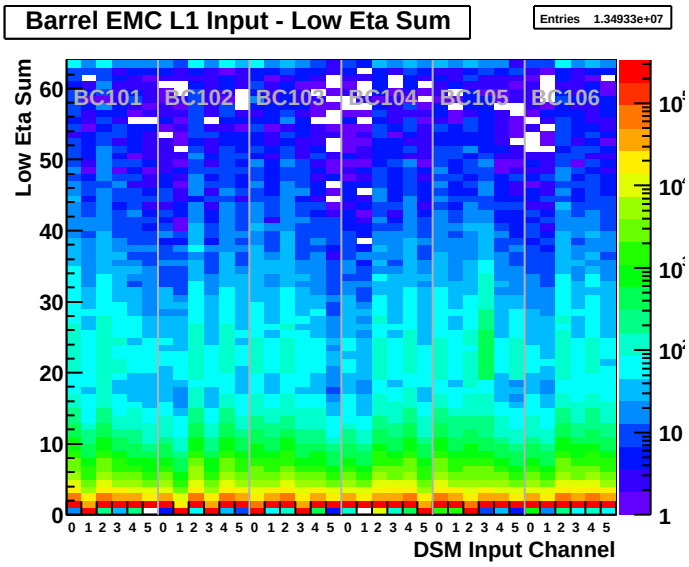
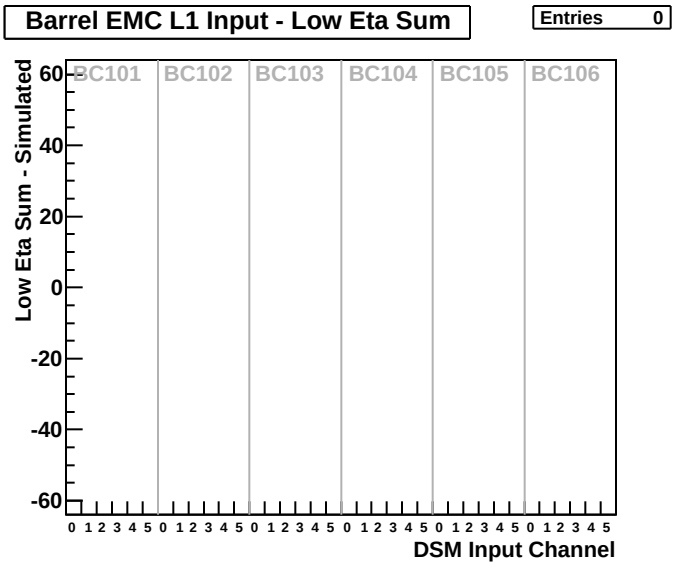
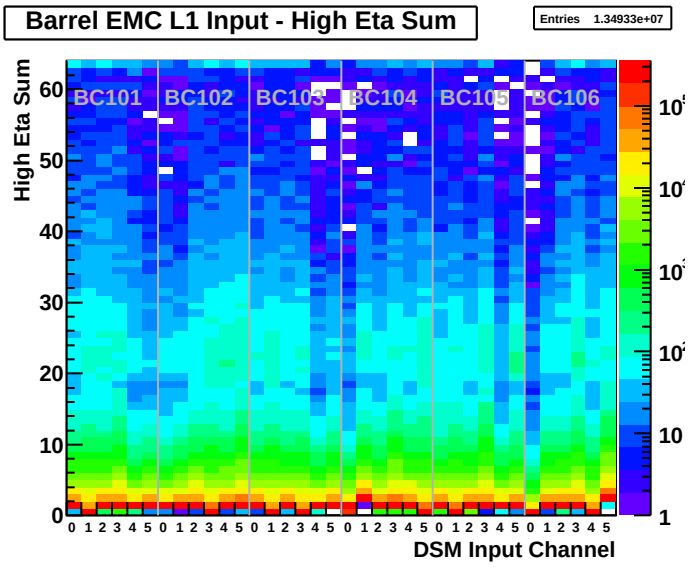
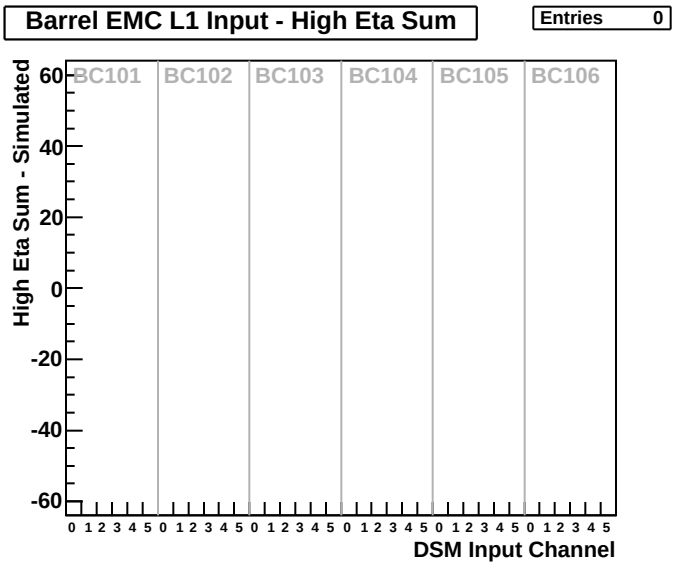
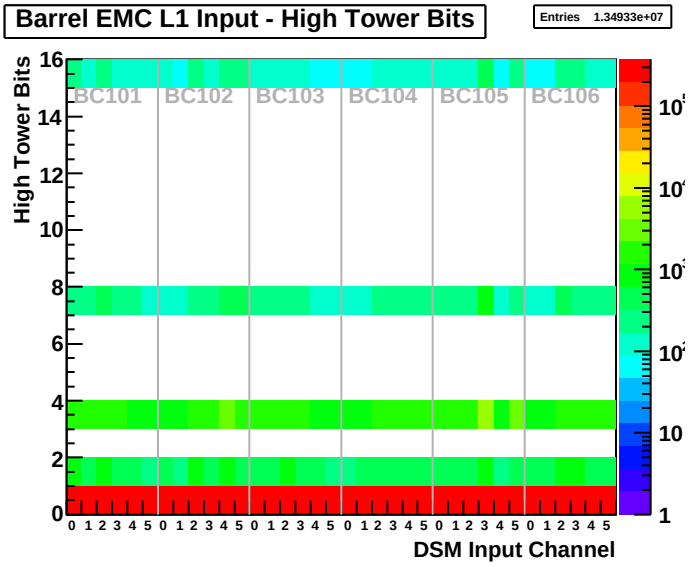
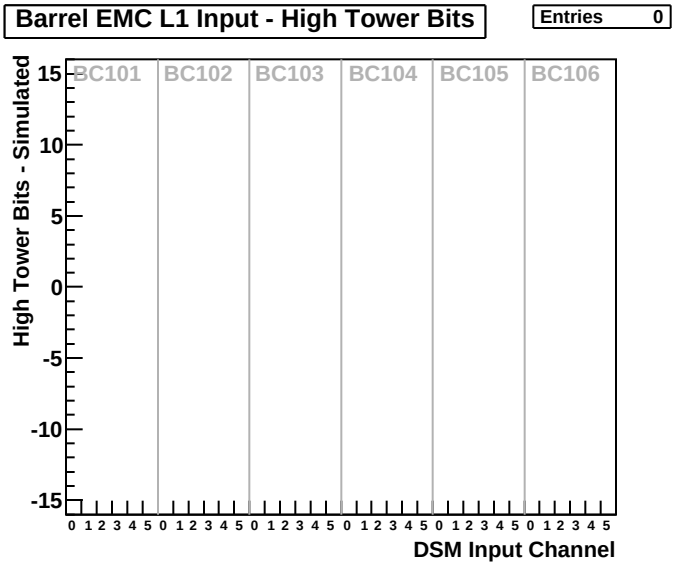

Barrel EMC L1 Input - Low Eta Sum
Entries 1.34933e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

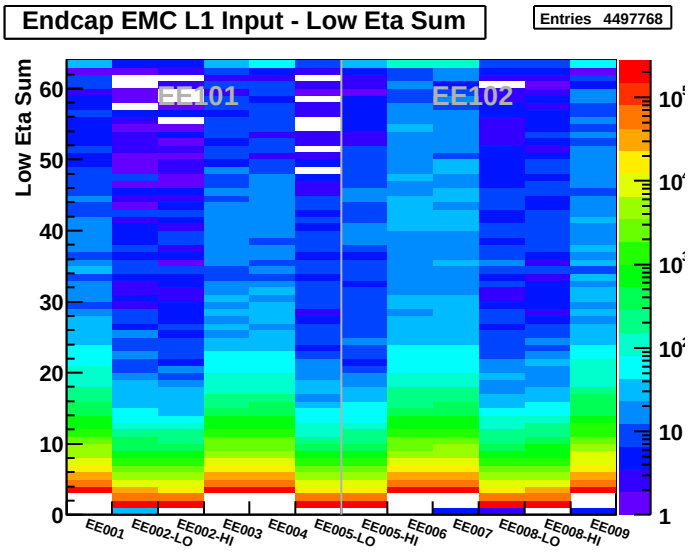

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

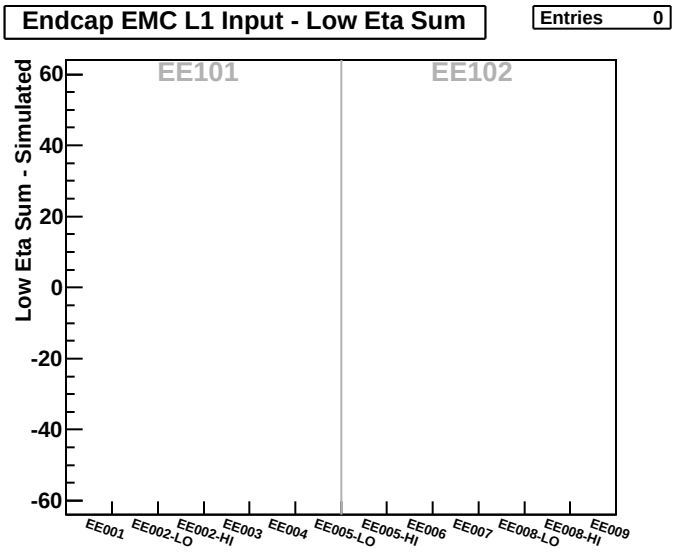

Barrel EMC L1 Input - High Eta Sum
Entries 1.34933e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

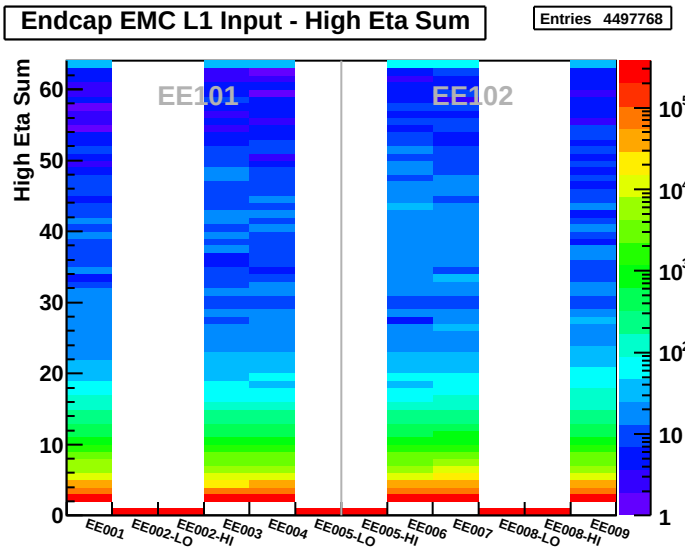

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

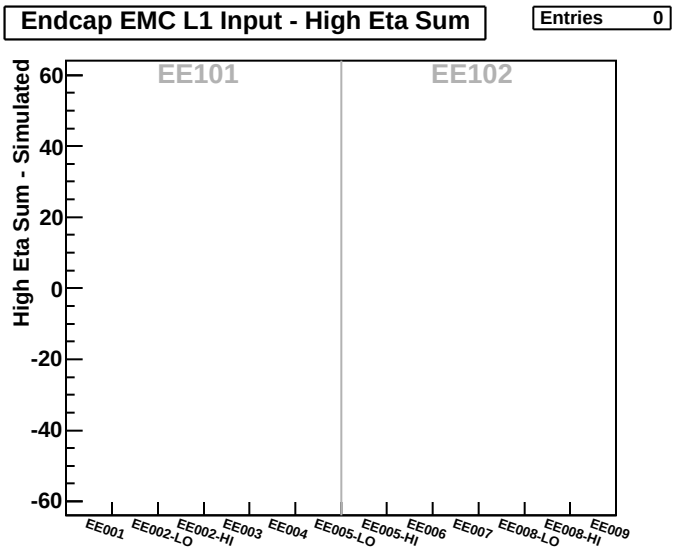

Barrel EMC L1 Input - High Tower Bits
Entries 1.34933e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

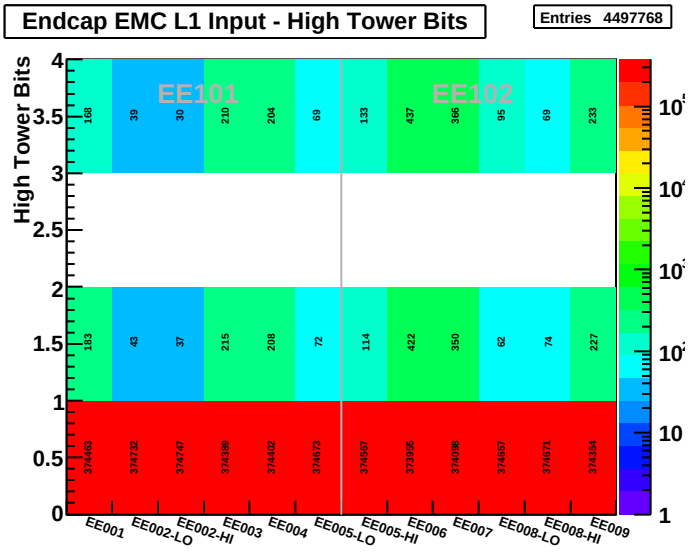

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

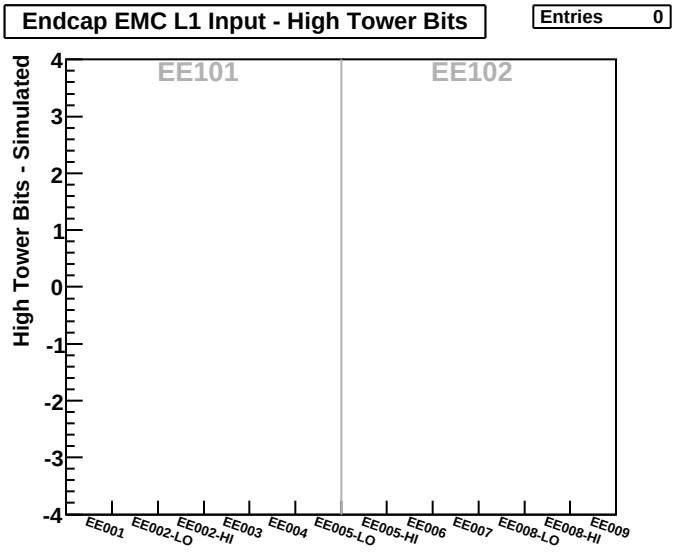

Endcap EMC L1 Input - Low Eta Sum
Entries 4497768
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

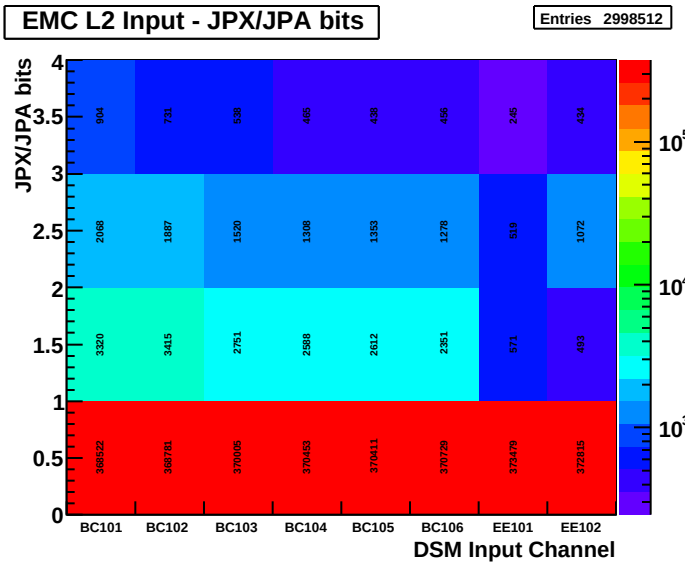

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

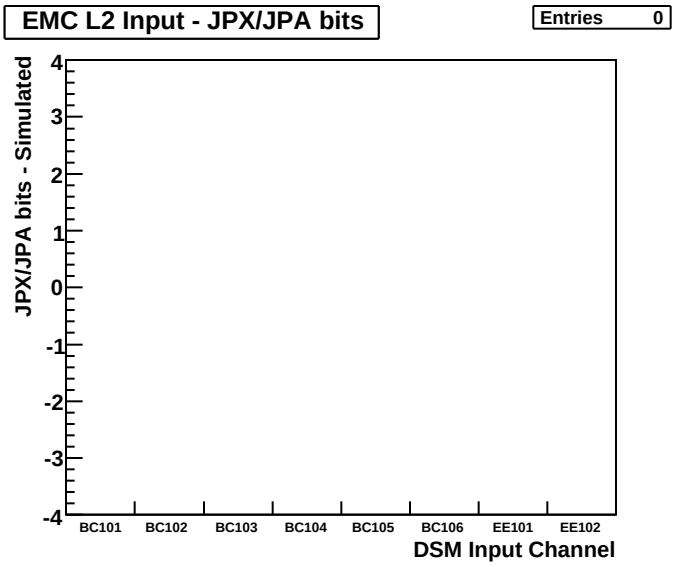

Endcap EMC L1 Input - High Eta Sum
Entries 4497768
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

