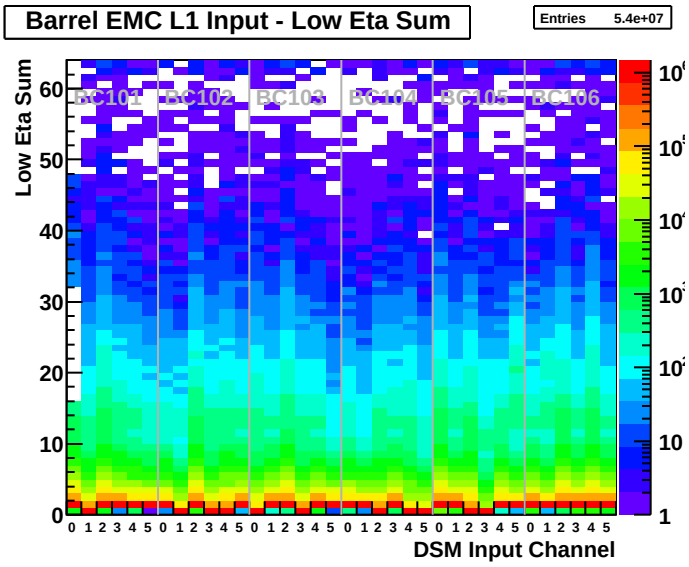
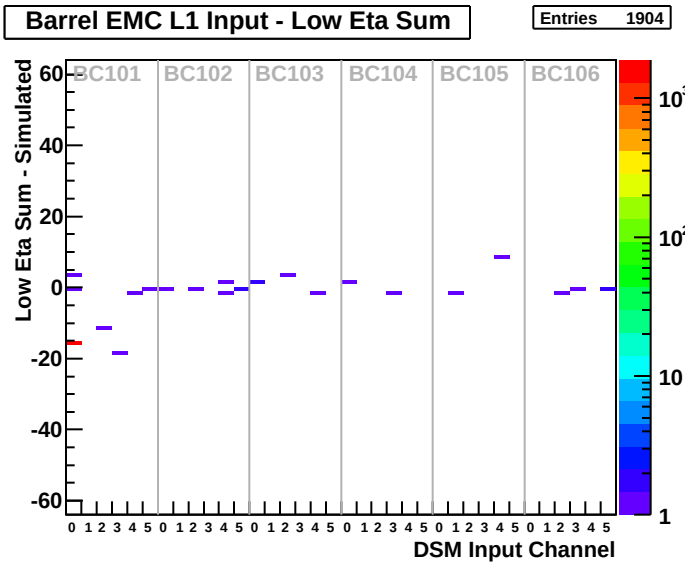
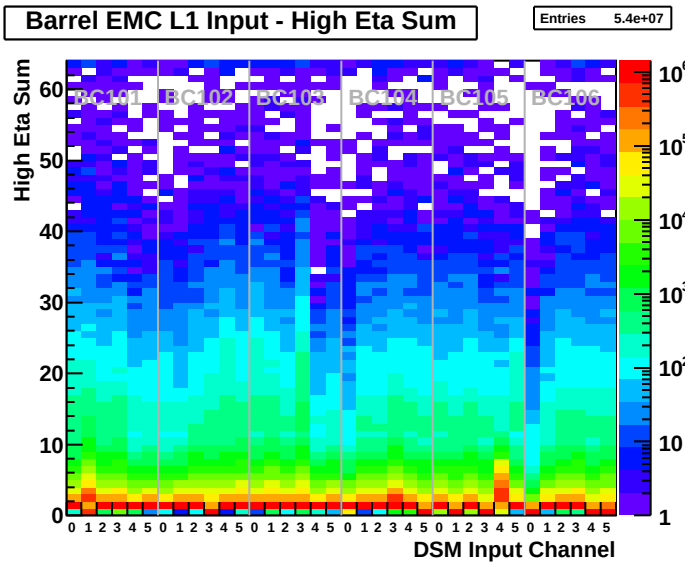
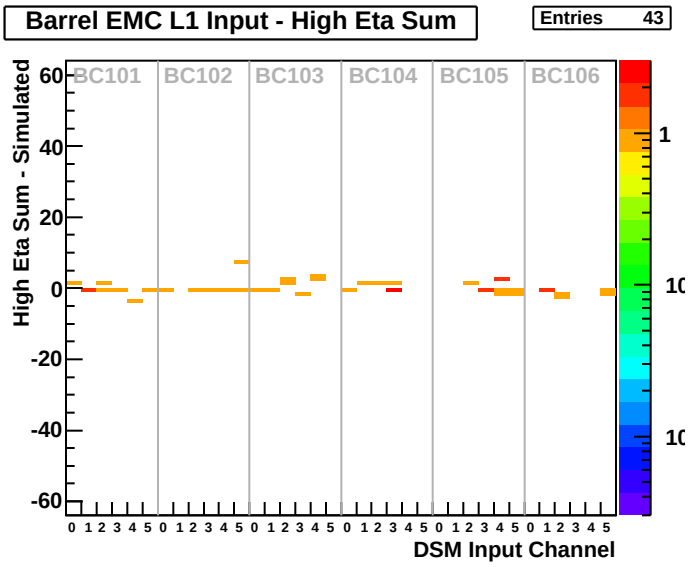
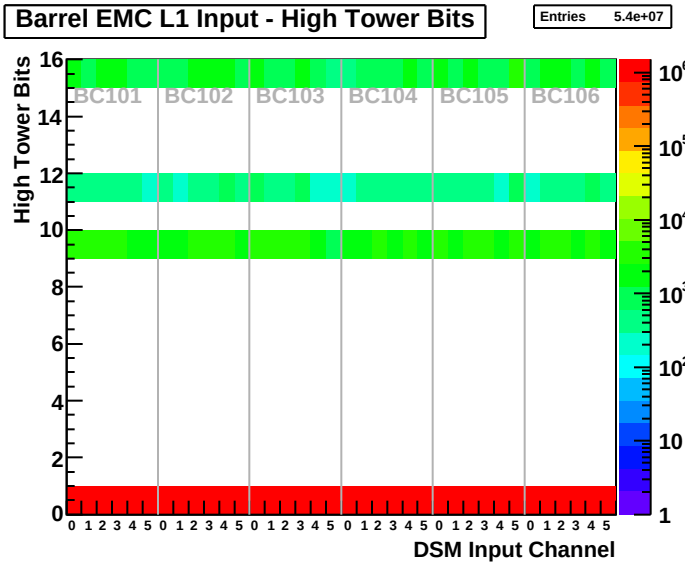
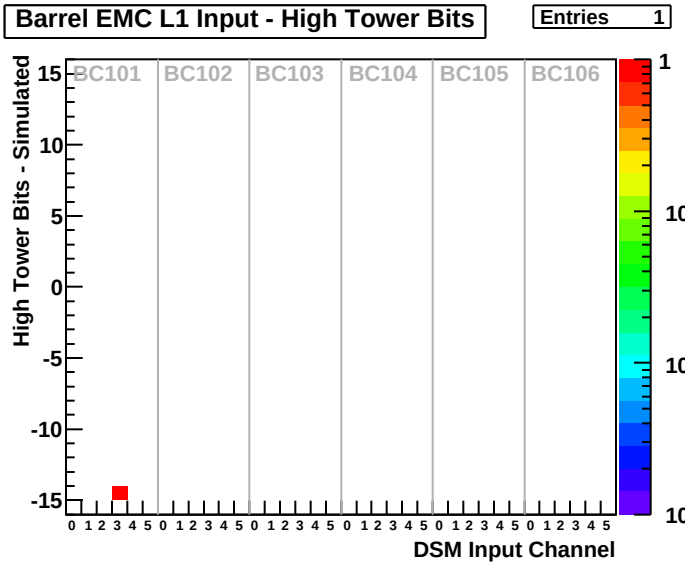

Barrel EMC L1 Input - Low Eta Sum
Entries 5.4e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

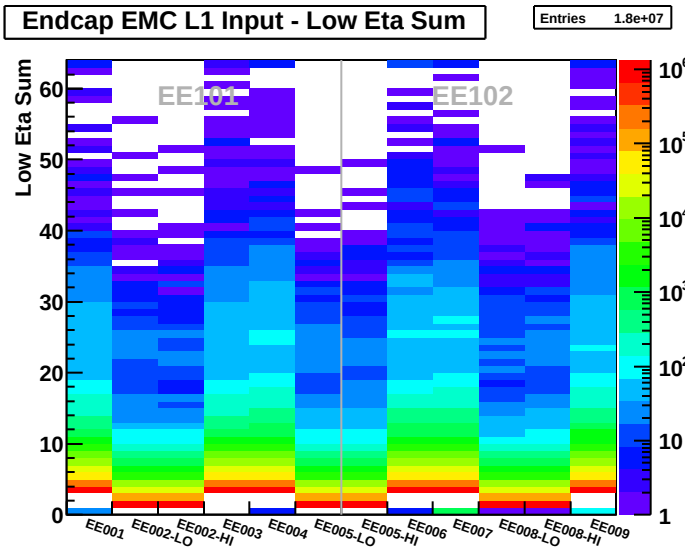

Barrel EMC L1 Input - Low Eta Sum
Entries 1904
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

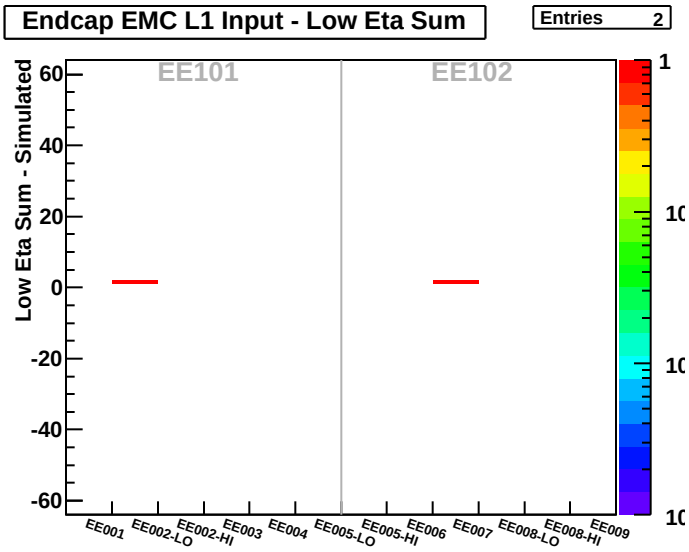

Barrel EMC L1 Input - High Eta Sum
Entries 5.4e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

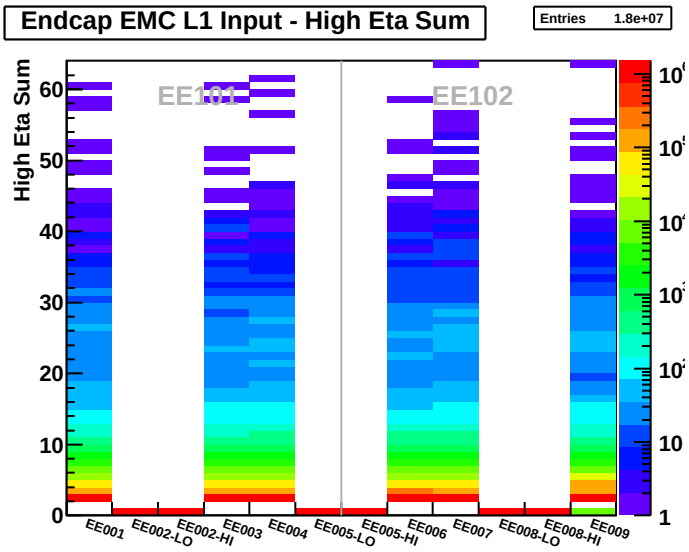

Barrel EMC L1 Input - High Eta Sum
Entries 43
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

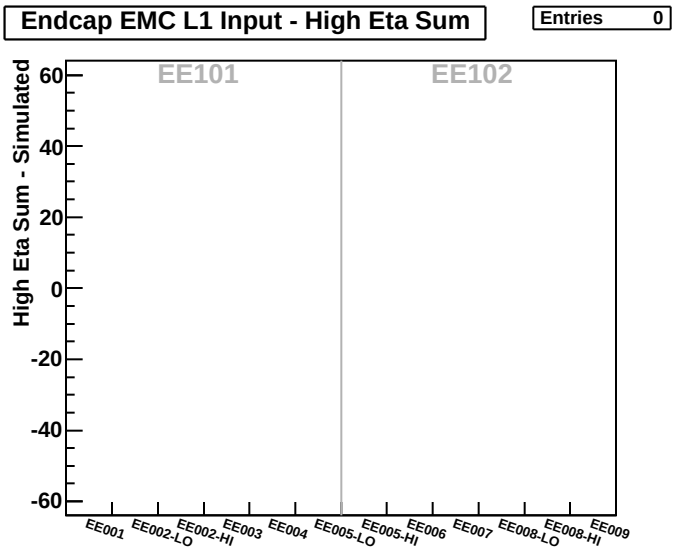

Barrel EMC L1 Input - High Tower Bits
Entries 5.4e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

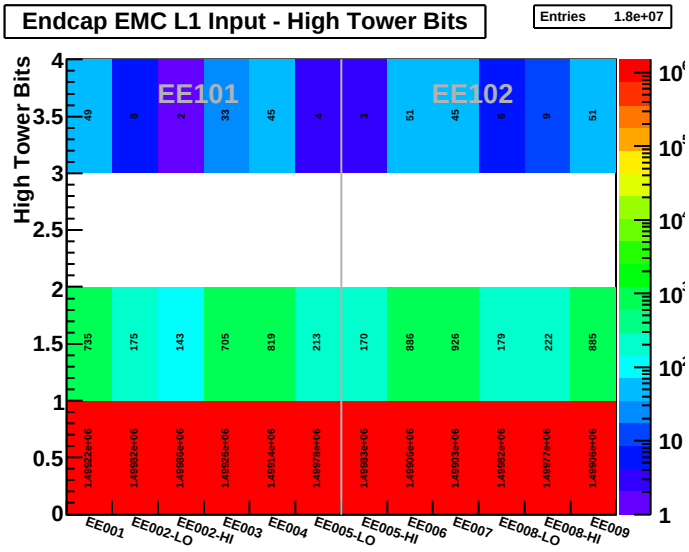

Barrel EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

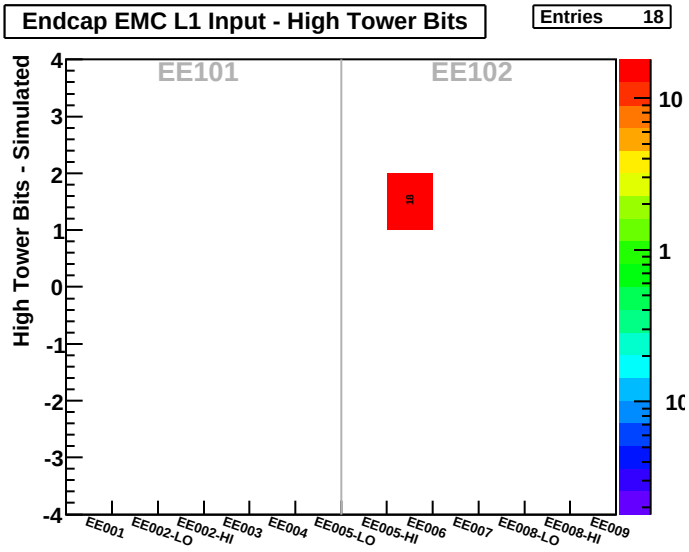

Endcap EMC L1 Input - Low Eta Sum
Entries 1.8e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

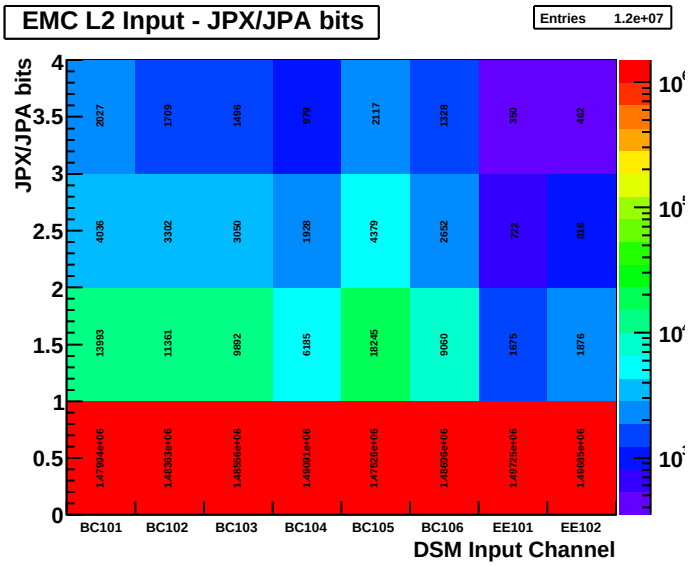

Endcap EMC L1 Input - Low Eta Sum
Entries 2
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

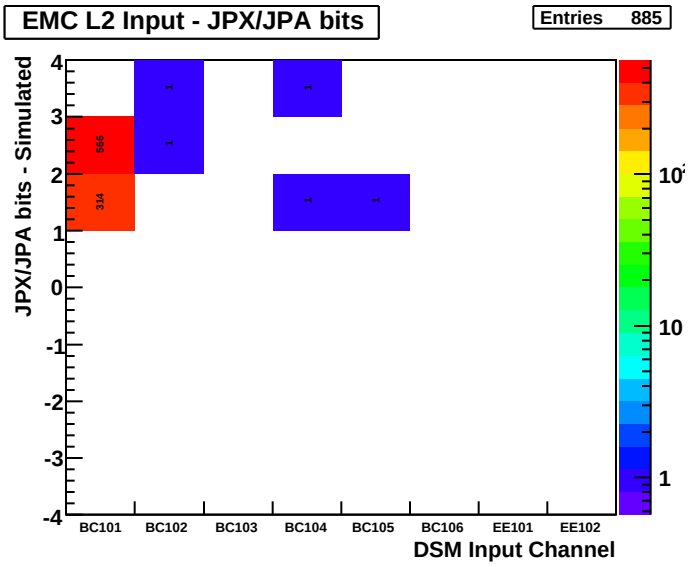

Endcap EMC L1 Input - High Eta Sum
Entries 1.8e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

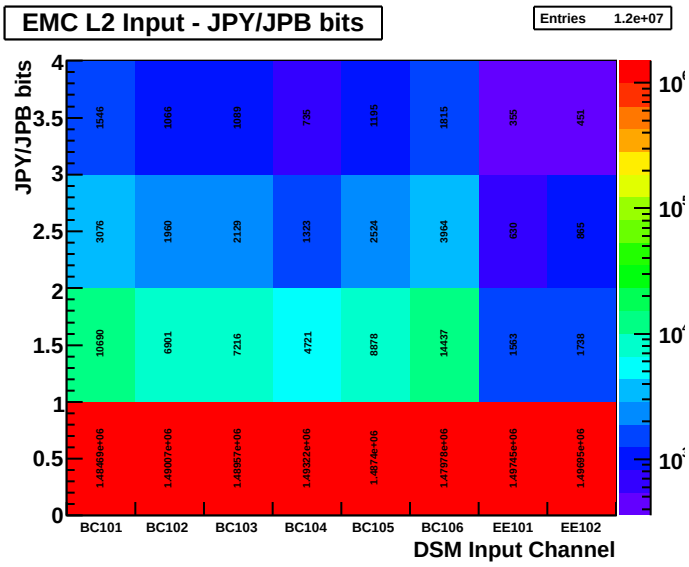

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

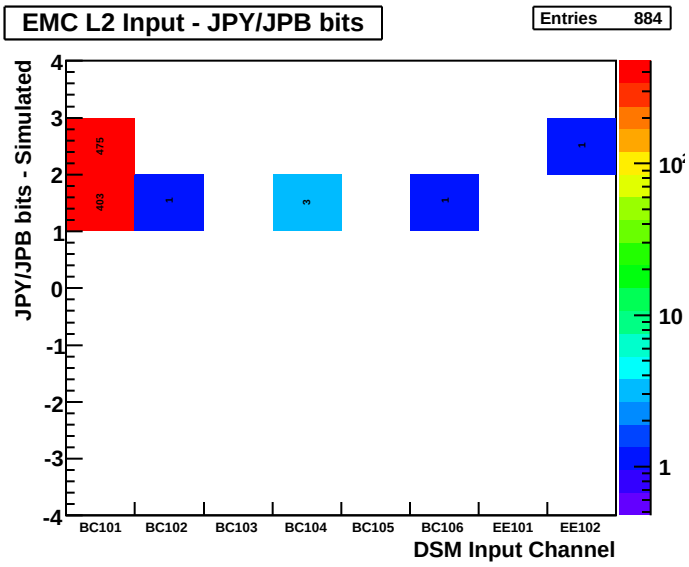

Endcap EMC L1 Input - High Tower Bits
Entries 1.8e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

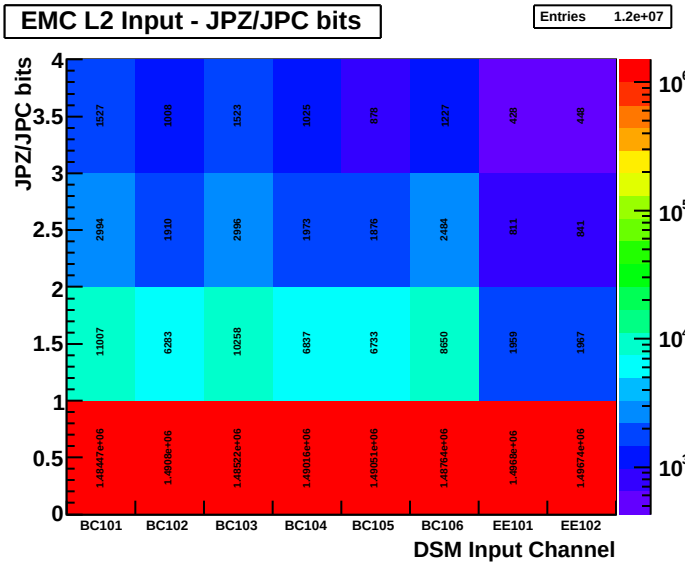

Endcap EMC L1 Input - High Tower Bits
Entries 18
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

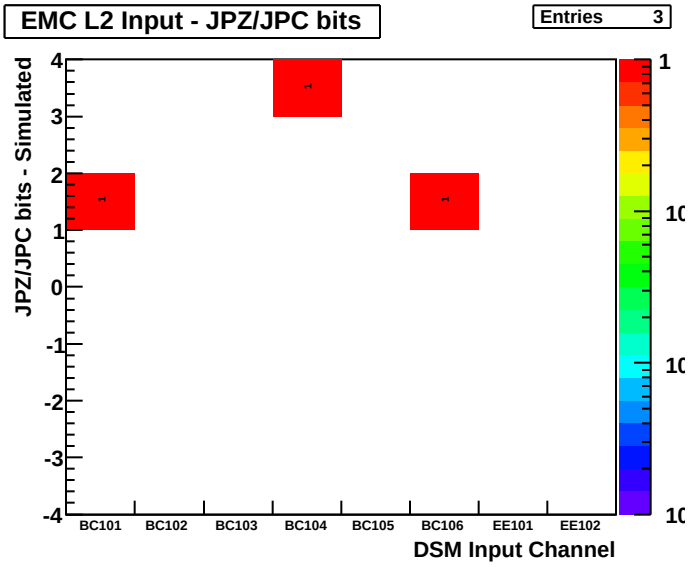

EMC L2 Input - JPX/JPA bits
Entries 1.2e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

