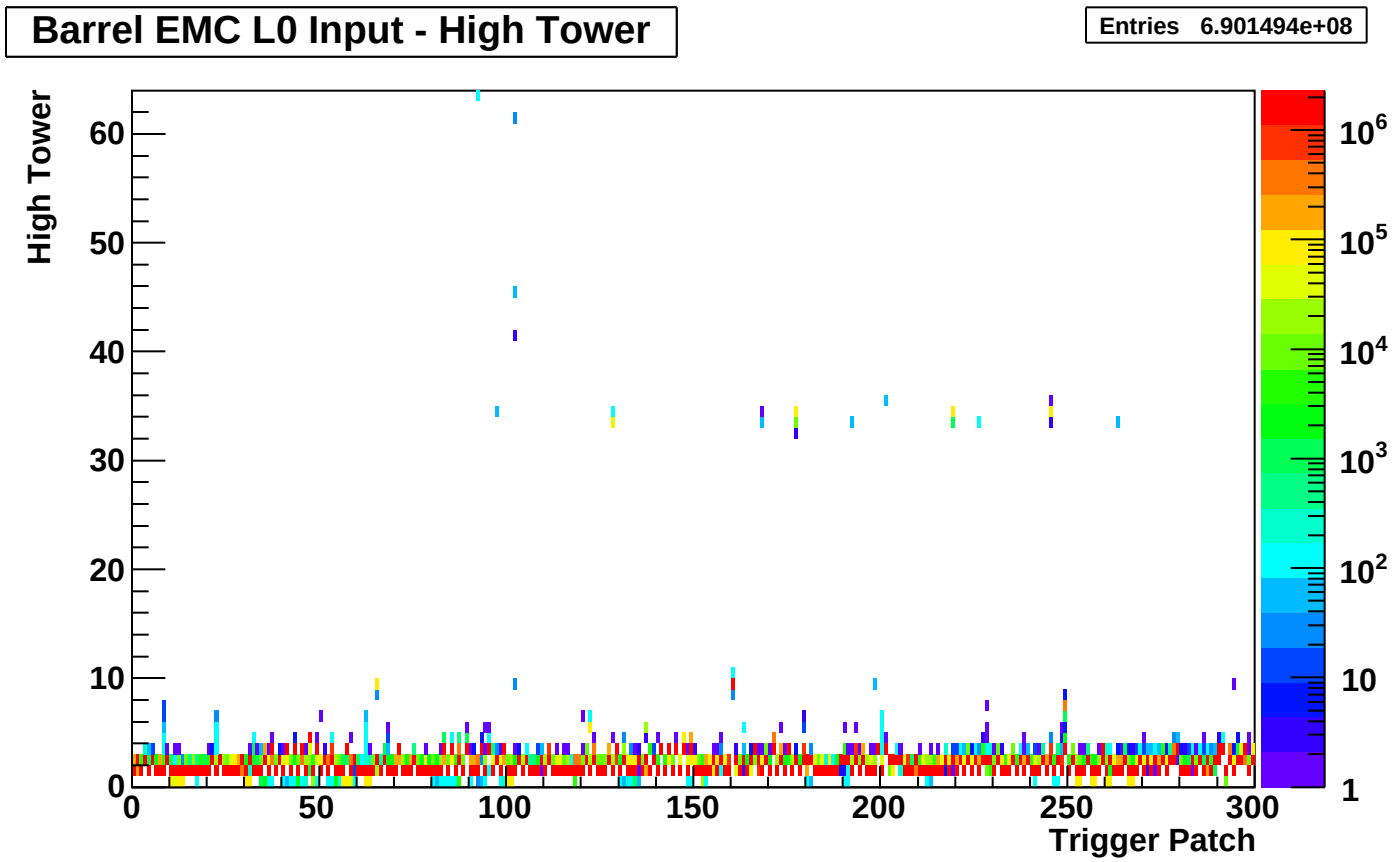
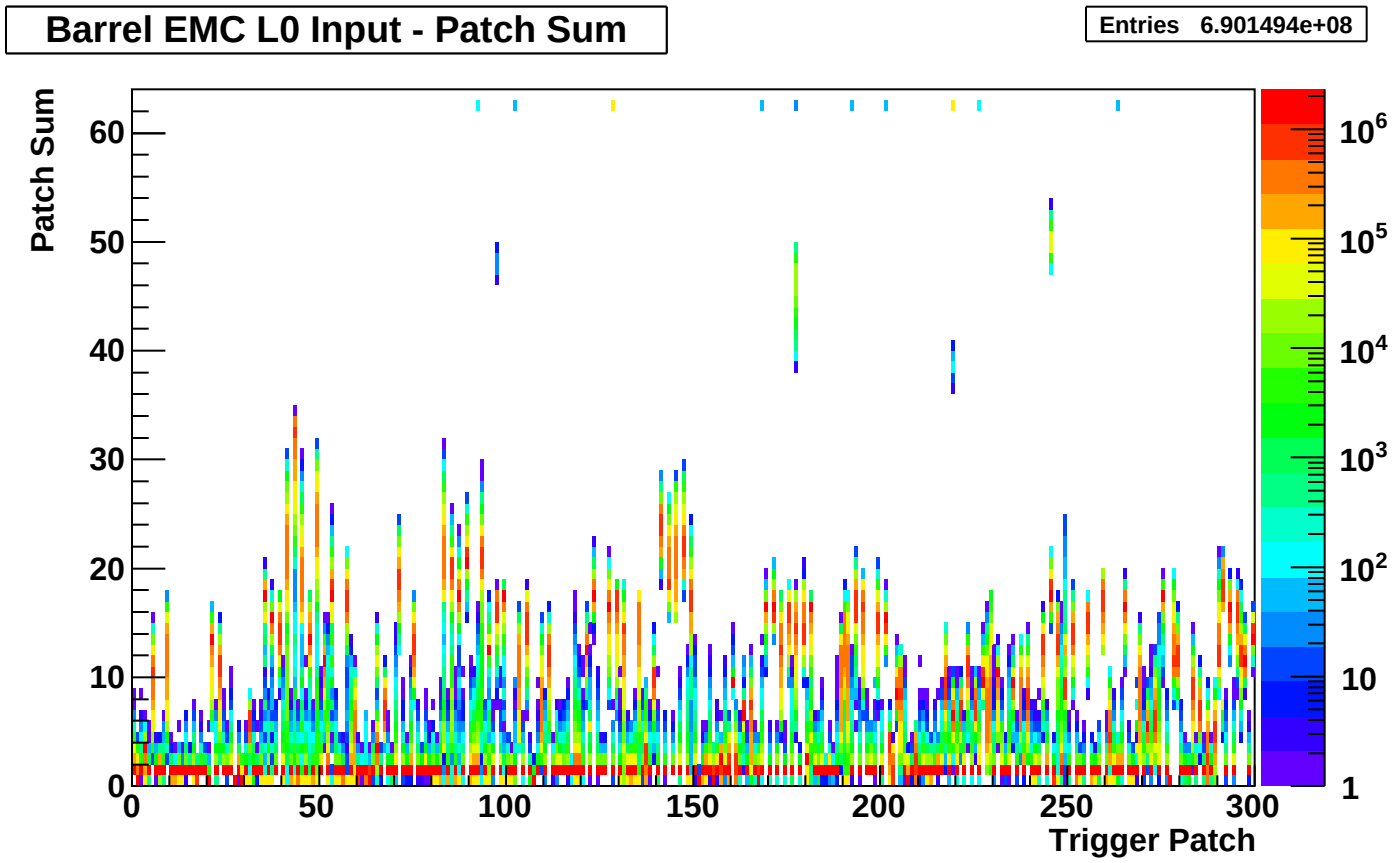
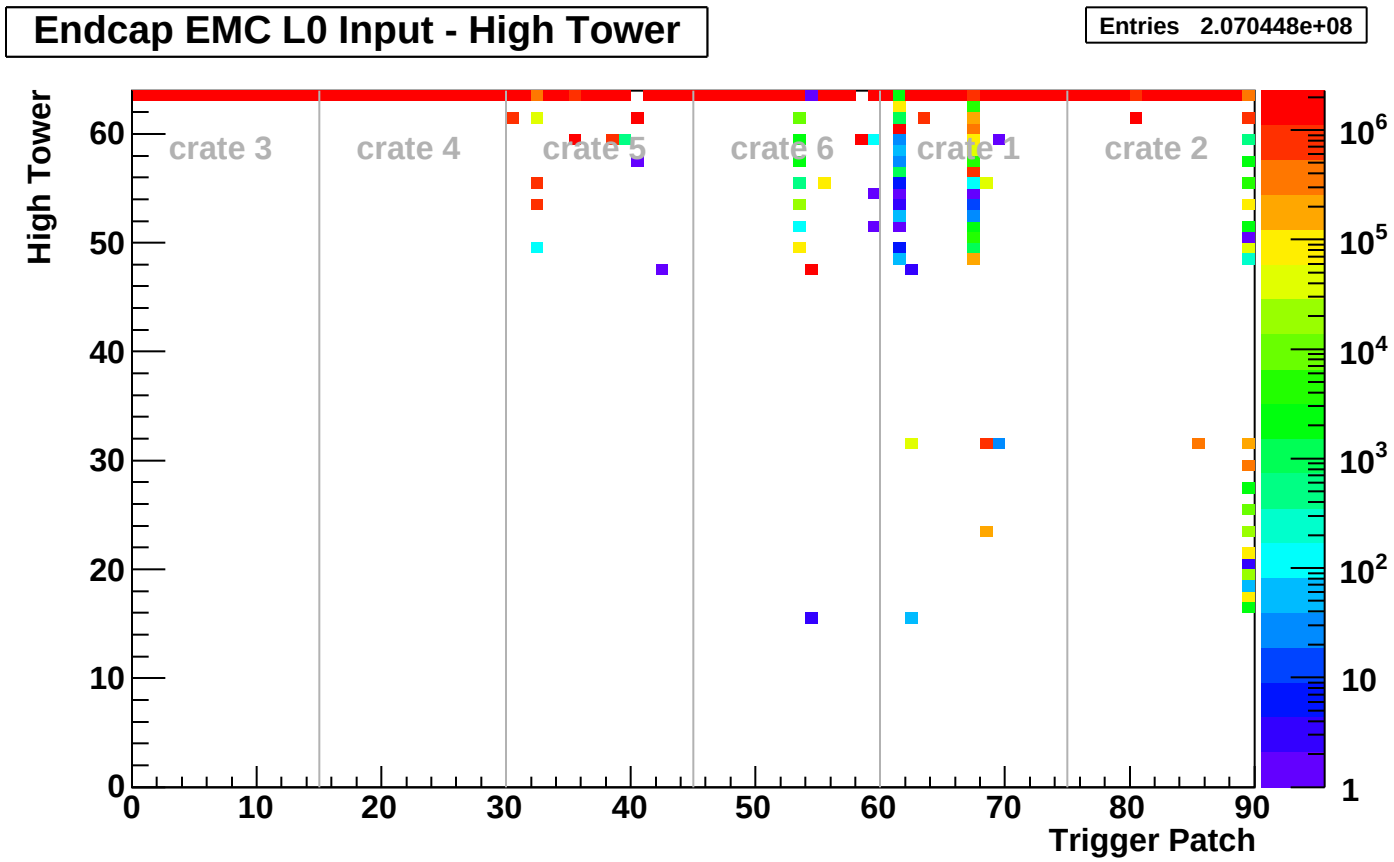
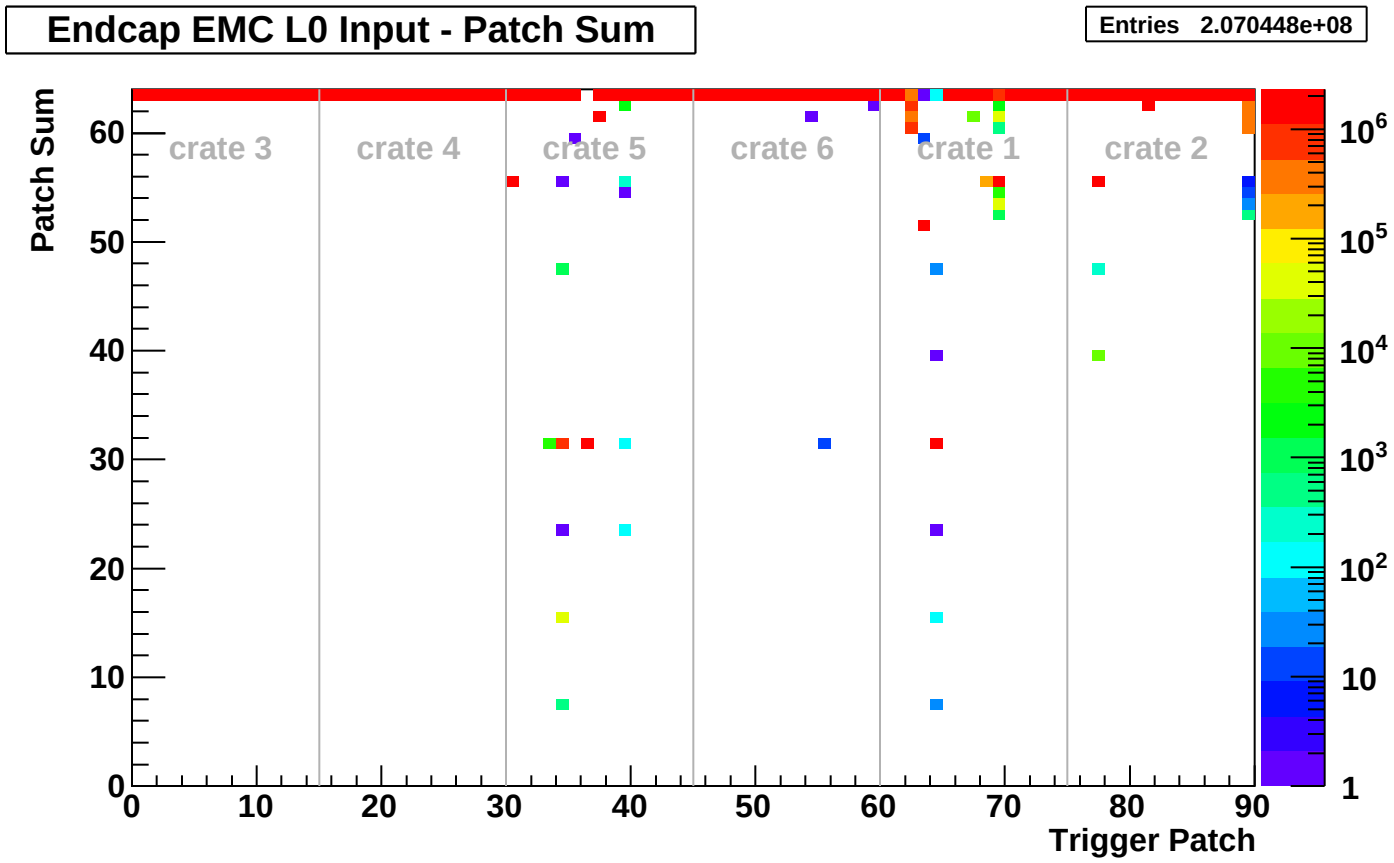
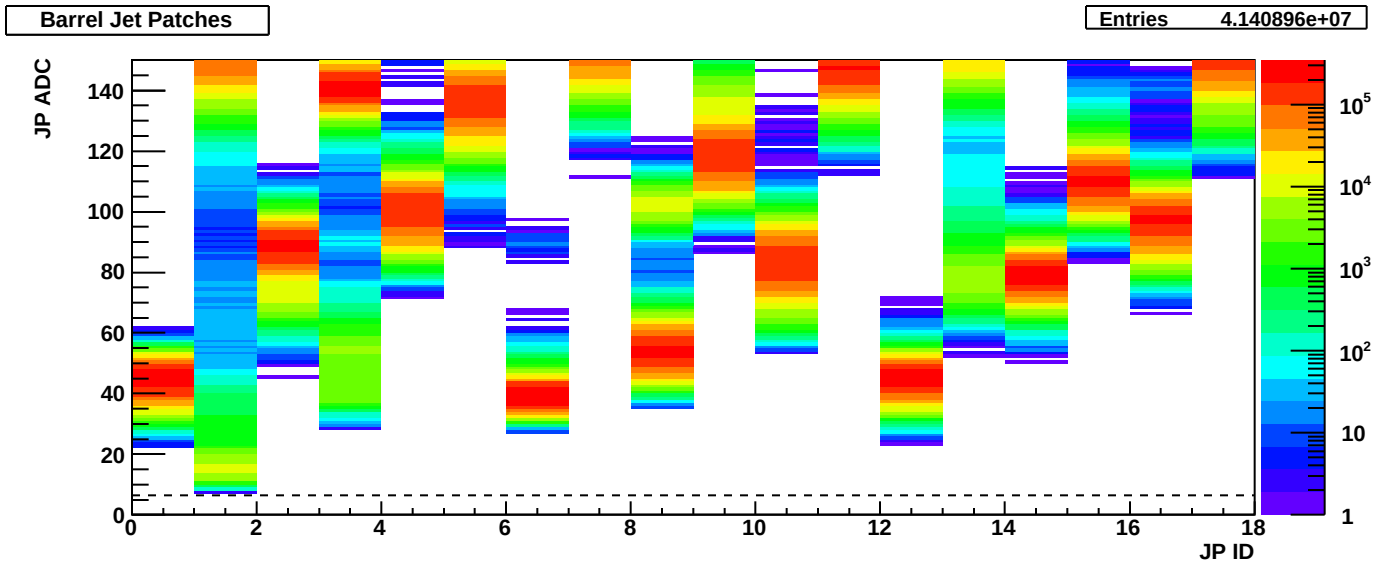
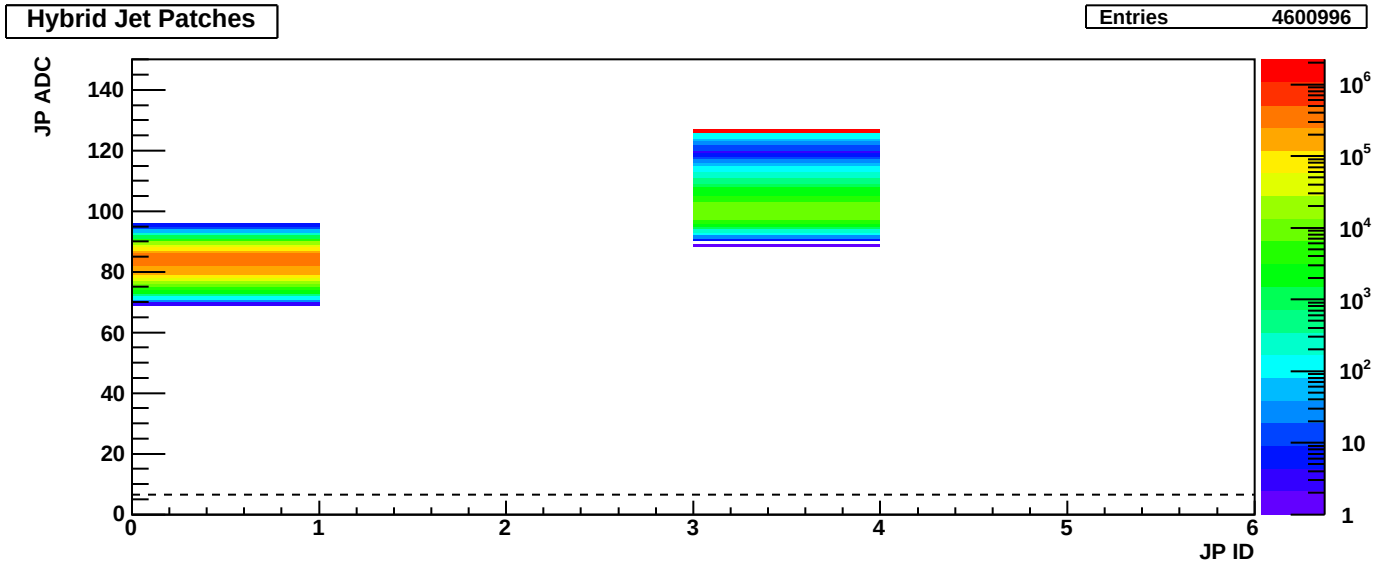

Barrel EMC L0 Input - High Tower
Entries 6.901494e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

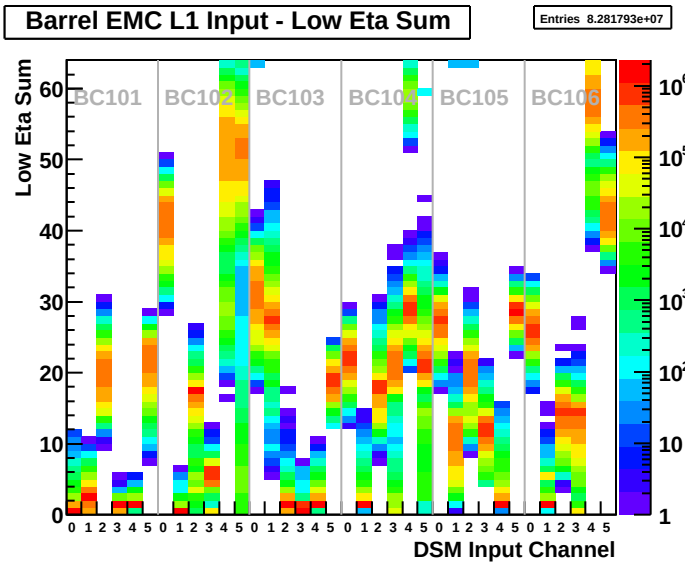

Barrel EMC L0 Input - Patch Sum
Entries 6.901494e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

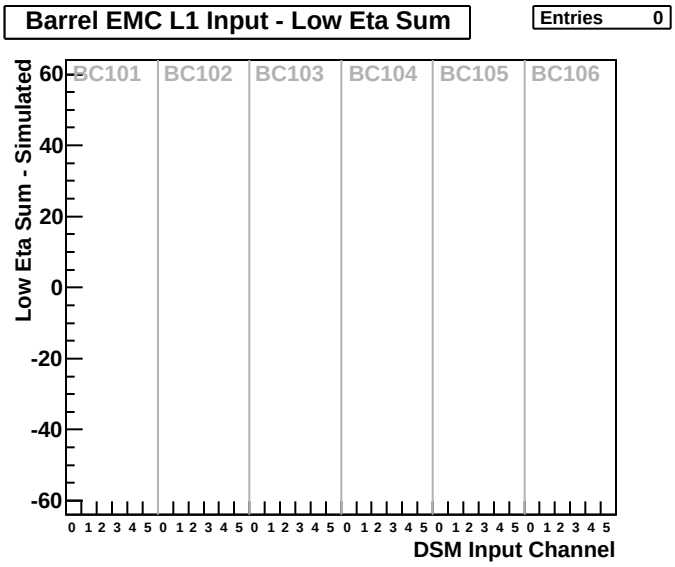

Endcap EMC L0 Input - High Tower
Entries 2.070448e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

