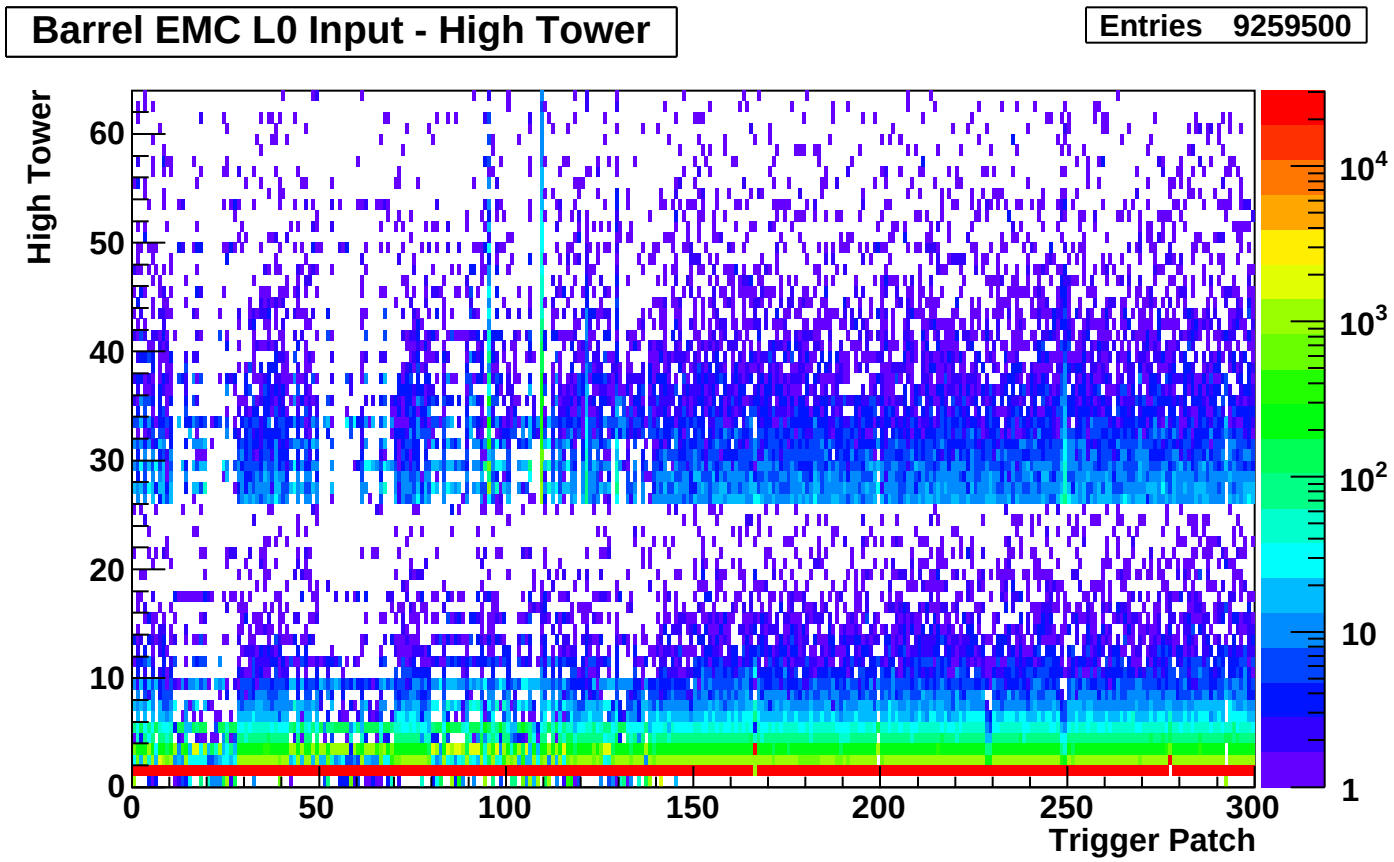
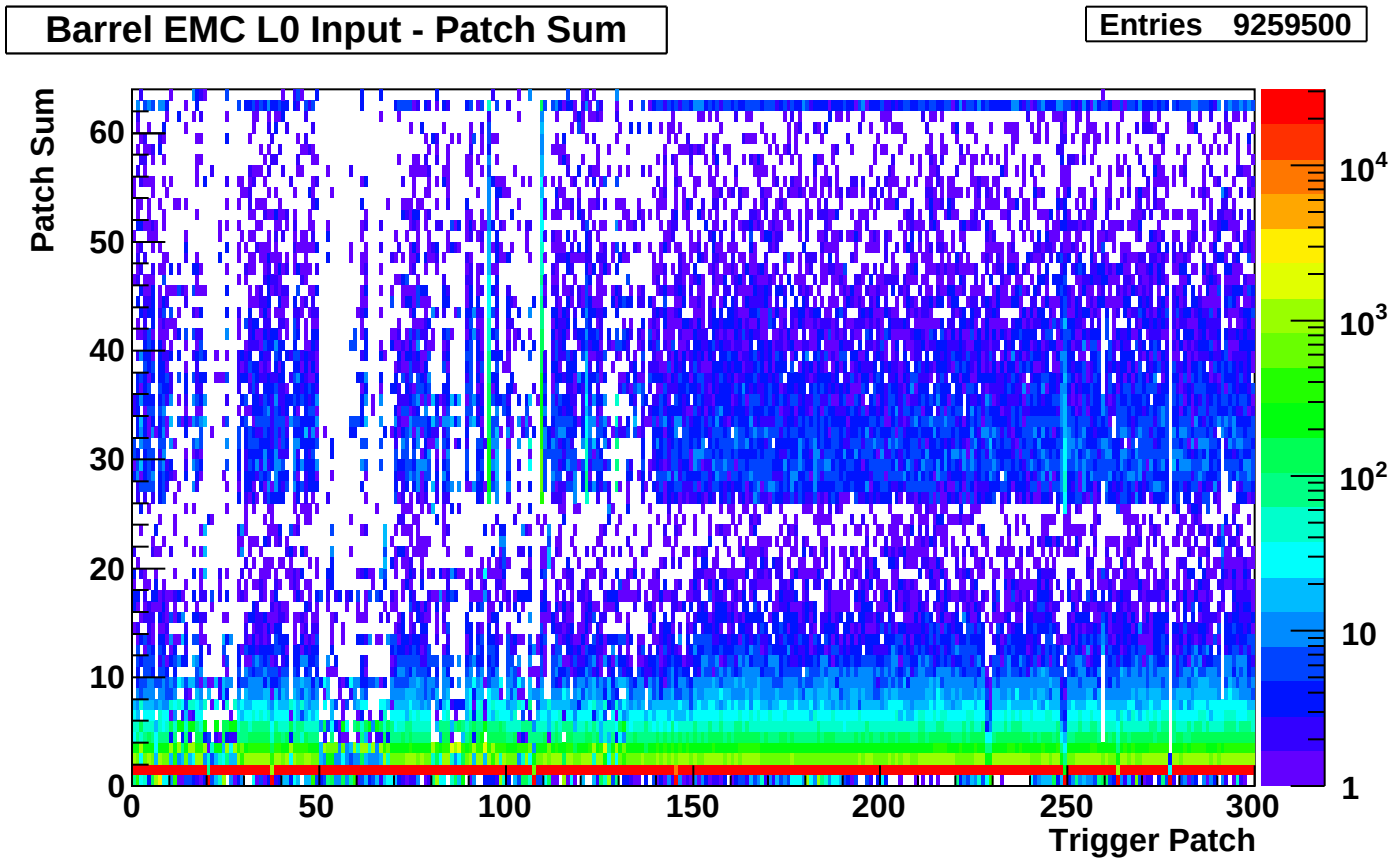
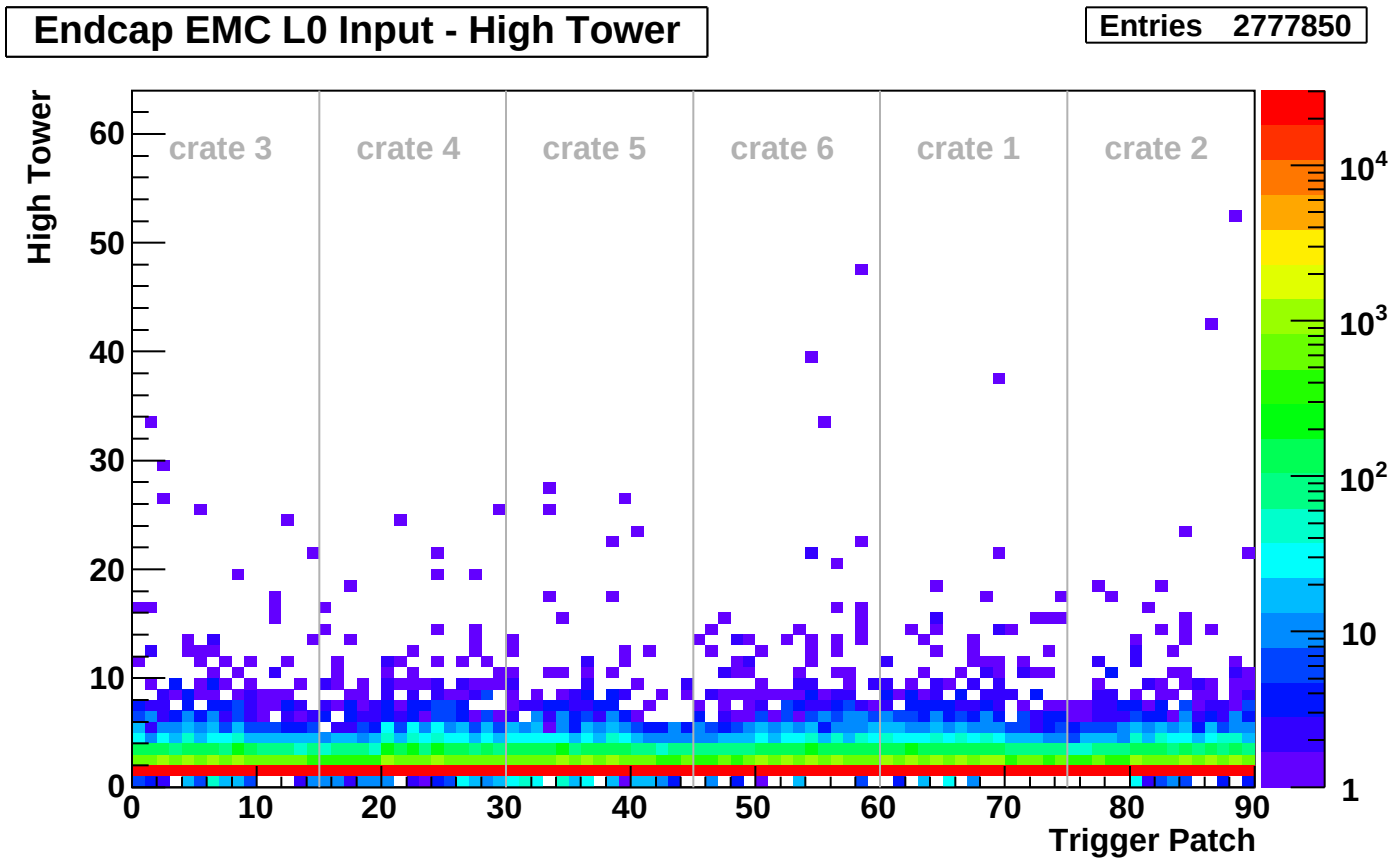
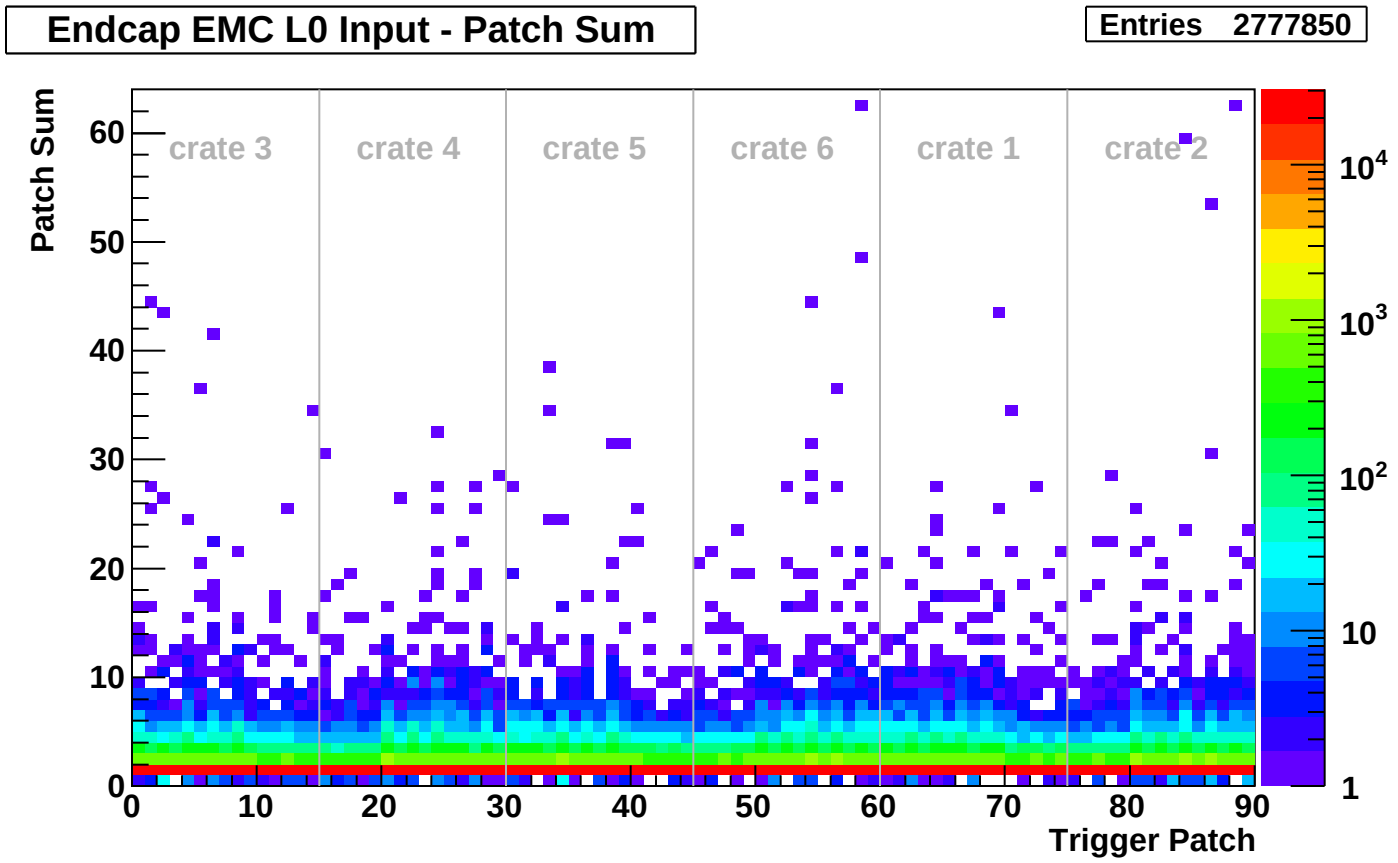
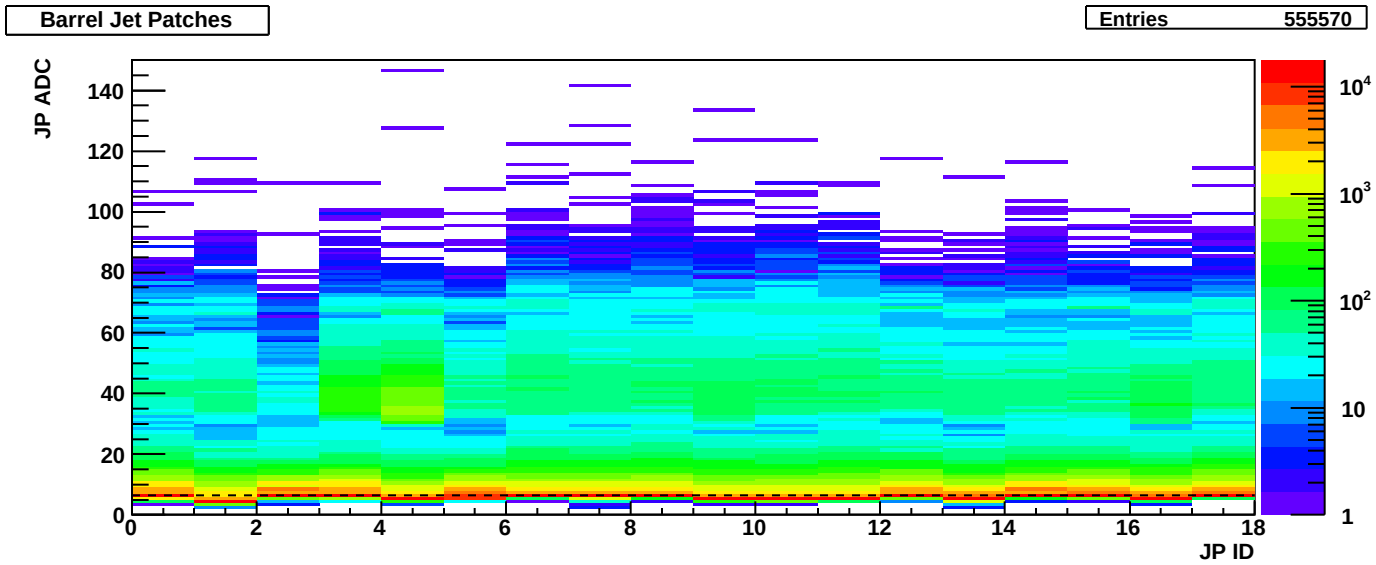
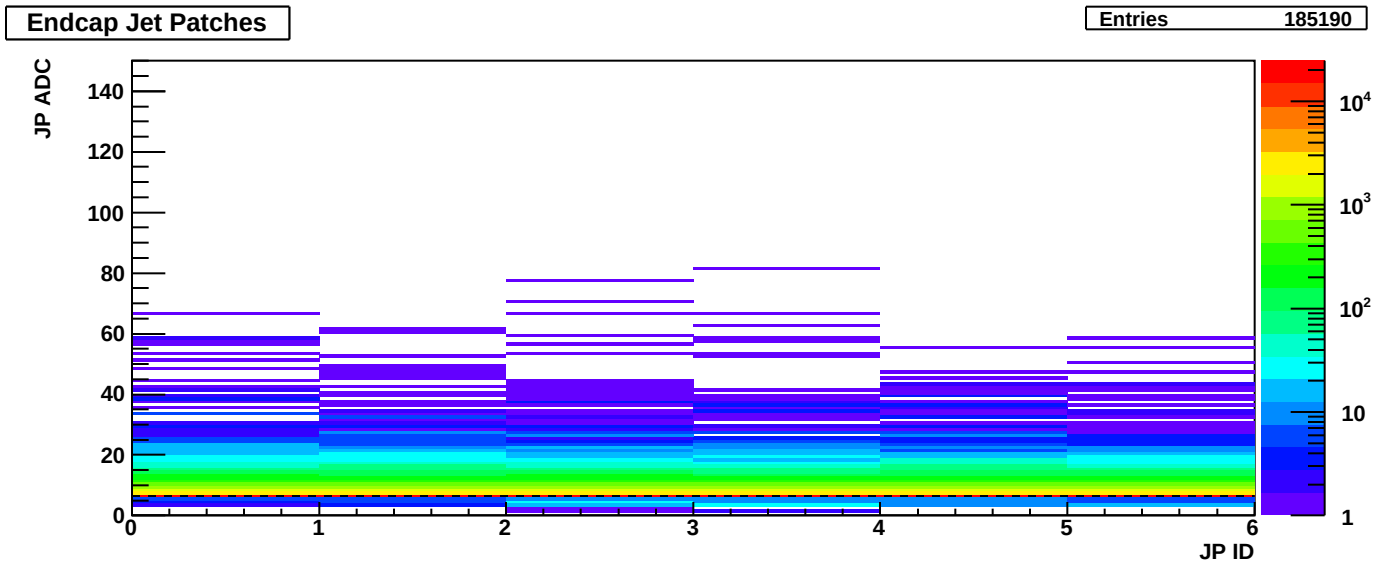

Barrel EMC L0 Input - High Tower
Entries 9259500
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

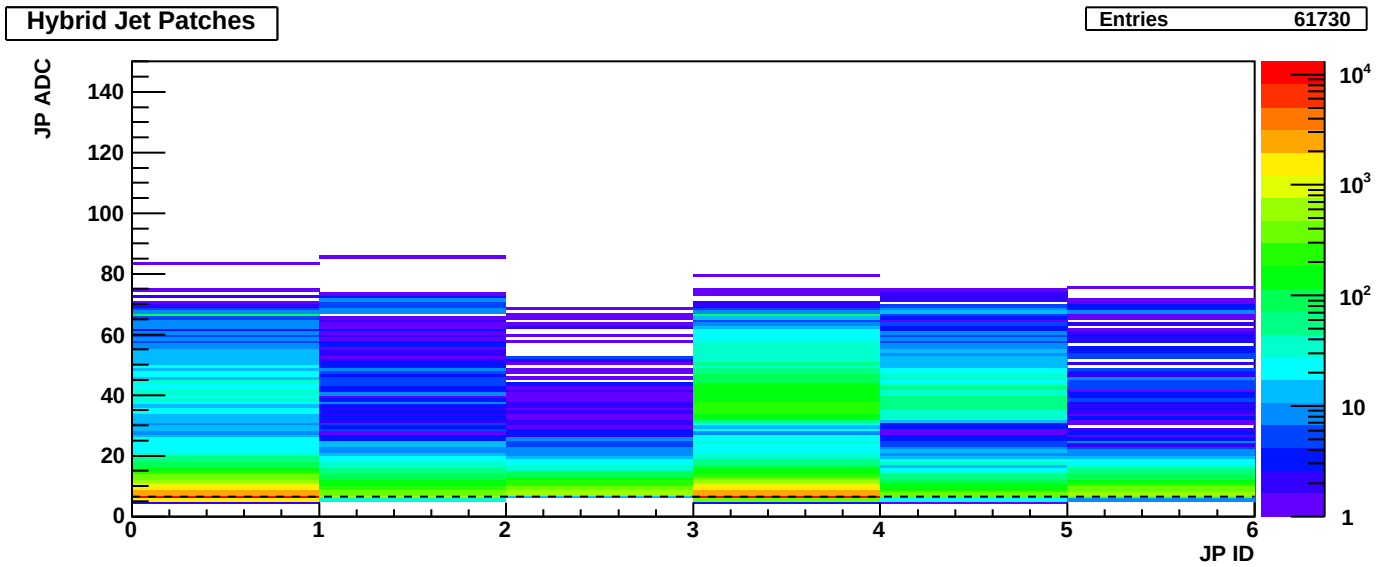

Barrel EMC L0 Input - Patch Sum
Entries 9259500
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

