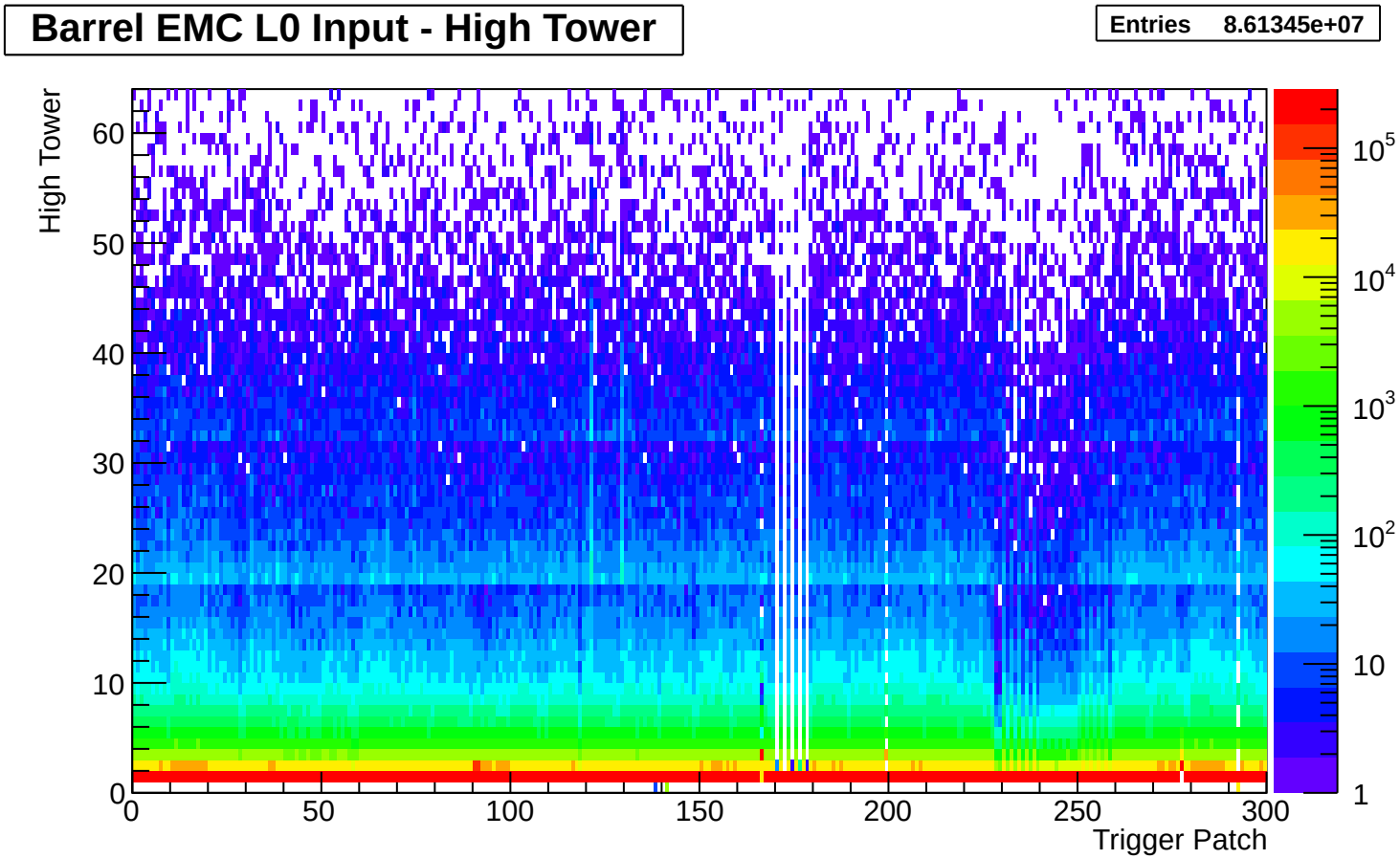
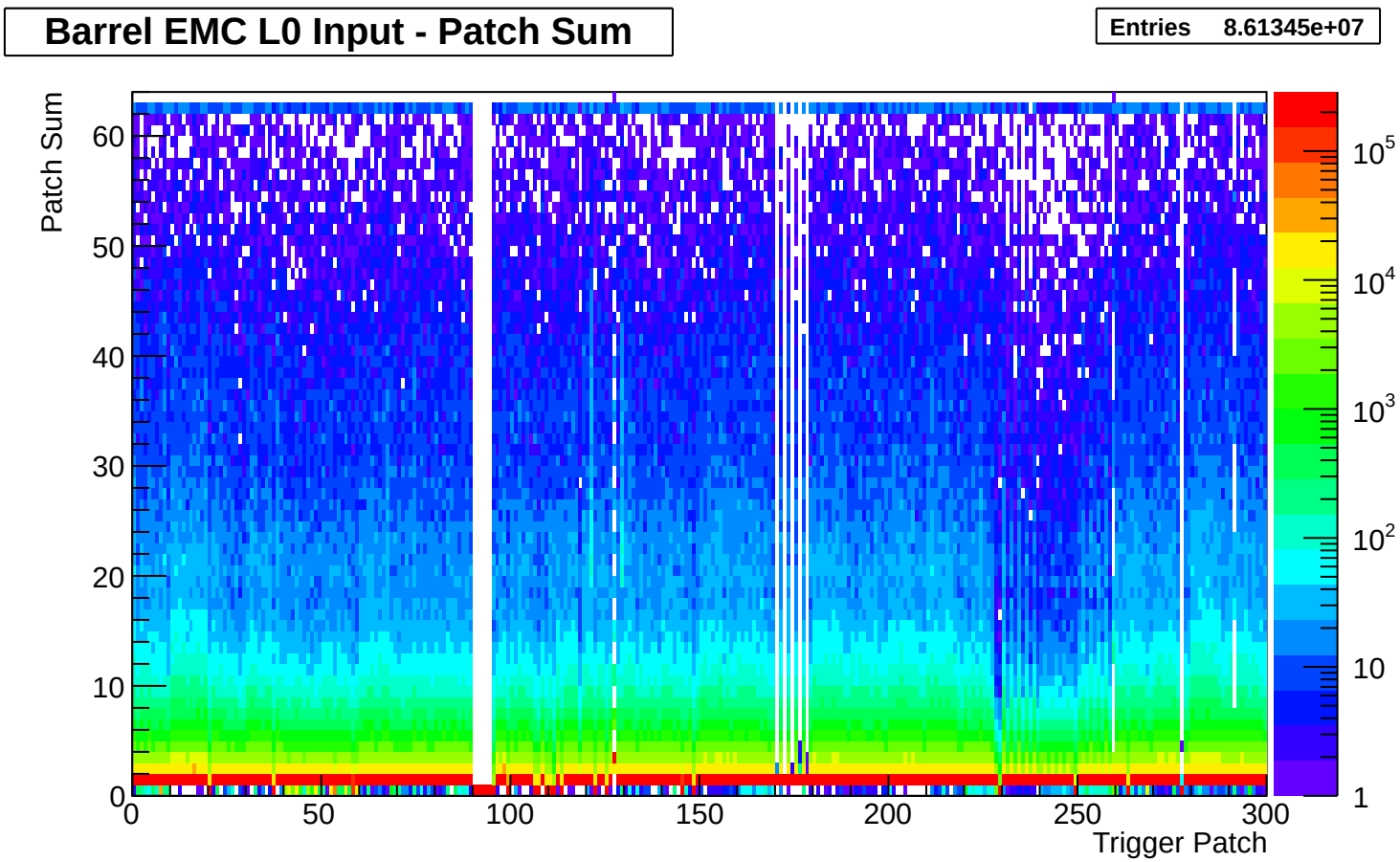
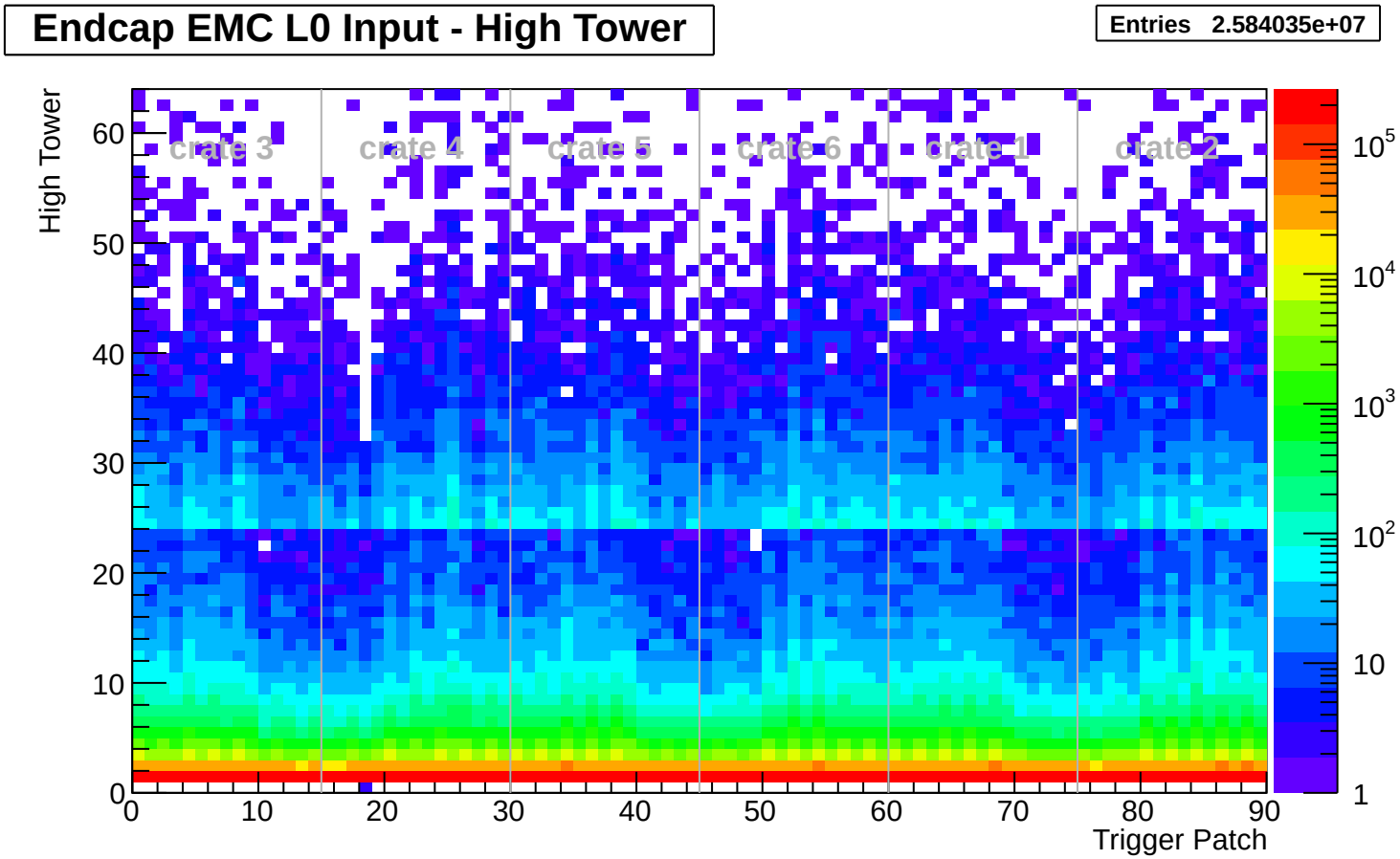
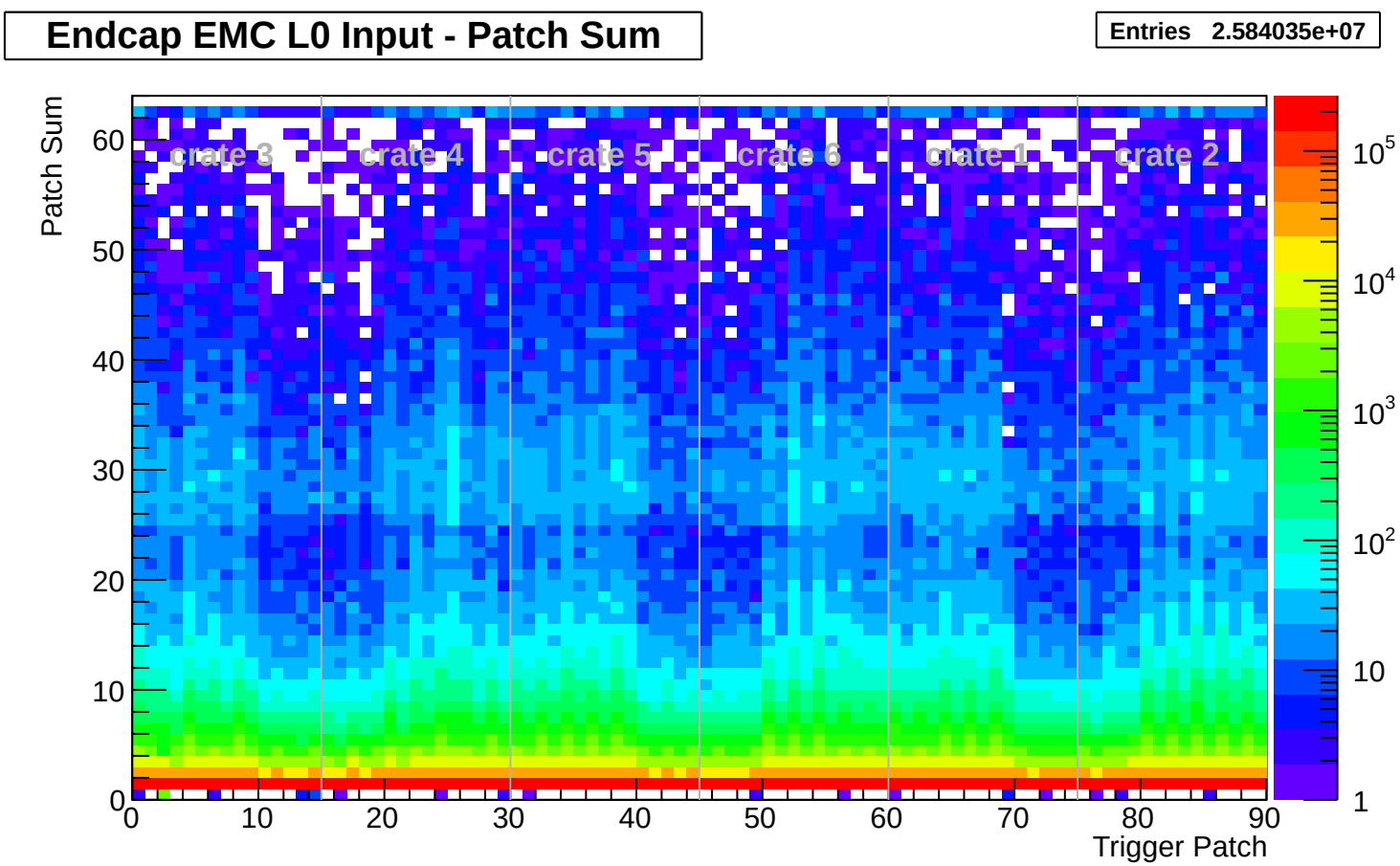
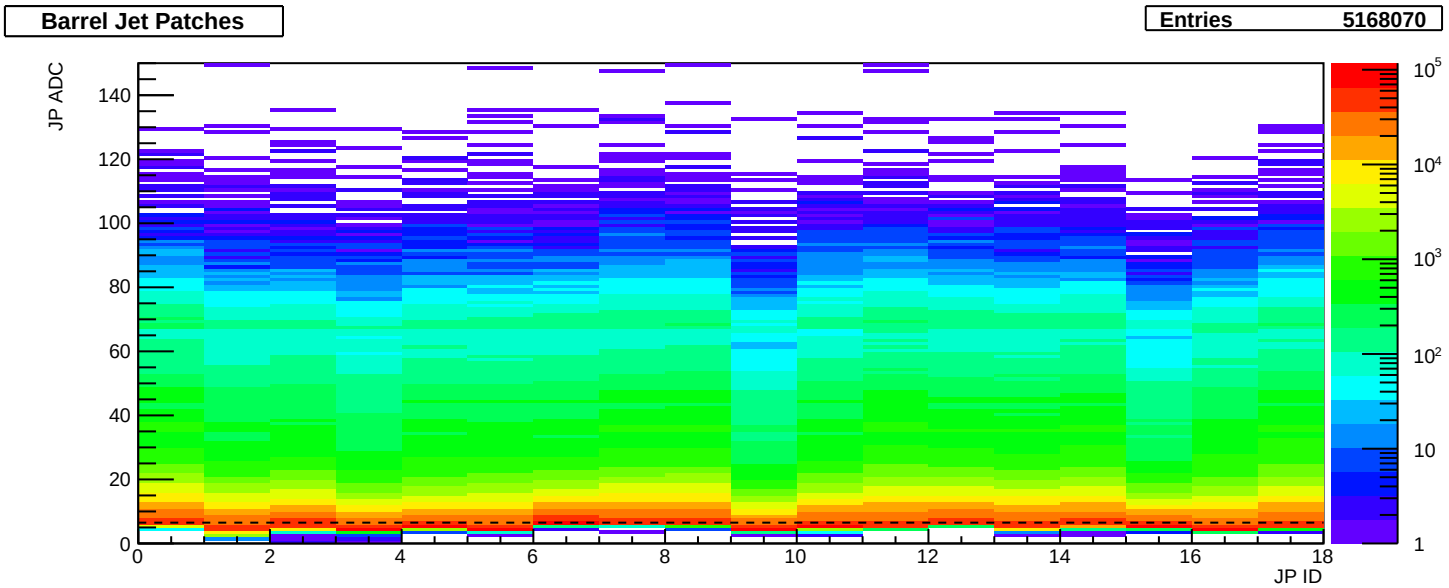
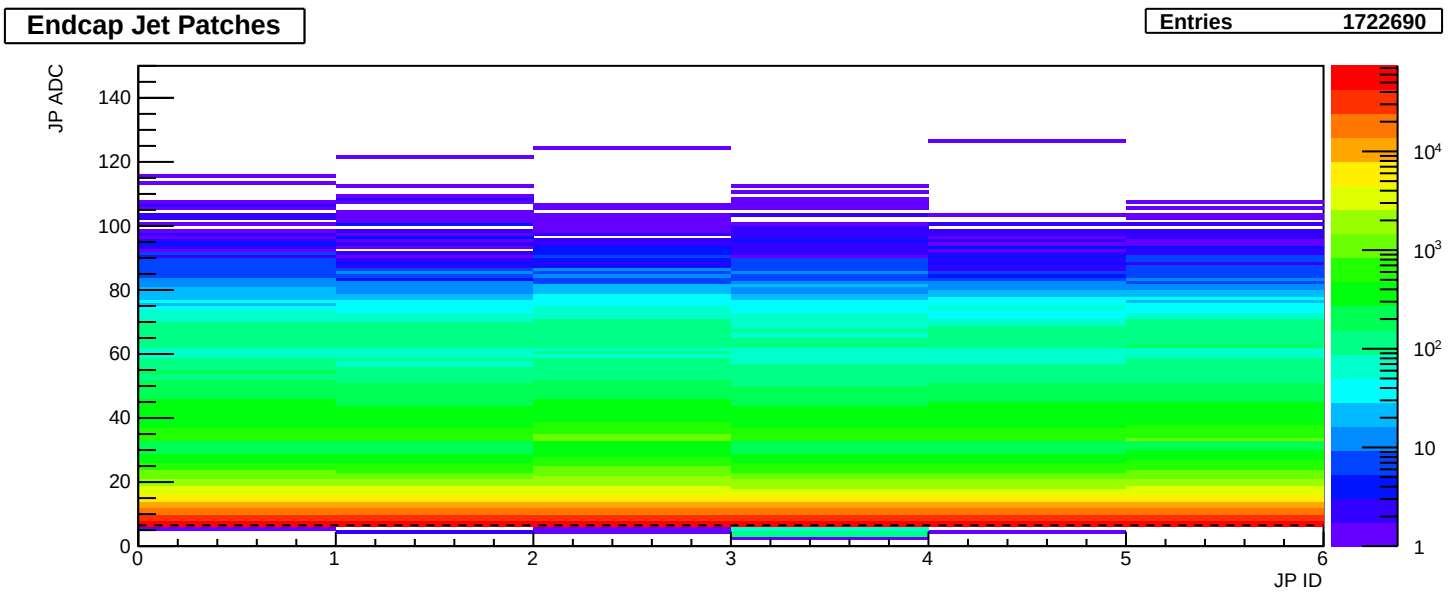

Barrel EMC L0 Input - High Tower
Entries 8.61345e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

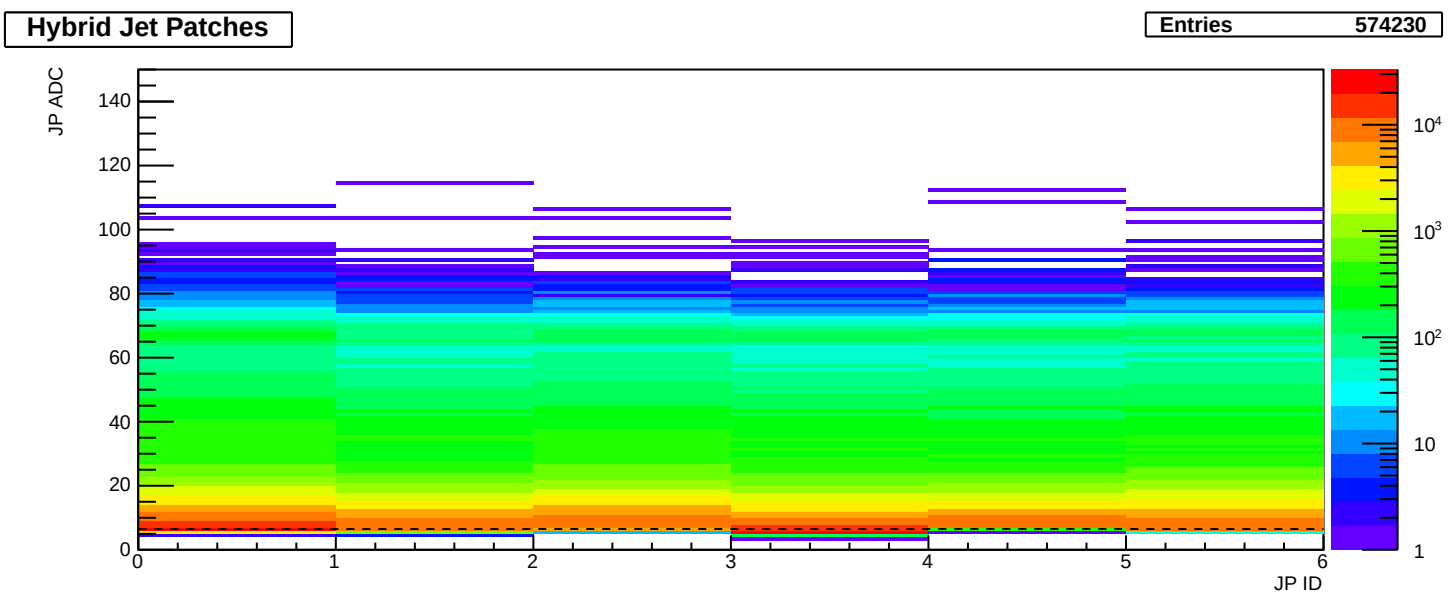

Barrel EMC L0 Input - Patch Sum
Entries 8.61345e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

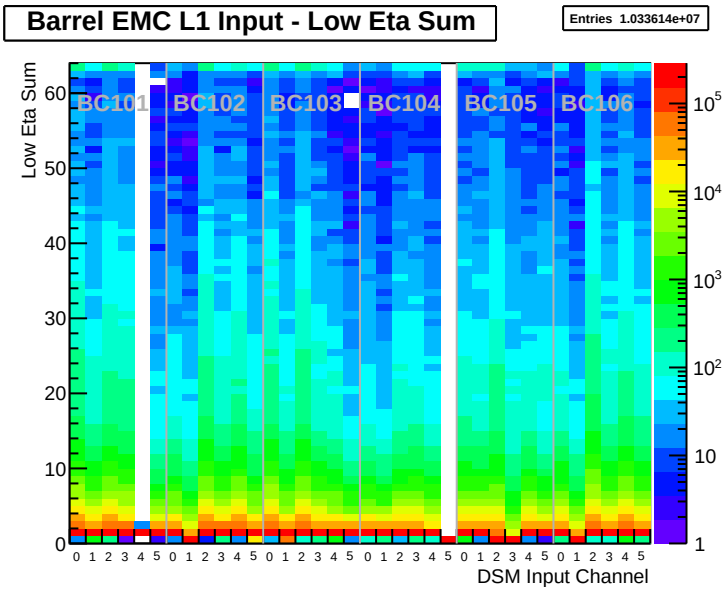

Endcap EMC L0 Input - High Tower
Entries 2.584035e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

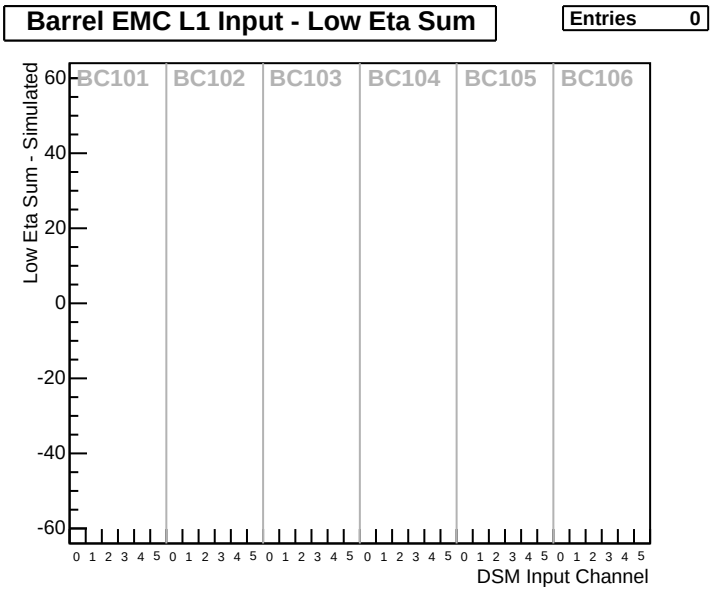

Endcap EMC L0 Input - Patch Sum
Entries 2.584035e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

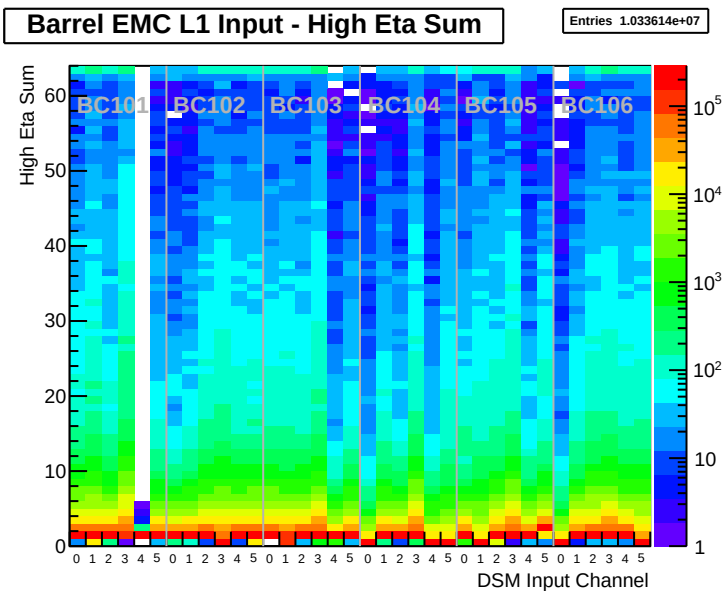

Barrel Jet Patches
Entries 5168070
JP ADC
JP ID

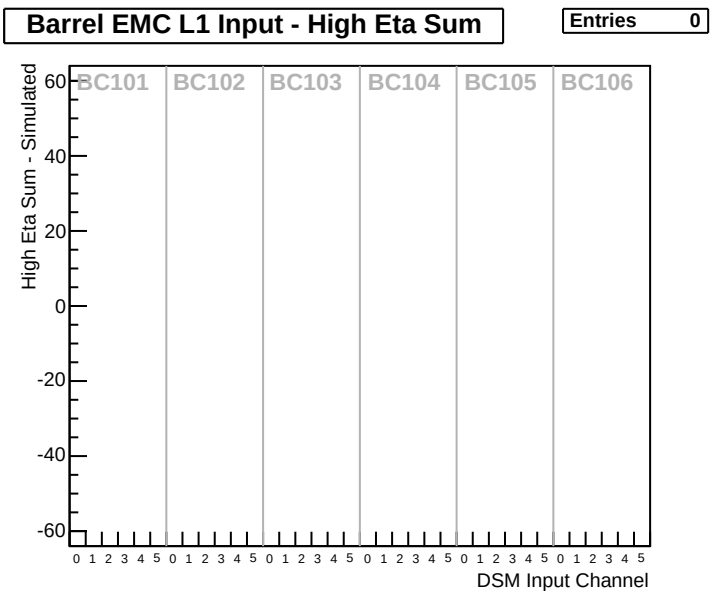

Endcap Jet Patches
Entries 1722690
JP ADC
JP ID

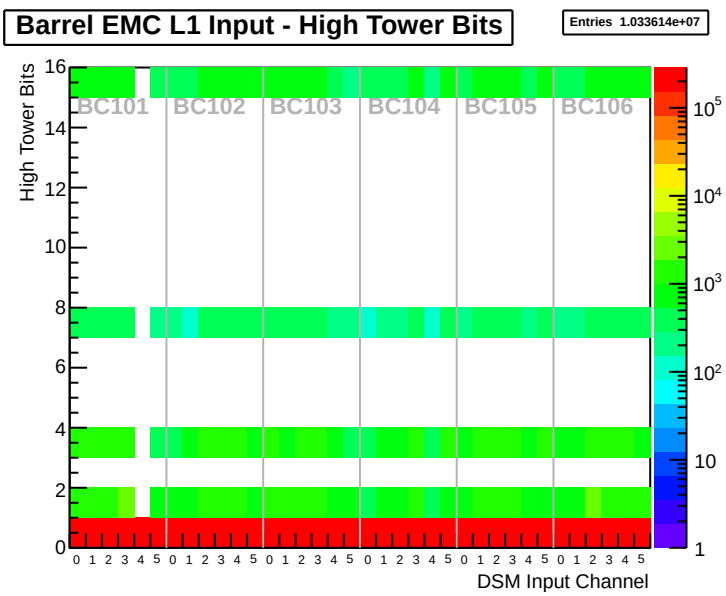

Hybrid Jet Patches
Entries 574230
JP ADC
JP ID

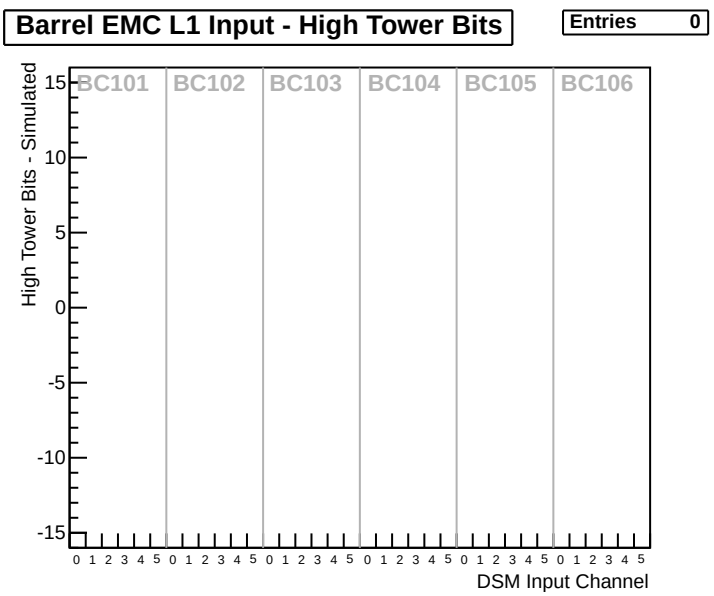

Barrel EMC L1 Input - Low Eta Sum
Entries 1.033614e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

