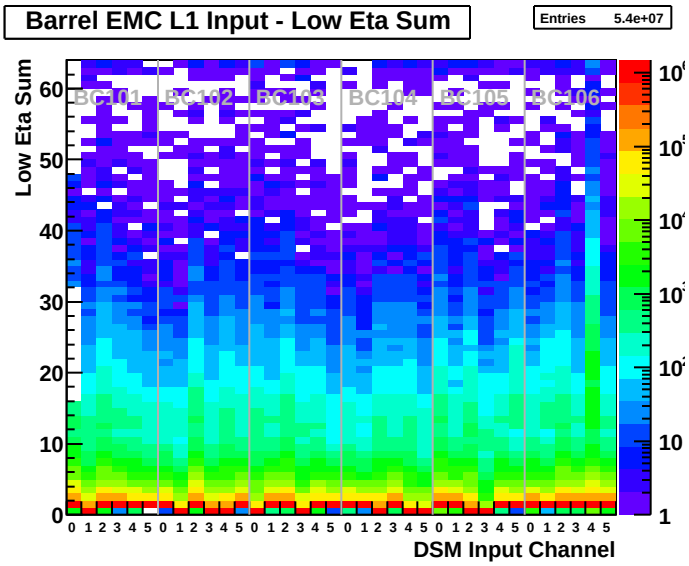
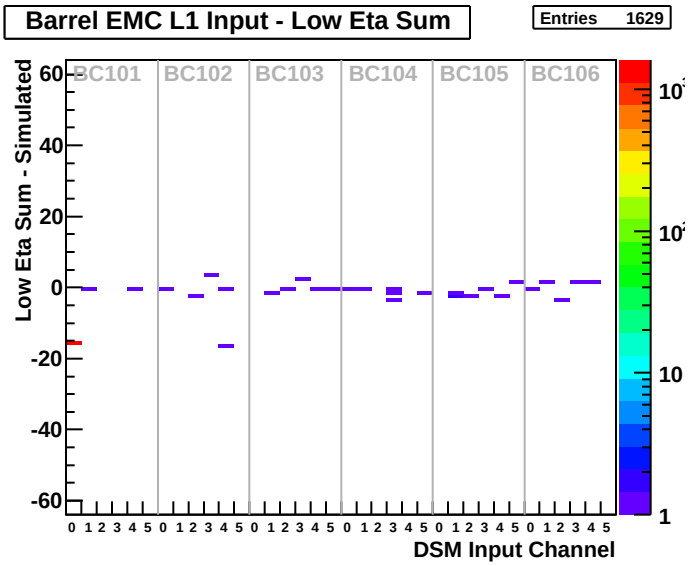
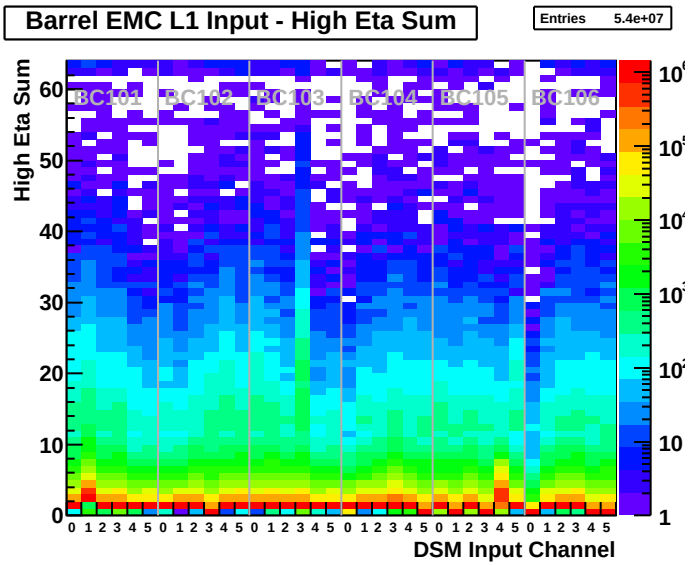
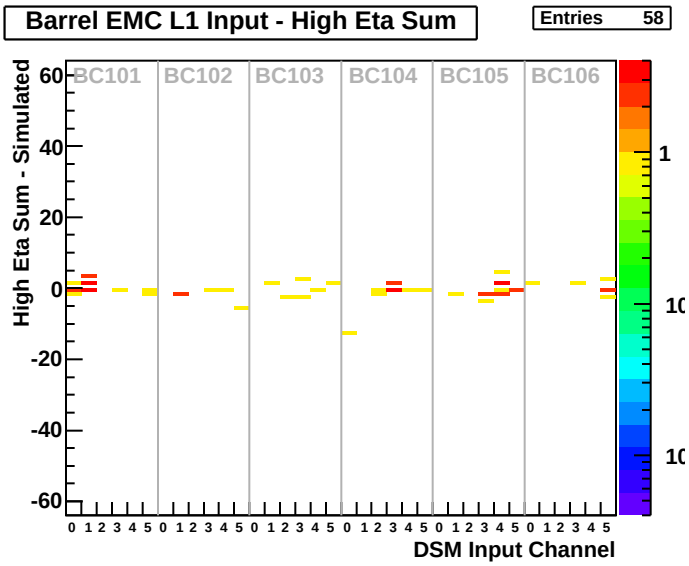
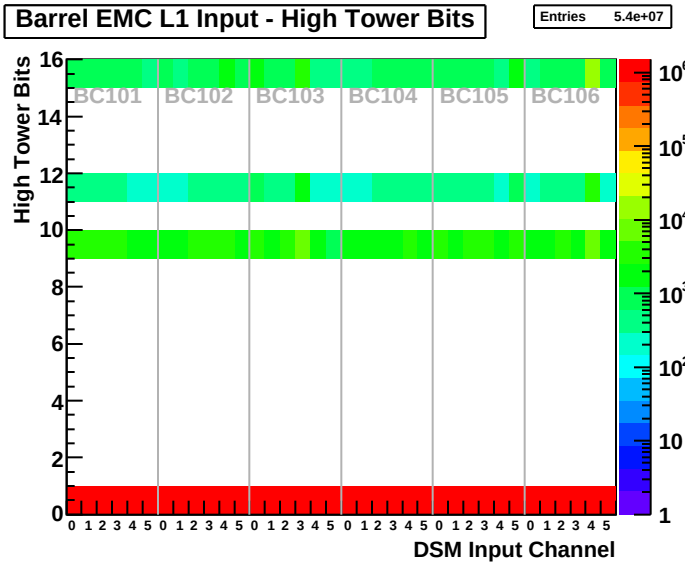
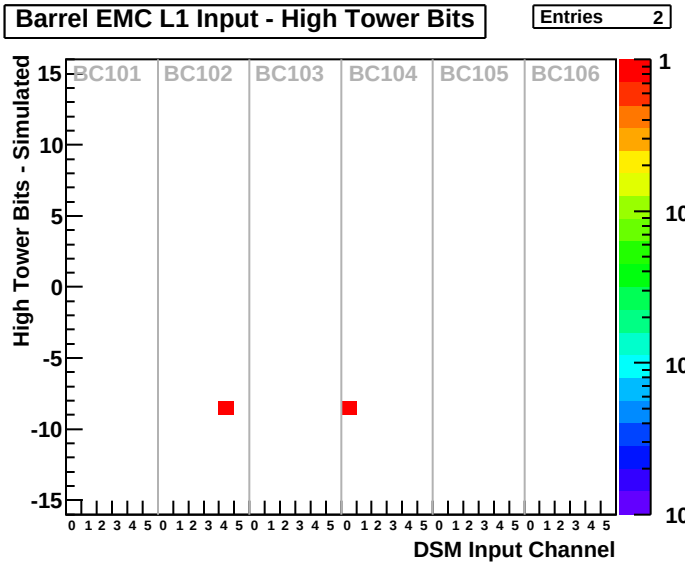

Barrel EMC L1 Input - Low Eta Sum
Entries 5.4e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

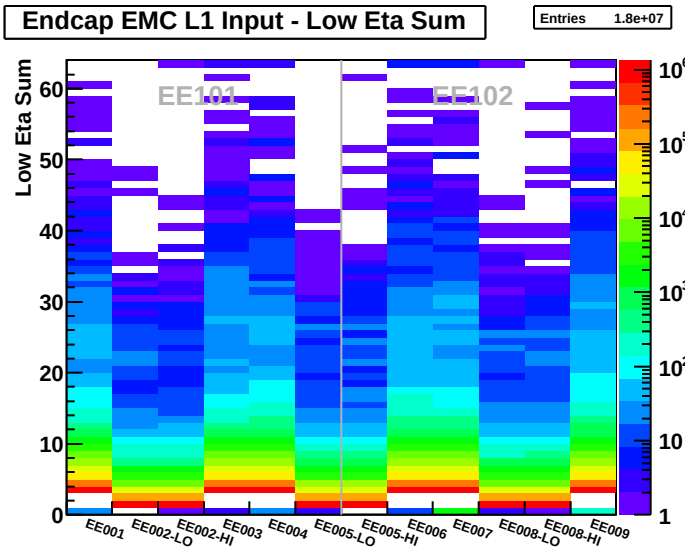

Barrel EMC L1 Input - Low Eta Sum
Entries 1629
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

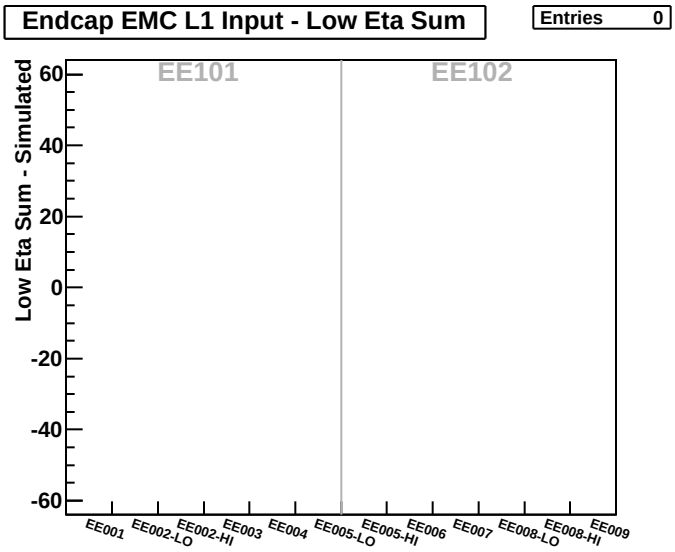

Barrel EMC L1 Input - High Eta Sum
Entries 5.4e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

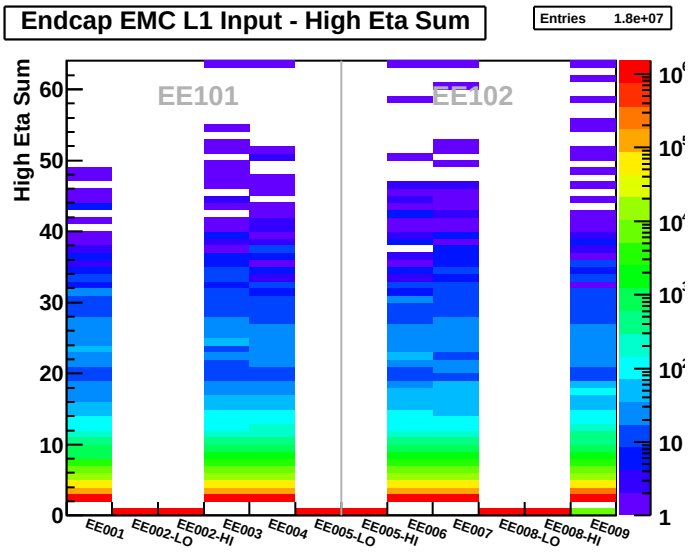

Barrel EMC L1 Input - High Eta Sum
Entries 58
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

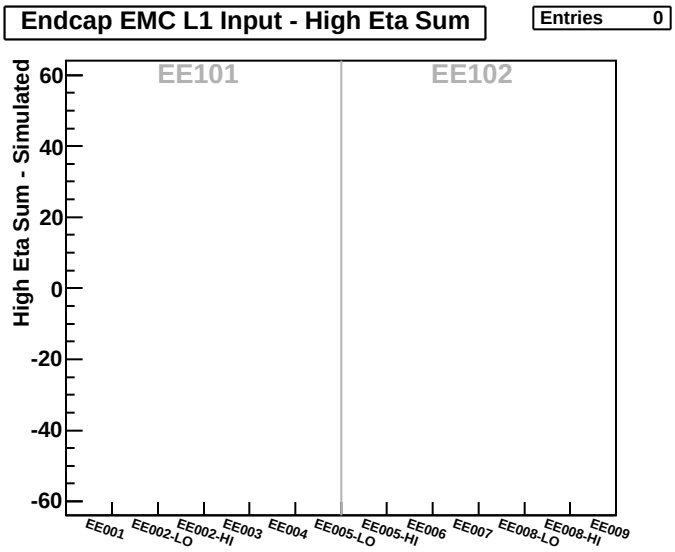

Barrel EMC L1 Input - High Tower Bits
Entries 5.4e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

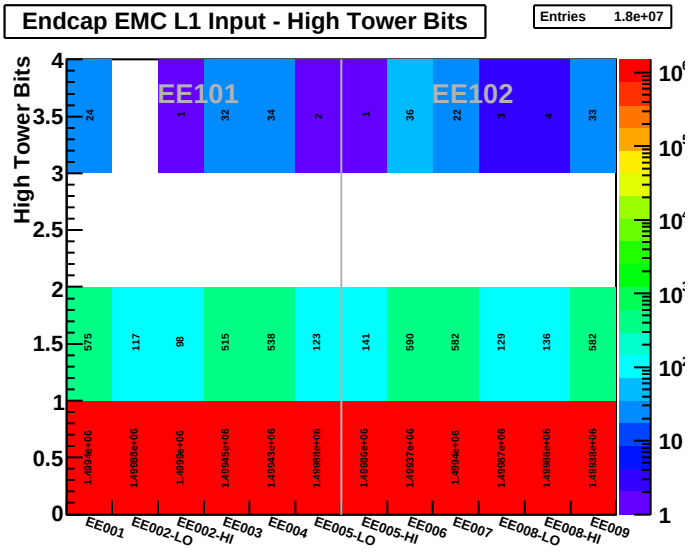

Barrel EMC L1 Input - High Tower Bits
Entries 2
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

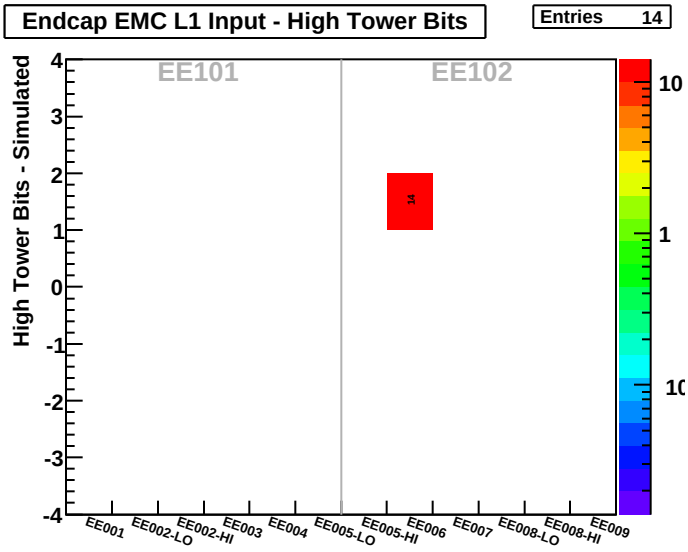

Endcap EMC L1 Input - Low Eta Sum
Entries 1.8e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

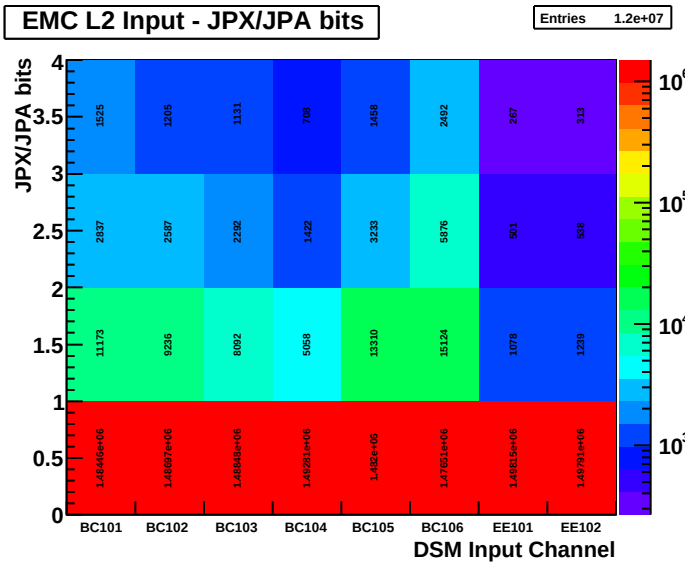

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

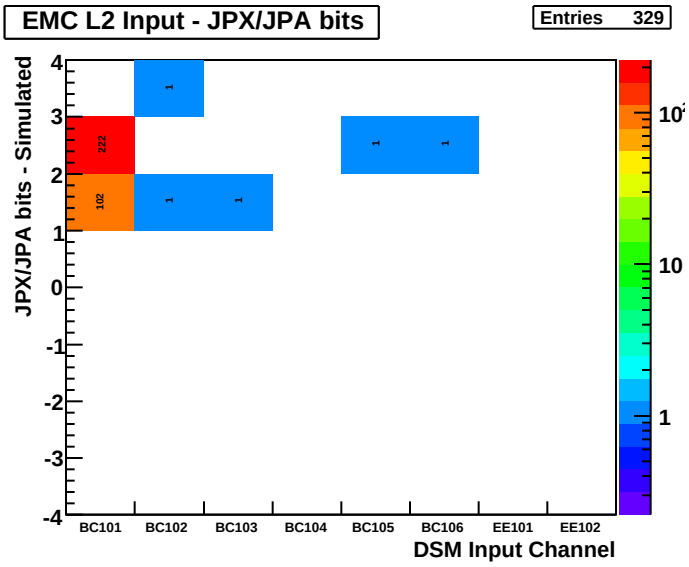

Endcap EMC L1 Input - High Eta Sum
Entries 1.8e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

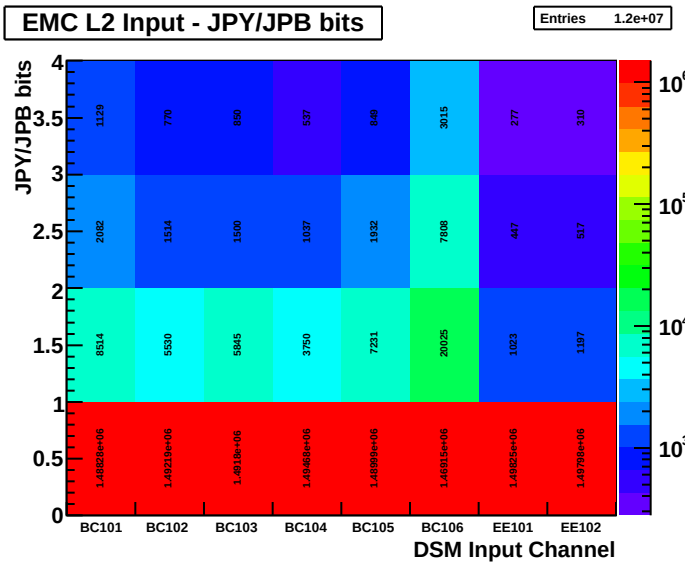

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

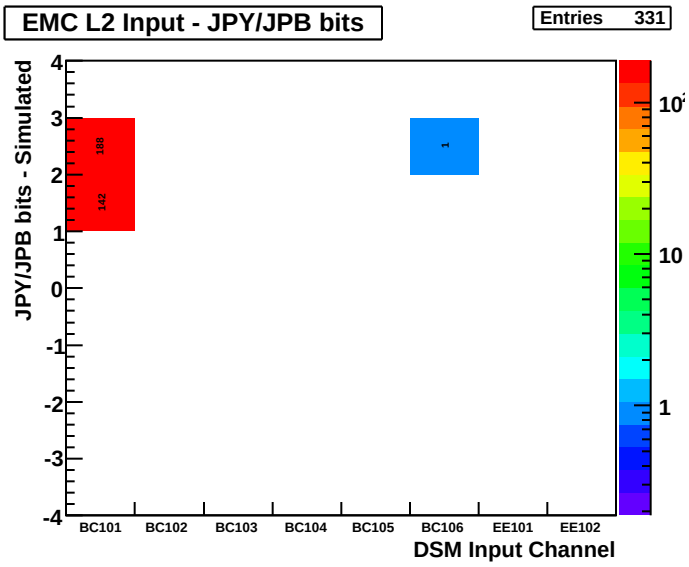

Endcap EMC L1 Input - High Tower Bits
Entries 1.8e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

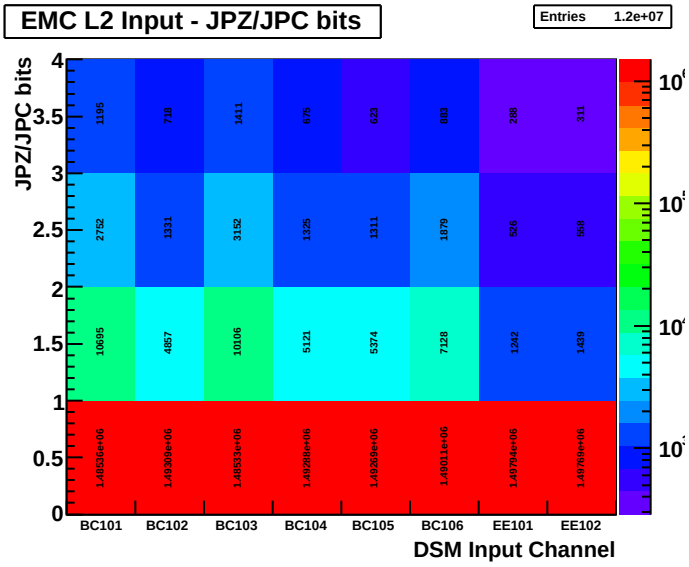

Endcap EMC L1 Input - High Tower Bits
Entries 14
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

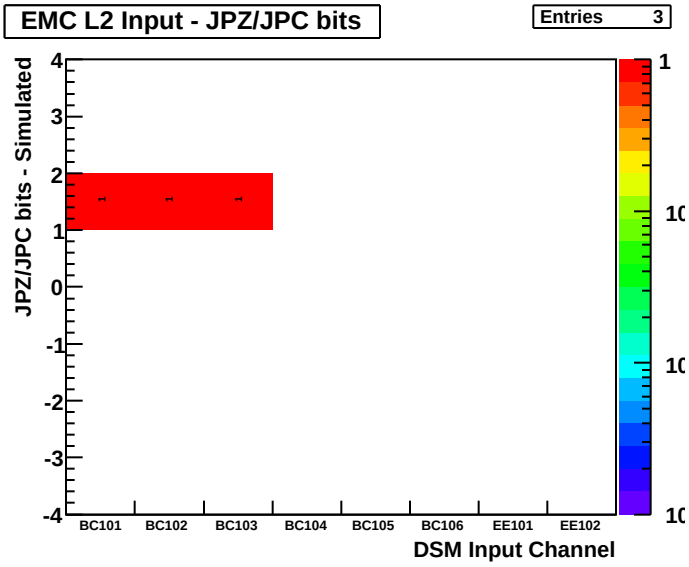

EMC L2 Input - JPX/JPA bits
Entries 1.2e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1525 1205 1131 708 1458 2492 267 313
2837 2587 2292 1422 3233 5876 901 538
11173 9236 8092 5058 13310 15124 1078 1239
1.48446e+06 1.48697e+06 1.48848e+06 1.49281e+06 1.492e+06 1.47651e+06 1.49815e+06 1.49791e+06

