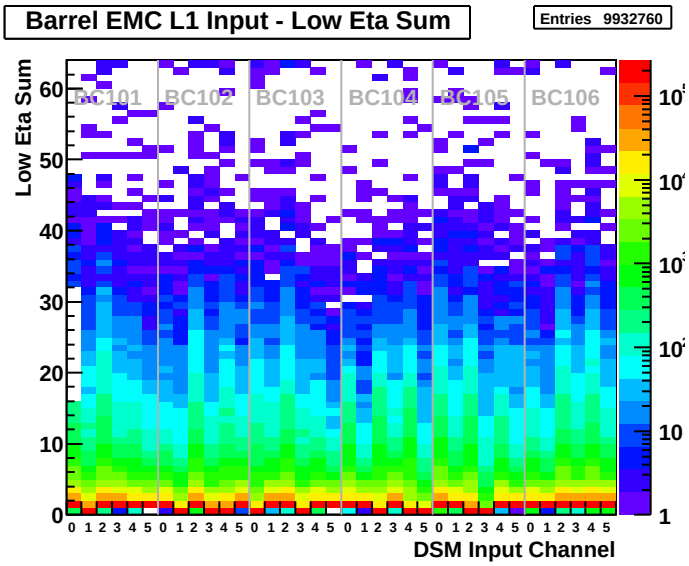
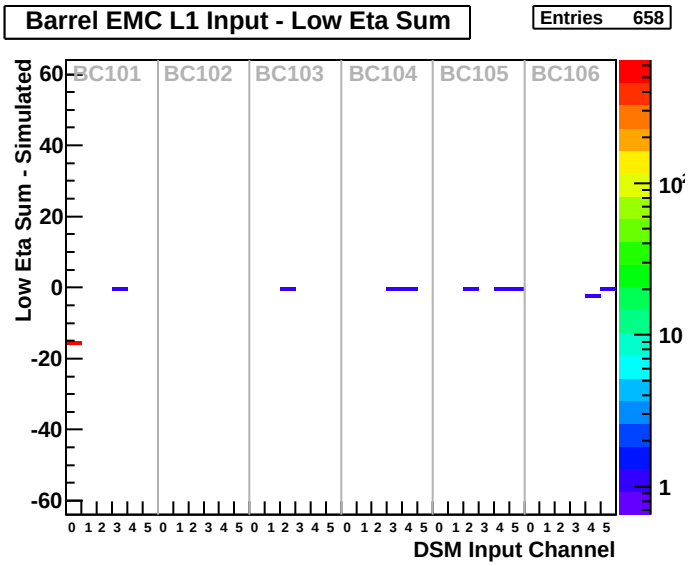
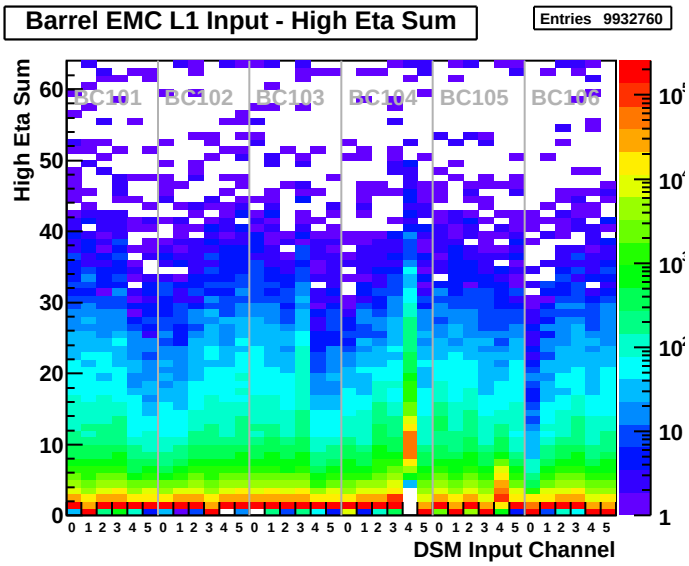
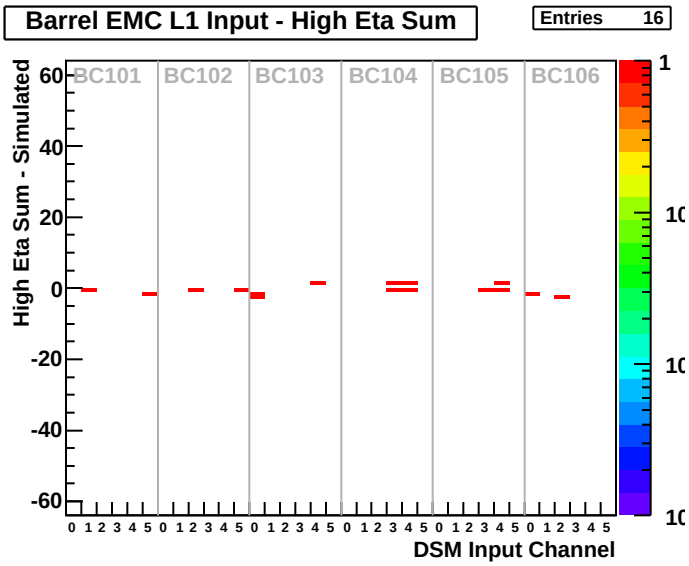
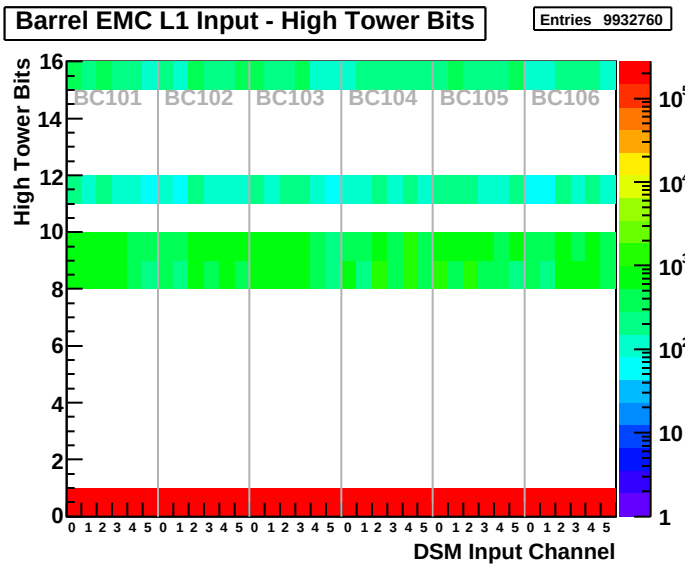
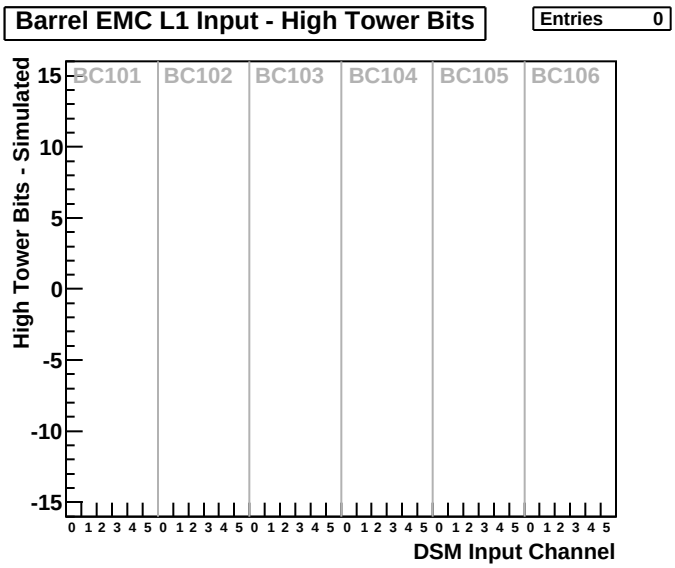

Barrel EMC L1 Input - Low Eta Sum
Entries 9932760
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

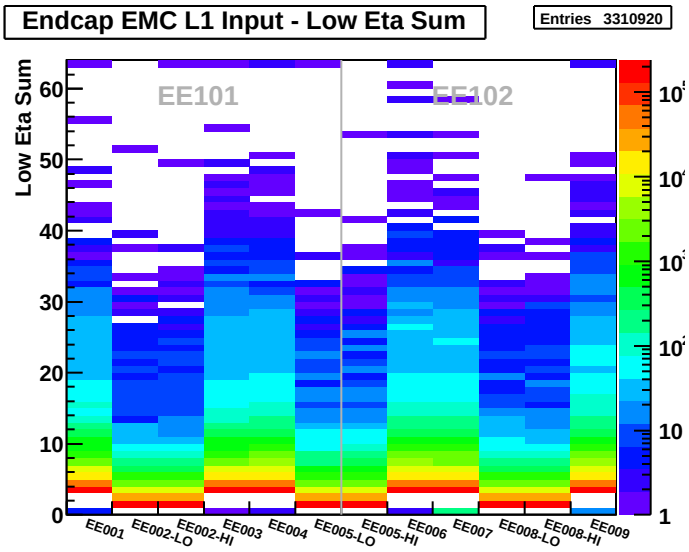

Barrel EMC L1 Input - Low Eta Sum
Entries 658
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

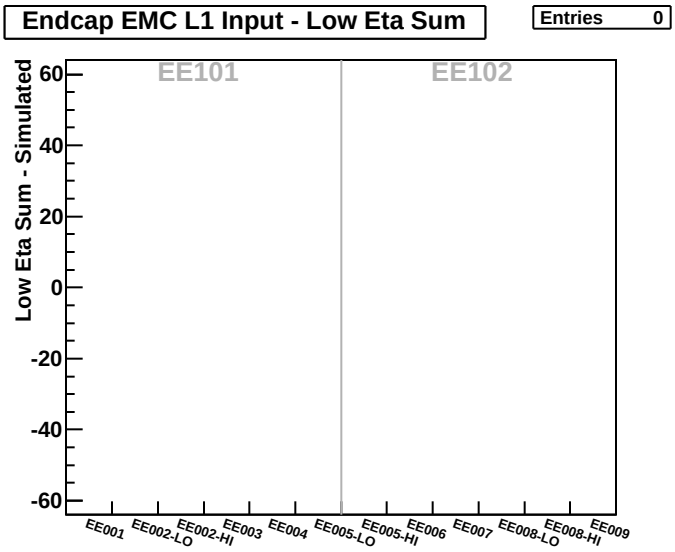

Barrel EMC L1 Input - High Eta Sum
Entries 9932760
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

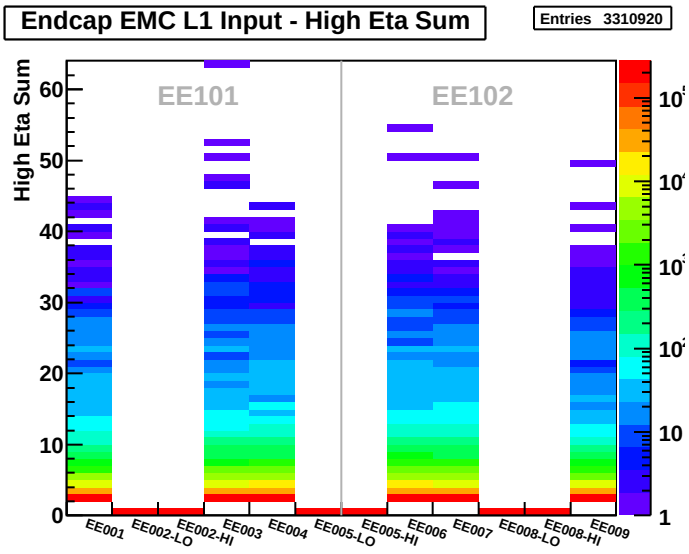

Barrel EMC L1 Input - High Eta Sum
Entries 16
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

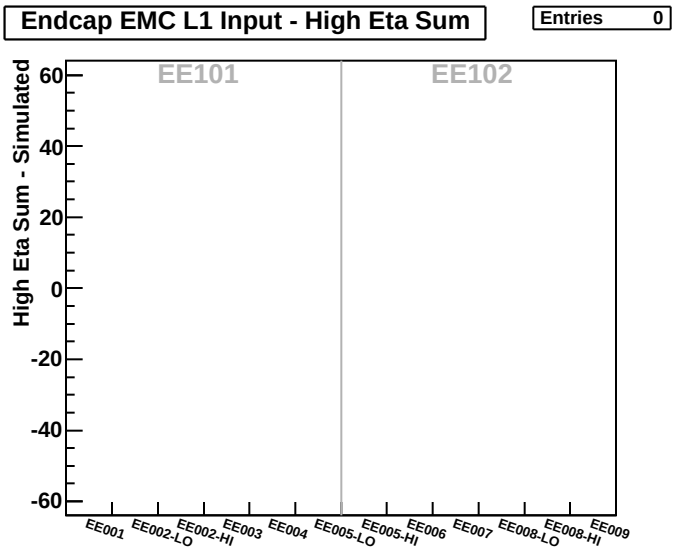

Barrel EMC L1 Input - High Tower Bits
Entries 9932760
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

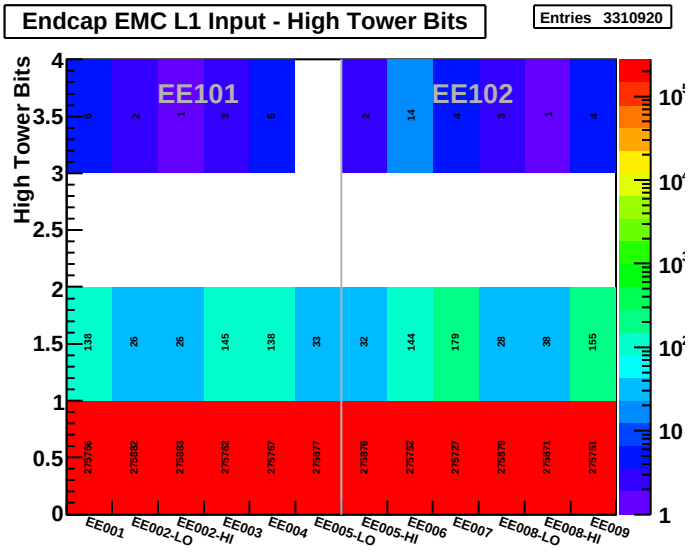

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

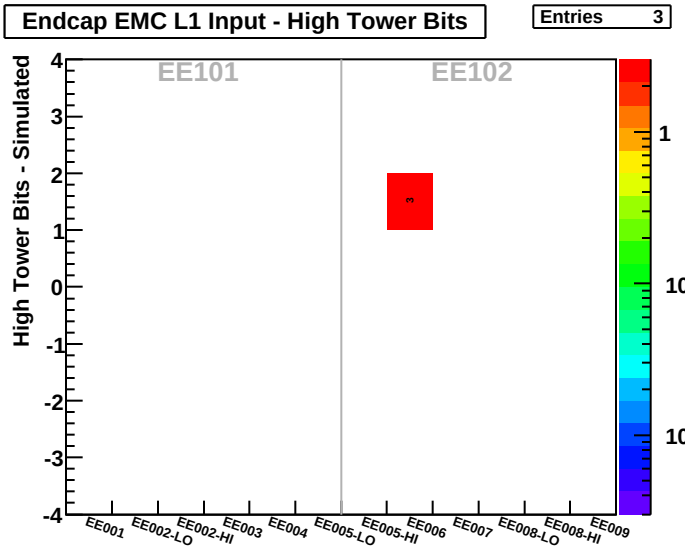

Endcap EMC L1 Input - Low Eta Sum
Entries 3310920
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

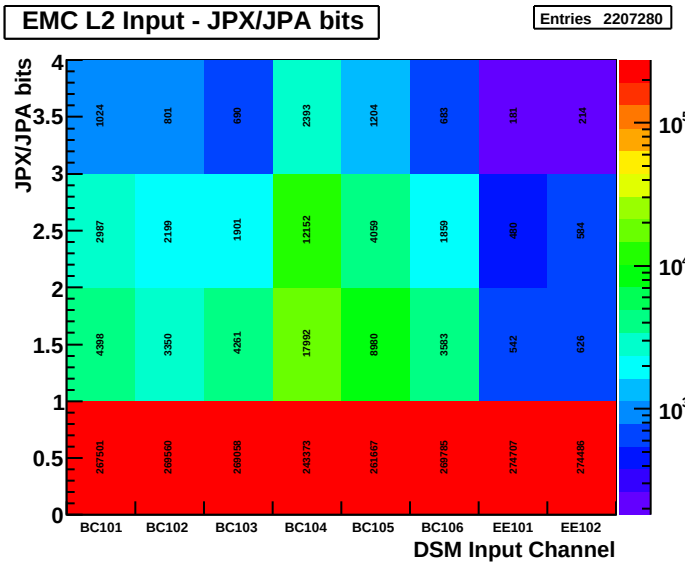

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

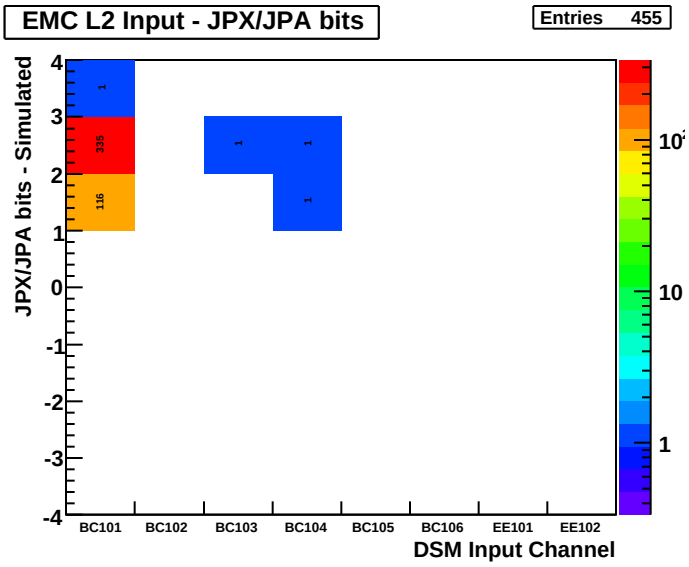

Endcap EMC L1 Input - High Eta Sum
Entries 3310920
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

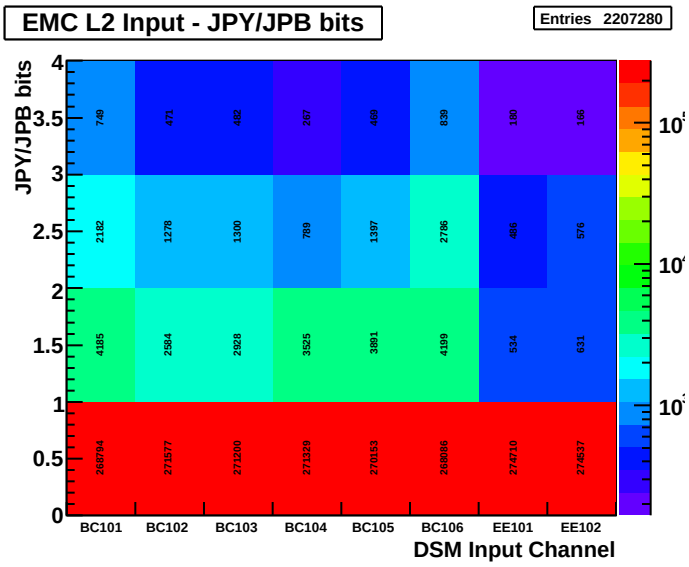

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

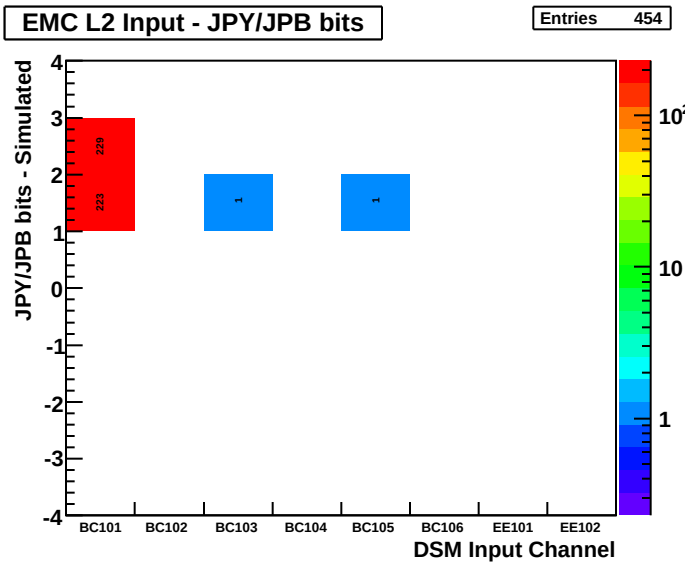

Endcap EMC L1 Input - High Tower Bits
Entries 3310920
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

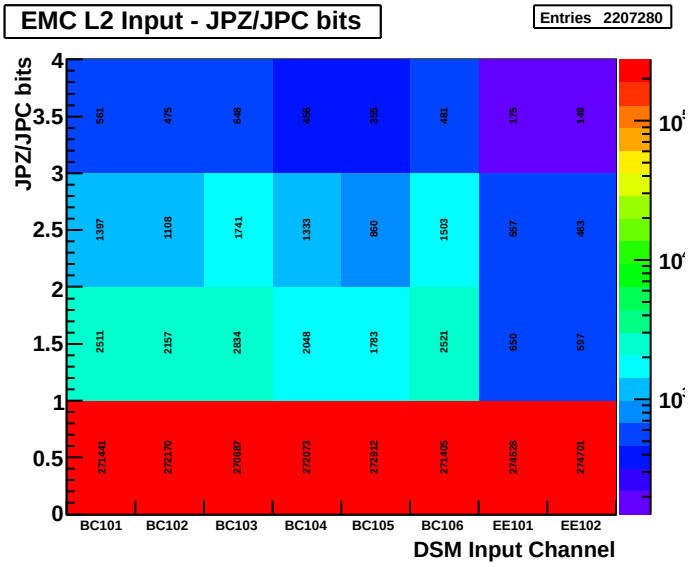

Endcap EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

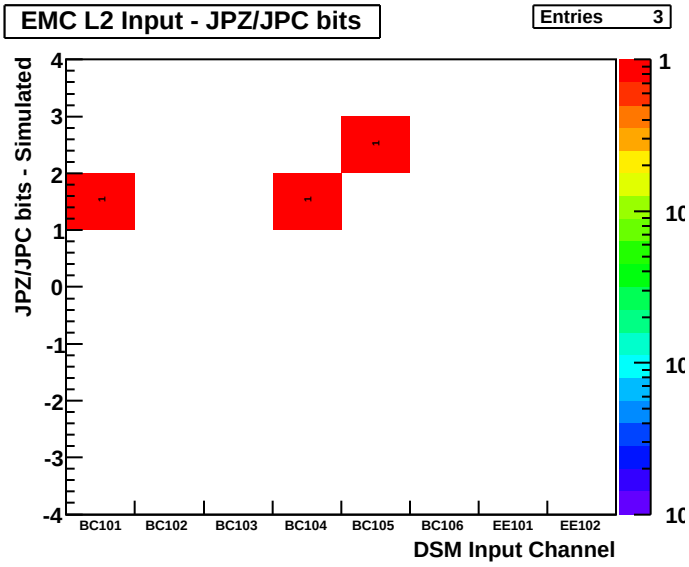

EMC L2 Input - JPX/JPA bits
Entries 2207280
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1024 801 690 2393 1204 683 181 214
2987 2199 1901 12152 4059 1859 480 594
4398 3350 4261 17992 8980 3583 542 626
267501 269560 269058 243373 261667 269785 274707 274486

