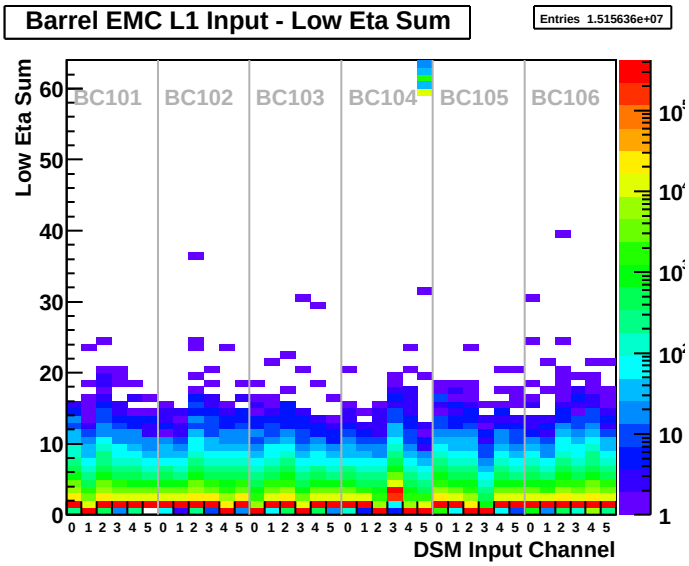
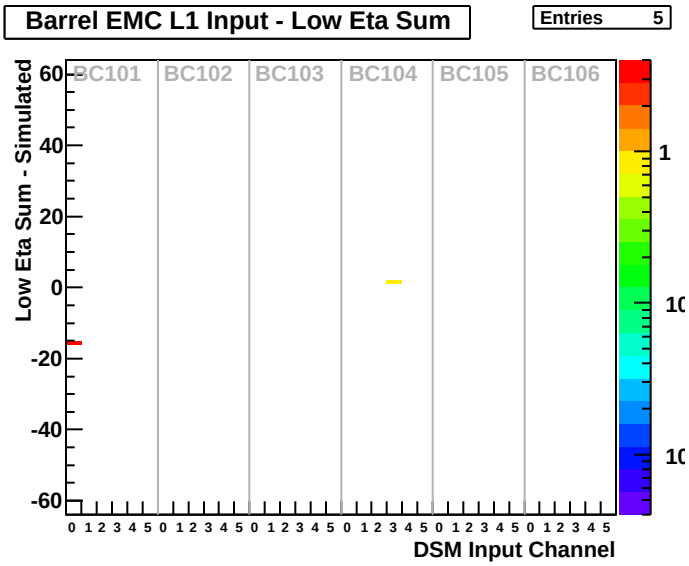
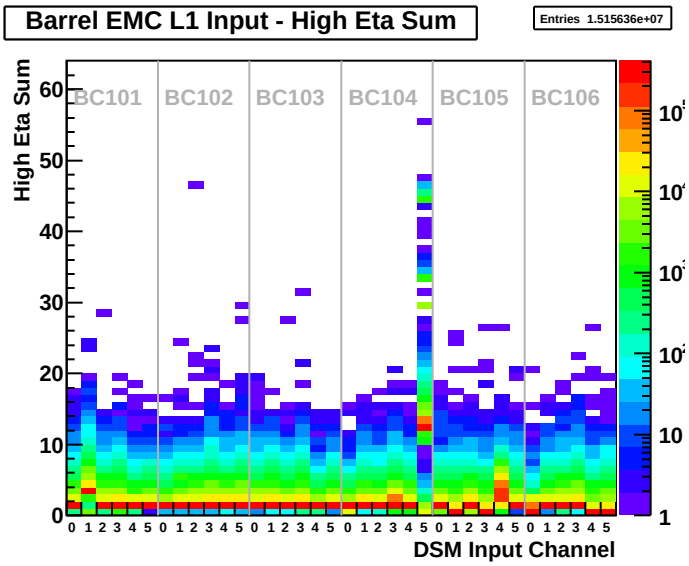
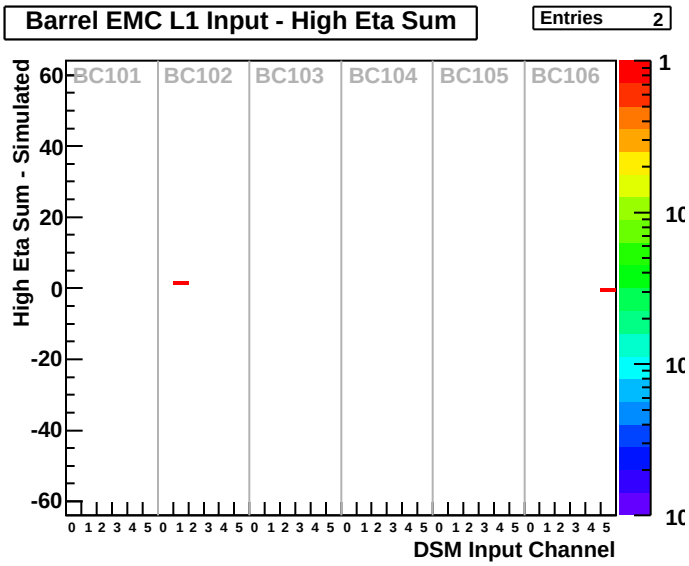
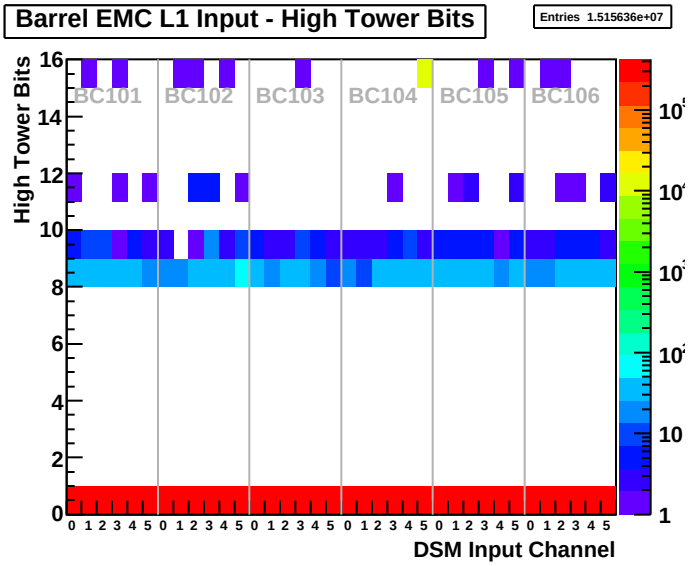
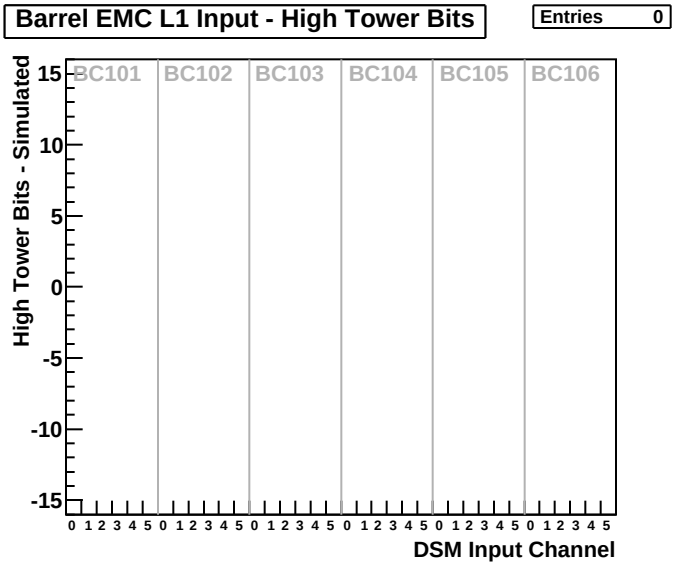

Barrel EMC L1 Input - Low Eta Sum
Entries 1.515636e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

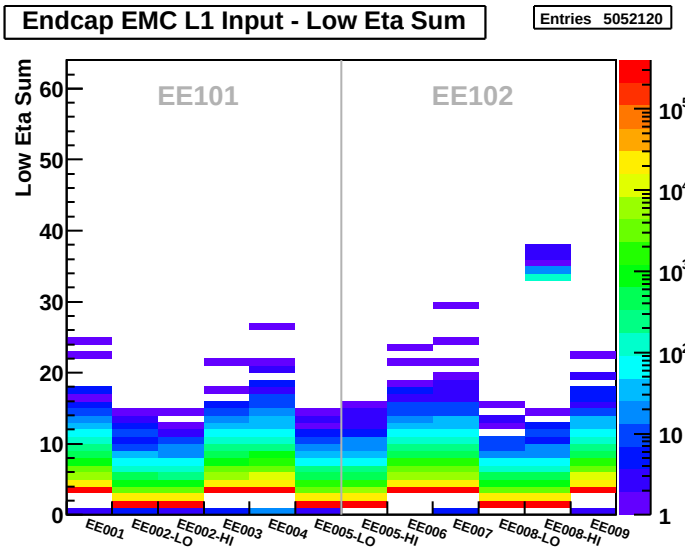

Barrel EMC L1 Input - Low Eta Sum
Entries 5
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

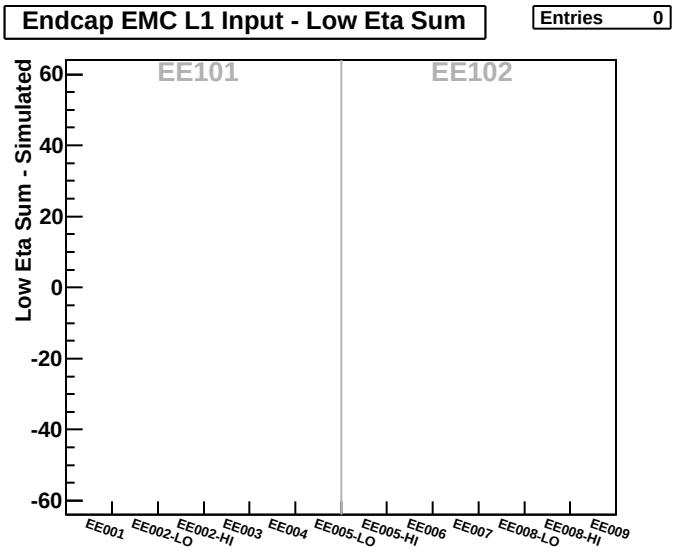

Barrel EMC L1 Input - High Eta Sum
Entries 1.515636e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

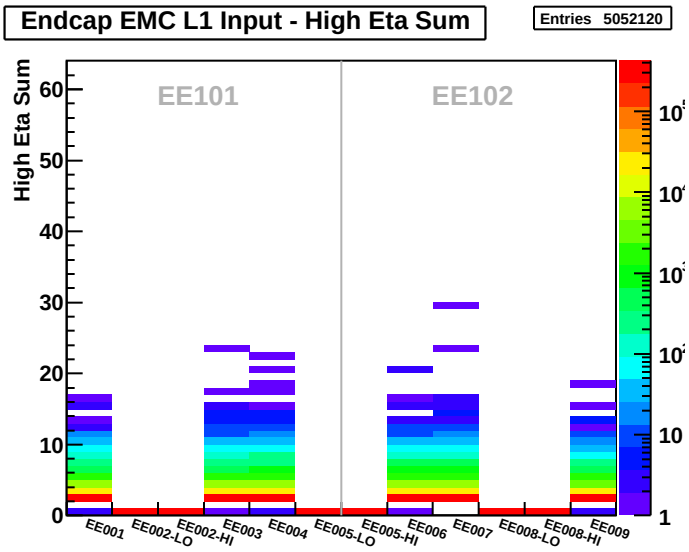

Barrel EMC L1 Input - High Eta Sum
Entries 2
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

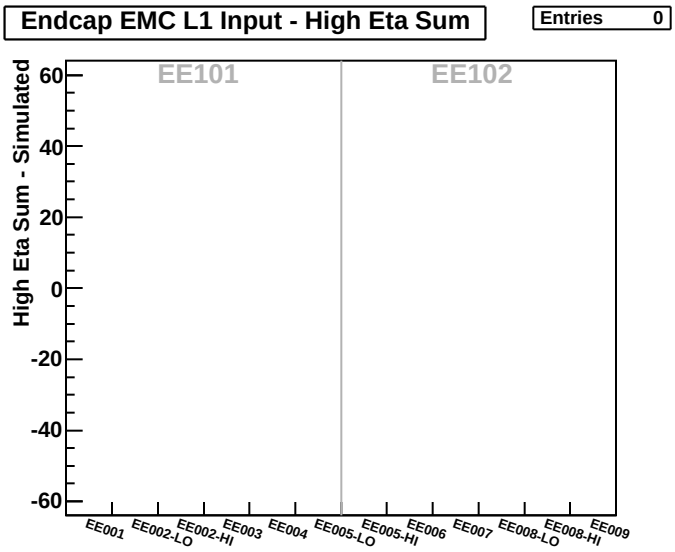

Barrel EMC L1 Input - High Tower Bits
Entries 1.515636e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

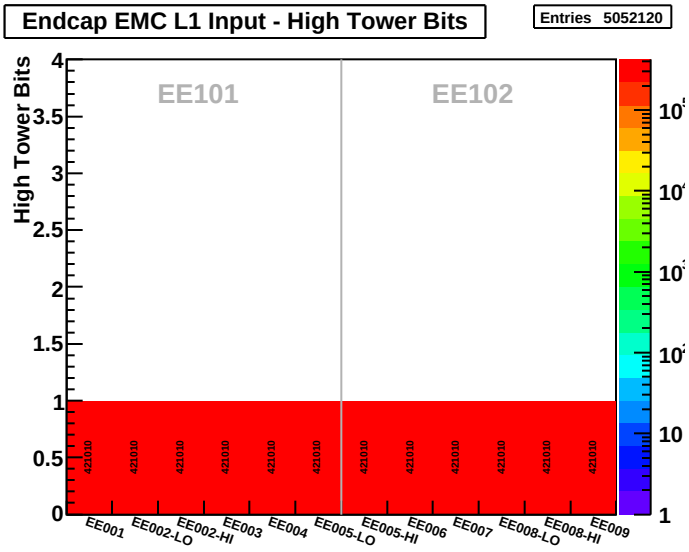

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

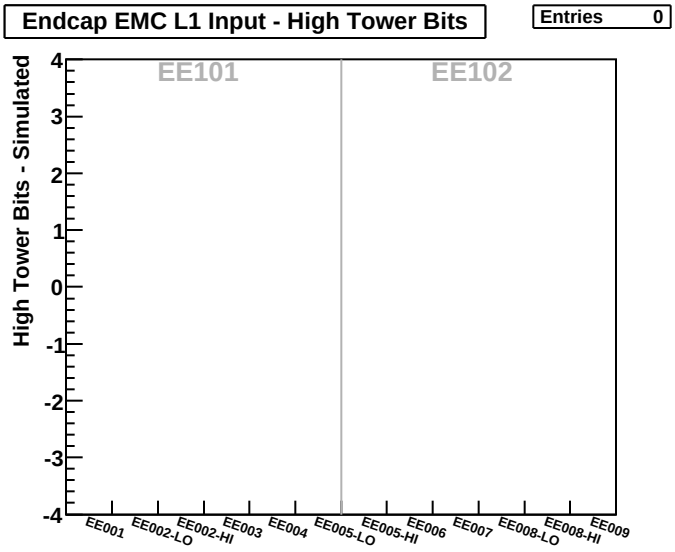

Endcap EMC L1 Input - Low Eta Sum
Entries 5052120
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

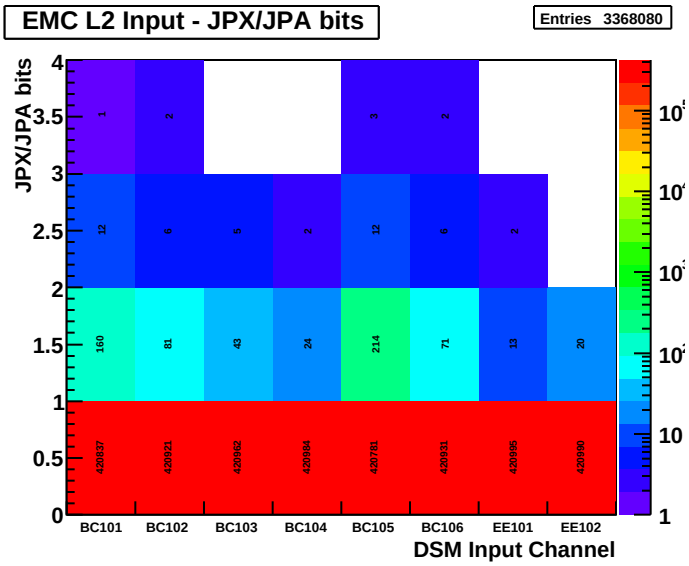

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

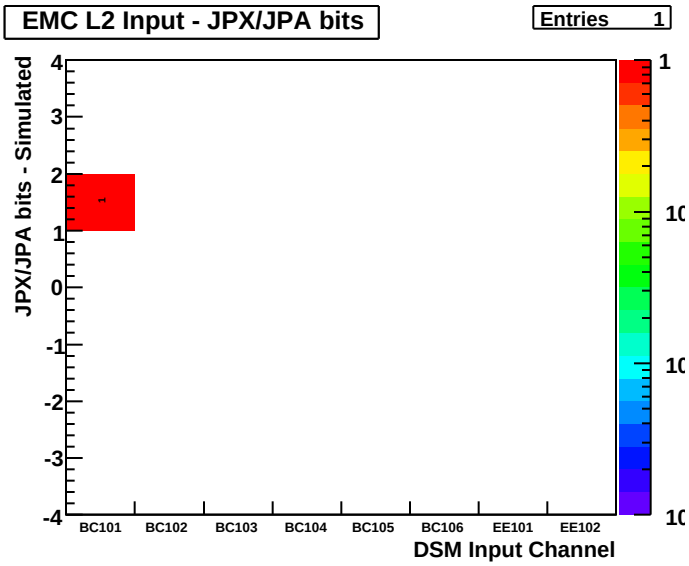

Endcap EMC L1 Input - High Eta Sum
Entries 5052120
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

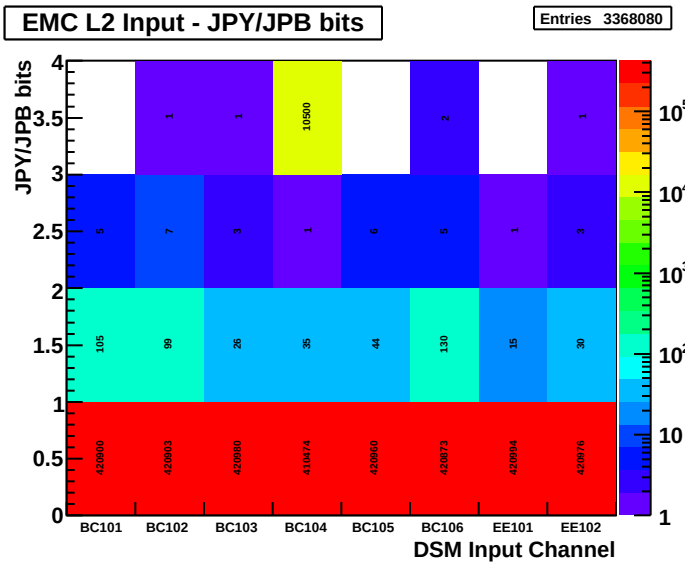

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

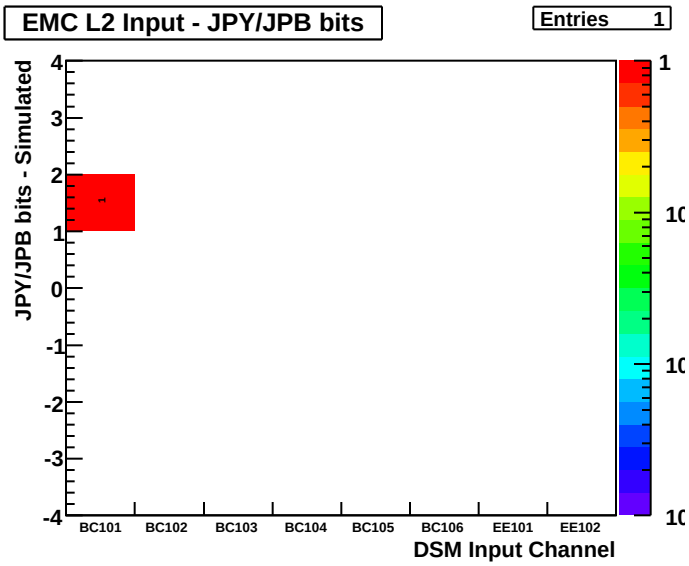

Endcap EMC L1 Input - High Tower Bits
Entries 5052120
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

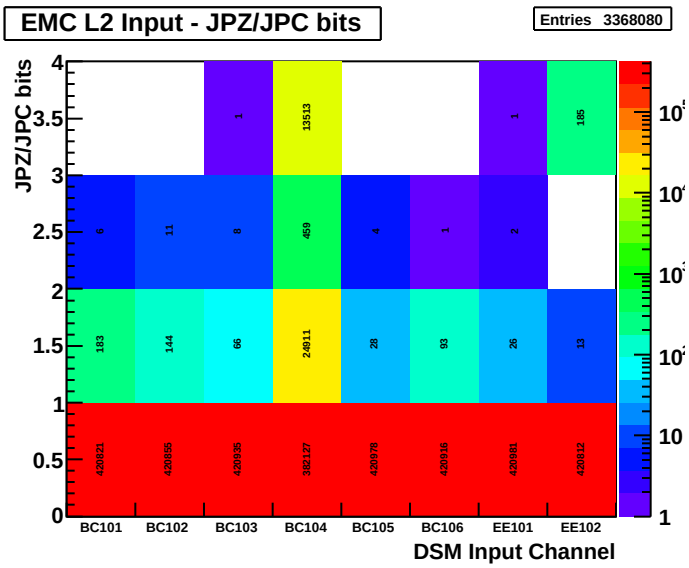

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

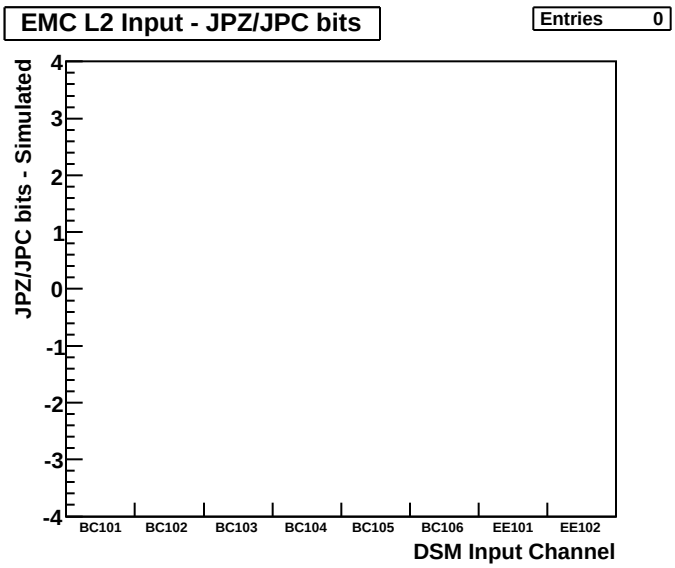

EMC L2 Input - JPX/JPA bits
Entries 3368080
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