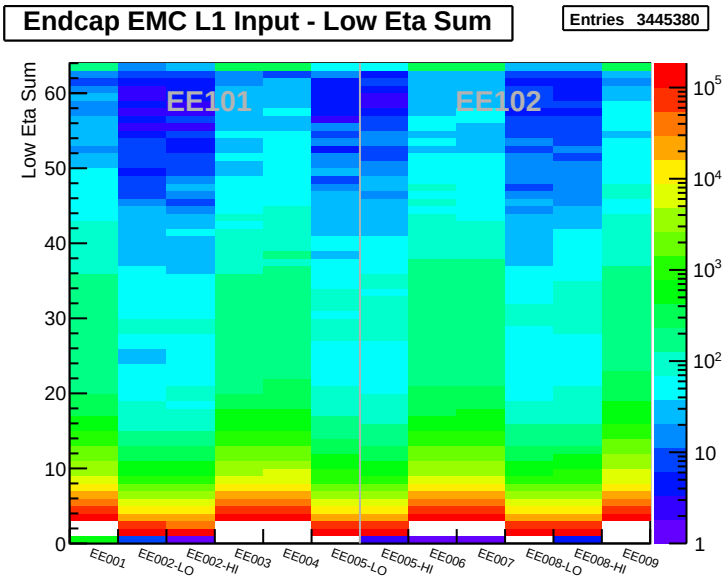

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

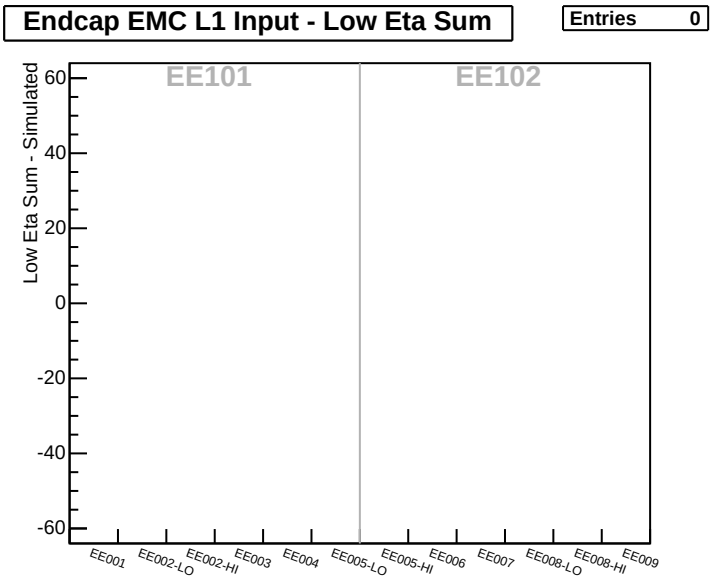

Barrel EMC L1 Input - High Eta Sum
Entries 1.033614e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

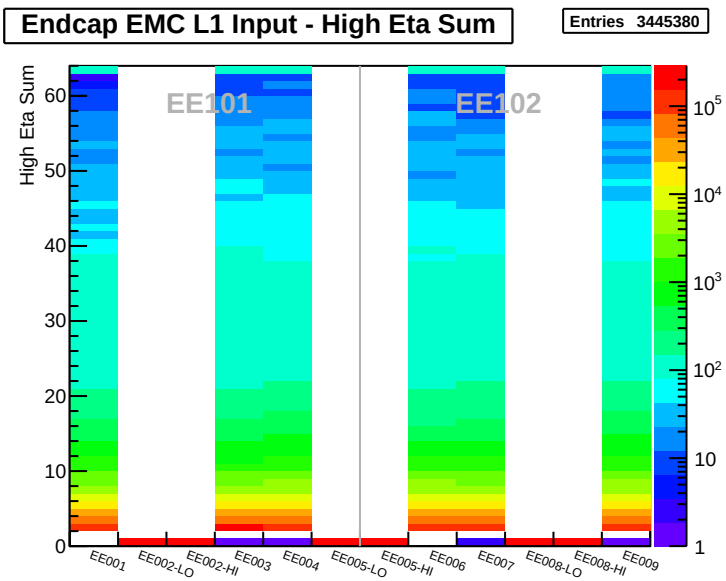

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

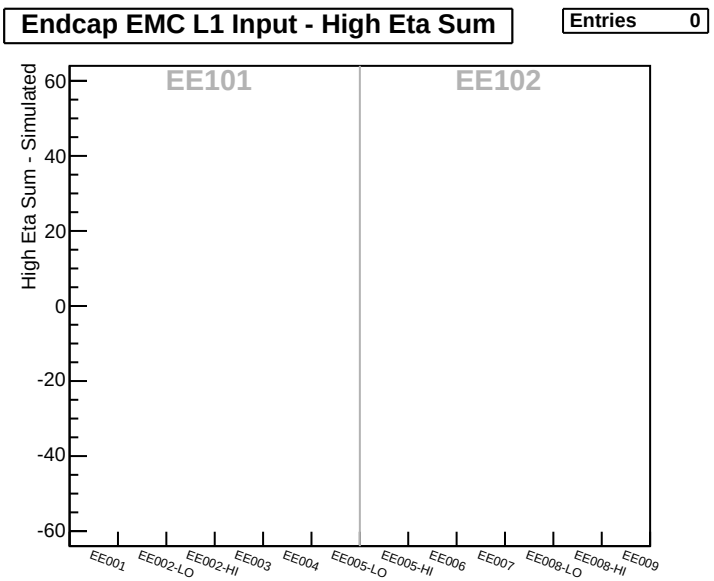

Barrel EMC L1 Input - High Tower Bits
Entries 1.033614e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

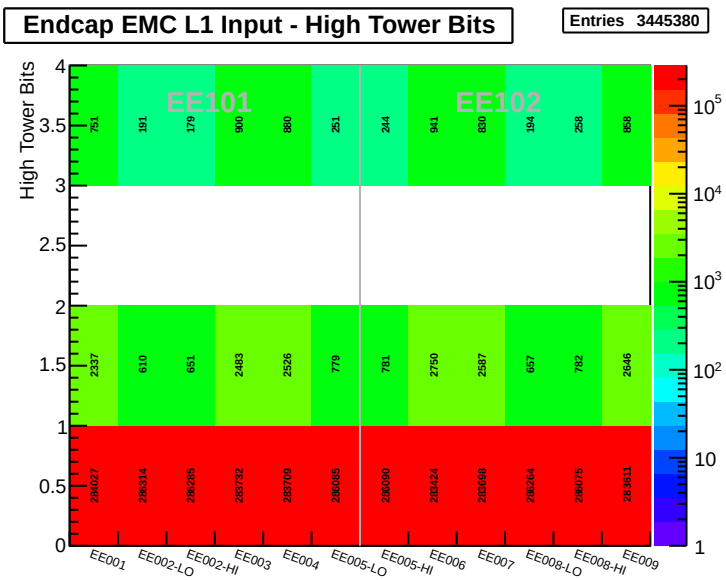

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

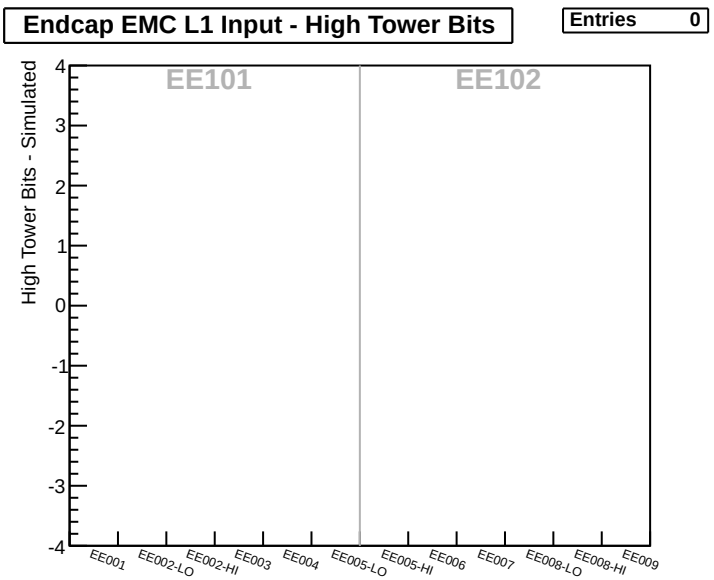

Endcap EMC L1 Input - Low Eta Sum
Entries 3445380
Low Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

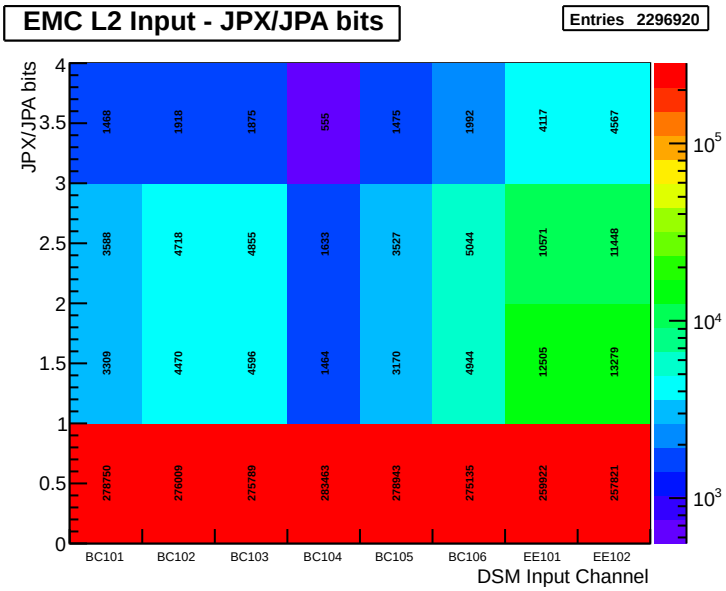

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

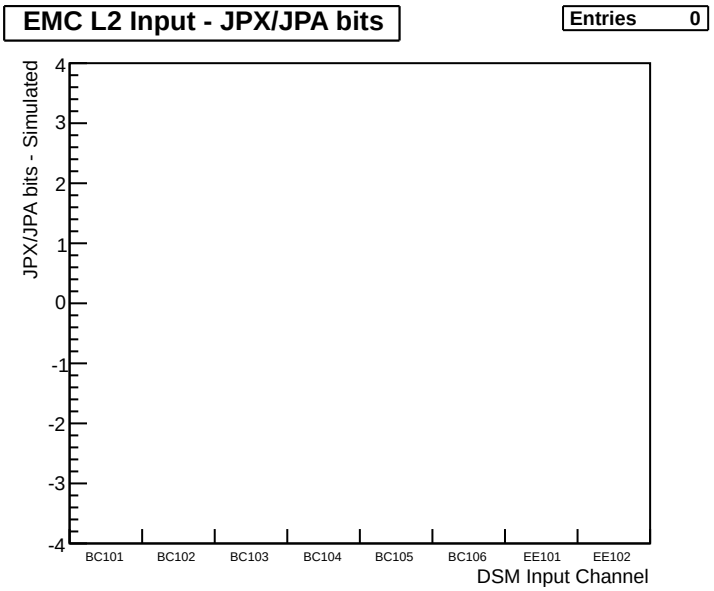

Endcap EMC L1 Input - High Eta Sum
Entries 3445380
High Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

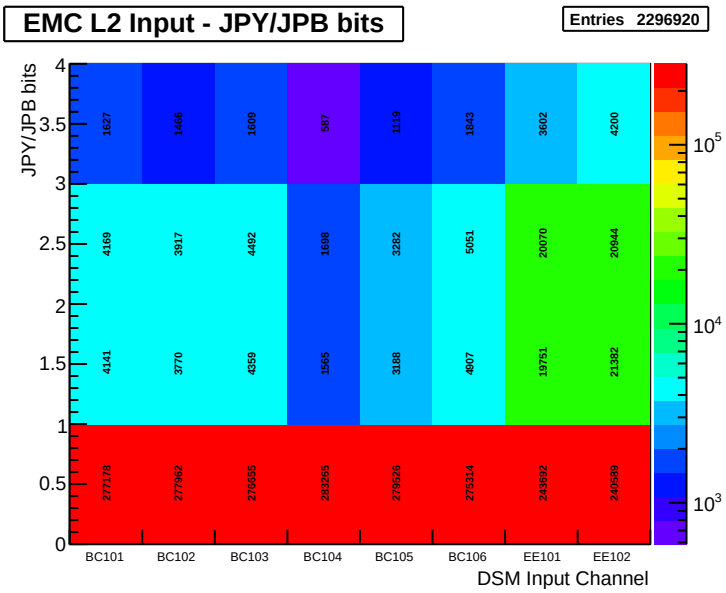

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

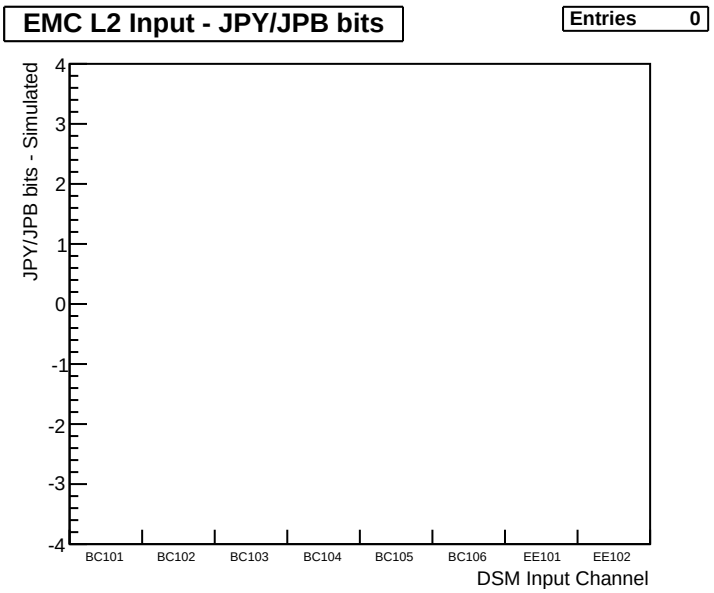

Endcap EMC L1 Input - High Tower Bits
Entries 3445380
High Tower Bits
EE101
EE102
751
191
179
900
880
251
244
941
830
194
258
858
2337
610
651
2483
2526
779
781
2750
2587
657
782
2646
284027
286314
286285
283732
283709
286085
286090
283424
283698
286264
286075
283611
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

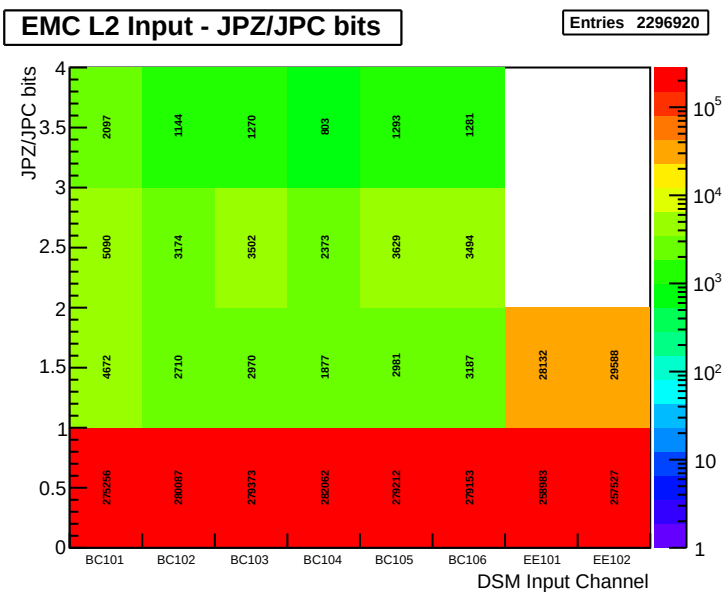

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

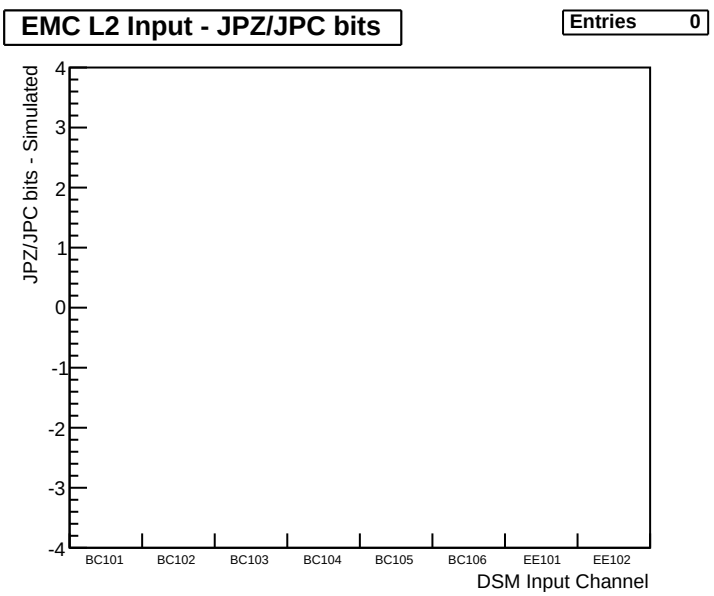

EMC L2 Input - JPX/JPA bits
Entries 2296920
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1468 1918 1875 555 1475 1992 4117 4567
3588 4718 4855 1633 3527 5044 10571 11448
3309 4470 4596 1464 3170 4944 12505 13279
278750 276009 275789 283463 278943 275135 259922 257821

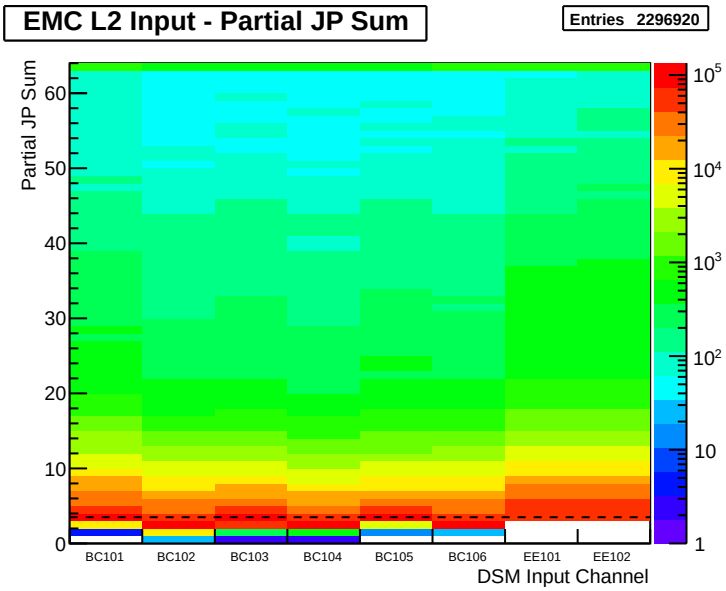

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

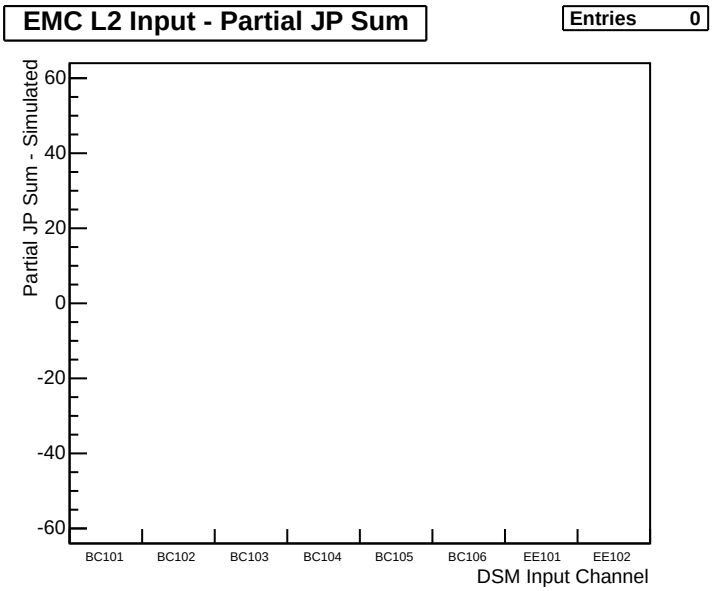

EMC L2 Input - JPY/JPB bits
Entries 2296920
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1627 1466 1609 587 1119 1843 3602 4200
4169 3917 4492 1698 3282 5051 20070 20944
4141 3770 4559 1565 3188 4907 19751 21382
277378 277962 276655 283265 279526 275314 243692 240589

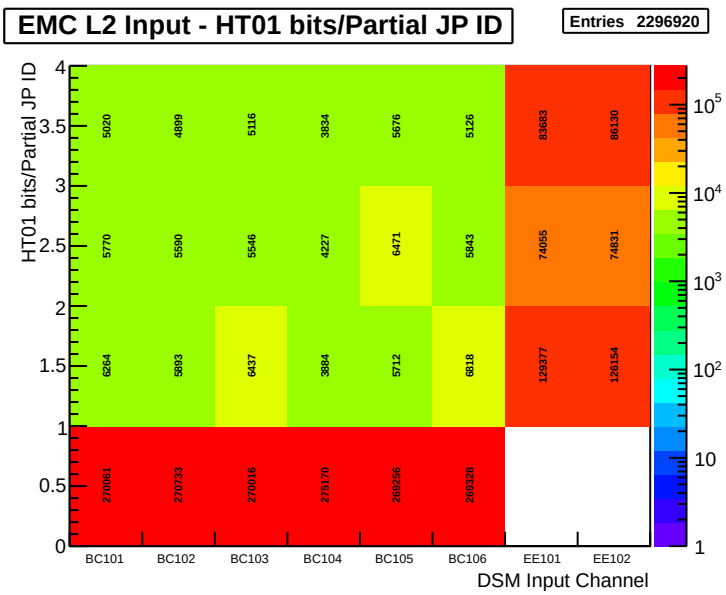

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

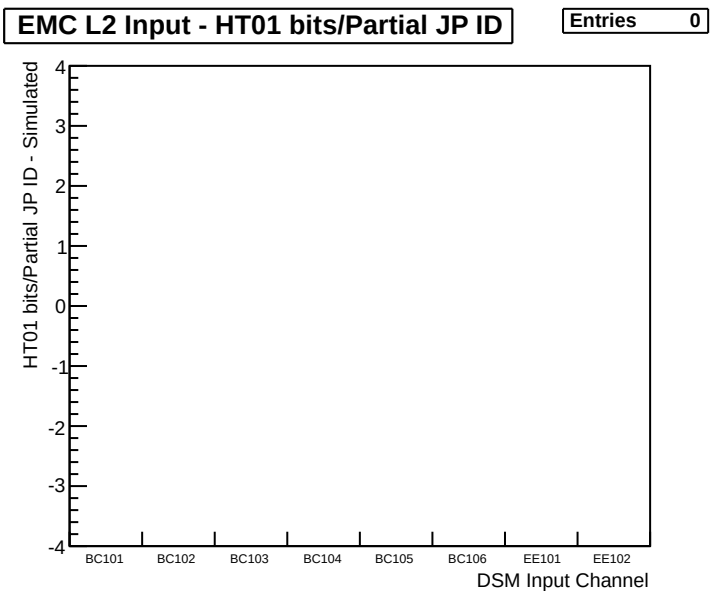

EMC L2 Input - JPZ/JPC bits
Entries 2296920
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2097 1144 1270 803 1293 1281
5090 3174 3502 2373 3629 3494
4672 2710 2970 1877 2981 3187 28132 29588
275256 280087 279373 282062 279212 279153 258983 257527

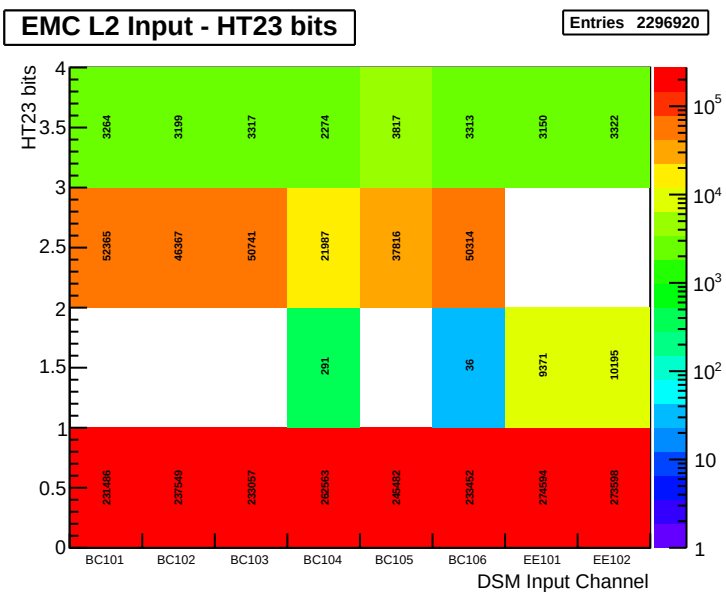

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

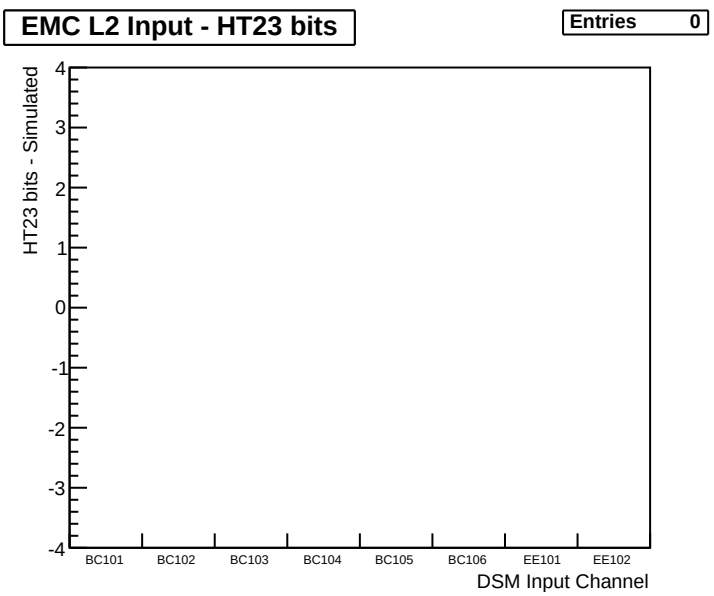

EMC L2 Input - Partial JP Sum
Entries 2296920
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

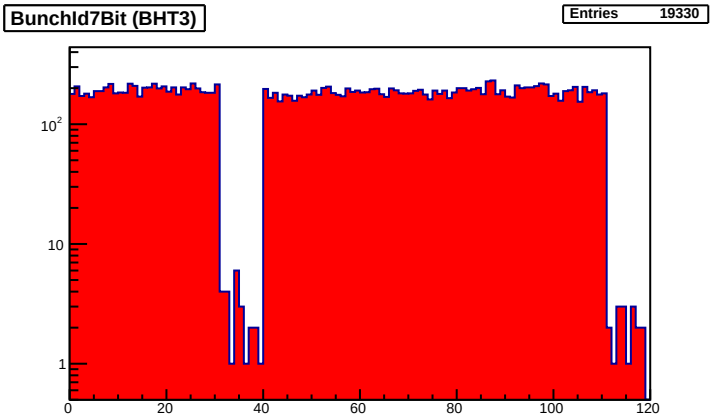

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

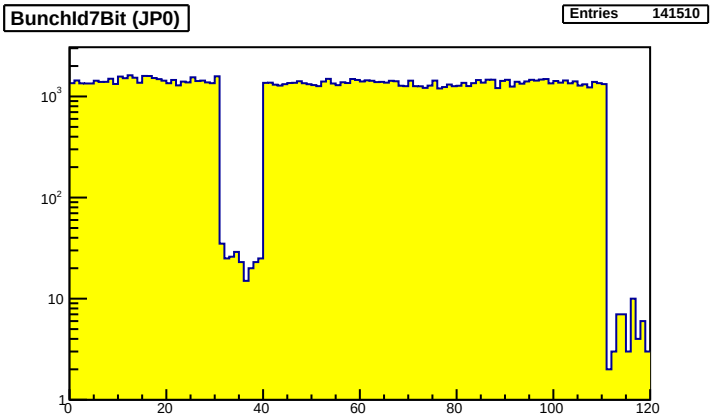

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2296920
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

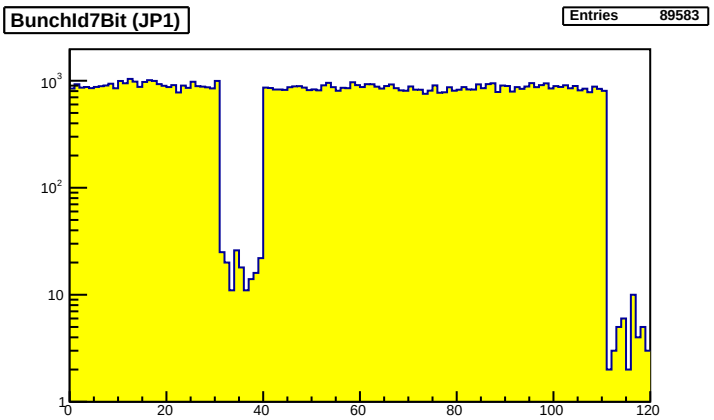

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

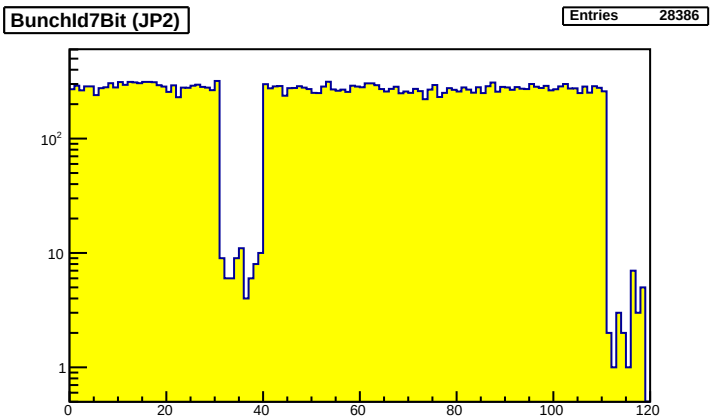

EMC L2 Input - HT23 bits
Entries 2296920
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