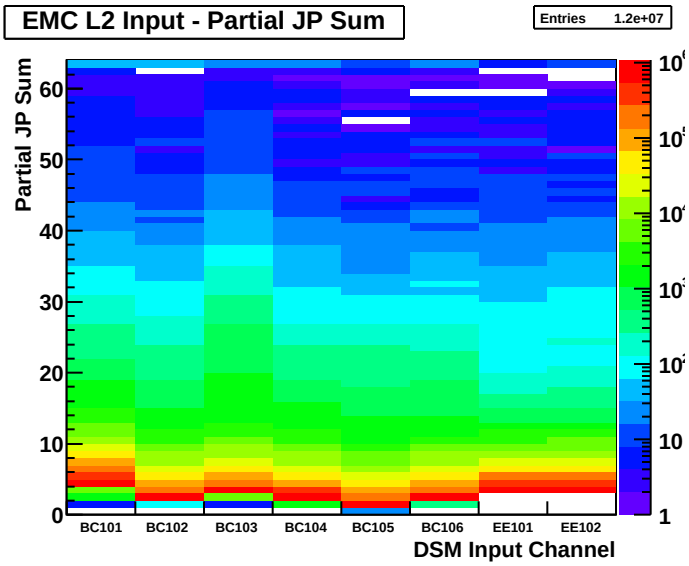

EMC L2 Input - JPX/JPA bits
Entries 329
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
222
102 1 1
1 1

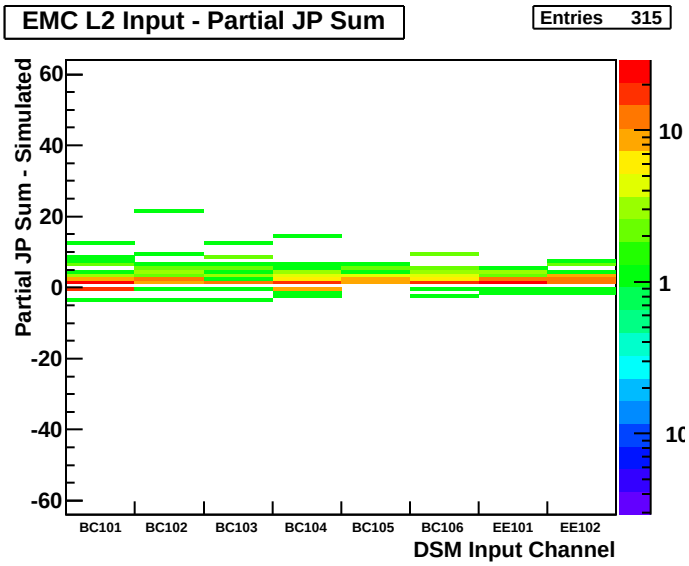

EMC L2 Input - JPY/JPB bits
Entries 1.2e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1129 770 850 537 849 3015 277 310
2082 1514 1500 1037 1932 7808 447 517
8514 5530 5845 3750 7231 20025 1023 1197
1.48828e+06 1.49219e+06 1.4918e+06 1.49468e+06 1.48999e+06 1.46915e+06 1.49825e+06 1.49798e+06

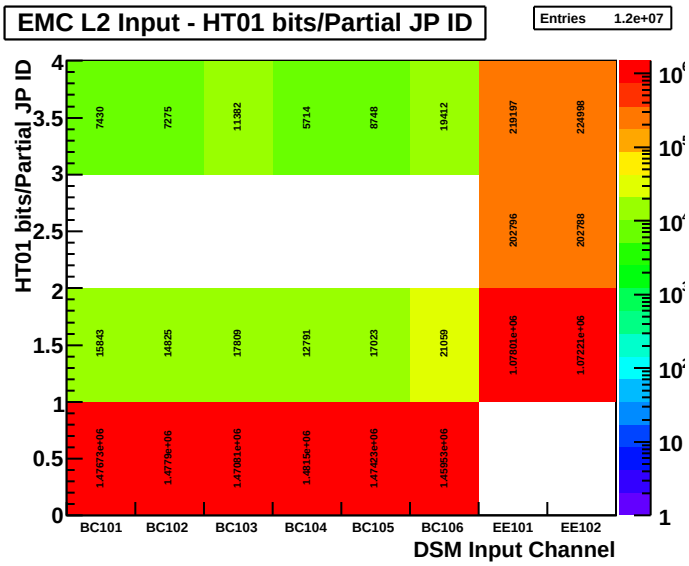

EMC L2 Input - JPY/JPB bits
Entries 331
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
188
142
1

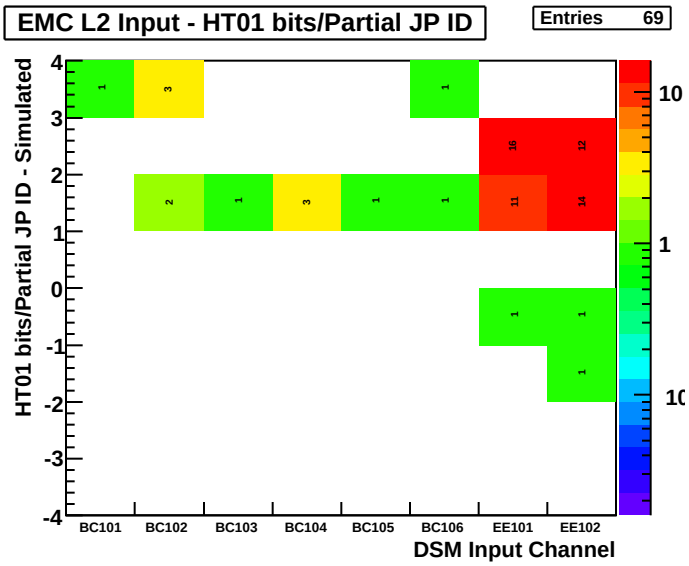

EMC L2 Input - JPZ/JPC bits
Entries 1.2e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1195 718 1411 675 623 883 288 311
2752 1331 3152 1325 1311 1879 526 558
10695 4857 10106 5121 5374 7128 1242 1439
1.48536e+06 1.49309e+06 1.48532e+06 1.49283e+06 1.49269e+06 1.49011e+06 1.49794e+06 1.49769e+06

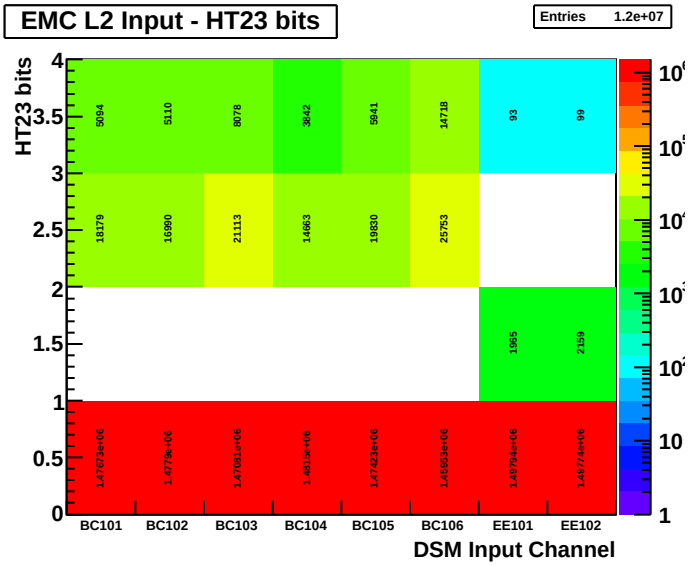

EMC L2 Input - JPZ/JPC bits
Entries 3
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1

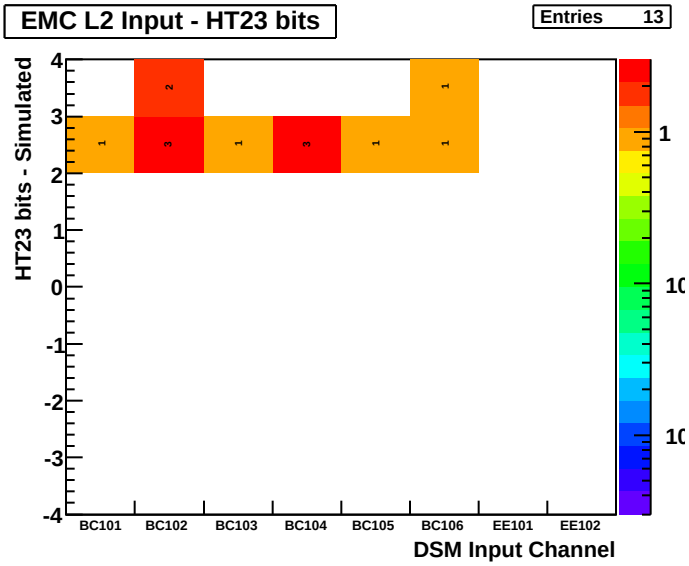

EMC L2 Input - Partial JP Sum
Entries 1.2e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

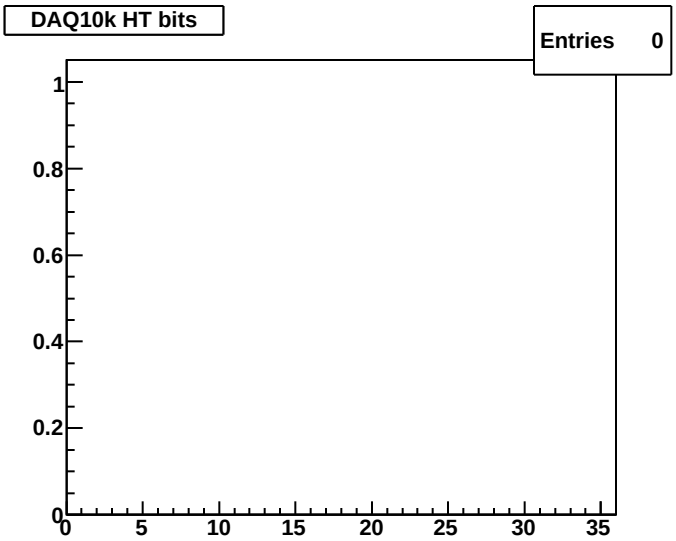

EMC L2 Input - Partial JP Sum
Entries 315
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

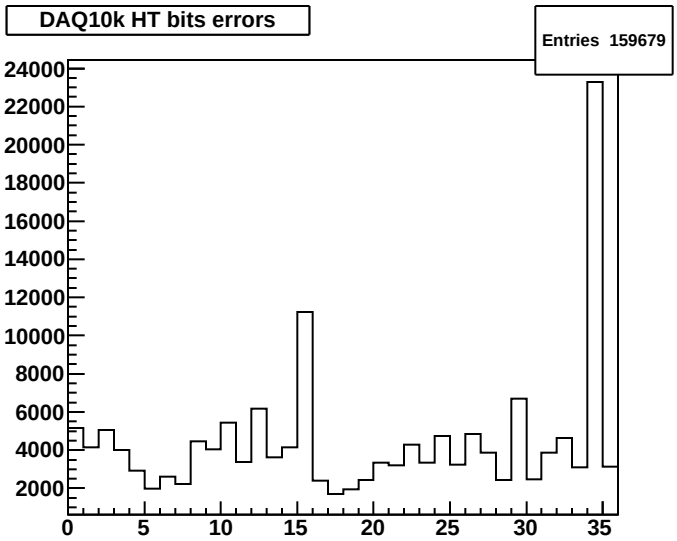

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.2e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

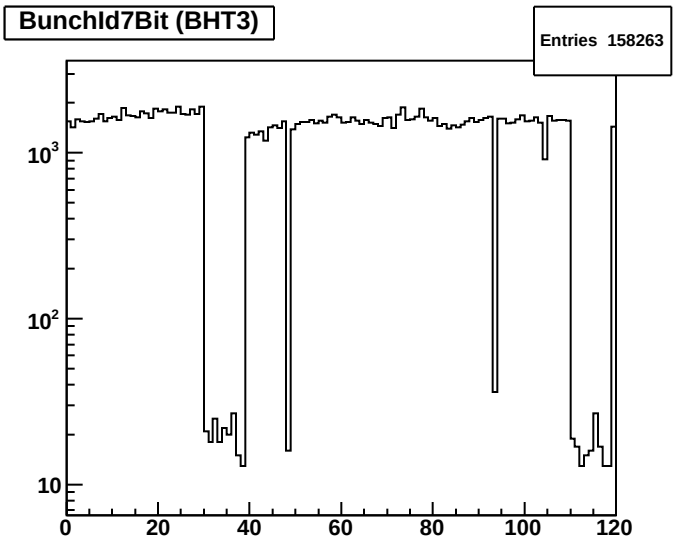

EMC L2 Input - HT01 bits/Partial JP ID
Entries 69
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

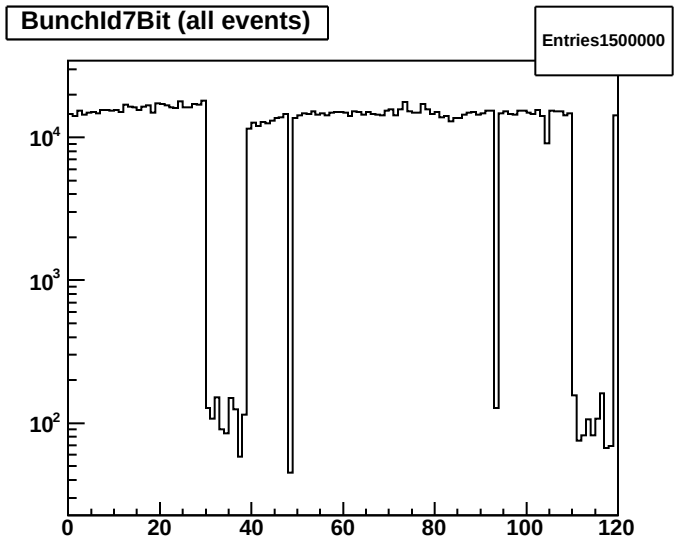

EMC L2 Input - HT23 bits
Entries 1.2e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

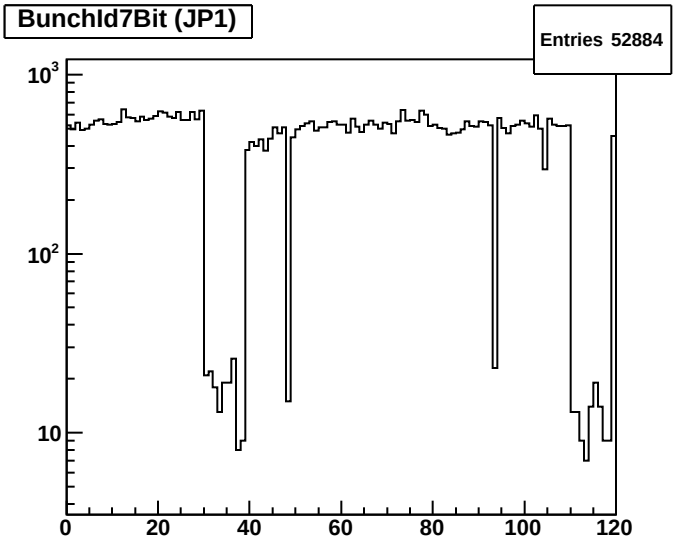

EMC L2 Input - HT23 bits
Entries 13
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