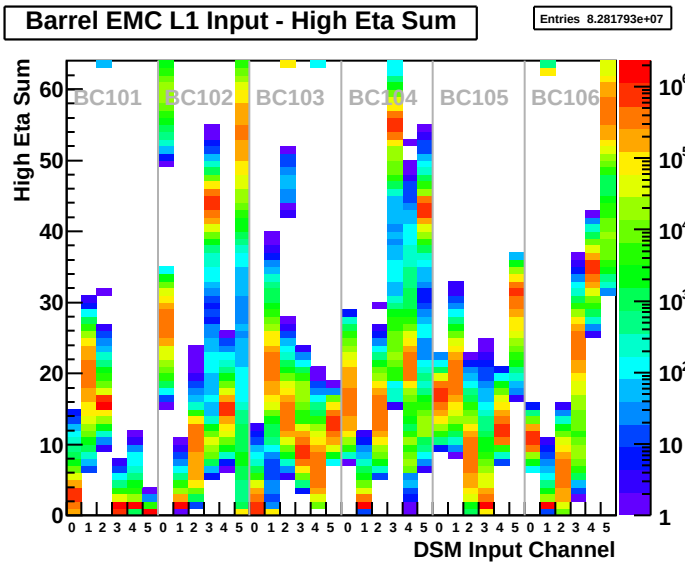

Endcap EMC L0 Input - Patch Sum
Entries 2.070448e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

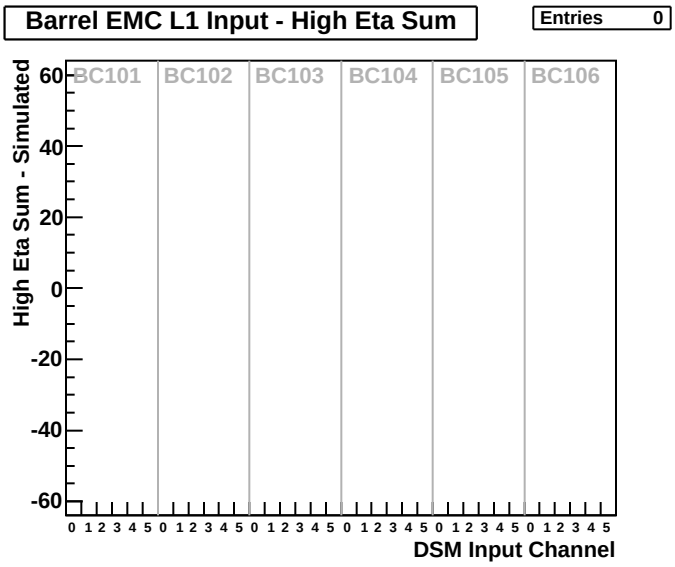

Barrel Jet Patches
Entries 4.140896e+07
JP ADC
JP ID

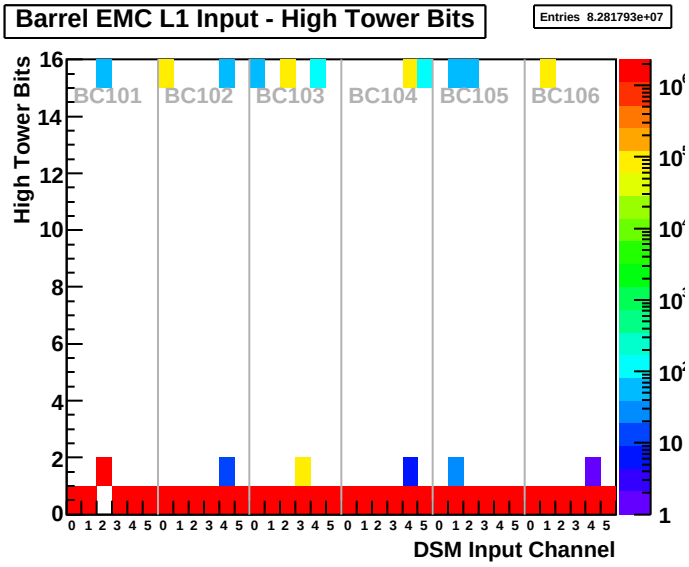

Hybrid Jet Patches
Entries 4600996
JP ADC
JP ID

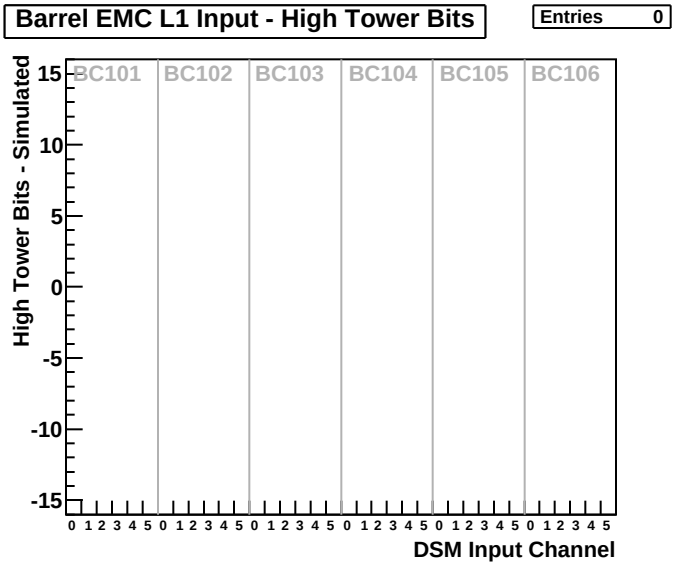

Barrel EMC L1 Input - Low Eta Sum
Entries 8.281793e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

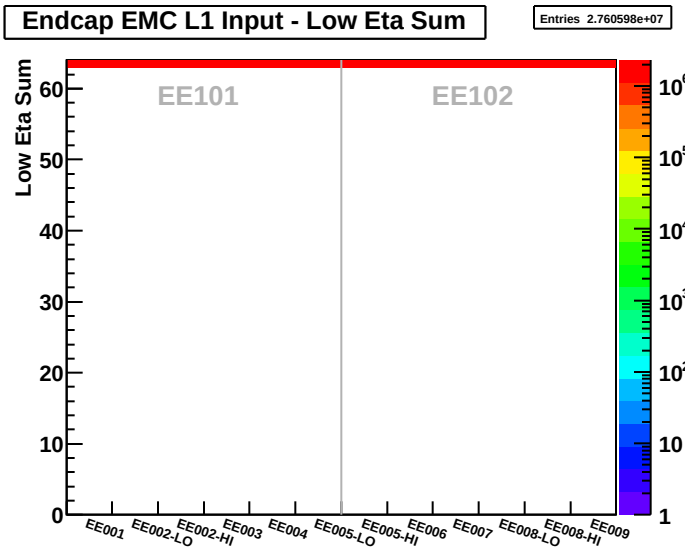

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

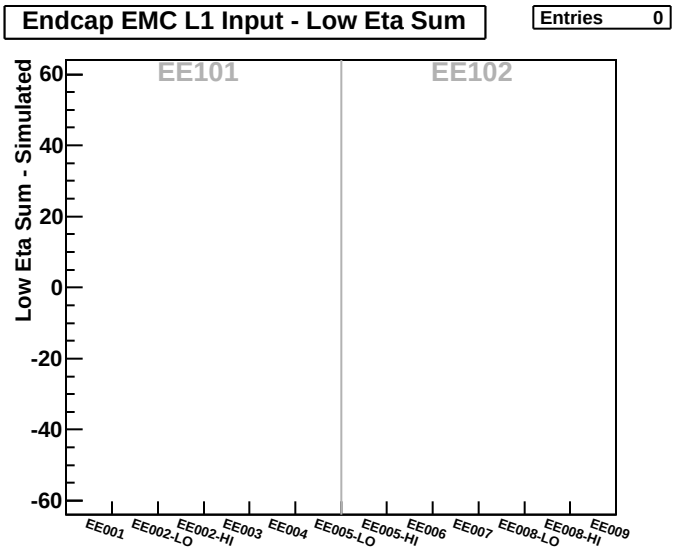

Barrel EMC L1 Input - High Eta Sum
Entries 8.281793e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

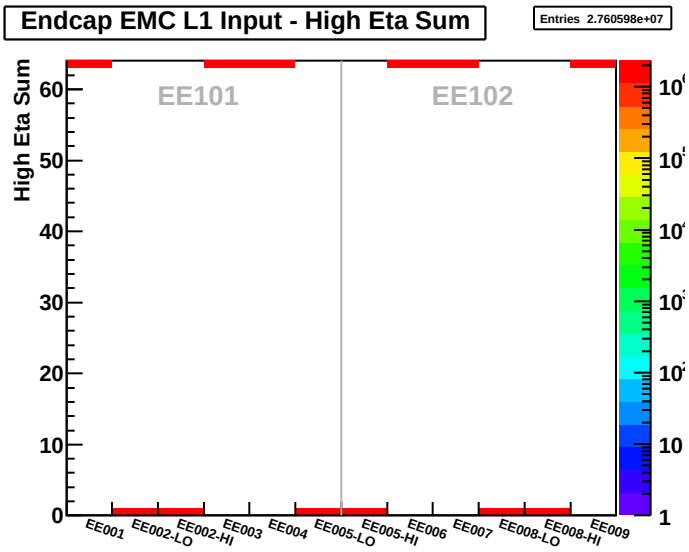

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

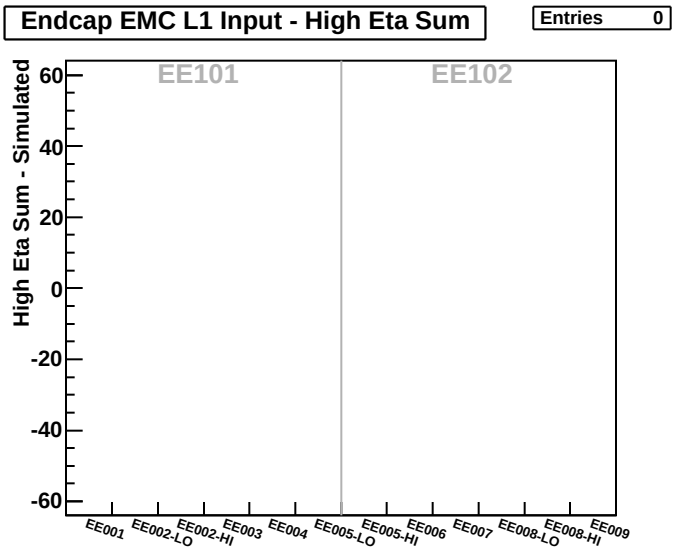

Barrel EMC L1 Input - High Tower Bits
Entries 8.281793e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

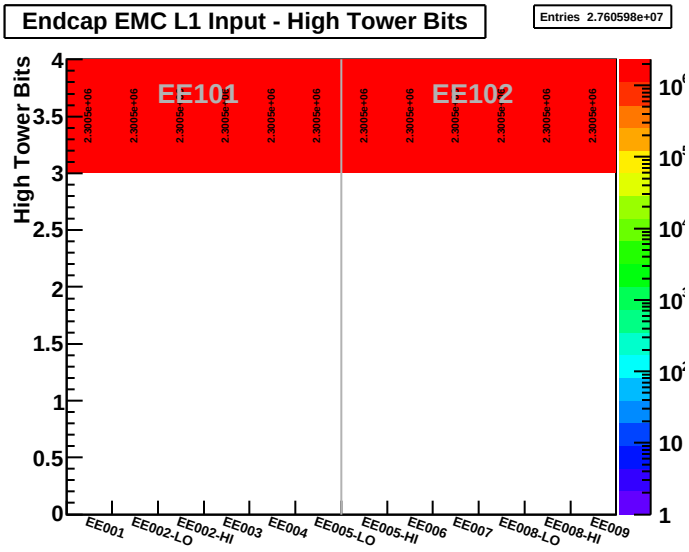

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

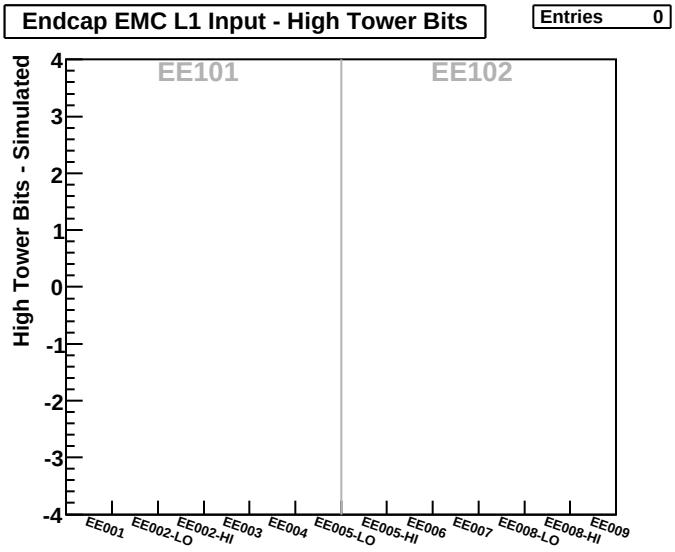

Endcap EMC L1 Input - Low Eta Sum
Entries 2.760598e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

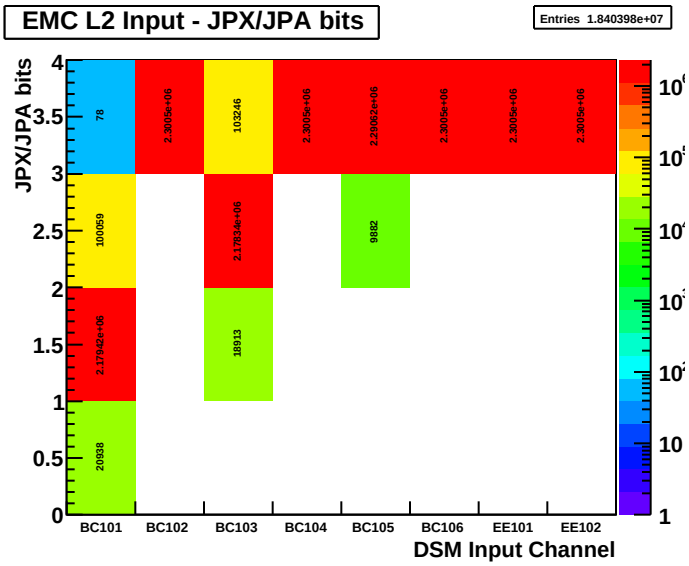

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

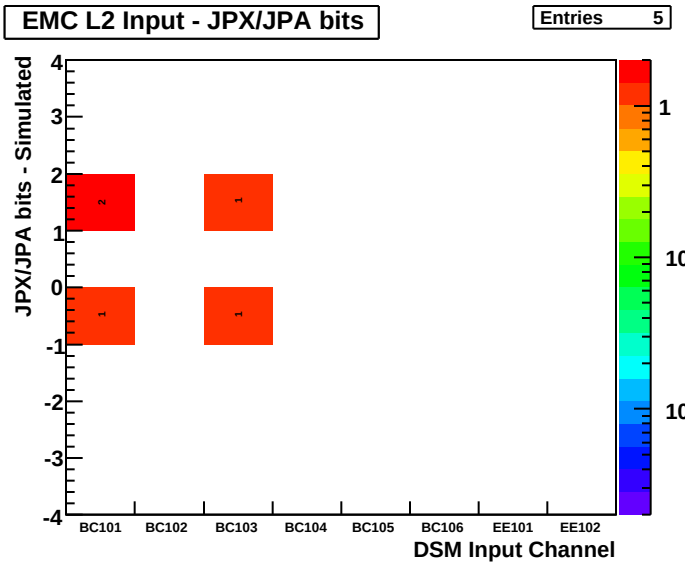

Endcap EMC L1 Input - High Eta Sum
Entries 2.760598e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

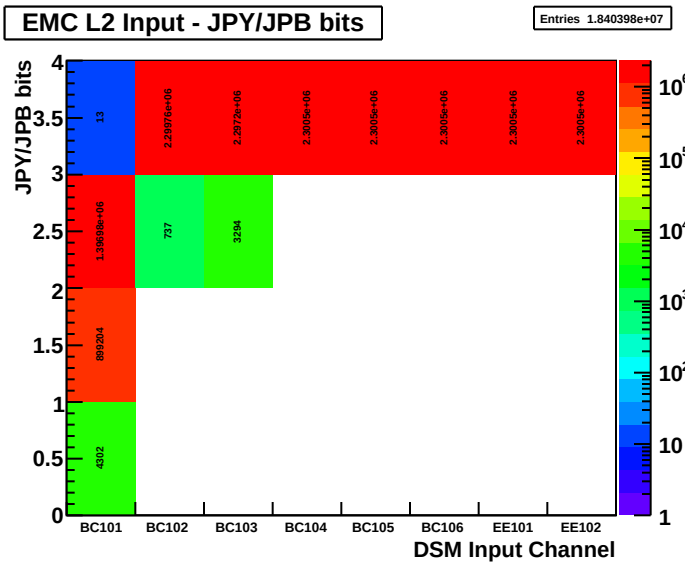

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

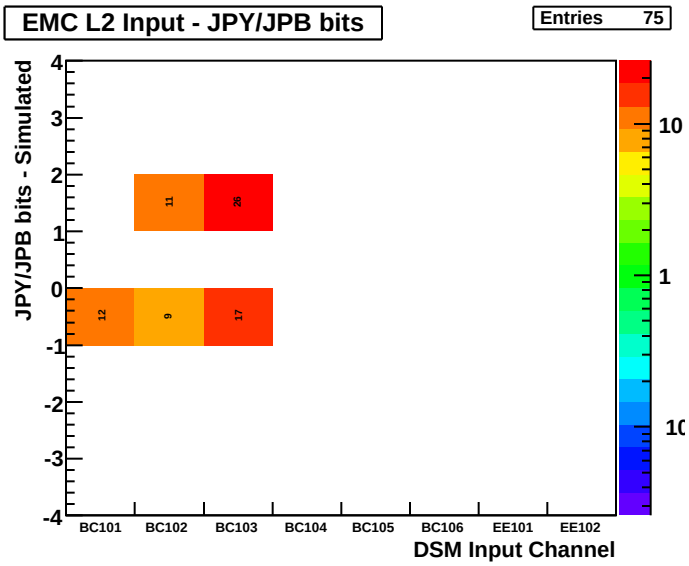

Endcap EMC L1 Input - High Tower Bits
Entries 2.760598e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

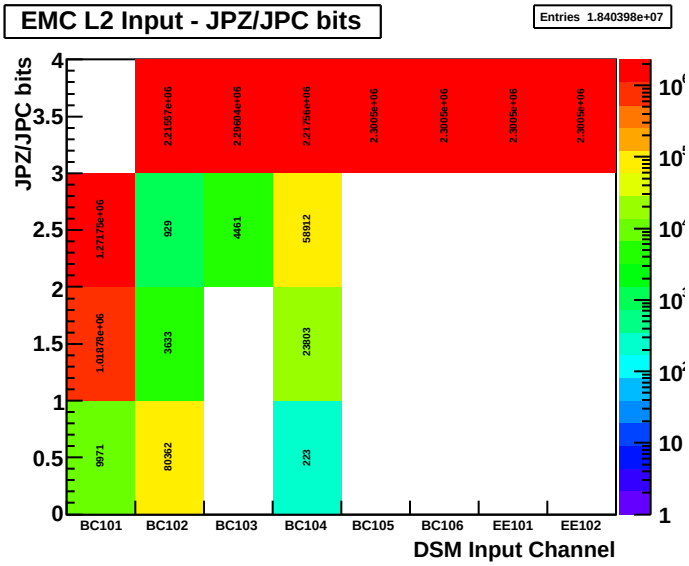

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

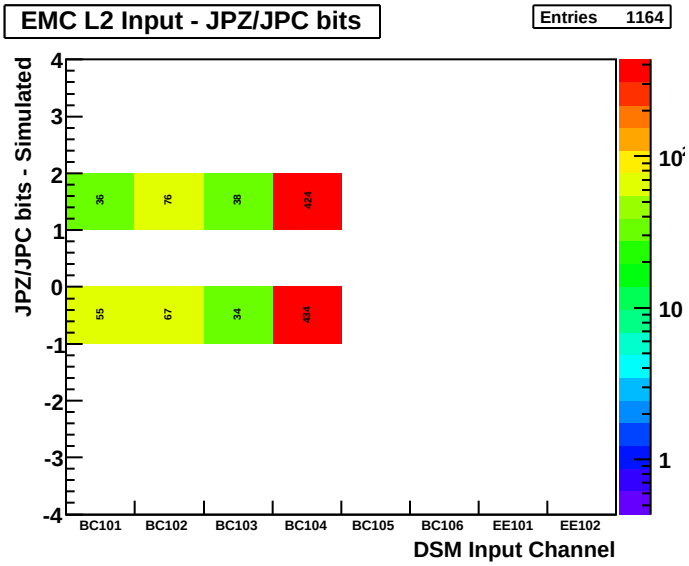

EMC L2 Input - JPX/JPA bits
Entries 1.840398e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
78
2.3005e+06
103246
2.3005e+06
2.29062e+06
2.3005e+06
2.3005e+06
2.3005e+06
100059
2.17834e+06
9882
2.17942e+06
18913
20938

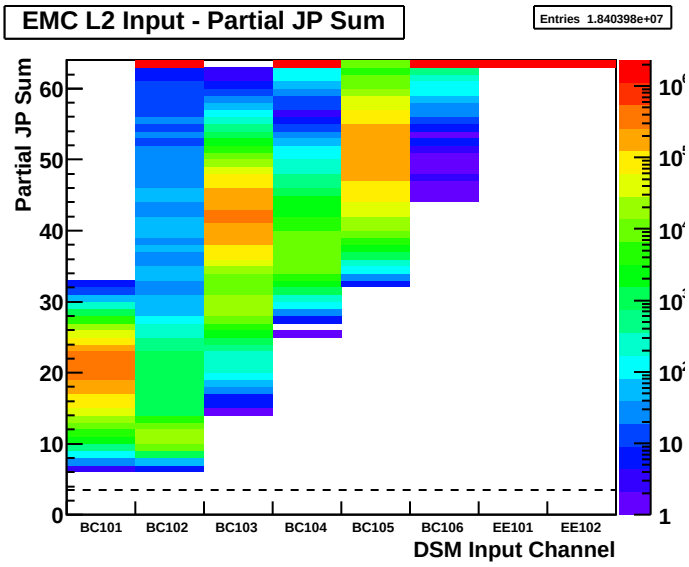

EMC L2 Input - JPX/JPA bits
Entries 5
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2
1
1
1

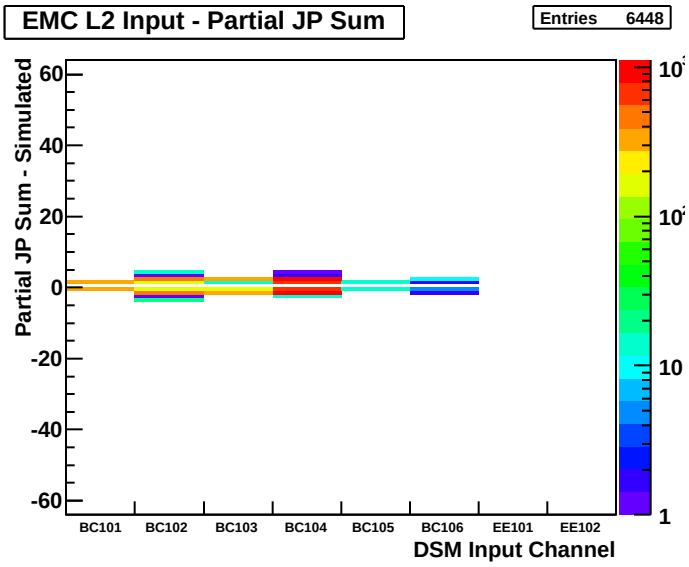

EMC L2 Input - JPY/JPB bits
Entries 1.840398e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
13
2.29976e+06
2.2972e+06
2.3005e+06
2.3005e+06
2.3005e+06
2.3005e+06
2.3005e+06
1.13658e+06
737
3294
893204
4302