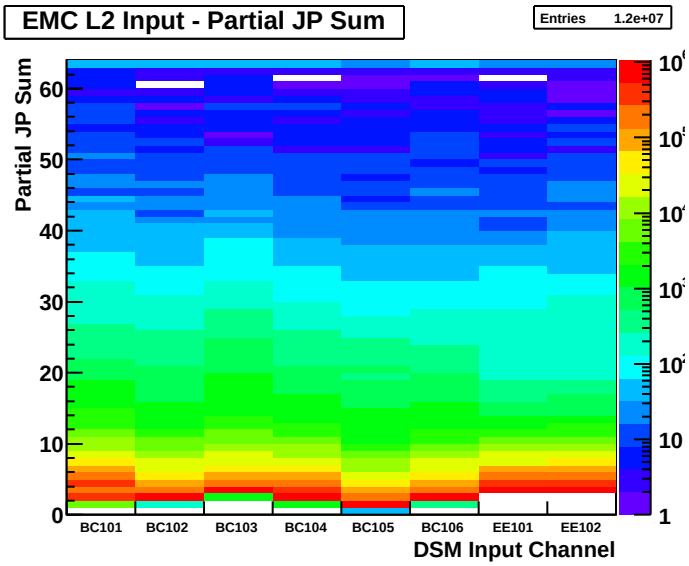

EMC L2 Input - JPX/JPA bits
Entries 885
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

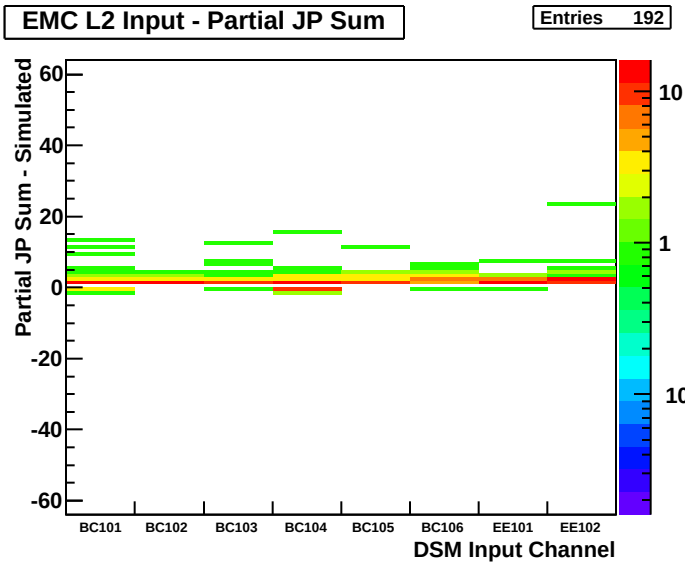

EMC L2 Input - JPY/JPB bits
Entries 1.2e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

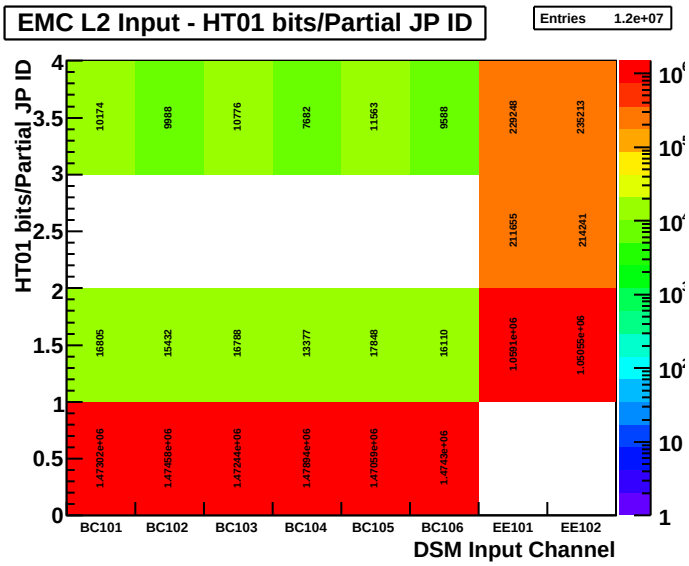

EMC L2 Input - JPY/JPB bits
Entries 884
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

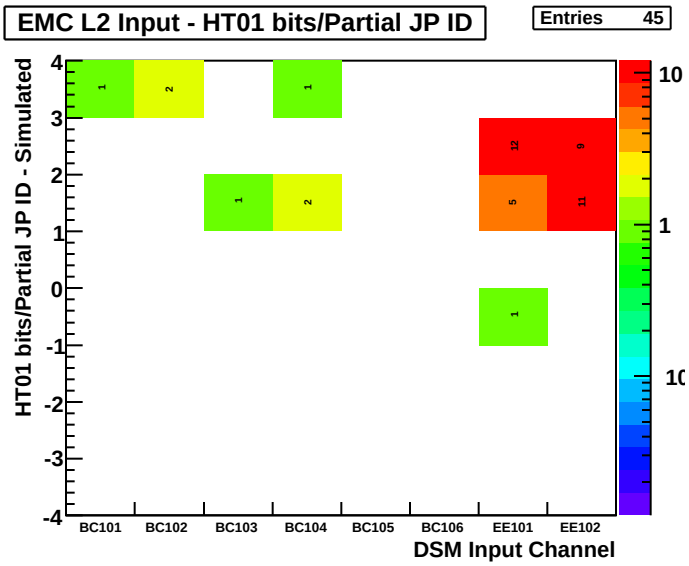

EMC L2 Input - JPZ/JPC bits
Entries 1.2e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

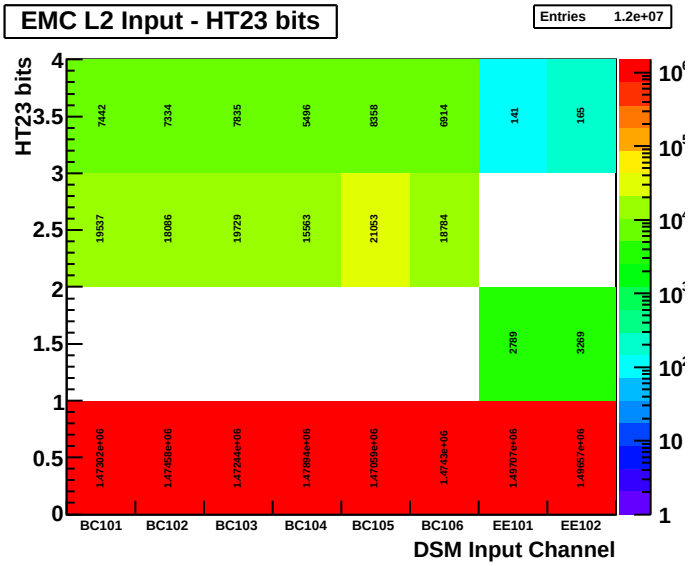

EMC L2 Input - JPZ/JPC bits
Entries 3
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

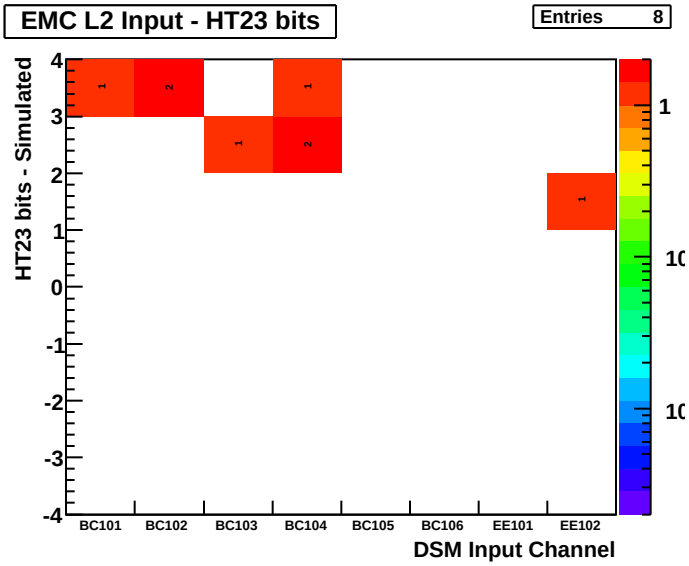

EMC L2 Input - Partial JP Sum
Entries 1.2e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

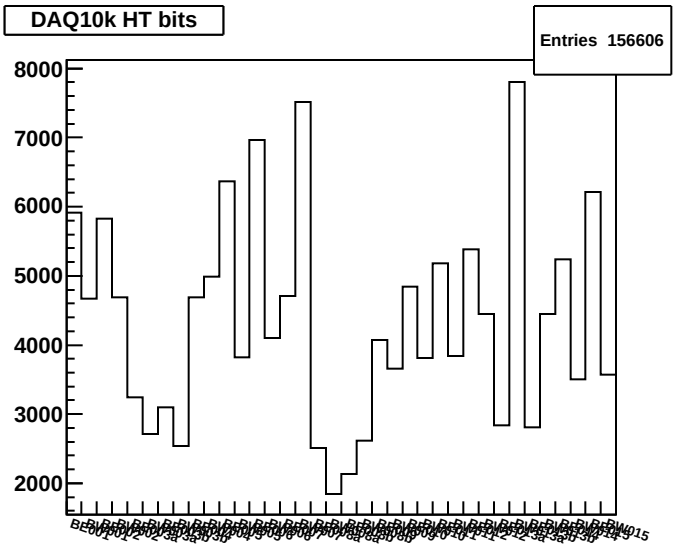

EMC L2 Input - Partial JP Sum
Entries 192
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

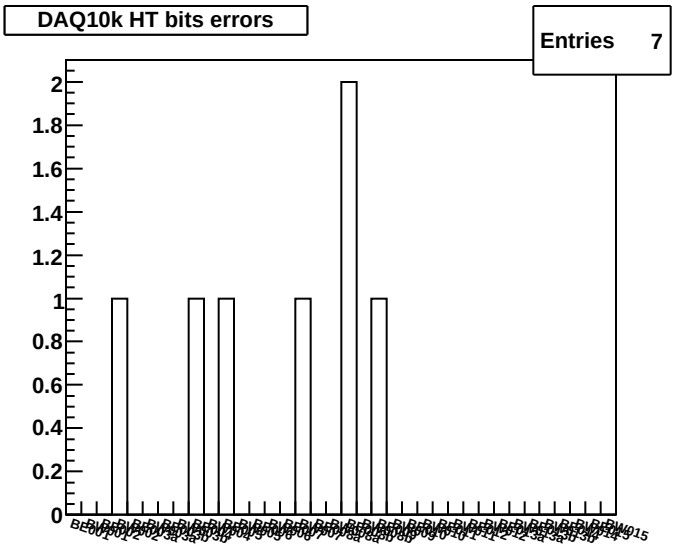

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.2e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

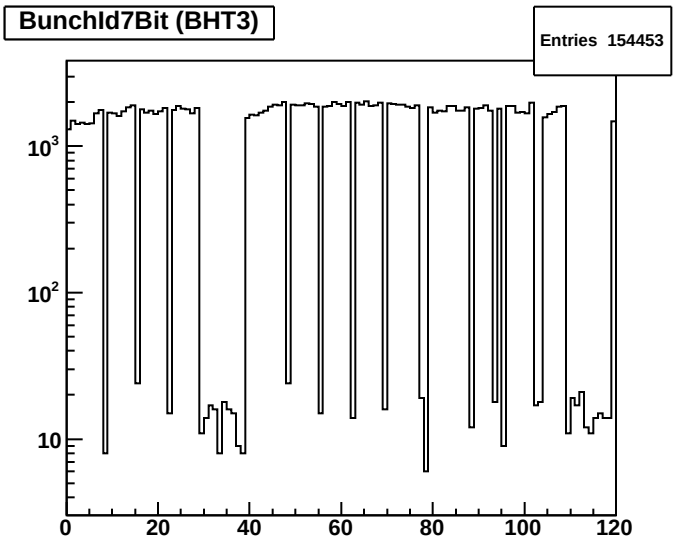

EMC L2 Input - HT01 bits/Partial JP ID
Entries 45
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

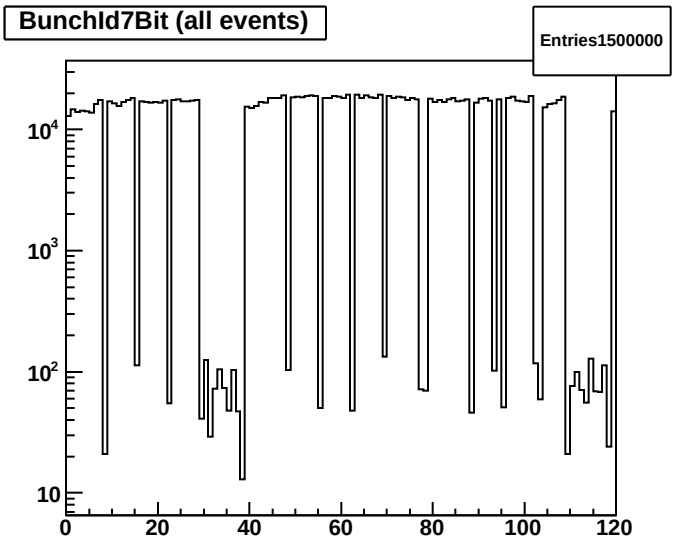

EMC L2 Input - HT23 bits
Entries 1.2e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

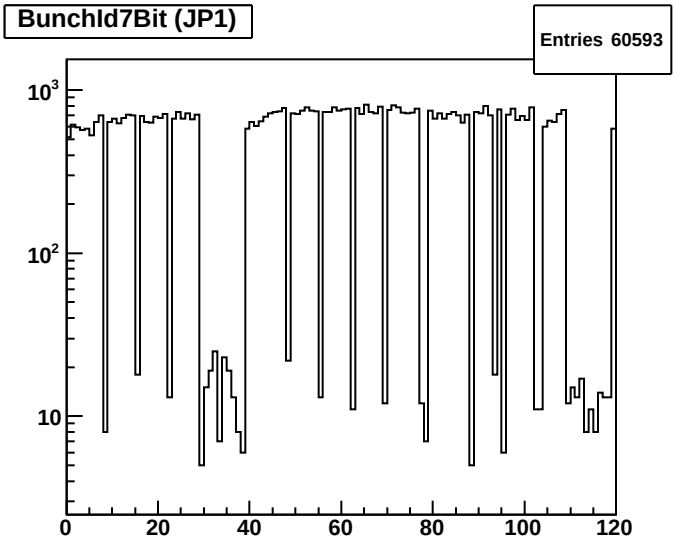

EMC L2 Input - HT23 bits
Entries 8
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

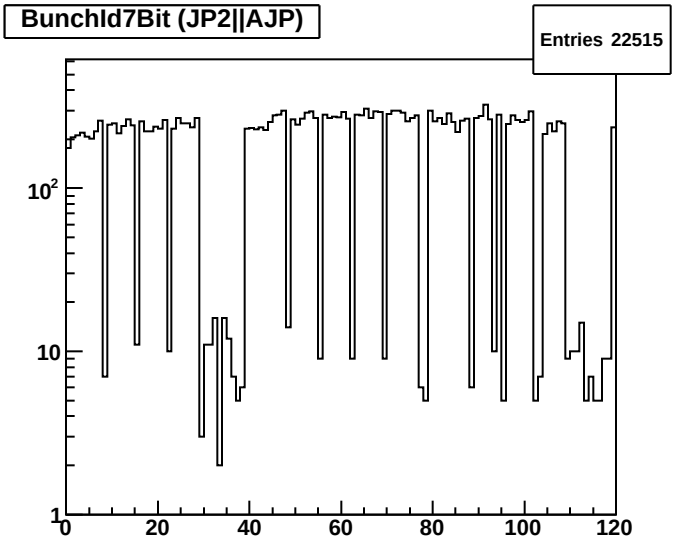

DAQ10k HT bits
Entries 156606
8000
7000
6000
5000
4000
3000
2000

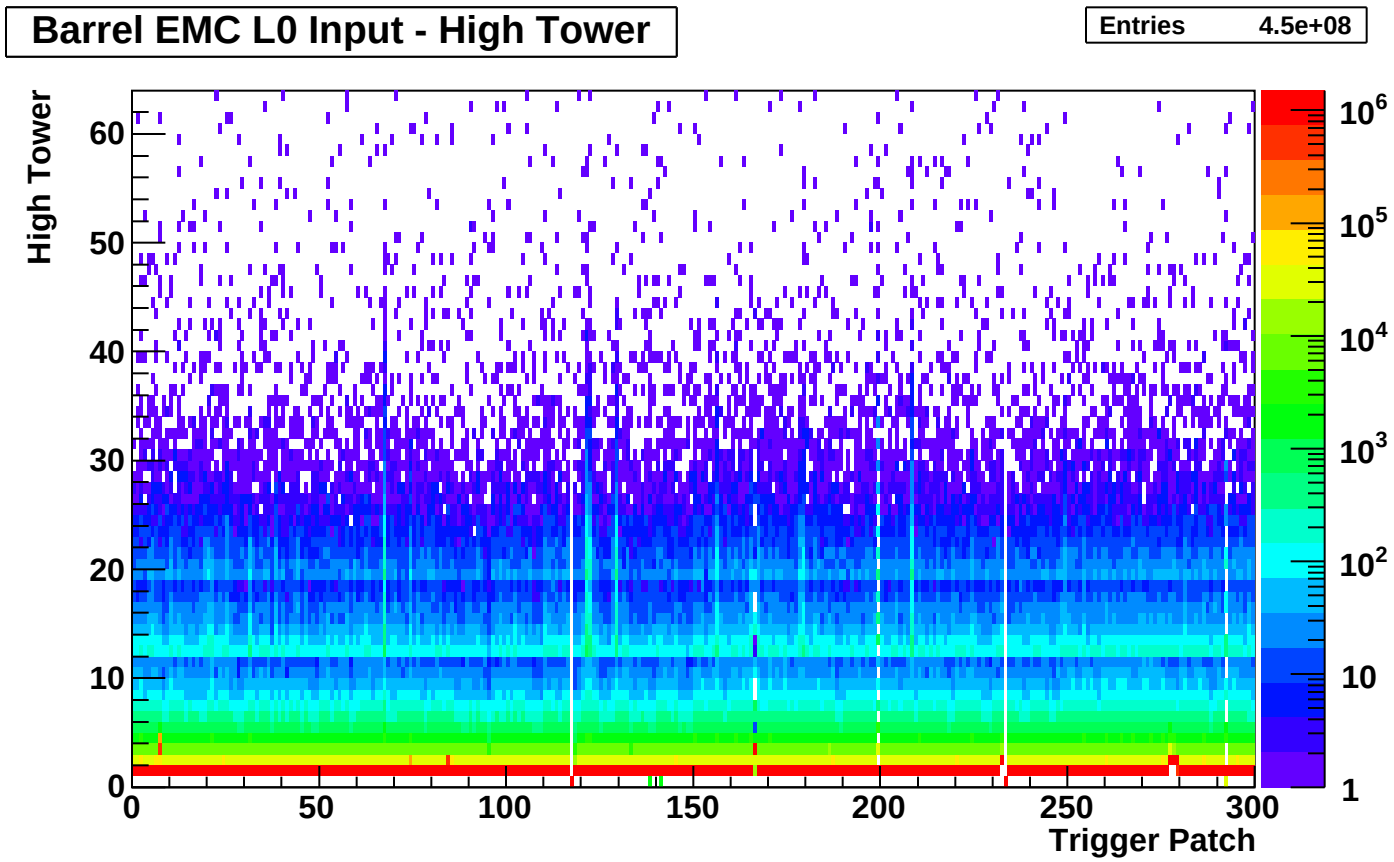

DAQ10k HT bits errors
Entries 7
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0

