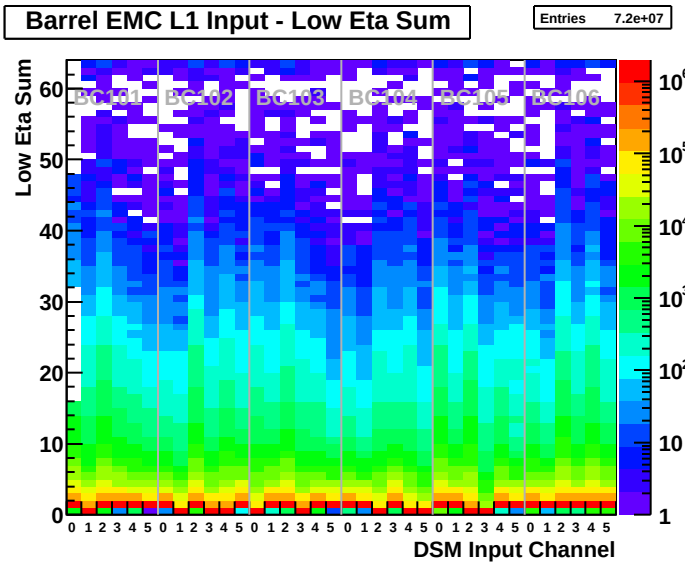
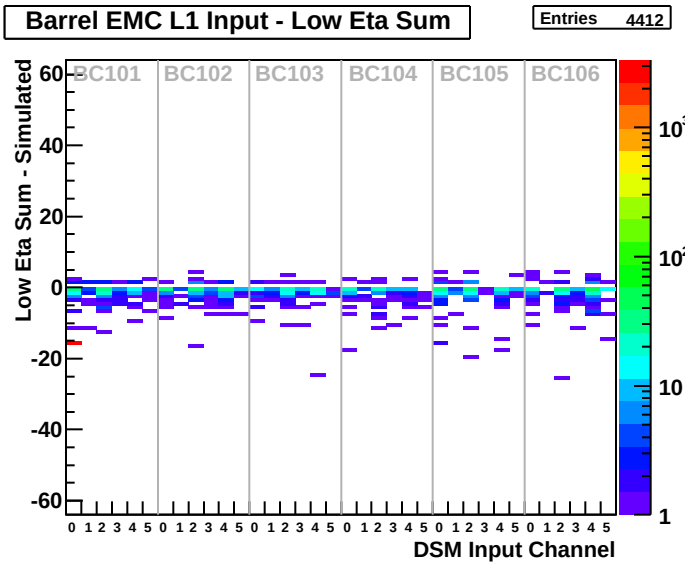
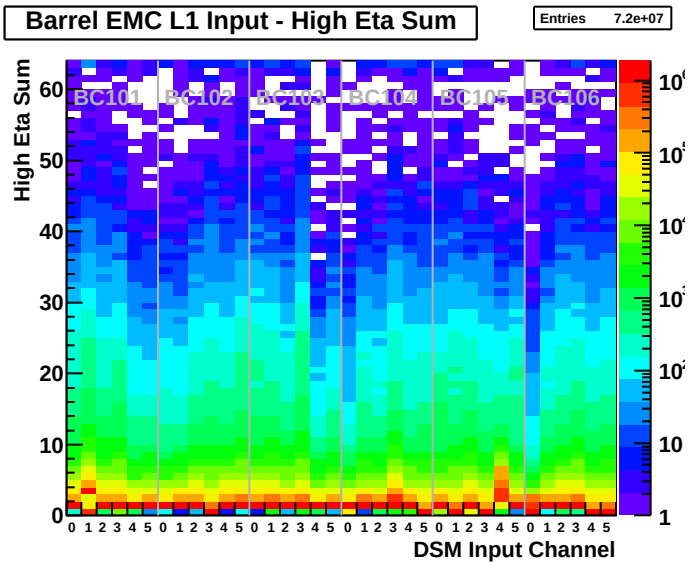
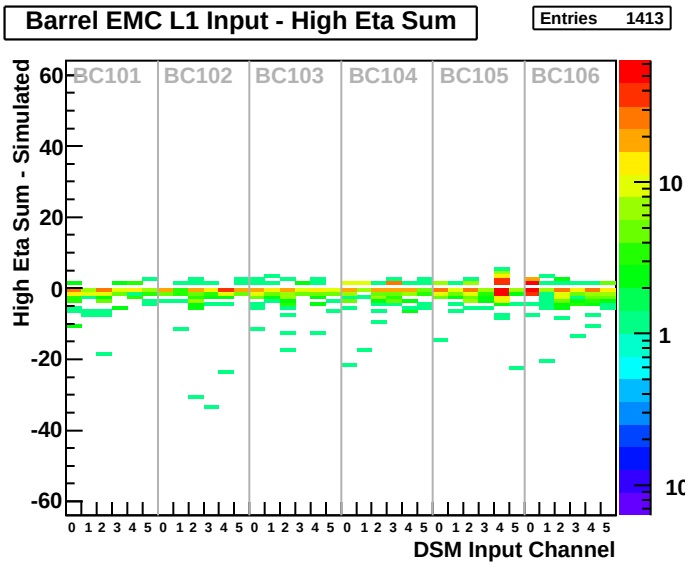
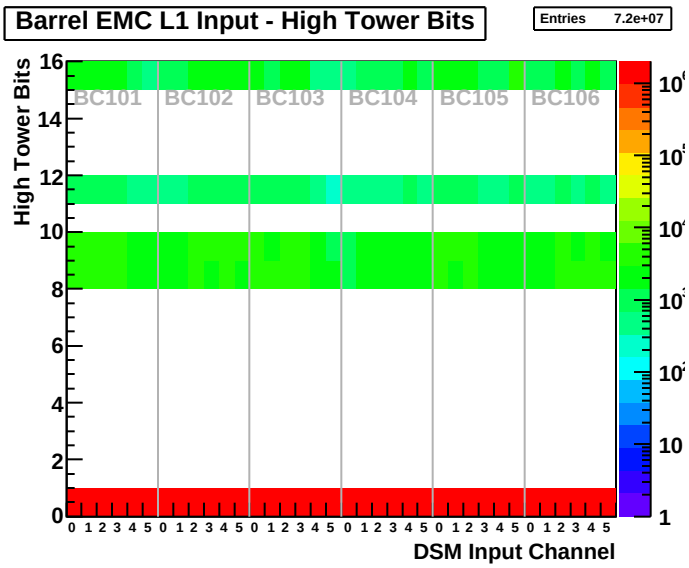
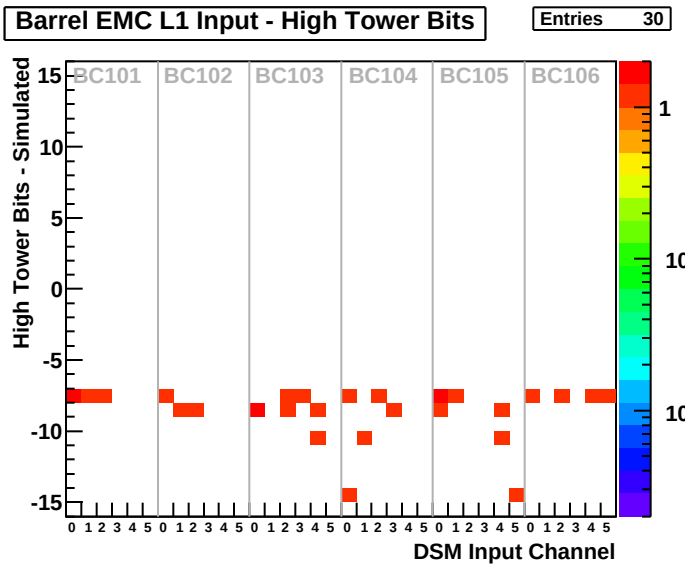

Barrel EMC L1 Input - Low Eta Sum
Entries 7.2e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

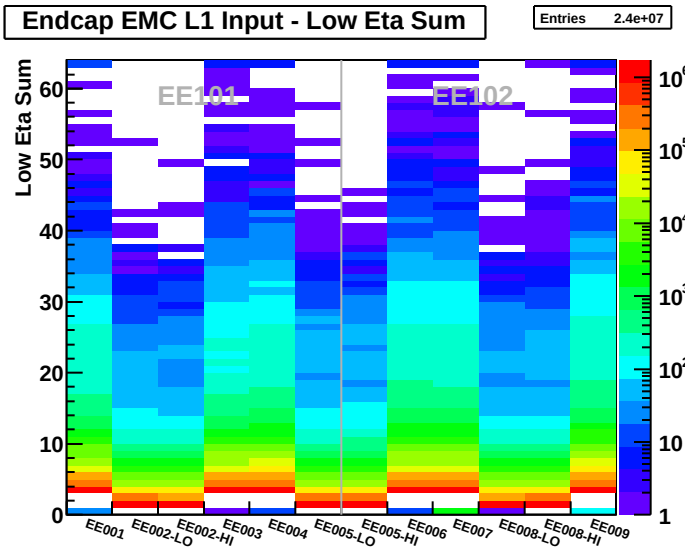

Barrel EMC L1 Input - Low Eta Sum
Entries 4412
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

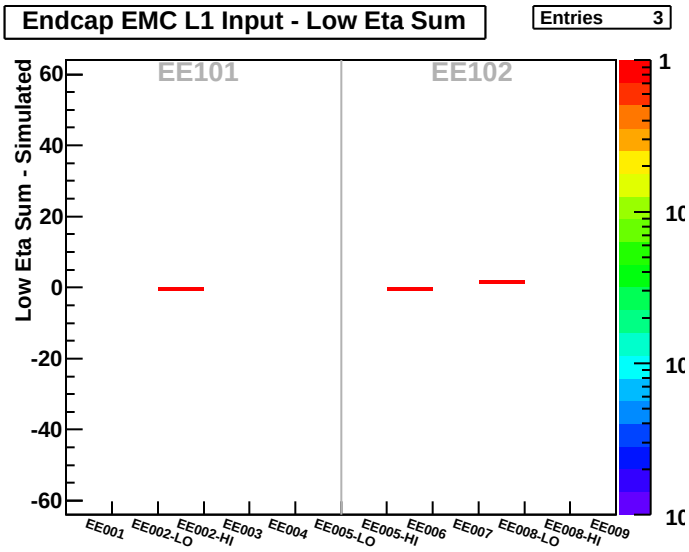

Barrel EMC L1 Input - High Eta Sum
Entries 7.2e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

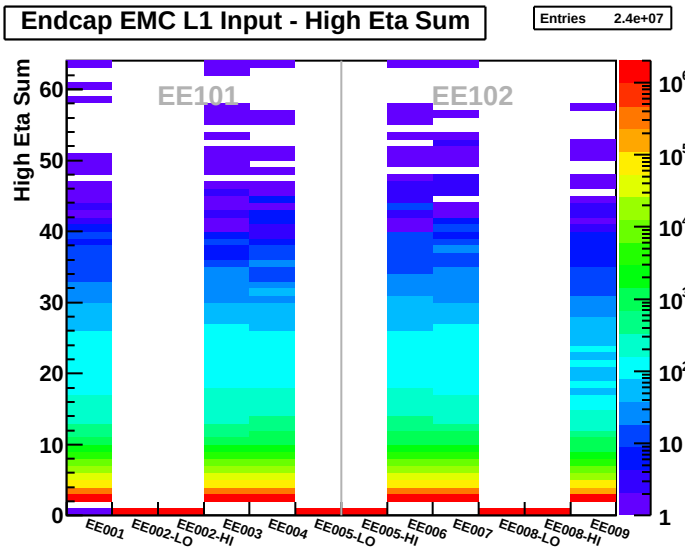

Barrel EMC L1 Input - High Eta Sum
Entries 1413
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

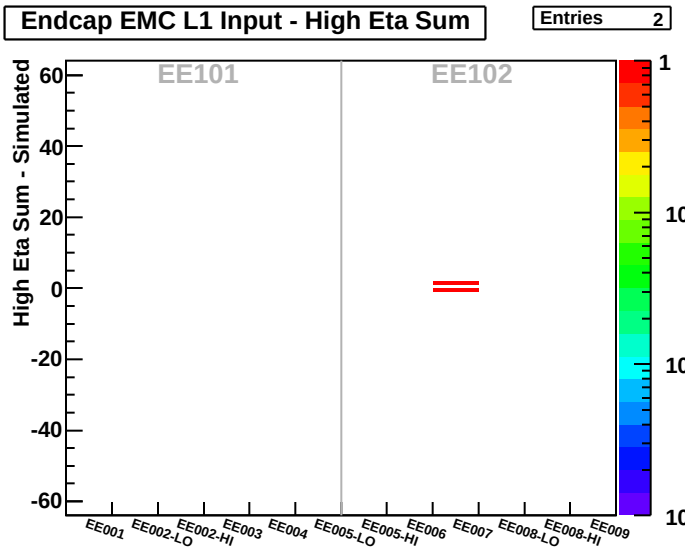

Barrel EMC L1 Input - High Tower Bits
Entries 7.2e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

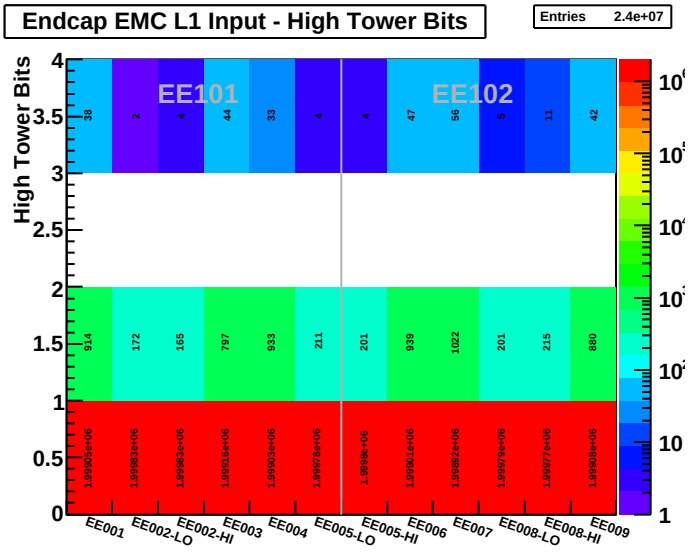

Barrel EMC L1 Input - High Tower Bits
Entries 30
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

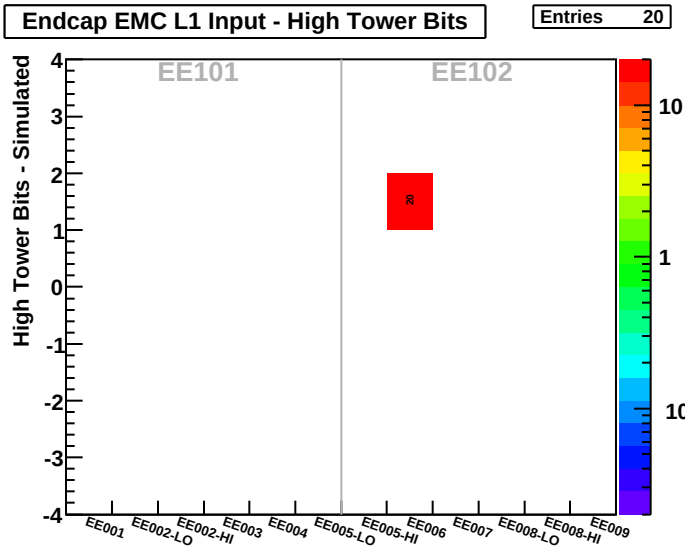

Endcap EMC L1 Input - Low Eta Sum
Entries 2.4e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

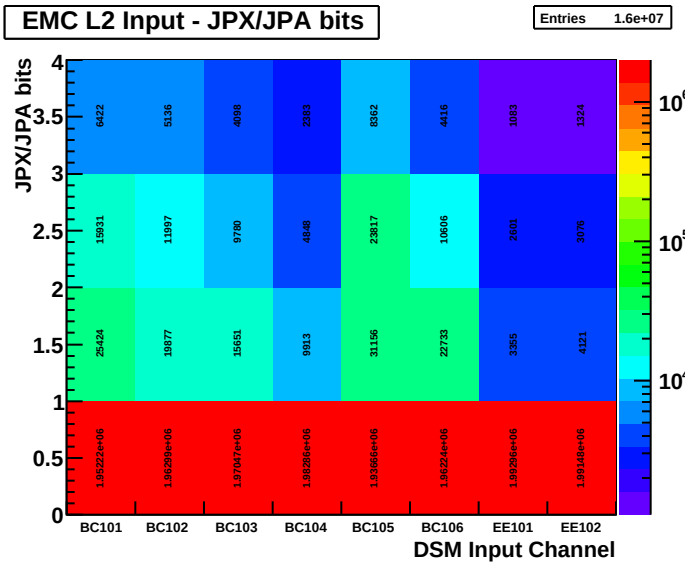

Endcap EMC L1 Input - Low Eta Sum
Entries 3
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

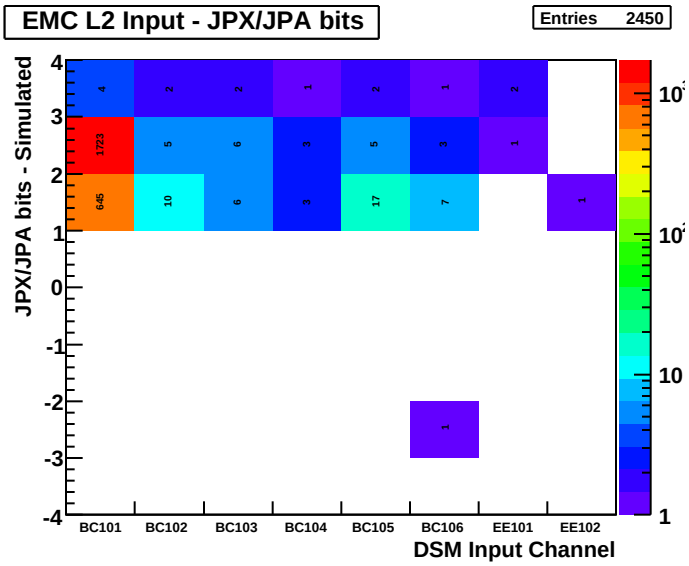

Endcap EMC L1 Input - High Eta Sum
Entries 2.4e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

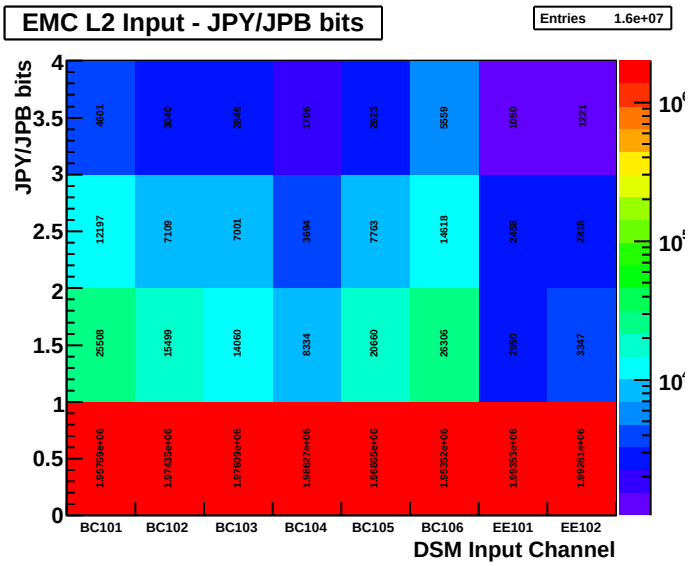

Endcap EMC L1 Input - High Eta Sum
Entries 2
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

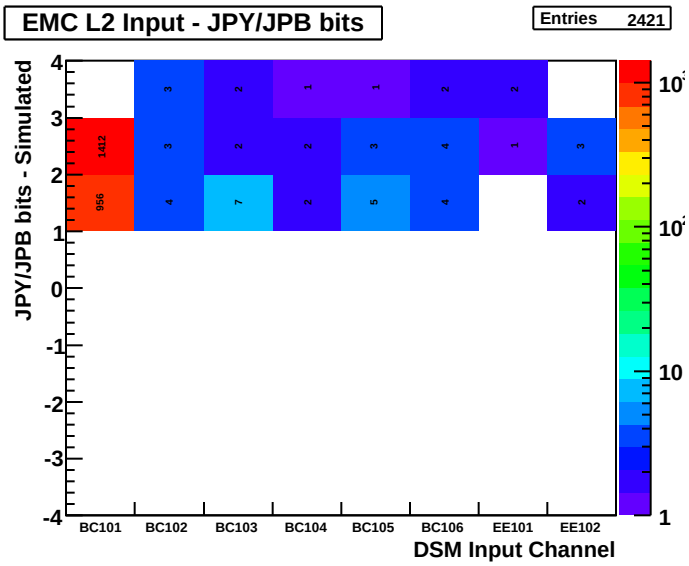

Endcap EMC L1 Input - High Tower Bits
Entries 2.4e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

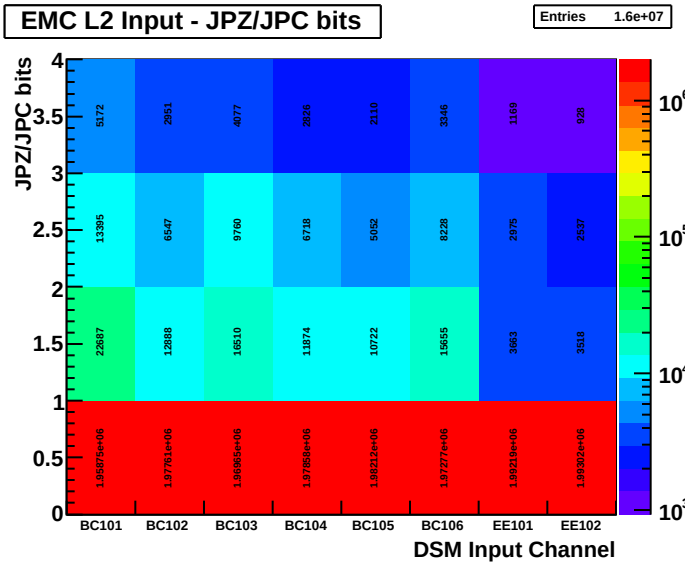

Endcap EMC L1 Input - High Tower Bits
Entries 20
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

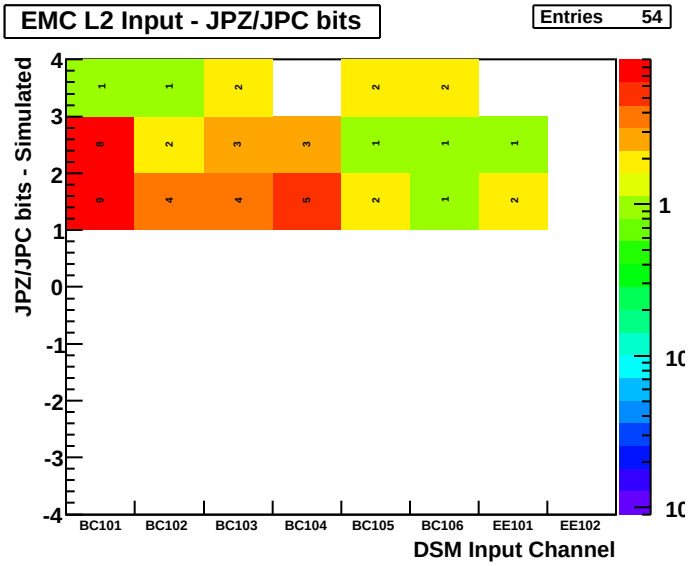

EMC L2 Input - JPX/JPA bits
Entries 1.6e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
6422 5136 4098 2383 8362 4416 1083 1324
15931 11997 9780 4848 23817 10606 2601 3076
25424 19877 15651 9913 31156 22733 3355 4121
1.95222e+06 1.96239e+06 1.97047e+06 1.98286e+06 1.93866e+06 1.96224e+06 1.99296e+06 1.99148e+06

