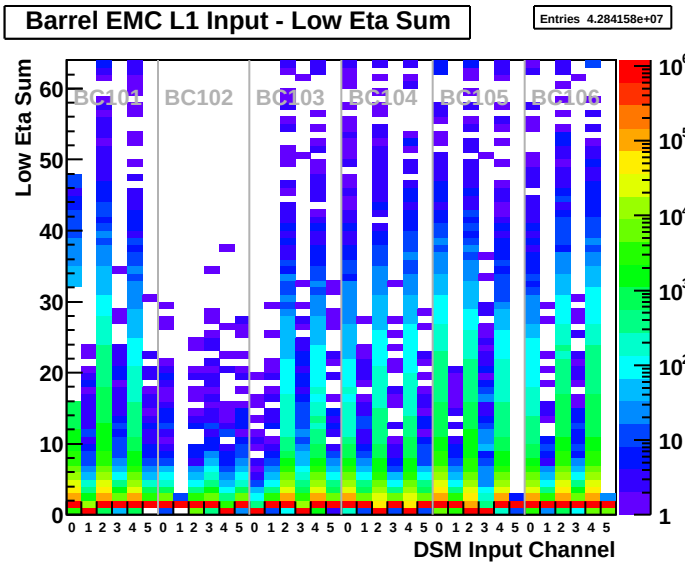
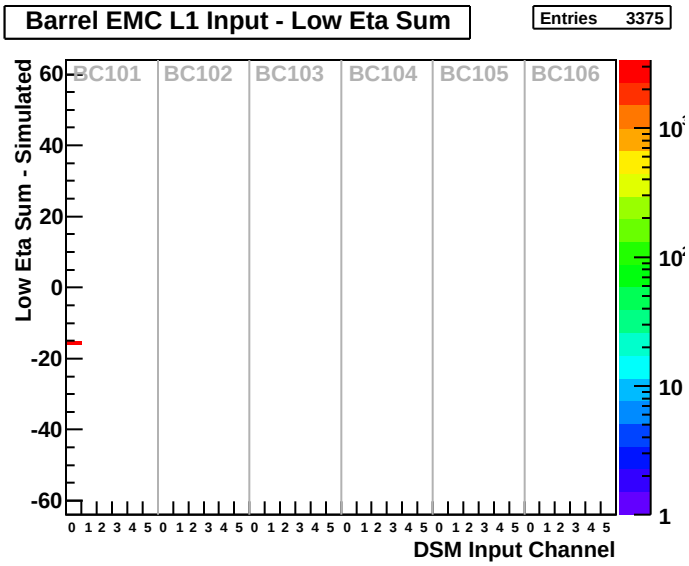
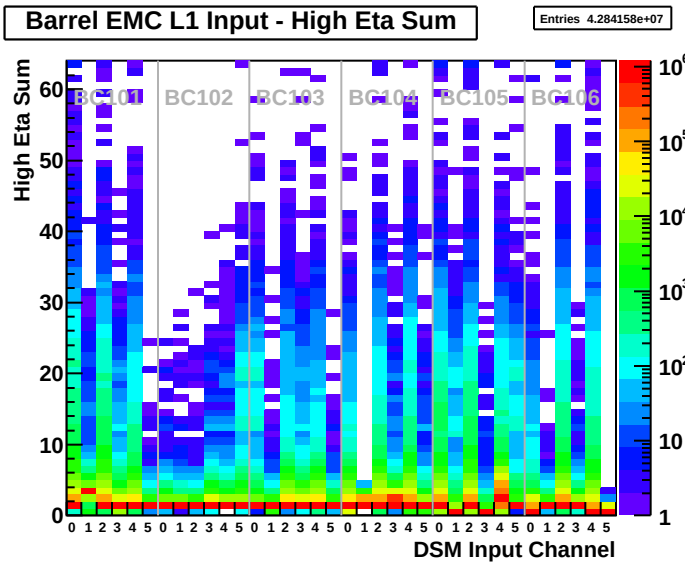
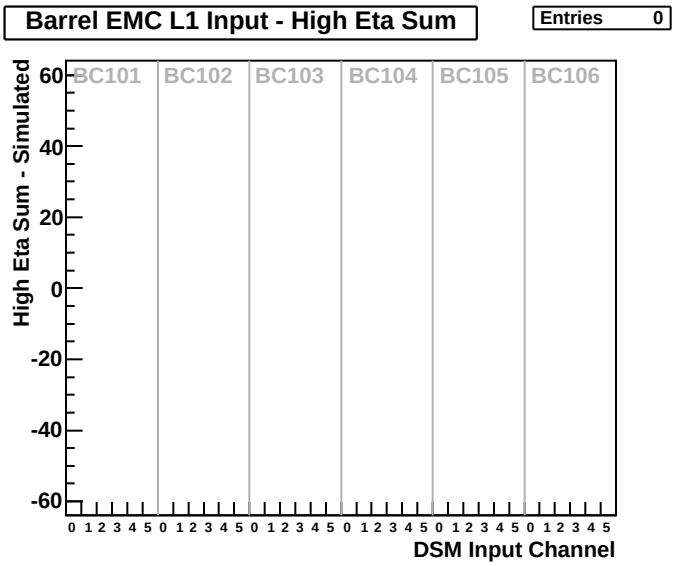
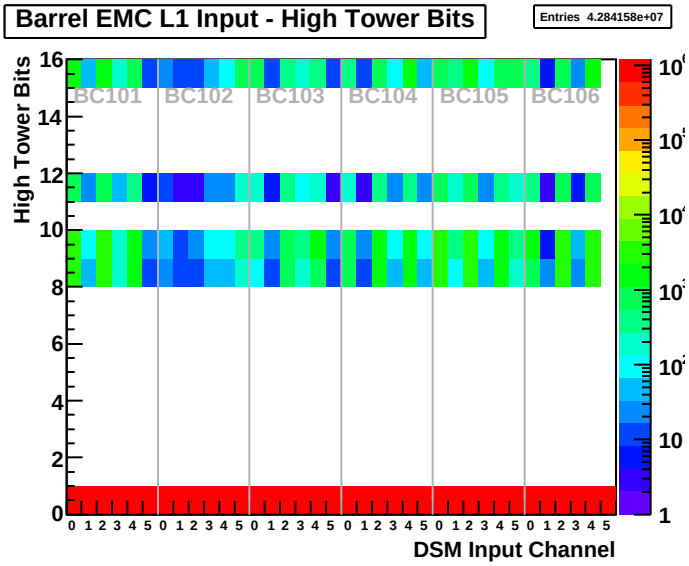
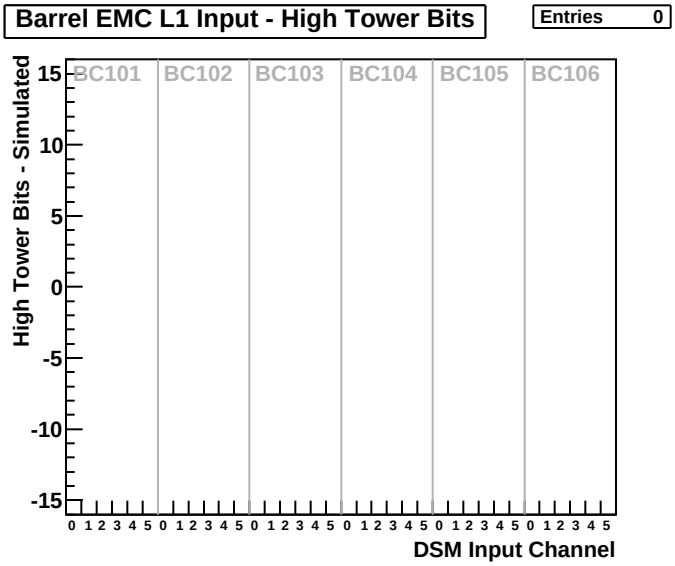

Barrel EMC L1 Input - Low Eta Sum
Entries 4.284158e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

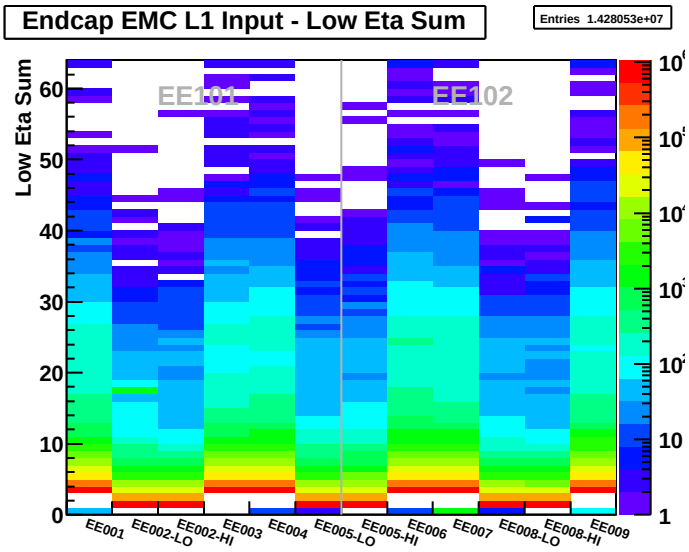

Barrel EMC L1 Input - Low Eta Sum
Entries 3375
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

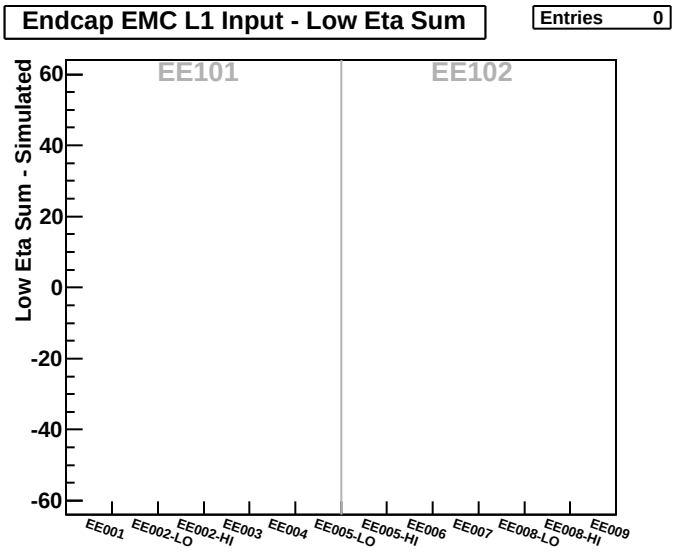

Barrel EMC L1 Input - High Eta Sum
Entries 4.284158e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

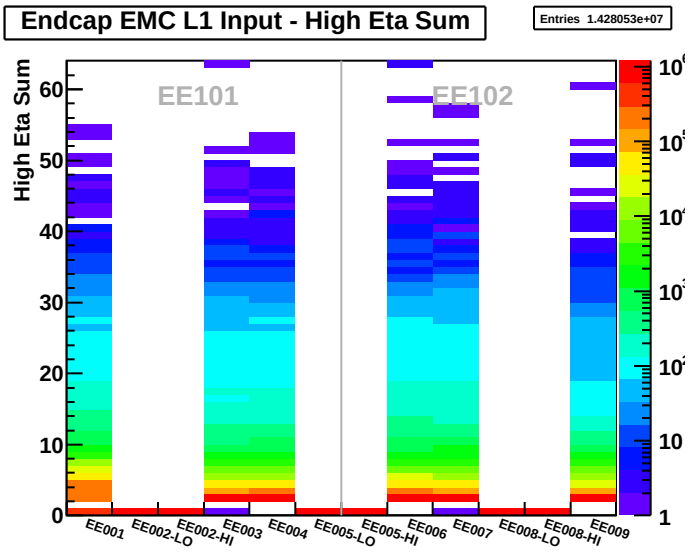

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

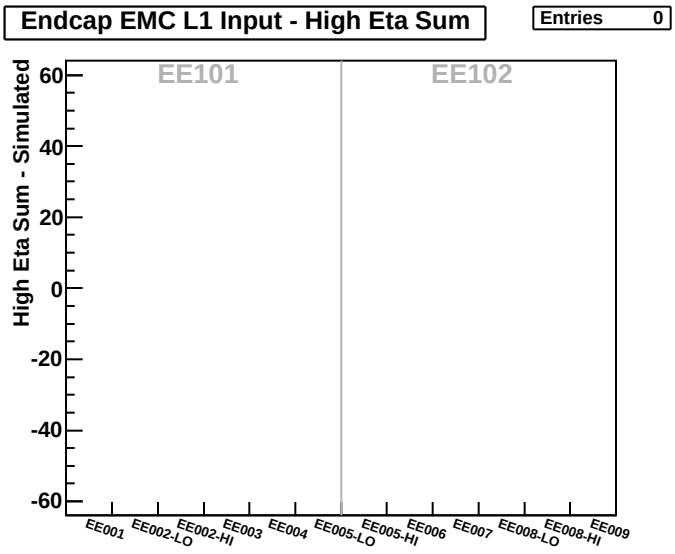

Barrel EMC L1 Input - High Tower Bits
Entries 4.284158e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

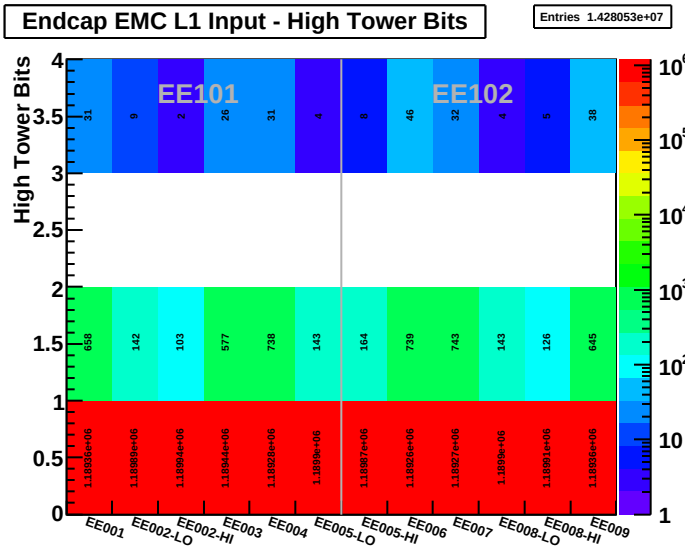

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

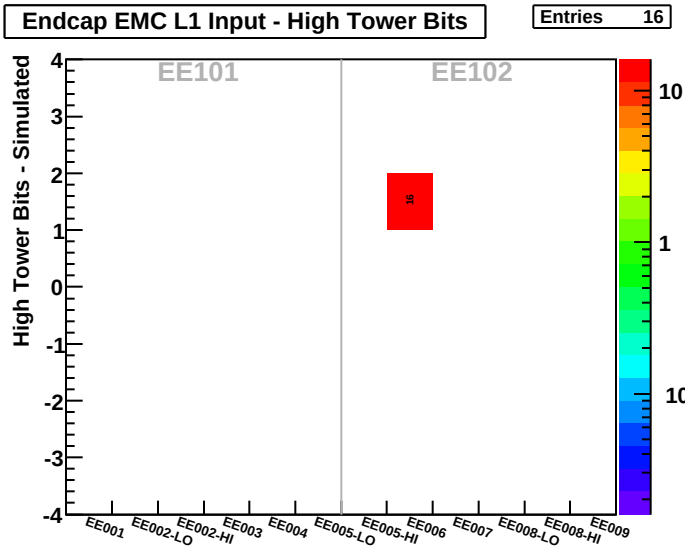

Endcap EMC L1 Input - Low Eta Sum
Entries 1.428053e+07
Low Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

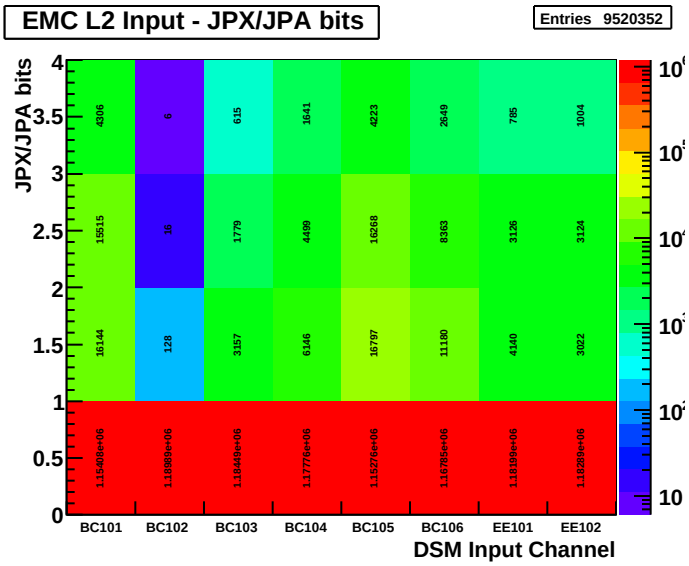

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

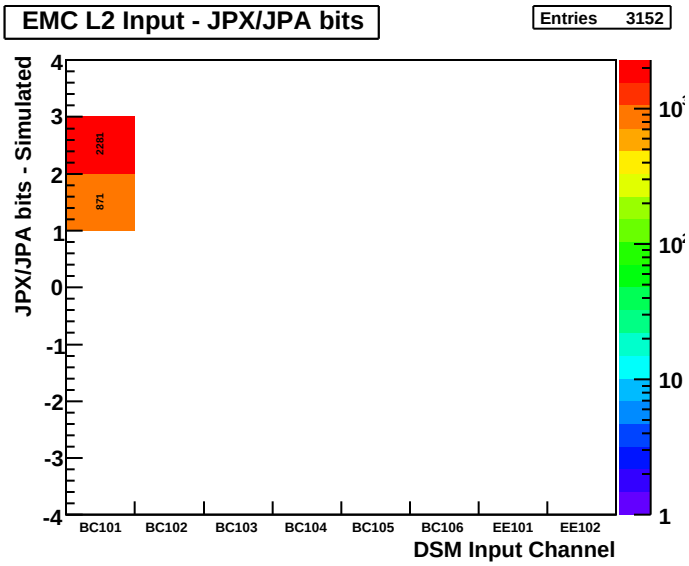

Endcap EMC L1 Input - High Eta Sum
Entries 1.428053e+07
High Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

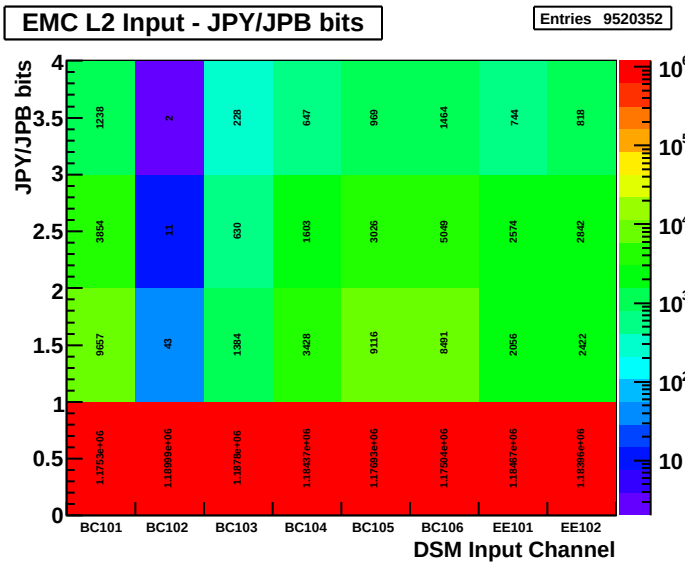

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

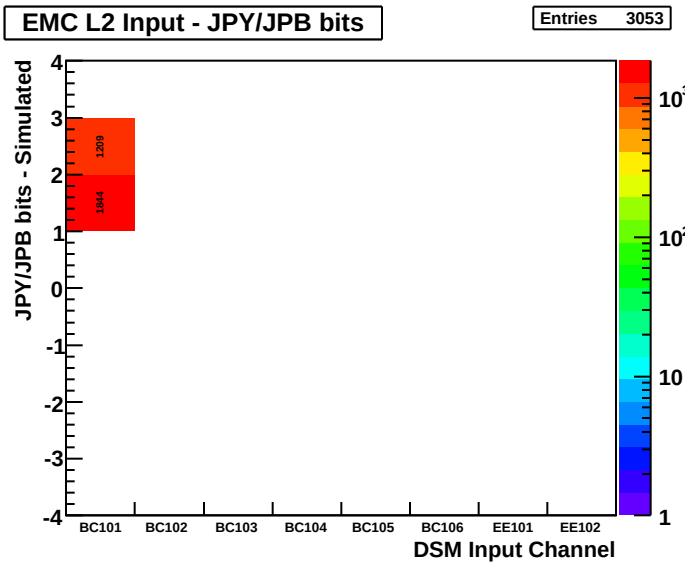

Endcap EMC L1 Input - High Tower Bits
Entries 1.428053e+07
High Tower Bits
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

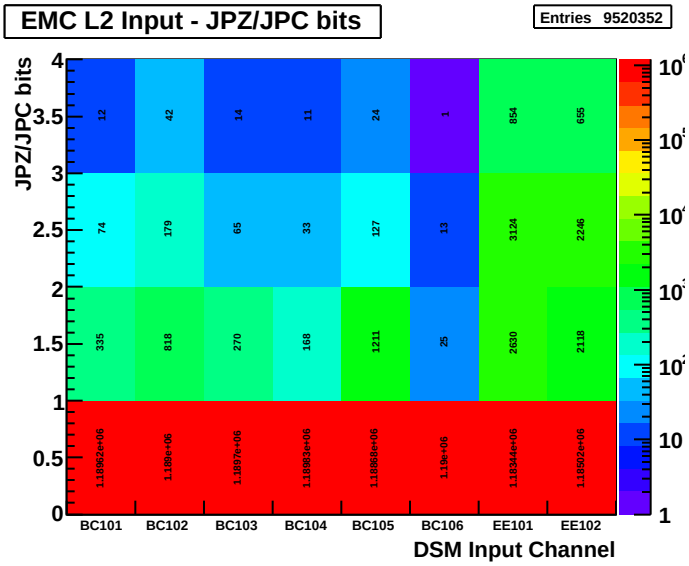

Endcap EMC L1 Input - High Tower Bits
Entries 16
High Tower Bits - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

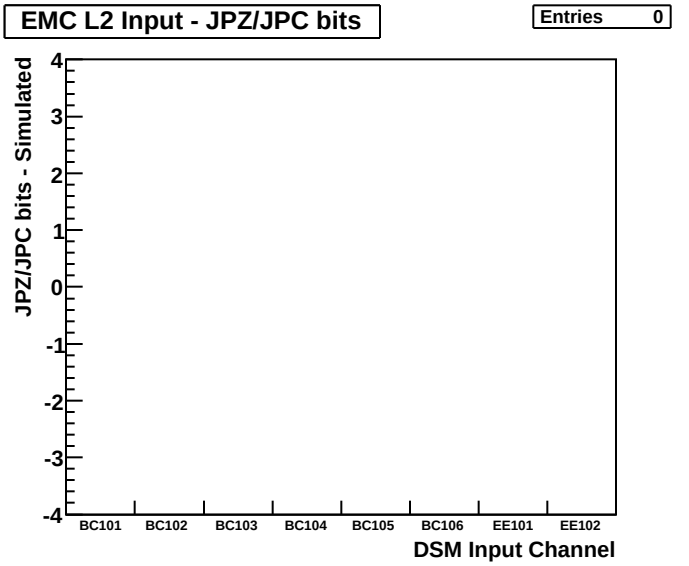

EMC L2 Input - JPX/JPA bits
Entries 9520352
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4306 6 615 1641 4223 2649 785 1004
15515 16 1779 4499 16268 8363 3126 3124
16144 128 3157 6146 16797 11180 4140 3022
1.15408e+06 1.18939e+06 1.18449e+06 1.17776e+06 1.15276e+06 1.16795e+06 1.18199e+06 1.18239e+06