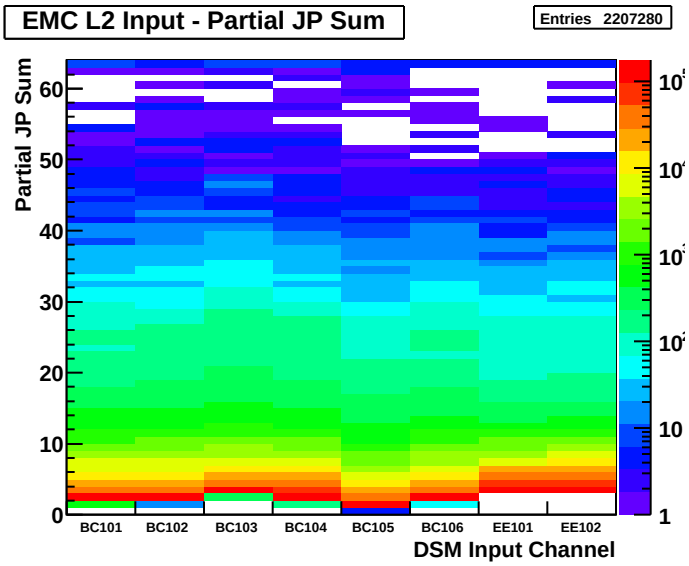

EMC L2 Input - JPX/JPA bits
Entries 455
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
335
116
1 1
1

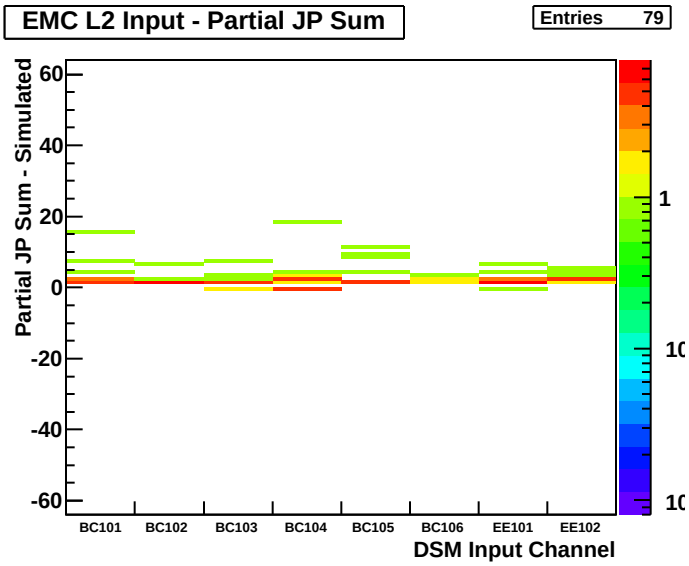

EMC L2 Input - JPY/JPB bits
Entries 2207280
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
749 471 482 267 469 839 180 166
2182 1278 1300 789 1397 2786 488 576
4185 2984 2928 3525 3891 4199 534 631
266794 271577 271200 271329 270153 268086 274710 274537

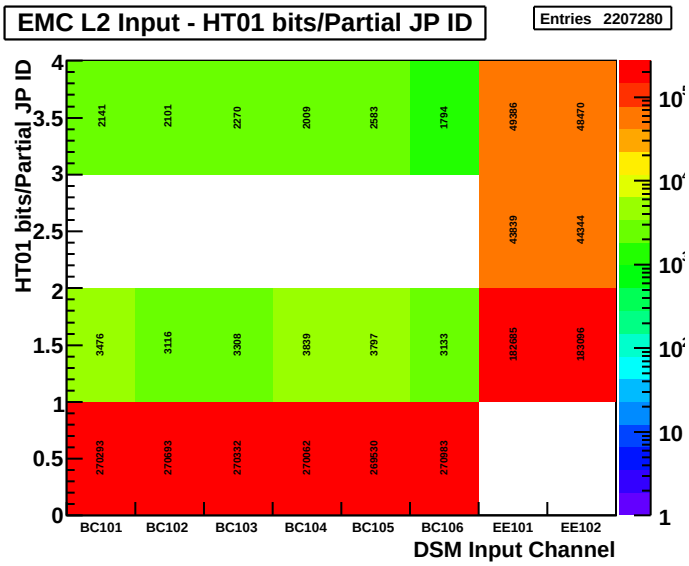

EMC L2 Input - JPY/JPB bits
Entries 454
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
229
223
1 1

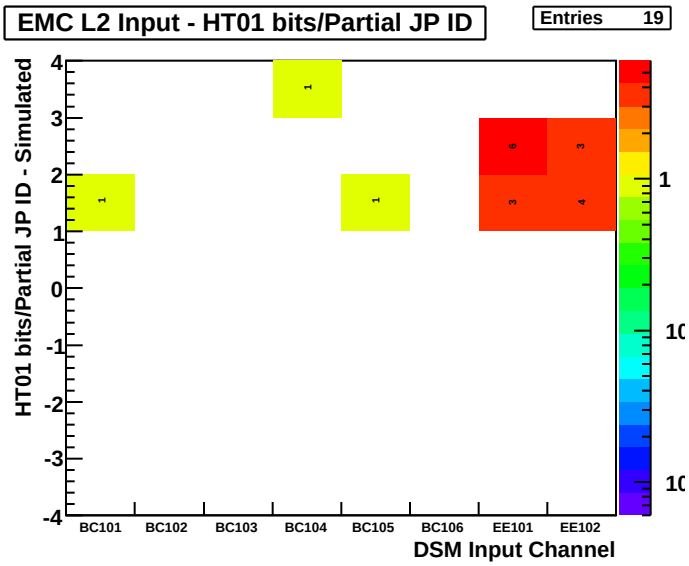

EMC L2 Input - JPZ/JPC bits
Entries 2207280
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
561 475 648 456 355 481 175 149
1397 1108 1741 1333 860 1503 557 463
2511 2157 2834 2048 1783 2521 650 597
271441 272170 270687 272073 272912 271405 274528 274701

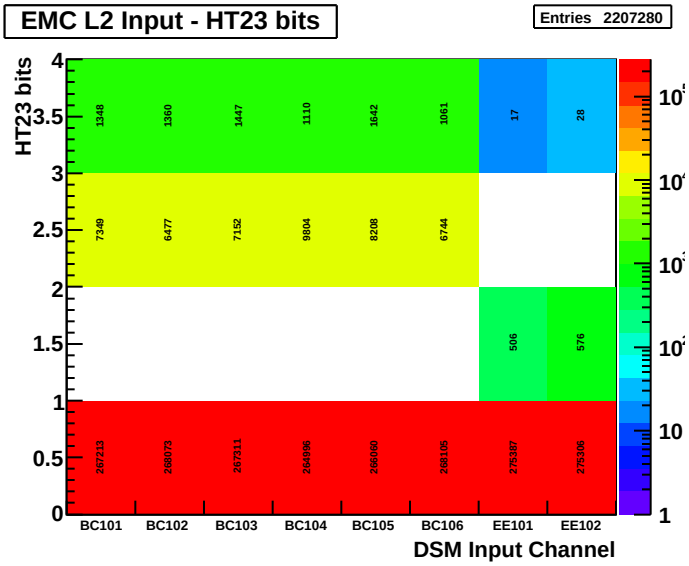

EMC L2 Input - JPZ/JPC bits
Entries 3
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1 1

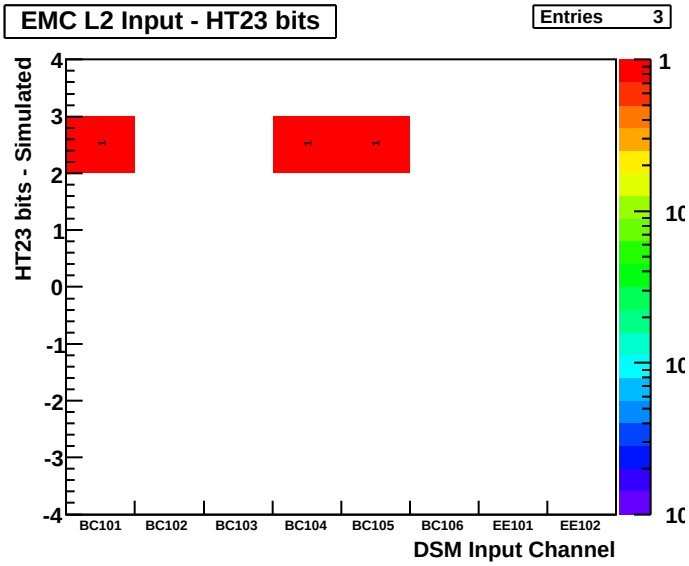

EMC L2 Input - Partial JP Sum
Entries 2207280
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

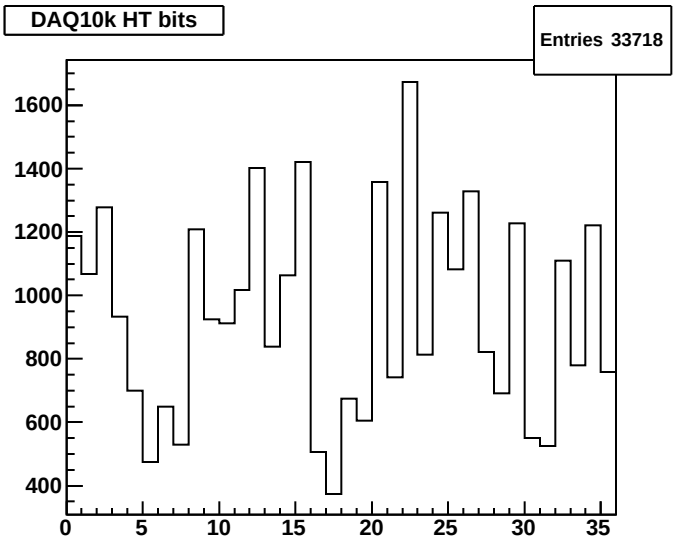

EMC L2 Input - Partial JP Sum
Entries 79
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

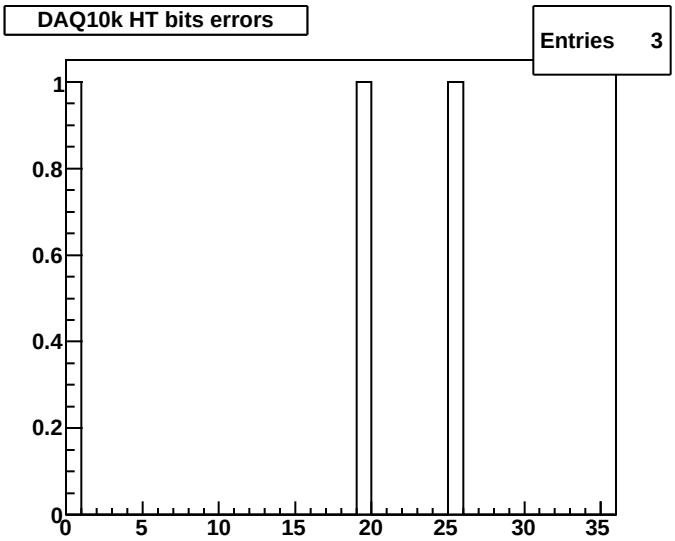

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2207280
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

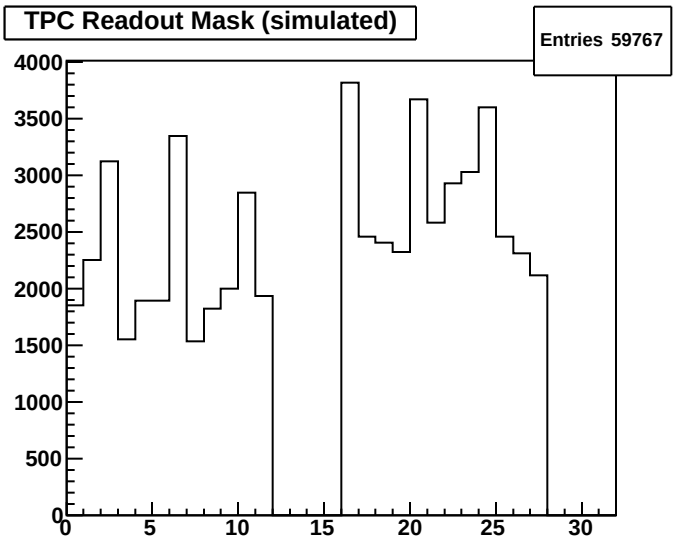

EMC L2 Input - HT01 bits/Partial JP ID
Entries 19
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

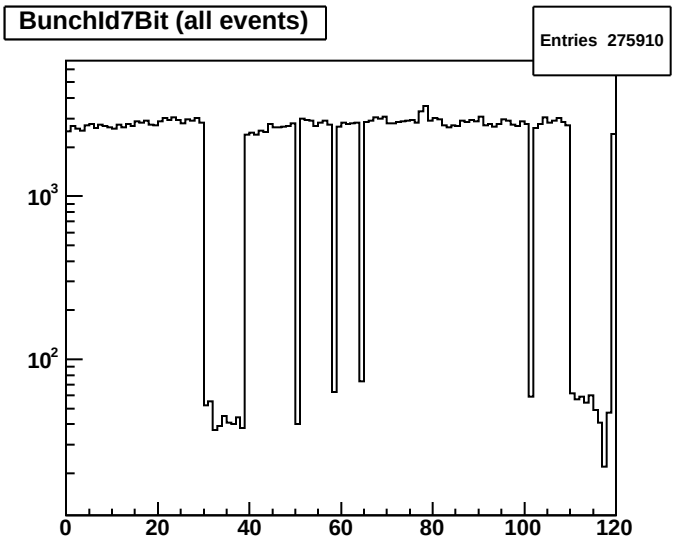

EMC L2 Input - HT23 bits
Entries 2207280
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

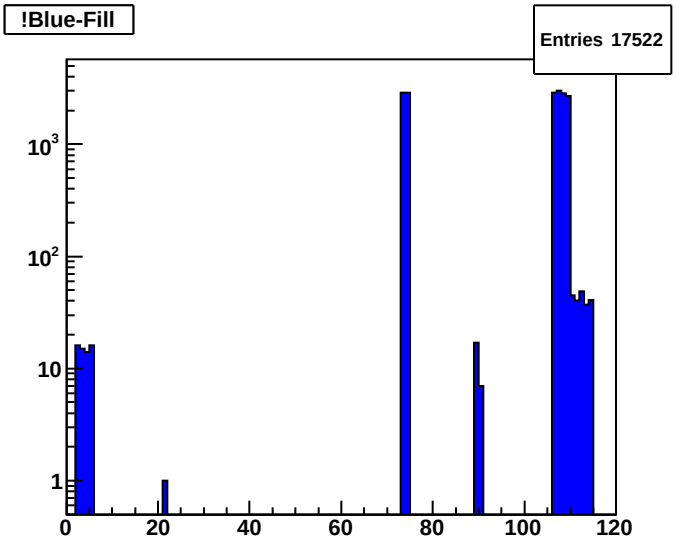

EMC L2 Input - HT23 bits
Entries 3
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