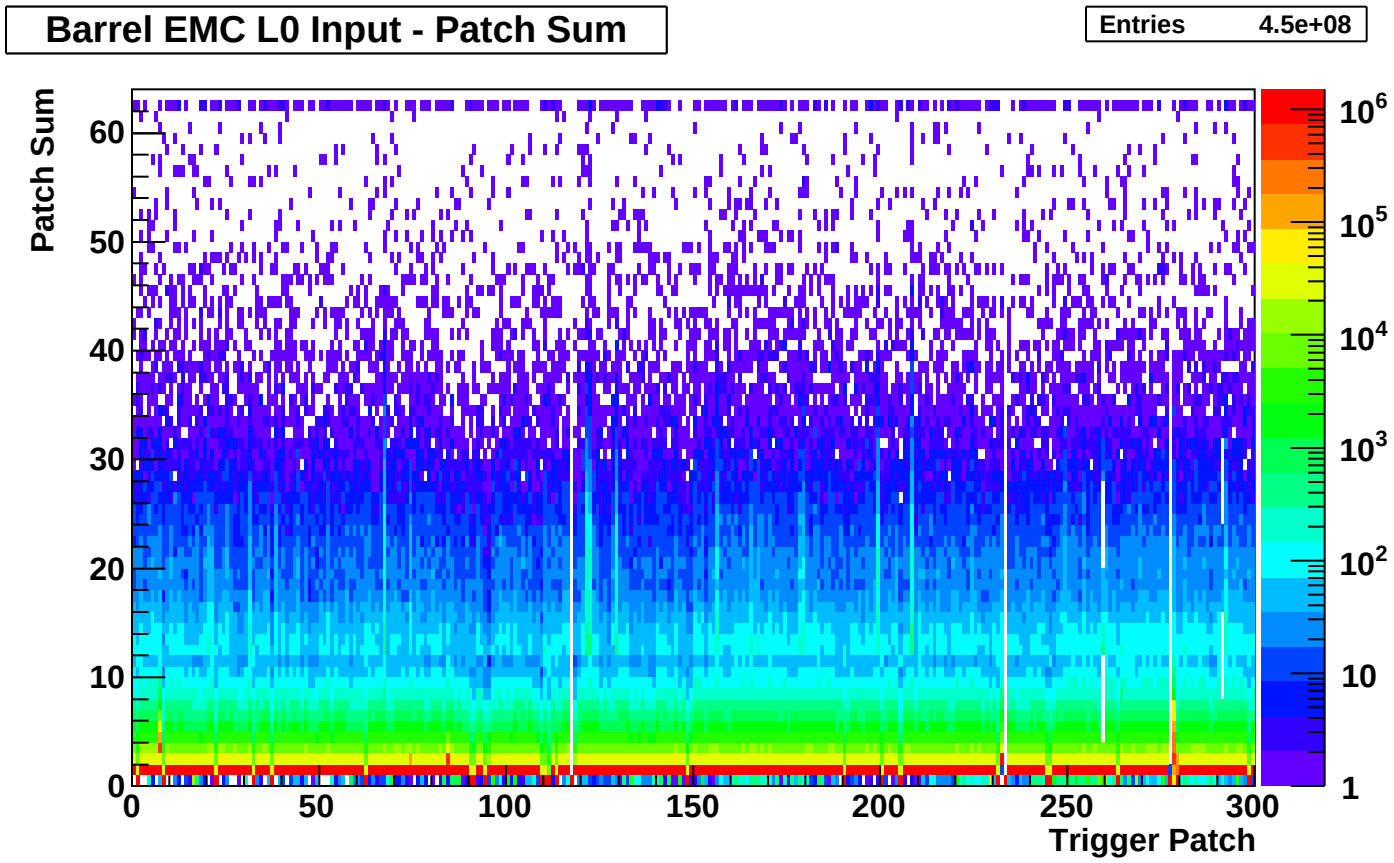

BunchId7Bit (BHT3)
Entries 154453
10^3
10^2
10
0
20
40
60
80
100
120

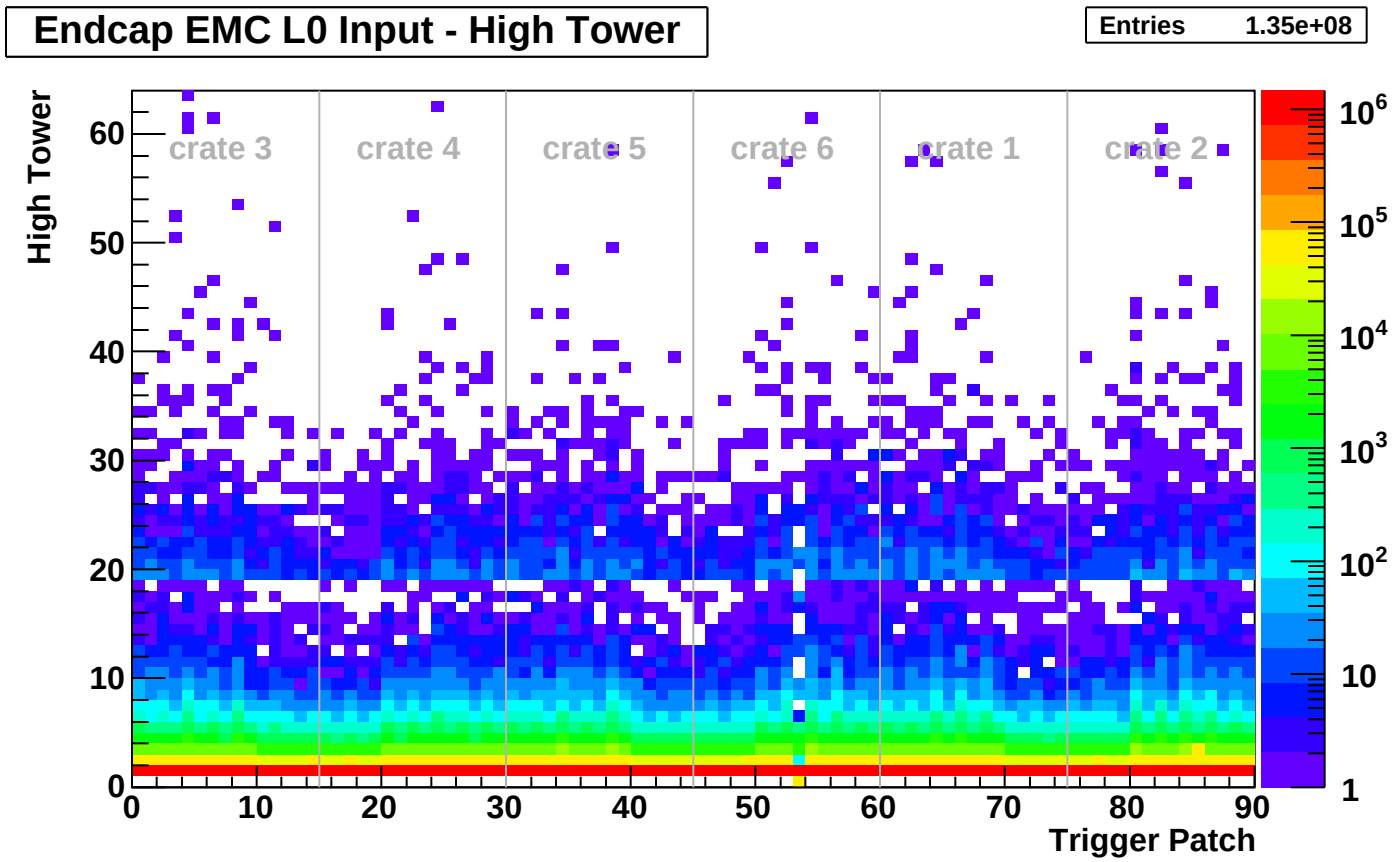

BunchId7Bit (all events)
Entries1500000
10^4
10^3
10^2
10
0
20
40
60
80
100
120

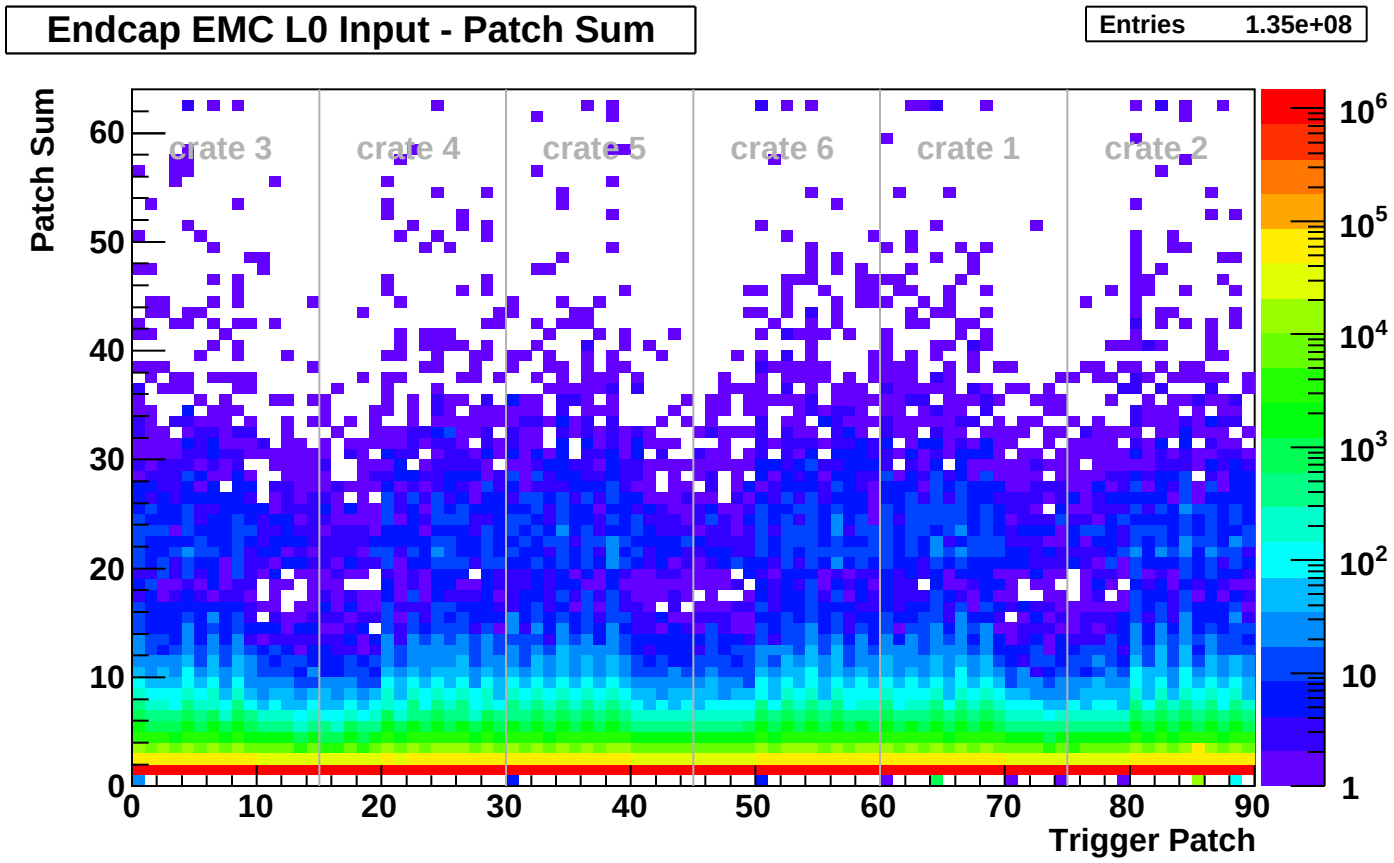

BunchId7Bit (JP1)
Entries 60593
10^3
10^2
10
0
20
40
60
80
100
120

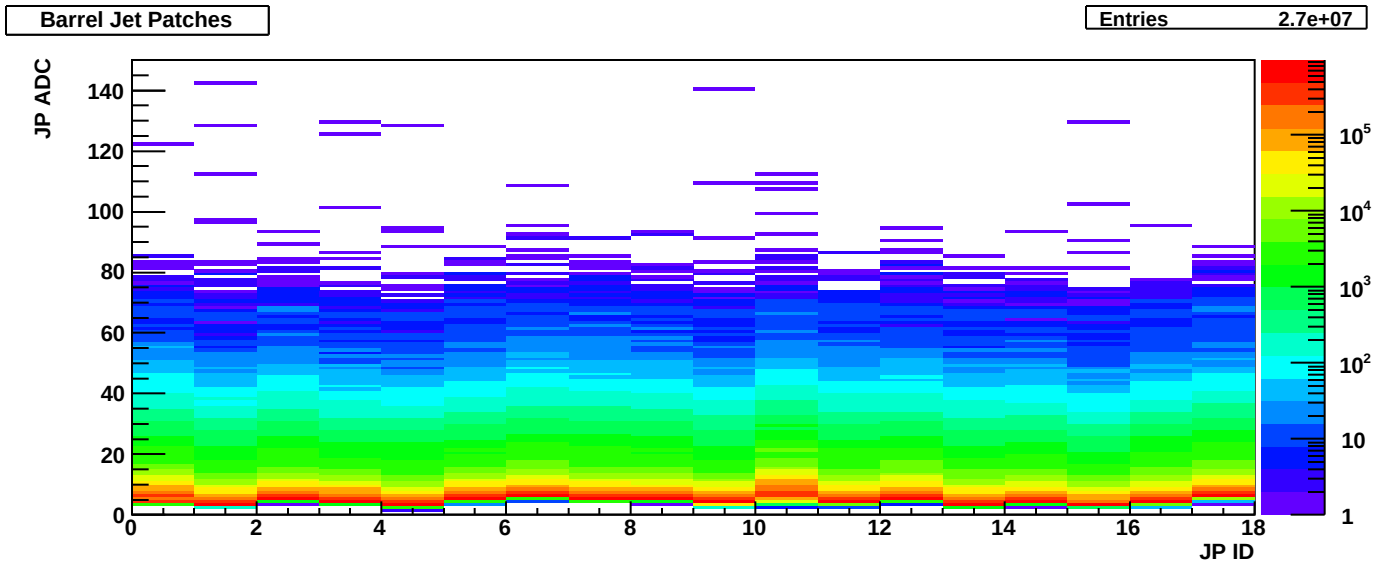

BunchId7Bit (JP2||AJP)
Entries 22515
10^2
10
1
0
20
40
60
80
100
120

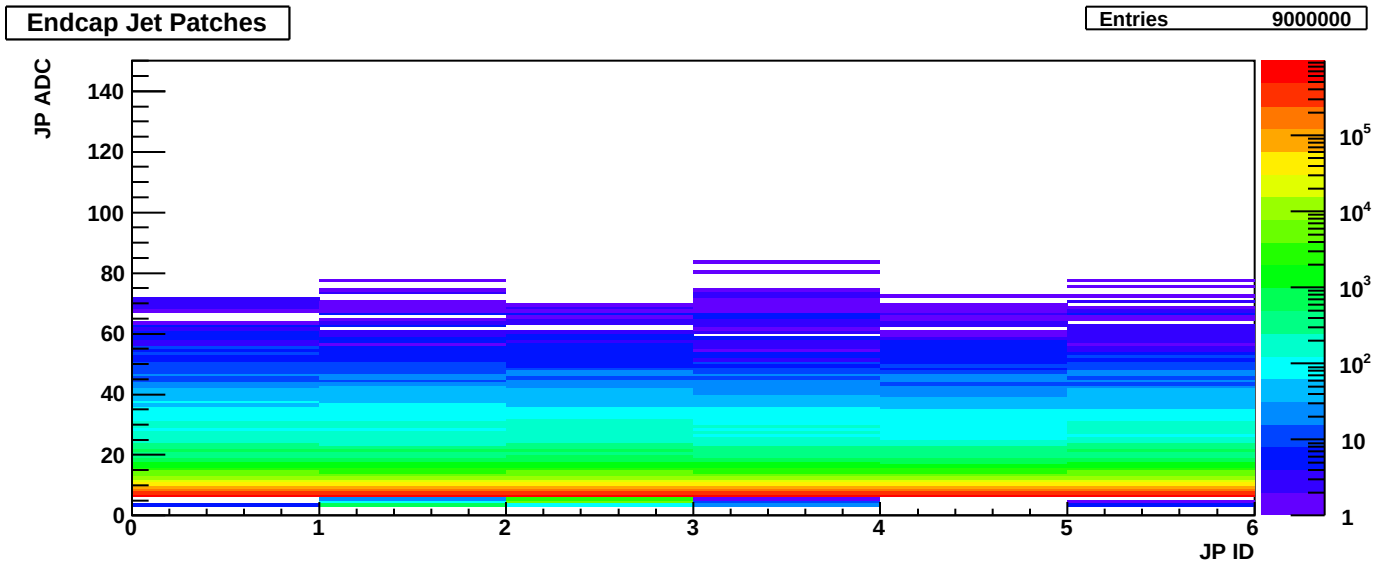

Barrel EMC L0 Input - High Tower
Entries 4.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

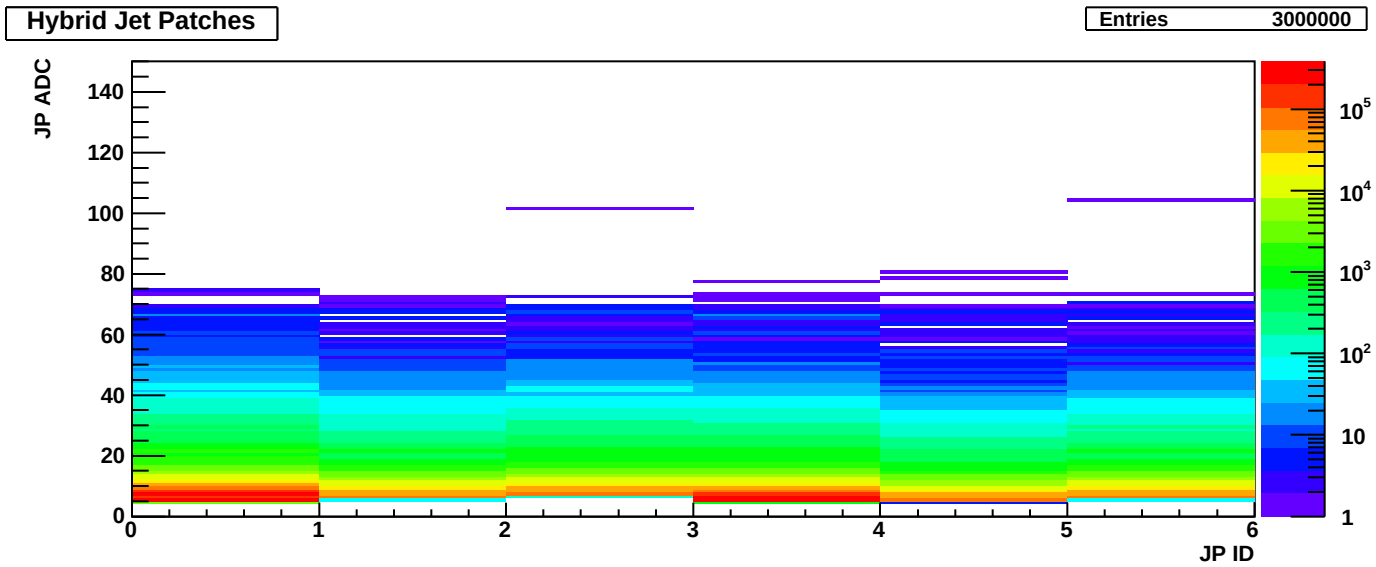

Barrel EMC L0 Input - Patch Sum
Entries 4.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

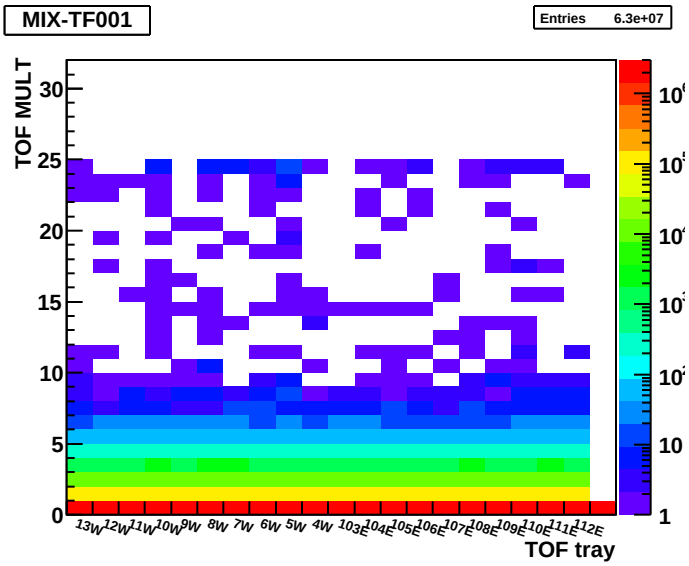

Endcap EMC L0 Input - High Tower
Entries 1.35e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

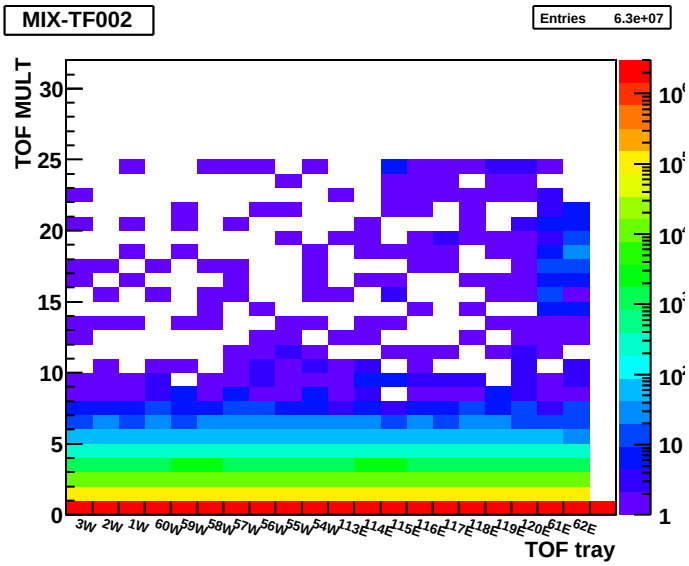

Endcap EMC L0 Input - Patch Sum
Entries 1.35e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