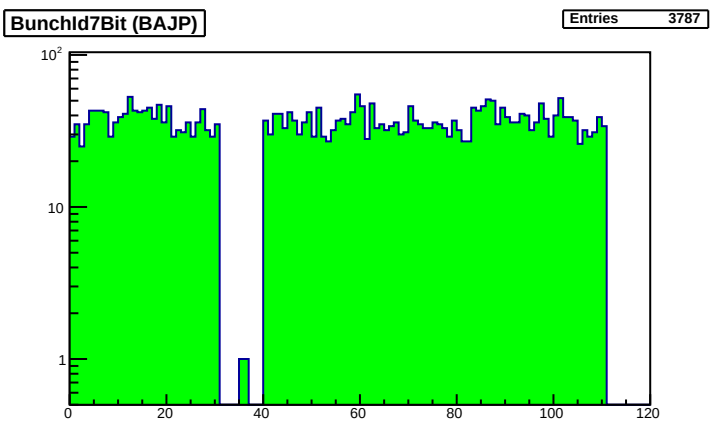

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

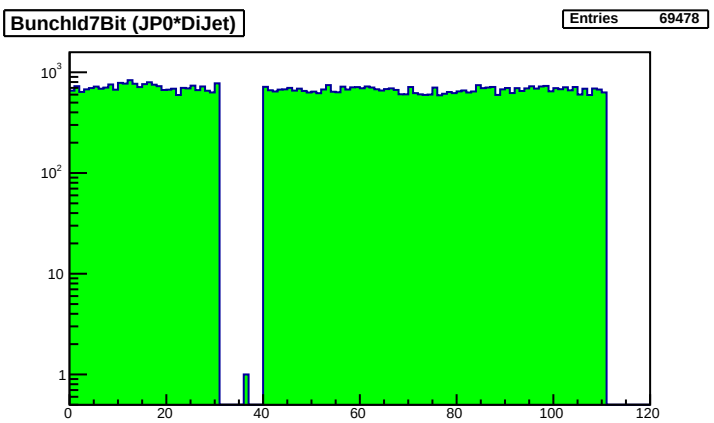

BunchId7Bit (BHT3)
Entries 19330

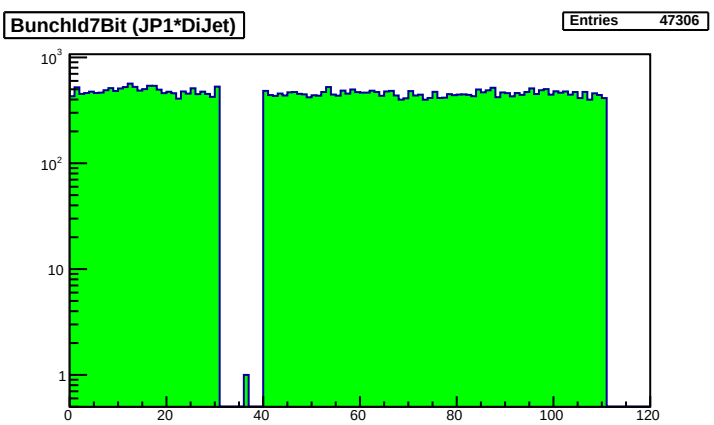

BunchId7Bit (JP0)
Entries 141510

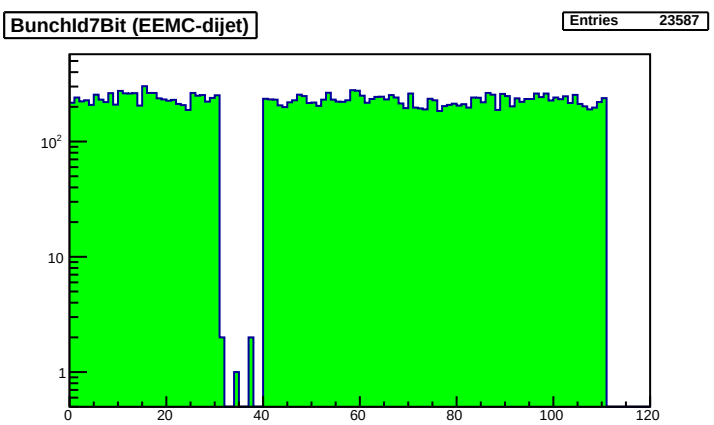

BunchId7Bit (JP1)
Entries 89583

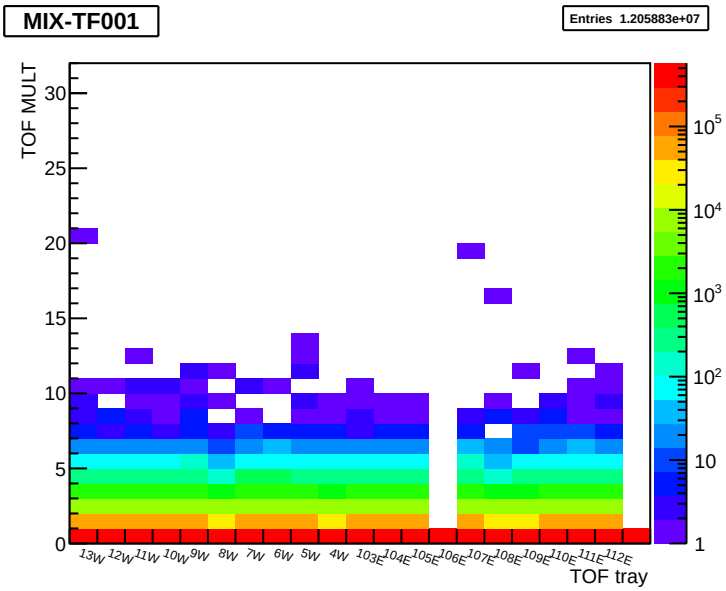

BunchId7Bit (JP2)
Entries 28386

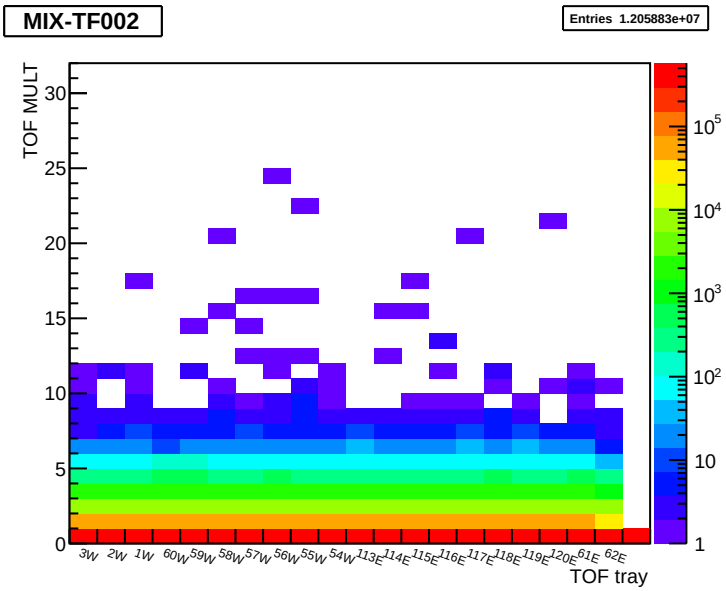

BunchId7Bit (BAJP)
Entries 3787

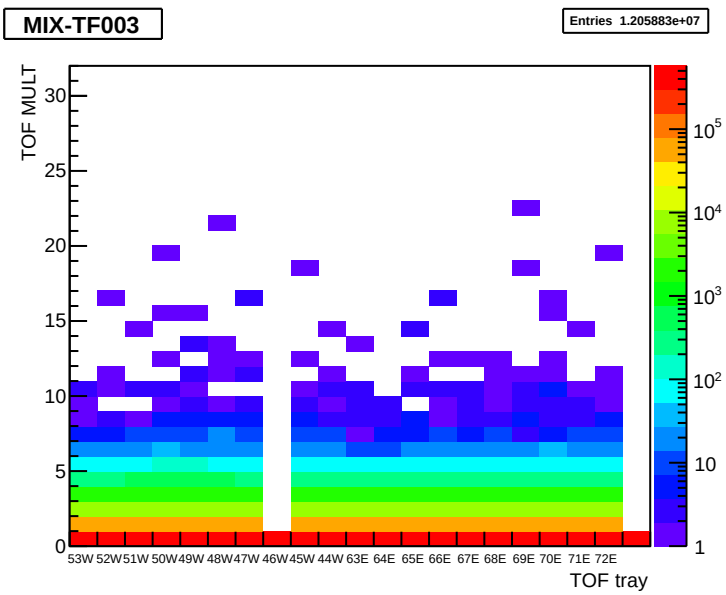

BunchId7Bit (JP0*DiJet)
Entries 69478

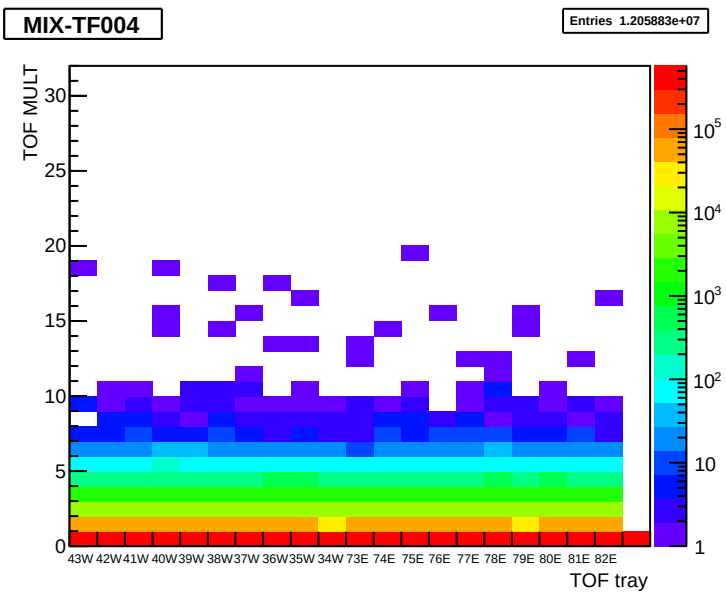

BunchId7Bit (JP1*DiJet)
Entries 47306

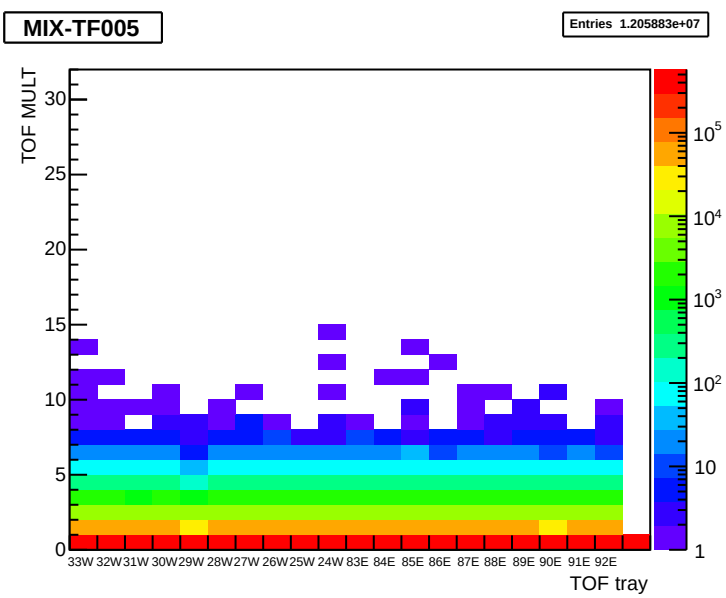

BunchId7Bit (EEMC-dijet)
Entries 23587

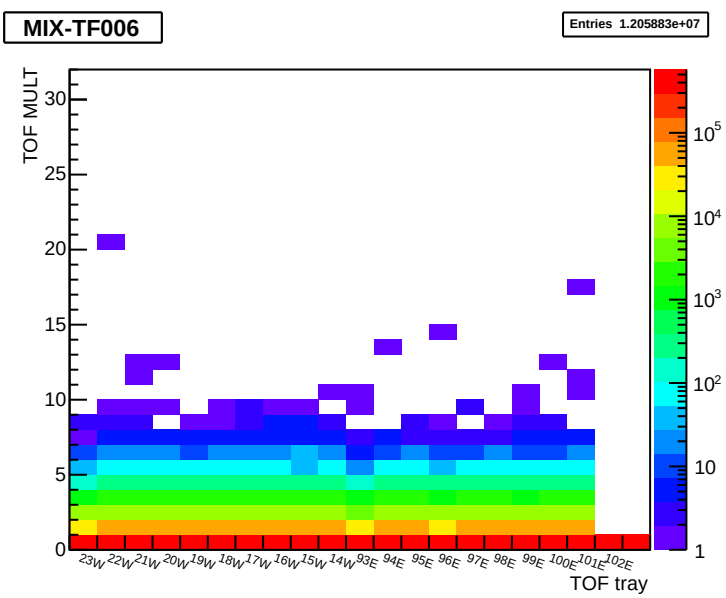

MIX-TF001
Entries 1.205883e+07
TOF MULT
TOF tray

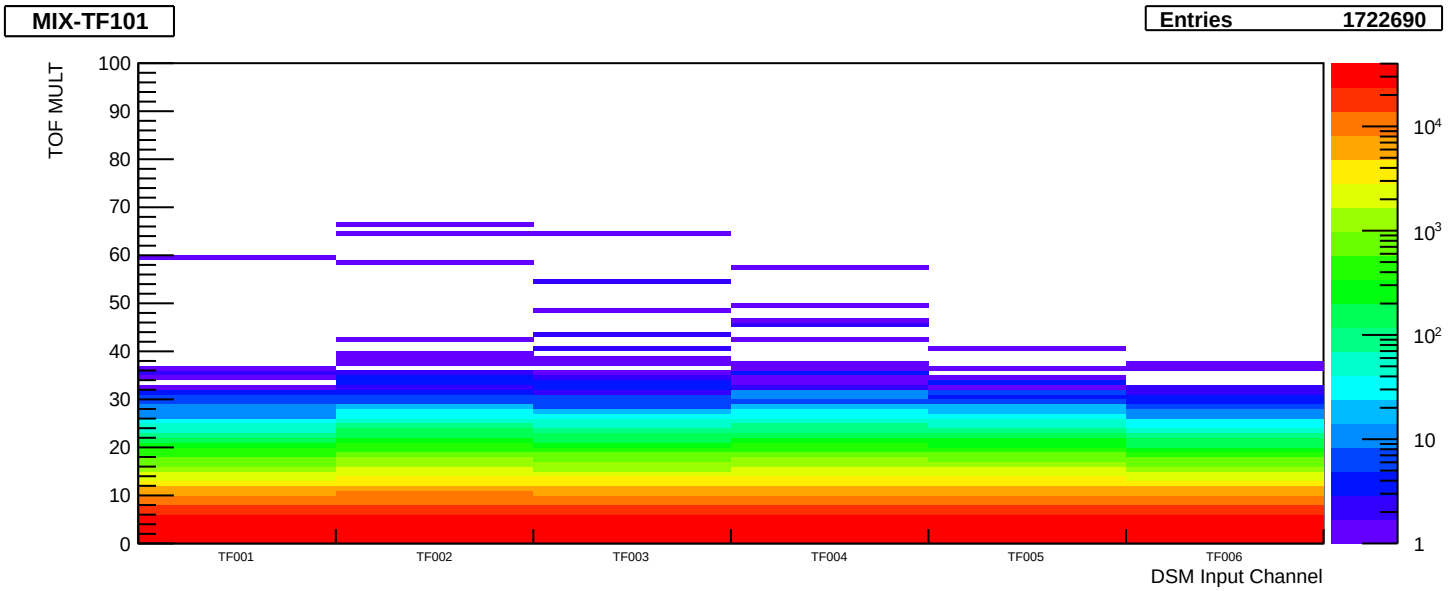

MIX-TF002
Entries 1.205883e+07
TOF MULT
TOF tray

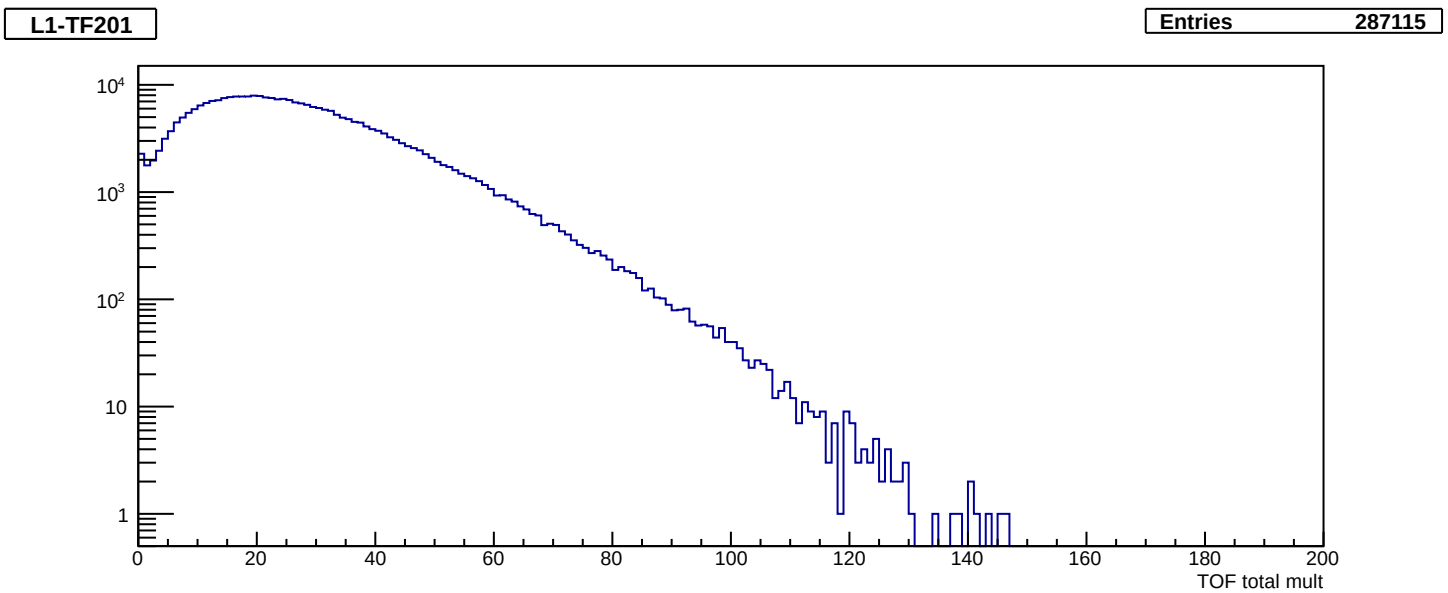

MIX-TF003
Entries 1.205883e+07
TOF MULT
TOF tray

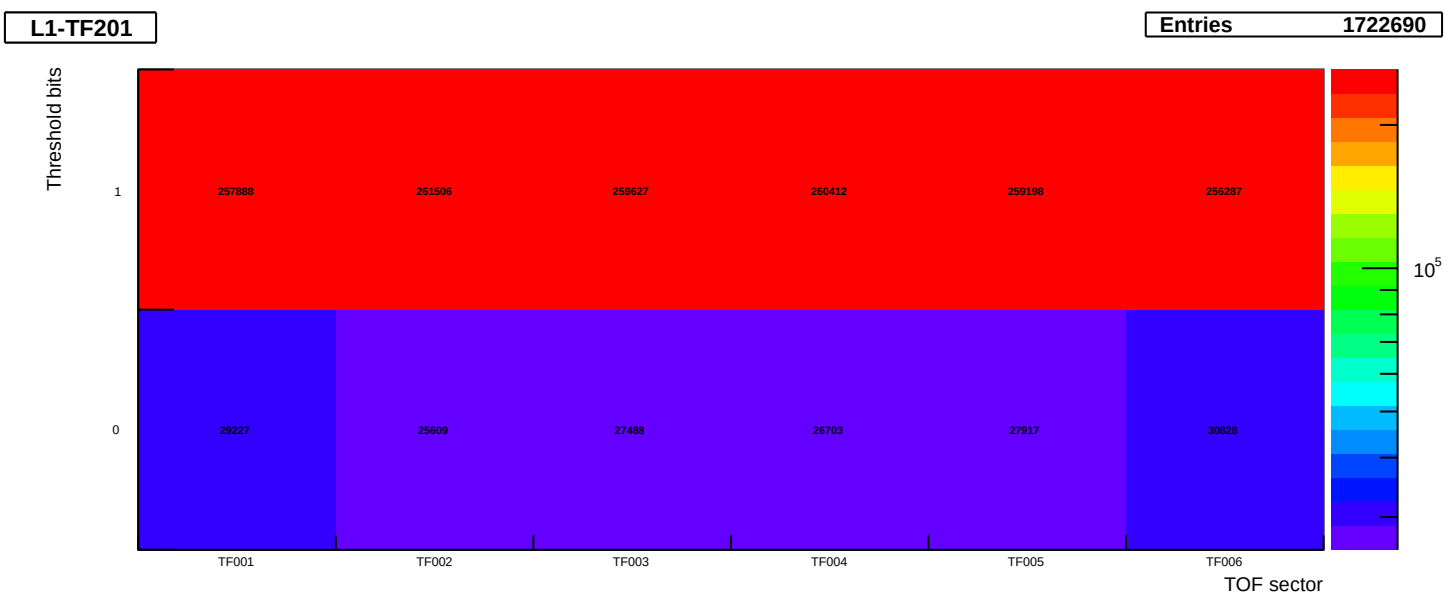

MIX-TF004
Entries 1.205883e+07
TOF MULT
TOF tray

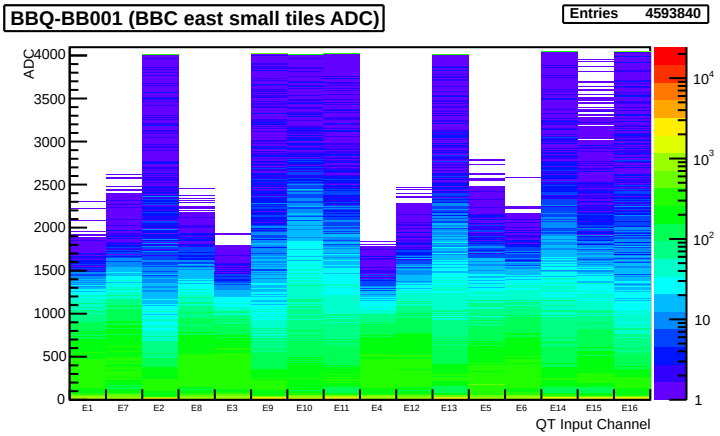

MIX-TF005
Entries 1.205883e+07
TOF MULT
TOF tray

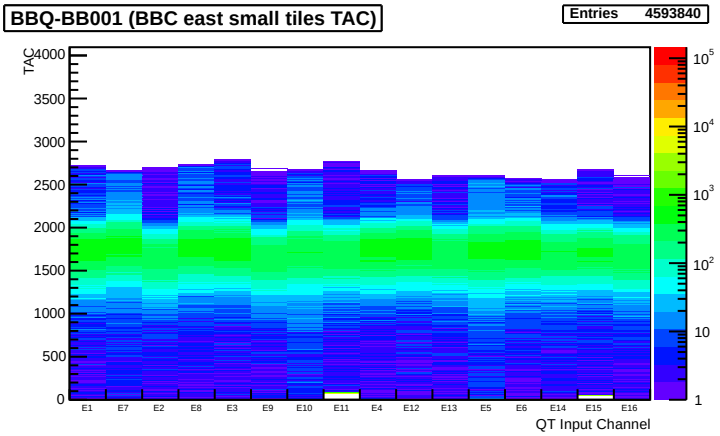

MIX-TF006
Entries 1.205883e+07
TOF MULT
TOF tray

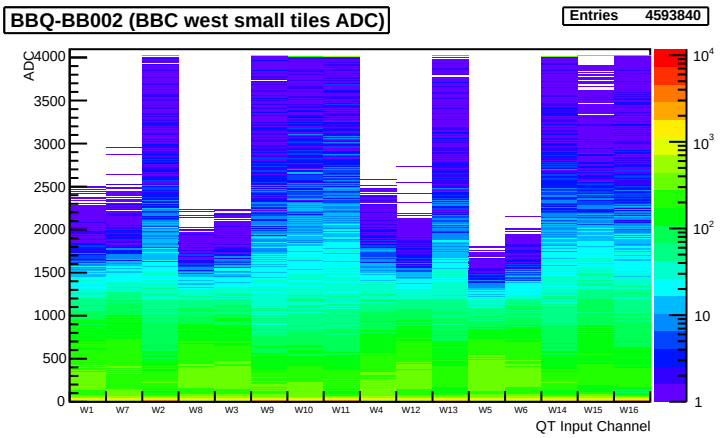

MIX-TF101
Entries 1722690
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

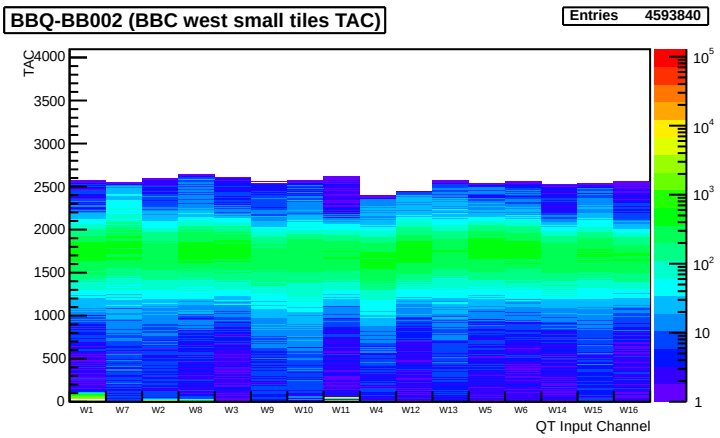

L1-TF201
Entries 287115
TOF total mult

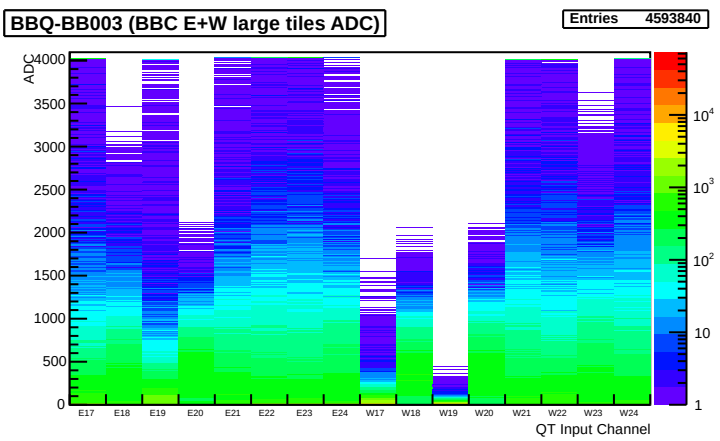

L1-TF201
Entries 1722690
Threshold bits
257888
261506
259627
260412
259198
256287
29227
25609
27488
26703
27917
30828
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

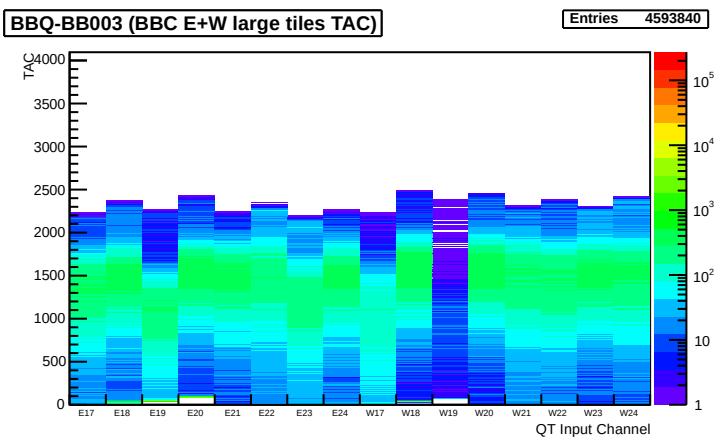

BBQ-BB001 (BBC east small tiles ADC)
Entries 4593840
ADC
QT Input Channel

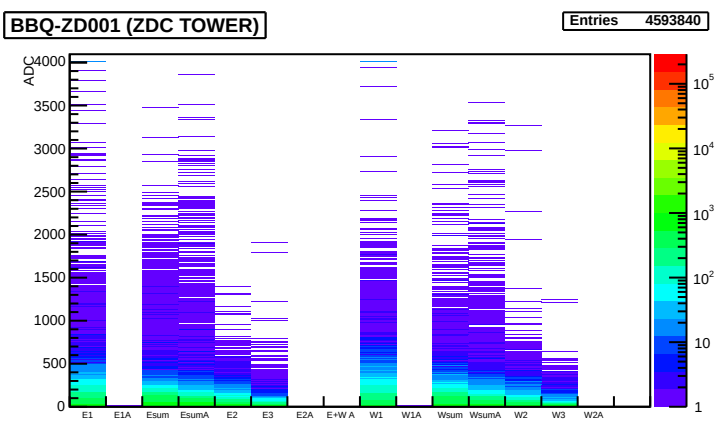

BBQ-BB001 (BBC east small tiles TAC)
Entries 4593840
TAC
QT Input Channel

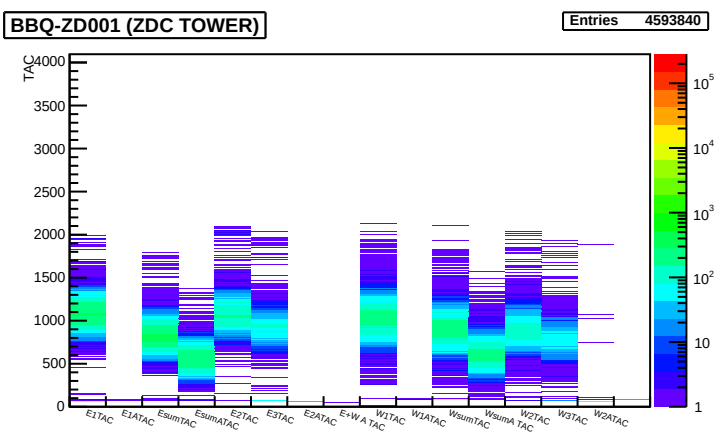

BBQ-BB002 (BBC west small tiles ADC)
Entries 4593840
ADC
QT Input Channel

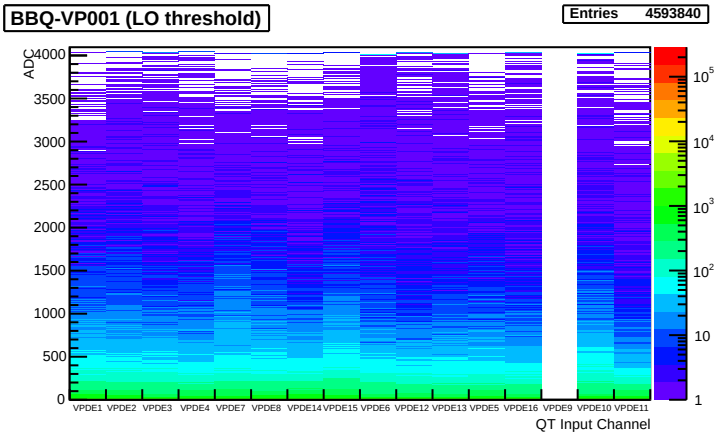

BBQ-BB002 (BBC west small tiles TAC)
Entries 4593840
TAC
QT Input Channel

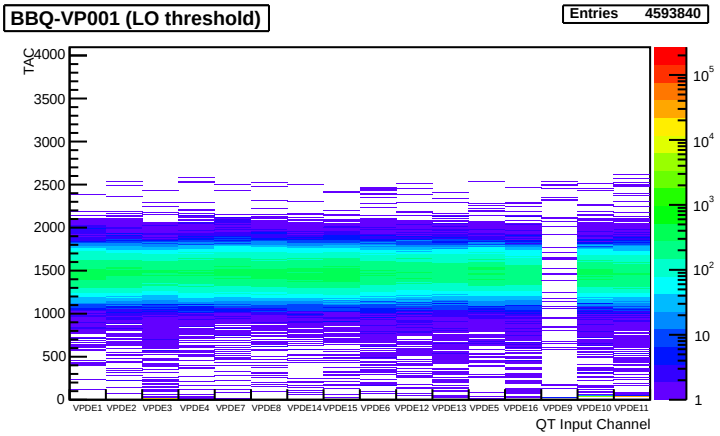

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4593840
ADC
QT Input Channel