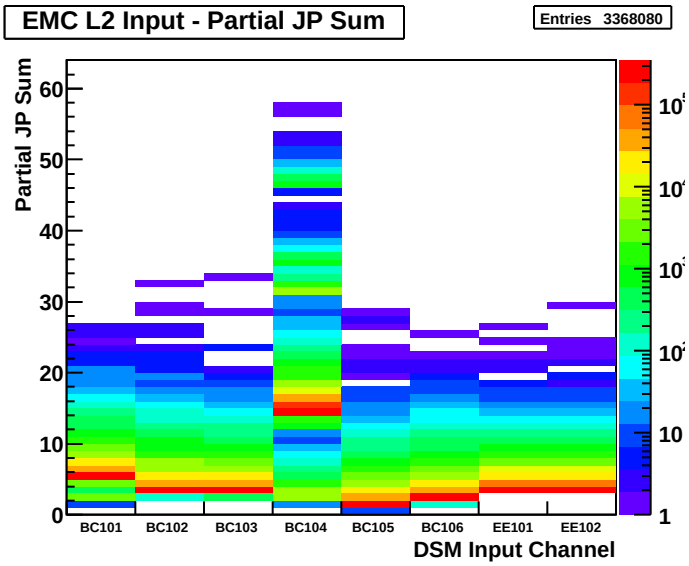

EMC L2 Input - JPX/JPA bits
Entries 1
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

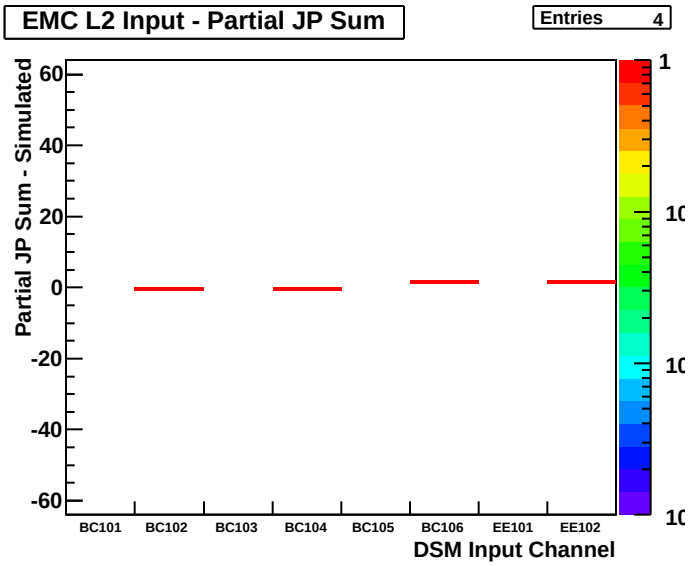

EMC L2 Input - JPY/JPB bits
Entries 3368080
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

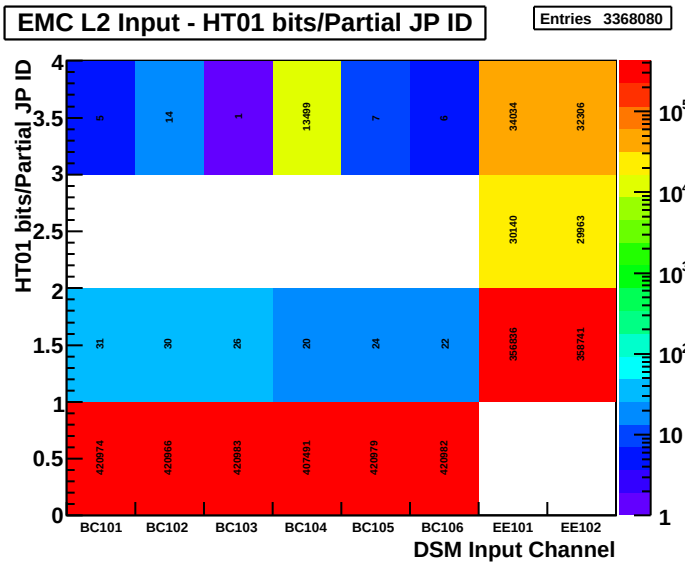

EMC L2 Input - JPY/JPB bits
Entries 1
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

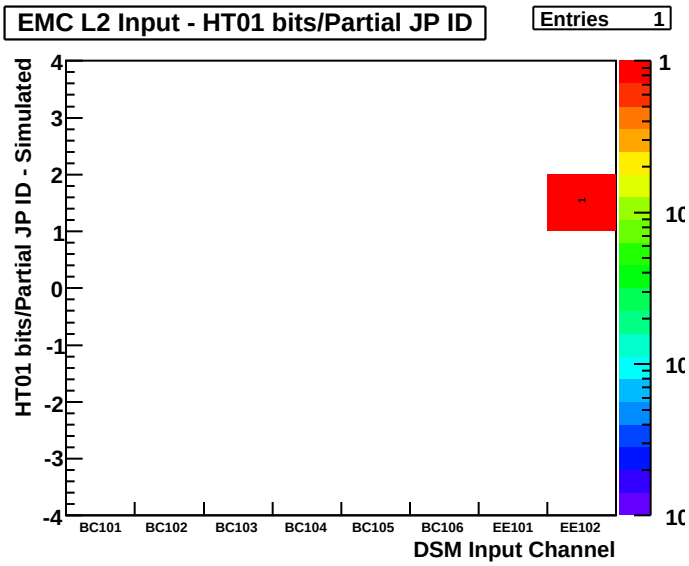

EMC L2 Input - JPZ/JPC bits
Entries 3368080
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

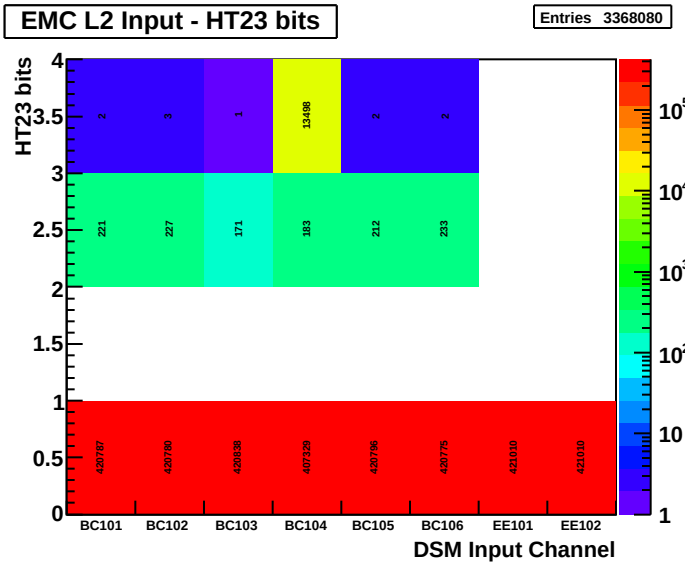

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

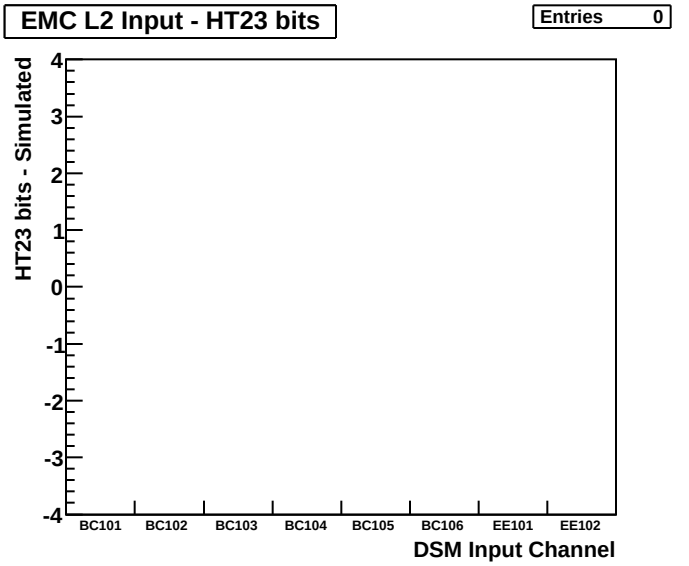

EMC L2 Input - Partial JP Sum
Entries 3368080
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

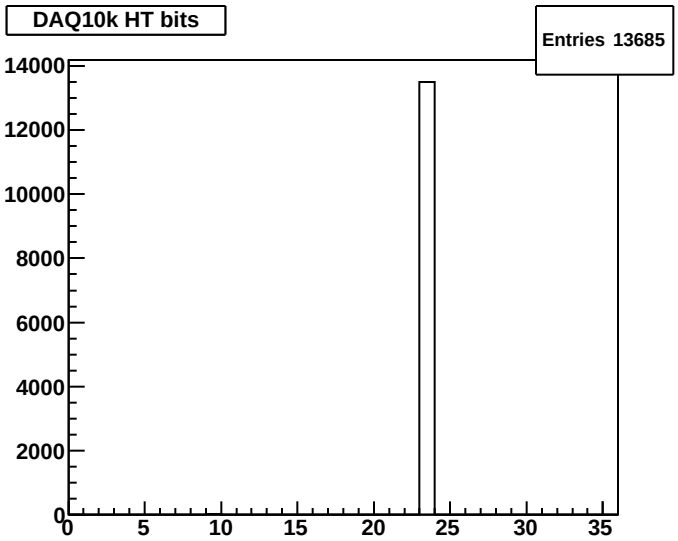

EMC L2 Input - Partial JP Sum
Entries 4
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

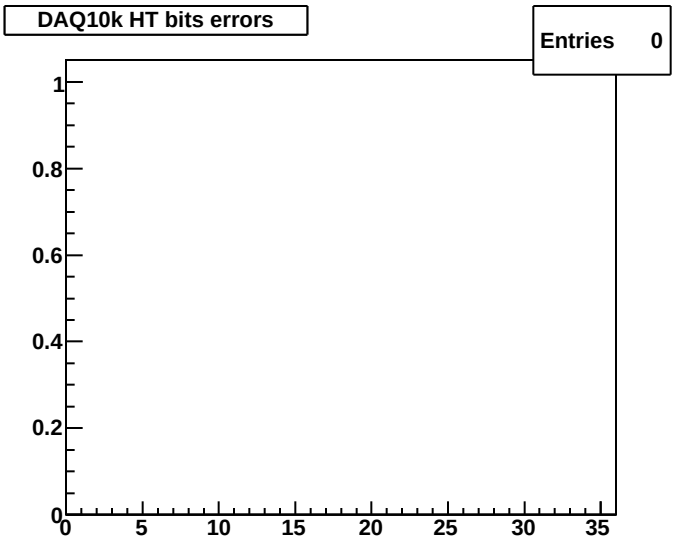

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3368080
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

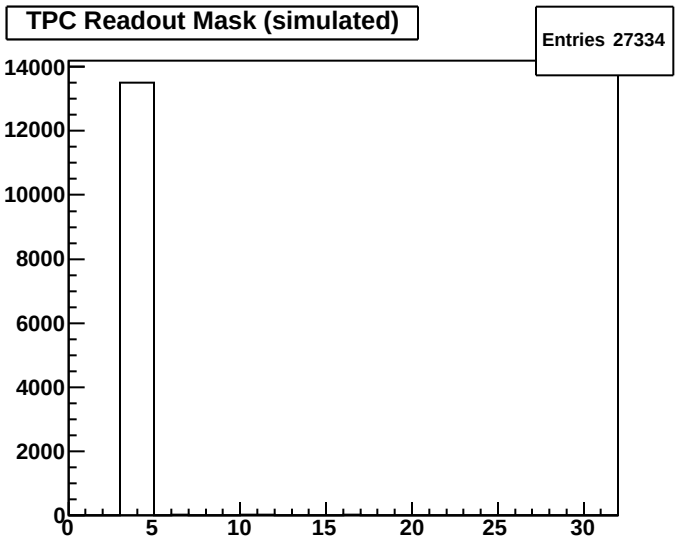

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

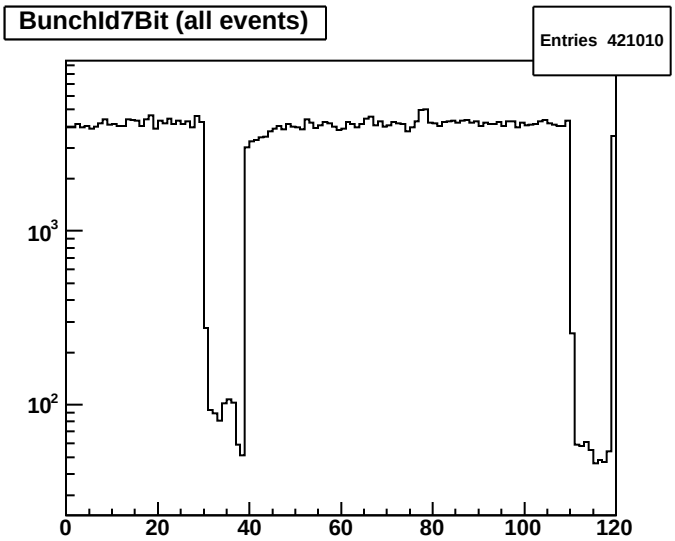

EMC L2 Input - HT23 bits
Entries 3368080
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

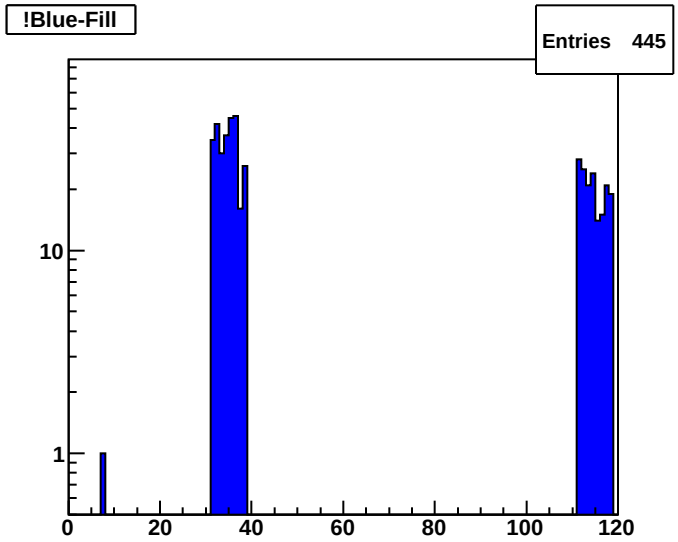

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

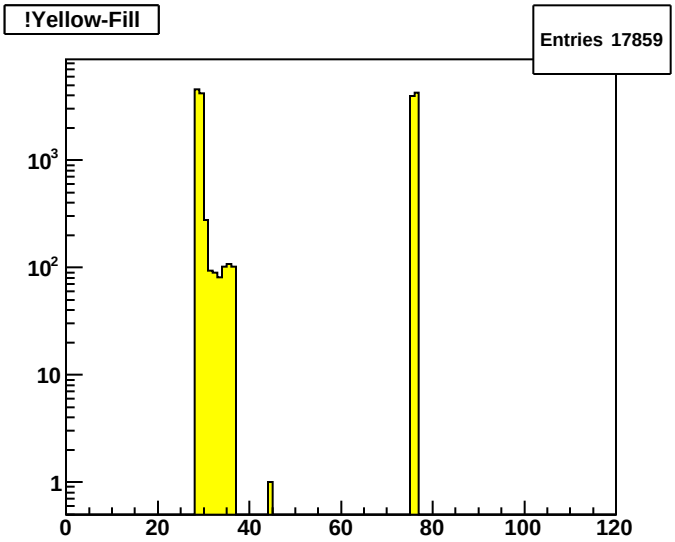

DAQ10k HT bits
Entries 13685
14000
12000
10000
8000
6000
4000
2000
0
0 5 10 15 20 25 30 35

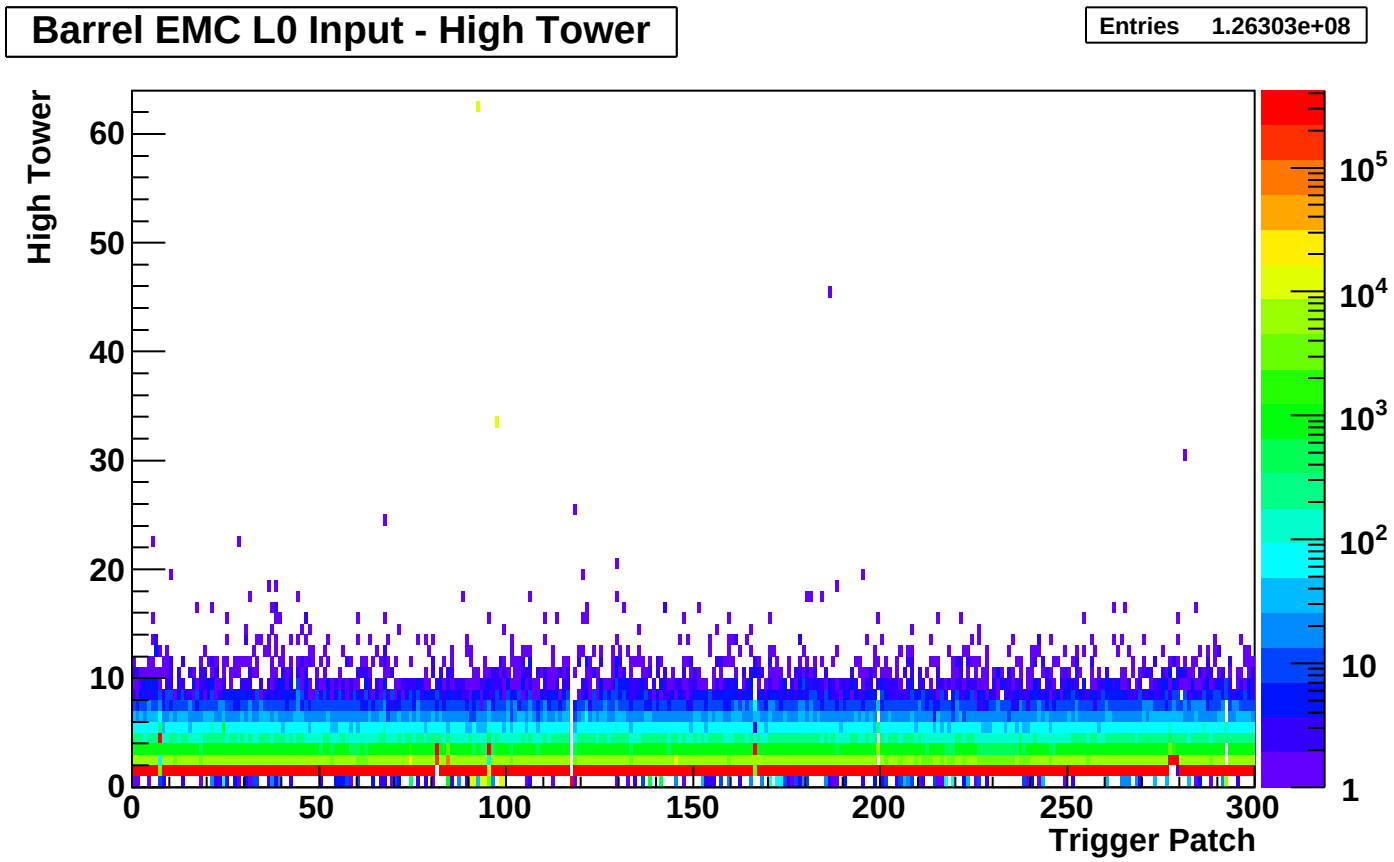

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

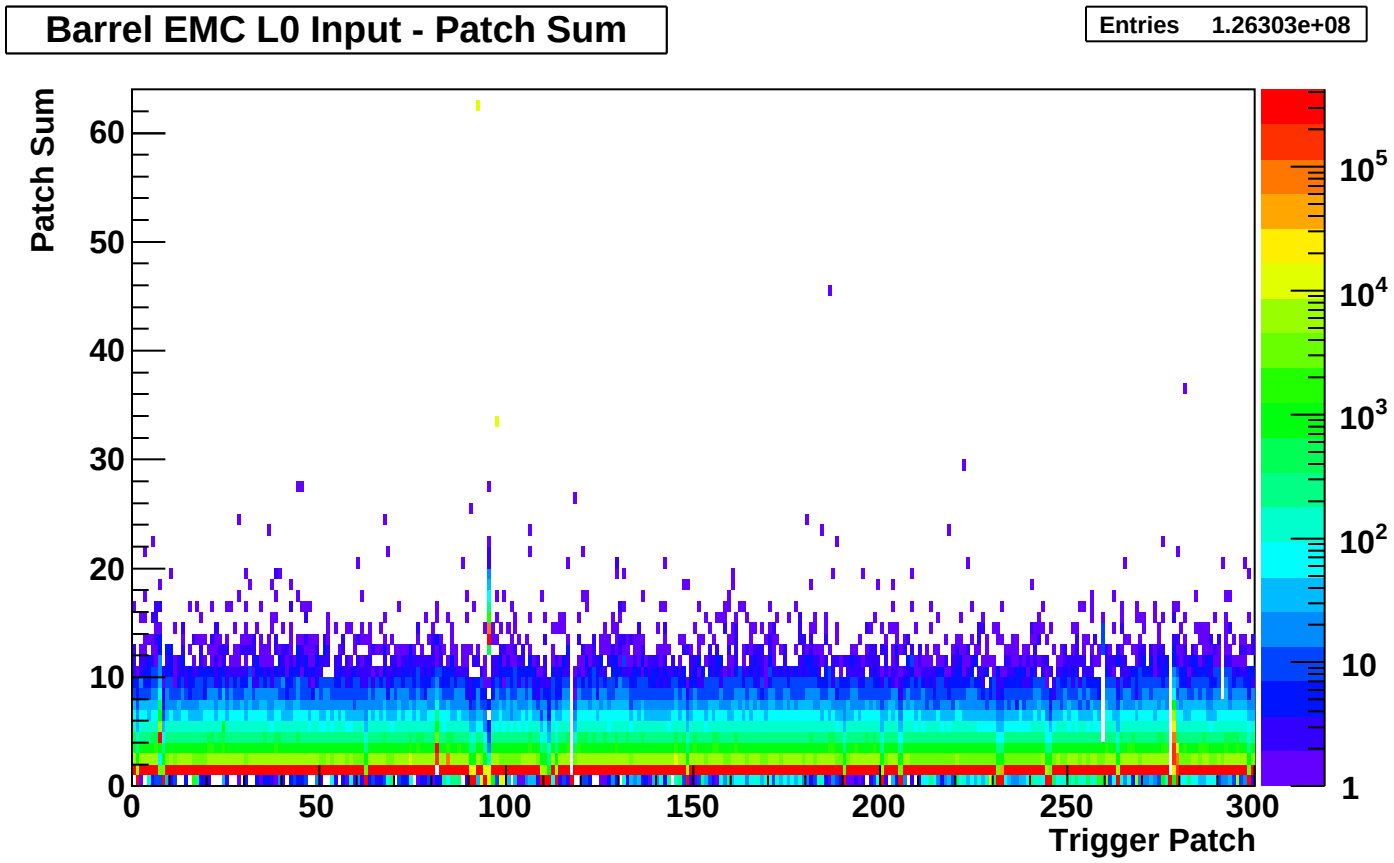

TPC Readout Mask (simulated)
Entries 27334
14000
12000
10000
8000
6000
4000
2000
0
0 5 10 15 20 25 30