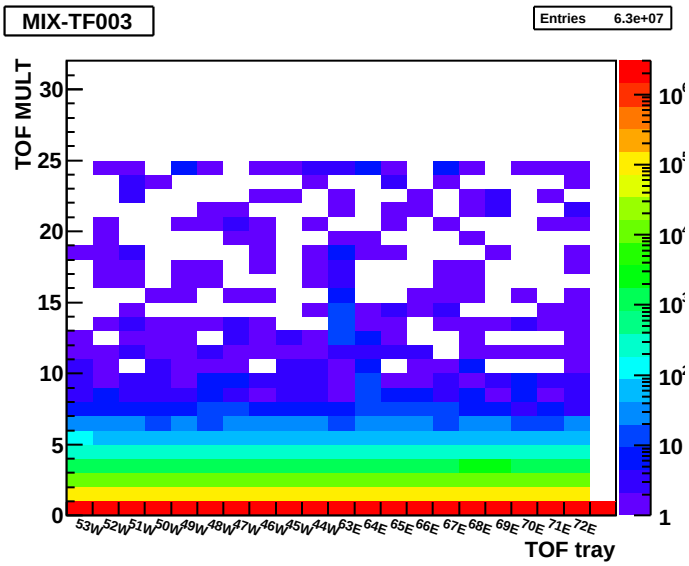

Barrel Jet Patches
Entries 2.7e+07
JP ADC
JP ID

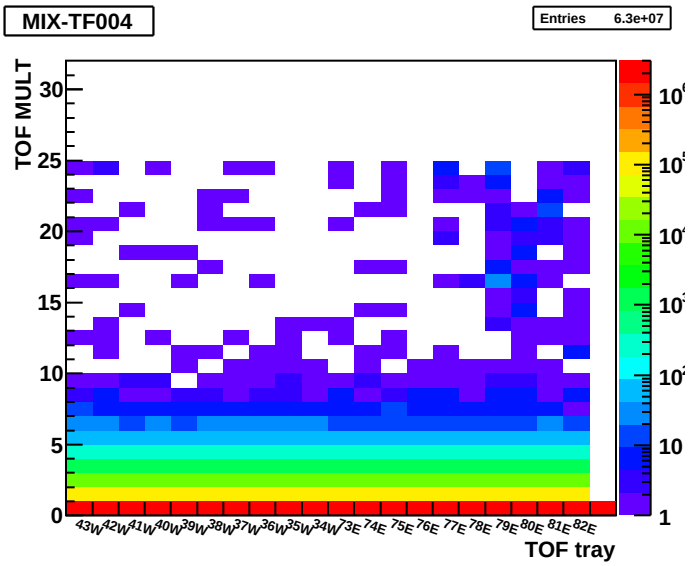

Endcap Jet Patches
Entries 9000000
JP ADC
JP ID

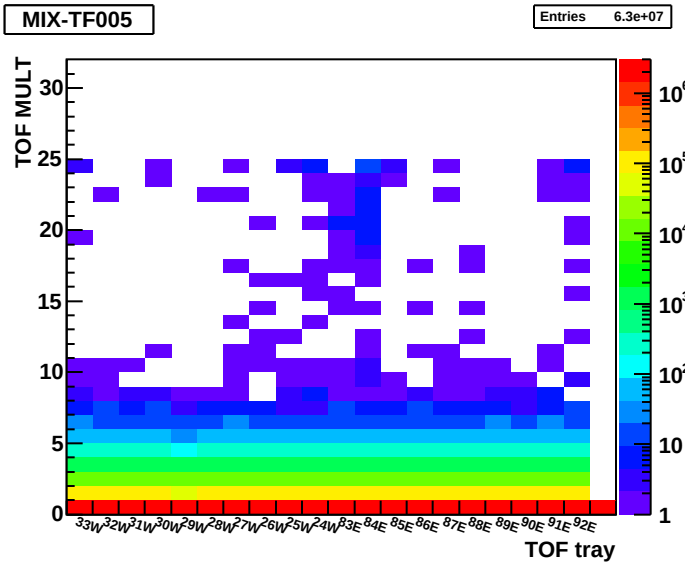

Hybrid Jet Patches
Entries 3000000
JP ADC
JP ID

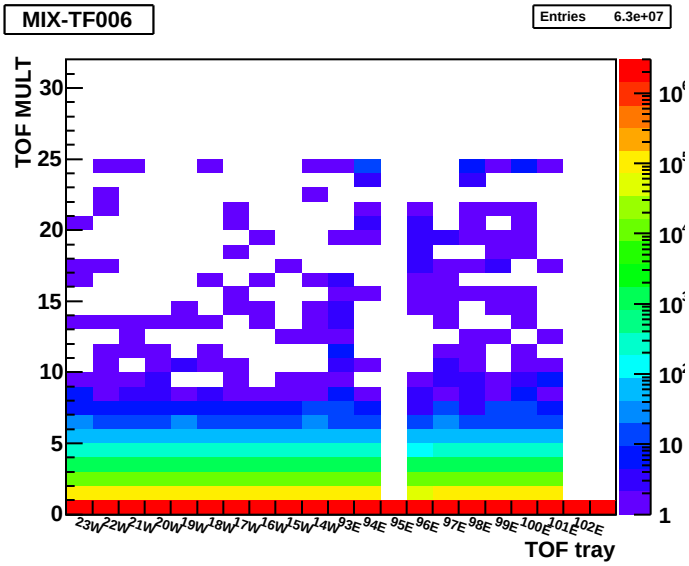

MIX-TF001
Entries 6.3e+07
TOF MULT
TOF tray

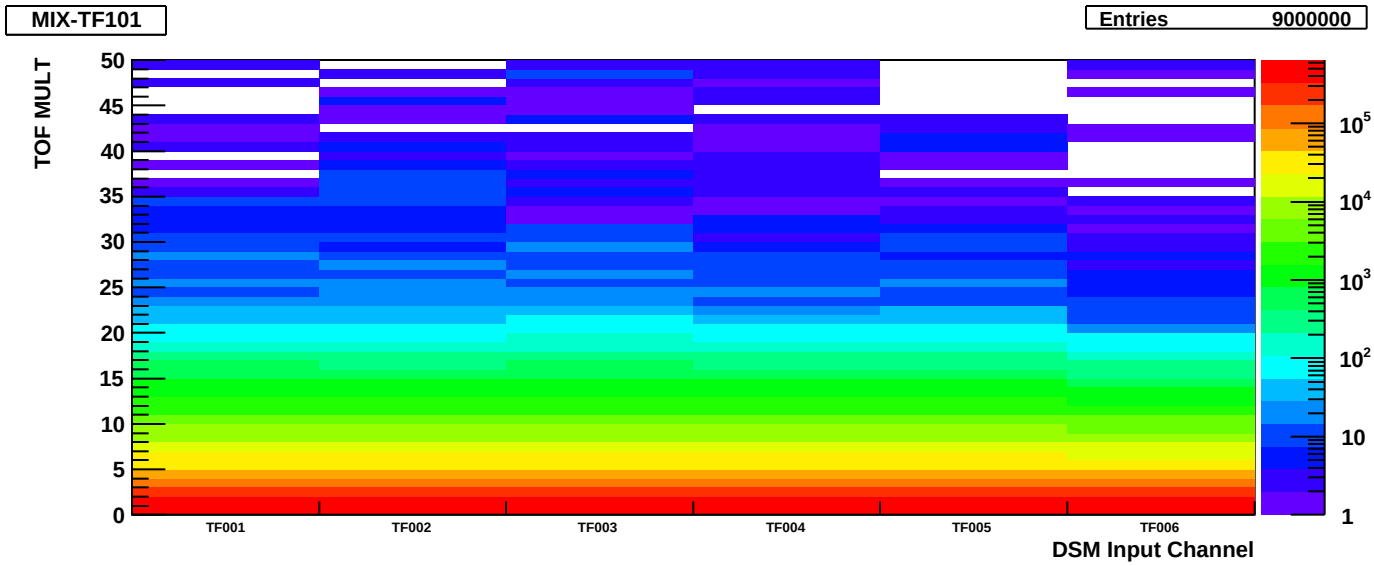

MIX-TF002
Entries 6.3e+07
TOF MULT
TOF tray

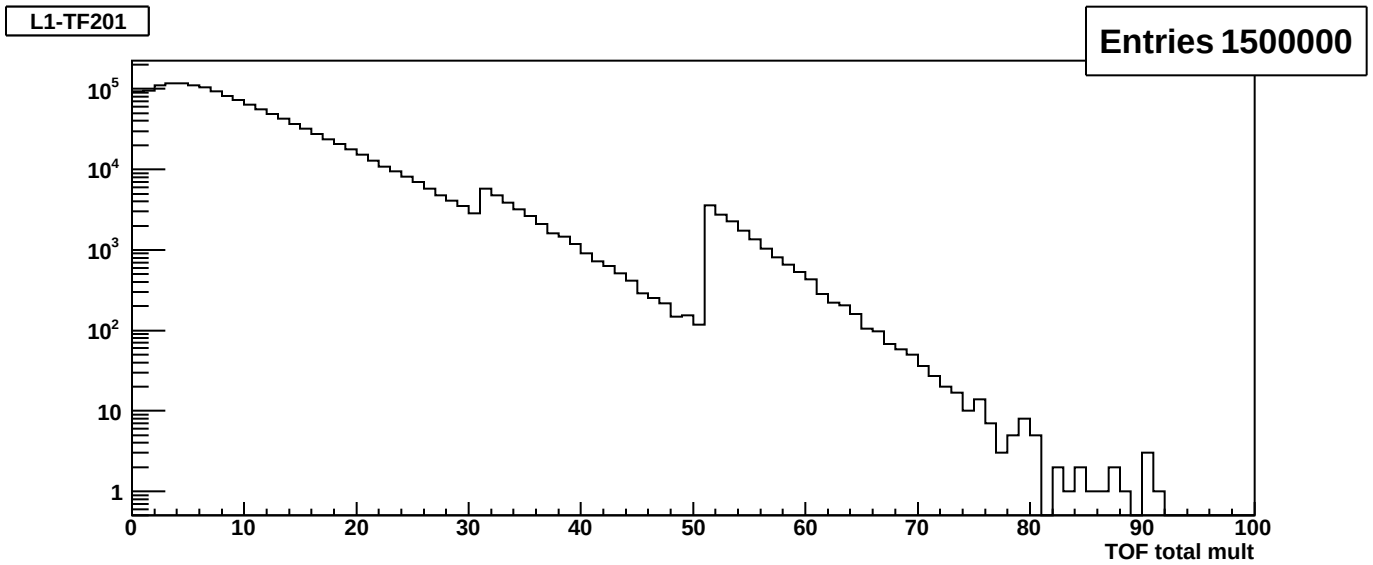

MIX-TF003
Entries 6.3e+07
TOF MULT
TOF tray

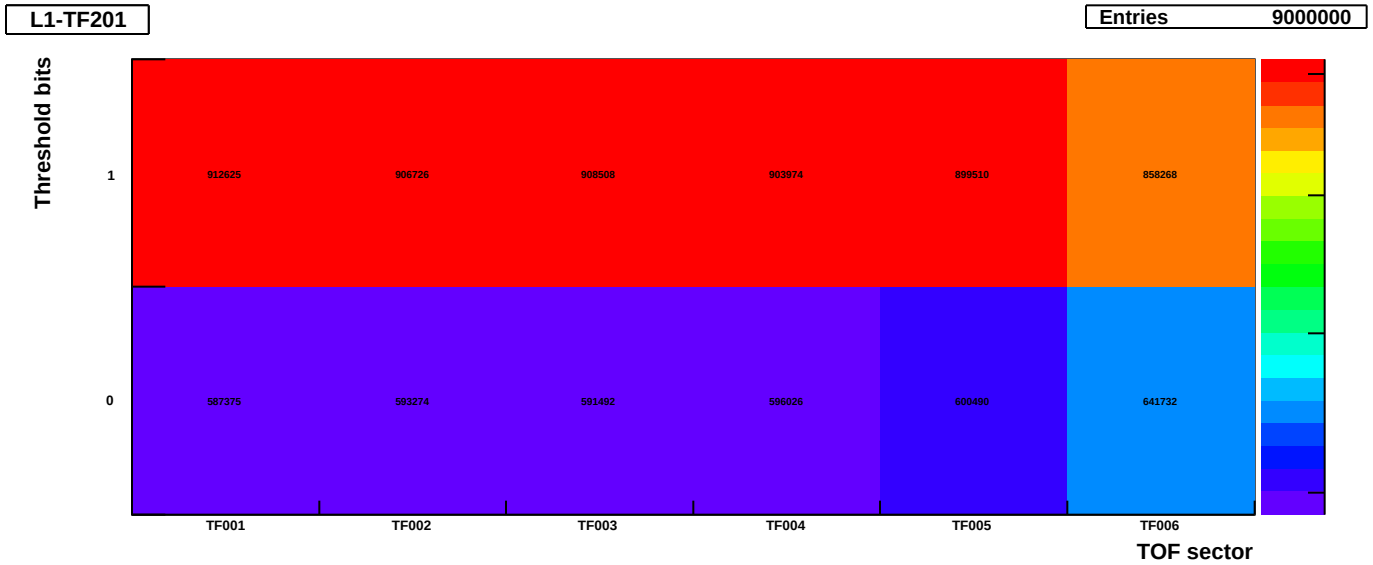

MIX-TF004
Entries 6.3e+07
TOF MULT
TOF tray

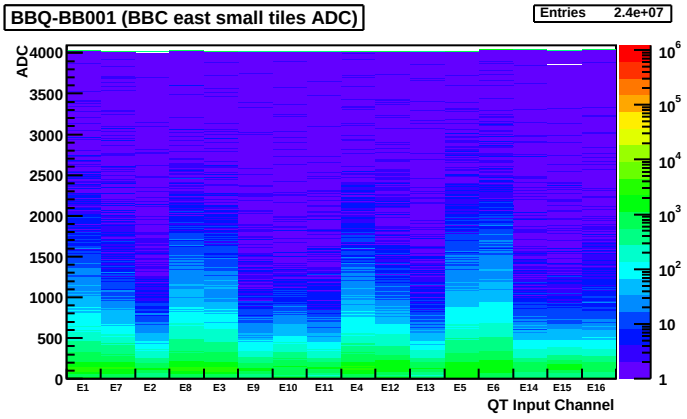

MIX-TF005
Entries 6.3e+07
TOF MULT
TOF tray

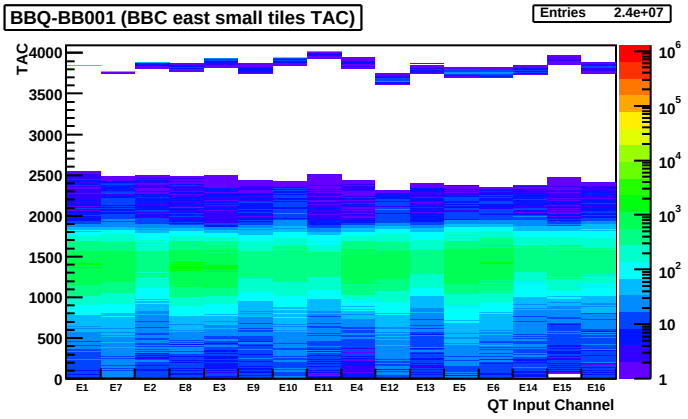

MIX-TF006
Entries 6.3e+07
TOF MULT
TOF tray

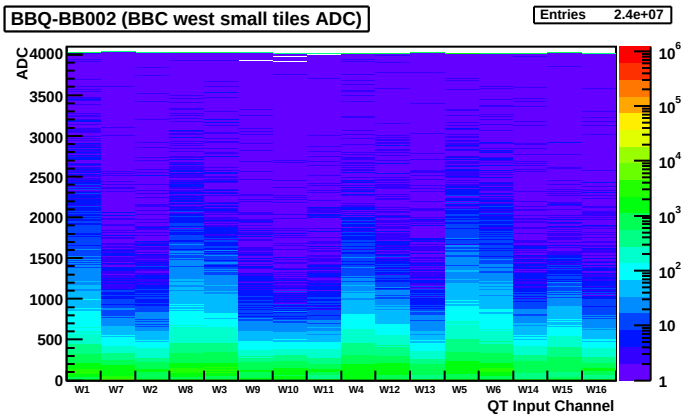

MIX-TF101
Entries 9000000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

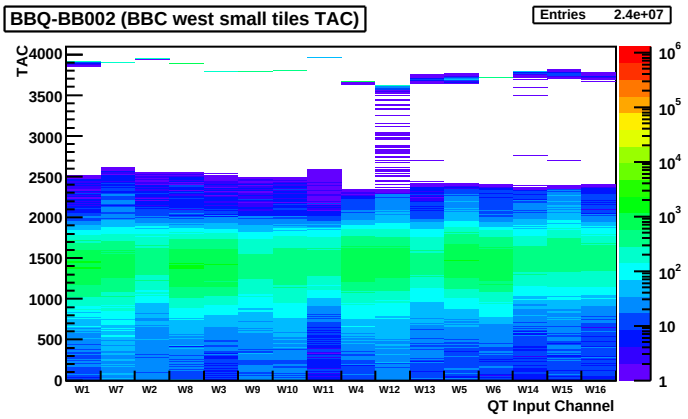

L1-TF201
Entries 1500000
TOF total mult

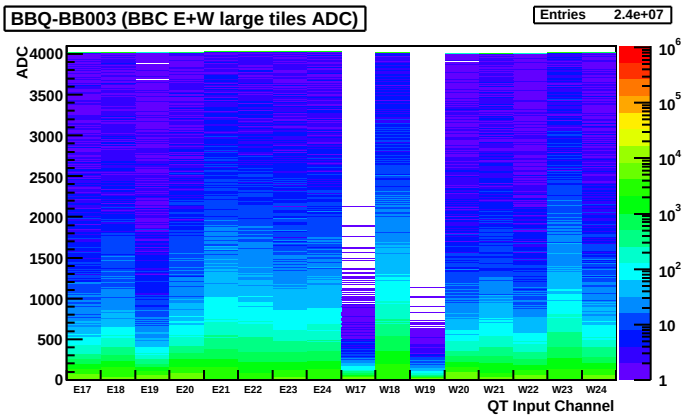

L1-TF201
Entries 9000000
Threshold bits
912625
906726
908508
903974
899510
858268
587375
593274
591492
596026
600490
641732
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

