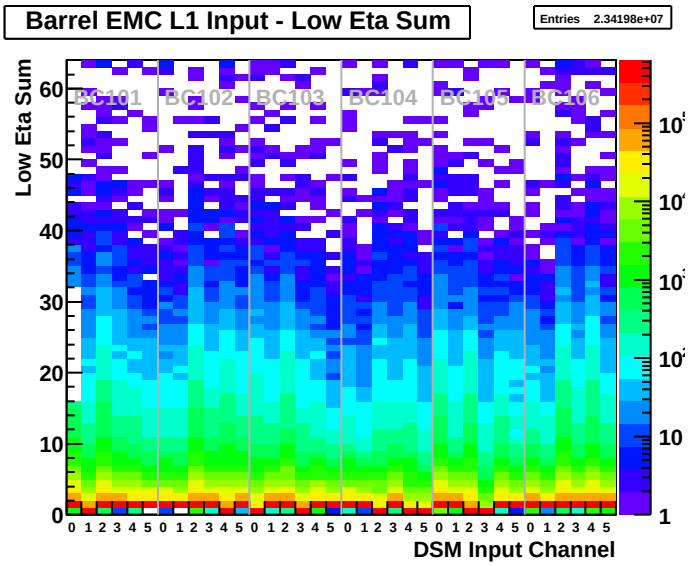
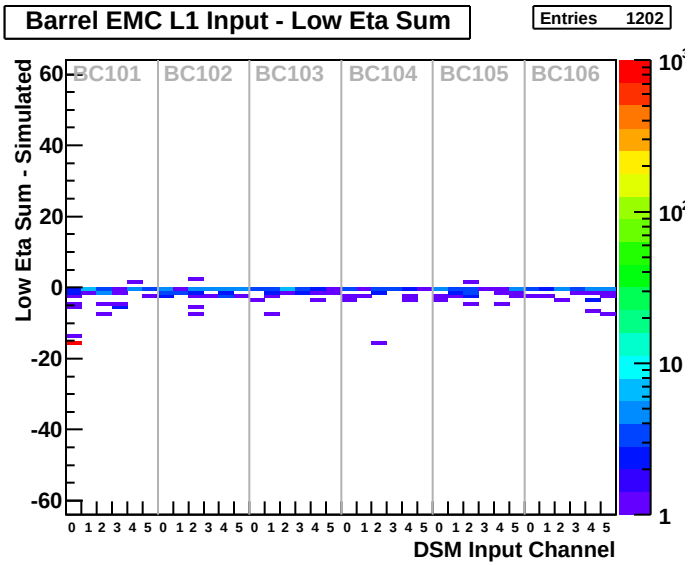
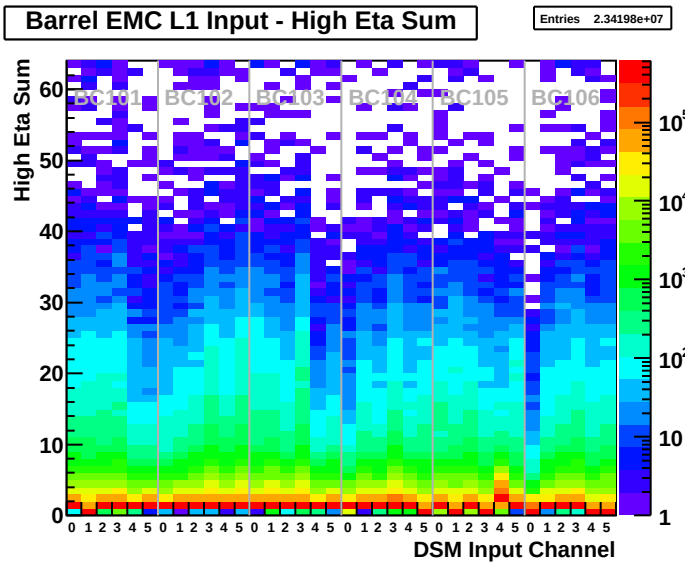
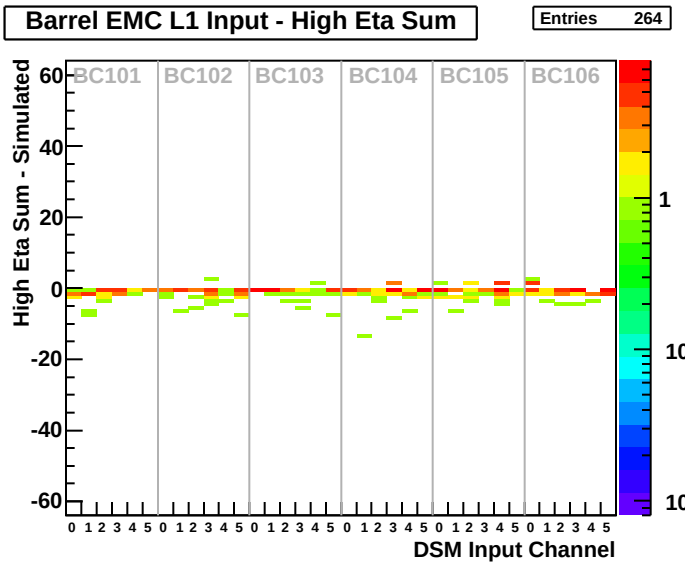
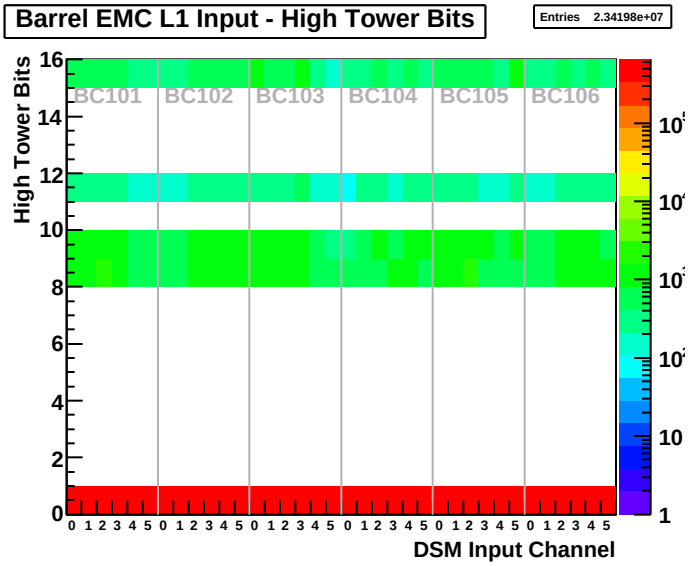
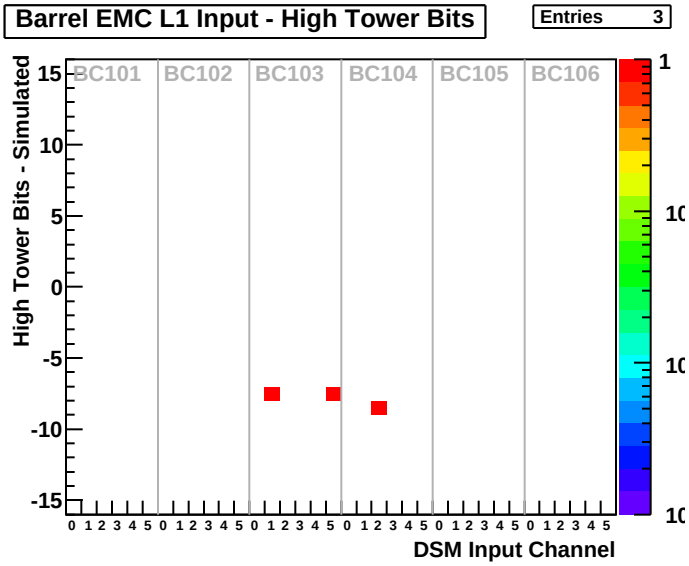

Barrel EMC L1 Input - Low Eta Sum
Entries 2.34198e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

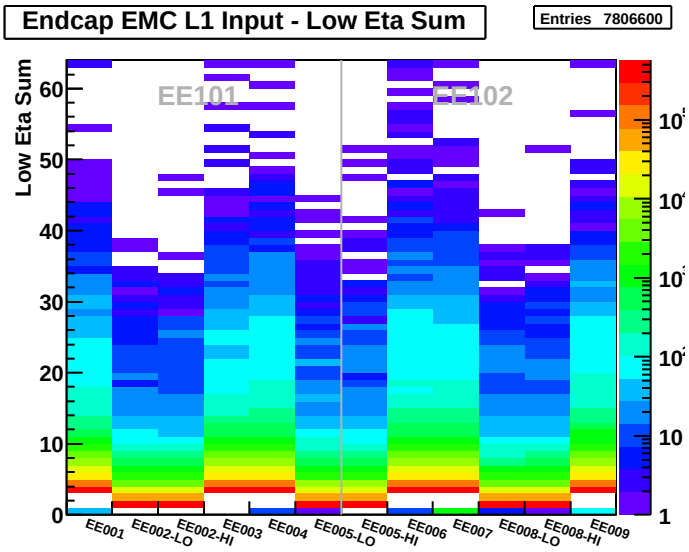

Barrel EMC L1 Input - Low Eta Sum
Entries 1202
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

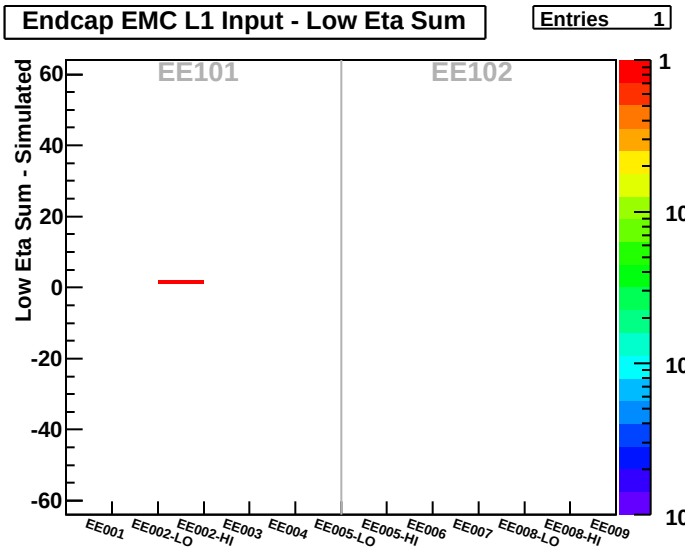

Barrel EMC L1 Input - High Eta Sum
Entries 2.34198e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

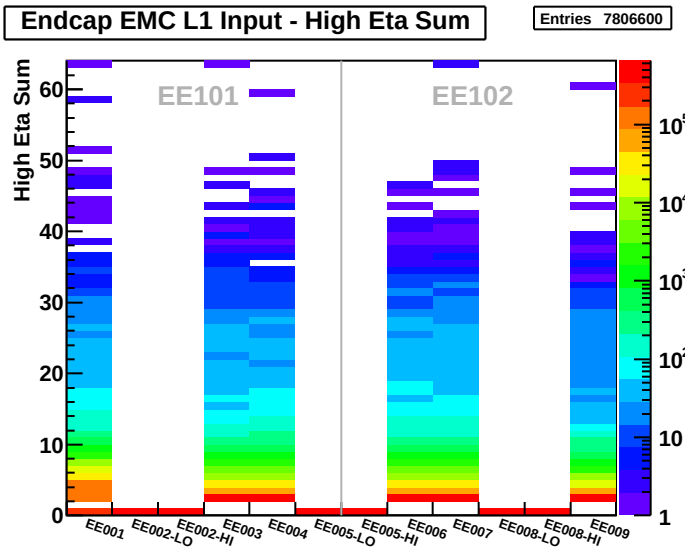

Barrel EMC L1 Input - High Eta Sum
Entries 264
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

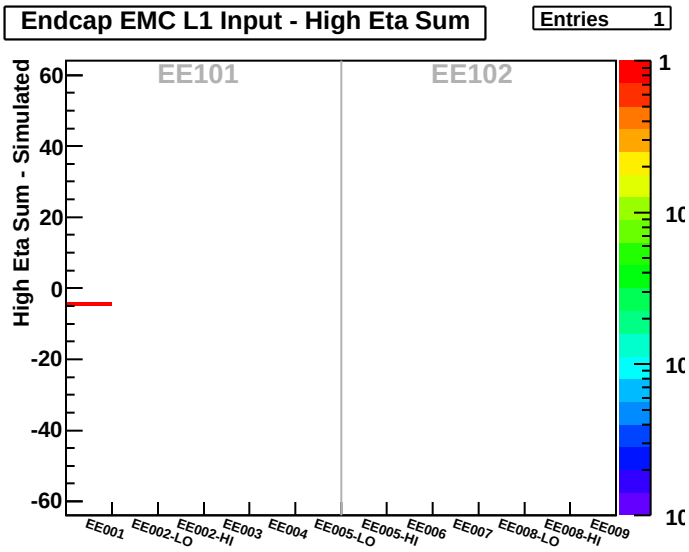

Barrel EMC L1 Input - High Tower Bits
Entries 2.34198e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

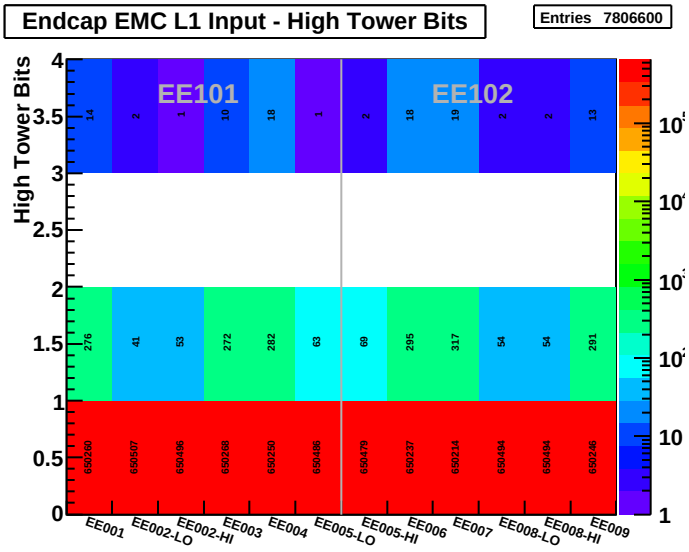

Barrel EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

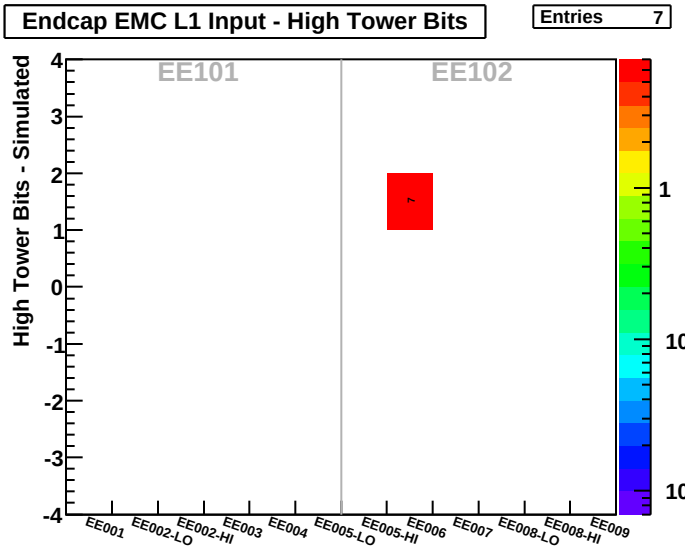

Endcap EMC L1 Input - Low Eta Sum
Entries 7806600
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

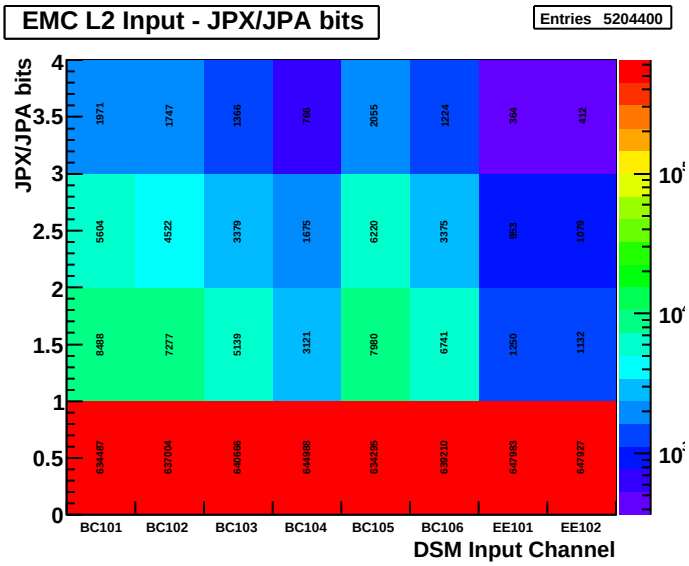

Endcap EMC L1 Input - Low Eta Sum
Entries 1
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

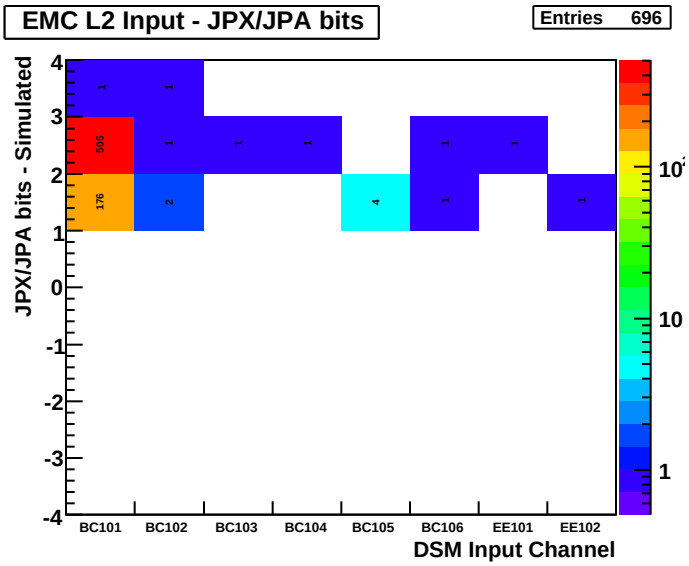

Endcap EMC L1 Input - High Eta Sum
Entries 7806600
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

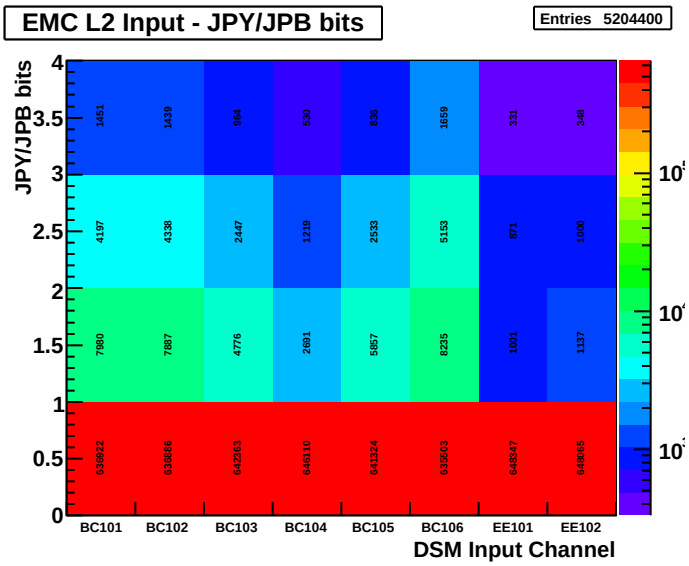

Endcap EMC L1 Input - High Eta Sum
Entries 1
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

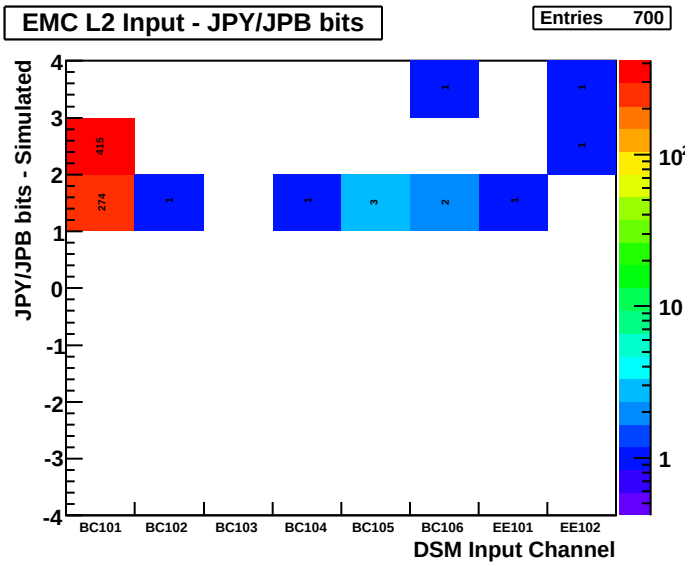

Endcap EMC L1 Input - High Tower Bits
Entries 7806600
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

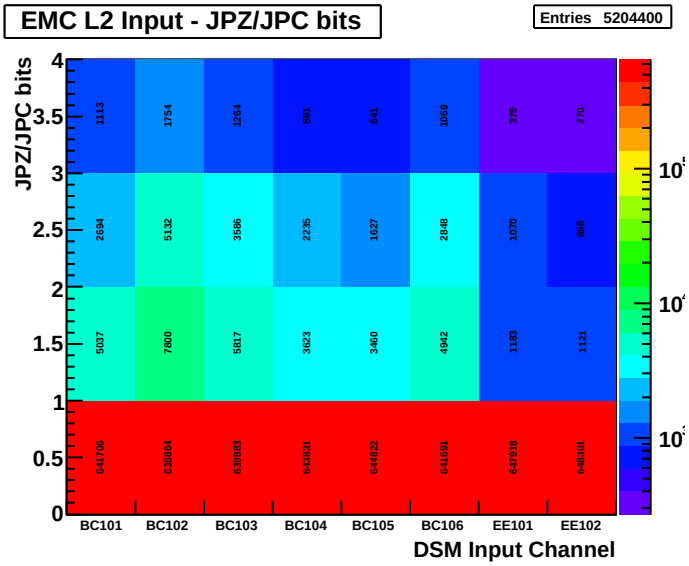

Endcap EMC L1 Input - High Tower Bits
Entries 7
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

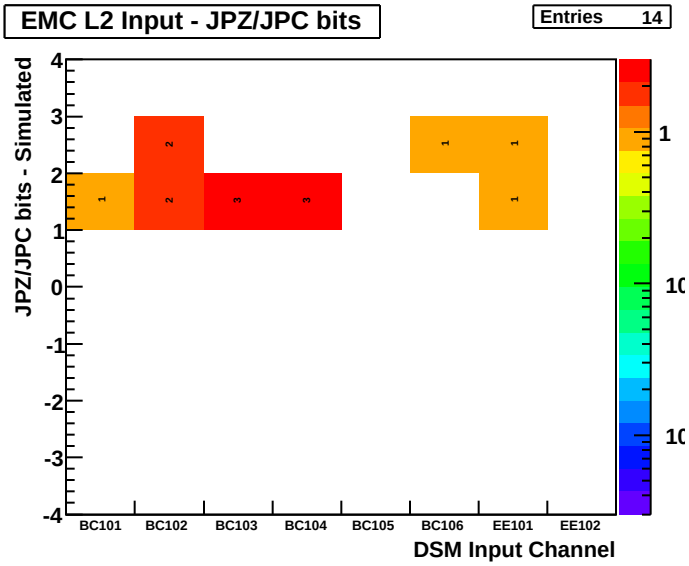

EMC L2 Input - JPX/JPA bits
Entries 5204400
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1971 1747 1366 766 2055 1224 364 412
5604 4522 3379 1675 6220 3375 953 1079
8488 7277 5139 3121 7980 6741 1250 1132
634467 637004 640666 644988 634295 639210 647983 647927