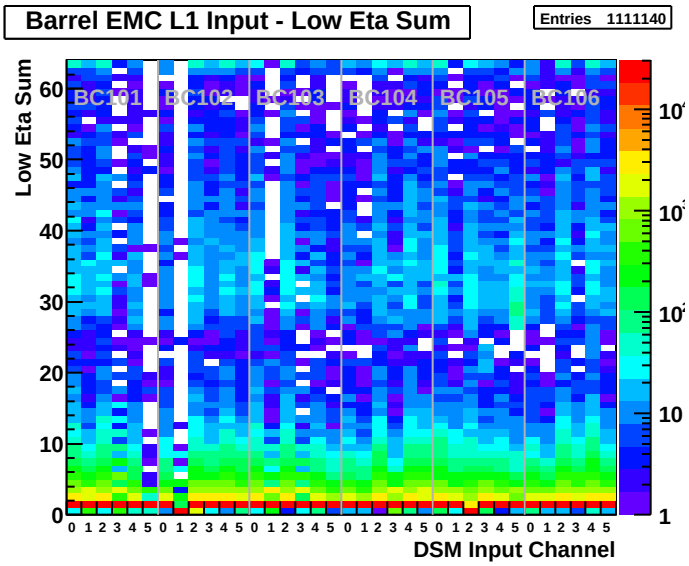

Endcap EMC L0 Input - High Tower
Entries 2777850
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

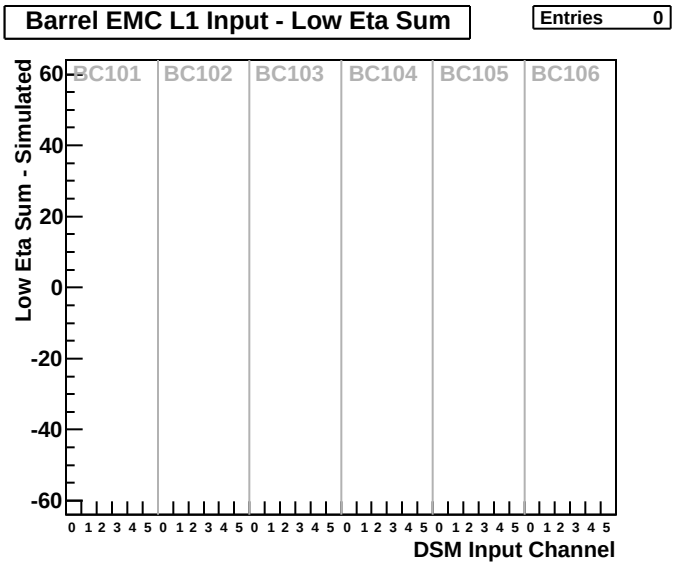

Endcap EMC L0 Input - Patch Sum
Entries 2777850
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

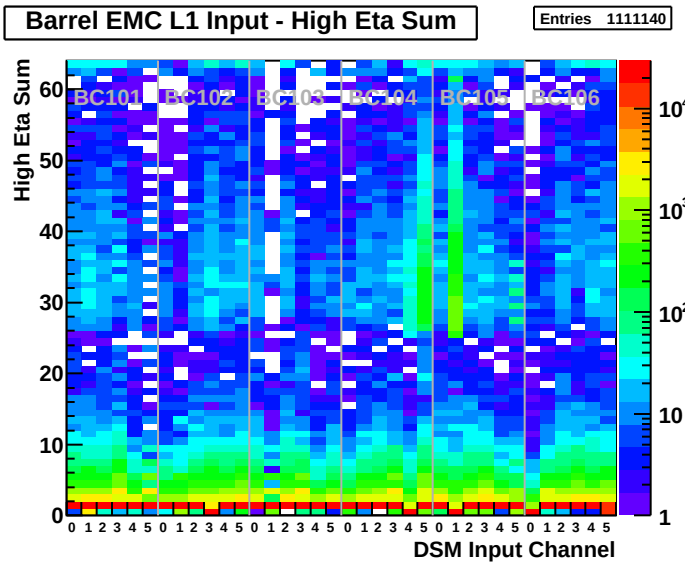

Barrel Jet Patches
Entries 555570
JP ADC
JP ID

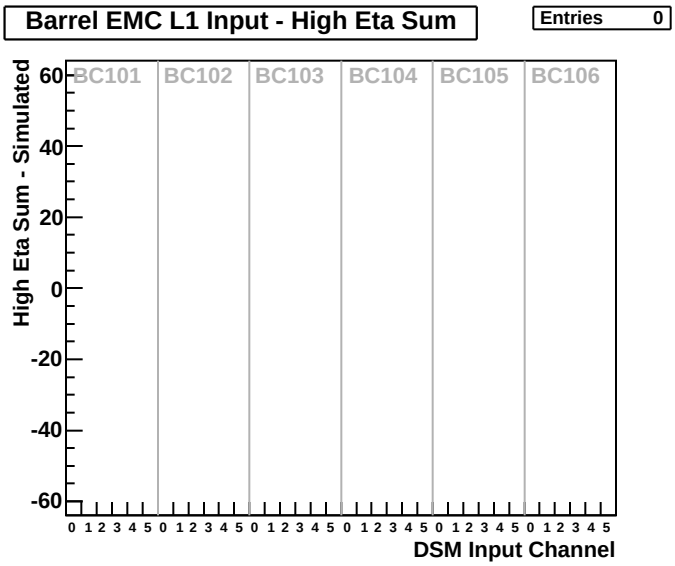

Endcap Jet Patches
Entries 185190
JP ADC
JP ID

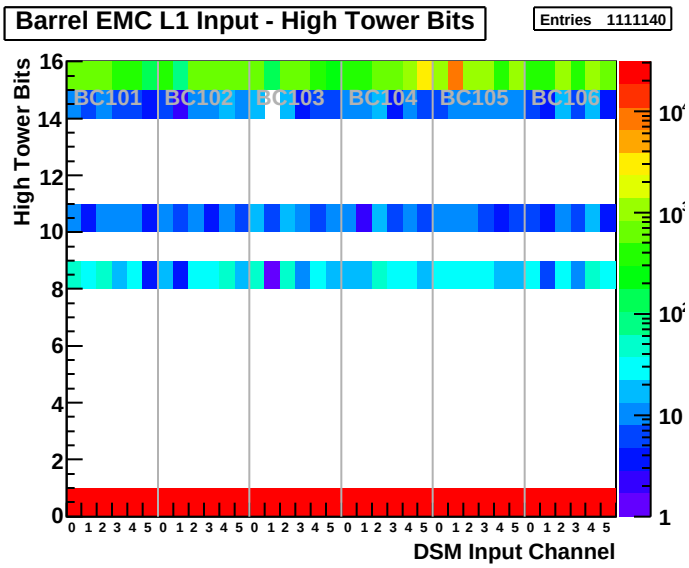

Hybrid Jet Patches
Entries 61730
JP ADC
JP ID

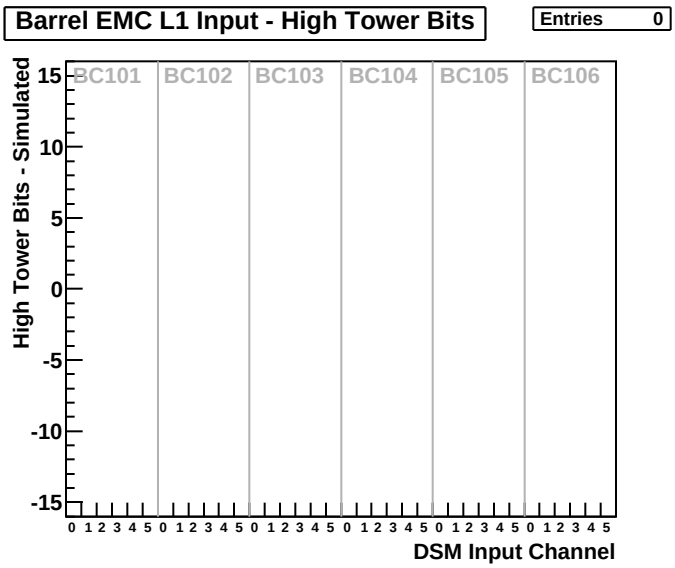

Barrel EMC L1 Input - Low Eta Sum
Entries 1111140
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

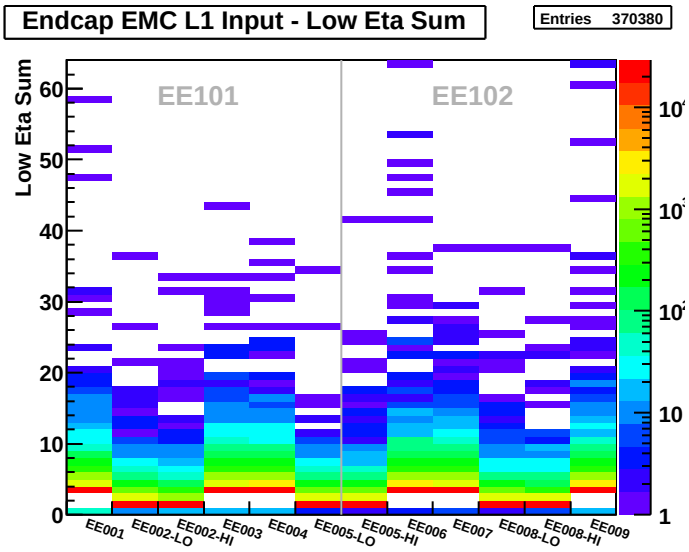

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

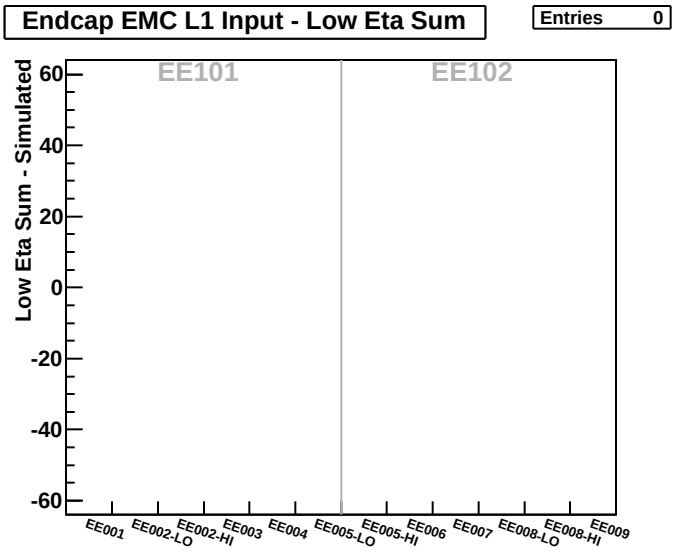

Barrel EMC L1 Input - High Eta Sum
Entries 1111140
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

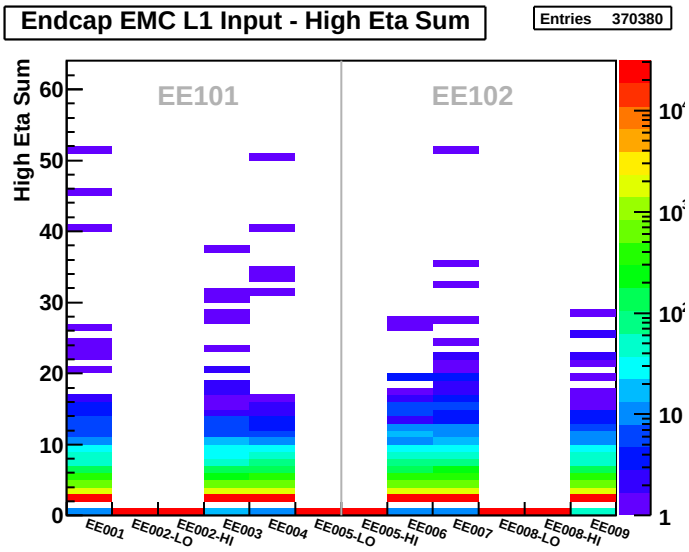

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

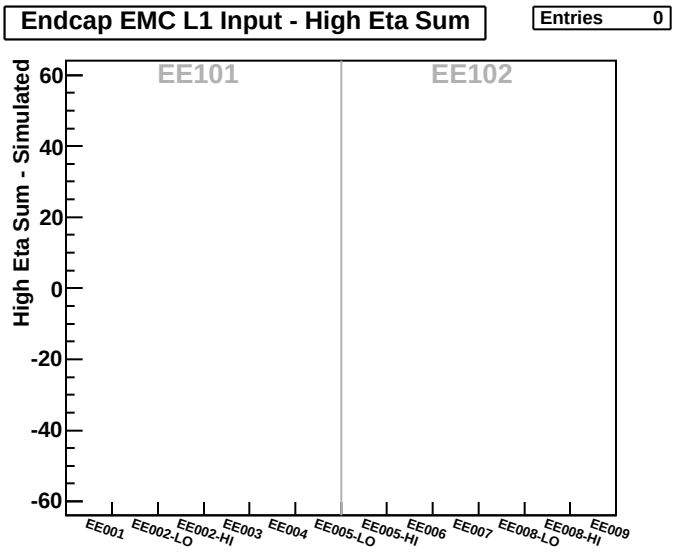

Barrel EMC L1 Input - High Tower Bits
Entries 1111140
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

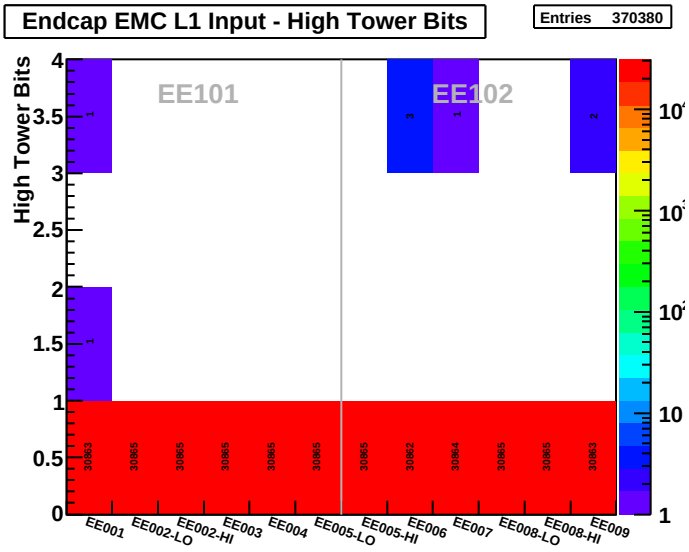

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

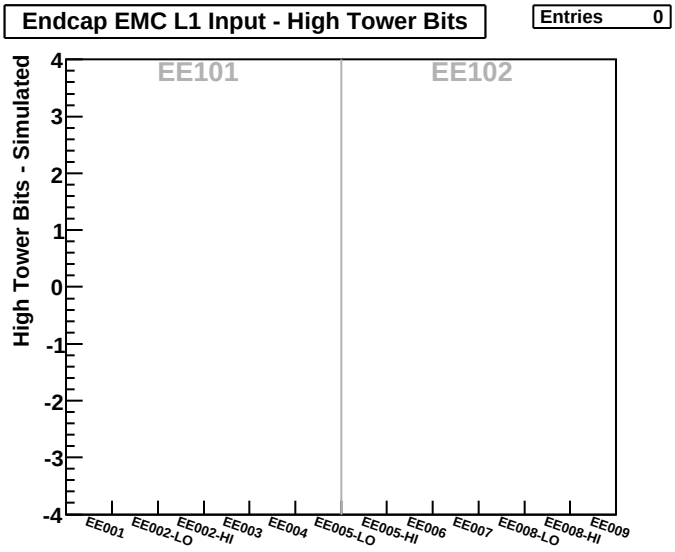

Endcap EMC L1 Input - Low Eta Sum
Entries 370380
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

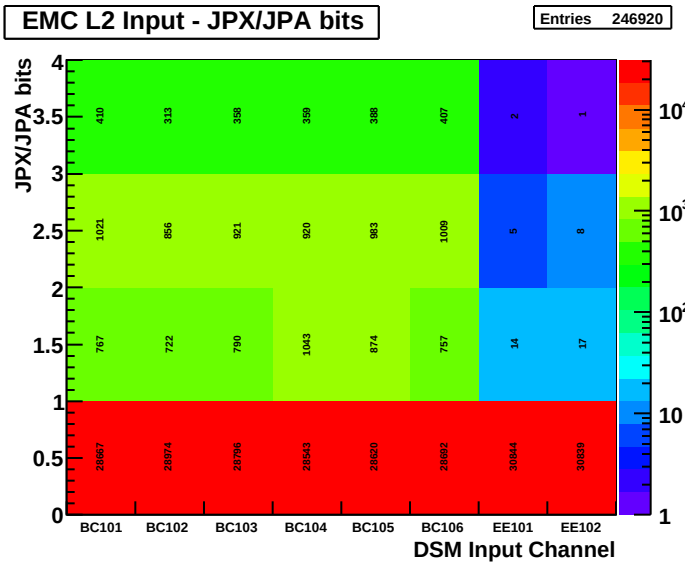

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

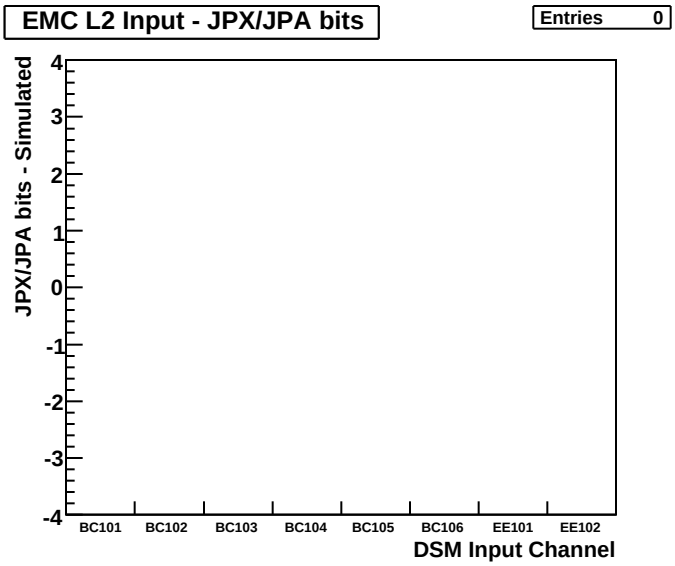

Endcap EMC L1 Input - High Eta Sum
Entries 370380
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

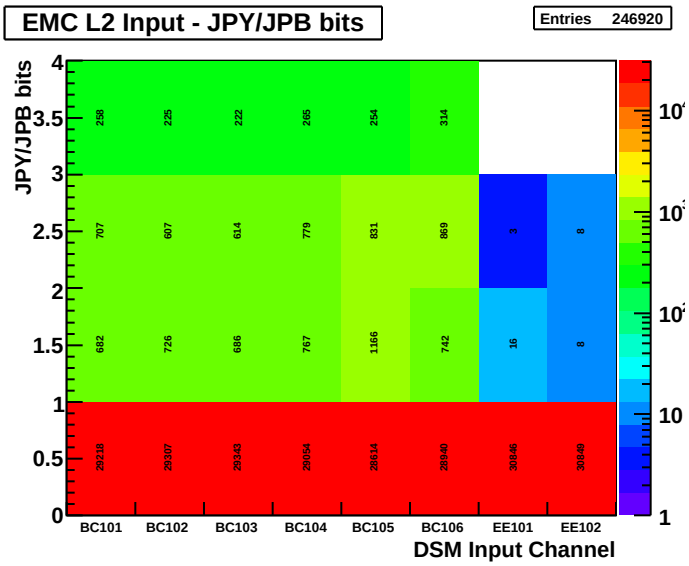

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

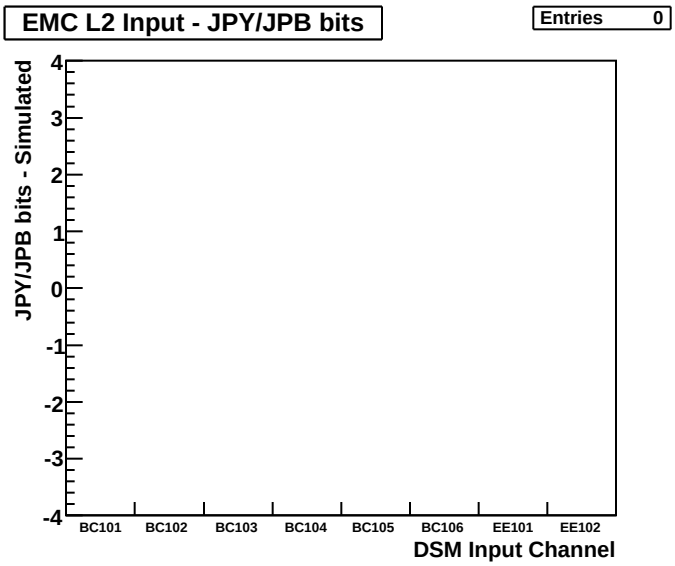

Endcap EMC L1 Input - High Tower Bits
Entries 370380
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

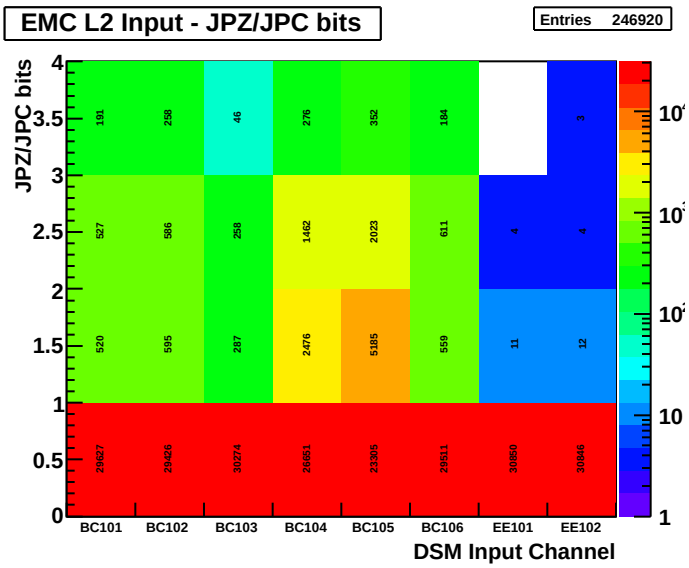

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

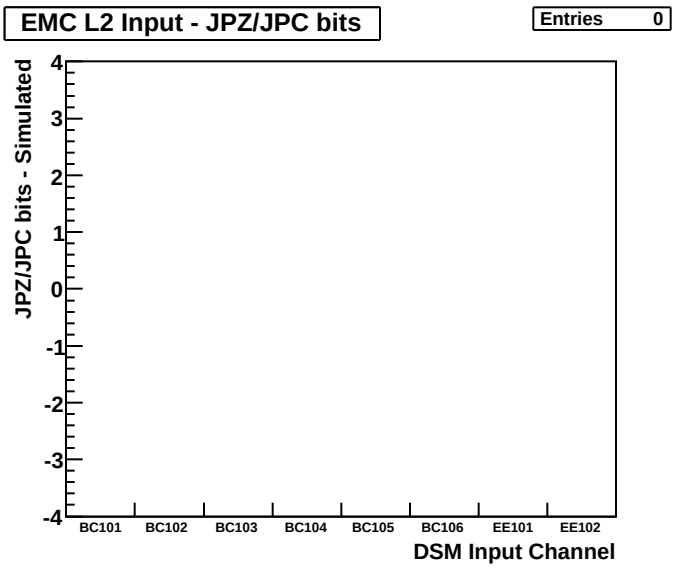

EMC L2 Input - JPX/JPA bits
Entries 246920
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
410 313 358 359 388 407 2 1
1021 856 921 920 983 1009 5 8
767 722 790 1043 874 757 14 17
28667 28974 28796 28543 28620 28692 30844 30839

