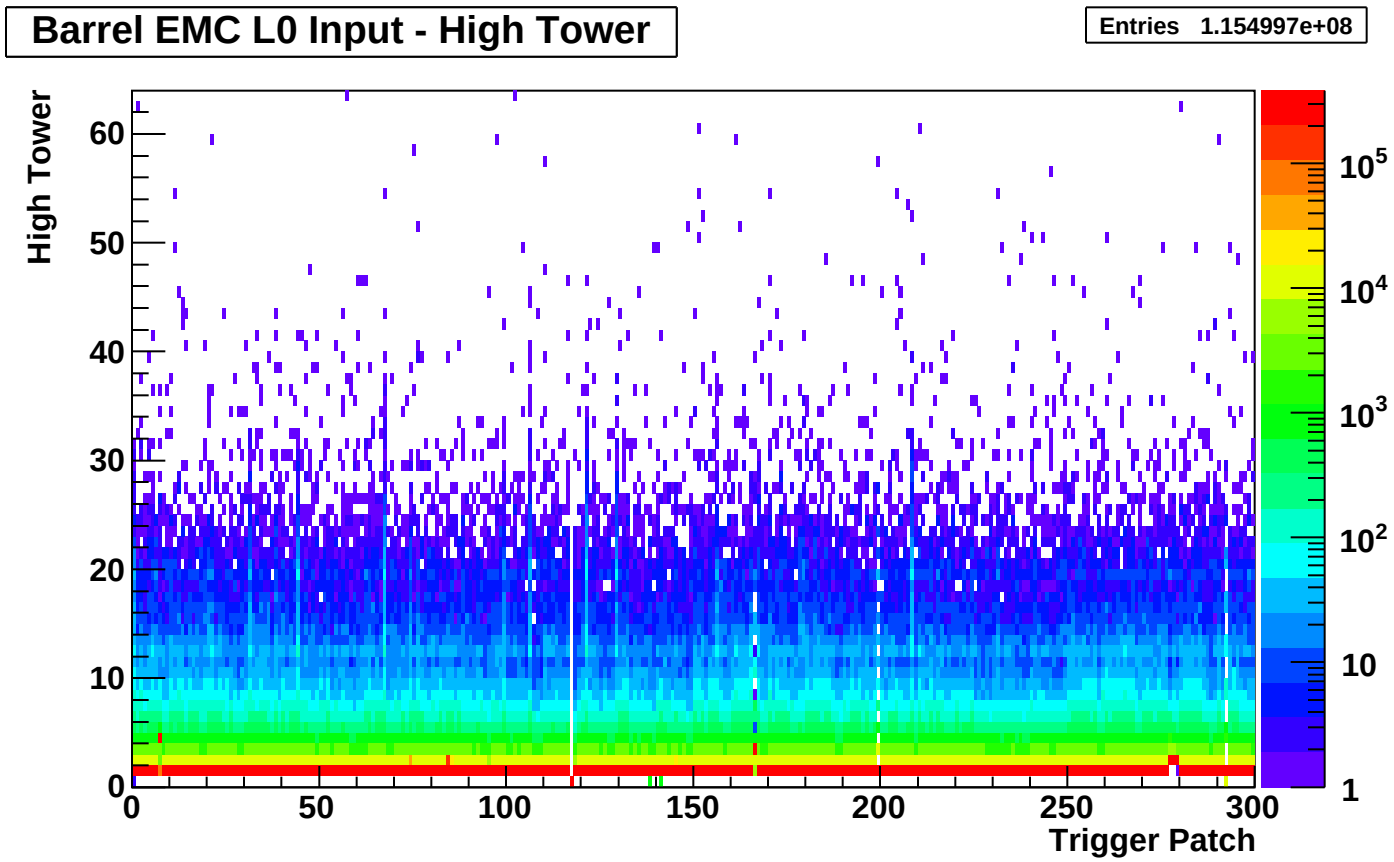
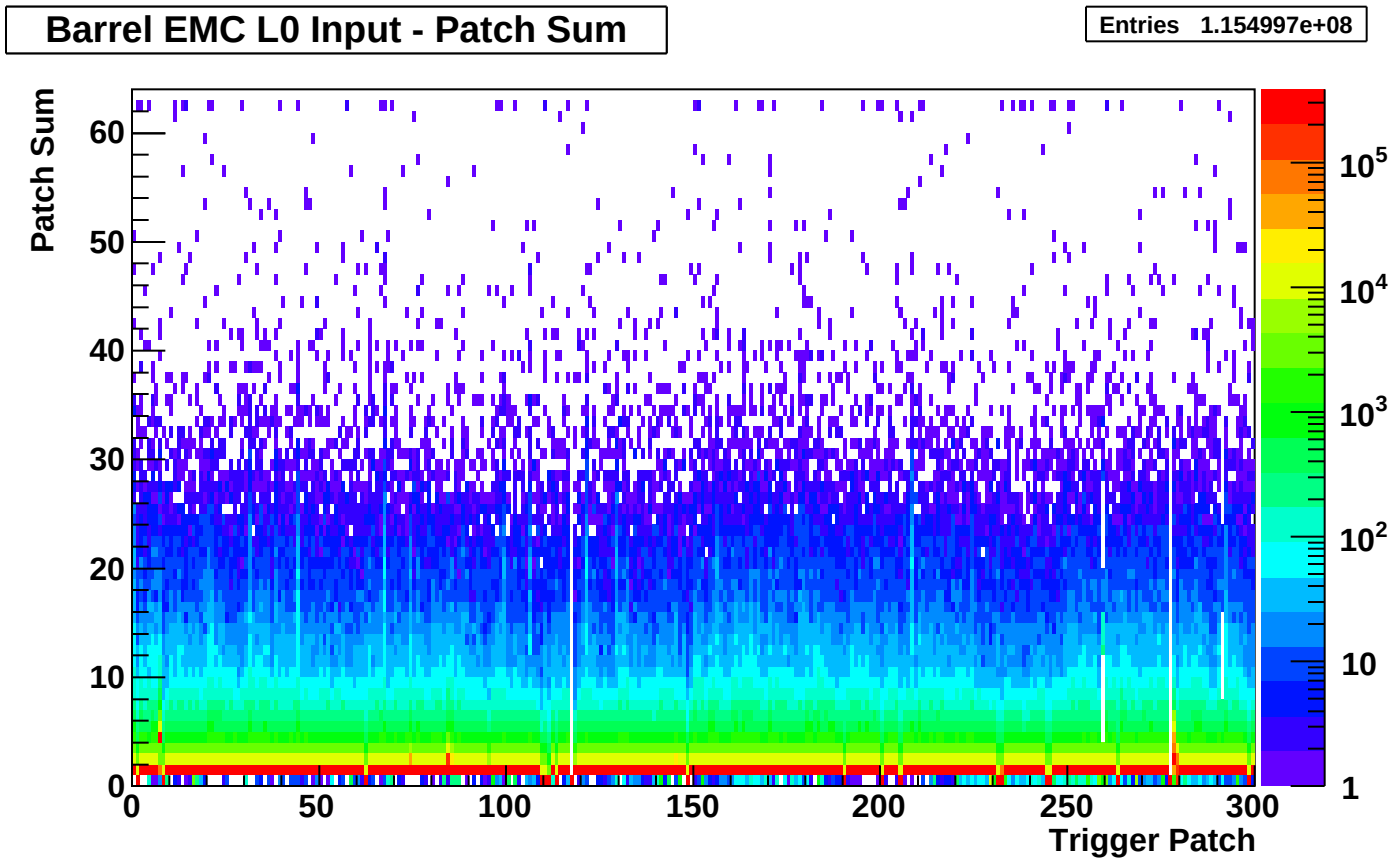
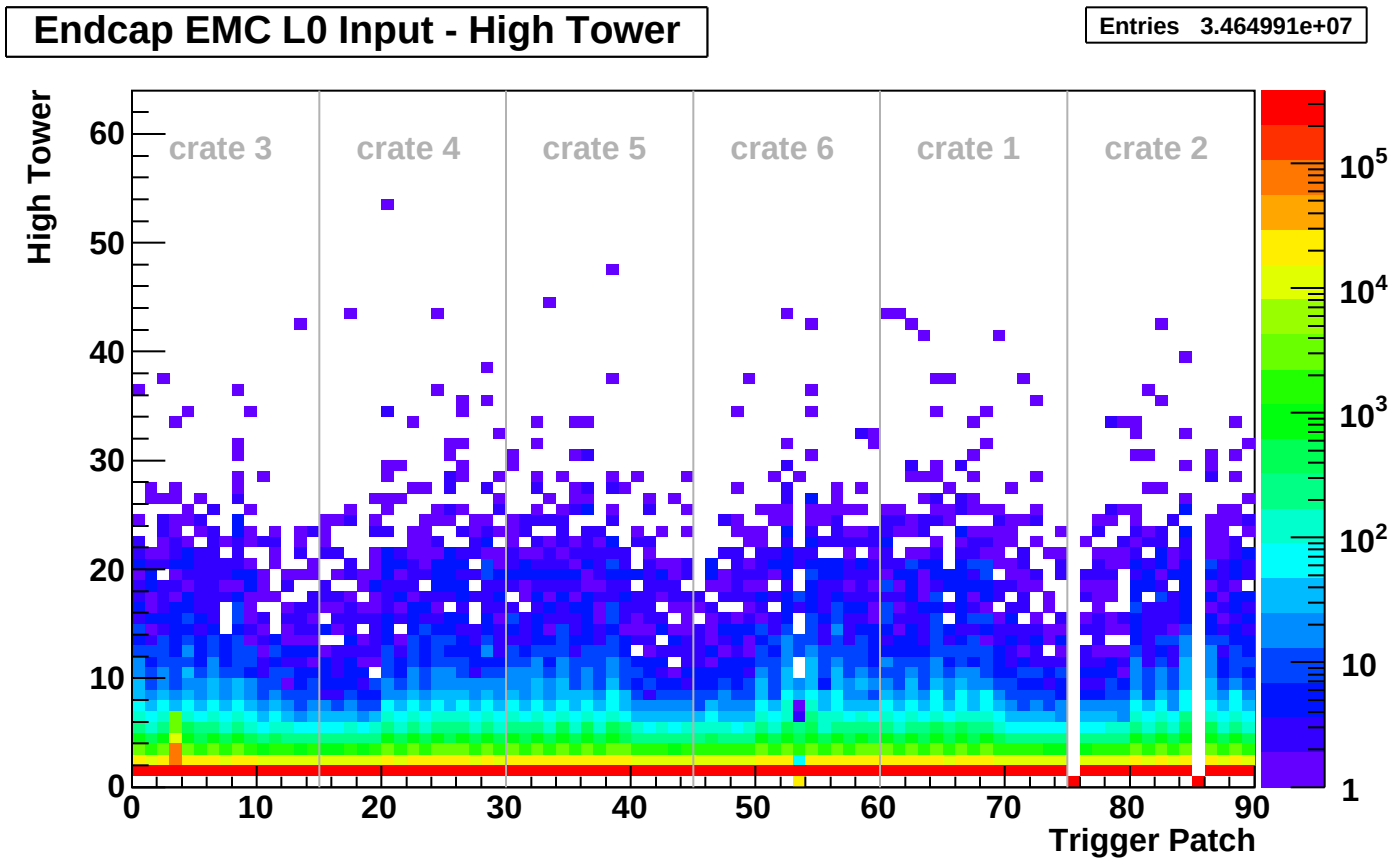
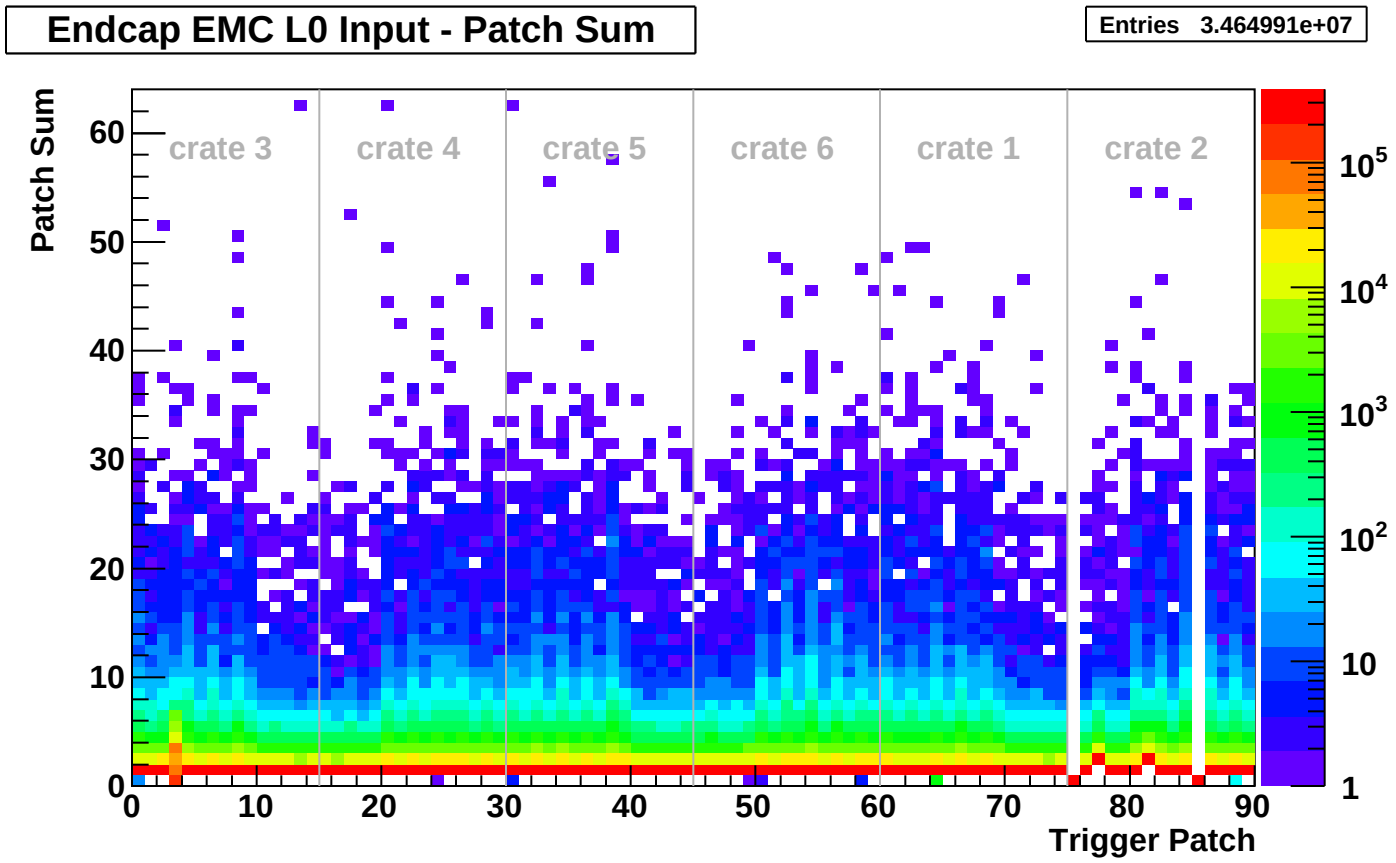
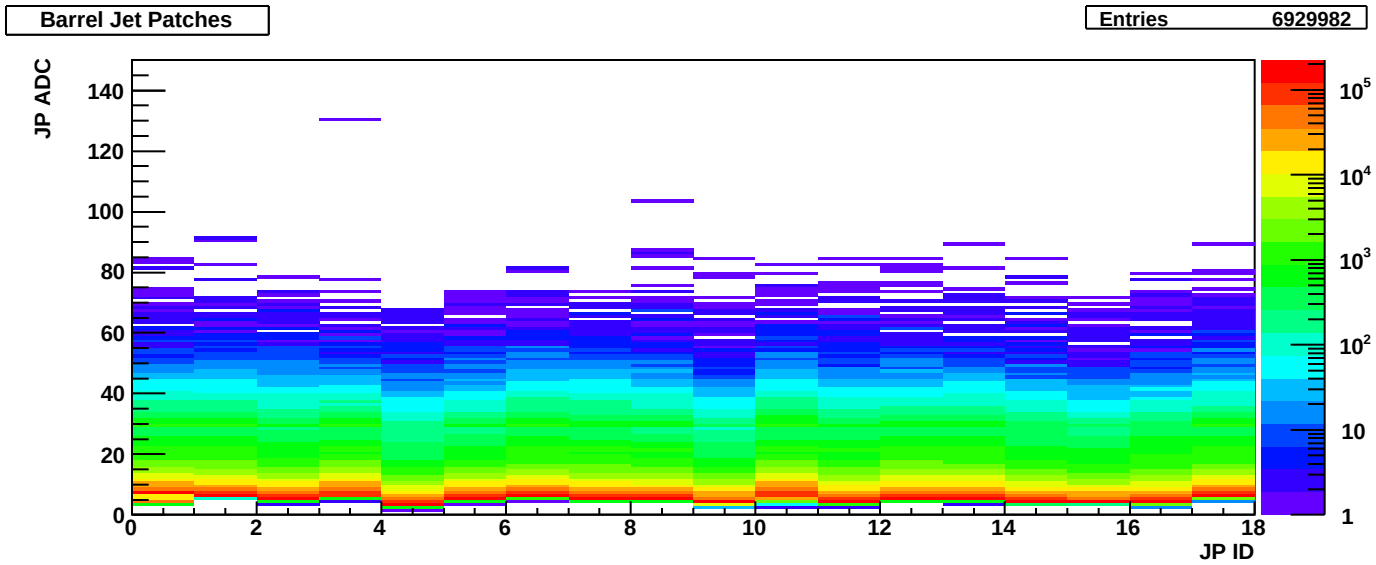
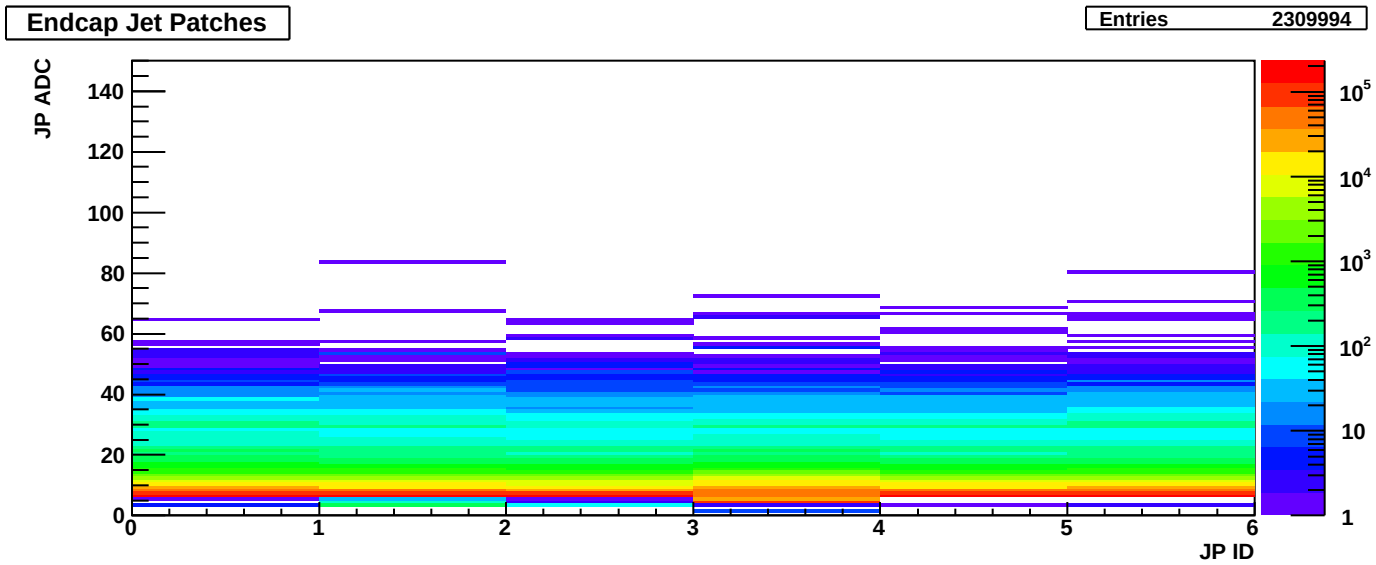

Barrel EMC L0 Input - High Tower
Entries 1.154997e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

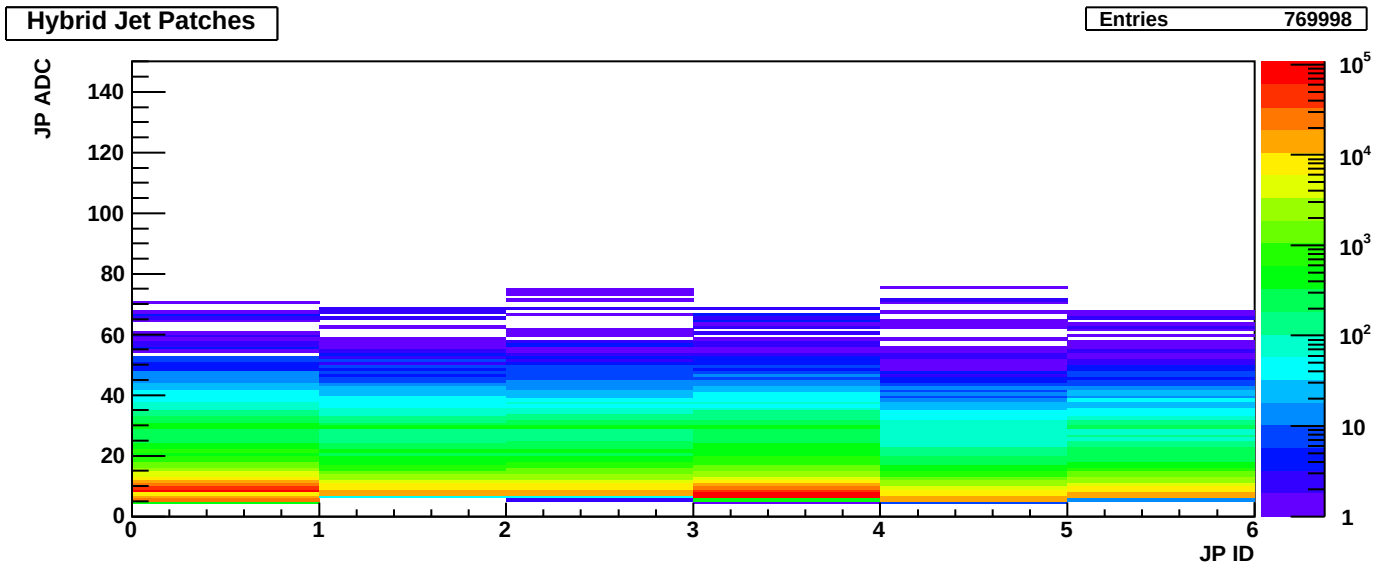

Barrel EMC L0 Input - Patch Sum
Entries 1.154997e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

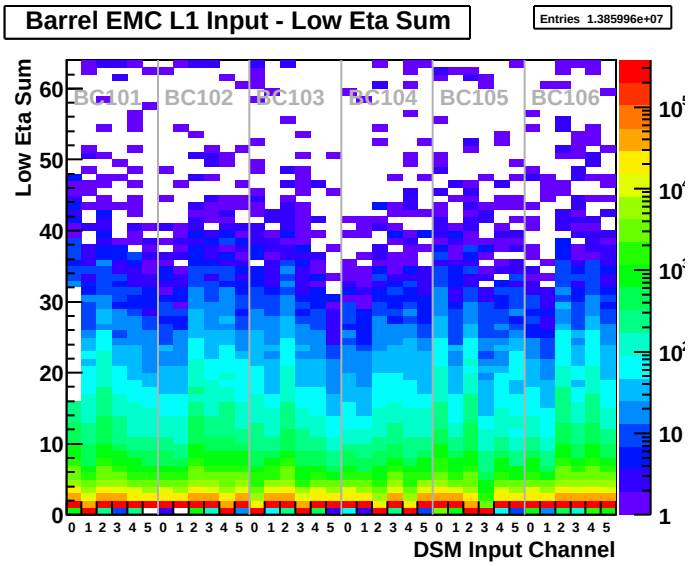

Endcap EMC L0 Input - High Tower
Entries 3.464991e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