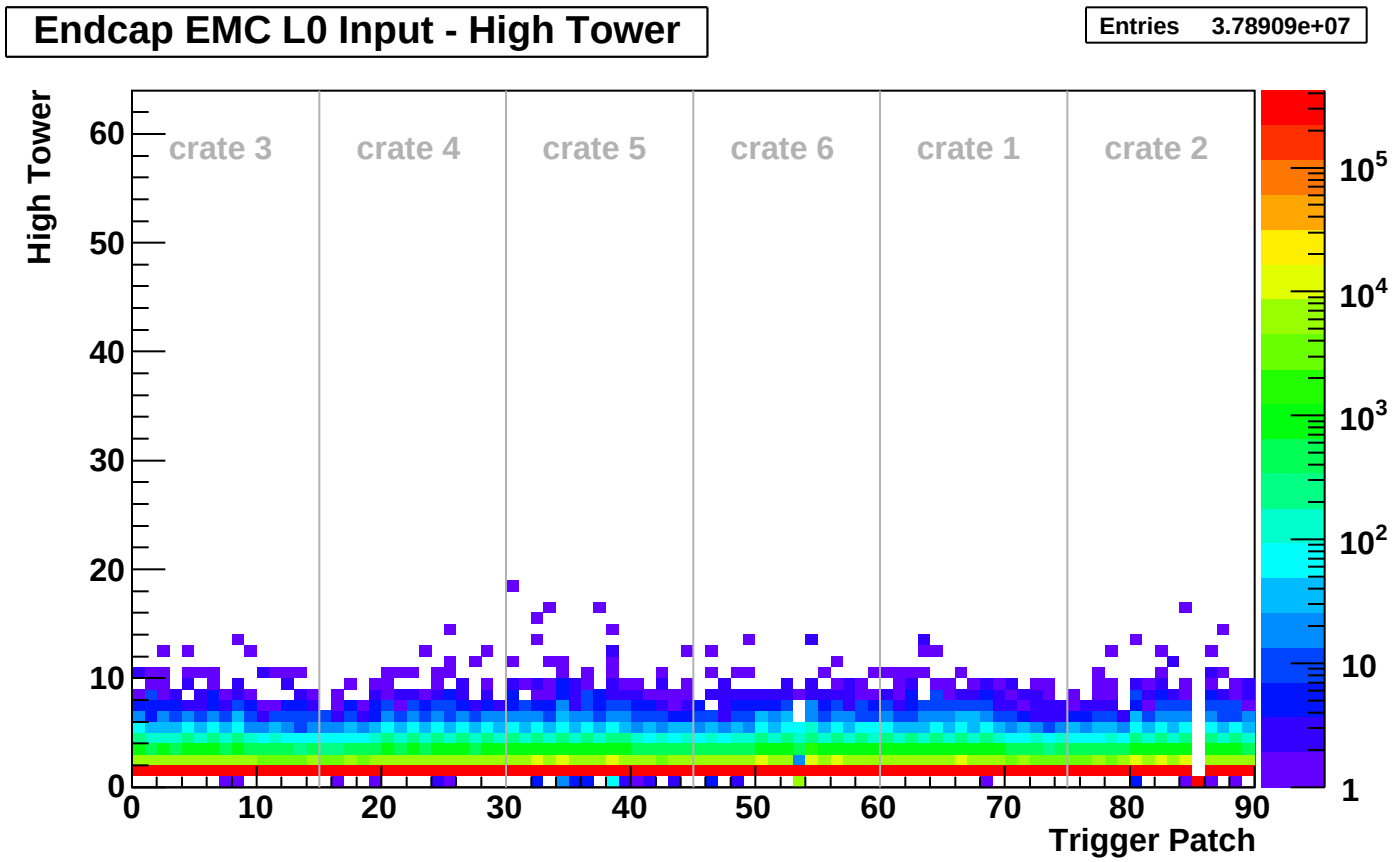

BunchId7Bit (all events)
Entries 421010
10^3
10^2
0 20 40 60 80 100 120

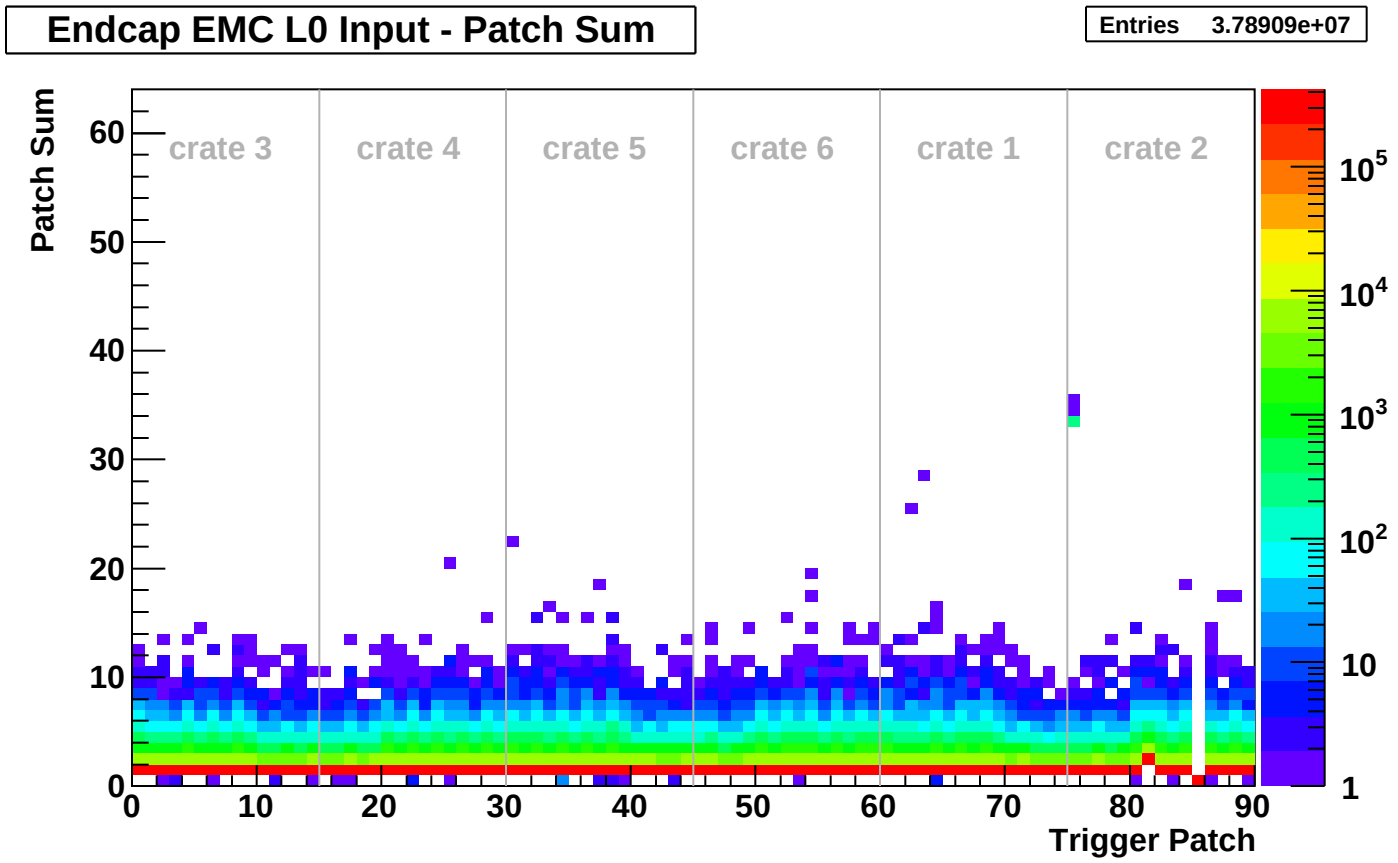

!Blue-Fill
Entries 445
10
1
0 20 40 60 80 100 120

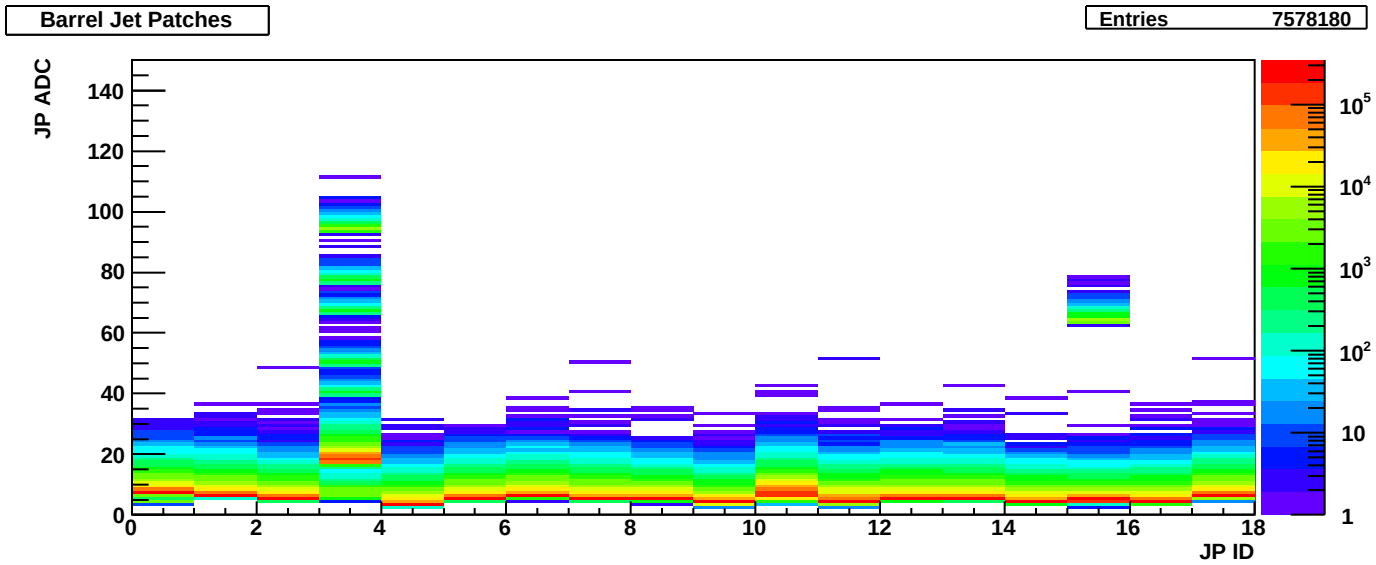

!Yellow-Fill
Entries 17859
10^3
10^2
10
1
0 20 40 60 80 100 120

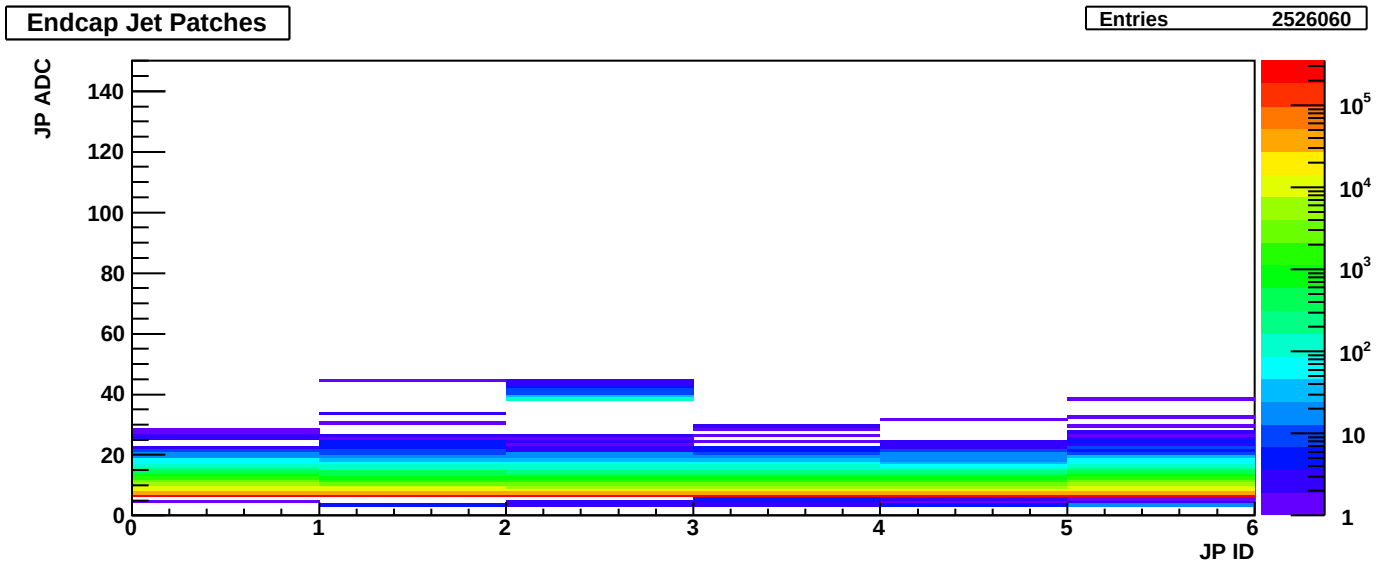

Barrel EMC L0 Input - High Tower
Entries 1.26303e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

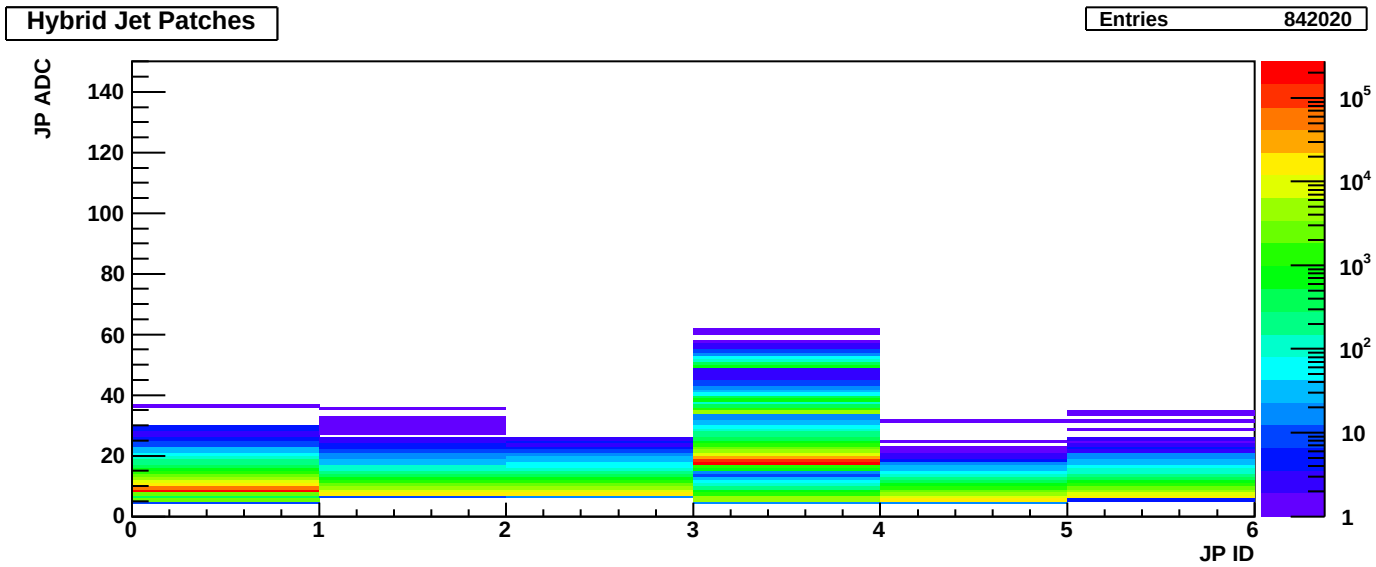

Barrel EMC L0 Input - Patch Sum
Entries 1.26303e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

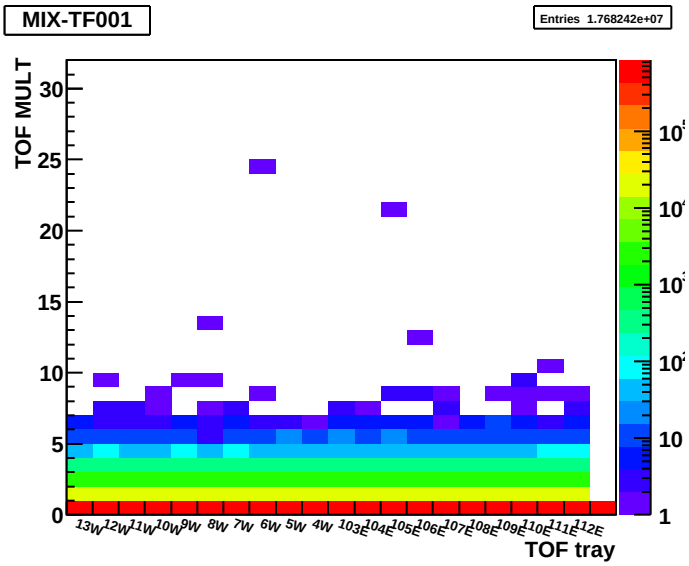

Endcap EMC L0 Input - High Tower
Entries 3.78909e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

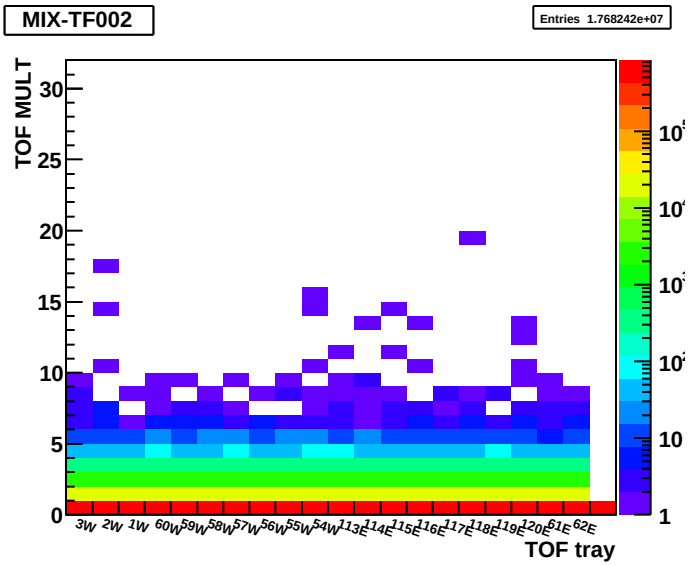

Endcap EMC L0 Input - Patch Sum
Entries 3.78909e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

