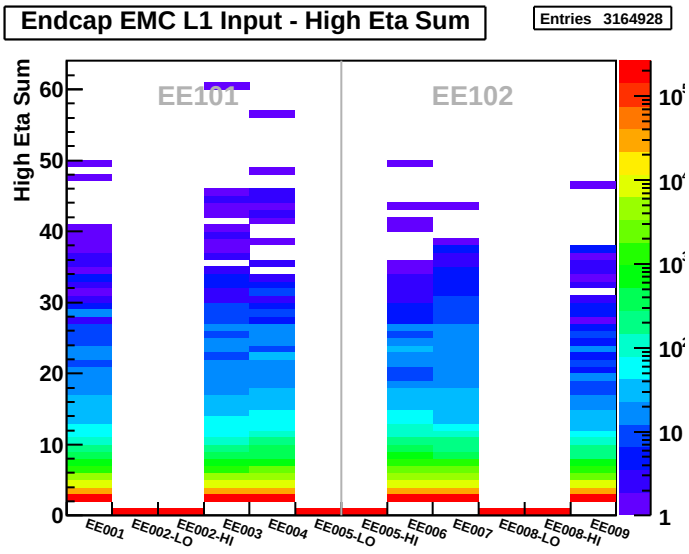

Barrel EMC L1 Input - High Eta Sum
Entries 19
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

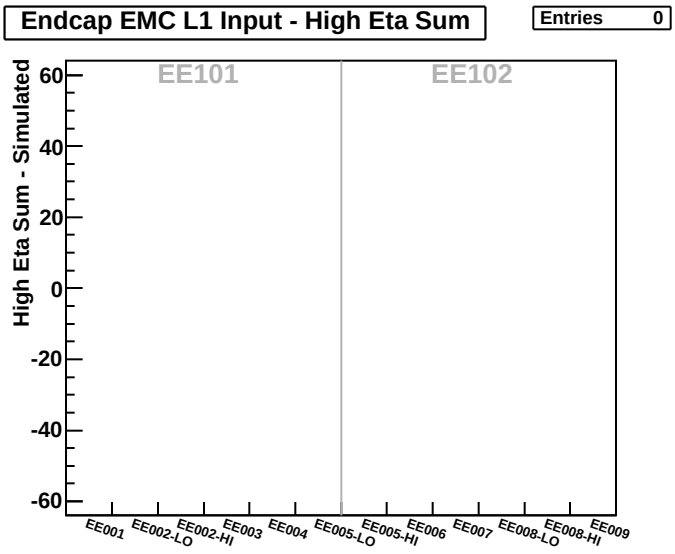

Barrel EMC L1 Input - High Tower Bits
Entries 9494784
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

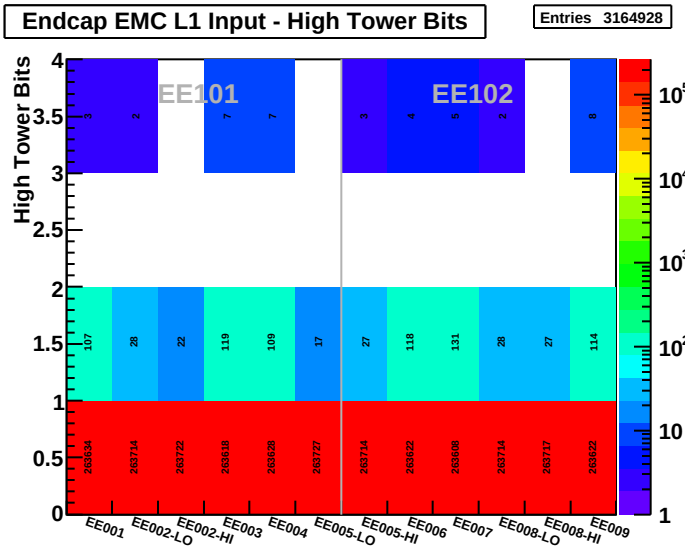

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

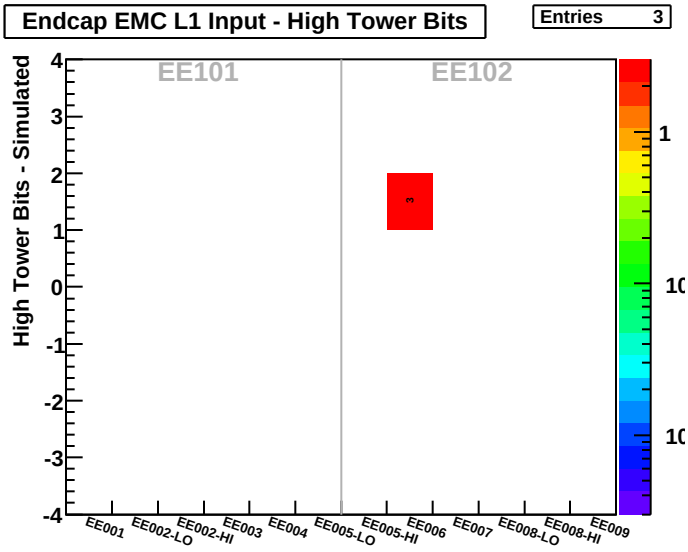

Endcap EMC L1 Input - Low Eta Sum
Entries 3164928
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

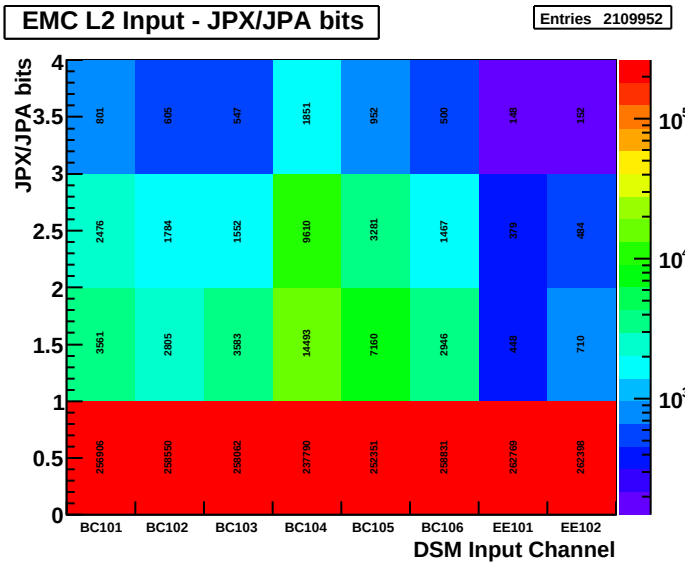

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

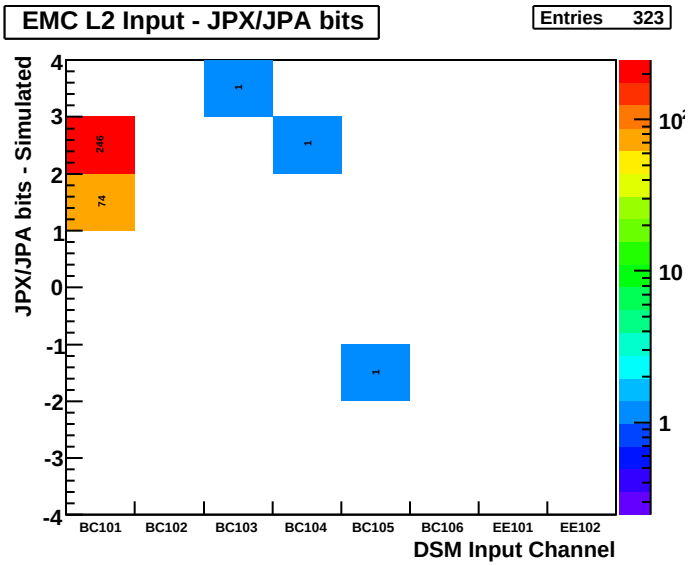

Endcap EMC L1 Input - High Eta Sum
Entries 3164928
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

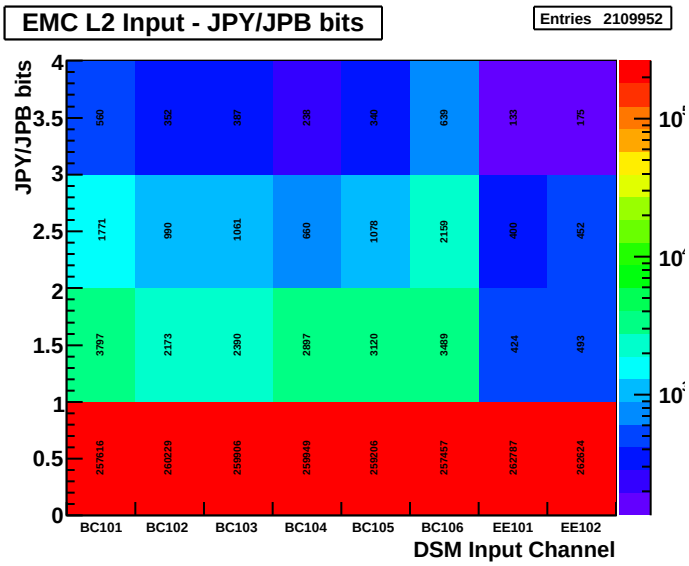

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

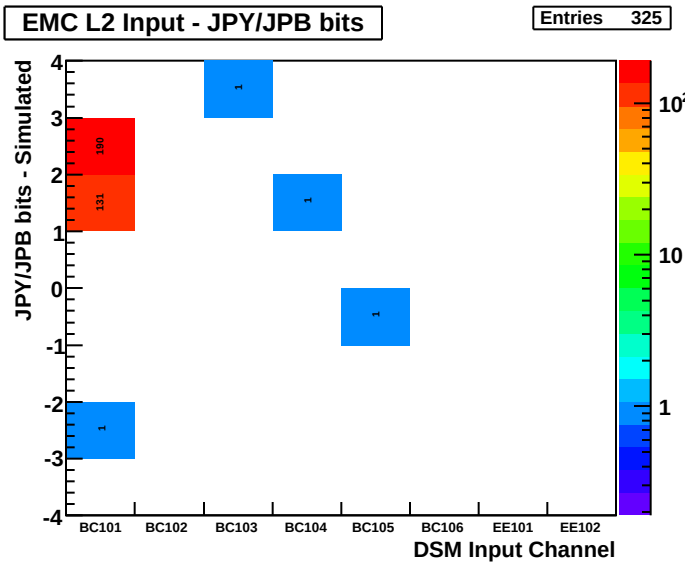

Endcap EMC L1 Input - High Tower Bits
Entries 3164928
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

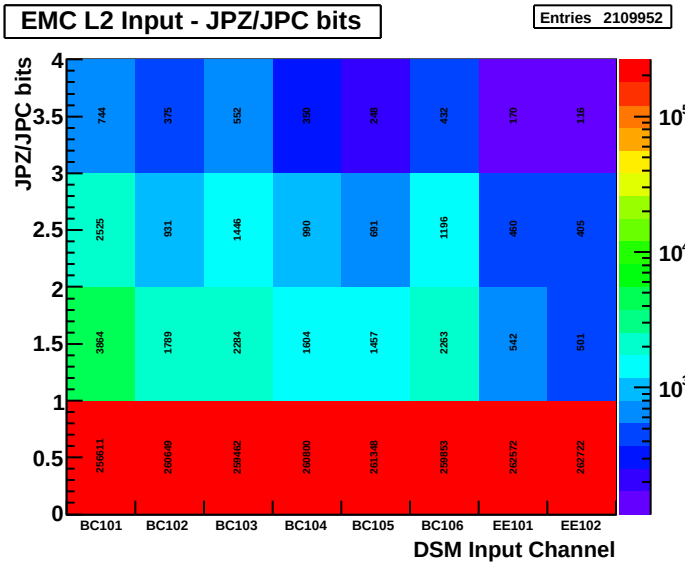

Endcap EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

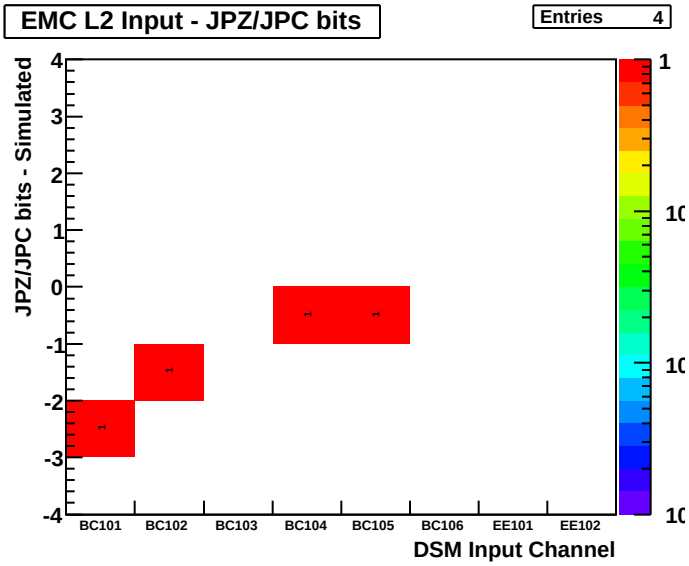

EMC L2 Input - JPX/JPA bits
Entries 2109952
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
801 605 547 1851 952 500 148 152
2476 1784 1552 9610 3281 1467 379 484
3561 2805 3583 14493 7160 2946 448 710
256906 258550 258062 237790 252351 258831 262769 262398

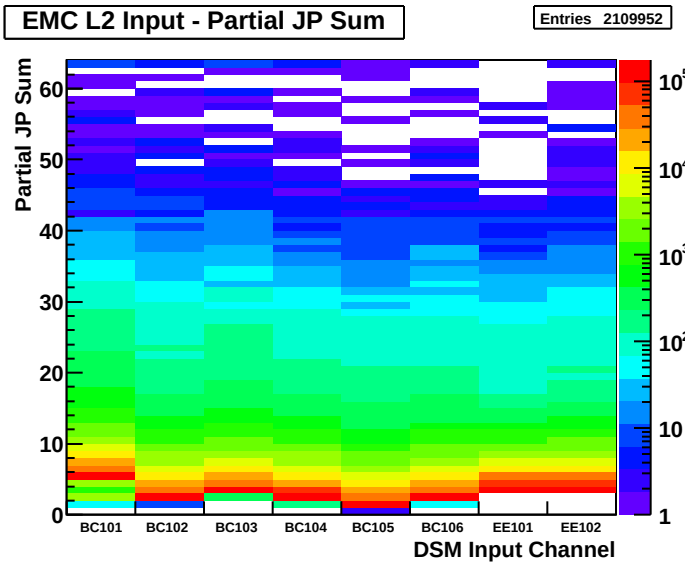

EMC L2 Input - JPX/JPA bits
Entries 323
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
246
74
1
1
1

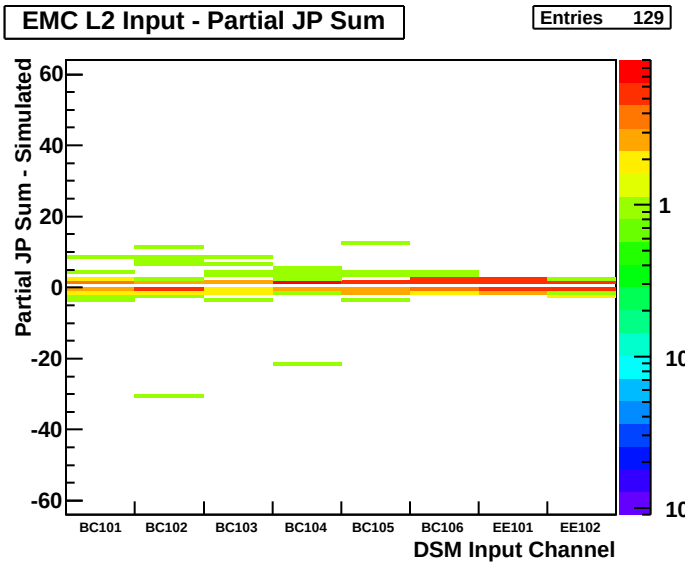

EMC L2 Input - JPY/JPB bits
Entries 2109952
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
560 352 397 238 340 639 133 175
1771 990 1061 660 1078 2159 400 452
3797 2173 2390 2897 3120 3489 424 493
257616 260229 259906 259949 259206 257457 262787 262524

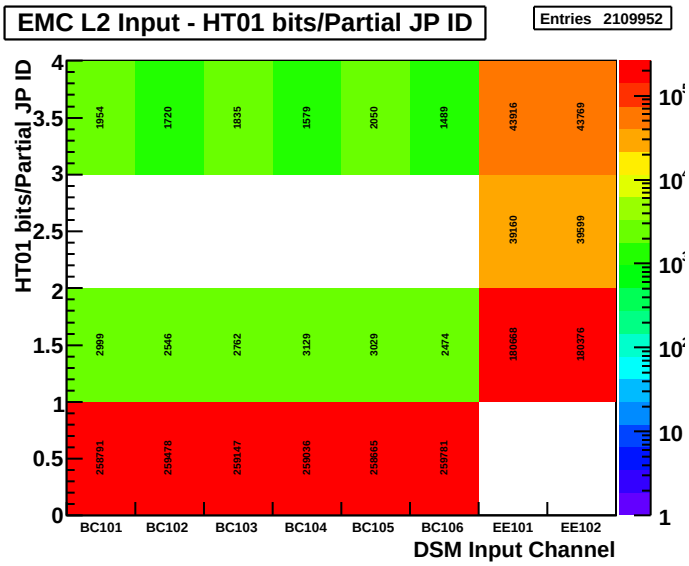

EMC L2 Input - JPY/JPB bits
Entries 325
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
190
131
1
1
1
1

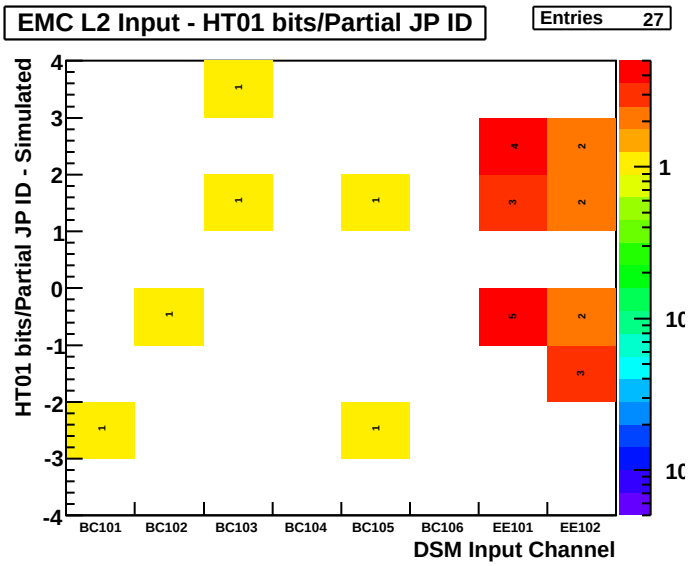

EMC L2 Input - JPZ/JPC bits
Entries 2109952
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
744 375 552 350 248 432 170 116
2525 931 1446 990 691 1196 460 405
3864 1789 2284 1604 1457 2263 542 501
256611 260349 259462 260300 261348 259853 262572 262722

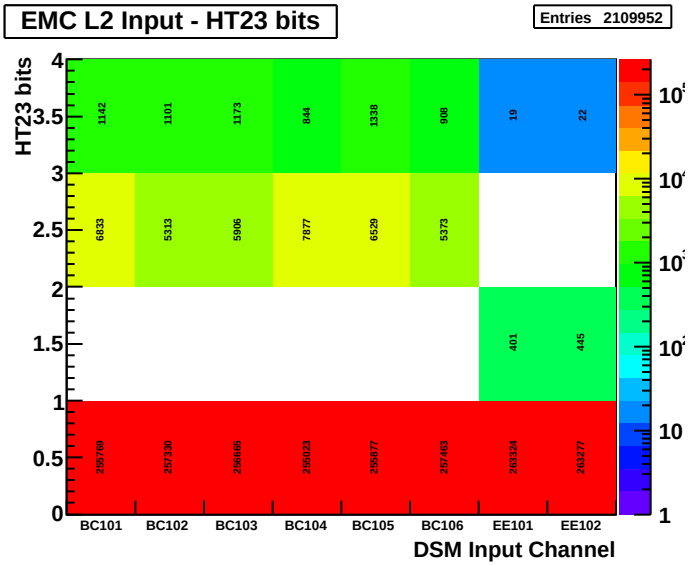

EMC L2 Input - JPZ/JPC bits
Entries 4
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1
1
1

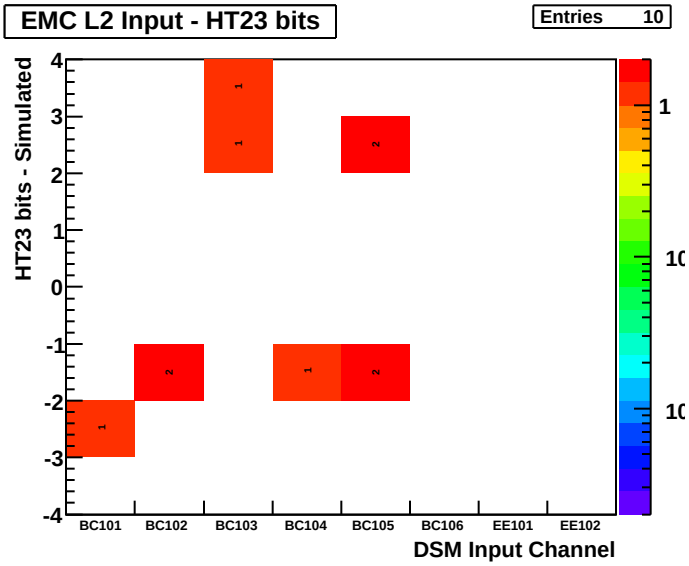

EMC L2 Input - Partial JP Sum
Entries 2109952
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

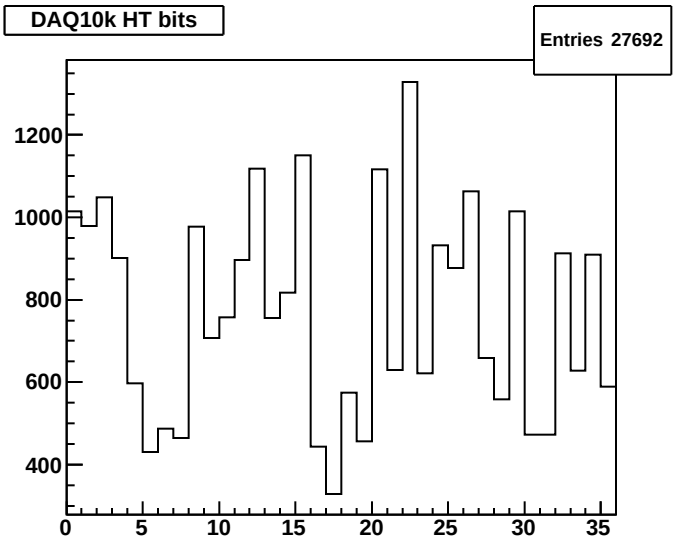

EMC L2 Input - Partial JP Sum
Entries 129
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

