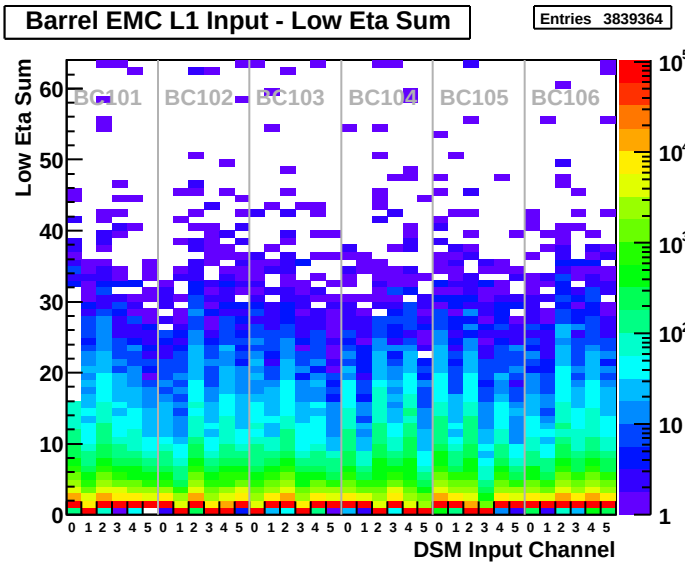
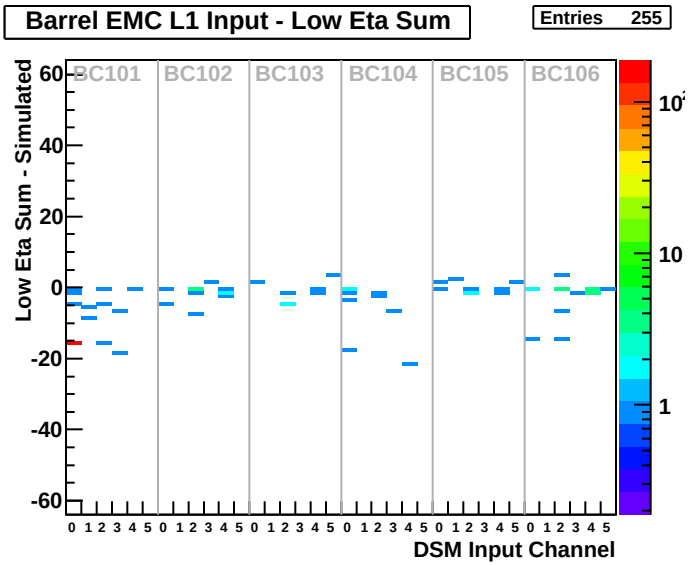
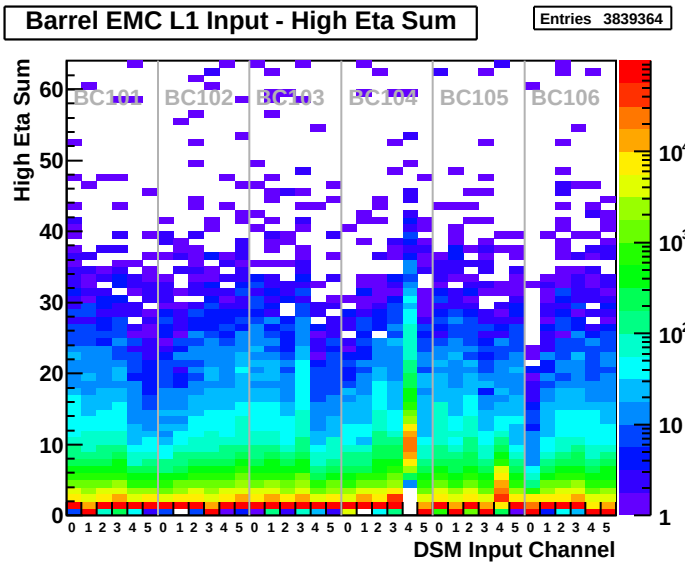
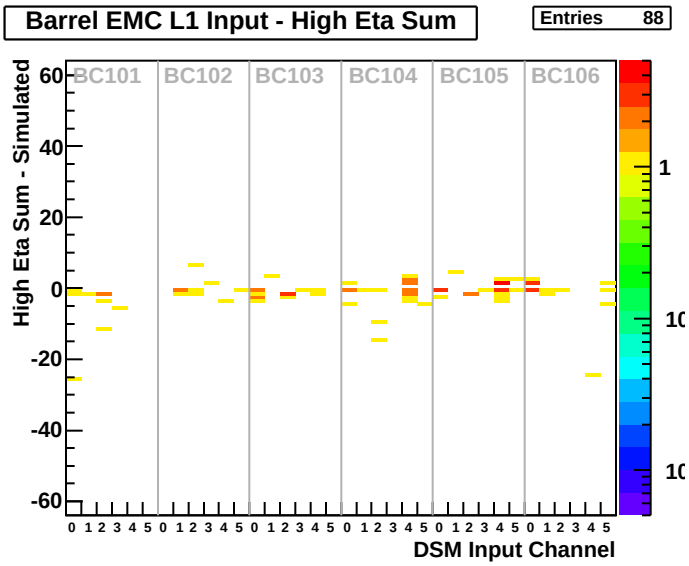
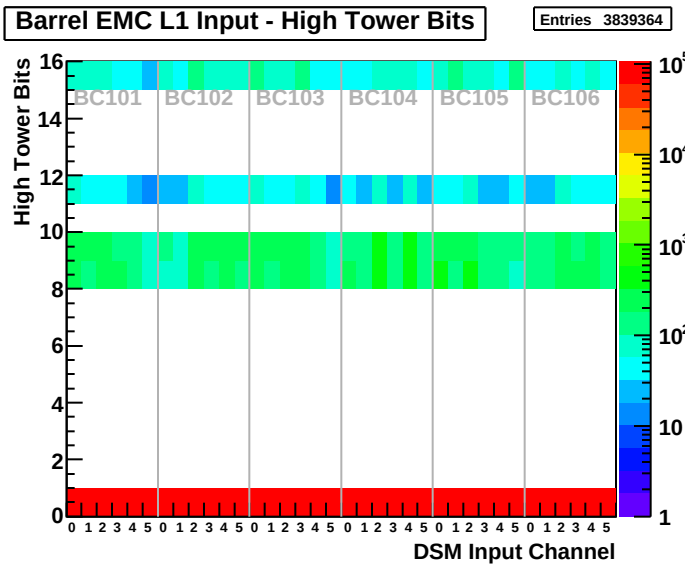
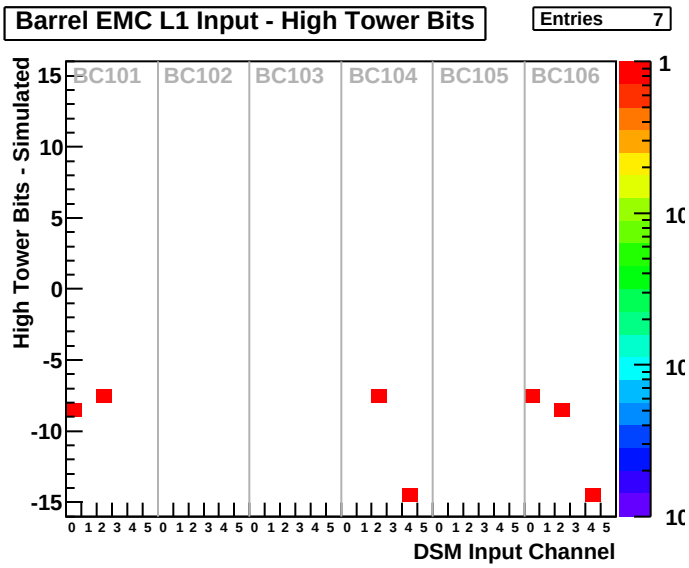

Barrel EMC L1 Input - Low Eta Sum
Entries 3839364
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

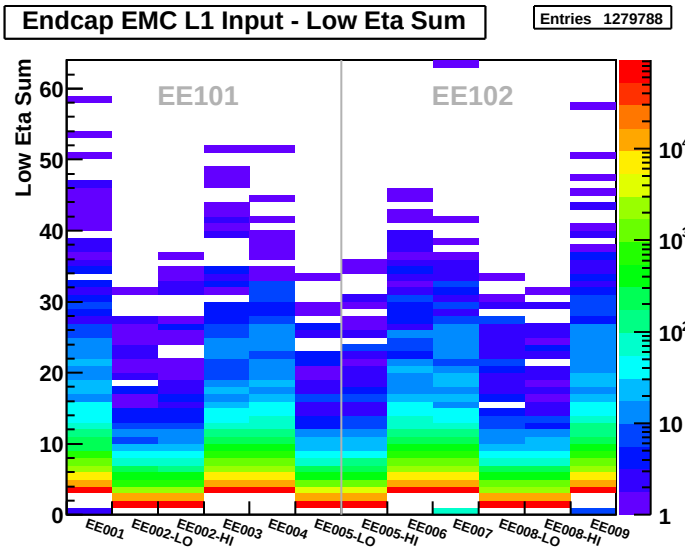

Barrel EMC L1 Input - Low Eta Sum
Entries 255
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

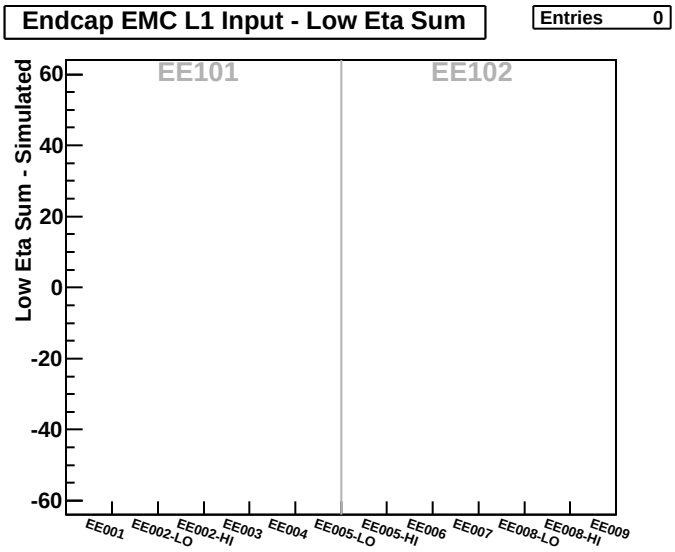

Barrel EMC L1 Input - High Eta Sum
Entries 3839364
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

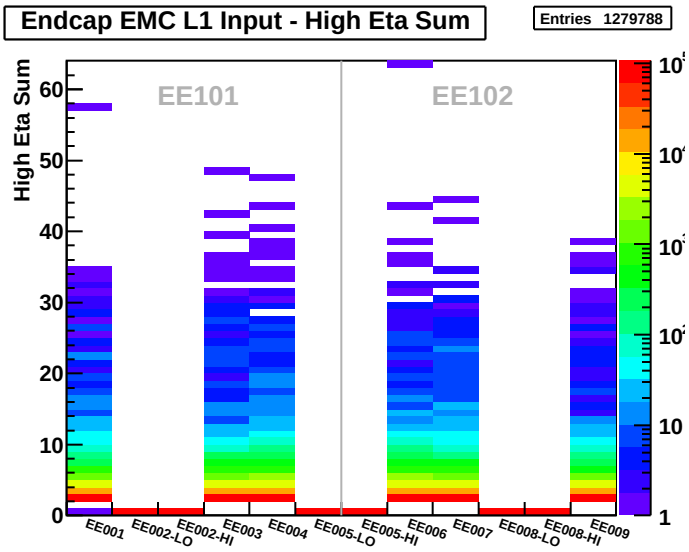

Barrel EMC L1 Input - High Eta Sum
Entries 88
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

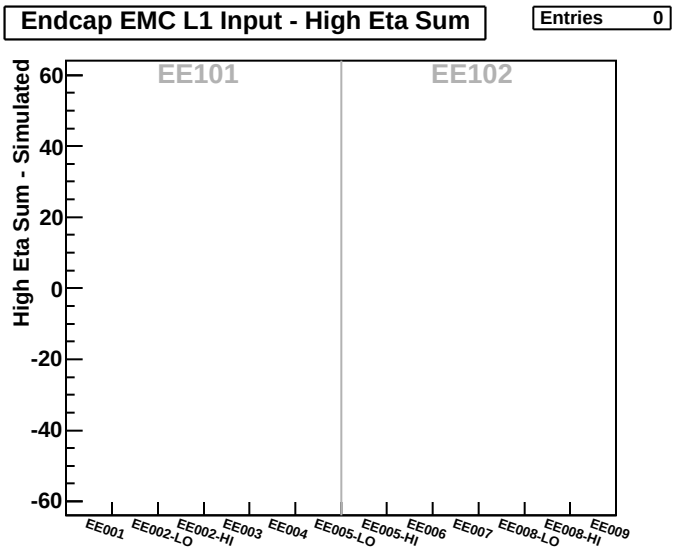

Barrel EMC L1 Input - High Tower Bits
Entries 3839364
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

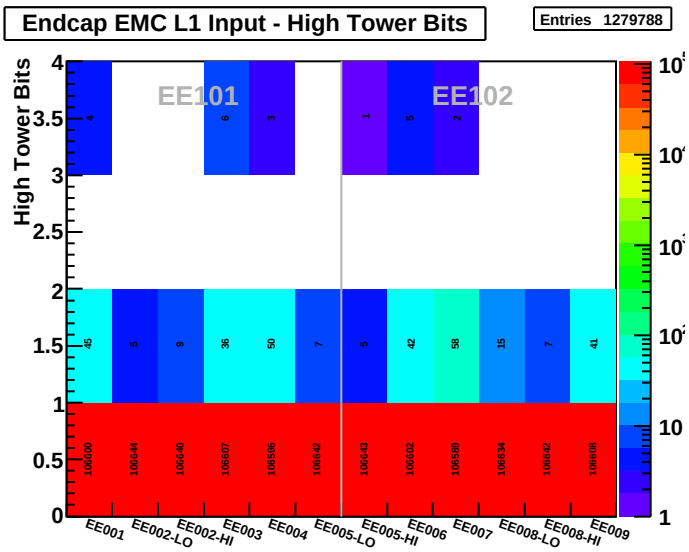

Barrel EMC L1 Input - High Tower Bits
Entries 7
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

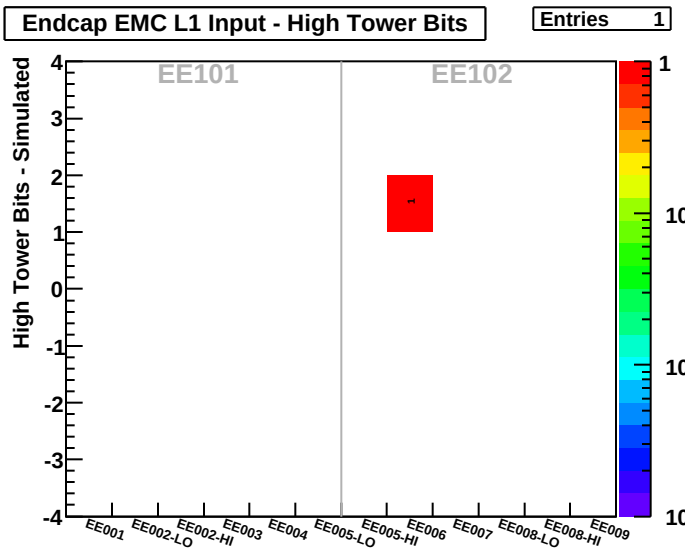

Endcap EMC L1 Input - Low Eta Sum
Entries 1279788
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

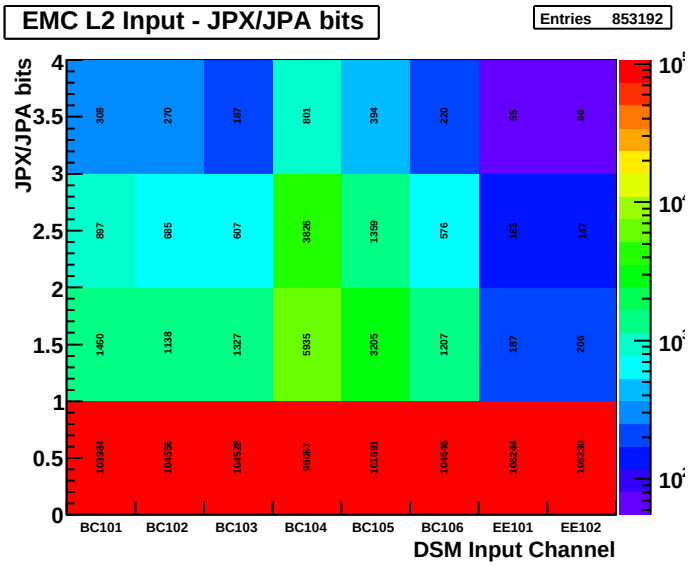

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

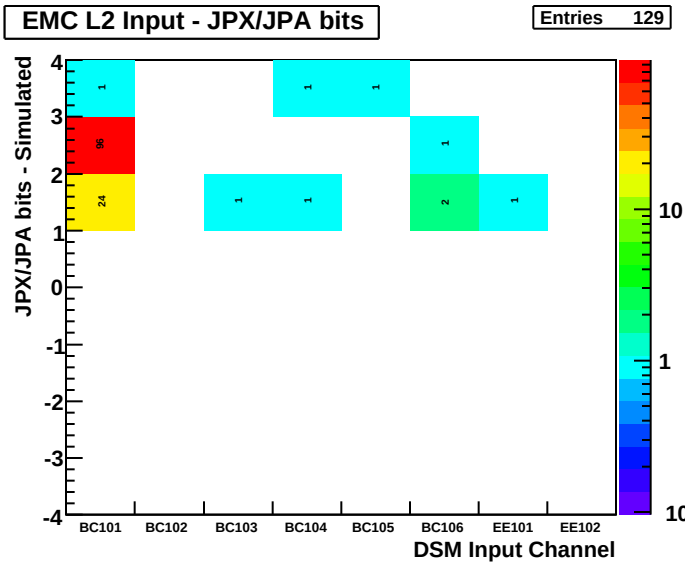

Endcap EMC L1 Input - High Eta Sum
Entries 1279788
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

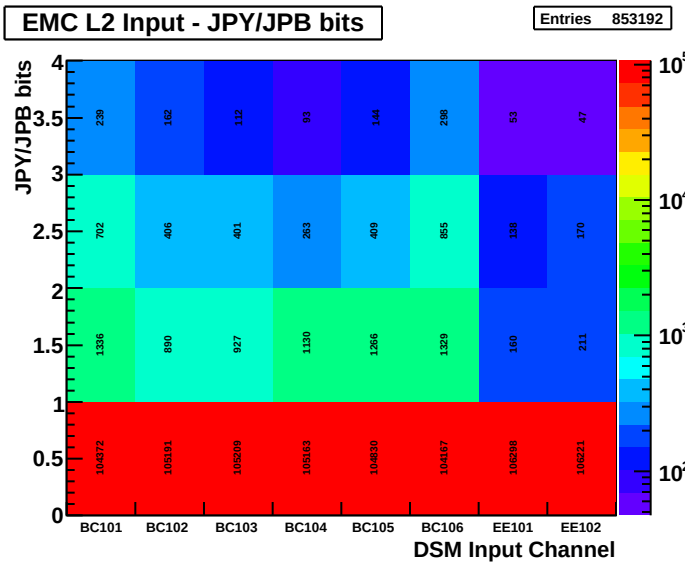

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

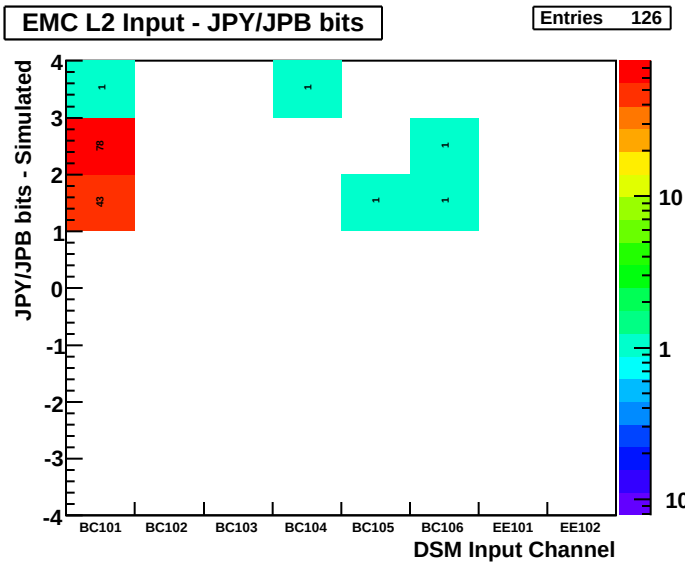

Endcap EMC L1 Input - High Tower Bits
Entries 1279788
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

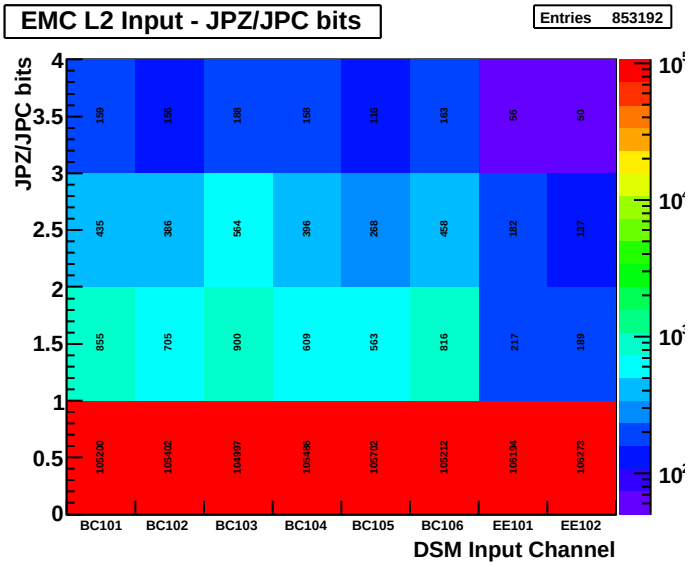

Endcap EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

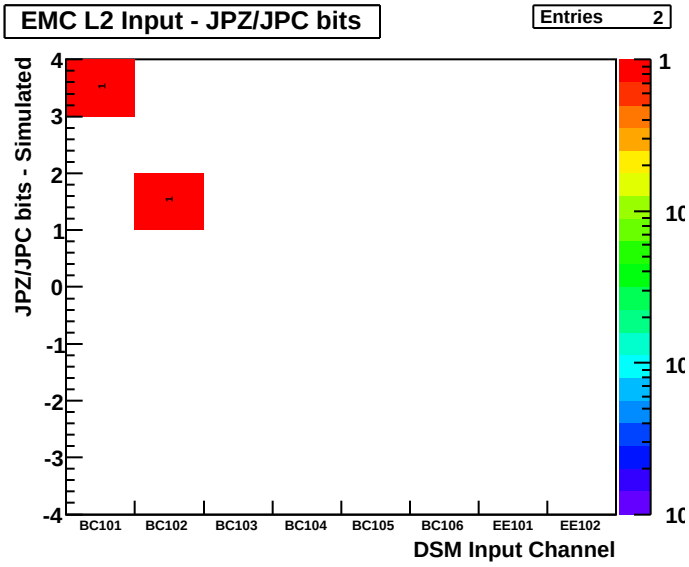

EMC L2 Input - JPX/JPA bits
Entries 853192
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
308 270 187 601 394 220 55 66
897 685 607 3826 1399 576 183 147
1460 1138 1327 5935 3205 1207 187 206
103994 104556 104528 96087 101691 104646 105244 105230