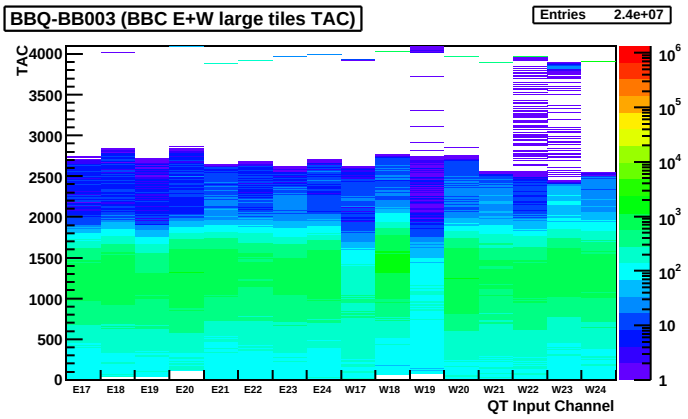

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

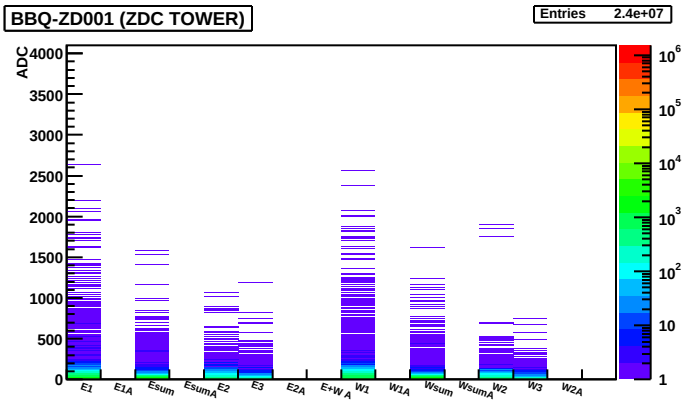

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

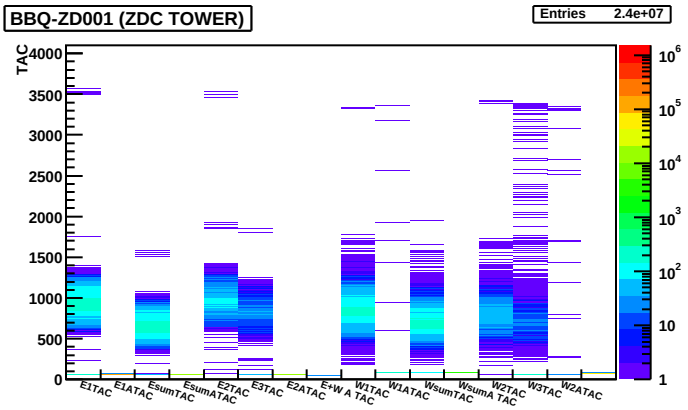

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

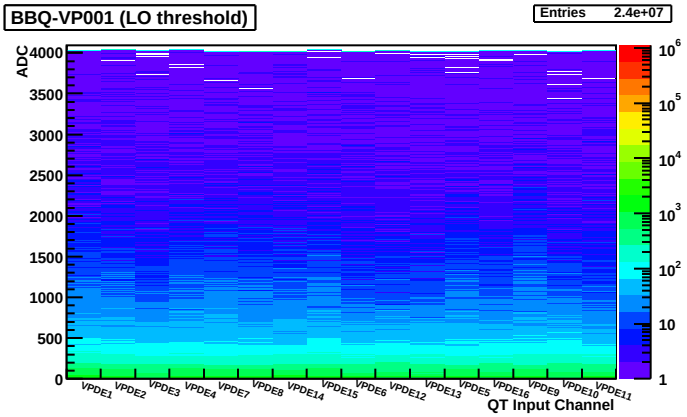

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

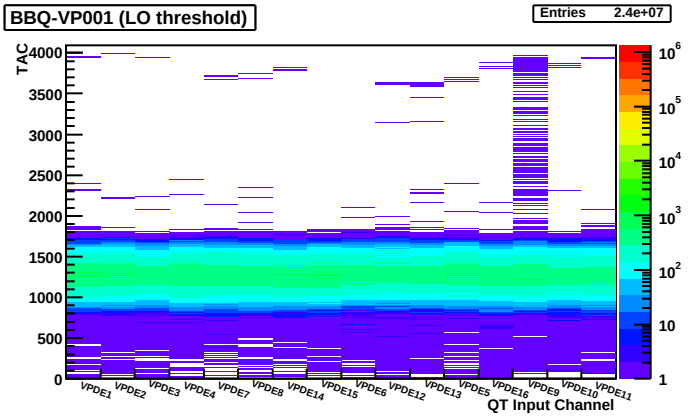

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

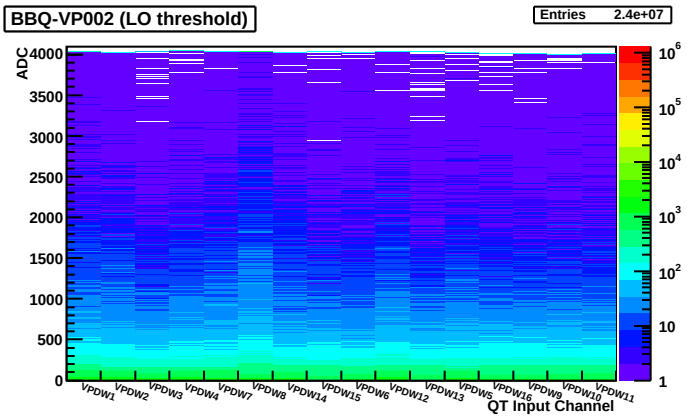

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

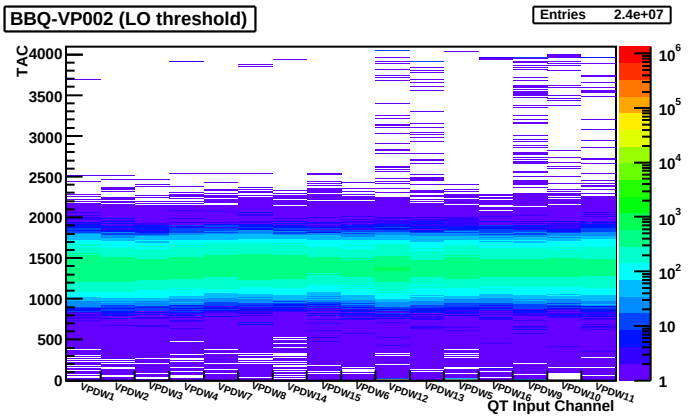

BBQ-ZD001 (ZDC TOWER)
Entries 2.4e+07
ADC

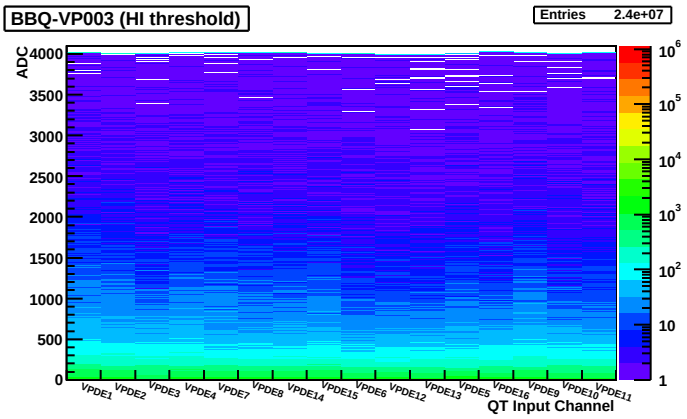

BBQ-ZD001 (ZDC TOWER)
Entries 2.4e+07
TAC

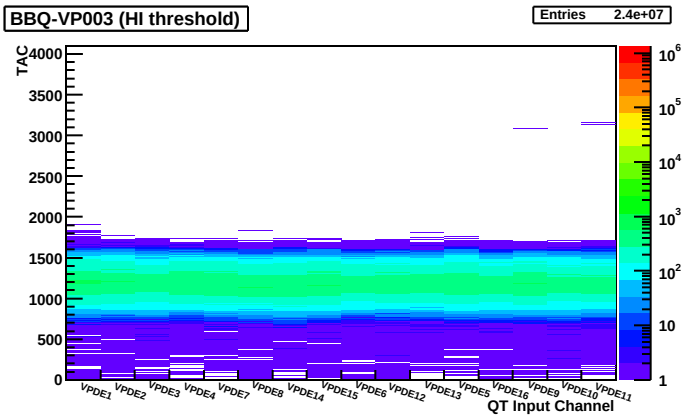

BBQ-VP001 (LO threshold)
Entries 2.4e+07
ADC
QT Input Channel

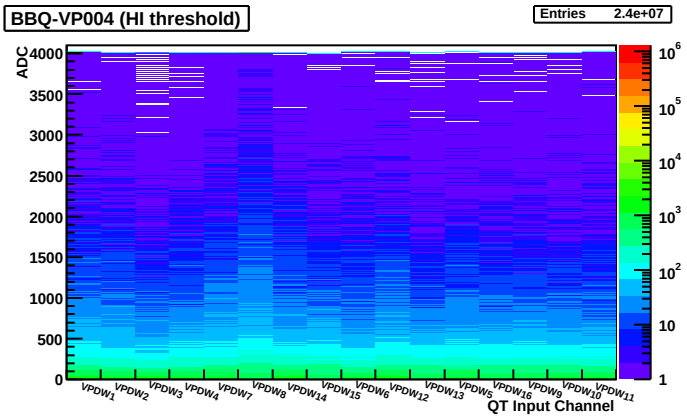

BBQ-VP001 (LO threshold)
Entries 2.4e+07
TAC
QT Input Channel

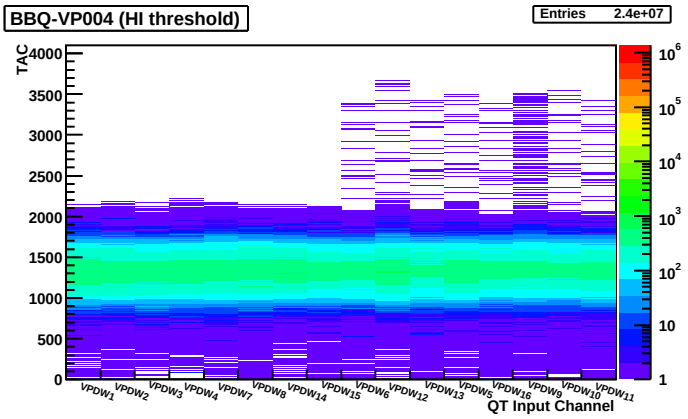

BBQ-VP002 (LO threshold)
Entries 2.4e+07
ADC
QT Input Channel

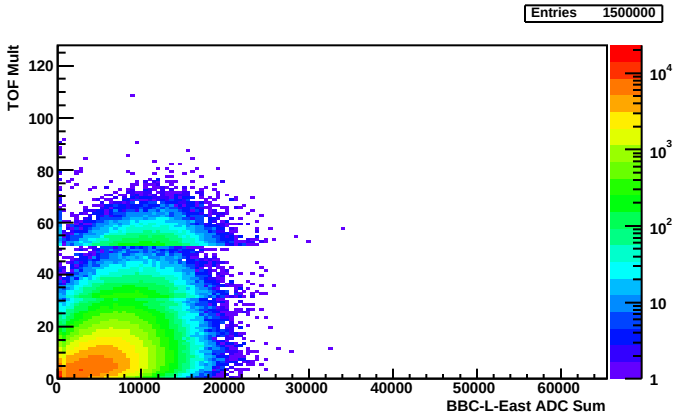

BBQ-VP002 (LO threshold)
Entries 2.4e+07
TAC
QT Input Channel

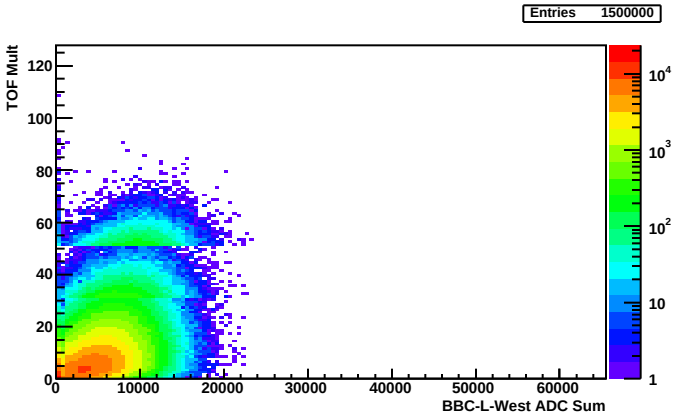

BBQ-VP003 (HI threshold)
Entries 2.4e+07
ADC
QT Input Channel

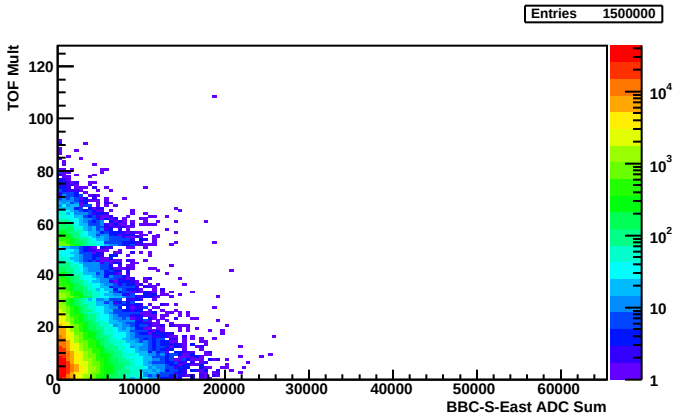

BBQ-VP003 (HI threshold)
Entries 2.4e+07
TAC
QT Input Channel

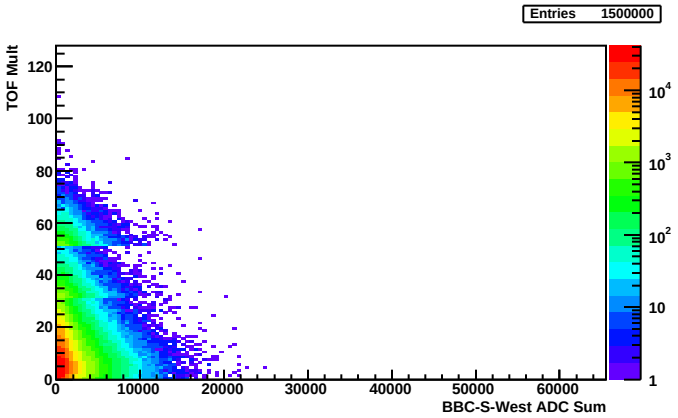

BBQ-VP004 (HI threshold)
Entries 2.4e+07
ADC
QT Input Channel

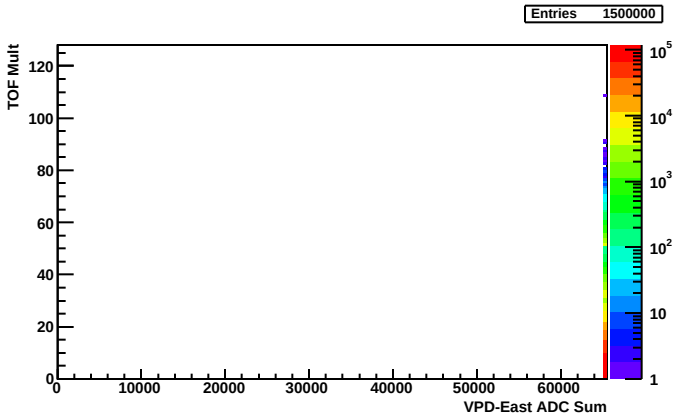

BBQ-VP004 (HI threshold)
Entries 2.4e+07
TAC
QT Input Channel

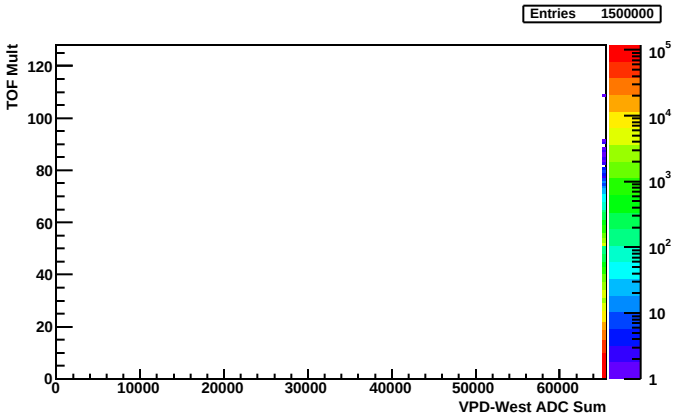

Entries 1500000
TOF Mult
BBC-L-East ADC Sum

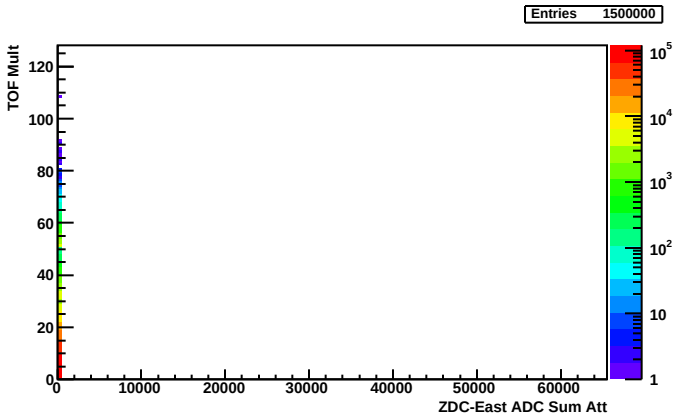

Entries 1500000
TOF Mult
BBC-L-West ADC Sum

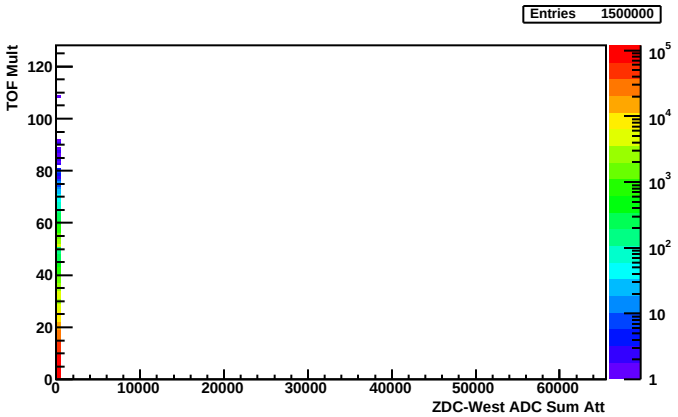

Entries 1500000
TOF Mult
BBC-S-East ADC Sum

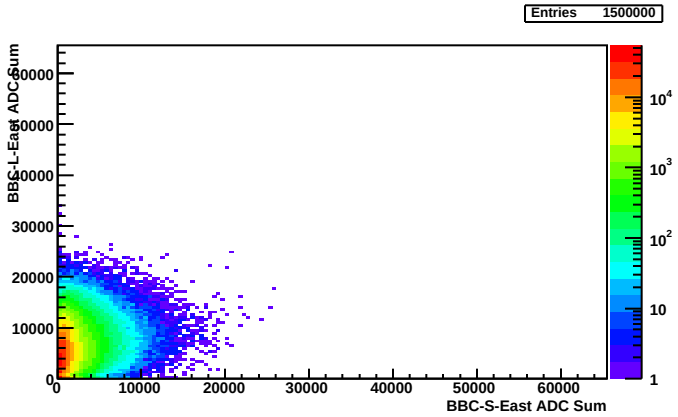

Entries 1500000
TOF Mult
BBC-S-West ADC Sum

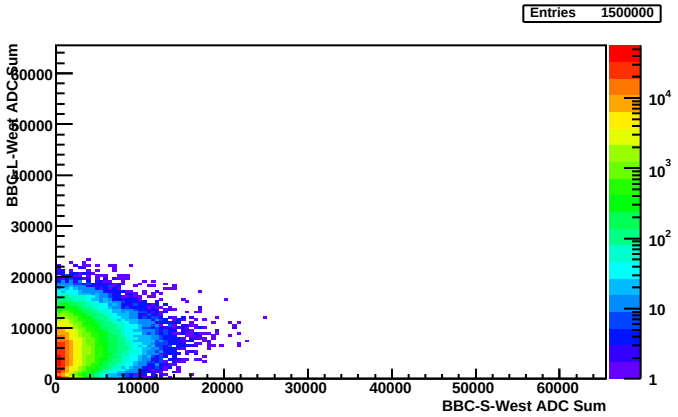

Entries 1500000
TOF Mult
VPD-East ADC Sum

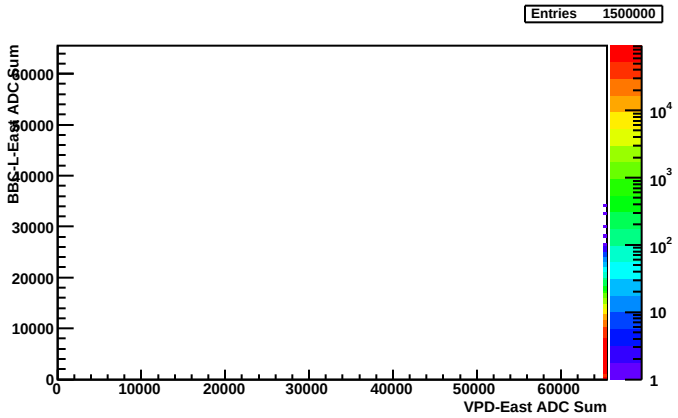

Entries 1500000
TOF Mult
VPD-West ADC Sum

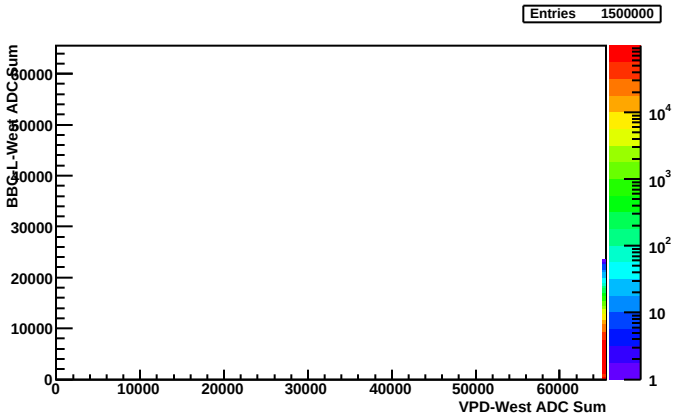

Entries 1500000
TOF Mult
ZDC-East ADC Sum Att

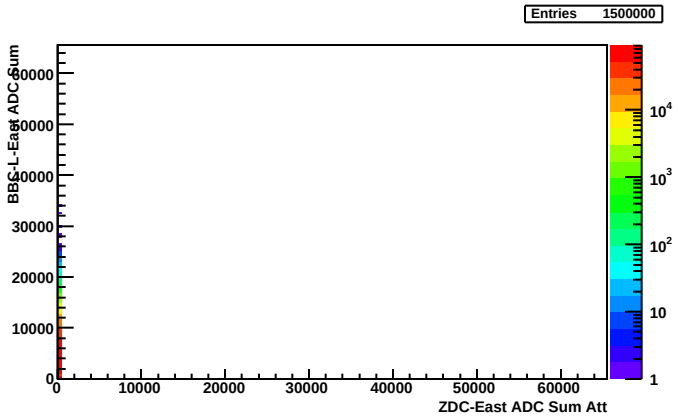

Entries 1500000
TOF Mult
ZDC-West ADC Sum Att


Entries 1500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 1500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 1500000
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 1500000
BBC-L-West ADC Sum
VPD-West ADC Sum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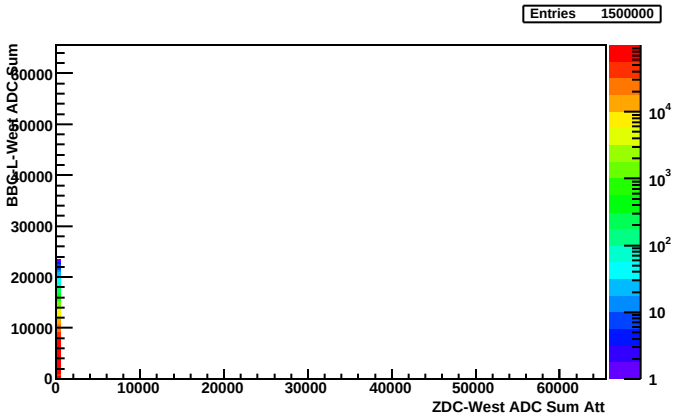
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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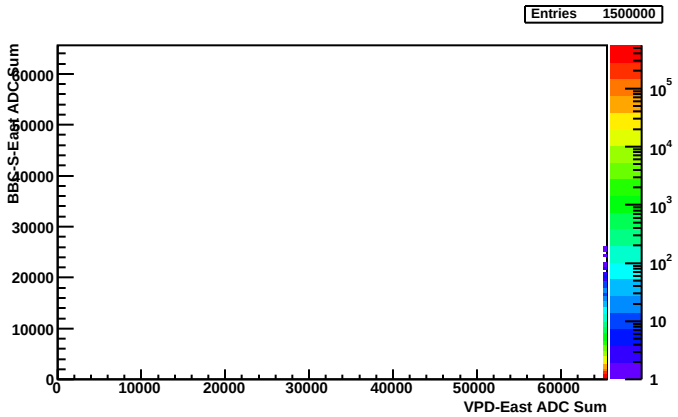
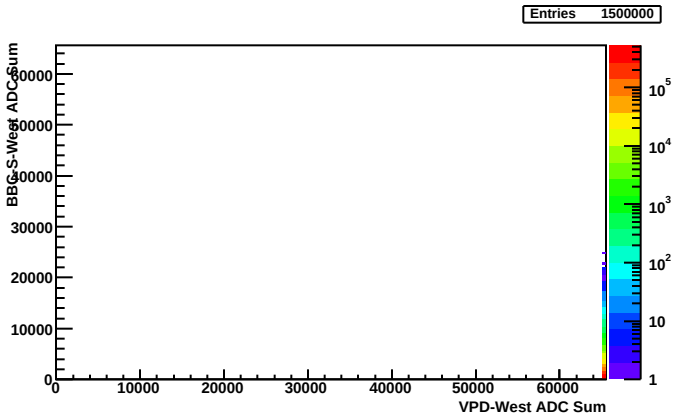
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 1500000
BBC-S-East ADC Sum
VPD-East ADC Sum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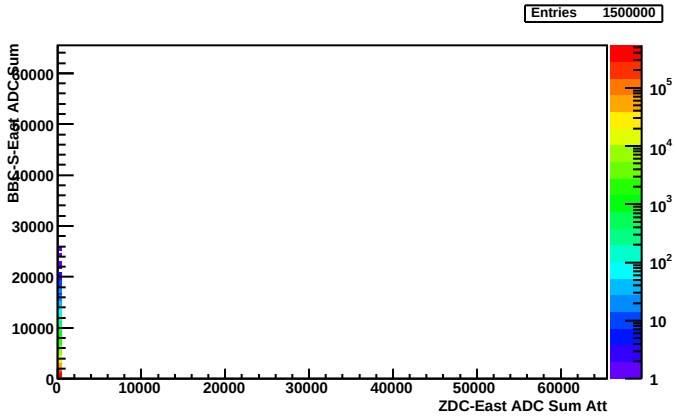
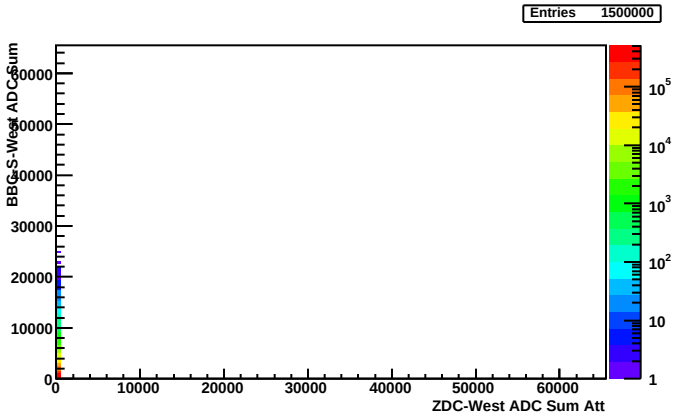
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 1500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att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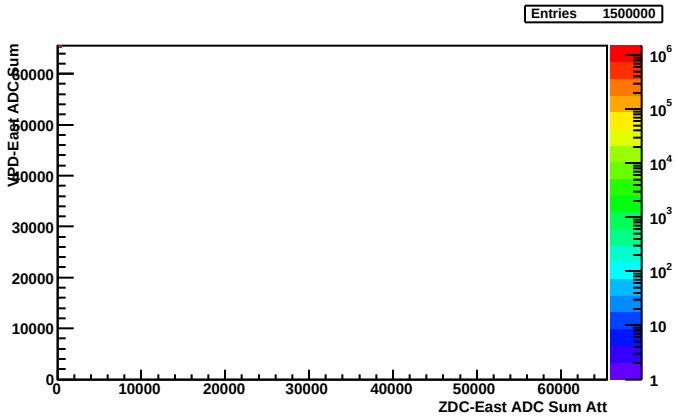
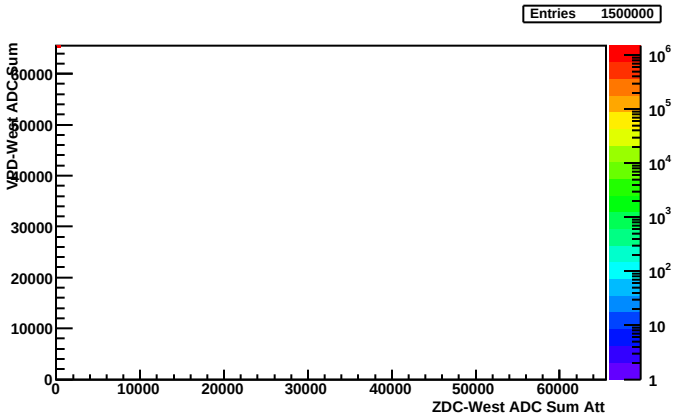
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 1500000
VPD-East ADC Sum
ZDC-East ADC Sum Att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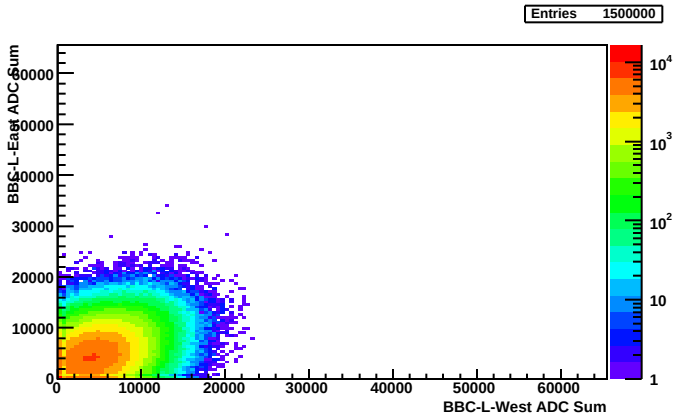
ZDC-West ADC Sum Att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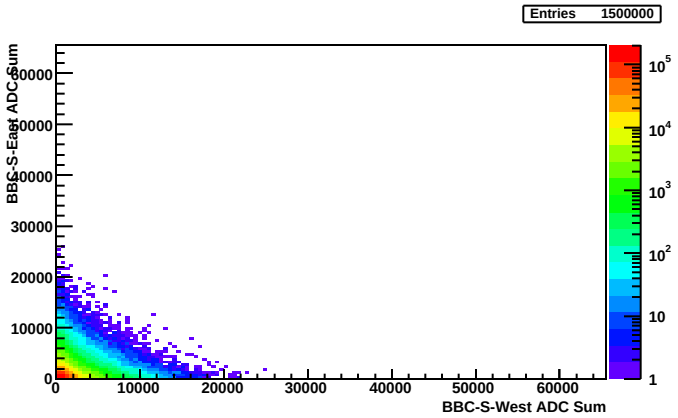
BBC-L-East ADC Sum
BBC-L-West ADC Sum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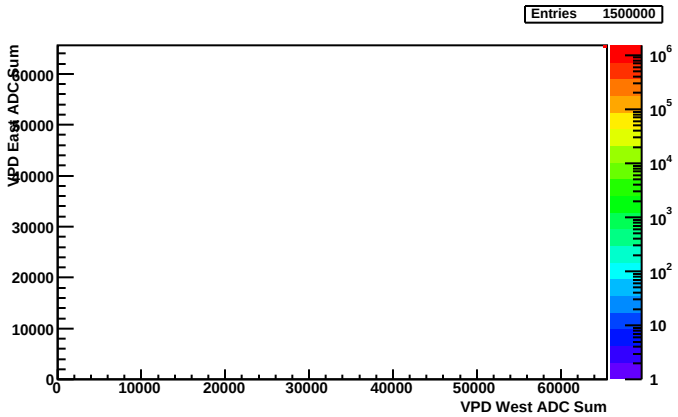
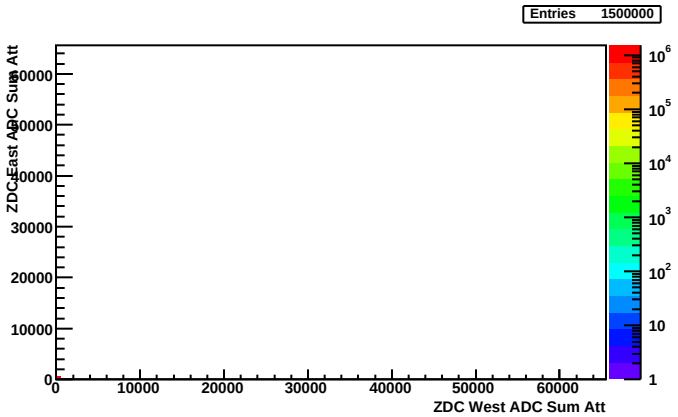
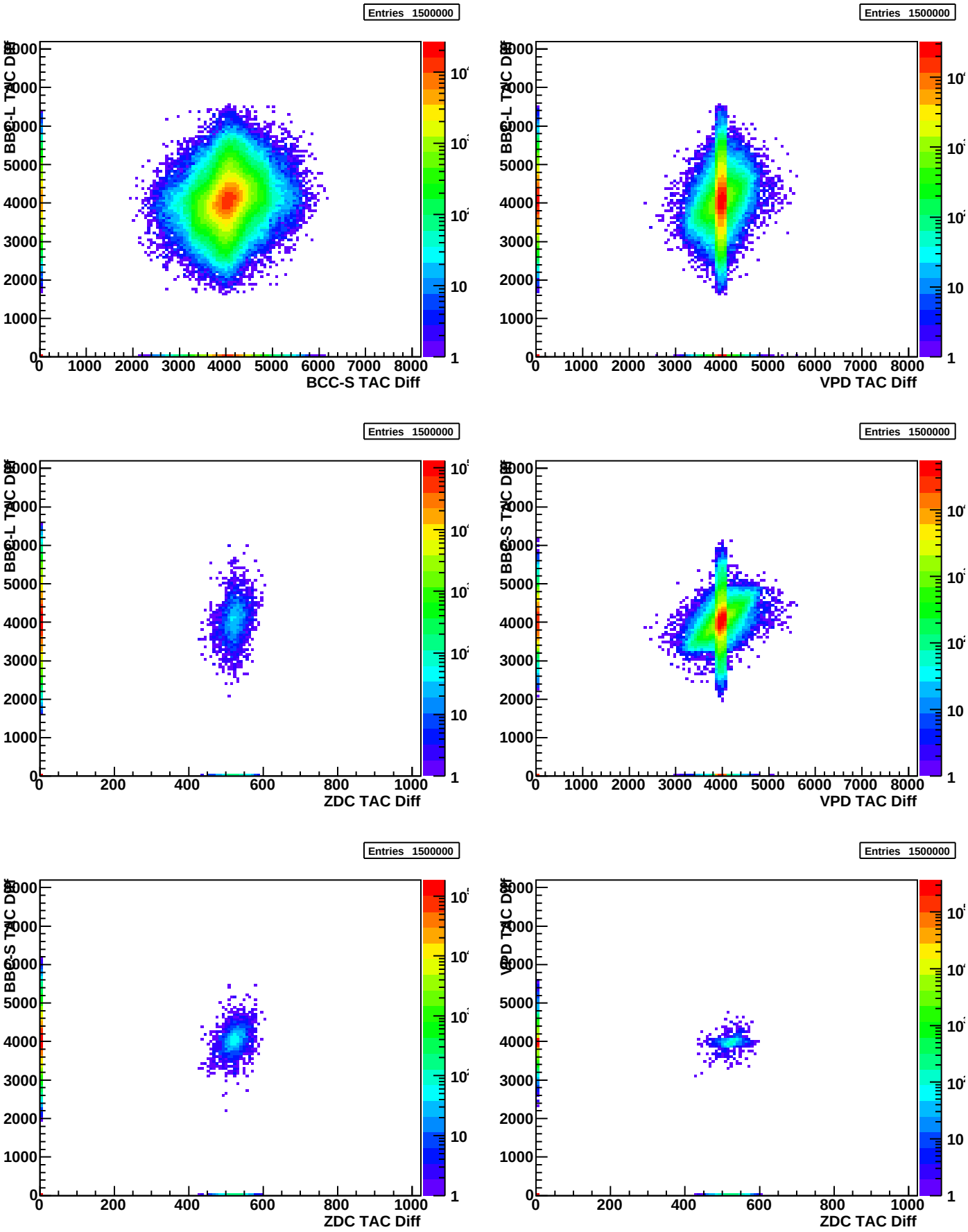
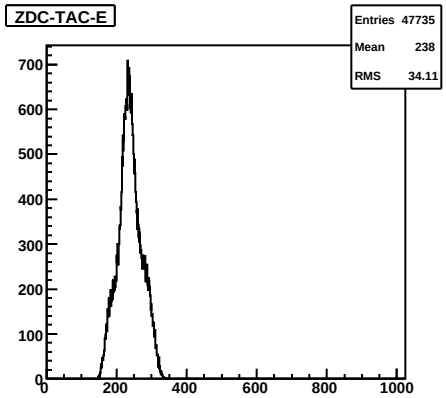
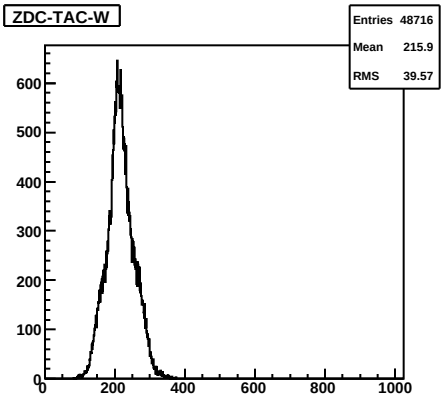
BBC-S-East ADC Sum
BBC-S-West ADC Sum