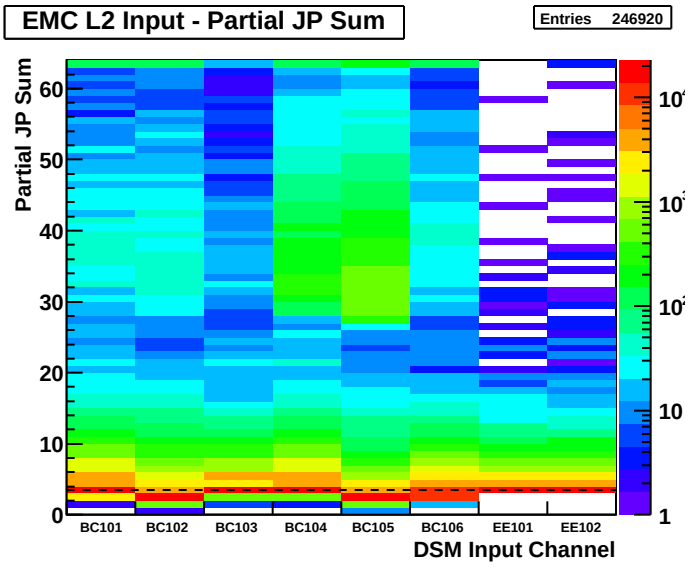

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

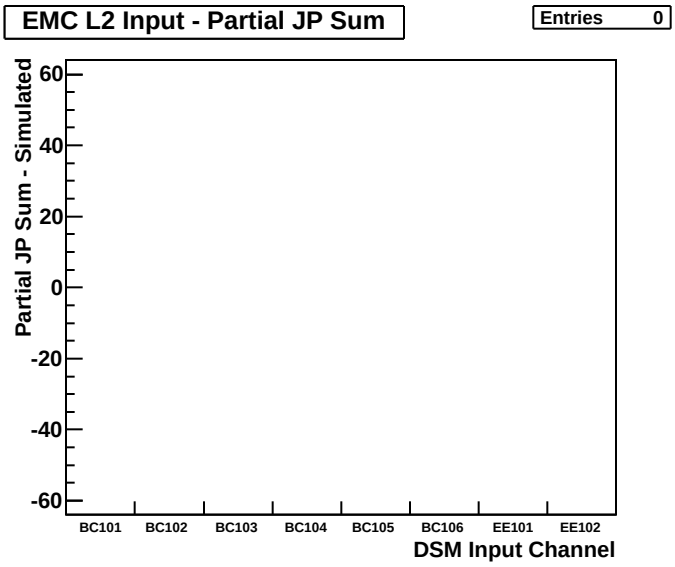

EMC L2 Input - JPY/JPB bits
Entries 246920
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
258 225 222 265 254 314
707 607 614 779 831 869 3 8
682 726 686 767 1166 742 16 8
29218 29307 29343 29054 28614 28940 30846 30849

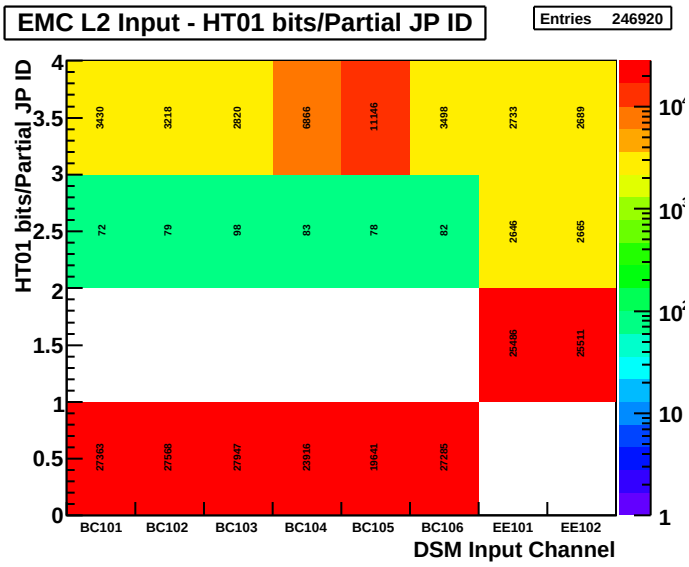

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

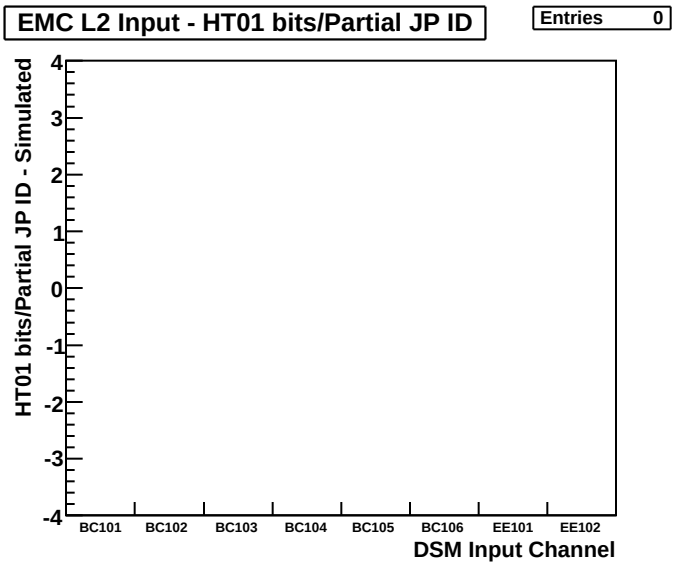

EMC L2 Input - JPZ/JPC bits
Entries 246920
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
191 258 46 276 352 184 3
527 586 258 1462 2023 611 4 4
520 595 287 2476 5185 559 11 12
29627 29426 30274 26651 23305 29511 30850 30846

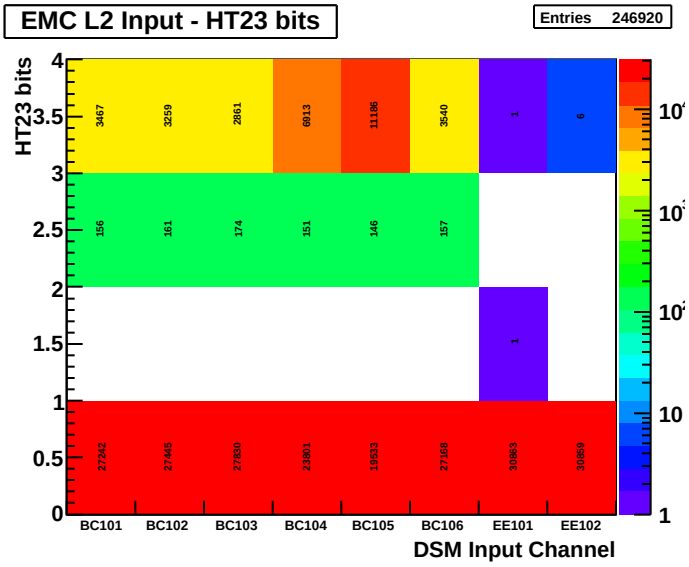

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

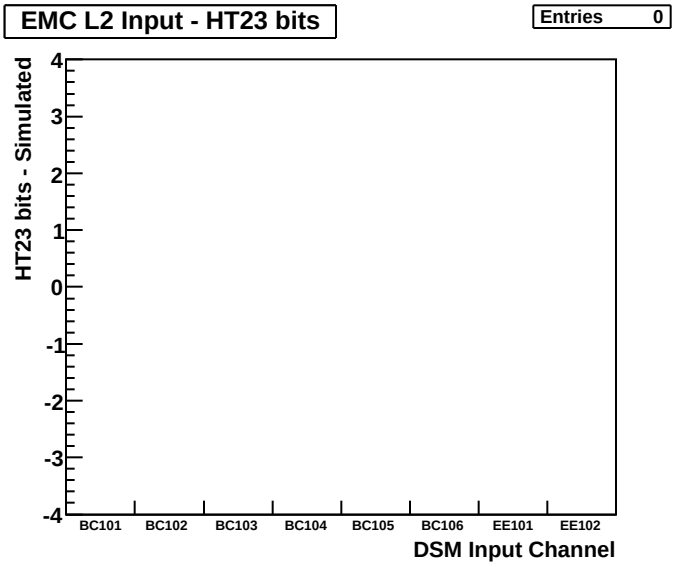

EMC L2 Input - Partial JP Sum
Entries 246920
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

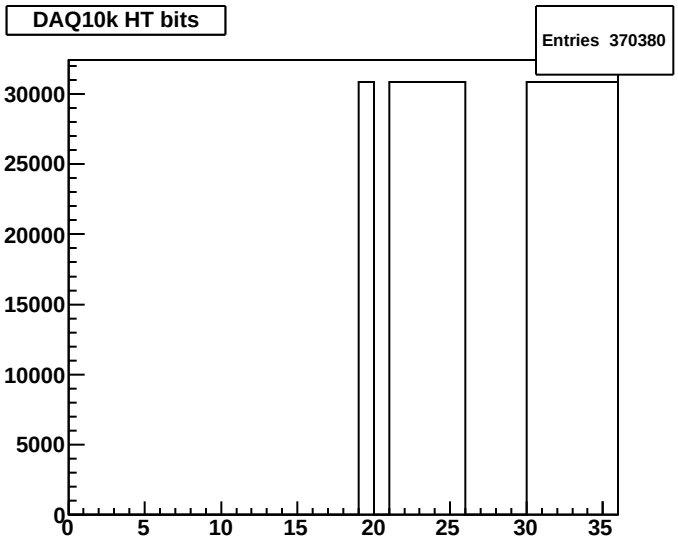

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

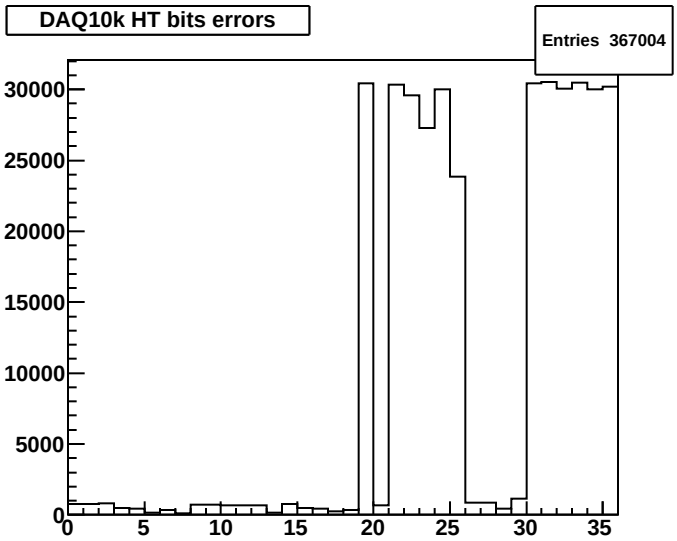

EMC L2 Input - HT01 bits/Partial JP ID
Entries 246920
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

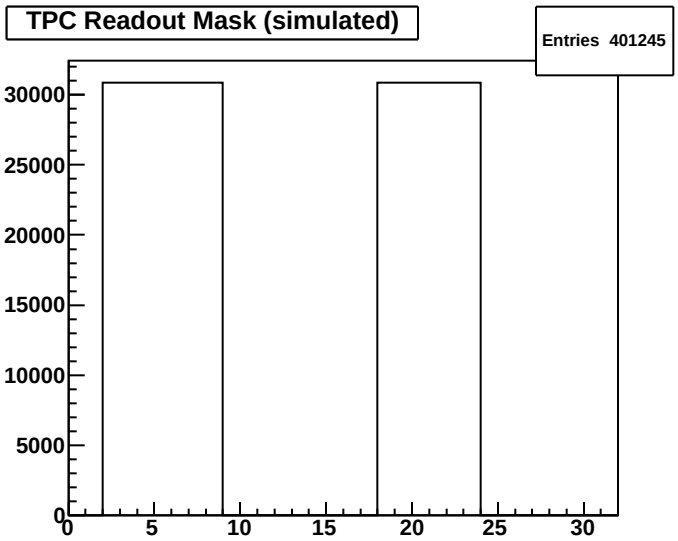

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

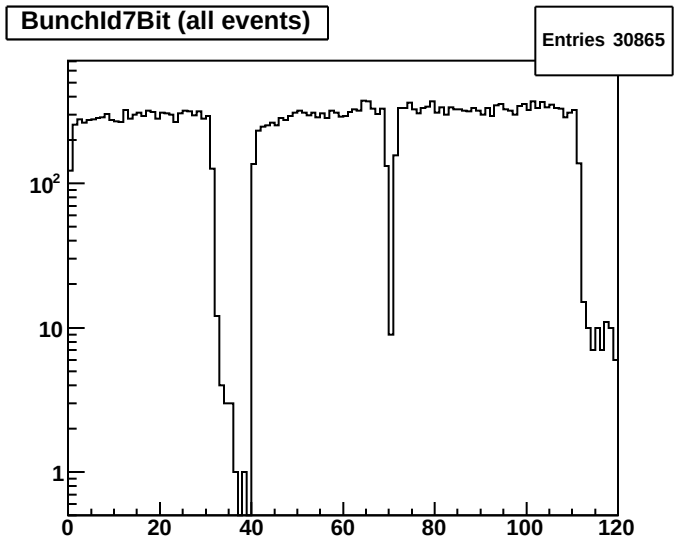

EMC L2 Input - HT23 bits
Entries 246920
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

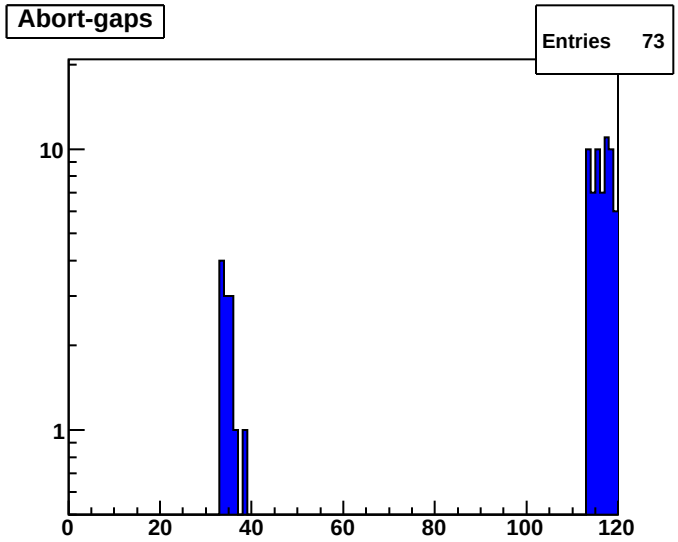

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

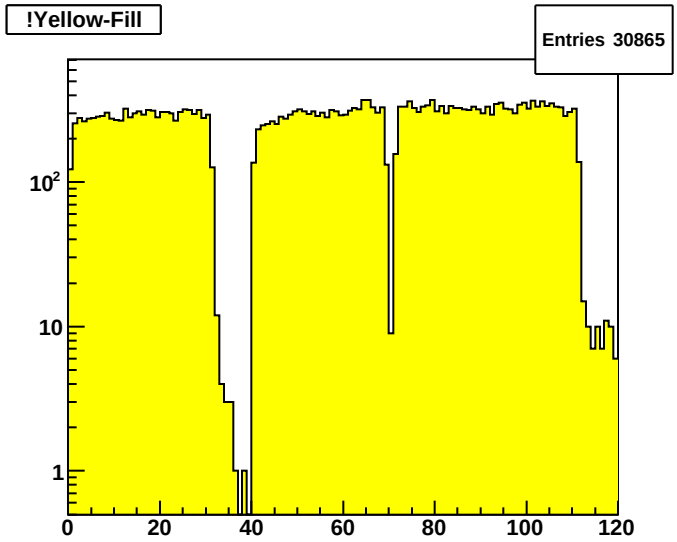

DAQ10k HT bits
Entries 370380
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

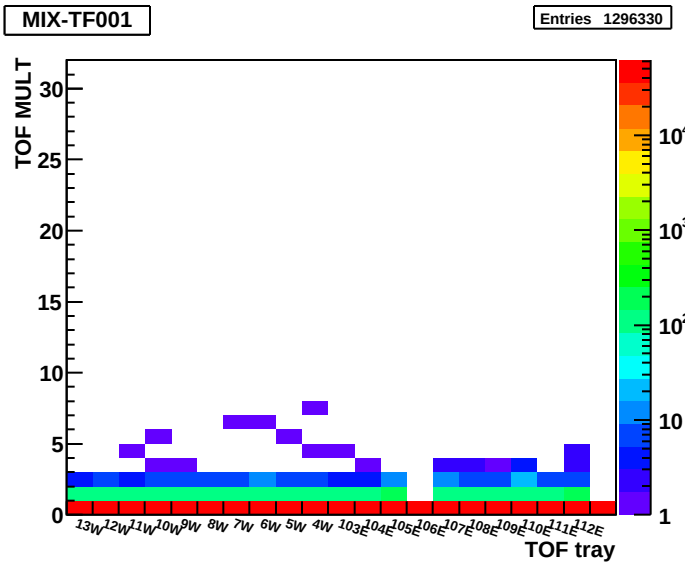

DAQ10k HT bits errors
Entries 367004
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

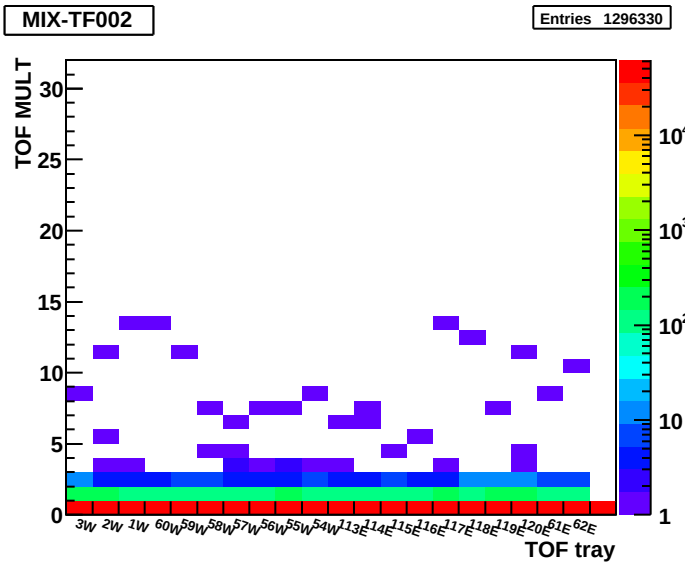

TPC Readout Mask (simulated)
Entries 401245
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30