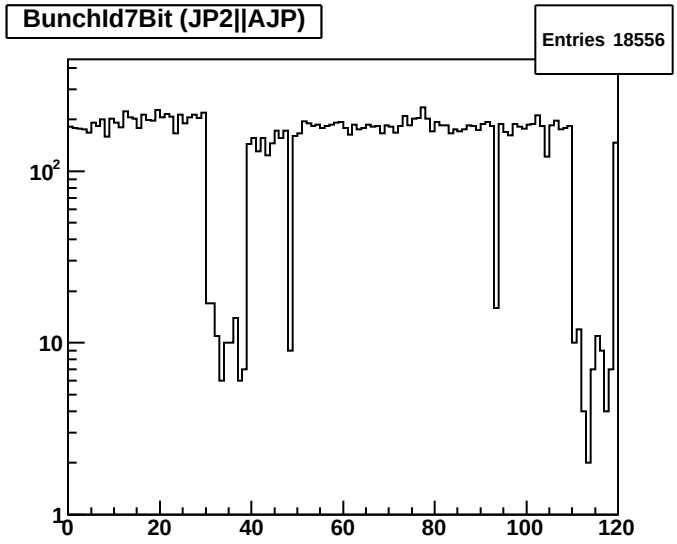

DAQ10k HT bits
Entries 0

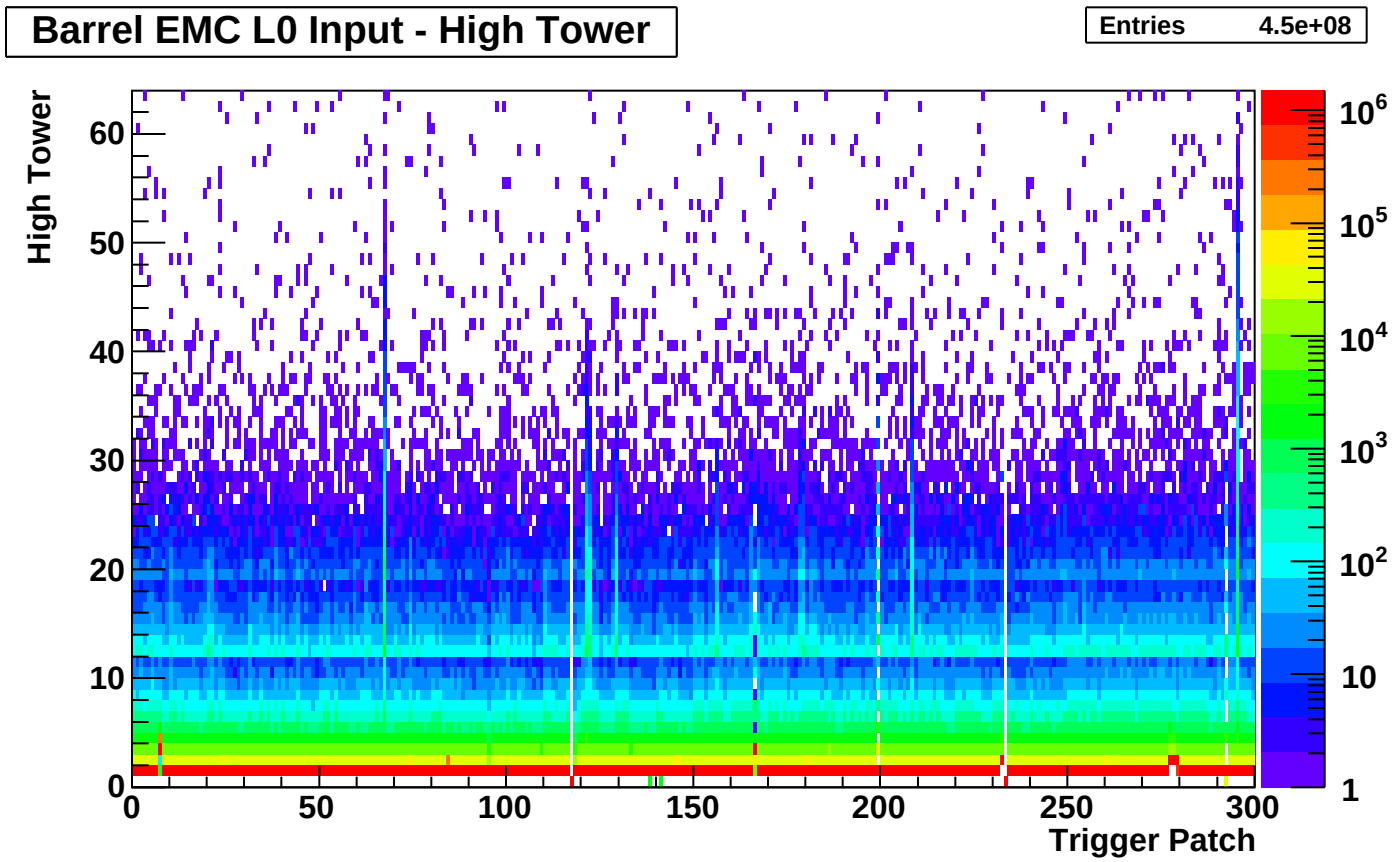

DAQ10k HT bits errors
Entries 159679

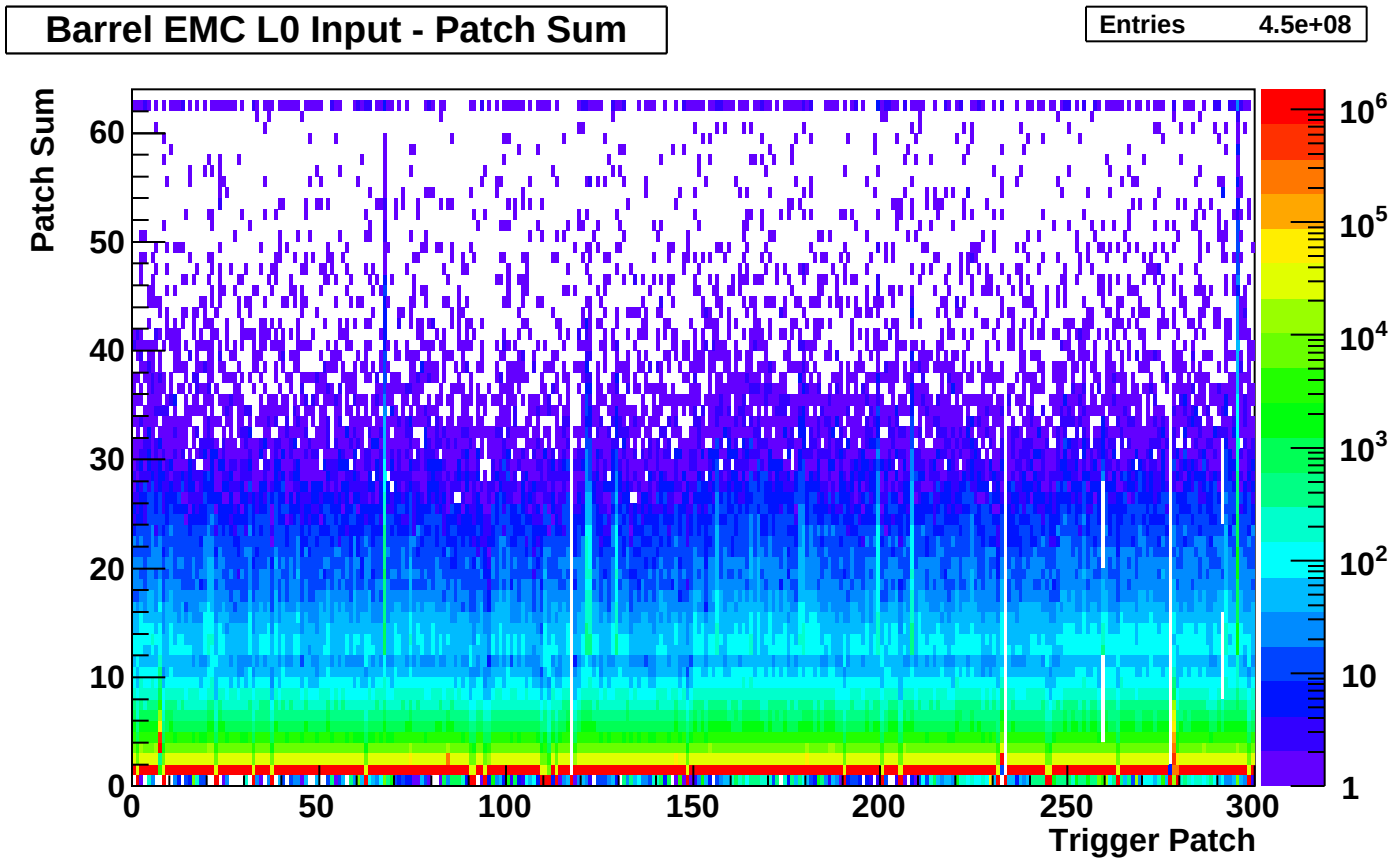

BunchId7Bit (BHT3)
Entries 158263

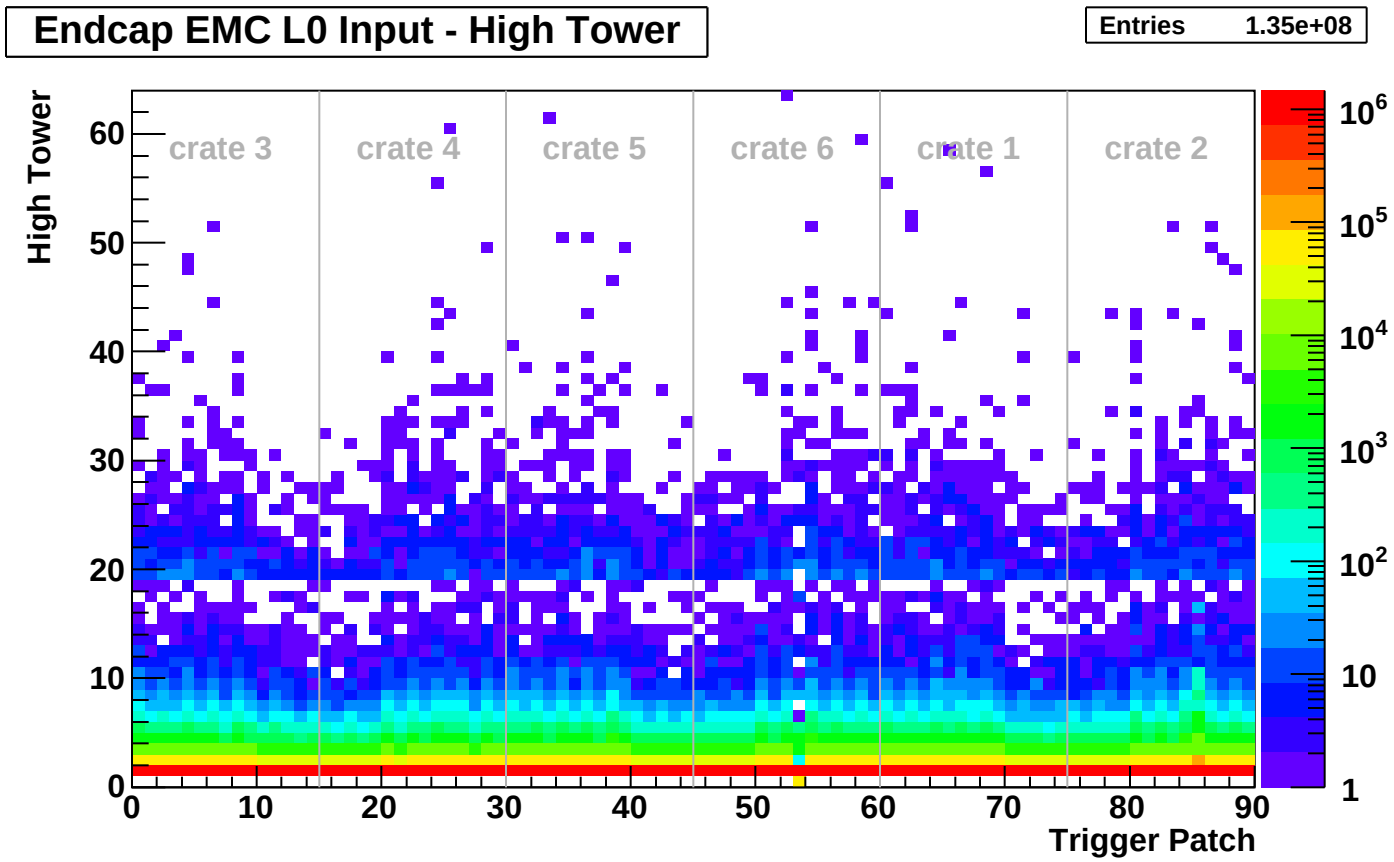

BunchId7Bit (all events)
Entries1500000

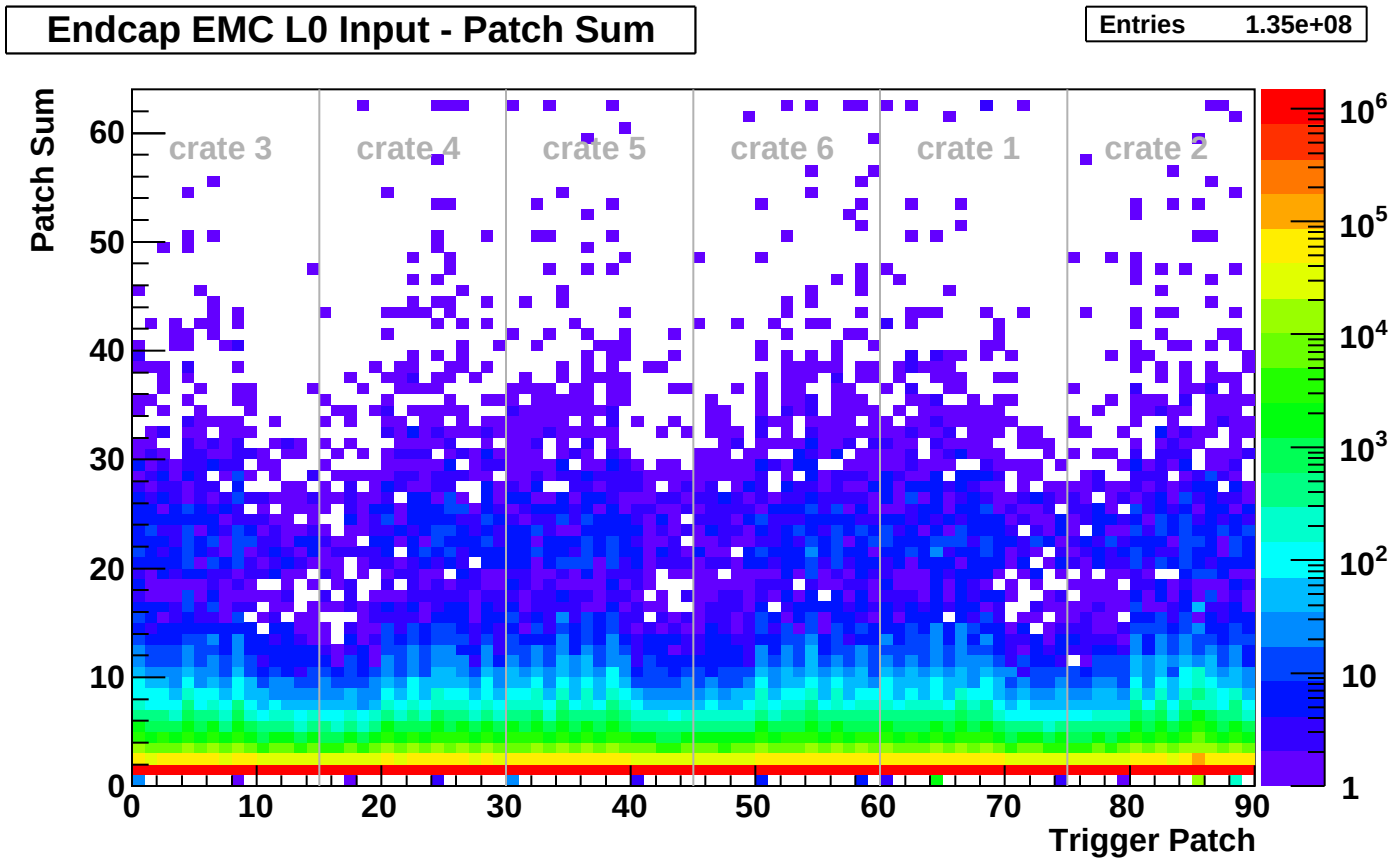

BunchId7Bit (JP1)
Entries 52884

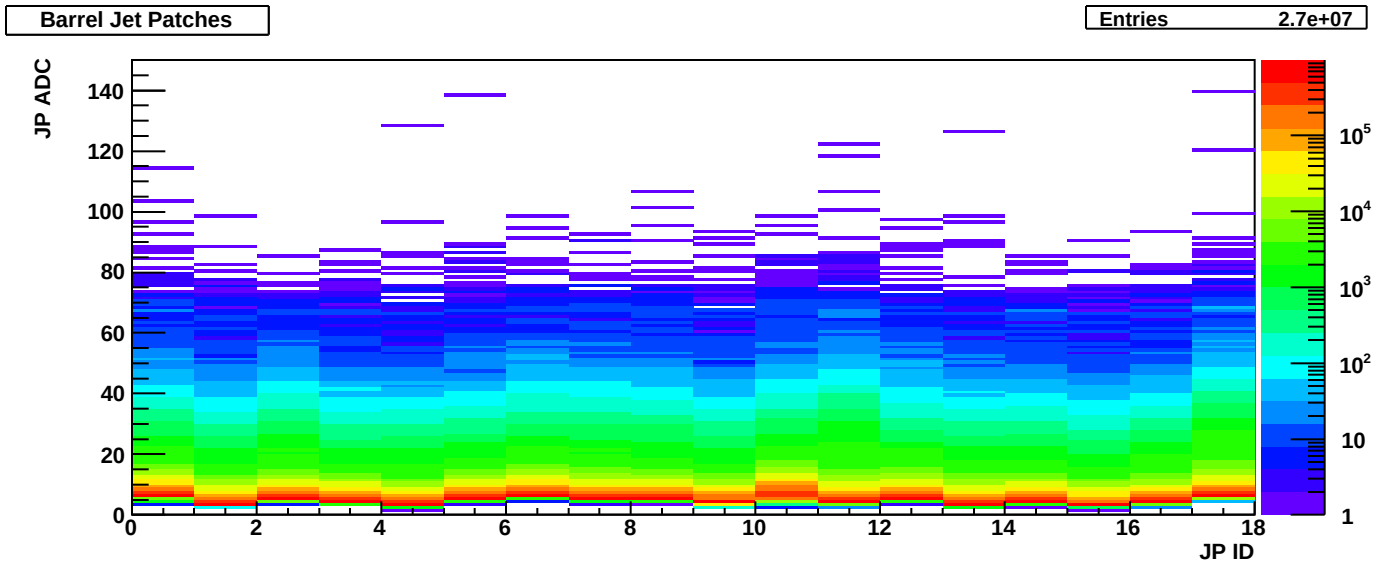

BunchId7Bit (JP2||AJP)
Entries 18556

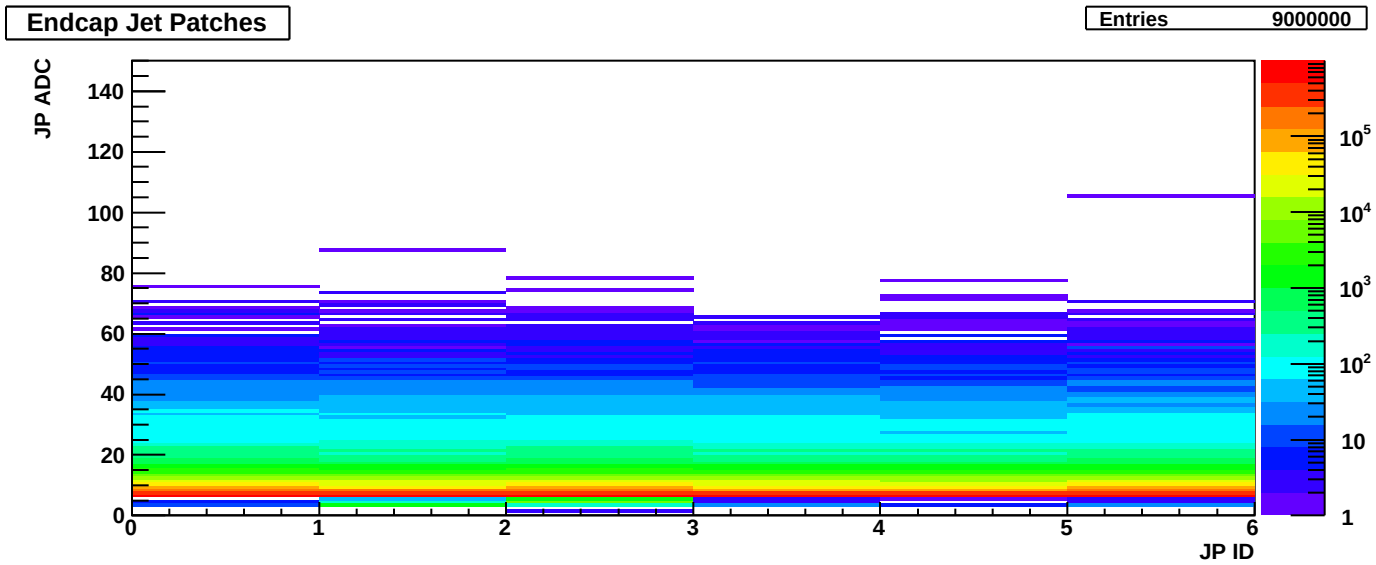

Barrel EMC L0 Input - High Tower
Entries 4.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

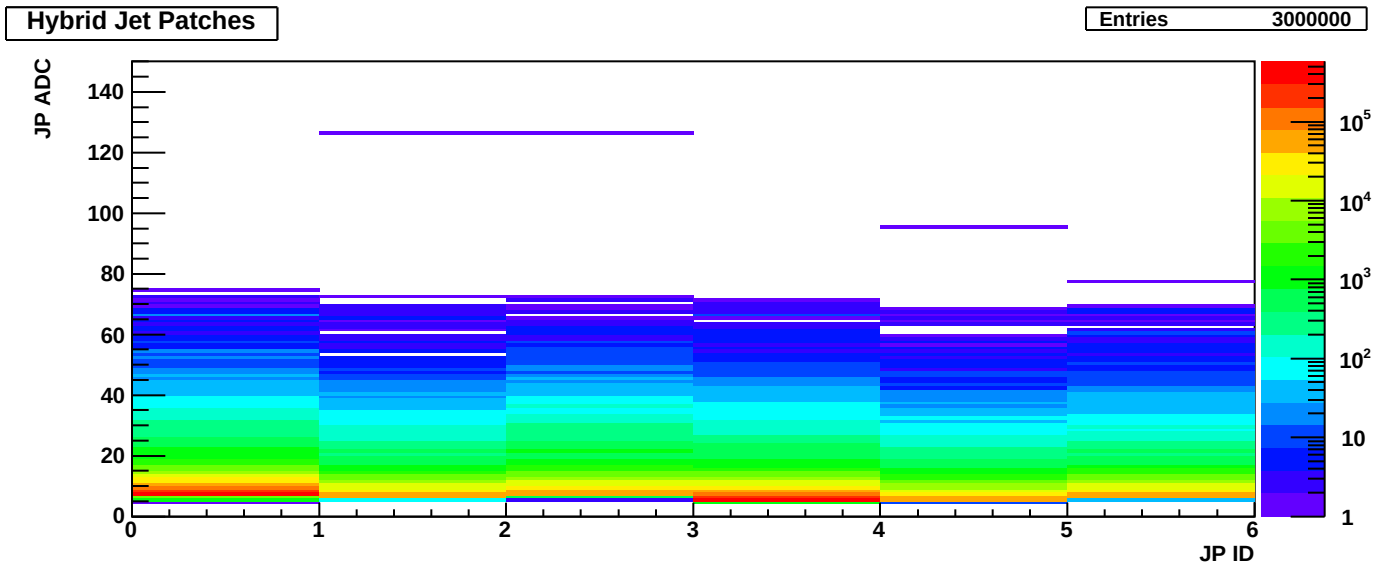

Barrel EMC L0 Input - Patch Sum
Entries 4.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

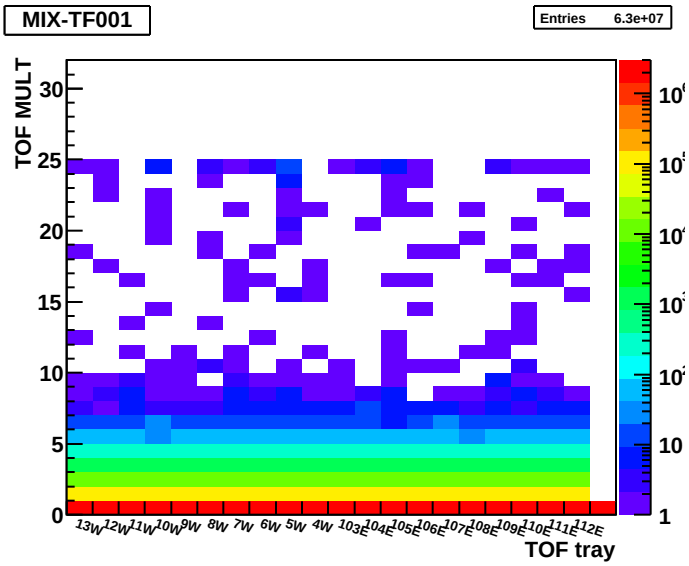

Endcap EMC L0 Input - High Tower
Entries 1.35e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

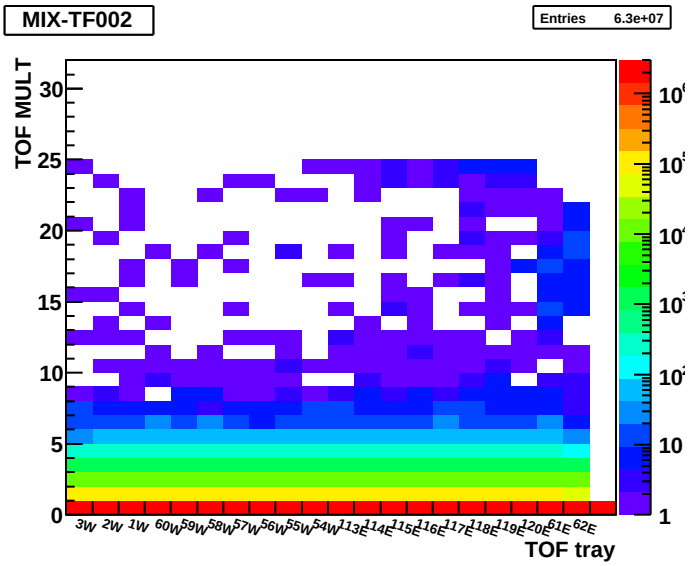

Endcap EMC L0 Input - Patch Sum
Entries 1.35e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