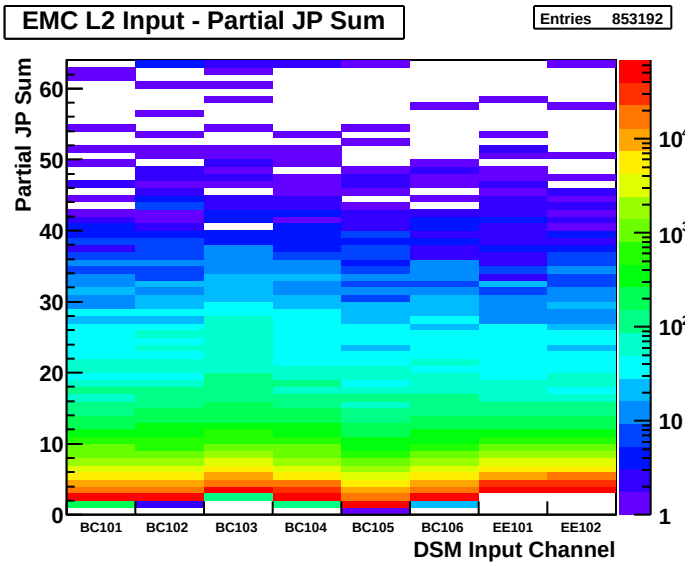

EMC L2 Input - JPX/JPA bits
Entries 129
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1
96 1
24 1 1 2 1

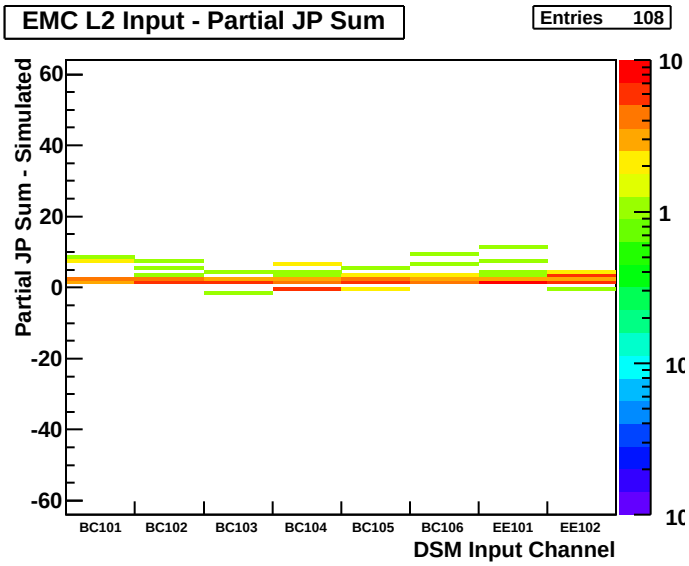

EMC L2 Input - JPY/JPB bits
Entries 853192
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
239 162 112 93 144 298 53 47
702 406 401 263 409 855 138 170
1336 890 927 1130 1266 1329 160 211
104372 105191 105209 105163 104830 104167 106298 106221

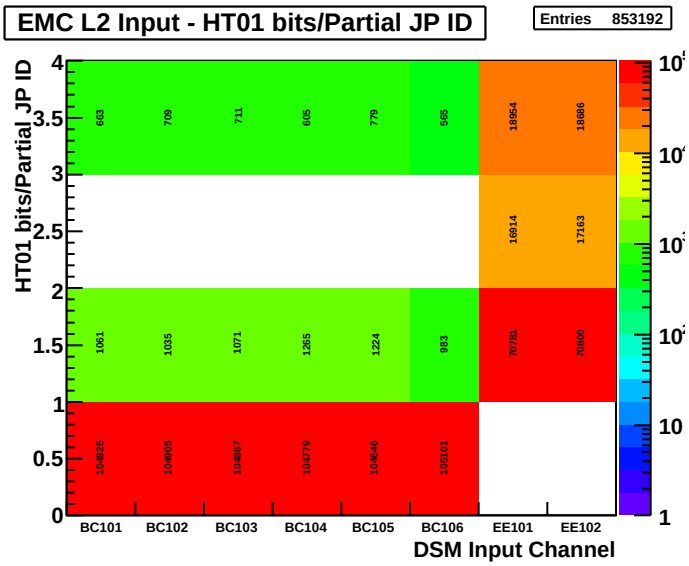

EMC L2 Input - JPY/JPB bits
Entries 126
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1
78 1
43 1 1

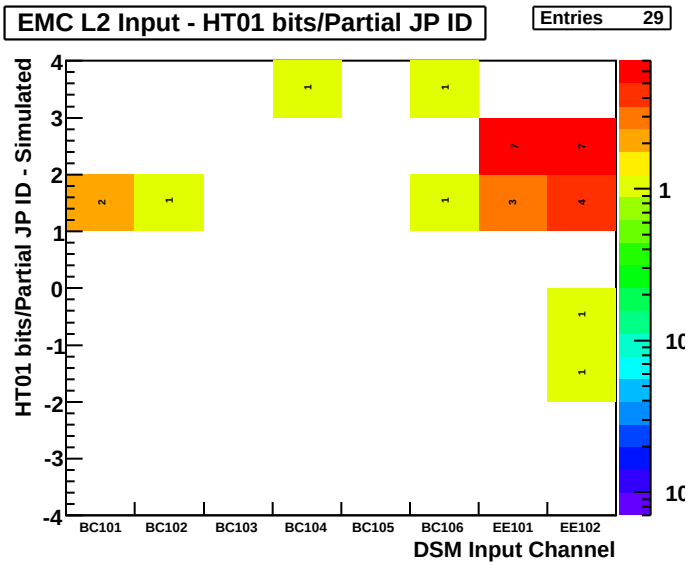

EMC L2 Input - JPZ/JPC bits
Entries 853192
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
159 156 188 158 116 163 56 50
435 386 564 396 268 458 182 137
855 705 900 609 563 816 217 189
105200 105402 104997 105486 105702 105212 106194 106273

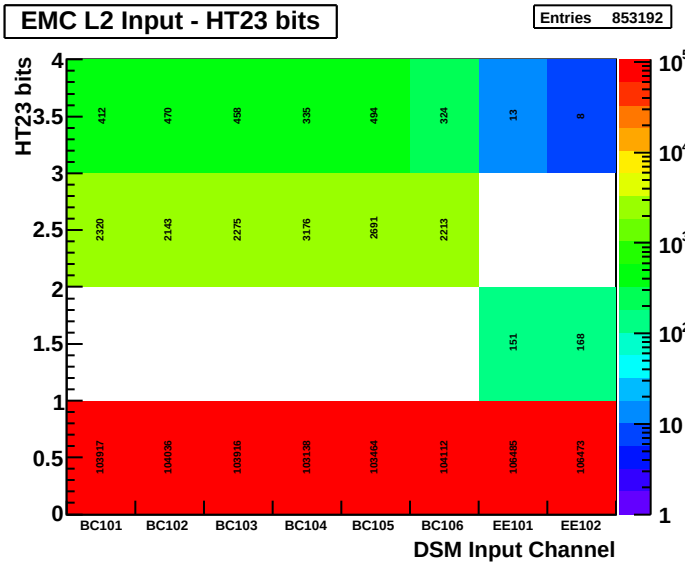

EMC L2 Input - JPZ/JPC bits
Entries 2
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1

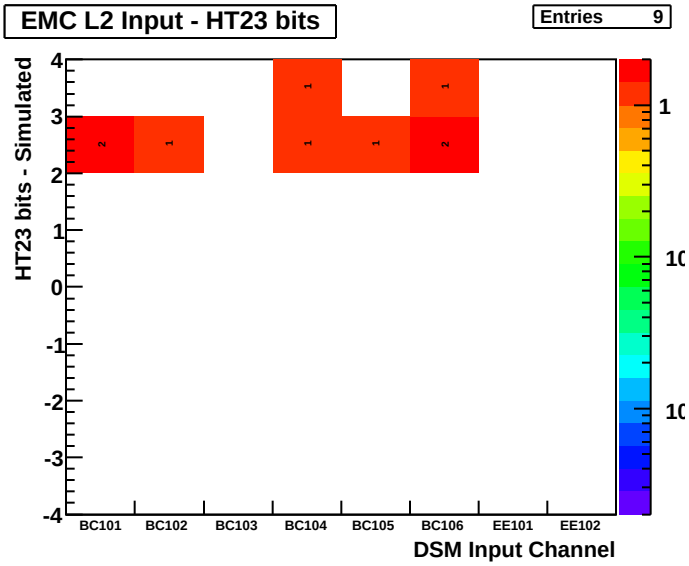

EMC L2 Input - Partial JP Sum
Entries 853192
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

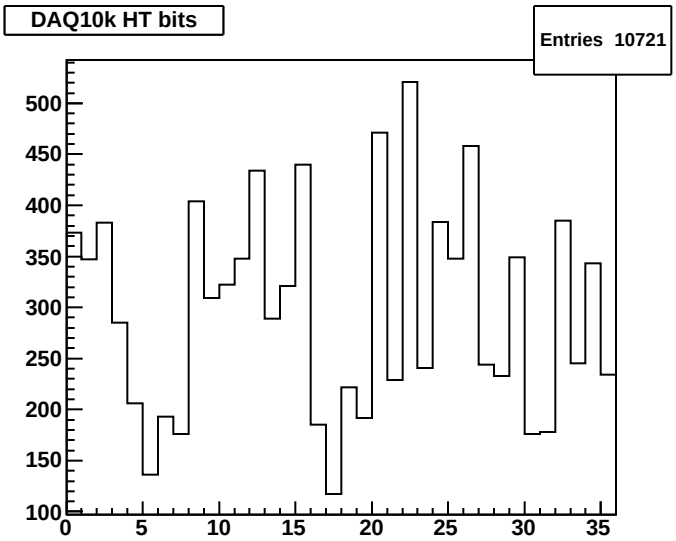

EMC L2 Input - Partial JP Sum
Entries 108
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

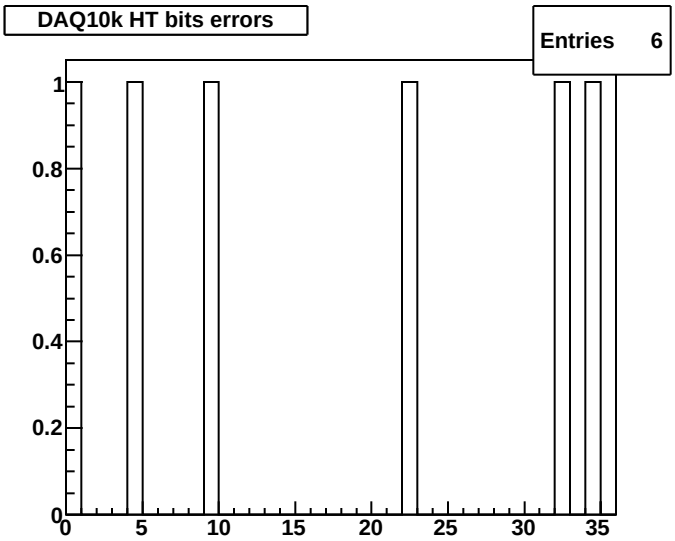

EMC L2 Input - HT01 bits/Partial JP ID
Entries 853192
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

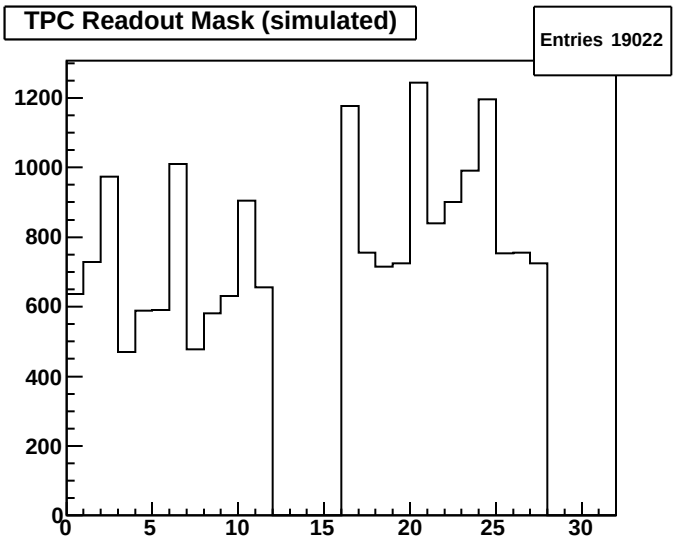

EMC L2 Input - HT01 bits/Partial JP ID
Entries 29
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

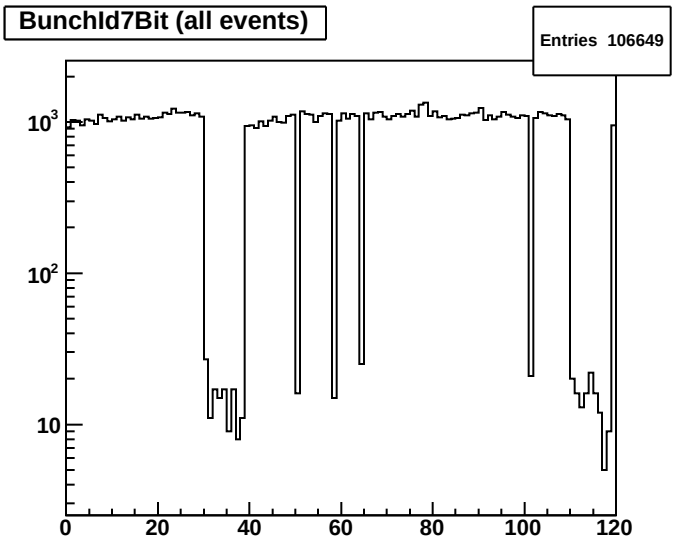

EMC L2 Input - HT23 bits
Entries 853192
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

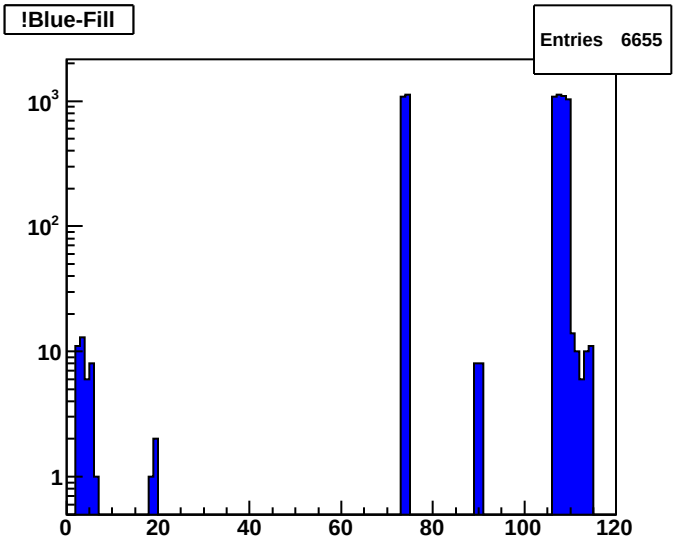

EMC L2 Input - HT23 bits
Entries 9
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