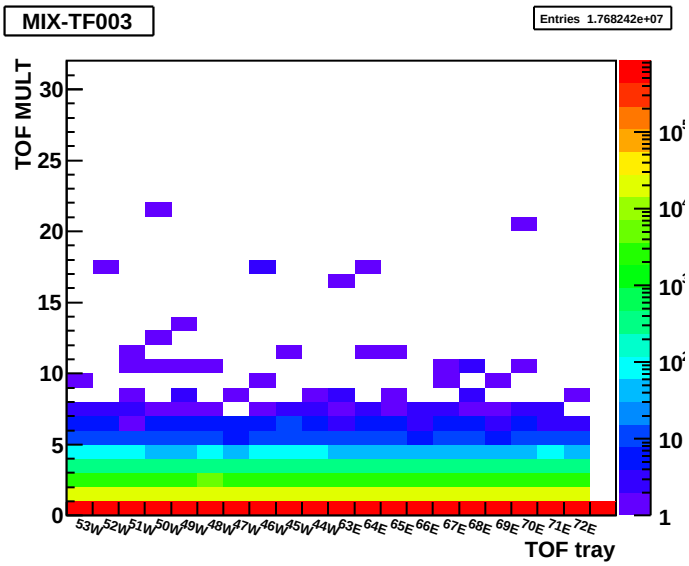

Barrel Jet Patches
Entries 7578180
JP ADC
JP ID

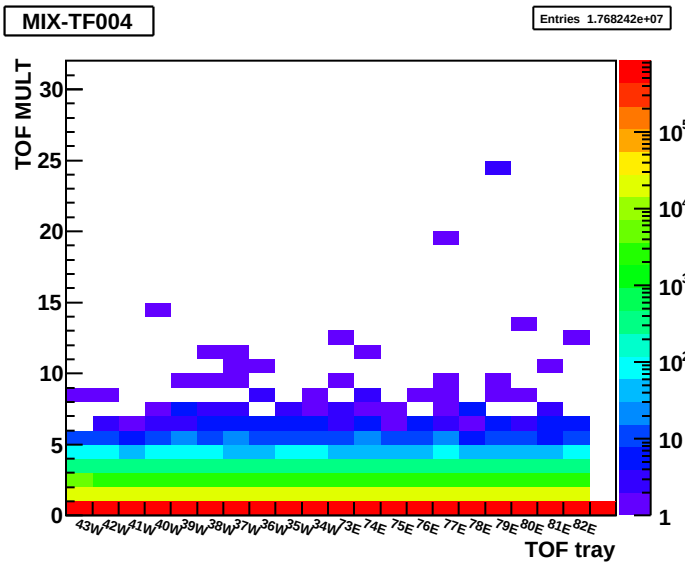

Endcap Jet Patches
Entries 2526060
JP ADC
JP ID

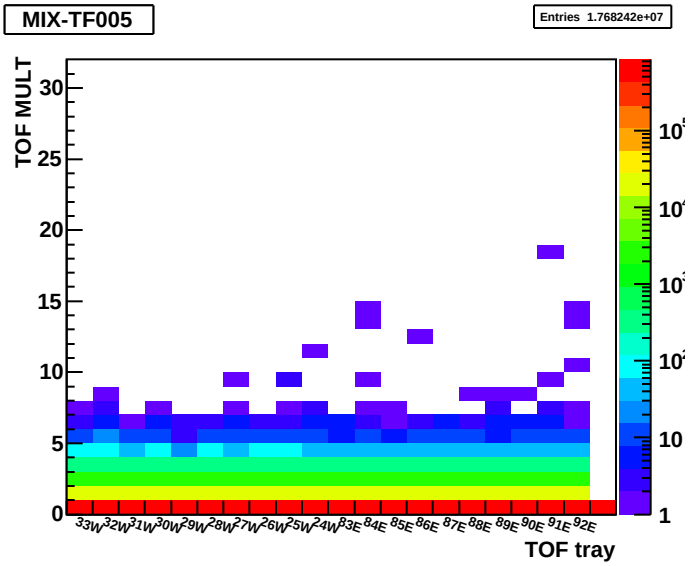

Hybrid Jet Patches
Entries 842020
JP ADC
JP ID

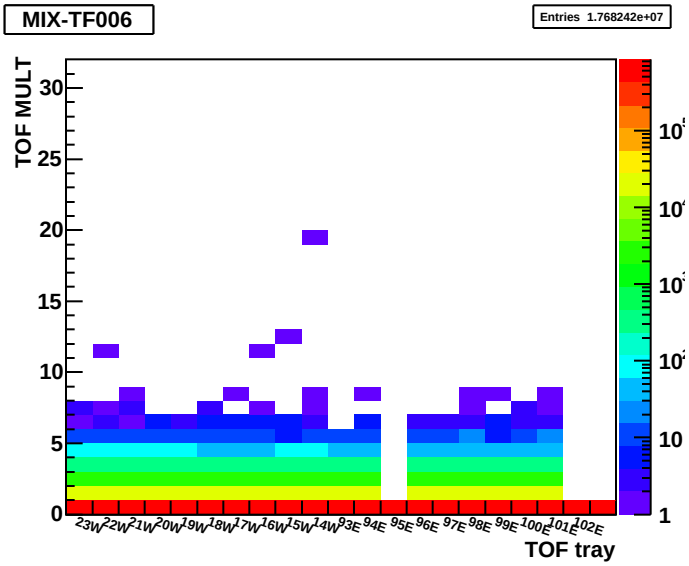

MIX-TF001
Entries 1.768242e+07
TOF MULT
TOF tray

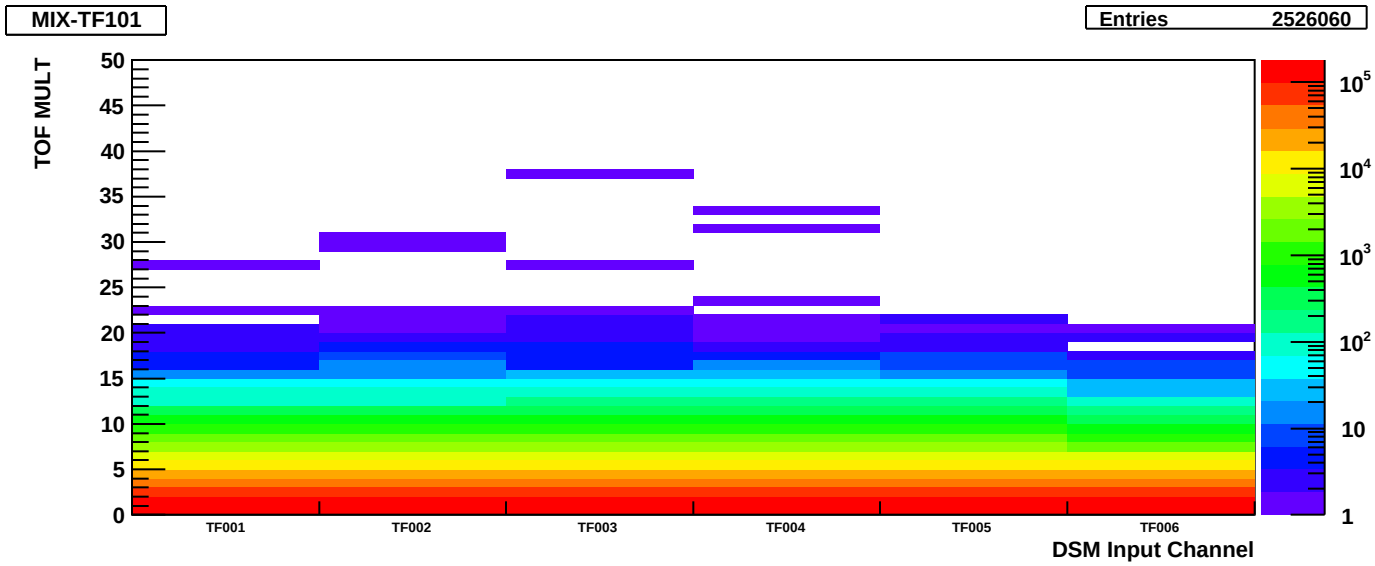

MIX-TF002
Entries 1.768242e+07
TOF MULT
TOF tray

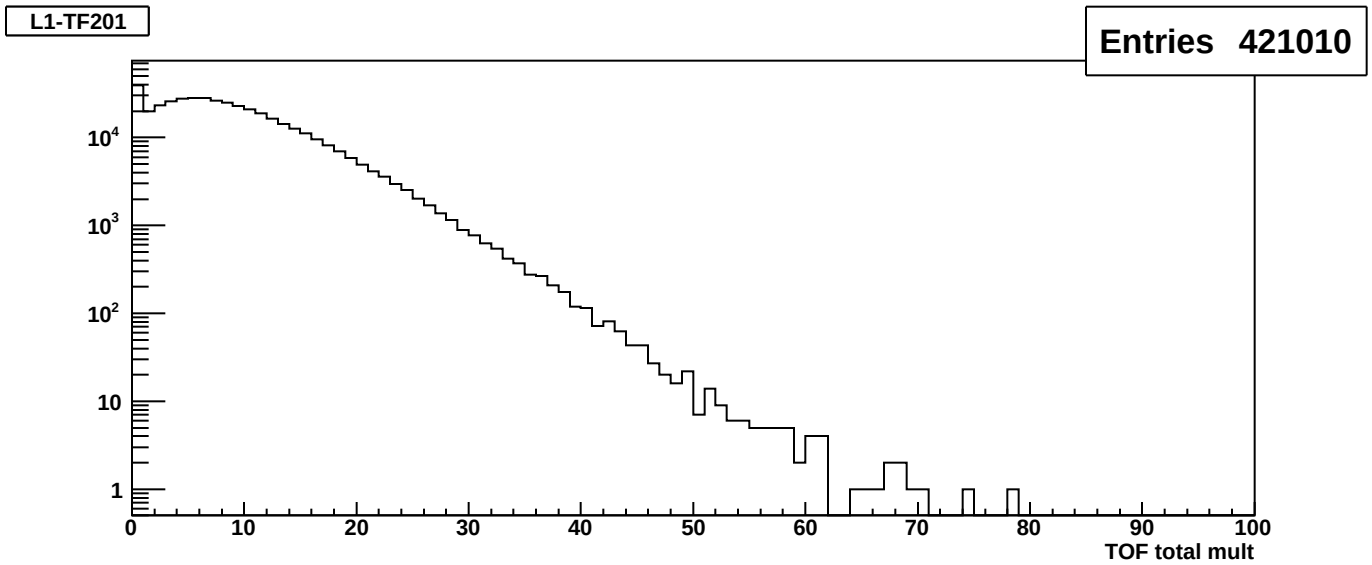

MIX-TF003
Entries 1.768242e+07
TOF MULT
TOF tray

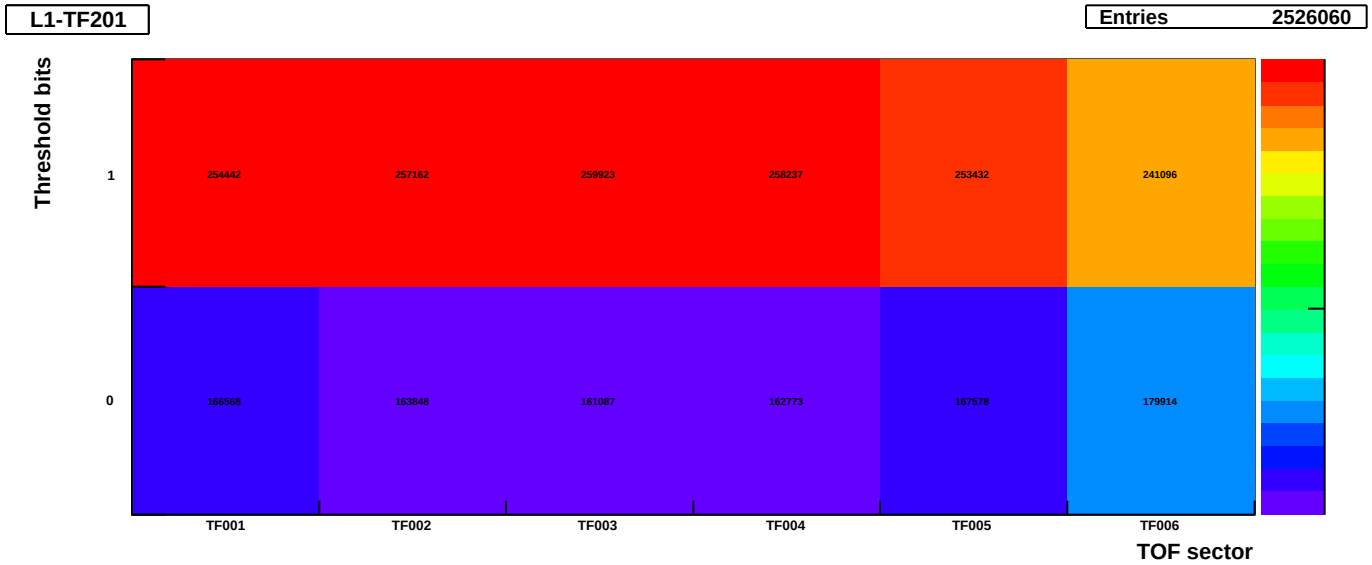

MIX-TF004
Entries 1.768242e+07
TOF MULT
TOF tray

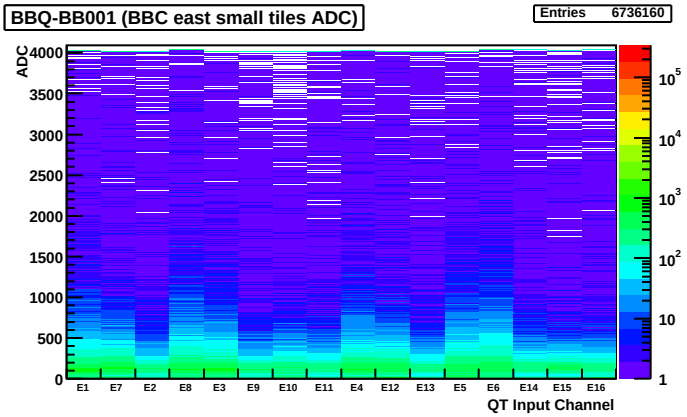

MIX-TF005
Entries 1.768242e+07
TOF MULT
TOF tray

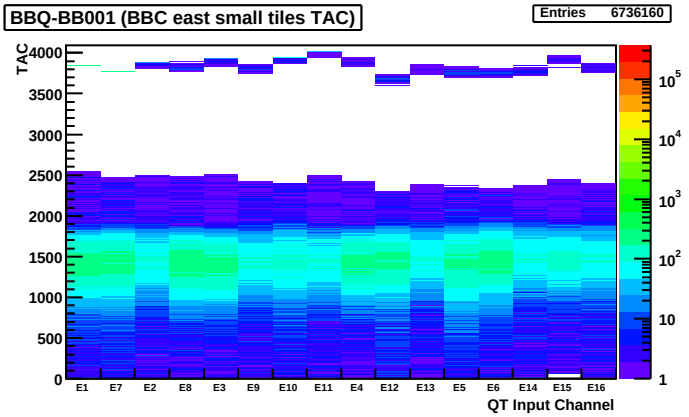

MIX-TF006
Entries 1.768242e+07
TOF MULT
TOF tray

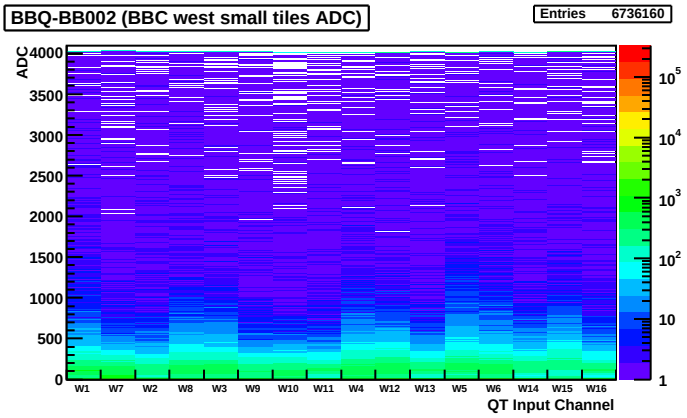

MIX-TF101
Entries 2526060
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

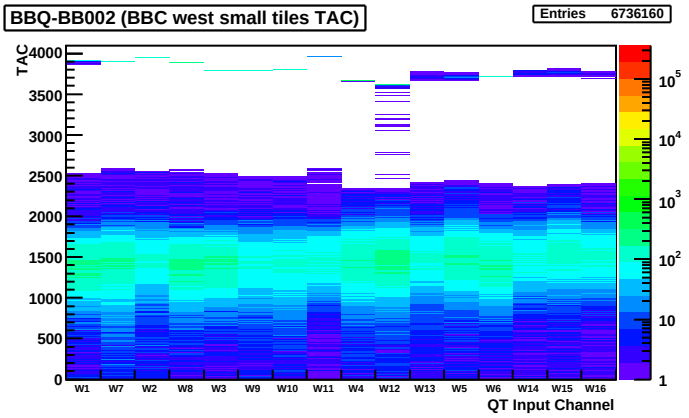

L1-TF201
Entries 421010
TOF total mult

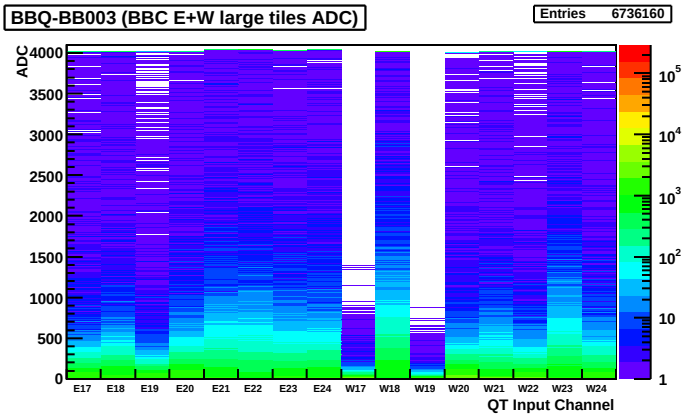

L1-TF201
Entries 2526060
Threshold bits
254442
257162
259923
258237
253432
241096
166568
163848
161087
162773
167578
179914
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

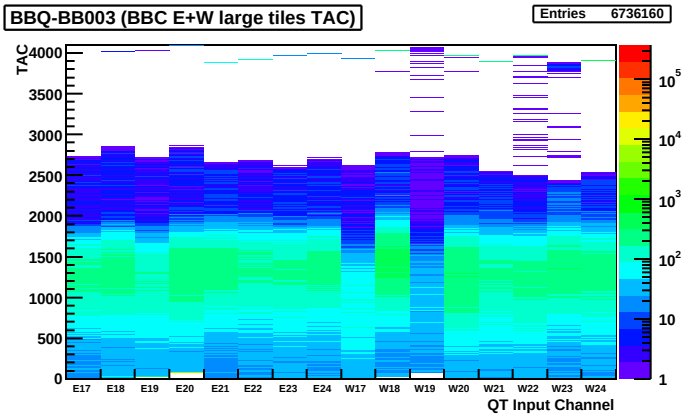

BBQ-BB001 (BBC east small tiles ADC)
Entries 6736160
ADC
QT Input Channel

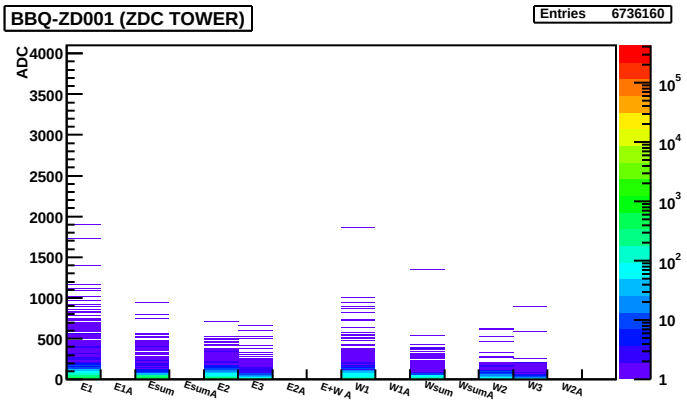

BBQ-BB001 (BBC east small tiles TAC)
Entries 6736160
TAC
QT Input Channel

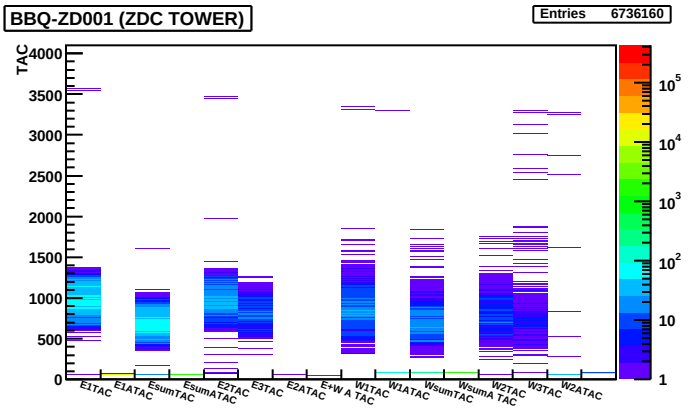

BBQ-BB002 (BBC west small tiles ADC)
Entries 6736160
ADC
QT Input Channel

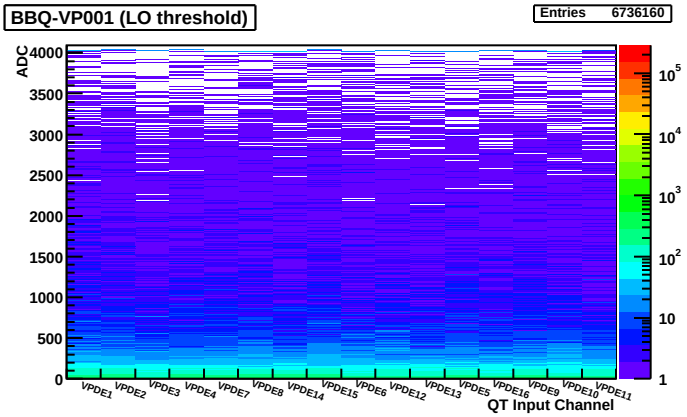

BBQ-BB002 (BBC west small tiles TAC)
Entries 6736160
TAC
QT Input Channel

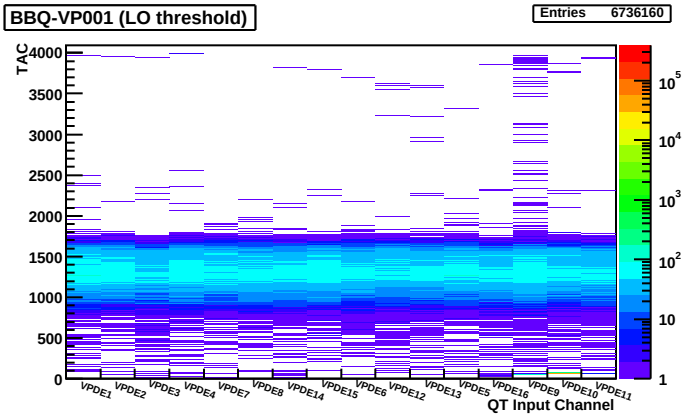

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6736160
ADC
QT Input Channel

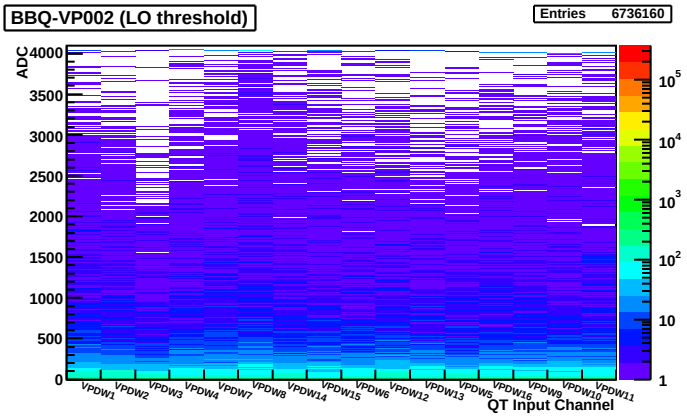

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6736160
TAC
QT Input Channel