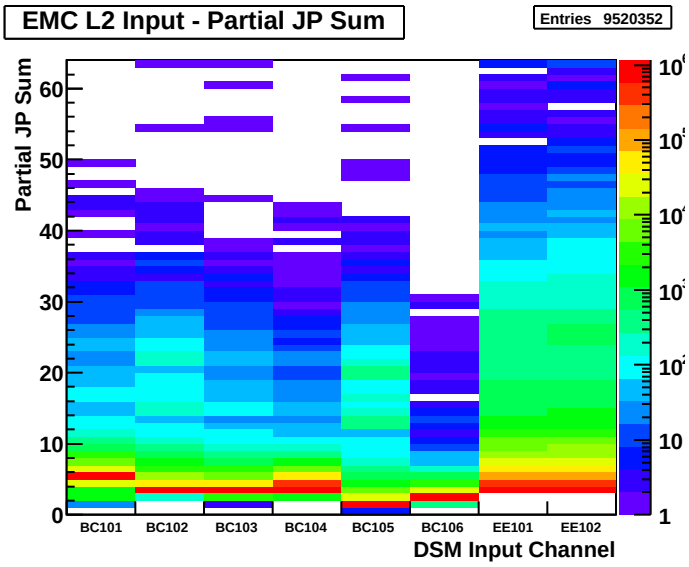

EMC L2 Input - JPX/JPA bits
Entries 3152
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2201
871

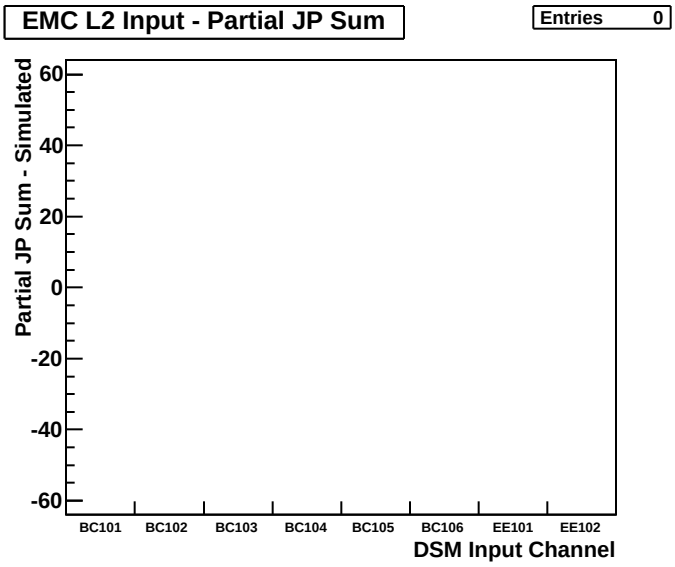

EMC L2 Input - JPY/JPB bits
Entries 9520352
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1238 2 228 647 969 1464 744 818
3854 11 630 1603 3026 5049 2574 2942
9657 43 1384 3428 9116 8491 2056 2422
1.1753e+06 1.18999e+06 1.1878e+06 1.18437e+06 1.17693e+06 1.17504e+06 1.18497e+06 1.18396e+06

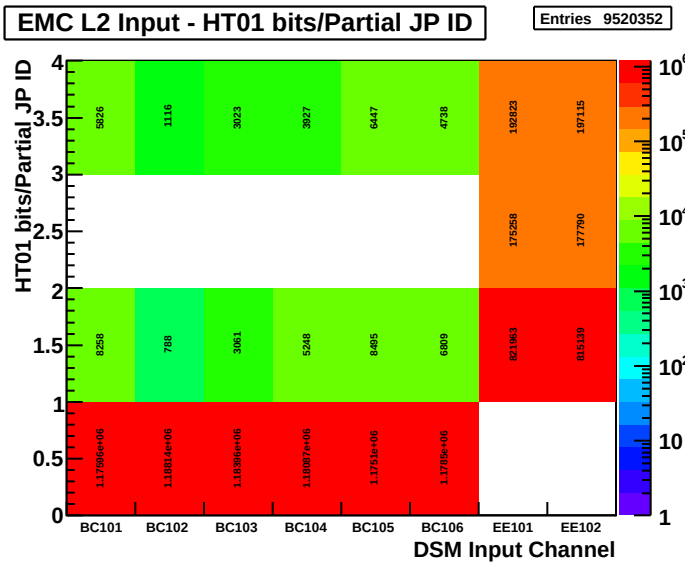

EMC L2 Input - JPY/JPB bits
Entries 3053
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1209
1844

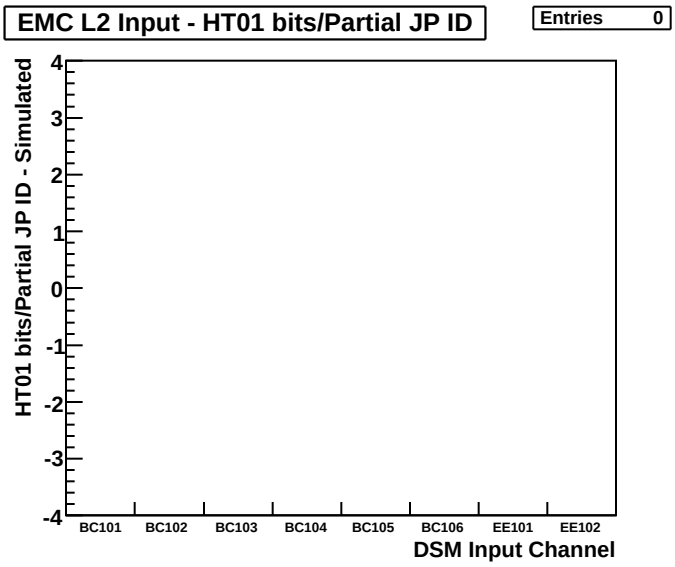

EMC L2 Input - JPZ/JPC bits
Entries 9520352
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
12 42 14 11 24 1 854 656
74 179 65 33 127 13 3124 2246
335 818 270 168 1211 25 2630 2118
1.18962e+06 1.19e+06 1.1897e+06 1.18983e+06 1.18988e+06 1.19e+06 1.18344e+06 1.18502e+06

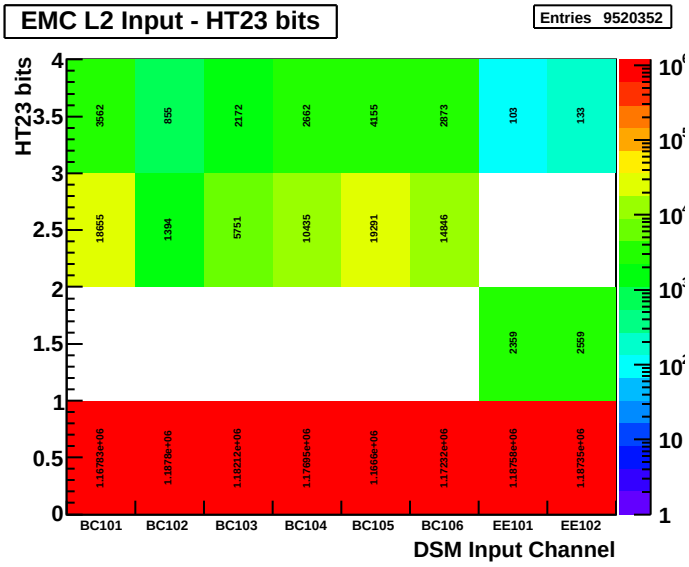

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

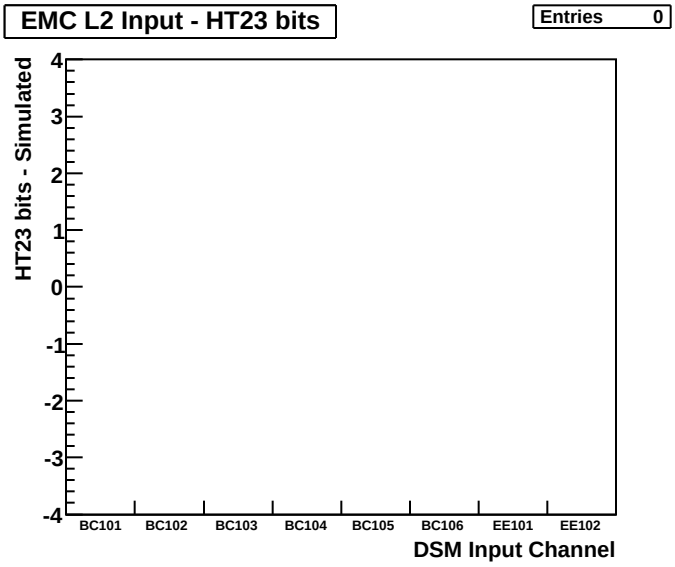

EMC L2 Input - Partial JP Sum
Entries 9520352
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

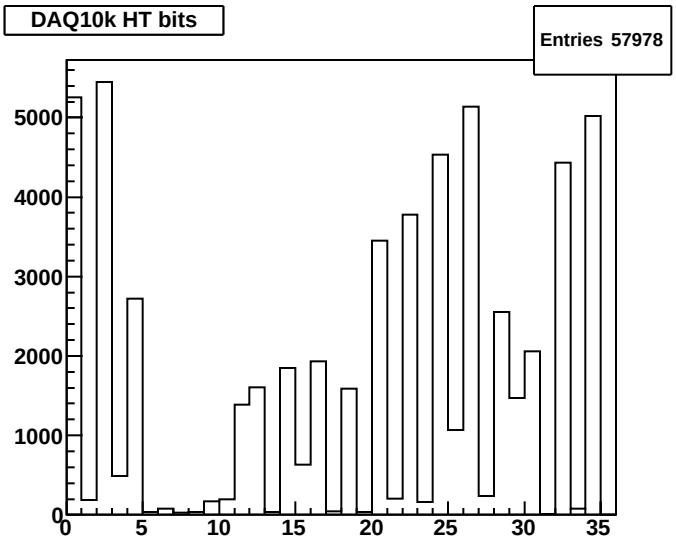

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

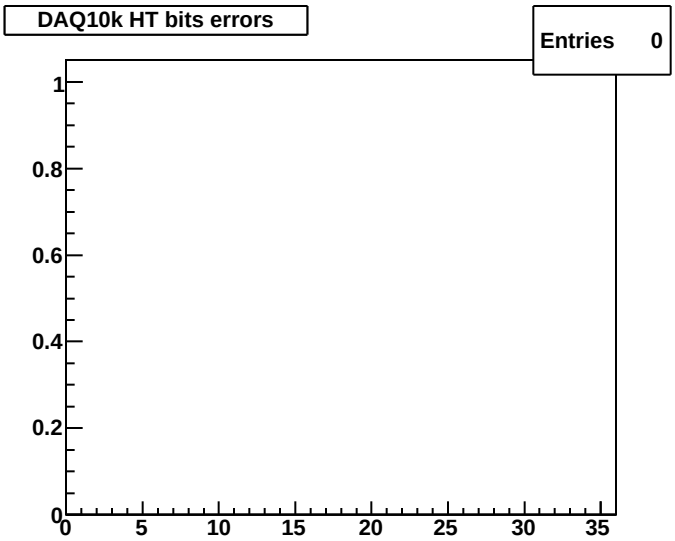

EMC L2 Input - HT01 bits/Partial JP ID
Entries 9520352
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

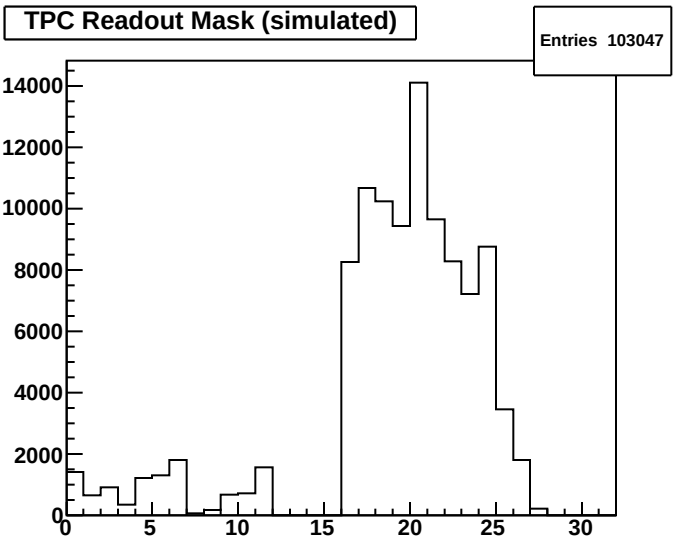

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

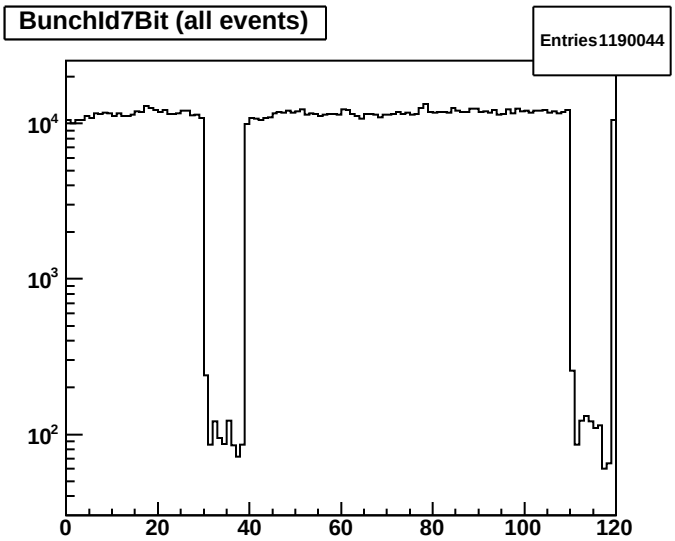

EMC L2 Input - HT23 bits
Entries 9520352
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

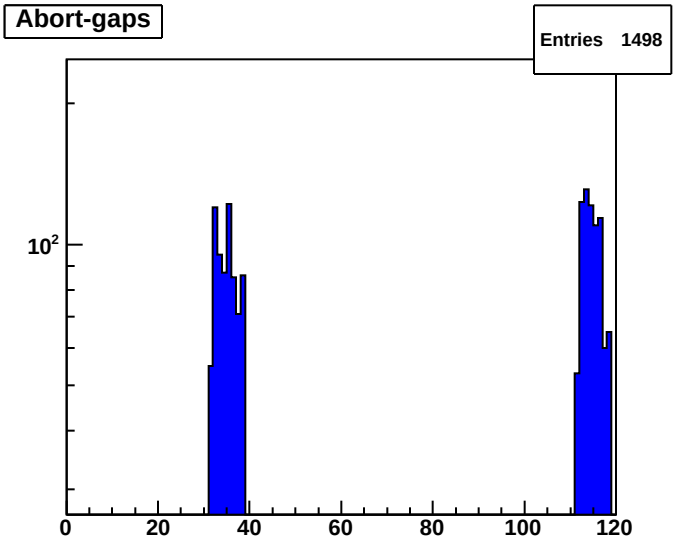

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

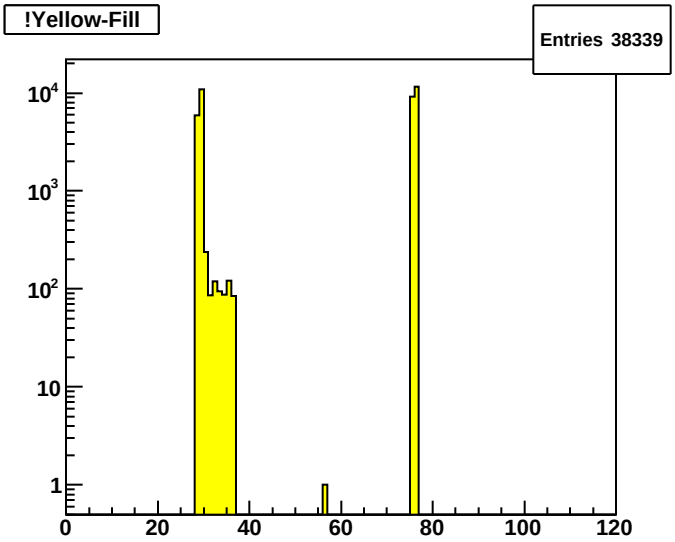

DAQ10k HT bits
Entries 57978
0
1000
2000
3000
4000
5000
0 5 10 15 20 25 30 35

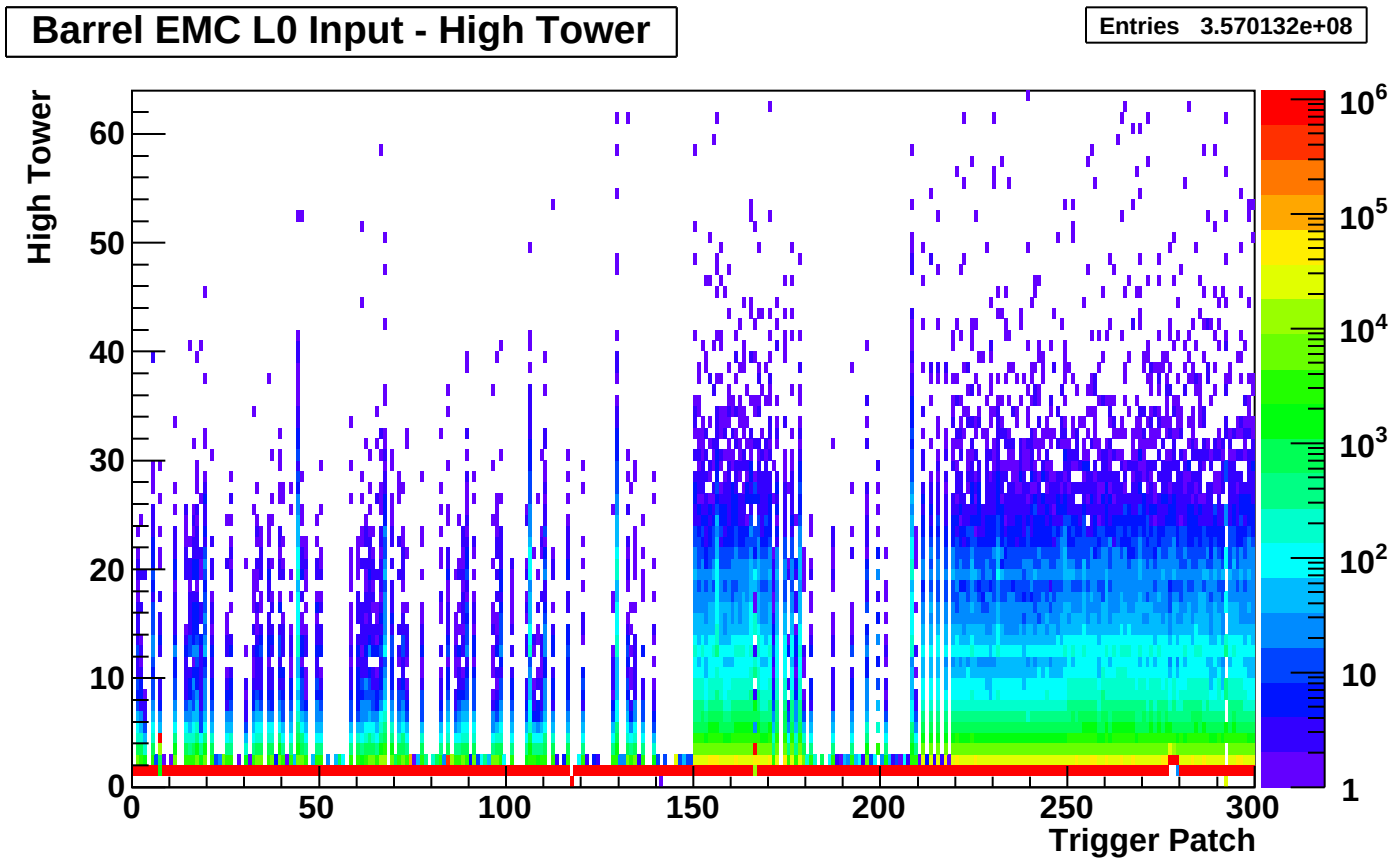

DAQ10k HT bits errors
Entries 0
0
0.2
0.4
0.6
0.8
1
0 5 10 15 20 25 30 35

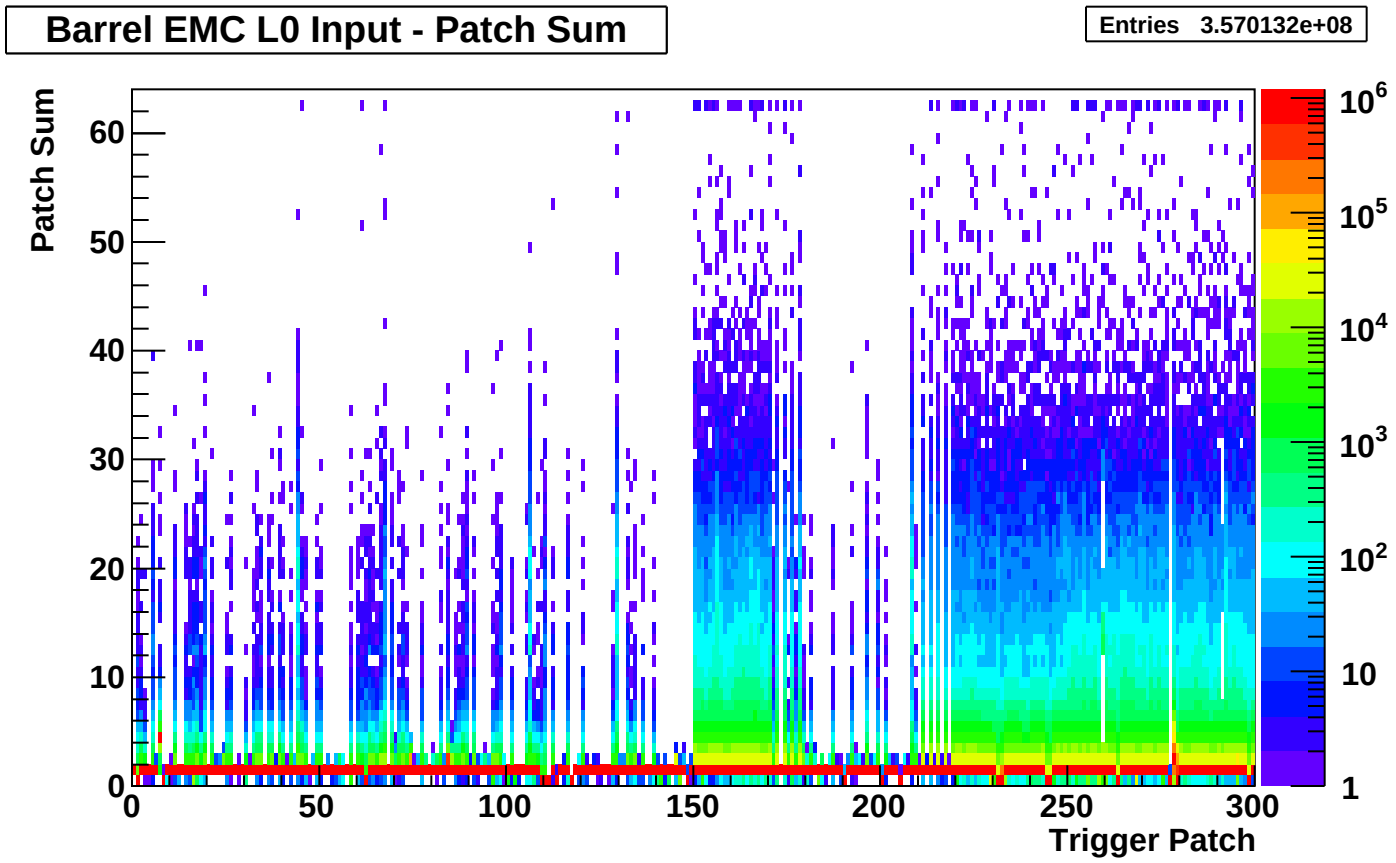

TPC Readout Mask (simulated)
Entries 103047
0
2000
4000
6000
8000
10000
12000
14000
0 5 10 15 20 25 30

