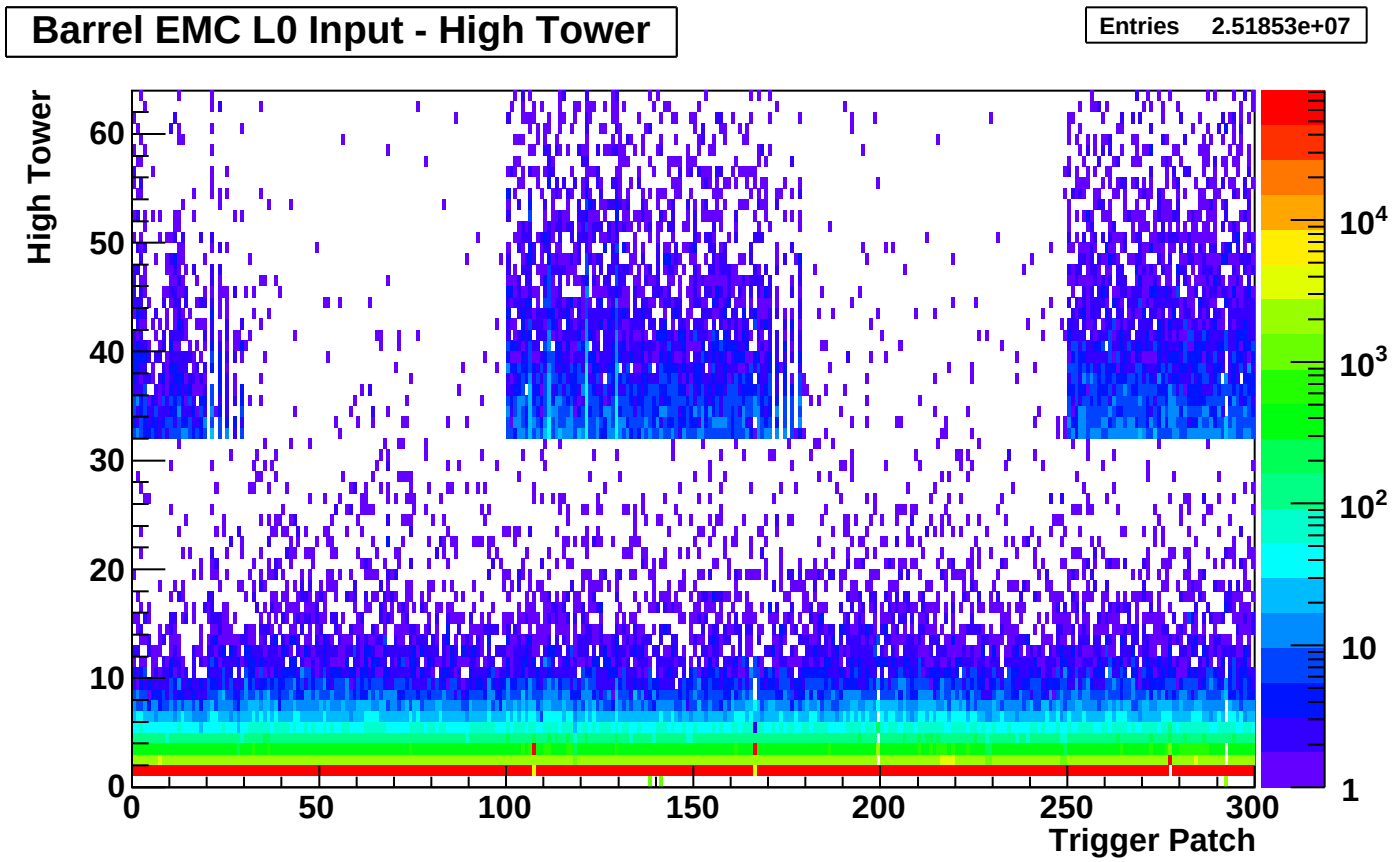
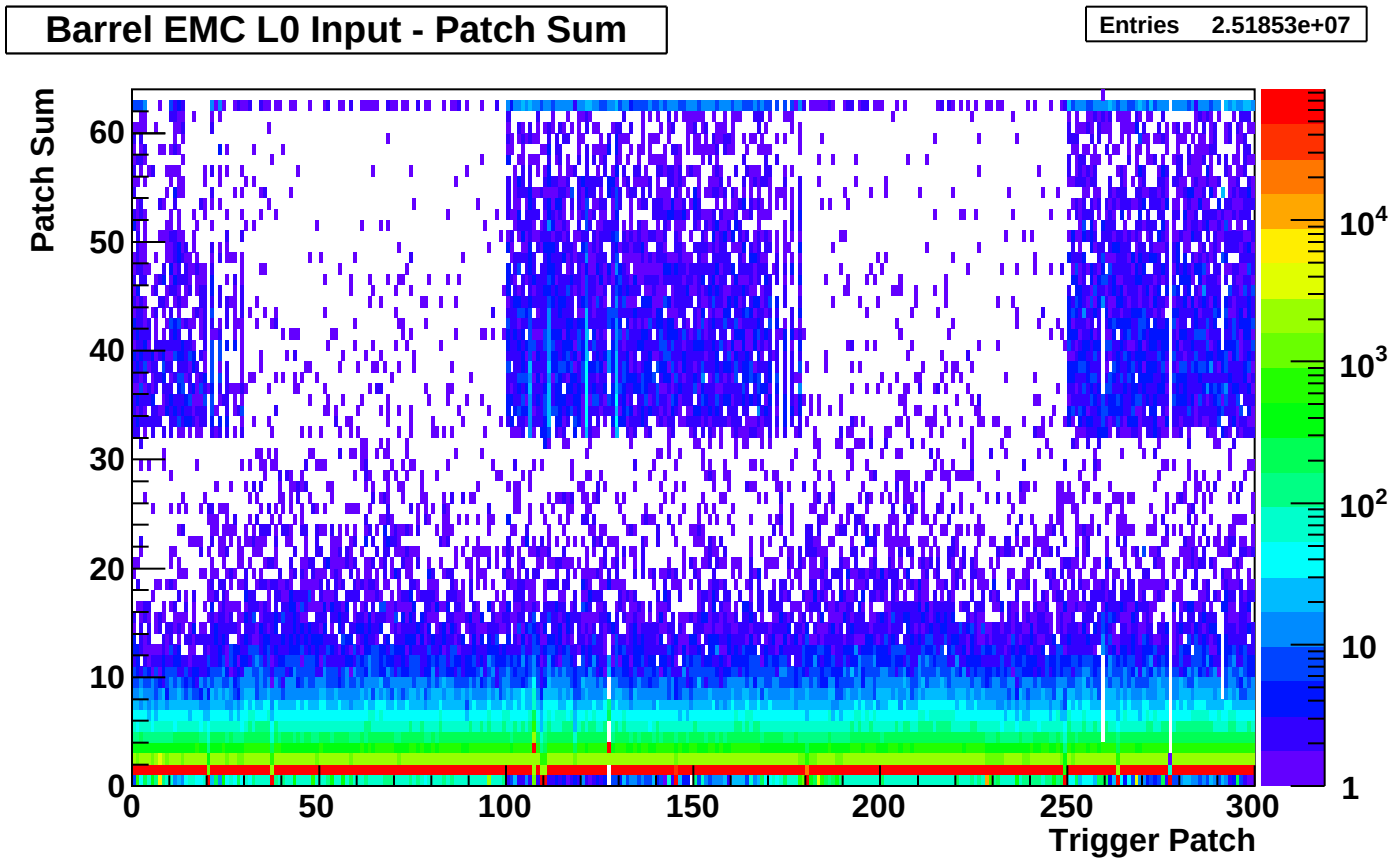
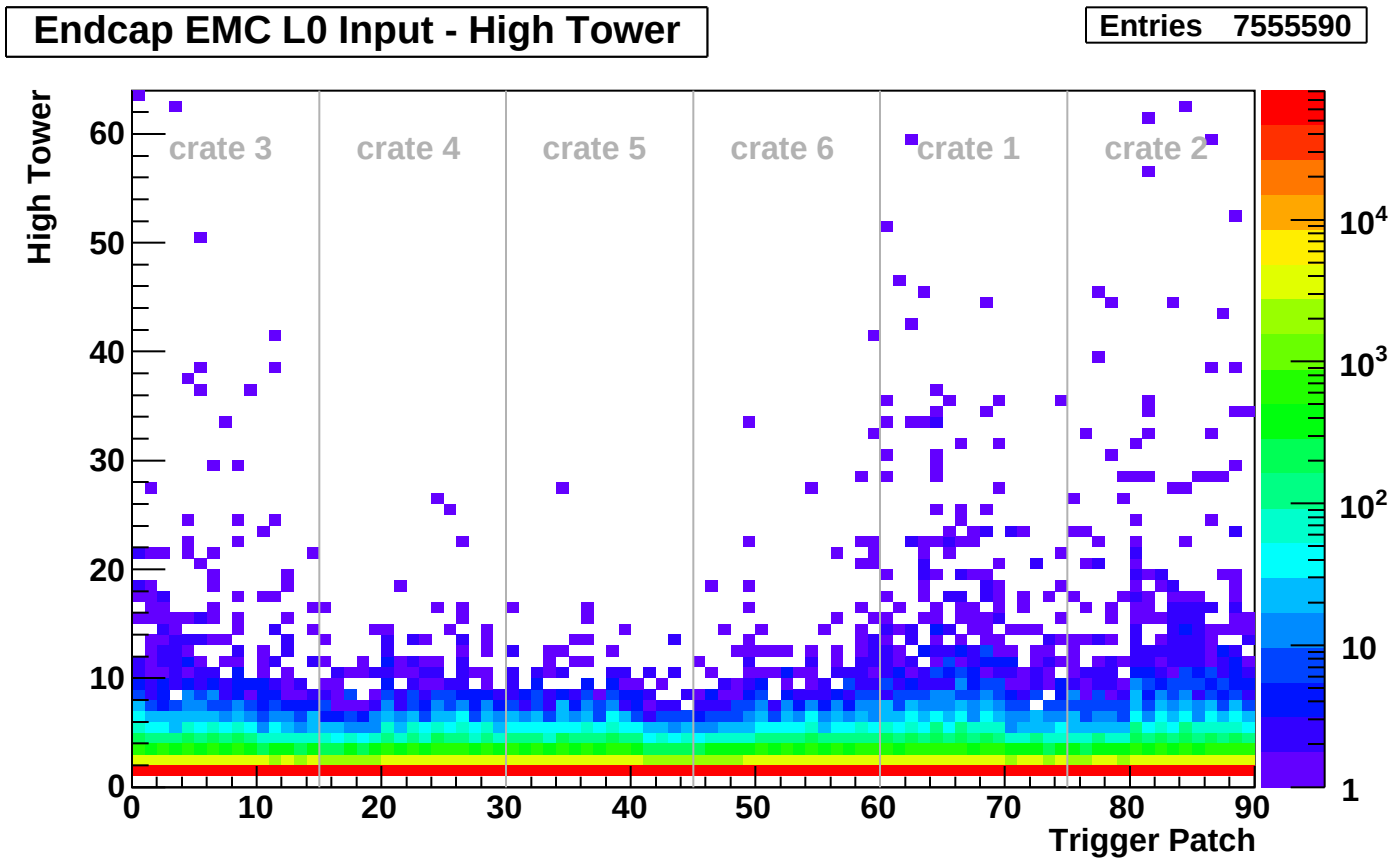
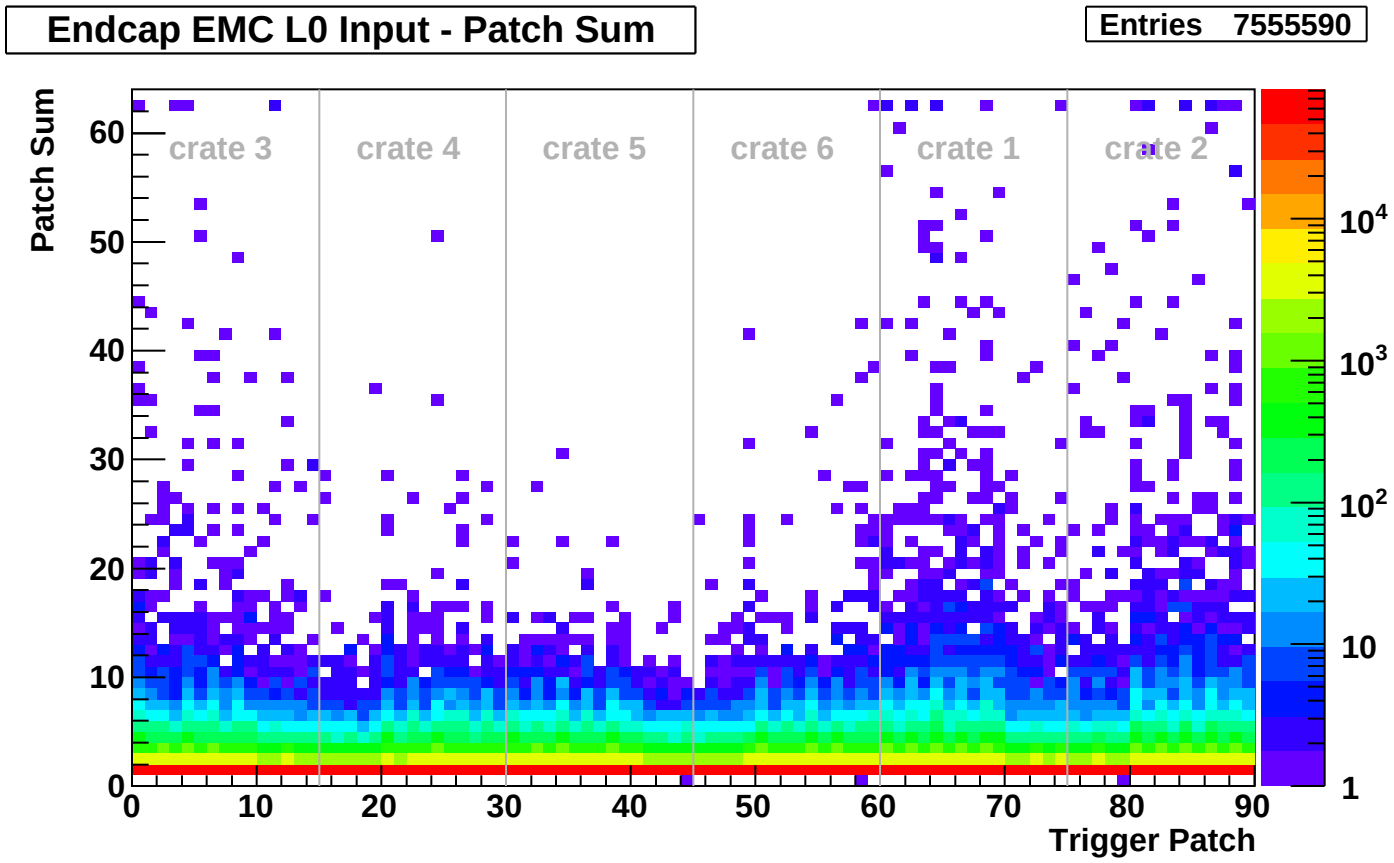
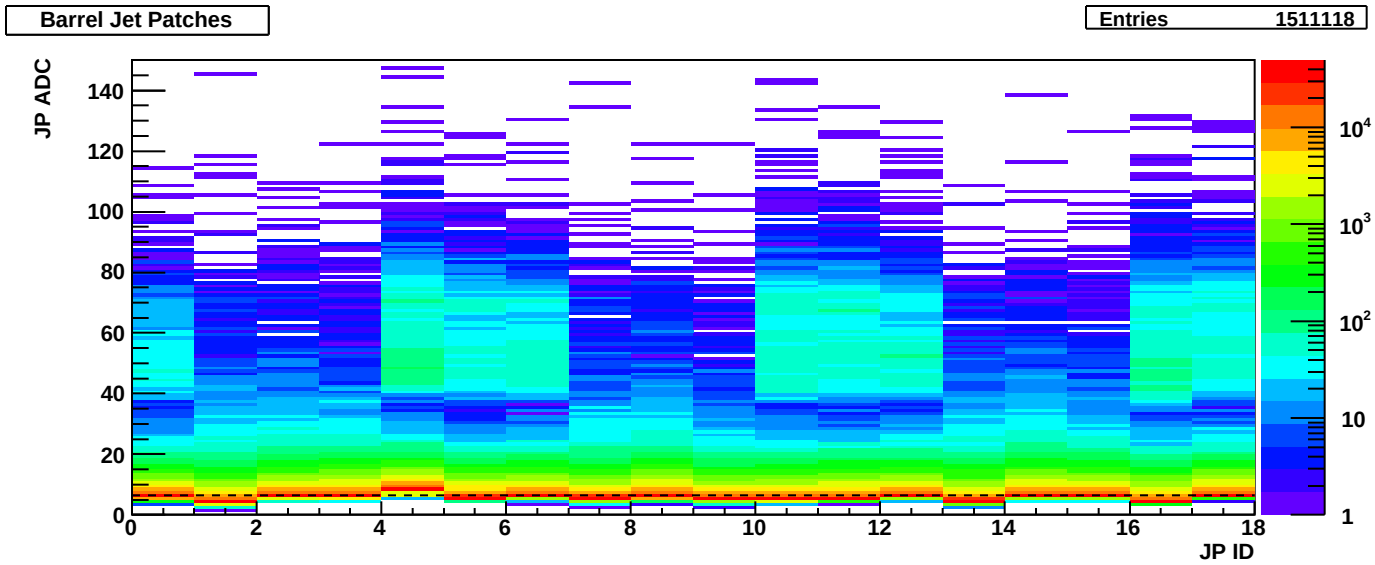
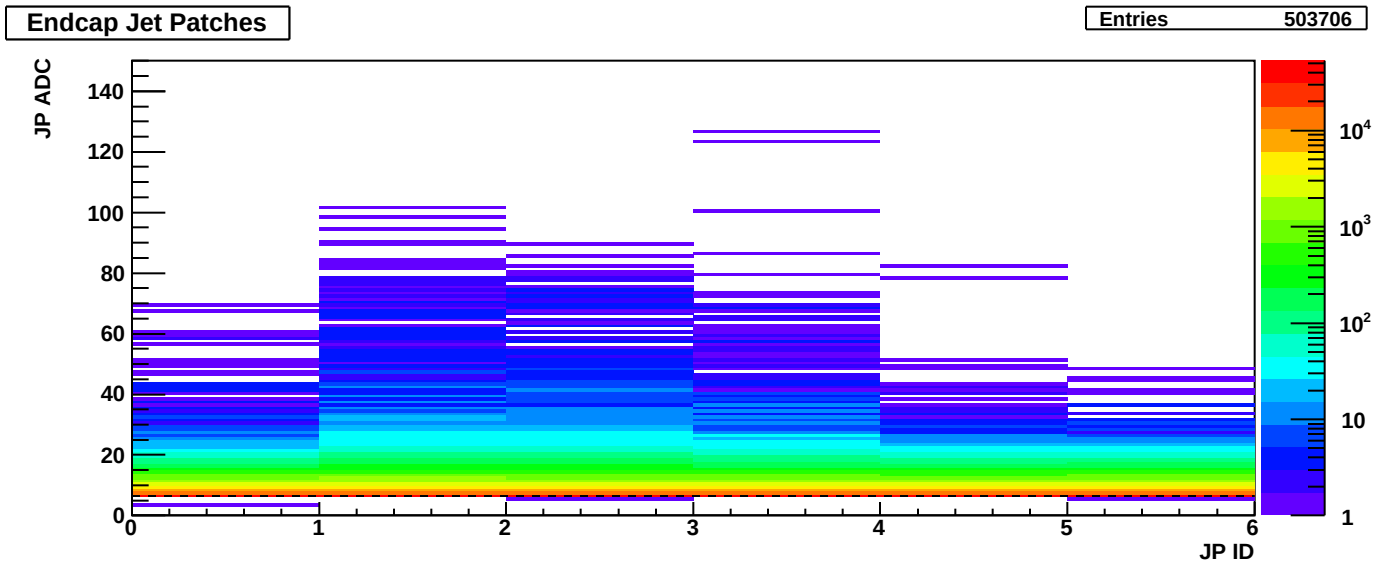

Barrel EMC L0 Input - High Tower
Entries 2.51853e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

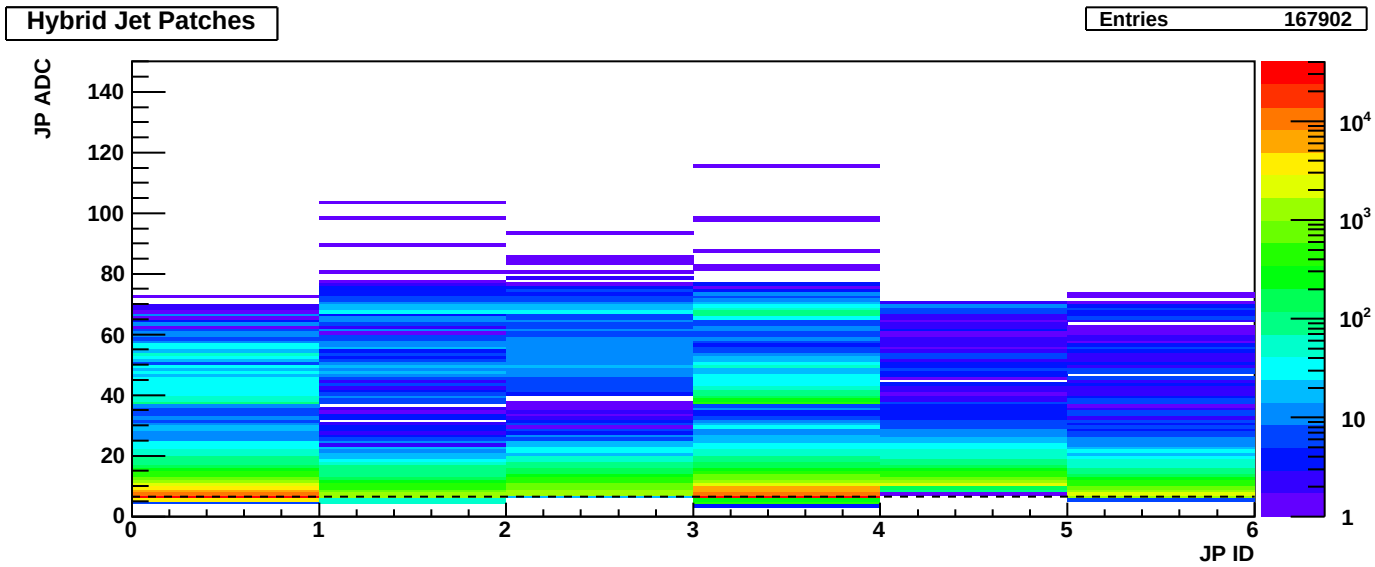

Barrel EMC L0 Input - Patch Sum
Entries 2.51853e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

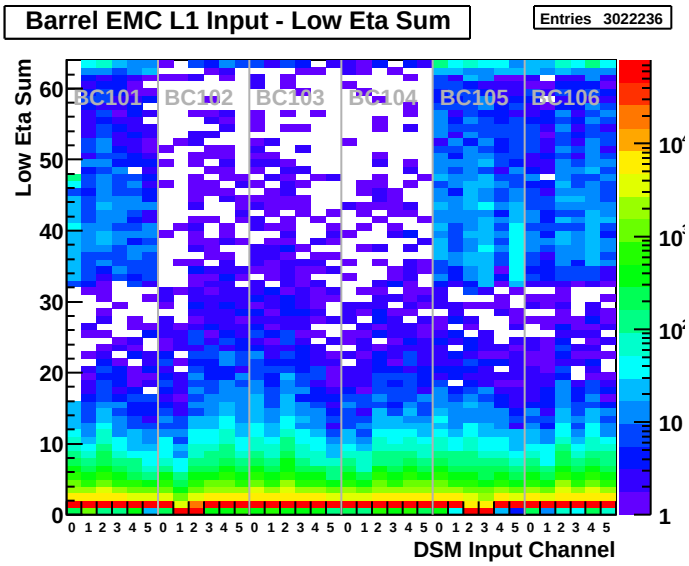

Endcap EMC L0 Input - High Tower
Entries 7555590
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