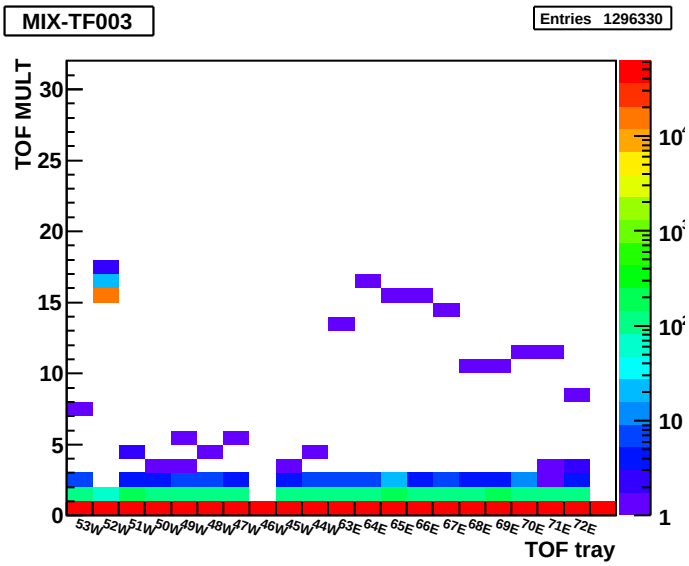

BunchId7Bit (all events)
Entries 30865
10^2
10
1
0 20 40 60 80 100 120

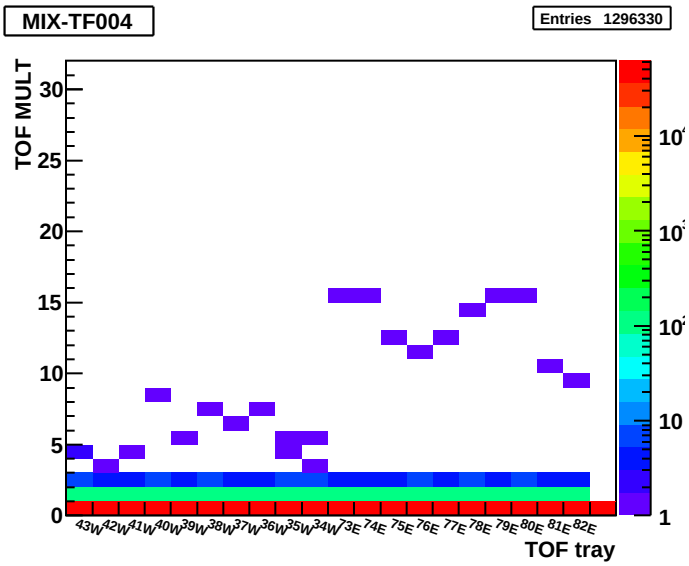

Abort-gaps
Entries 73
10
1
0 20 40 60 80 100 120

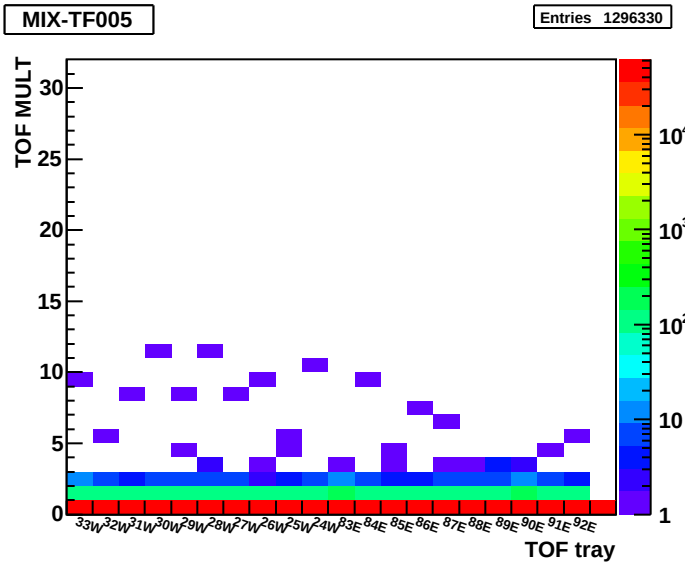

!Yellow-Fill
Entries 30865
10^2
10
1
0 20 40 60 80 100 120

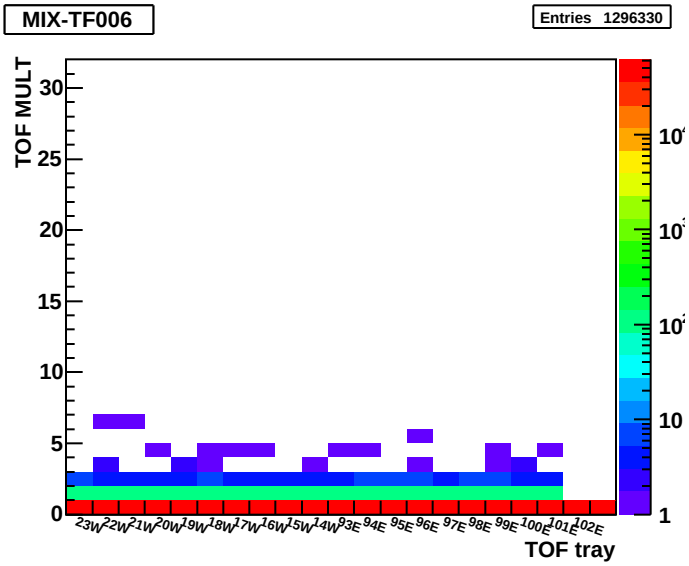

MIX-TF001
Entries 1296330
TOF MULT
TOF tray

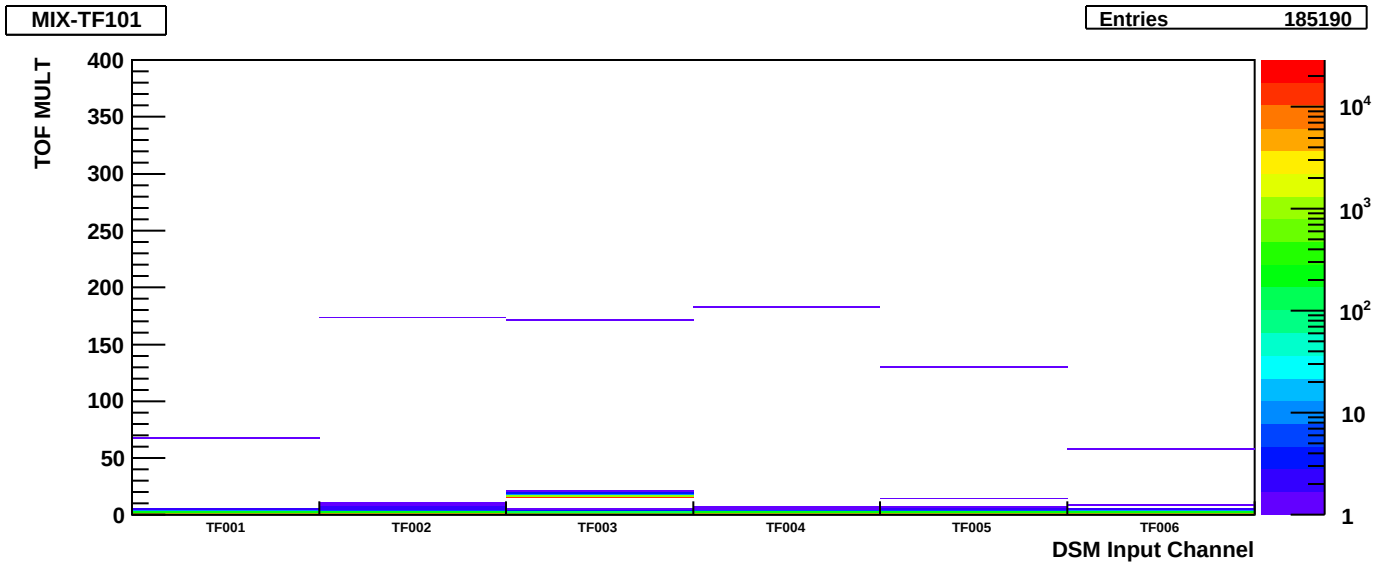

MIX-TF002
Entries 1296330
TOF MULT
TOF tray

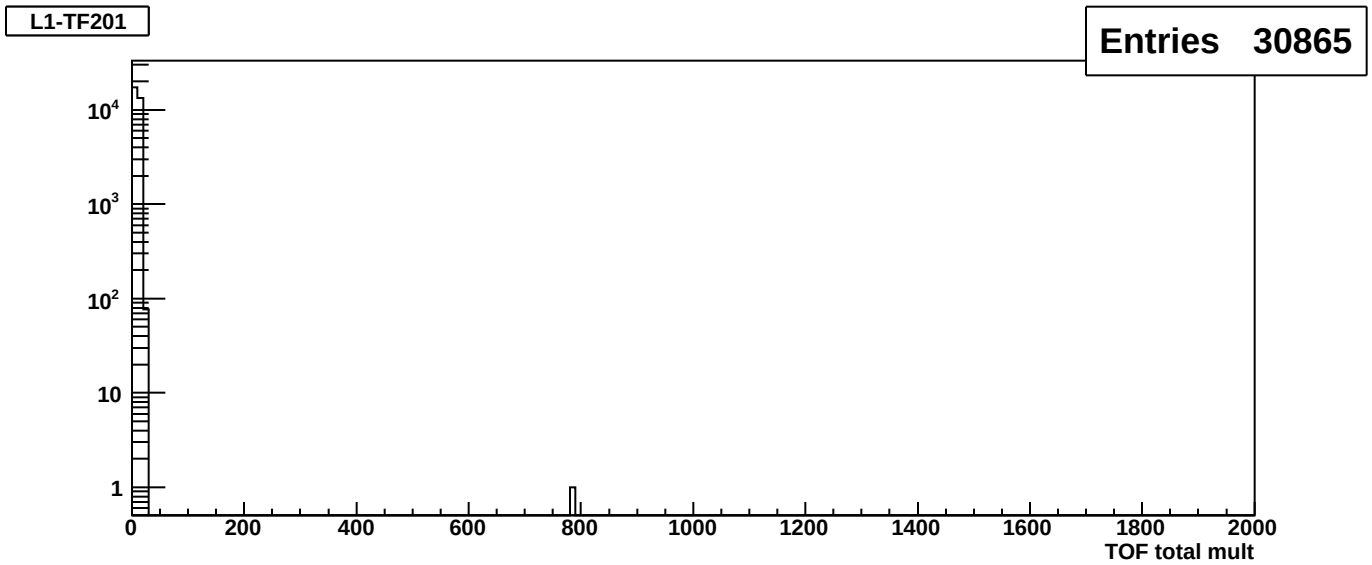

MIX-TF003
Entries 1296330
TOF MULT
TOF tray

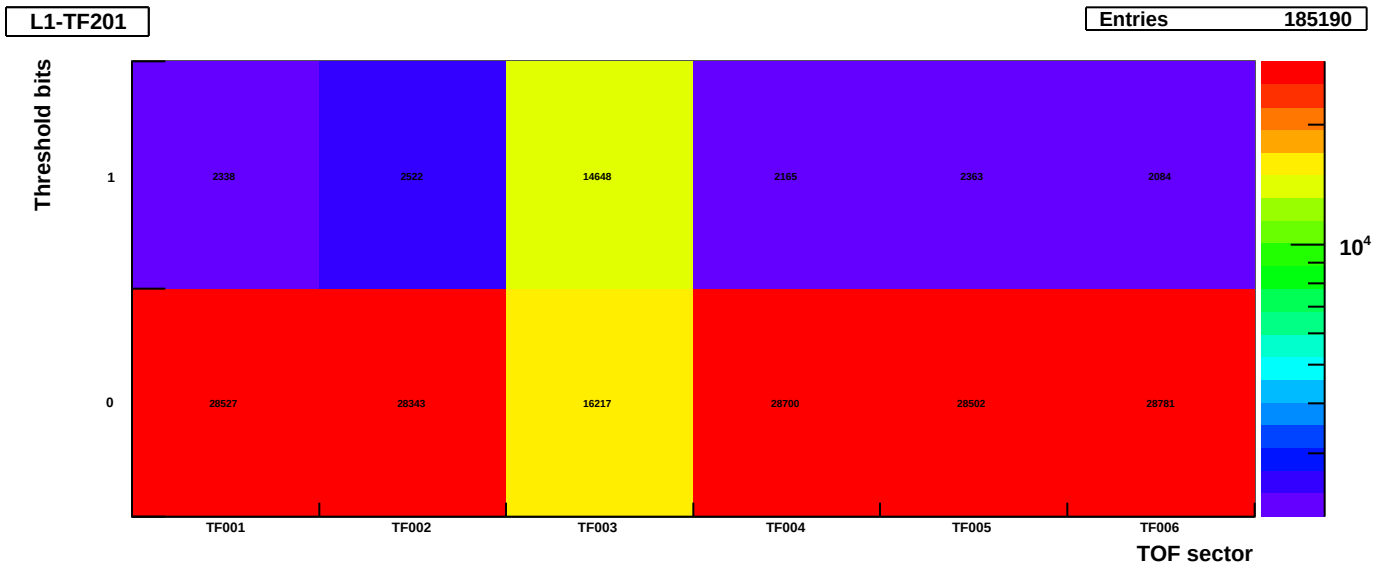

MIX-TF004
Entries 1296330
TOF MULT
TOF tray

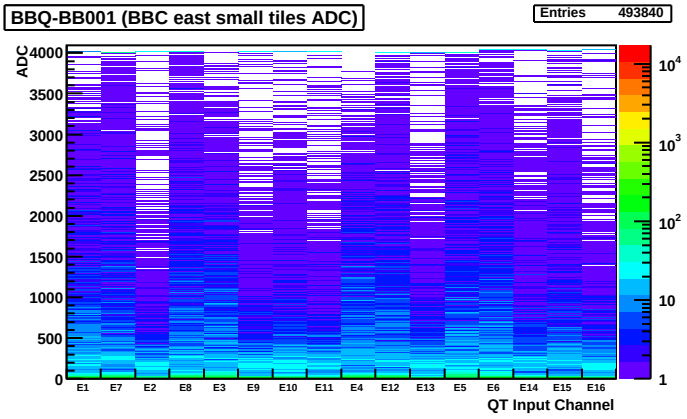

MIX-TF005
Entries 1296330
TOF MULT
TOF tray

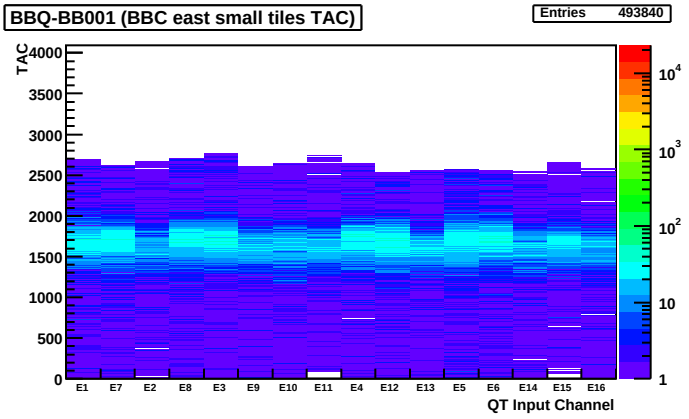

MIX-TF006
Entries 1296330
TOF MULT
TOF tray

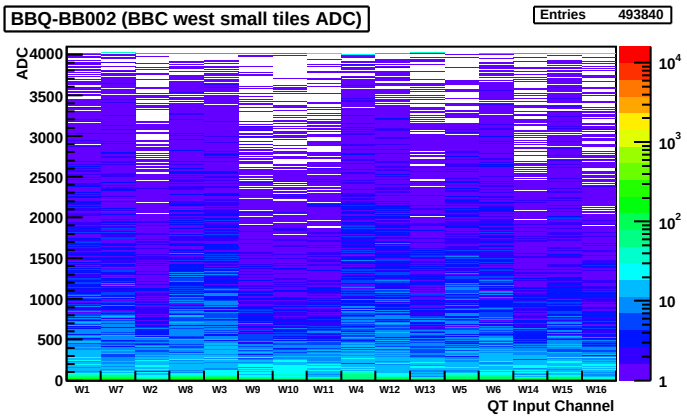

MIX-TF101
Entries 185190
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

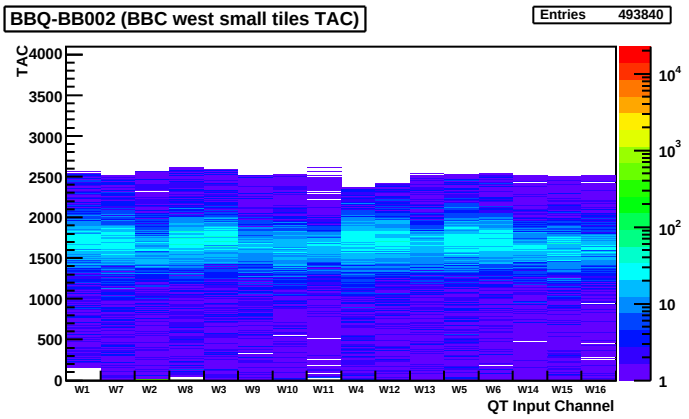

L1-TF201
Entries 30865
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

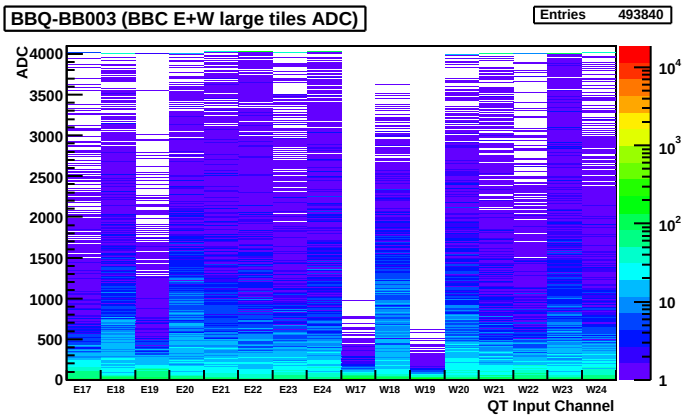

L1-TF201
Entries 185190
Threshold bits
1
0
2338
2522
14648
2165
2363
2084
28527
28343
16217
28700
28502
28781
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4

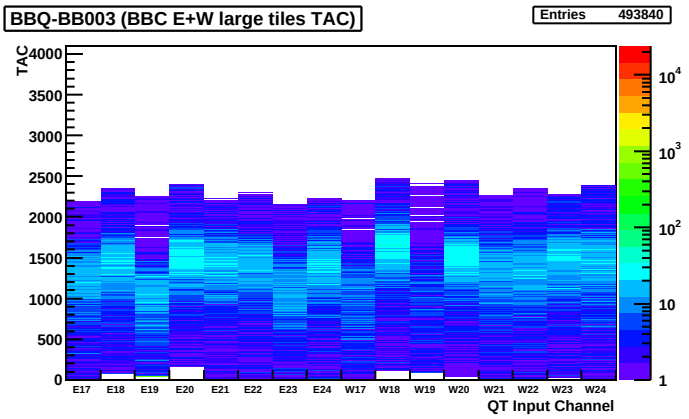

BBQ-BB001 (BBC east small tiles ADC)
Entries 493840
ADC
QT Input Channel

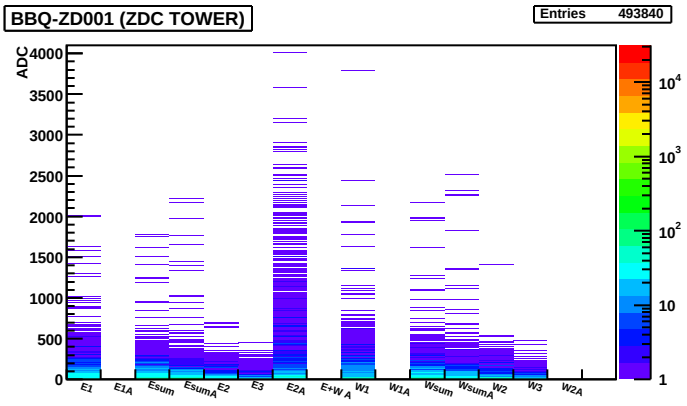

BBQ-BB001 (BBC east small tiles TAC)
Entries 493840
TAC
QT Input Channel

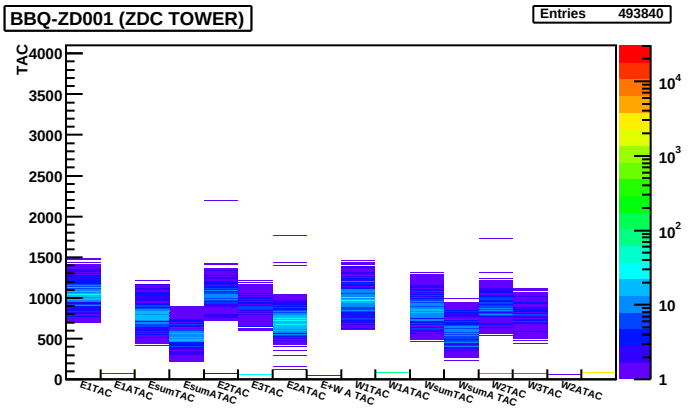

BBQ-BB002 (BBC west small tiles ADC)
Entries 493840
ADC
QT Input Channel

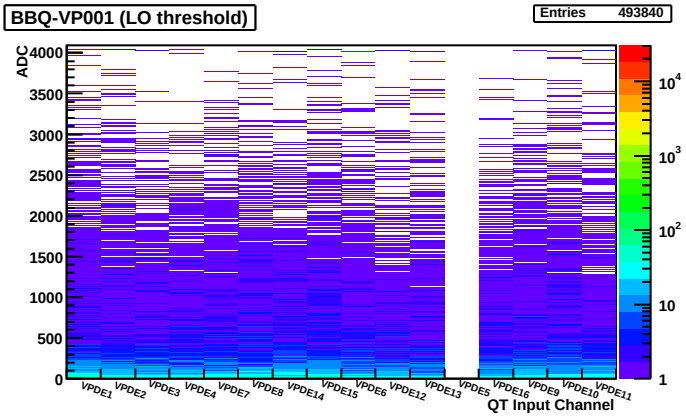

BBQ-BB002 (BBC west small tiles TAC)
Entries 493840
TAC
QT Input Channel

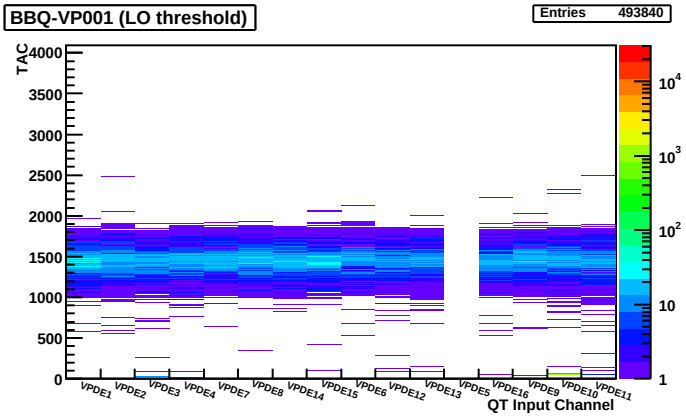

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 493840
ADC
QT Input Channel

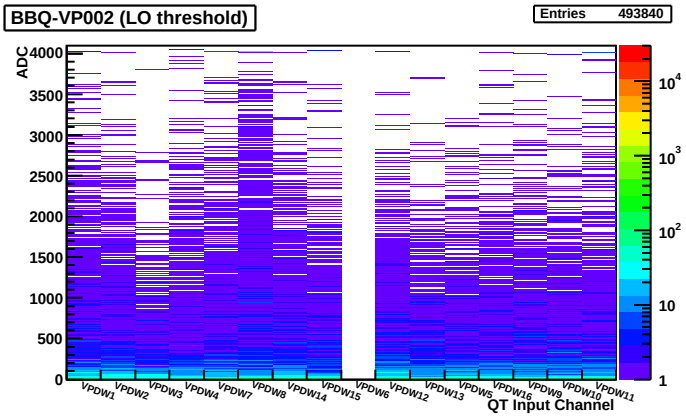

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 493840
TAC
QT Input Channel