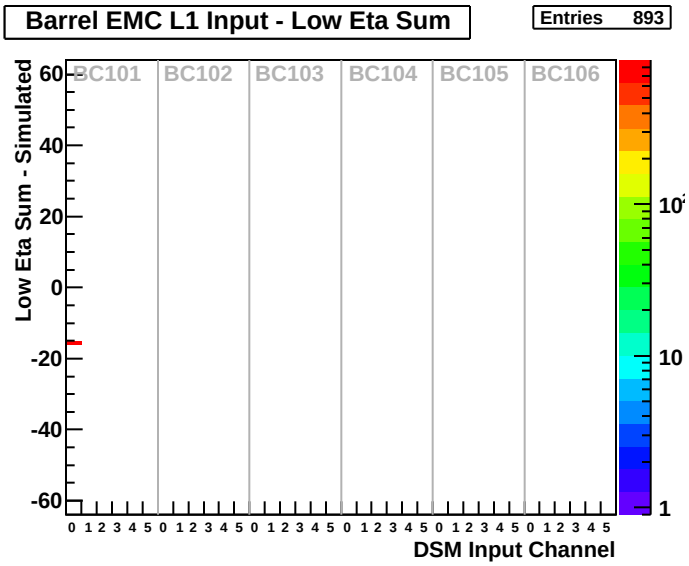

Endcap EMC L0 Input - Patch Sum
Entries 3.464991e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

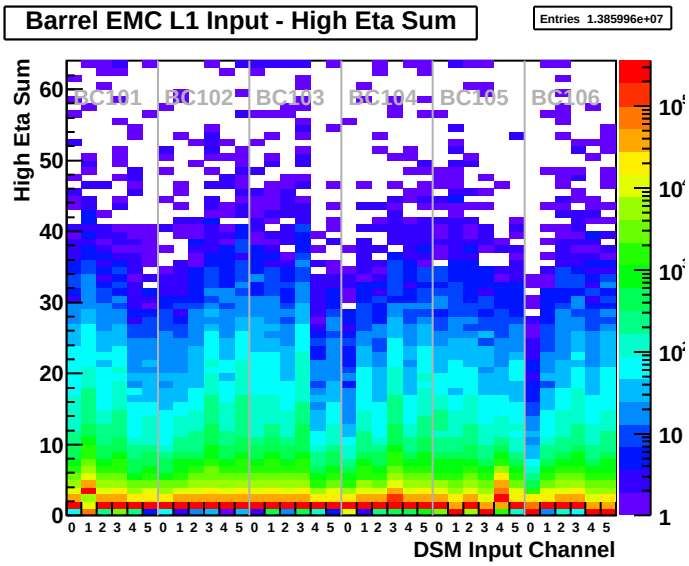

Barrel Jet Patches
Entries 6929982
JP ADC
JP ID

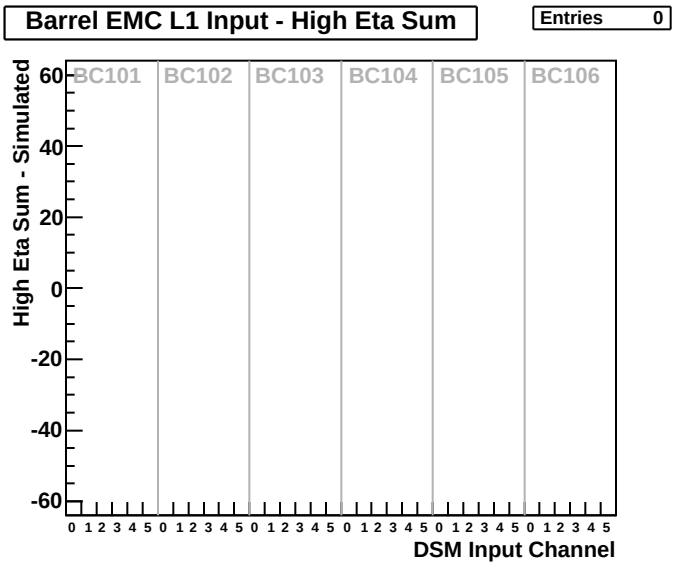

Endcap Jet Patches
Entries 2309994
JP ADC
JP ID

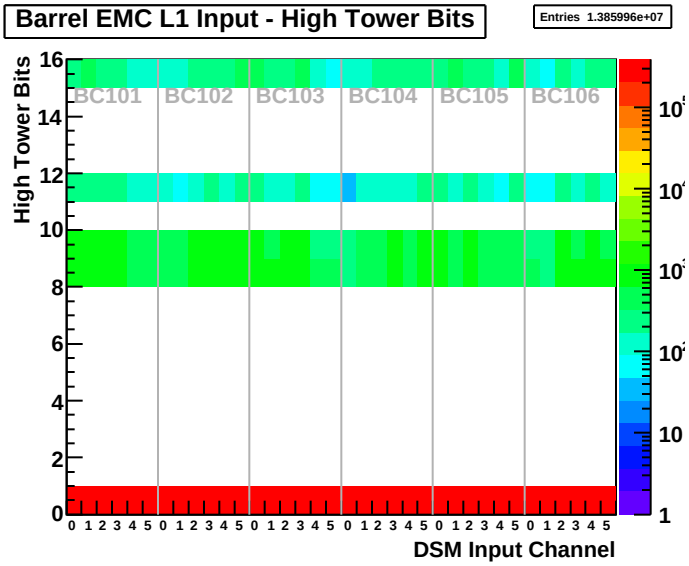

Hybrid Jet Patches
Entries 769998
JP ADC
JP ID

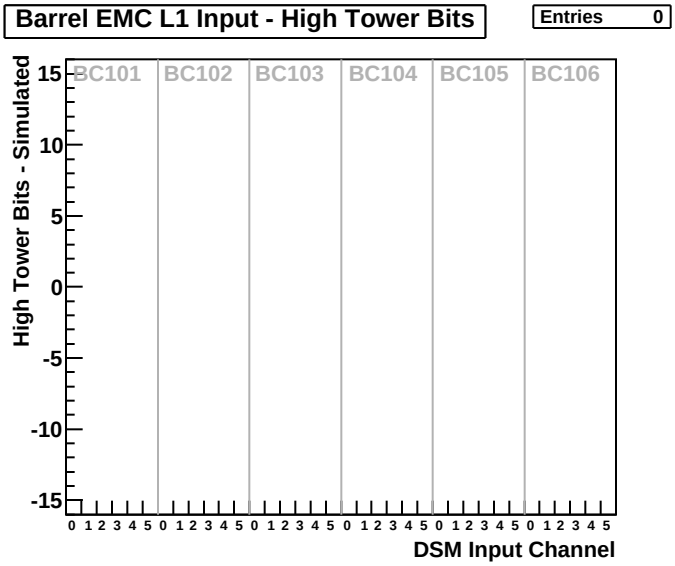

Barrel EMC L1 Input - Low Eta Sum
Entries 1.385996e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

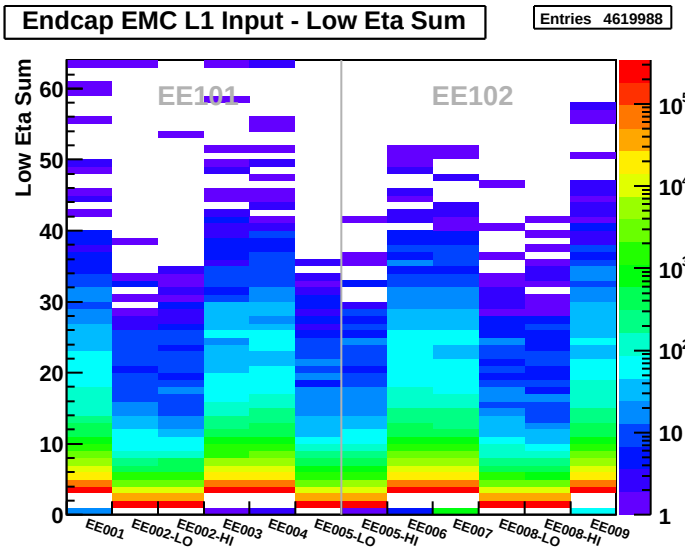

Barrel EMC L1 Input - Low Eta Sum
Entries 893
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

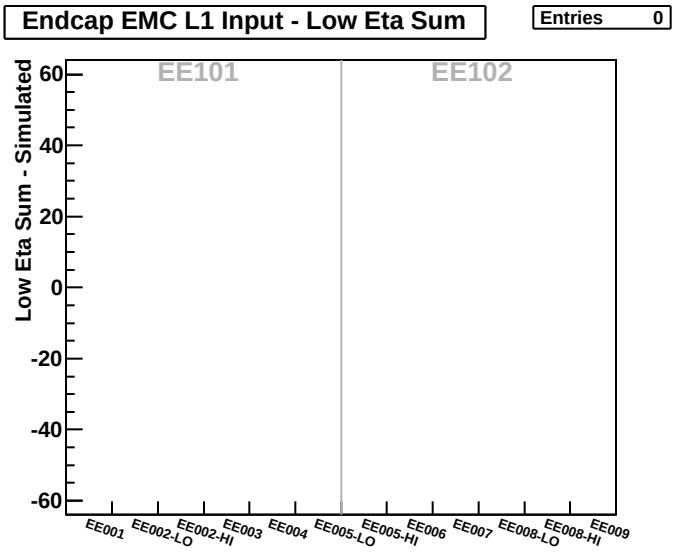

Barrel EMC L1 Input - High Eta Sum
Entries 1.385996e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

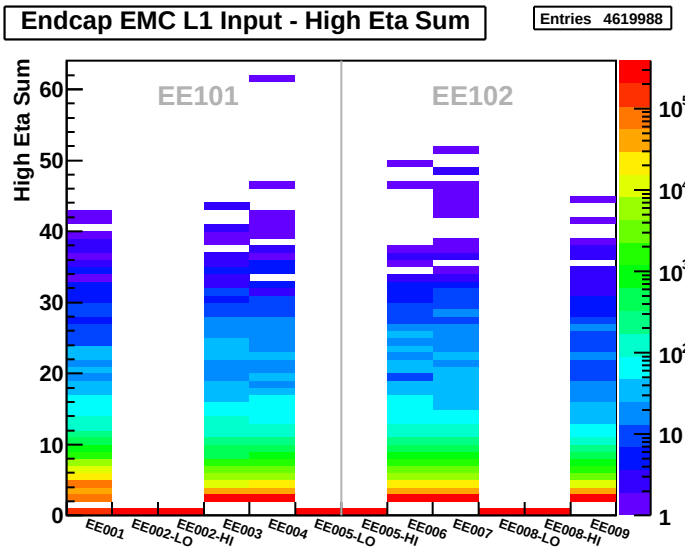

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

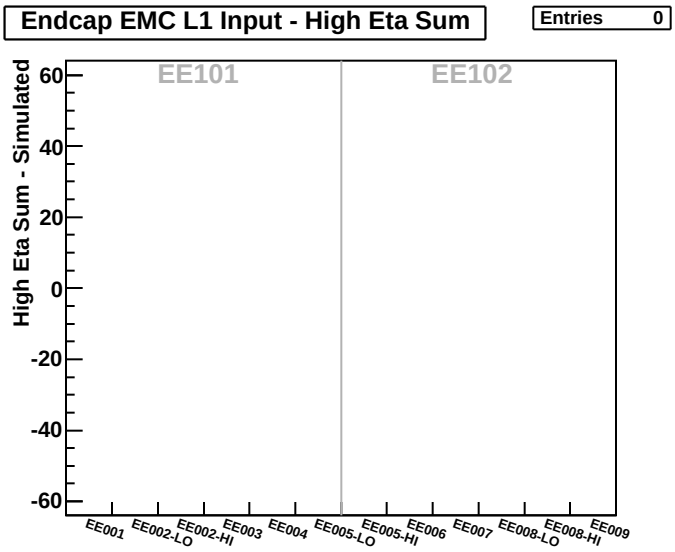

Barrel EMC L1 Input - High Tower Bits
Entries 1.385996e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

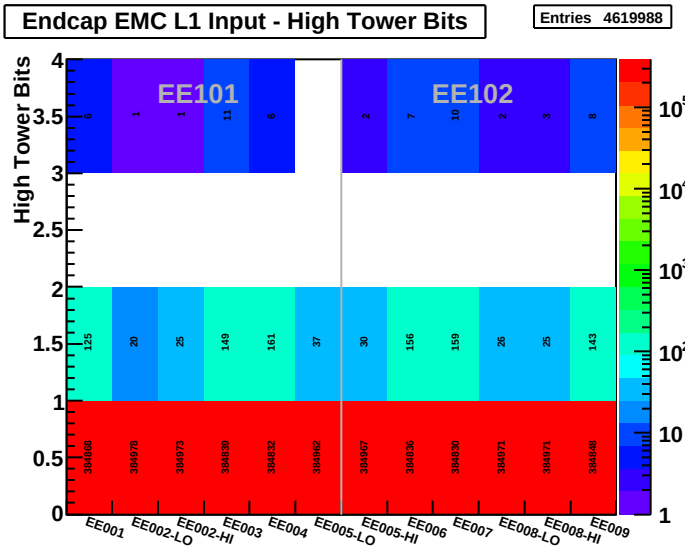

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

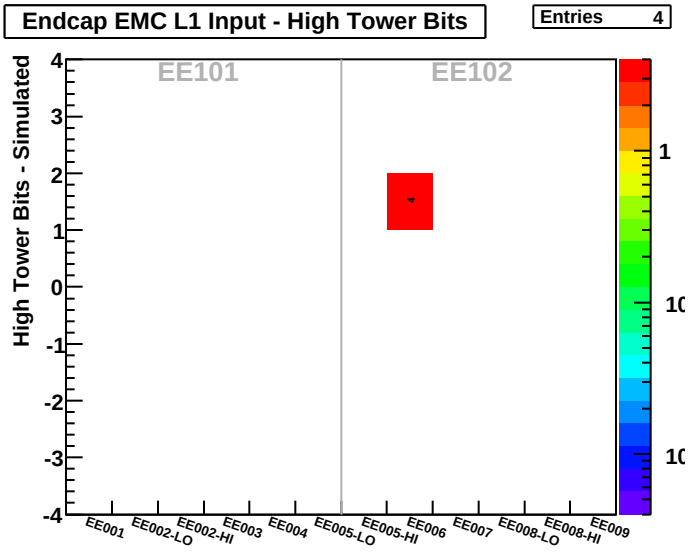

Endcap EMC L1 Input - Low Eta Sum
Entries 4619988
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

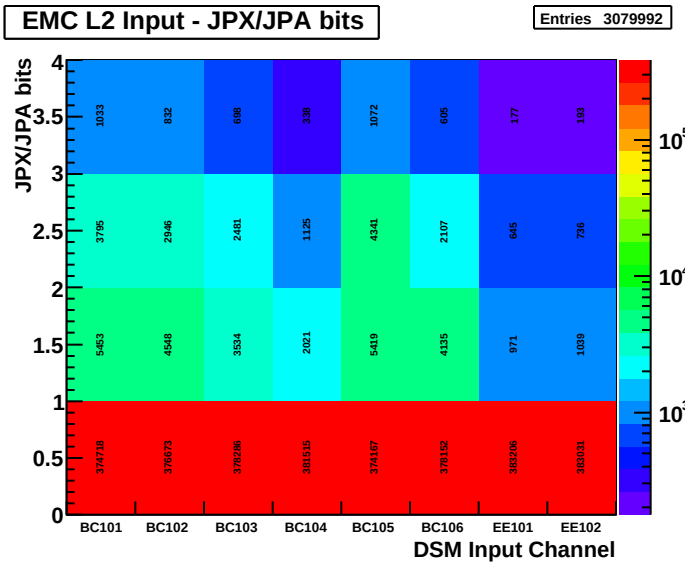

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

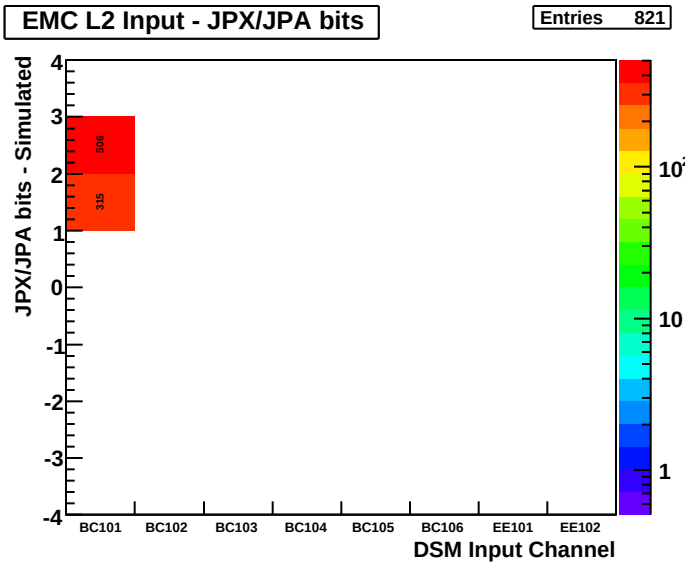

Endcap EMC L1 Input - High Eta Sum
Entries 4619988
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

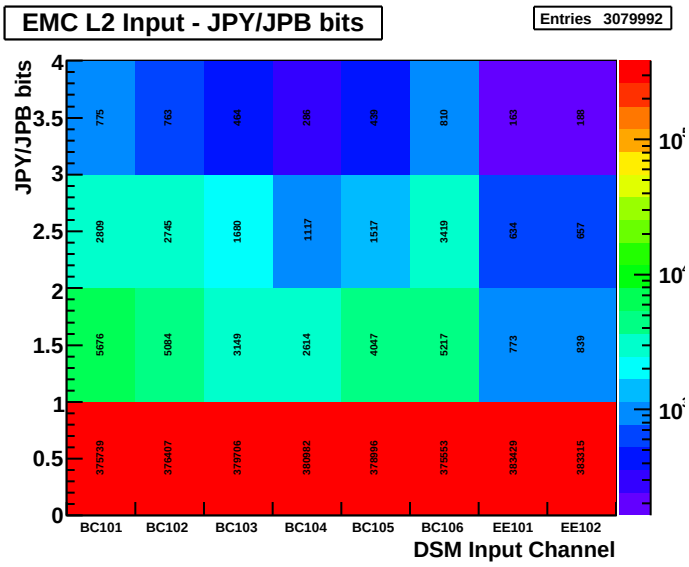

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

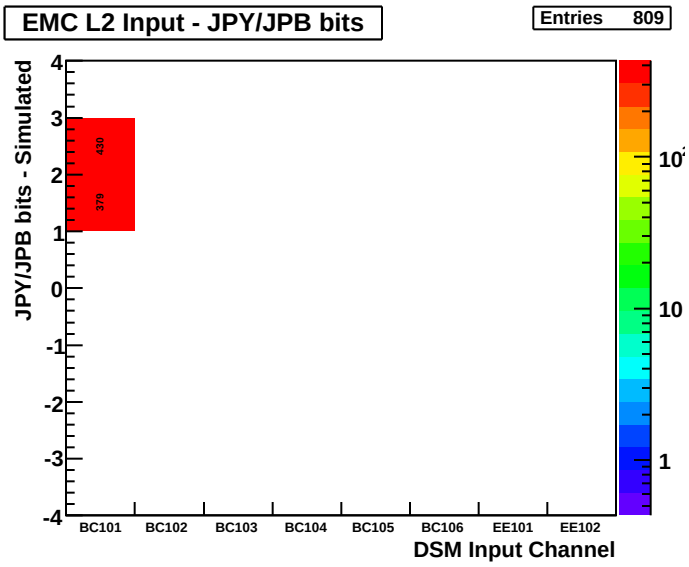

Endcap EMC L1 Input - High Tower Bits
Entries 4619988
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

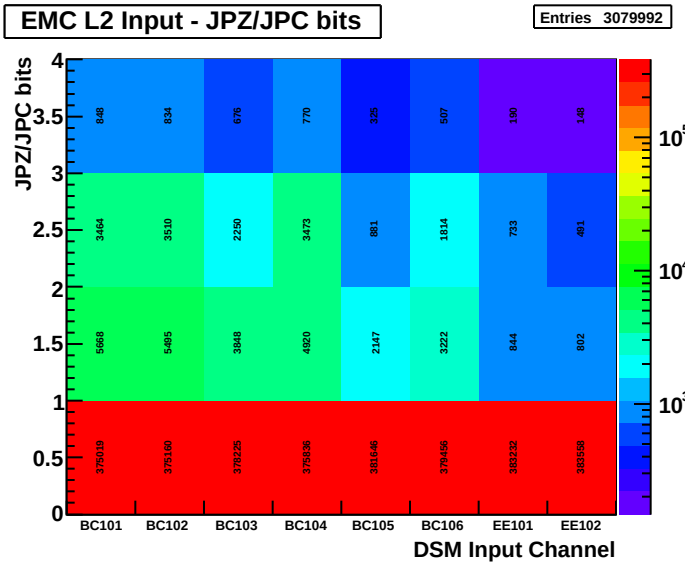

Endcap EMC L1 Input - High Tower Bits
Entries 4
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

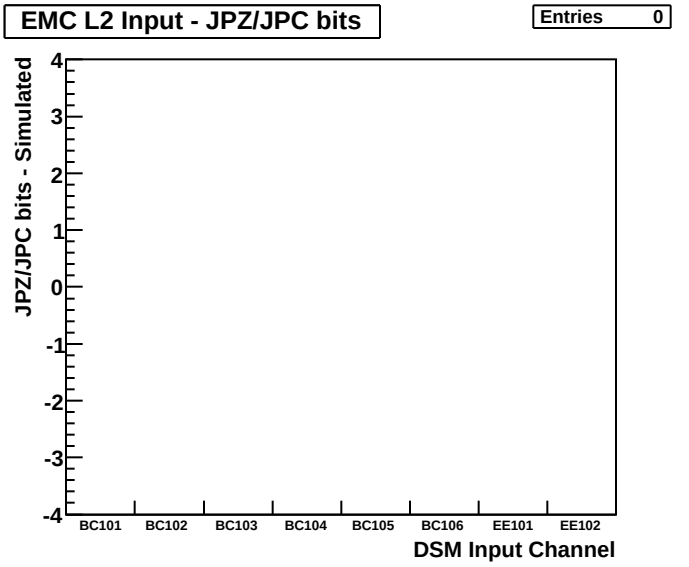

EMC L2 Input - JPX/JPA bits
Entries 3079992
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1033 832 698 338 1072 605 177 193
3795 2946 2481 1125 4341 2107 645 736
5453 4548 3534 2021 5419 4135 971 1039
374718 375673 378286 381515 374167 378152 383206 383031