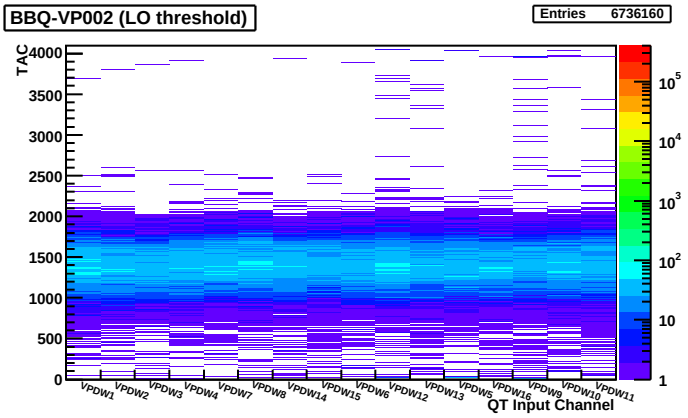

BBQ-ZD001 (ZDC TOWER)
Entries 6736160
ADC

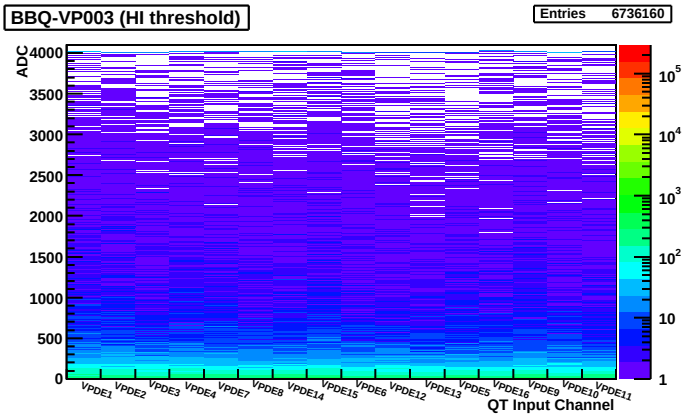

BBQ-ZD001 (ZDC TOWER)
Entries 6736160
TAC

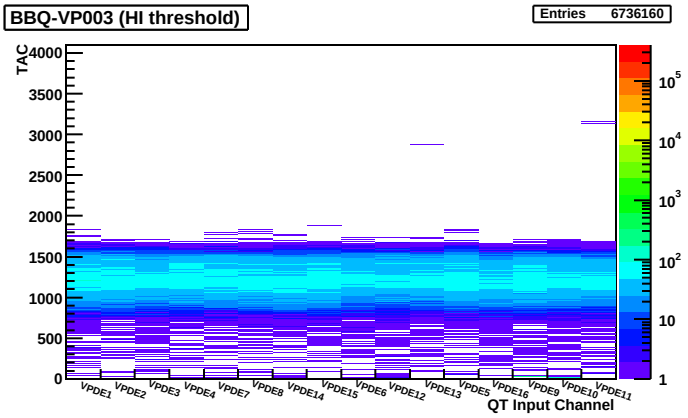

BBQ-VP001 (LO threshold)
Entries 6736160
ADC
QT Input Channel

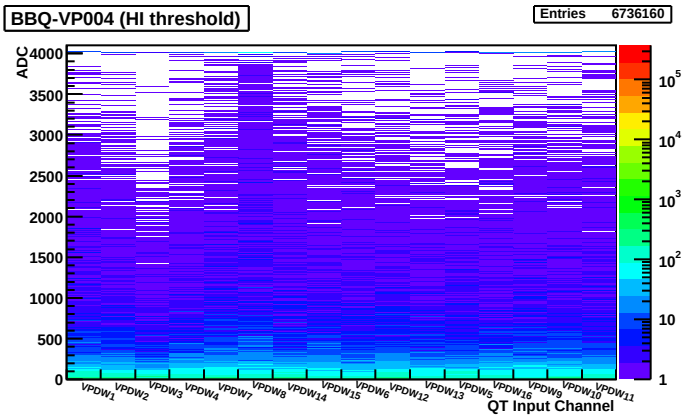

BBQ-VP001 (LO threshold)
Entries 6736160
TAC
QT Input Channel

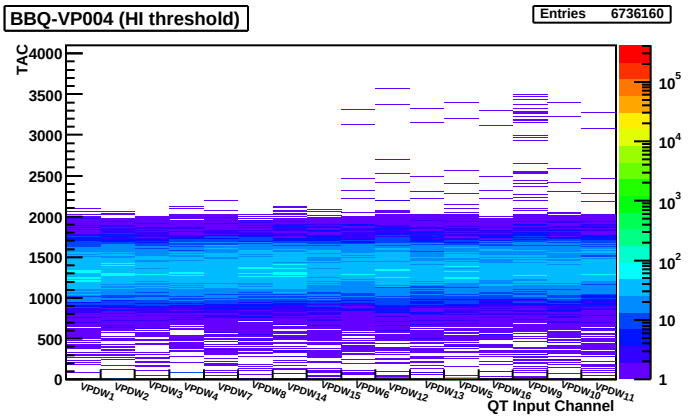

BBQ-VP002 (LO threshold)
Entries 6736160
ADC
QT Input Channel

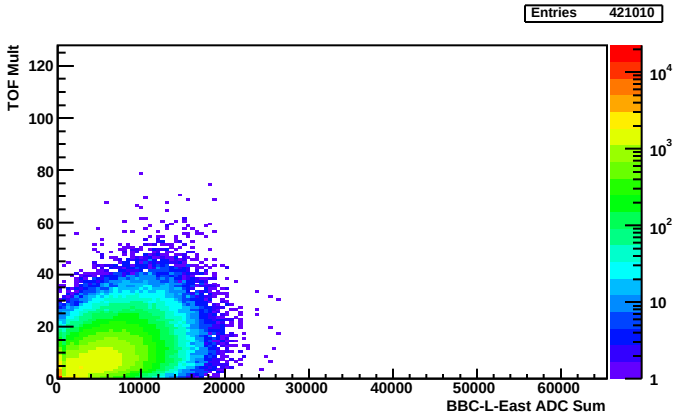

BBQ-VP002 (LO threshold)
Entries 6736160
TAC
QT Input Channel

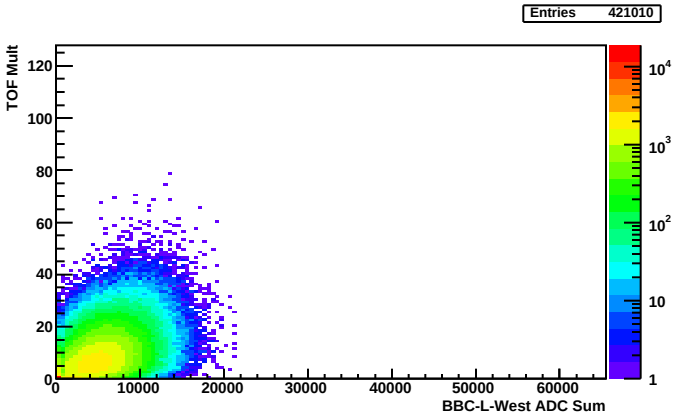

BBQ-VP003 (HI threshold)
Entries 6736160
ADC
QT Input Channel

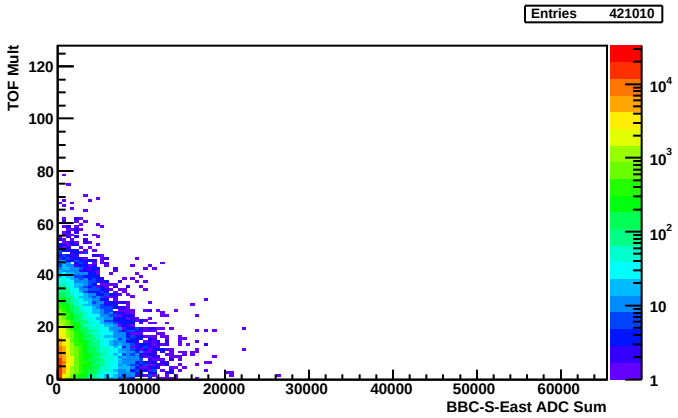

BBQ-VP003 (HI threshold)
Entries 6736160
TAC
QT Input Channel

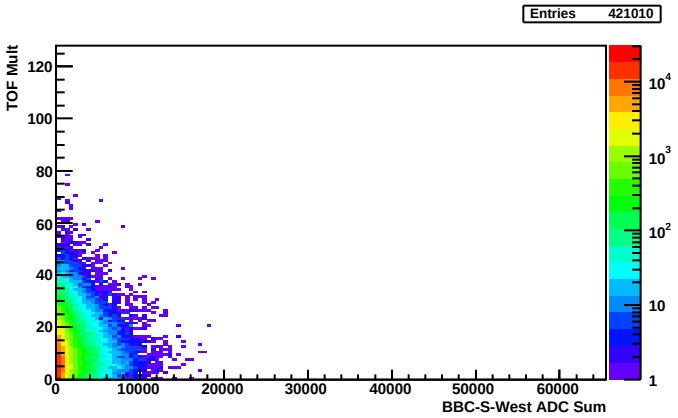

BBQ-VP004 (HI threshold)
Entries 6736160
ADC
QT Input Channel

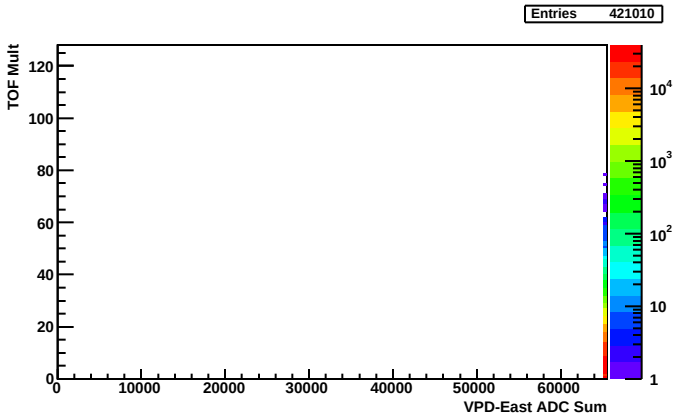

BBQ-VP004 (HI threshold)
Entries 6736160
TAC
QT Input Channel

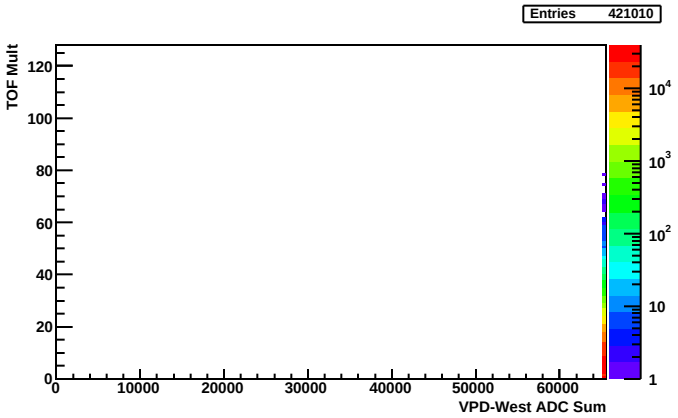

Entries 421010
TOF Mult
BBC-L-East ADC Sum

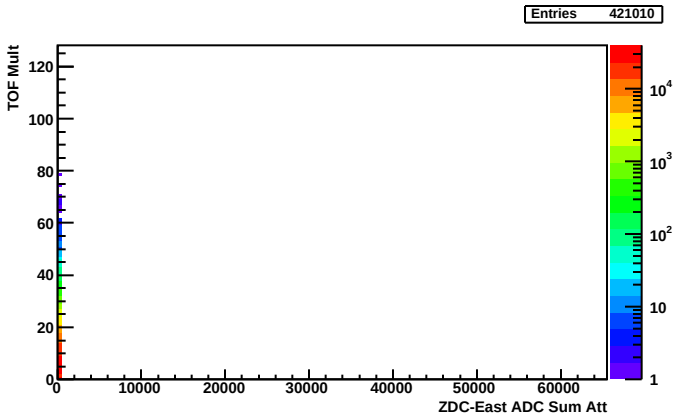

Entries 421010
TOF Mult
BBC-L-West ADC Sum

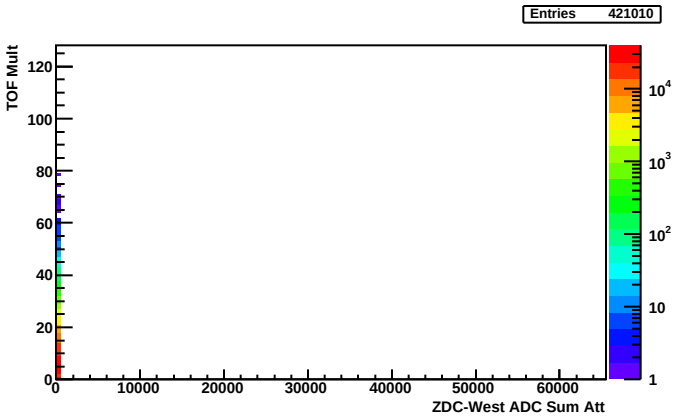

Entries 421010
TOF Mult
BBC-S-East ADC Sum

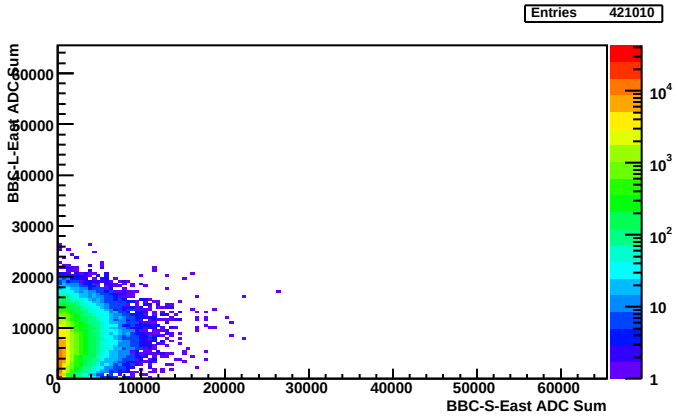

Entries 421010
TOF Mult
BBC-S-West ADC Sum

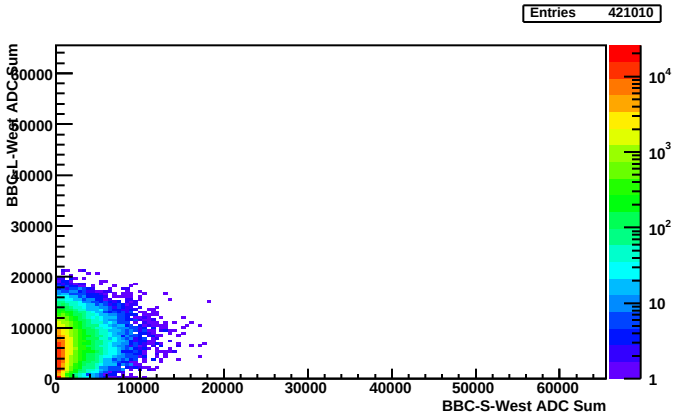

Entries 421010
TOF Mult
VPD-East ADC Sum

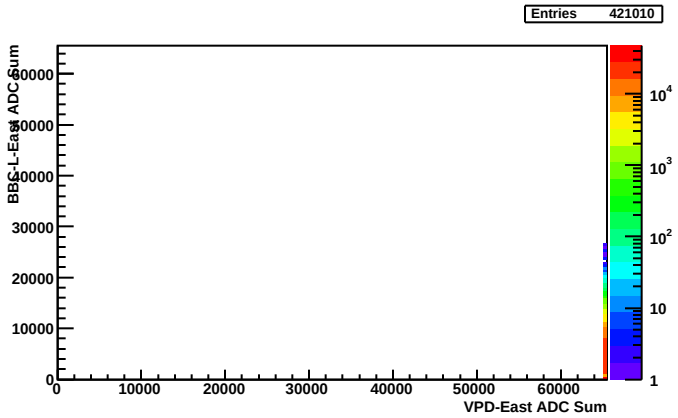

Entries 421010
TOF Mult
VPD-West ADC Sum

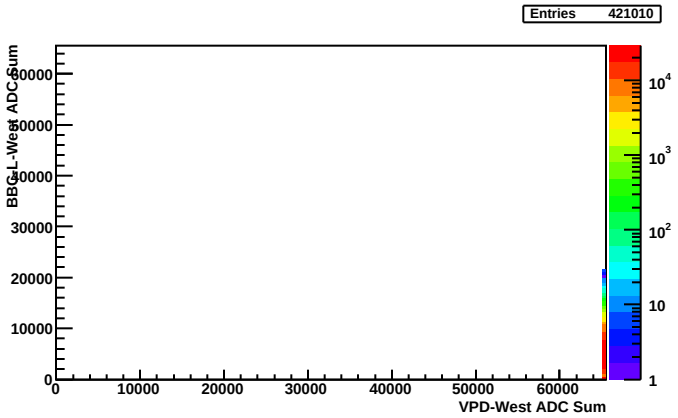

Entries 421010
TOF Mult
ZDC-East ADC Sum Att

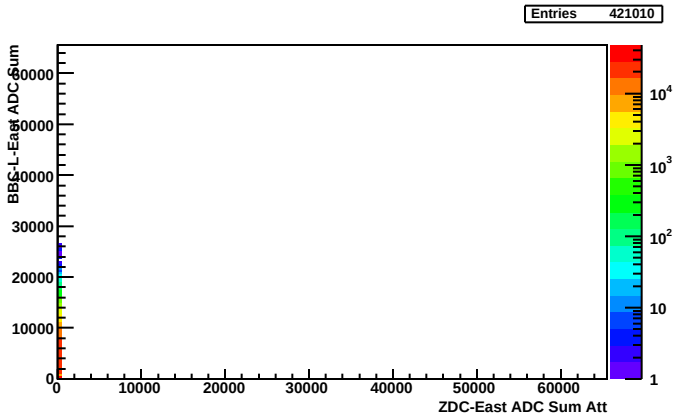

Entries 421010
TOF Mult
ZDC-West ADC Sum Att

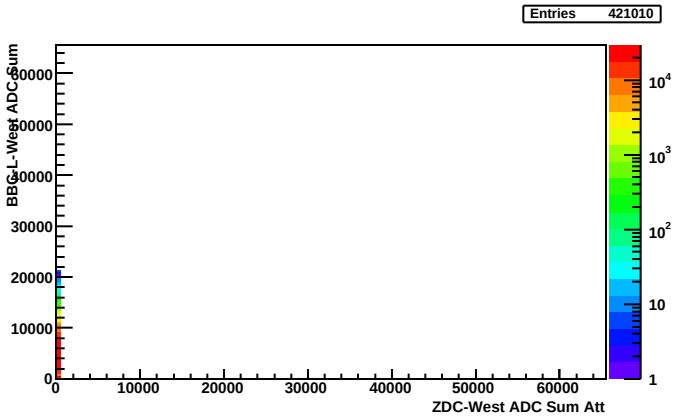

Entries 421010
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 421010
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 421010
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 421010
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 421010
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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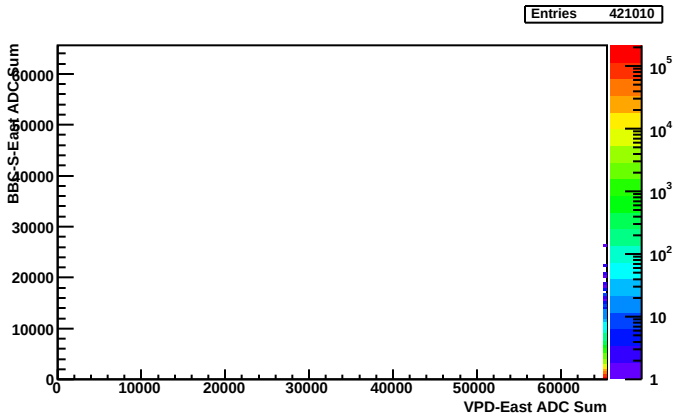
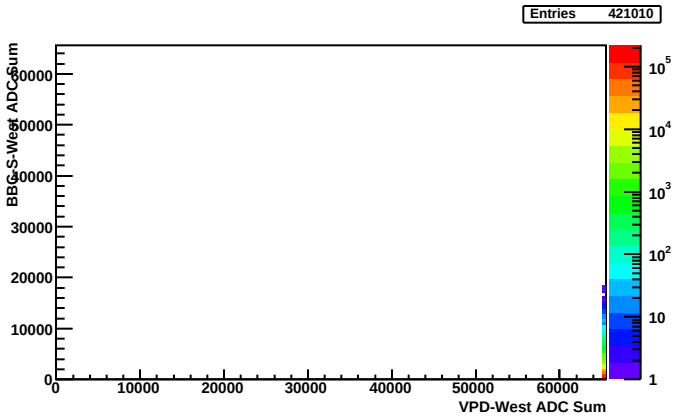
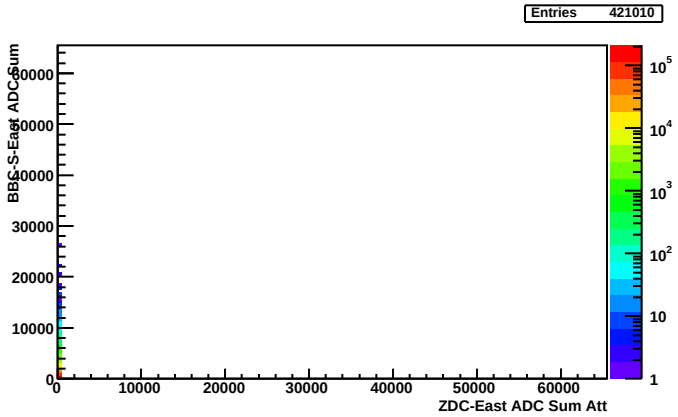
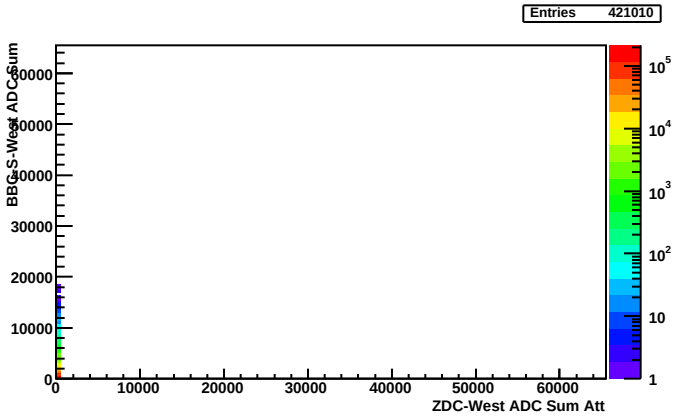
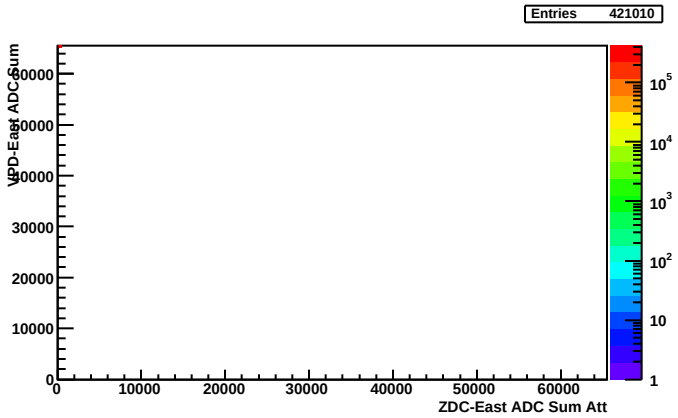
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