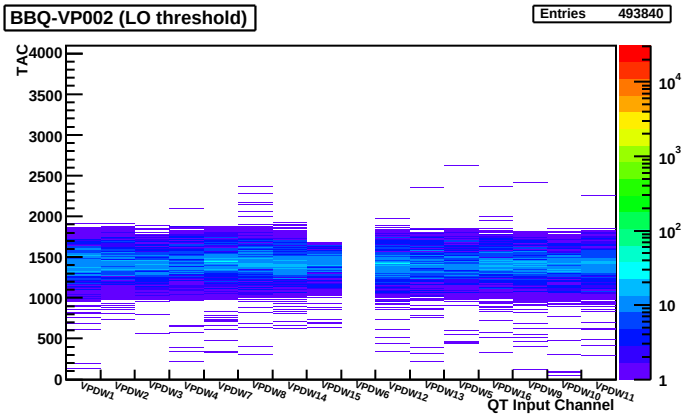

BBQ-ZD001 (ZDC TOWER)
Entries 493840
ADC

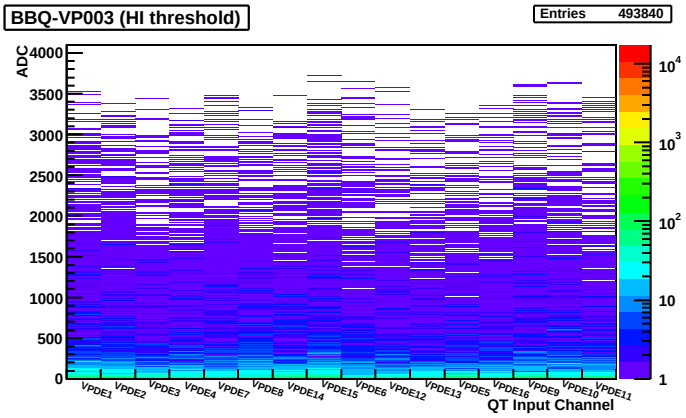

BBQ-ZD001 (ZDC TOWER)
Entries 493840
TAC

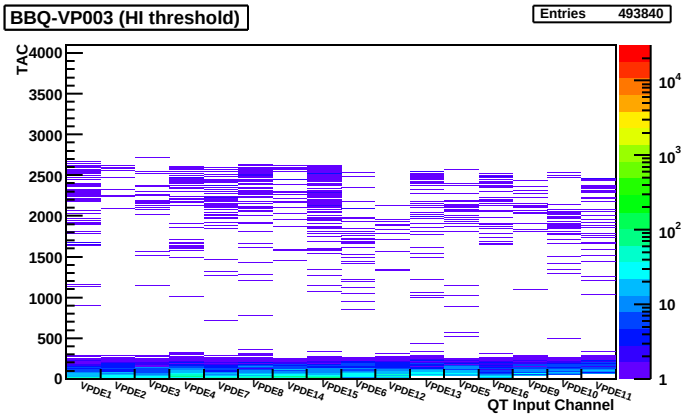

BBQ-VP001 (LO threshold)
Entries 493840
ADC
QT Input Channel

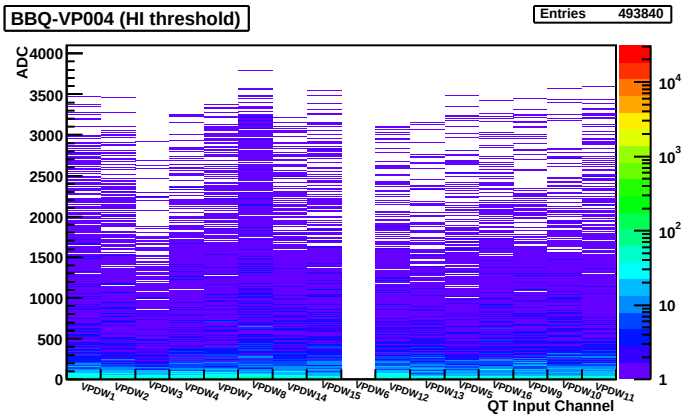

BBQ-VP001 (LO threshold)
Entries 493840
TAC
QT Input Channel

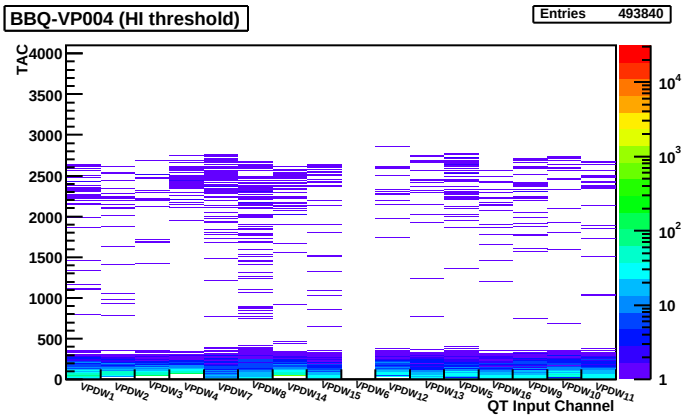

BBQ-VP002 (LO threshold)
Entries 493840
ADC
QT Input Channel

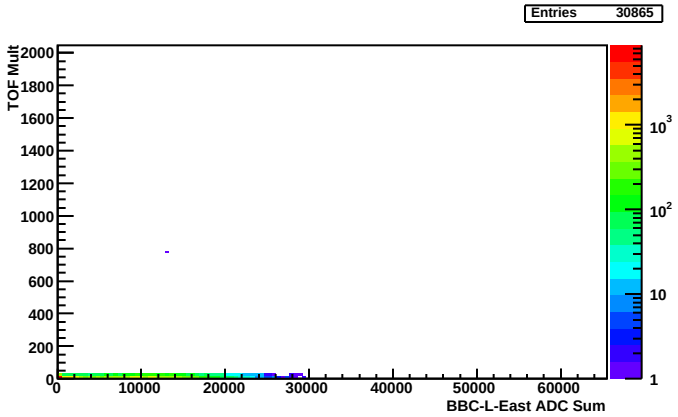

BBQ-VP002 (LO threshold)
Entries 493840
TAC
QT Input Channel

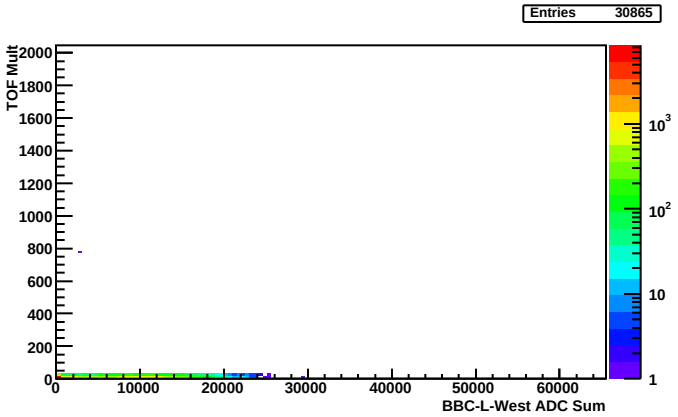

BBQ-VP003 (HI threshold)
Entries 493840
ADC
QT Input Channel

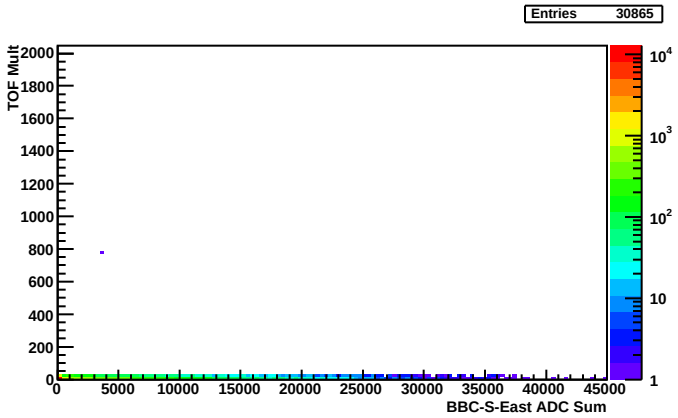

BBQ-VP003 (HI threshold)
Entries 493840
TAC
QT Input Channel

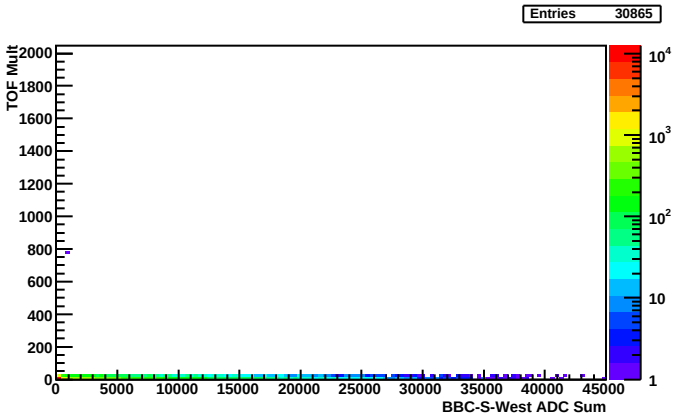

BBQ-VP004 (HI threshold)
Entries 493840
ADC
QT Input Channel

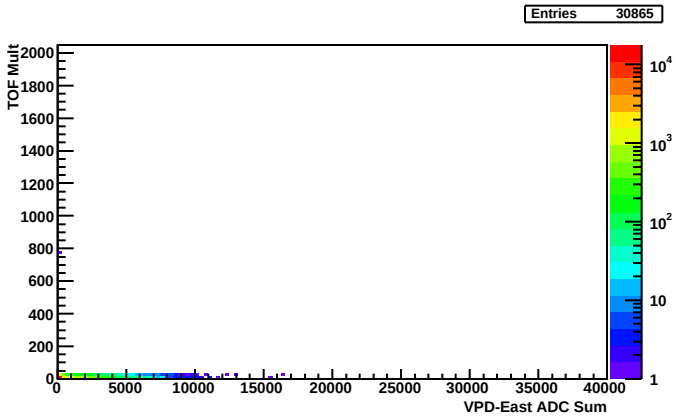

BBQ-VP004 (HI threshold)
Entries 493840
TAC
QT Input Channel

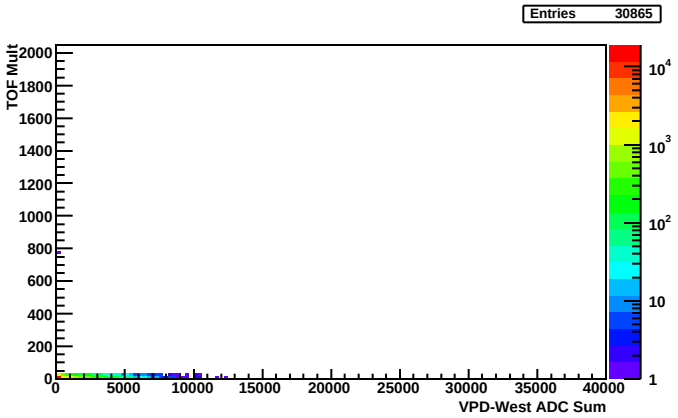

Entries 30865
TOF Mult
BBC-L-East ADC Sum

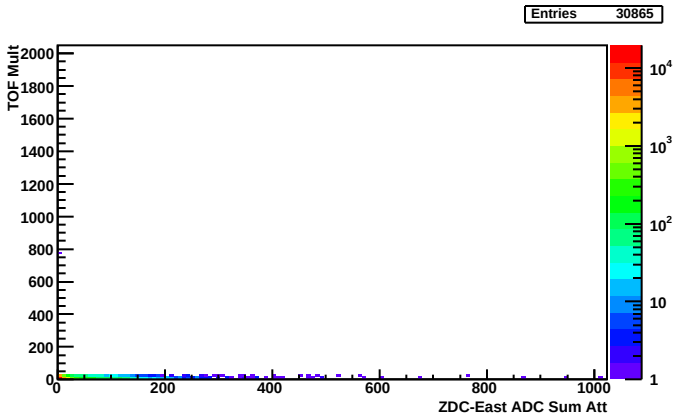

Entries 30865
TOF Mult
BBC-L-West ADC Sum

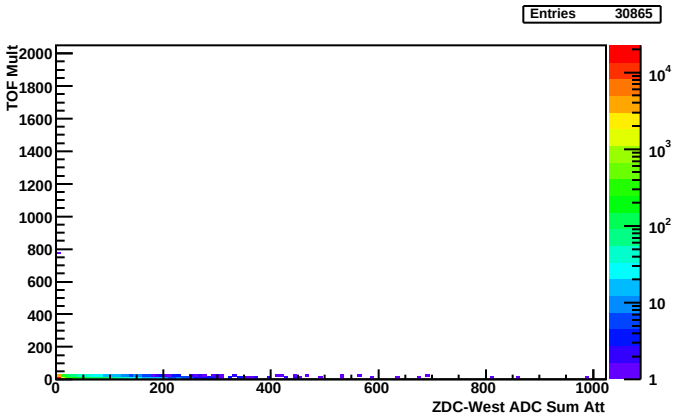

Entries 30865
TOF Mult
BBC-S-East ADC Sum

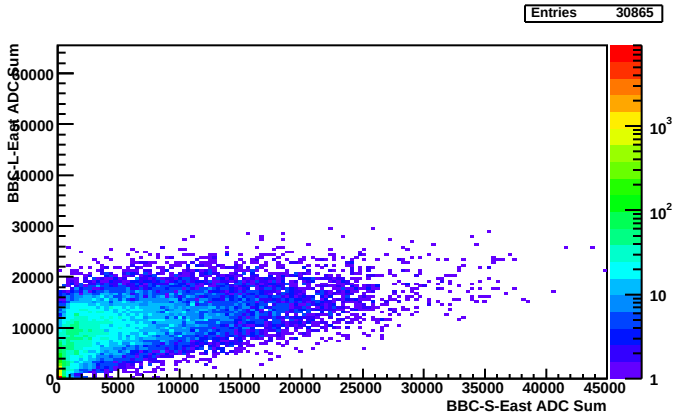

Entries 30865
TOF Mult
BBC-S-West ADC Sum

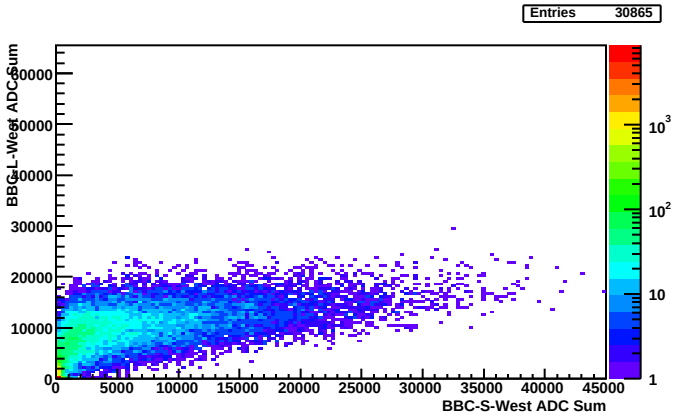

Entries 30865
TOF Mult
VPD-East ADC Sum

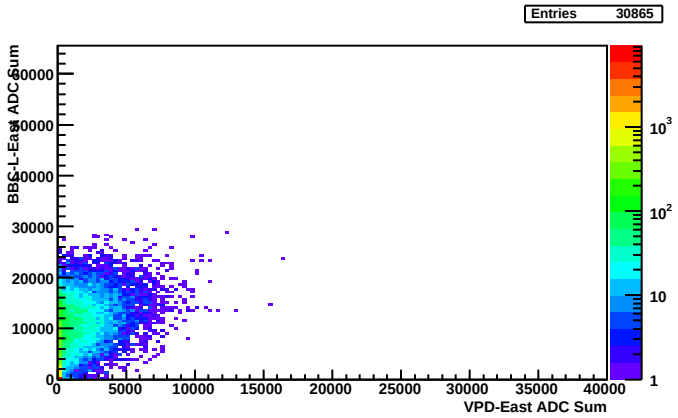

Entries 30865
TOF Mult
VPD-West ADC Sum

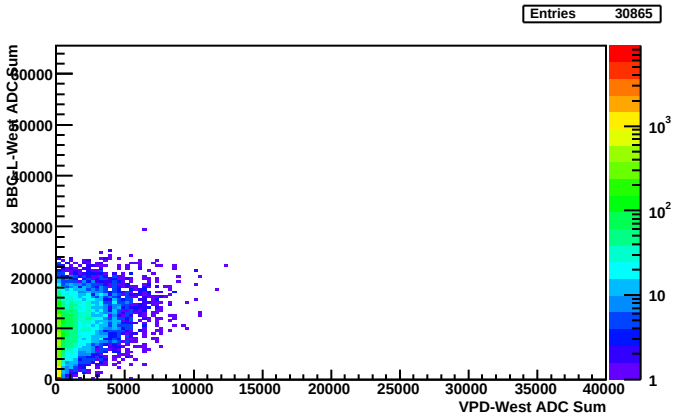

Entries 30865
TOF Mult
ZDC-East ADC Sum Att

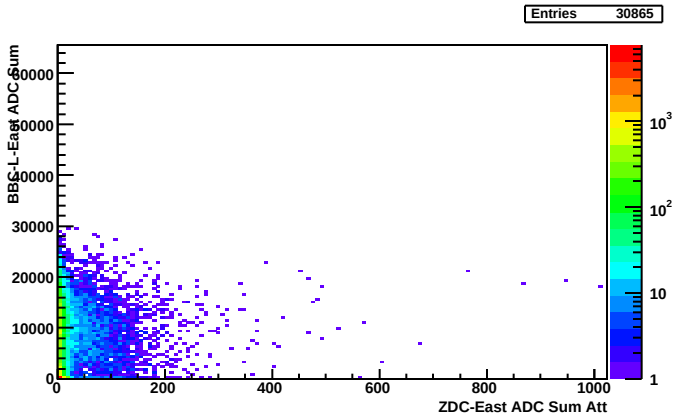

Entries 30865
TOF Mult
ZDC-West ADC Sum Att

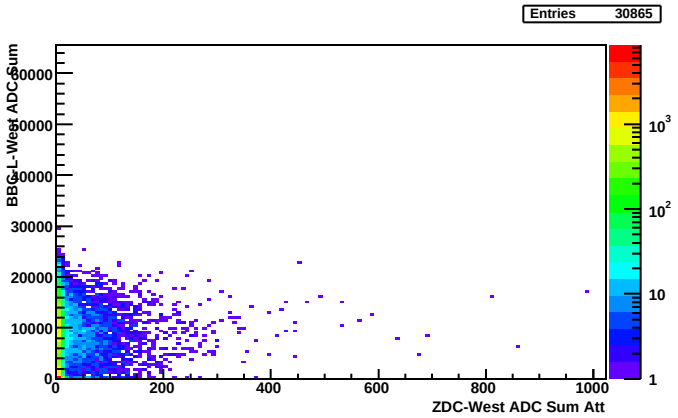

Entries 30865
BBC-L-East ADC Sum
BBC-S-East ADC Sum

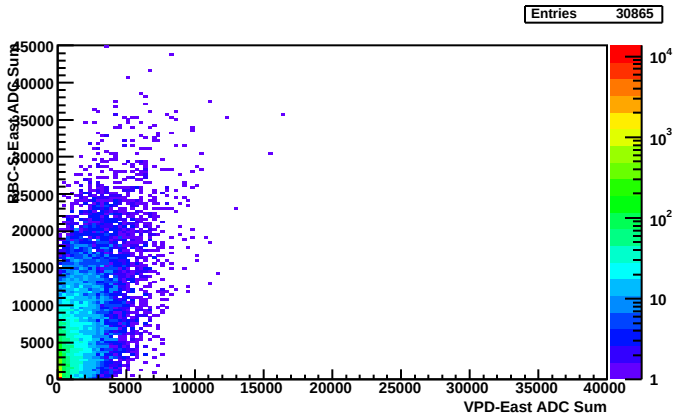

Entries 30865
BBC-L-West ADC Sum
BBC-S-West ADC Sum

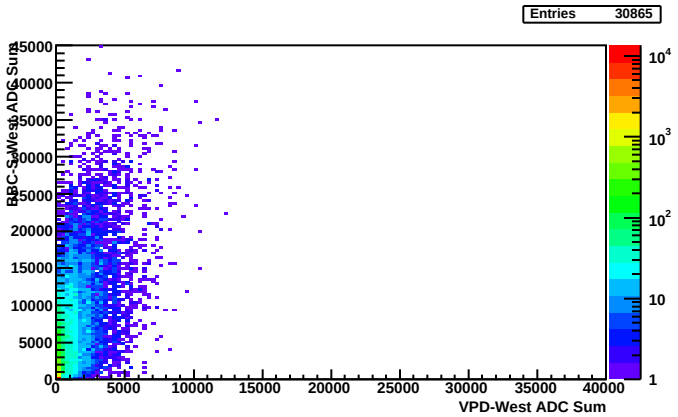

Entries 30865
BBC-L-East ADC Sum
VPD-East ADC Sum

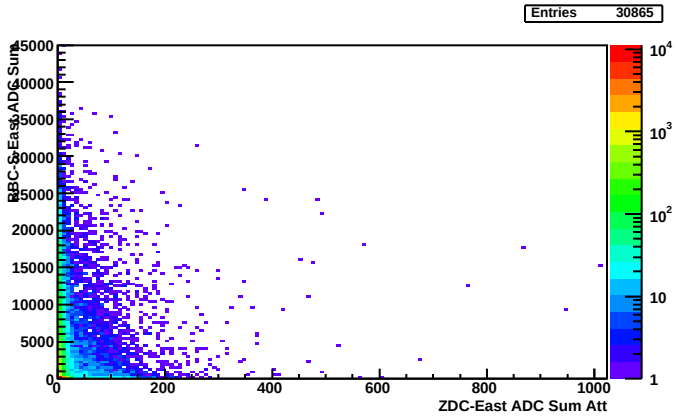

Entries 30865
BBC-L-West ADC Sum
VPD-West ADC Sum

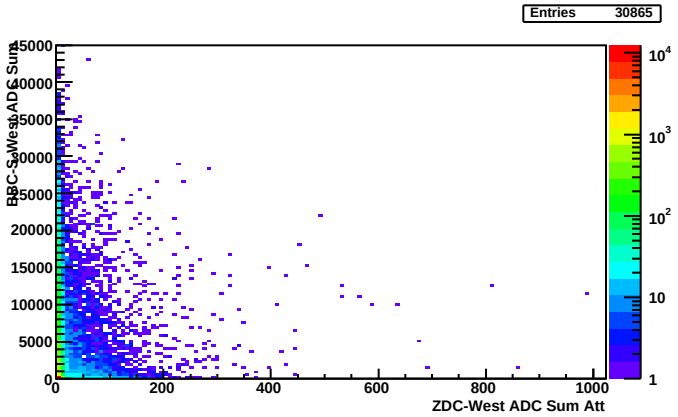

Entries 30865
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

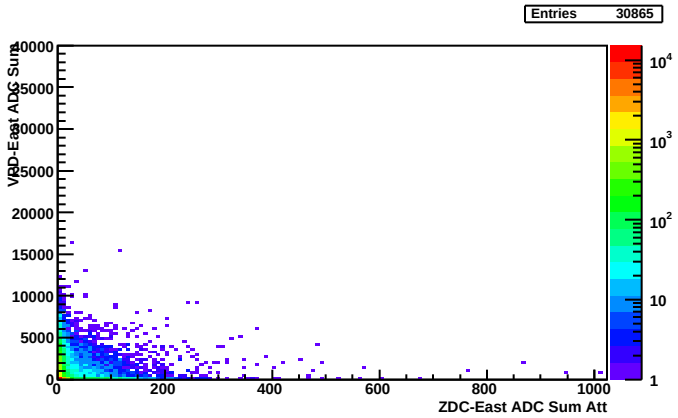

Entries 30865
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

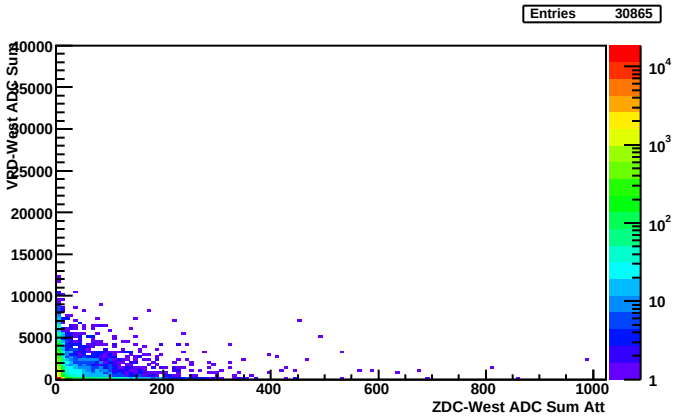

Entries 30865
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 30865
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 30865
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 30865
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 30865
VPD-East ADC Sum
ZDC-East ADC Sum Att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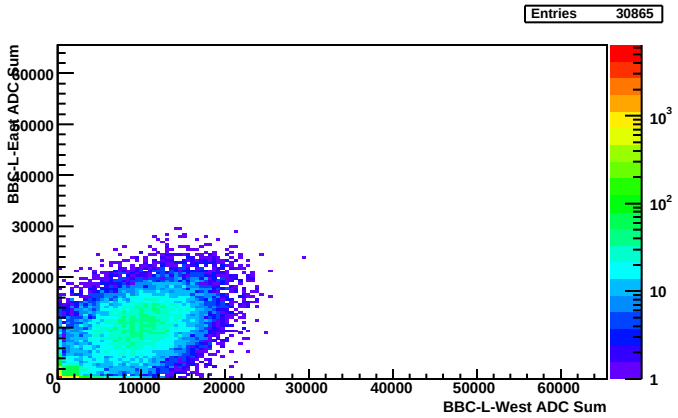
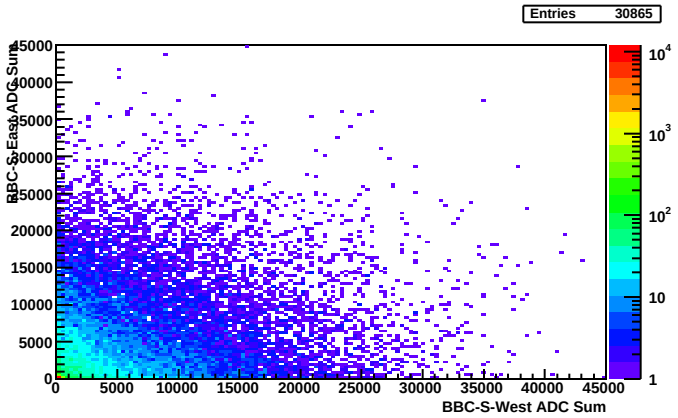
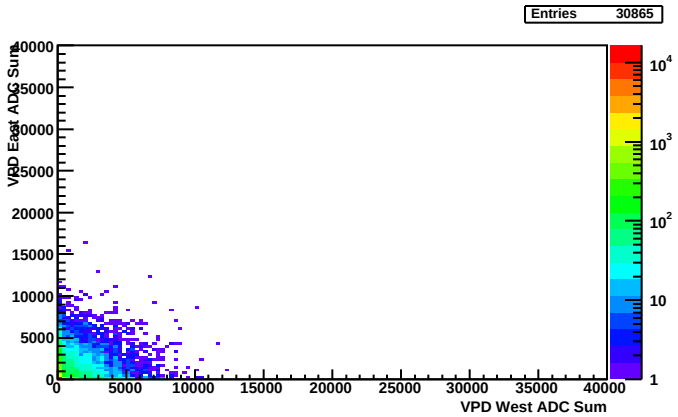
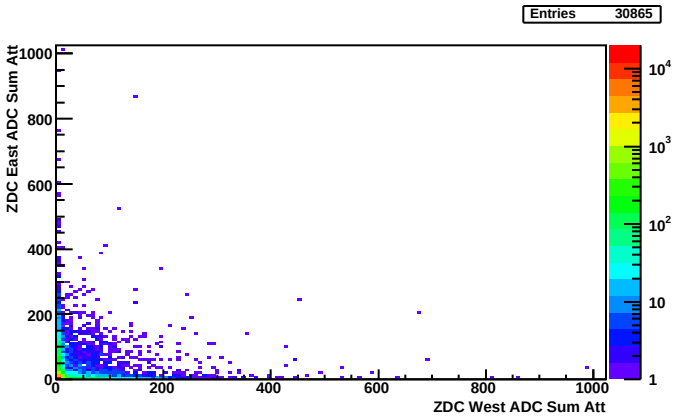
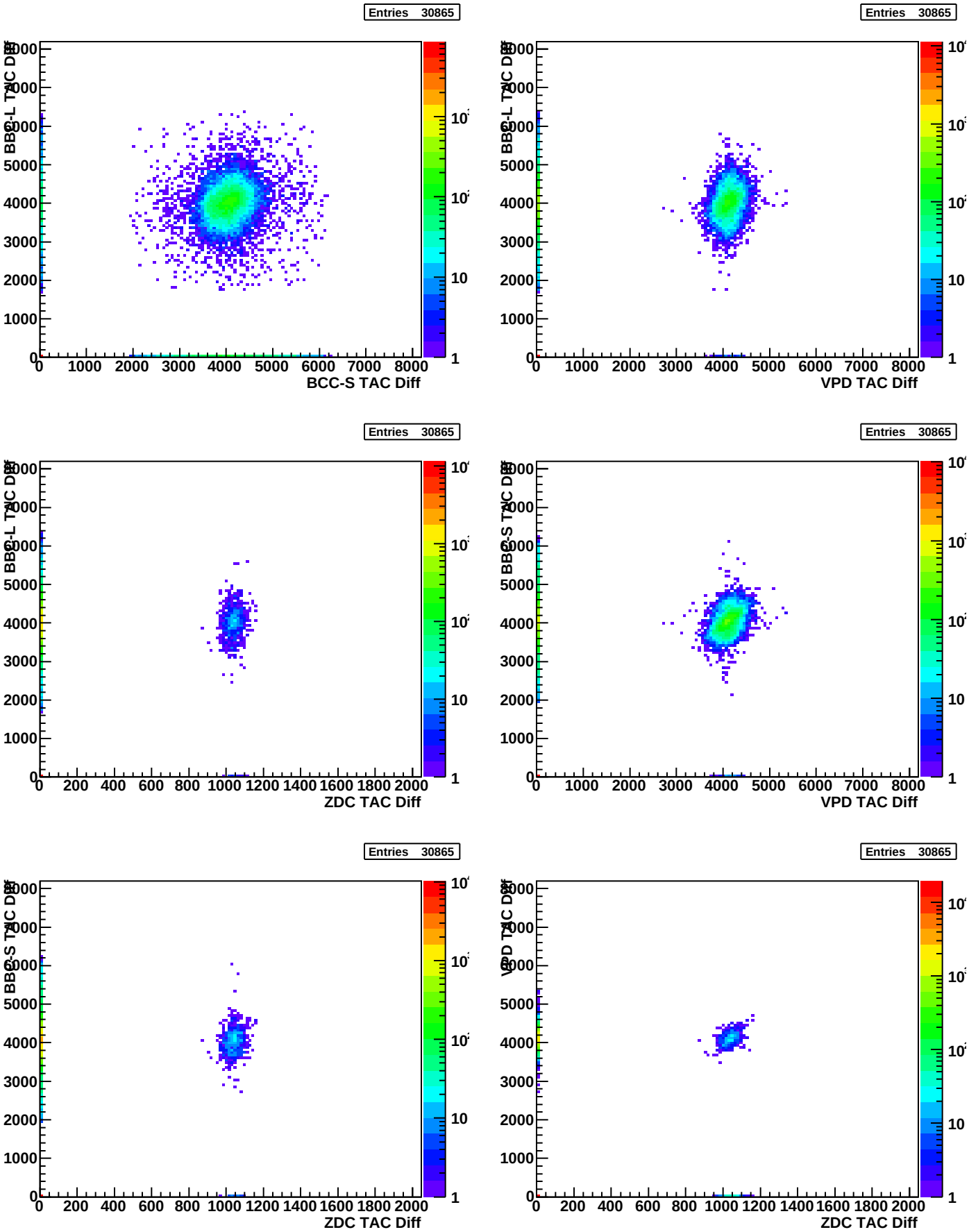
VPD-West ADC Sum
ZDC-West ADC Sum Att

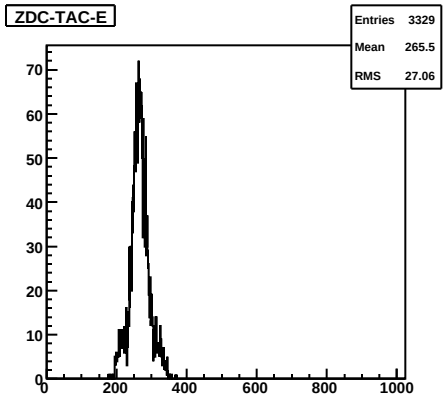

Entries 30865
BBC-L-East ADC Sum
BBC-L-West ADC Sum

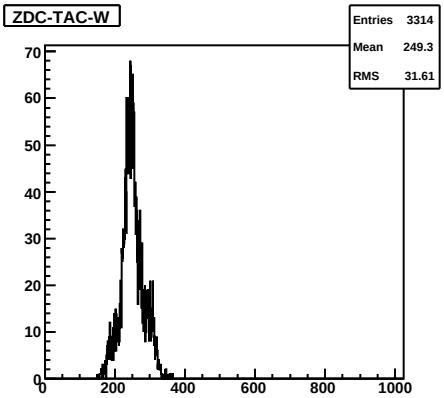

Entries 30865
BBC-S-East ADC Sum
BBC-S-West ADC Sum

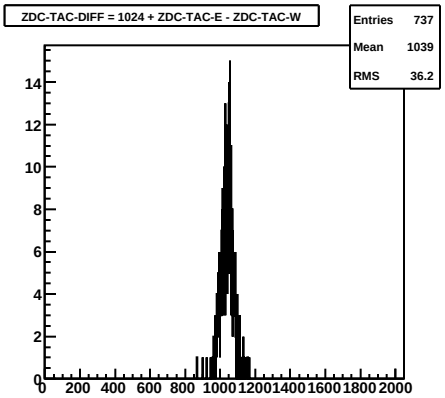

Entries 30865
VPD East ADC Sum
VPD West ADC Sum

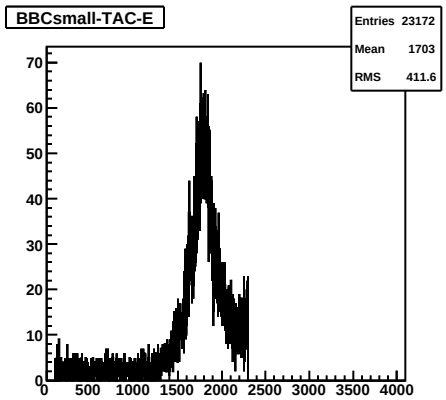

Entries 30865
ZDC East ADC Sum Att
ZDC West ADC Sum Att

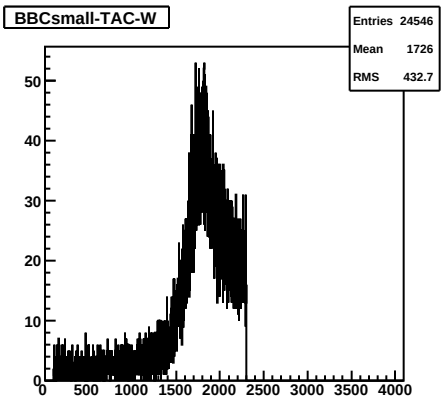

Entries 30865
BBC-L TAC Diff
BCC-S TAC Diff
Entries 30865
BBC-L TAC Diff
VPD TAC Diff
Entries 30865
BBC-L TAC Diff
ZDC TAC Diff
Entries 30865
BBC-S TAC Diff
VPD TAC Diff
Entries 30865
BBC-S TAC Diff
ZDC TAC Diff
Entries 30865
VPD TAC Diff
ZDC TAC Diff