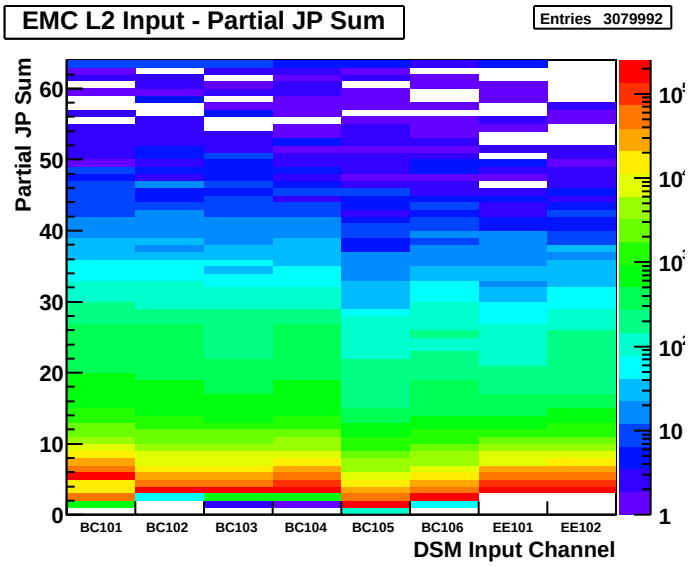

EMC L2 Input - JPX/JPA bits
Entries 821
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
506
315

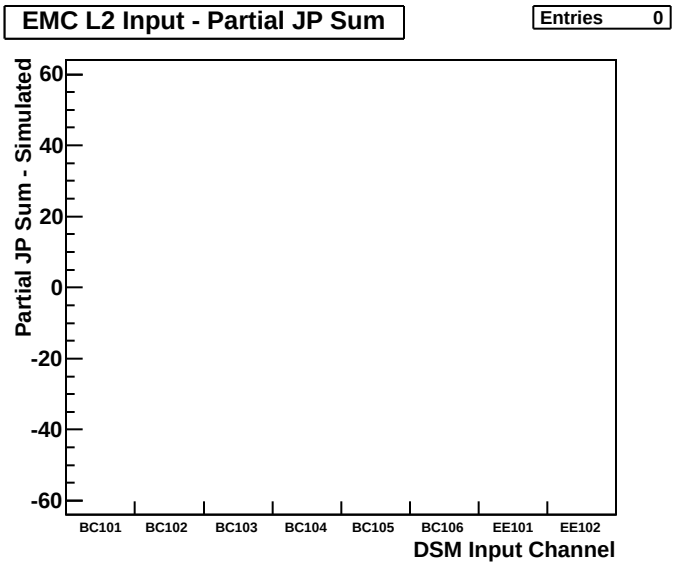

EMC L2 Input - JPY/JPB bits
Entries 3079992
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
775 763 464 286 439 810 163 188
2809 2745 1680 1117 1517 3419 634 657
5676 5084 3149 2614 4047 5217 773 839
375739 376407 378706 380982 378996 375553 383429 383315

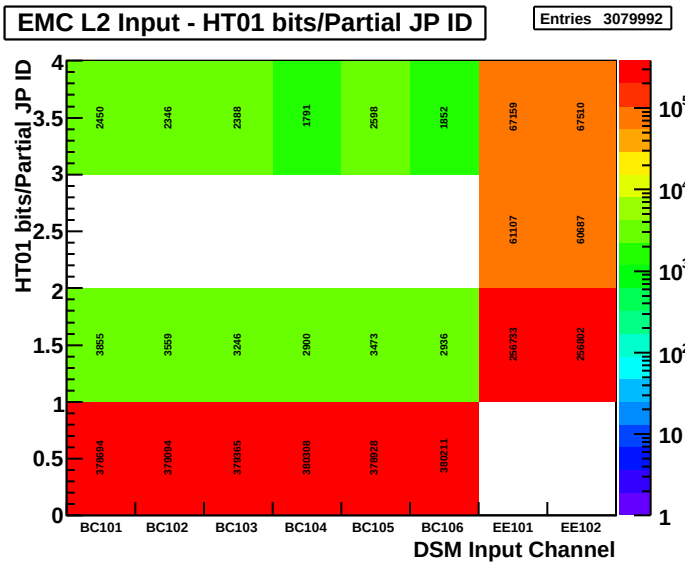

EMC L2 Input - JPY/JPB bits
Entries 809
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
430
379

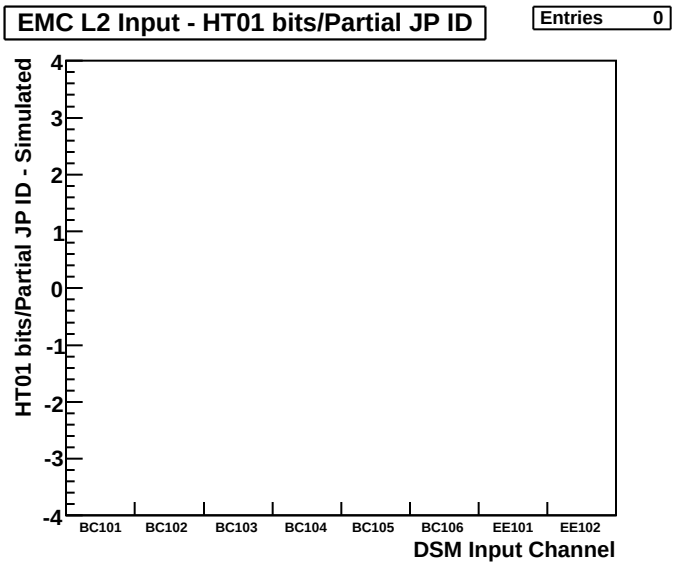

EMC L2 Input - JPZ/JPC bits
Entries 3079992
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
848 834 676 770 325 507 130 148
3464 3510 2250 3473 881 1814 733 491
5668 5495 3848 4920 2147 3222 844 802
375019 375160 378225 375836 381646 379456 383232 383558

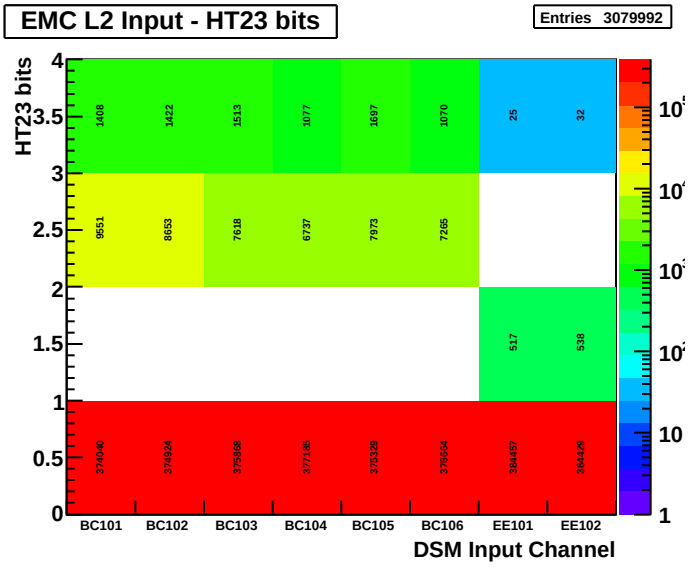

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

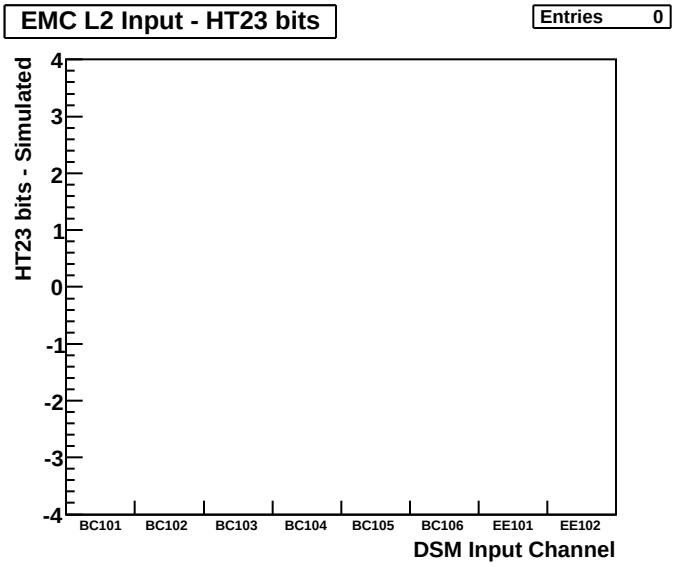

EMC L2 Input - Partial JP Sum
Entries 3079992
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

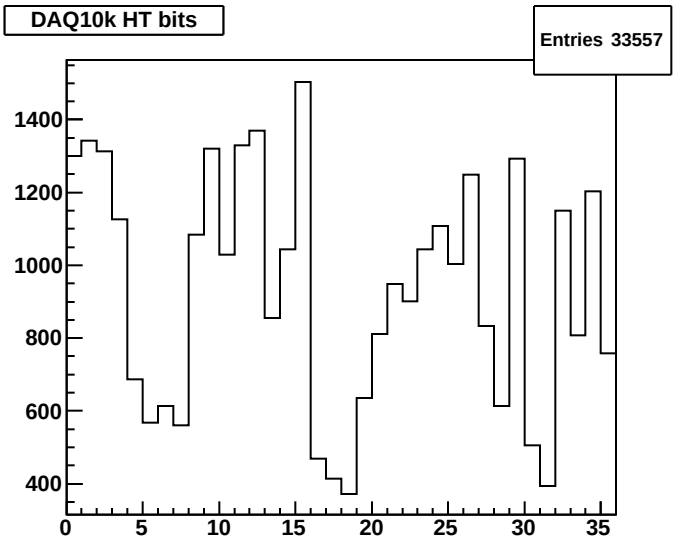

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

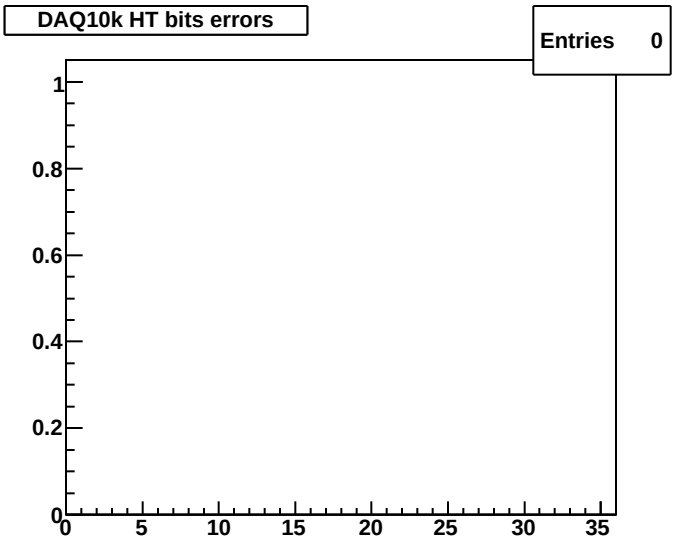

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3079992
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

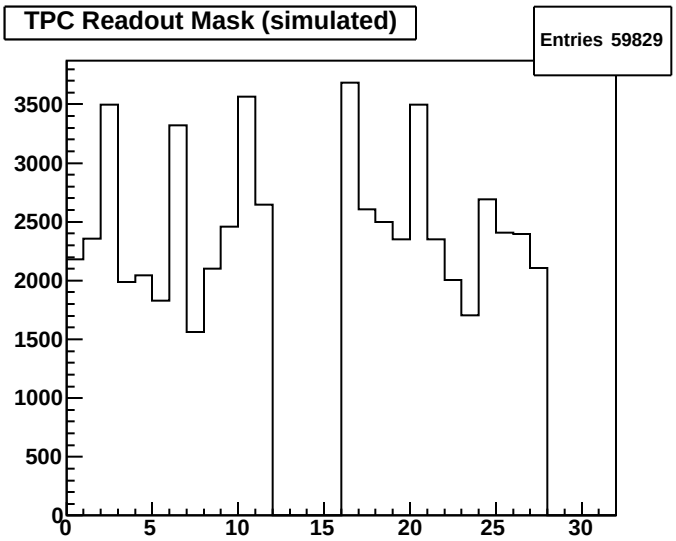

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

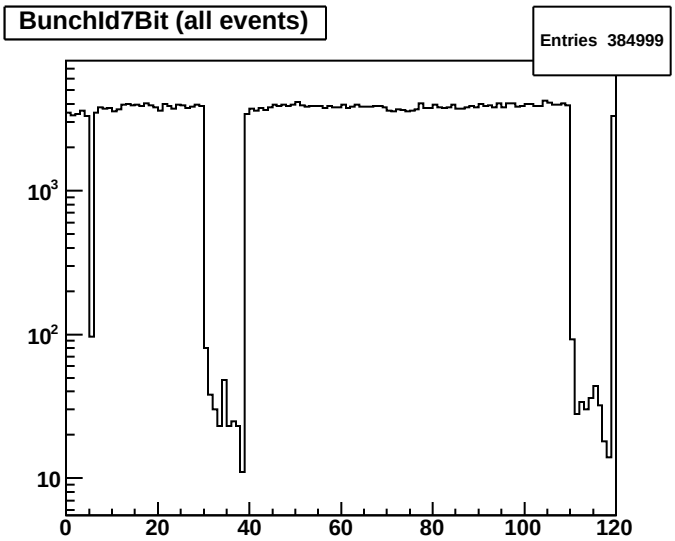

EMC L2 Input - HT23 bits
Entries 3079992
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

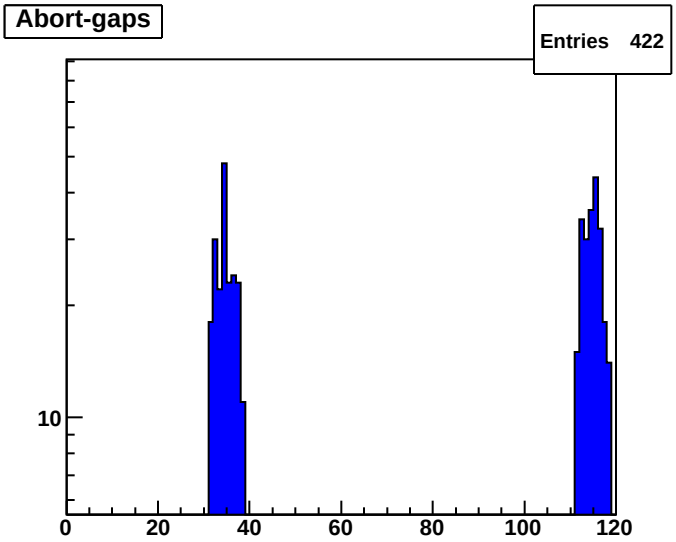

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

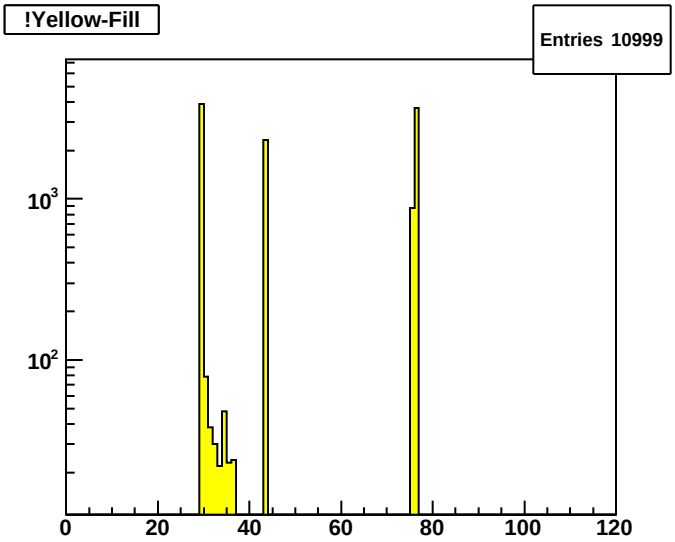

DAQ10k HT bits
Entries 33557
1400
1200
1000
800
600
400
0 5 10 15 20 25 30 35

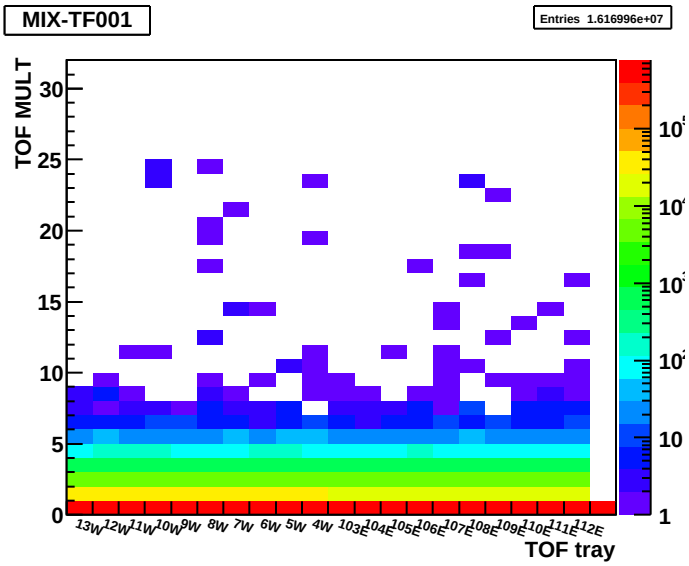

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

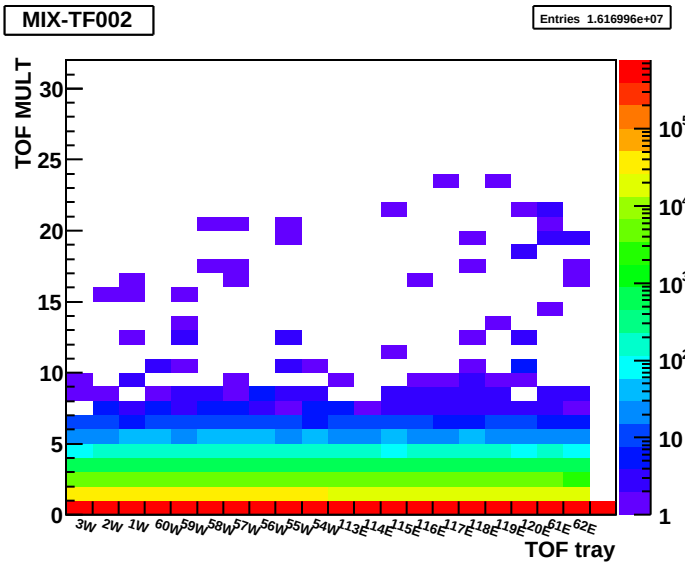

TPC Readout Mask (simulated)
Entries 59829
3500
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30

