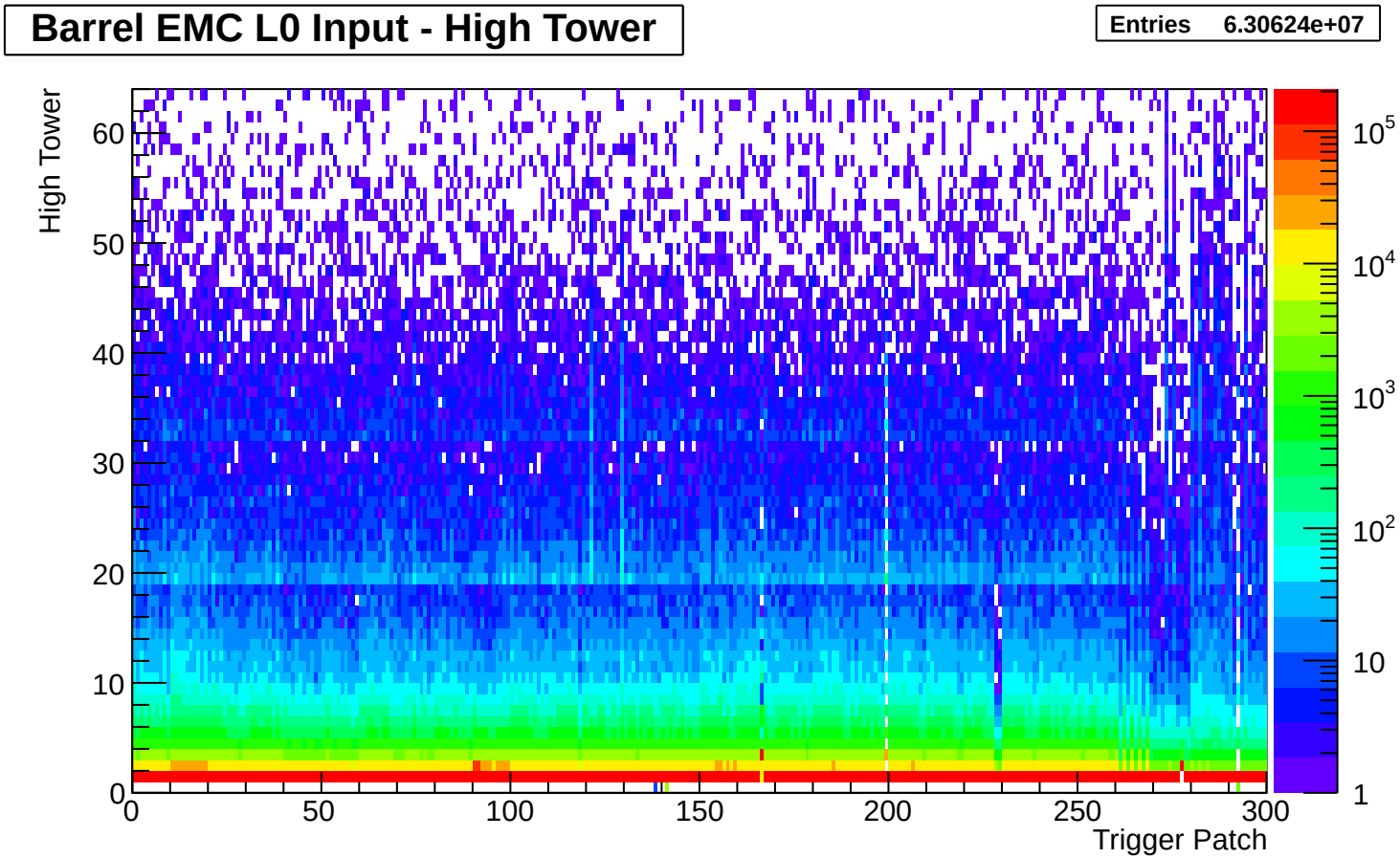
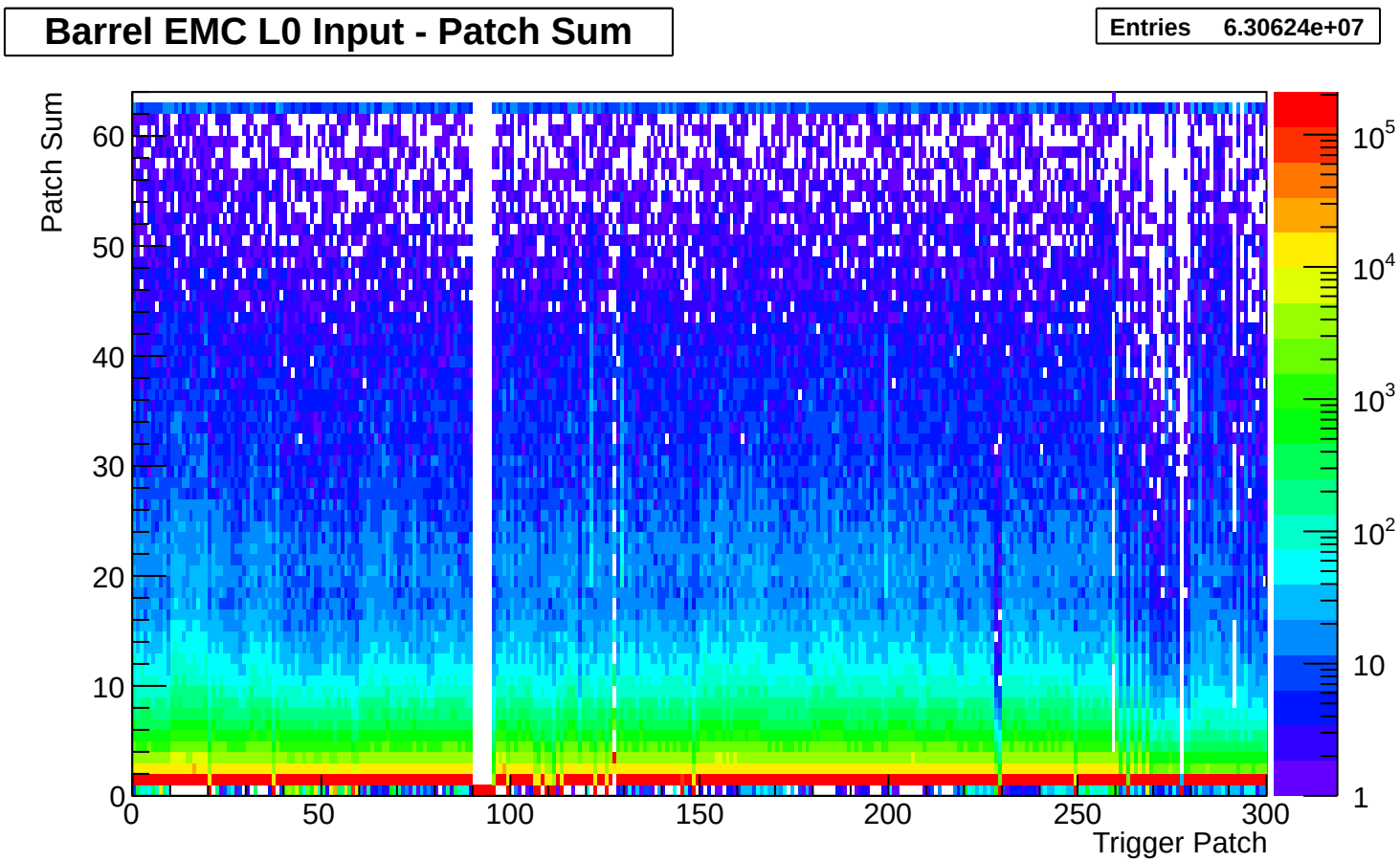
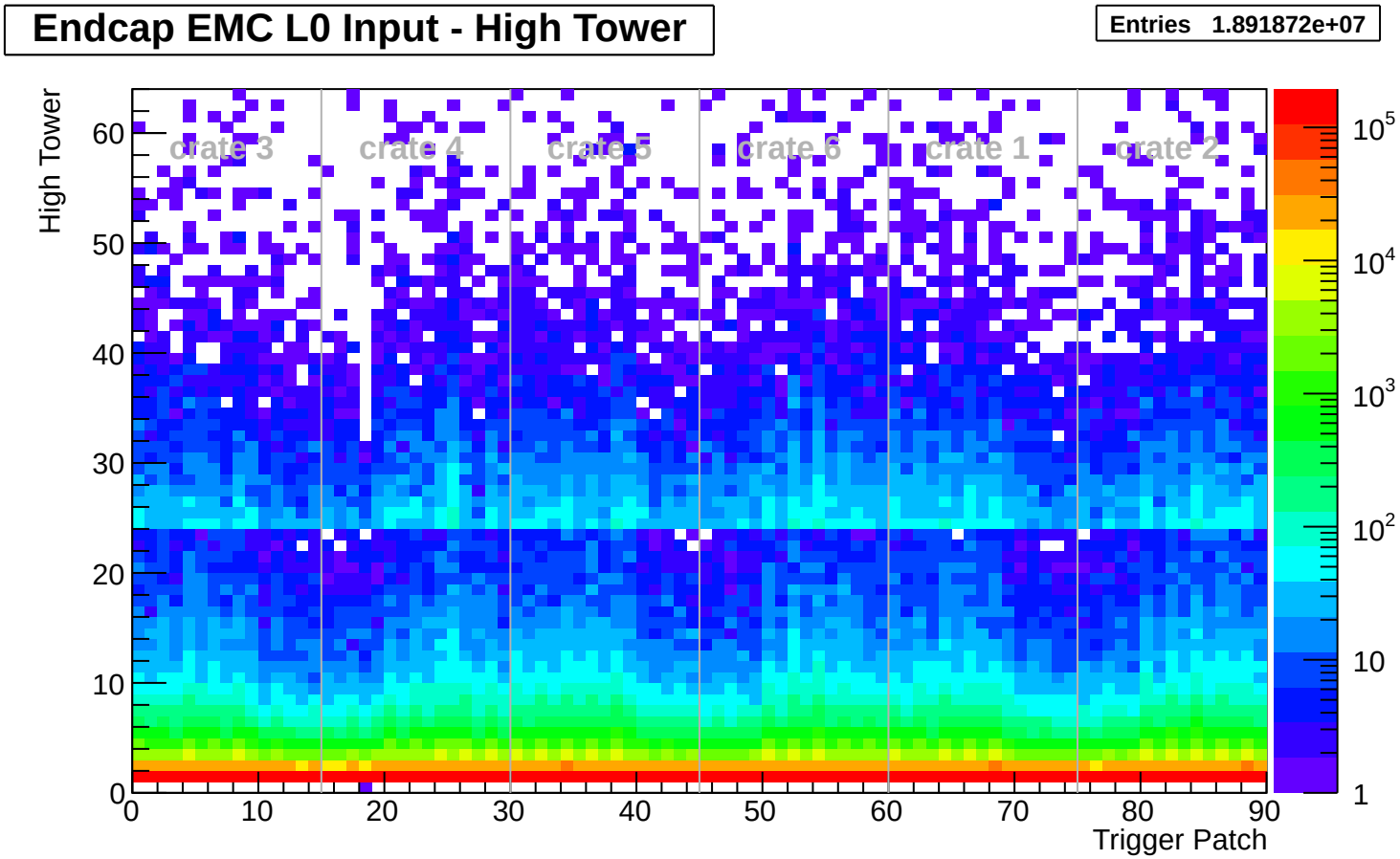
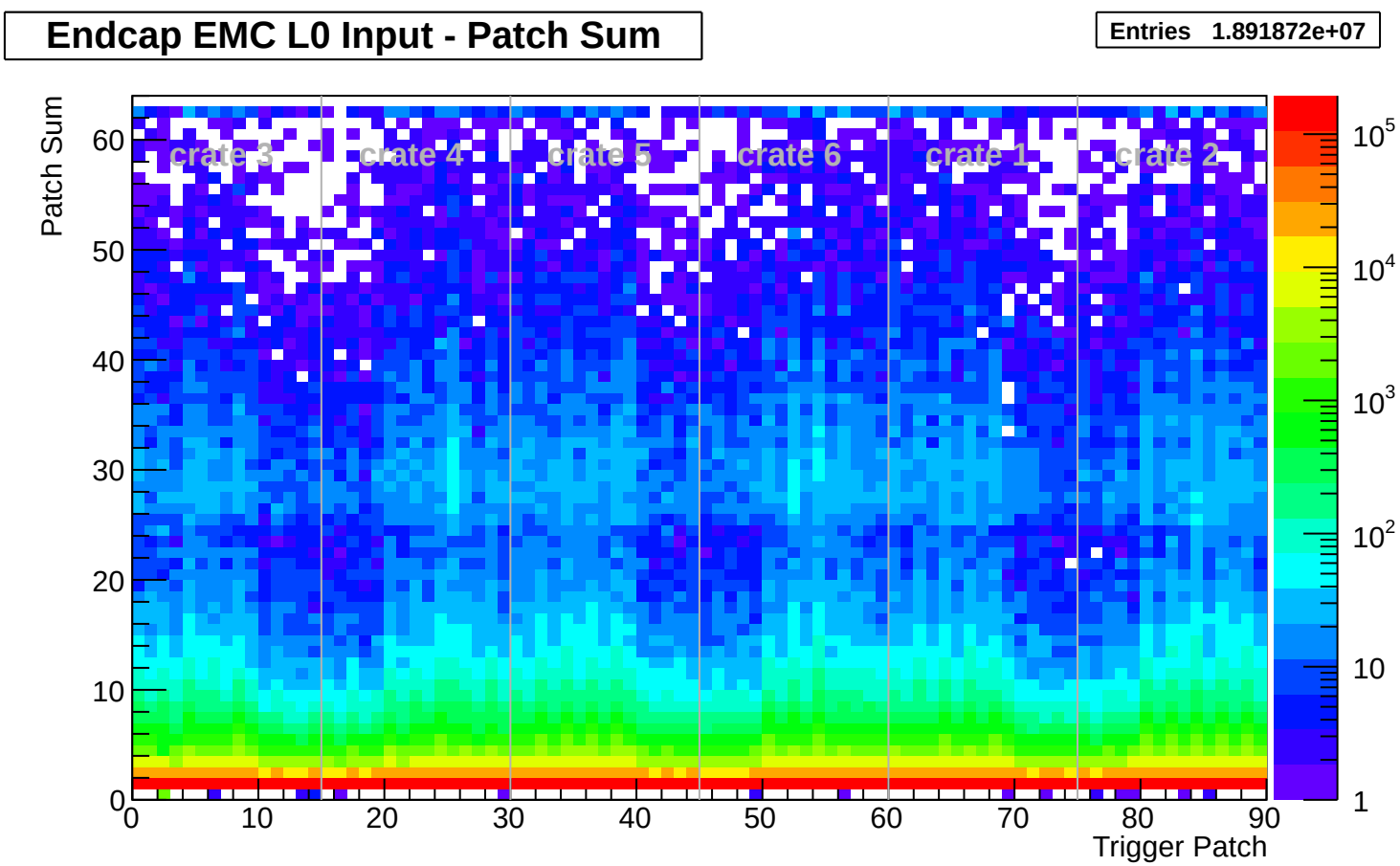
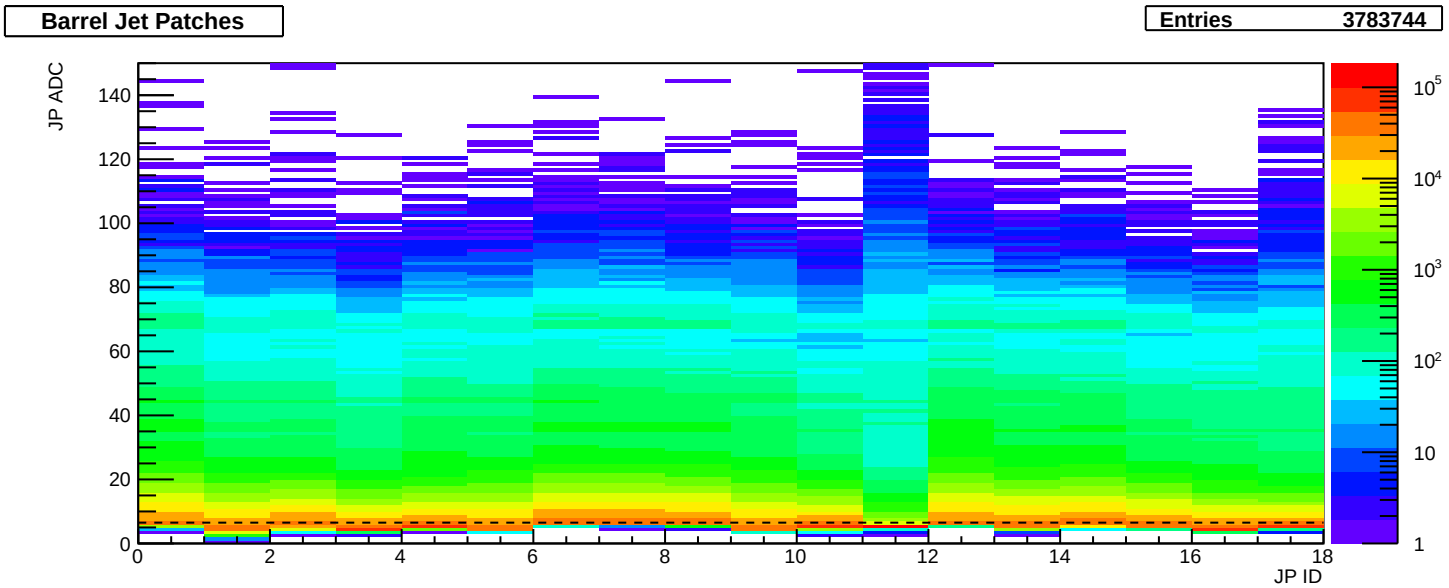
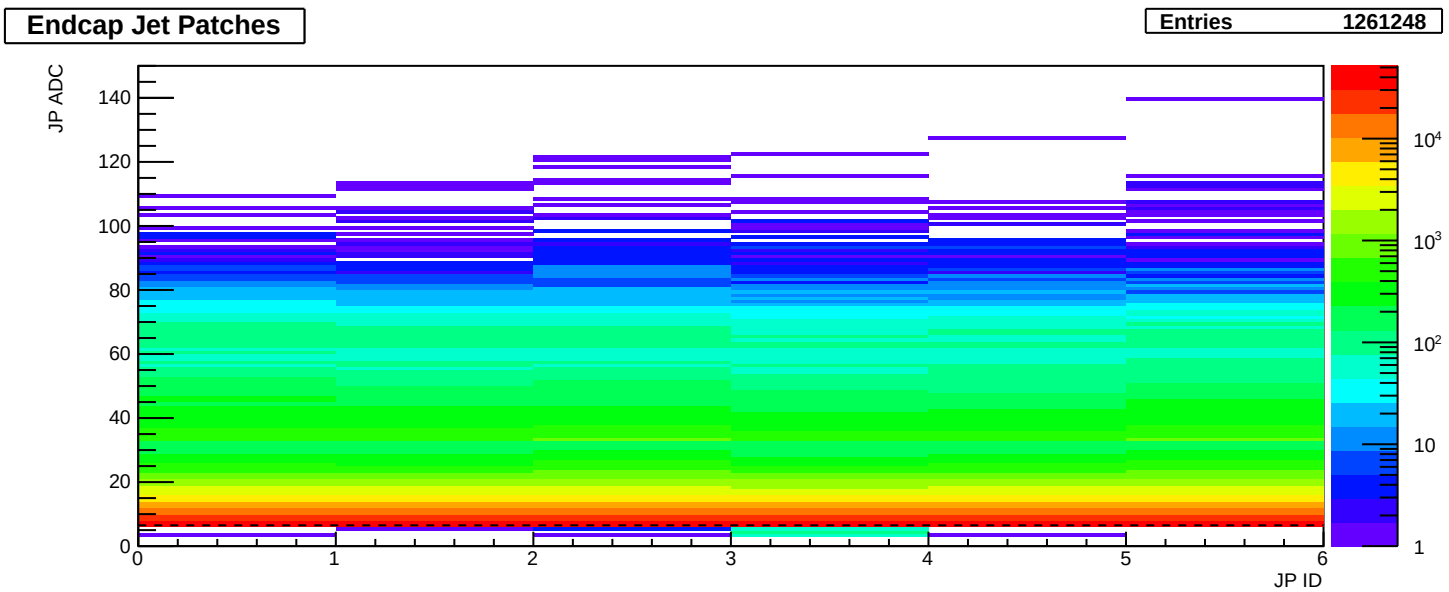

Barrel EMC L0 Input - High Tower
Entries 6.30624e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

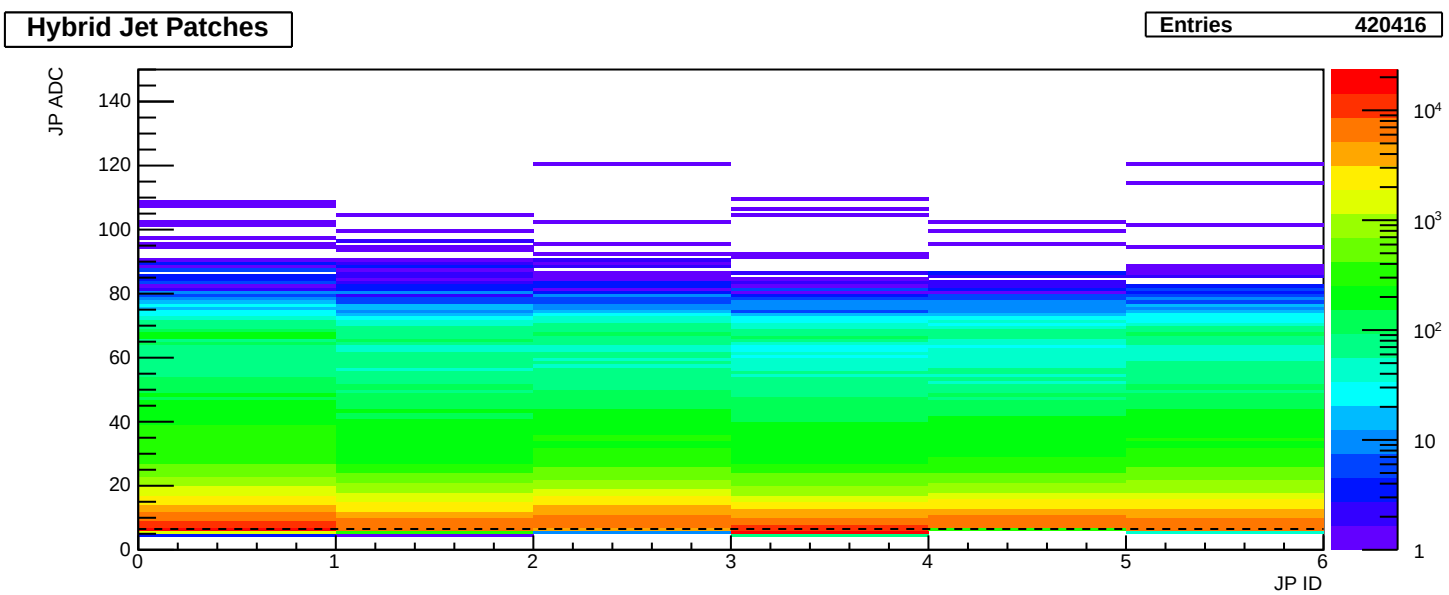

Barrel EMC L0 Input - Patch Sum
Entries 6.30624e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

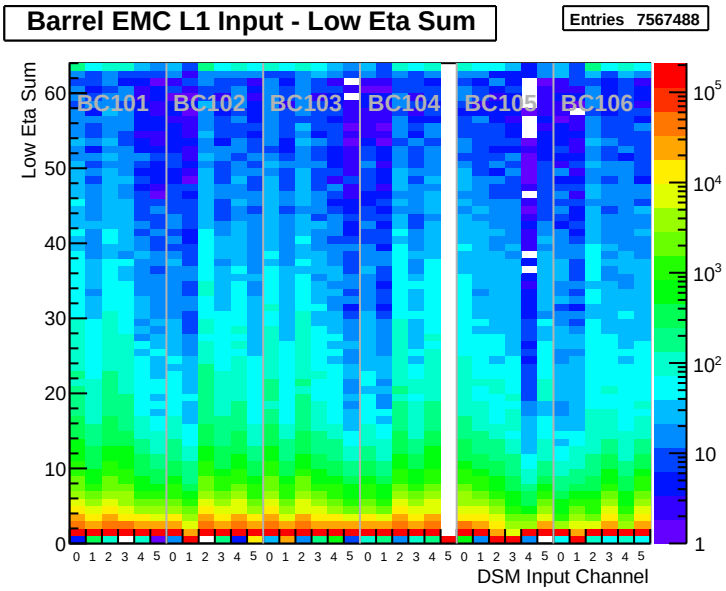

Endcap EMC L0 Input - High Tower
Entries 1.891872e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

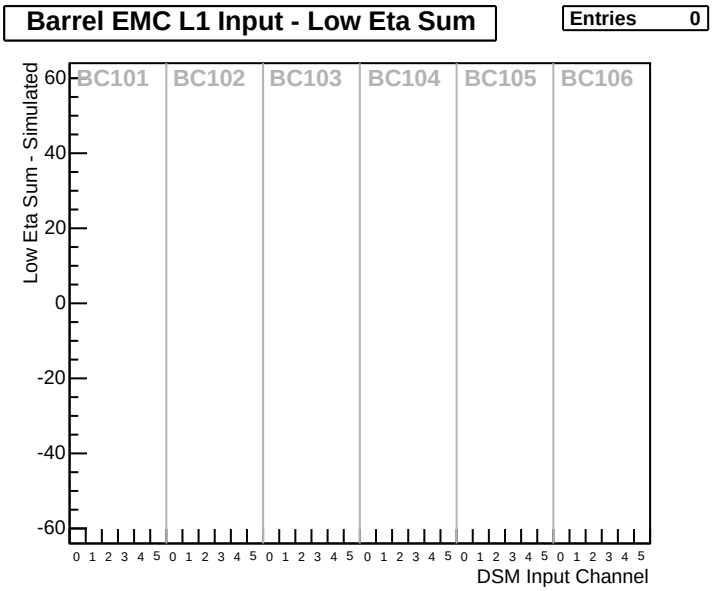

Endcap EMC L0 Input - Patch Sum
Entries 1.891872e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

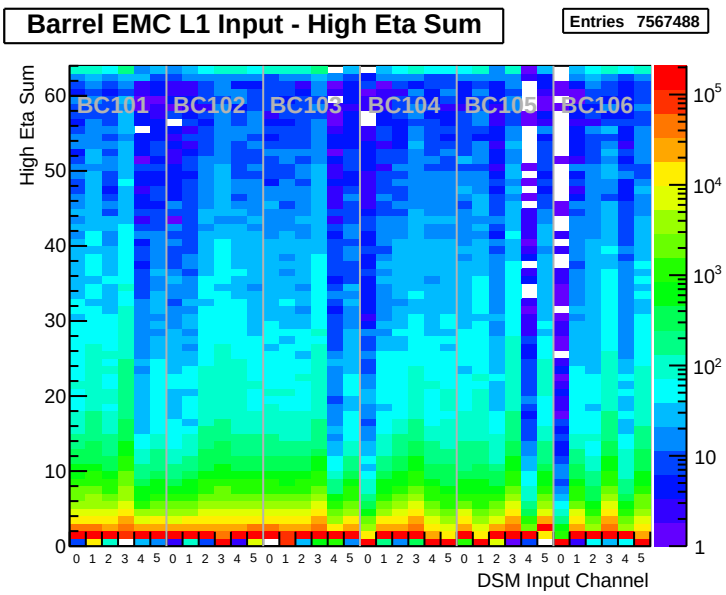

Barrel Jet Patches
Entries 3783744
JP ADC
JP ID

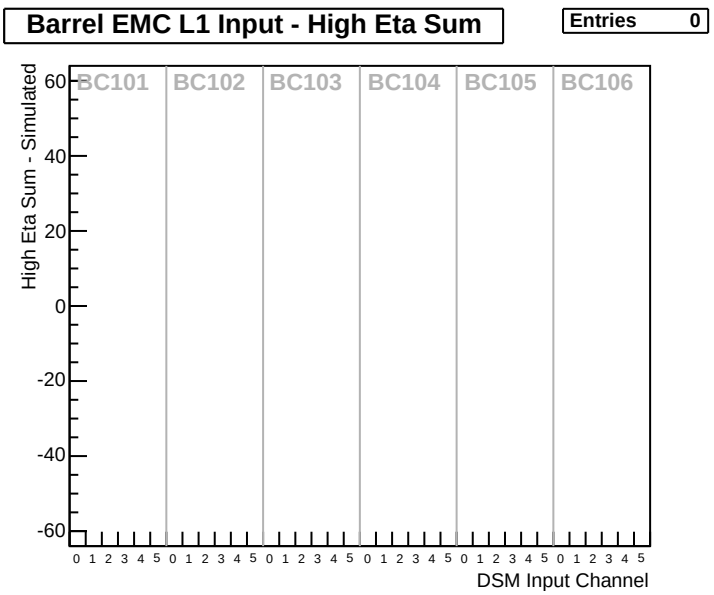

Endcap Jet Patches
Entries 1261248
JP ADC
JP ID

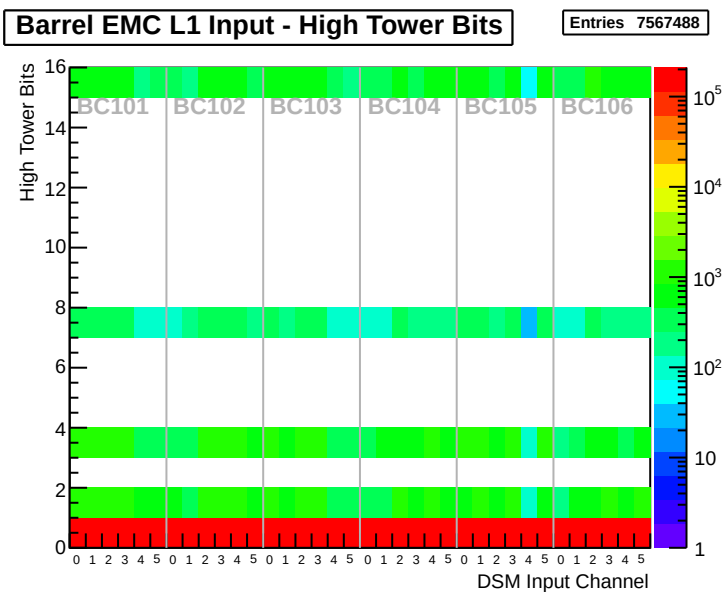

Hybrid Jet Patches
Entries 420416
JP ADC
JP ID

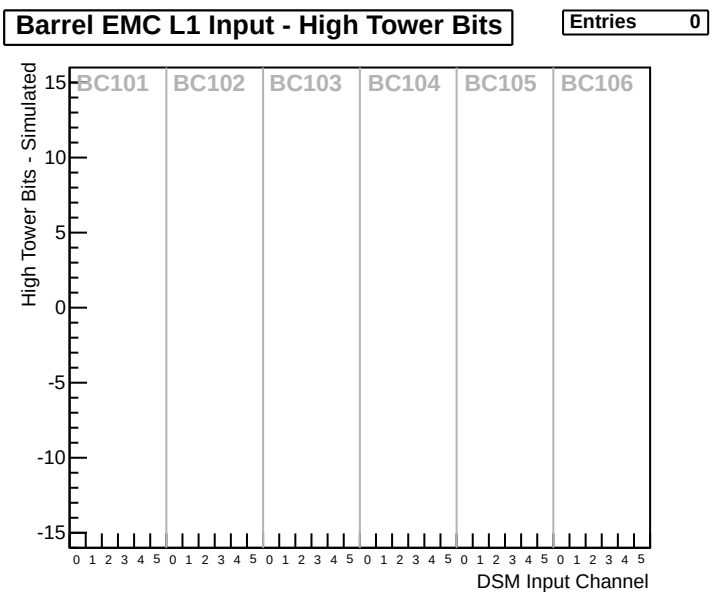

Barrel EMC L1 Input - Low Eta Sum
Entries 7567488
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