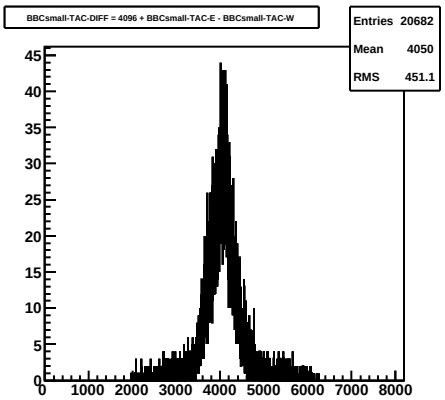

ZDC-TAC-E
Entries 3329
Mean 265.5
RMS 27.06

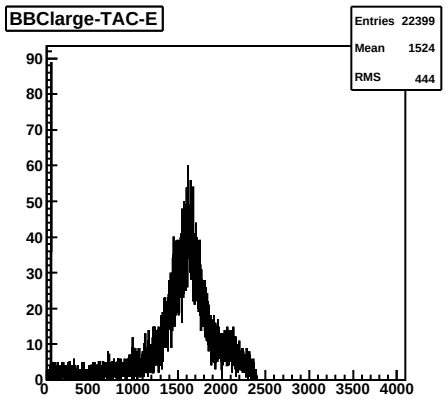

ZDC-TAC-W
Entries 3314
Mean 249.3
RMS 31.61

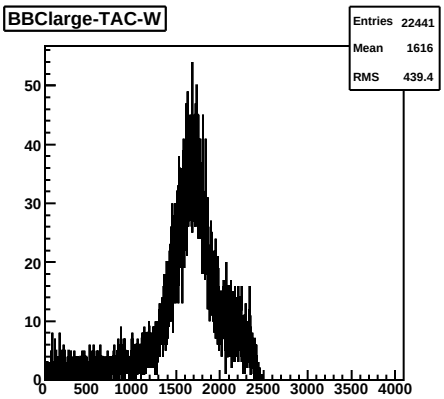

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 737
Mean 1039
RMS 36.2

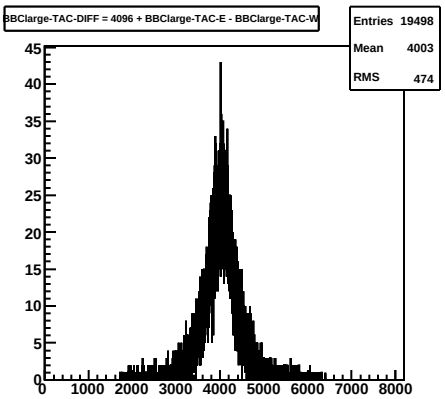

BBCsmall-TAC-E
Entries 23172
Mean 1703
RMS 411.6

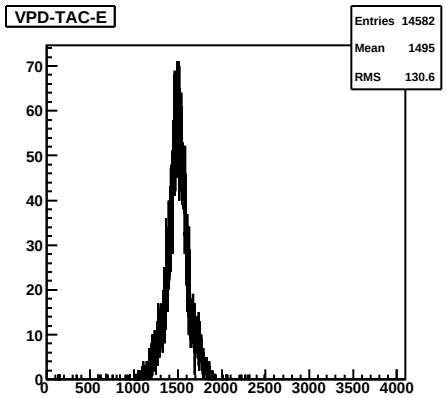

BBCsmall-TAC-W
Entries 24546
Mean 1726
RMS 432.7

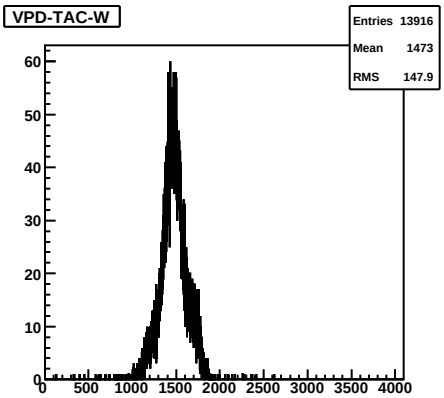

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 20682
Mean 4050
RMS 451.1

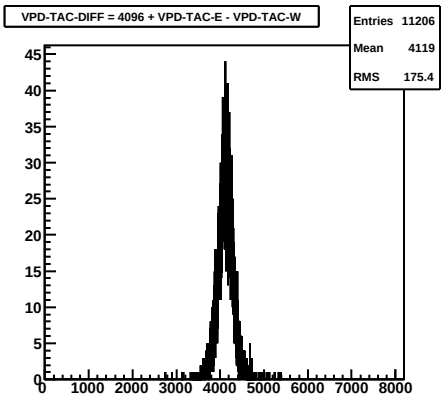

BBClarge-TAC-E
Entries 22399
Mean 1524
RMS 444

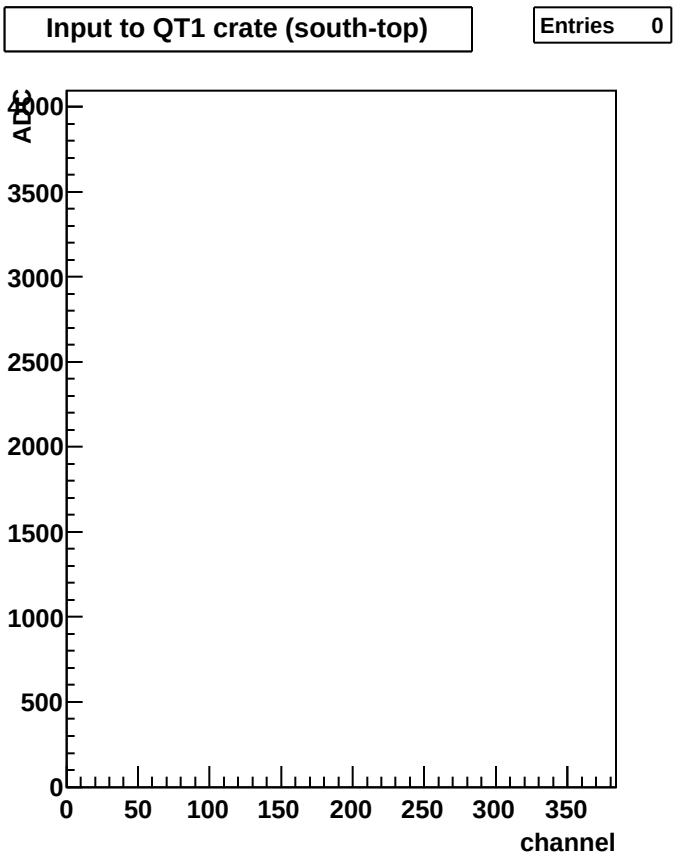

BBClarge-TAC-W
Entries 22441
Mean 1616
RMS 439.4

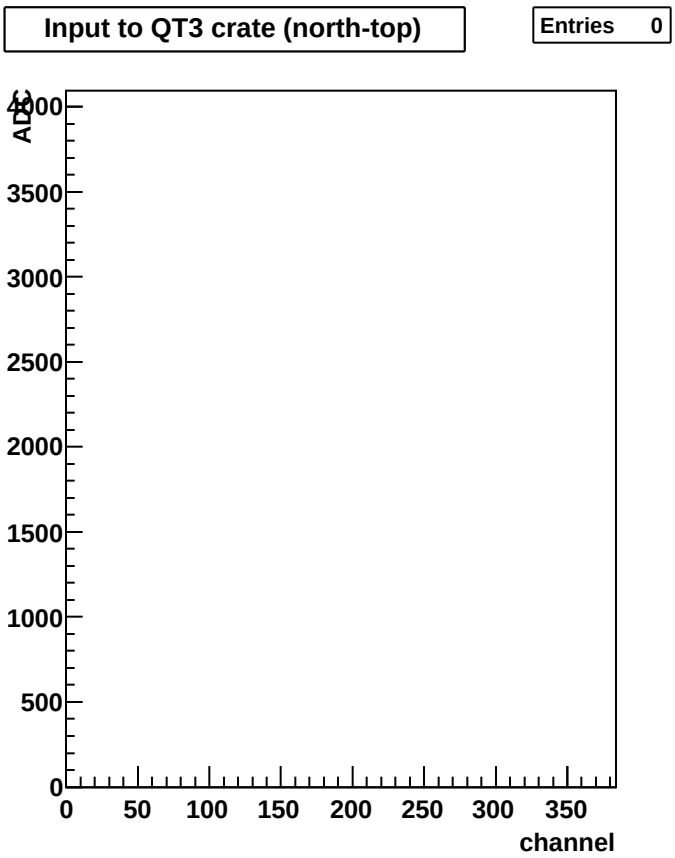

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 19498
Mean 4003
RMS 474

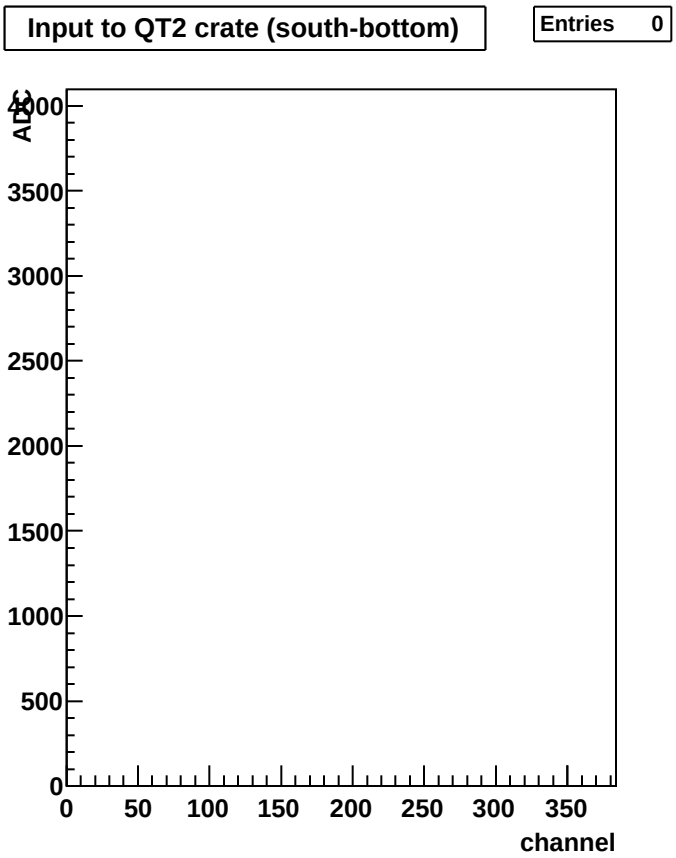

VPD-TAC-E
Entries 14582
Mean 1495
RMS 130.6

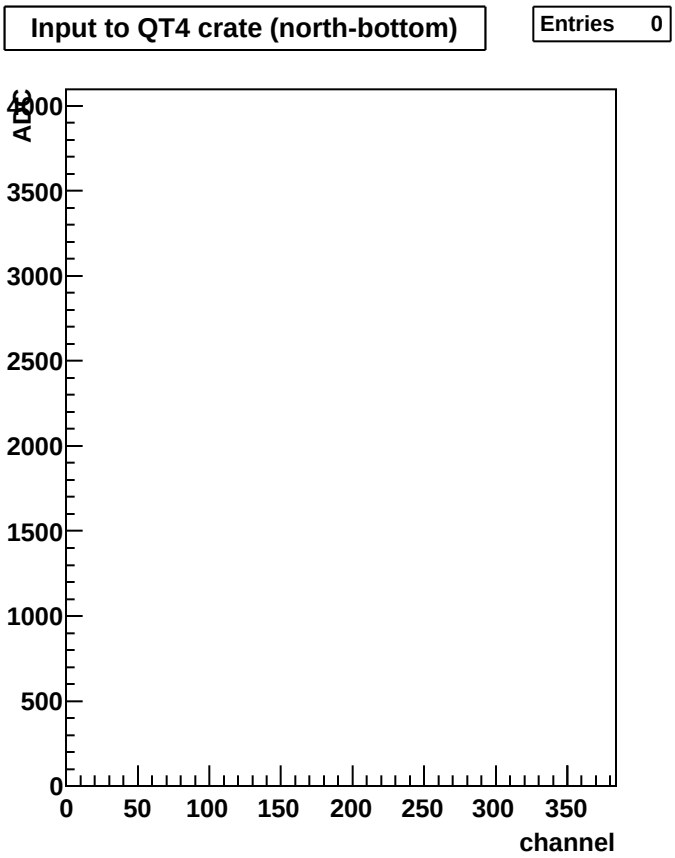

VPD-TAC-W
Entries 13916
Mean 1473
RMS 147.9

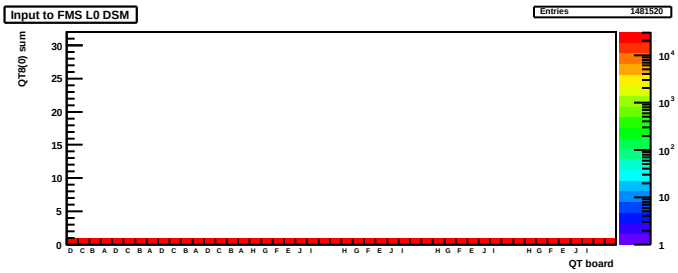

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 11206
Mean 4119
RMS 175.4

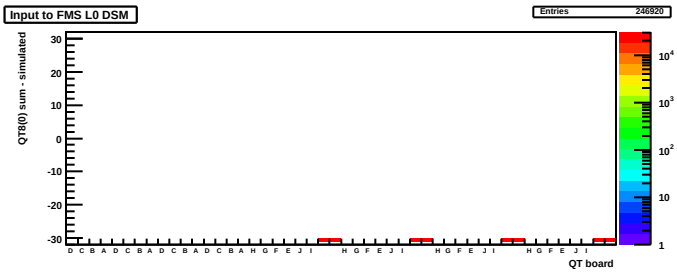

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

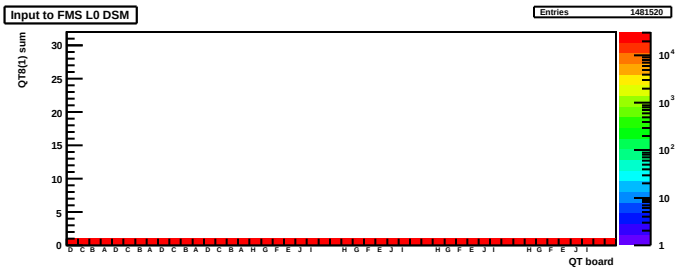

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

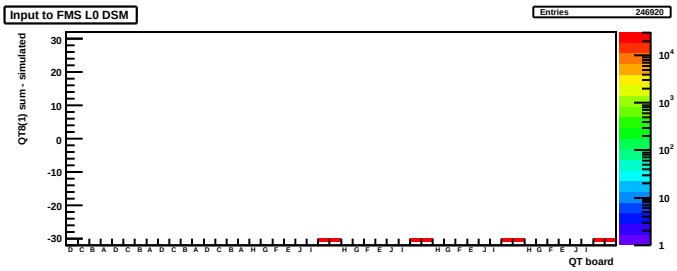

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

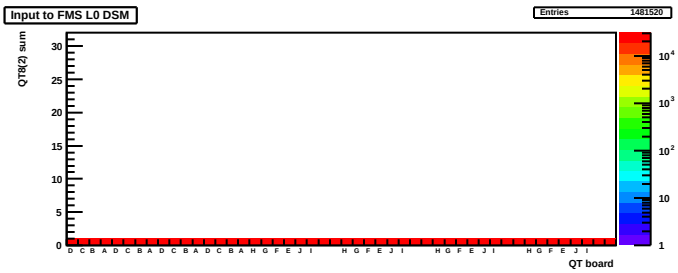

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

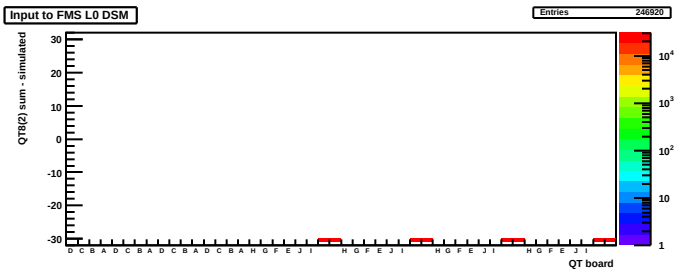

Input to FMS L0 DSM
Entries 1481520
QT8(0) sum
QT board

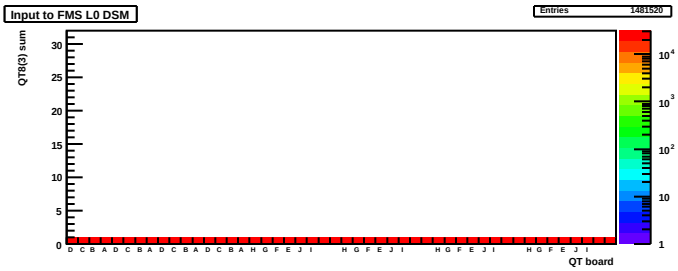

Input to FMS L0 DSM
Entries 246920
QT8(0) sum - simulated
QT board

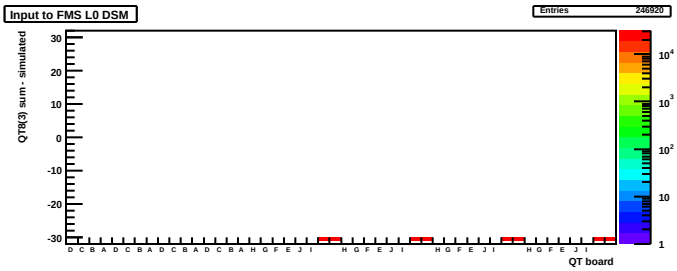

Input to FMS L0 DSM
Entries 1481520
QT8(1) sum
QT board

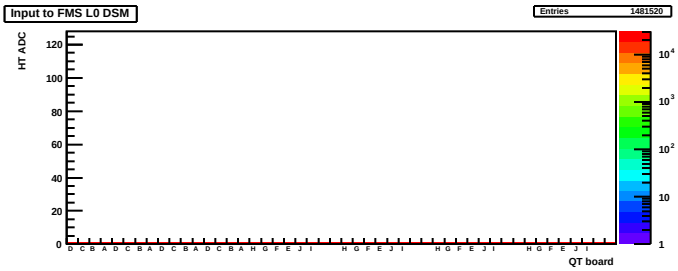

Input to FMS L0 DSM
Entries 246920
QT8(1) sum - simulated
QT board

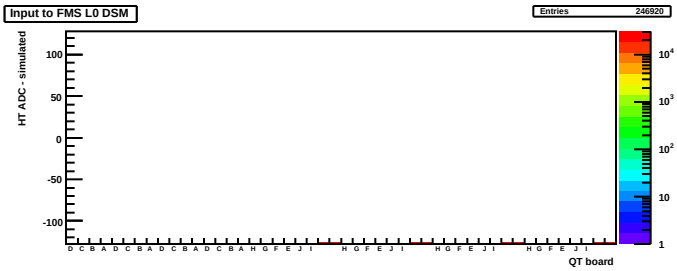

Input to FMS L0 DSM
Entries 1481520
QT8(2) sum
QT board

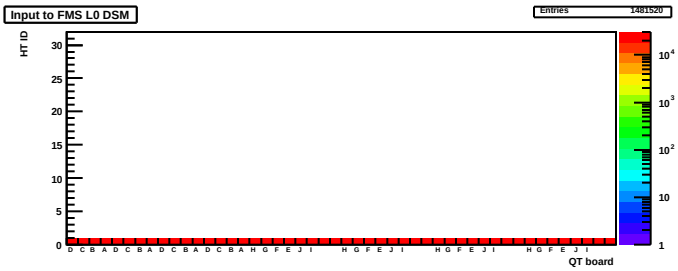

Input to FMS L0 DSM
Entries 246920
QT8(2) sum - simulated
QT board

