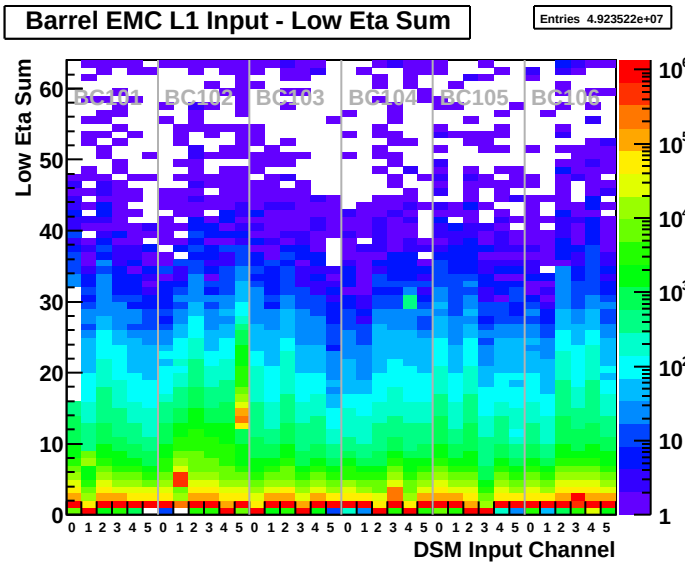
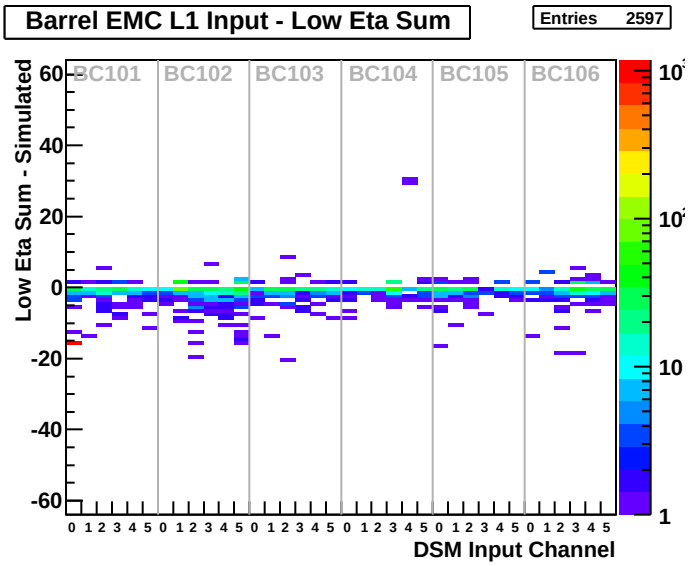
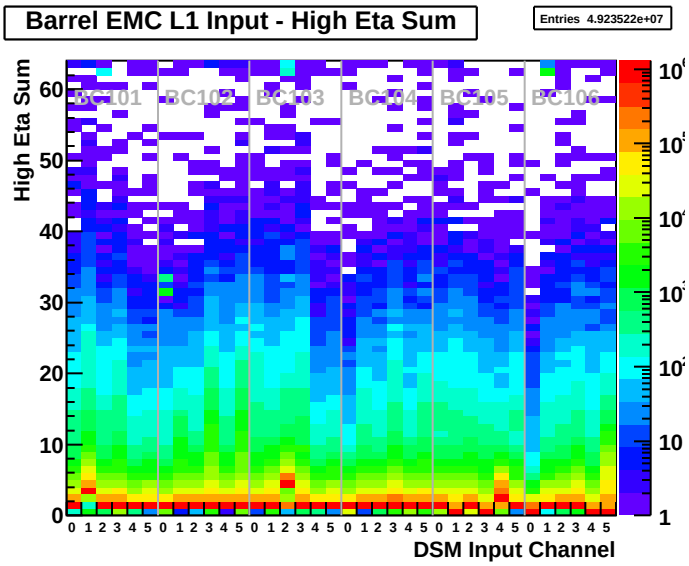
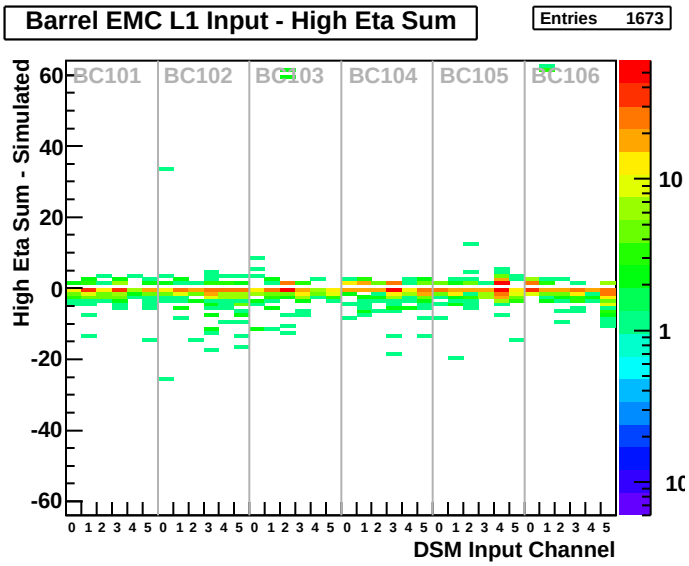
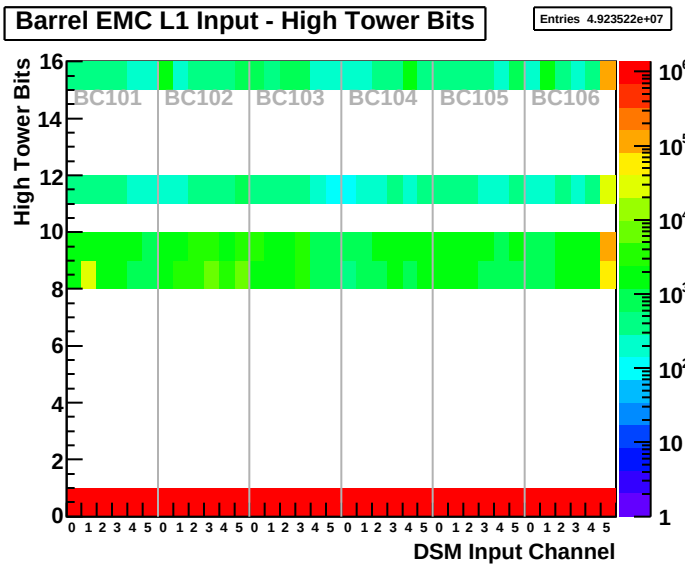
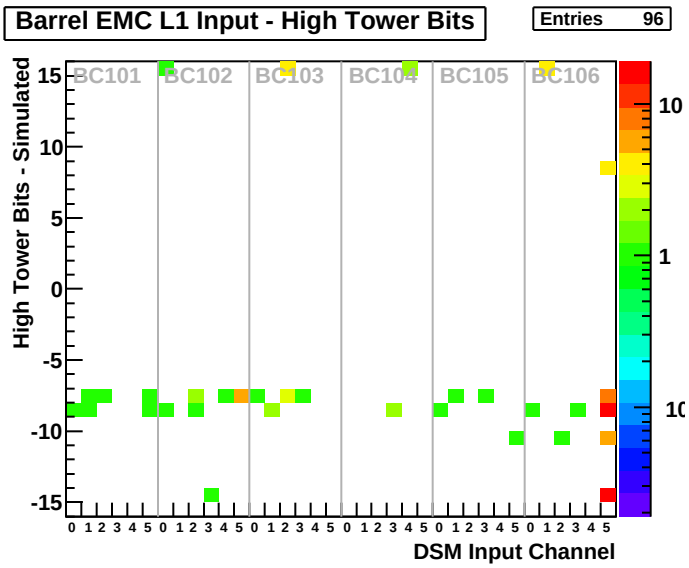

Barrel EMC L1 Input - Low Eta Sum
Entries 4.923522e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

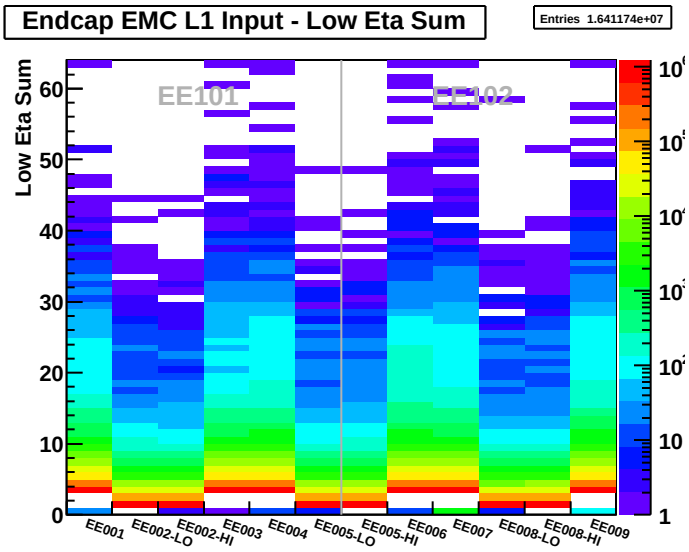

Barrel EMC L1 Input - Low Eta Sum
Entries 2597
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

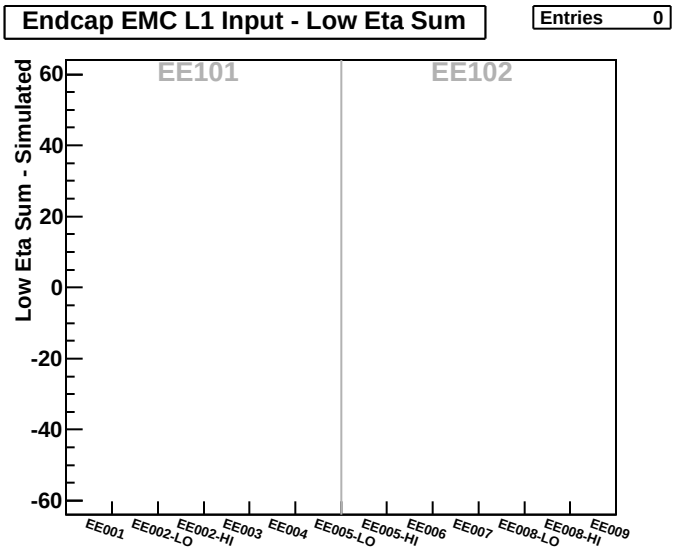

Barrel EMC L1 Input - High Eta Sum
Entries 4.923522e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

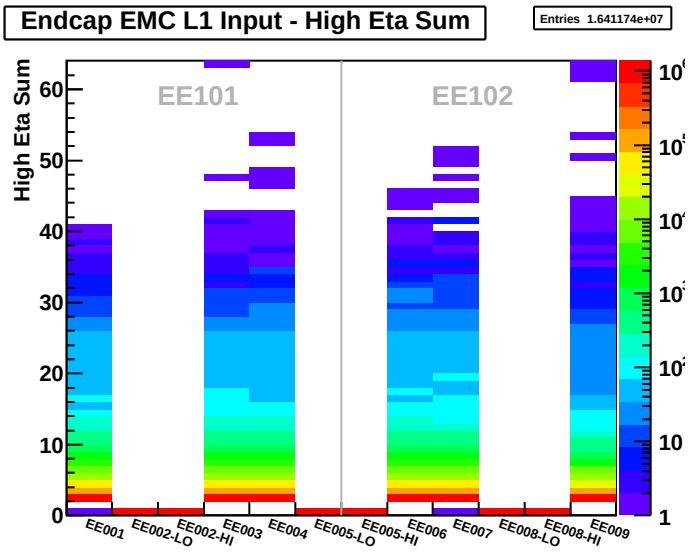

Barrel EMC L1 Input - High Eta Sum
Entries 1673
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

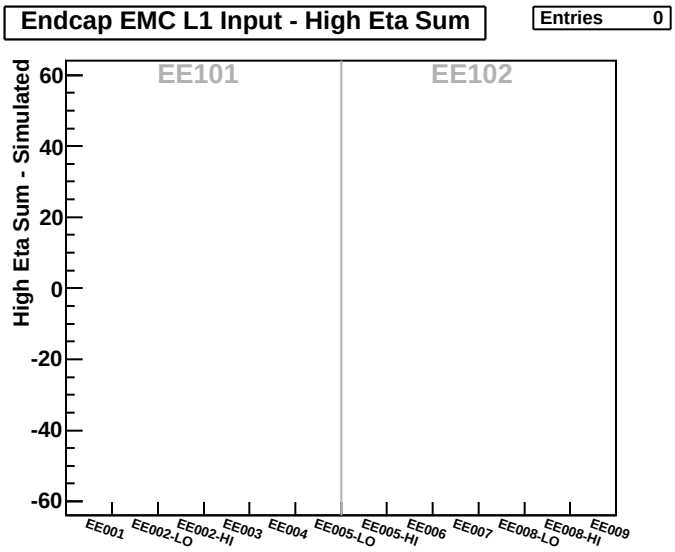

Barrel EMC L1 Input - High Tower Bits
Entries 4.923522e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

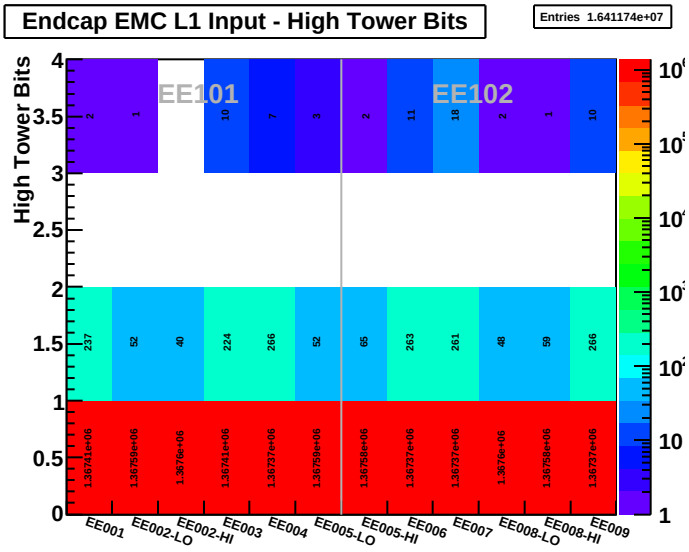

Barrel EMC L1 Input - High Tower Bits
Entries 96
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

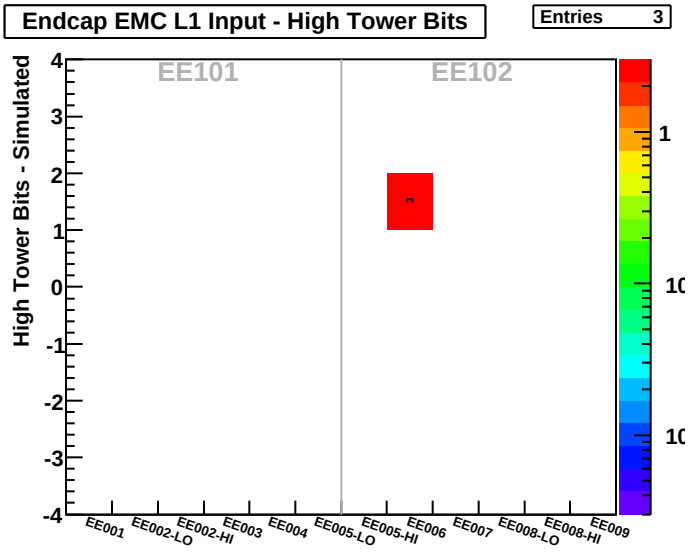

Endcap EMC L1 Input - Low Eta Sum
Entries 1.641174e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

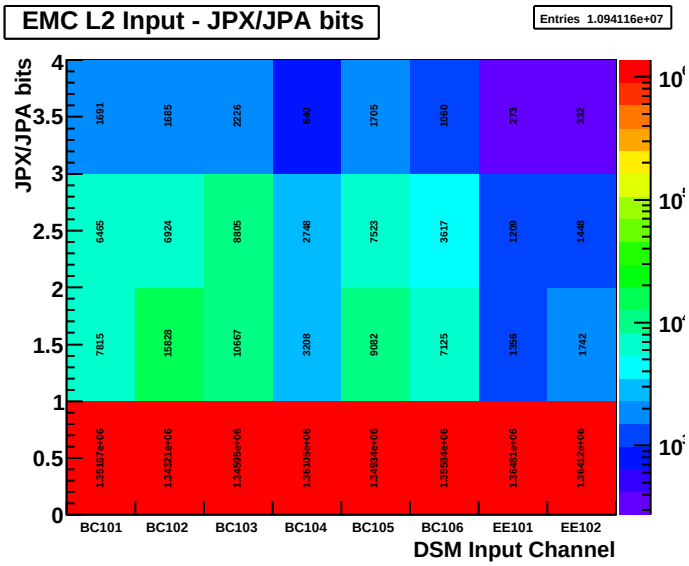

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

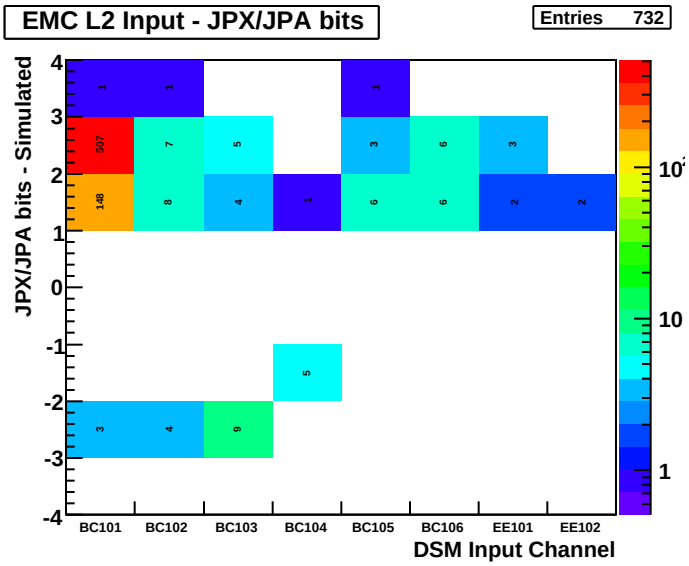

Endcap EMC L1 Input - High Eta Sum
Entries 1.641174e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

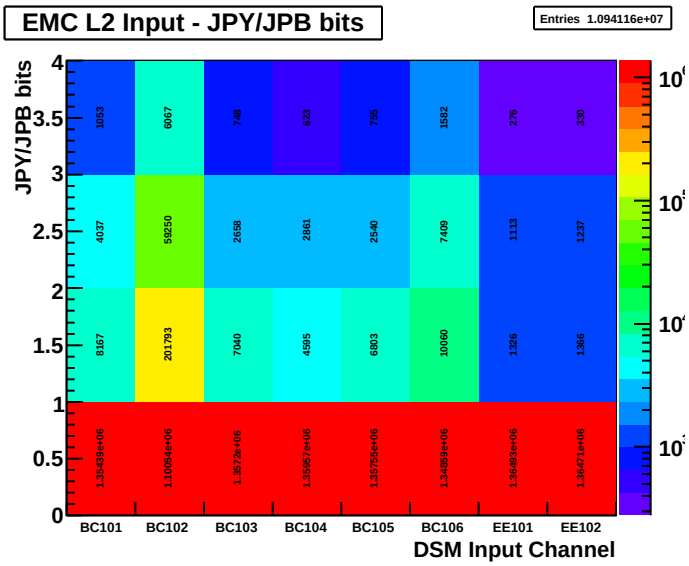

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

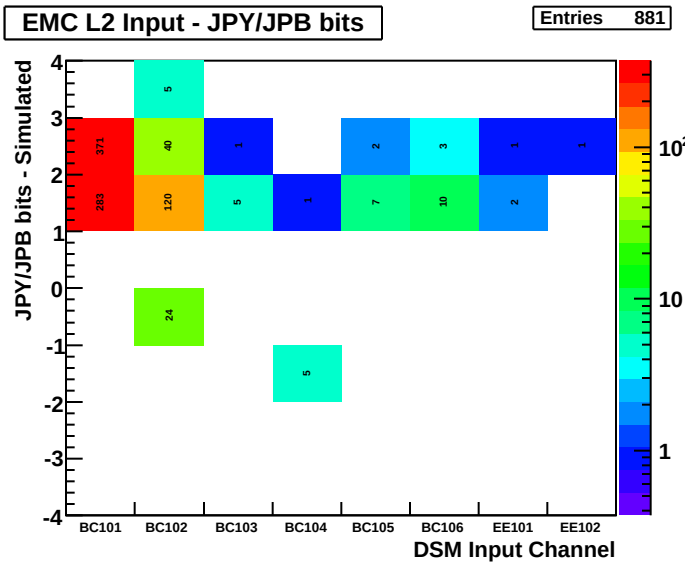

Endcap EMC L1 Input - High Tower Bits
Entries 1.641174e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

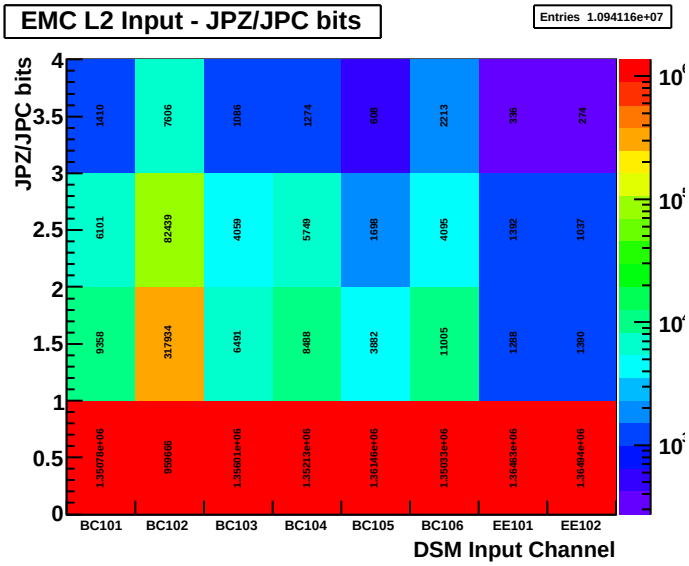

Endcap EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

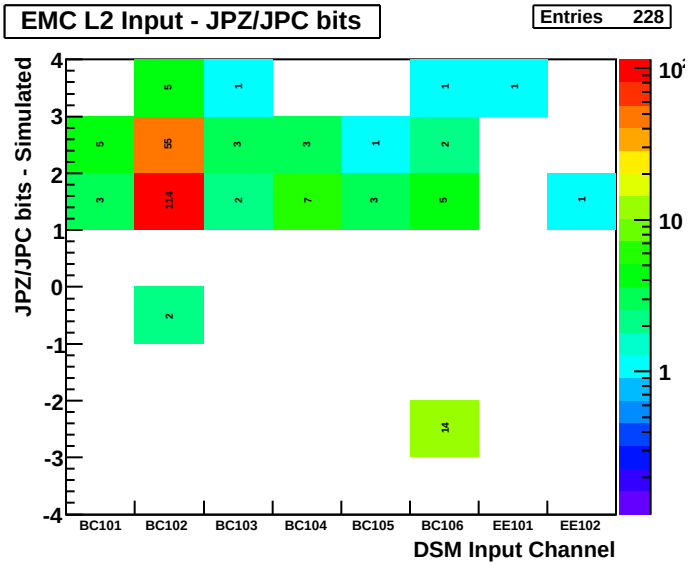

EMC L2 Input - JPX/JPA bits
Entries 1.094116e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