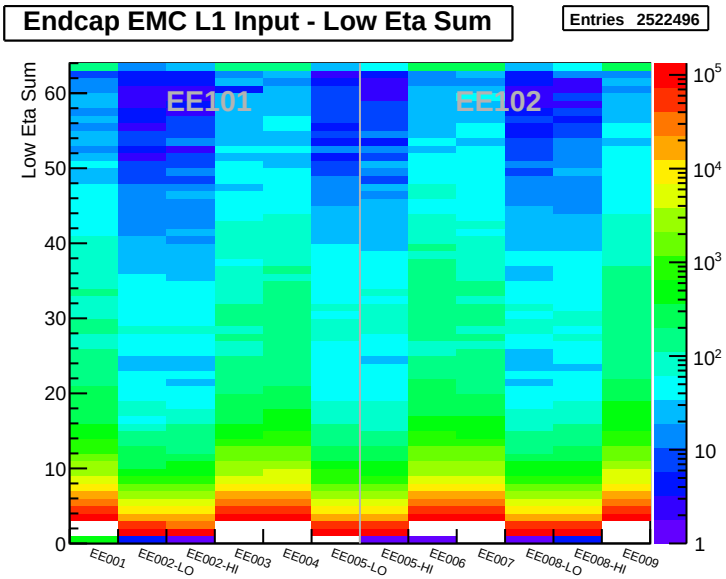

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

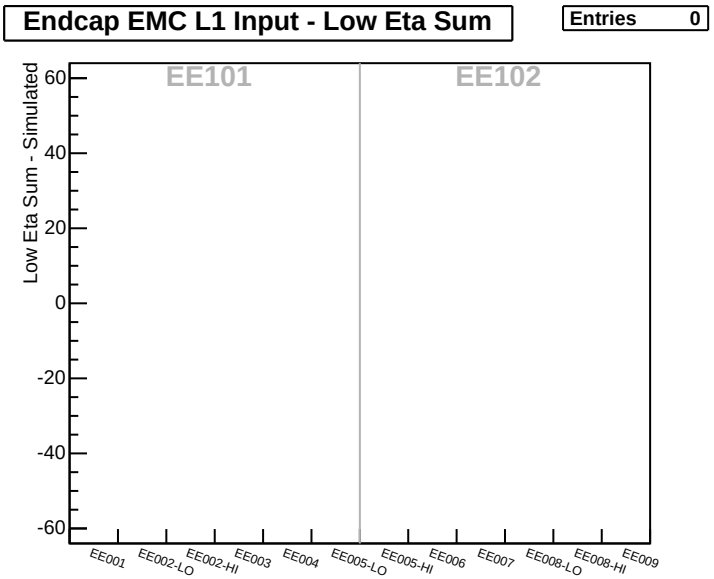

Barrel EMC L1 Input - High Eta Sum
Entries 7567488
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

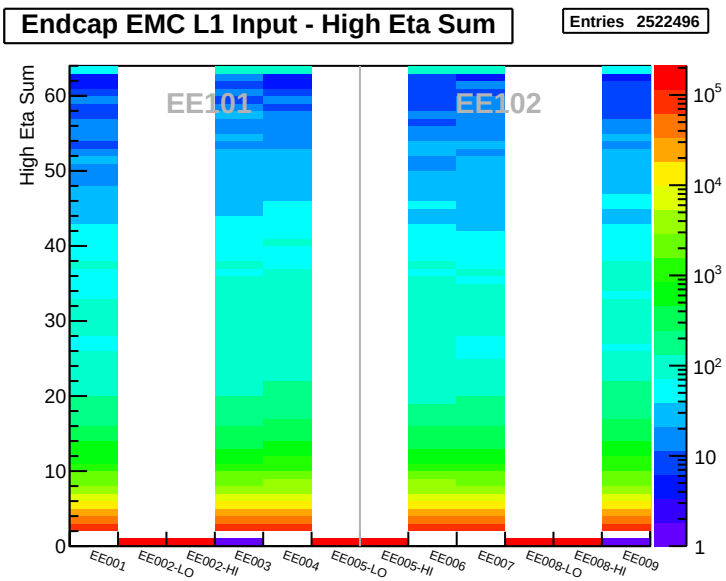

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

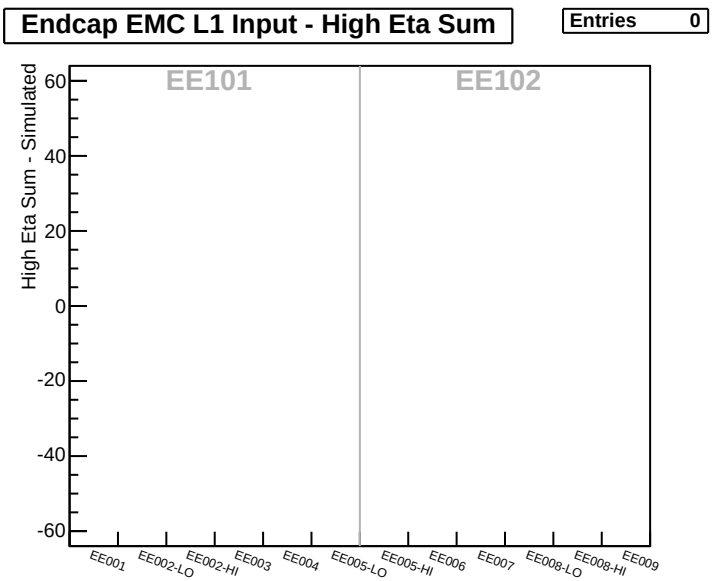

Barrel EMC L1 Input - High Tower Bits
Entries 7567488
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

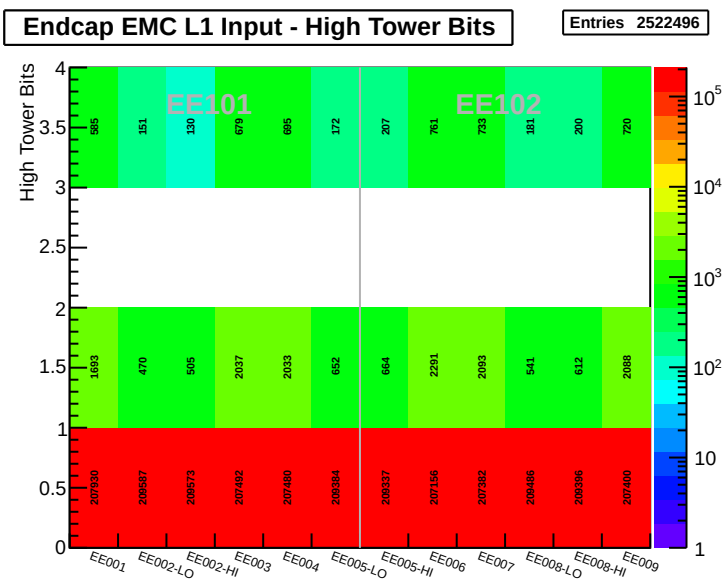

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

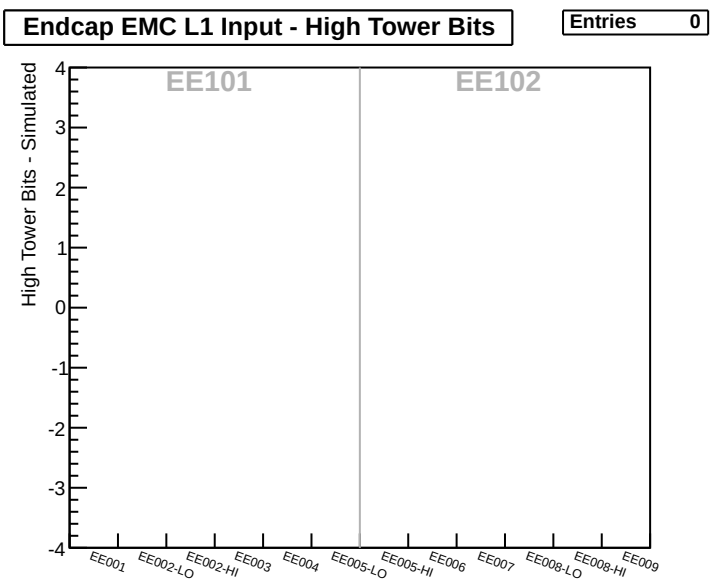

Endcap EMC L1 Input - Low Eta Sum
Entries 2522496
Low Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

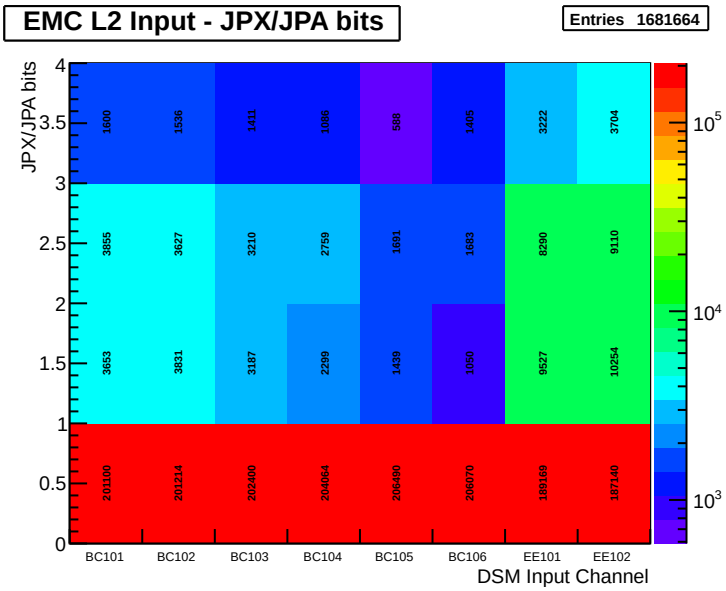

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

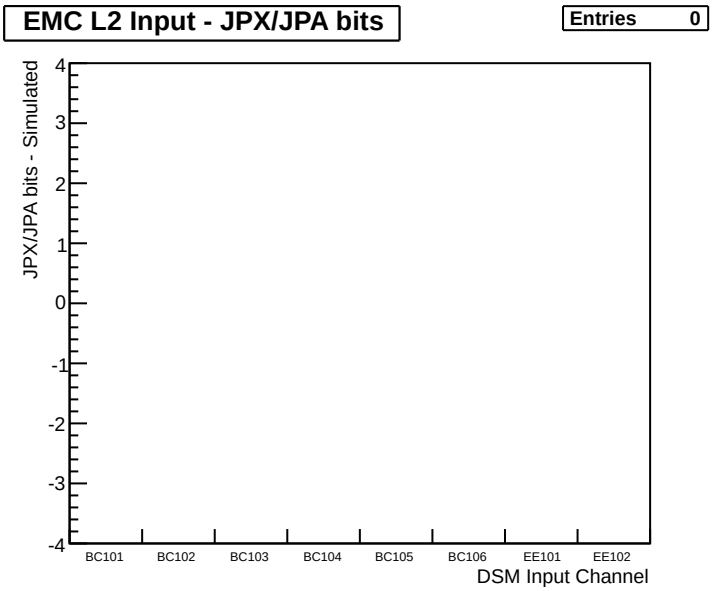

Endcap EMC L1 Input - High Eta Sum
Entries 2522496
High Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

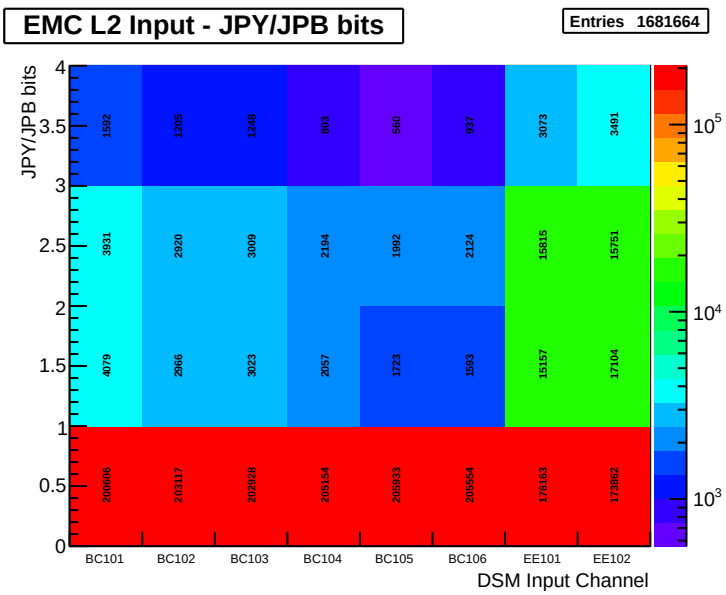

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

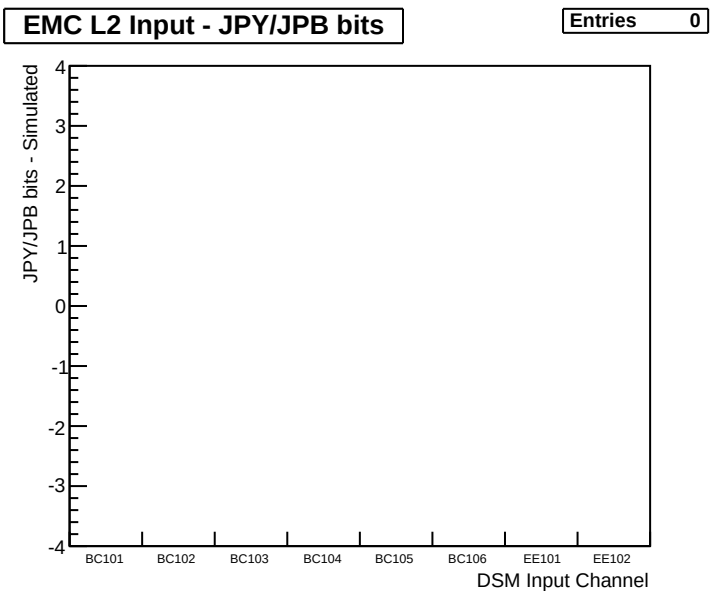

Endcap EMC L1 Input - High Tower Bits
Entries 2522496
High Tower Bits
EE101
EE102
585
151
130
679
695
172
207
761
733
181
200
720
1693
470
505
2037
2033
652
664
2291
2093
541
612
2088
207930
209587
209573
207492
207480
209384
209337
207156
207382
208486
209396
207400
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

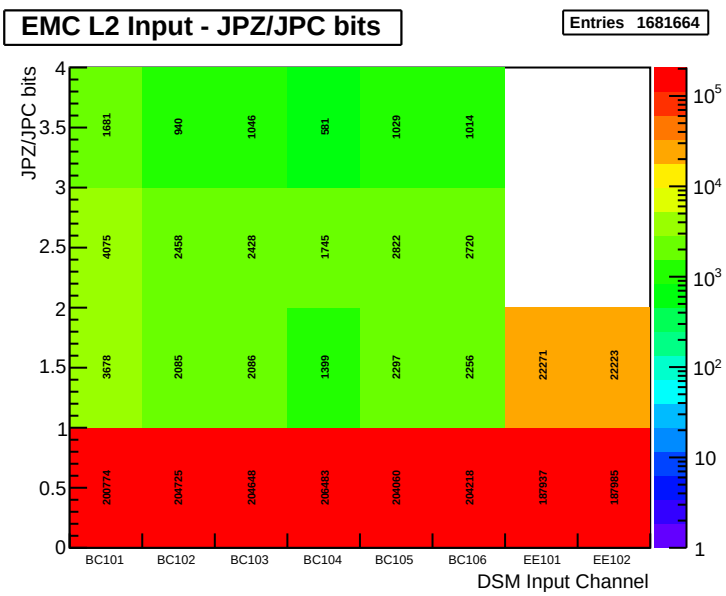

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

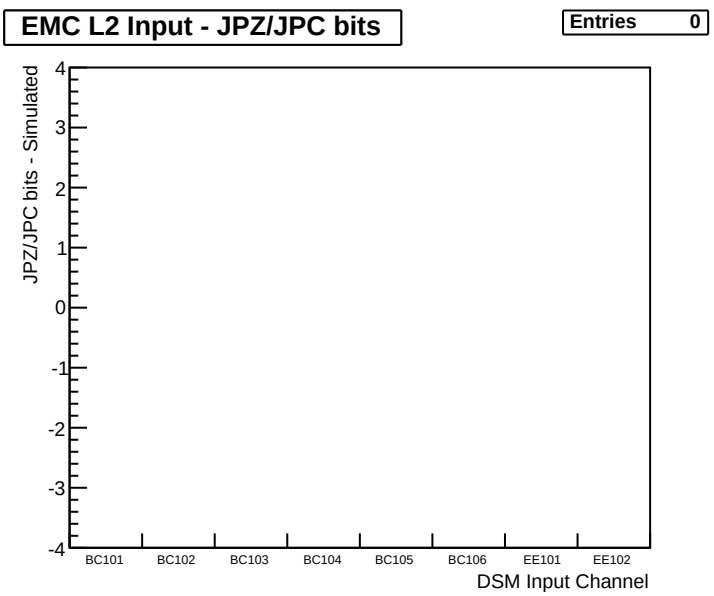

EMC L2 Input - JPX/JPA bits
Entries 1681664
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1600 1536 1411 1086 588 1405 3222 3704
3855 3627 3210 2759 1691 1683 8290 9110
3653 3831 3187 2299 1439 1050 9527 10254
201100 201214 202400 204064 206490 206070 189169 187140

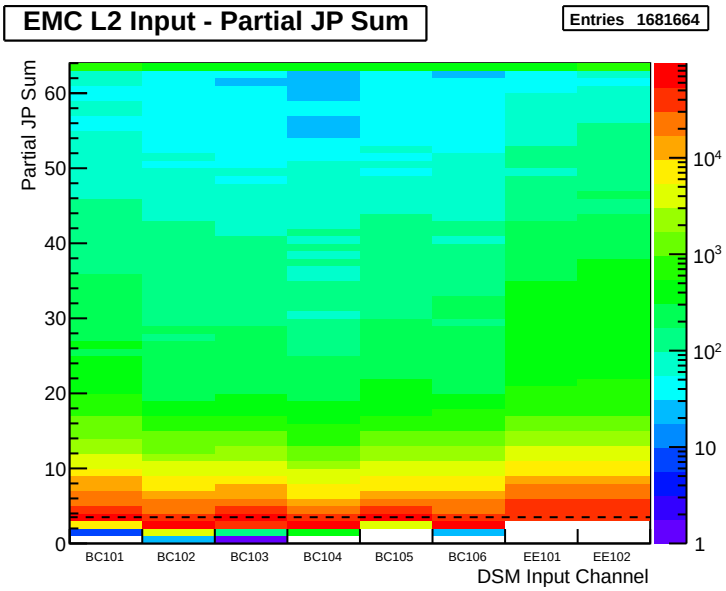

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

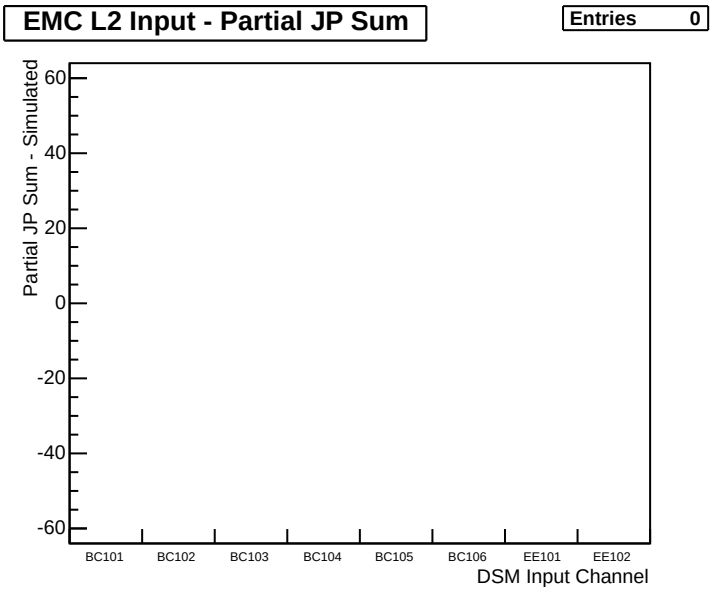

EMC L2 Input - JPY/JPB bits
Entries 1681664
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1592 1205 1248 803 560 937 3073 3491
3931 2920 3009 2194 1992 2124 15815 15751
4079 2966 3023 2057 1723 1593 15157 17104
200606 203117 202928 205154 205933 205554 176163 173862

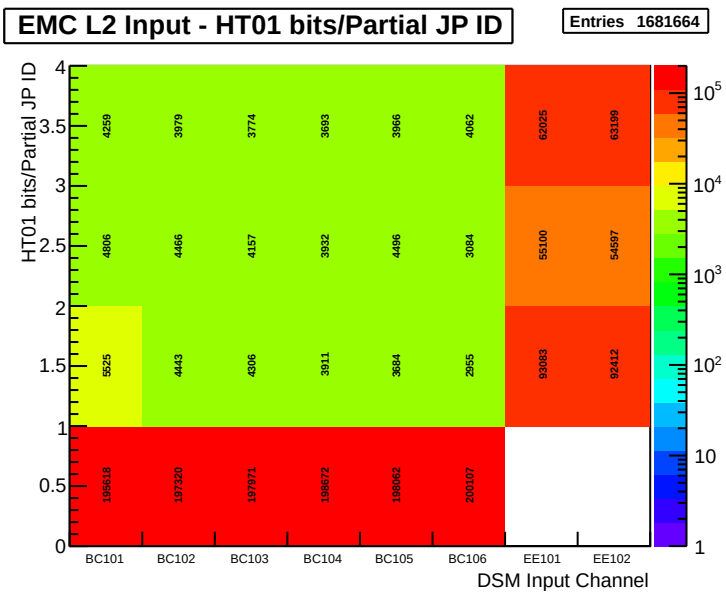

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

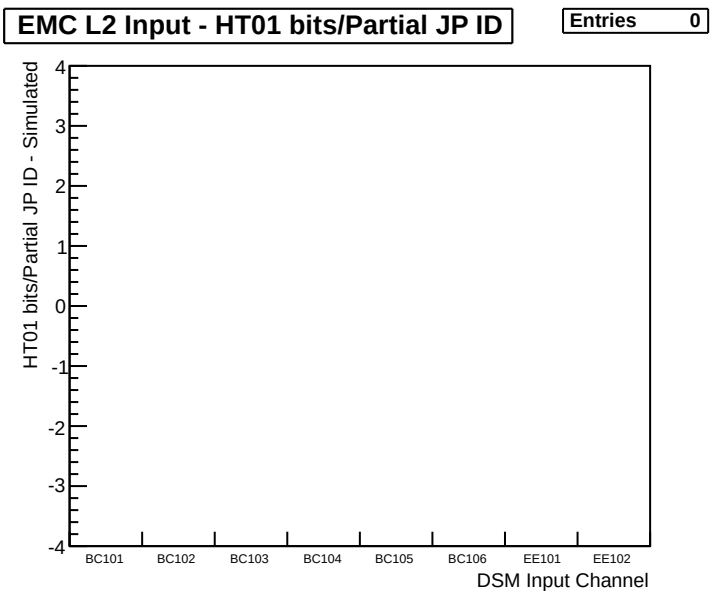

EMC L2 Input - JPZ/JPC bits
Entries 1681664
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1681 940 1046 581 1029 1014
4075 2458 2428 1745 2822 2720
3678 2085 2086 1399 2297 2256 22271 22223
200774 204725 204648 206483 204060 204218 187937 187985

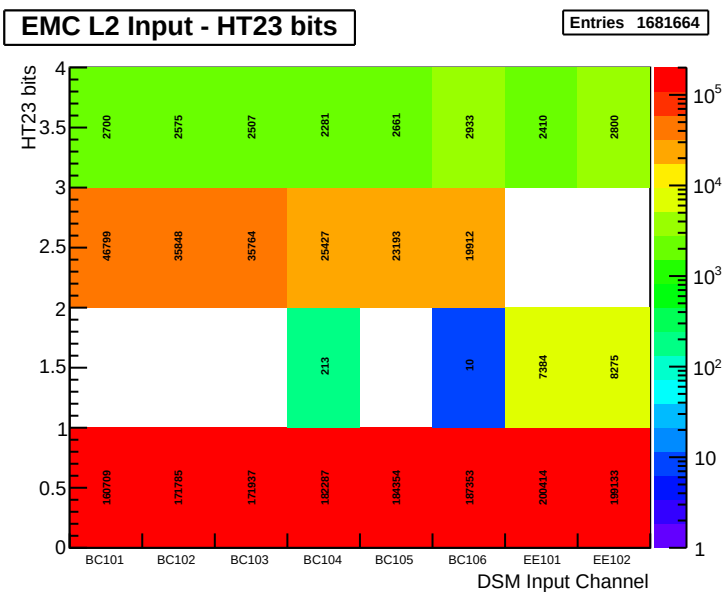

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

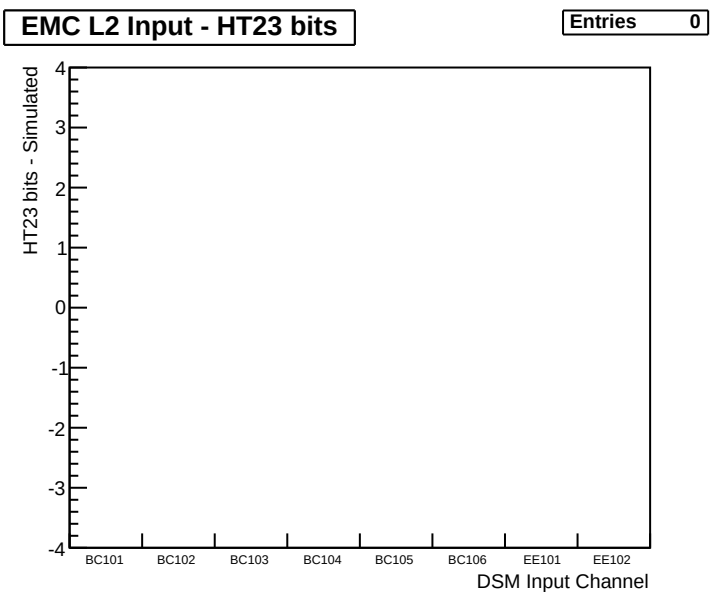

EMC L2 Input - Partial JP Sum
Entries 1681664
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

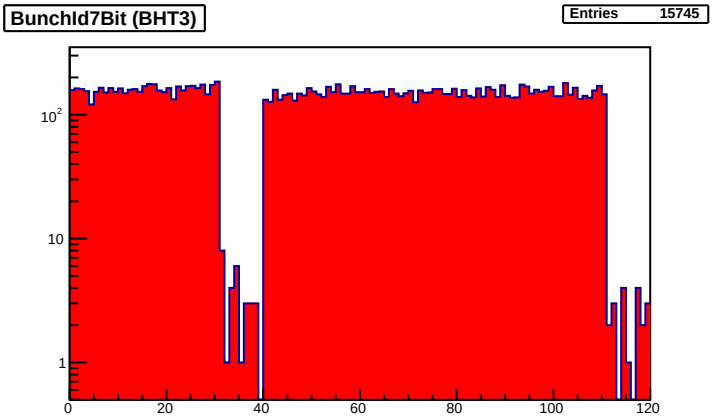

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

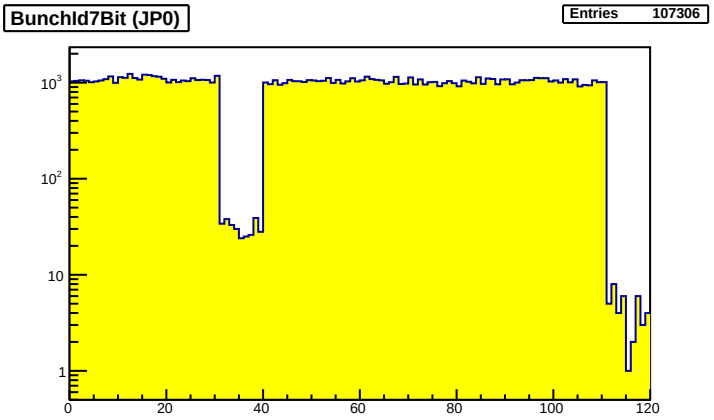

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1681664
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

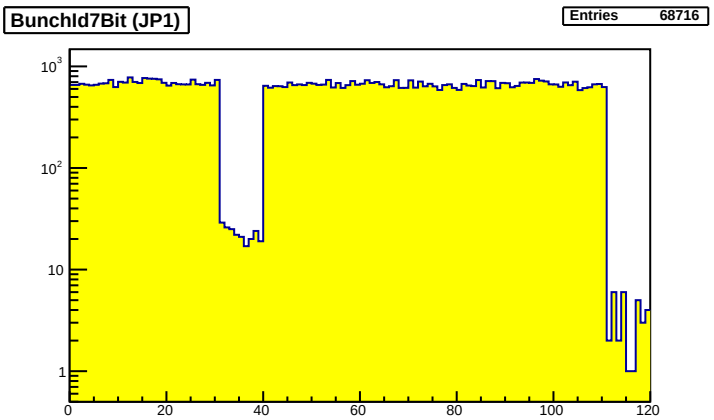

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

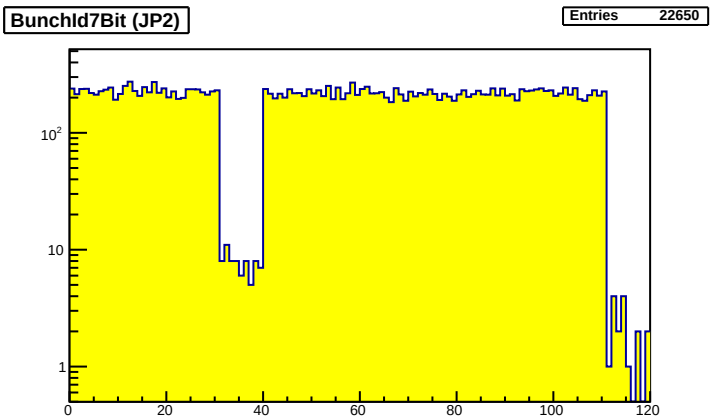

EMC L2 Input - HT23 bits
Entries 1681664
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