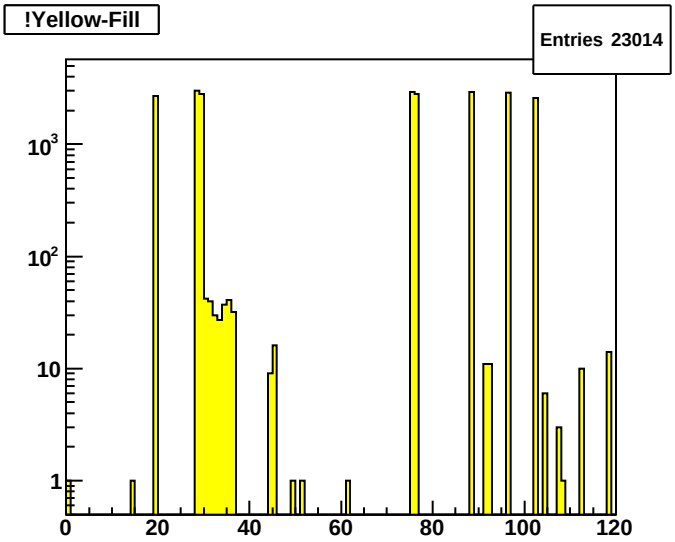

DAQ10k HT bits
Entries 33718

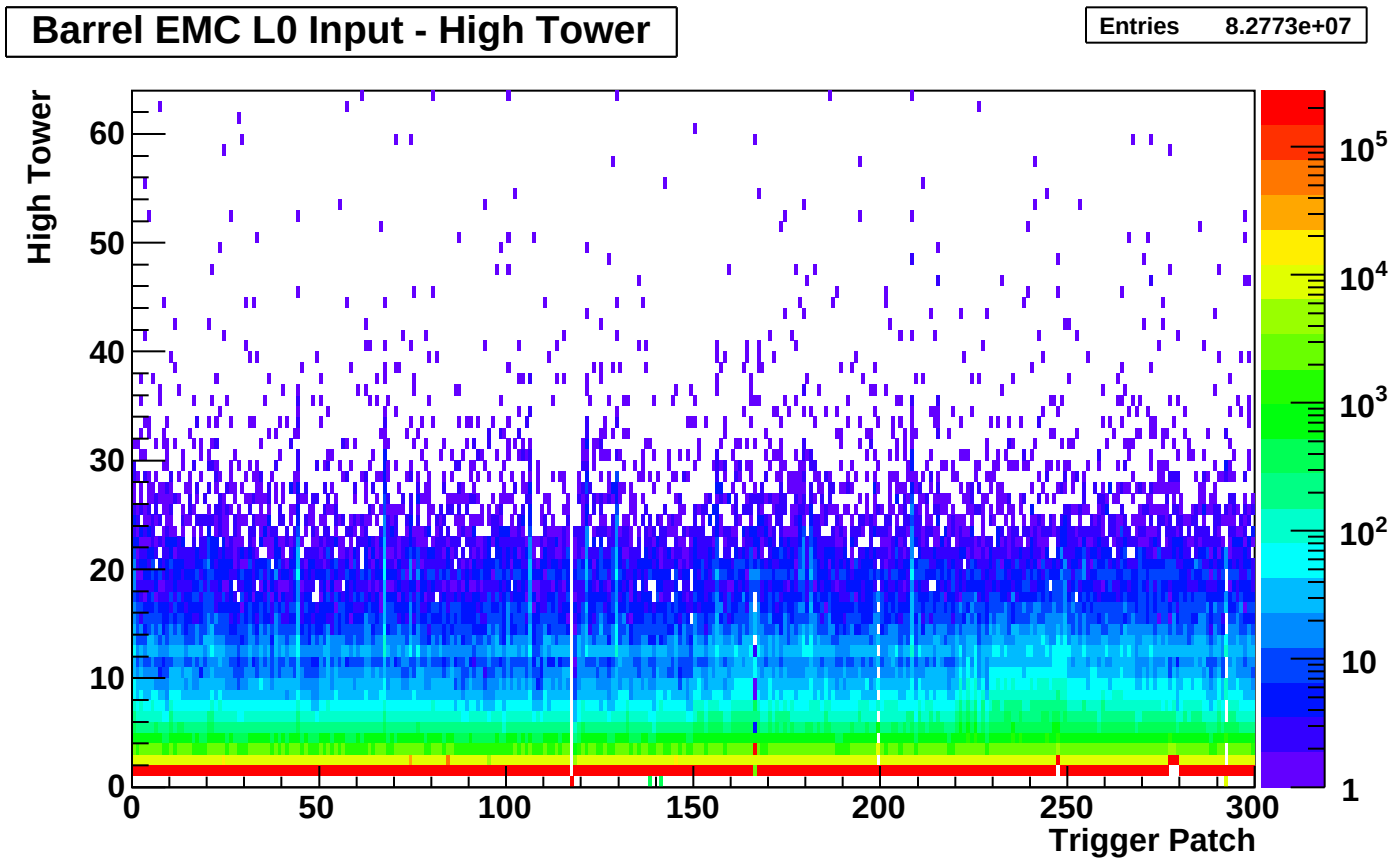

DAQ10k HT bits errors
Entries 3

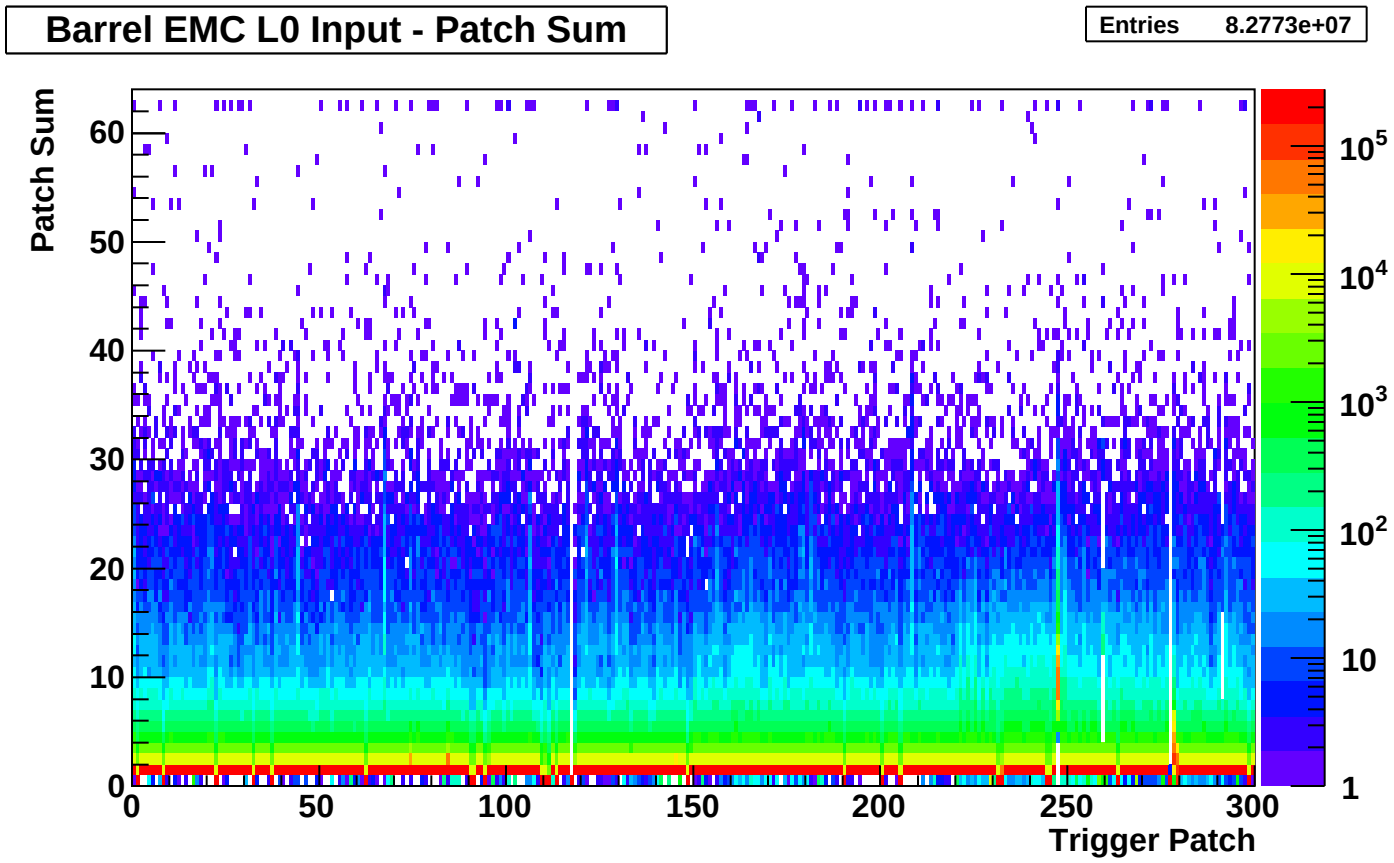

TPC Readout Mask (simulated)
Entries 59767

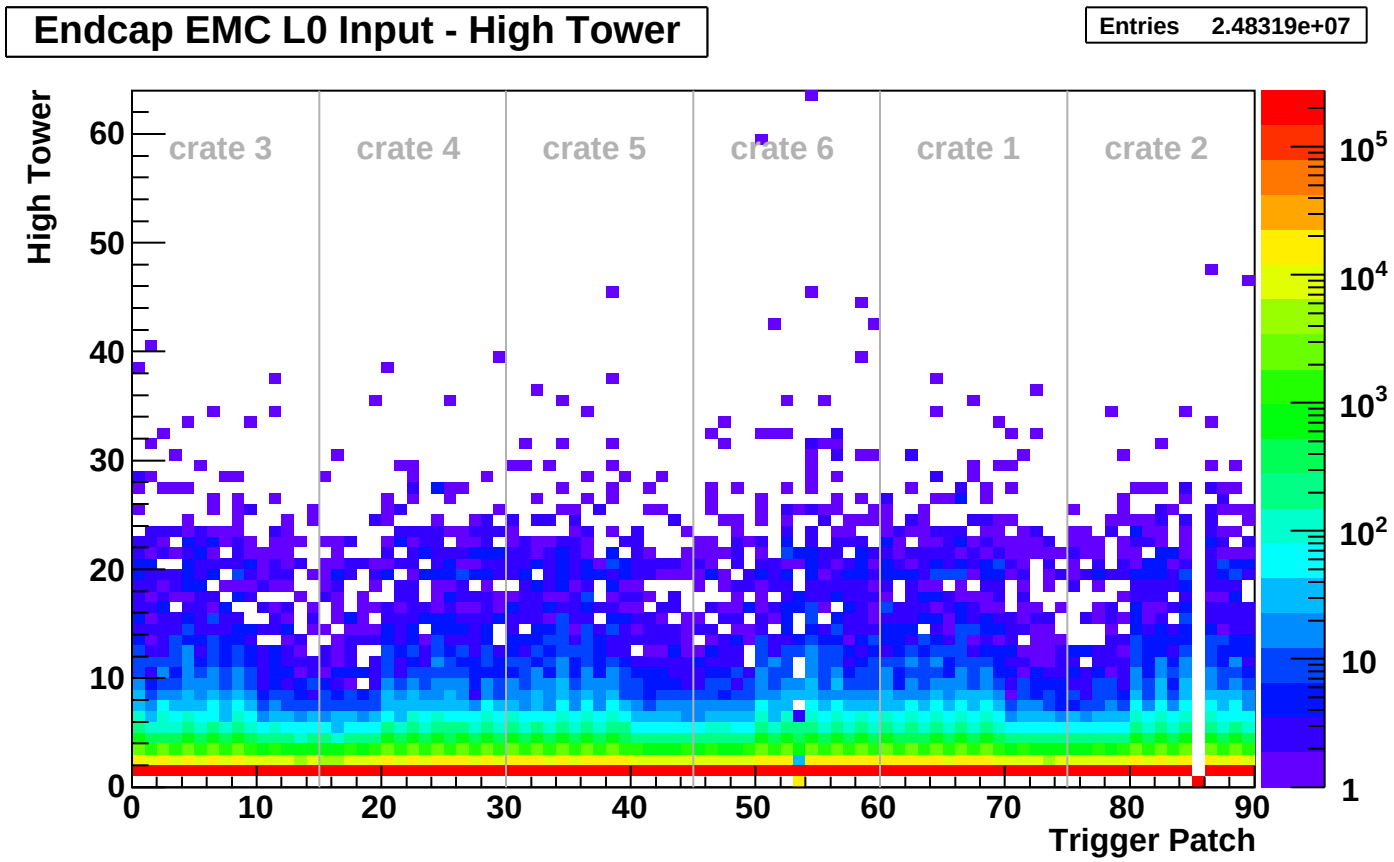

BunchId7Bit (all events)
Entries 275910

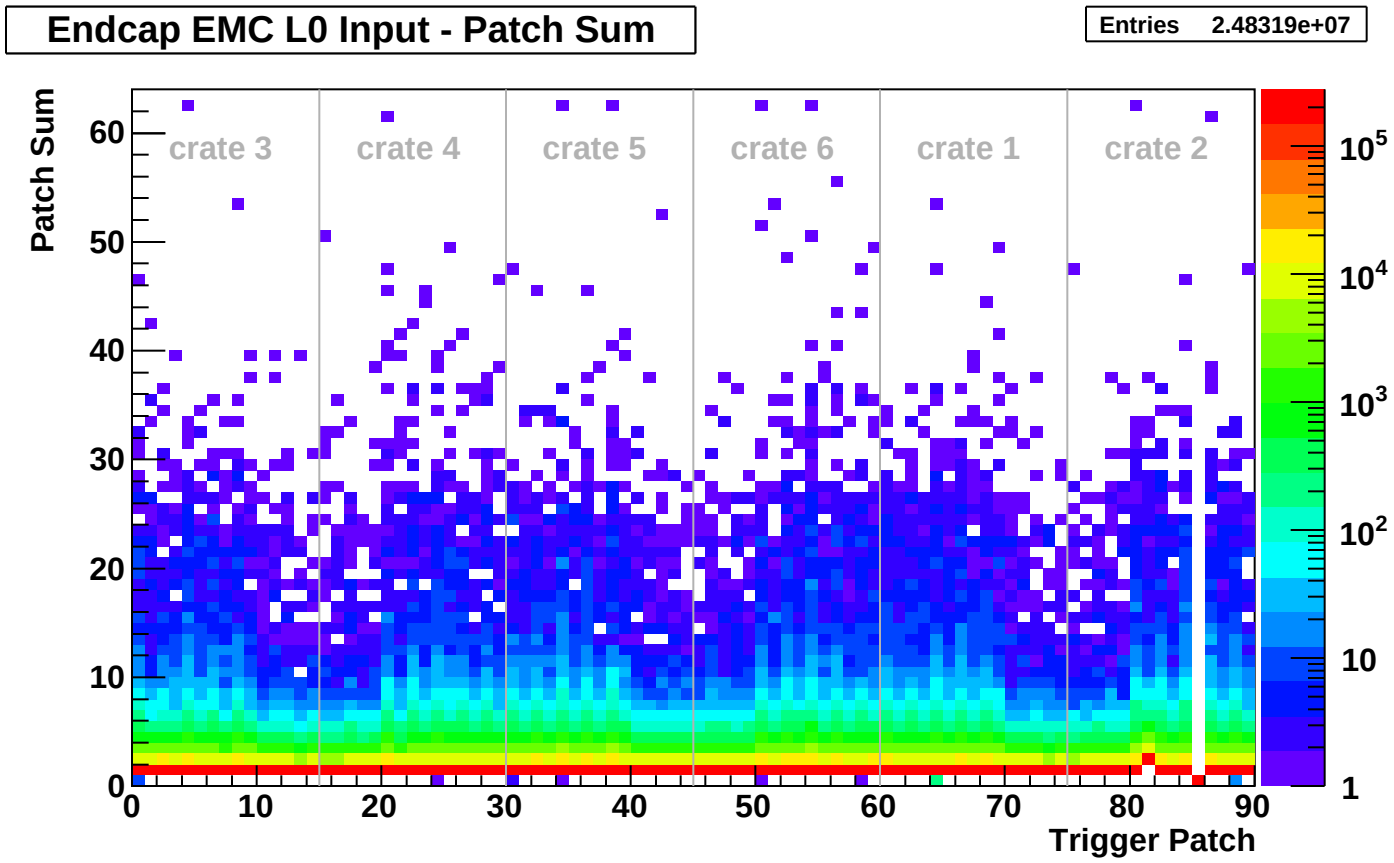

!Blue-Fill
Entries 17522

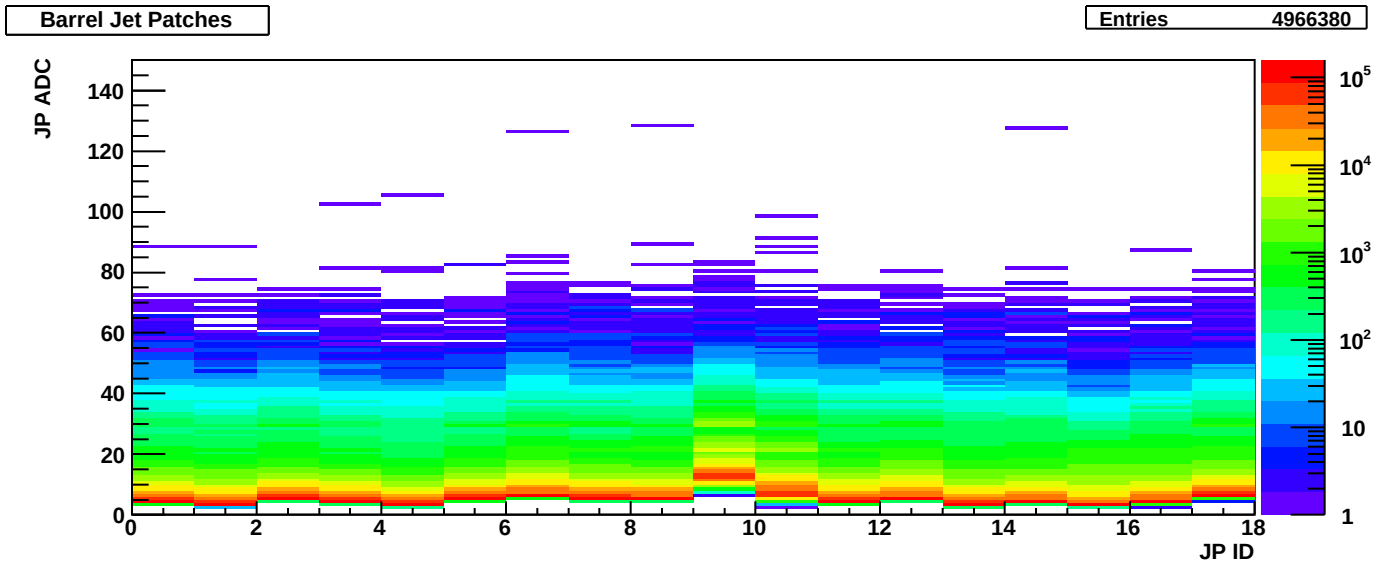

!Yellow-Fill
Entries 23014

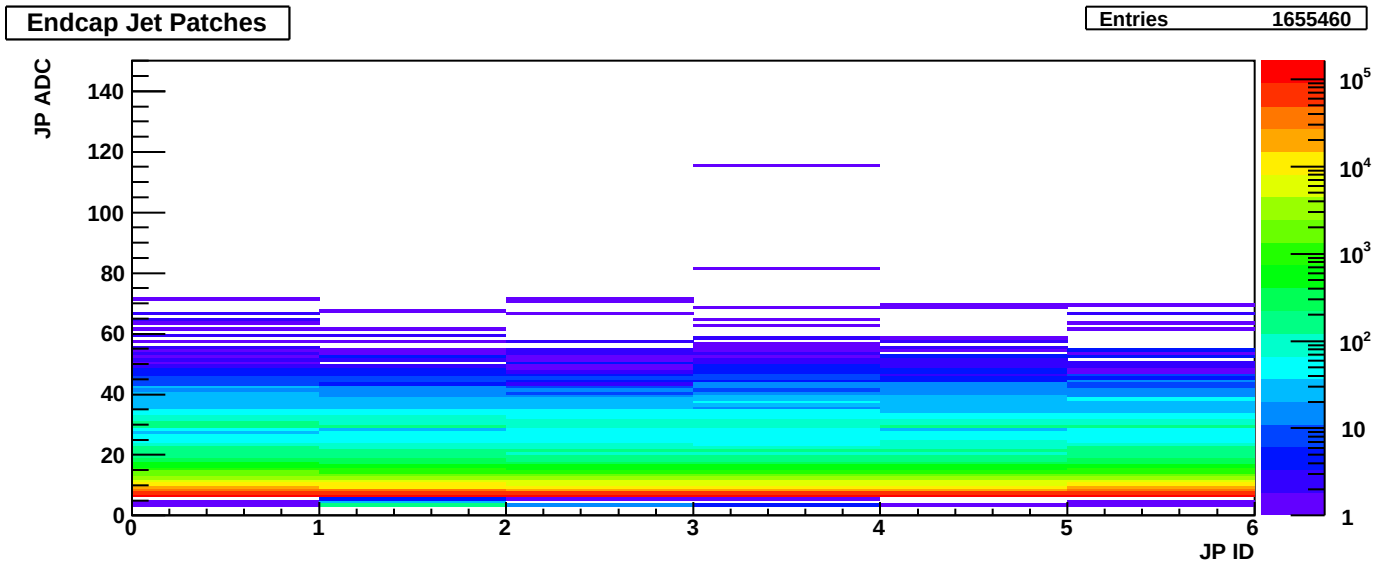

Barrel EMC L0 Input - High Tower
Entries 8.2773e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

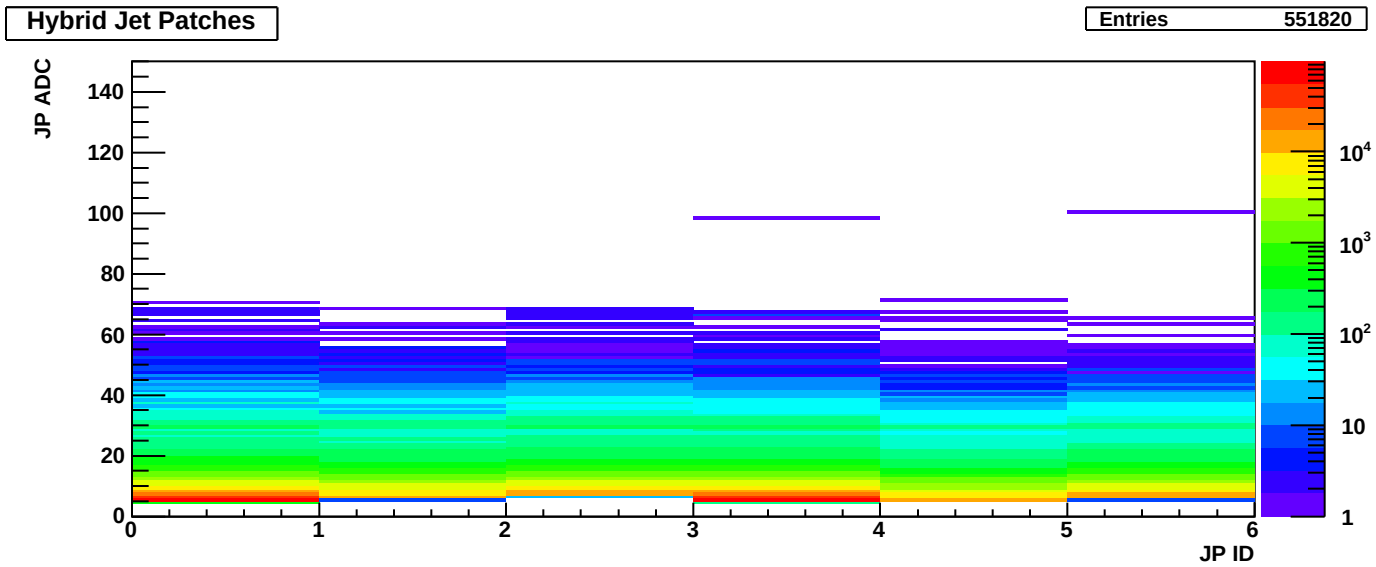

Barrel EMC L0 Input - Patch Sum
Entries 8.2773e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

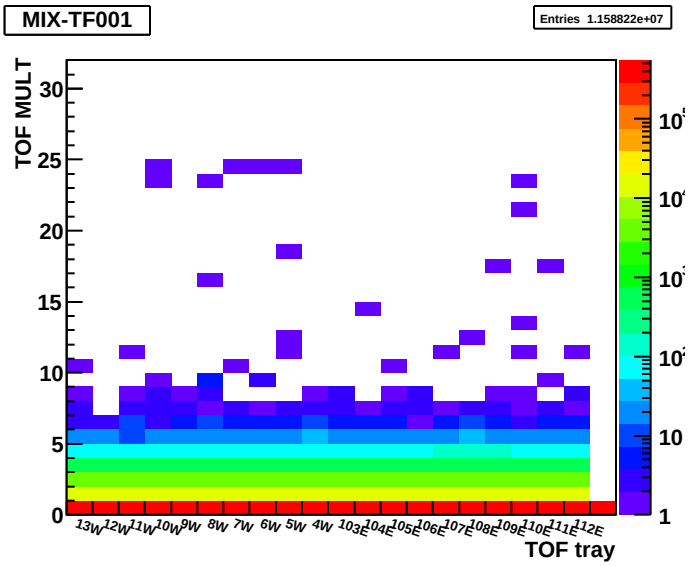

Endcap EMC L0 Input - High Tower
Entries 2.48319e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

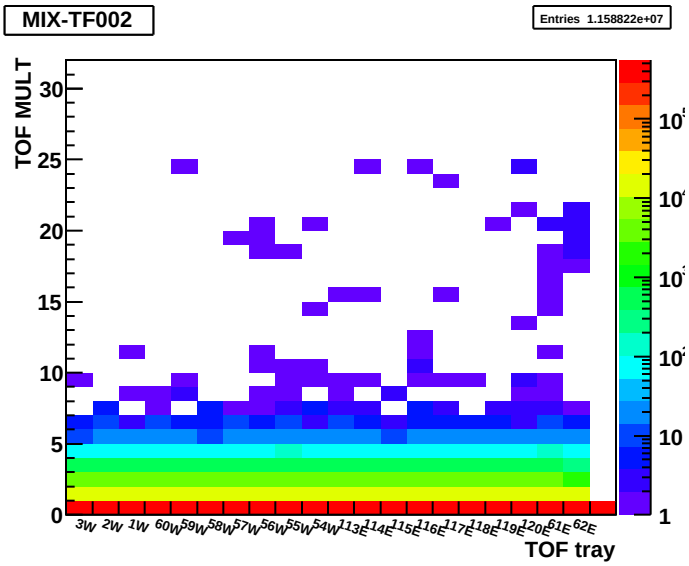

Endcap EMC L0 Input - Patch Sum
Entries 2.48319e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