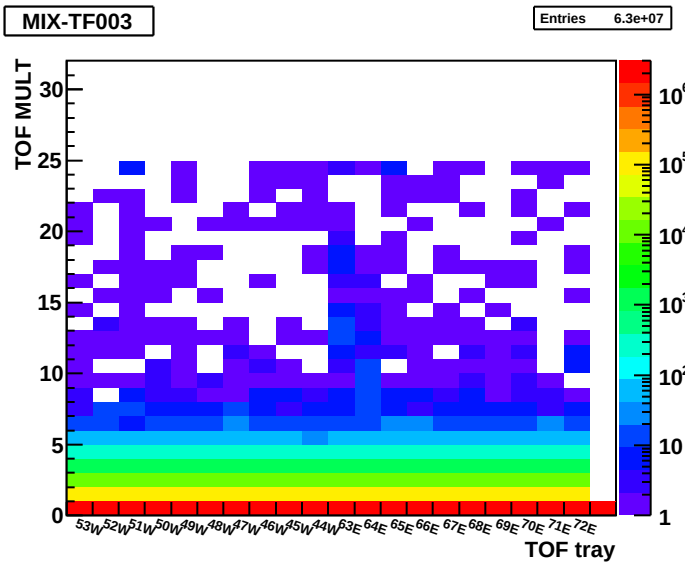

Barrel Jet Patches
Entries 2.7e+07
JP ADC
JP ID

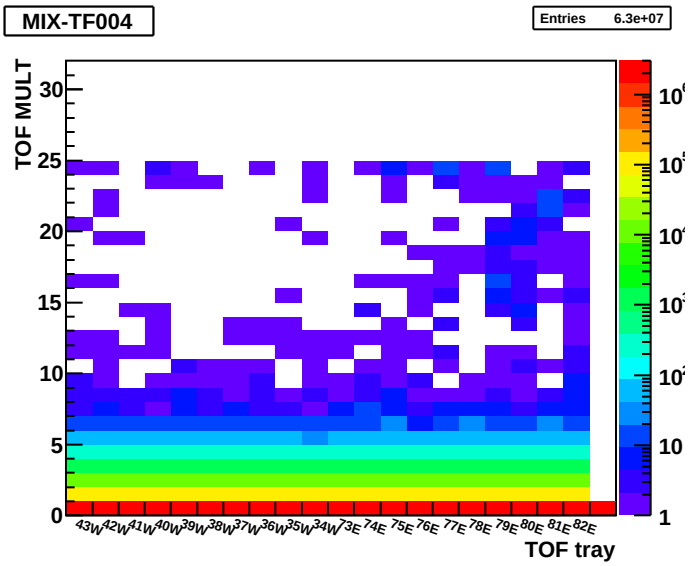

Endcap Jet Patches
Entries 9000000
JP ADC
JP ID

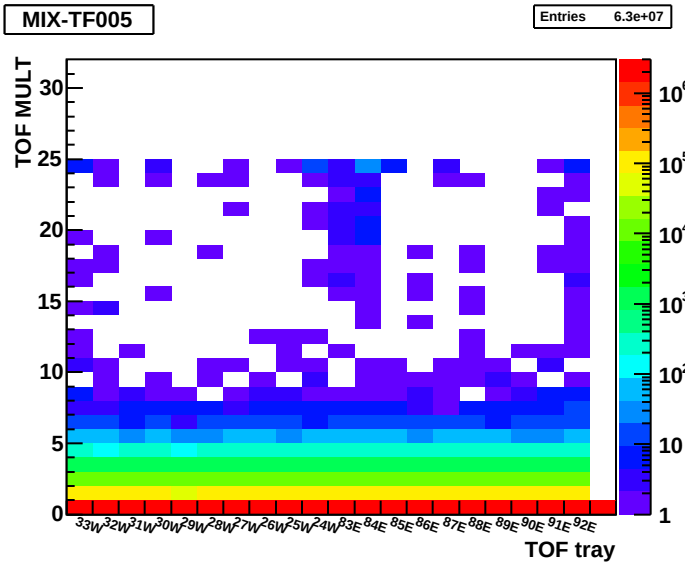

Hybrid Jet Patches
Entries 3000000
JP ADC
JP ID

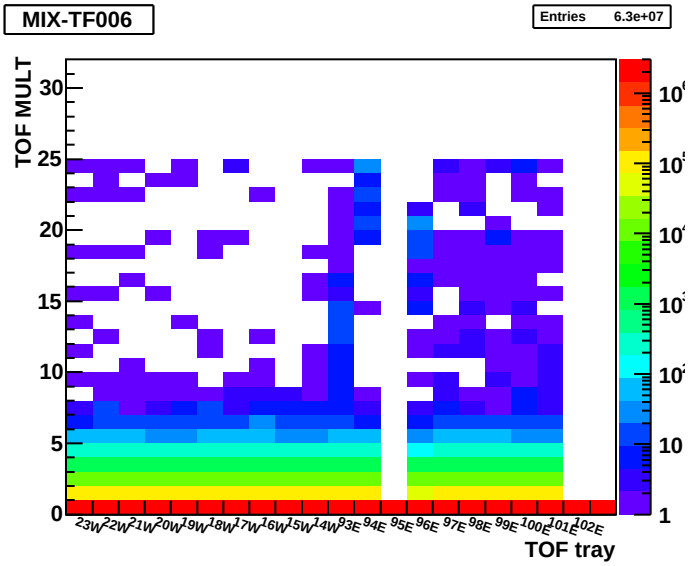

MIX-TF001
Entries 6.3e+07
TOF MULT
TOF tray

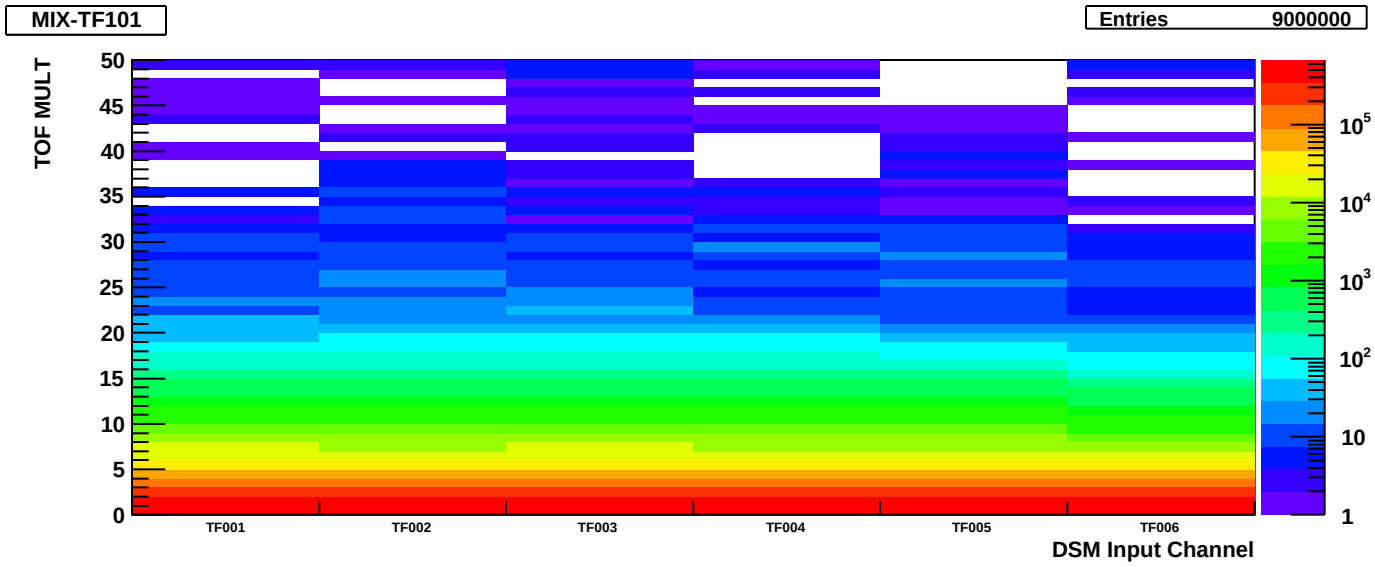

MIX-TF002
Entries 6.3e+07
TOF MULT
TOF tray

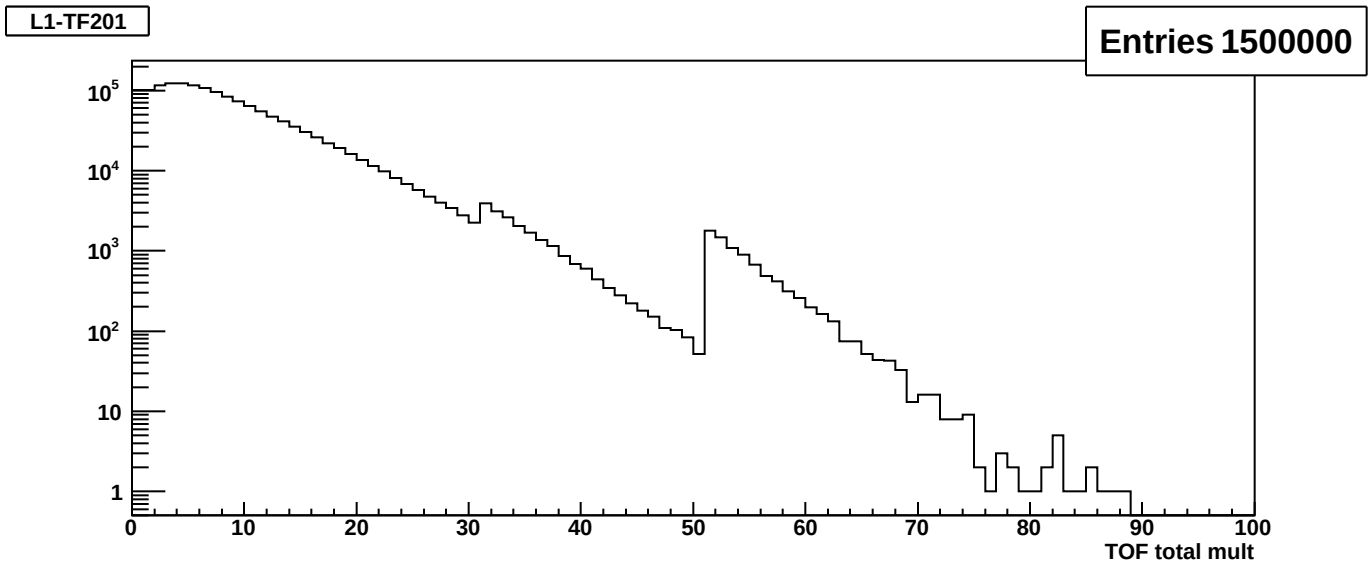

MIX-TF003
Entries 6.3e+07
TOF MULT
TOF tray

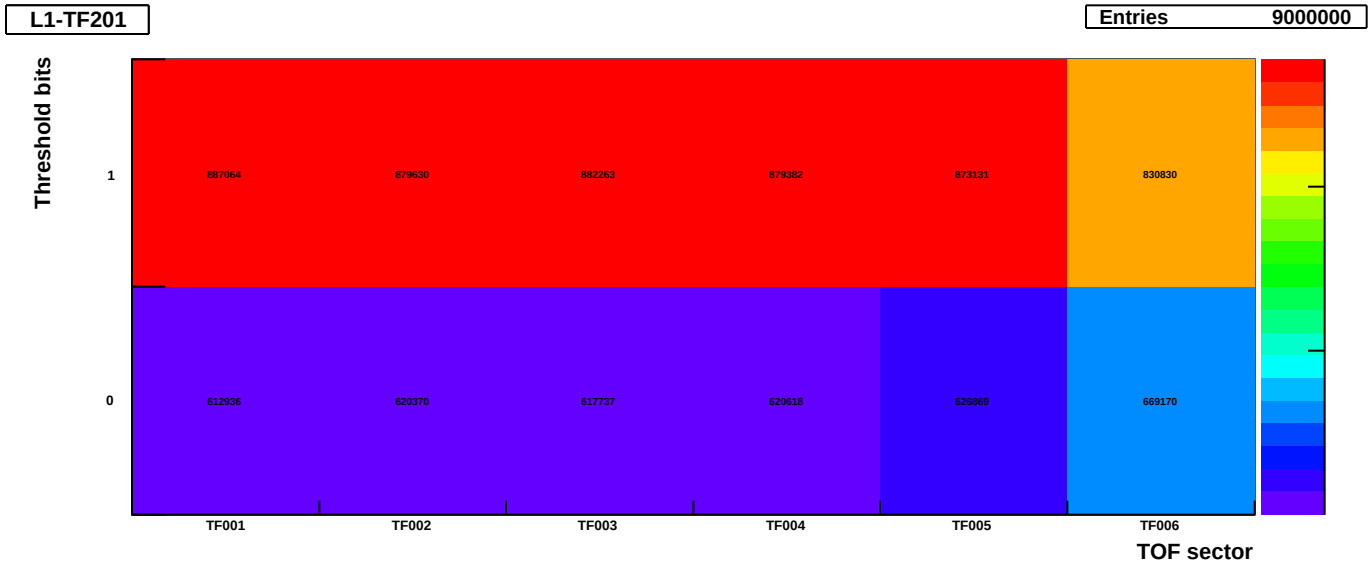

MIX-TF004
Entries 6.3e+07
TOF MULT
TOF tray

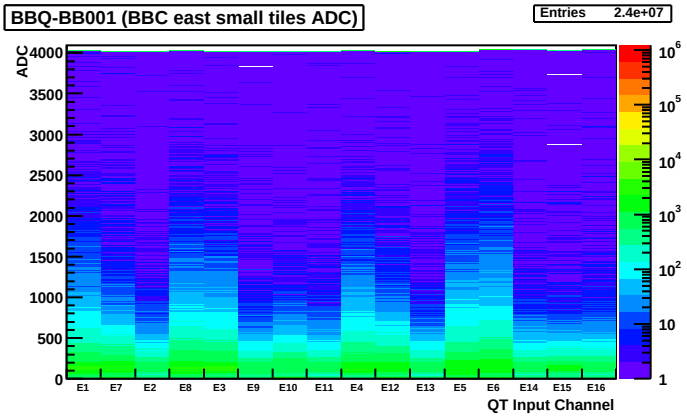

MIX-TF005
Entries 6.3e+07
TOF MULT
TOF tray

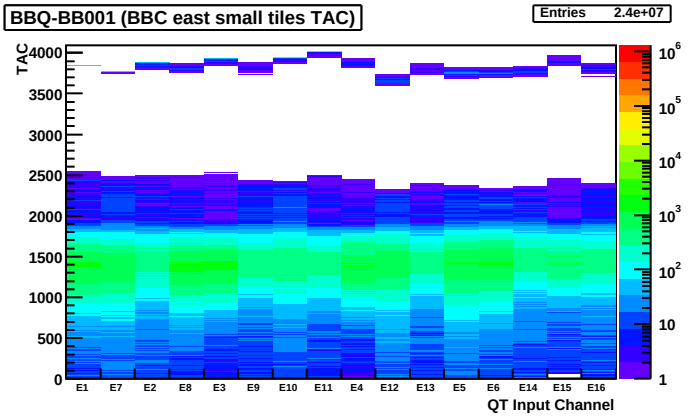

MIX-TF006
Entries 6.3e+07
TOF MULT
TOF tray

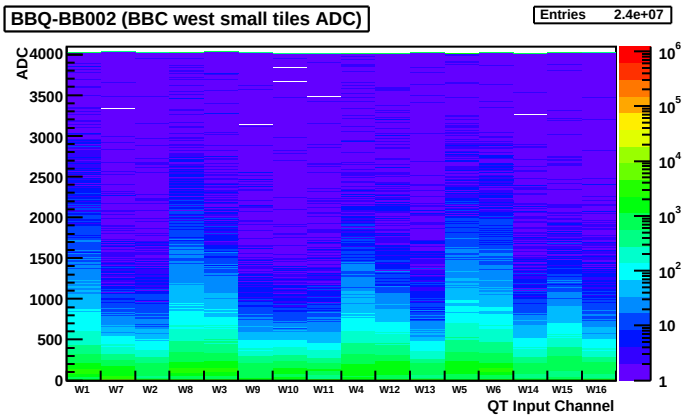

MIX-TF101
Entries 9000000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

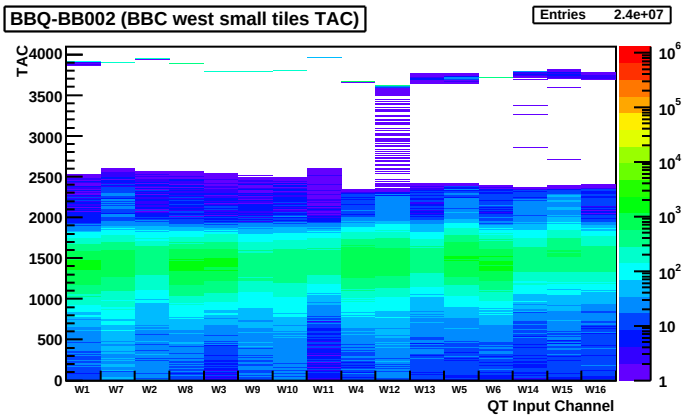

L1-TF201
Entries 1500000
TOF total mult

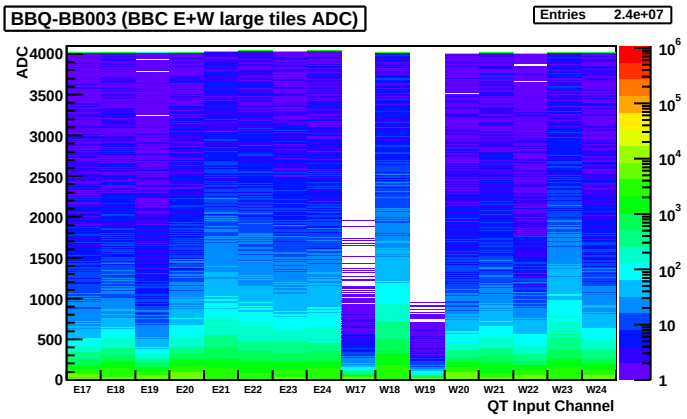

L1-TF201
Entries 9000000
Threshold bits
887064
879630
882263
879382
873131
830830
612936
620370
617737
620618
626869
669170
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