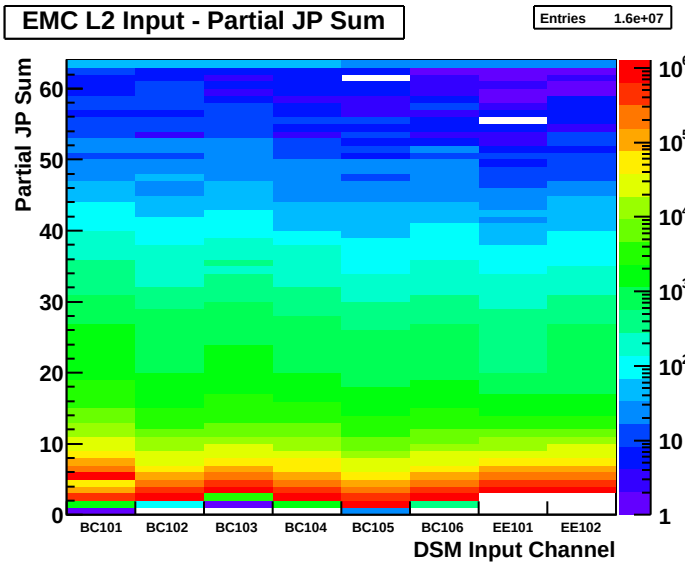

EMC L2 Input - JPX/JPA bits
Entries 2450
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4 2 2 1 2 1 2
1723 5 6 3 5 3 1
645 10 6 3 17 7 1
1

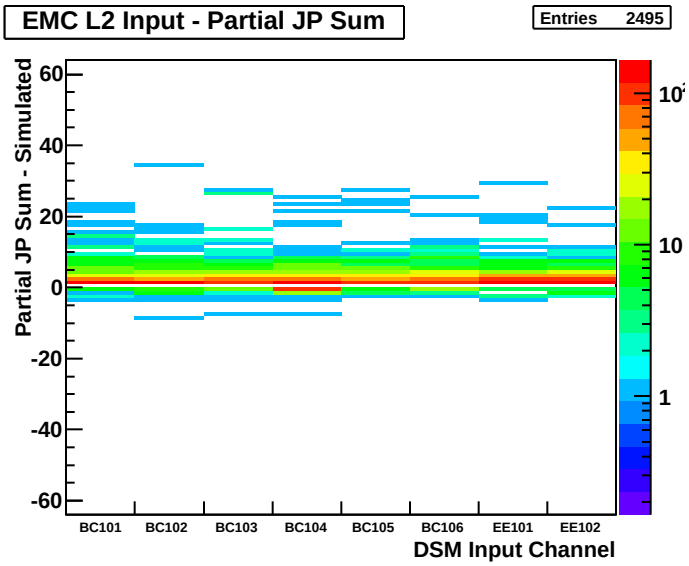

EMC L2 Input - JPY/JPB bits
Entries 1.6e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4601 3040 2846 1706 2923 5559 1050 1221
12197 7109 7001 3694 7763 14618 2468 2818
25508 15499 14060 8334 20660 26306 2350 3347
1.95769e+06 1.97435e+06 1.97609e+06 1.98627e+06 1.96895e+06 1.95392e+06 1.99393e+06 1.99261e+06

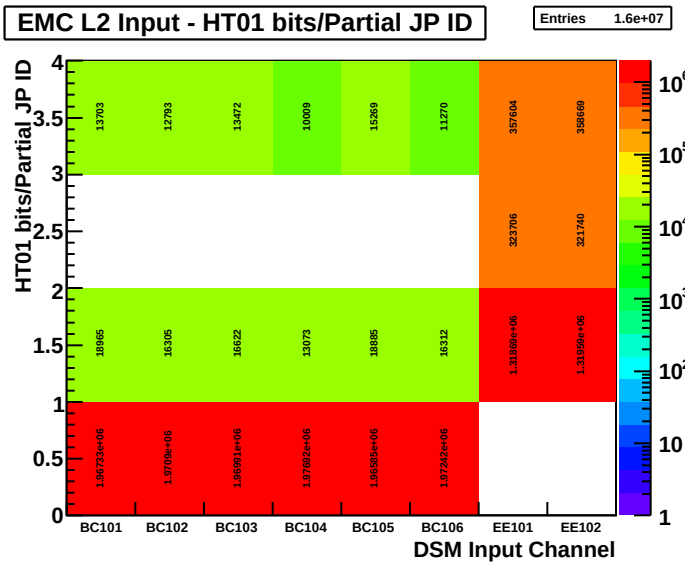

EMC L2 Input - JPY/JPB bits
Entries 2421
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3 2 1 1 2 2
1412 3 2 2 3 4 1 3
956 4 7 2 5 4 2

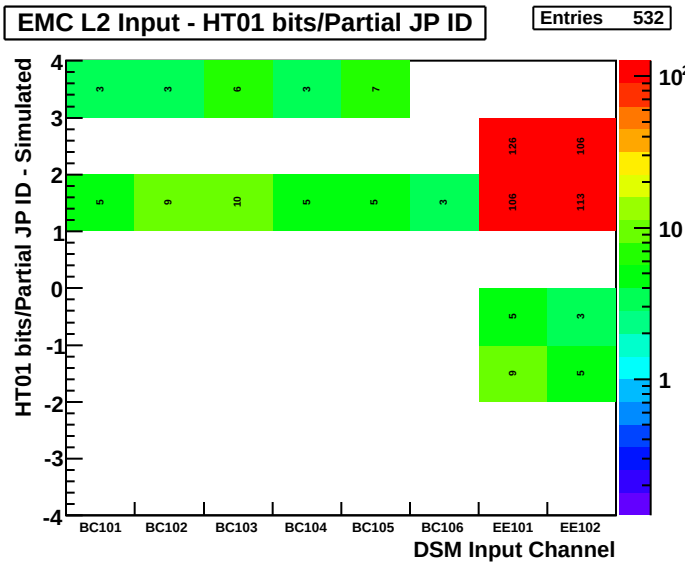

EMC L2 Input - JPZ/JPC bits
Entries 1.6e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5172 2951 4077 2826 2110 3346 1169 928
13395 6547 9760 6718 5052 8228 2975 2537
22687 12888 16510 11874 10722 15655 3663 3518
1.95875e+06 1.97761e+06 1.96965e+06 1.97858e+06 1.98212e+06 1.97277e+06 1.99219e+06 1.99302e+06

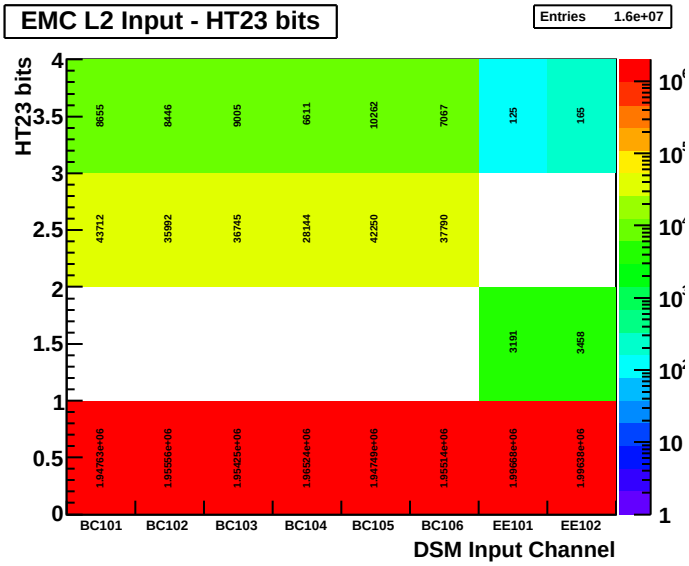

EMC L2 Input - JPZ/JPC bits
Entries 54
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 2 2 2
8 2 3 3 1 1 1
9 4 4 5 2 1 2

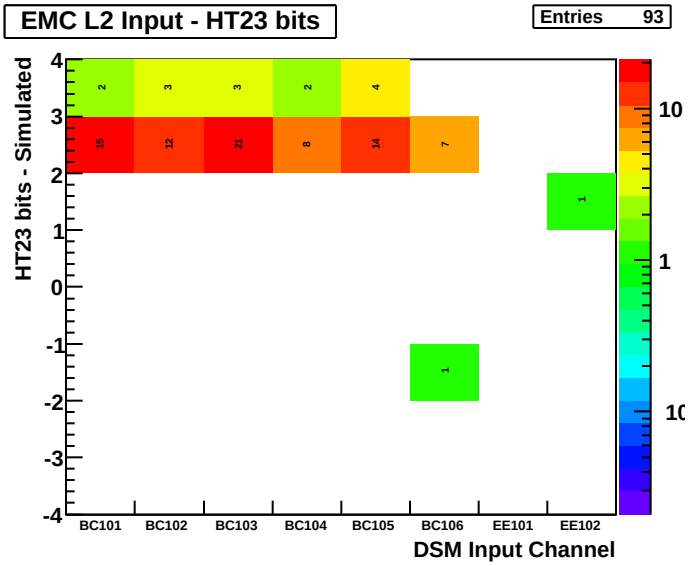

EMC L2 Input - Partial JP Sum
Entries 1.6e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

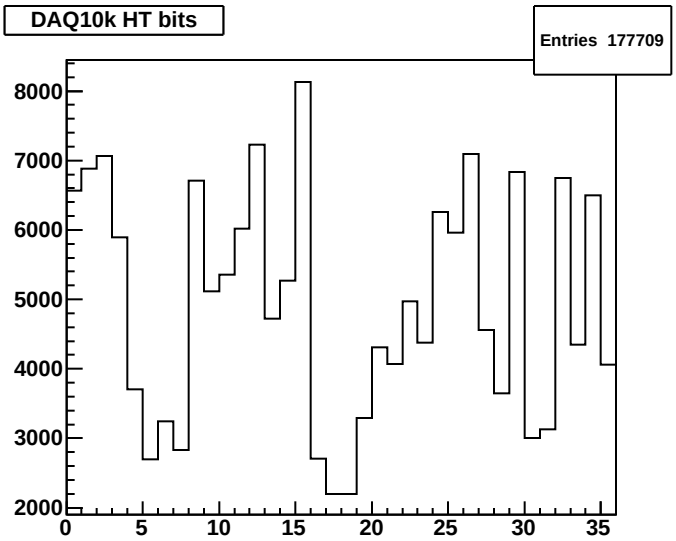

EMC L2 Input - Partial JP Sum
Entries 2495
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

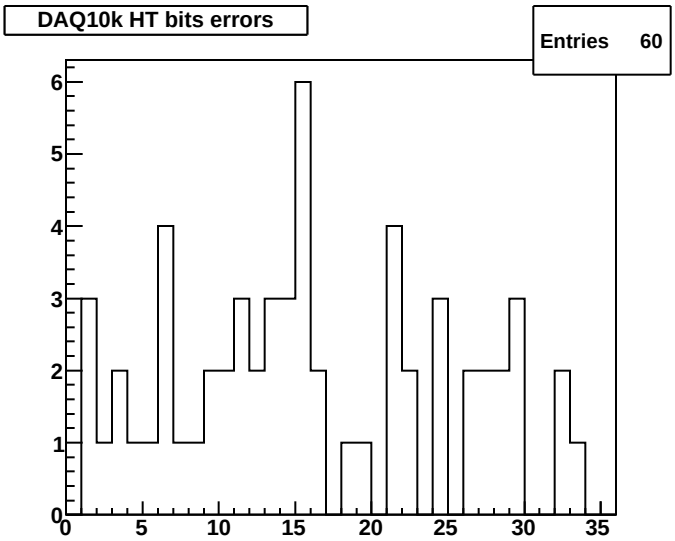

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.6e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

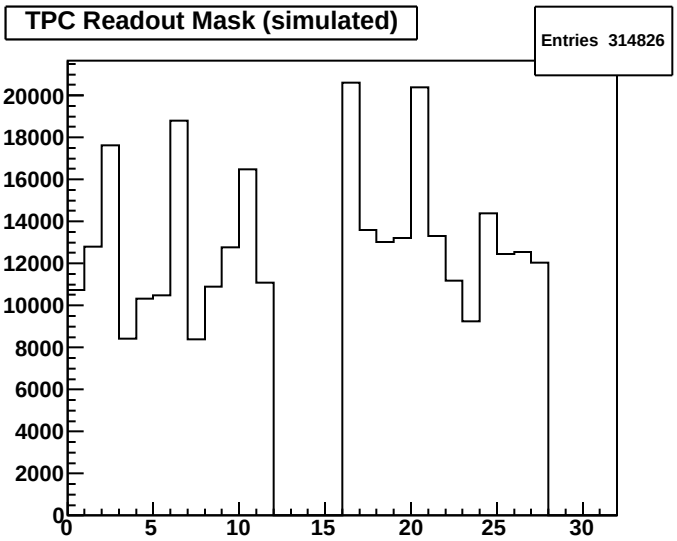

EMC L2 Input - HT01 bits/Partial JP ID
Entries 532
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

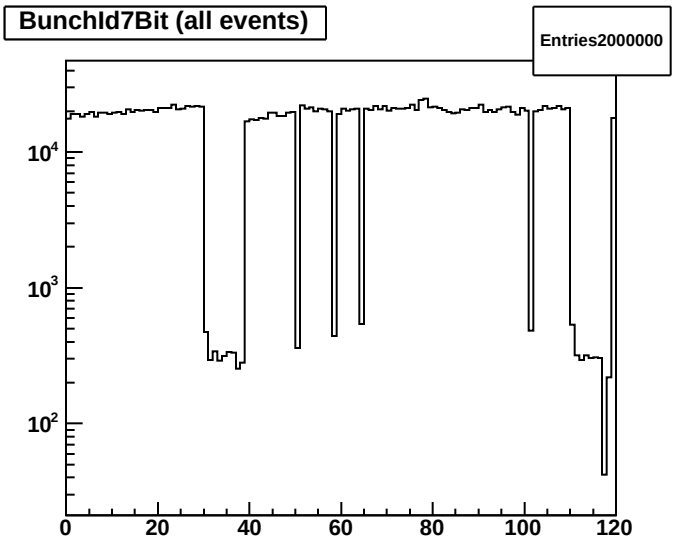

EMC L2 Input - HT23 bits
Entries 1.6e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

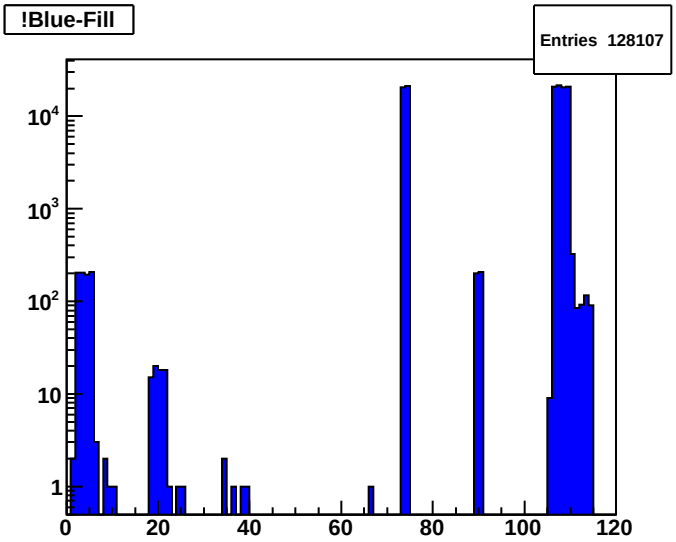

EMC L2 Input - HT23 bits
Entries 93
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