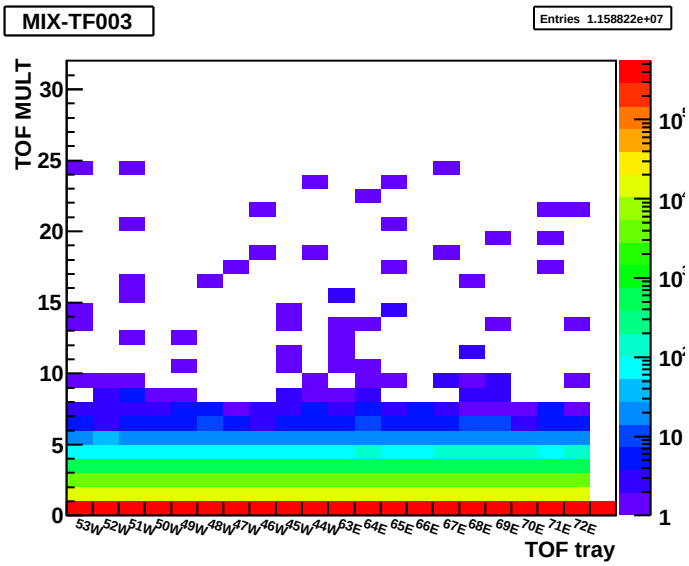

Barrel Jet Patches
Entries 4966380
JP ADC
JP ID

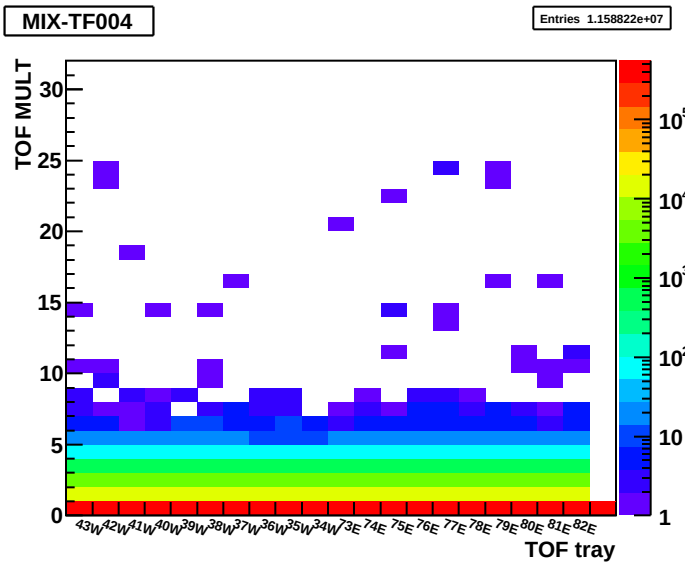

Endcap Jet Patches
Entries 1655460
JP ADC
JP ID

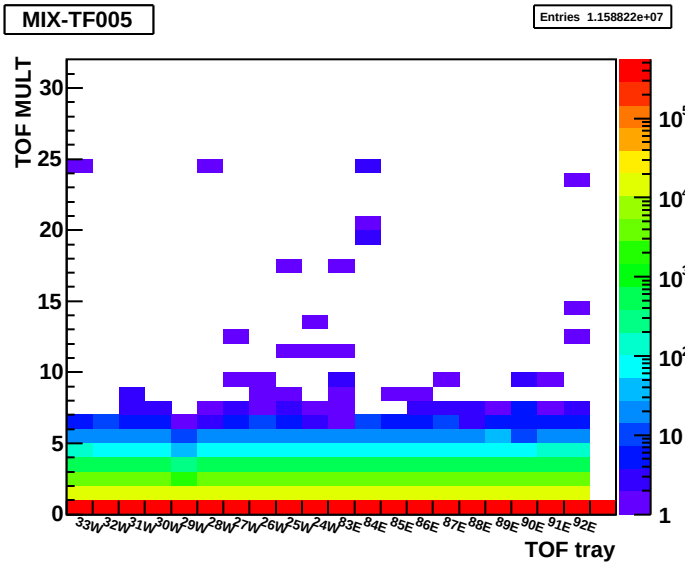

Hybrid Jet Patches
Entries 551820
JP ADC
JP ID

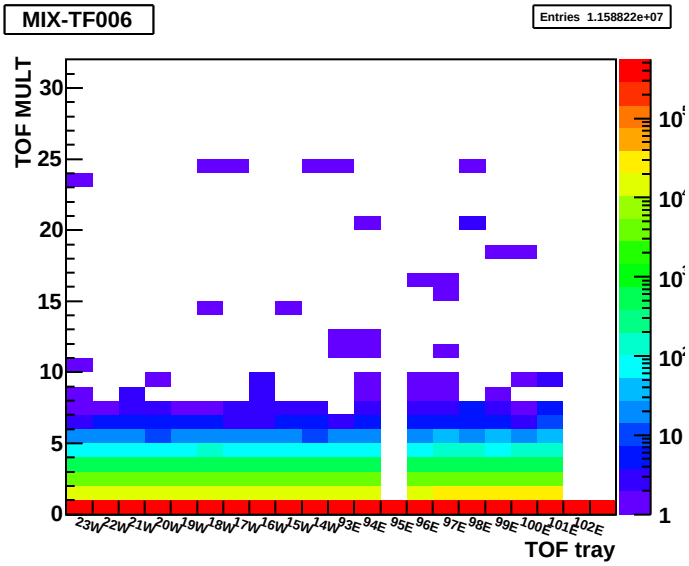

MIX-TF001
Entries 1.158822e+07
TOF MULT
TOF tray

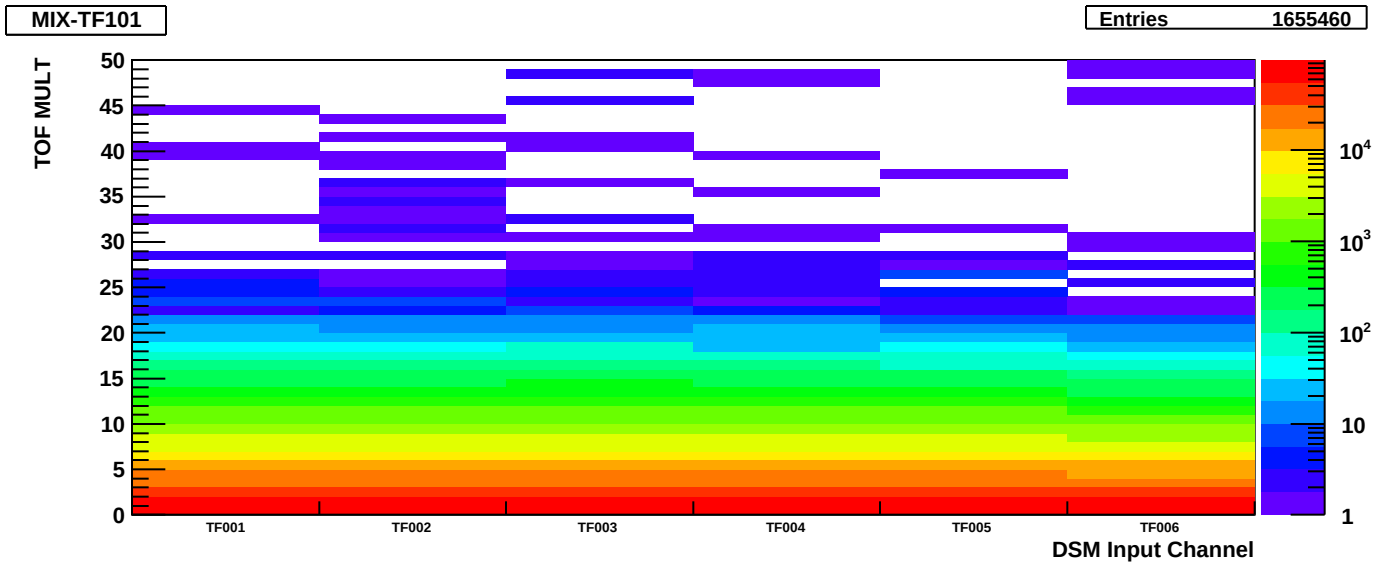

MIX-TF002
Entries 1.158822e+07
TOF MULT
TOF tray

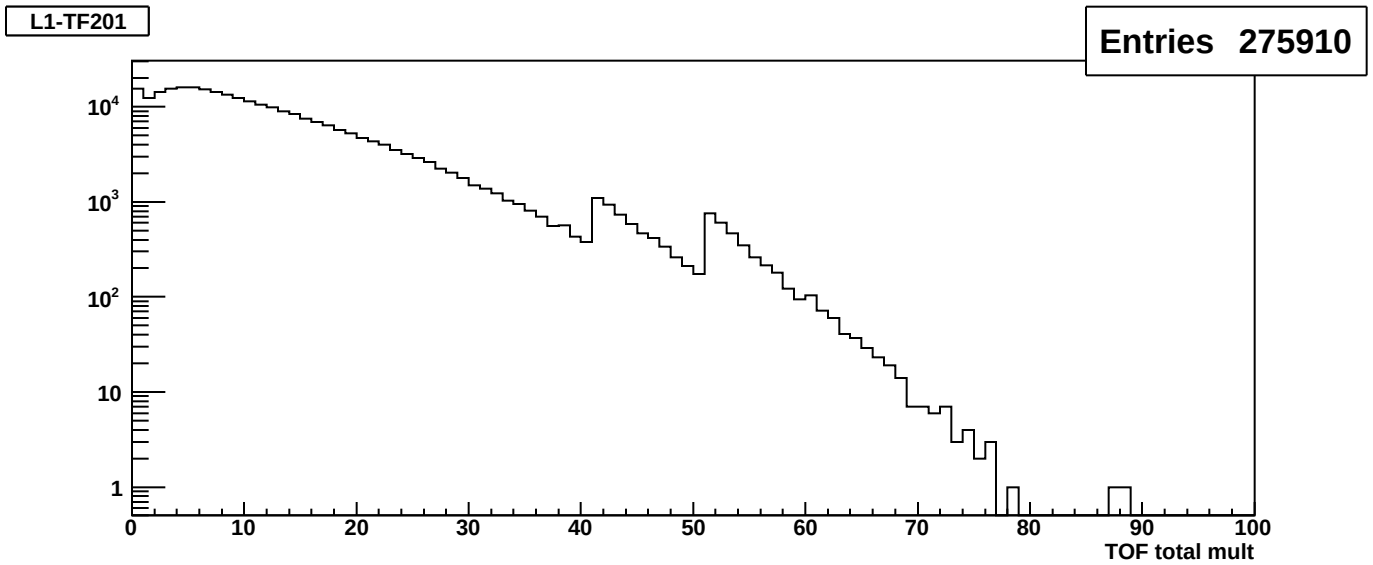

MIX-TF003
Entries 1.158822e+07
TOF MULT
TOF tray

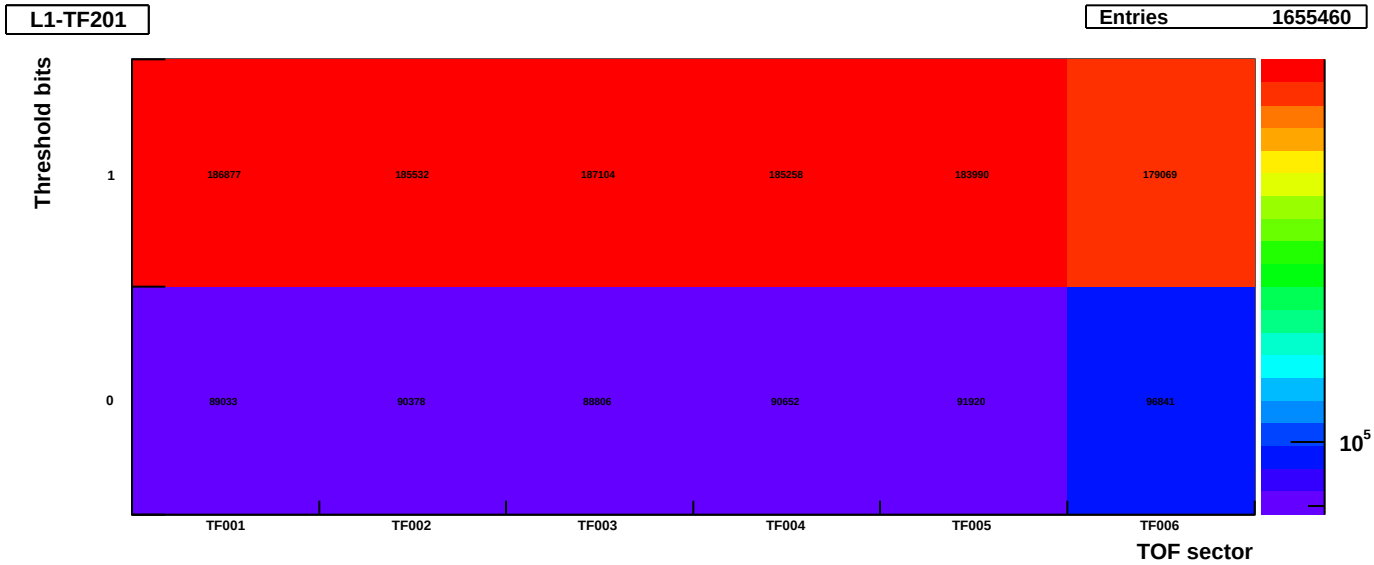

MIX-TF004
Entries 1.158822e+07
TOF MULT
TOF tray

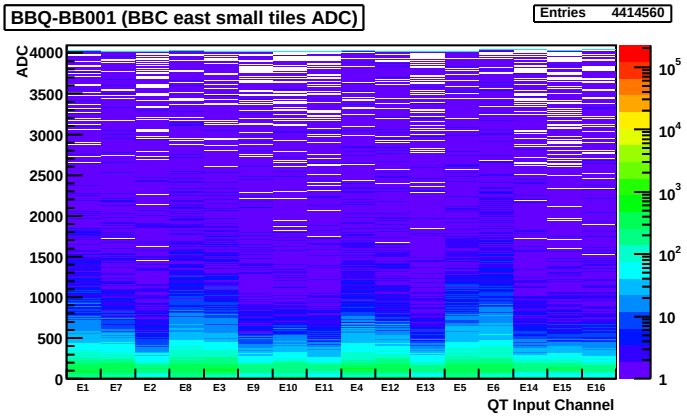

MIX-TF005
Entries 1.158822e+07
TOF MULT
TOF tray

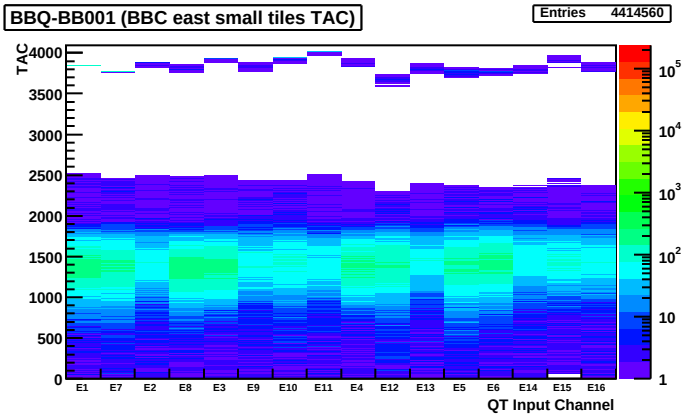

MIX-TF006
Entries 1.158822e+07
TOF MULT
TOF tray

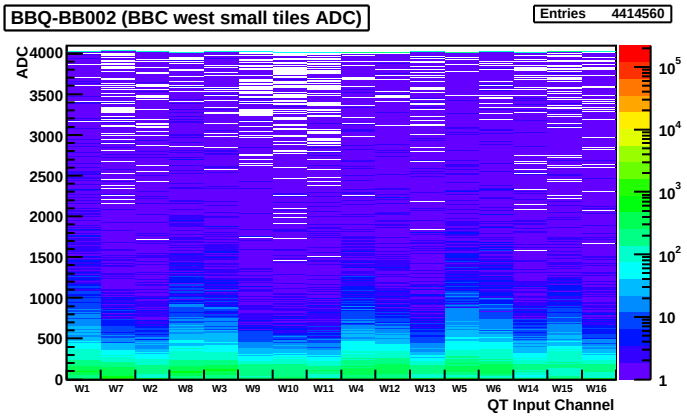

MIX-TF101
Entries 1655460
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

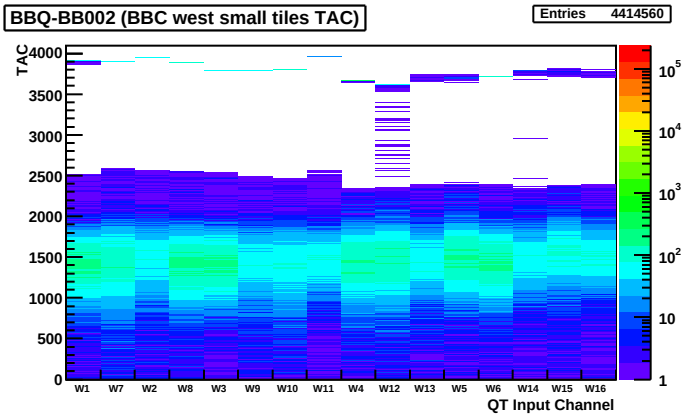

L1-TF201
Entries 275910
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

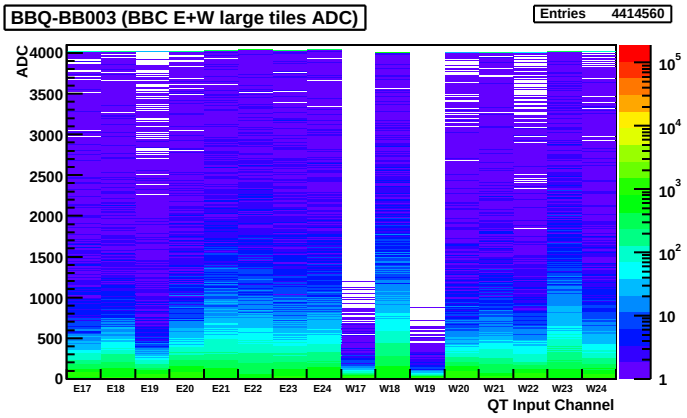

L1-TF201
Entries 1655460
Threshold bits
1
0
186877
185532
187104
185258
183990
179069
89033
90378
88806
90652
91920
96841
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

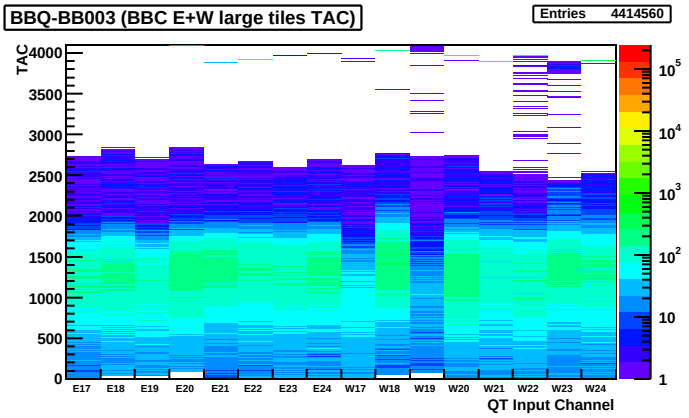

BBQ-BB001 (BBC east small tiles ADC)
Entries 4414560
ADC
QT Input Channel

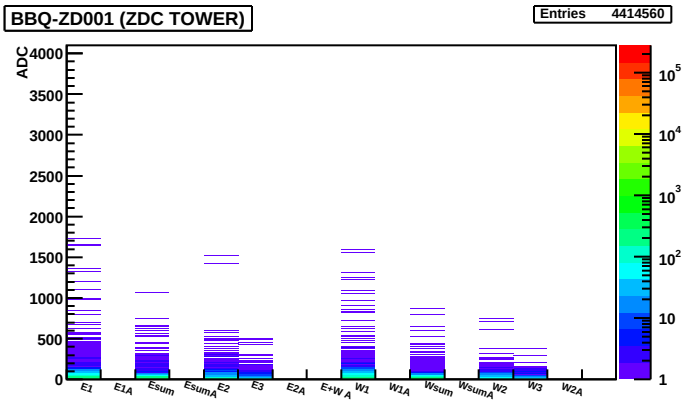

BBQ-BB001 (BBC east small tiles TAC)
Entries 4414560
TAC
QT Input Channel

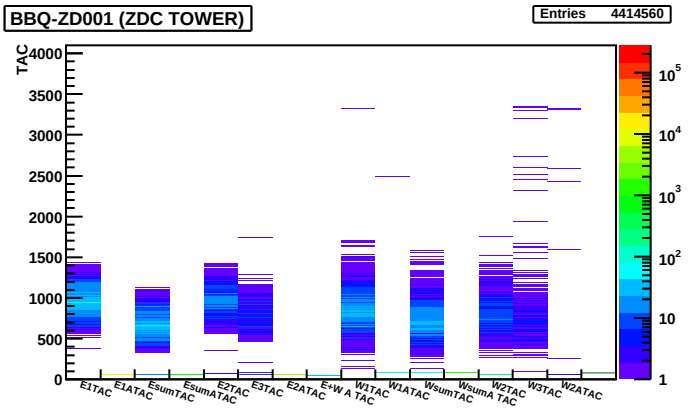

BBQ-BB002 (BBC west small tiles ADC)
Entries 4414560
ADC
QT Input Channel

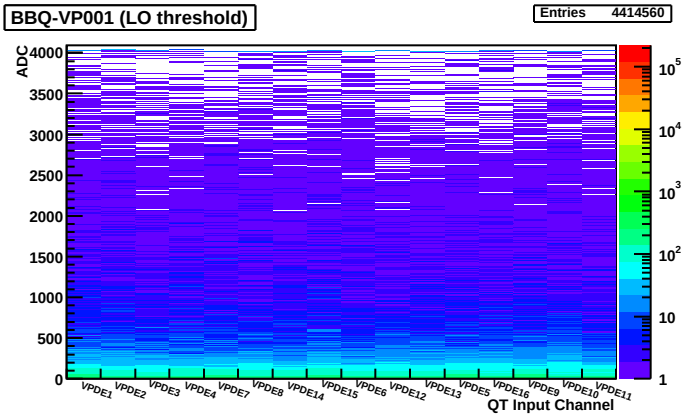

BBQ-BB002 (BBC west small tiles TAC)
Entries 4414560
TAC
QT Input Channel

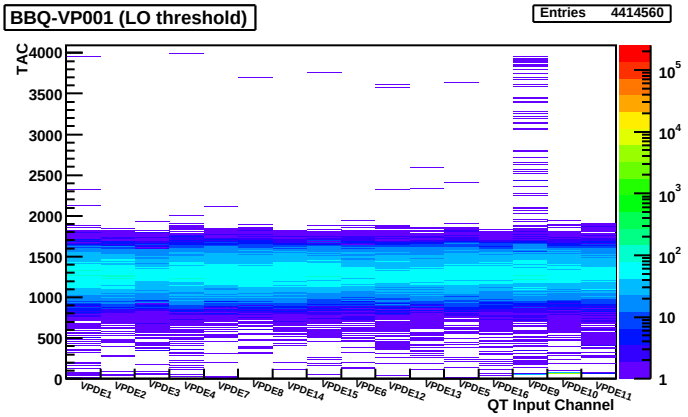

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4414560
ADC
QT Input Channel

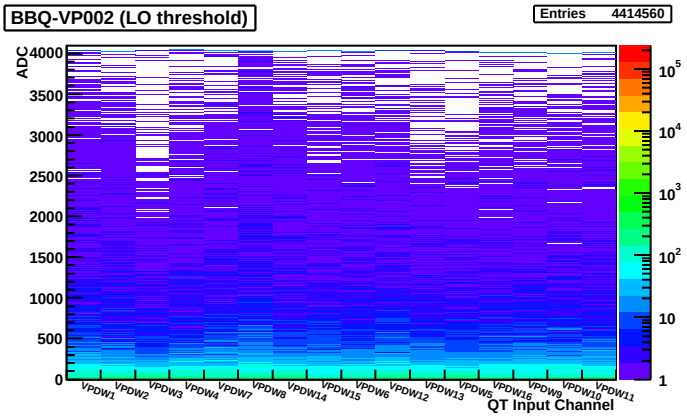

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4414560
TAC
QT Input Channel