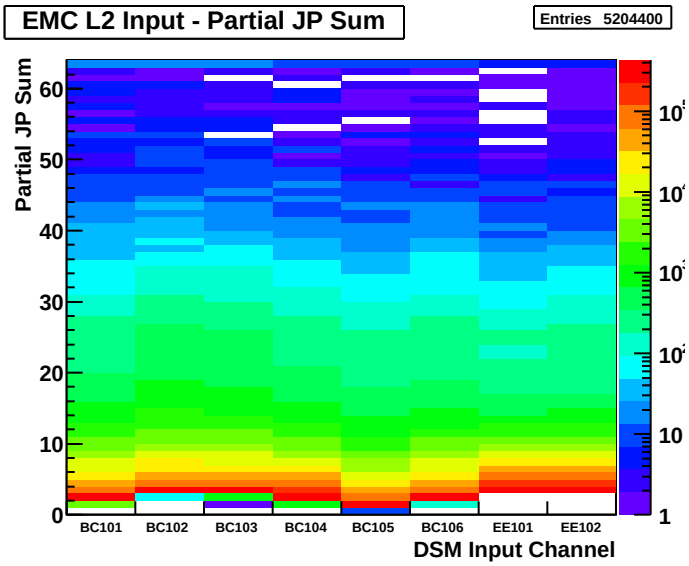

EMC L2 Input - JPX/JPA bits
Entries 696
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1
505 1 1 1 1 1
176 2 4 1 1

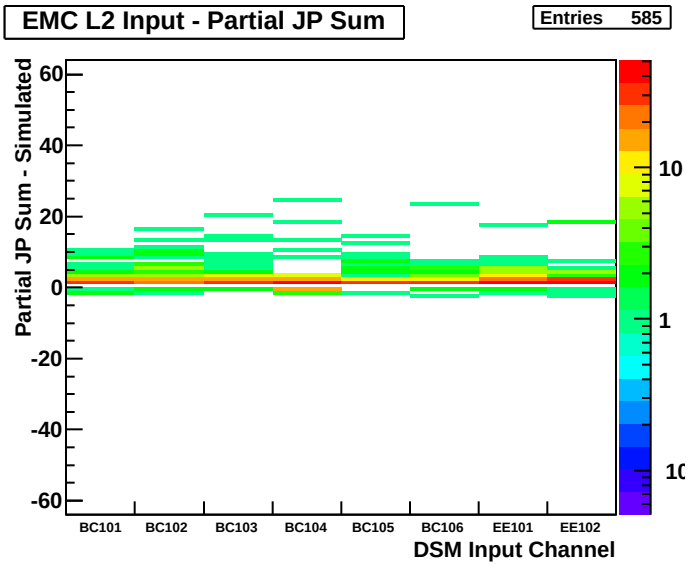

EMC L2 Input - JPY/JPB bits
Entries 5204400
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1451 1439 964 530 836 1659 331 348
4197 4338 2447 1219 2533 5153 871 1000
7980 7887 4776 2691 5857 8235 1001 1137
636922 638886 642263 646110 641324 635593 648347 648065

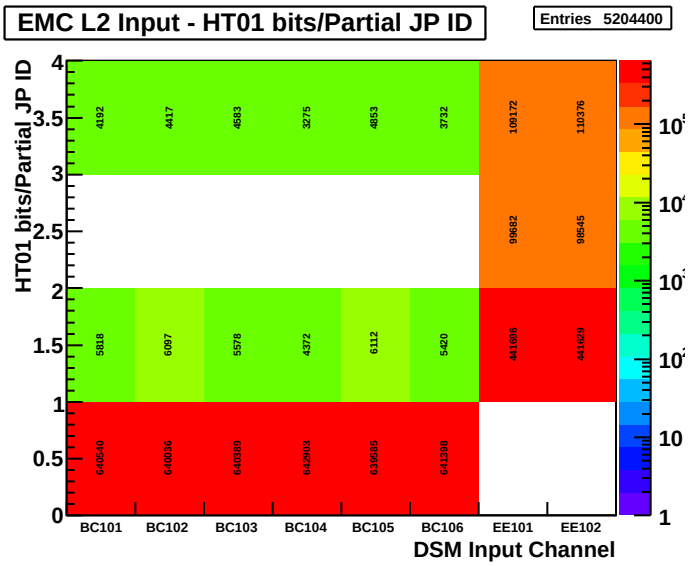

EMC L2 Input - JPY/JPB bits
Entries 700
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1
415 1
274 1 1 3 2 1

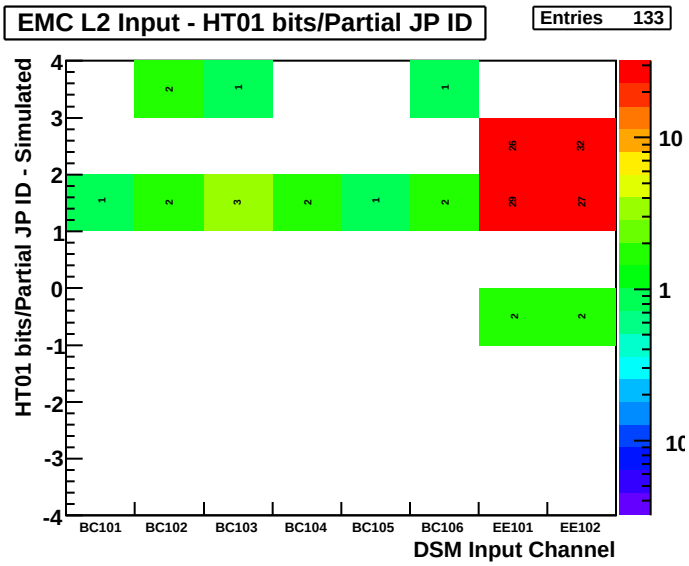

EMC L2 Input - JPZ/JPC bits
Entries 5204400
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1113 1754 1264 861 641 1069 379 270
2694 5132 3586 2235 1627 2848 1070 858
5037 7800 5817 3623 3460 4942 1183 1121
641706 635864 639883 643831 644922 641691 647918 648301

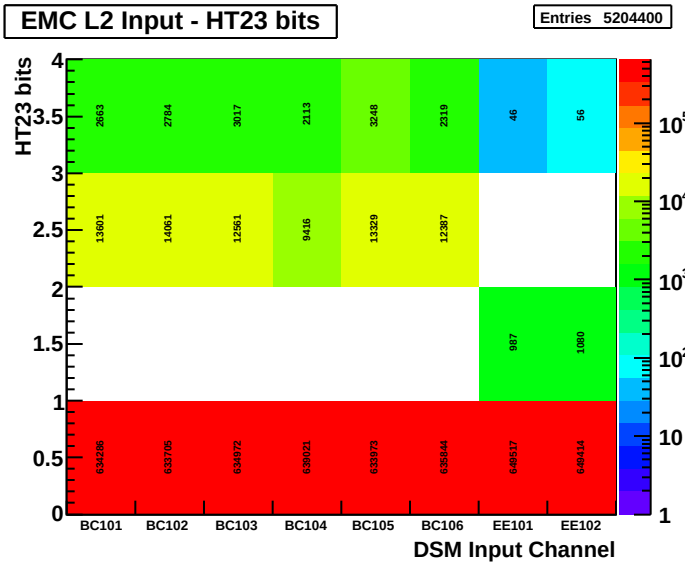

EMC L2 Input - JPZ/JPC bits
Entries 14
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1
1 2 3 3 1

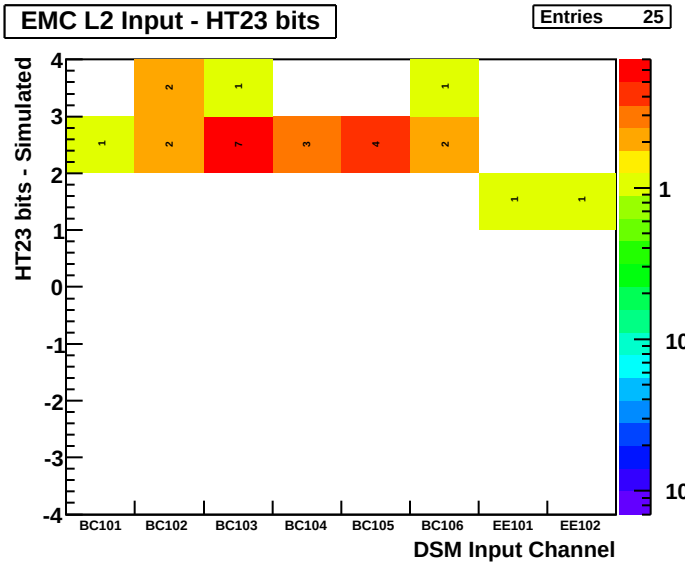

EMC L2 Input - Partial JP Sum
Entries 5204400
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

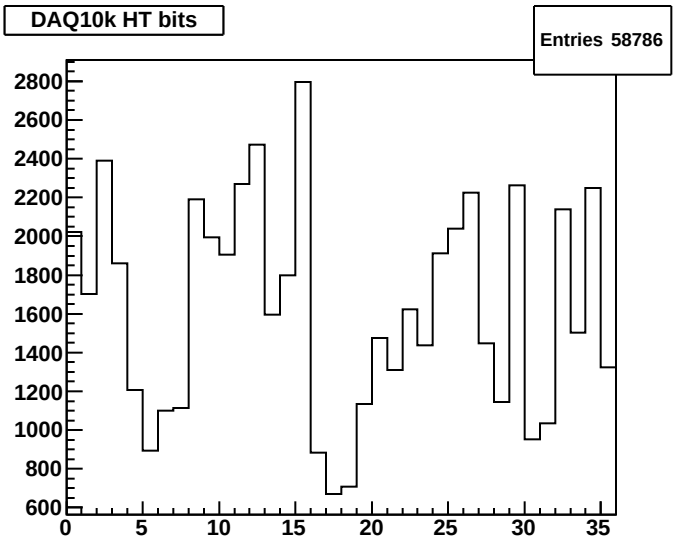

EMC L2 Input - Partial JP Sum
Entries 585
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

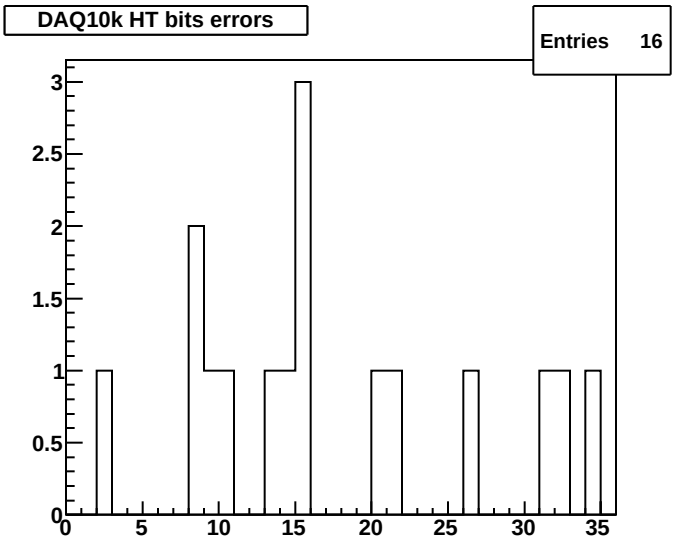

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5204400
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

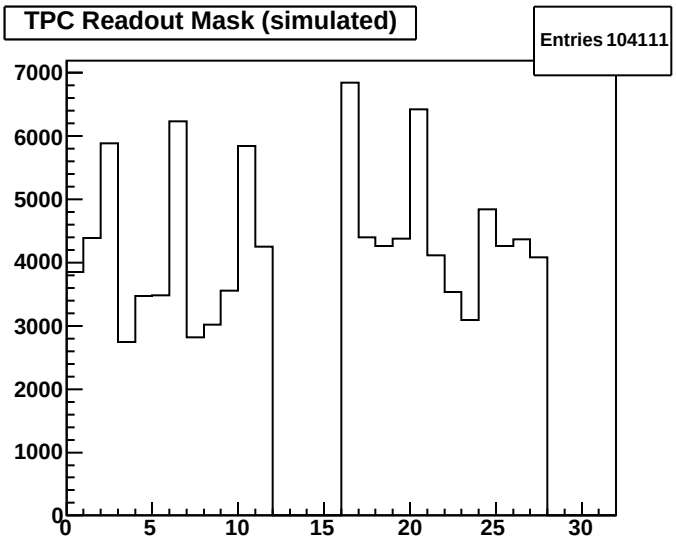

EMC L2 Input - HT01 bits/Partial JP ID
Entries 133
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

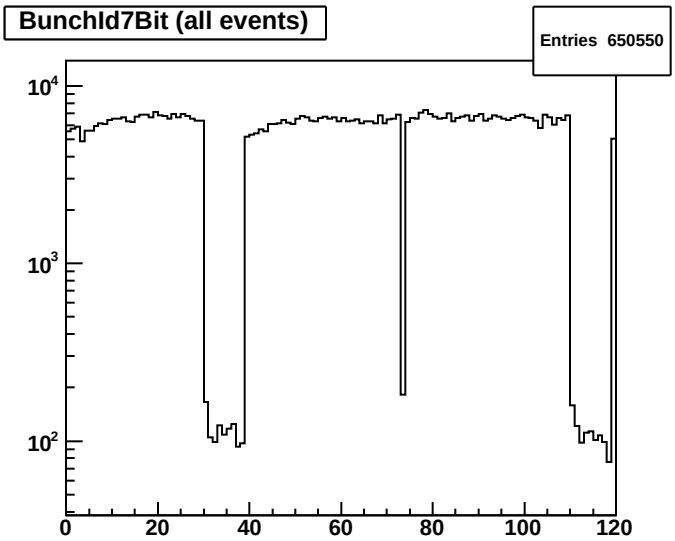

EMC L2 Input - HT23 bits
Entries 5204400
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

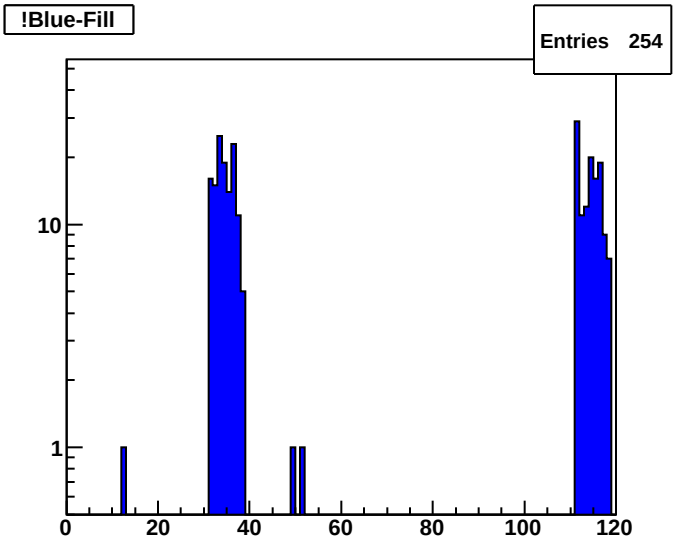

EMC L2 Input - HT23 bits
Entries 25
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

