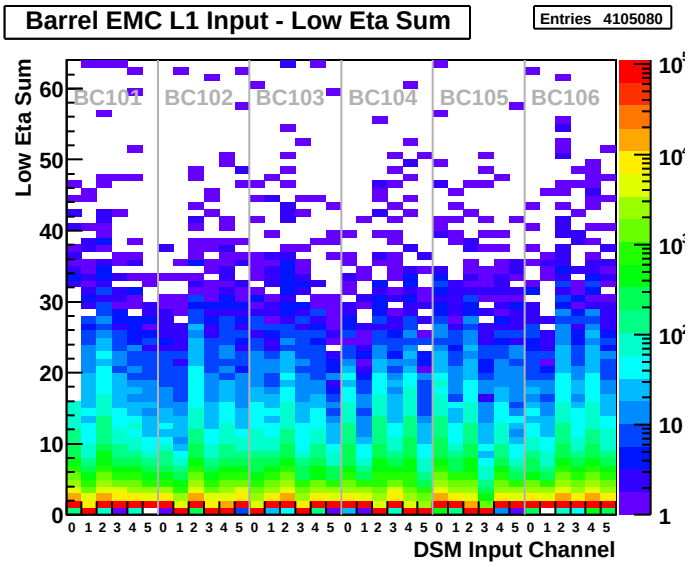
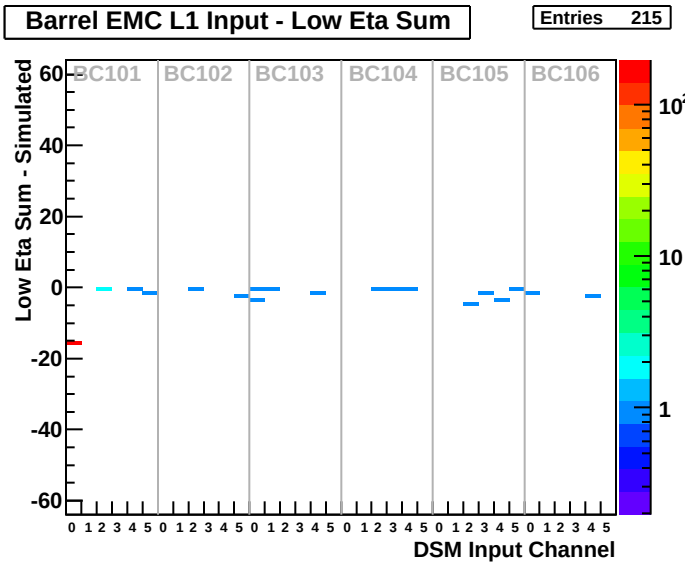
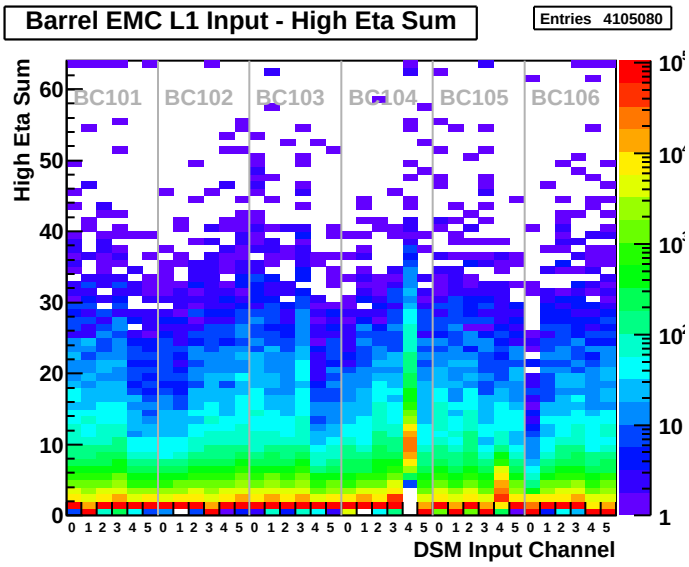
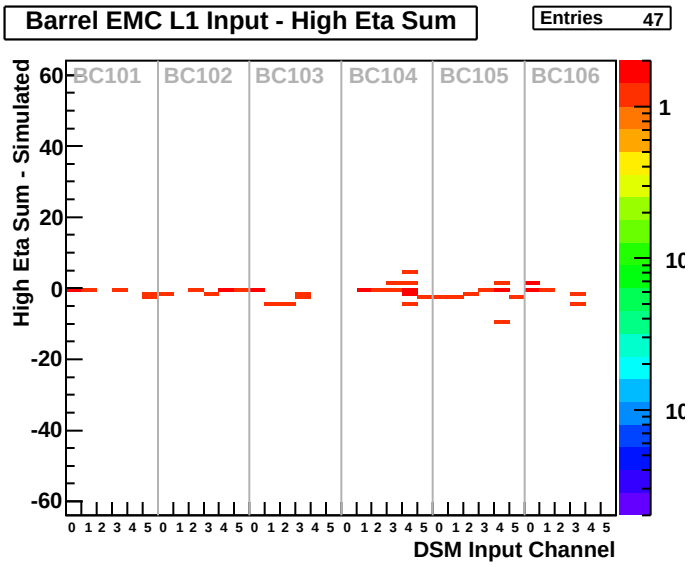
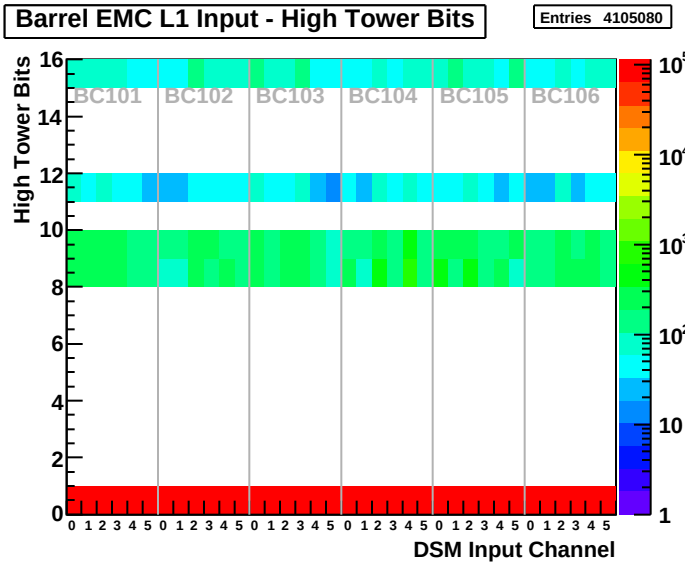
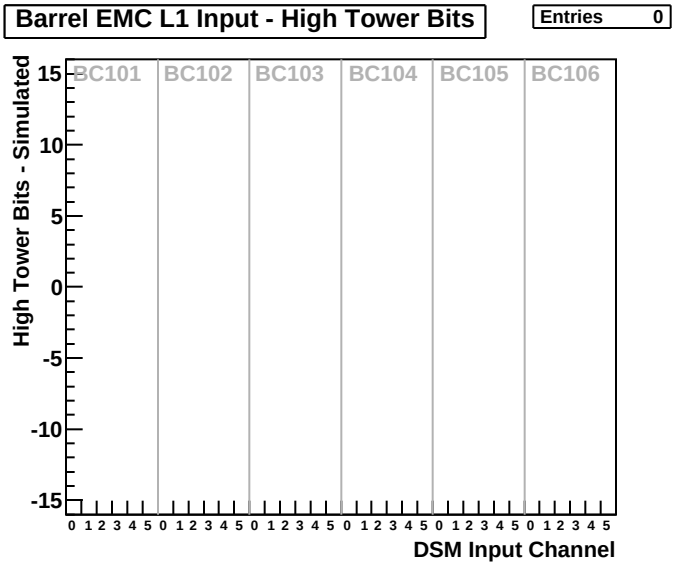

Barrel EMC L1 Input - Low Eta Sum
Entries 4105080
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

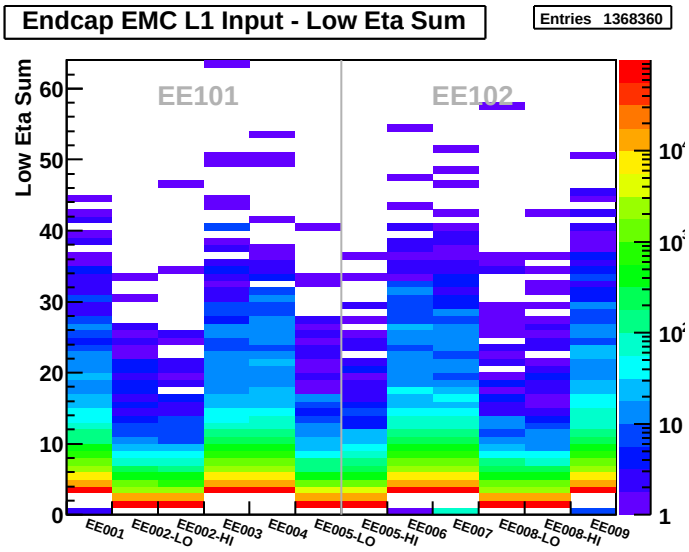

Barrel EMC L1 Input - Low Eta Sum
Entries 215
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

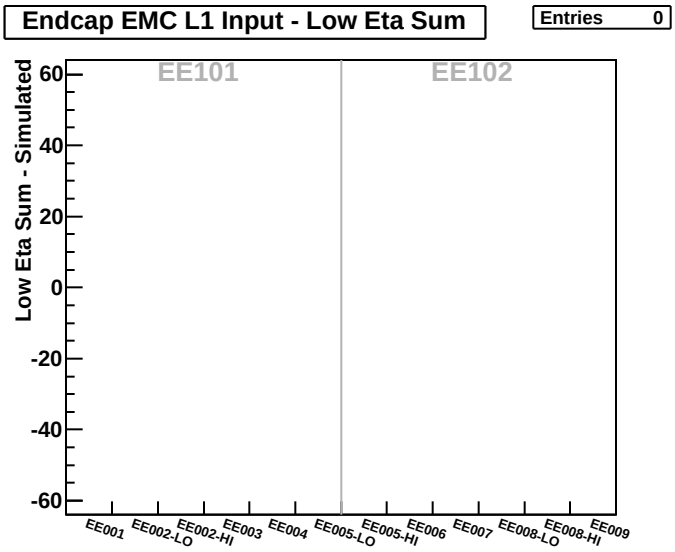

Barrel EMC L1 Input - High Eta Sum
Entries 4105080
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

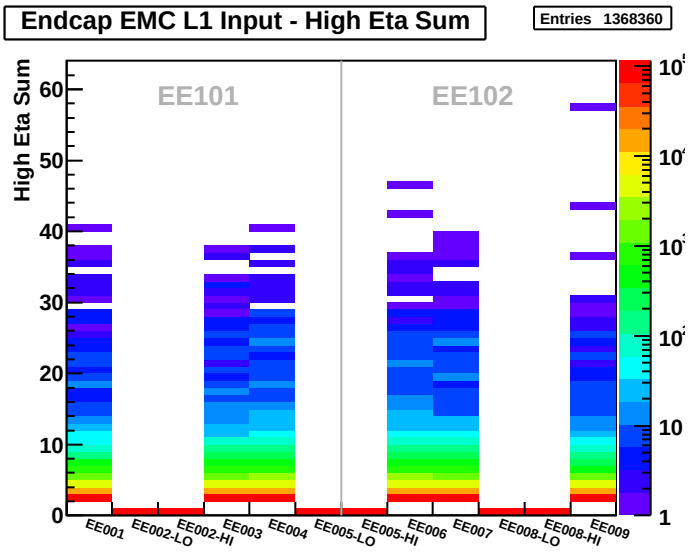

Barrel EMC L1 Input - High Eta Sum
Entries 47
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

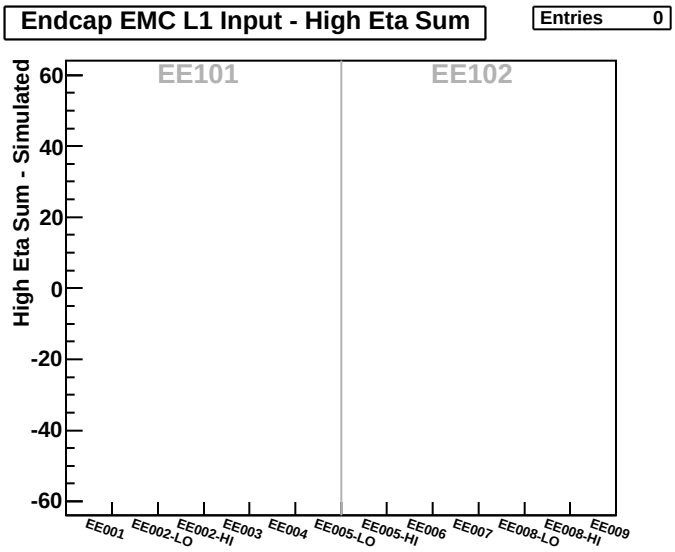

Barrel EMC L1 Input - High Tower Bits
Entries 4105080
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

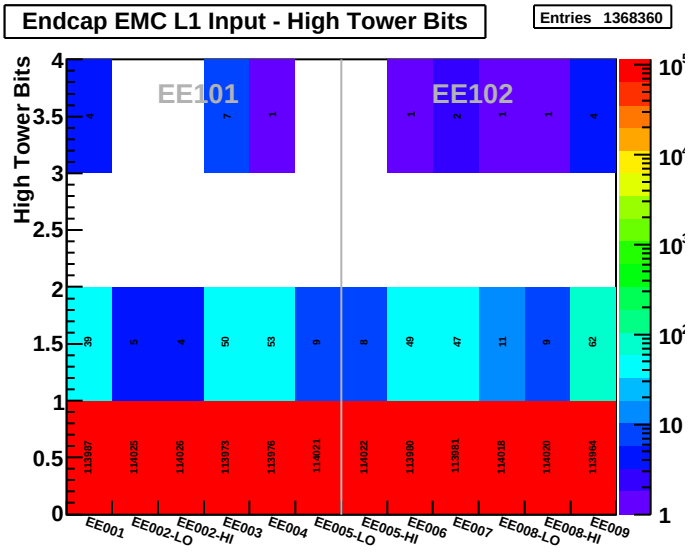

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

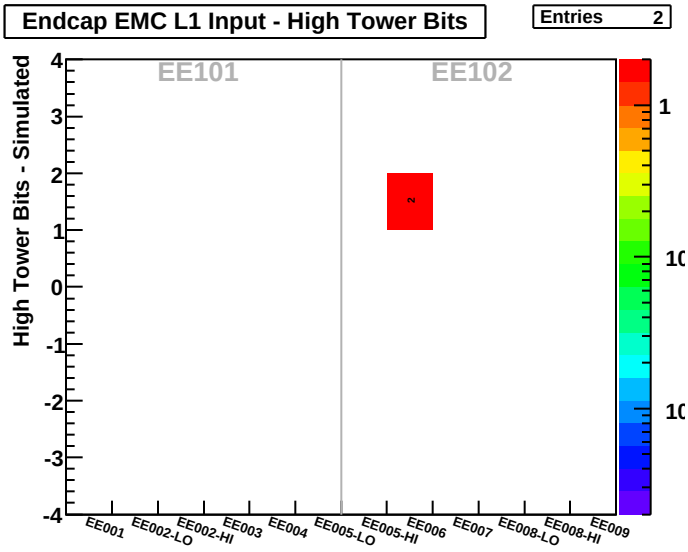

Endcap EMC L1 Input - Low Eta Sum
Entries 1368360
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

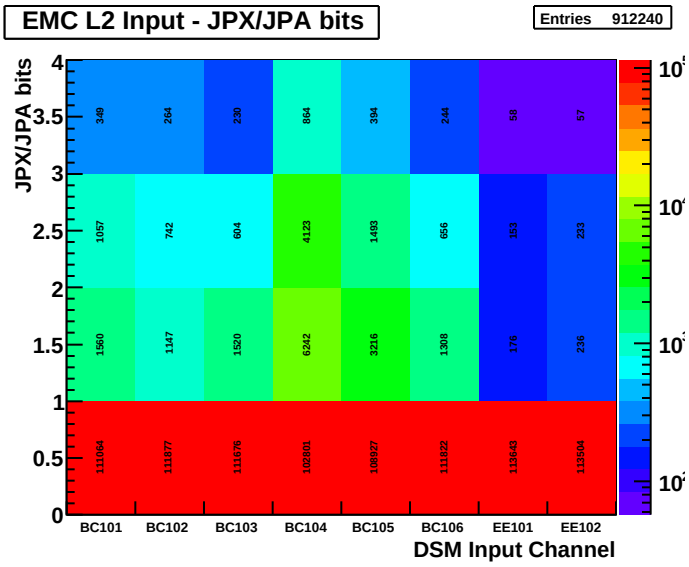

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

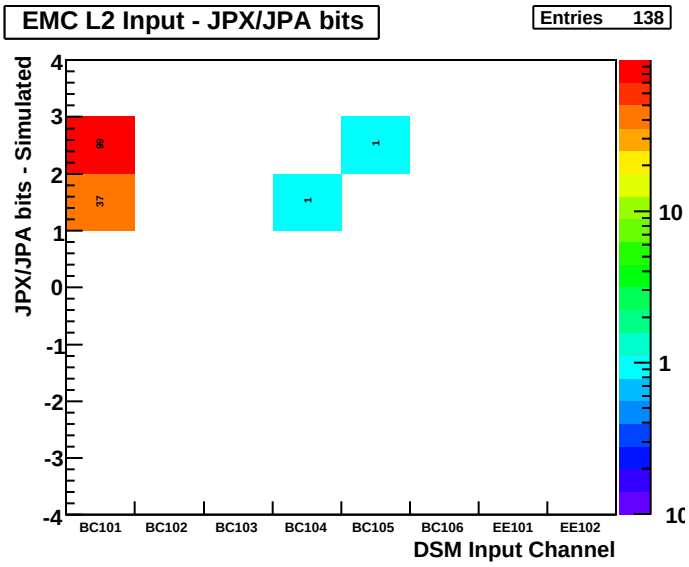

Endcap EMC L1 Input - High Eta Sum
Entries 1368360
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

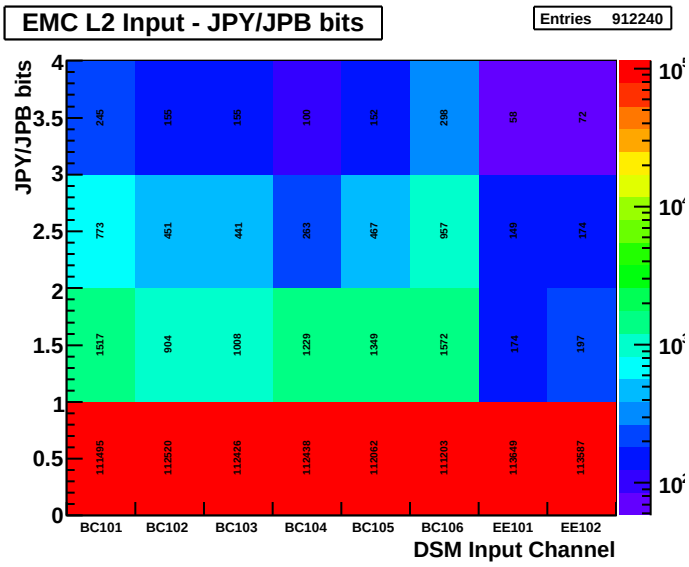

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

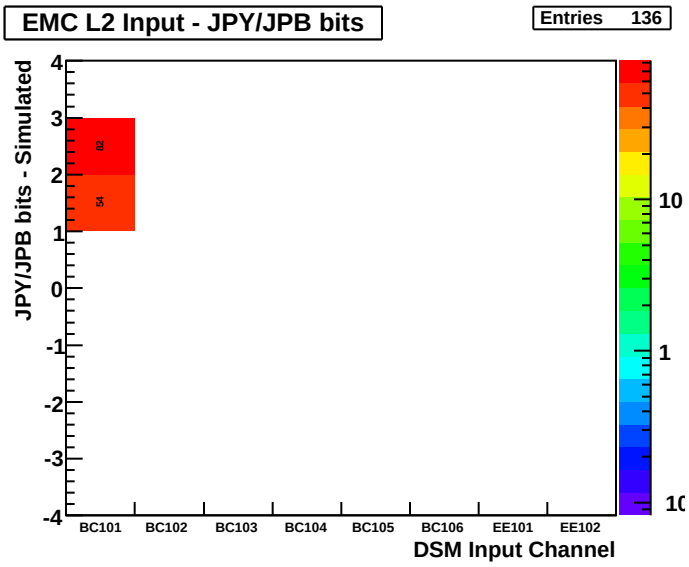

Endcap EMC L1 Input - High Tower Bits
Entries 1368360
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

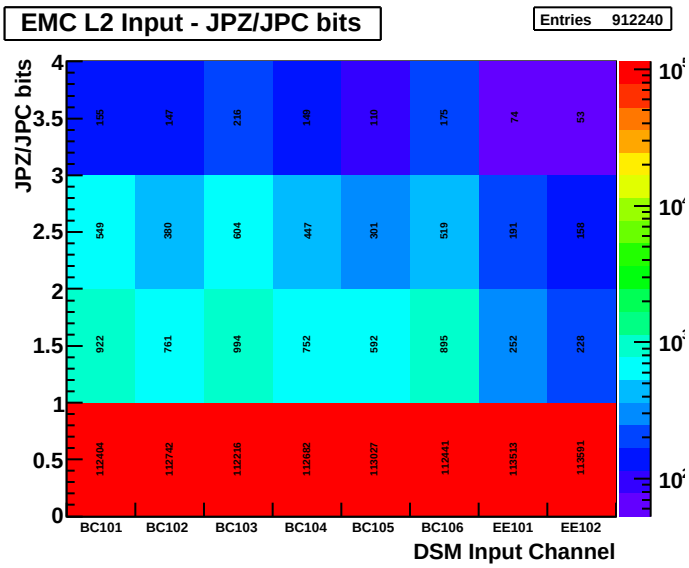

Endcap EMC L1 Input - High Tower Bits
Entries 2
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

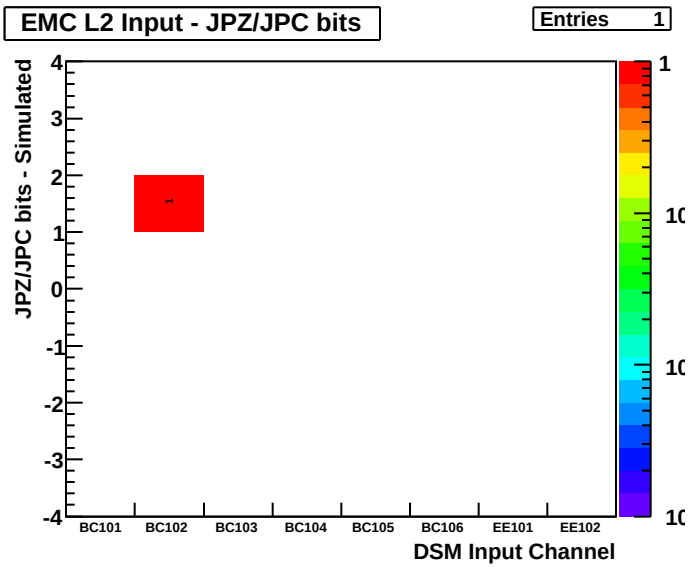

EMC L2 Input - JPX/JPA bits
Entries 912240
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
349 264 230 664 394 244 58 57
1057 742 604 4123 1493 656 153 233
1560 1147 1520 6242 3216 1308 176 236
111064 111877 111676 102801 108927 111822 113643 113504