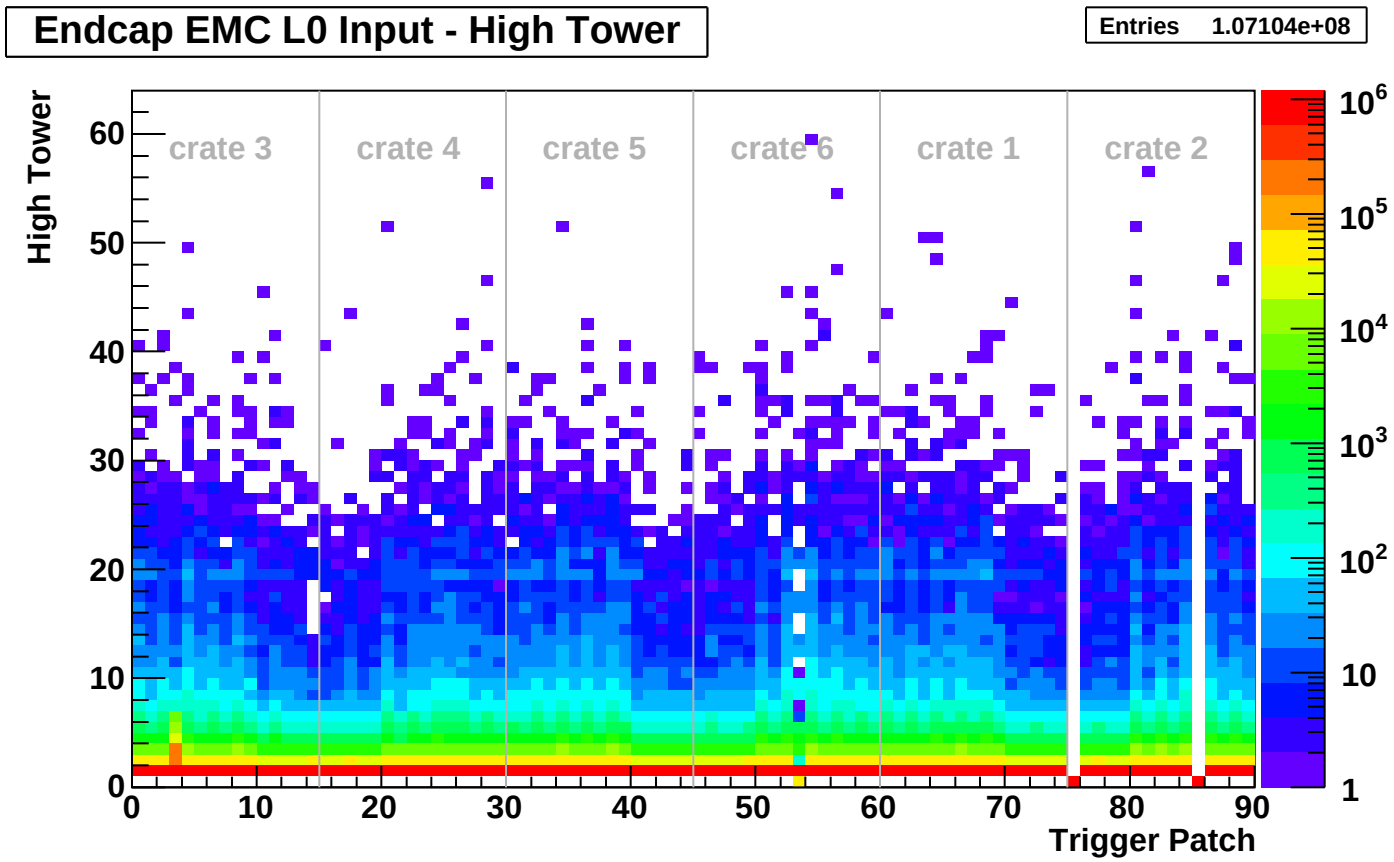

BunchId7Bit (all events)
Entries 1190044
10^2
10^3
10^4
0 20 40 60 80 100 120

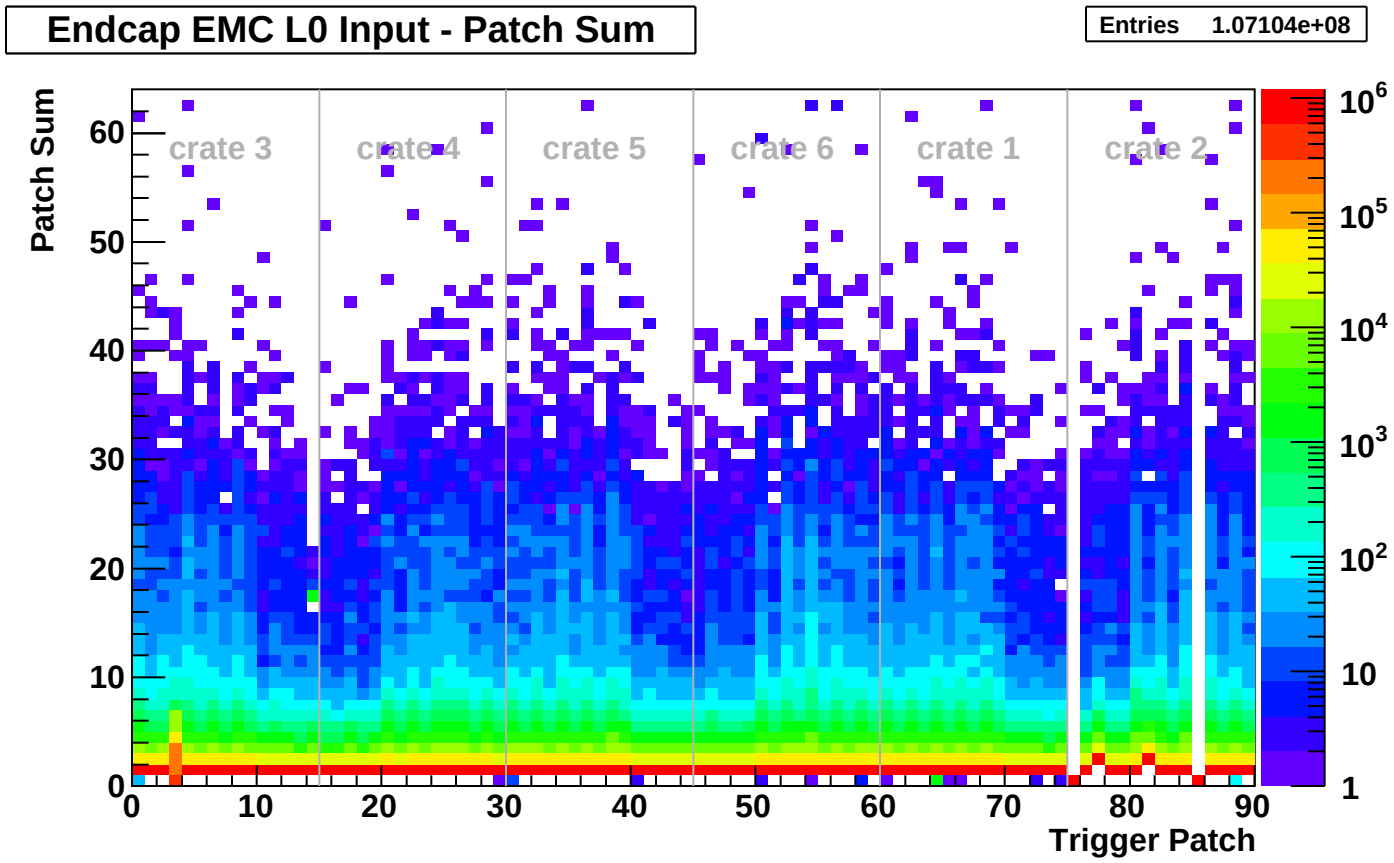

Abort-gaps
Entries 1498
10^2
0 20 40 60 80 100 120

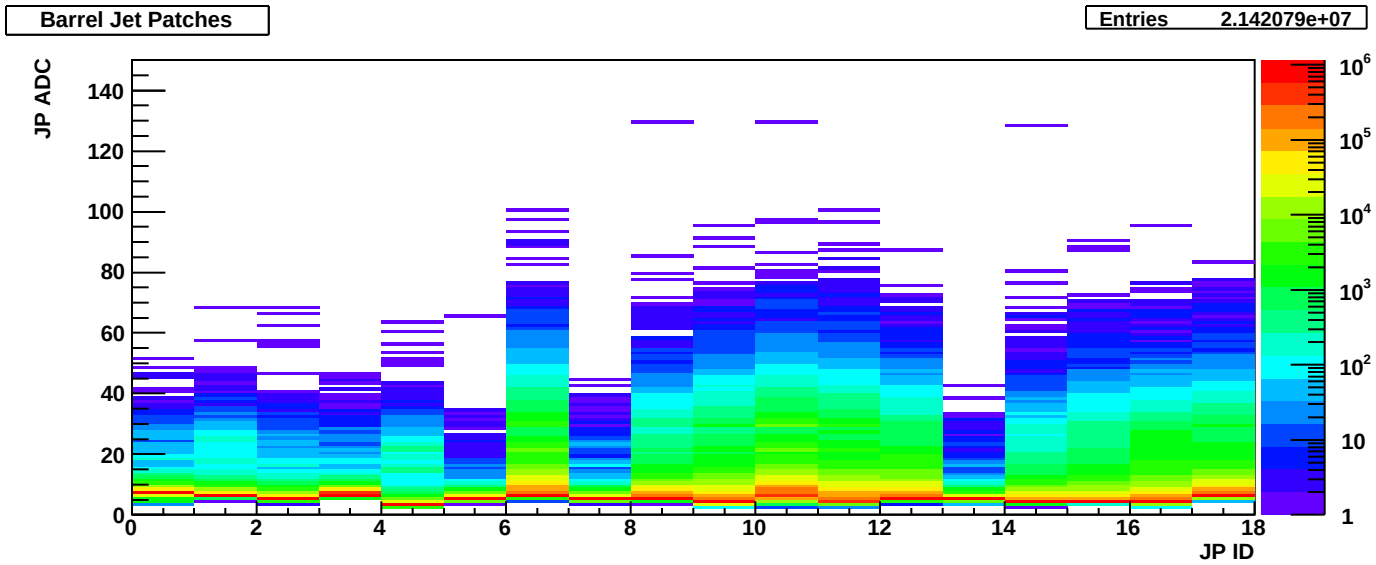

!Yellow-Fill
Entries 38339
1
10
10^2
10^3
10^4
0 20 40 60 80 100 120

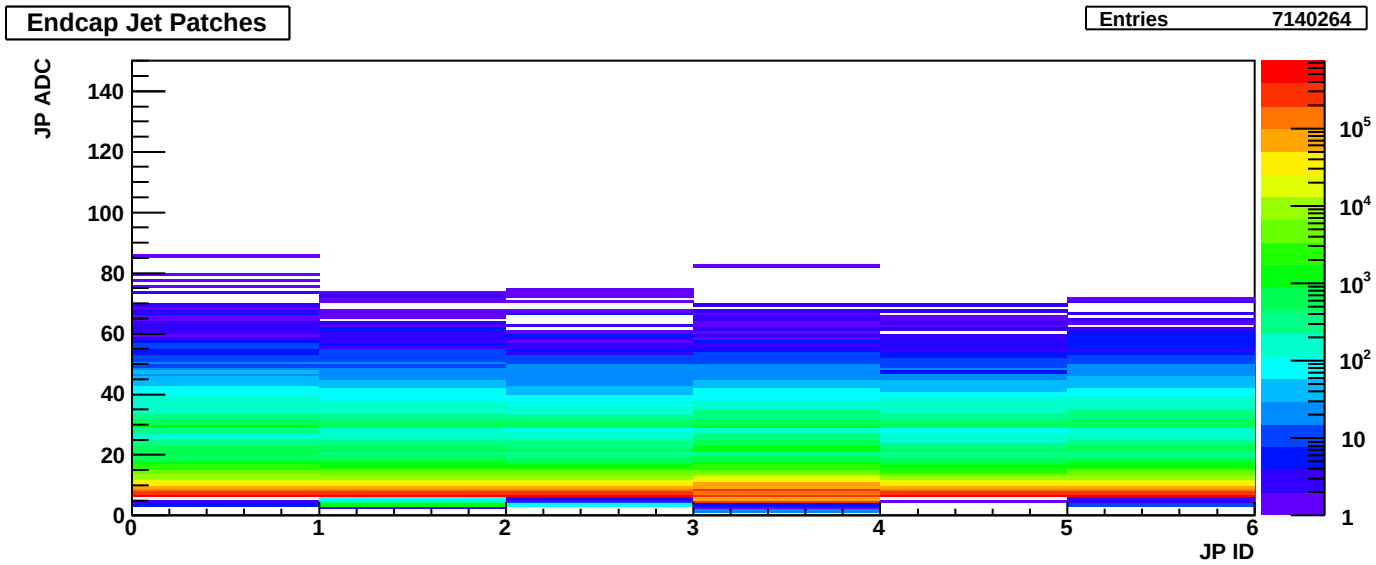

Barrel EMC L0 Input - High Tower
Entries 3.570132e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

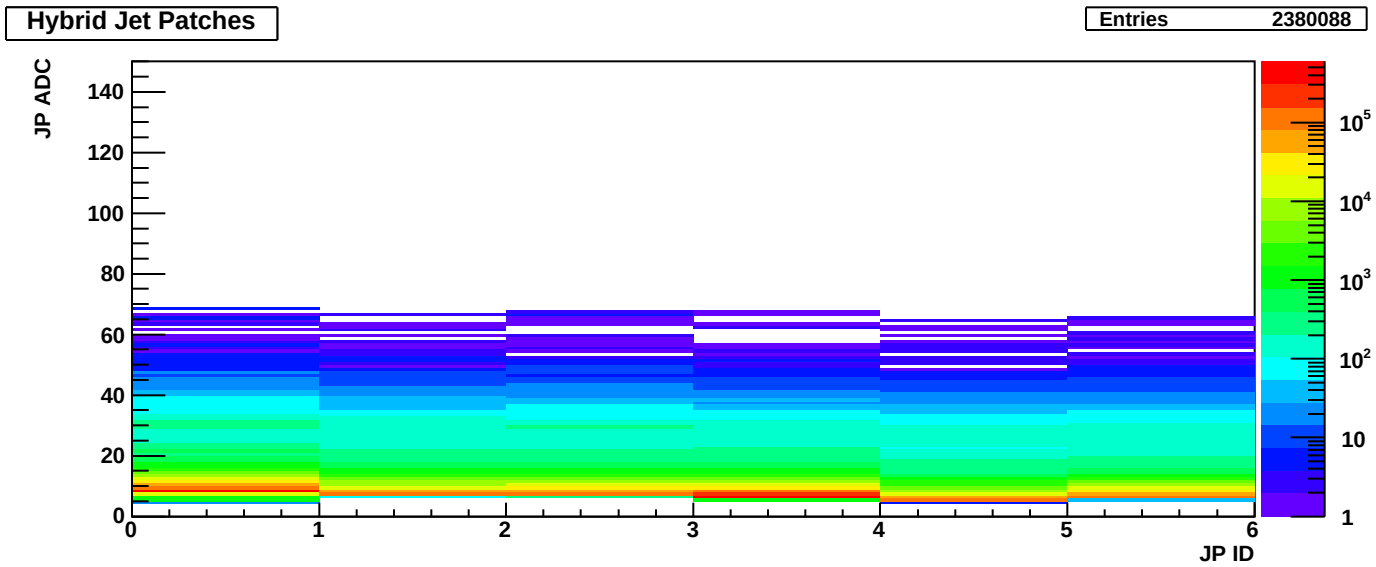

Barrel EMC L0 Input - Patch Sum
Entries 3.570132e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

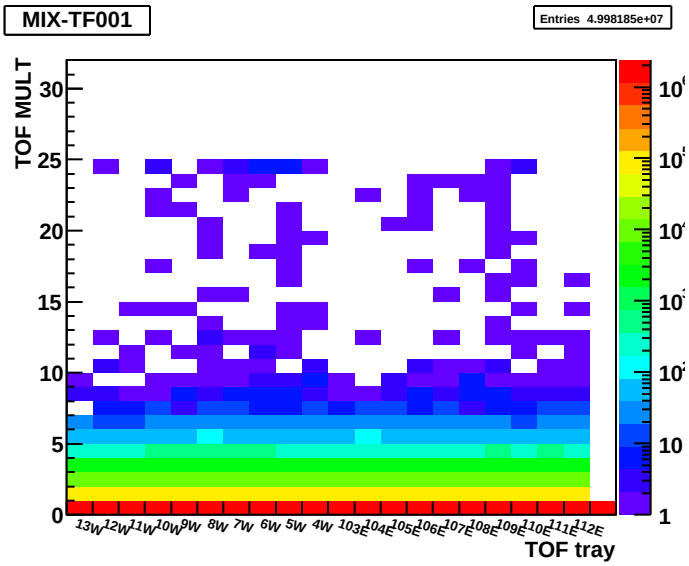

Endcap EMC L0 Input - High Tower
Entries 1.07104e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

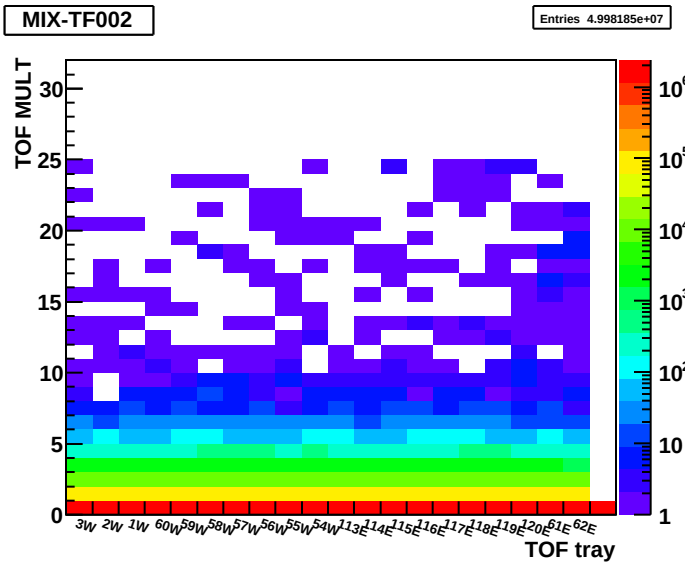

Endcap EMC L0 Input - Patch Sum
Entries 1.07104e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