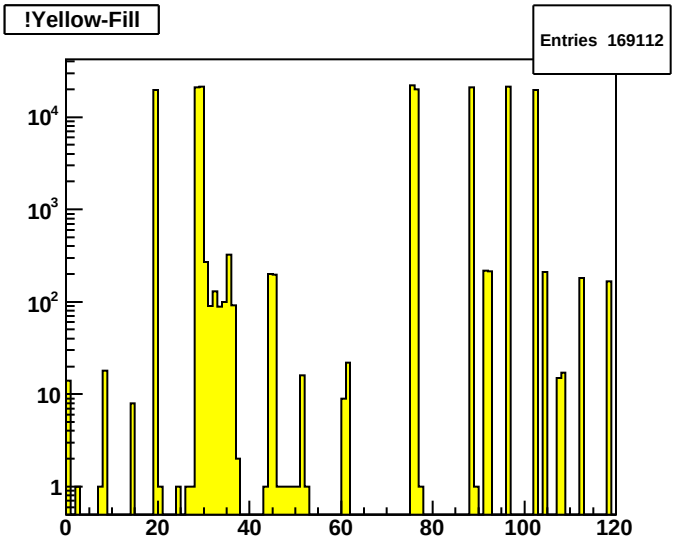

DAQ10k HT bits
Entries 177709

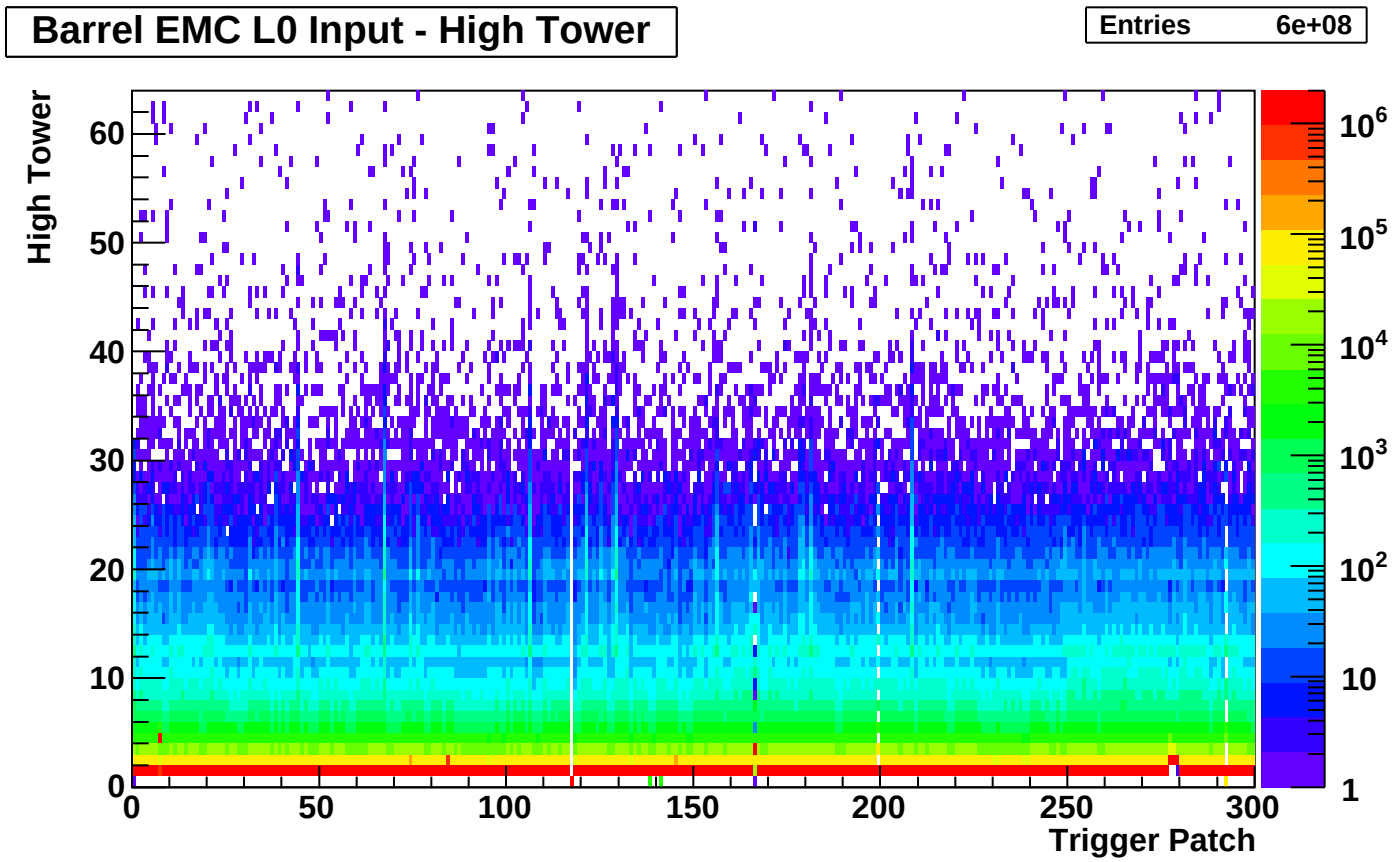

DAQ10k HT bits errors
Entries 60

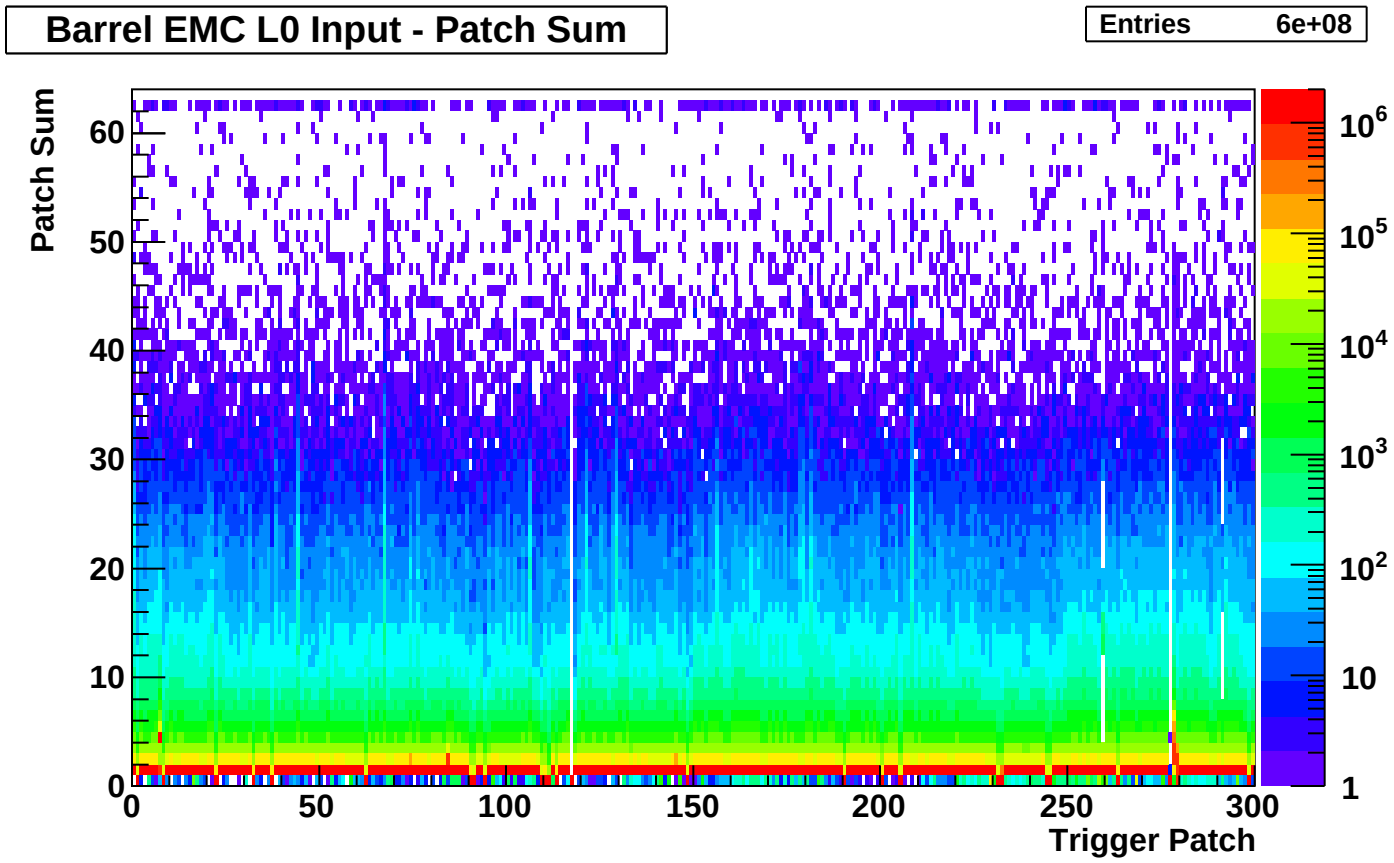

TPC Readout Mask (simulated)
Entries 314826

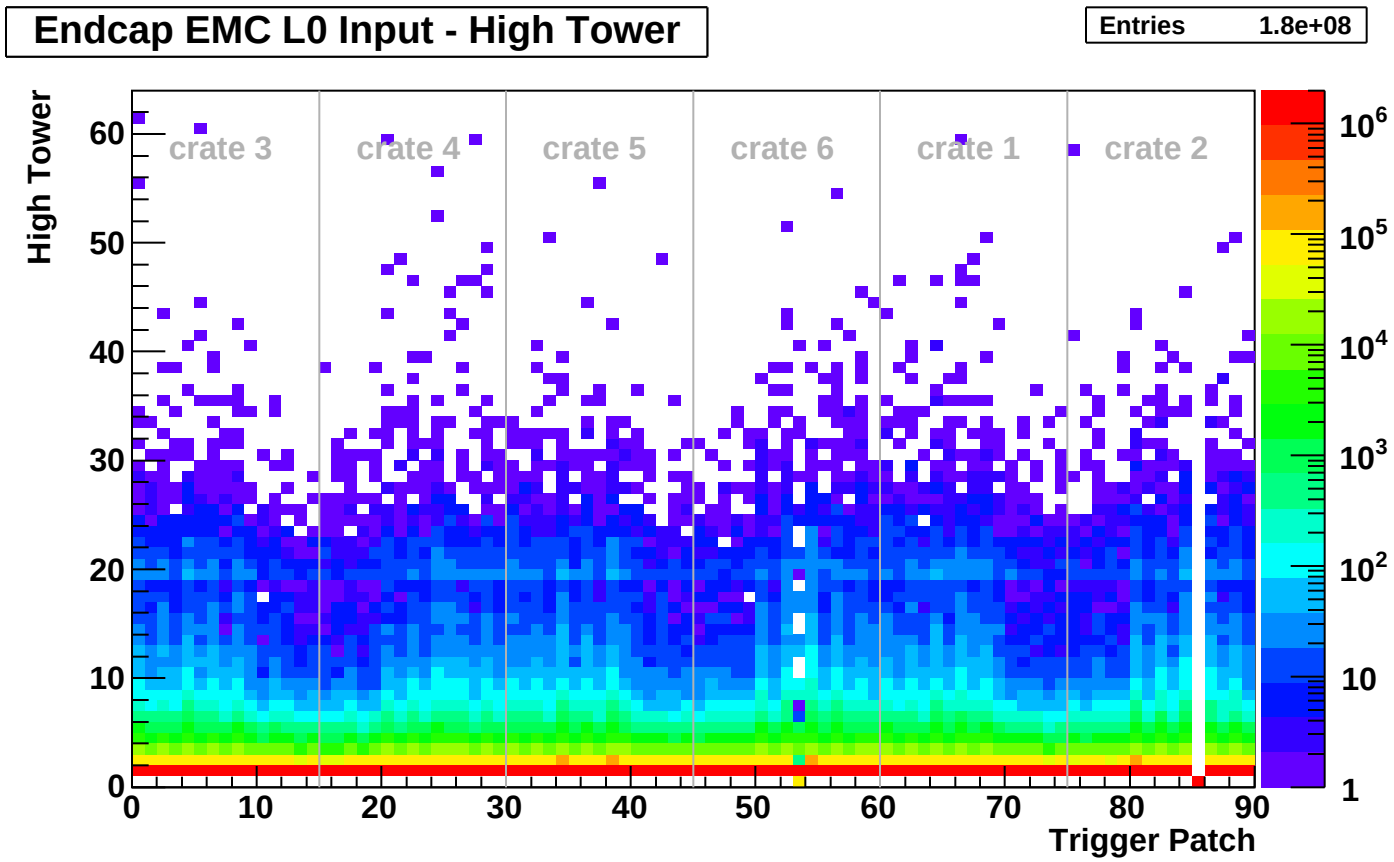

BunchId7Bit (all events)
Entries2000000

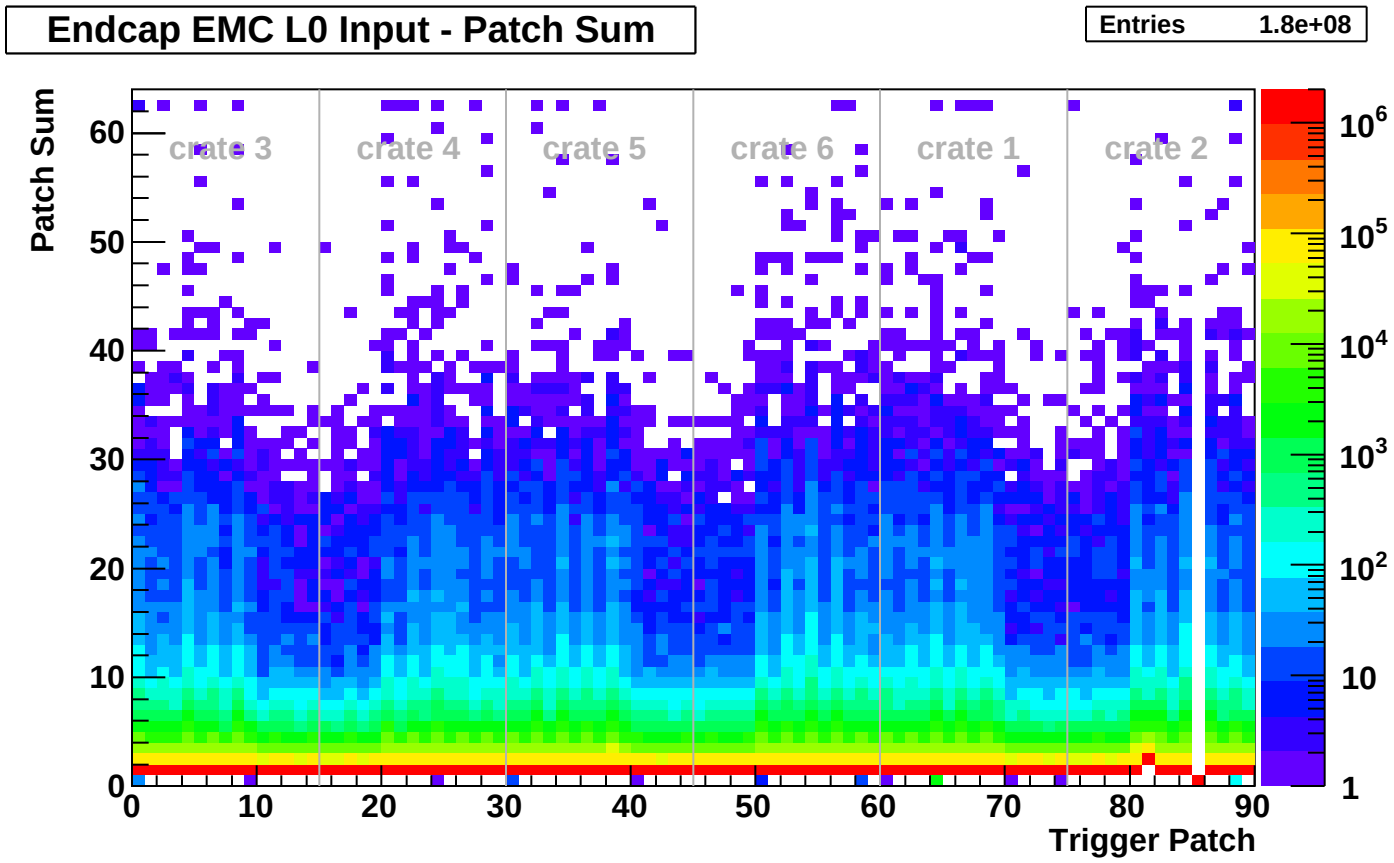

!Blue-Fill
Entries 128107

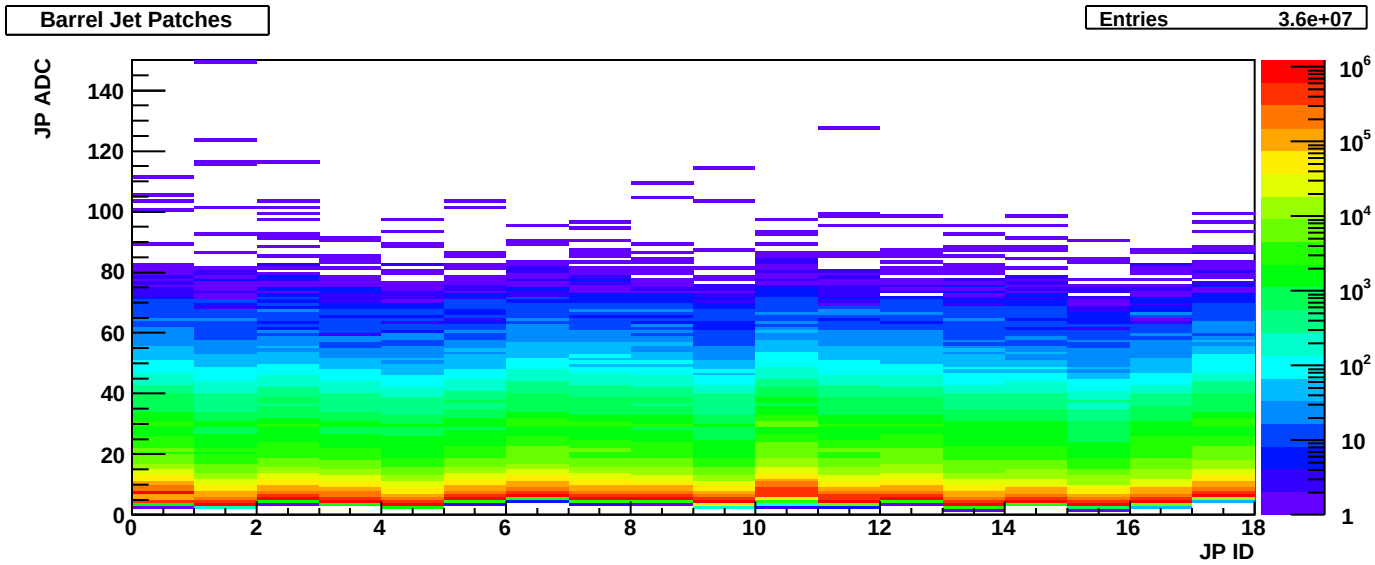

!Yellow-Fill
Entries 169112

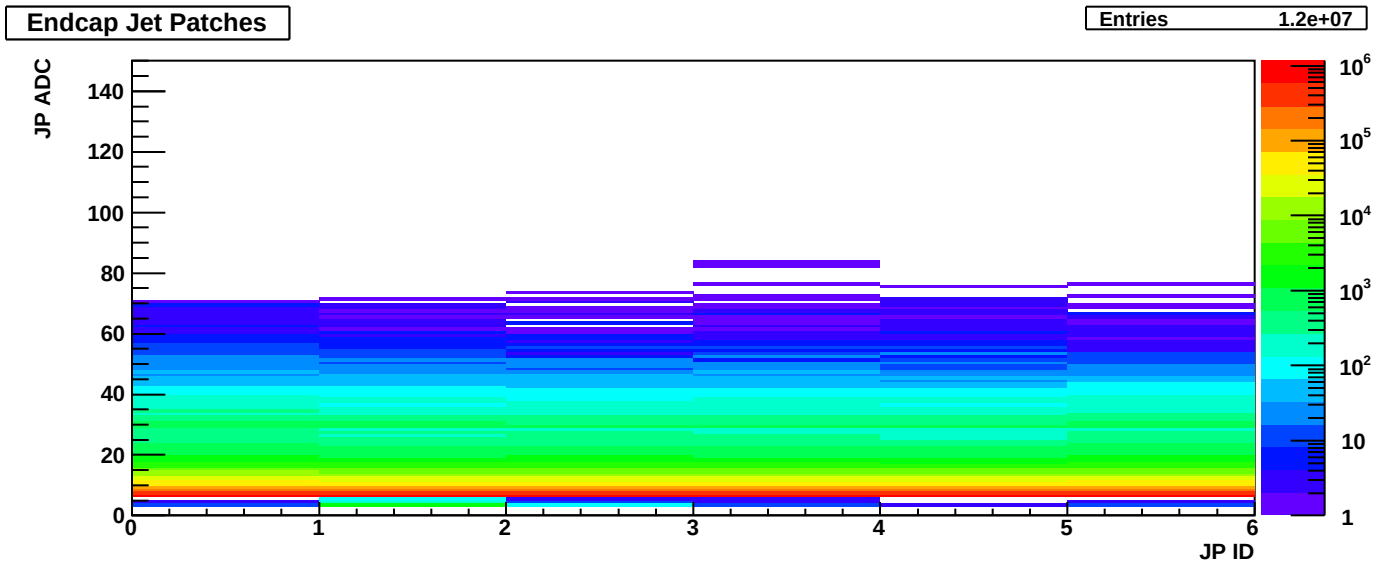

Barrel EMC L0 Input - High Tower
Entries 6e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

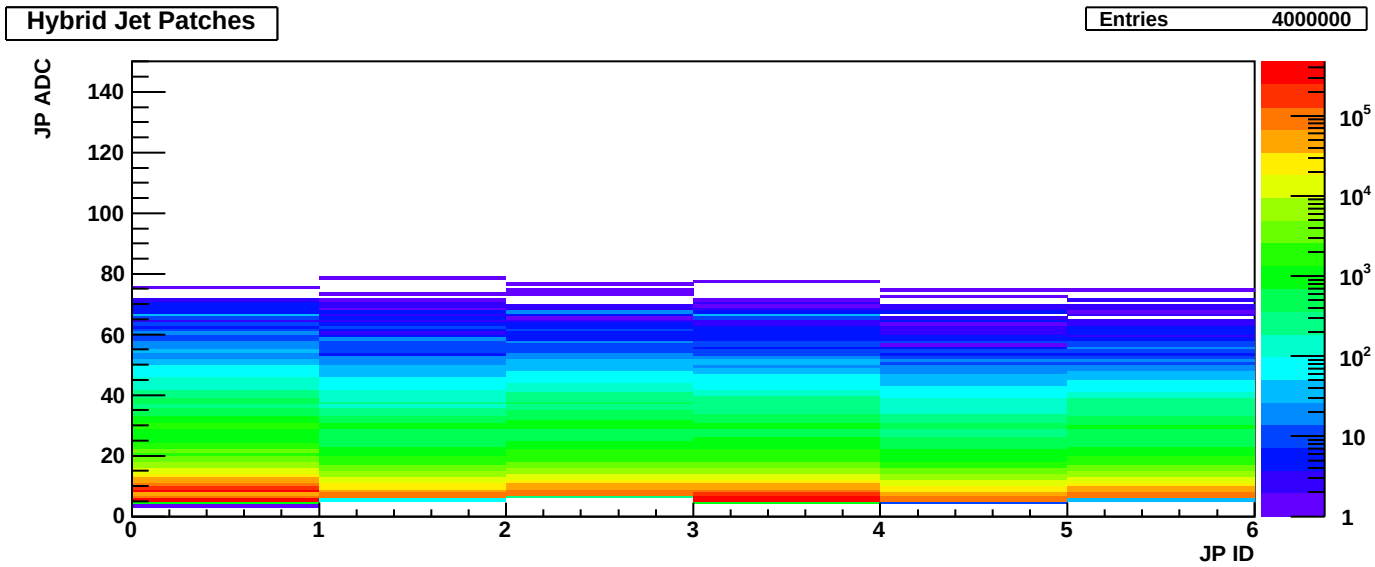

Barrel EMC L0 Input - Patch Sum
Entries 6e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

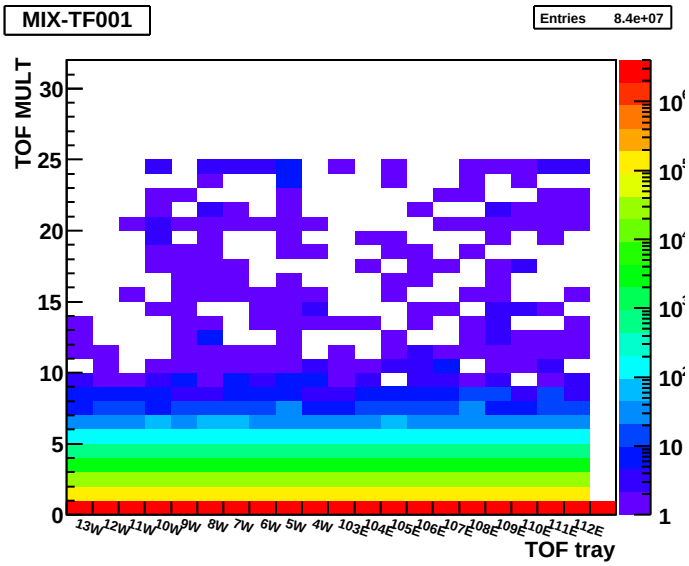

Endcap EMC L0 Input - High Tower
Entries 1.8e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

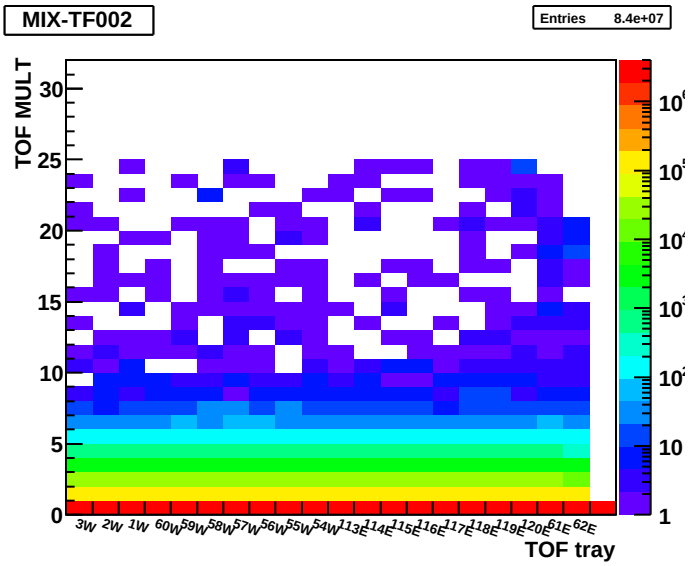

Endcap EMC L0 Input - Patch Sum
Entries 1.8e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