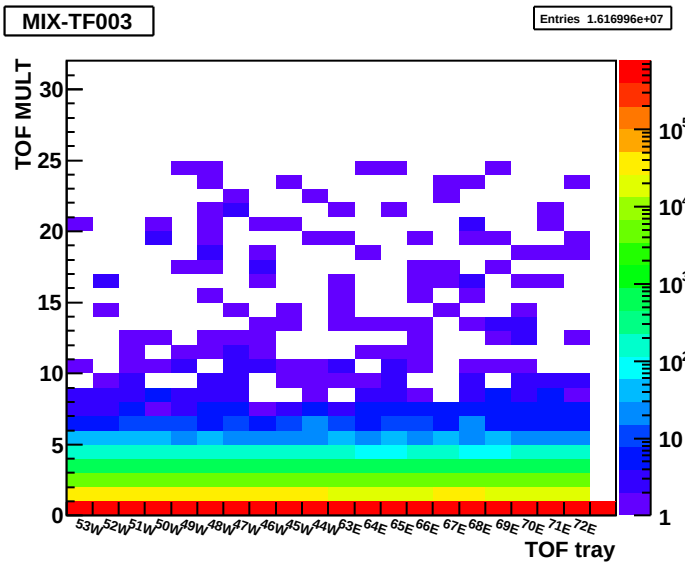

BunchId7Bit (all events)
Entries 384999
10^3
10^2
10
0 20 40 60 80 100 120

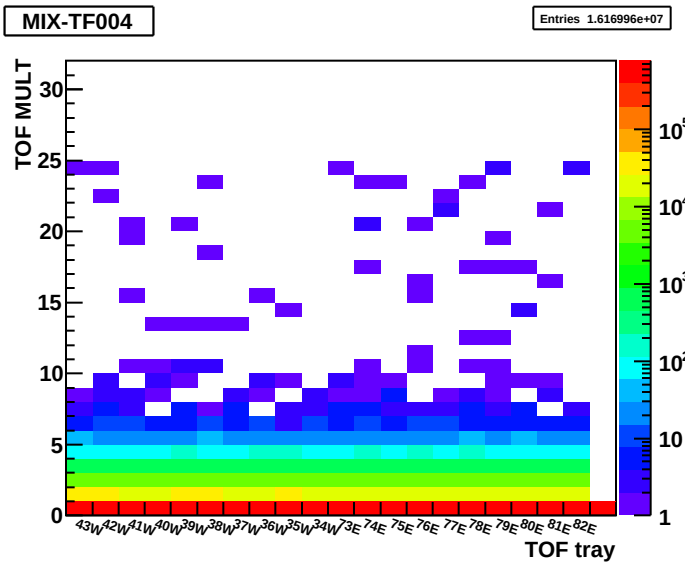

Abort-gaps
Entries 422
10
0 20 40 60 80 100 120

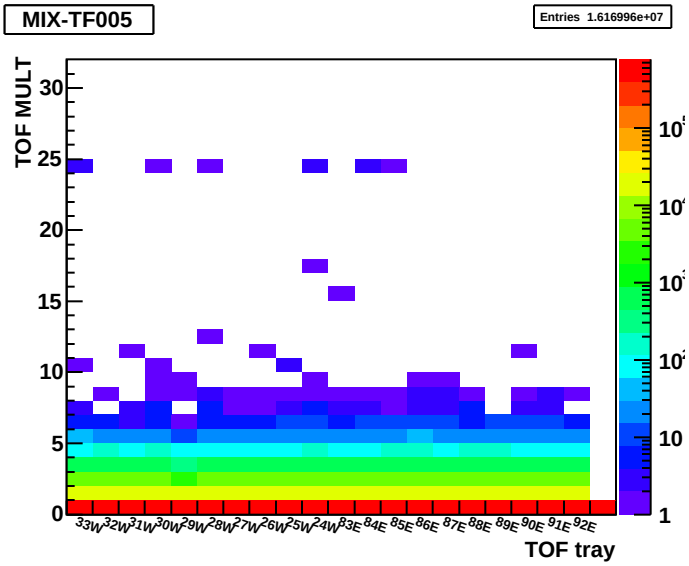

!Yellow-Fill
Entries 10999
10^3
10^2
0 20 40 60 80 100 120

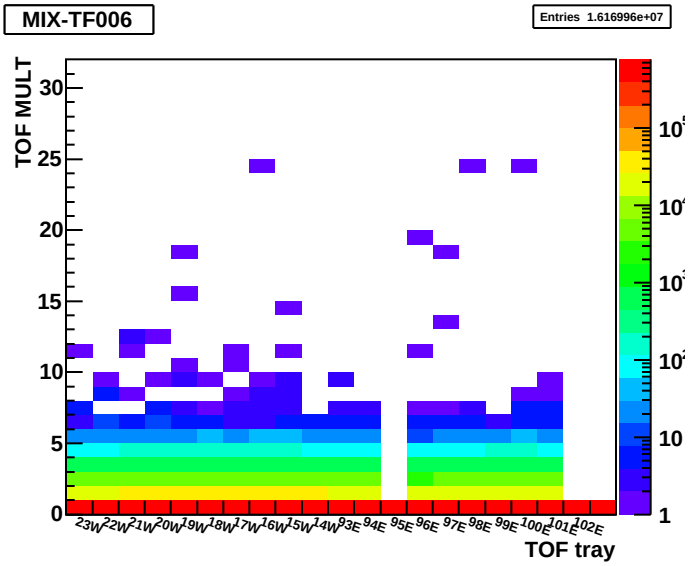

MIX-TF001
Entries 1.616996e+07
TOF MULT
TOF tray

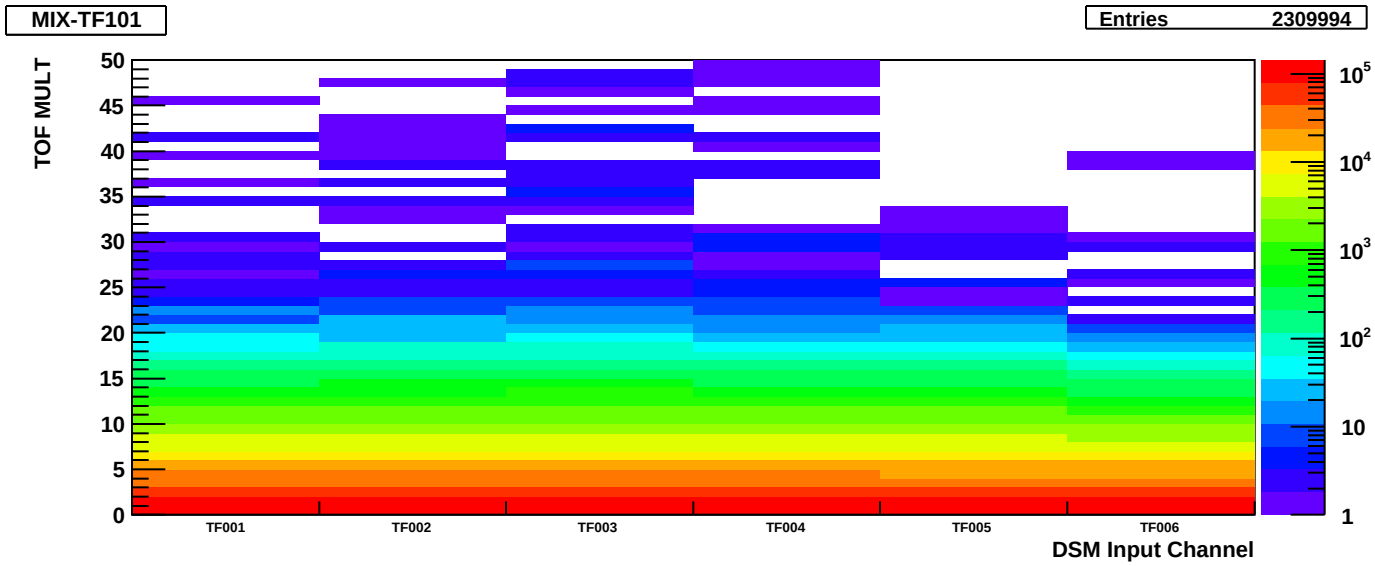

MIX-TF002
Entries 1.616996e+07
TOF MULT
TOF tray

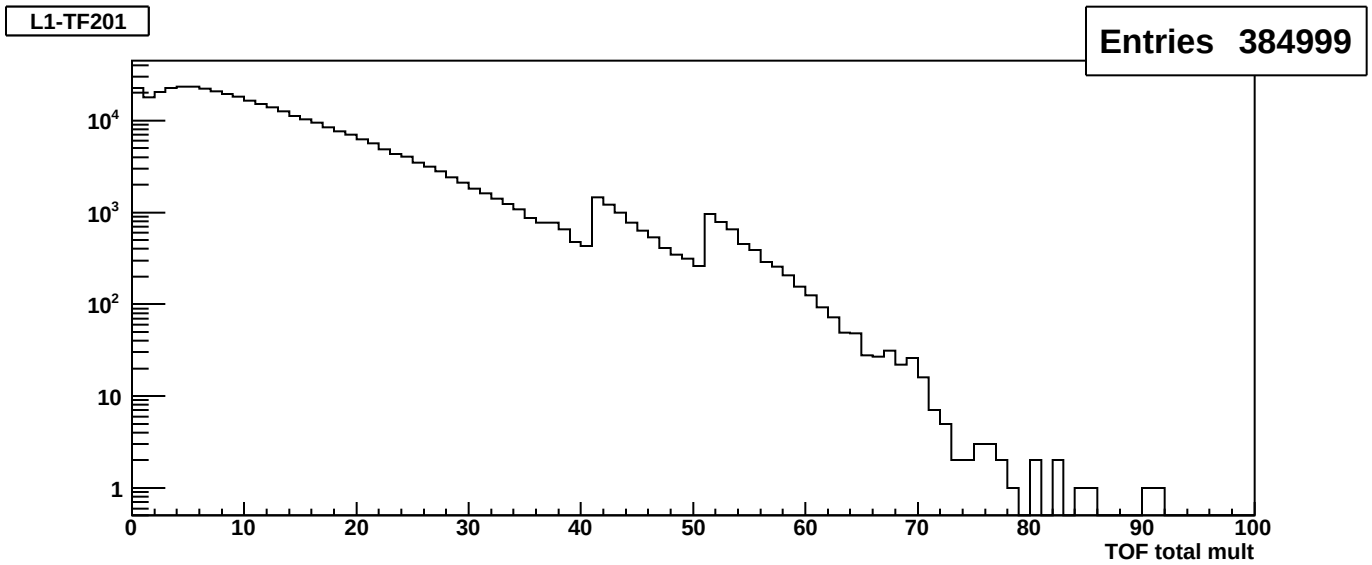

MIX-TF003
Entries 1.616996e+07
TOF MULT
TOF tray

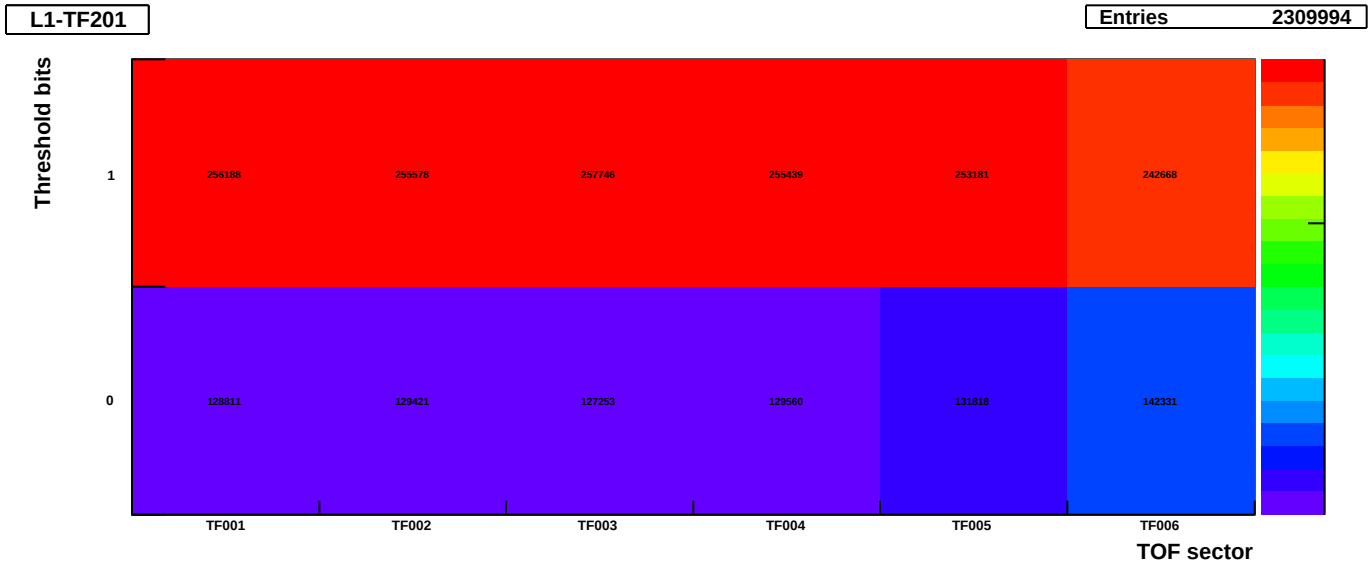

MIX-TF004
Entries 1.616996e+07
TOF MULT
TOF tray

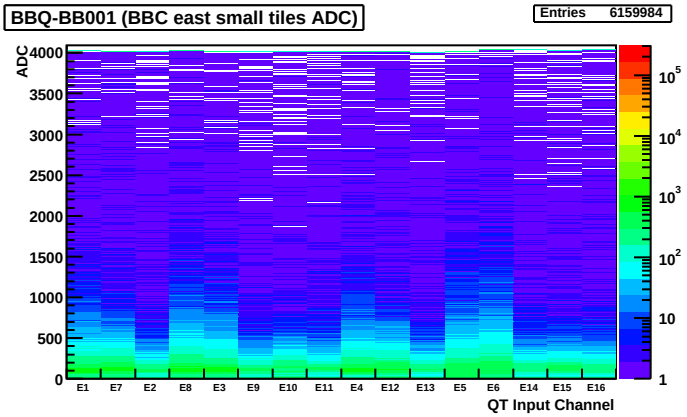

MIX-TF005
Entries 1.616996e+07
TOF MULT
TOF tray

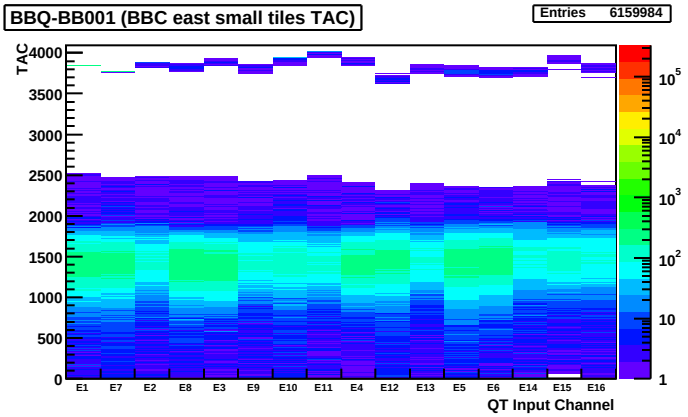

MIX-TF006
Entries 1.616996e+07
TOF MULT
TOF tray

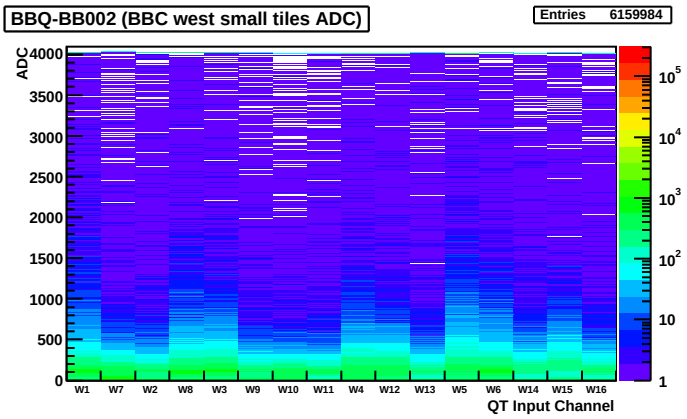

MIX-TF101
Entries 2309994
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

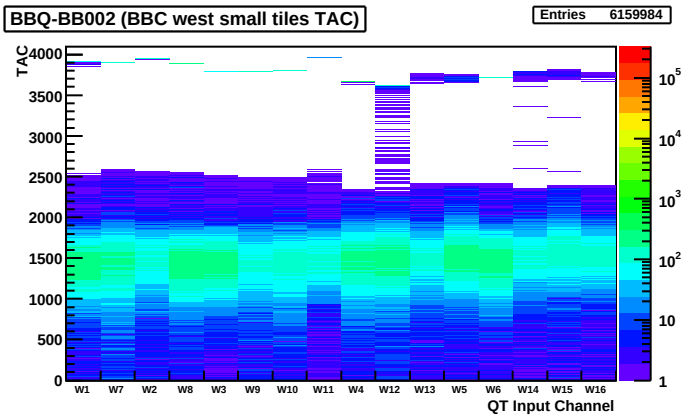

L1-TF201
Entries 384999
TOF total mult

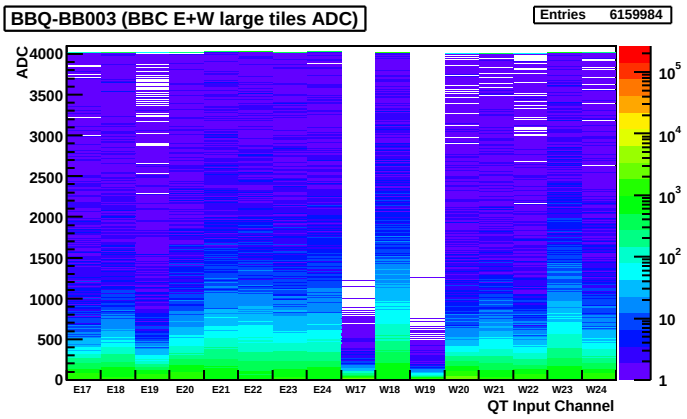

L1-TF201
Entries 2309994
Threshold bits
256188
255578
257746
255439
253181
242668
128811
129421
127253
129560
131818
142331
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

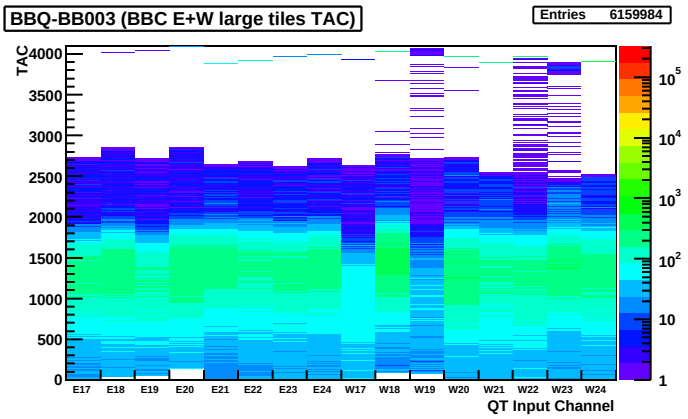

BBQ-BB001 (BBC east small tiles ADC)
Entries 6159984
ADC
QT Input Channel

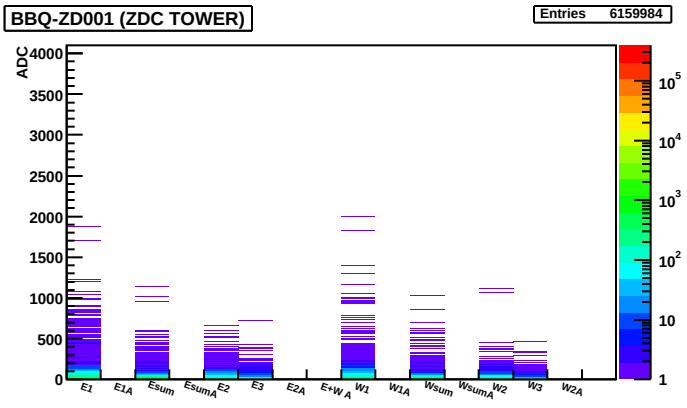

BBQ-BB001 (BBC east small tiles TAC)
Entries 6159984
TAC
QT Input Channel

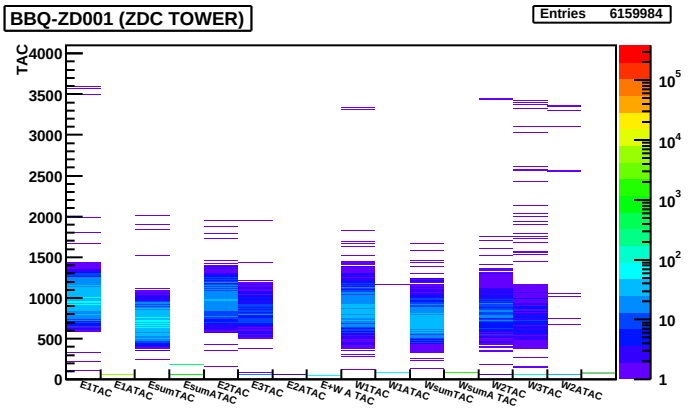

BBQ-BB002 (BBC west small tiles ADC)
Entries 6159984
ADC
QT Input Channel

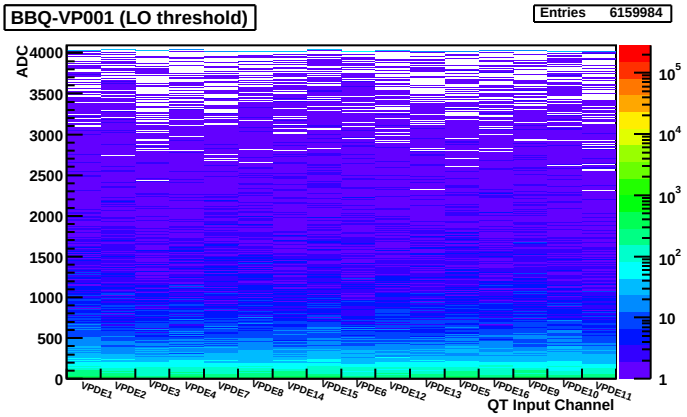

BBQ-BB002 (BBC west small tiles TAC)
Entries 6159984
TAC
QT Input Channel

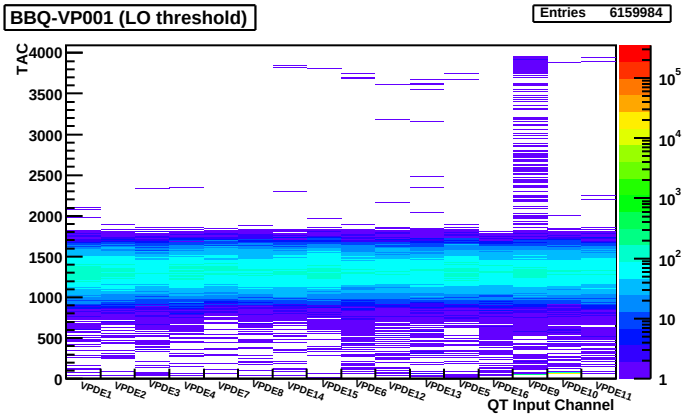

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6159984
ADC
QT Input Channel

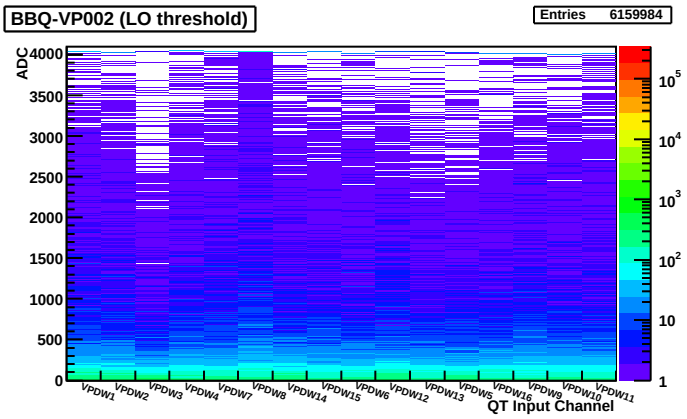

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6159984
TAC
QT Input Channel