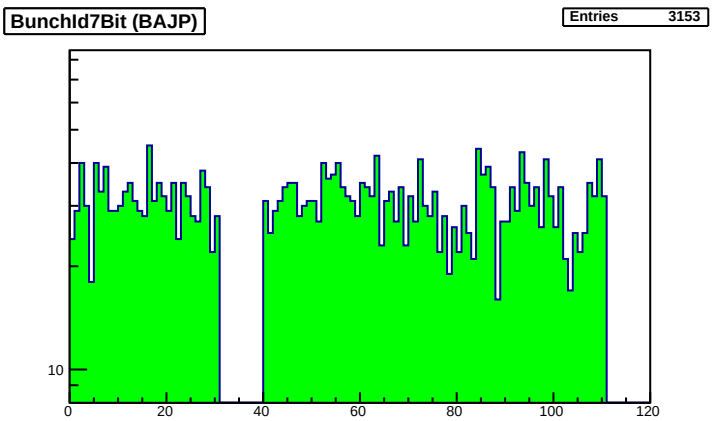

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

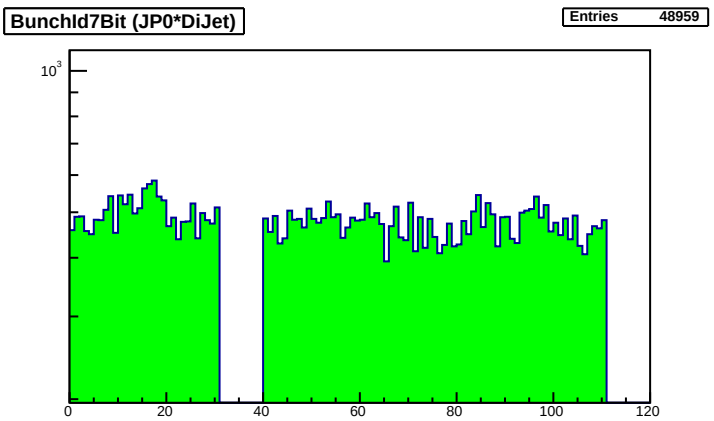

BunchId7Bit (BHT3)
Entries 15745

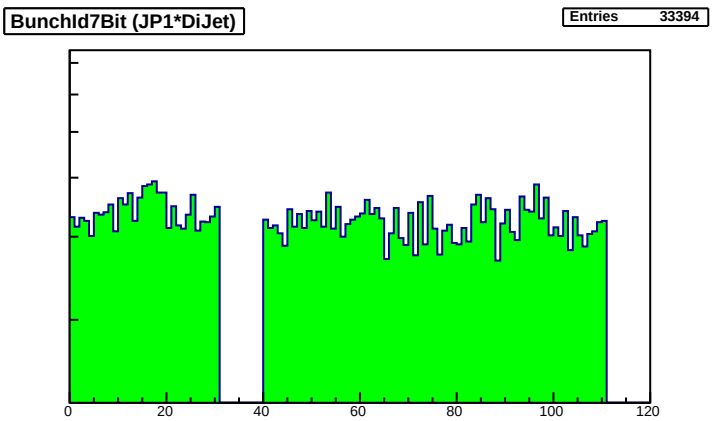

BunchId7Bit (JP0)
Entries 107306

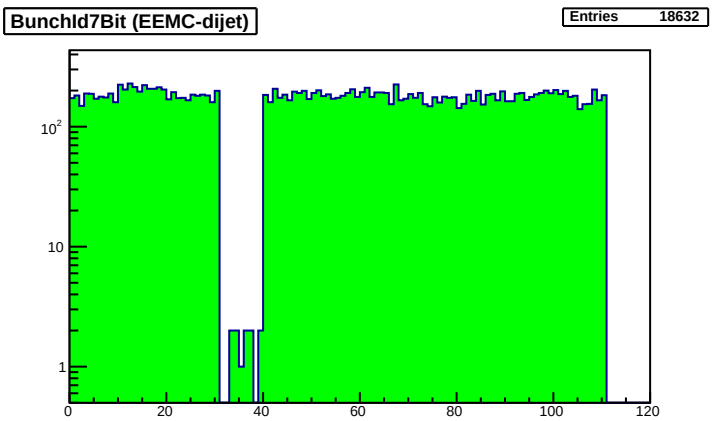

BunchId7Bit (JP1)
Entries 68716

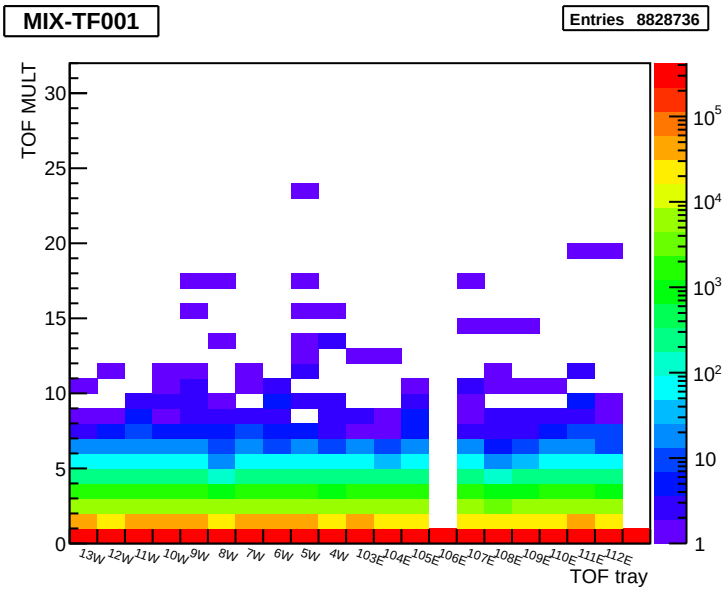

BunchId7Bit (JP2)
Entries 22650

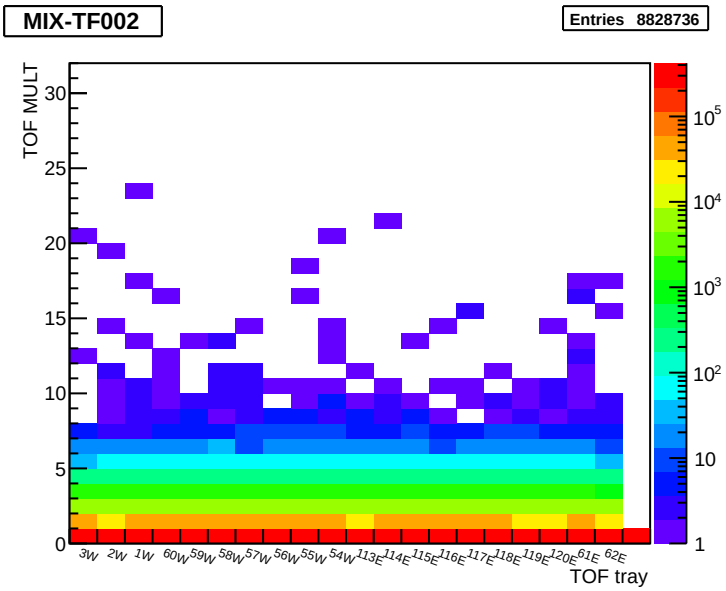

BunchId7Bit (BAJP)
Entries 3153

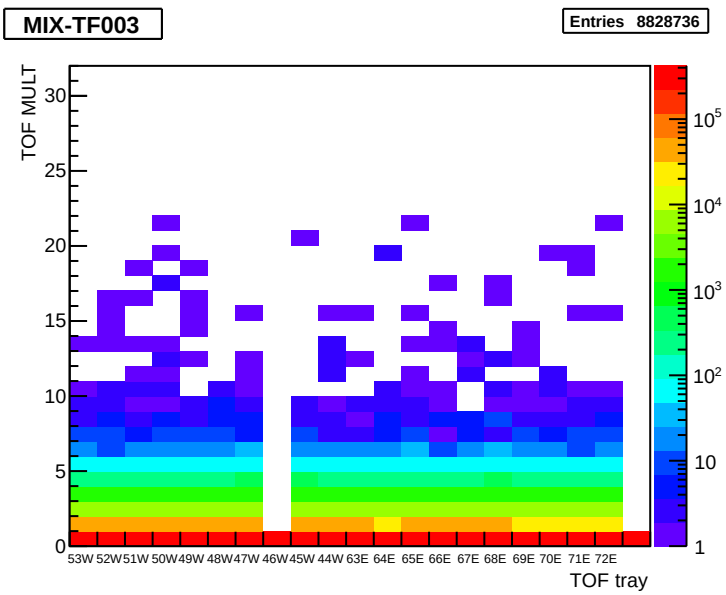

BunchId7Bit (JP0*DiJet)
Entries 48959

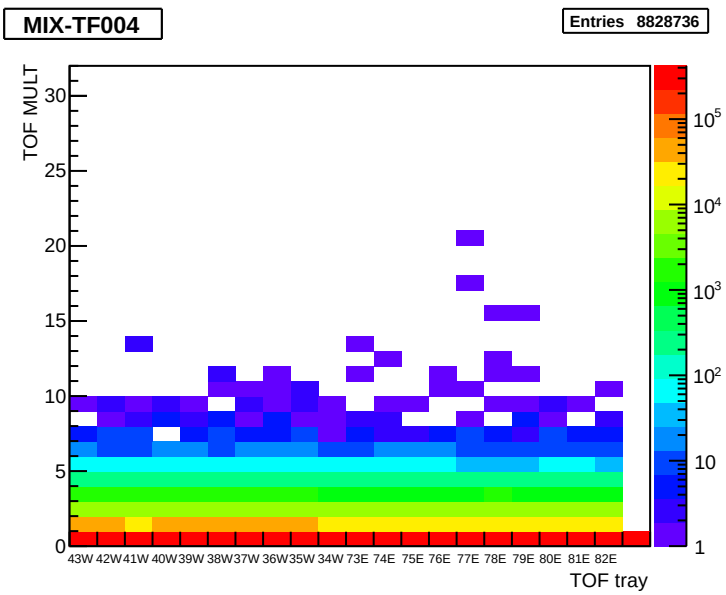

BunchId7Bit (JP1*DiJet)
Entries 33394

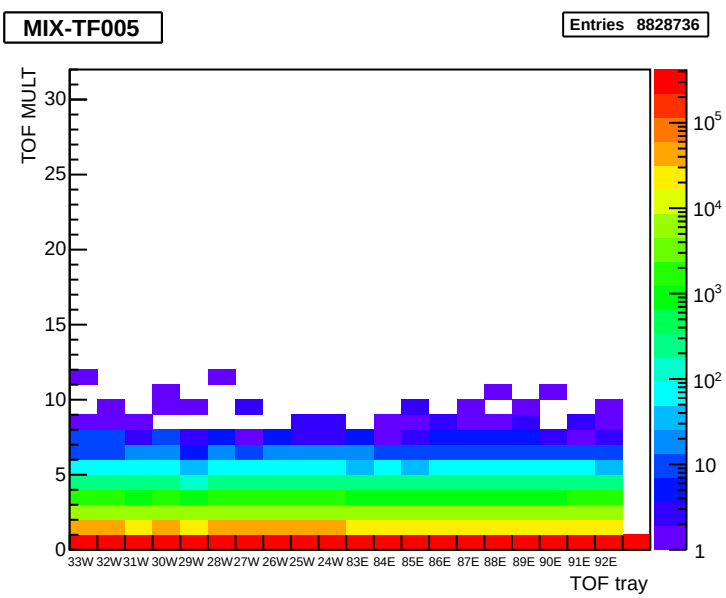

BunchId7Bit (EEMC-dijet)
Entries 18632

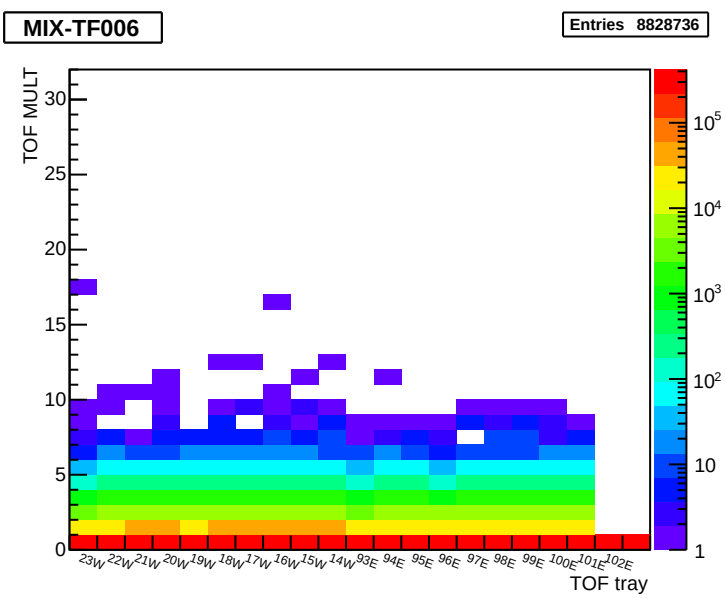

MIX-TF001
Entries 8828736
TOF MULT
TOF tray

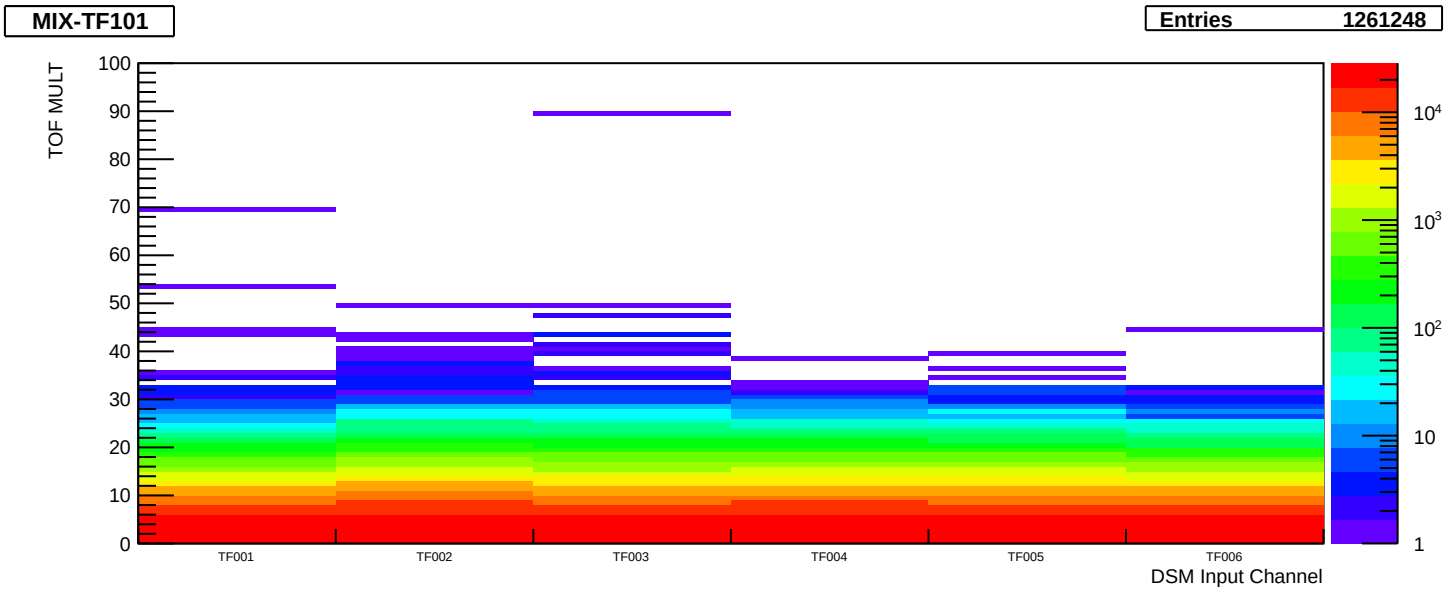

MIX-TF002
Entries 8828736
TOF MULT
TOF tray

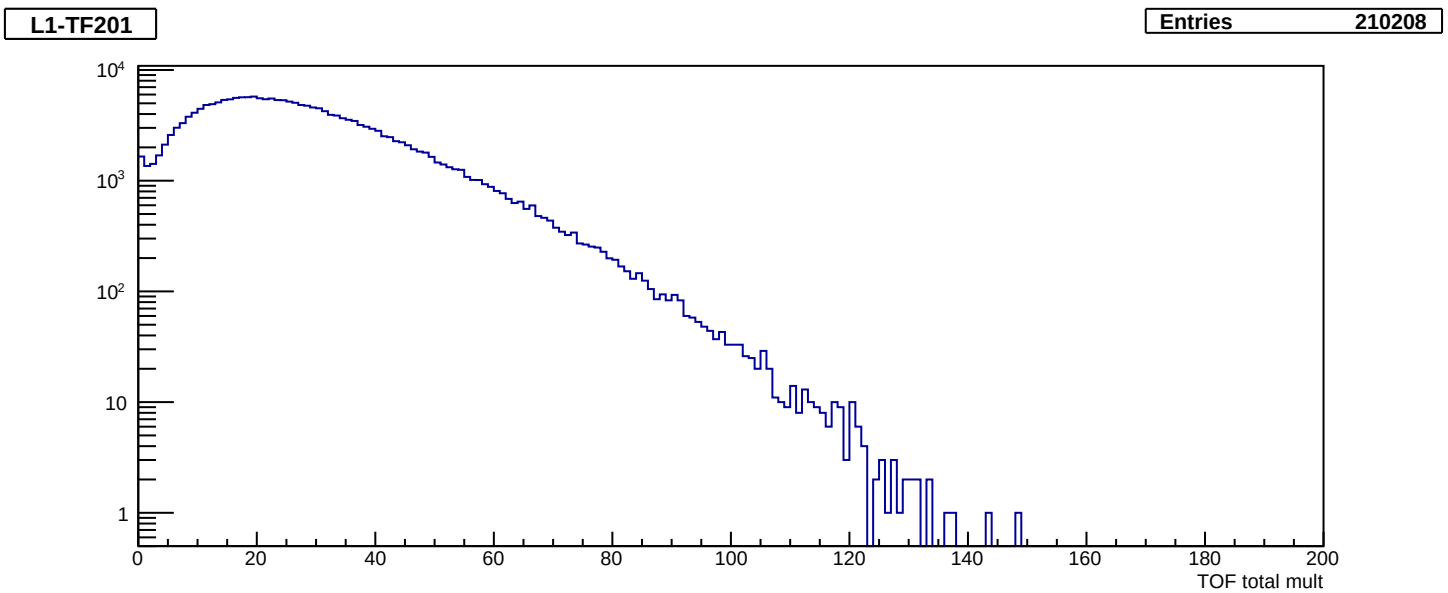

MIX-TF003
Entries 8828736
TOF MULT
TOF tray

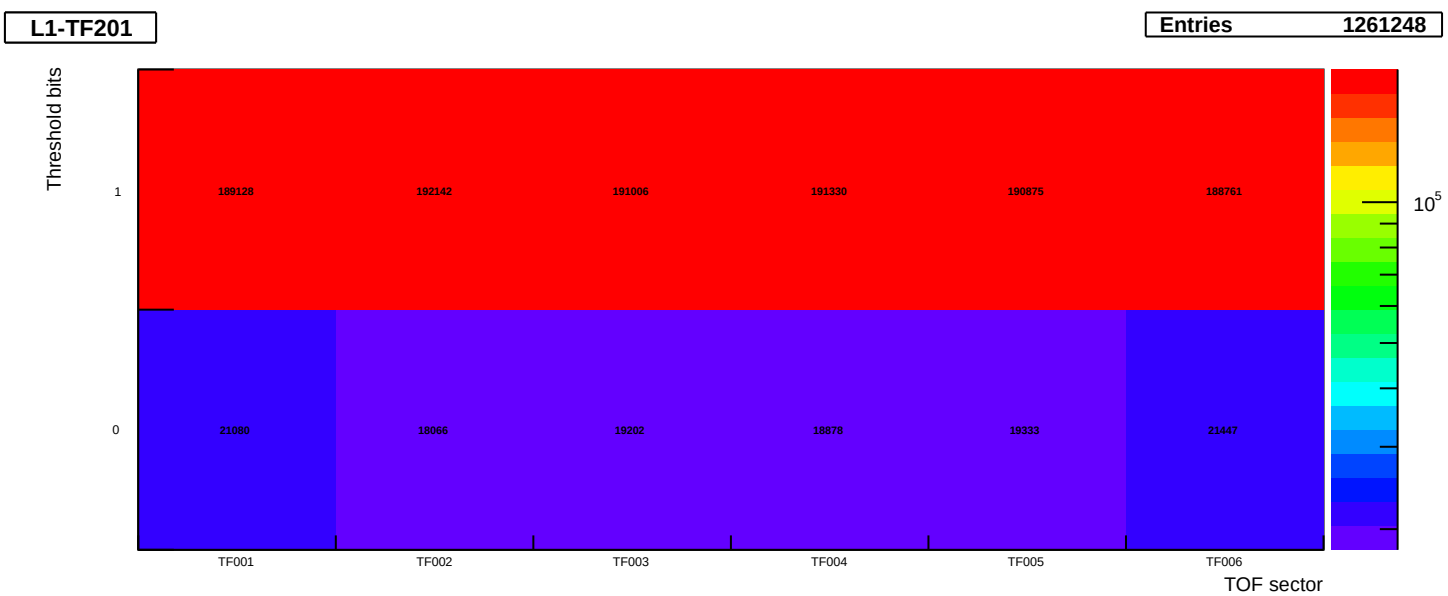

MIX-TF004
Entries 8828736
TOF MULT
TOF tray

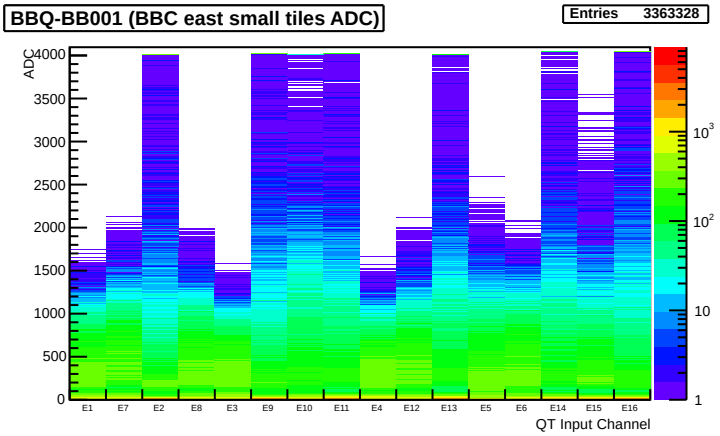

MIX-TF005
Entries 8828736
TOF MULT
TOF tray

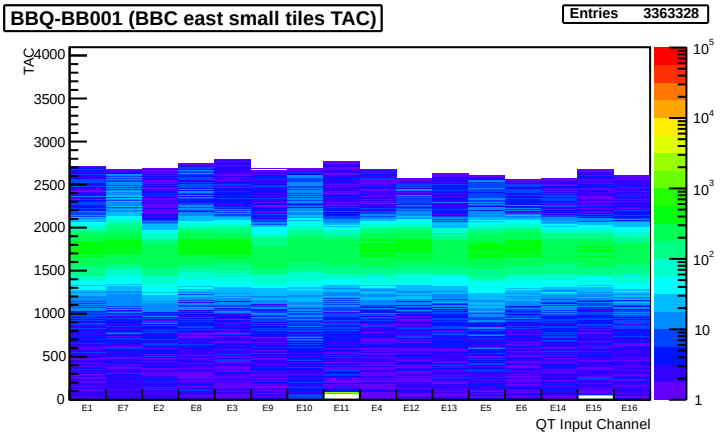

MIX-TF006
Entries 8828736
TOF MULT
TOF tray

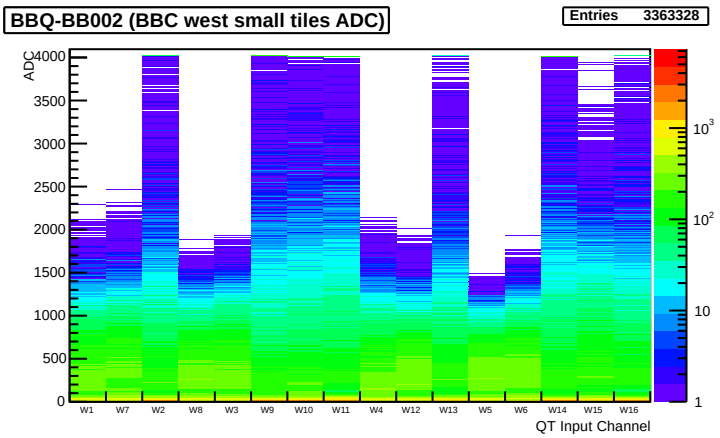

MIX-TF101
Entries 1261248
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

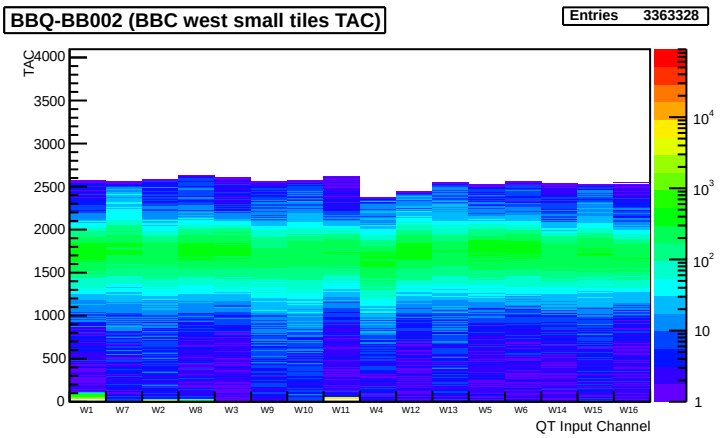

L1-TF201
Entries 210208
TOF total mult

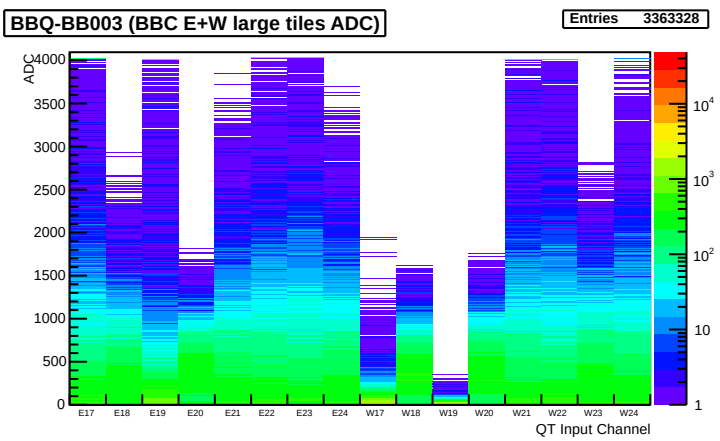

L1-TF201
Entries 1261248
Threshold bits
189128
192142
191006
191330
190875
188761
21080
18066
19202
18878
19333
21447
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

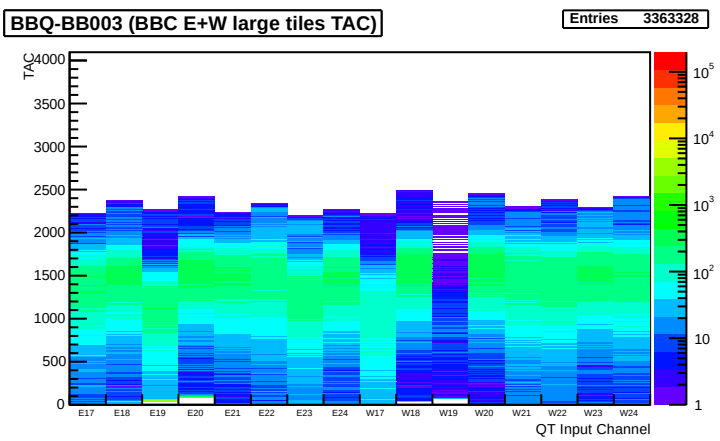

BBQ-BB001 (BBC east small tiles ADC)
Entries 3363328
ADC
QT Input Channel

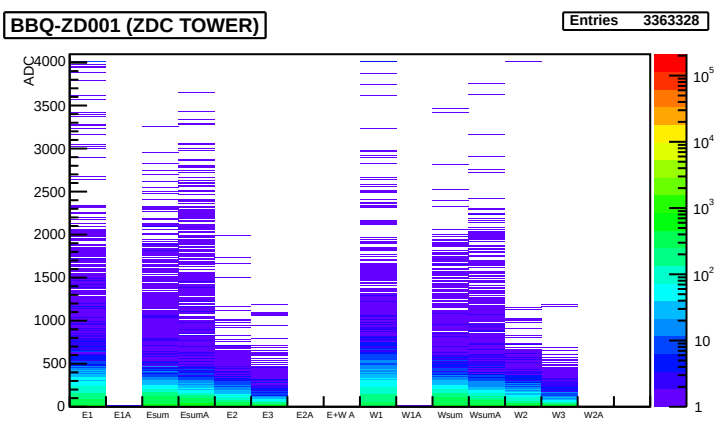

BBQ-BB001 (BBC east small tiles TAC)
Entries 3363328
TAC
QT Input Channel

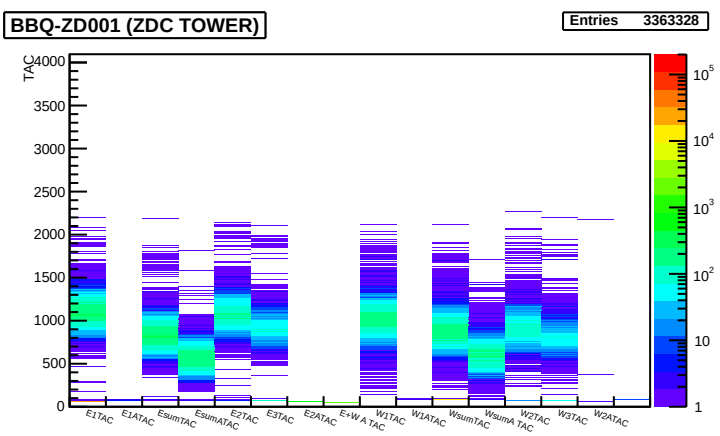

BBQ-BB002 (BBC west small tiles ADC)
Entries 3363328
ADC
QT Input Channel

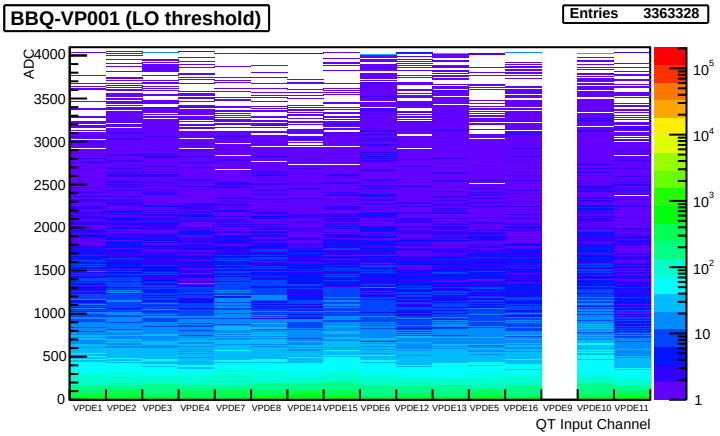

BBQ-BB002 (BBC west small tiles TAC)
Entries 3363328
TAC
QT Input Channel

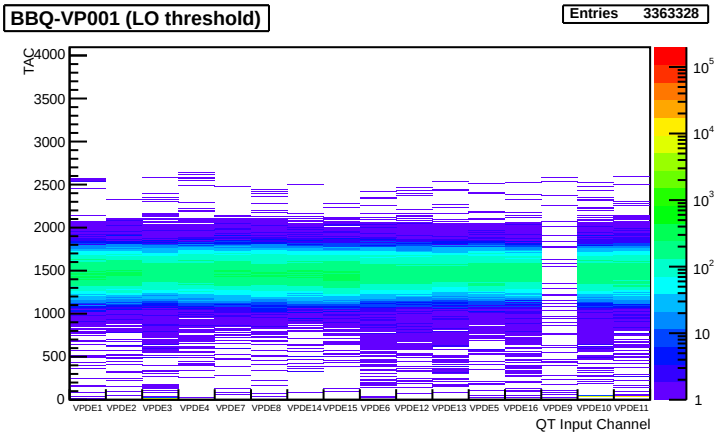

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3363328
ADC
QT Input Channel