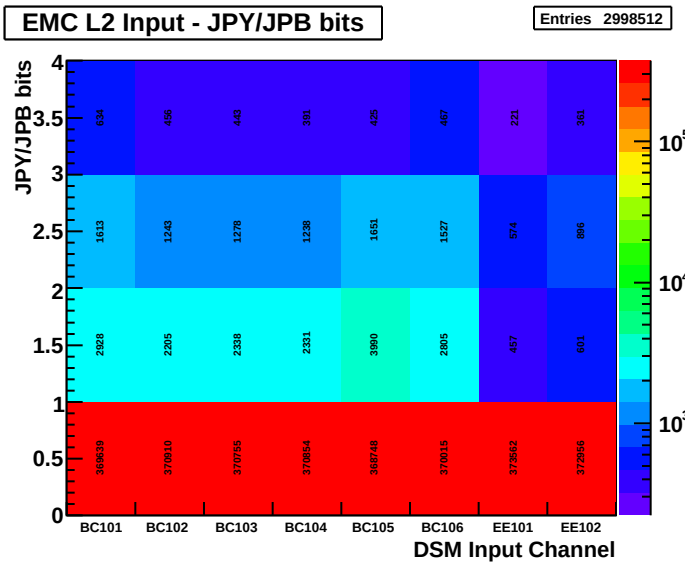

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

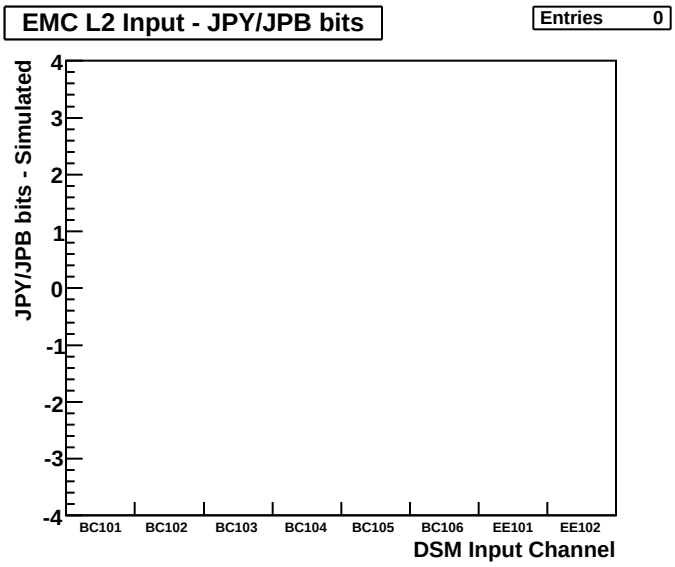

Endcap EMC L1 Input - High Tower Bits
Entries 4497768
High Tower Bits
EE101
EE102
168 39 30 210 204 69 133 437 366 95 69 233
183 43 37 215 208 72 114 422 350 62 74 227
374463 374732 374747 374389 374402 374673 374567 373955 374098 374657 374671 374354
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

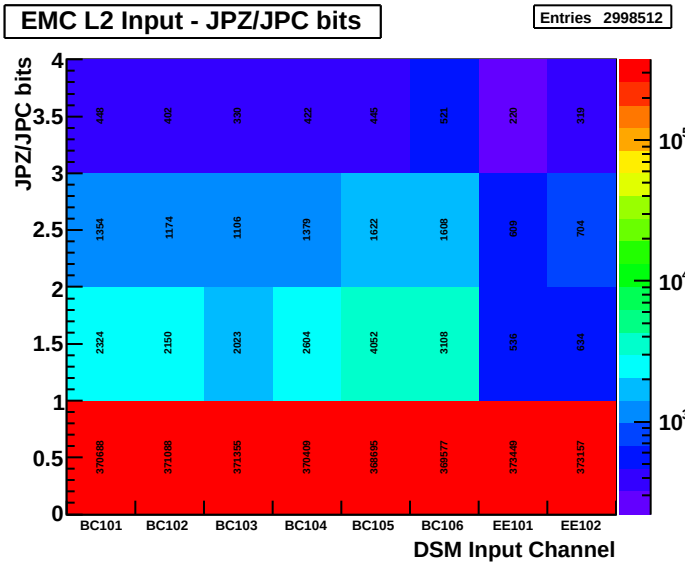

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

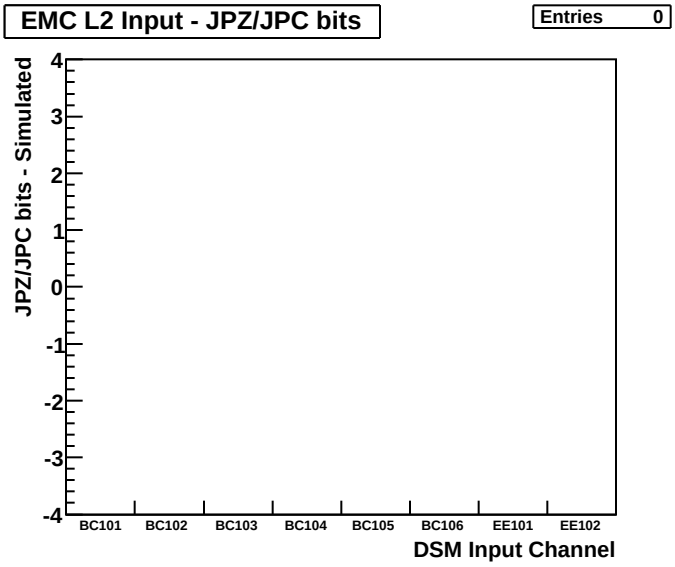

EMC L2 Input - JPX/JPA bits
Entries 2998512
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
904 731 538 465 438 456 265 434
2068 1887 1520 1308 1353 1278 519 1072
3320 3415 2751 2588 2612 2351 571 433
368522 368781 370005 370453 370411 370729 373479 372815

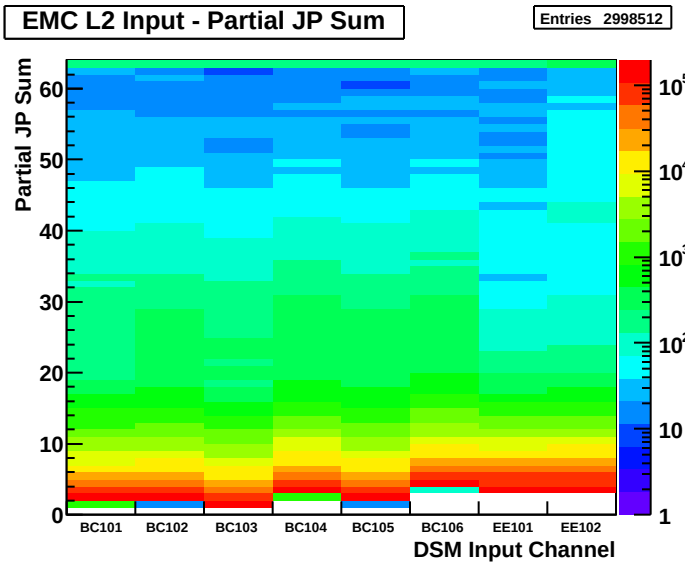

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

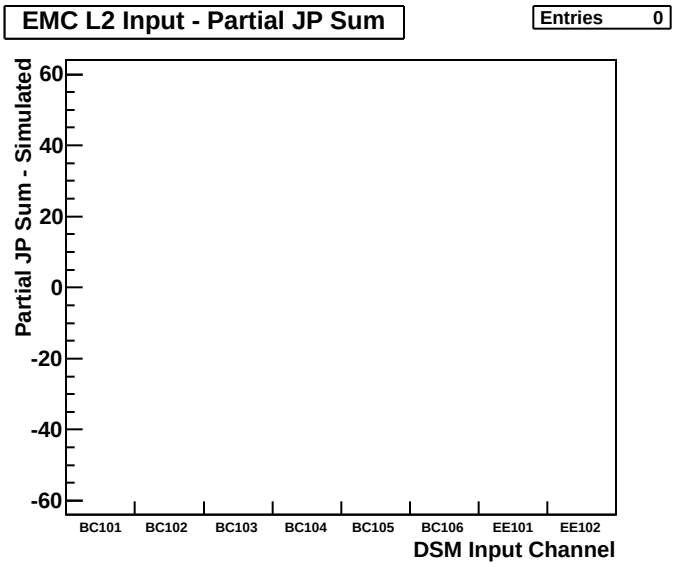

EMC L2 Input - JPY/JPB bits
Entries 2998512
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
634 456 442 391 425 467 221 361
1613 1243 1278 1238 1651 1527 574 896
2928 2205 2338 2331 3990 2805 457 601
369639 370910 370755 370854 368748 370015 373562 372956

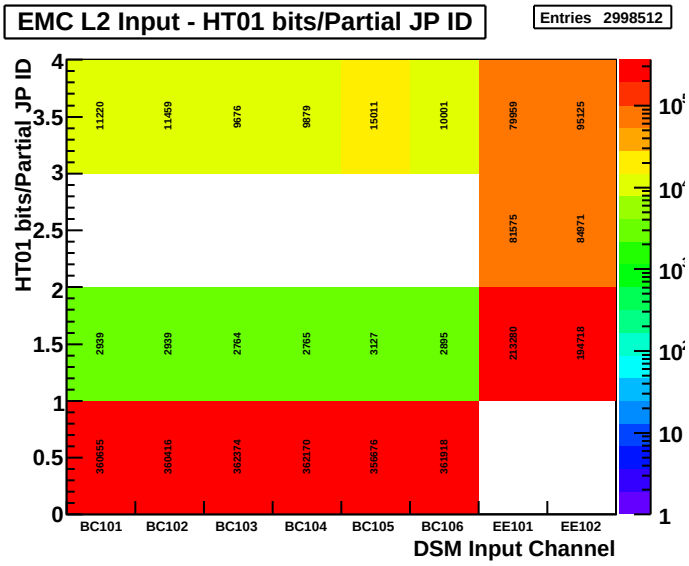

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

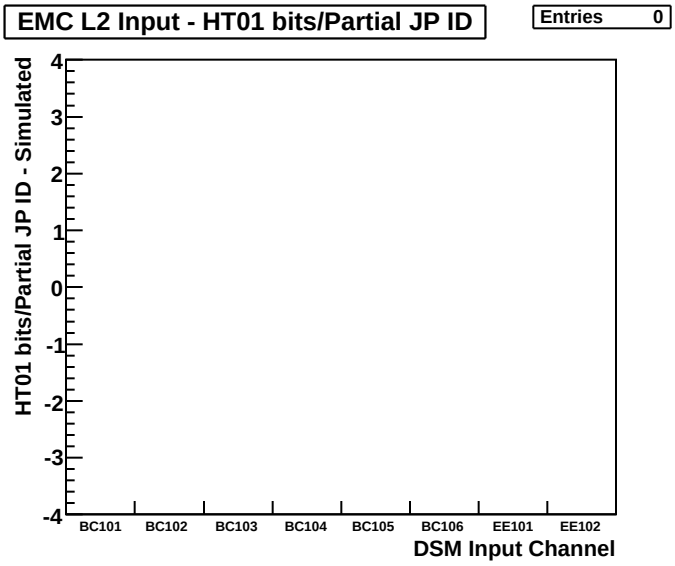

EMC L2 Input - JPZ/JPC bits
Entries 2998512
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
448 402 330 422 445 521 220 319
1354 1174 1106 1379 1622 1608 609 704
2324 2150 2023 2604 4052 3108 536 634
370588 371088 371355 370409 368695 369577 373449 373157

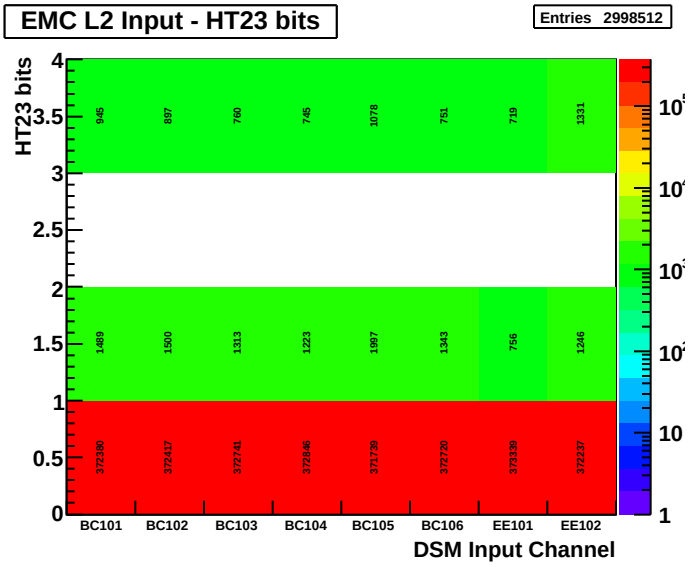

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

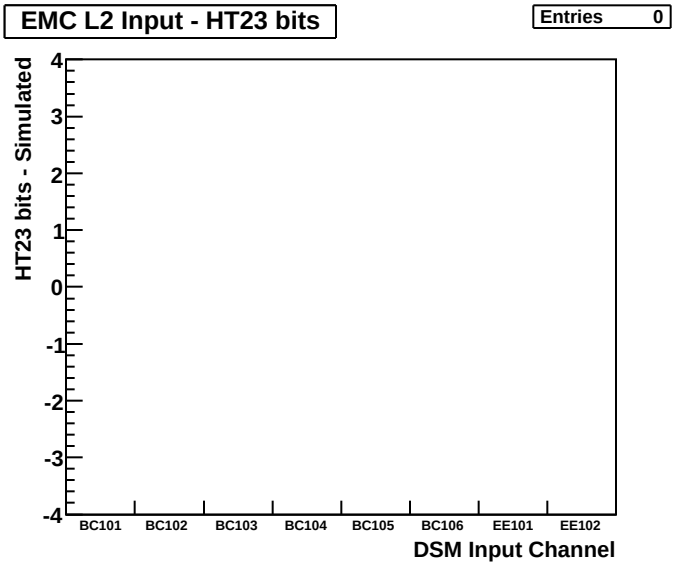

EMC L2 Input - Partial JP Sum
Entries 2998512
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

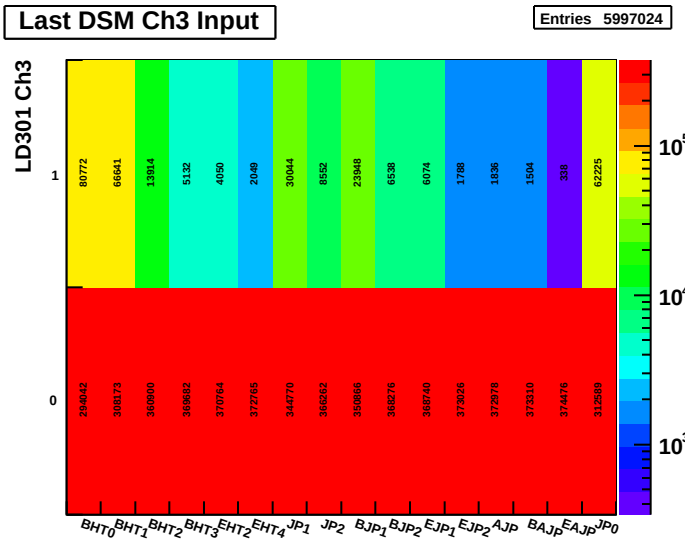

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

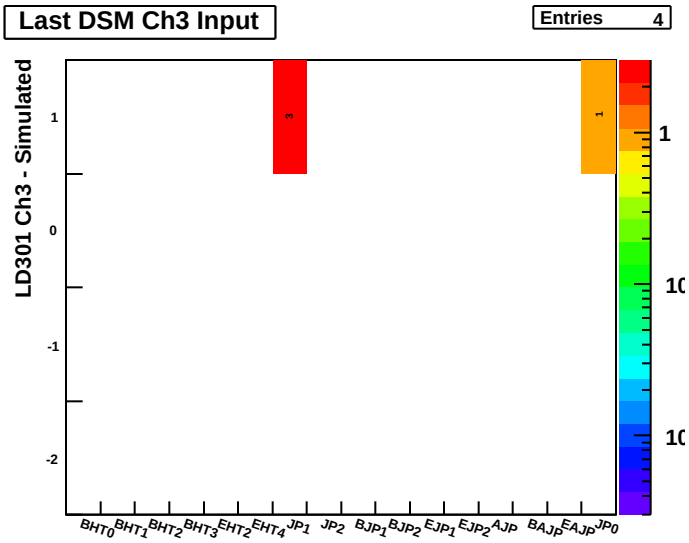

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2998512
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

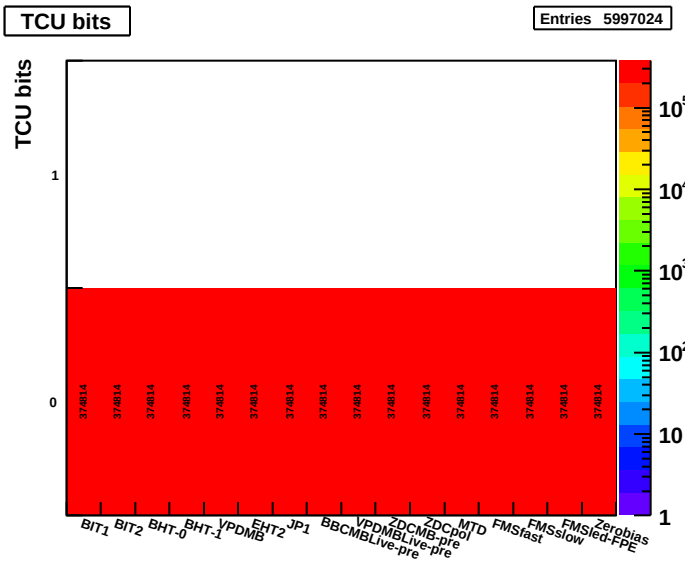

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

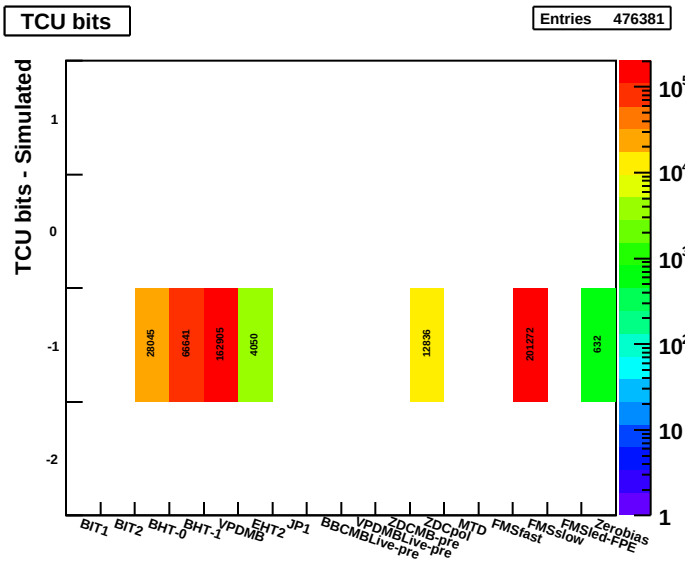

EMC L2 Input - HT23 bits
Entries 2998512
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

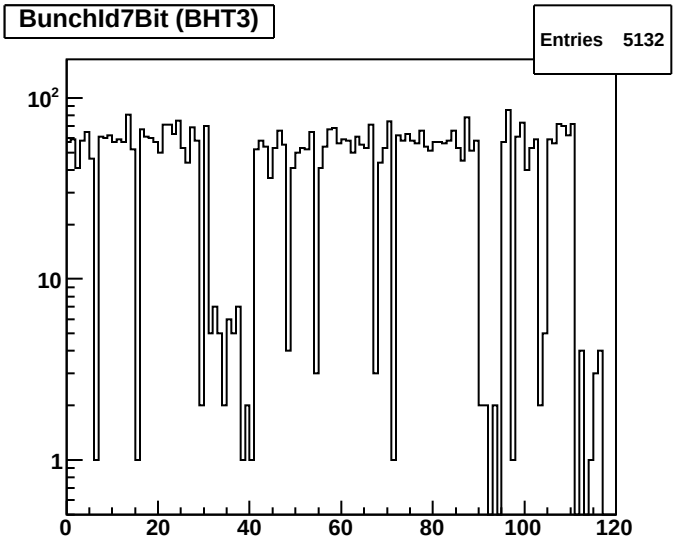

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

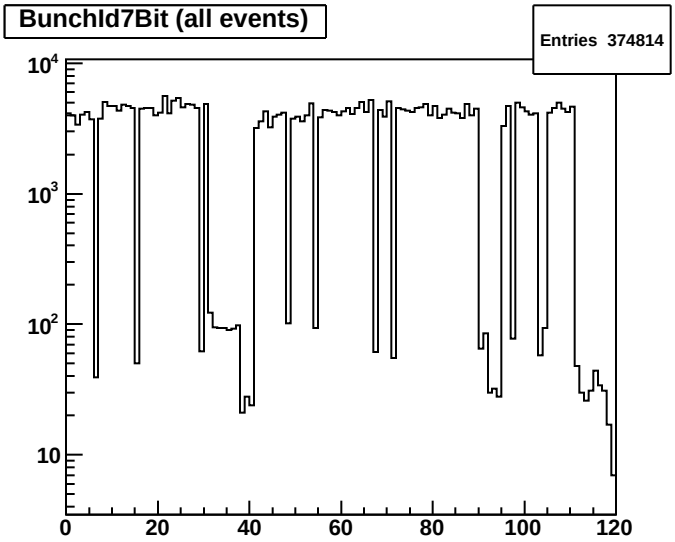

Last DSM Ch3 Input
Entries 5997024
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