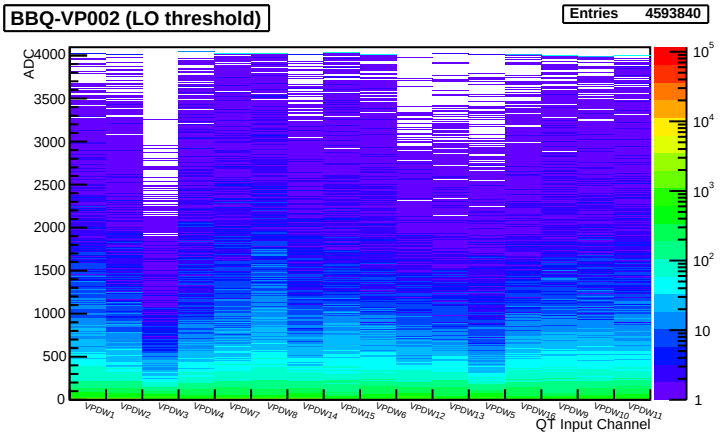

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4593840
TAC
QT Input Channel

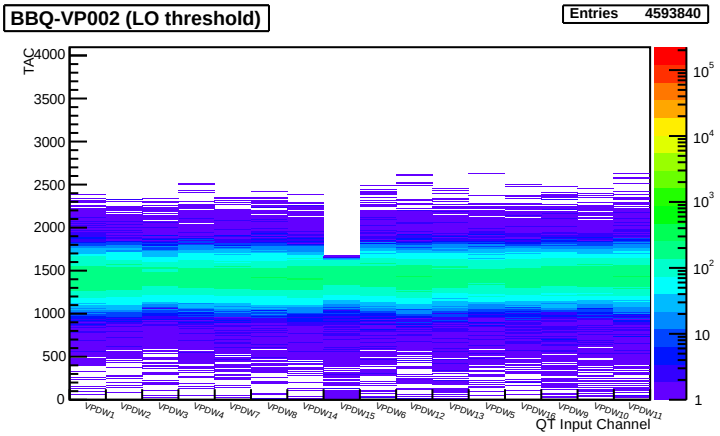

BBQ-ZD001 (ZDC TOWER)
Entries 4593840
ADC

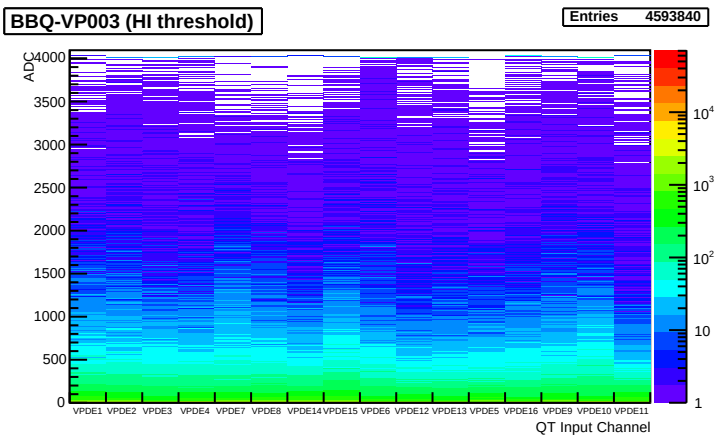

BBQ-ZD001 (ZDC TOWER)
Entries 4593840
TAC

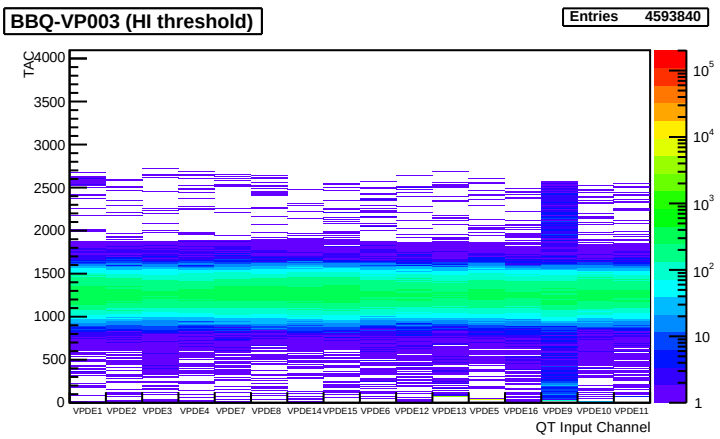

BBQ-VP001 (LO threshold)
Entries 4593840
ADC
QT Input Channel

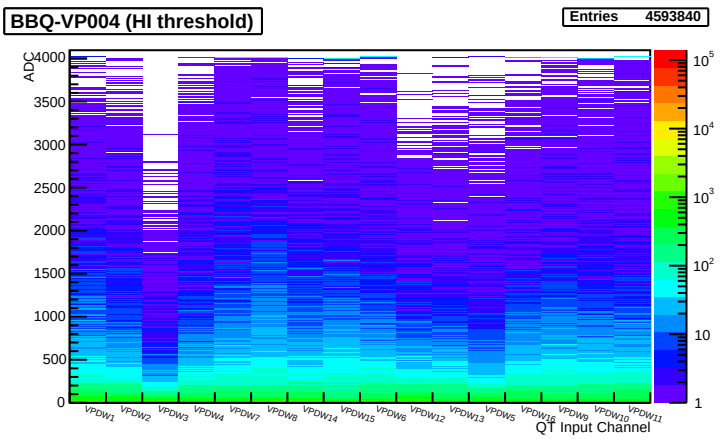

BBQ-VP001 (LO threshold)
Entries 4593840
TAC
QT Input Channel

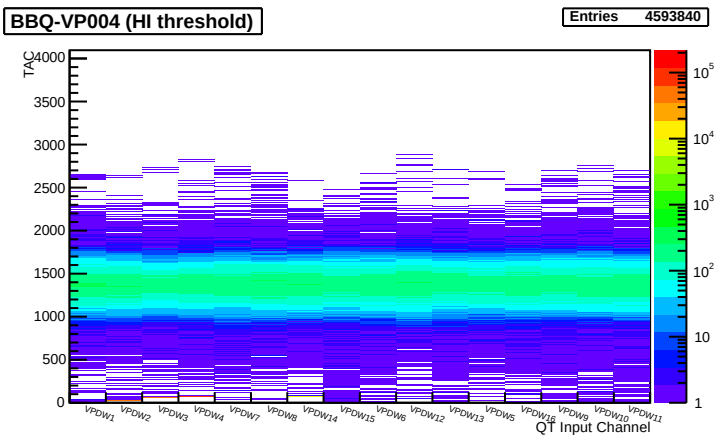

BBQ-VP002 (LO threshold)
Entries 4593840
ADC
QT Input Channel

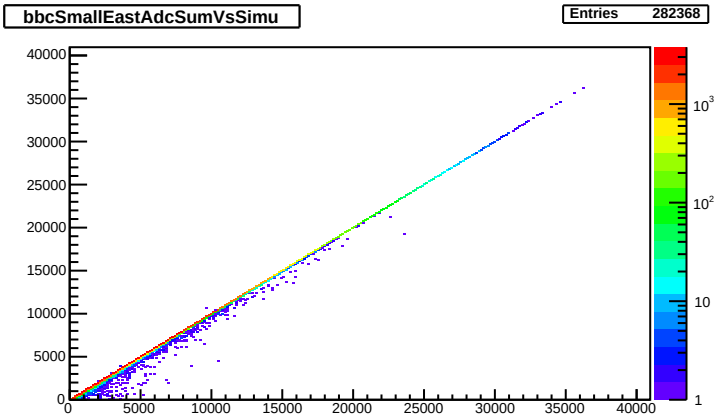

BBQ-VP002 (LO threshold)
Entries 4593840
TAC
QT Input Channel

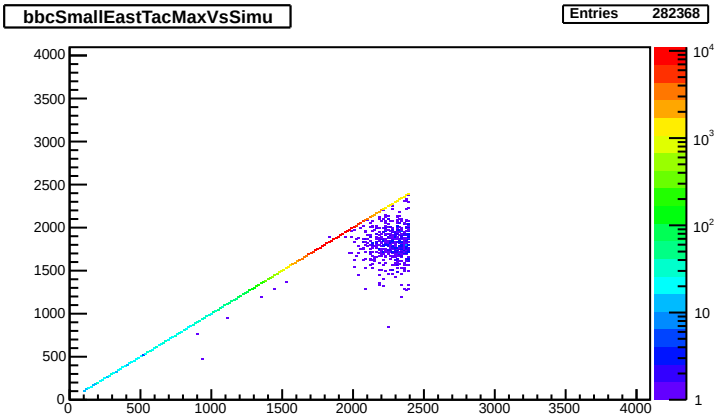

BBQ-VP003 (HI threshold)
Entries 4593840
ADC
QT Input Channel

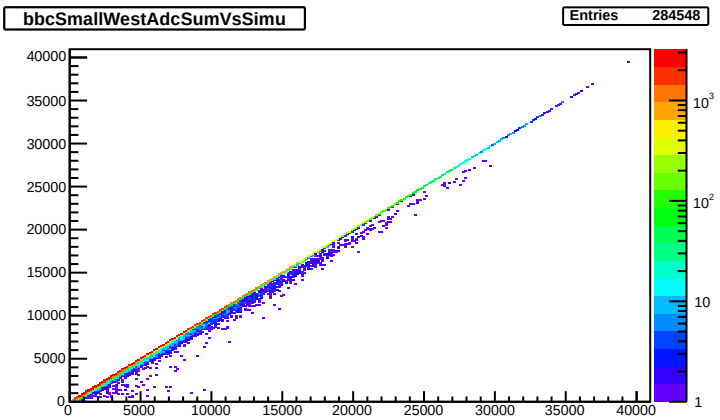

BBQ-VP003 (HI threshold)
Entries 4593840
TAC
QT Input Channel

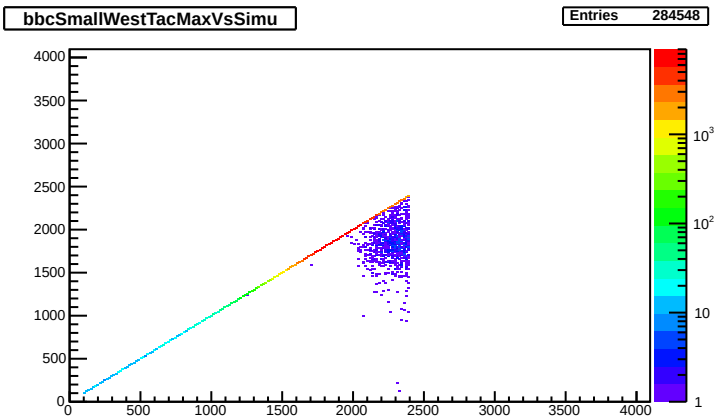

BBQ-VP004 (HI threshold)
Entries 4593840
ADC
QT Input Channel

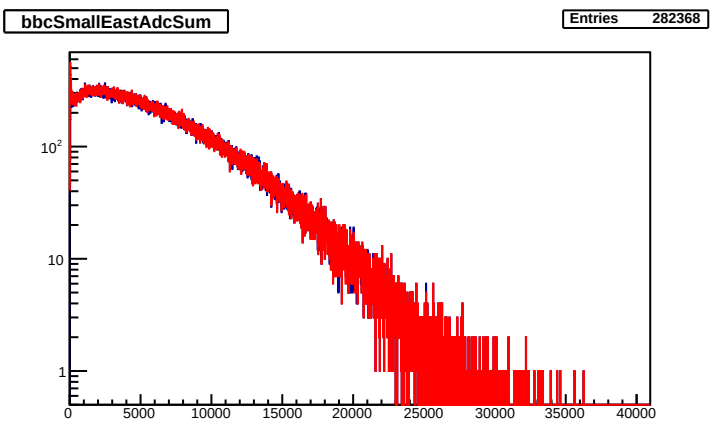

BBQ-VP004 (HI threshold)
Entries 4593840
TAC
QT Input Channel

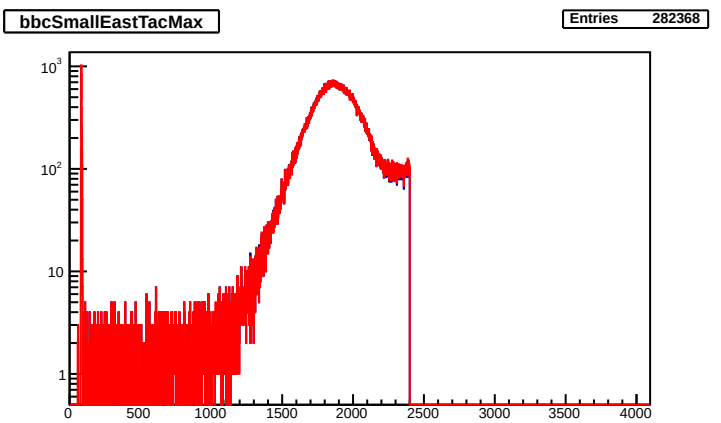

bbcSmallEastAdcSumVsSimu
Entries 282368

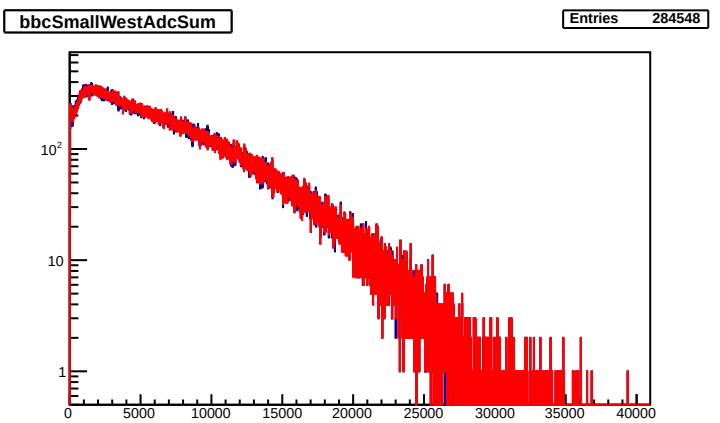

bbcSmallEastTacMaxVsSimu
Entries 282368

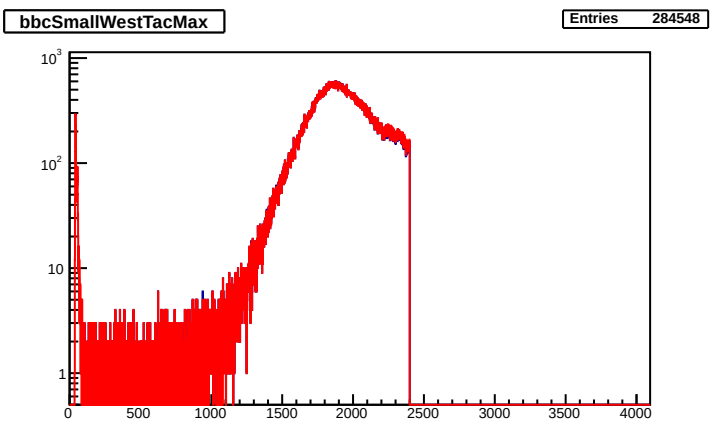

bbcSmallWestAdcSumVsSimu
Entries 284548

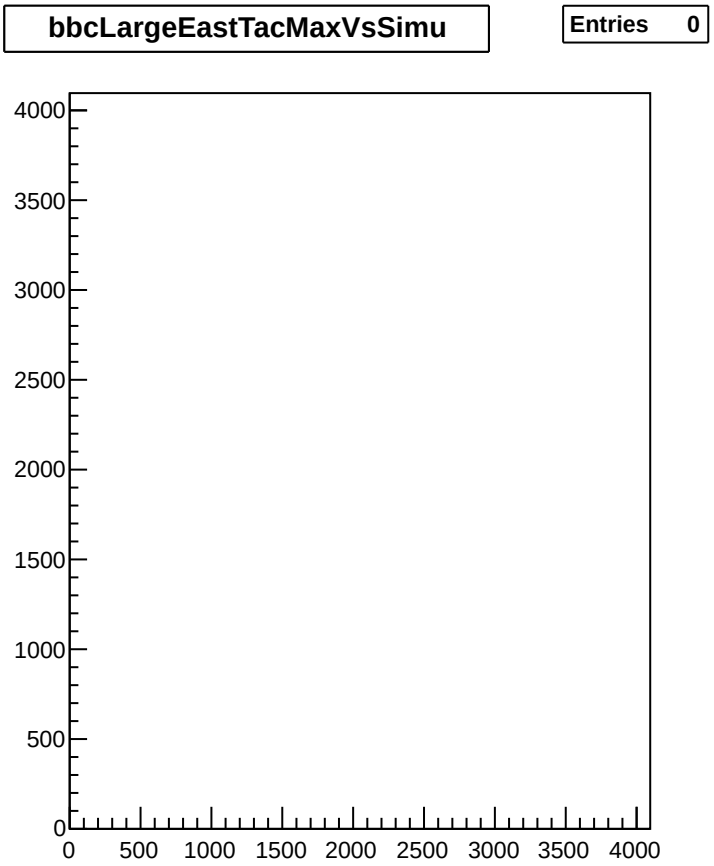

bbcSmallWestTacMaxVsSimu
Entries 284548

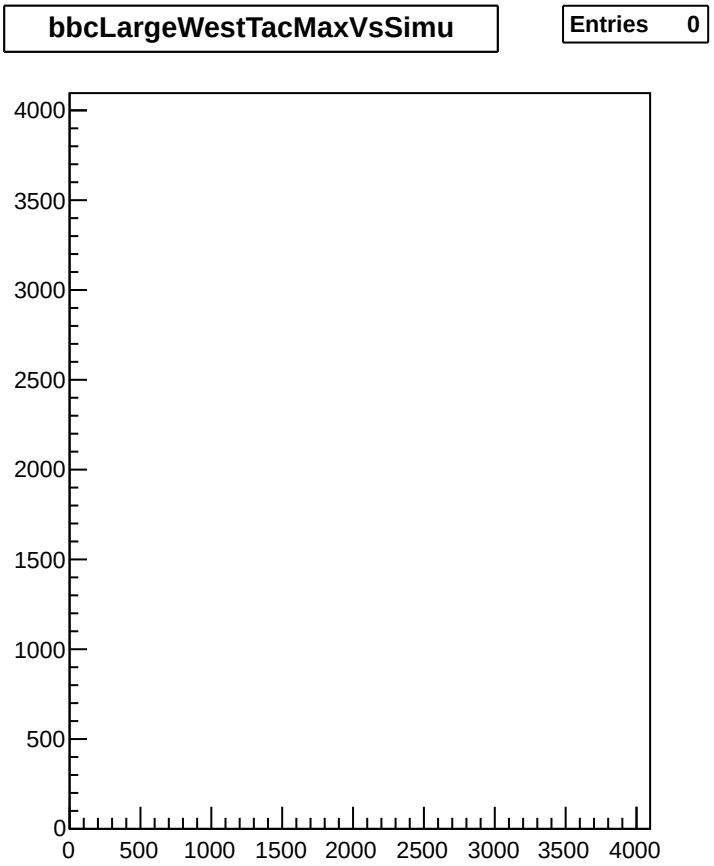

bbcSmallEastAdcSum
Entries 282368

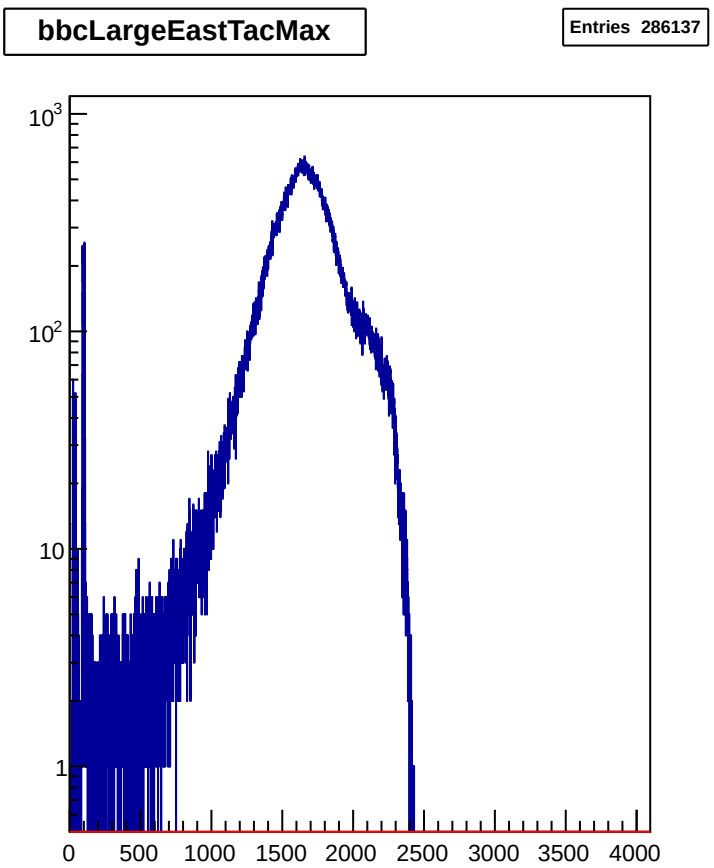

bbcSmallEastTacMax
Entries 282368

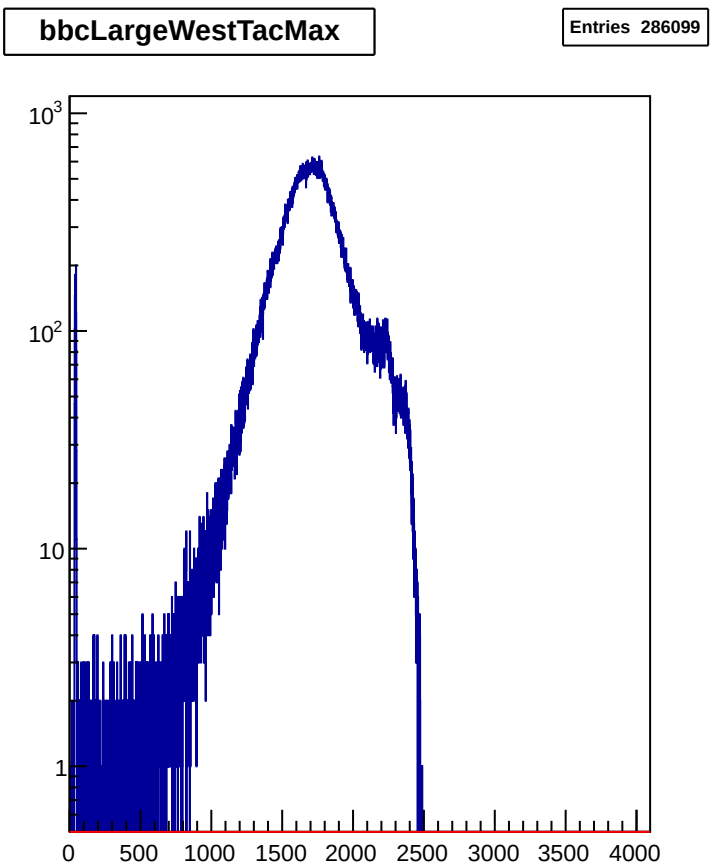

bbcSmallWestAdcSum
Entries 284548

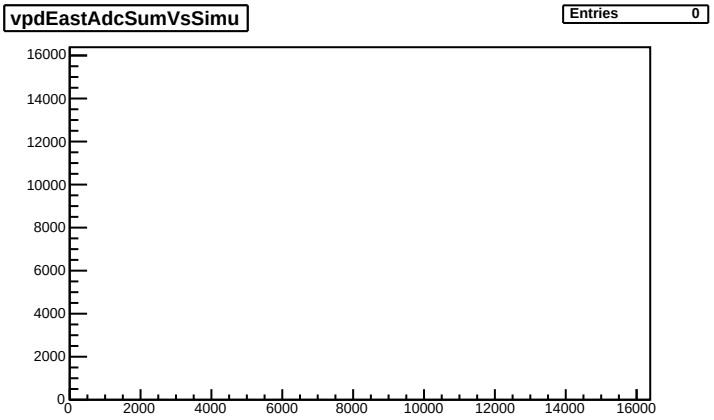

bbcSmallWestTacMax
Entries 284548

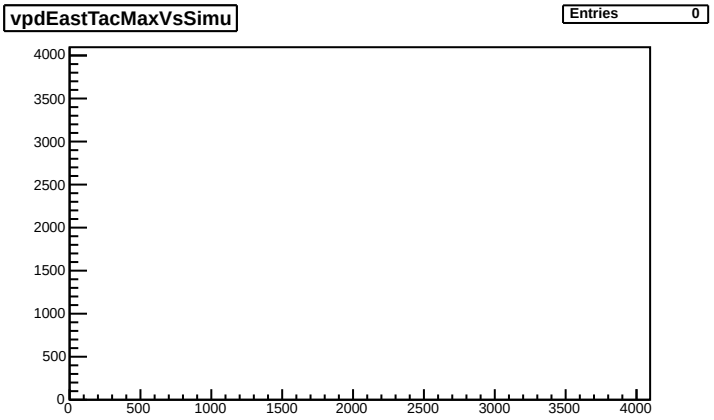

bbcLargeEastTacMaxVsSimu
Entries 0
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000

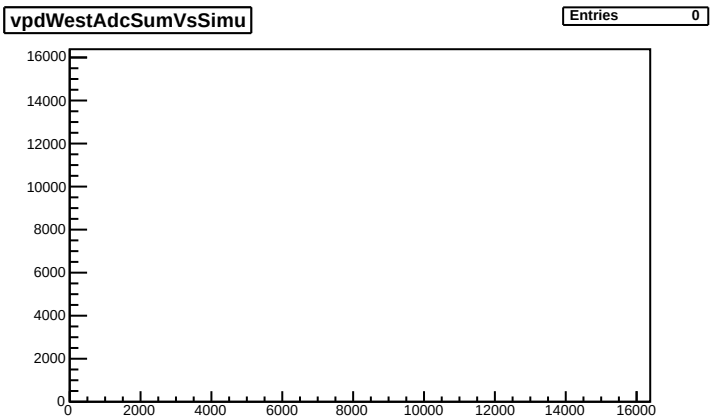

bbcLargeWestTacMaxVsSimu
Entries 0
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000

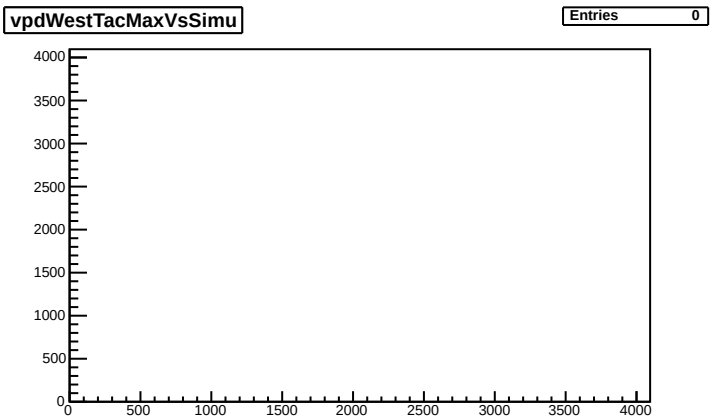

bbcLargeEastTacMax
Entries 286137
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

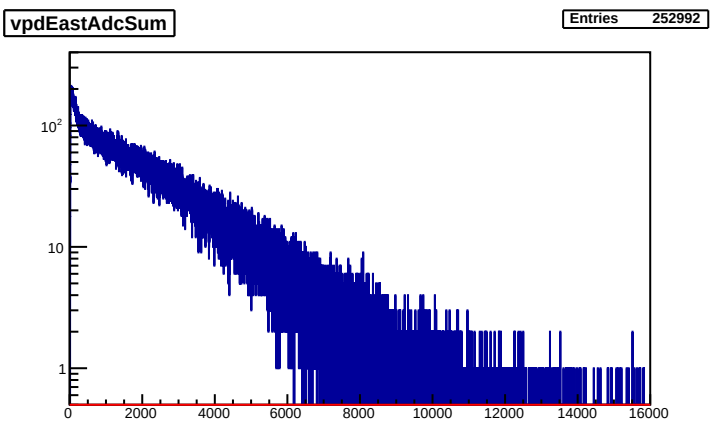

bbcLargeWestTacMax
Entries 286099
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