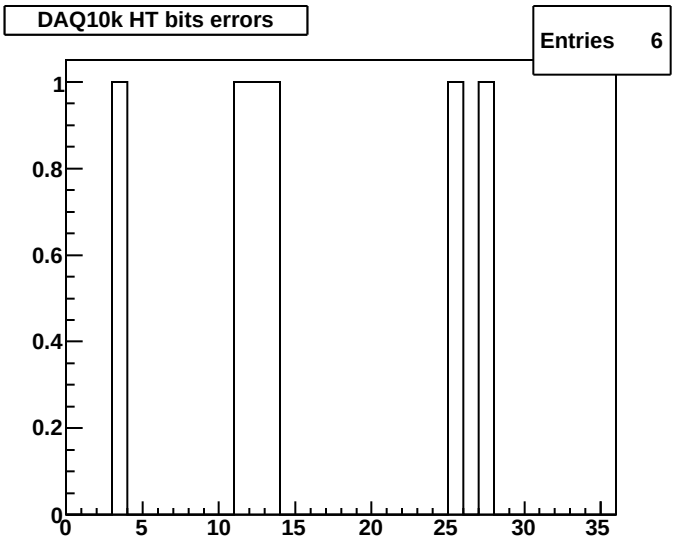

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2109952
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

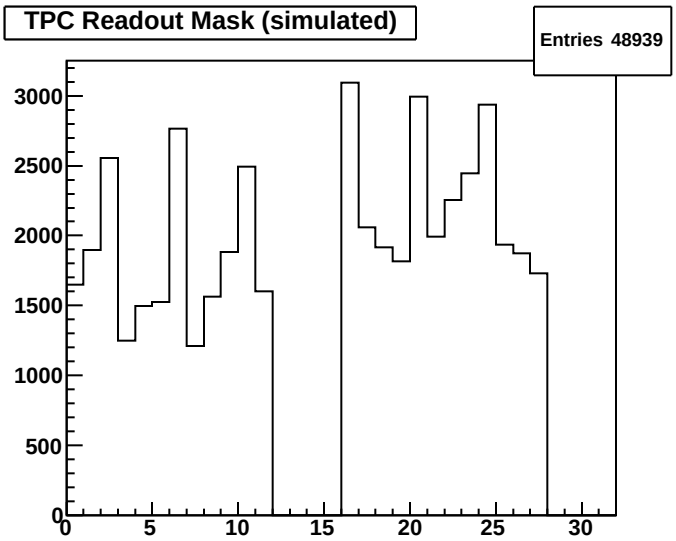

EMC L2 Input - HT01 bits/Partial JP ID
Entries 27
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

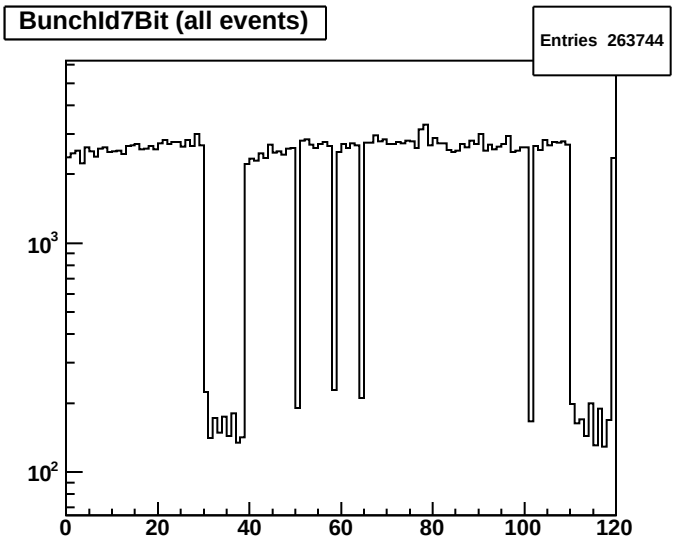

EMC L2 Input - HT23 bits
Entries 2109952
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

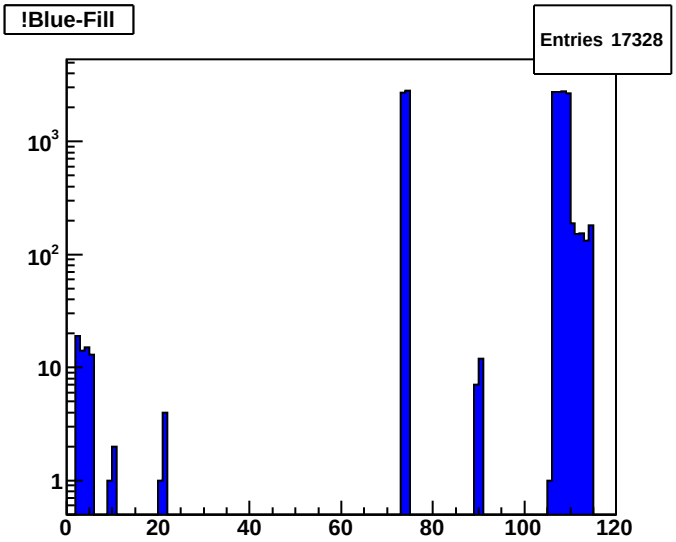

EMC L2 Input - HT23 bits
Entries 10
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