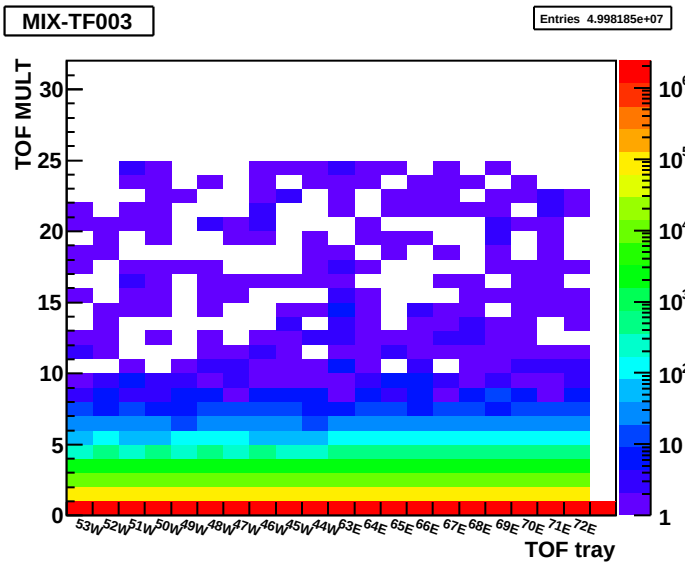

Barrel Jet Patches
Entries 2.142079e+07
JP ADC
JP ID

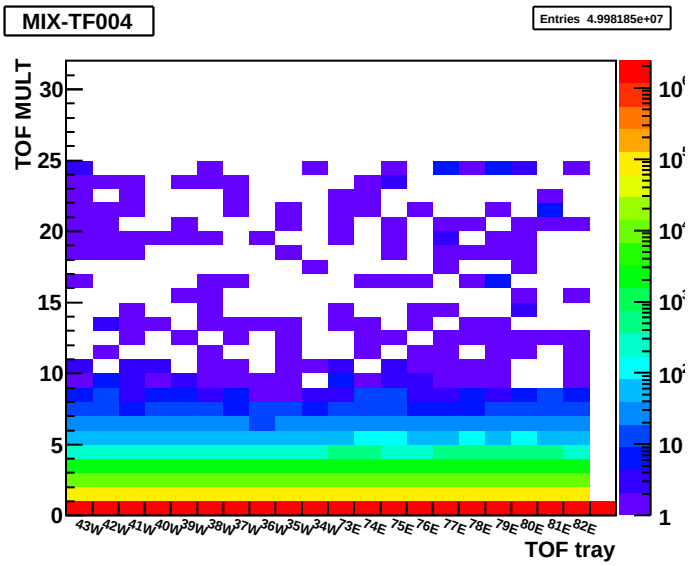

Endcap Jet Patches
Entries 7140264
JP ADC
JP ID

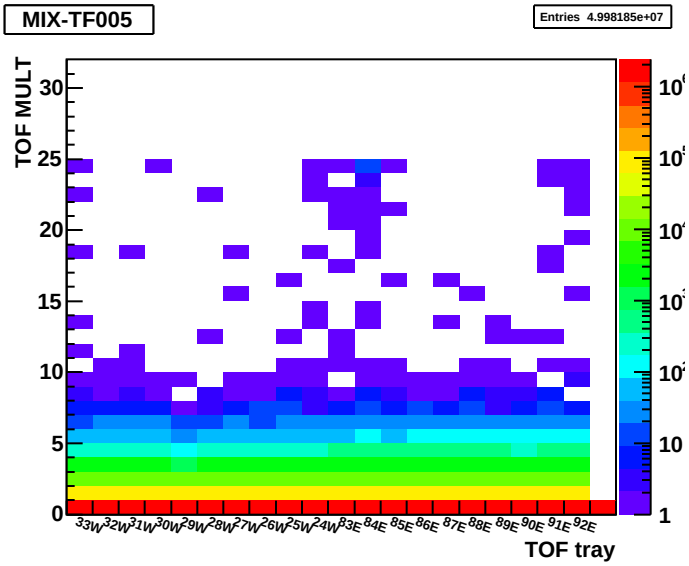

Hybrid Jet Patches
Entries 2380088
JP ADC
JP ID

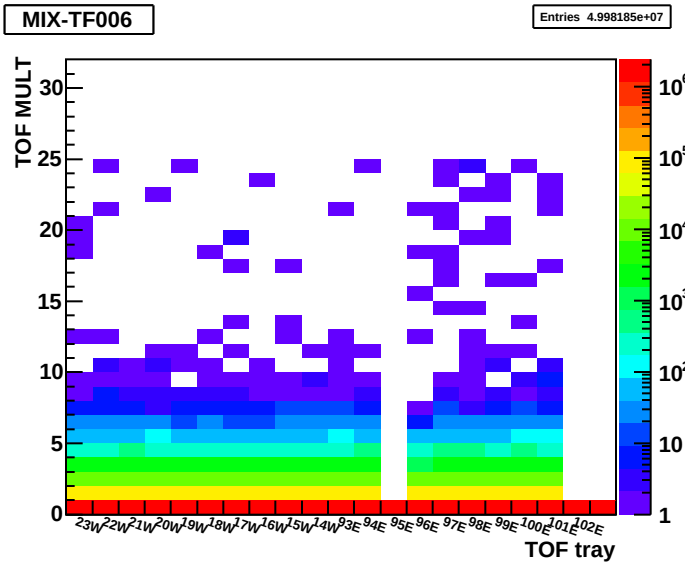

MIX-TF001
Entries 4.998185e+07
TOF MULT
TOF tray

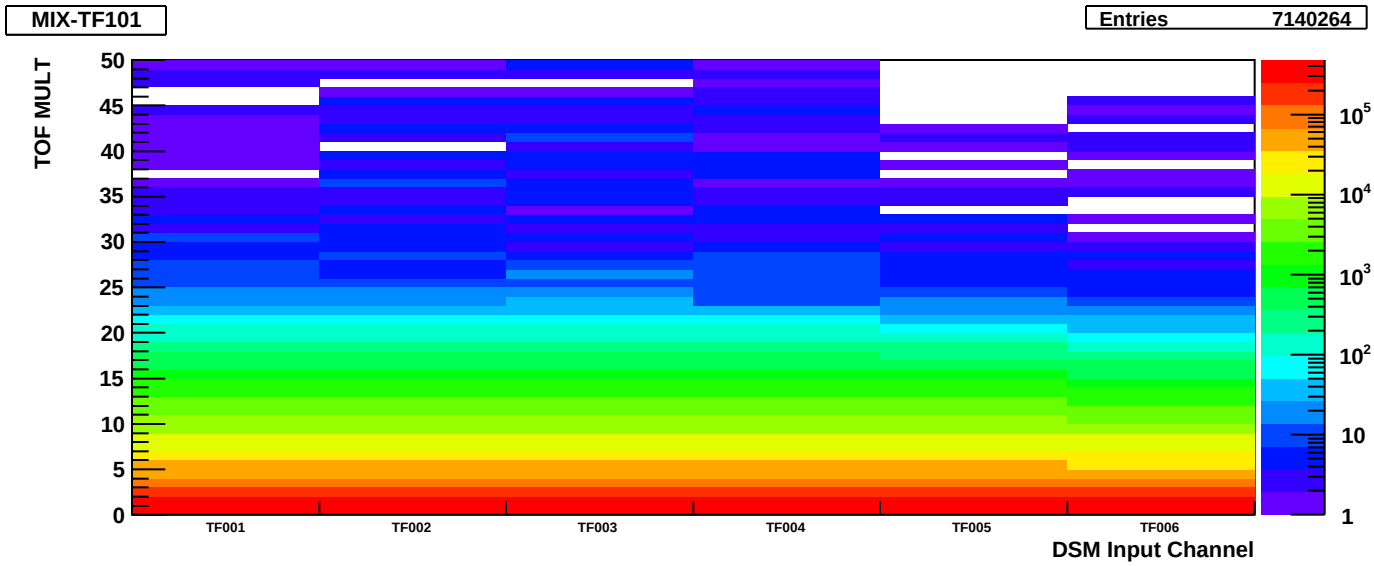

MIX-TF002
Entries 4.998185e+07
TOF MULT
TOF tray

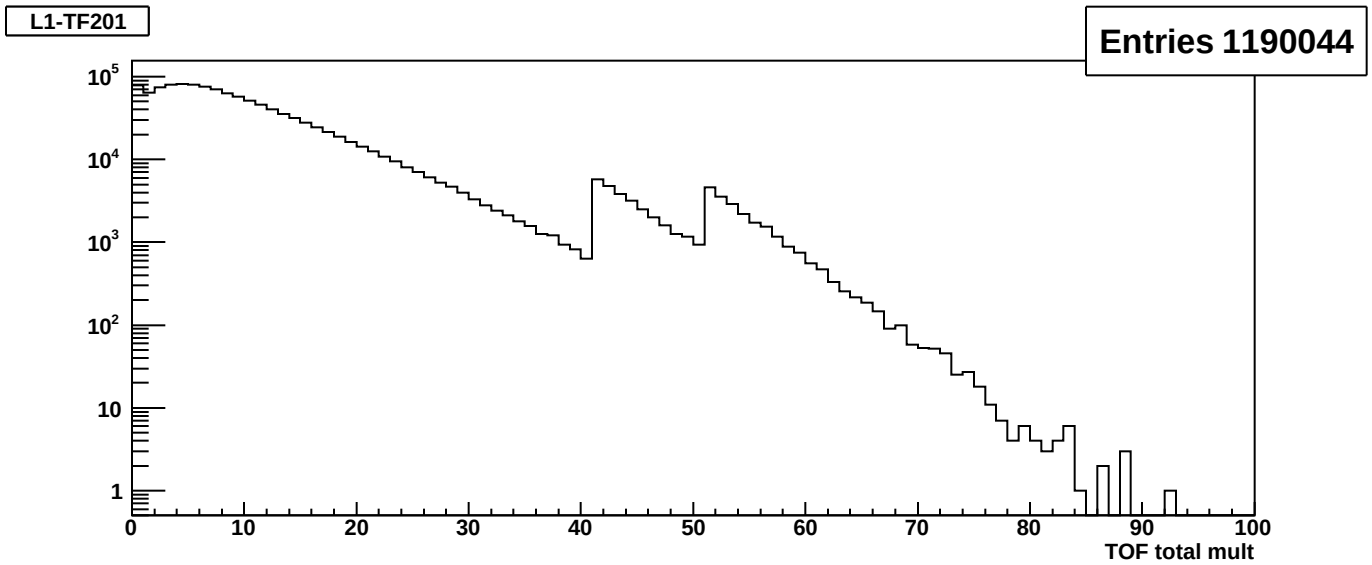

MIX-TF003
Entries 4.998185e+07
TOF MULT
TOF tray

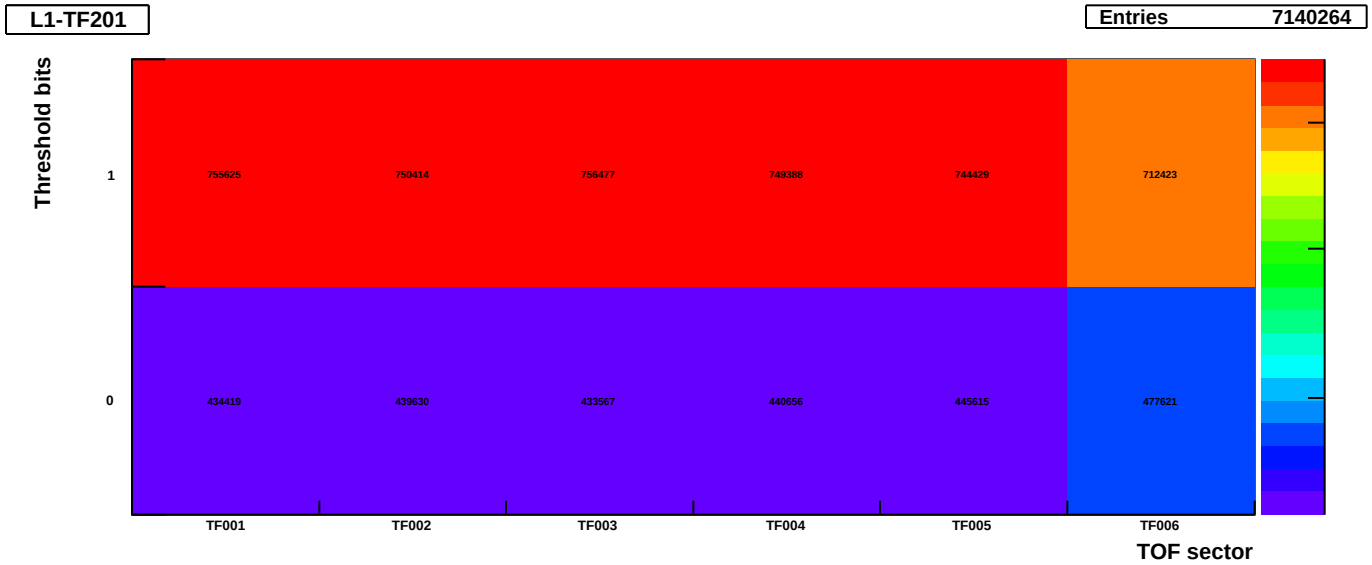

MIX-TF004
Entries 4.998185e+07
TOF MULT
TOF tray

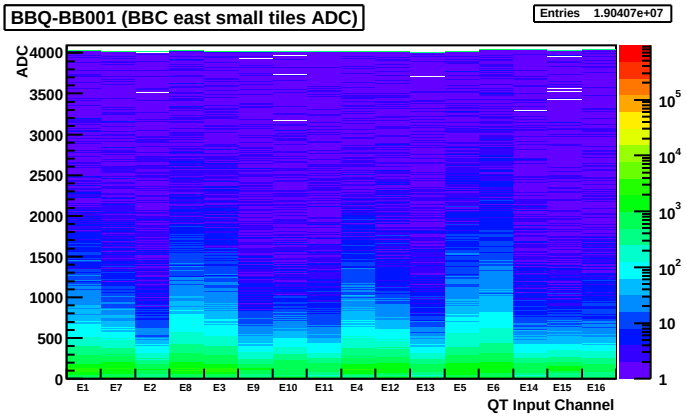

MIX-TF005
Entries 4.998185e+07
TOF MULT
TOF tray

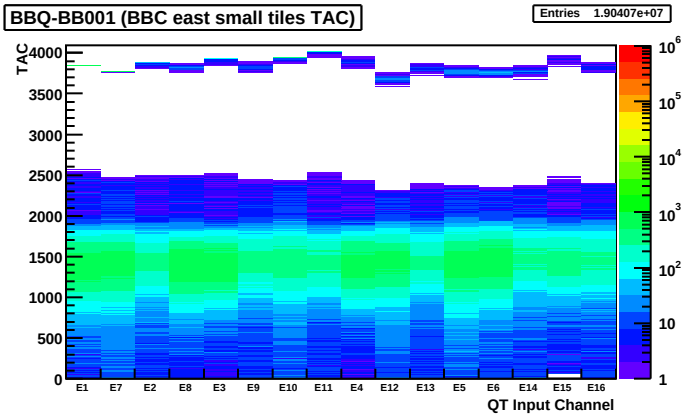

MIX-TF006
Entries 4.998185e+07
TOF MULT
TOF tray

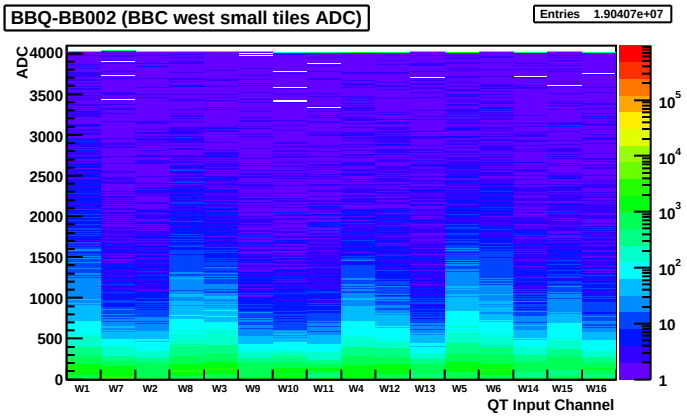

MIX-TF101
Entries 7140264
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

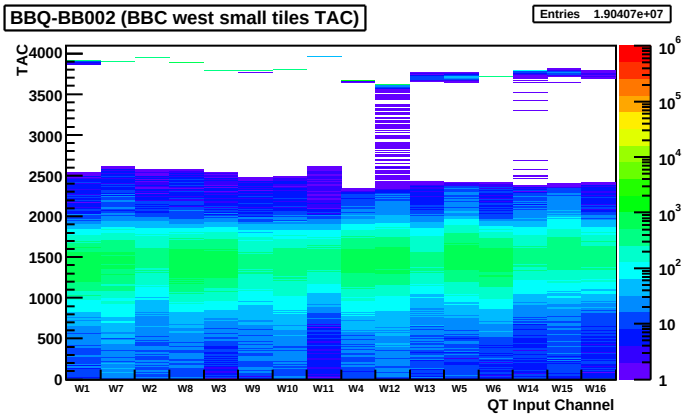

L1-TF201
Entries 1190044
TOF total mult

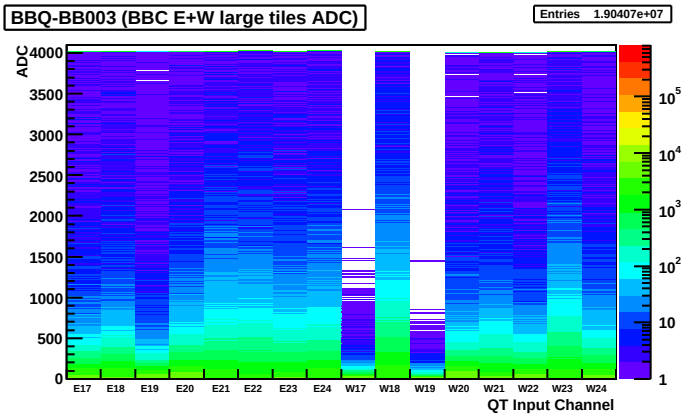

L1-TF201
Entries 7140264
Threshold bits
755625
750414
756477
749388
744429
712423
434419
439630
433567
440656
445615
477621
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

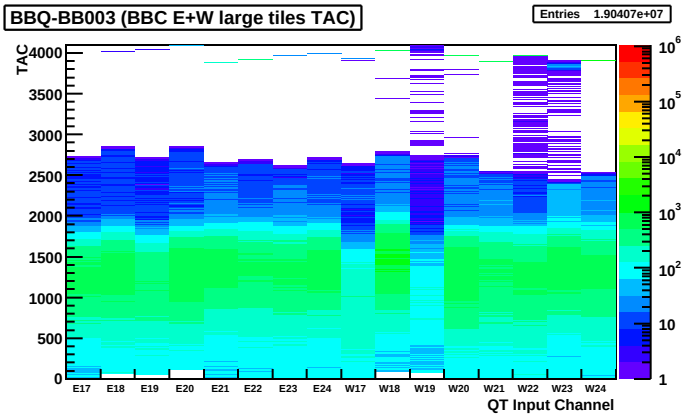

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.90407e+07
ADC
QT Input Channel

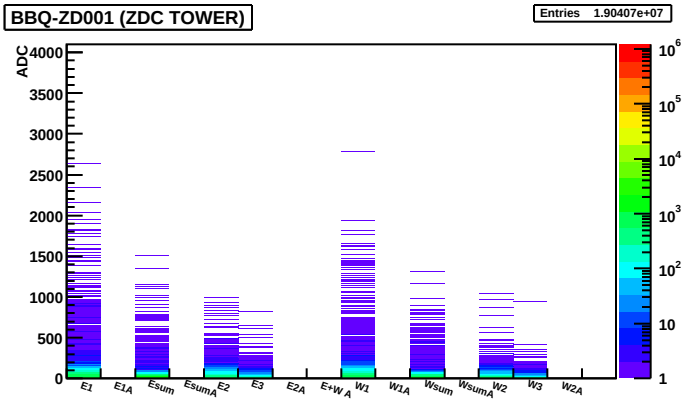

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.90407e+07
TAC
QT Input Channel

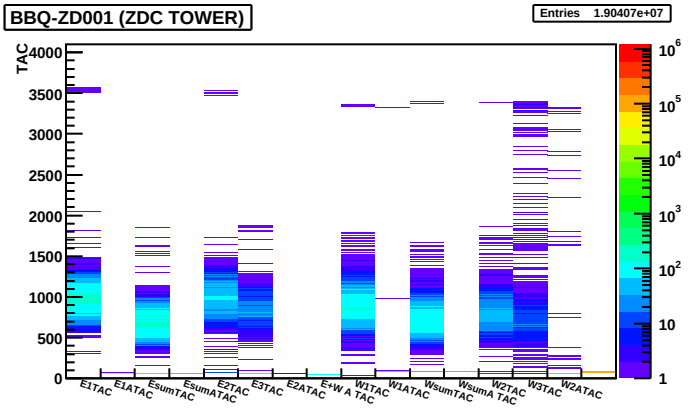

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.90407e+07
ADC
QT Input Channel

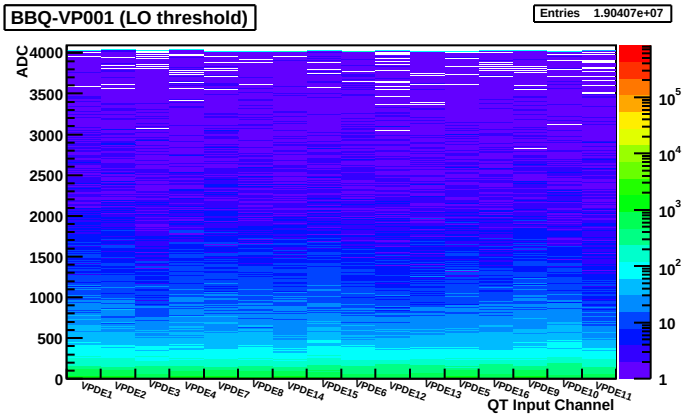

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.90407e+07
TAC
QT Input Channel

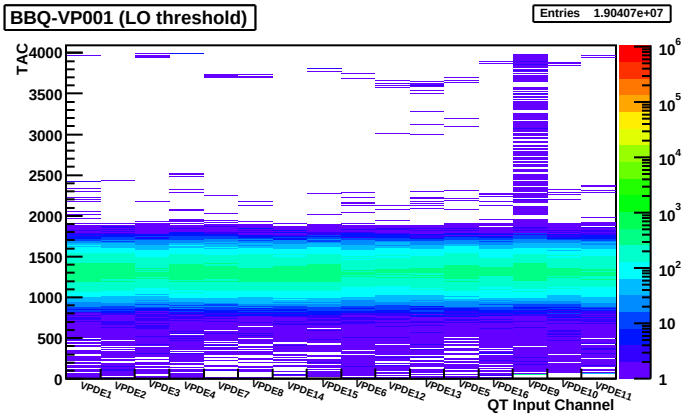

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.90407e+07
ADC
QT Input Channel

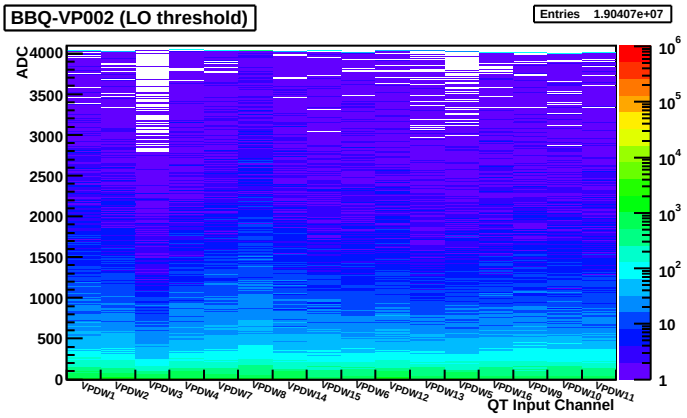

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.90407e+07
TAC
QT Input Channel