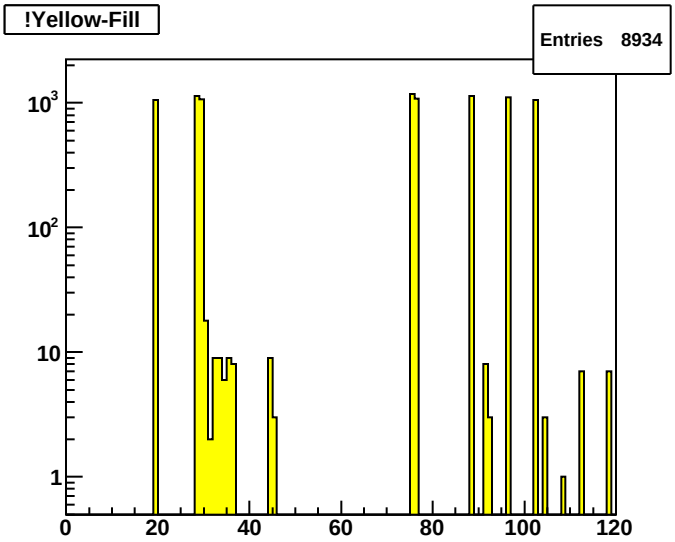

DAQ10k HT bits
Entries 10721

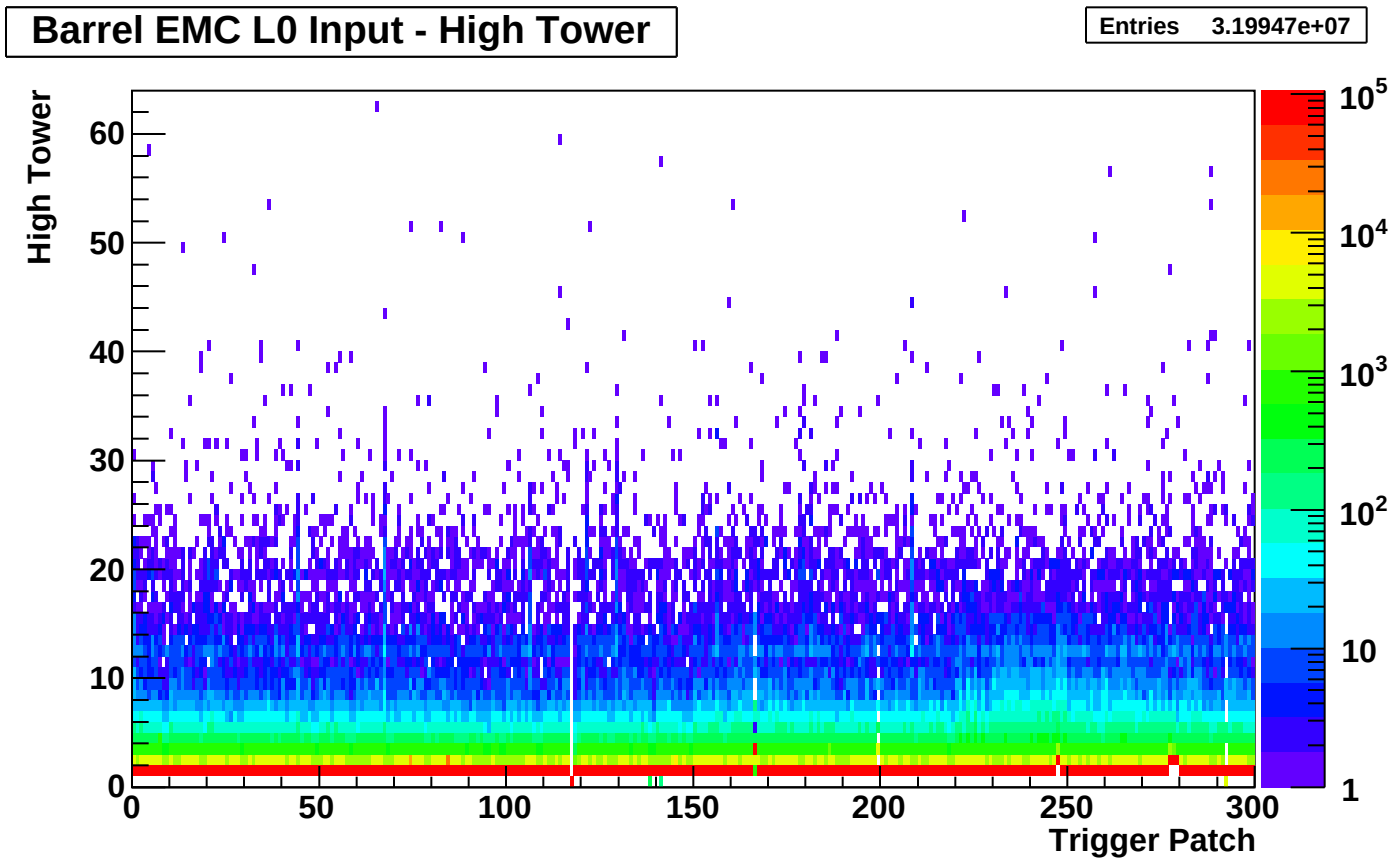

DAQ10k HT bits errors
Entries 6

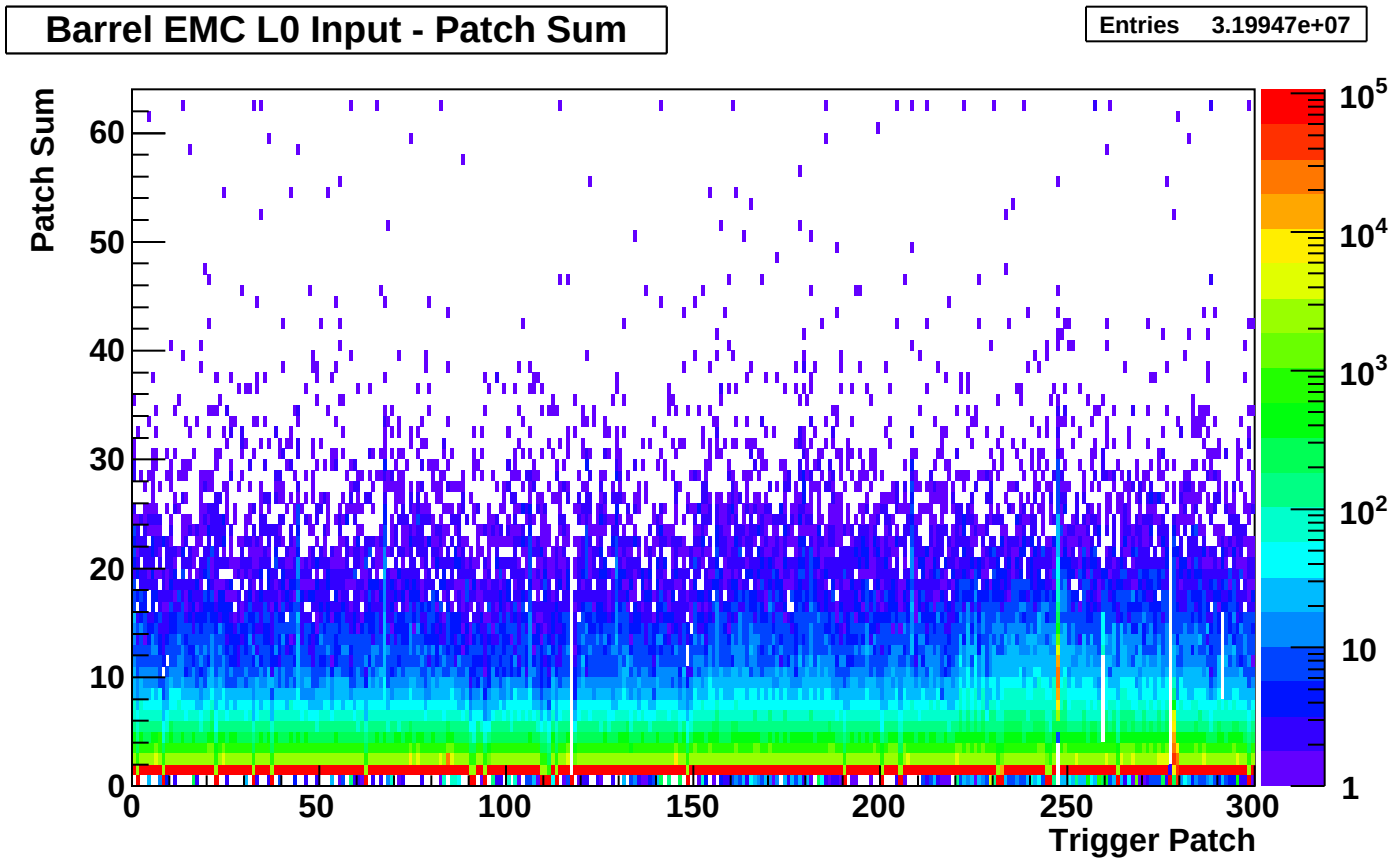

TPC Readout Mask (simulated)
Entries 19022

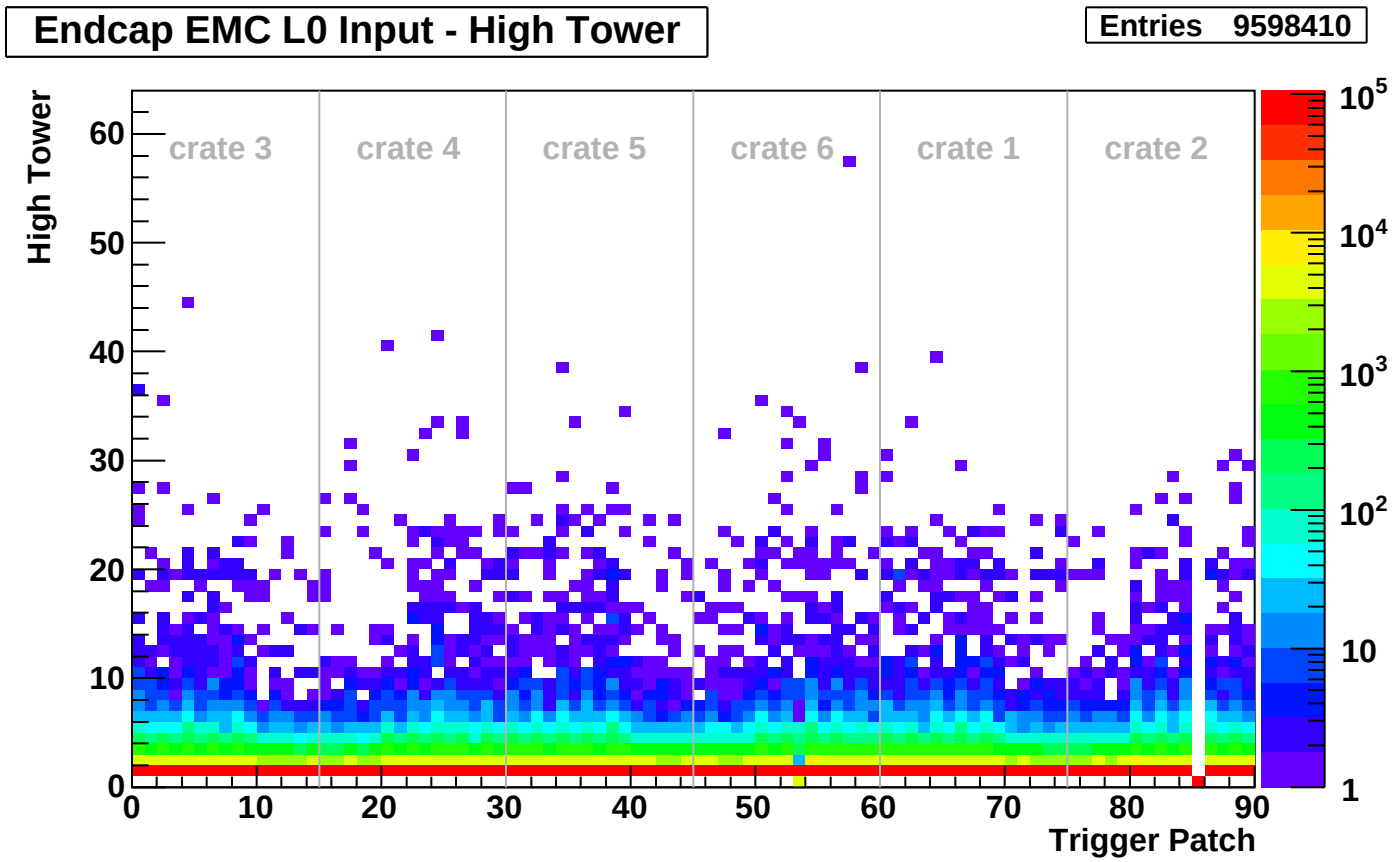

BunchId7Bit (all events)
Entries 106649

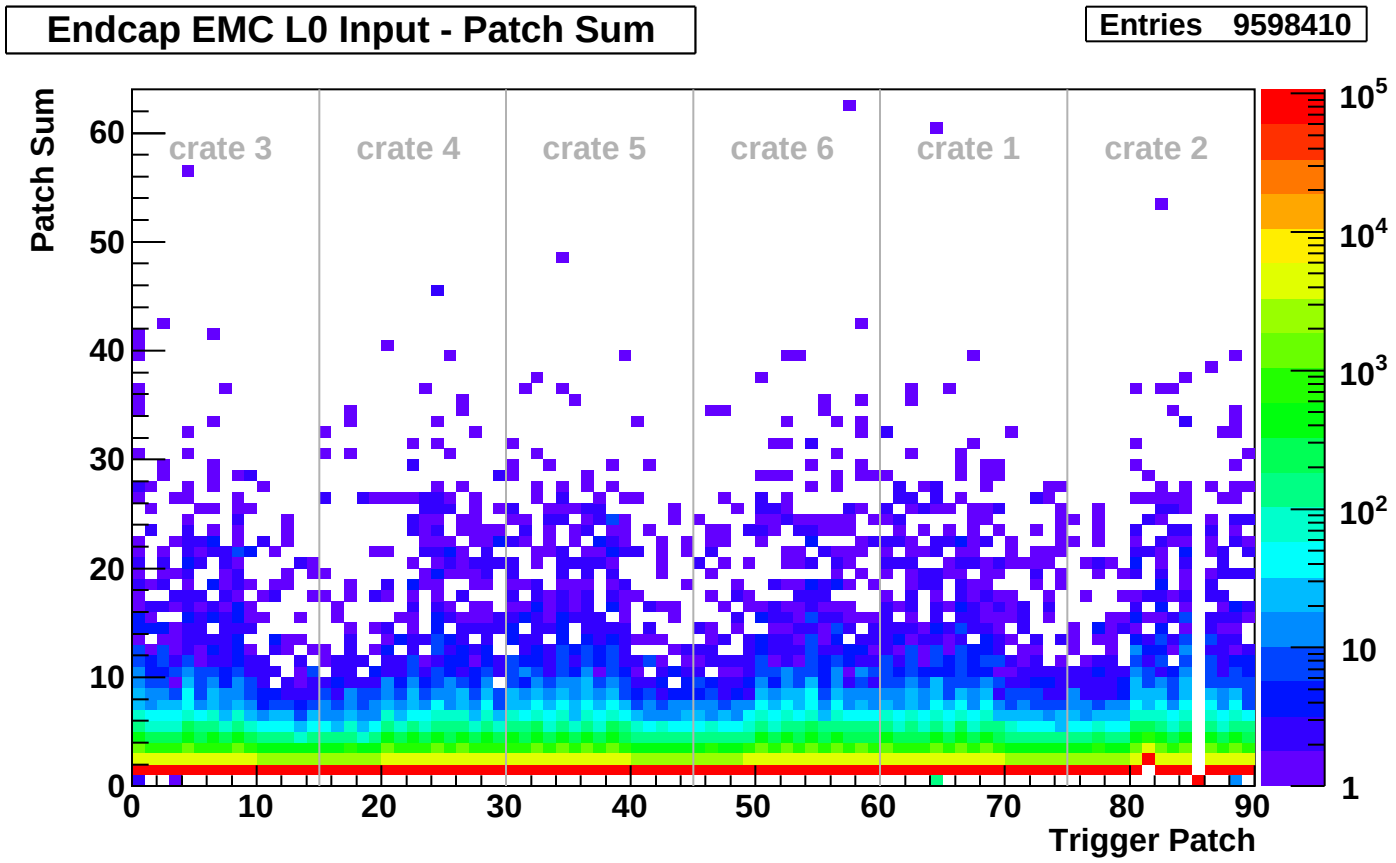

!Blue-Fill
Entries 6655

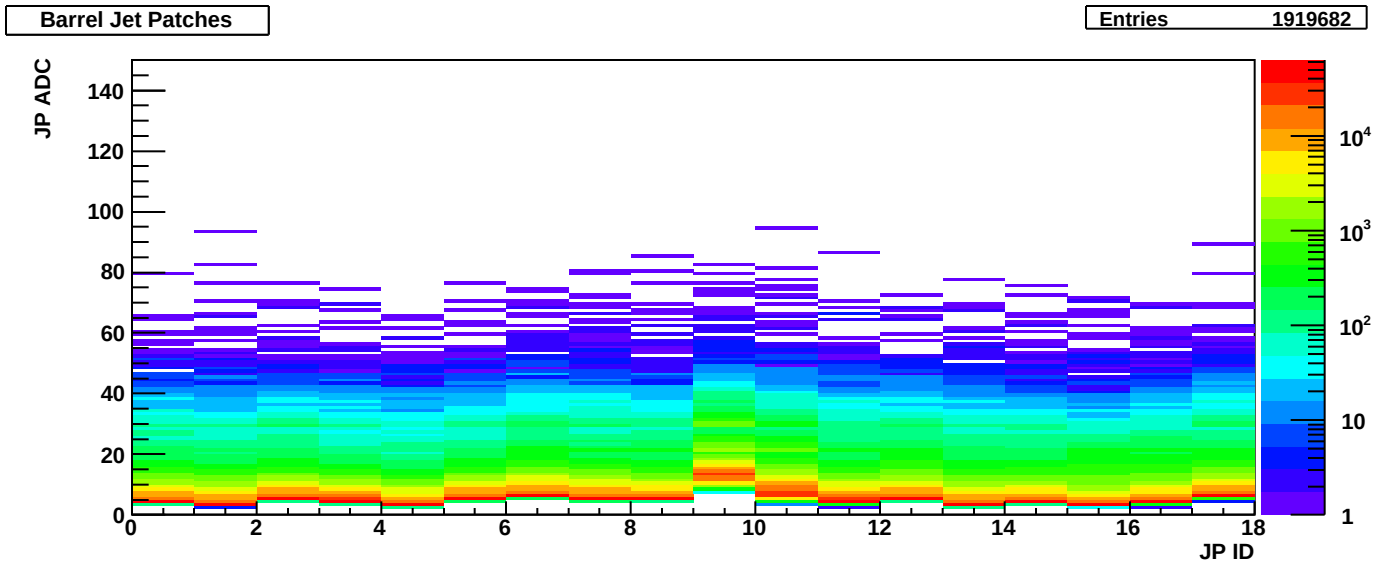

!Yellow-Fill
Entries 8934

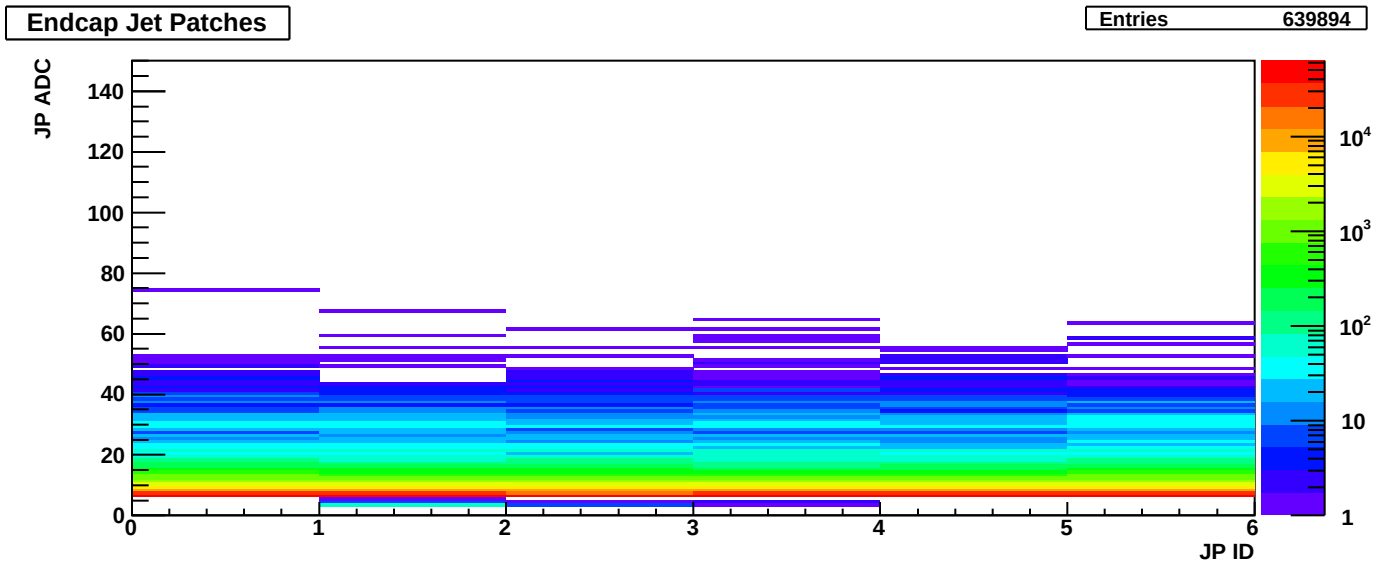

Barrel EMC L0 Input - High Tower
Entries 3.19947e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

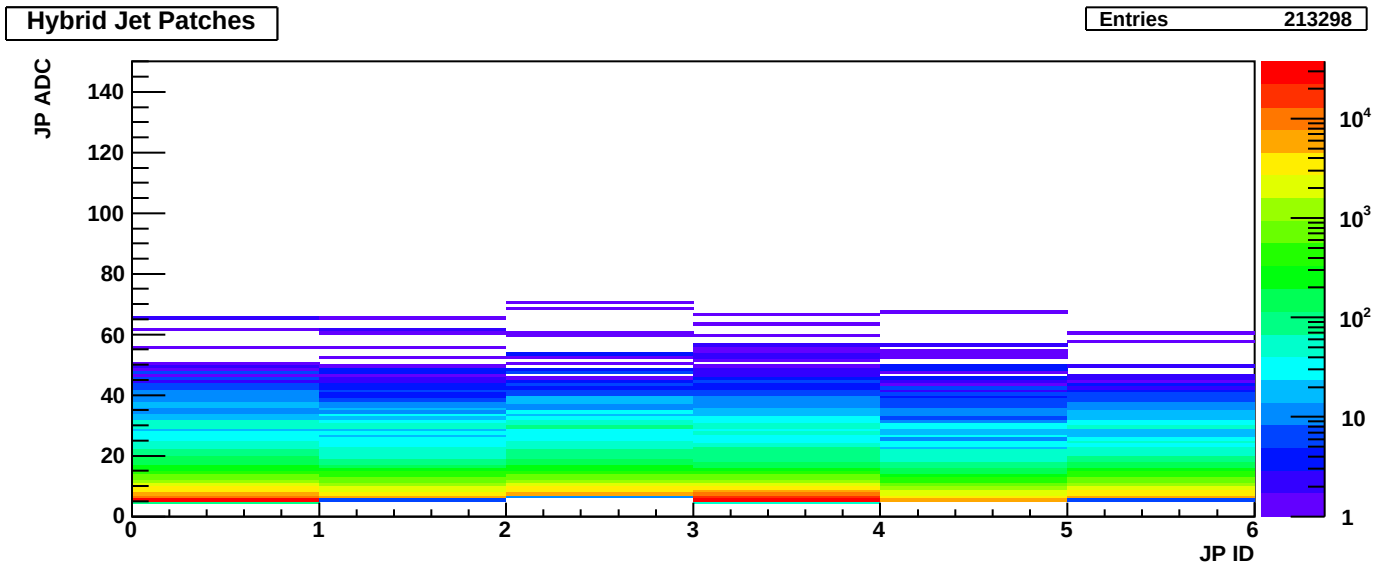

Barrel EMC L0 Input - Patch Sum
Entries 3.19947e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

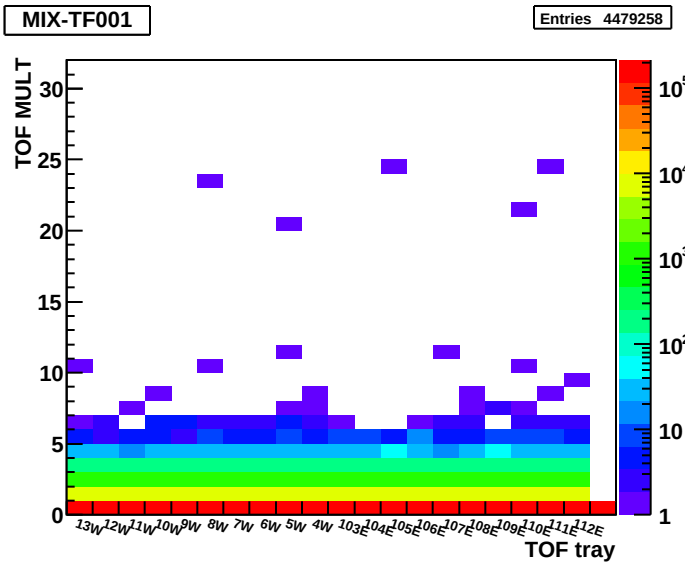

Endcap EMC L0 Input - High Tower
Entries 9598410
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

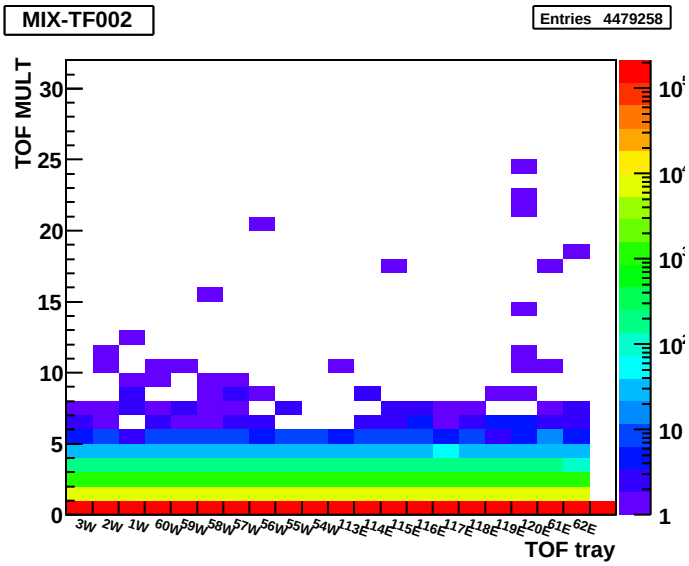

Endcap EMC L0 Input - Patch Sum
Entries 9598410
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