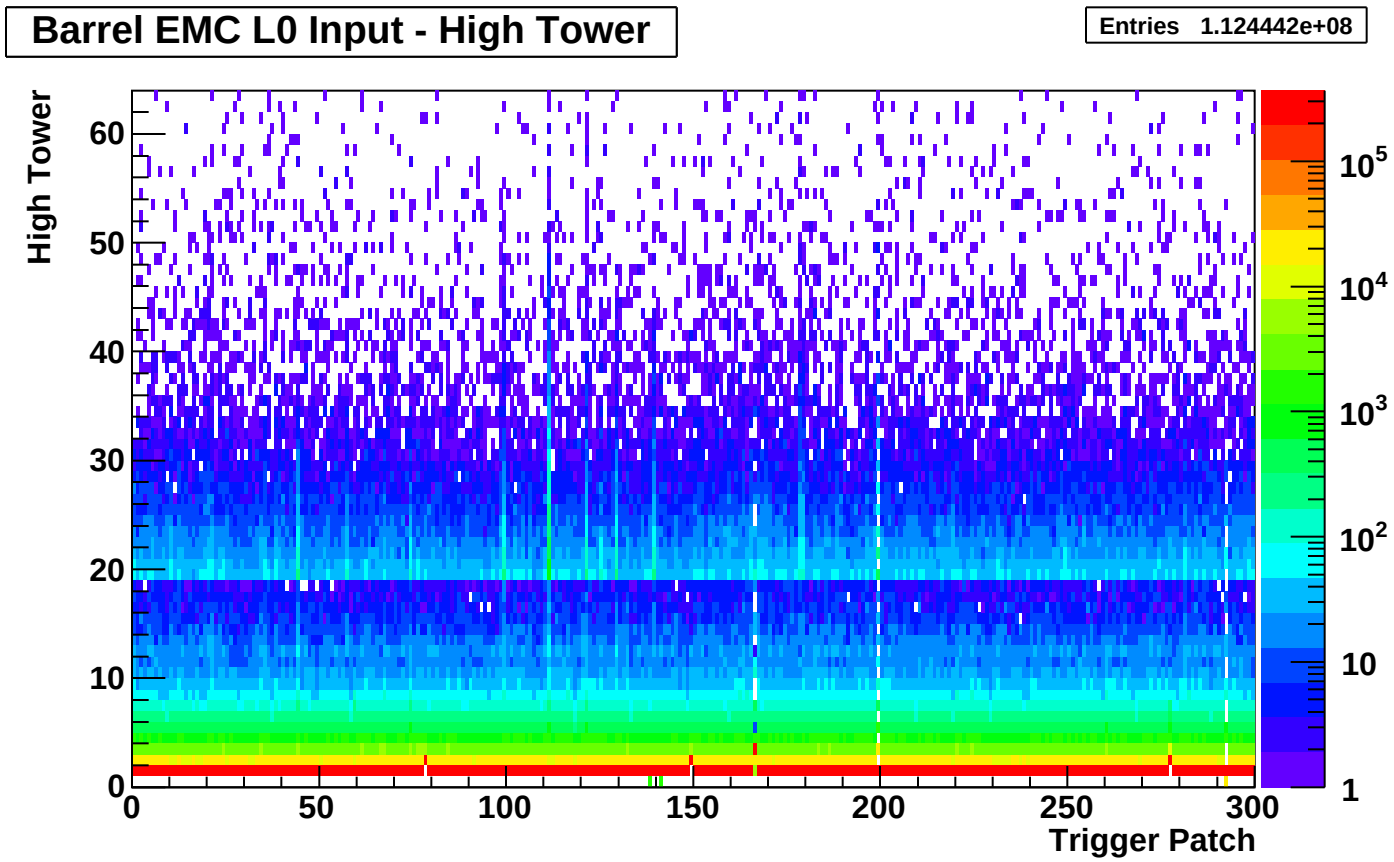

Last DSM Ch3 Input
Entries 4
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

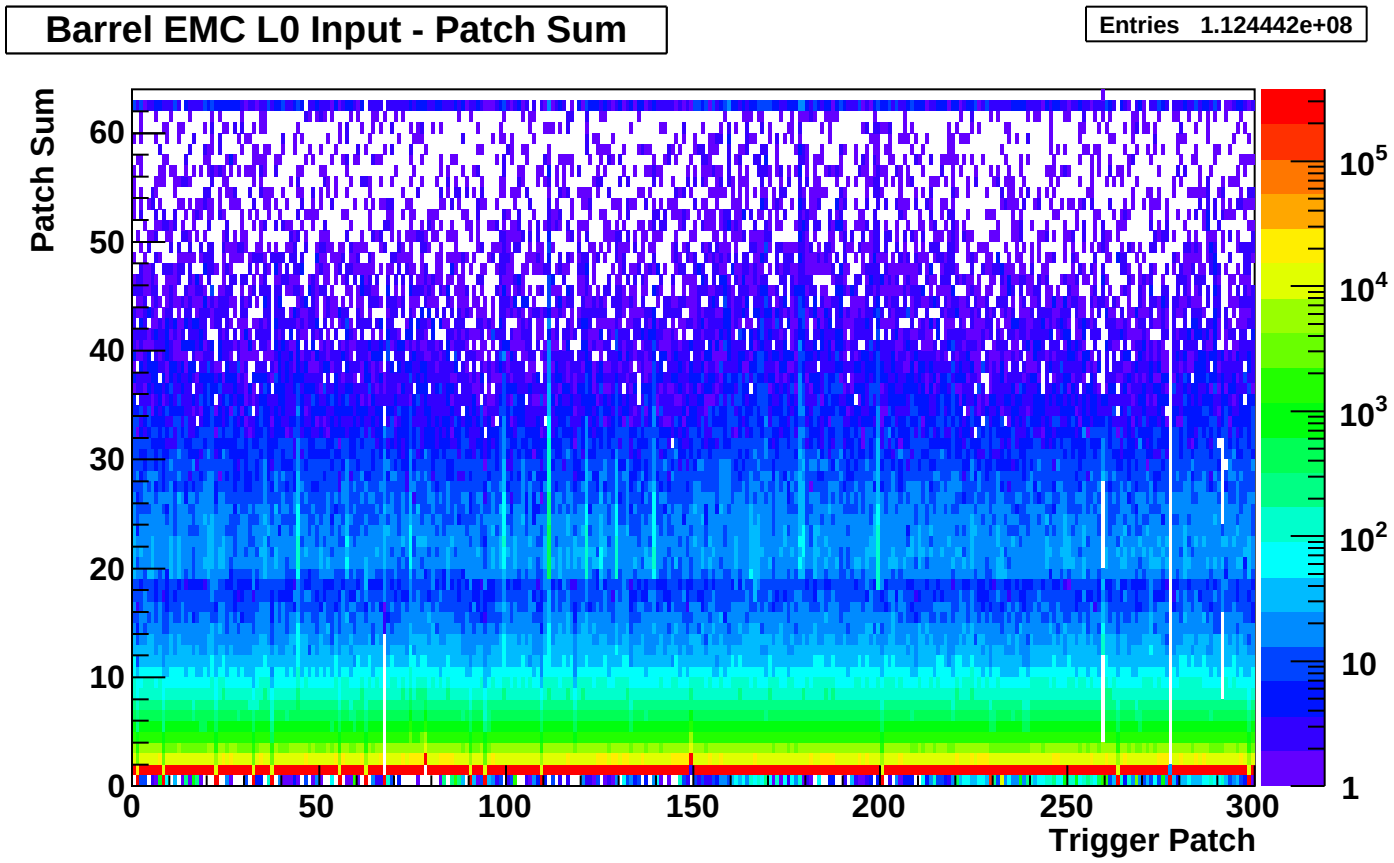

TCU bits
Entries 5997024
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

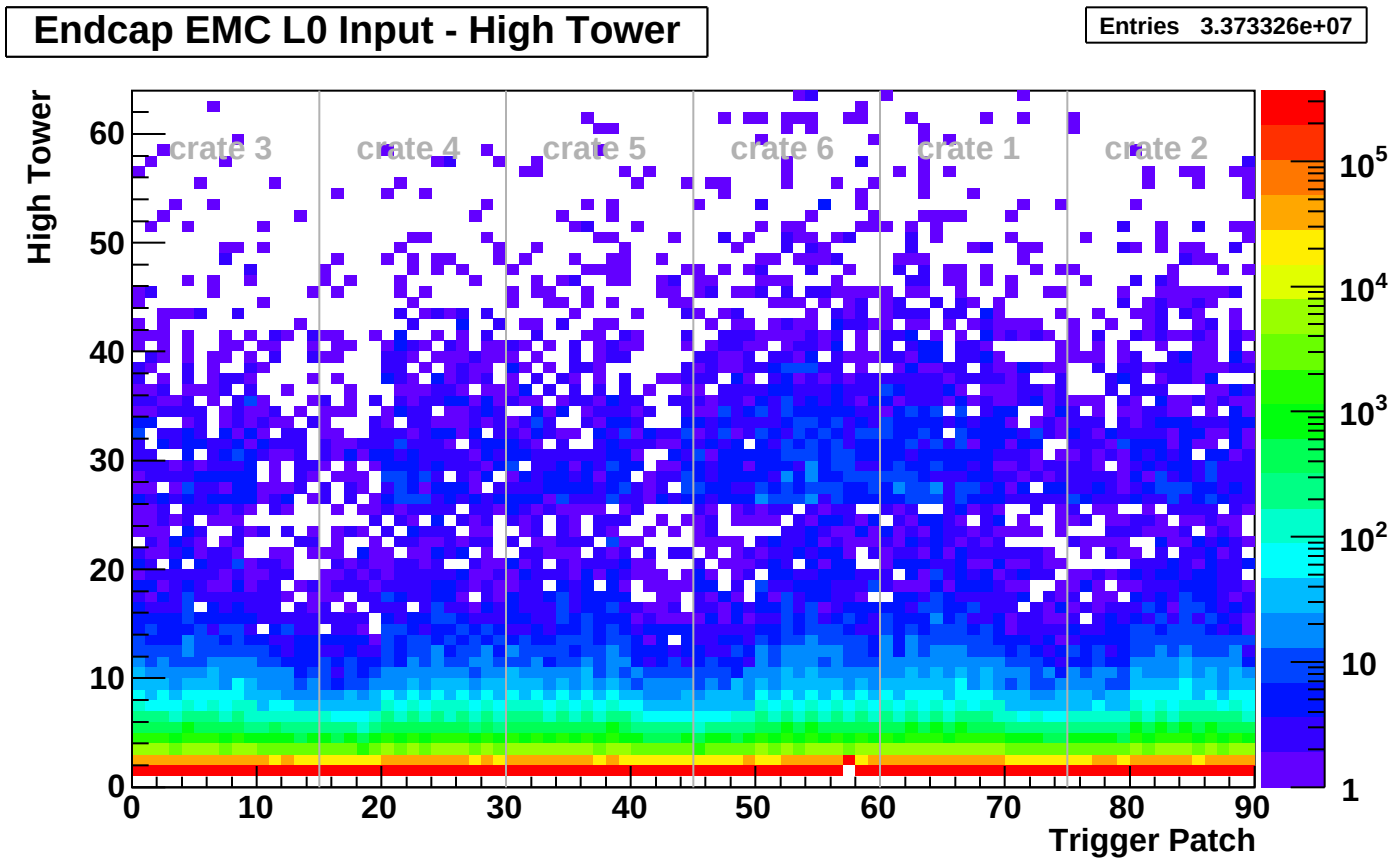

TCU bits
Entries 476381
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

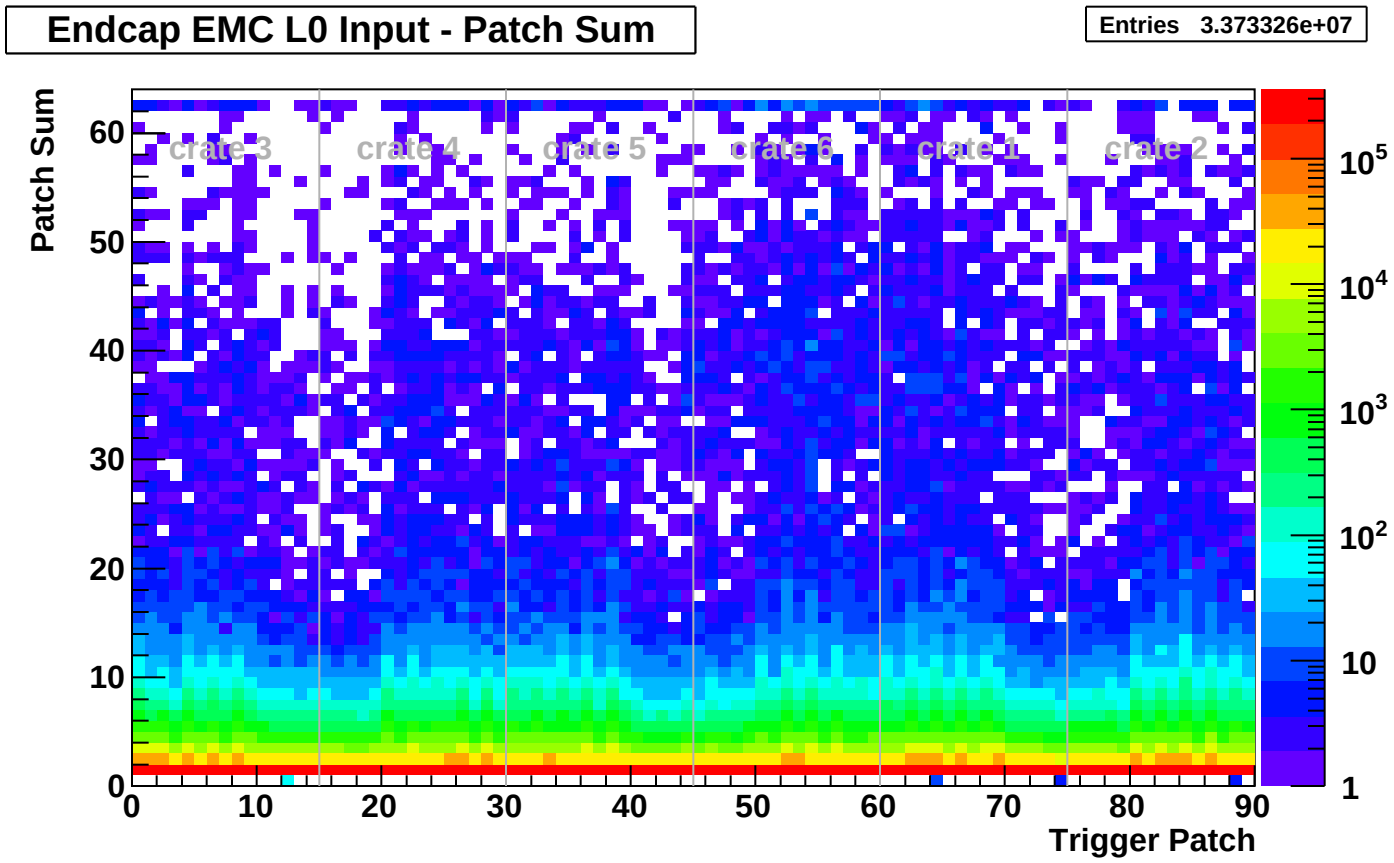

BunchId7Bit (BHT3)
Entries 5132

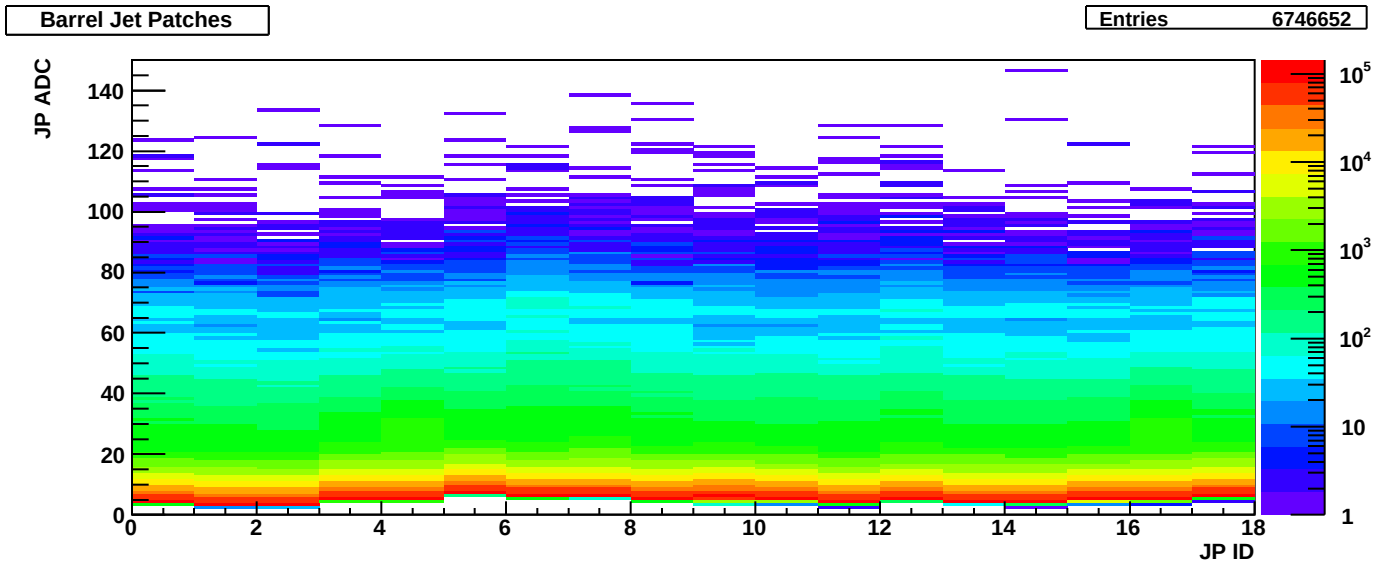

BunchId7Bit (all events)
Entries 374814

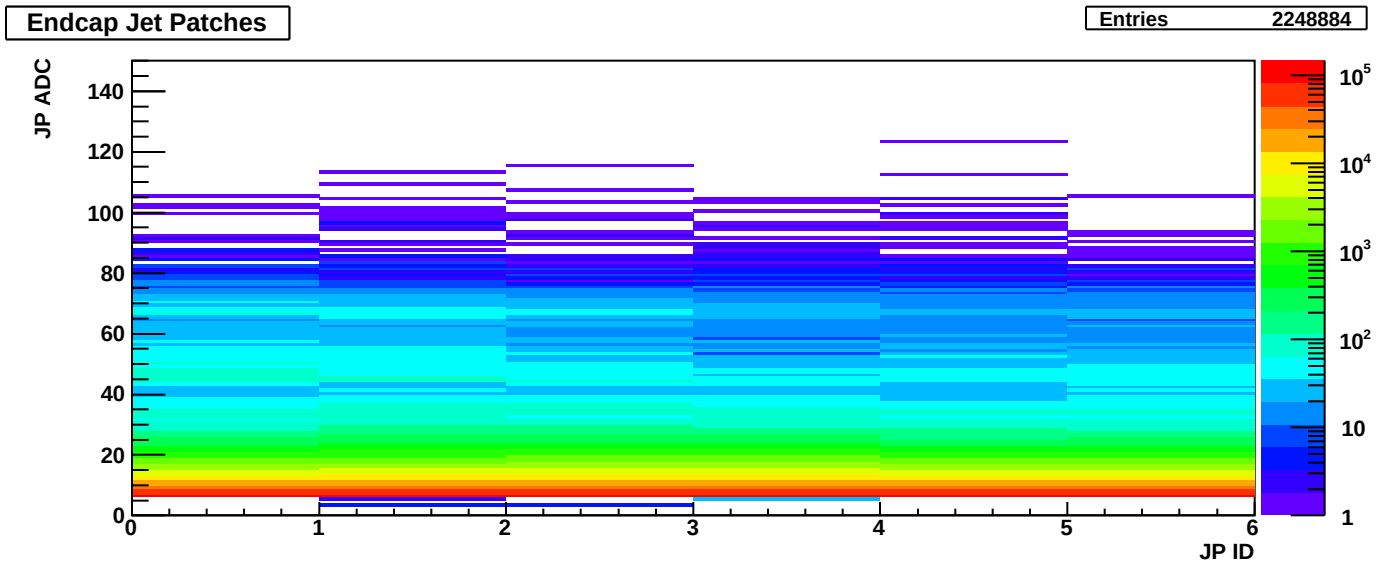

Barrel EMC L0 Input - High Tower
Entries 1.124442e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