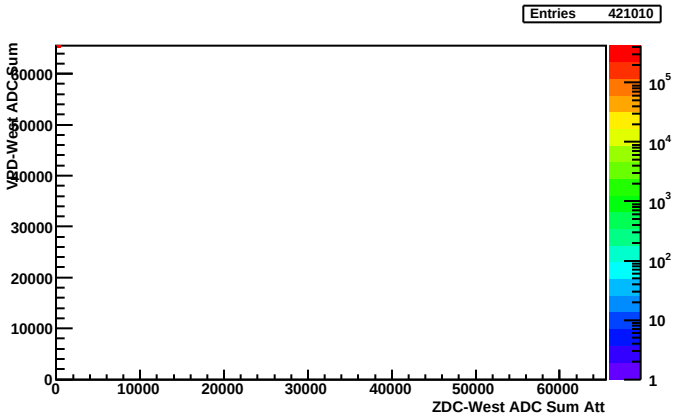

Entries 421010
BBC-S-East ADC Sum
VPD-East ADC Sum

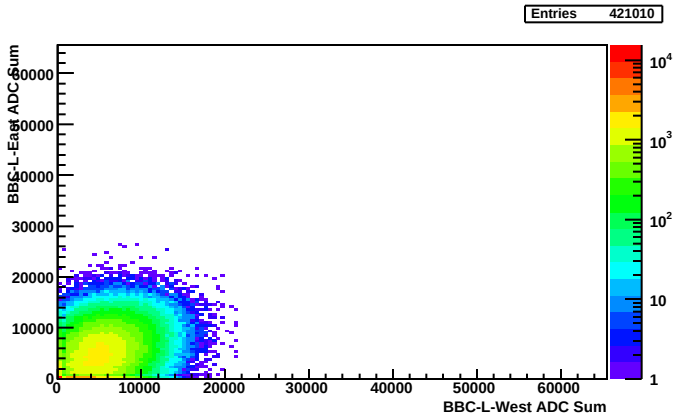

Entries 421010
BBC-S-West ADC Sum
VPD-West ADC Sum

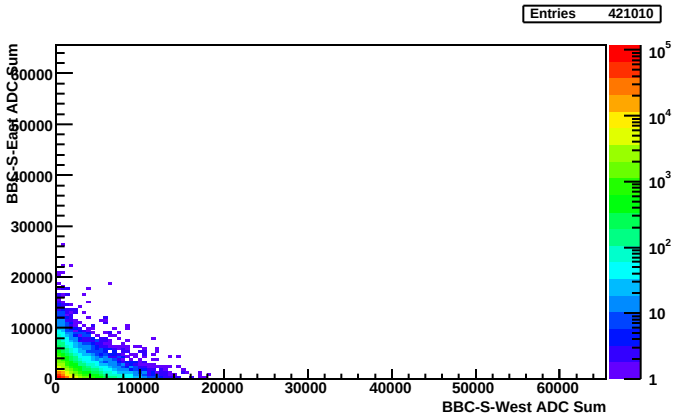

Entries 421010
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

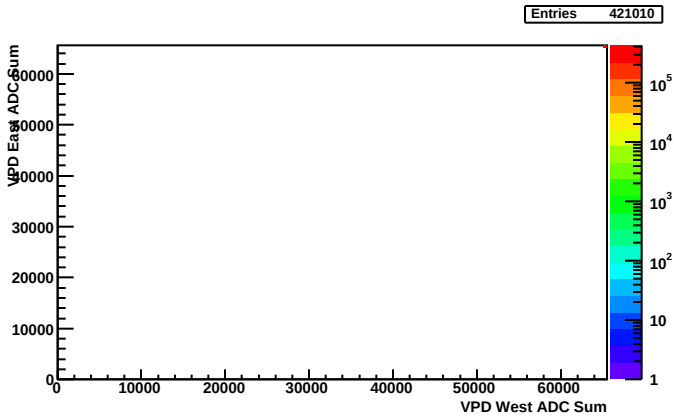

Entries 421010
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

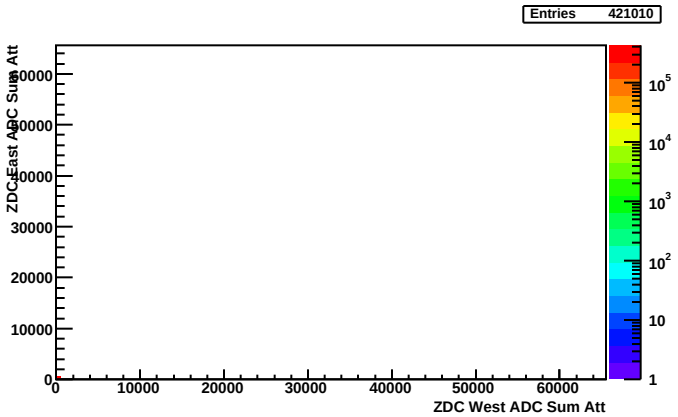

Entries 421010
VPD-East ADC Sum
ZDC-East ADC Sum Att

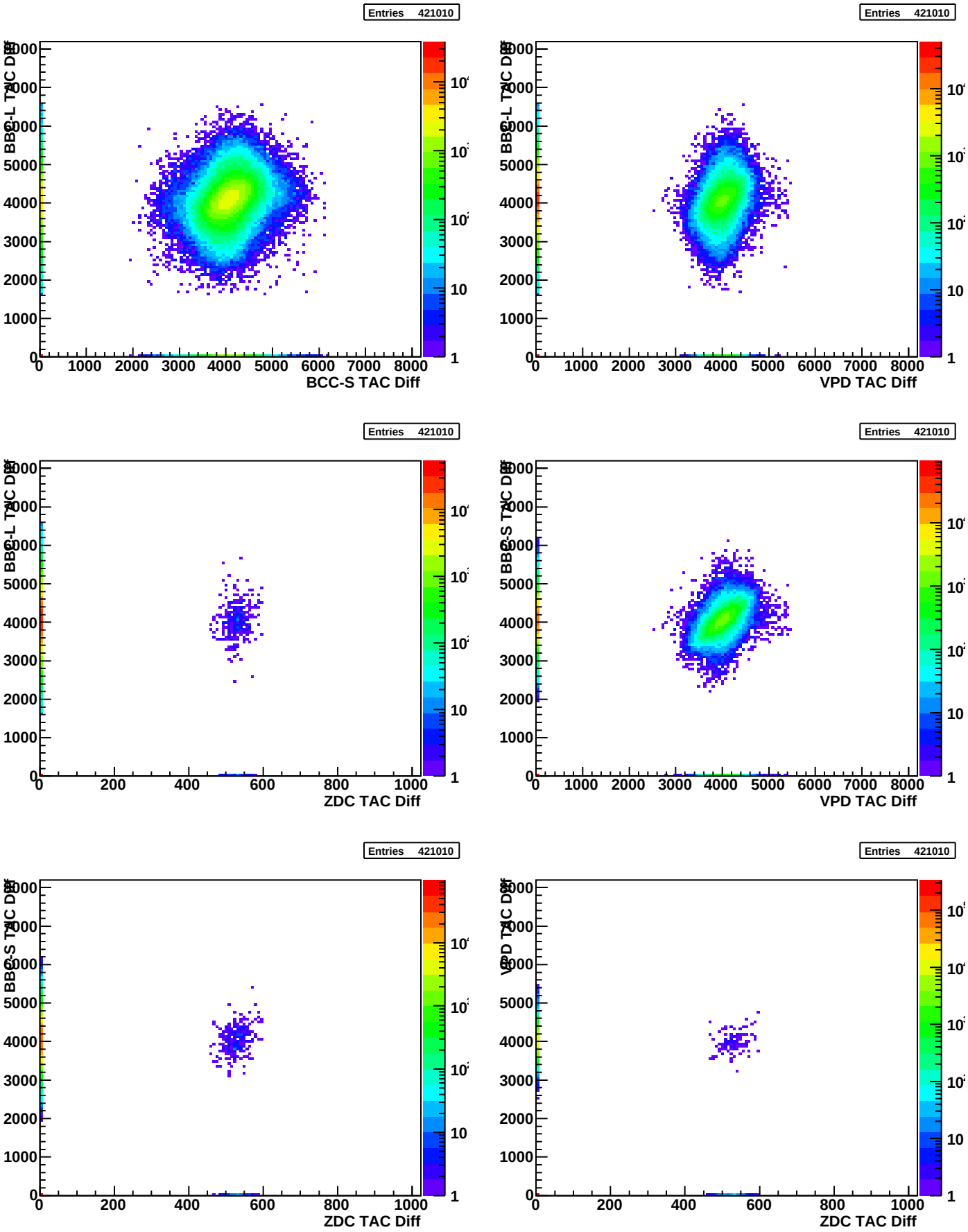

Entries 421010
VPD-West ADC Sum
ZDC-West ADC Sum Att

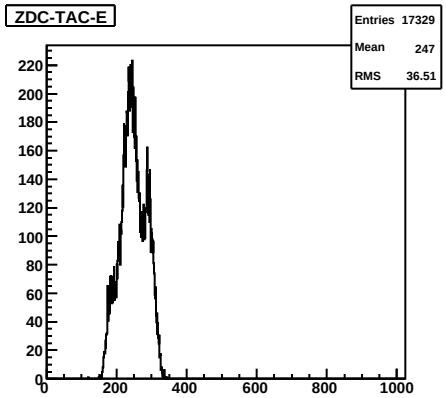

Entries 421010
BBC-L-East ADC Sum
BBC-L-West ADC Sum

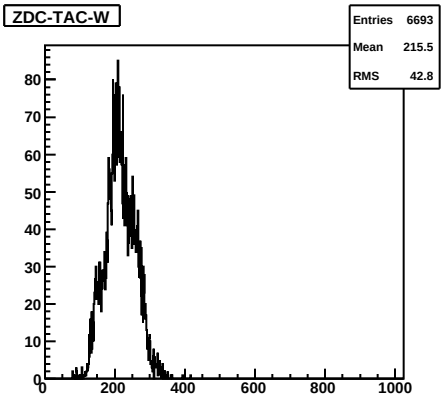

Entries 421010
BBC-S-East ADC Sum
BBC-S-West ADC Sum

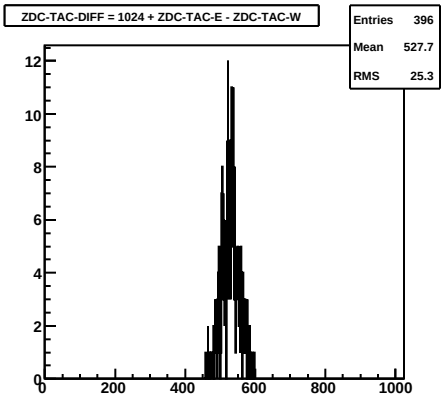

Entries 421010
VPD East ADC Sum
VPD West ADC Sum

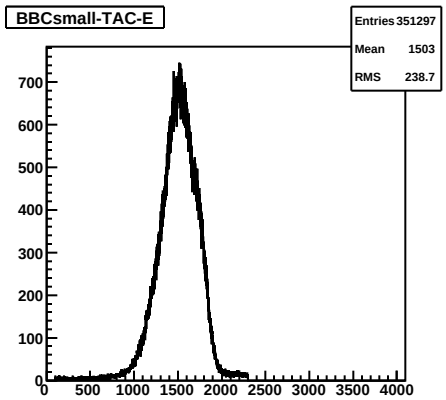

Entries 421010
ZDC East ADC Sum Att
ZDC West ADC Sum Att

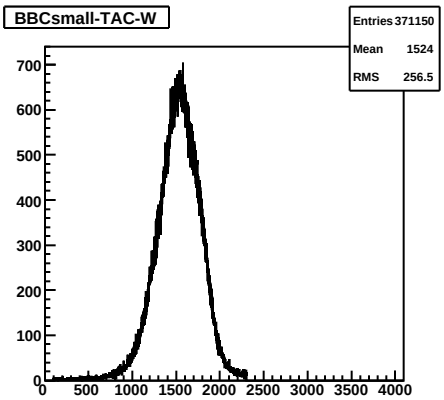

Entries 421010
BBC-L TAC Diff
BCC-S TAC Diff
Entries 421010
BBC-L TAC Diff
VPD TAC Diff
Entries 421010
BBC-L TAC Diff
ZDC TAC Diff
Entries 421010
BBC-S TAC Diff
VPD TAC Diff
Entries 421010
BBC-S TAC Diff
ZDC TAC Diff
Entries 421010
VPD TAC Diff
ZDC TAC Diff