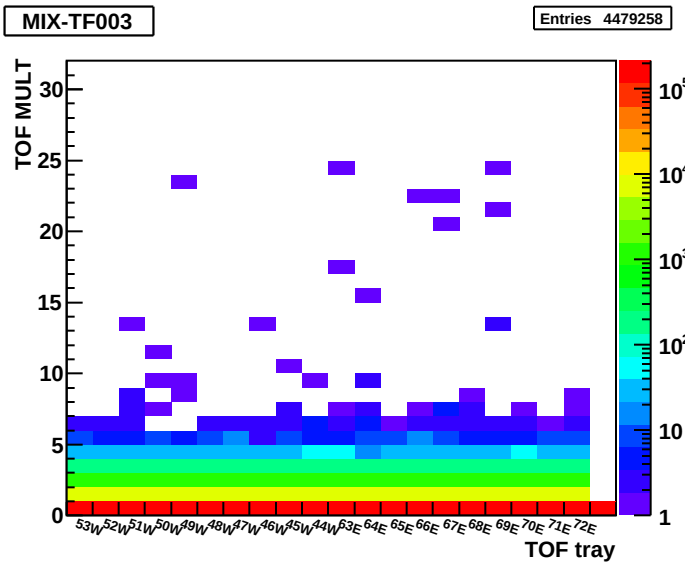

Barrel Jet Patches
Entries 1919682
JP ADC
JP ID

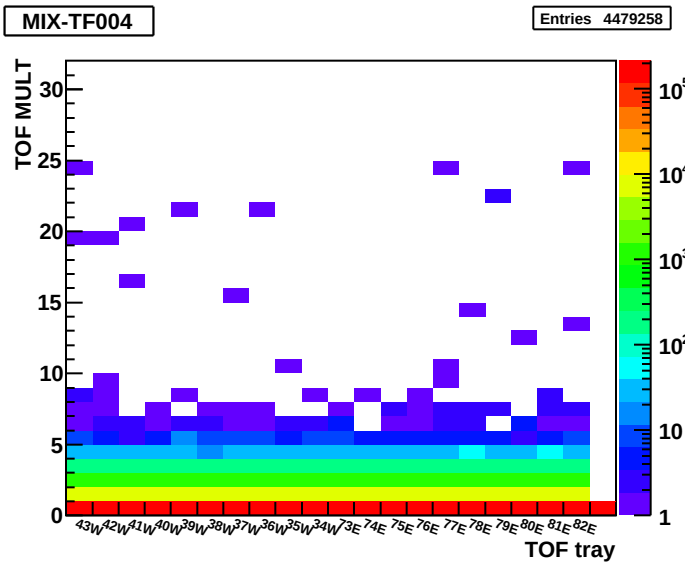

Endcap Jet Patches
Entries 639894
JP ADC
JP ID

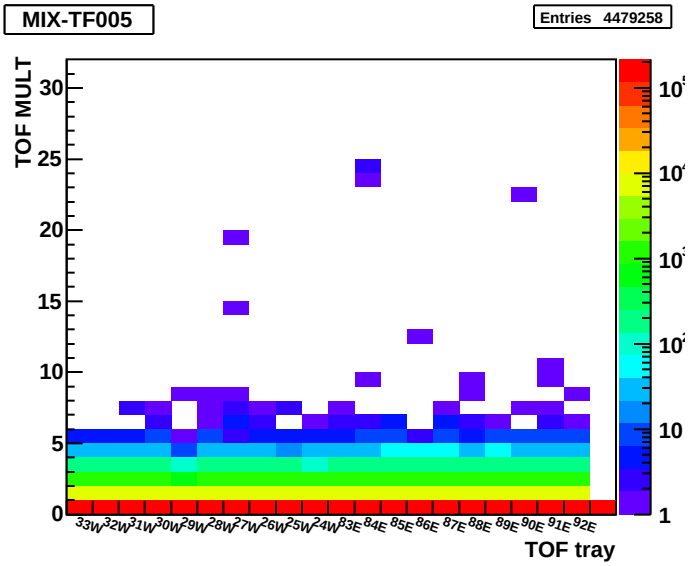

Hybrid Jet Patches
Entries 213298
JP ADC
JP ID

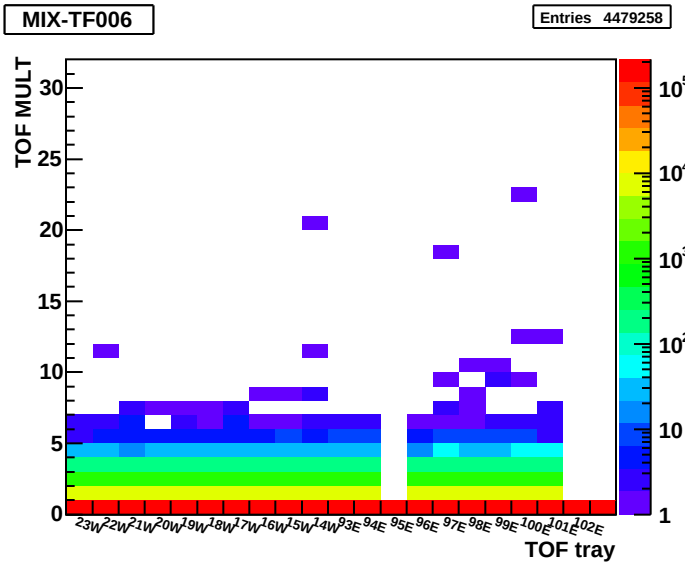

MIX-TF001
Entries 4479258
TOF MULT
TOF tray

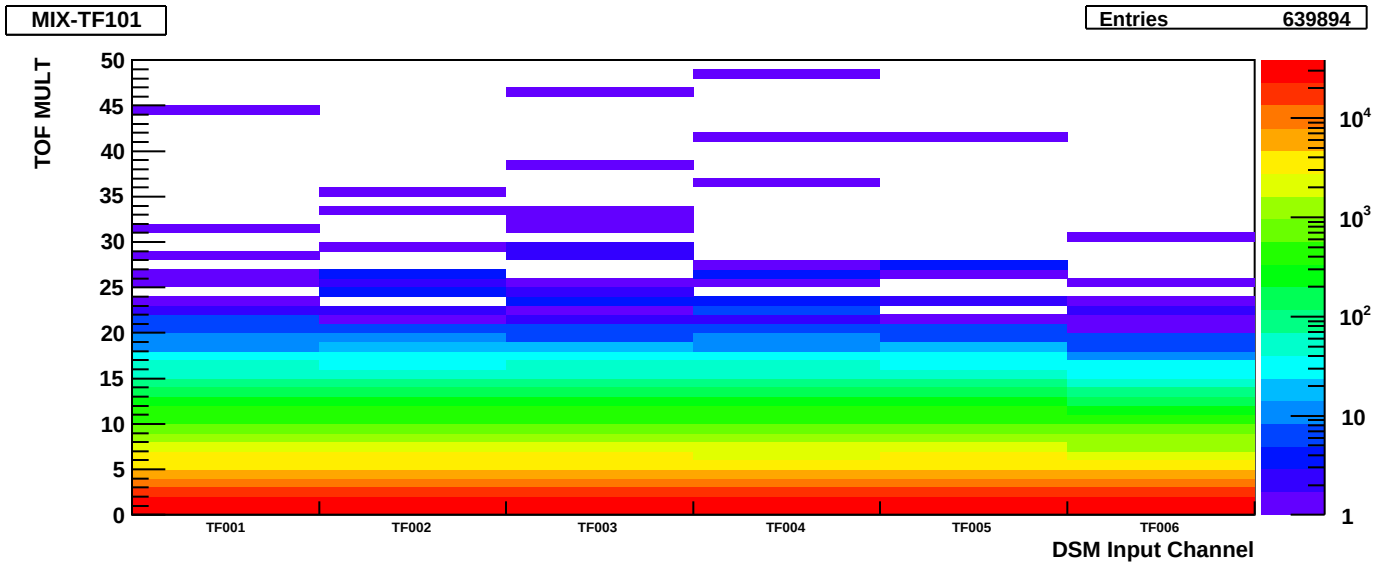

MIX-TF002
Entries 4479258
TOF MULT
TOF tray

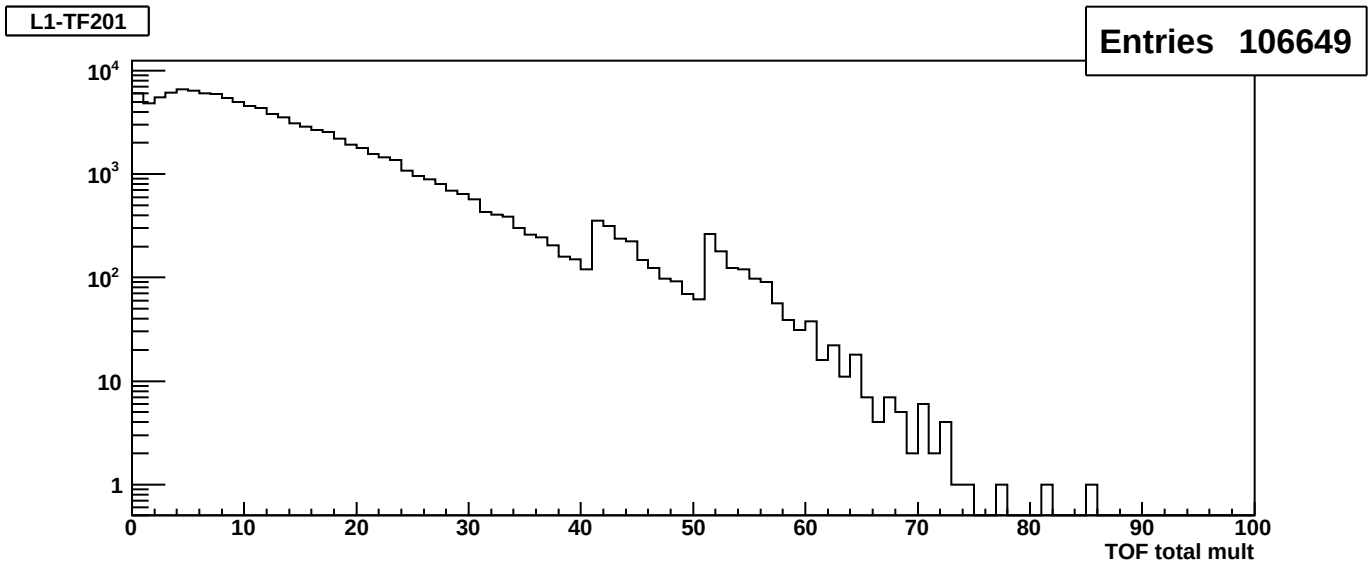

MIX-TF003
Entries 4479258
TOF MULT
TOF tray

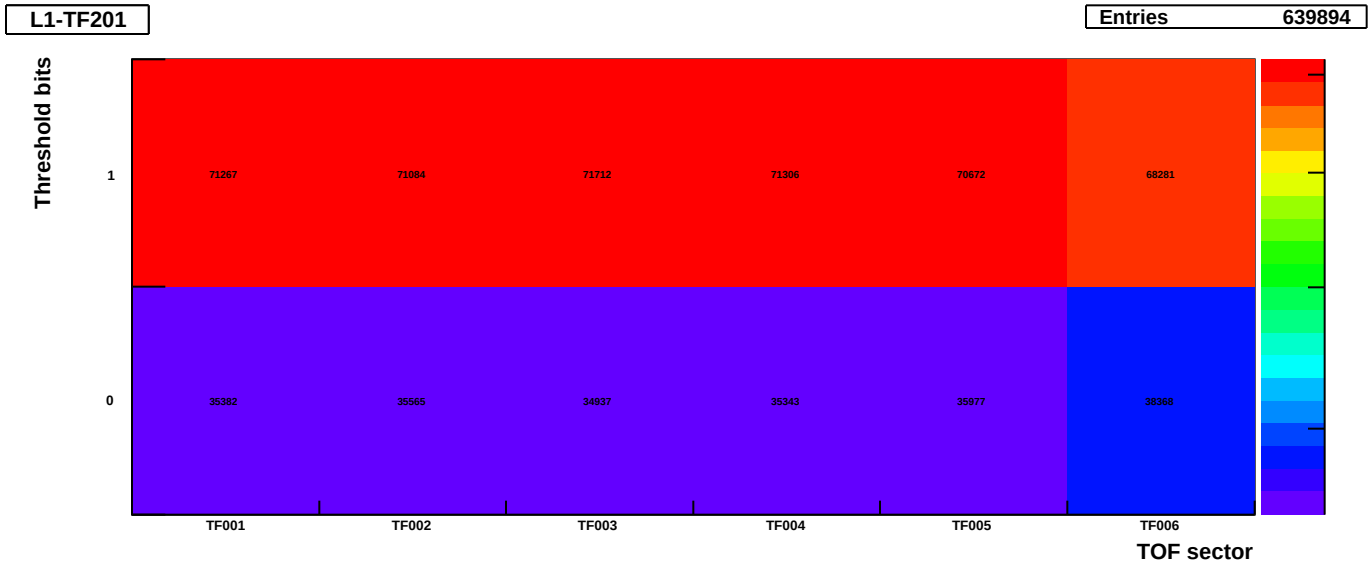

MIX-TF004
Entries 4479258
TOF MULT
TOF tray

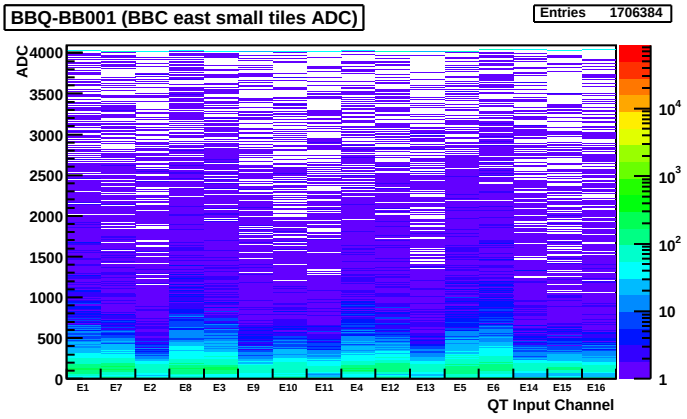

MIX-TF005
Entries 4479258
TOF MULT
TOF tray

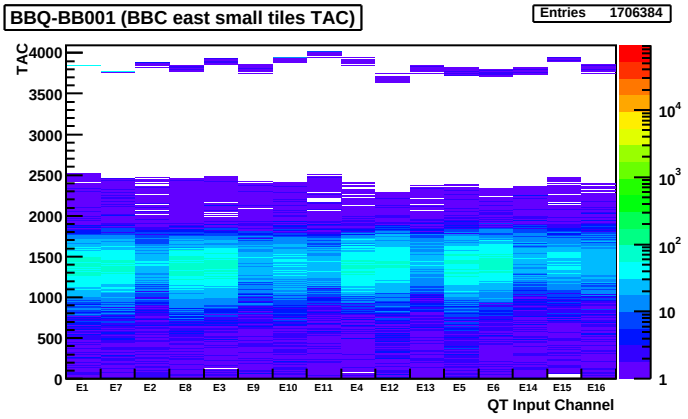

MIX-TF006
Entries 4479258
TOF MULT
TOF tray

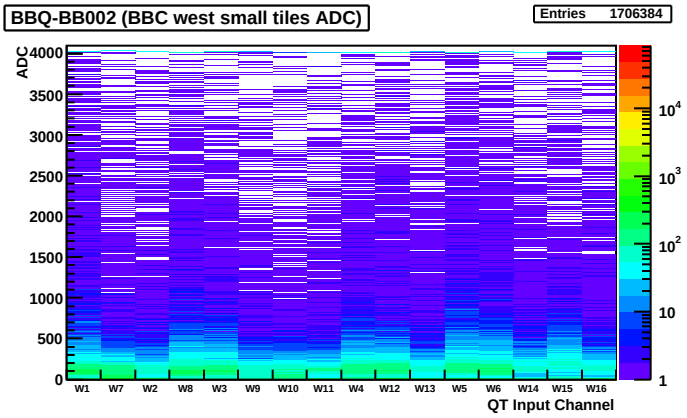

MIX-TF101
Entries 639894
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

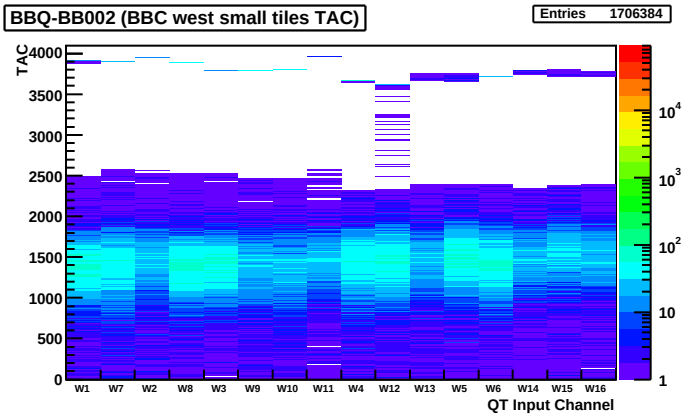

L1-TF201
Entries 106649
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

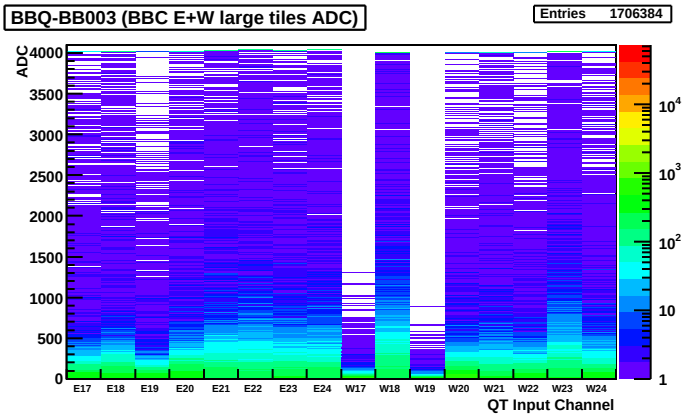

L1-TF201
Entries 639894
Threshold bits
1
0
71267
71084
71712
71306
70672
68281
35382
35565
34937
35343
35977
38368
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

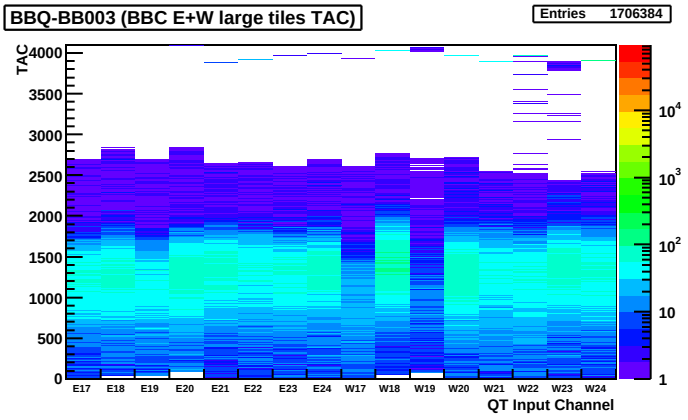

BBQ-BB001 (BBC east small tiles ADC)
Entries 1706384
ADC
QT Input Channel

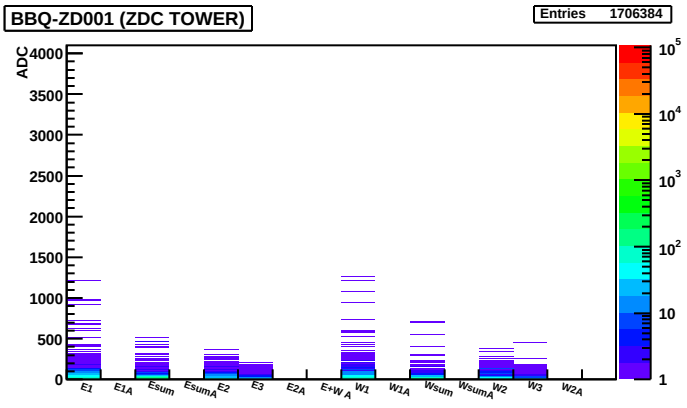

BBQ-BB001 (BBC east small tiles TAC)
Entries 1706384
TAC
QT Input Channel

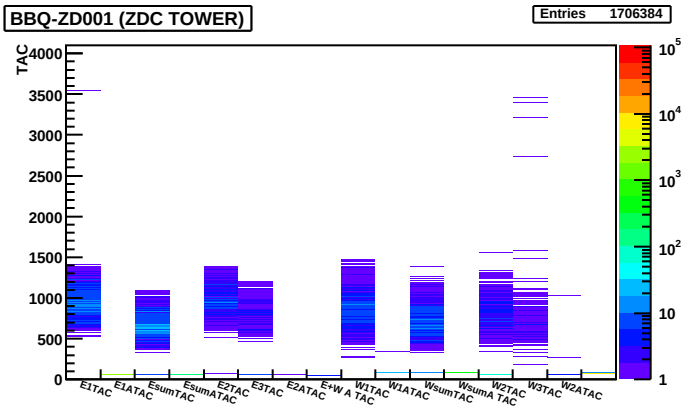

BBQ-BB002 (BBC west small tiles ADC)
Entries 1706384
ADC
QT Input Channel

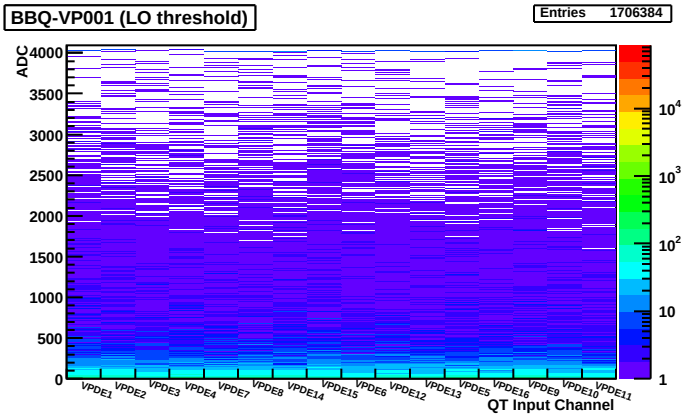

BBQ-BB002 (BBC west small tiles TAC)
Entries 1706384
TAC
QT Input Channel

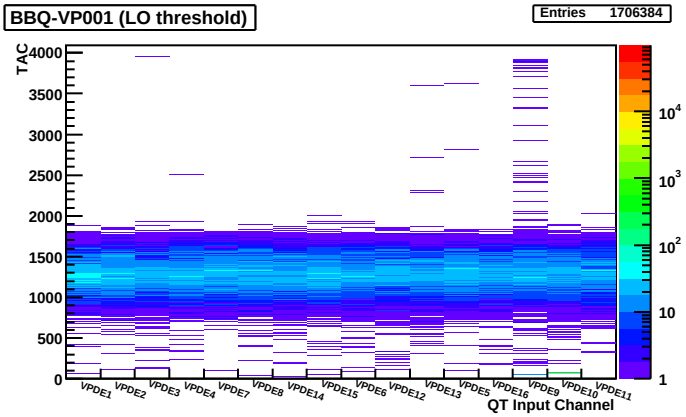

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1706384
ADC
QT Input Channel

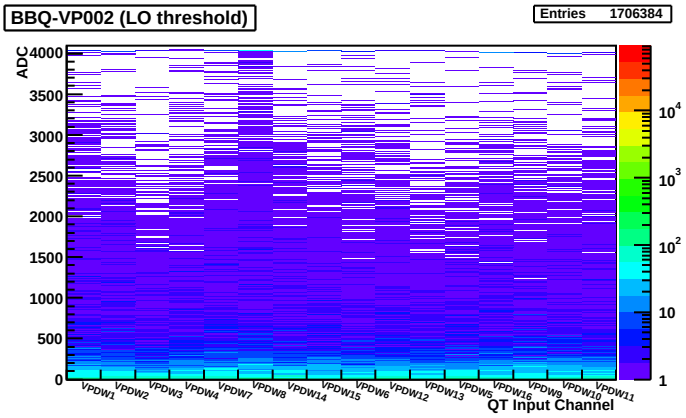

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1706384
TAC
QT Input Channel