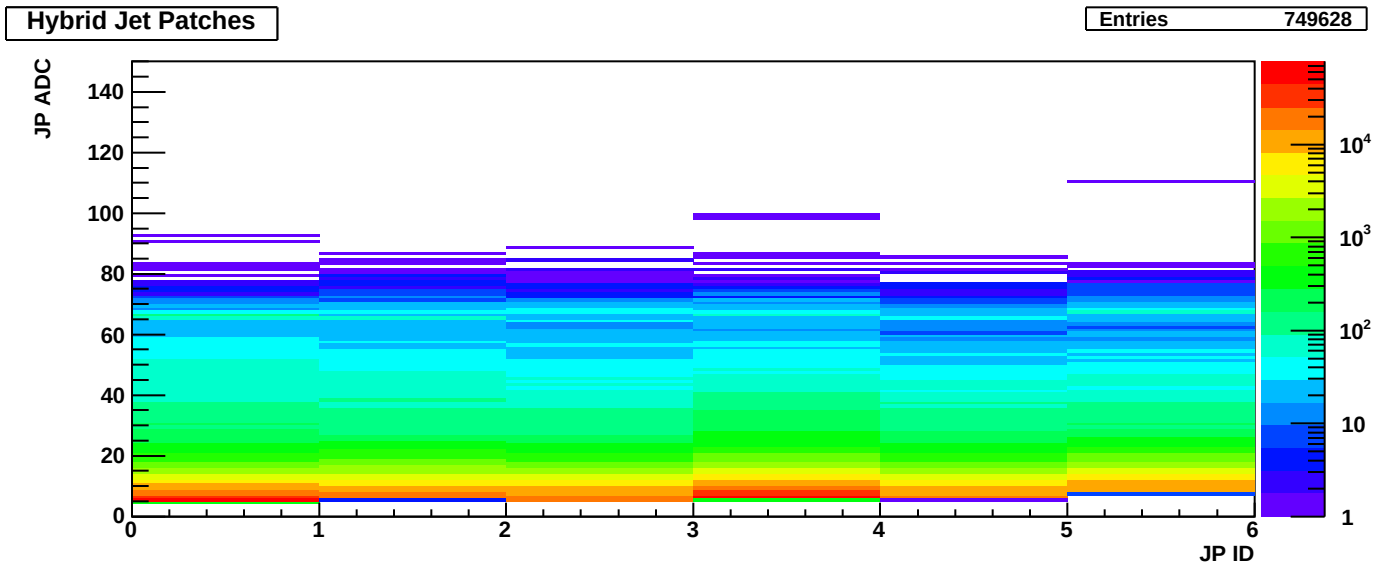

Barrel EMC L0 Input - Patch Sum
Entries 1.124442e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

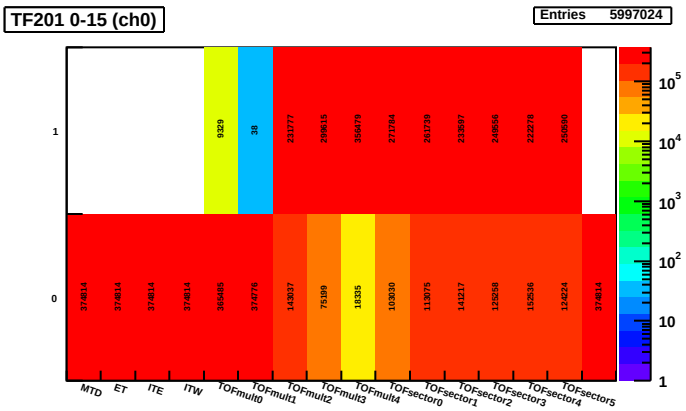

Endcap EMC L0 Input - High Tower
Entries 3.373326e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

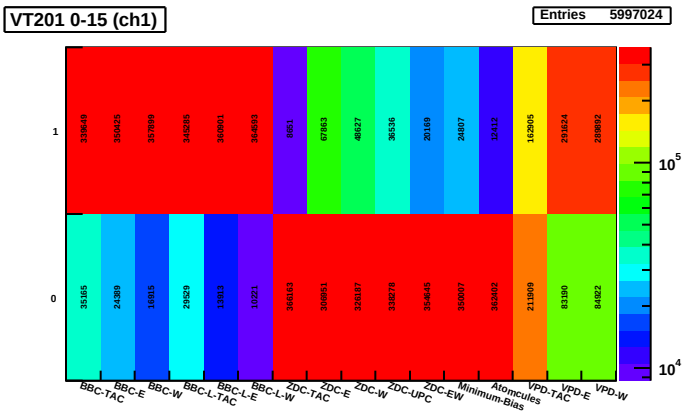

Endcap EMC L0 Input - Patch Sum
Entries 3.373326e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

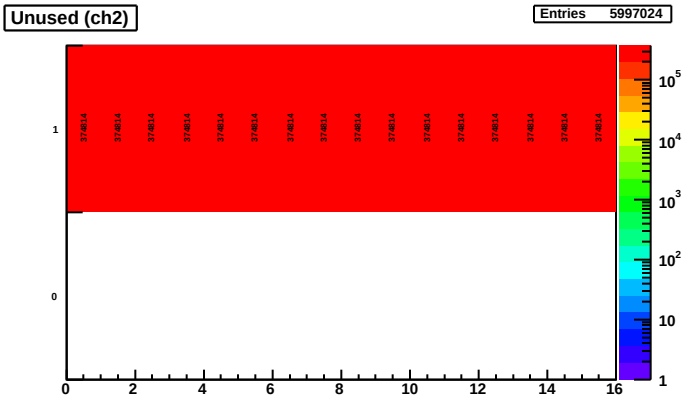

Barrel Jet Patches
Entries 6746652
JP ADC
JP ID

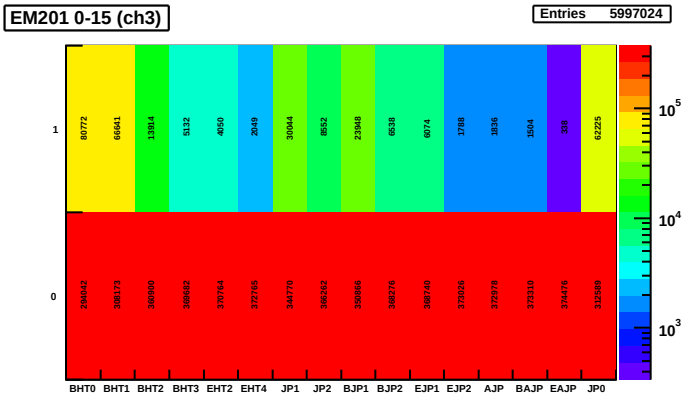

Endcap Jet Patches
Entries 2248884
JP ADC
JP ID

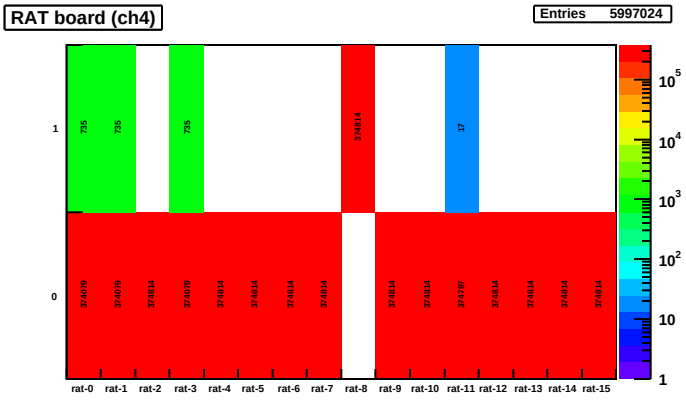

Hybrid Jet Patches
Entries 749628
JP ADC
JP ID

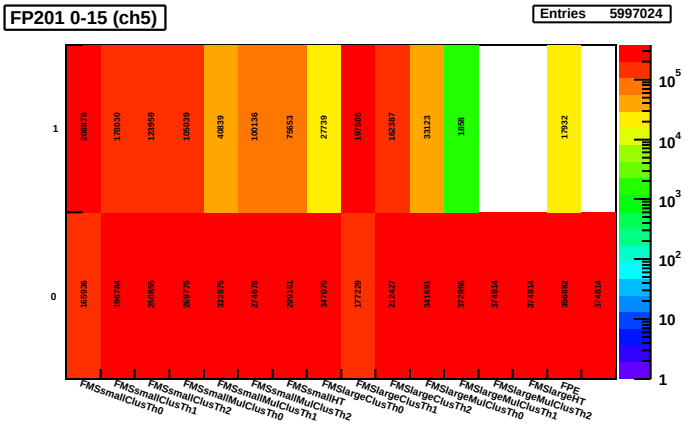

TF201 0-15 (ch0)
Entries 5997024
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

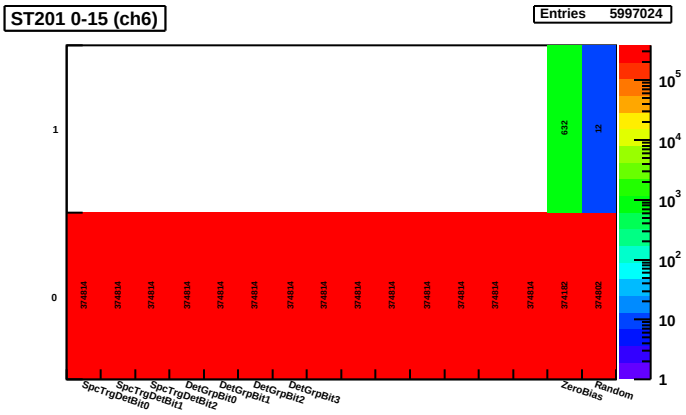

VT201 0-15 (ch1)
Entries 5997024
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

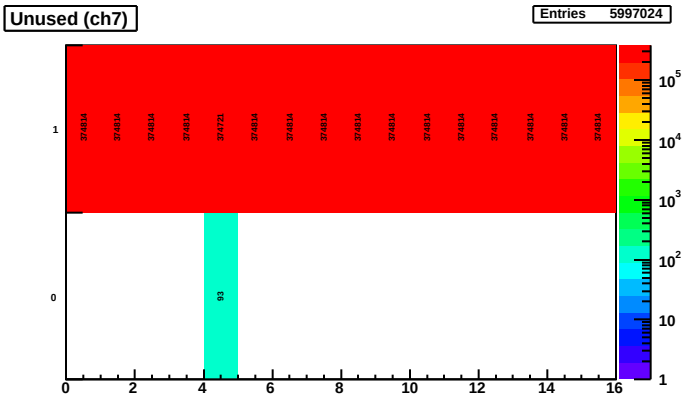

Unused (ch2)
Entries 5997024

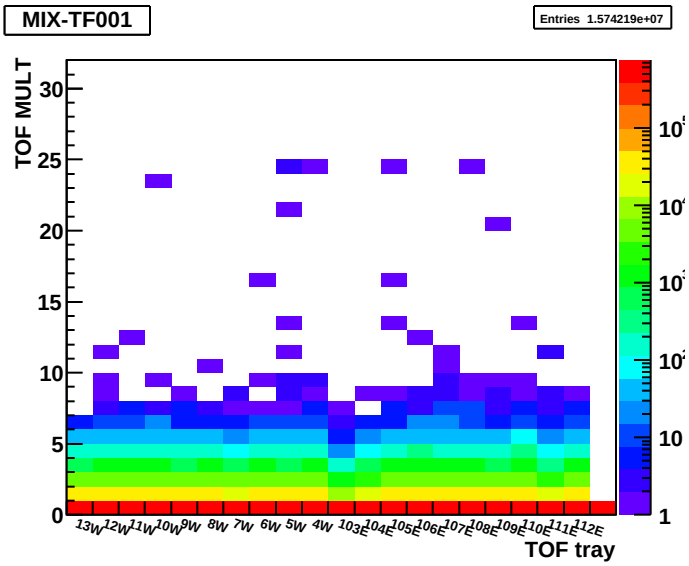

EM201 0-15 (ch3)
Entries 5997024
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

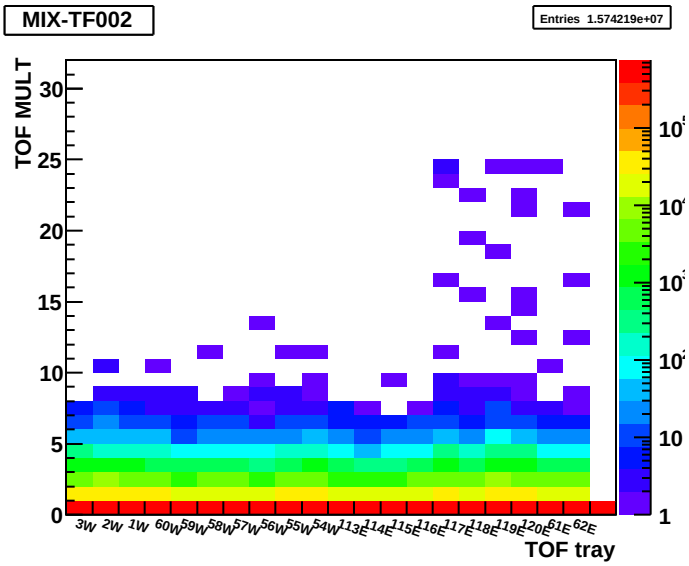

RAT board (ch4)
Entries 5997024
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

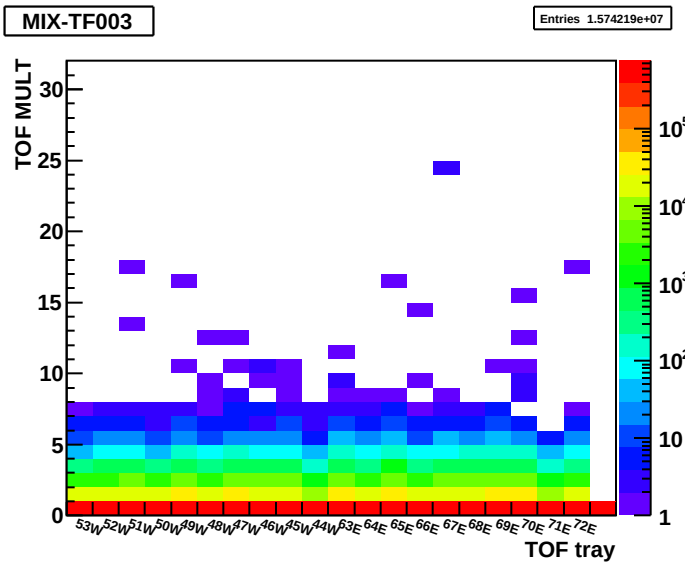

FP201 0-15 (ch5)
Entries 5997024
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

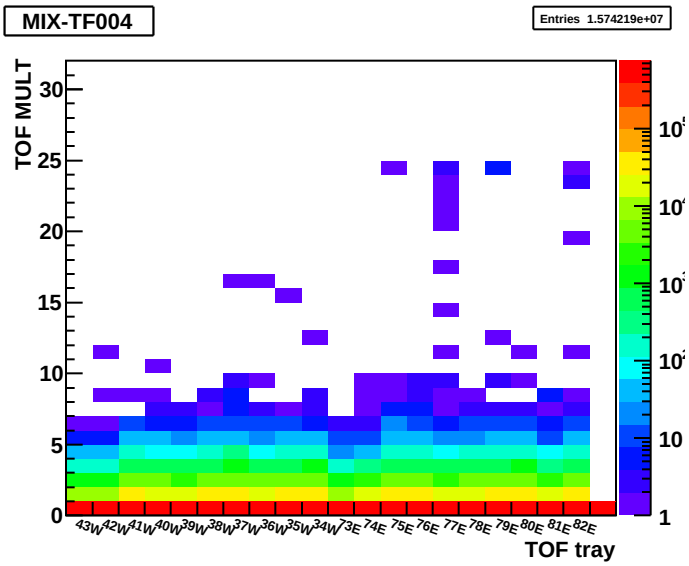

ST201 0-15 (ch6)
Entries 5997024
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