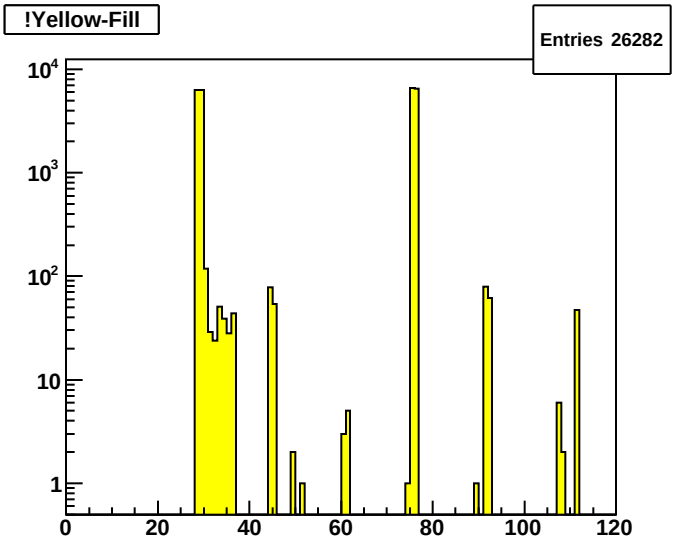

DAQ10k HT bits
Entries 58786

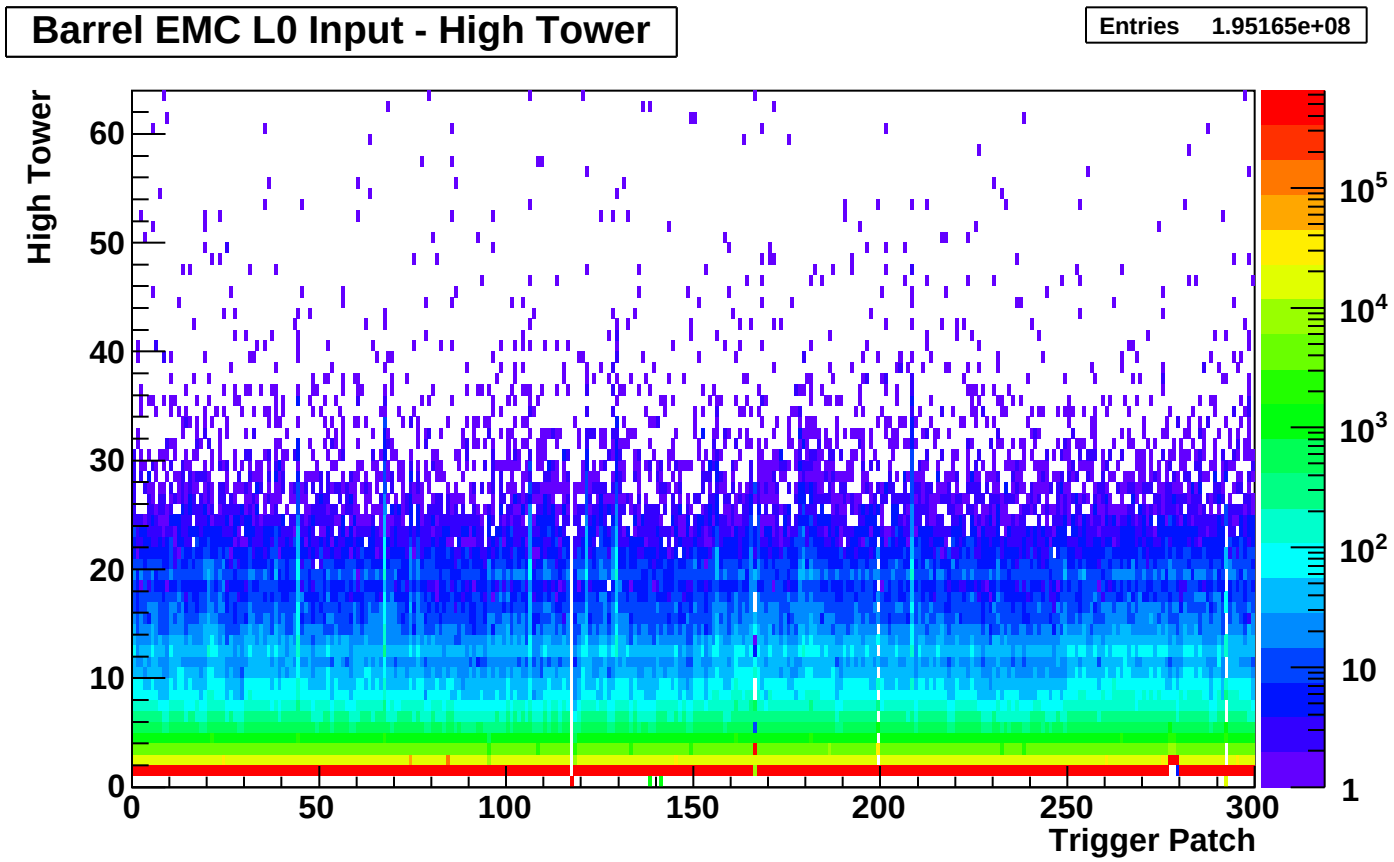

DAQ10k HT bits errors
Entries 16

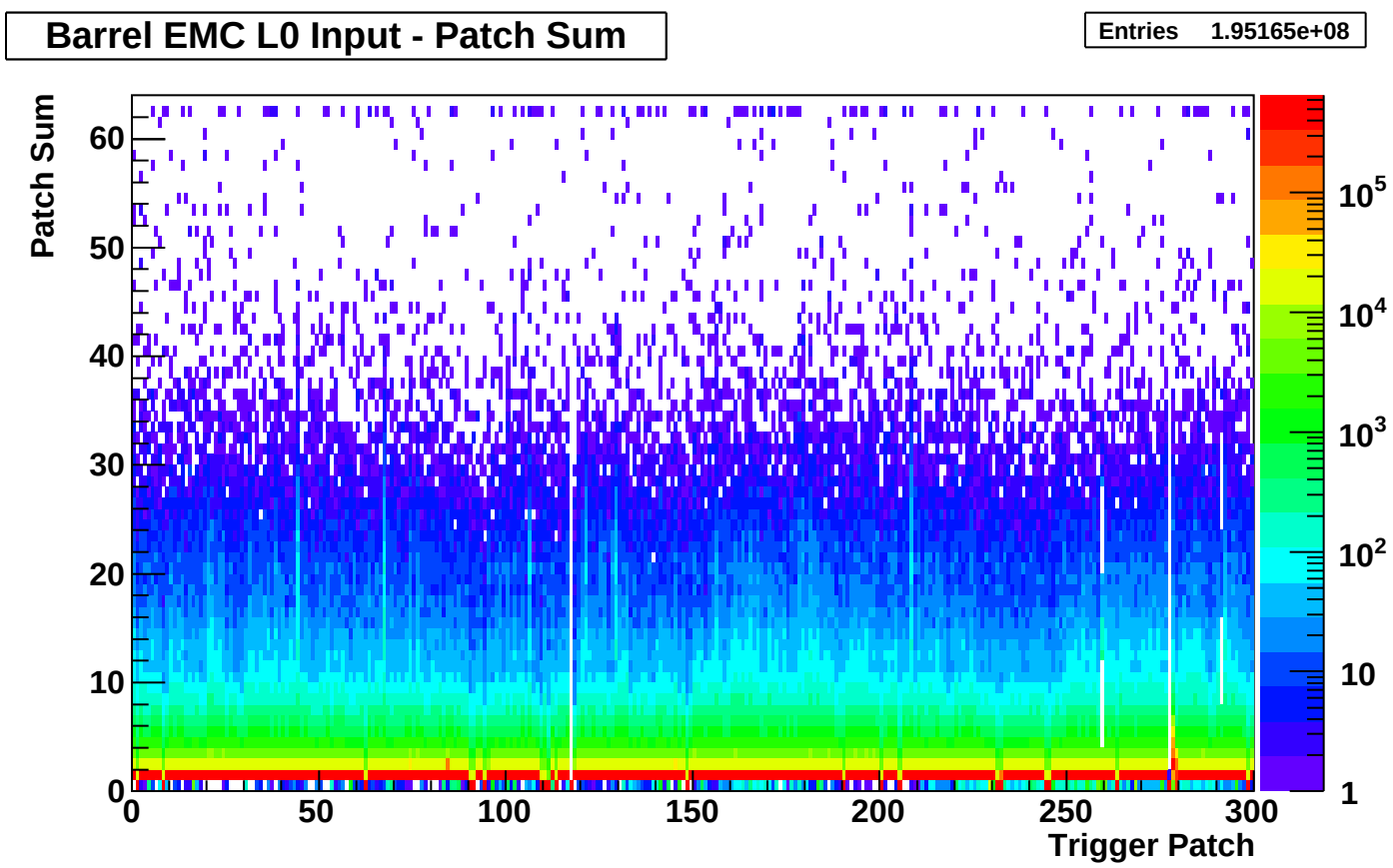

TPC Readout Mask (simulated)
Entries 104111

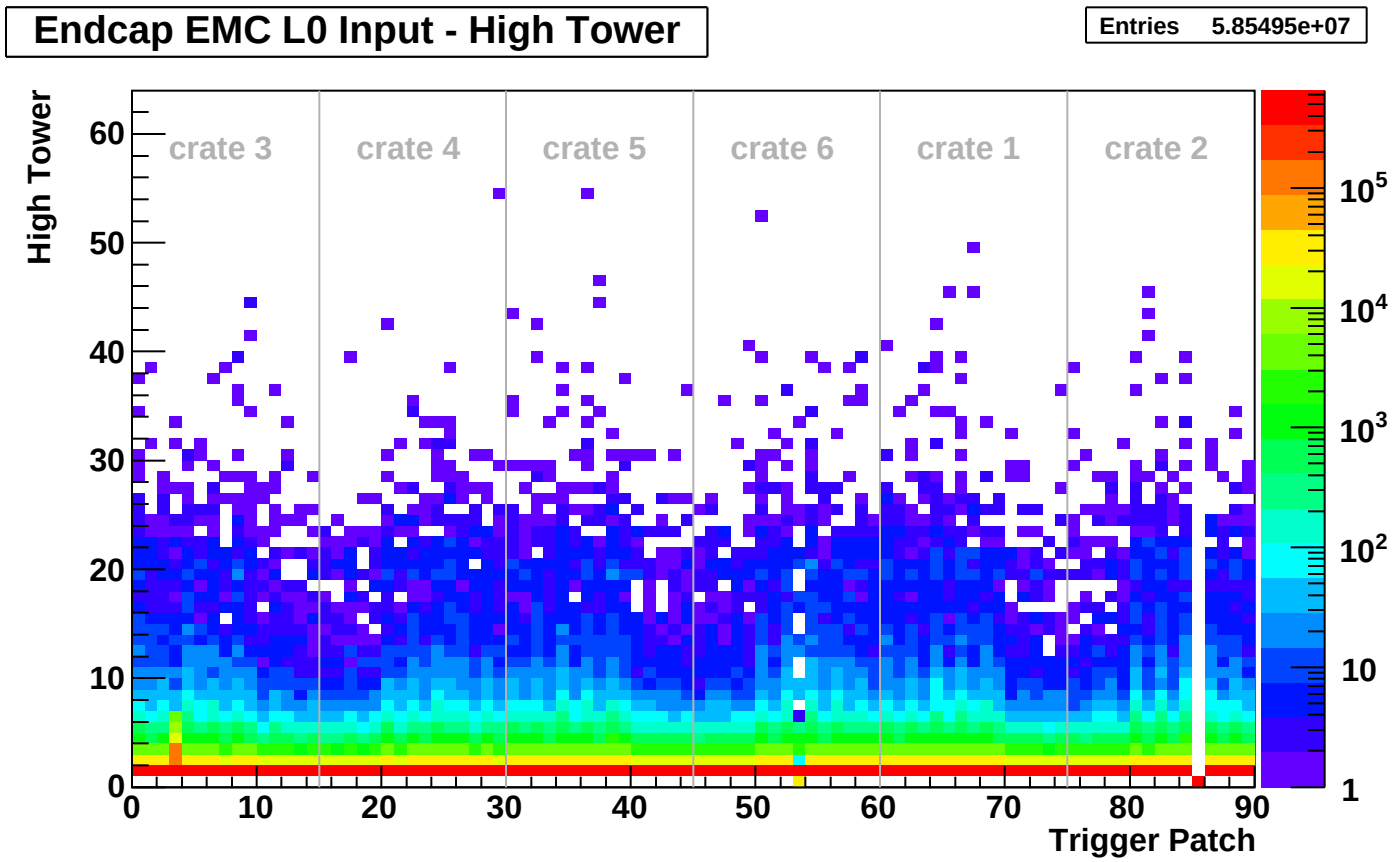

BunchId7Bit (all events)
Entries 650550

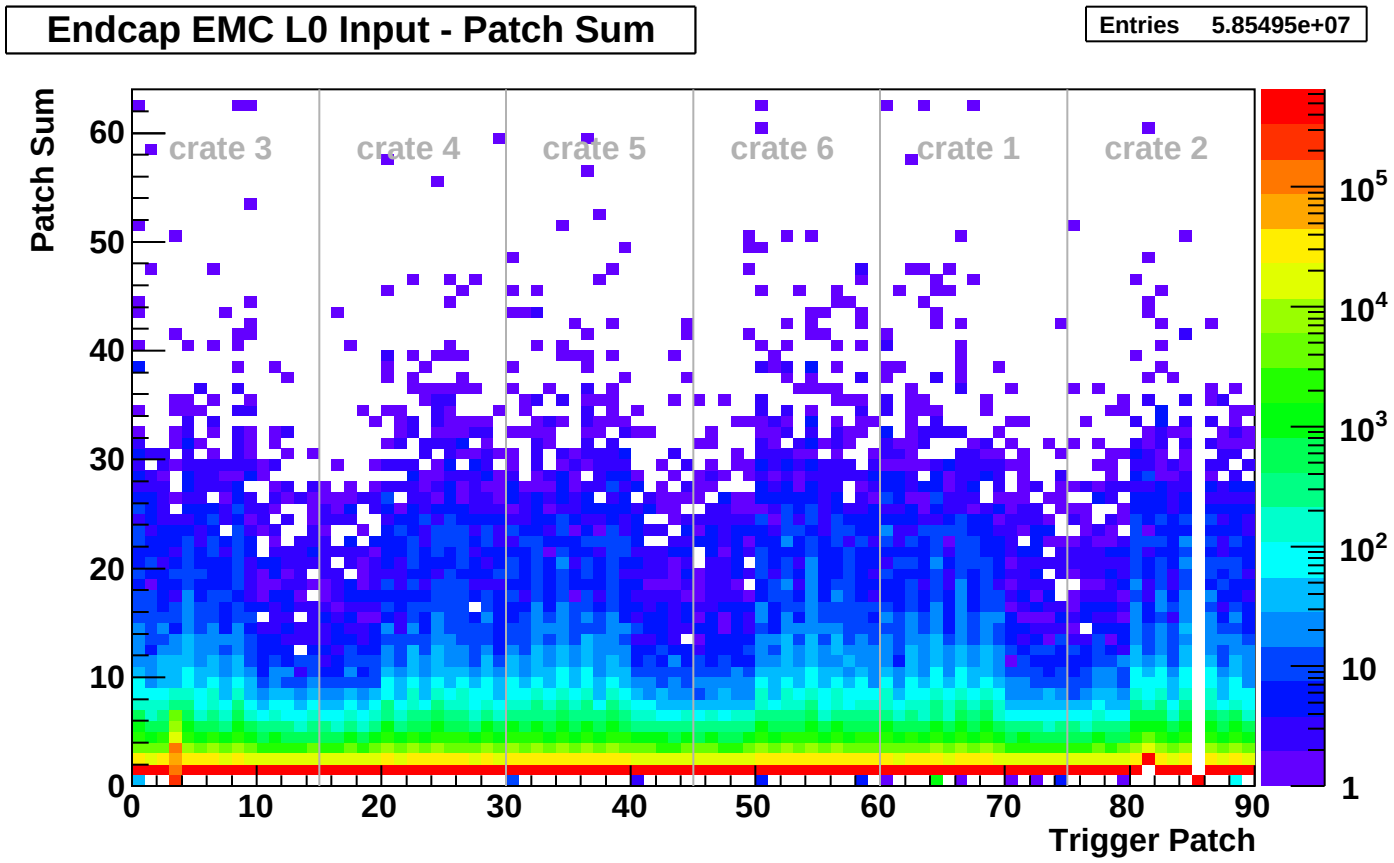

!Blue-Fill
Entries 254

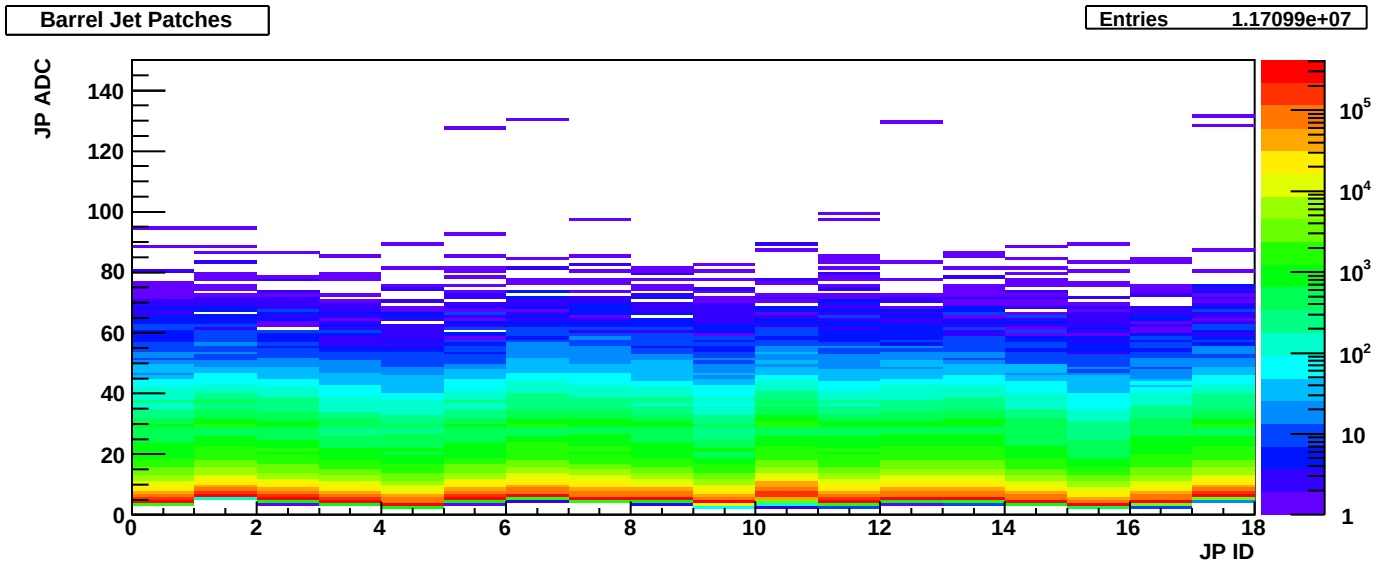

!Yellow-Fill
Entries 26282

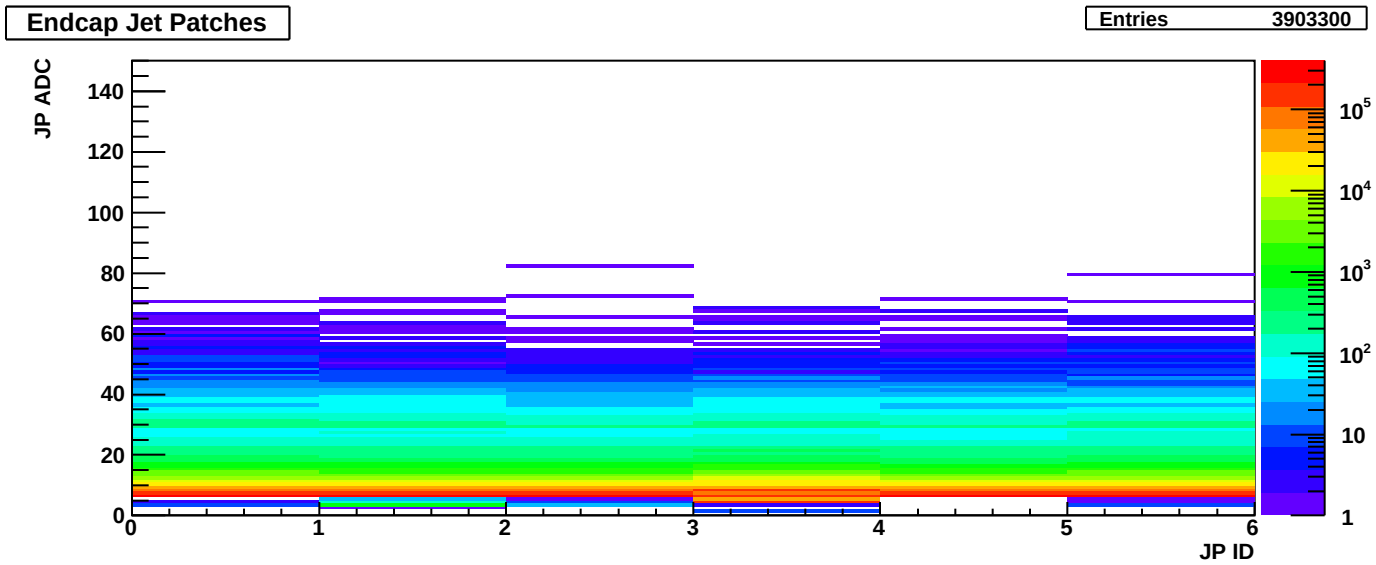

Barrel EMC L0 Input - High Tower
Entries 1.95165e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

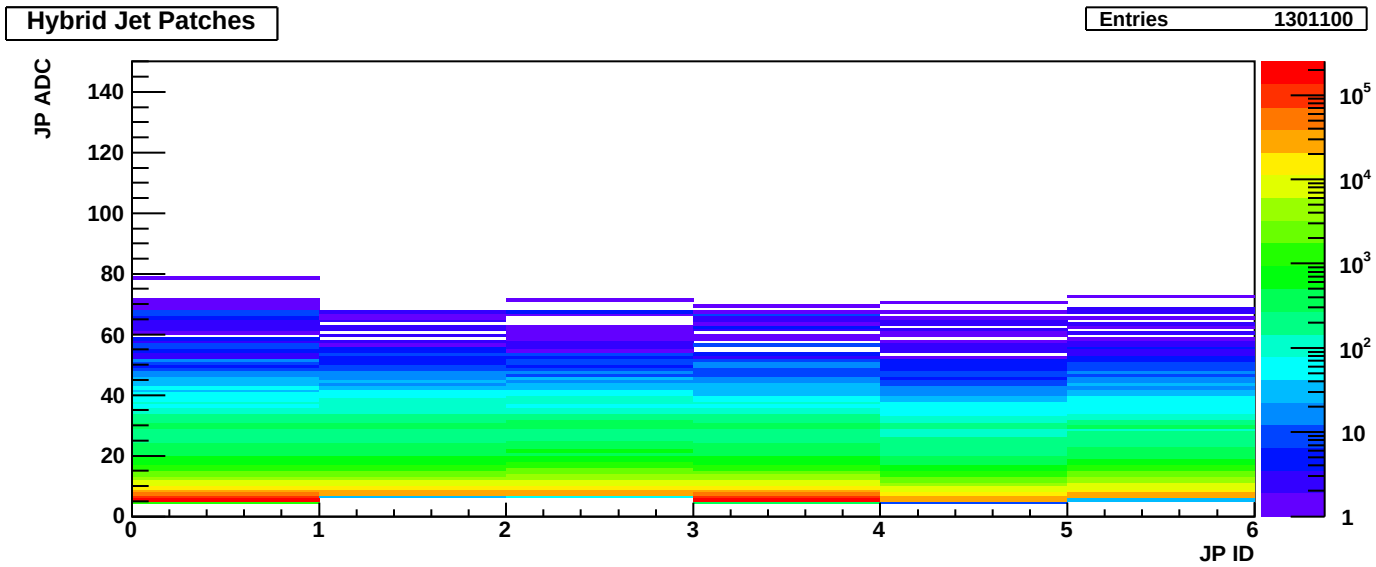

Barrel EMC L0 Input - Patch Sum
Entries 1.95165e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

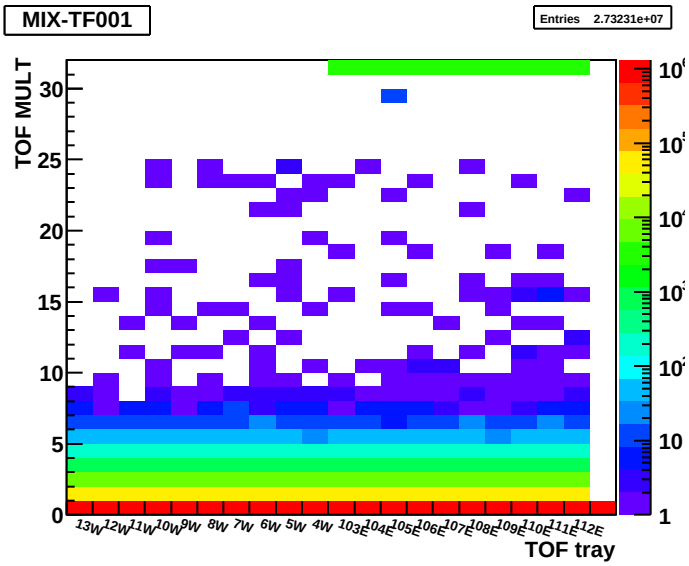

Endcap EMC L0 Input - High Tower
Entries 5.85495e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

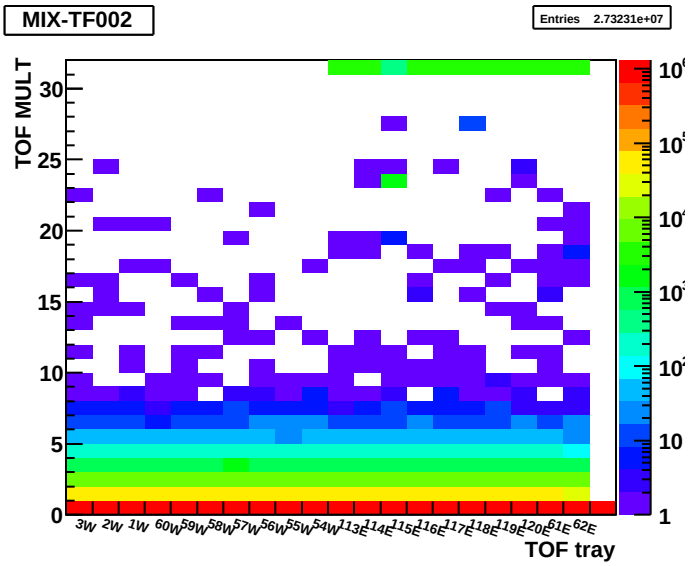

Endcap EMC L0 Input - Patch Sum
Entries 5.85495e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