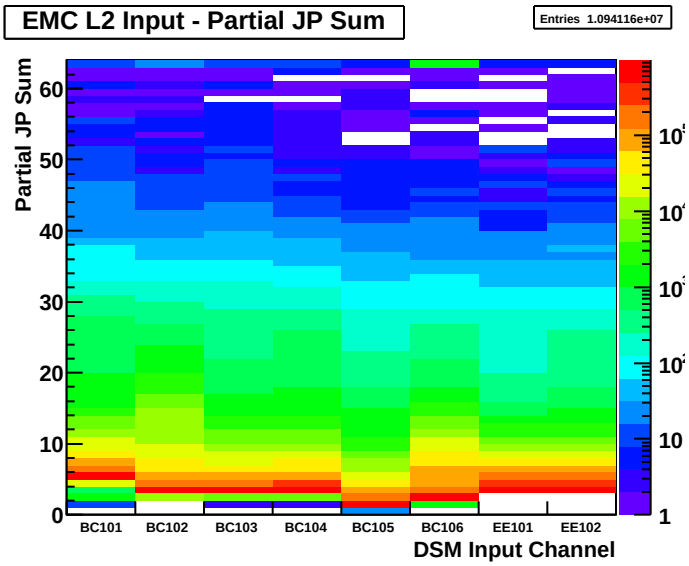

EMC L2 Input - JPX/JPA bits
Entries 732
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

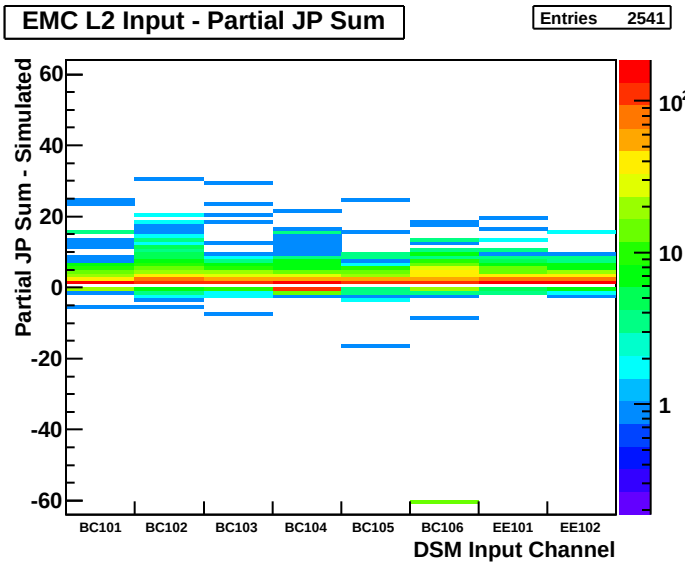

EMC L2 Input - JPY/JPB bits
Entries 1.094116e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

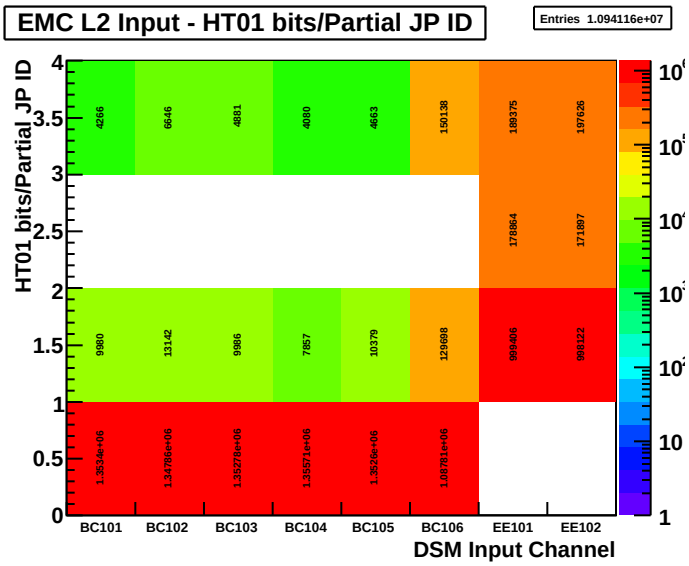

EMC L2 Input - JPY/JPB bits
Entries 881
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

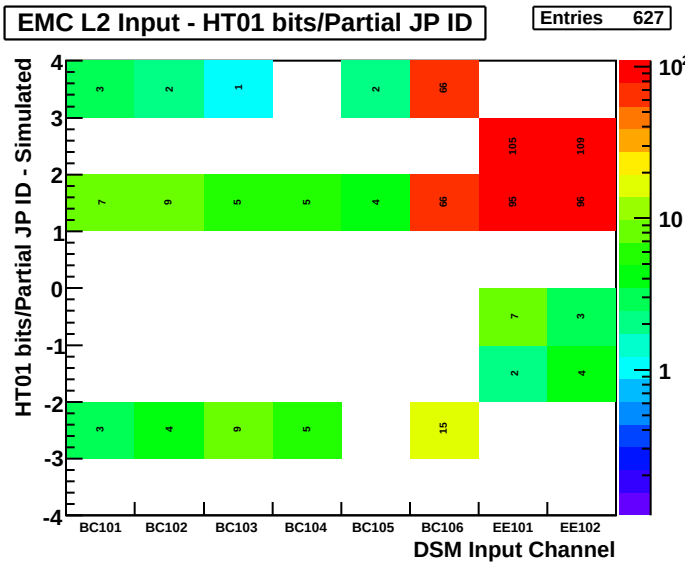

EMC L2 Input - JPZ/JPC bits
Entries 1.094116e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

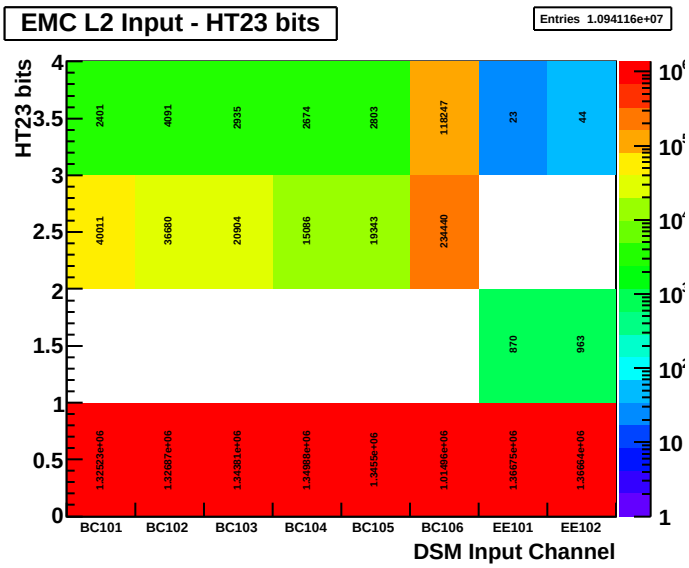

EMC L2 Input - JPZ/JPC bits
Entries 228
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

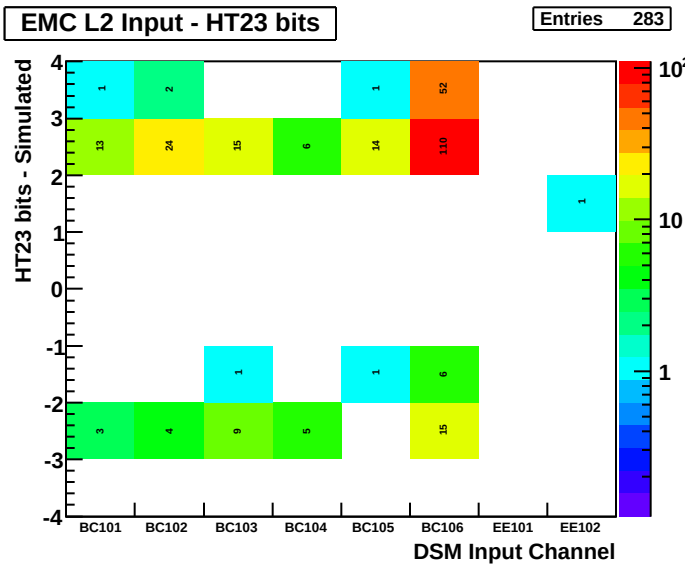

EMC L2 Input - Partial JP Sum
Entries 1.094116e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

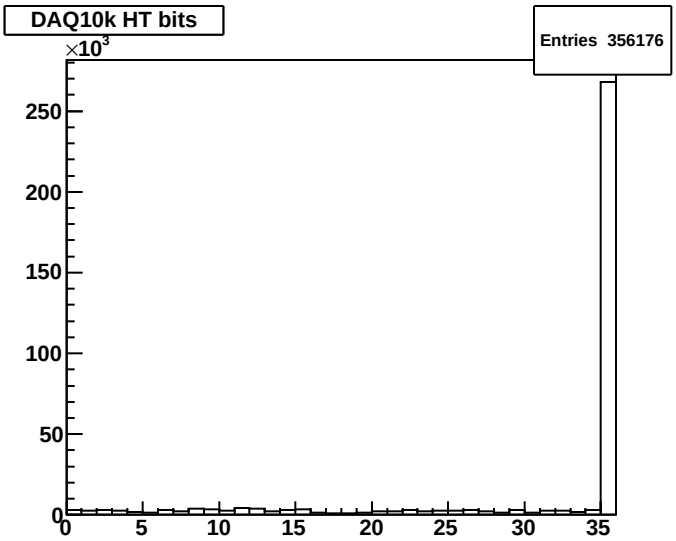

EMC L2 Input - Partial JP Sum
Entries 2541
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

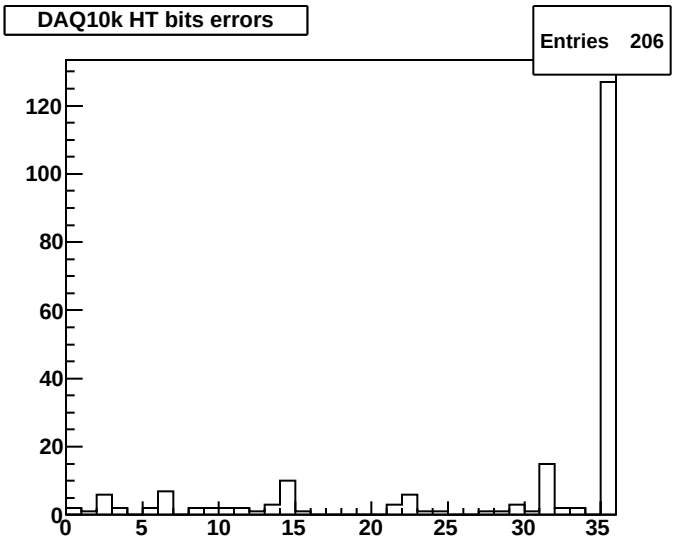

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.094116e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

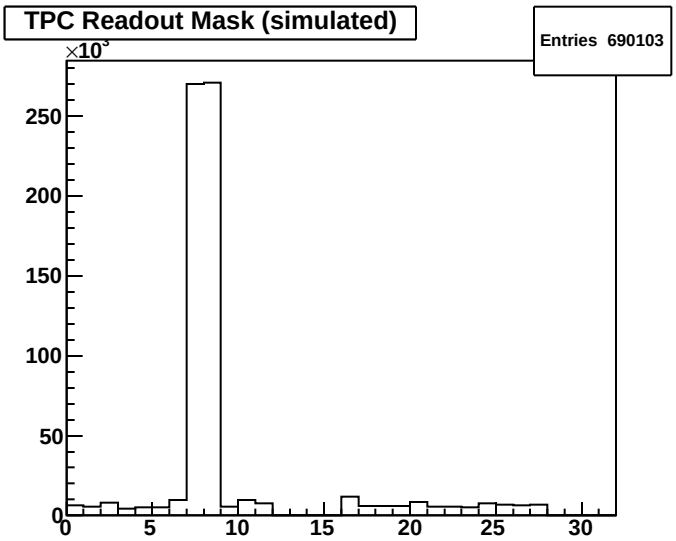

EMC L2 Input - HT01 bits/Partial JP ID
Entries 627
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

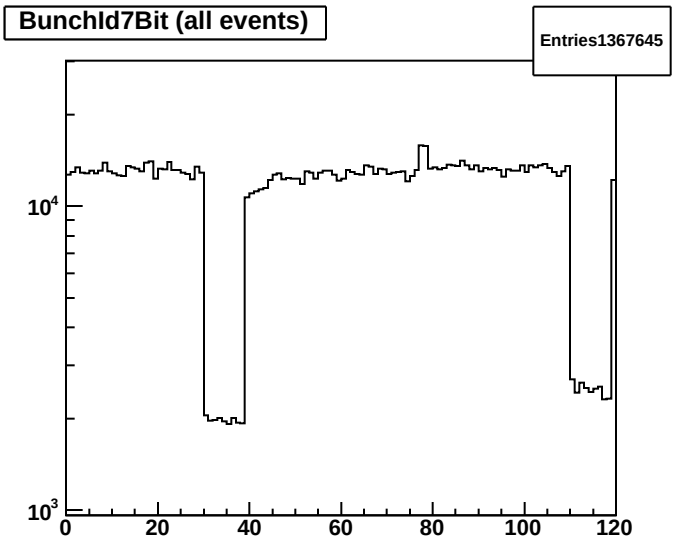

EMC L2 Input - HT23 bits
Entries 1.094116e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

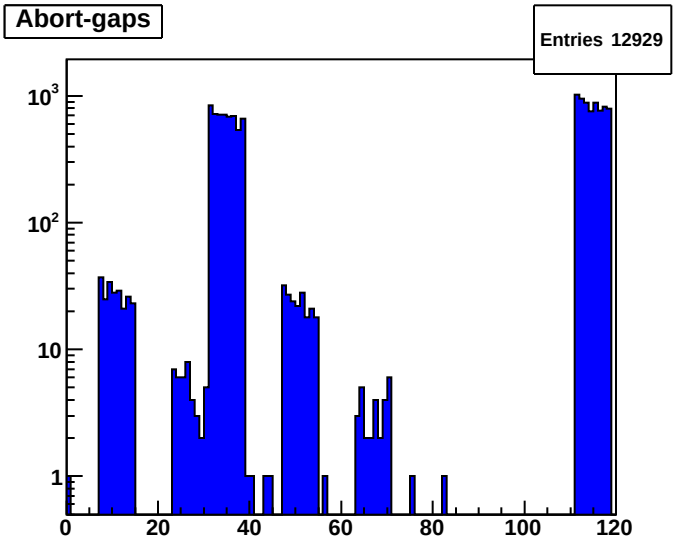

EMC L2 Input - HT23 bits
Entries 283
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

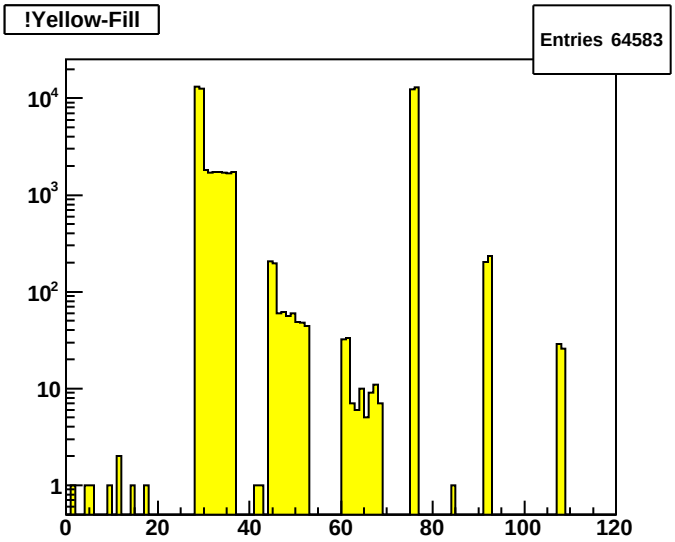

DAQ10k HT bits
Entries 356176
×10^3
250
200
150
100
50
0
0 5 10 15 20 25 30 35

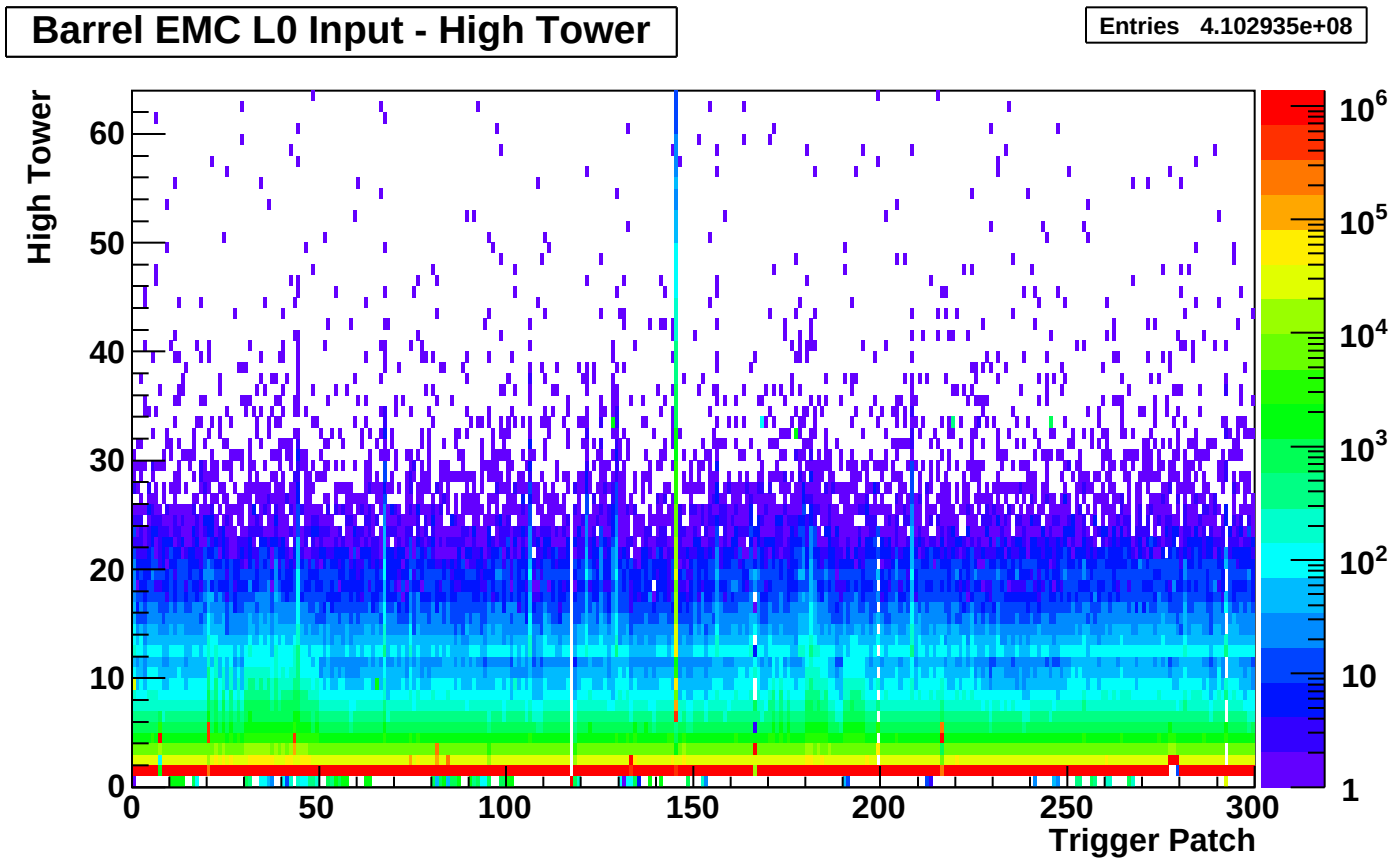

DAQ10k HT bits errors
Entries 206
120
100
80
60
40
20
0
0 5 10 15 20 25 30 35

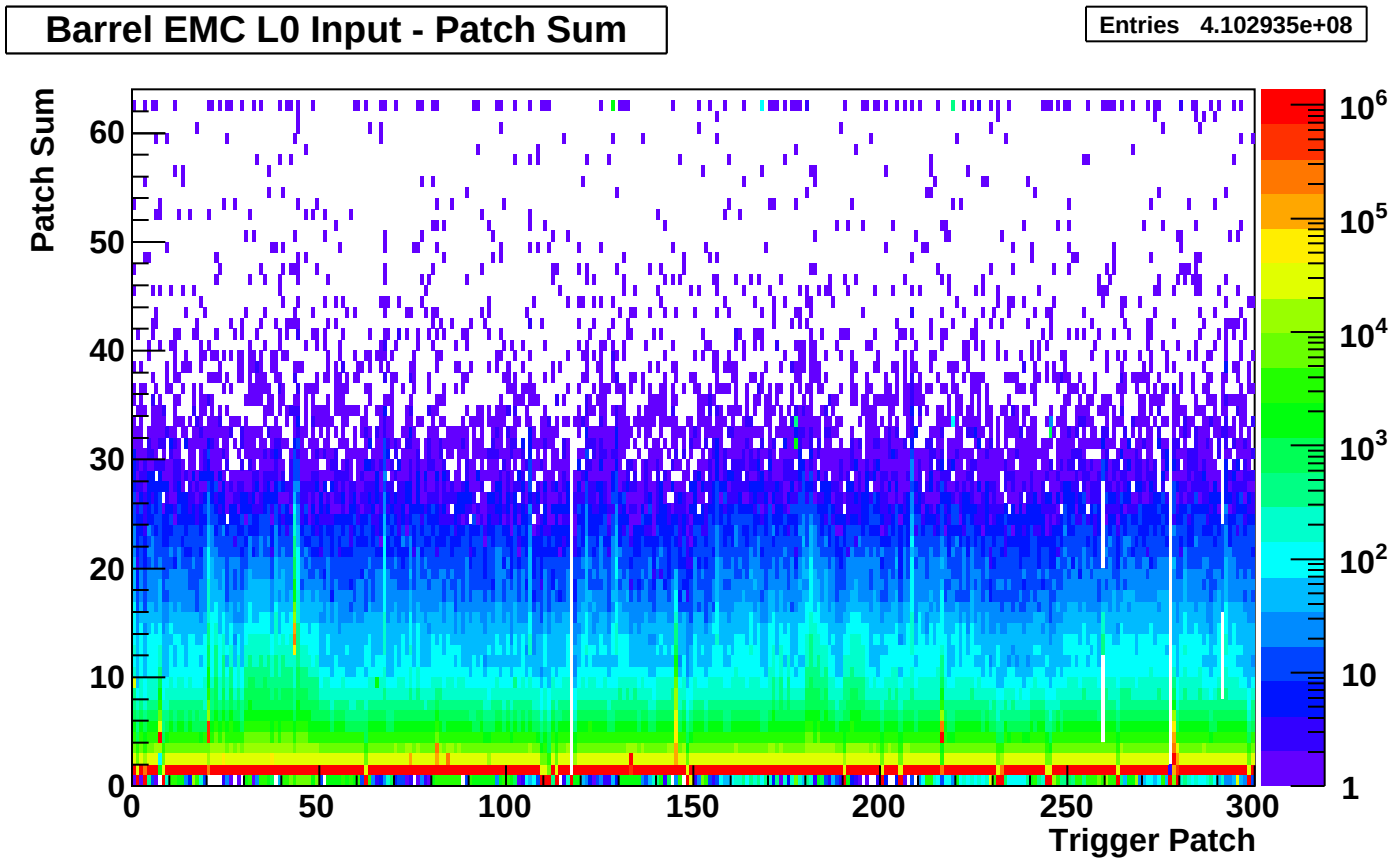

TPC Readout Mask (simulated)
Entries 690103
×10^3
250
200
150
100
50
0
0 5 10 15 20 25 30