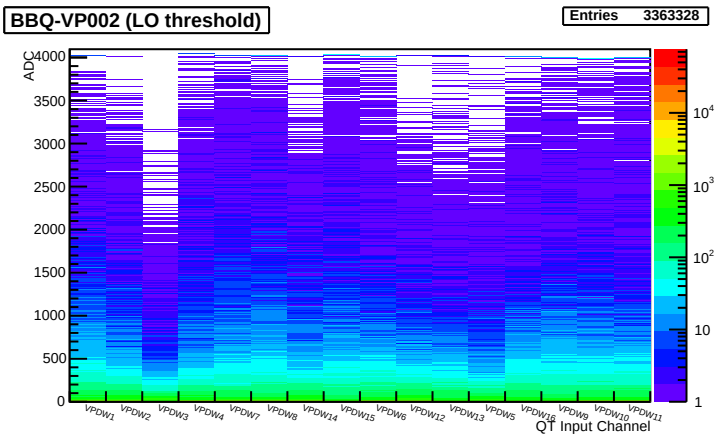

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3363328
TAC
QT Input Channel

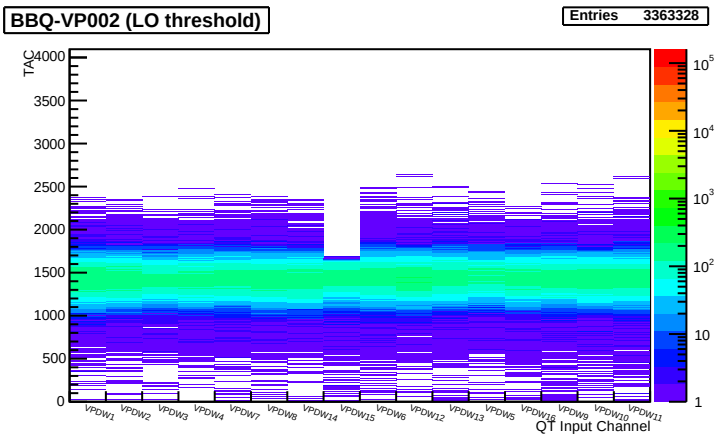

BBQ-ZD001 (ZDC TOWER)
Entries 3363328
ADC

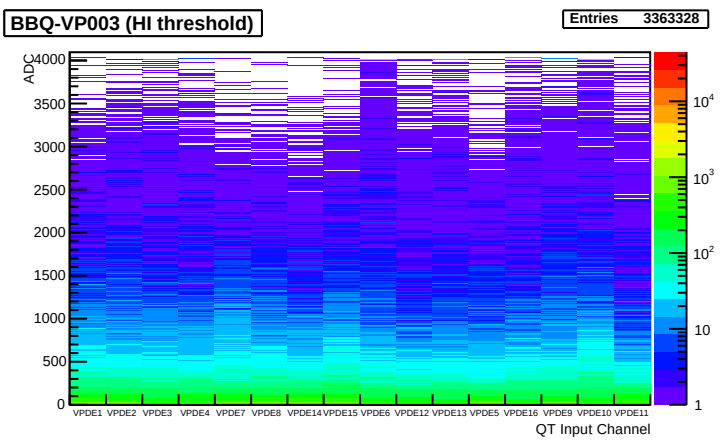

BBQ-ZD001 (ZDC TOWER)
Entries 3363328
TAC

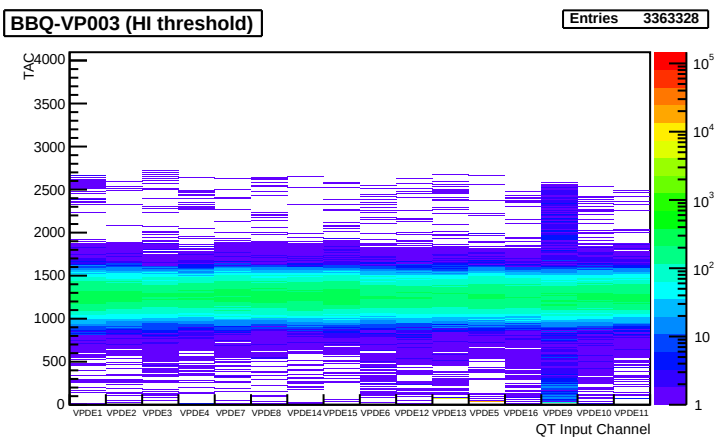

BBQ-VP001 (LO threshold)
Entries 3363328
ADC
QT Input Channel

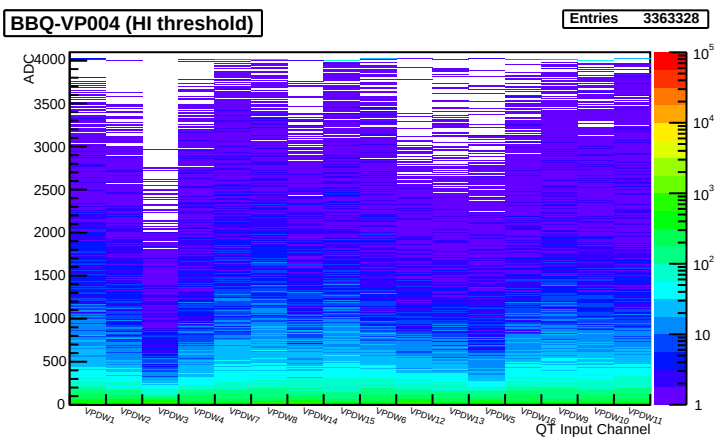

BBQ-VP001 (LO threshold)
Entries 3363328
TAC
QT Input Channel

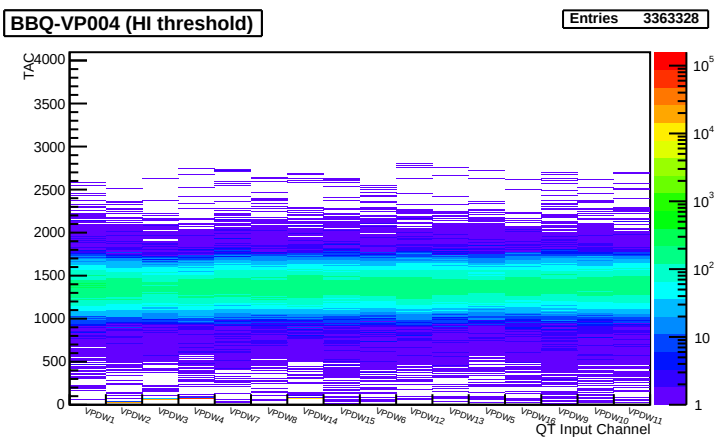

BBQ-VP002 (LO threshold)
Entries 3363328
ADC
QT Input Channel

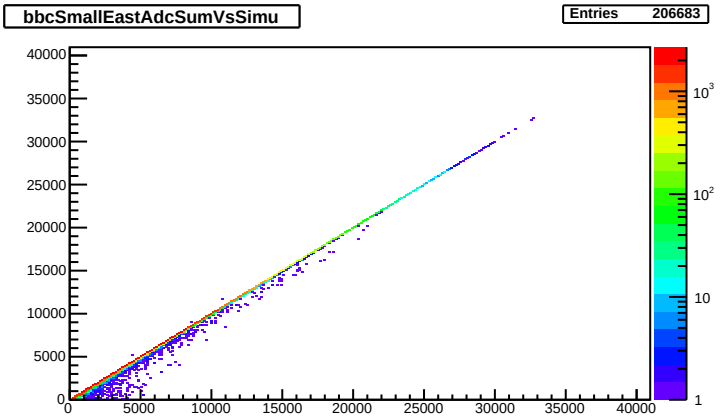

BBQ-VP002 (LO threshold)
Entries 3363328
TAC
QT Input Channel

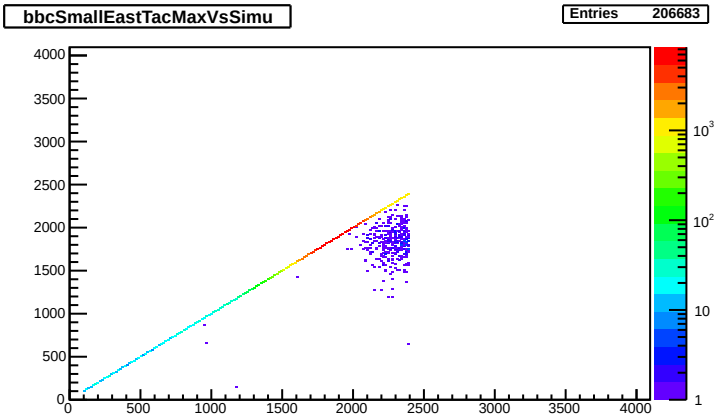

BBQ-VP003 (HI threshold)
Entries 3363328
ADC
QT Input Channel

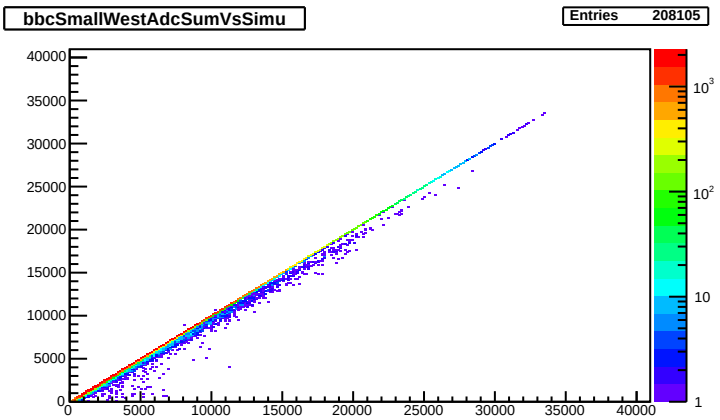

BBQ-VP003 (HI threshold)
Entries 3363328
TAC
QT Input Channel

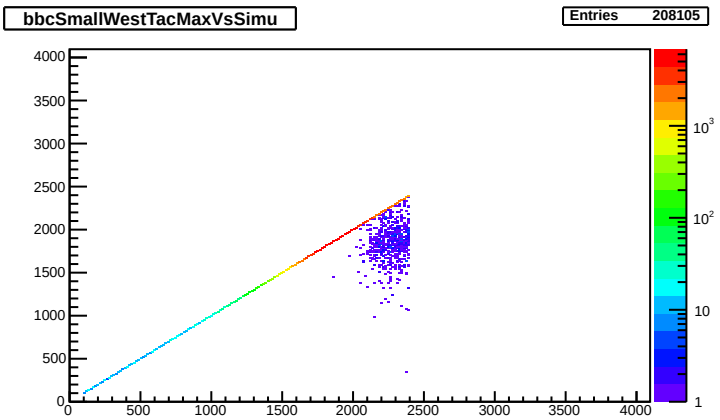

BBQ-VP004 (HI threshold)
Entries 3363328
ADC
QT Input Channel

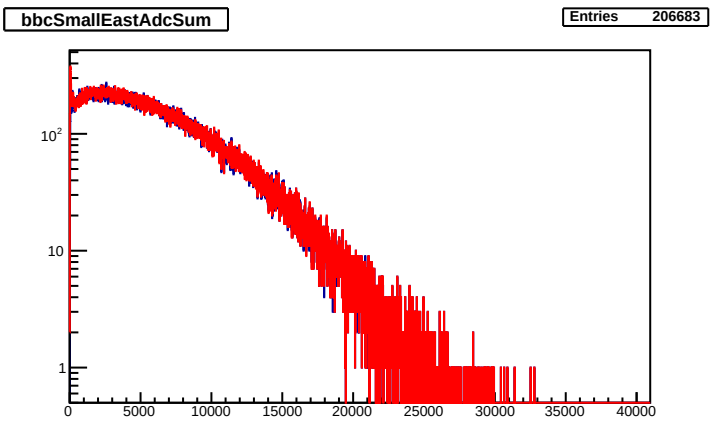

BBQ-VP004 (HI threshold)
Entries 3363328
TAC
QT Input Channel

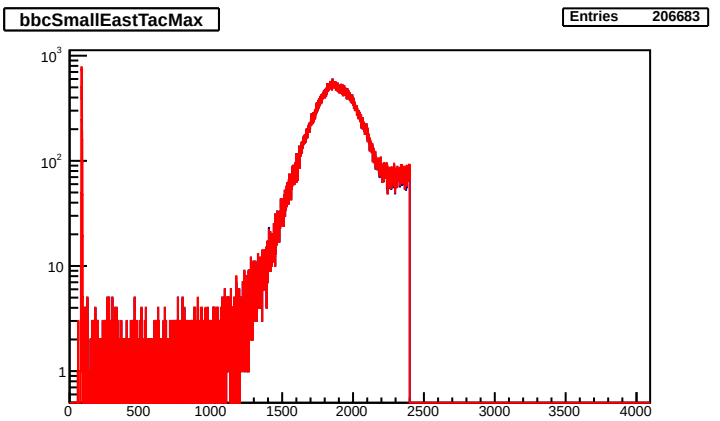

bbcSmallEastAdcSumVsSimu
Entries 206683

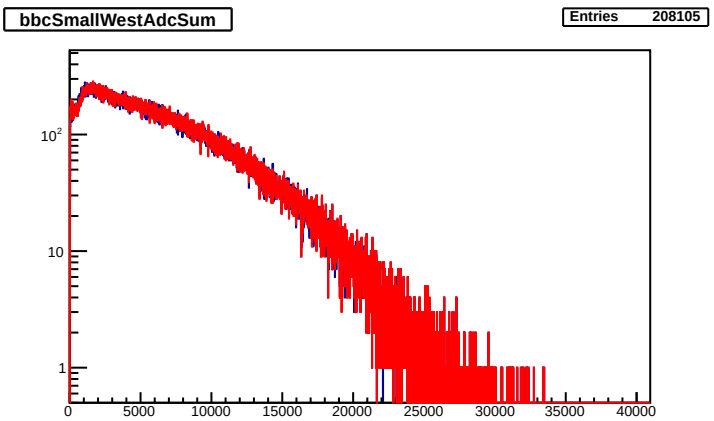

bbcSmallEastTacMaxVsSimu
Entries 206683

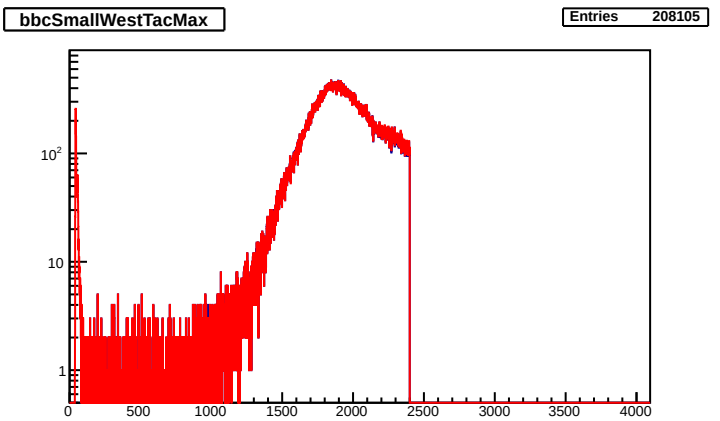

bbcSmallWestAdcSumVsSimu
Entries 208105

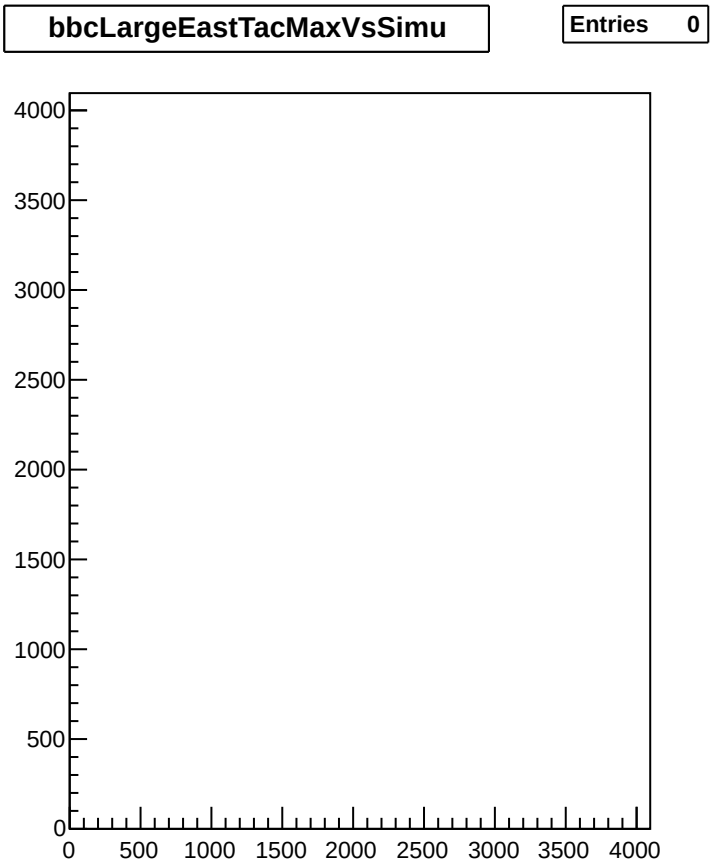

bbcSmallWestTacMaxVsSimu
Entries 208105

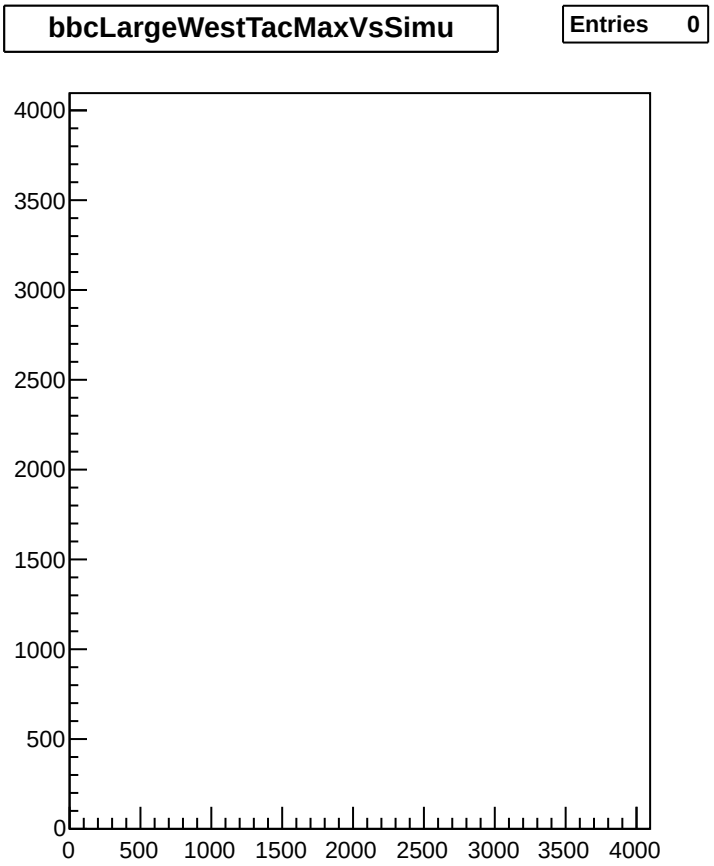

bbcSmallEastAdcSum
Entries 206683

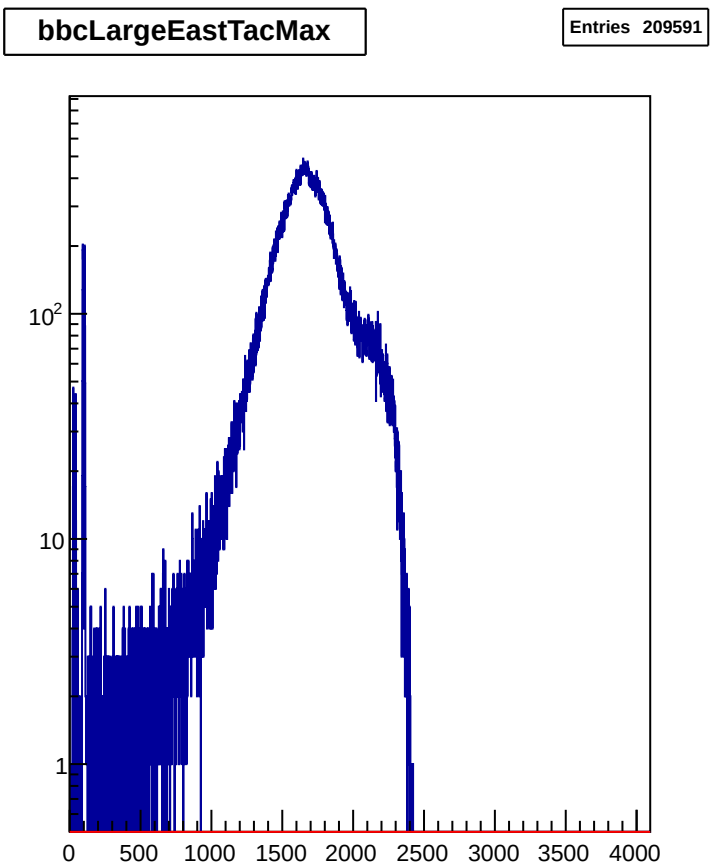

bbcSmallEastTacMax
Entries 206683

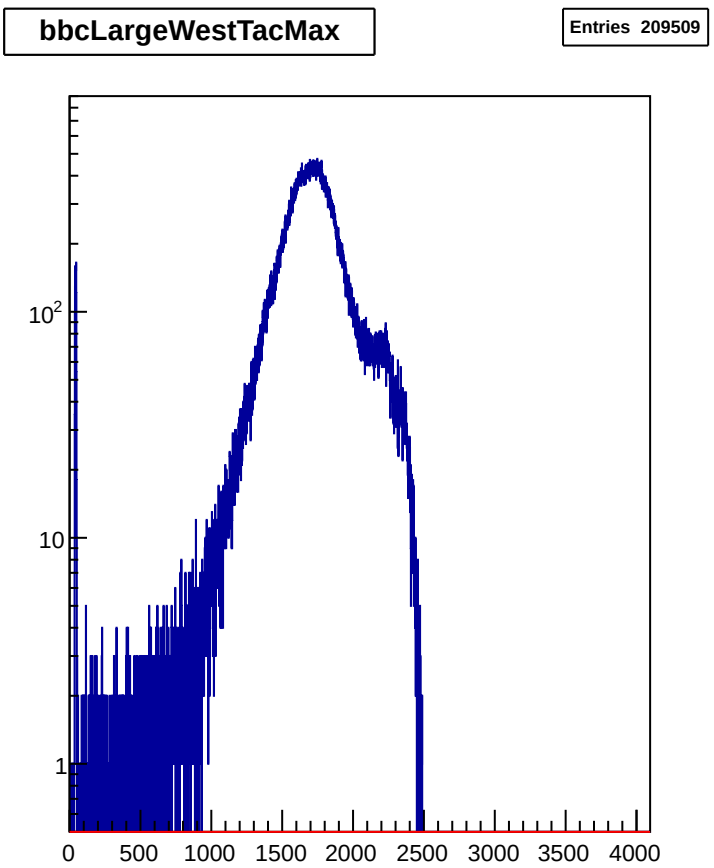

bbcSmallWestAdcSum
Entries 208105

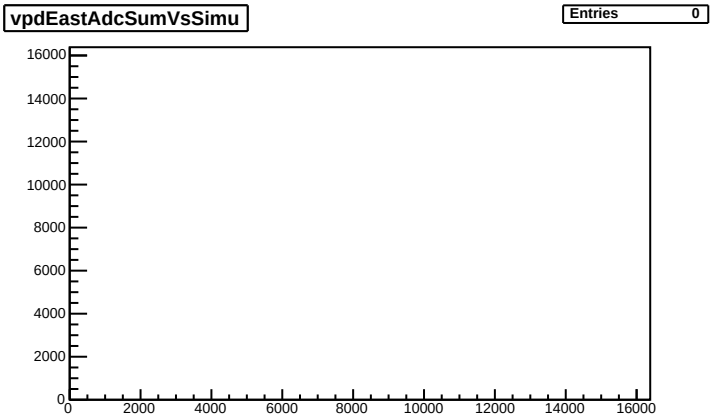

bbcSmallWestTacMax
Entries 208105

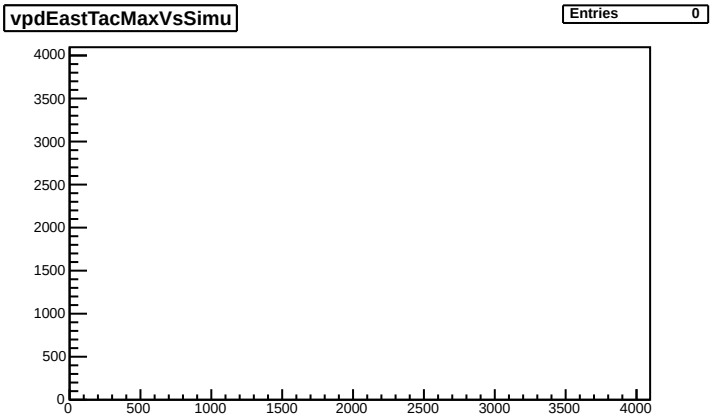

bbcLargeEastTacMaxVsSimu
Entries 0
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000

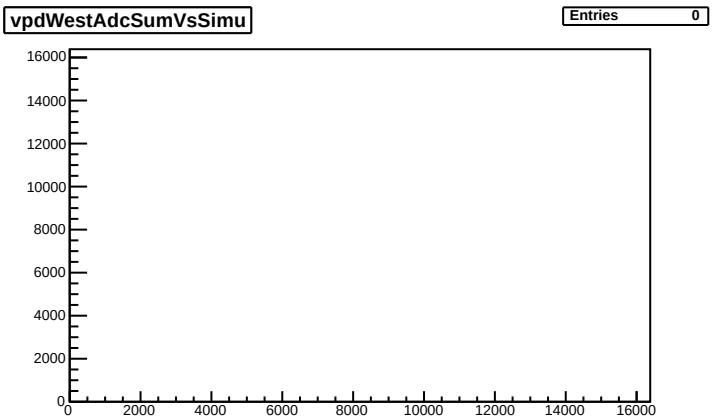

bbcLargeWestTacMaxVsSimu
Entries 0
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000

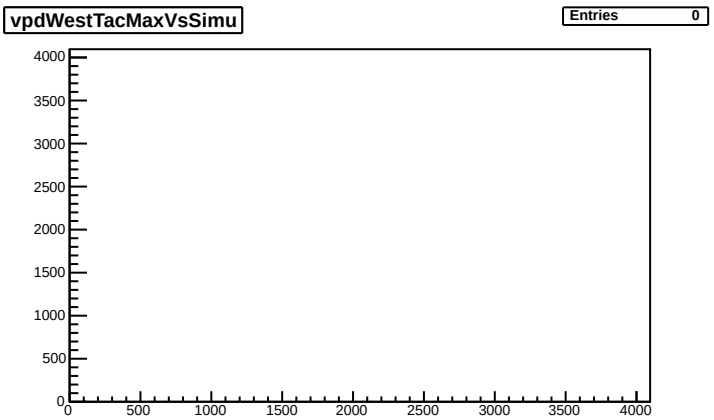

bbcLargeEastTacMax
Entries 209591
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

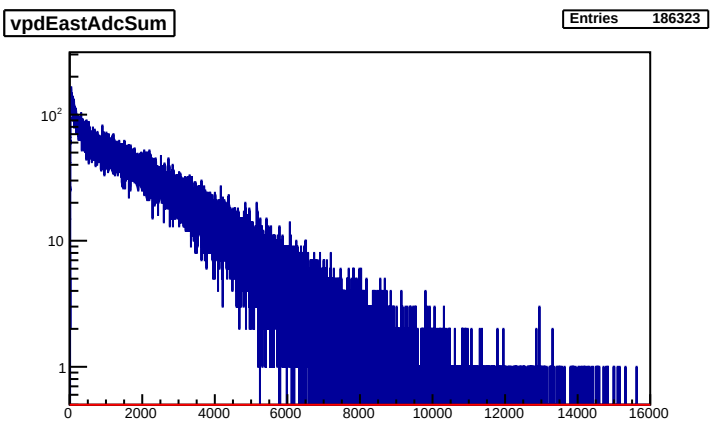

bbcLargeWestTacMax
Entries 209509
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