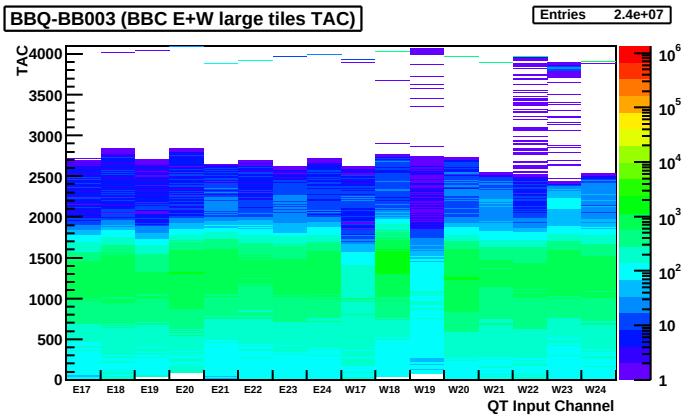

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

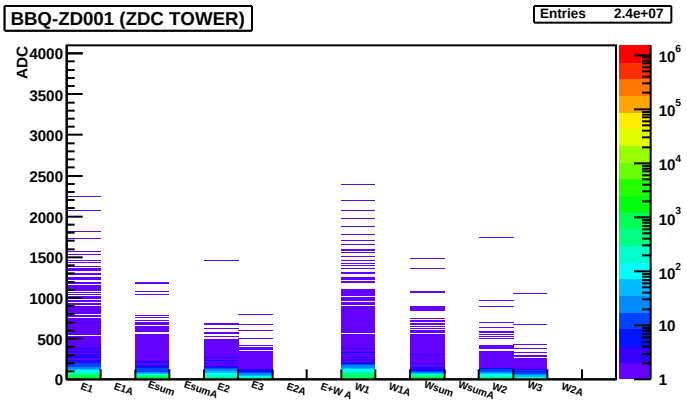

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

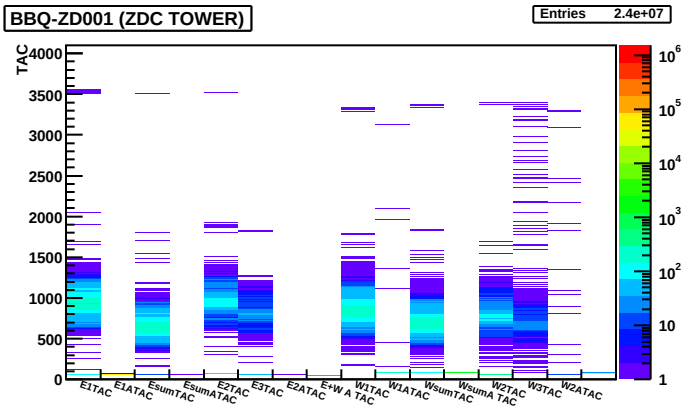

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

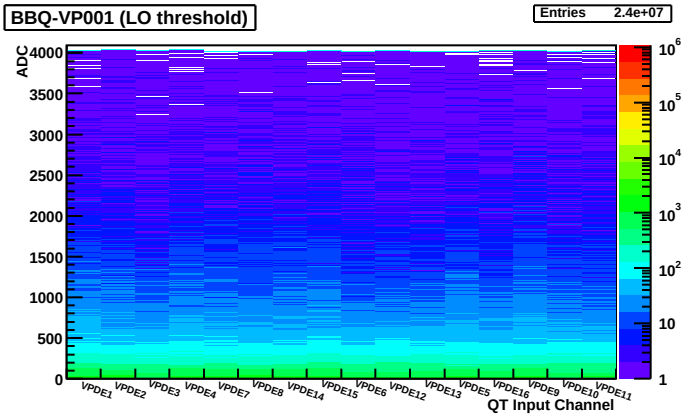

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

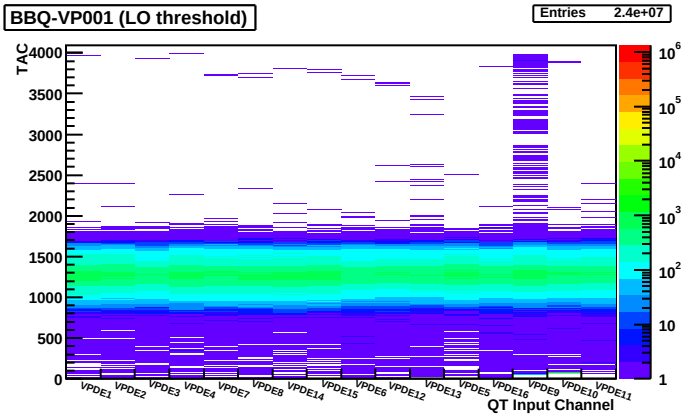

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

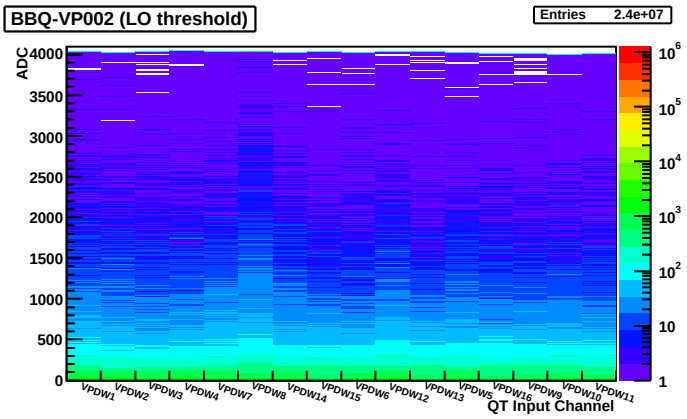

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

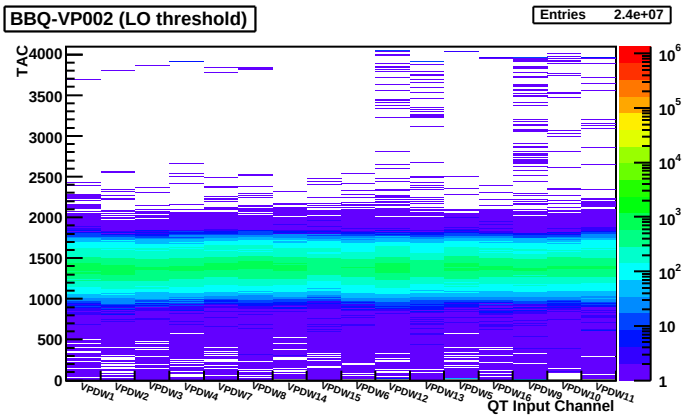

BBQ-ZD001 (ZDC TOWER)
Entries 2.4e+07
ADC

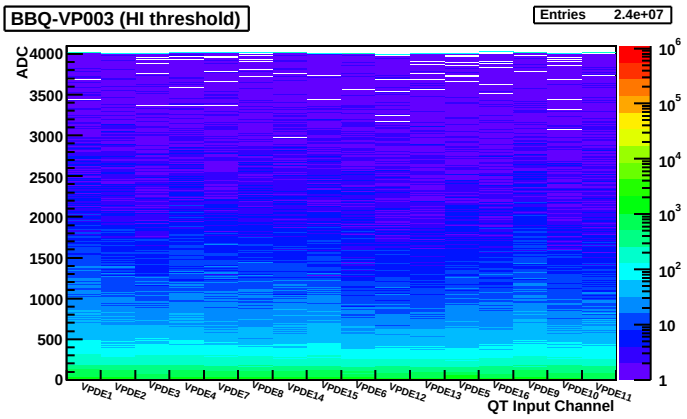

BBQ-ZD001 (ZDC TOWER)
Entries 2.4e+07
TAC

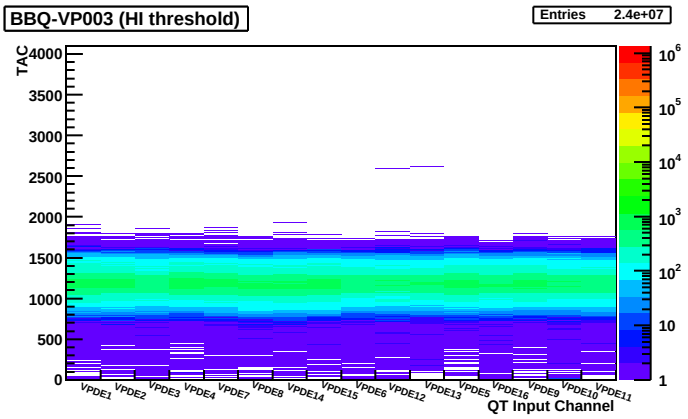

BBQ-VP001 (LO threshold)
Entries 2.4e+07
ADC
QT Input Channel

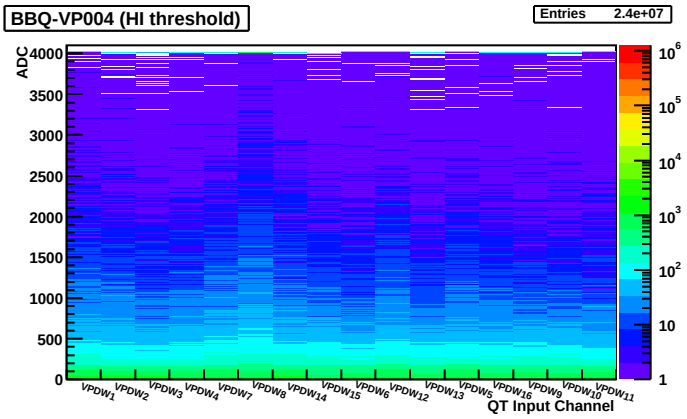

BBQ-VP001 (LO threshold)
Entries 2.4e+07
TAC
QT Input Channel

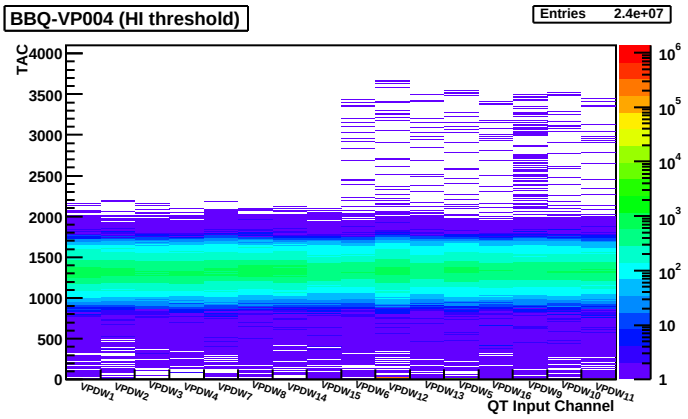

BBQ-VP002 (LO threshold)
Entries 2.4e+07
ADC
QT Input Channel

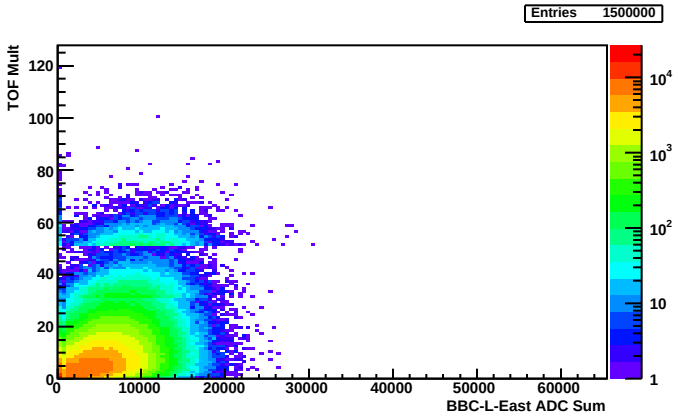

BBQ-VP002 (LO threshold)
Entries 2.4e+07
TAC
QT Input Channel

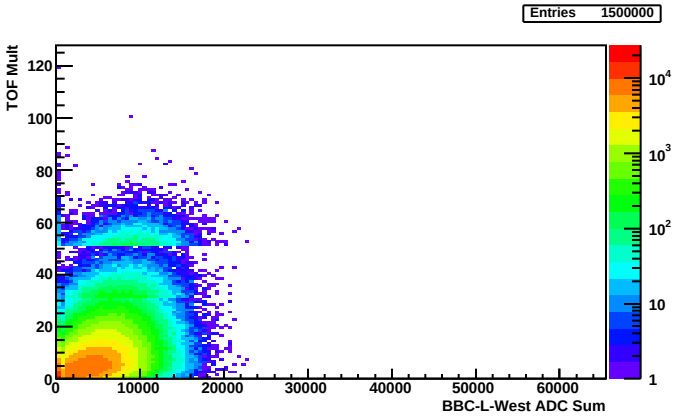

BBQ-VP003 (HI threshold)
Entries 2.4e+07
ADC
QT Input Channel

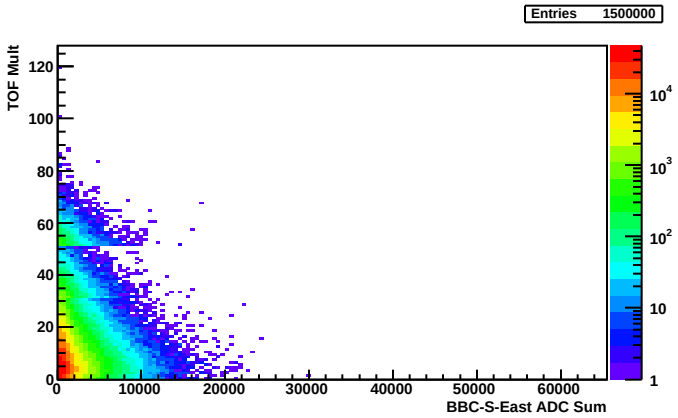

BBQ-VP003 (HI threshold)
Entries 2.4e+07
TAC
QT Input Channel

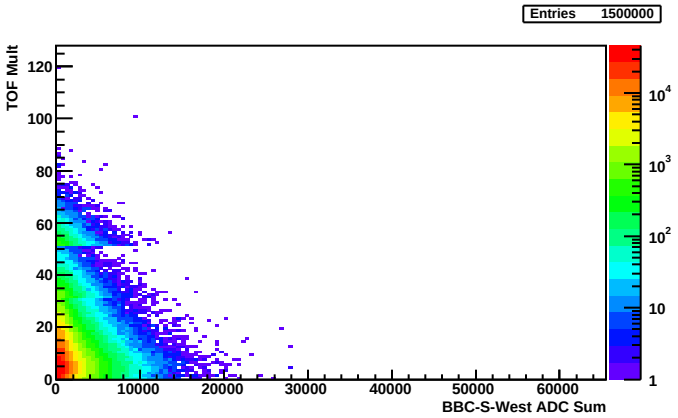

BBQ-VP004 (HI threshold)
Entries 2.4e+07
ADC
QT Input Channel

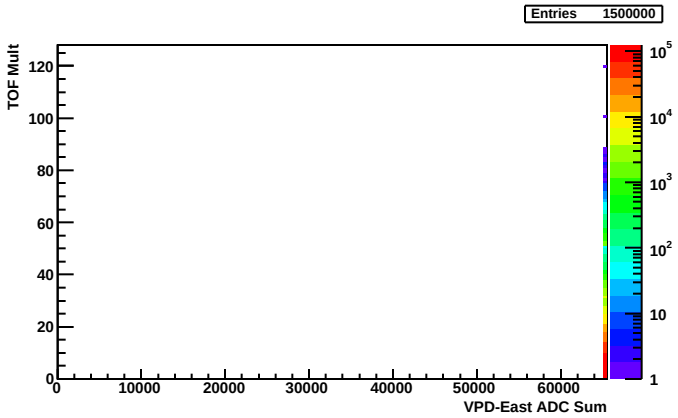

BBQ-VP004 (HI threshold)
Entries 2.4e+07
TAC
QT Input Channel

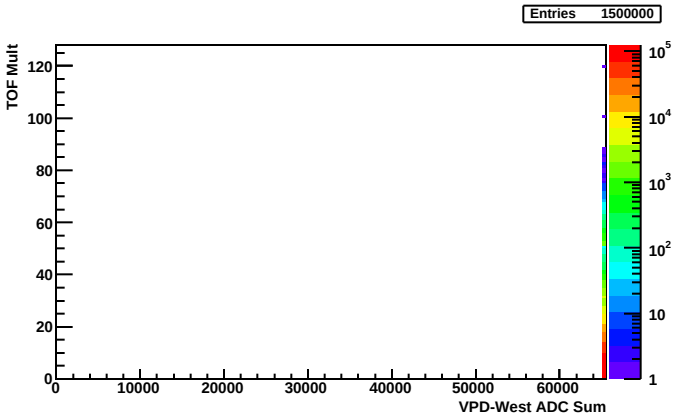

Entries 1500000
TOF Mult
BBC-L-East ADC Sum

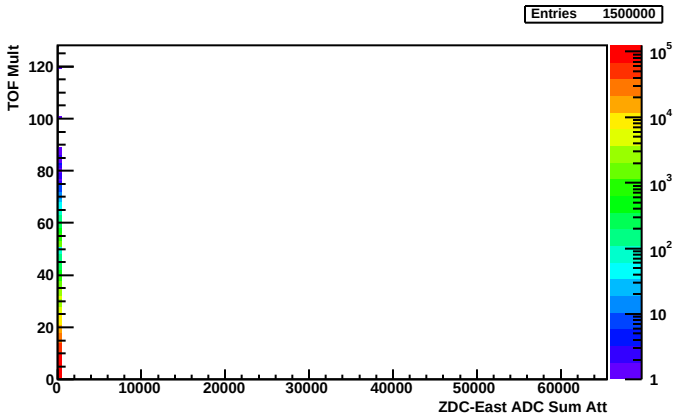

Entries 1500000
TOF Mult
BBC-L-West ADC Sum

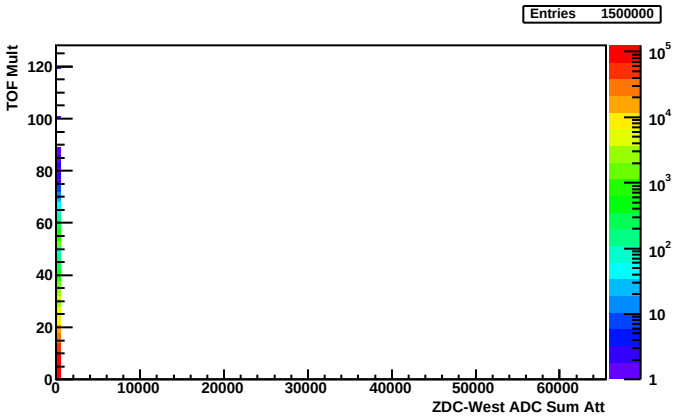

Entries 1500000
TOF Mult
BBC-S-East ADC Sum

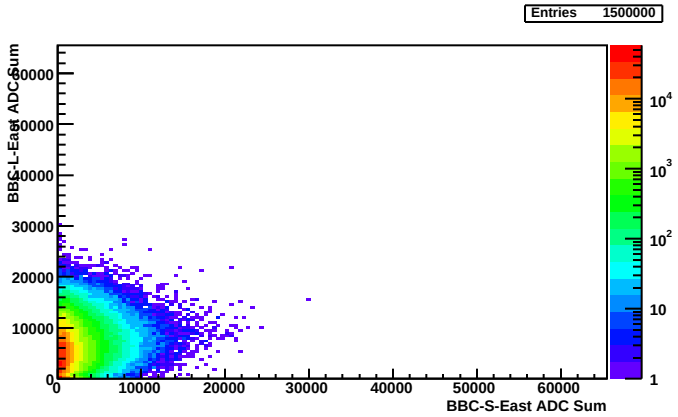

Entries 1500000
TOF Mult
BBC-S-West ADC Sum

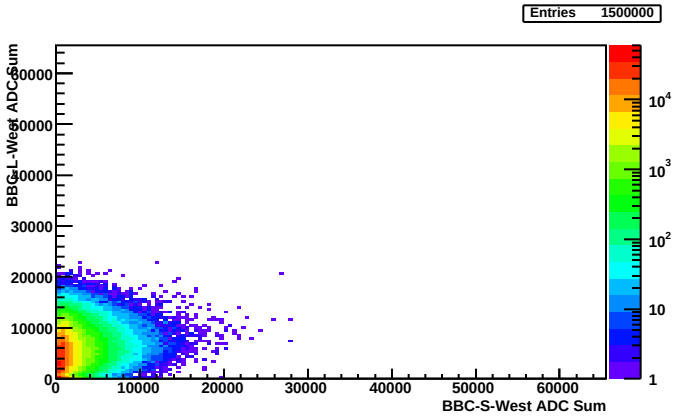

Entries 1500000
TOF Mult
VPD-East ADC Sum

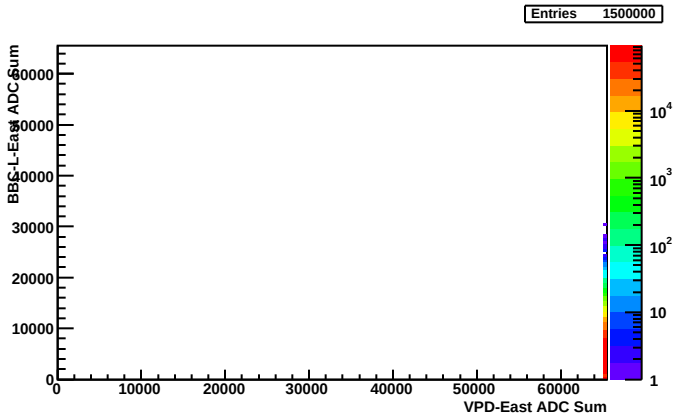

Entries 1500000
TOF Mult
VPD-West ADC Sum

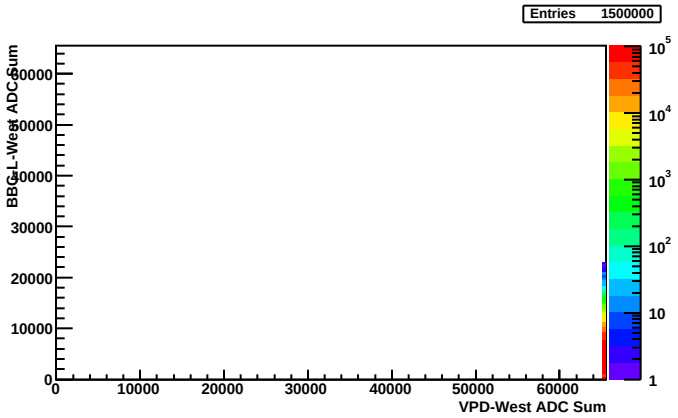