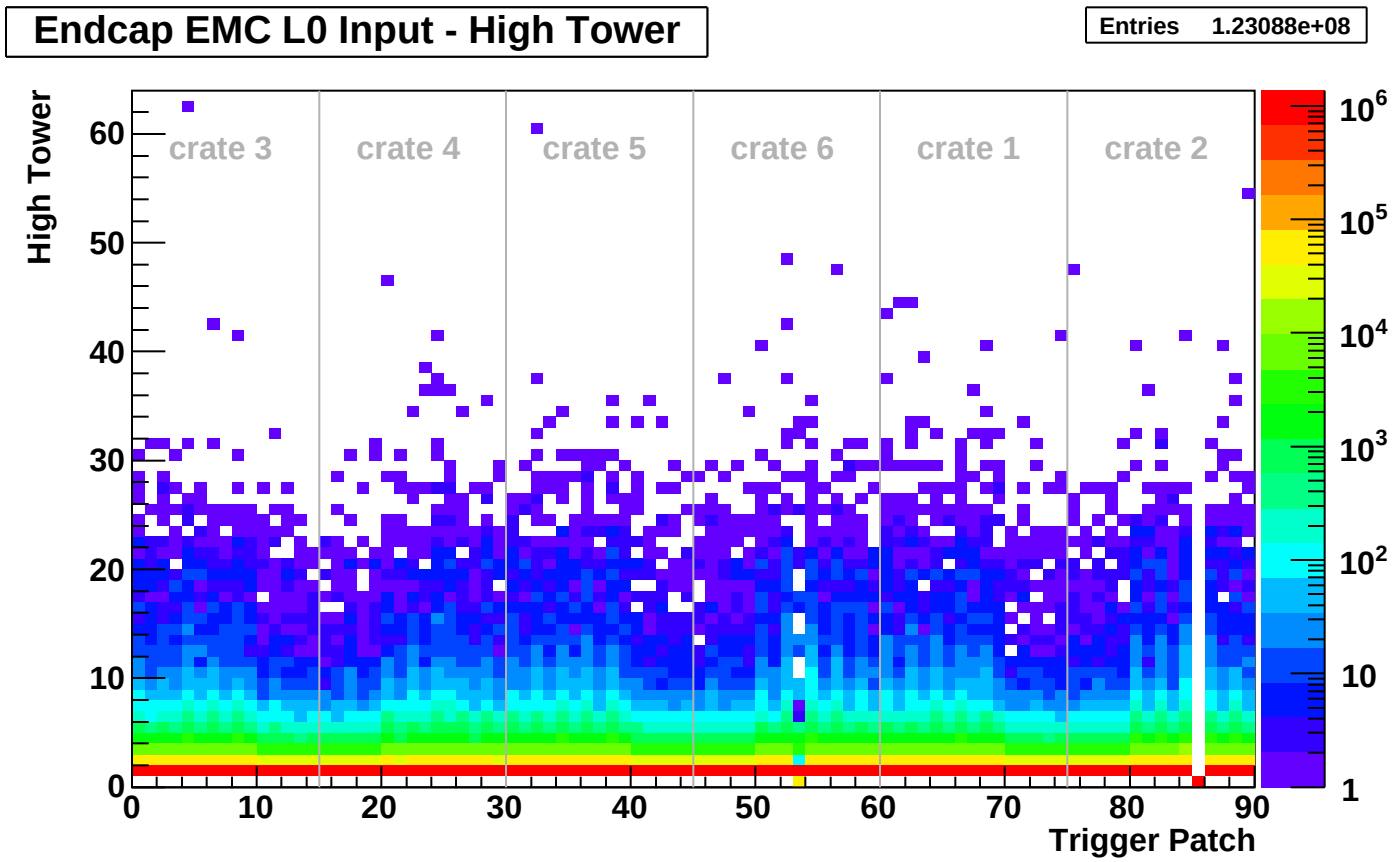

BunchId7Bit (all events)
Entries1367645
10^4
10^3
0 20 40 60 80 100 120

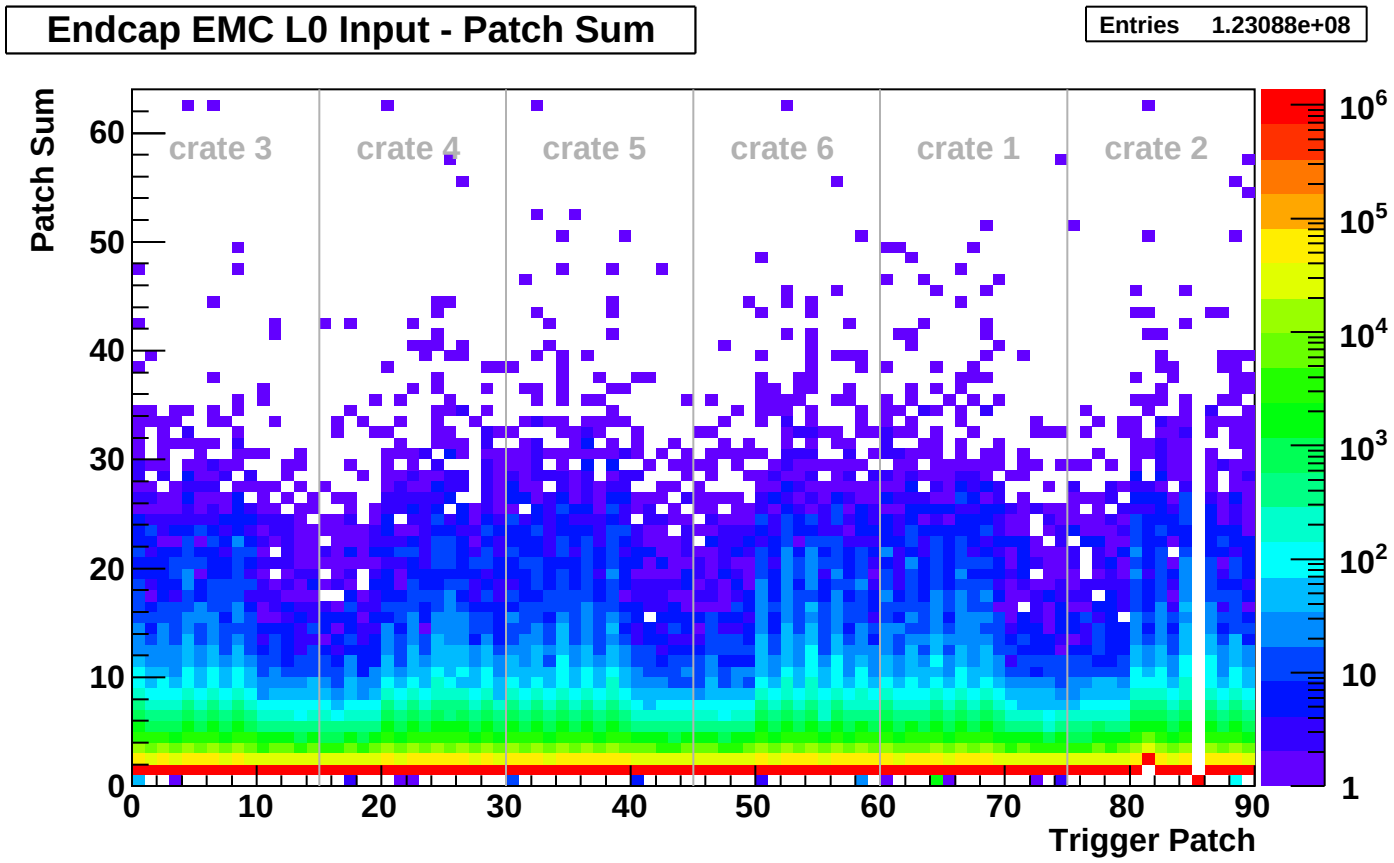

Abort-gaps
Entries 12929
10^3
10^2
10
1
0 20 40 60 80 100 120

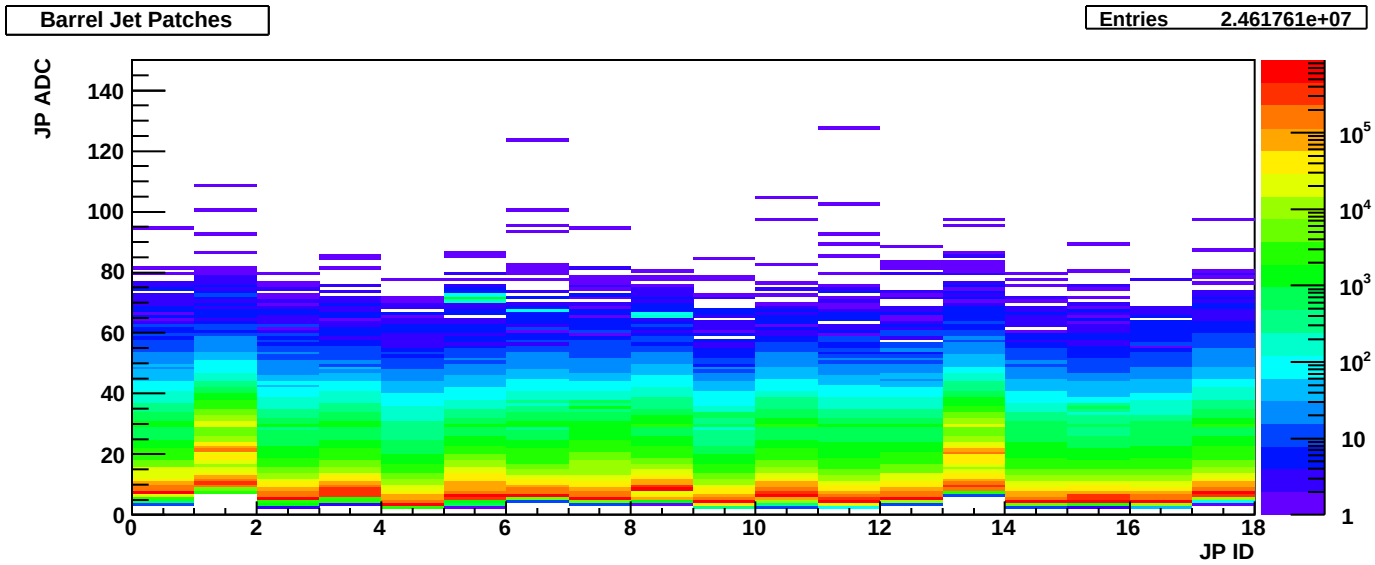

!Yellow-Fill
Entries 64583
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

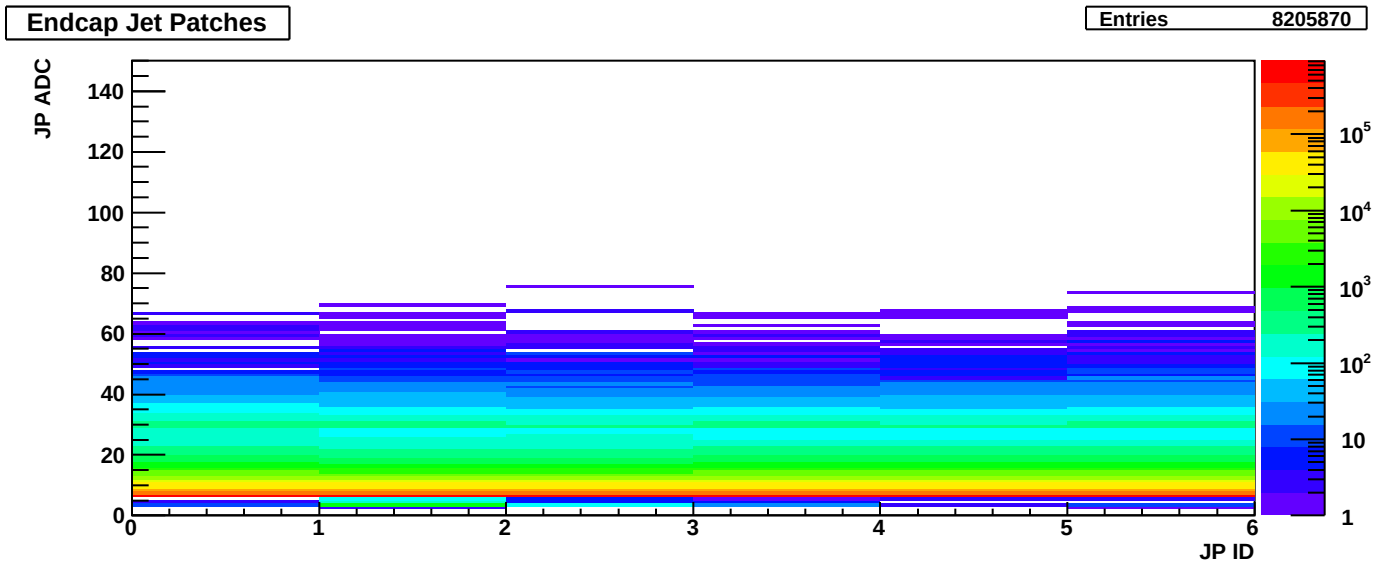

Barrel EMC L0 Input - High Tower
Entries 4.102935e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

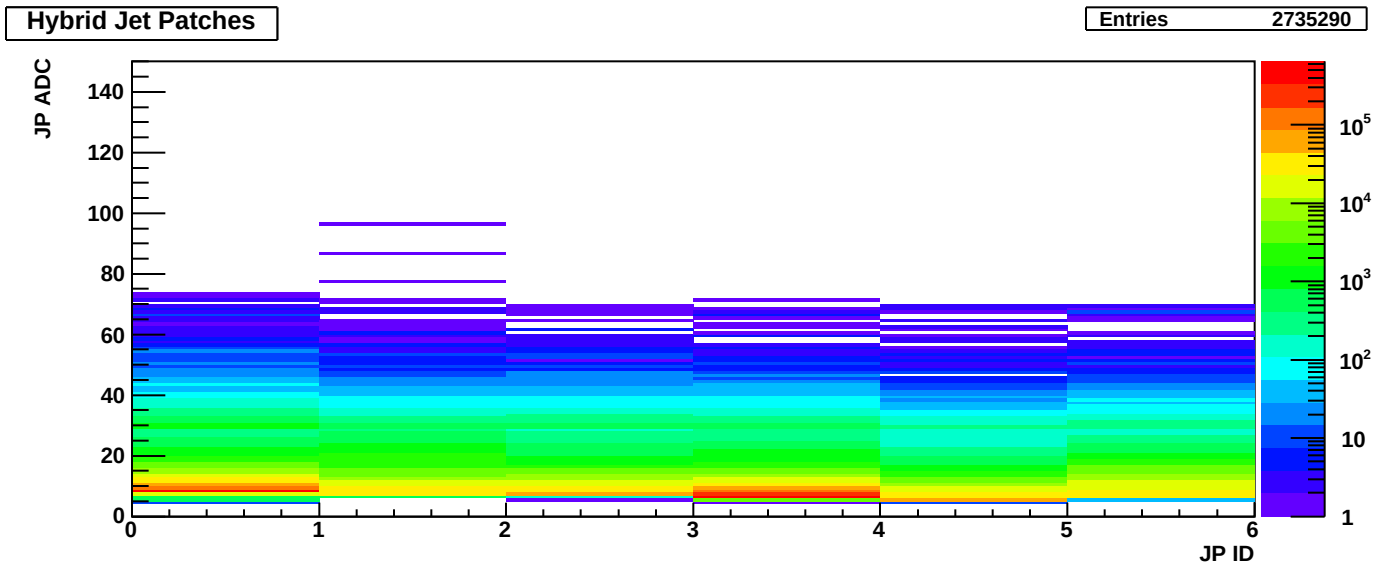

Barrel EMC L0 Input - Patch Sum
Entries 4.102935e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

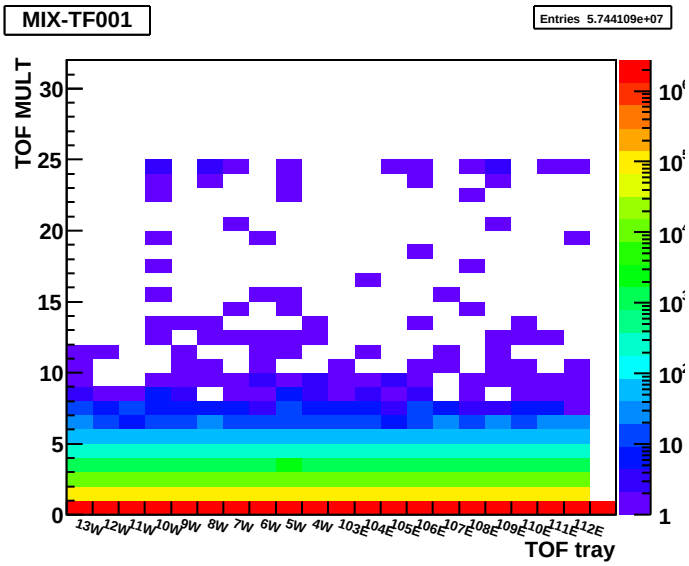

Endcap EMC L0 Input - High Tower
Entries 1.23088e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

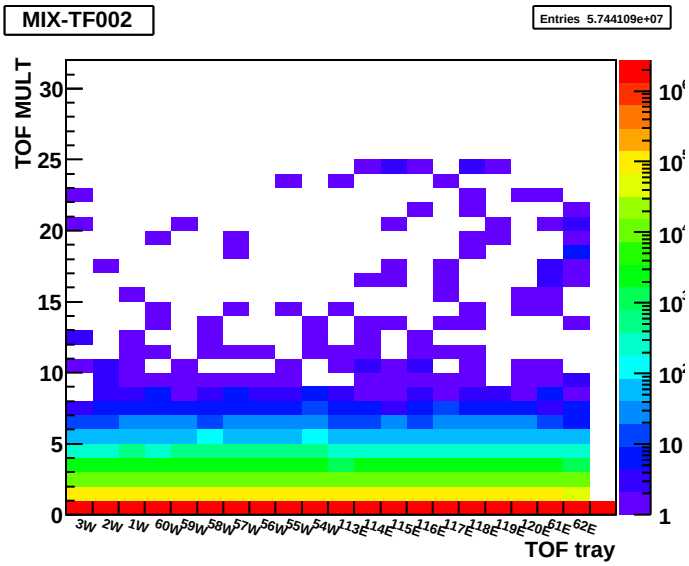

Endcap EMC L0 Input - Patch Sum
Entries 1.23088e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