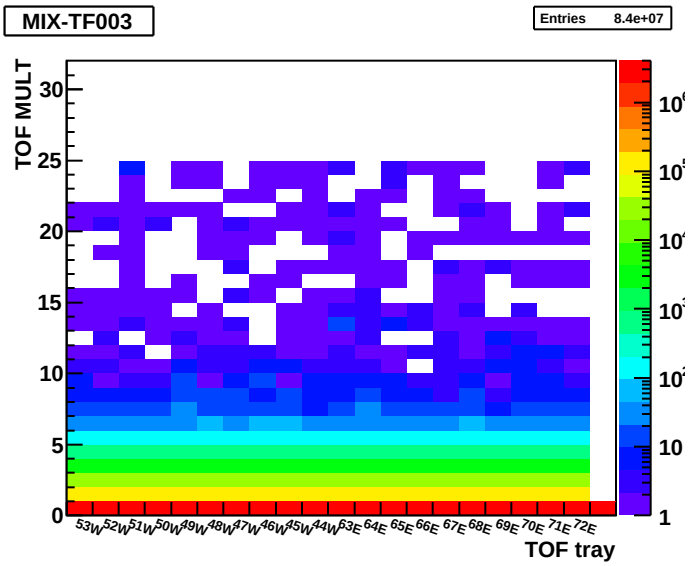

Barrel Jet Patches
Entries 3.6e+07
JP ADC
JP ID

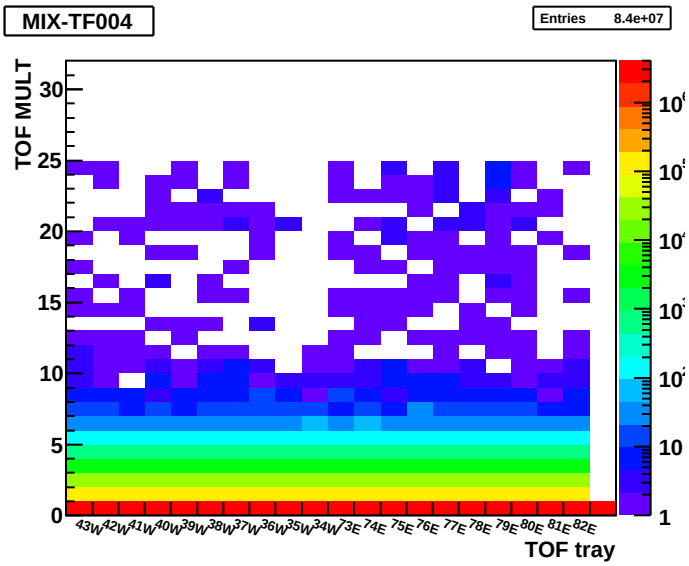

Endcap Jet Patches
Entries 1.2e+07
JP ADC
JP ID

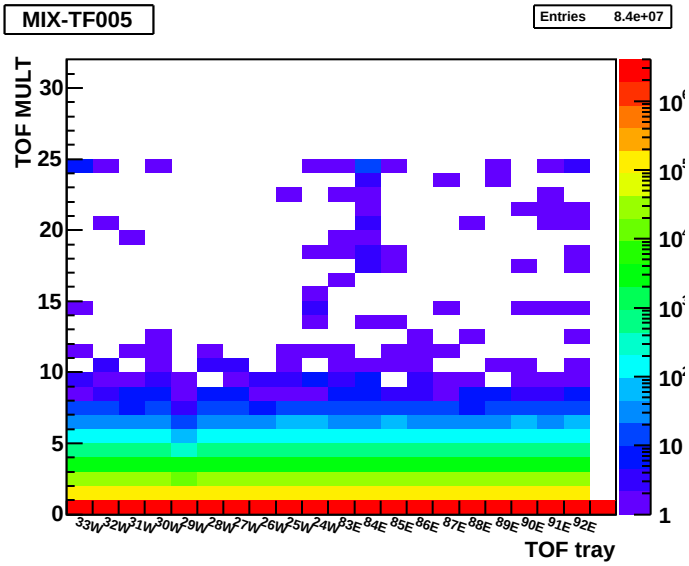

Hybrid Jet Patches
Entries 4000000
JP ADC
JP ID

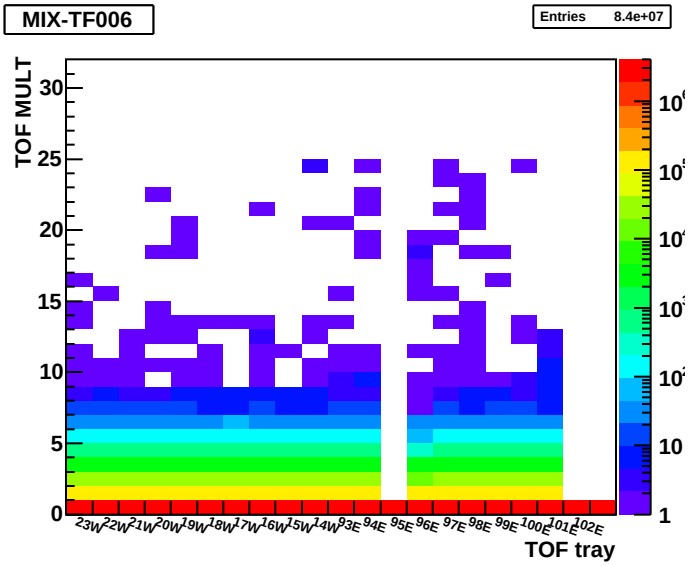

MIX-TF001
Entries 8.4e+07
TOF MULT
TOF tray

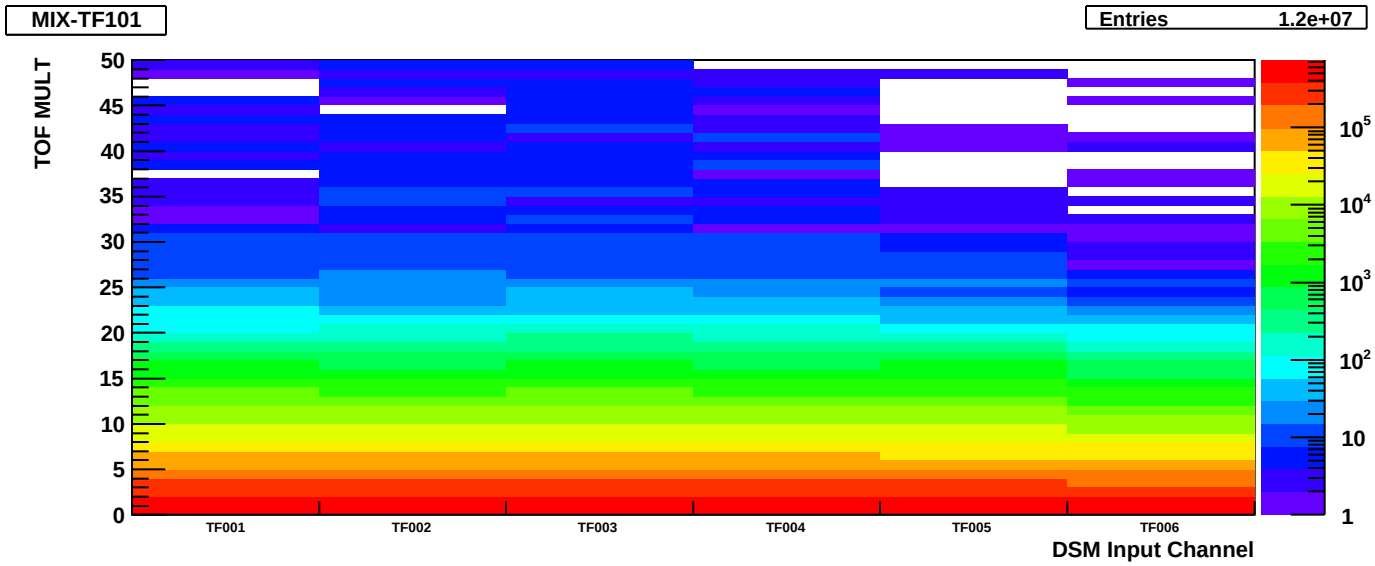

MIX-TF002
Entries 8.4e+07
TOF MULT
TOF tray

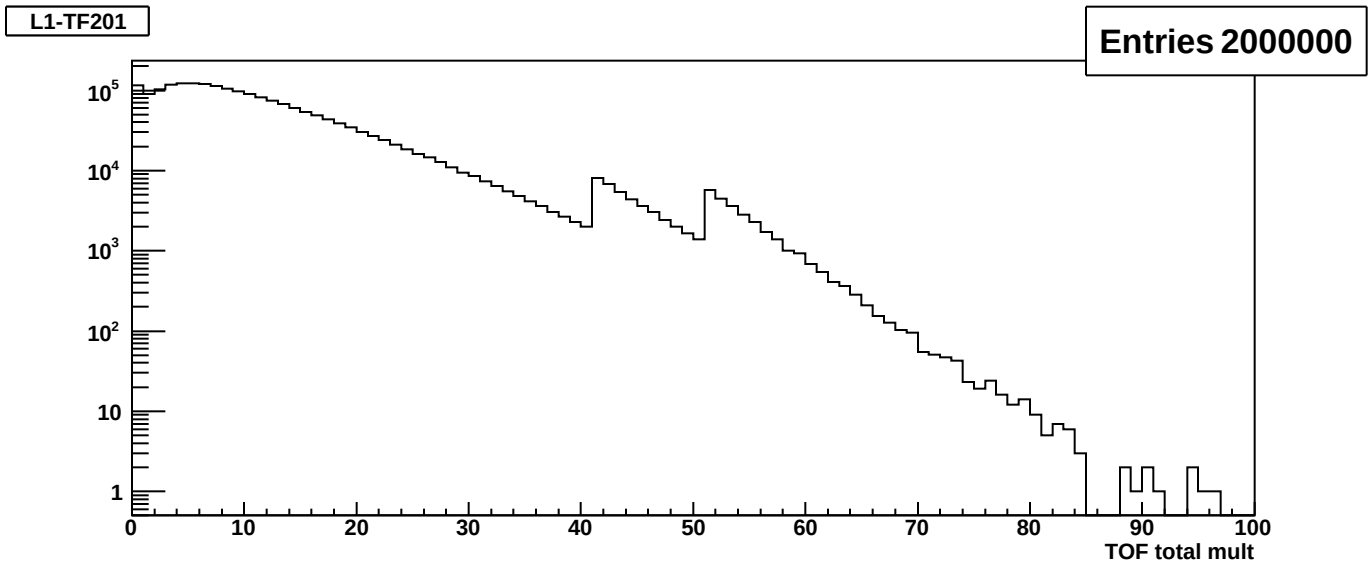

MIX-TF003
Entries 8.4e+07
TOF MULT
TOF tray

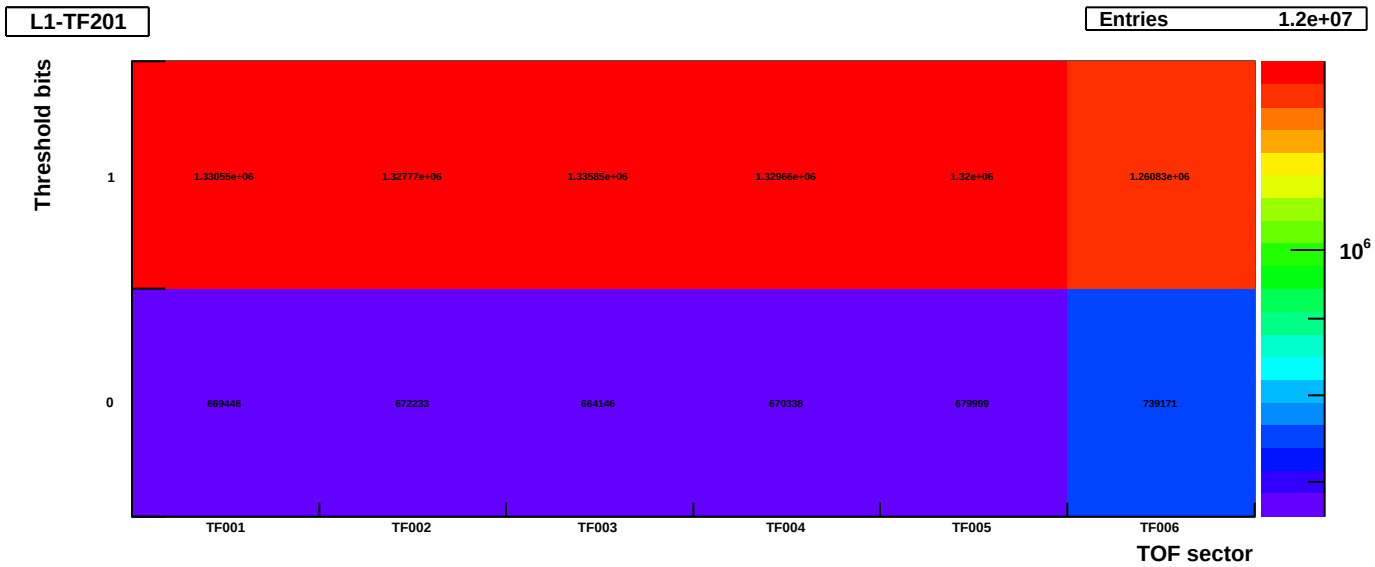

MIX-TF004
Entries 8.4e+07
TOF MULT
TOF tray

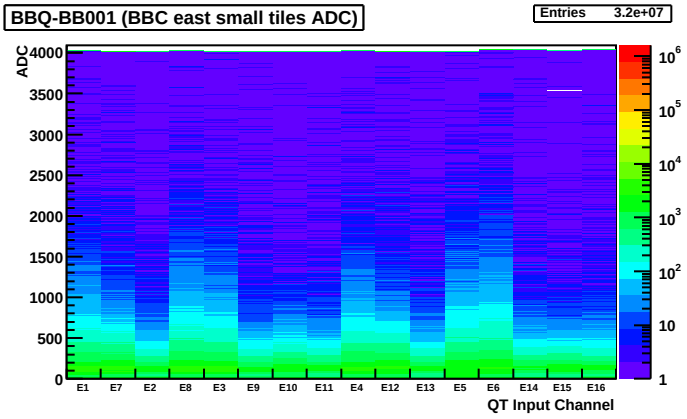

MIX-TF005
Entries 8.4e+07
TOF MULT
TOF tray

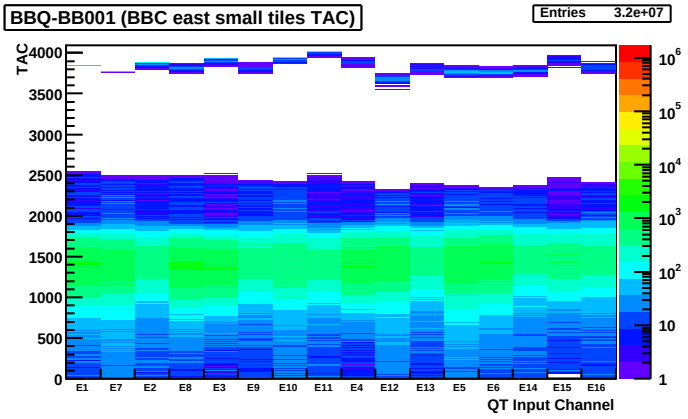

MIX-TF006
Entries 8.4e+07
TOF MULT
TOF tray

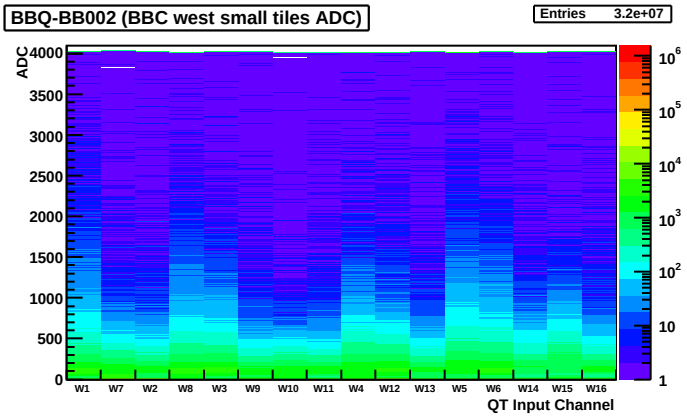

MIX-TF101
Entries 1.2e+07
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

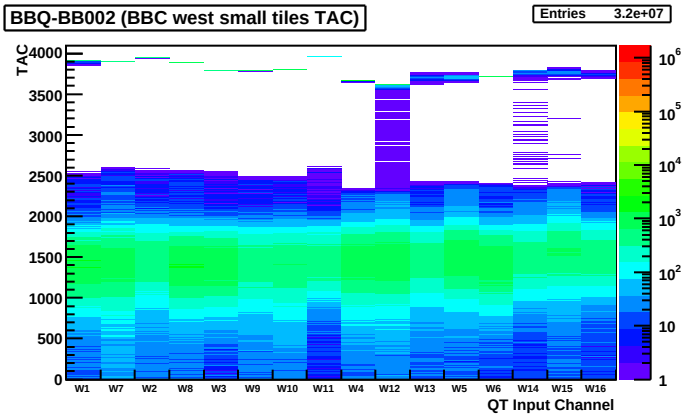

L1-TF201
Entries 2000000
10^5
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

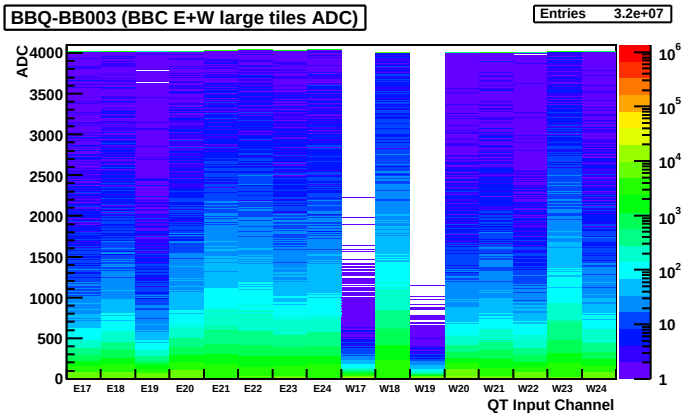

L1-TF201
Entries 1.2e+07
Threshold bits
1
0
1.33055e+06
1.32777e+06
1.33585e+06
1.32966e+06
1.32e+06
1.26083e+06
669448
672233
664146
670338
679999
739171
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6

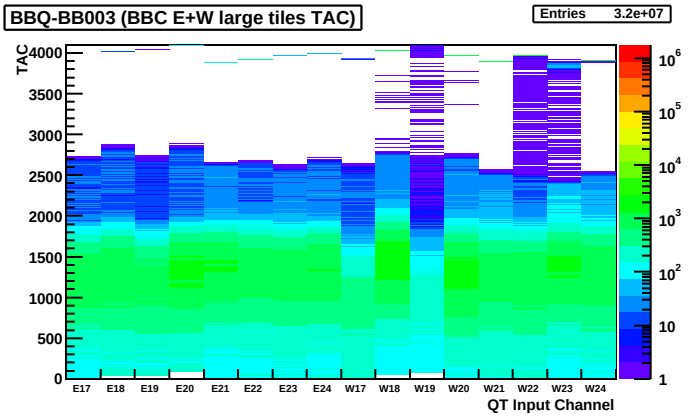

BBQ-BB001 (BBC east small tiles ADC)
Entries 3.2e+07
ADC
QT Input Channel

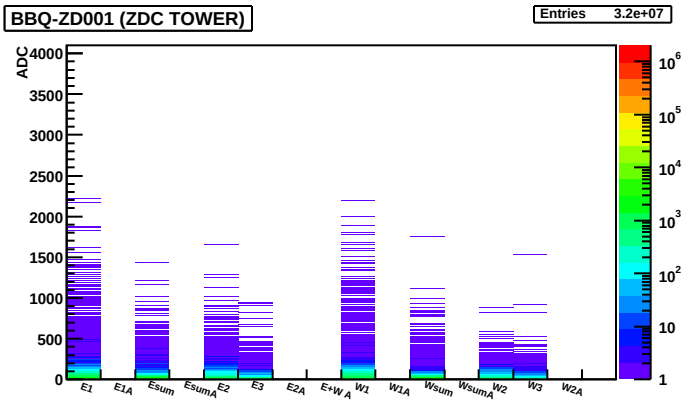

BBQ-BB001 (BBC east small tiles TAC)
Entries 3.2e+07
TAC
QT Input Channel

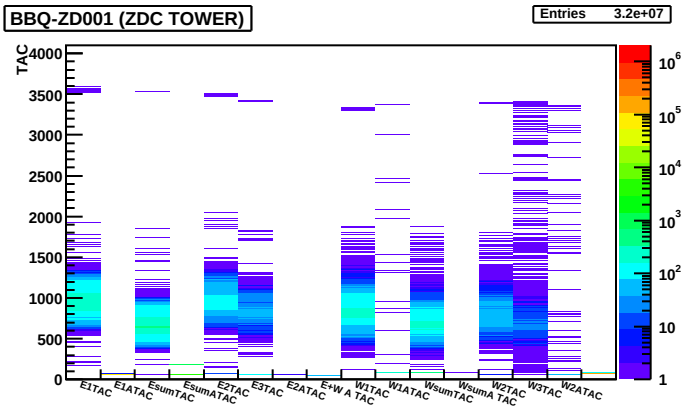

BBQ-BB002 (BBC west small tiles ADC)
Entries 3.2e+07
ADC
QT Input Channel

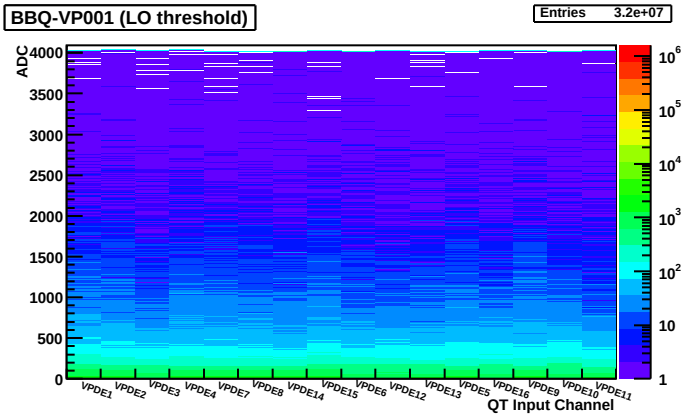

BBQ-BB002 (BBC west small tiles TAC)
Entries 3.2e+07
TAC
QT Input Channel

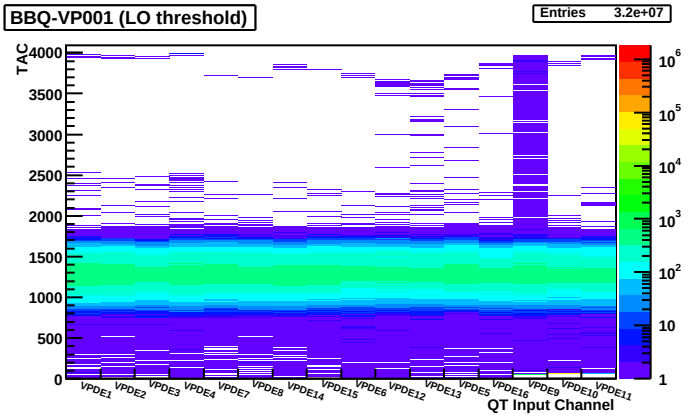

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3.2e+07
ADC
QT Input Channel

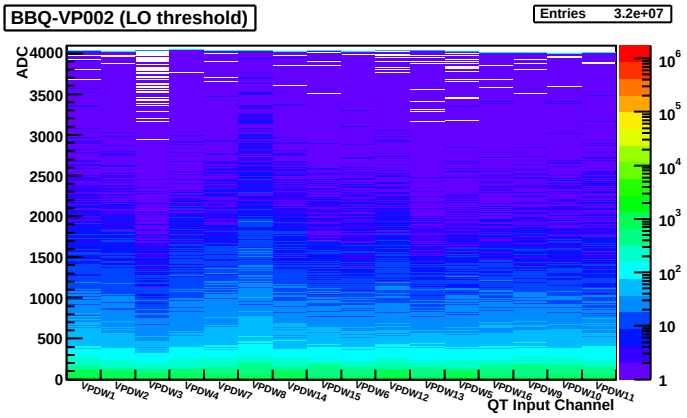

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3.2e+07
TAC
QT Input Channel