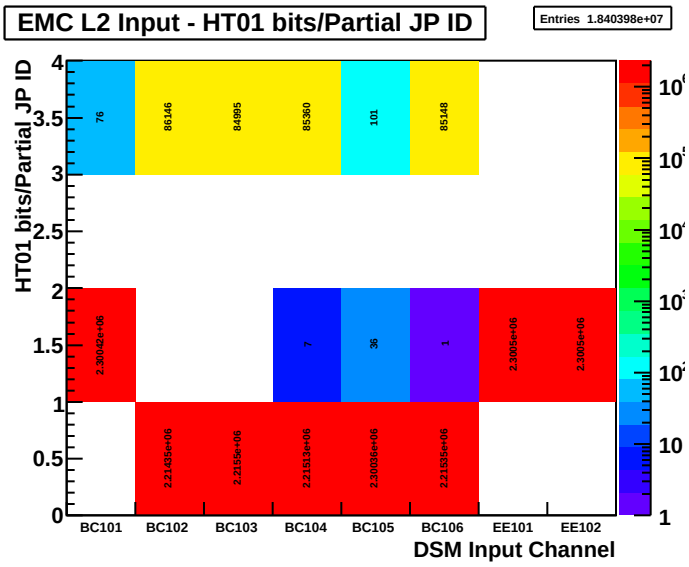

EMC L2 Input - JPY/JPB bits
Entries 75
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
11
26
12
9
17

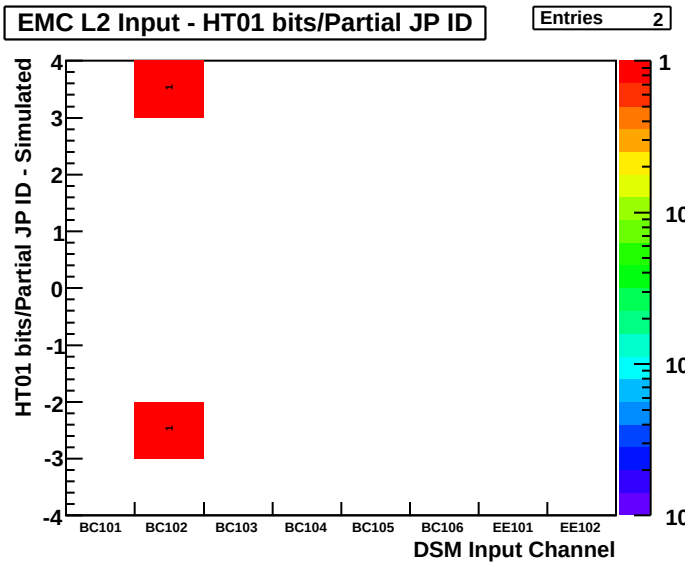

EMC L2 Input - JPZ/JPC bits
Entries 1.840398e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2.21557e+06
2.23604e+06
2.21756e+06
2.3005e+06
2.3005e+06
2.3005e+06
2.3005e+06
1.27175e+06
929
4461
58912
1.01878e+06
3633
23803
9971
80362
223

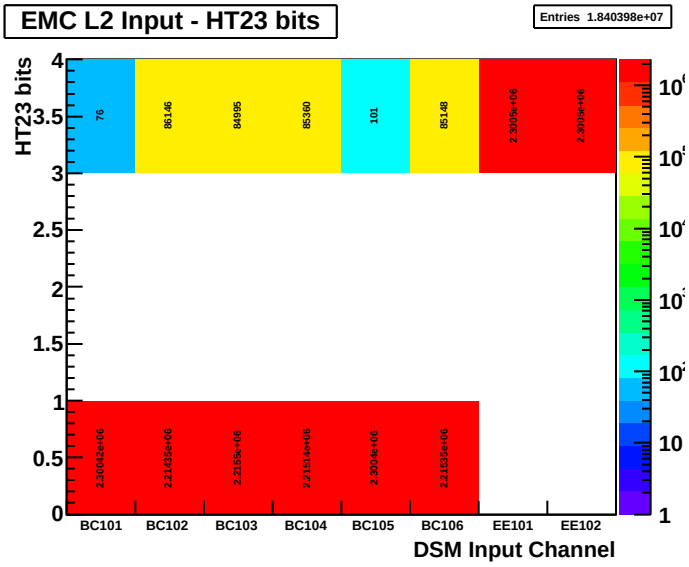

EMC L2 Input - JPZ/JPC bits
Entries 1164
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
36
76
38
424
55
67
34
434

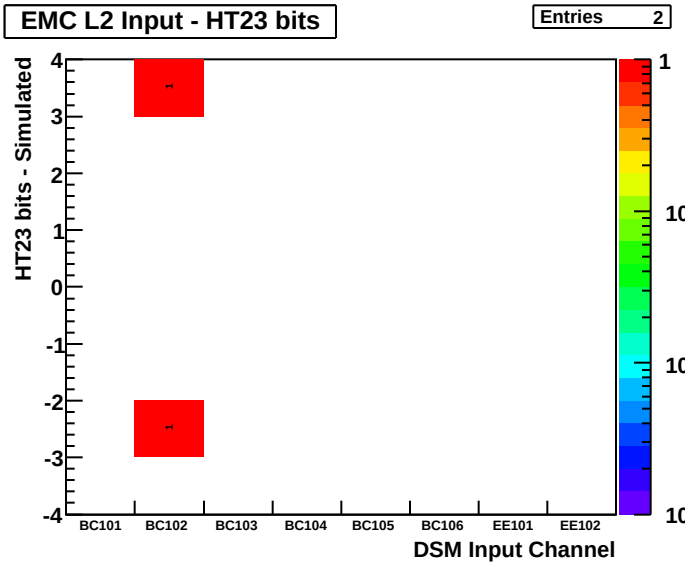

EMC L2 Input - Partial JP Sum
Entries 1.840398e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

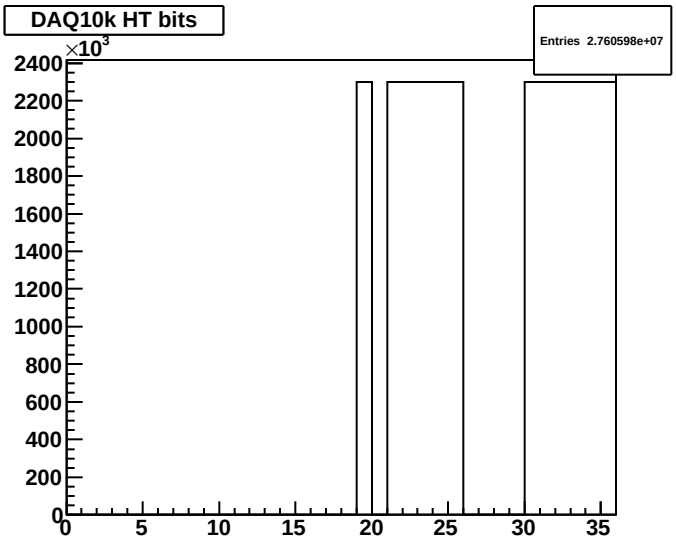

EMC L2 Input - Partial JP Sum
Entries 6448
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

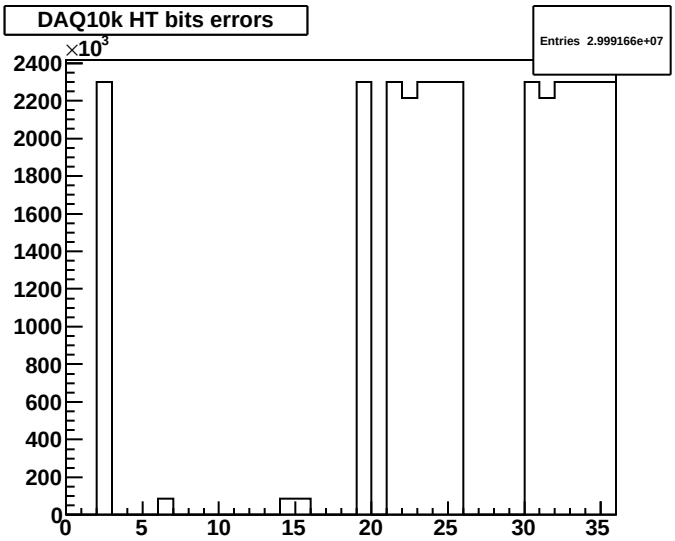

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.840398e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

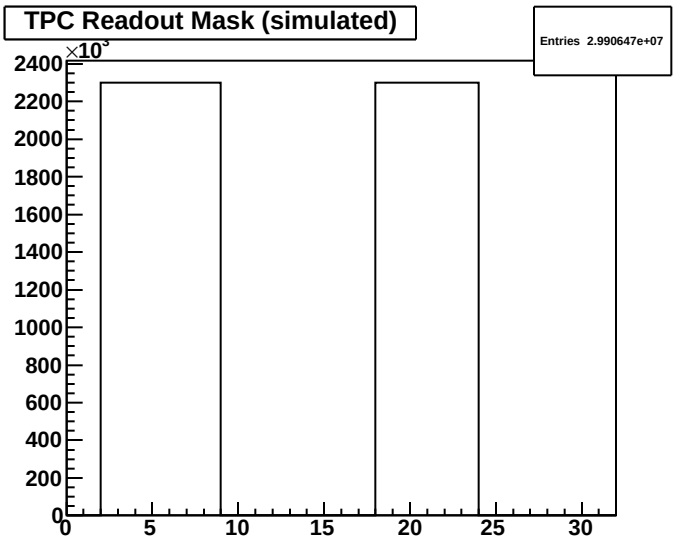

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

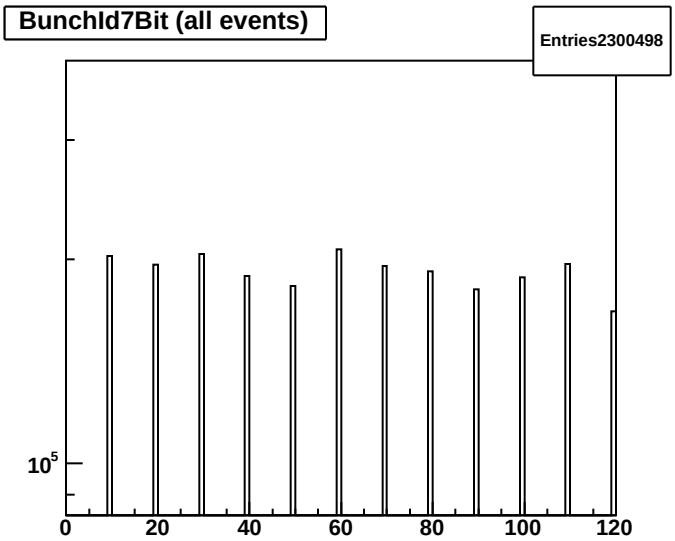

EMC L2 Input - HT23 bits
Entries 1.840398e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

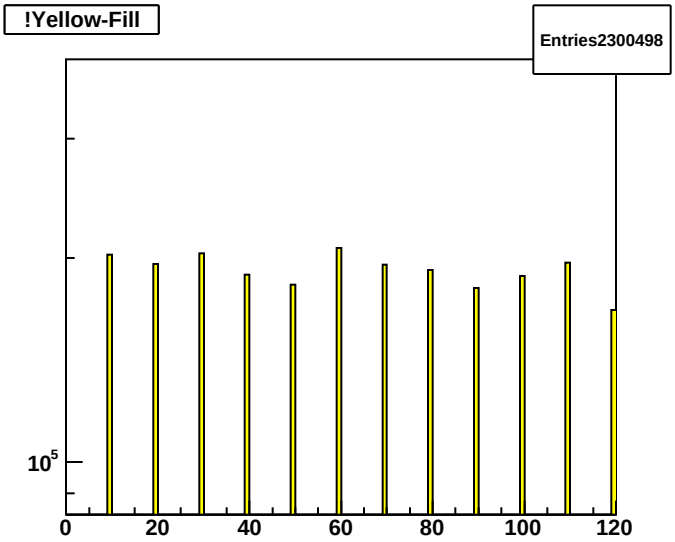

EMC L2 Input - HT23 bits
Entries 2
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

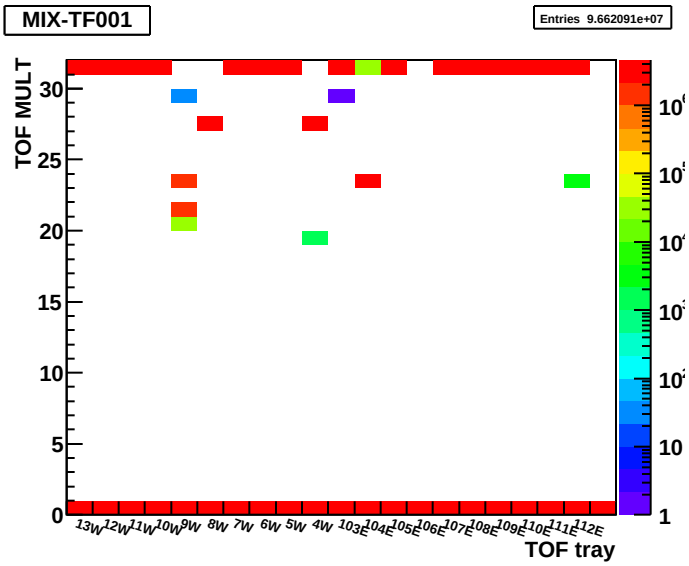

DAQ10k HT bits
Entries 2.760598e+07
×10^3
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 5 10 15 20 25 30 35

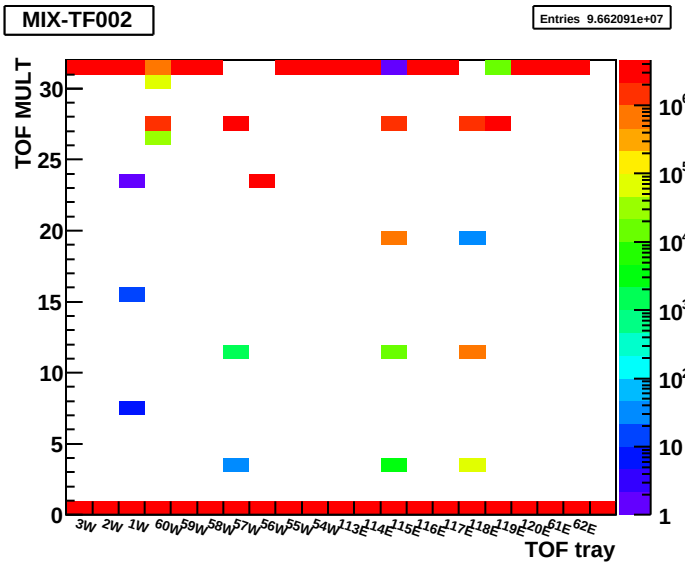

DAQ10k HT bits errors
Entries 2.999166e+07
×10^3
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 5 10 15 20 25 30 35

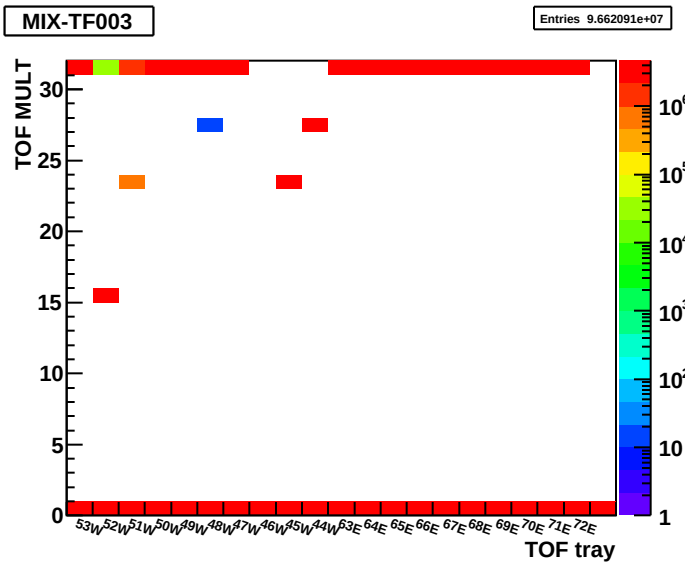

TPC Readout Mask (simulated)
Entries 2.990647e+07
×10^3
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 5 10 15 20 25 30