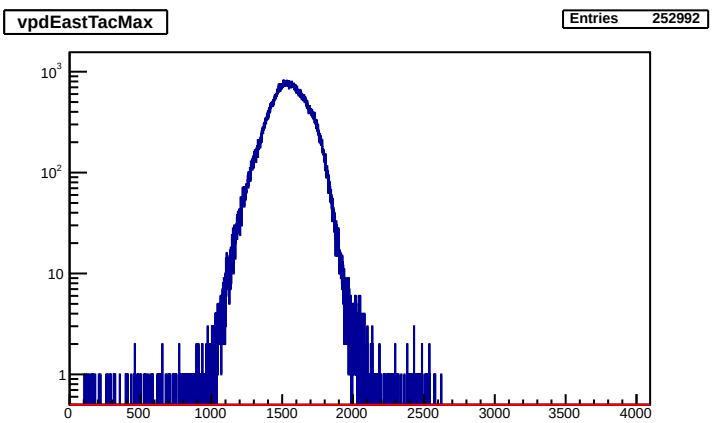

vpdEastAdcSumVsSimu
Entries 0

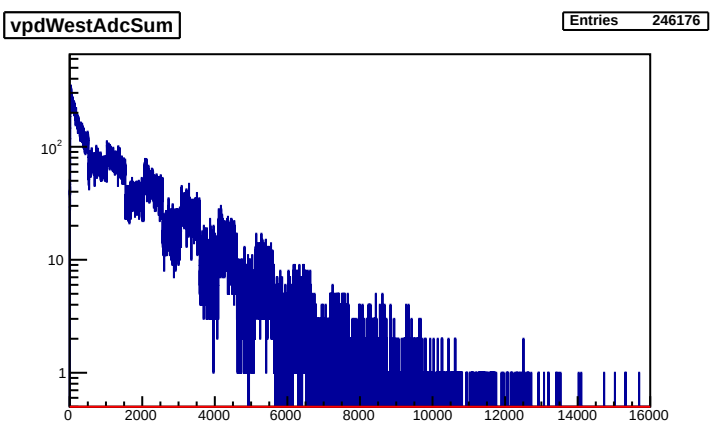

vpdEastTacMaxVsSimu
Entries 0

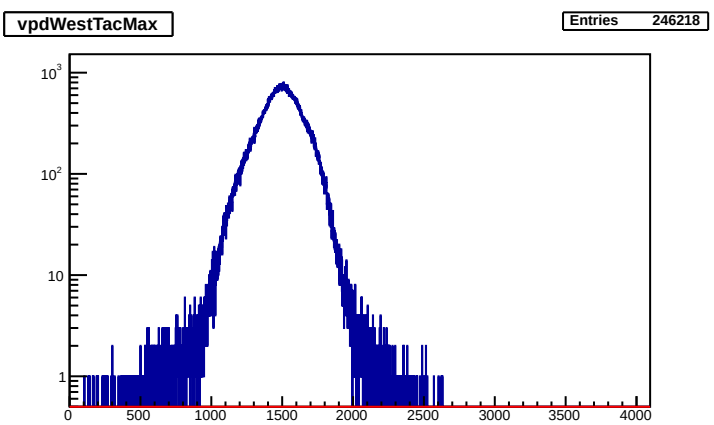

vpdWestAdcSumVsSimu
Entries 0

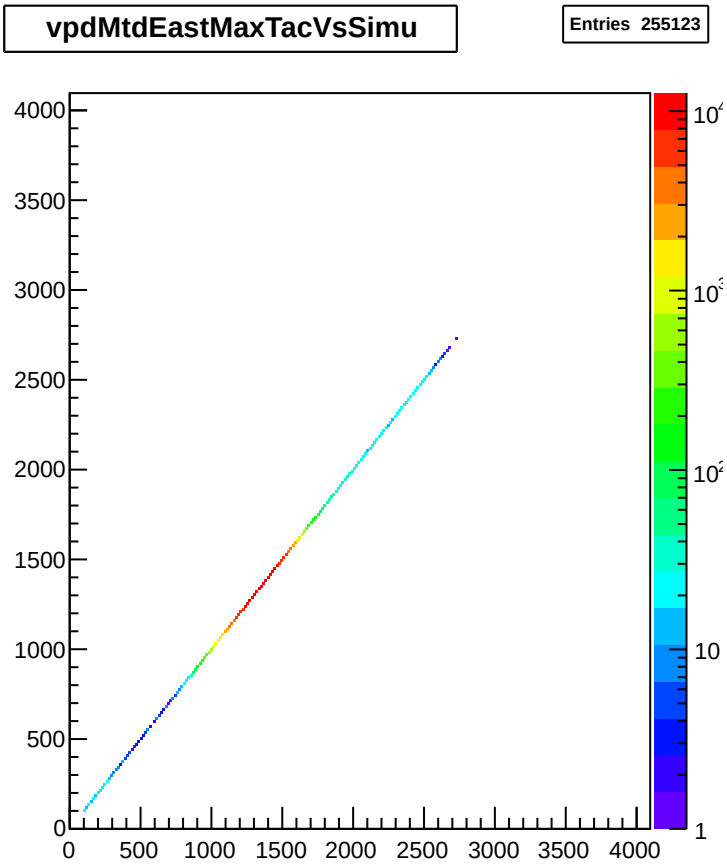

vpdWestTacMaxVsSimu
Entries 0

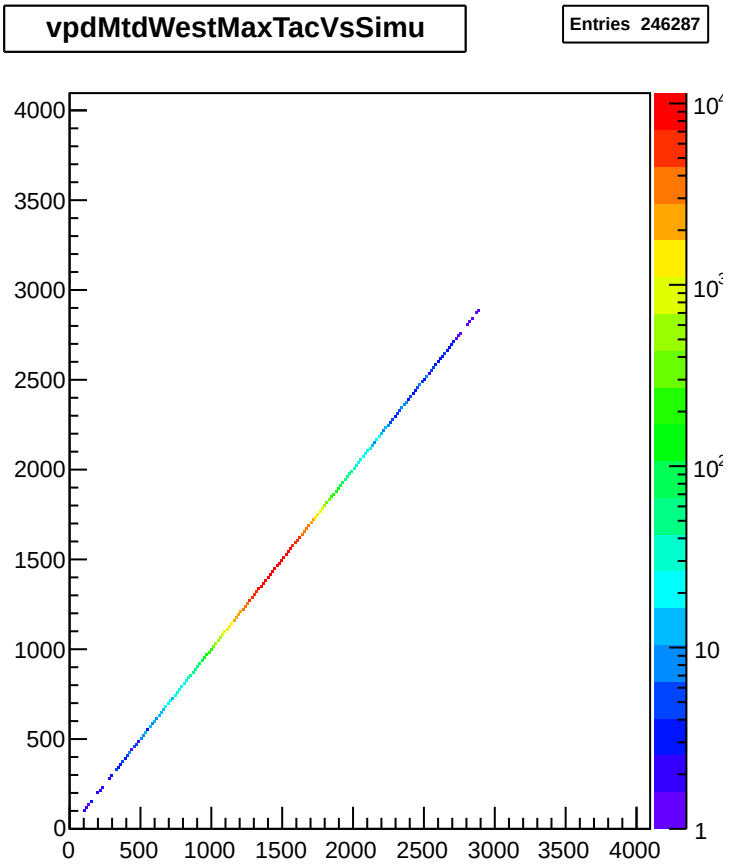

vpdEastAdcSum
Entries 252992

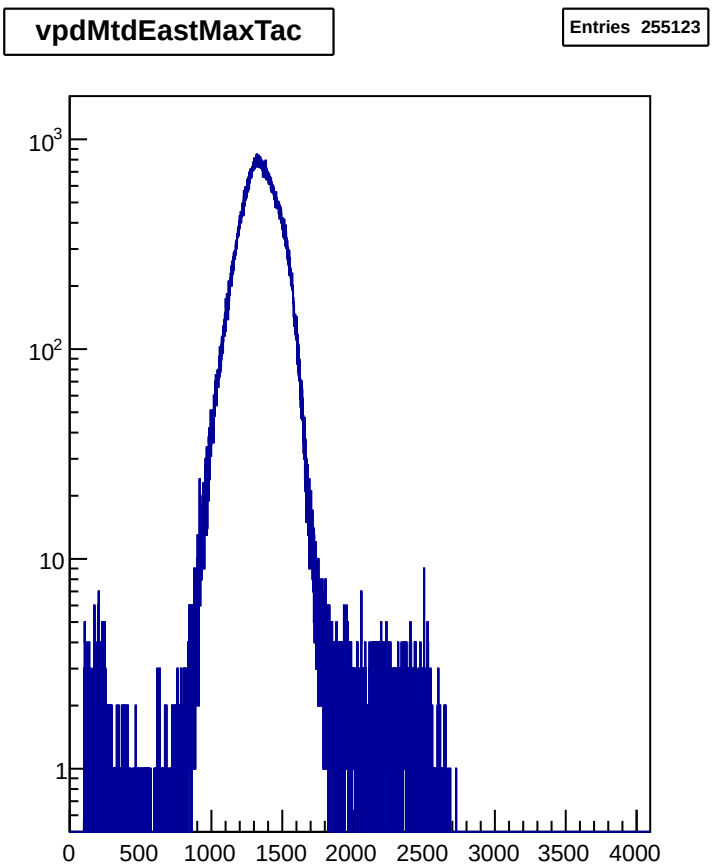

vpdEastTacMax
Entries 252992

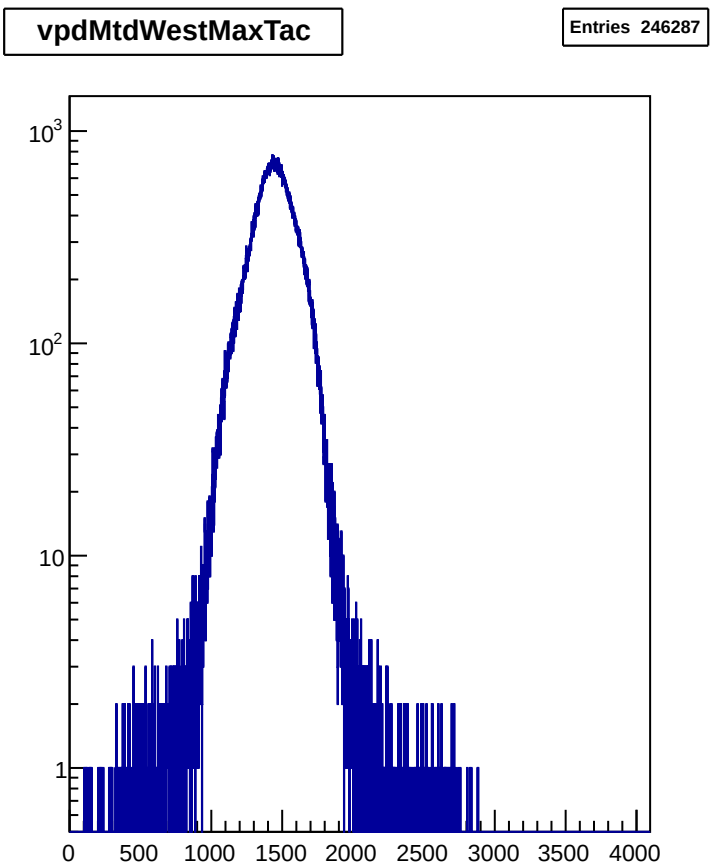

vpdWestAdcSum
Entries 246176

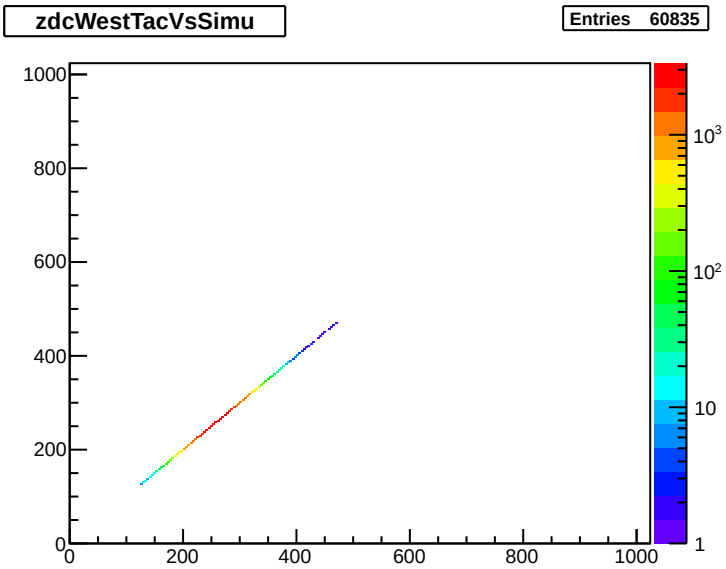

vpdWestTacMax
Entries 246218

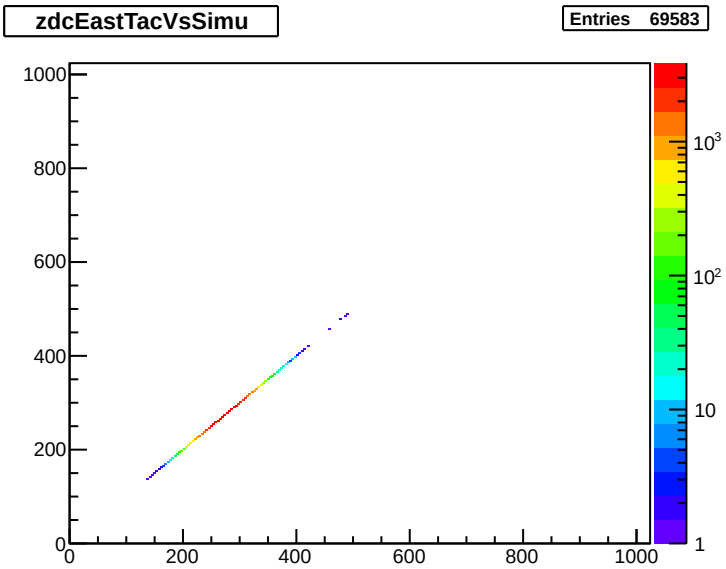

vpdMtdEastMaxTacVsSimu
Entries 255123
0
500
1000
1500
2000
2500
3000
3500
4000
1
10
10²
10³
10⁴

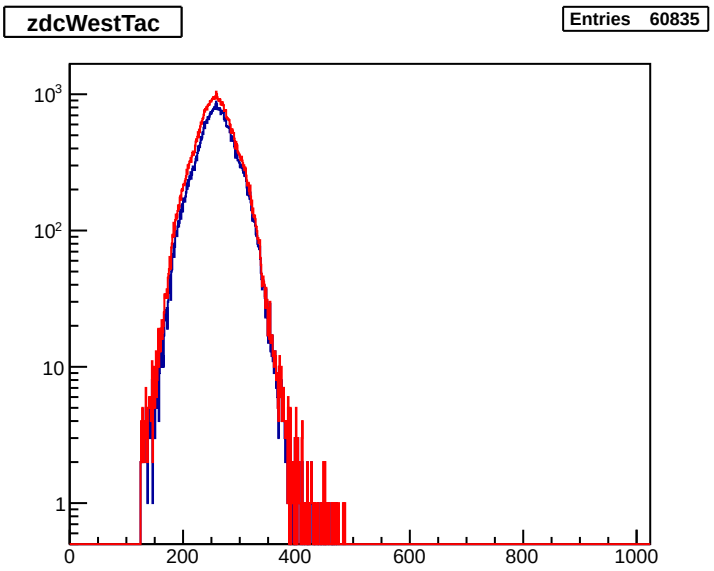

vpdMtdWestMaxTacVsSimu
Entries 246287
0
500
1000
1500
2000
2500
3000
3500
4000
1
10
10²
10³
10⁴

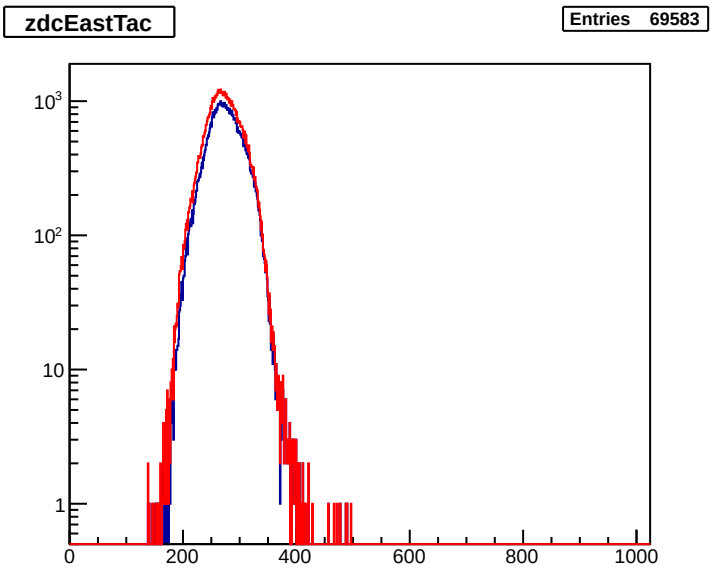

vpdMtdEastMaxTac
Entries 255123
0
500
1000
1500
2000
2500
3000
3500
4000
1
10
10²
10³

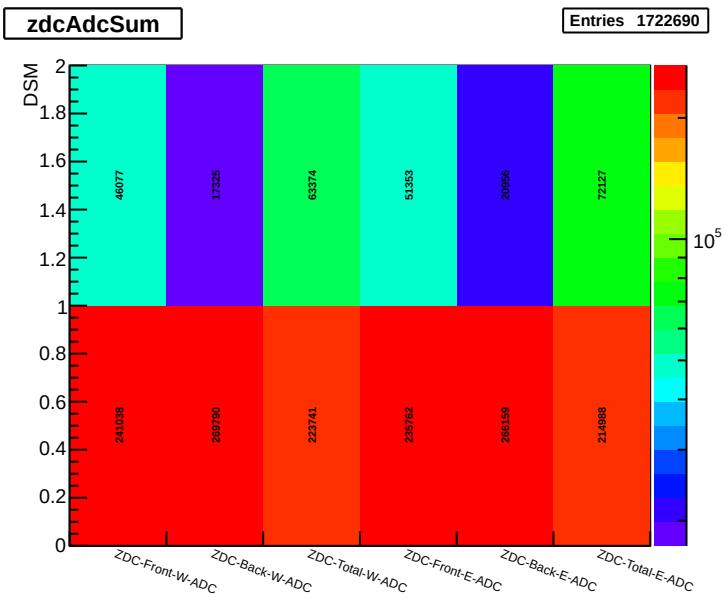

vpdMtdWestMaxTac
Entries 246287
0
500
1000
1500
2000
2500
3000
3500
4000
1
10
10²
10³

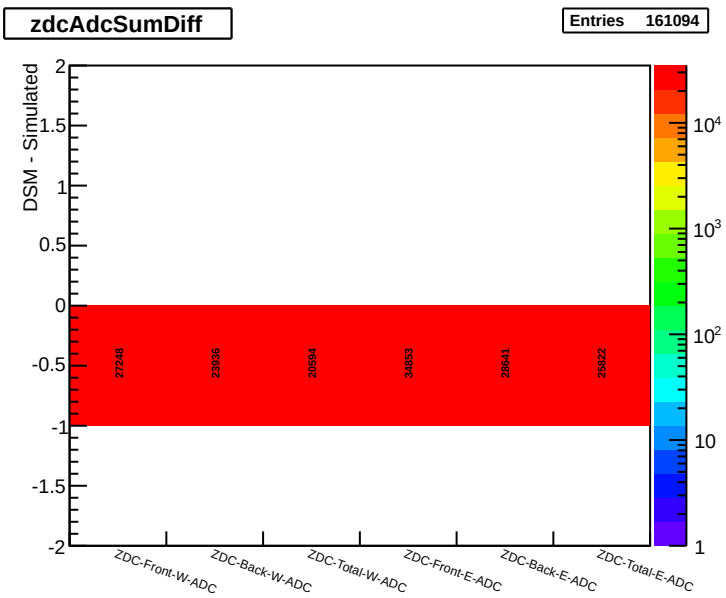

zdcWestTacVsSimu
Entries 60835

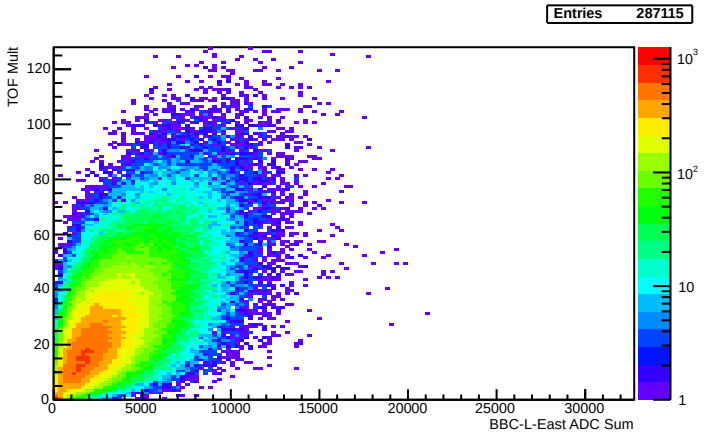

zdcEastTacVsSimu
Entries 69583

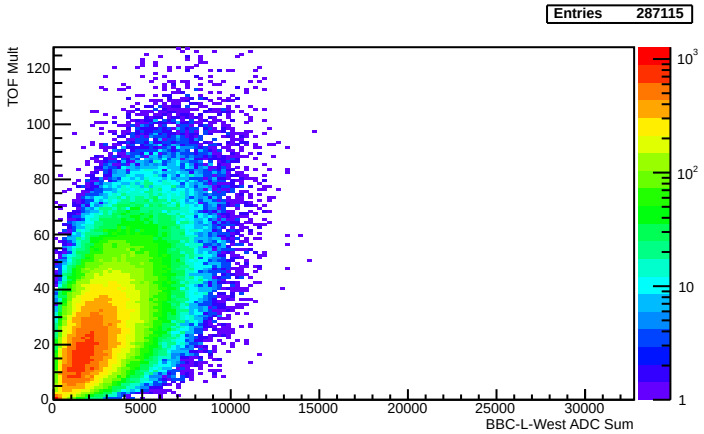

zdcWestTac
Entries 60835

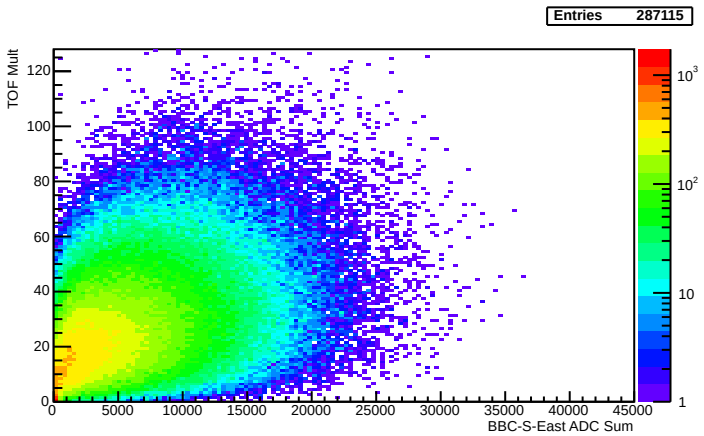

zdcEastTac
Entries 69583

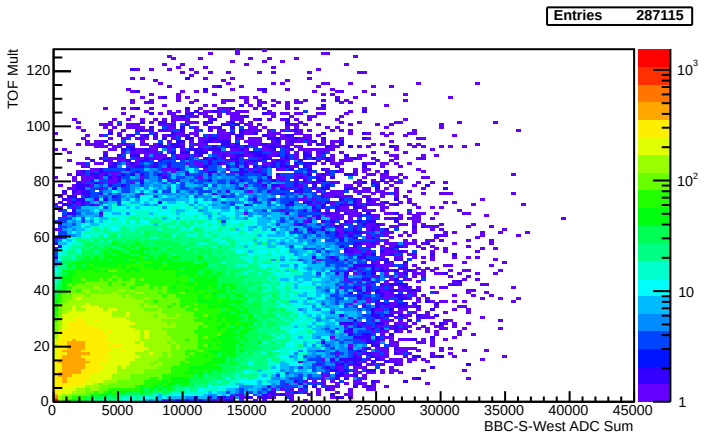

zdcAdcSum
Entries 1722690
DSM
46077
17325
63374
51353
20956
72127
241038
269790
223741
235762
266159
214988
ZDC-Front-W-ADC
ZDC-Back-W-ADC
ZDC-Total-W-ADC
ZDC-Front-E-ADC
ZDC-Back-E-ADC
ZDC-Total-E-ADC

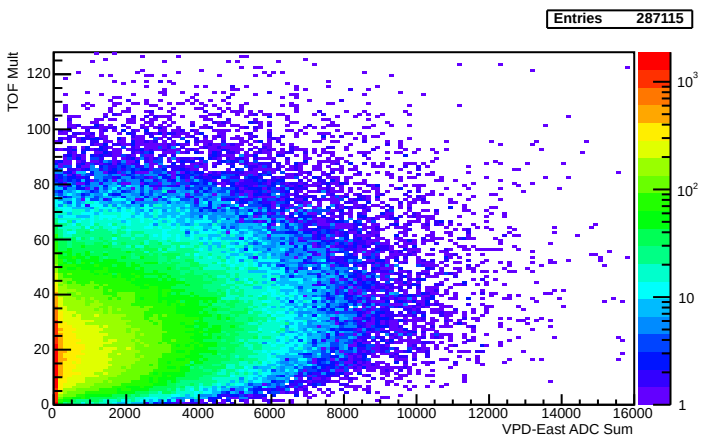

zdcAdcSumDiff
Entries 161094
DSM - Simulated
27248
23936
20594
34853
28641
25822
ZDC-Front-W-ADC
ZDC-Back-W-ADC
ZDC-Total-W-ADC
ZDC-Front-E-ADC
ZDC-Back-E-ADC
ZDC-Total-E-ADC