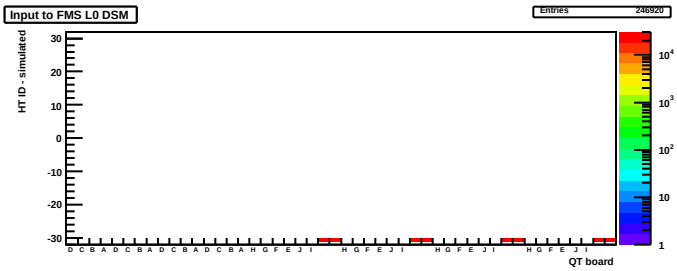

Input to FMS L0 DSM
Entries 1481520
QT8(3) sum
QT board

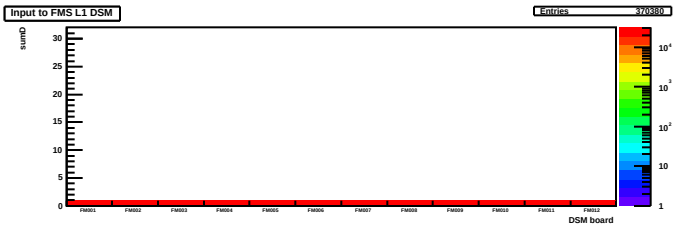

Input to FMS L0 DSM
Entries 246920
QT8(3) sum - simulated
QT board

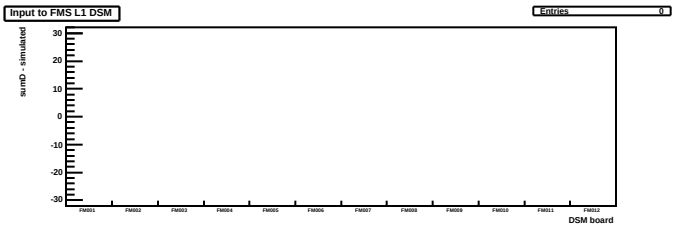

Input to FMS L0 DSM
Entries 1481520
HT ADC
QT board

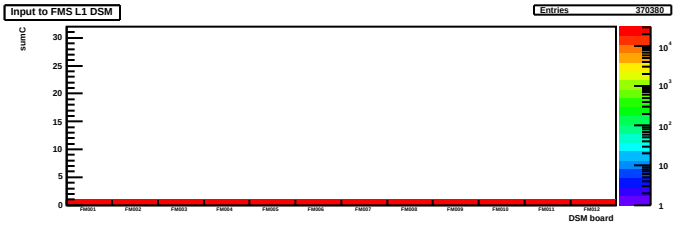

Input to FMS L0 DSM
Entries 246920
HT ADC - simulated
QT board

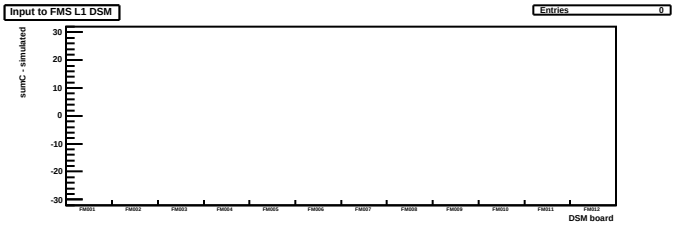

Input to FMS L0 DSM
Entries 1481520
HT ID
QT board

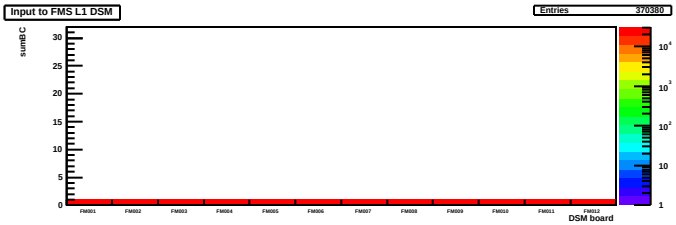

Input to FMS L0 DSM
Entries 246920
HT ID - simulated
QT board

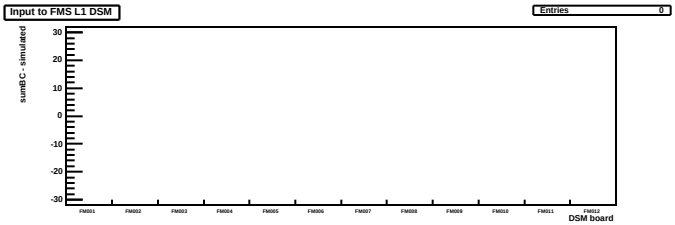

Input to FMS L1 DSM
Entries 370380
sumD
DSM board

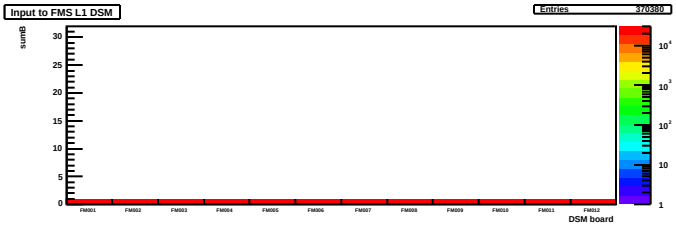

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

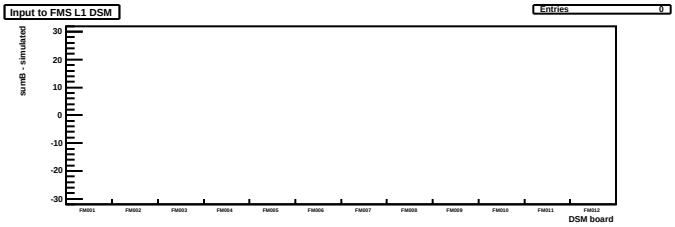

Input to FMS L1 DSM
Entries 370380
sumC
DSM board

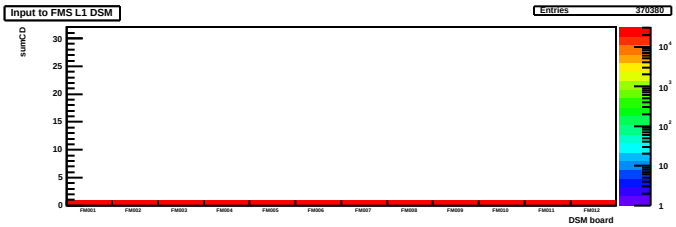

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

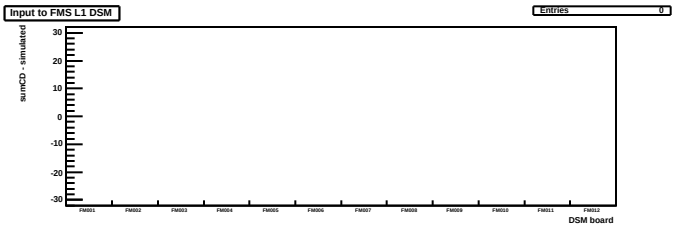

Input to FMS L1 DSM
Entries 370380
sumBC
DSM board

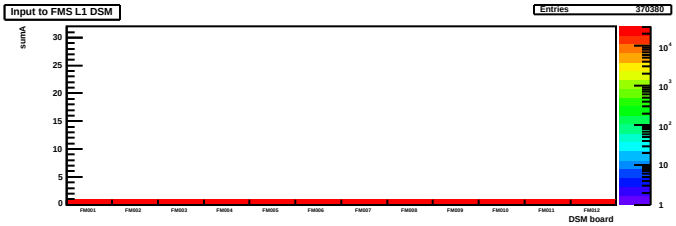

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

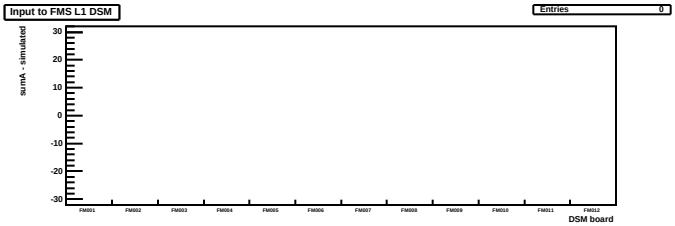

Input to FMS L1 DSM
Entries 370380
sumB
DSM board

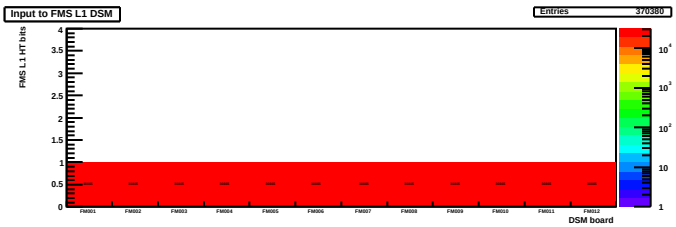

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

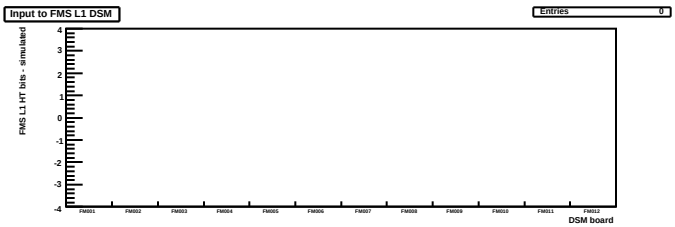

Input to FMS L1 DSM
Entries 370380
sumCD
DSM board

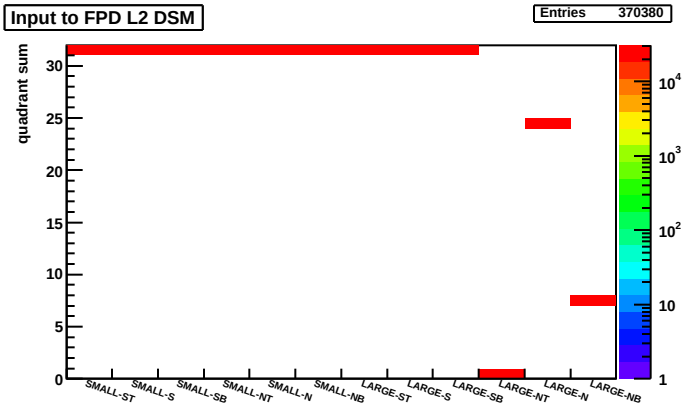

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

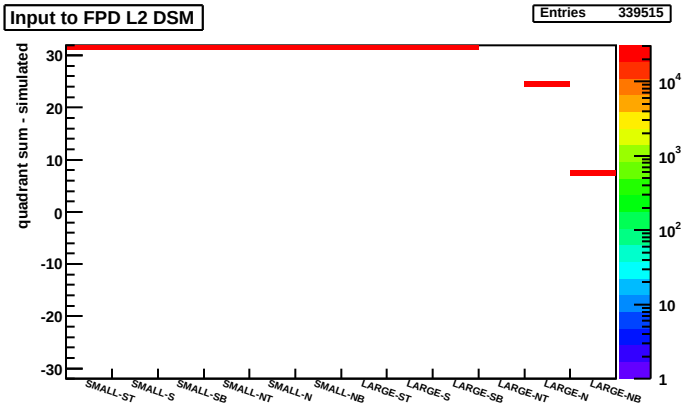

Input to FMS L1 DSM
Entries 370380
sumA
DSM board

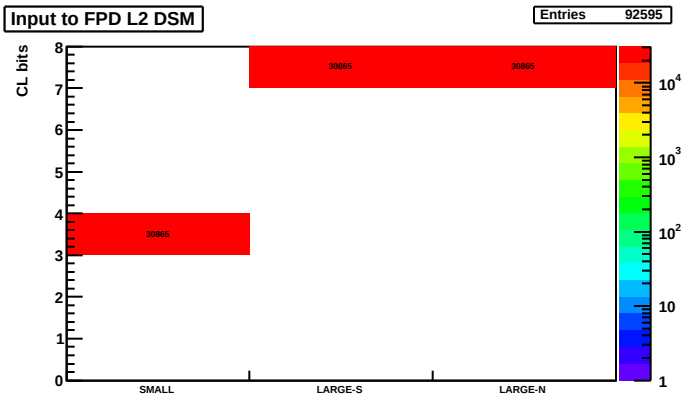

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

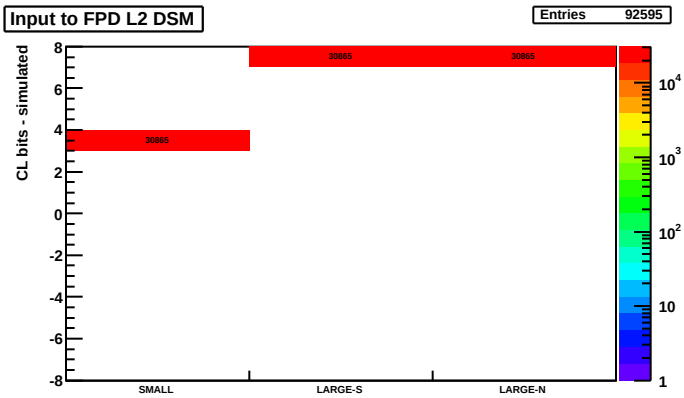

Input to FMS L1 DSM
Entries 370380
FMS L1 HT bits
DSM board

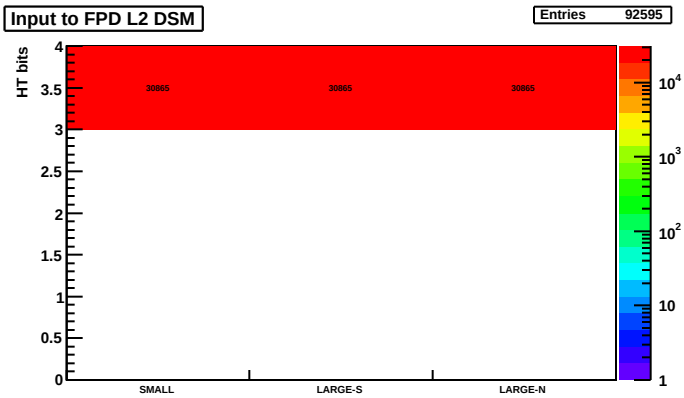

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

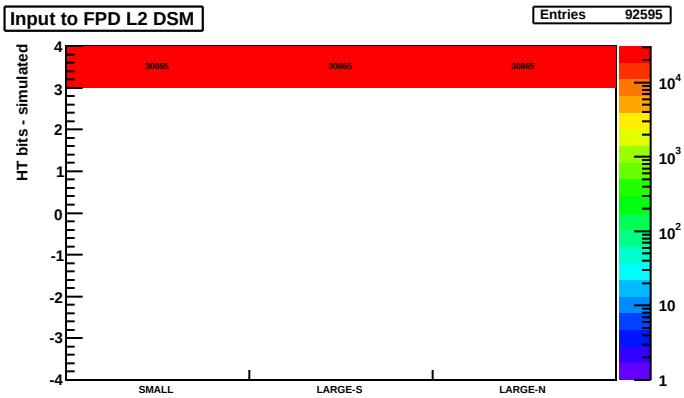

Input to FPD L2 DSM
Entries 370380
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

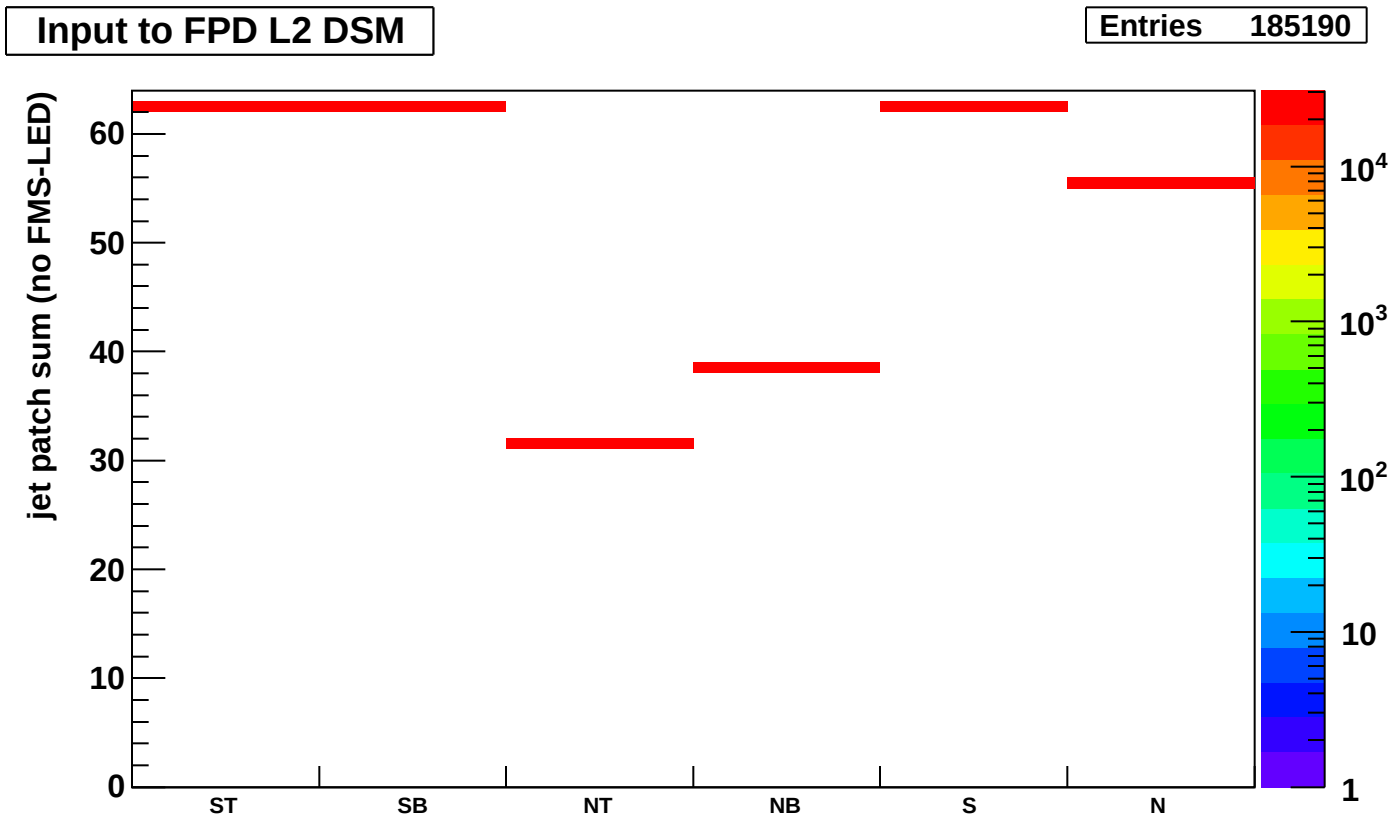

Input to FPD L2 DSM
Entries 339515
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