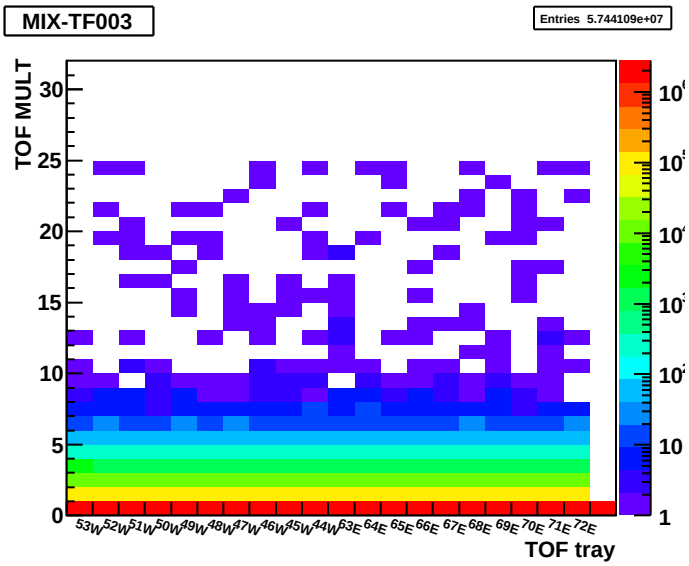

Barrel Jet Patches
Entries 2.461761e+07
JP ADC
JP ID

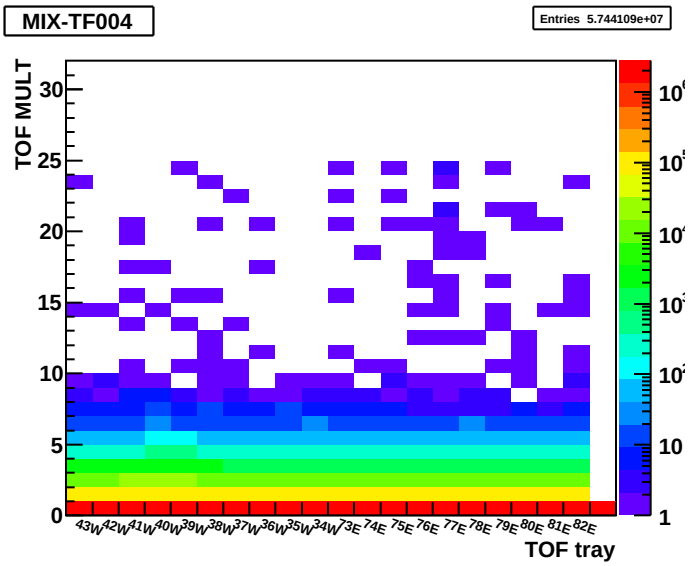

Endcap Jet Patches
Entries 8205870
JP ADC
JP ID

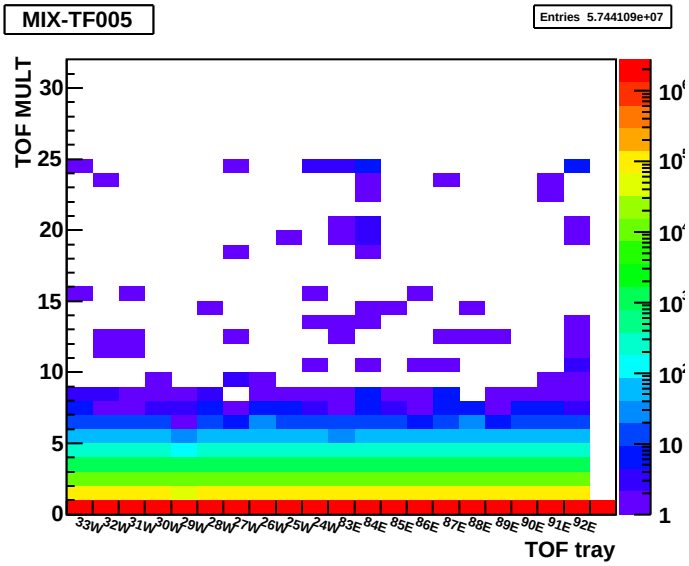

Hybrid Jet Patches
Entries 2735290
JP ADC
JP ID

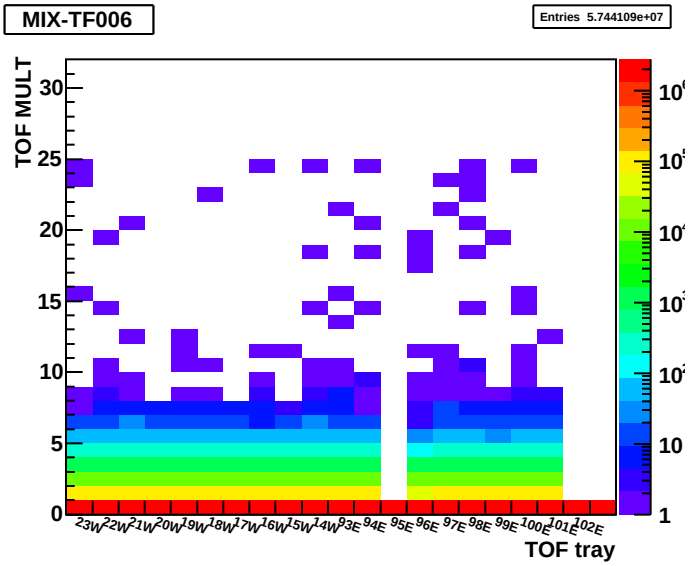

MIX-TF001
Entries 5.744109e+07
TOF MULT
TOF tray

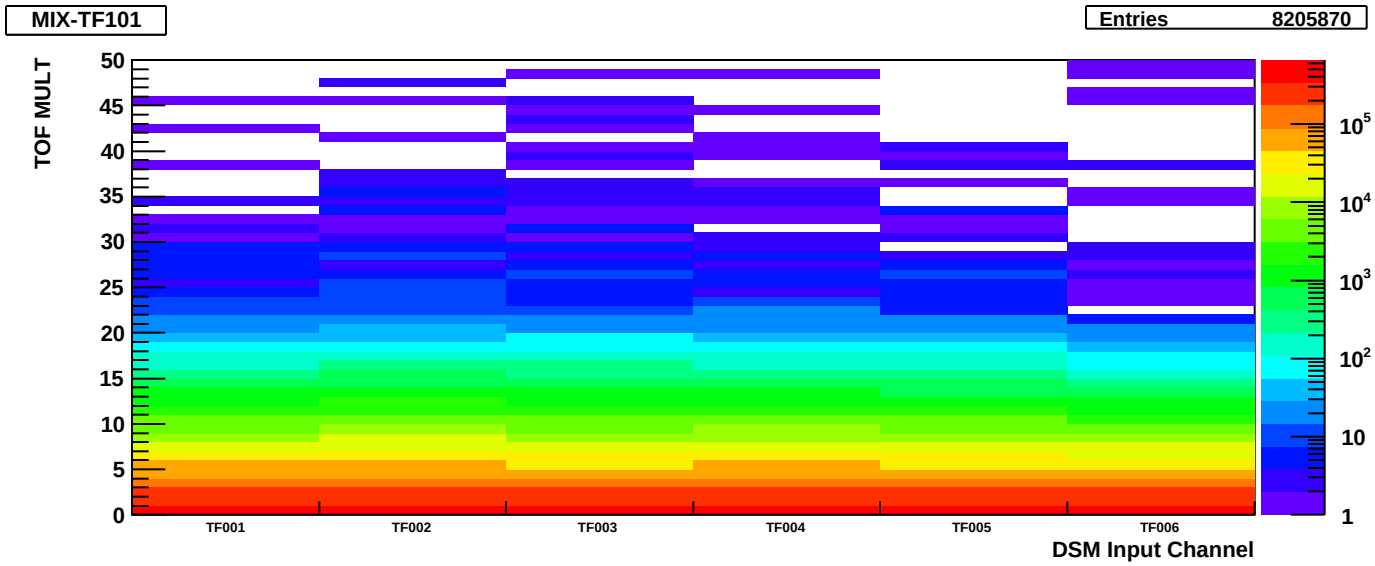

MIX-TF002
Entries 5.744109e+07
TOF MULT
TOF tray

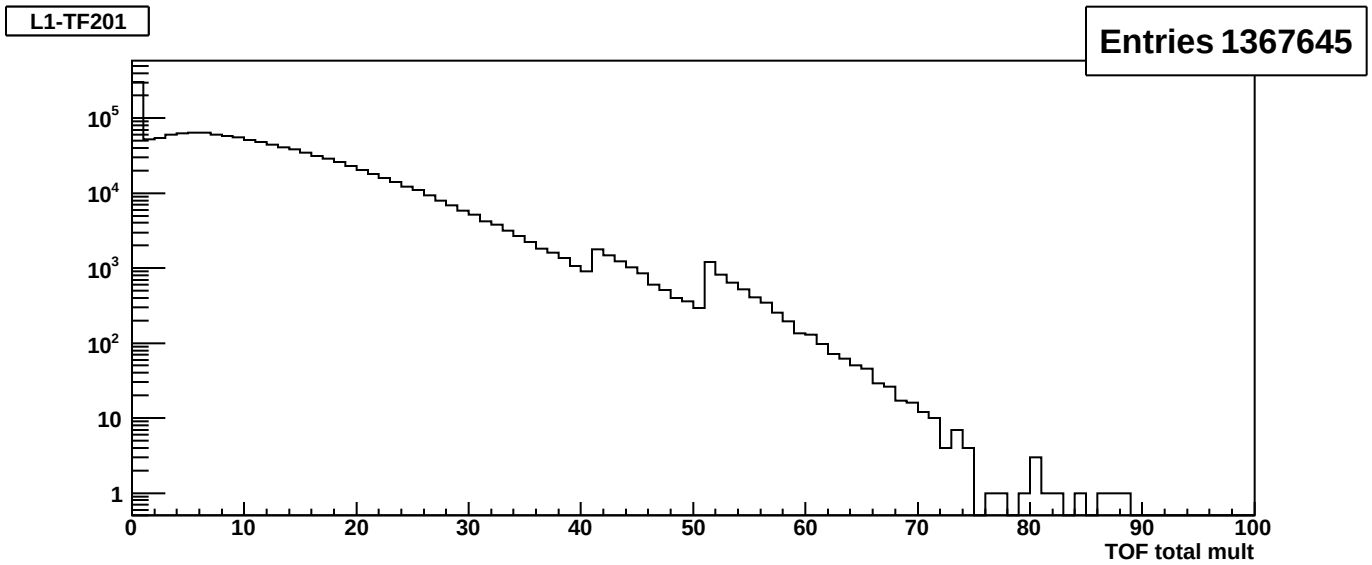

MIX-TF003
Entries 5.744109e+07
TOF MULT
TOF tray

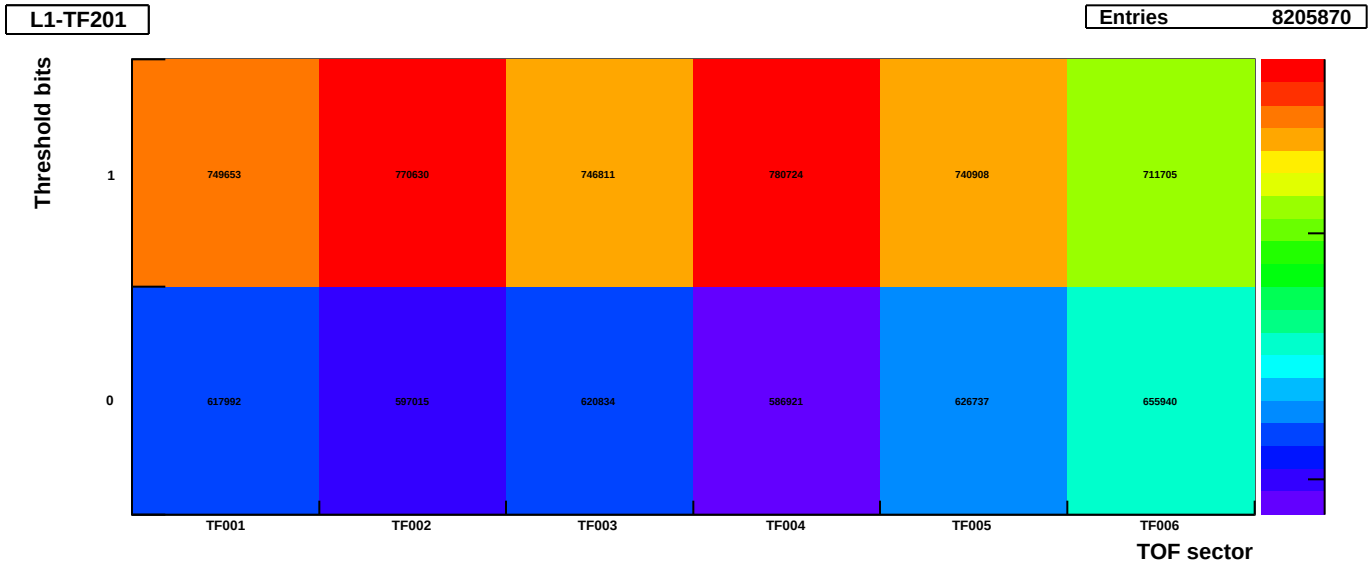

MIX-TF004
Entries 5.744109e+07
TOF MULT
TOF tray

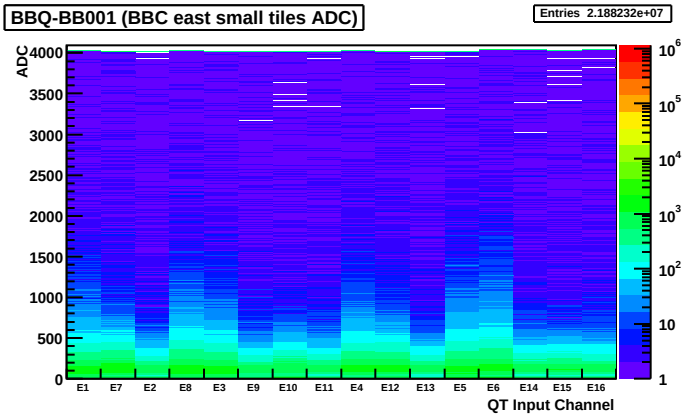

MIX-TF005
Entries 5.744109e+07
TOF MULT
TOF tray

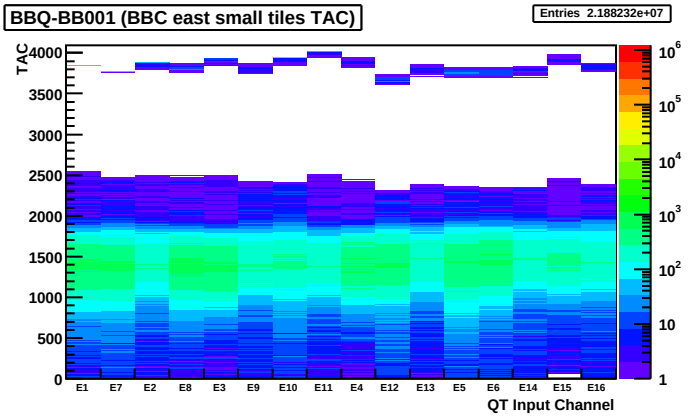

MIX-TF006
Entries 5.744109e+07
TOF MULT
TOF tray

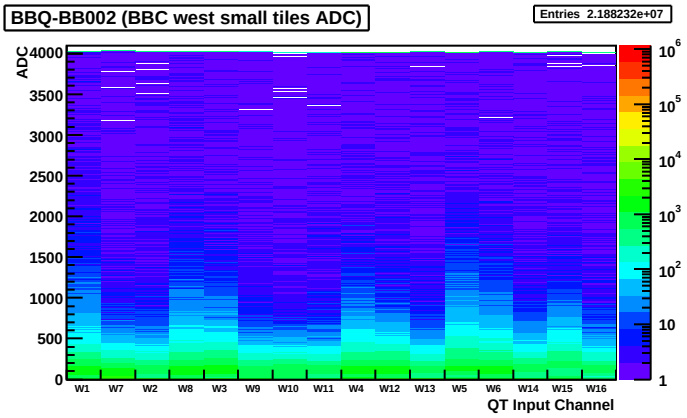

MIX-TF101
Entries 8205870
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

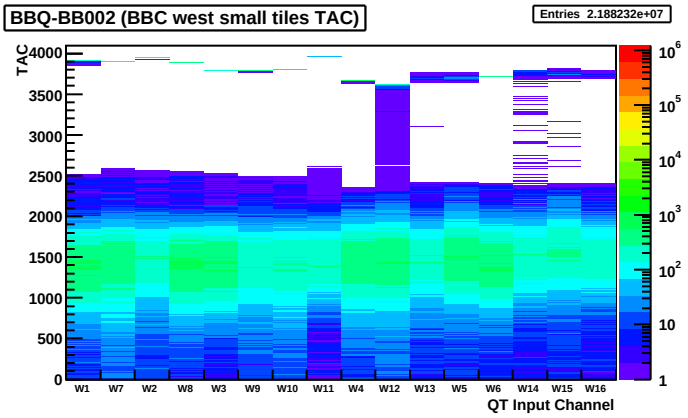

L1-TF201
Entries 1367645
TOF total mult

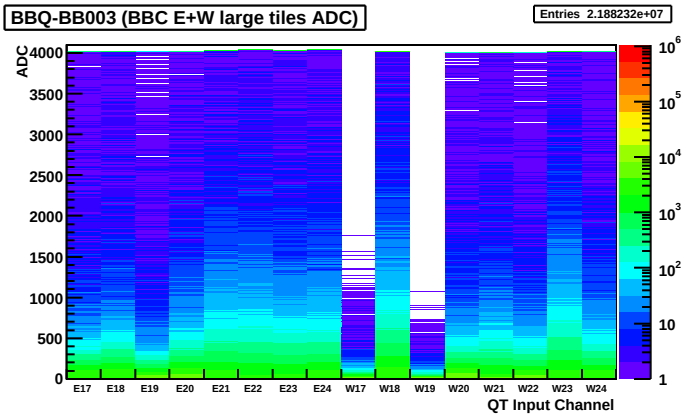

L1-TF201
Entries 8205870
Threshold bits
749653
770630
746811
780724
740908
711705
617992
597015
620834
586921
626737
655940
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

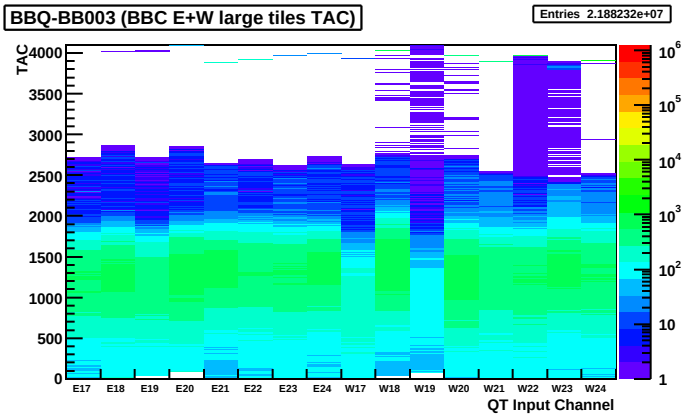

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.188232e+07
ADC
QT Input Channel

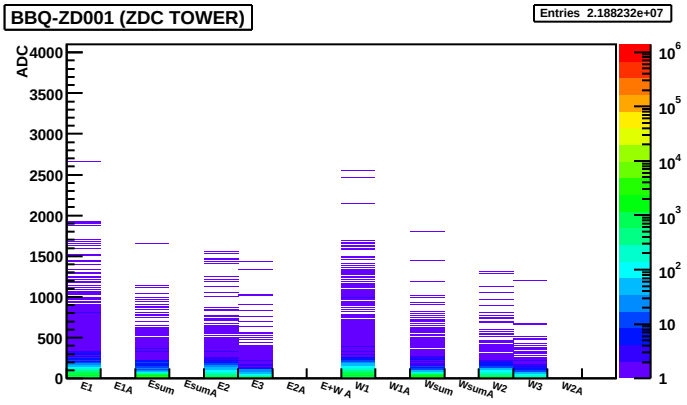

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.188232e+07
TAC
QT Input Channel

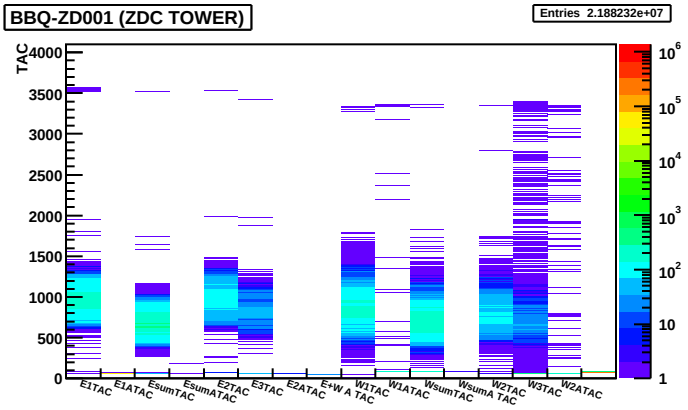

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.188232e+07
ADC
QT Input Channel

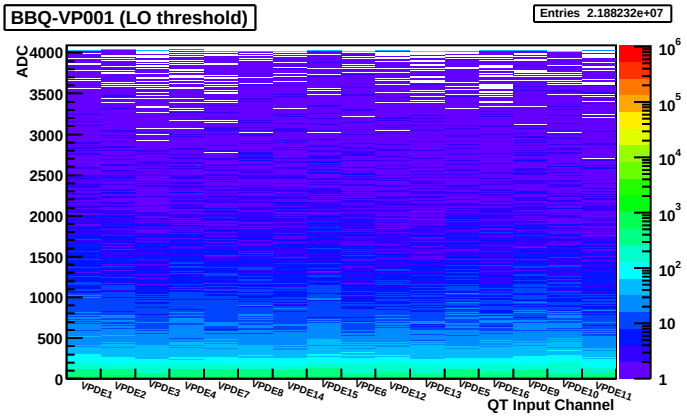

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.188232e+07
TAC
QT Input Channel

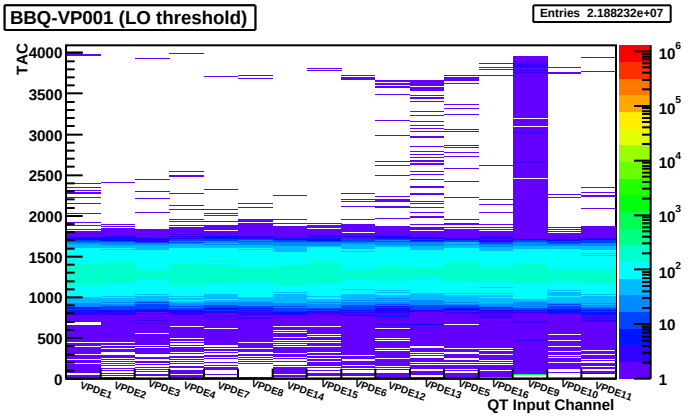

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.188232e+07
ADC
QT Input Channel

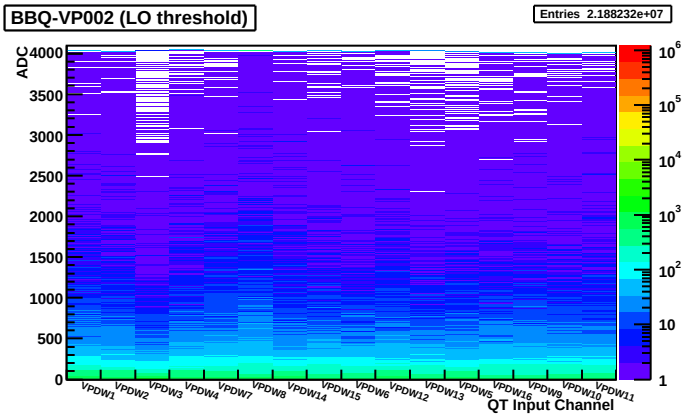

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.188232e+07
TAC
QT Input Channel