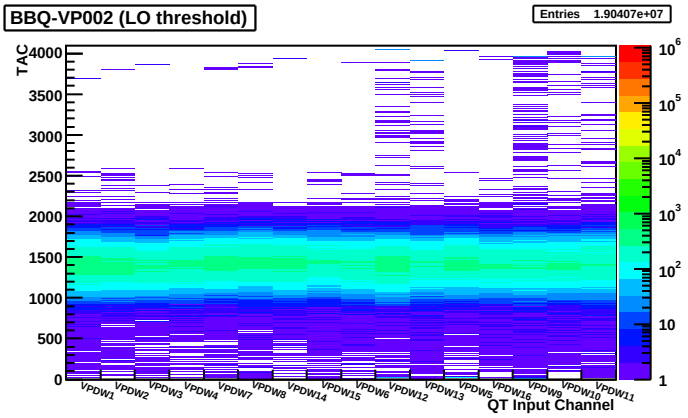

BBQ-ZD001 (ZDC TOWER)
Entries 1.90407e+07
ADC

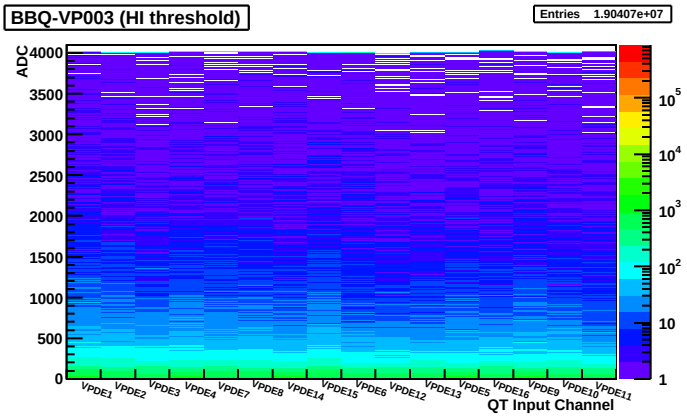

BBQ-ZD001 (ZDC TOWER)
Entries 1.90407e+07
TAC

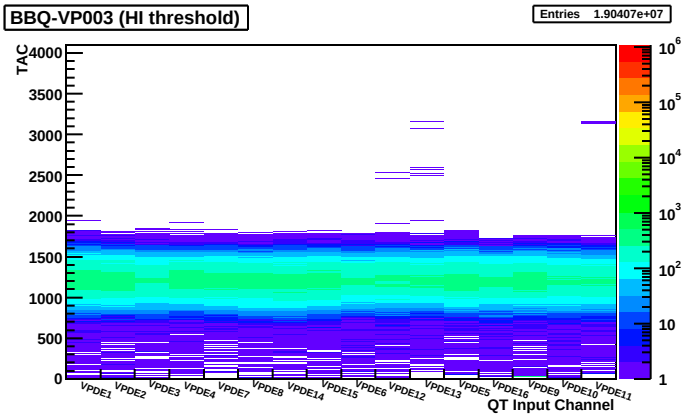

BBQ-VP001 (LO threshold)
Entries 1.90407e+07
ADC
QT Input Channel

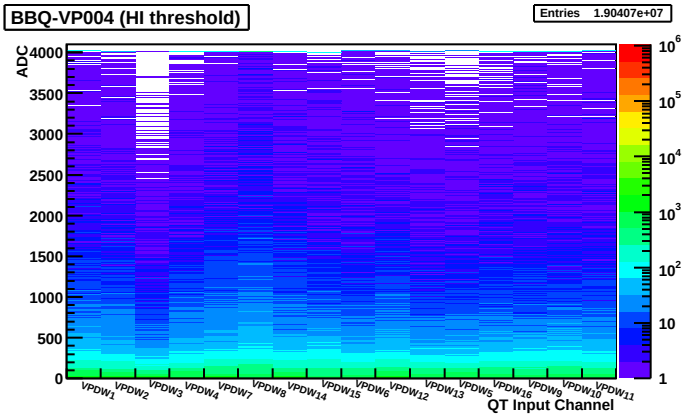

BBQ-VP001 (LO threshold)
Entries 1.90407e+07
TAC
QT Input Channel

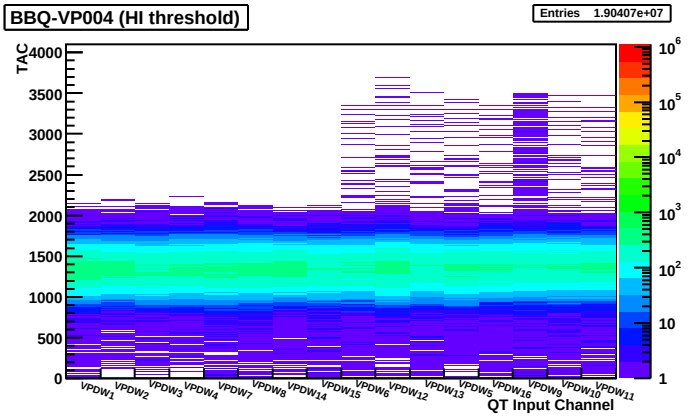

BBQ-VP002 (LO threshold)
Entries 1.90407e+07
ADC
QT Input Channel

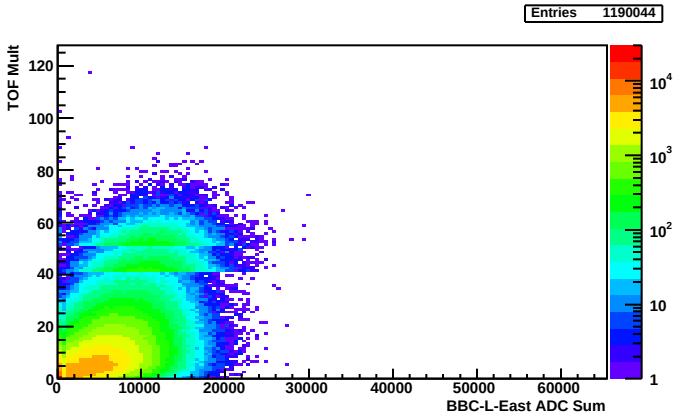

BBQ-VP002 (LO threshold)
Entries 1.90407e+07
TAC
QT Input Channel

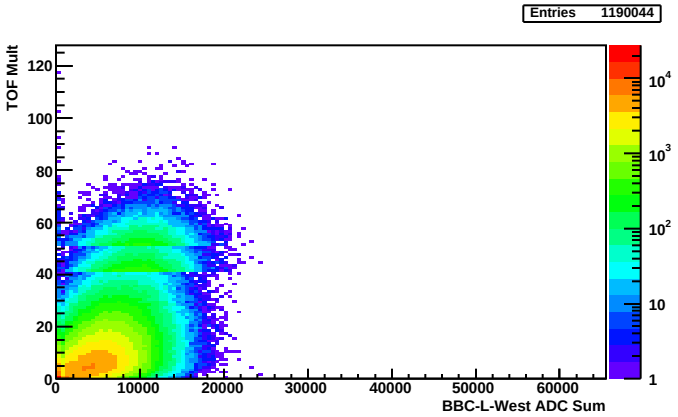

BBQ-VP003 (HI threshold)
Entries 1.90407e+07
ADC
QT Input Channel

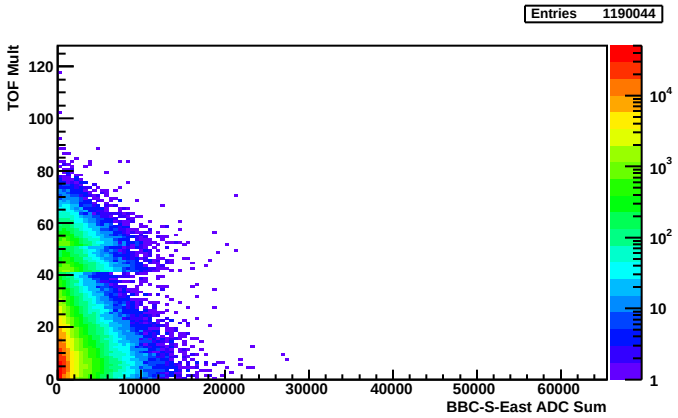

BBQ-VP003 (HI threshold)
Entries 1.90407e+07
TAC
QT Input Channel

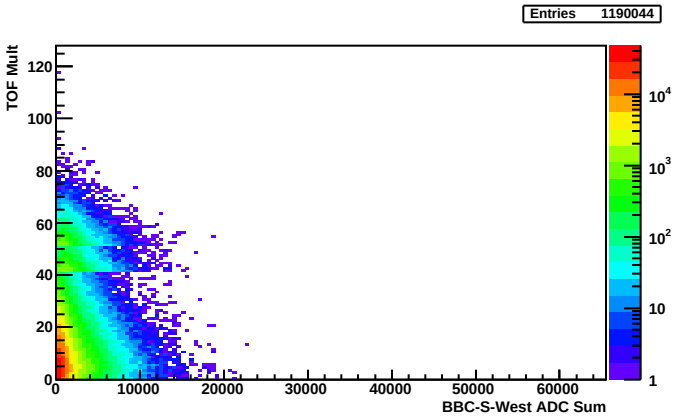

BBQ-VP004 (HI threshold)
Entries 1.90407e+07
ADC
QT Input Channel

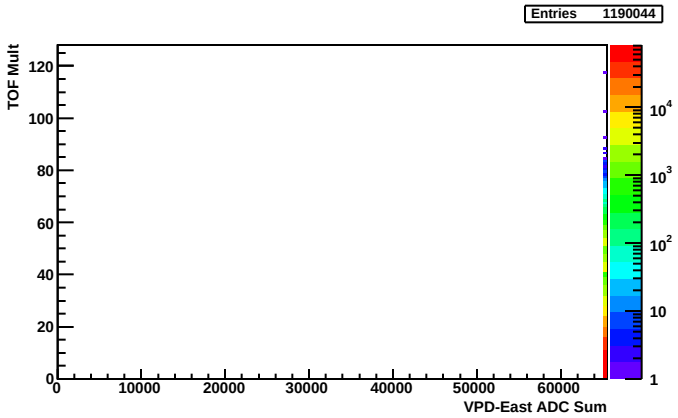

BBQ-VP004 (HI threshold)
Entries 1.90407e+07
TAC
QT Input Channel

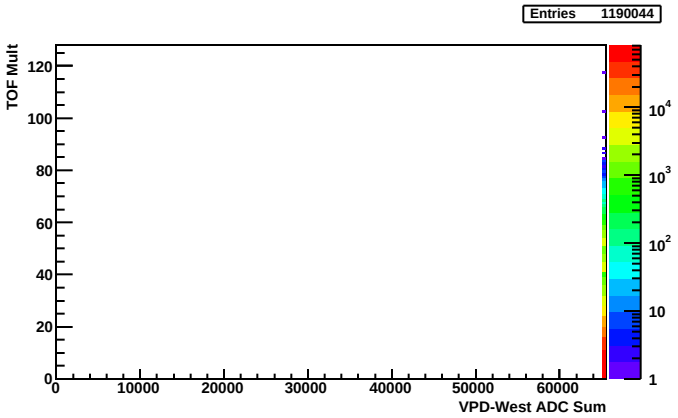

Entries 1190044
TOF Mult
BBC-L-East ADC Sum

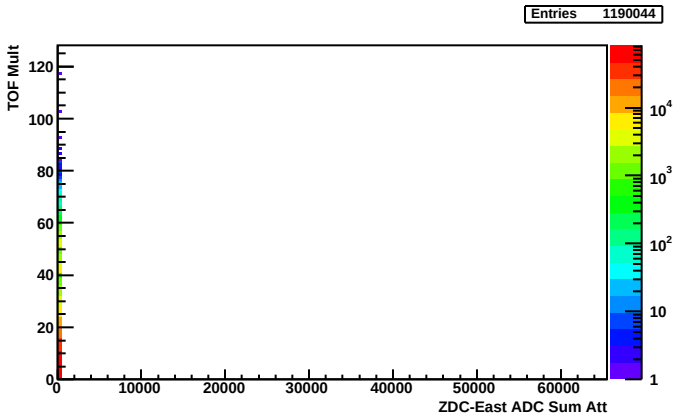

Entries 1190044
TOF Mult
BBC-L-West ADC Sum

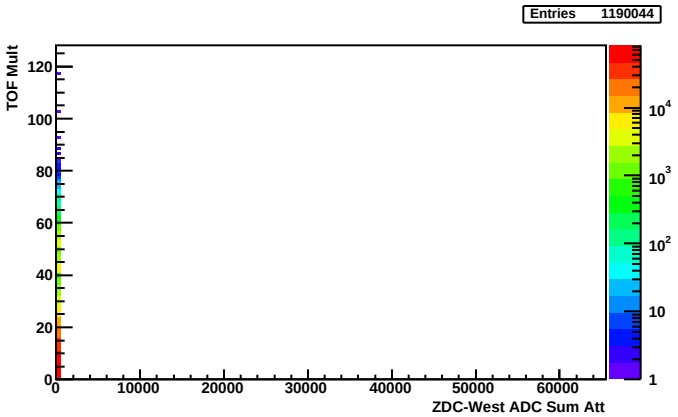

Entries 1190044
TOF Mult
BBC-S-East ADC Sum

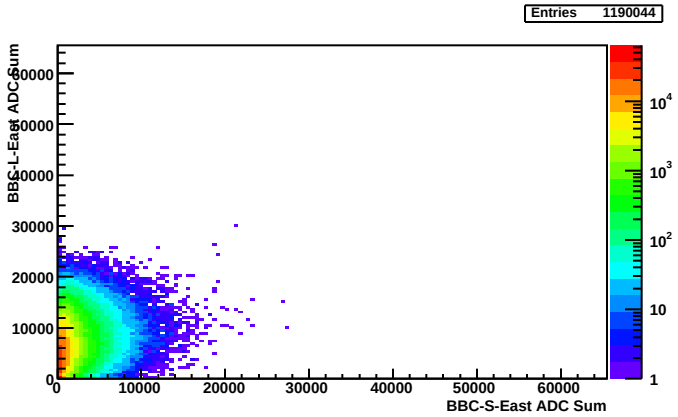

Entries 1190044
TOF Mult
BBC-S-West ADC Sum

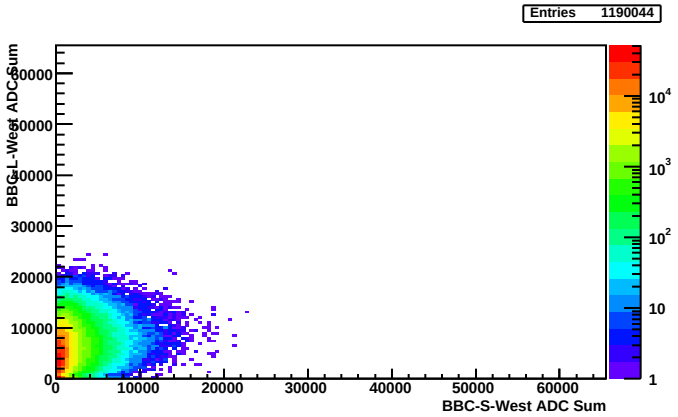

Entries 1190044
TOF Mult
VPD-East ADC Sum

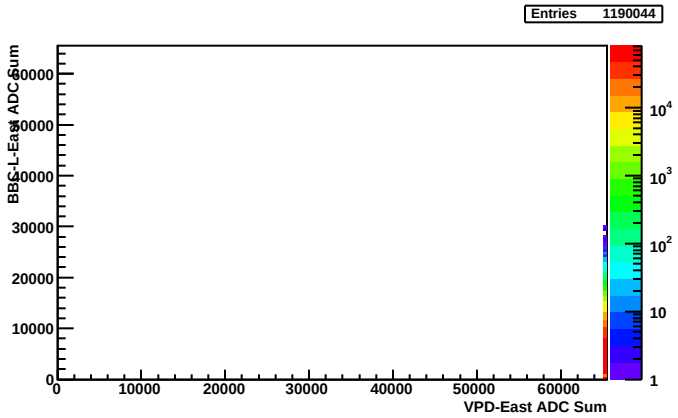

Entries 1190044
TOF Mult
VPD-West ADC Sum

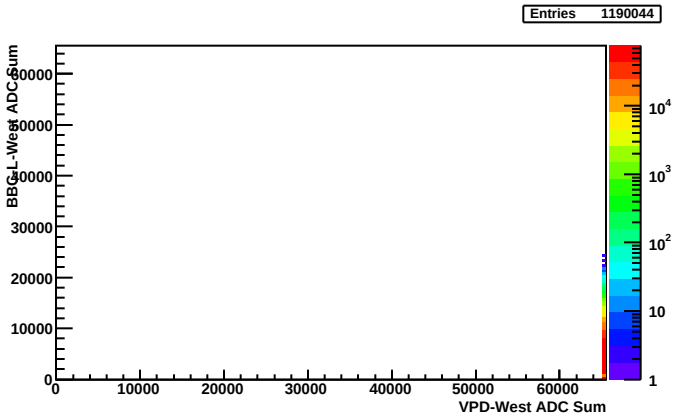

Entries 1190044
TOF Mult
ZDC-East ADC Sum Att

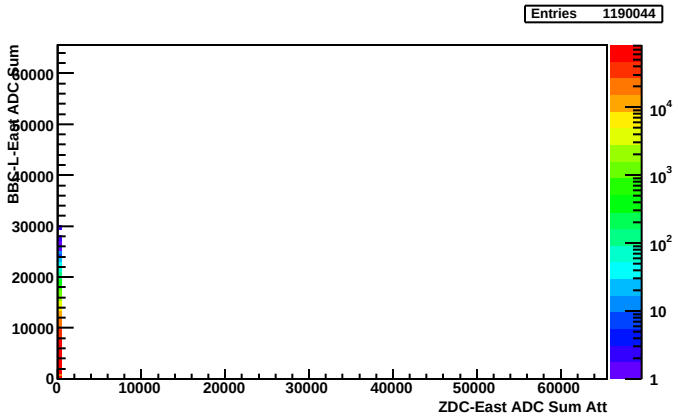

Entries 1190044
TOF Mult
ZDC-West ADC Sum Att

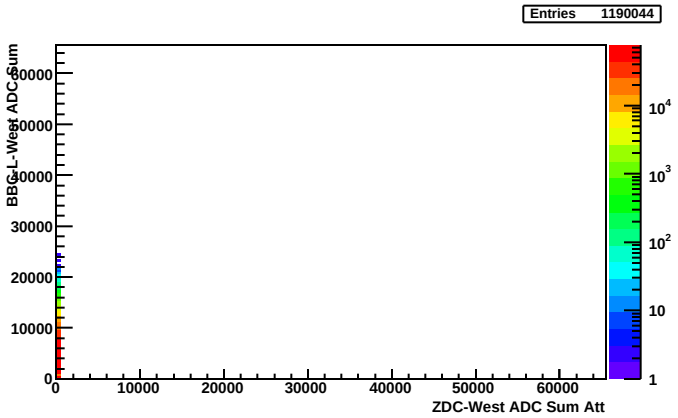

Entries 1190044
BBC-L-East ADC Sum
BBC-S-East ADC Sum

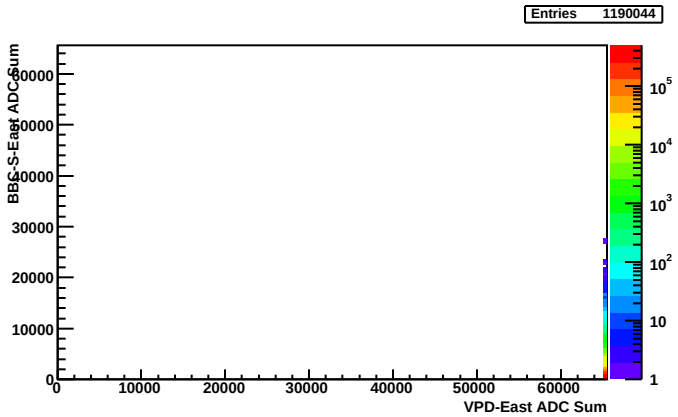

Entries 1190044
BBC-L-West ADC Sum
BBC-S-West ADC Sum

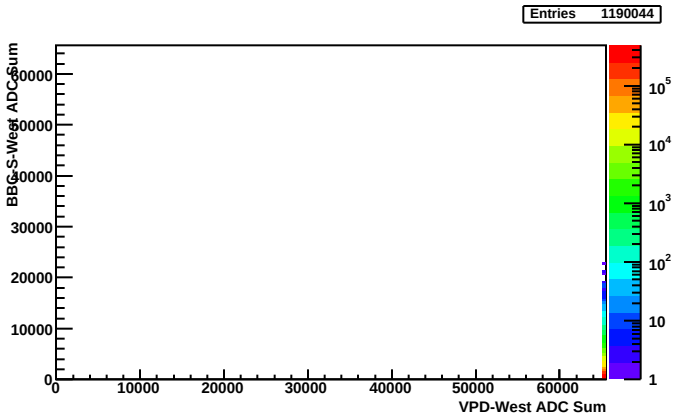

Entries 1190044
BBC-L-East ADC Sum
VPD-East ADC Sum

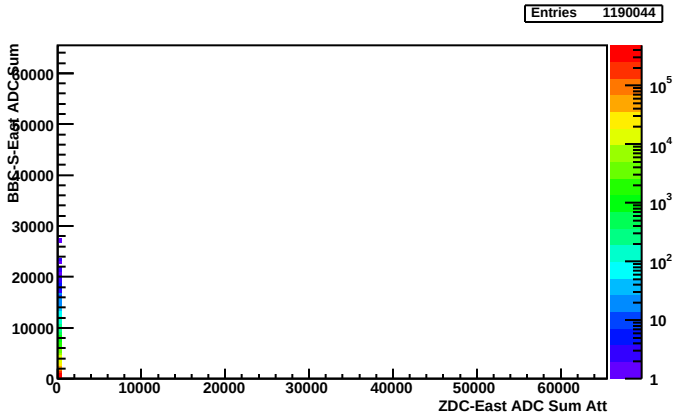

Entries 1190044
BBC-L-West ADC Sum
VPD-West ADC Sum

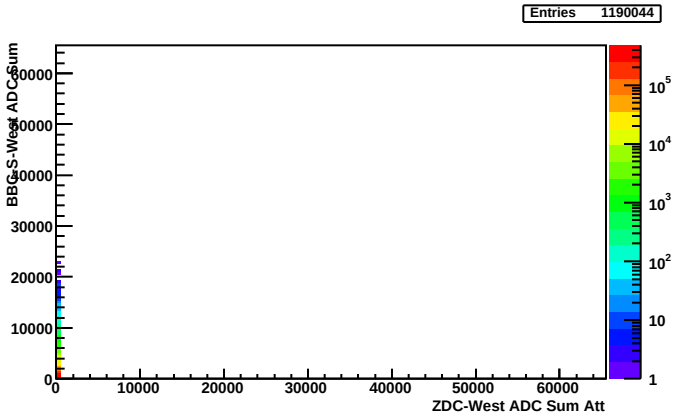

Entries 1190044
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

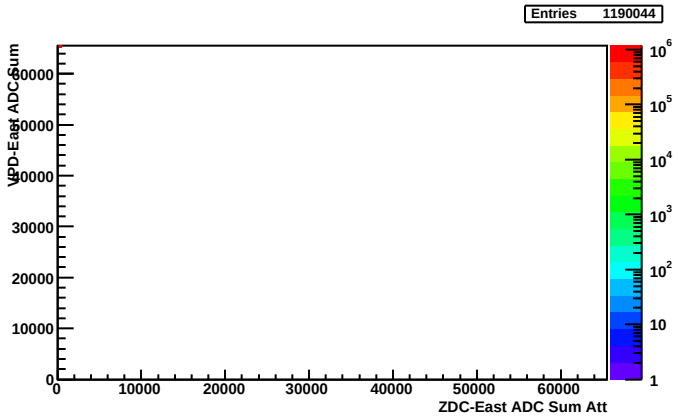

Entries 1190044
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

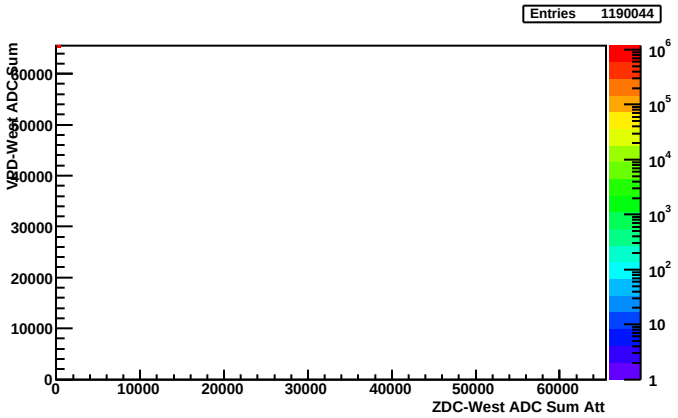

Entries 1190044
BBC-S-East ADC Sum
VPD-East ADC Sum

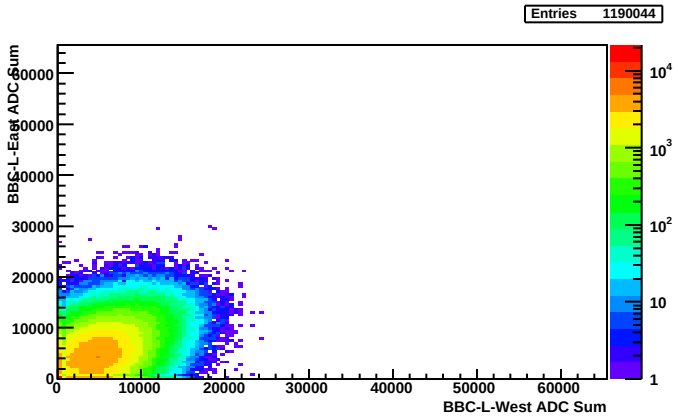

Entries 1190044
BBC-S-West ADC Sum
VPD-West ADC Sum

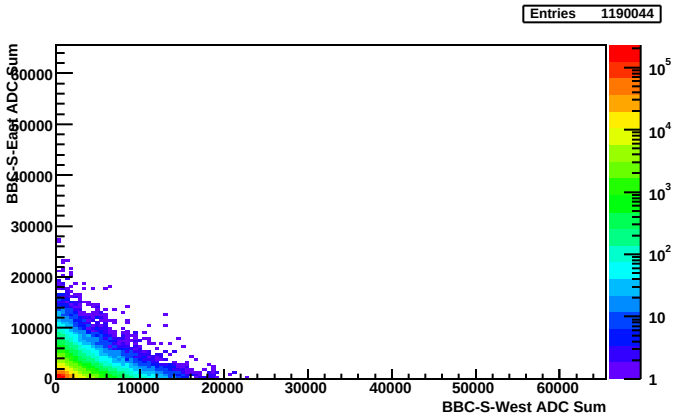

Entries 1190044
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

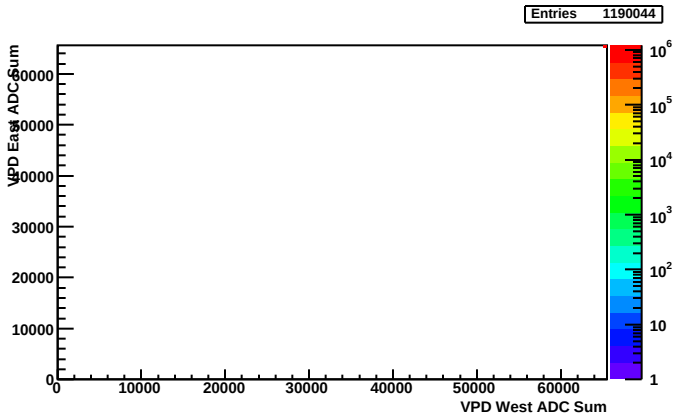

Entries 1190044
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

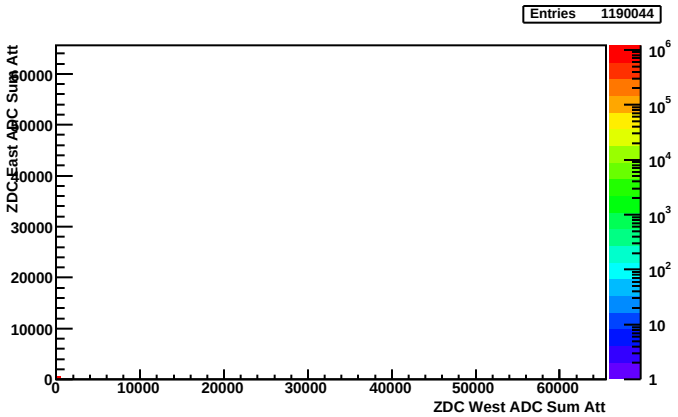

Entries 1190044
VPD-East ADC Sum
ZDC-East ADC Sum Att

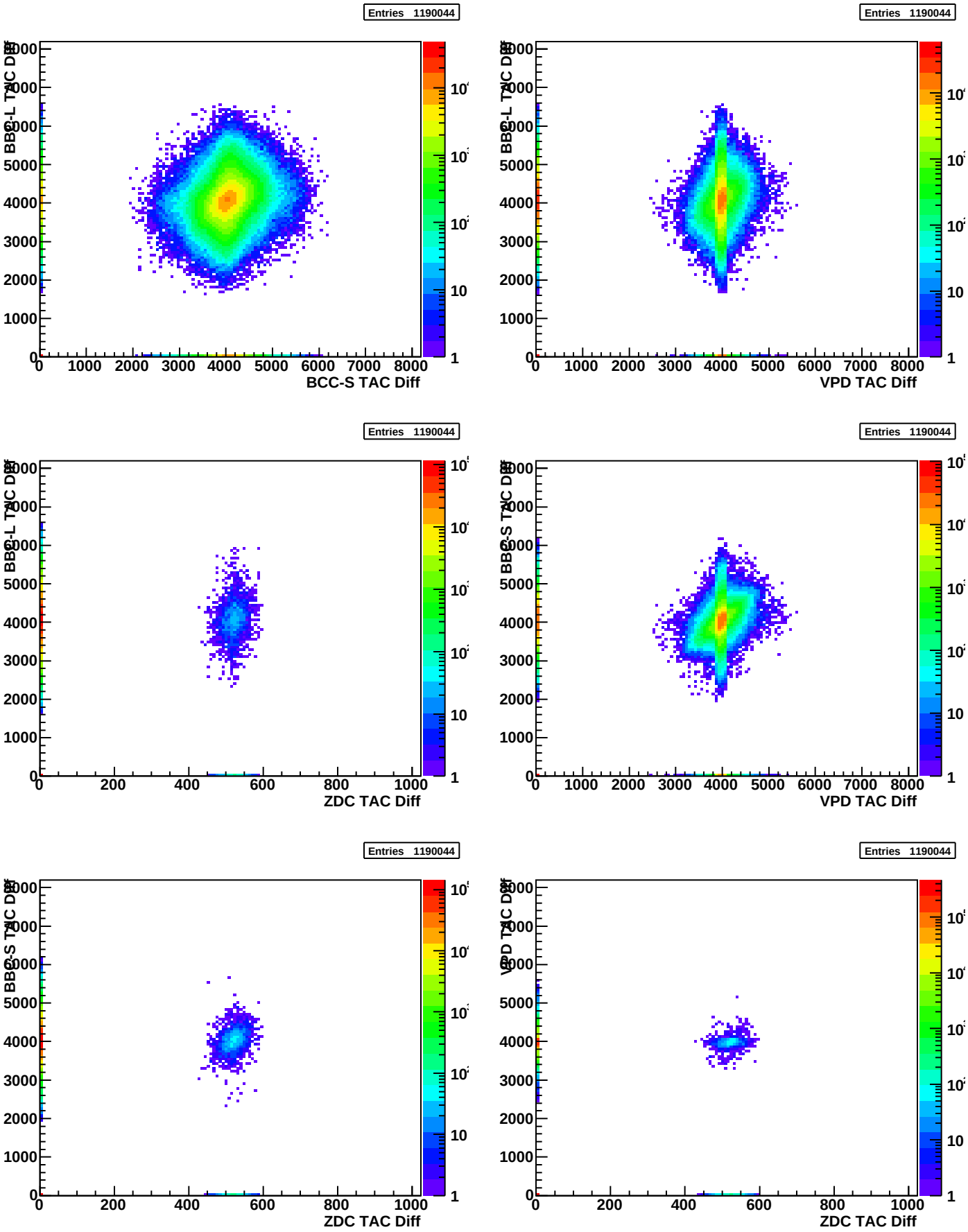

Entries 1190044
VPD-West ADC Sum
ZDC-West ADC Sum Att

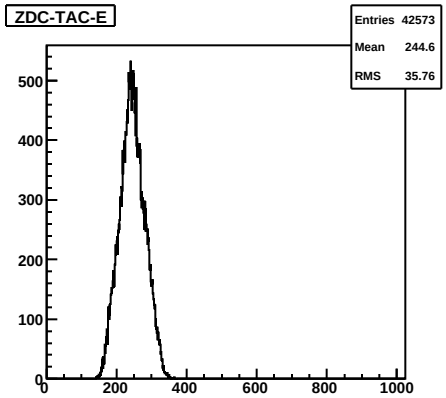

Entries 1190044
BBC-L-East ADC Sum
BBC-L-West ADC Sum

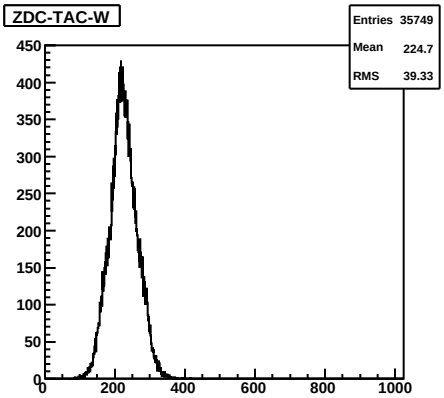

Entries 1190044
BBC-S-East ADC Sum
BBC-S-West ADC Sum

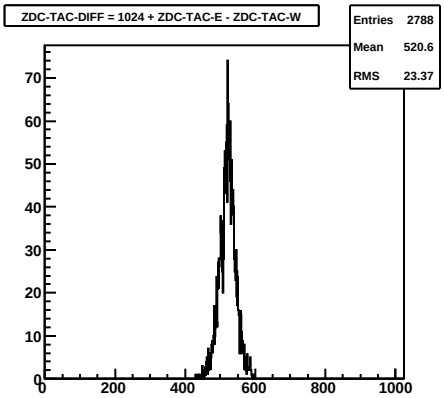

Entries 1190044
VPD East ADC Sum
VPD West ADC Sum

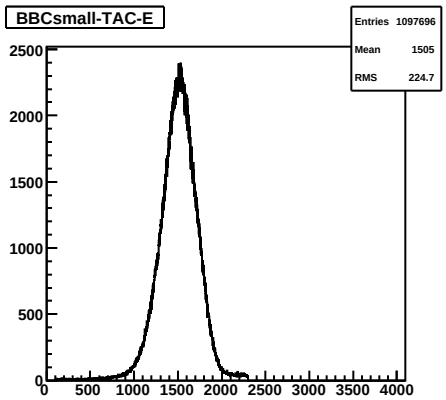

Entries 1190044
ZDC East ADC Sum Att
ZDC West ADC Sum Att

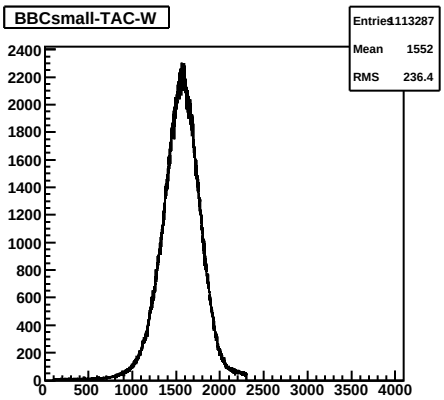

Entries 1190044
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1190044
BBC-L TAC Diff
VPD TAC Diff
Entries 1190044
BBC-L TAC Diff
ZDC TAC Diff
Entries 1190044
BBC-S TAC Diff
VPD TAC Diff
Entries 1190044
BBC-S TAC Diff
ZDC TAC Diff
Entries 1190044
VPD TAC Diff
ZDC TAC Diff