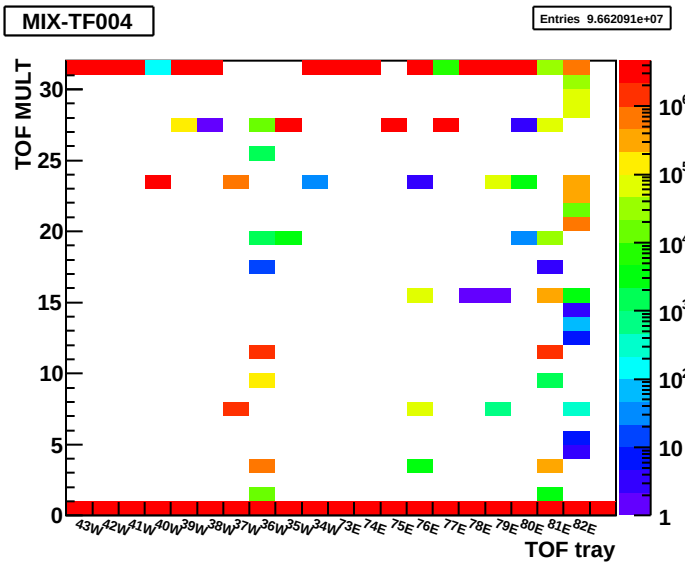

BunchId7Bit (all events)
Entries2300498
10^5
0 20 40 60 80 100 120

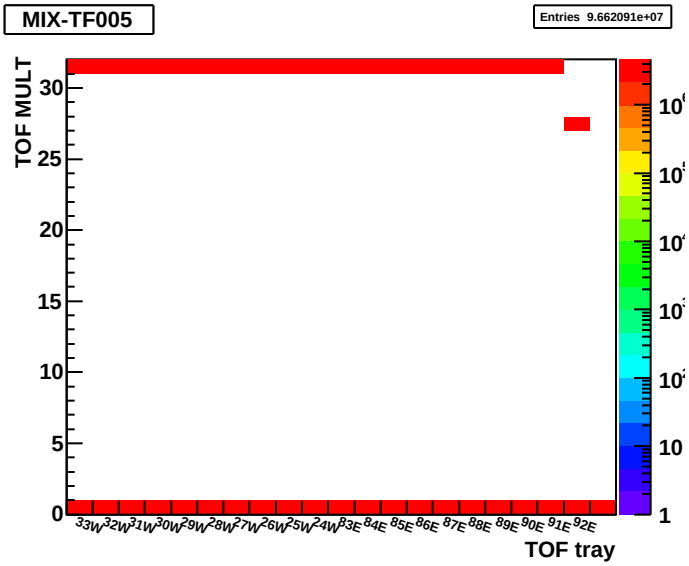

!Yellow-Fill
Entries2300498
10^5
0 20 40 60 80 100 120

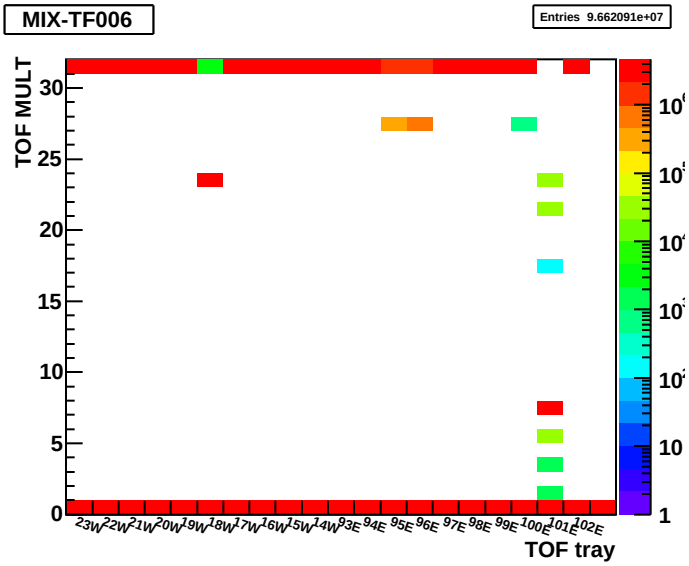

MIX-TF001
Entries 9.662091e+07
TOF MULT
TOF tray

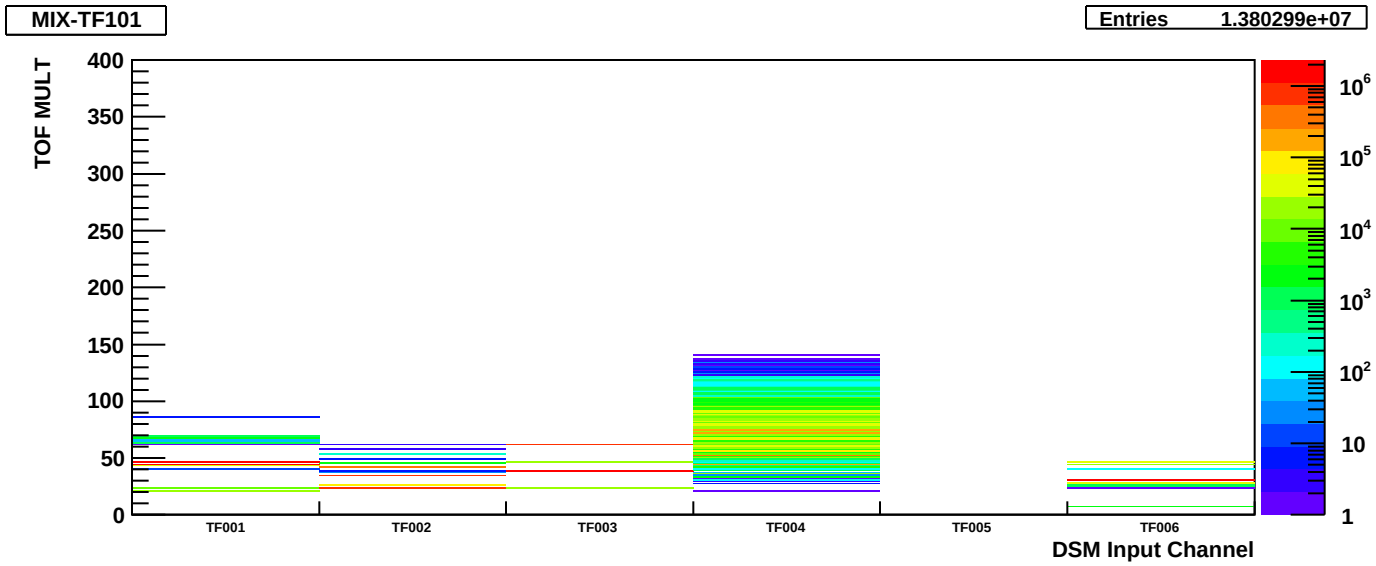

MIX-TF002
Entries 9.662091e+07
TOF MULT
TOF tray

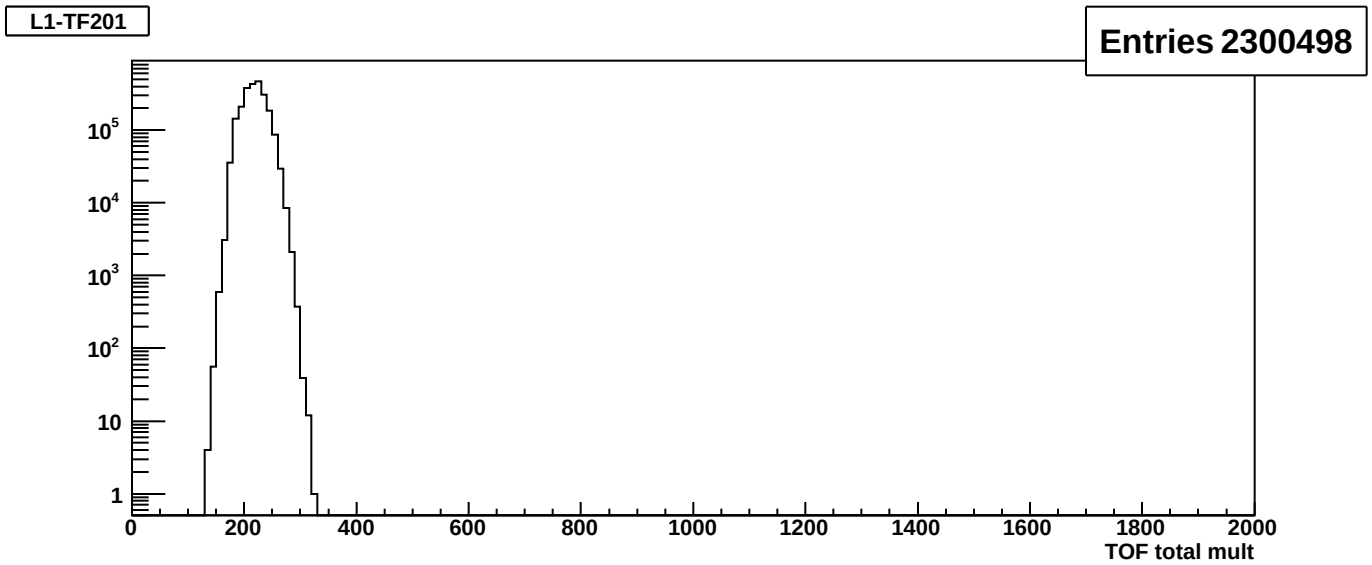

MIX-TF003
Entries 9.662091e+07
TOF MULT
TOF tray

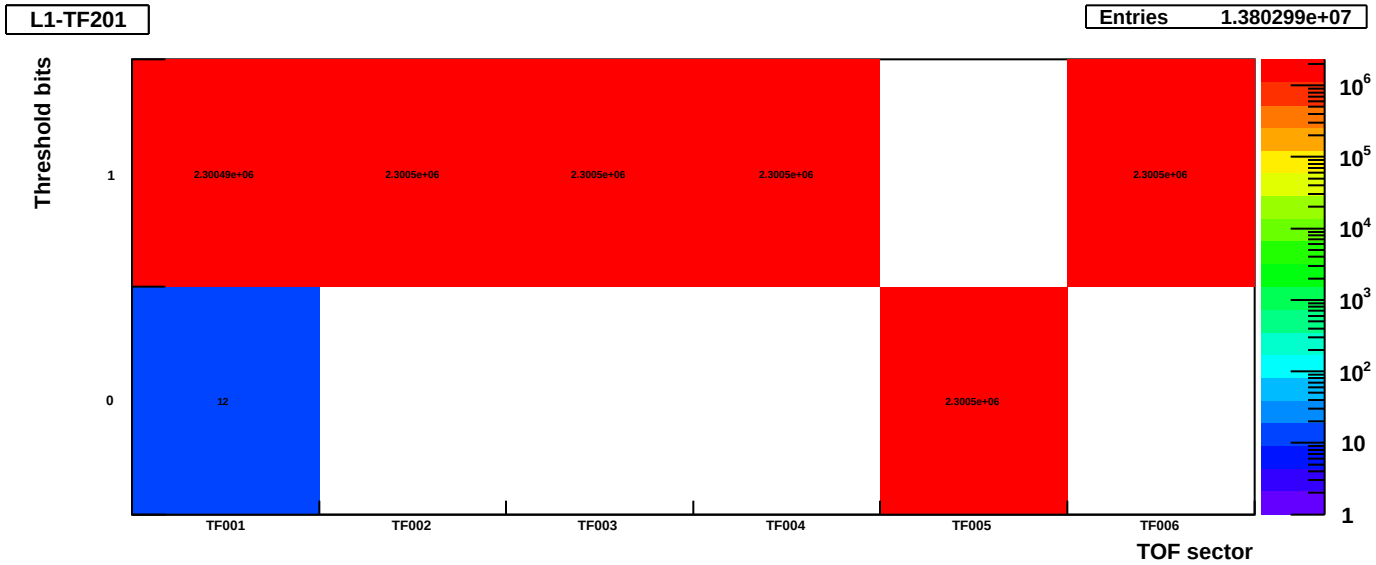

MIX-TF004
Entries 9.662091e+07
TOF MULT
TOF tray

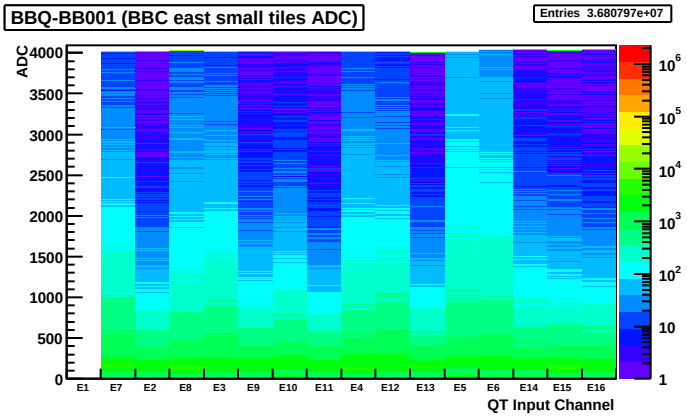

MIX-TF005
Entries 9.662091e+07
TOF MULT
TOF tray

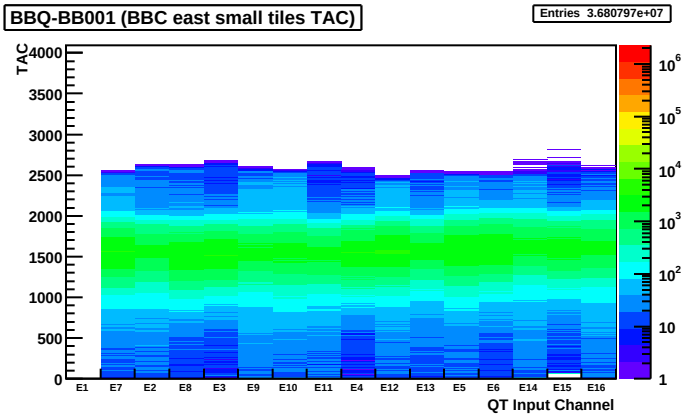

MIX-TF006
Entries 9.662091e+07
TOF MULT
TOF tray

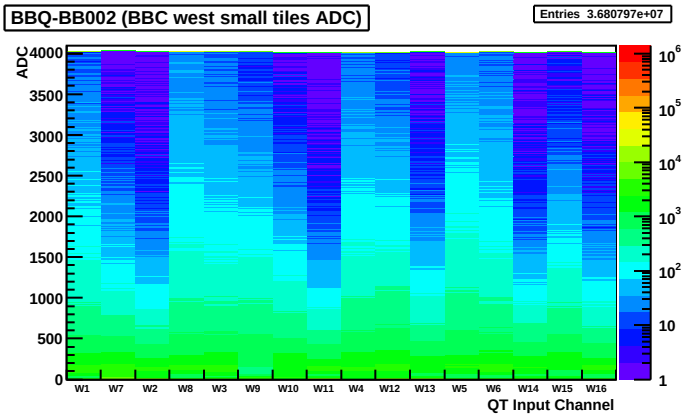

MIX-TF101
Entries 1.380299e+07
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^6
10^5
10^4
10^3
10^2
10
1

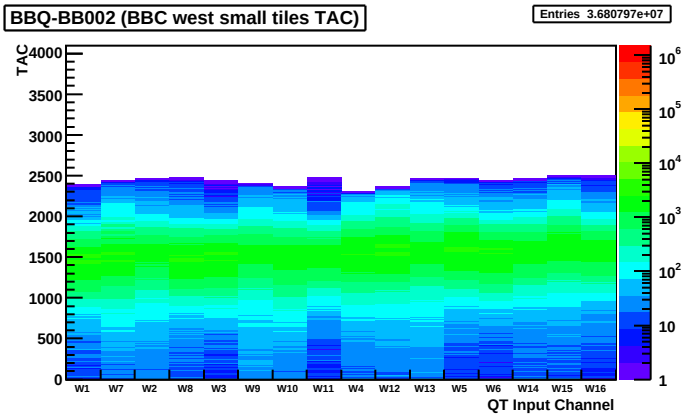

L1-TF201
Entries 2300498
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

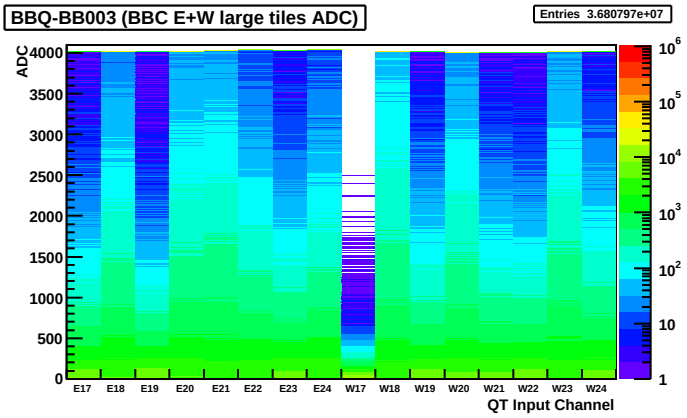

L1-TF201
Entries 1.380299e+07
Threshold bits
1
0
2.30049e+06
2.3005e+06
2.3005e+06
2.3005e+06
2.3005e+06
12
2.3005e+06
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6
10^5
10^4
10^3
10^2
10
1

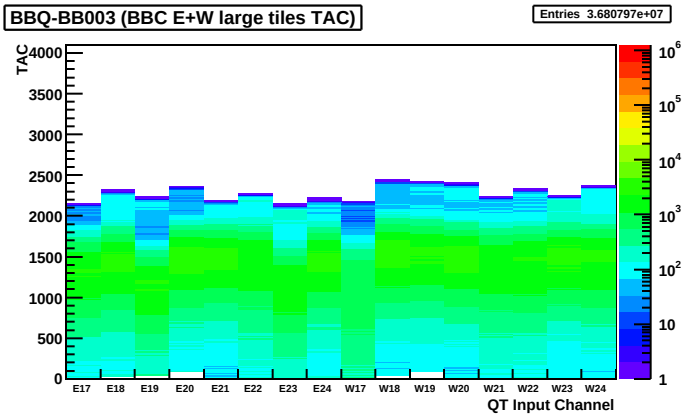

BBQ-BB001 (BBC east small tiles ADC)
Entries 3.680797e+07
ADC
QT Input Channel

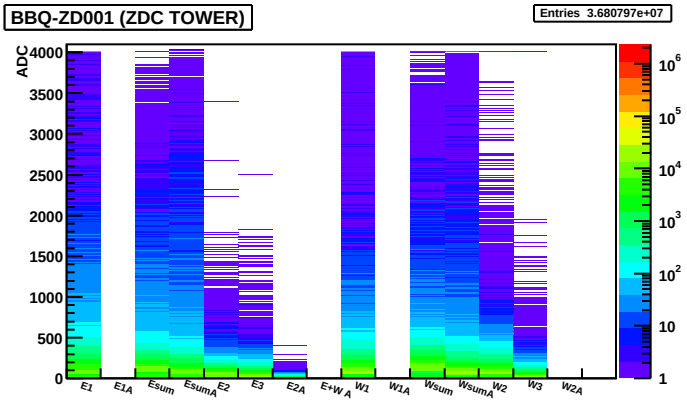

BBQ-BB001 (BBC east small tiles TAC)
Entries 3.680797e+07
TAC
QT Input Channel

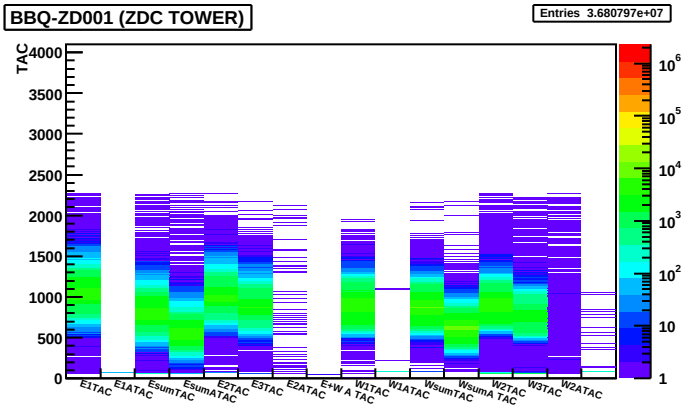

BBQ-BB002 (BBC west small tiles ADC)
Entries 3.680797e+07
ADC
QT Input Channel

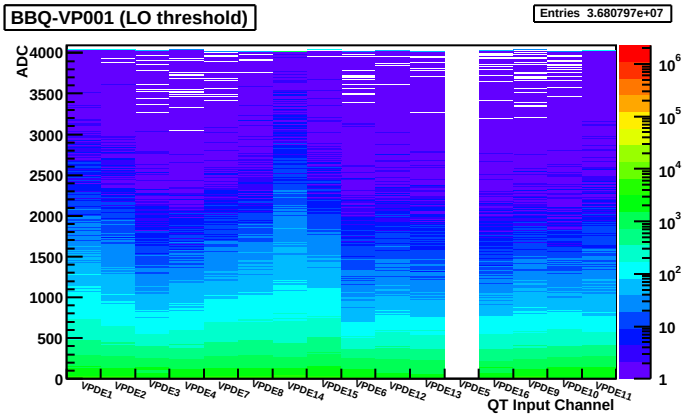

BBQ-BB002 (BBC west small tiles TAC)
Entries 3.680797e+07
TAC
QT Input Channel

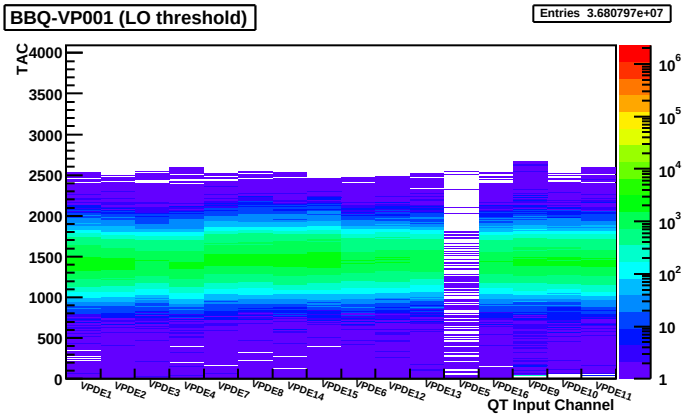

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3.680797e+07
ADC
QT Input Channel

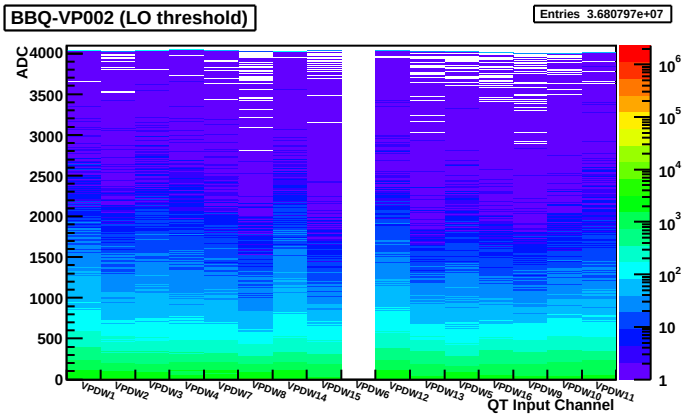

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3.680797e+07
TAC
QT Input Channel