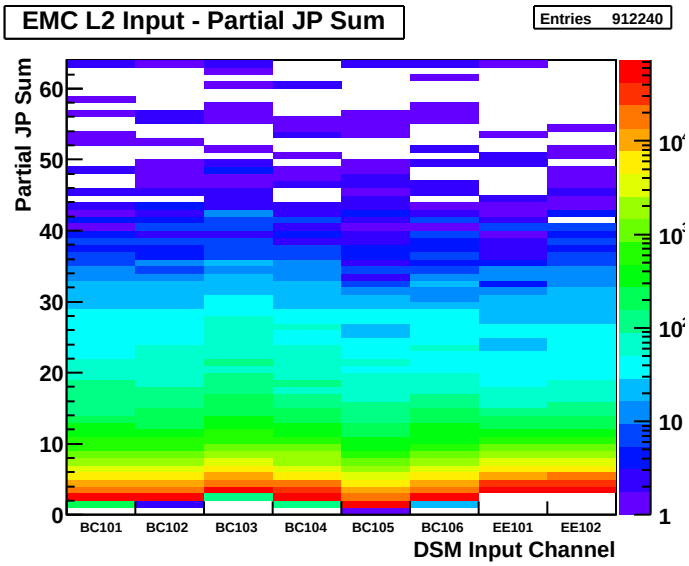

EMC L2 Input - JPX/JPA bits
Entries 138
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
99
37
1
1

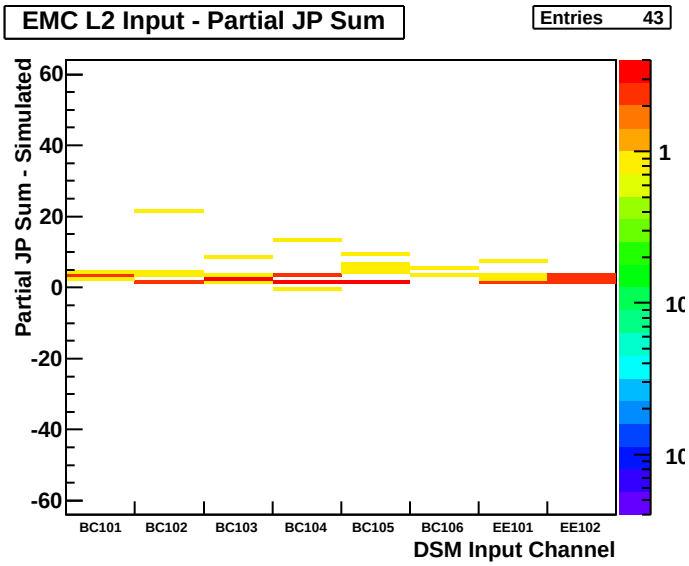

EMC L2 Input - JPY/JPB bits
Entries 912240
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
245 155 155 100 152 298 58 72
773 451 441 263 467 957 149 174
1517 904 1008 1229 1349 1572 174 197
111495 112520 112426 112438 112062 111203 113649 113587

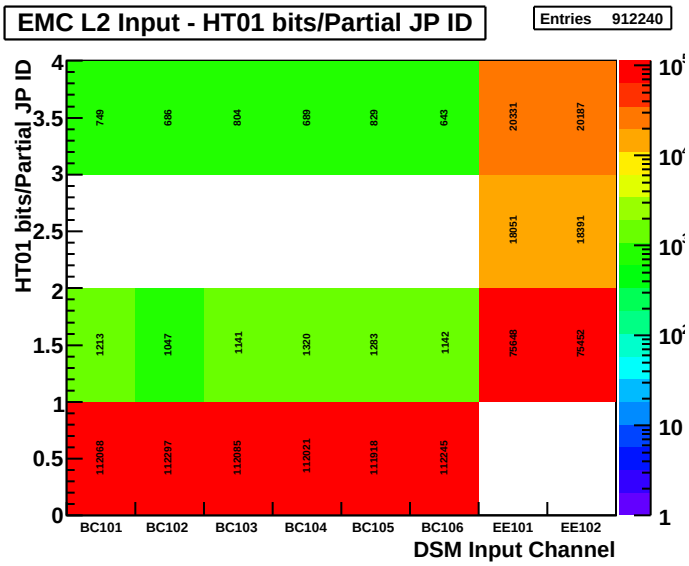

EMC L2 Input - JPY/JPB bits
Entries 136
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
82
54

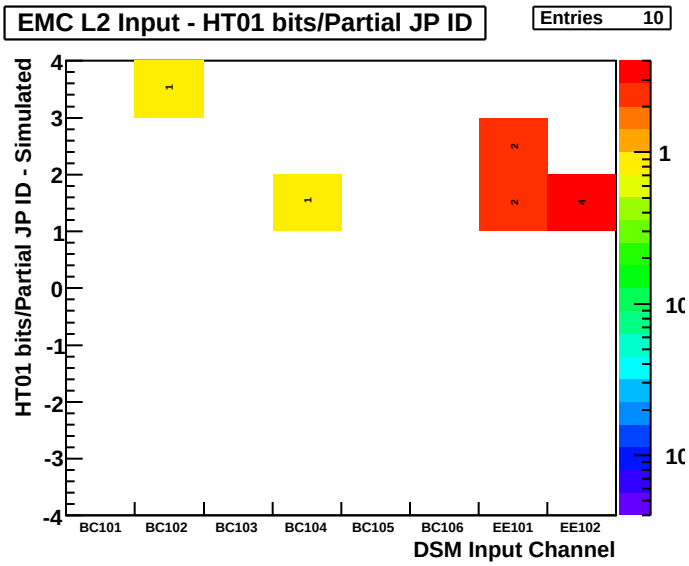

EMC L2 Input - JPZ/JPC bits
Entries 912240
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
155 147 216 149 110 175 74 53
549 380 604 447 301 519 191 158
922 761 994 752 592 895 252 228
112404 112742 112216 112682 113027 112441 113513 113591

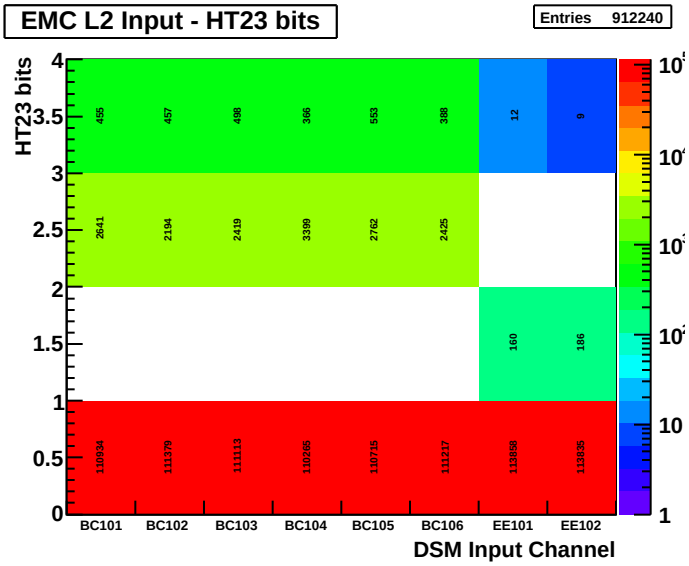

EMC L2 Input - JPZ/JPC bits
Entries 1
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

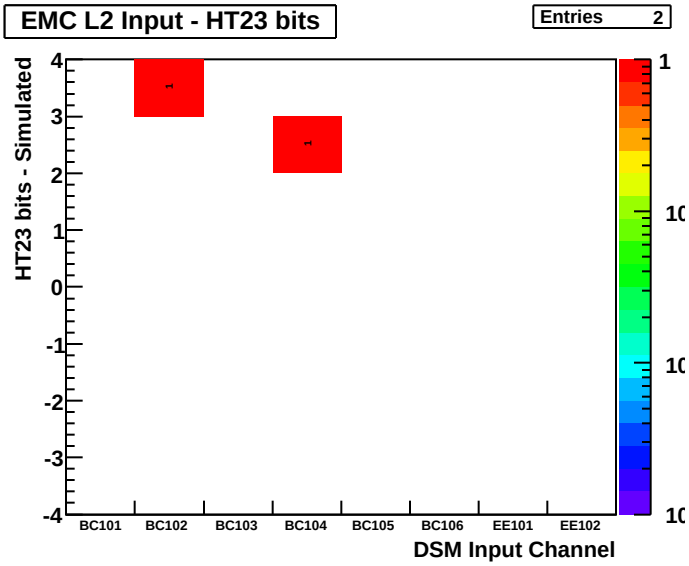

EMC L2 Input - Partial JP Sum
Entries 912240
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

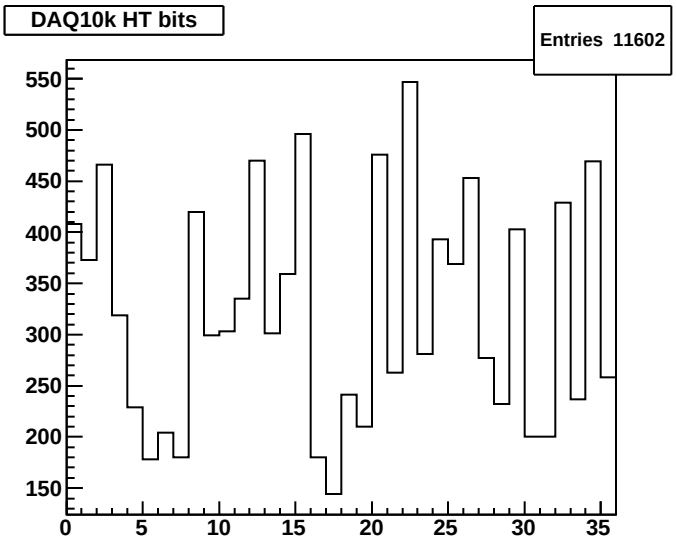

EMC L2 Input - Partial JP Sum
Entries 43
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

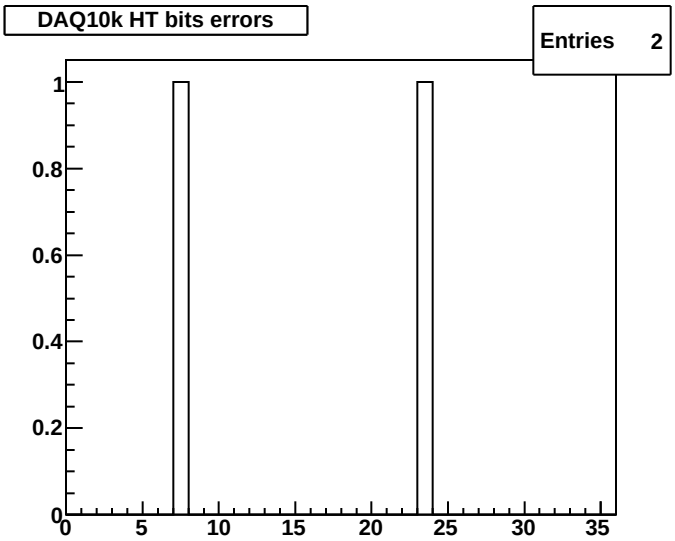

EMC L2 Input - HT01 bits/Partial JP ID
Entries 912240
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

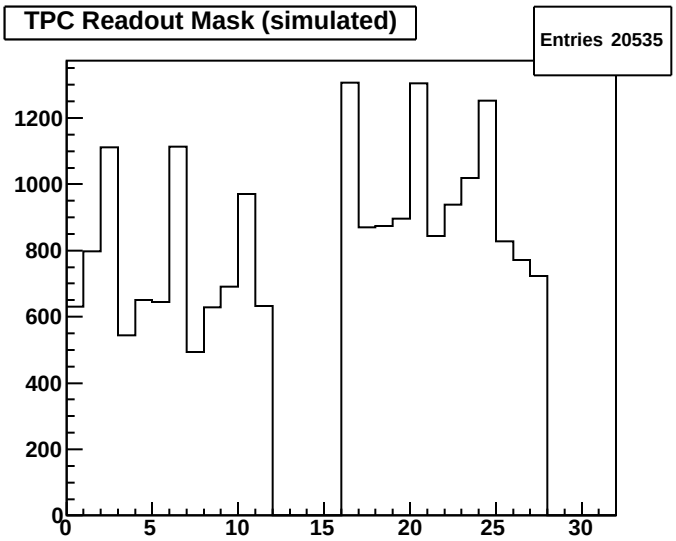

EMC L2 Input - HT01 bits/Partial JP ID
Entries 10
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

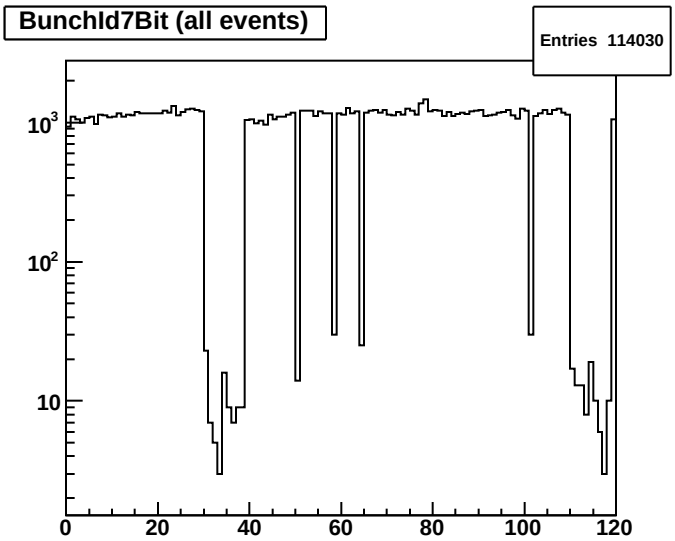

EMC L2 Input - HT23 bits
Entries 912240
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

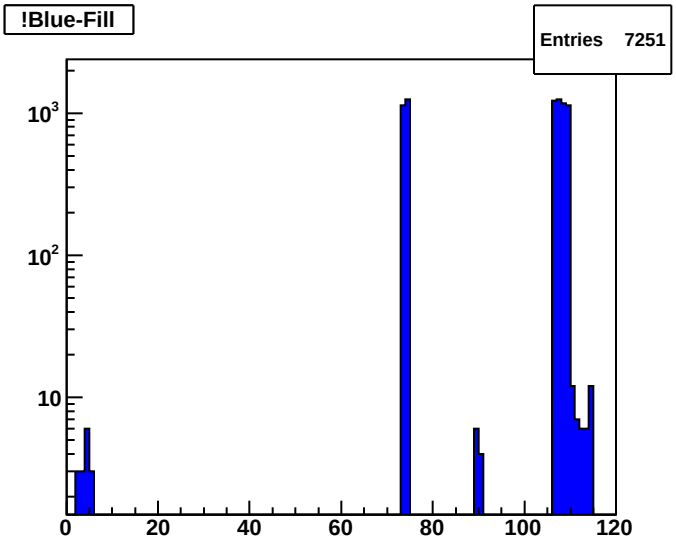

EMC L2 Input - HT23 bits
Entries 2
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