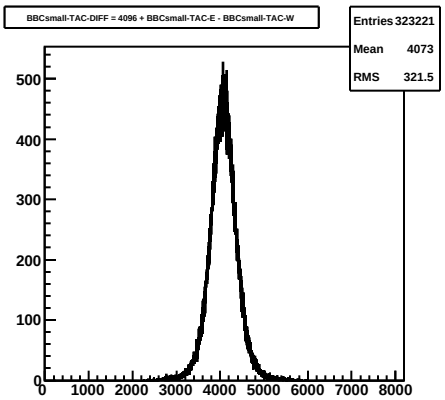

ZDC-TAC-E
Entries 17329
Mean 247
RMS 36.51

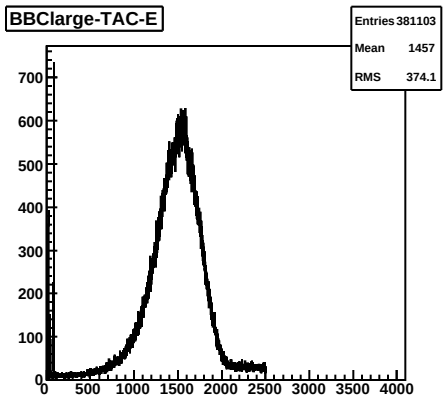

ZDC-TAC-W
Entries 6693
Mean 215.5
RMS 42.8

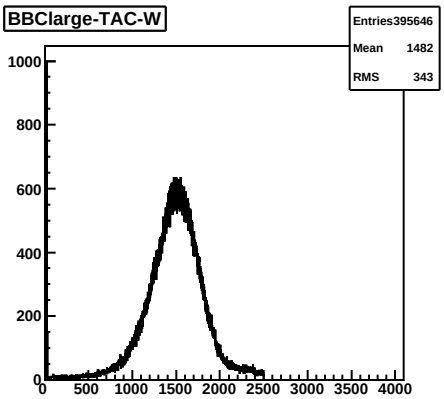

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 396
Mean 527.7
RMS 25.3

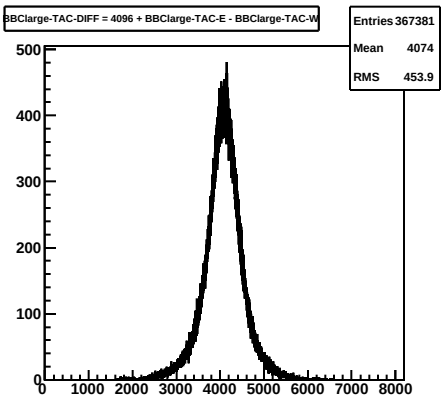

BBCsmall-TAC-E
Entries 351297
Mean 1503
RMS 238.7

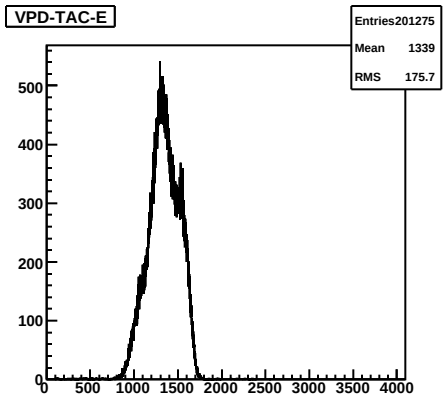

BBCsmall-TAC-W
Entries 371150
Mean 1524
RMS 256.5

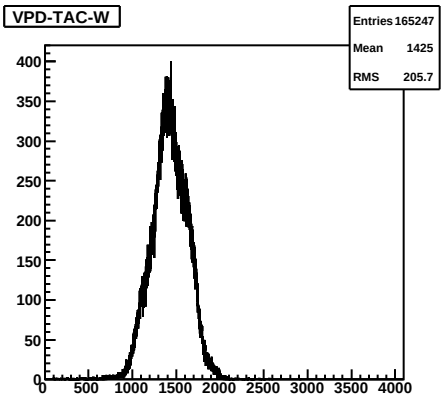

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 323221
Mean 4073
RMS 321.5

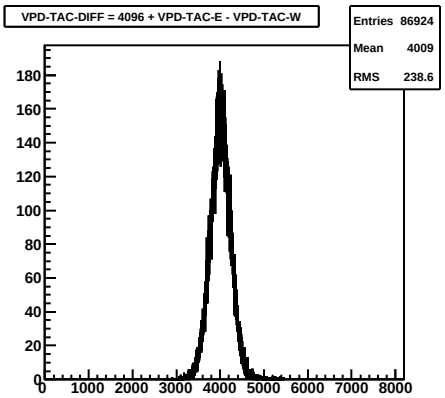

BBClarge-TAC-E
Entries 381103
Mean 1457
RMS 374.1

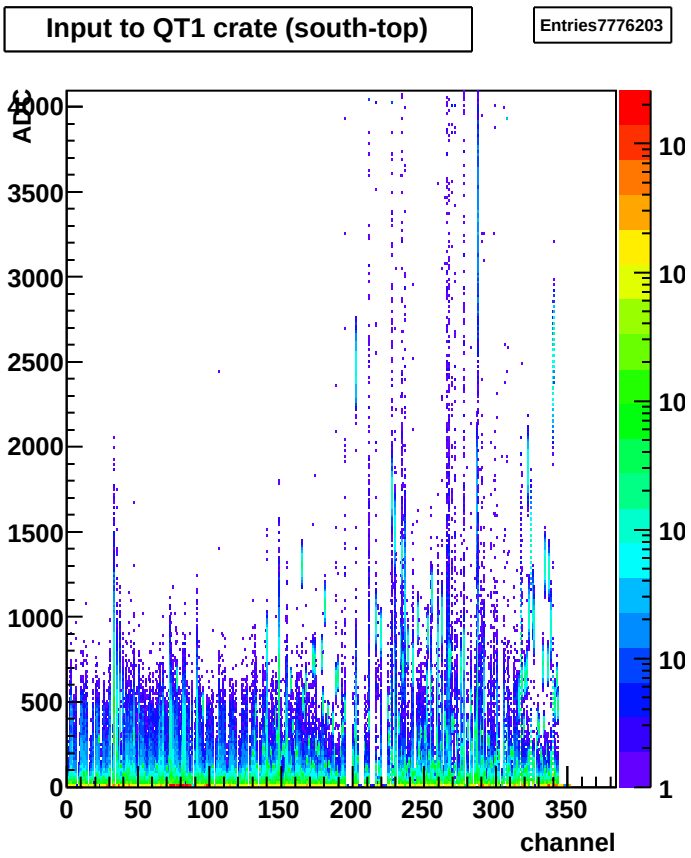

BBClarge-TAC-W
Entries 395646
Mean 1482
RMS 343

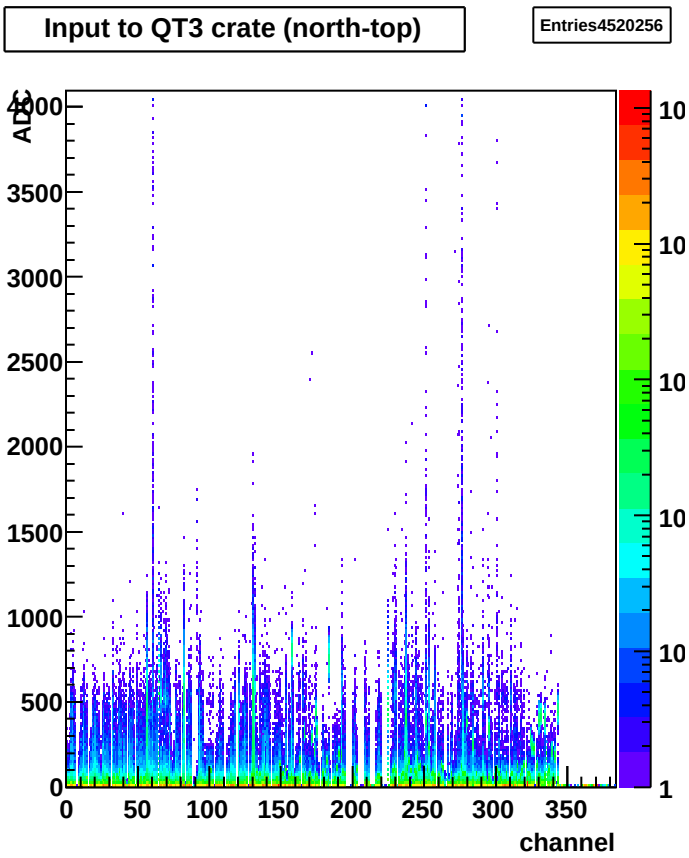

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 367381
Mean 4074
RMS 453.9

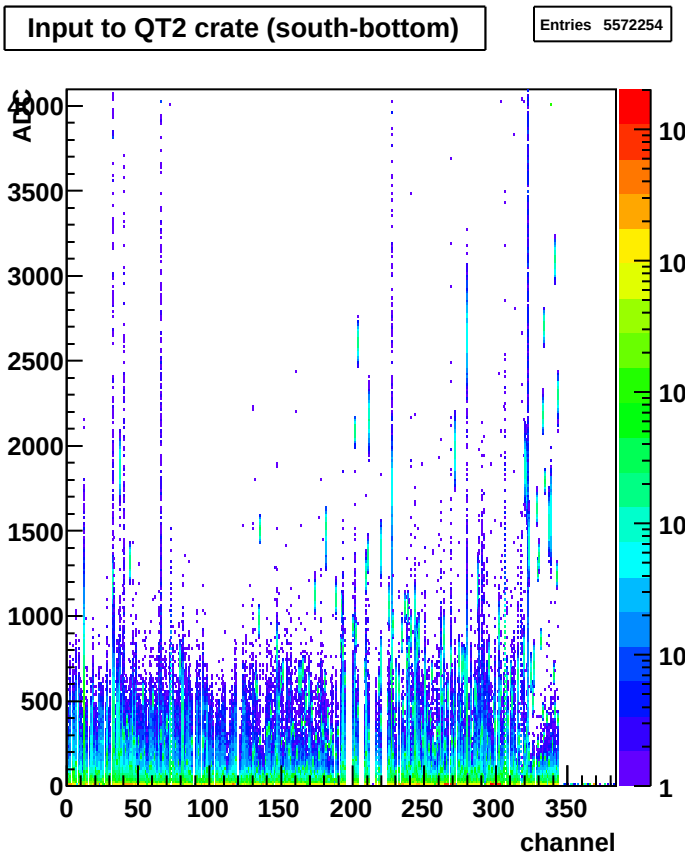

VPD-TAC-E
Entries 201275
Mean 1339
RMS 175.7

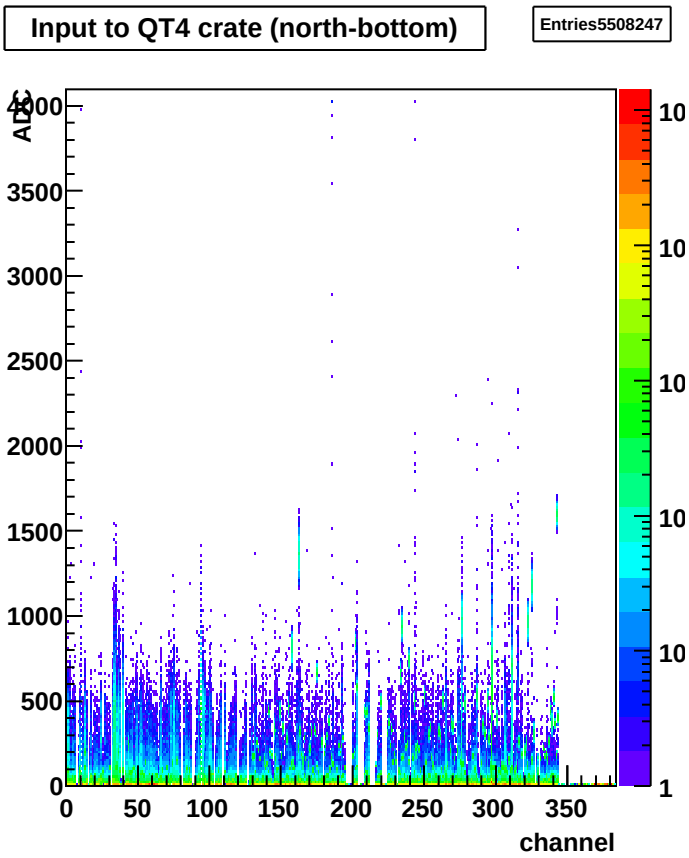

VPD-TAC-W
Entries 165247
Mean 1425
RMS 205.7

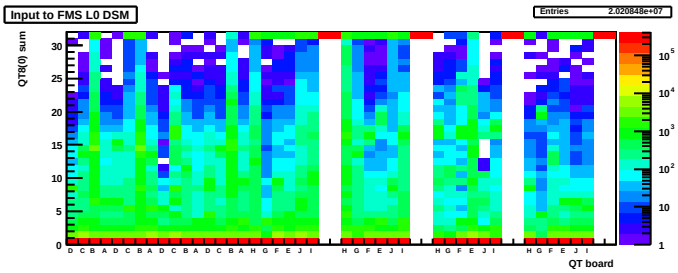

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 86924
Mean 4009
RMS 238.6

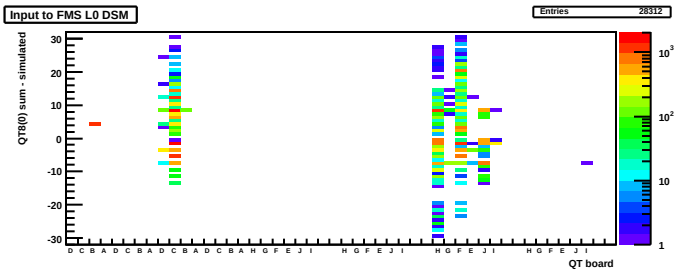

Input to QT1 crate (south-top)
Entries7776203
ADC
channel

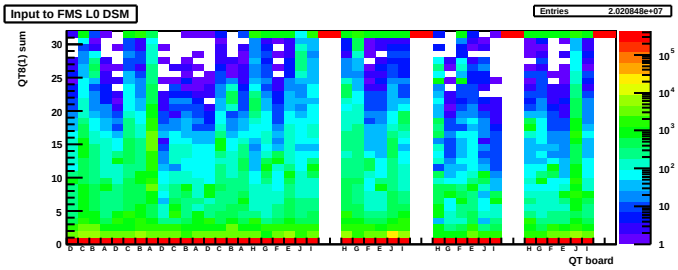

Input to QT3 crate (north-top)
Entries4520256
ADC
channel

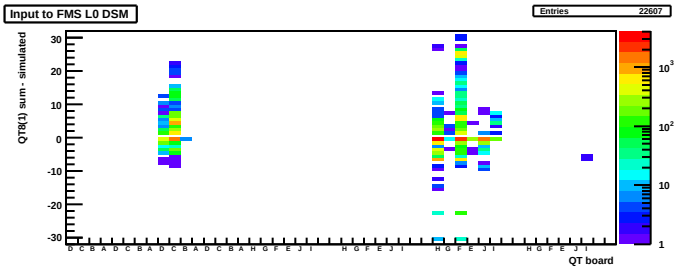

Input to QT2 crate (south-bottom)
Entries 5572254
ADC
channel

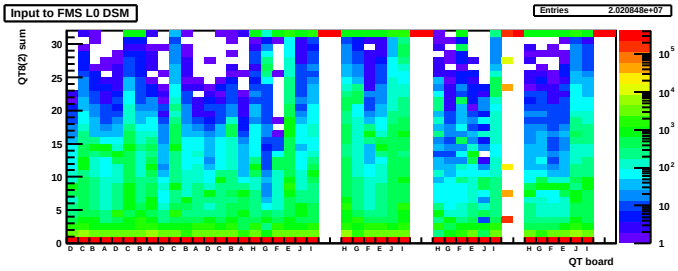

Input to QT4 crate (north-bottom)
Entries5508247
ADC
channel

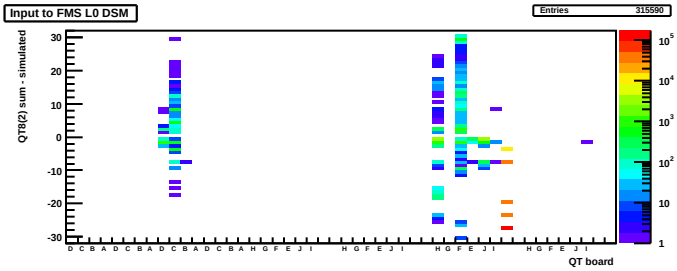

Input to FMS L0 DSM
Entries 2.020848e+07
QT8(0) sum
QT board

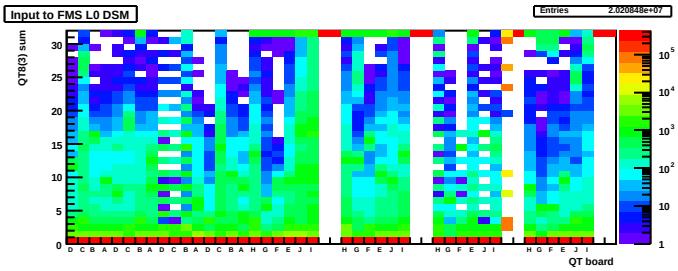

Input to FMS L0 DSM
Entries 28312
QT8(0) sum - simulated
QT board

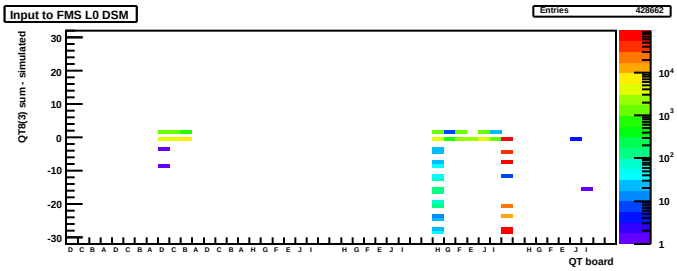

Input to FMS L0 DSM
Entries 2.020848e+07
QT8(1) sum
QT board

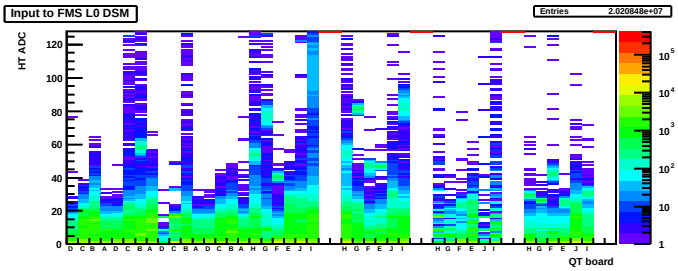

Input to FMS L0 DSM
Entries 22607
QT8(1) sum - simulated
QT board

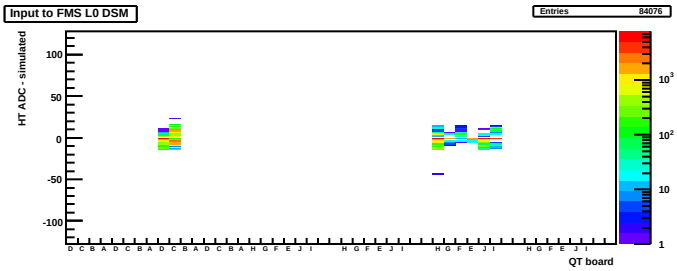

Input to FMS L0 DSM
Entries 2.020848e+07
QT8(2) sum
QT board

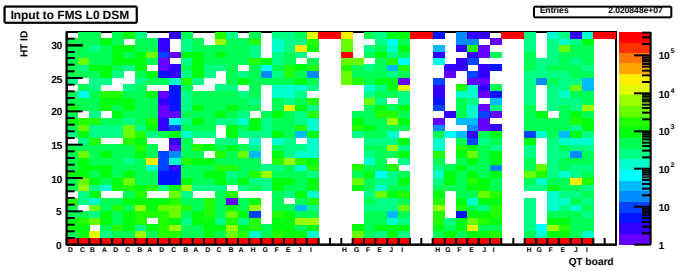

Input to FMS L0 DSM
Entries 315590
QT8(2) sum - simulated
QT board

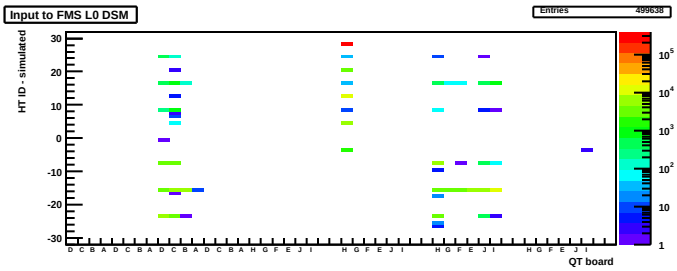

Input to FMS L0 DSM
Entries 2.020848e+07
QT8(3) sum
QT board

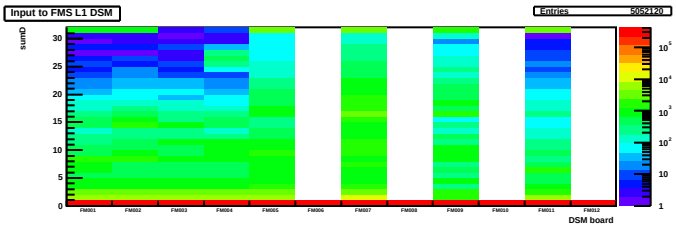

Input to FMS L0 DSM
Entries 428662
QT8(3) sum - simulated
QT board

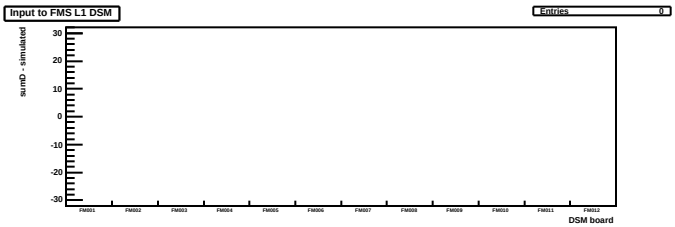

Input to FMS L0 DSM
Entries 2.020848e+07
HT ADC
QT board

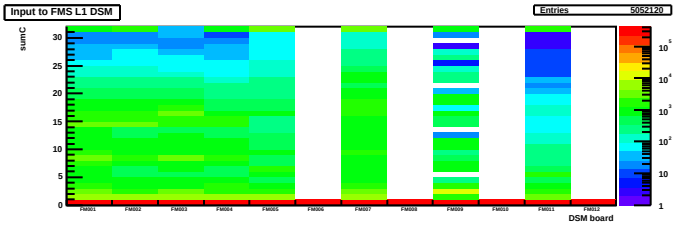

Input to FMS L0 DSM
Entries 84076
HT ADC - simulated
QT board

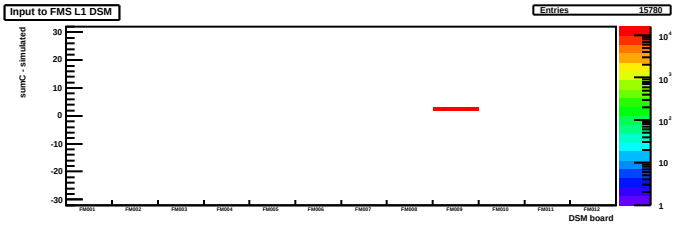

Input to FMS L0 DSM
Entries 2.020848e+07
HT ID
QT board

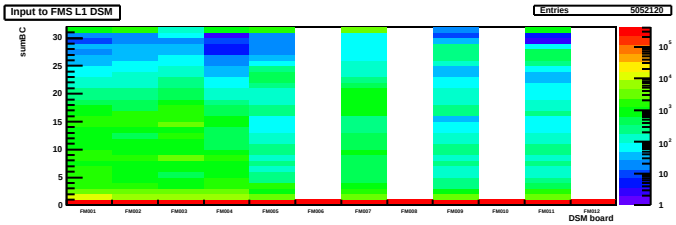

Input to FMS L0 DSM
Entries 499638
HT ID - simulated
QT board

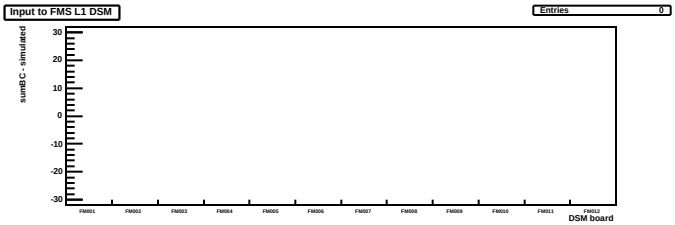

Input to FMS L1 DSM
Entries 5052120
sumD
DSM board

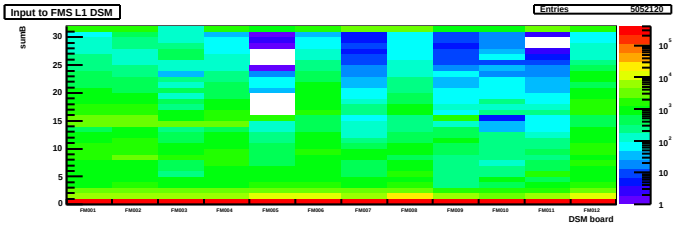

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

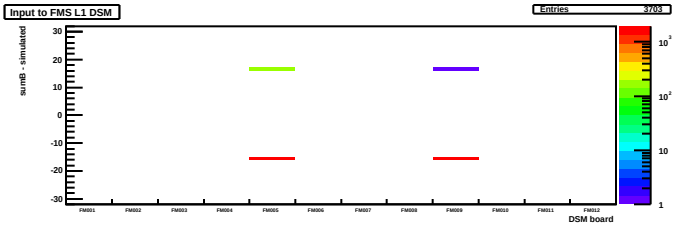

Input to FMS L1 DSM
Entries 5052120
sumC
DSM board

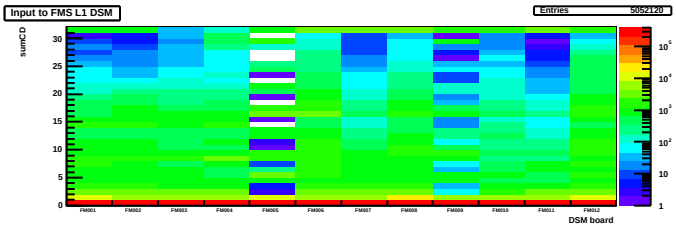

Input to FMS L1 DSM
Entries 15780
sumC - simulated
DSM board

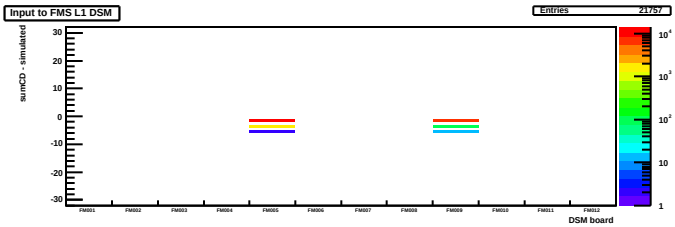

Input to FMS L1 DSM
Entries 5052120
sumBC
DSM board

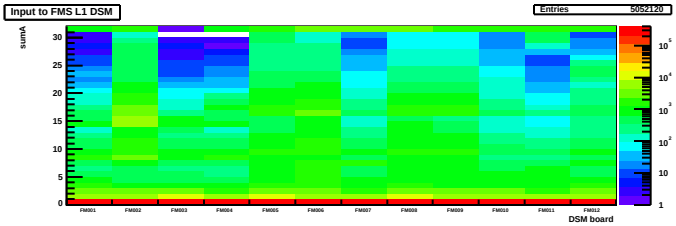

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

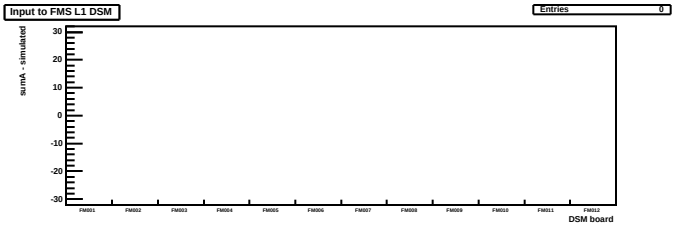

Input to FMS L1 DSM
Entries 5052120
sumB
DSM board

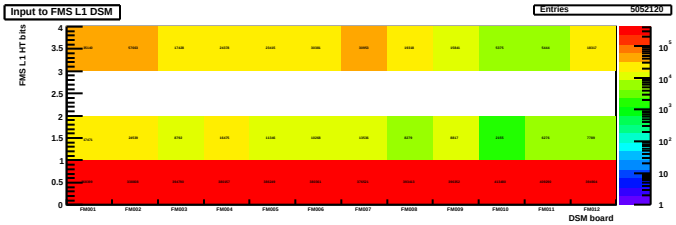

Input to FMS L1 DSM
Entries 3703
sumB - simulated
DSM board

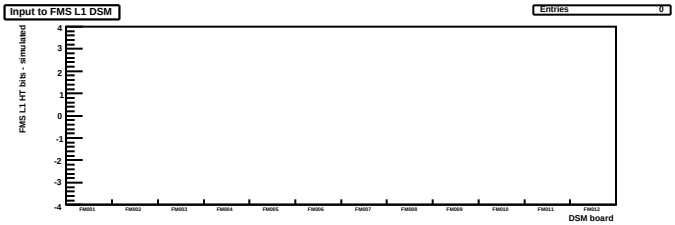

Input to FMS L1 DSM
Entries 5052120
sumCD
DSM board

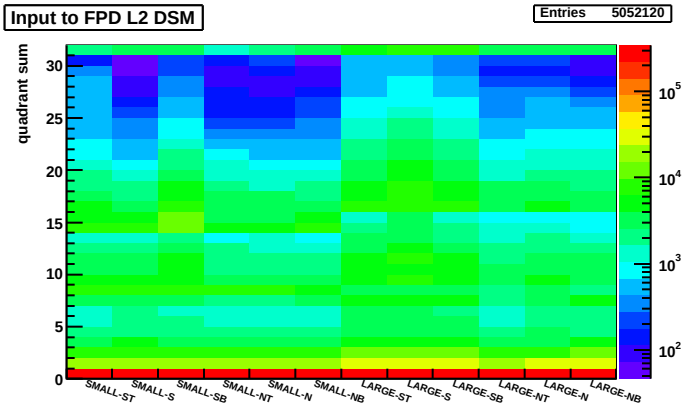

Input to FMS L1 DSM
Entries 21757
sumCD - simulated
DSM board

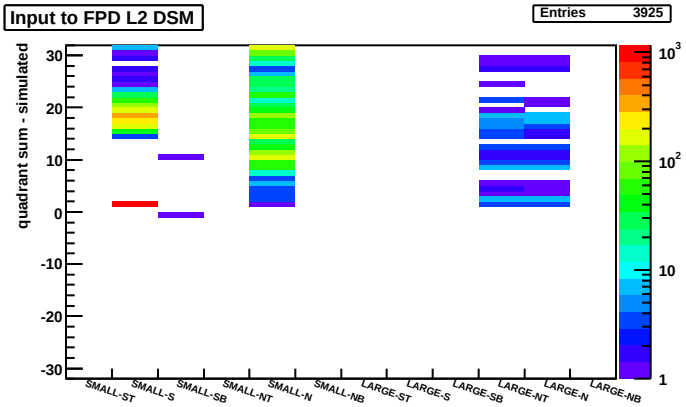

Input to FMS L1 DSM
Entries 5052120
sumA
DSM board

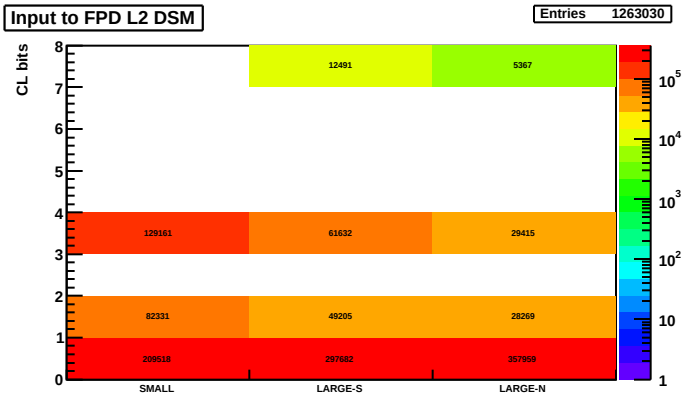

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

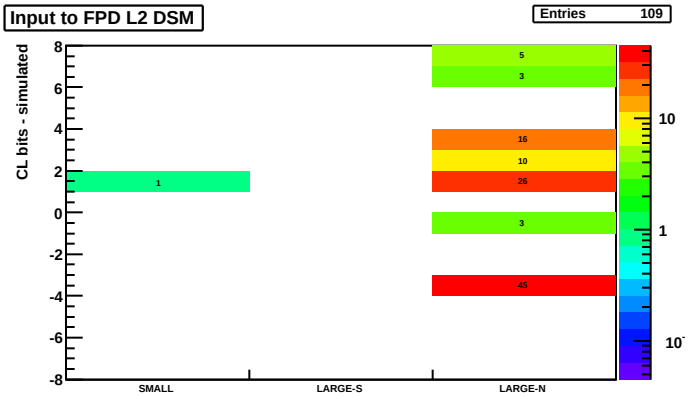

Input to FMS L1 DSM
Entries 5052120
FMS L1 HT bits
DSM board

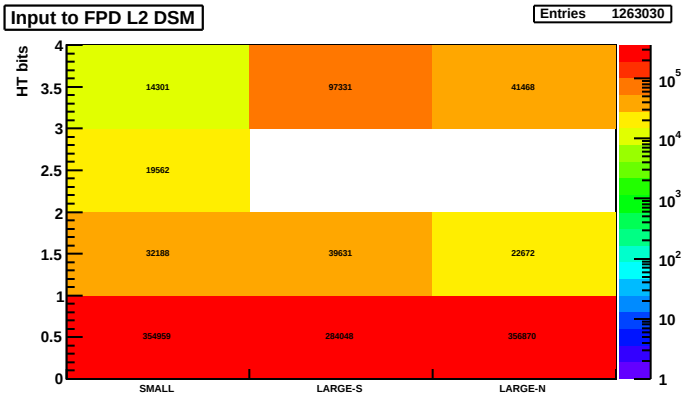

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

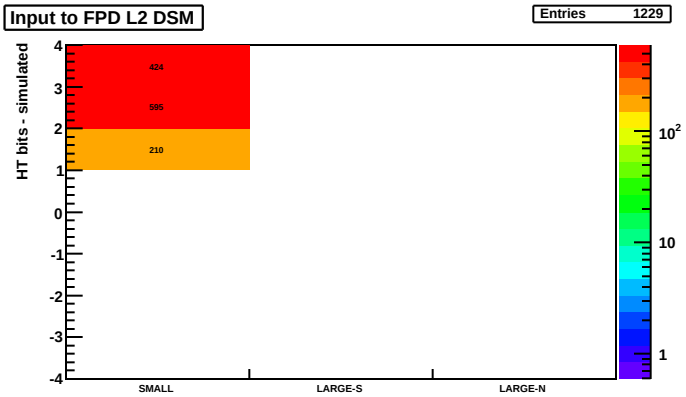

Input to FPD L2 DSM
Entries 5052120
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

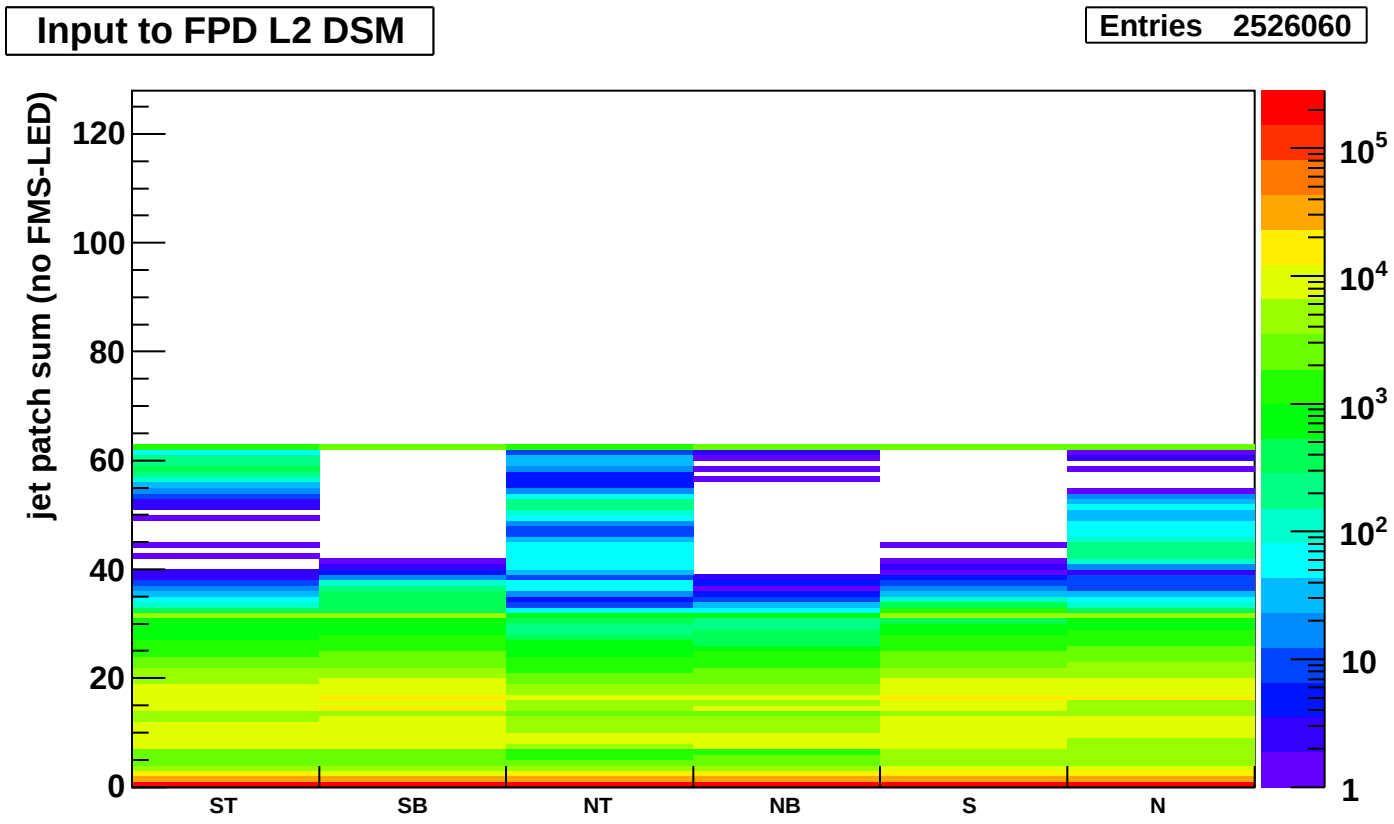

Input to FPD L2 DSM
Entries 3925
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

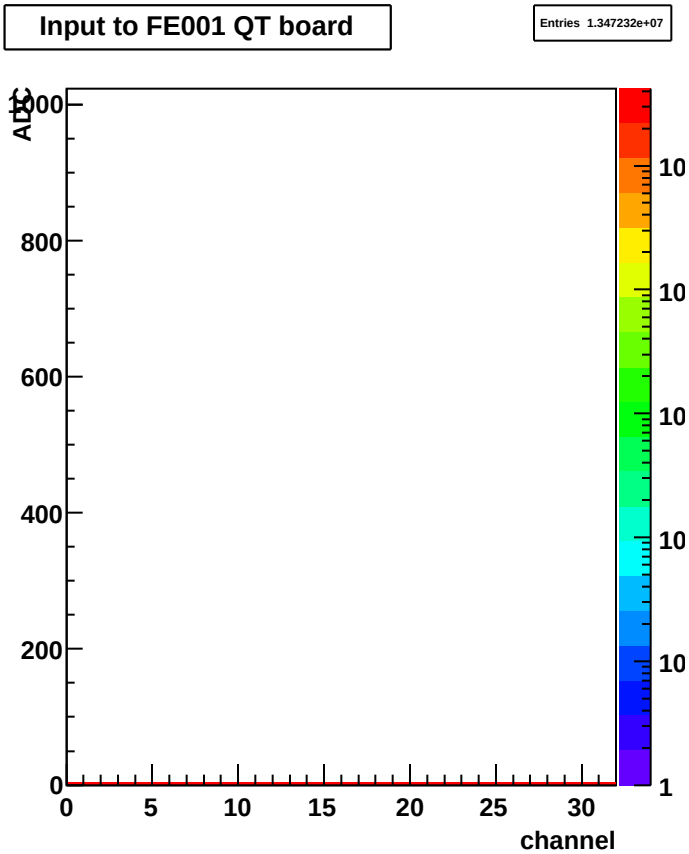

Input to FPD L2 DSM
Entries 1263030
CL bits
12491
5367
129161
61632
29415
82331
49205
28269
209518
297682
357959
SMALL
LARGE-S
LARGE-N