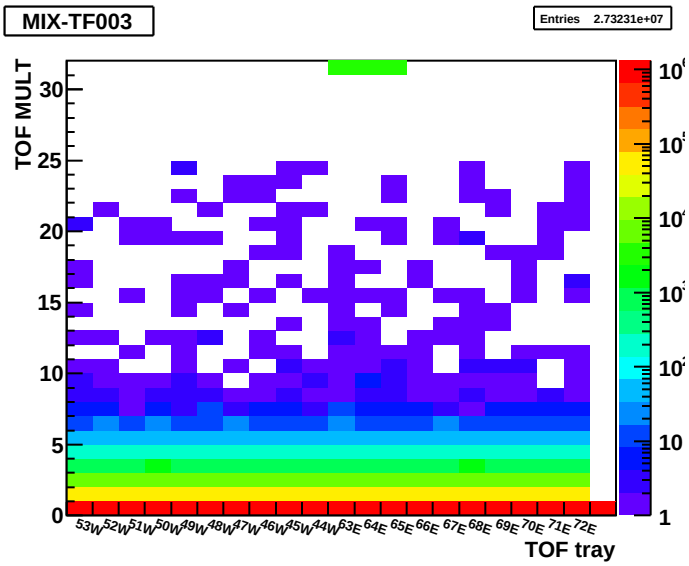

Barrel Jet Patches
Entries 1.17099e+07
JP ADC
JP ID

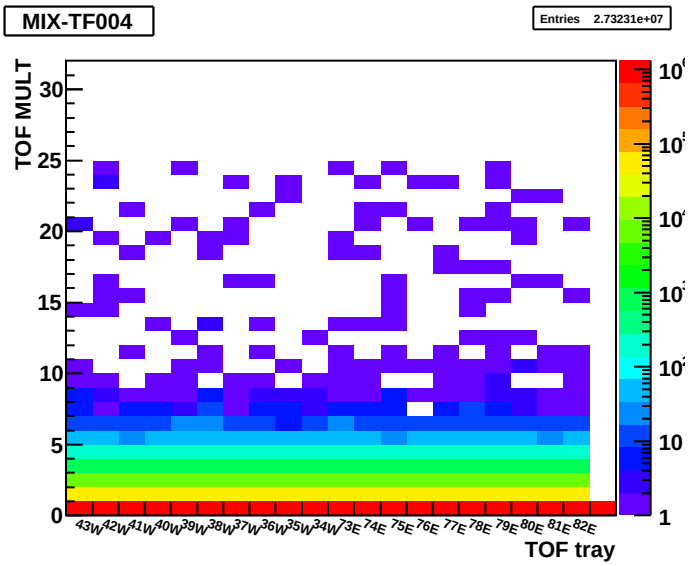

Endcap Jet Patches
Entries 3903300
JP ADC
JP ID

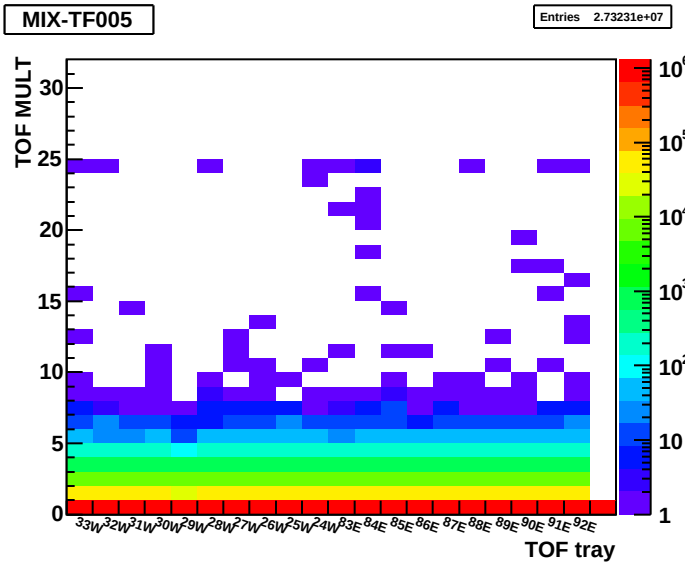

Hybrid Jet Patches
Entries 1301100
JP ADC
JP ID

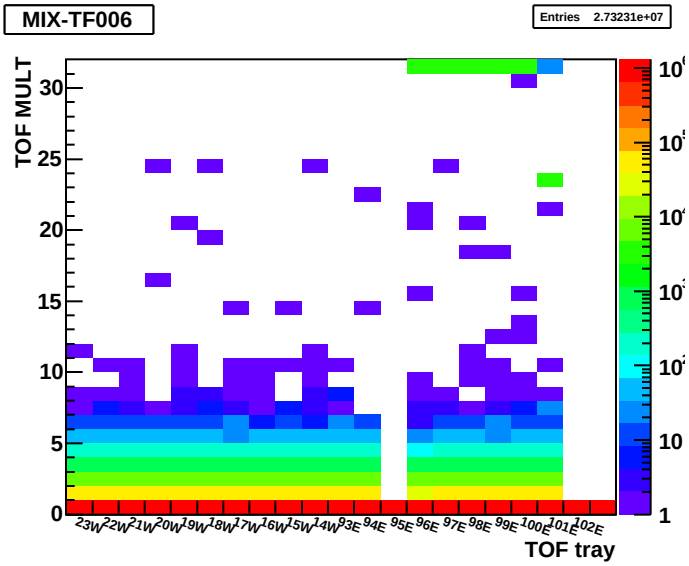

MIX-TF001
Entries 2.73231e+07
TOF MULT
TOF tray

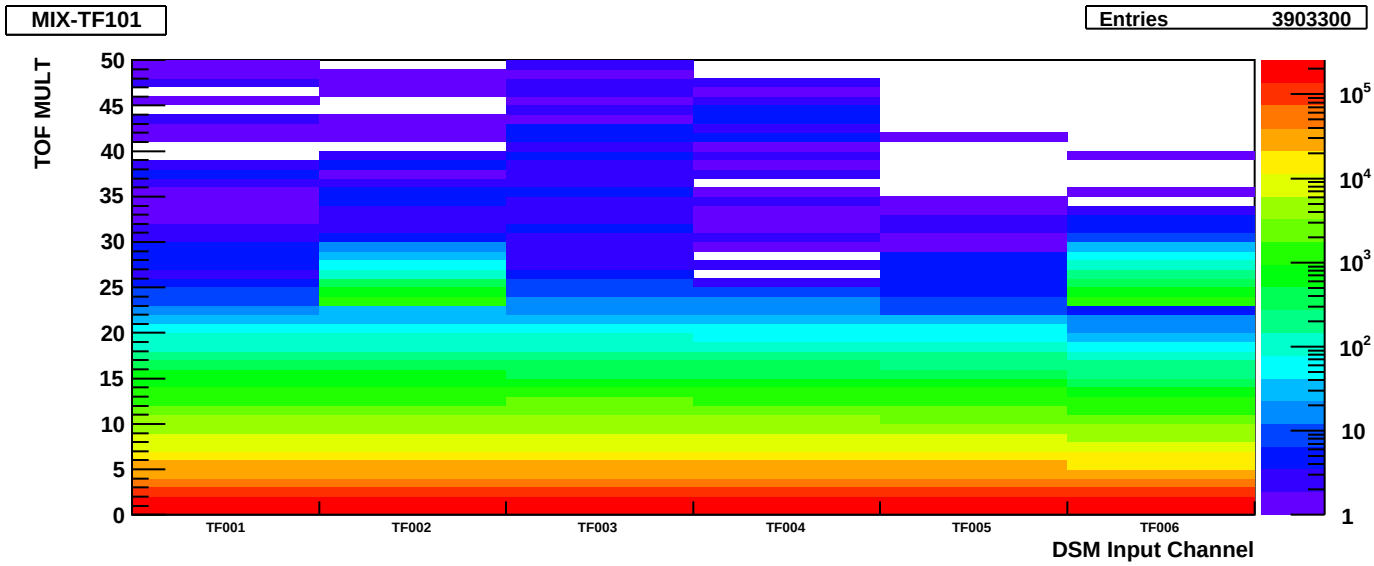

MIX-TF002
Entries 2.73231e+07
TOF MULT
TOF tray

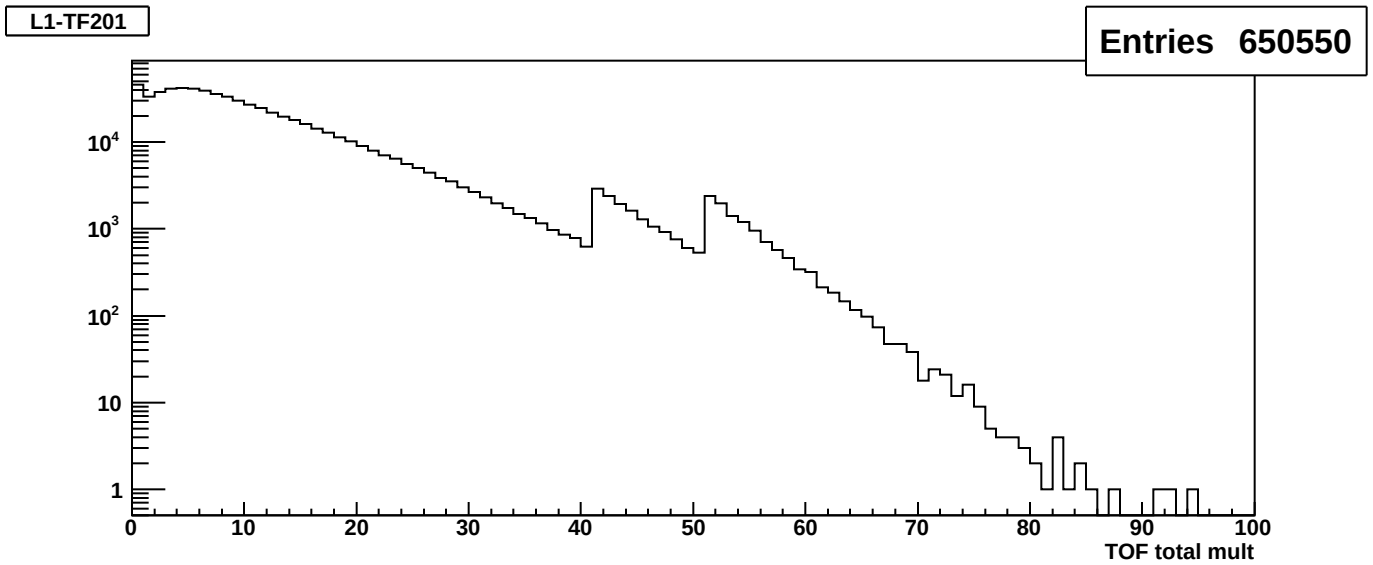

MIX-TF003
Entries 2.73231e+07
TOF MULT
TOF tray

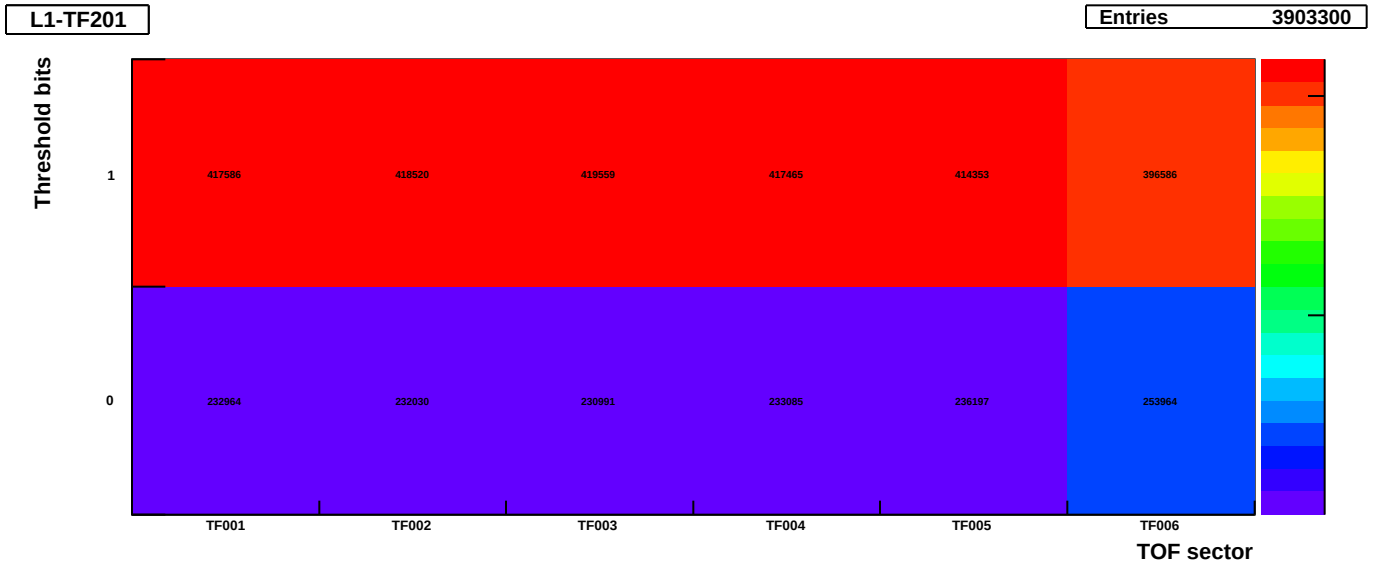

MIX-TF004
Entries 2.73231e+07
TOF MULT
TOF tray

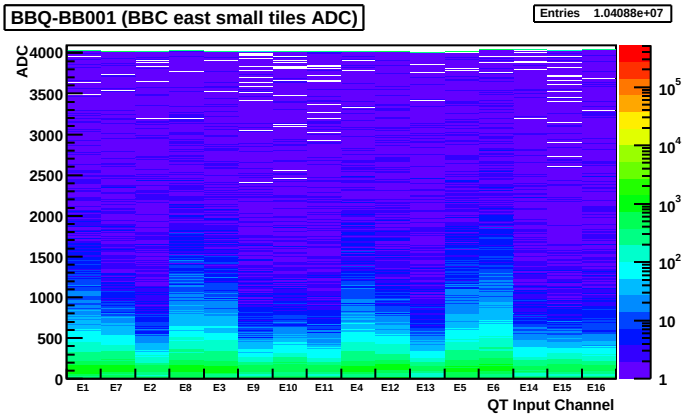

MIX-TF005
Entries 2.73231e+07
TOF MULT
TOF tray

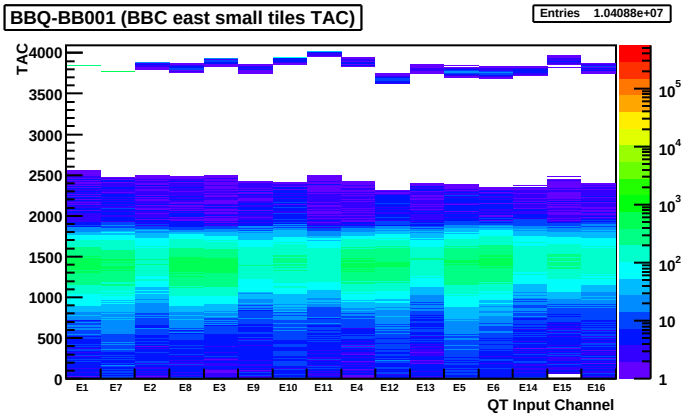

MIX-TF006
Entries 2.73231e+07
TOF MULT
TOF tray

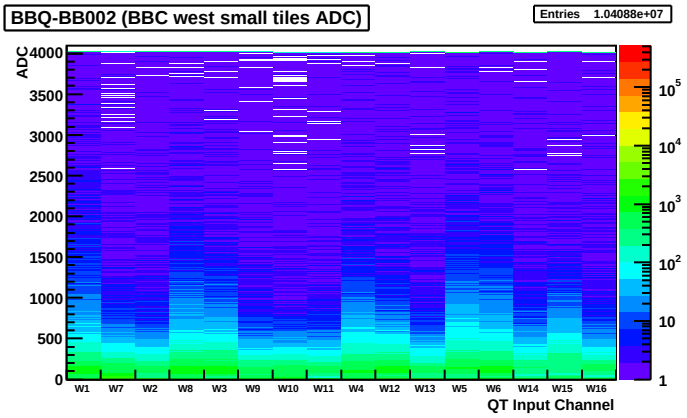

MIX-TF101
Entries 3903300
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

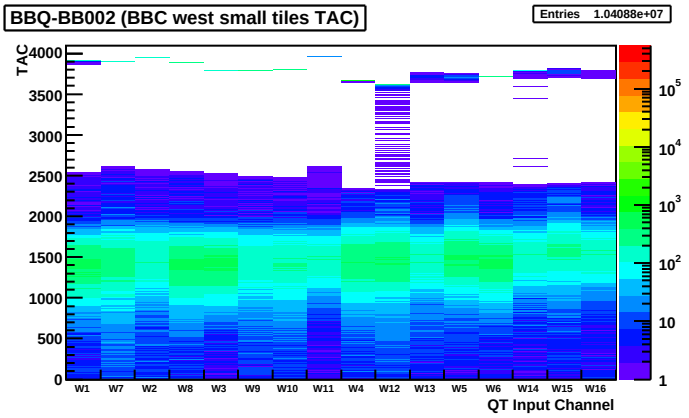

L1-TF201
Entries 650550
TOF total mult

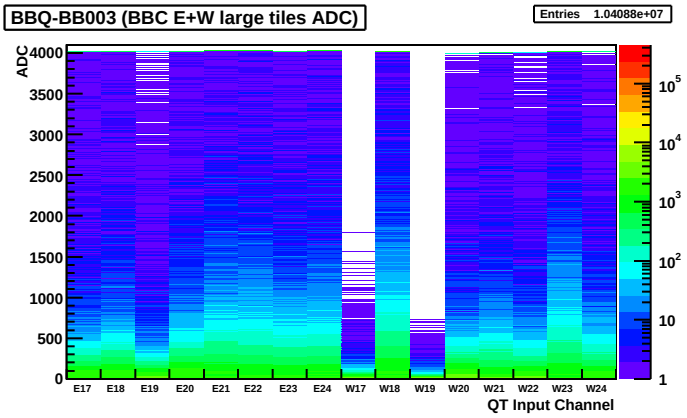

L1-TF201
Entries 3903300
Threshold bits
417586
418520
419559
417465
414353
396586
232964
232030
230991
233085
236197
253964
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

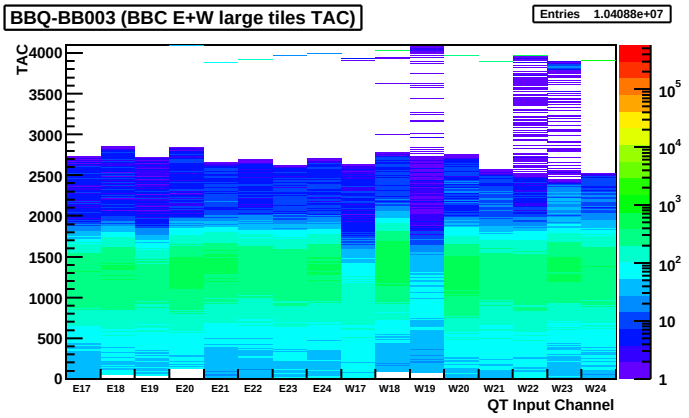

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.04088e+07
ADC
QT Input Channel

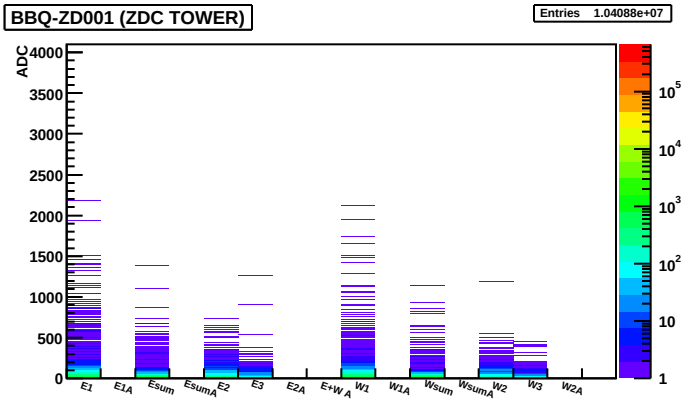

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.04088e+07
TAC
QT Input Channel

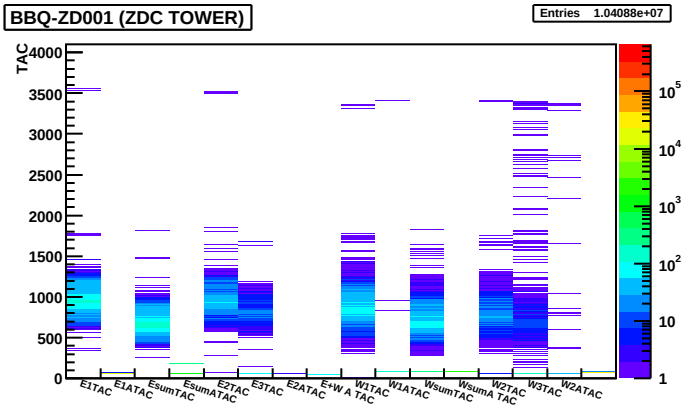

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.04088e+07
ADC
QT Input Channel

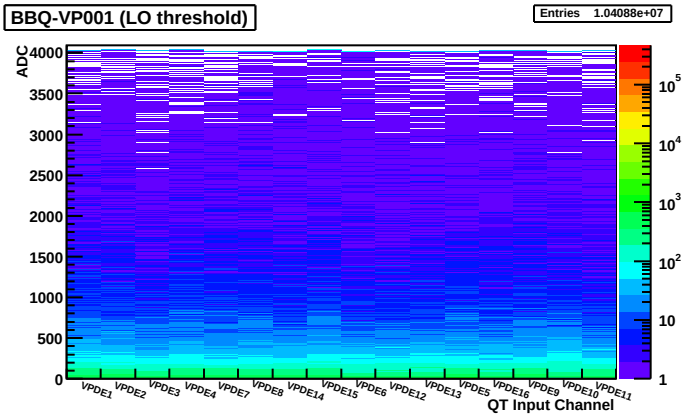

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.04088e+07
TAC
QT Input Channel

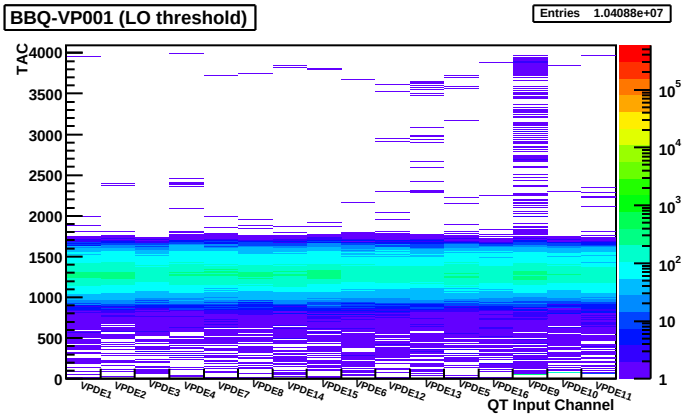

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.04088e+07
ADC
QT Input Channel

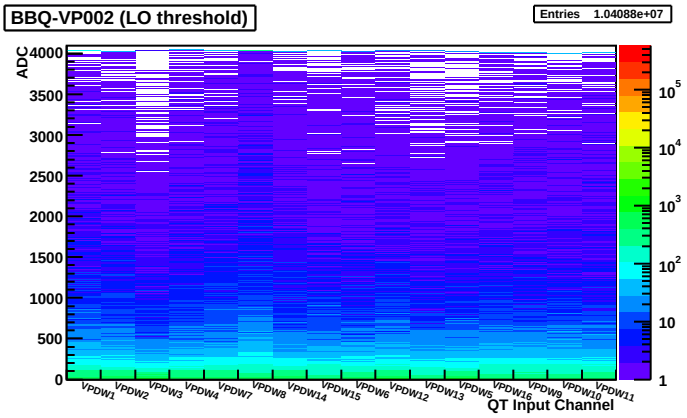

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.04088e+07
TAC
QT Input Channel