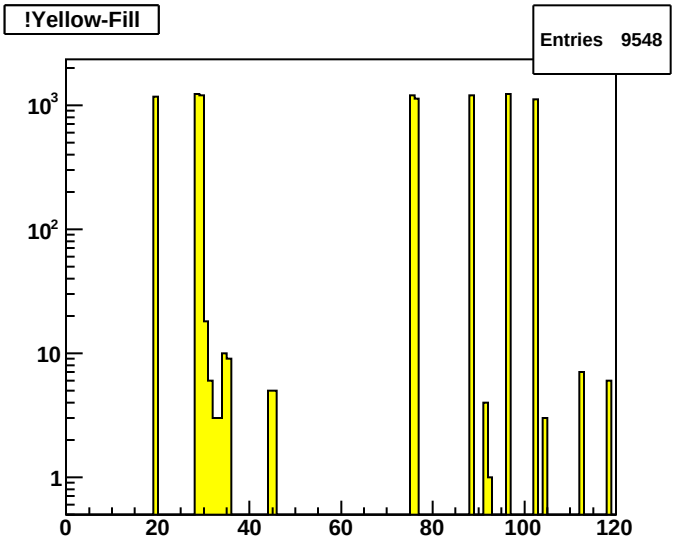

DAQ10k HT bits
Entries 11602

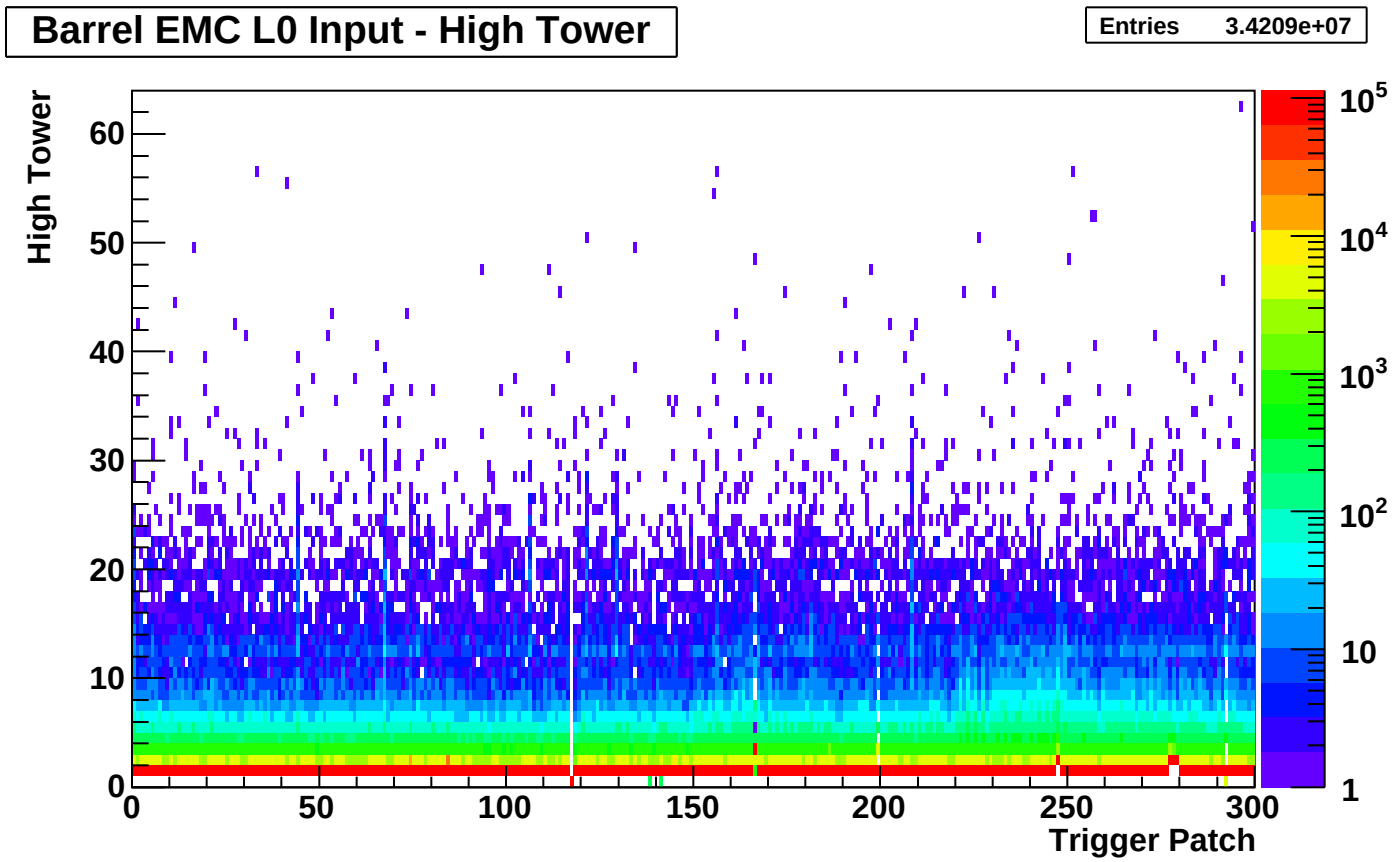

DAQ10k HT bits errors
Entries 2

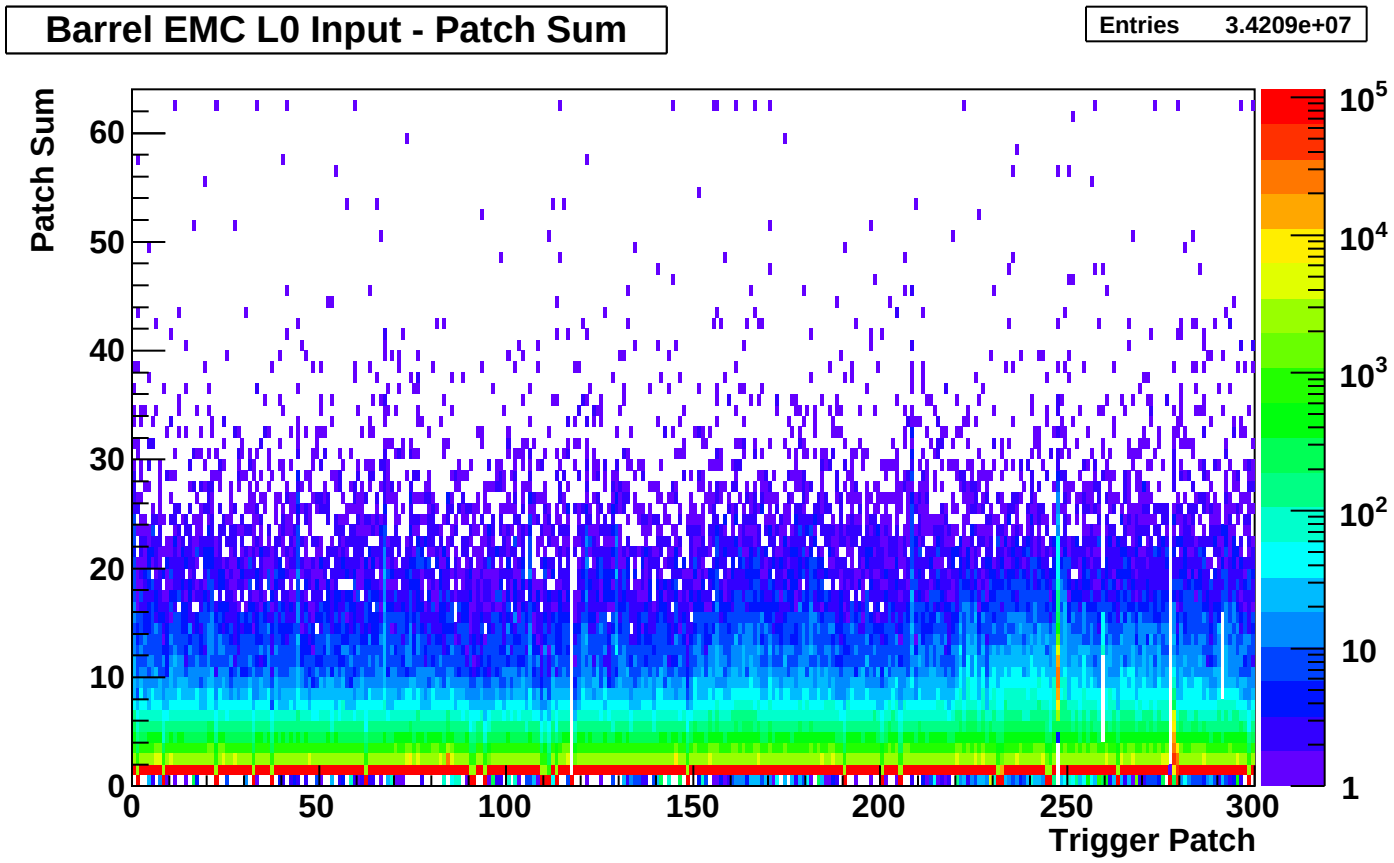

TPC Readout Mask (simulated)
Entries 20535

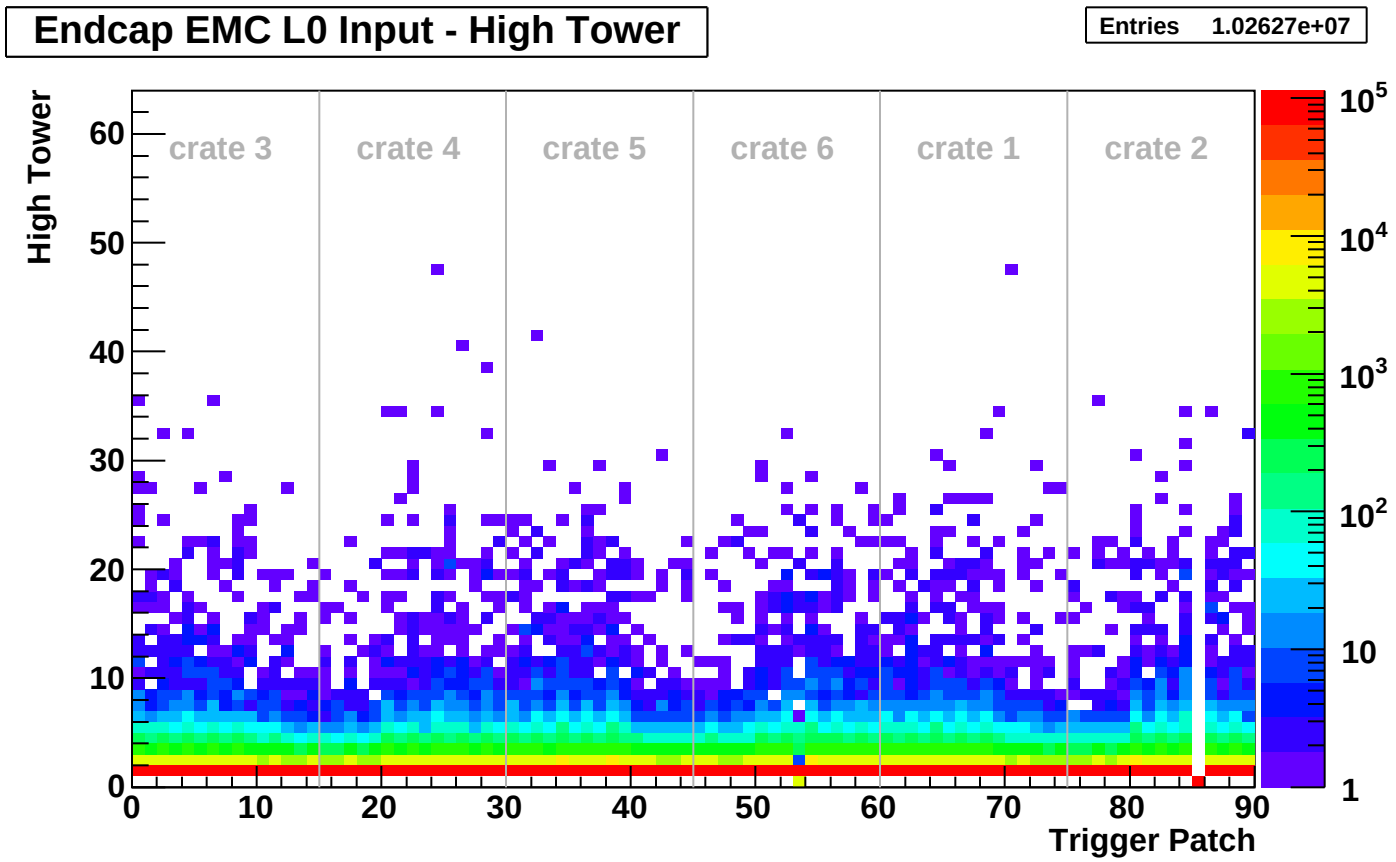

BunchId7Bit (all events)
Entries 114030

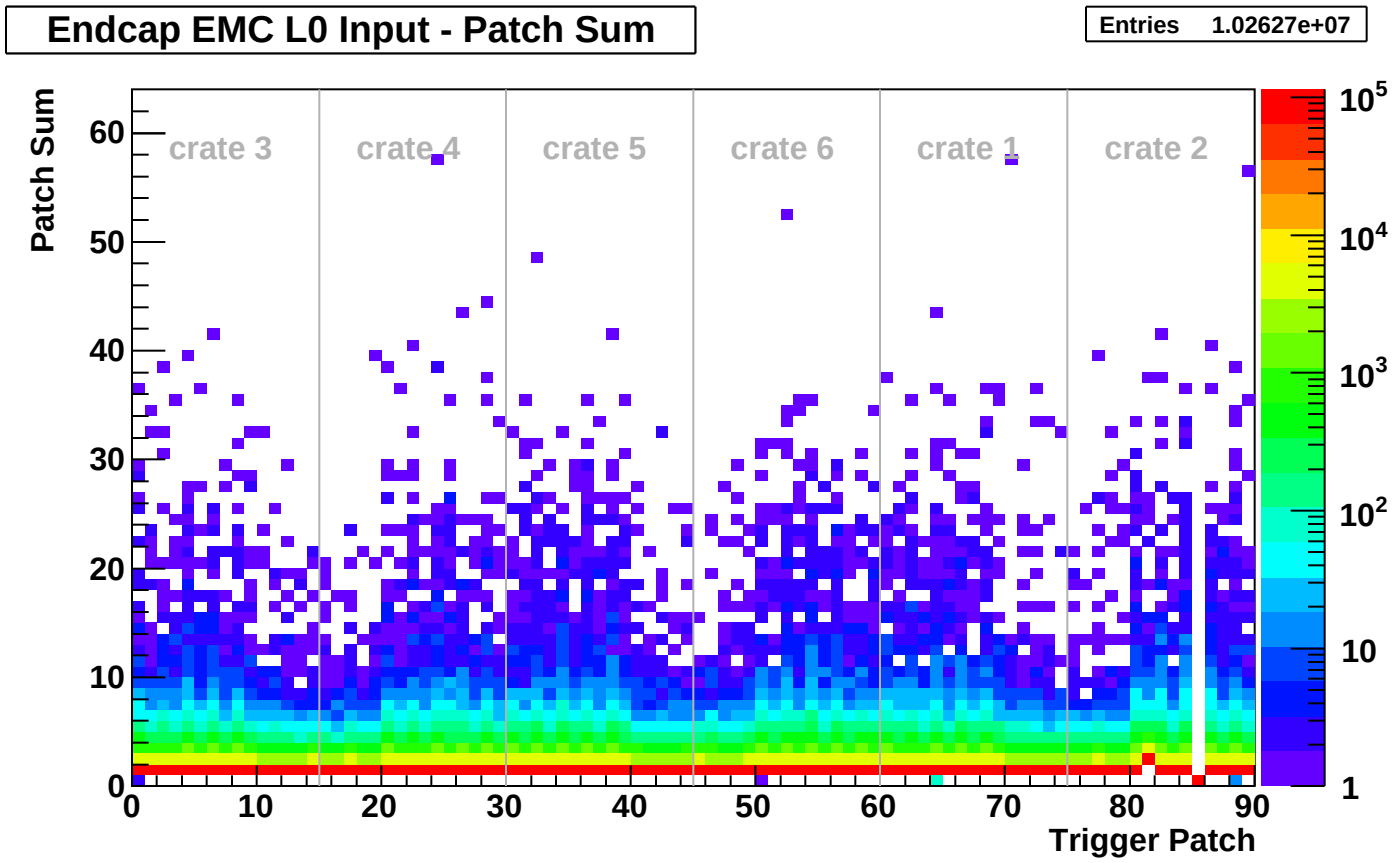

!Blue-Fill
Entries 7251

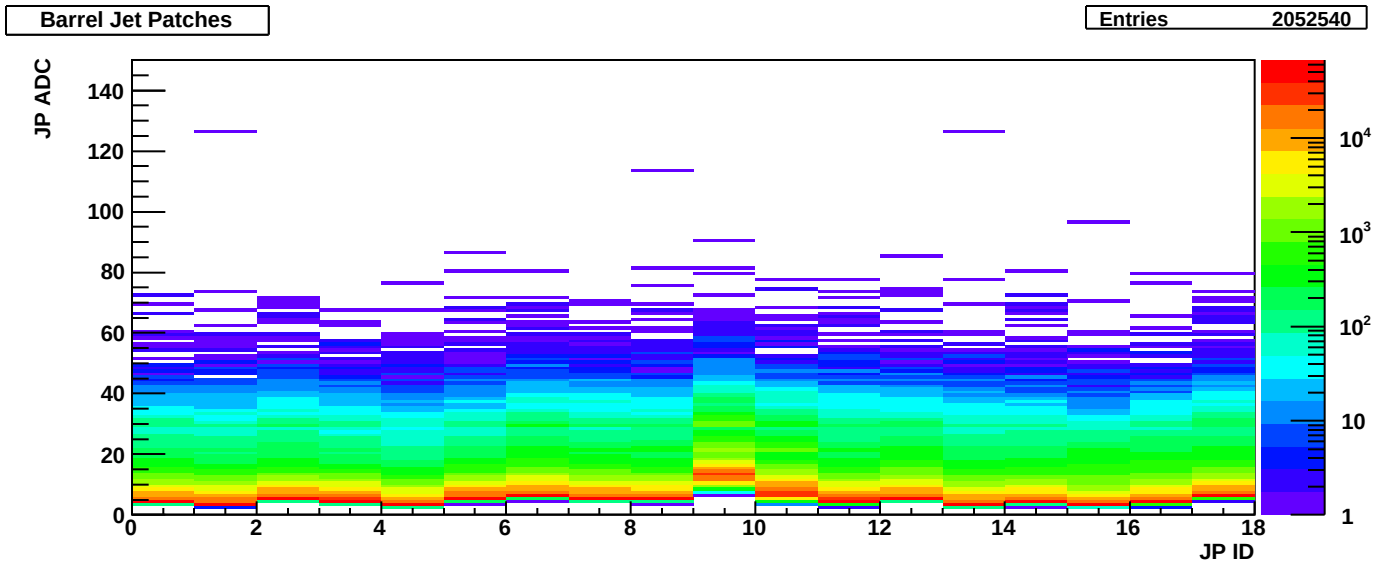

!Yellow-Fill
Entries 9548

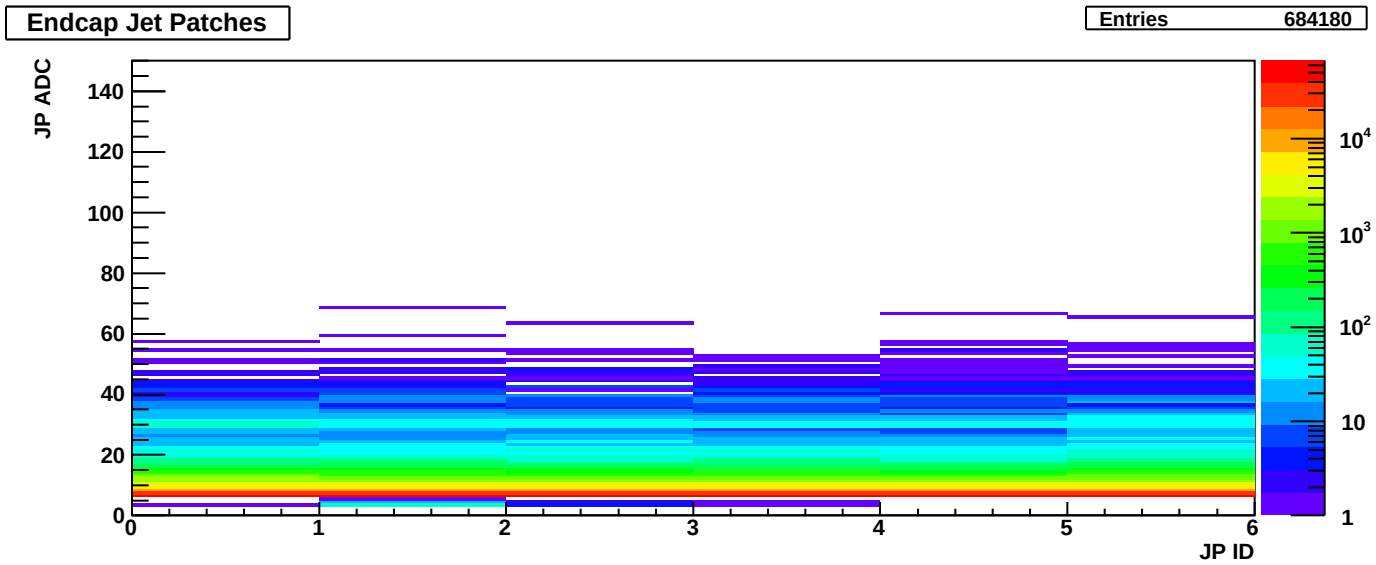

Barrel EMC L0 Input - High Tower
Entries 3.4209e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

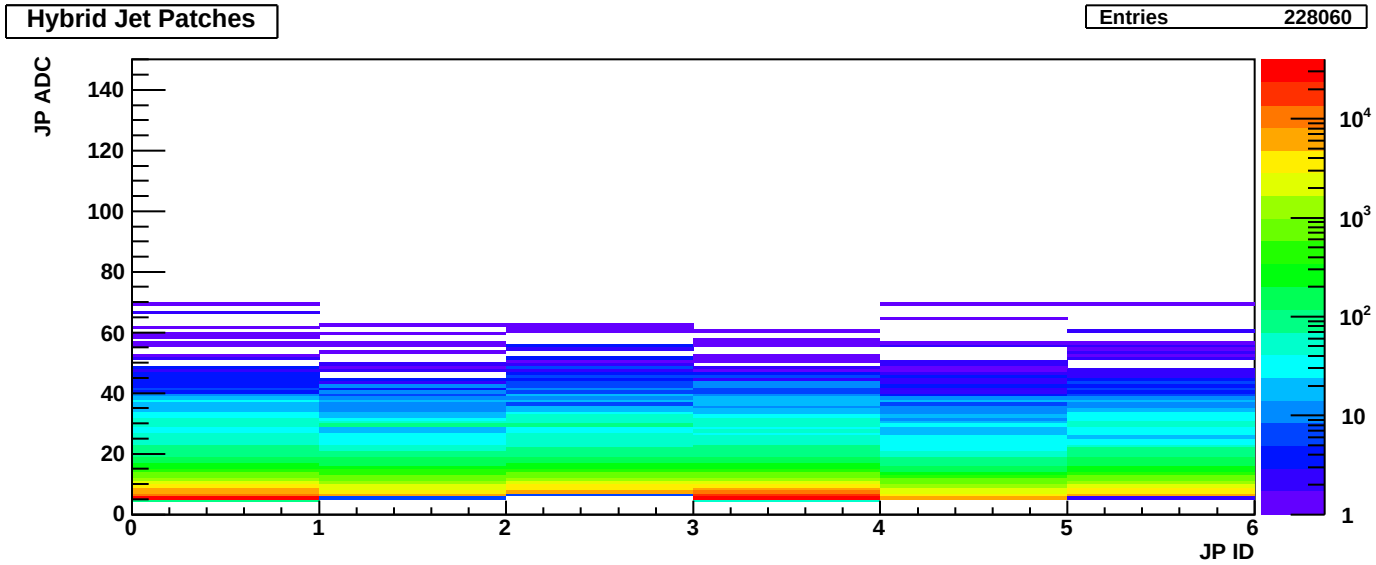

Barrel EMC L0 Input - Patch Sum
Entries 3.4209e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

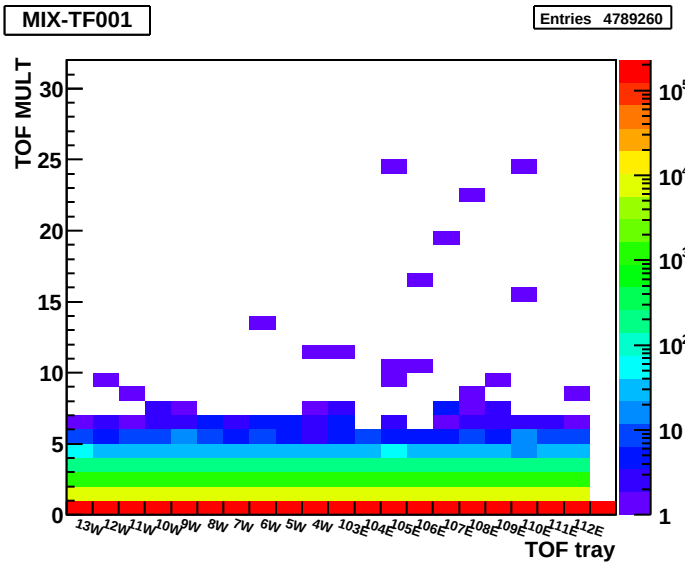

Endcap EMC L0 Input - High Tower
Entries 1.02627e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

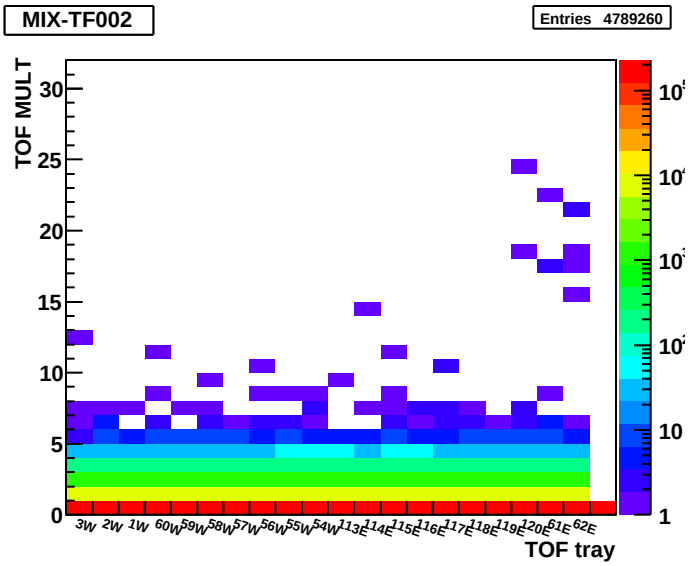

Endcap EMC L0 Input - Patch Sum
Entries 1.02627e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