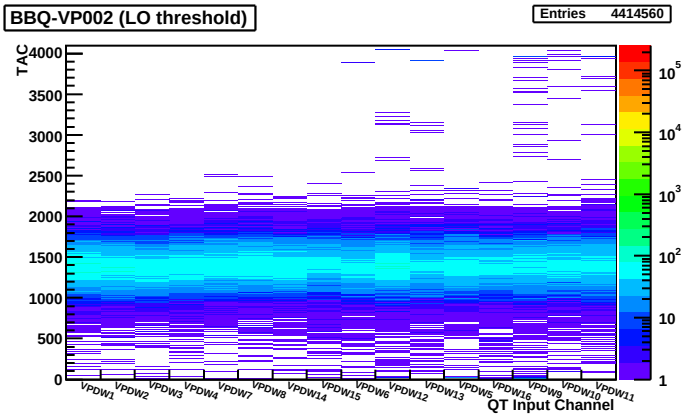

BBQ-ZD001 (ZDC TOWER)
Entries 4414560
ADC

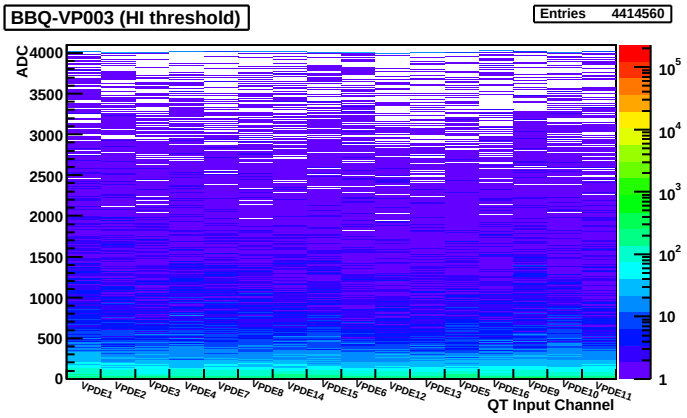

BBQ-ZD001 (ZDC TOWER)
Entries 4414560
TAC

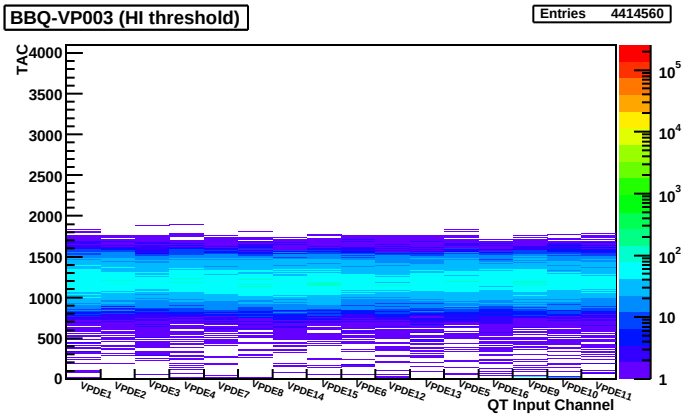

BBQ-VP001 (LO threshold)
Entries 4414560
ADC
QT Input Channel

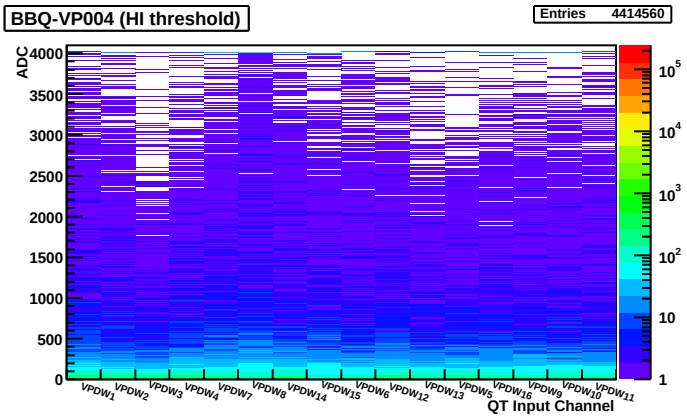

BBQ-VP001 (LO threshold)
Entries 4414560
TAC
QT Input Channel

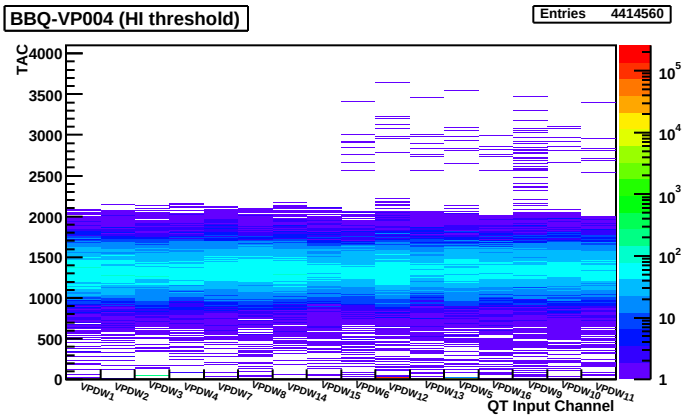

BBQ-VP002 (LO threshold)
Entries 4414560
ADC
QT Input Channel

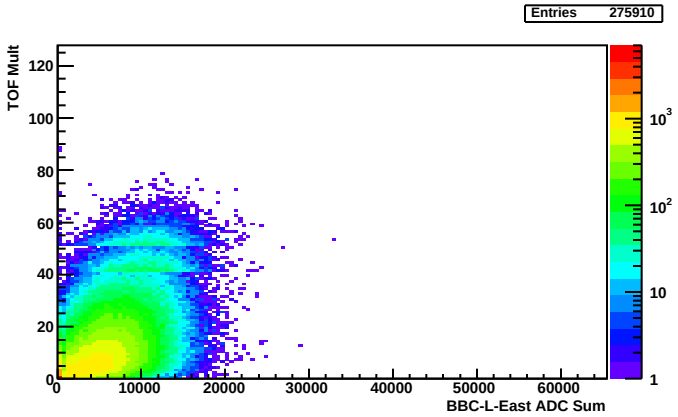

BBQ-VP002 (LO threshold)
Entries 4414560
TAC
QT Input Channel

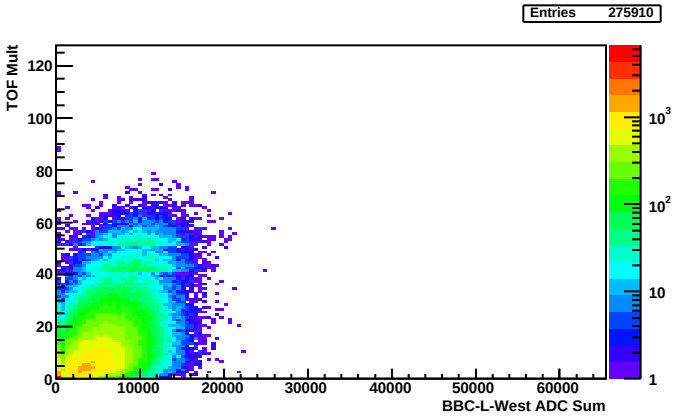

BBQ-VP003 (HI threshold)
Entries 4414560
ADC
QT Input Channel

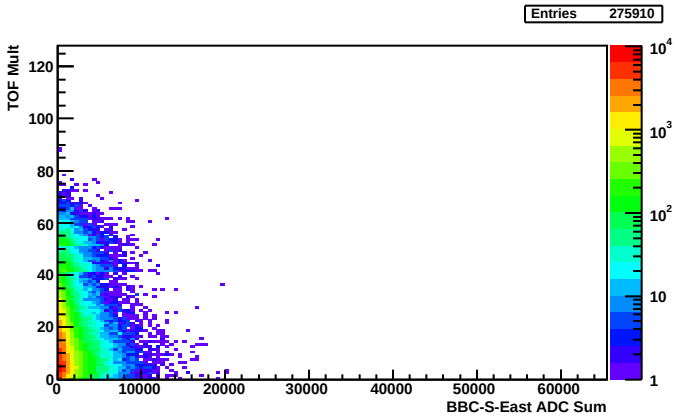

BBQ-VP003 (HI threshold)
Entries 4414560
TAC
QT Input Channel

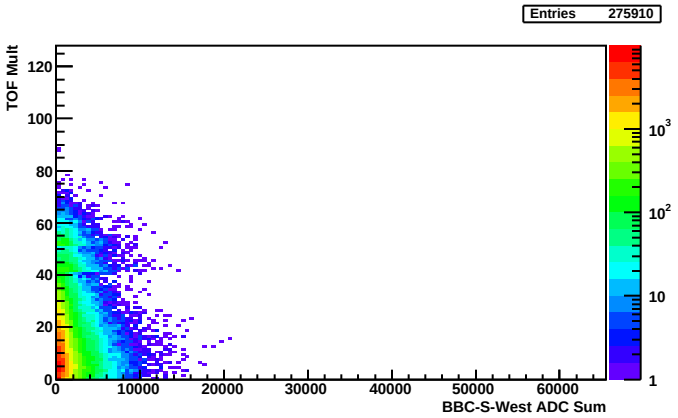

BBQ-VP004 (HI threshold)
Entries 4414560
ADC
QT Input Channel

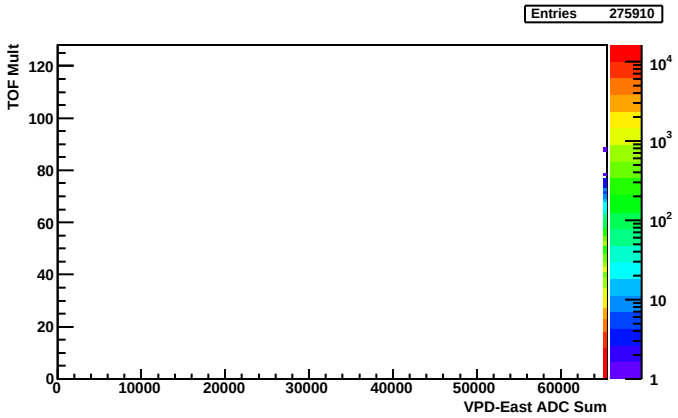

BBQ-VP004 (HI threshold)
Entries 4414560
TAC
QT Input Channel

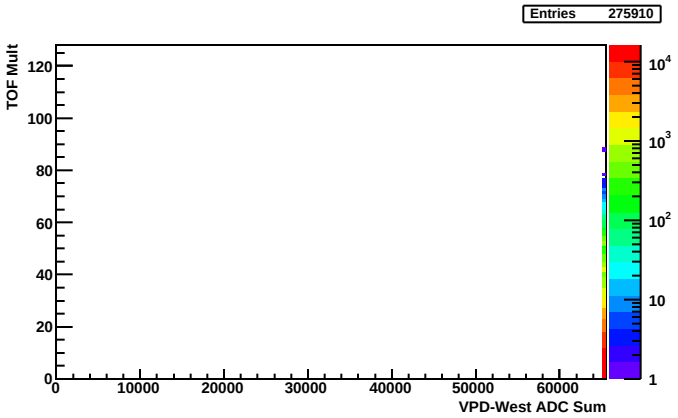

Entries 275910
TOF Mult
BBC-L-East ADC Sum

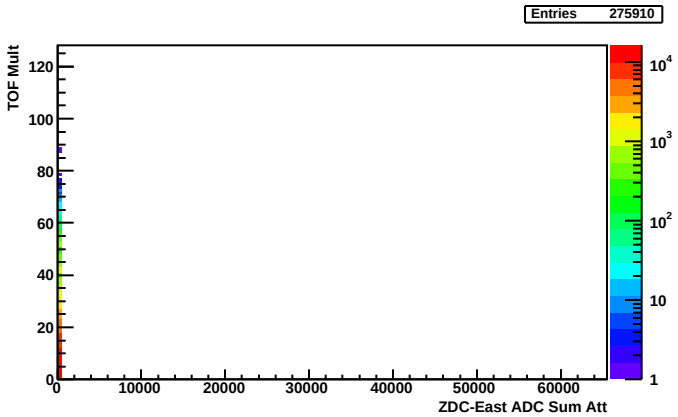

Entries 275910
TOF Mult
BBC-L-West ADC Sum

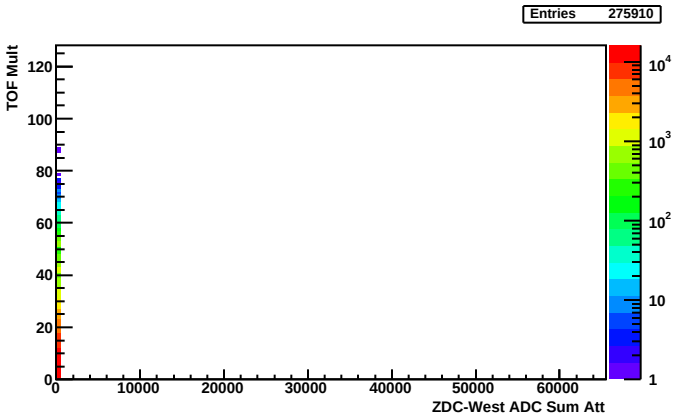

Entries 275910
TOF Mult
BBC-S-East ADC Sum

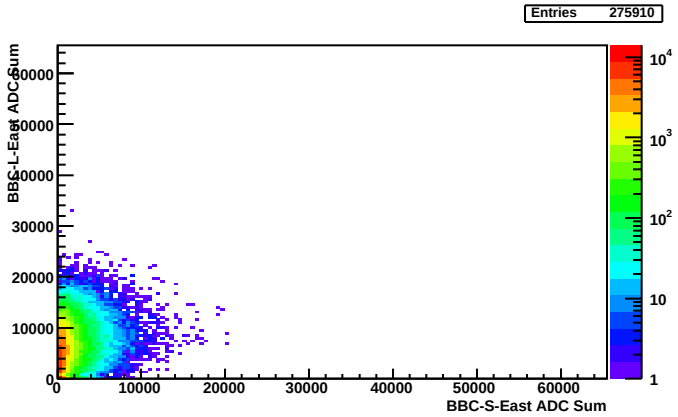

Entries 275910
TOF Mult
BBC-S-West ADC Sum

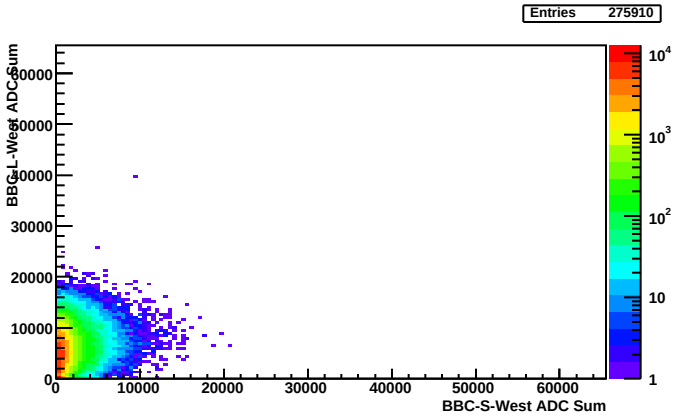

Entries 275910
TOF Mult
VPD-East ADC Sum

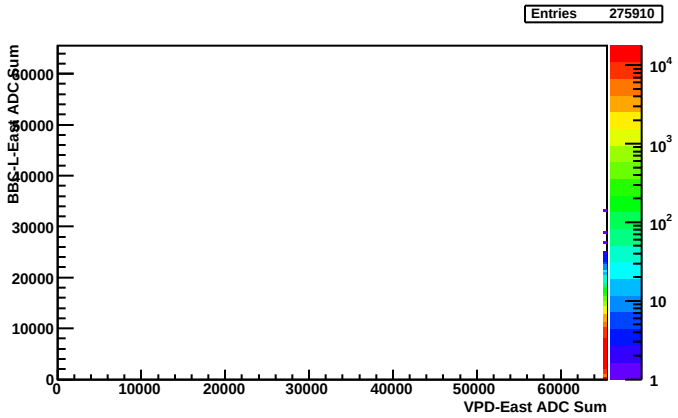

Entries 275910
TOF Mult
VPD-West ADC Sum

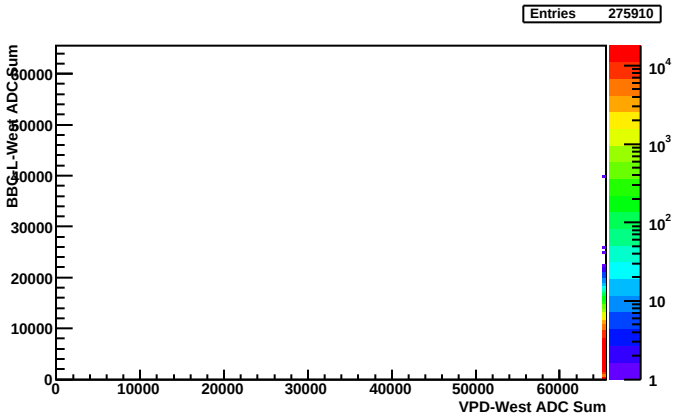

Entries 275910
TOF Mult
ZDC-East ADC Sum Att

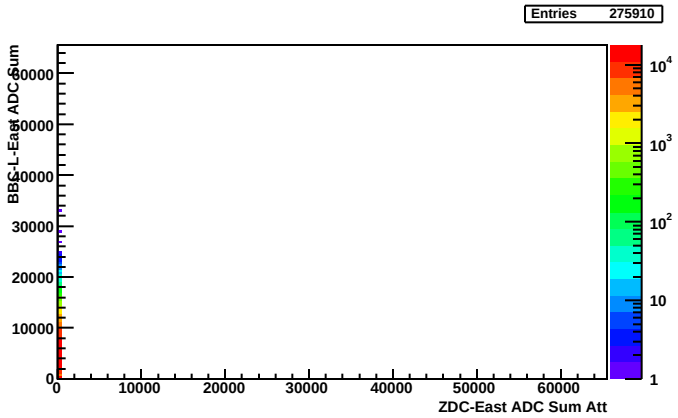

Entries 275910
TOF Mult
ZDC-West ADC Sum Att

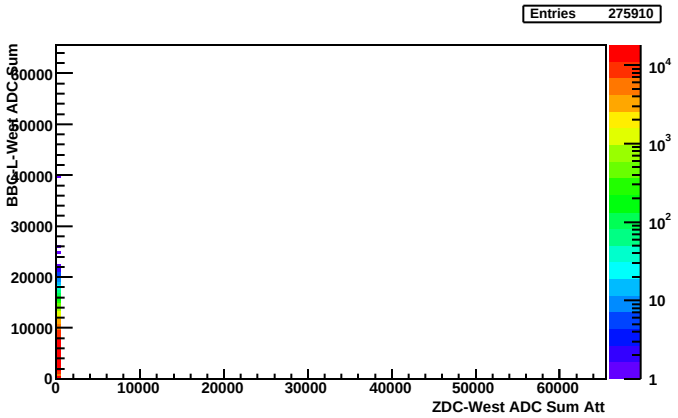

Entries 275910
BBC-L-East ADC Sum
BBC-S-East ADC Sum

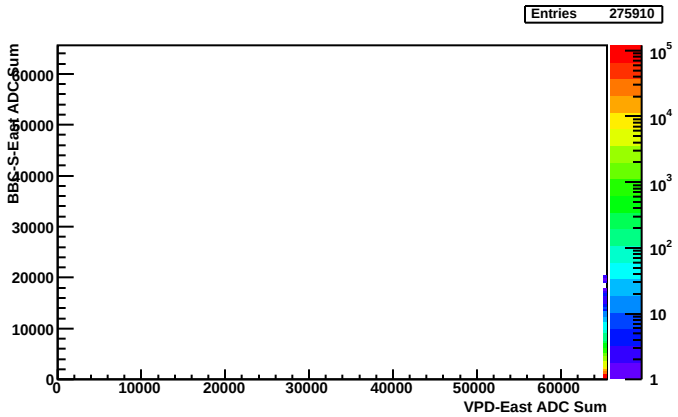

Entries 275910
BBC-L-West ADC Sum
BBC-S-West ADC Sum

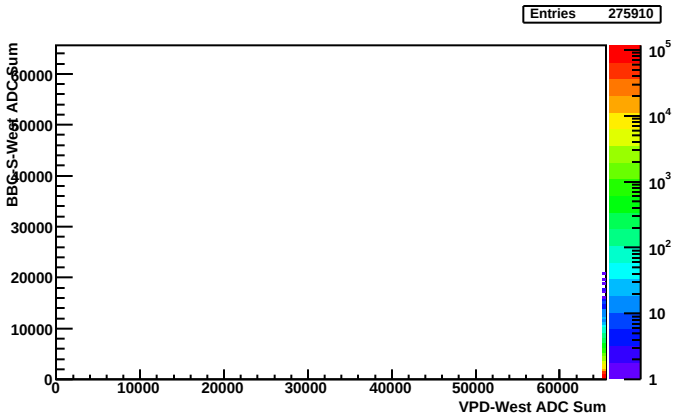

Entries 275910
BBC-L-East ADC Sum
VPD-East ADC Sum

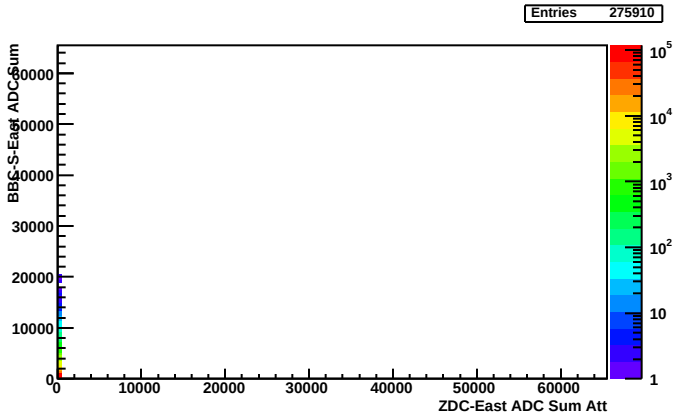

Entries 275910
BBC-L-West ADC Sum
VPD-West ADC Sum

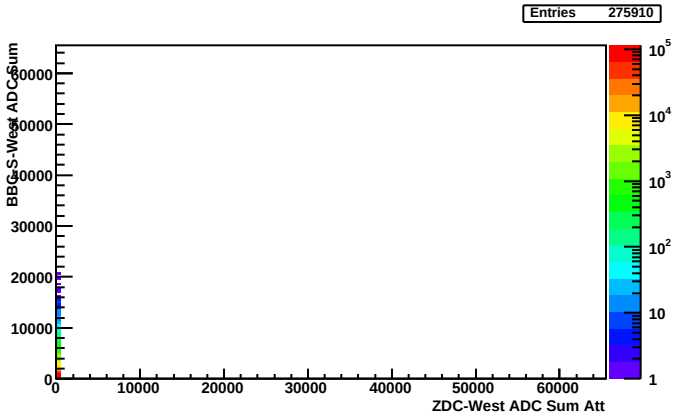

Entries 275910
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

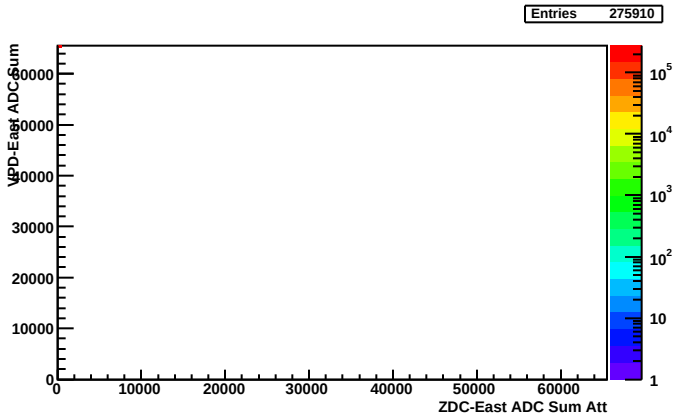

Entries 275910
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

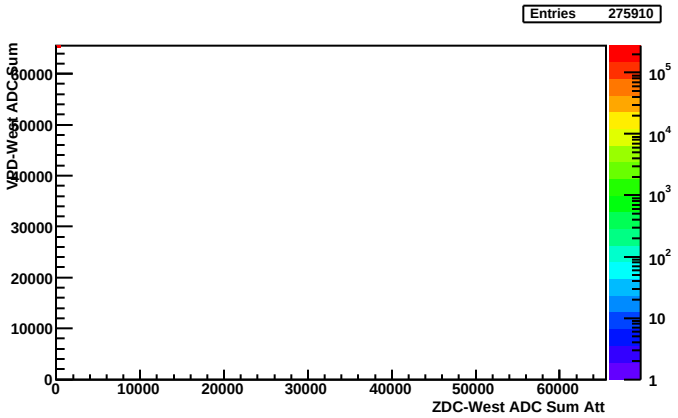

Entries 275910
BBC-S-East ADC Sum
VPD-East ADC Sum

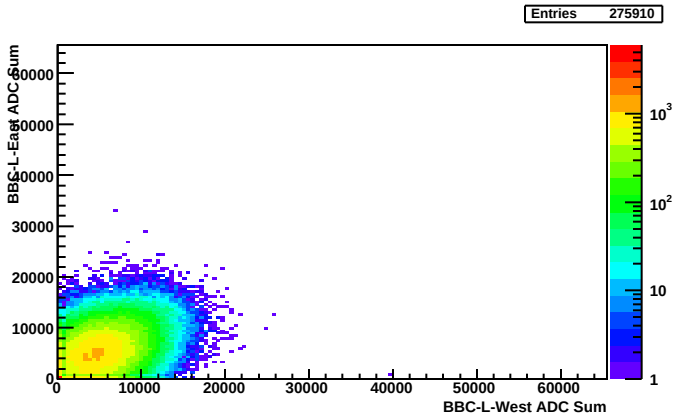

Entries 275910
BBC-S-West ADC Sum
VPD-West ADC Sum

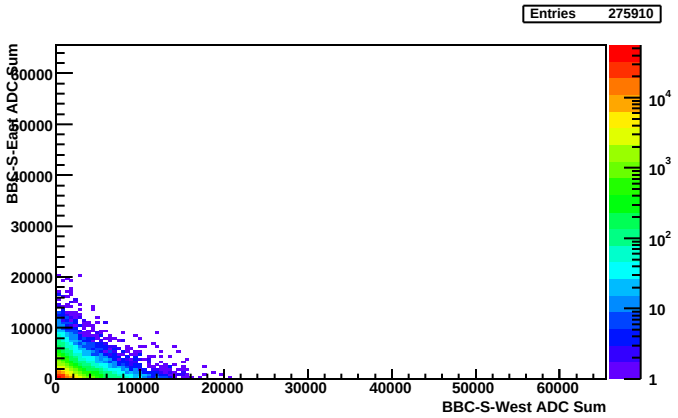

Entries 275910
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

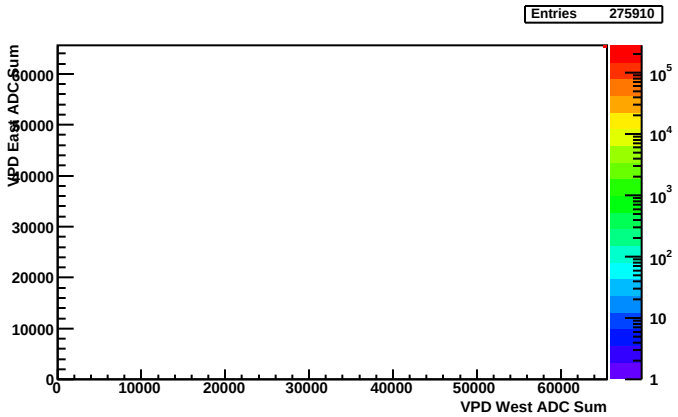

Entries 275910
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

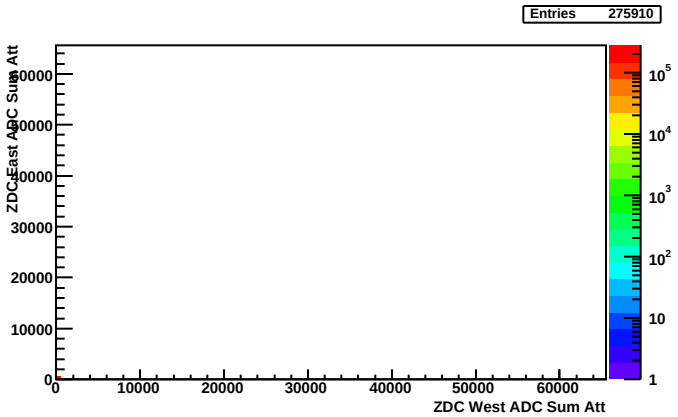

Entries 275910
VPD-East ADC Sum
ZDC-East ADC Sum Att

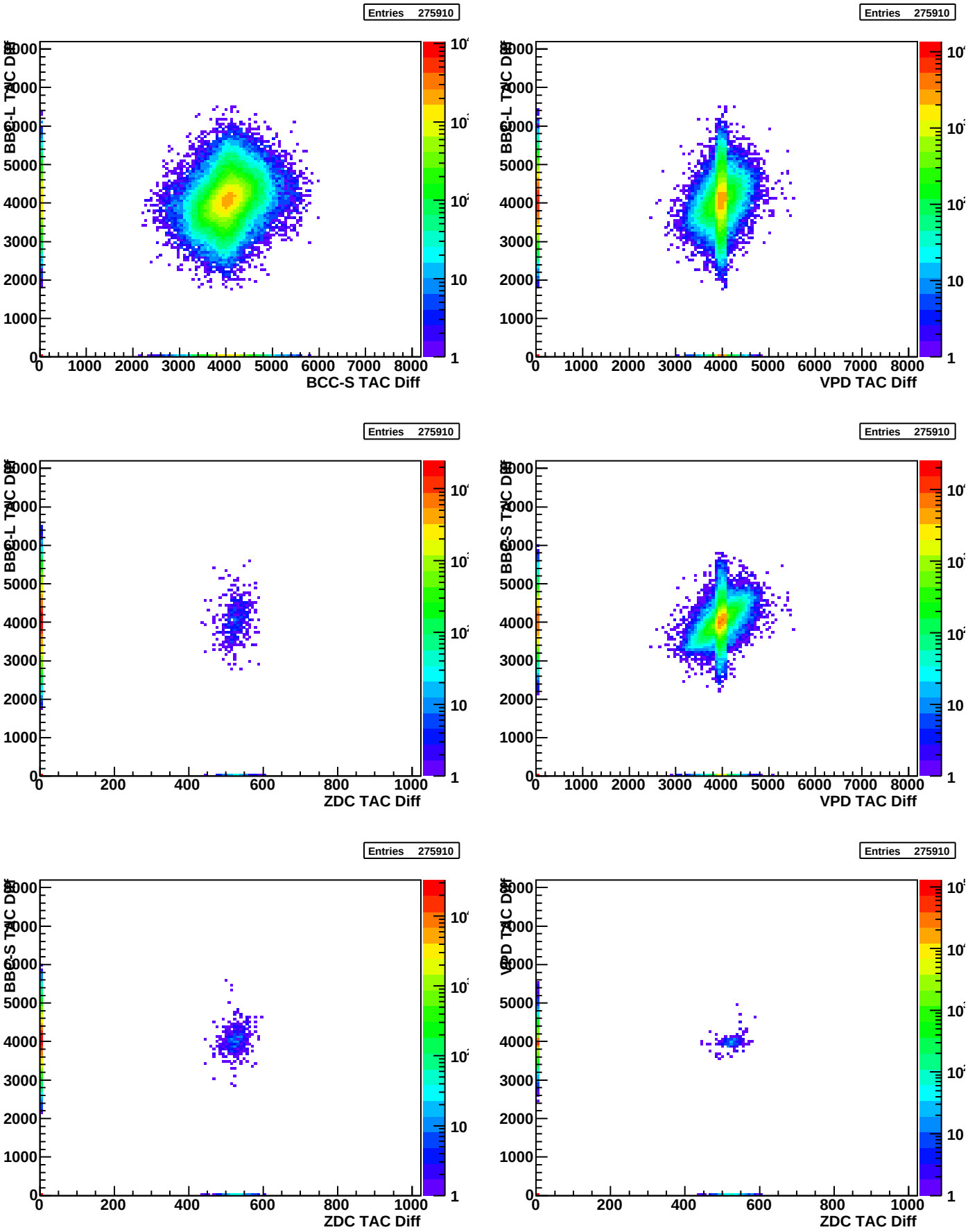

Entries 275910
VPD-West ADC Sum
ZDC-West ADC Sum Att

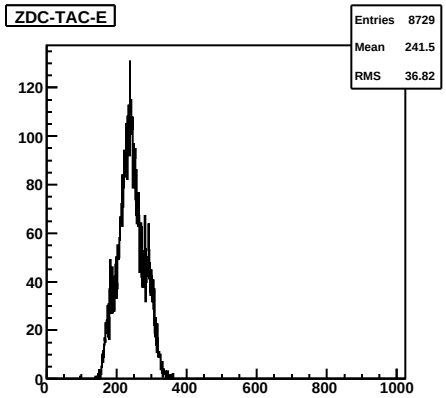

Entries 275910
BBC-L-East ADC Sum
BBC-L-West ADC Sum

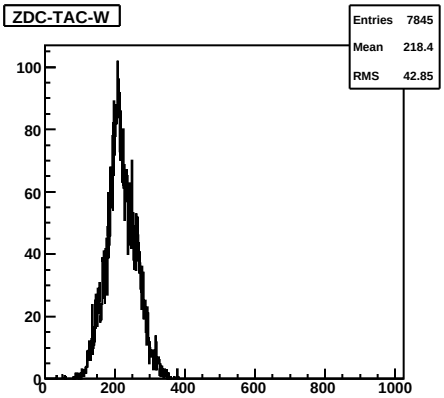

Entries 275910
BBC-S-East ADC Sum
BBC-S-West ADC Sum

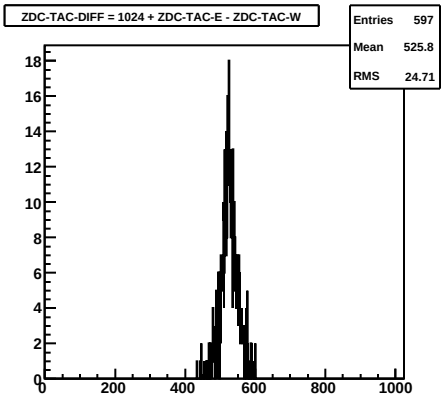

Entries 275910
VPD East ADC Sum
VPD West ADC Sum

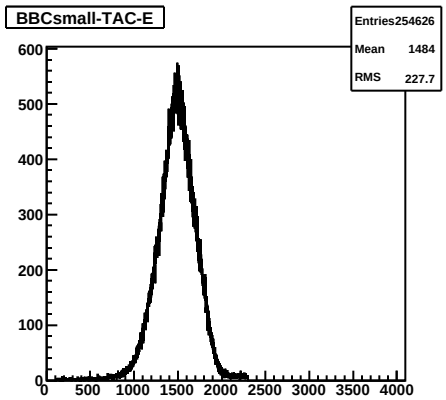

Entries 275910
ZDC East ADC Sum Att
ZDC West ADC Sum Att

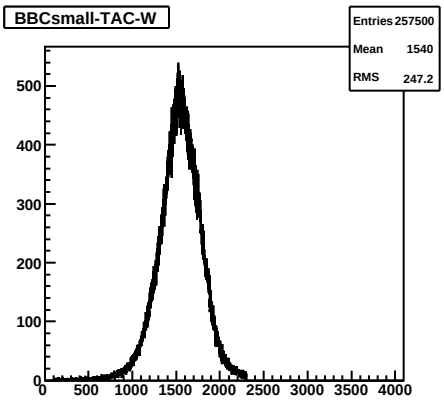

Entries 275910
BBC-L TAC Diff
BCC-S TAC Diff
Entries 275910
BBC-L TAC Diff
VPD TAC Diff
Entries 275910
BBC-L TAC Diff
ZDC TAC Diff
Entries 275910
BBC-S TAC Diff
VPD TAC Diff
Entries 275910
BBC-S TAC Diff
ZDC TAC Diff
Entries 275910
VPD TAC Diff
ZDC TAC Diff