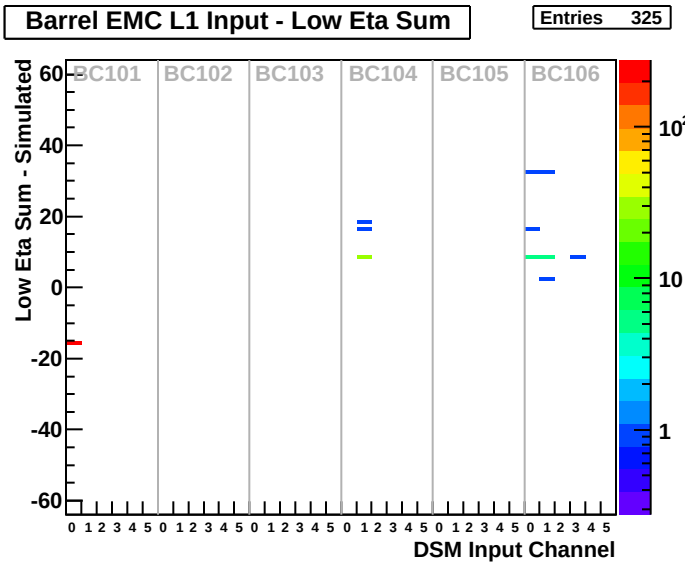

Endcap EMC L0 Input - Patch Sum
Entries 7555590
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

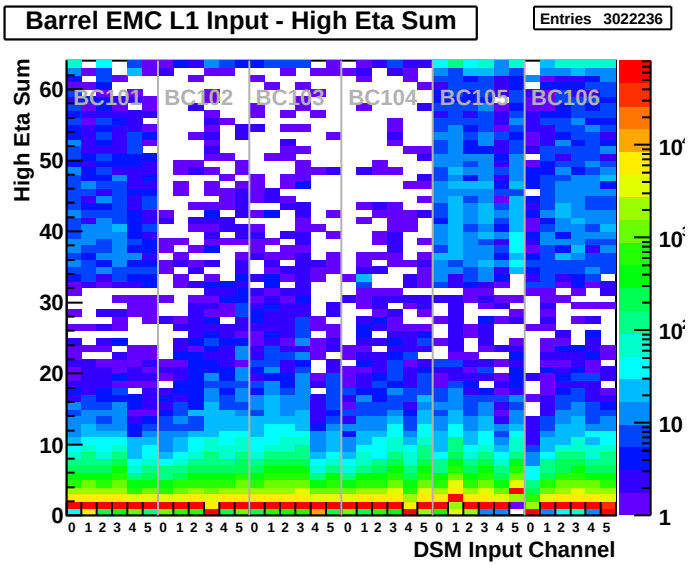

Barrel Jet Patches
Entries 1511118
JP ADC
JP ID

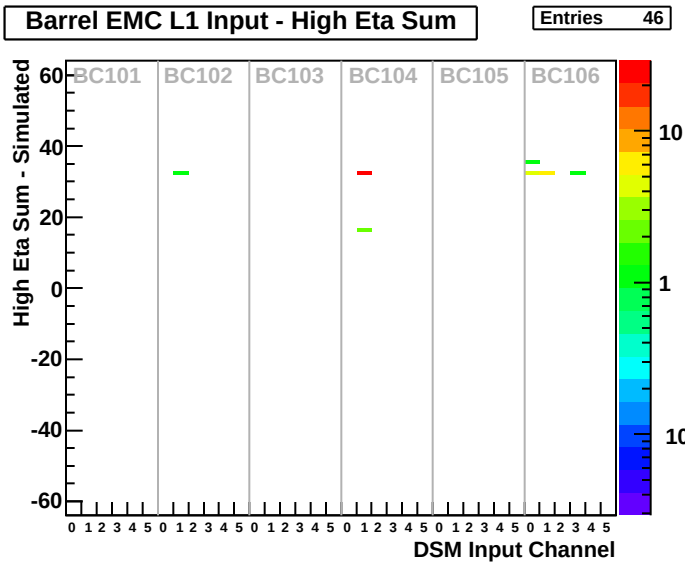

Endcap Jet Patches
Entries 503706
JP ADC
JP ID

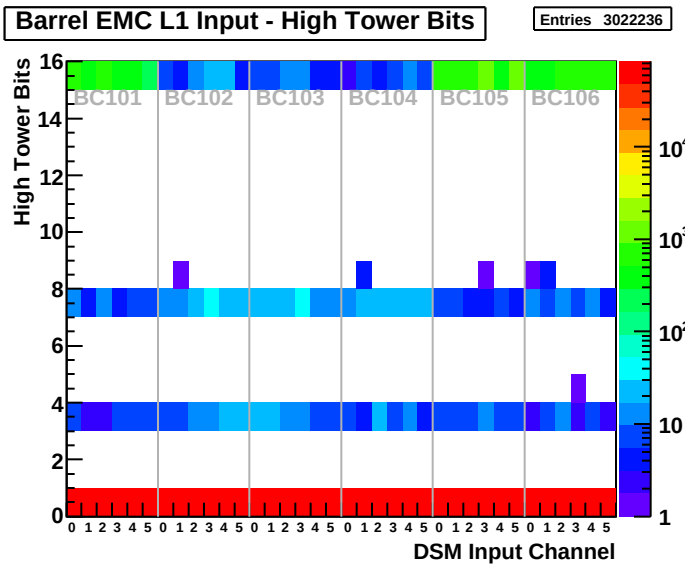

Hybrid Jet Patches
Entries 167902
JP ADC
JP ID

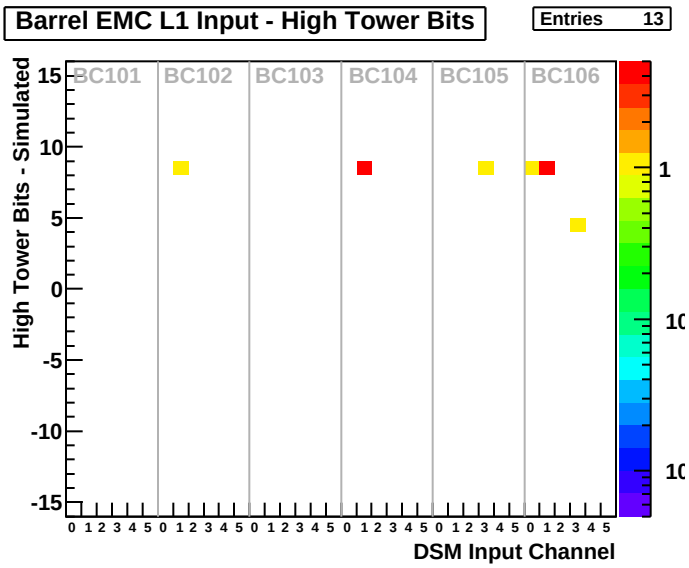

Barrel EMC L1 Input - Low Eta Sum
Entries 3022236
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

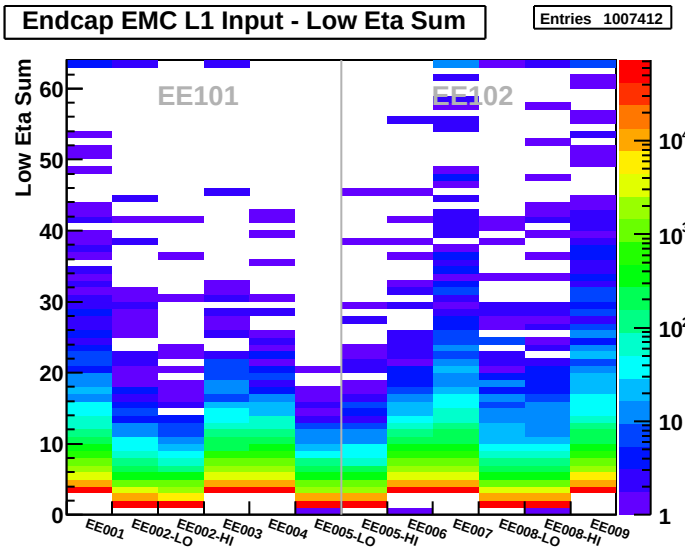

Barrel EMC L1 Input - Low Eta Sum
Entries 325
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

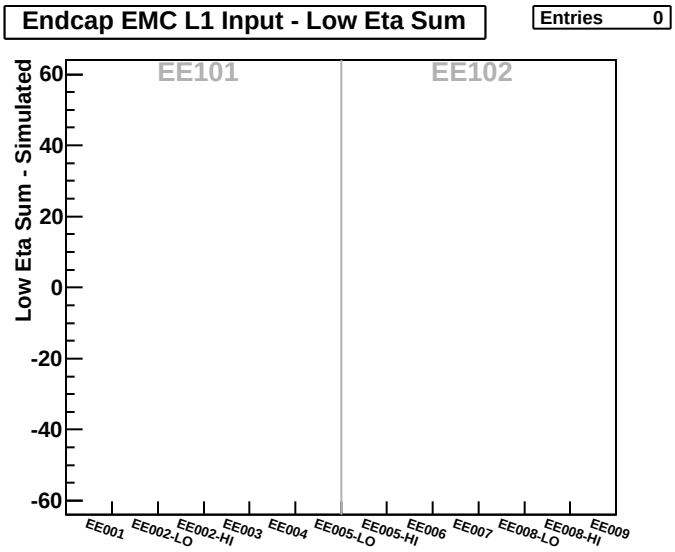

Barrel EMC L1 Input - High Eta Sum
Entries 3022236
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

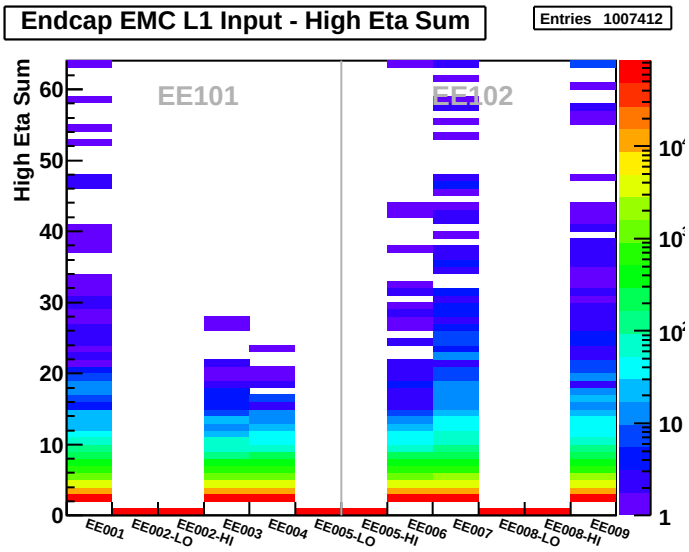

Barrel EMC L1 Input - High Eta Sum
Entries 46
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

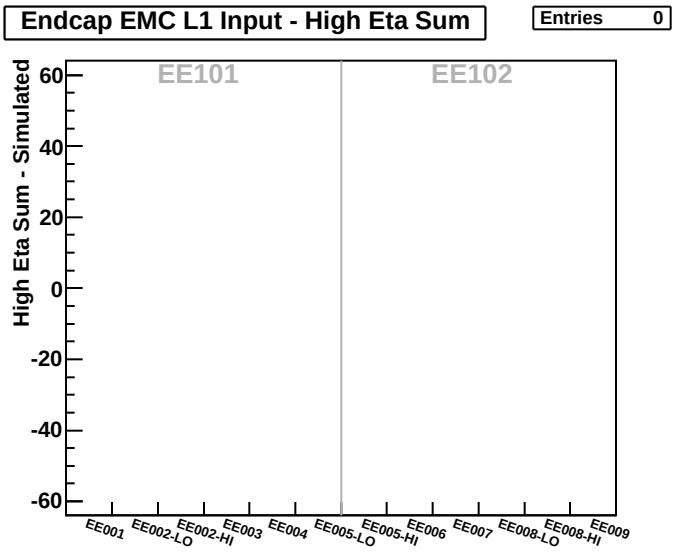

Barrel EMC L1 Input - High Tower Bits
Entries 3022236
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

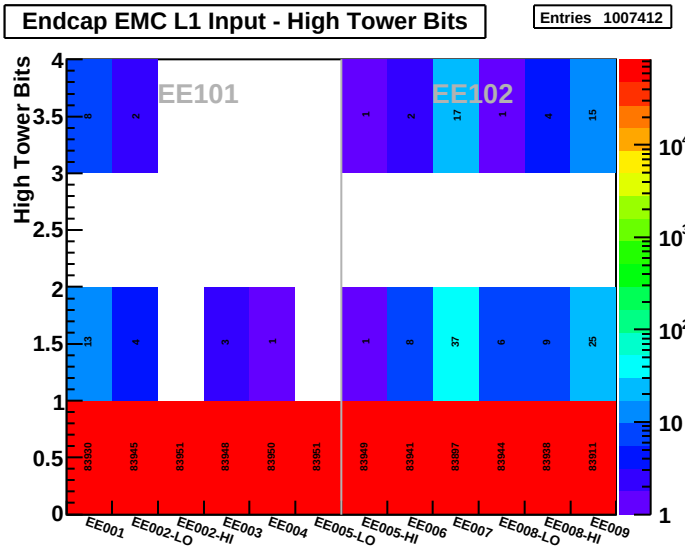

Barrel EMC L1 Input - High Tower Bits
Entries 13
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

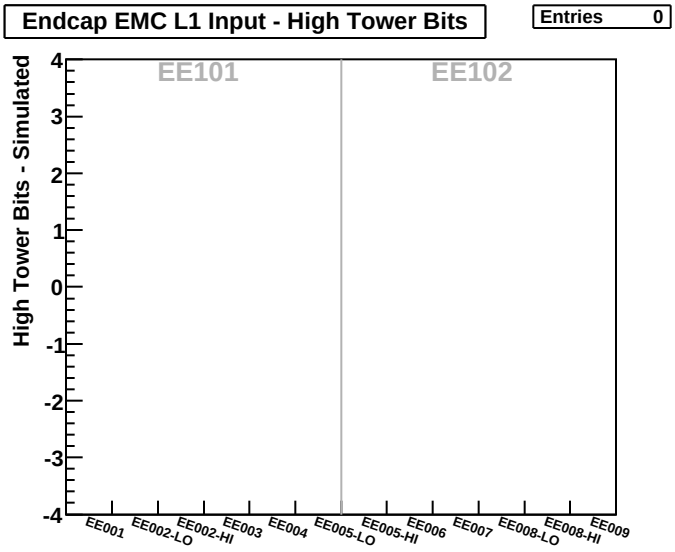

Endcap EMC L1 Input - Low Eta Sum
Entries 1007412
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

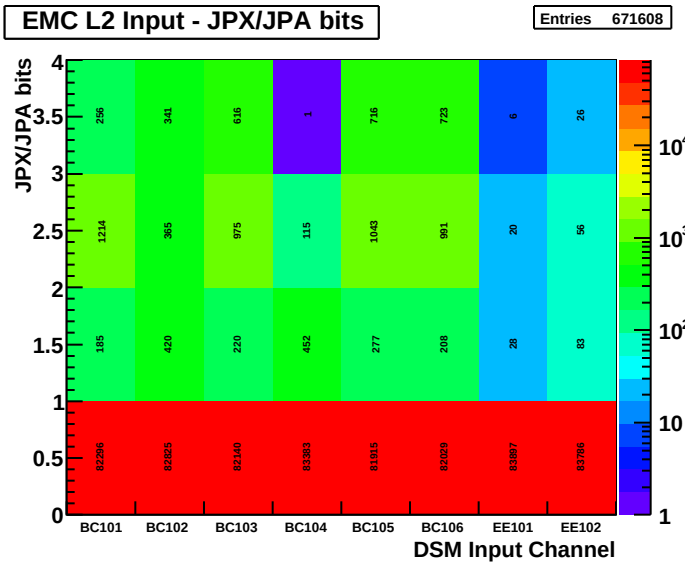

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

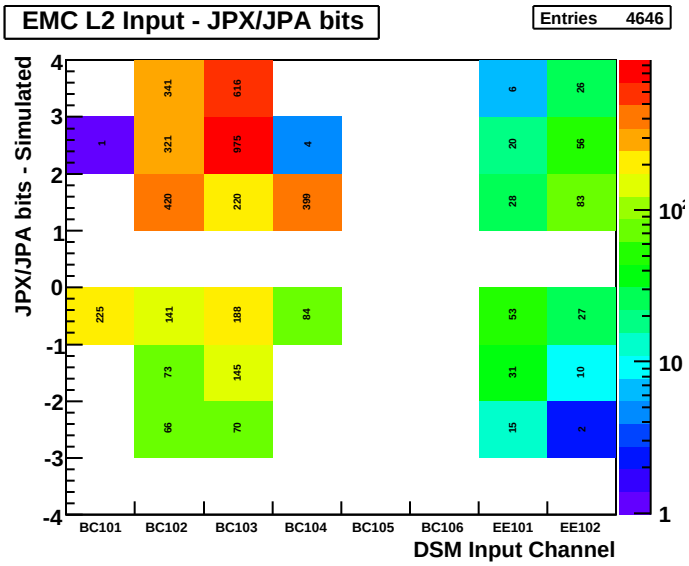

Endcap EMC L1 Input - High Eta Sum
Entries 1007412
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

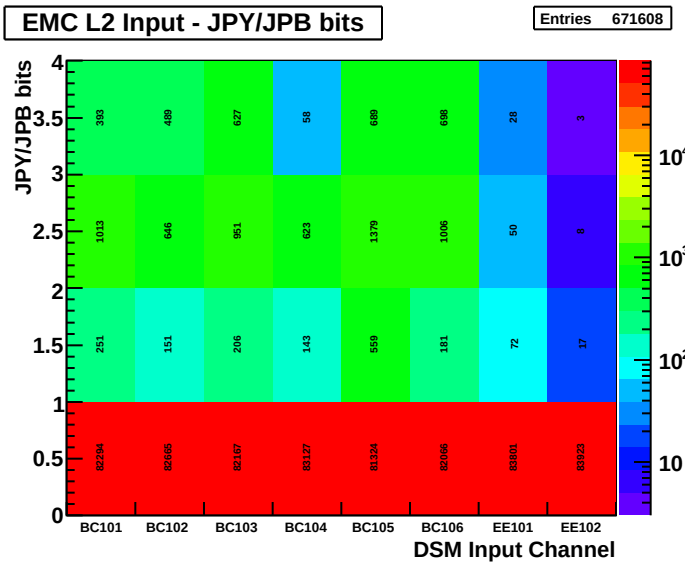

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

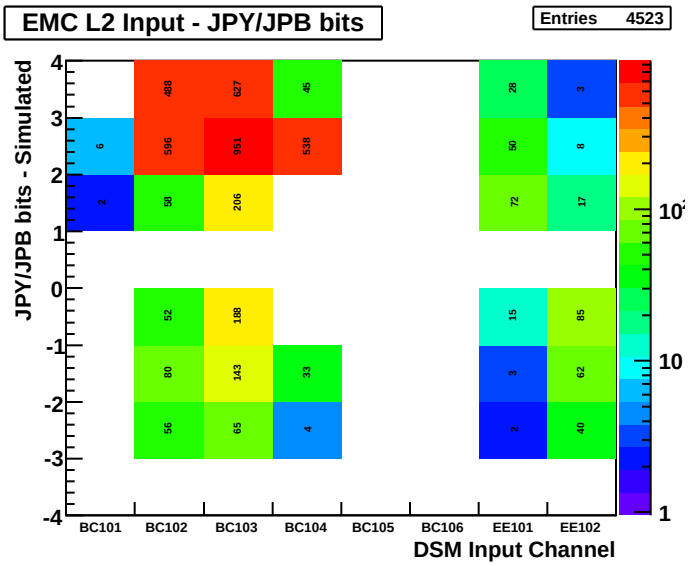

Endcap EMC L1 Input - High Tower Bits
Entries 1007412
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

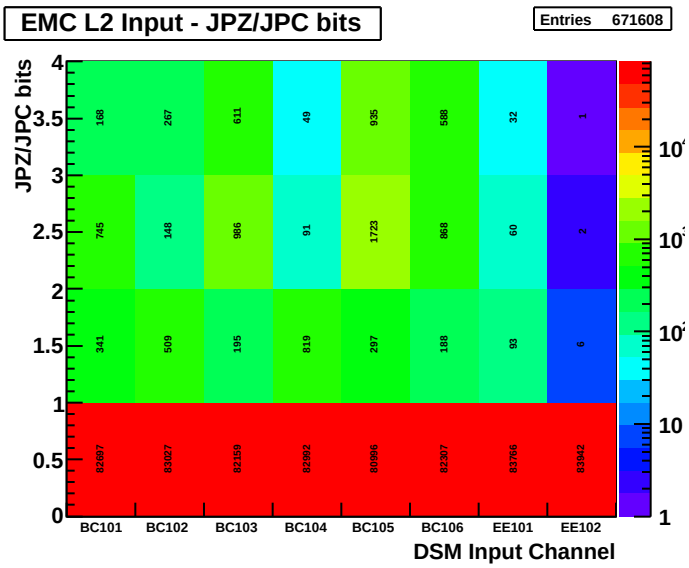

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

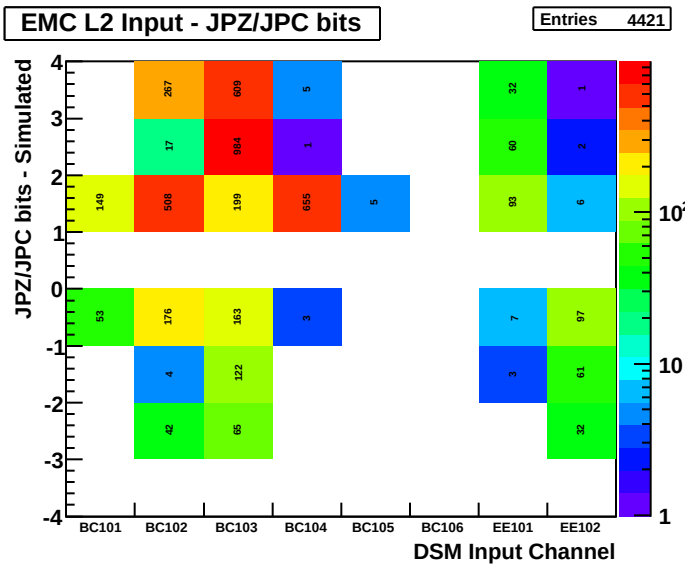

EMC L2 Input - JPX/JPA bits
Entries 671608
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