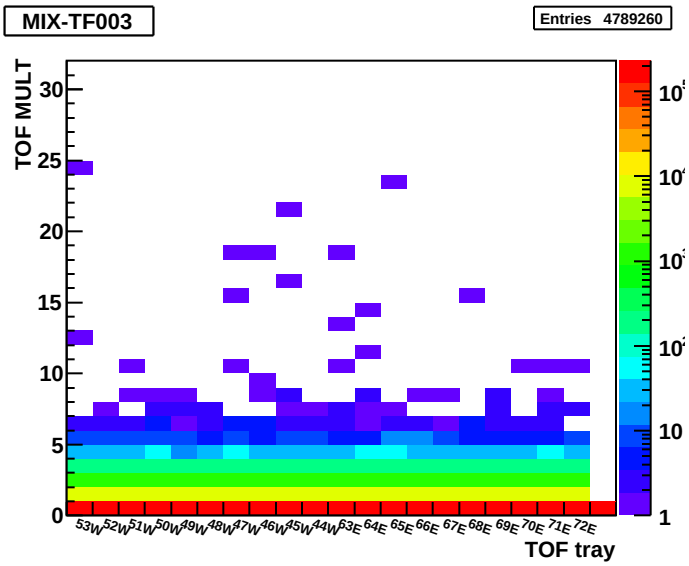

Barrel Jet Patches
Entries 2052540
JP ADC
JP ID

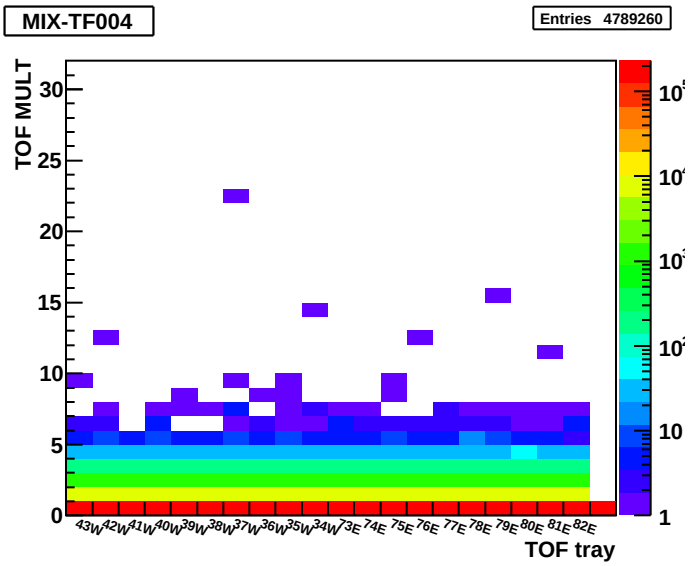

Endcap Jet Patches
Entries 684180
JP ADC
JP ID

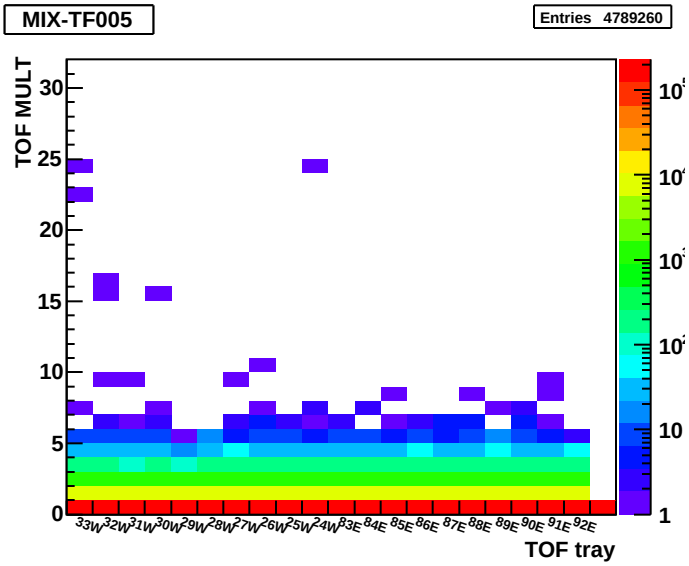

Hybrid Jet Patches
Entries 228060
JP ADC
JP ID

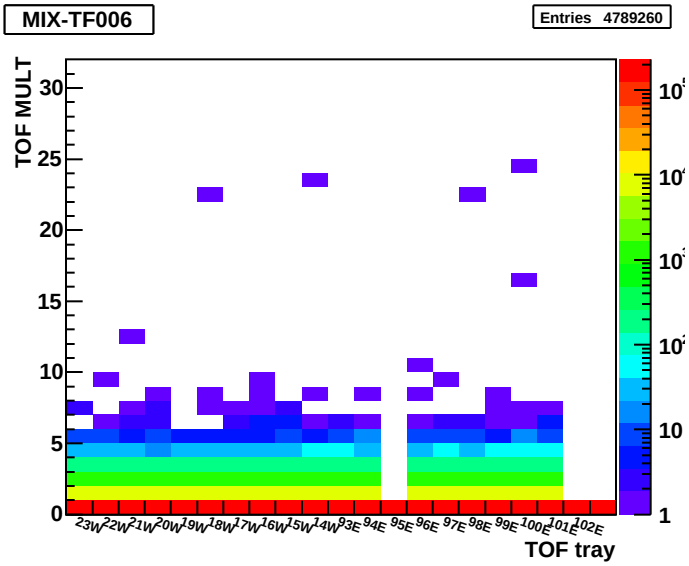

MIX-TF001
Entries 4789260
TOF MULT
TOF tray

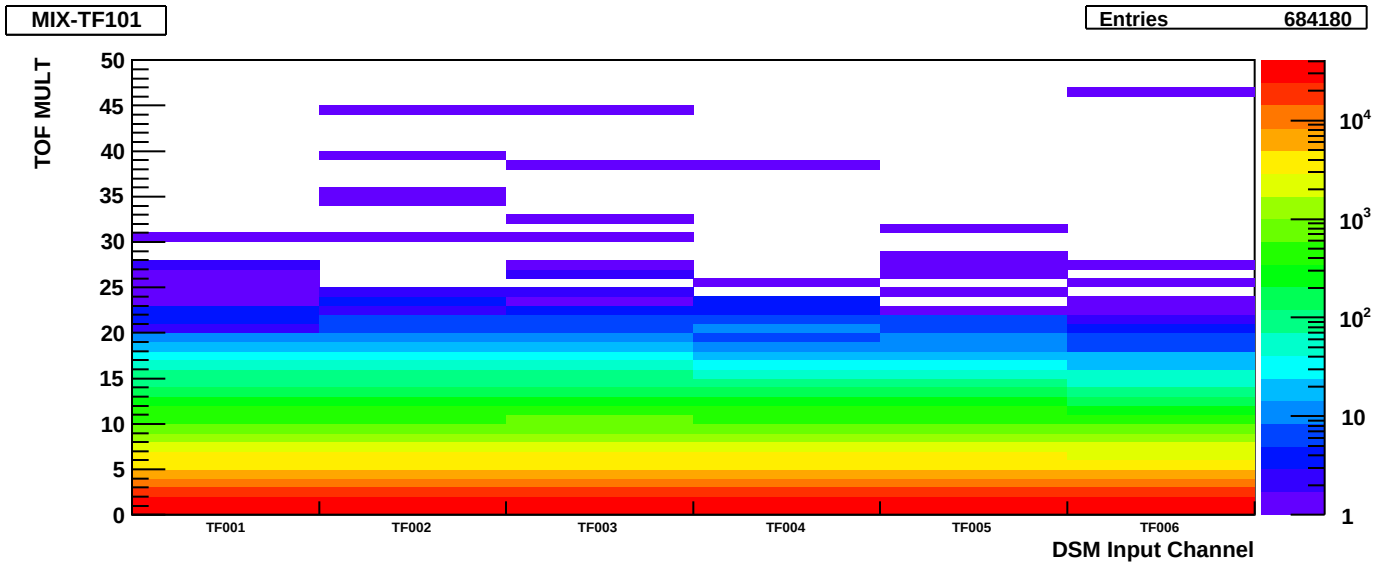

MIX-TF002
Entries 4789260
TOF MULT
TOF tray

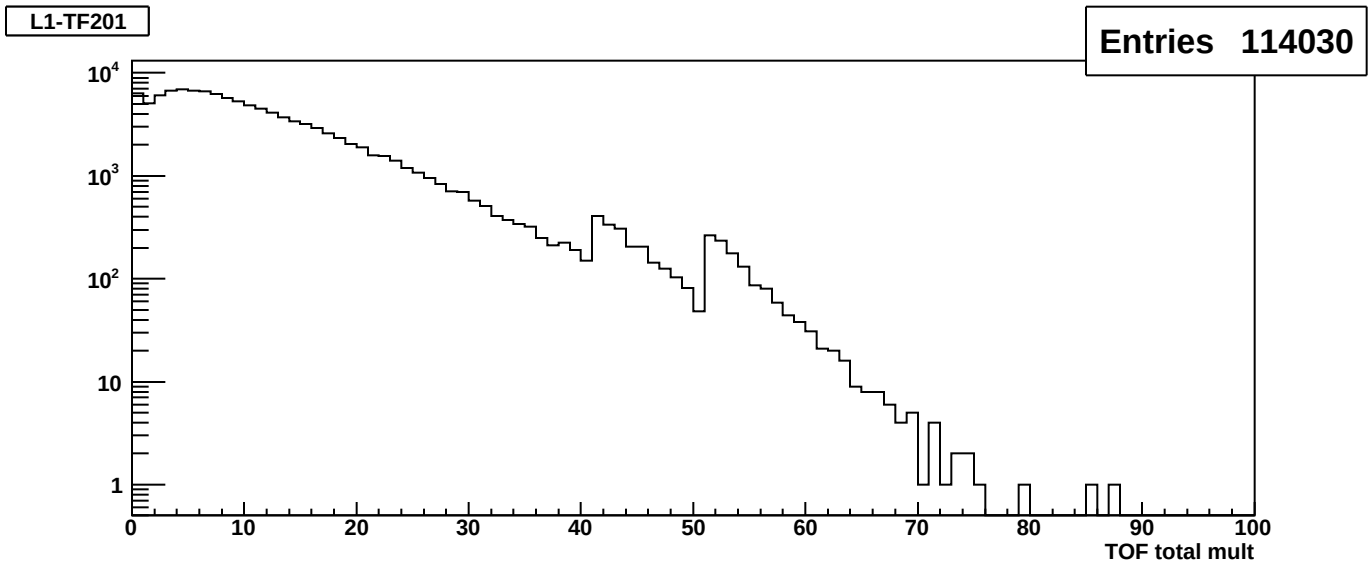

MIX-TF003
Entries 4789260
TOF MULT
TOF tray

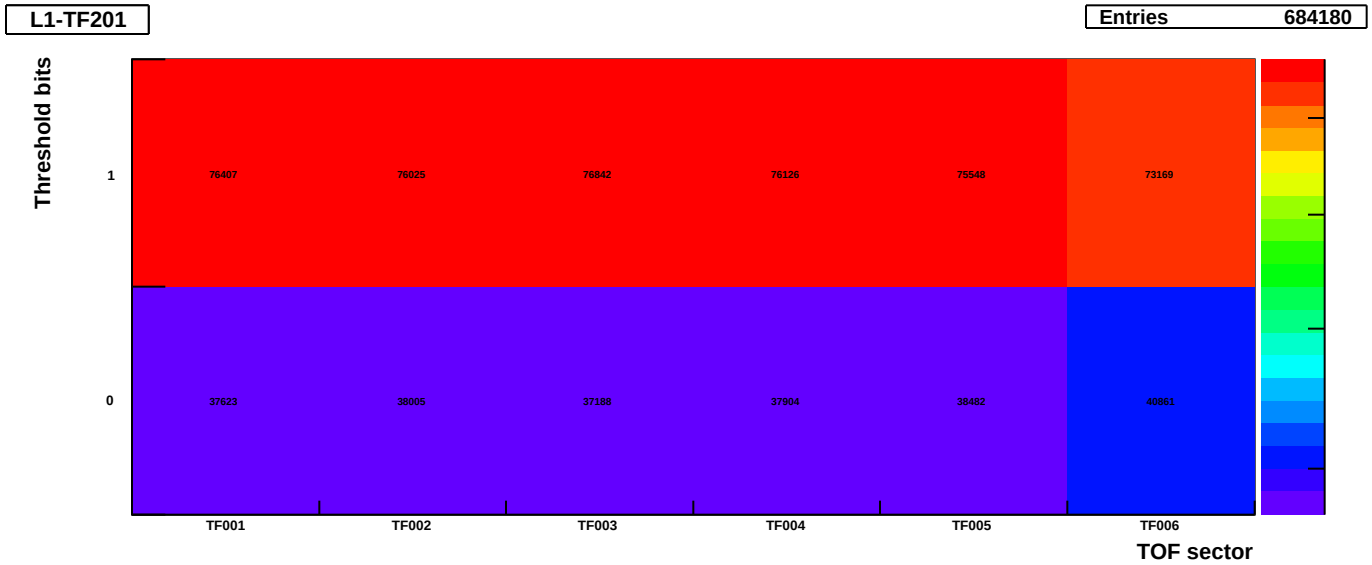

MIX-TF004
Entries 4789260
TOF MULT
TOF tray

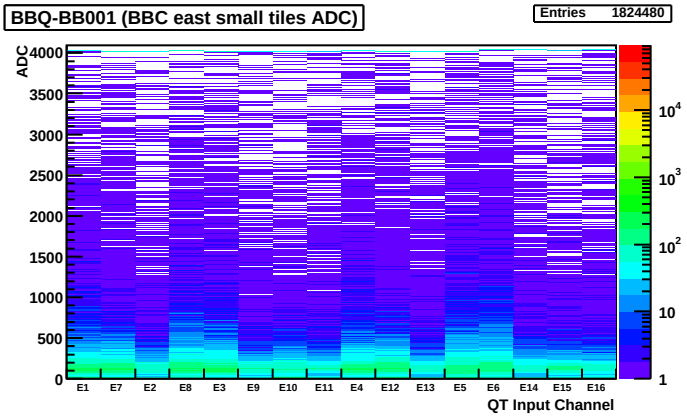

MIX-TF005
Entries 4789260
TOF MULT
TOF tray

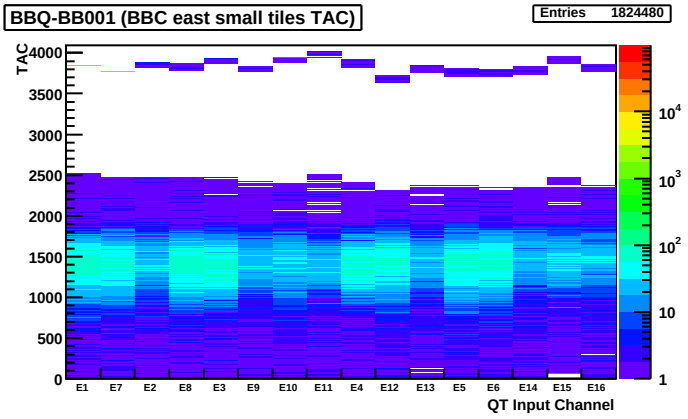

MIX-TF006
Entries 4789260
TOF MULT
TOF tray

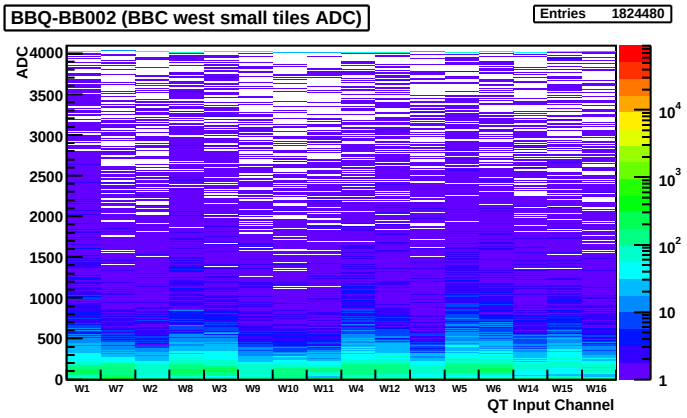

MIX-TF101
Entries 684180
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

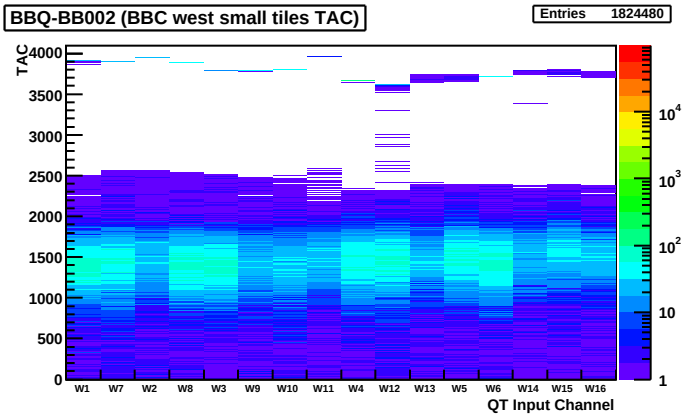

L1-TF201
Entries 114030
TOF total mult

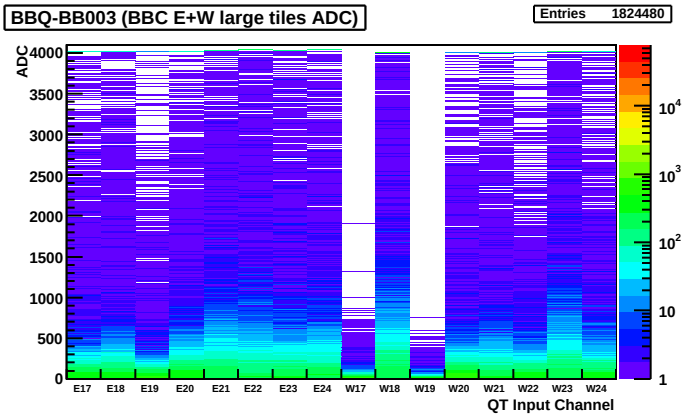

L1-TF201
Entries 684180
Threshold bits
76407
76025
76842
76126
75548
73169
37623
38005
37188
37904
38482
40861
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

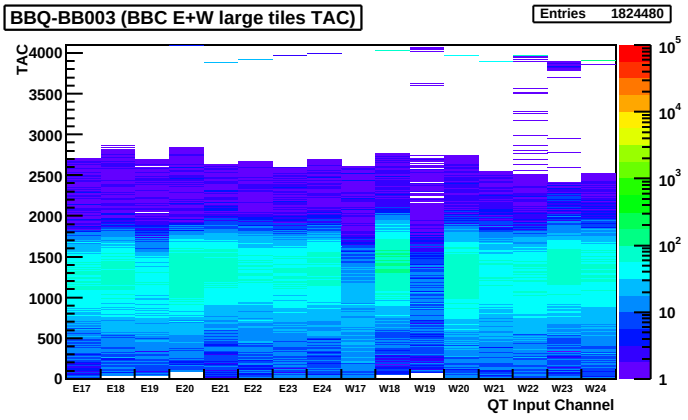

BBQ-BB001 (BBC east small tiles ADC)
Entries 1824480
ADC
QT Input Channel

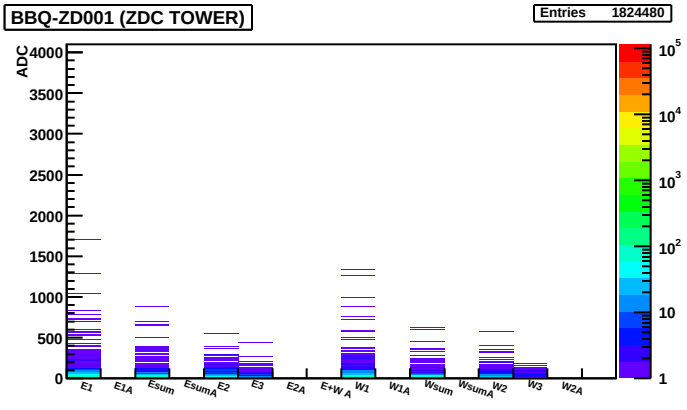

BBQ-BB001 (BBC east small tiles TAC)
Entries 1824480
TAC
QT Input Channel

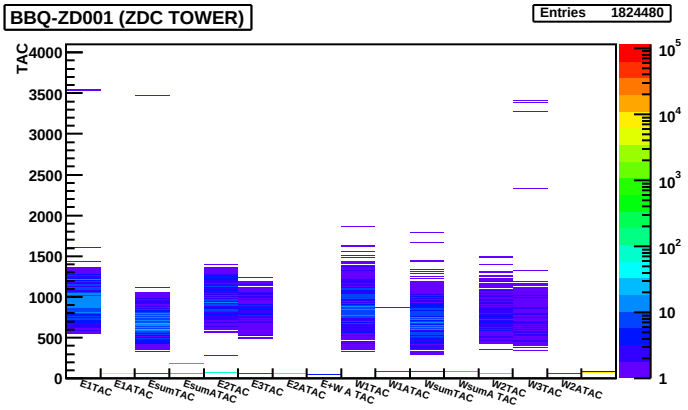

BBQ-BB002 (BBC west small tiles ADC)
Entries 1824480
ADC
QT Input Channel

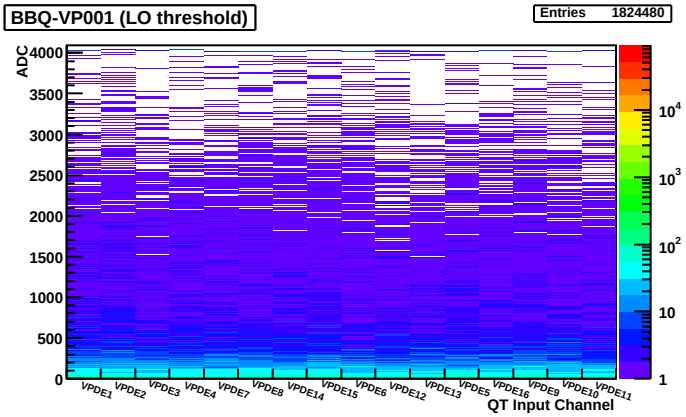

BBQ-BB002 (BBC west small tiles TAC)
Entries 1824480
TAC
QT Input Channel

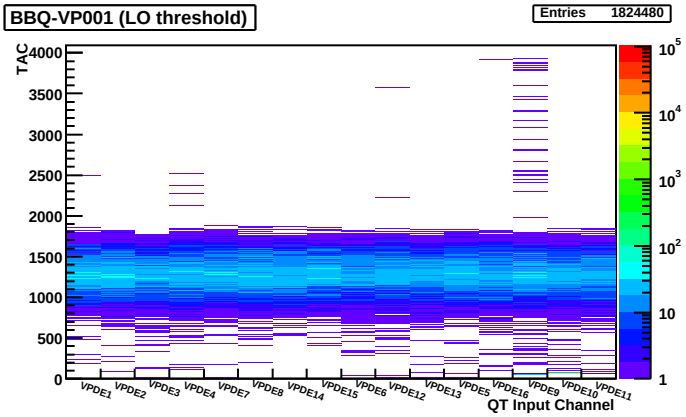

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1824480
ADC
QT Input Channel

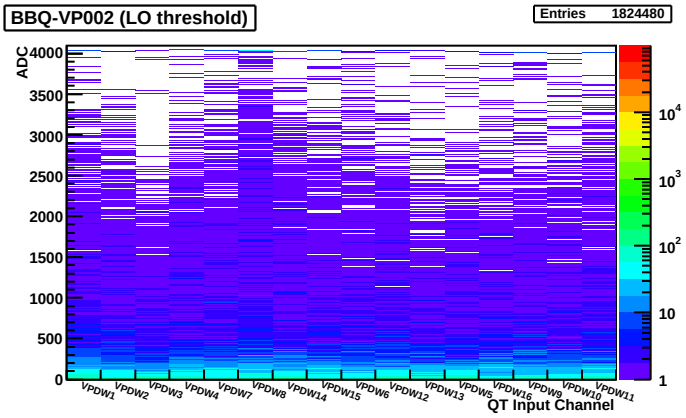

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1824480
TAC
QT Input Channel