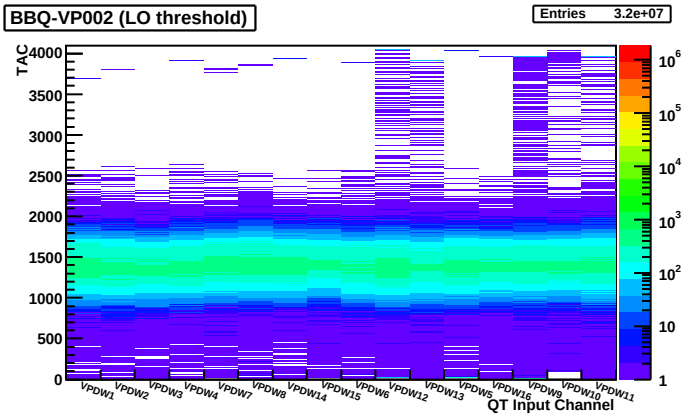

BBQ-ZD001 (ZDC TOWER)
Entries 3.2e+07
ADC

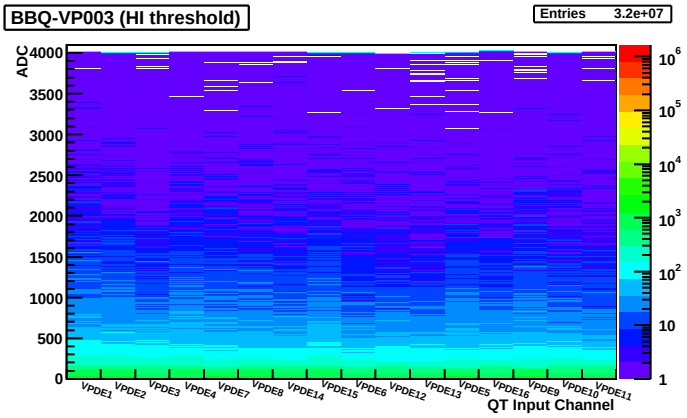

BBQ-ZD001 (ZDC TOWER)
Entries 3.2e+07
TAC

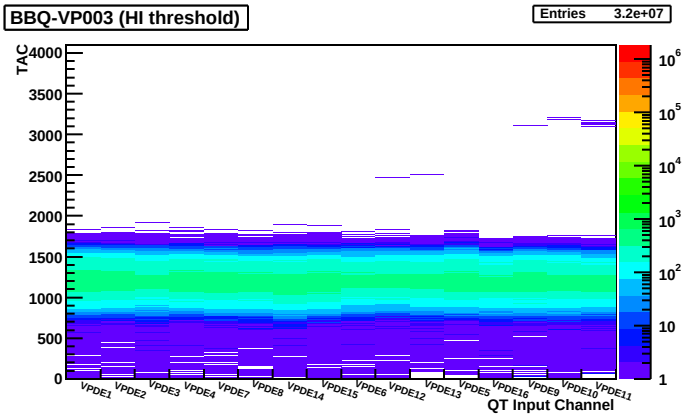

BBQ-VP001 (LO threshold)
Entries 3.2e+07
ADC
QT Input Channel

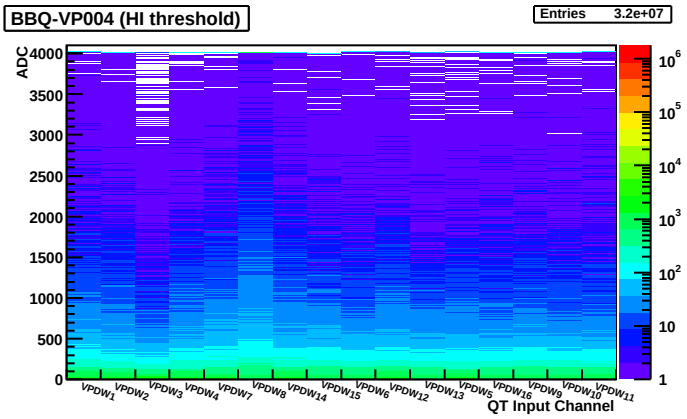

BBQ-VP001 (LO threshold)
Entries 3.2e+07
TAC
QT Input Channel

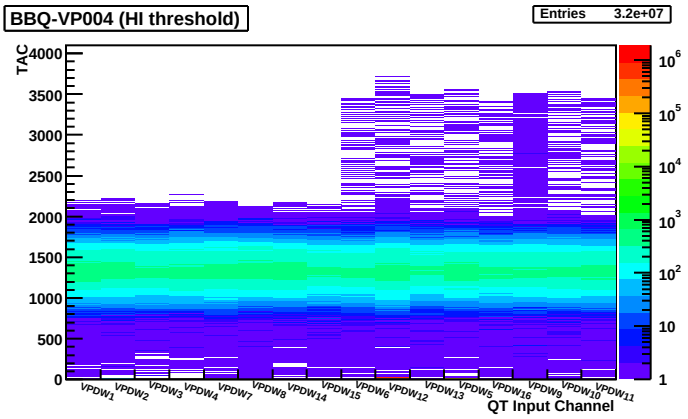

BBQ-VP002 (LO threshold)
Entries 3.2e+07
ADC
QT Input Channel

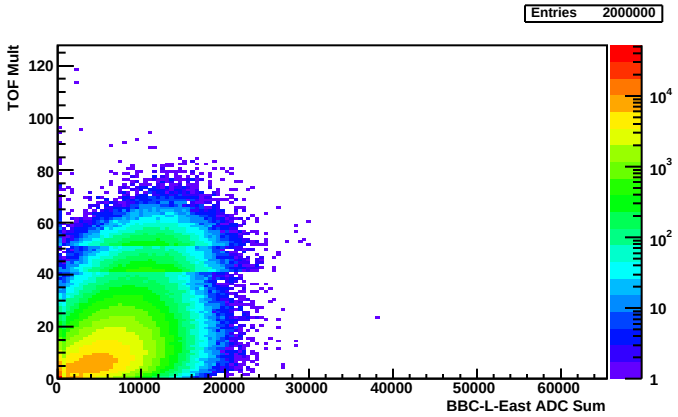

BBQ-VP002 (LO threshold)
Entries 3.2e+07
TAC
QT Input Channel

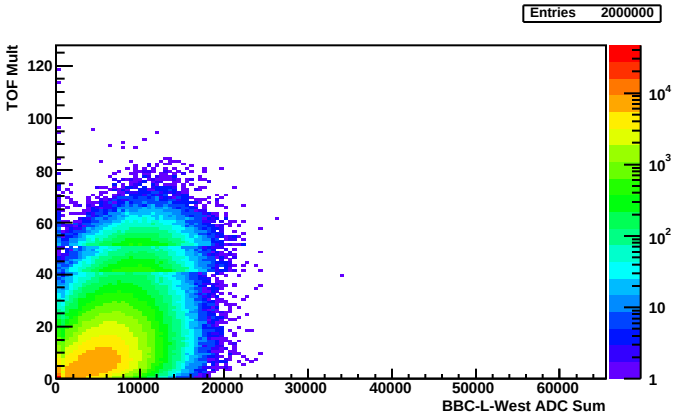

BBQ-VP003 (HI threshold)
Entries 3.2e+07
ADC
QT Input Channel

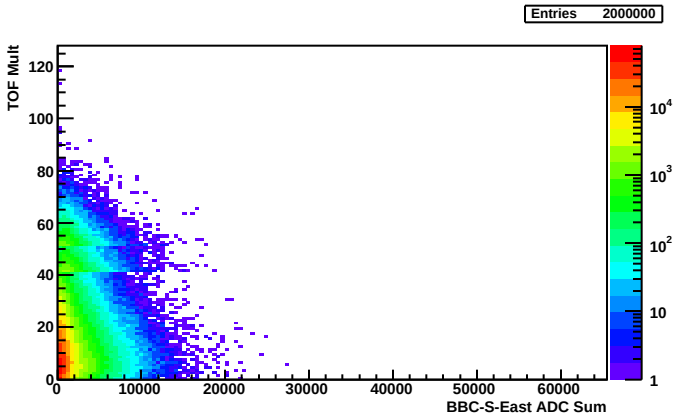

BBQ-VP003 (HI threshold)
Entries 3.2e+07
TAC
QT Input Channel

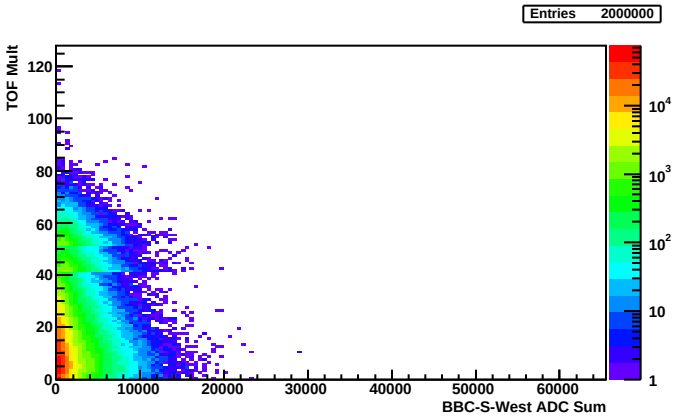

BBQ-VP004 (HI threshold)
Entries 3.2e+07
ADC
QT Input Channel

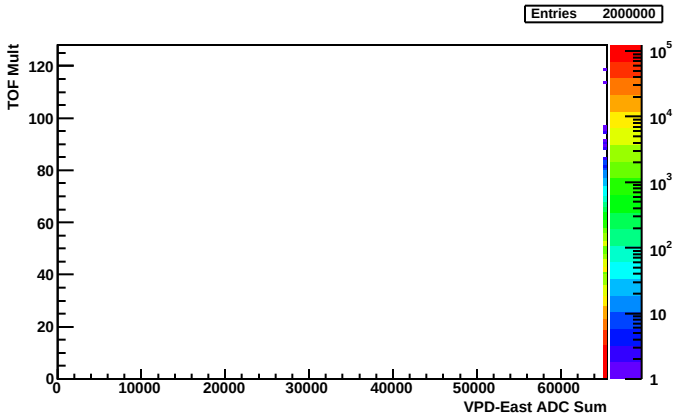

BBQ-VP004 (HI threshold)
Entries 3.2e+07
TAC
QT Input Channel

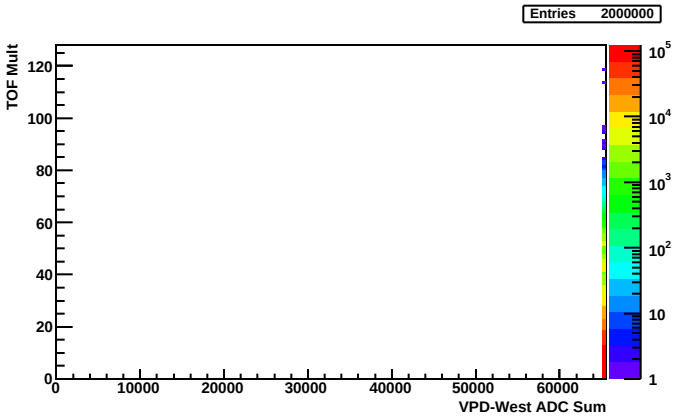

Entries 2000000
TOF Mult
BBC-L-East ADC Sum

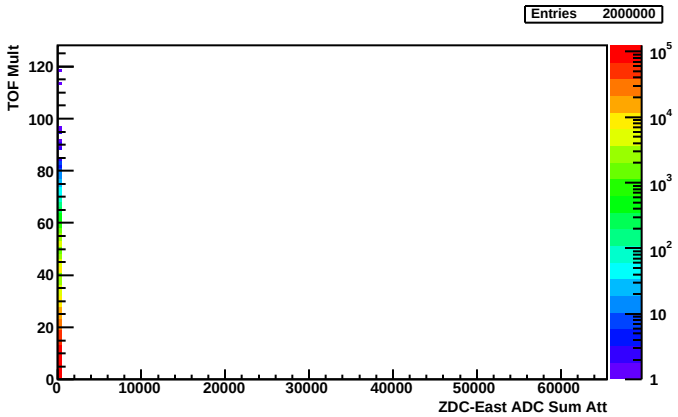

Entries 2000000
TOF Mult
BBC-L-West ADC Sum

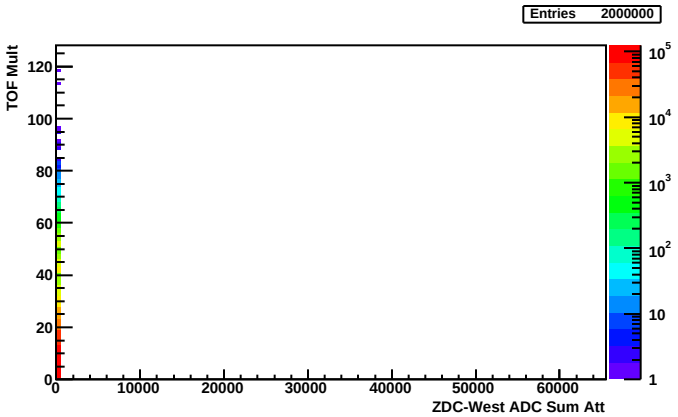

Entries 2000000
TOF Mult
BBC-S-East ADC Sum

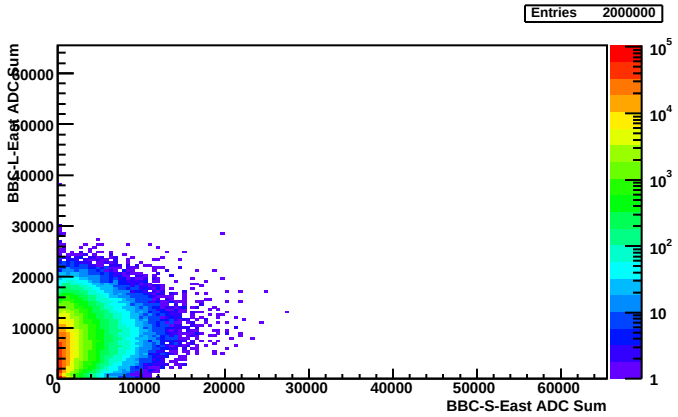

Entries 2000000
TOF Mult
BBC-S-West ADC Sum

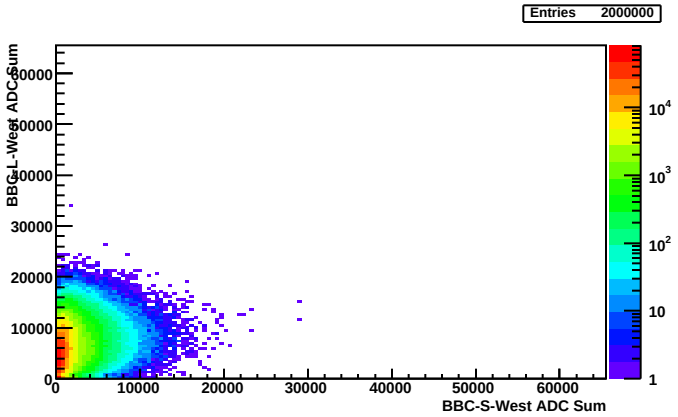

Entries 2000000
TOF Mult
VPD-East ADC Sum

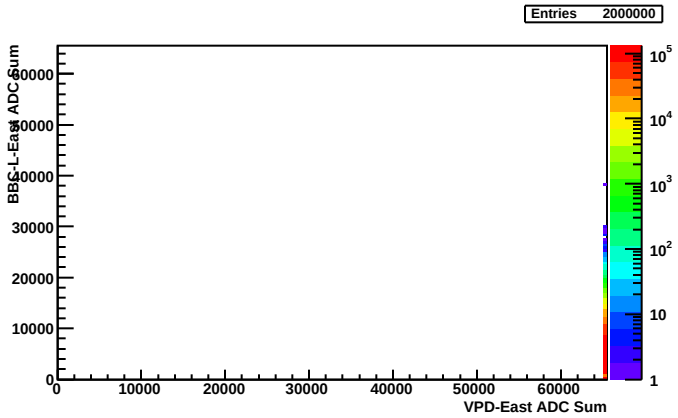

Entries 2000000
TOF Mult
VPD-West ADC Sum

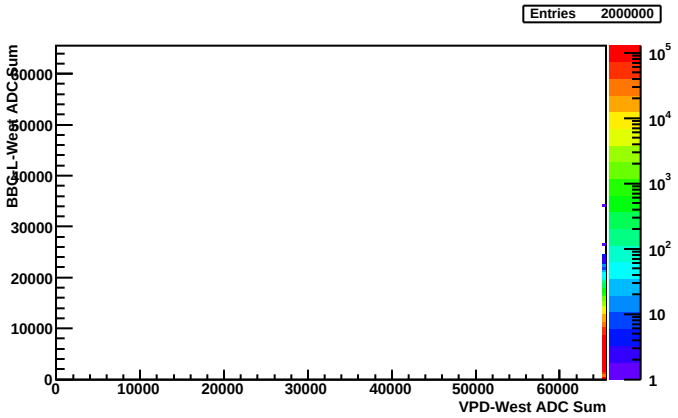

Entries 2000000
TOF Mult
ZDC-East ADC Sum Att

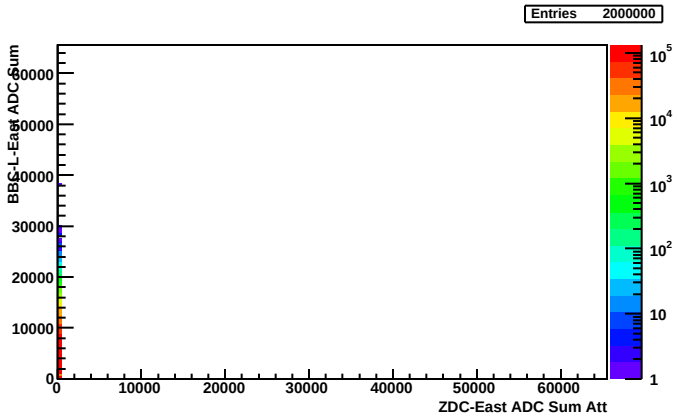

Entries 2000000
TOF Mult
ZDC-West ADC Sum Att

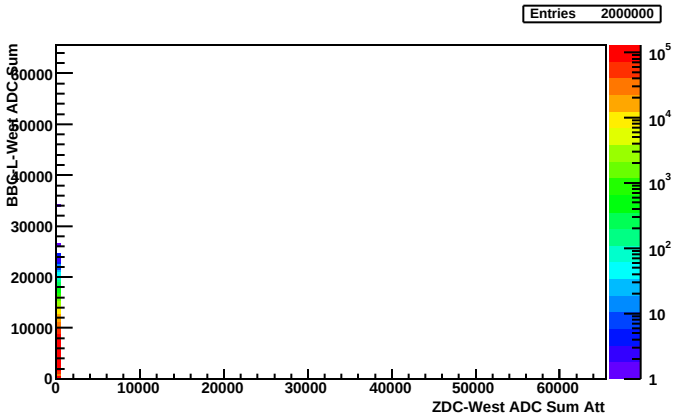

Entries 2000000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

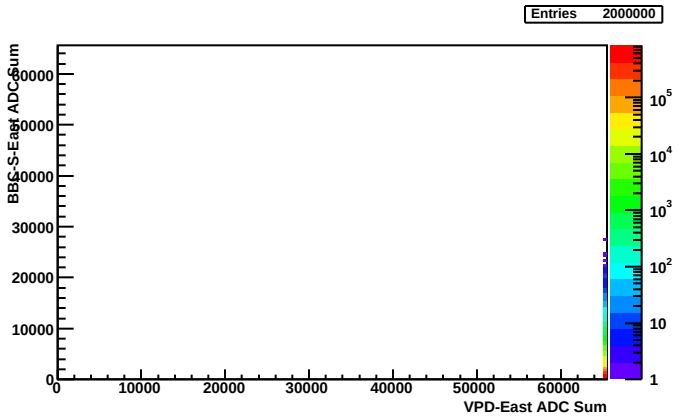

Entries 2000000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

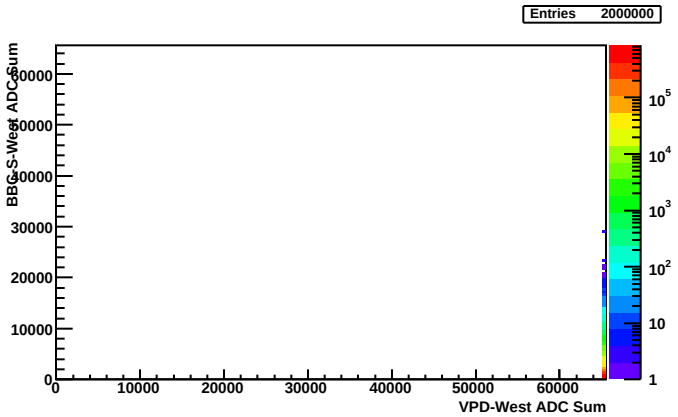

Entries 2000000
BBC-L-East ADC Sum
VPD-East ADC Sum

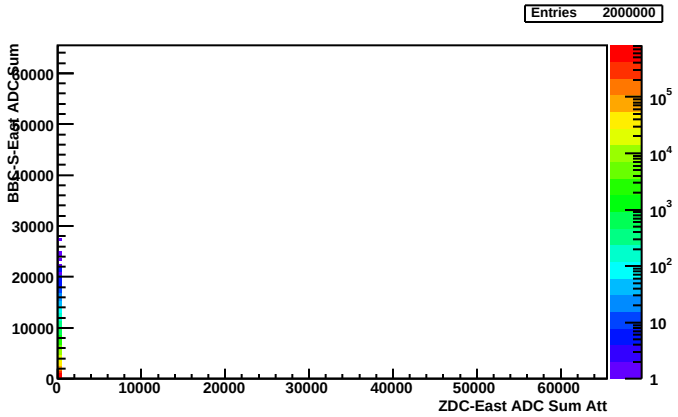

Entries 2000000
BBC-L-West ADC Sum
VPD-West ADC Sum

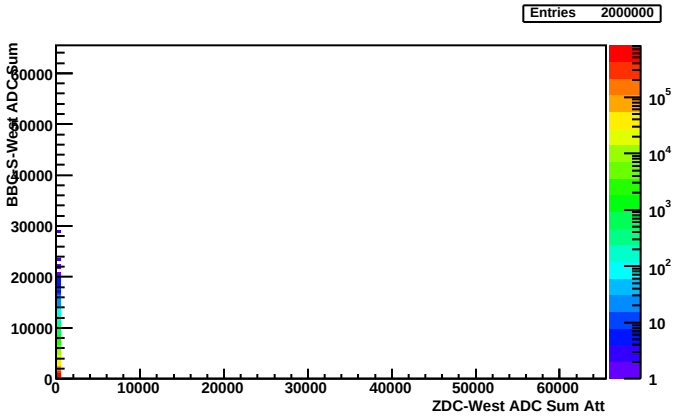

Entries 2000000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

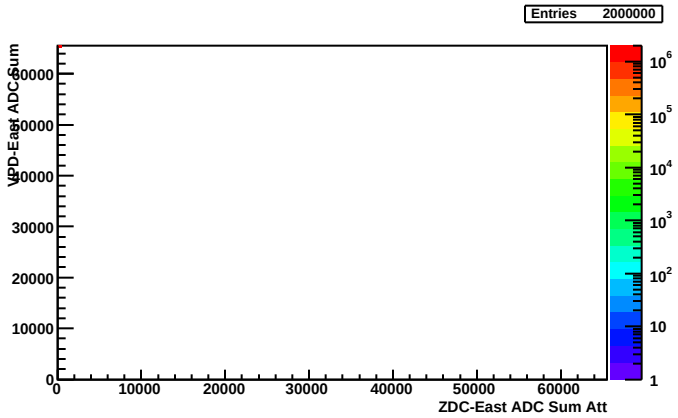

Entries 2000000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

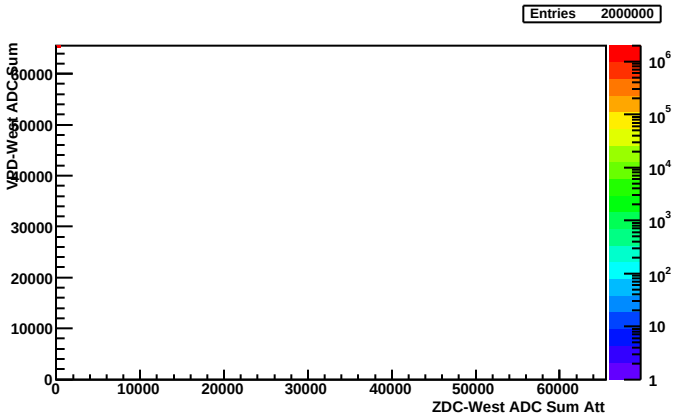

Entries 2000000
BBC-S-East ADC Sum
VPD-East ADC Sum

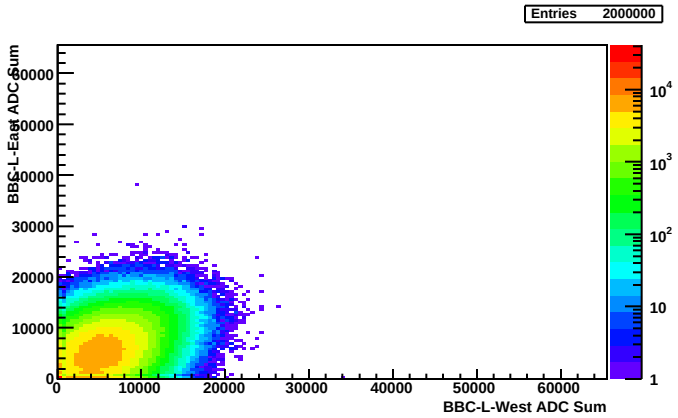

Entries 2000000
BBC-S-West ADC Sum
VPD-West ADC Sum

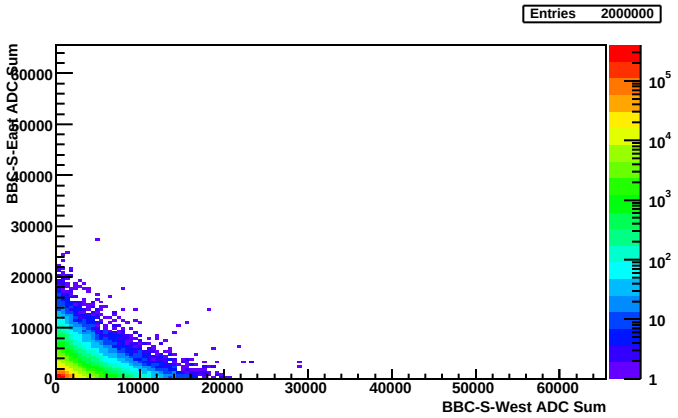

Entries 2000000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

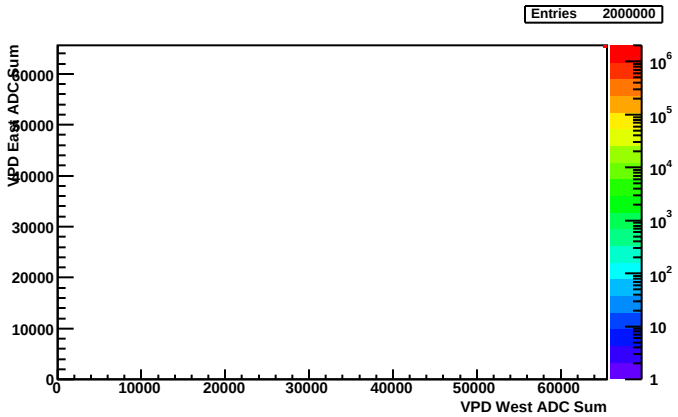

Entries 2000000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

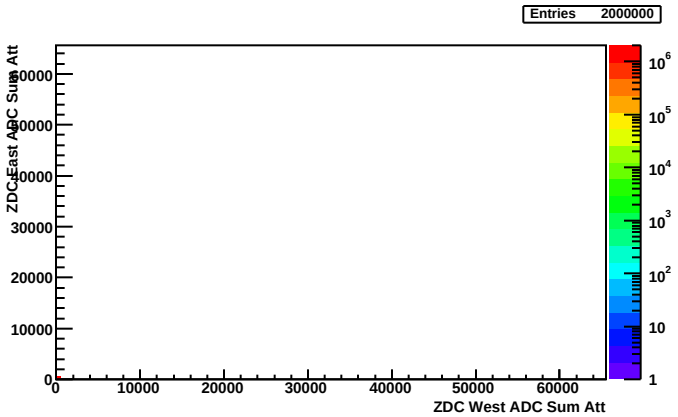

Entries 2000000
VPD-East ADC Sum
ZDC-East ADC Sum Att

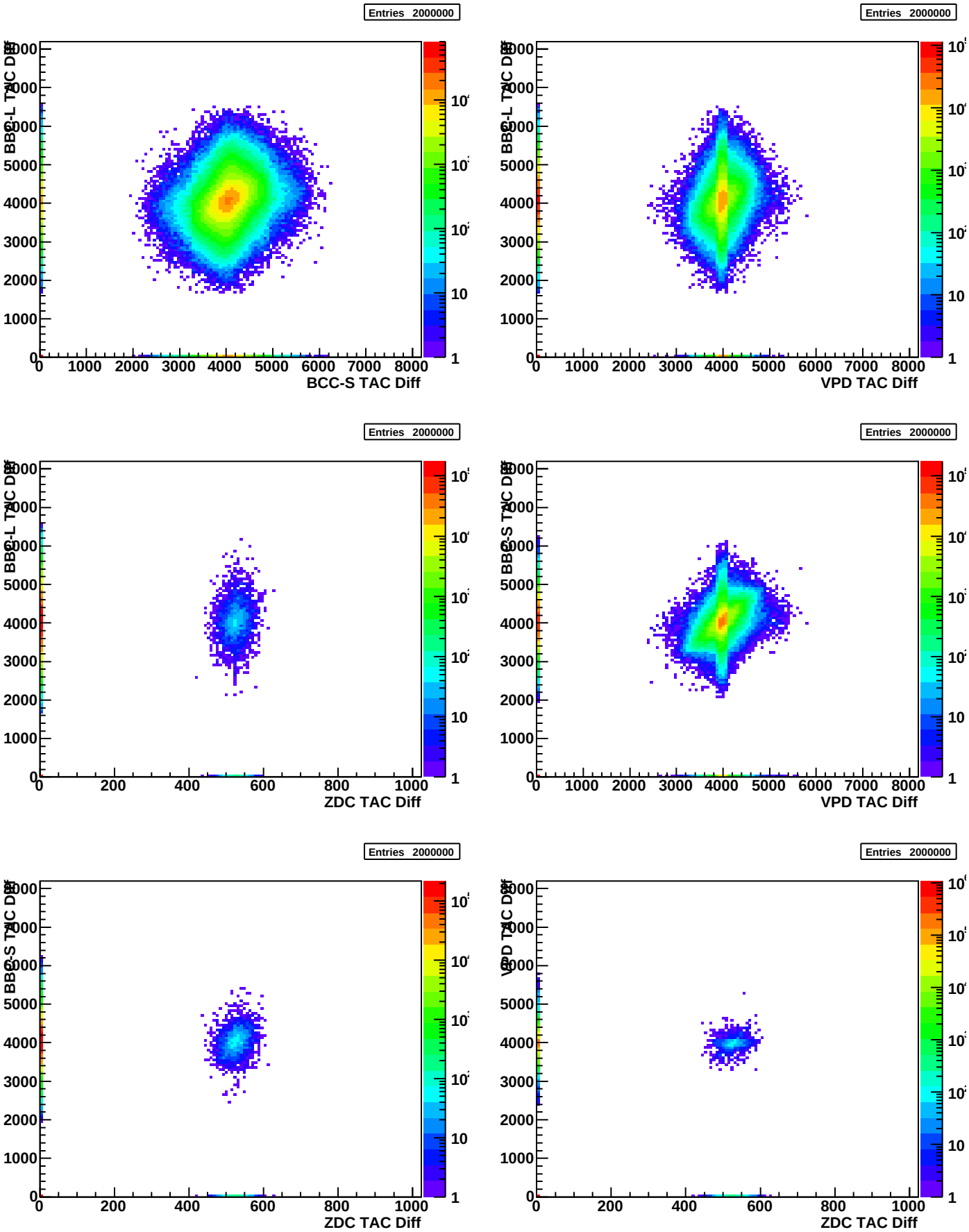

Entries 2000000
VPD-West ADC Sum
ZDC-West ADC Sum Att


Entries 2000000
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 2000000
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 2000000
VPD East ADC Sum
VPD West ADC Sum