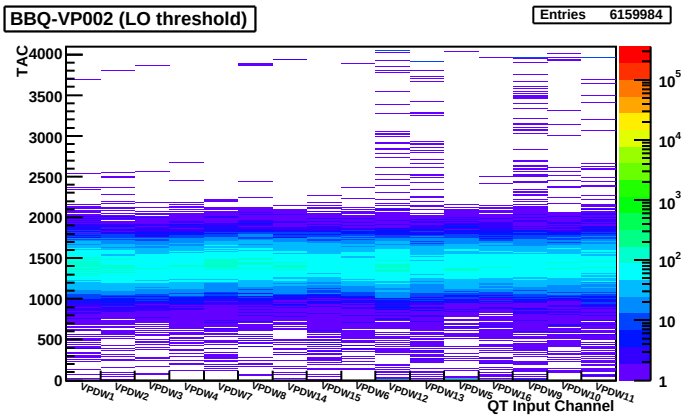

BBQ-ZD001 (ZDC TOWER)
Entries 6159984
ADC

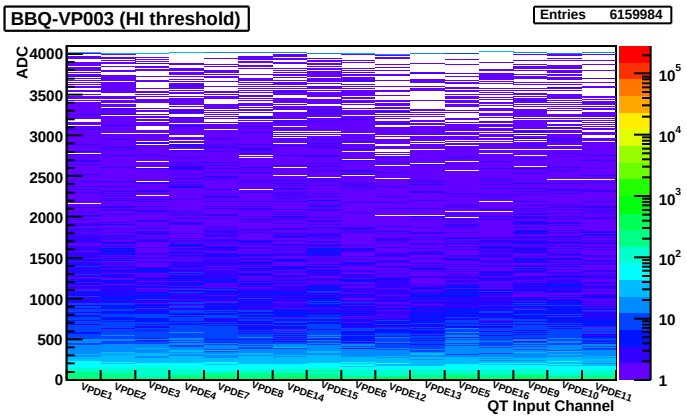

BBQ-ZD001 (ZDC TOWER)
Entries 6159984
TAC

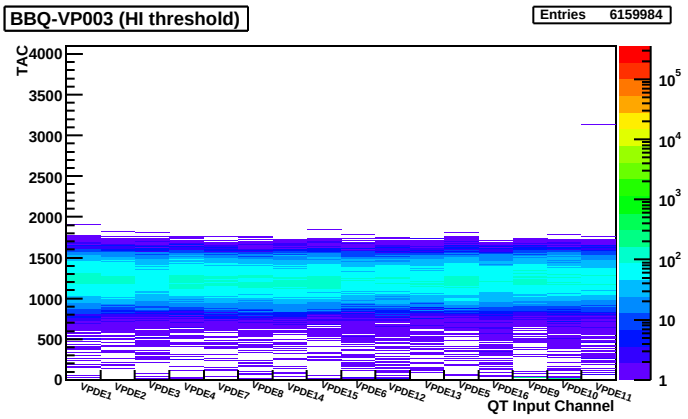

BBQ-VP001 (LO threshold)
Entries 6159984
ADC
QT Input Channel

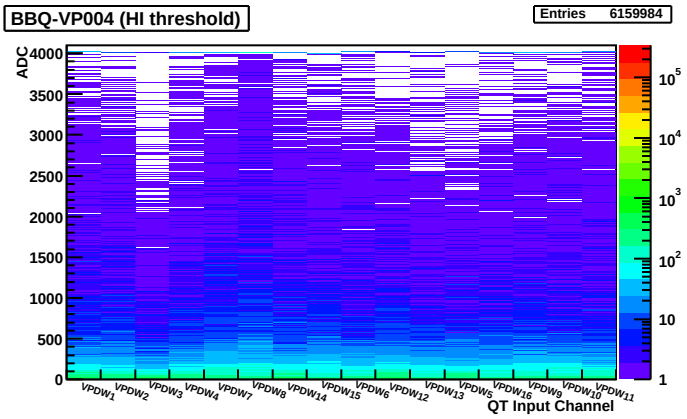

BBQ-VP001 (LO threshold)
Entries 6159984
TAC
QT Input Channel

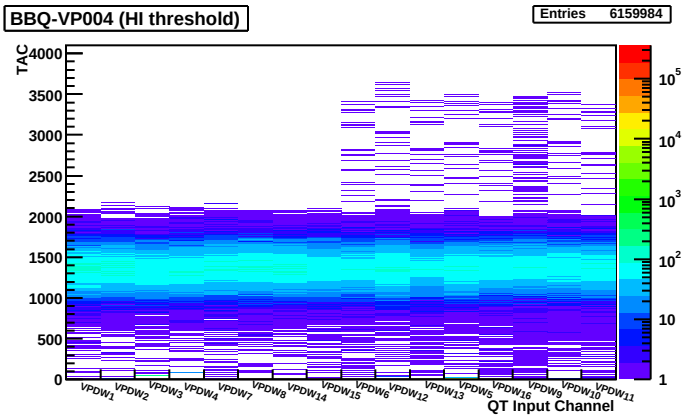

BBQ-VP002 (LO threshold)
Entries 6159984
ADC
QT Input Channel

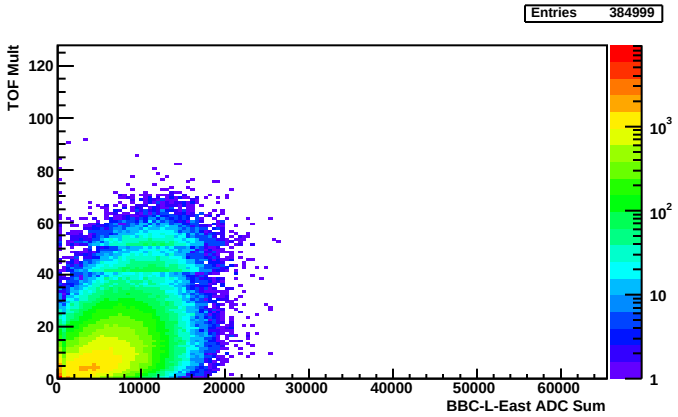

BBQ-VP002 (LO threshold)
Entries 6159984
TAC
QT Input Channel

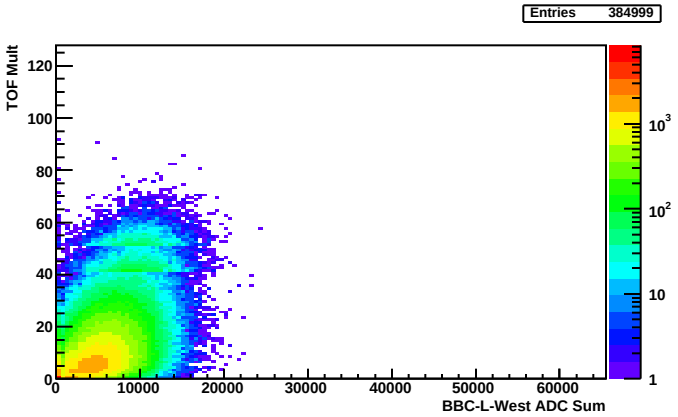

BBQ-VP003 (HI threshold)
Entries 6159984
ADC
QT Input Channel

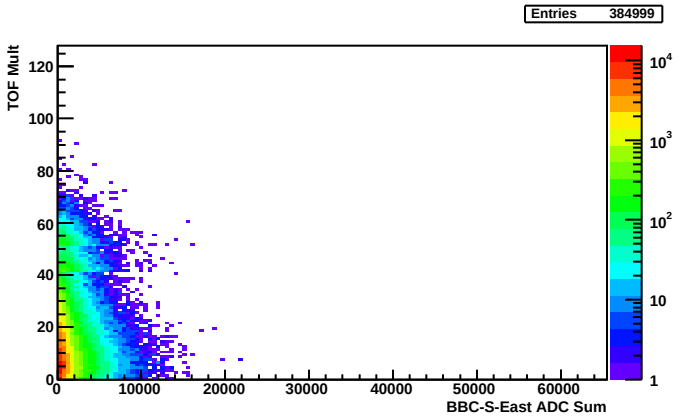

BBQ-VP003 (HI threshold)
Entries 6159984
TAC
QT Input Channel

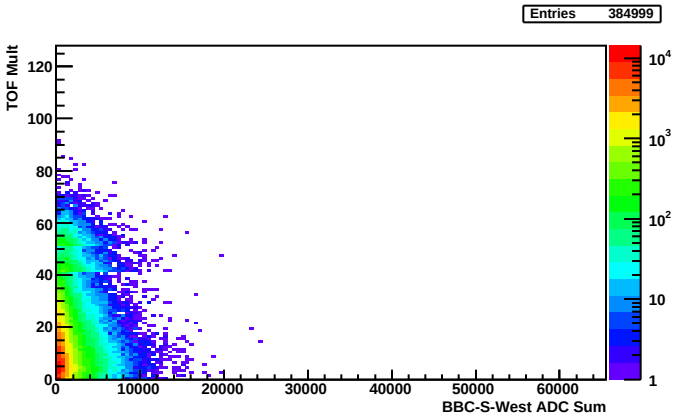

BBQ-VP004 (HI threshold)
Entries 6159984
ADC
QT Input Channel

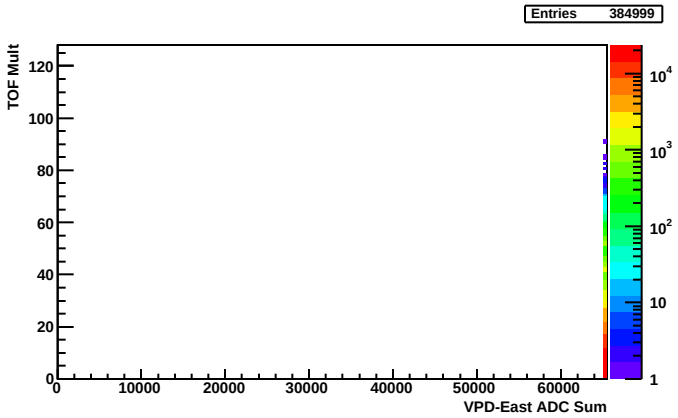

BBQ-VP004 (HI threshold)
Entries 6159984
TAC
QT Input Channel

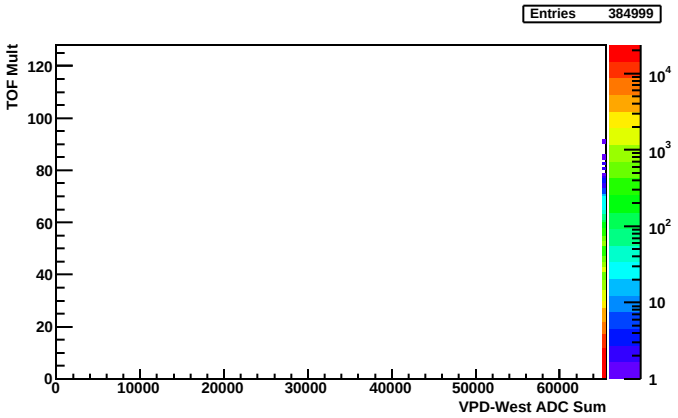

Entries 384999
TOF Mult
BBC-L-East ADC Sum

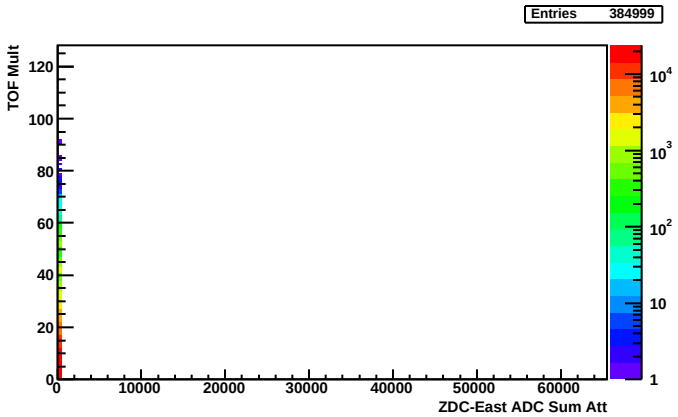

Entries 384999
TOF Mult
BBC-L-West ADC Sum

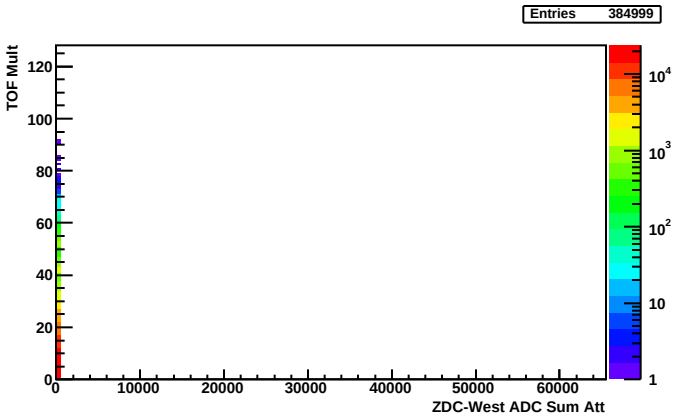

Entries 384999
TOF Mult
BBC-S-East ADC Sum

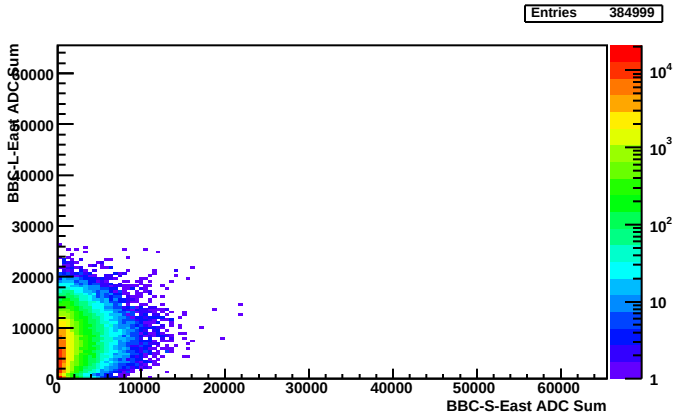

Entries 384999
TOF Mult
BBC-S-West ADC Sum

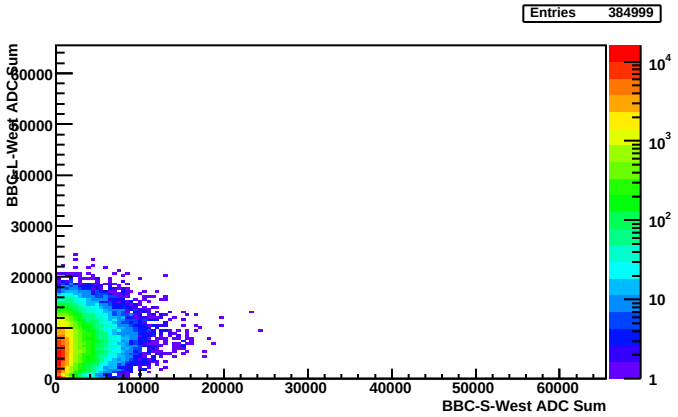

Entries 384999
TOF Mult
VPD-East ADC Sum

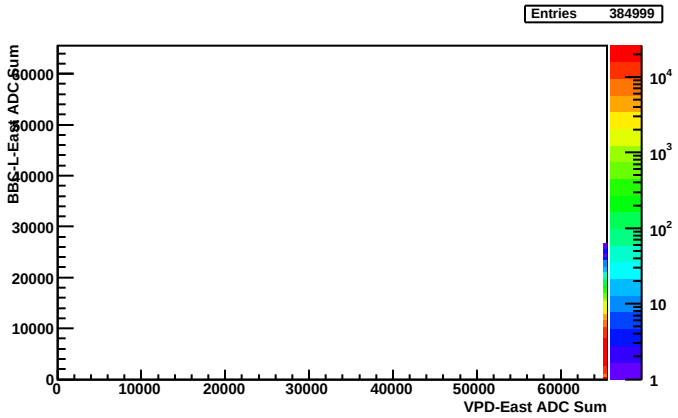

Entries 384999
TOF Mult
VPD-West ADC Sum

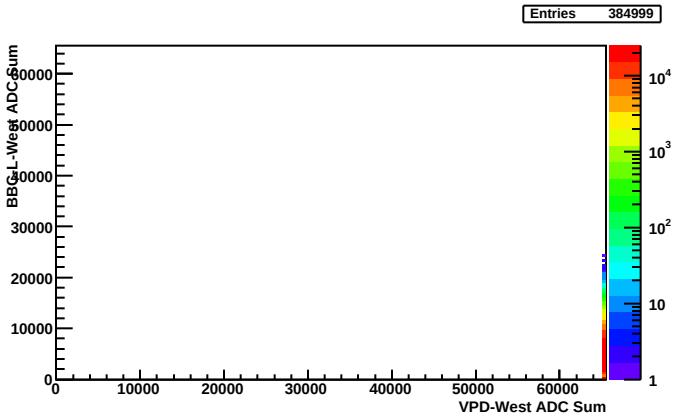

Entries 384999
TOF Mult
ZDC-East ADC Sum Att

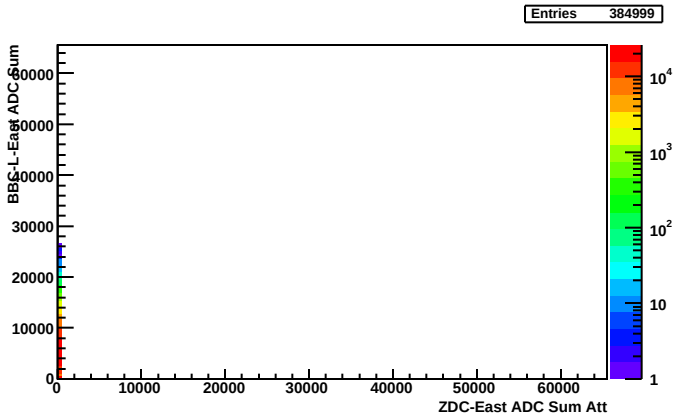

Entries 384999
TOF Mult
ZDC-West ADC Sum Att

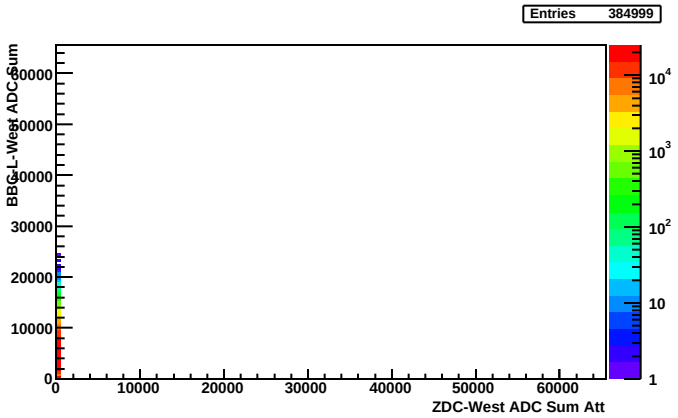

Entries 384999
BBC-L-East ADC Sum
BBC-S-East ADC Sum

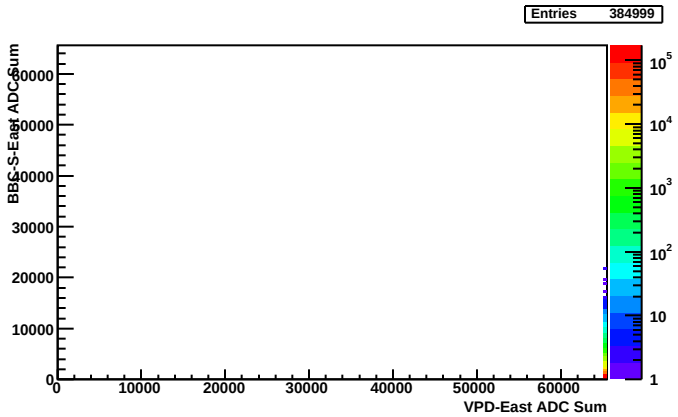

Entries 384999
BBC-L-West ADC Sum
BBC-S-West ADC Sum

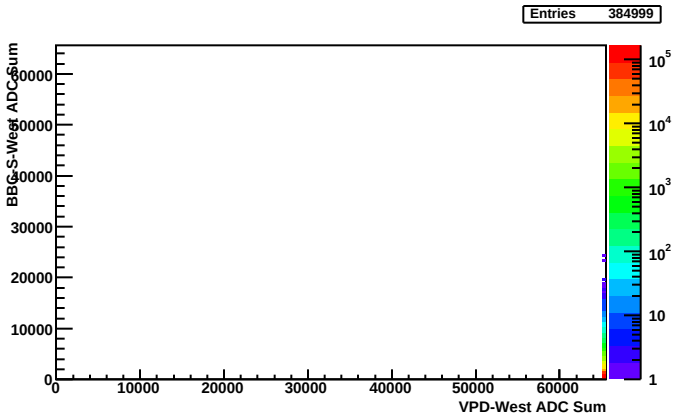

Entries 384999
BBC-L-East ADC Sum
VPD-East ADC Sum

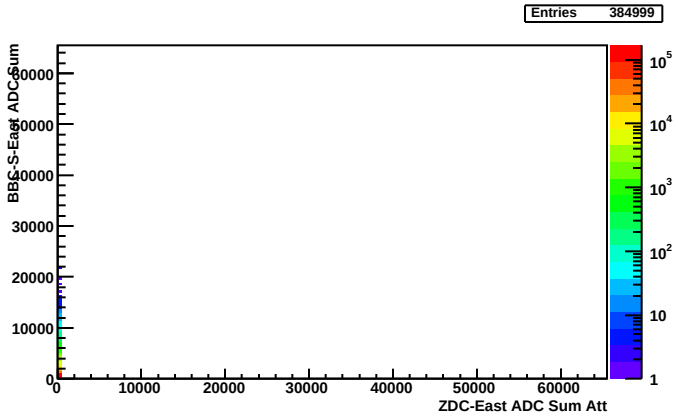

Entries 384999
BBC-L-West ADC Sum
VPD-West ADC Sum

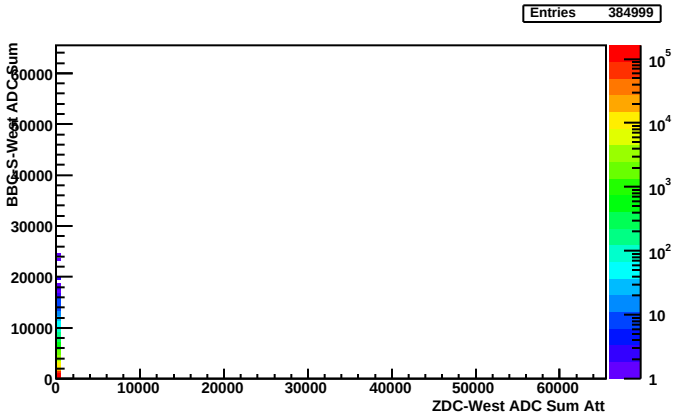

Entries 384999
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

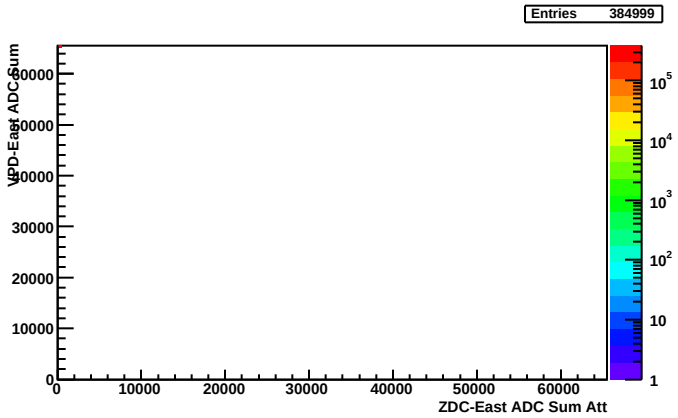

Entries 384999
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

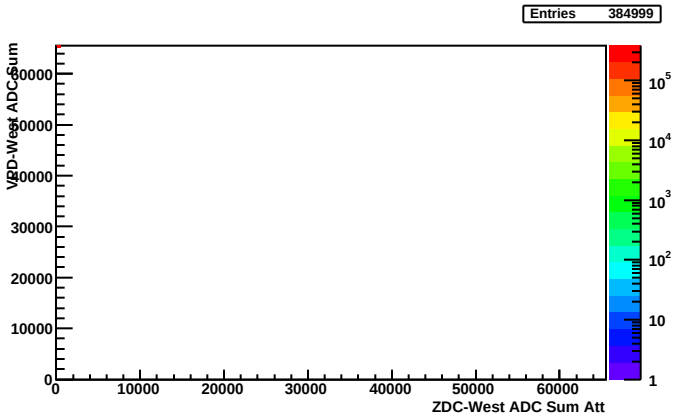

Entries 384999
BBC-S-East ADC Sum
VPD-East ADC Sum

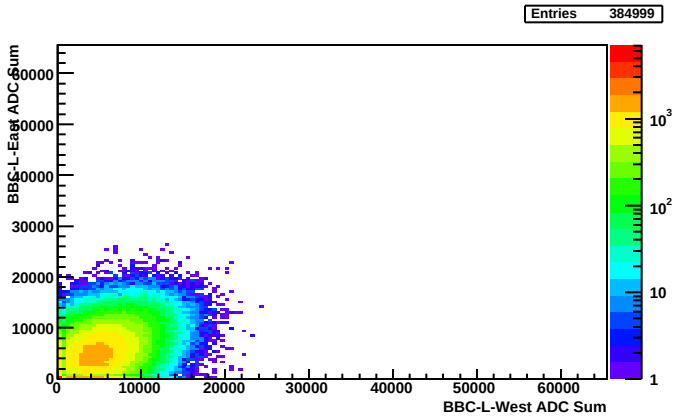

Entries 384999
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 384999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 384999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 384999
VPD-East ADC Sum
ZDC-East ADC Sum Att