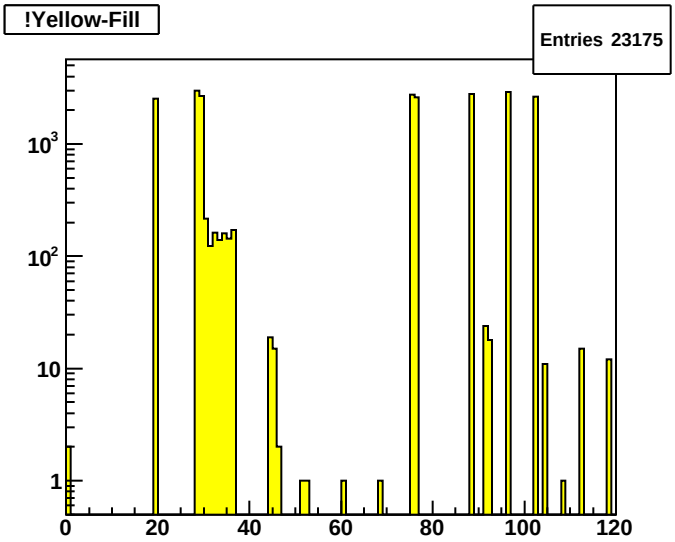

DAQ10k HT bits
Entries 27692

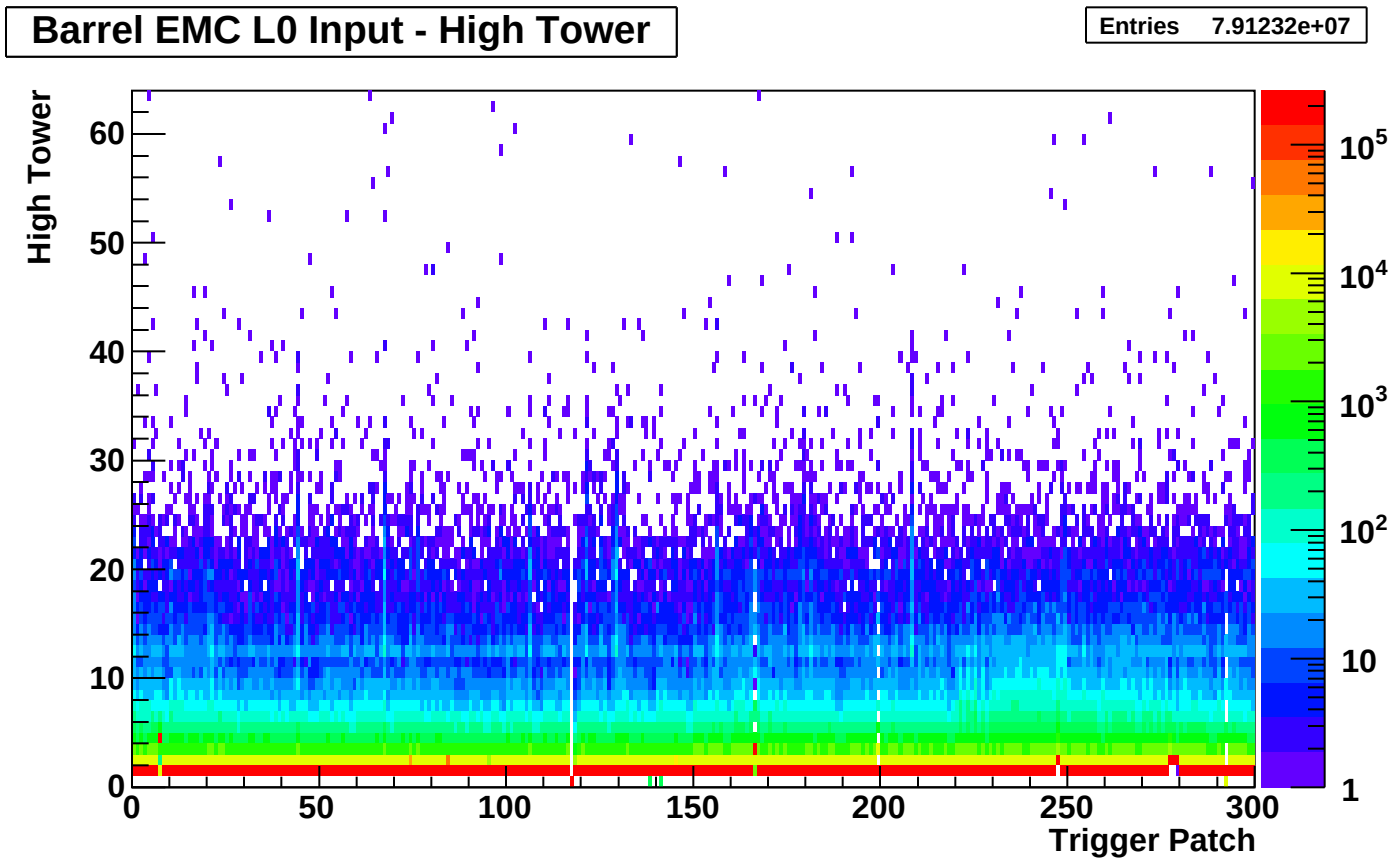

DAQ10k HT bits errors
Entries 6

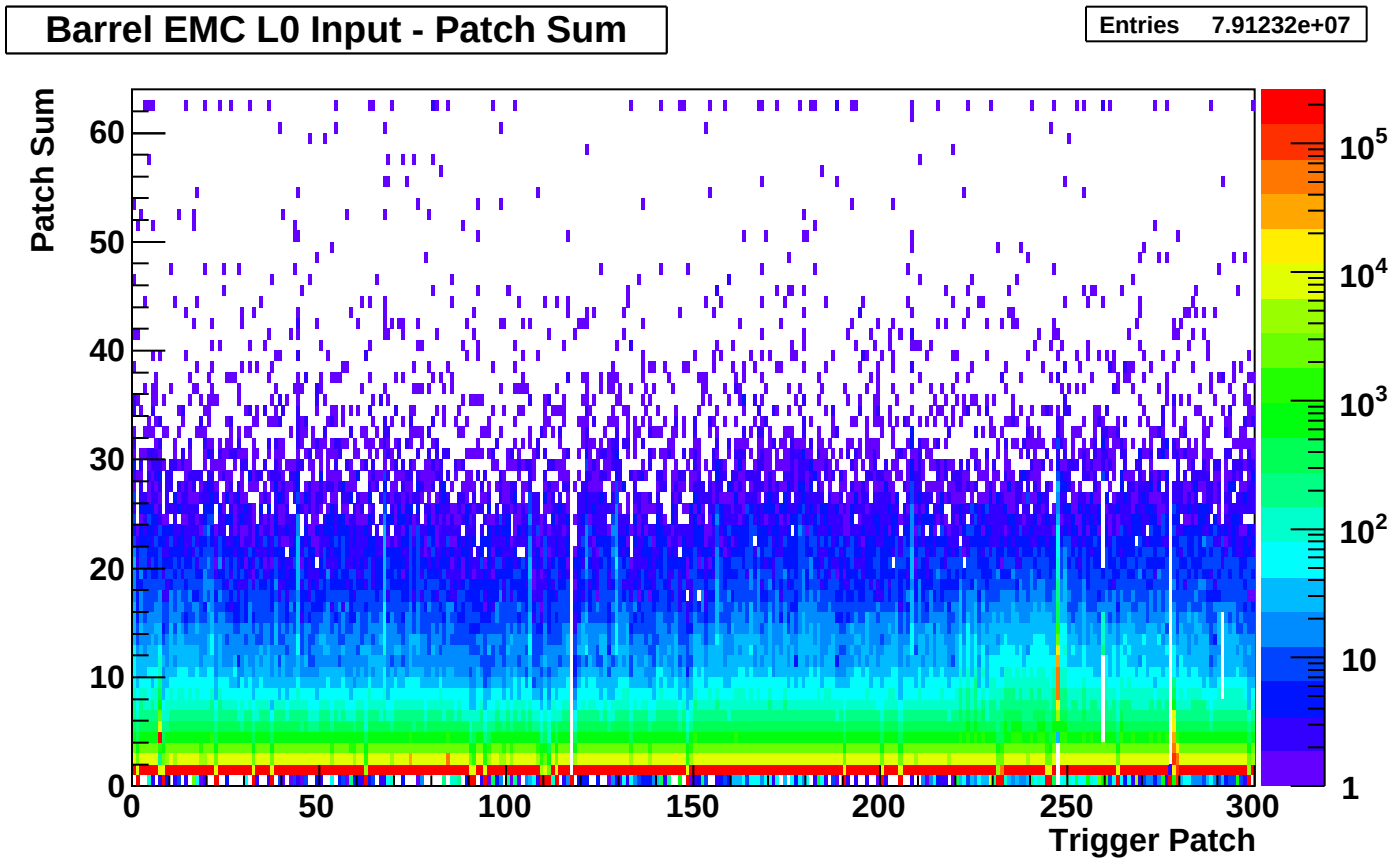

TPC Readout Mask (simulated)
Entries 48939

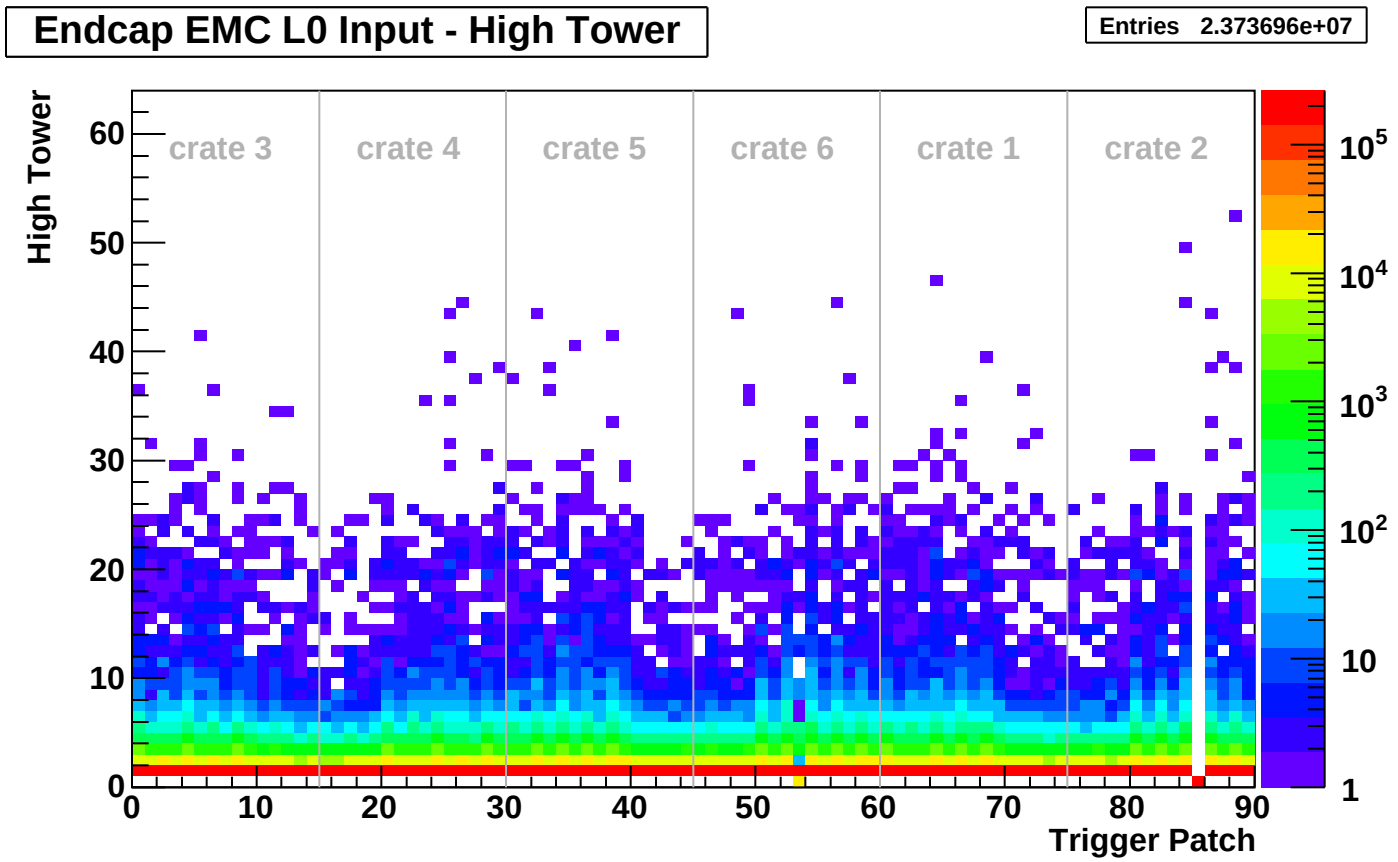

BunchId7Bit (all events)
Entries 263744

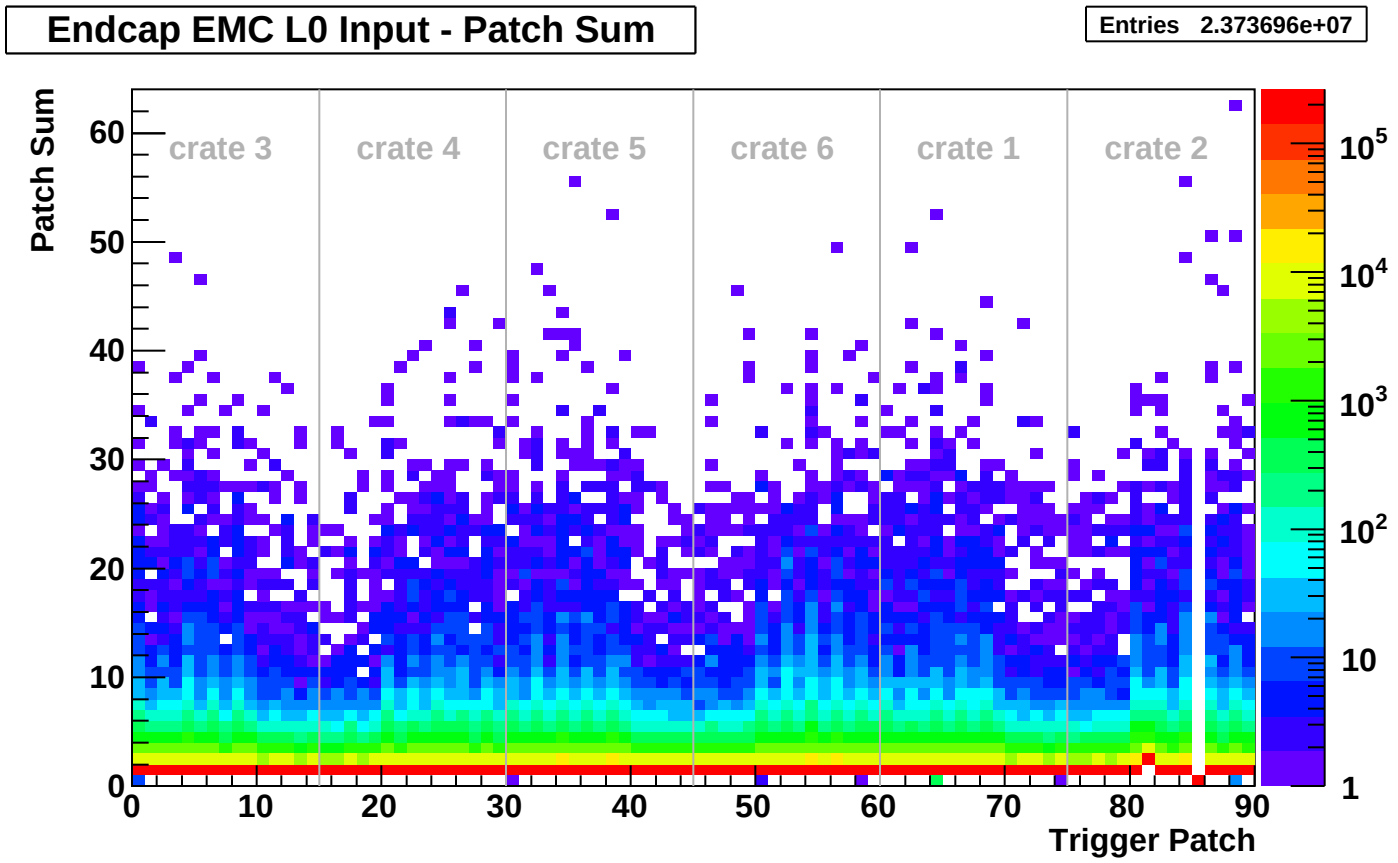

!Blue-Fill
Entries 17328

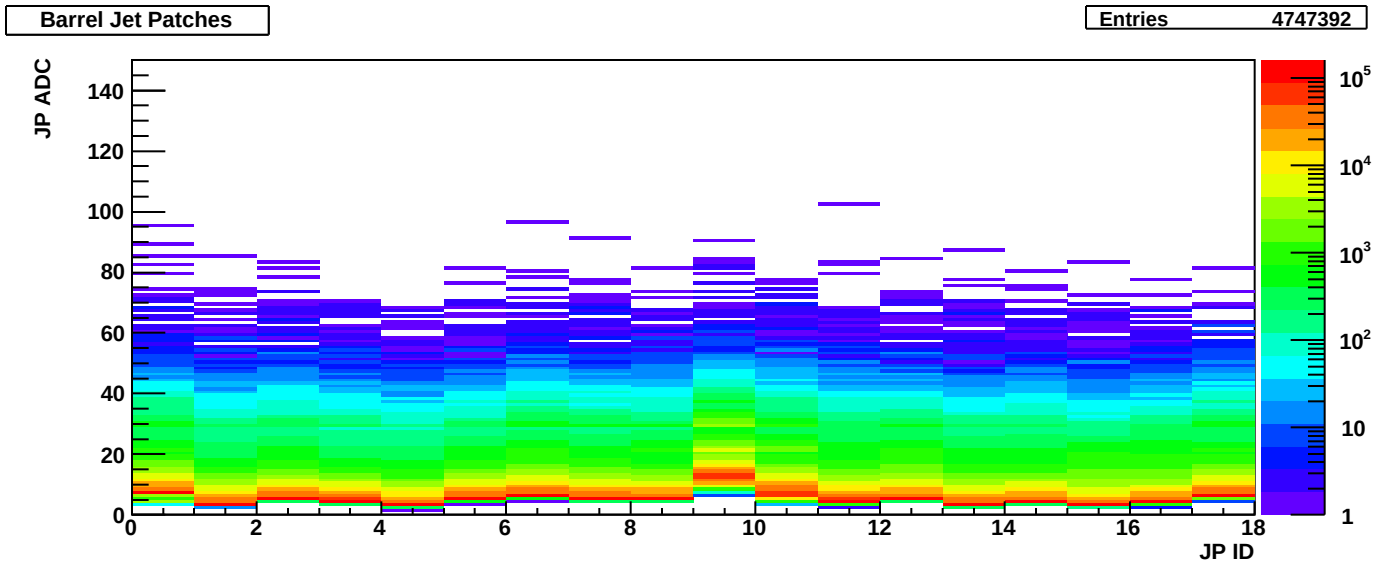

!Yellow-Fill
Entries 23175

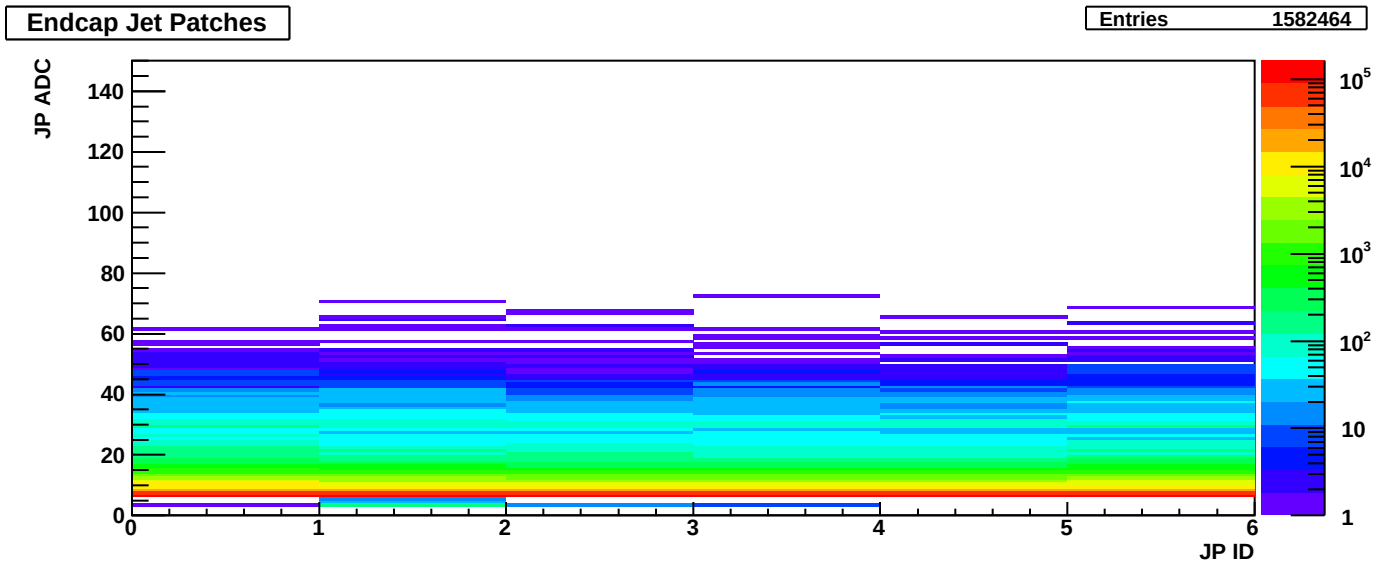

Barrel EMC L0 Input - High Tower
Entries 7.91232e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

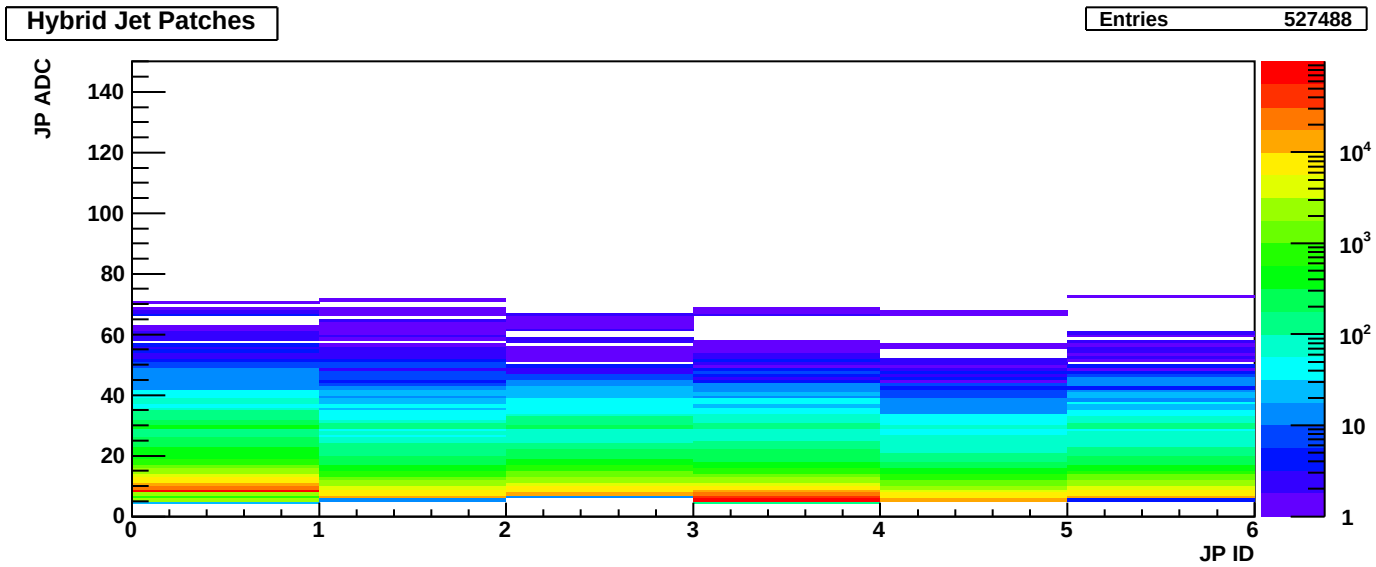

Barrel EMC L0 Input - Patch Sum
Entries 7.91232e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

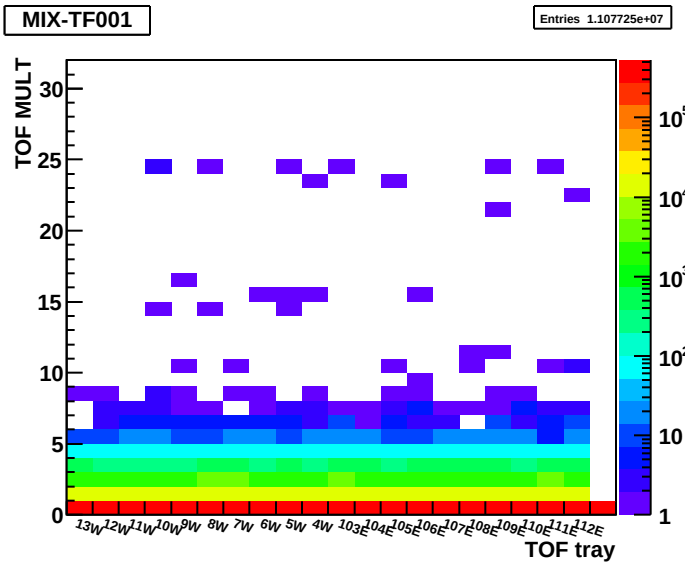

Endcap EMC L0 Input - High Tower
Entries 2.373696e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

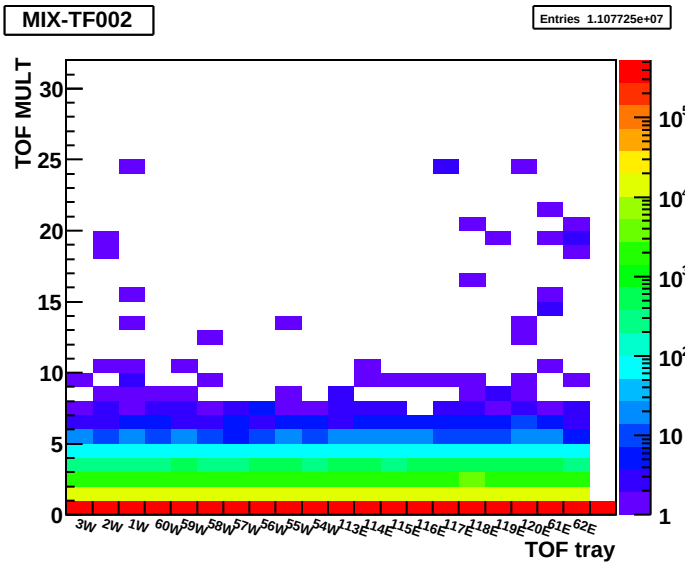

Endcap EMC L0 Input - Patch Sum
Entries 2.373696e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