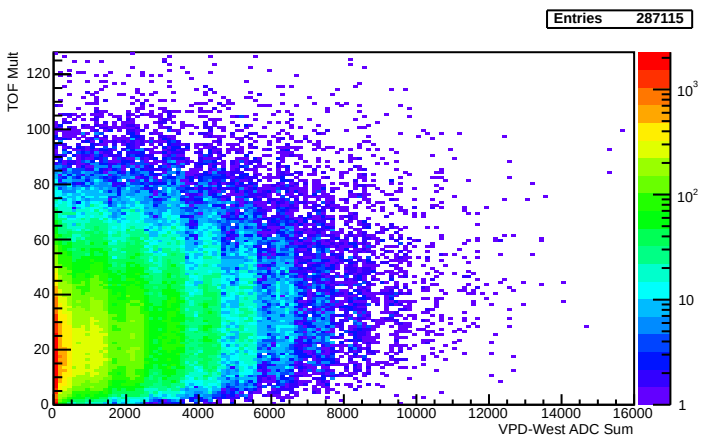

Entries 287115
TOF Mult
BBC-L-East ADC Sum

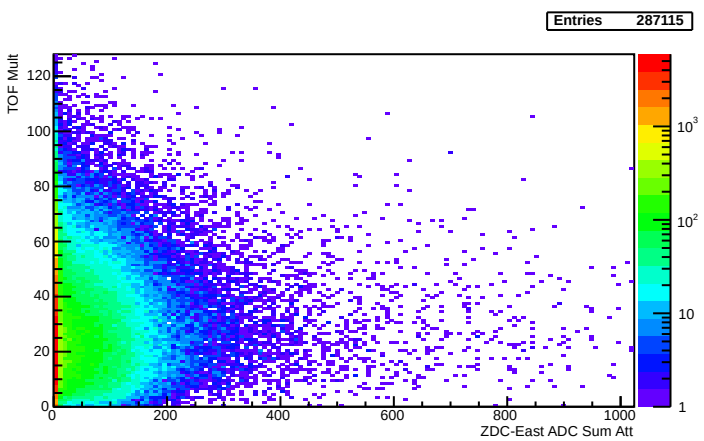

Entries 287115
TOF Mult
BBC-L-West ADC Sum

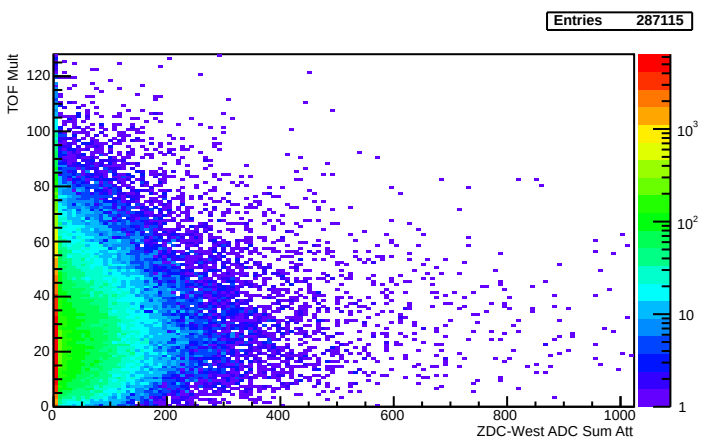

Entries 287115
TOF Mult
BBC-S-East ADC Sum

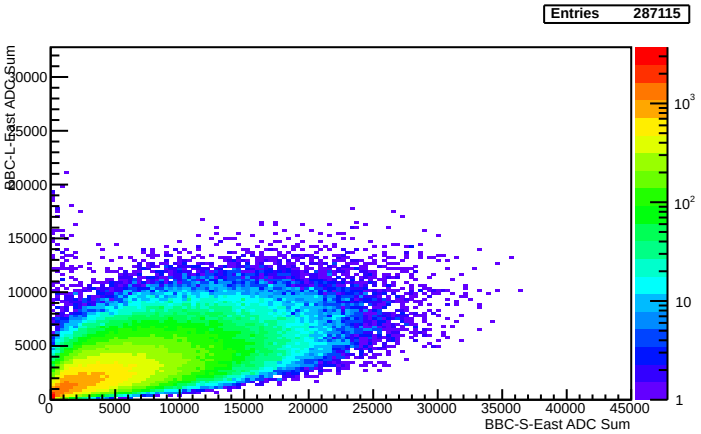

Entries 287115
TOF Mult
BBC-S-West ADC Sum

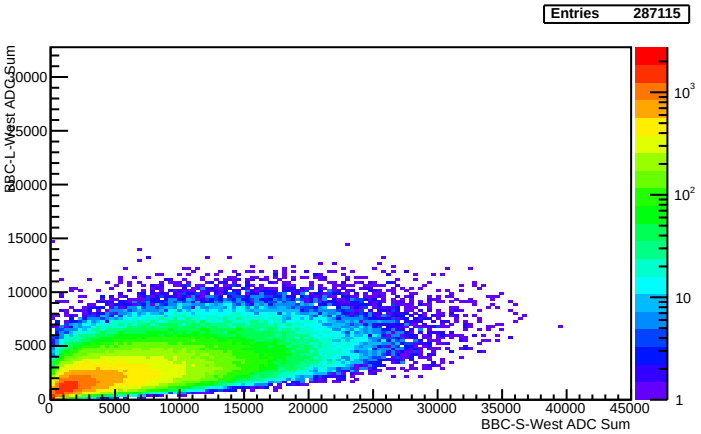

Entries 287115
TOF Mult
VPD-East ADC Sum

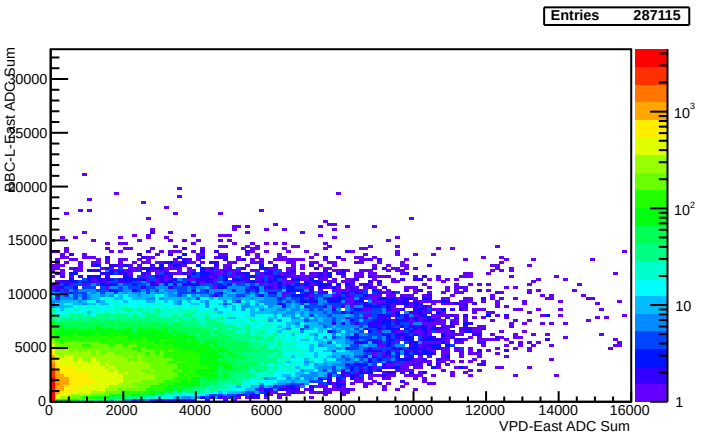

Entries 287115
TOF Mult
VPD-West ADC Sum

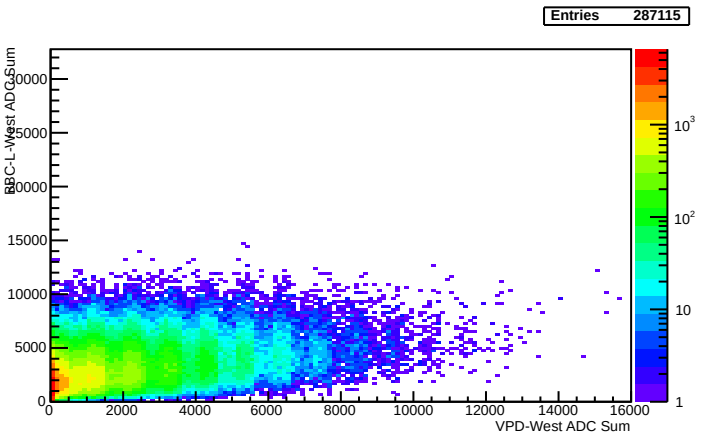

Entries 287115
TOF Mult
ZDC-East ADC Sum Att

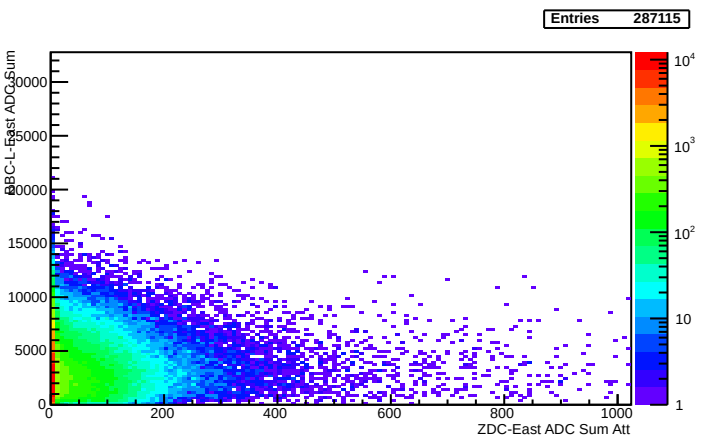

Entries 287115
TOF Mult
ZDC-West ADC Sum Att

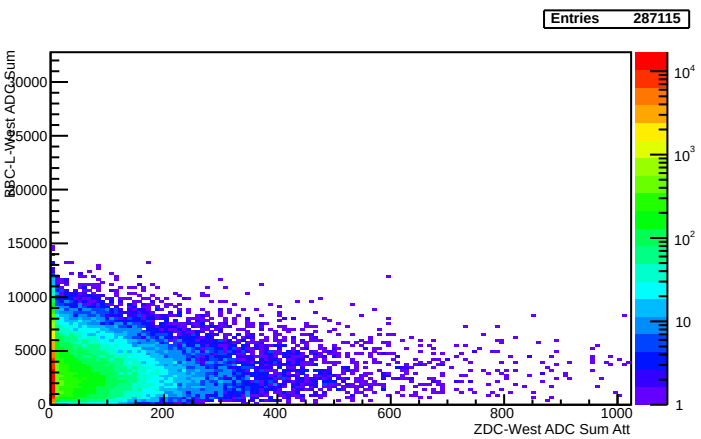

Entries 287115
BBC-L-East ADC Sum
BBC-S-East ADC Sum

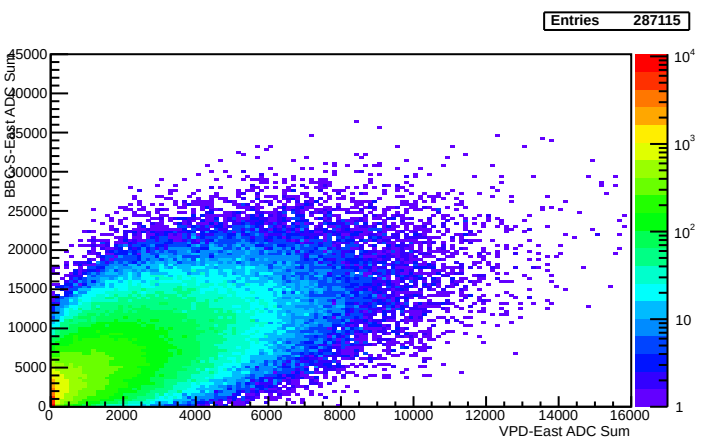

Entries 287115
BBC-L-West ADC Sum
BBC-S-West ADC Sum

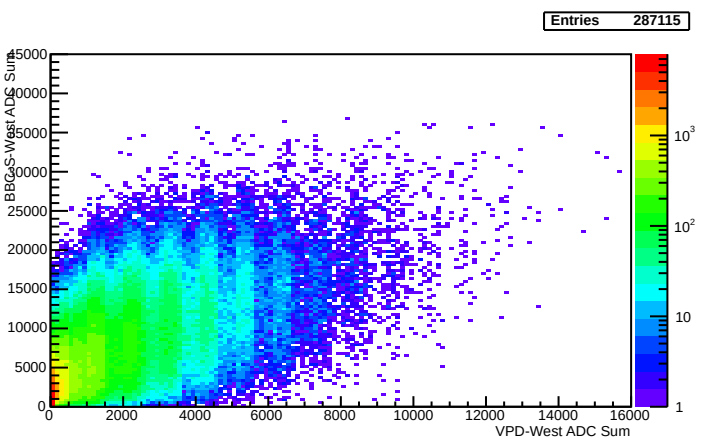

Entries 287115
BBC-L-East ADC Sum
VPD-East ADC Sum

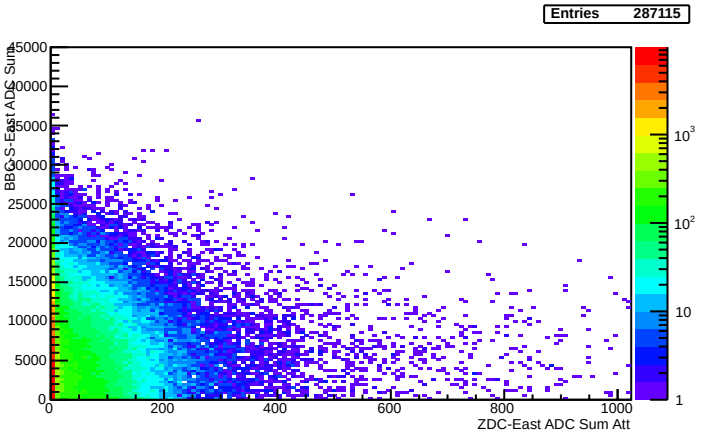

Entries 287115
BBC-L-West ADC Sum
VPD-West ADC Sum

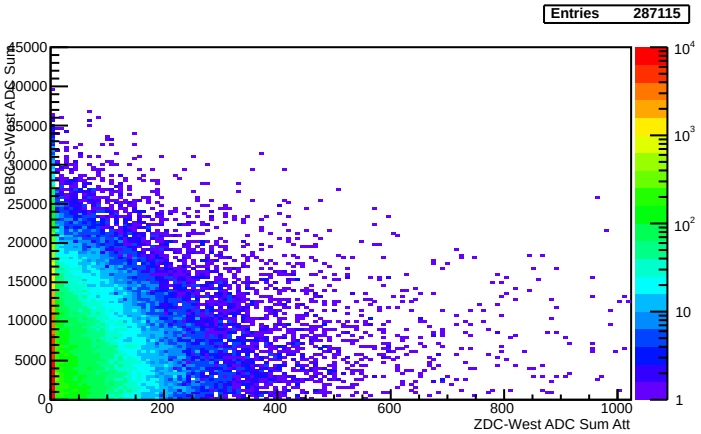

Entries 287115
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

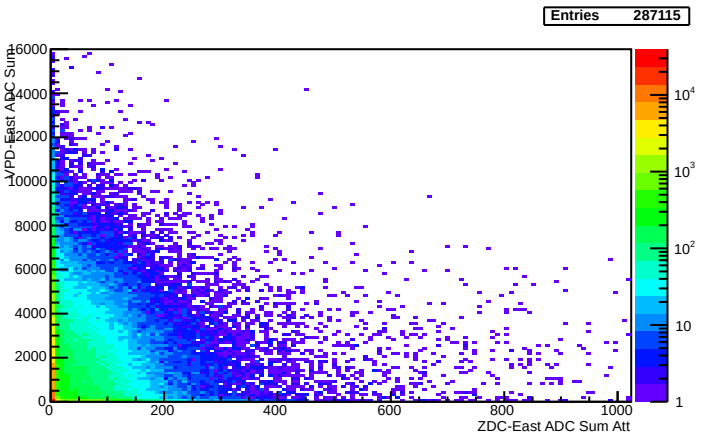

Entries 287115
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

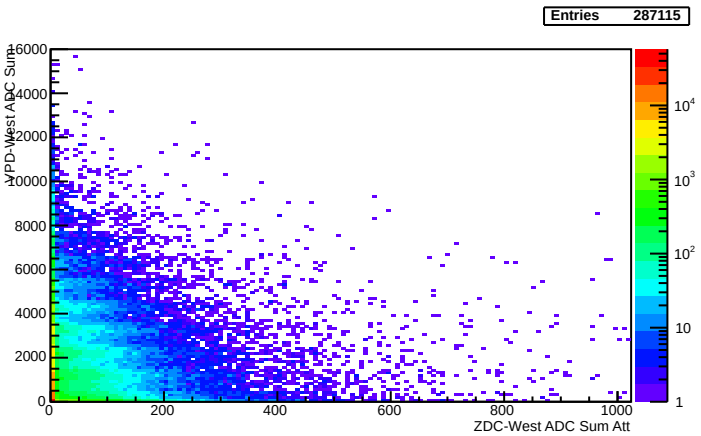

Entries 287115
BBC-S-East ADC Sum
VPD-East ADC Sum

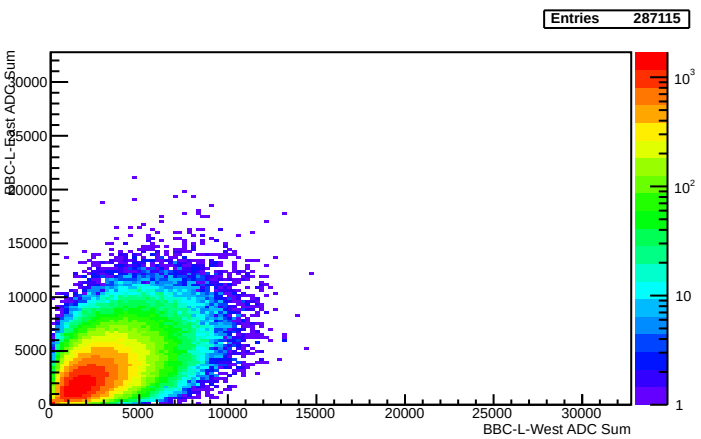

Entries 287115
BBC-S-West ADC Sum
VPD-West ADC Sum

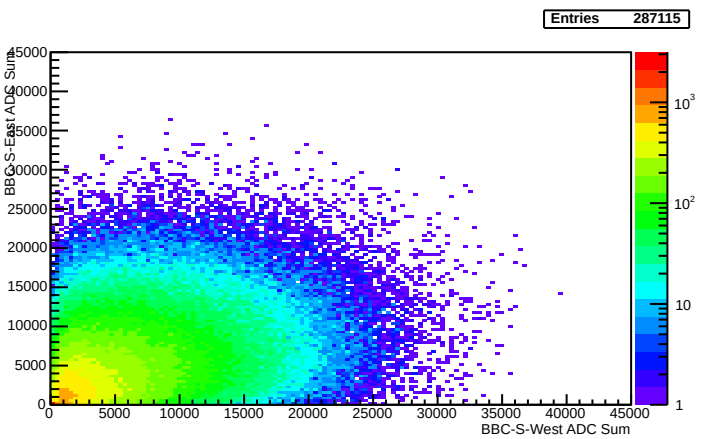

Entries 287115
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

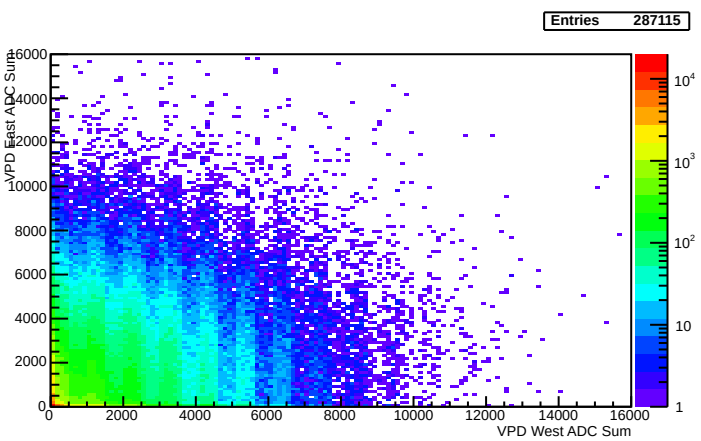

Entries 287115
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

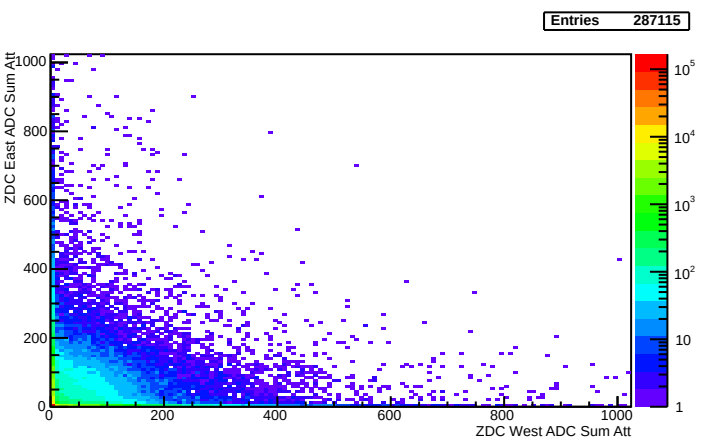

Entries 287115
VPD-East ADC Sum
ZDC-East ADC Sum Att

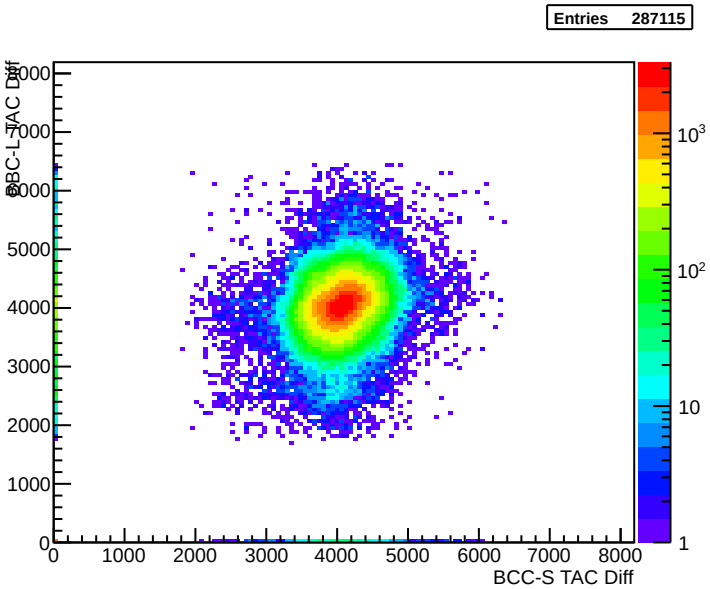

Entries 287115
VPD-West ADC Sum
ZDC-West ADC Sum Att

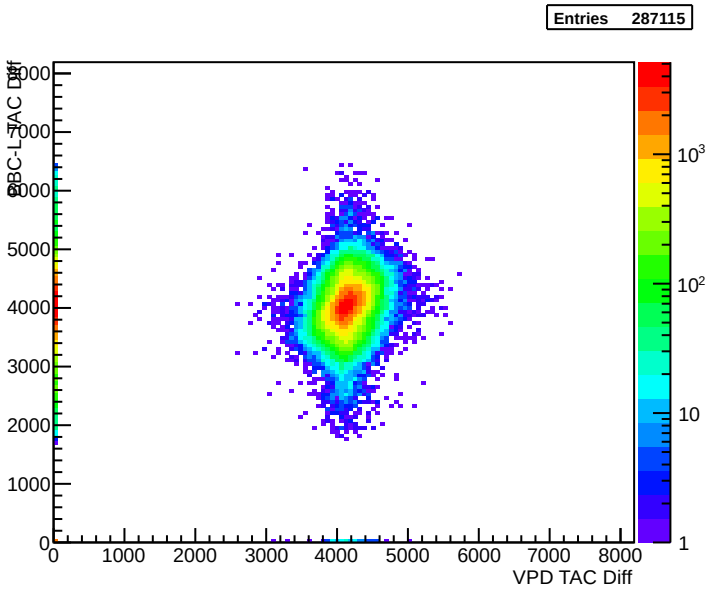

Entries 287115
BBC-L-East ADC Sum
BBC-L-West ADC Sum

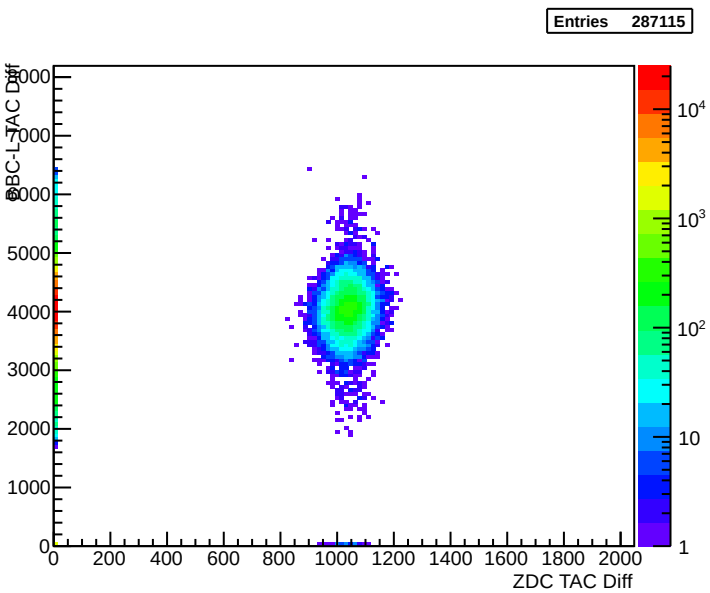

Entries 287115
BBC-S-East ADC Sum
BBC-S-West ADC Sum

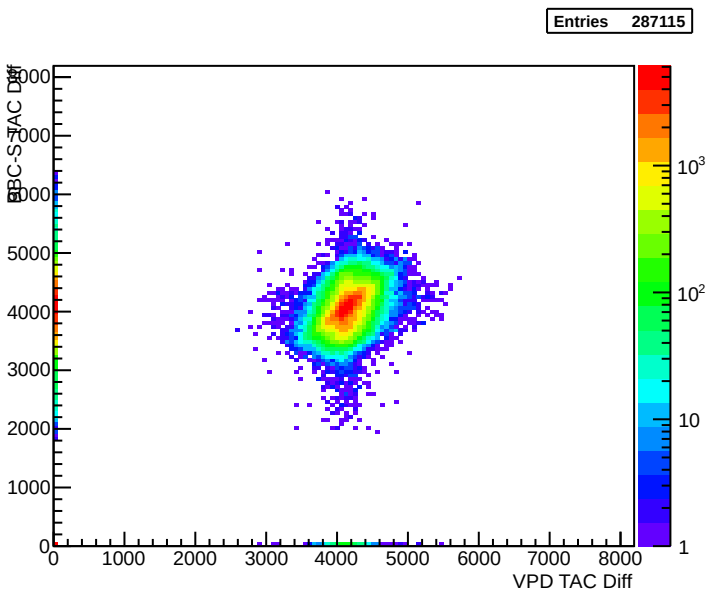

Entries 287115
VPD East ADC Sum
VPD West ADC Sum

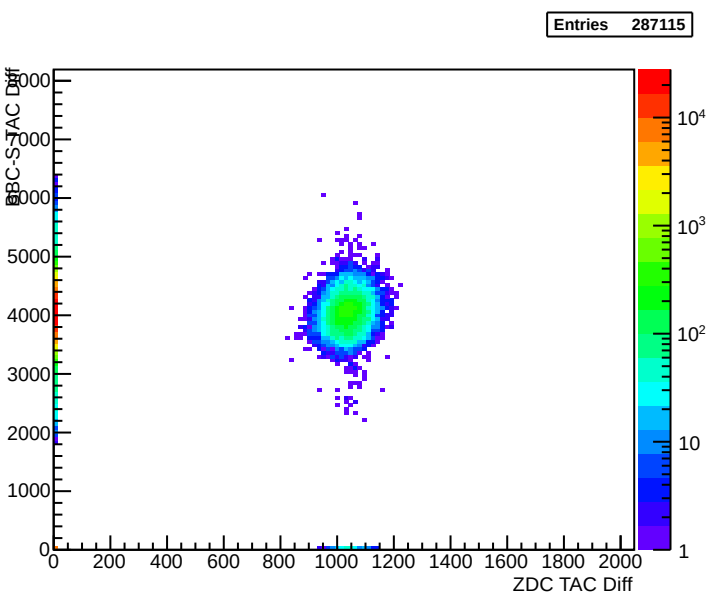

Entries 287115
ZDC East ADC Sum Att
ZDC West ADC Sum Att

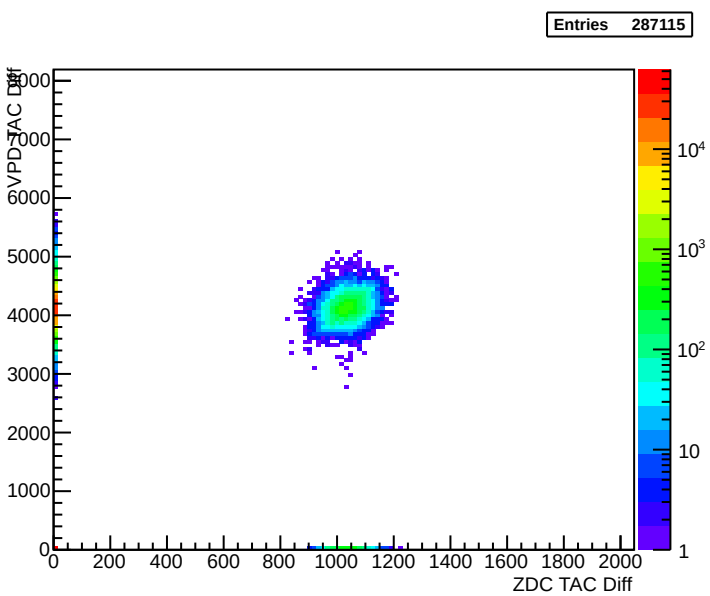

Entries 287115
BBC-L TAC Diff
BCC-S TAC Diff

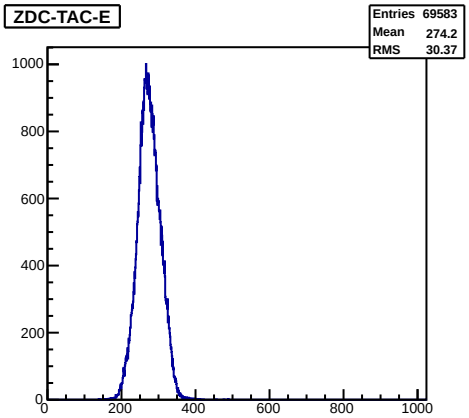

Entries 287115
BBC-L TAC Diff
VPD TAC Diff

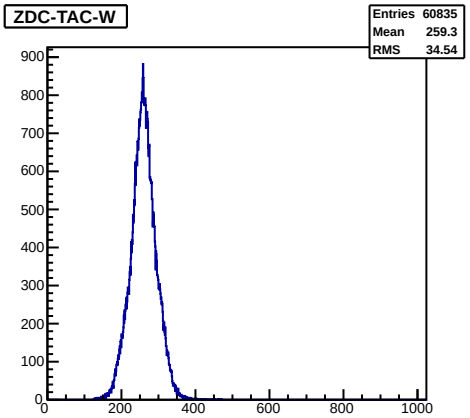

Entries 287115
BBC-L TAC Diff
ZDC TAC Diff

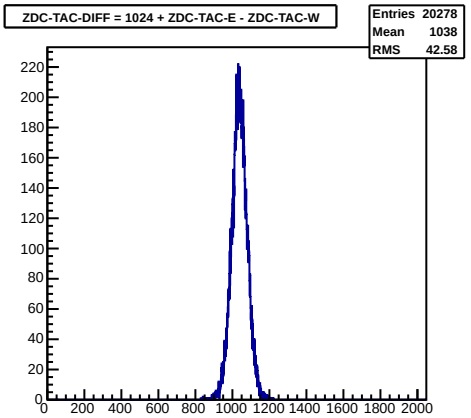

Entries 287115
BBC-S TAC Diff
VPD TAC Diff

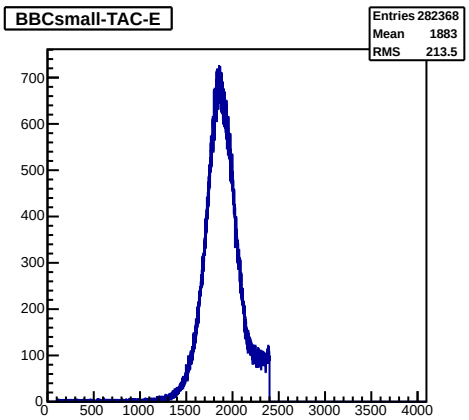

Entries 287115
BBC-S TAC Diff
ZDC TAC Diff

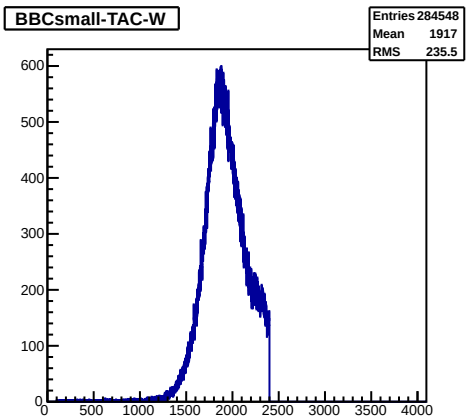

Entries 287115
VPD TAC Diff
ZDC TAC Diff

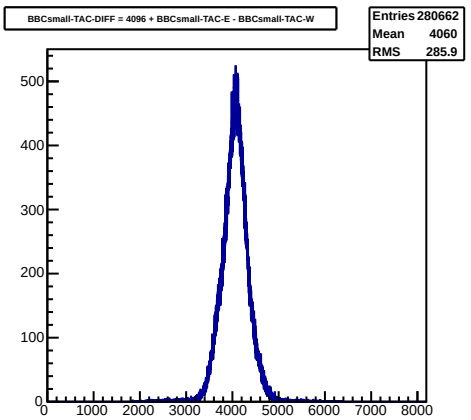

ZDC-TAC-E
Entries 69583
Mean 274.2
RMS 30.37

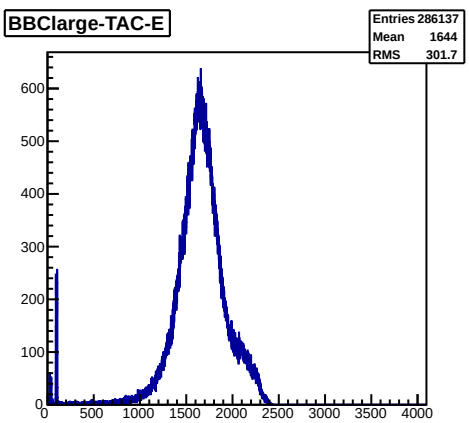

ZDC-TAC-W
Entries 60835
Mean 259.3
RMS 34.54

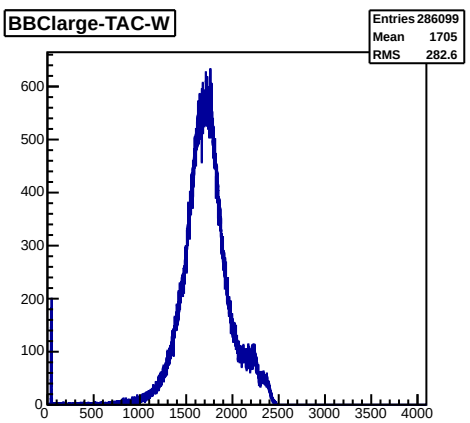

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 20278
Mean 1038
RMS 42.58

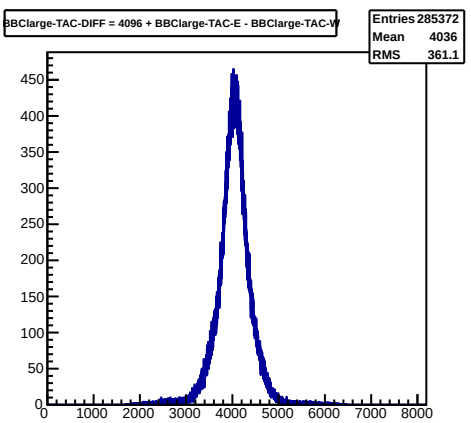

BBCsmall-TAC-E
Entries 282368
Mean 1883
RMS 213.5

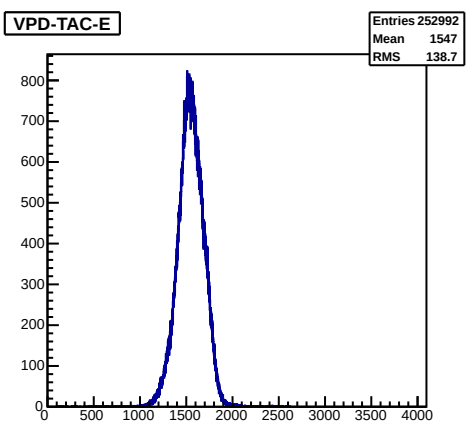

BBCsmall-TAC-W
Entries 284548
Mean 1917
RMS 235.5

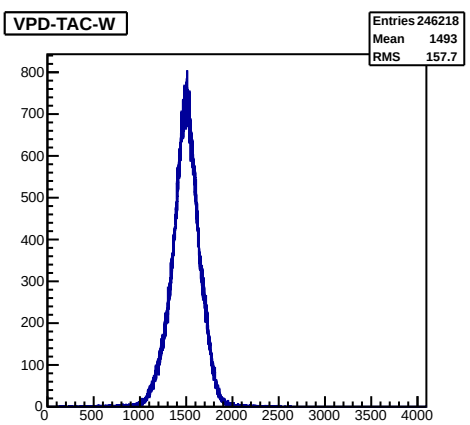

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 280662
Mean 4060
RMS 285.9

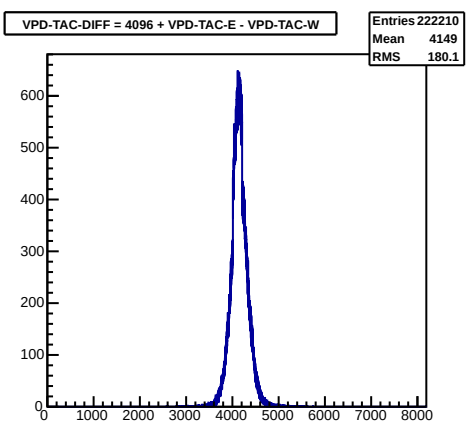

BBClarge-TAC-E
Entries 286137
Mean 1644
RMS 301.7

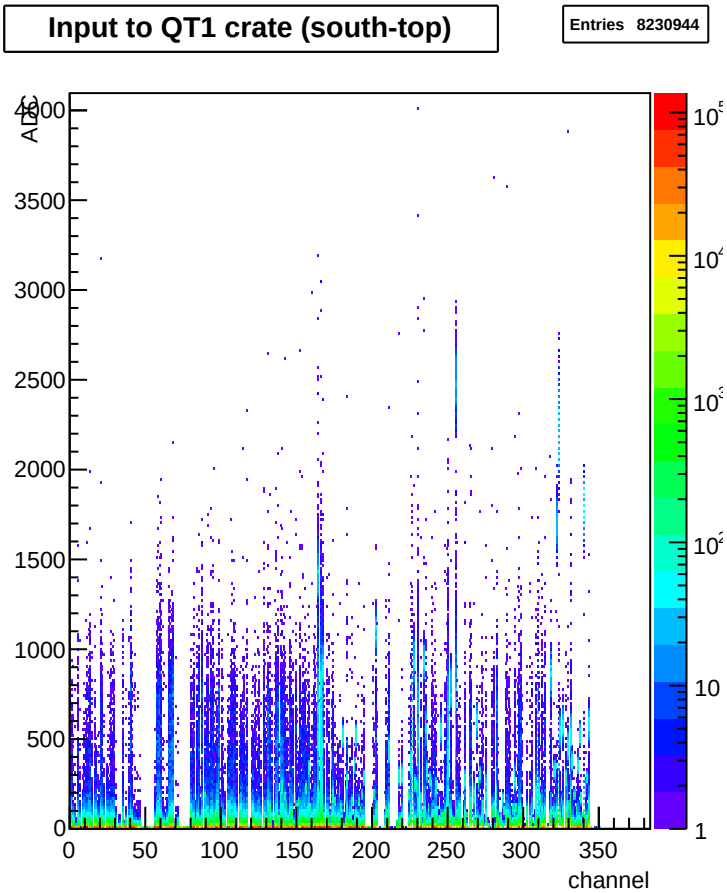

BBClarge-TAC-W
Entries 286099
Mean 1705
RMS 282.6

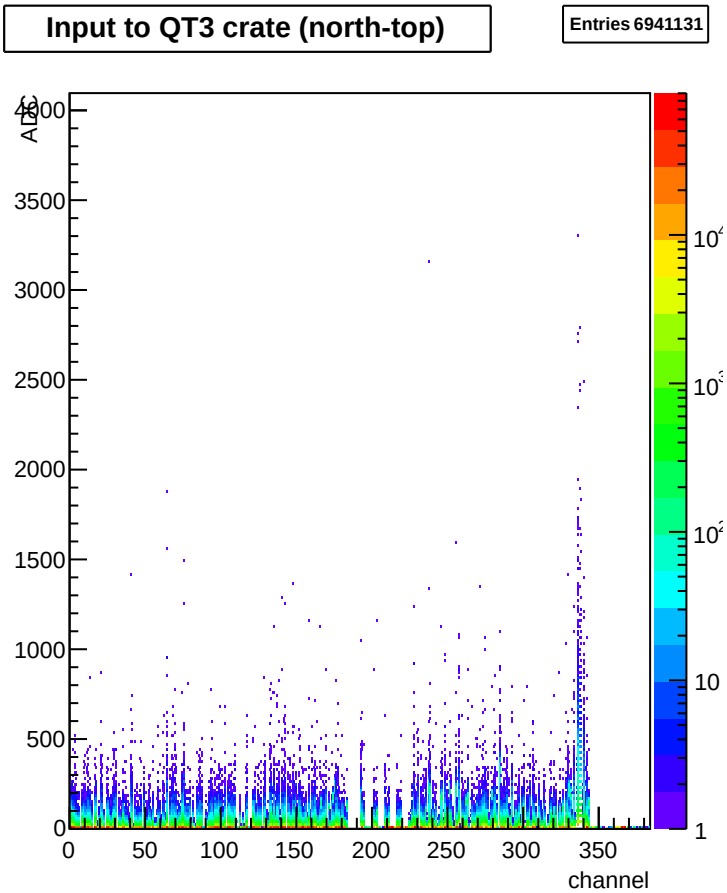