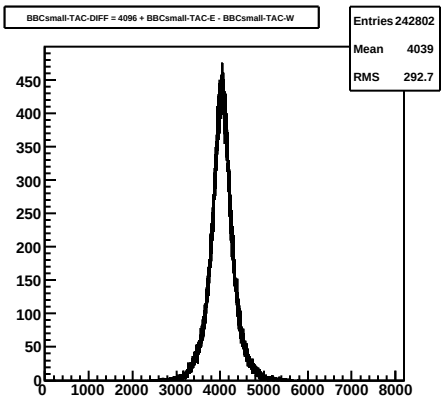

ZDC-TAC-E
Entries 8729
Mean 241.5
RMS 36.82

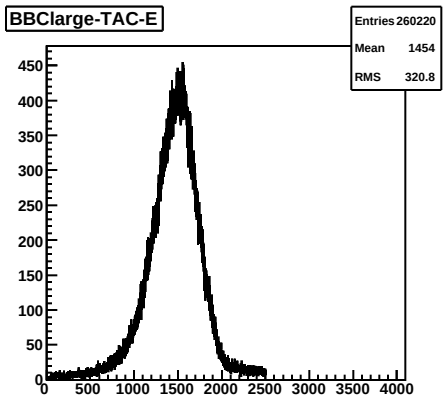

ZDC-TAC-W
Entries 7845
Mean 218.4
RMS 42.85

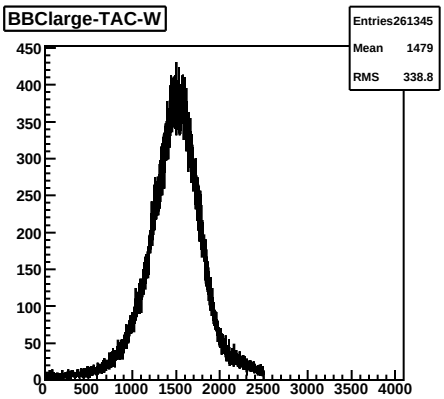

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 597
Mean 525.8
RMS 24.71

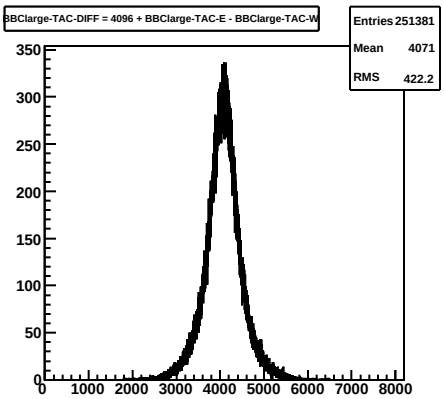

BBCsmall-TAC-E
Entries 254626
Mean 1484
RMS 227.7

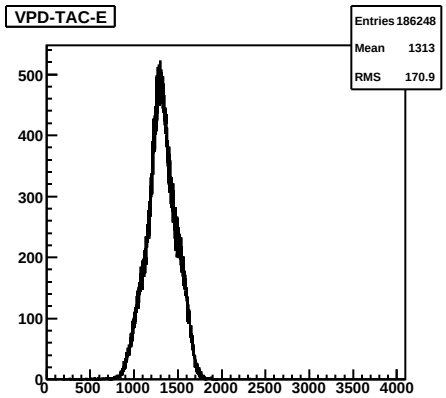

BBCsmall-TAC-W
Entries 257500
Mean 1540
RMS 247.2

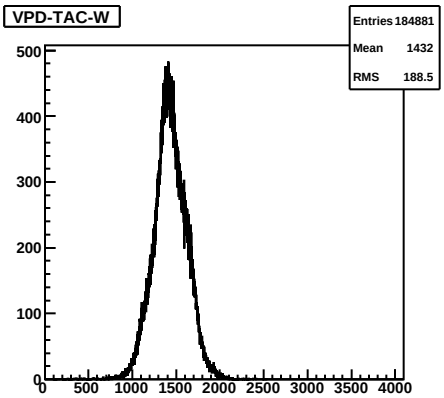

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 242802
Mean 4039
RMS 292.7

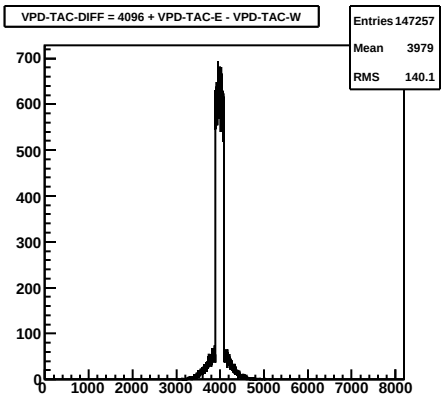

BBClarge-TAC-E
Entries 260220
Mean 1454
RMS 320.8

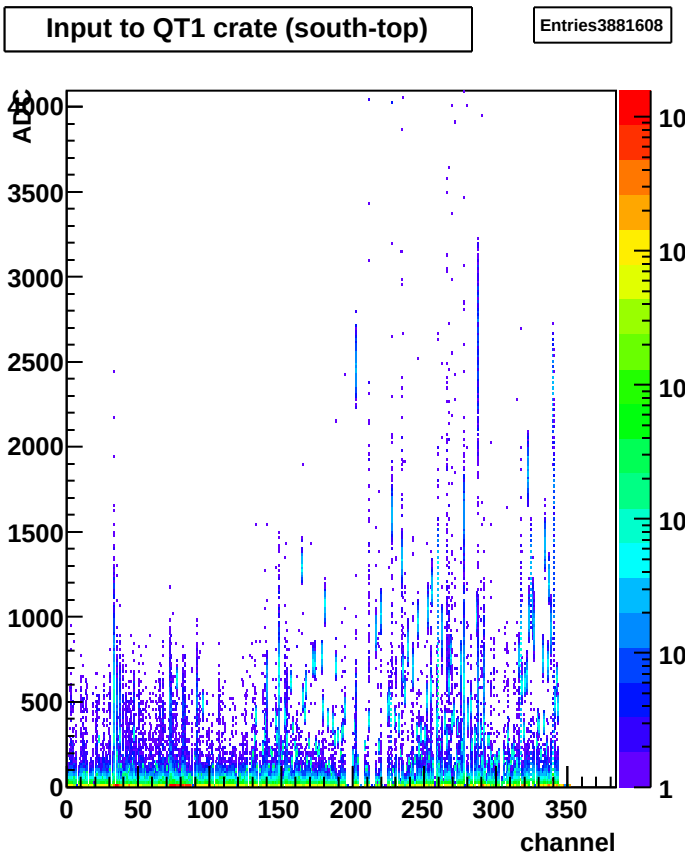

BBClarge-TAC-W
Entries 261345
Mean 1479
RMS 338.8

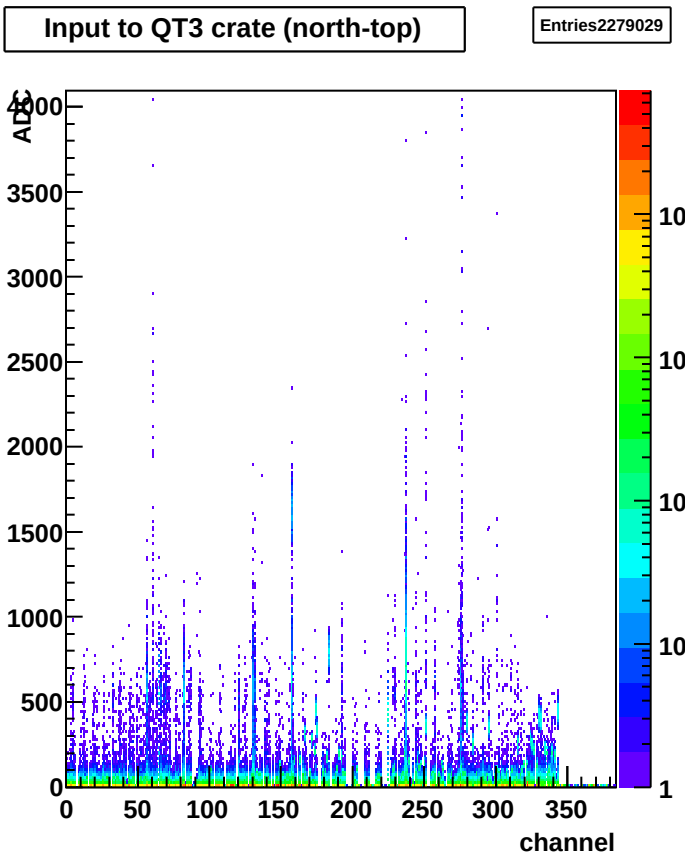

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 251381
Mean 4071
RMS 422.2

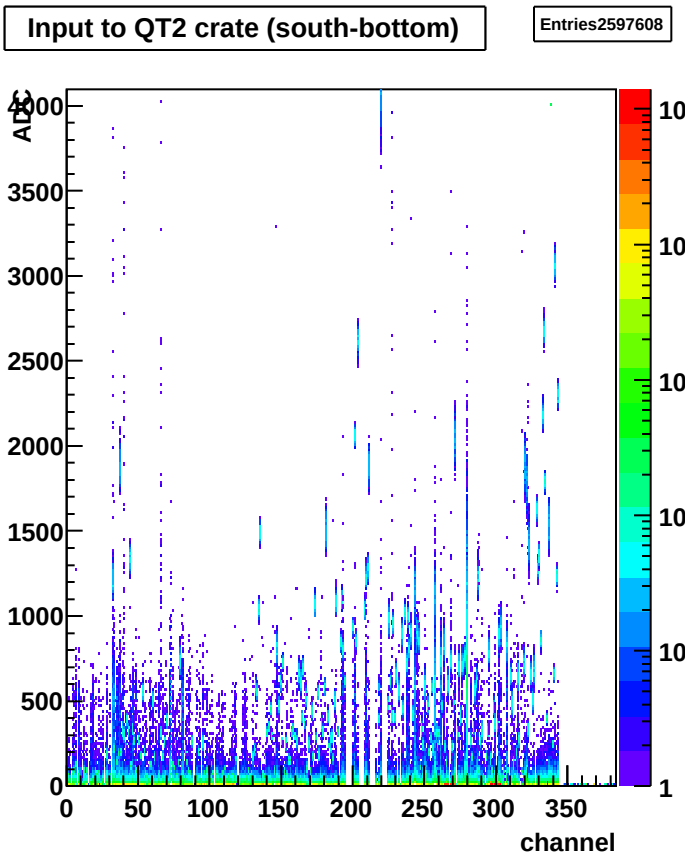

VPD-TAC-E
Entries 186248
Mean 1313
RMS 170.9

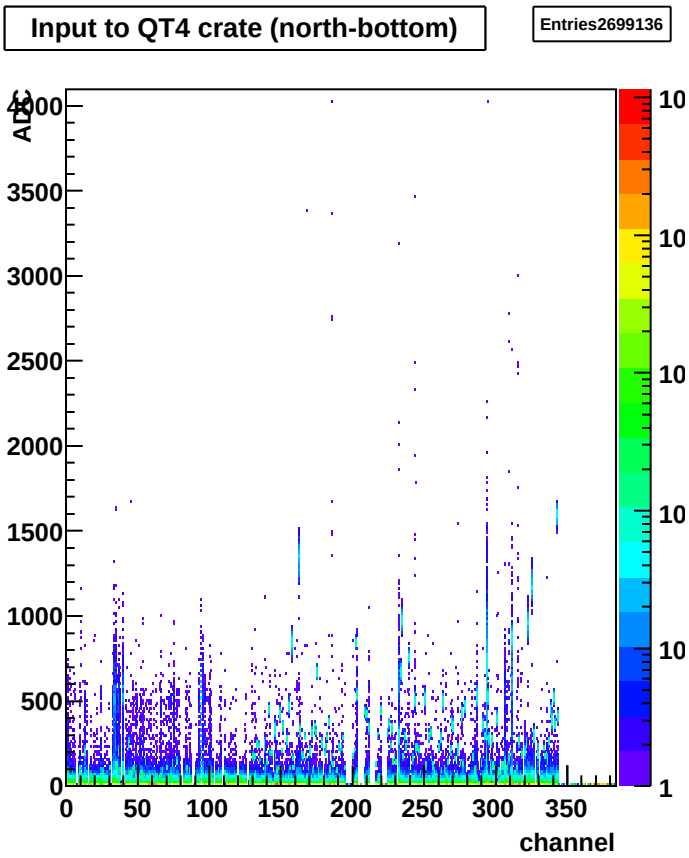

VPD-TAC-W
Entries 184881
Mean 1432
RMS 188.5

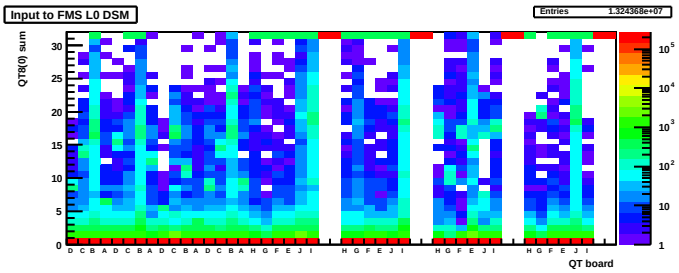

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 147257
Mean 3979
RMS 140.1

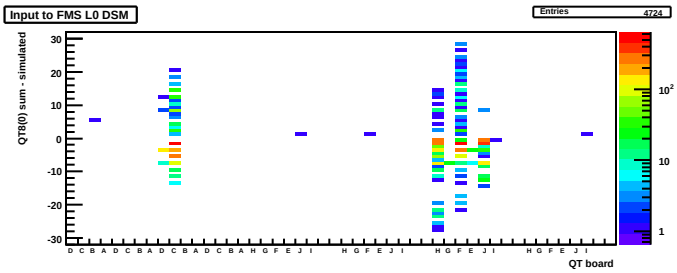

Input to QT1 crate (south-top)
Entries3881608
ADC
channel

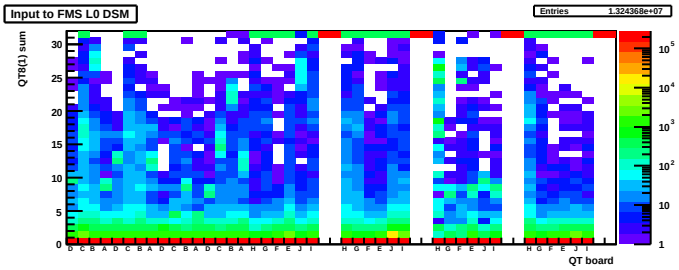

Input to QT3 crate (north-top)
Entries2279029
ADC
channel

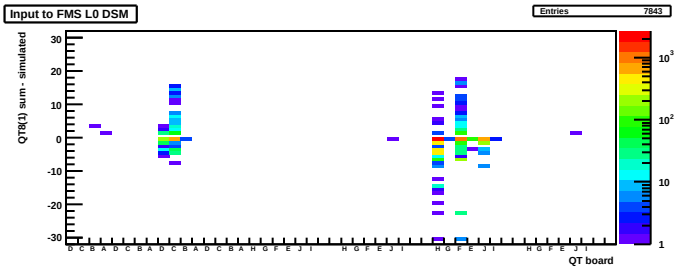

Input to QT2 crate (south-bottom)
Entries2597608
ADC
channel

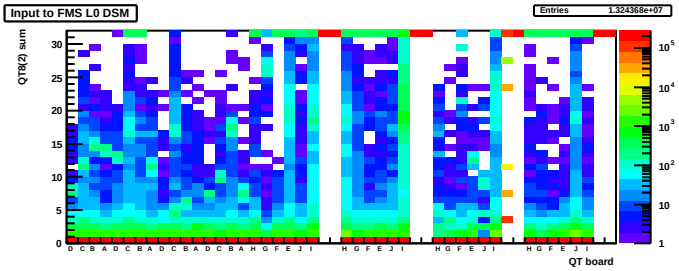

Input to QT4 crate (north-bottom)
Entries2699136
ADC
channel

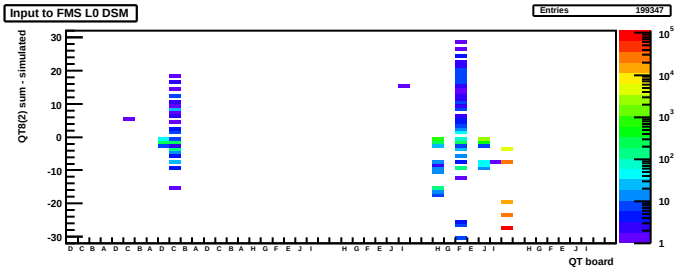

Input to FMS L0 DSM
Entries 1.324368e+07
QT8(0) sum
QT board

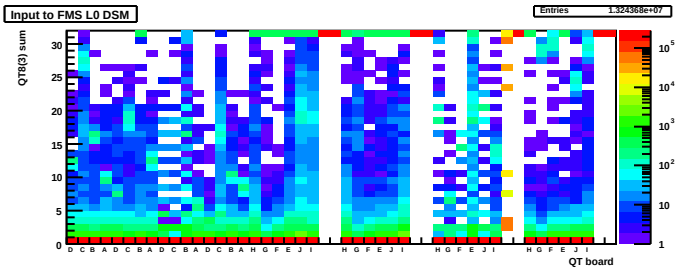

Input to FMS L0 DSM
Entries 4724
QT8(0) sum - simulated
QT board

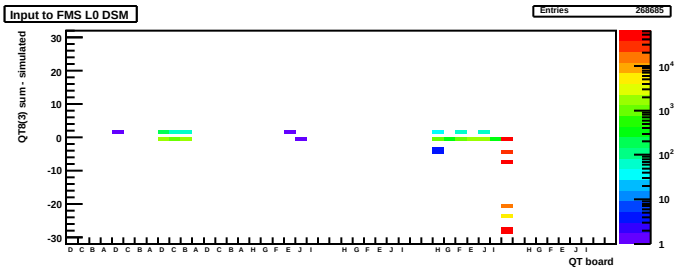

Input to FMS L0 DSM
Entries 1.324368e+07
QT8(1) sum
QT board

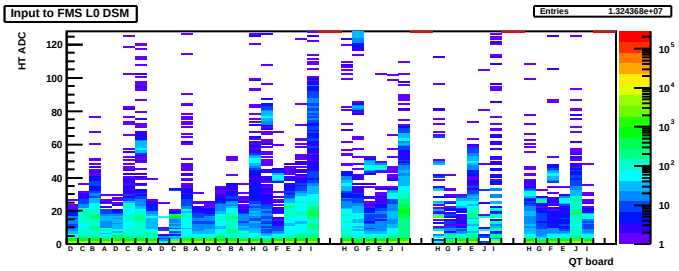

Input to FMS L0 DSM
Entries 7843
QT8(1) sum - simulated
QT board

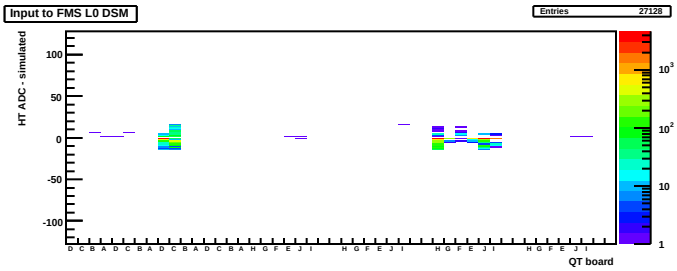

Input to FMS L0 DSM
Entries 1.324368e+07
QT8(2) sum
QT board

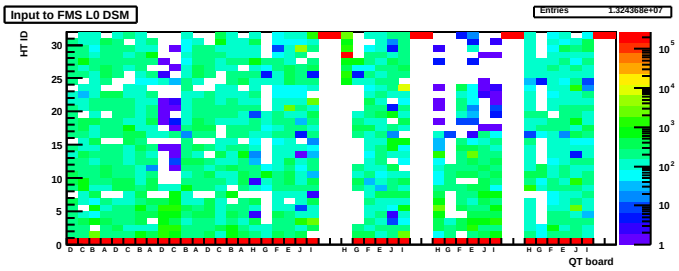

Input to FMS L0 DSM
Entries 199347
QT8(2) sum - simulated
QT board

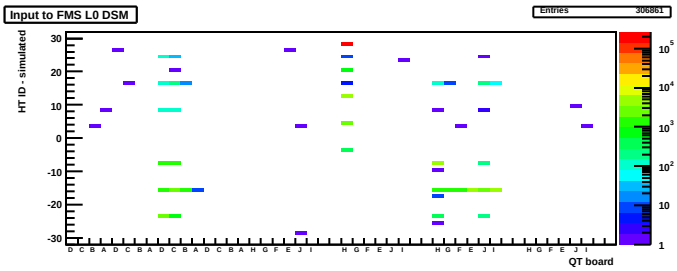

Input to FMS L0 DSM
Entries 1.324368e+07