Entries 1500000
TOF Mult
ZDC-East ADC Sum Att

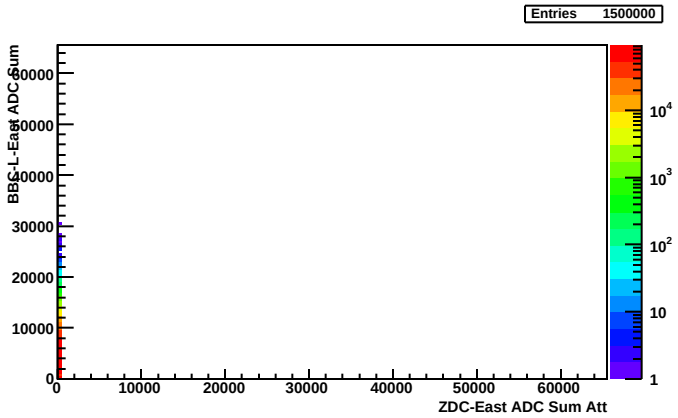

Entries 1500000
TOF Mult
ZDC-West ADC Sum Att

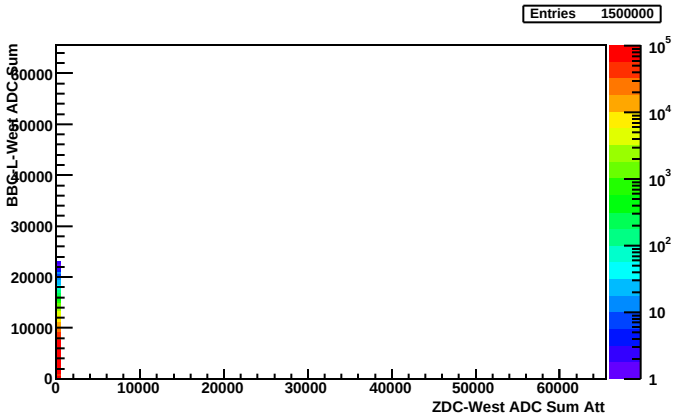

Entries 1500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

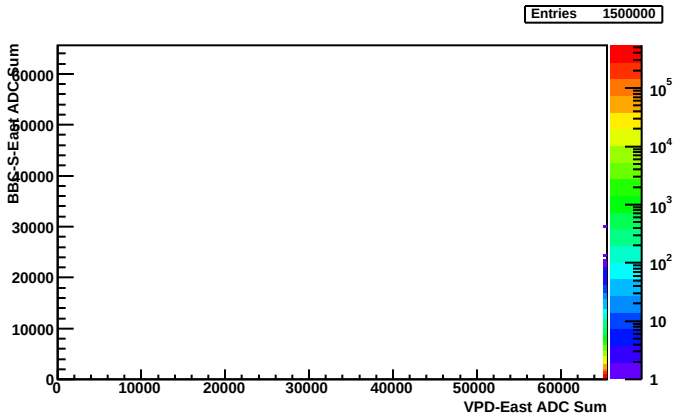

Entries 1500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

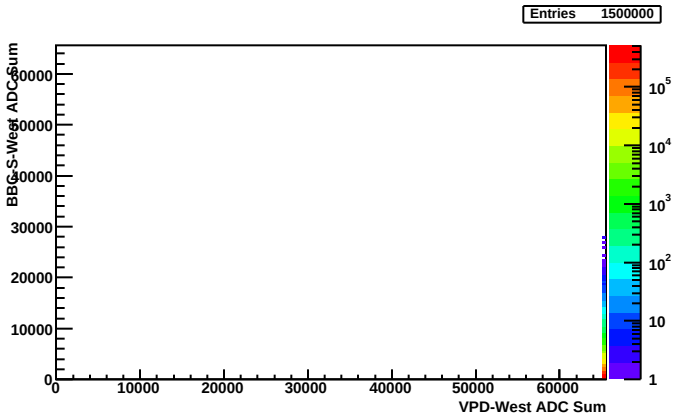

Entries 1500000
BBC-L-East ADC Sum
VPD-East ADC Sum

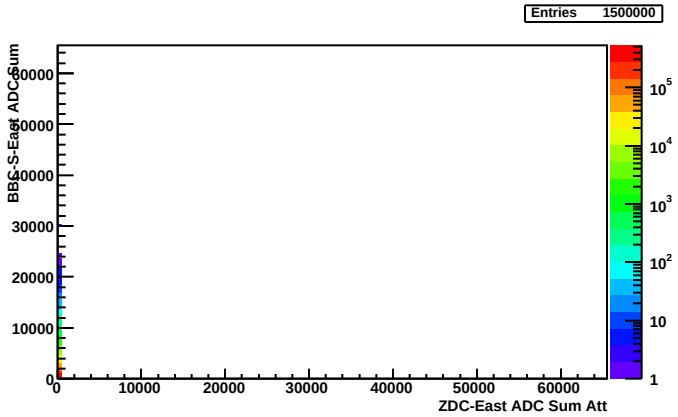

Entries 1500000
BBC-L-West ADC Sum
VPD-West ADC Sum

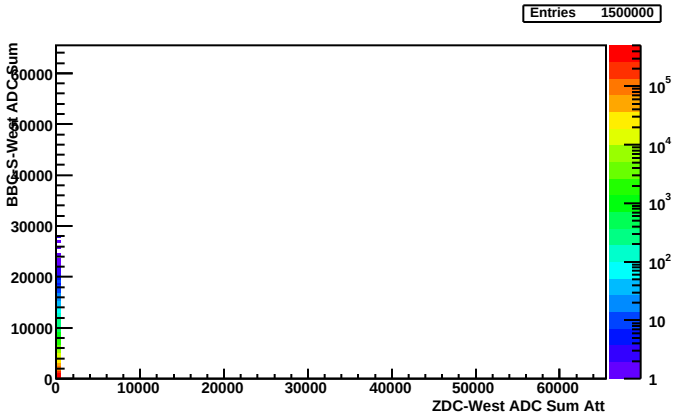

Entries 1500000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

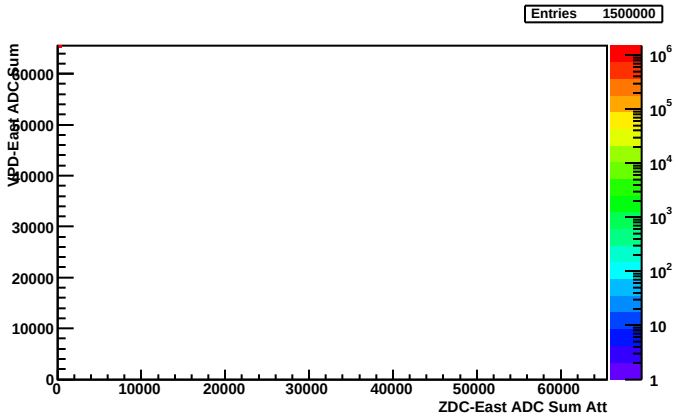

Entries 1500000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

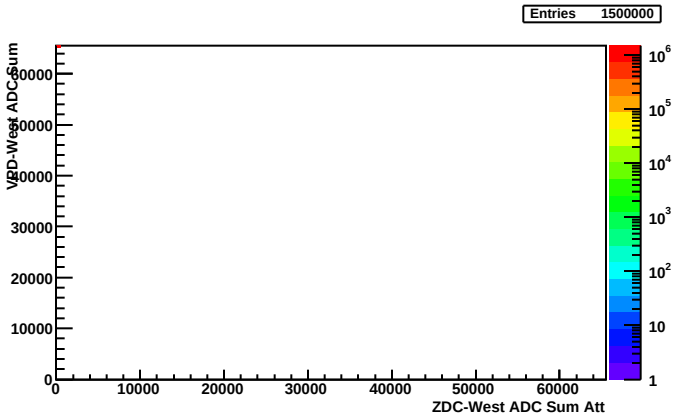

Entries 1500000
BBC-S-East ADC Sum
VPD-East ADC Sum

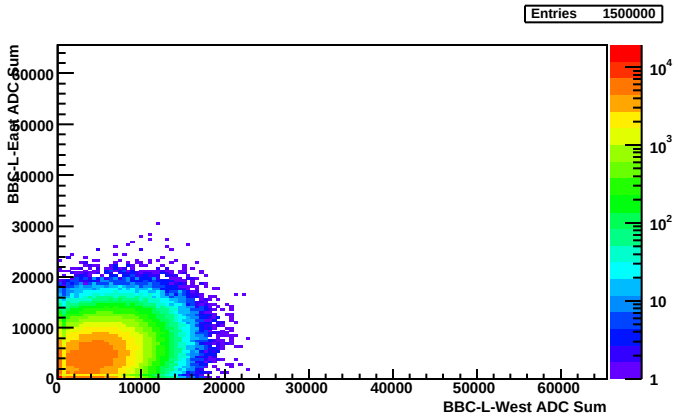

Entries 1500000
BBC-S-West ADC Sum
VPD-West ADC Sum

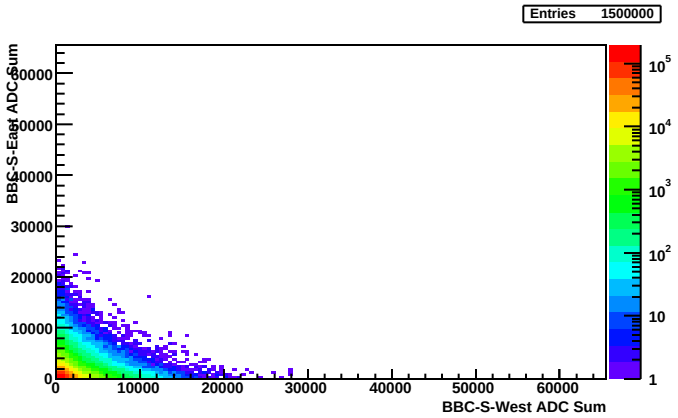

Entries 1500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

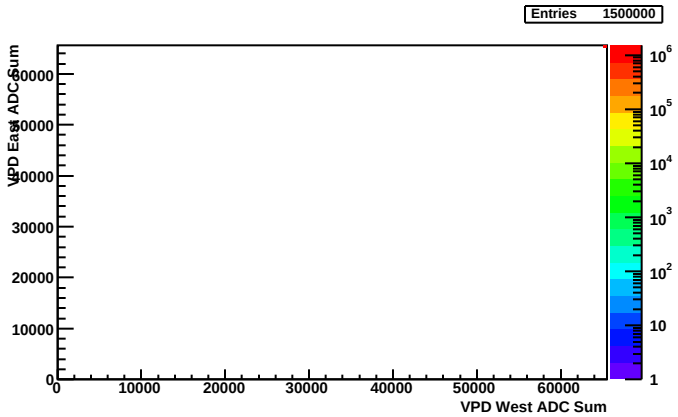

Entries 1500000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

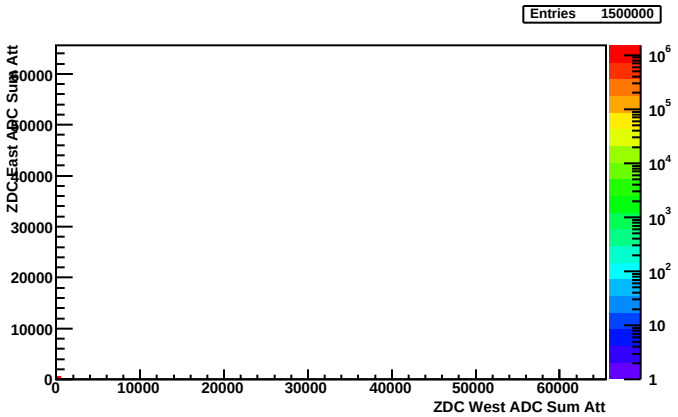

Entries 1500000
VPD-East ADC Sum
ZDC-East ADC Sum Att

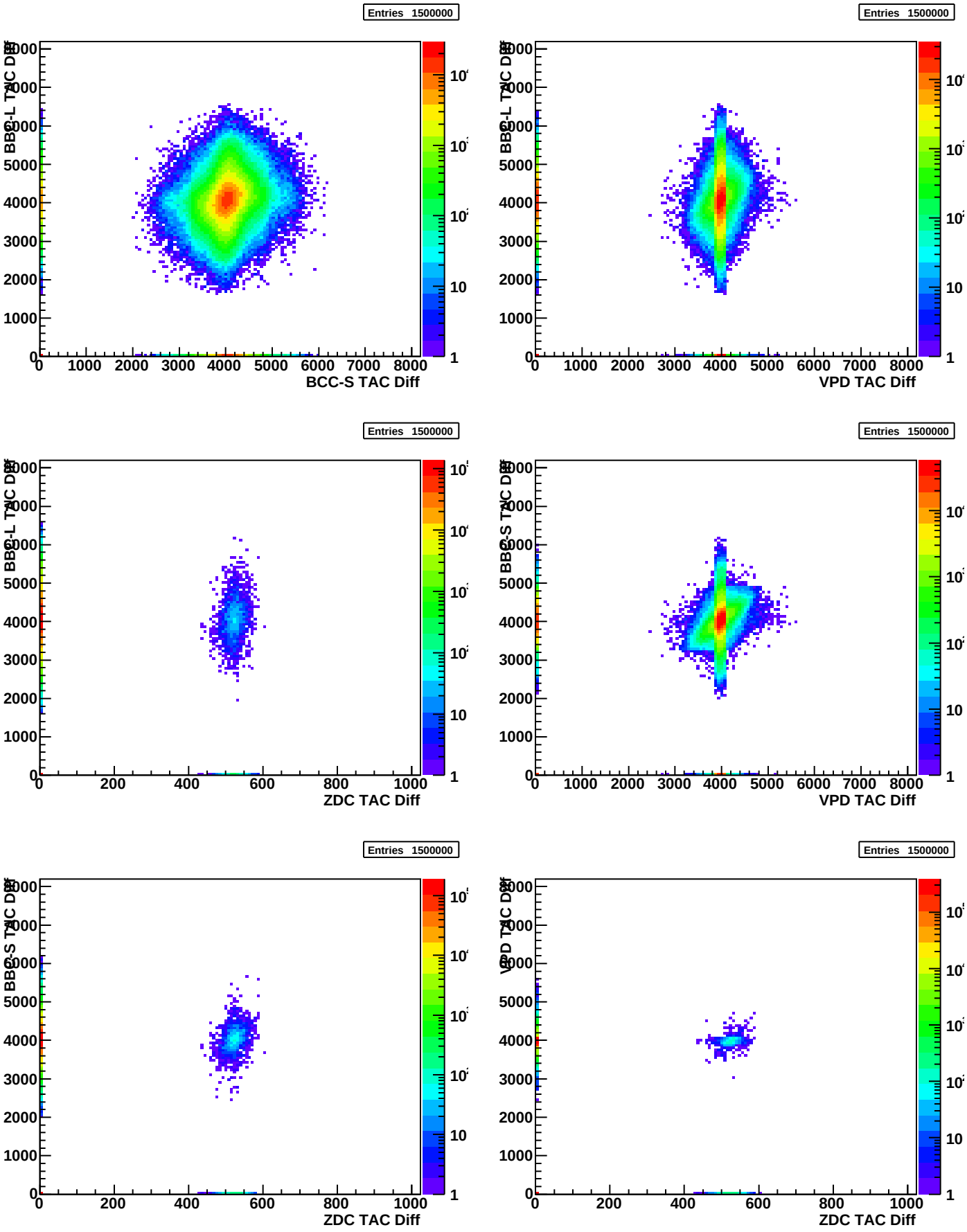

Entries 1500000
VPD-West ADC Sum
ZDC-West ADC Sum Att

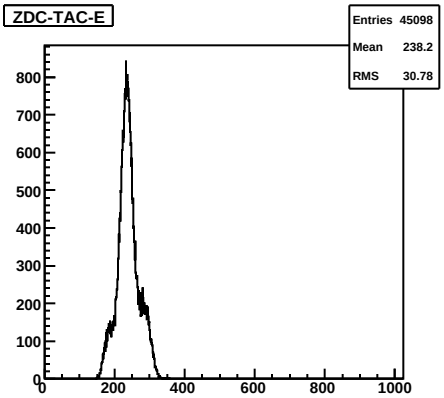

Entries 1500000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

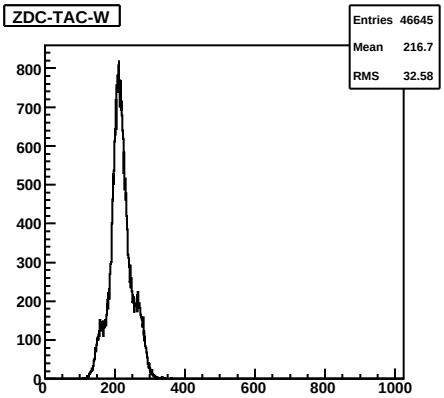

Entries 1500000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

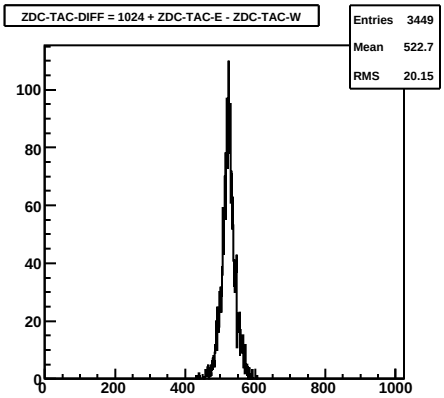

Entries 1500000
VPD East ADC Sum
VPD West ADC Sum

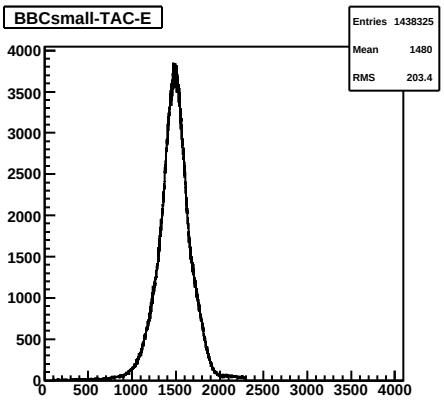

Entries 1500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

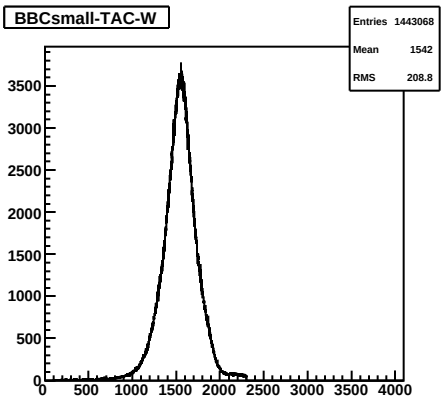

Entries 1500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1500000
BBC-L TAC Diff
VPD TAC Diff
Entries 1500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 1500000
BBC-S TAC Diff
VPD TAC Diff
Entries 1500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 1500000
VPD TAC Diff
ZDC TAC Diff