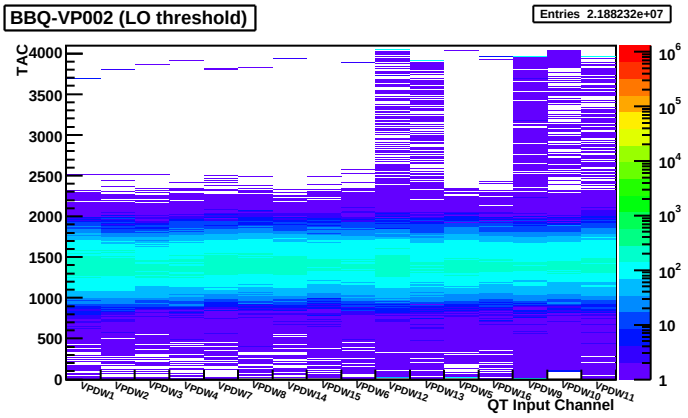

BBQ-ZD001 (ZDC TOWER)
Entries 2.188232e+07
ADC

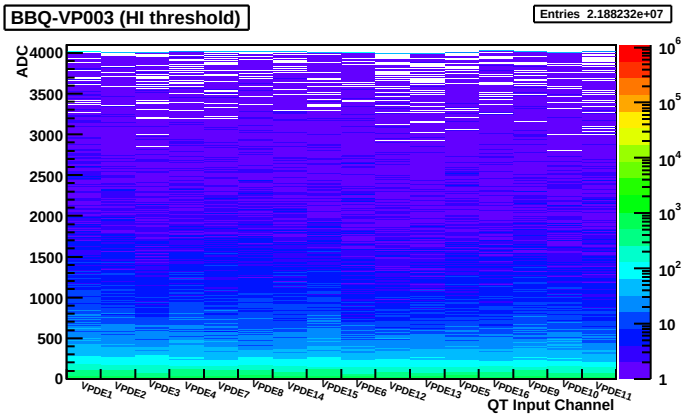

BBQ-ZD001 (ZDC TOWER)
Entries 2.188232e+07
TAC

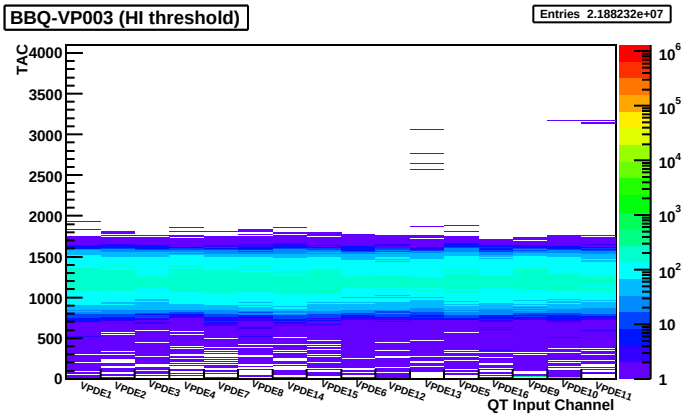

BBQ-VP001 (LO threshold)
Entries 2.188232e+07
ADC
QT Input Channel

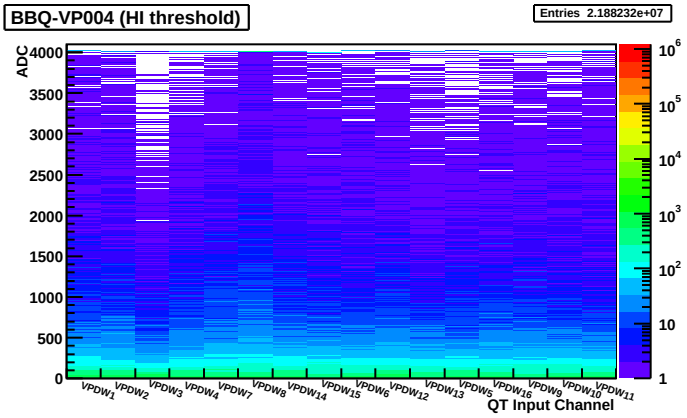

BBQ-VP001 (LO threshold)
Entries 2.188232e+07
TAC
QT Input Channel

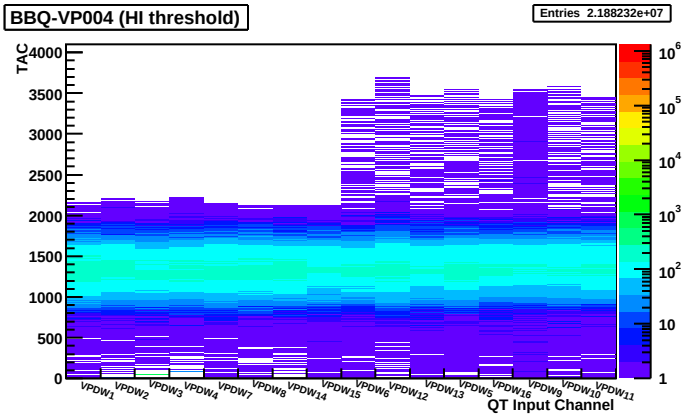

BBQ-VP002 (LO threshold)
Entries 2.188232e+07
ADC
QT Input Channel

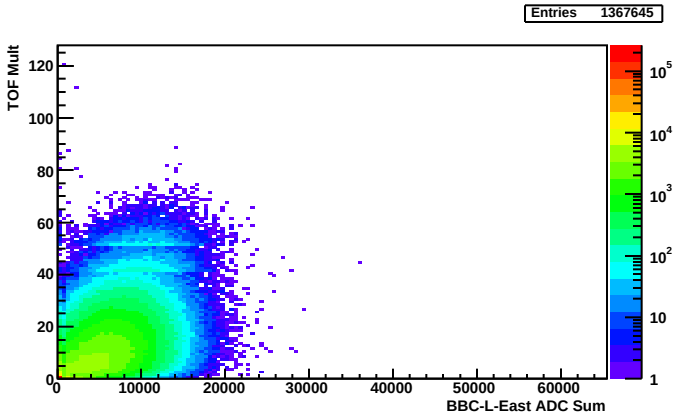

BBQ-VP002 (LO threshold)
Entries 2.188232e+07
TAC
QT Input Channel

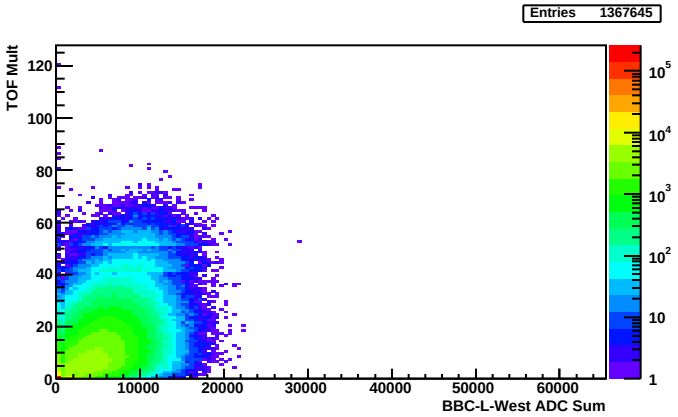

BBQ-VP003 (HI threshold)
Entries 2.188232e+07
ADC
QT Input Channel

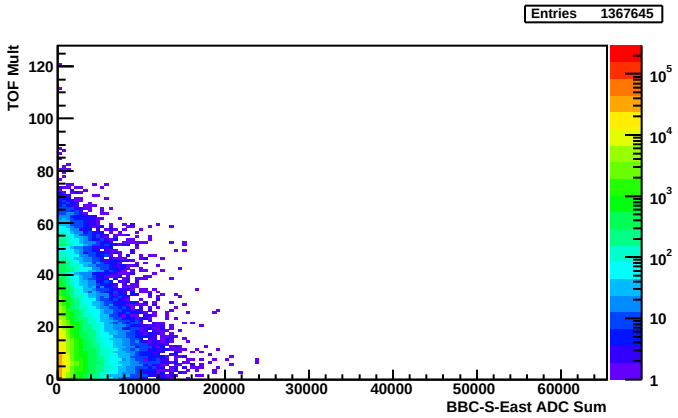

BBQ-VP003 (HI threshold)
Entries 2.188232e+07
TAC
QT Input Channel

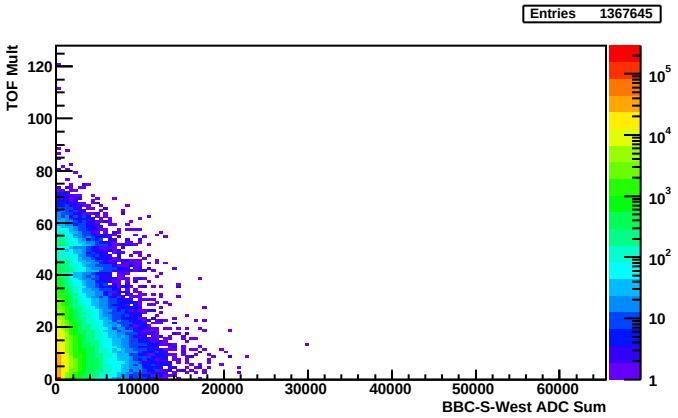

BBQ-VP004 (HI threshold)
Entries 2.188232e+07
ADC
QT Input Channel

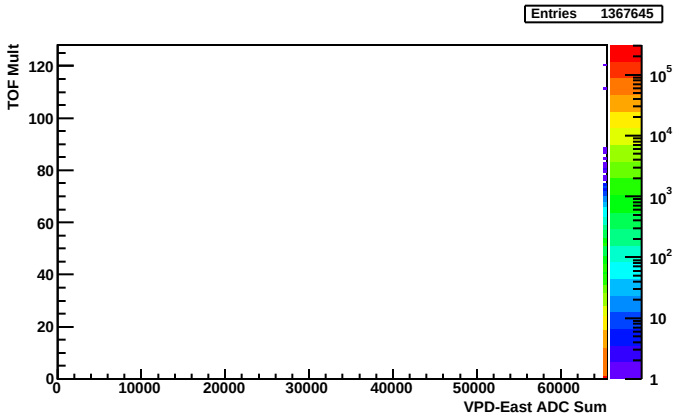

BBQ-VP004 (HI threshold)
Entries 2.188232e+07
TAC
QT Input Channel

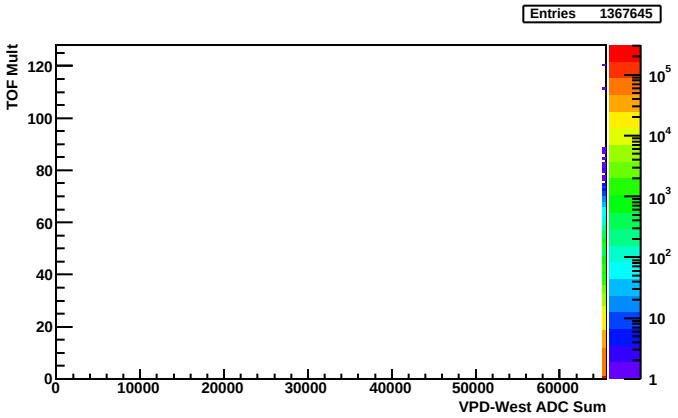

Entries 1367645
TOF Mult
BBC-L-East ADC Sum

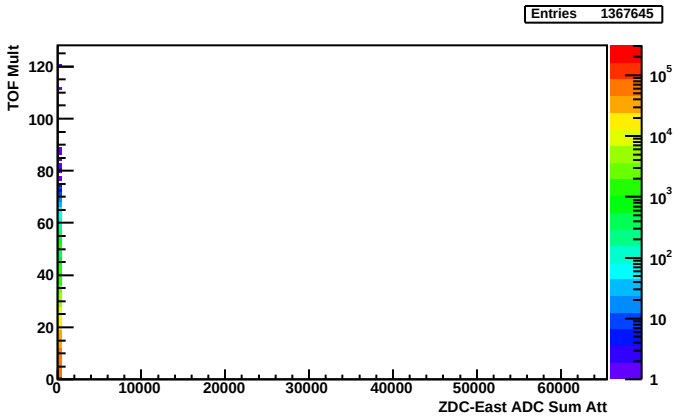

Entries 1367645
TOF Mult
BBC-L-West ADC Sum

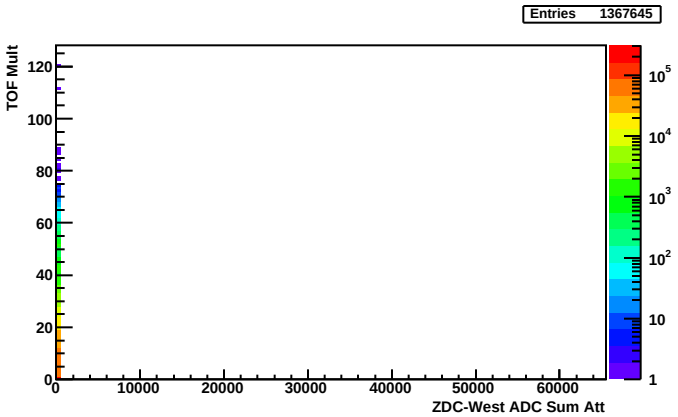

Entries 1367645
TOF Mult
BBC-S-East ADC Sum

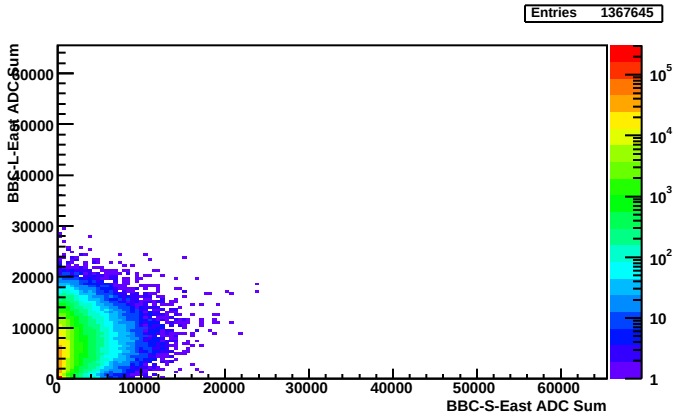

Entries 1367645
TOF Mult
BBC-S-West ADC Sum

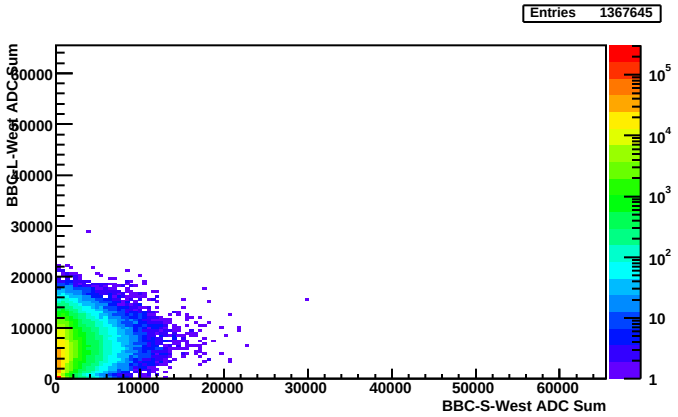

Entries 1367645
TOF Mult
VPD-East ADC Sum

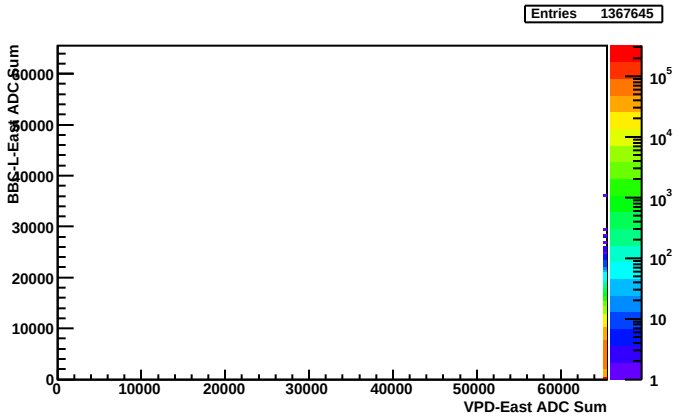

Entries 1367645
TOF Mult
VPD-West ADC Sum


Entries 1367645
TOF Mult
ZDC-East ADC Sum Att


Entries 1367645
TOF Mult
ZDC-West ADC Sum Att


Entries 1367645
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 1367645
BBC-L-West ADC Sum
BBC-S-West ADC Sum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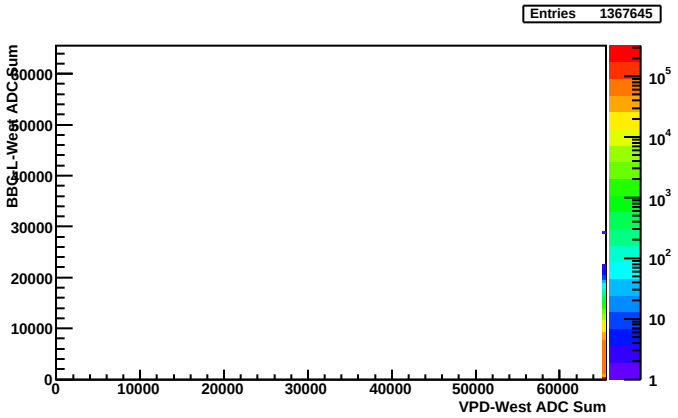
BBC-L-East ADC Sum
VPD-East ADC Sum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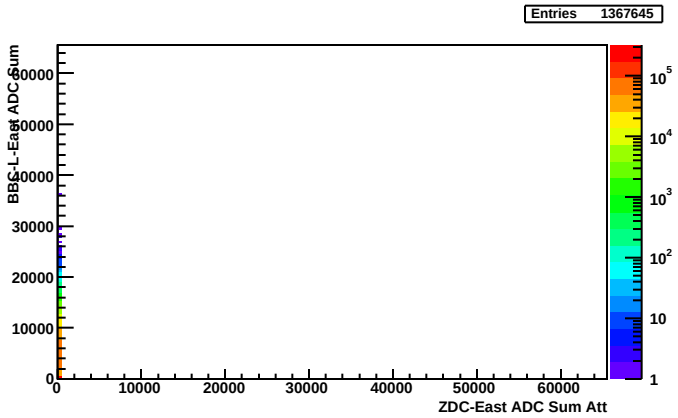
BBC-L-West ADC Sum
VPD-West ADC Sum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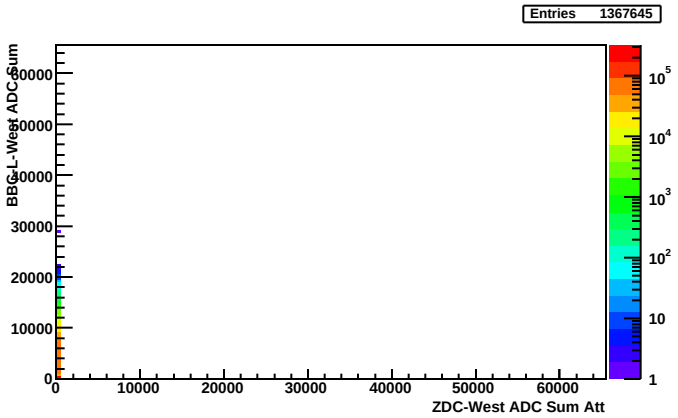
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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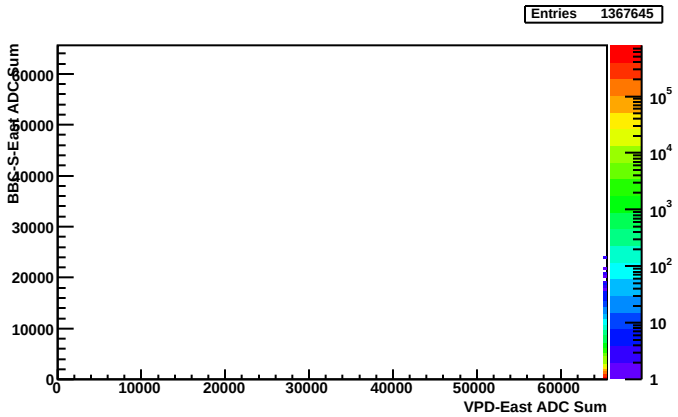
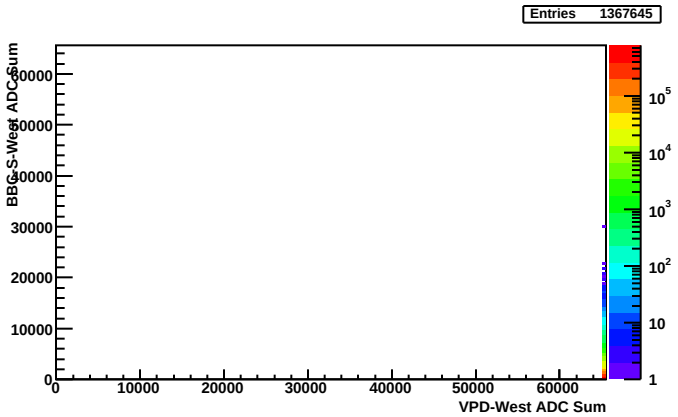
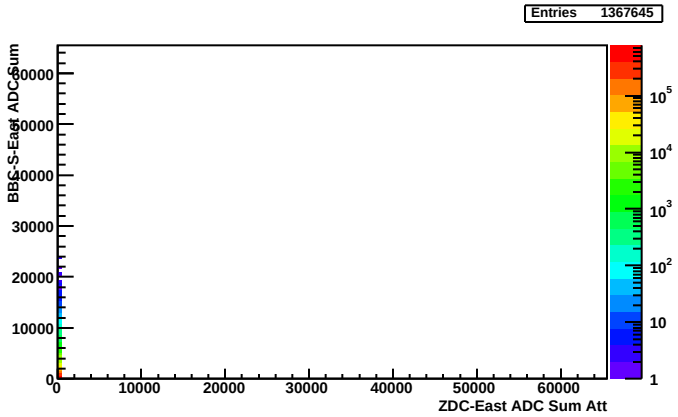
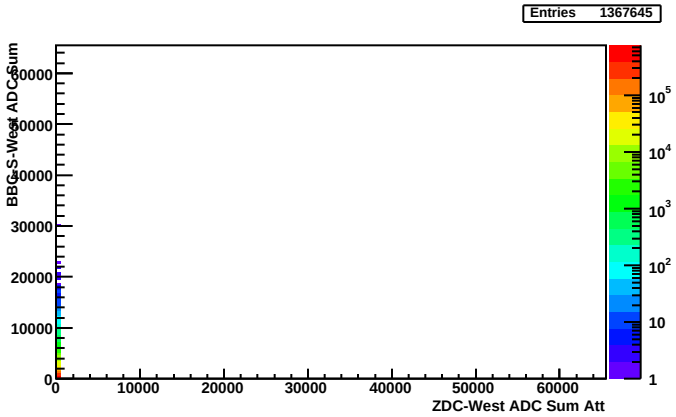
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 1367645
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 1367645
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 1367645
BBC-S-East ADC Sum
ZDC-East ADC Sum Att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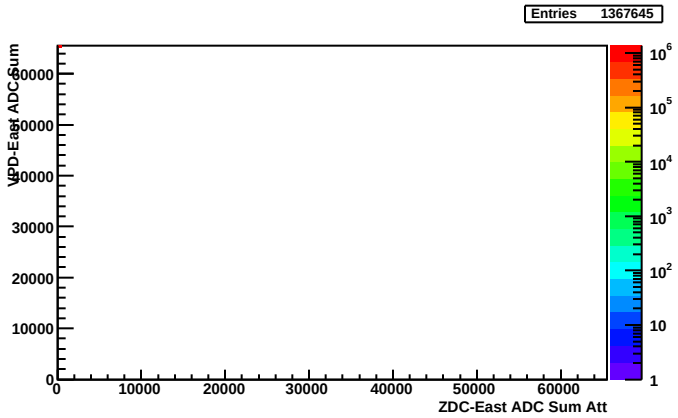
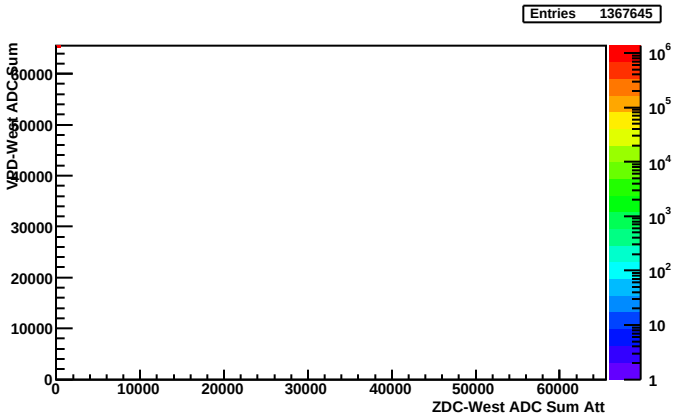
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 1367645
VPD-East ADC Sum
ZDC-East ADC Sum Att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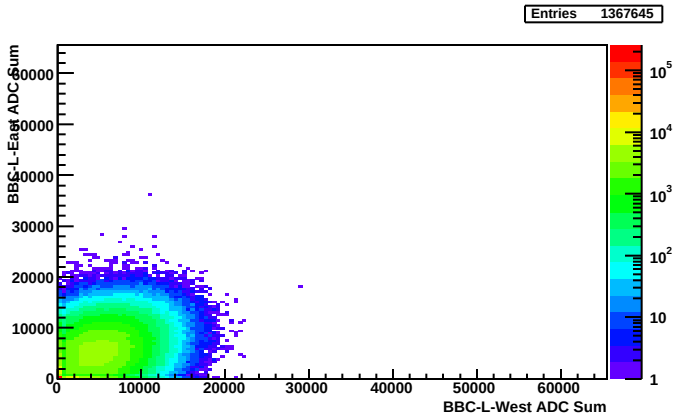
VPD-West ADC Sum
ZDC-West ADC Sum Att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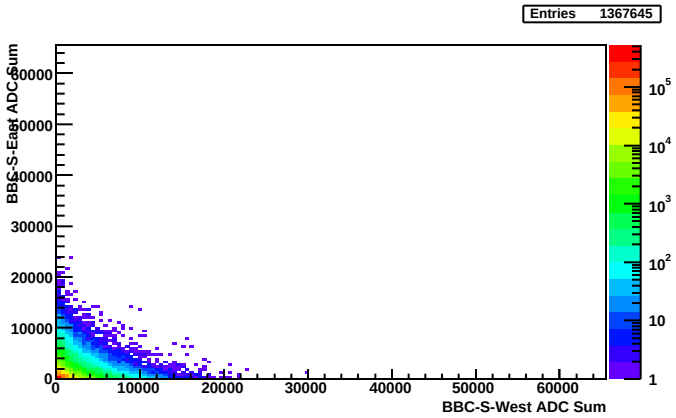
BBC-L-East ADC Sum
BBC-L-West ADC Sum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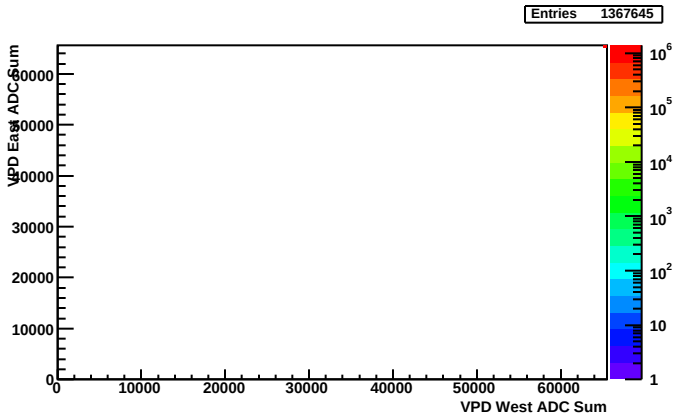
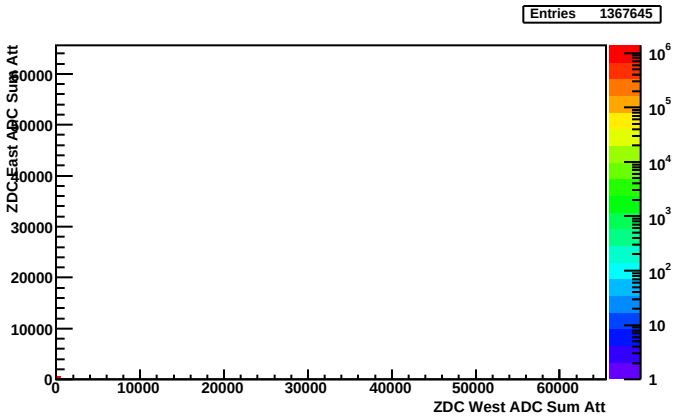
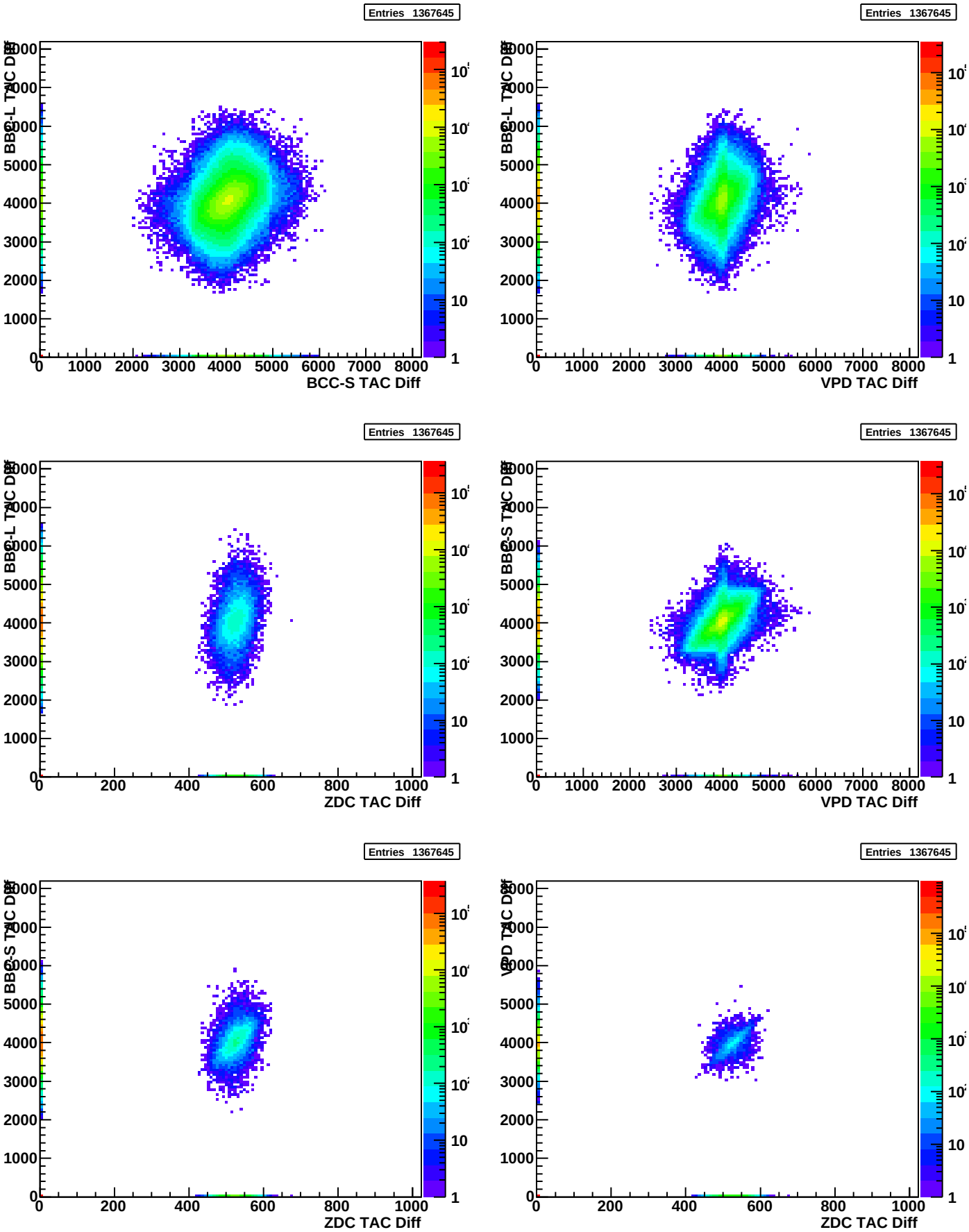
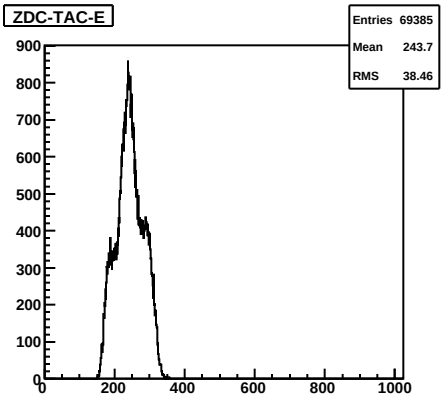
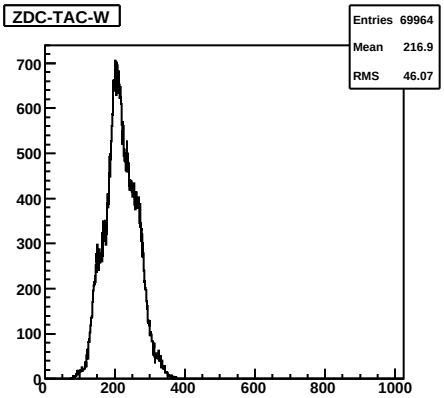
BBC-S-East ADC Sum
BBC-S-West ADC Sum