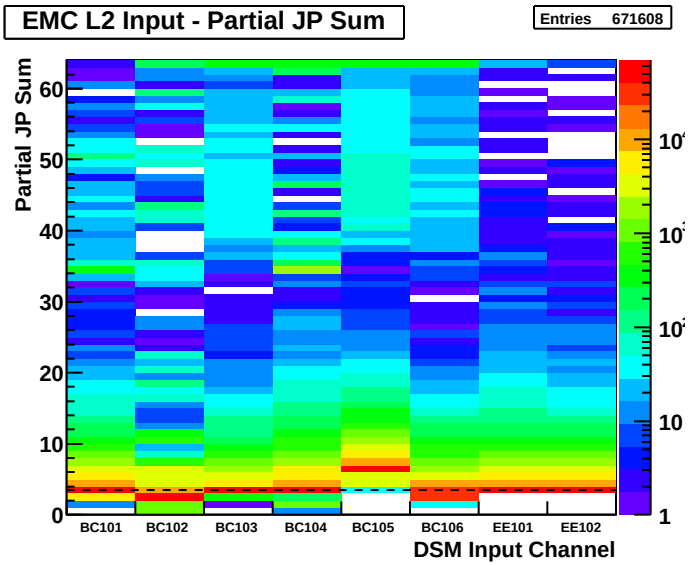

EMC L2 Input - JPX/JPA bits
Entries 4646
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

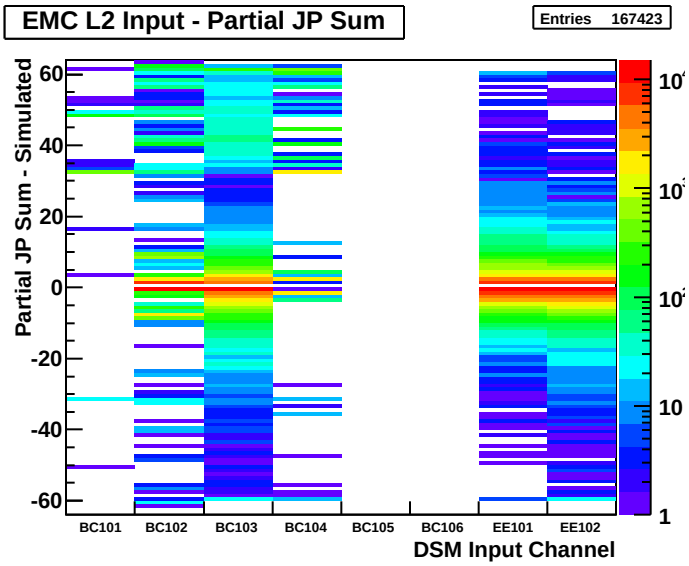

EMC L2 Input - JPY/JPB bits
Entries 671608
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

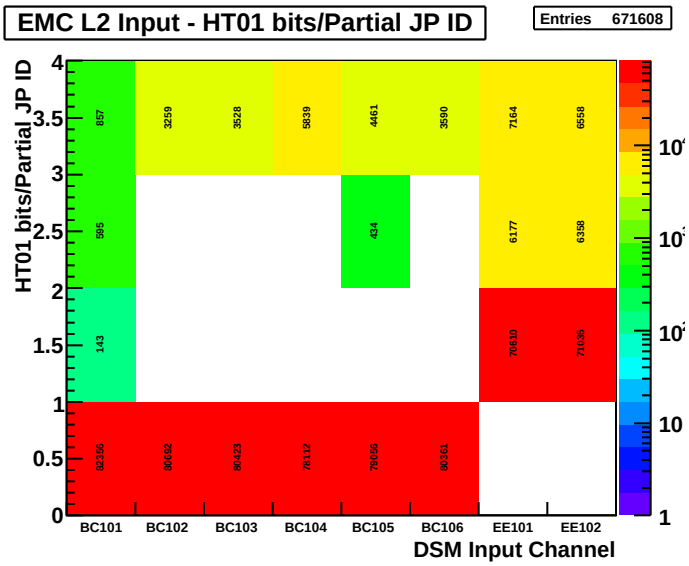

EMC L2 Input - JPY/JPB bits
Entries 4523
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

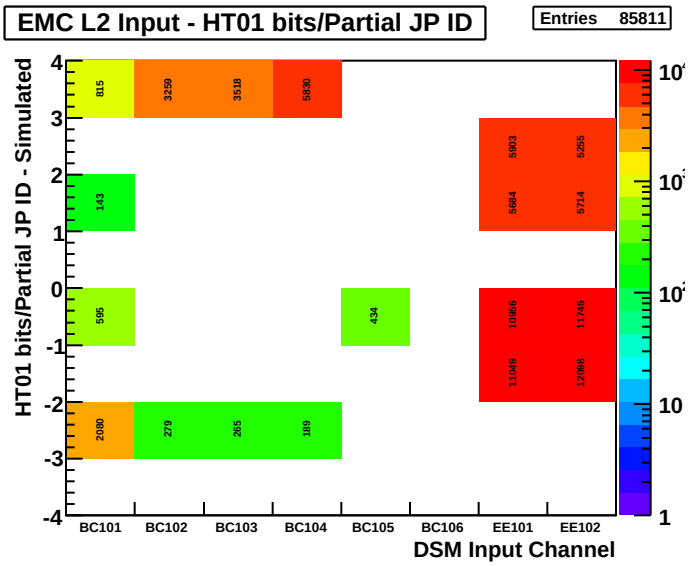

EMC L2 Input - JPZ/JPC bits
Entries 671608
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

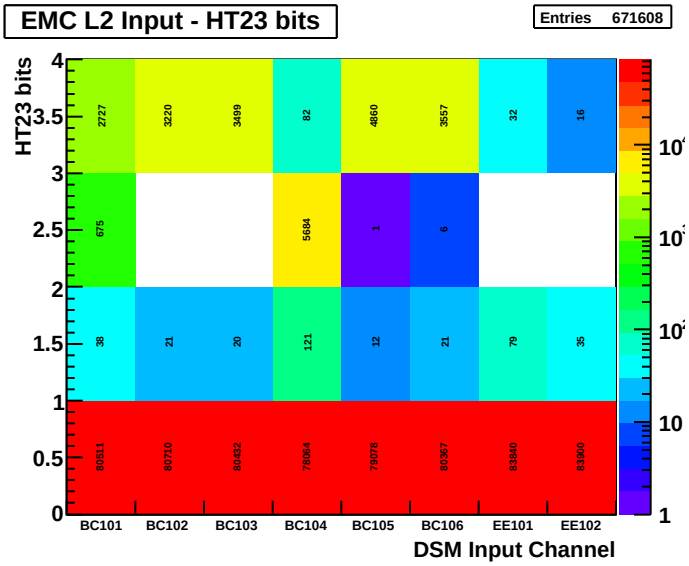

EMC L2 Input - JPZ/JPC bits
Entries 4421
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

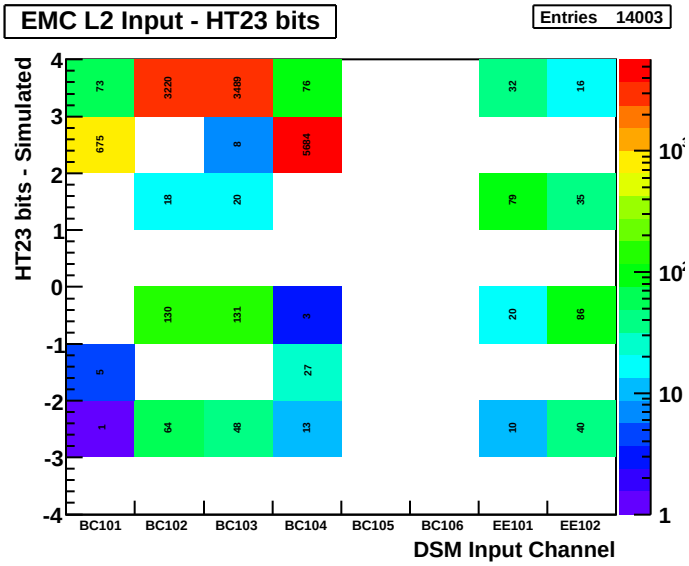

EMC L2 Input - Partial JP Sum
Entries 671608
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

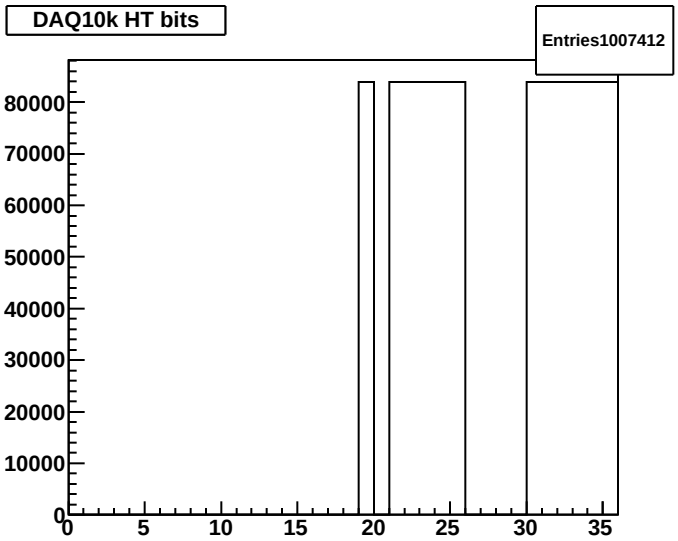

EMC L2 Input - Partial JP Sum
Entries 167423
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

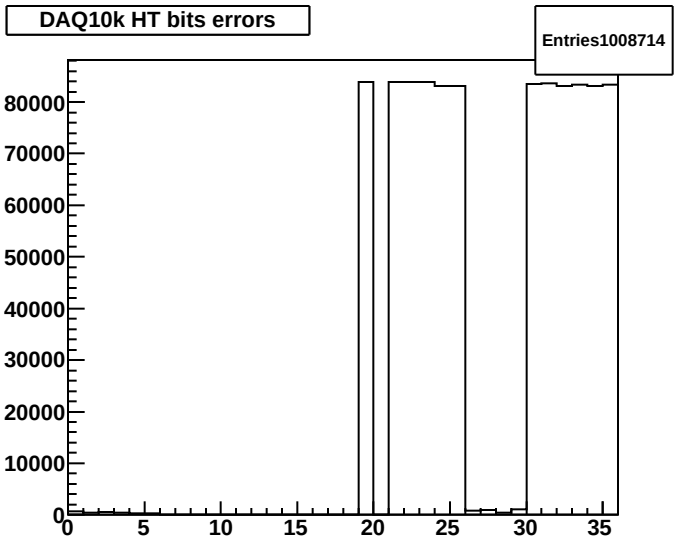

EMC L2 Input - HT01 bits/Partial JP ID
Entries 671608
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

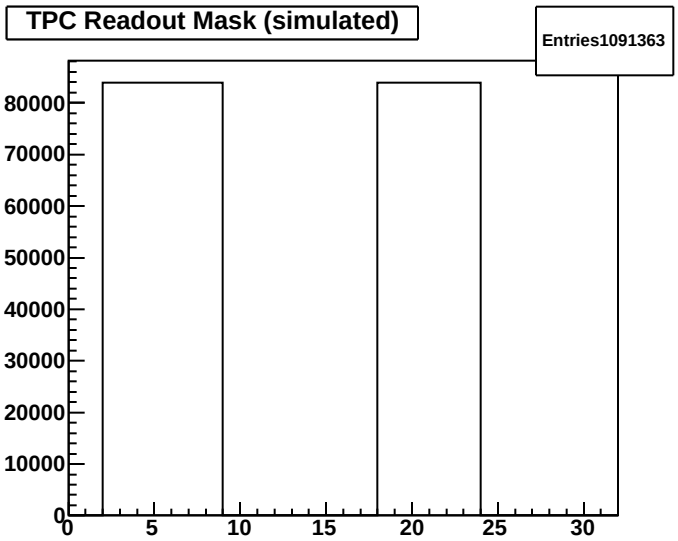

EMC L2 Input - HT01 bits/Partial JP ID
Entries 85811
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

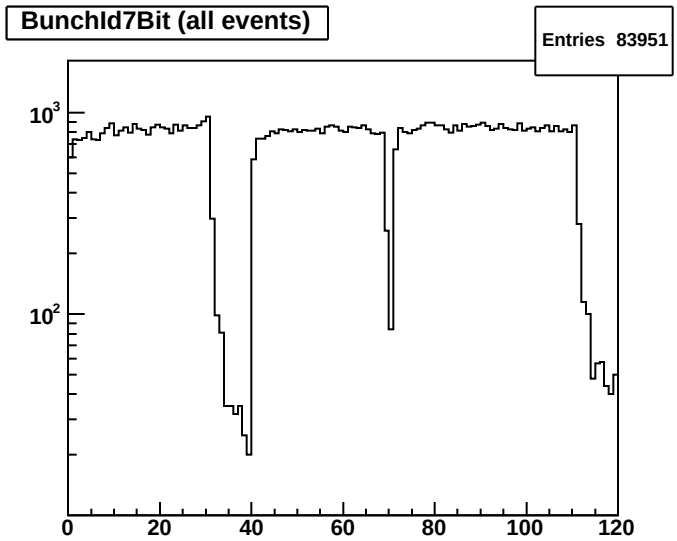

EMC L2 Input - HT23 bits
Entries 671608
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

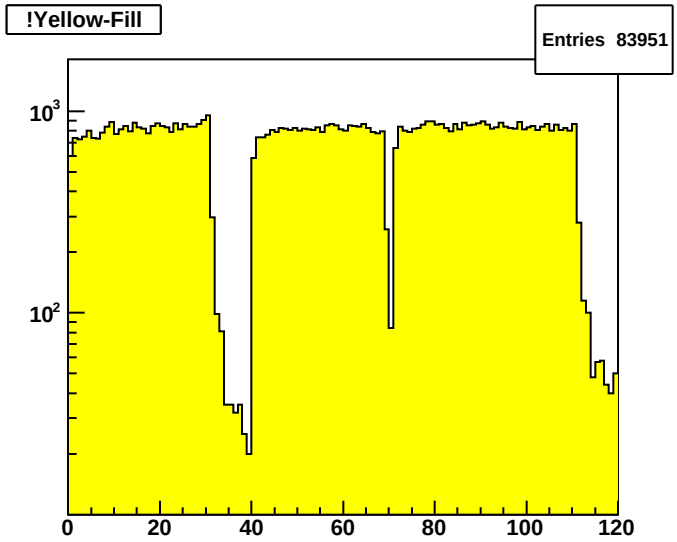

EMC L2 Input - HT23 bits
Entries 14003
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

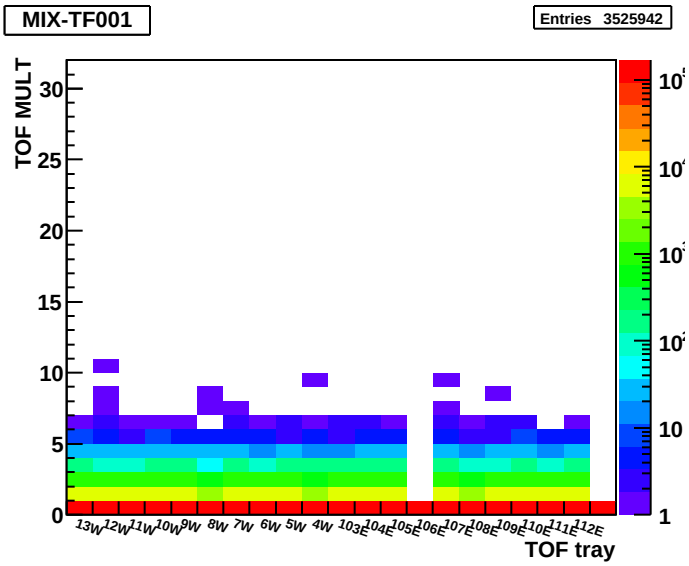

DAQ10k HT bits
Entries1007412
80000
70000
60000
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

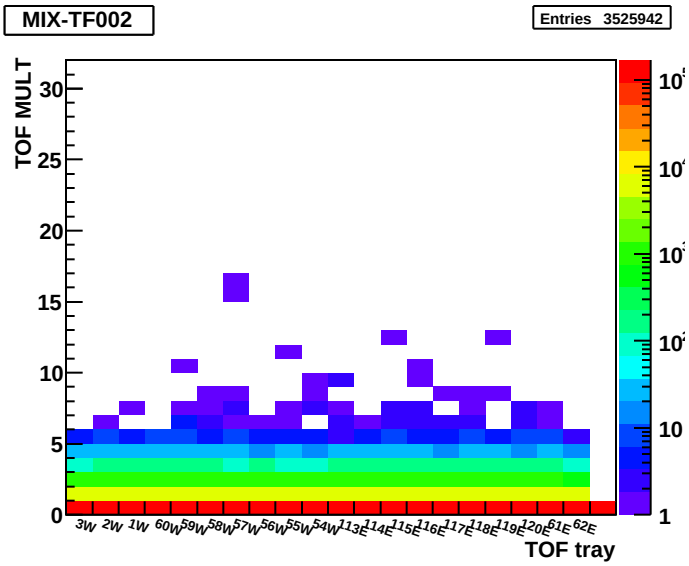

DAQ10k HT bits errors
Entries1008714
80000
70000
60000
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

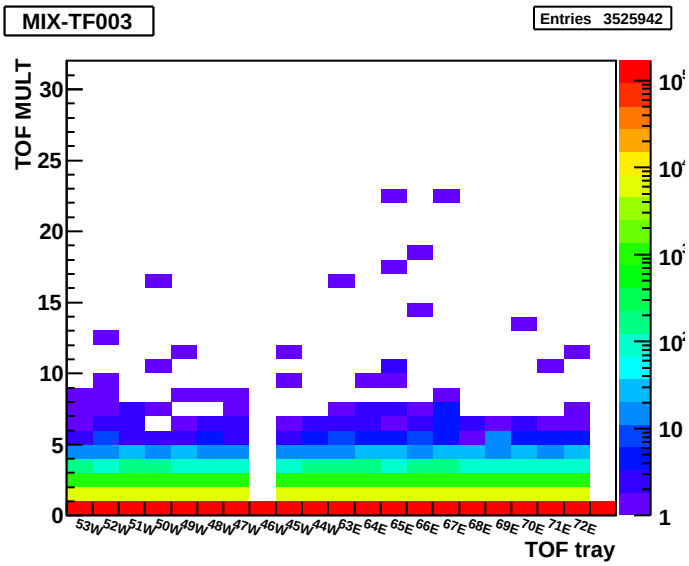

TPC Readout Mask (simulated)
Entries1091363
80000
70000
60000
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30