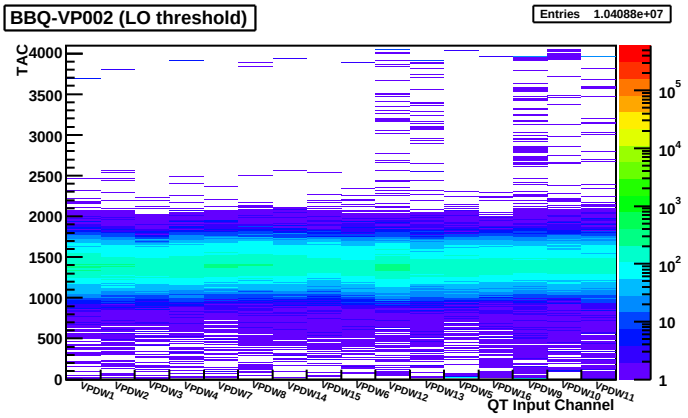

BBQ-ZD001 (ZDC TOWER)
Entries 1.04088e+07
ADC

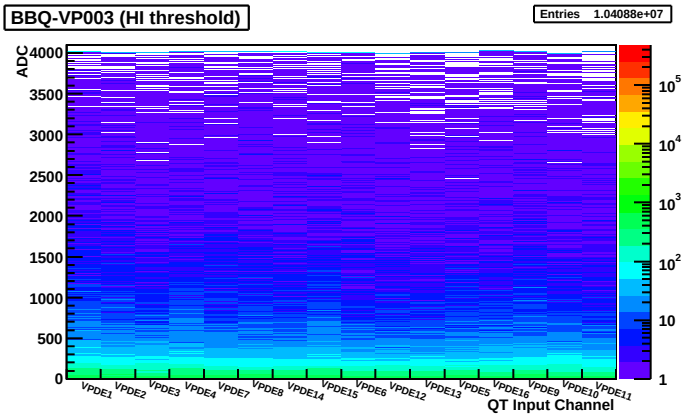

BBQ-ZD001 (ZDC TOWER)
Entries 1.04088e+07
TAC

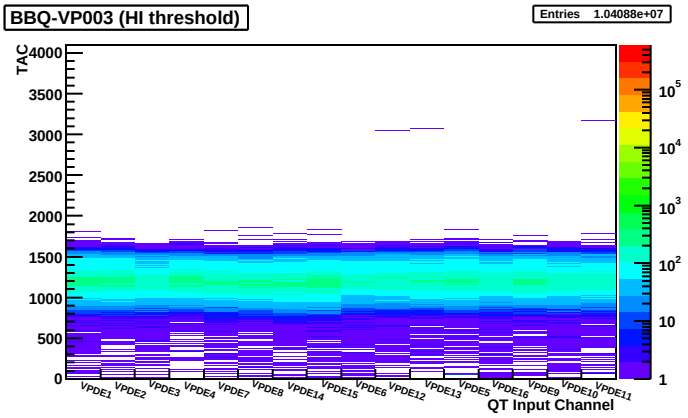

BBQ-VP001 (LO threshold)
Entries 1.04088e+07
ADC
QT Input Channel

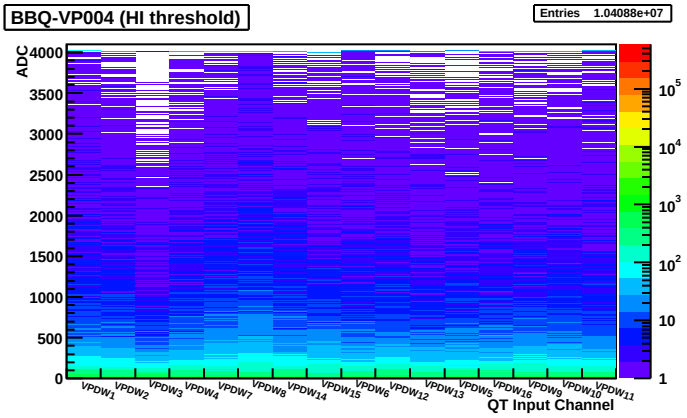

BBQ-VP001 (LO threshold)
Entries 1.04088e+07
TAC
QT Input Channel

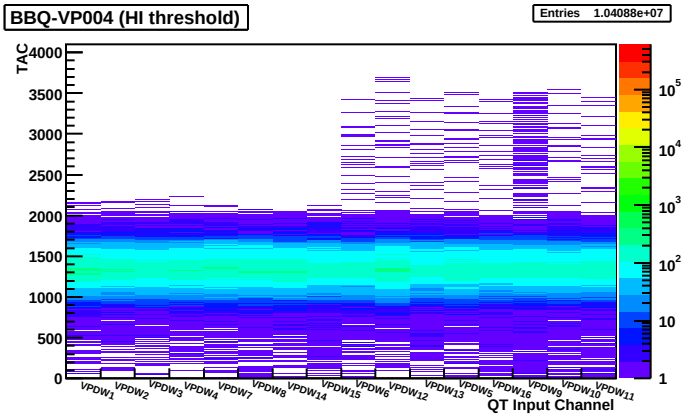

BBQ-VP002 (LO threshold)
Entries 1.04088e+07
ADC
QT Input Channel

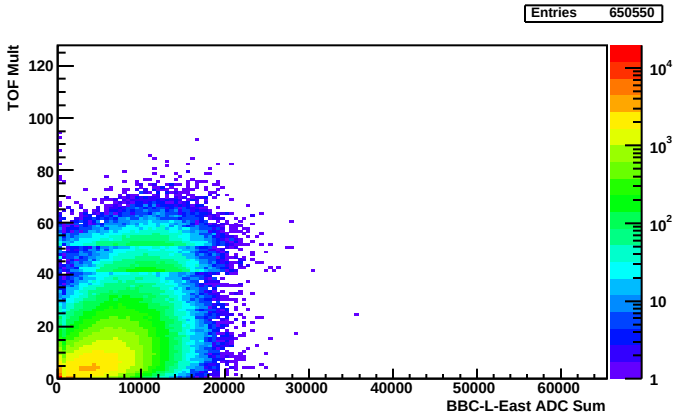

BBQ-VP002 (LO threshold)
Entries 1.04088e+07
TAC
QT Input Channel

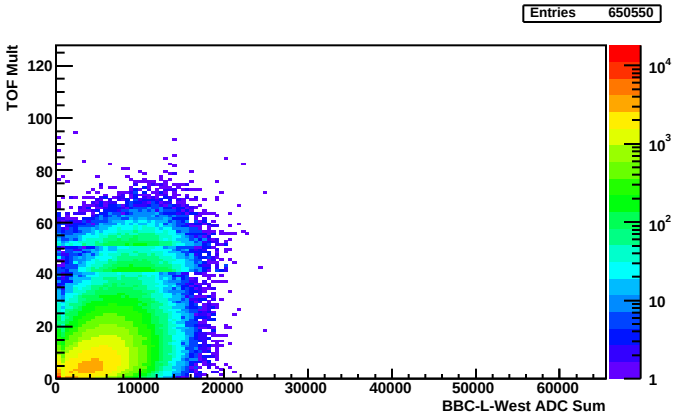

BBQ-VP003 (HI threshold)
Entries 1.04088e+07
ADC
QT Input Channel

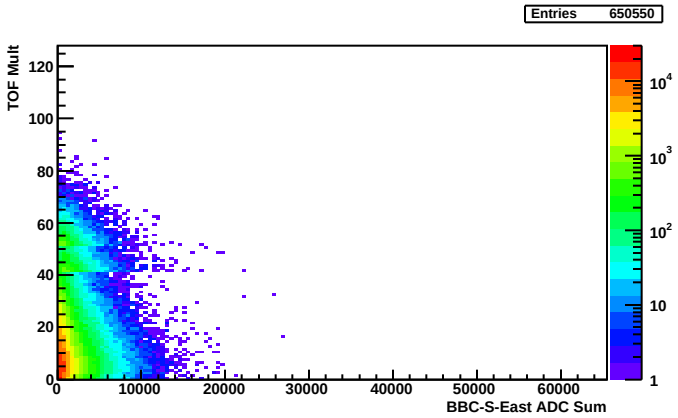

BBQ-VP003 (HI threshold)
Entries 1.04088e+07
TAC
QT Input Channel

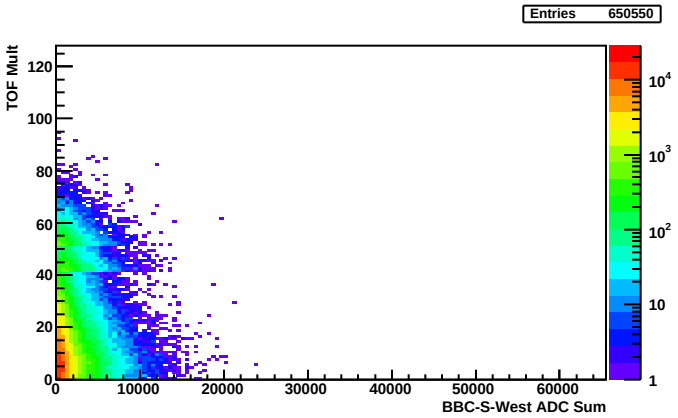

BBQ-VP004 (HI threshold)
Entries 1.04088e+07
ADC
QT Input Channel

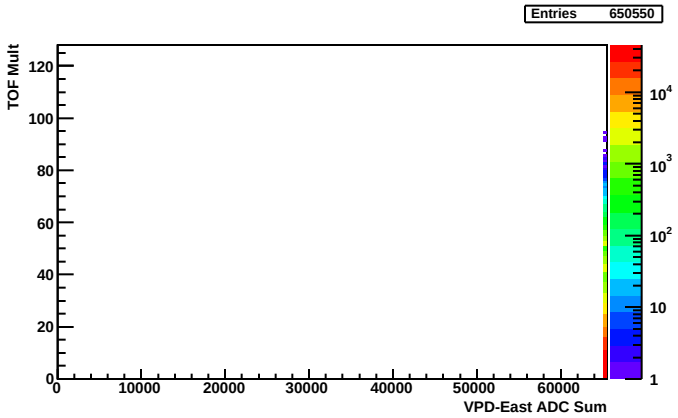

BBQ-VP004 (HI threshold)
Entries 1.04088e+07
TAC
QT Input Channel

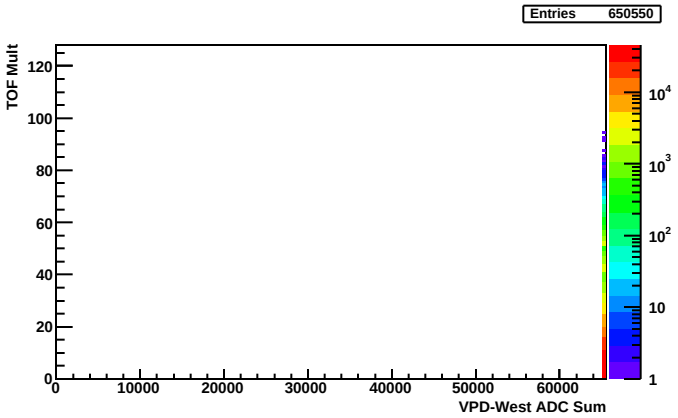

Entries 650550
TOF Mult
BBC-L-East ADC Sum

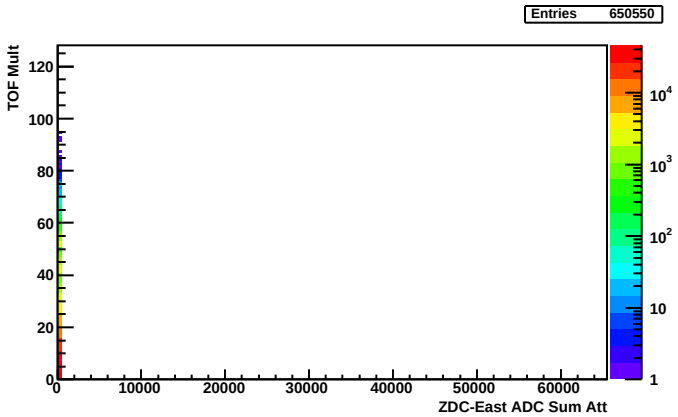

Entries 650550
TOF Mult
BBC-L-West ADC Sum

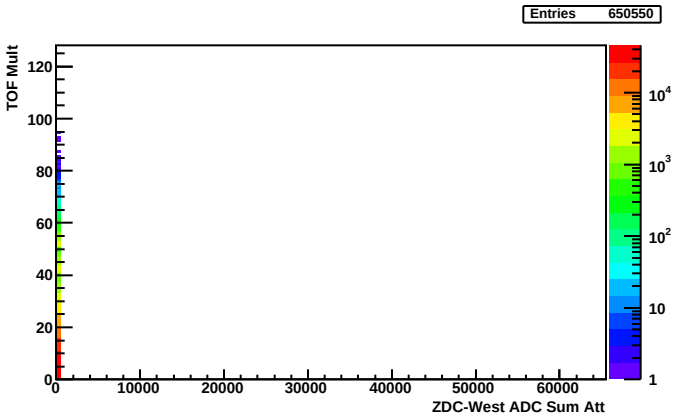

Entries 650550
TOF Mult
BBC-S-East ADC Sum

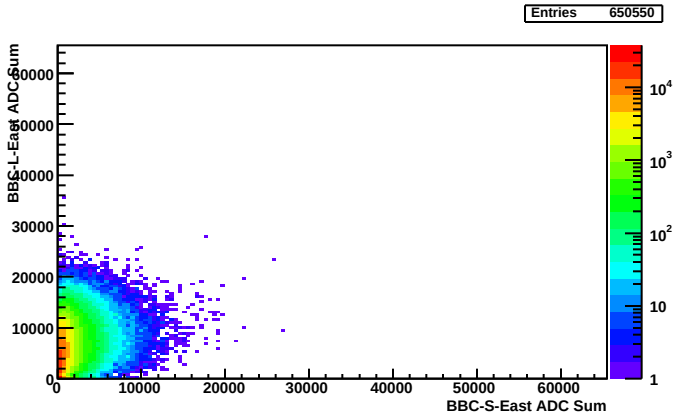

Entries 650550
TOF Mult
BBC-S-West ADC Sum

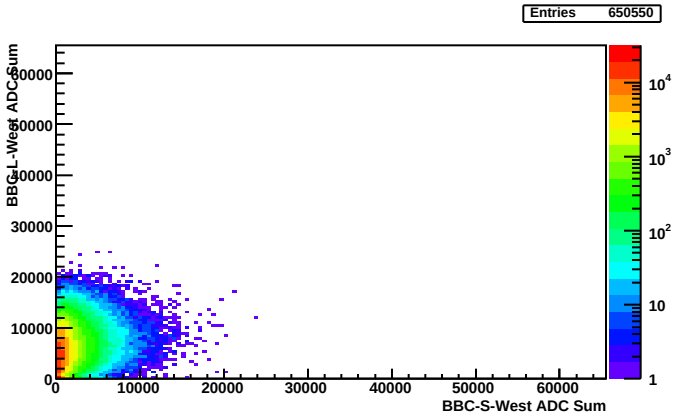

Entries 650550
TOF Mult
VPD-East ADC Sum

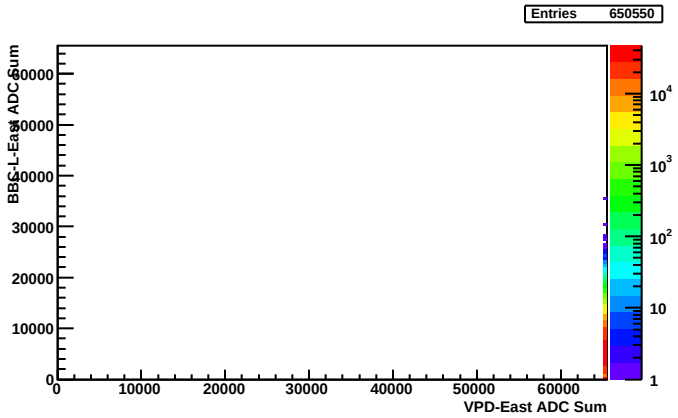

Entries 650550
TOF Mult
VPD-West ADC Sum

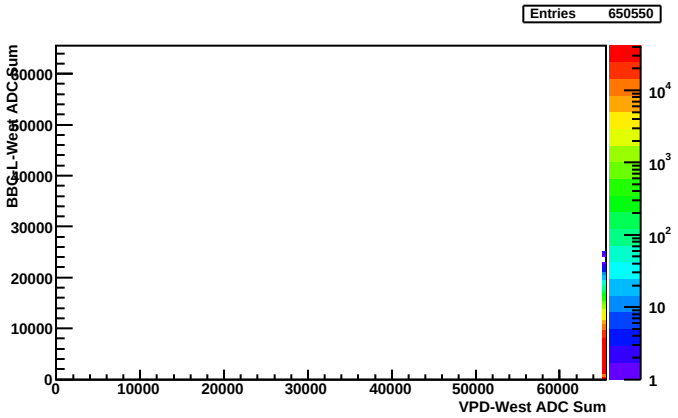

Entries 650550
TOF Mult
ZDC-East ADC Sum Att

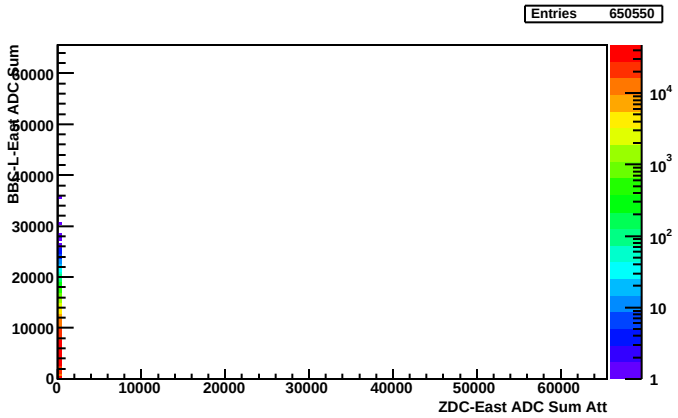

Entries 650550
TOF Mult
ZDC-West ADC Sum Att

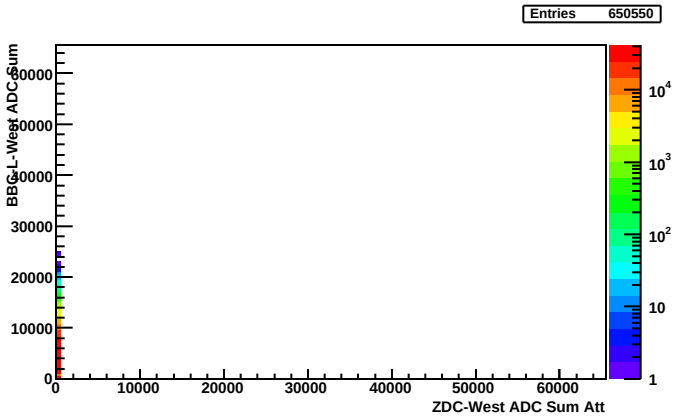

Entries 650550
BBC-L-East ADC Sum
BBC-S-East ADC Sum

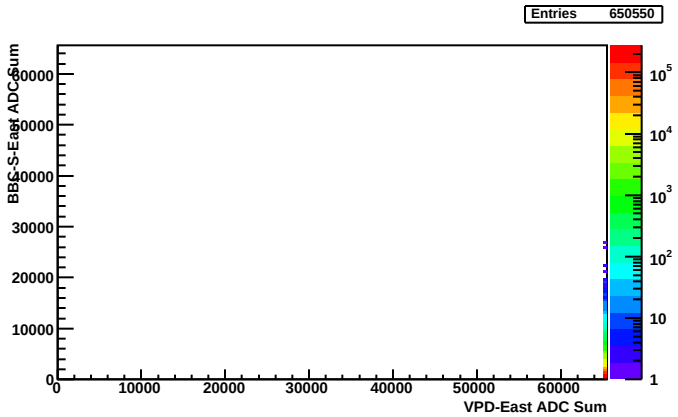

Entries 650550
BBC-L-West ADC Sum
BBC-S-West ADC Sum

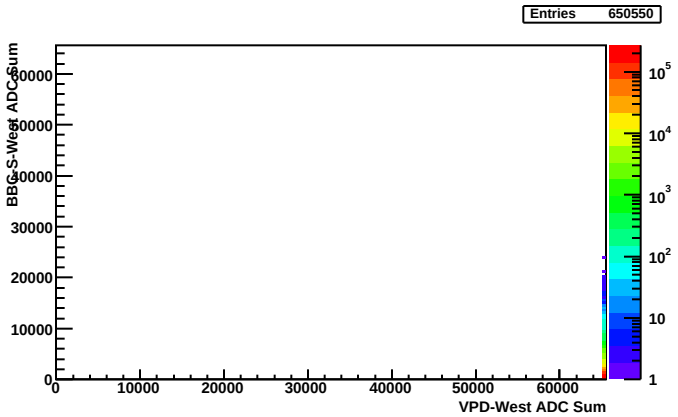

Entries 650550
BBC-L-East ADC Sum
VPD-East ADC Sum

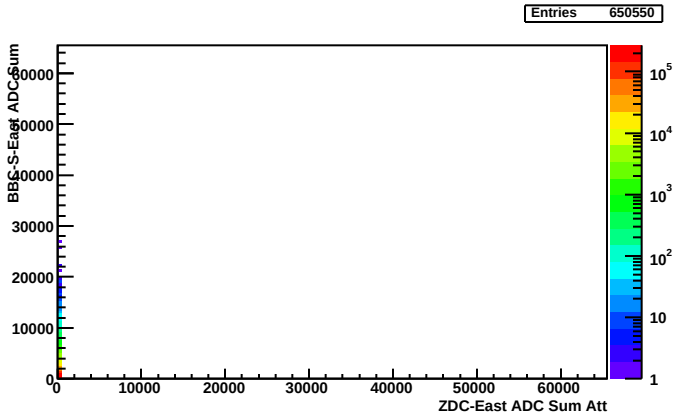

Entries 650550
BBC-L-West ADC Sum
VPD-West ADC Sum

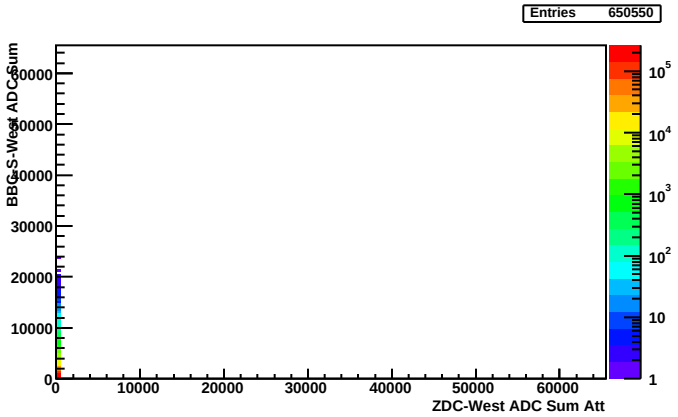

Entries 650550
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

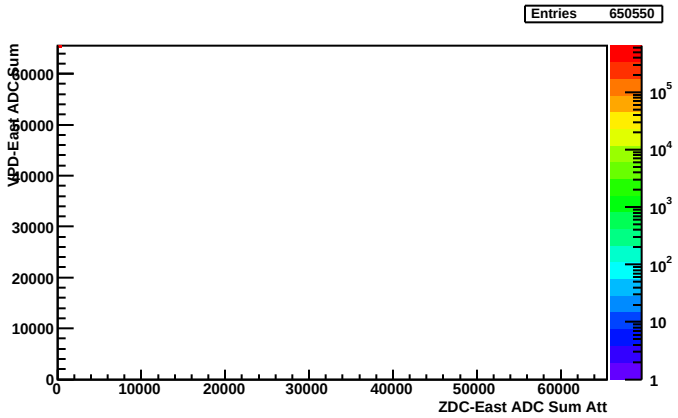

Entries 650550
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

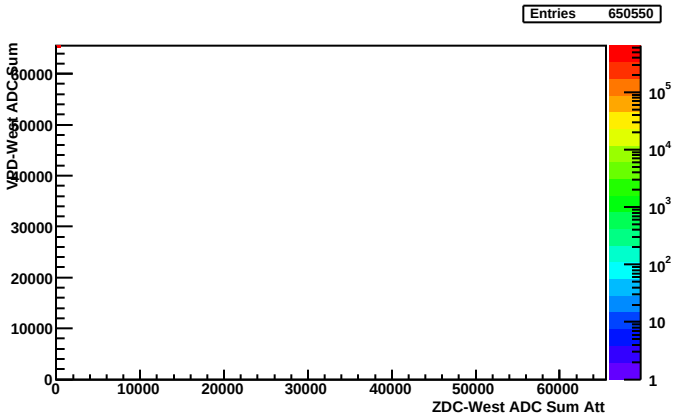

Entries 650550
BBC-S-East ADC Sum
VPD-East ADC Sum

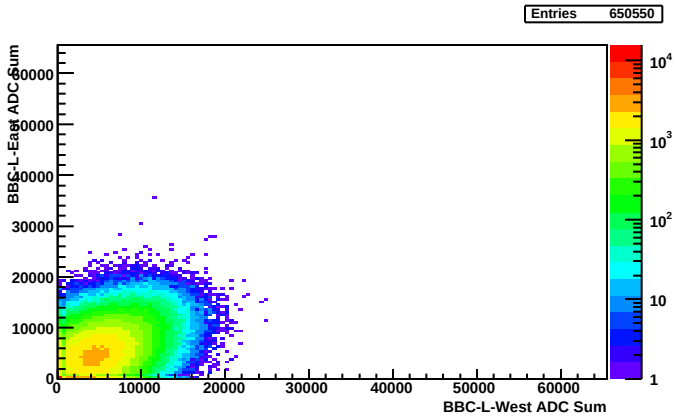

Entries 650550
BBC-S-West ADC Sum
VPD-West ADC Sum

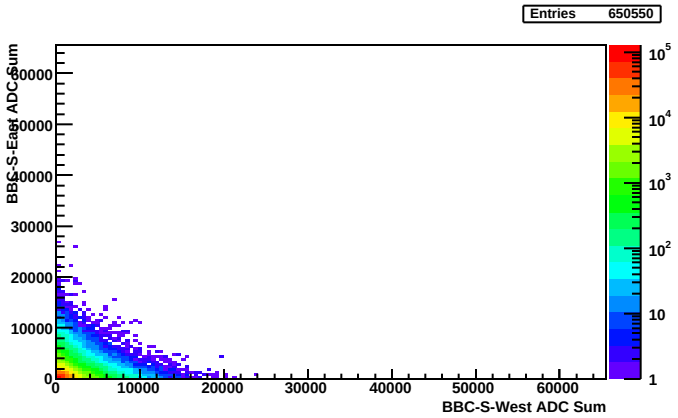

Entries 650550
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

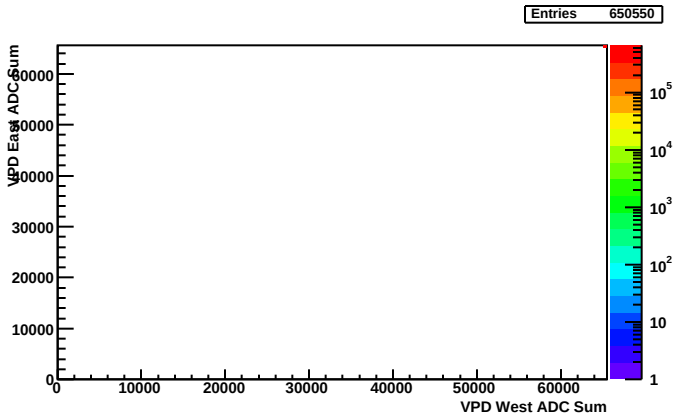

Entries 650550
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

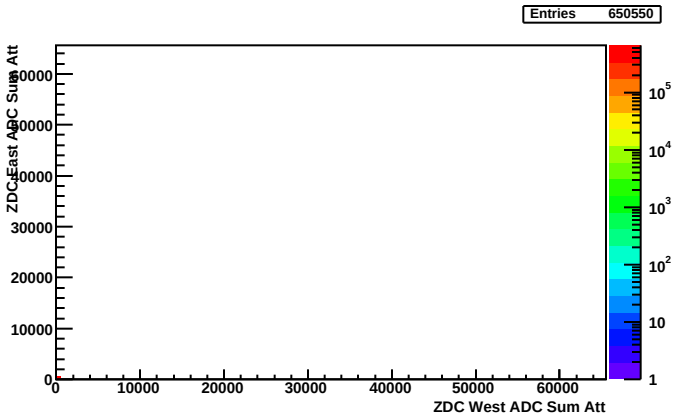

Entries 650550
VPD-East ADC Sum
ZDC-East ADC Sum Att

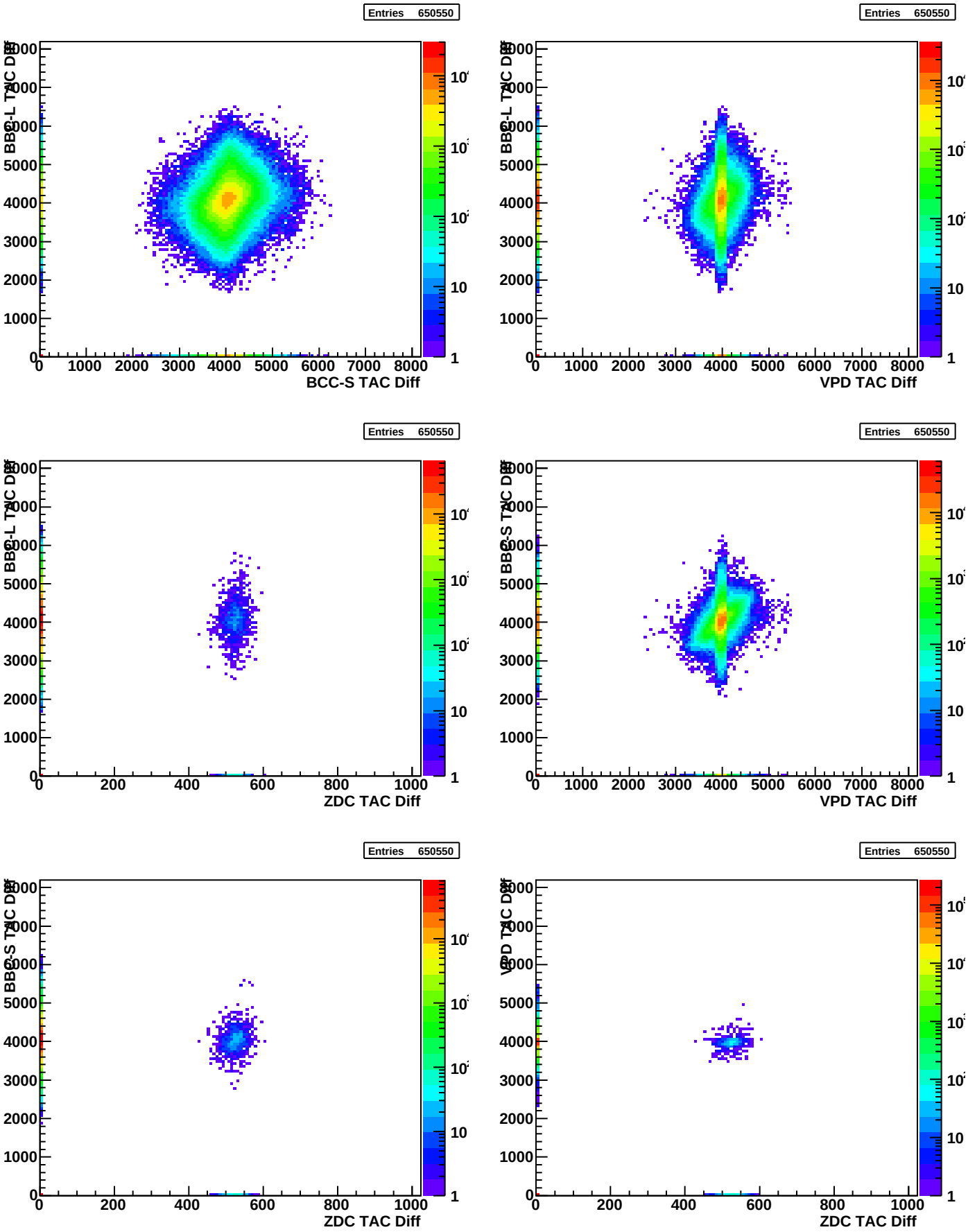

Entries 650550
VPD-West ADC Sum
ZDC-West ADC Sum Att

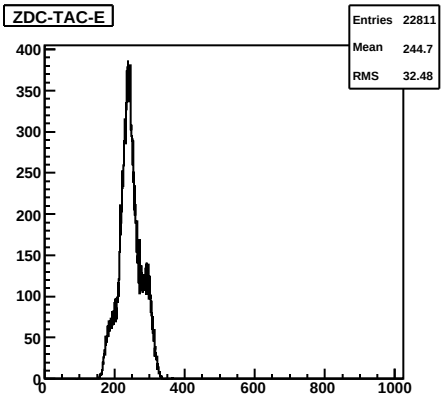

Entries 650550
BBC-L-East ADC Sum
BBC-L-West ADC Sum

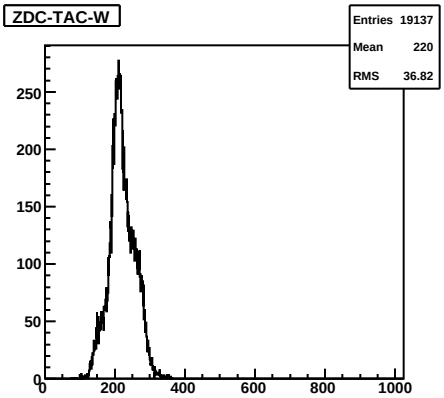

Entries 650550
BBC-S-East ADC Sum
BBC-S-West ADC Sum

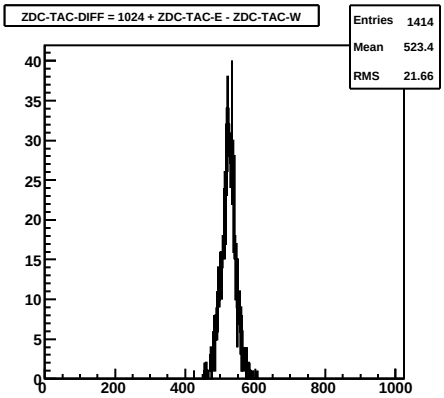

Entries 650550
VPD East ADC Sum
VPD West ADC Sum

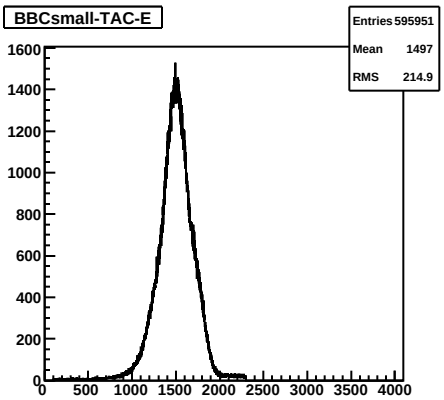

Entries 650550
ZDC East ADC Sum Att
ZDC West ADC Sum Att

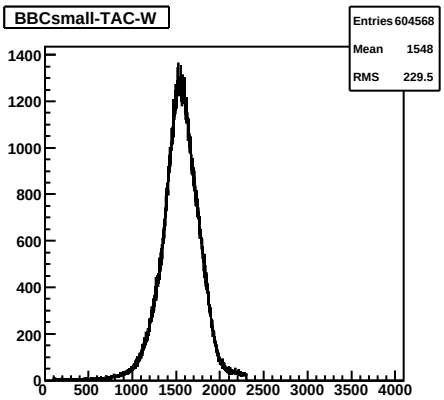

Entries 650550
BBC-L TAC Diff
BCC-S TAC Diff
Entries 650550
BBC-L TAC Diff
VPD TAC Diff
Entries 650550
BBC-L TAC Diff
ZDC TAC Diff
Entries 650550
BBC-S TAC Diff
VPD TAC Diff
Entries 650550
BBC-S TAC Diff
ZDC TAC Diff
Entries 650550
VPD TAC Diff
ZDC TAC Diff