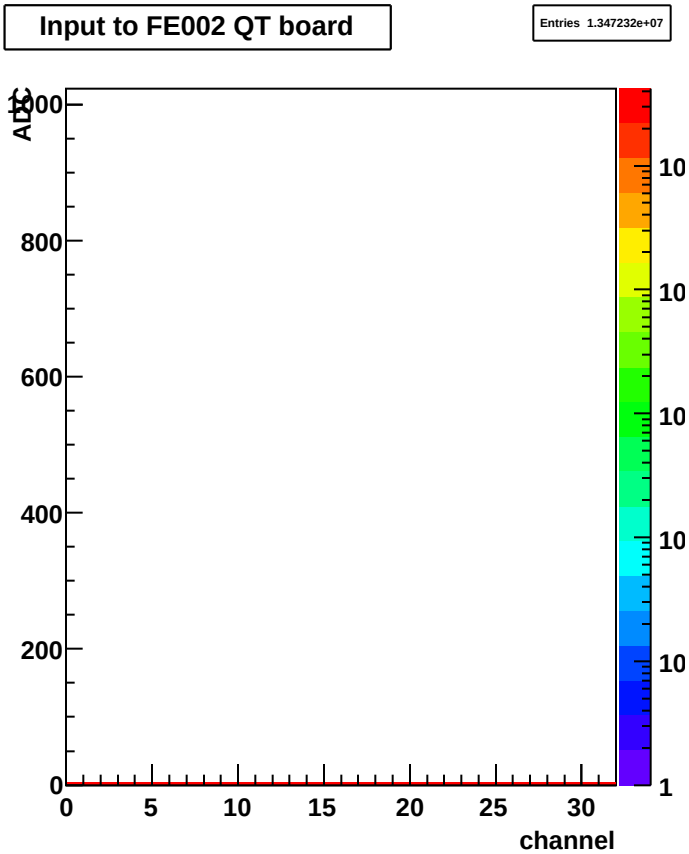

Input to FPD L2 DSM
Entries 109
CL bits - simulated
5
3
16
10
1
26
3
45
SMALL
LARGE-S
LARGE-N

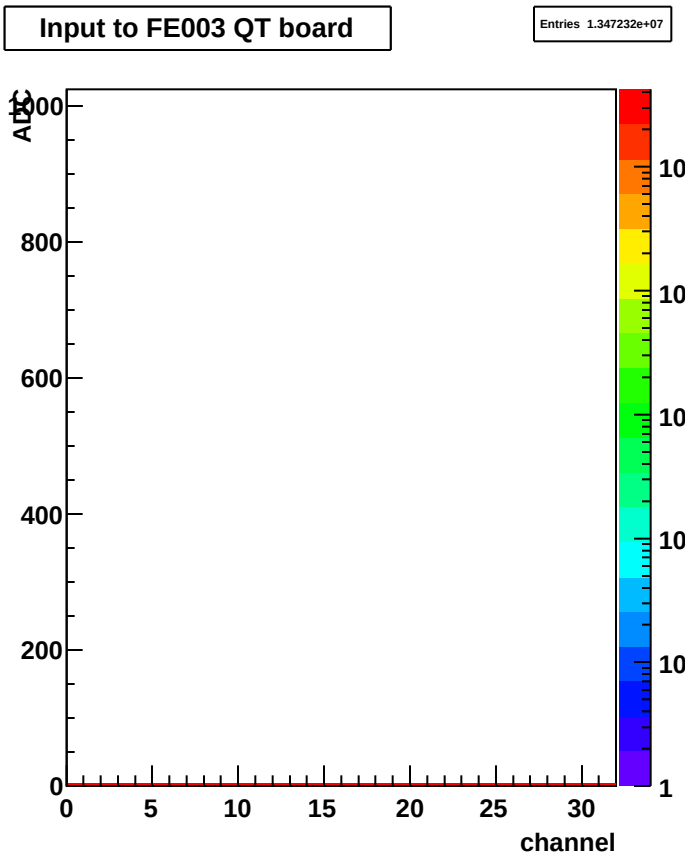

Input to FPD L2 DSM
Entries 1263030
HT bits
14301
97331
41468
19562
32188
39631
22672
354959
284048
356870
SMALL
LARGE-S
LARGE-N

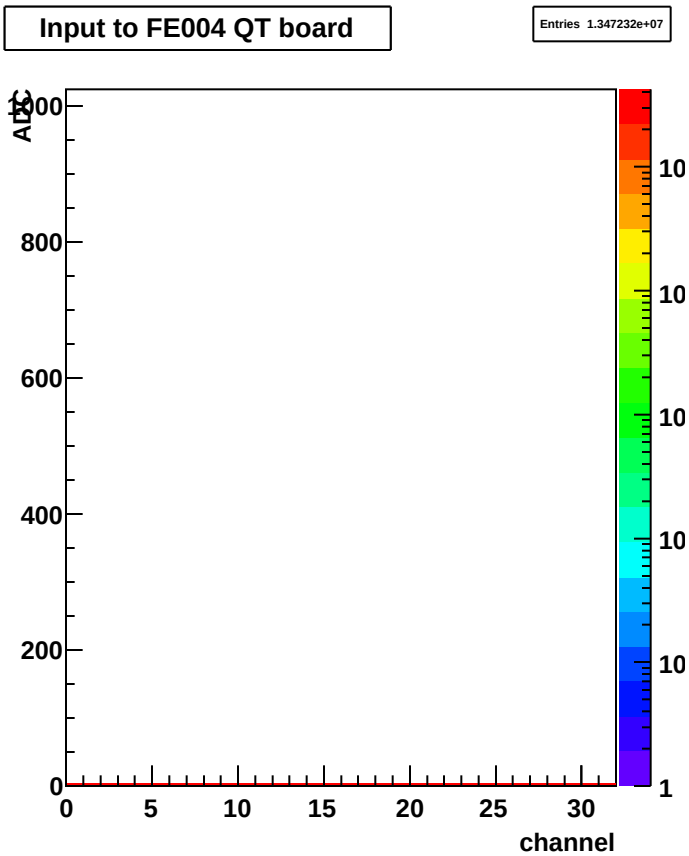

Input to FPD L2 DSM
Entries 1229
HT bits - simulated
424
595
210
SMALL
LARGE-S
LARGE-N

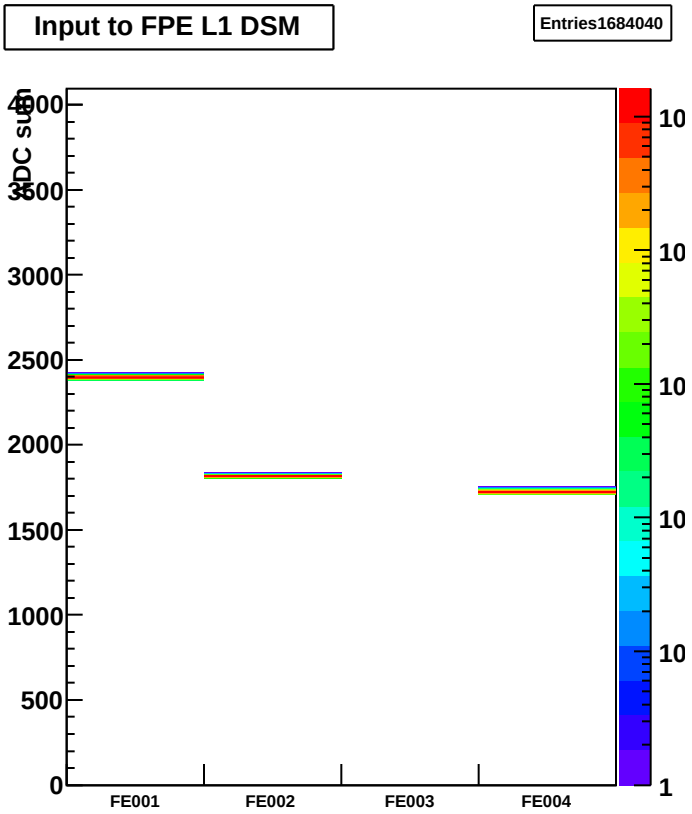

Input to FPD L2 DSM
Entries 2526060
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

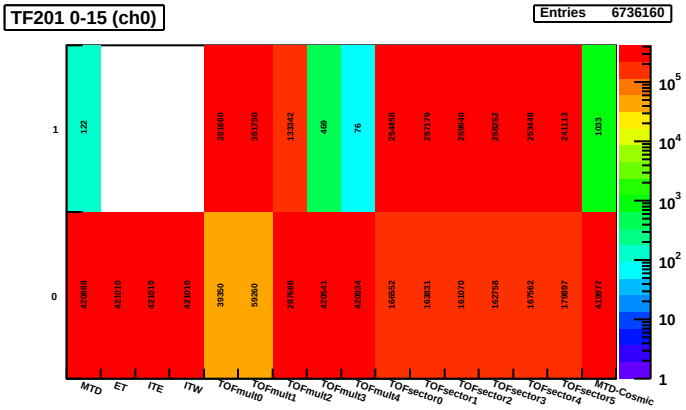

Input to FE001 QT board
Entries 1.347232e+07
ADC
channel

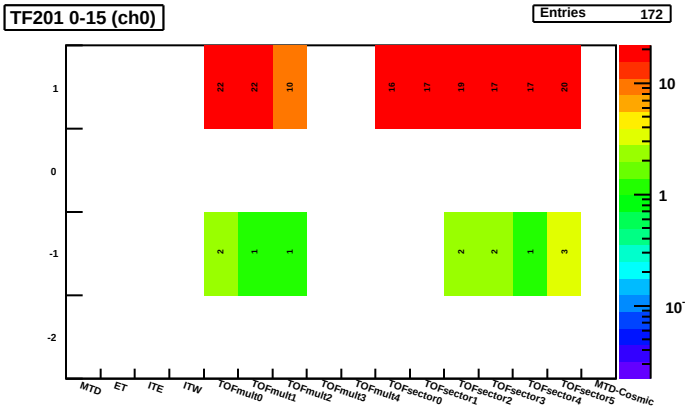

Input to FE002 QT board
Entries 1.347232e+07
ADC
channel

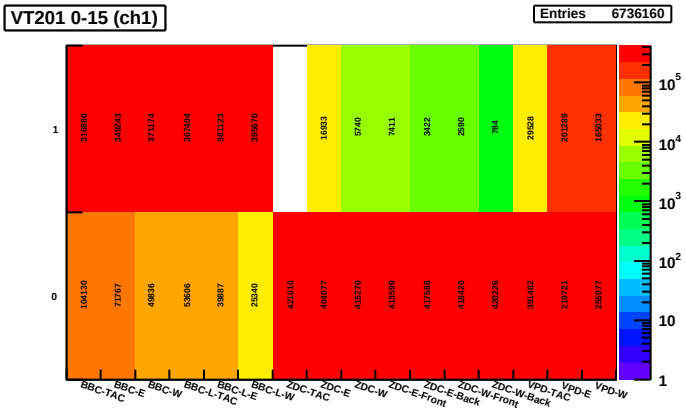

Input to FE003 QT board
Entries 1.347232e+07
ADC
channel

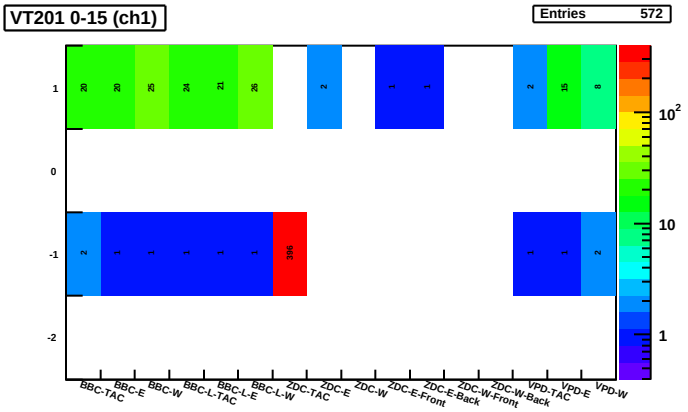

Input to FE004 QT board
Entries 1.347232e+07
ADC
channel

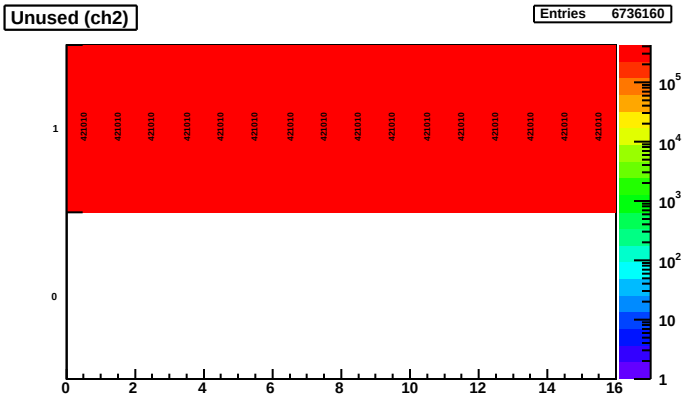

Input to FPE L1 DSM
Entries1684040
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

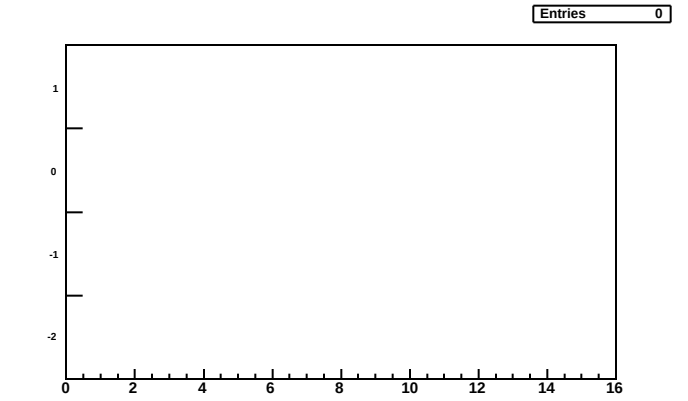

TF201 0-15 (ch0)
Entries 6736160
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 172
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 6736160
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 572
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


Unused (ch2)
Entries 6736160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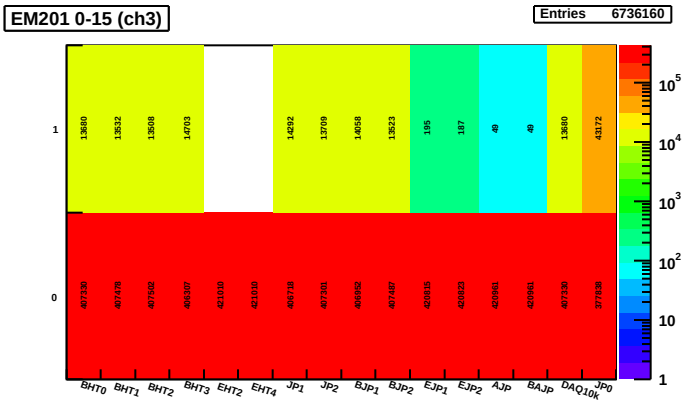
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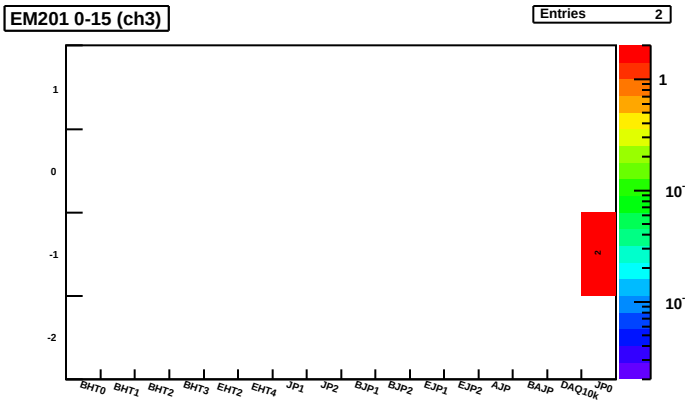
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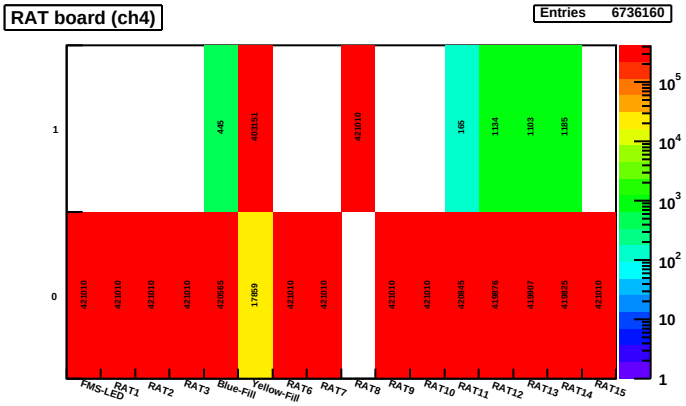
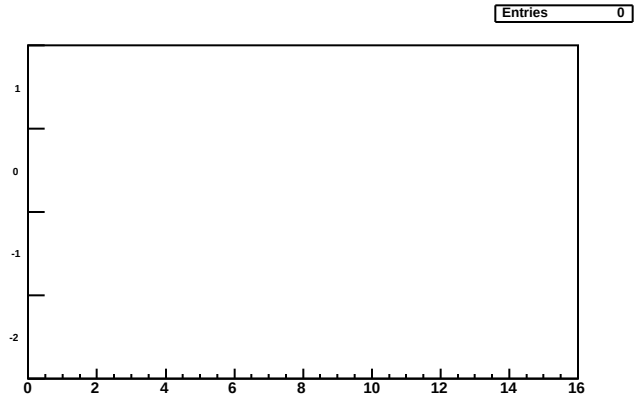
RAT board (ch4)





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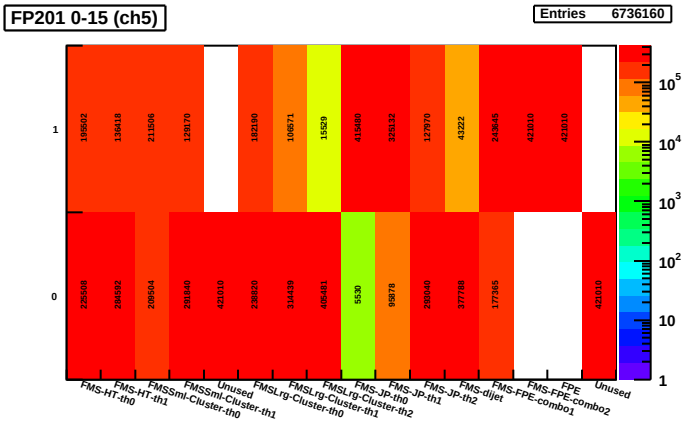

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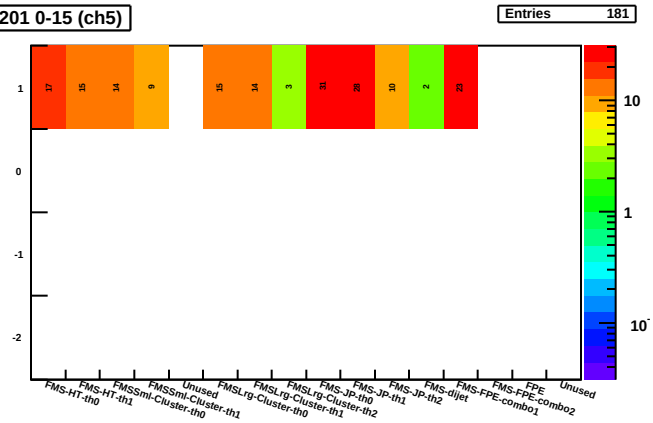

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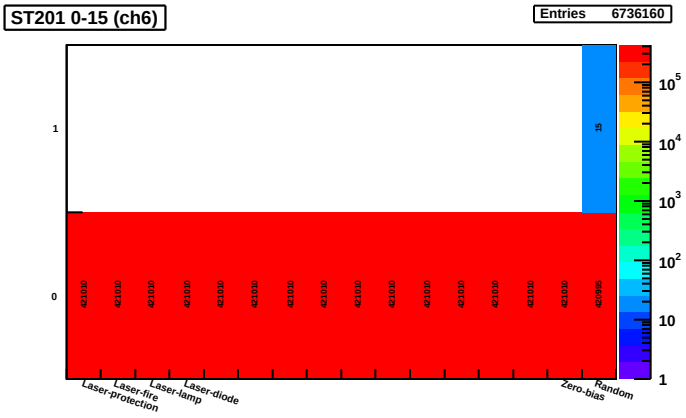

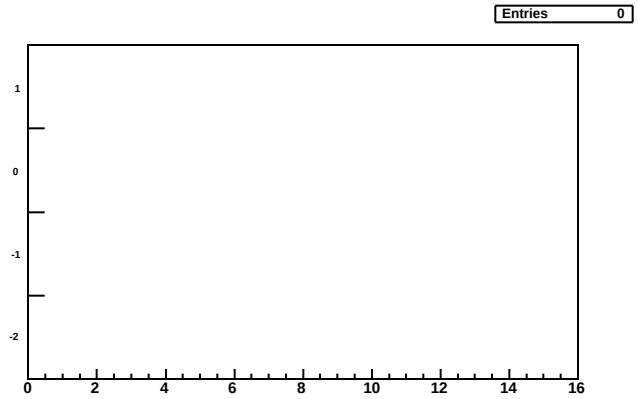
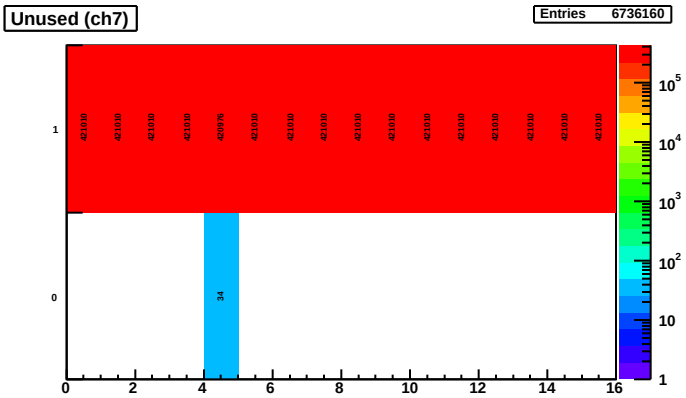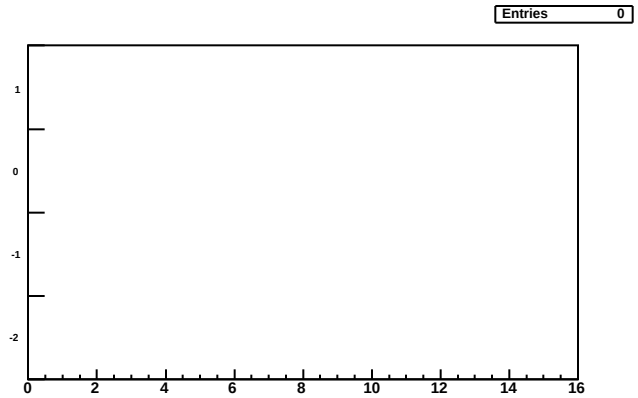
Unused (ch7)