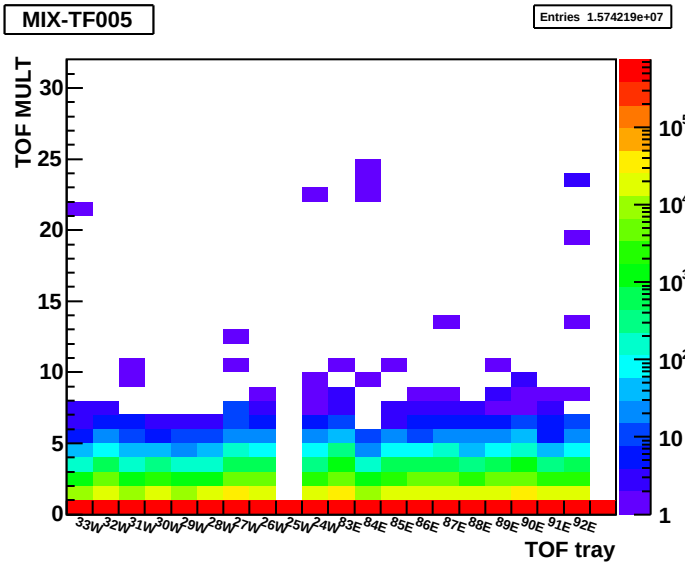

Unused (ch7)
Entries 5997024

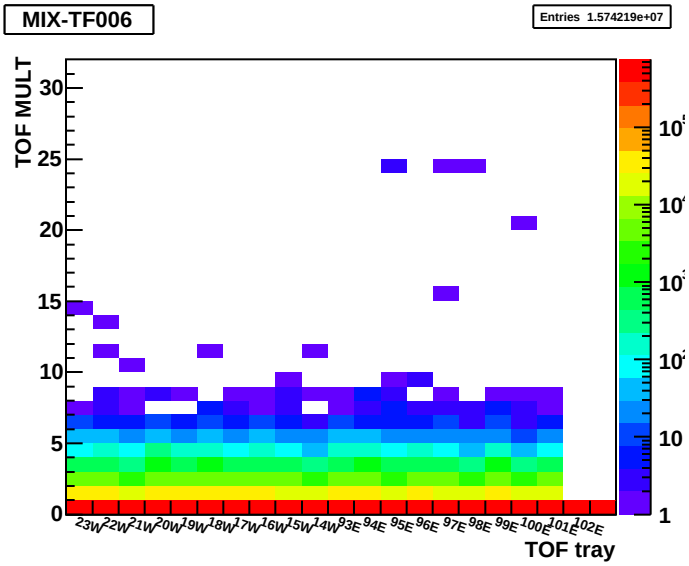

MIX-TF001
Entries 1.574219e+07
TOF MULT
TOF tray

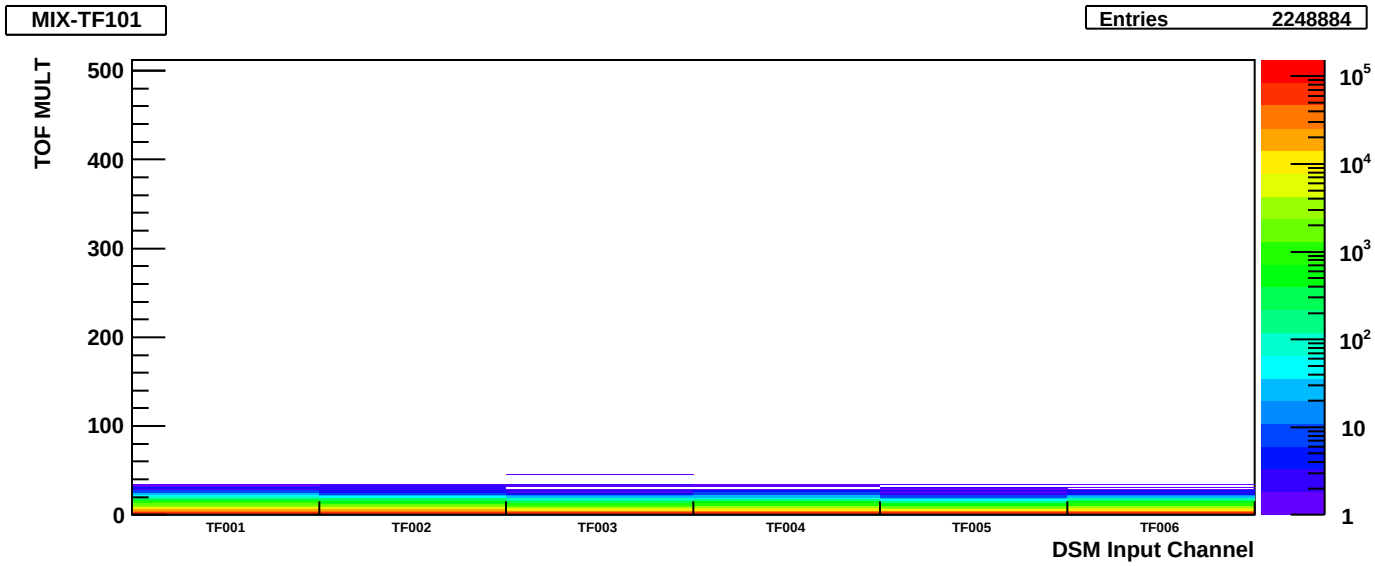

MIX-TF002
Entries 1.574219e+07
TOF MULT
TOF tray

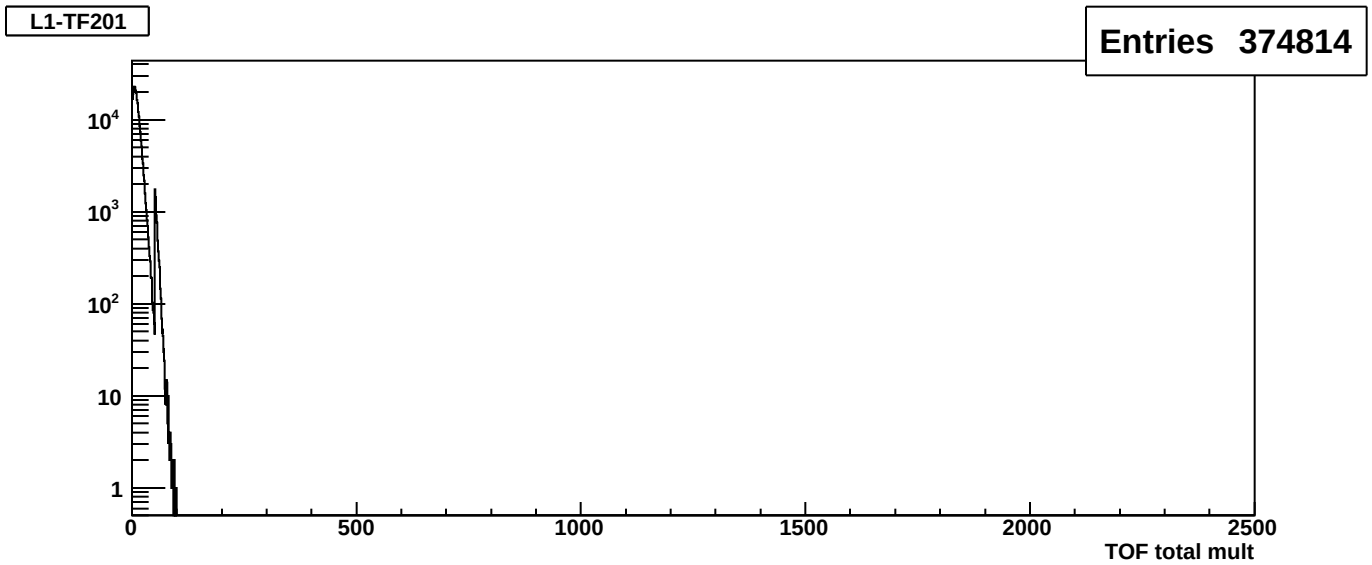

MIX-TF003
Entries 1.574219e+07
TOF MULT
TOF tray

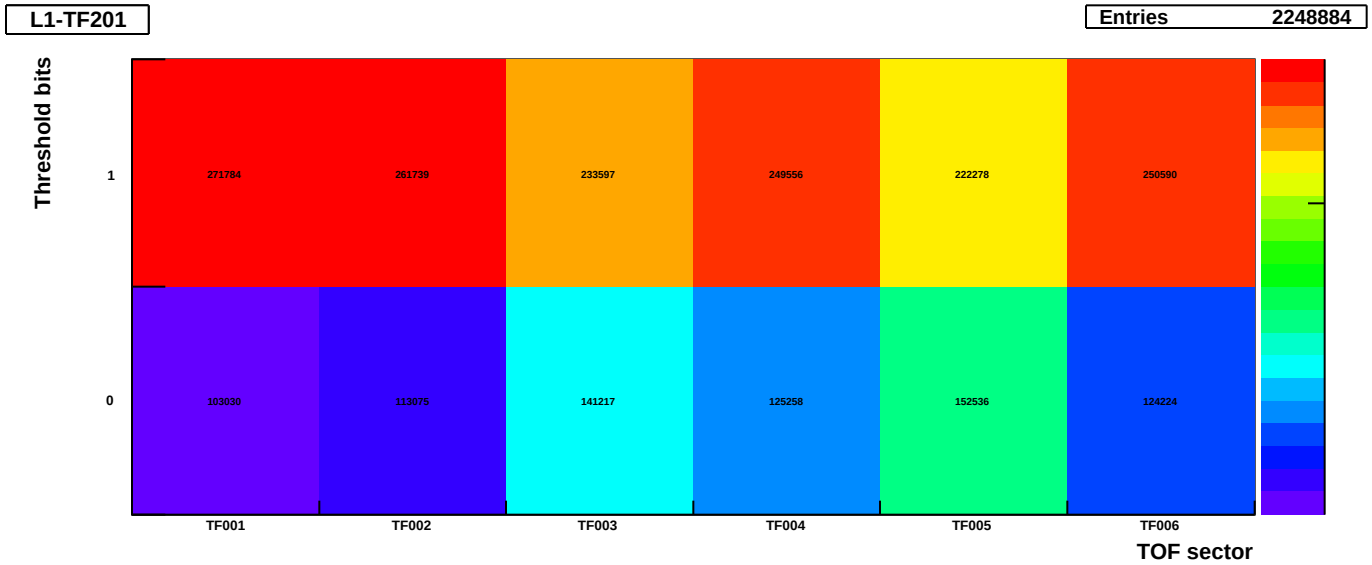

MIX-TF004
Entries 1.574219e+07
TOF MULT
TOF tray

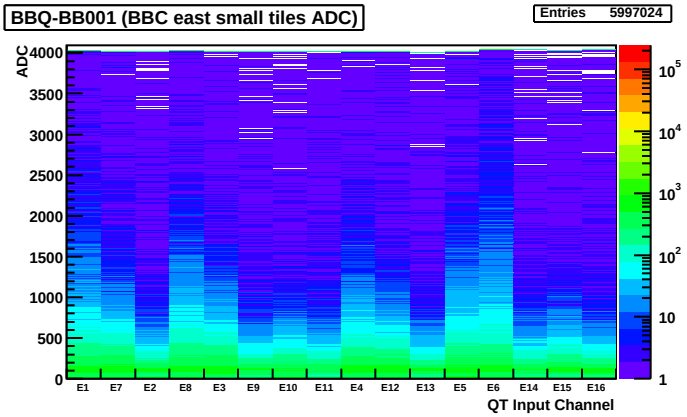

MIX-TF005
Entries 1.574219e+07
TOF MULT
TOF tray

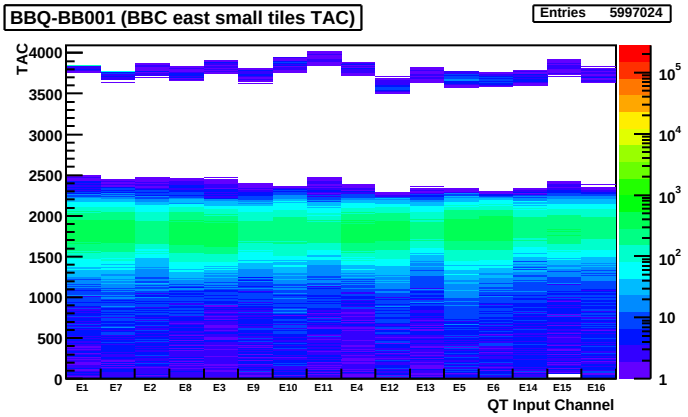

MIX-TF006
Entries 1.574219e+07
TOF MULT
TOF tray

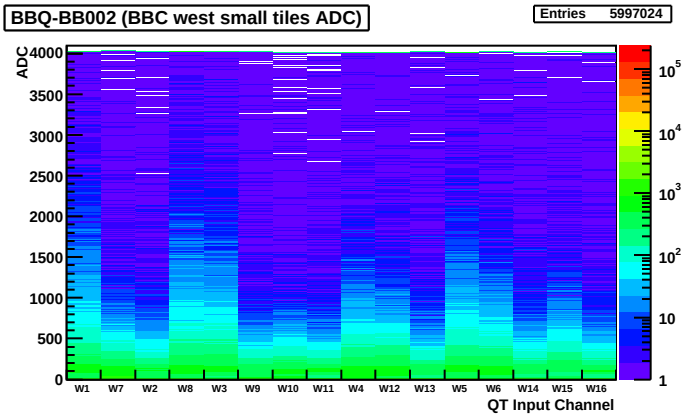

MIX-TF101
Entries 2248884
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

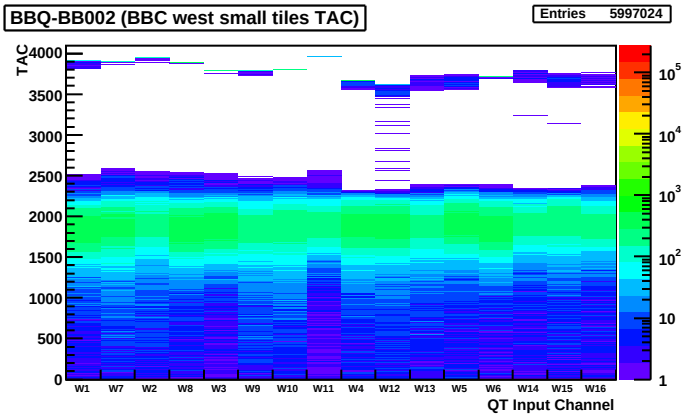

L1-TF201
Entries 374814
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

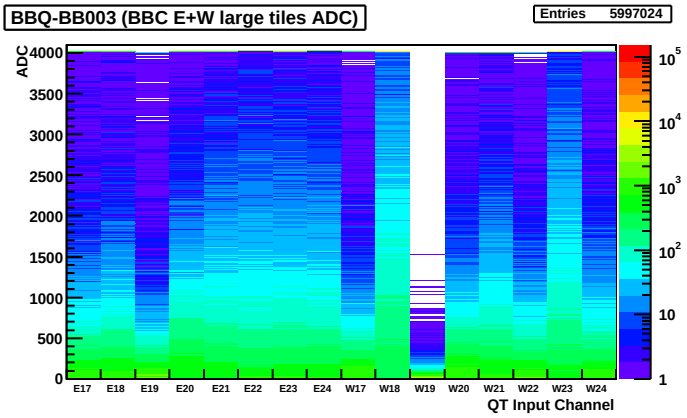

L1-TF201
Entries 2248884
Threshold bits
1
0
271784
261739
233597
249556
222278
250590
103030
113075
141217
125258
152536
124224
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

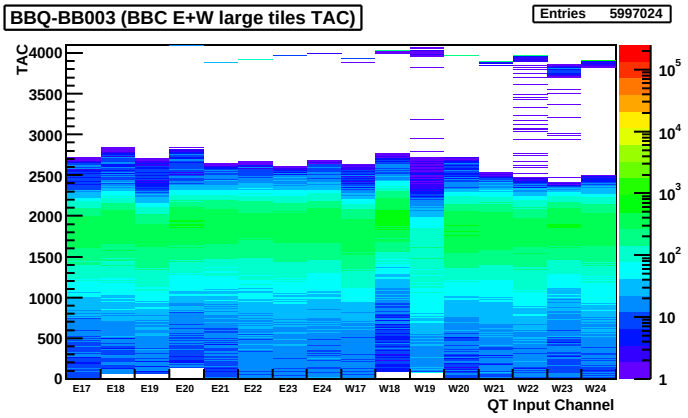

BBQ-BB001 (BBC east small tiles ADC)
Entries 5997024
ADC
QT Input Channel

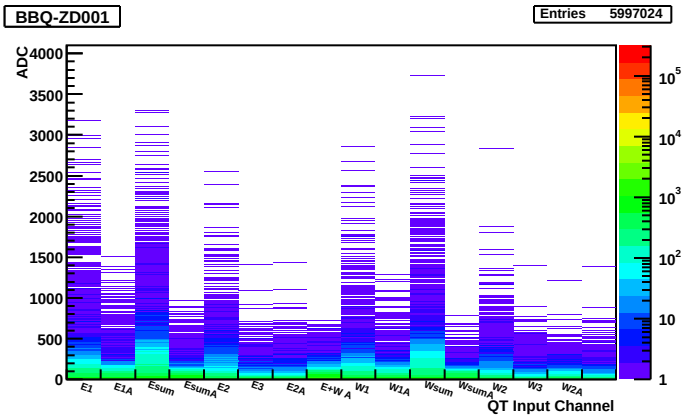

BBQ-BB001 (BBC east small tiles TAC)
Entries 5997024
TAC
QT Input Channel

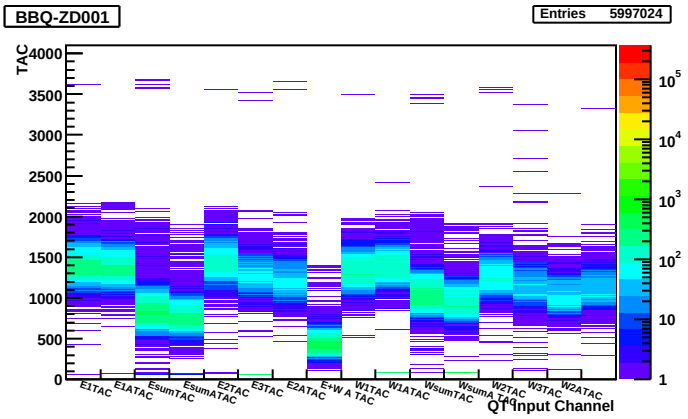

BBQ-BB002 (BBC west small tiles ADC)
Entries 5997024
ADC
QT Input Channel

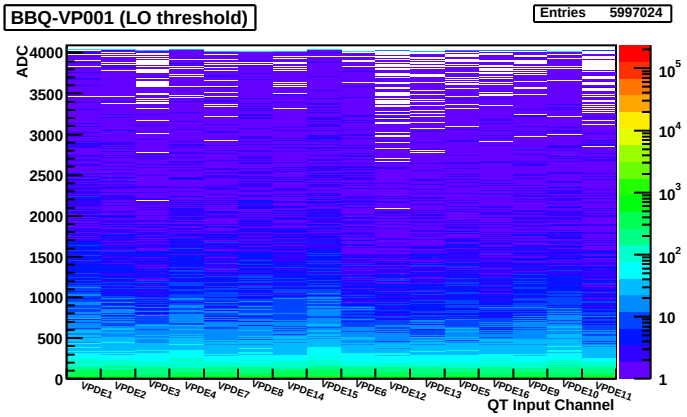

BBQ-BB002 (BBC west small tiles TAC)
Entries 5997024
TAC
QT Input Channel

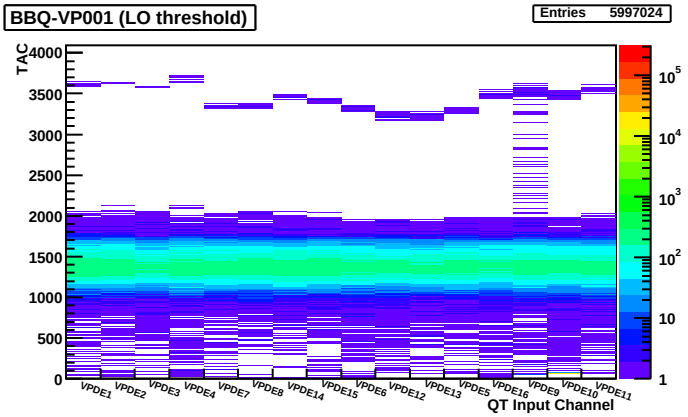

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5997024
ADC
QT Input Channel