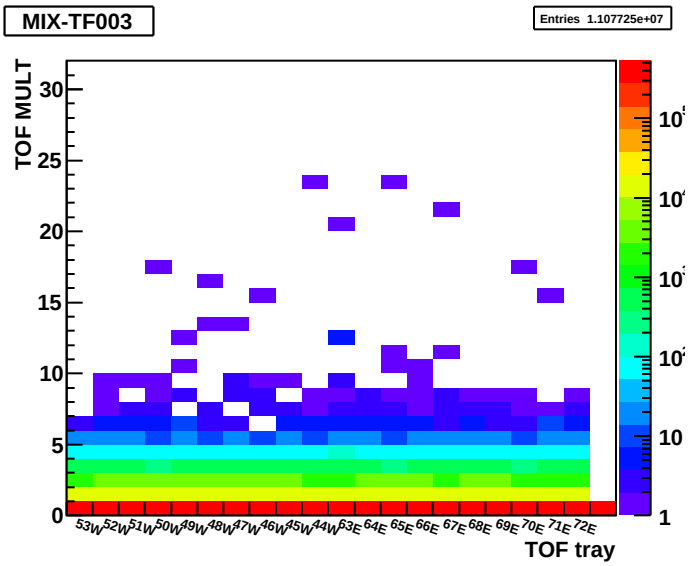

Barrel Jet Patches
Entries 4747392
JP ADC
JP ID

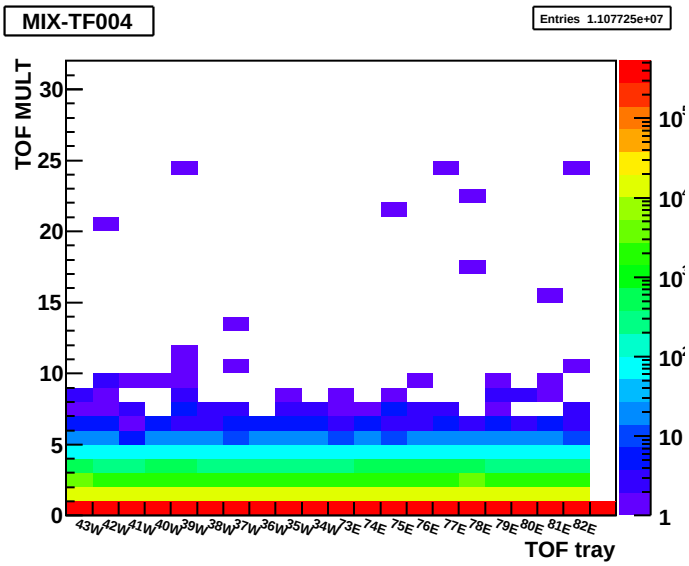

Endcap Jet Patches
Entries 1582464
JP ADC
JP ID

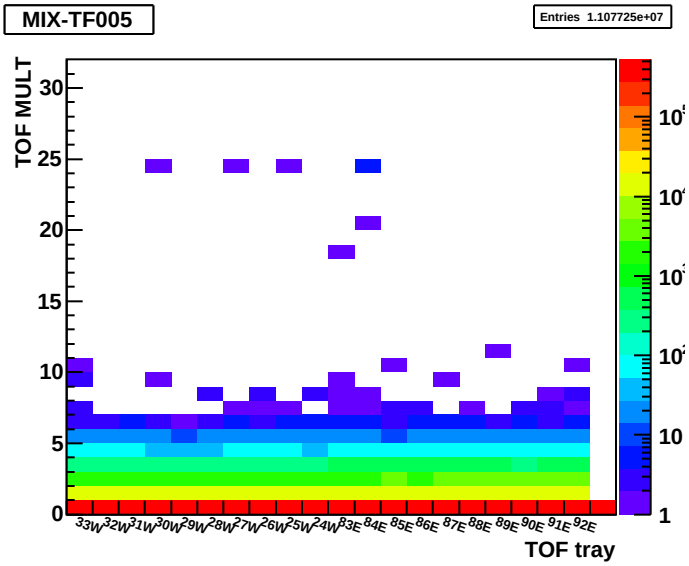

Hybrid Jet Patches
Entries 527488
JP ADC
JP ID

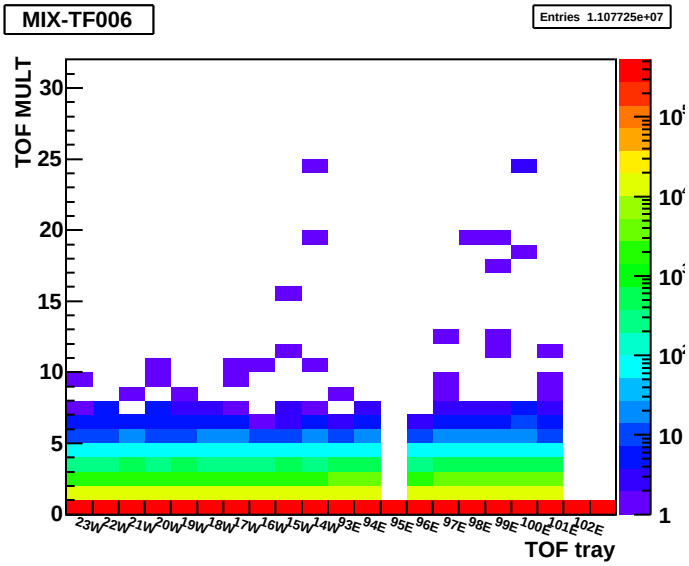

MIX-TF001
Entries 1.107725e+07
TOF MULT
TOF tray

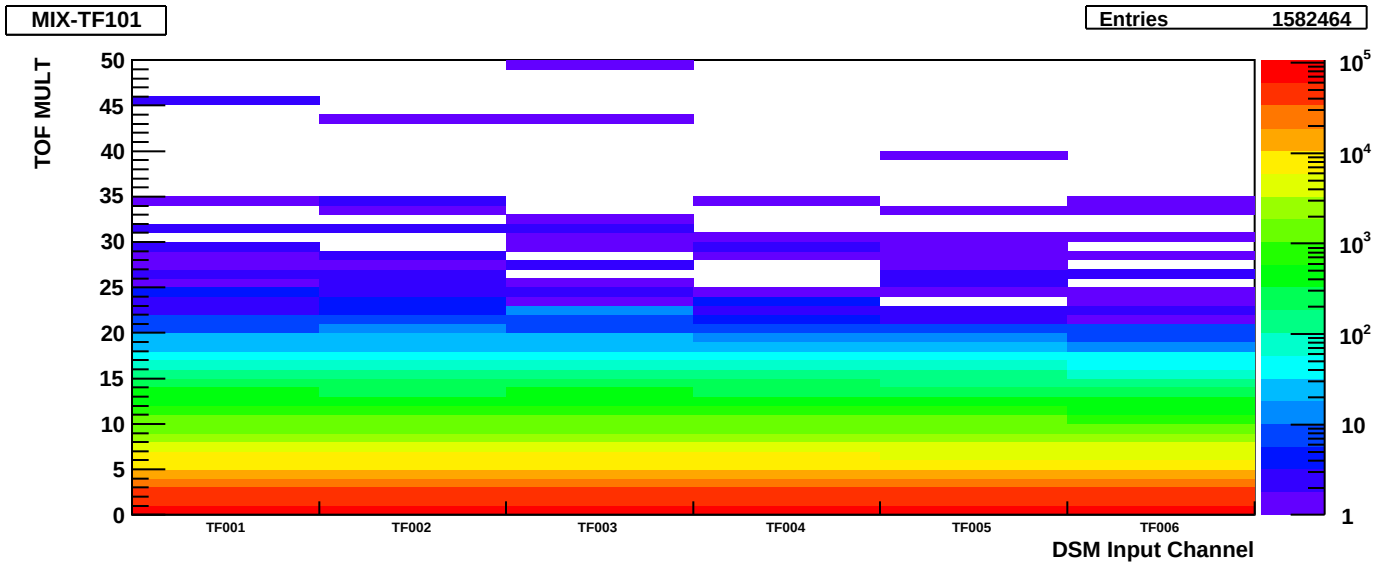

MIX-TF002
Entries 1.107725e+07
TOF MULT
TOF tray

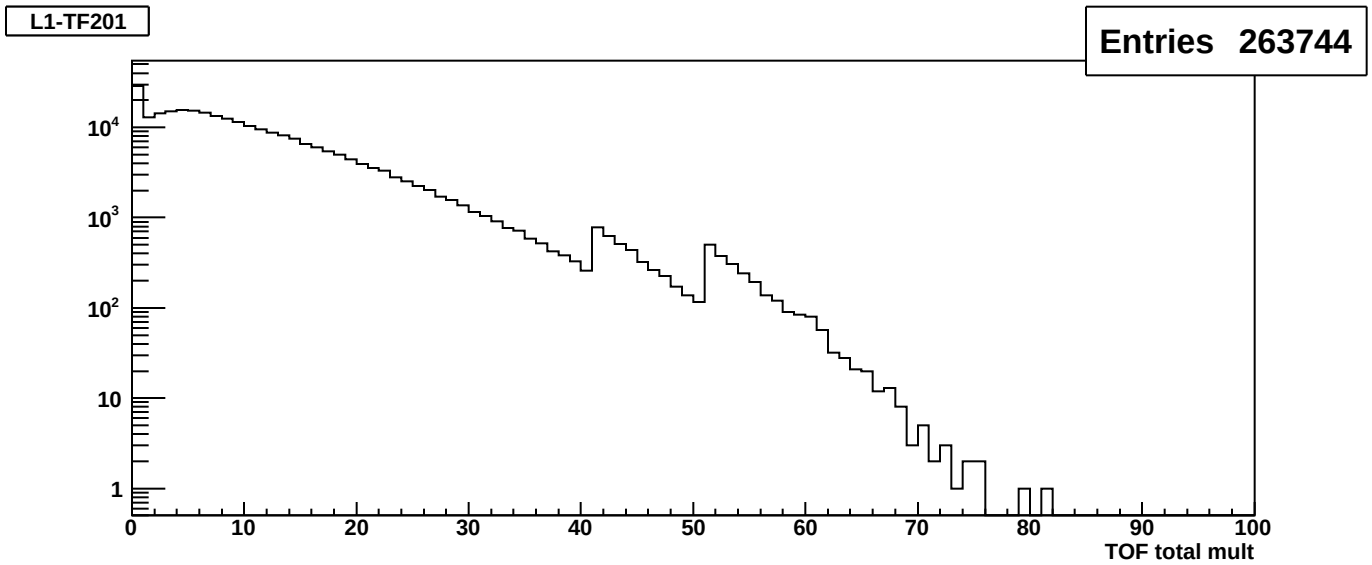

MIX-TF003
Entries 1.107725e+07
TOF MULT
TOF tray

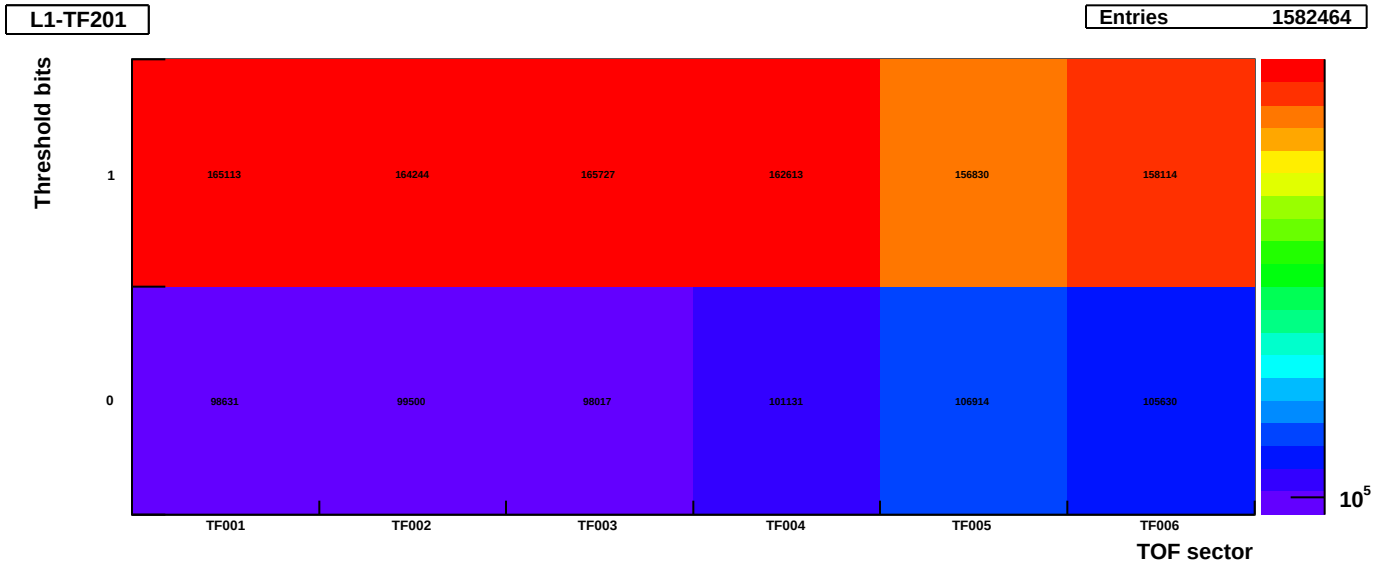

MIX-TF004
Entries 1.107725e+07
TOF MULT
TOF tray

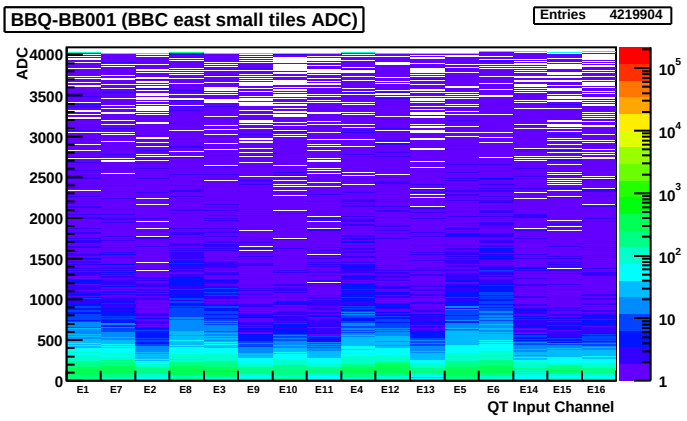

MIX-TF005
Entries 1.107725e+07
TOF MULT
TOF tray

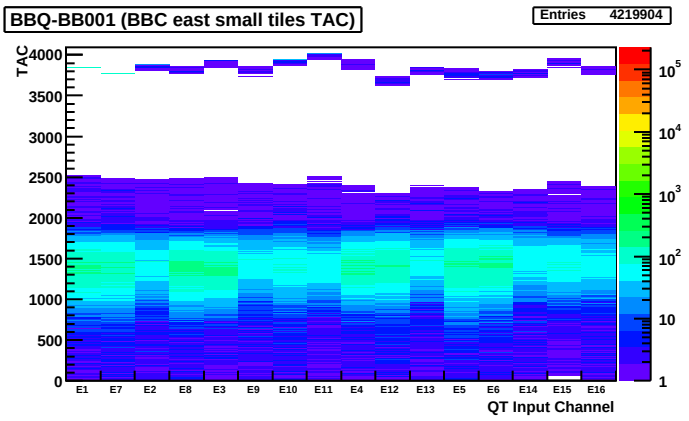

MIX-TF006
Entries 1.107725e+07
TOF MULT
TOF tray

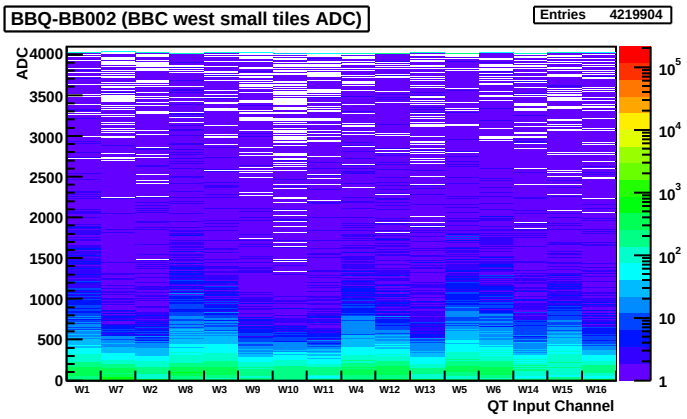

MIX-TF101
Entries 1582464
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

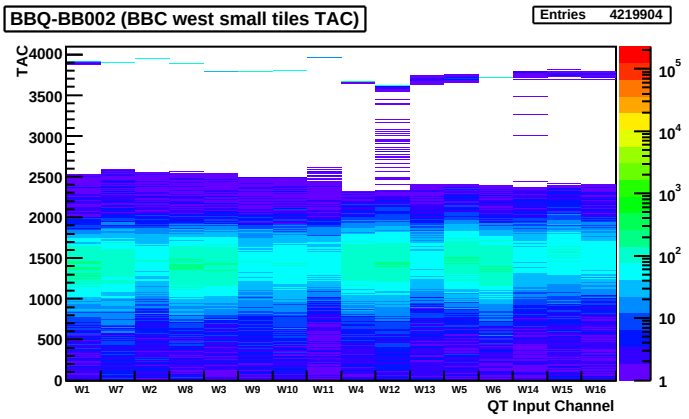

L1-TF201
Entries 263744
TOF total mult

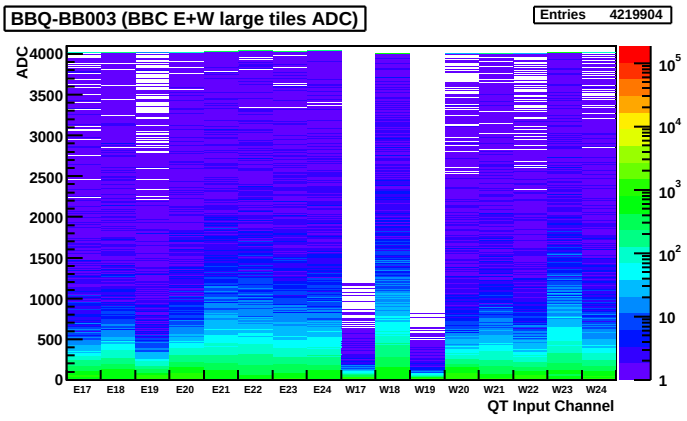

L1-TF201
Entries 1582464
Threshold bits
165113
164244
165727
162613
156830
158114
98631
99500
98017
101131
106914
105630
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

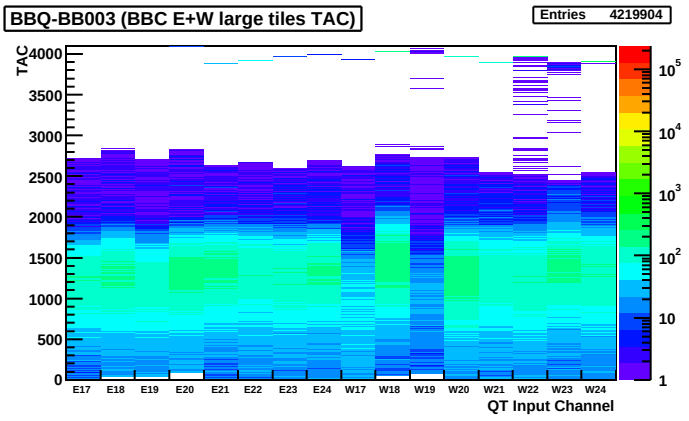

BBQ-BB001 (BBC east small tiles ADC)
Entries 4219904
ADC
QT Input Channel

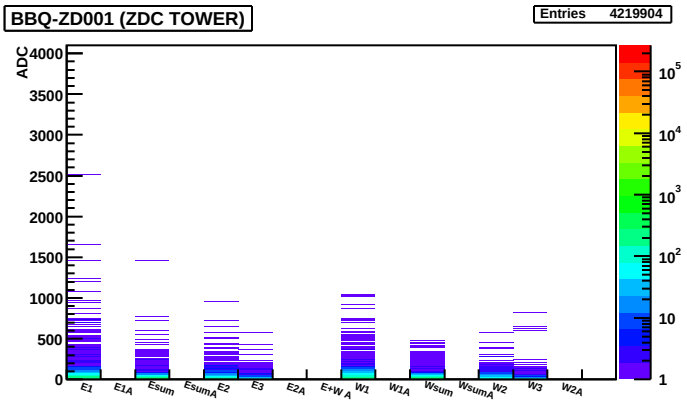

BBQ-BB001 (BBC east small tiles TAC)
Entries 4219904
TAC
QT Input Channel

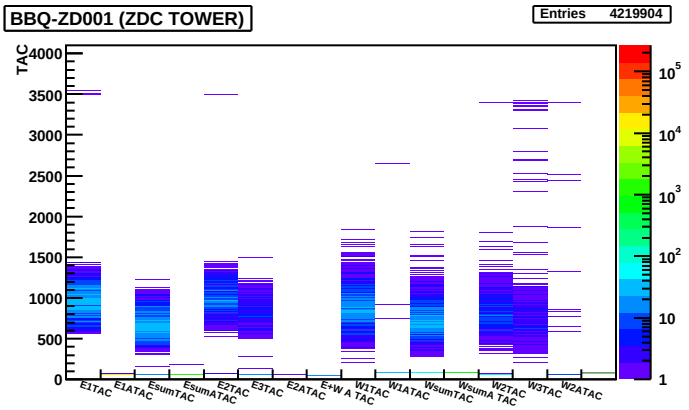

BBQ-BB002 (BBC west small tiles ADC)
Entries 4219904
ADC
QT Input Channel

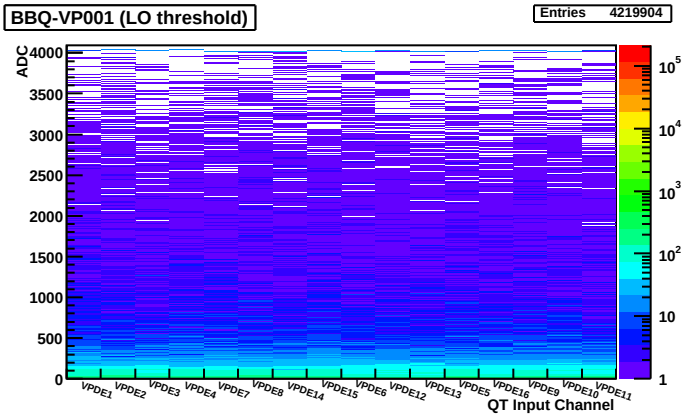

BBQ-BB002 (BBC west small tiles TAC)
Entries 4219904
TAC
QT Input Channel

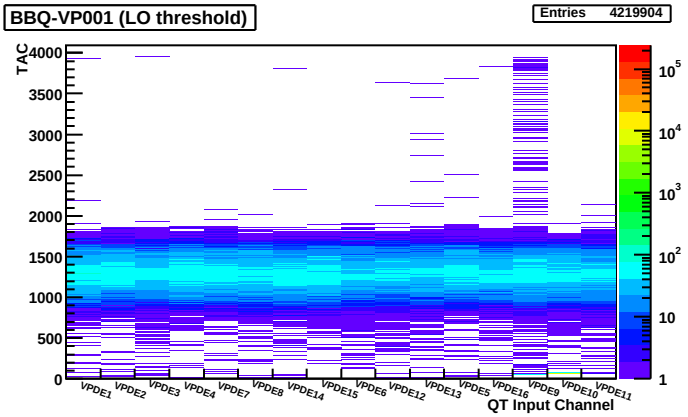

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4219904
ADC
QT Input Channel

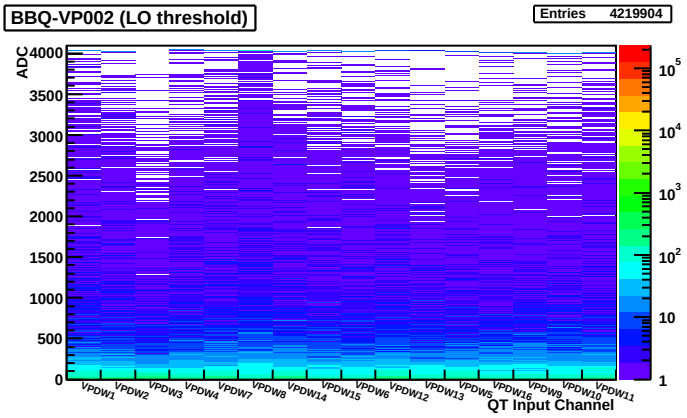

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4219904
TAC
QT Input Channel