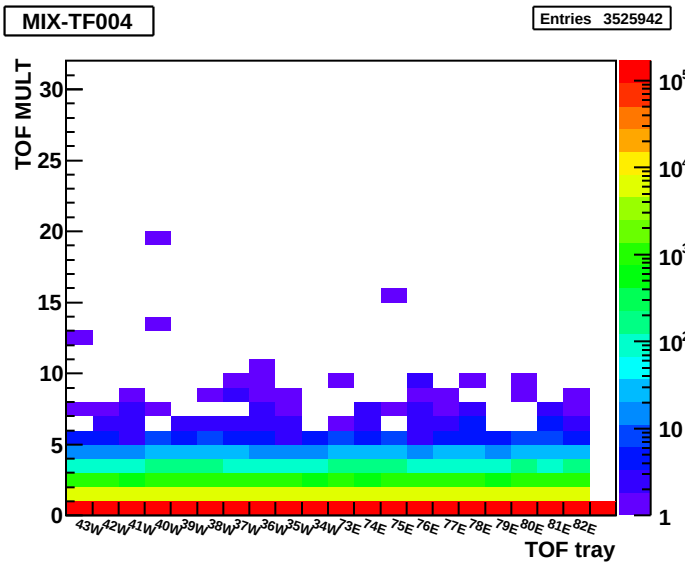

BunchId7Bit (all events)
Entries 83951
10^3
10^2
0 20 40 60 80 100 120

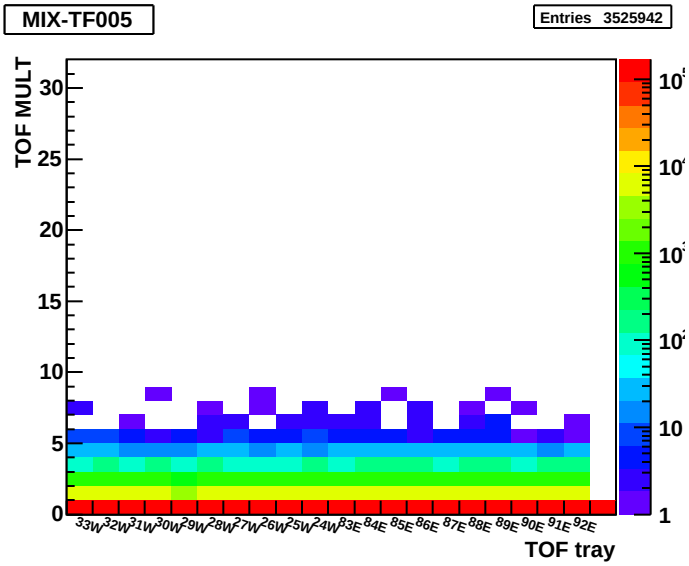

!Yellow-Fill
Entries 83951
10^3
10^2
0 20 40 60 80 100 120

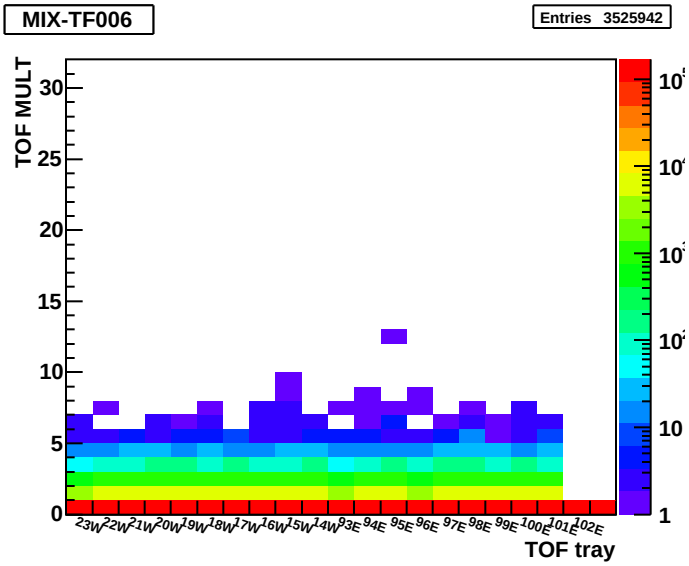

MIX-TF001
Entries 3525942
TOF MULT
TOF tray

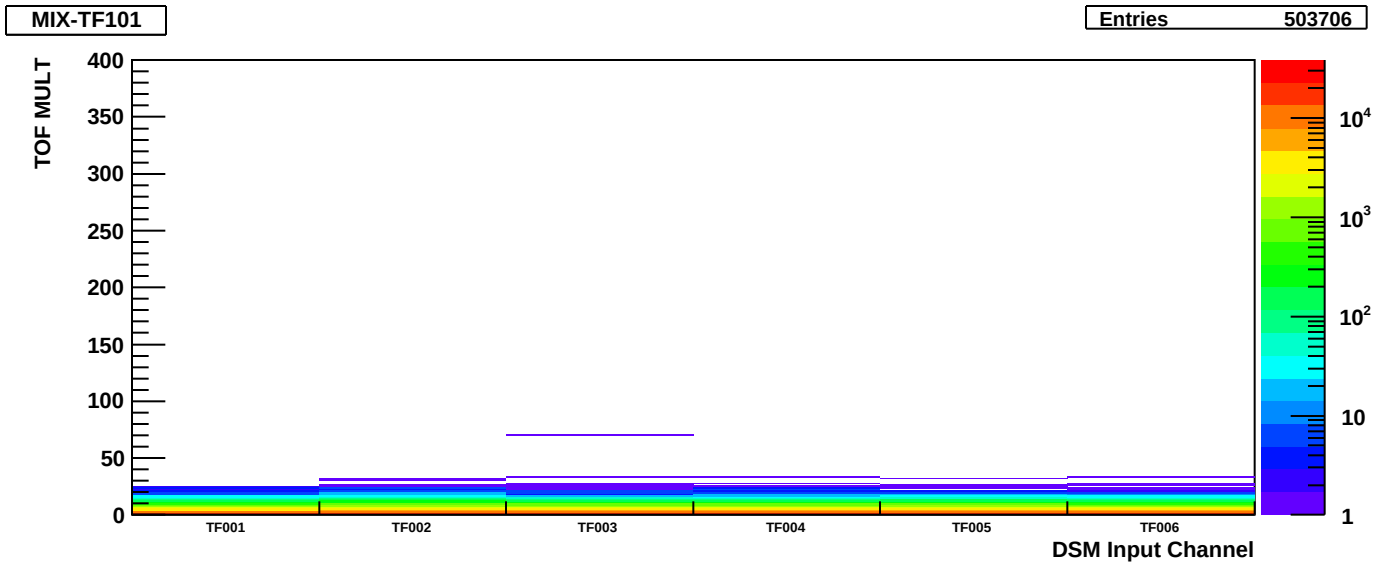

MIX-TF002
Entries 3525942
TOF MULT
TOF tray

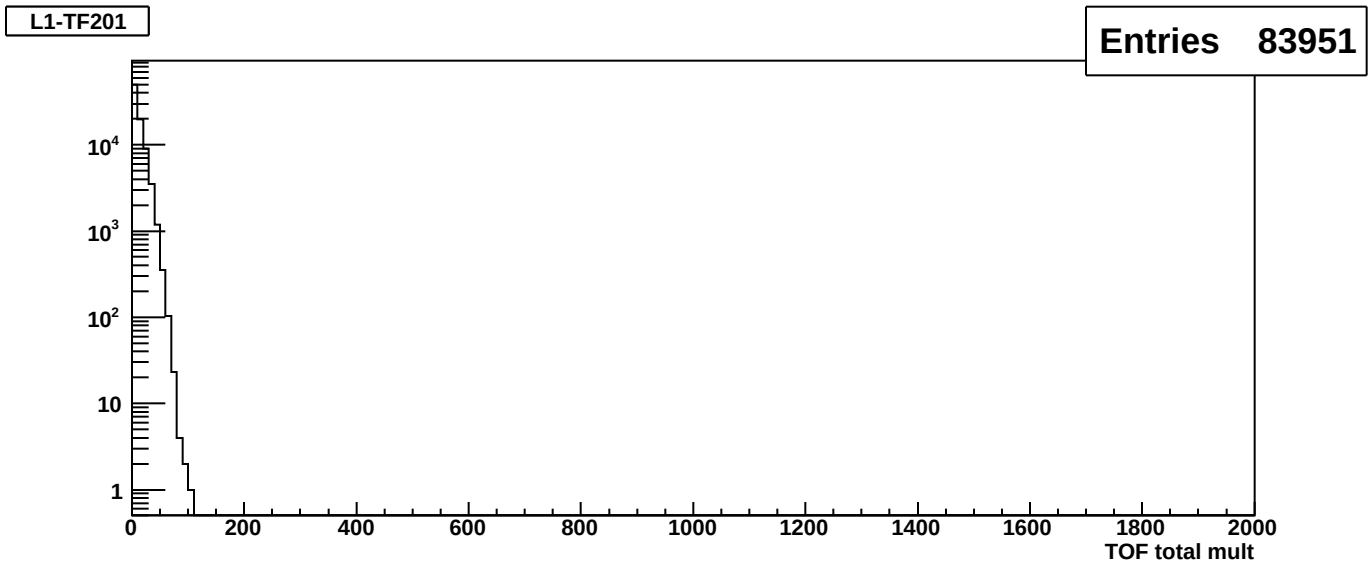

MIX-TF003
Entries 3525942
TOF MULT
TOF tray

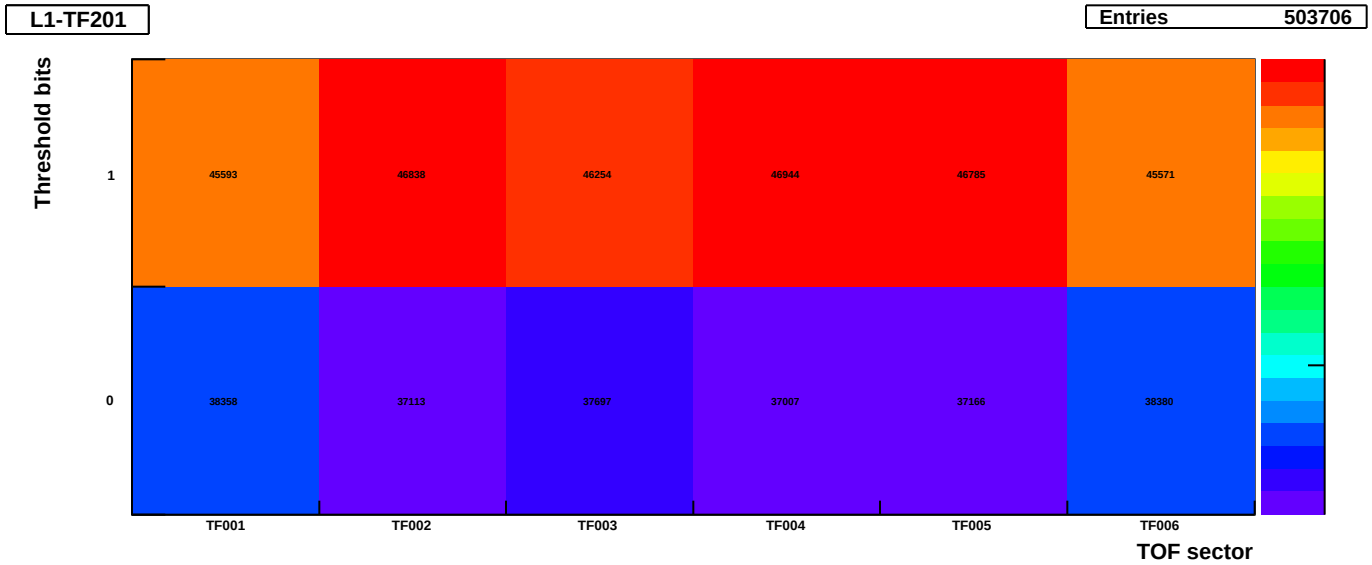

MIX-TF004
Entries 3525942
TOF MULT
TOF tray

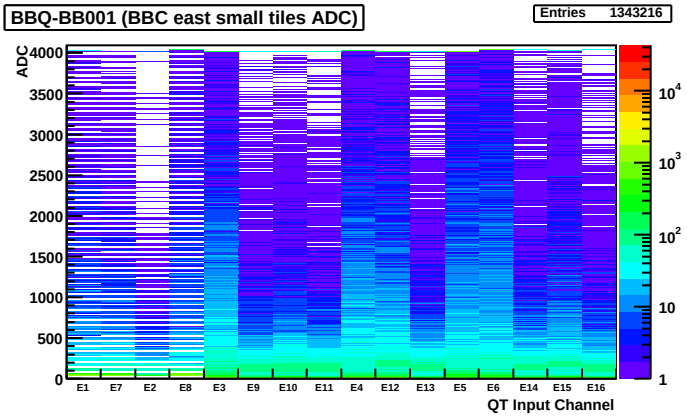

MIX-TF005
Entries 3525942
TOF MULT
TOF tray

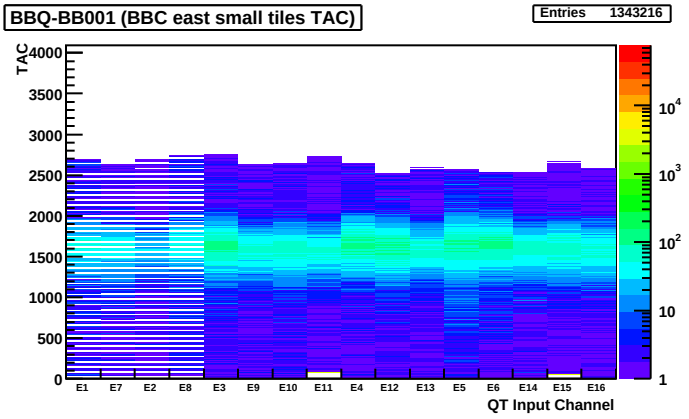

MIX-TF006
Entries 3525942
TOF MULT
TOF tray

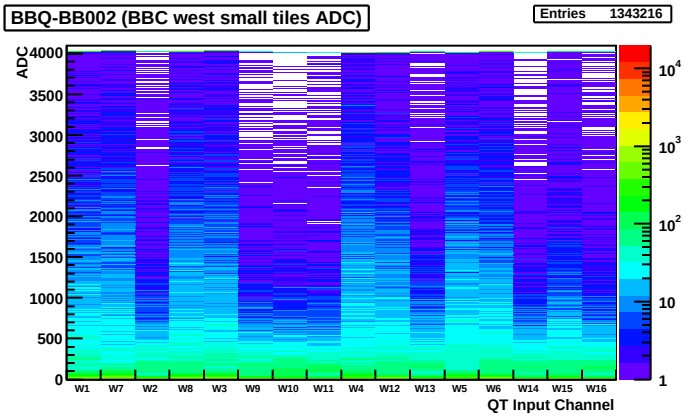

MIX-TF101
Entries 503706
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

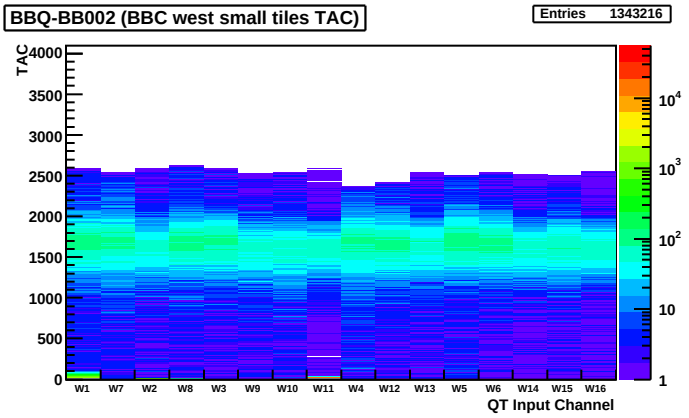

L1-TF201
Entries 83951
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

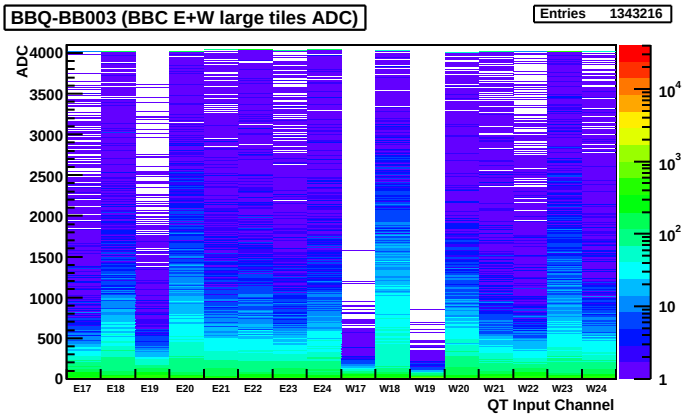

L1-TF201
Entries 503706
Threshold bits
1
0
45593
46838
46254
46944
46785
45571
38358
37113
37697
37007
37166
38380
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

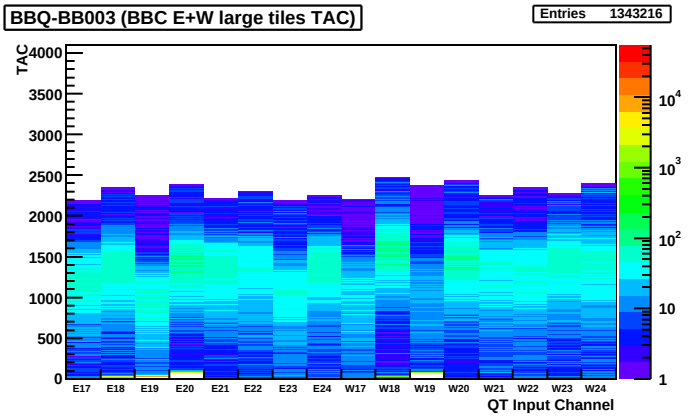

BBQ-BB001 (BBC east small tiles ADC)
Entries 1343216
ADC
QT Input Channel

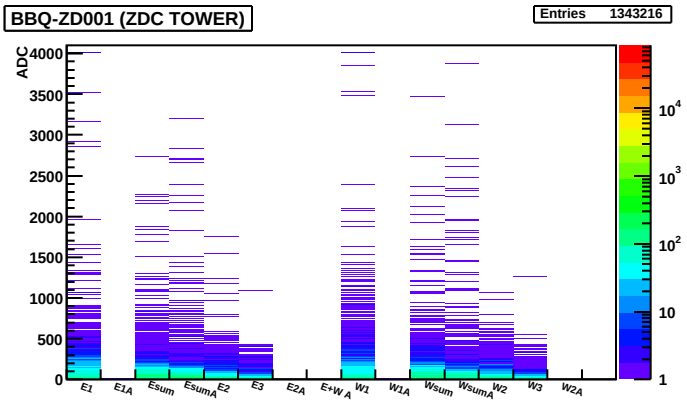

BBQ-BB001 (BBC east small tiles TAC)
Entries 1343216
TAC
QT Input Channel

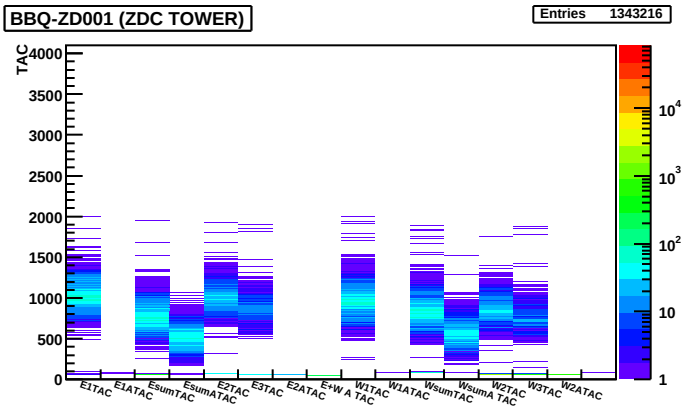

BBQ-BB002 (BBC west small tiles ADC)
Entries 1343216
ADC
QT Input Channel

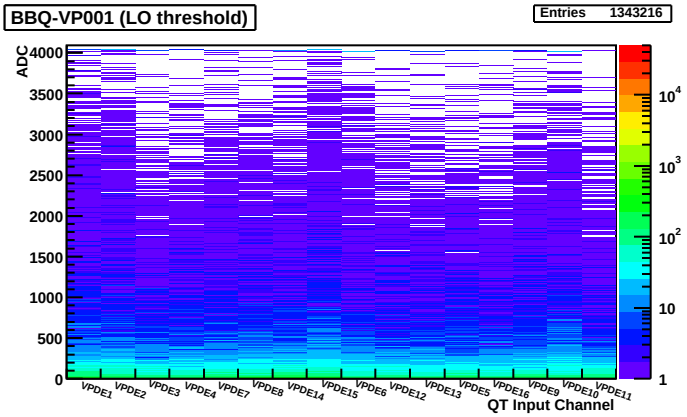

BBQ-BB002 (BBC west small tiles TAC)
Entries 1343216
TAC
QT Input Channel

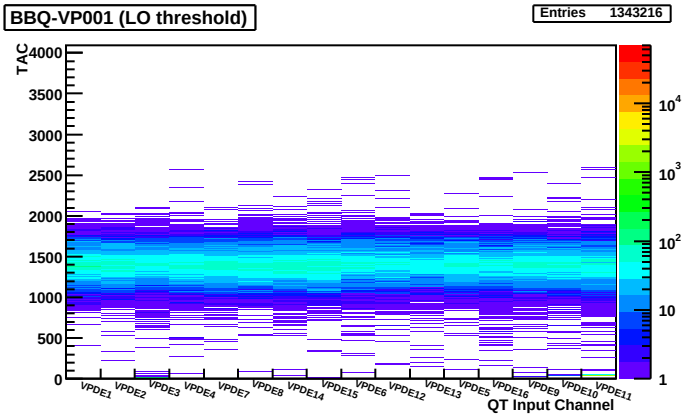

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1343216
ADC
QT Input Channel

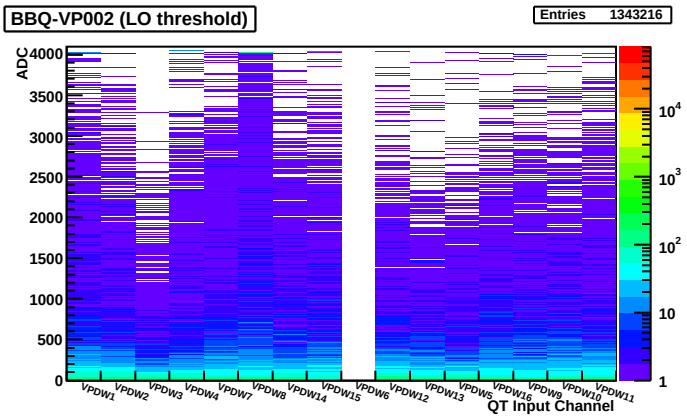

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1343216
TAC
QT Input Channel