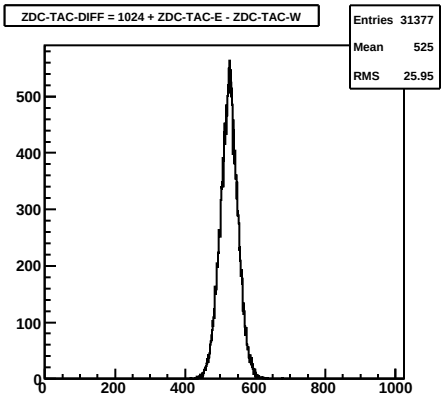

Entries 1367645
VPD East ADC Sum
VPD West ADC Sum

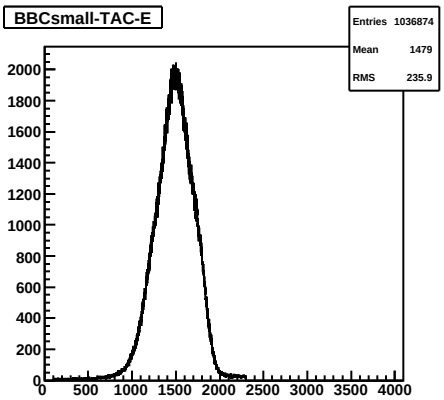

Entries 1367645
ZDC-East ADC Sum Att
ZDC West ADC Sum Att

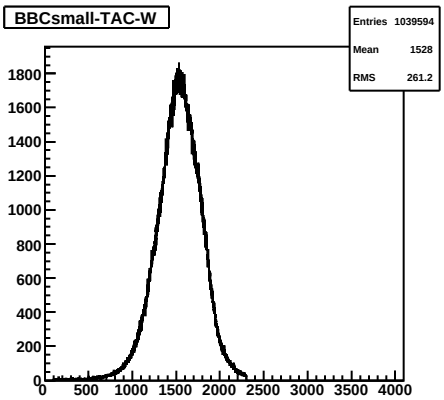

Entries 1367645
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1367645
BBC-L TAC Diff
VPD TAC Diff
Entries 1367645
BBC-L TAC Diff
ZDC TAC Diff
Entries 1367645
BBC-S TAC Diff
VPD TAC Diff
Entries 1367645
BBC-S TAC Diff
ZDC TAC Diff
Entries 1367645
VPD TAC Diff
ZDC TAC Diff