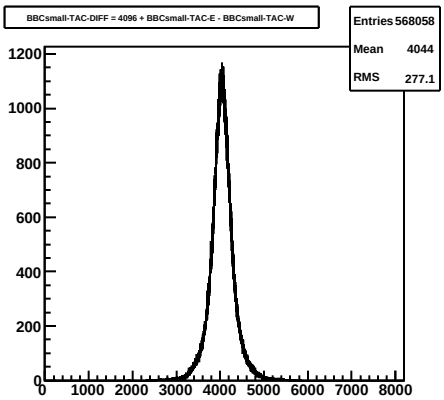

ZDC-TAC-E
Entries 22811
Mean 244.7
RMS 32.48

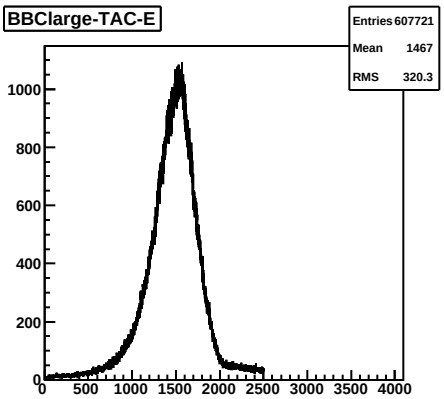

ZDC-TAC-W
Entries 19137
Mean 220
RMS 36.82

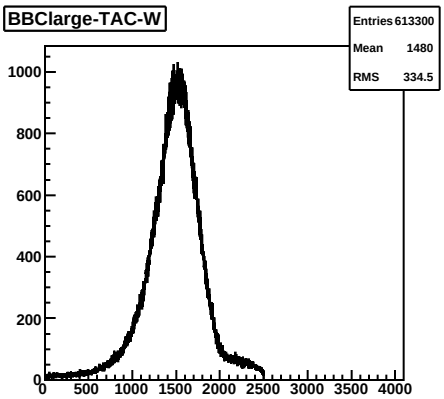

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 1414
Mean 523.4
RMS 21.66

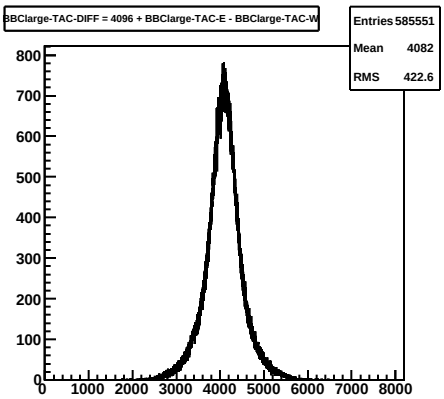

BBCsmall-TAC-E
Entries 595951
Mean 1497
RMS 214.9

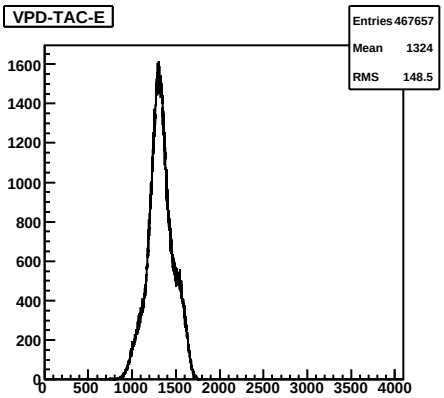

BBCsmall-TAC-W
Entries 604568
Mean 1548
RMS 229.5

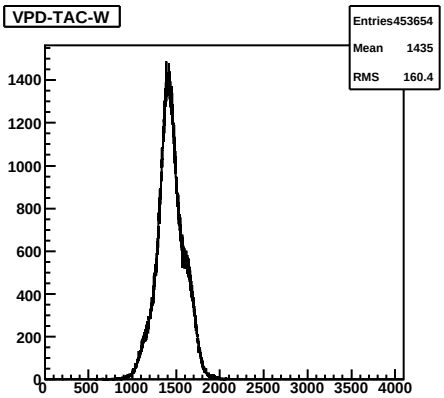

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 568058
Mean 4044
RMS 277.1

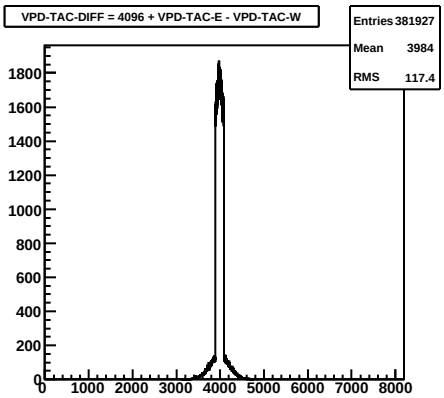

BBClarge-TAC-E
Entries 607721
Mean 1467
RMS 320.3

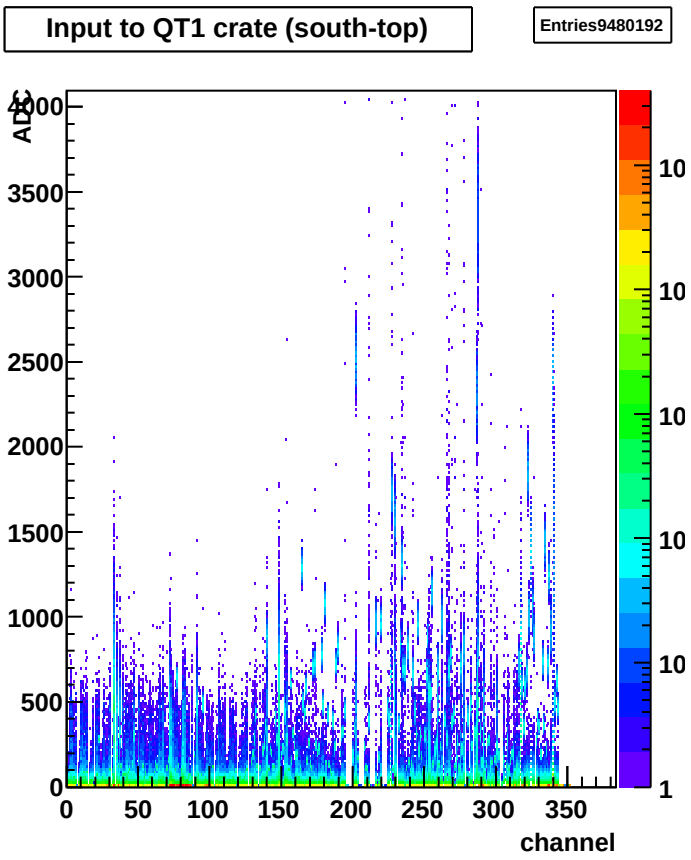

BBClarge-TAC-W
Entries 613300
Mean 1480
RMS 334.5

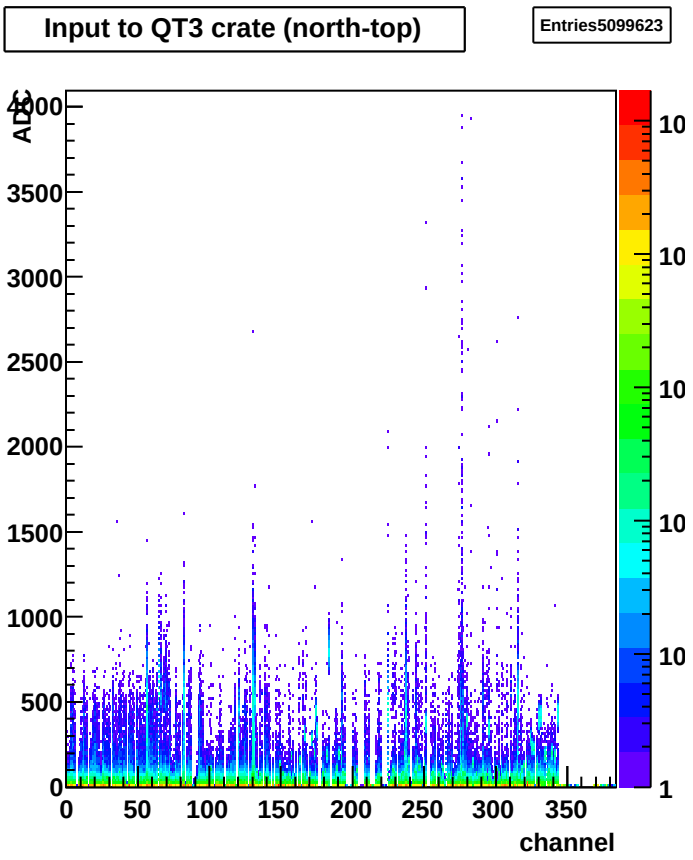

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 585551
Mean 4082
RMS 422.6

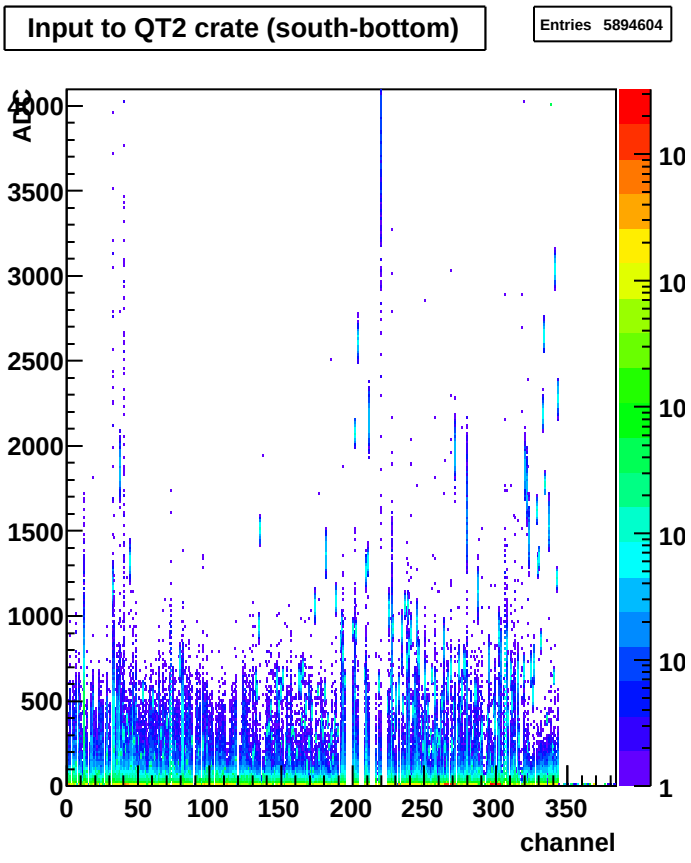

VPD-TAC-E
Entries 467657
Mean 1324
RMS 148.5

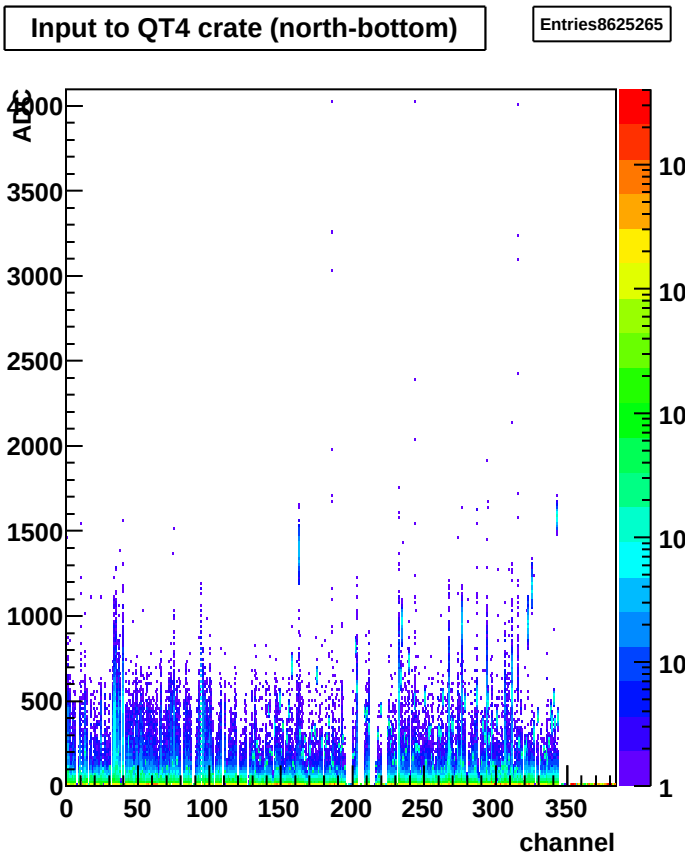

VPD-TAC-W
Entries 453654
Mean 1435
RMS 160.4

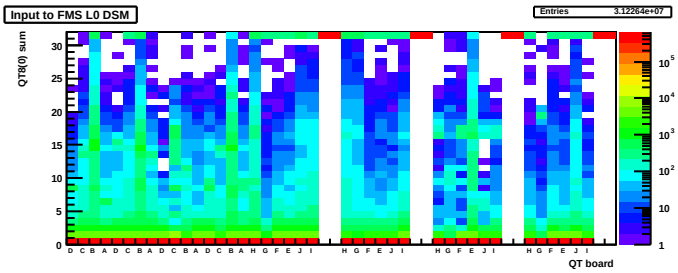

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 381927
Mean 3984
RMS 117.4

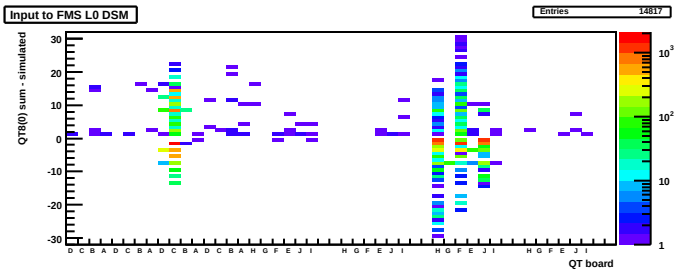

Input to QT1 crate (south-top)
Entries9480192
ADC
channel

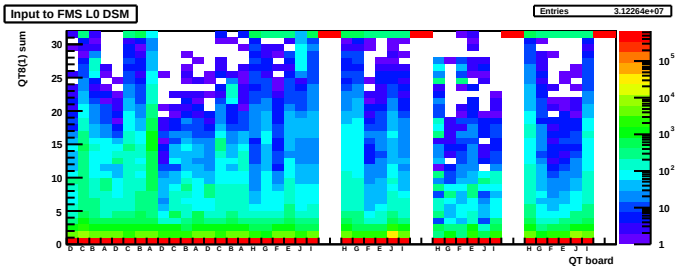

Input to QT3 crate (north-top)
Entries5099623
ADC
channel

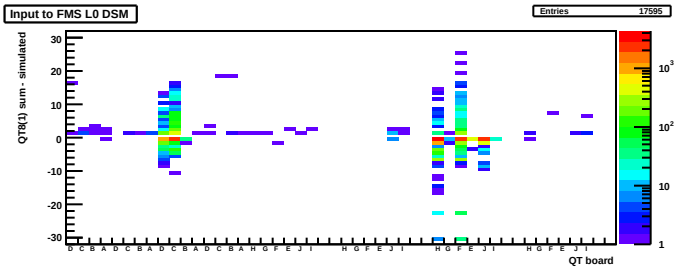

Input to QT2 crate (south-bottom)
Entries 5894604
ADC
channel

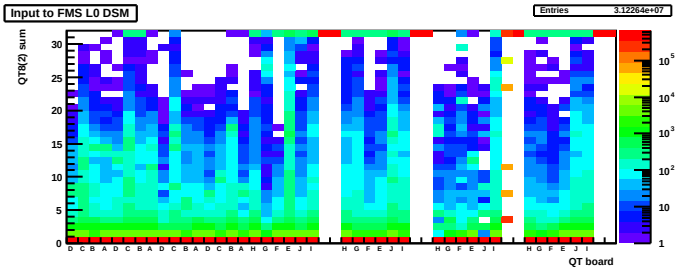

Input to QT4 crate (north-bottom)
Entries8625265
ADC
channel

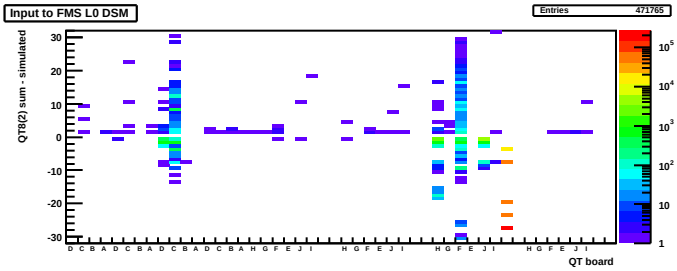

Input to FMS L0 DSM
Entries 3.12264e+07
QT8(0) sum
QT board

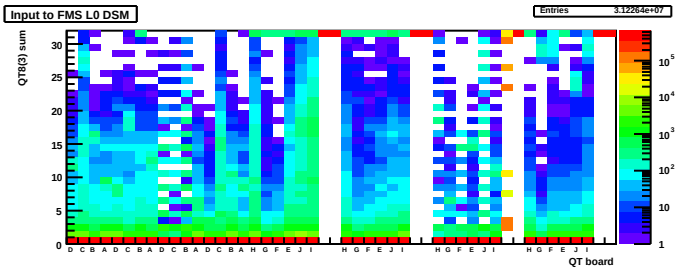

Input to FMS L0 DSM
Entries 14817
QT8(0) sum - simulated
QT board

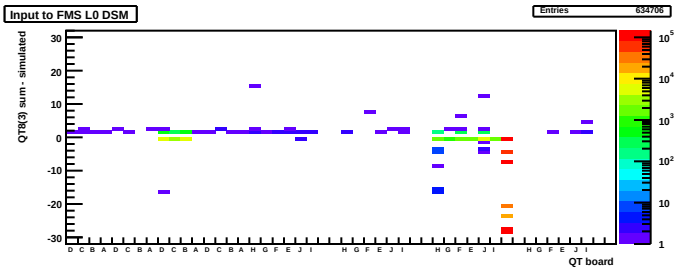

Input to FMS L0 DSM
Entries 3.12264e+07
QT8(1) sum
QT board

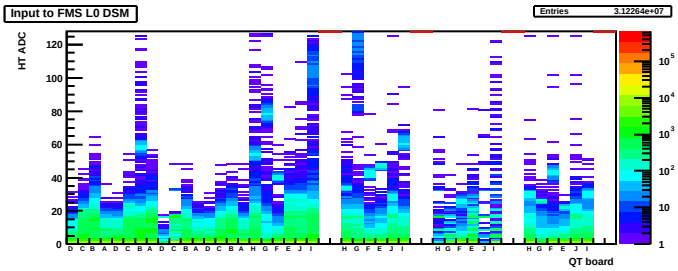

Input to FMS L0 DSM
Entries 17595
QT8(1) sum - simulated
QT board

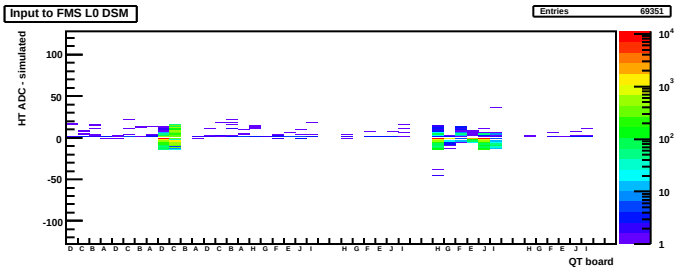

Input to FMS L0 DSM
Entries 3.12264e+07
QT8(2) sum
QT board

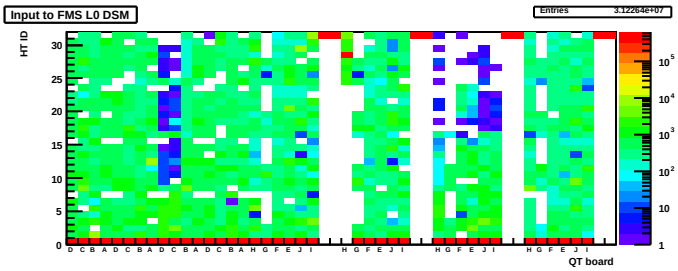

Input to FMS L0 DSM
Entries 471765
QT8(2) sum - simulated