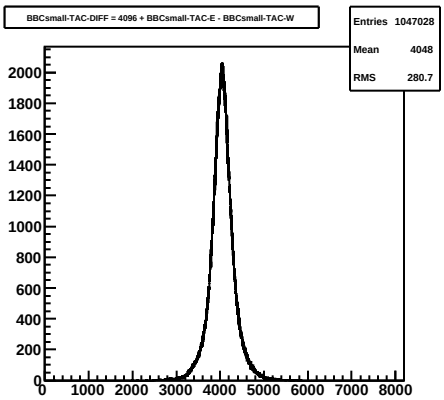

ZDC-TAC-E
Entries 42573
Mean 244.6
RMS 35.76

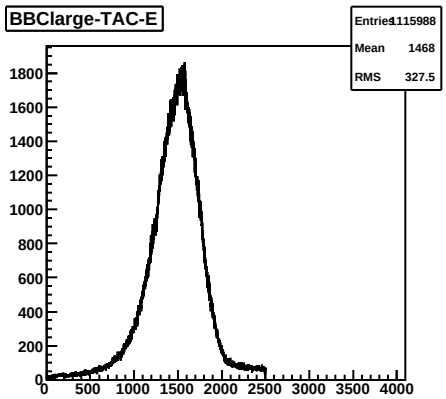

ZDC-TAC-W
Entries 35749
Mean 224.7
RMS 39.33

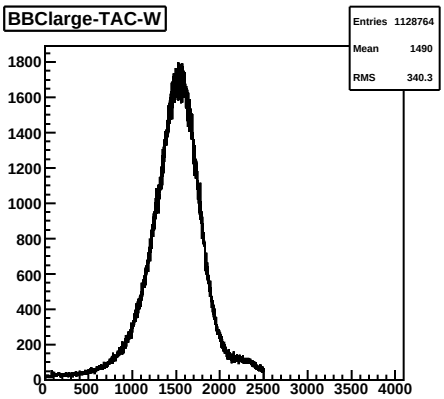

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2788
Mean 520.6
RMS 23.37

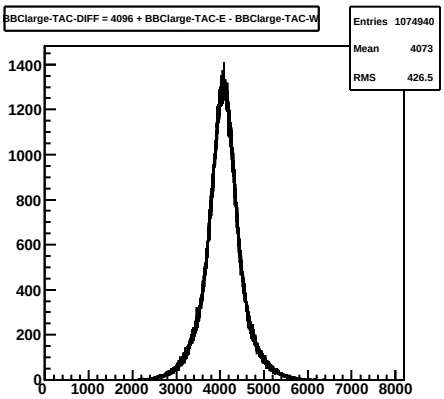

BBCsmall-TAC-E
Entries 1097696
Mean 1505
RMS 224.7

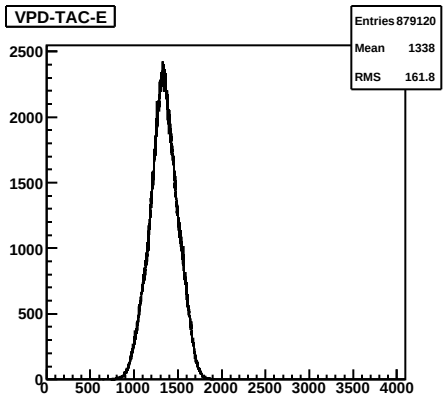

BBCsmall-TAC-W
Entries 1113287
Mean 1552
RMS 236.4

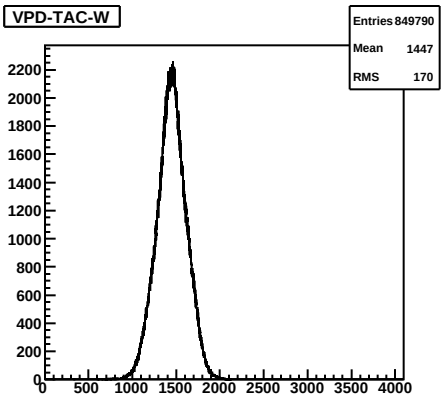

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1047028
Mean 4048
RMS 280.7

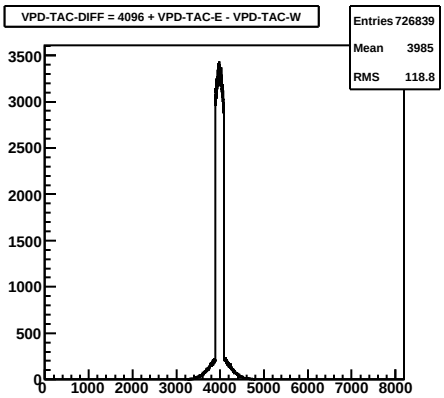

BBClarge-TAC-E
Entries 1115988
Mean 1468
RMS 327.5

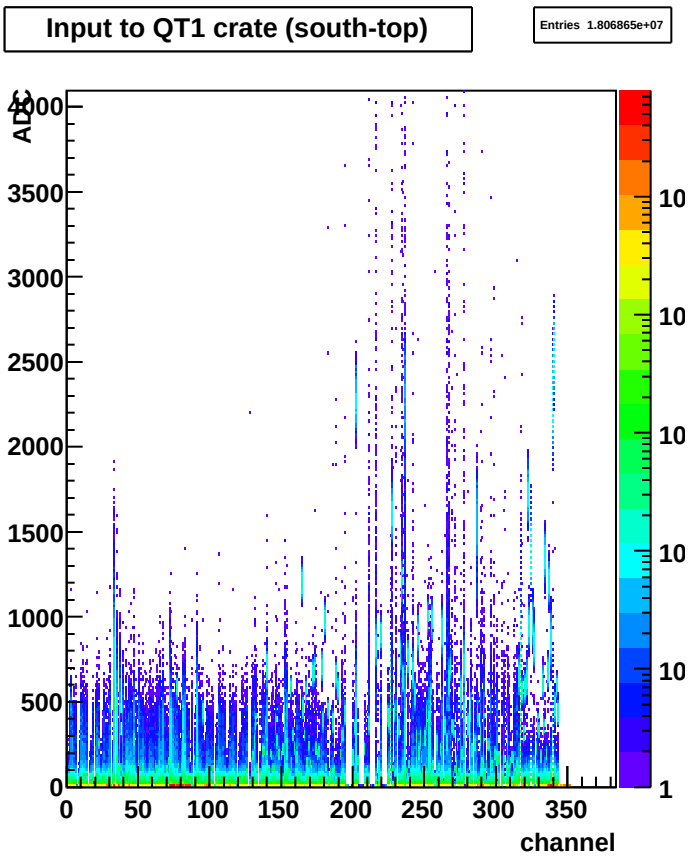

BBClarge-TAC-W
Entries 1128764
Mean 1490
RMS 340.3

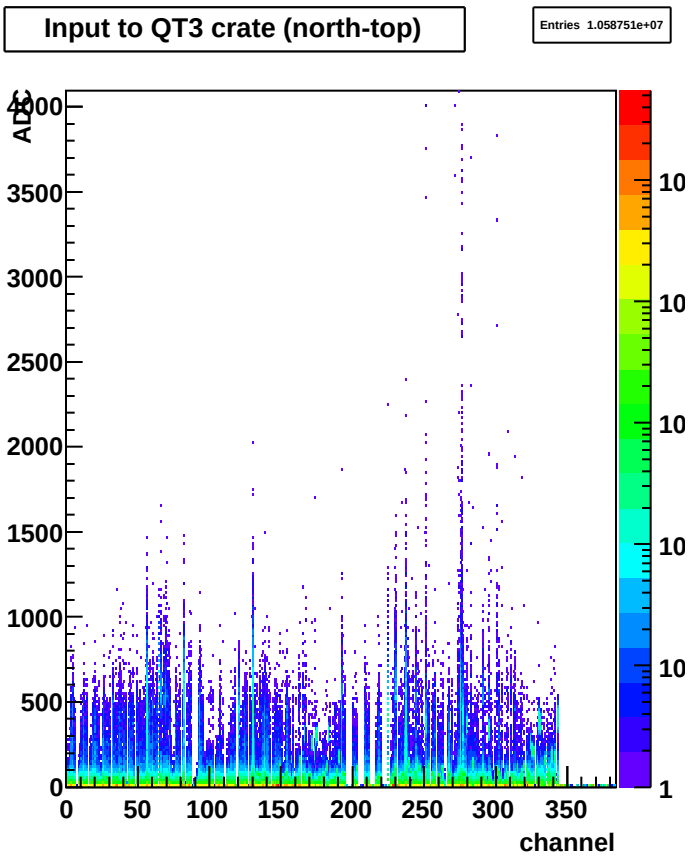

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1074940
Mean 4073
RMS 426.5

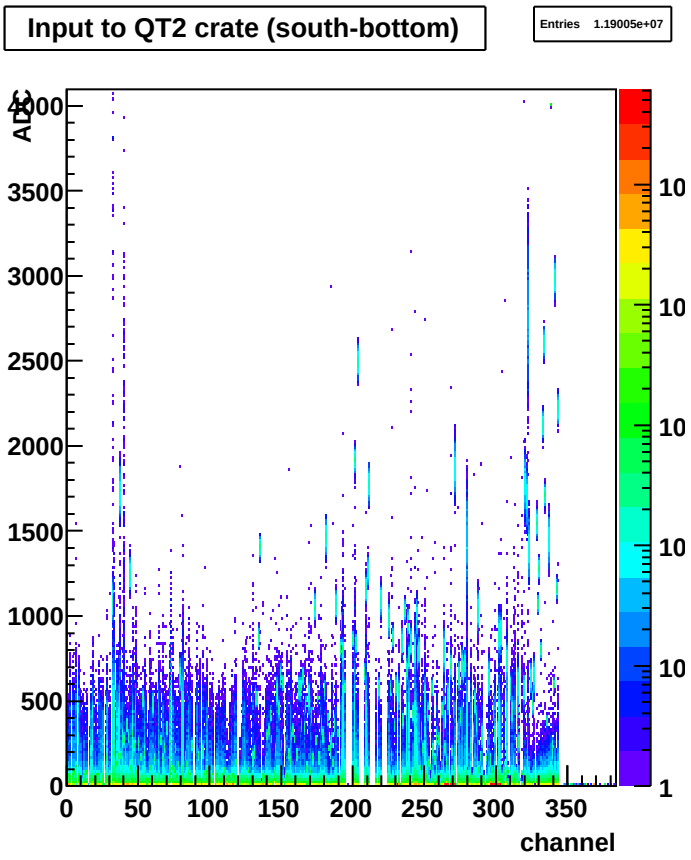

VPD-TAC-E
Entries 879120
Mean 1338
RMS 161.8

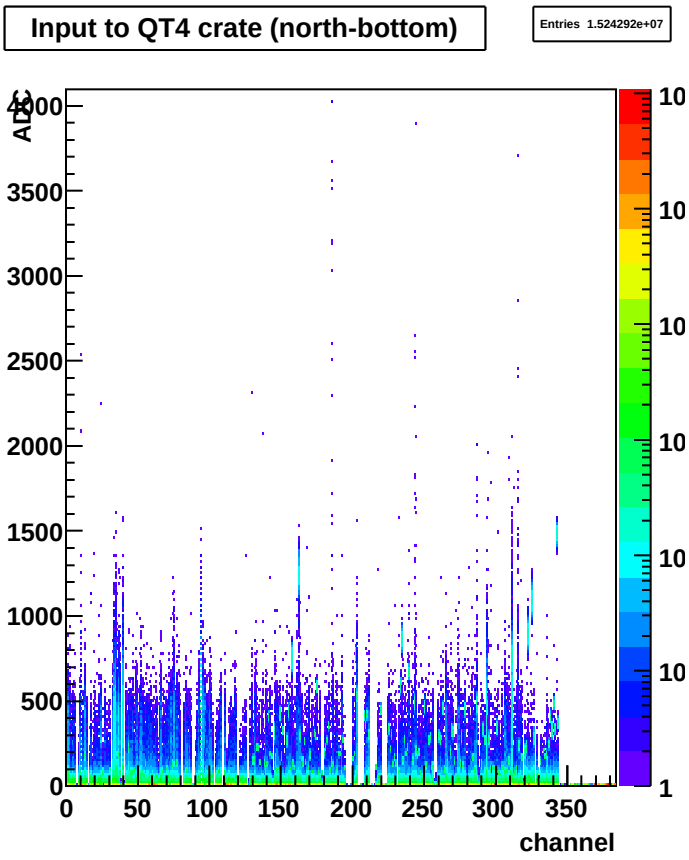

VPD-TAC-W
Entries 849790
Mean 1447
RMS 170

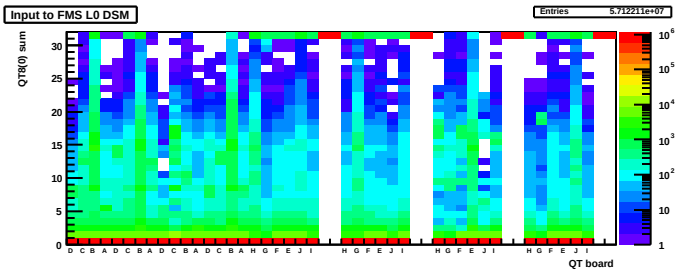

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 726839
Mean 3985
RMS 118.8

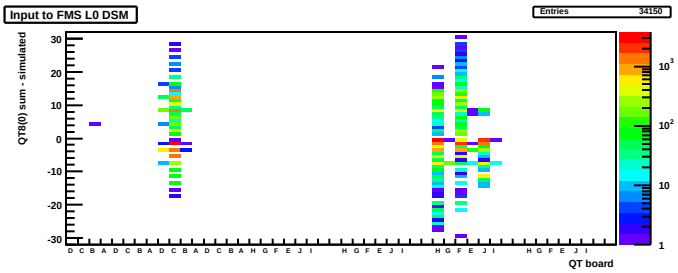

Input to QT1 crate (south-top)
Entries 1.806865e+07
ADC
channel

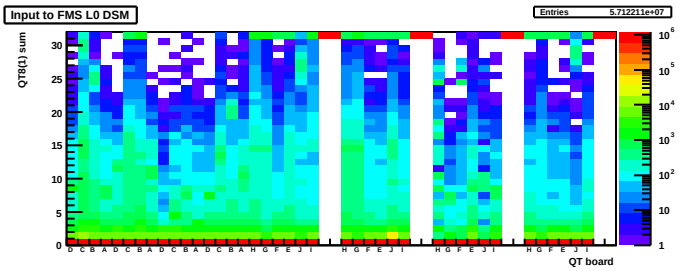

Input to QT3 crate (north-top)
Entries 1.058751e+07
ADC
channel

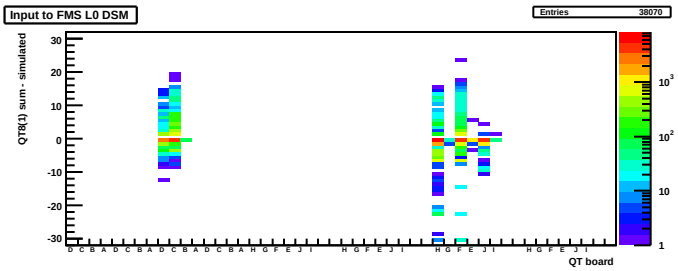

Input to QT2 crate (south-bottom)
Entries 1.19005e+07
ADC
channel

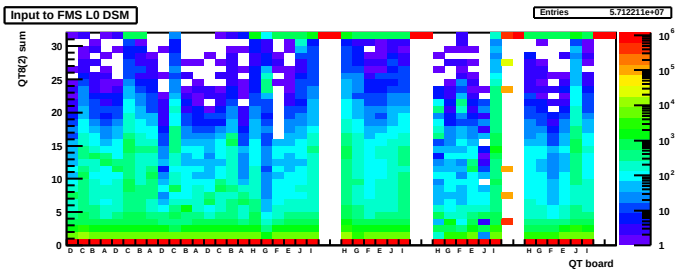

Input to QT4 crate (north-bottom)
Entries 1.524292e+07
ADC
channel

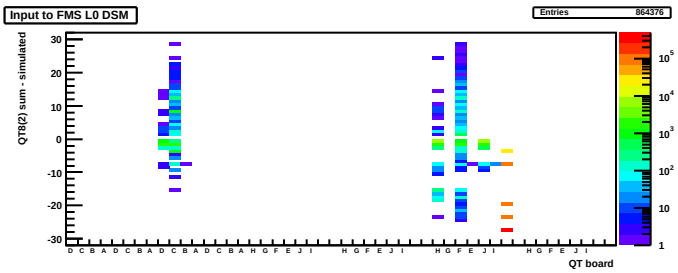

Input to FMS L0 DSM
Entries 5.712211e+07
QT8(0) sum
QT board

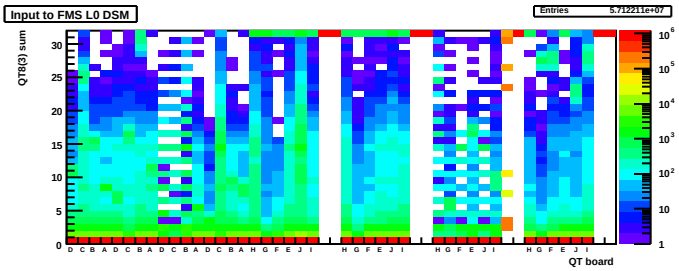

Input to FMS L0 DSM
Entries 34150
QT8(0) sum - simulated
QT board

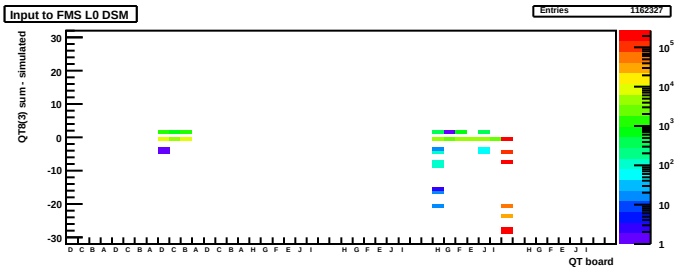

Input to FMS L0 DSM
Entries 5.712211e+07
QT8(1) sum
QT board

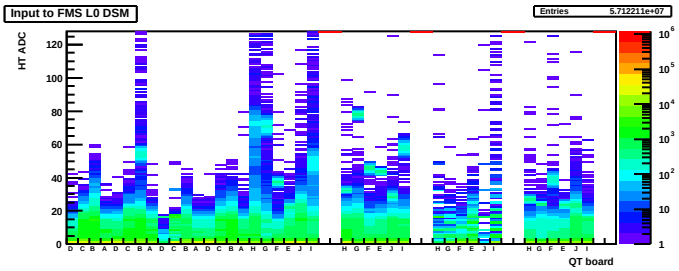

Input to FMS L0 DSM
Entries 38070
QT8(1) sum - simulated
QT board

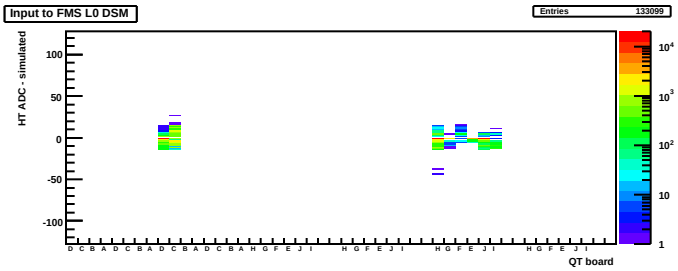

Input to FMS L0 DSM
Entries 5.712211e+07
QT8(2) sum
QT board

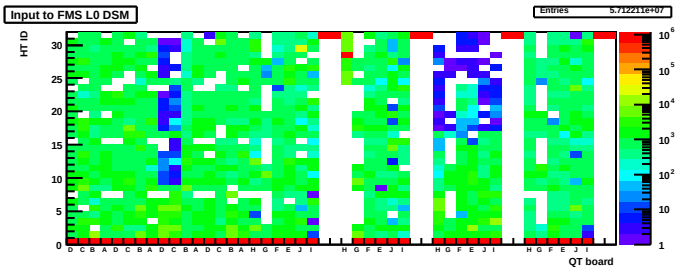

Input to FMS L0 DSM
Entries 864376
QT8(2) sum - simulated
QT board

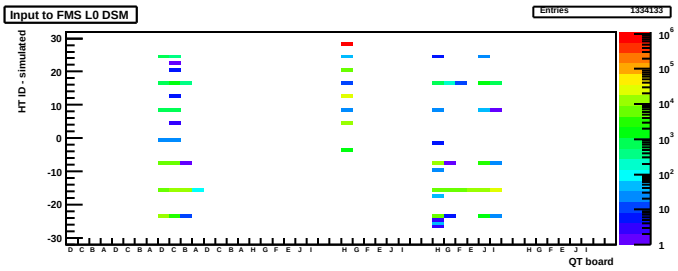

Input to FMS L0 DSM
Entries 5.712211e+07
QT8(3) sum