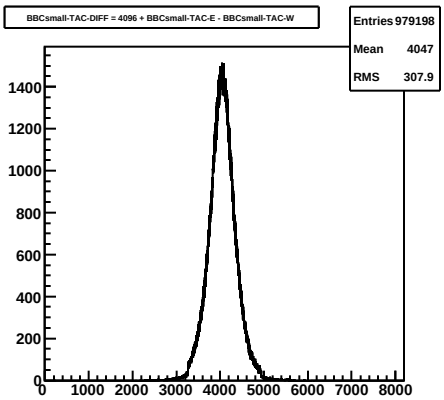

ZDC-TAC-E
Entries 69385
Mean 243.7
RMS 38.46

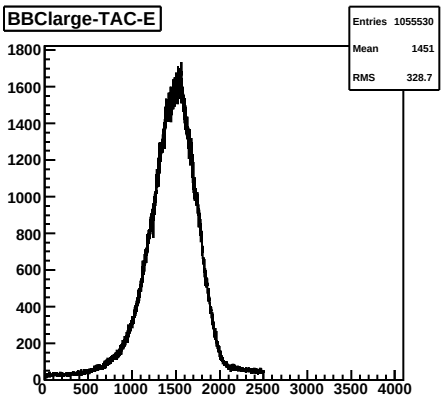

ZDC-TAC-W
Entries 69964
Mean 216.9
RMS 46.07

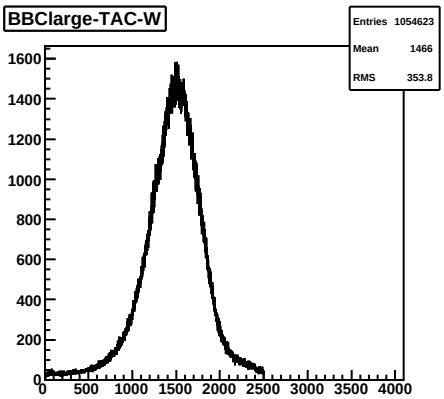

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 31377
Mean 525
RMS 25.95

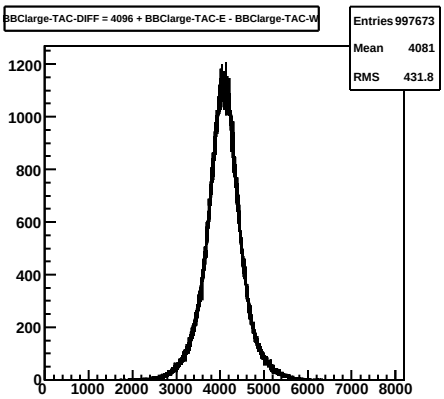

BBCsmall-TAC-E
Entries 1036874
Mean 1479
RMS 235.9

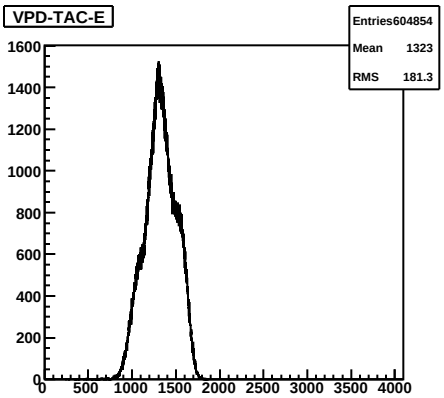

BBCsmall-TAC-W
Entries 1039594
Mean 1528
RMS 261.2

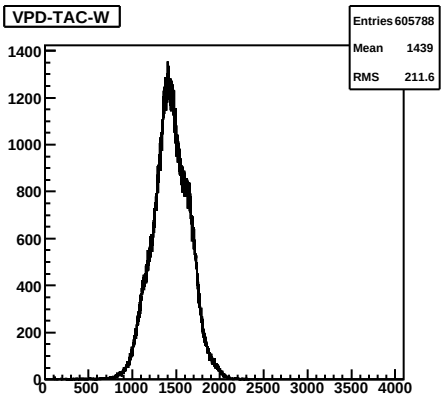

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 979198
Mean 4047
RMS 307.9

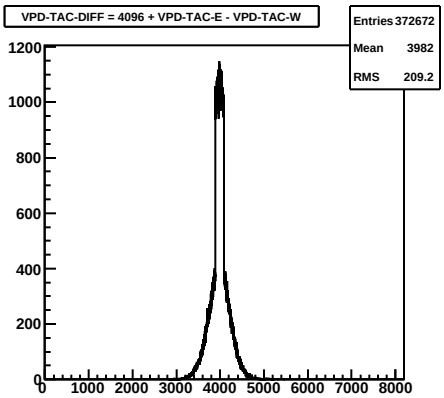

BBClarge-TAC-E
Entries 1055530
Mean 1451
RMS 328.7

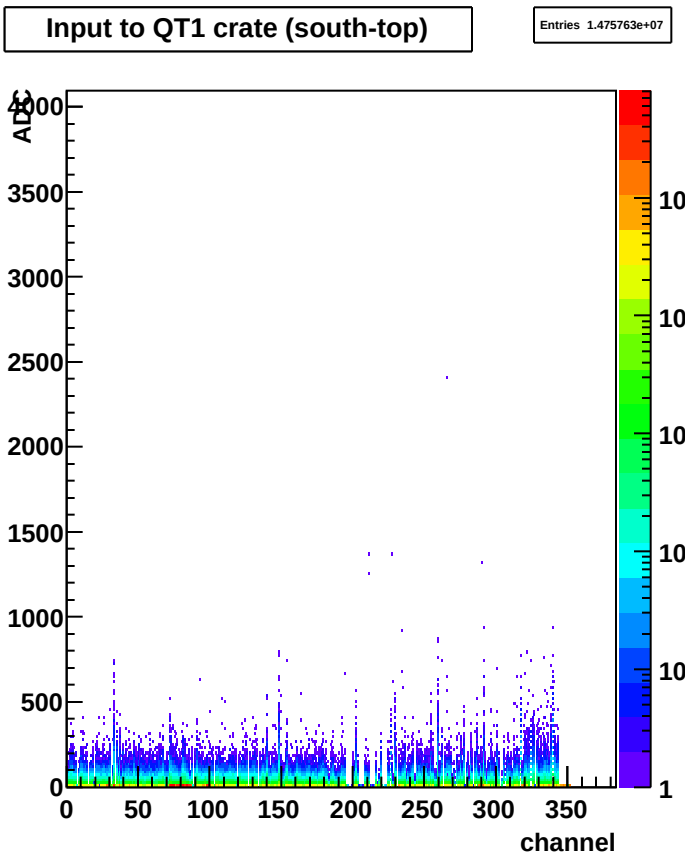

BBClarge-TAC-W
Entries 1054623
Mean 1466
RMS 353.8

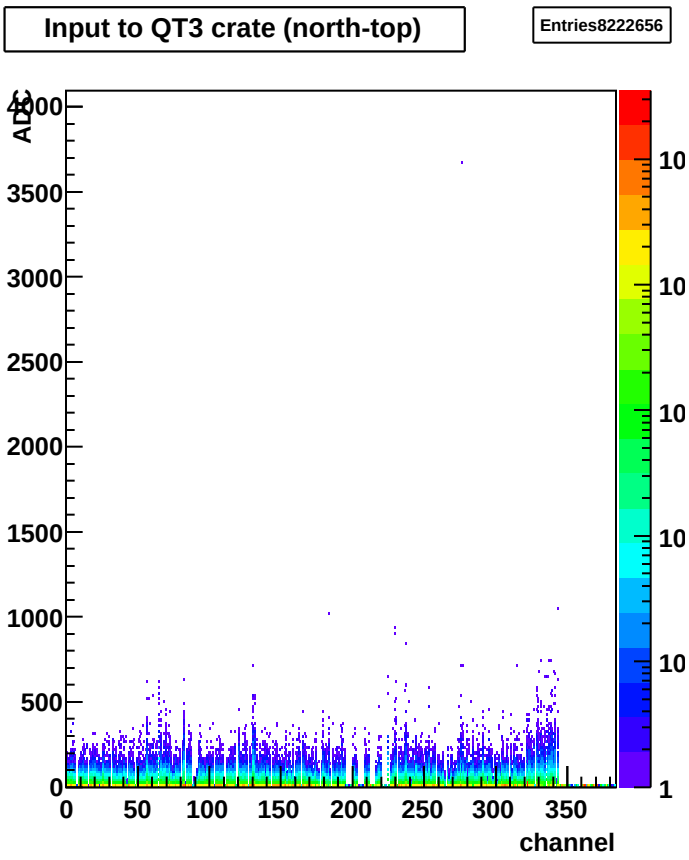

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 997673
Mean 4081
RMS 431.8

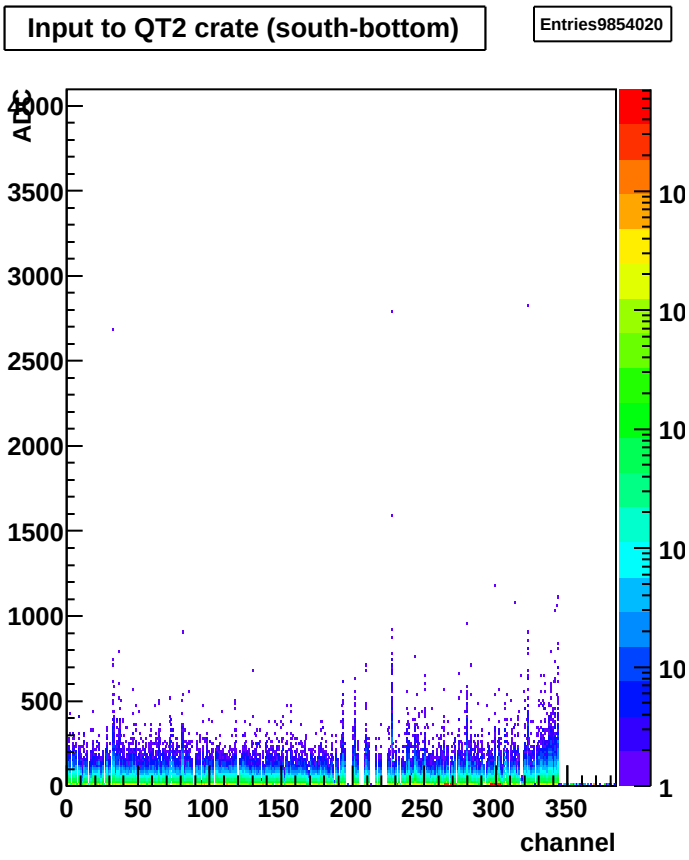

VPD-TAC-E
Entries 604854
Mean 1323
RMS 181.3

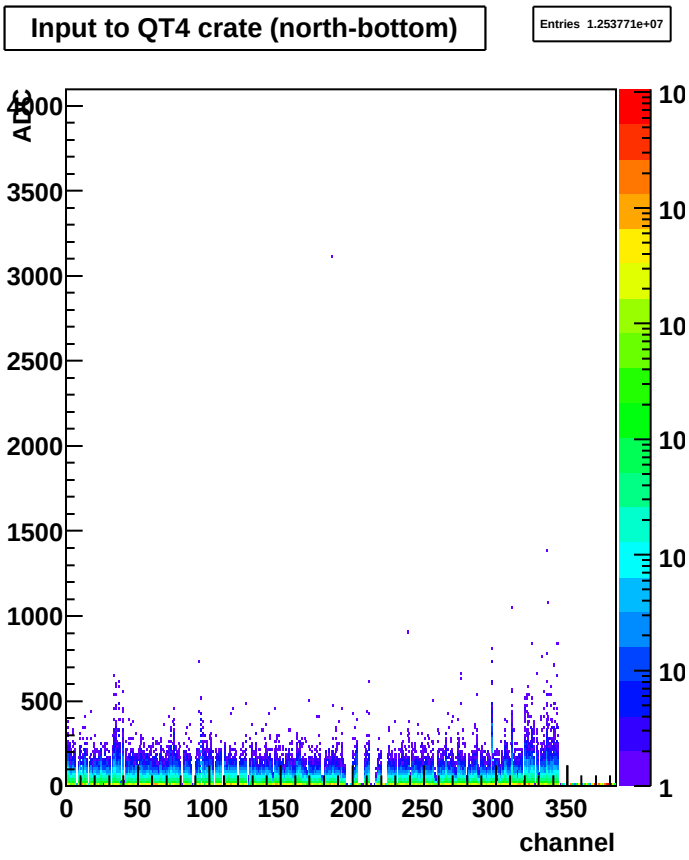

VPD-TAC-W
Entries 605788
Mean 1439
RMS 211.6

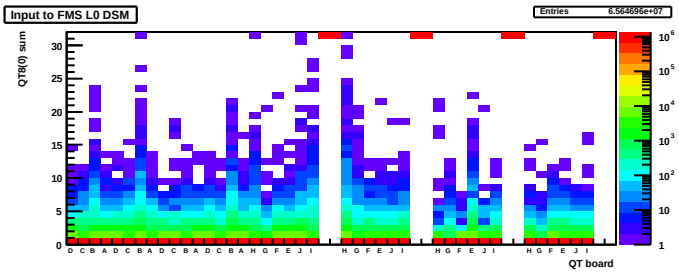

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 372672
Mean 3982
RMS 209.2

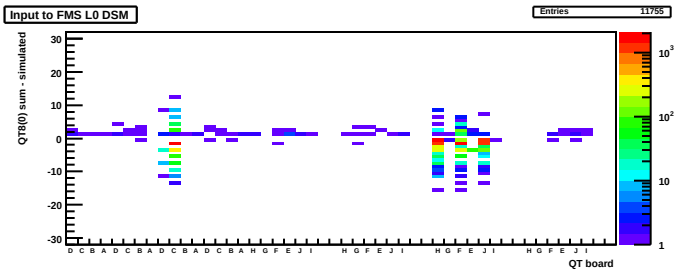

Input to QT1 crate (south-top)
Entries 1.475763e+07
ADC
channel

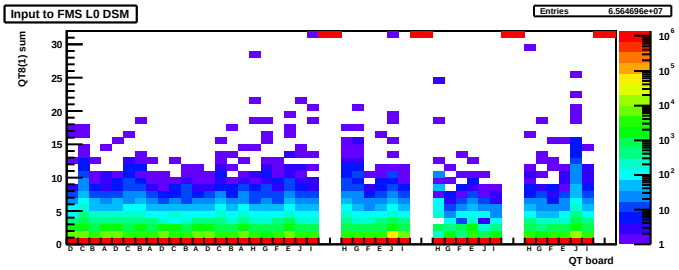

Input to QT3 crate (north-top)
Entries8222656
ADC
channel

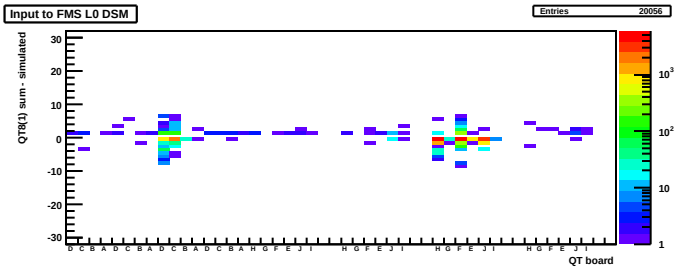

Input to QT2 crate (south-bottom)
Entries9854020
ADC
channel

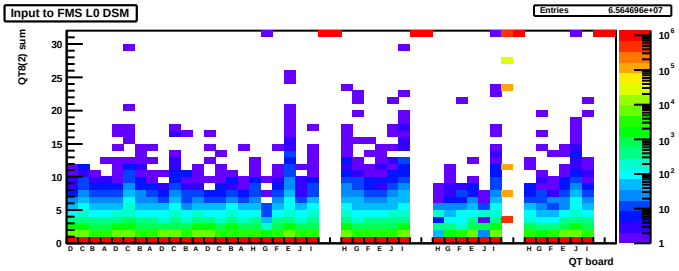

Input to QT4 crate (north-bottom)
Entries 1.253771e+07
ADC
channel

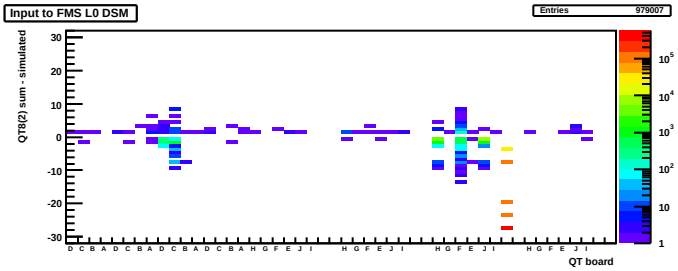

Input to FMS L0 DSM
Entries 6.564696e+07
QT8(0) sum
QT board

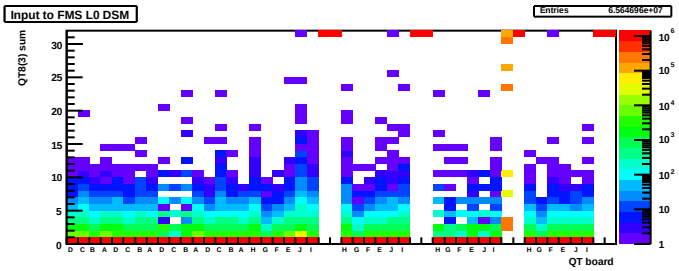

Input to FMS L0 DSM
Entries 11755
QT8(0) sum - simulated
QT board

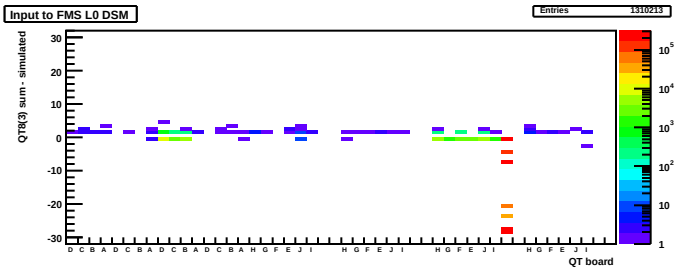

Input to FMS L0 DSM
Entries 6.564696e+07
QT8(1) sum
QT board

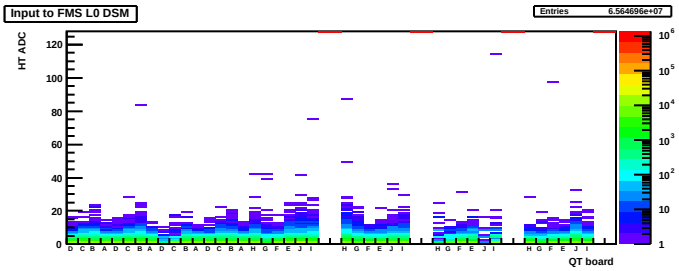

Input to FMS L0 DSM
Entries 20056
QT8(1) sum - simulated
QT board

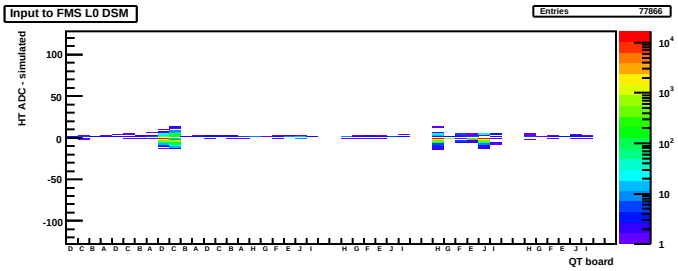

Input to FMS L0 DSM
Entries 6.564696e+07
QT8(2) sum
QT board

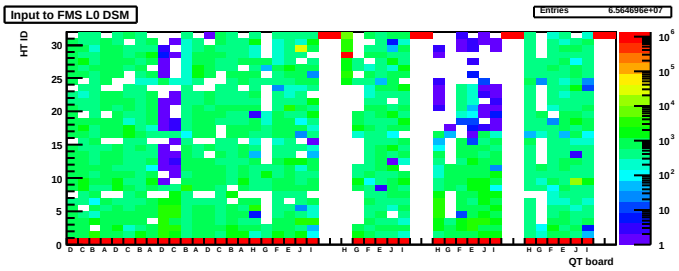

Input to FMS L0 DSM
Entries 979007
QT8(2) sum - simulated
QT board

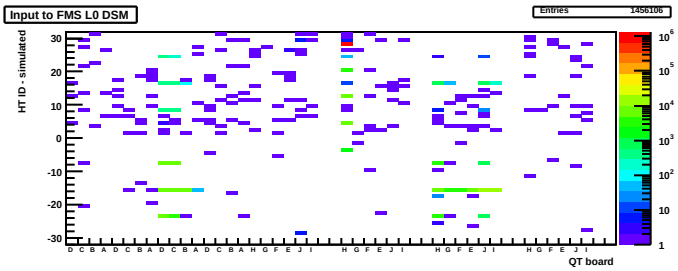

Input to FMS L0 DSM
Entries 6.564696e+07
QT8(3) sum
QT board

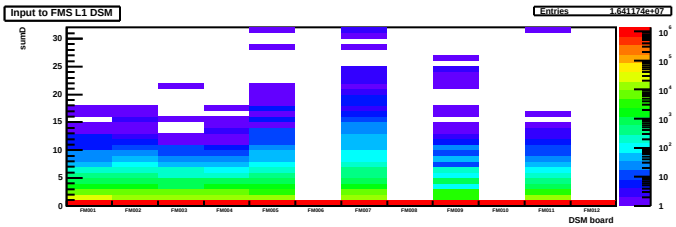

Input to FMS L0 DSM
Entries 1310213
QT8(3) sum - simulated
QT board

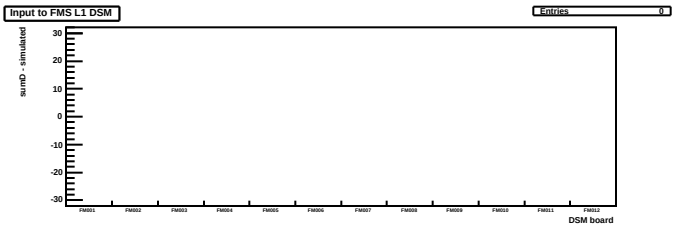

Input to FMS L0 DSM
Entries 6.564696e+07
HT ADC
QT board

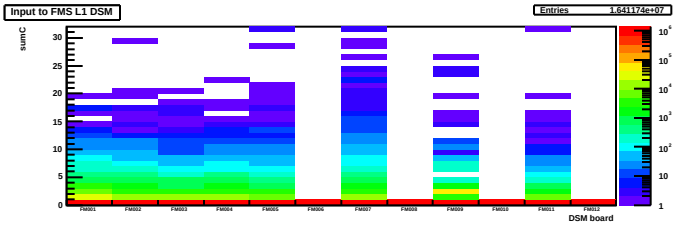

Input to FMS L0 DSM
Entries 77866
HT ADC - simulated
QT board

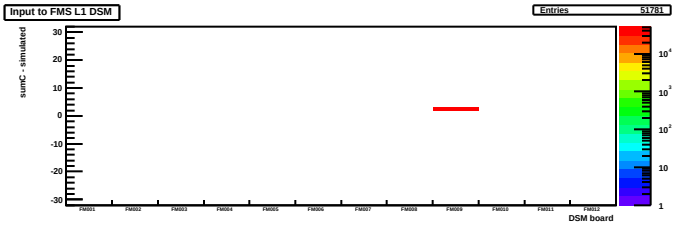

Input to FMS L0 DSM
Entries 6.564696e+07
HT ID
QT board

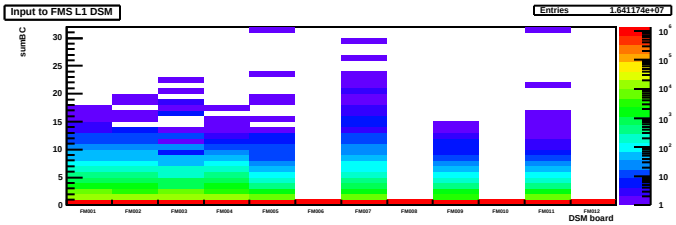

Input to FMS L0 DSM
Entries 1456106
HT ID - simulated
QT board

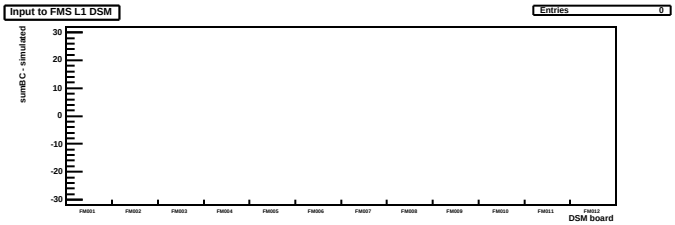

Input to FMS L1 DSM
Entries 1.641174e+07
sumD
DSM board

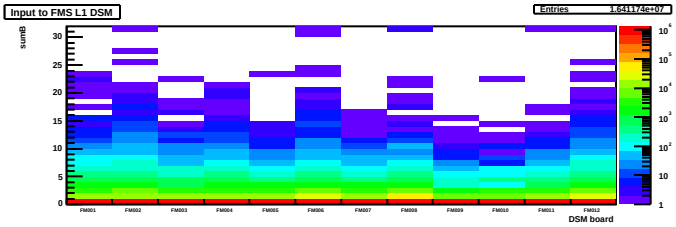

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

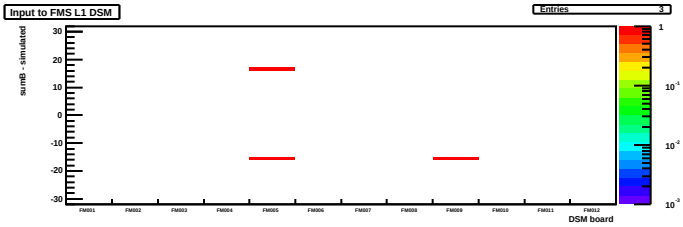

Input to FMS L1 DSM
Entries 1.641174e+07
sumC
DSM board

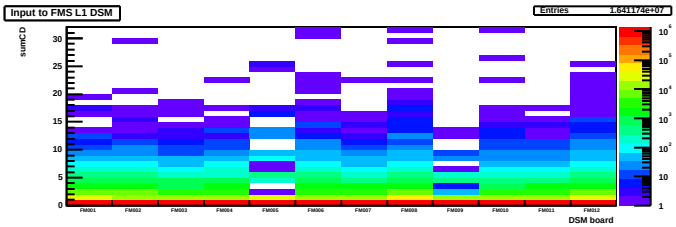

Input to FMS L1 DSM
Entries 51781
sumC - simulated
DSM board

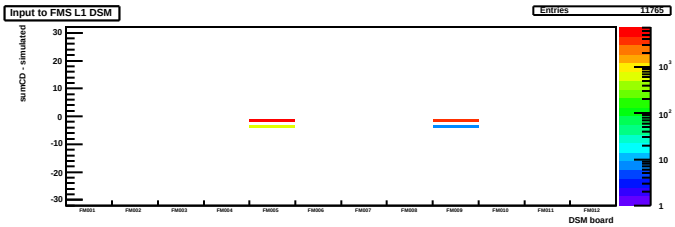

Input to FMS L1 DSM
Entries 1.641174e+07
sumBC
DSM board

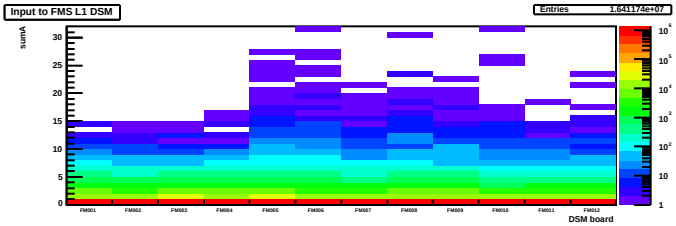

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

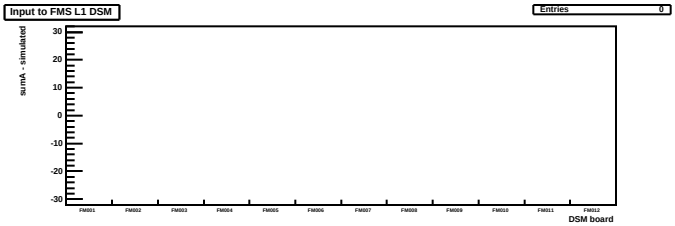

Input to FMS L1 DSM
Entries 1.641174e+07
sumB
DSM board

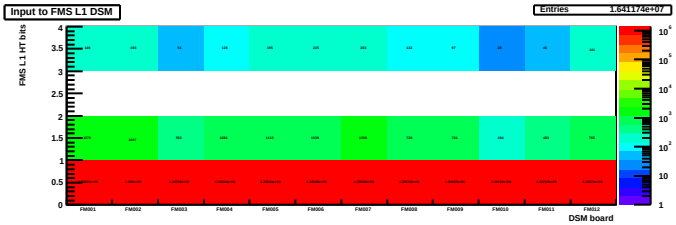

Input to FMS L1 DSM
Entries 3
sumB - simulated
DSM board

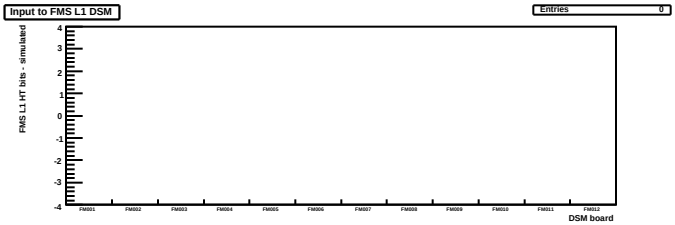

Input to FMS L1 DSM
Entries 1.641174e+07
sumCD
DSM board

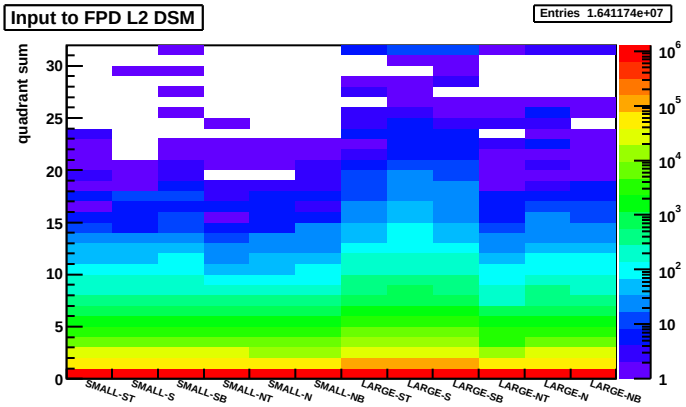

Input to FMS L1 DSM
Entries 11765
sumCD - simulated
DSM board

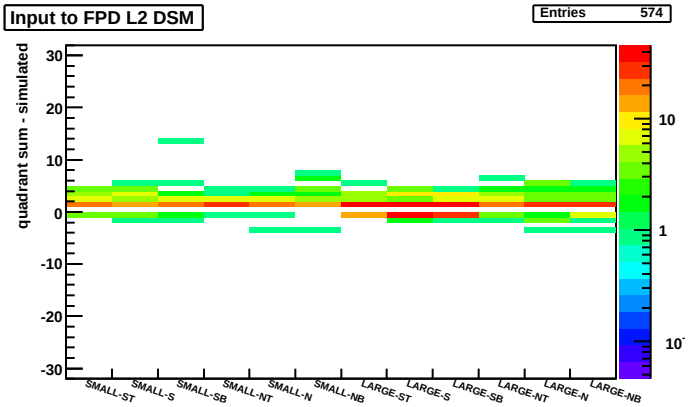

Input to FMS L1 DSM
Entries 1.641174e+07
sumA
DSM board

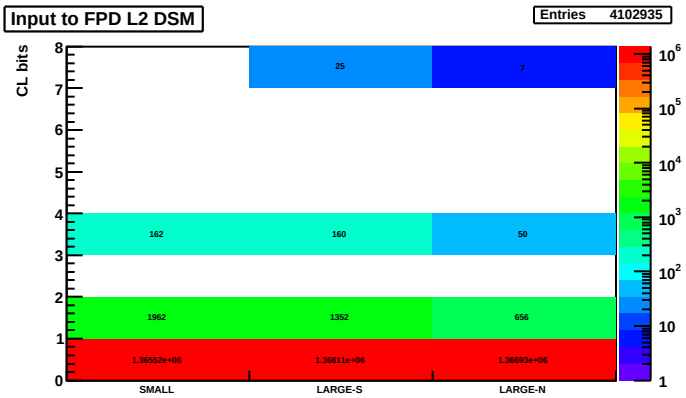

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

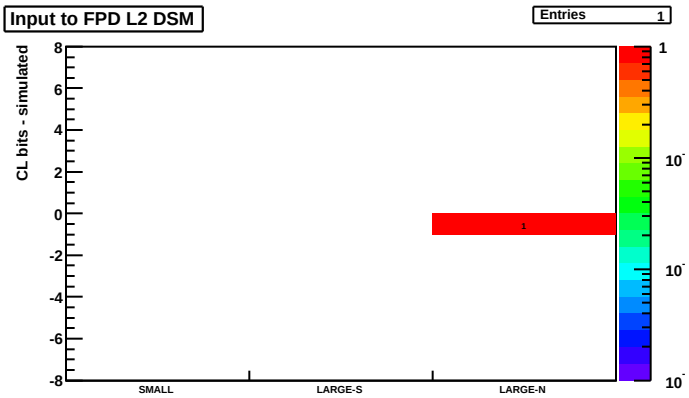

Input to FMS L1 DSM
Entries 1.641174e+07
FMS L1 HT bits
DSM board

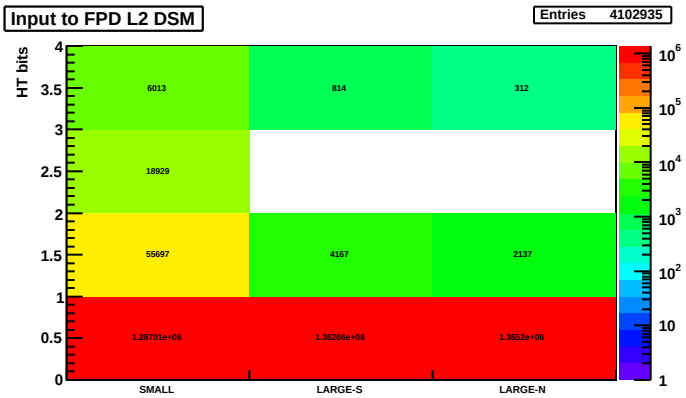

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

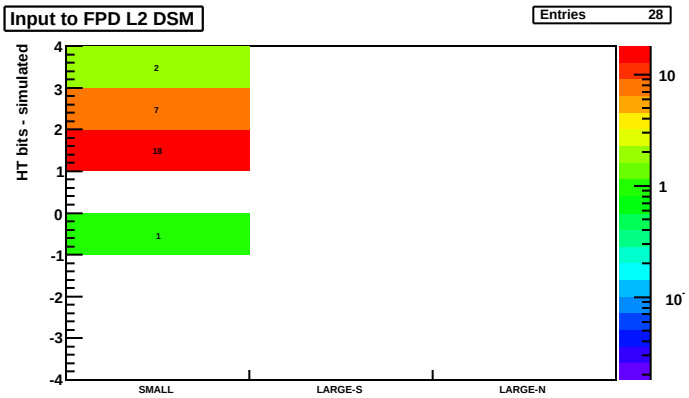

Input to FPD L2 DSM
Entries 1.641174e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

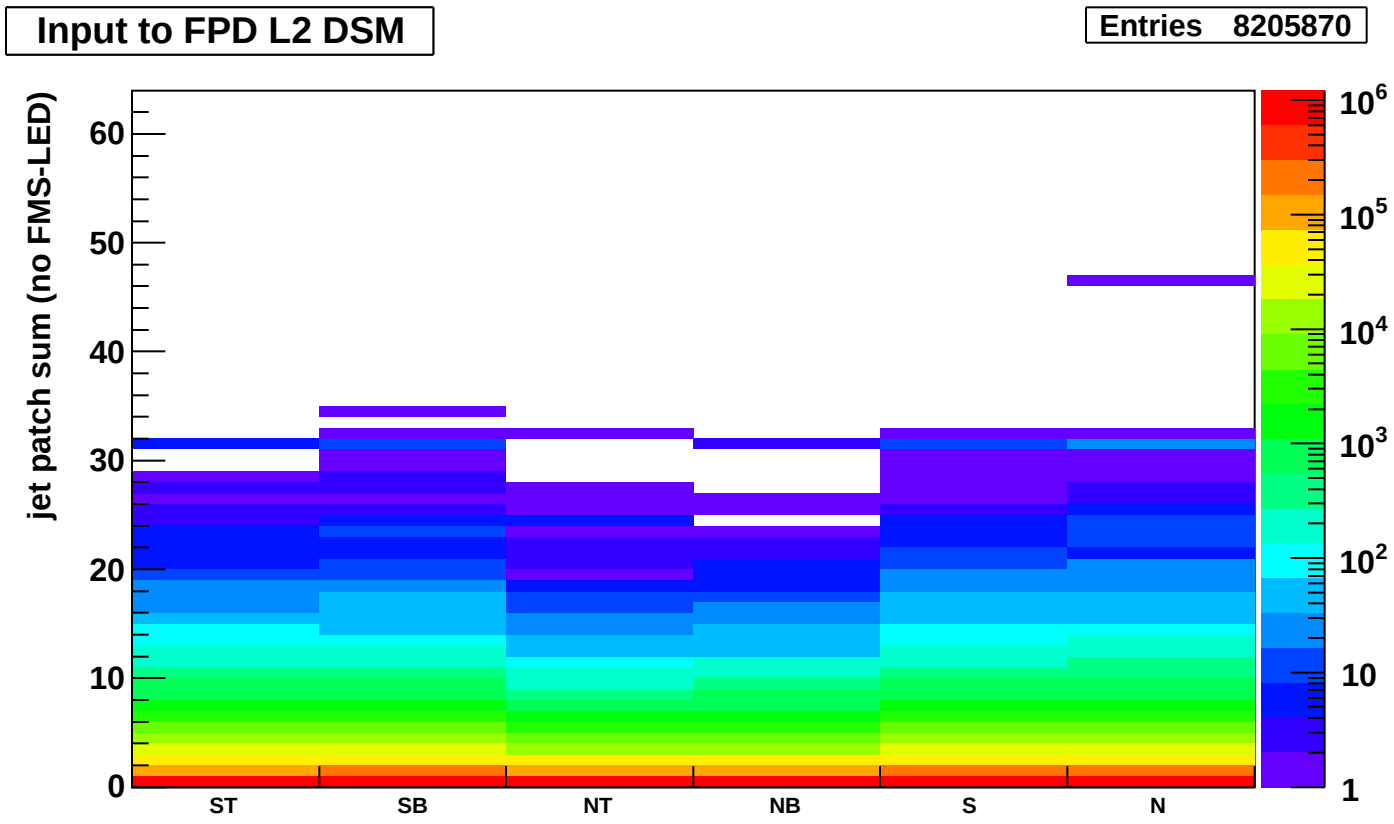

Input to FPD L2 DSM
Entries 574
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

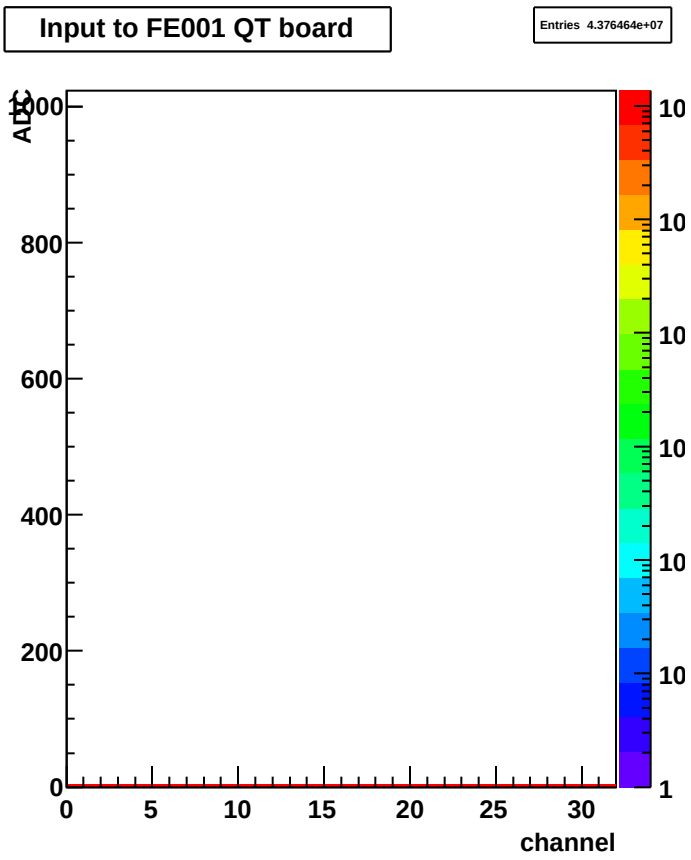

Input to FPD L2 DSM
Entries 4102935
CL bits
25
7
162
160
50
1962
1352
656
1.36552e+06
1.36611e+06
1.36693e+06
SMALL
LARGE-S
LARGE-N