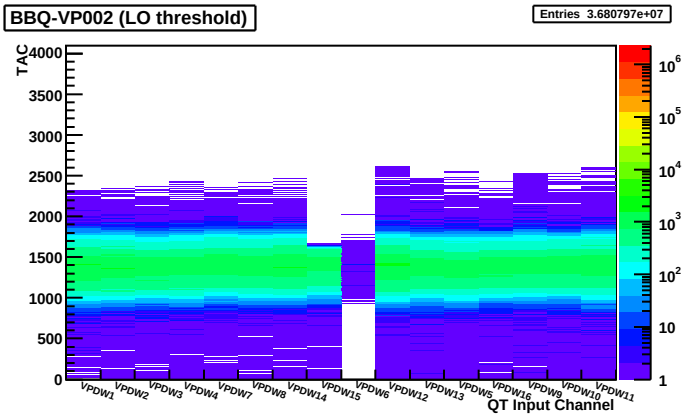

BBQ-ZD001 (ZDC TOWER)
Entries 3.680797e+07
ADC

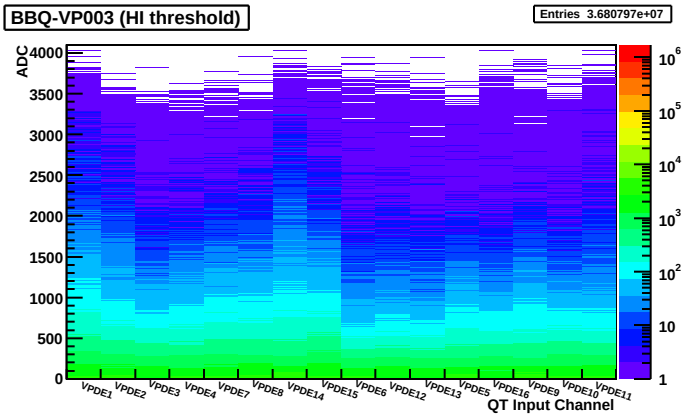

BBQ-ZD001 (ZDC TOWER)
Entries 3.680797e+07
TAC

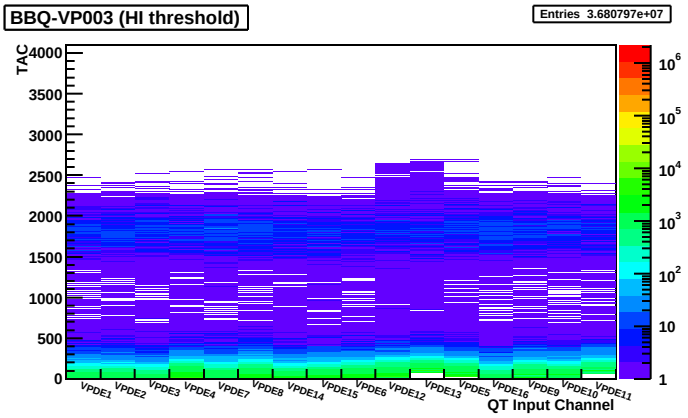

BBQ-VP001 (LO threshold)
Entries 3.680797e+07
ADC
QT Input Channel

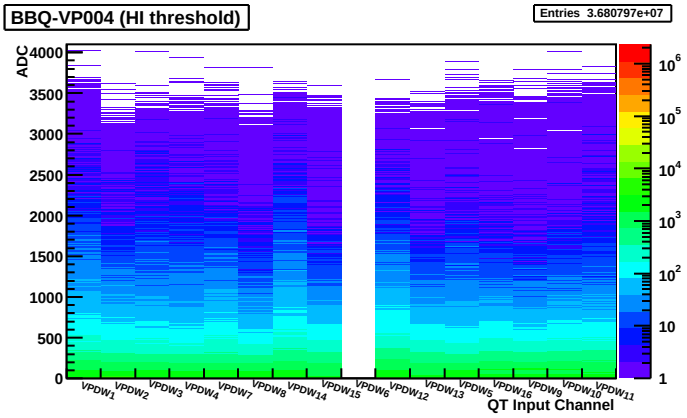

BBQ-VP001 (LO threshold)
Entries 3.680797e+07
TAC
QT Input Channel

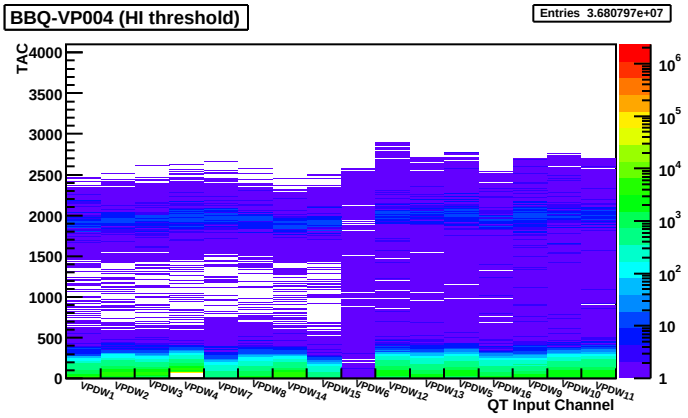

BBQ-VP002 (LO threshold)
Entries 3.680797e+07
ADC
QT Input Channel

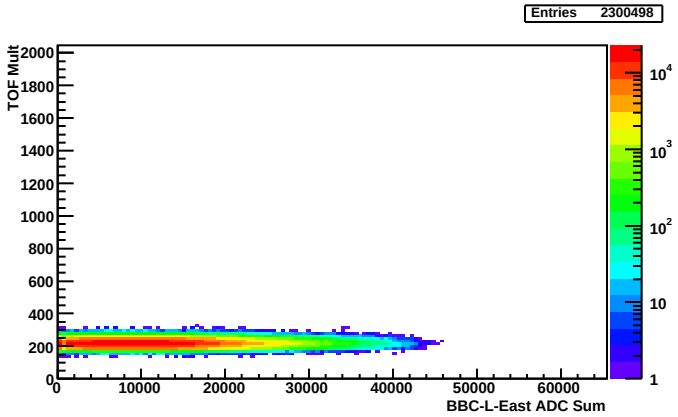

BBQ-VP002 (LO threshold)
Entries 3.680797e+07
TAC
QT Input Channel

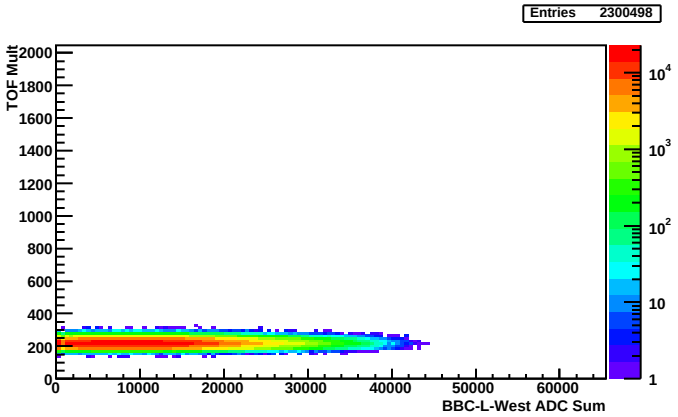

BBQ-VP003 (HI threshold)
Entries 3.680797e+07
ADC
QT Input Channel

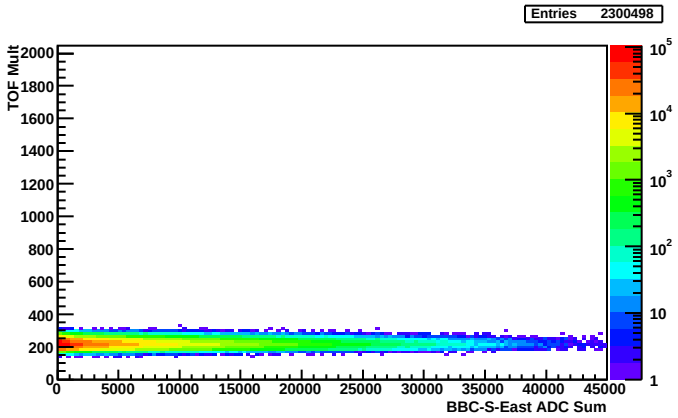

BBQ-VP003 (HI threshold)
Entries 3.680797e+07
TAC
QT Input Channel

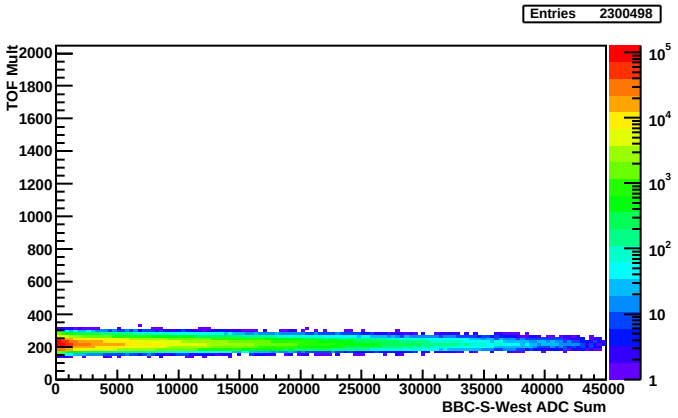

BBQ-VP004 (HI threshold)
Entries 3.680797e+07
ADC
QT Input Channel

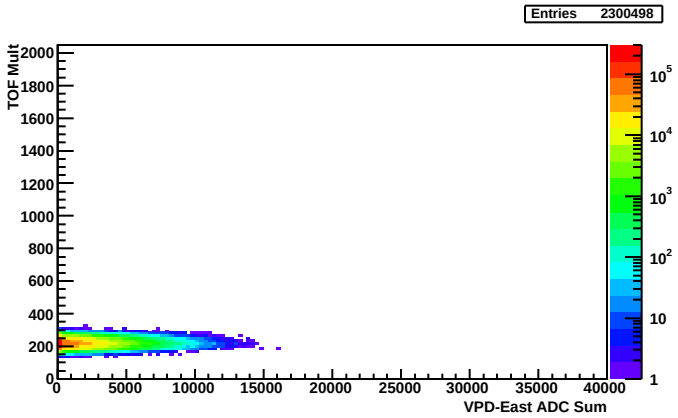

BBQ-VP004 (HI threshold)
Entries 3.680797e+07
TAC
QT Input Channel

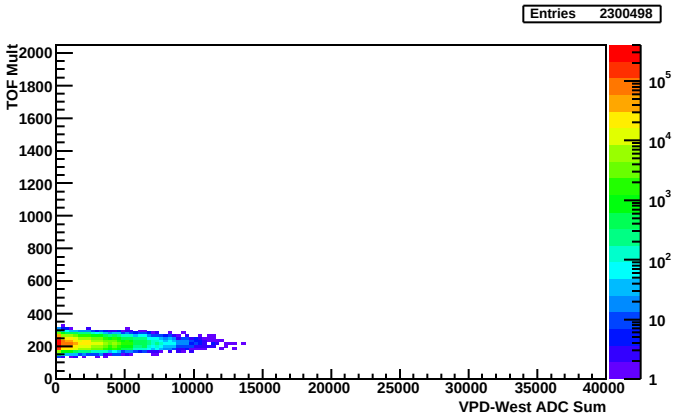

Entries 2300498
TOF Mult
BBC-L-East ADC Sum

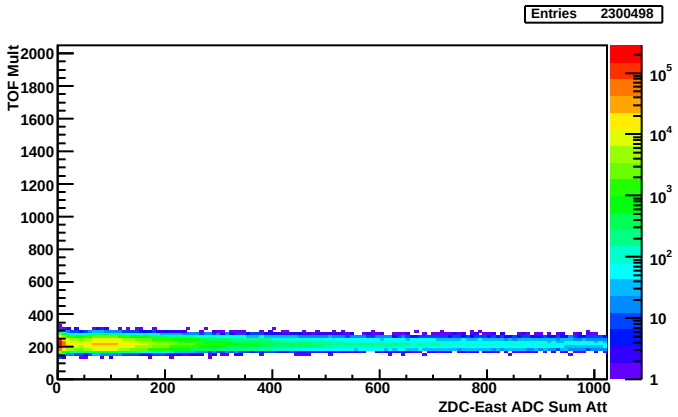

Entries 2300498
TOF Mult
BBC-L-West ADC Sum

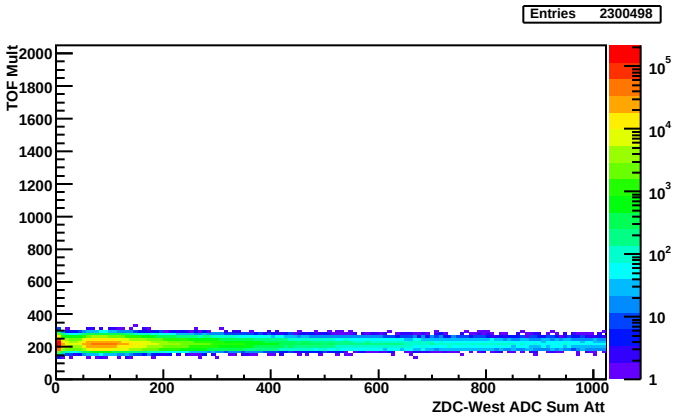

Entries 2300498
TOF Mult
BBC-S-East ADC Sum

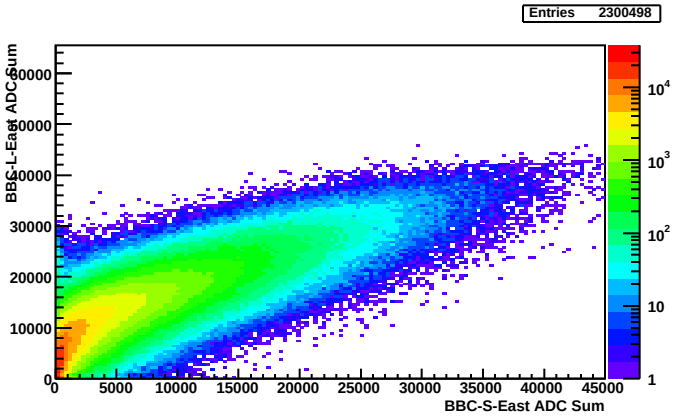

Entries 2300498
TOF Mult
BBC-S-West ADC Sum

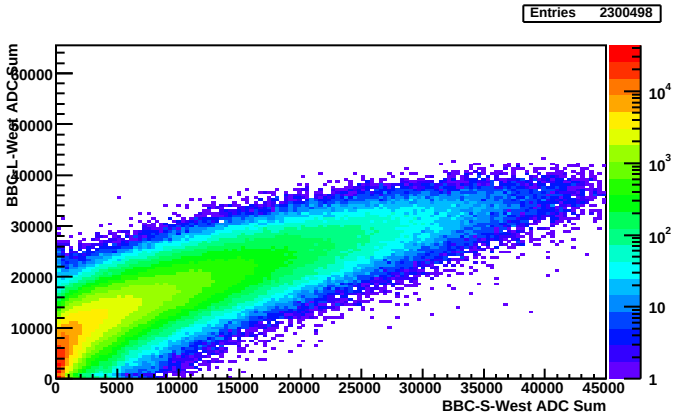

Entries 2300498
TOF Mult
VPD-East ADC Sum

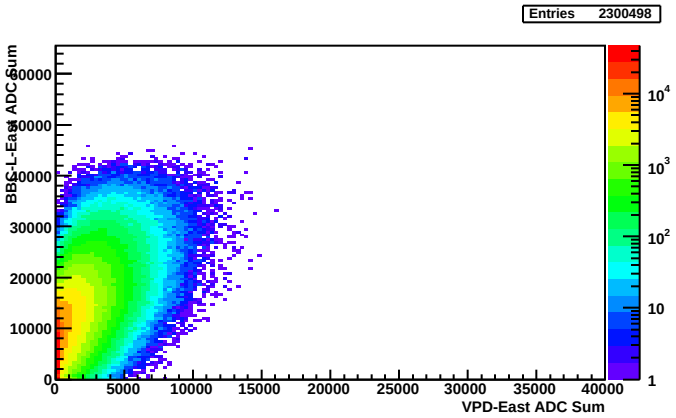

Entries 2300498
TOF Mult
VPD-West ADC Sum

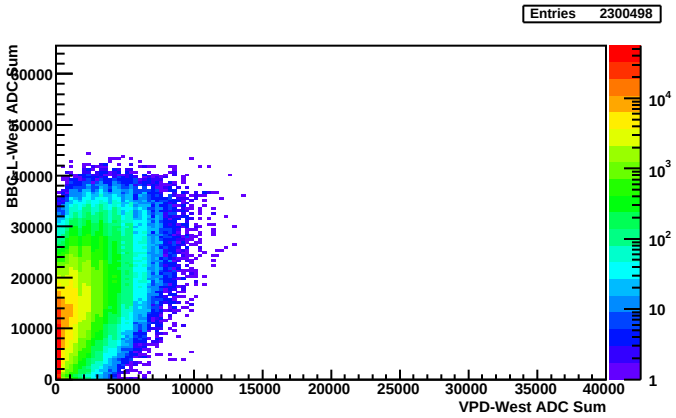

Entries 2300498
TOF Mult
ZDC-East ADC Sum Att

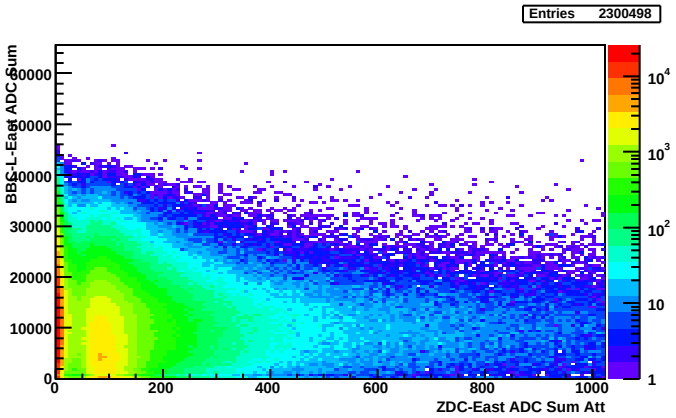

Entries 2300498
TOF Mult
ZDC-West ADC Sum Att

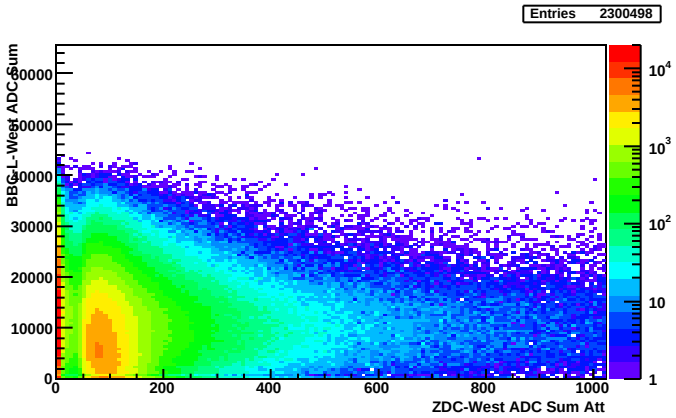

Entries 2300498
BBC-L-East ADC Sum
BBC-S-East ADC Sum

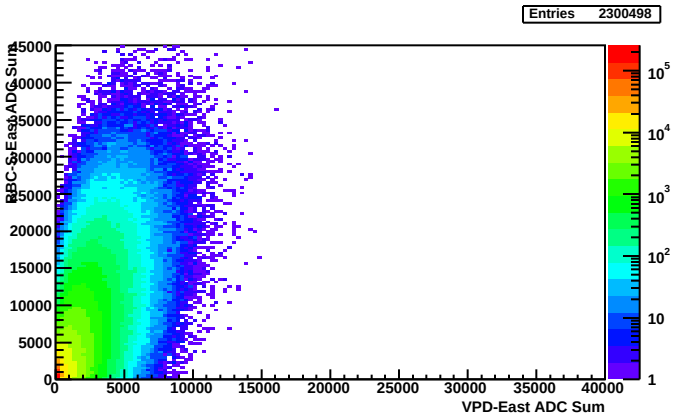

Entries 2300498
BBC-L-West ADC Sum
BBC-S-West ADC Sum

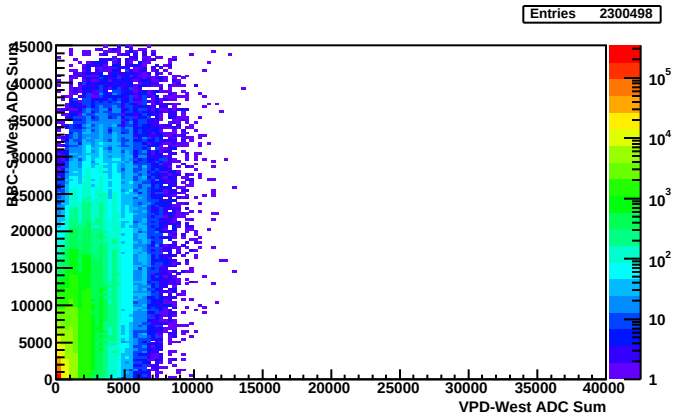

Entries 2300498
BBC-L-East ADC Sum
VPD-East ADC Sum

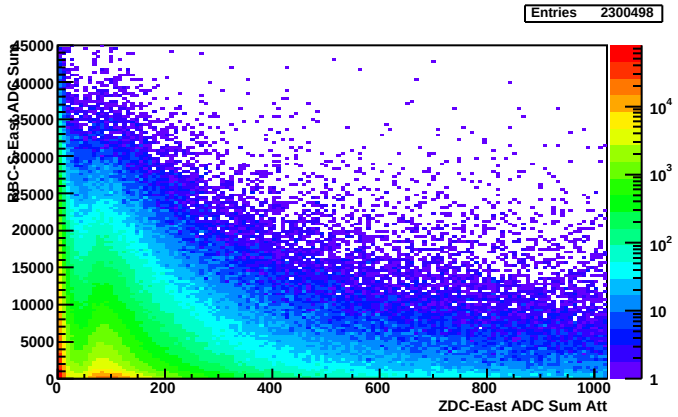

Entries 2300498
BBC-L-West ADC Sum
VPD-West ADC Sum