QT8(3) sum
QT board

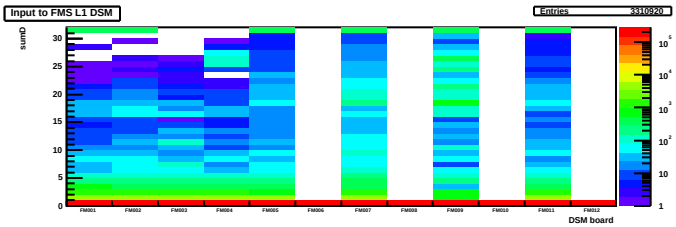

Input to FMS L0 DSM
Entries 268685
QT8(3) sum - simulated
QT board

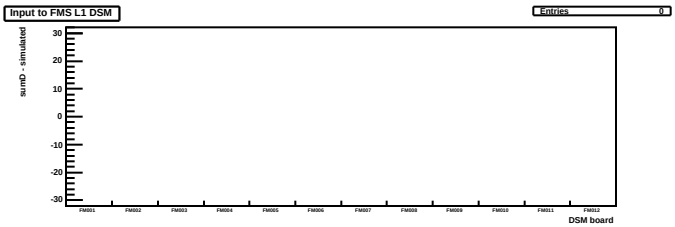

Input to FMS L0 DSM
Entries 1.324368e+07
HT ADC
QT board

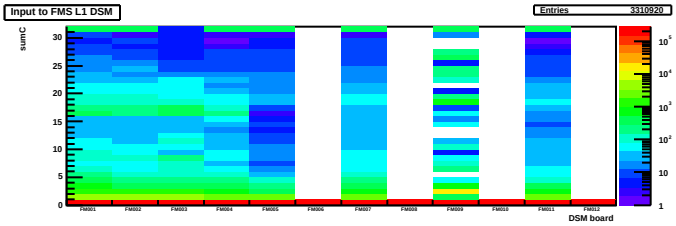

Input to FMS L0 DSM
Entries 27128
HT ADC - simulated
QT board

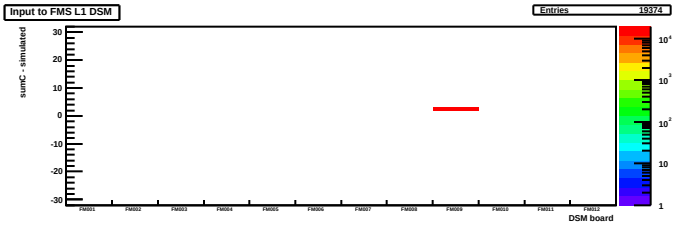

Input to FMS L0 DSM
Entries 1.324368e+07
HT ID
QT board

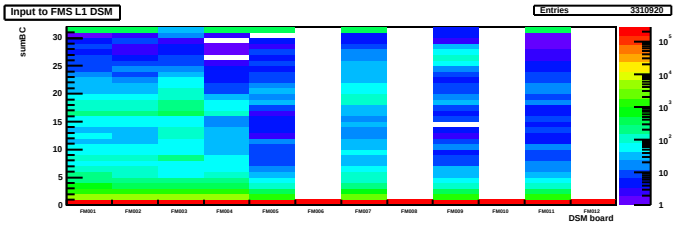

Input to FMS L0 DSM
Entries 306861
HT ID - simulated
QT board

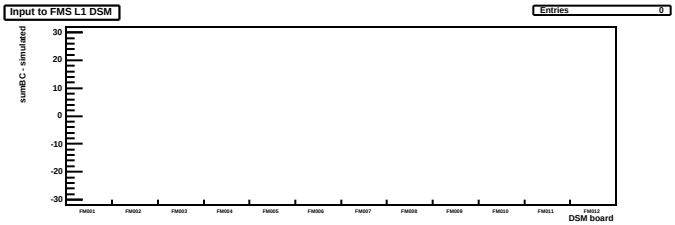

Input to FMS L1 DSM
Entries 3310920
sumD
DSM board

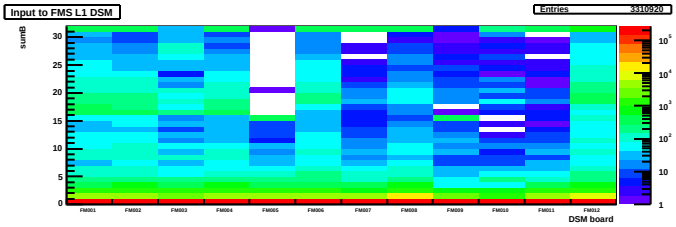

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

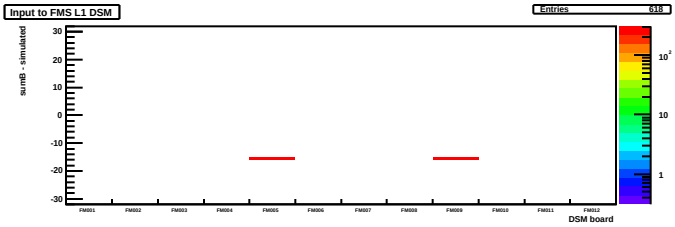

Input to FMS L1 DSM
Entries 3310920
sumC
DSM board

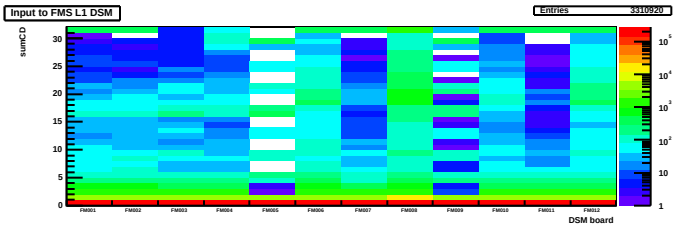

Input to FMS L1 DSM
Entries 19374
sumC - simulated
DSM board

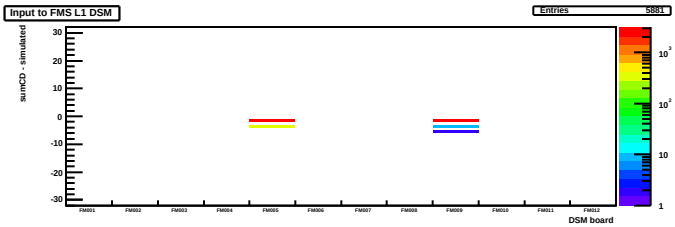

Input to FMS L1 DSM
Entries 3310920
sumBC
DSM board

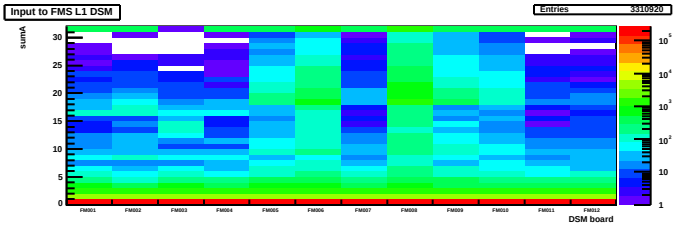

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

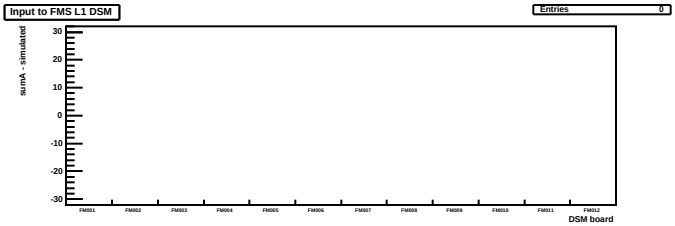

Input to FMS L1 DSM
Entries 3310920
sumB
DSM board

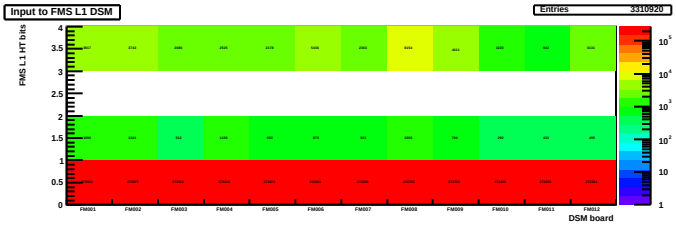

Input to FMS L1 DSM
Entries 618
sumB - simulated
DSM board

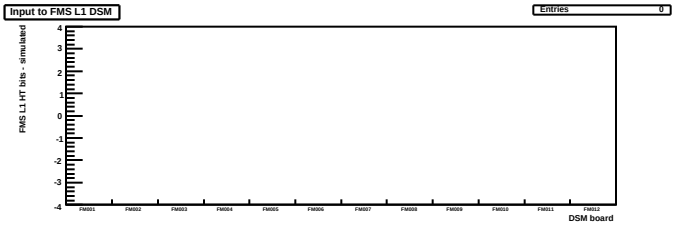

Input to FMS L1 DSM
Entries 3310920
sumCD
DSM board

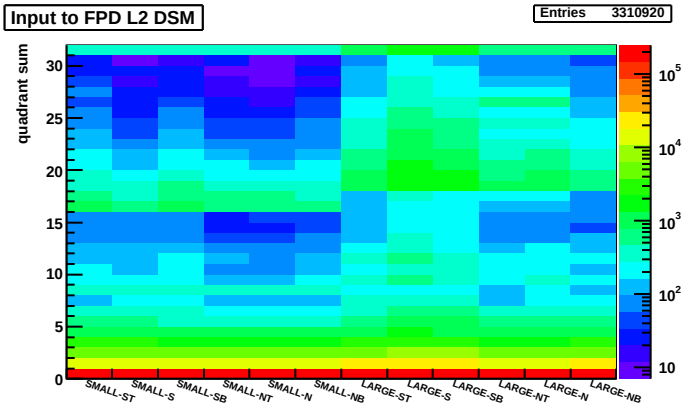

Input to FMS L1 DSM
Entries 5881
sumCD - simulated
DSM board

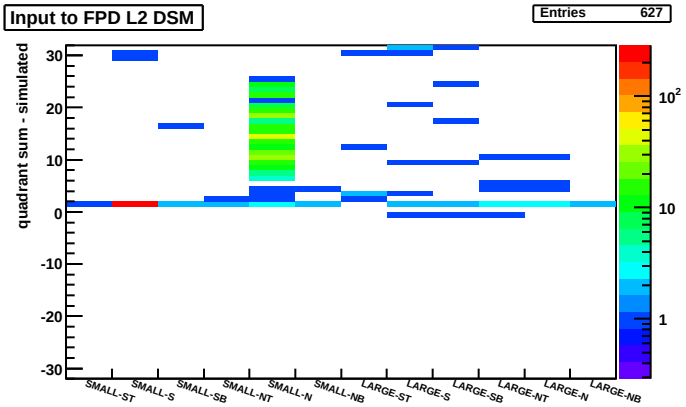

Input to FMS L1 DSM
Entries 3310920
sumA
DSM board

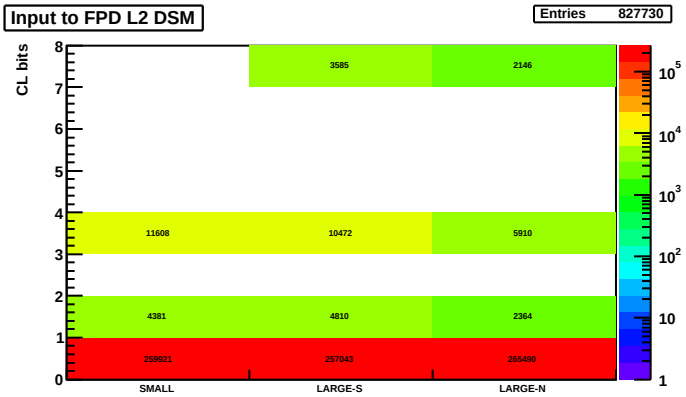

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

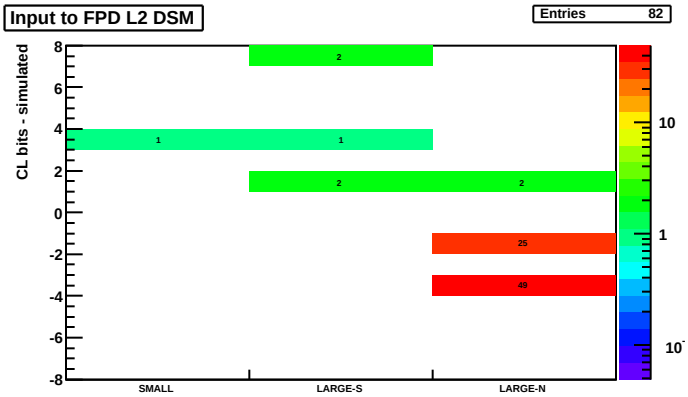

Input to FMS L1 DSM
Entries 3310920
FMS L1 HT bits
DSM board

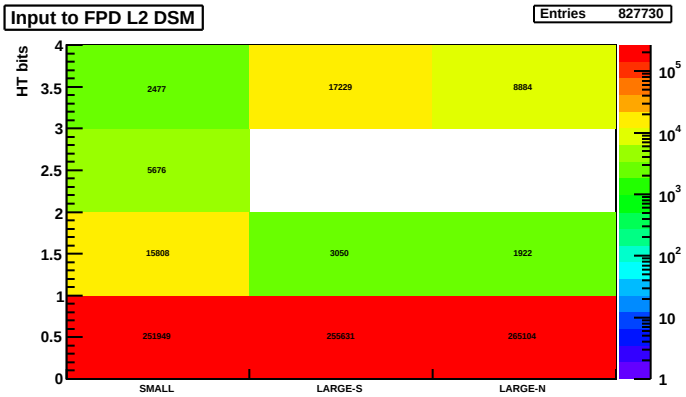

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

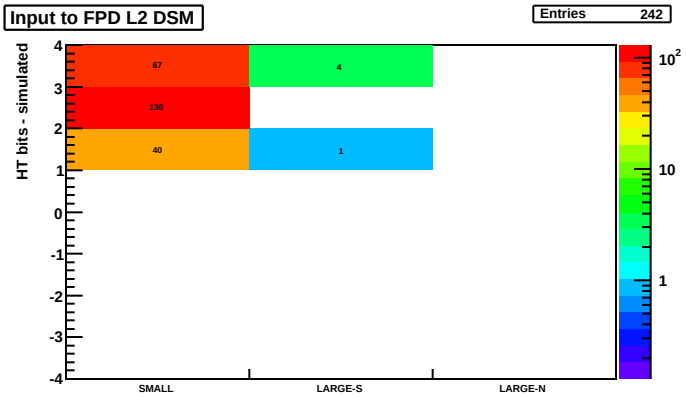

Input to FPD L2 DSM
Entries 3310920
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

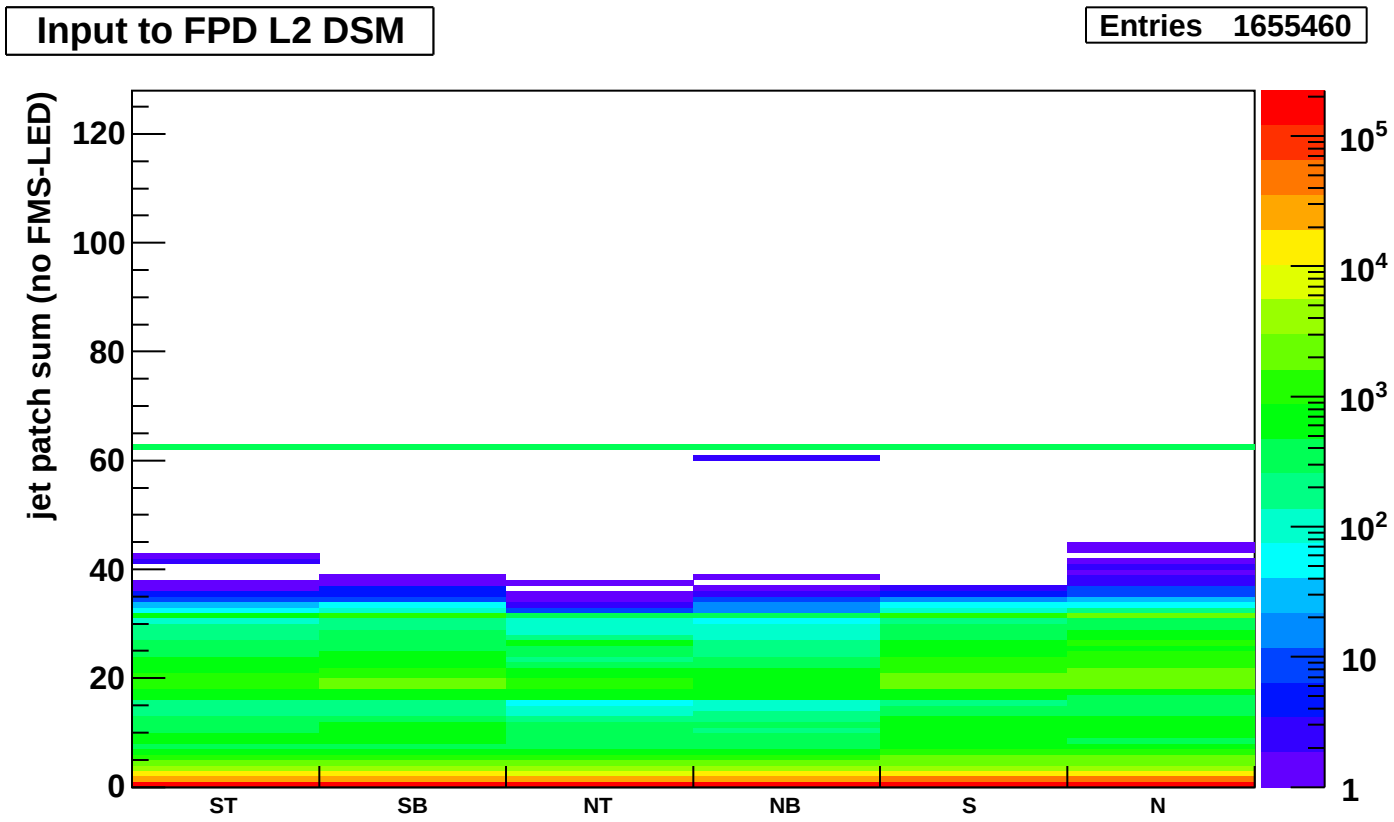

Input to FPD L2 DSM
Entries 627
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

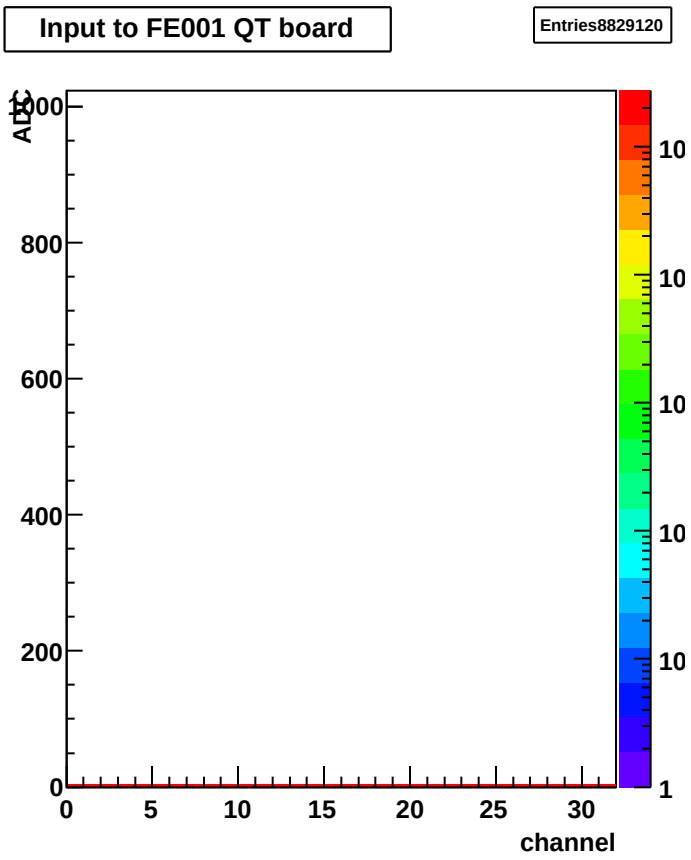

Input to FPD L2 DSM
Entries 827730
CL bits
3585
2146
11608
10472
5910
4381
4810
2364
259921
257043
265490
SMALL
LARGE-S
LARGE-N