Entries 384999
VPD-West ADC Sum
ZDC-West ADC Sum Att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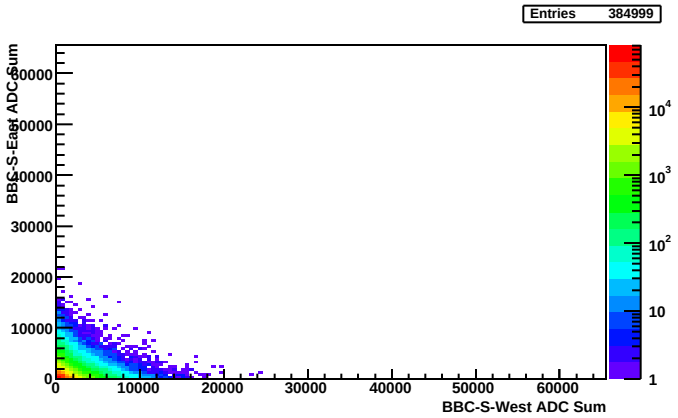
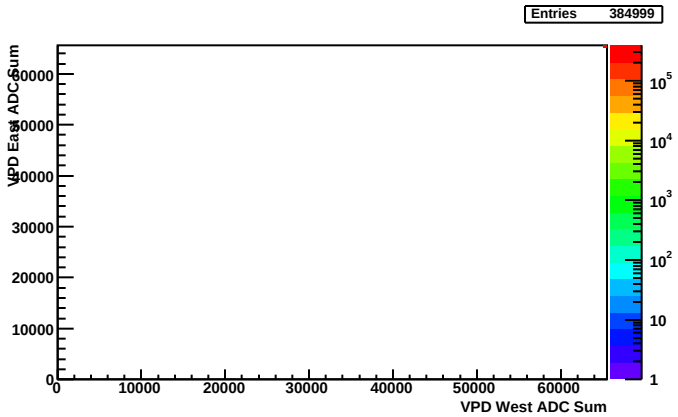
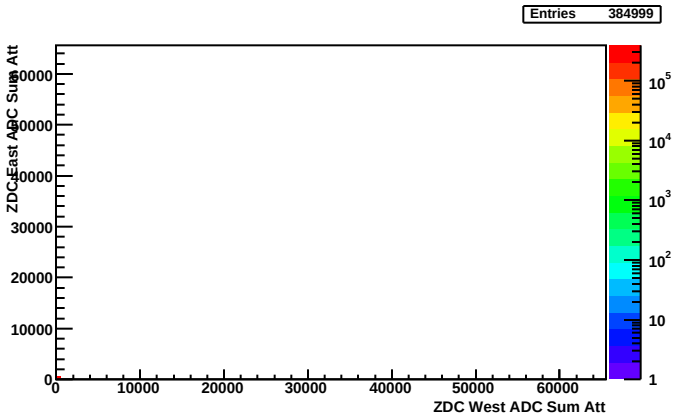
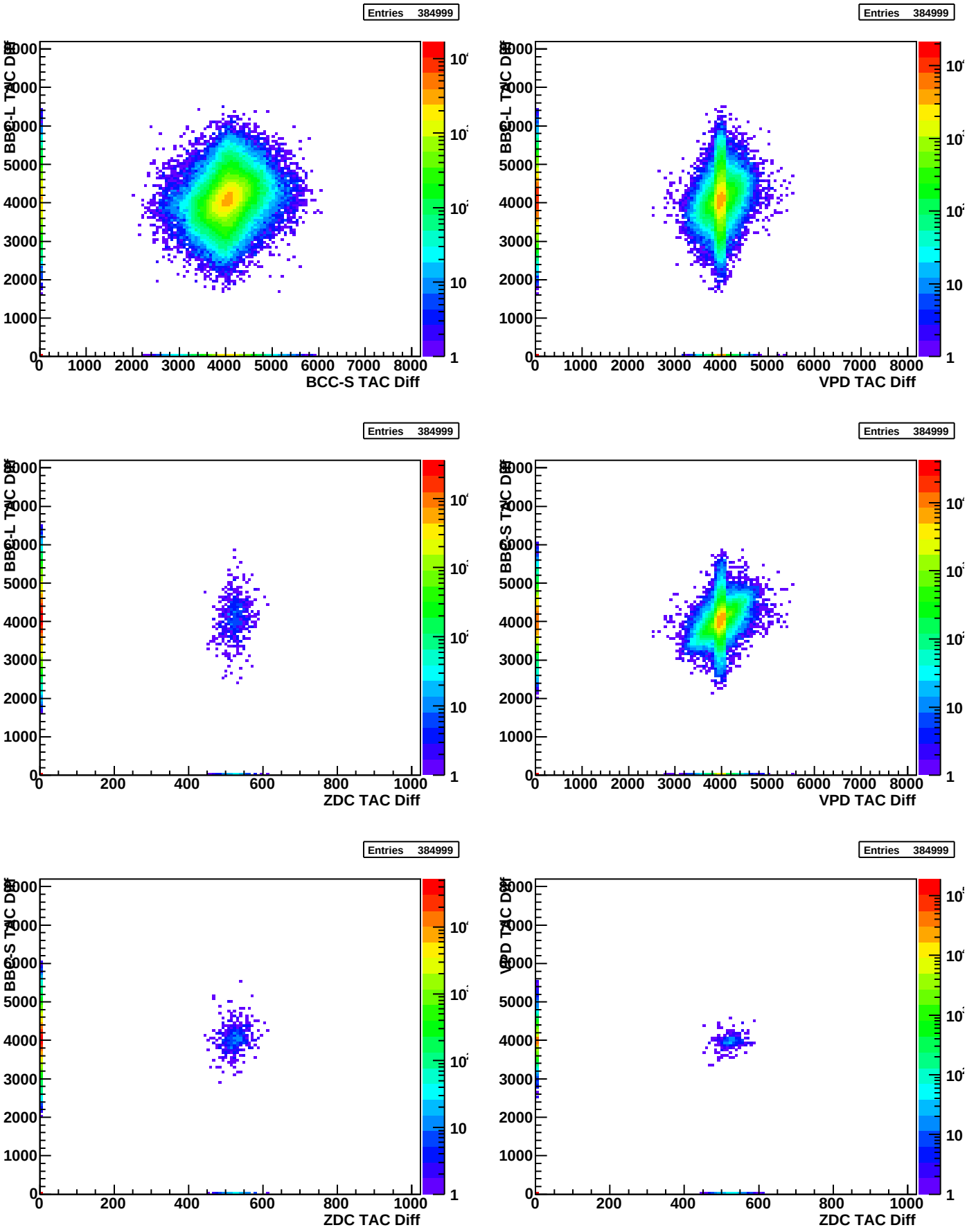
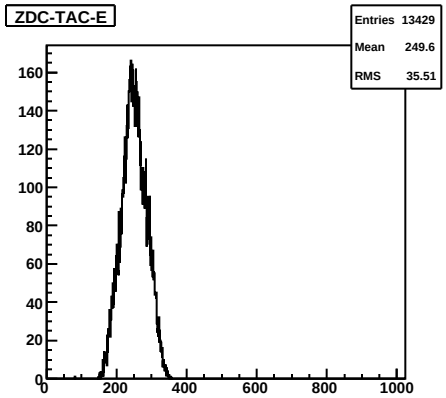
BBC-L-East ADC Sum
BBC-L-West ADC Sum

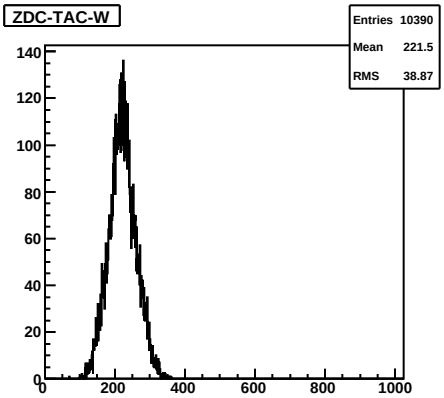

Entries 384999
BBC-S-East ADC Sum
BBC-S-West ADC Sum

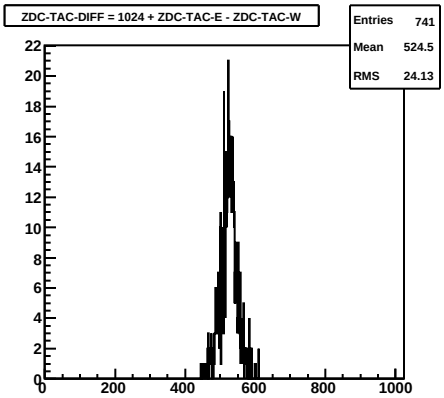

Entries 384999
VPD East ADC Sum
VPD West ADC Sum

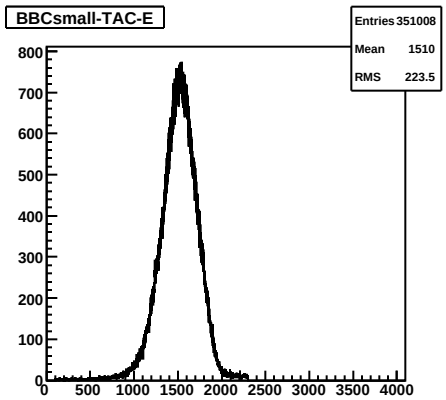

Entries 384999
ZDC-East ADC Sum Att
ZDC West ADC Sum Att

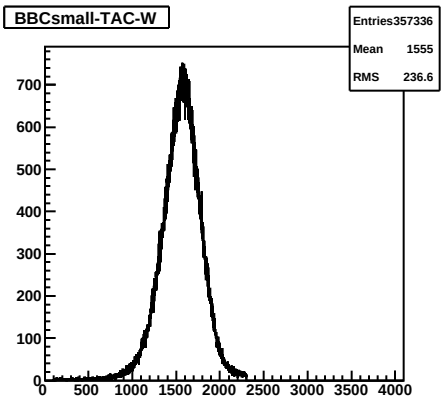

Entries 384999
BBC-L TAC Diff
BCC-S TAC Diff
Entries 384999
BBC-L TAC Diff
VPD TAC Diff
Entries 384999
BBC-L TAC Diff
ZDC TAC Diff
Entries 384999
BBC-S TAC Diff
VPD TAC Diff
Entries 384999
BBC-S TAC Diff
ZDC TAC Diff
Entries 384999
VPD TAC Diff
ZDC TAC Diff