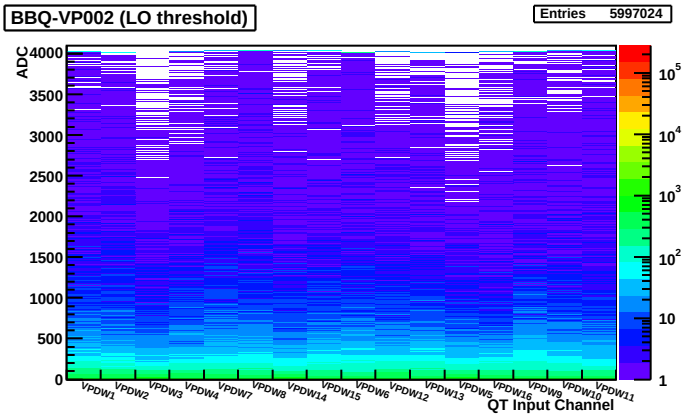

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5997024
TAC
QT Input Channel

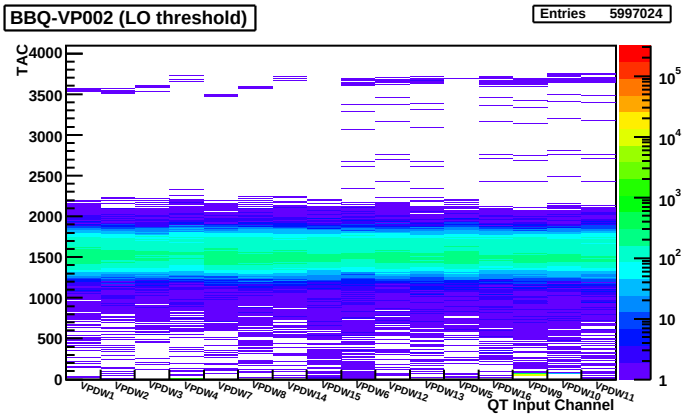

BBQ-ZD001
Entries 5997024
ADC
QT Input Channel

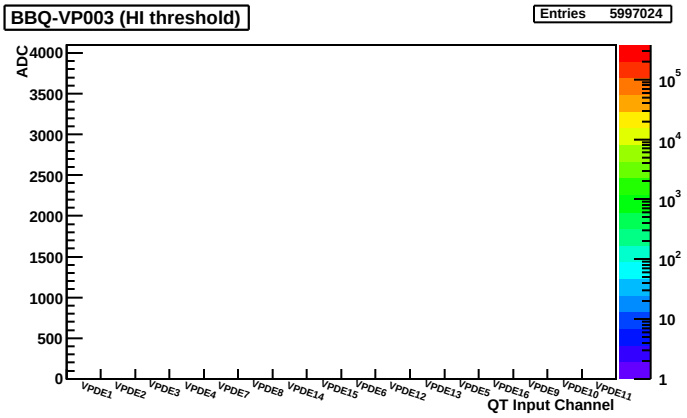

BBQ-ZD001
Entries 5997024
TAC
QT Input Channel

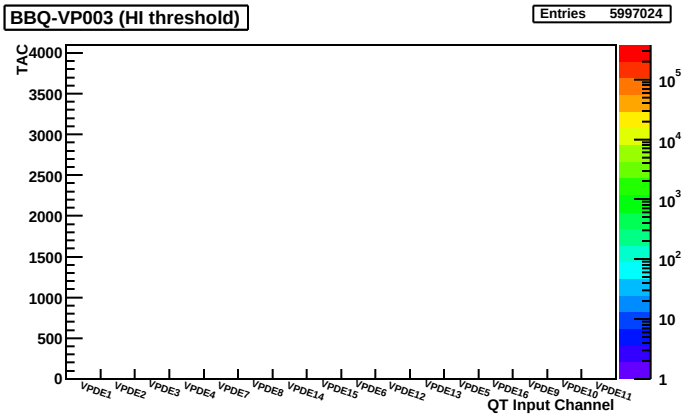

BBQ-VP001 (LO threshold)
Entries 5997024
ADC
QT Input Channel

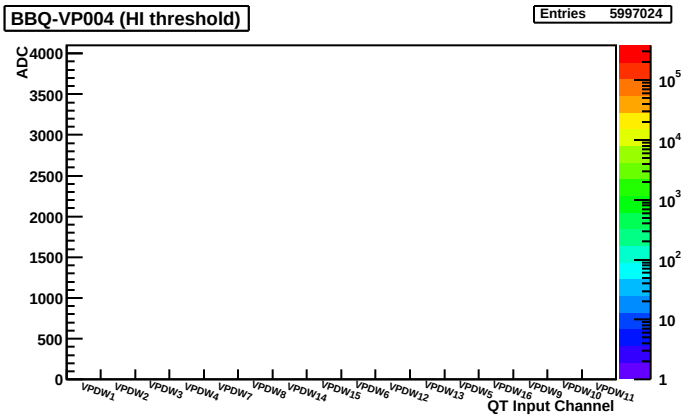

BBQ-VP001 (LO threshold)
Entries 5997024
TAC
QT Input Channel

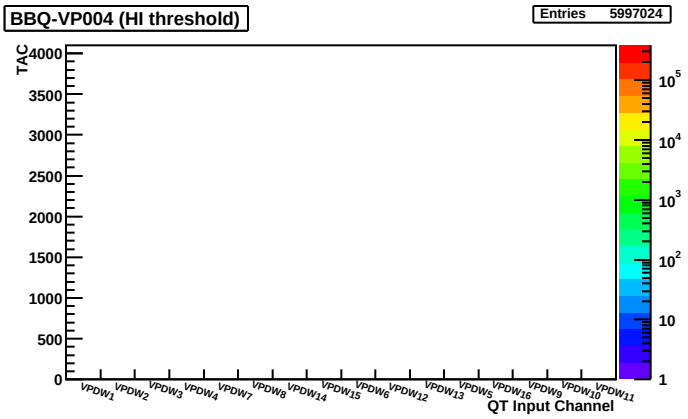

BBQ-VP002 (LO threshold)
Entries 5997024
ADC
QT Input Channel

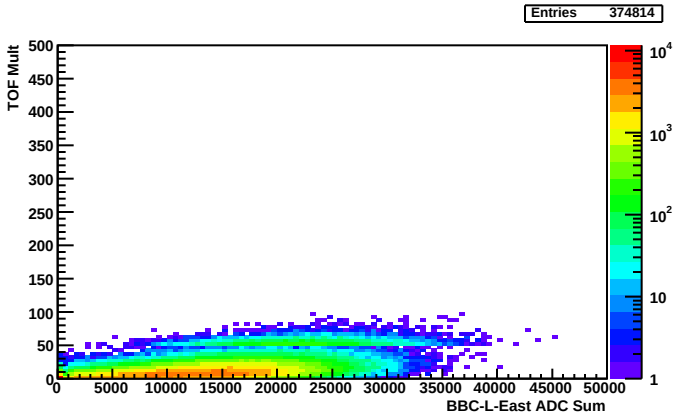

BBQ-VP002 (LO threshold)
Entries 5997024
TAC
QT Input Channel

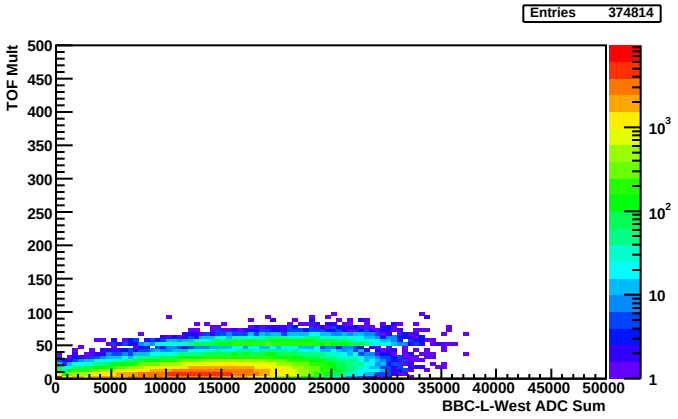

BBQ-VP003 (HI threshold)
Entries 5997024
ADC
QT Input Channel

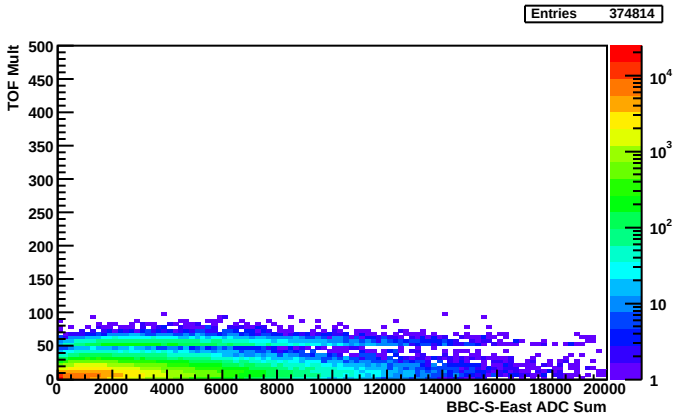

BBQ-VP003 (HI threshold)
Entries 5997024
TAC
QT Input Channel

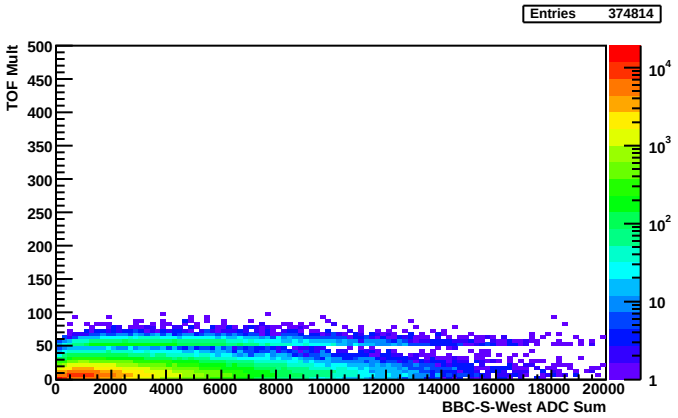

BBQ-VP004 (HI threshold)
Entries 5997024
ADC
QT Input Channel

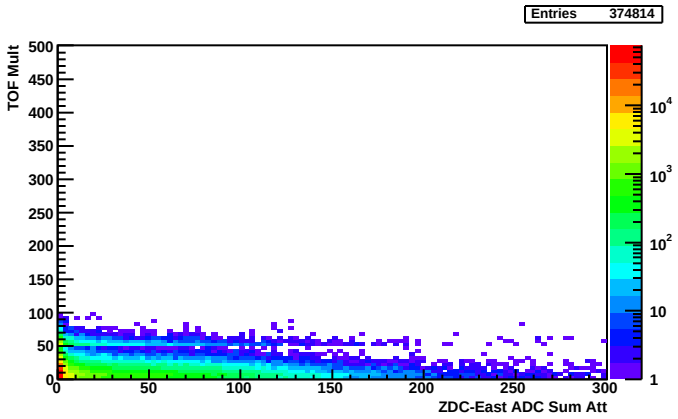

BBQ-VP004 (HI threshold)
Entries 5997024
TAC
QT Input Channel

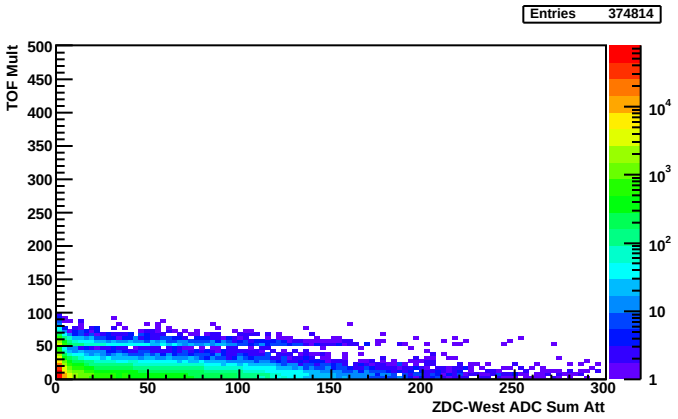

Entries 374814
TOF Mult
BBC-L-East ADC Sum

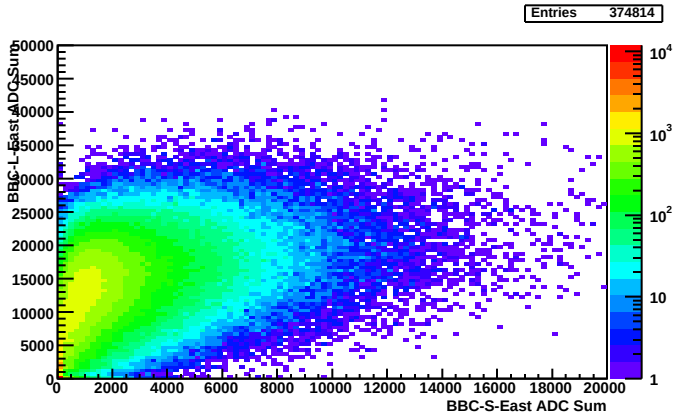

Entries 374814
TOF Mult
BBC-L-West ADC Sum

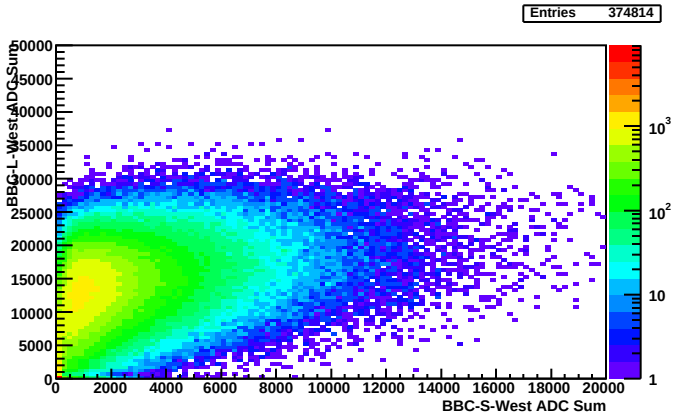

Entries 374814
TOF Mult
BBC-S-East ADC Sum

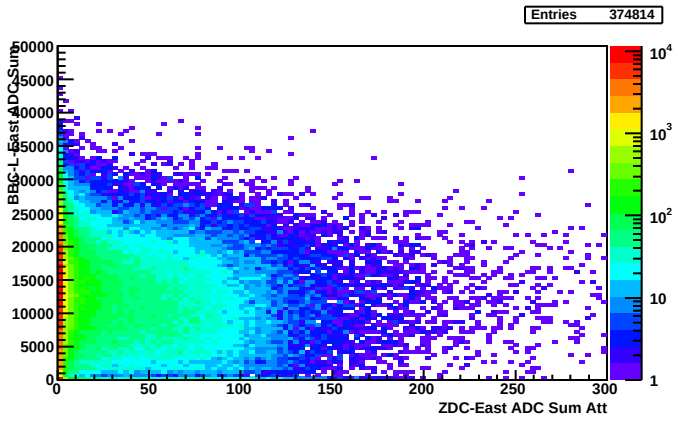