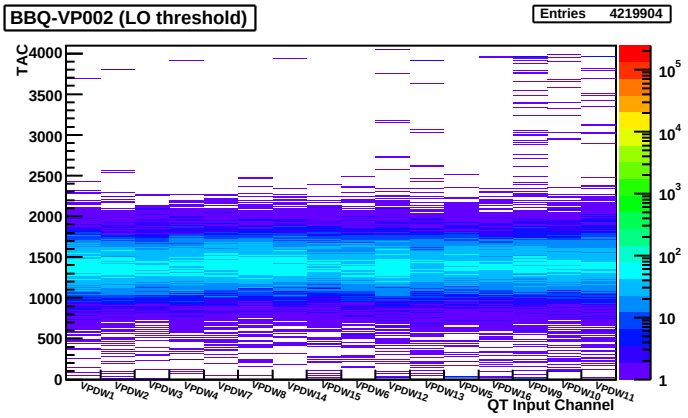

BBQ-ZD001 (ZDC TOWER)
Entries 4219904
ADC

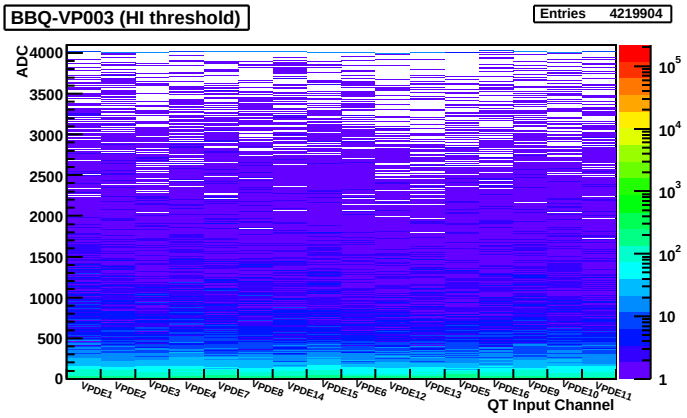

BBQ-ZD001 (ZDC TOWER)
Entries 4219904
TAC

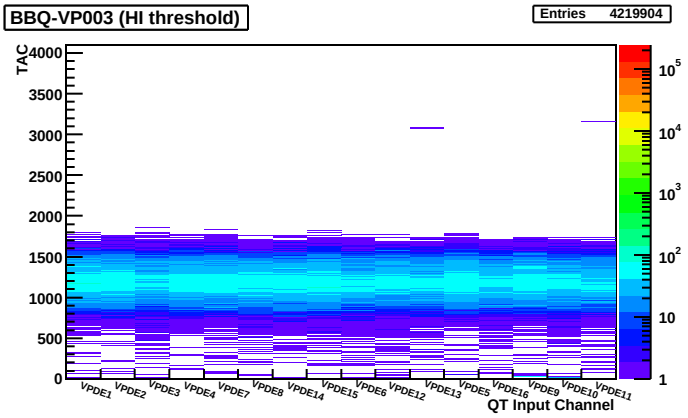

BBQ-VP001 (LO threshold)
Entries 4219904
ADC
QT Input Channel

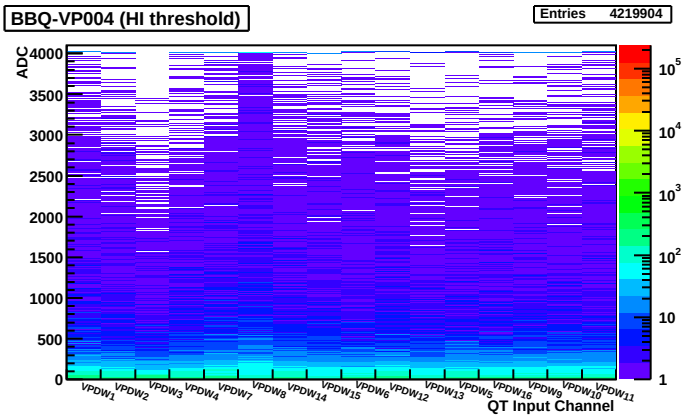

BBQ-VP001 (LO threshold)
Entries 4219904
TAC
QT Input Channel

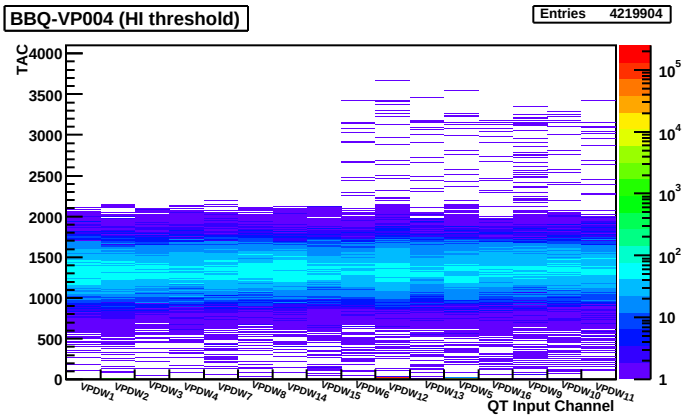

BBQ-VP002 (LO threshold)
Entries 4219904
ADC
QT Input Channel

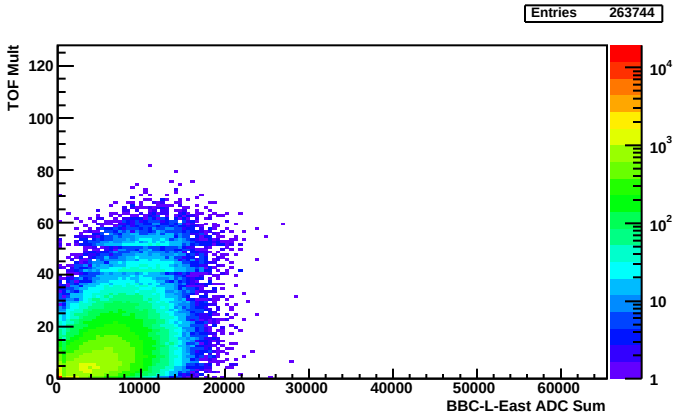

BBQ-VP002 (LO threshold)
Entries 4219904
TAC
QT Input Channel

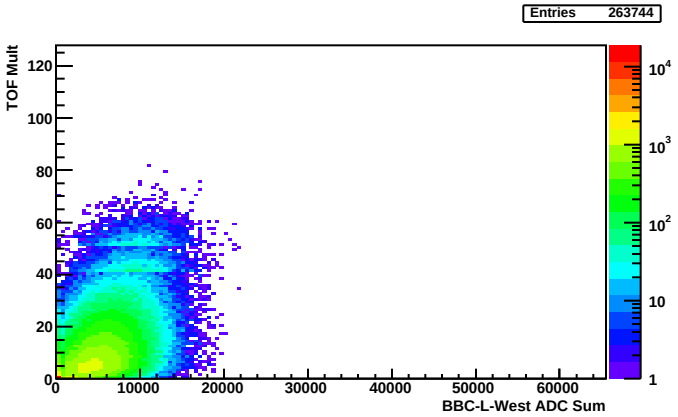

BBQ-VP003 (HI threshold)
Entries 4219904
ADC
QT Input Channel

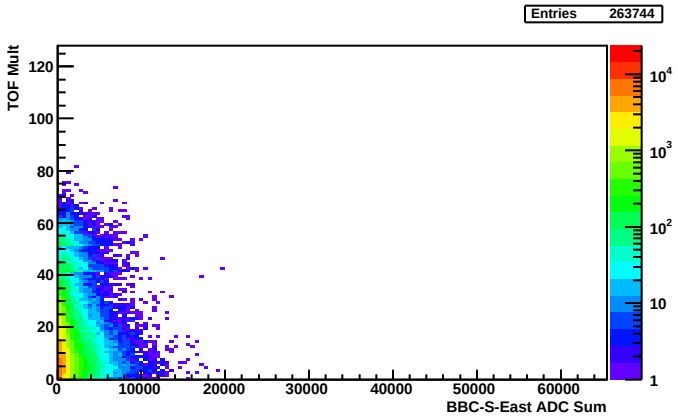

BBQ-VP003 (HI threshold)
Entries 4219904
TAC
QT Input Channel

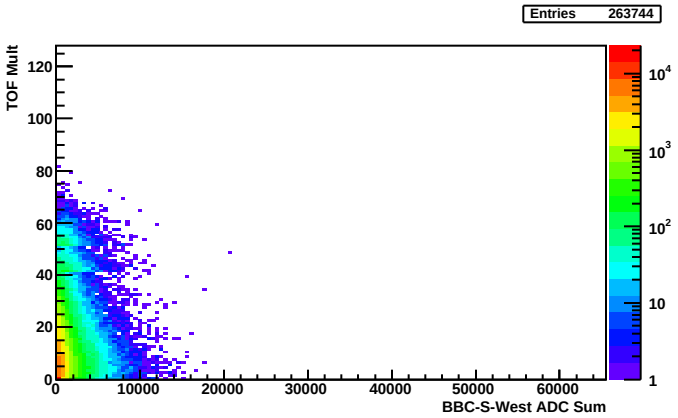

BBQ-VP004 (HI threshold)
Entries 4219904
ADC
QT Input Channel

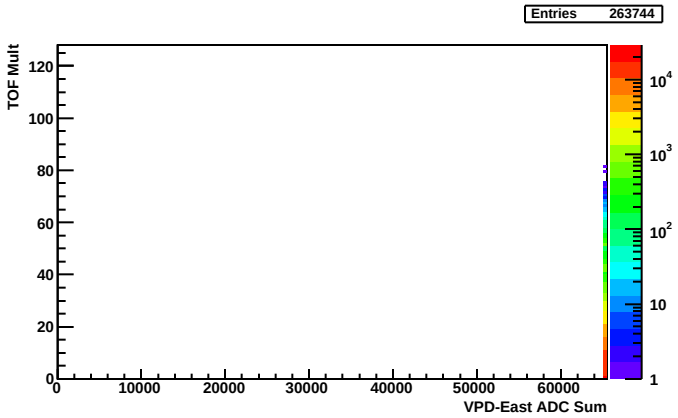

BBQ-VP004 (HI threshold)
Entries 4219904
TAC
QT Input Channel

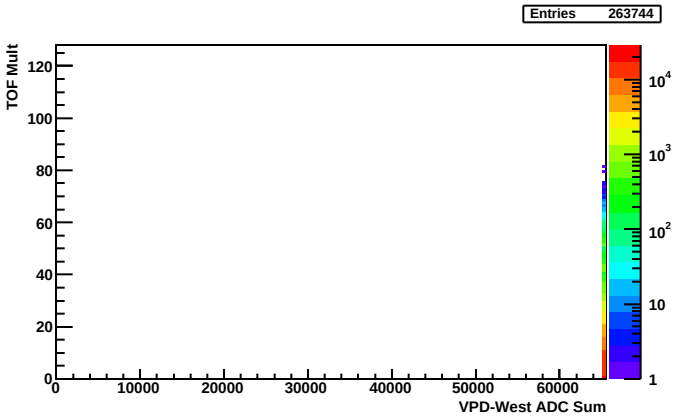

Entries 263744
TOF Mult
BBC-L-East ADC Sum

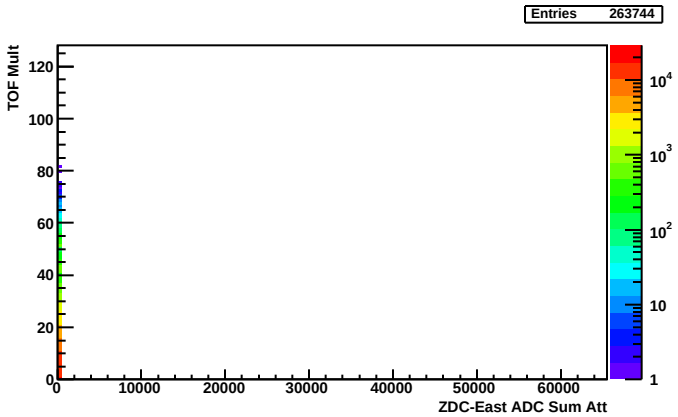

Entries 263744
TOF Mult
BBC-L-West ADC Sum

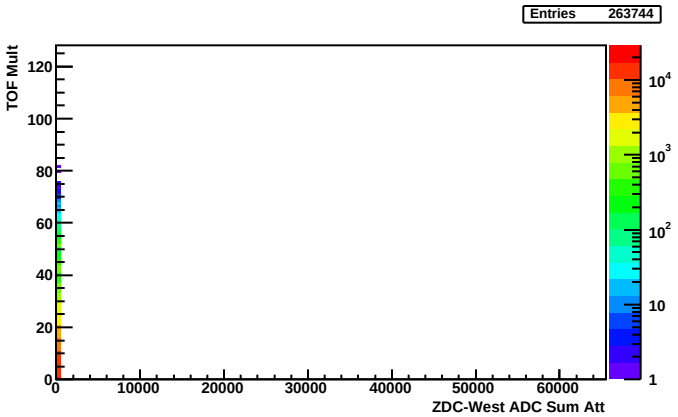

Entries 263744
TOF Mult
BBC-S-East ADC Sum

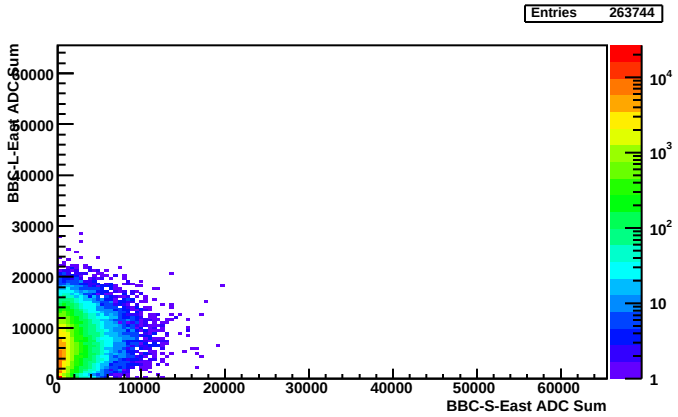

Entries 263744
TOF Mult
BBC-S-West ADC Sum

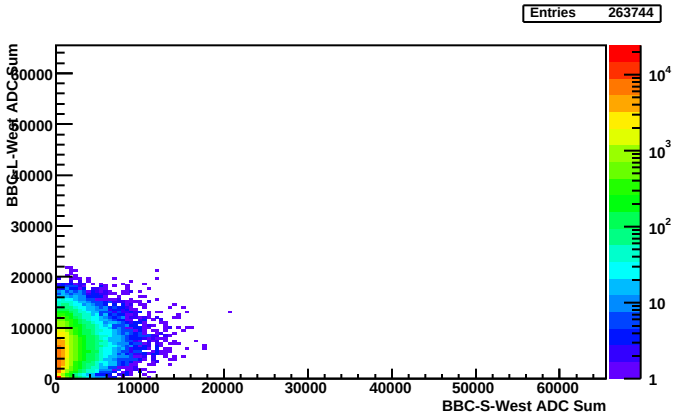

Entries 263744
TOF Mult
VPD-East ADC Sum

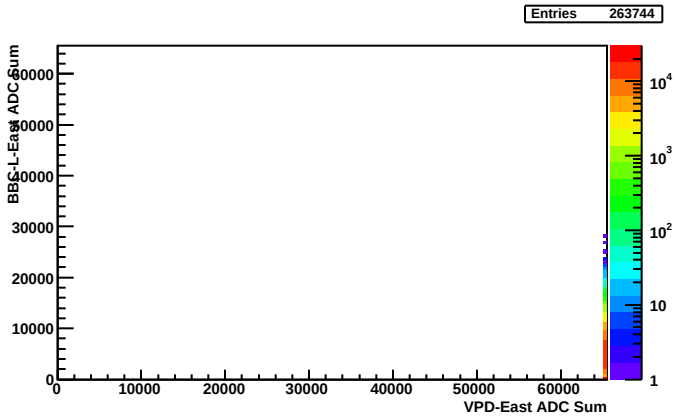

Entries 263744
TOF Mult
VPD-West ADC Sum

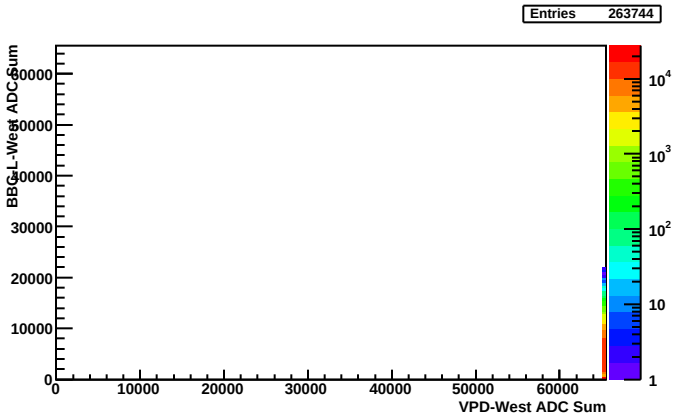

Entries 263744
TOF Mult
ZDC-East ADC Sum Att

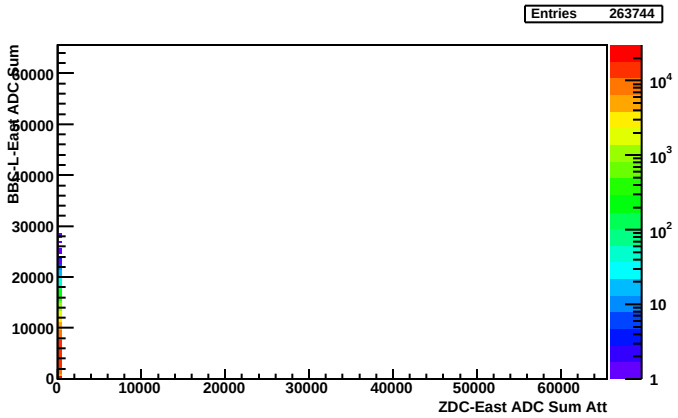

Entries 263744
TOF Mult
ZDC-West ADC Sum Att

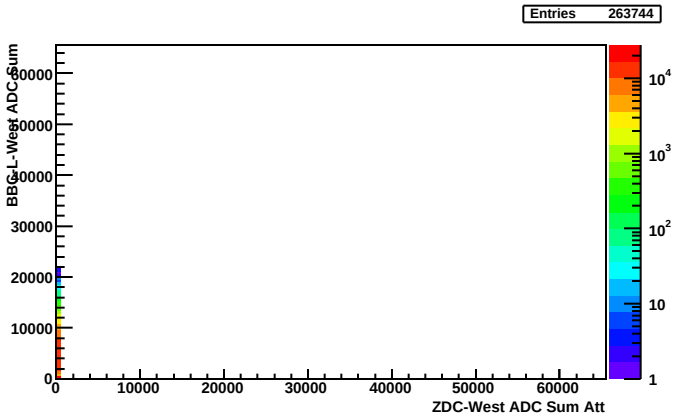

Entries 263744
BBC-L-East ADC Sum
BBC-S-East ADC Sum

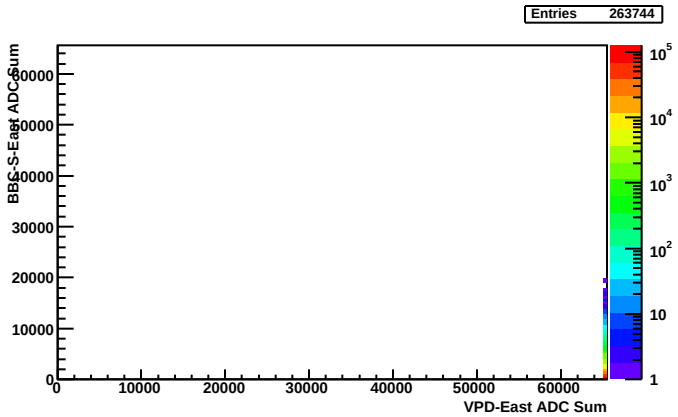

Entries 263744
BBC-L-West ADC Sum
BBC-S-West ADC Sum

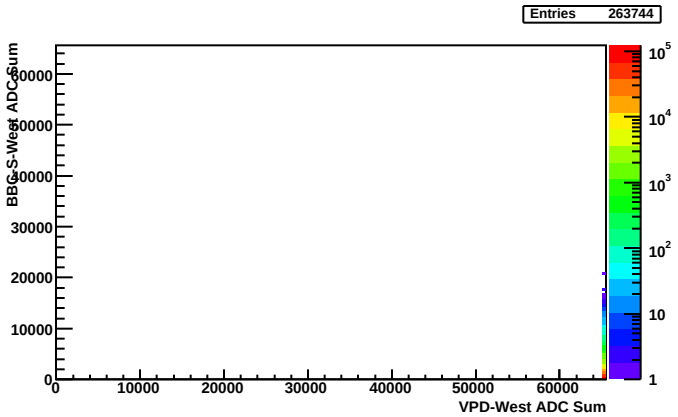

Entries 263744
BBC-L-East ADC Sum
VPD-East ADC Sum

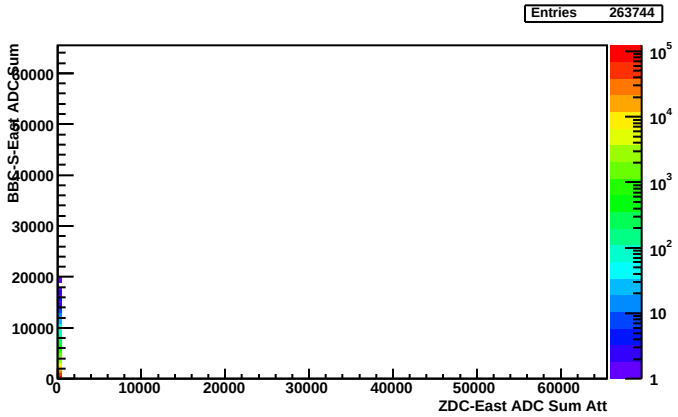

Entries 263744
BBC-L-West ADC Sum
VPD-West ADC Sum

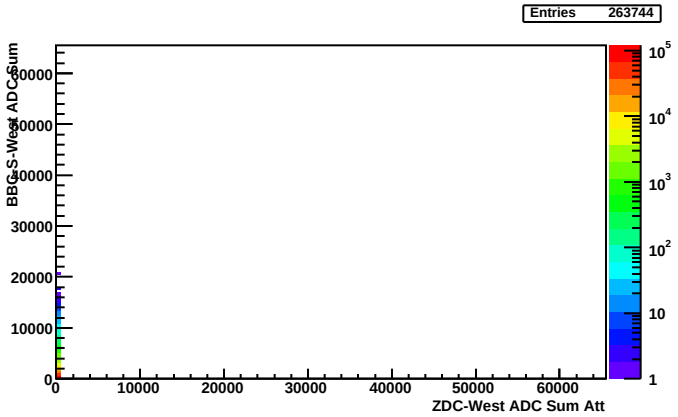

Entries 263744
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

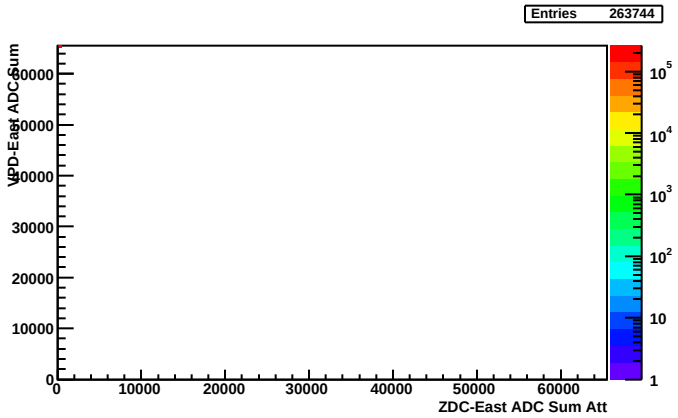

Entries 263744
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

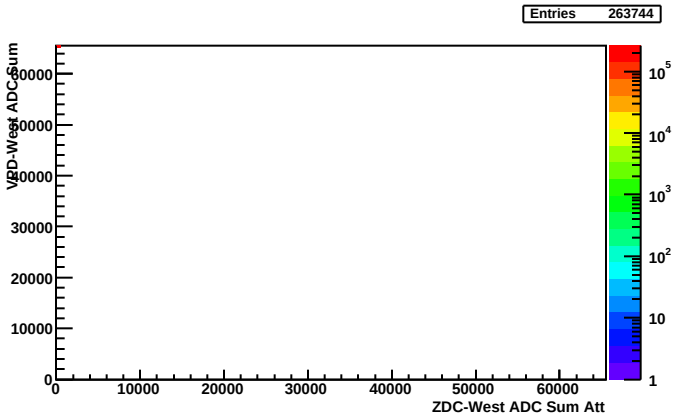

Entries 263744
BBC-S-East ADC Sum
VPD-East ADC Sum

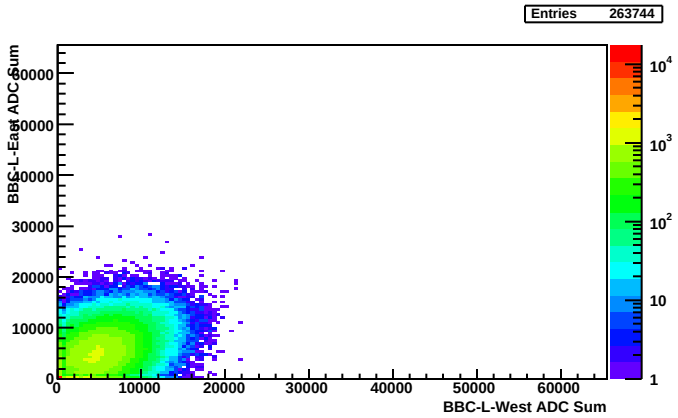

Entries 263744
BBC-S-West ADC Sum
VPD-West ADC Sum

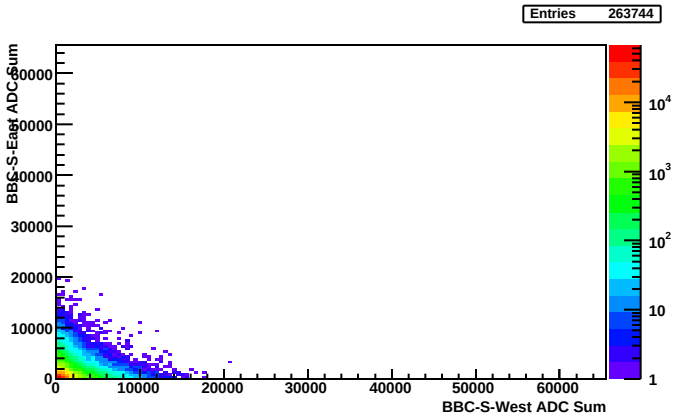

Entries 263744
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

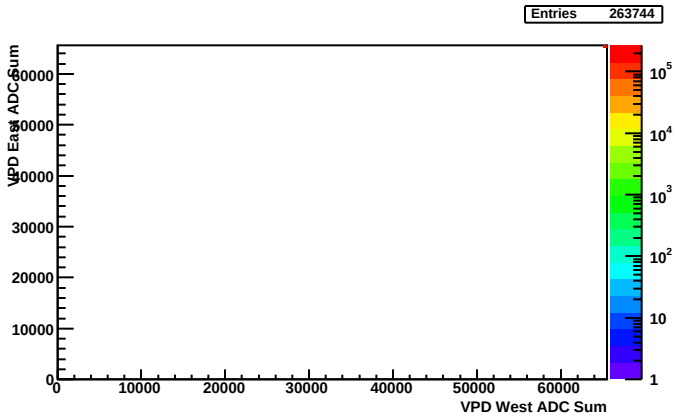

Entries 263744
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

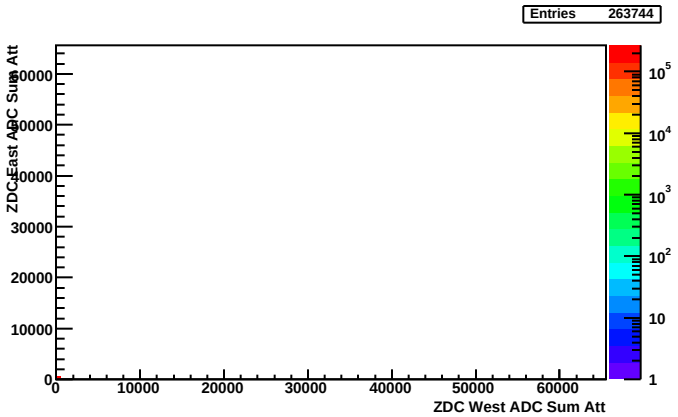

Entries 263744
VPD-East ADC Sum
ZDC-East ADC Sum Att

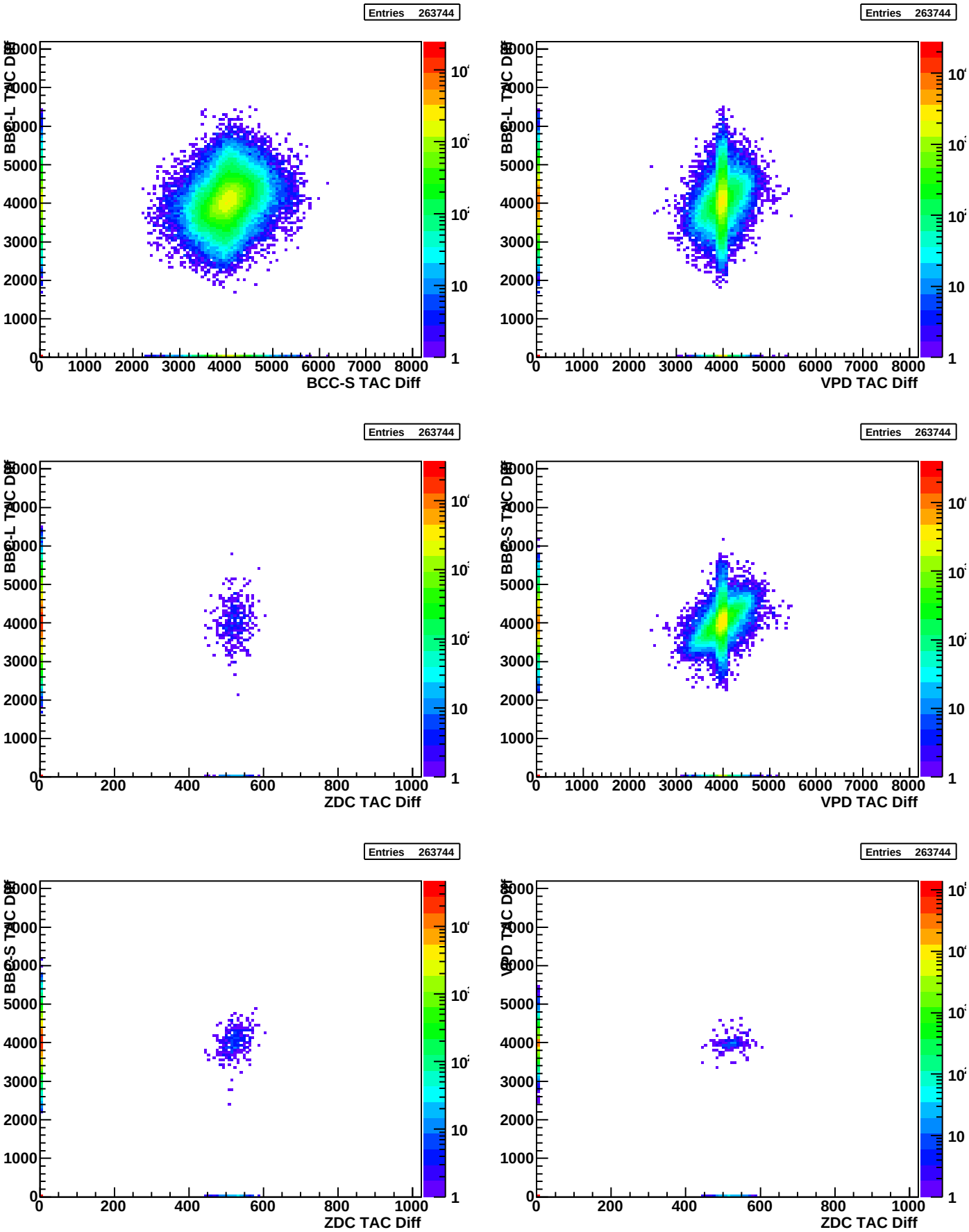

Entries 263744
VPD-West ADC Sum
ZDC-West ADC Sum Att

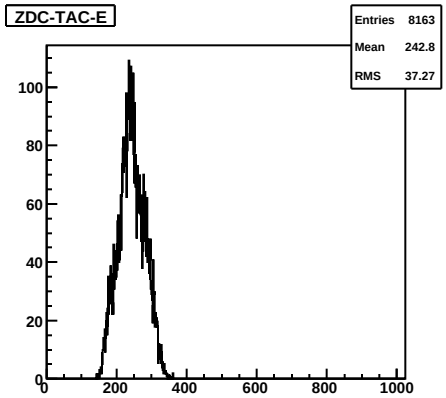

Entries 263744
BBC-L-East ADC Sum
BBC-L-West ADC Sum

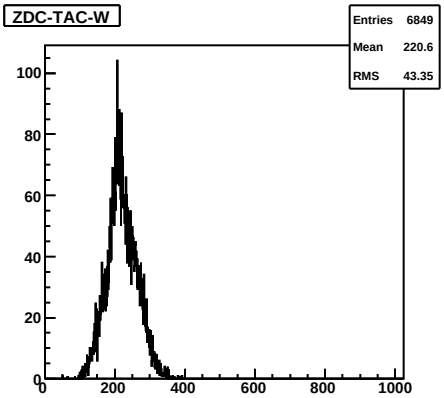

Entries 263744
BBC-S-East ADC Sum
BBC-S-West ADC Sum

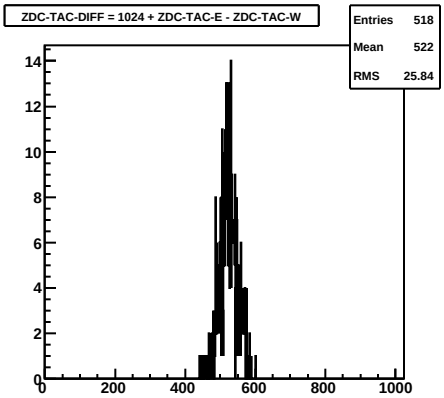

Entries 263744
VPD East ADC Sum
VPD West ADC Sum

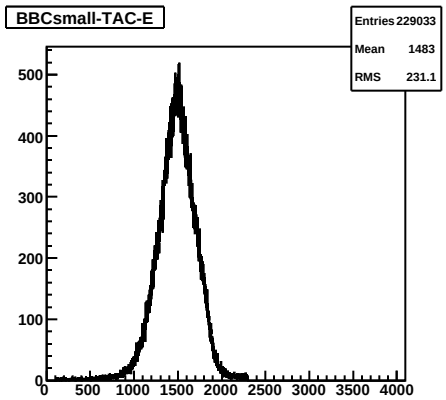

Entries 263744
ZDC East ADC Sum Att
ZDC West ADC Sum Att

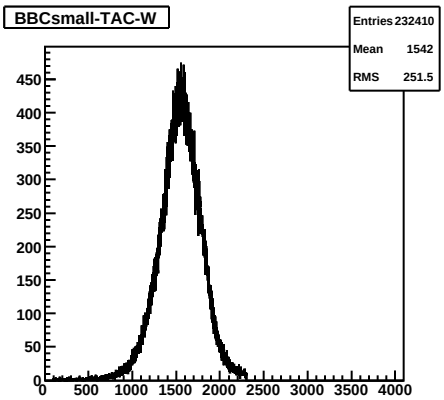

Entries 263744
BBC-L TAC Diff
BCC-S TAC Diff
Entries 263744
BBC-L TAC Diff
VPD TAC Diff
Entries 263744
BBC-L TAC Diff
ZDC TAC Diff
Entries 263744
BBC-S TAC Diff
VPD TAC Diff
Entries 263744
BBC-S TAC Diff
ZDC TAC Diff
Entries 263744
VPD TAC Diff
ZDC TAC Diff