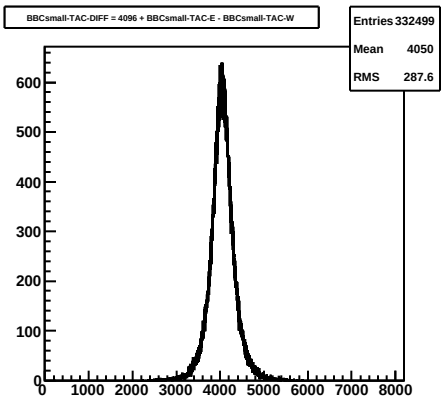

ZDC-TAC-E
Entries 13429
Mean 249.6
RMS 35.51

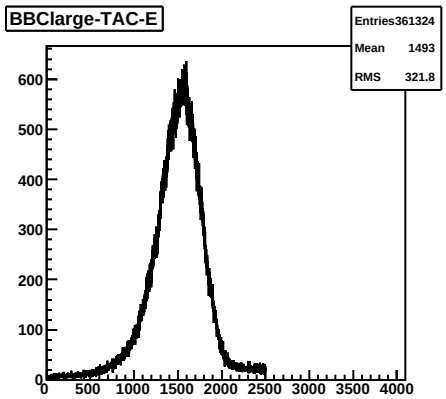

ZDC-TAC-W
Entries 10390
Mean 221.5
RMS 38.87

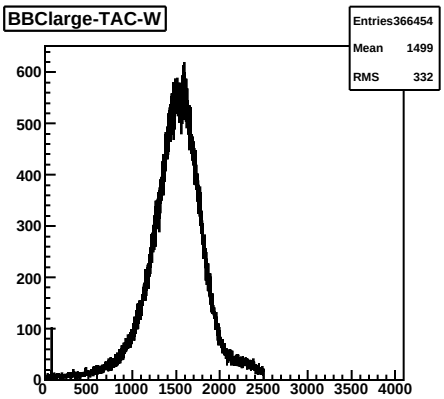

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 741
Mean 524.5
RMS 24.13

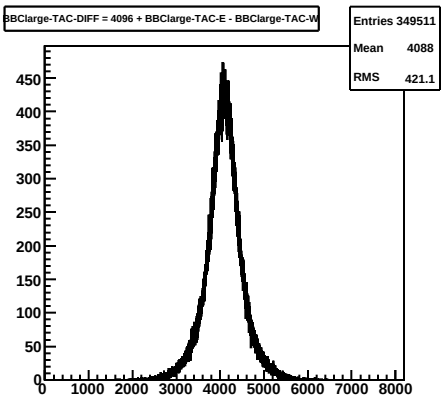

BBCsmall-TAC-E
Entries 351008
Mean 1510
RMS 223.5

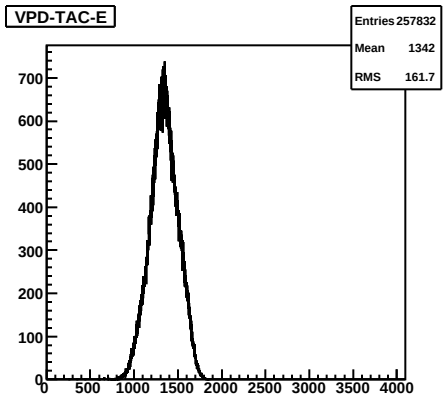

BBCsmall-TAC-W
Entries 357336
Mean 1555
RMS 236.6

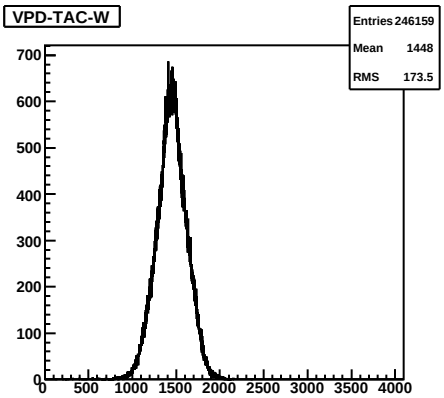

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 332499
Mean 4050
RMS 287.6

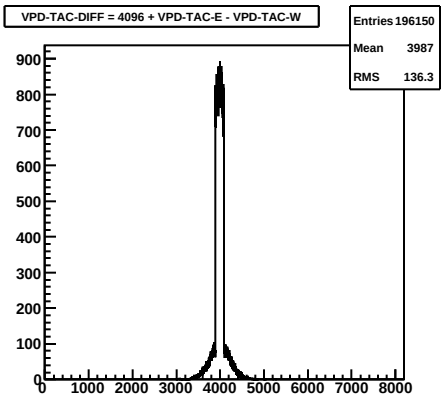

BBClarge-TAC-E
Entries 361324
Mean 1493
RMS 321.8

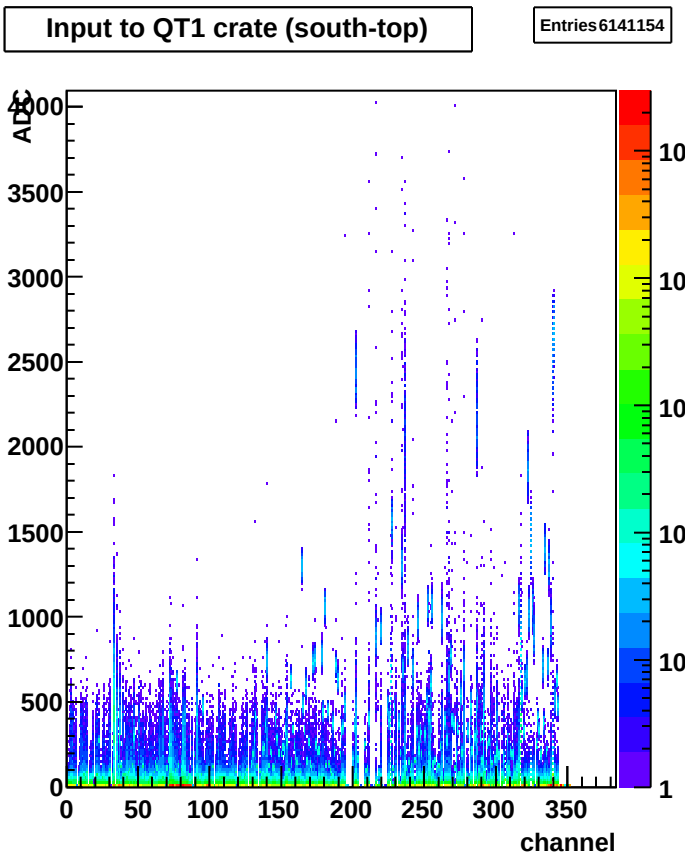

BBClarge-TAC-W
Entries 366454
Mean 1499
RMS 332

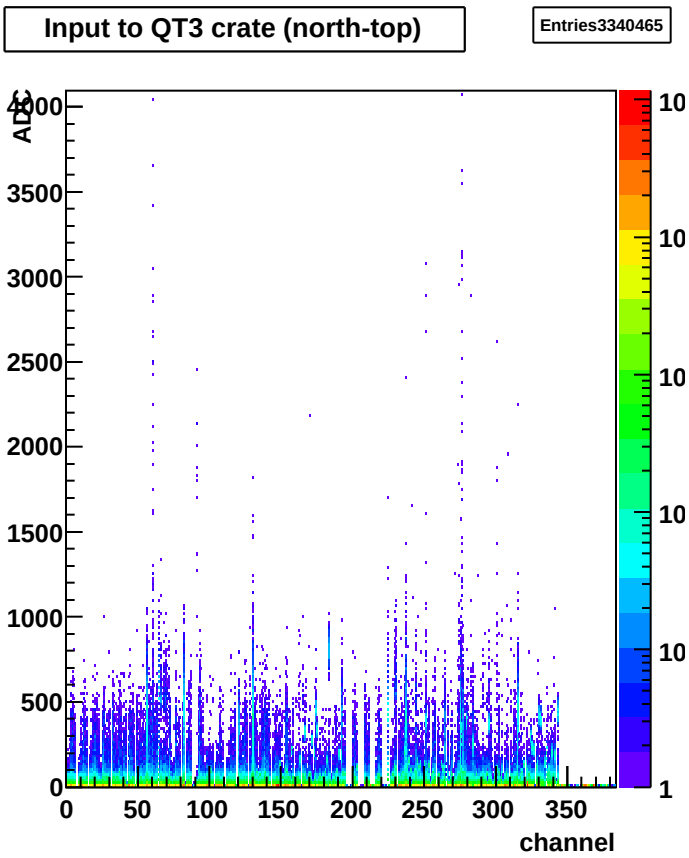

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 349511
Mean 4088
RMS 421.1

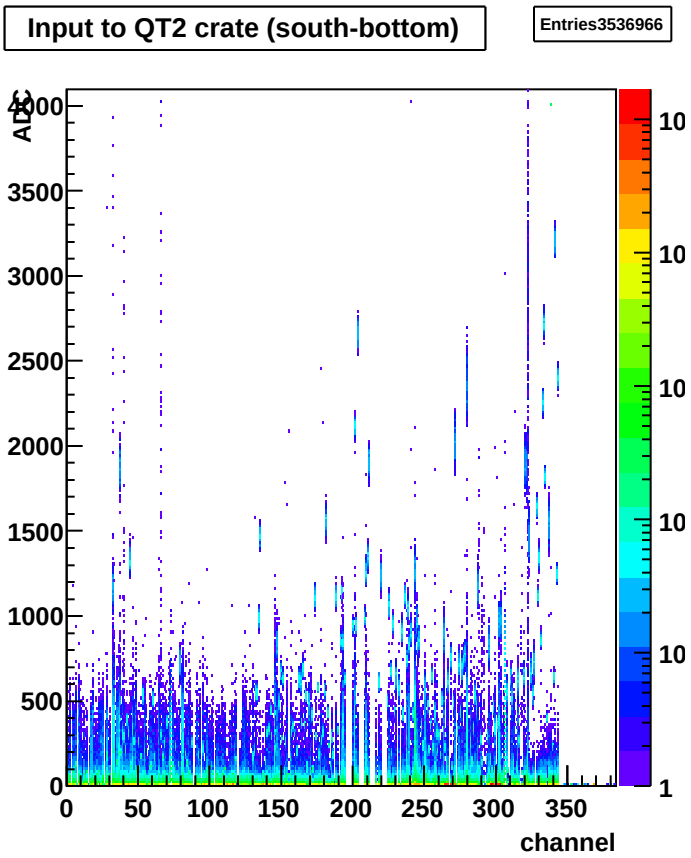

VPD-TAC-E
Entries 257832
Mean 1342
RMS 161.7

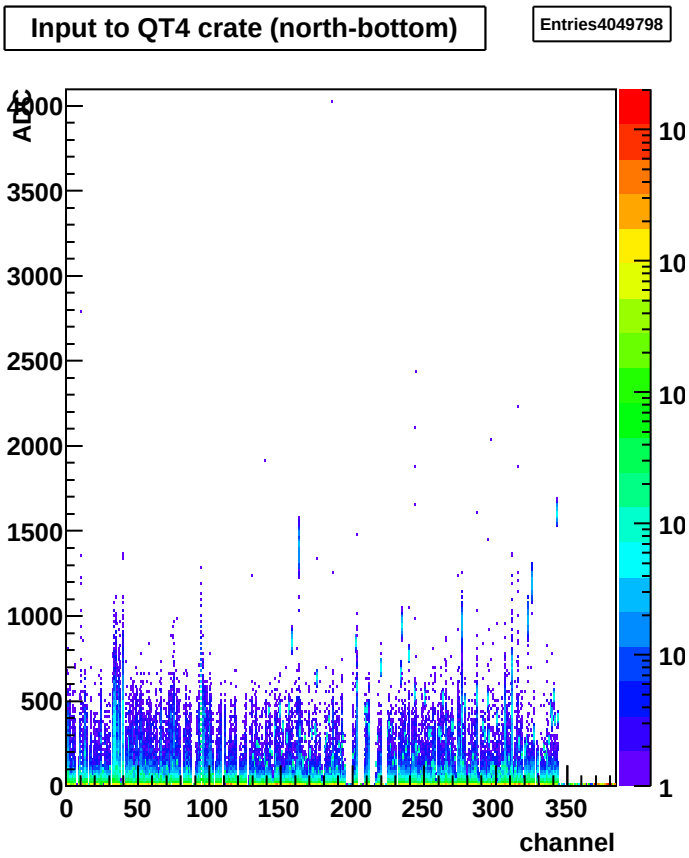

VPD-TAC-W
Entries 246159
Mean 1448
RMS 173.5

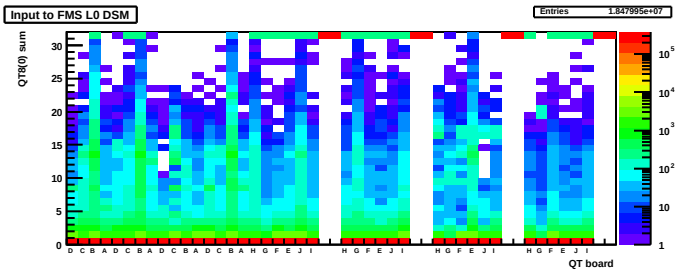

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 196150
Mean 3987
RMS 136.3

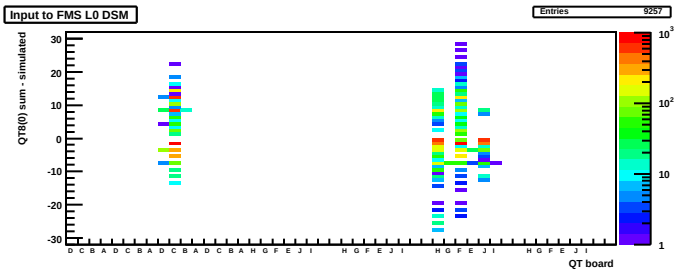

Input to QT1 crate (south-top)
Entries 6141154
ADC
channel

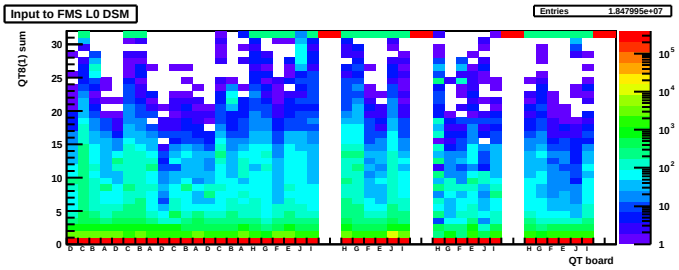

Input to QT3 crate (north-top)
Entries 3340465
ADC
channel

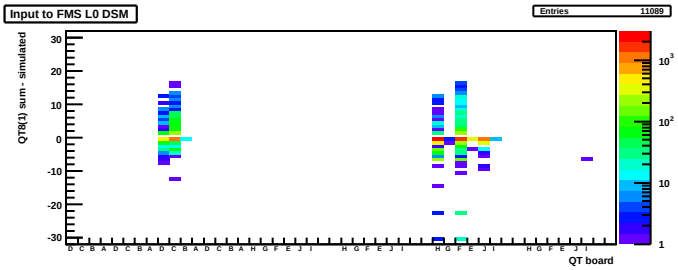

Input to QT2 crate (south-bottom)
Entries 3536966
ADC
channel

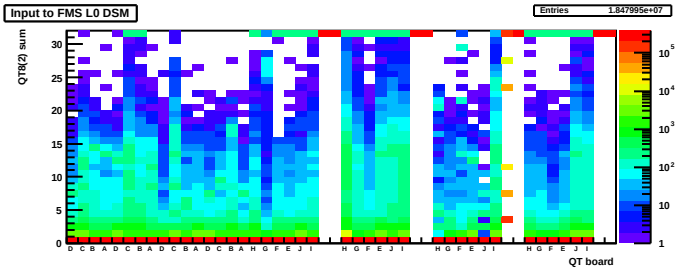

Input to QT4 crate (north-bottom)
Entries 4049798
ADC
channel

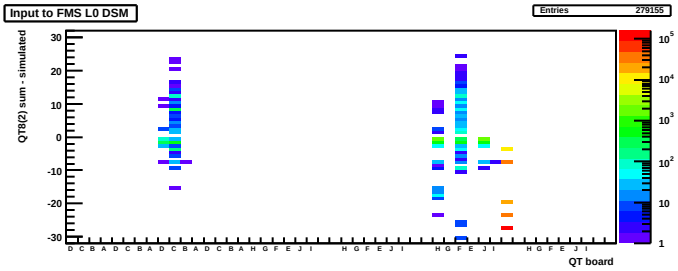

Input to FMS L0 DSM
Entries 1.847995e+07
QT8(0) sum
QT board

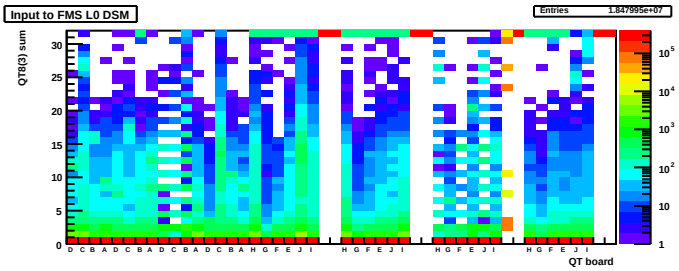

Input to FMS L0 DSM
Entries 9257
QT8(0) sum - simulated
QT board

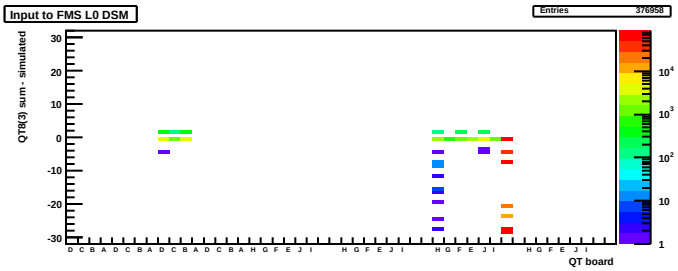

Input to FMS L0 DSM
Entries 1.847995e+07
QT8(1) sum
QT board

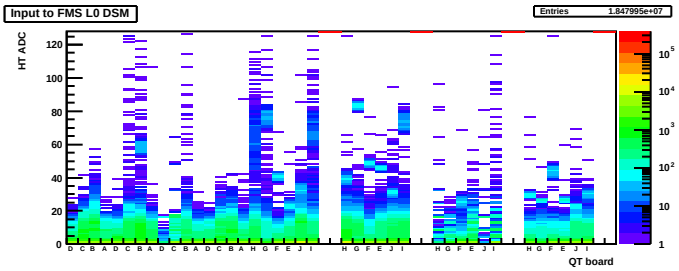

Input to FMS L0 DSM
Entries 11089
QT8(1) sum - simulated
QT board

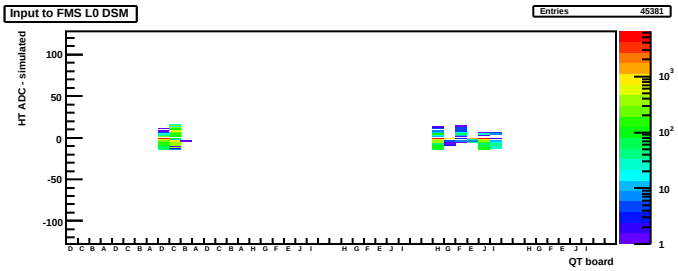

Input to FMS L0 DSM
Entries 1.847995e+07
QT8(2) sum
QT board

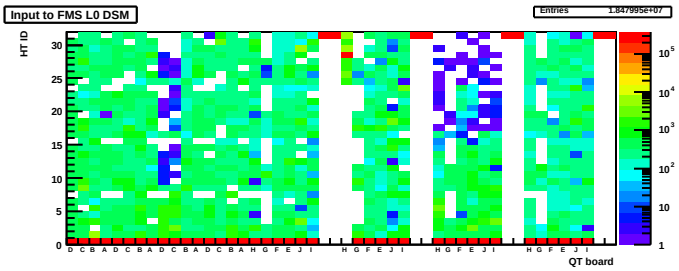

Input to FMS L0 DSM
Entries 279155
QT8(2) sum - simulated
QT board

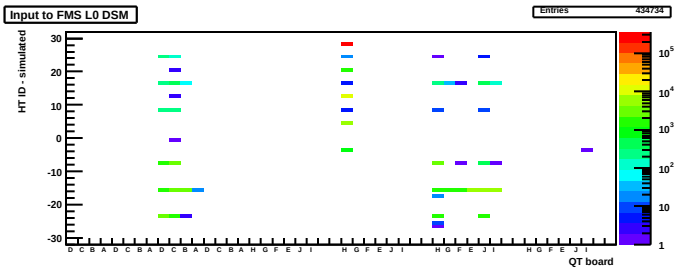

Input to FMS L0 DSM
Entries 1.847995e+07
QT8(3) sum
QT board

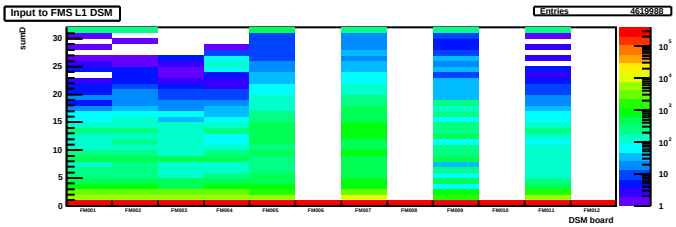

Input to FMS L0 DSM
Entries 376958
QT8(3) sum - simulated
QT board

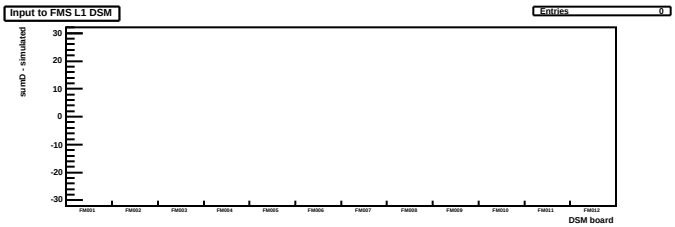

Input to FMS L0 DSM
Entries 1.847995e+07
HT ADC
QT board

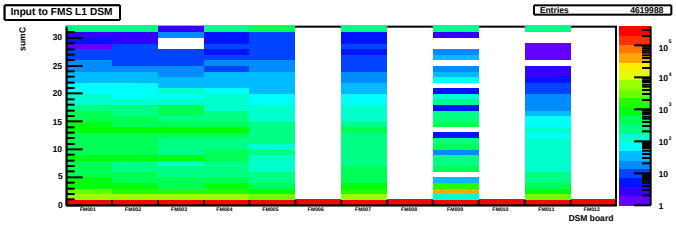

Input to FMS L0 DSM
Entries 45381
HT ADC - simulated
QT board

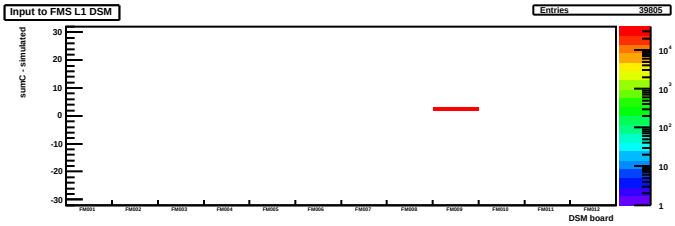

Input to FMS L0 DSM
Entries 1.847995e+07
HT ID
QT board

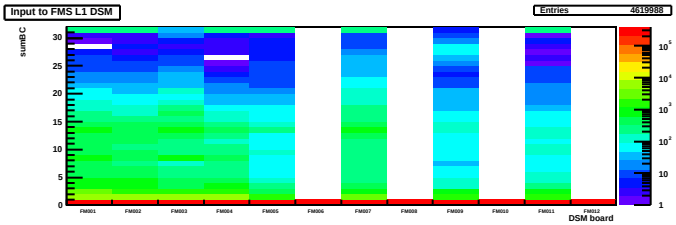

Input to FMS L0 DSM
Entries 434734
HT ID - simulated
QT board

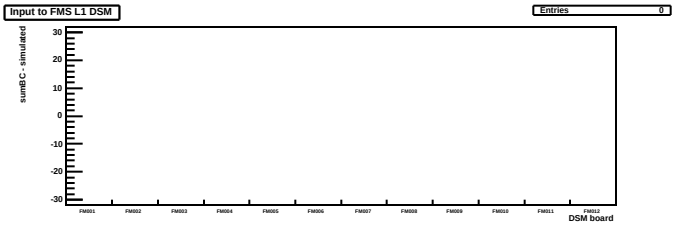

Input to FMS L1 DSM
Entries 4619988
sumD
DSM board

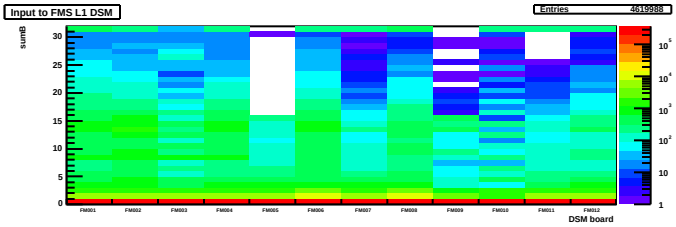

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

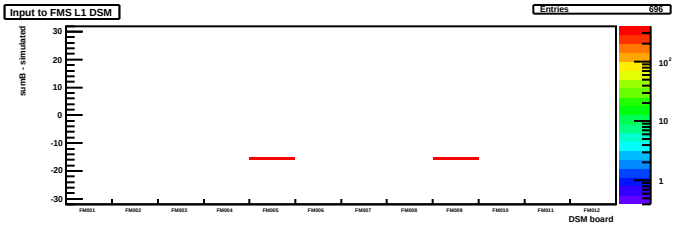

Input to FMS L1 DSM
Entries 4619988
sumC
DSM board

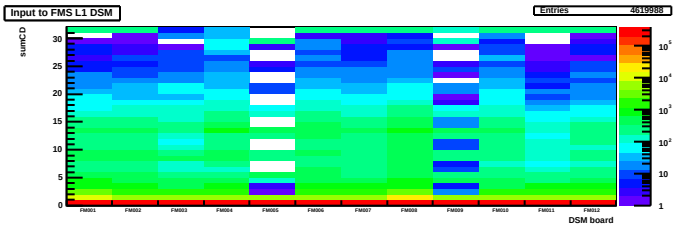

Input to FMS L1 DSM
Entries 39805
sumC - simulated
DSM board

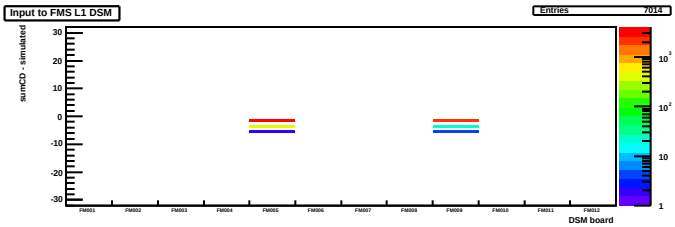

Input to FMS L1 DSM
Entries 4619988
sumBC
DSM board

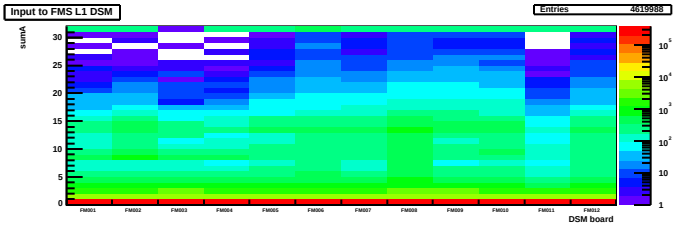

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

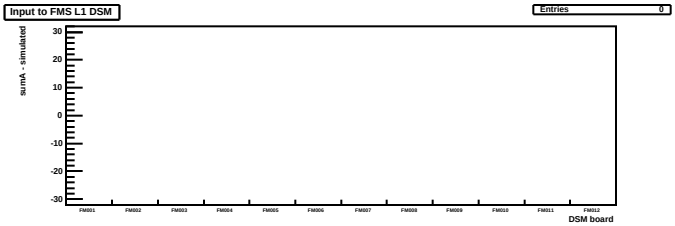

Input to FMS L1 DSM
Entries 4619988
sumB
DSM board

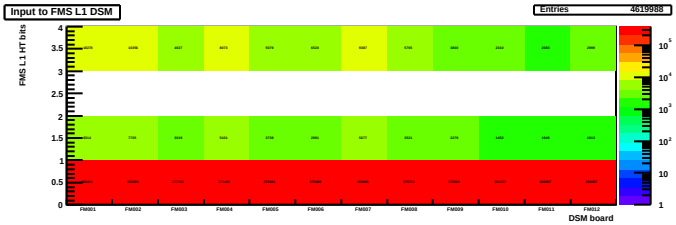

Input to FMS L1 DSM
Entries 696
sumB - simulated
DSM board

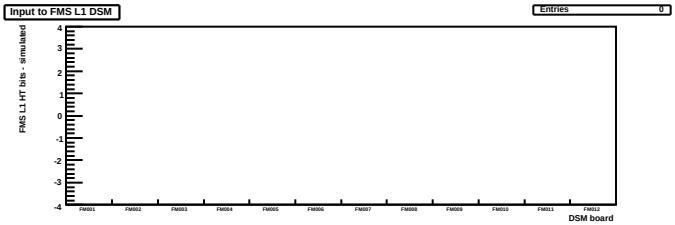

Input to FMS L1 DSM
Entries 4619988
sumCD
DSM board

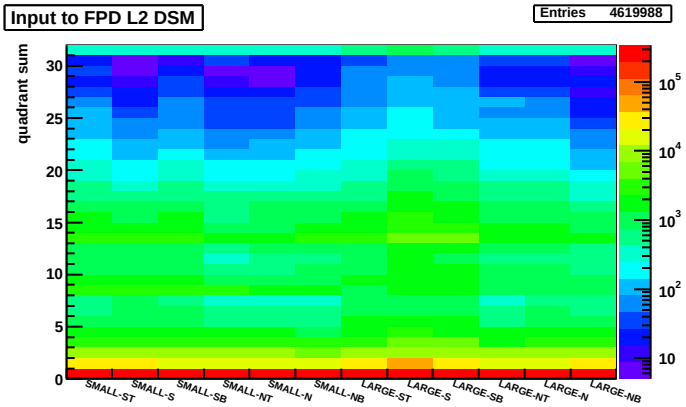

Input to FMS L1 DSM
Entries 7014
sumCD - simulated
DSM board

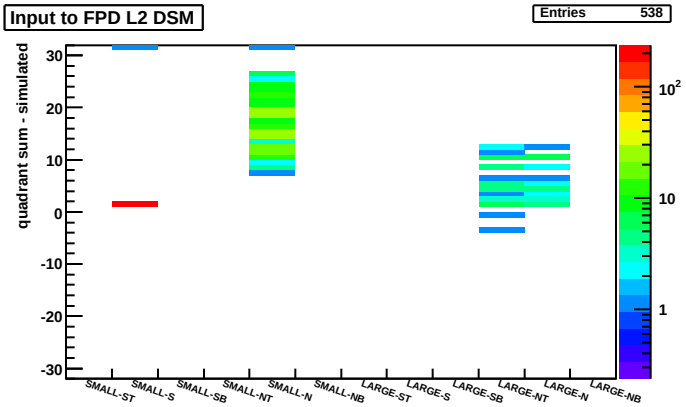

Input to FMS L1 DSM
Entries 4619988
sumA
DSM board

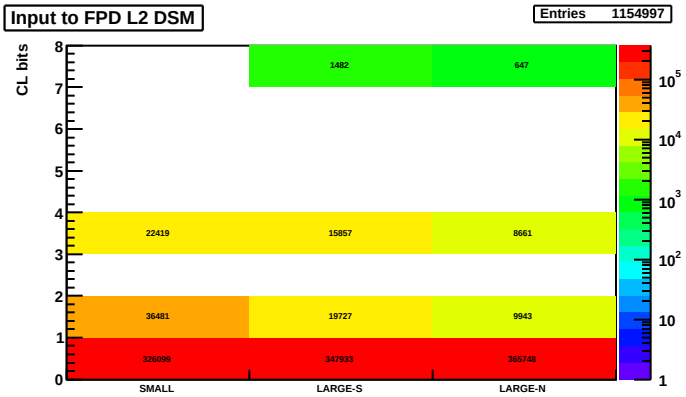

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

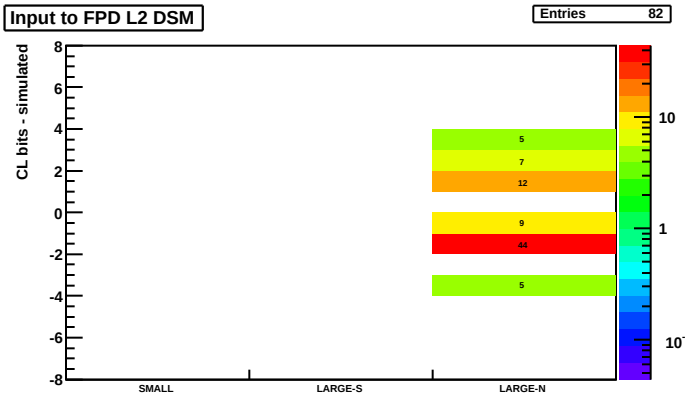

Input to FMS L1 DSM
Entries 4619988
FMS L1 HT bits
DSM board

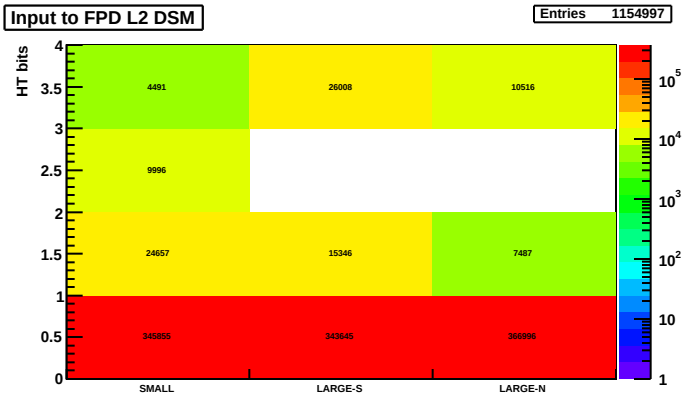

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

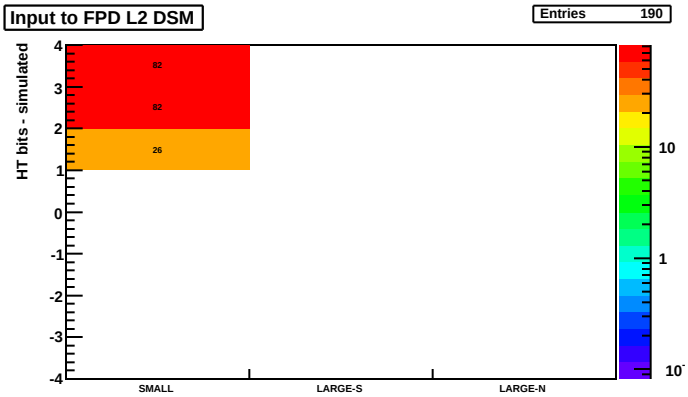

Input to FPD L2 DSM
Entries 4619988
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

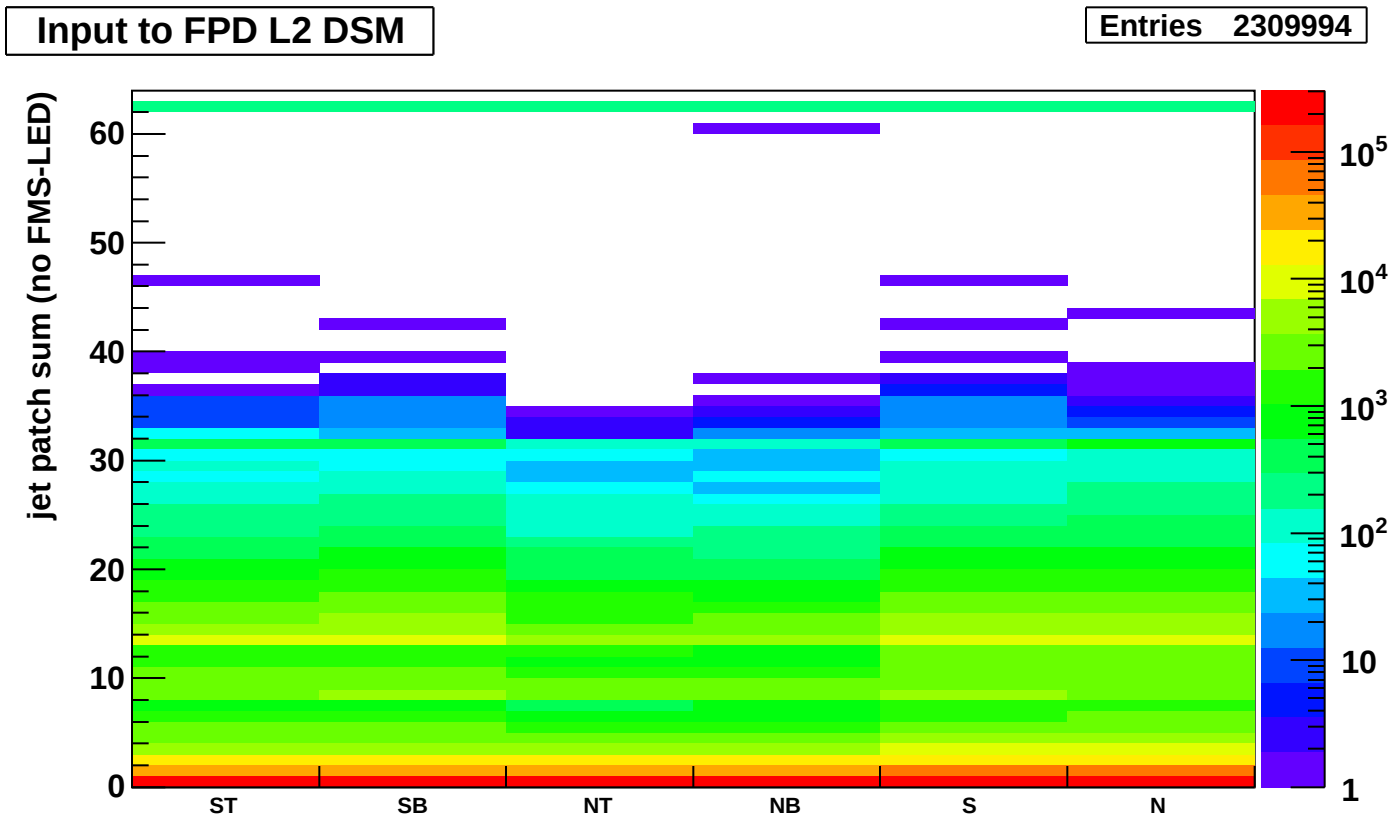

Input to FPD L2 DSM
Entries 538
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