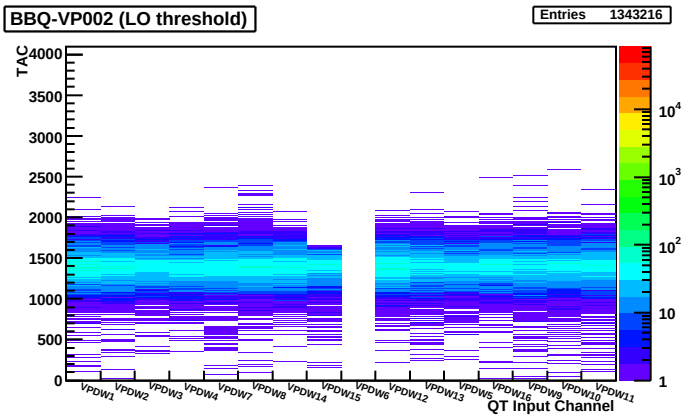

BBQ-ZD001 (ZDC TOWER)
Entries 1343216
ADC

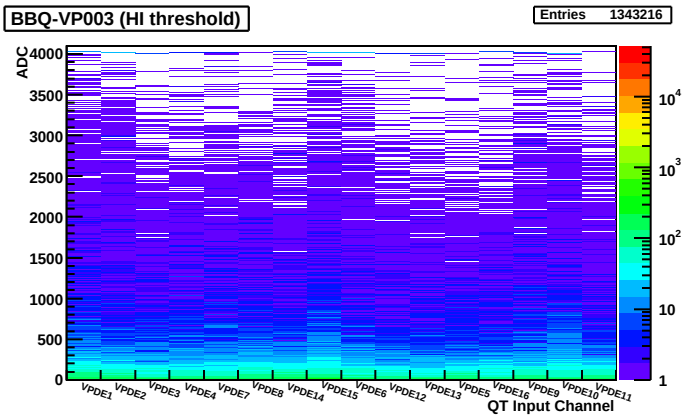

BBQ-ZD001 (ZDC TOWER)
Entries 1343216
TAC

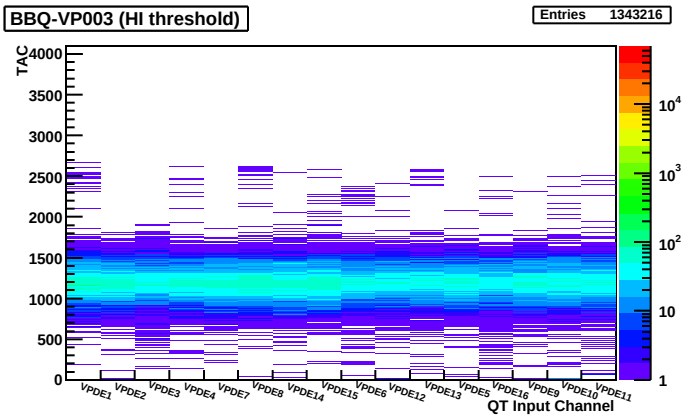

BBQ-VP001 (LO threshold)
Entries 1343216
ADC
QT Input Channel

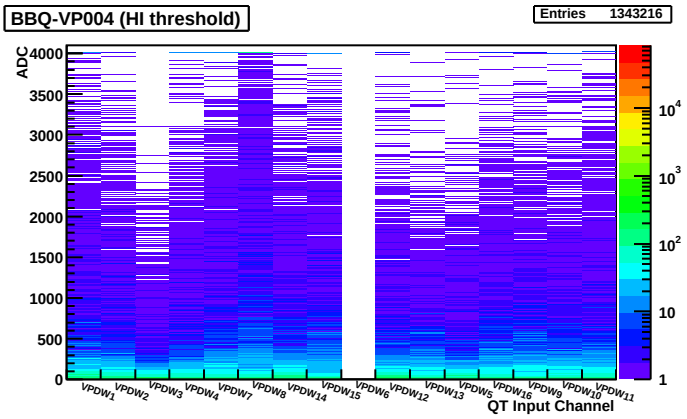

BBQ-VP001 (LO threshold)
Entries 1343216
TAC
QT Input Channel

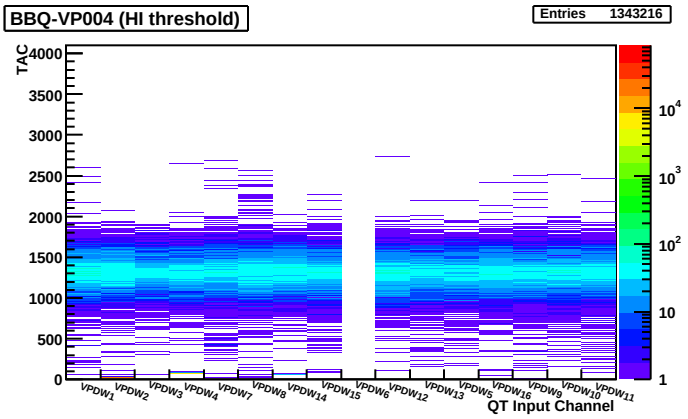

BBQ-VP002 (LO threshold)
Entries 1343216
ADC
QT Input Channel

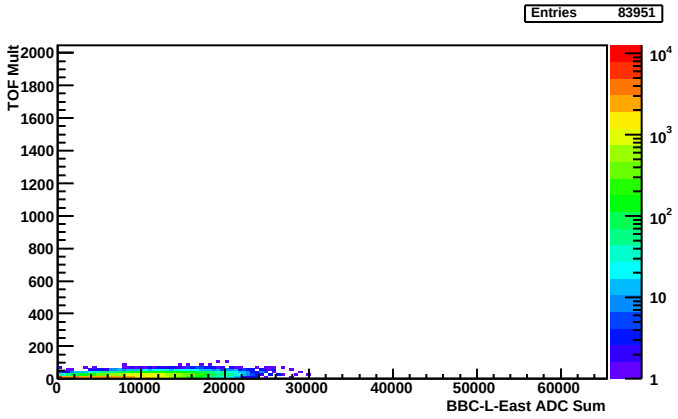

BBQ-VP002 (LO threshold)
Entries 1343216
TAC
QT Input Channel

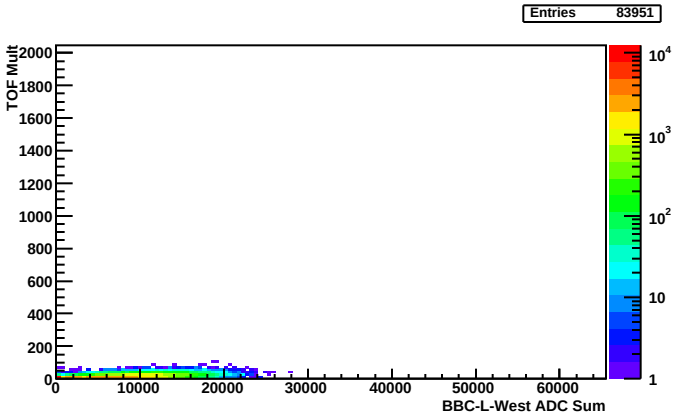

BBQ-VP003 (HI threshold)
Entries 1343216
ADC
QT Input Channel

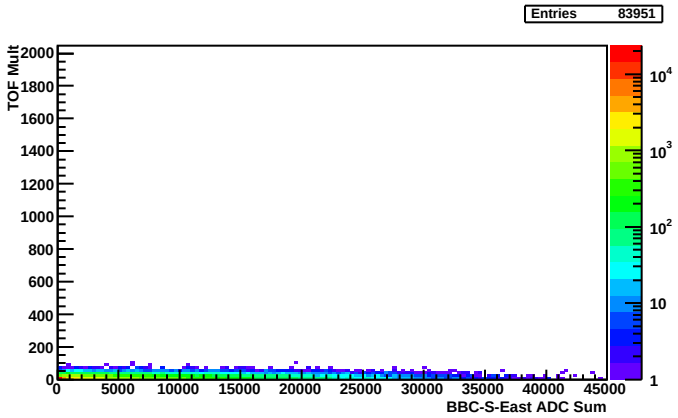

BBQ-VP003 (HI threshold)
Entries 1343216
TAC
QT Input Channel

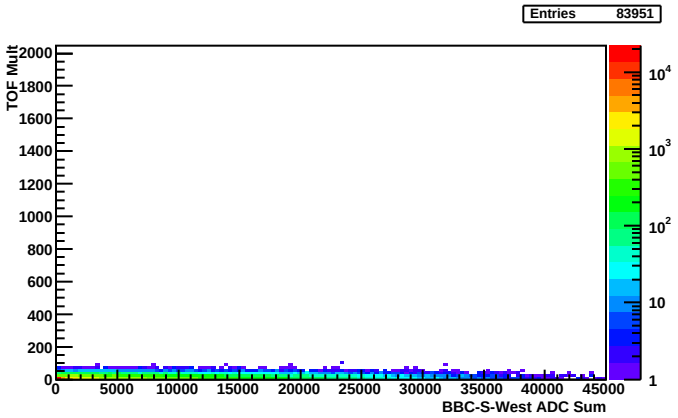

BBQ-VP004 (HI threshold)
Entries 1343216
ADC
QT Input Channel

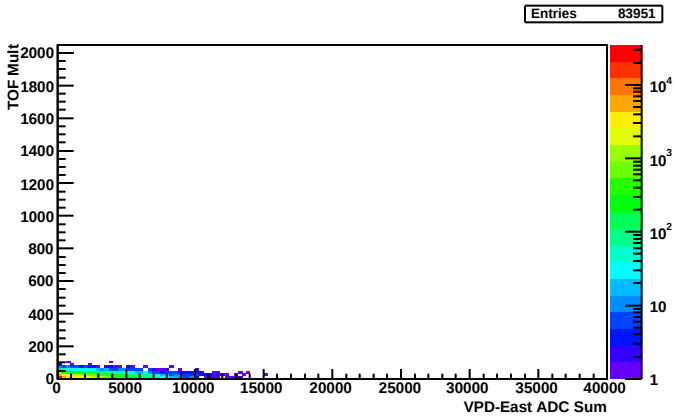

BBQ-VP004 (HI threshold)
Entries 1343216
TAC
QT Input Channel

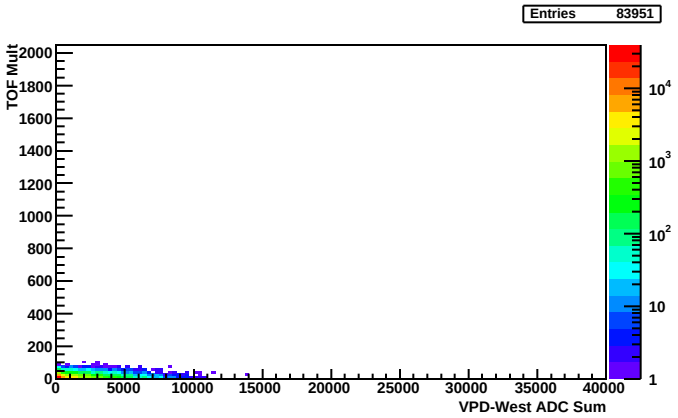

Entries 83951
TOF Mult
BBC-L-East ADC Sum

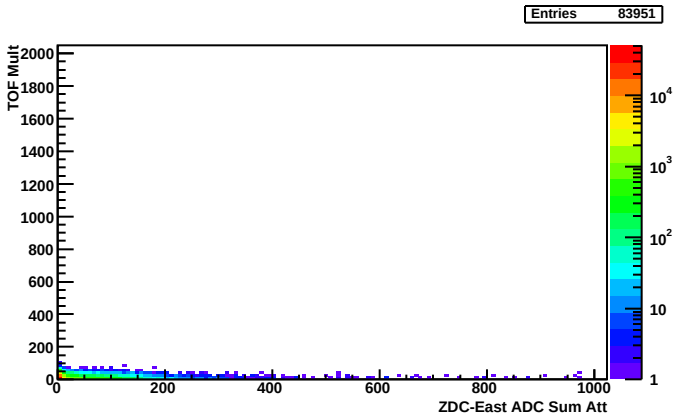

Entries 83951
TOF Mult
BBC-L-West ADC Sum

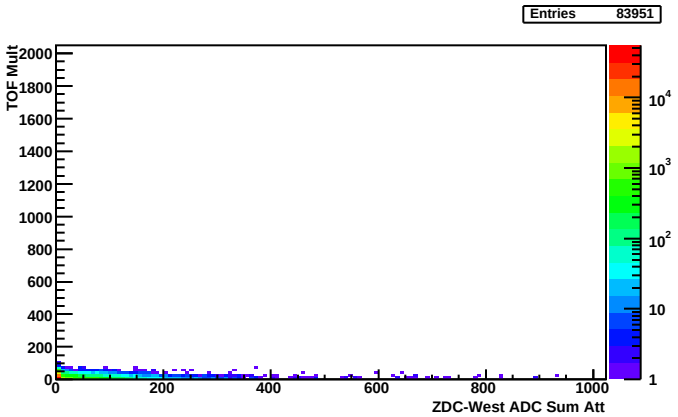

Entries 83951
TOF Mult
BBC-S-East ADC Sum

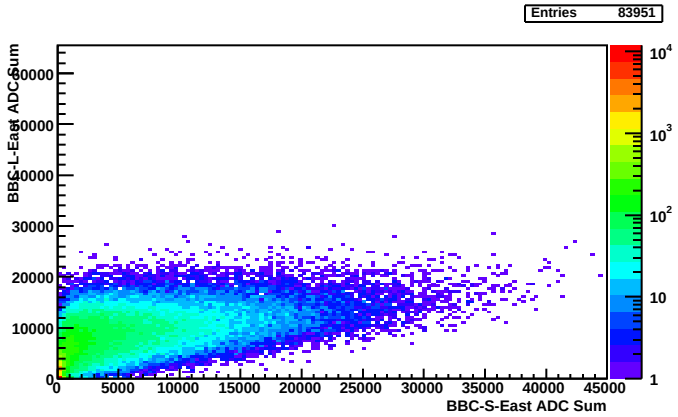

Entries 83951
TOF Mult
BBC-S-West ADC Sum

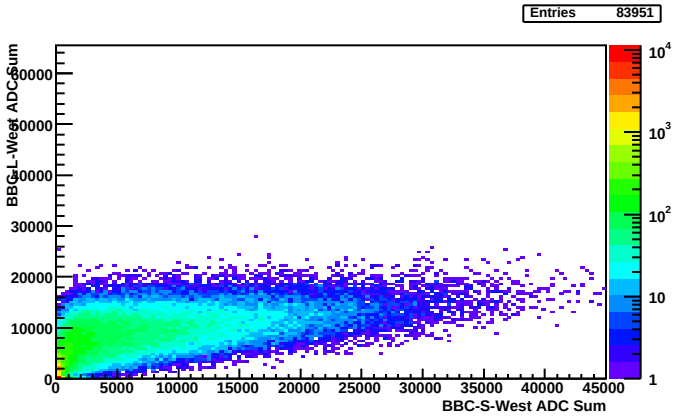

Entries 83951
TOF Mult
VPD-East ADC Sum

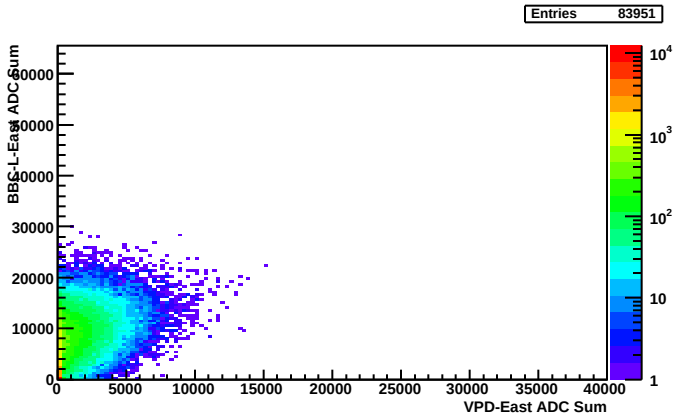

Entries 83951
TOF Mult
VPD-West ADC Sum

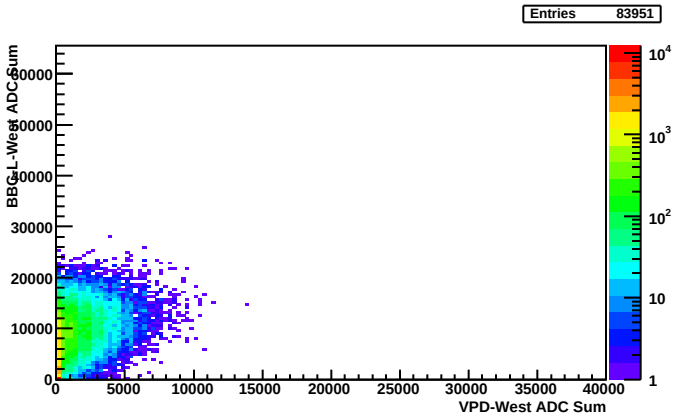

Entries 83951
TOF Mult
ZDC-East ADC Sum Att

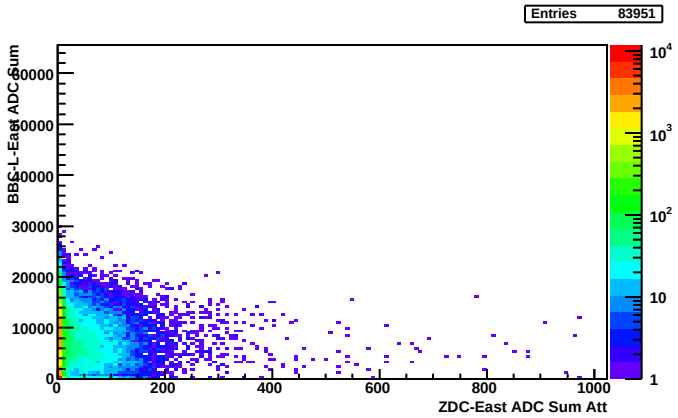

Entries 83951
TOF Mult
ZDC-West ADC Sum Att


Entries 83951
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 83951
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 83951
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 83951
BBC-L-West ADC Sum
VPD-West ADC Sum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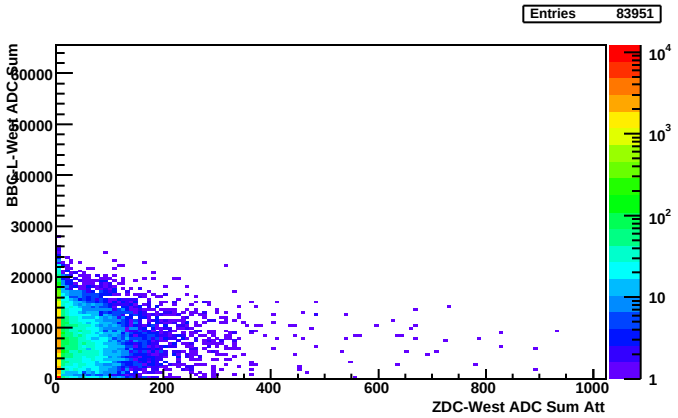
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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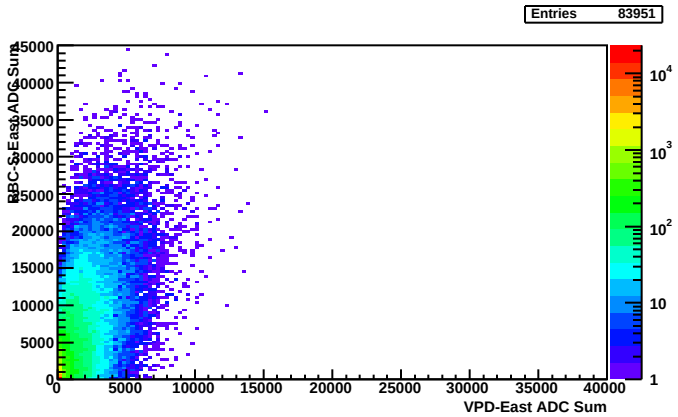
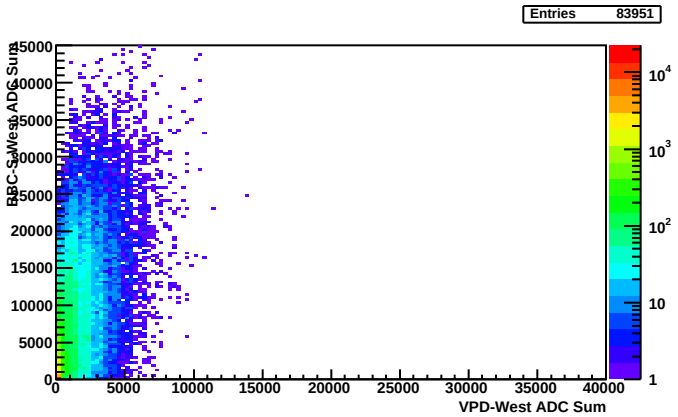
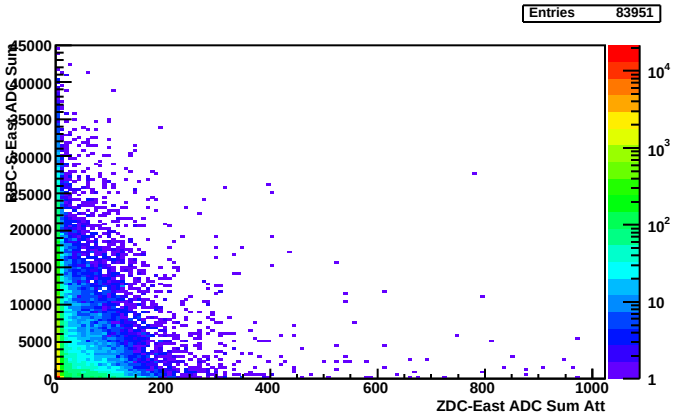
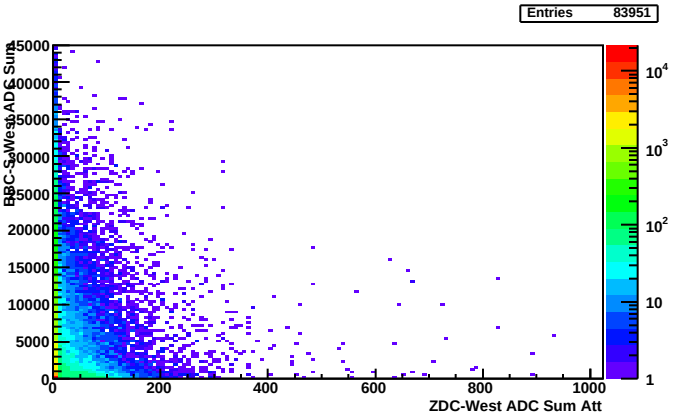
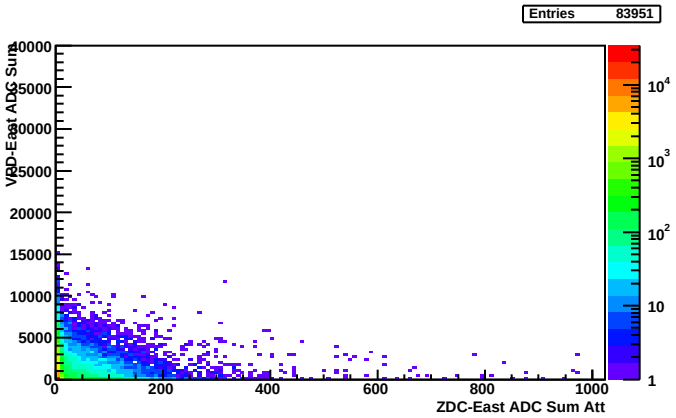
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