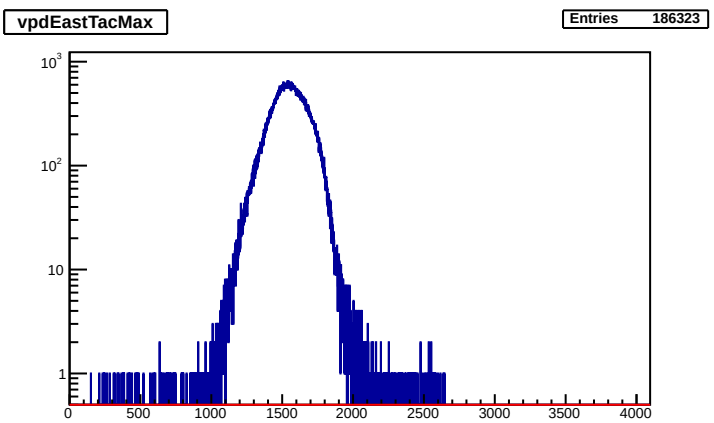

vpdEastAdcSumVsSimu
Entries 0

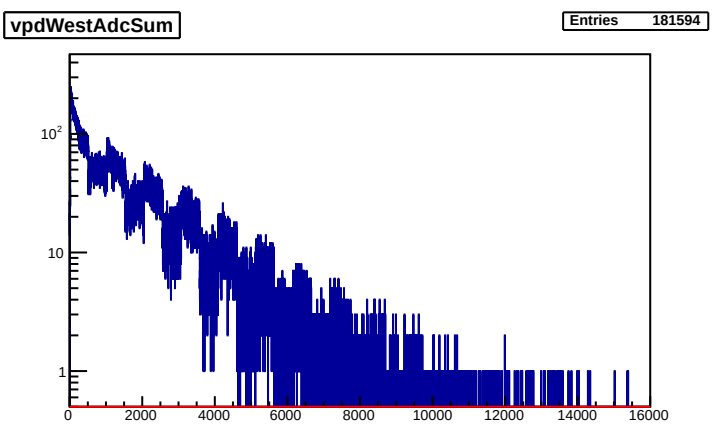

vpdEastTacMaxVsSimu
Entries 0

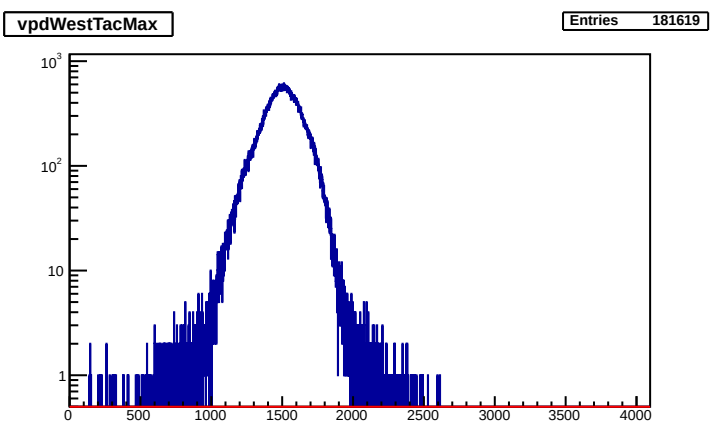

vpdWestAdcSumVsSimu
Entries 0

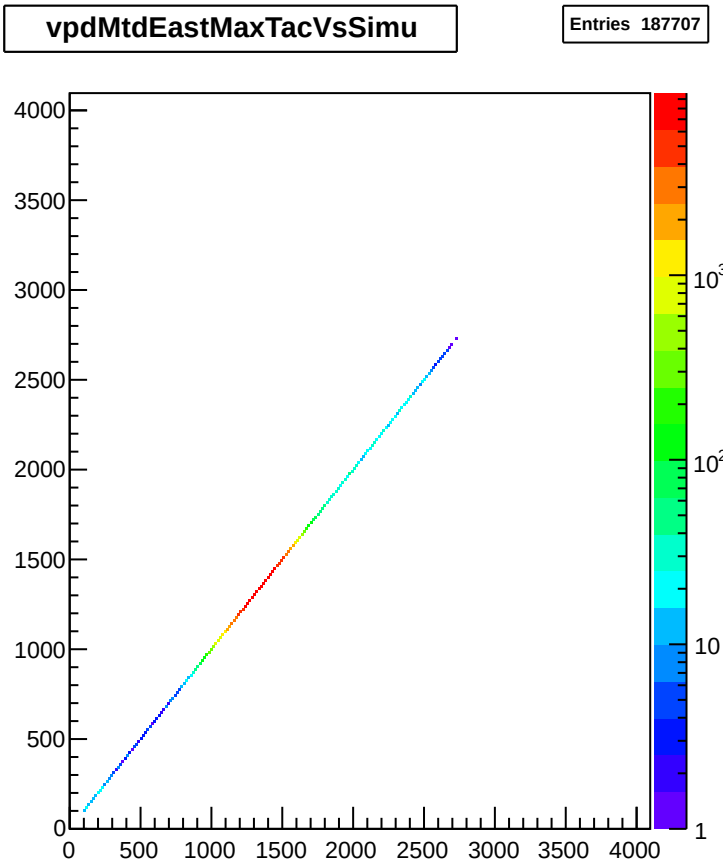

vpdWestTacMaxVsSimu
Entries 0

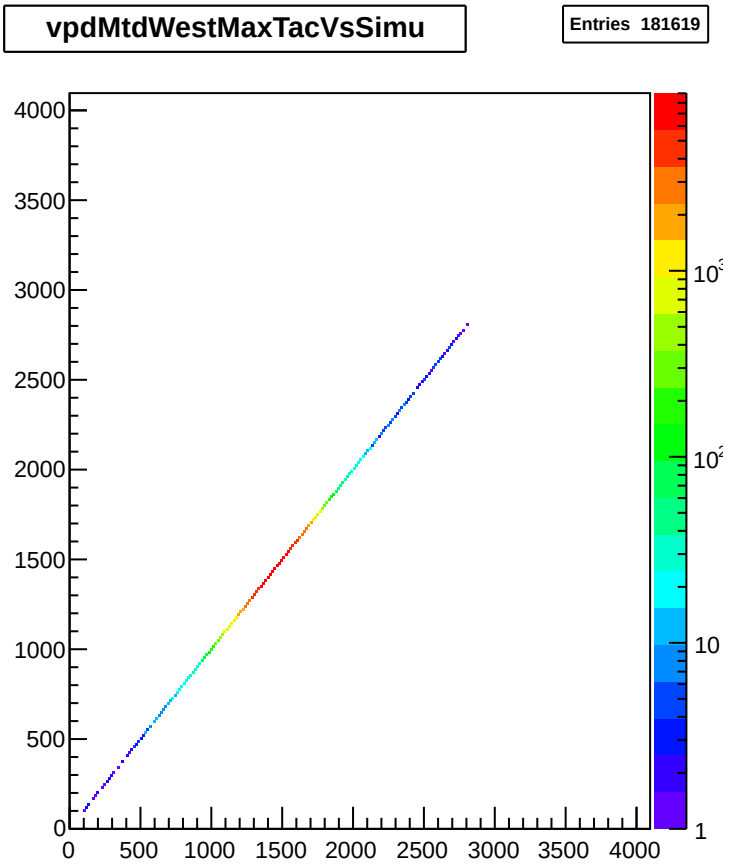

vpdEastAdcSum
Entries 186323

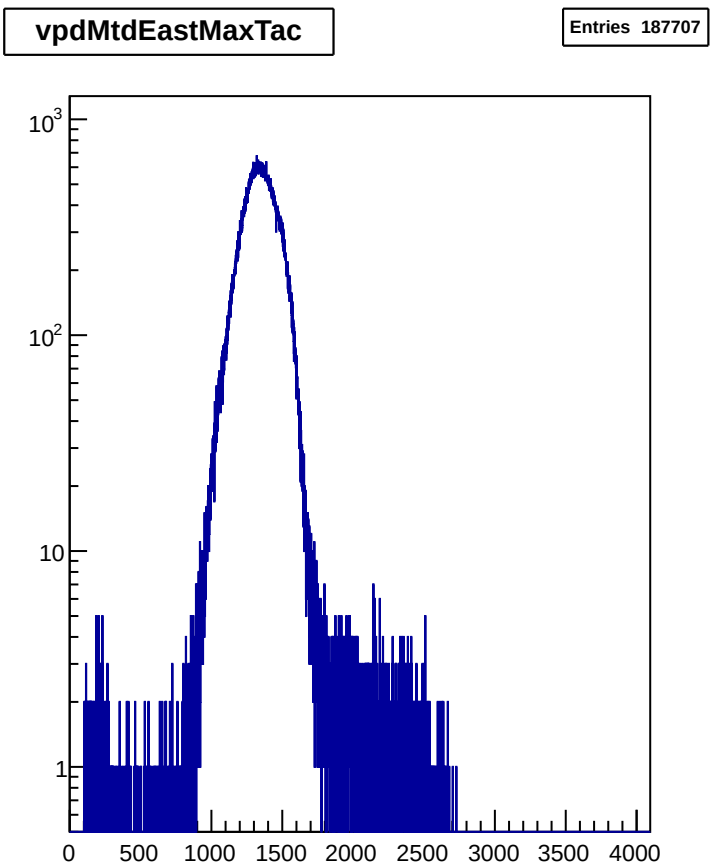

vpdEastTacMax
Entries 186323

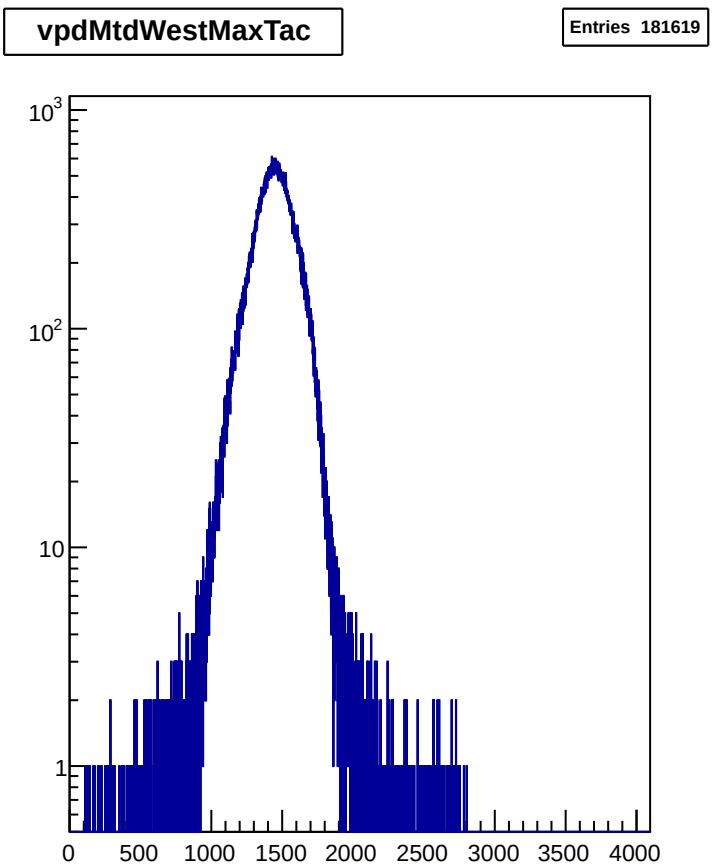

vpdWestAdcSum
Entries 181594

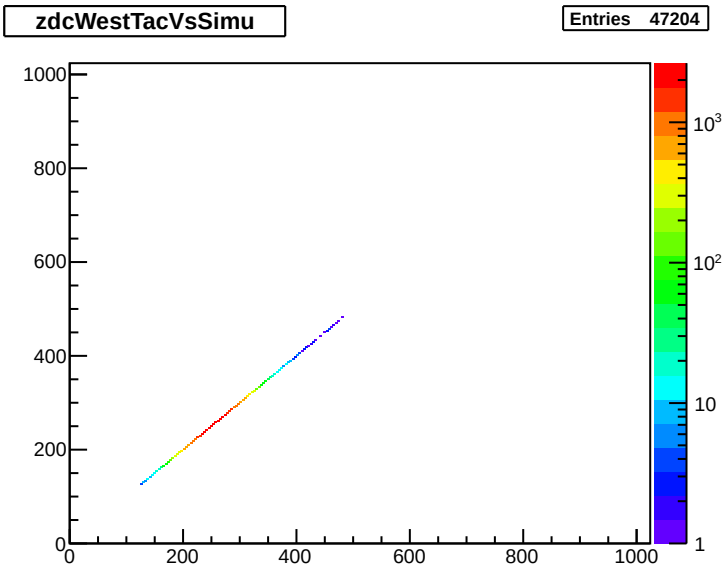

vpdWestTacMax
Entries 181619

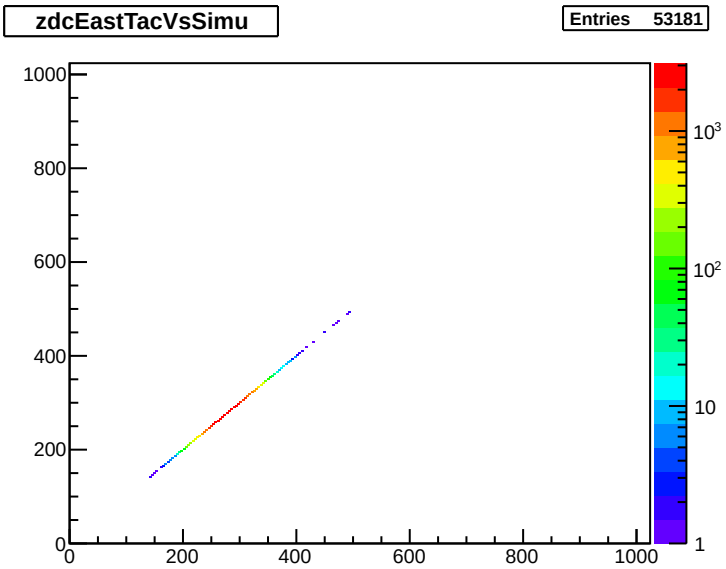

vpdMtdEastMaxTacVsSimu
Entries 187707
0
500
1000
1500
2000
2500
3000
3500
4000
1
10
10²
10³

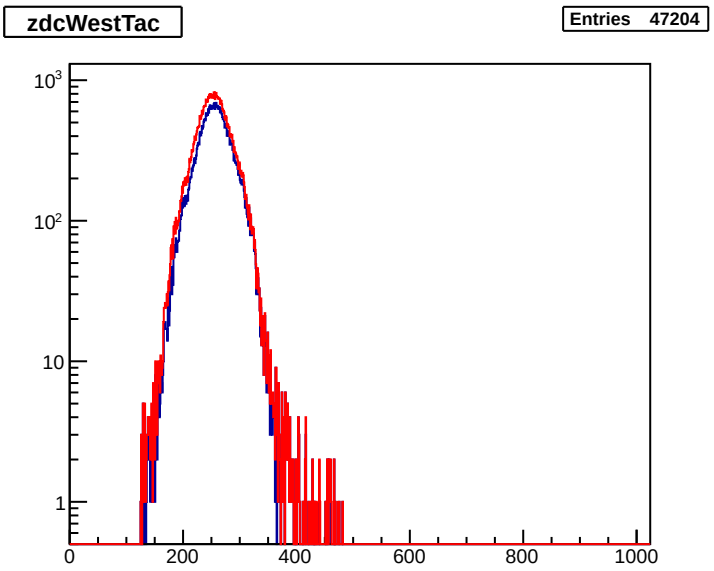

vpdMtdWestMaxTacVsSimu
Entries 181619
0
500
1000
1500
2000
2500
3000
3500
4000
1
10
10²
10³

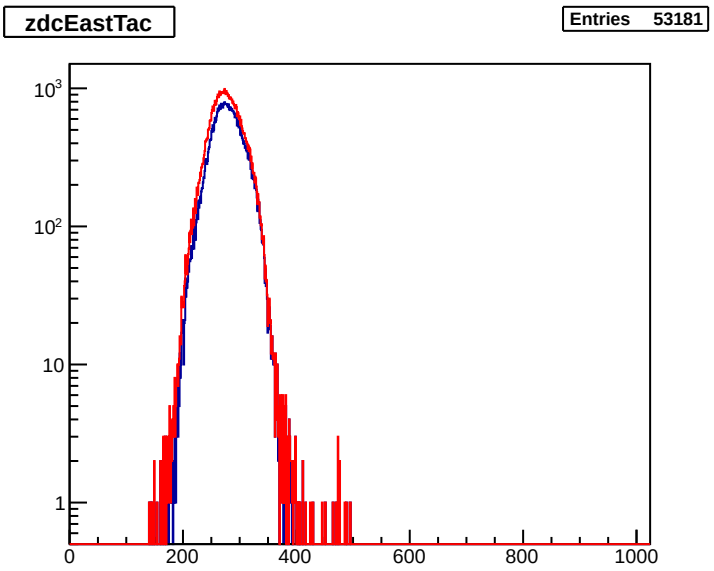

vpdMtdEastMaxTac
Entries 187707
1
10
10²
10³
0
500
1000
1500
2000
2500
3000
3500
4000

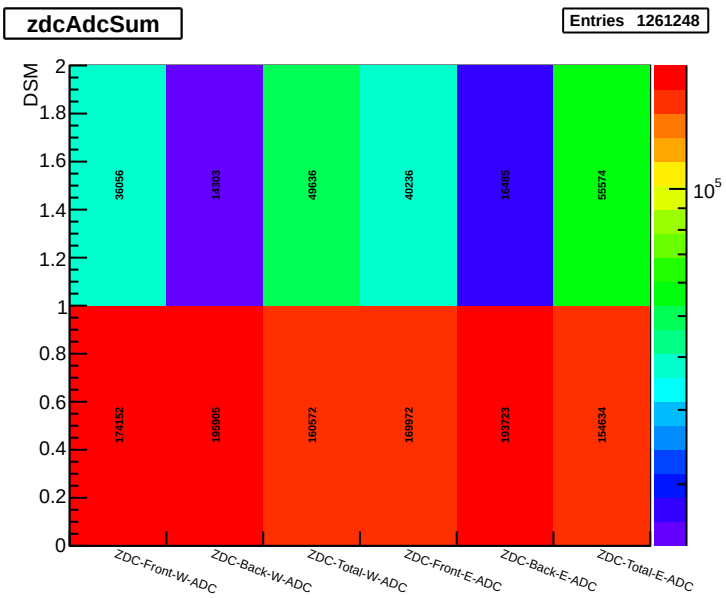

vpdMtdWestMaxTac
Entries 181619
1
10
10²
10³
0
500
1000
1500
2000
2500
3000
3500
4000

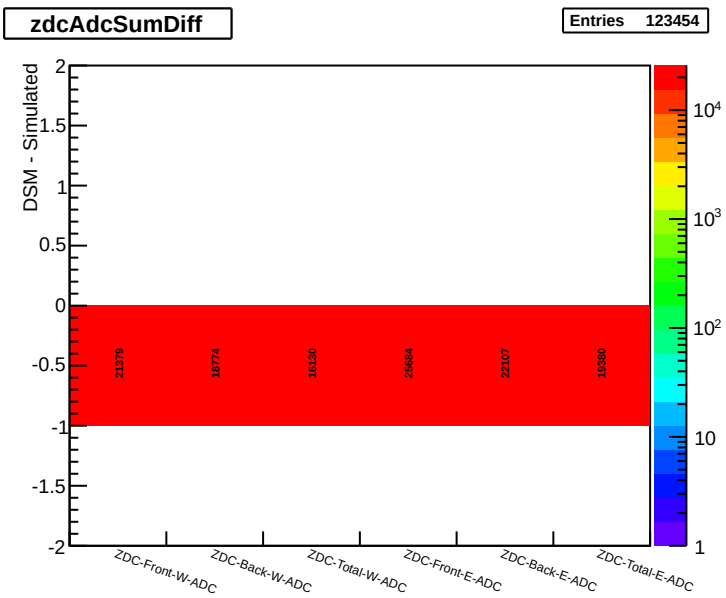

zdcWestTacVsSimu
Entries 47204

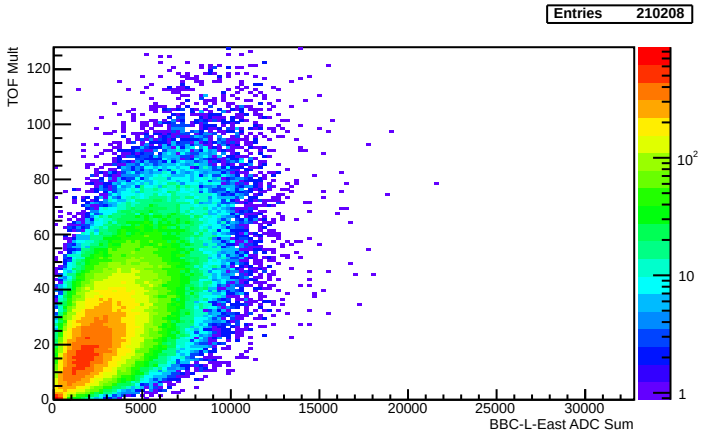

zdcEastTacVsSimu
Entries 53181

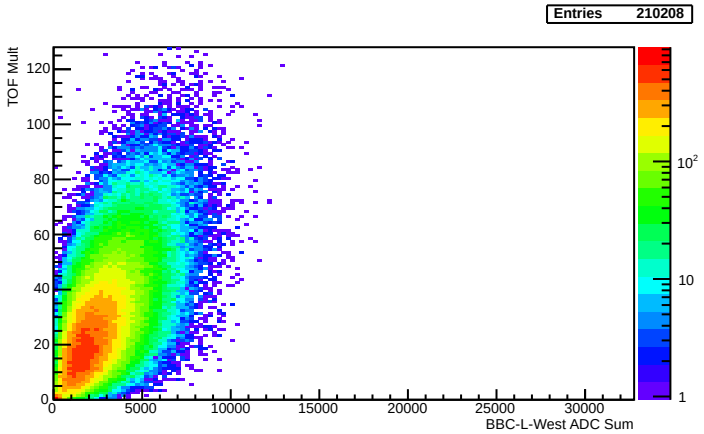

zdcWestTac
Entries 47204

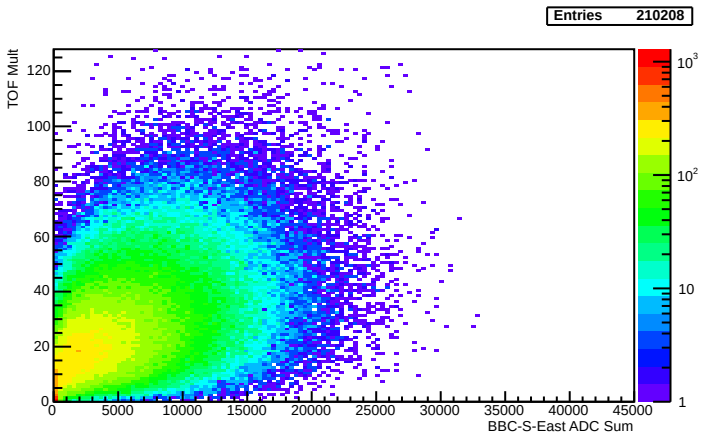

zdcEastTac
Entries 53181

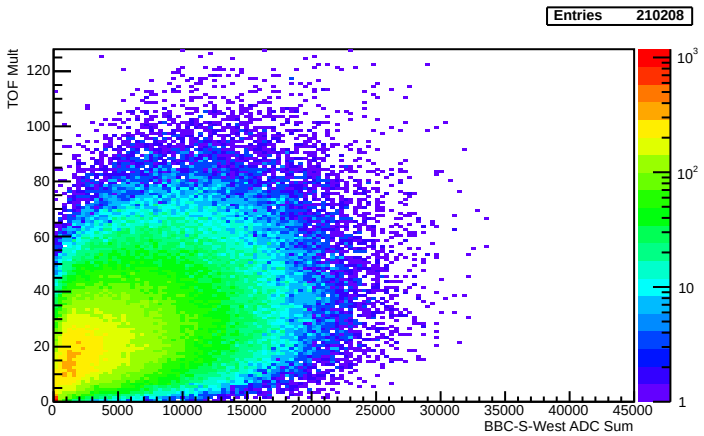

zdcAdcSum
Entries 1261248
DSM
36056
14303
49636
40236
16465
55574
174152
195905
160572
169972
193723
154634
ZDC-Front-W-ADC
ZDC-Back-W-ADC
ZDC-Total-W-ADC
ZDC-Front-E-ADC
ZDC-Back-E-ADC
ZDC-Total-E-ADC

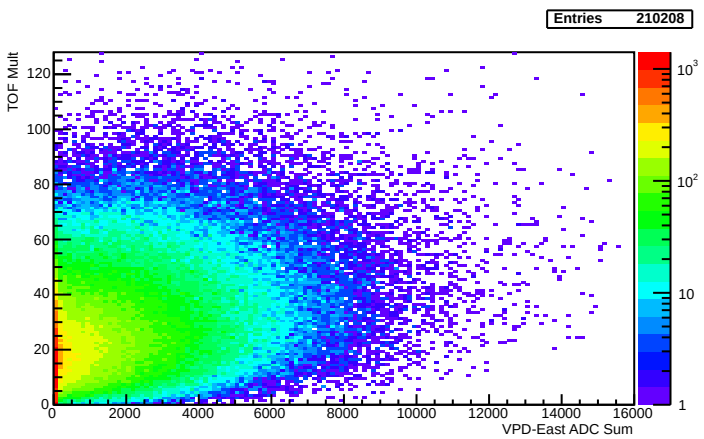

zdcAdcSumDiff
Entries 123454
DSM - Simulated
21379
18774
16130
25684
22107
19380
ZDC-Front-W-ADC
ZDC-Back-W-ADC
ZDC-Total-W-ADC
ZDC-Front-E-ADC
ZDC-Back-E-ADC
ZDC-Total-E-ADC