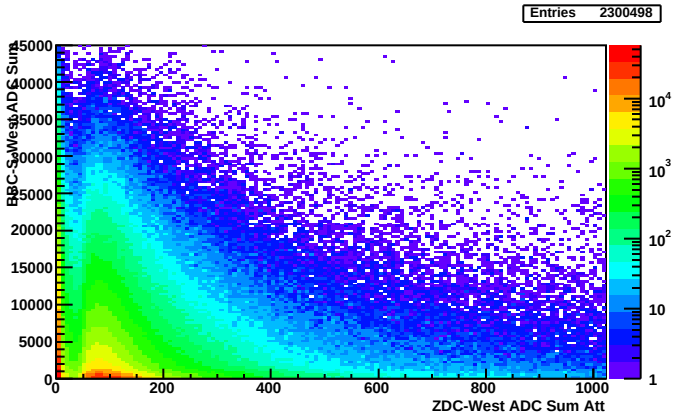

Entries 2300498
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

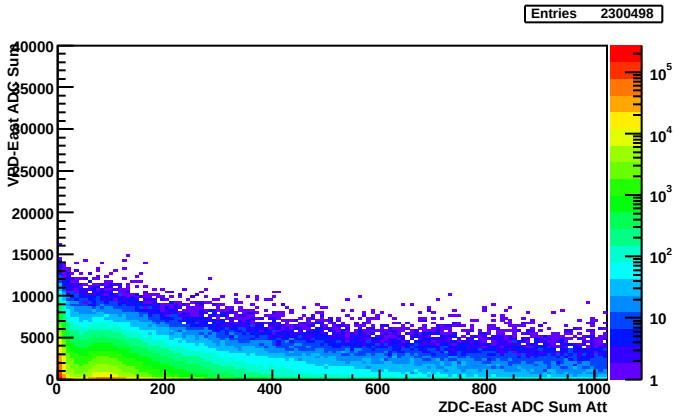

Entries 2300498
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

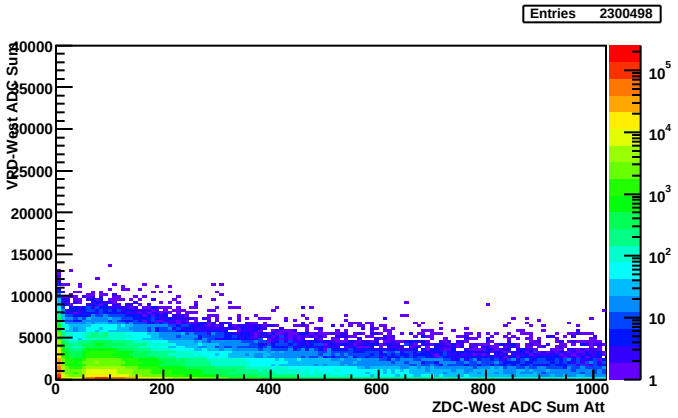

Entries 2300498
BBC-S-East ADC Sum
VPD-East ADC Sum

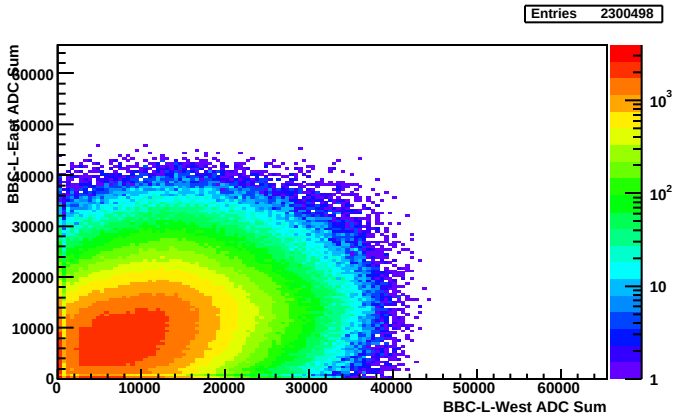

Entries 2300498
BBC-S-West ADC Sum
VPD-West ADC Sum

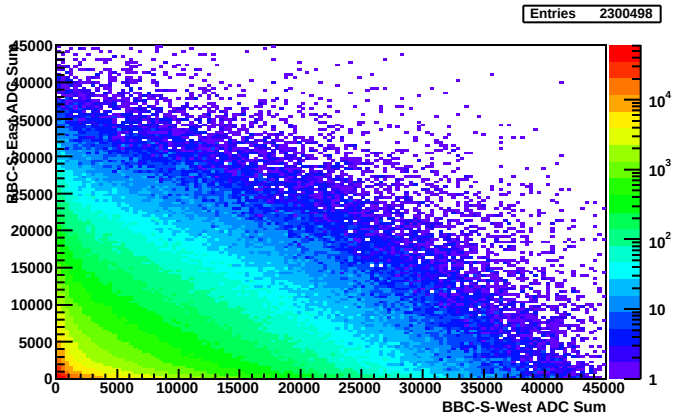

Entries 2300498
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

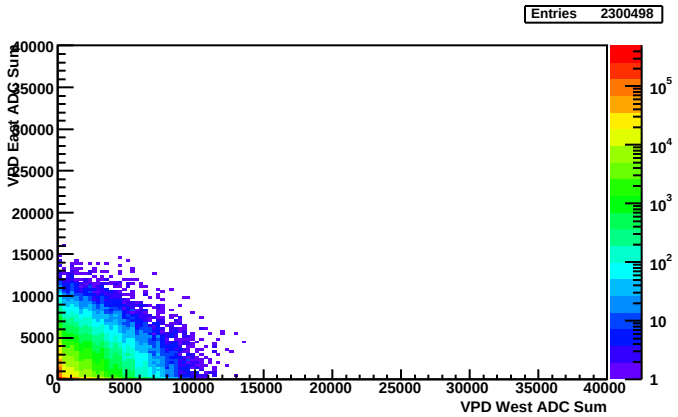

Entries 2300498
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

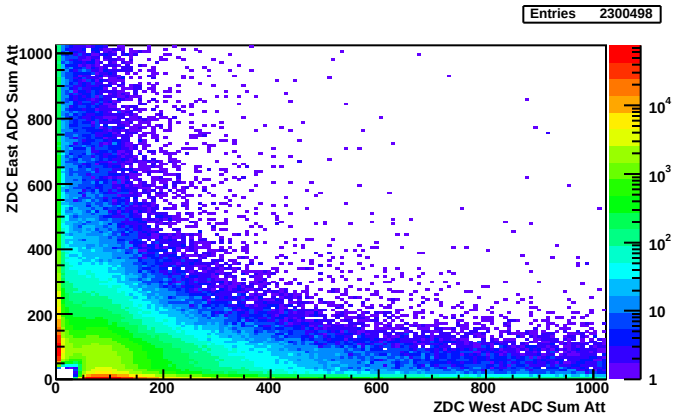

Entries 2300498
VPD-East ADC Sum
ZDC-East ADC Sum Att

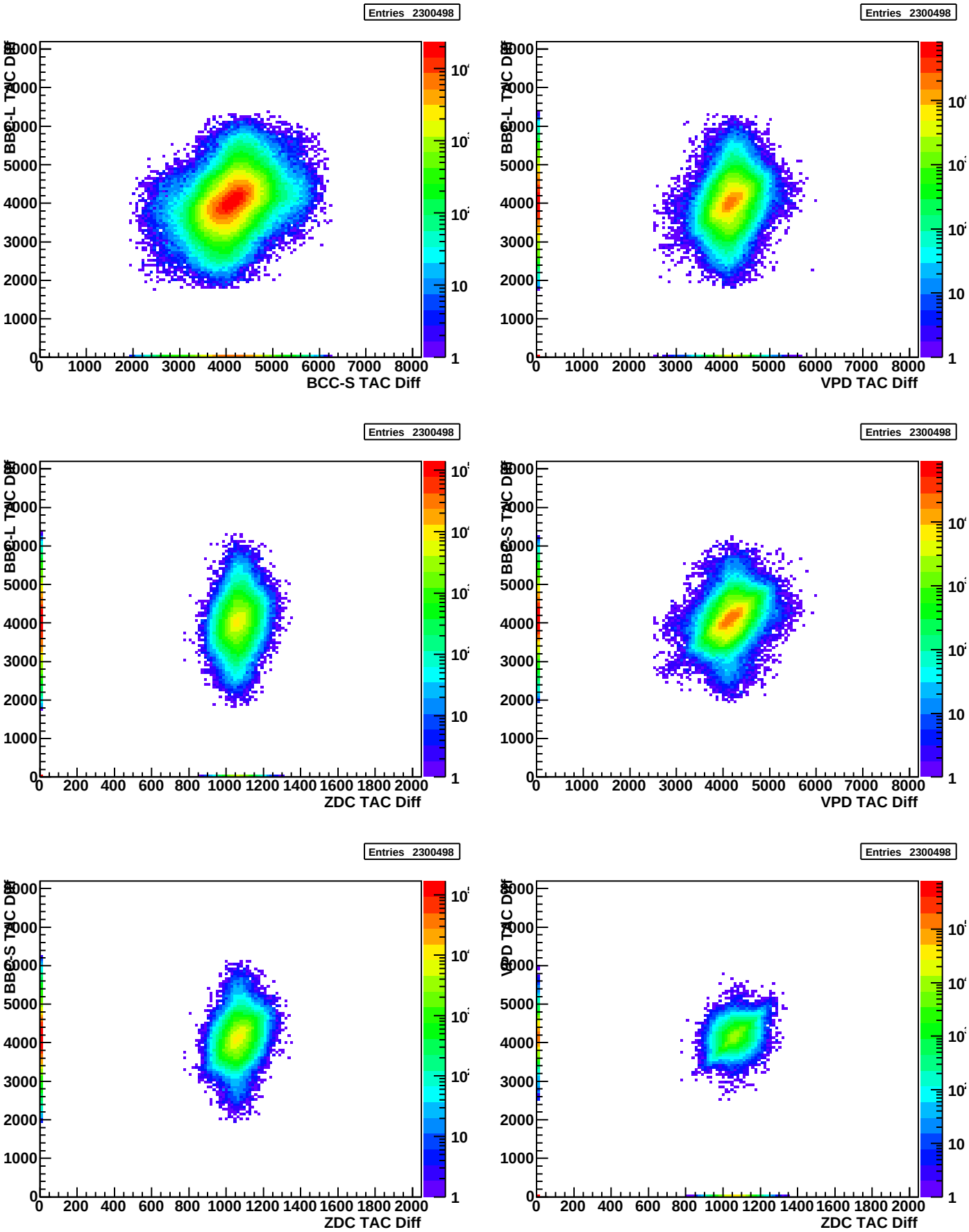

Entries 2300498
VPD-West ADC Sum
ZDC-West ADC Sum Att

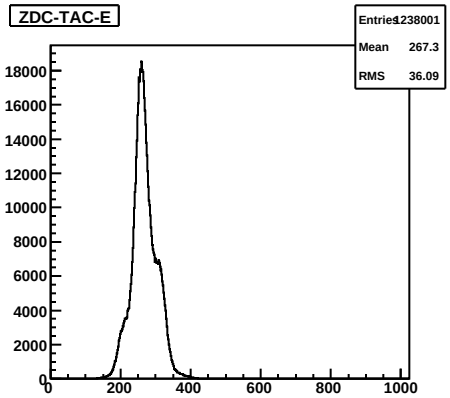

Entries 2300498
BBC-L-East ADC Sum
BBC-L-West ADC Sum

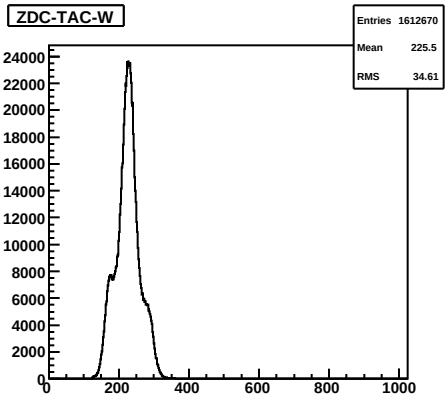

Entries 2300498
BBC-S-East ADC Sum
BBC-S-West ADC Sum

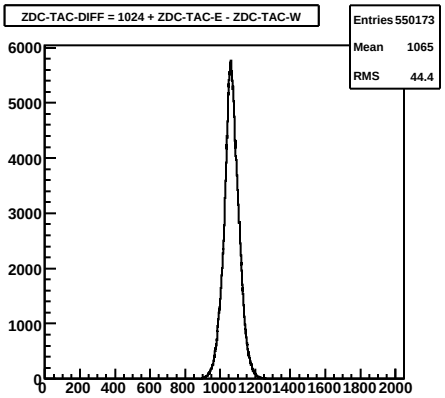

Entries 2300498
VPD East ADC Sum
VPD West ADC Sum

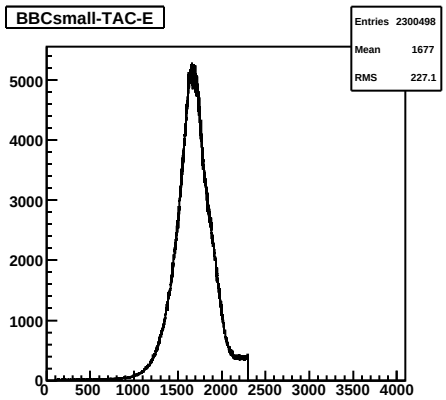

Entries 2300498
ZDC East ADC Sum Att
ZDC West ADC Sum Att

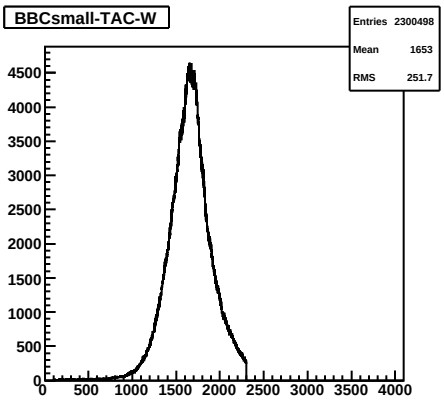

Entries 2300498
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2300498
BBC-L TAC Diff
VPD TAC Diff
Entries 2300498
BBC-L TAC Diff
ZDC TAC Diff
Entries 2300498
BBC-S TAC Diff
VPD TAC Diff
Entries 2300498
BBC-S TAC Diff
ZDC TAC Diff
Entries 2300498
VPD TAC Diff
ZDC TAC Diff

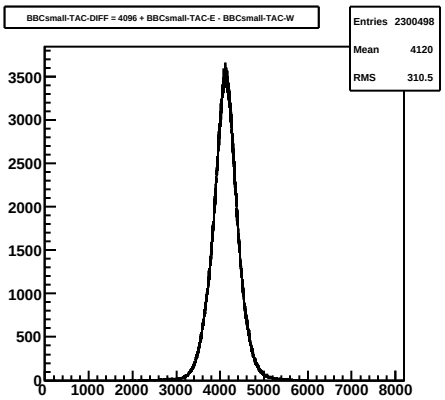

ZDC-TAC-E
Entries 1238001
Mean 267.3
RMS 36.09

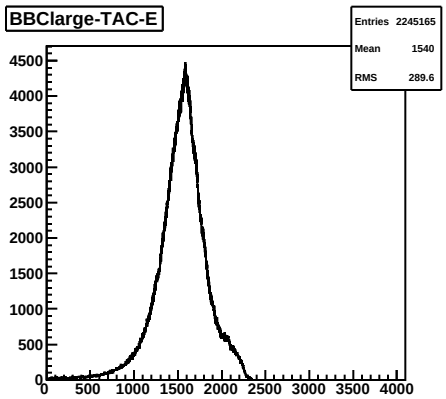

ZDC-TAC-W
Entries 1612670
Mean 225.5
RMS 34.61

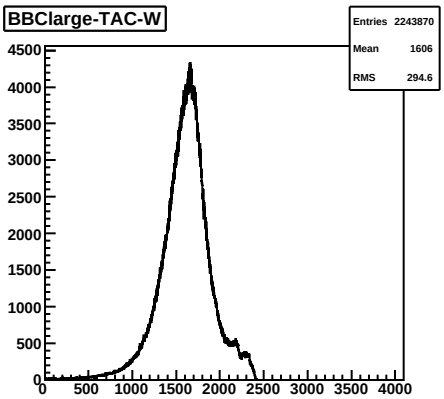

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 550173
Mean 1065
RMS 44.4

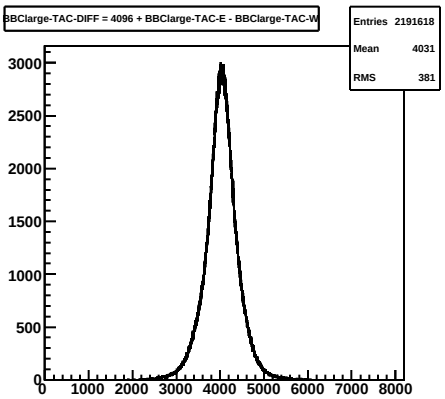

BBCsmall-TAC-E
Entries 2300498
Mean 1677
RMS 227.1

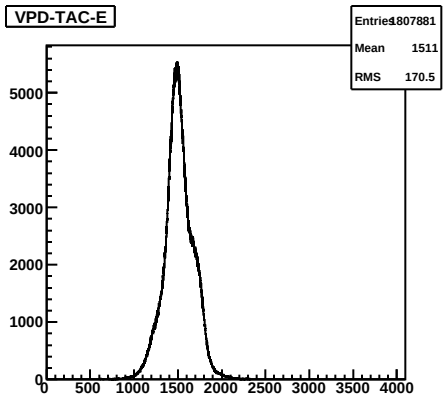

BBCsmall-TAC-W
Entries 2300498
Mean 1653
RMS 251.7

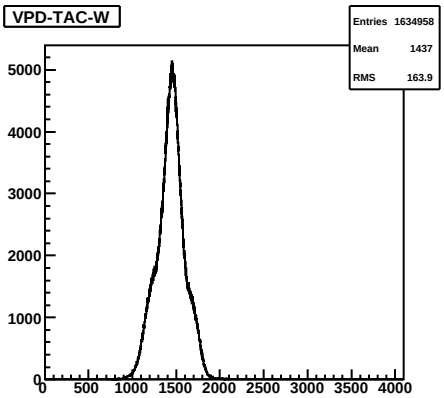

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 2300498
Mean 4120
RMS 310.5