QT board

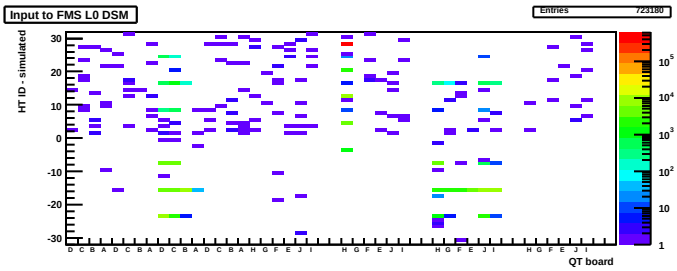

Input to FMS L0 DSM
Entries 3.12264e+07
QT8(3) sum
QT board

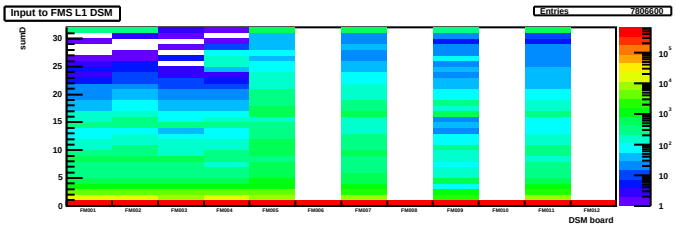

Input to FMS L0 DSM
Entries 634706
QT8(3) sum - simulated
QT board

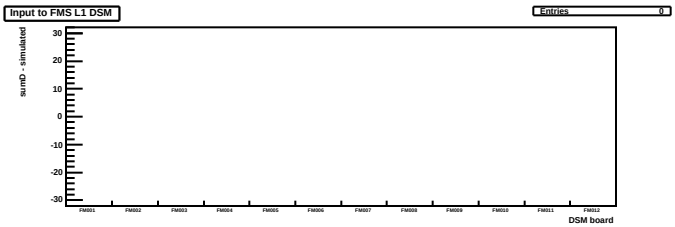

Input to FMS L0 DSM
Entries 3.12264e+07
HT ADC
QT board

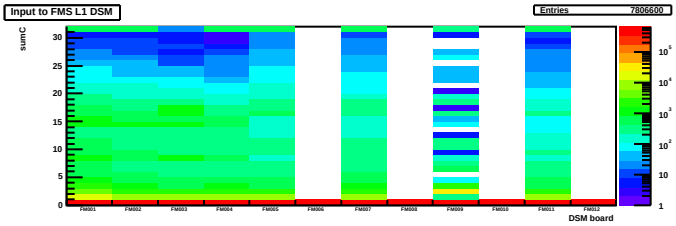

Input to FMS L0 DSM
Entries 69351
HT ADC - simulated
QT board

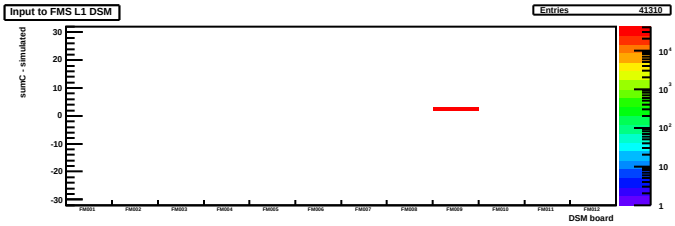

Input to FMS L0 DSM
Entries 3.12264e+07
HT ID
QT board

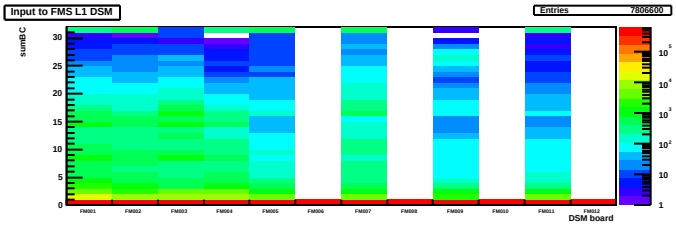

Input to FMS L0 DSM
Entries 723180
HT ID - simulated
QT board

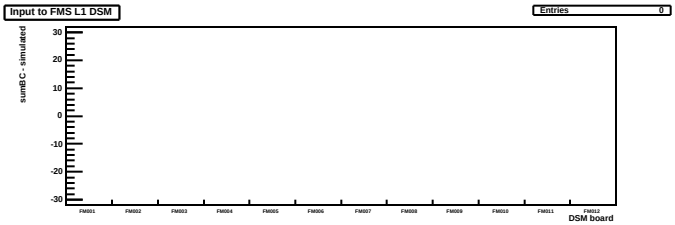

Input to FMS L1 DSM
Entries 7806600
sumD
DSM board

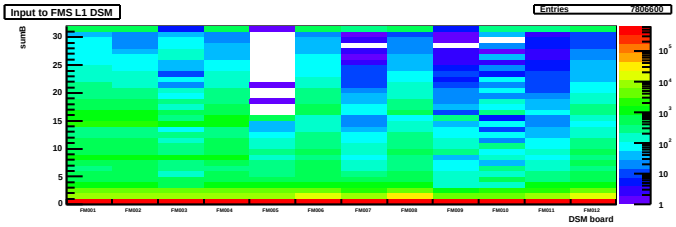

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

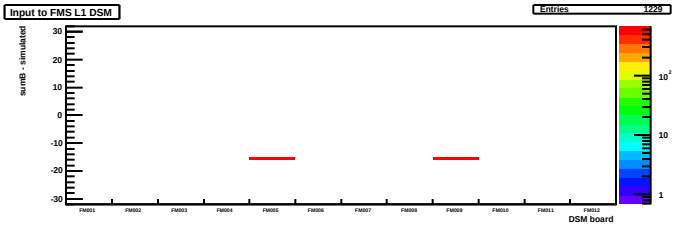

Input to FMS L1 DSM
Entries 7806600
sumC
DSM board

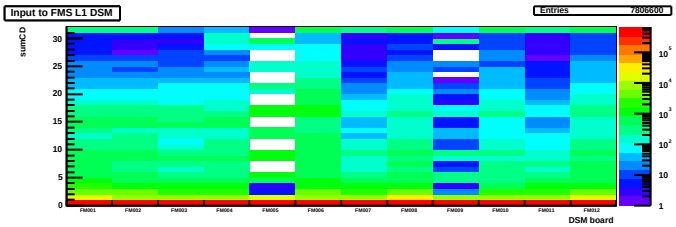

Input to FMS L1 DSM
Entries 41310
sumC - simulated
DSM board

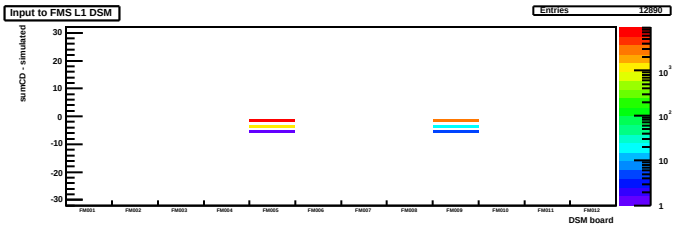

Input to FMS L1 DSM
Entries 7806600
sumBC
DSM board

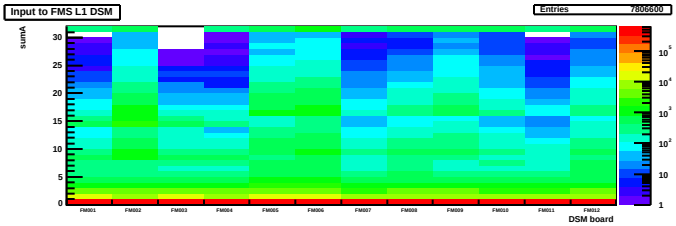

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

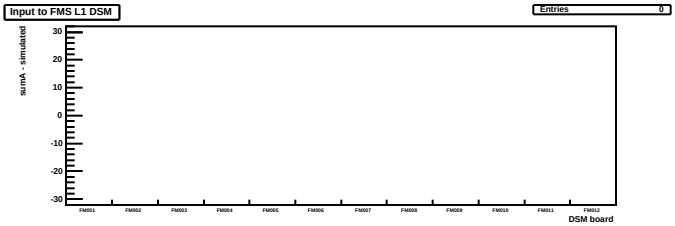

Input to FMS L1 DSM
Entries 7806600
sumB
DSM board

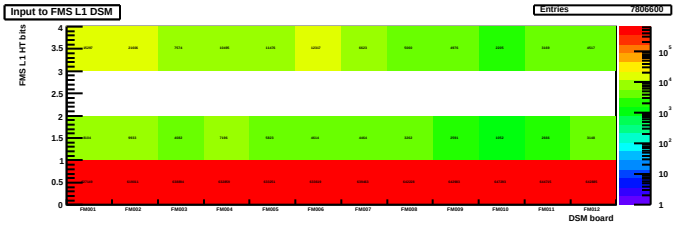

Input to FMS L1 DSM
Entries 1229
sumB - simulated
DSM board

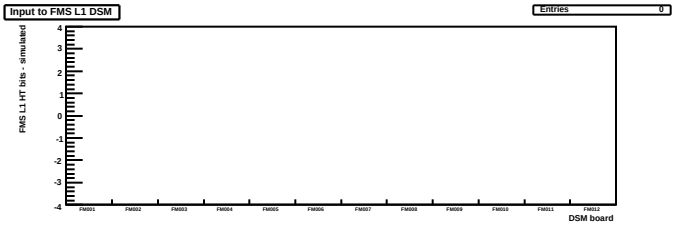

Input to FMS L1 DSM
Entries 7806600
sumCD
DSM board

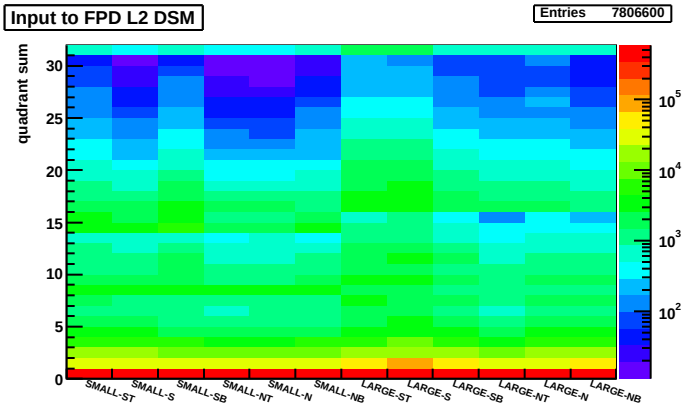

Input to FMS L1 DSM
Entries 12890
sumCD - simulated
DSM board

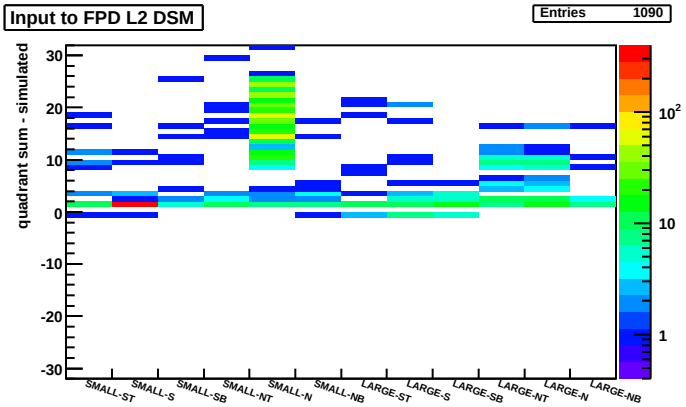

Input to FMS L1 DSM
Entries 7806600
sumA
DSM board

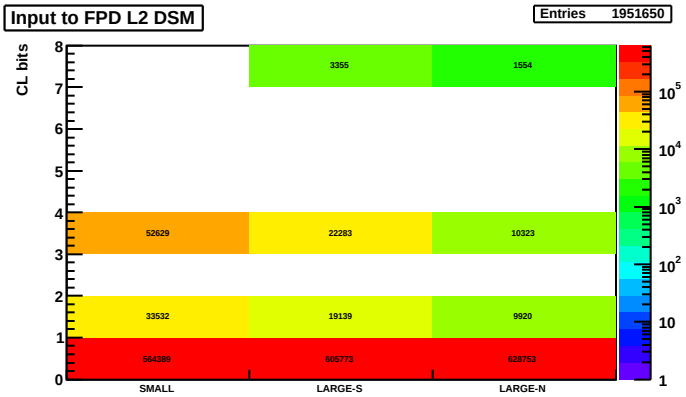

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

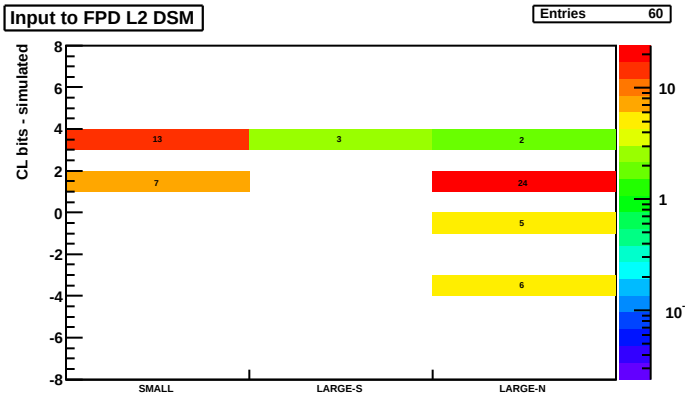

Input to FMS L1 DSM
Entries 7806600
FMS L1 HT bits
DSM board

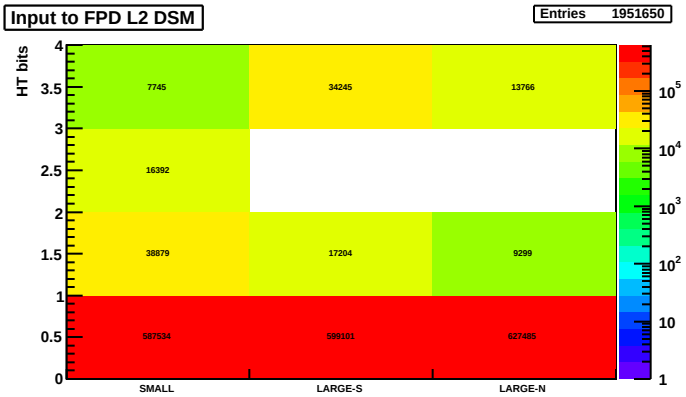

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

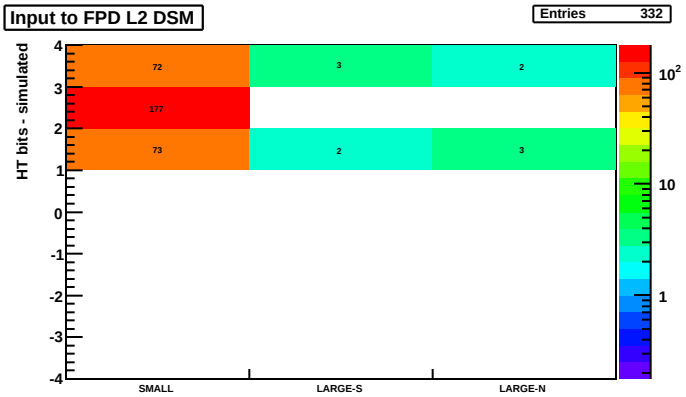

Input to FPD L2 DSM
Entries 7806600
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

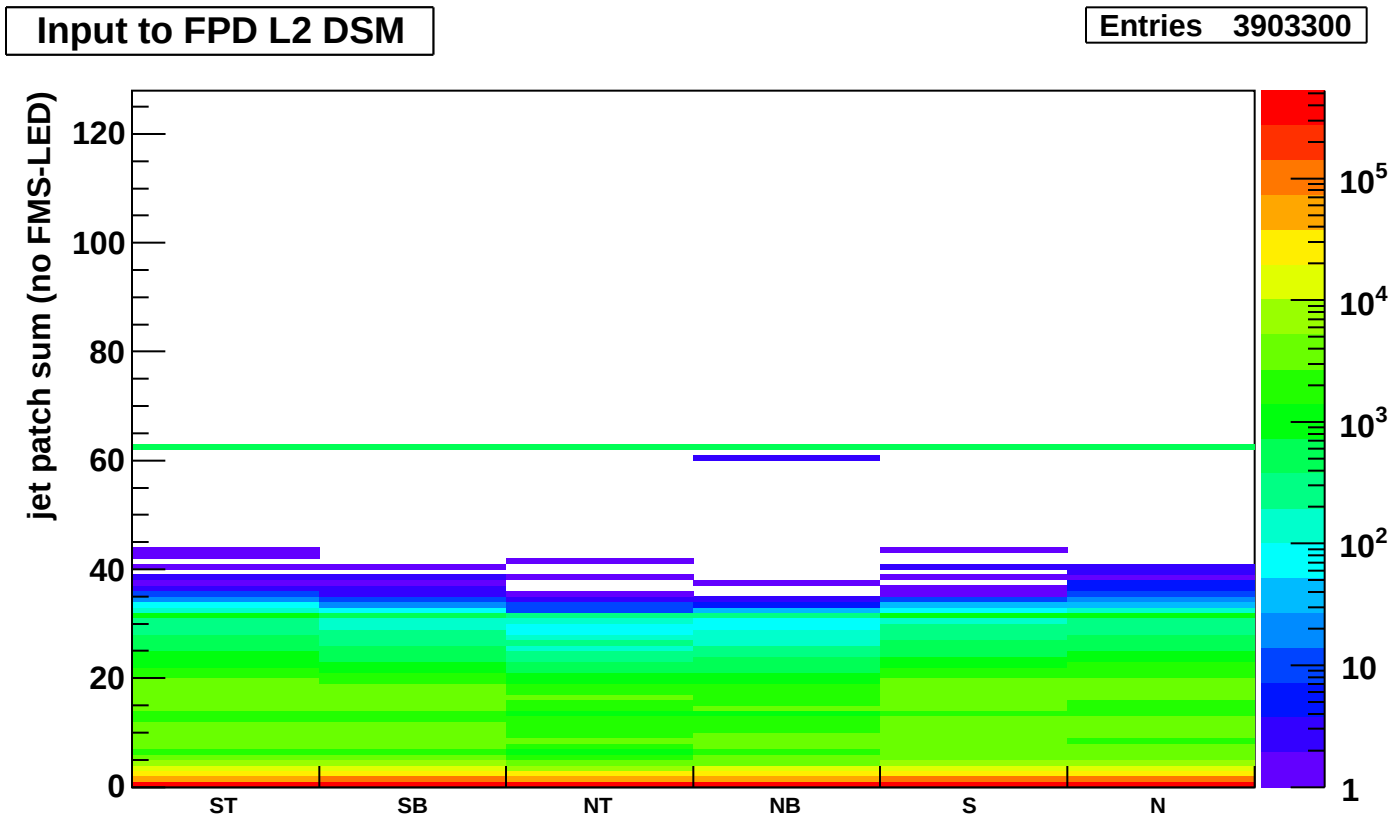

Input to FPD L2 DSM
Entries 1090
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