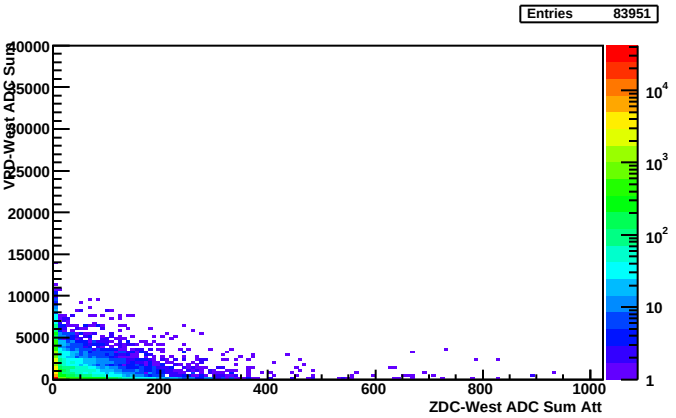

Entries 83951
BBC-S-East ADC Sum
VPD-East ADC Sum

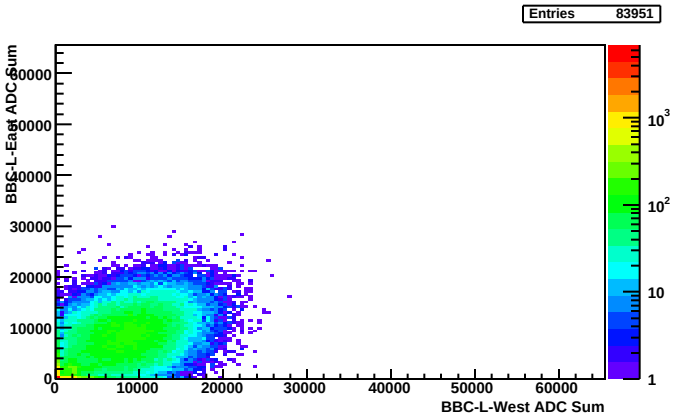

Entries 83951
BBC-S-West ADC Sum
VPD-West ADC Sum

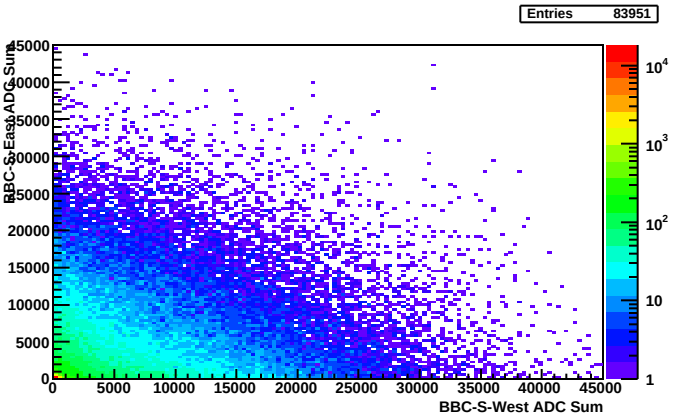

Entries 83951
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

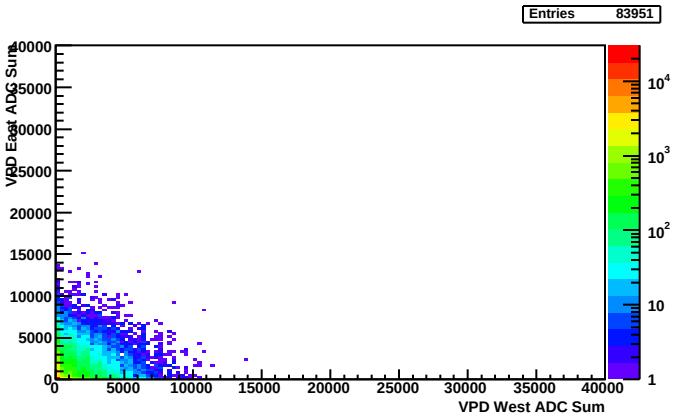

Entries 83951
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

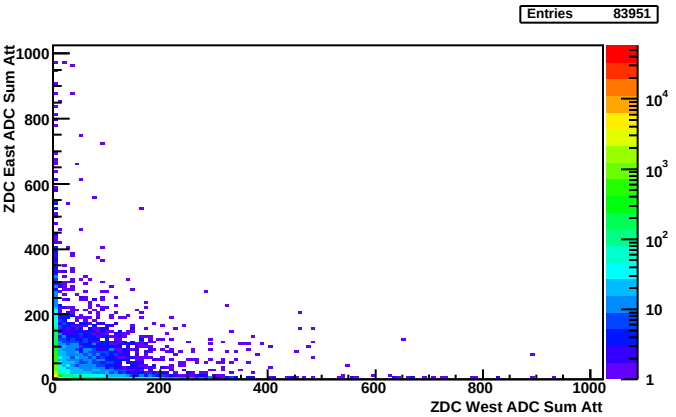

Entries 83951
VPD-East ADC Sum
ZDC-East ADC Sum Att

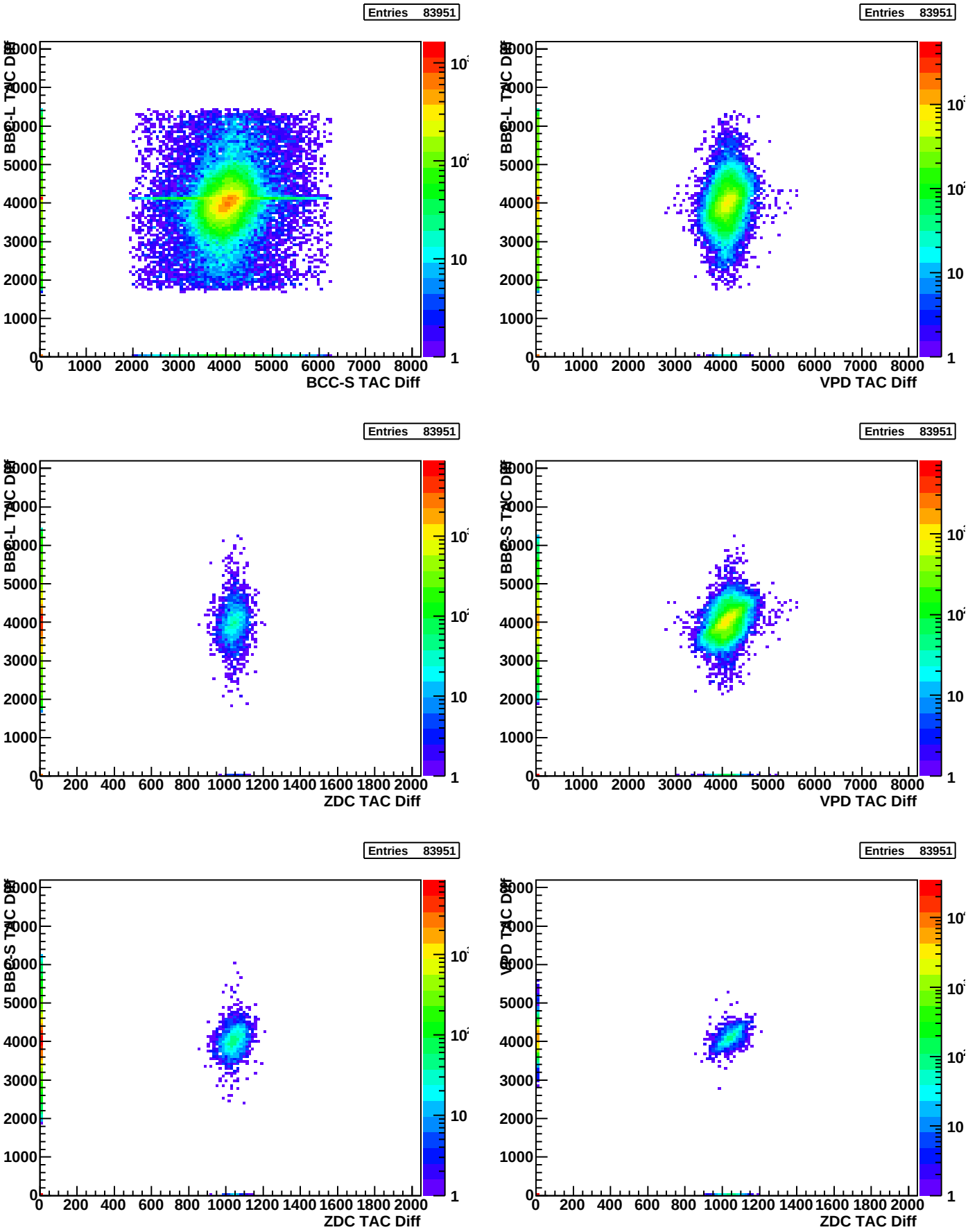

Entries 83951
VPD-West ADC Sum
ZDC-West ADC Sum Att

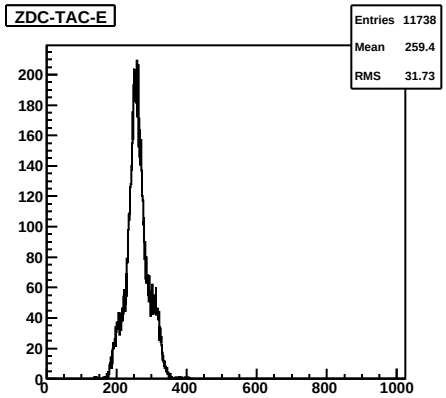

Entries 83951
BBC-L-East ADC Sum
BBC-L-West ADC Sum

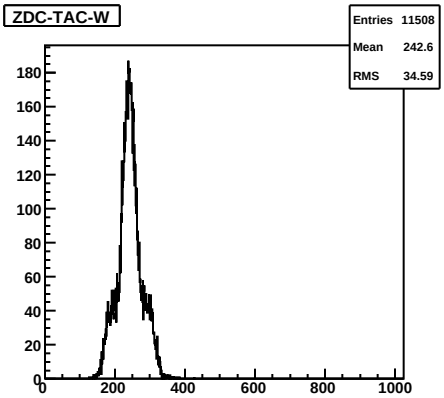

Entries 83951
BBC-S-East ADC Sum
BBC-S-West ADC Sum

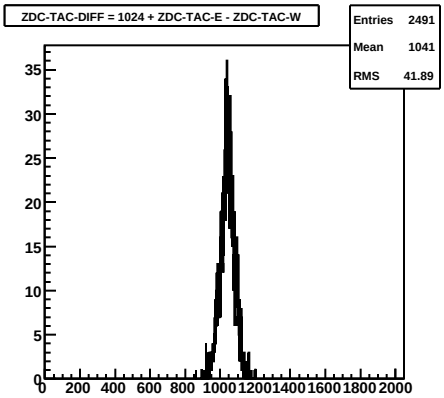

Entries 83951
VPD East ADC Sum
VPD West ADC Sum

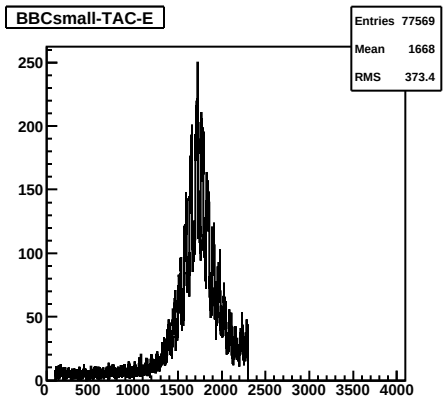

Entries 83951
ZDC East ADC Sum Att
ZDC West ADC Sum Att

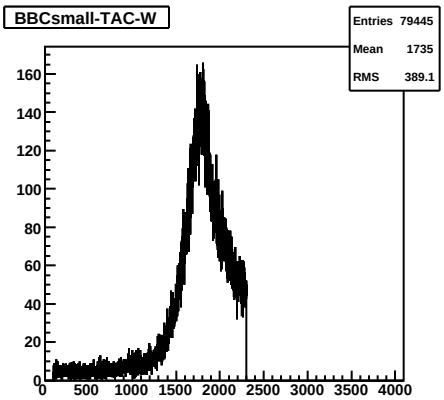

Entries 83951
BBC-L TAC Diff
BCC-S TAC Diff
Entries 83951
BBC-L TAC Diff
VPD TAC Diff
Entries 83951
BBC-L TAC Diff
ZDC TAC Diff
Entries 83951
BBC-S TAC Diff
VPD TAC Diff
Entries 83951
BBC-S TAC Diff
ZDC TAC Diff
Entries 83951
VPD TAC Diff
ZDC TAC Diff