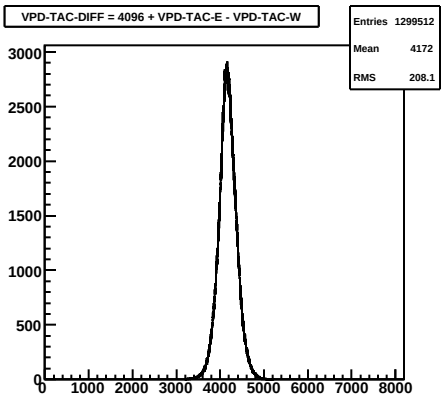

BBClarge-TAC-E
Entries 2245165
Mean 1540
RMS 289.6

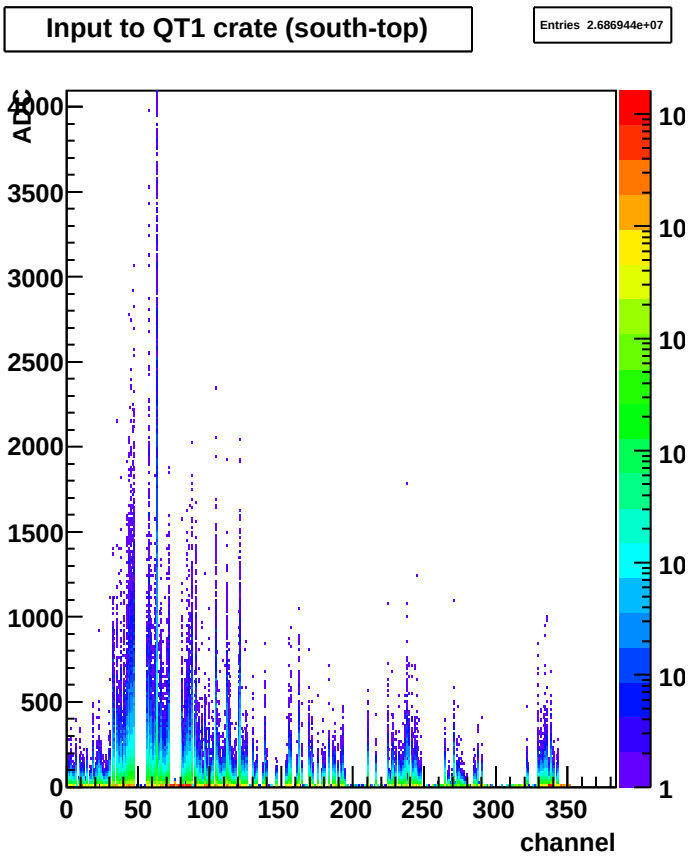

BBClarge-TAC-W
Entries 2243870
Mean 1606
RMS 294.6

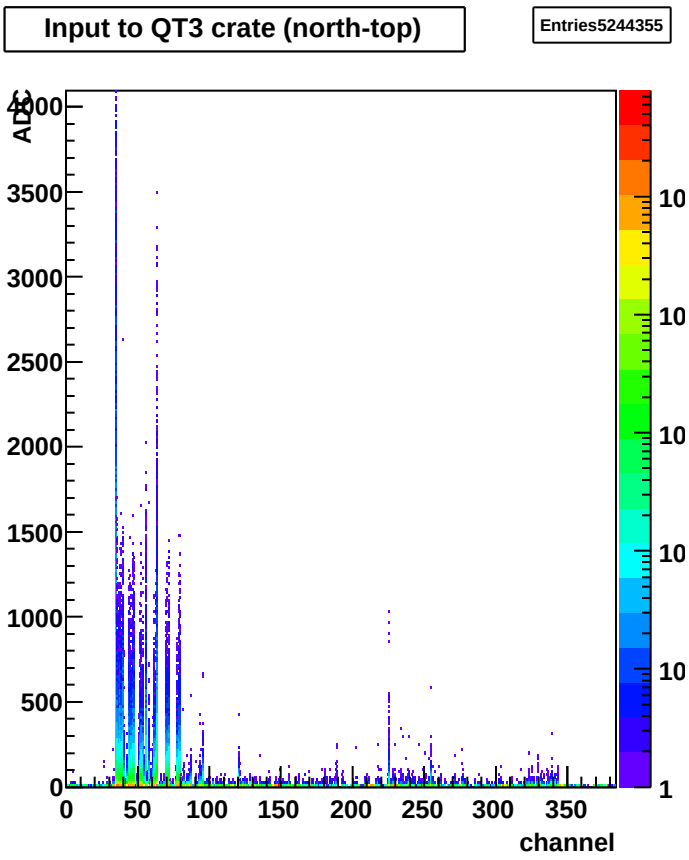

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2191618
Mean 4031
RMS 381

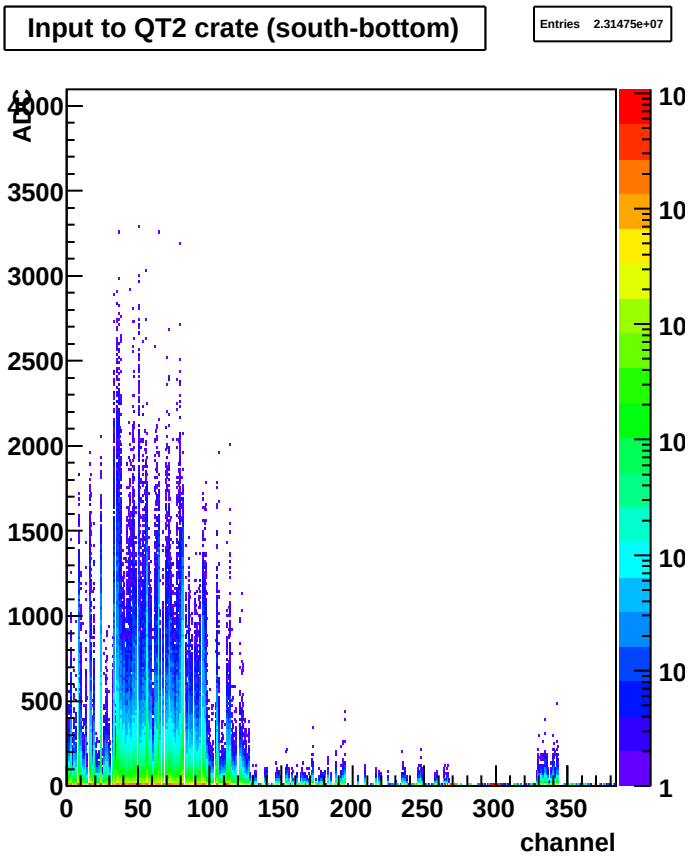

VPD-TAC-E
Entries 1807881
Mean 1511
RMS 170.5

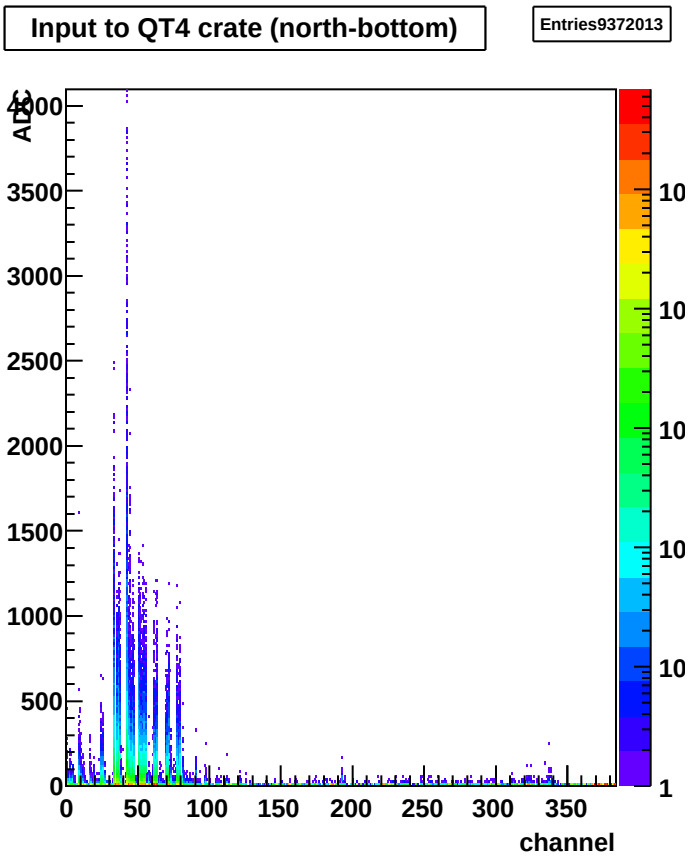

VPD-TAC-W
Entries 1634958
Mean 1437
RMS 163.9

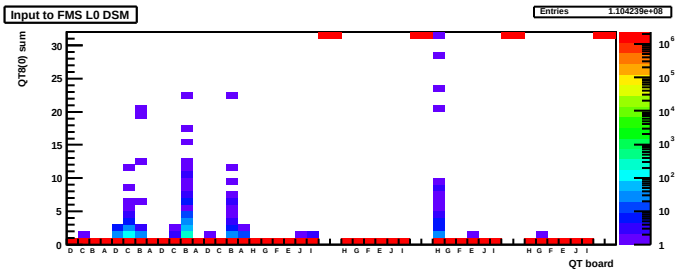

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1299512
Mean 4172
RMS 208.1

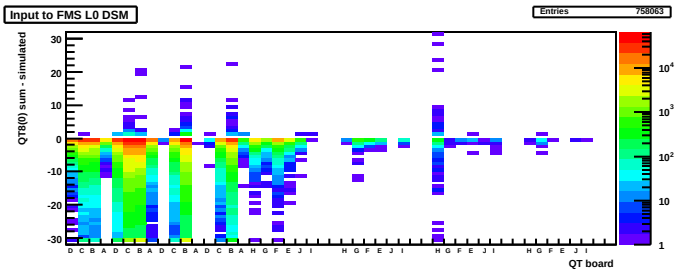

Input to QT1 crate (south-top)
Entries 2.686944e+07
ADC
channel

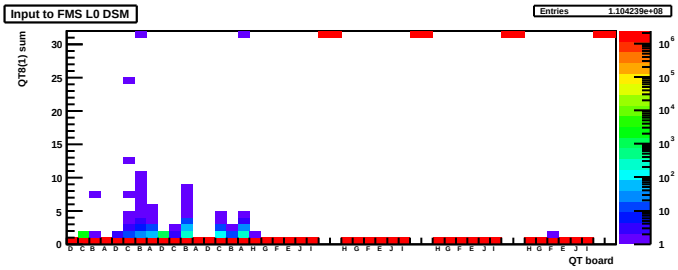

Input to QT3 crate (north-top)
Entries5244355
ADC
channel

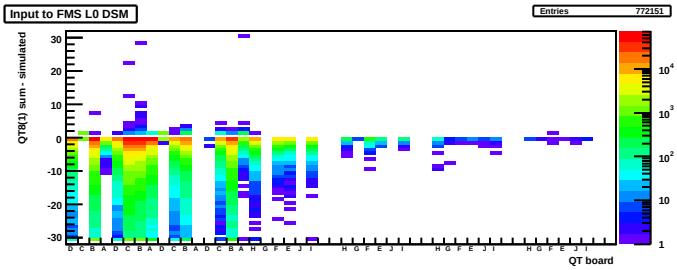

Input to QT2 crate (south-bottom)
Entries 2.31475e+07
ADC
channel

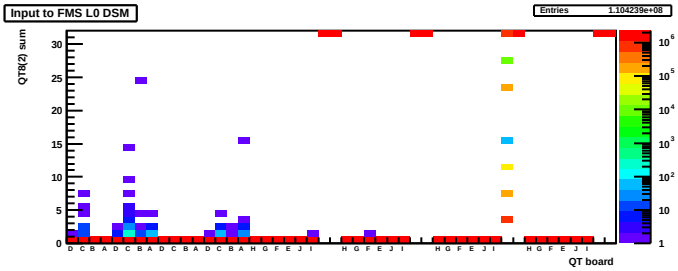

Input to QT4 crate (north-bottom)
Entries9372013
ADC
channel

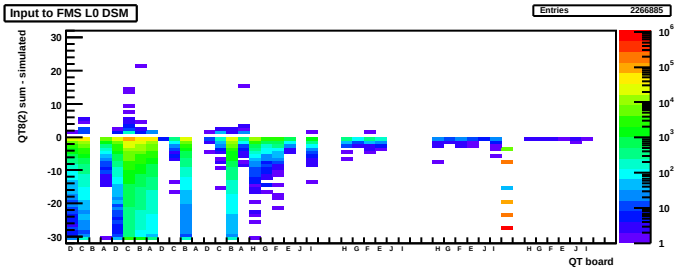

Input to FMS L0 DSM
Entries 1.104239e+08
QT8(0) sum
QT board

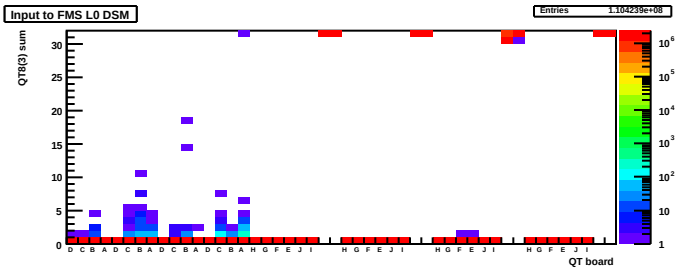

Input to FMS L0 DSM
Entries 758063
QT8(0) sum - simulated
QT board

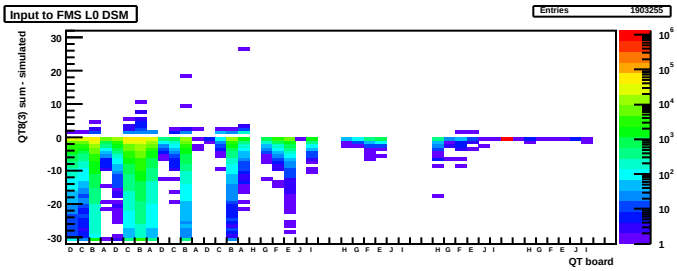

Input to FMS L0 DSM
Entries 1.104239e+08
QT8(1) sum
QT board

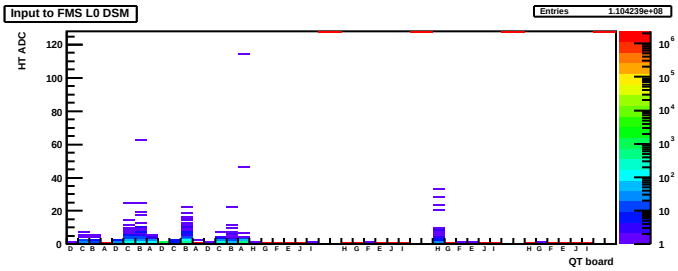

Input to FMS L0 DSM
Entries 772151
QT8(1) sum - simulated
QT board

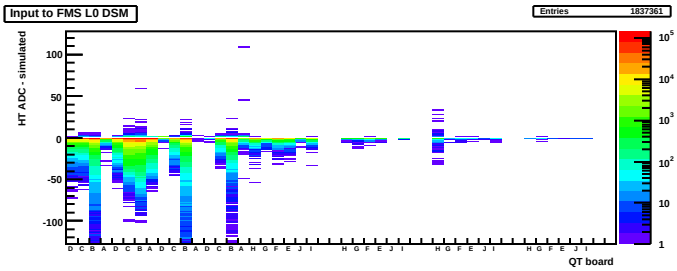

Input to FMS L0 DSM
Entries 1.104239e+08
QT8(2) sum
QT board

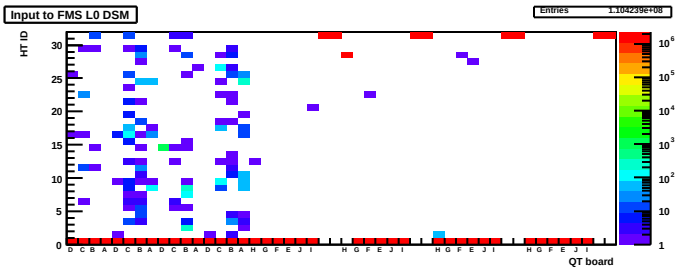

Input to FMS L0 DSM
Entries 2266885
QT8(2) sum - simulated
QT board

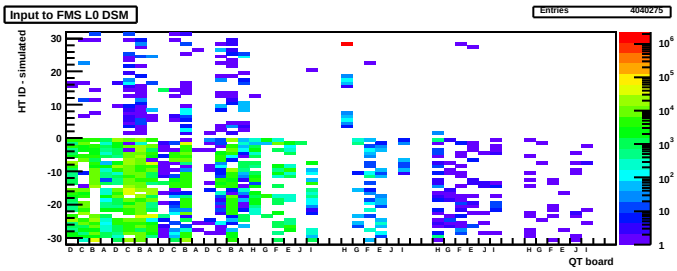

Input to FMS L0 DSM
Entries 1.104239e+08
QT8(3) sum
QT board

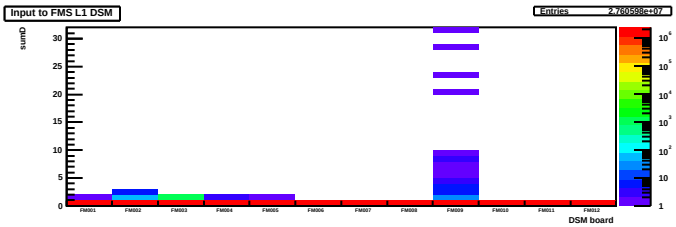

Input to FMS L0 DSM
Entries 1903255
QT8(3) sum - simulated
QT board

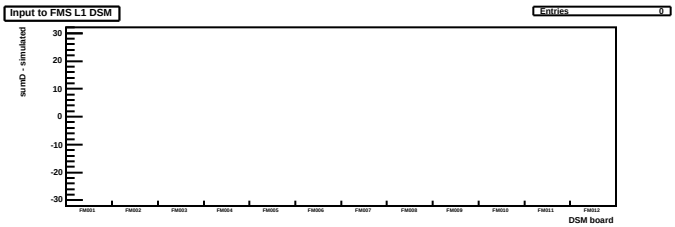

Input to FMS L0 DSM
Entries 1.104239e+08
HT ADC
QT board

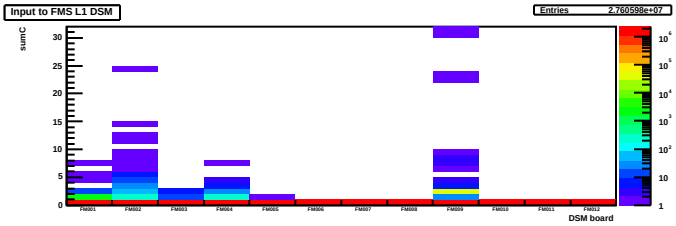

Input to FMS L0 DSM
Entries 1837361
HT ADC - simulated
QT board

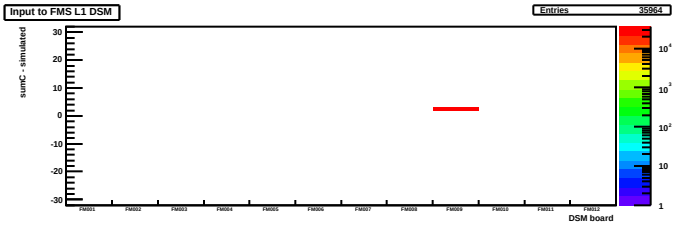

Input to FMS L0 DSM
Entries 1.104239e+08
HT ID
QT board

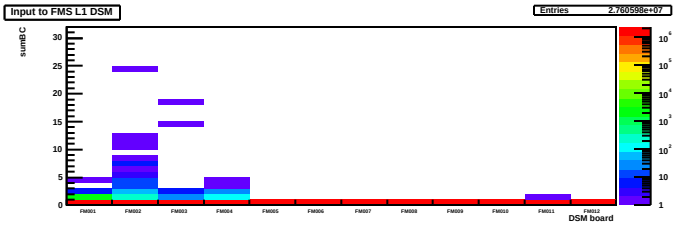

Input to FMS L0 DSM
Entries 4040275
HT ID - simulated
QT board

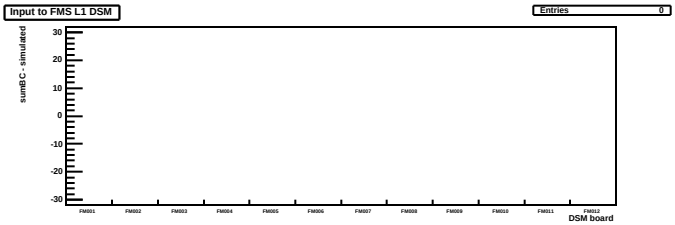

Input to FMS L1 DSM
Entries 2.760598e+07
sumD
DSM board

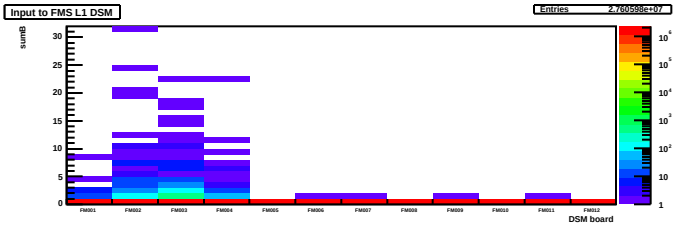

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

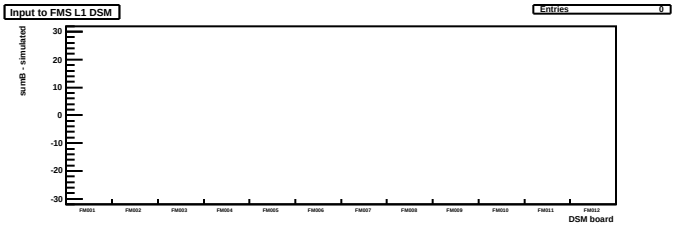

Input to FMS L1 DSM
Entries 2.760598e+07
sumC
DSM board

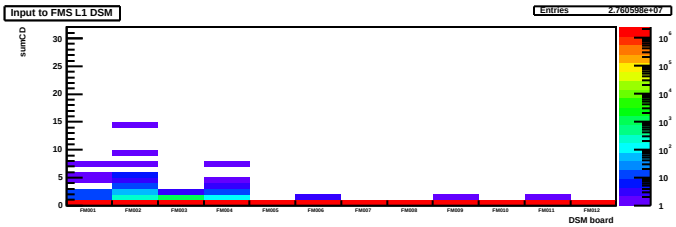

Input to FMS L1 DSM
Entries 35964
sumC - simulated
DSM board

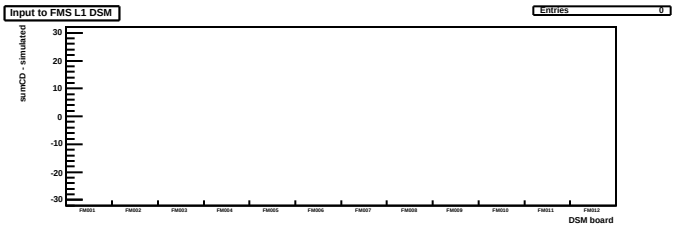

Input to FMS L1 DSM
Entries 2.760598e+07
sumBC
DSM board

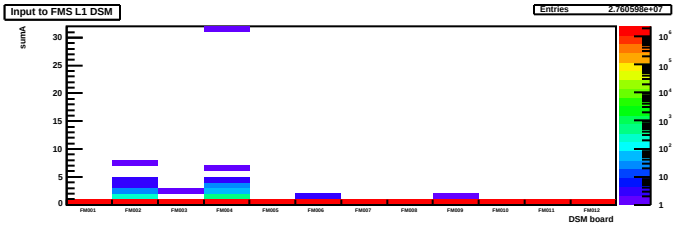

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

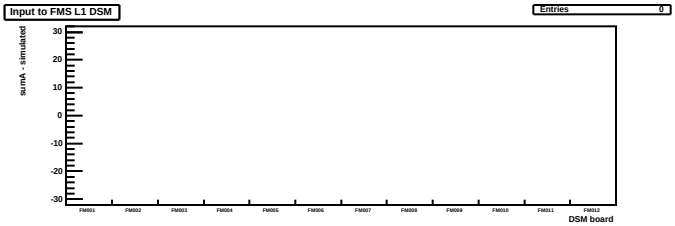

Input to FMS L1 DSM
Entries 2.760598e+07
sumB
DSM board

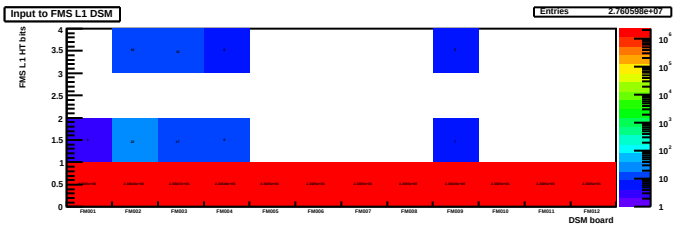

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

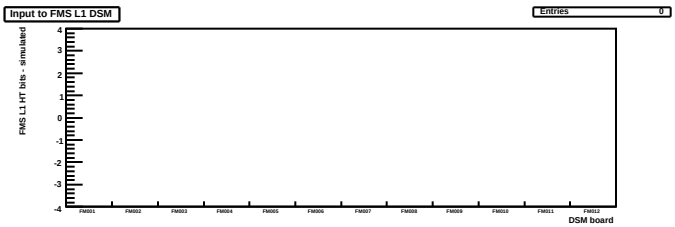

Input to FMS L1 DSM
Entries 2.760598e+07
sumCD
DSM board

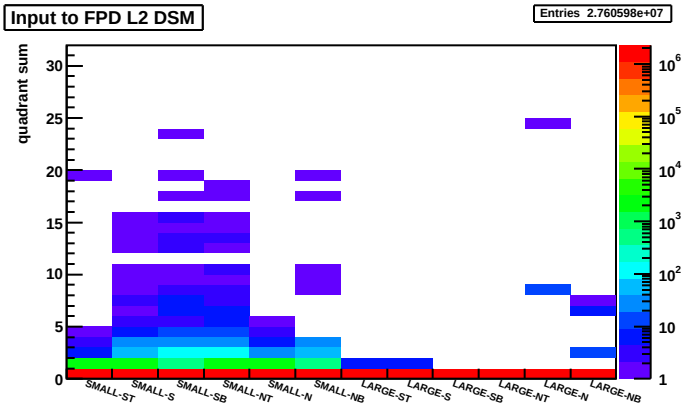

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

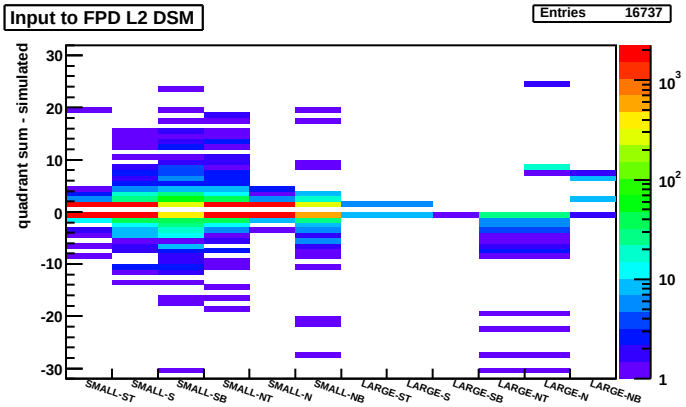

Input to FMS L1 DSM
Entries 2.760598e+07
sumA
DSM board

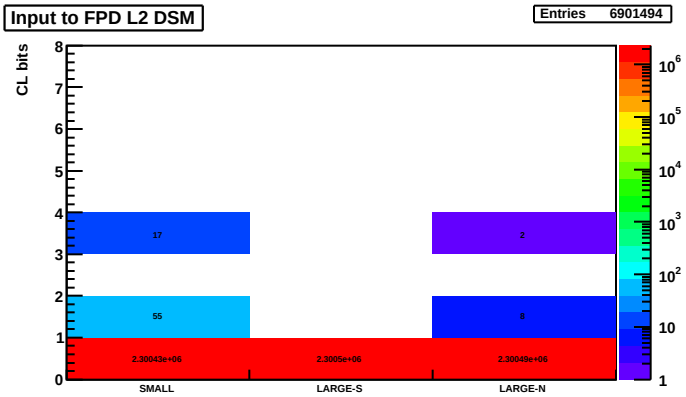

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

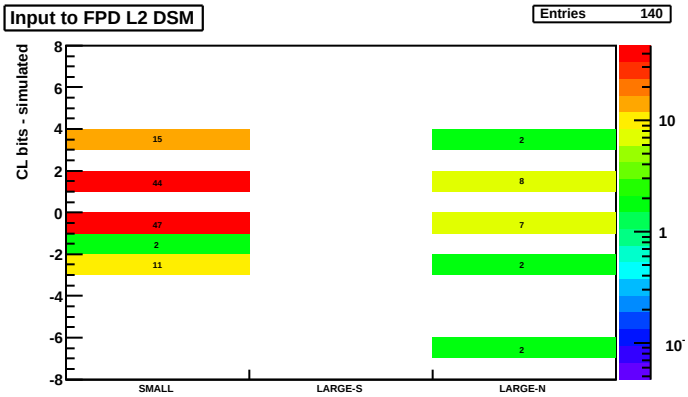

Input to FMS L1 DSM
Entries 2.760598e+07
FMS L1 HT bits
DSM board

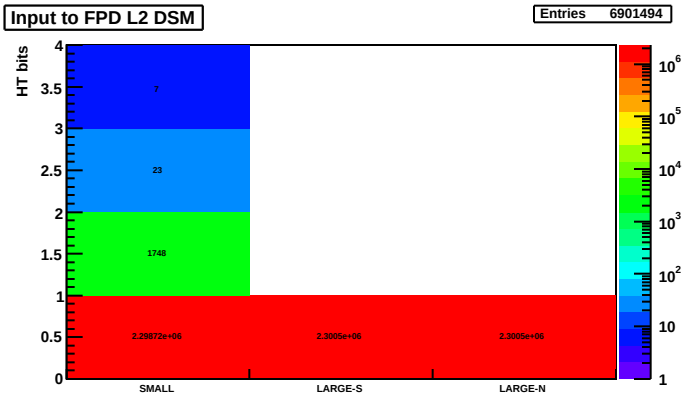

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

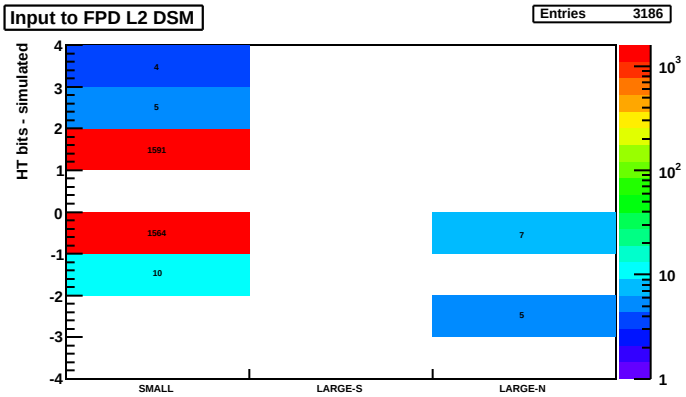

Input to FPD L2 DSM
Entries 2.760598e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

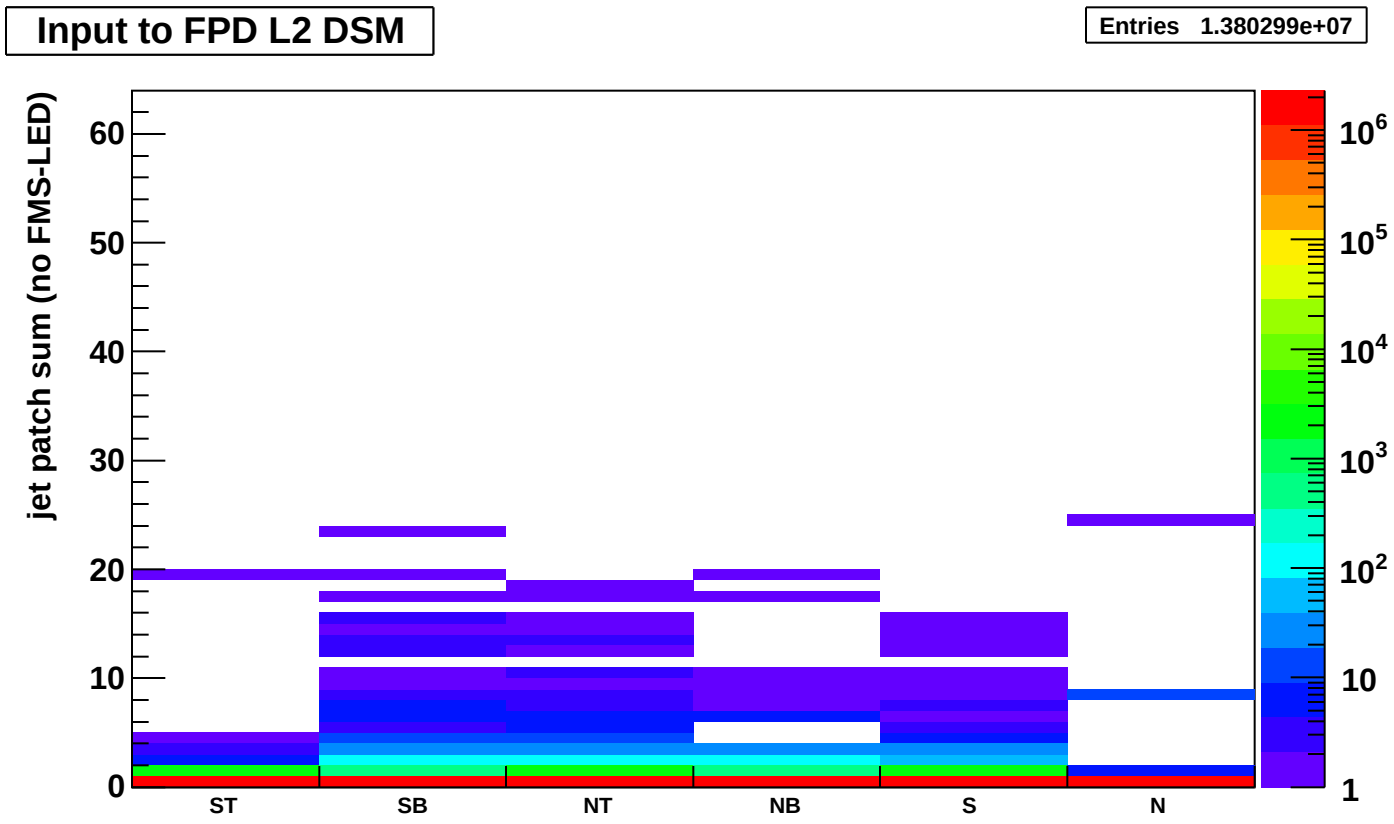

Input to FPD L2 DSM
Entries 16737
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

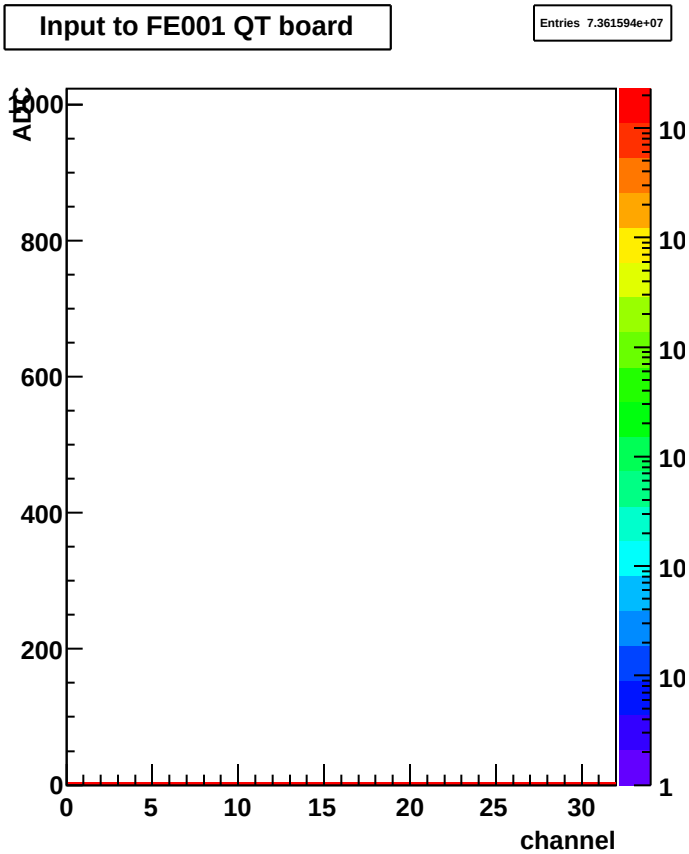

Input to FPD L2 DSM
Entries 6901494
CL bits
17
55
2.30043e+06
2
8
2.3005e+06
2.30049e+06
SMALL
LARGE-S
LARGE-N

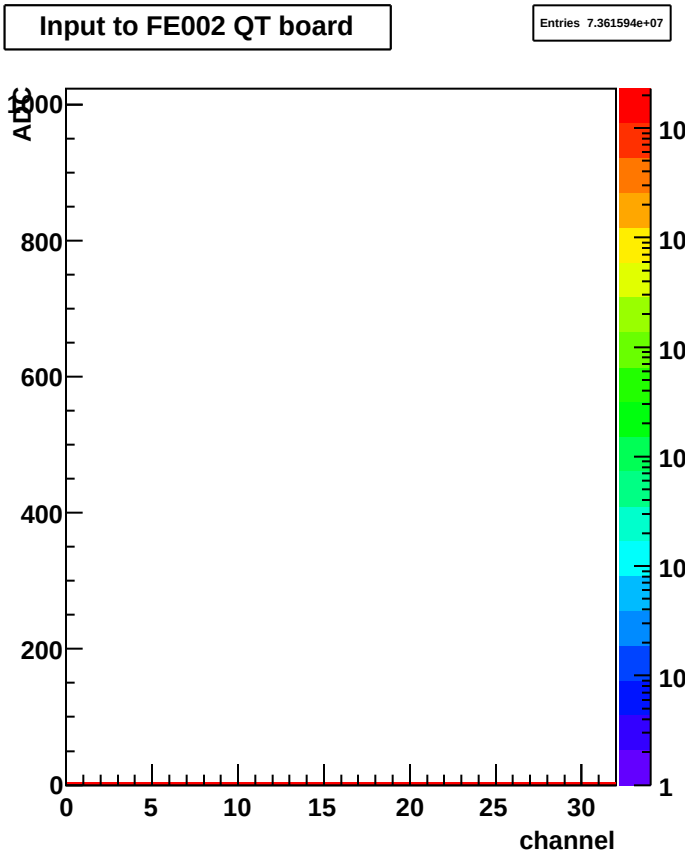

Input to FPD L2 DSM
Entries 140
CL bits - simulated
15
44
47
2
11
2
8
7
2
2
SMALL
LARGE-S
LARGE-N