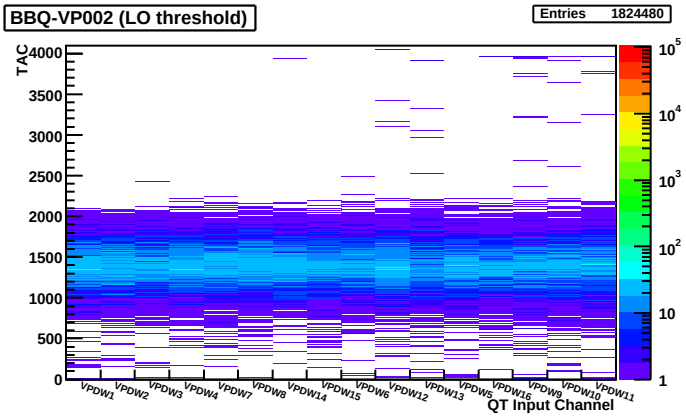

BBQ-ZD001 (ZDC TOWER)
Entries 1824480
ADC

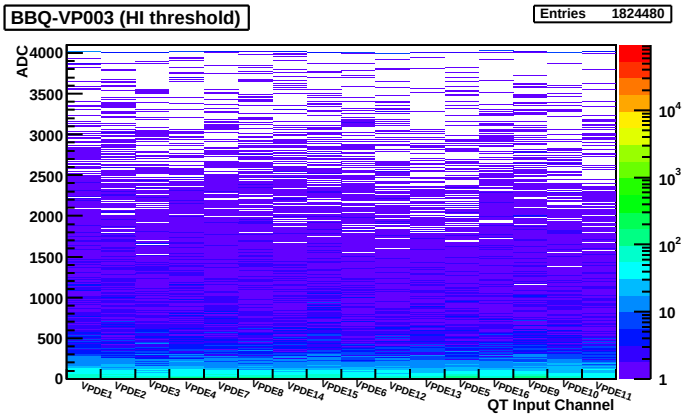

BBQ-ZD001 (ZDC TOWER)
Entries 1824480
TAC

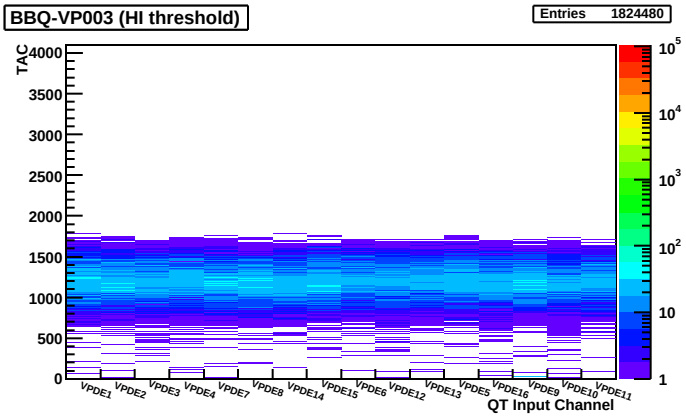

BBQ-VP001 (LO threshold)
Entries 1824480
ADC
QT Input Channel

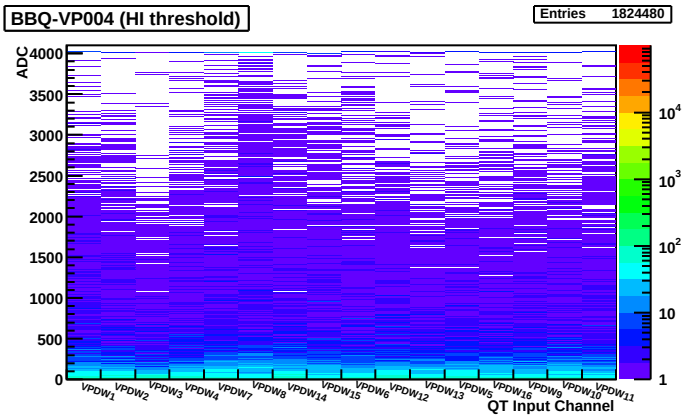

BBQ-VP001 (LO threshold)
Entries 1824480
TAC
QT Input Channel

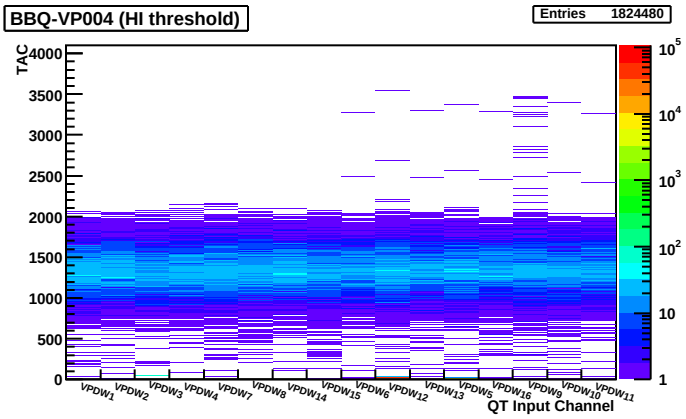

BBQ-VP002 (LO threshold)
Entries 1824480
ADC
QT Input Channel

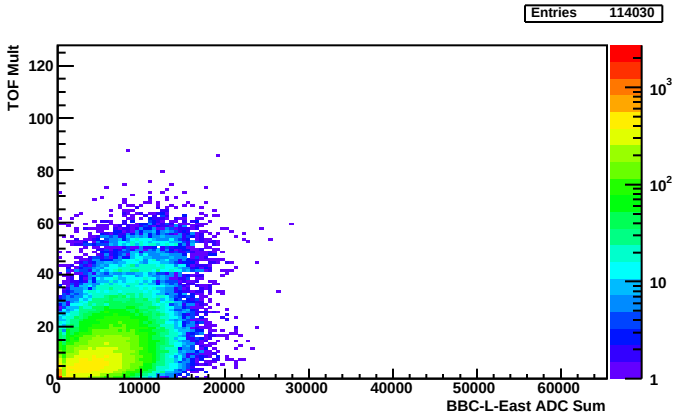

BBQ-VP002 (LO threshold)
Entries 1824480
TAC
QT Input Channel

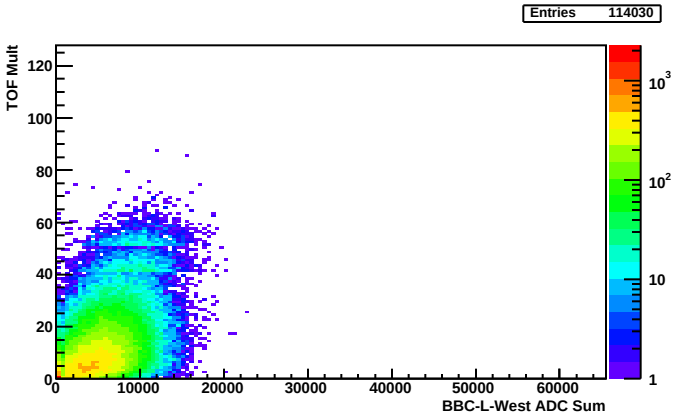

BBQ-VP003 (HI threshold)
Entries 1824480
ADC
QT Input Channel

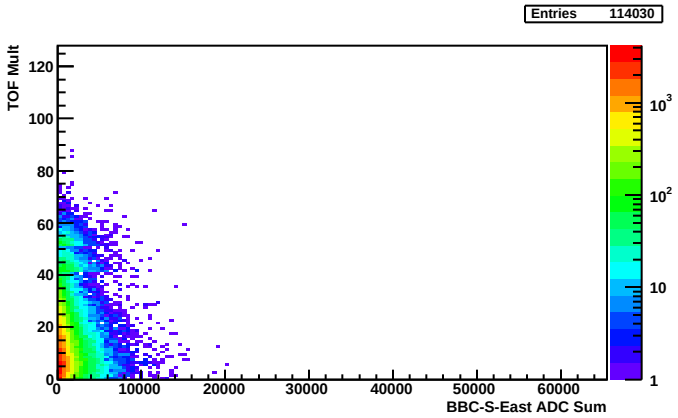

BBQ-VP003 (HI threshold)
Entries 1824480
TAC
QT Input Channel

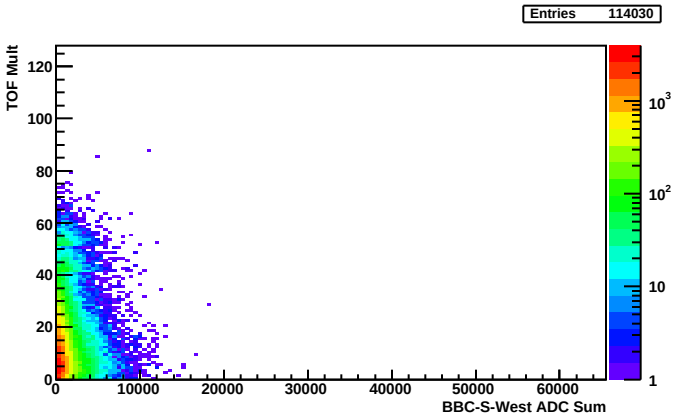

BBQ-VP004 (HI threshold)
Entries 1824480
ADC
QT Input Channel

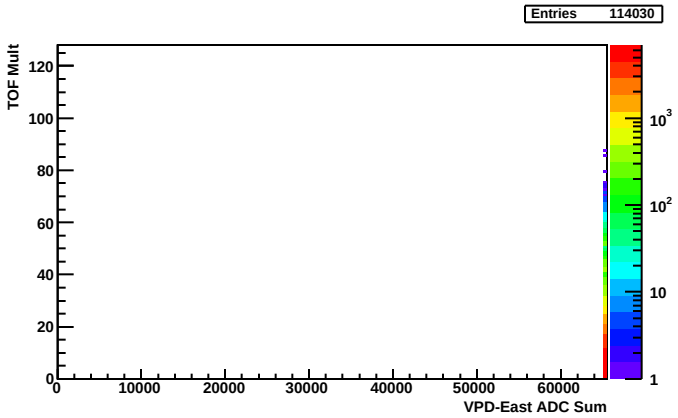

BBQ-VP004 (HI threshold)
Entries 1824480
TAC
QT Input Channel

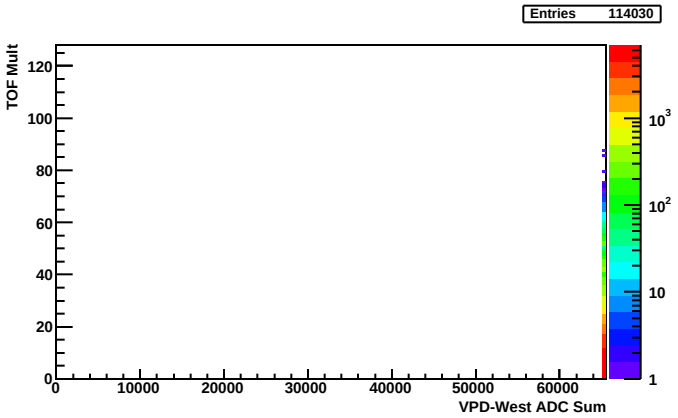

Entries 114030
TOF Mult
BBC-L-East ADC Sum

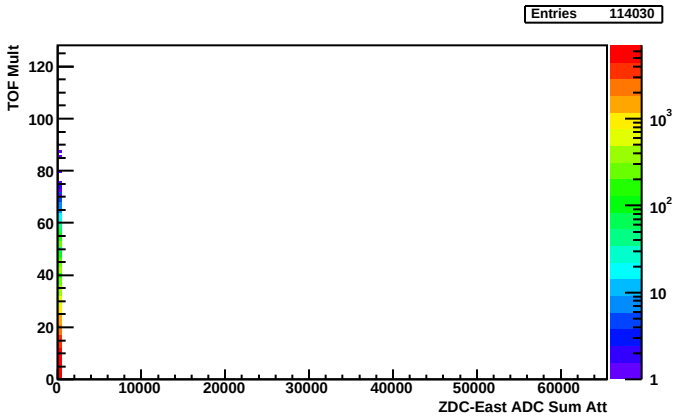

Entries 114030
TOF Mult
BBC-L-West ADC Sum

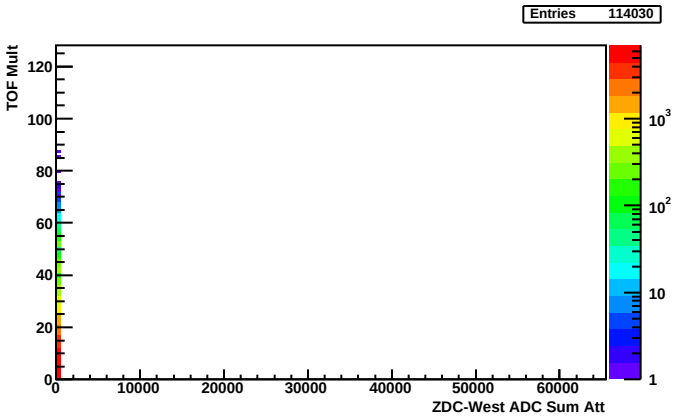

Entries 114030
TOF Mult
BBC-S-East ADC Sum

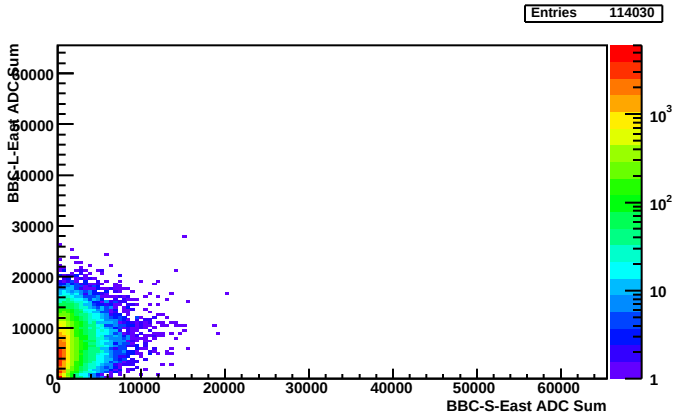

Entries 114030
TOF Mult
BBC-S-West ADC Sum

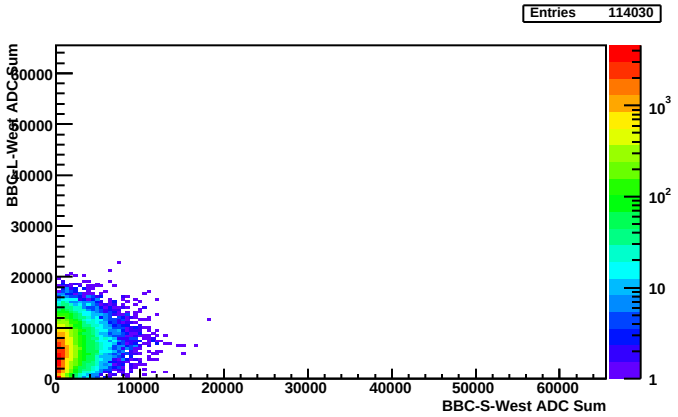

Entries 114030
TOF Mult
VPD-East ADC Sum

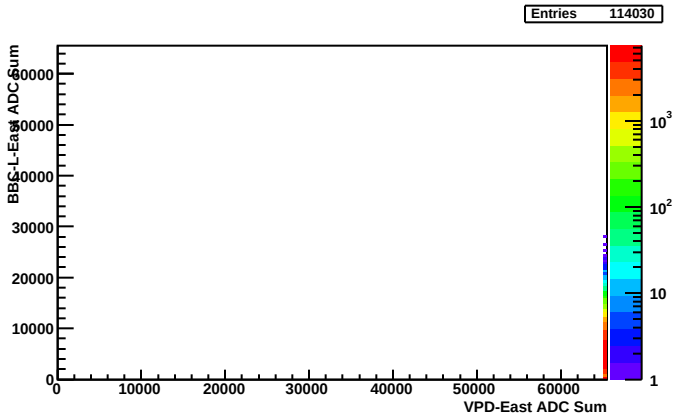

Entries 114030
TOF Mult
VPD-West ADC Sum

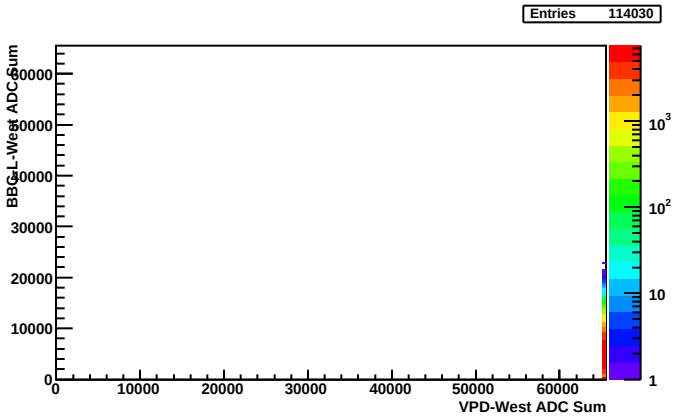

Entries 114030
TOF Mult
ZDC-East ADC Sum Att

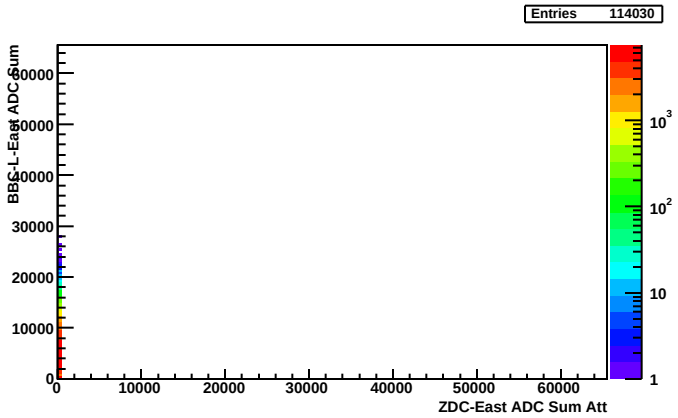

Entries 114030
TOF Mult
ZDC-West ADC Sum Att

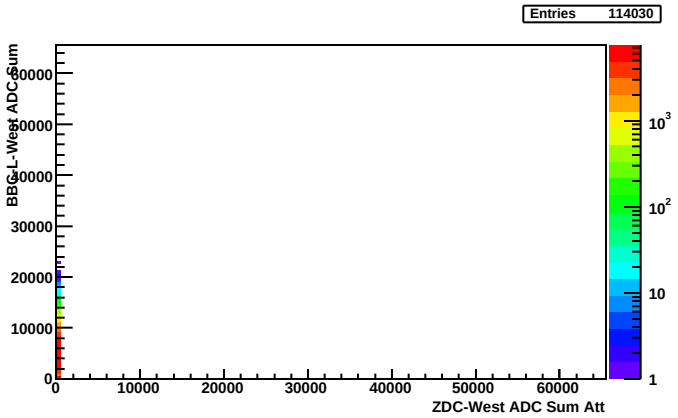

Entries 114030
BBC-L-East ADC Sum
BBC-S-East ADC Sum

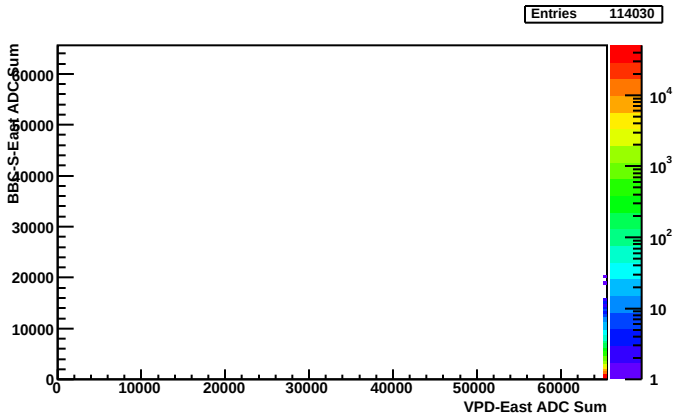

Entries 114030
BBC-L-West ADC Sum
BBC-S-West ADC Sum

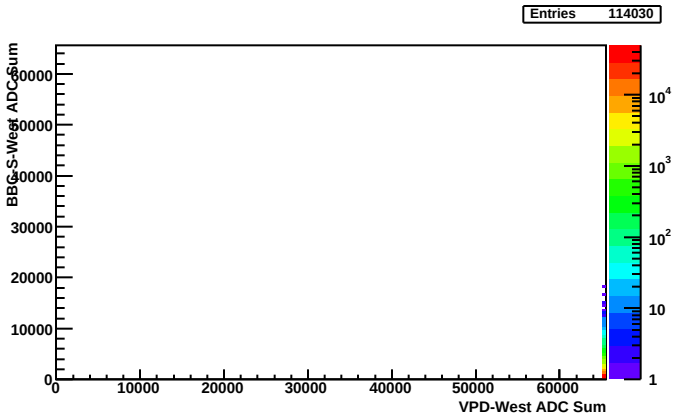

Entries 114030
BBC-L-East ADC Sum
VPD-East ADC Sum

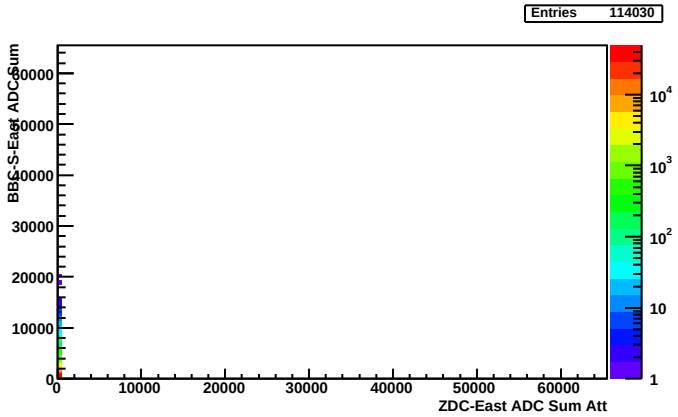

Entries 114030
BBC-L-West ADC Sum
VPD-West ADC Sum

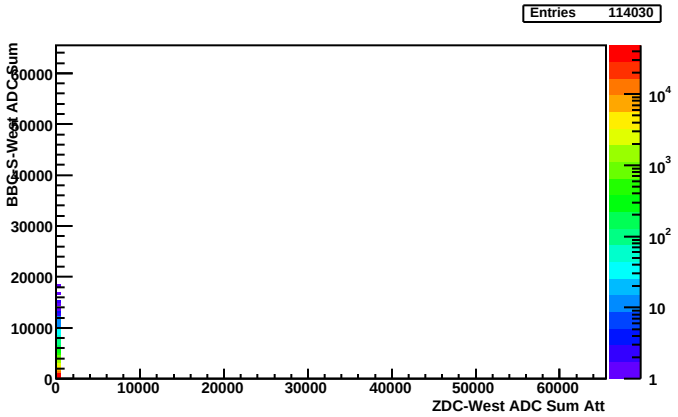

Entries 114030
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

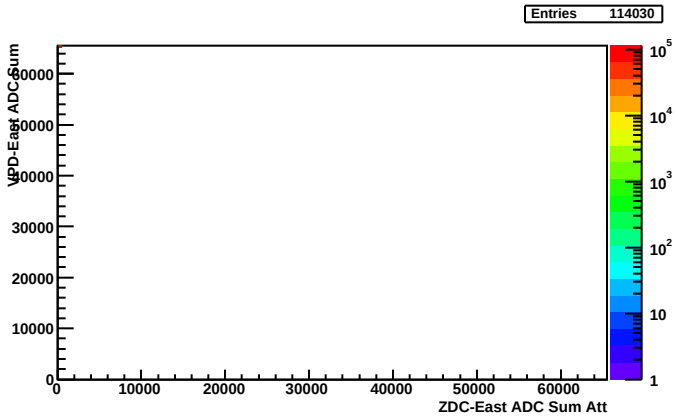

Entries 114030
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 114030
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 114030
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 114030
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 114030
BBC-S-West ADC Sum
ZDC-West ADC Sum Att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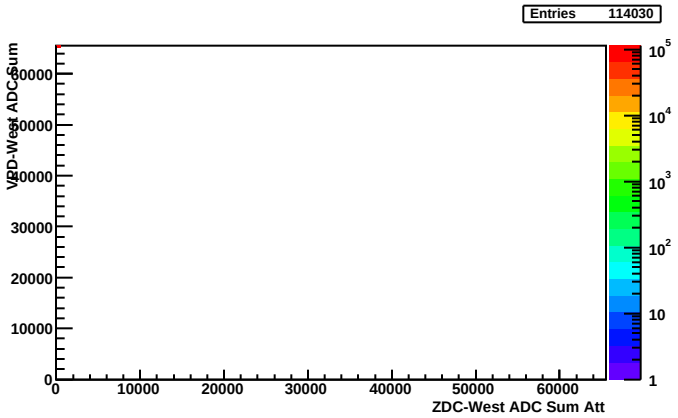