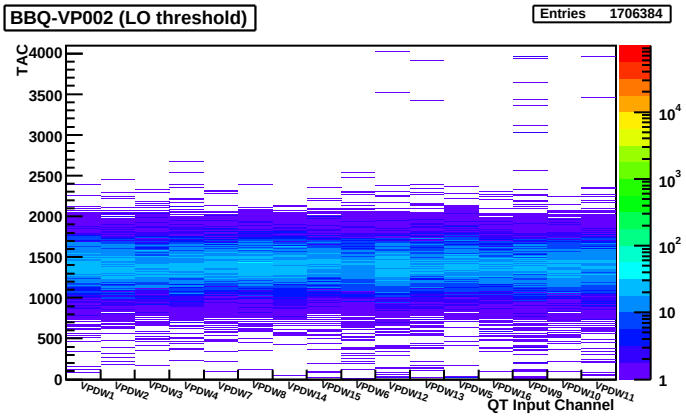

BBQ-ZD001 (ZDC TOWER)
Entries 1706384
ADC

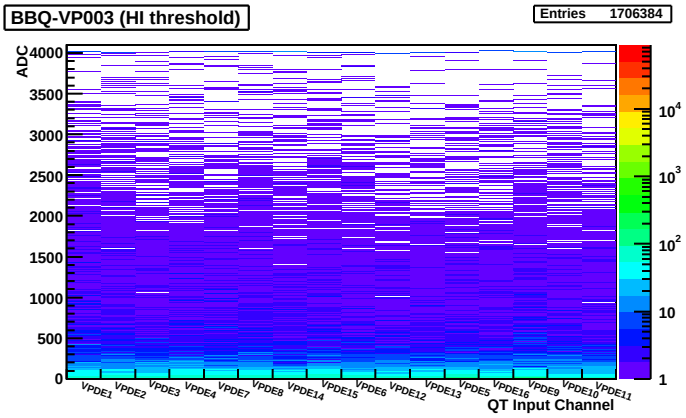

BBQ-ZD001 (ZDC TOWER)
Entries 1706384
TAC

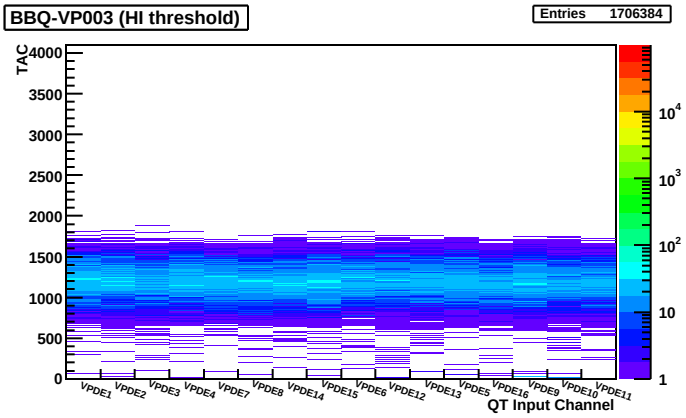

BBQ-VP001 (LO threshold)
Entries 1706384
ADC
QT Input Channel

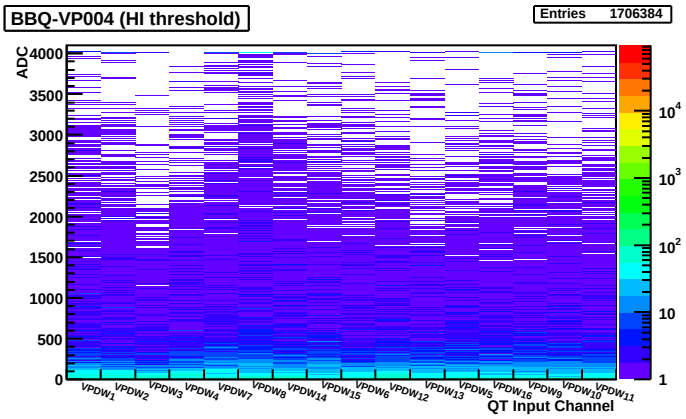

BBQ-VP001 (LO threshold)
Entries 1706384
TAC
QT Input Channel

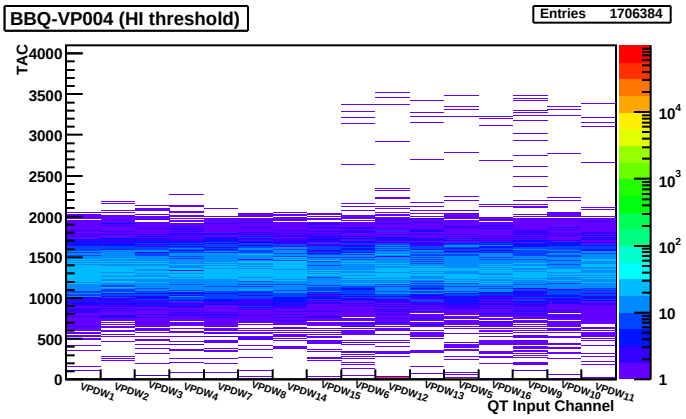

BBQ-VP002 (LO threshold)
Entries 1706384
ADC
QT Input Channel

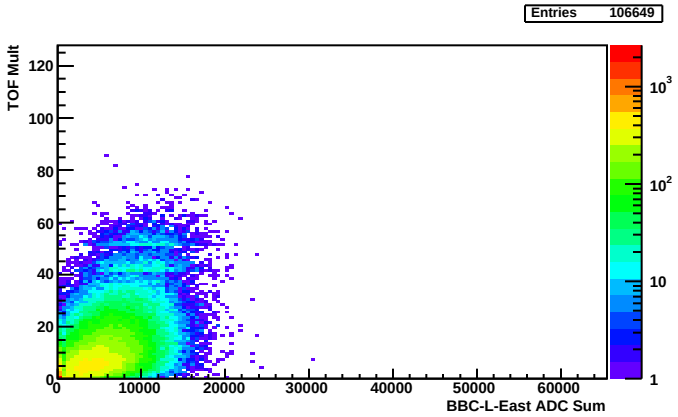

BBQ-VP002 (LO threshold)
Entries 1706384
TAC
QT Input Channel

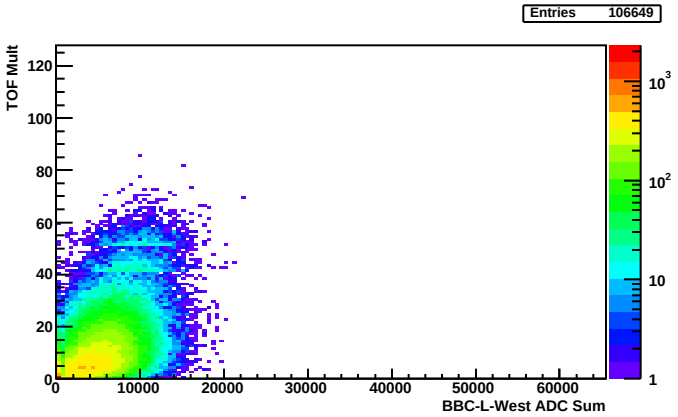

BBQ-VP003 (HI threshold)
Entries 1706384
ADC
QT Input Channel

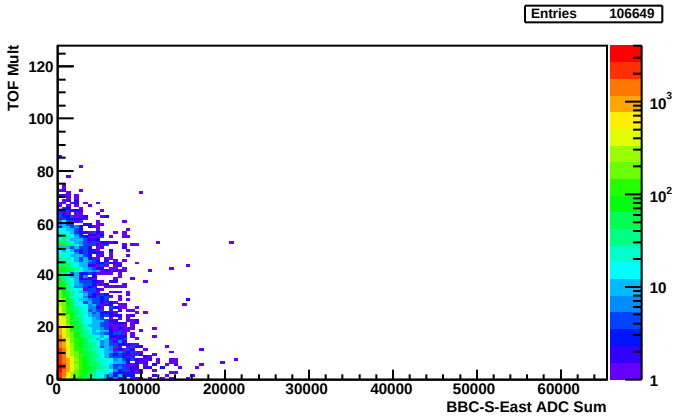

BBQ-VP003 (HI threshold)
Entries 1706384
TAC
QT Input Channel

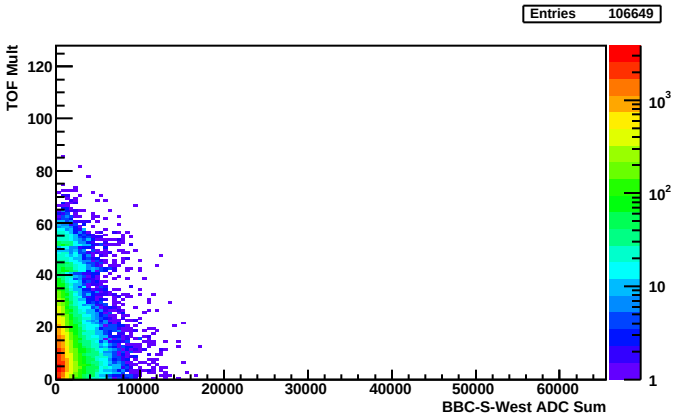

BBQ-VP004 (HI threshold)
Entries 1706384
ADC
QT Input Channel

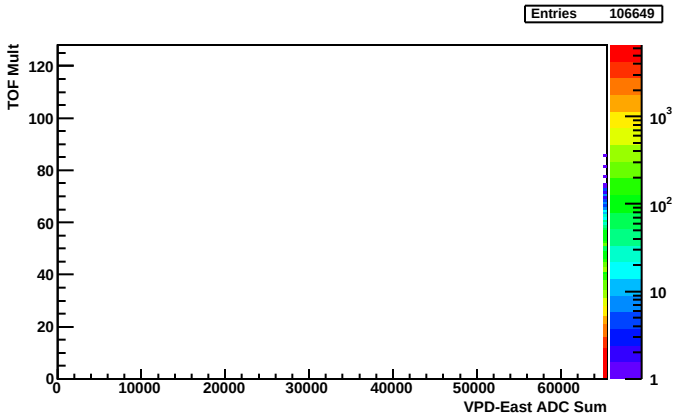

BBQ-VP004 (HI threshold)
Entries 1706384
TAC
QT Input Channel

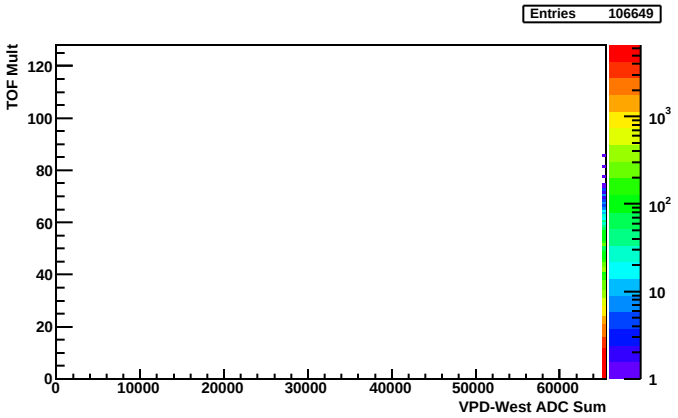

Entries 106649
TOF Mult
BBC-L-East ADC Sum

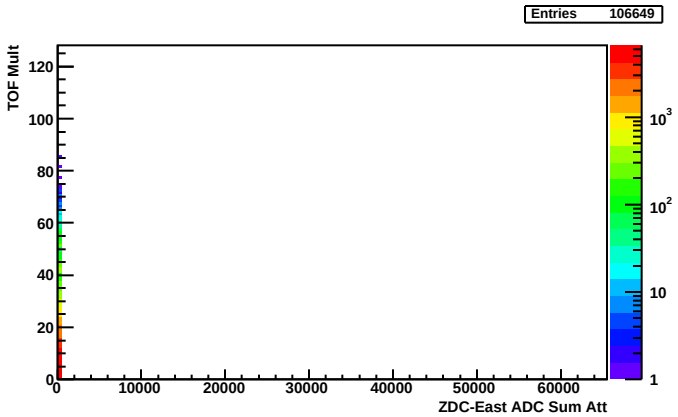

Entries 106649
TOF Mult
BBC-L-West ADC Sum

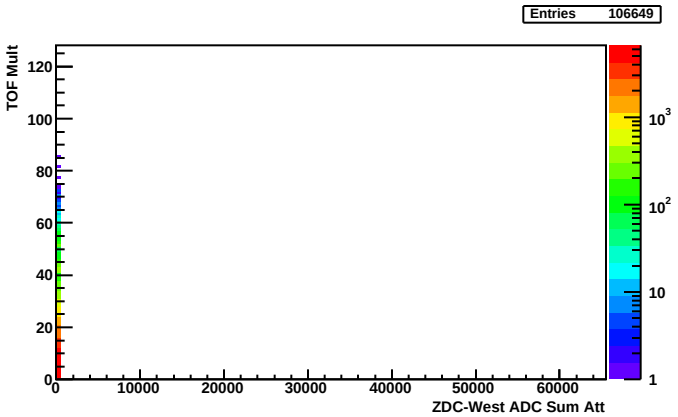

Entries 106649
TOF Mult
BBC-S-East ADC Sum

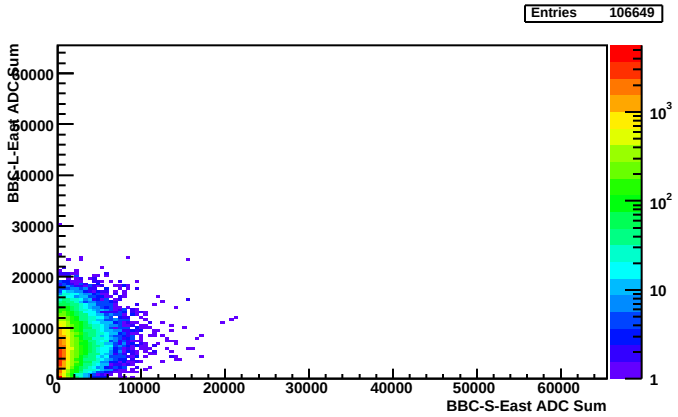

Entries 106649
TOF Mult
BBC-S-West ADC Sum

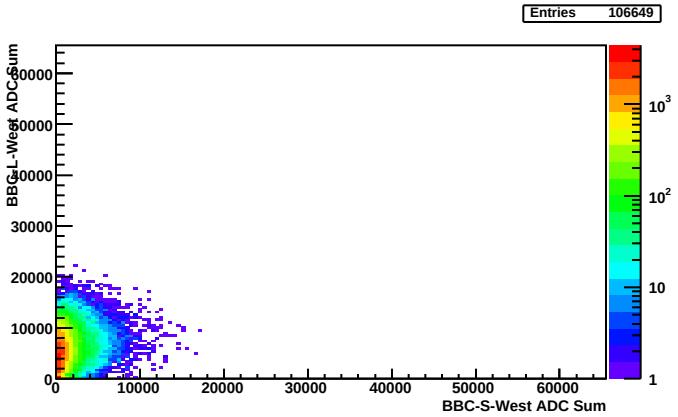

Entries 106649
TOF Mult
VPD-East ADC Sum

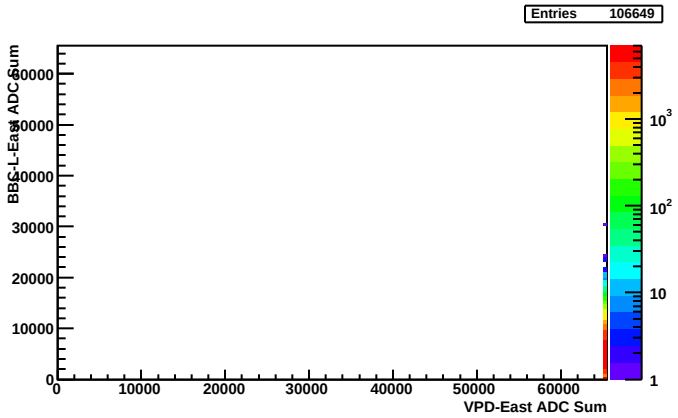

Entries 106649
TOF Mult
VPD-West ADC Sum

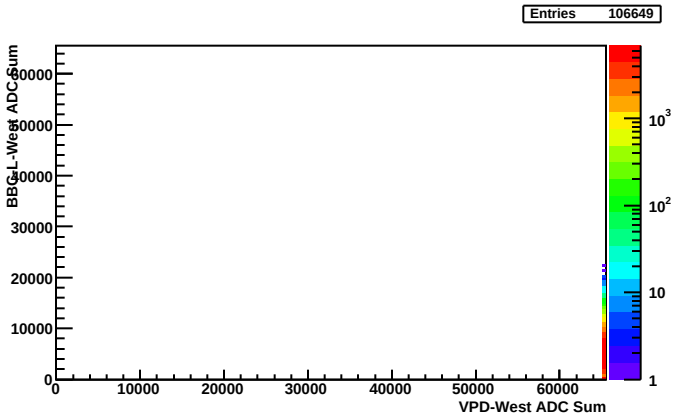

Entries 106649
TOF Mult
ZDC-East ADC Sum Att

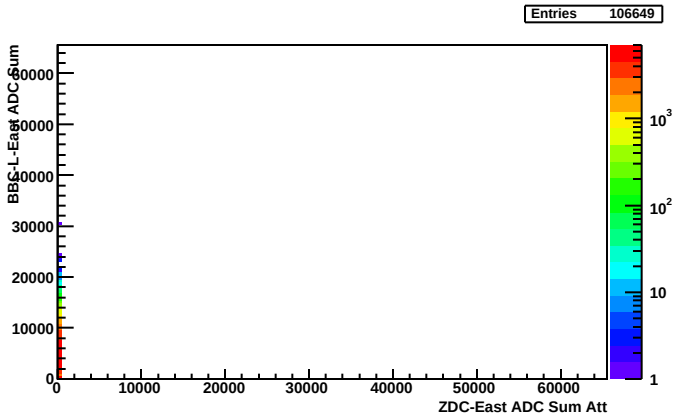

Entries 106649
TOF Mult
ZDC-West ADC Sum Att

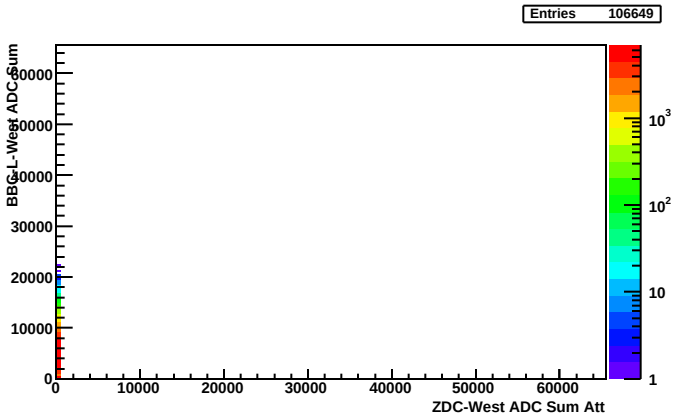

Entries 106649
BBC-L-East ADC Sum
BBC-S-East ADC Sum

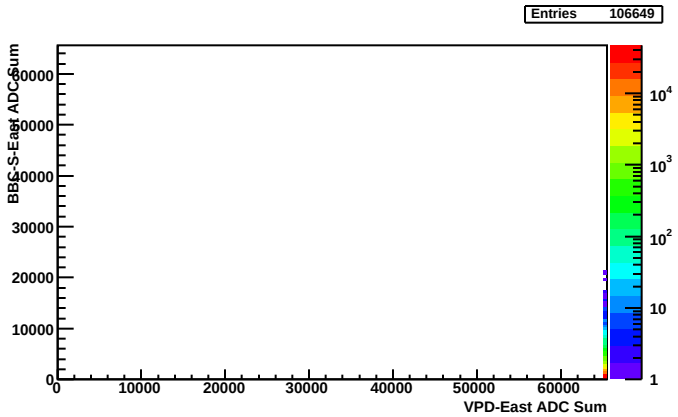

Entries 106649
BBC-L-West ADC Sum
BBC-S-West ADC Sum

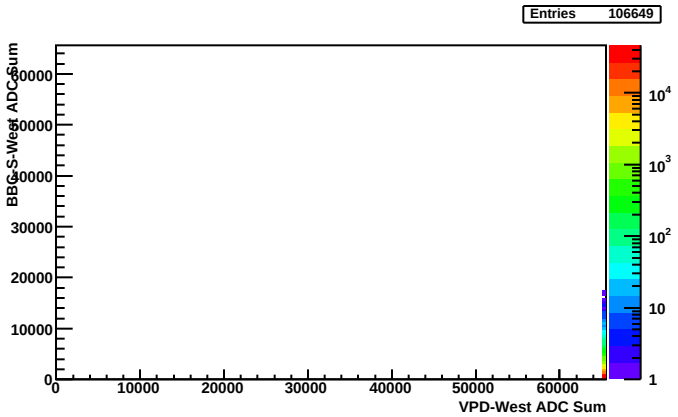

Entries 106649
BBC-L-East ADC Sum
VPD-East ADC Sum

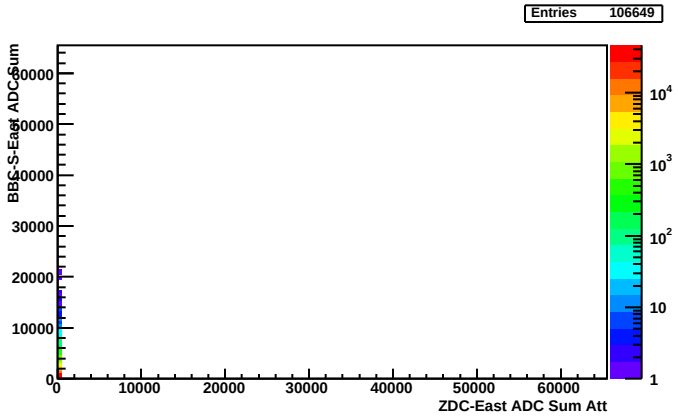

Entries 106649
BBC-L-West ADC Sum
VPD-West ADC Sum

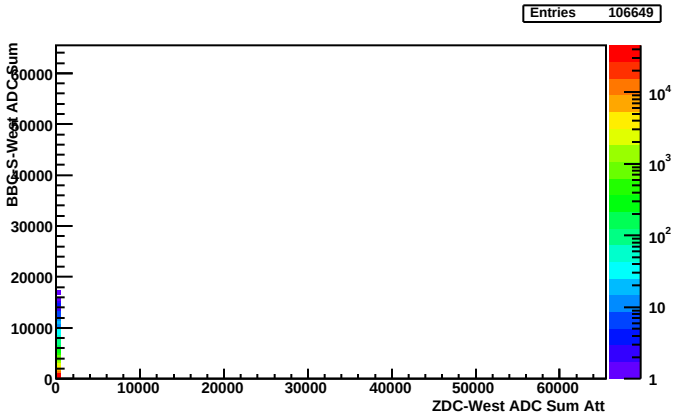

Entries 106649
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

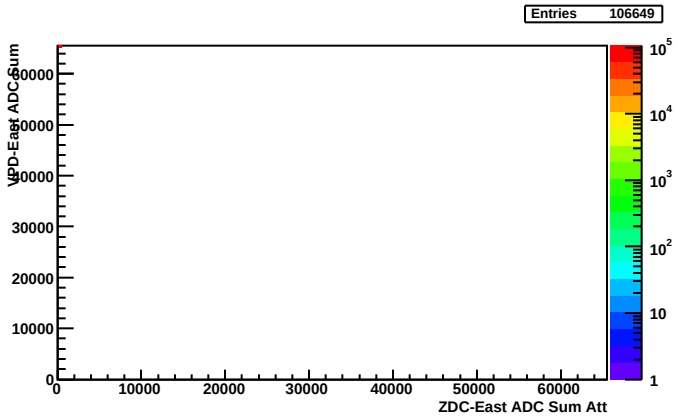

Entries 106649
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

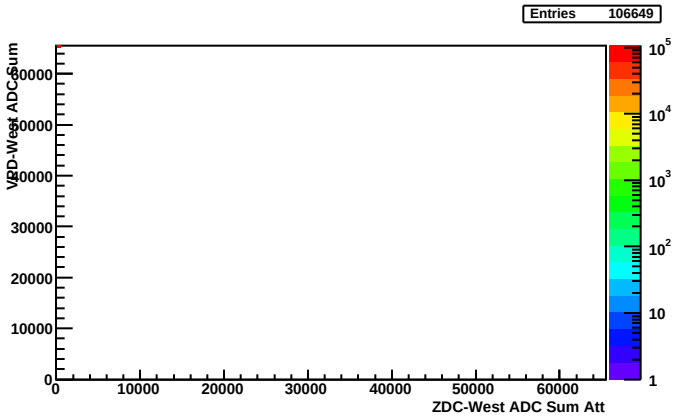

Entries 106649
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 106649
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 106649
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 106649
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 106649
VPD-East ADC Sum
ZDC-East ADC Sum Att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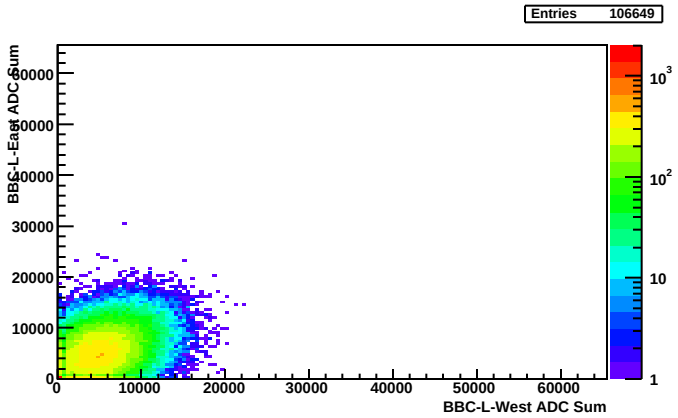
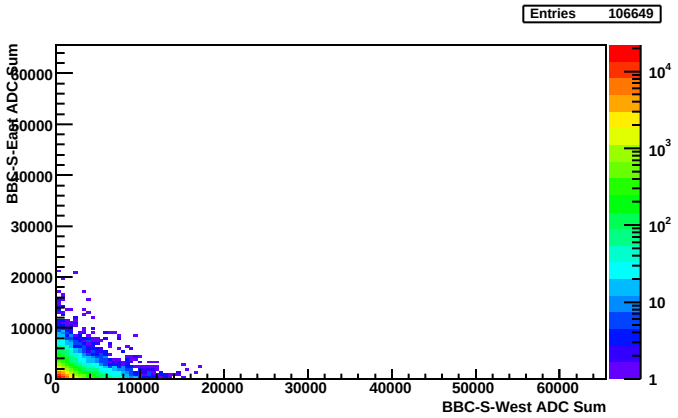
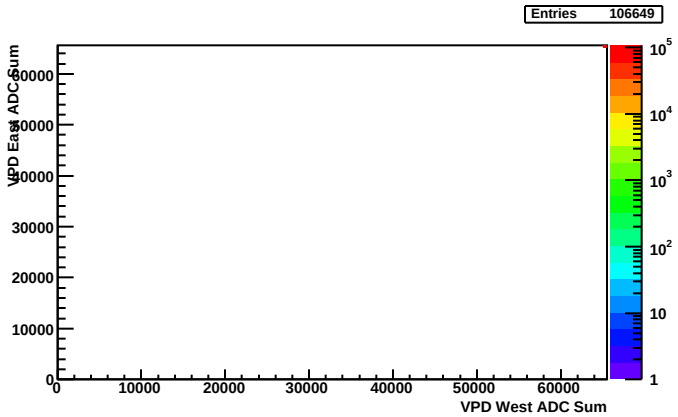
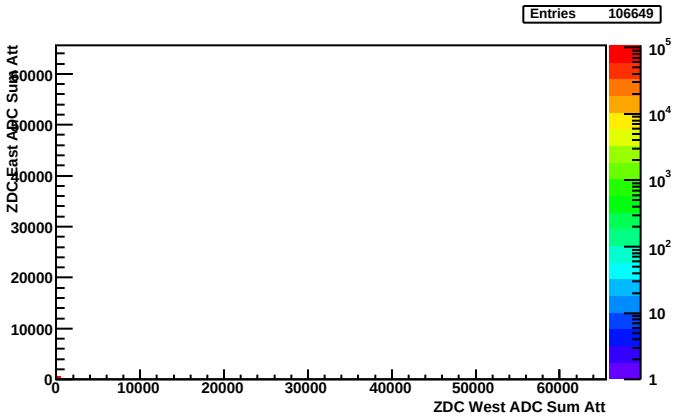
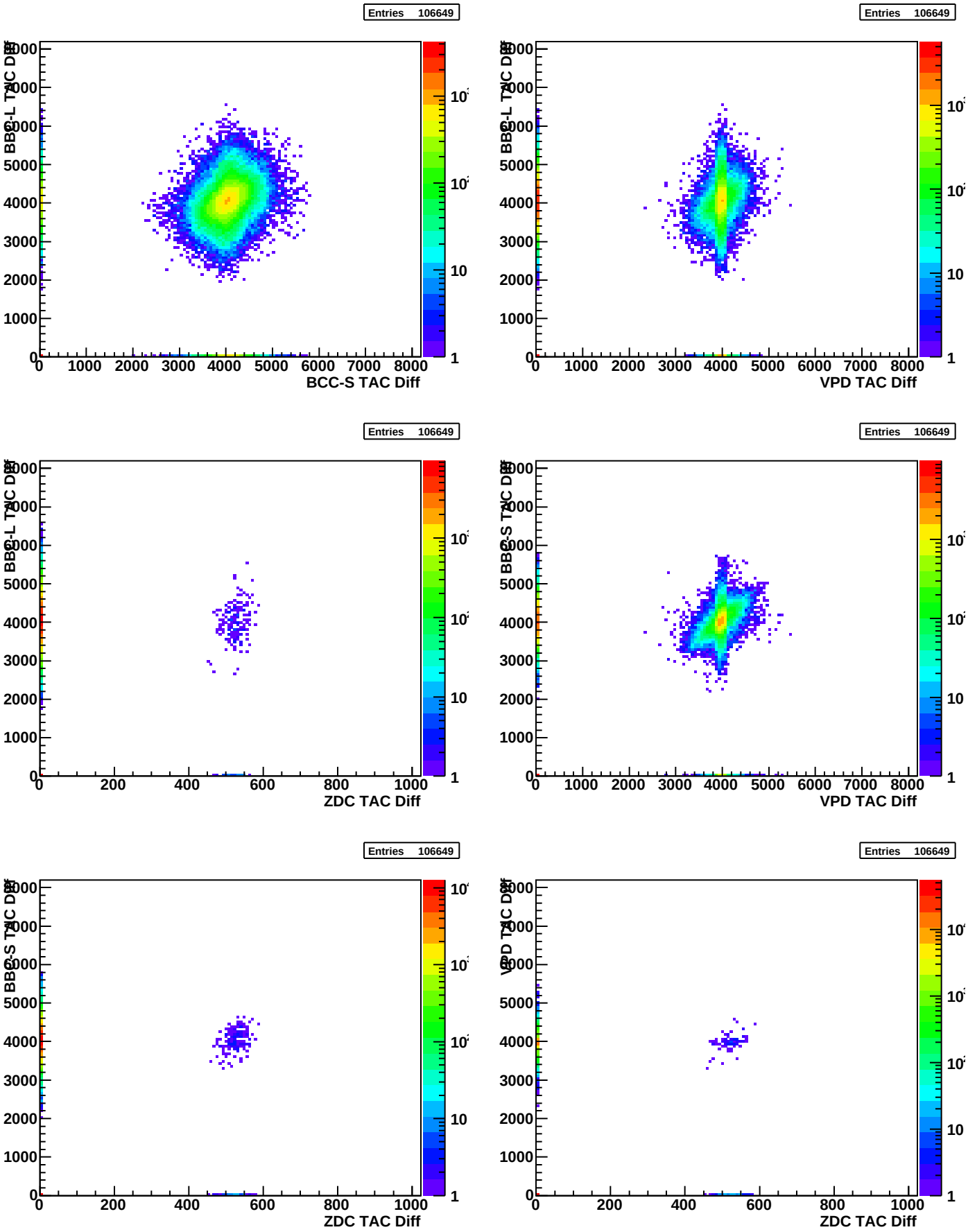
VPD-West ADC Sum
ZDC-West ADC Sum Att