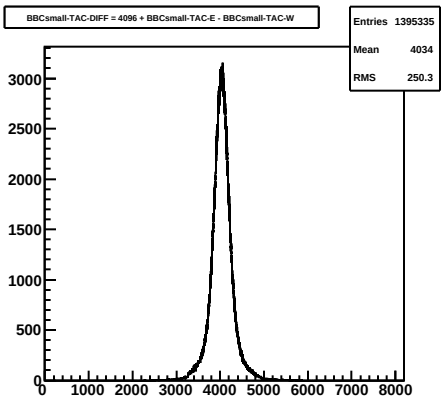

ZDC-TAC-E
Entries 45098
Mean 238.2
RMS 30.78

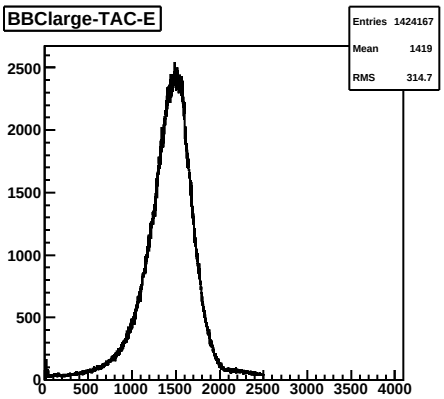

ZDC-TAC-W
Entries 46645
Mean 216.7
RMS 32.58

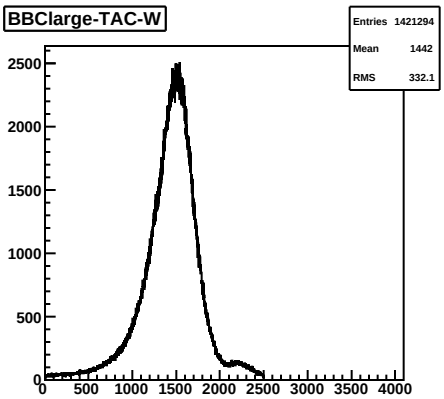

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 3449
Mean 522.7
RMS 20.15

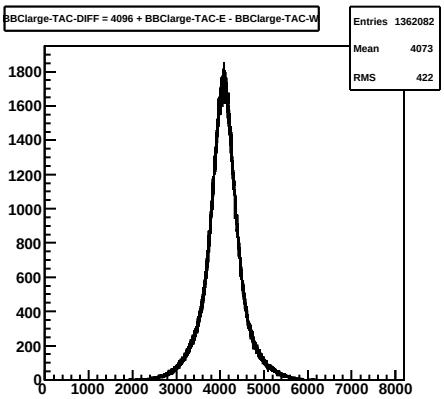

BBCsmall-TAC-E
Entries 1438325
Mean 1480
RMS 203.4

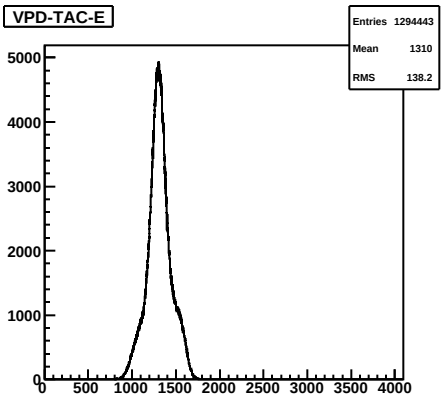

BBCsmall-TAC-W
Entries 1443068
Mean 1542
RMS 208.8

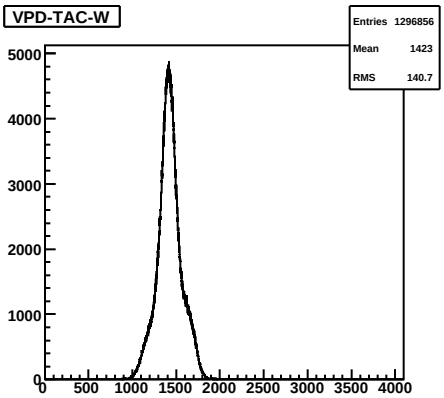

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1395335
Mean 4034
RMS 250.3

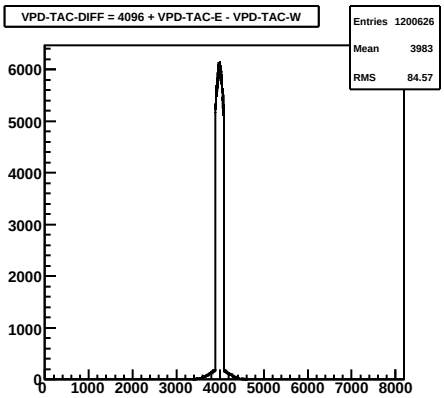

BBClarge-TAC-E
Entries 1424167
Mean 1419
RMS 314.7

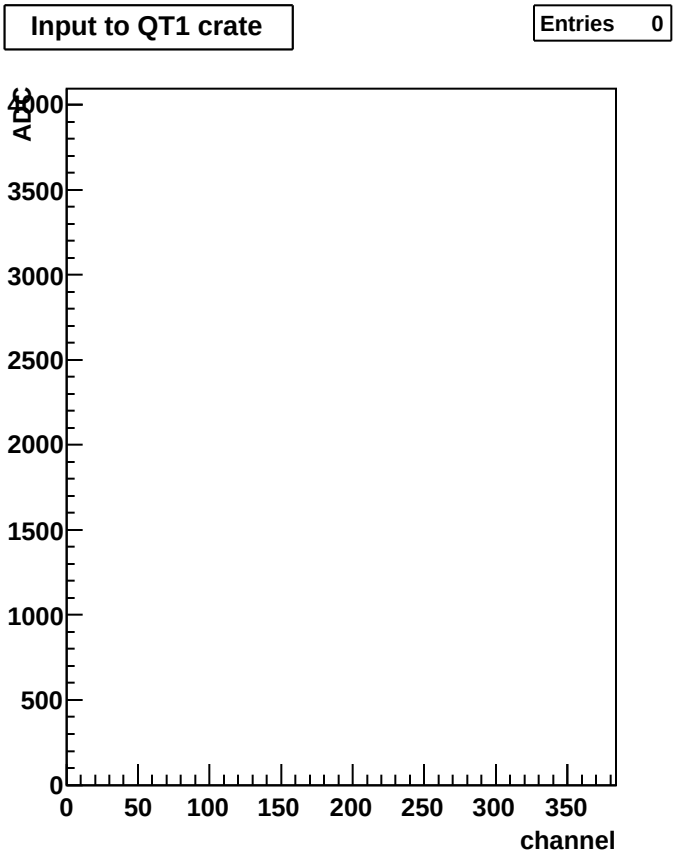

BBClarge-TAC-W
Entries 1421294
Mean 1442
RMS 332.1

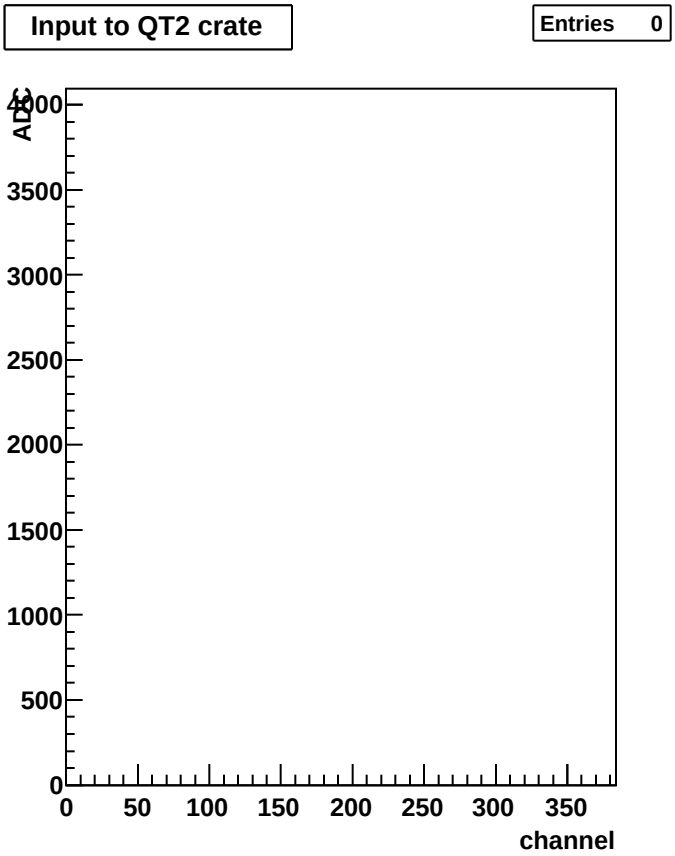

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1362082
Mean 4073
RMS 422

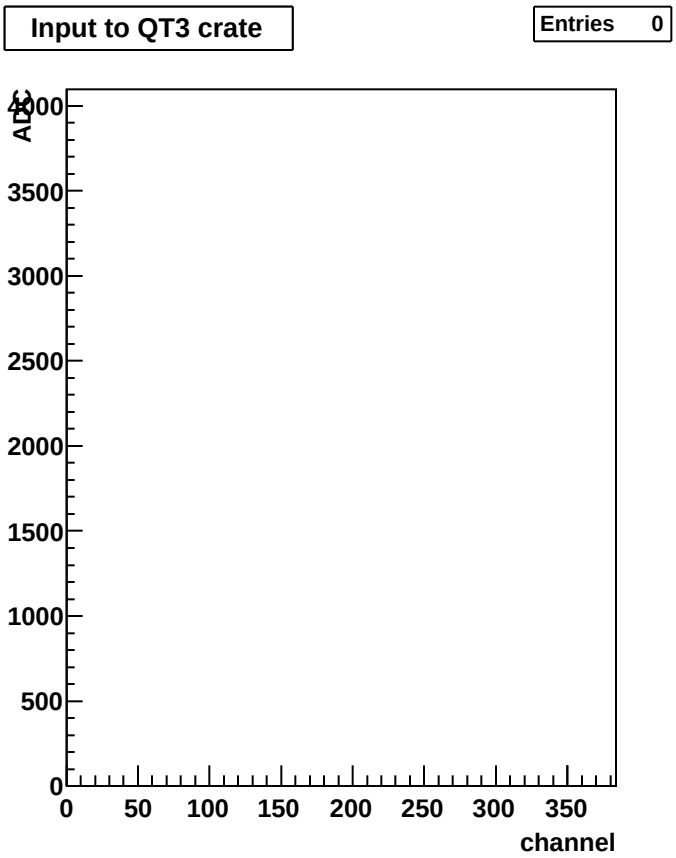

VPD-TAC-E
Entries 1294443
Mean 1310
RMS 138.2

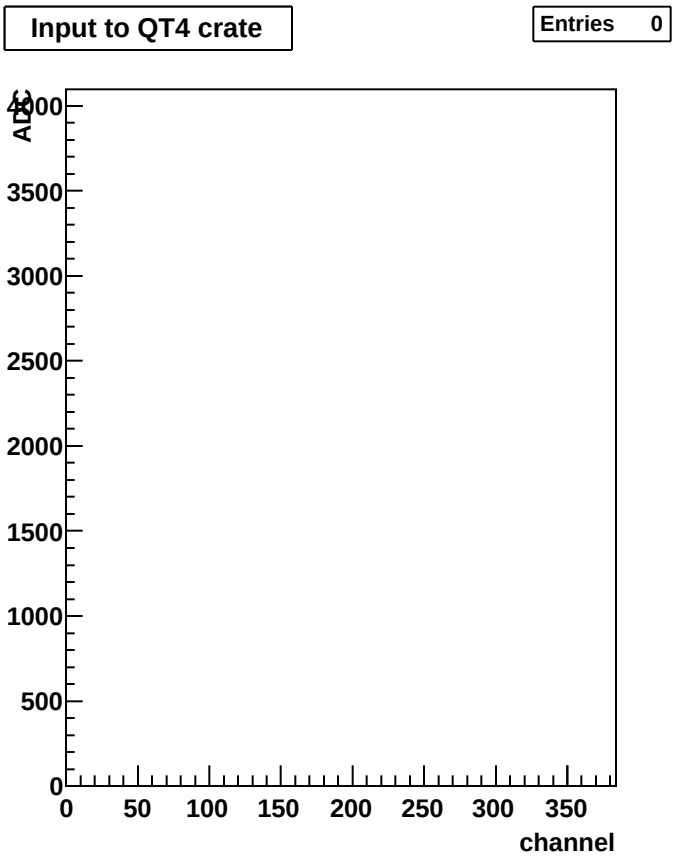

VPD-TAC-W
Entries 1296856
Mean 1423
RMS 140.7

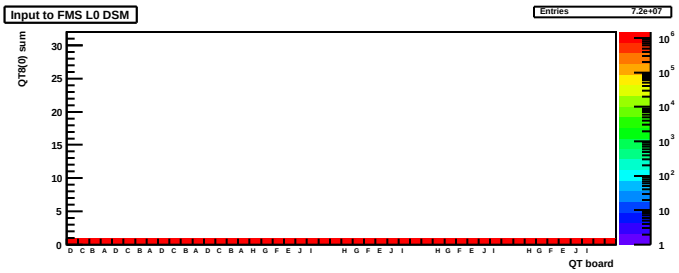

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1200626
Mean 3983
RMS 84.57

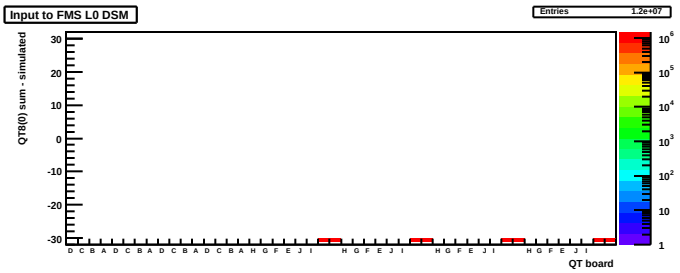

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

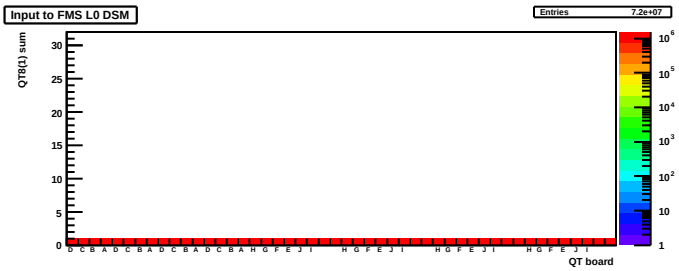

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

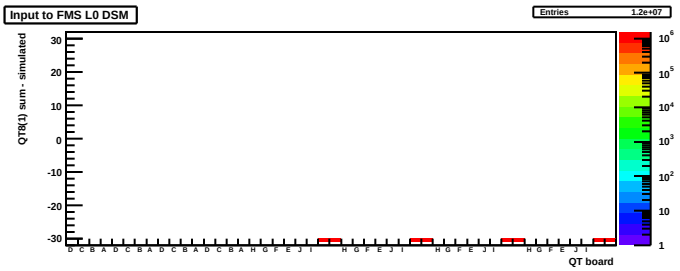

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

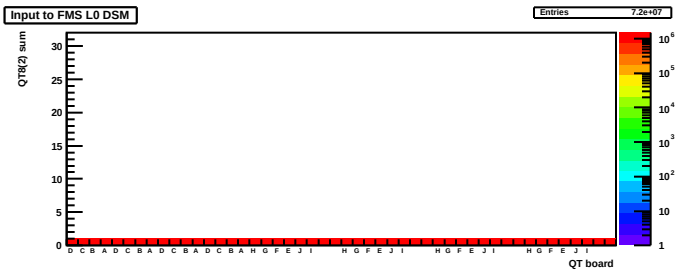

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

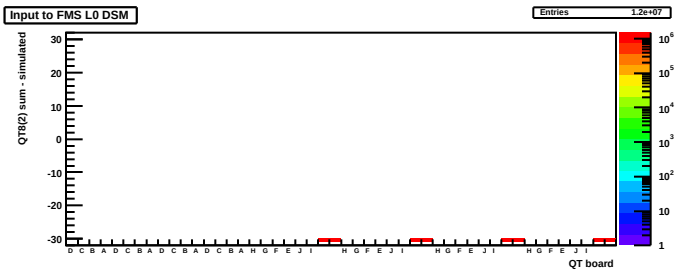

Input to FMS L0 DSM
Entries 7.2e+07
QT8(0) sum
QT board

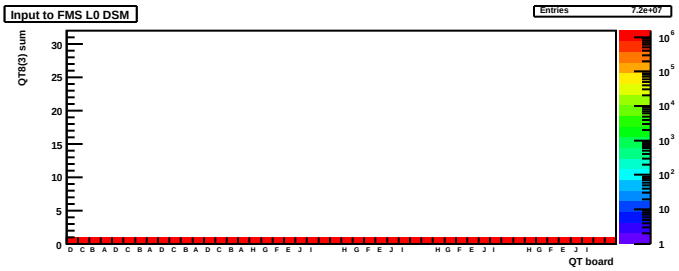

Input to FMS L0 DSM
Entries 1.2e+07
QT8(0) sum - simulated
QT board

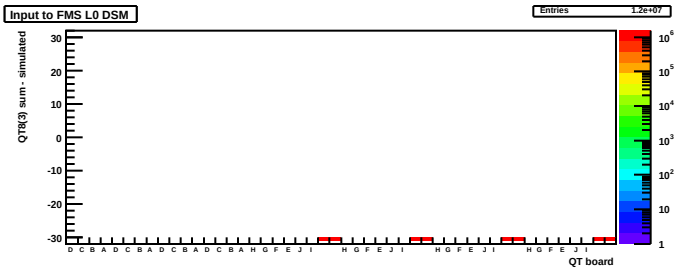

Input to FMS L0 DSM
Entries 7.2e+07
QT8(1) sum
QT board

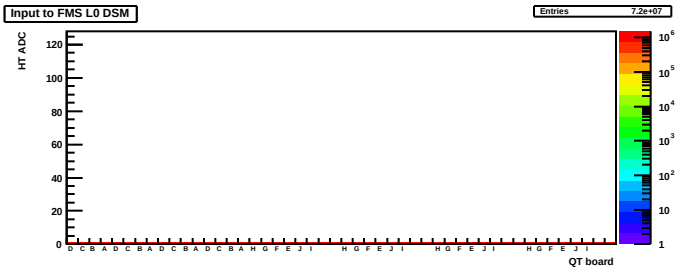

Input to FMS L0 DSM
Entries 1.2e+07
QT8(1) sum - simulated
QT board

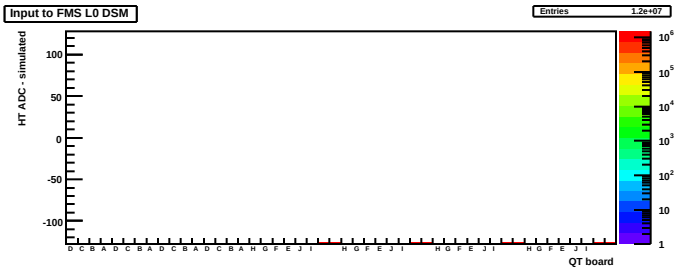

Input to FMS L0 DSM
Entries 7.2e+07
QT8(2) sum
QT board

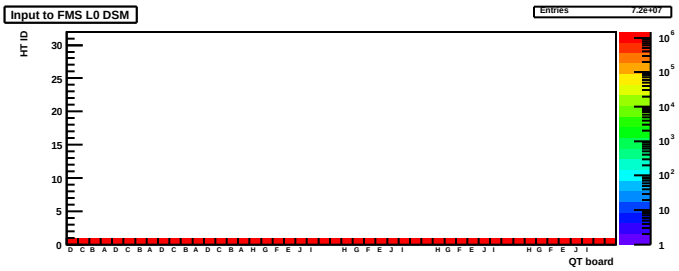

Input to FMS L0 DSM
Entries 1.2e+07
QT8(2) sum - simulated
QT board

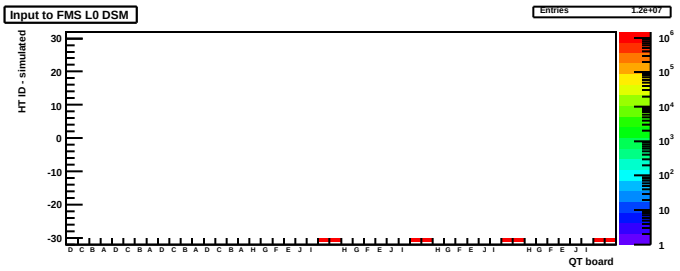

Input to FMS L0 DSM
Entries 7.2e+07
QT8(3) sum
QT board

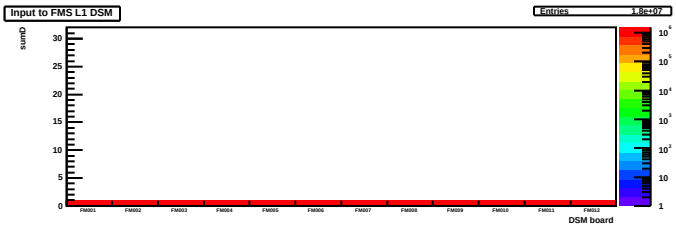

Input to FMS L0 DSM
Entries 1.2e+07
QT8(3) sum - simulated
QT board

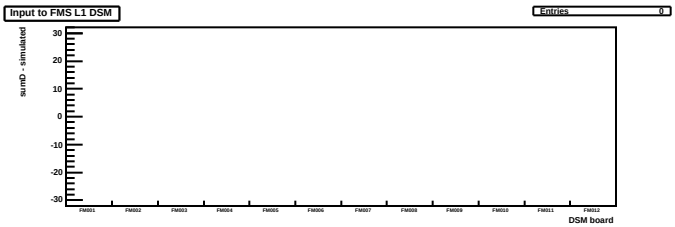

Input to FMS L0 DSM
Entries 7.2e+07
HT ADC
QT board

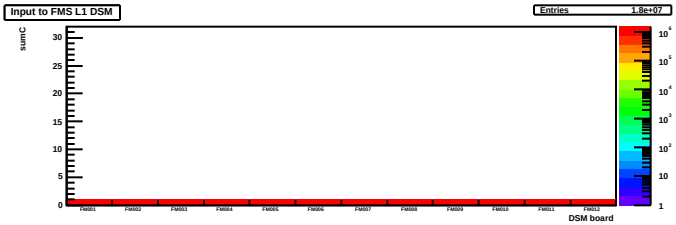

Input to FMS L0 DSM
Entries 1.2e+07
HT ADC - simulated
QT board

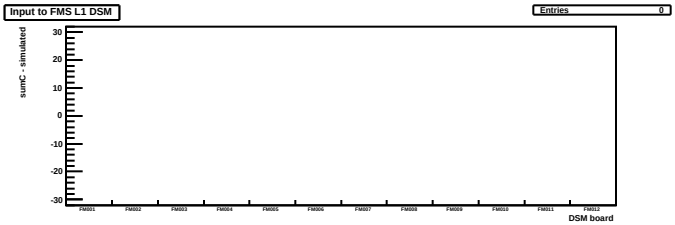

Input to FMS L0 DSM
Entries 7.2e+07
HT ID
QT board

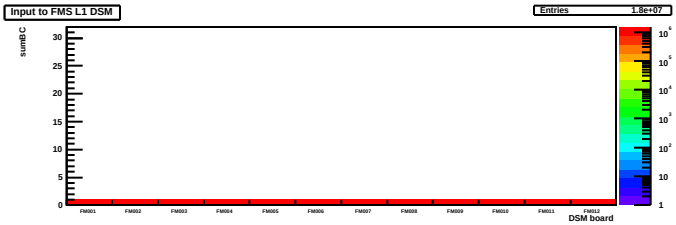

Input to FMS L0 DSM
Entries 1.2e+07
HT ID - simulated
QT board

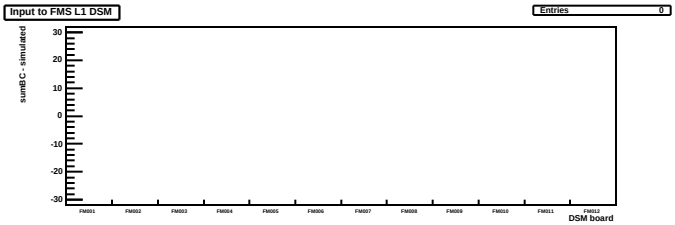

Input to FMS L1 DSM
Entries 1.8e+07
sumD
DSM board

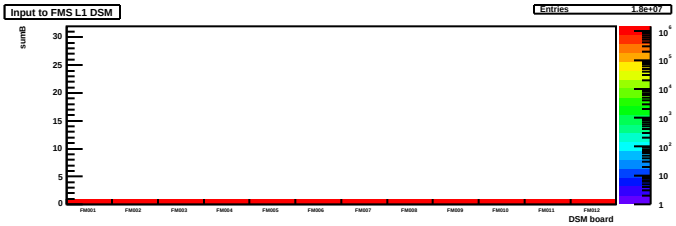

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

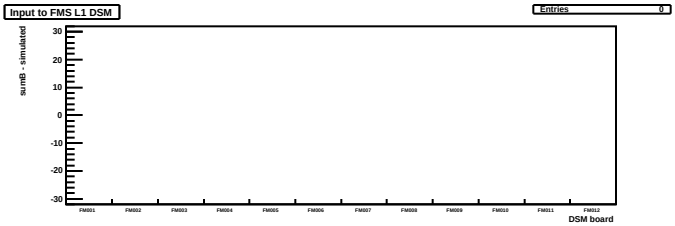

Input to FMS L1 DSM
Entries 1.8e+07
sumC
DSM board

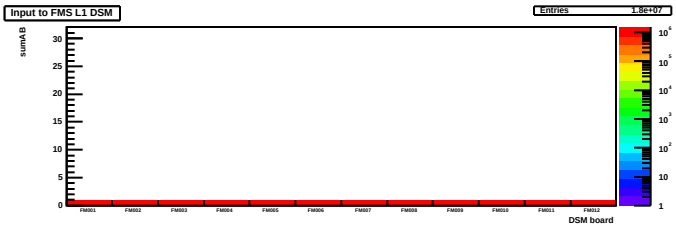

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

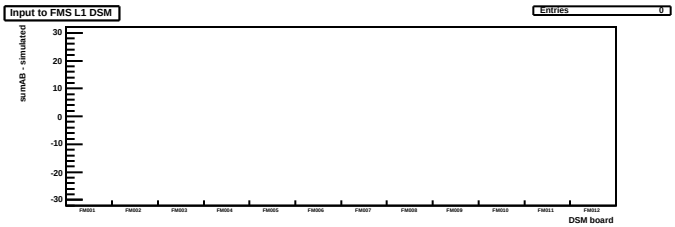

Input to FMS L1 DSM
Entries 1.8e+07
sumBC
DSM board

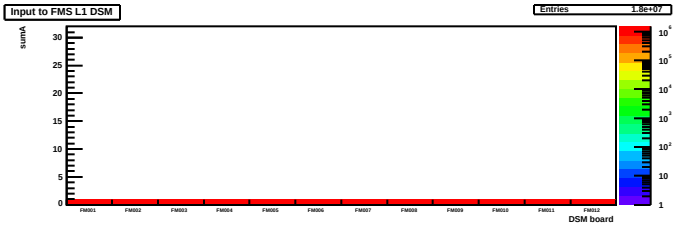

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

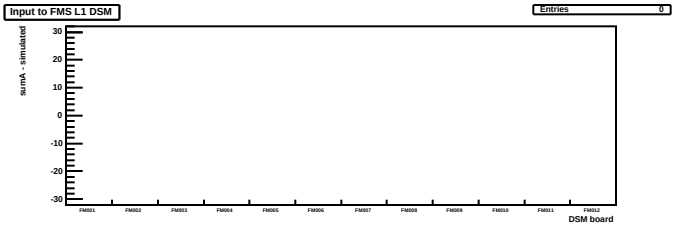

Input to FMS L1 DSM
Entries 1.8e+07
sumB
DSM board

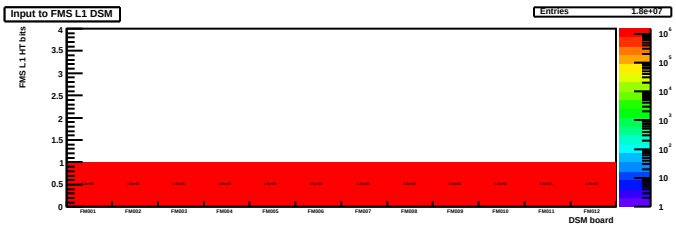

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

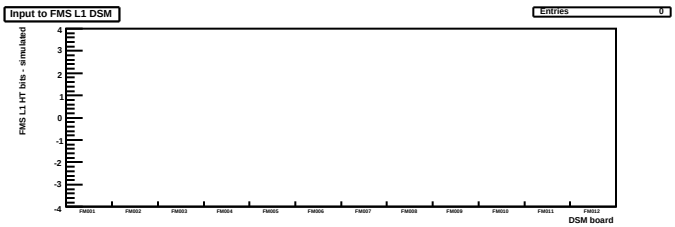

Input to FMS L1 DSM
Entries 1.8e+07
sumAB
DSM board

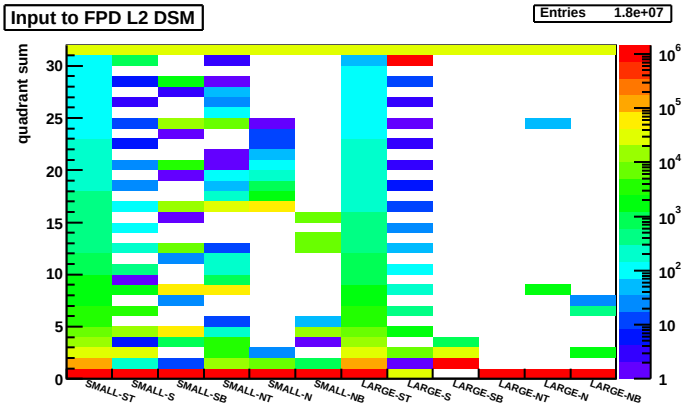

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

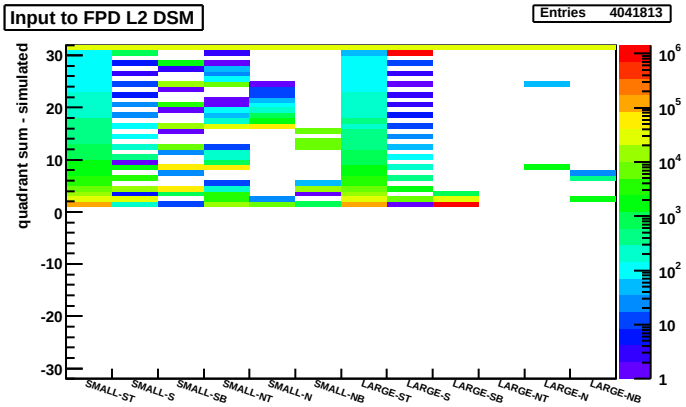

Input to FMS L1 DSM
Entries 1.8e+07
sumA
DSM board

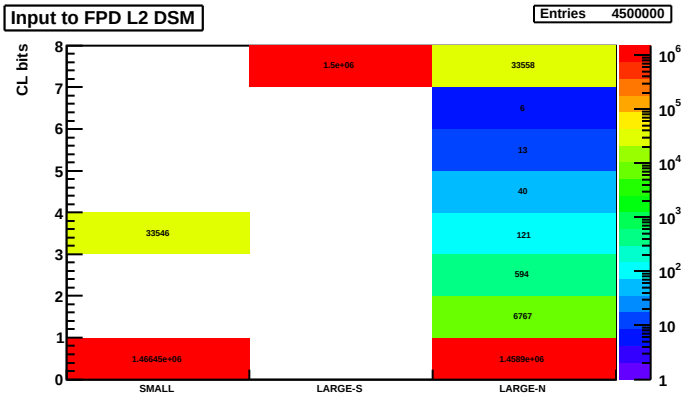

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

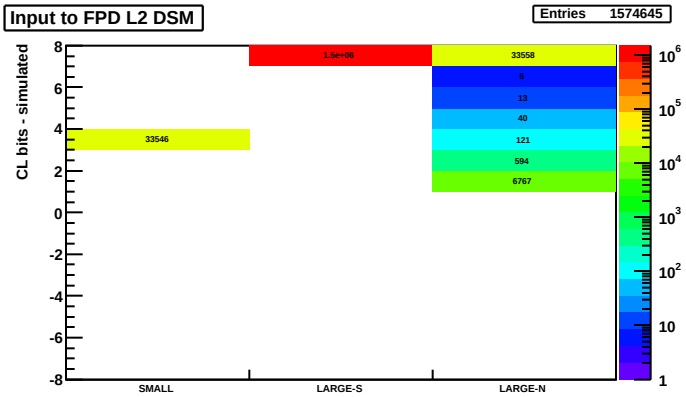

Input to FMS L1 DSM
Entries 1.8e+07
FMS L1 HT bits
DSM board

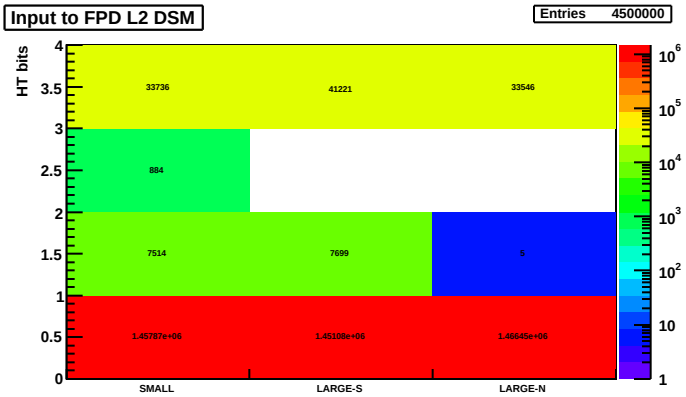

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

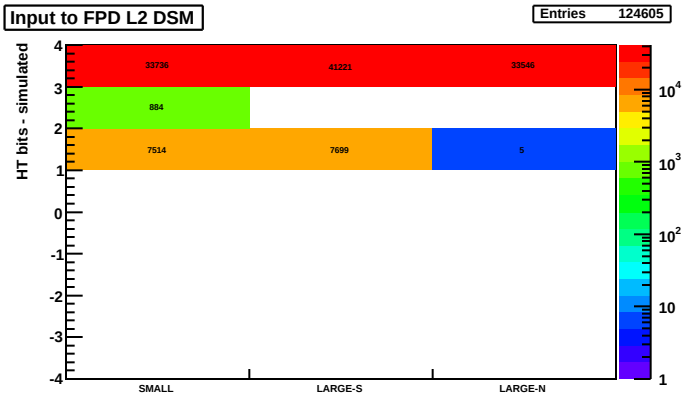

Input to FPD L2 DSM
Entries 1.8e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

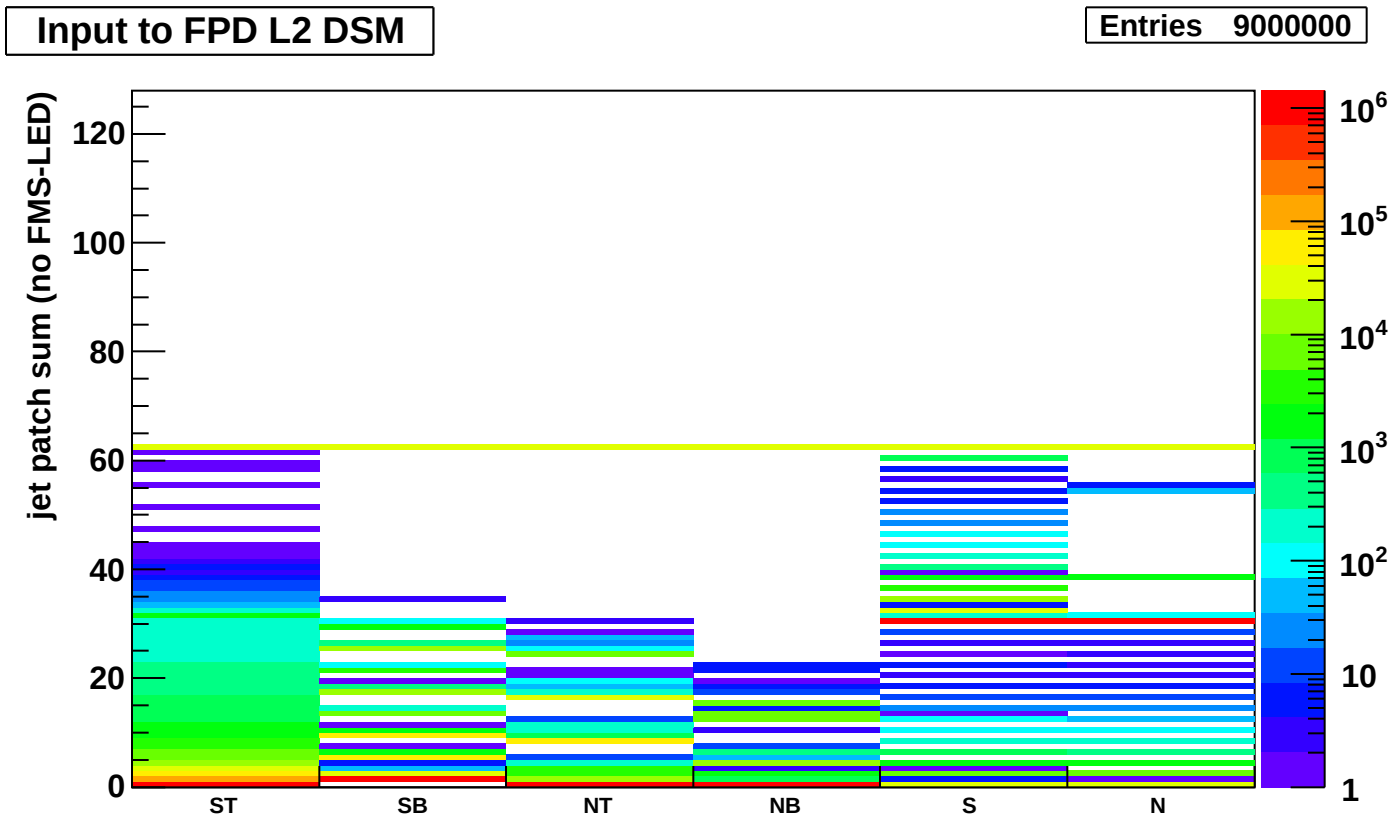

Input to FPD L2 DSM
Entries 4041813
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

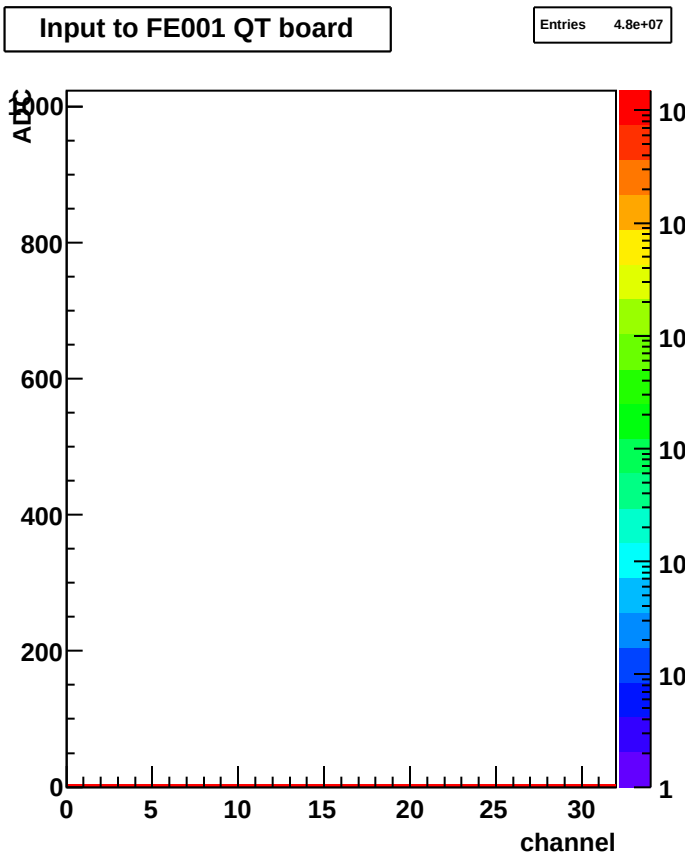

Input to FPD L2 DSM
Entries 4500000
CL bits
1.5e+06
33558
6
13
40
121
594
6767
33546
1.46645e+06
1.4589e+06
SMALL
LARGE-S
LARGE-N