VPD-East ADC Sum
ZDC-East ADC Sum Att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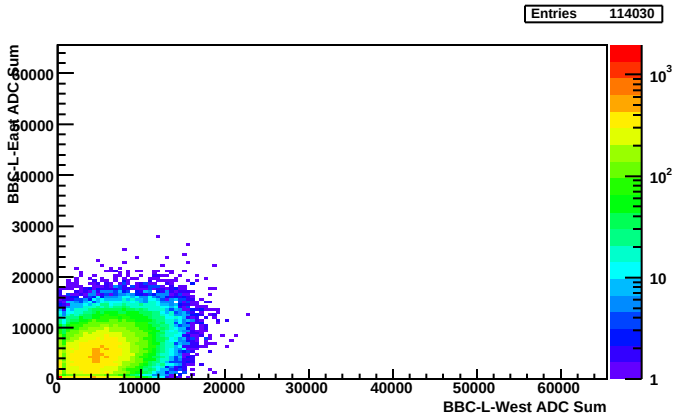
VPD-West ADC Sum
ZDC-West ADC Sum Att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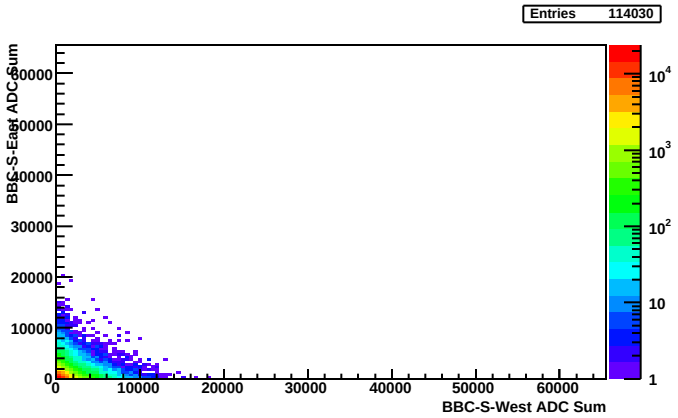
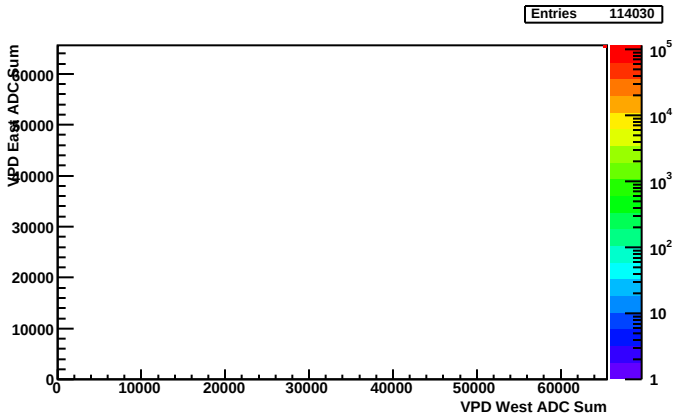
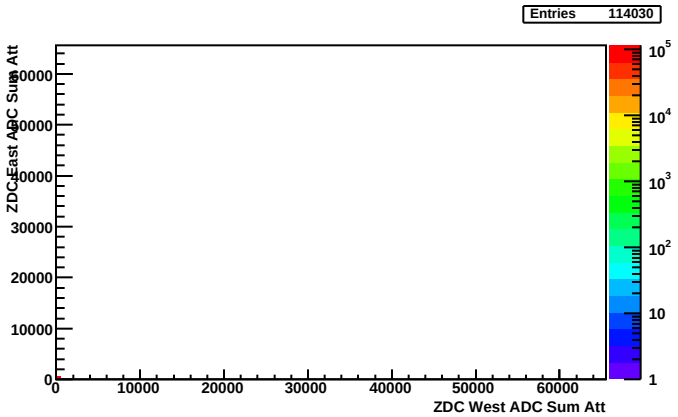
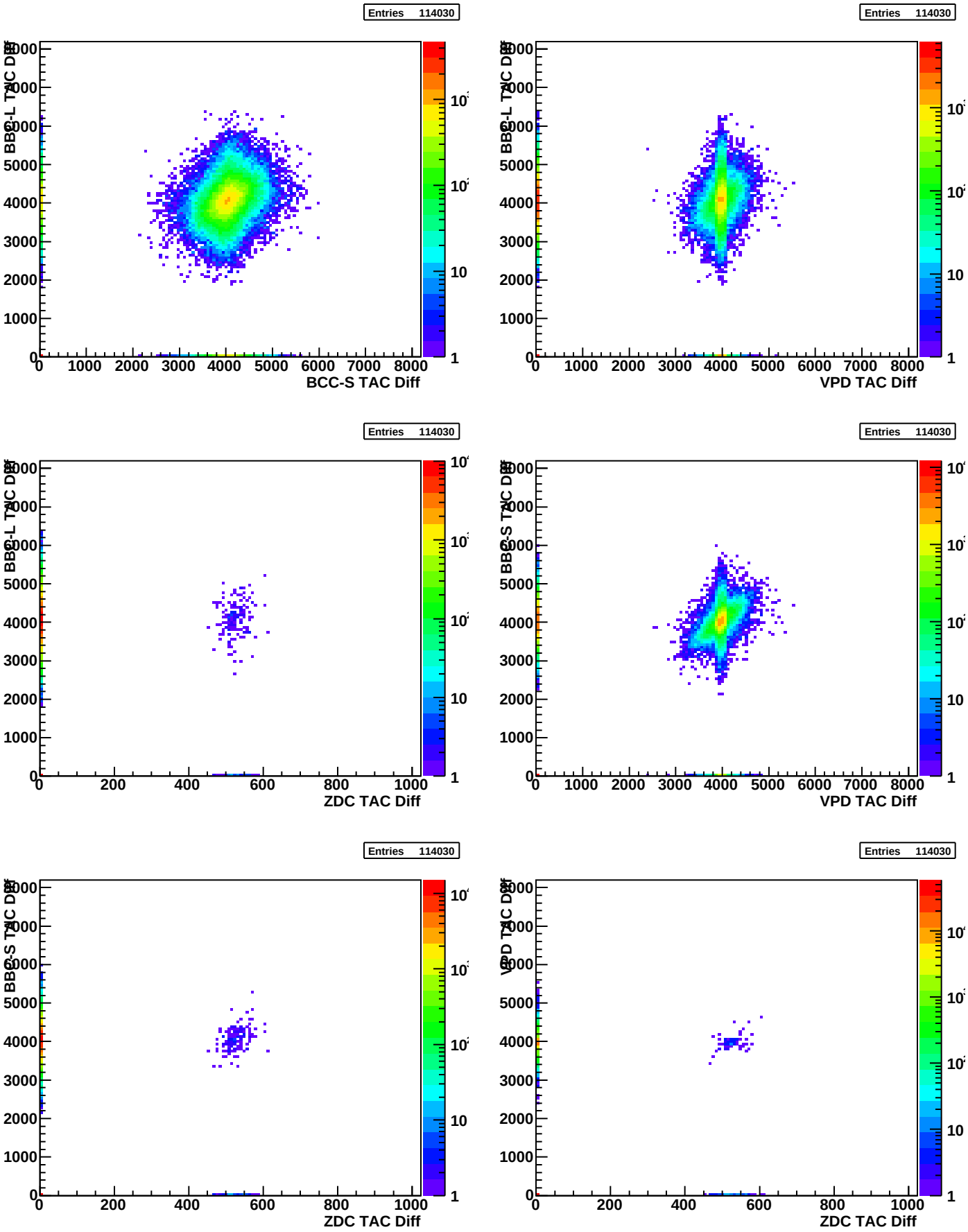
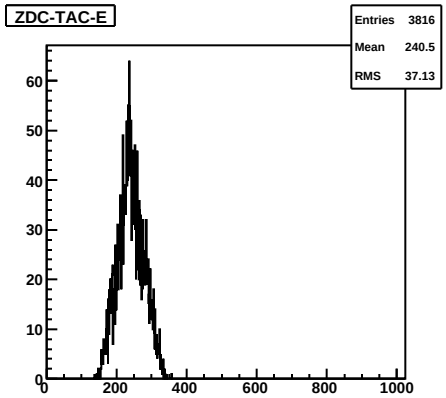
BBC-L-East ADC Sum
BBC-L-West ADC Sum

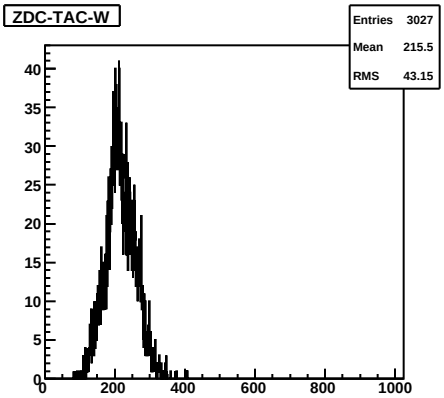

Entries 114030
BBC-S-East ADC Sum
BBC-S-West ADC Sum

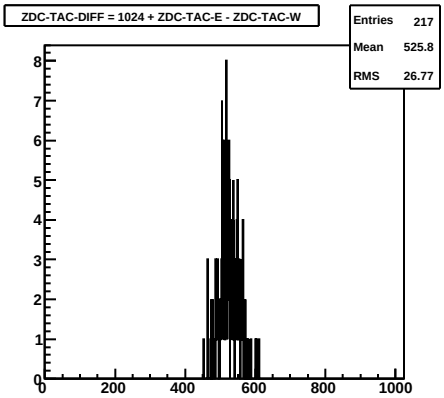

Entries 114030
VPD East ADC Sum
VPD West ADC Sum

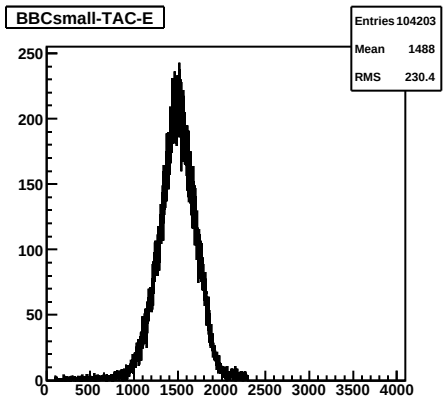

Entries 114030
ZDC East ADC Sum Att
ZDC West ADC Sum Att

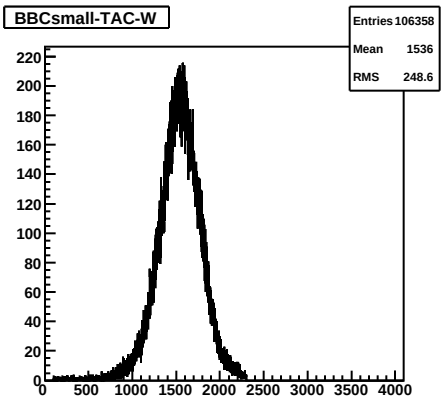

Entries 114030
BBC-L TAC Diff
BCC-S TAC Diff
Entries 114030
BBC-L TAC Diff
VPD TAC Diff
Entries 114030
BBC-L TAC Diff
ZDC TAC Diff
Entries 114030
BBC-S TAC Diff
VPD TAC Diff
Entries 114030
BBC-S TAC Diff
ZDC TAC Diff
Entries 114030
VPD TAC Diff
ZDC TAC Diff

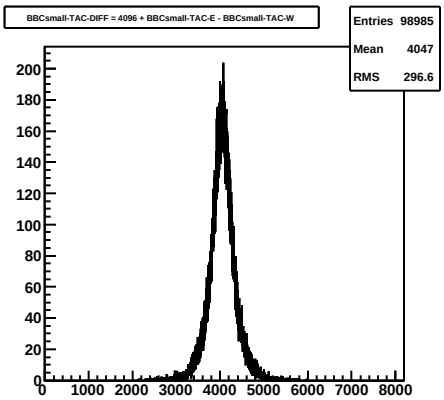

ZDC-TAC-E
Entries 3816
Mean 240.5
RMS 37.13

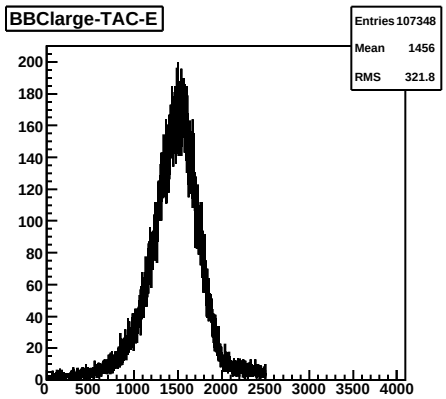

ZDC-TAC-W
Entries 3027
Mean 215.5
RMS 43.15

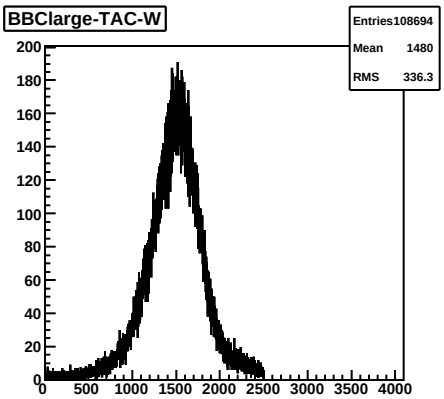

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 217
Mean 525.8
RMS 26.77

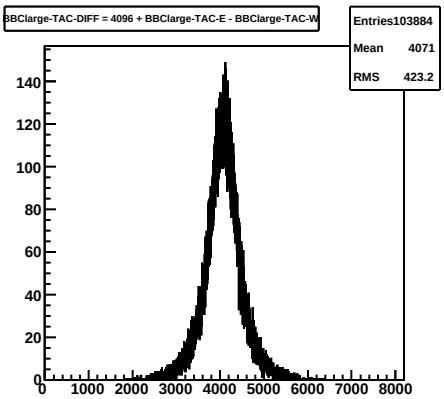

BBCsmall-TAC-E
Entries 104203
Mean 1488
RMS 230.4

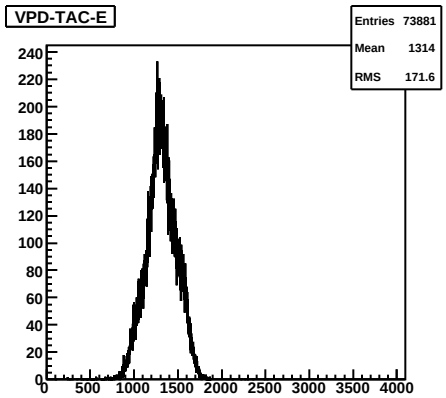

BBCsmall-TAC-W
Entries 106358
Mean 1536
RMS 248.6

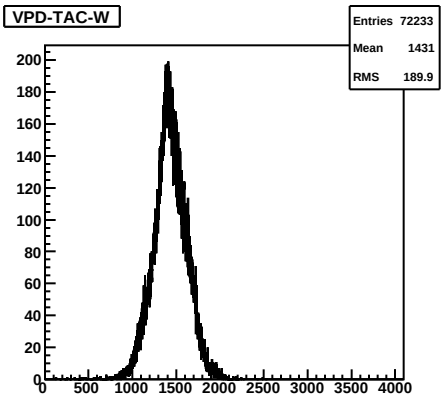

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 98985
Mean 4047
RMS 296.6

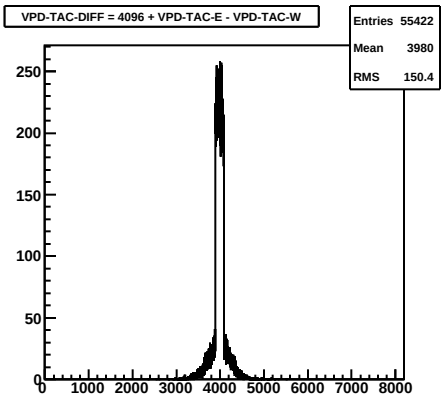

BBClarge-TAC-E
Entries 107348
Mean 1456
RMS 321.8

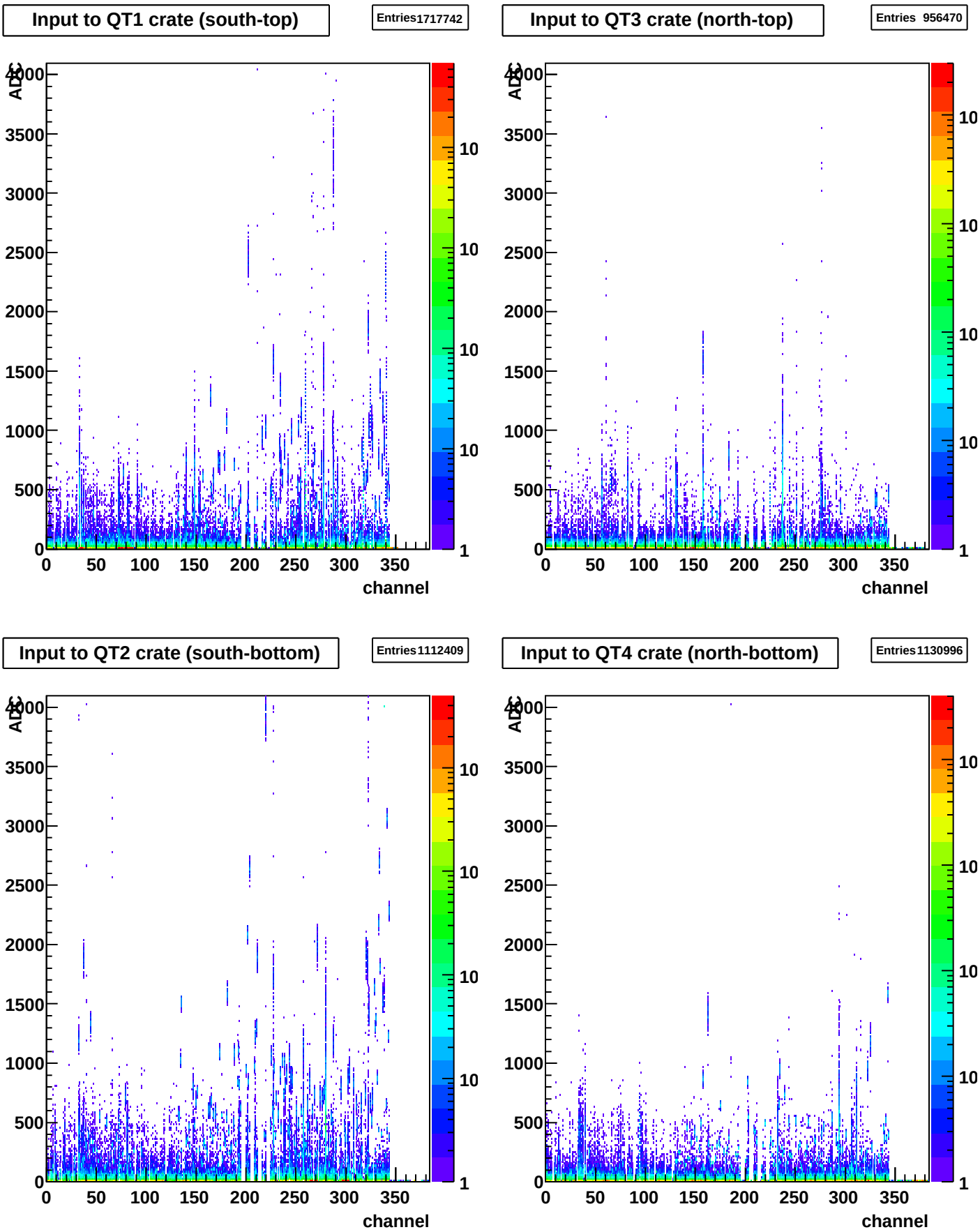

BBClarge-TAC-W
Entries 108694
Mean 1480
RMS 336.3

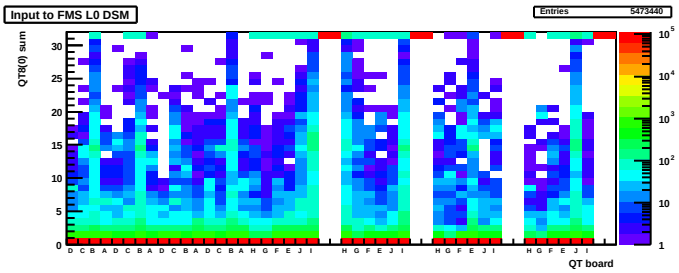

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 103884
Mean 4071
RMS 423.2

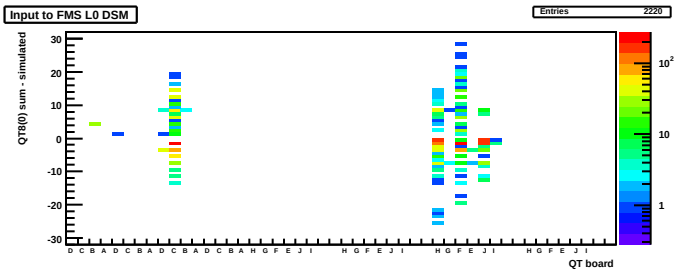

VPD-TAC-E
Entries 73881
Mean 1314
RMS 171.6

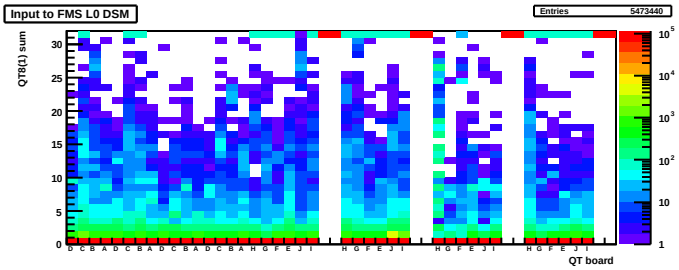

VPD-TAC-W
Entries 72233
Mean 1431
RMS 189.9

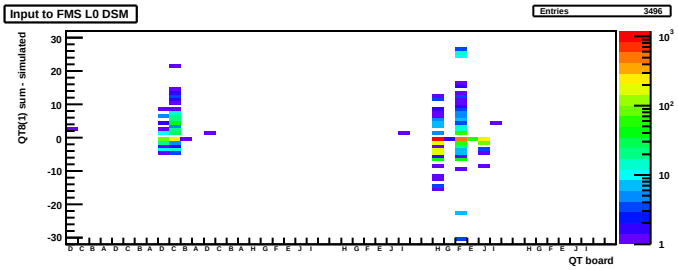

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 55422
Mean 3980
RMS 150.4

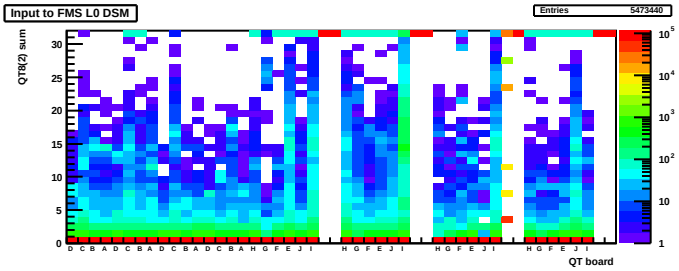

Input to QT1 crate (south-top)
Entries 1717742
Input to QT3 crate (north-top)
Entries 956470
Input to QT2 crate (south-bottom)
Entries 1112409
Input to QT4 crate (north-bottom)
Entries 1130996
ADC
channel
0
500
1000
1500
2000
2500
3000
3500
4000
0
50
100
150
200
250
300
350
1
10