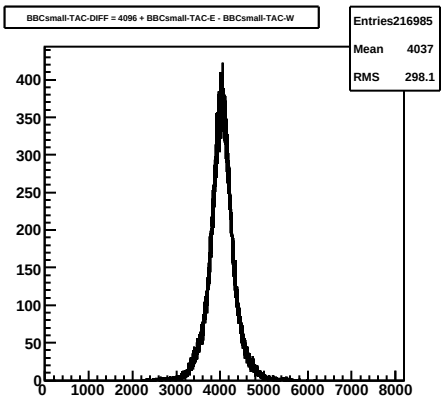

ZDC-TAC-E
Entries 8163
Mean 242.8
RMS 37.27

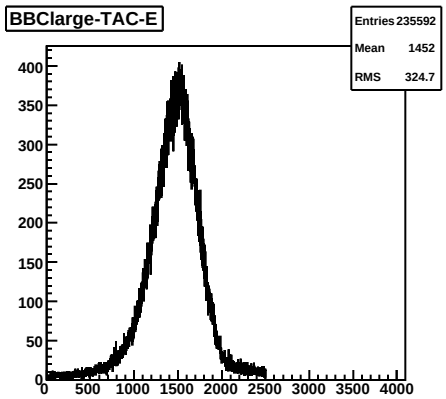

ZDC-TAC-W
Entries 6849
Mean 220.6
RMS 43.35

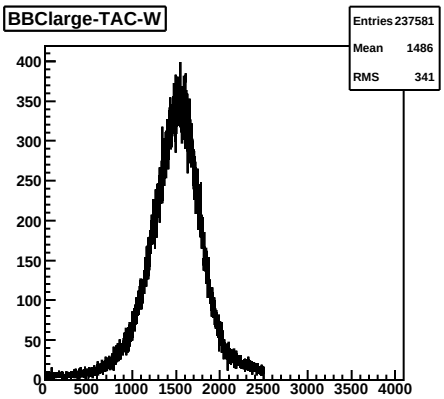

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 518
Mean 522
RMS 25.84

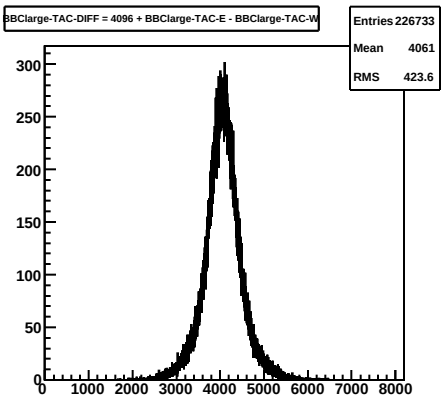

BBCsmall-TAC-E
Entries 229033
Mean 1483
RMS 231.1

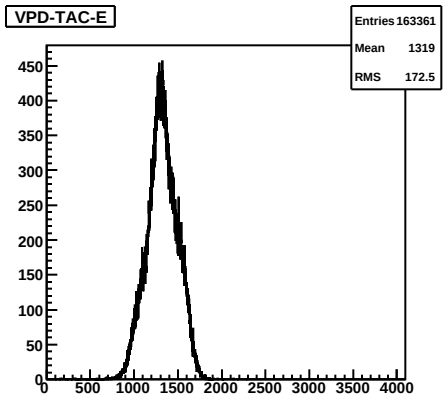

BBCsmall-TAC-W
Entries 232410
Mean 1542
RMS 251.5

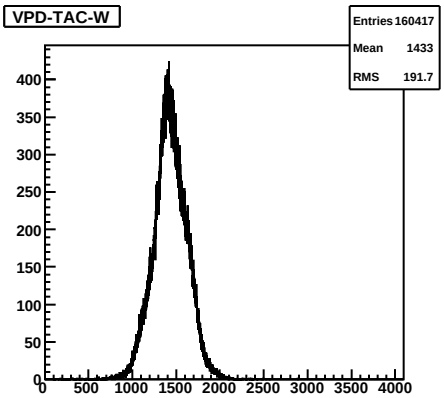

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 216985
Mean 4037
RMS 298.1

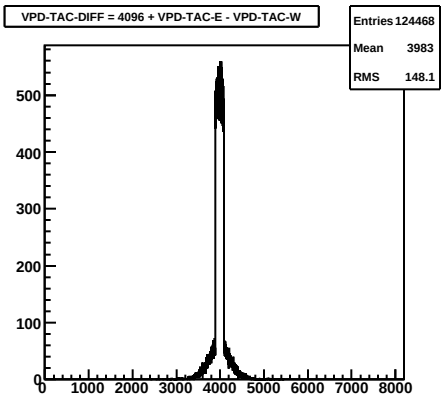

BBClarge-TAC-E
Entries 235592
Mean 1452
RMS 324.7

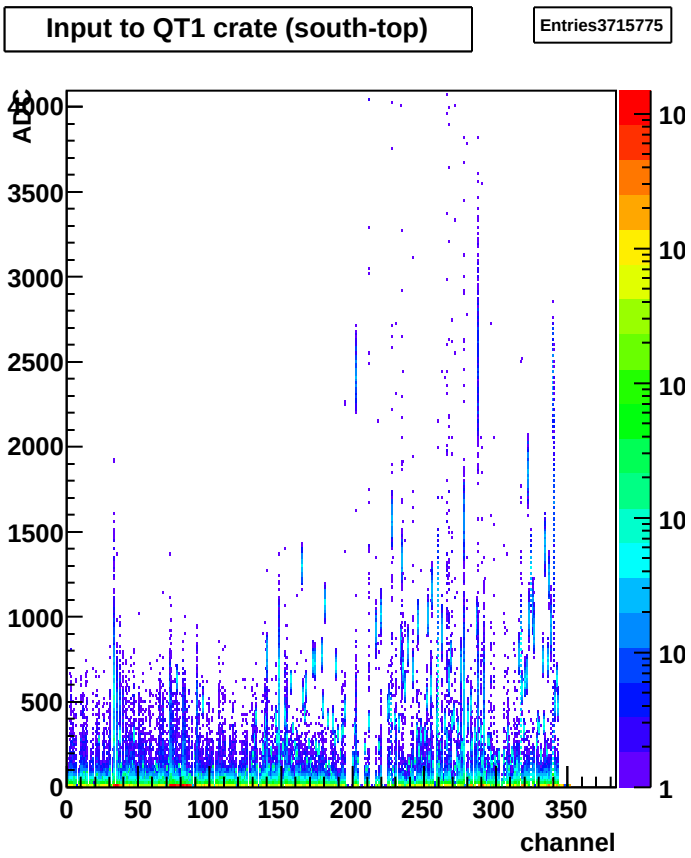

BBClarge-TAC-W
Entries 237581
Mean 1486
RMS 341

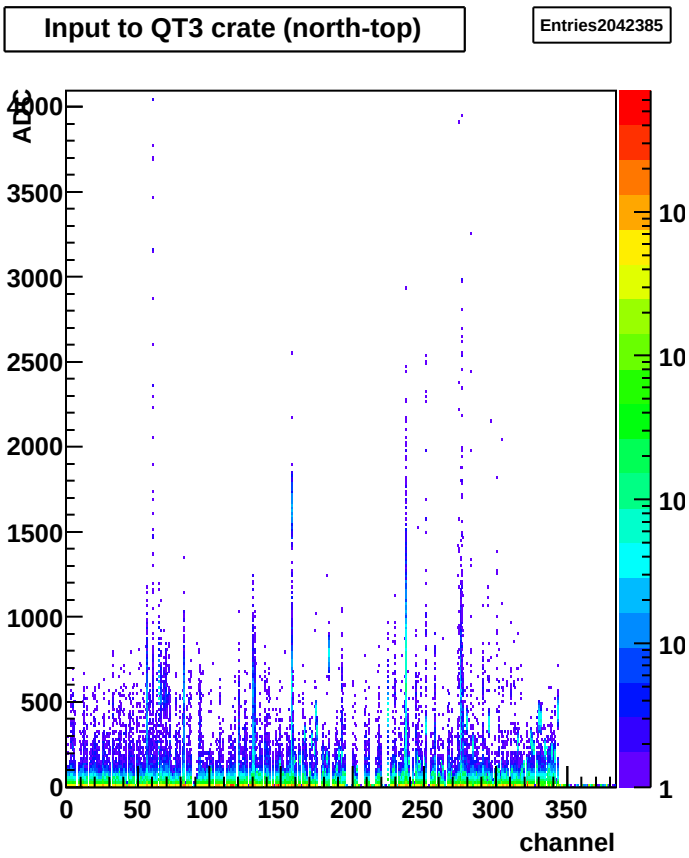

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 226733
Mean 4061
RMS 423.6

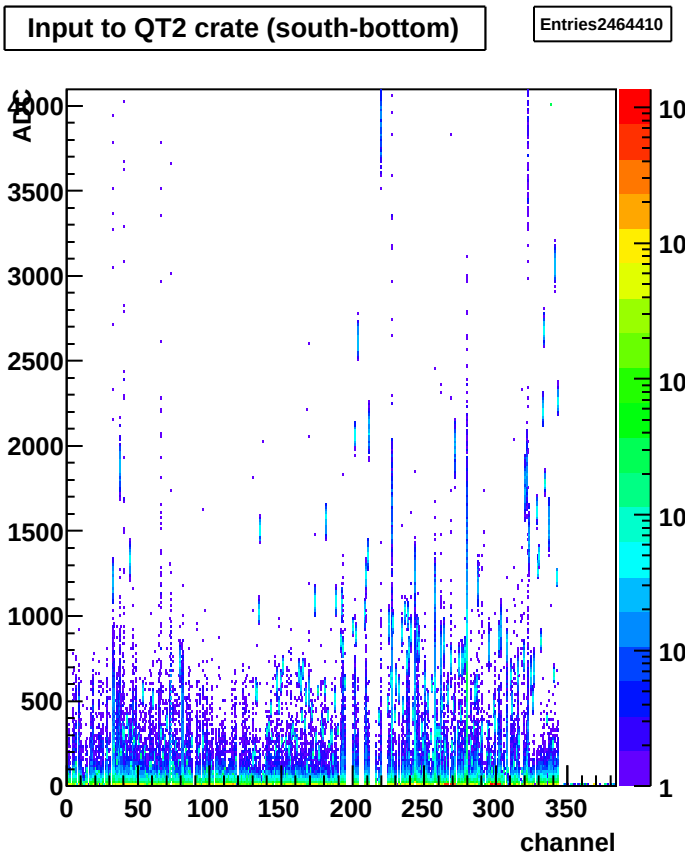

VPD-TAC-E
Entries 163361
Mean 1319
RMS 172.5

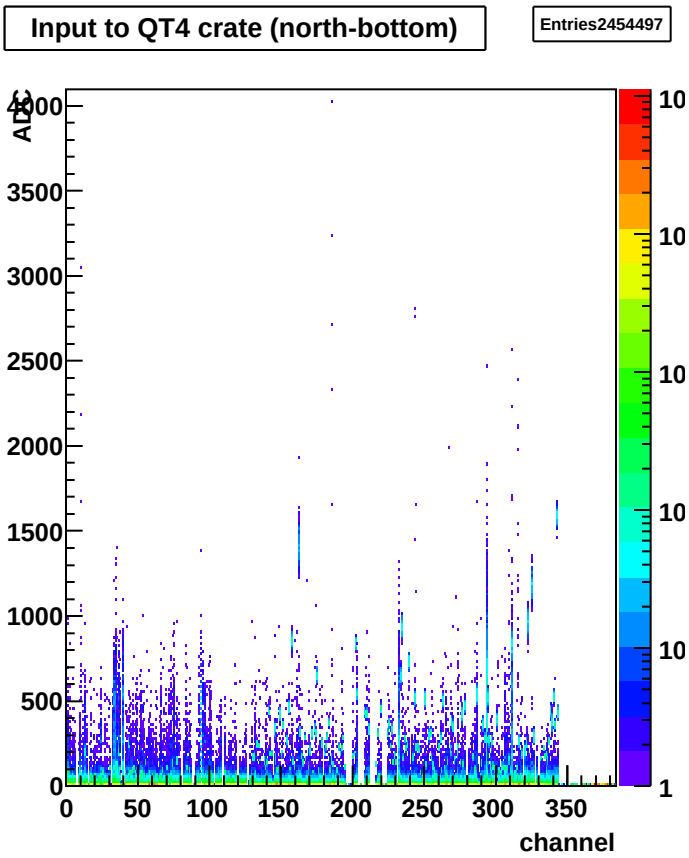

VPD-TAC-W
Entries 160417
Mean 1433
RMS 191.7

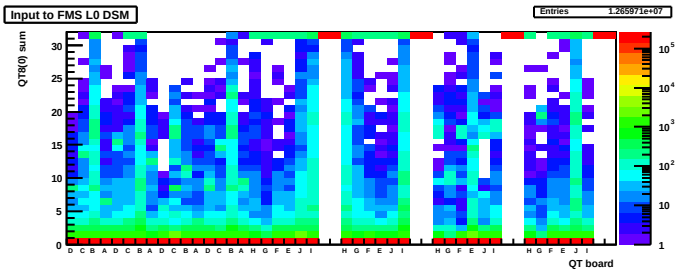

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 124468
Mean 3983
RMS 148.1

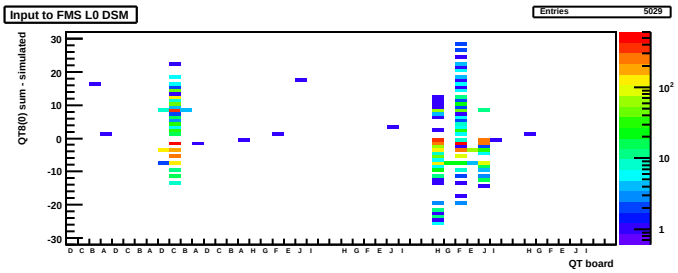

Input to QT1 crate (south-top)
Entries3715775
ADC
channel

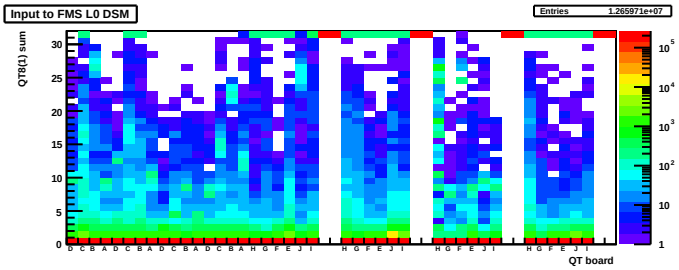

Input to QT3 crate (north-top)
Entries2042385
ADC
channel

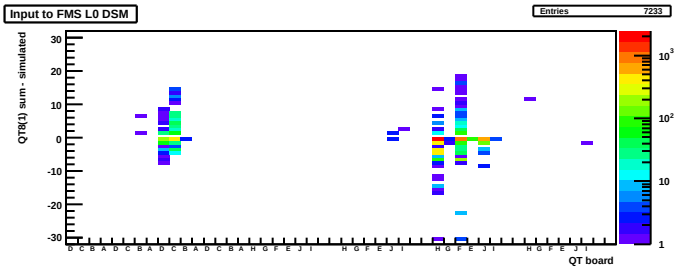

Input to QT2 crate (south-bottom)
Entries2464410
ADC
channel

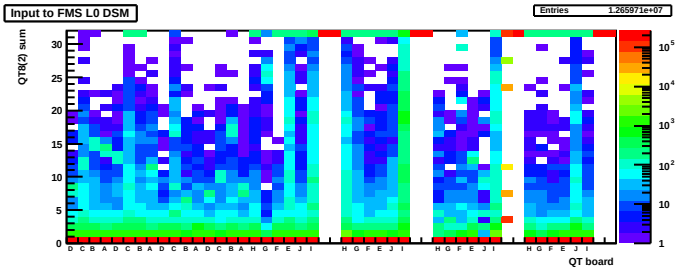

Input to QT4 crate (north-bottom)
Entries2454497
ADC
channel

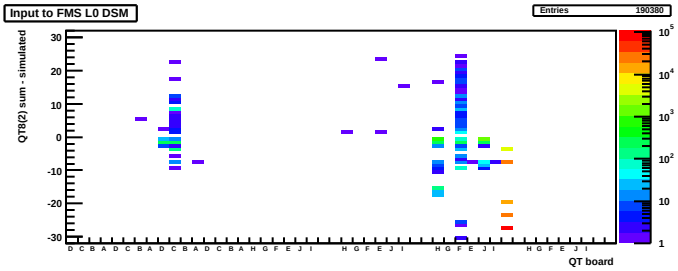

Input to FMS L0 DSM
Entries 1.265971e+07
QT8(0) sum
QT board

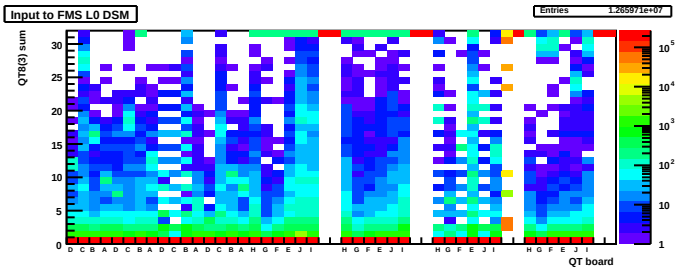

Input to FMS L0 DSM
Entries 5029
QT8(0) sum - simulated
QT board

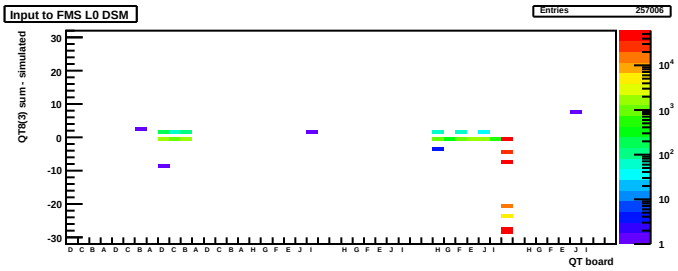

Input to FMS L0 DSM
Entries 1.265971e+07
QT8(1) sum
QT board

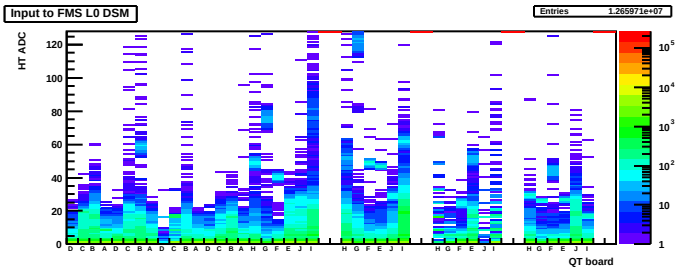

Input to FMS L0 DSM
Entries 7233
QT8(1) sum - simulated
QT board

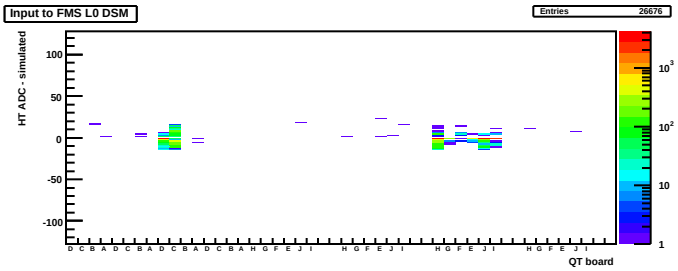

Input to FMS L0 DSM
Entries 1.265971e+07
QT8(2) sum
QT board

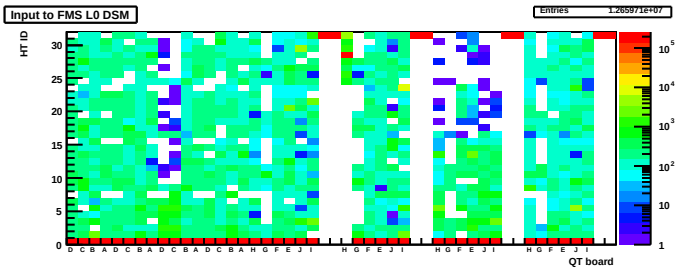

Input to FMS L0 DSM
Entries 190380
QT8(2) sum - simulated
QT board

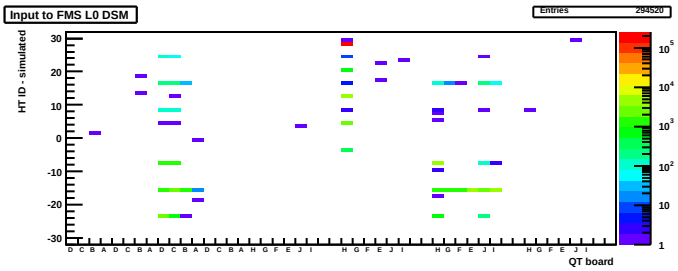

Input to FMS L0 DSM
Entries 1.265971e+07
QT8(3) sum
QT board

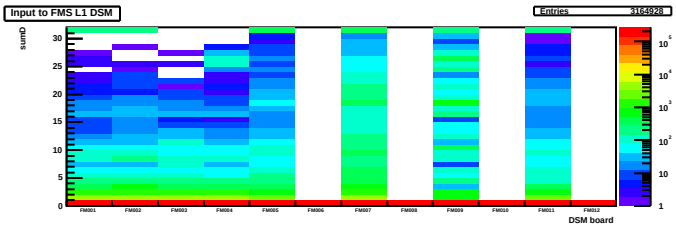