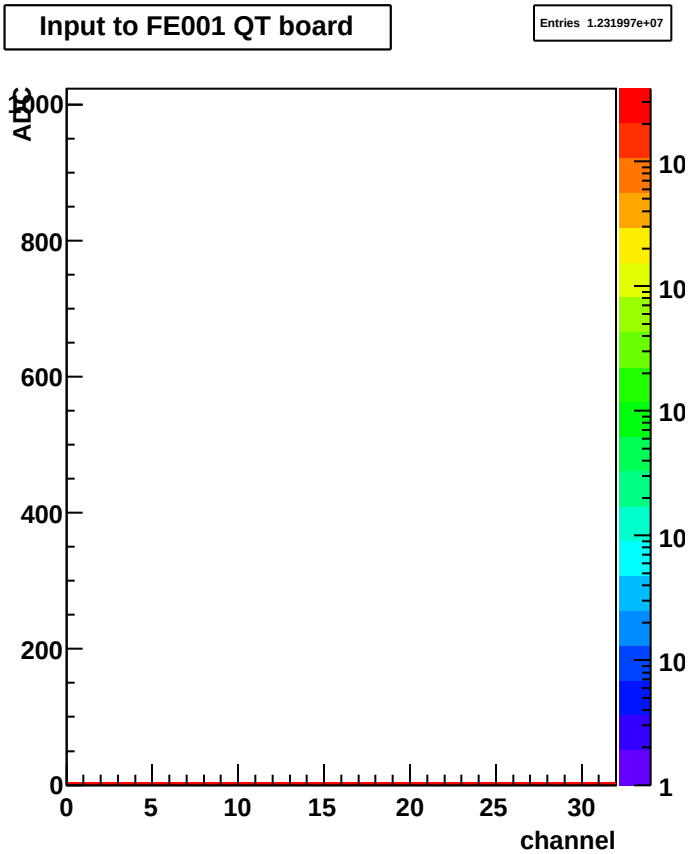

Input to FPD L2 DSM
Entries 1154997
CL bits
1482
647
22419
15857
8661
36481
19727
9943
326099
347933
365748
SMALL
LARGE-S
LARGE-N

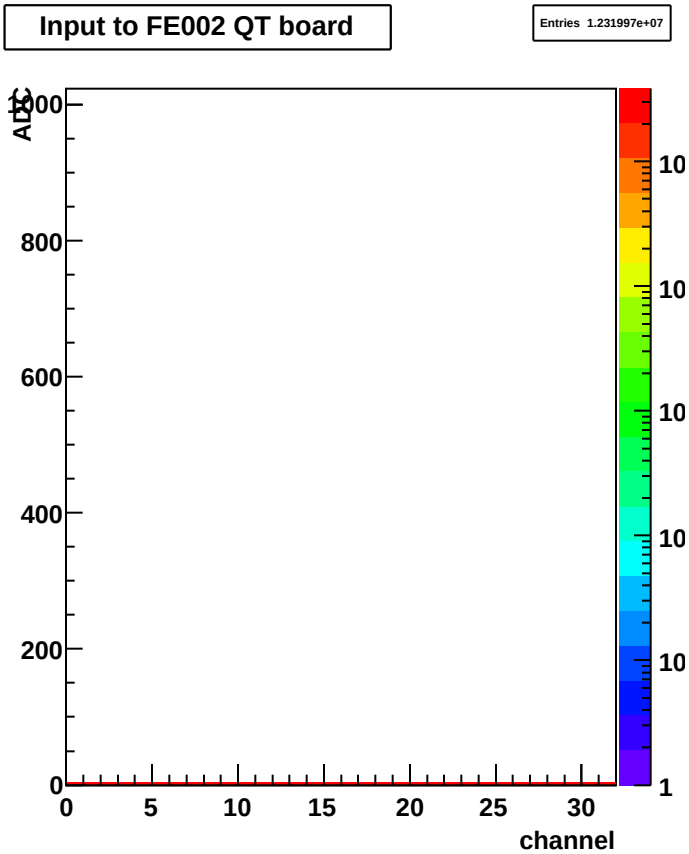

Input to FPD L2 DSM
Entries 82
CL bits - simulated
5
7
12
9
44
5
SMALL
LARGE-S
LARGE-N

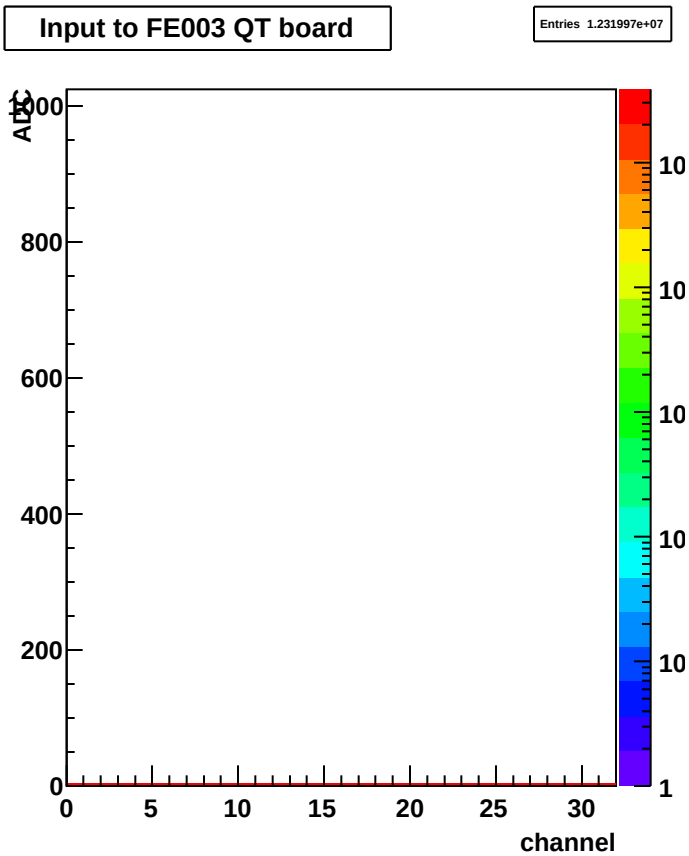

Input to FPD L2 DSM
Entries 1154997
HT bits
4491
26008
10516
9996
24657
15346
7487
345855
343645
366996
SMALL
LARGE-S
LARGE-N

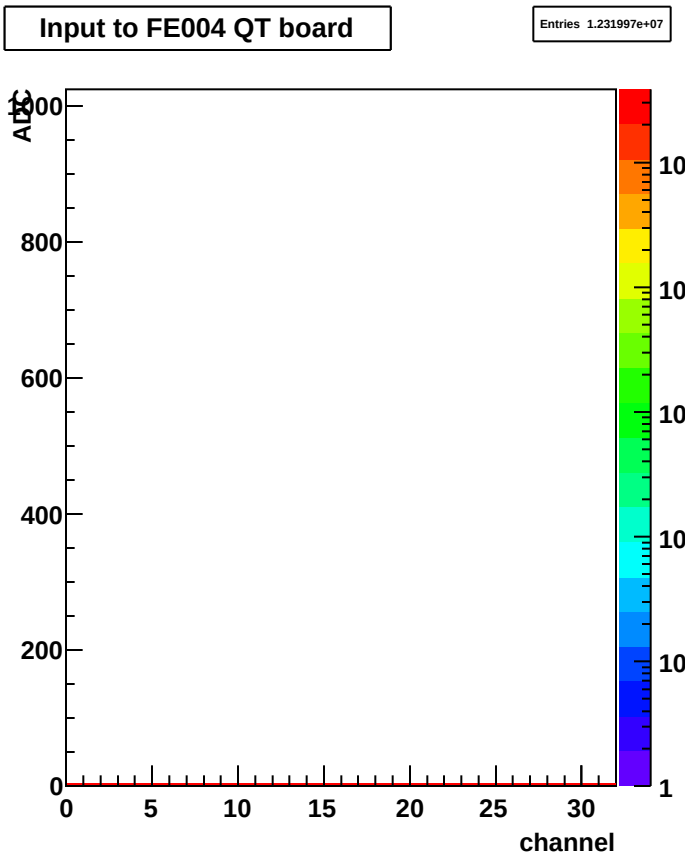

Input to FPD L2 DSM
Entries 190
HT bits - simulated
82
82
26
SMALL
LARGE-S
LARGE-N

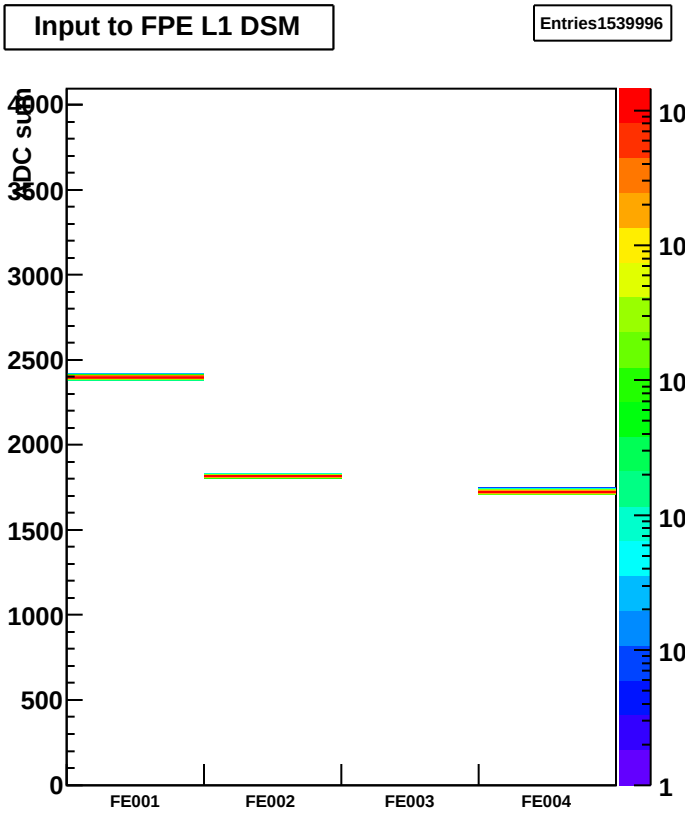

Input to FPD L2 DSM
Entries 2309994
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

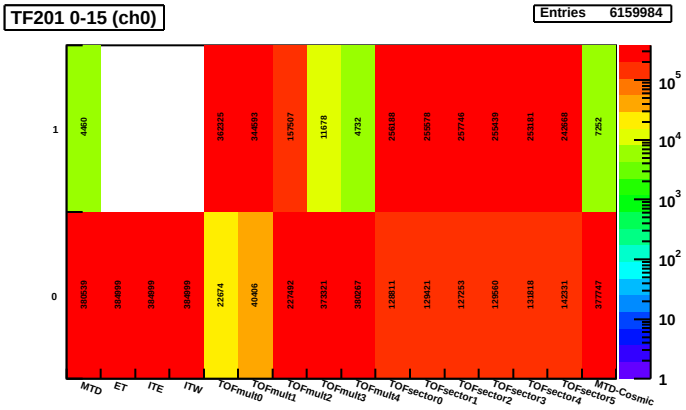

Input to FE001 QT board
Entries 1.231997e+07
ADC
channel

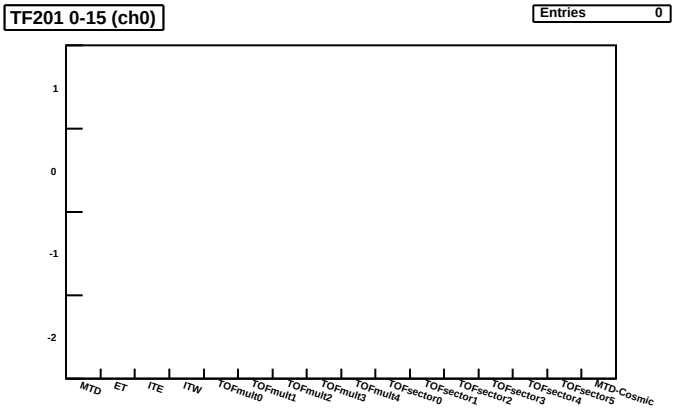

Input to FE002 QT board
Entries 1.231997e+07
ADC
channel

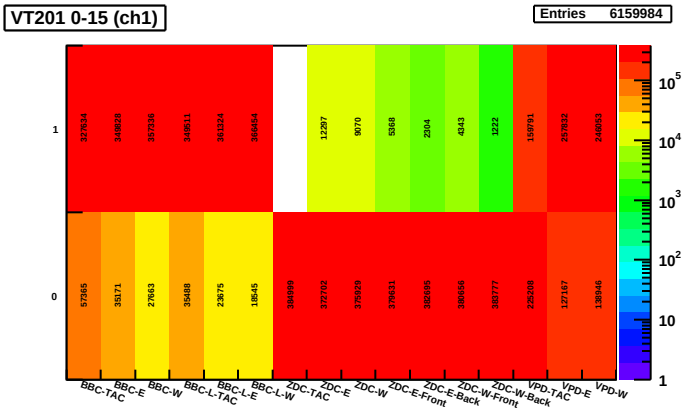

Input to FE003 QT board
Entries 1.231997e+07
ADC
channel

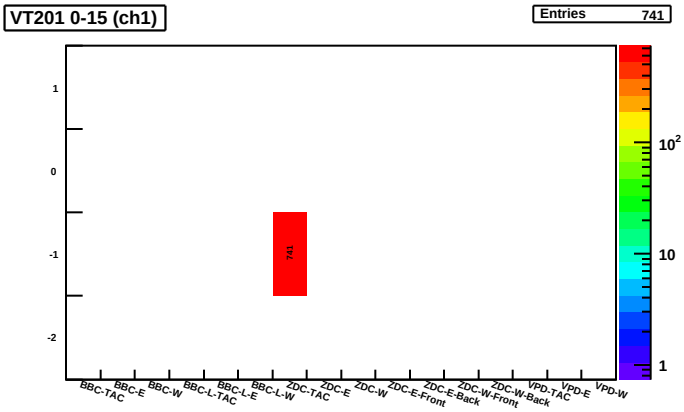

Input to FE004 QT board
Entries 1.231997e+07
ADC
channel


Input to FPE L1 DSM
Entries1539996
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 6159984
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


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


VT201 0-15 (ch1)
Entries 6159984
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 741
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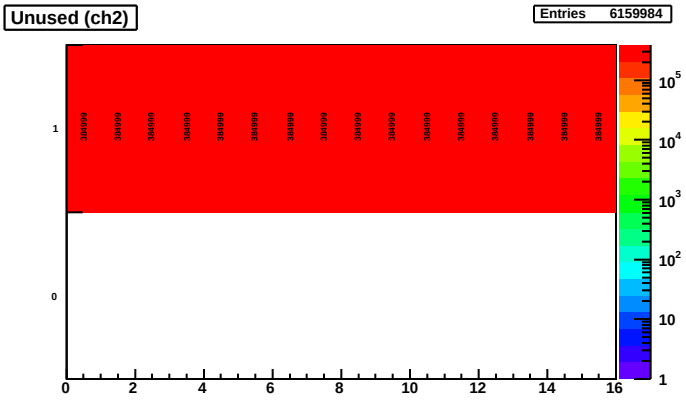
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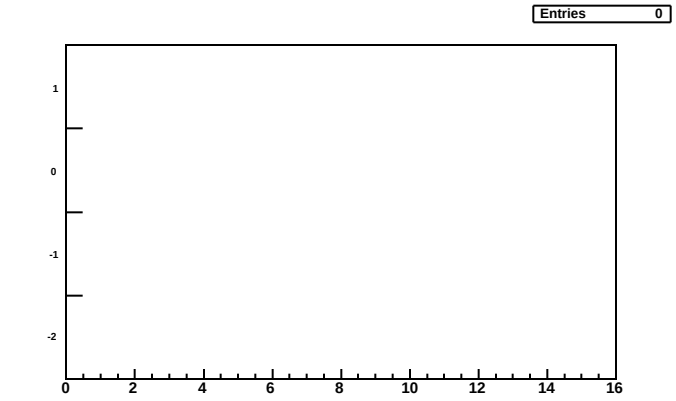
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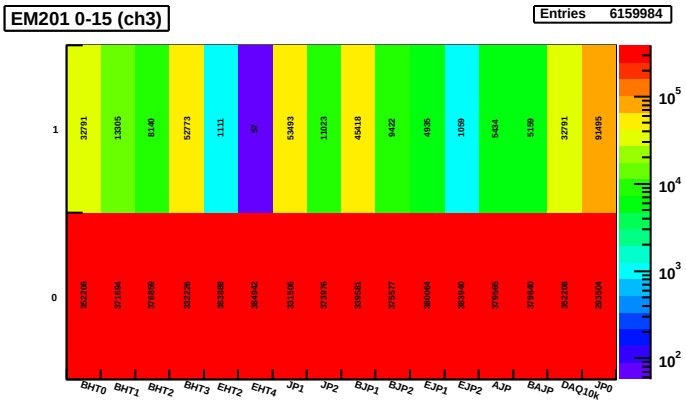
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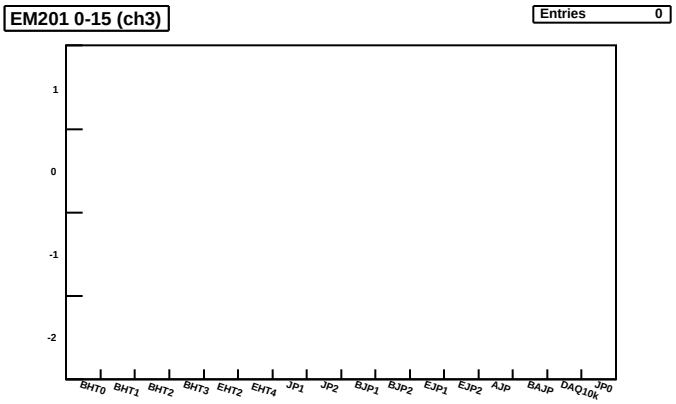
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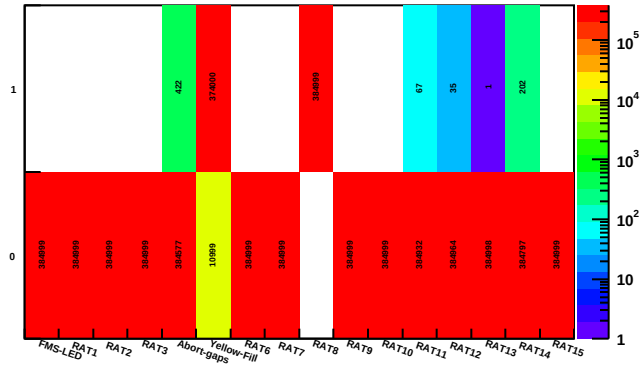
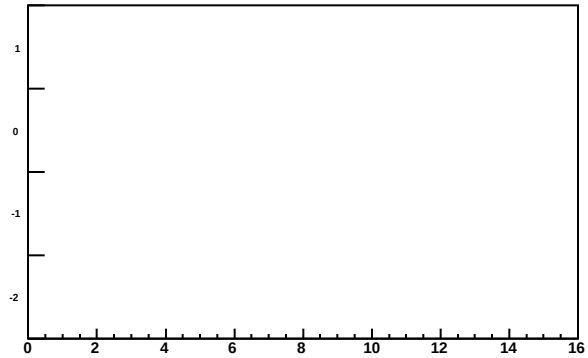
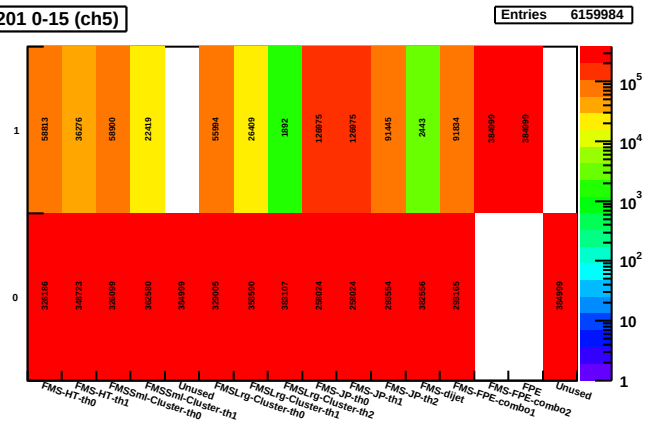
RAT board (ch4)

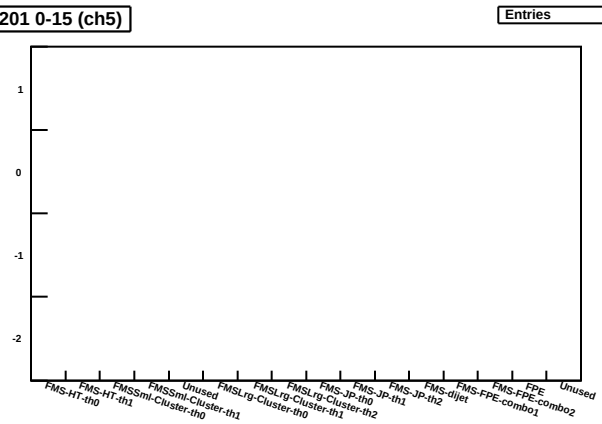




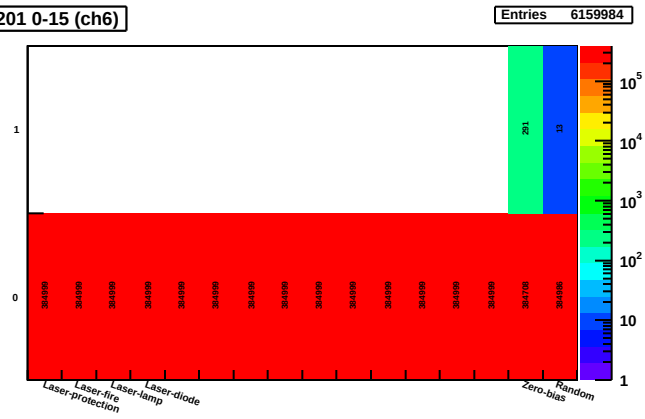
FP201 0-15 (ch5)

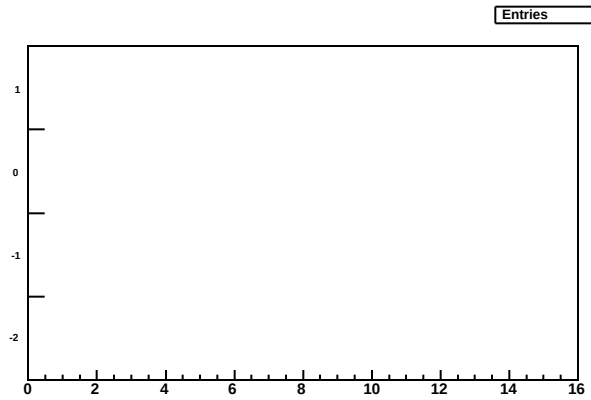
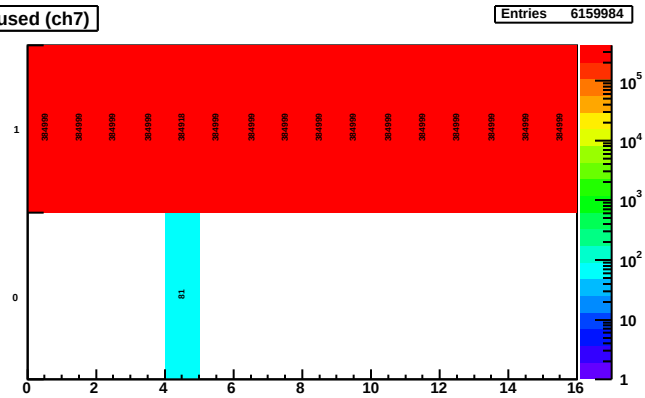
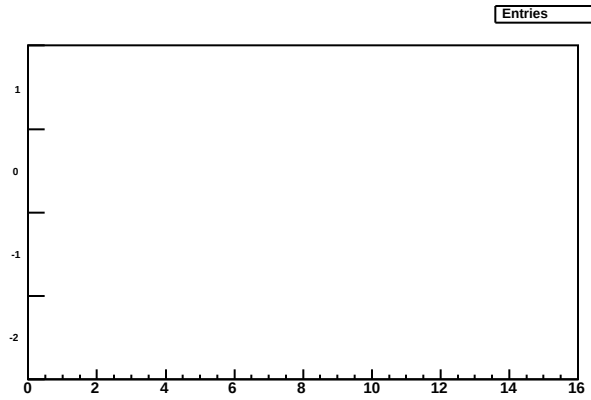


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)