Entries 374814
TOF Mult
BBC-S-West ADC Sum

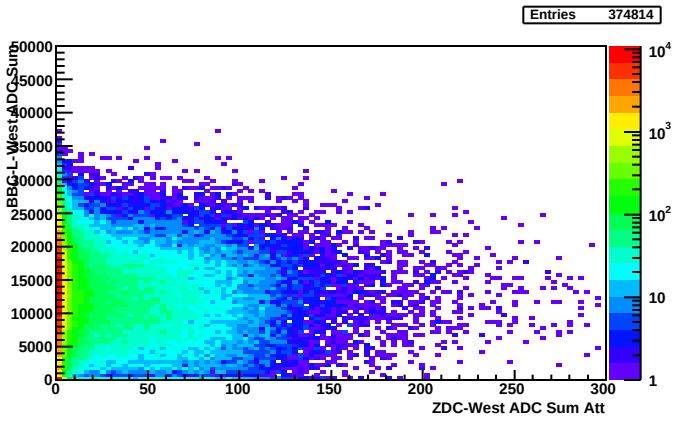

Entries 374814
TOF Mult
ZDC-East ADC Sum Att

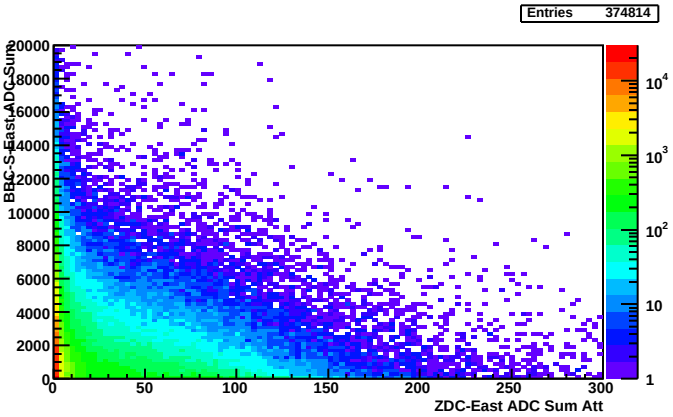

Entries 374814
TOF Mult
ZDC-West ADC Sum Att

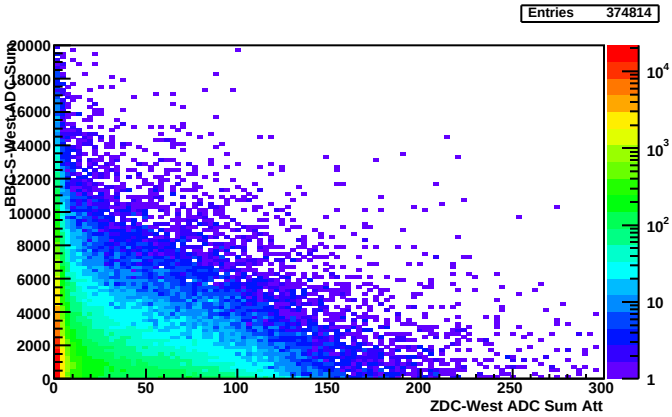

Entries 374814
BBC-L-East ADC Sum
BBC-S-East ADC Sum

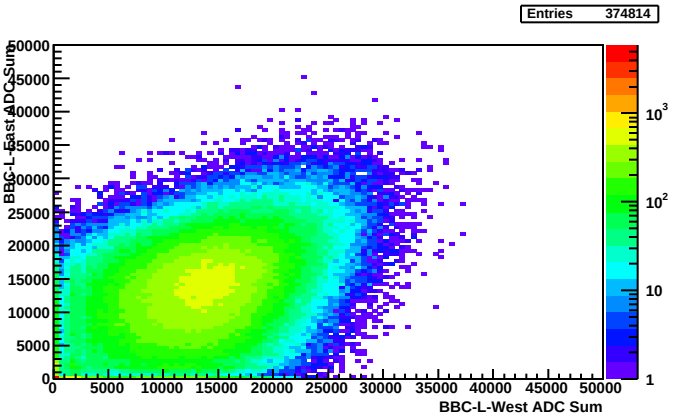

Entries 374814
BBC-L-West ADC Sum
BBC-S-West ADC Sum

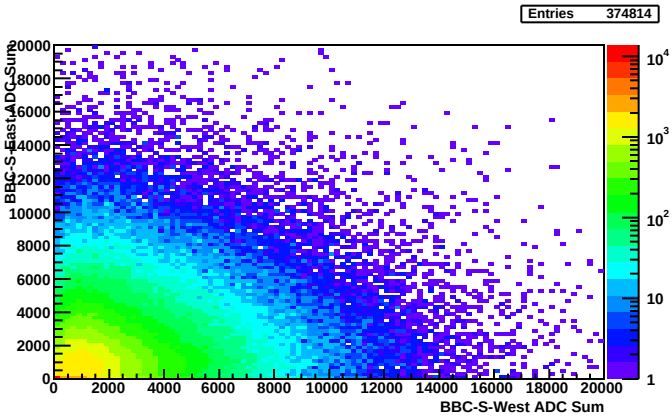

Entries 374814
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

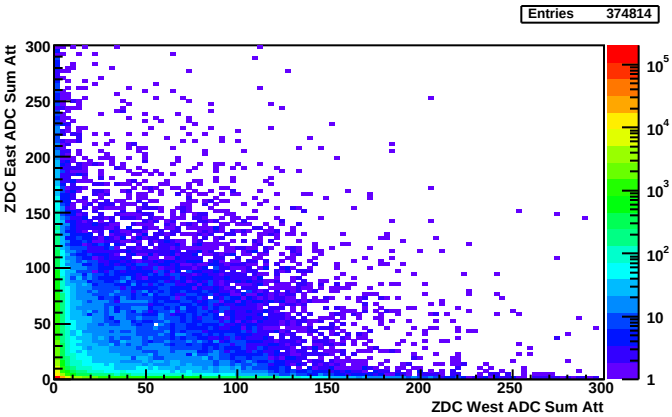

Entries 374814
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

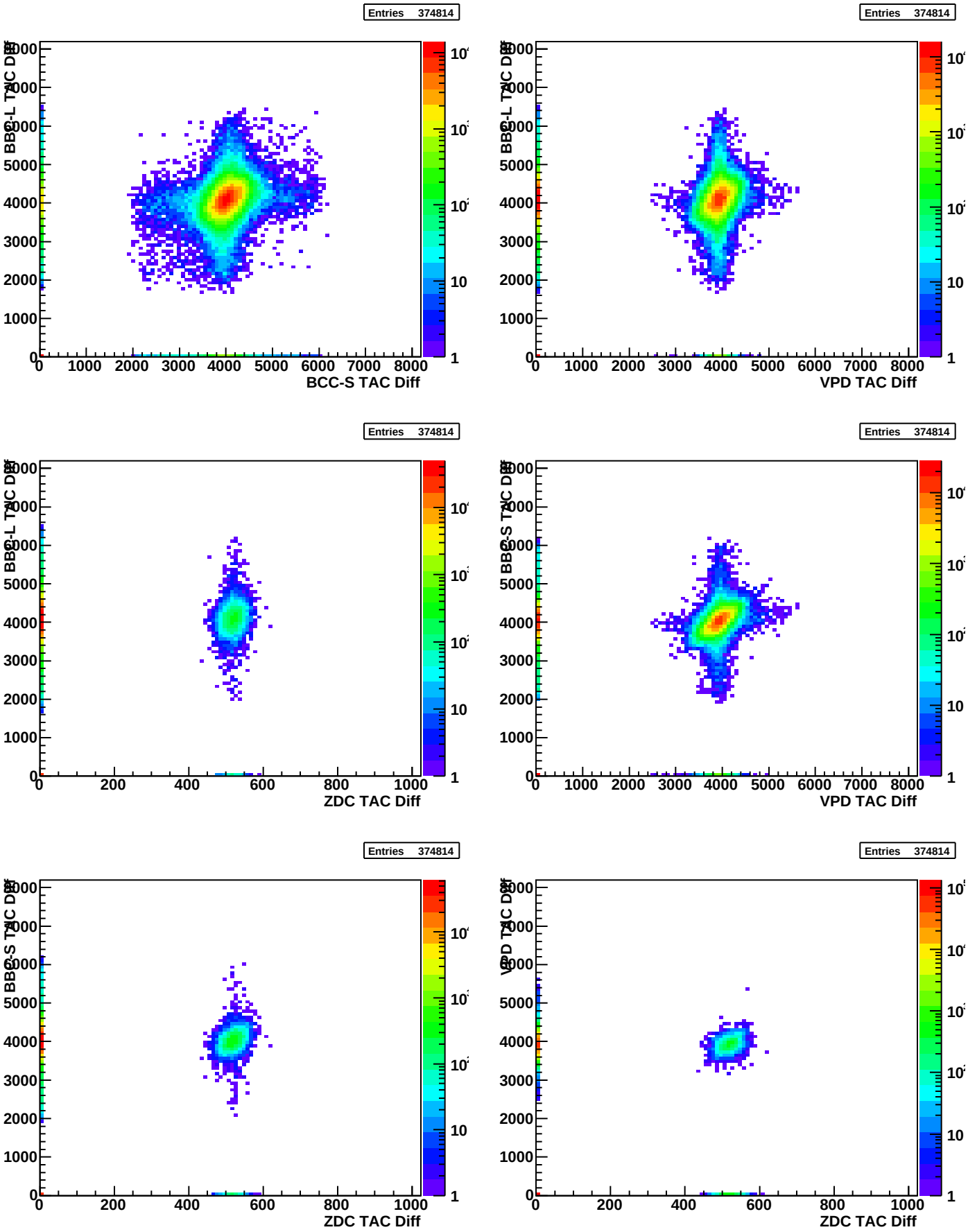

Entries 374814
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

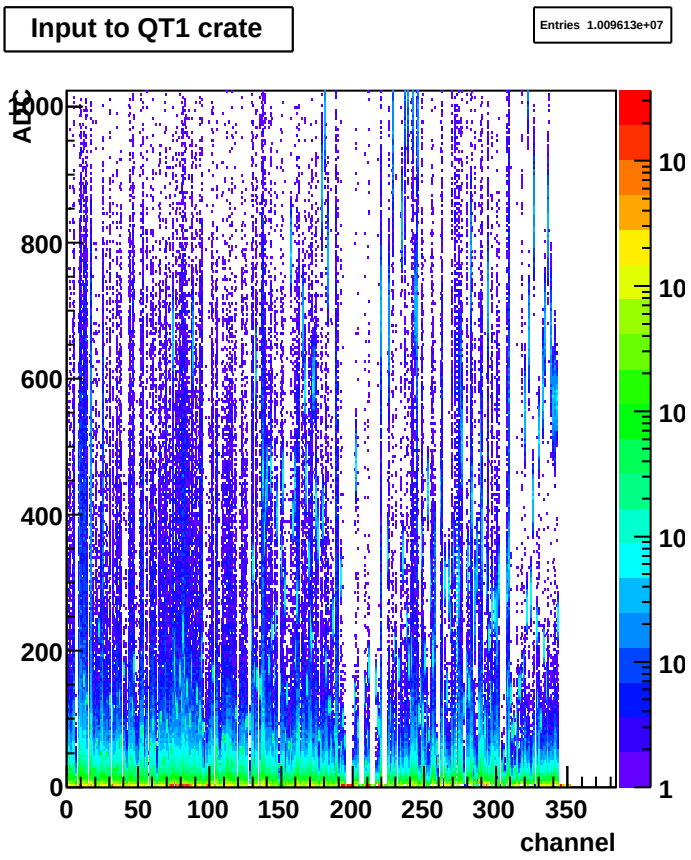

Entries 374814
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

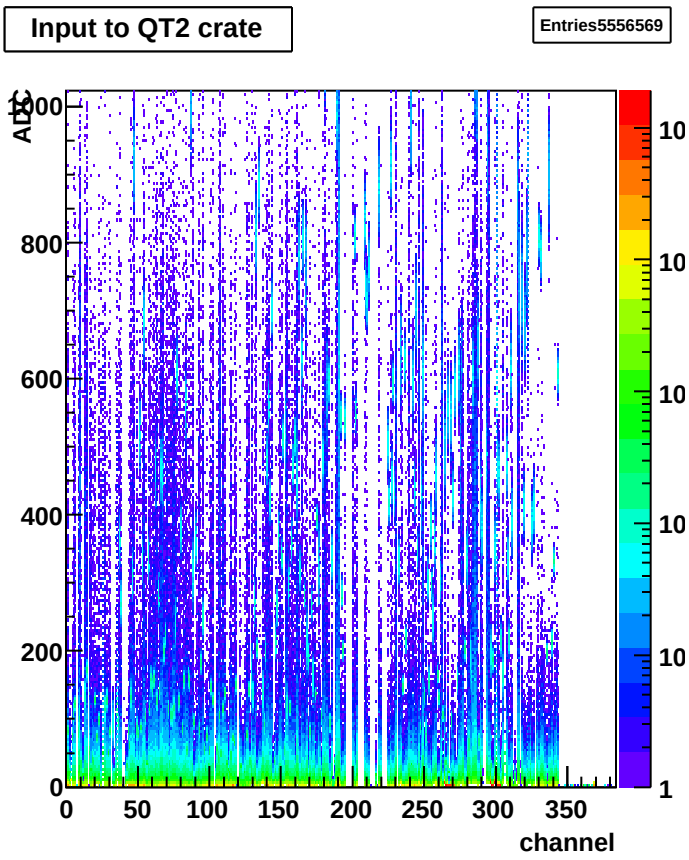

Entries 374814
BBC-L-East ADC Sum
BBC-L-West ADC Sum

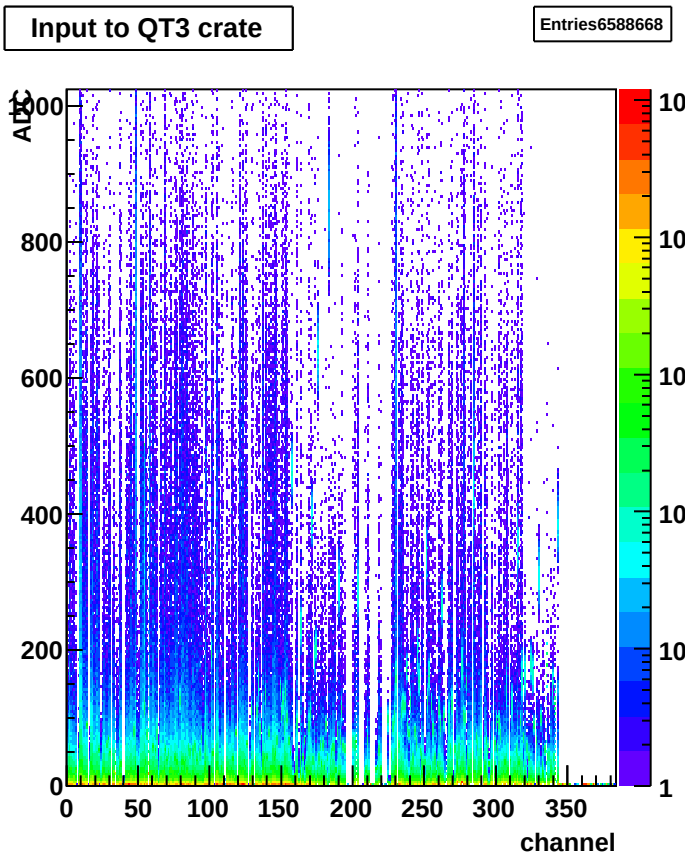

Entries 374814
BBC-S-East ADC Sum
BBC-S-West ADC Sum

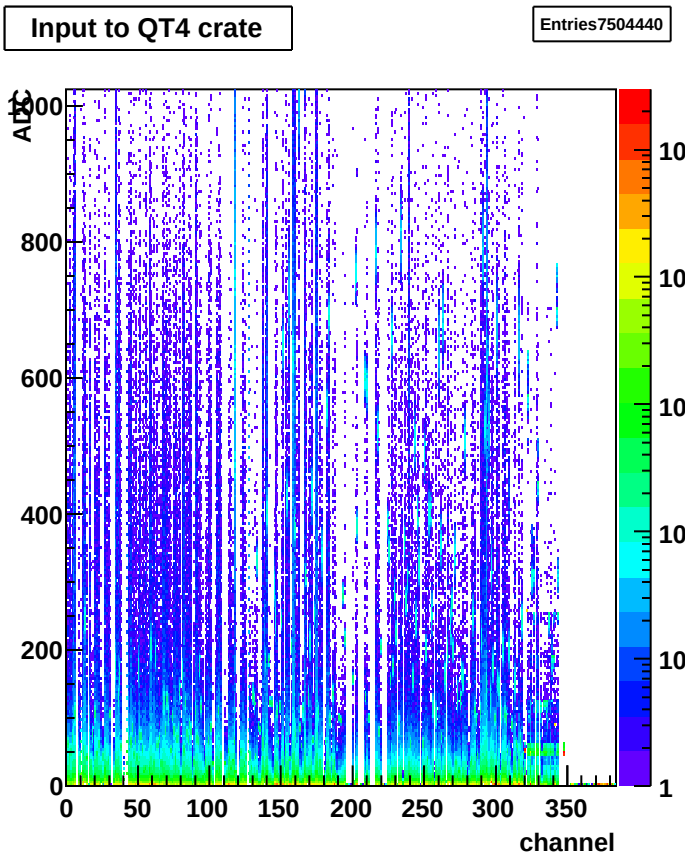

Entries 374814
ZDC East ADC Sum Att
ZDC West ADC Sum Att

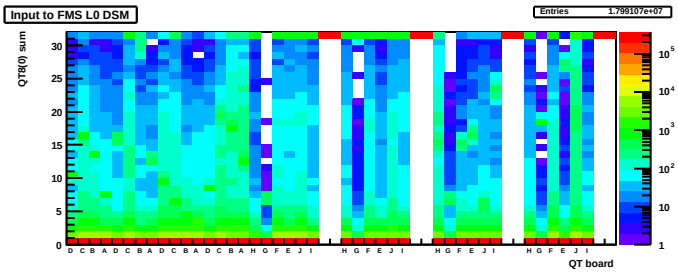

Entries 374814
BBC-L TAC Diff
BCC-S TAC Diff
Entries 374814
BBC-L TAC Diff
VPD TAC Diff
Entries 374814
BBC-L TAC Diff
ZDC TAC Diff
Entries 374814
BBC-S TAC Diff
VPD TAC Diff
Entries 374814
BBC-S TAC Diff
ZDC TAC Diff
Entries 374814
VPD TAC Diff
ZDC TAC Diff