Input to FMS L0 DSM
Entries 257006
QT8(3) sum - simulated
QT board

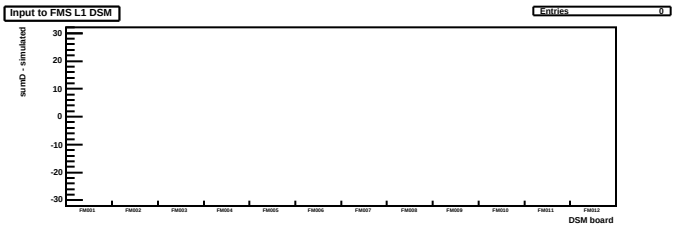

Input to FMS L0 DSM
Entries 1.265971e+07
HT ADC
QT board

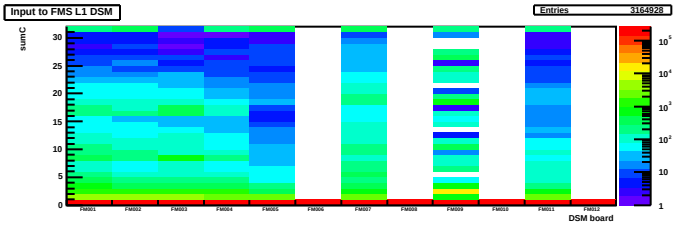

Input to FMS L0 DSM
Entries 26676
HT ADC - simulated
QT board

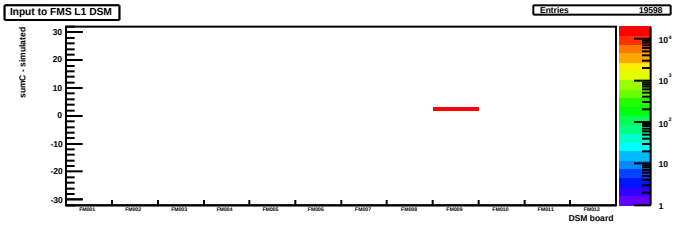

Input to FMS L0 DSM
Entries 1.265971e+07
HT ID
QT board

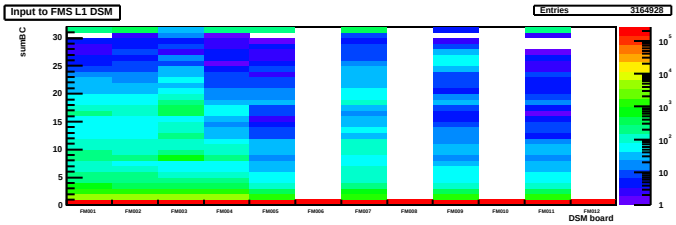

Input to FMS L0 DSM
Entries 284520
HT ID - simulated
QT board

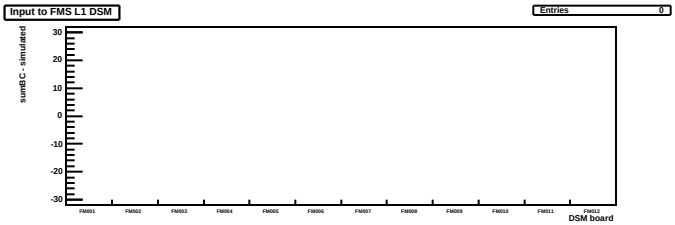

Input to FMS L1 DSM
Entries 3164928
sumD
DSM board

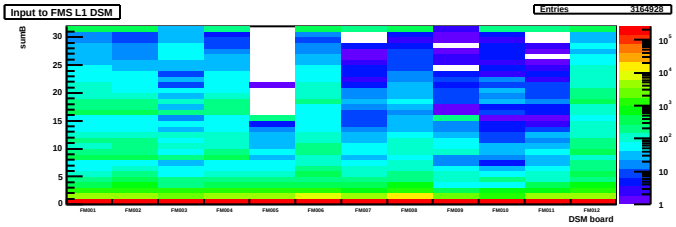

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

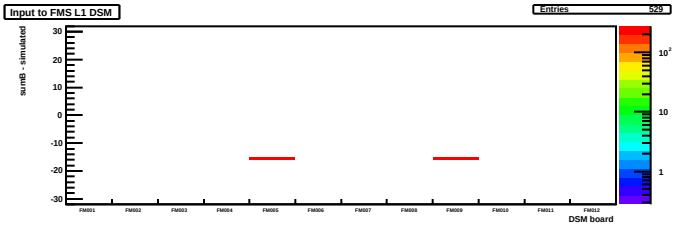

Input to FMS L1 DSM
Entries 3164928
sumC
DSM board

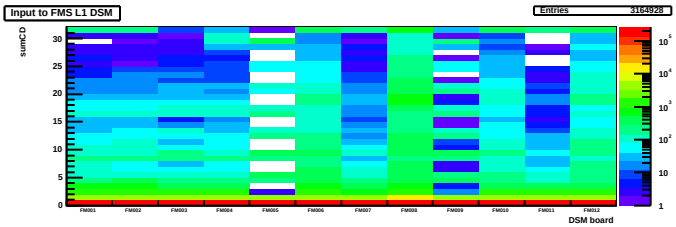

Input to FMS L1 DSM
Entries 19598
sumC - simulated
DSM board

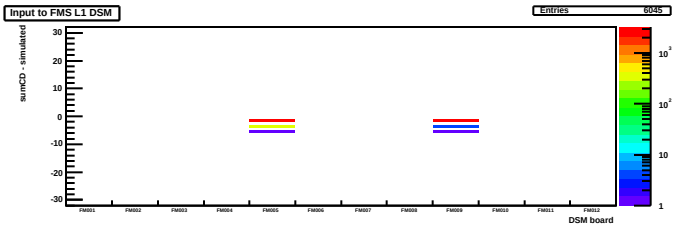

Input to FMS L1 DSM
Entries 3164928
sumBC
DSM board

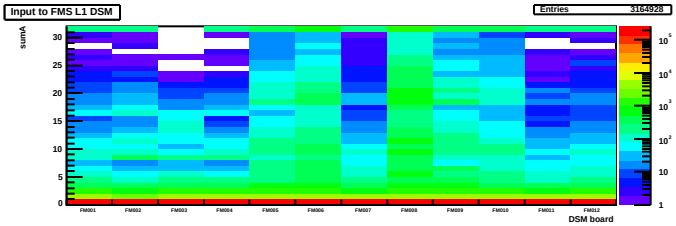

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

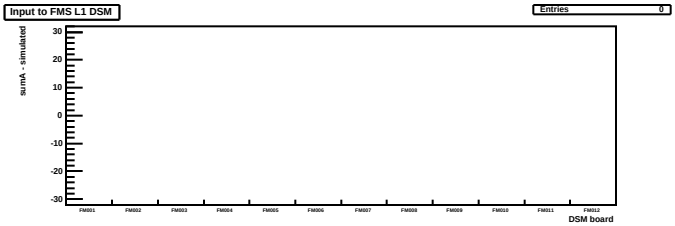

Input to FMS L1 DSM
Entries 3164928
sumB
DSM board

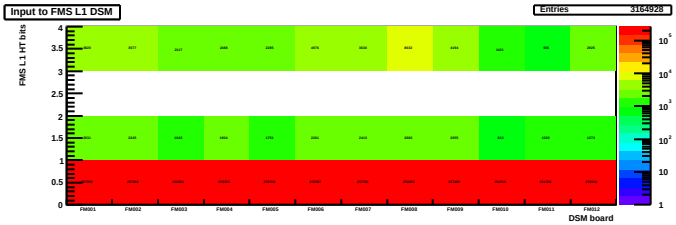

Input to FMS L1 DSM
Entries 529
sumB - simulated
DSM board

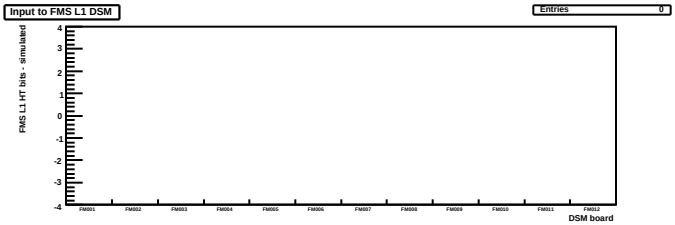

Input to FMS L1 DSM
Entries 3164928
sumCD
DSM board

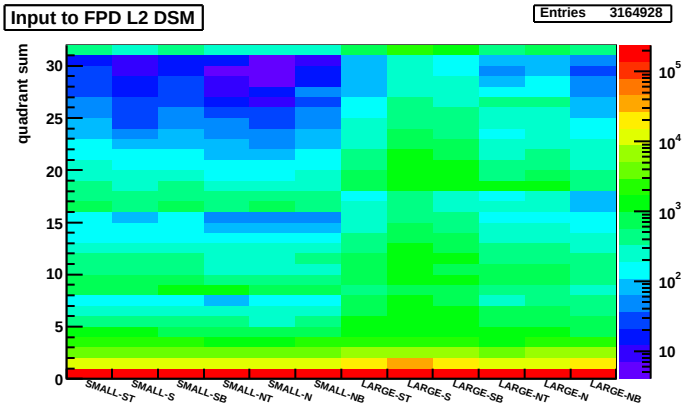

Input to FMS L1 DSM
Entries 6045
sumCD - simulated
DSM board

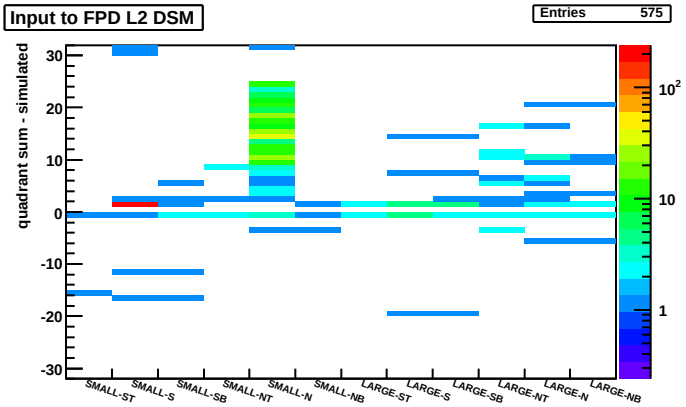

Input to FMS L1 DSM
Entries 3164928
sumA
DSM board

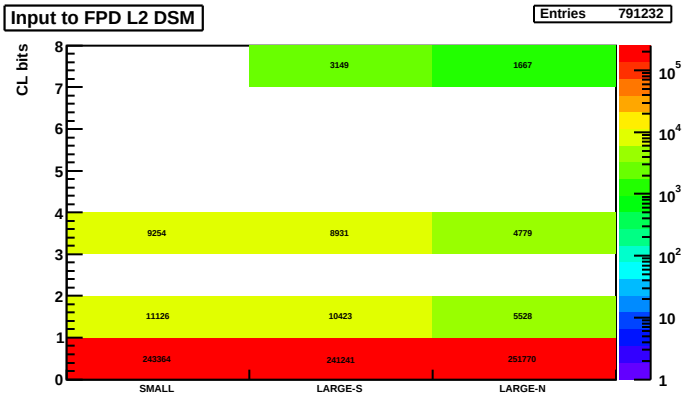

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

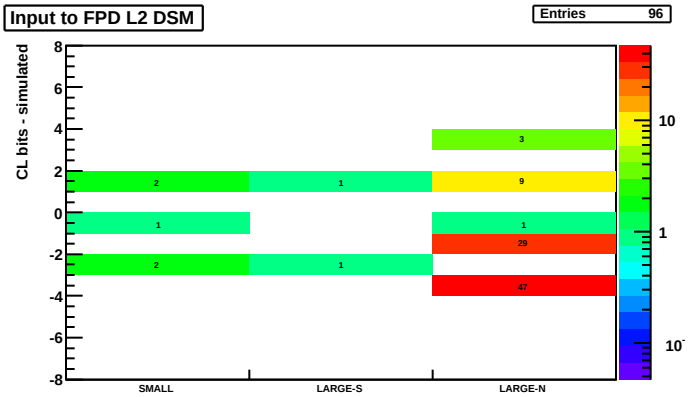

Input to FMS L1 DSM
Entries 3164928
FMS L1 HT bits
DSM board

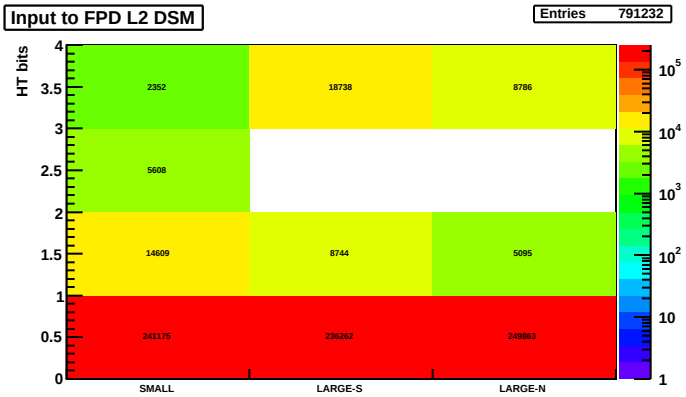

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

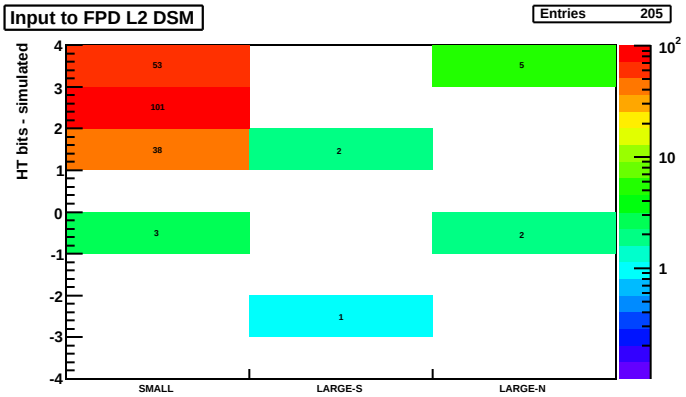

Input to FPD L2 DSM
Entries 3164928
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

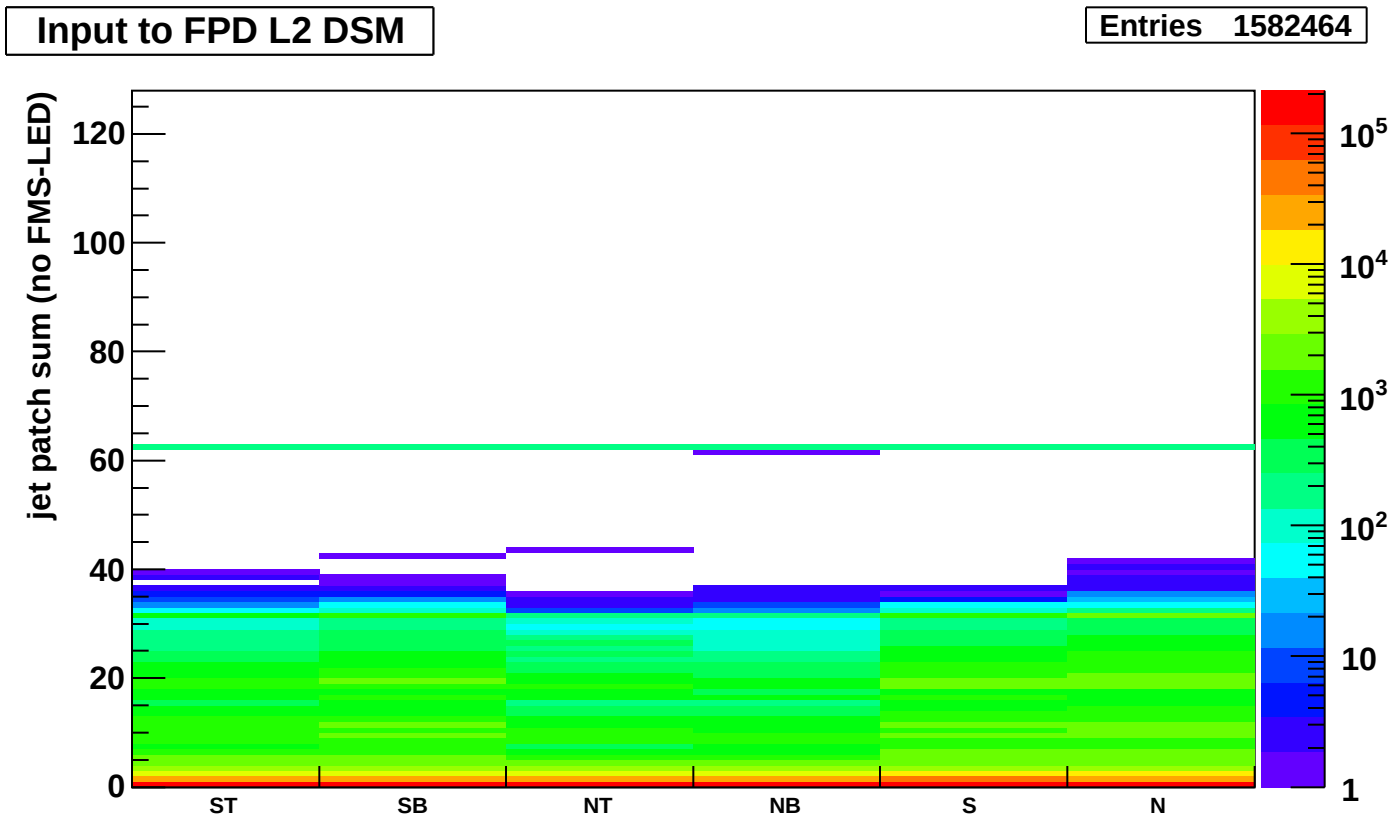

Input to FPD L2 DSM
Entries 575
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

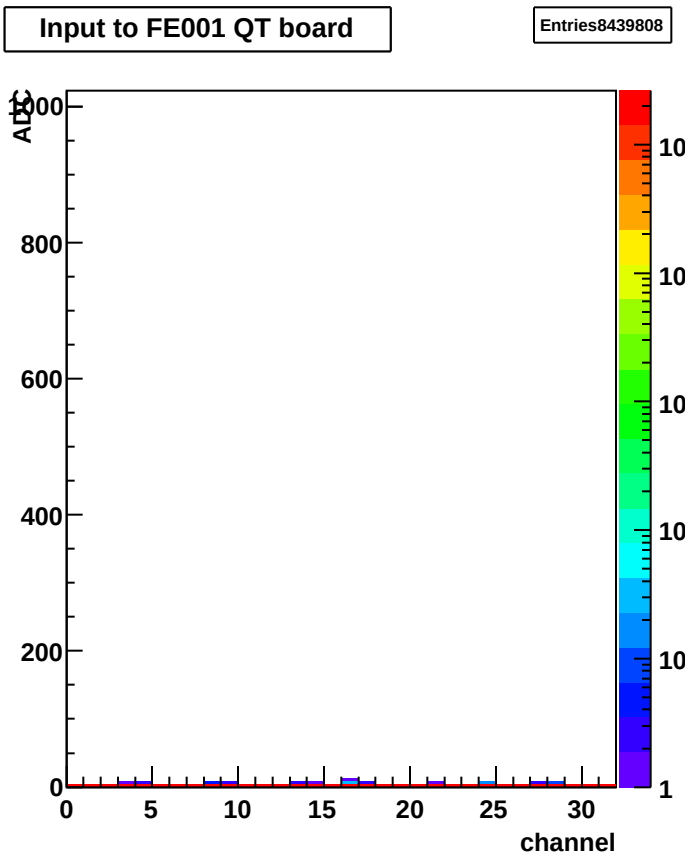

Input to FPD L2 DSM
Entries 791232
CL bits
3149
1667
9254
8931
4779
11126
10423
5528
243364
241241
251770
SMALL
LARGE-S
LARGE-N

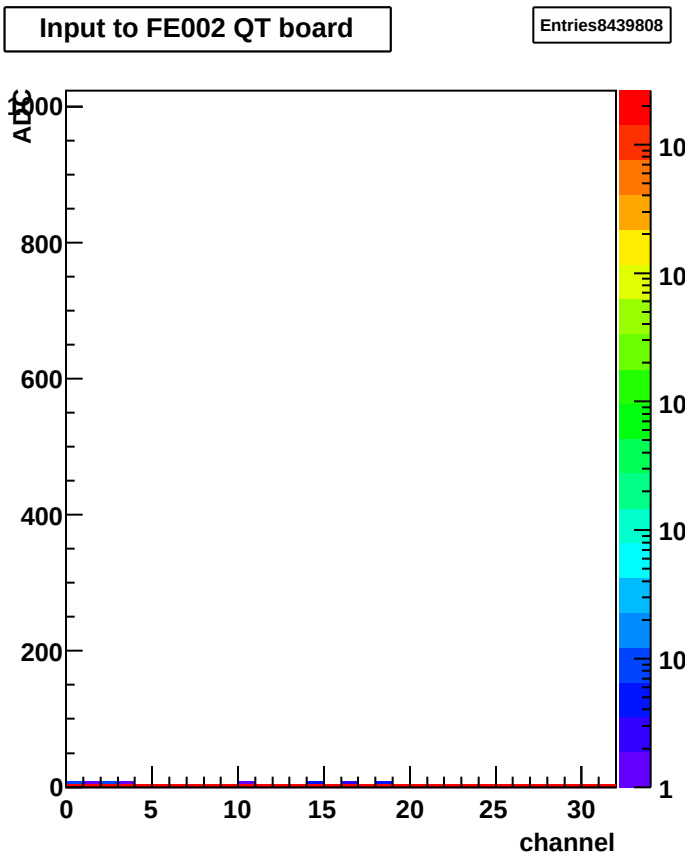

Input to FPD L2 DSM
Entries 96
CL bits - simulated
3
2
1
9
1
1
29
2
1
47
SMALL
LARGE-S
LARGE-N