Entries 2000000
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 2000000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2000000
BBC-L TAC Diff
VPD TAC Diff
Entries 2000000
BBC-L TAC Diff
ZDC TAC Diff
Entries 2000000
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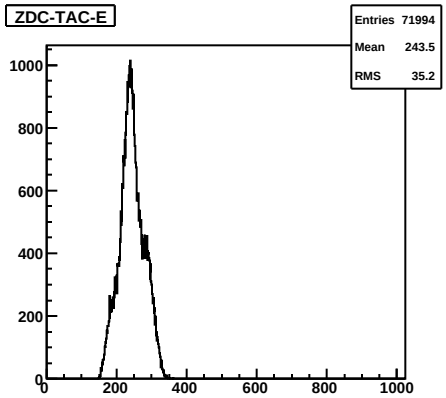
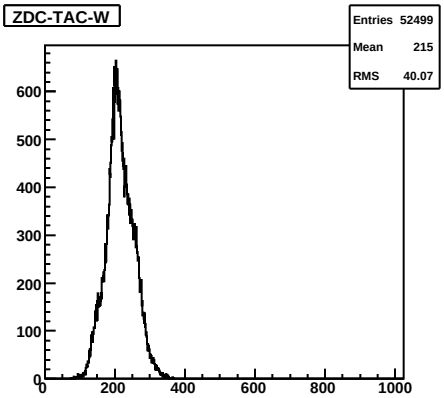
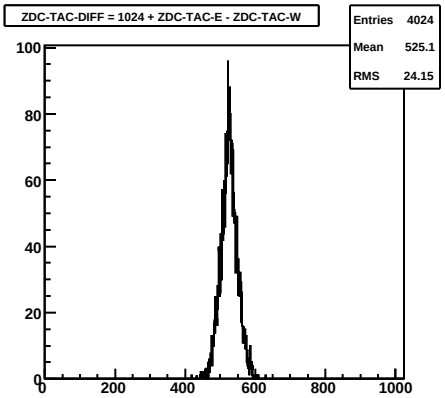
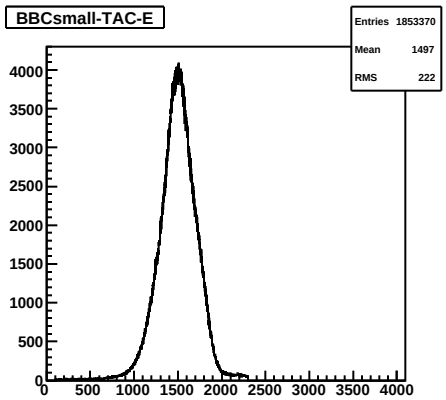
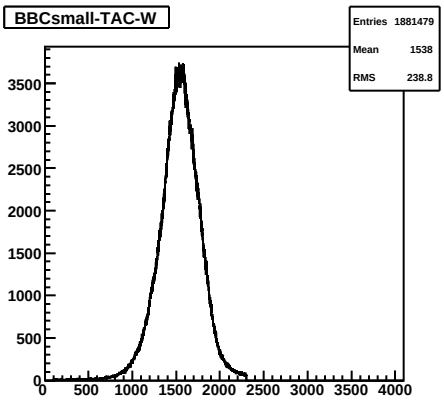
BBC-S TAC Diff
ZDC TAC Diff
Entries 2000000
VPD TAC Diff
ZDC TAC Diff