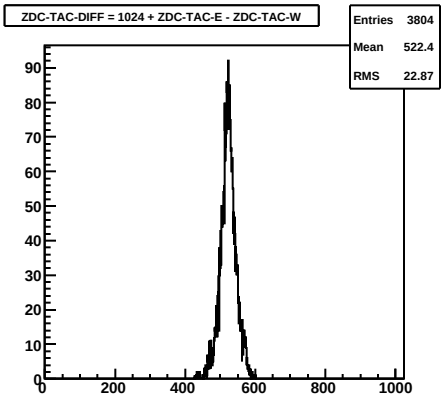

Entries 1500000
VPD East ADC Sum
VPD West ADC Sum

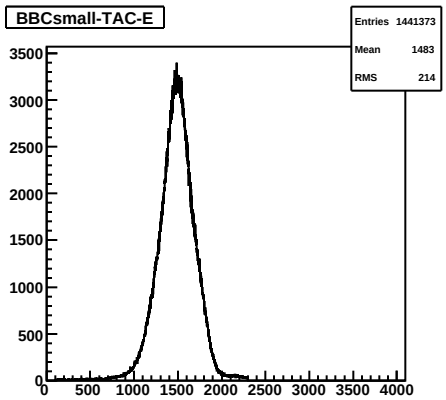

Entries 1500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

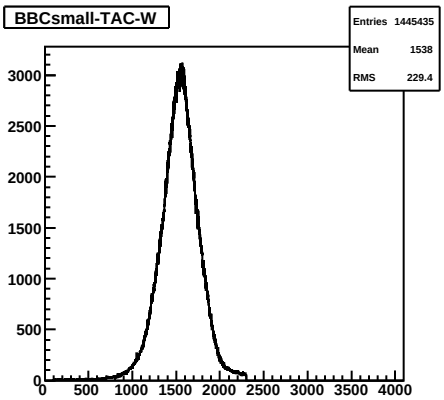

Entries 1500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1500000
BBC-L TAC Diff
VPD TAC Diff
Entries 1500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 1500000
BBC-S TAC Diff
VPD TAC Diff
Entries 1500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 1500000
VPD TAC Diff
ZDC TAC Diff