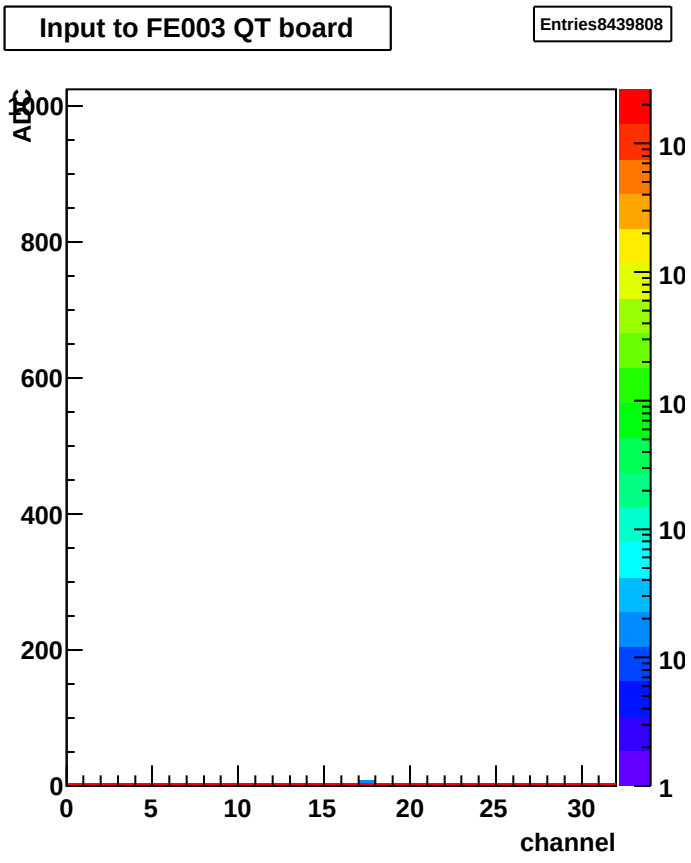

Input to FPD L2 DSM
Entries 791232
HT bits
2352
18738
8786
5608
14609
8744
5095
241175
236262
249863
SMALL
LARGE-S
LARGE-N

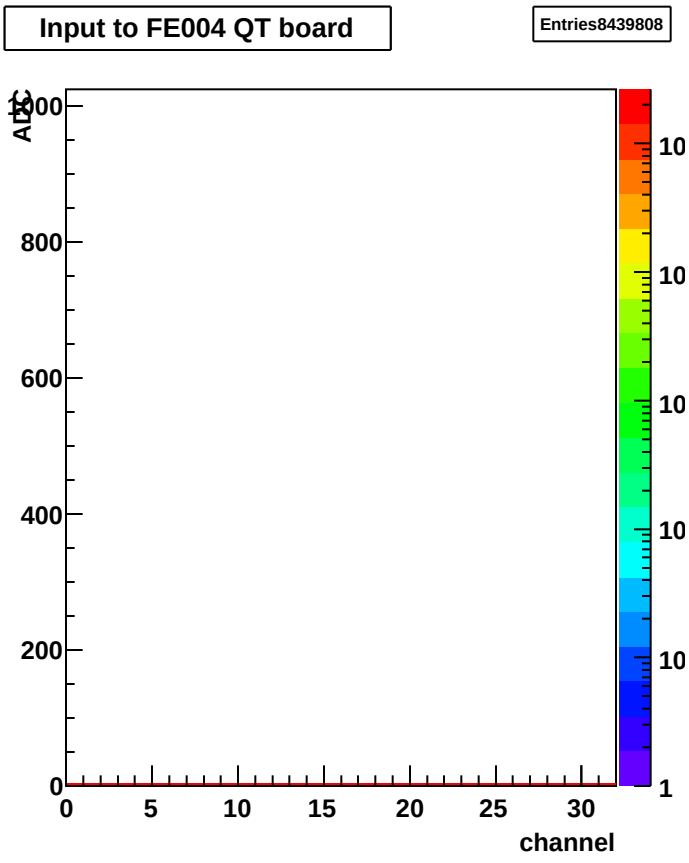

Input to FPD L2 DSM
Entries 205
HT bits - simulated
53
5
101
38
2
3
2
1
SMALL
LARGE-S
LARGE-N

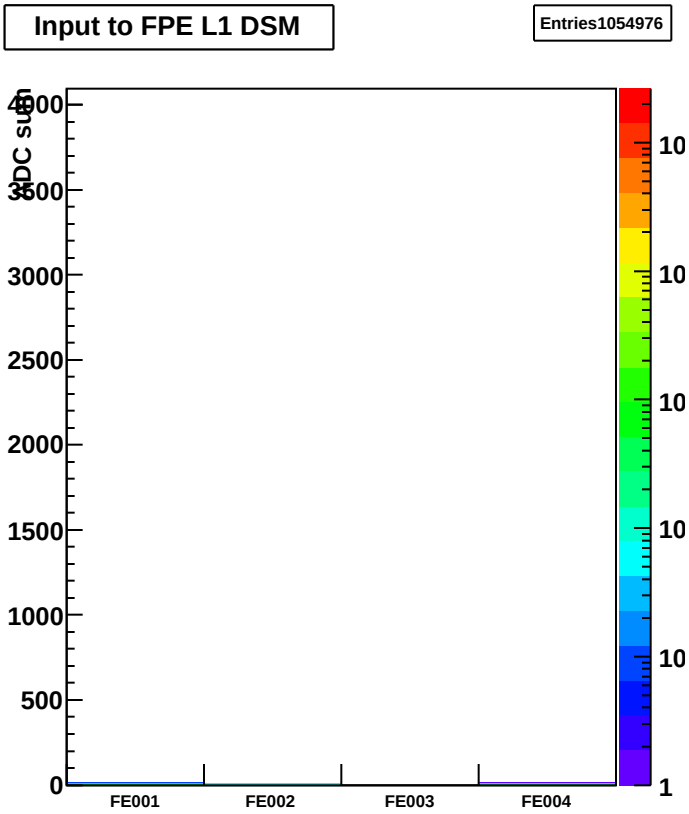

Input to FPD L2 DSM
Entries 1582464
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

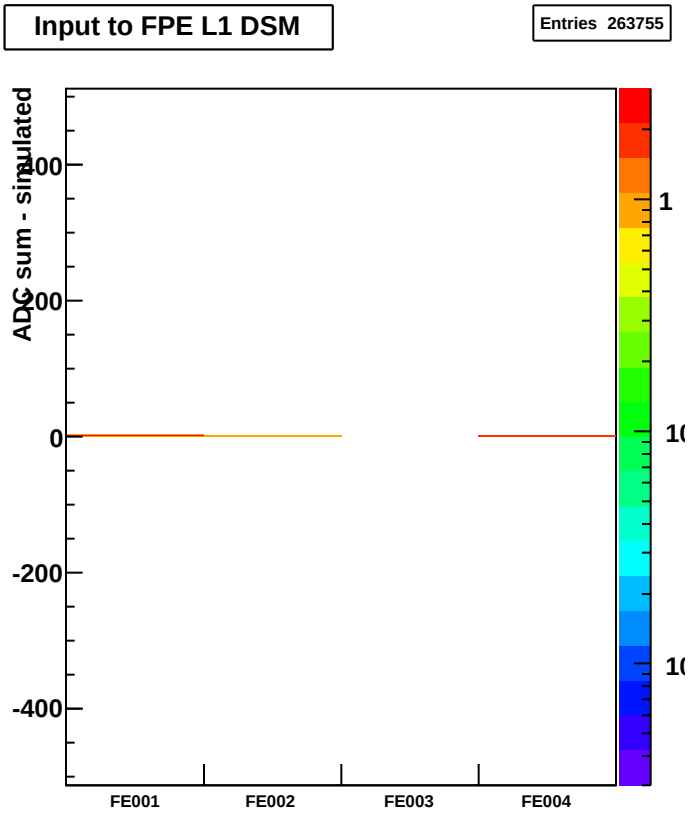

Input to FE001 QT board
Entries8439808
ADC
channel

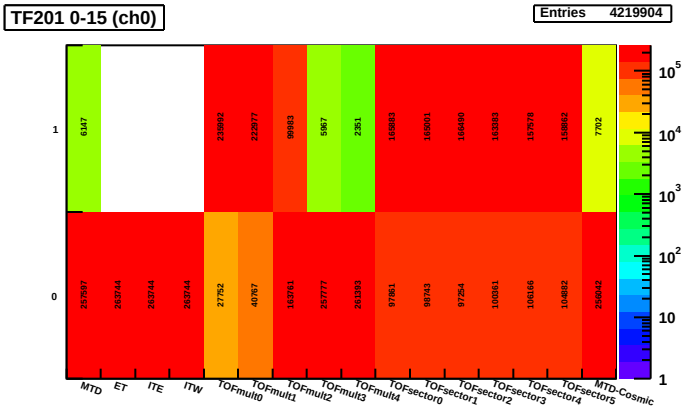

Input to FE002 QT board
Entries8439808
ADC
channel

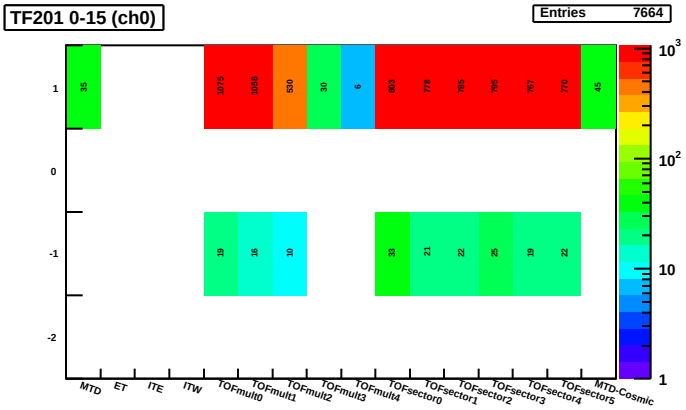

Input to FE003 QT board
Entries8439808
ADC
channel

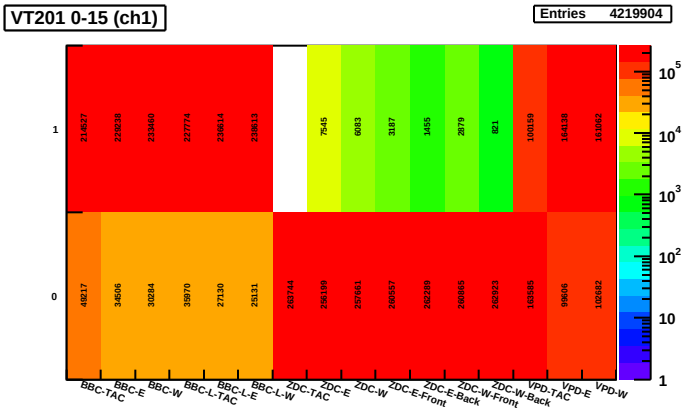

Input to FE004 QT board
Entries8439808
ADC
channel

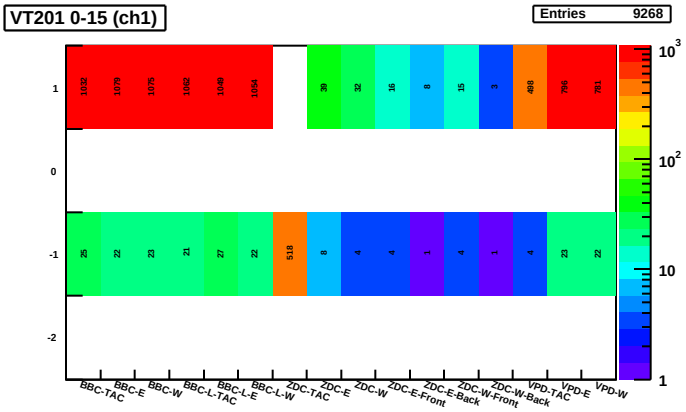

Input to FPE L1 DSM
Entries1054976
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 263755
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004


TF201 0-15 (ch0)
Entries 4219904
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 7664
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 4219904
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 9268
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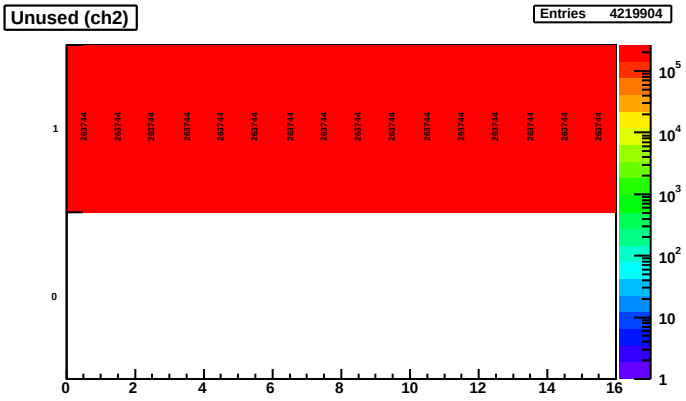
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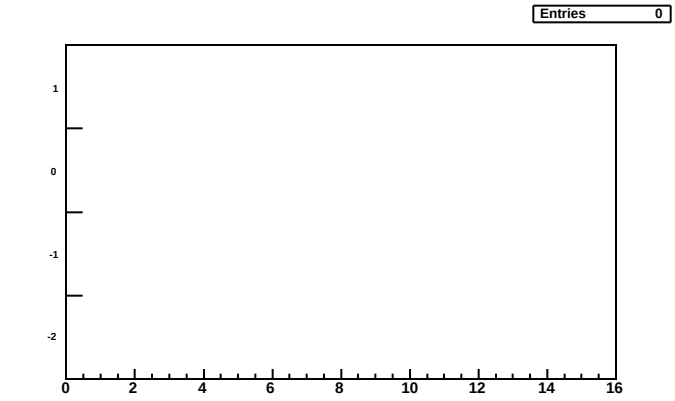
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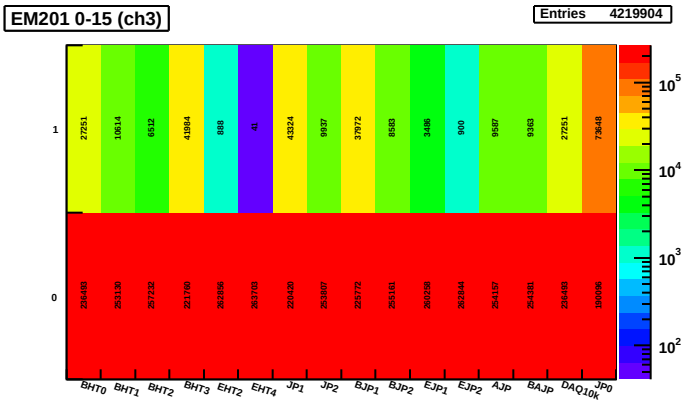
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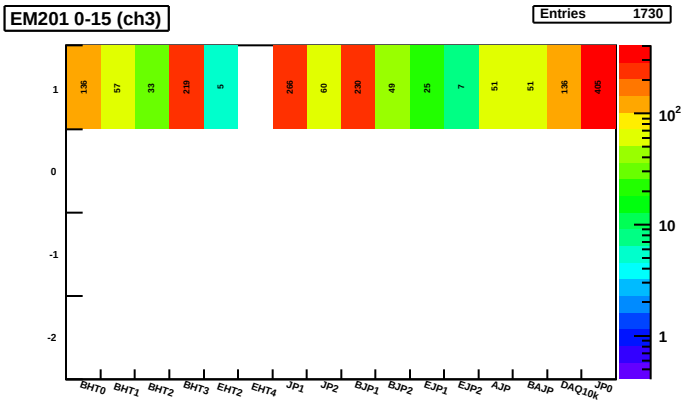
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Entries 1730
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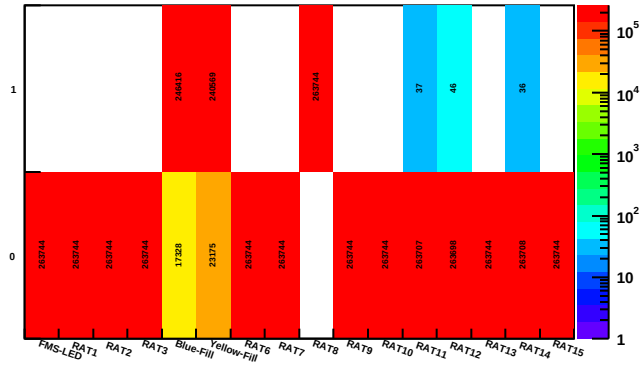
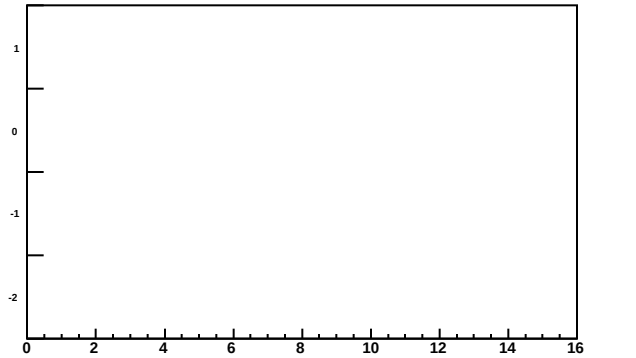
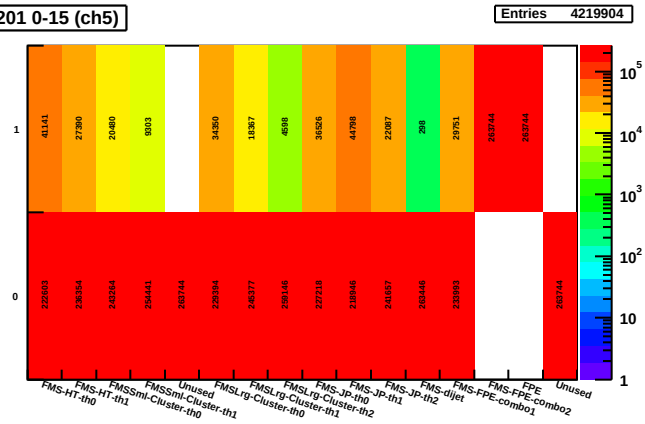
RAT board (ch4)





FP201 0-15 (ch5)



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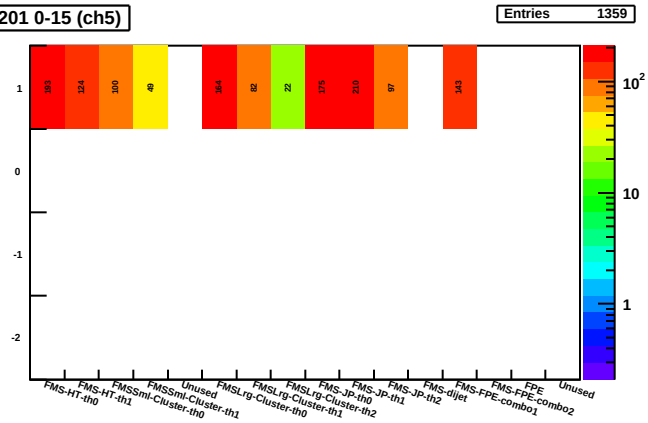
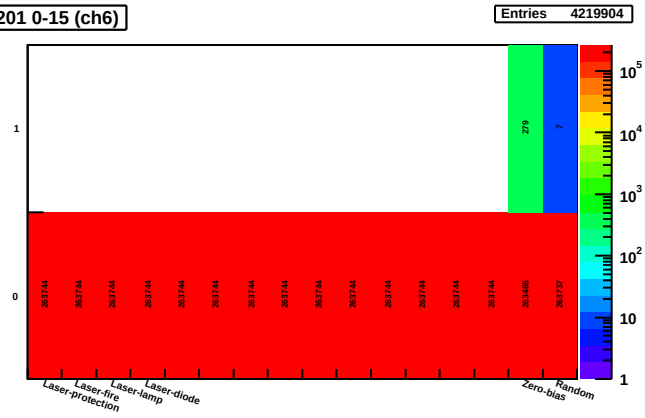
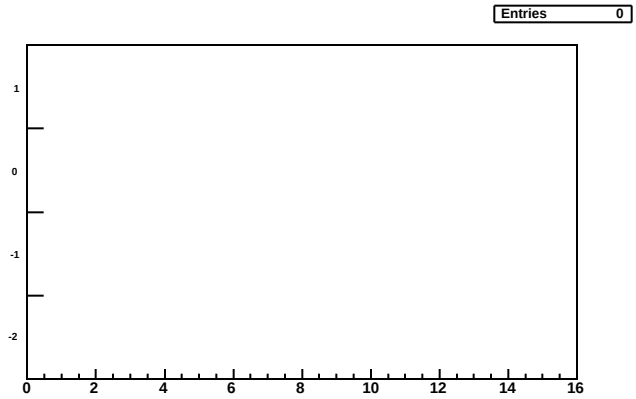
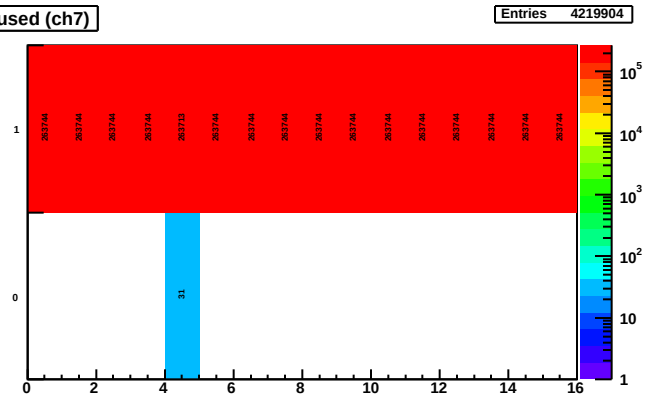
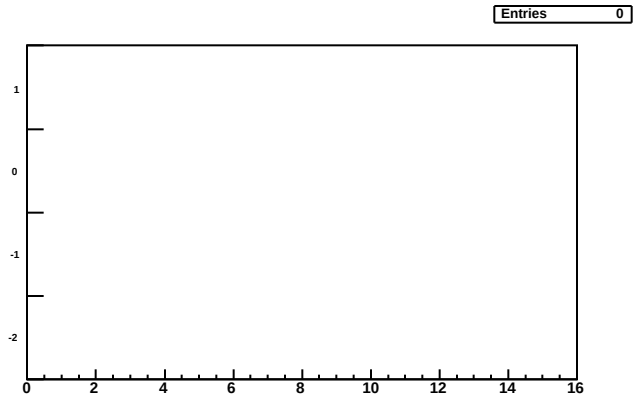


ST201 0-15 (ch6)





Unused (ch7)