QT board

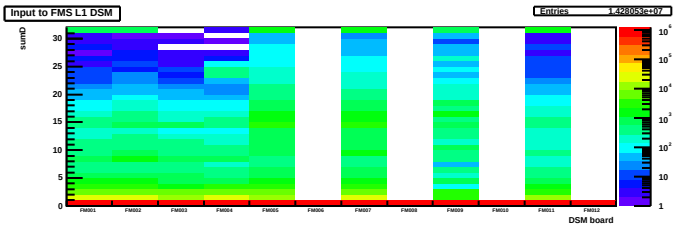

Input to FMS L0 DSM
Entries 1162327
QT8(3) sum - simulated
QT board

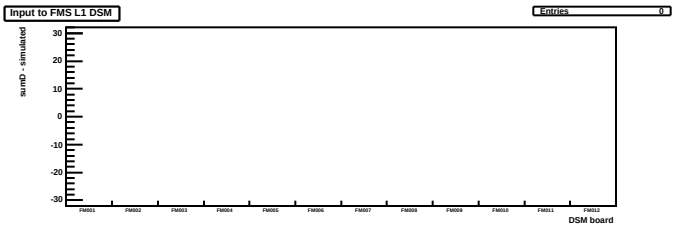

Input to FMS L0 DSM
Entries 5.712211e+07
HT ADC
QT board

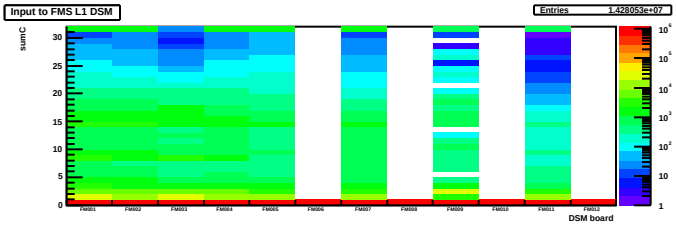

Input to FMS L0 DSM
Entries 133099
HT ADC - simulated
QT board

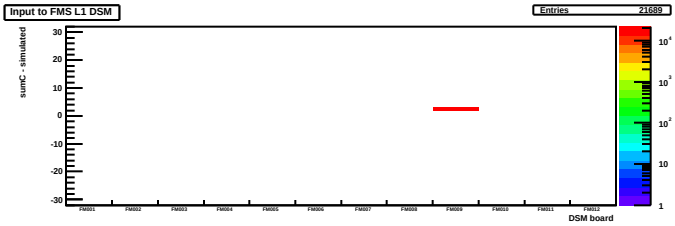

Input to FMS L0 DSM
Entries 5.712211e+07
HT ID
QT board

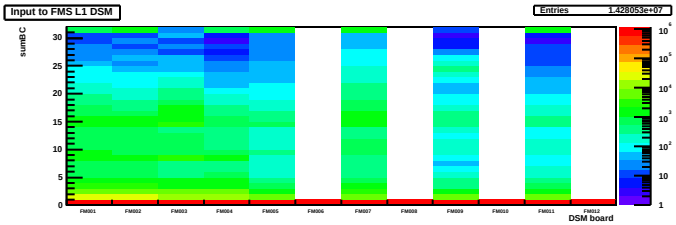

Input to FMS L0 DSM
Entries 1334133
HT ID - simulated
QT board

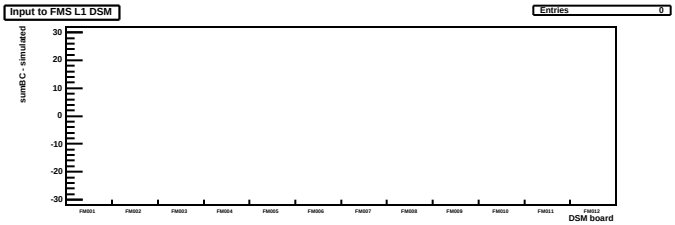

Input to FMS L1 DSM
Entries 1.428053e+07
sumD
DSM board

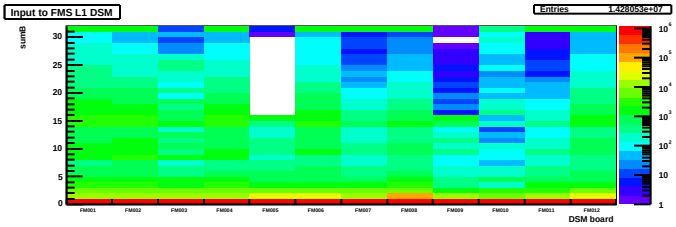

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

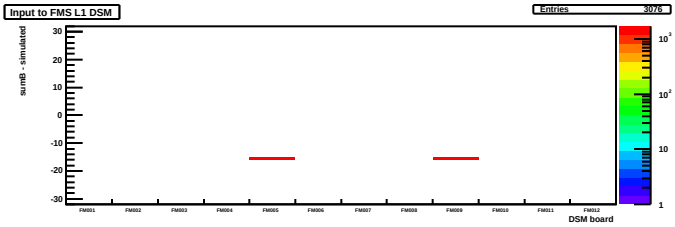

Input to FMS L1 DSM
Entries 1.428053e+07
sumC
DSM board

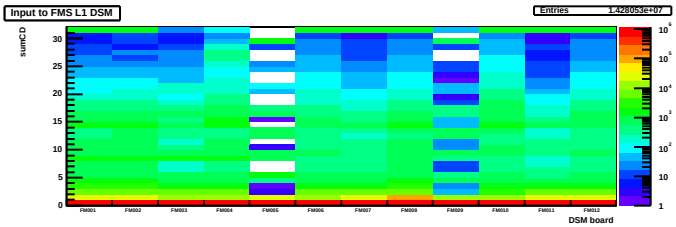

Input to FMS L1 DSM
Entries 21689
sumC - simulated
DSM board

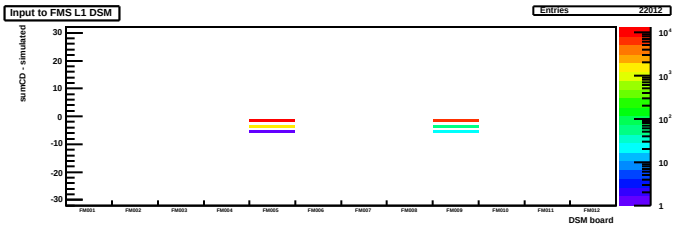

Input to FMS L1 DSM
Entries 1.428053e+07
sumBC
DSM board

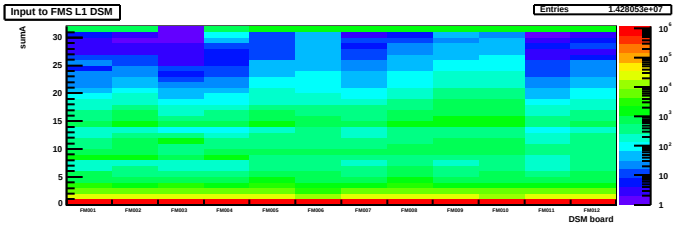

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

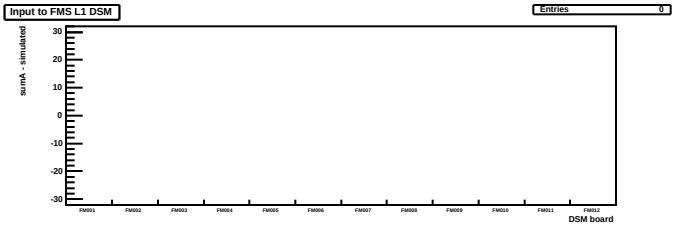

Input to FMS L1 DSM
Entries 1.428053e+07
sumB
DSM board

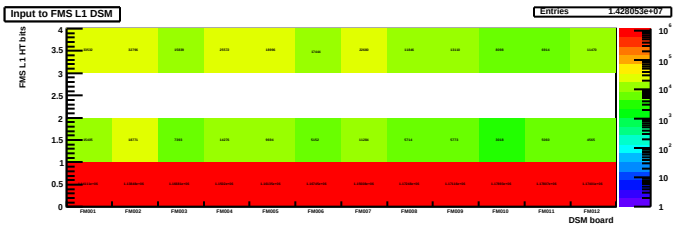

Input to FMS L1 DSM
Entries 3076
sumB - simulated
DSM board

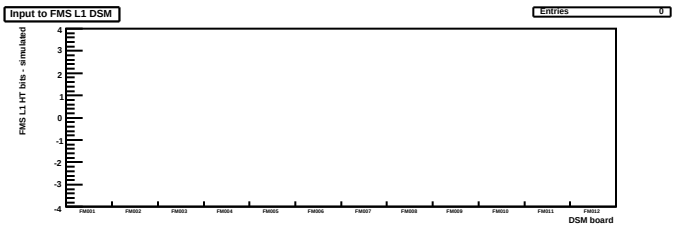

Input to FMS L1 DSM
Entries 1.428053e+07
sumCD
DSM board

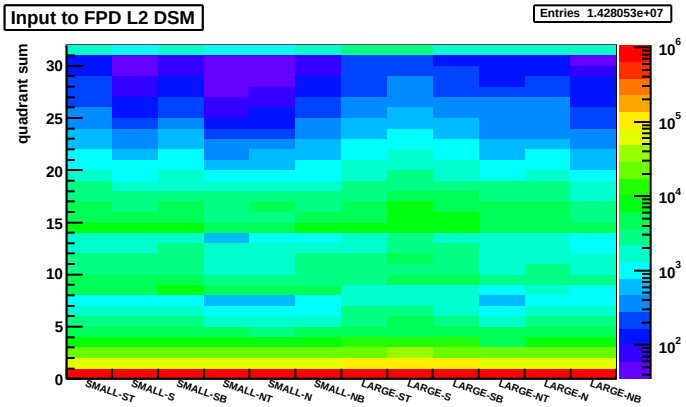

Input to FMS L1 DSM
Entries 22012
sumCD - simulated
DSM board

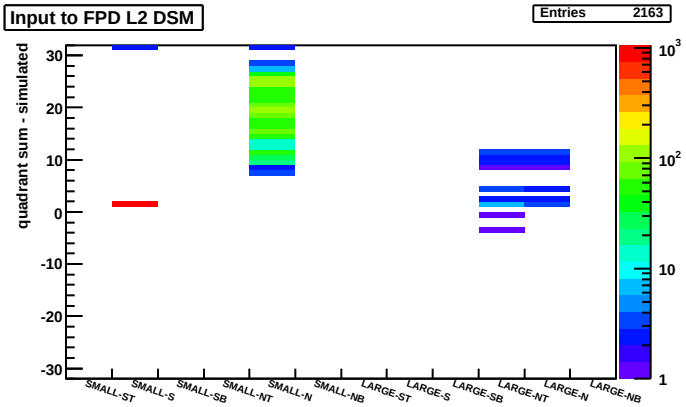

Input to FMS L1 DSM
Entries 1.428053e+07
sumA
DSM board

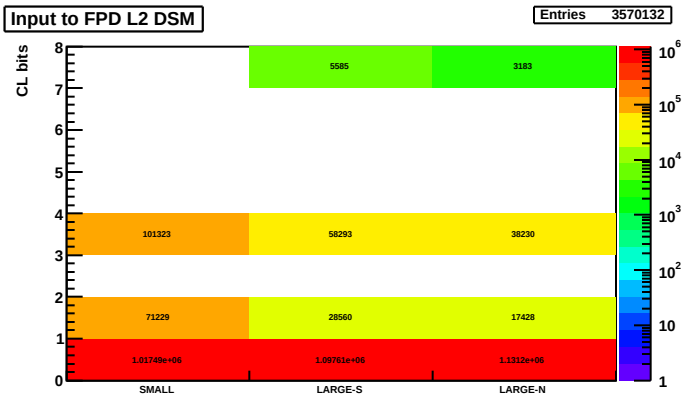

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

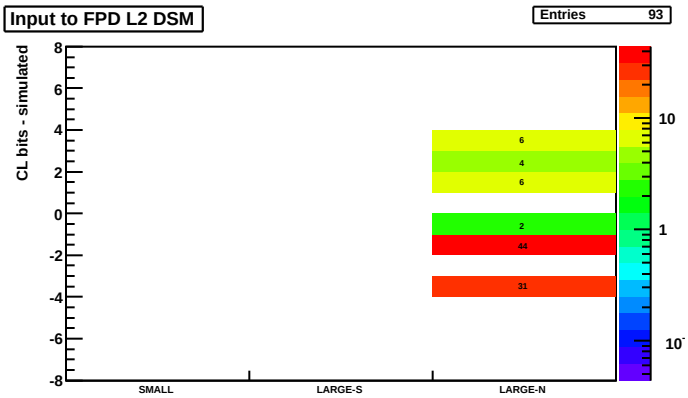

Input to FMS L1 DSM
Entries 1.428053e+07
FMS L1 HT bits
DSM board

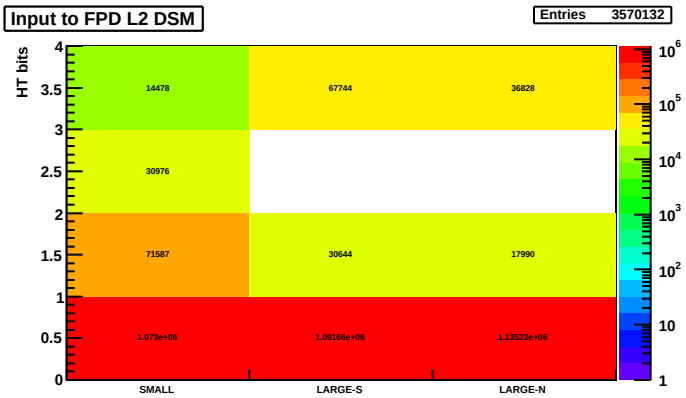

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

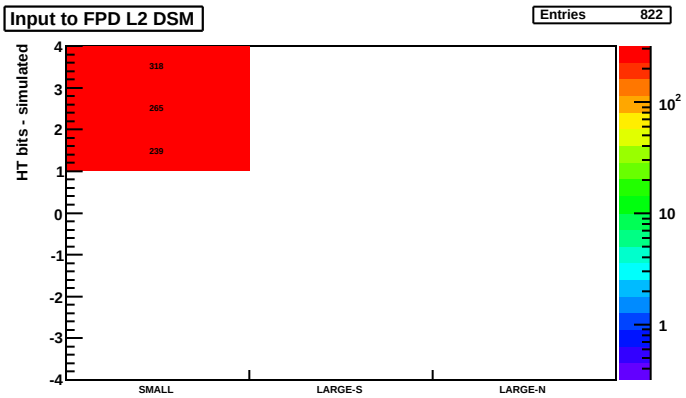

Input to FPD L2 DSM
Entries 1.428053e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

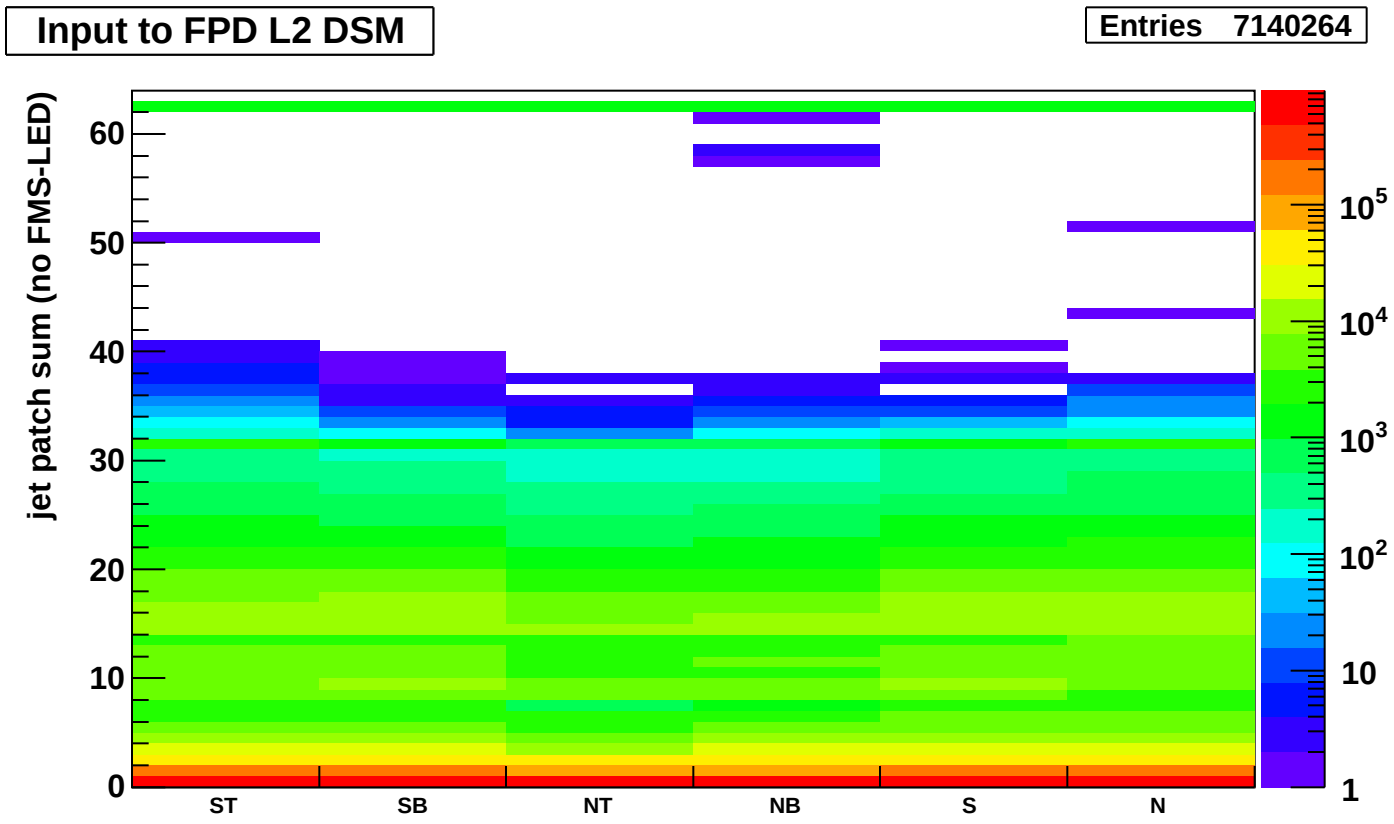

Input to FPD L2 DSM
Entries 2163
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

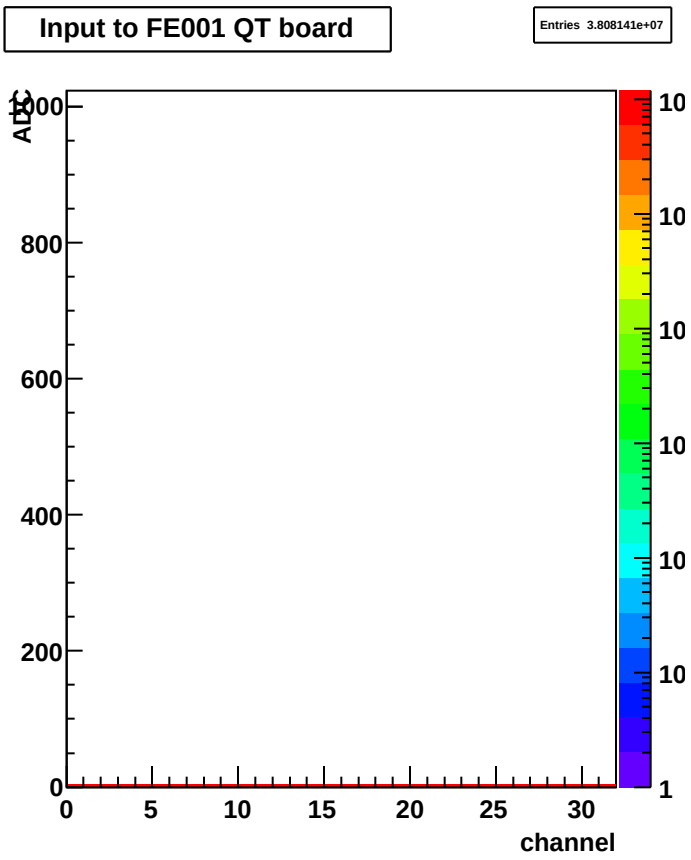

Input to FPD L2 DSM
Entries 3570132
CL bits
5585
3183
101323
58293
38230
71229
28560
17428
1.01749e+06
1.09761e+06
1.1312e+06
SMALL
LARGE-S
LARGE-N