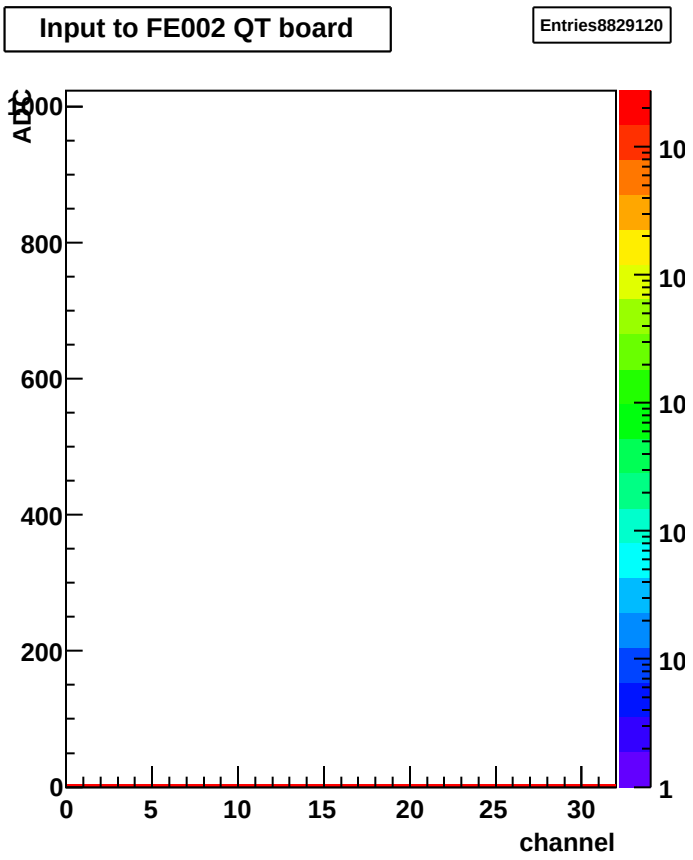

Input to FPD L2 DSM
Entries 82
CL bits - simulated
2
1
1
2
2
25
49
SMALL
LARGE-S
LARGE-N

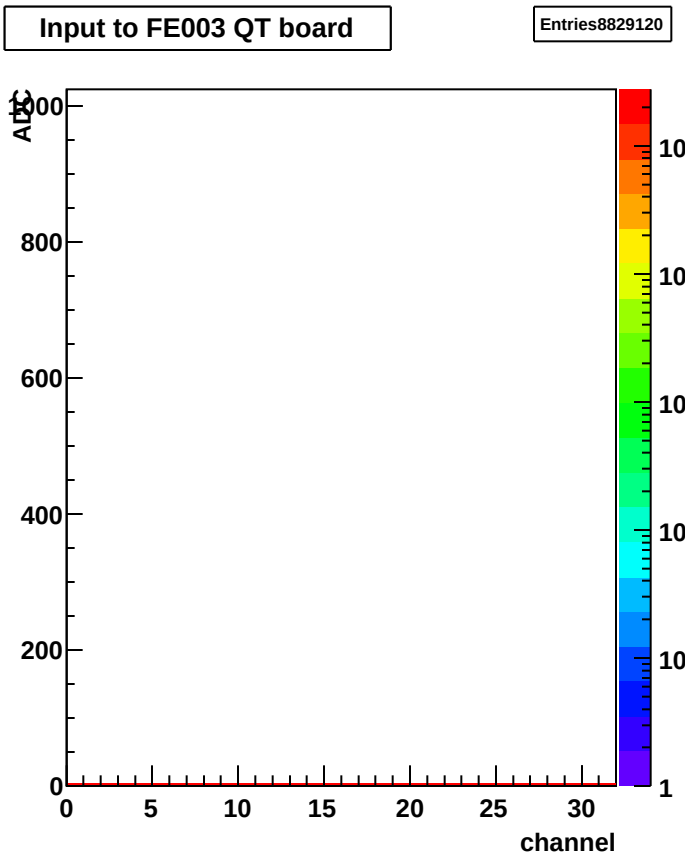

Input to FPD L2 DSM
Entries 827730
HT bits
2477
17229
8884
5676
15808
3050
1922
251949
255631
265104
SMALL
LARGE-S
LARGE-N

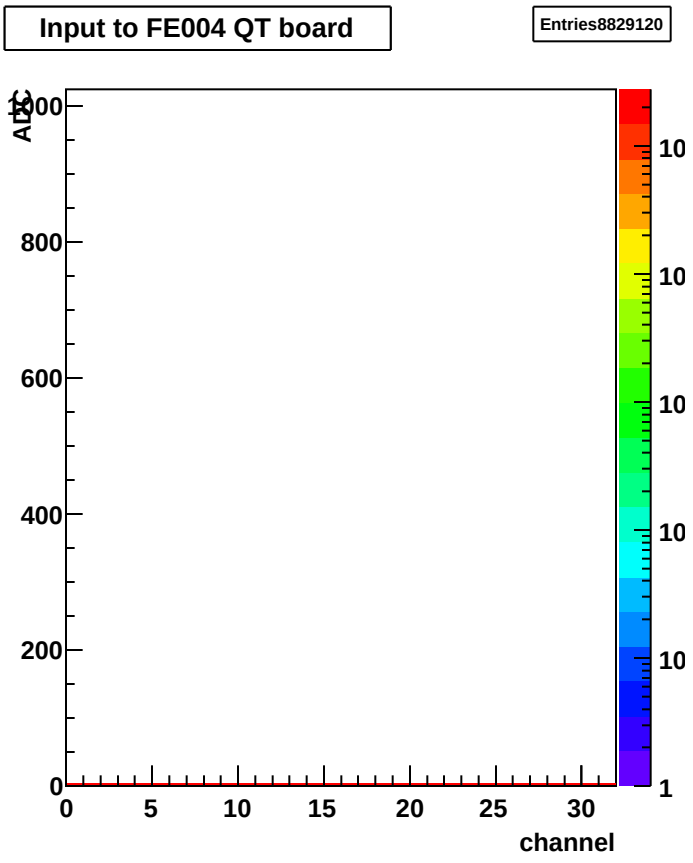

Input to FPD L2 DSM
Entries 242
HT bits - simulated
67
4
130
40
1
SMALL
LARGE-S
LARGE-N

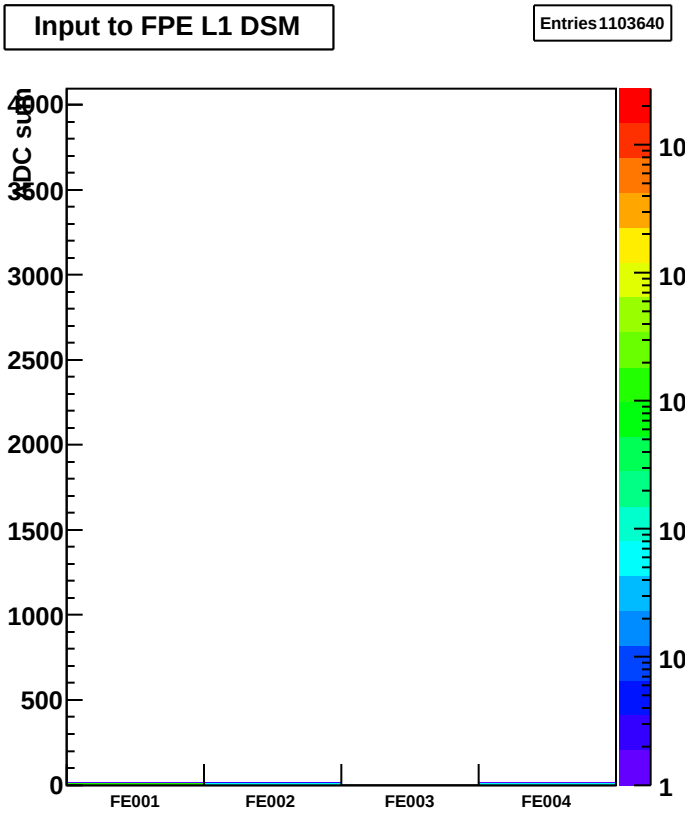

Input to FPD L2 DSM
Entries 1655460
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

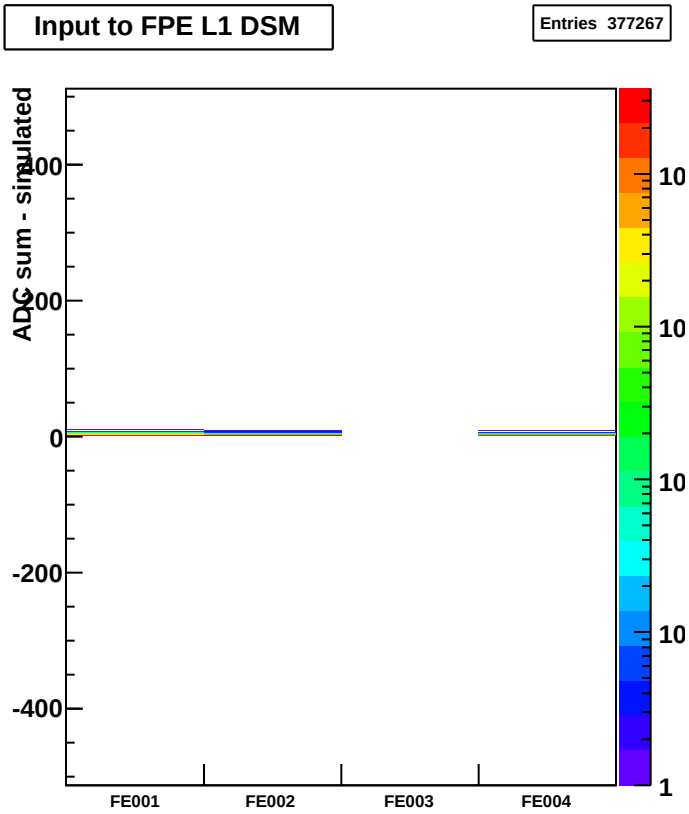

Input to FE001 QT board
Entries8829120
ADC
channel

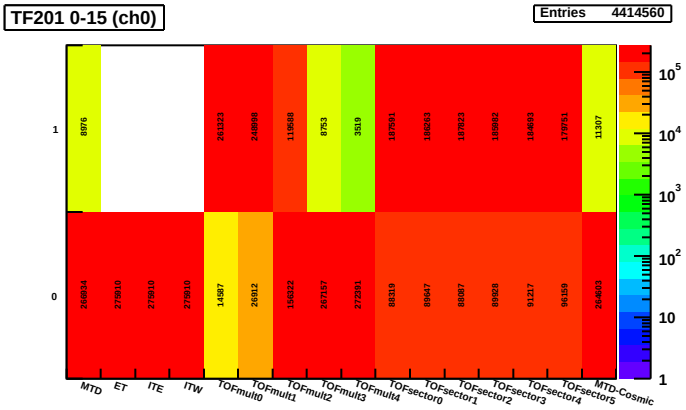

Input to FE002 QT board
Entries8829120
ADC
channel

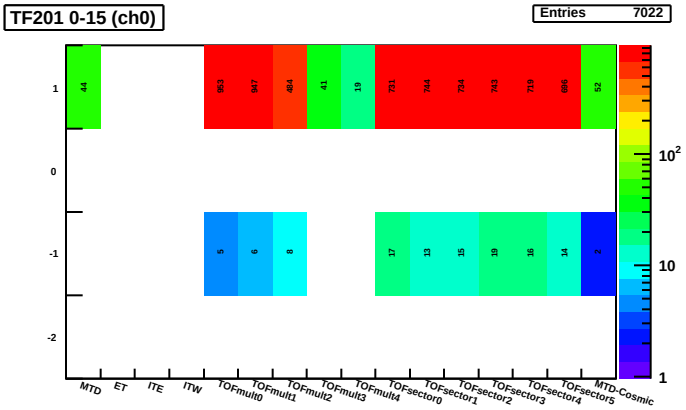

Input to FE003 QT board
Entries8829120
ADC
channel

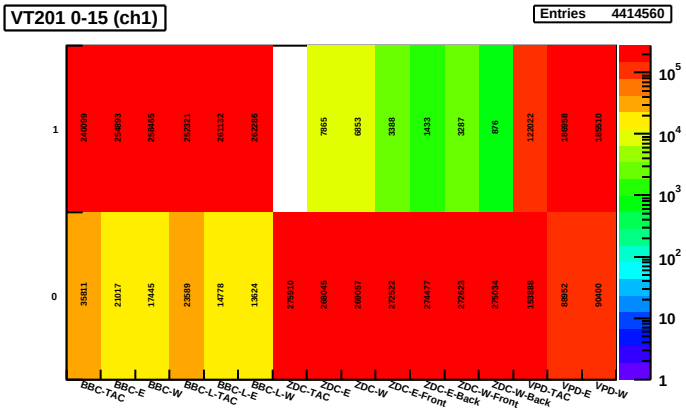

Input to FE004 QT board
Entries8829120
ADC
channel

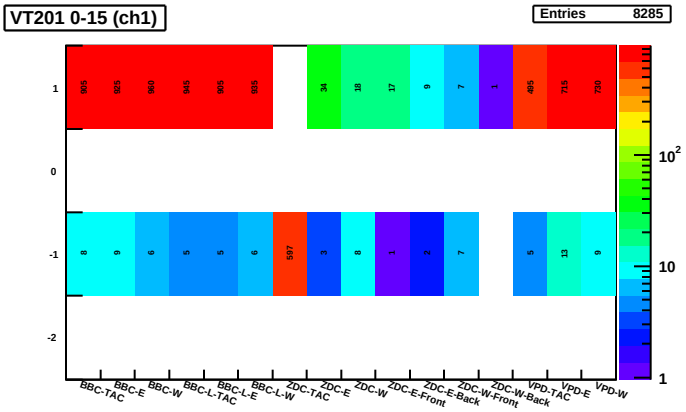

Input to FPE L1 DSM
Entries 1103640
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 377267
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


TF201 0-15 (ch0)
Entries 4414560
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 7022
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 4414560
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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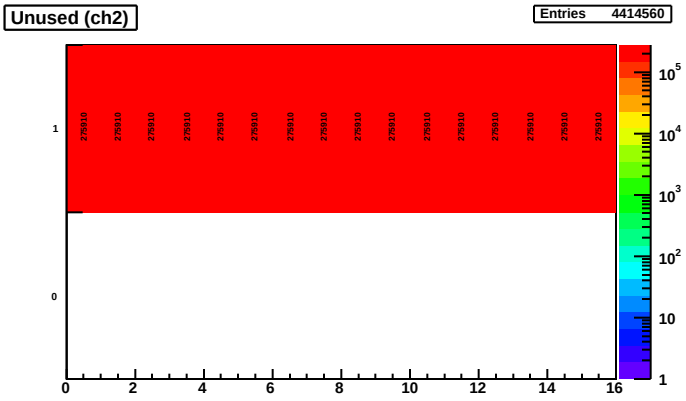
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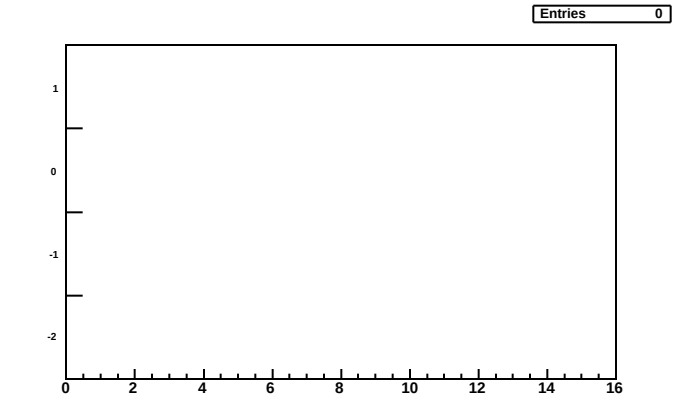
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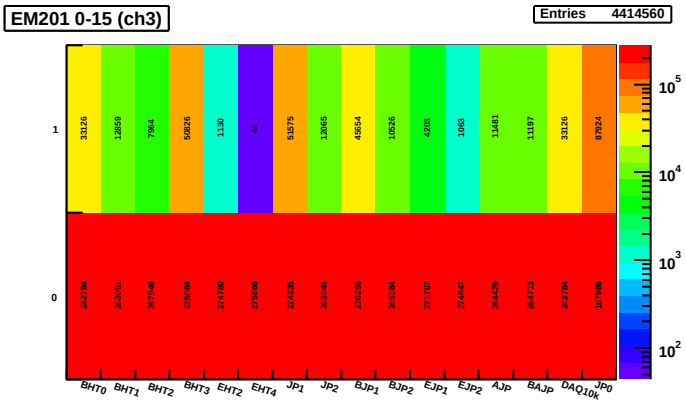
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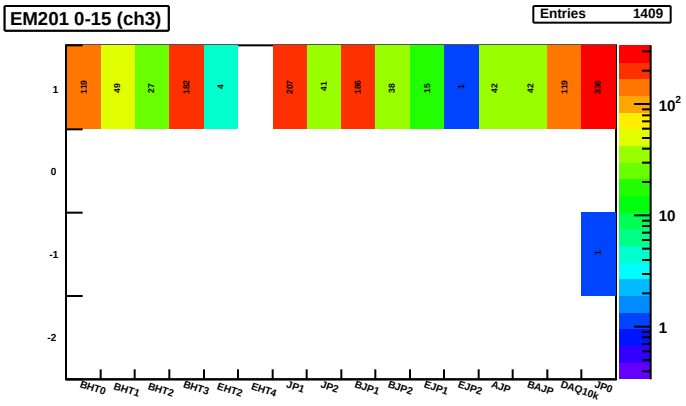
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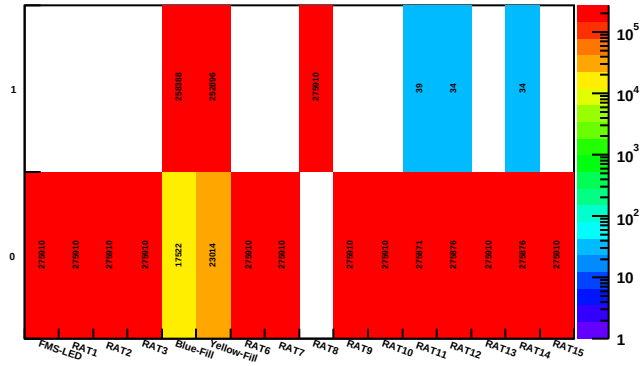
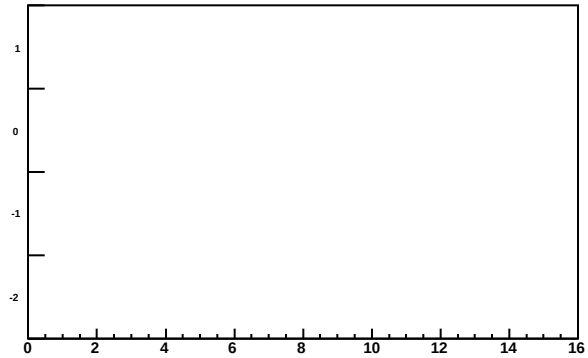
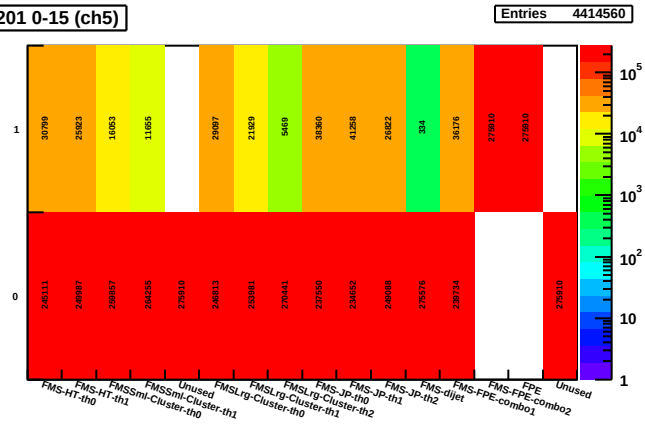
RAT board (ch4)

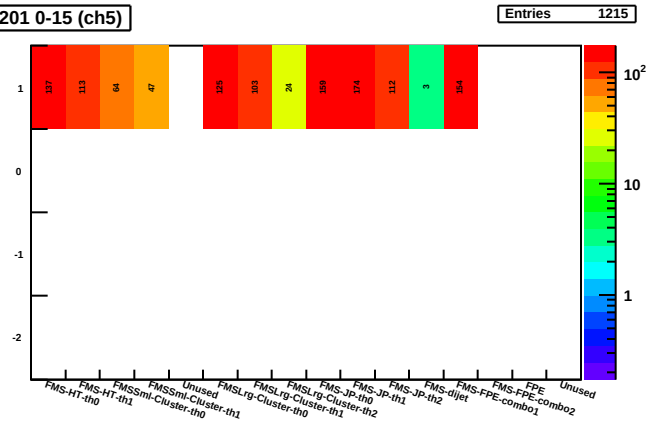




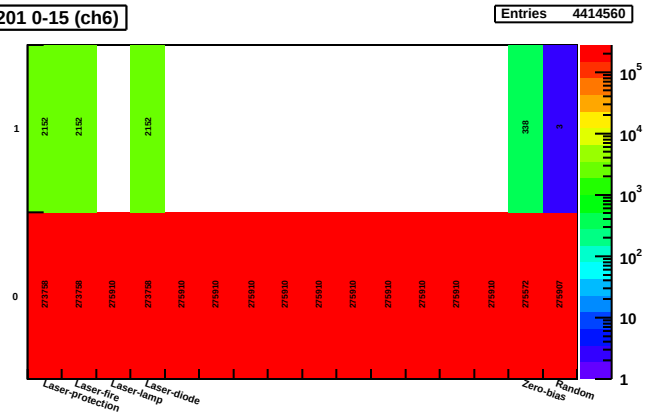
FP201 0-15 (ch5)

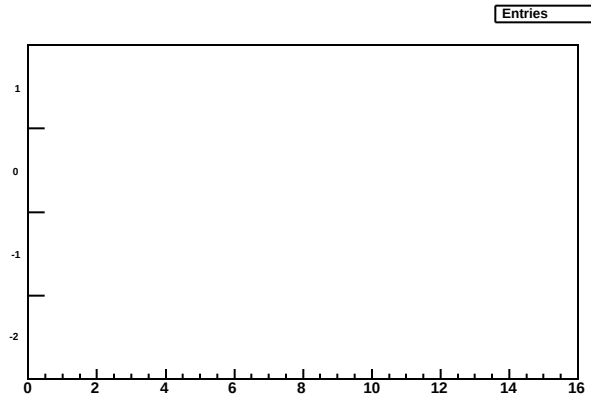
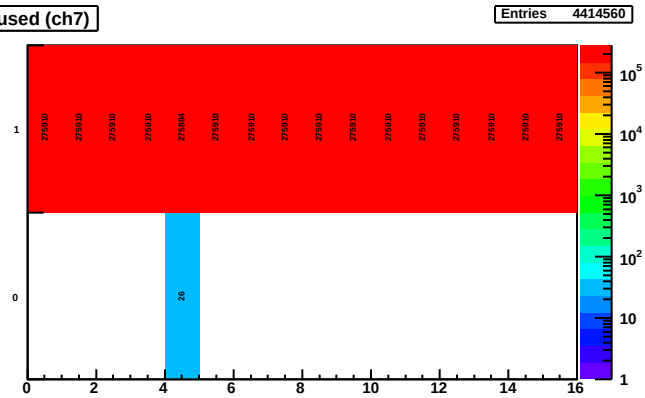
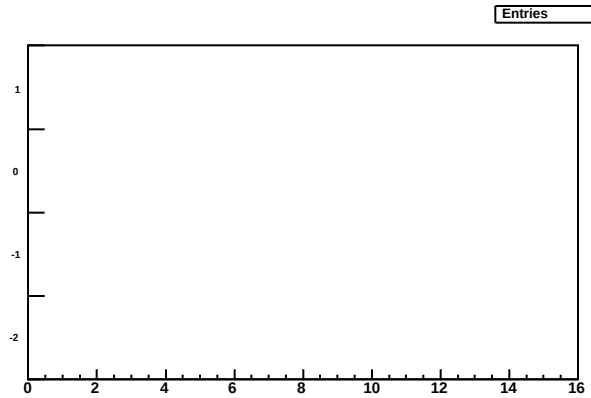


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)