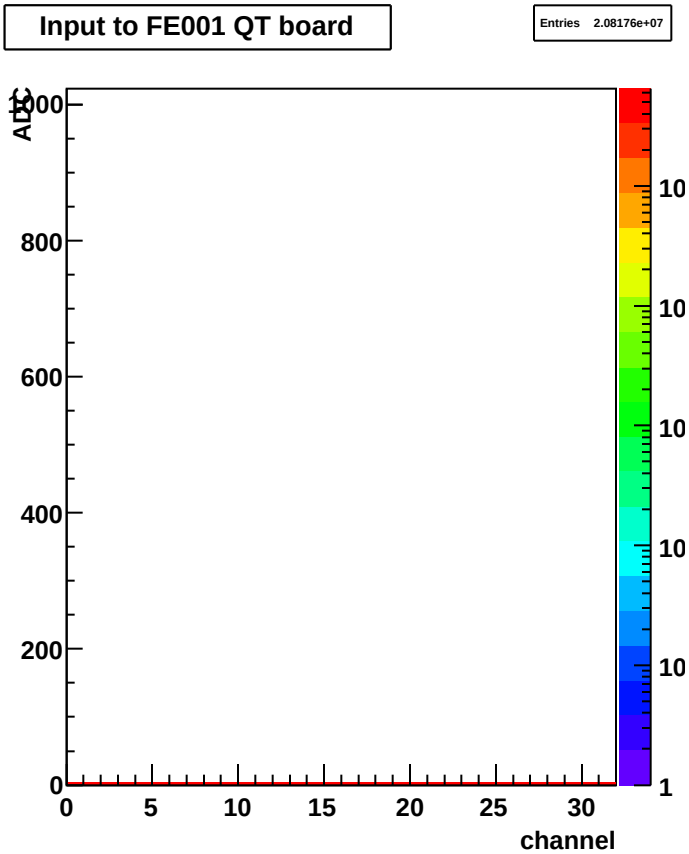

Input to FPD L2 DSM
Entries 1951650
CL bits
3355
1554
52629
22283
10323
33532
19139
9920
564389
605773
628753
SMALL
LARGE-S
LARGE-N

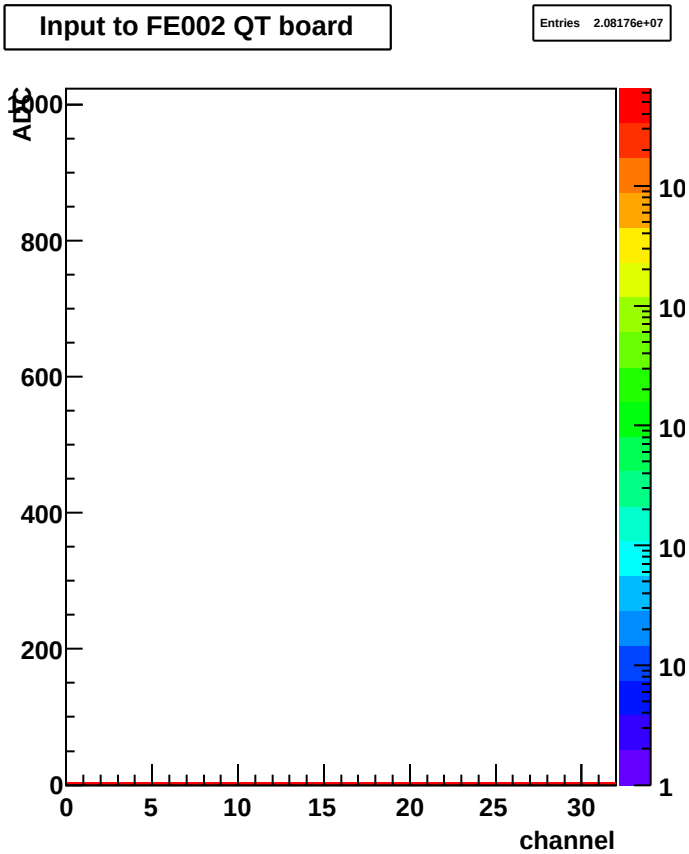

Input to FPD L2 DSM
Entries 60
CL bits - simulated
13
3
2
7
24
5
6
SMALL
LARGE-S
LARGE-N

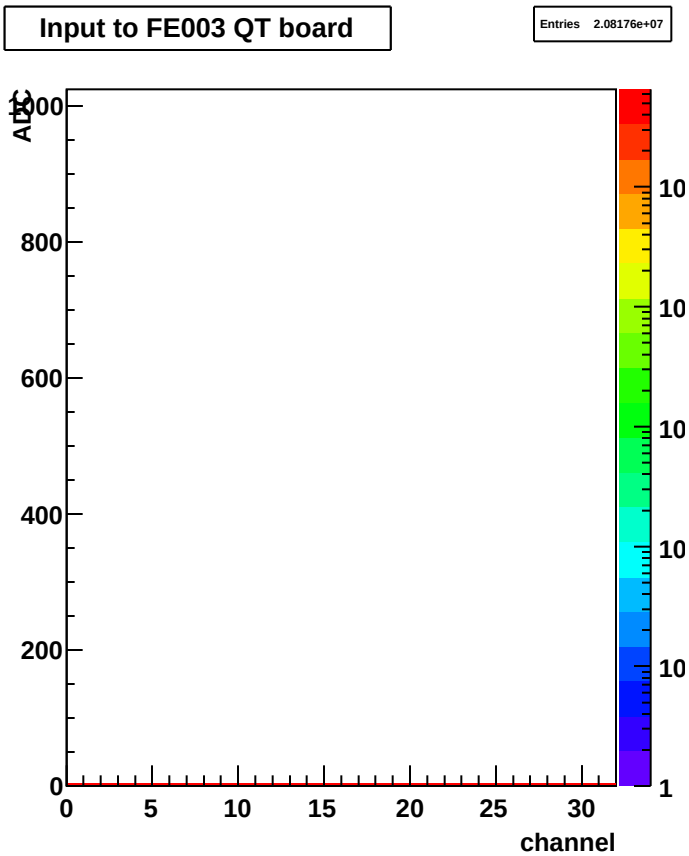

Input to FPD L2 DSM
Entries 1951650
HT bits
7745
34245
13766
16392
38879
17204
9299
587534
599101
627485
SMALL
LARGE-S
LARGE-N

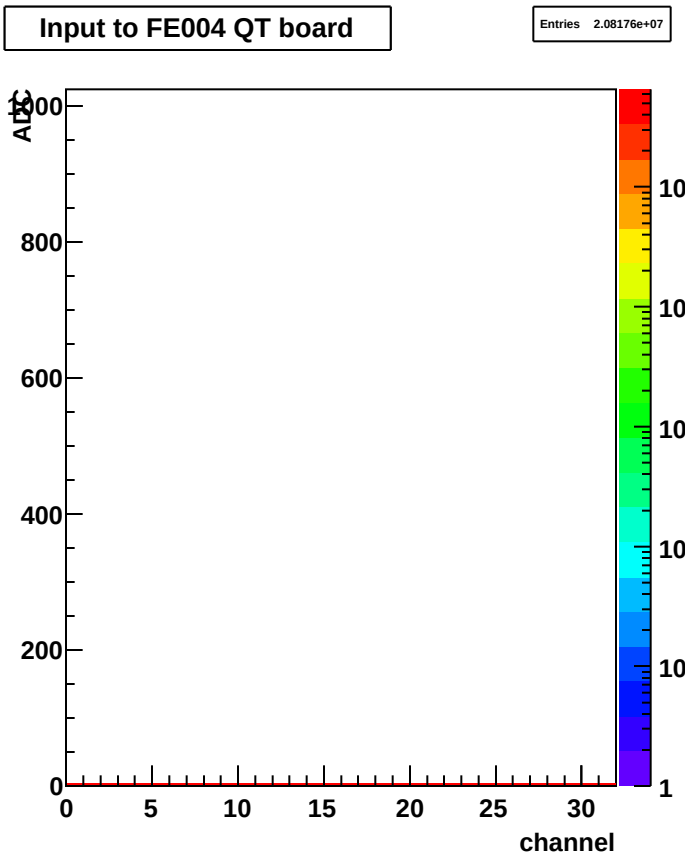

Input to FPD L2 DSM
Entries 332
HT bits - simulated
72
3
2
177
73
2
3
SMALL
LARGE-S
LARGE-N

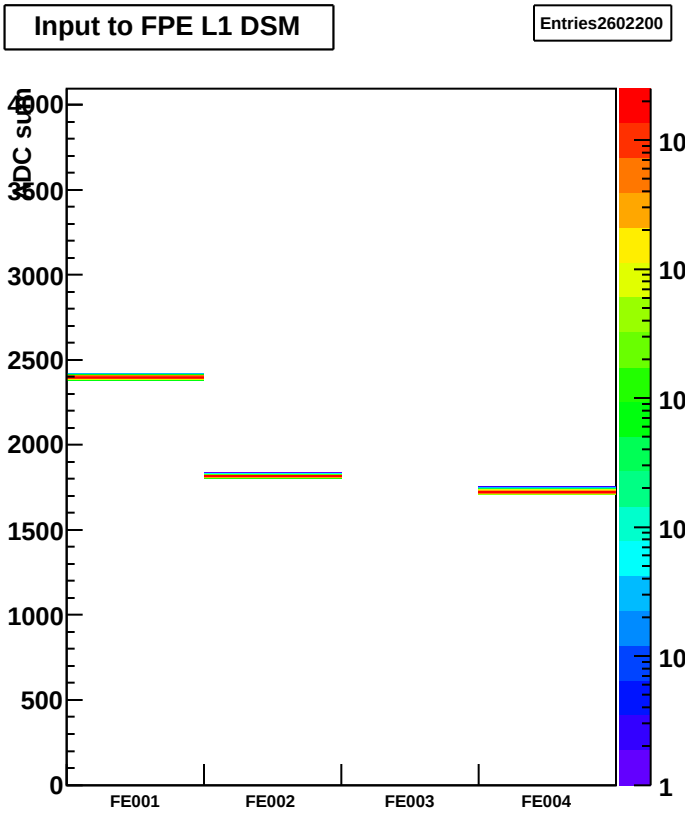

Input to FPD L2 DSM
Entries 3903300
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

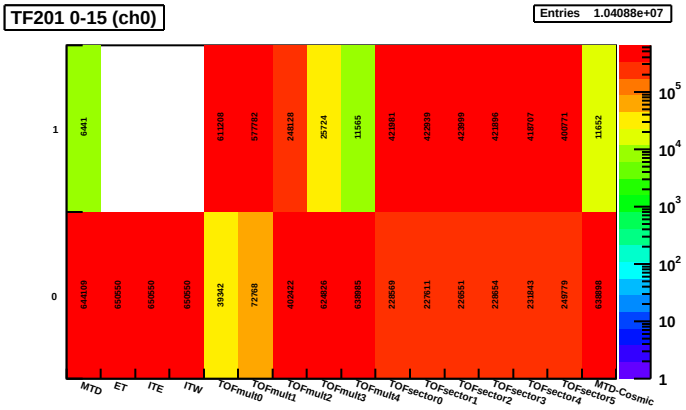

Input to FE001 QT board
Entries 2.08176e+07
ADC
channel

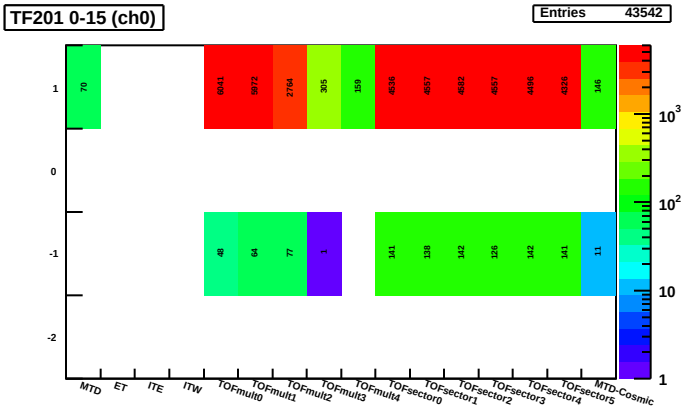

Input to FE002 QT board
Entries 2.08176e+07
ADC
channel

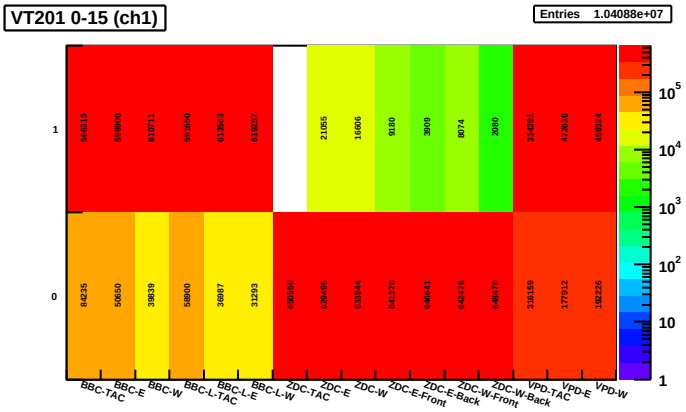

Input to FE003 QT board
Entries 2.08176e+07
ADC
channel

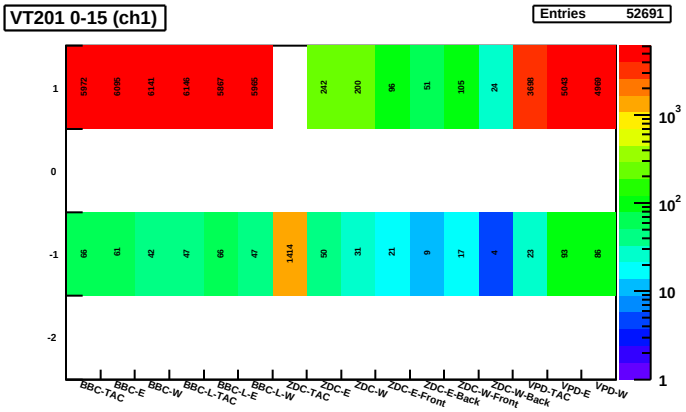

Input to FE004 QT board
Entries 2.08176e+07
ADC
channel


Input to FPE L1 DSM
Entries2602200
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 1.04088e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 43542
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1.04088e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


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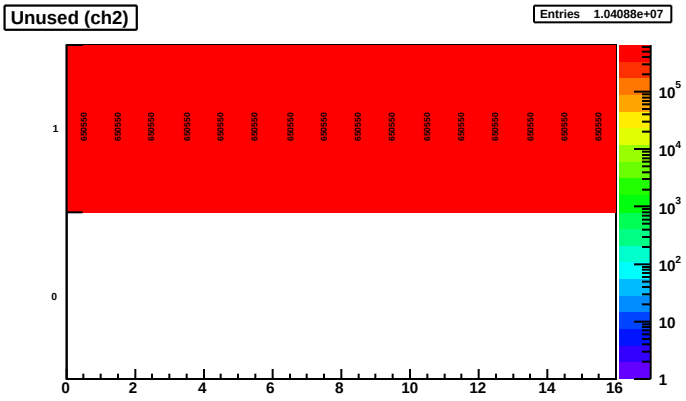
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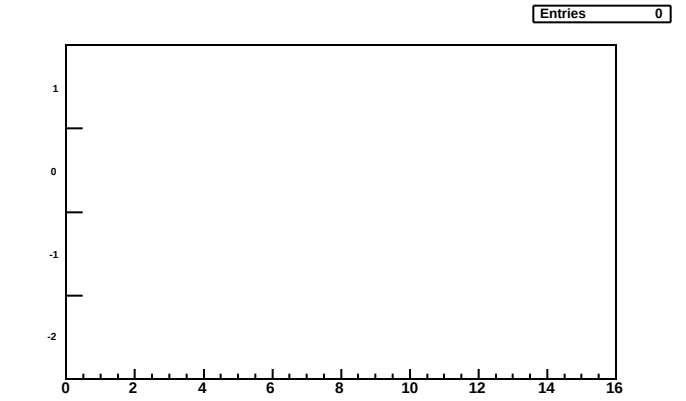
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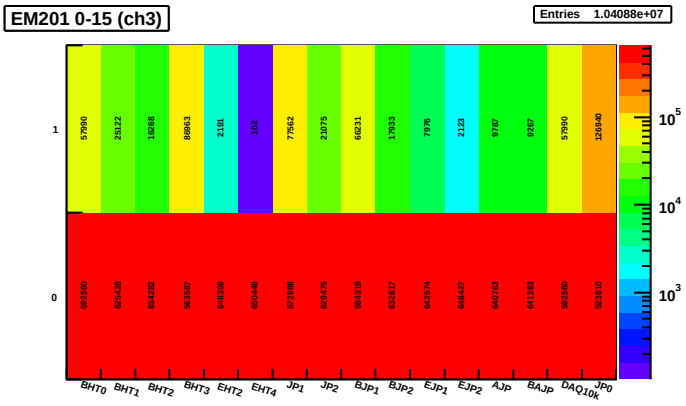
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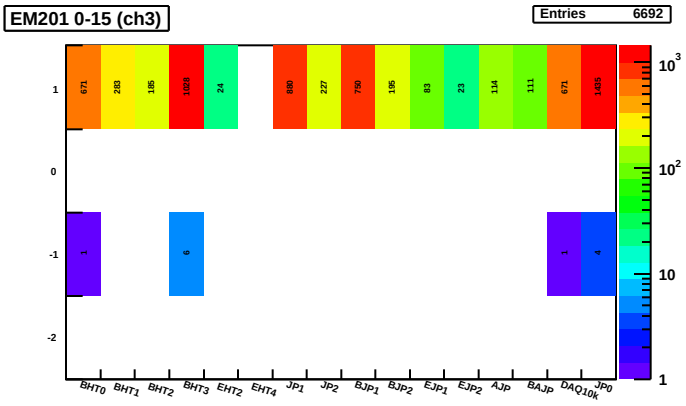
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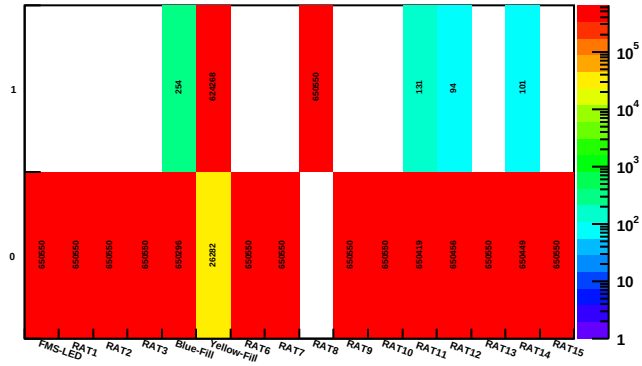
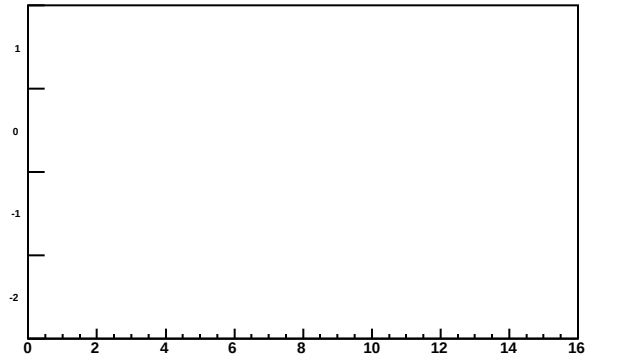
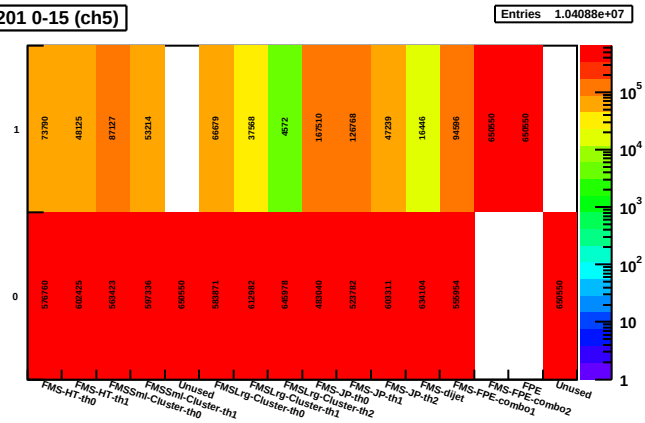
RAT board (ch4)





FP201 0-15 (ch5)



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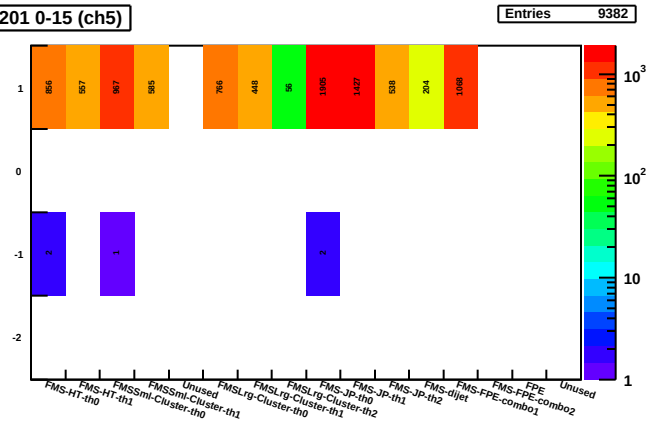
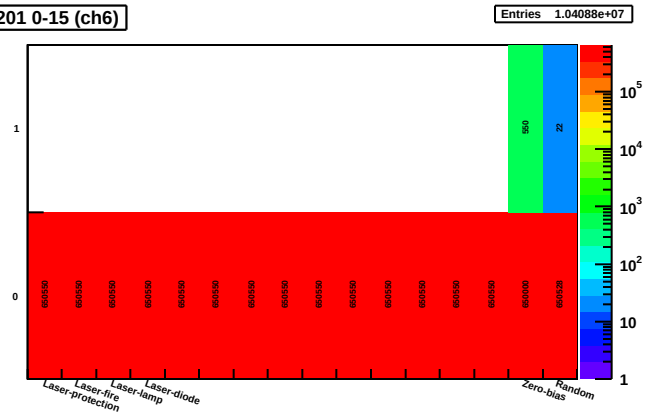
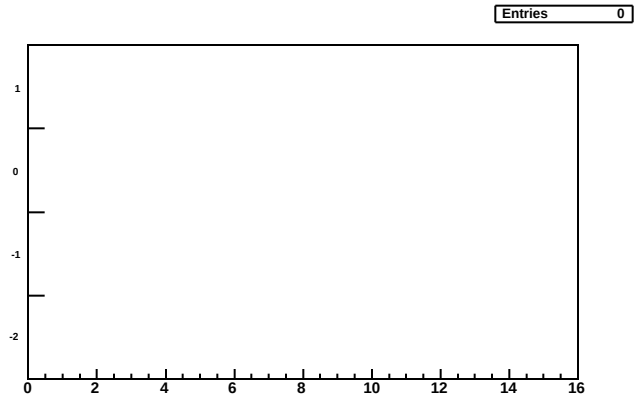
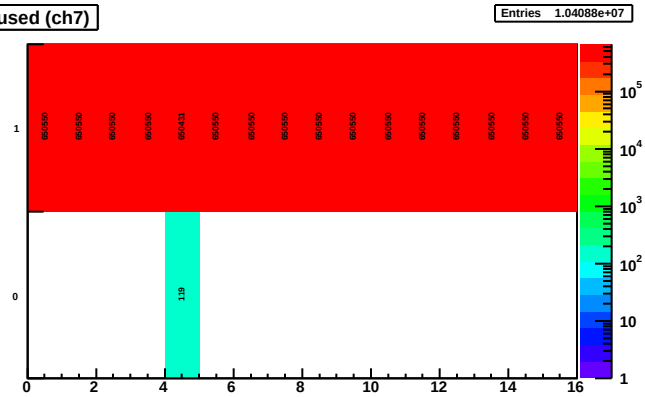
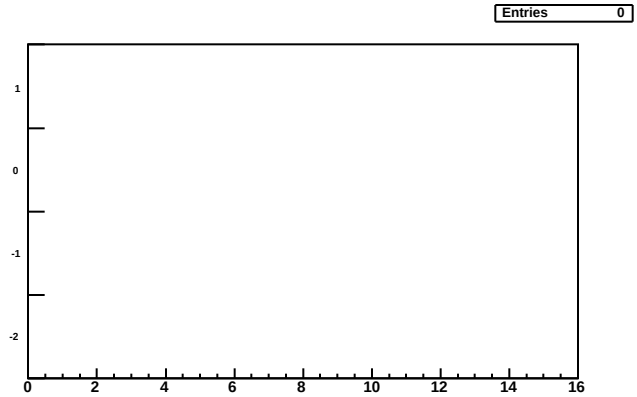


ST201 0-15 (ch6)





Unused (ch7)