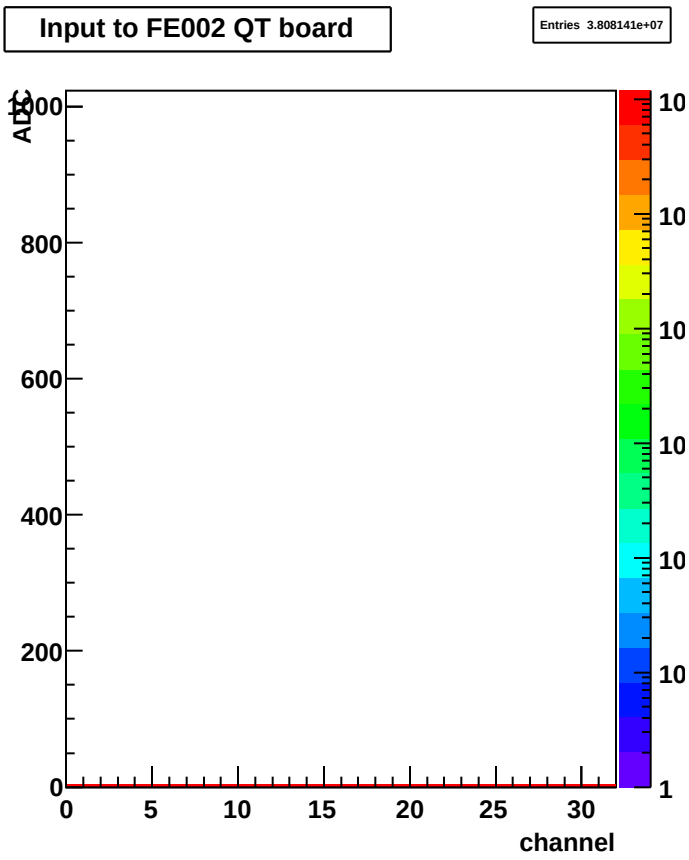

Input to FPD L2 DSM
Entries 93
CL bits - simulated
6
4
6
2
44
31
SMALL
LARGE-S
LARGE-N

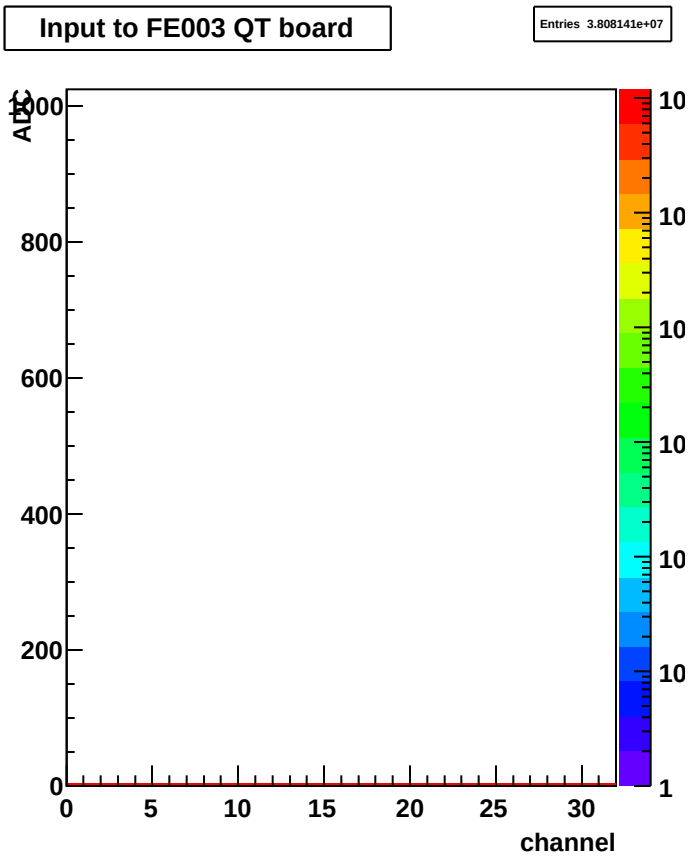

Input to FPD L2 DSM
Entries 3570132
HT bits
14478
67744
36828
30976
71587
30644
17990
1.073e+06
1.09166e+06
1.13523e+06
SMALL
LARGE-S
LARGE-N

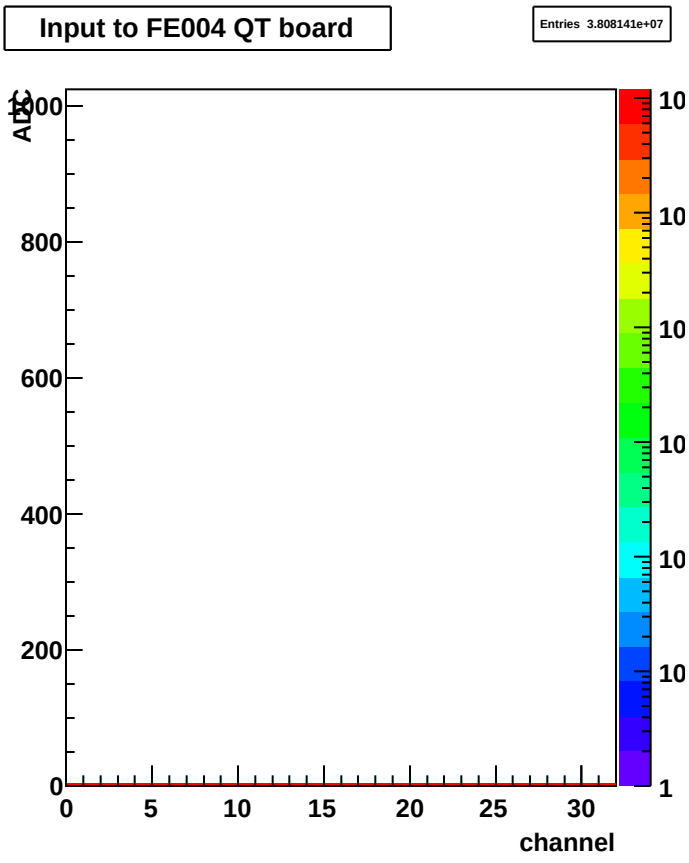

Input to FPD L2 DSM
Entries 822
HT bits - simulated
318
265
239
SMALL
LARGE-S
LARGE-N

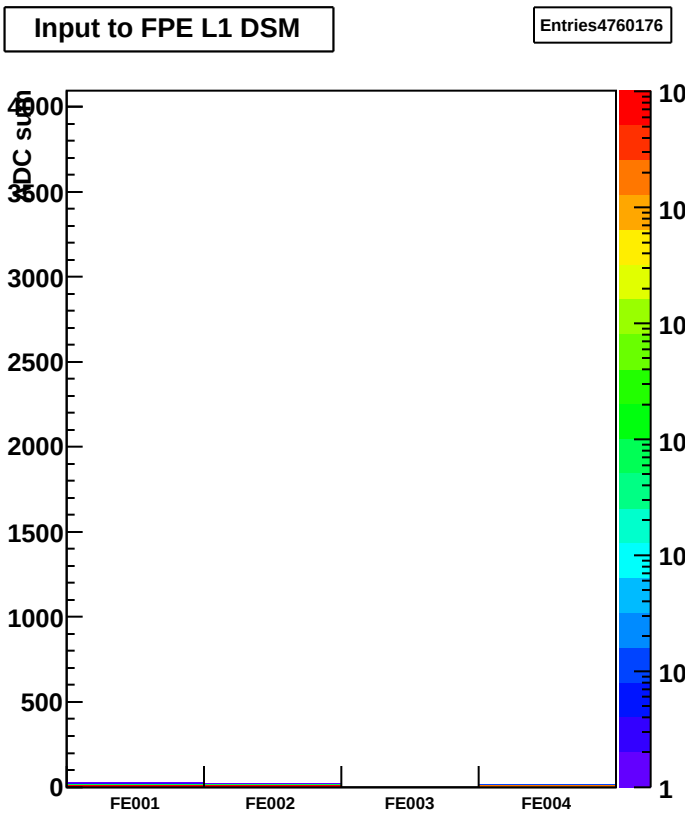

Input to FPD L2 DSM
Entries 7140264
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

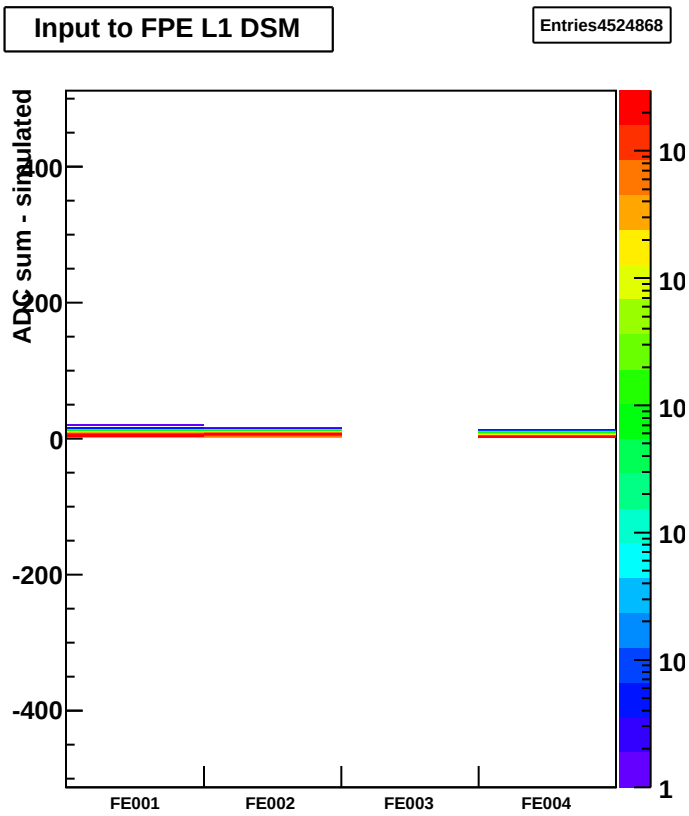

Input to FE001 QT board
Entries 3.808141e+07
ADC
channel

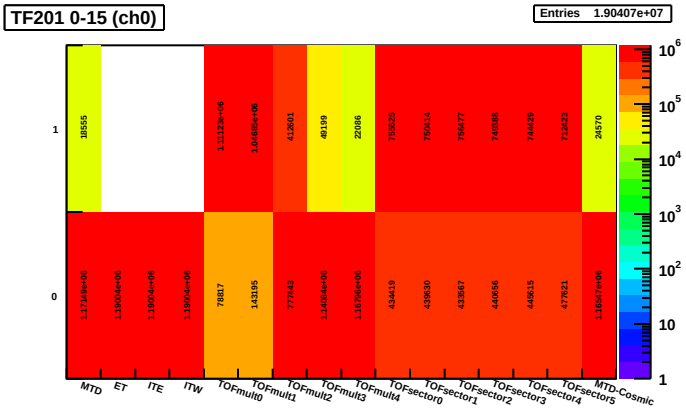

Input to FE002 QT board
Entries 3.808141e+07
ADC
channel


Input to FE003 QT board
Entries 3.808141e+07
ADC
channel


Input to FE004 QT board
Entries 3.808141e+07
ADC
channel


Input to FPE L1 DSM
Entries4760176
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


Input to FPE L1 DSM
Entries4524868
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1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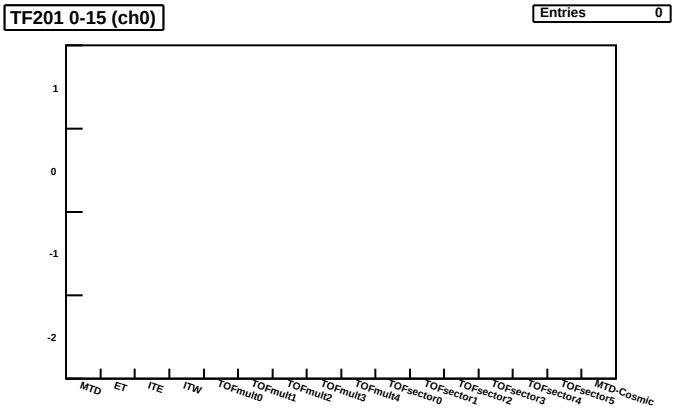
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic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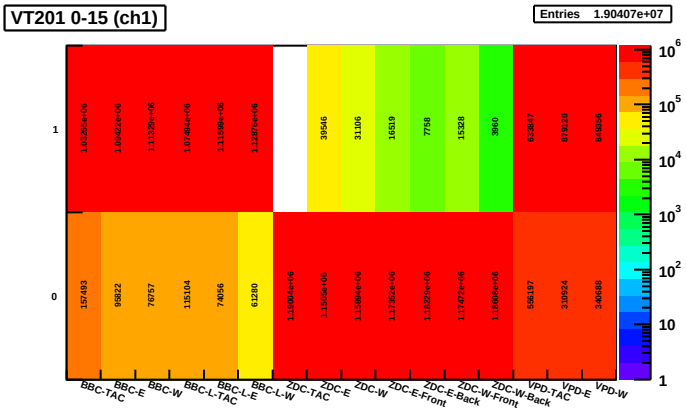
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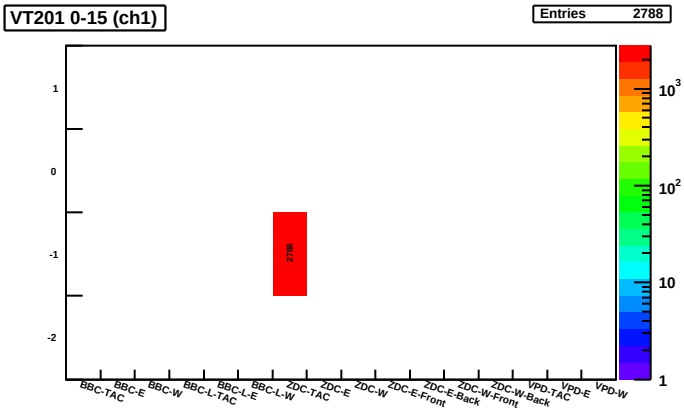
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W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Entries 2788
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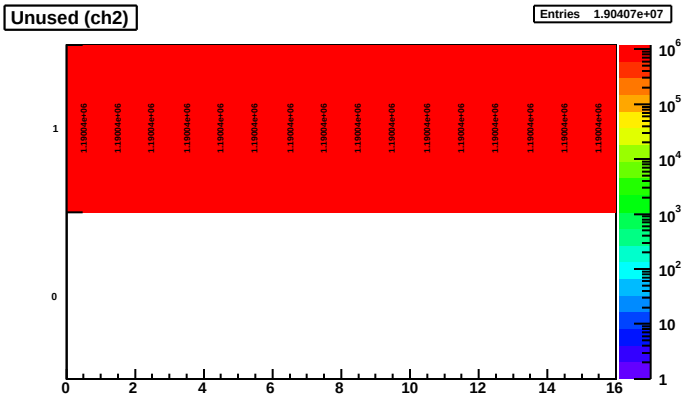
Unused (ch2)
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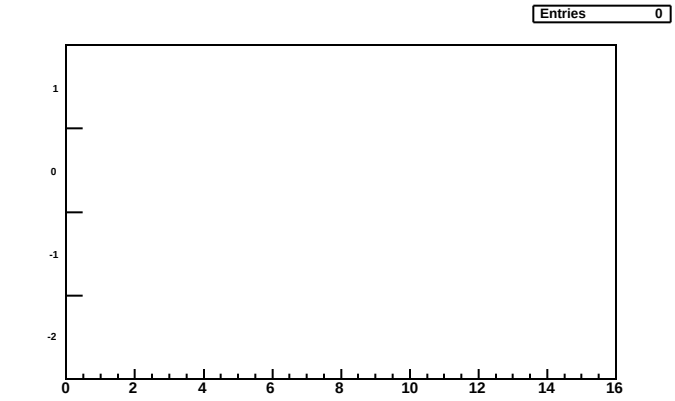
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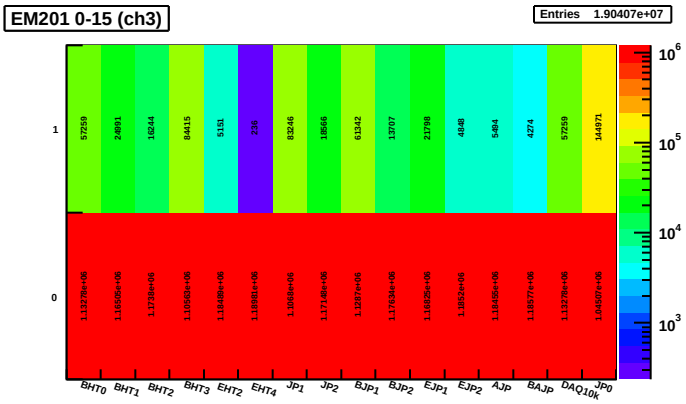
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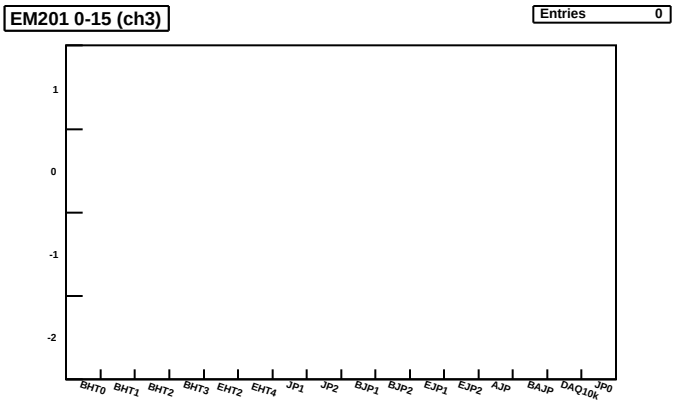
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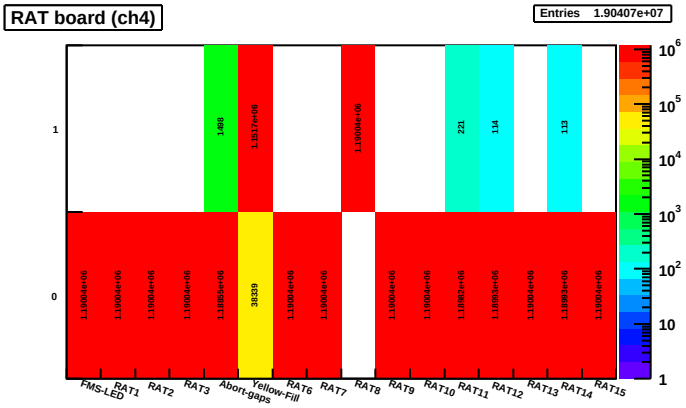
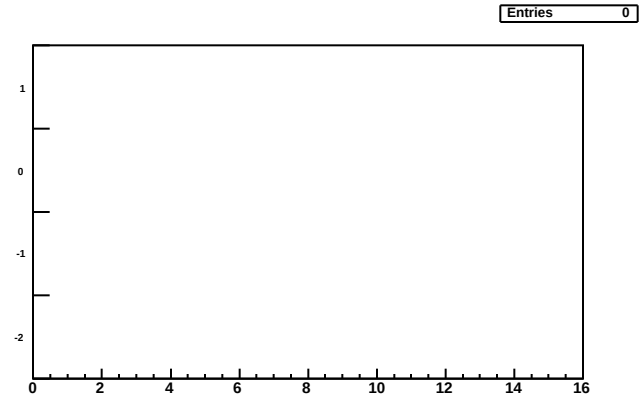
RAT board (ch4)





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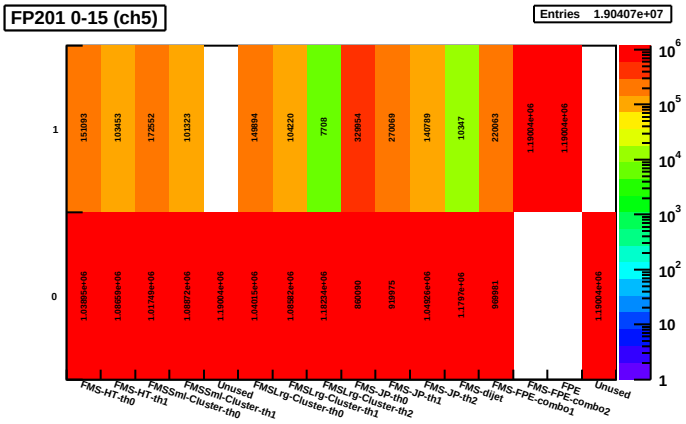

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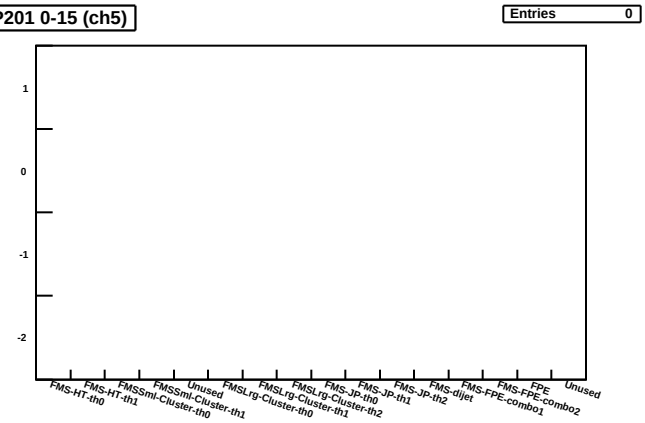
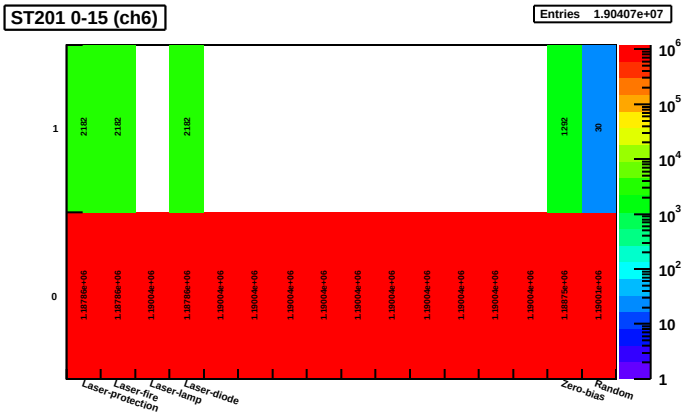
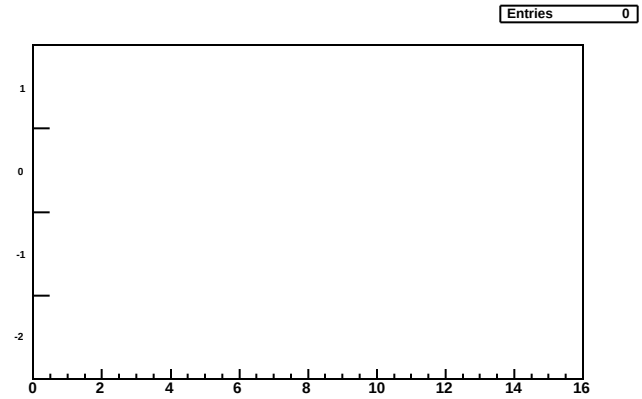
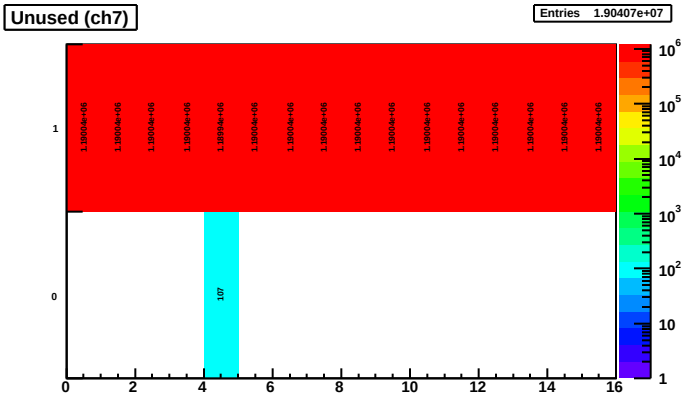
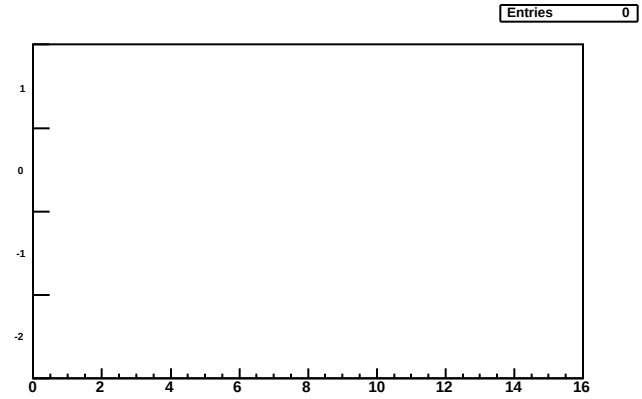


ST201 0-15 (ch6)





Unused (ch7)