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 285372
Mean 4036
RMS 361.1

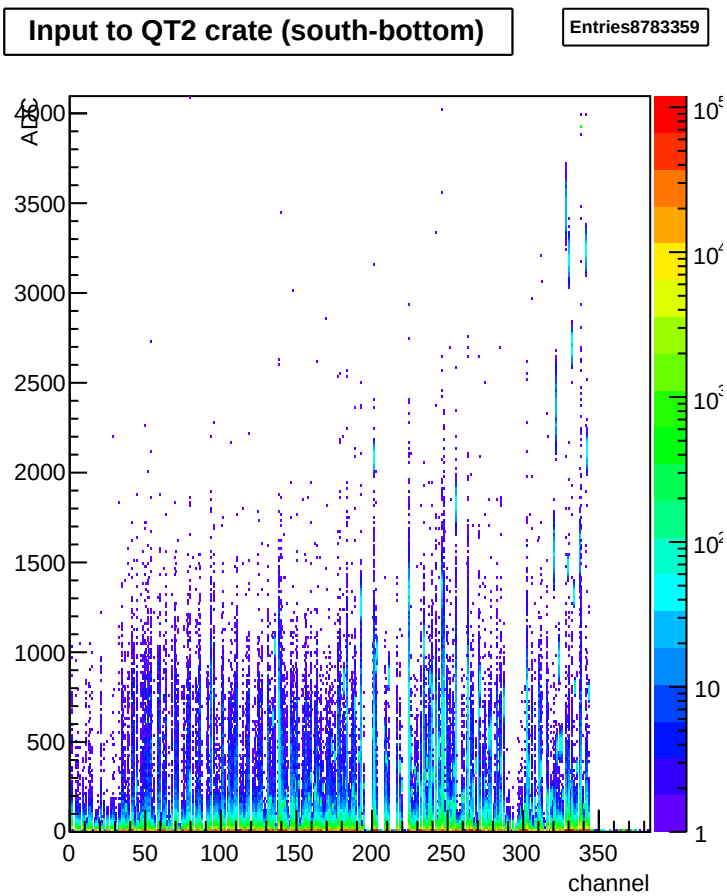

VPD-TAC-E
Entries 252992
Mean 1547
RMS 138.7

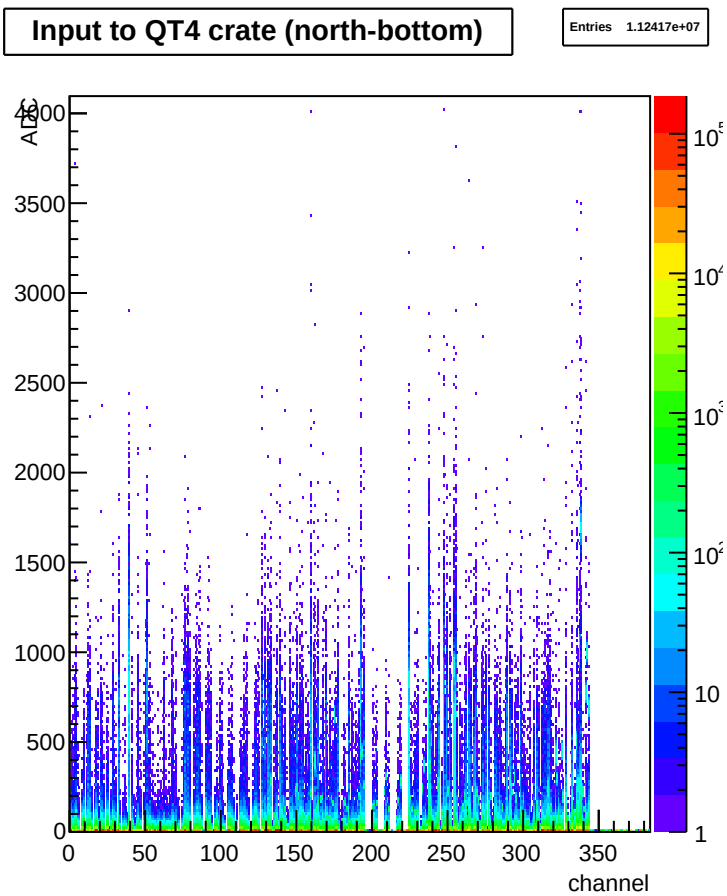

VPD-TAC-W
Entries 246218
Mean 1493
RMS 157.7

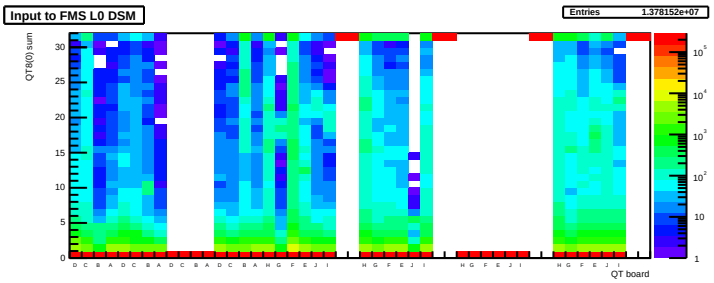

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 222210
Mean 4149
RMS 180.1

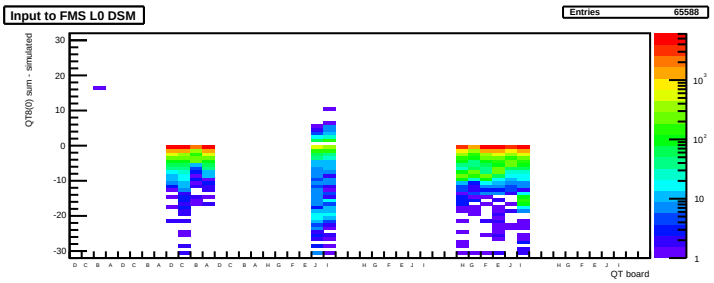

Input to QT1 crate (south-top)
Entries 8230944
ADC
channel

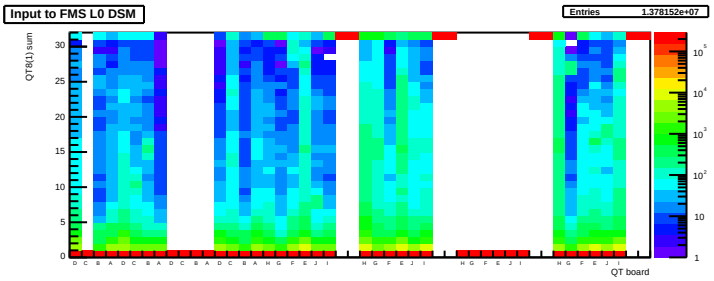

Input to QT3 crate (north-top)
Entries 6941131
ADC
channel

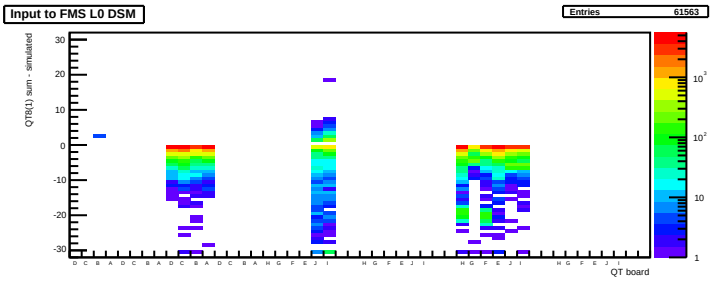

Input to QT2 crate (south-bottom)
Entries8783359
ADC
channel

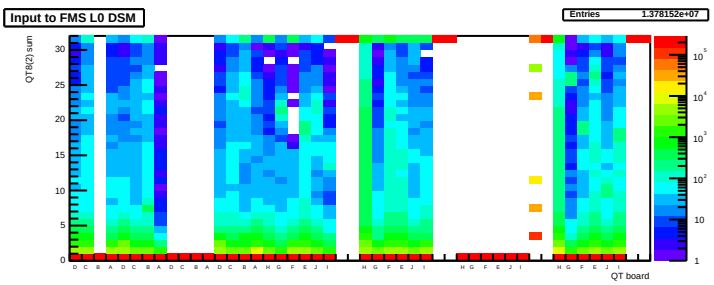

Input to QT4 crate (north-bottom)
Entries 1.12417e+07
ADC
channel

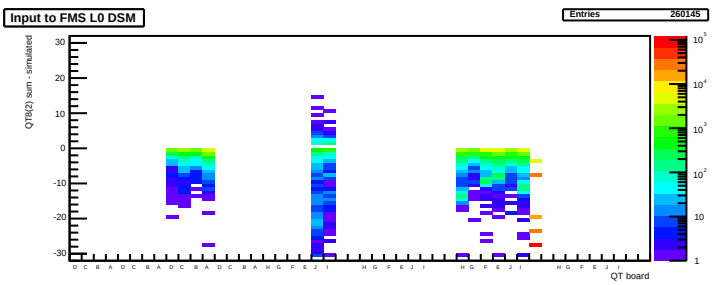

Input to FMS L0 DSM
Entries 1.378152e+07
QT8(0) sum
QT board

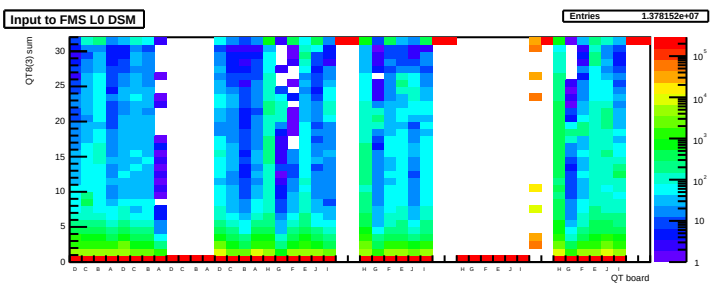

Input to FMS L0 DSM
Entries 65588
QT8(0) sum - simulated
QT board

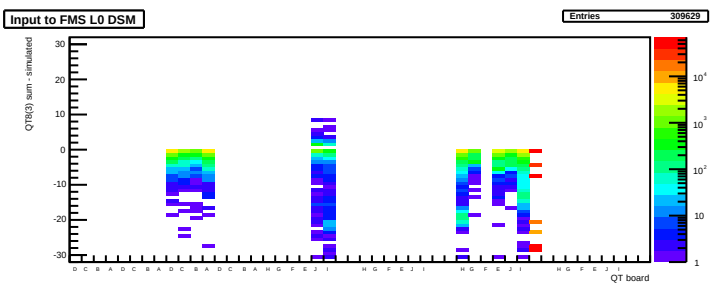

Input to FMS L0 DSM
Entries 1.378152e+07
QT8(1) sum
QT board

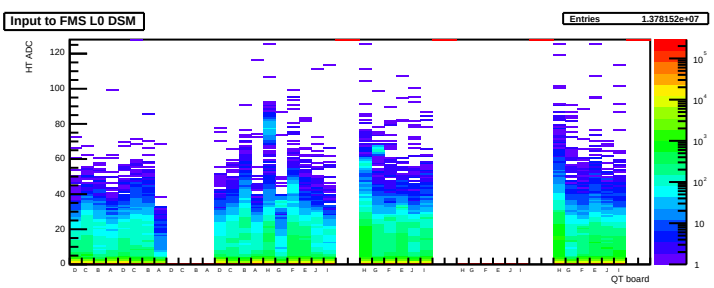

Input to FMS L0 DSM
Entries 61563
QT8(1) sum - simulated
QT board

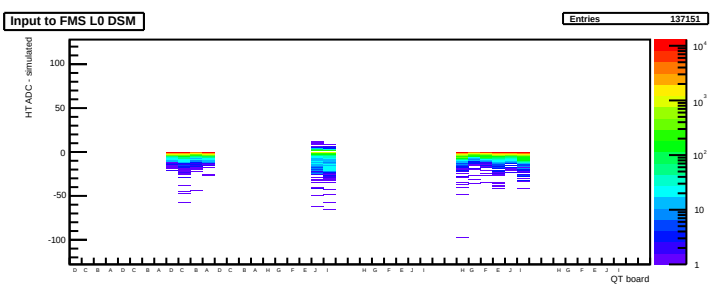

Input to FMS L0 DSM
Entries 1.378152e+07
QT8(2) sum
QT board

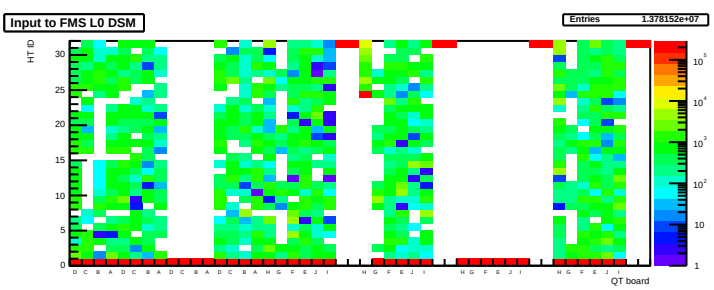

Input to FMS L0 DSM
Entries 260145
QT8(2) sum - simulated
QT board

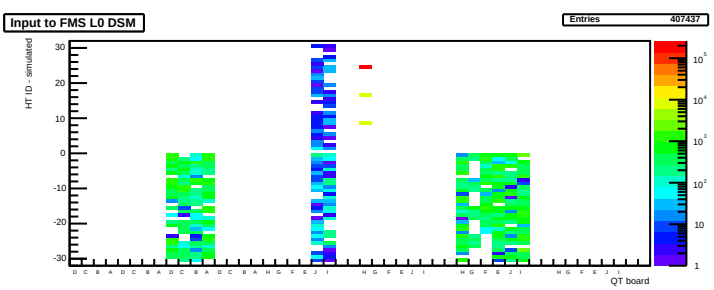

Input to FMS L0 DSM
Entries 1.378152e+07
QT8(3) sum
QT board

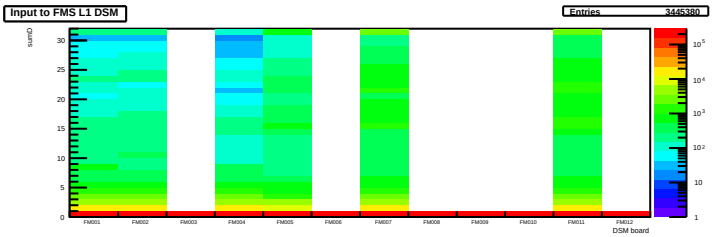

Input to FMS L0 DSM
Entries 309629
QT8(3) sum - simulated
QT board

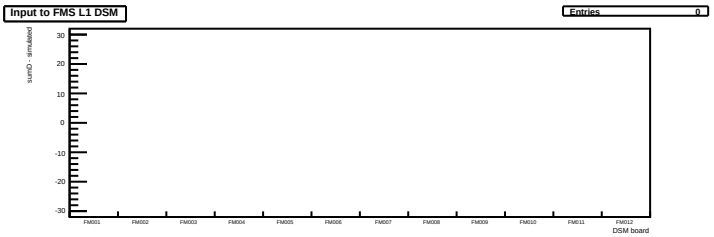

Input to FMS L0 DSM
Entries 1.378152e+07
HT ADC
QT board

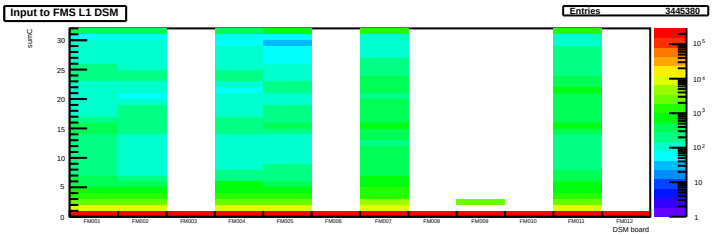

Input to FMS L0 DSM
Entries 137151
HT ADC - simulated
QT board

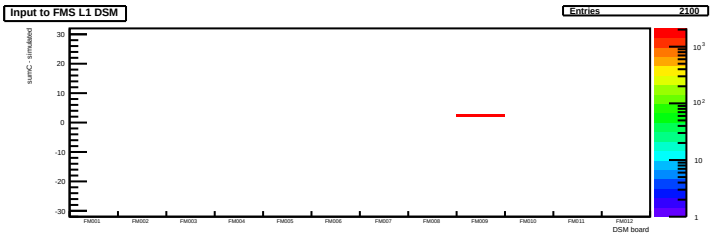

Input to FMS L0 DSM
Entries 1.378152e+07
HT ID
QT board

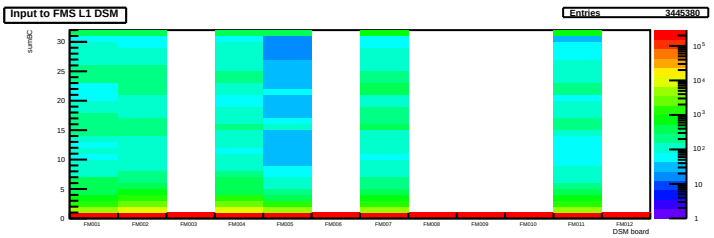

Input to FMS L0 DSM
Entries 407437
HT ID - simulated
QT board

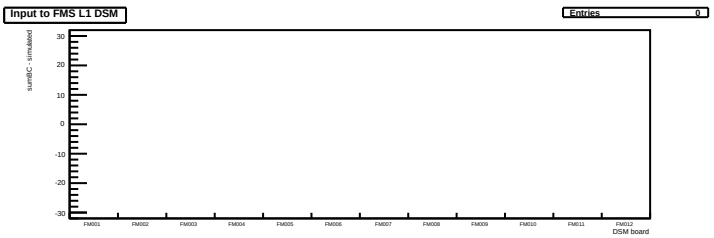

Input to FMS L1 DSM
Entries 3445380
sumD
DSM board

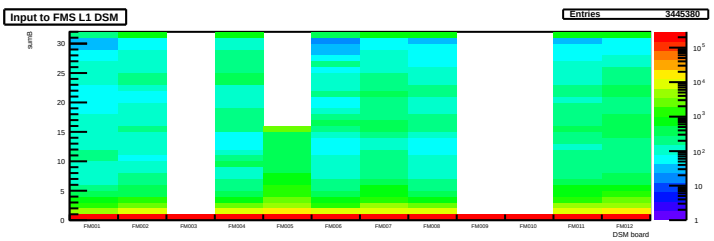

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

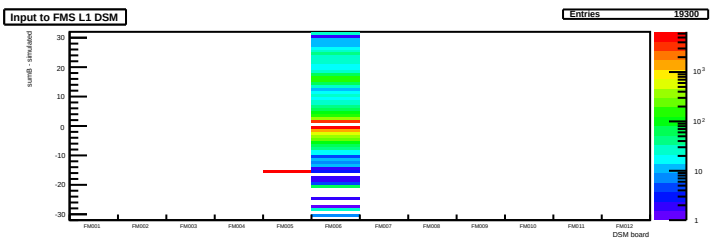

Input to FMS L1 DSM
Entries 3445380
sumC
DSM board

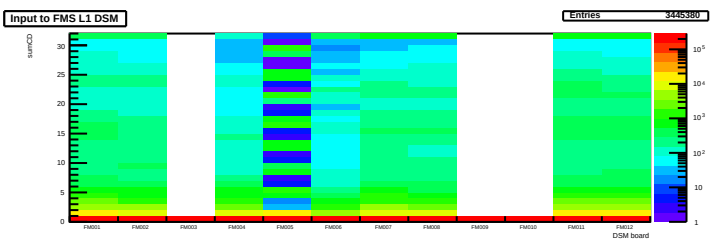

Input to FMS L1 DSM
Entries 2100
sumC - simulated
DSM board

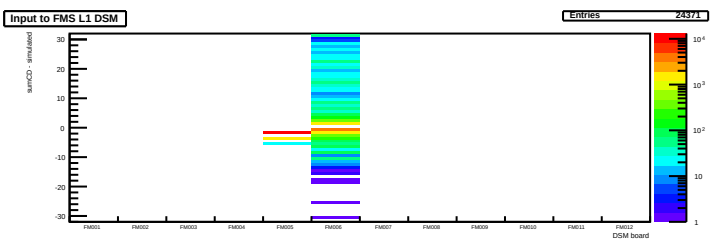

Input to FMS L1 DSM
Entries 3445380
sumBC
DSM board

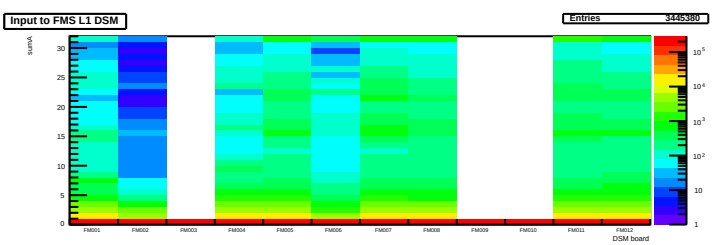

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

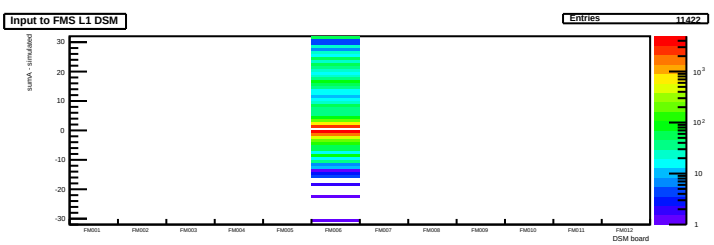

Input to FMS L1 DSM
Entries 3445380
sumB
DSM board

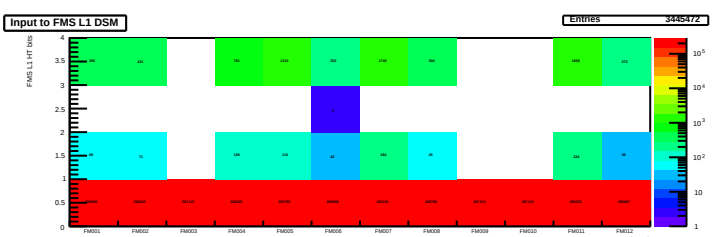

Input to FMS L1 DSM
Entries 19300
sumB - simulated
DSM board

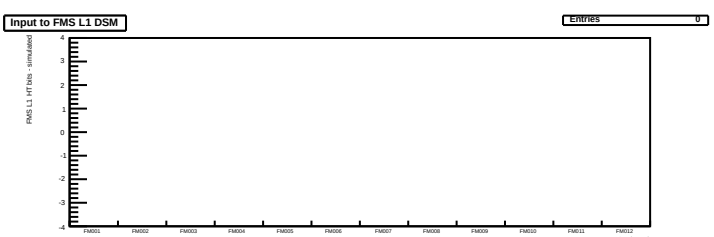

Input to FMS L1 DSM
Entries 3445380
sumCD
DSM board

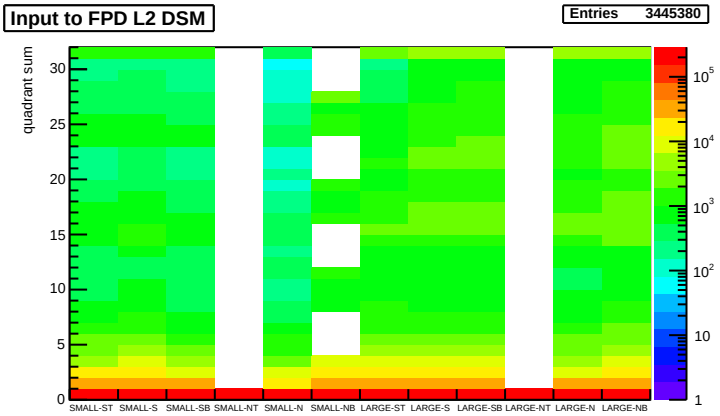

Input to FMS L1 DSM
Entries 24371
sumCD - simulated
DSM board

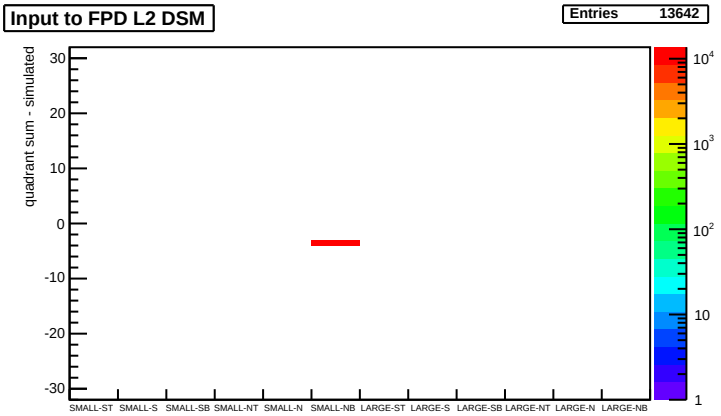

Input to FMS L1 DSM
Entries 3445380
sumA
DSM board

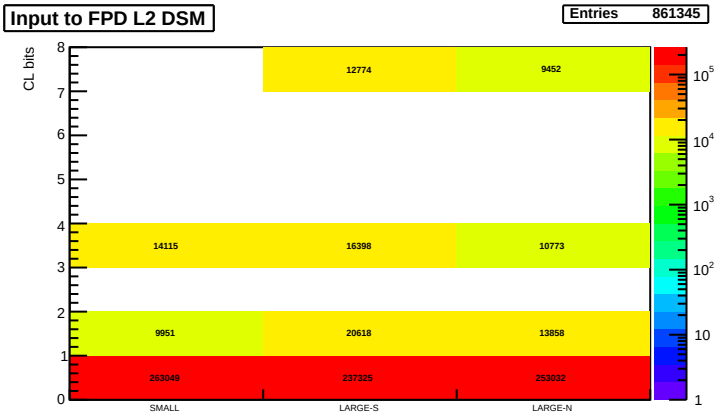

Input to FMS L1 DSM
Entries 11422
sumA - simulated
DSM board

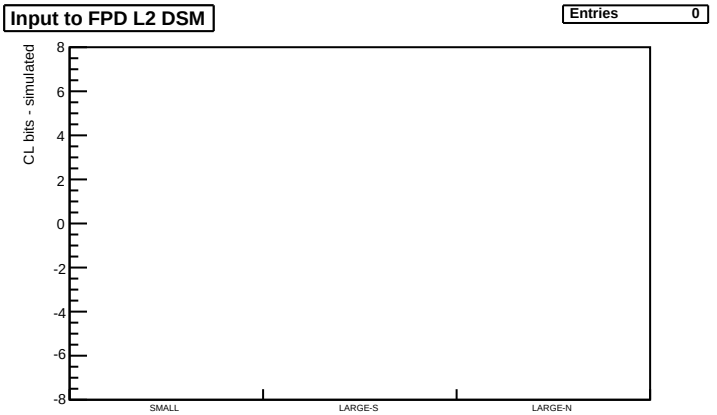

Input to FMS L1 DSM
Entries 3445472
FMS L1 HT bits
DSM board

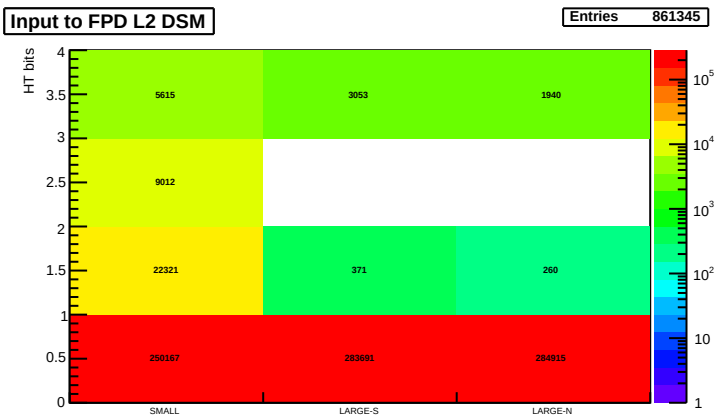

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

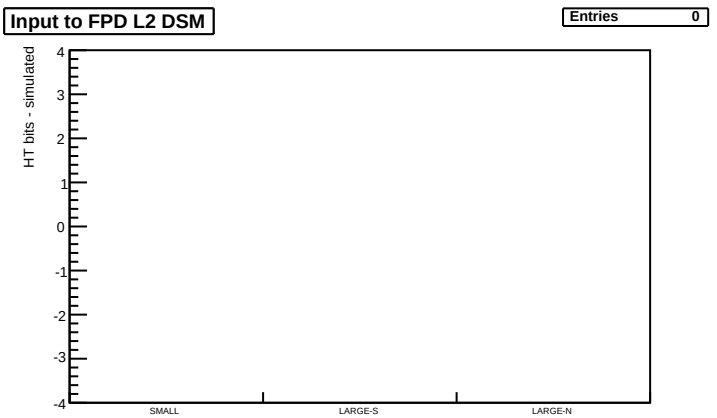

Input to FPD L2 DSM
Entries 3445380
quadrant sum
SMALL-ST SMALL-S SMALL-SB SMALL-NT SMALL-N SMALL-NB LARGE-ST LARGE-S LARGE-SB LARGE-NT LARGE-N LARGE-NB