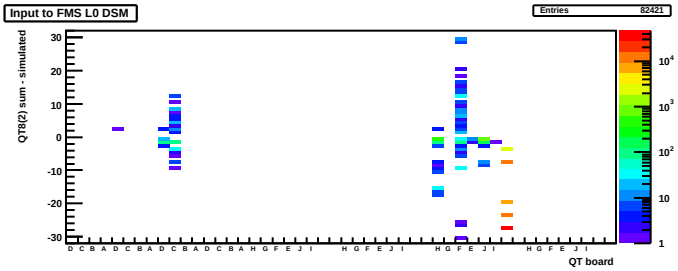

Input to FMS L0 DSM
Entries 5473440
QT8(0) sum
QT board

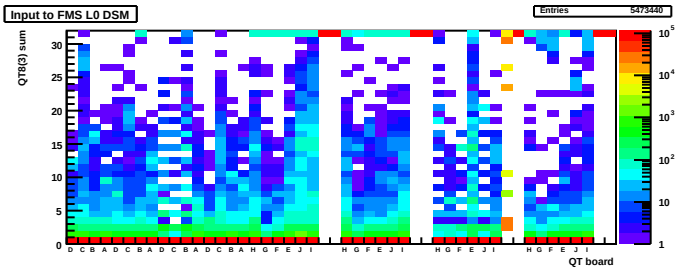

Input to FMS L0 DSM
Entries 2220
QT8(0) sum - simulated
QT board

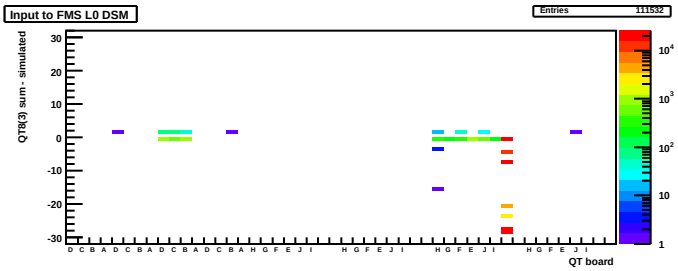

Input to FMS L0 DSM
Entries 5473440
QT8(1) sum
QT board

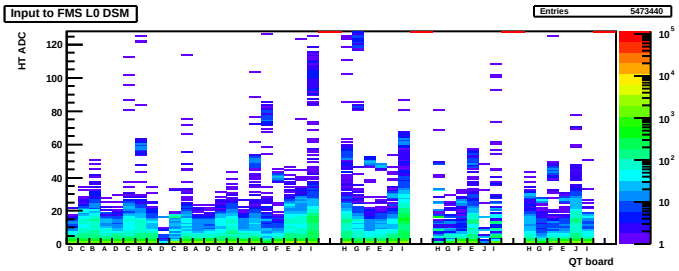

Input to FMS L0 DSM
Entries 3496
QT8(1) sum - simulated
QT board

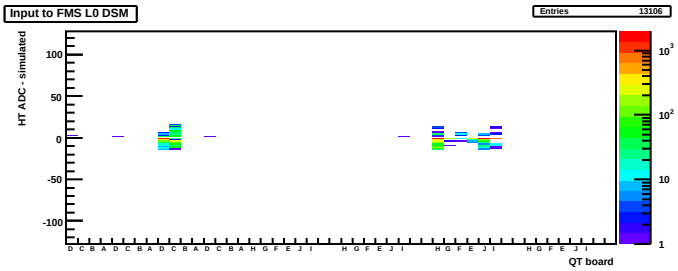

Input to FMS L0 DSM
Entries 5473440
QT8(2) sum
QT board

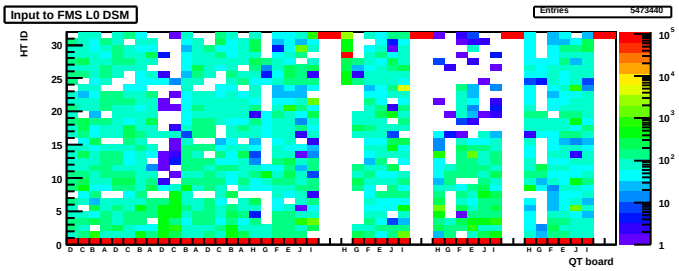

Input to FMS L0 DSM
Entries 82421
QT8(2) sum - simulated
QT board

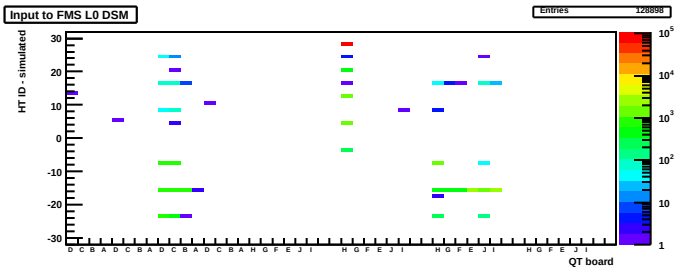

Input to FMS L0 DSM
Entries 5473440
QT8(3) sum
QT board

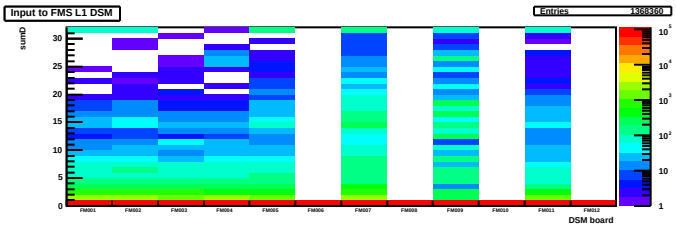

Input to FMS L0 DSM
Entries 111532
QT8(3) sum - simulated
QT board

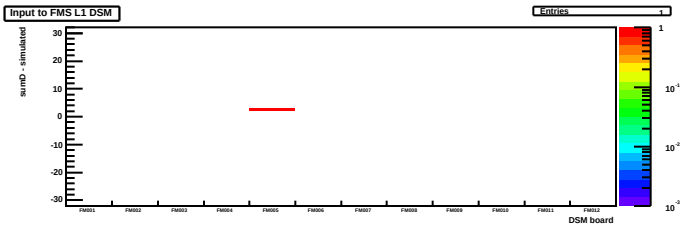

Input to FMS L0 DSM
Entries 5473440
HT ADC
QT board

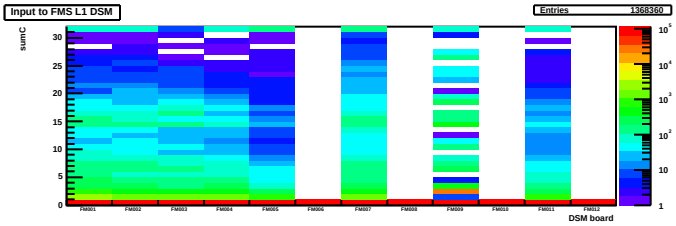

Input to FMS L0 DSM
Entries 13106
HT ADC - simulated
QT board

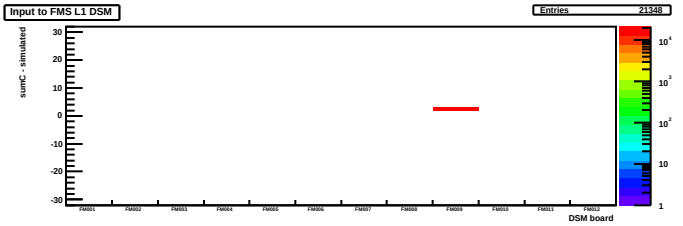

Input to FMS L0 DSM
Entries 5473440
HT ID
QT board

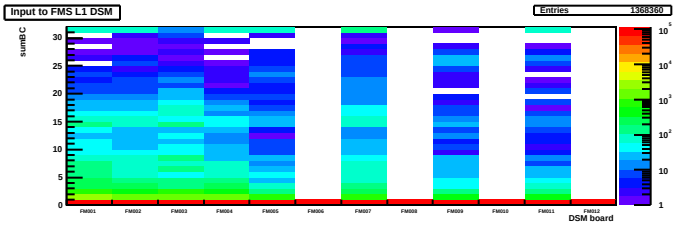

Input to FMS L0 DSM
Entries 128898
HT ID - simulated
QT board

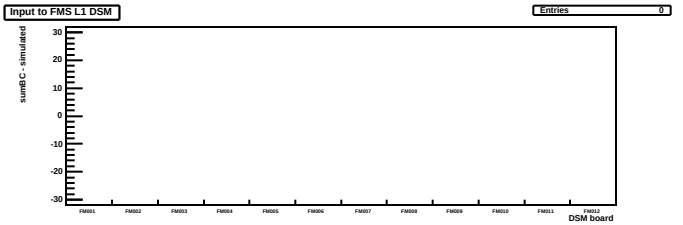

Input to FMS L1 DSM
Entries 1368360
sumD
DSM board

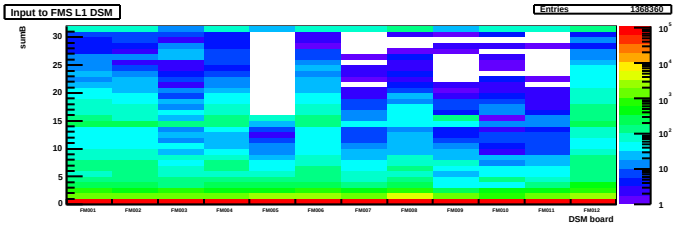

Input to FMS L1 DSM
Entries 1
sumD - simulated
DSM board

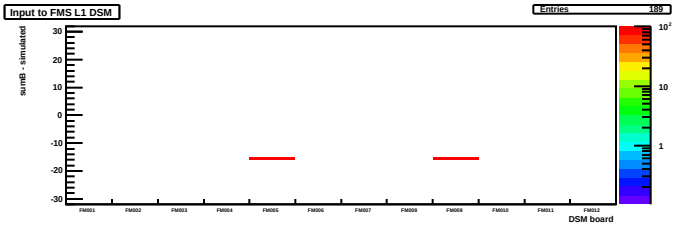

Input to FMS L1 DSM
Entries 1368360
sumC
DSM board

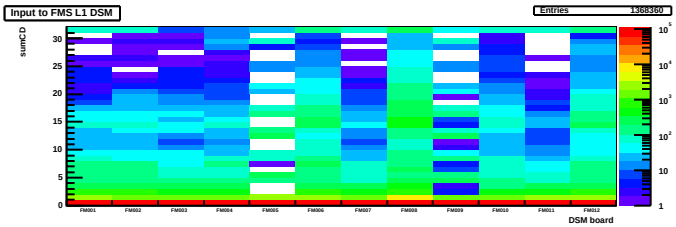

Input to FMS L1 DSM
Entries 21348
sumC - simulated
DSM board

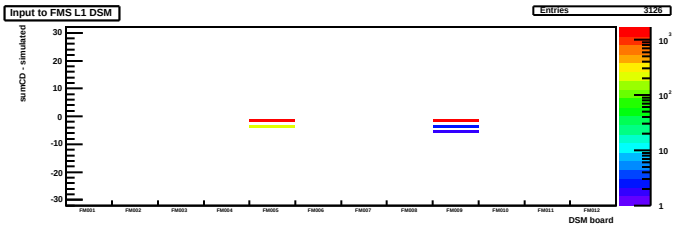

Input to FMS L1 DSM
Entries 1368360
sumBC
DSM board

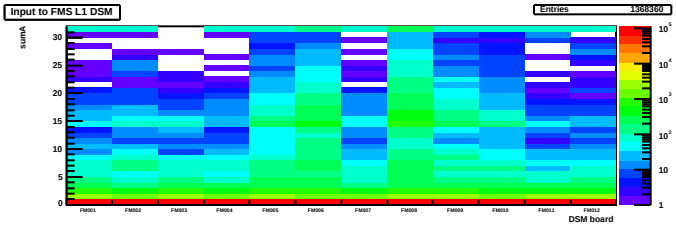

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

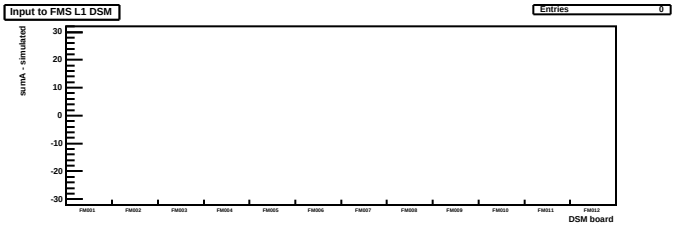

Input to FMS L1 DSM
Entries 1368360
sumB
DSM board

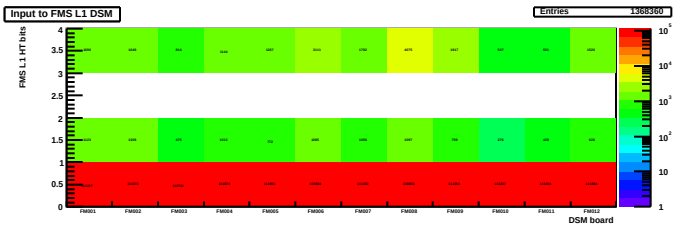

Input to FMS L1 DSM
Entries 189
sumB - simulated
DSM board

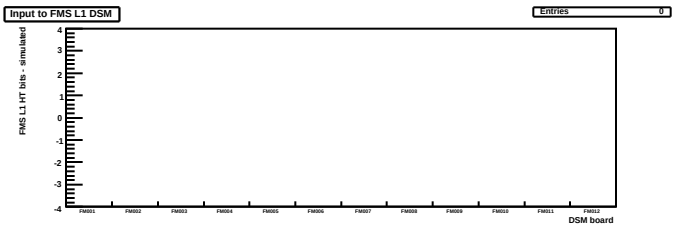

Input to FMS L1 DSM
Entries 1368360
sumCD
DSM board

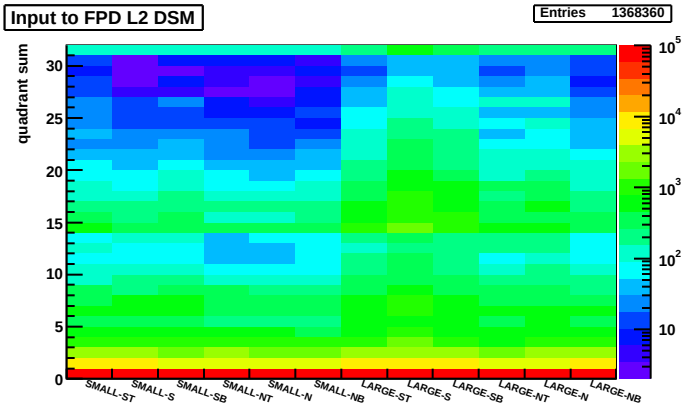

Input to FMS L1 DSM
Entries 3126
sumCD - simulated
DSM board

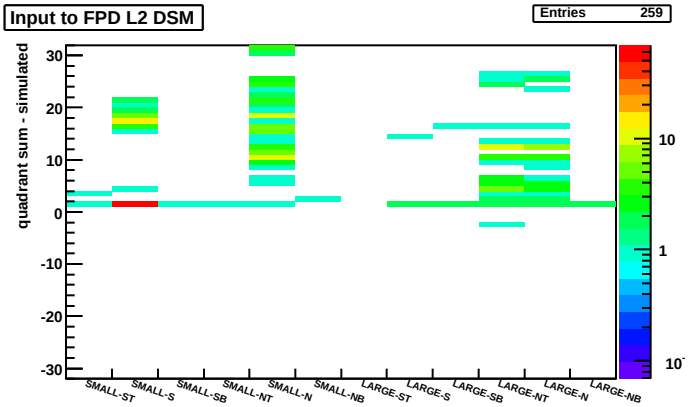

Input to FMS L1 DSM
Entries 1368360
sumA
DSM board

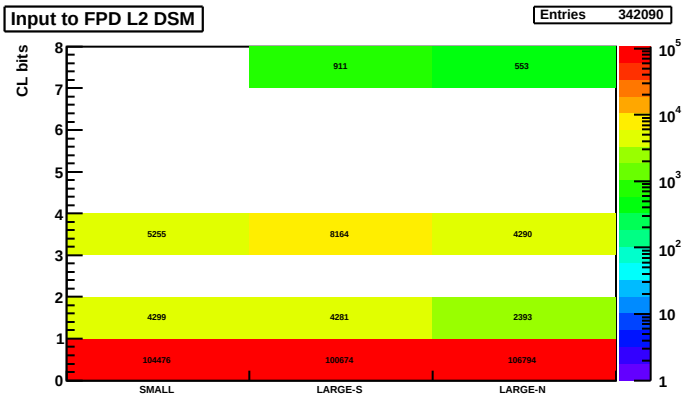

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

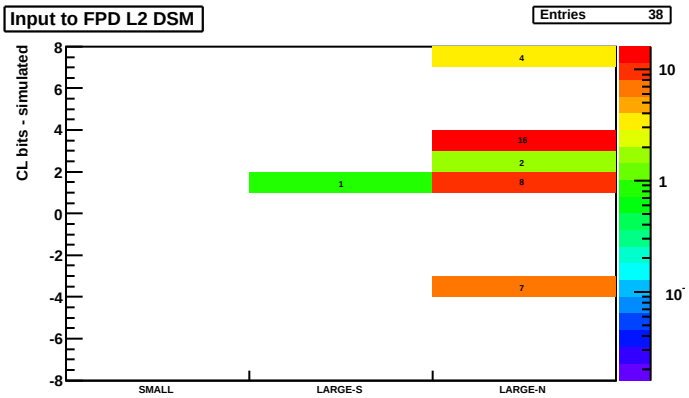

Input to FMS L1 DSM
Entries 1368360
FMS L1 HT bits
DSM board

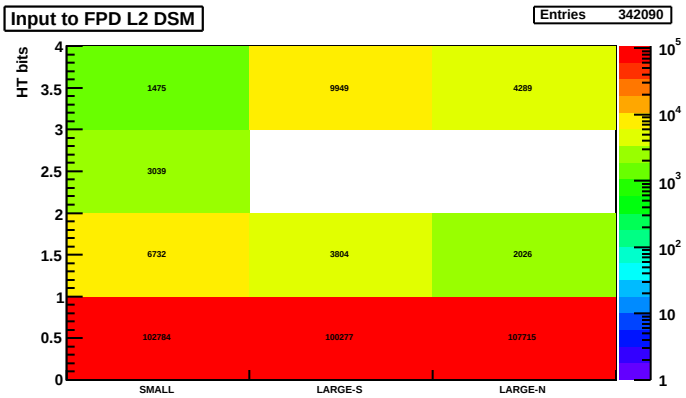

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

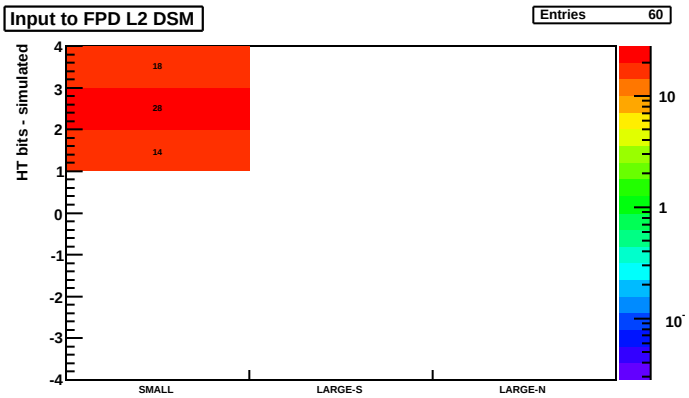

Input to FPD L2 DSM
Entries 1368360
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

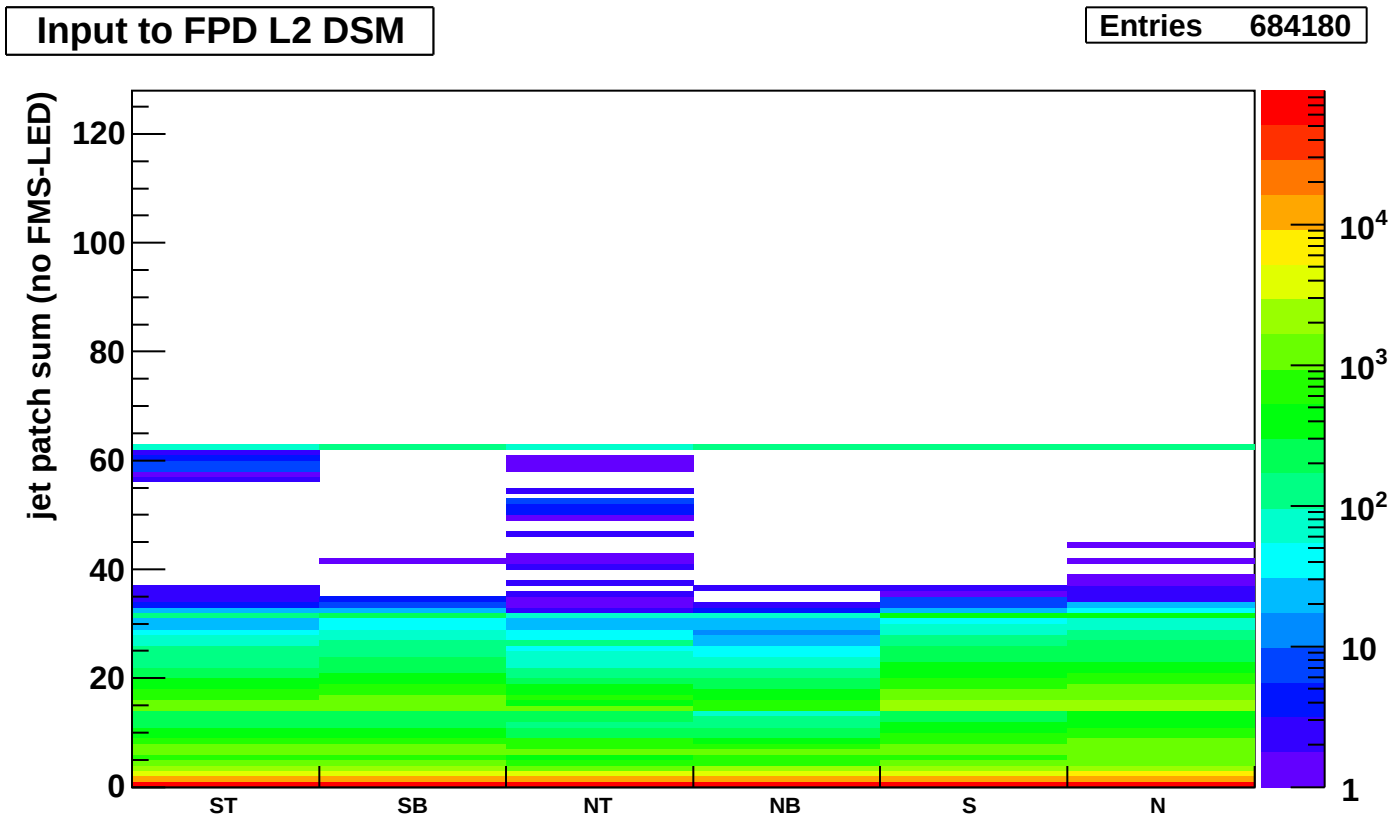

Input to FPD L2 DSM
Entries 259
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

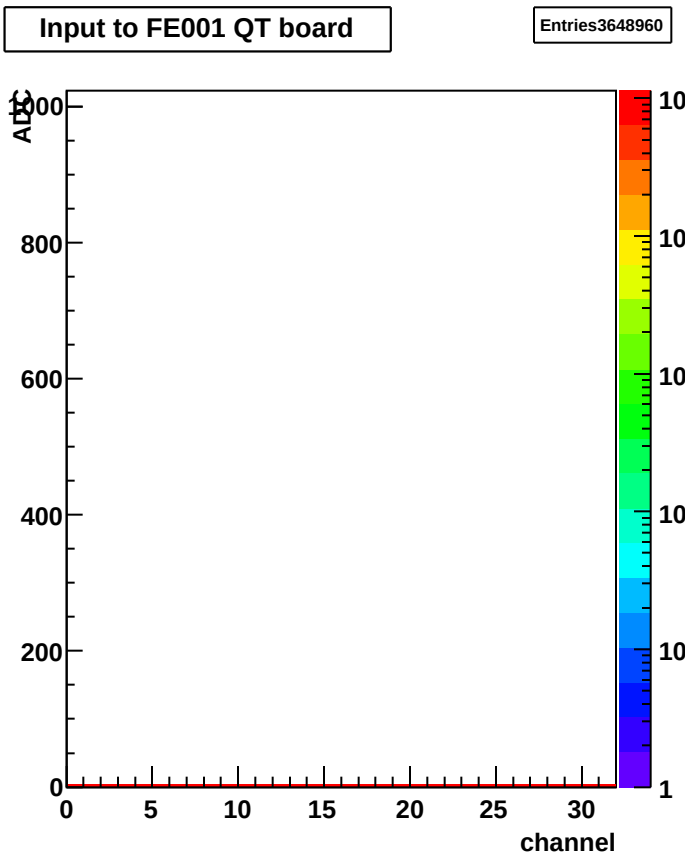

Input to FPD L2 DSM
Entries 342090
CL bits
911
553
5255
8164
4290
4299
4281
2393
104476
100674
106794
SMALL
LARGE-S
LARGE-N

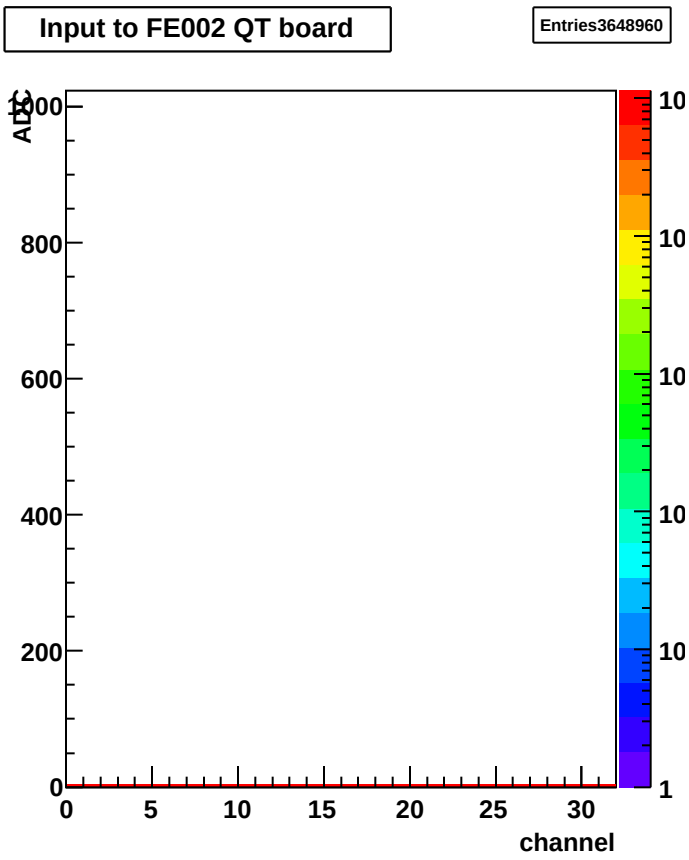

Input to FPD L2 DSM
Entries 38
CL bits - simulated
4
16
2
1
8
7
SMALL
LARGE-S
LARGE-N