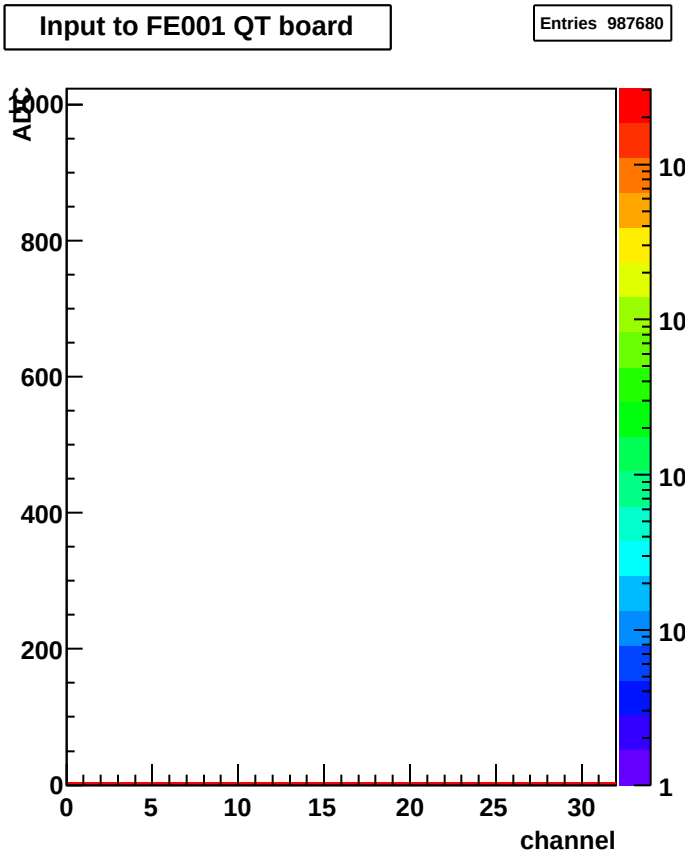

Input to FPD L2 DSM
Entries 92595
CL bits
30865
30865
30865
SMALL
LARGE-S
LARGE-N

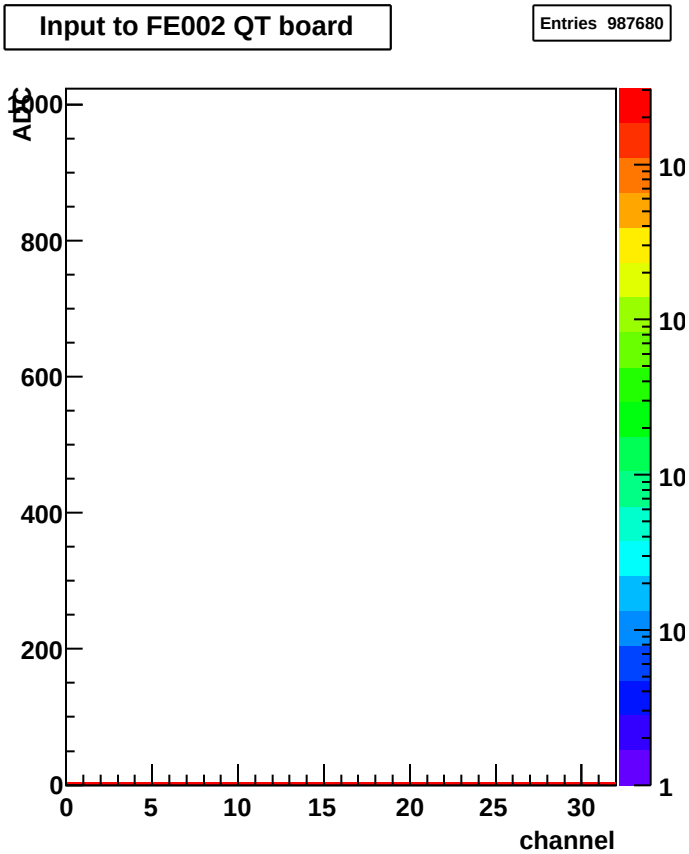

Input to FPD L2 DSM
Entries 92595
CL bits - simulated
30865
30865
30865
SMALL
LARGE-S
LARGE-N

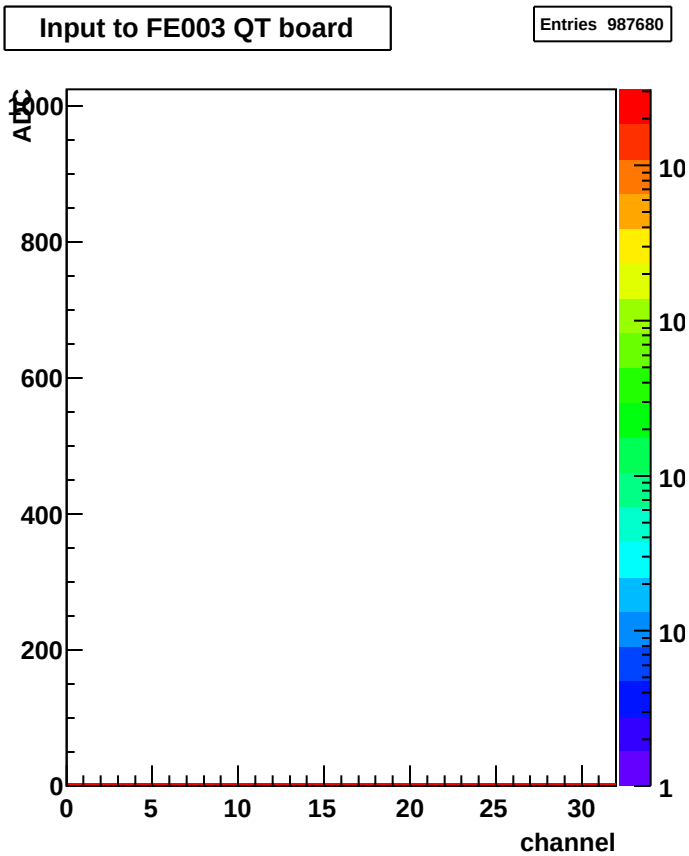

Input to FPD L2 DSM
Entries 92595
HT bits
30865
30865
30865
SMALL
LARGE-S
LARGE-N

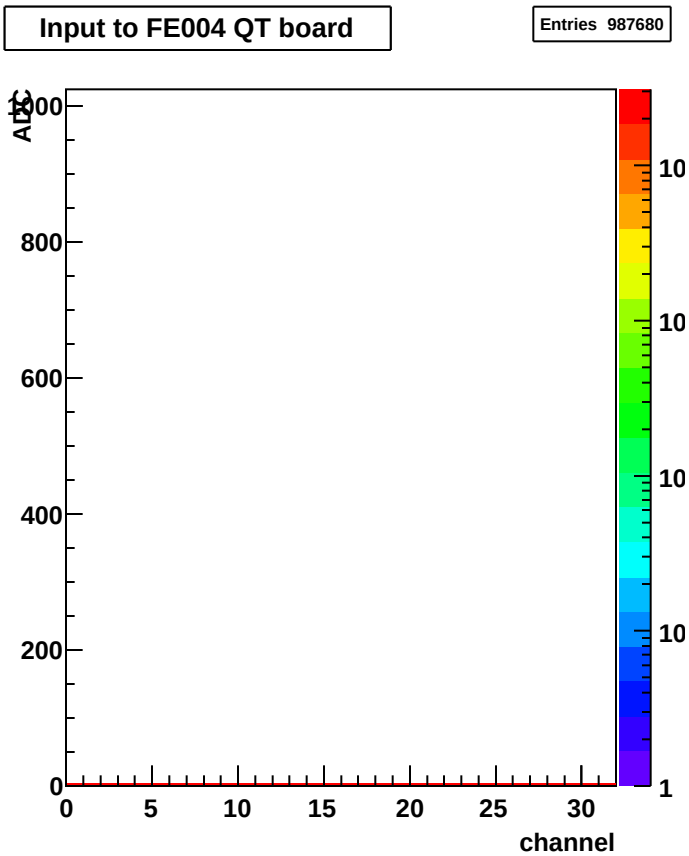

Input to FPD L2 DSM
Entries 92595
HT bits - simulated
30865
30865
30865
SMALL
LARGE-S
LARGE-N

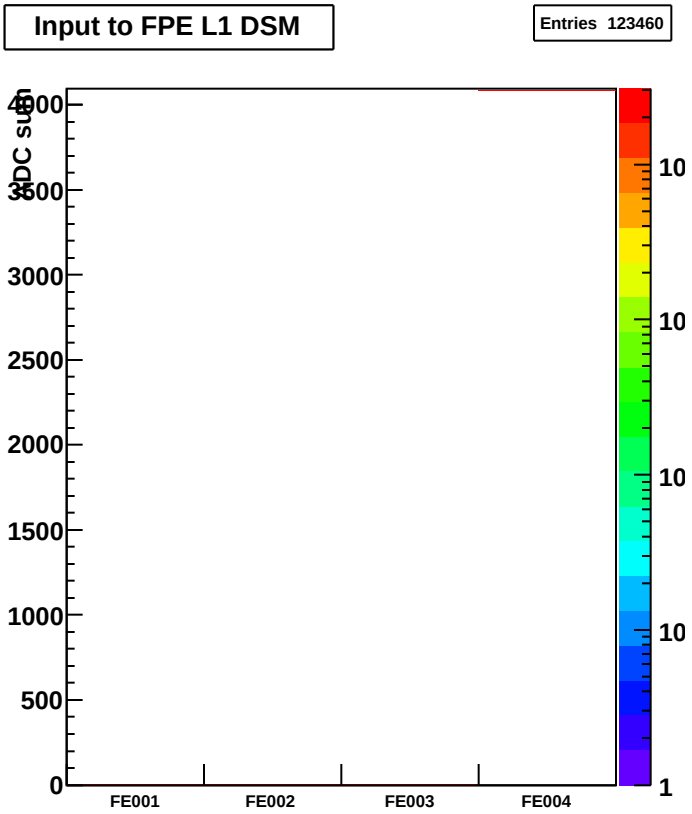

Input to FPD L2 DSM
Entries 185190
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

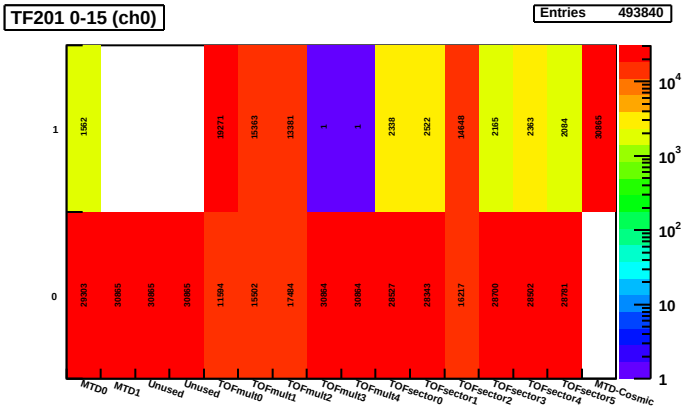

Input to FE001 QT board
Entries 987680
ADC
channel

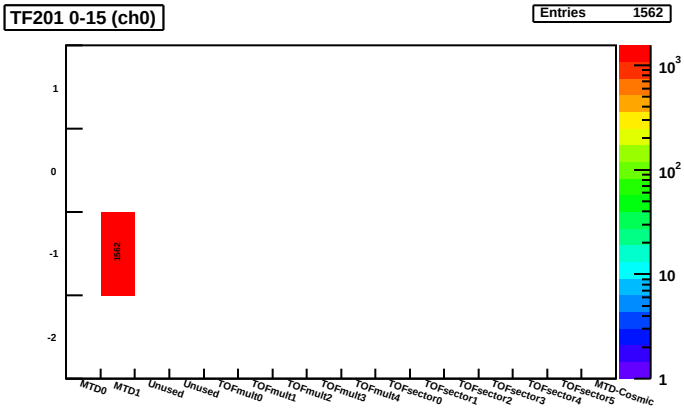

Input to FE002 QT board
Entries 987680
ADC
channel

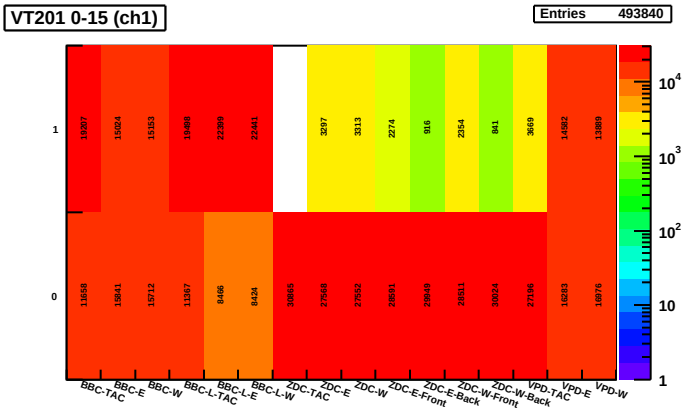

Input to FE003 QT board
Entries 987680
ADC
channel

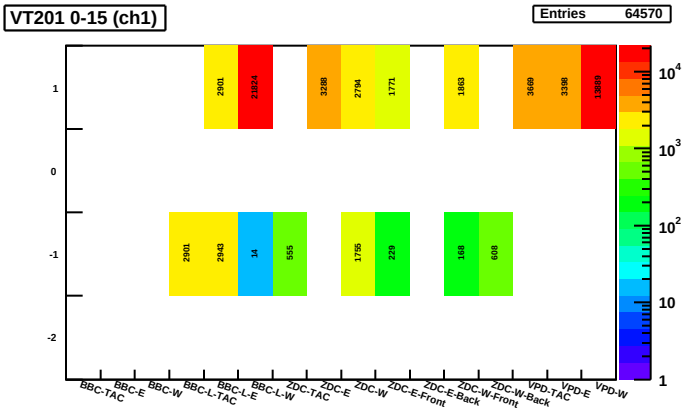

Input to FE004 QT board
Entries 987680
ADC
channel


Input to FPE L1 DSM
Entries 123460
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1


TF201 0-15 (ch0)
Entries 493840
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 1562
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 493840
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 64570
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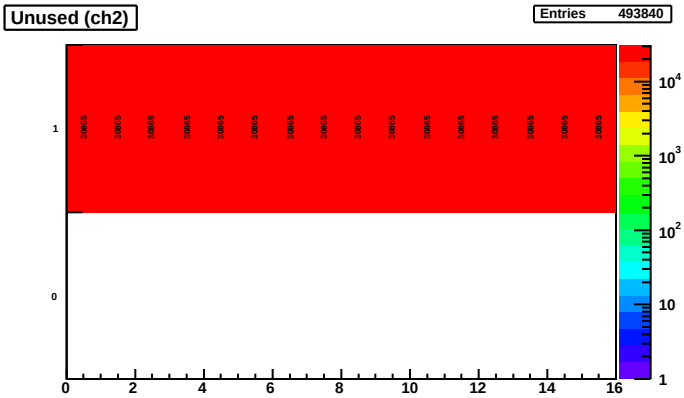
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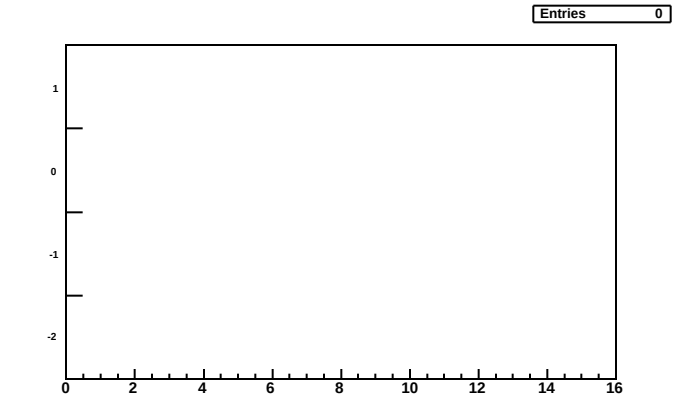
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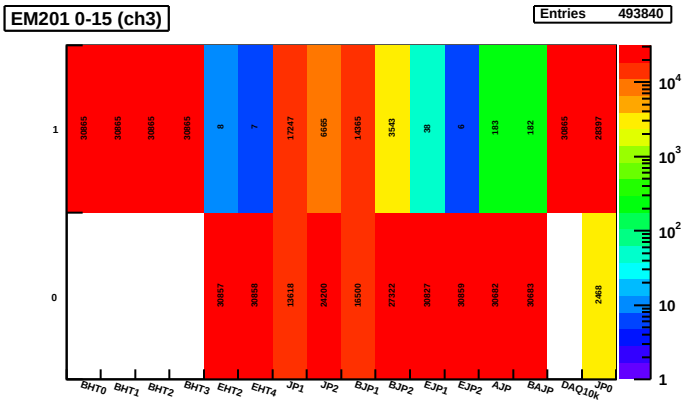
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Entries 493840
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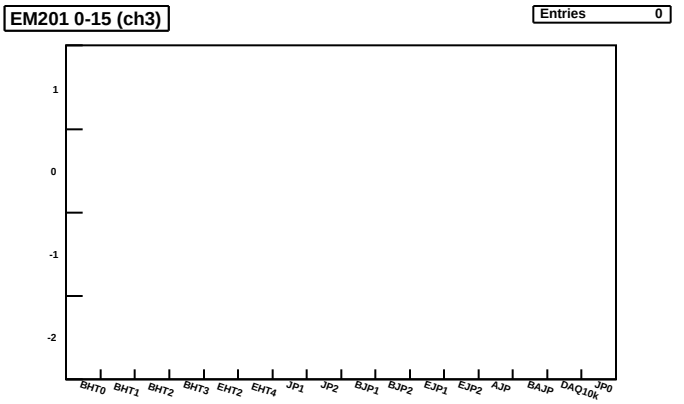
EM201 0-15 (ch3)
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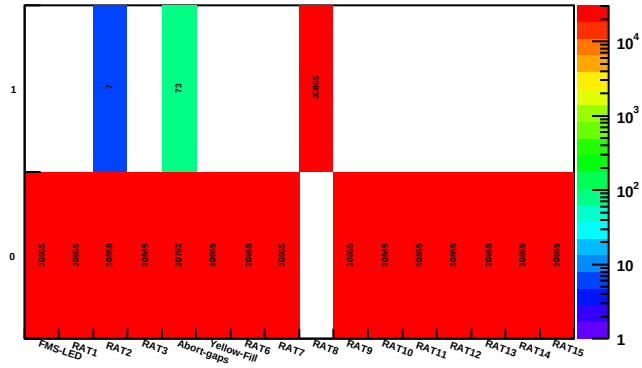
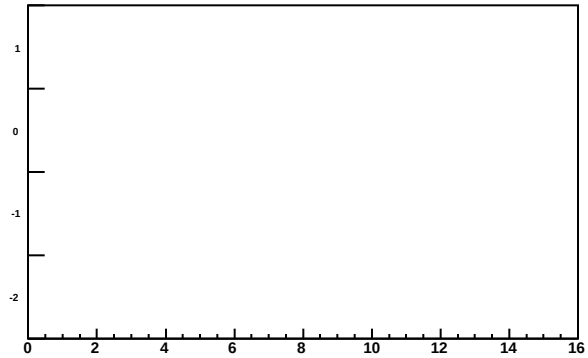
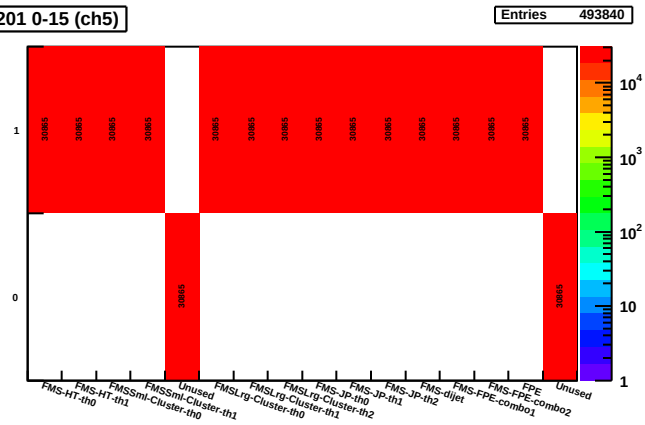
RAT board (ch4)





FP201 0-15 (ch5)



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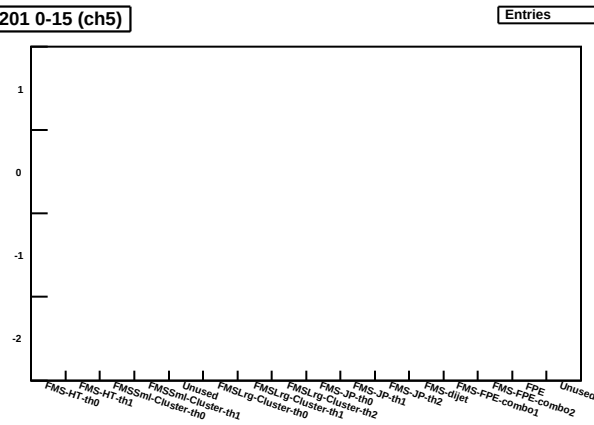
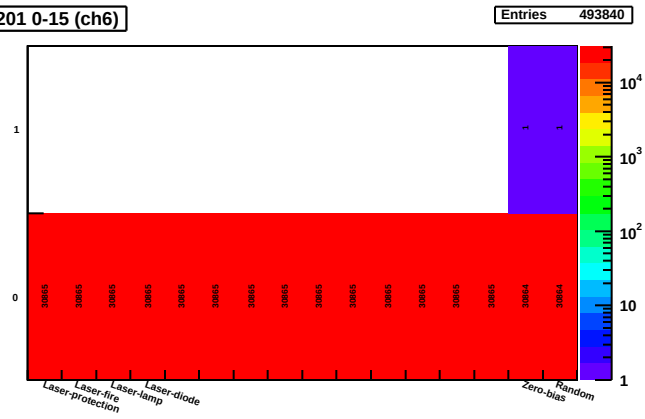
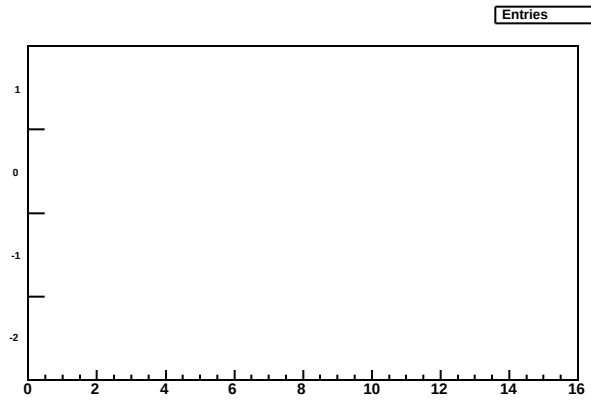
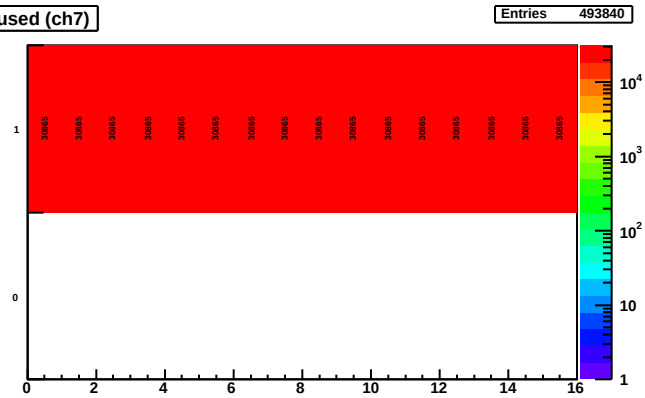
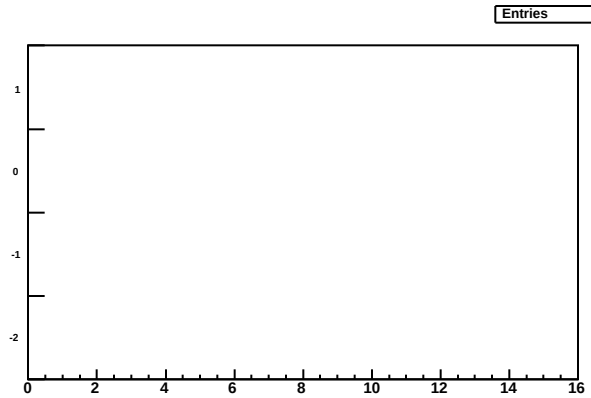


ST201 0-15 (ch6)





Unused (ch7)