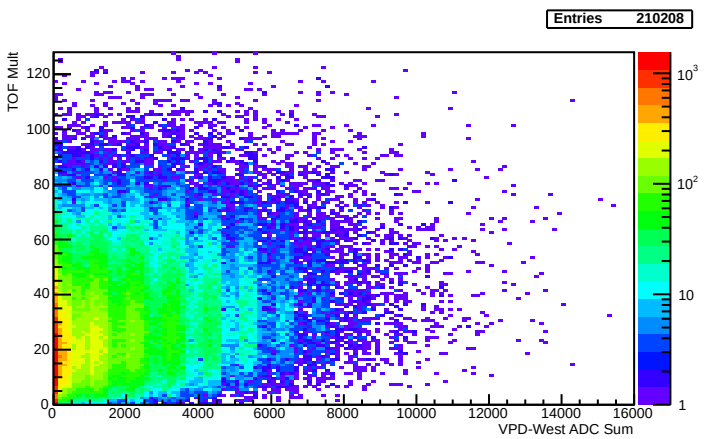

Entries 210208
TOF Mult
BBC-L-East ADC Sum

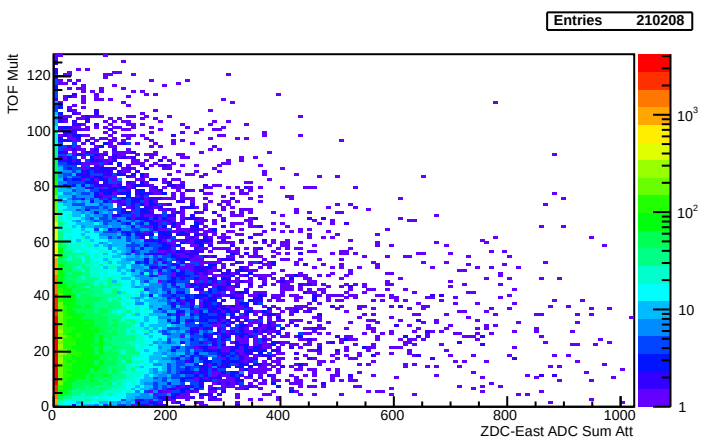

Entries 210208
TOF Mult
BBC-L-West ADC Sum

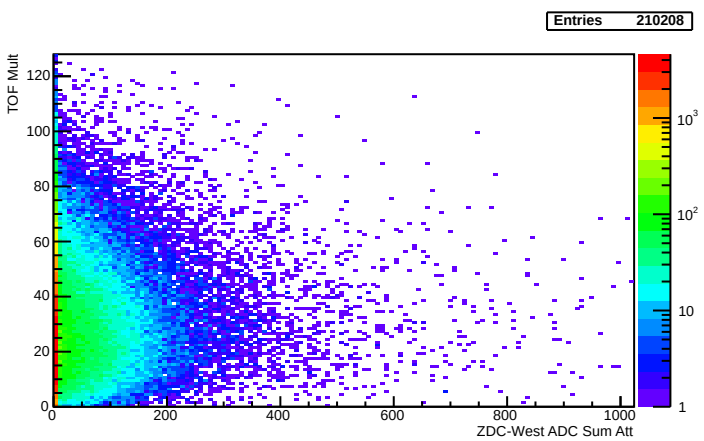

Entries 210208
TOF Mult
BBC-S-East ADC Sum

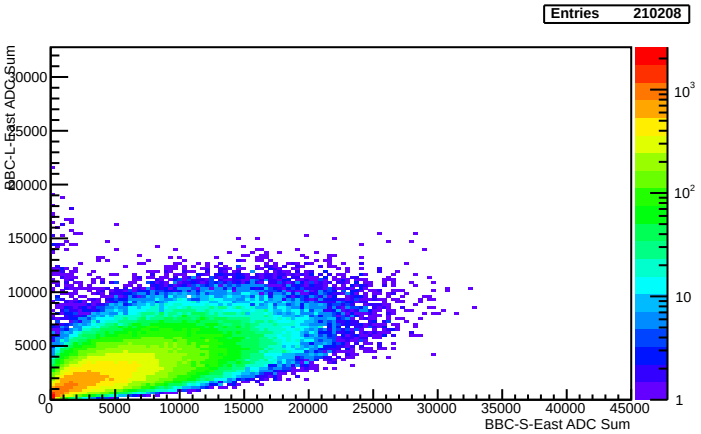

Entries 210208
TOF Mult
BBC-S-West ADC Sum

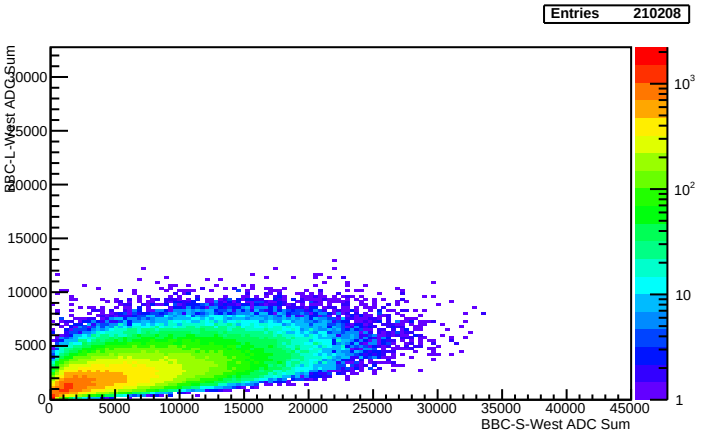

Entries 210208
TOF Mult
VPD-East ADC Sum

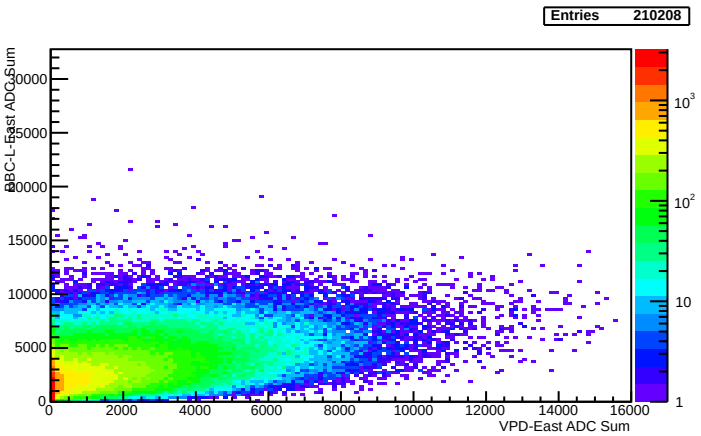

Entries 210208
TOF Mult
VPD-West ADC Sum

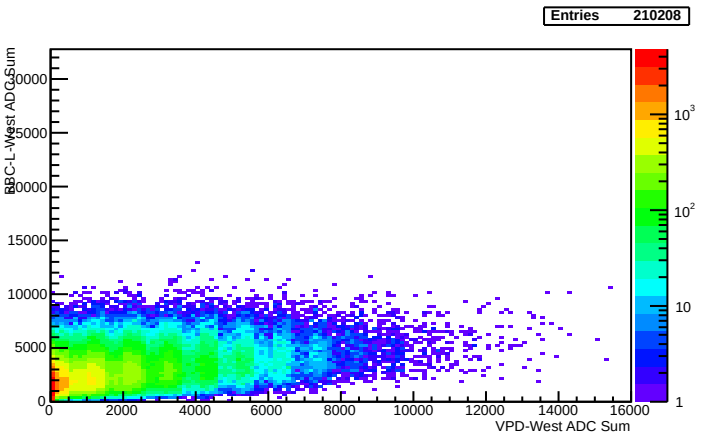

Entries 210208
TOF Mult
ZDC-East ADC Sum Att

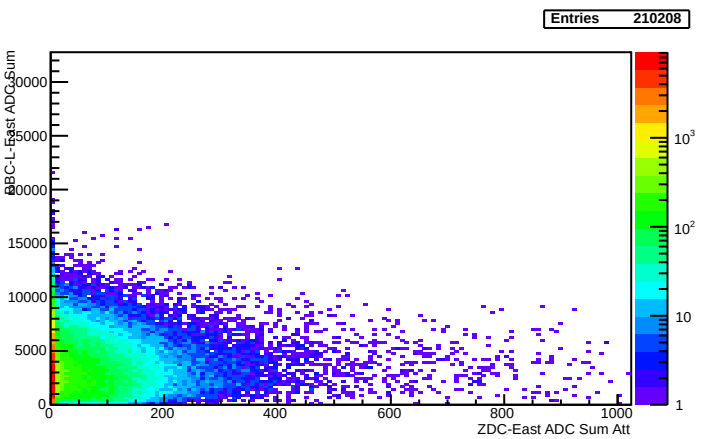

Entries 210208
TOF Mult
ZDC-West ADC Sum Att


Entries 210208
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 210208
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 210208
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 210208
BBC-L-West ADC Sum
VPD-West ADC Sum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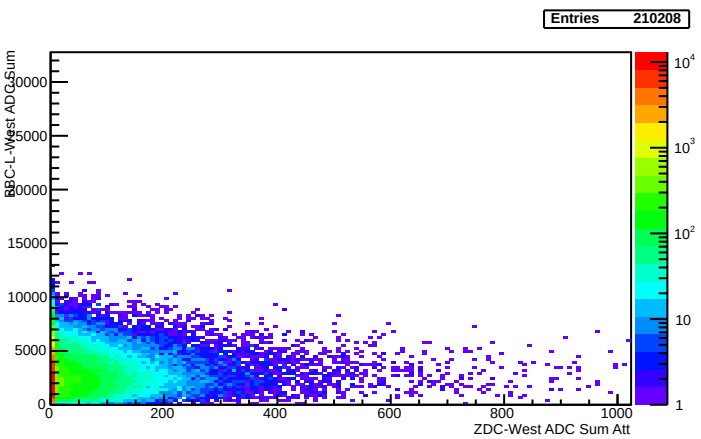
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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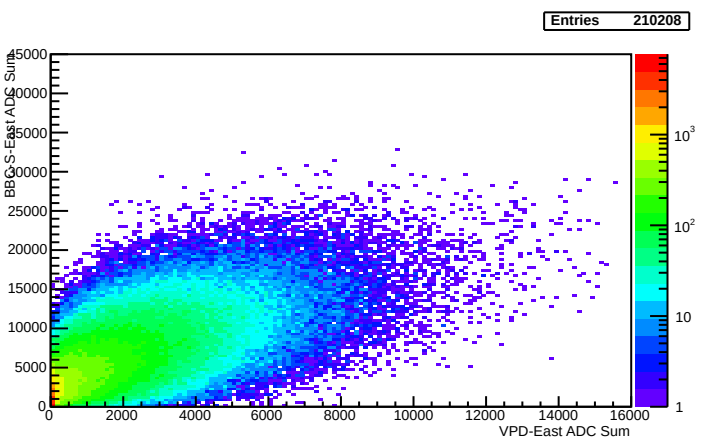
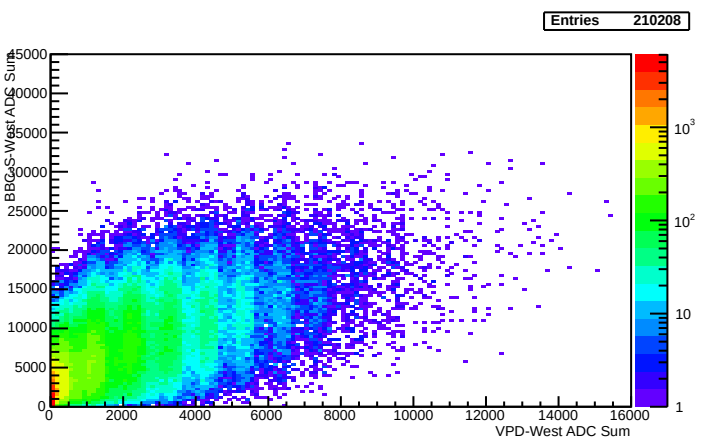
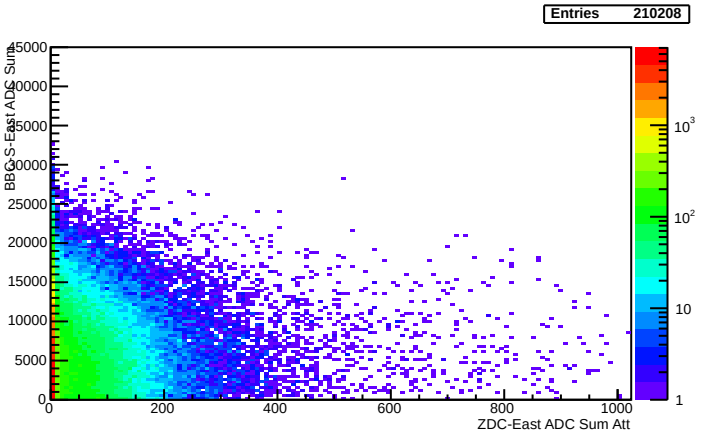
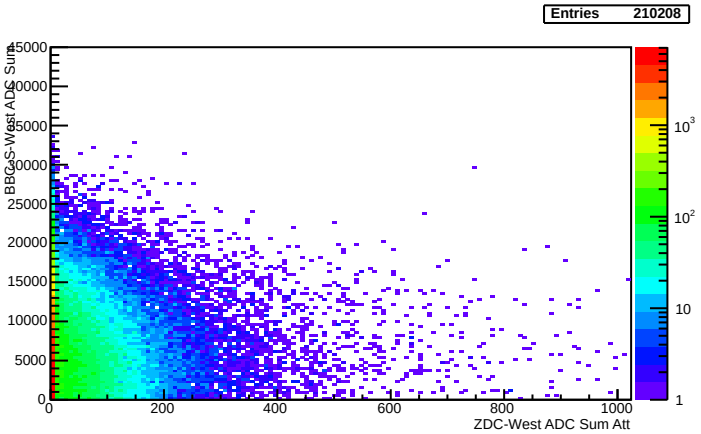
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 210208
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 210208
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 210208
BBC-S-East ADC Sum
ZDC-East ADC Sum Att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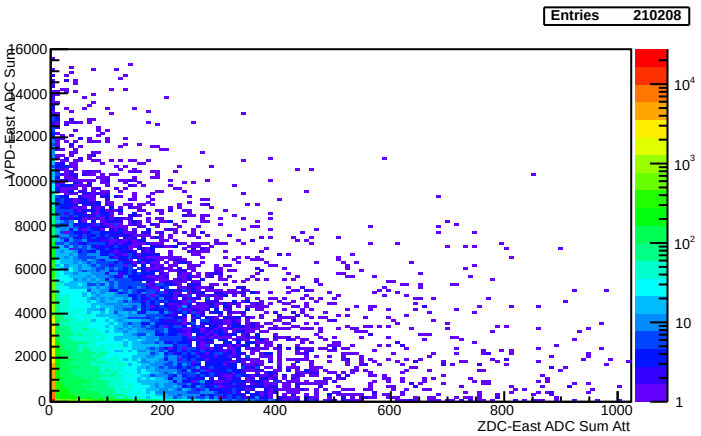
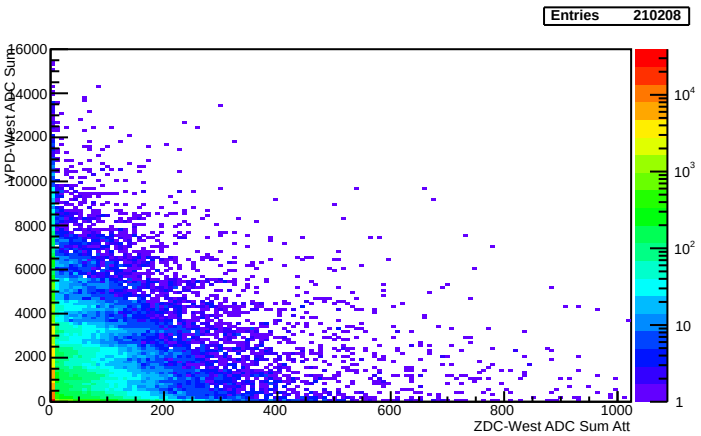
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 210208
VPD-East ADC Sum
ZDC-East ADC Sum Att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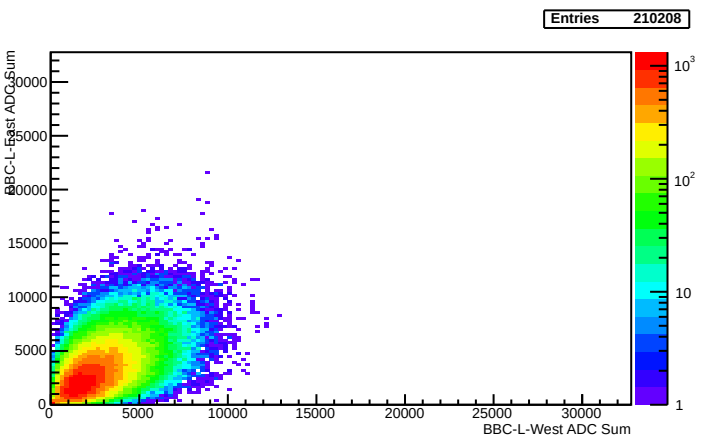
VPD-West ADC Sum
ZDC-West ADC Sum Att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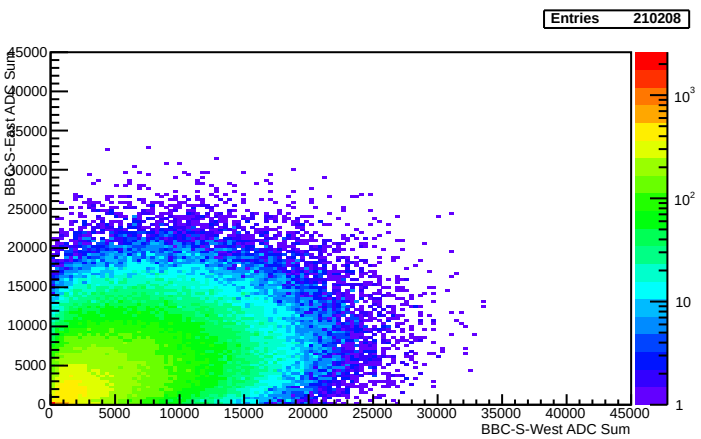
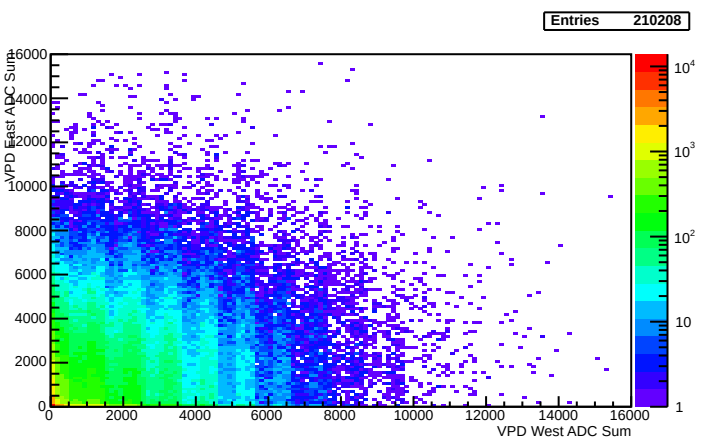
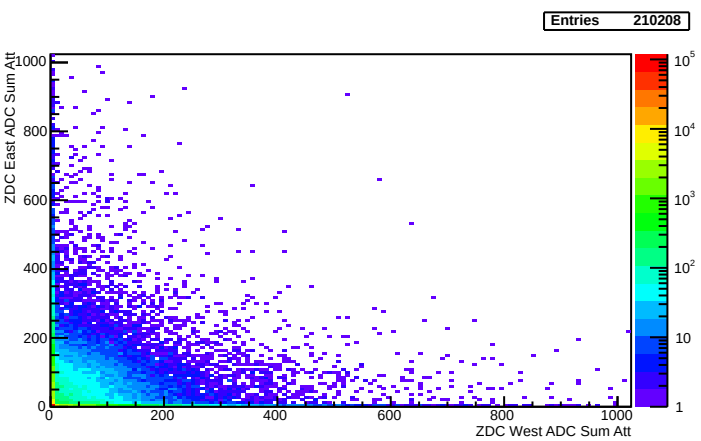
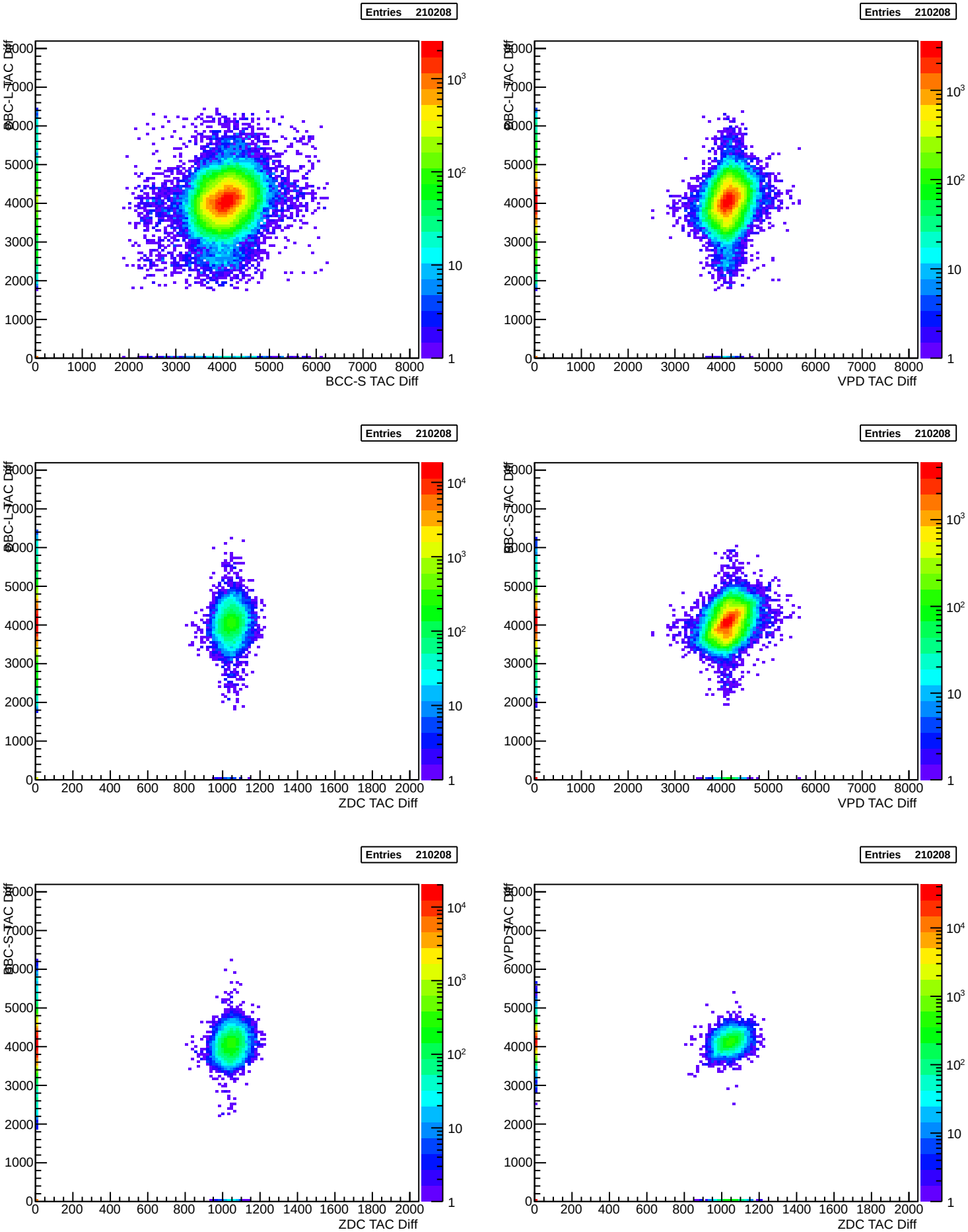
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 210208
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 210208
VPD East ADC Sum
VPD West ADC Sum


Entries 210208
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 210208
BBC-L TAC Diff
BCC-S TAC Diff
Entries 210208
BBC-L TAC Diff
VPD TAC Diff
Entries 210208
BBC-L TAC Diff
ZDC TAC Diff
Entries 210208
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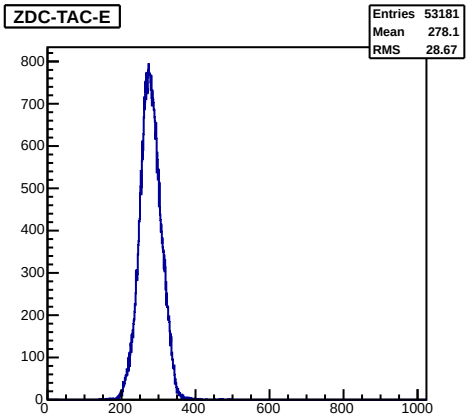
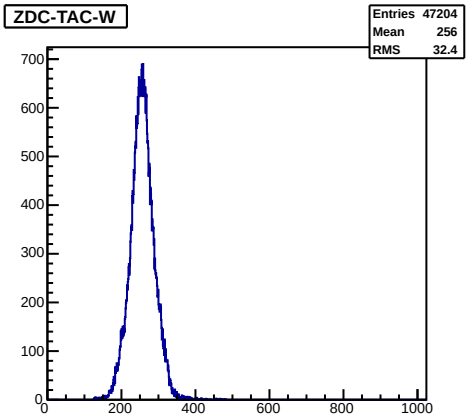
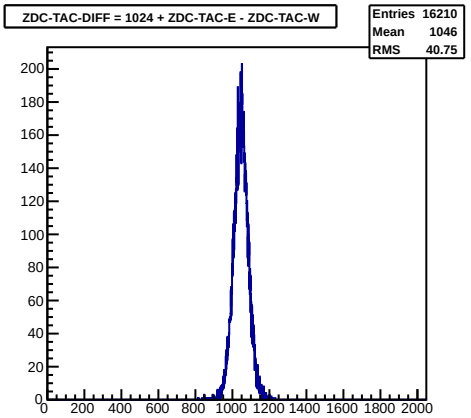
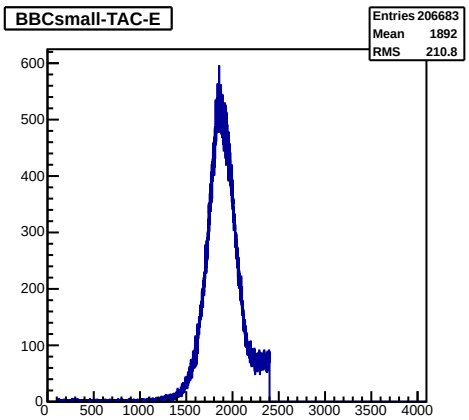
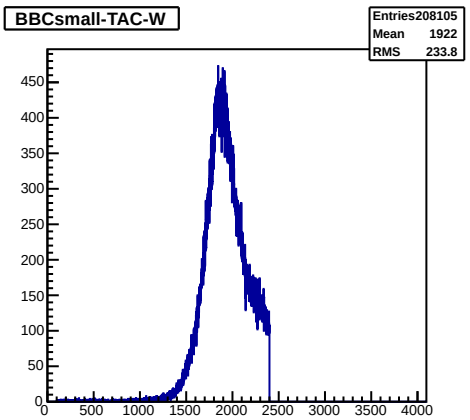
VPD TAC Diff
Entries 210208
BBC-S TAC Diff
ZDC TAC Diff
Entries 210208
VPD TAC Diff
ZDC TAC Diff