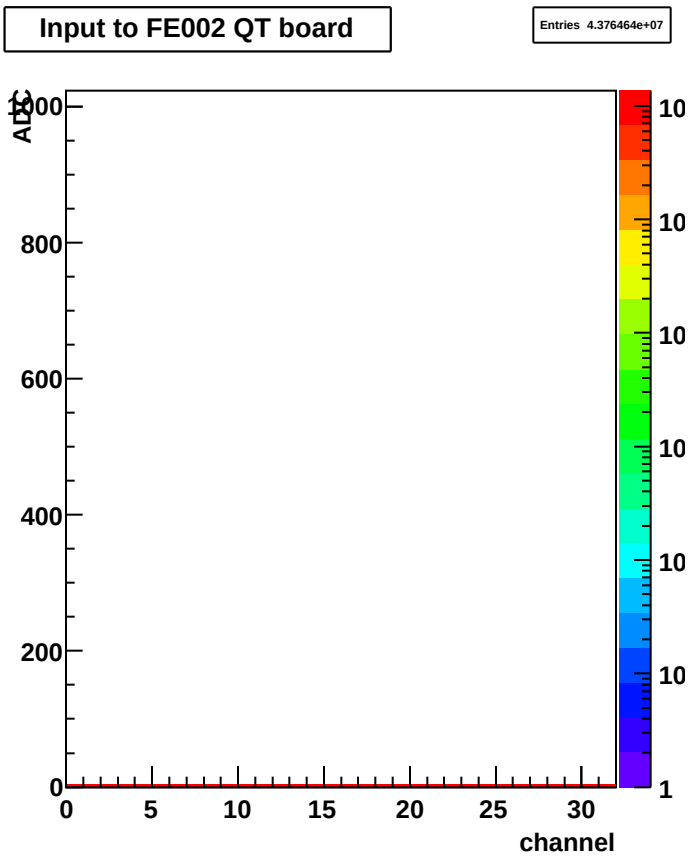

Input to FPD L2 DSM
Entries 1
CL bits - simulated
1
SMALL
LARGE-S
LARGE-N

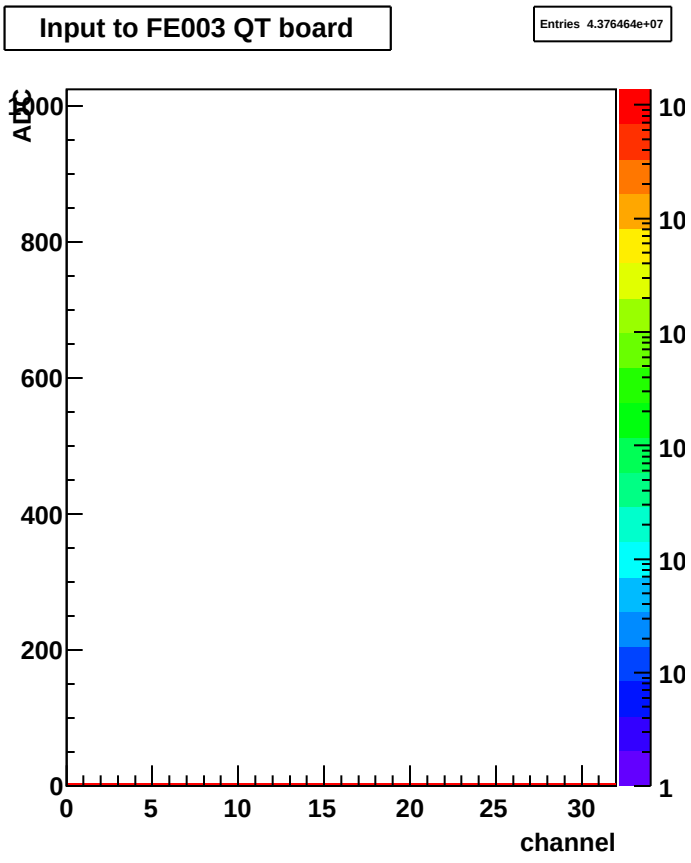

Input to FPD L2 DSM
Entries 4102935
HT bits
6013
814
312
18929
55697
4167
2137
1.28701e+06
1.36266e+06
1.3652e+06
SMALL
LARGE-S
LARGE-N

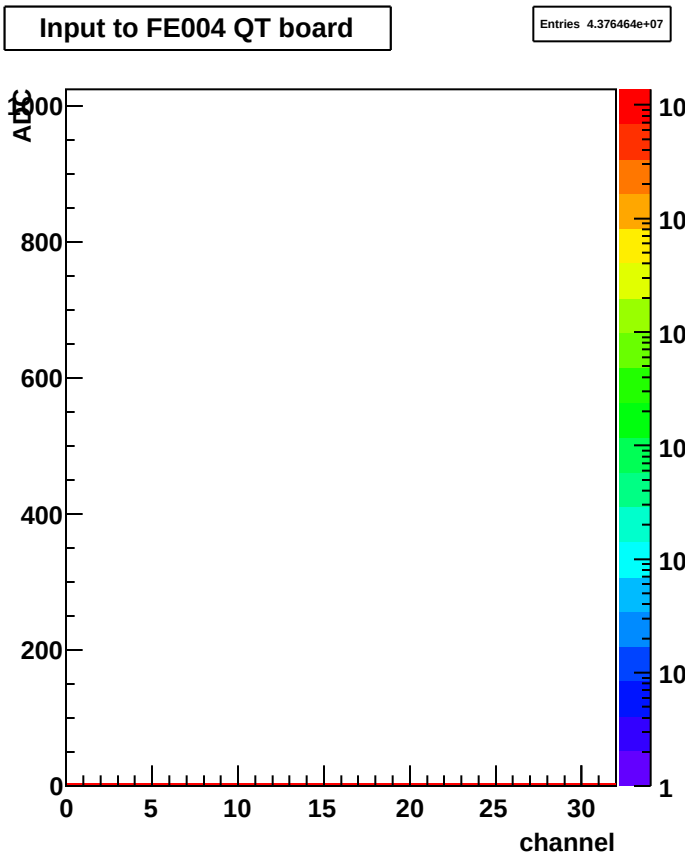

Input to FPD L2 DSM
Entries 28
HT bits - simulated
2
7
18
1
SMALL
LARGE-S
LARGE-N

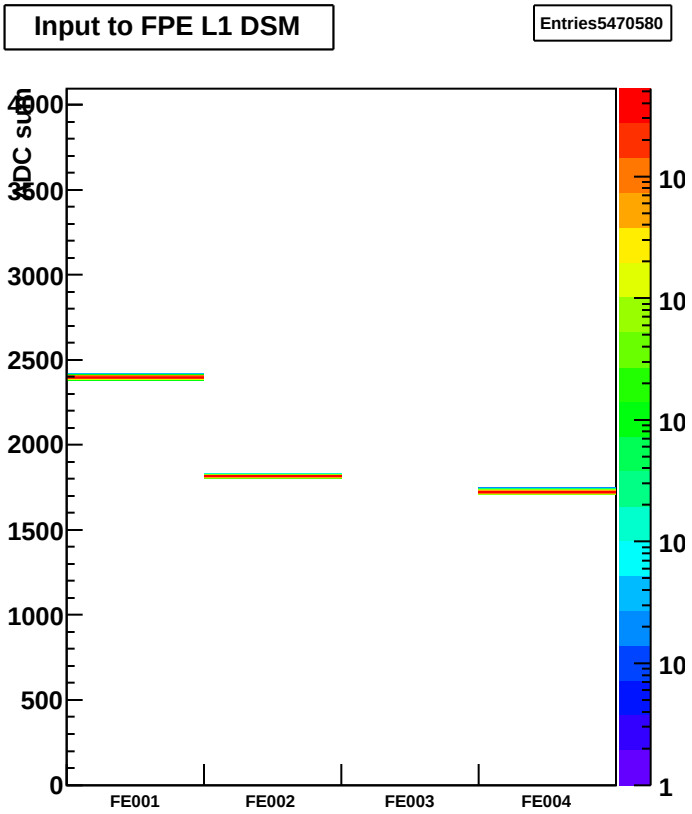

Input to FPD L2 DSM
Entries 8205870
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

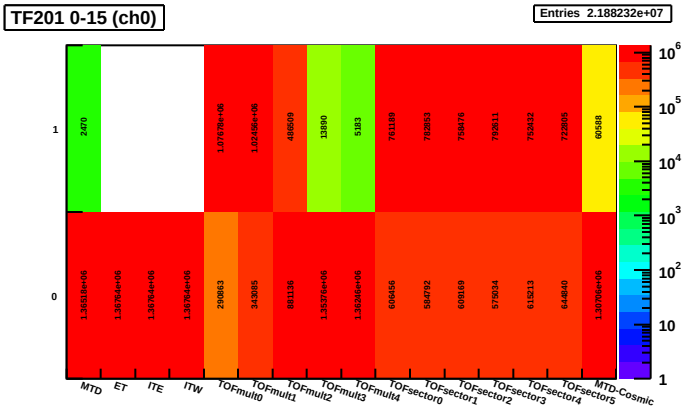

Input to FE001 QT board
Entries 4.376464e+07
ADC
channel

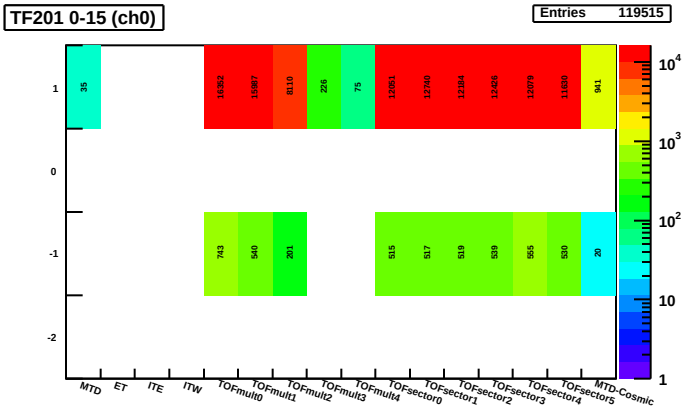

Input to FE002 QT board
Entries 4.376464e+07
ADC
channel

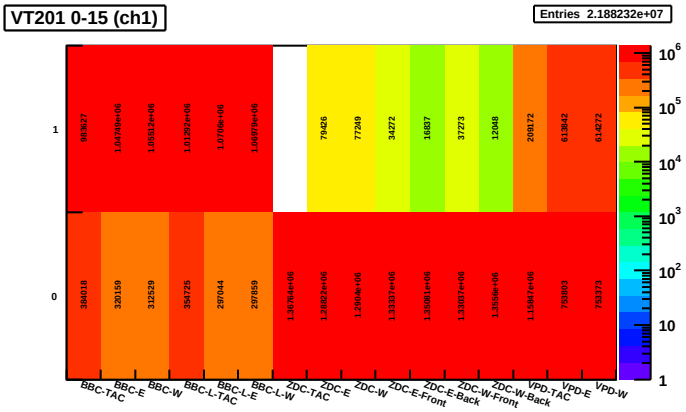

Input to FE003 QT board
Entries 4.376464e+07
ADC
channel

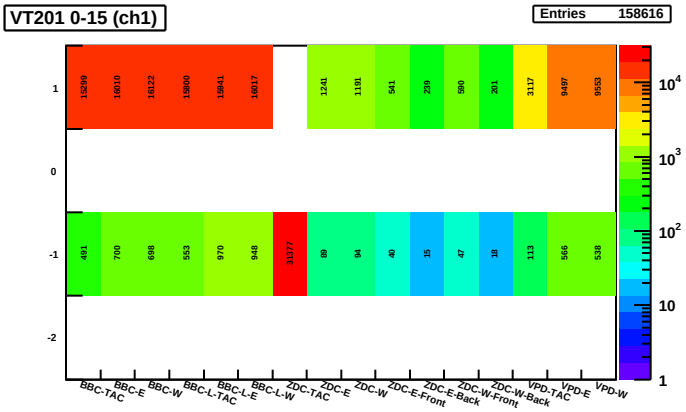

Input to FE004 QT board
Entries 4.376464e+07
ADC
channel

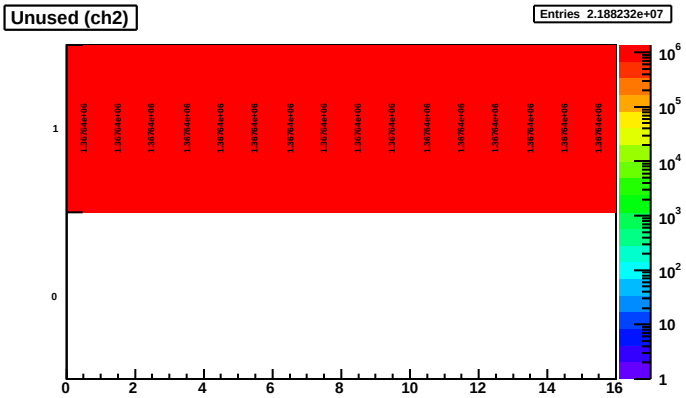

Input to FPE L1 DSM
Entries5470580
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

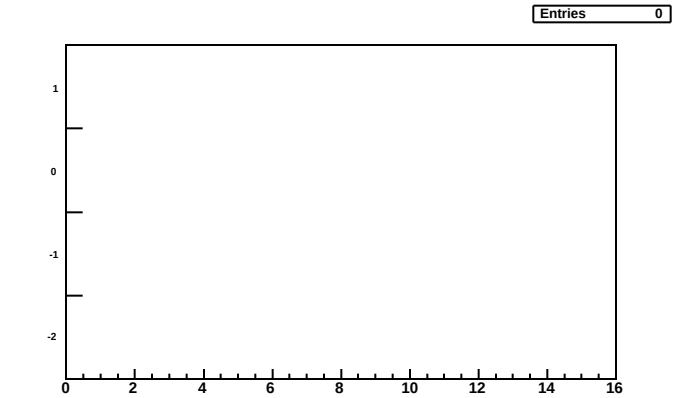

TF201 0-15 (ch0)
Entries 2.188232e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

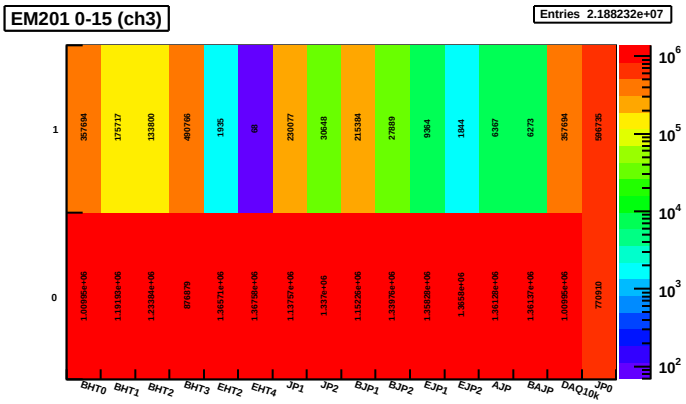

TF201 0-15 (ch0)
Entries 119515
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 2.188232e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 158616
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


Unused (ch2)
Entries 2.188232e+07


Entries 0


EM201 0-15 (ch3)
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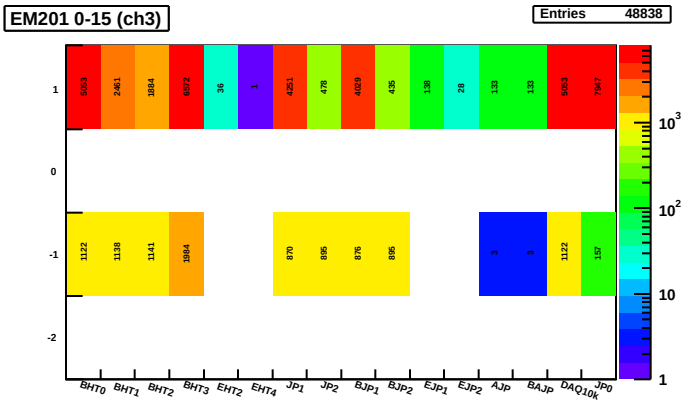
EM201 0-15 (ch3)
Entries 48838
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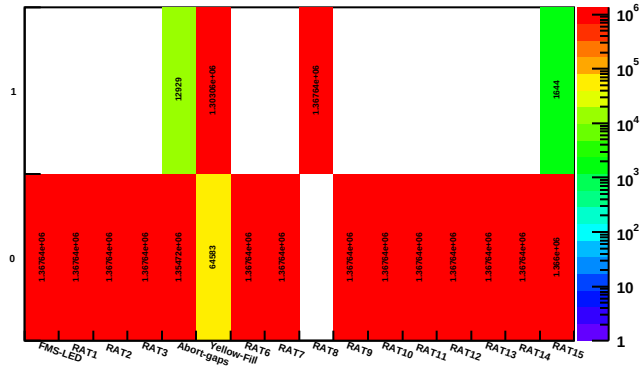
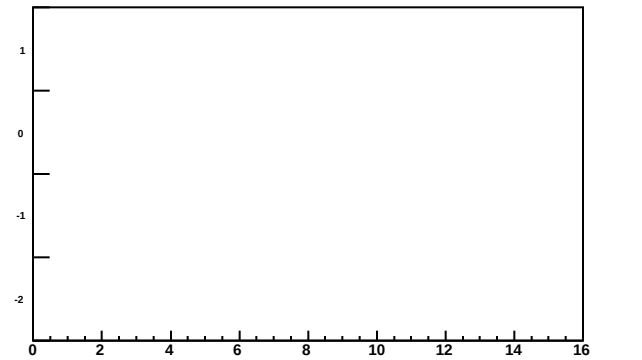
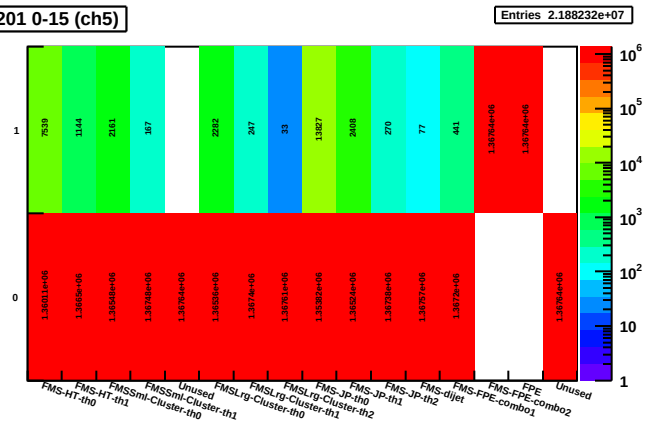
RAT board (ch4)

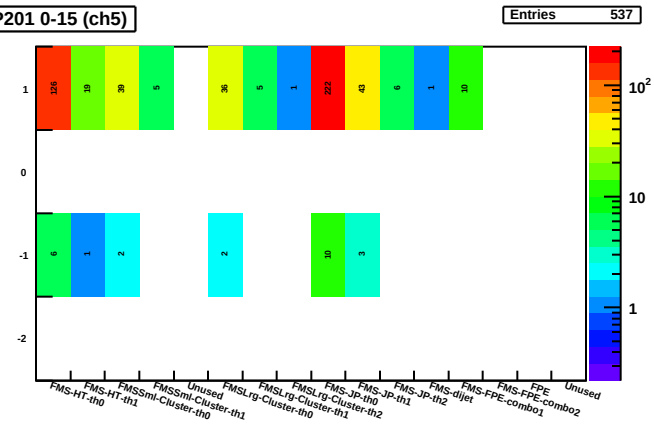




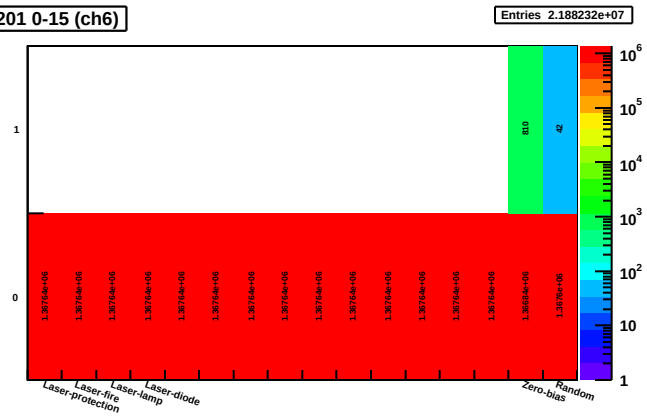
FP201 0-15 (ch5)

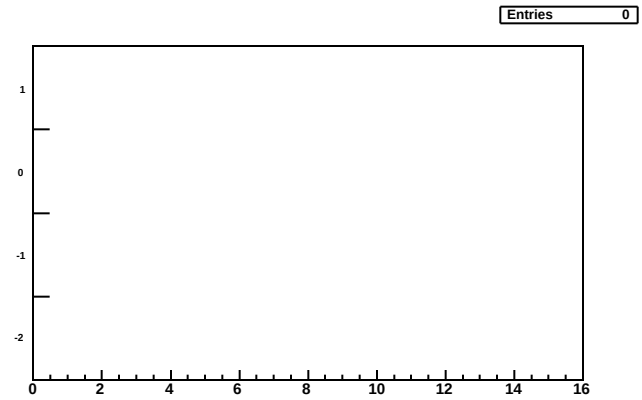
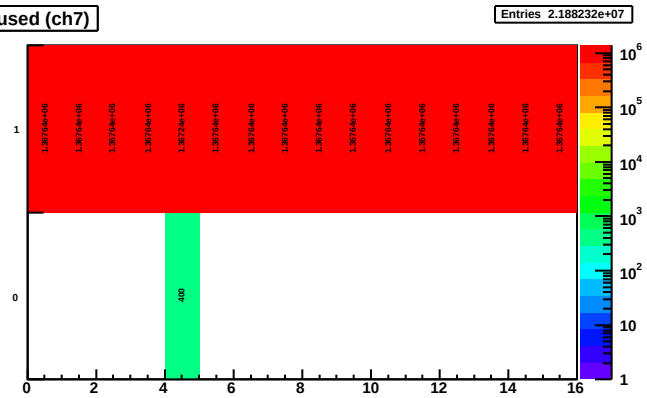
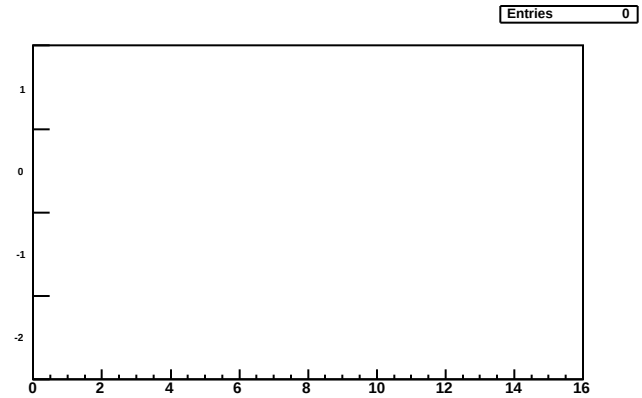


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)