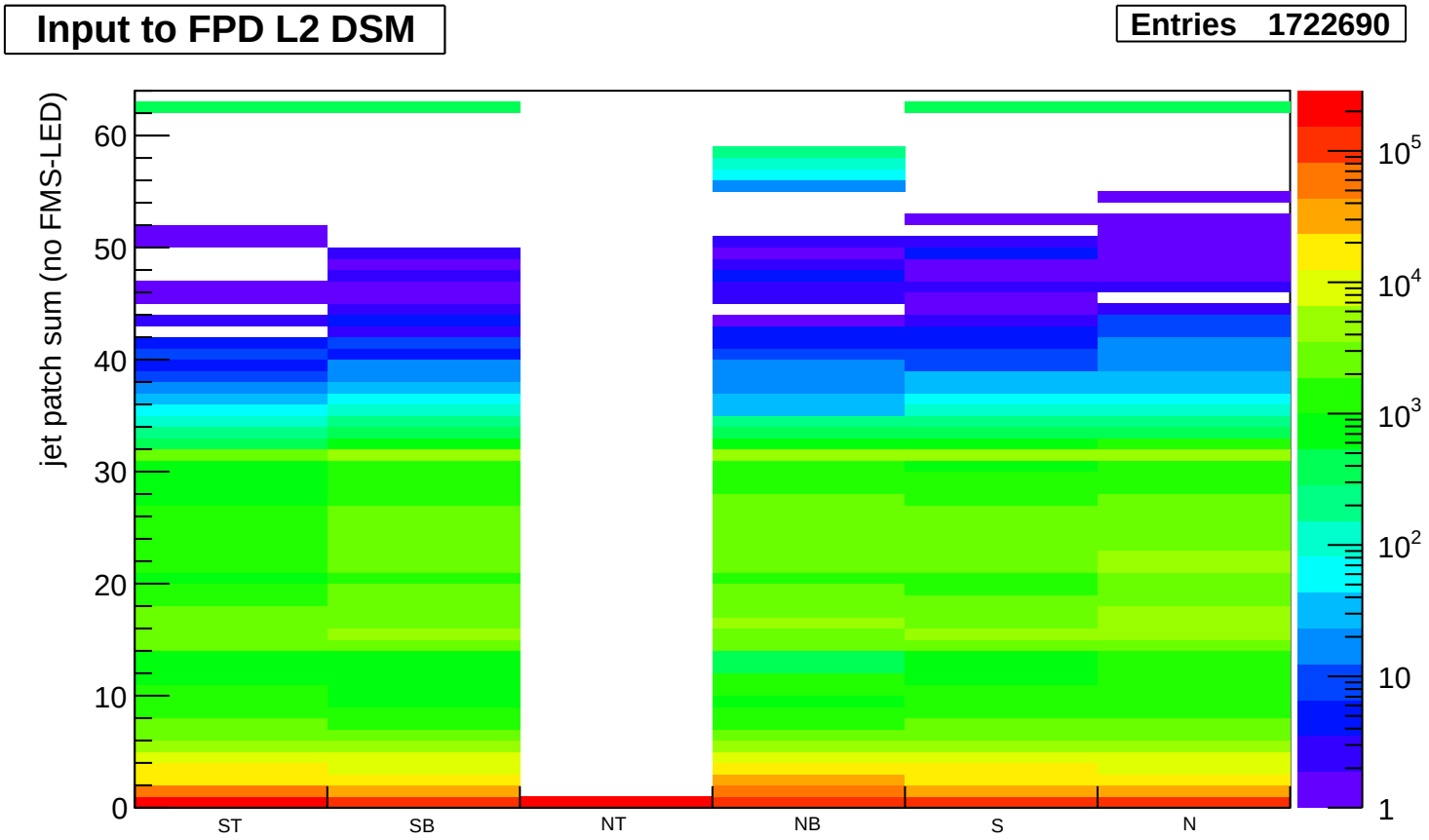

Input to FPD L2 DSM
Entries 13642
quadrant sum - simulated
SMALL-ST SMALL-S SMALL-SB SMALL-NT SMALL-N SMALL-NB LARGE-ST LARGE-S LARGE-SB LARGE-NT LARGE-N LARGE-NB

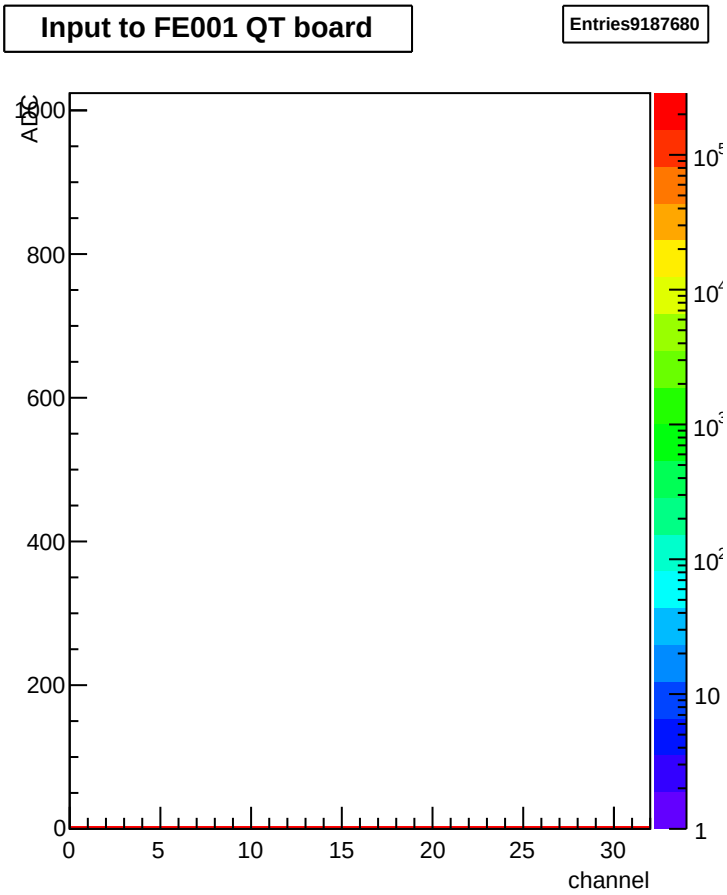

Input to FPD L2 DSM
Entries 861345
CL bits
12774
9452
14115
16398
10773
9951
20618
13858
263049
237325
253032
SMALL
LARGE-S
LARGE-N

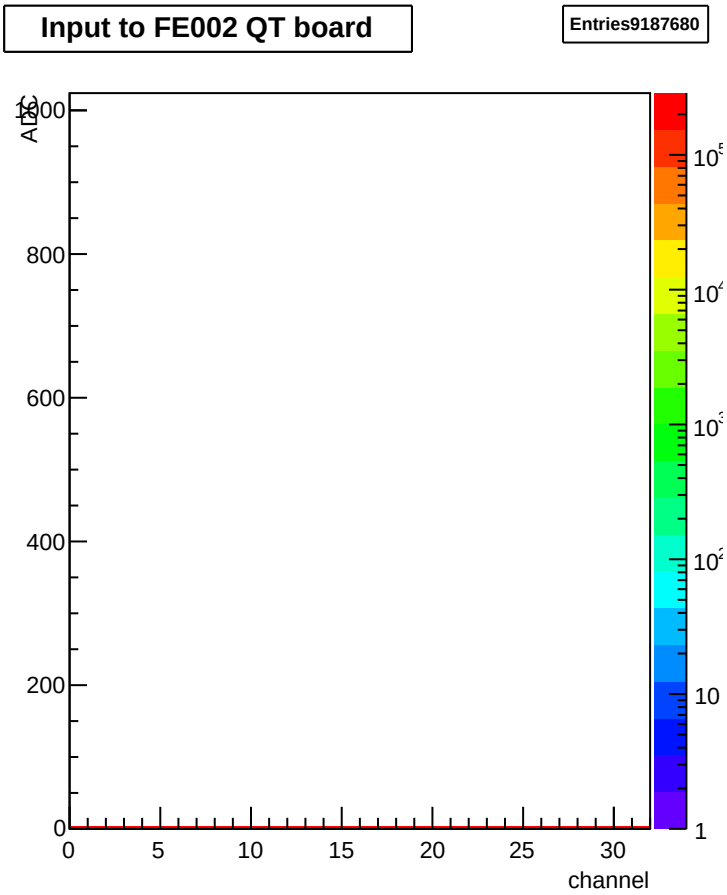

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

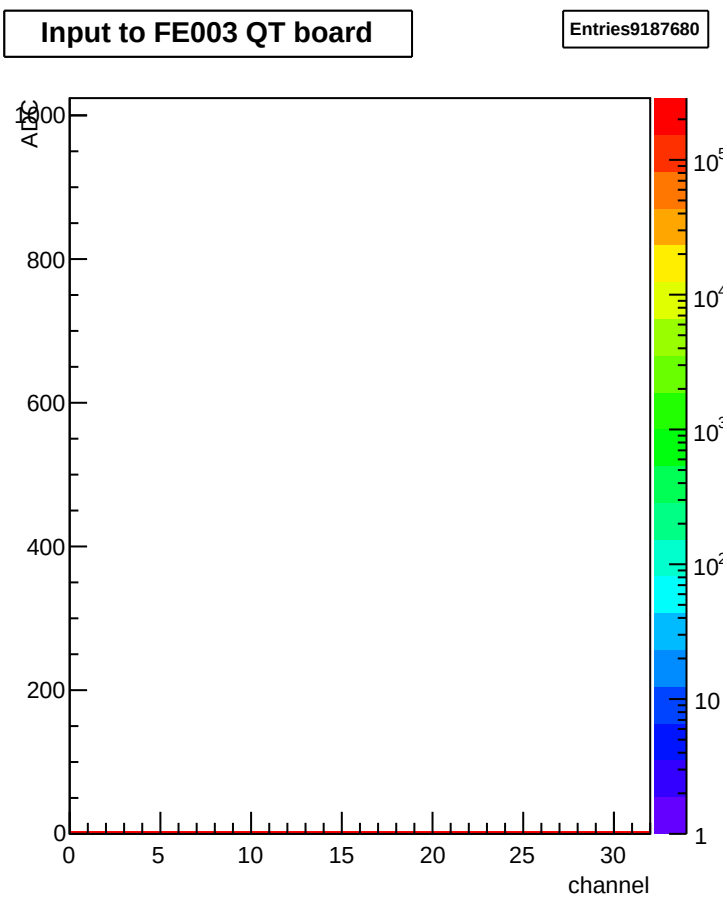

Input to FPD L2 DSM
Entries 861345
HT bits
5615
3053
1940
9012
22321
371
260
250167
283691
284915
SMALL
LARGE-S
LARGE-N

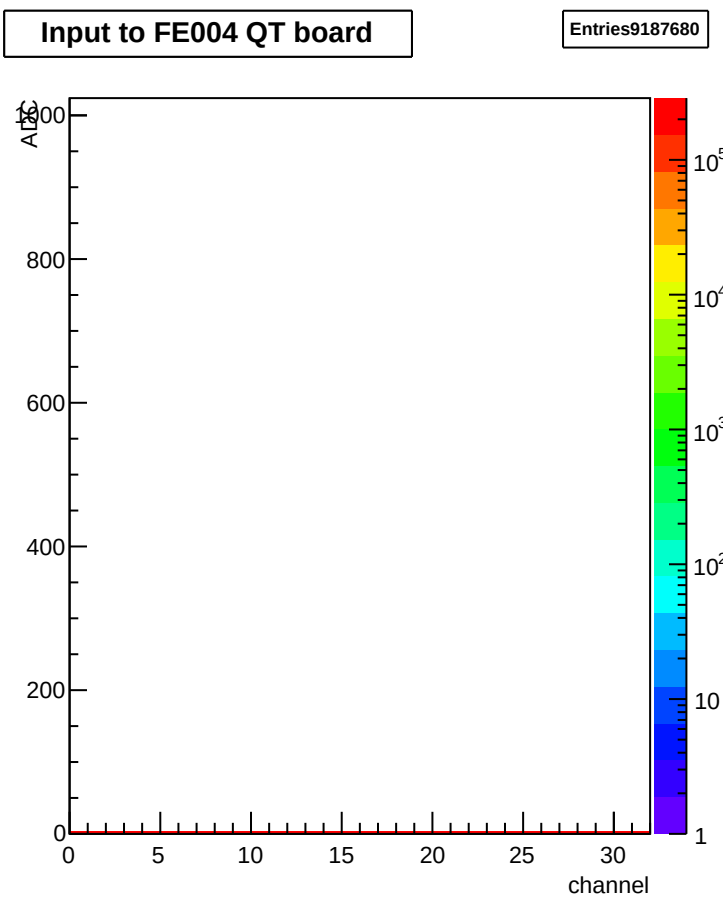

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

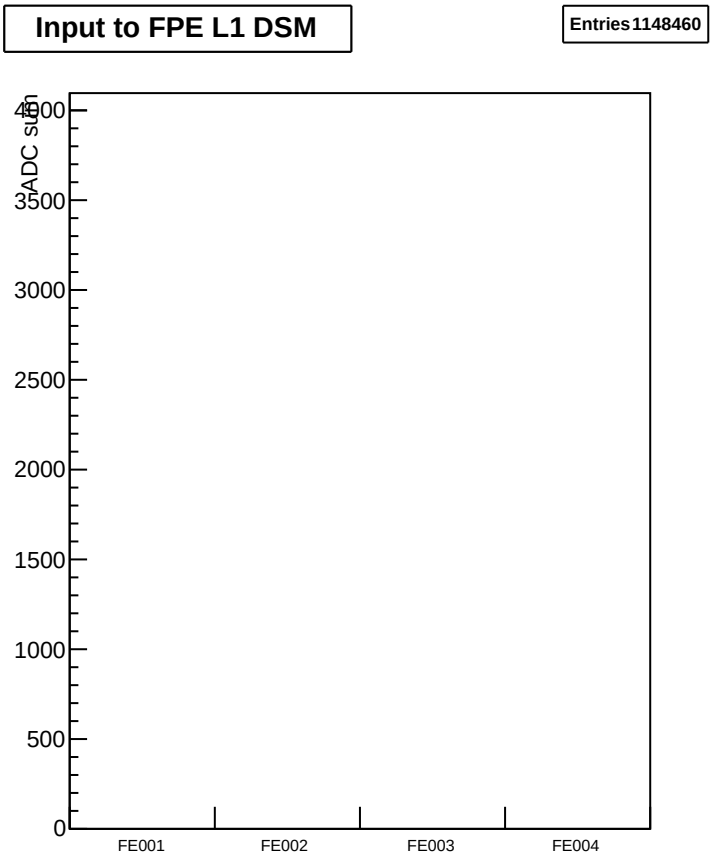

Input to FPD L2 DSM
Entries 1722690
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

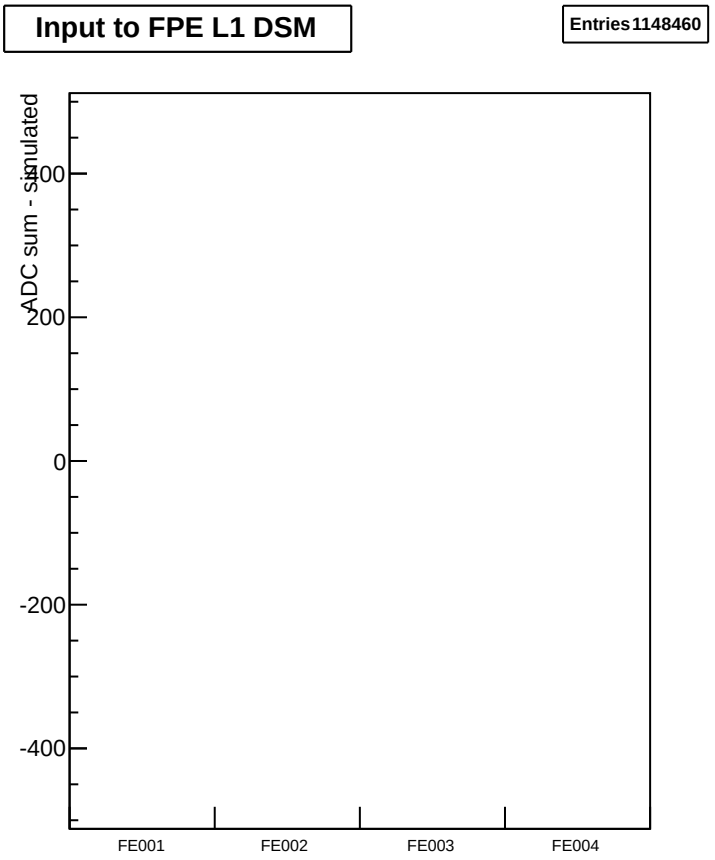

Input to FE001 QT board
Entries9187680
ADC
channel

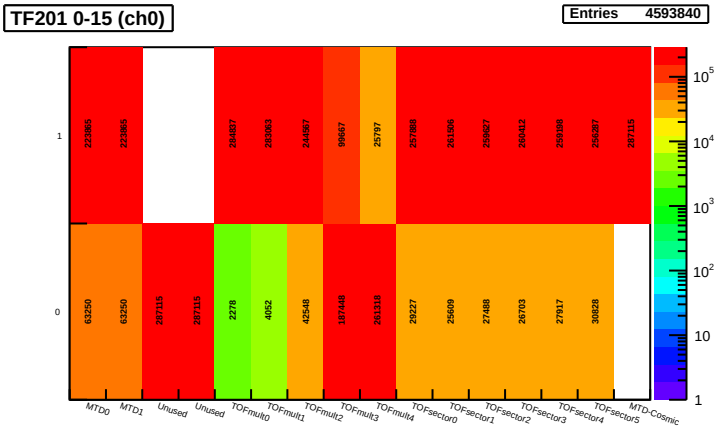

Input to FE002 QT board
Entries9187680
ADC
channel

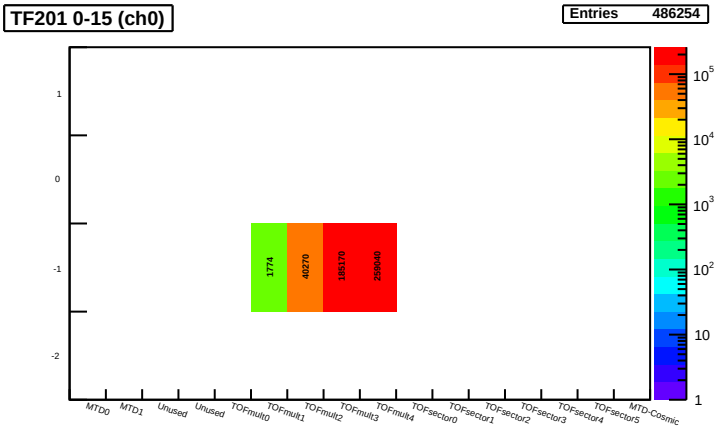

Input to FE003 QT board
Entries9187680
ADC
channel

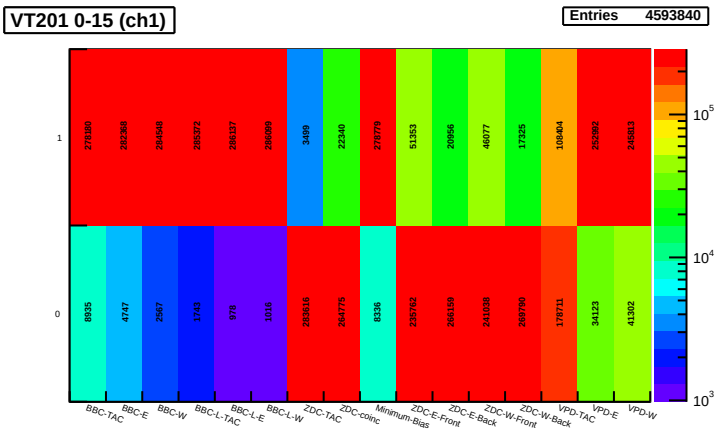

Input to FE004 QT board
Entries9187680
ADC
channel

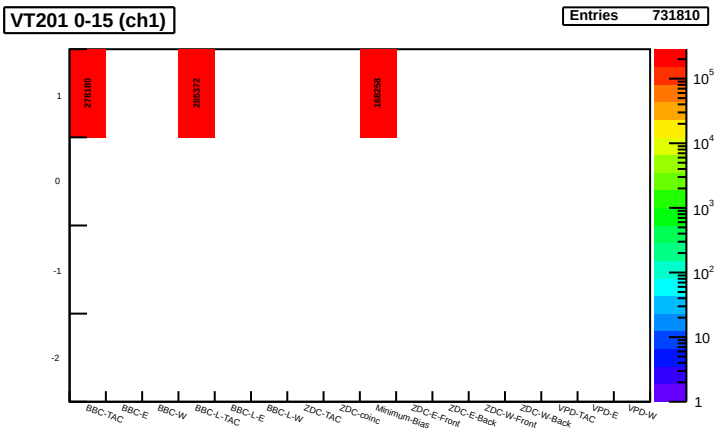

Input to FPE L1 DSM
Entries 1148460
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004

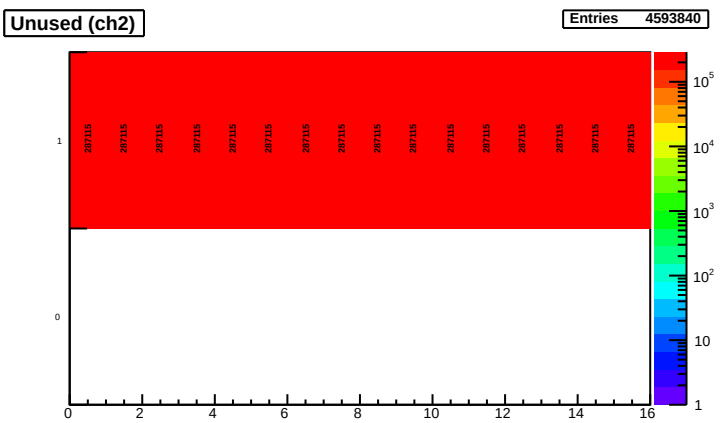

Input to FPE L1 DSM
Entries 1148460
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004

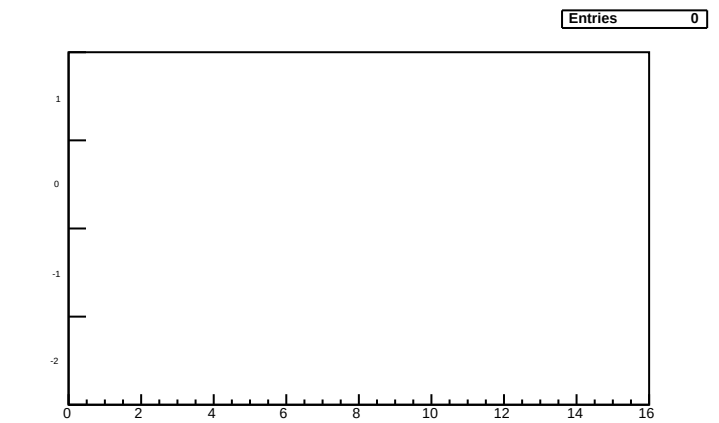

TF201 0-15 (ch0)
Entries 4593840
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

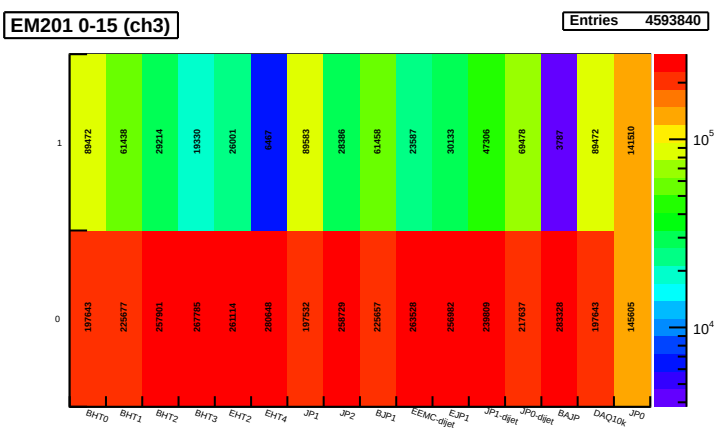

TF201 0-15 (ch0)
Entries 486254
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

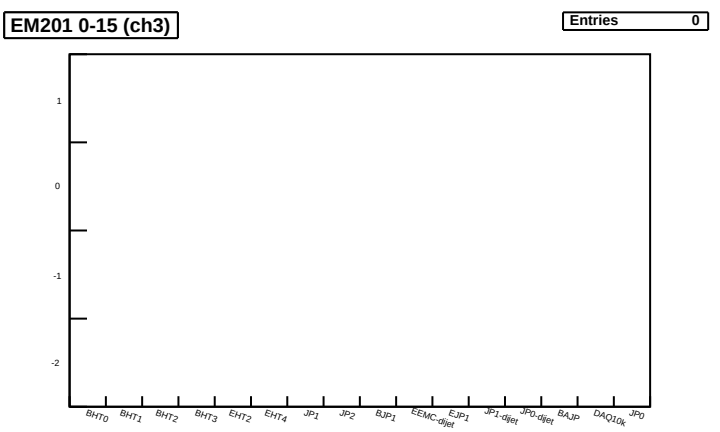

VT201 0-15 (ch1)
Entries 4593840
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 731810
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

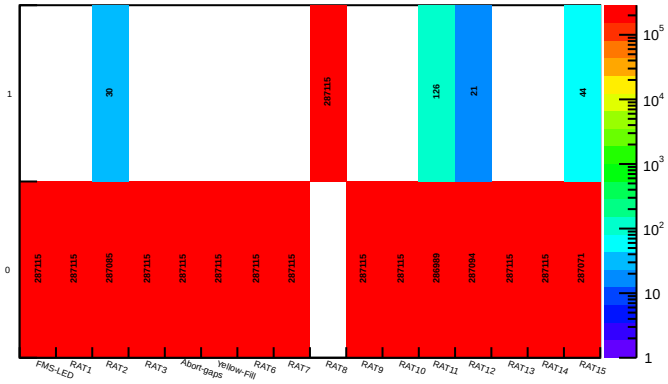

Unused (ch2)
Entries 4593840

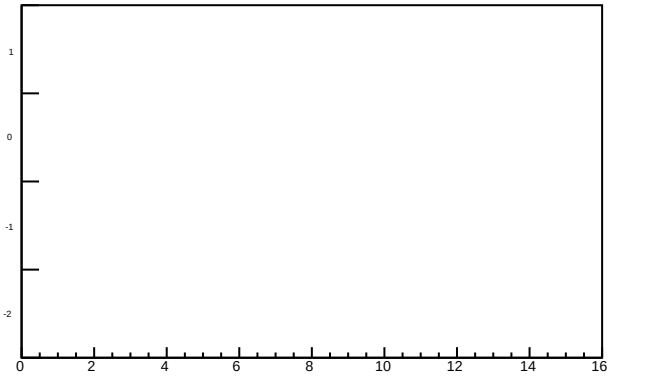

Entries 0


EM201 0-15 (ch3)
Entries 4593840
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 EEMC-dijet EJP1 JP1-dijet JP0-dijet BAJP DAQ10k JP0

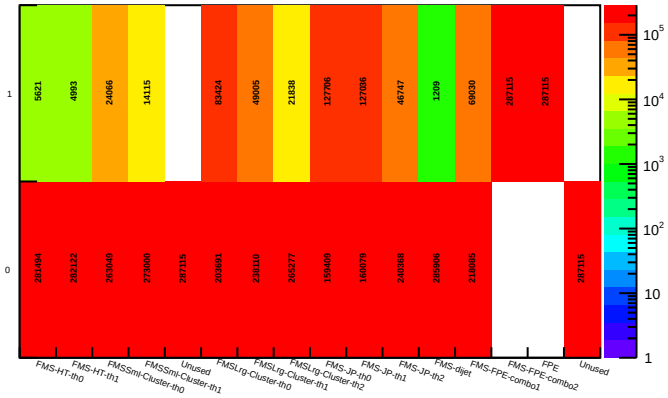

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 EEMC-dijet EJP1 JP1-dijet JP0-dijet BAJP DAQ10k JP0

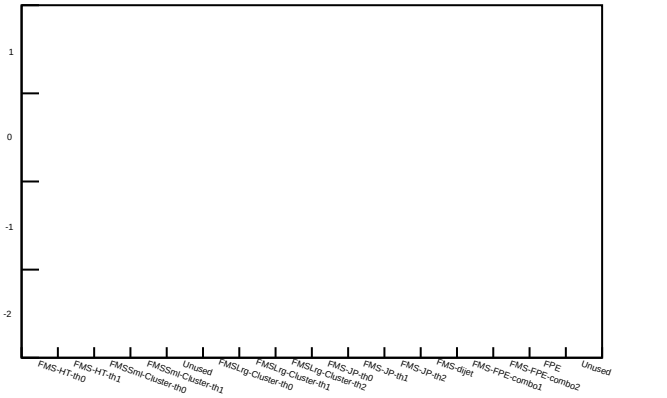
RAT board (ch4)



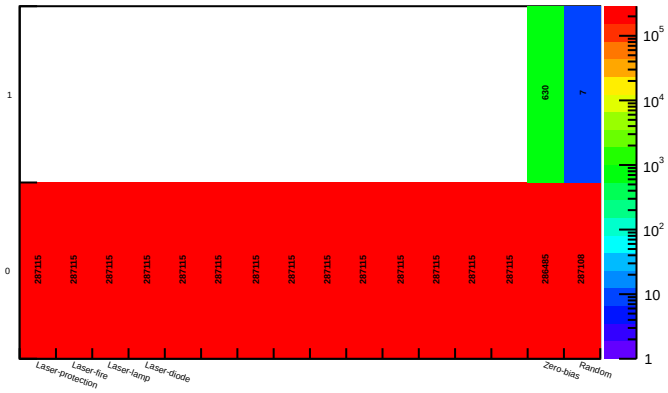


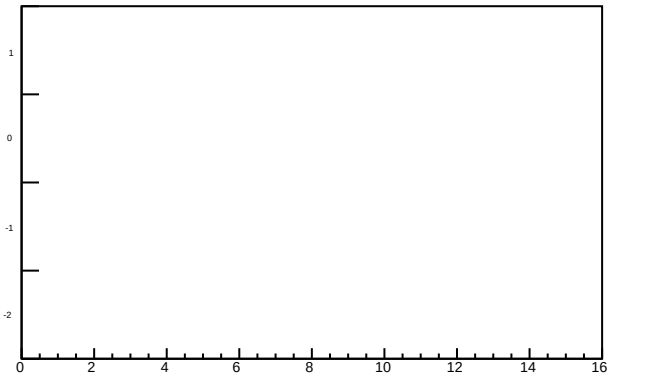
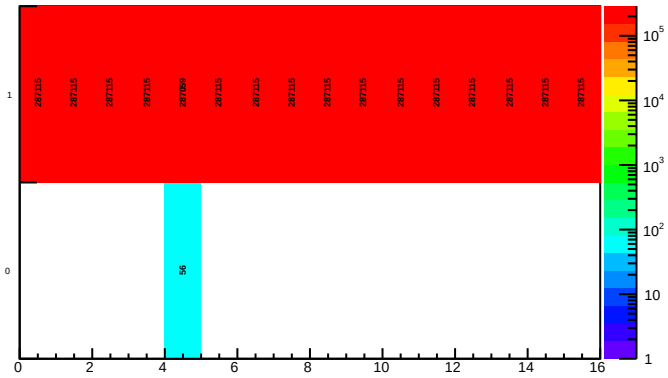
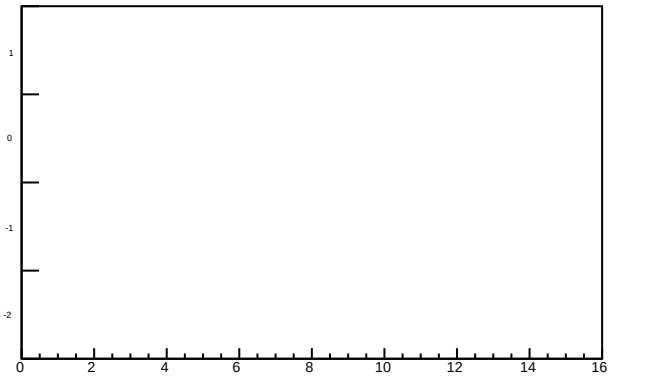
FP201 0-15 (ch5)





ST201 0-15 (ch6)





Unused (ch7)