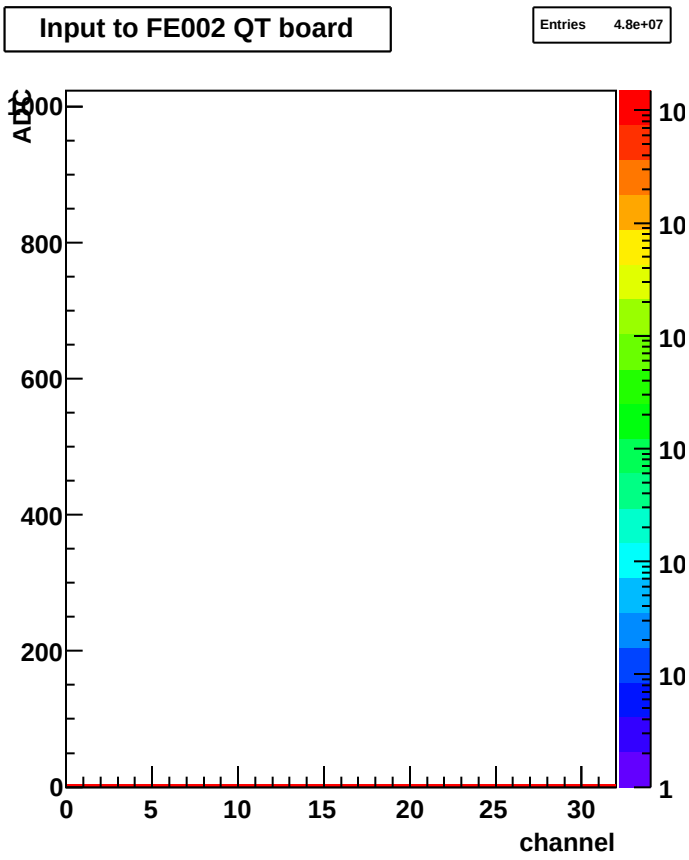

Input to FPD L2 DSM
Entries 1574645
CL bits - simulated
1.5e+06
33558
6
13
40
121
594
6767
33546
SMALL
LARGE-S
LARGE-N

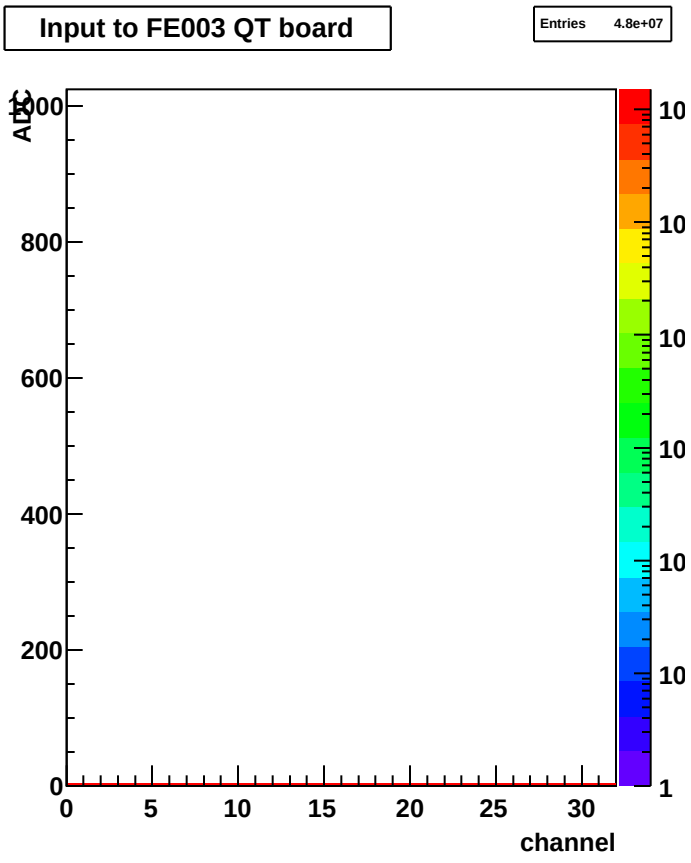

Input to FPD L2 DSM
Entries 4500000
HT bits
33736
41221
33546
884
7514
7699
5
1.45787e+06
1.45108e+06
1.46645e+06
SMALL
LARGE-S
LARGE-N

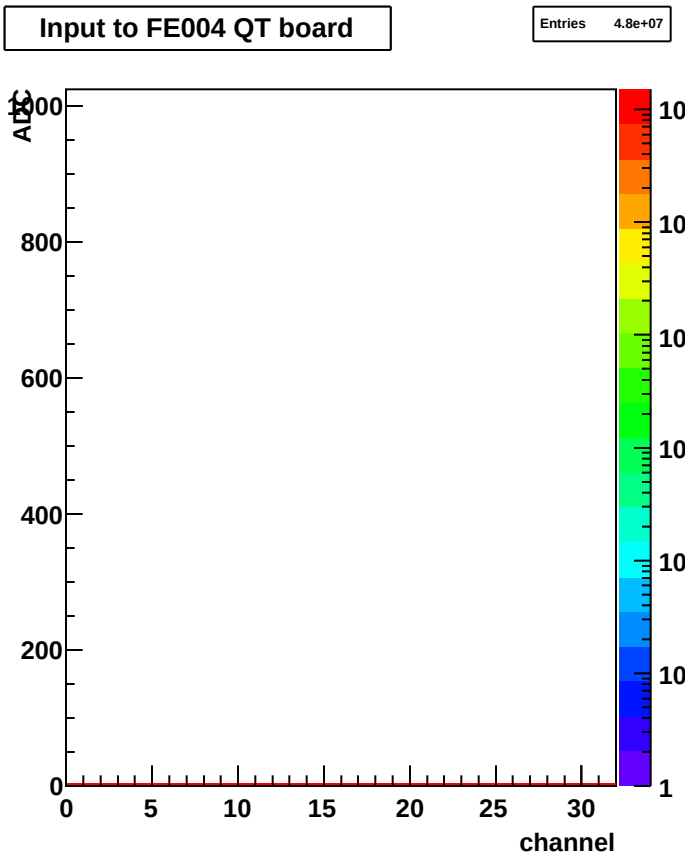

Input to FPD L2 DSM
Entries 124605
HT bits - simulated
33736
41221
33546
884
7514
7699
5
SMALL
LARGE-S
LARGE-N

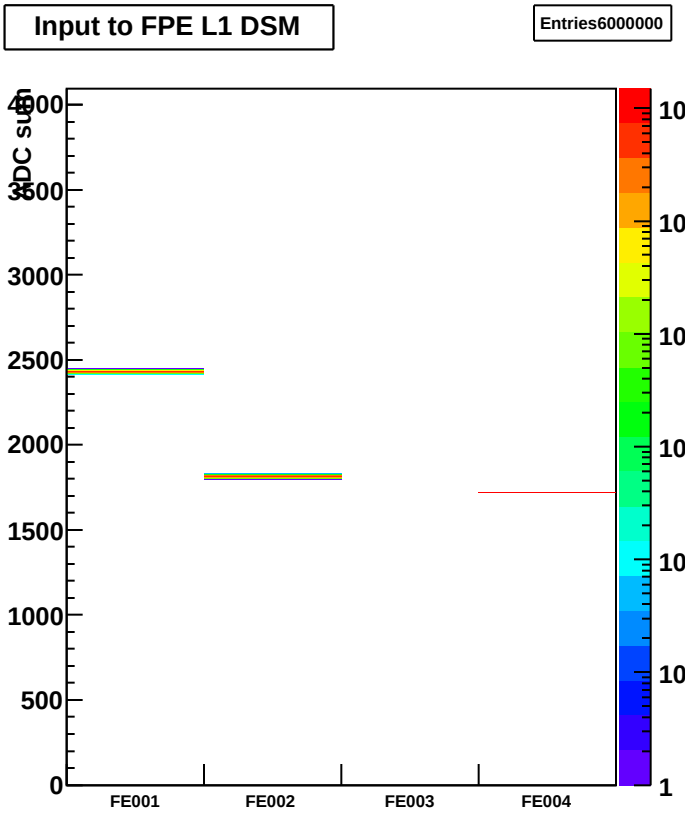

Input to FPD L2 DSM
Entries 9000000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

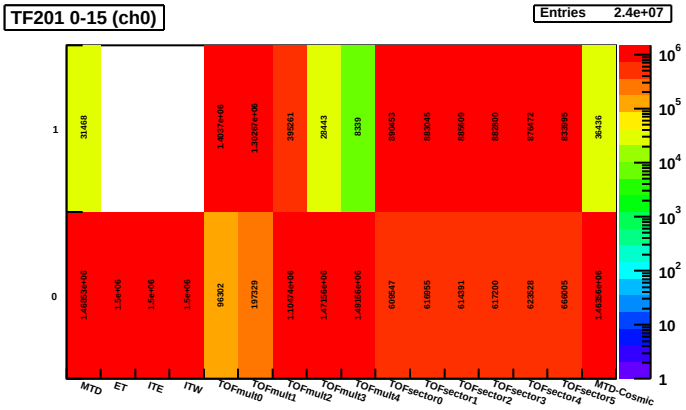

Input to FE001 QT board
Entries 4.8e+07
ADC
channel

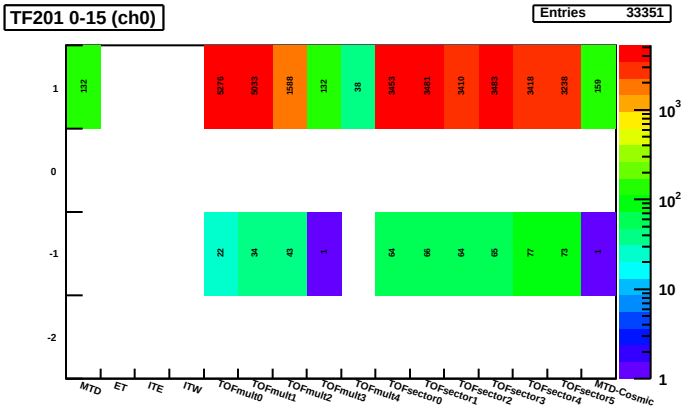

Input to FE002 QT board
Entries 4.8e+07
ADC
channel

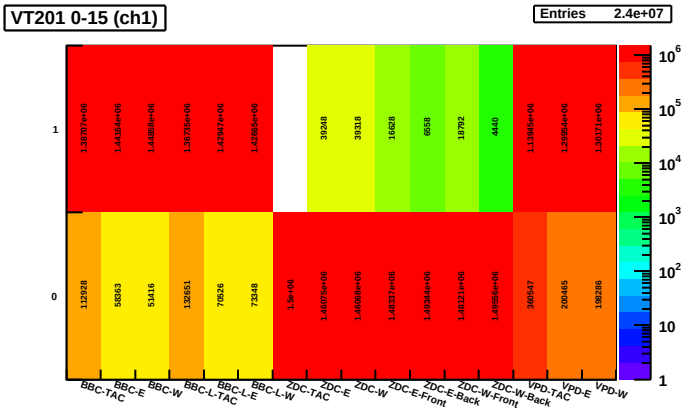

Input to FE003 QT board
Entries 4.8e+07
ADC
channel


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 33351
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic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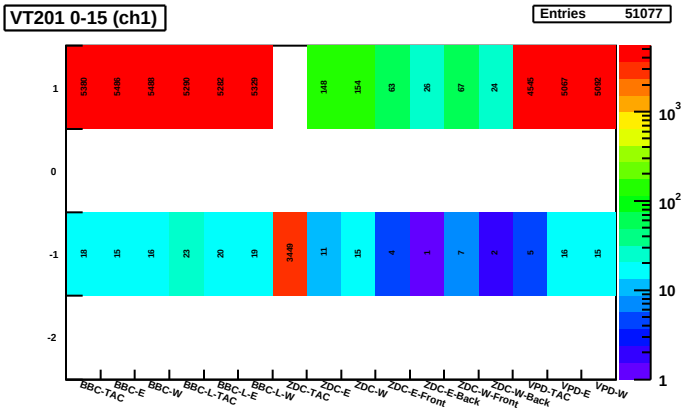
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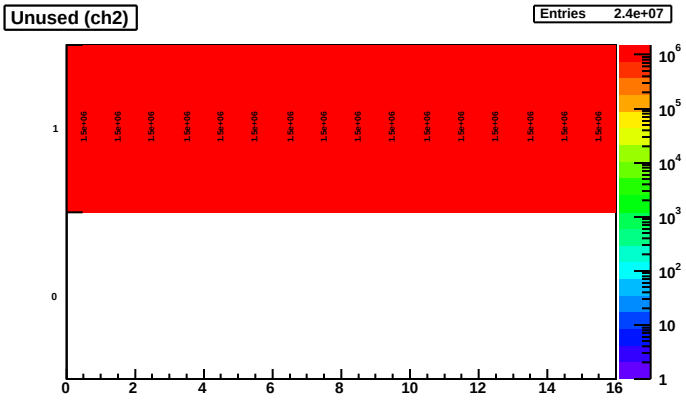
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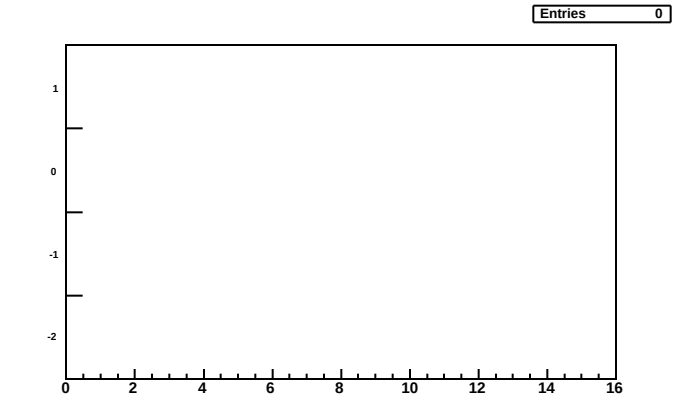
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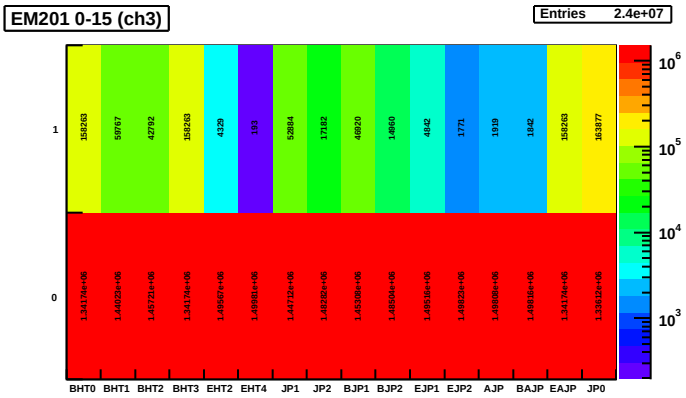
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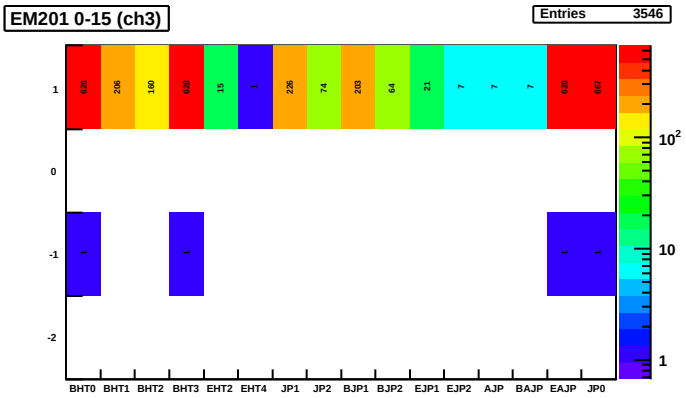
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Entries 3546
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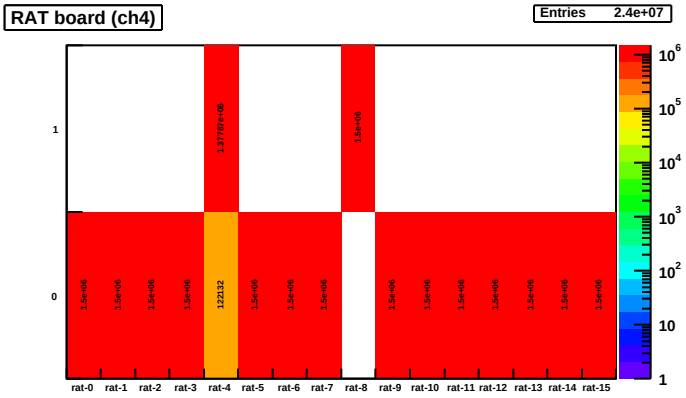
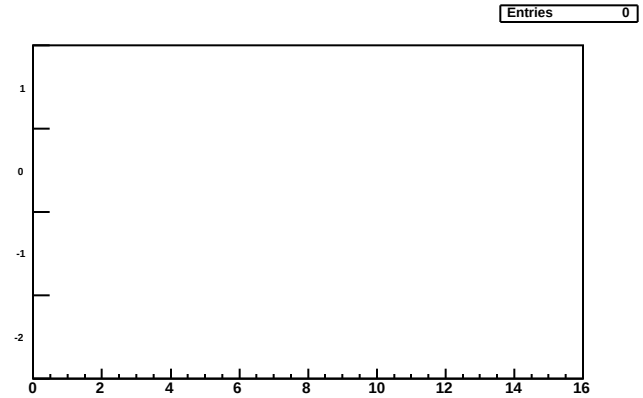
RAT board (ch4)





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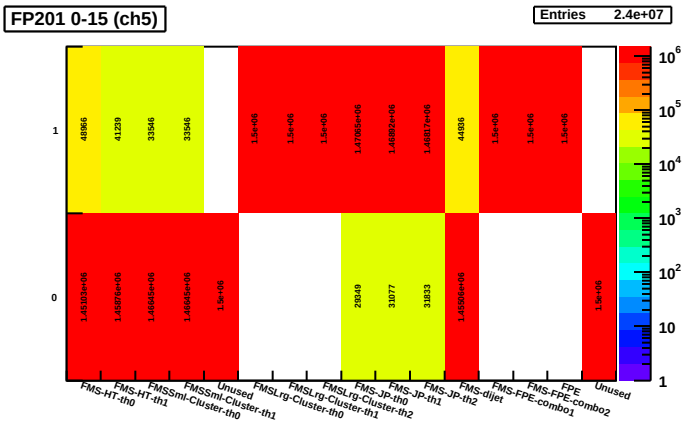

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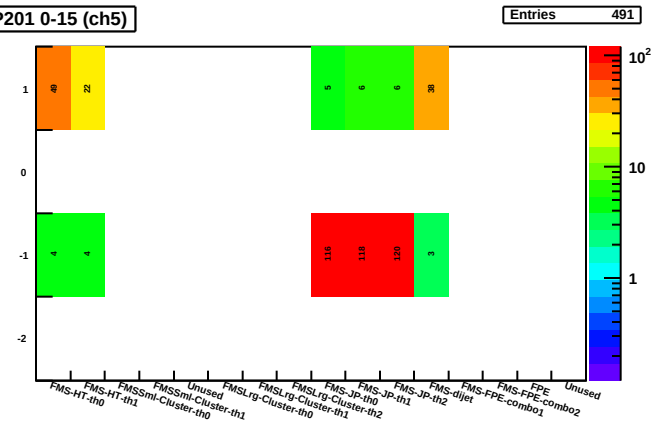
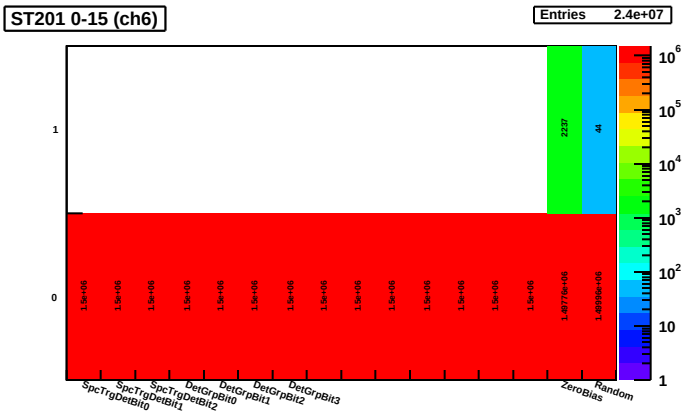
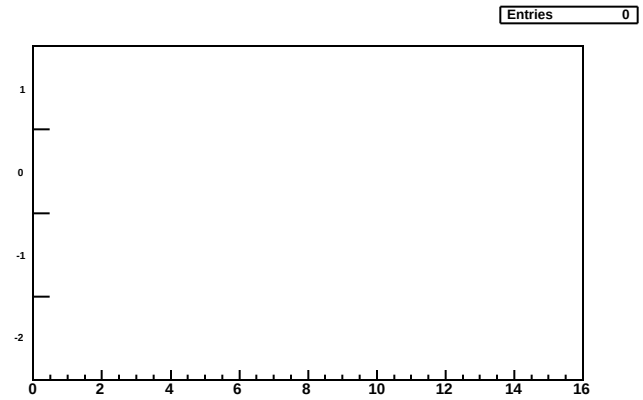
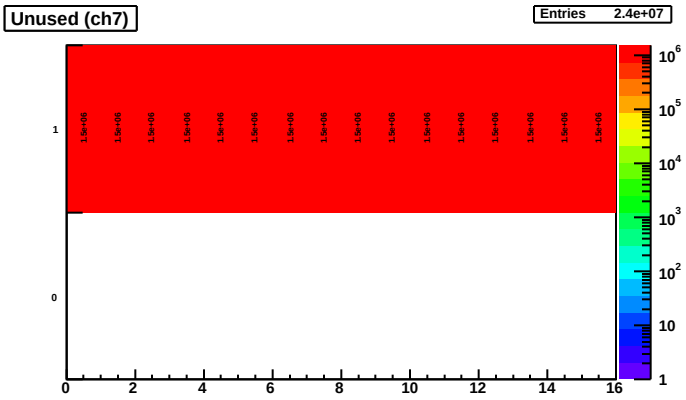
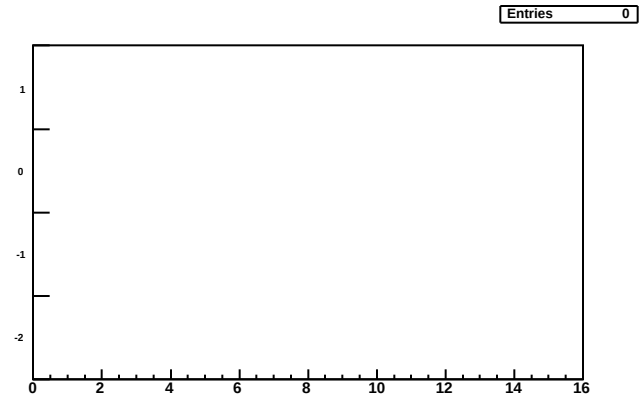


ST201 0-15 (ch6)





Unused (ch7)