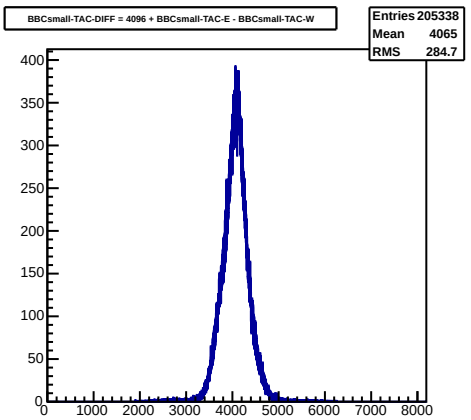

ZDC-TAC-E
Entries 53181
Mean 278.1
RMS 28.67

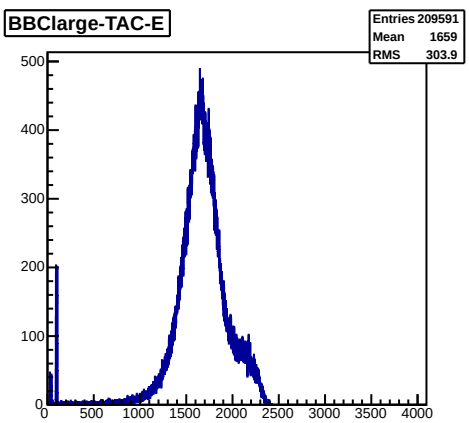

ZDC-TAC-W
Entries 47204
Mean 256
RMS 32.4

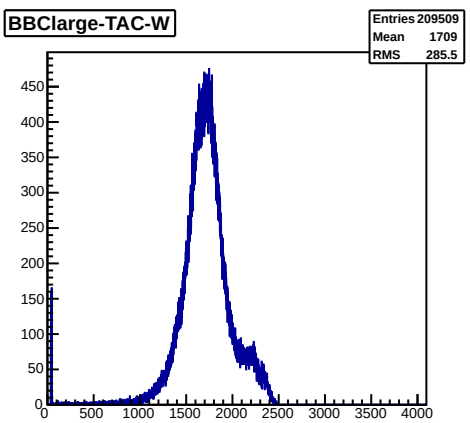

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 16210
Mean 1046
RMS 40.75

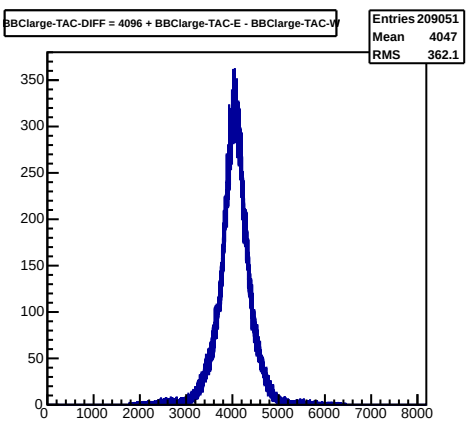

BBCsmall-TAC-E
Entries 206683
Mean 1892
RMS 210.8

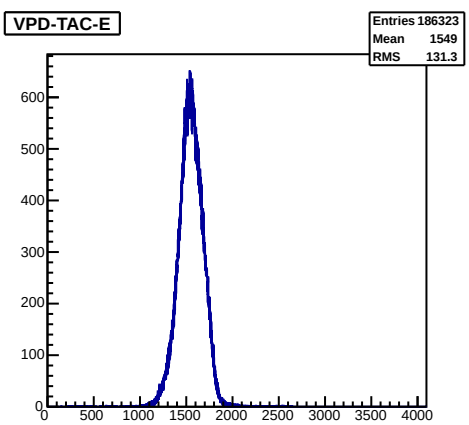

BBCsmall-TAC-W
Entries 208105
Mean 1922
RMS 233.8

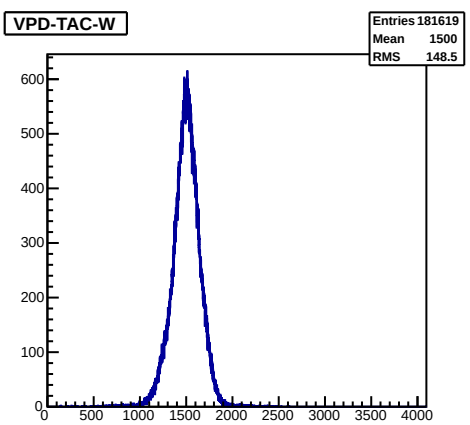

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 205338
Mean 4065
RMS 284.7

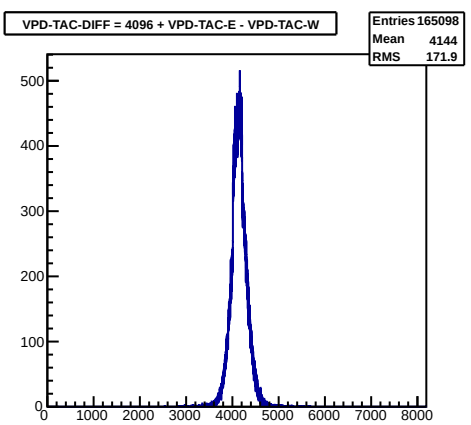

BBClarge-TAC-E
Entries 209591
Mean 1659
RMS 303.9

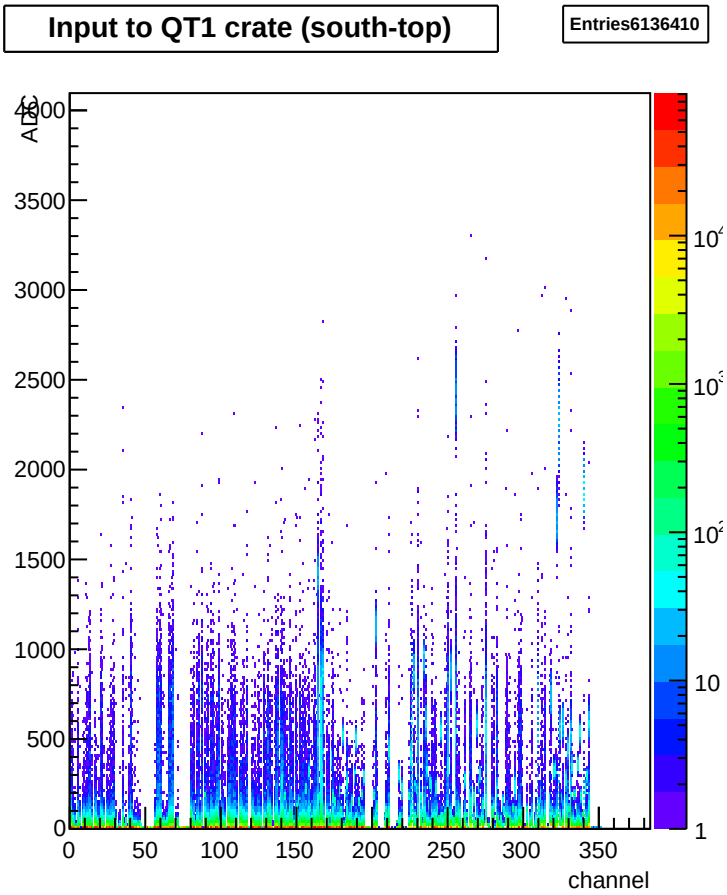

BBClarge-TAC-W
Entries 209509
Mean 1709
RMS 285.5

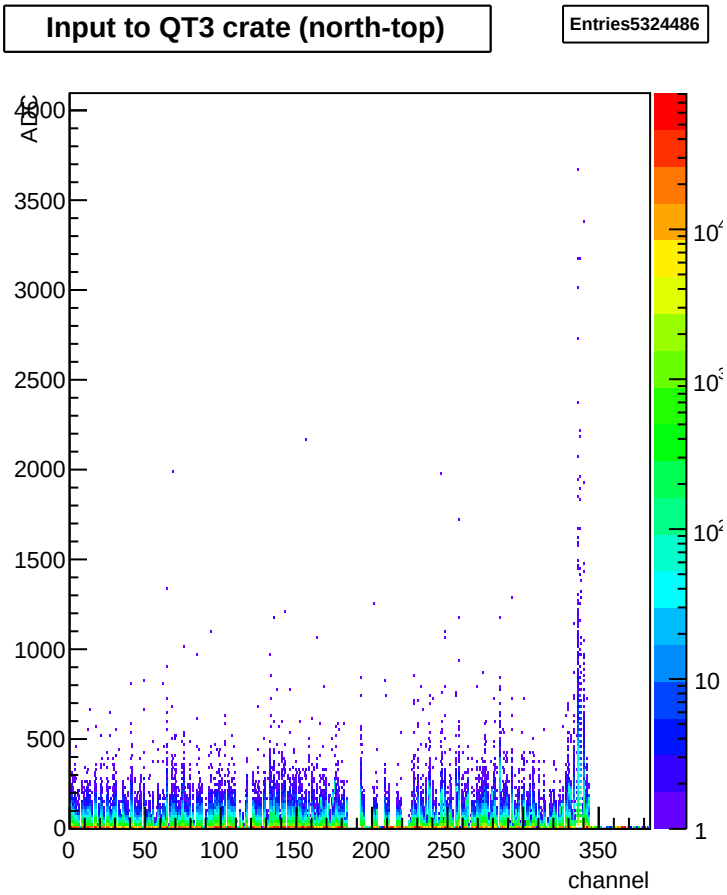

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 209051
Mean 4047
RMS 362.1

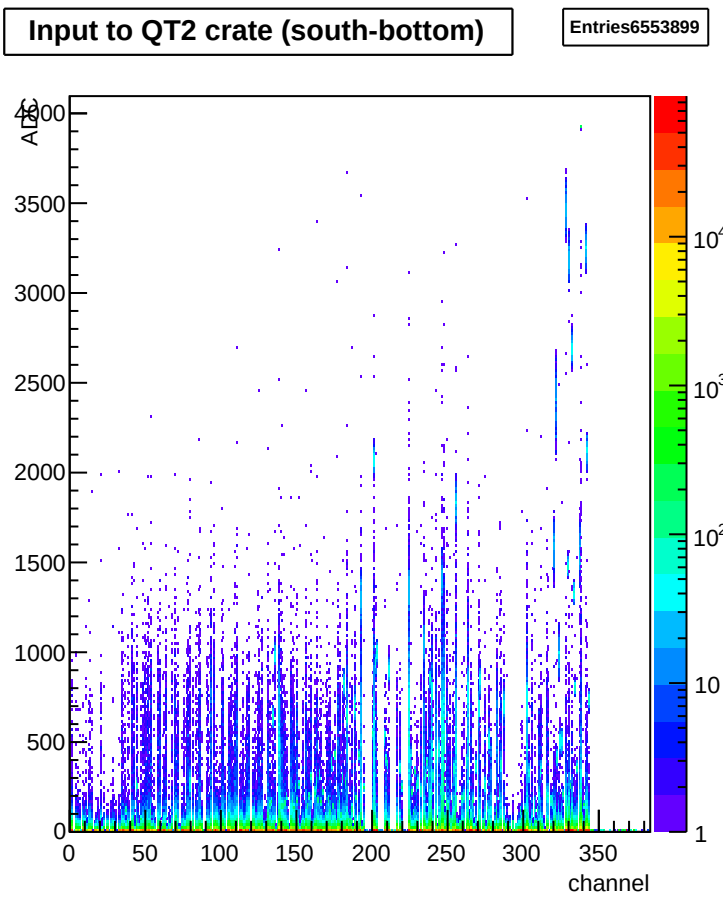

VPD-TAC-E
Entries 186323
Mean 1549
RMS 131.3

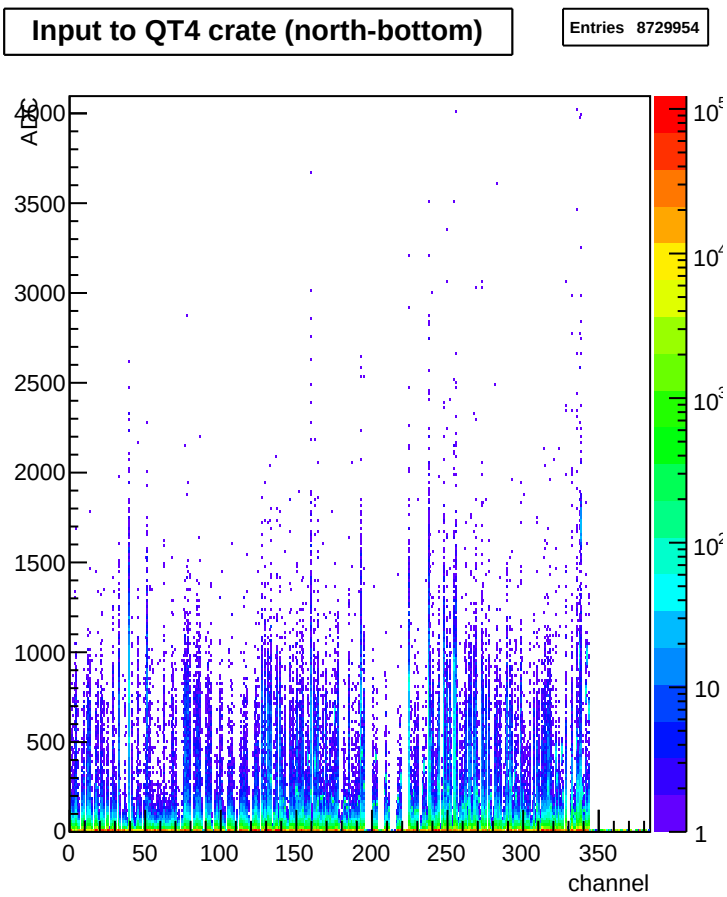

VPD-TAC-W
Entries 181619
Mean 1500
RMS 148.5

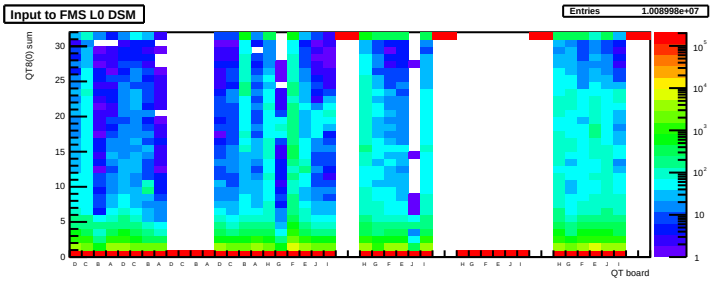

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 165098
Mean 4144
RMS 171.9

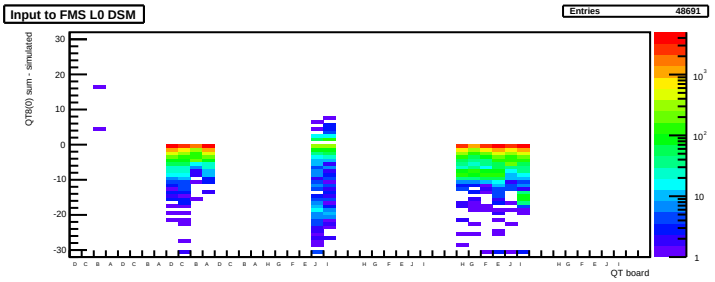

Input to QT1 crate (south-top)
Entries6136410
ADC
channel

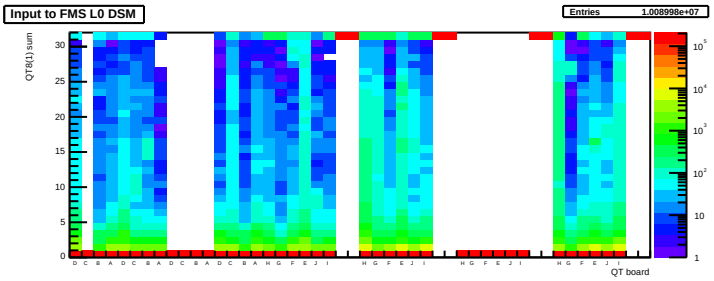

Input to QT3 crate (north-top)
Entries5324486
ADC
channel

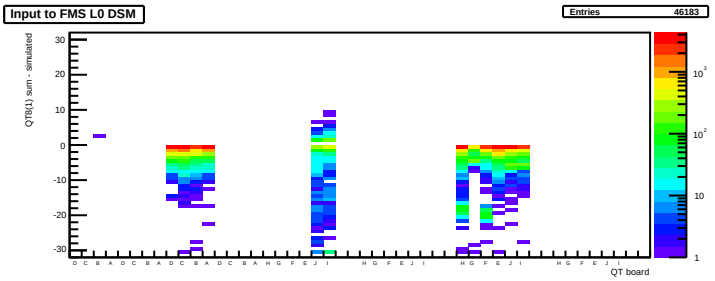

Input to QT2 crate (south-bottom)
Entries6553899
ADC
channel

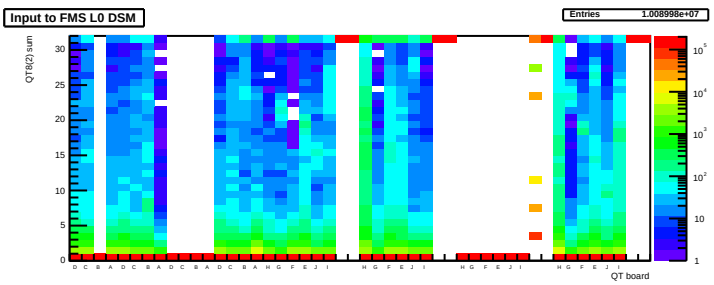

Input to QT4 crate (north-bottom)
Entries 8729954
ADC
channel

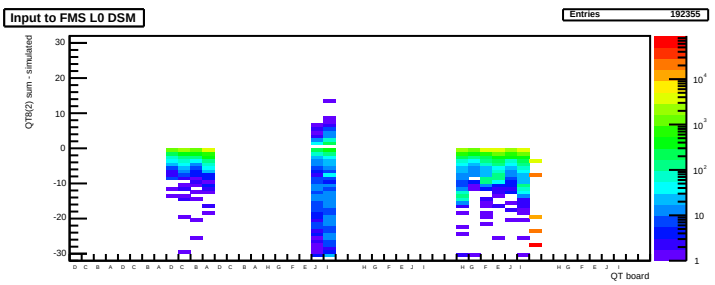

Input to FMS L0 DSM
Entries 1.008998e+07
QT8(0) sum
QT board

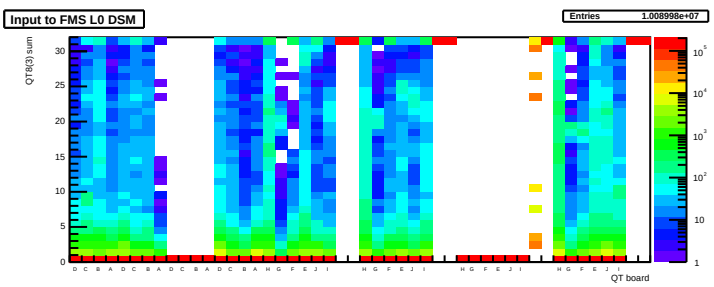

Input to FMS L0 DSM
Entries 48691
QT8(0) sum - simulated
QT board

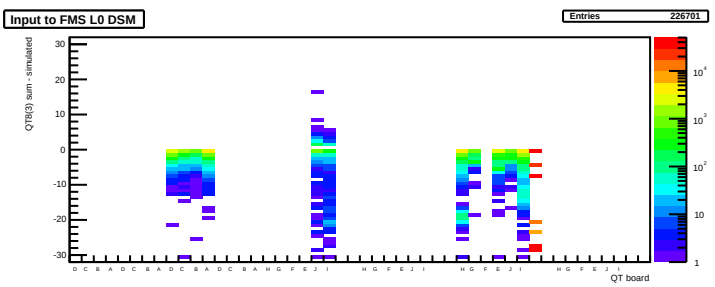

Input to FMS L0 DSM
Entries 1.008998e+07
QT8(1) sum
QT board

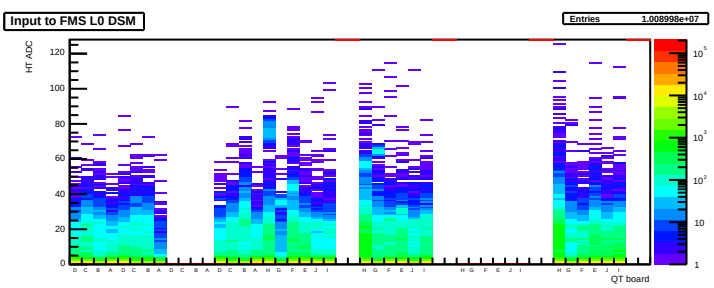

Input to FMS L0 DSM
Entries 46183
QT8(1) sum - simulated
QT board

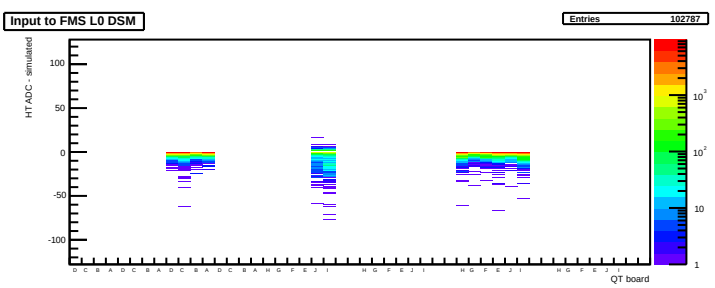

Input to FMS L0 DSM
Entries 1.008998e+07
QT8(2) sum
QT board

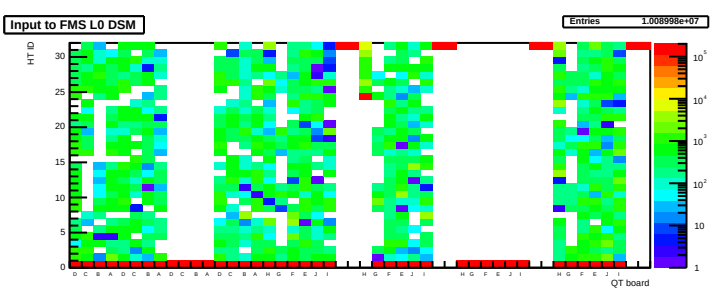

Input to FMS L0 DSM
Entries 192355
QT8(2) sum - simulated
QT board

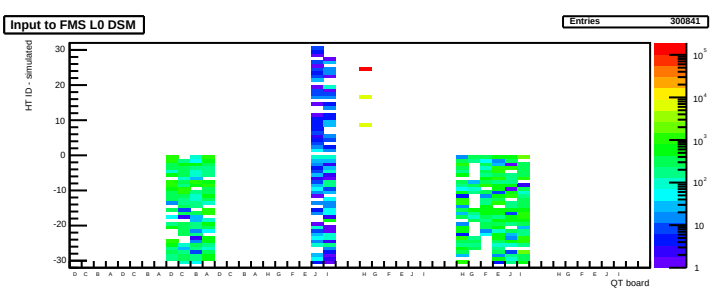

Input to FMS L0 DSM
Entries 1.008998e+07
QT8(3) sum
QT board

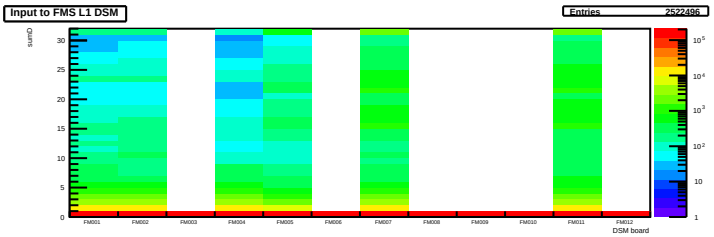

Input to FMS L0 DSM
Entries 226701
QT8(3) sum - simulated
QT board

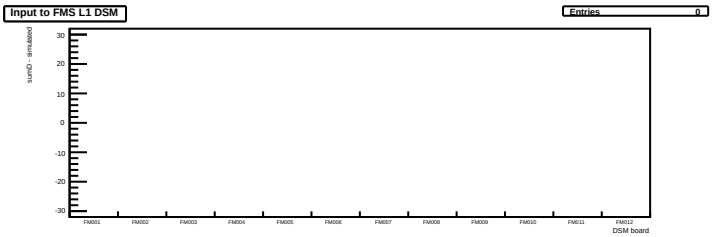

Input to FMS L0 DSM
Entries 1.008998e+07
HT ADC
QT board

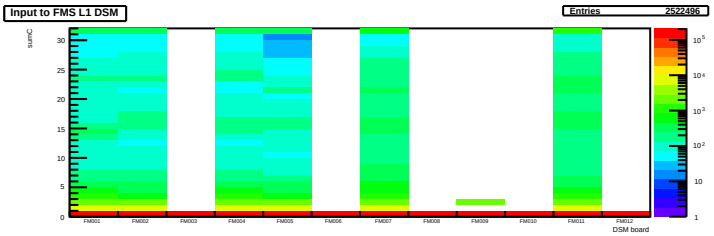

Input to FMS L0 DSM
Entries 102787
HT ADC - simulated
QT board

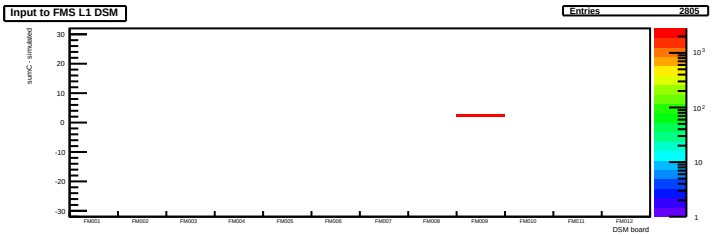

Input to FMS L0 DSM
Entries 1.008998e+07
HT ID
QT board

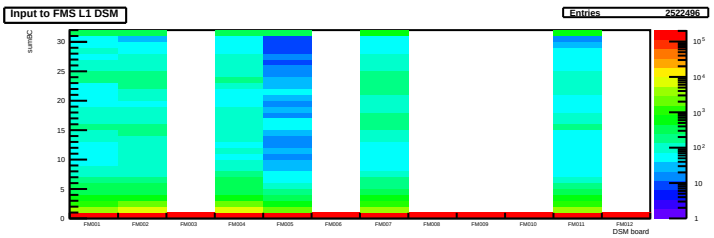

Input to FMS L0 DSM
Entries 300841
HT ID - simulated
QT board

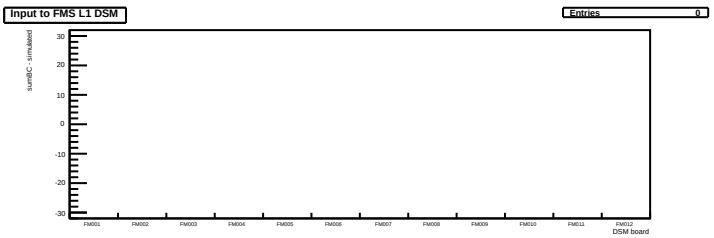

Input to FMS L1 DSM
Entries 2522496
sumD
DSM board

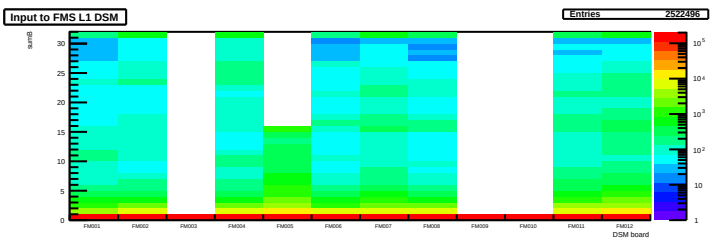

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

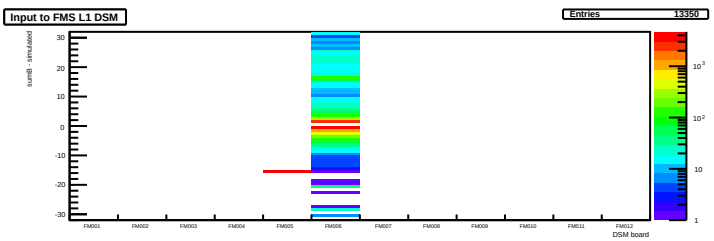

Input to FMS L1 DSM
Entries 2522496
sumC
DSM board

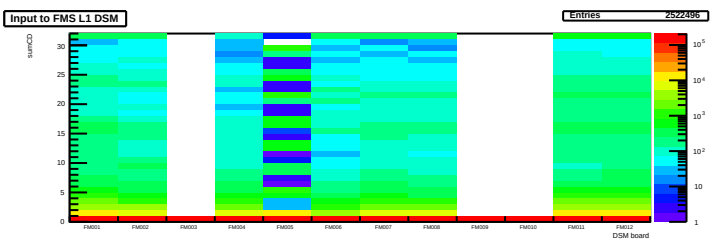

Input to FMS L1 DSM
Entries 2805
sumC - simulated
DSM board

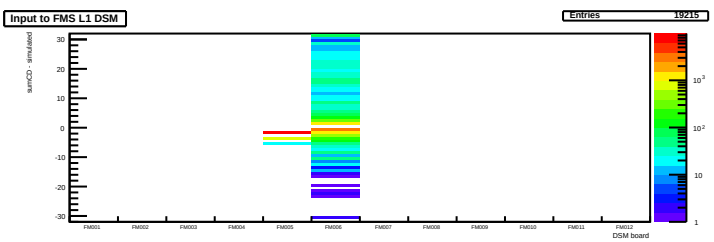

Input to FMS L1 DSM
Entries 2522496
sumBC
DSM board

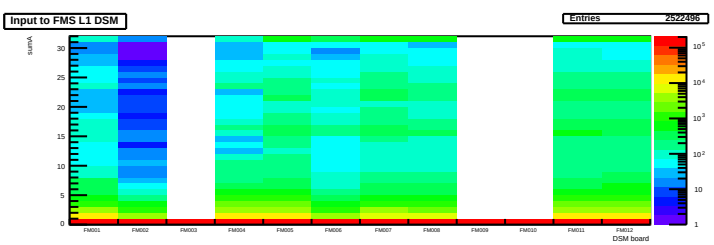

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

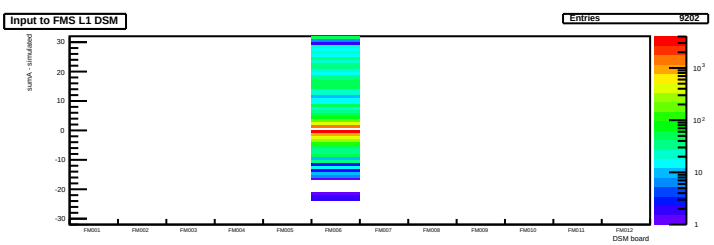

Input to FMS L1 DSM
Entries 2522496
sumB
DSM board

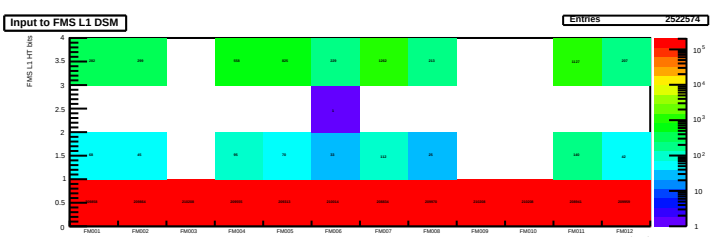

Input to FMS L1 DSM
Entries 13350
sumB - simulated
DSM board

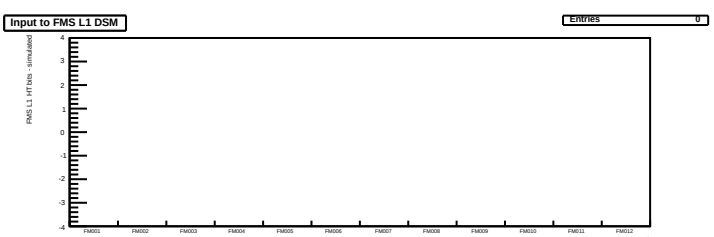

Input to FMS L1 DSM
Entries 2522496
sumCD
DSM board

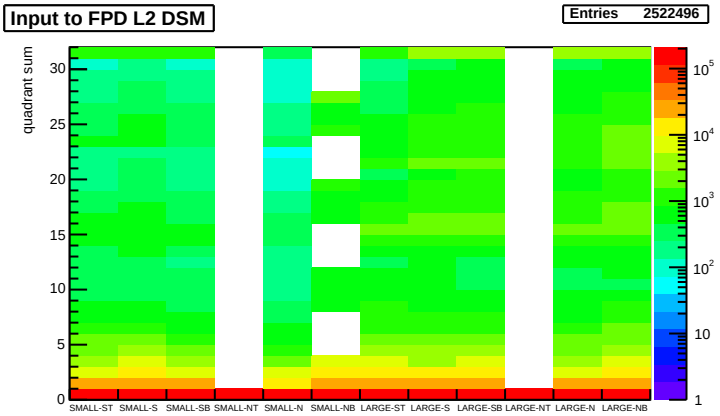

Input to FMS L1 DSM
Entries 19215
sumCD - simulated
DSM board

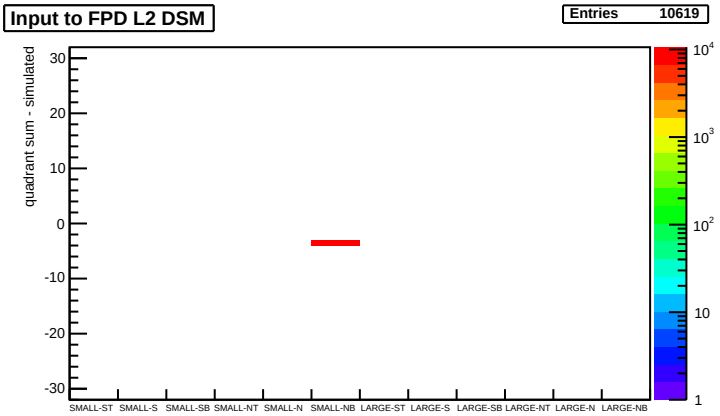

Input to FMS L1 DSM
Entries 2522496
sumA
DSM board

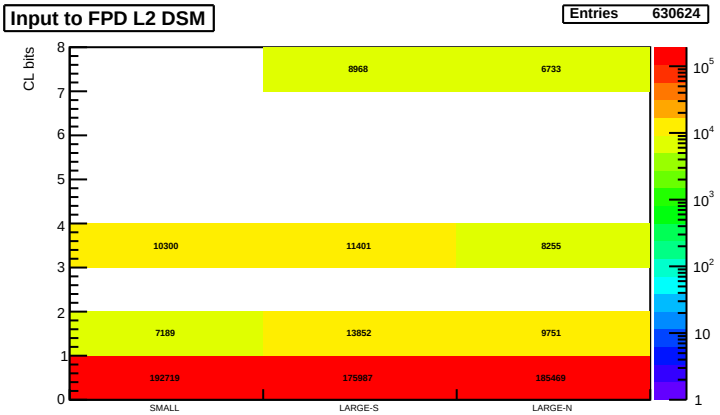

Input to FMS L1 DSM
Entries 9202
sumA - simulated
DSM board

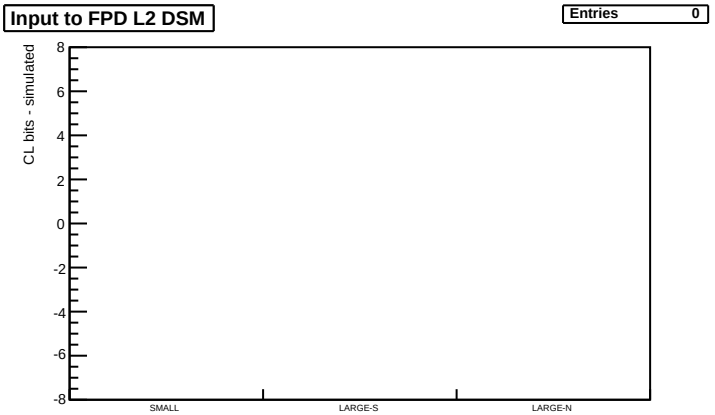

Input to FMS L1 DSM
Entries 2522574
FMS L1 HT bits
DSM board

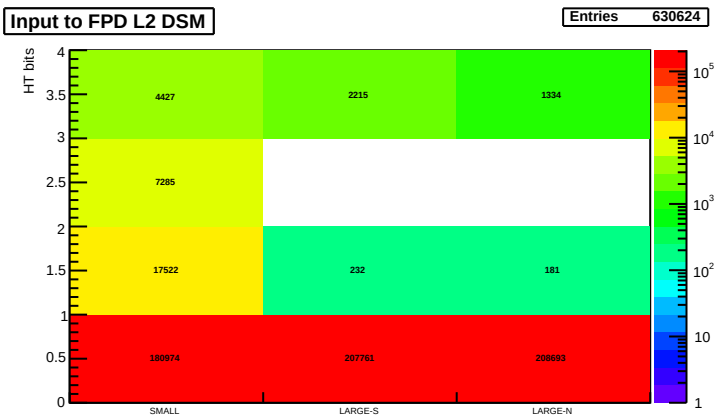

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

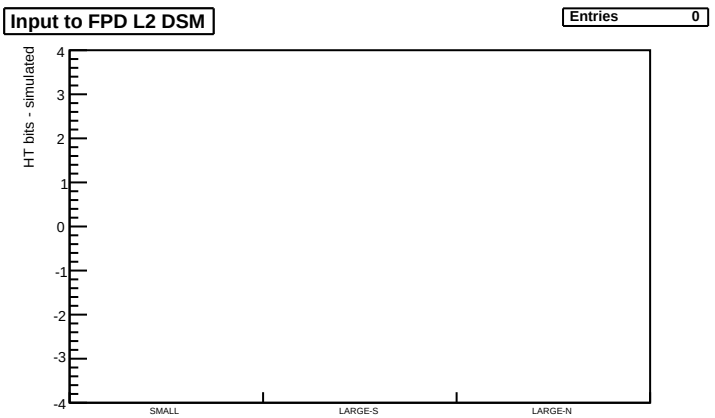

Input to FPD L2 DSM
Entries 2522496
quadrant sum
SMALL-ST SMALL-S SMALL-SB SMALL-NT SMALL-N SMALL-NB LARGE-ST LARGE-S LARGE-SB LARGE-NT LARGE-N LARGE-NB

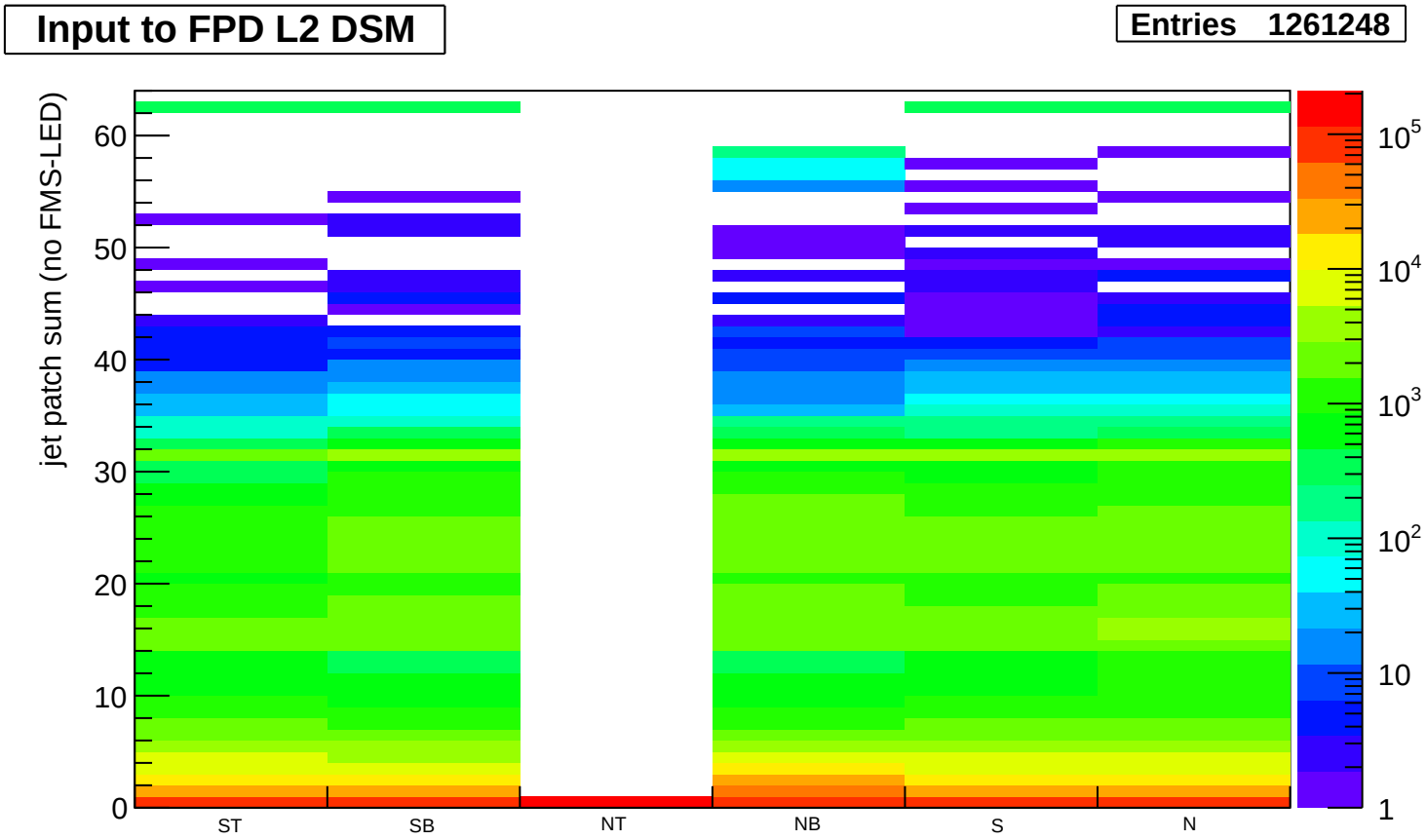

Input to FPD L2 DSM
Entries 10619
quadrant sum - simulated
SMALL-ST SMALL-S SMALL-SB SMALL-NT SMALL-N SMALL-NB LARGE-ST LARGE-S LARGE-SB LARGE-NT LARGE-N LARGE-NB