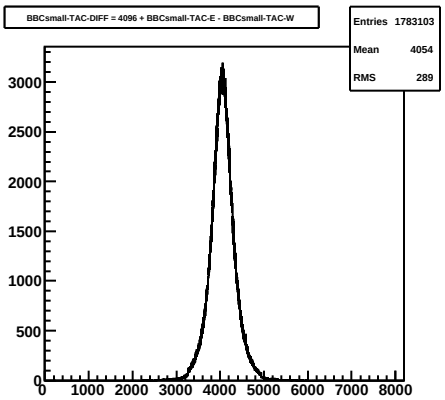

ZDC-TAC-E
Entries 71994
Mean 243.5
RMS 35.2

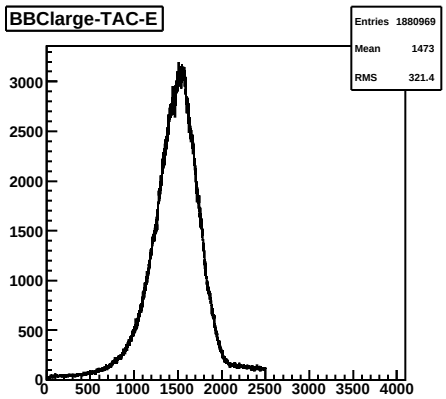

ZDC-TAC-W
Entries 52499
Mean 215
RMS 40.07

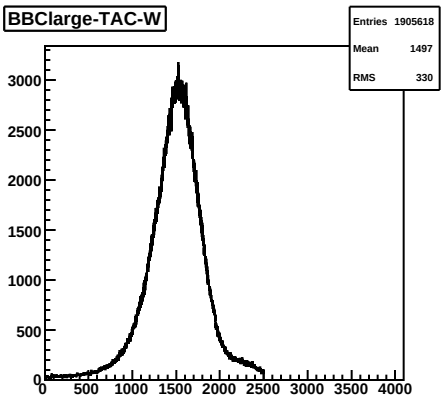

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 4024
Mean 525.1
RMS 24.15

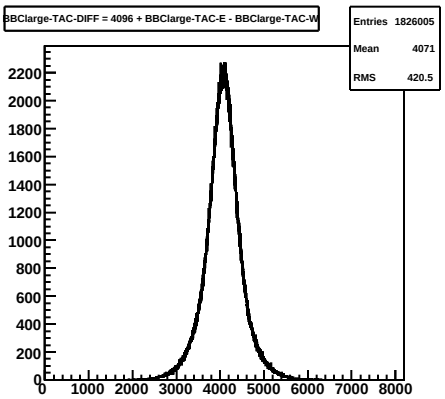

BBCsmall-TAC-E
Entries 1853370
Mean 1497
RMS 222

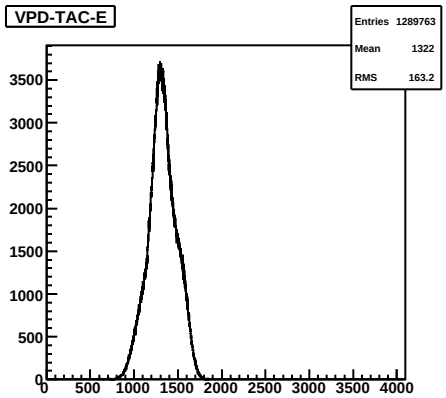

BBCsmall-TAC-W
Entries 1881479
Mean 1538
RMS 238.8

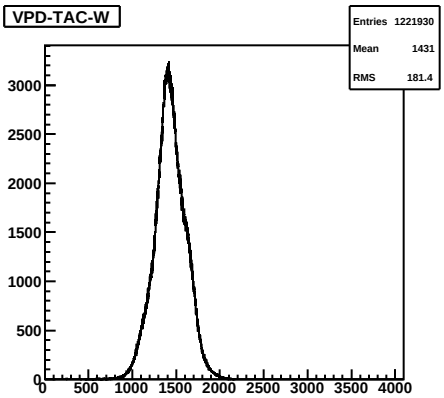

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1783103
Mean 4054
RMS 289

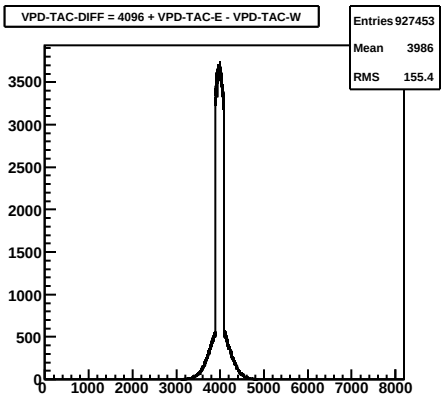

BBClarge-TAC-E
Entries 1880969
Mean 1473
RMS 321.4

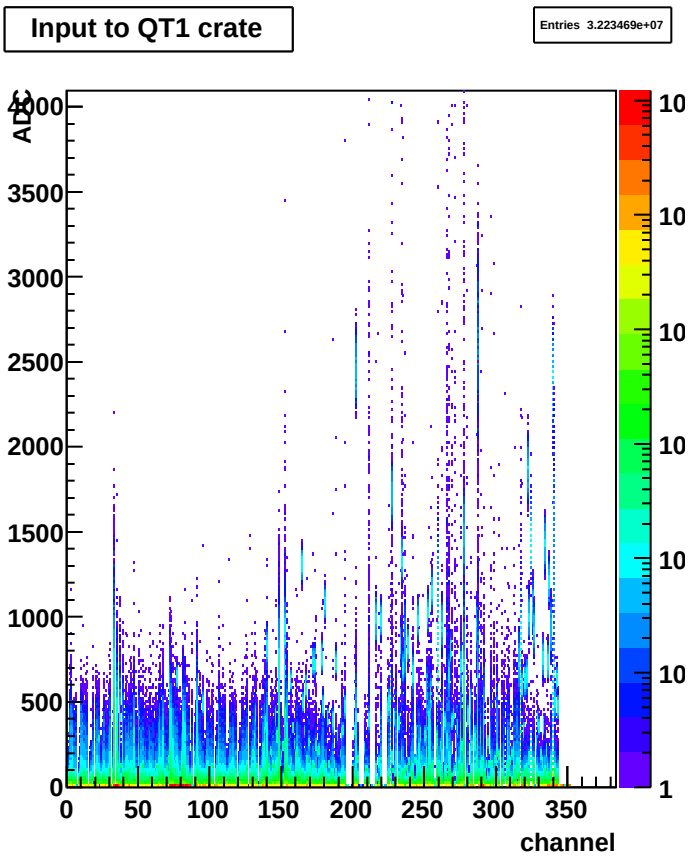

BBClarge-TAC-W
Entries 1905618
Mean 1497
RMS 330

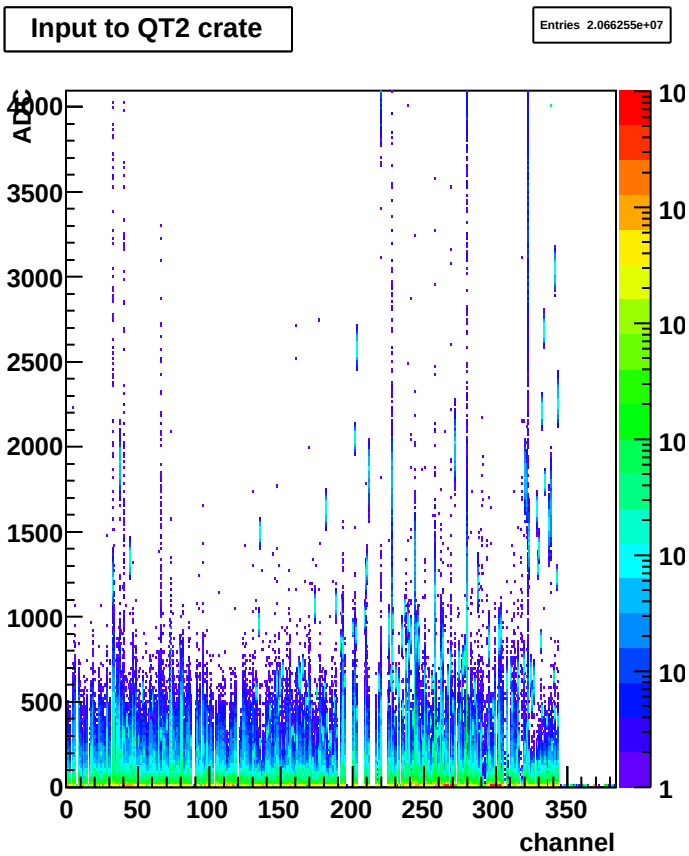

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1826005
Mean 4071
RMS 420.5

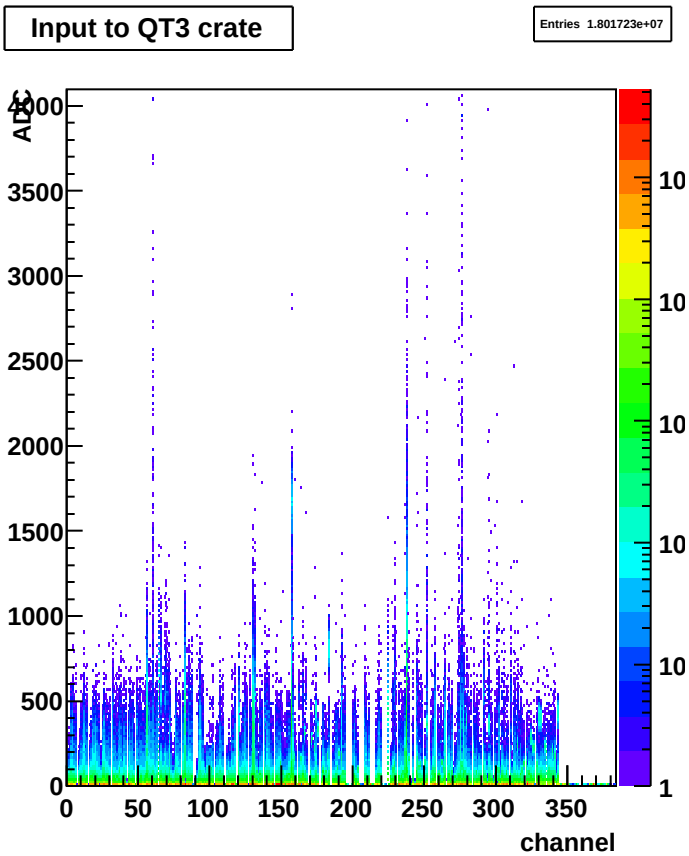

VPD-TAC-E
Entries 1289763
Mean 1322
RMS 163.2

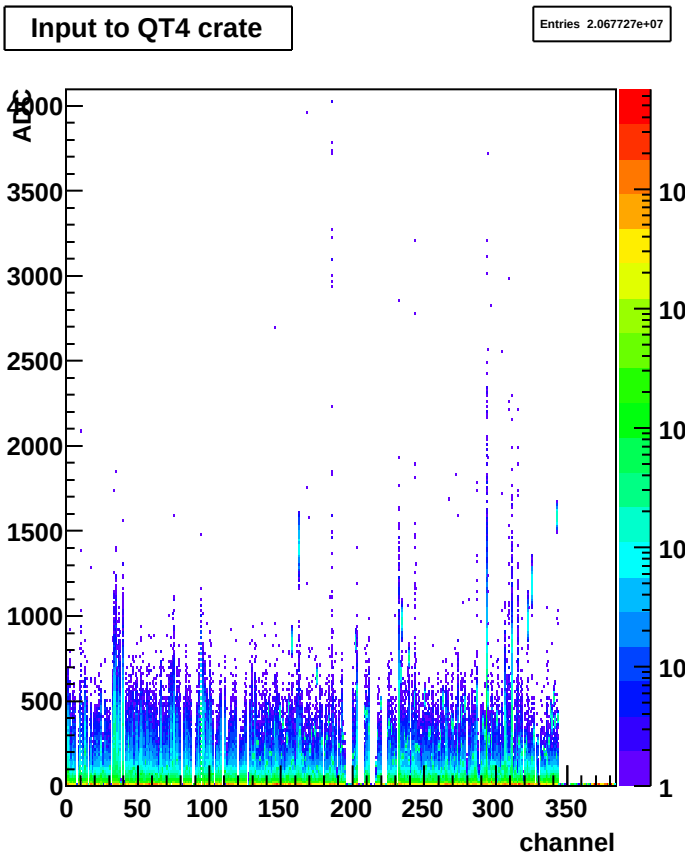

VPD-TAC-W
Entries 1221930
Mean 1431
RMS 181.4

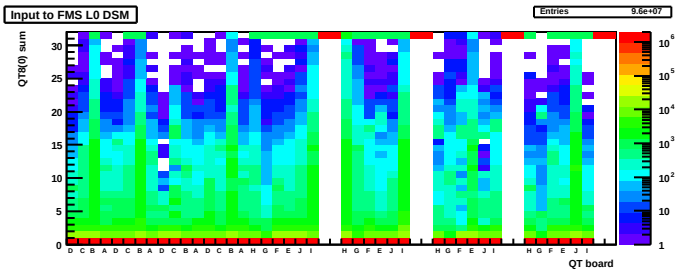

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 927453
Mean 3986
RMS 155.4

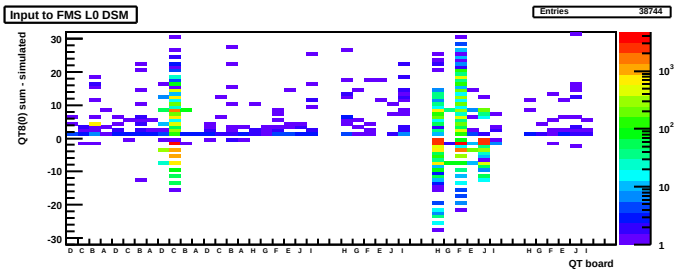

Input to QT1 crate
Entries 3.223469e+07
ADC
channel

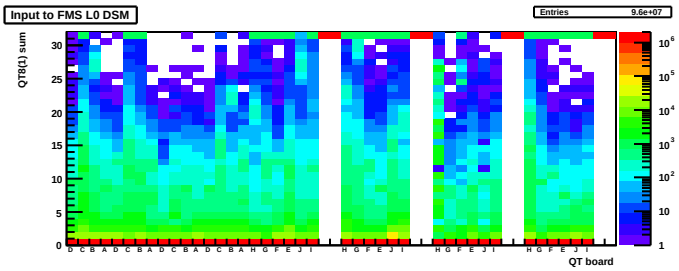

Input to QT2 crate
Entries 2.066255e+07
ADC
channel

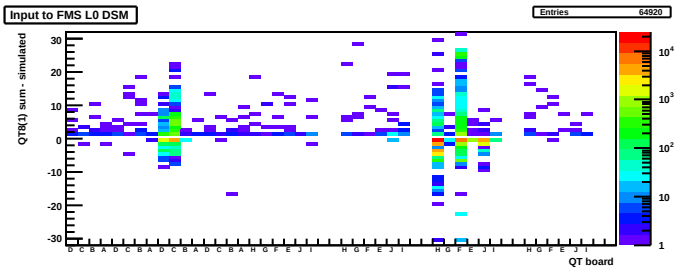

Input to QT3 crate
Entries 1.801723e+07
ADC
channel

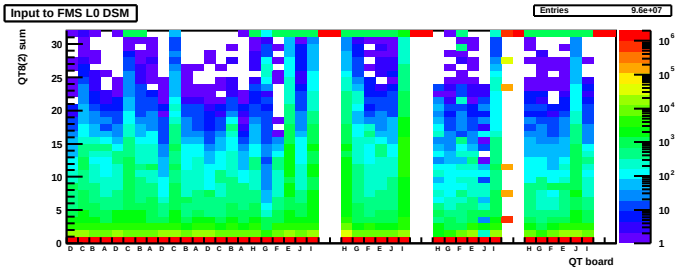

Input to QT4 crate
Entries 2.067727e+07
ADC
channel

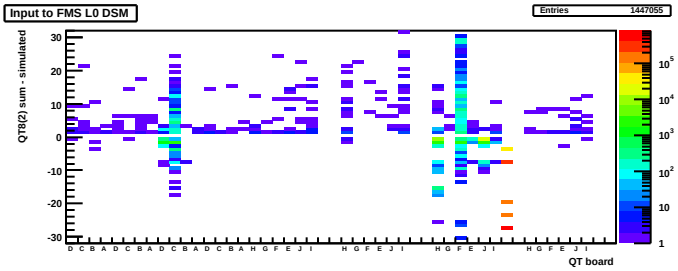

Input to FMS L0 DSM
Entries 9.6e+07
QT8(0) sum
QT board

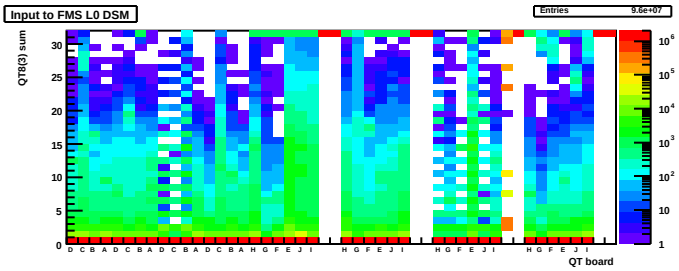

Input to FMS L0 DSM
Entries 38744
QT8(0) sum - simulated
QT board

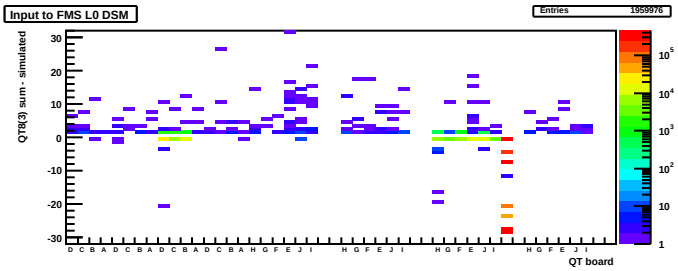

Input to FMS L0 DSM
Entries 9.6e+07
QT8(1) sum
QT board

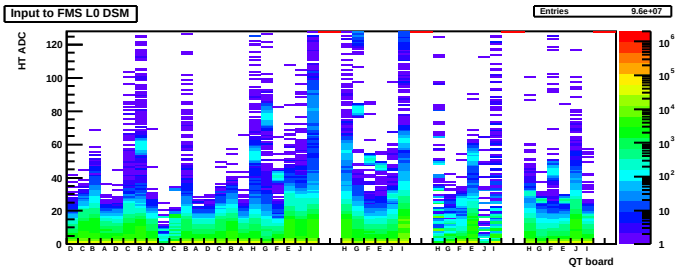

Input to FMS L0 DSM
Entries 64920
QT8(1) sum - simulated
QT board

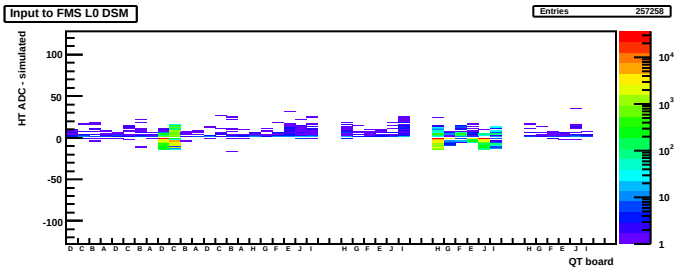

Input to FMS L0 DSM
Entries 9.6e+07
QT8(2) sum
QT board

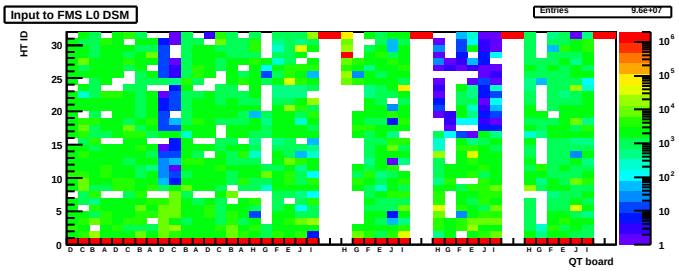

Input to FMS L0 DSM
Entries 1447055
QT8(2) sum - simulated
QT board

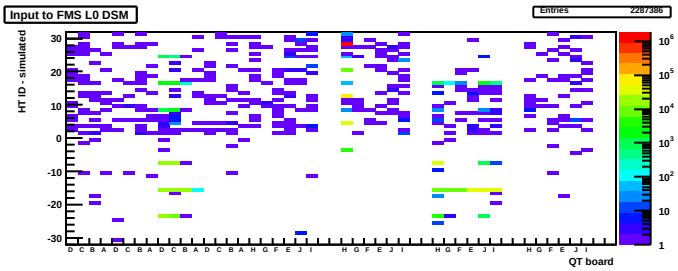

Input to FMS L0 DSM
Entries 9.6e+07
QT8(3) sum
QT board

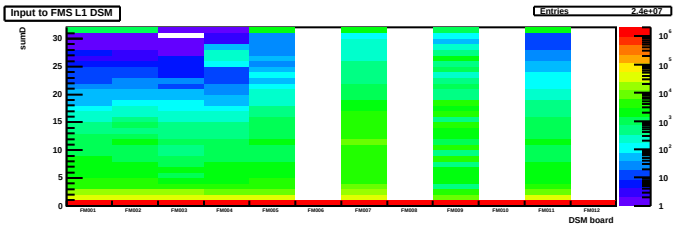

Input to FMS L0 DSM
Entries 1959976
QT8(3) sum - simulated
QT board

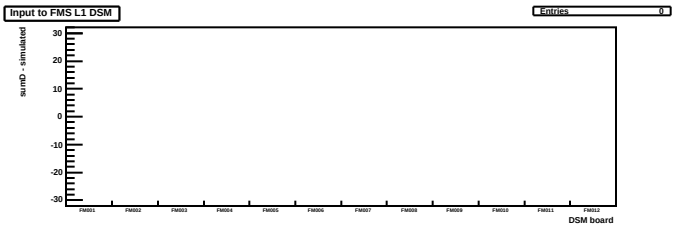

Input to FMS L0 DSM
Entries 9.6e+07
HT ADC
QT board

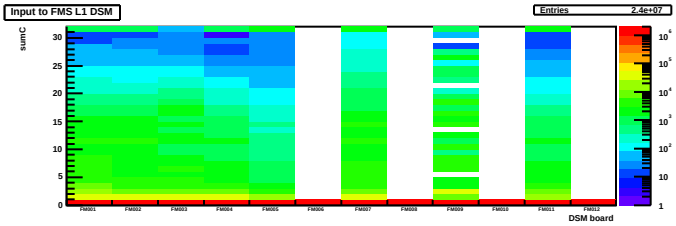

Input to FMS L0 DSM
Entries 257258
HT ADC - simulated
QT board

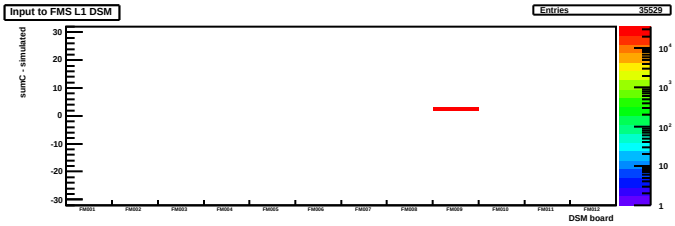

Input to FMS L0 DSM
Entries 9.6e+07
HT ID
QT board

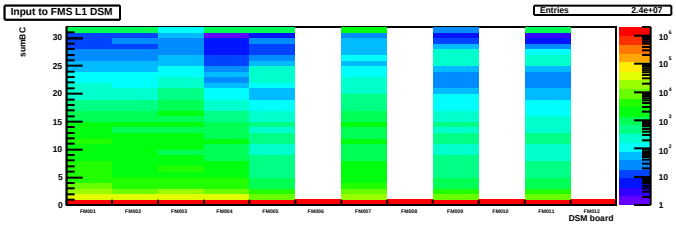

Input to FMS L0 DSM
Entries 2287386
HT ID - simulated
QT board

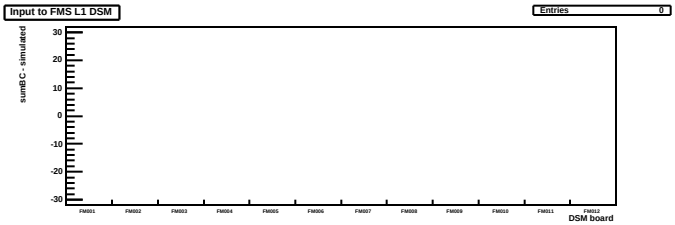

Input to FMS L1 DSM
Entries 2.4e+07
sumD
DSM board

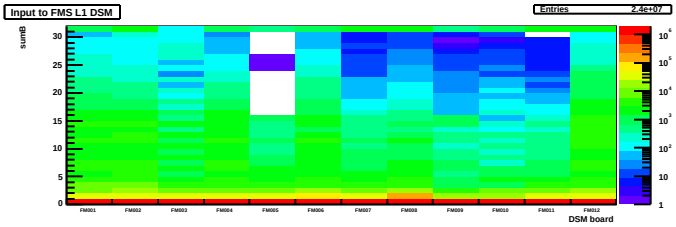

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

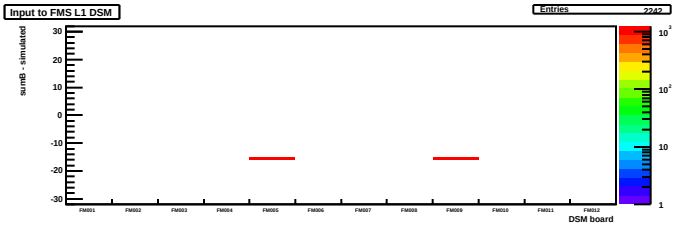

Input to FMS L1 DSM
Entries 2.4e+07
sumC
DSM board

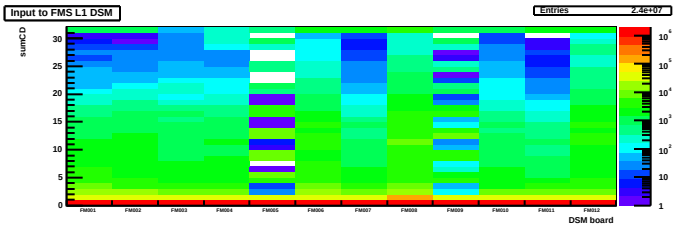

Input to FMS L1 DSM
Entries 35529
sumC - simulated
DSM board

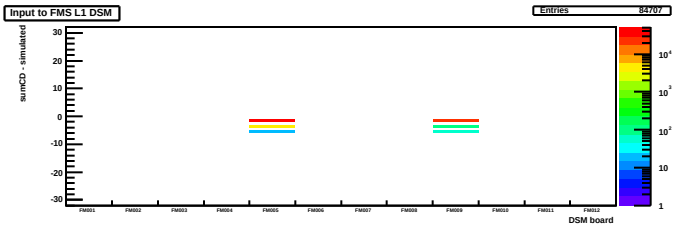

Input to FMS L1 DSM
Entries 2.4e+07
sumBC
DSM board

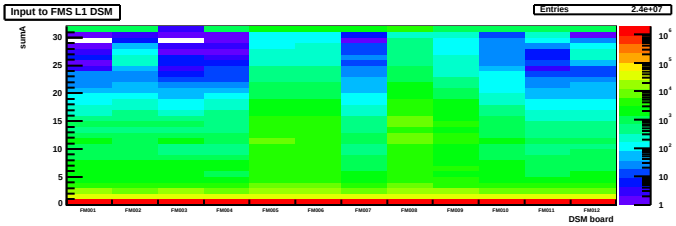

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

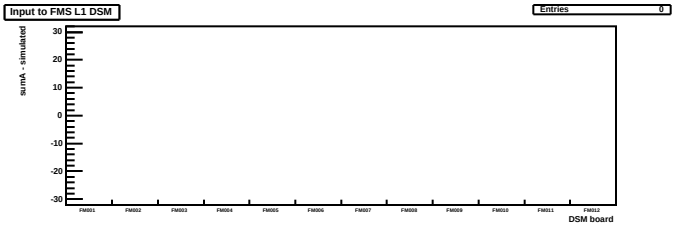

Input to FMS L1 DSM
Entries 2.4e+07
sumB
DSM board

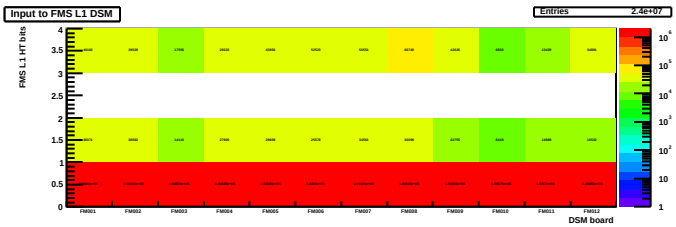

Input to FMS L1 DSM
Entries 2242
sumB - simulated
DSM board

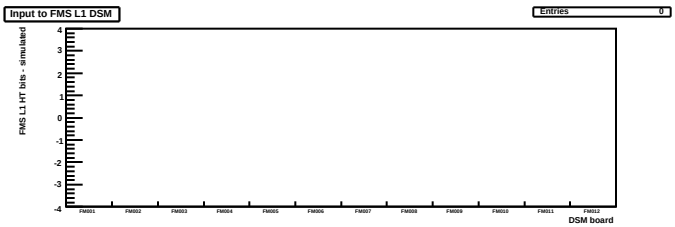

Input to FMS L1 DSM
Entries 2.4e+07
sumCD
DSM board

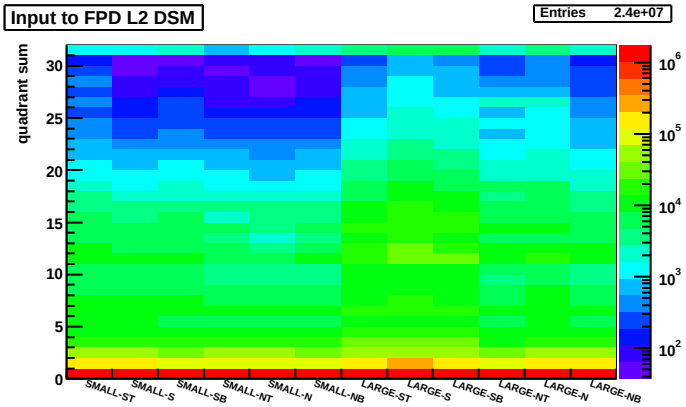

Input to FMS L1 DSM
Entries 84707
sumCD - simulated
DSM board

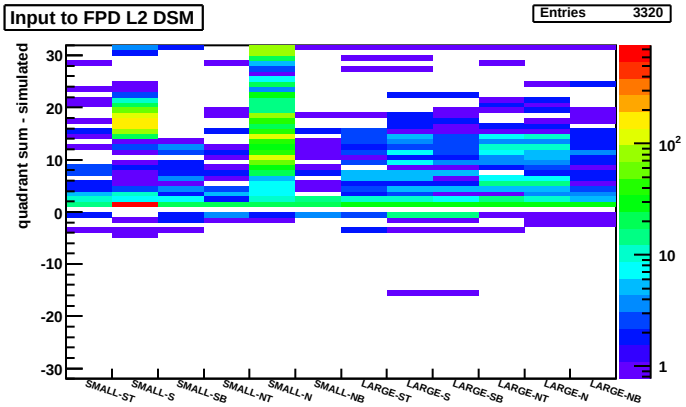

Input to FMS L1 DSM
Entries 2.4e+07
sumA
DSM board

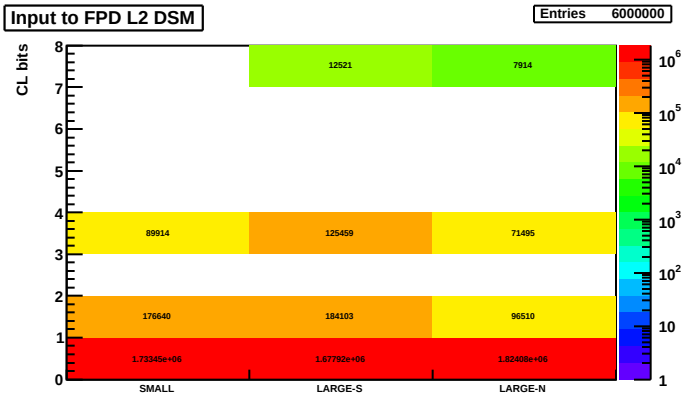

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

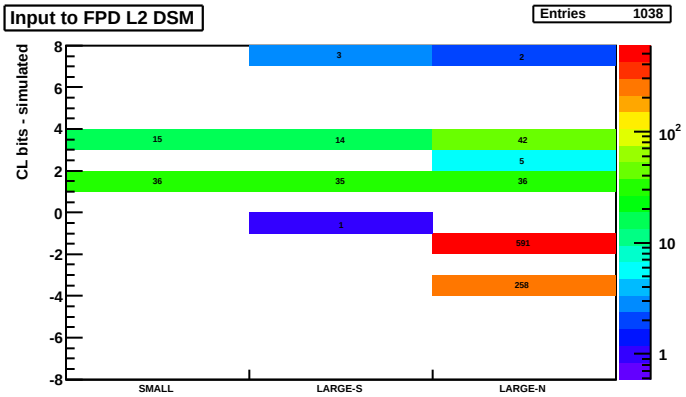

Input to FMS L1 DSM
Entries 2.4e+07
FMS L1 HT bits
DSM board

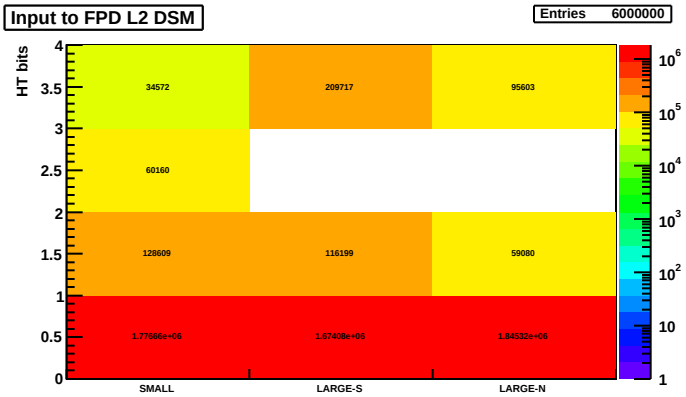

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

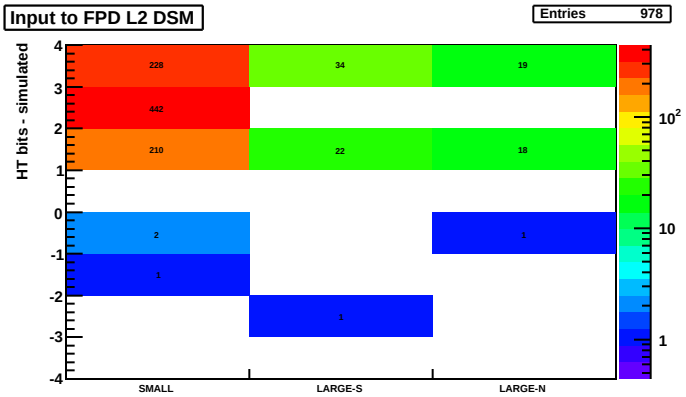

Input to FPD L2 DSM
Entries 2.4e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

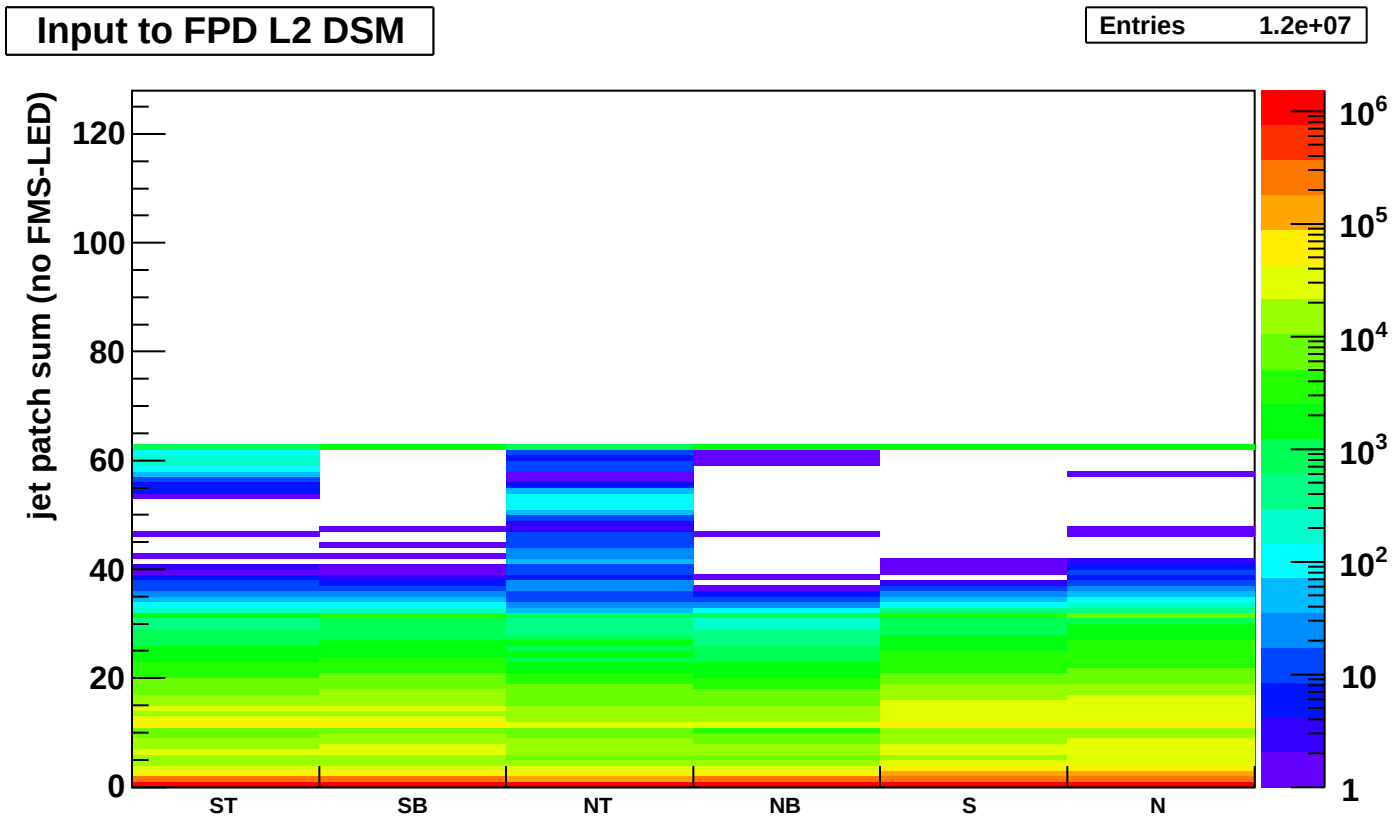

Input to FPD L2 DSM
Entries 3320
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

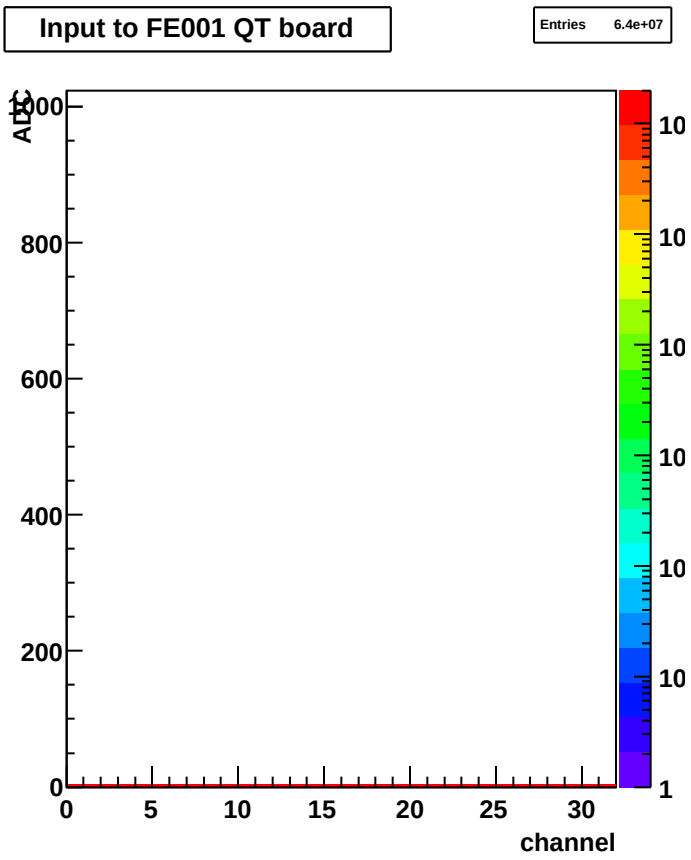

Input to FPD L2 DSM
Entries 6000000
CL bits
12521
7914
89914
125459
71495
176640
184103
96510
1.73345e+06
1.67792e+06
1.82408e+06
SMALL
LARGE-S
LARGE-N