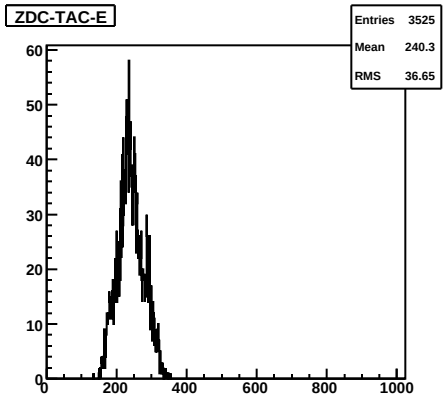

Entries 106649
BBC-L-East ADC Sum
BBC-L-West ADC Sum

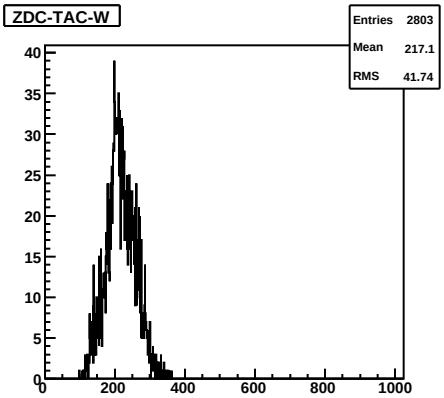

Entries 106649
BBC-S-East ADC Sum
BBC-S-West ADC Sum

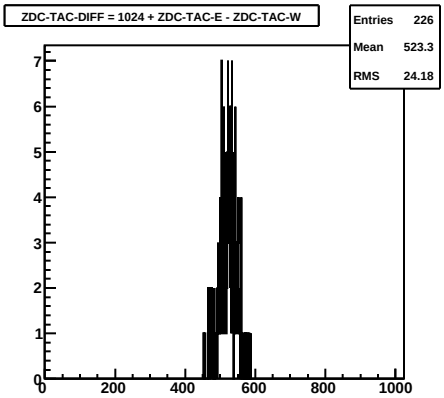

Entries 106649
VPD East ADC Sum
VPD West ADC Sum

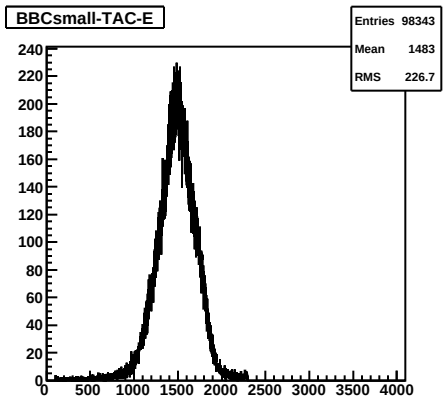

Entries 106649
ZDC East ADC Sum Att
ZDC West ADC Sum Att

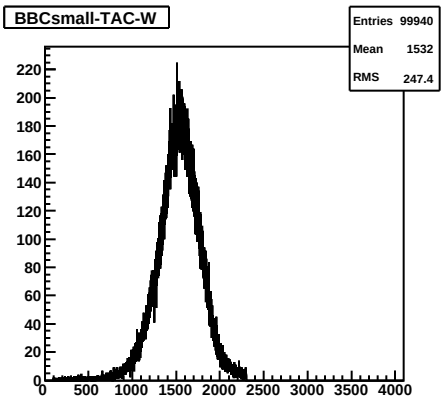

Entries 106649
BBC-L TAC Diff
BCC-S TAC Diff
Entries 106649
BBC-L TAC Diff
VPD TAC Diff
Entries 106649
BBC-L TAC Diff
ZDC TAC Diff
Entries 106649
BBC-S TAC Diff
VPD TAC Diff
Entries 106649
BBC-S TAC Diff
ZDC TAC Diff
Entries 106649
VPD TAC Diff
ZDC TAC Diff