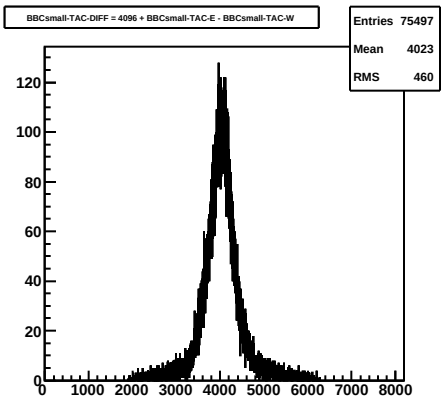

ZDC-TAC-E
Entries 11738
Mean 259.4
RMS 31.73

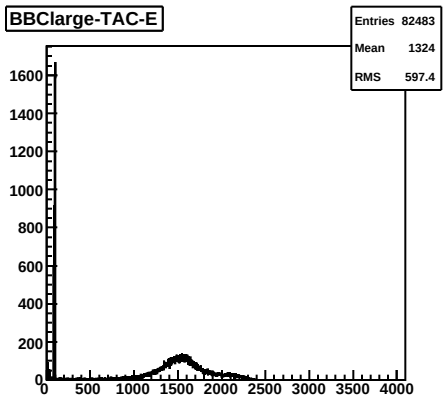

ZDC-TAC-W
Entries 11508
Mean 242.6
RMS 34.59

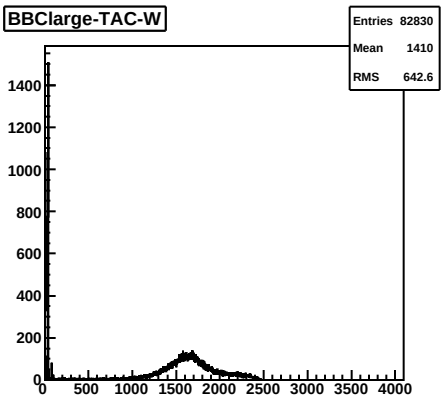

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2491
Mean 1041
RMS 41.89

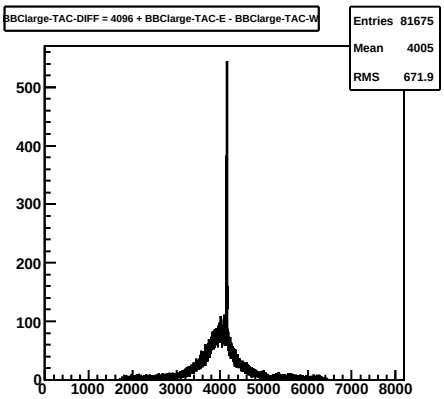

BBCsmall-TAC-E
Entries 77569
Mean 1668
RMS 373.4

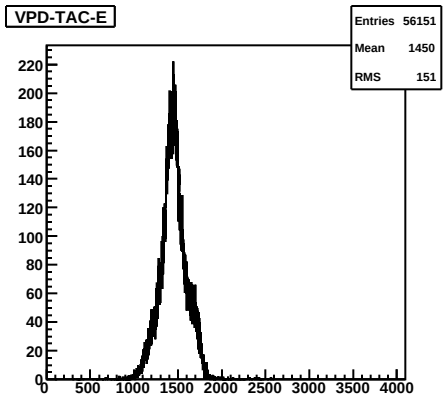

BBCsmall-TAC-W
Entries 79445
Mean 1735
RMS 389.1

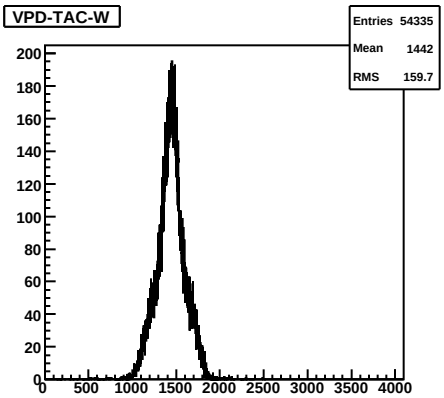

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 75497
Mean 4023
RMS 460

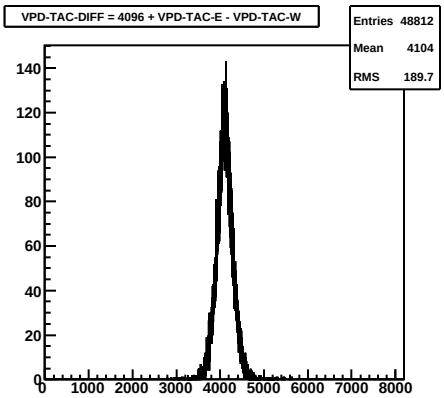

BBClarge-TAC-E
Entries 82483
Mean 1324
RMS 597.4

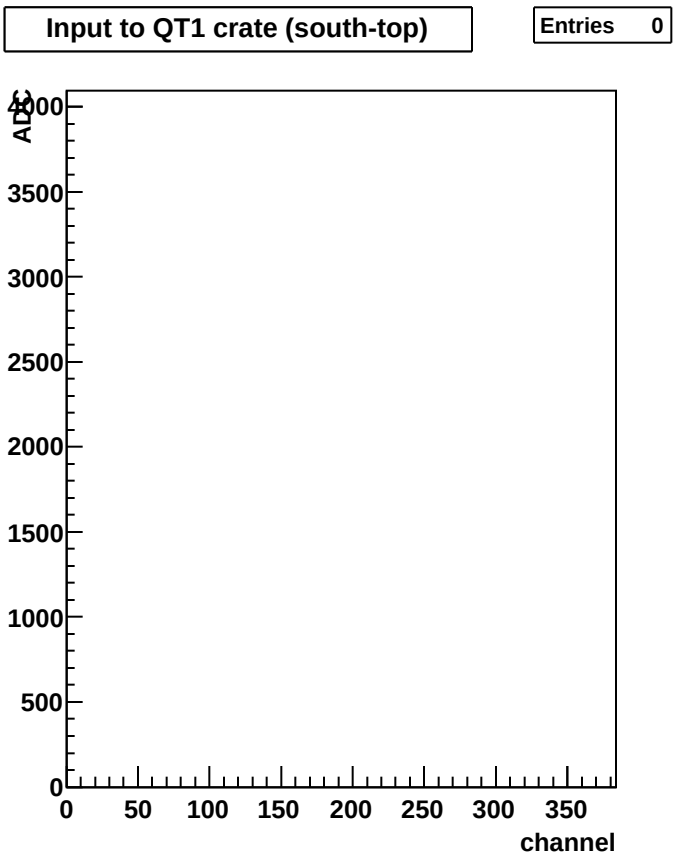

BBClarge-TAC-W
Entries 82830
Mean 1410
RMS 642.6

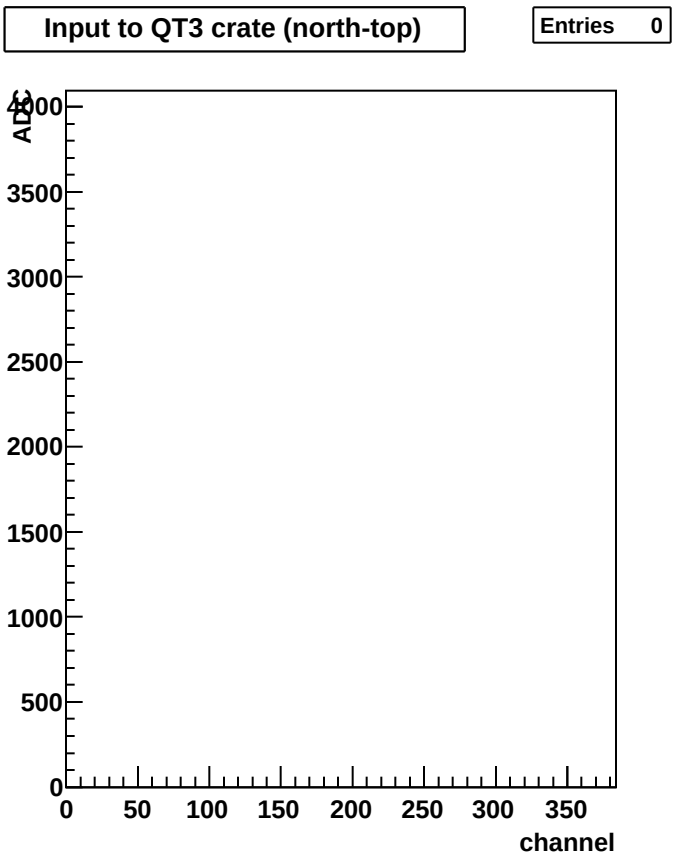

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 81675
Mean 4005
RMS 671.9

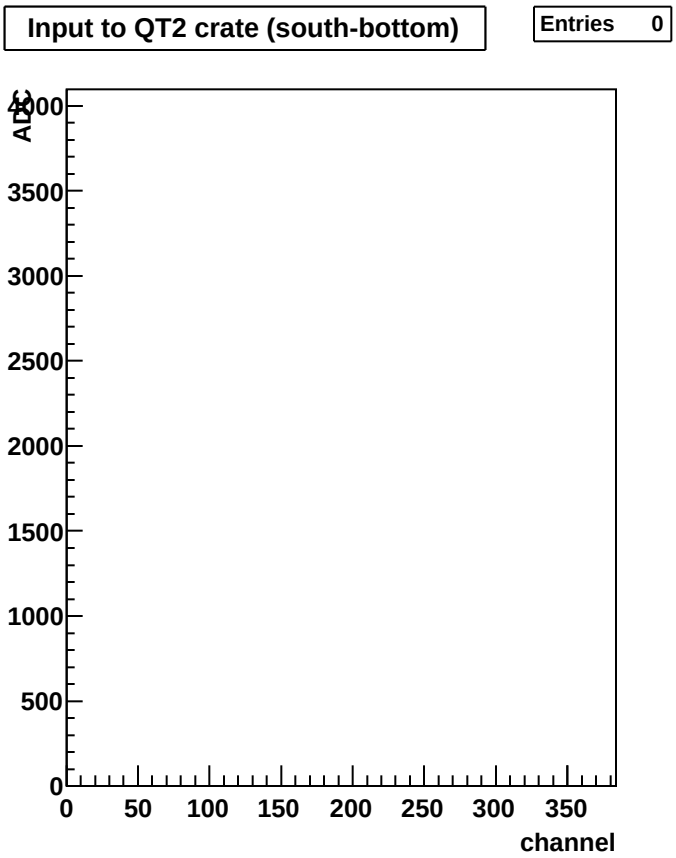

VPD-TAC-E
Entries 56151
Mean 1450
RMS 151

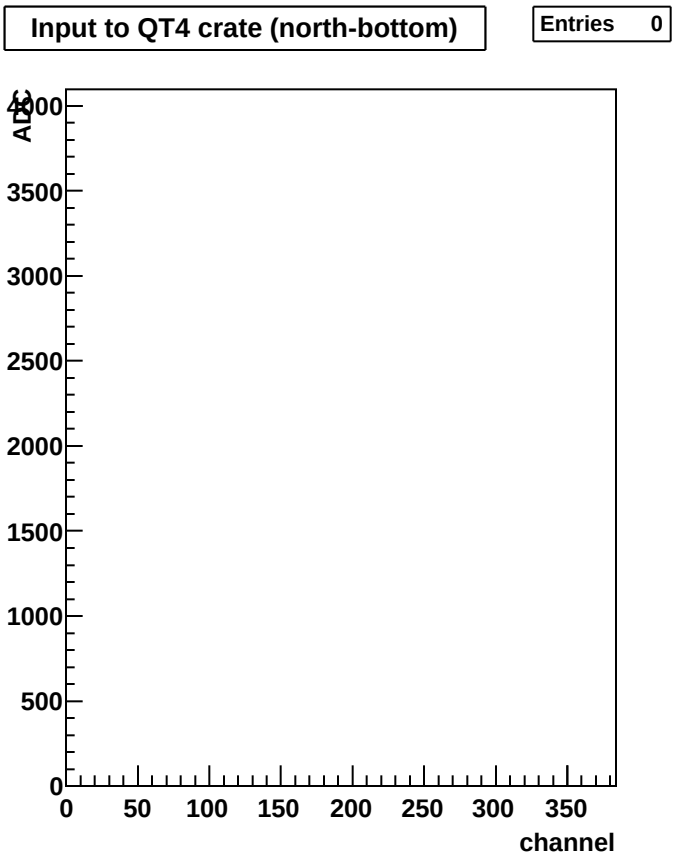

VPD-TAC-W
Entries 54335
Mean 1442
RMS 159.7

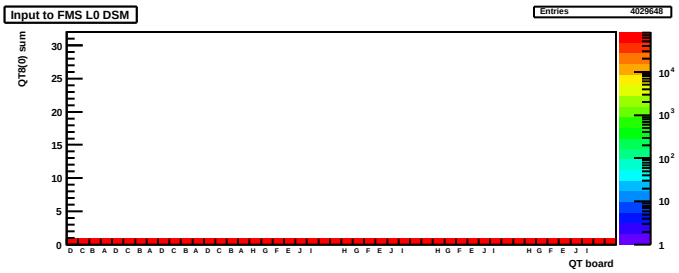

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 48812
Mean 4104
RMS 189.7

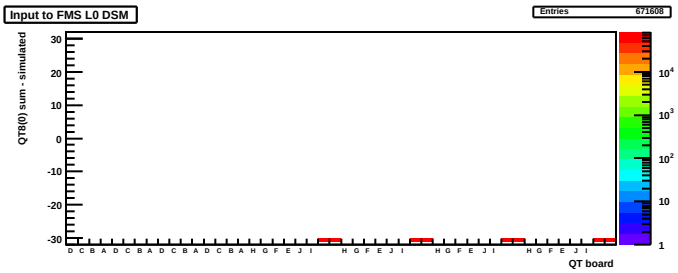

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

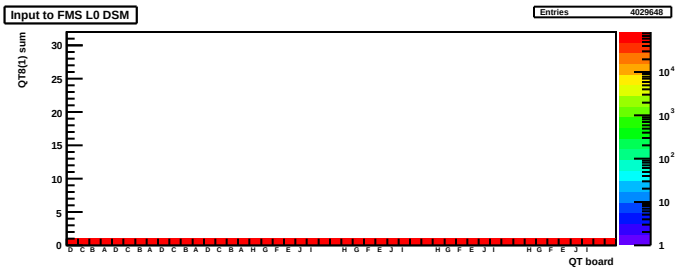

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

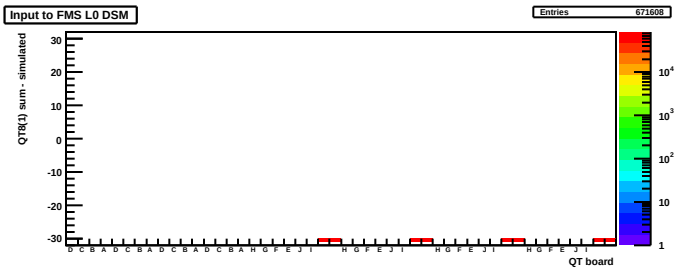

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

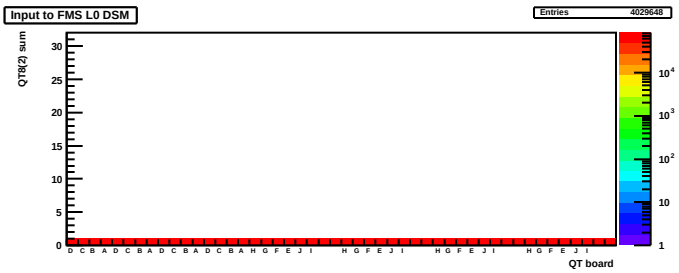

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

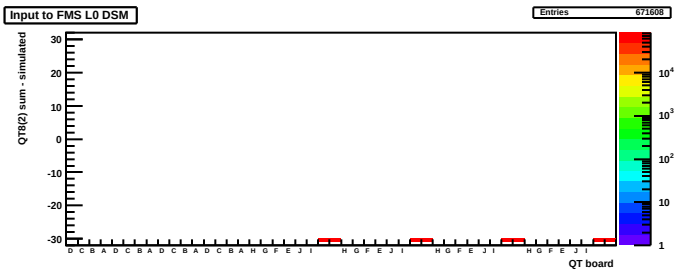

Input to FMS L0 DSM
Entries 4029648
QT8(0) sum
QT board

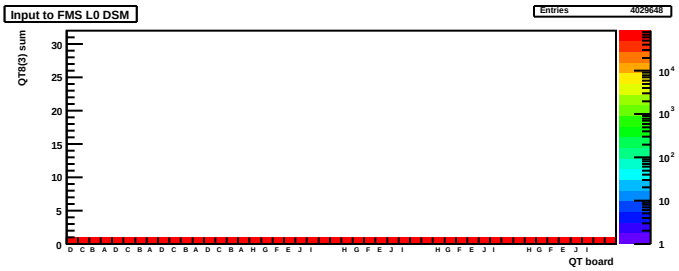

Input to FMS L0 DSM
Entries 671608
QT8(0) sum - simulated
QT board

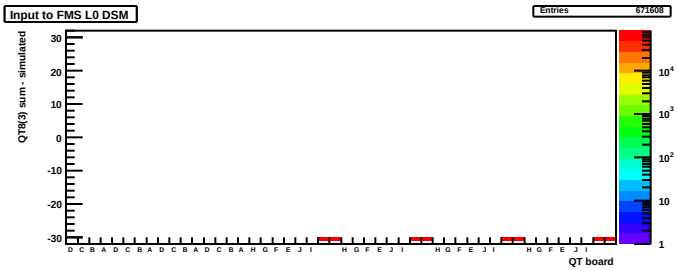

Input to FMS L0 DSM
Entries 4029648
QT8(1) sum
QT board

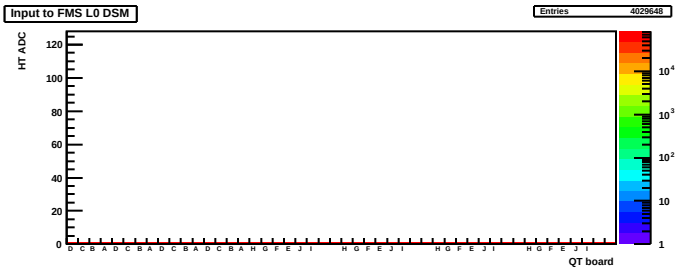

Input to FMS L0 DSM
Entries 671608
QT8(1) sum - simulated
QT board

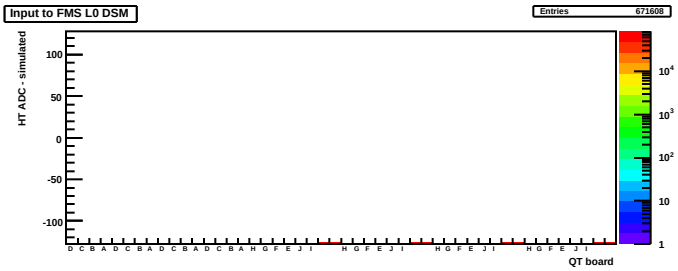

Input to FMS L0 DSM
Entries 4029648
QT8(2) sum
QT board

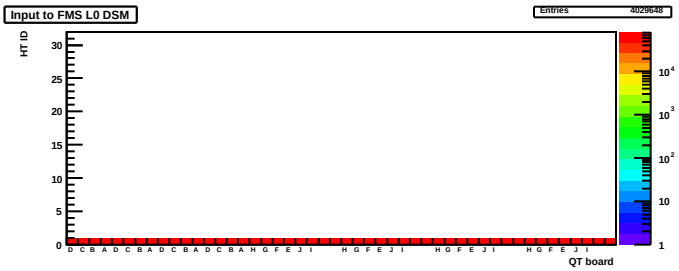

Input to FMS L0 DSM
Entries 671608
QT8(2) sum - simulated
QT board

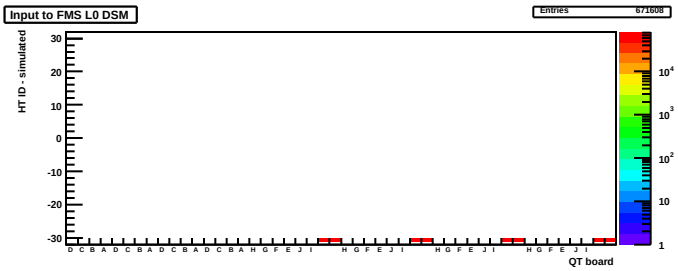

Input to FMS L0 DSM
Entries 4029648
QT8(3) sum
QT board

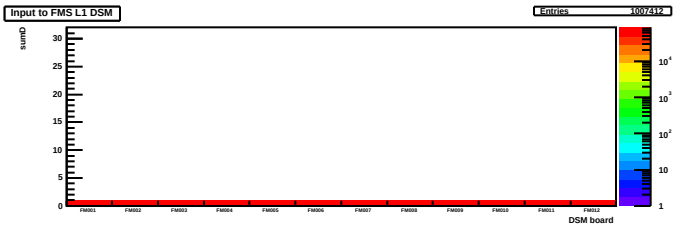

Input to FMS L0 DSM
Entries 671608
QT8(3) sum - simulated
QT board

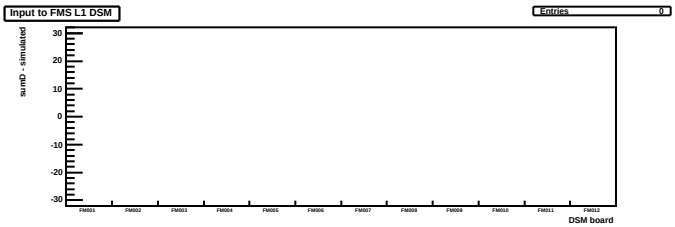

Input to FMS L0 DSM
Entries 4029648
HT ADC
QT board

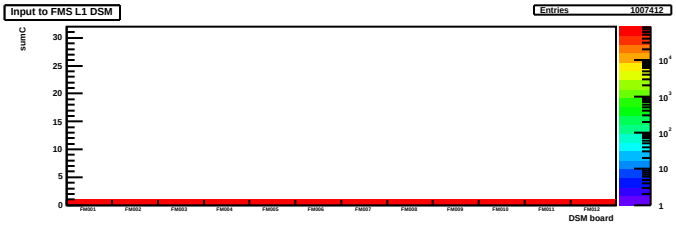

Input to FMS L0 DSM
Entries 671608
HT ADC - simulated
QT board

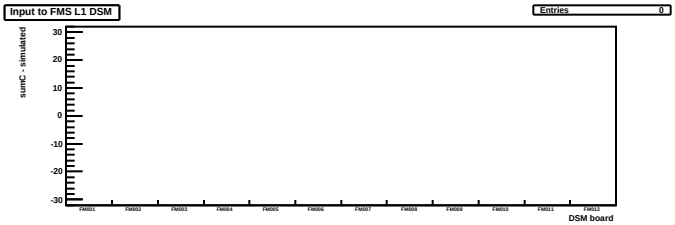

Input to FMS L0 DSM
Entries 4029648
HT ID
QT board

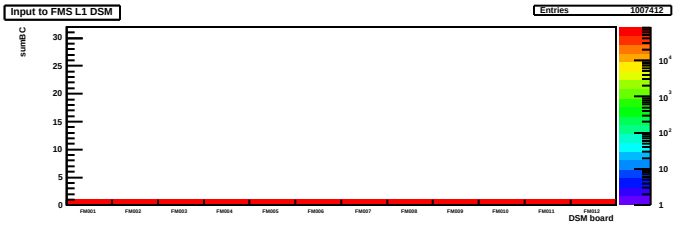

Input to FMS L0 DSM
Entries 671608
HT ID - simulated
QT board

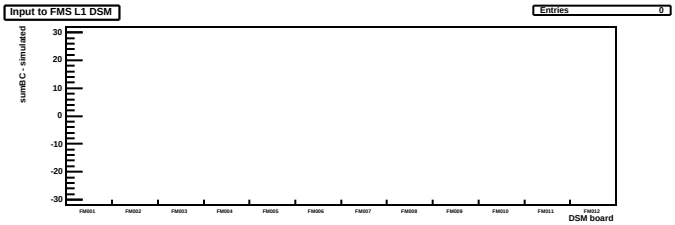

Input to FMS L1 DSM
Entries 1007412
sumD
DSM board

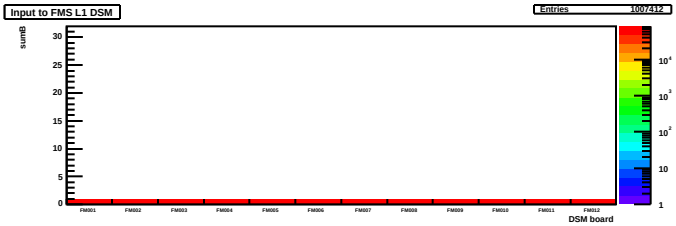

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

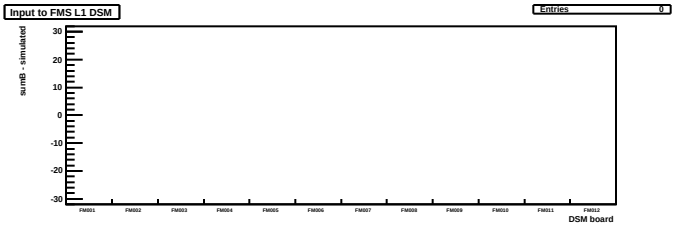

Input to FMS L1 DSM
Entries 1007412
sumC
DSM board

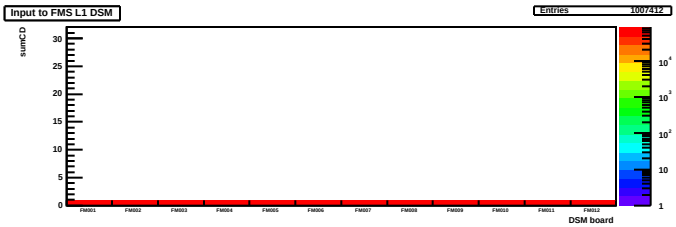

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

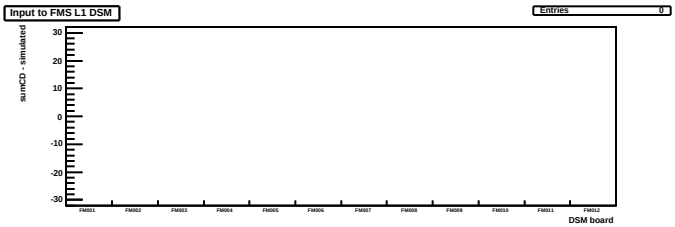

Input to FMS L1 DSM
Entries 1007412
sumBC
DSM board

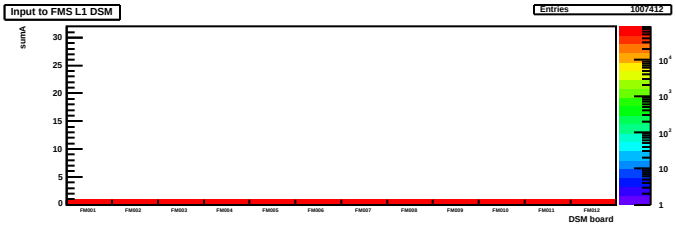

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

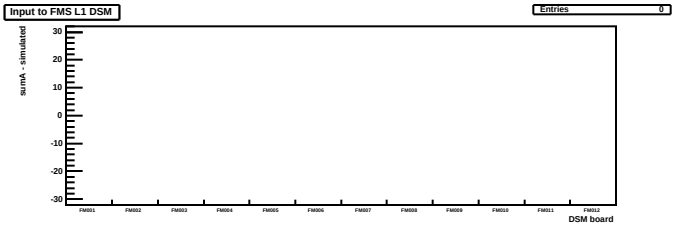

Input to FMS L1 DSM
Entries 1007412
sumB
DSM board

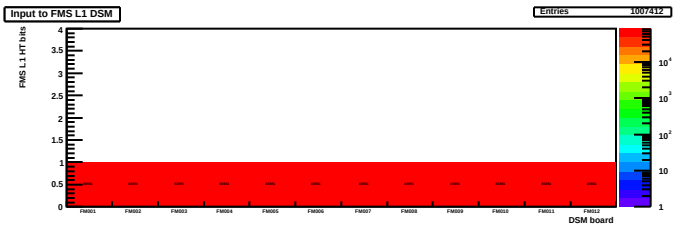

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

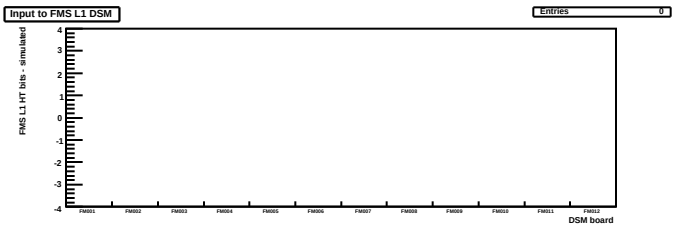

Input to FMS L1 DSM
Entries 1007412
sumCD
DSM board

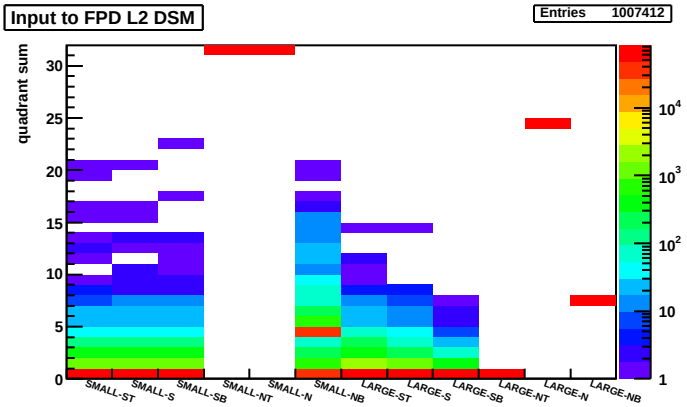

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

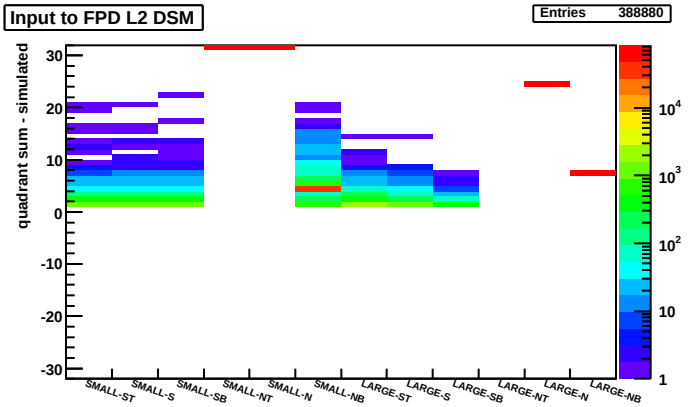

Input to FMS L1 DSM
Entries 1007412
sumA
DSM board

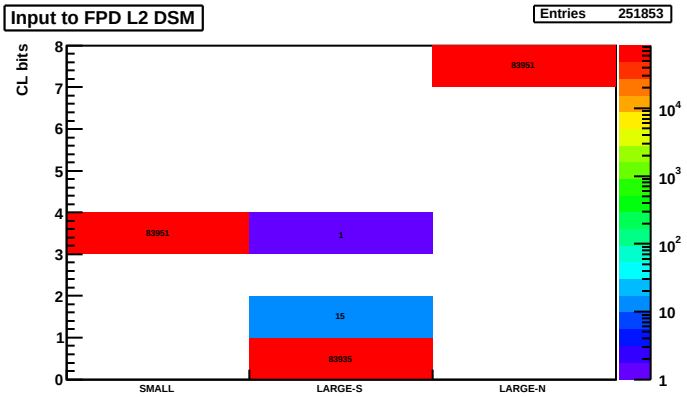

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

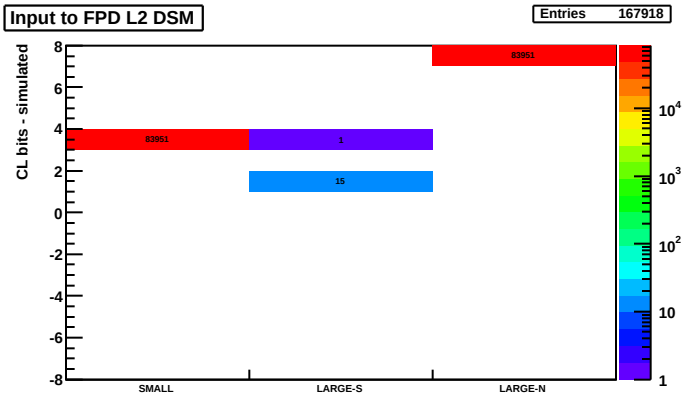

Input to FMS L1 DSM
Entries 1007412
FMS L1 HT bits
DSM board

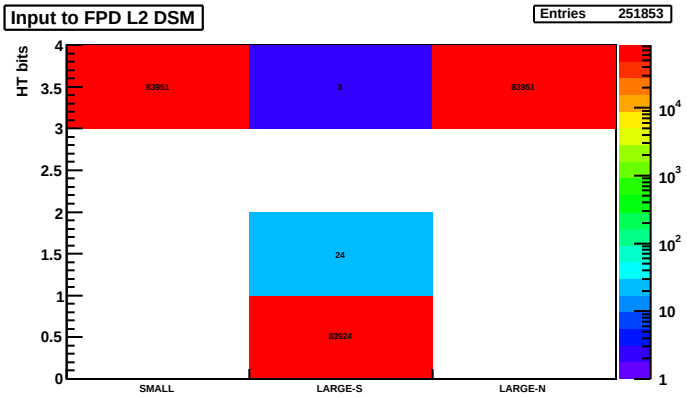

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

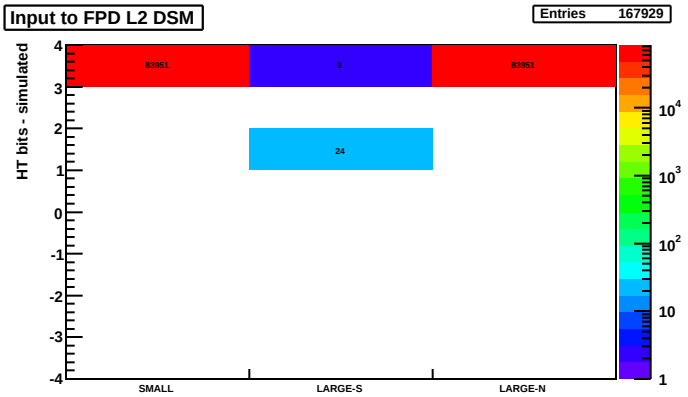

Input to FPD L2 DSM
Entries 1007412
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

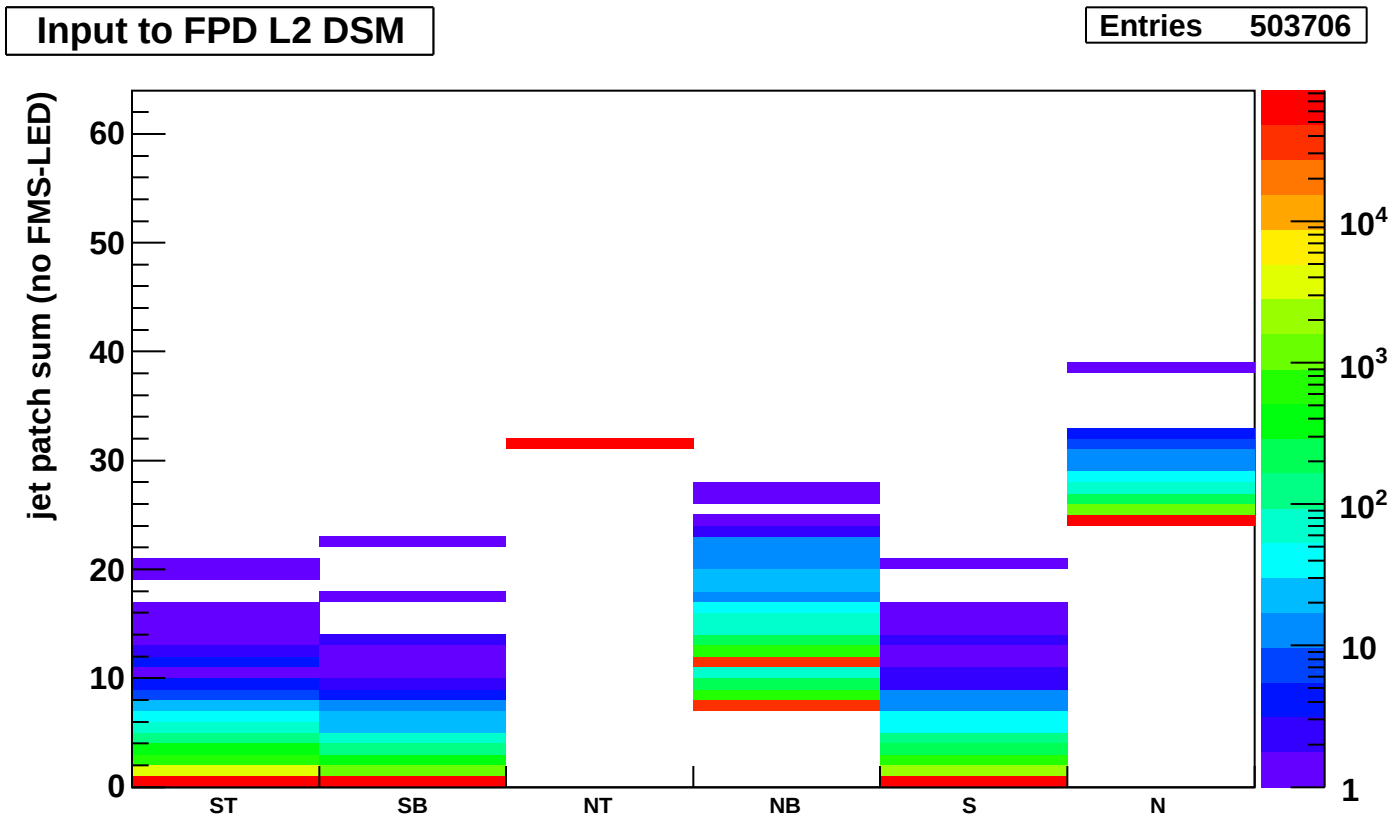

Input to FPD L2 DSM
Entries 388880
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

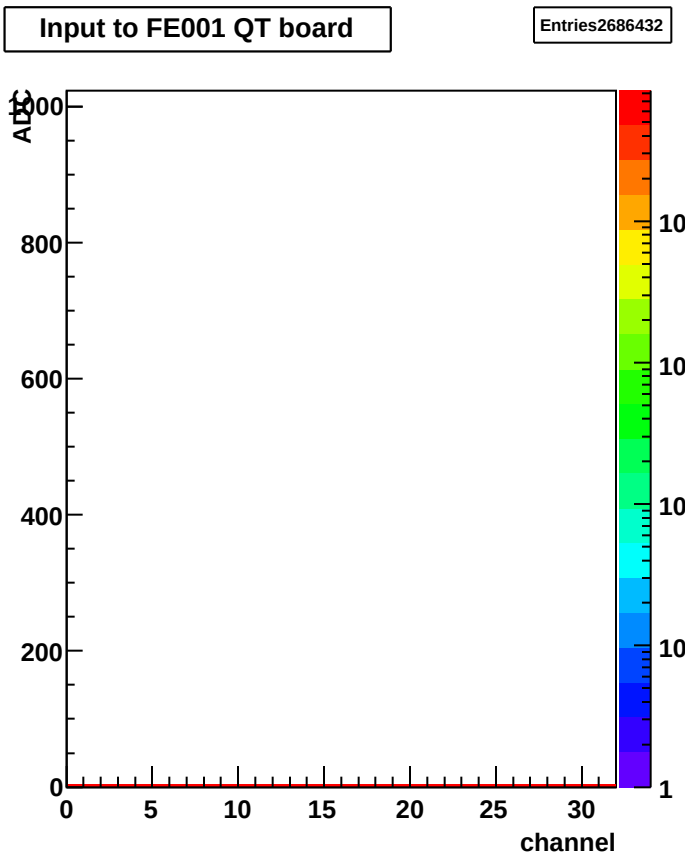

Input to FPD L2 DSM
Entries 251853
CL bits
83951
1
15
83935
SMALL
LARGE-S
LARGE-N

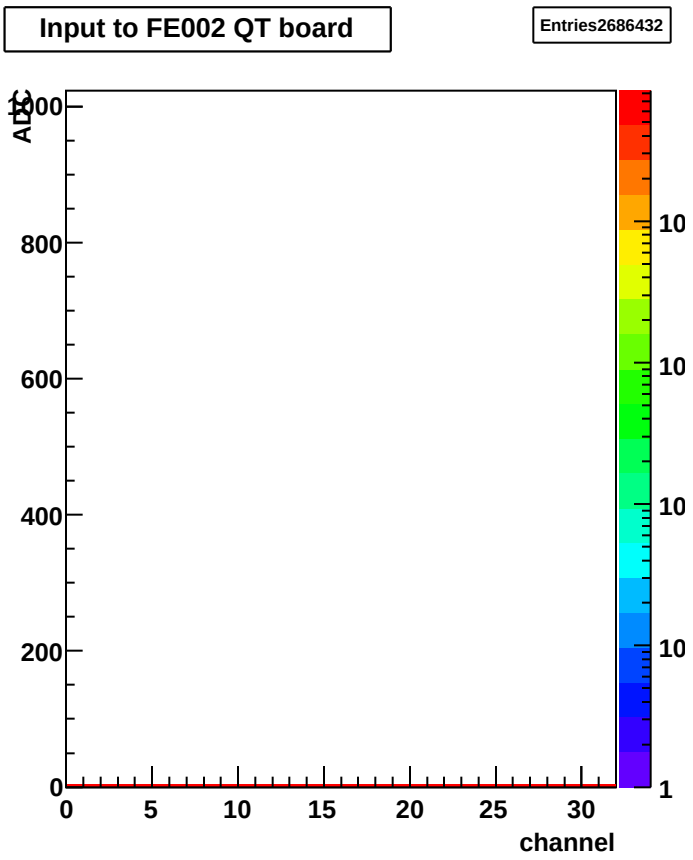

Input to FPD L2 DSM
Entries 167918
CL bits - simulated
83951
1
15
SMALL
LARGE-S
LARGE-N