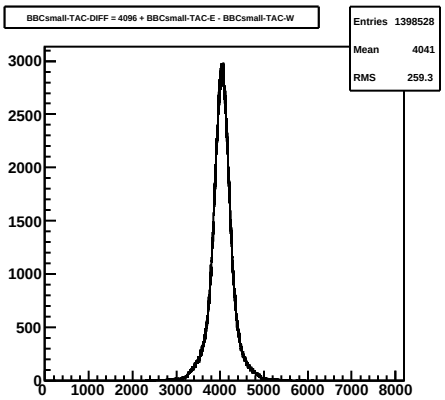

ZDC-TAC-E
Entries 47735
Mean 238
RMS 34.11

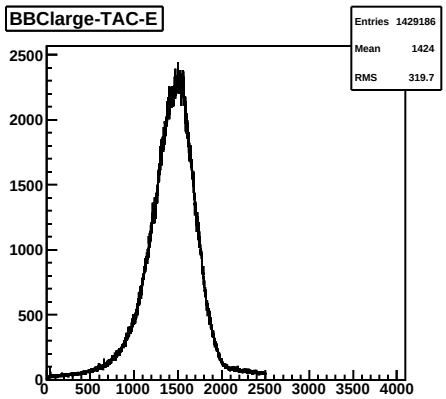

ZDC-TAC-W
Entries 48716
Mean 215.9
RMS 39.57

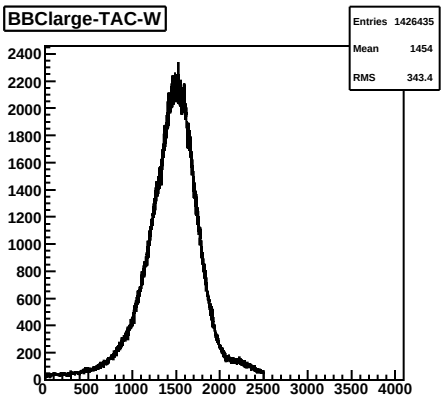

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 3804
Mean 522.4
RMS 22.87

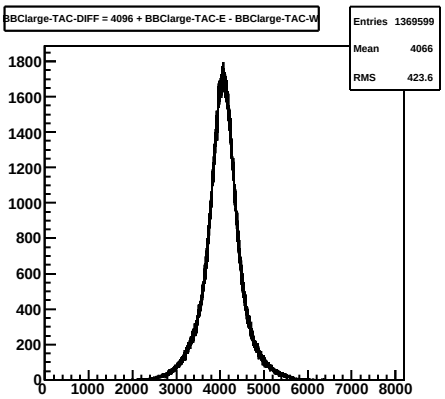

BBCsmall-TAC-E
Entries 1441373
Mean 1483
RMS 214

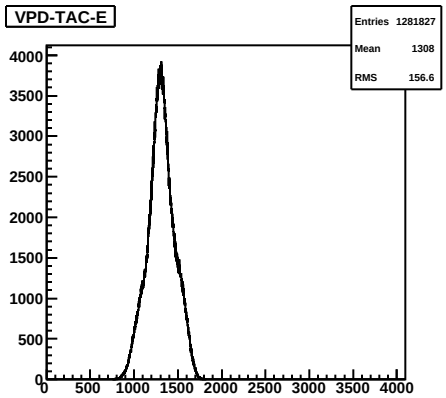

BBCsmall-TAC-W
Entries 1445435
Mean 1538
RMS 229.4

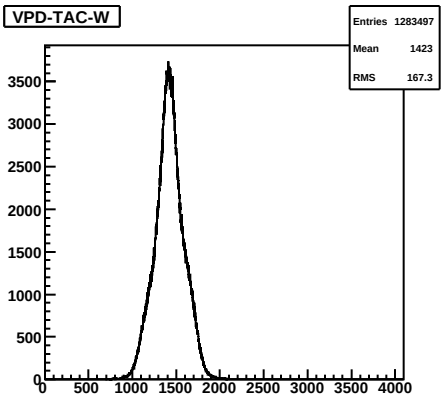

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1398528
Mean 4041
RMS 259.3

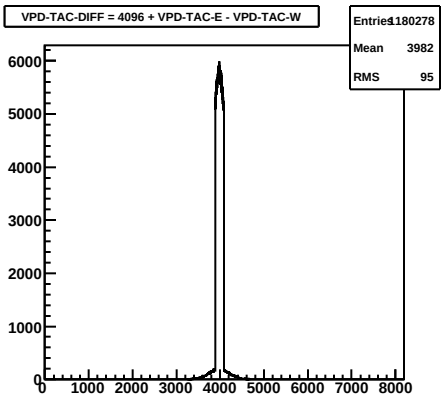

BBClarge-TAC-E
Entries 1429186
Mean 1424
RMS 319.7

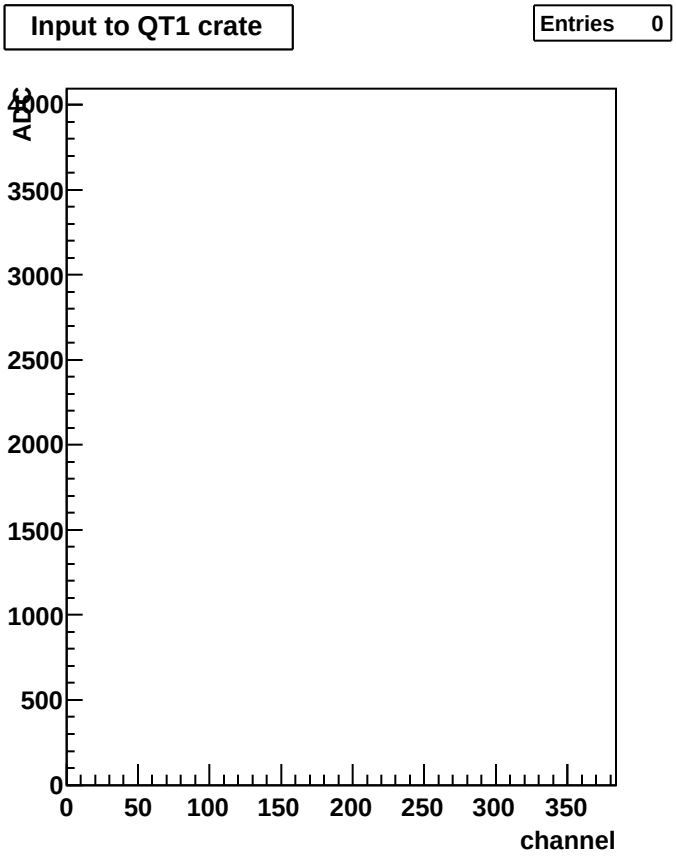

BBClarge-TAC-W
Entries 1426435
Mean 1454
RMS 343.4

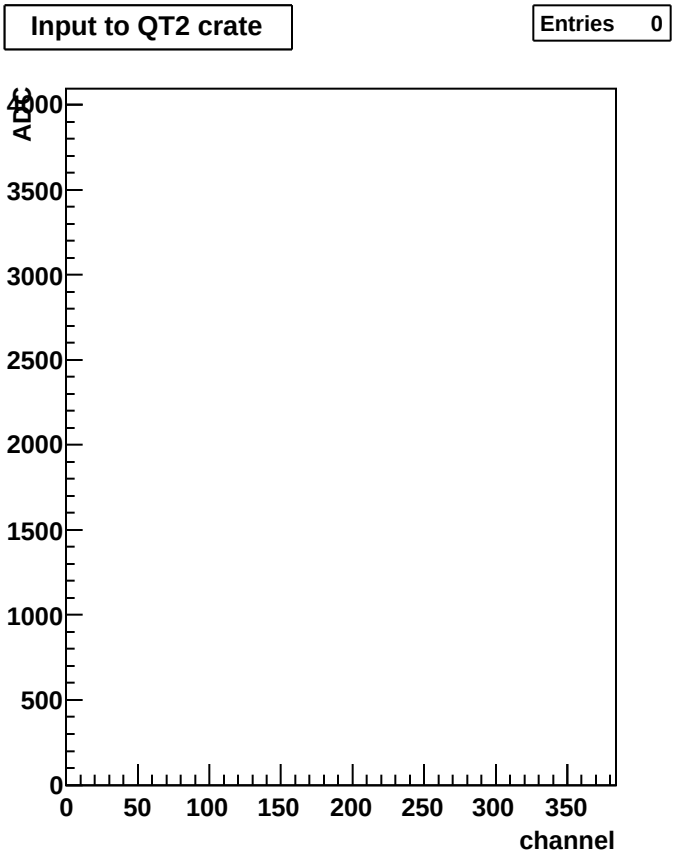

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1369599
Mean 4066
RMS 423.6

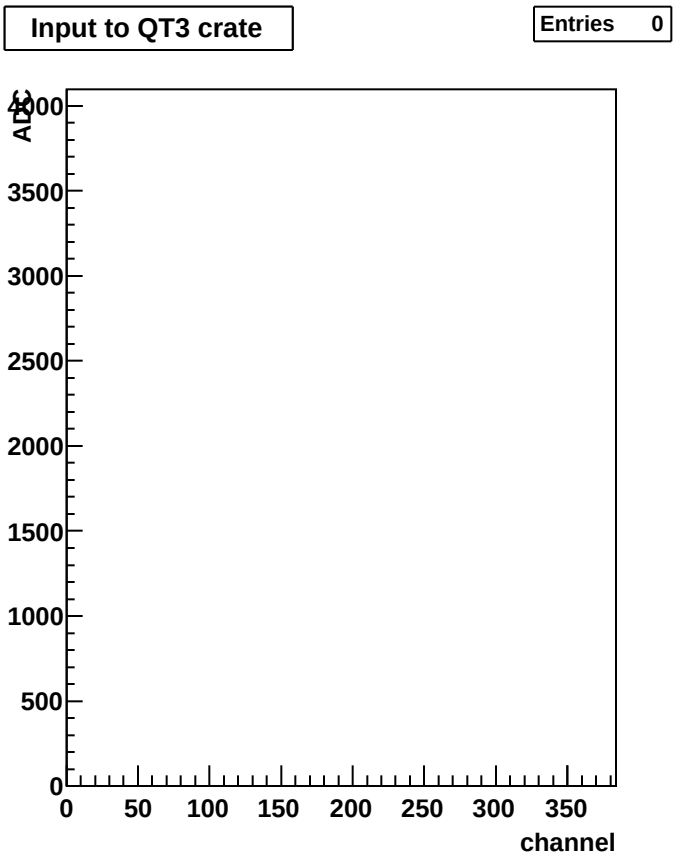

VPD-TAC-E
Entries 1281827
Mean 1308
RMS 156.6

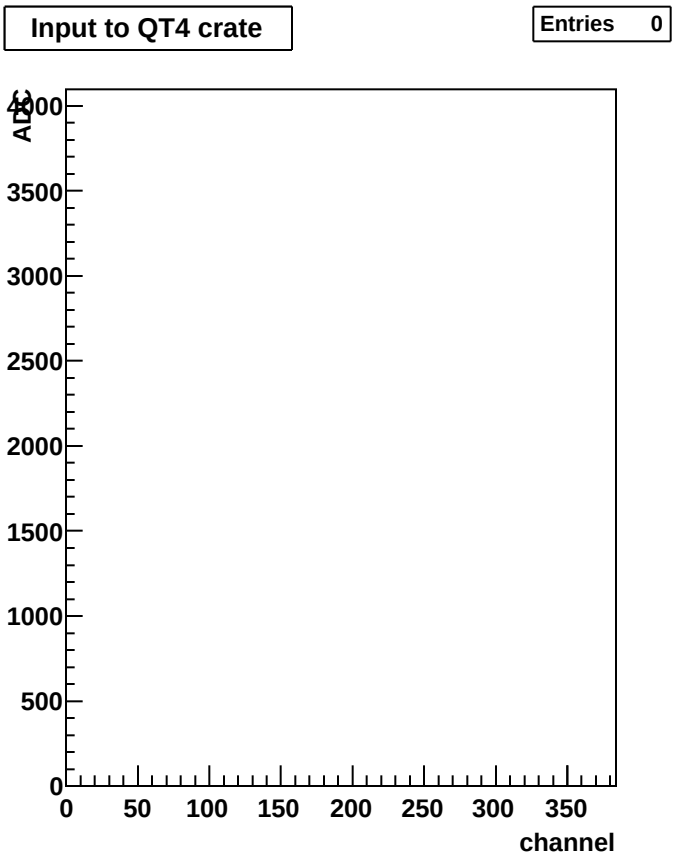

VPD-TAC-W
Entries 1283497
Mean 1423
RMS 167.3

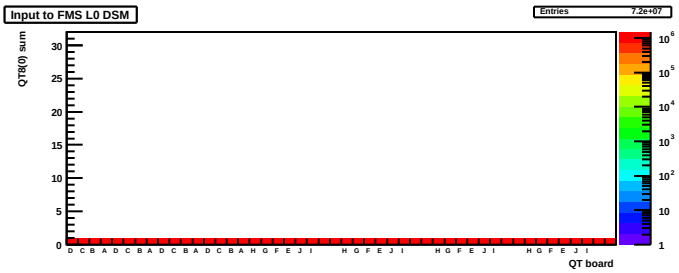

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1180278
Mean 3982
RMS 95

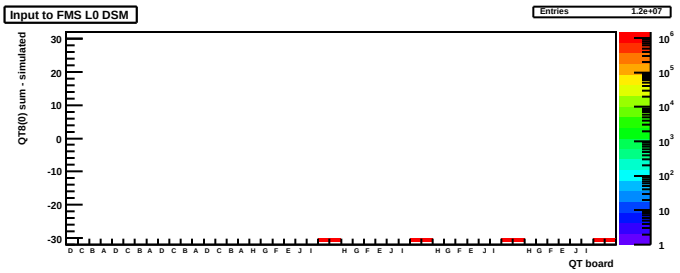

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

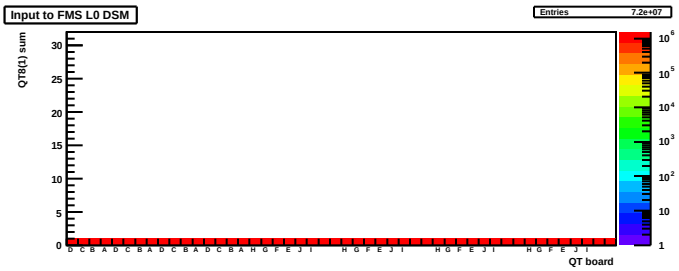

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

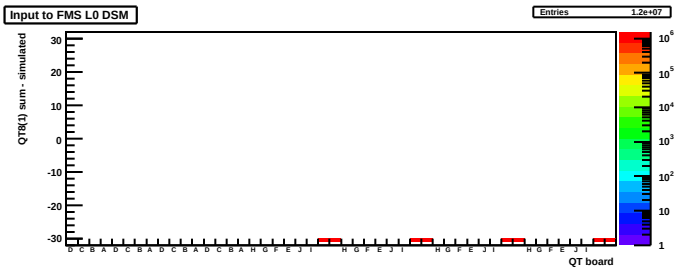

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

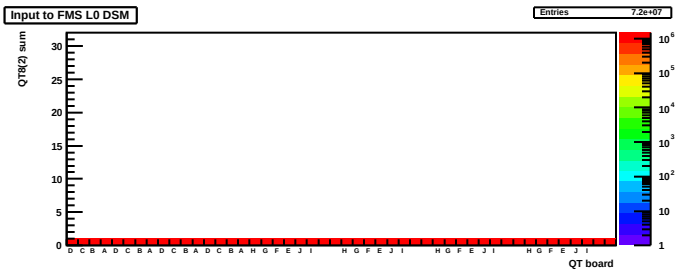

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

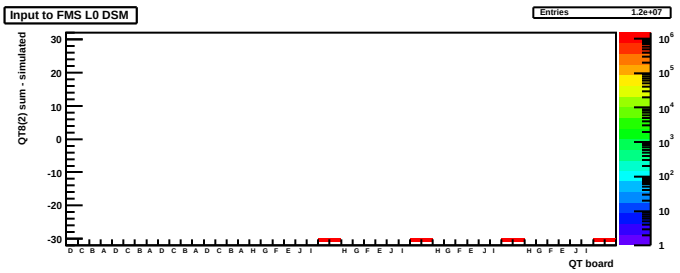

Input to FMS L0 DSM
Entries 7.2e+07
QT8(0) sum
QT board

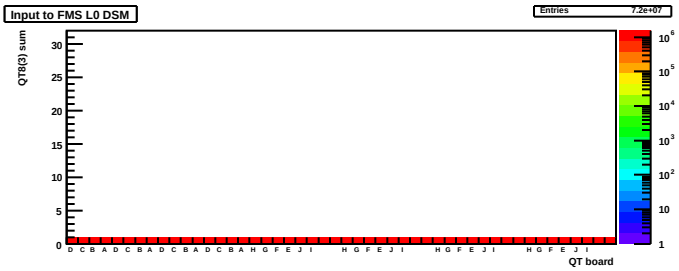

Input to FMS L0 DSM
Entries 1.2e+07
QT8(0) sum - simulated
QT board

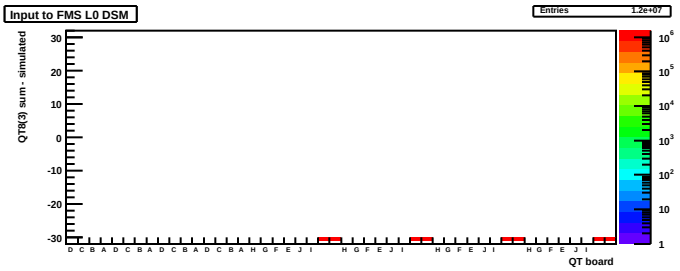

Input to FMS L0 DSM
Entries 7.2e+07
QT8(1) sum
QT board

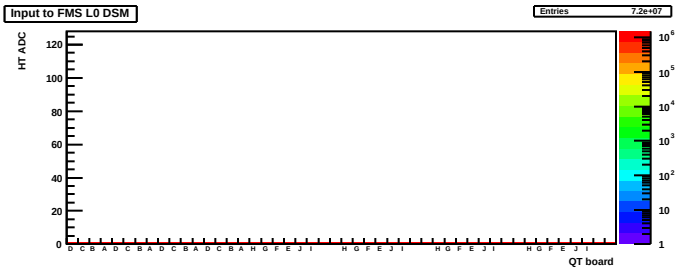

Input to FMS L0 DSM
Entries 1.2e+07
QT8(1) sum - simulated
QT board

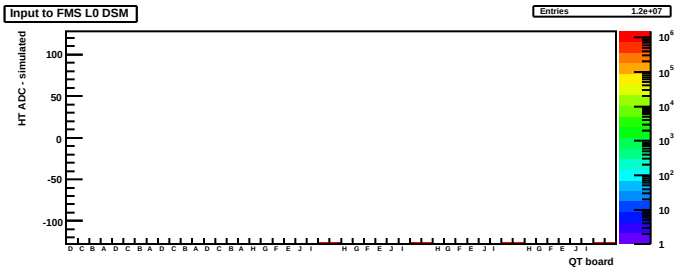

Input to FMS L0 DSM
Entries 7.2e+07
QT8(2) sum
QT board

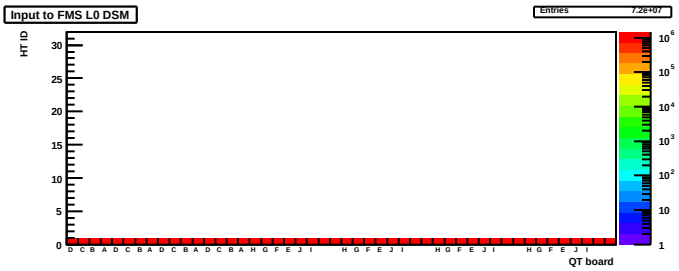

Input to FMS L0 DSM
Entries 1.2e+07
QT8(2) sum - simulated
QT board

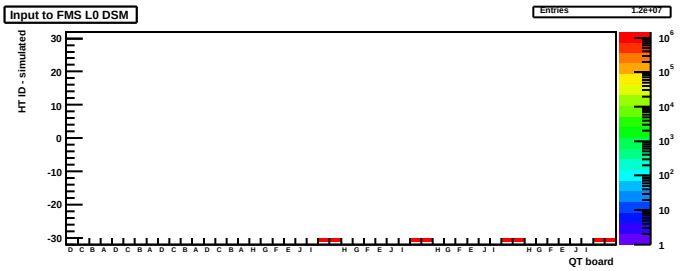

Input to FMS L0 DSM
Entries 7.2e+07
QT8(3) sum
QT board

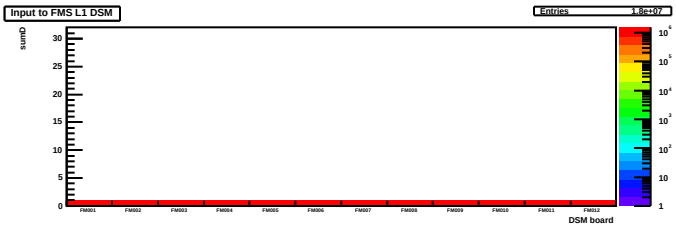

Input to FMS L0 DSM
Entries 1.2e+07
QT8(3) sum - simulated
QT board

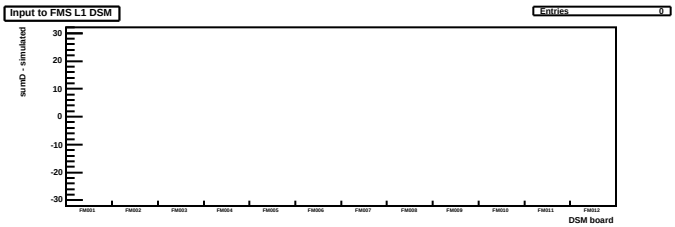

Input to FMS L0 DSM
Entries 7.2e+07
HT ADC
QT board

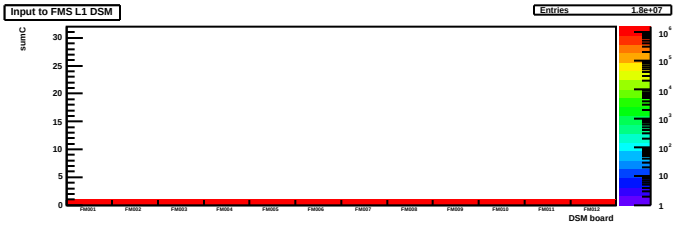

Input to FMS L0 DSM
Entries 1.2e+07
HT ADC - simulated
QT board

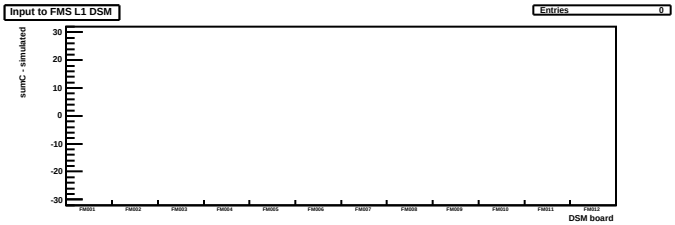

Input to FMS L0 DSM
Entries 7.2e+07
HT ID
QT board

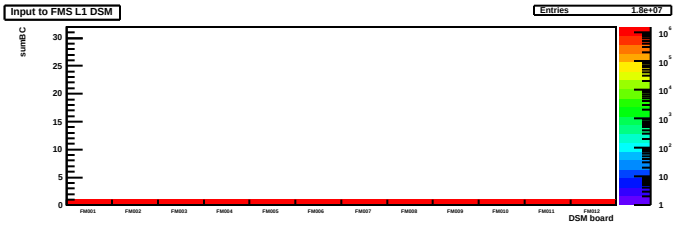

Input to FMS L0 DSM
Entries 1.2e+07
HT ID - simulated
QT board

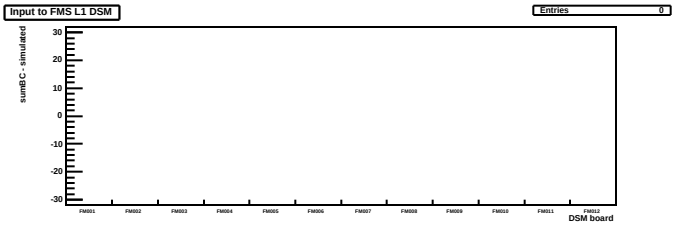

Input to FMS L1 DSM
Entries 1.8e+07
sumD
DSM board

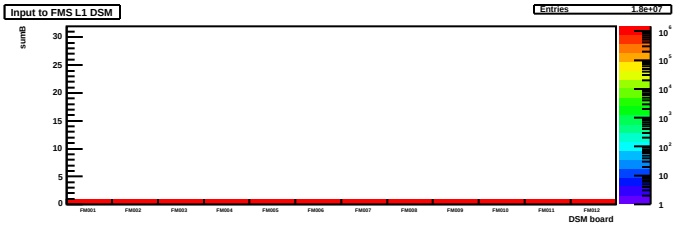

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

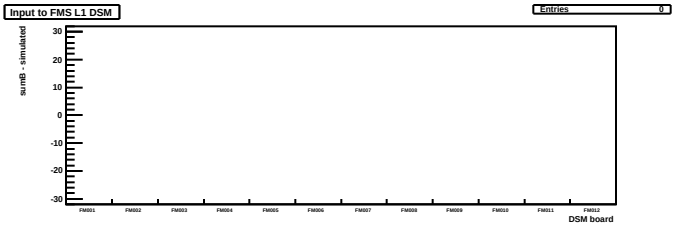

Input to FMS L1 DSM
Entries 1.8e+07
sumC
DSM board

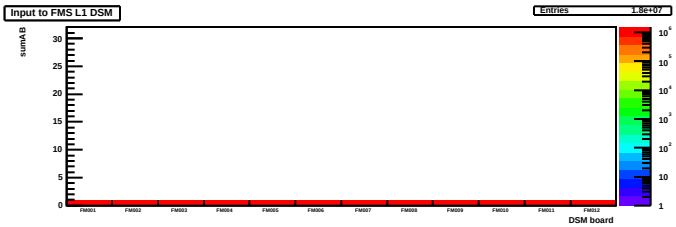

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

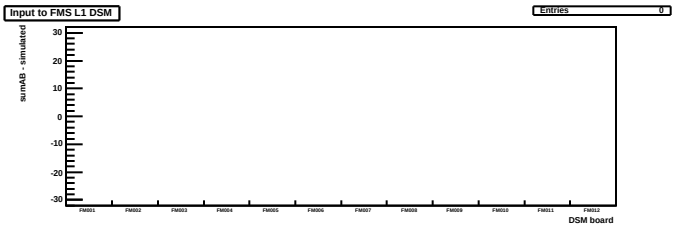

Input to FMS L1 DSM
Entries 1.8e+07
sumBC
DSM board

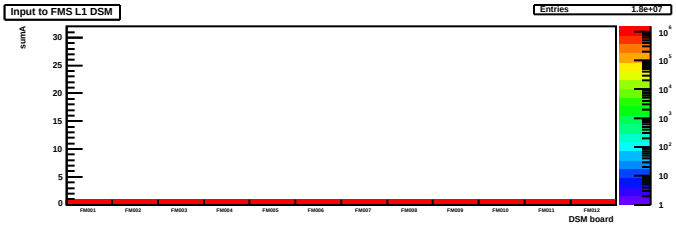

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

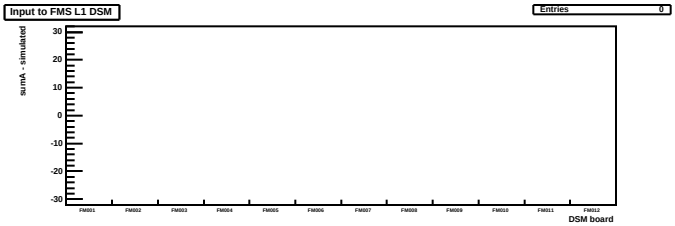

Input to FMS L1 DSM
Entries 1.8e+07
sumB
DSM board

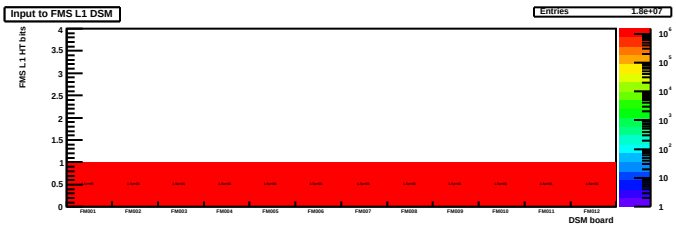

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

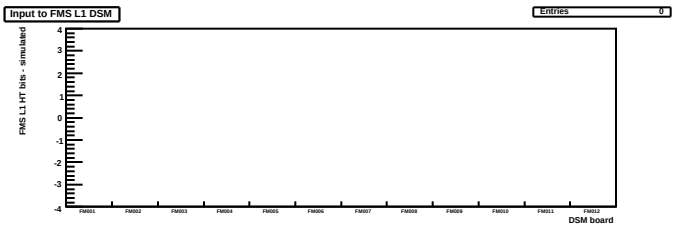

Input to FMS L1 DSM
Entries 1.8e+07
sumAB
DSM board

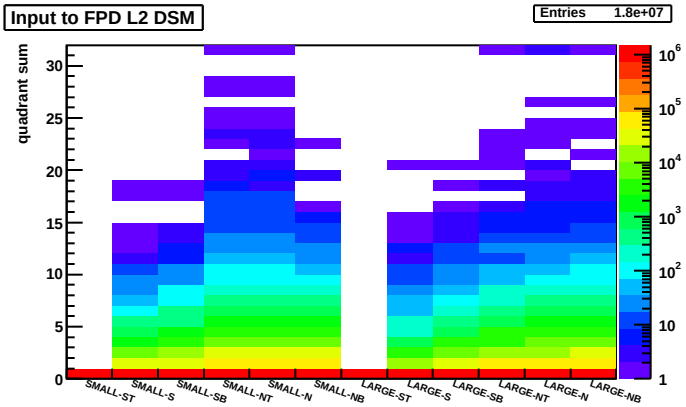

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

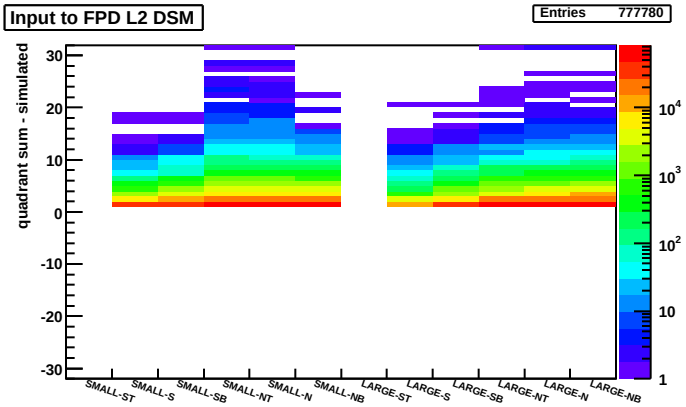

Input to FMS L1 DSM
Entries 1.8e+07
sumA
DSM board

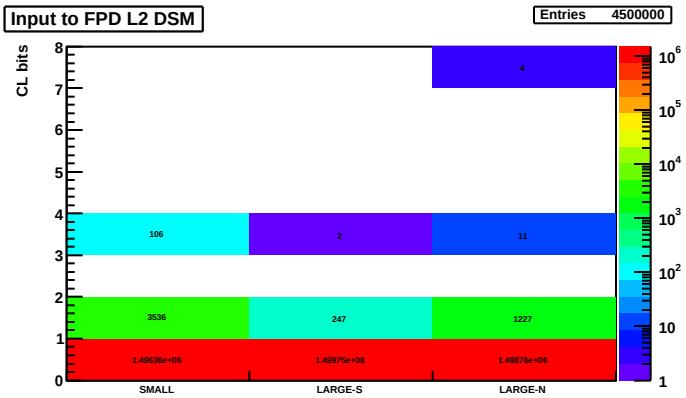

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

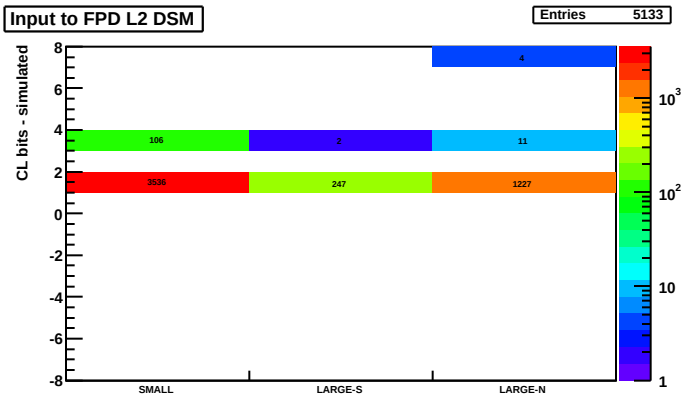

Input to FMS L1 DSM
Entries 1.8e+07
FMS L1 HT bits
DSM board

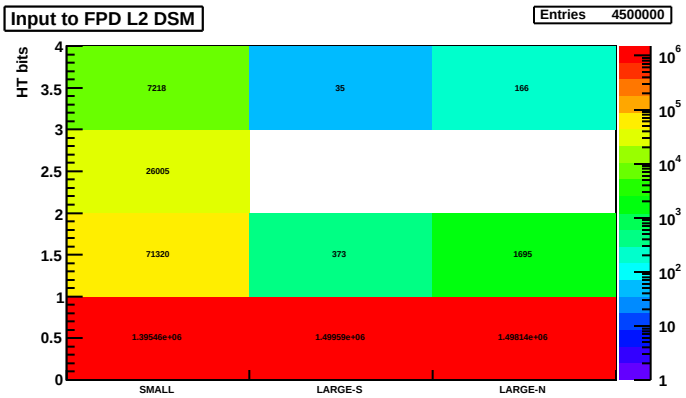

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

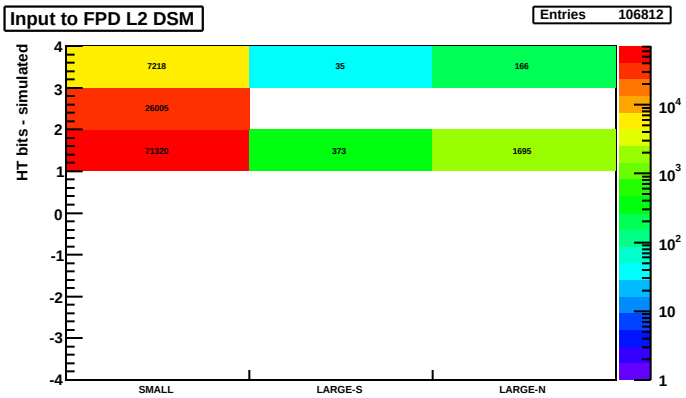

Input to FPD L2 DSM
Entries 1.8e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

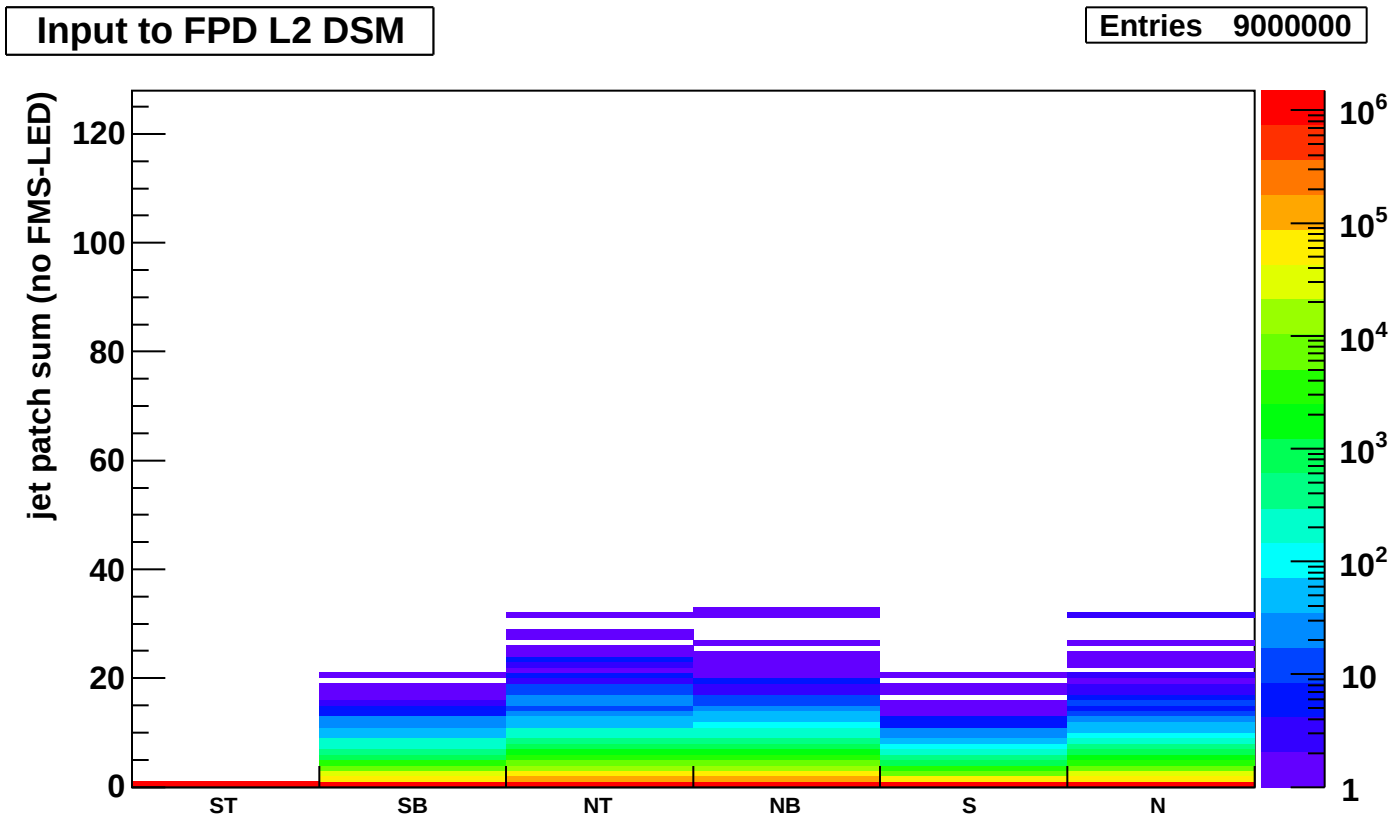

Input to FPD L2 DSM
Entries 777780
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

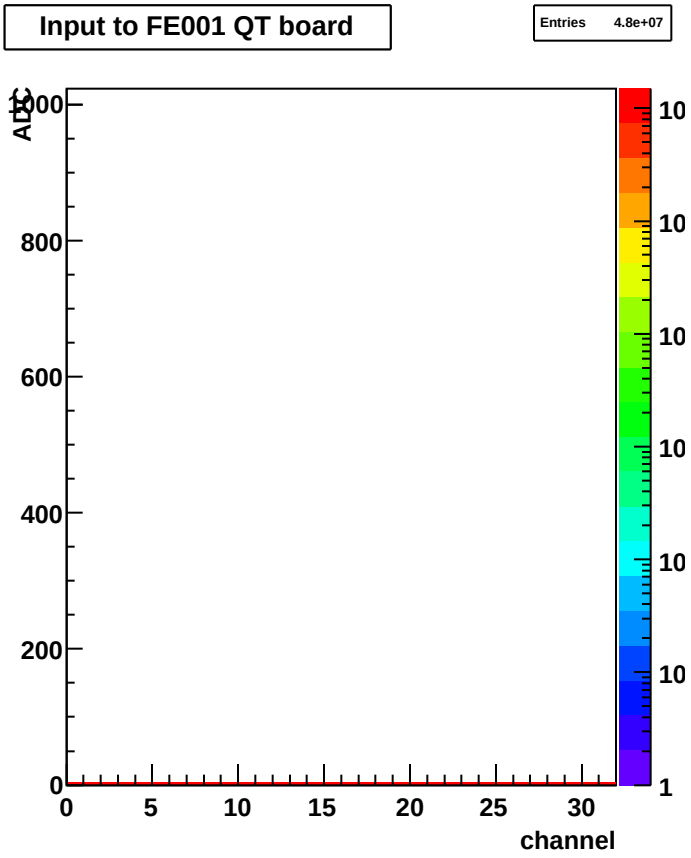

Input to FPD L2 DSM
Entries 4500000
CL bits
4
106
2
11
3536
247
1227
1.49636e+06
1.49975e+06
1.49876e+06
SMALL
LARGE-S
LARGE-N