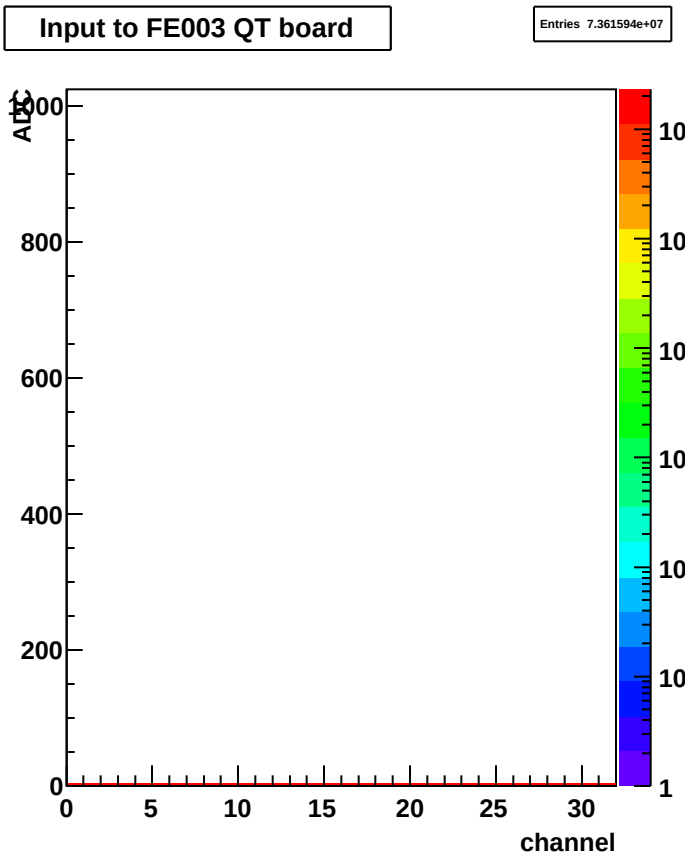

Input to FPD L2 DSM
Entries 6901494
HT bits
7
23
1748
2.29872e+06
2.3005e+06
2.3005e+06
SMALL
LARGE-S
LARGE-N

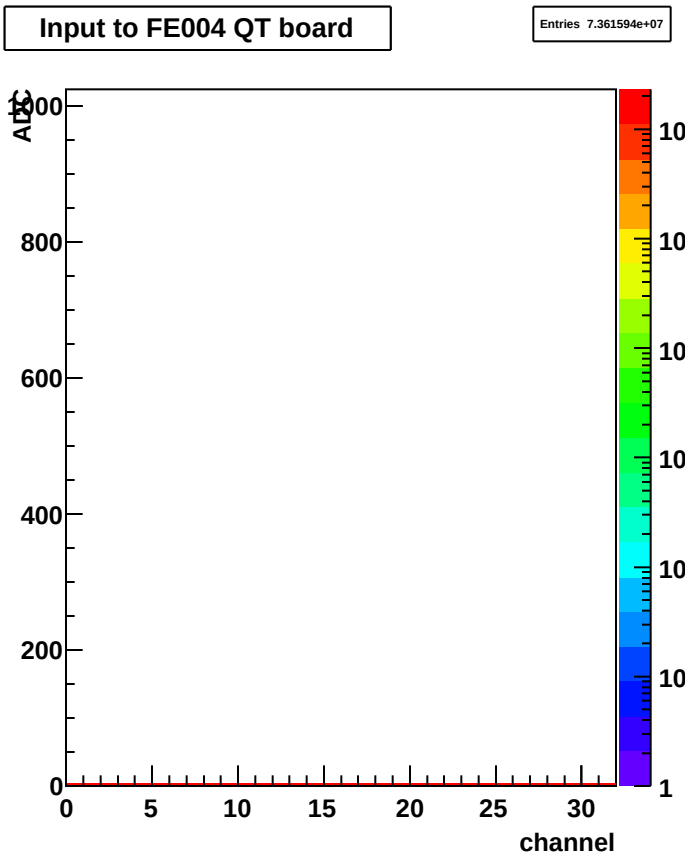

Input to FPD L2 DSM
Entries 3186
HT bits - simulated
4
5
1591
1564
10
7
5
SMALL
LARGE-S
LARGE-N

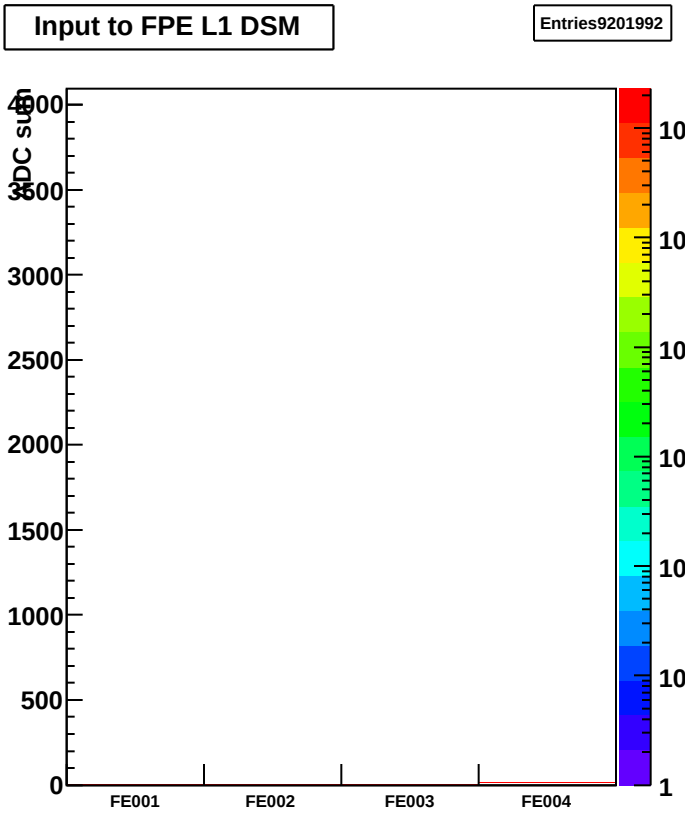

Input to FPD L2 DSM
Entries 1.380299e+07
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

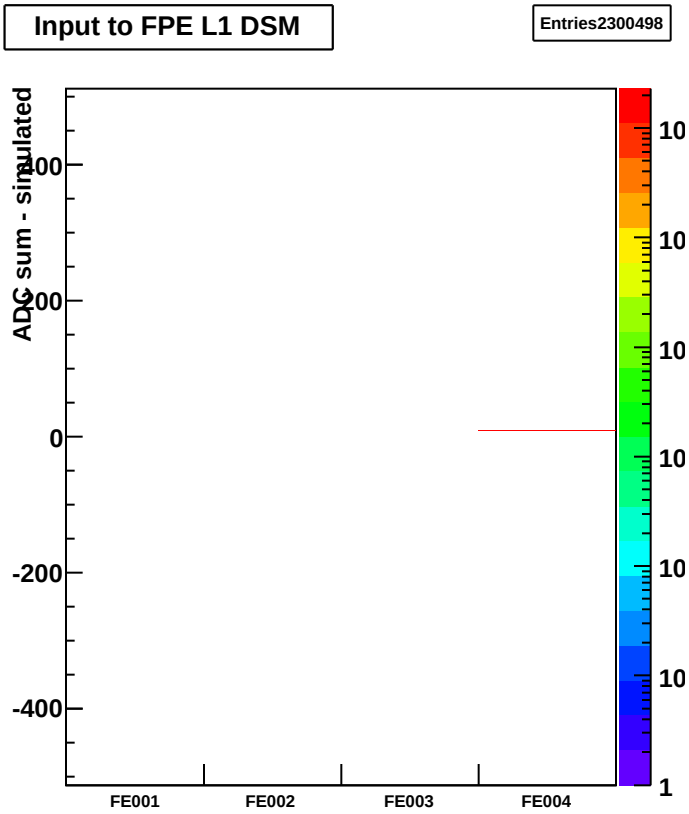

Input to FE001 QT board
Entries 7.361594e+07
ADC
channel


Input to FE002 QT board
Entries 7.361594e+07
ADC
channel

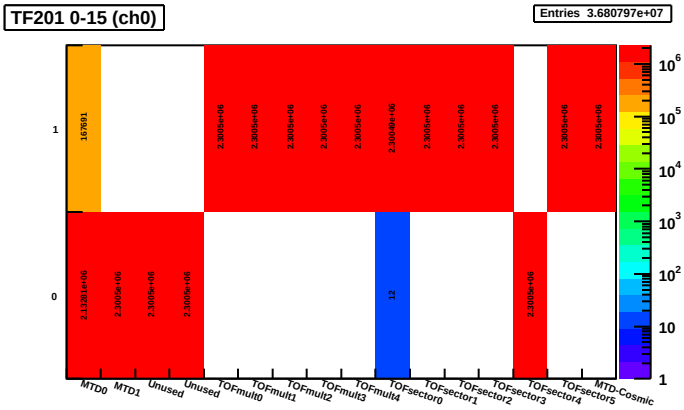

Input to FE003 QT board
Entries 7.361594e+07
ADC
channel


Input to FE004 QT board
Entries 7.361594e+07
ADC
channel

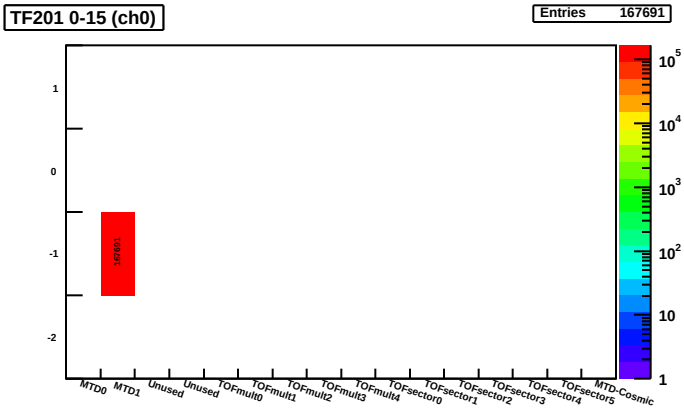

Input to FPE L1 DSM
Entries9201992
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


Input to FPE L1 DSM
Entries2300498
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1

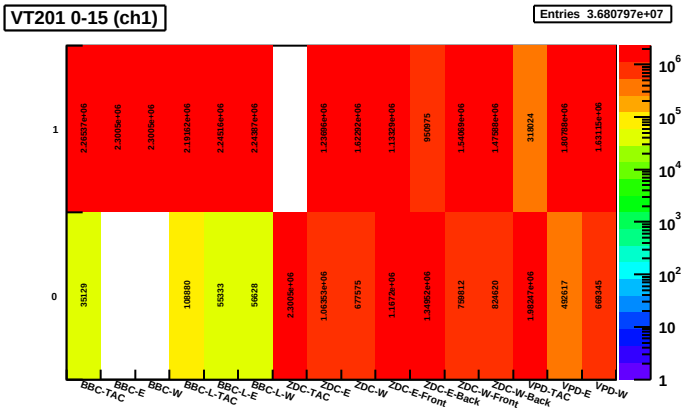
TF201 0-15 (ch0)



TF201 0-15 (ch0)



VT201 0-15 (ch1)



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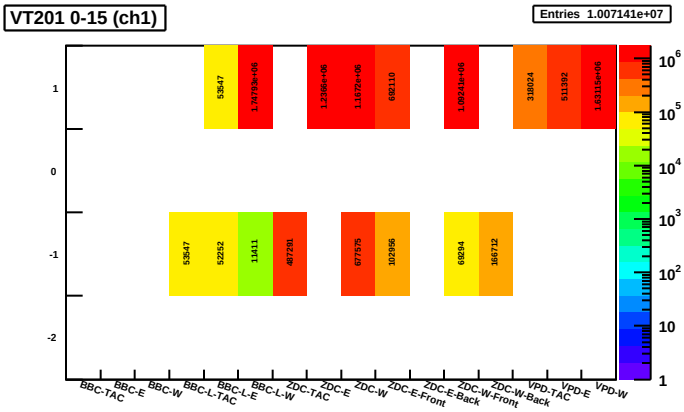

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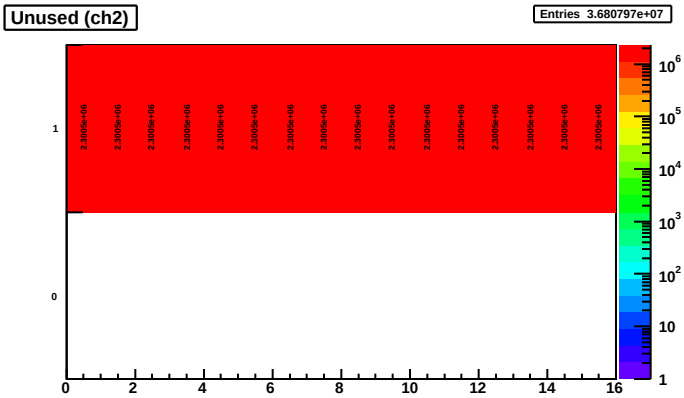

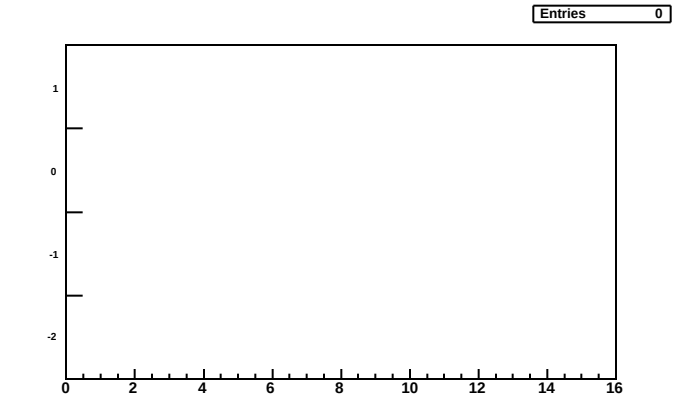

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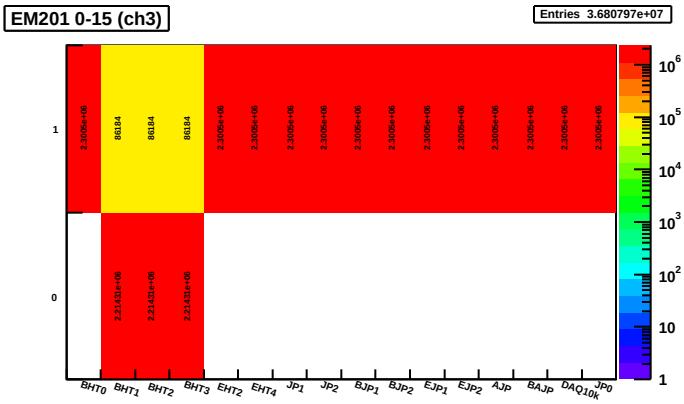

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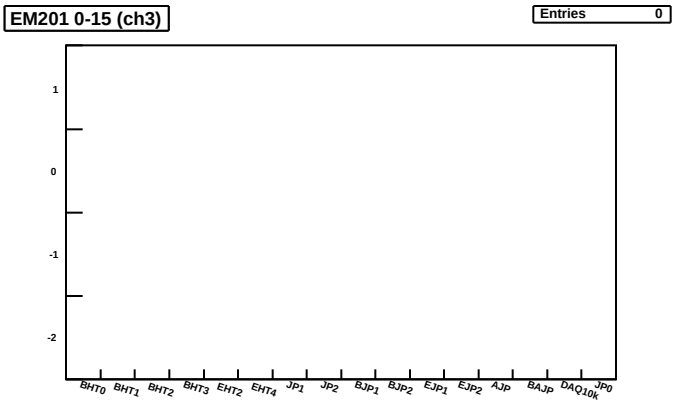
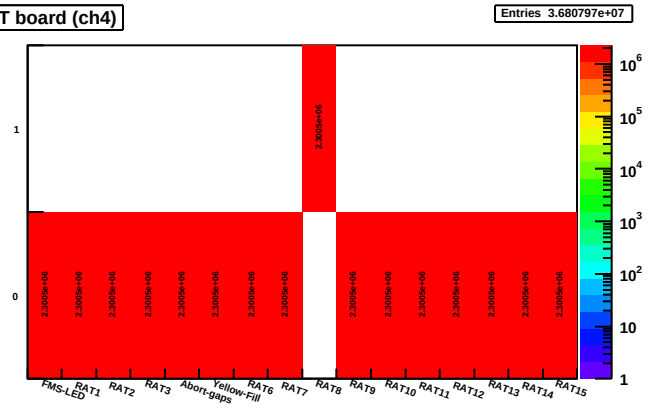
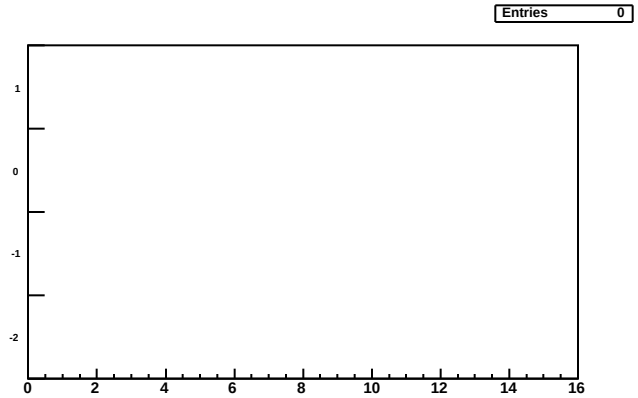
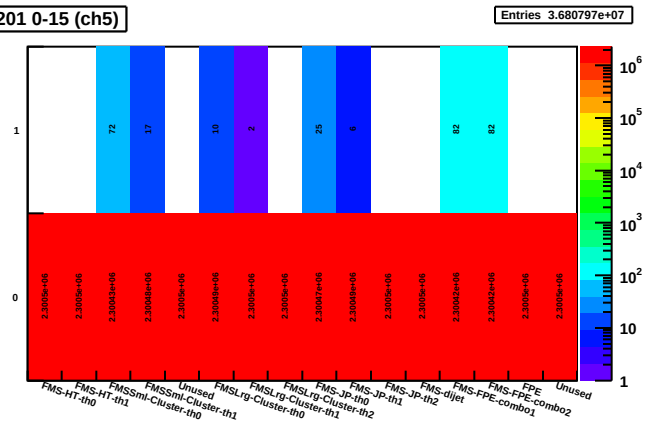


RAT board (ch4)

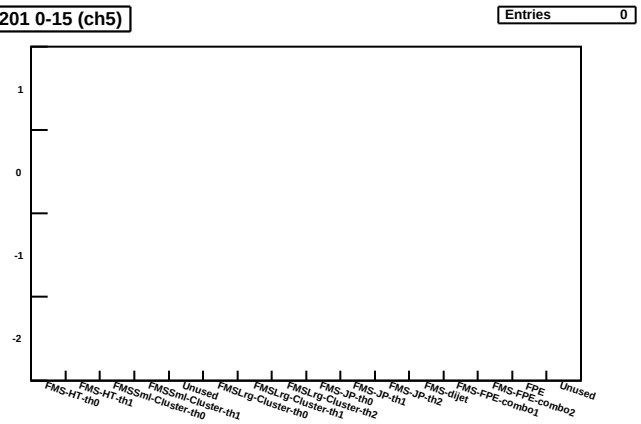




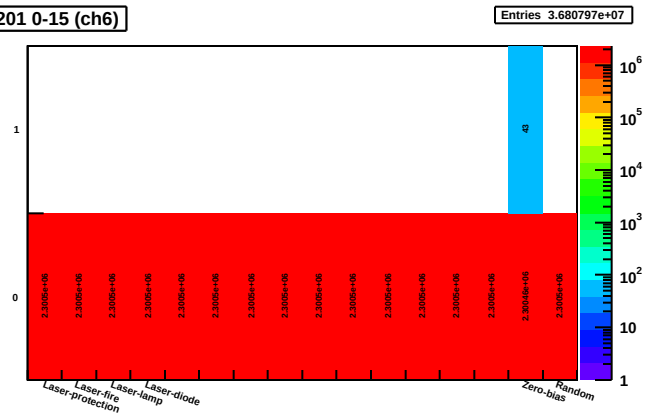
FP201 0-15 (ch5)

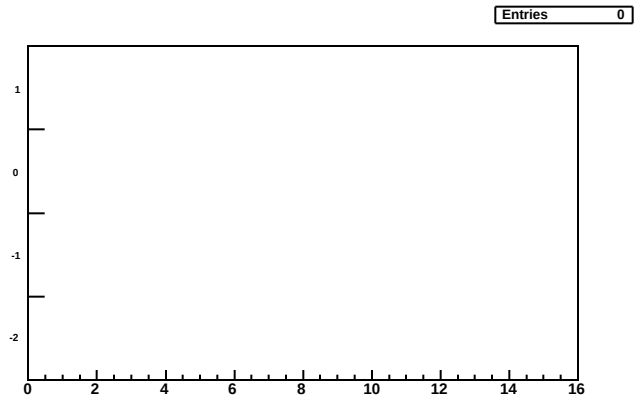
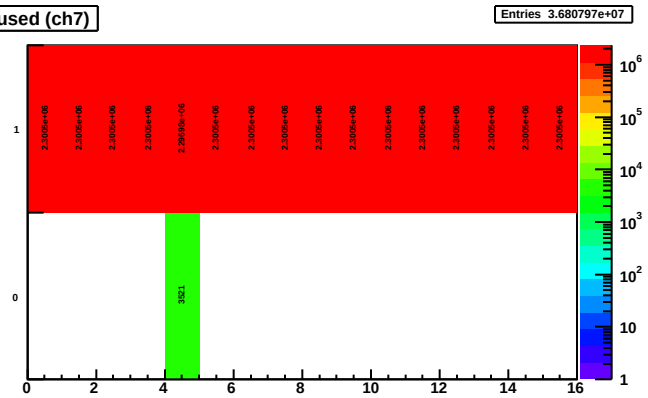
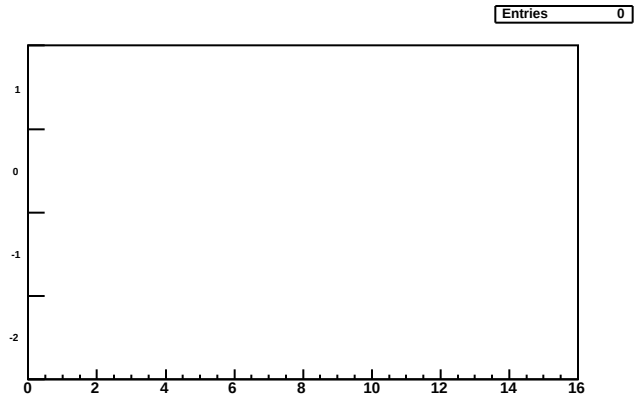


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)