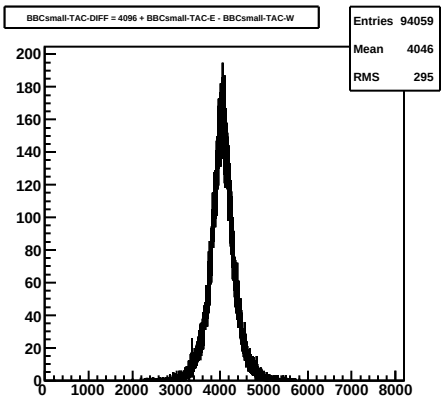

ZDC-TAC-E
Entries 3525
Mean 240.3
RMS 36.65

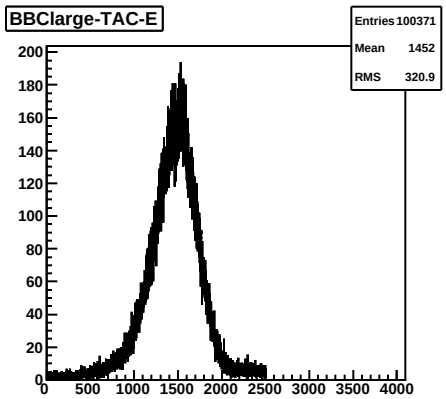

ZDC-TAC-W
Entries 2803
Mean 217.1
RMS 41.74

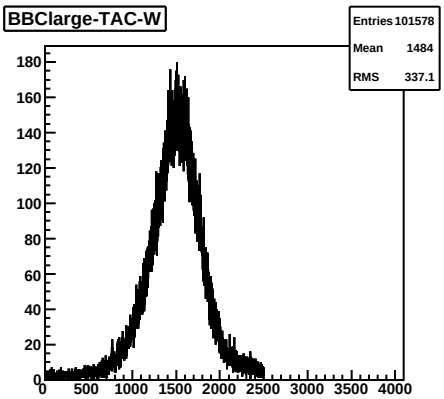

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 226
Mean 523.3
RMS 24.18

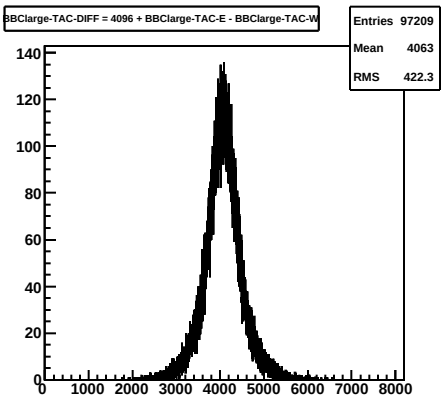

BBCsmall-TAC-E
Entries 98343
Mean 1483
RMS 226.7

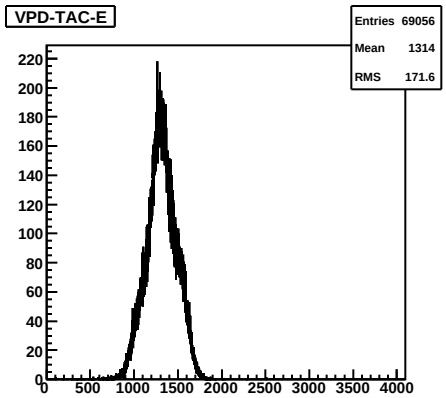

BBCsmall-TAC-W
Entries 99940
Mean 1532
RMS 247.4

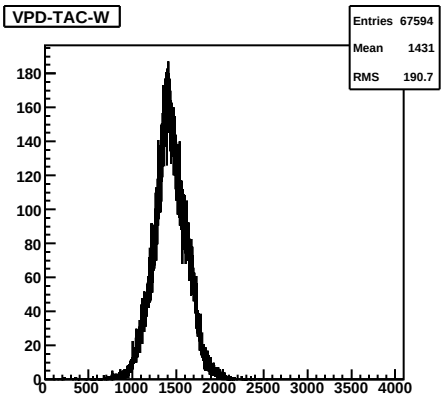

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 94059
Mean 4046
RMS 295

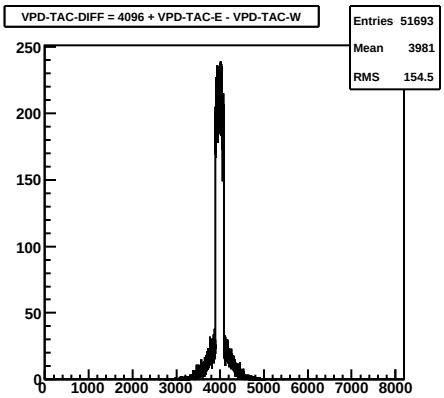

BBClarge-TAC-E
Entries 100371
Mean 1452
RMS 320.9

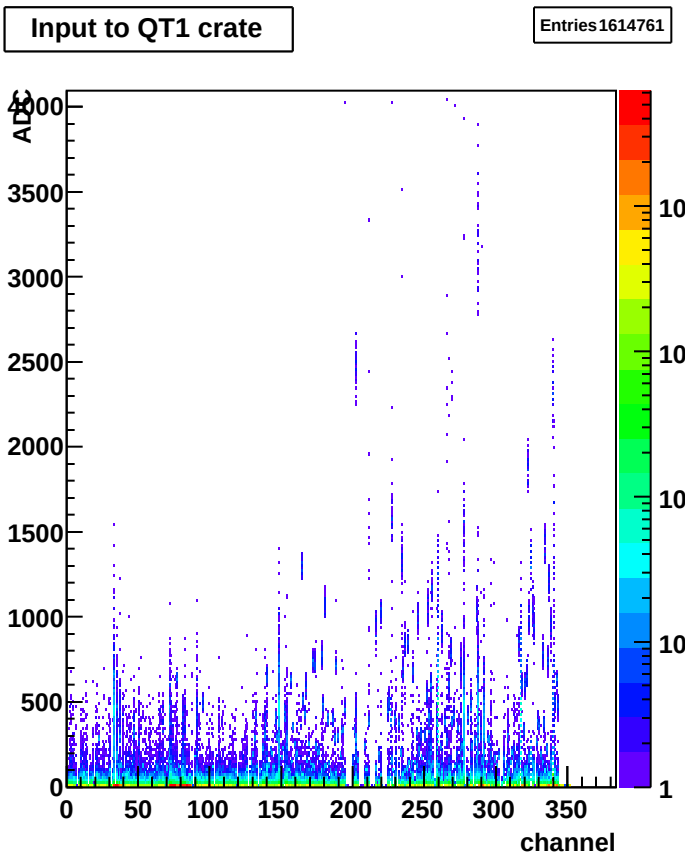

BBClarge-TAC-W
Entries 101578
Mean 1484
RMS 337.1

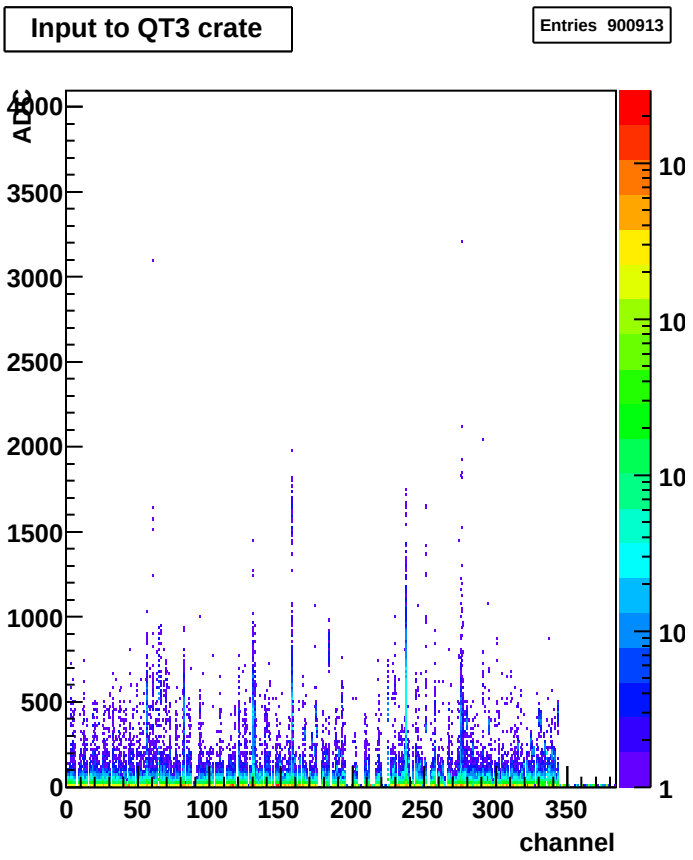

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 97209
Mean 4063
RMS 422.3

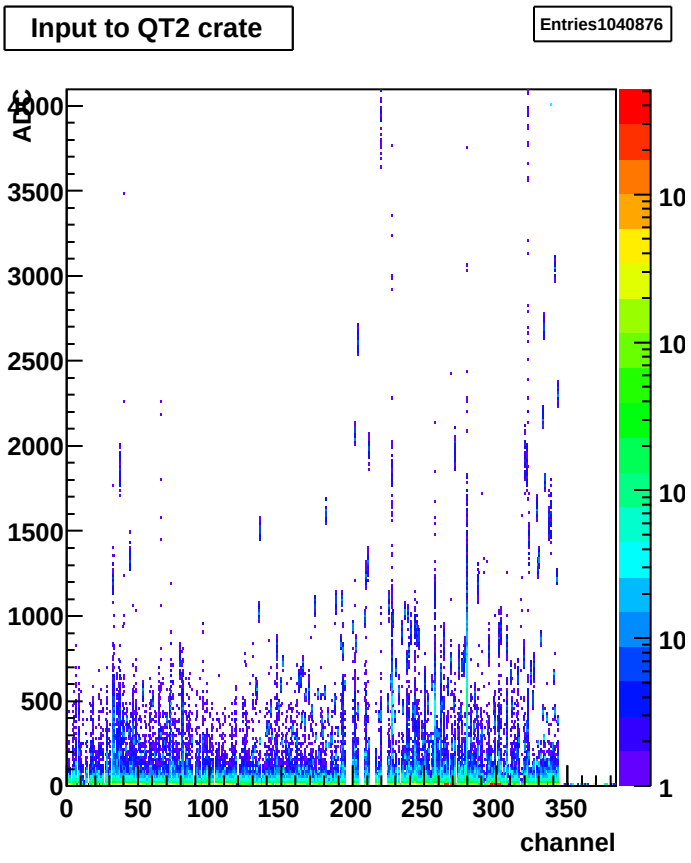

VPD-TAC-E
Entries 69056
Mean 1314
RMS 171.6

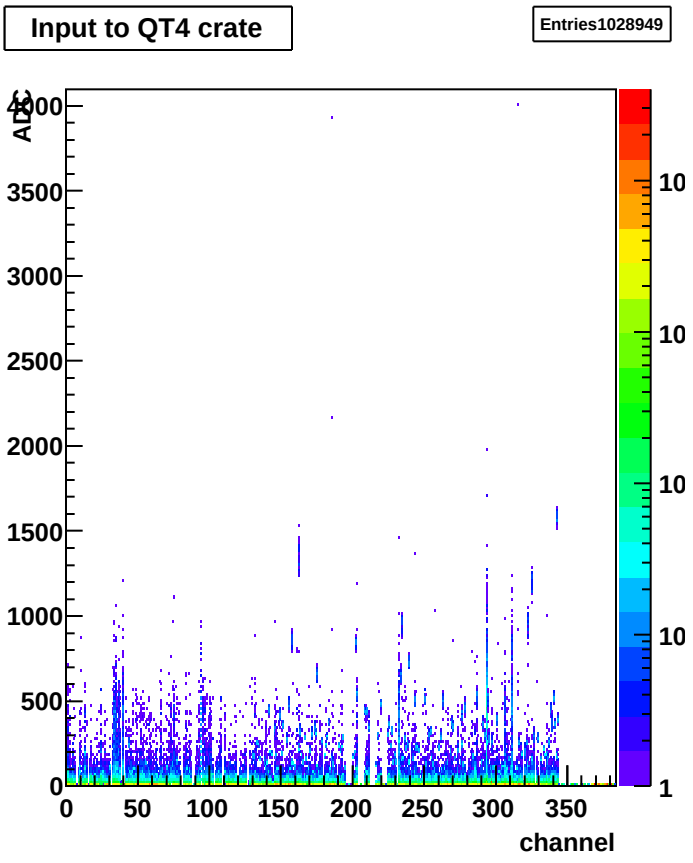

VPD-TAC-W
Entries 67594
Mean 1431
RMS 190.7

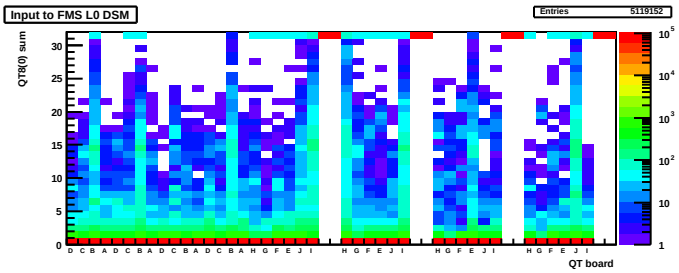

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 51693
Mean 3981
RMS 154.5

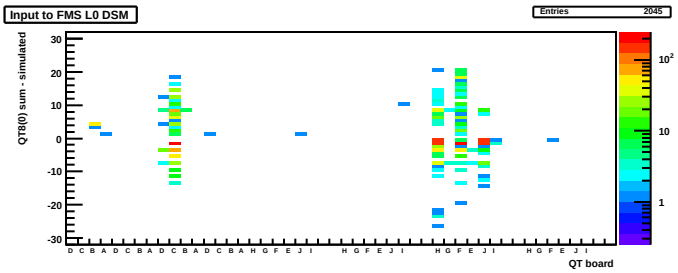

Input to QT1 crate
Entries1614761
ADC
channel

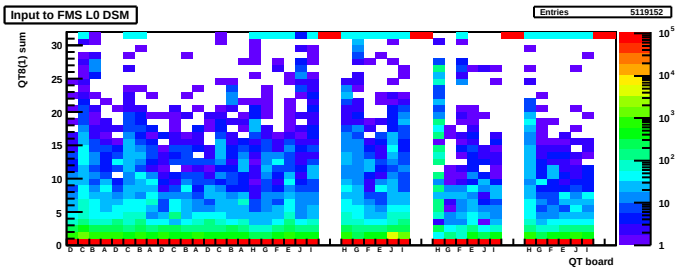

Input to QT3 crate
Entries 900913
ADC
channel

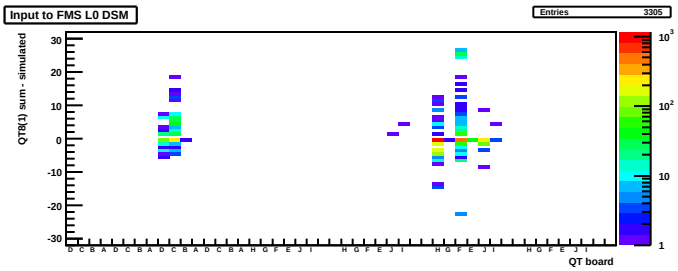

Input to QT2 crate
Entries1040876
ADC
channel

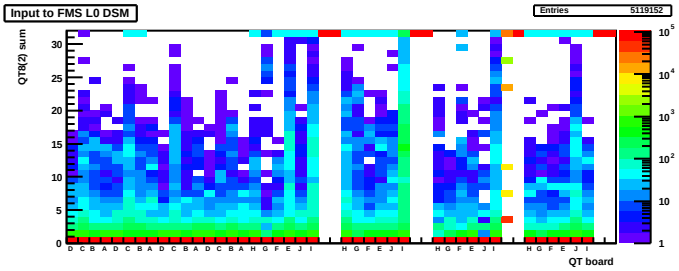

Input to QT4 crate
Entries1028949
ADC
channel

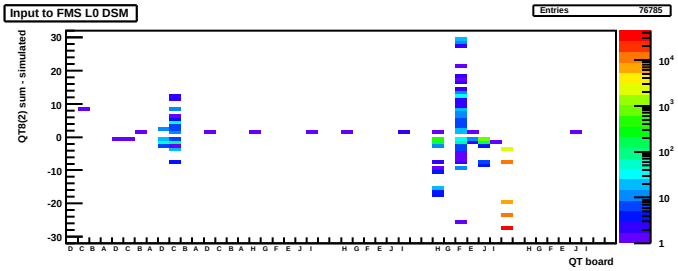

Input to FMS L0 DSM
Entries 5119152
QT8(0) sum
QT board

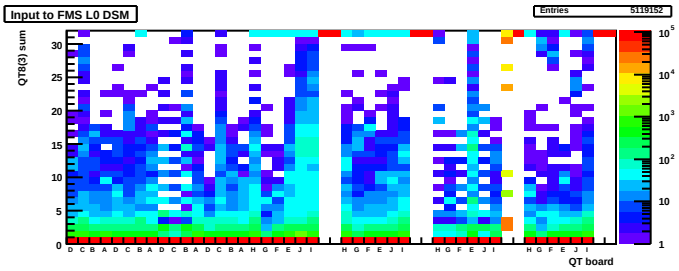

Input to FMS L0 DSM
Entries 2045
QT8(0) sum - simulated
QT board

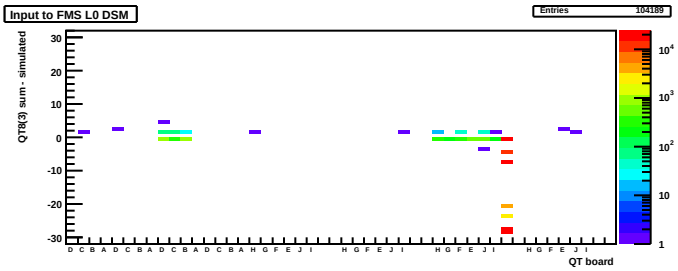

Input to FMS L0 DSM
Entries 5119152
QT8(1) sum
QT board

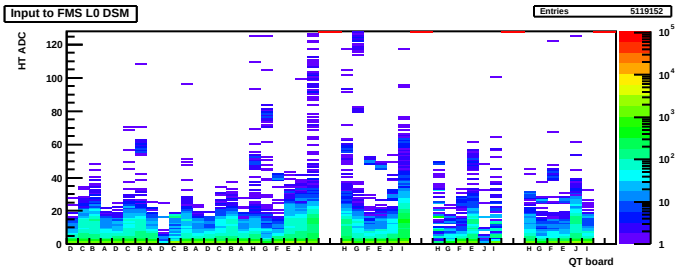

Input to FMS L0 DSM
Entries 3305
QT8(1) sum - simulated
QT board

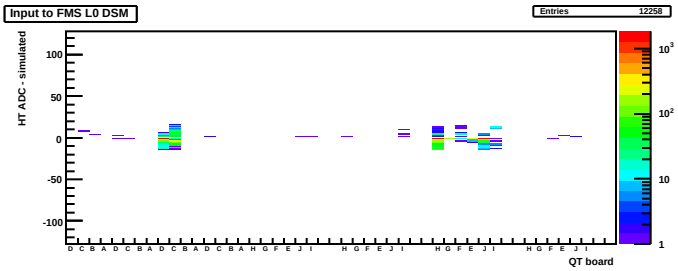

Input to FMS L0 DSM
Entries 5119152
QT8(2) sum
QT board

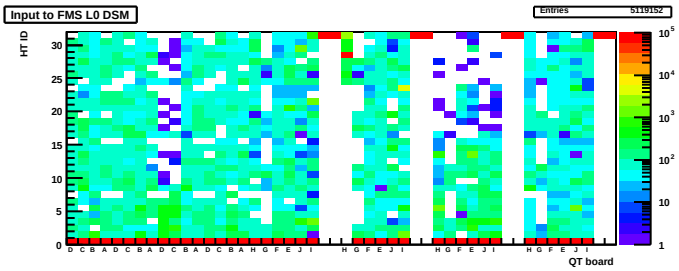

Input to FMS L0 DSM
Entries 76785
QT8(2) sum - simulated
QT board

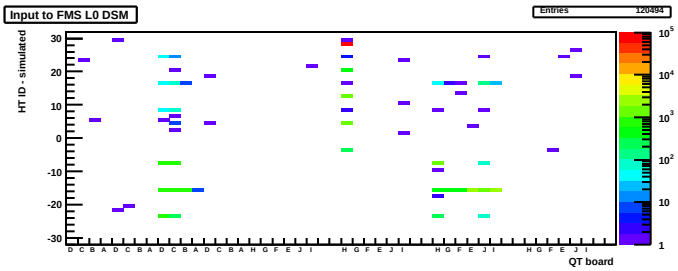

Input to FMS L0 DSM
Entries 5119152
QT8(3) sum
QT board

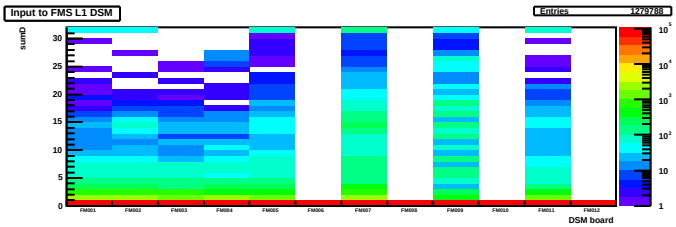

Input to FMS L0 DSM
Entries 104189
QT8(3) sum - simulated
QT board

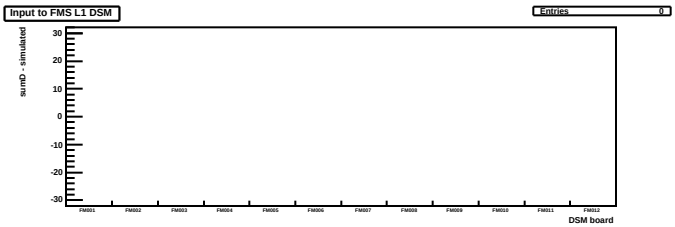

Input to FMS L0 DSM
Entries 5119152
HT ADC
QT board

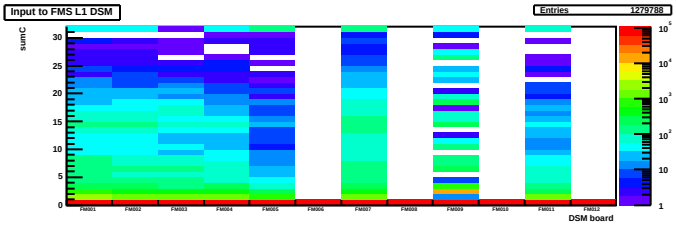

Input to FMS L0 DSM
Entries 12258
HT ADC - simulated
QT board

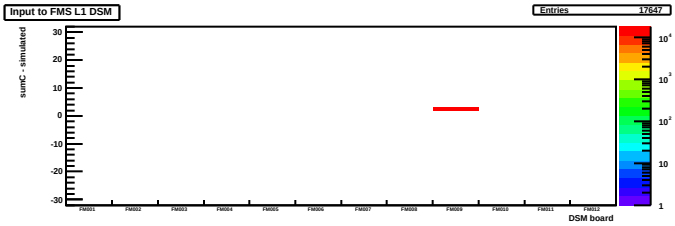

Input to FMS L0 DSM
Entries 5119152
HT ID
QT board

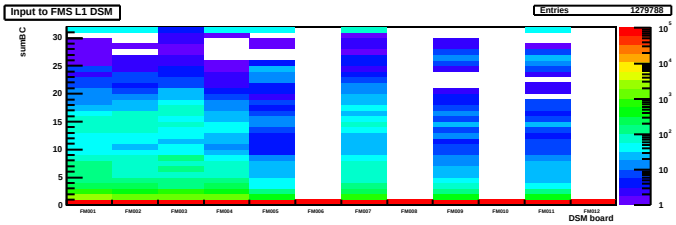

Input to FMS L0 DSM
Entries 120484
HT ID - simulated
QT board

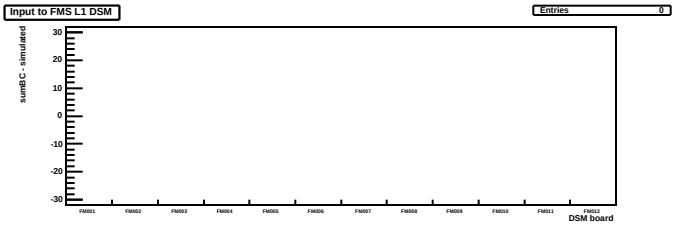

Input to FMS L1 DSM
Entries 1279788
sumD
DSM board

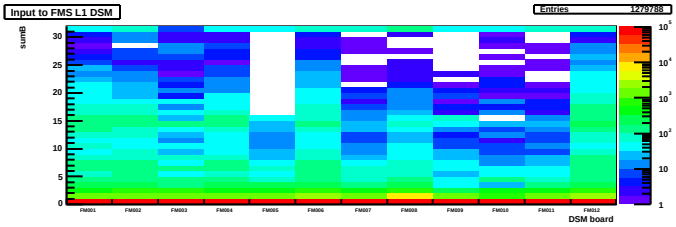

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

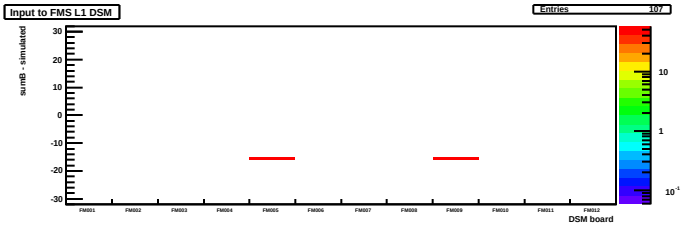

Input to FMS L1 DSM
Entries 1279788
sumC
DSM board

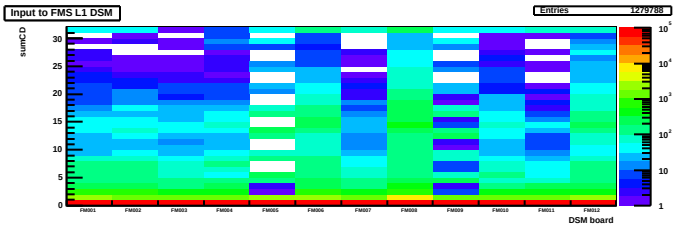

Input to FMS L1 DSM
Entries 17647
sumC - simulated
DSM board

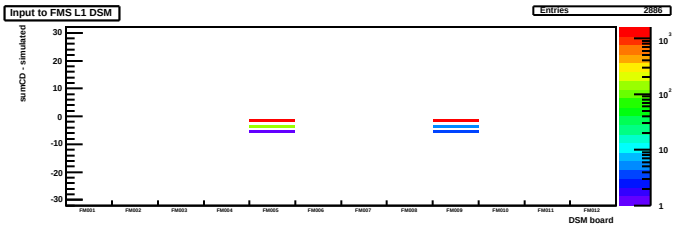

Input to FMS L1 DSM
Entries 1279788
sumBC
DSM board

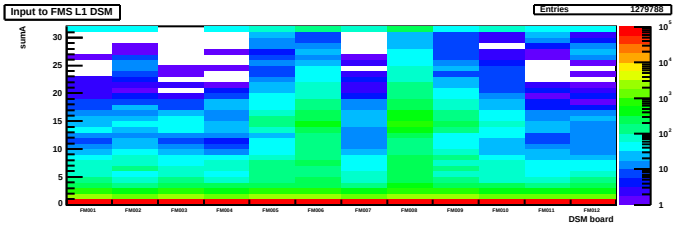

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

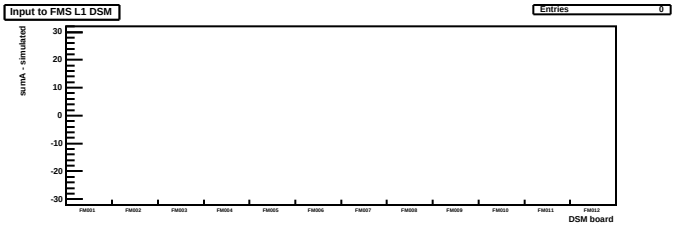

Input to FMS L1 DSM
Entries 1279788
sumB
DSM board

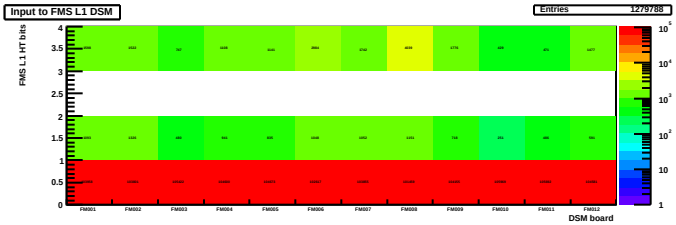

Input to FMS L1 DSM
Entries 107
sumB - simulated
DSM board

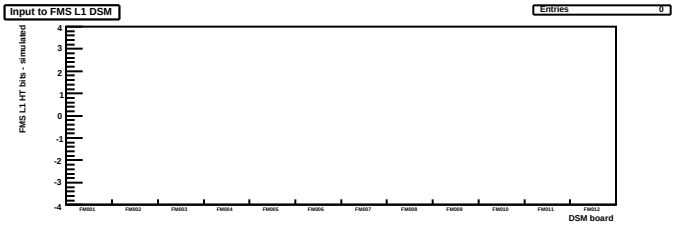

Input to FMS L1 DSM
Entries 1279788
sumCD
DSM board

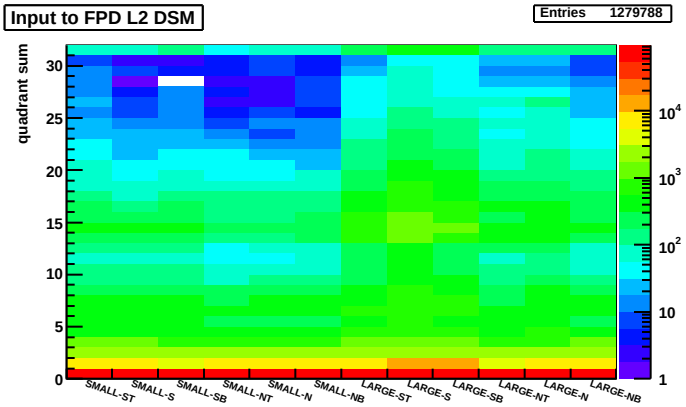

Input to FMS L1 DSM
Entries 2886
sumCD - simulated
DSM board

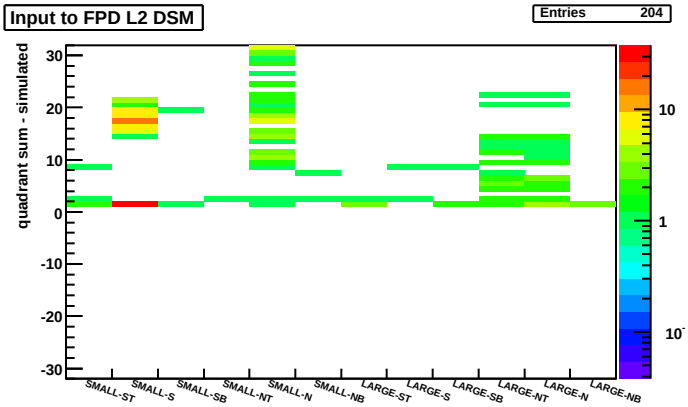

Input to FMS L1 DSM
Entries 1279788
sumA
DSM board

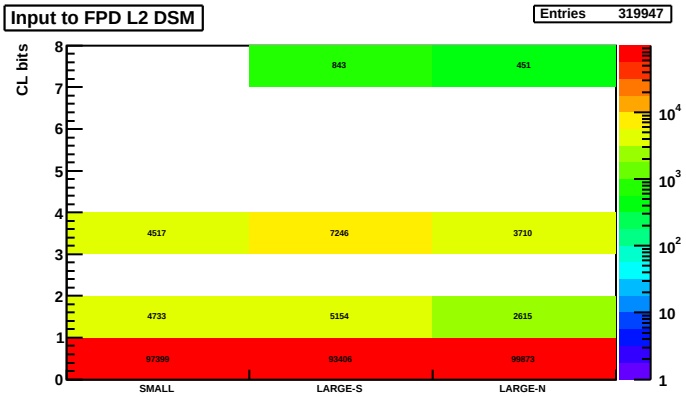

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

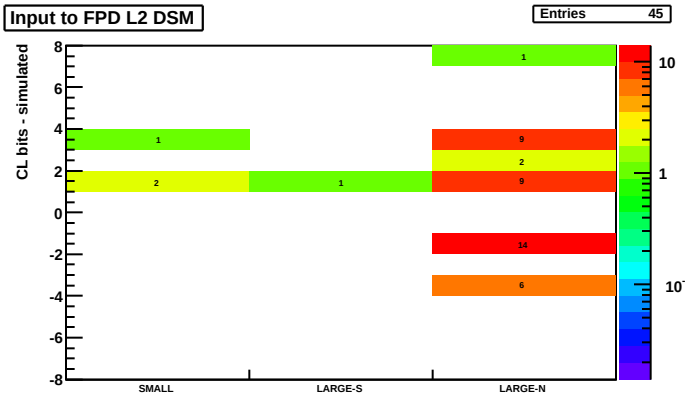

Input to FMS L1 DSM
Entries 1279788
FMS L1 HT bits
DSM board

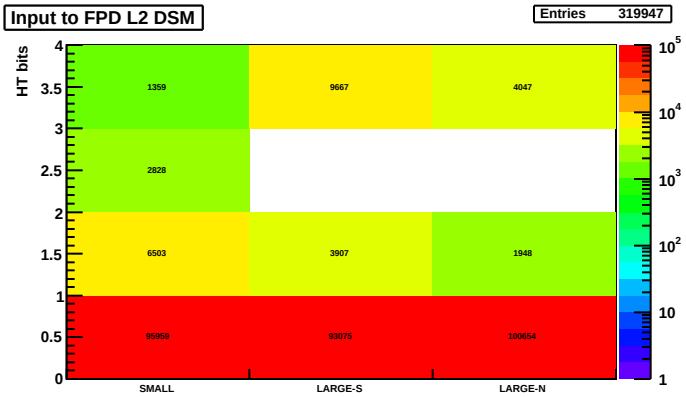

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

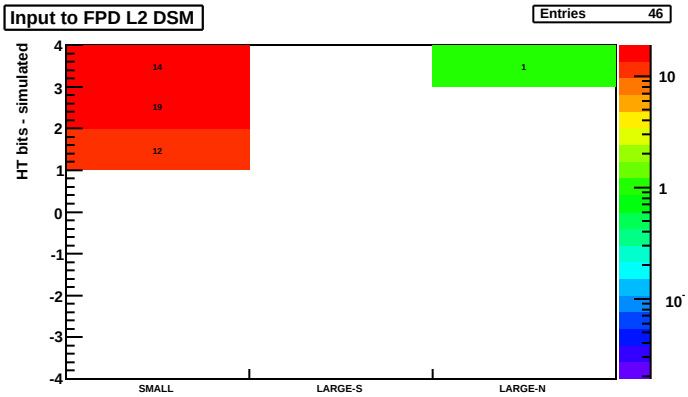

Input to FPD L2 DSM
Entries 1279788
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

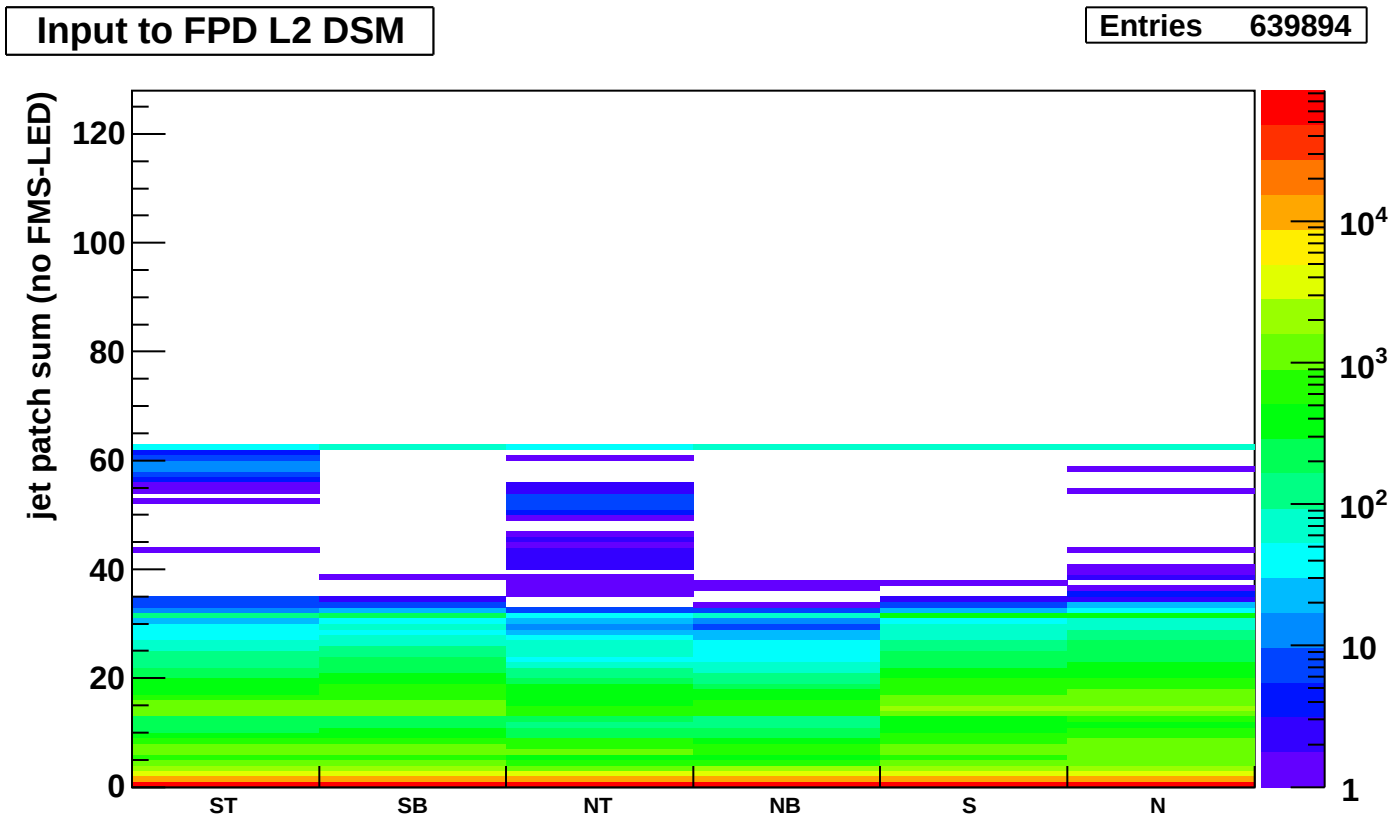

Input to FPD L2 DSM
Entries 204
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

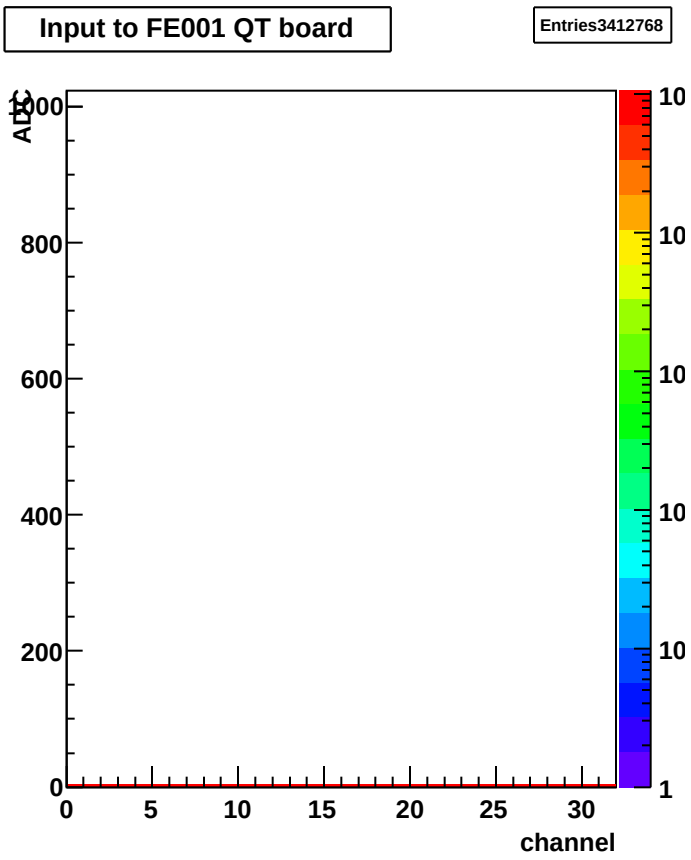

Input to FPD L2 DSM
Entries 319947
CL bits
843
451
4517
7246
3710
4733
5154
2615
97399
93406
99873
SMALL
LARGE-S
LARGE-N