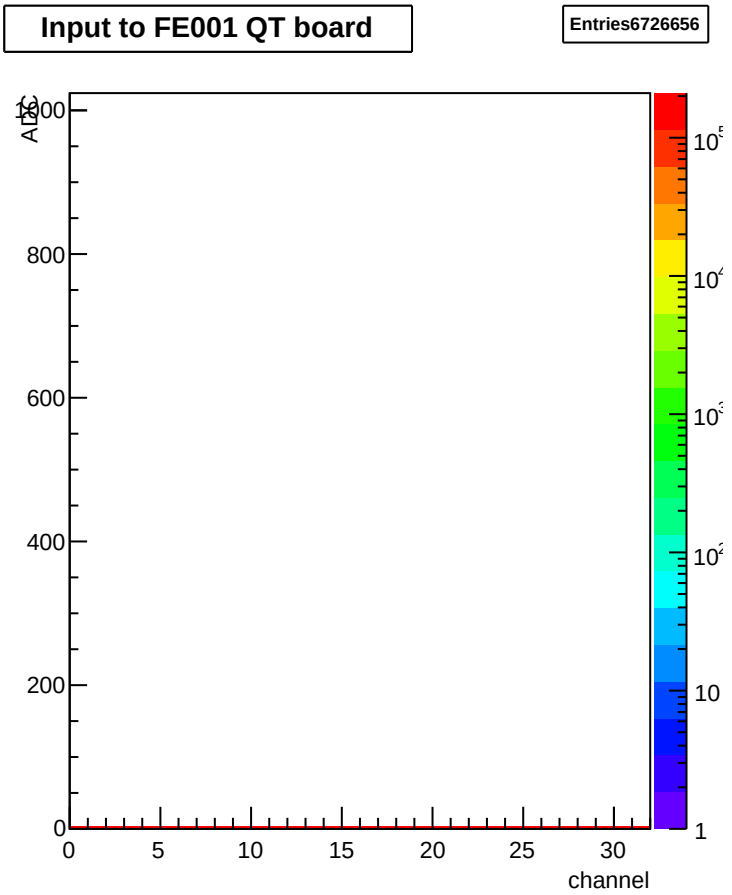

Input to FPD L2 DSM
Entries 630624
CL bits
8968
6733
10300
11401
8255
7189
13852
9751
192719
175987
185469
SMALL
LARGE-S
LARGE-N

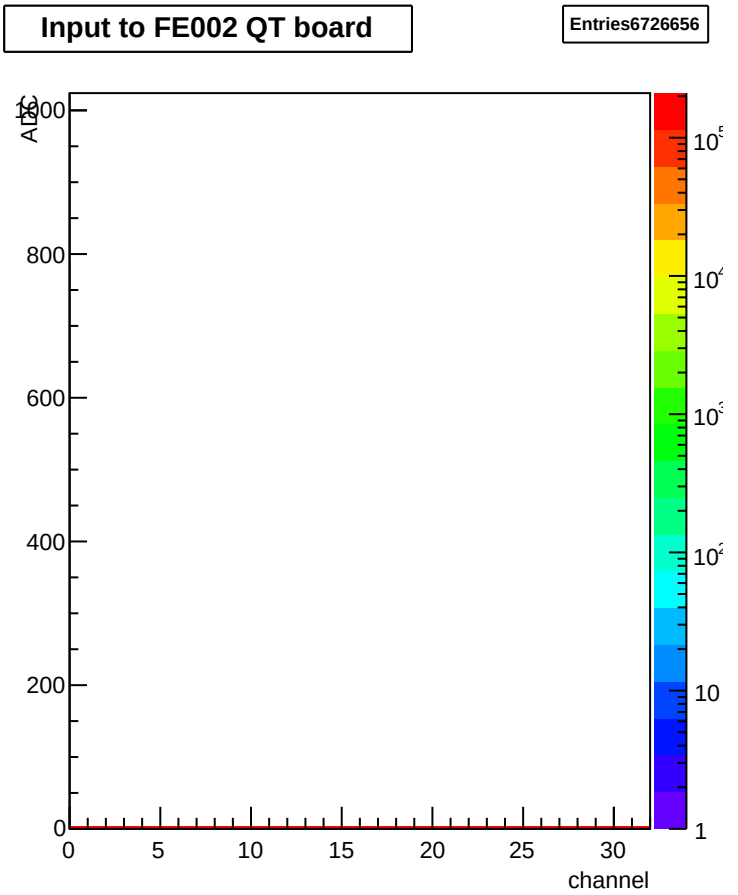

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

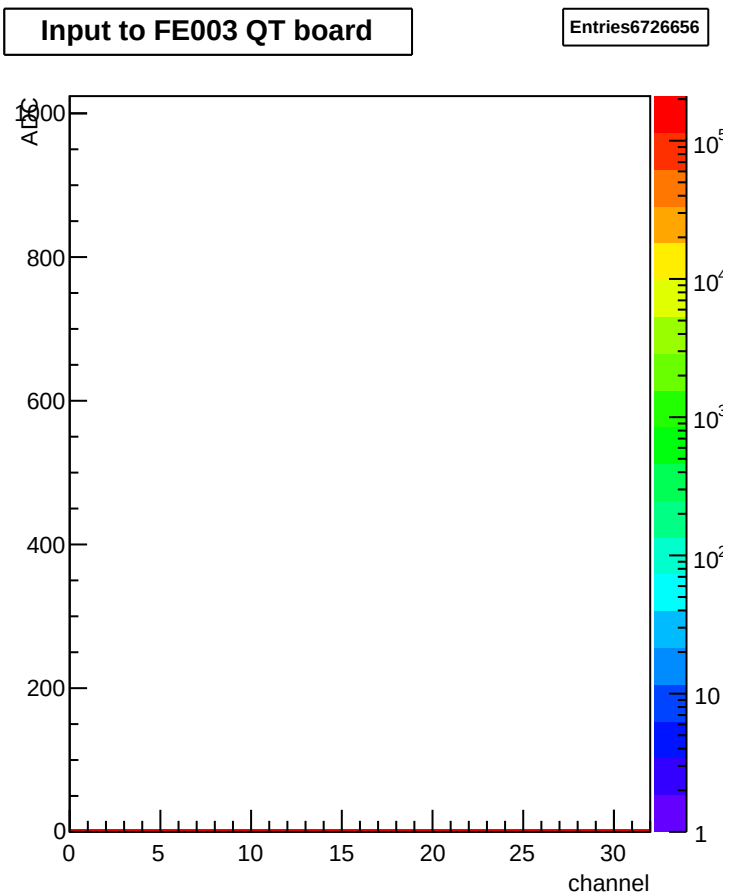

Input to FPD L2 DSM
Entries 630624
HT bits
4427
2215
1334
7285
17522
232
181
180974
207761
208693
SMALL
LARGE-S
LARGE-N

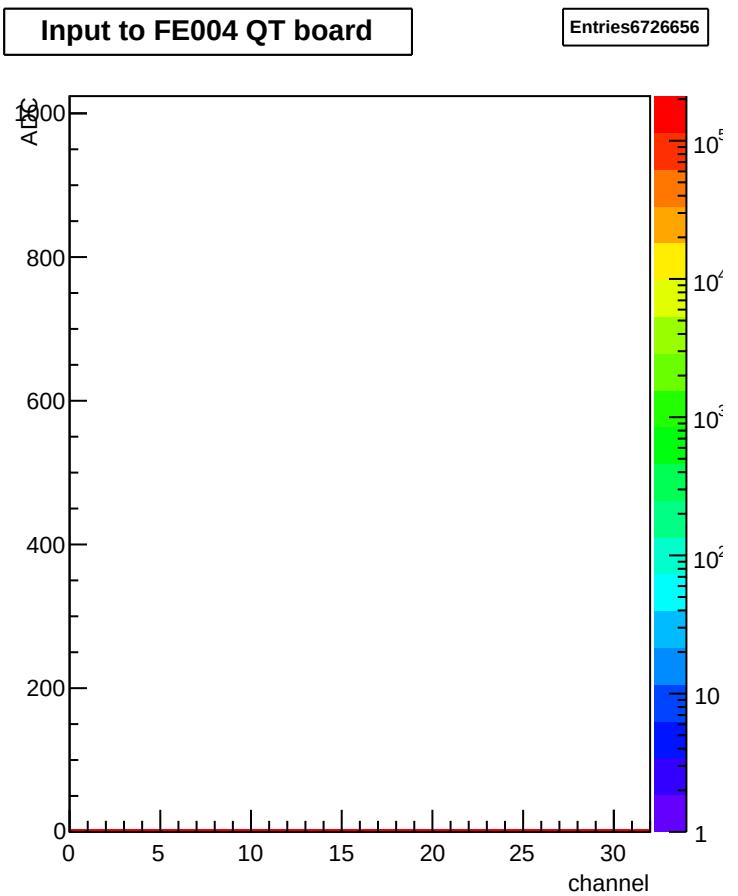

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

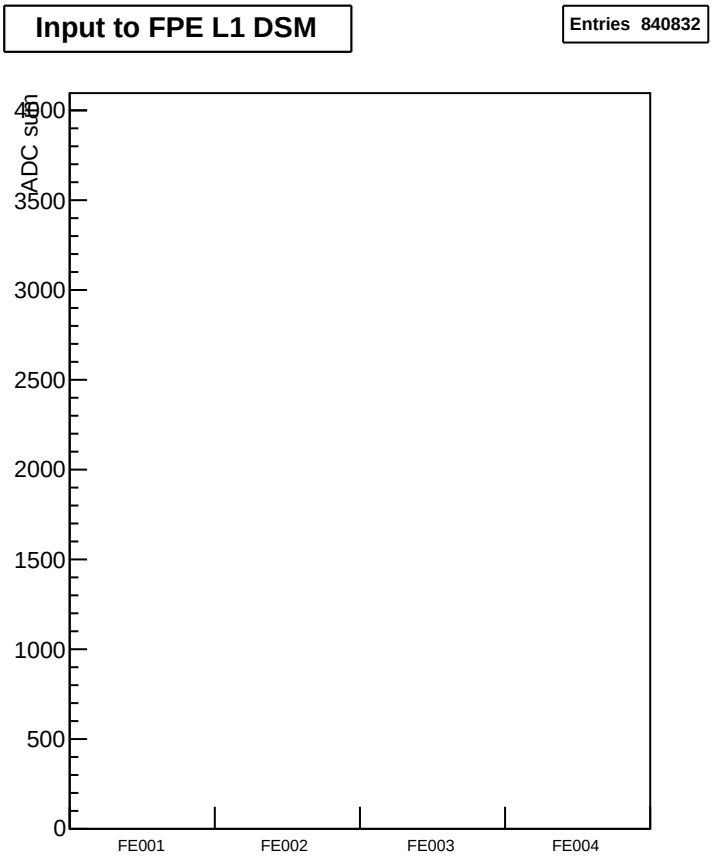

Input to FPD L2 DSM
Entries 1261248
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

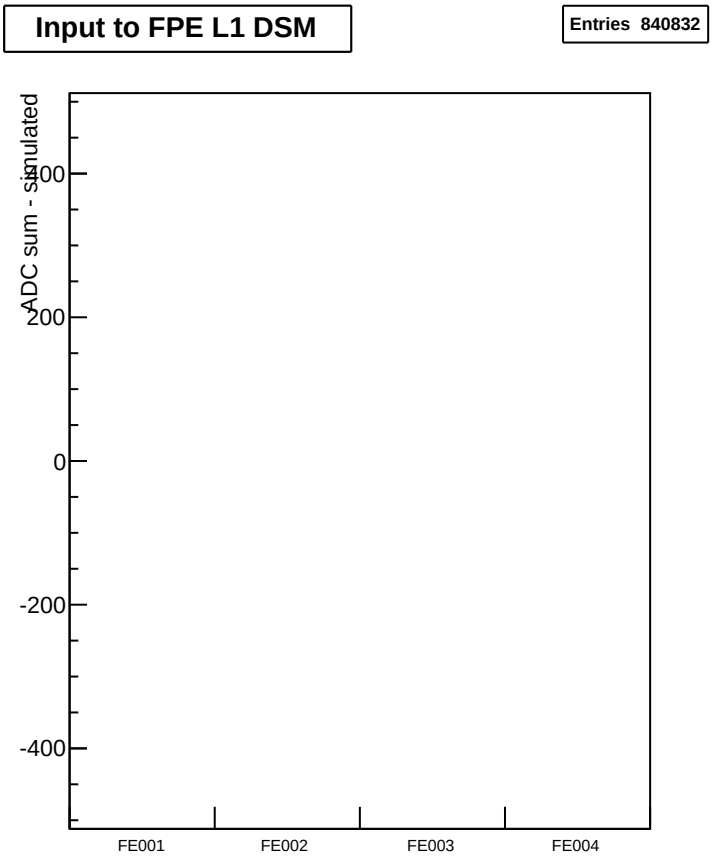

Input to FE001 QT board
Entries6726656
ADC
channel

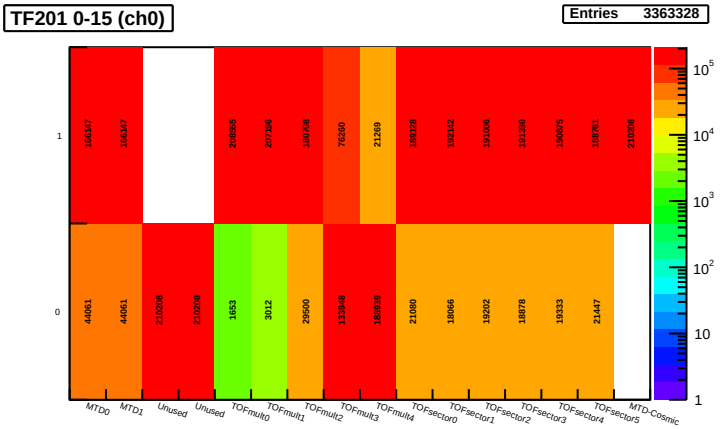

Input to FE002 QT board
Entries6726656
ADC
channel

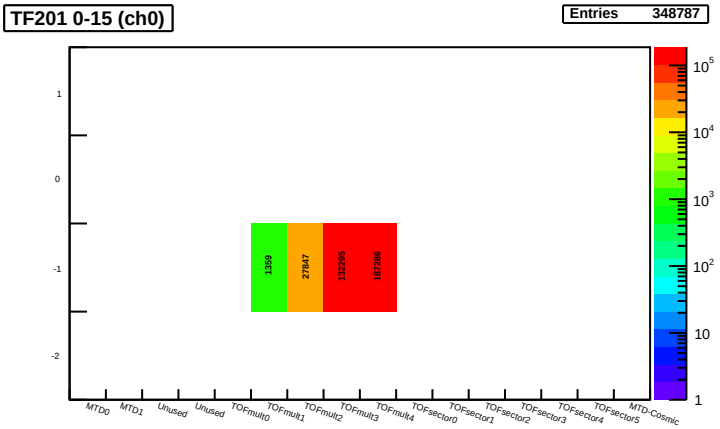

Input to FE003 QT board
Entries6726656
ADC
channel

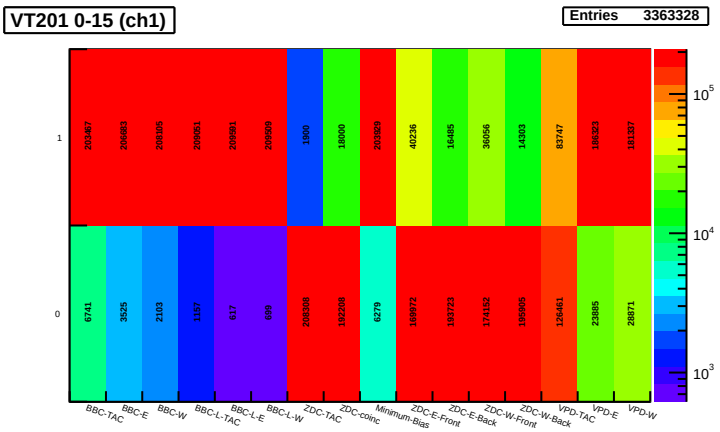

Input to FE004 QT board
Entries6726656
ADC
channel

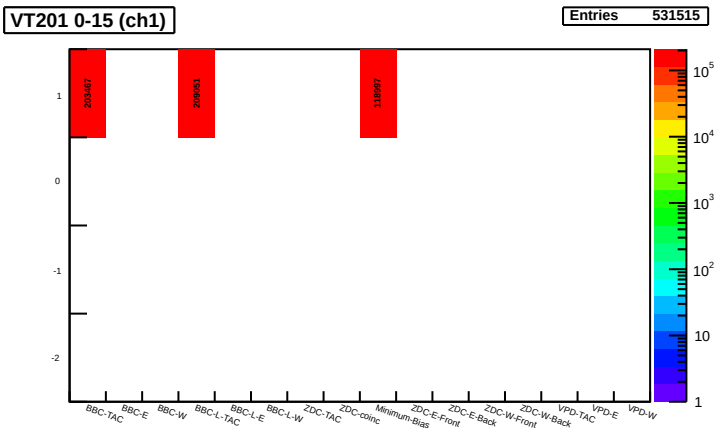

Input to FPE L1 DSM
Entries 840832
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004

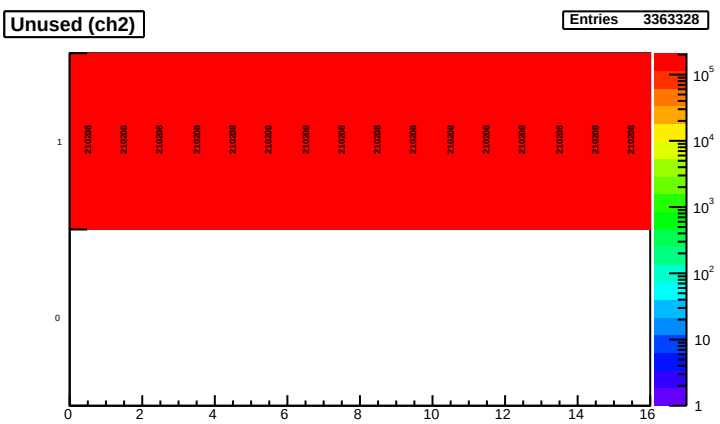

Input to FPE L1 DSM
Entries 840832
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004

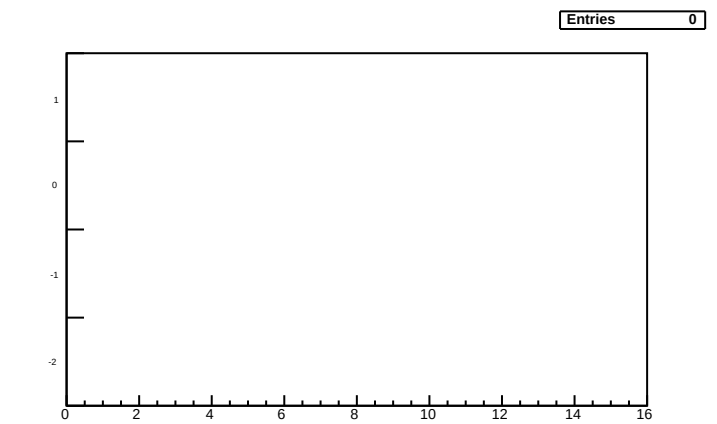

TF201 0-15 (ch0)
Entries 3363328
1 166147 166147 208555 207196 180708 76260 21269 189128 192142 191006 191330 190675 188761 210208
0 44061 44061 210208 210208 1653 3012 29500 133948 188839 21080 18066 19202 18878 19333 21447
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
10^5 10^4 10^3 10^2 10 1

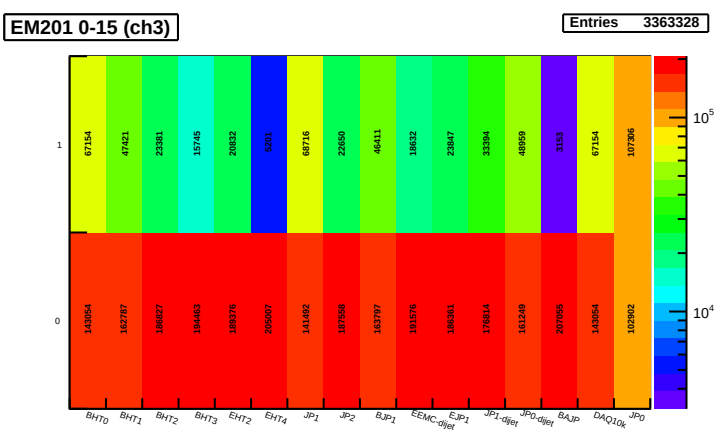

TF201 0-15 (ch0)
Entries 348787
1359 27847 132295 187288
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
10^5 10^4 10^3 10^2 10 1

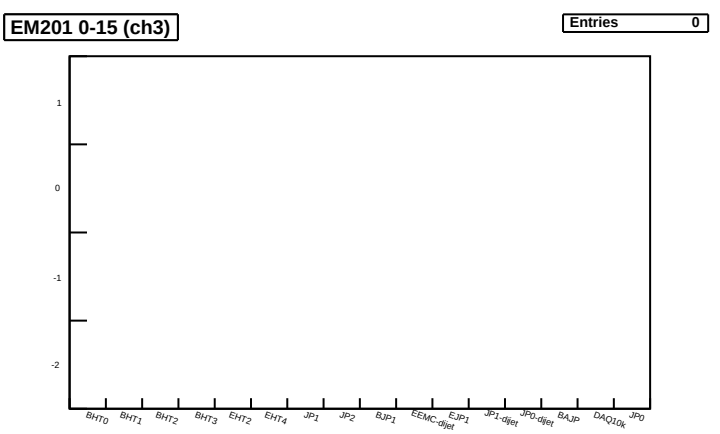

VT201 0-15 (ch1)
Entries 3363328
1 203467 206683 208195 209051 209391 209509 1900 18000 203829 40236 16485 36056 14303 83747 186323 181337
0 6741 3525 2103 1157 617 699 208308 192208 6279 169972 193723 174152 195905 126461 23885 28871
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W
10^5 10^4 10^3


VT201 0-15 (ch1)
Entries 531515
1 203467 209051 118997
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W
10^5 10^4 10^3 10^2 10 1

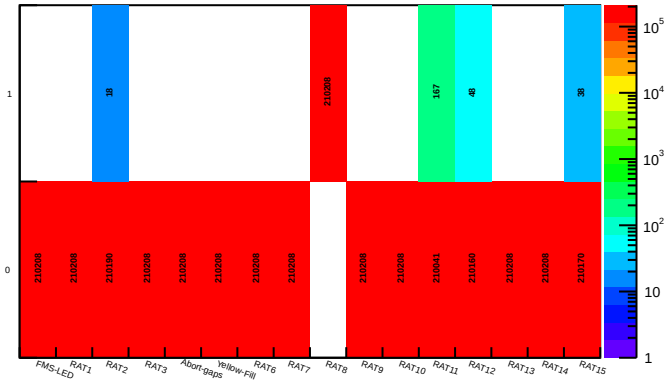

Unused (ch2)
Entries 3363328
1 210208 210208 210208 210208 210208 210208 210208 210208 210208 210208 210208 210208 210208 210208 210208 210208
0
0 2 4 6 8 10 12 14 16
10^5 10^4 10^3 10^2 10 1

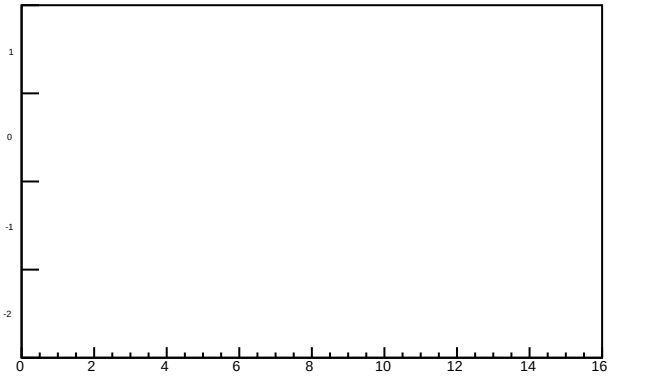

Entries 0
0 2 4 6 8 10 12 14 16


EM201 0-15 (ch3)
Entries 3363328
1 67154 47421 23381 15745 20832 5201 68716 22650 46411 18632 23847 33394 48959 3153 67154 107306
0 143054 162787 188827 194463 189376 209007 141492 187558 163797 191576 186361 176814 161249 207095 143054 102902
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 EEMC-diJet EJP-1 JP1-diJet JP0-diJet BAJP DAQ10k JP0
10^5 10^4

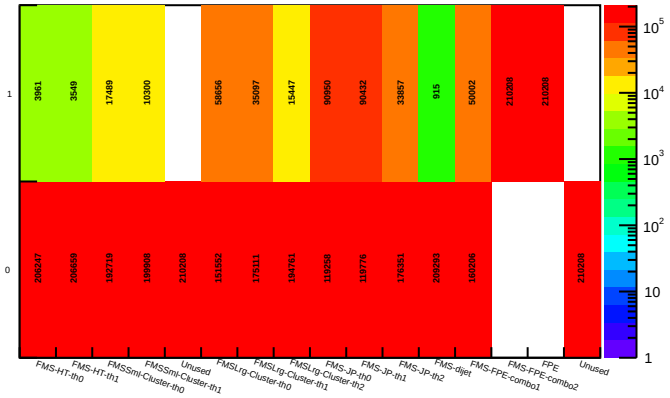

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 EEMC-diJet EJP-1 JP1-diJet JP0-diJet BAJP DAQ10k JP0

RAT board (ch4)

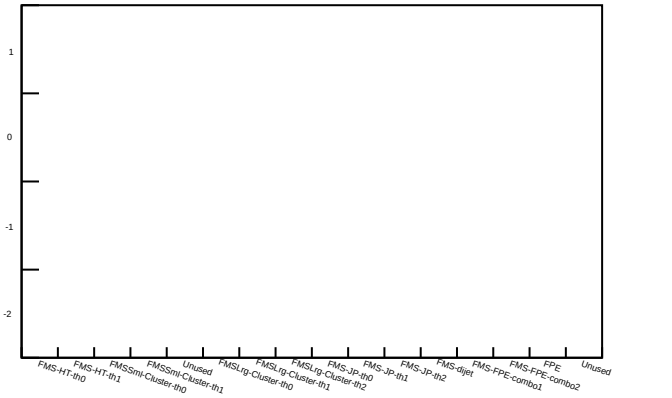




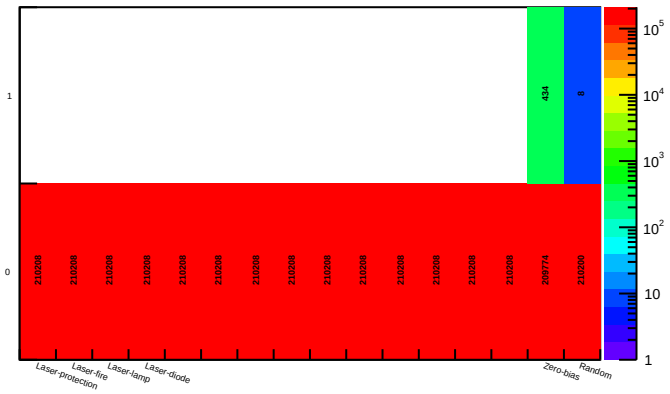
FP201 0-15 (ch5)

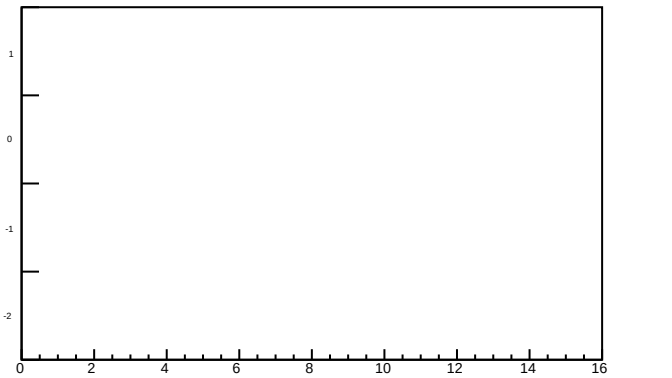
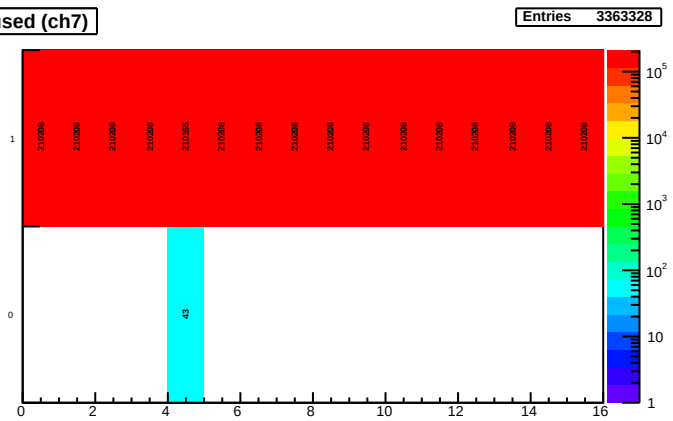
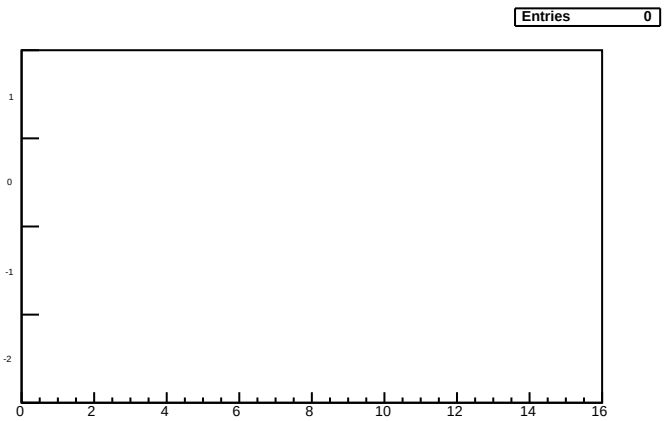


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)