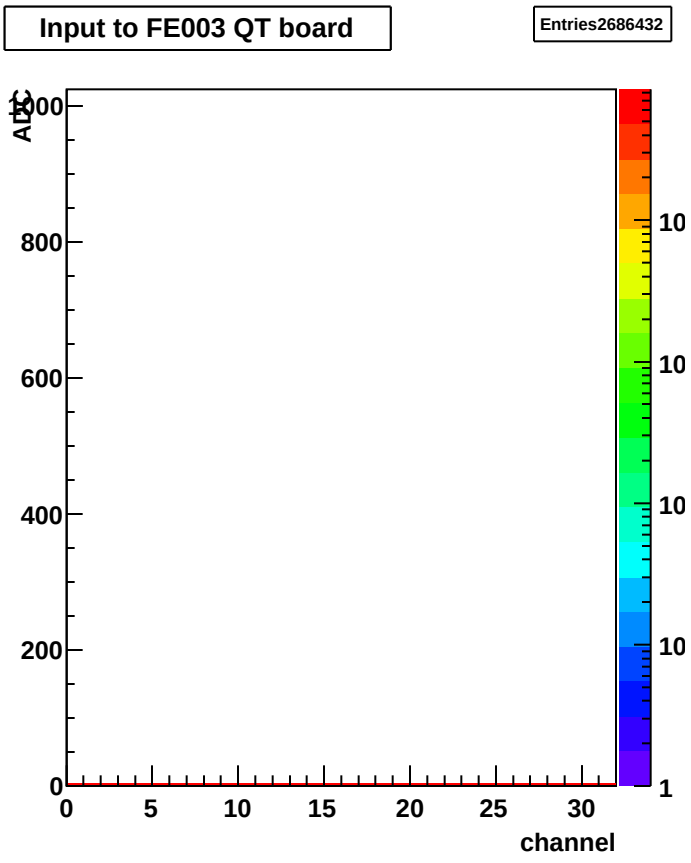

Input to FPD L2 DSM
Entries 251853
HT bits
83951
3
24
83924
SMALL
LARGE-S
LARGE-N

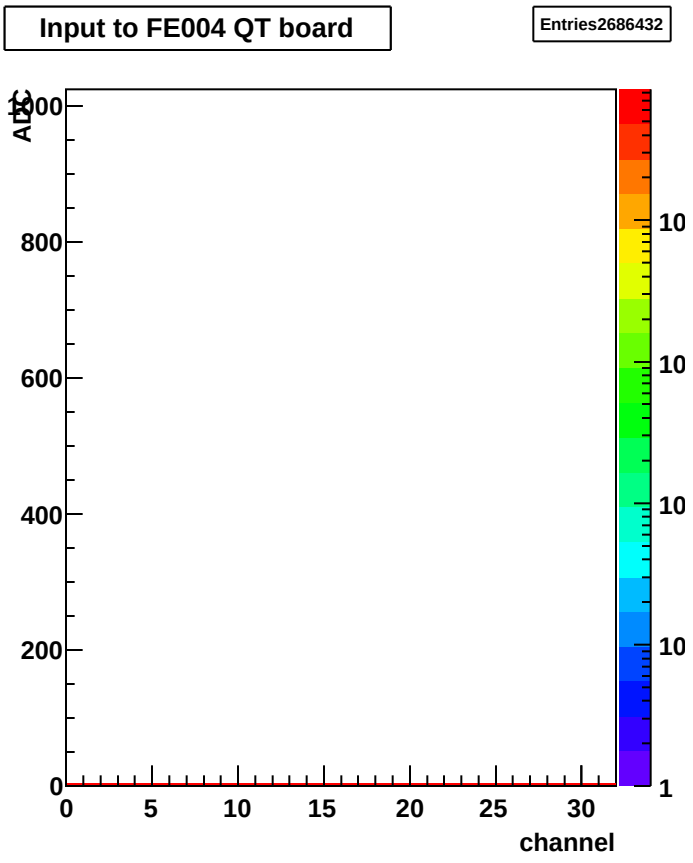

Input to FPD L2 DSM
Entries 167929
HT bits - simulated
83951
3
24
SMALL
LARGE-S
LARGE-N

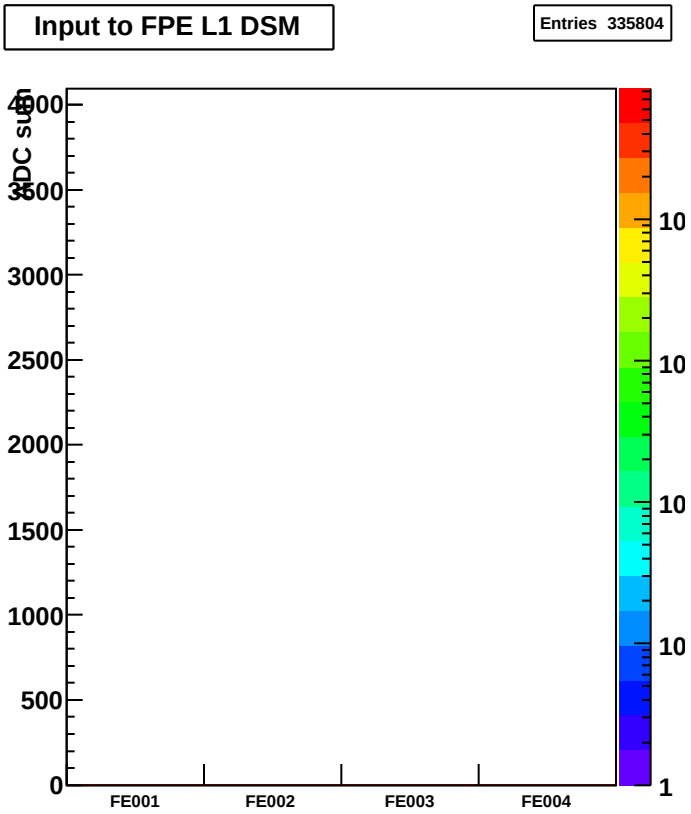

Input to FPD L2 DSM
Entries 503706
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

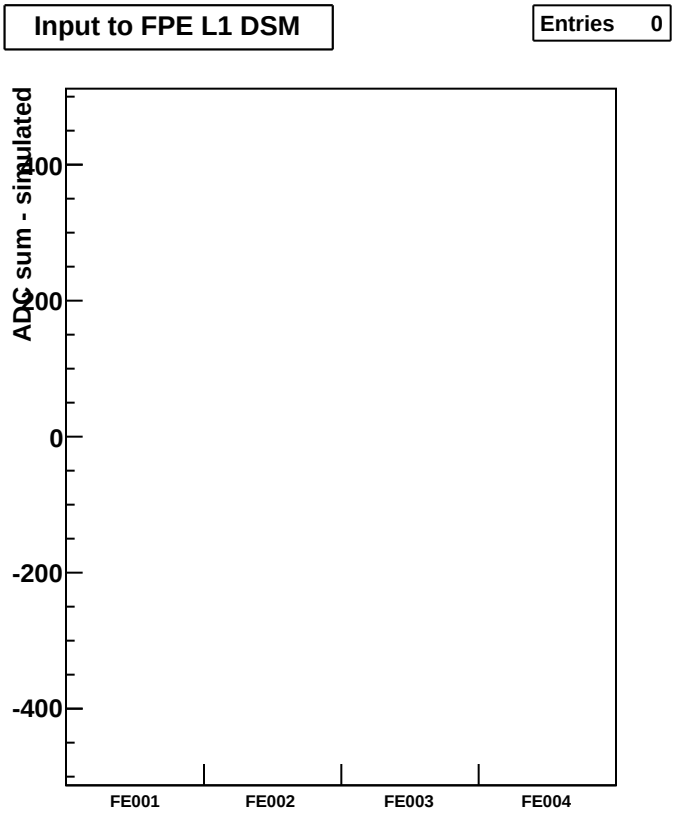

Input to FE001 QT board
Entries2686432
ADC
channel

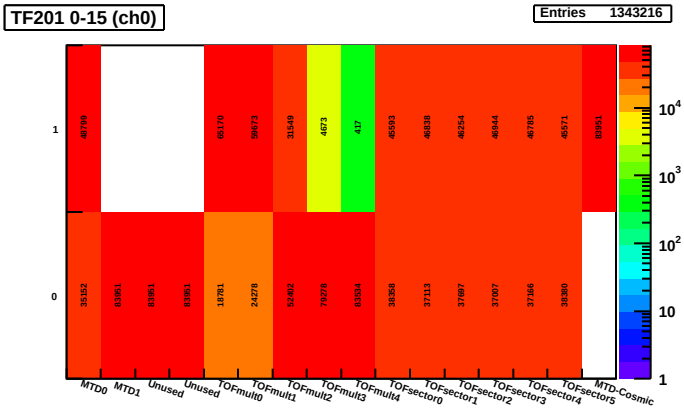

Input to FE002 QT board
Entries2686432
ADC
channel

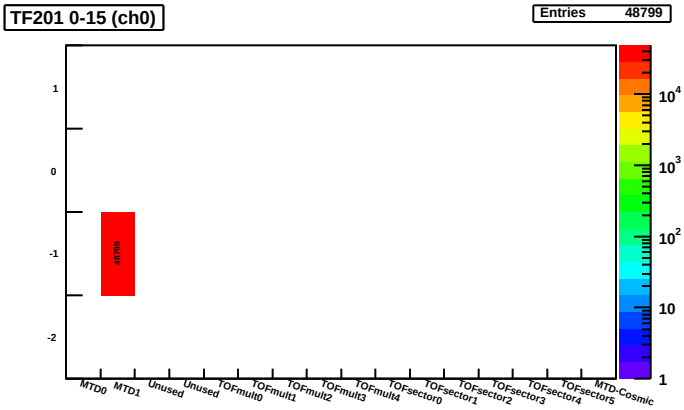

Input to FE003 QT board
Entries2686432
ADC
channel

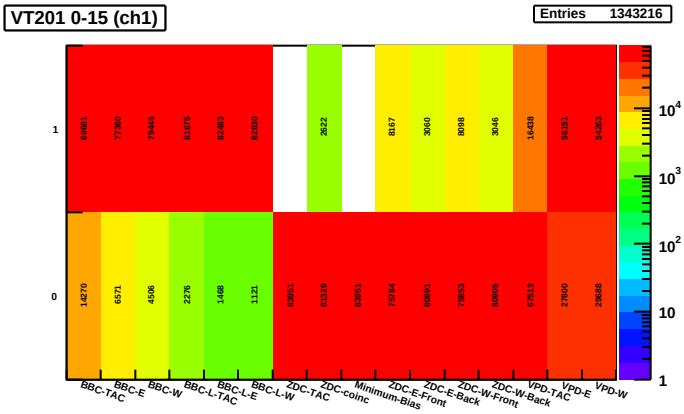

Input to FE004 QT board
Entries2686432
ADC
channel

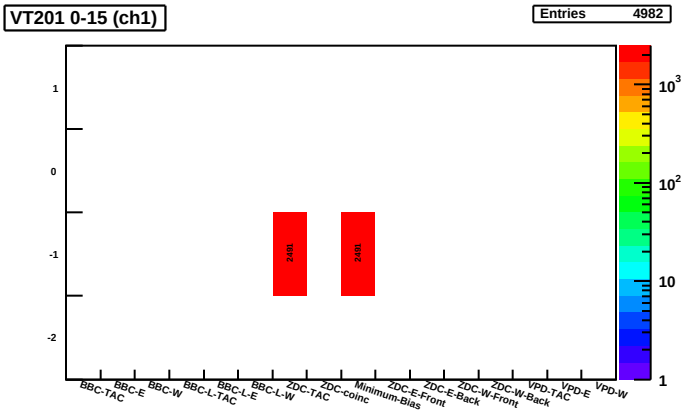

Input to FPE L1 DSM
Entries 335804
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

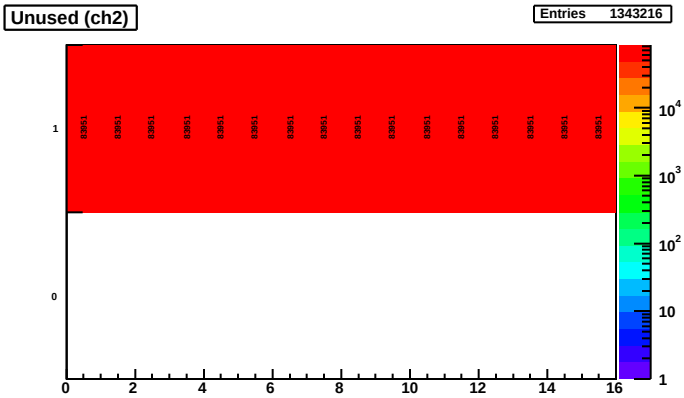

Input to FPE L1 DSM
Entries 0
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004

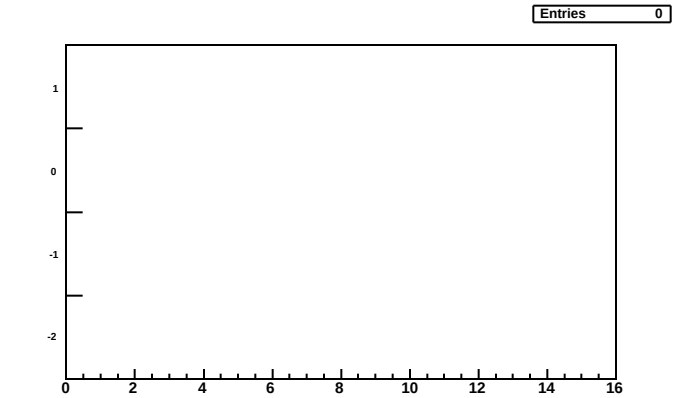

TF201 0-15 (ch0)
Entries 1343216
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

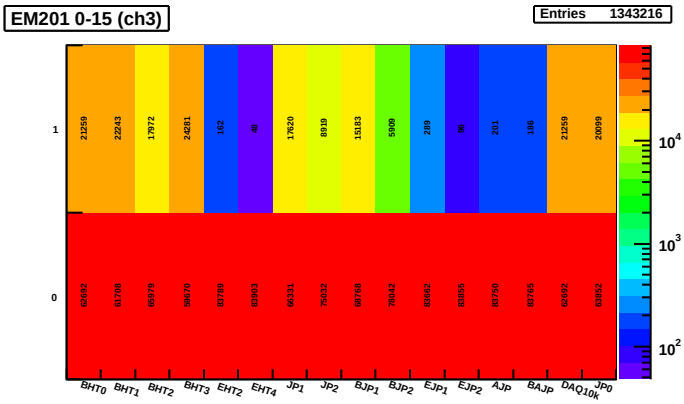

TF201 0-15 (ch0)
Entries 48799
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1343216
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 4982
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


Unused (ch2)
Entries 1343216


Entries 0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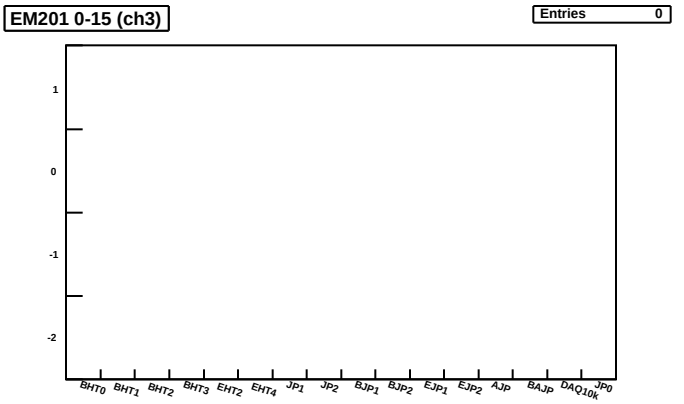
EM201 0-15 (ch3)
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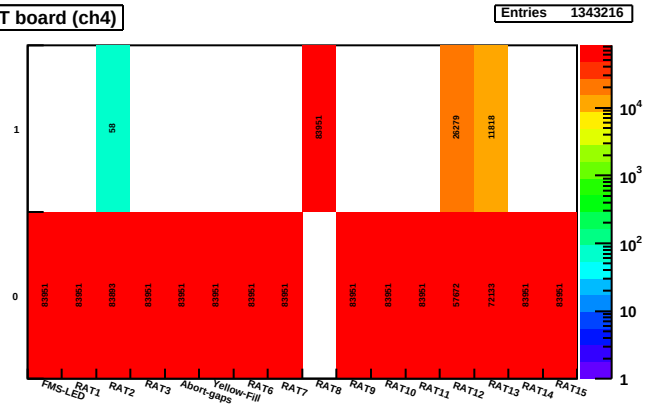
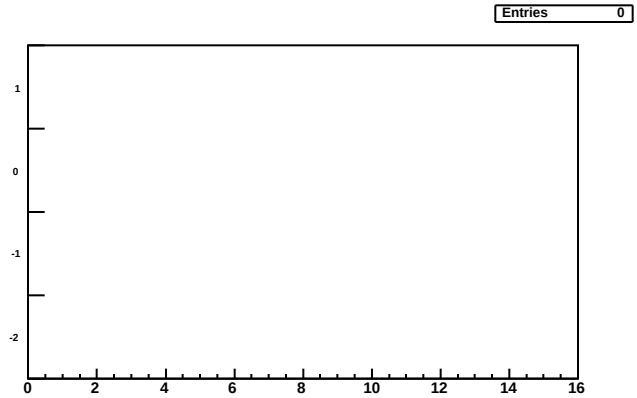
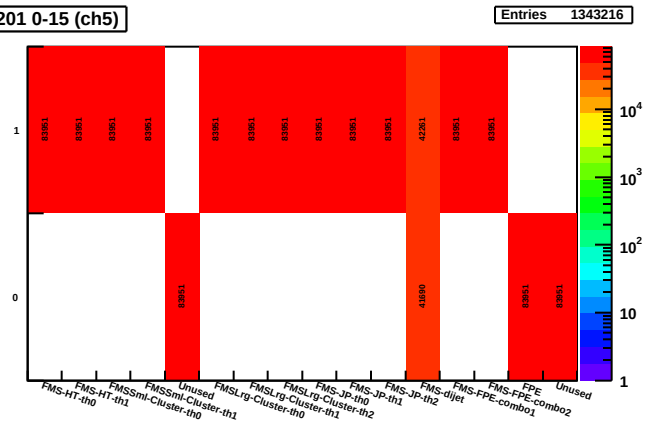
RAT board (ch4)





FP201 0-15 (ch5)



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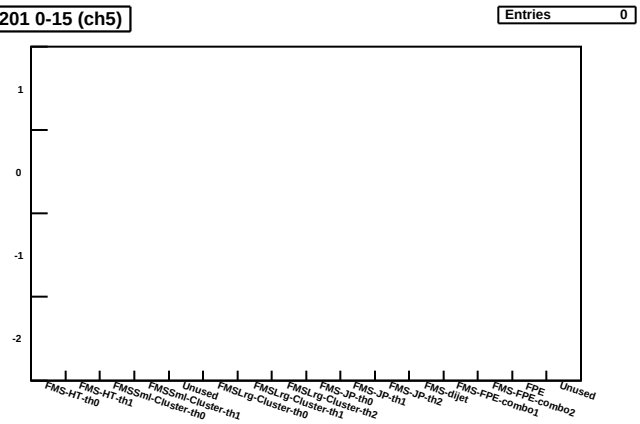
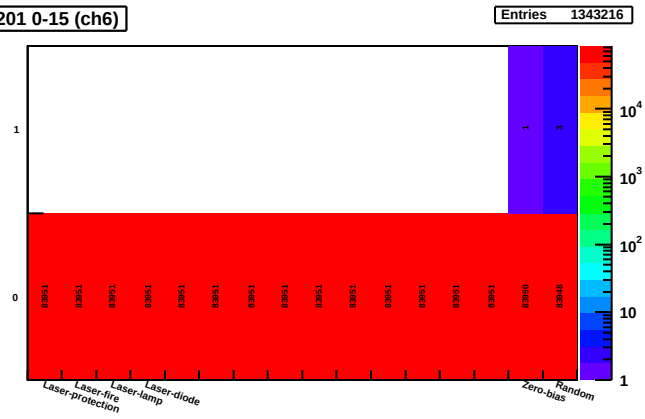
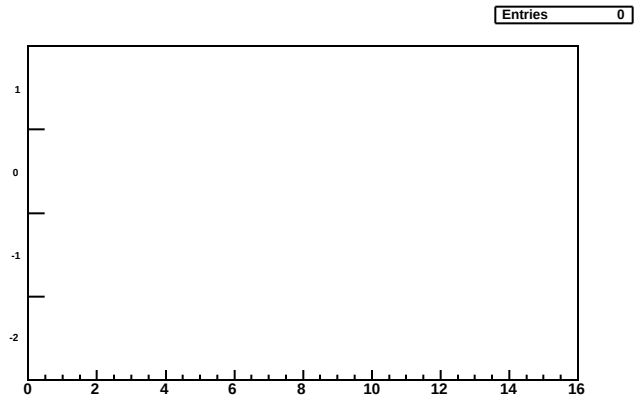
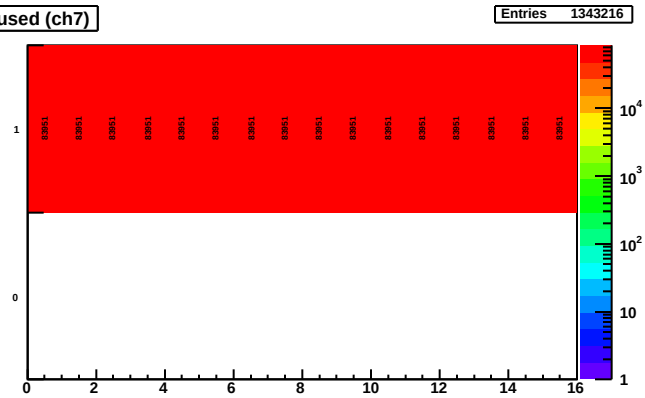
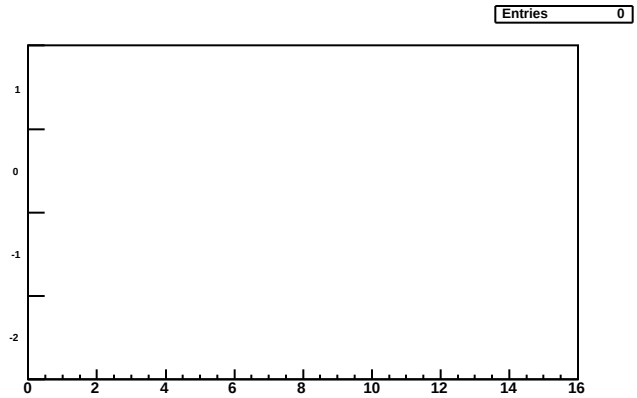


ST201 0-15 (ch6)





Unused (ch7)