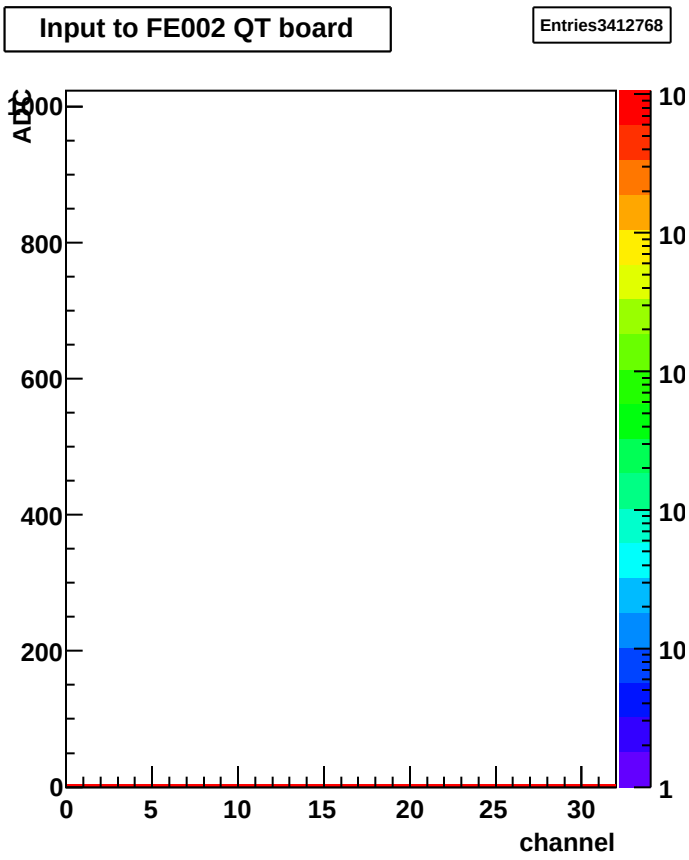

Input to FPD L2 DSM
Entries 45
CL bits - simulated
1
1
9
2
2
1
9
14
6
SMALL
LARGE-S
LARGE-N

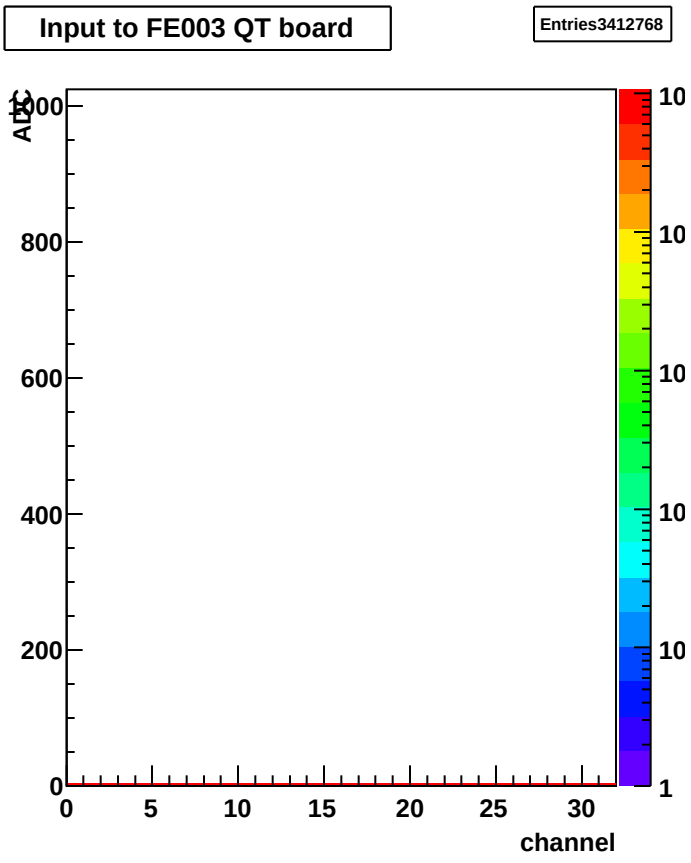

Input to FPD L2 DSM
Entries 319947
HT bits
1359
9667
4047
2828
6503
3907
1948
95959
93075
100654
SMALL
LARGE-S
LARGE-N

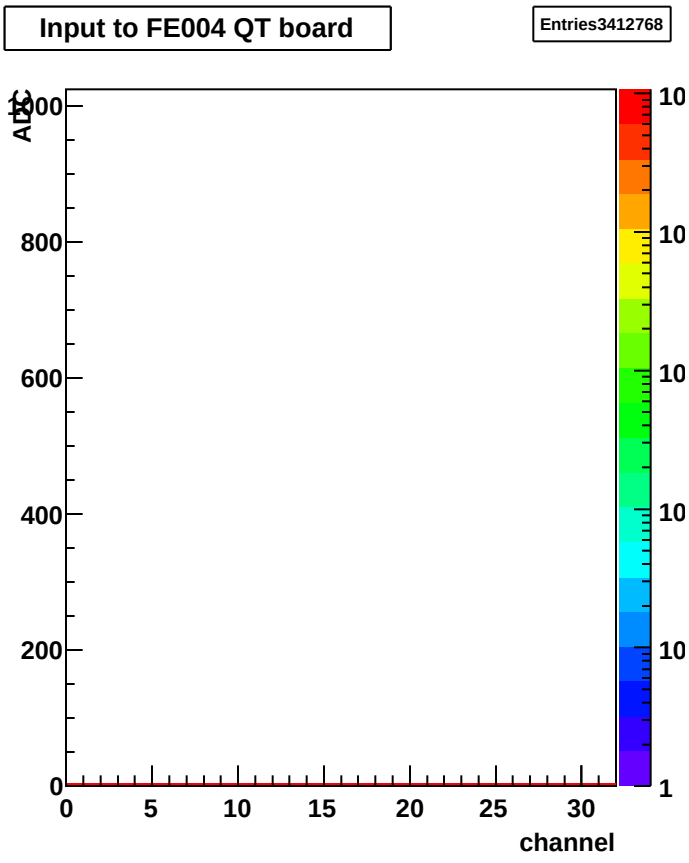

Input to FPD L2 DSM
Entries 46
HT bits - simulated
14
1
19
12
SMALL
LARGE-S
LARGE-N

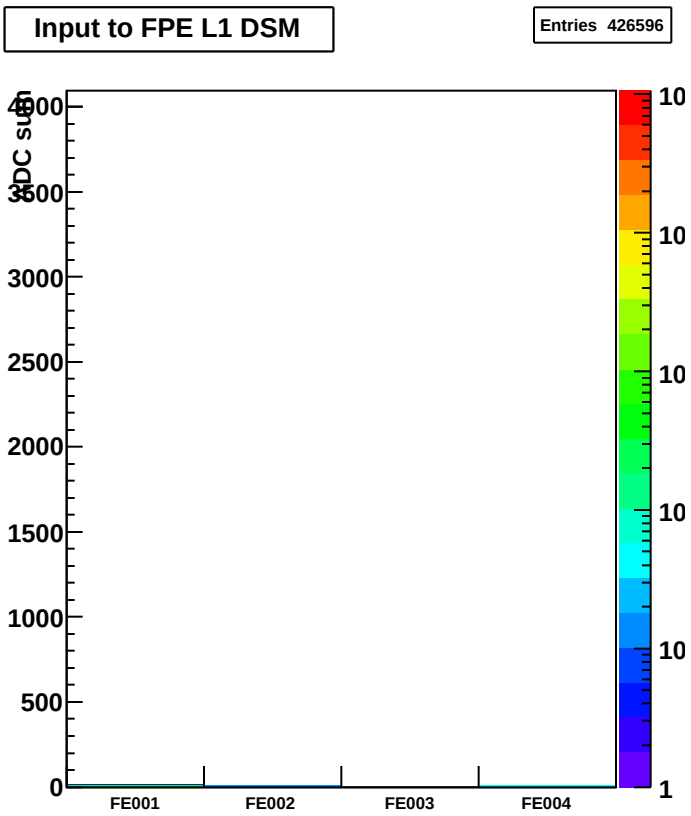

Input to FPD L2 DSM
Entries 639894
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

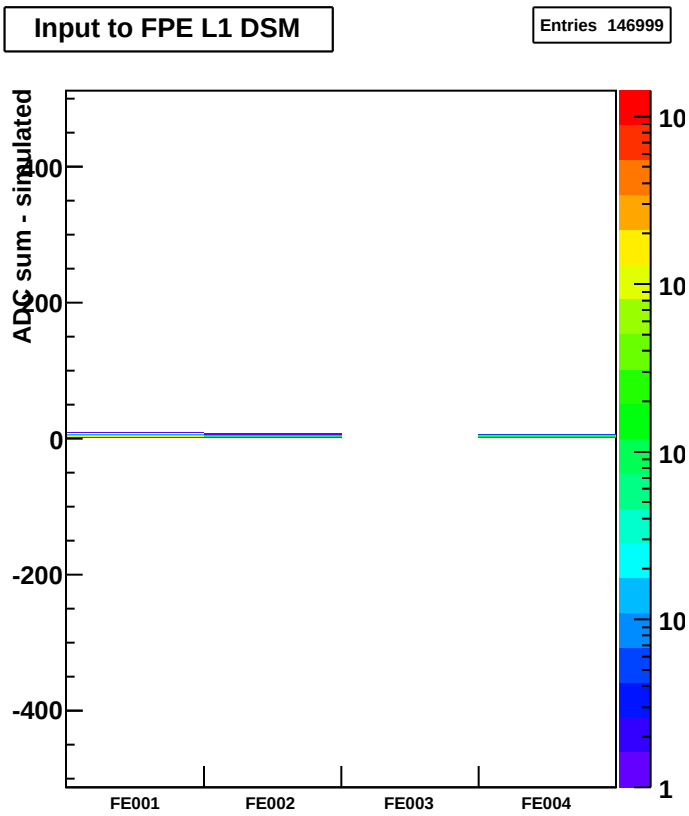

Input to FE001 QT board
Entries3412768
ADC
channel

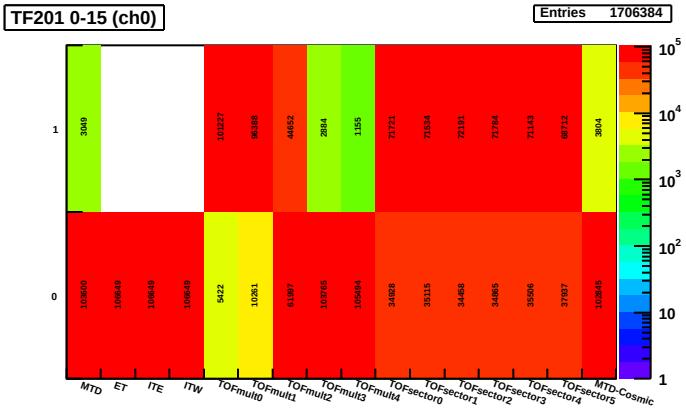

Input to FE002 QT board
Entries3412768
ADC
channel

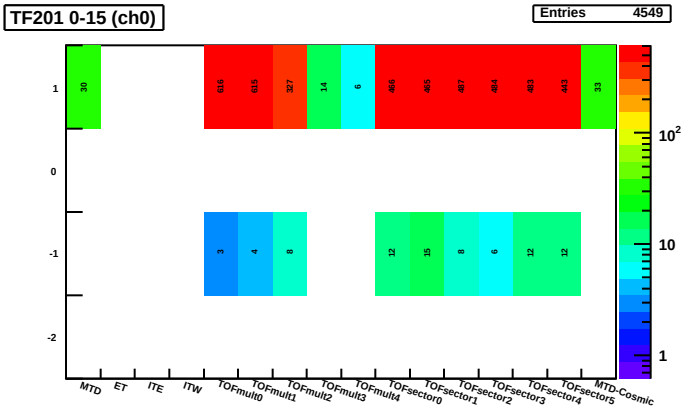

Input to FE003 QT board
Entries3412768
ADC
channel

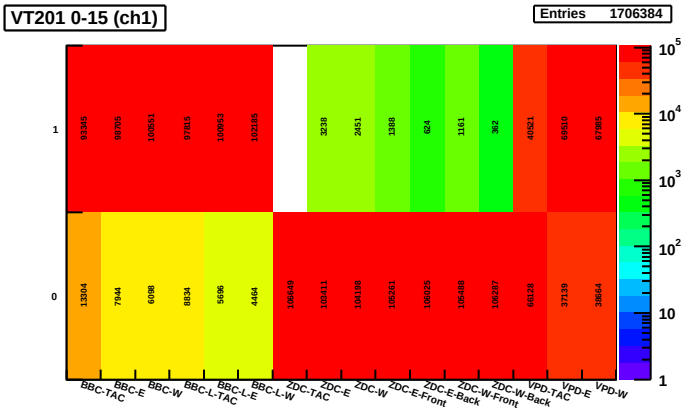

Input to FE004 QT board
Entries3412768
ADC
channel

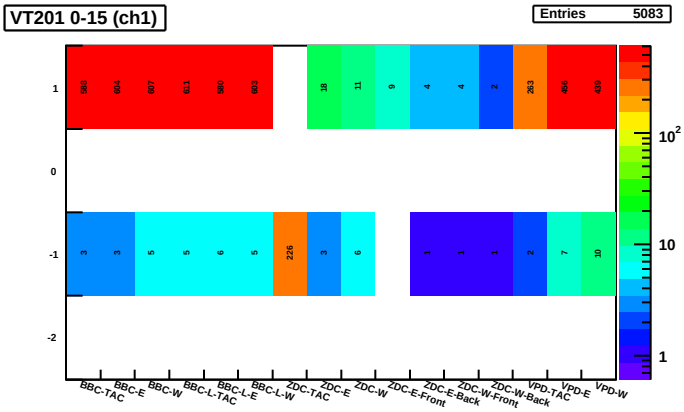

Input to FPE L1 DSM
Entries 426596
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

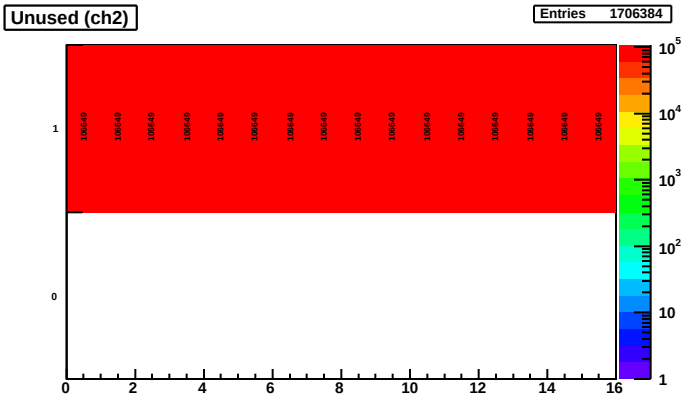

Input to FPE L1 DSM
Entries 146999
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1

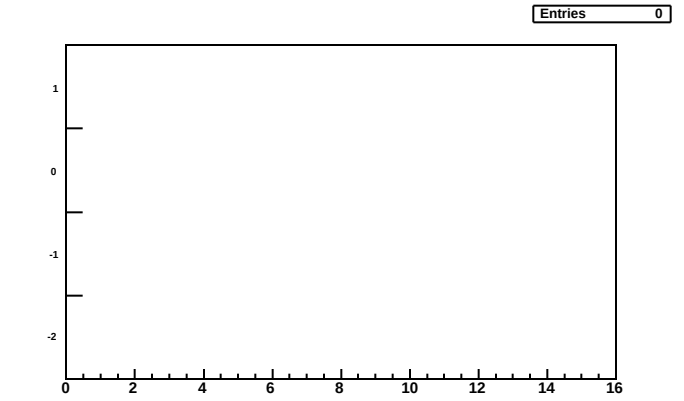

TF201 0-15 (ch0)
Entries 1706384
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

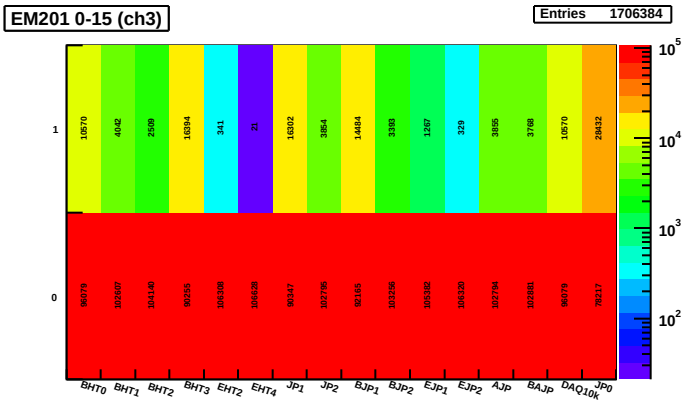

TF201 0-15 (ch0)
Entries 4549
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1706384
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 5083
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


Unused (ch2)
Entries 1706384


Entries 0


EM201 0-15 (ch3)
Entries 1706384
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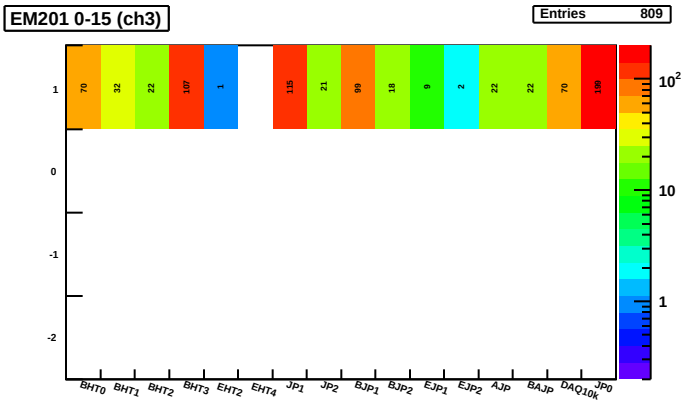
EM201 0-15 (ch3)
Entries 809
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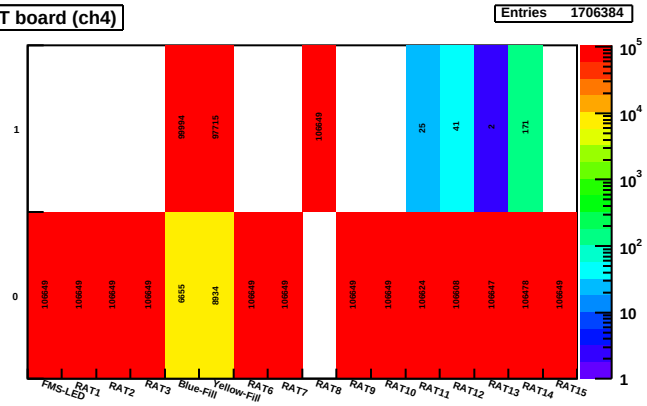
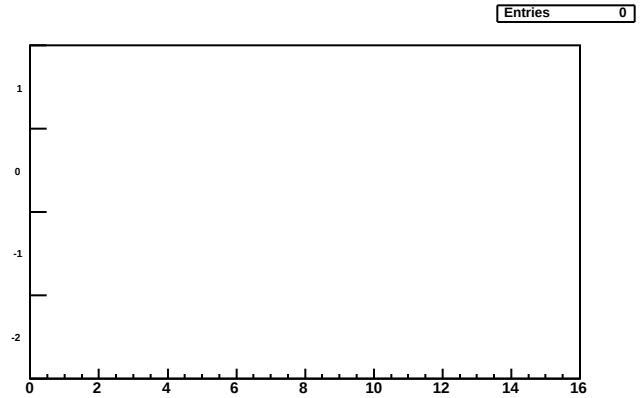
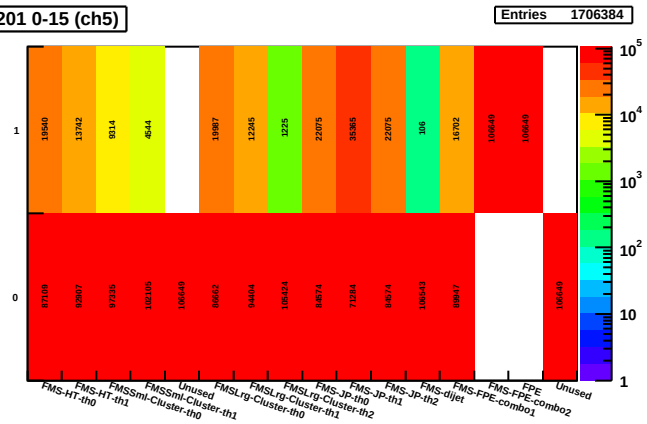
RAT board (ch4)

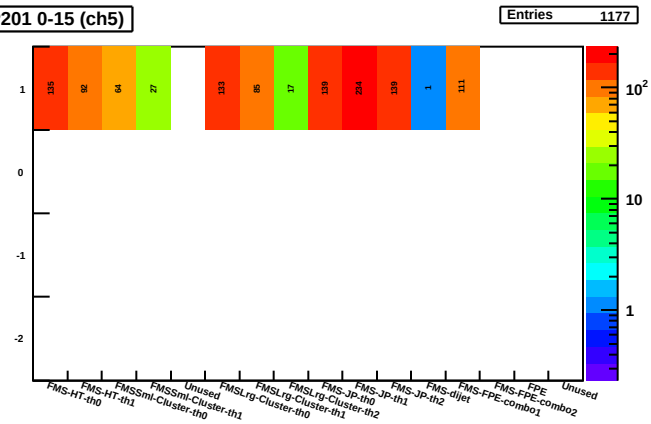




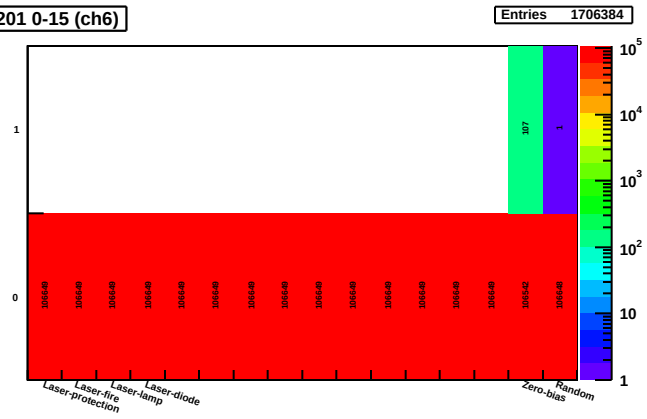
FP201 0-15 (ch5)

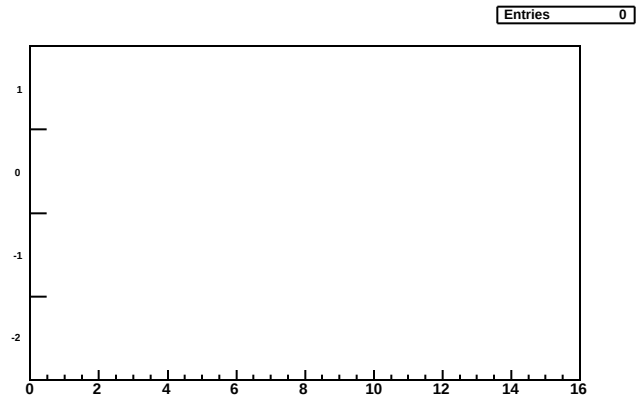
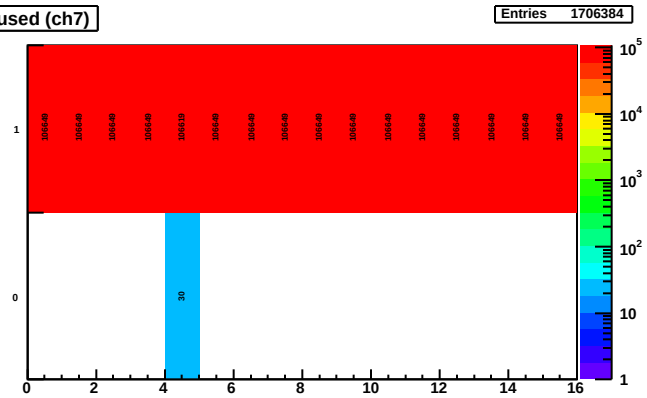
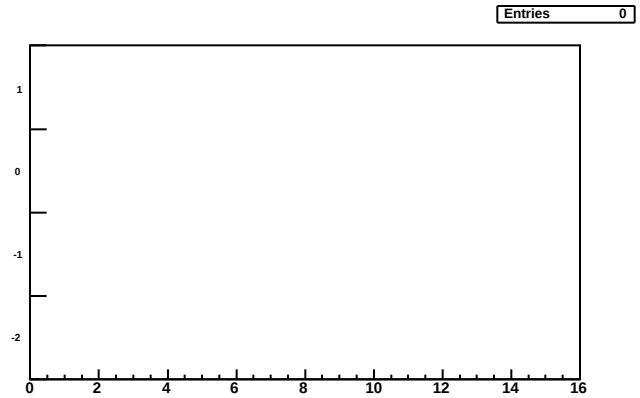


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)