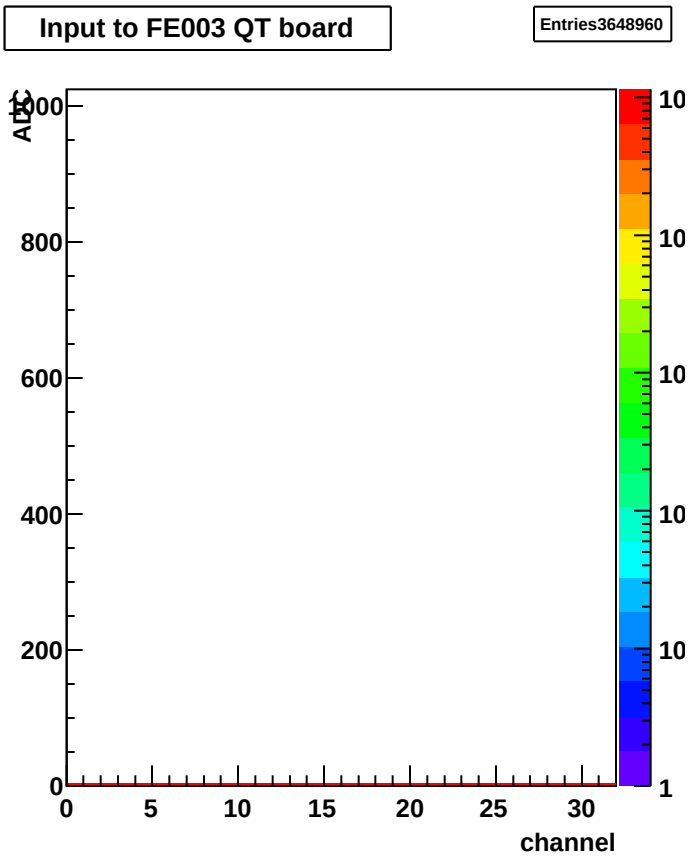

Input to FPD L2 DSM
Entries 342090
HT bits
1475
9949
4289
3039
6732
3804
2026
102784
100277
107715
SMALL
LARGE-S
LARGE-N

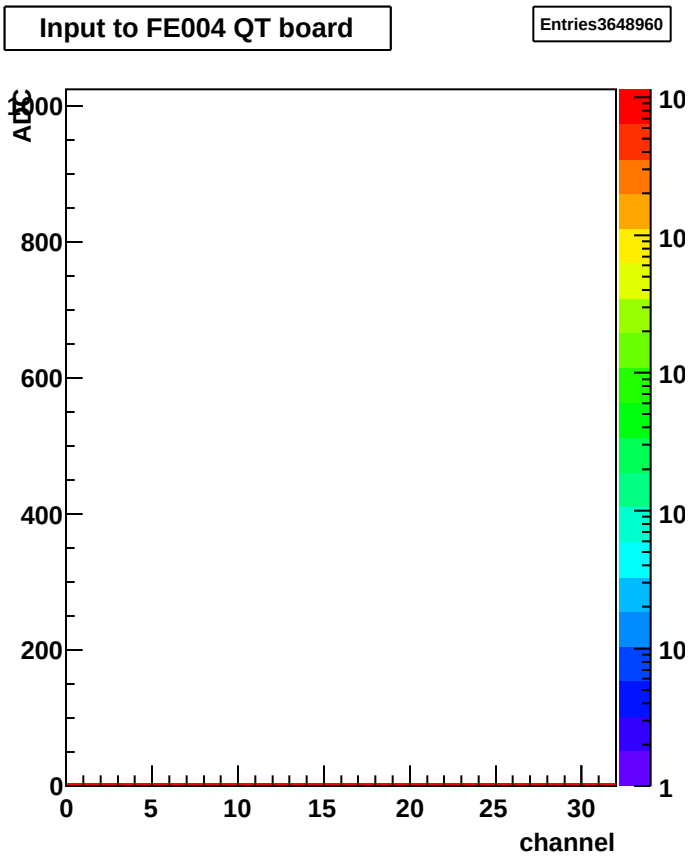

Input to FPD L2 DSM
Entries 60
HT bits - simulated
18
28
14
SMALL
LARGE-S
LARGE-N

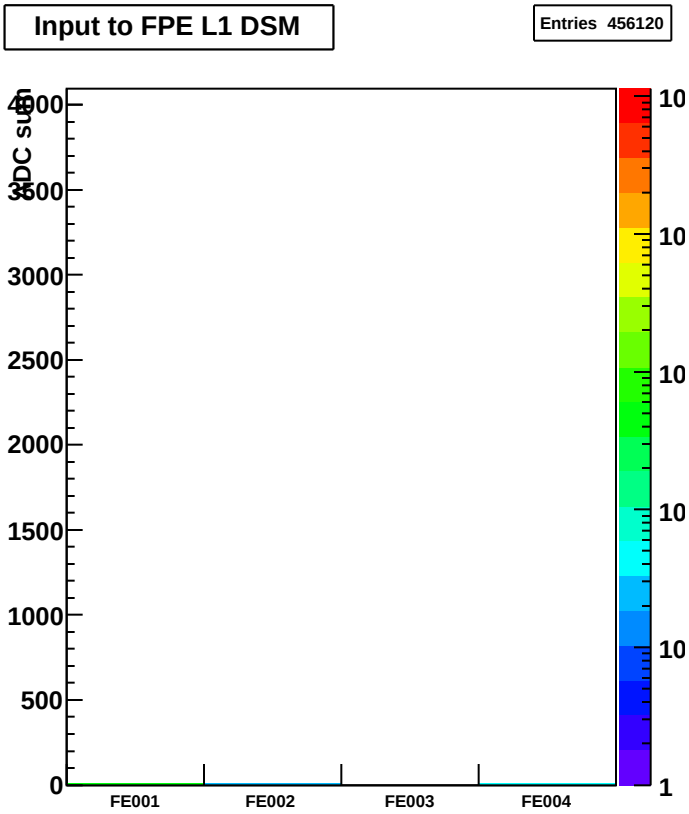

Input to FPD L2 DSM
Entries 684180
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

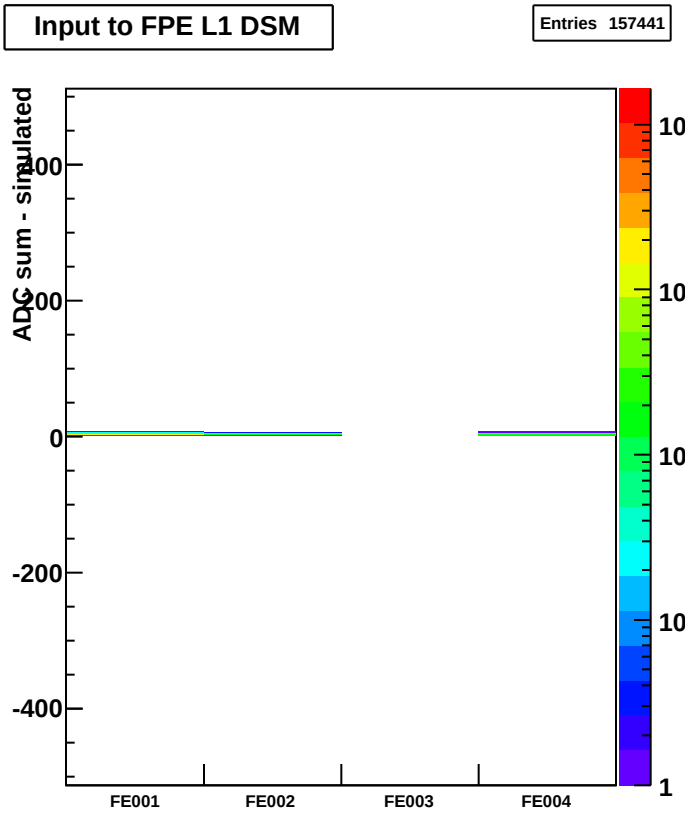

Input to FE001 QT board
Entries3648960
ADC
channel

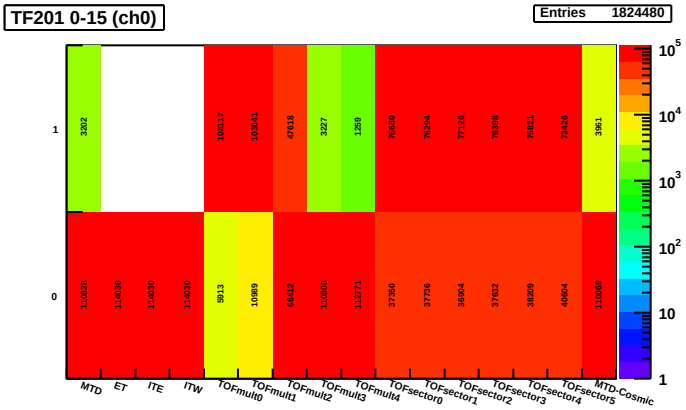

Input to FE002 QT board
Entries3648960
ADC
channel

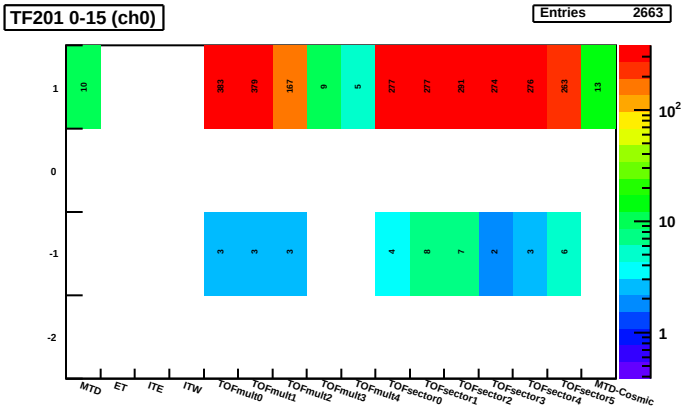

Input to FE003 QT board
Entries3648960
ADC
channel

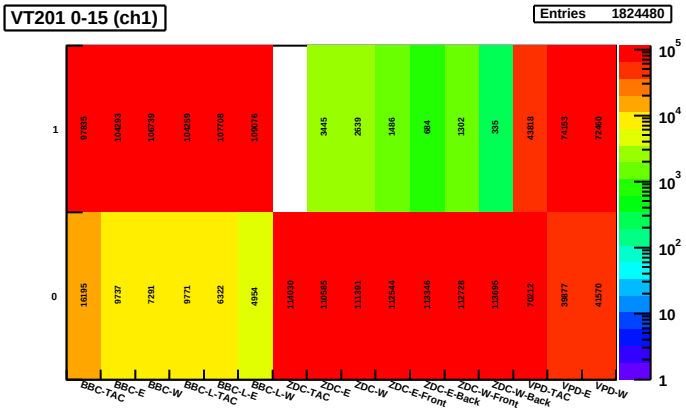

Input to FE004 QT board
Entries3648960
ADC
channel

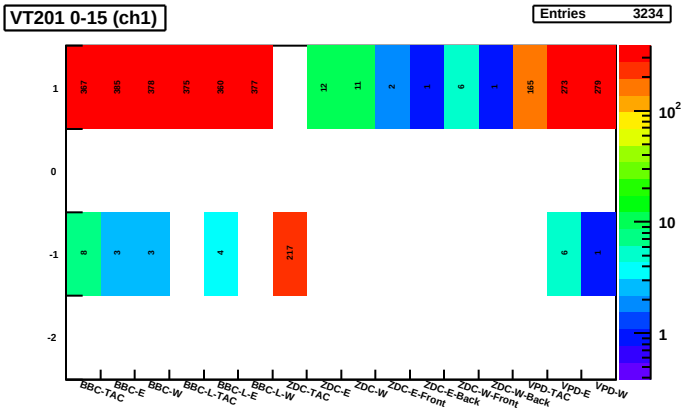

Input to FPE L1 DSM
Entries 456120
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

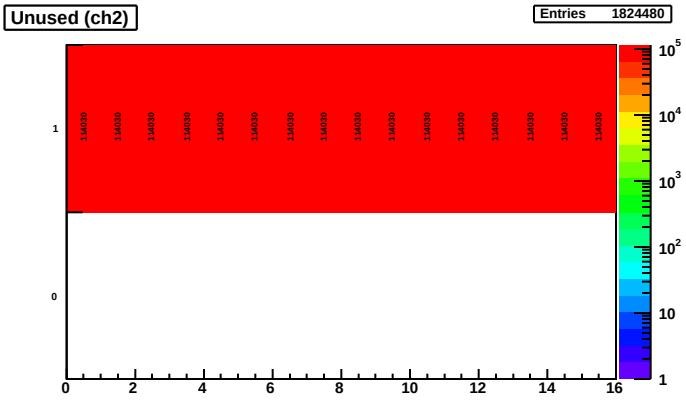

Input to FPE L1 DSM
Entries 157441
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1

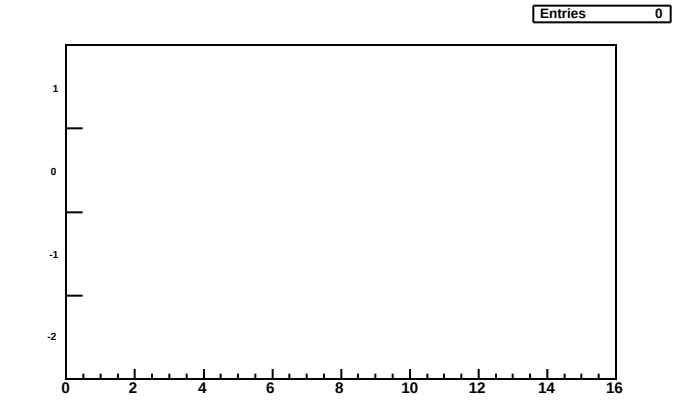

TF201 0-15 (ch0)
Entries 1824480
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

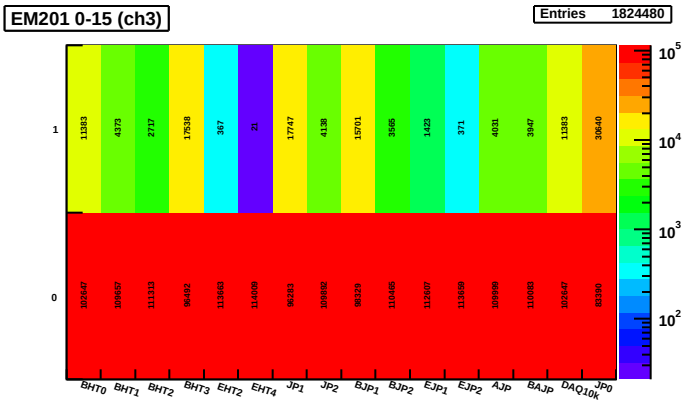

TF201 0-15 (ch0)
Entries 2663
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1824480
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 3234
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 1824480


Entries 0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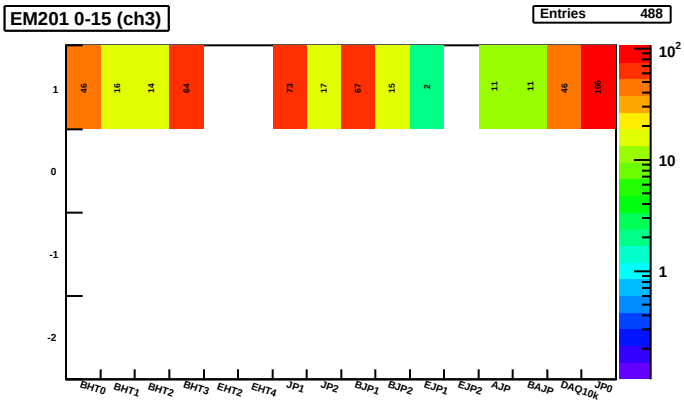
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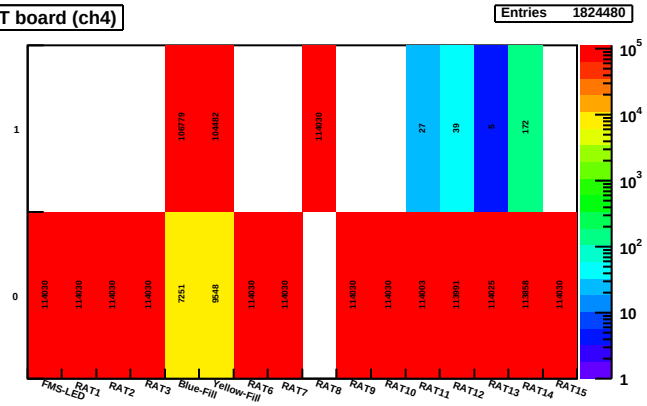
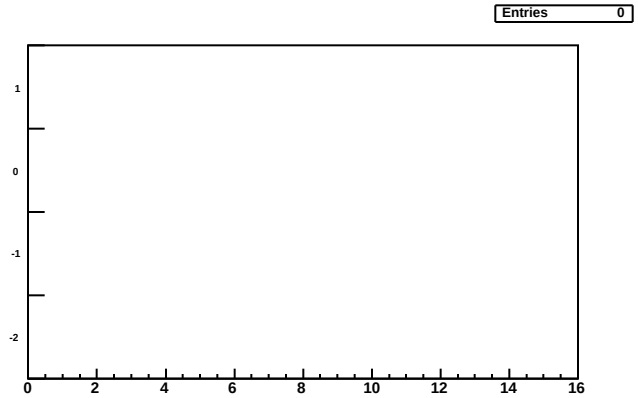
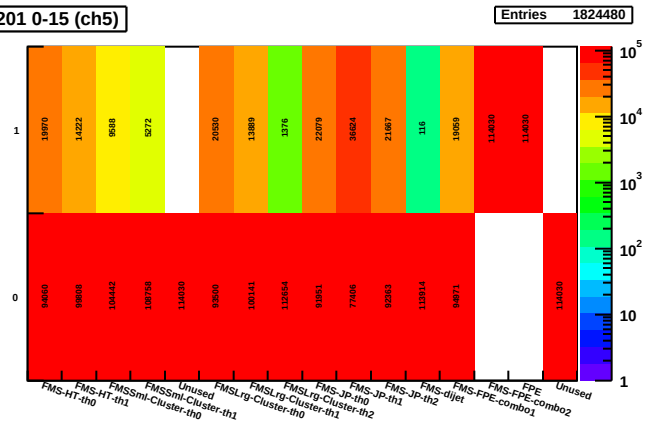
RAT board (ch4)





FP201 0-15 (ch5)



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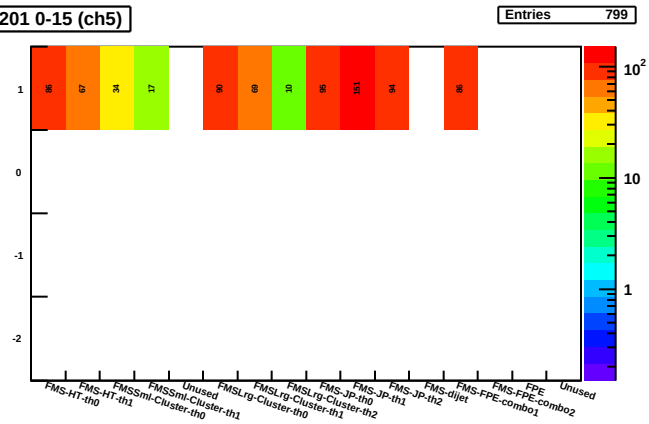

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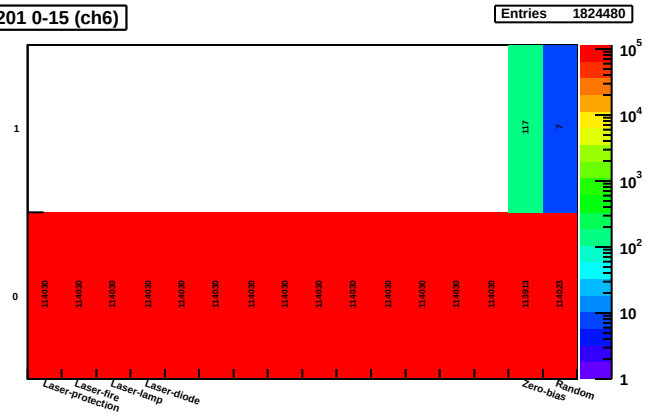

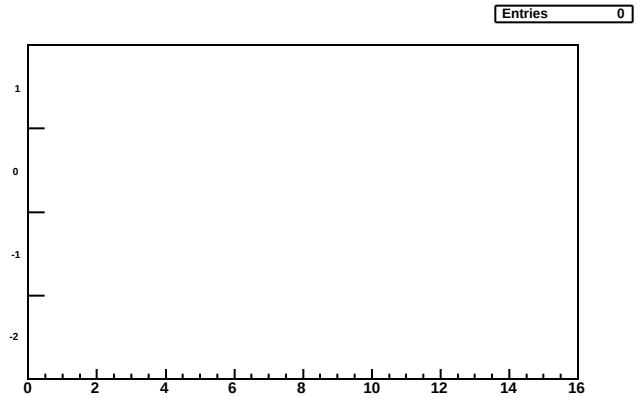
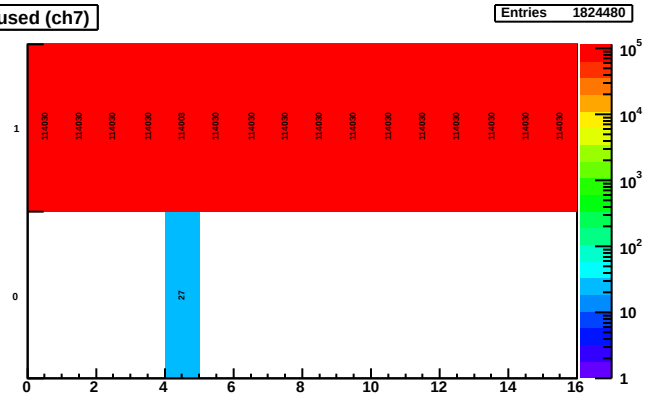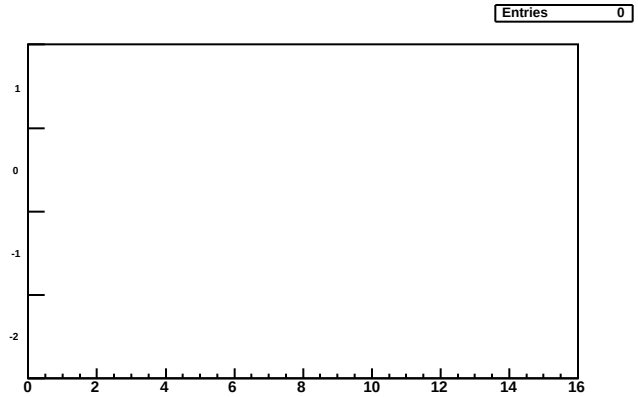
Unused (ch7)