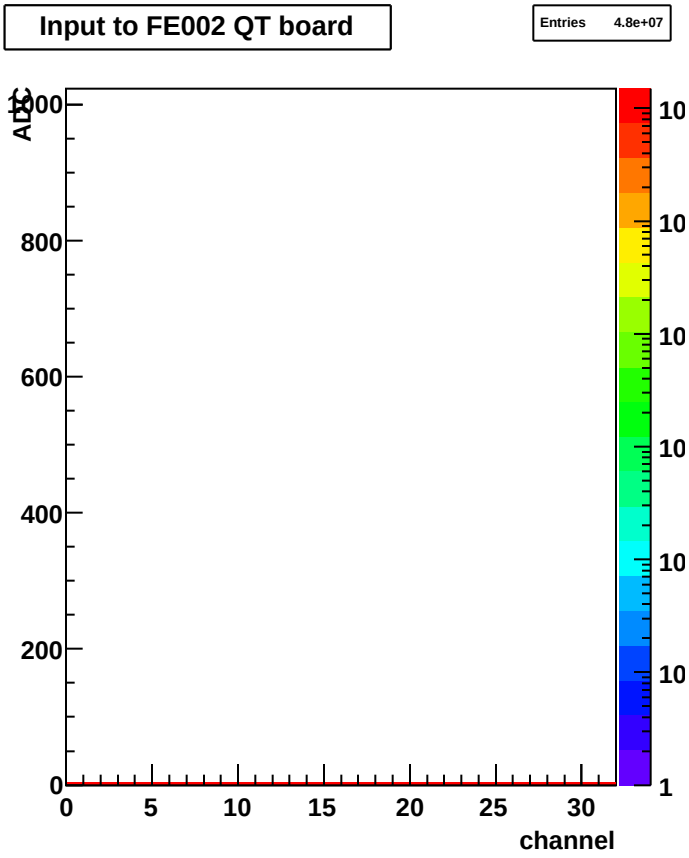

Input to FPD L2 DSM
Entries 5133
CL bits - simulated
4
106
2
11
3536
247
1227
SMALL
LARGE-S
LARGE-N

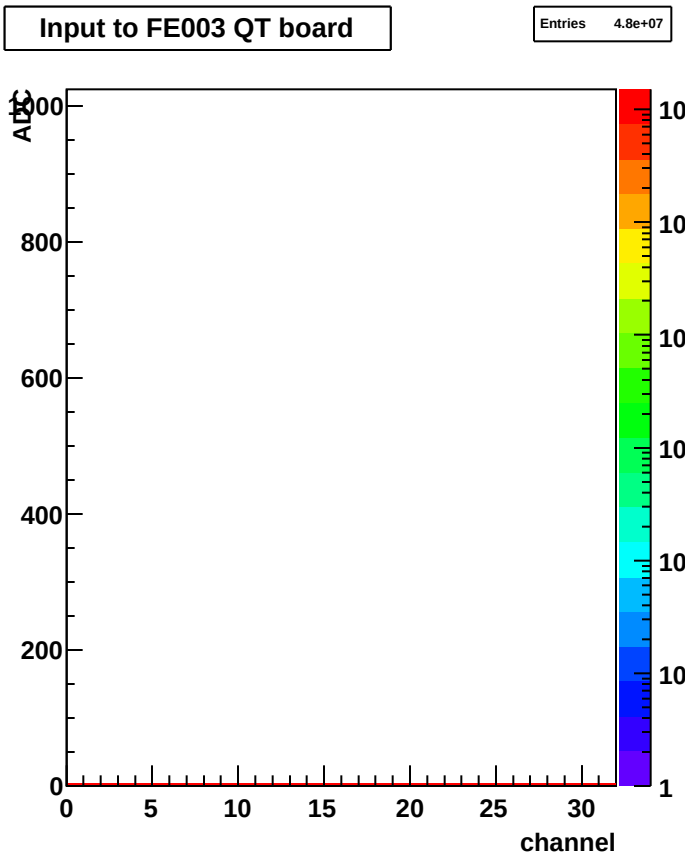

Input to FPD L2 DSM
Entries 4500000
HT bits
7218
35
166
26005
71320
373
1695
1.39546e+06
1.49959e+06
1.49814e+06
SMALL
LARGE-S
LARGE-N

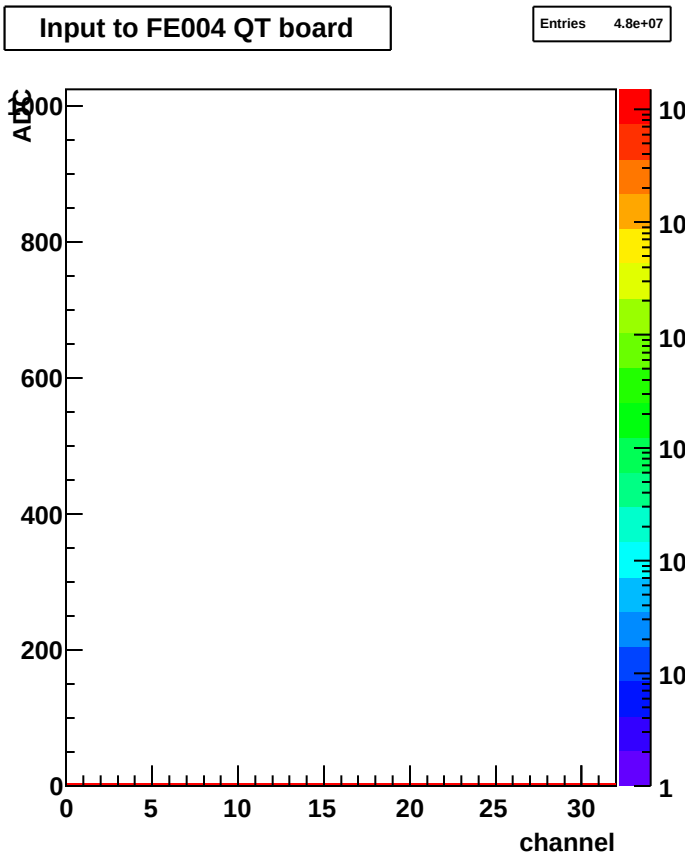

Input to FPD L2 DSM
Entries 106812
HT bits - simulated
7218
35
166
26005
71320
373
1695
SMALL
LARGE-S
LARGE-N

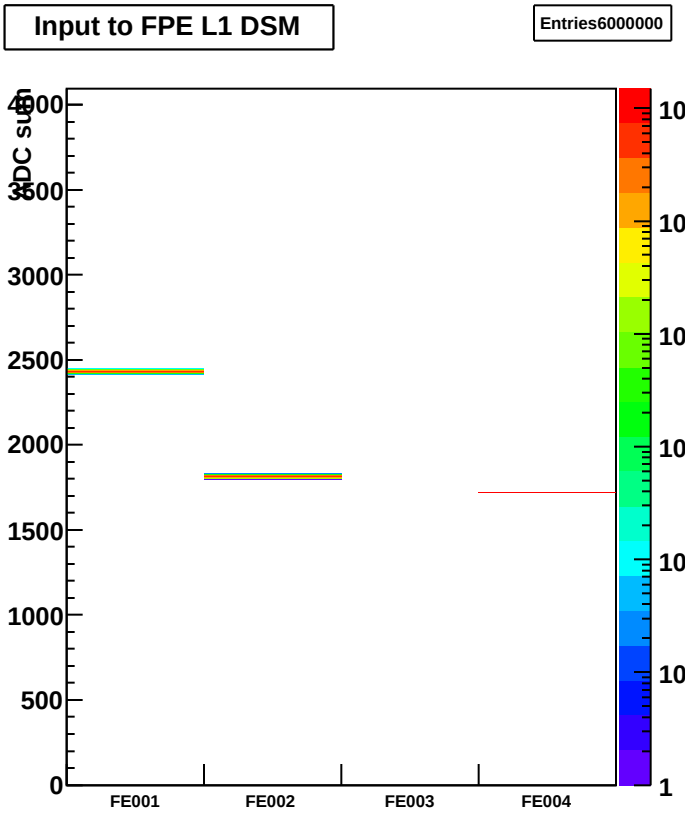

Input to FPD L2 DSM
Entries 9000000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

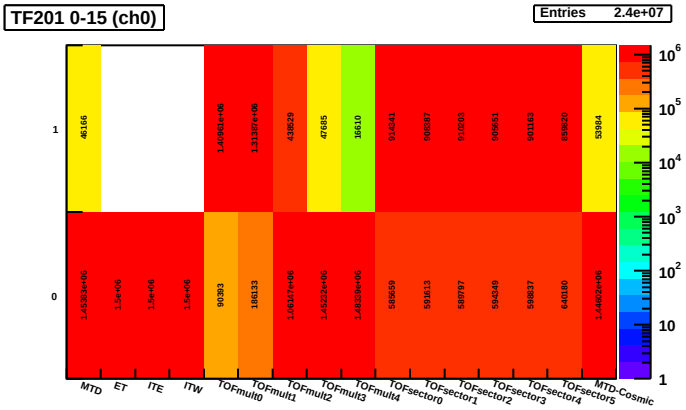

Input to FE001 QT board
Entries 4.8e+07
ADC
channel

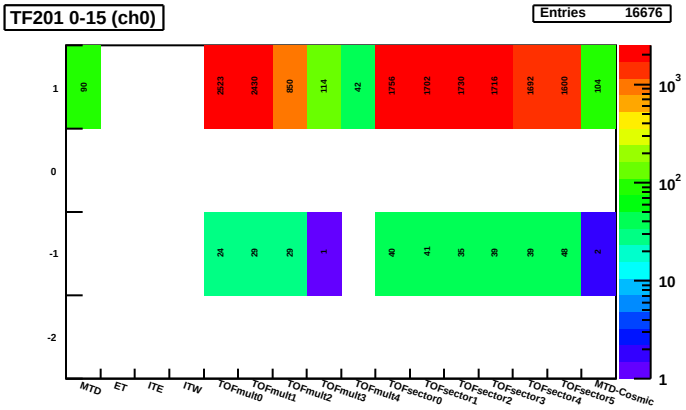

Input to FE002 QT board
Entries 4.8e+07
ADC
channel

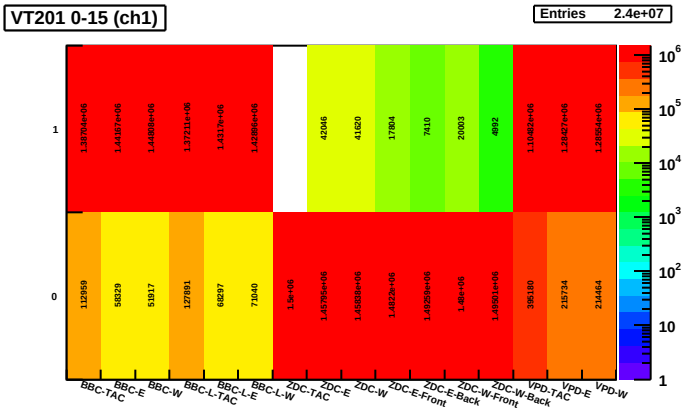

Input to FE003 QT board
Entries 4.8e+07
ADC
channel

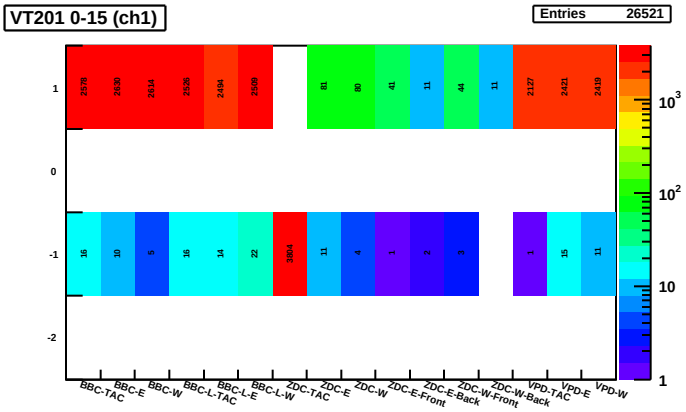

Input to FE004 QT board
Entries 4.8e+07
ADC
channel


Input to FPE L1 DSM
Entries6000000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 2.4e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 16676
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 2.4e+07
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 26521
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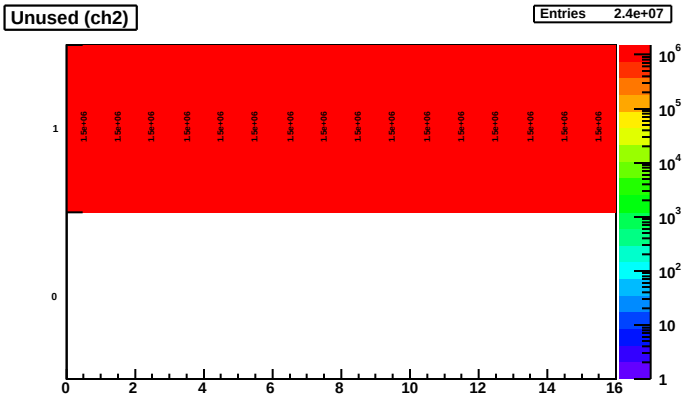
Unused (ch2)
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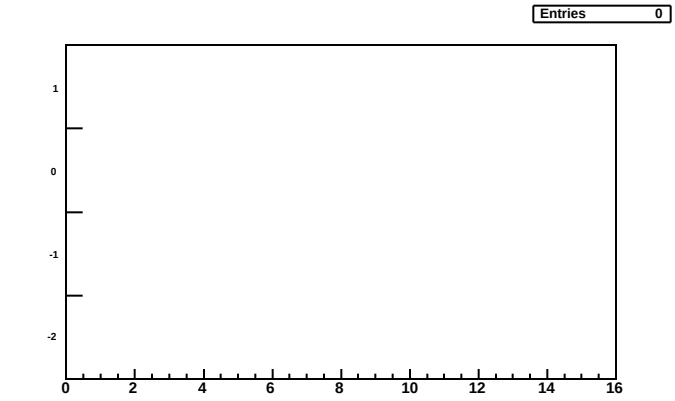
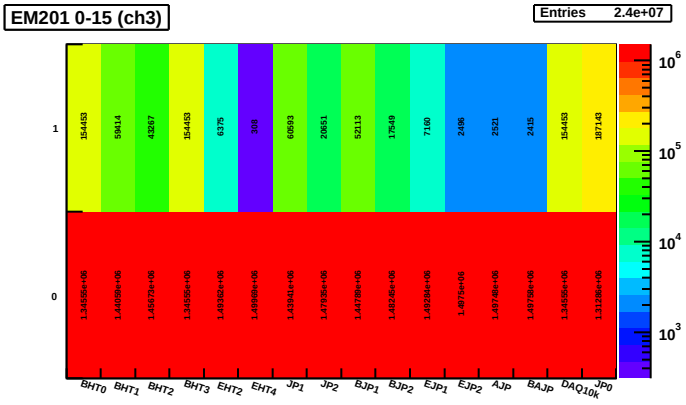

Entries 0


EM201 0-15 (ch3)
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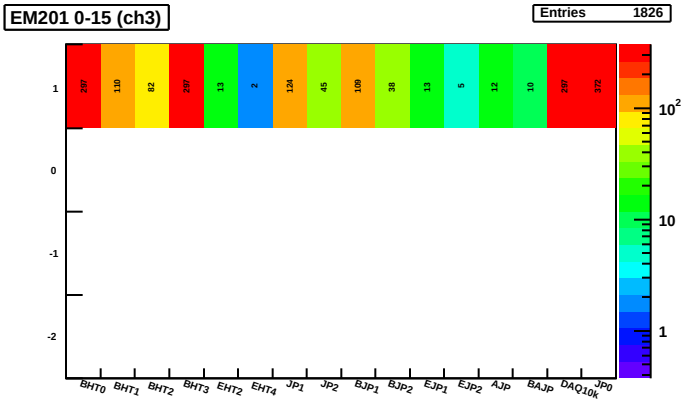
EM201 0-15 (ch3)
Entries 1826
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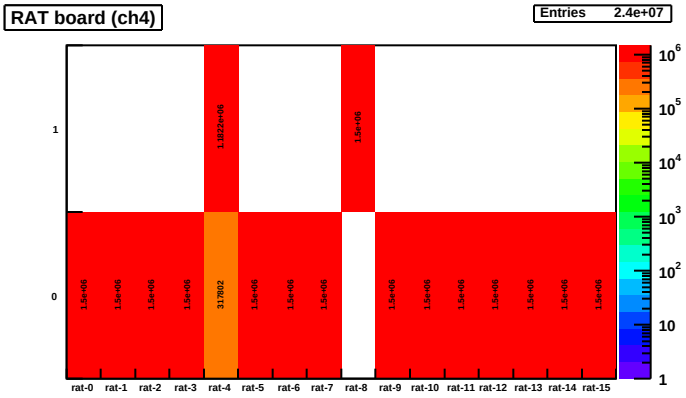
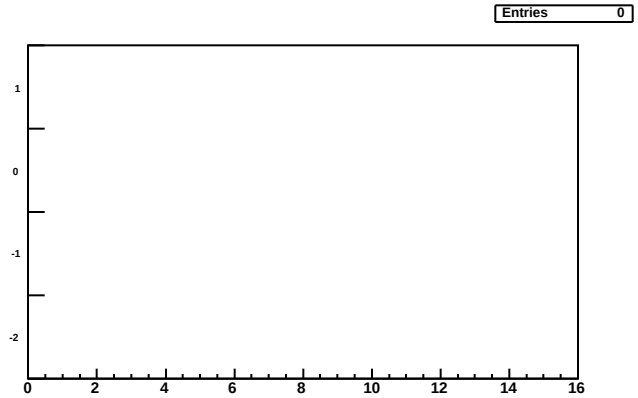
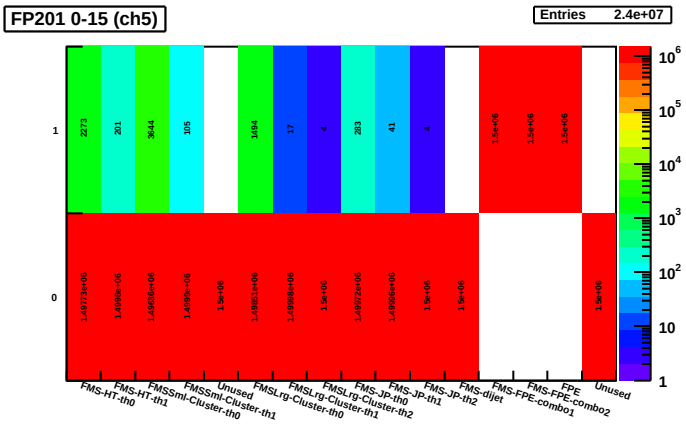
RAT board (ch4)





FP201 0-15 (ch5)



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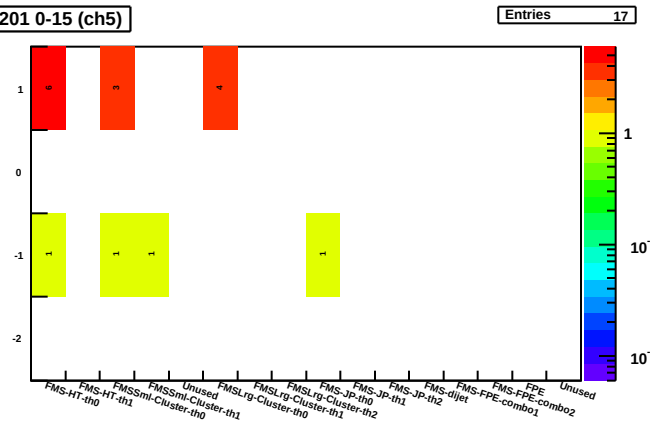
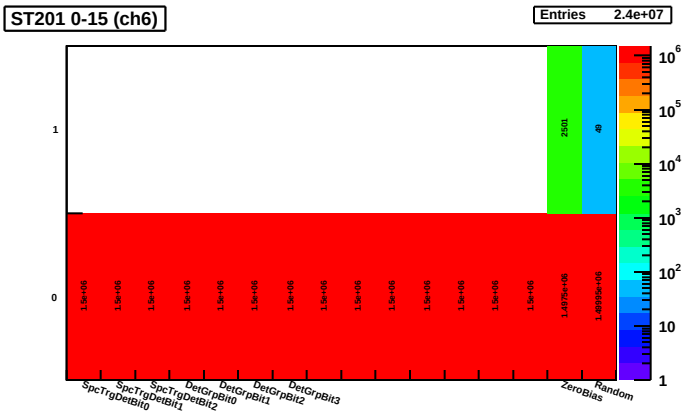
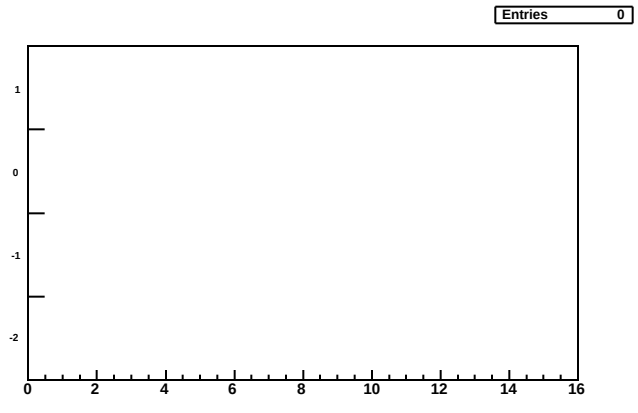
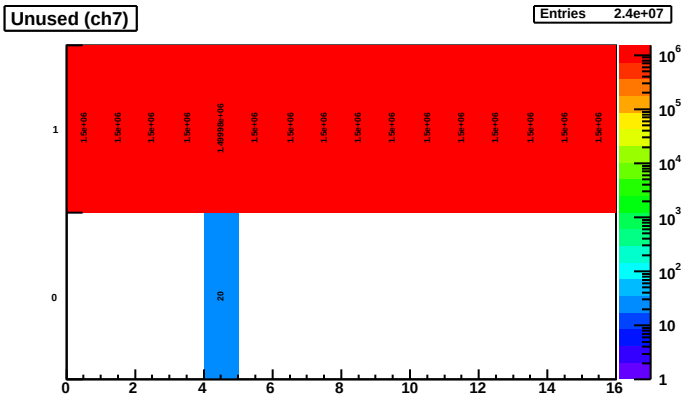
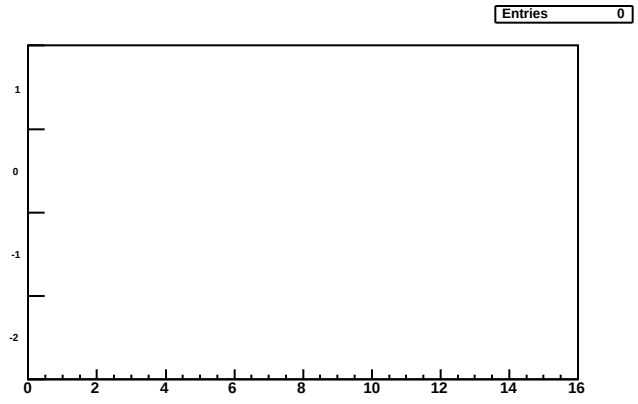


ST201 0-15 (ch6)





Unused (ch7)