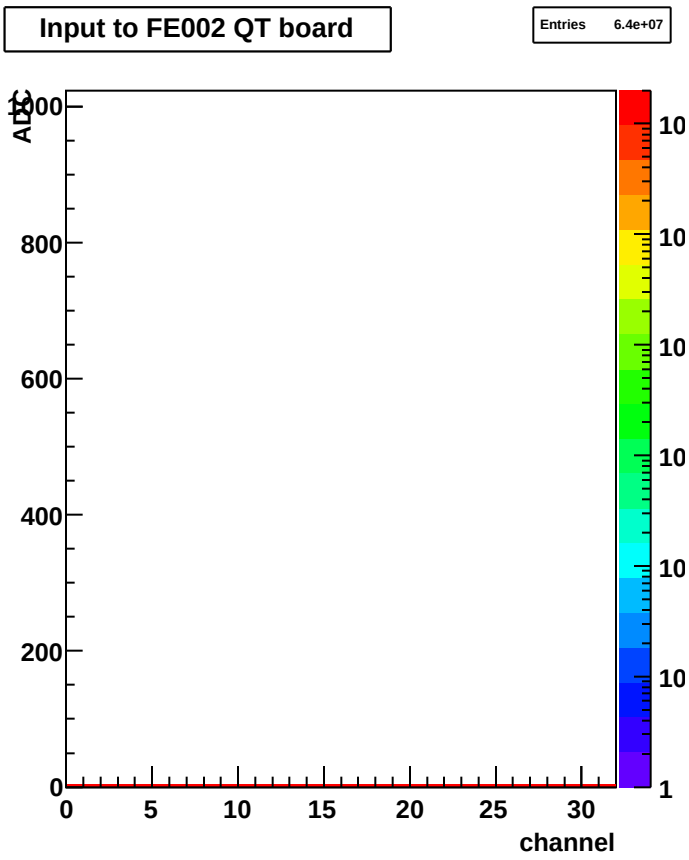

Input to FPD L2 DSM
Entries 1038
CL bits - simulated
3
2
15
14
42
5
36
35
36
1
591
258
SMALL
LARGE-S
LARGE-N

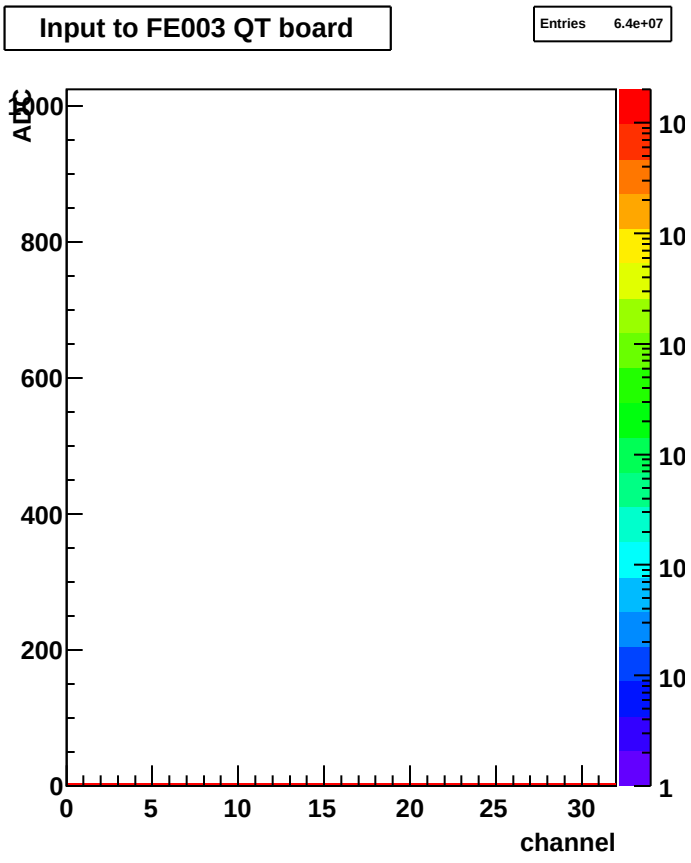

Input to FPD L2 DSM
Entries 6000000
HT bits
34572
209717
95603
60160
128609
116199
59080
1.77666e+06
1.67408e+06
1.84532e+06
SMALL
LARGE-S
LARGE-N

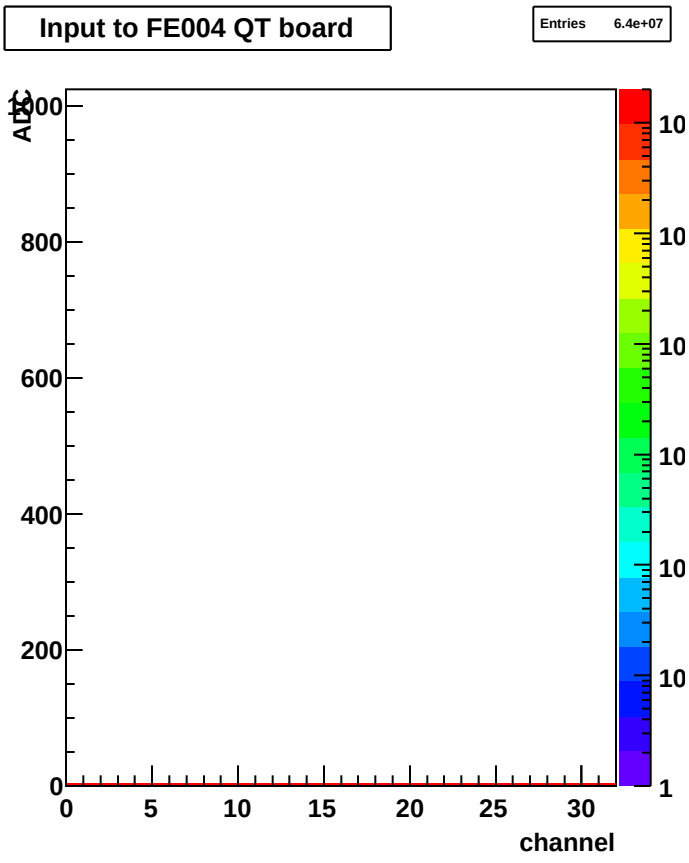

Input to FPD L2 DSM
Entries 978
HT bits - simulated
228
34
19
442
210
22
18
2
1
1
1
SMALL
LARGE-S
LARGE-N

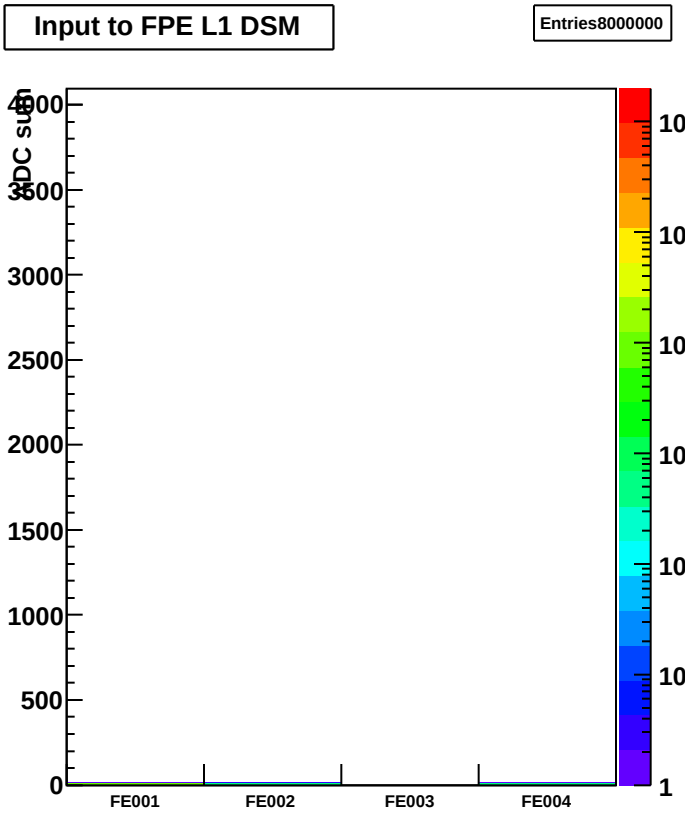

Input to FPD L2 DSM
Entries 1.2e+07
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

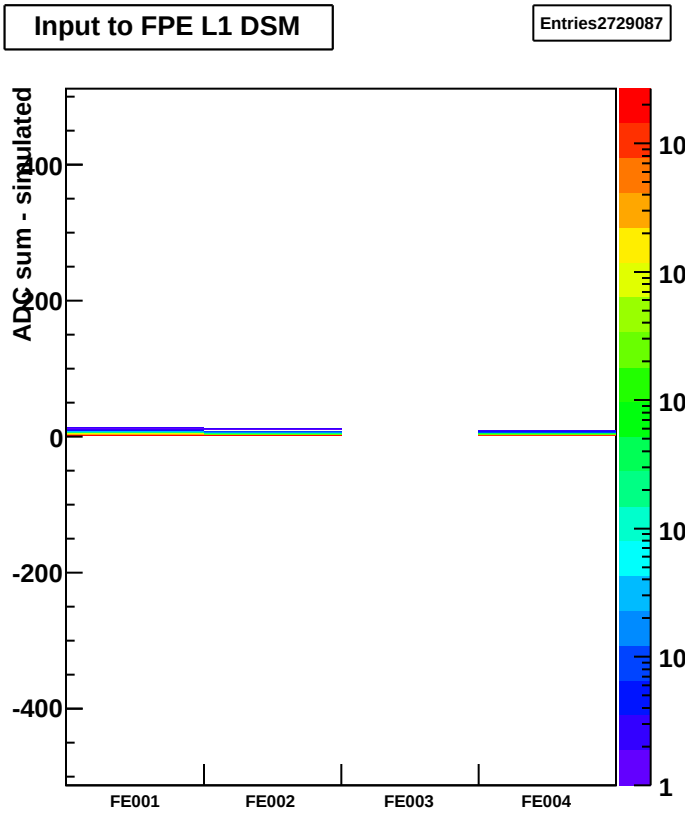

Input to FE001 QT board
Entries 6.4e+07
ADC
channel

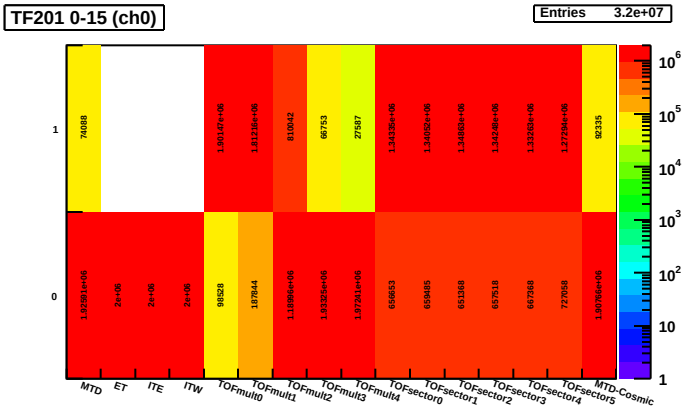

Input to FE002 QT board
Entries 6.4e+07
ADC
channel

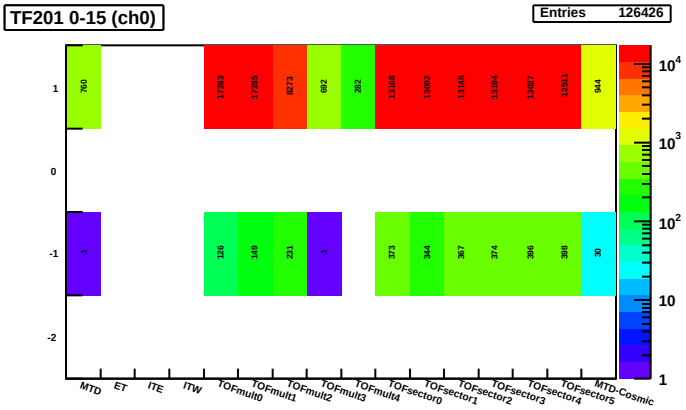

Input to FE003 QT board
Entries 6.4e+07
ADC
channel


Input to FE004 QT board
Entries 6.4e+07
ADC
channel


Input to FPE L1 DSM
Entries8000000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


Input to FPE L1 DSM
Entries2729087
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 3.2e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 126426
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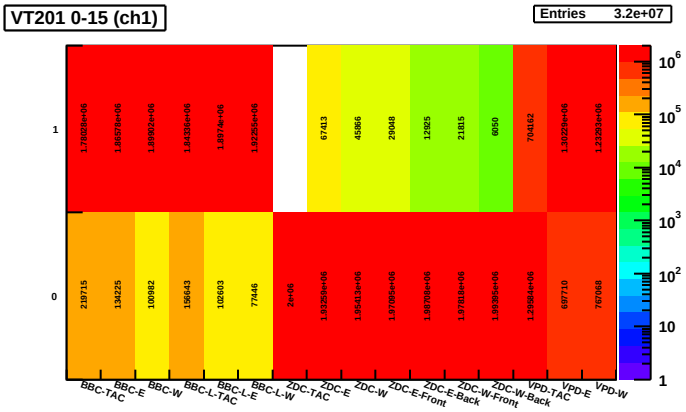
VT201 0-15 (ch1)
Entries 3.2e+07
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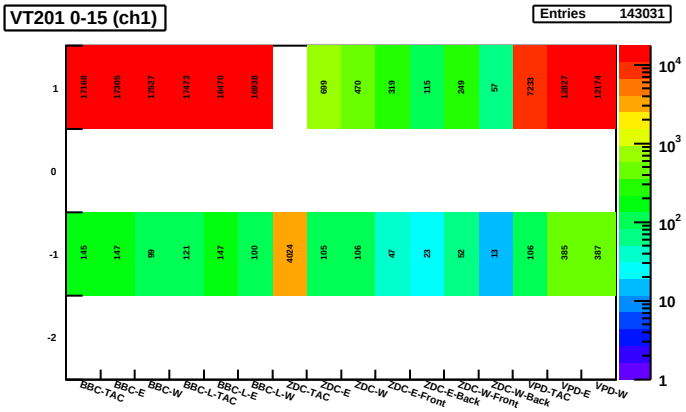
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Entries 143031
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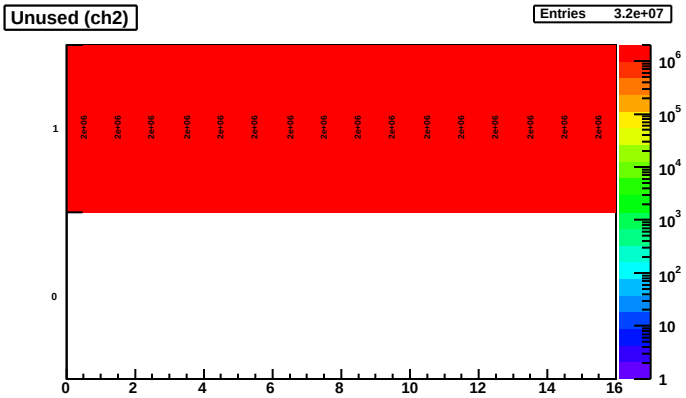
Unused (ch2)
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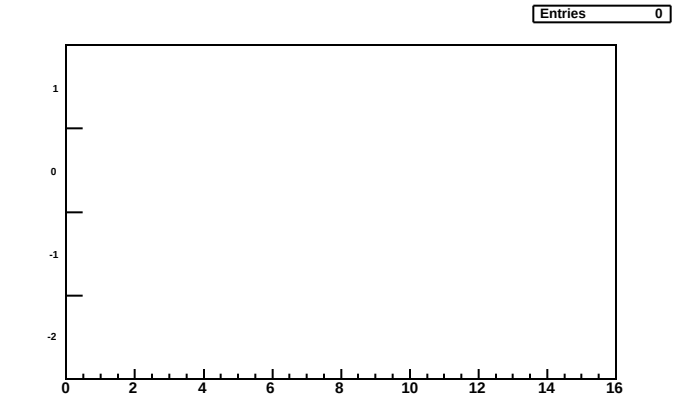
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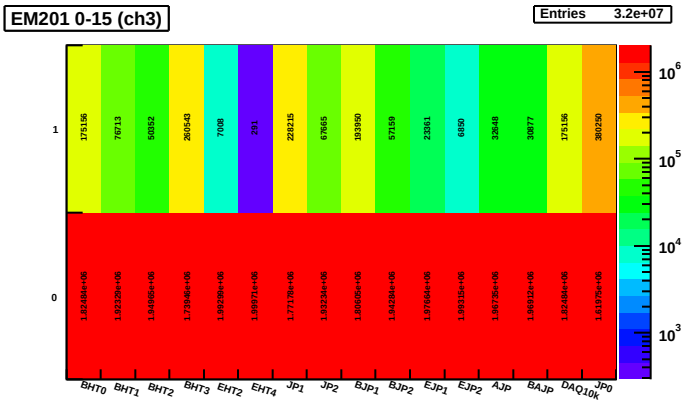
EM201 0-15 (ch3)
Entries 3.2e+07
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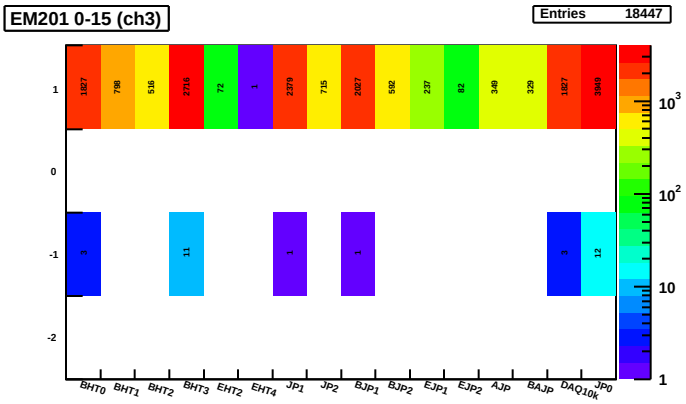
EM201 0-15 (ch3)
Entries 18447
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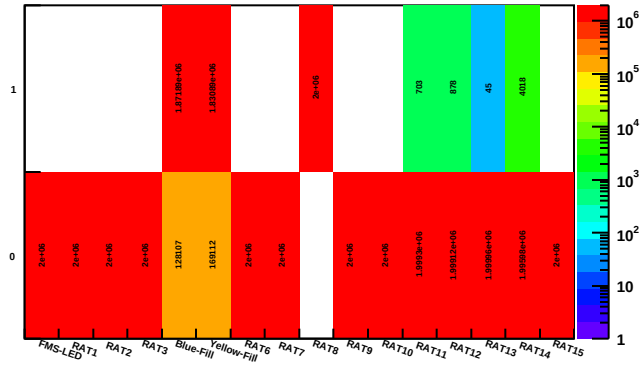
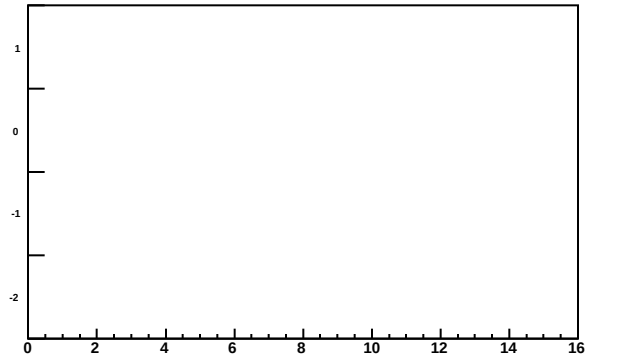
RAT board (ch4)





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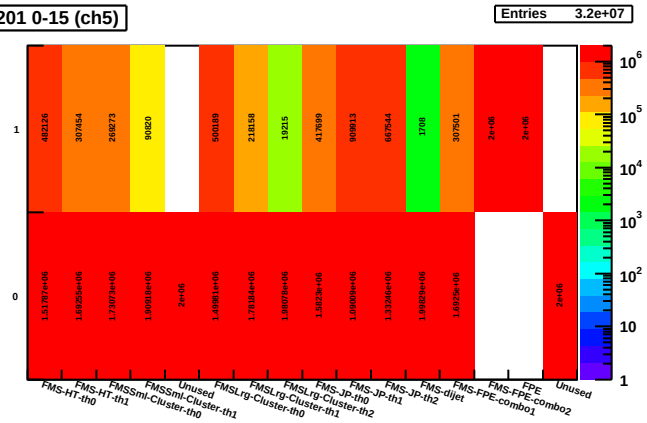

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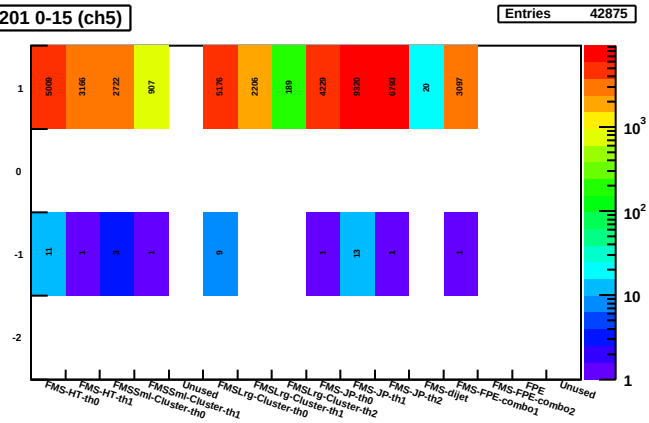
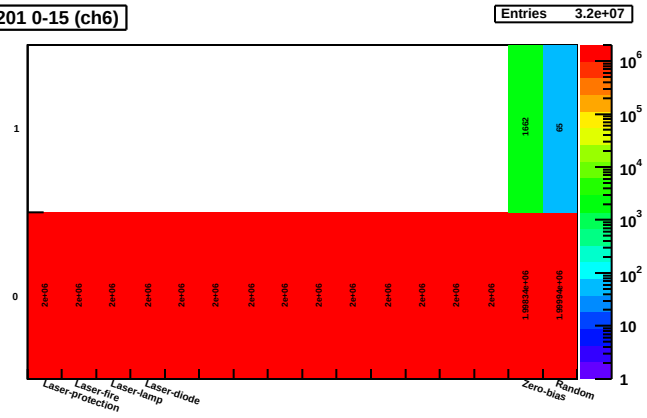
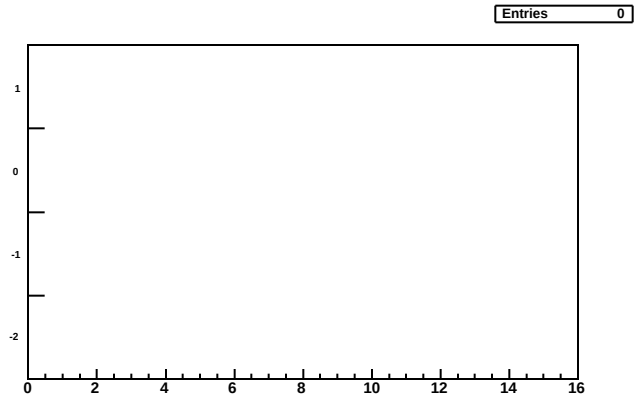
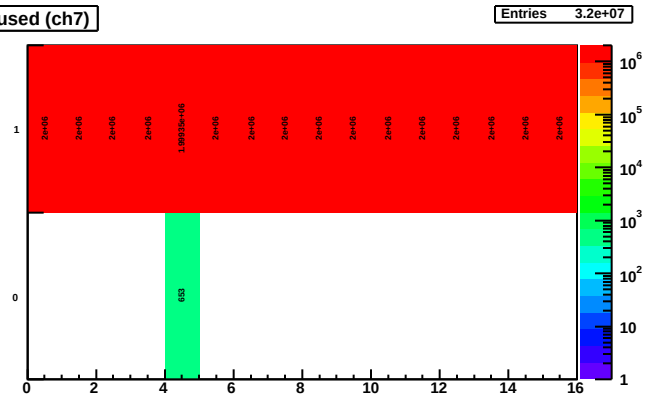
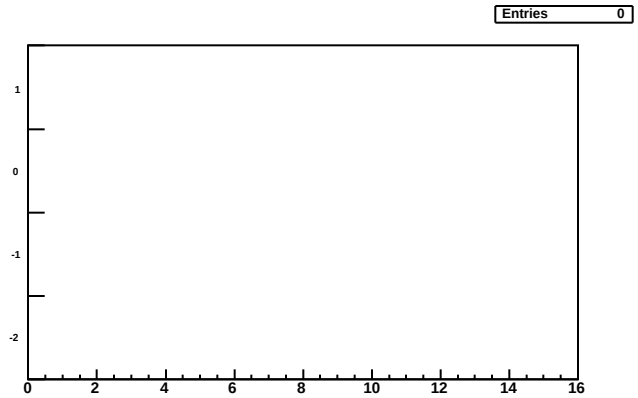


ST201 0-15 (ch6)





Unused (ch7)