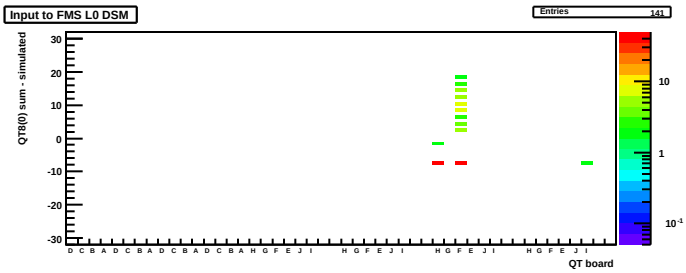

Input to QT1 crate
Entries 1.009613e+07
ADC
channel

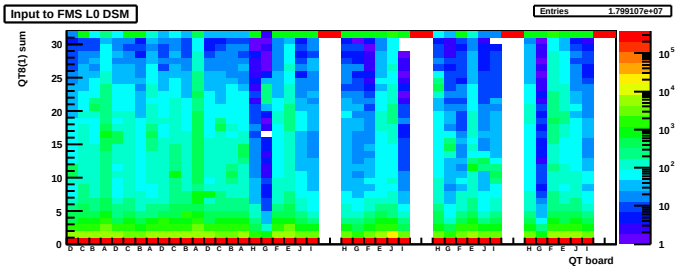

Input to QT2 crate
Entries5556569
ADC
channel

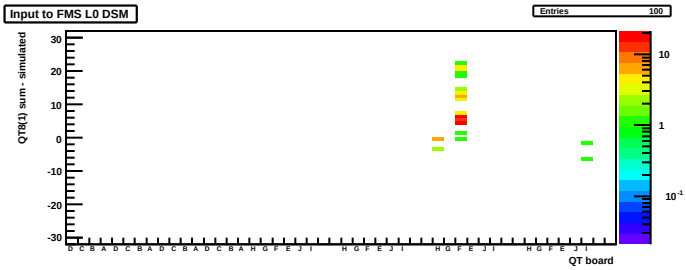

Input to QT3 crate
Entries6588668
ADC
channel

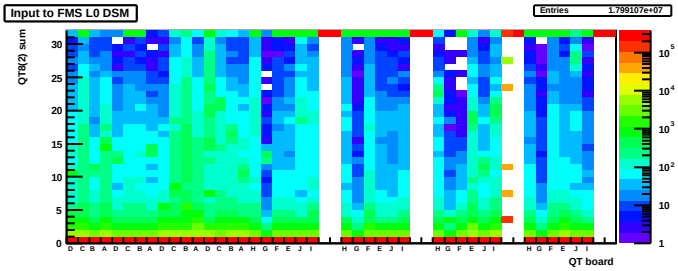

Input to QT4 crate
Entries7504440
ADC
channel

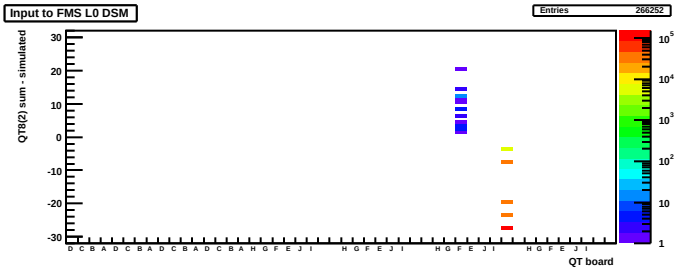

Input to FMS L0 DSM
Entries 1.799107e+07
QT8(0) sum
QT board

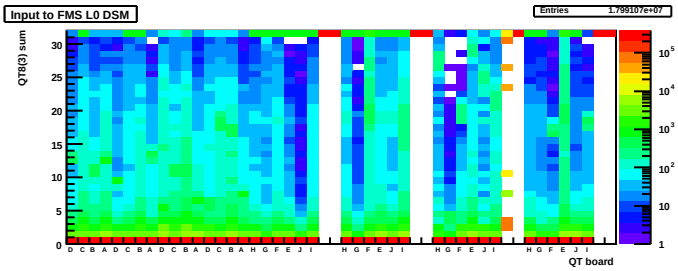

Input to FMS L0 DSM
Entries 141
QT8(0) sum - simulated
QT board

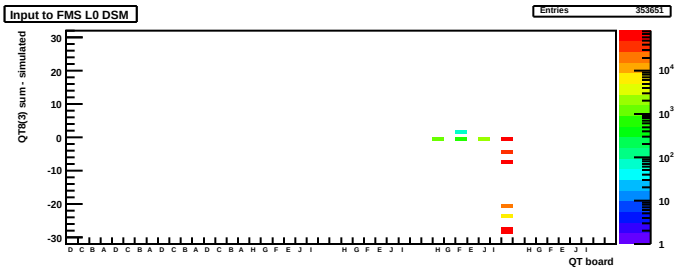

Input to FMS L0 DSM
Entries 1.799107e+07
QT8(1) sum
QT board

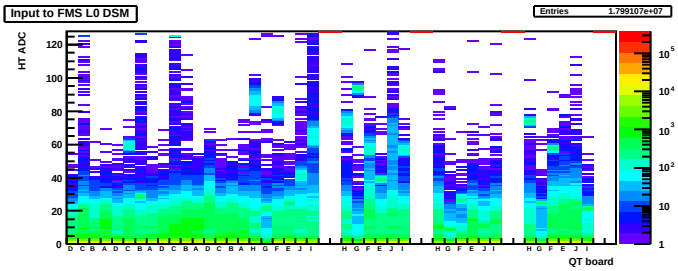

Input to FMS L0 DSM
Entries 100
QT8(1) sum - simulated
QT board

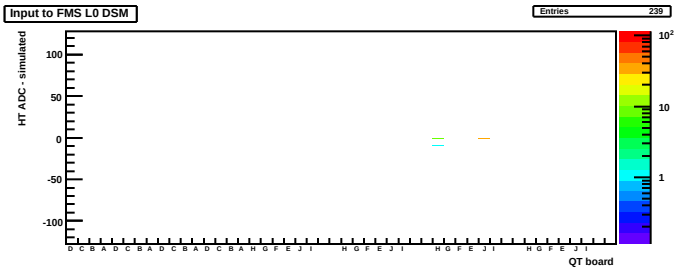

Input to FMS L0 DSM
Entries 1.799107e+07
QT8(2) sum
QT board

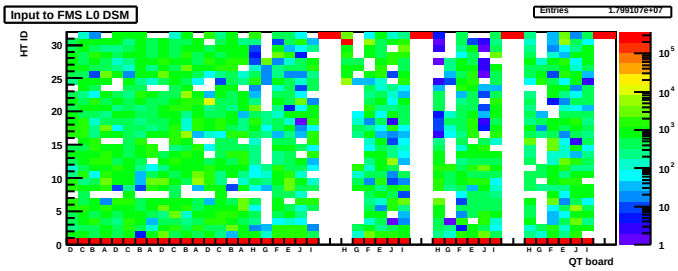

Input to FMS L0 DSM
Entries 266252
QT8(2) sum - simulated
QT board

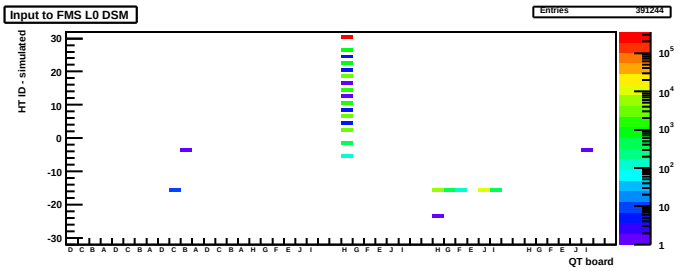

Input to FMS L0 DSM
Entries 1.799107e+07
QT8(3) sum
QT board

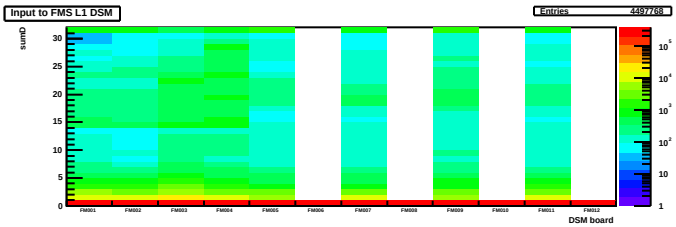

Input to FMS L0 DSM
Entries 353651
QT8(3) sum - simulated
QT board

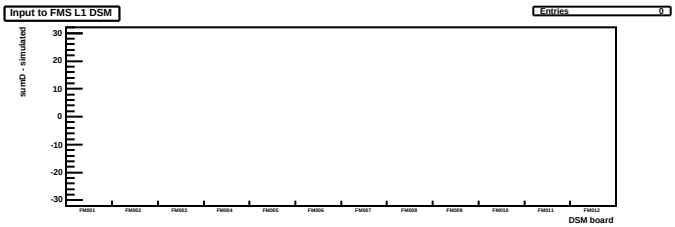

Input to FMS L0 DSM
Entries 1.799107e+07
HT ADC
QT board

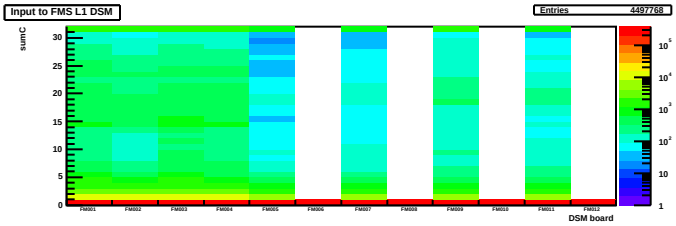

Input to FMS L0 DSM
Entries 239
HT ADC - simulated
QT board

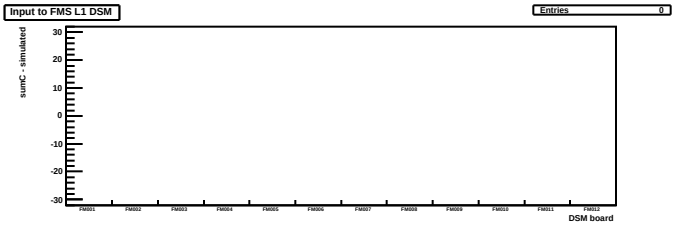

Input to FMS L0 DSM
Entries 1.799107e+07
HT ID
QT board

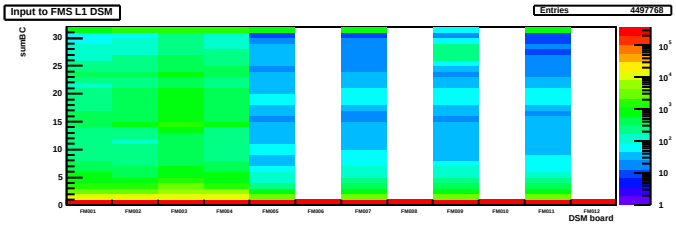

Input to FMS L0 DSM
Entries 391244
HT ID - simulated
QT board

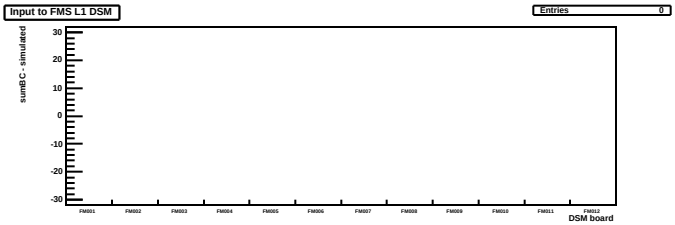

Input to FMS L1 DSM
Entries 4497768
sumD
DSM board

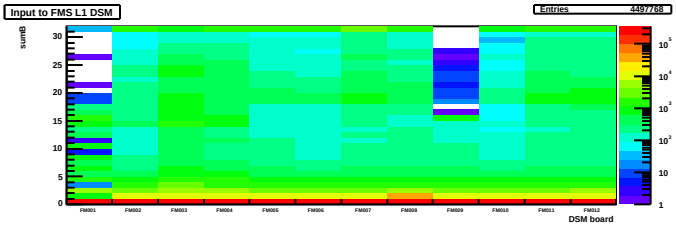

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

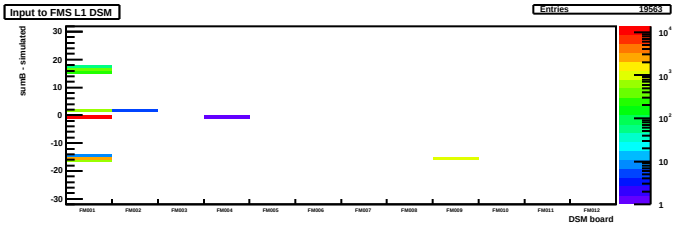

Input to FMS L1 DSM
Entries 4497768
sumC
DSM board

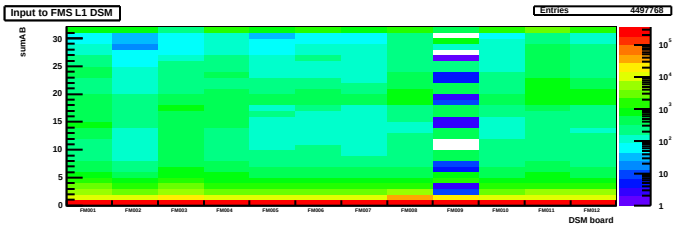

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

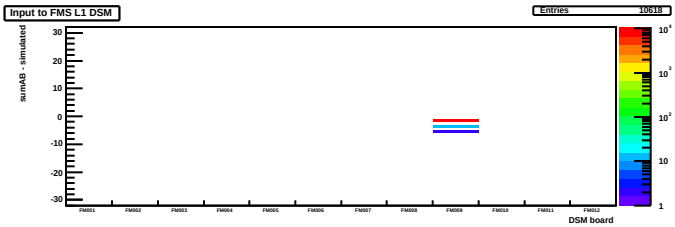

Input to FMS L1 DSM
Entries 4497768
sumBC
DSM board

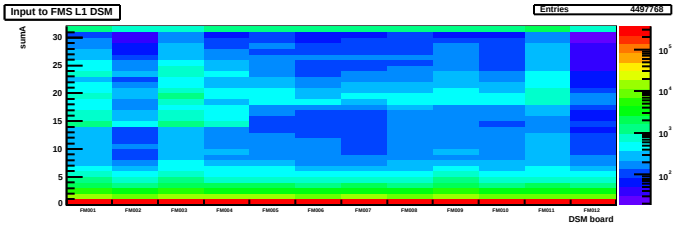

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

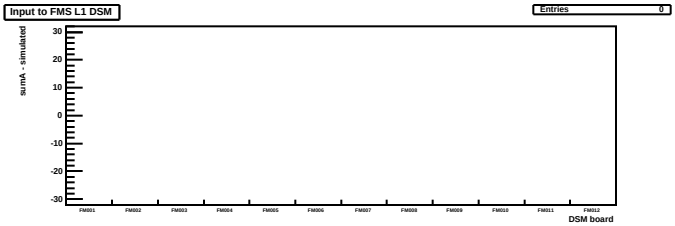

Input to FMS L1 DSM
Entries 4497768
sumB
DSM board

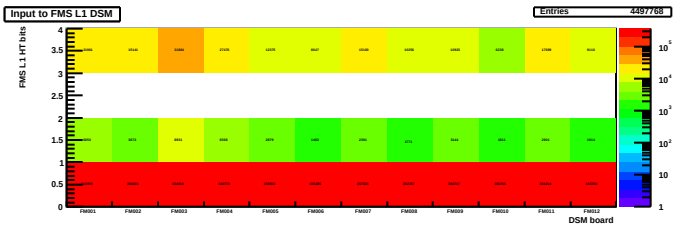

Input to FMS L1 DSM
Entries 19563
sumB - simulated
DSM board

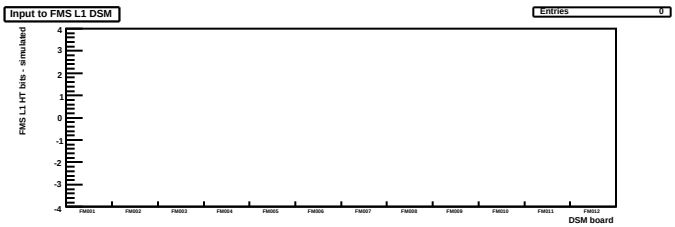

Input to FMS L1 DSM
Entries 4497768
sumAB
DSM board

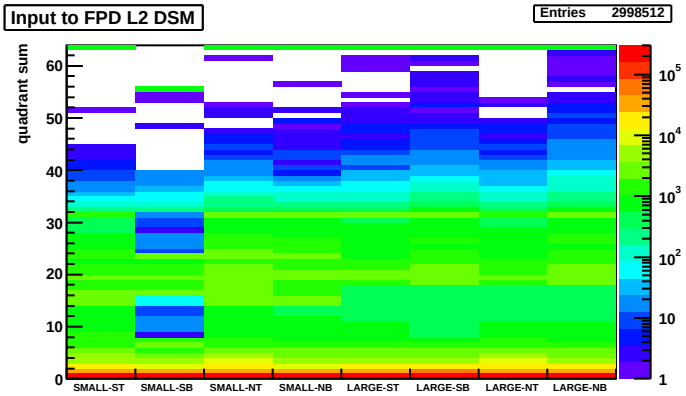

Input to FMS L1 DSM
Entries 10618
sumAB - simulated
DSM board

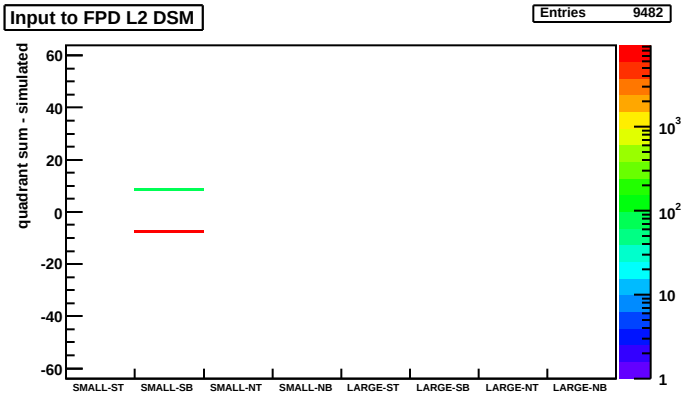

Input to FMS L1 DSM
Entries 4497768
sumA
DSM board

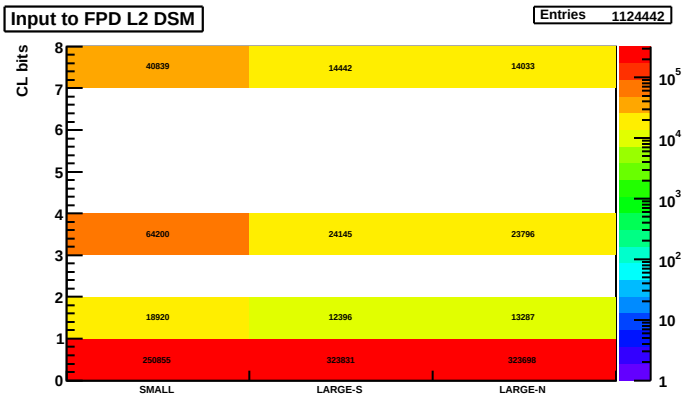

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

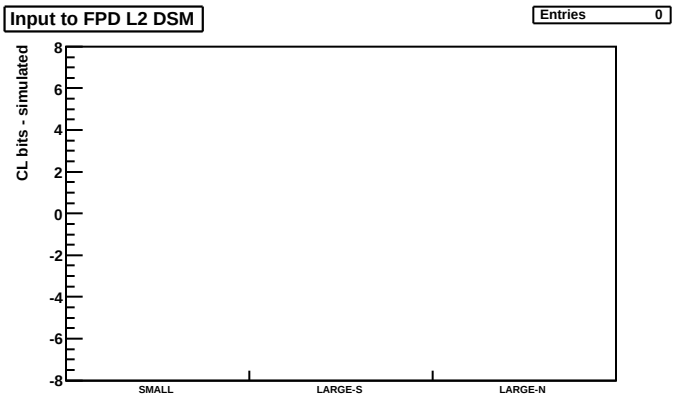

Input to FMS L1 DSM
Entries 4497768
FMS L1 HT bits
DSM board

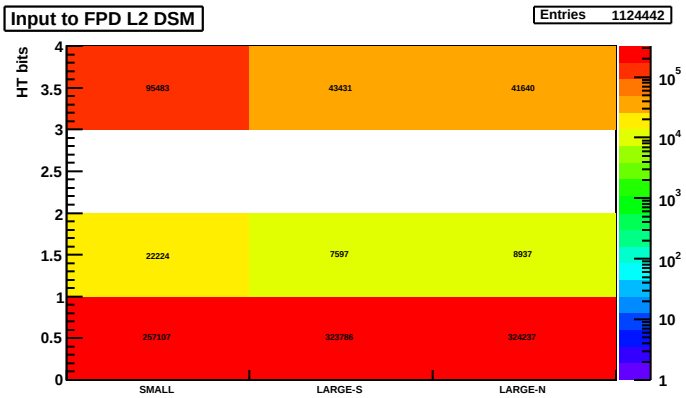

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

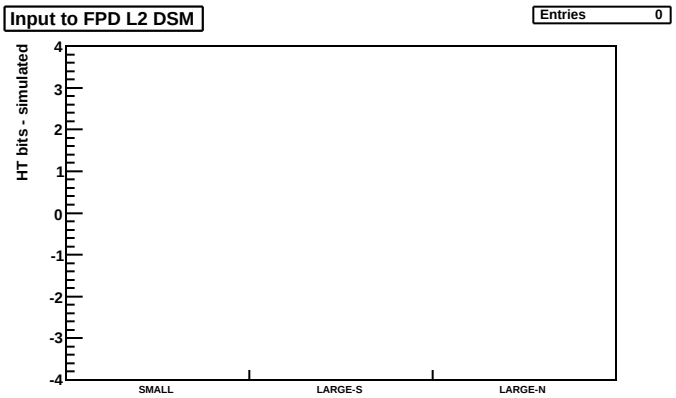

Input to FPD L2 DSM
Entries 2998512
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

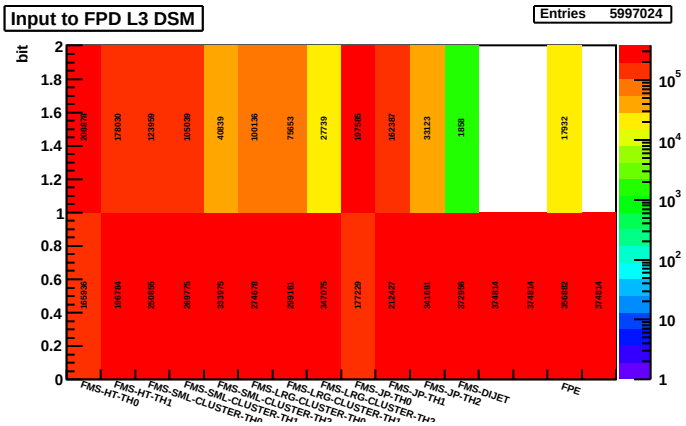

Input to FPD L2 DSM
Entries 9482
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

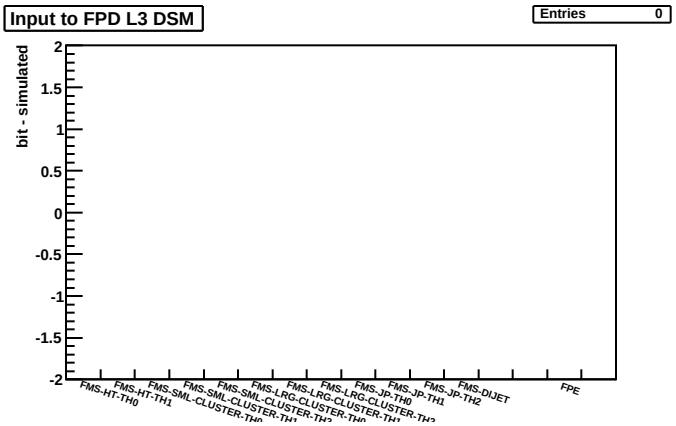

Input to FPD L2 DSM
Entries 1124442
CL bits
40839 14442 14033
64200 24145 23796
18920 12396 13287
250855 323831 323698
SMALL LARGE-S LARGE-N

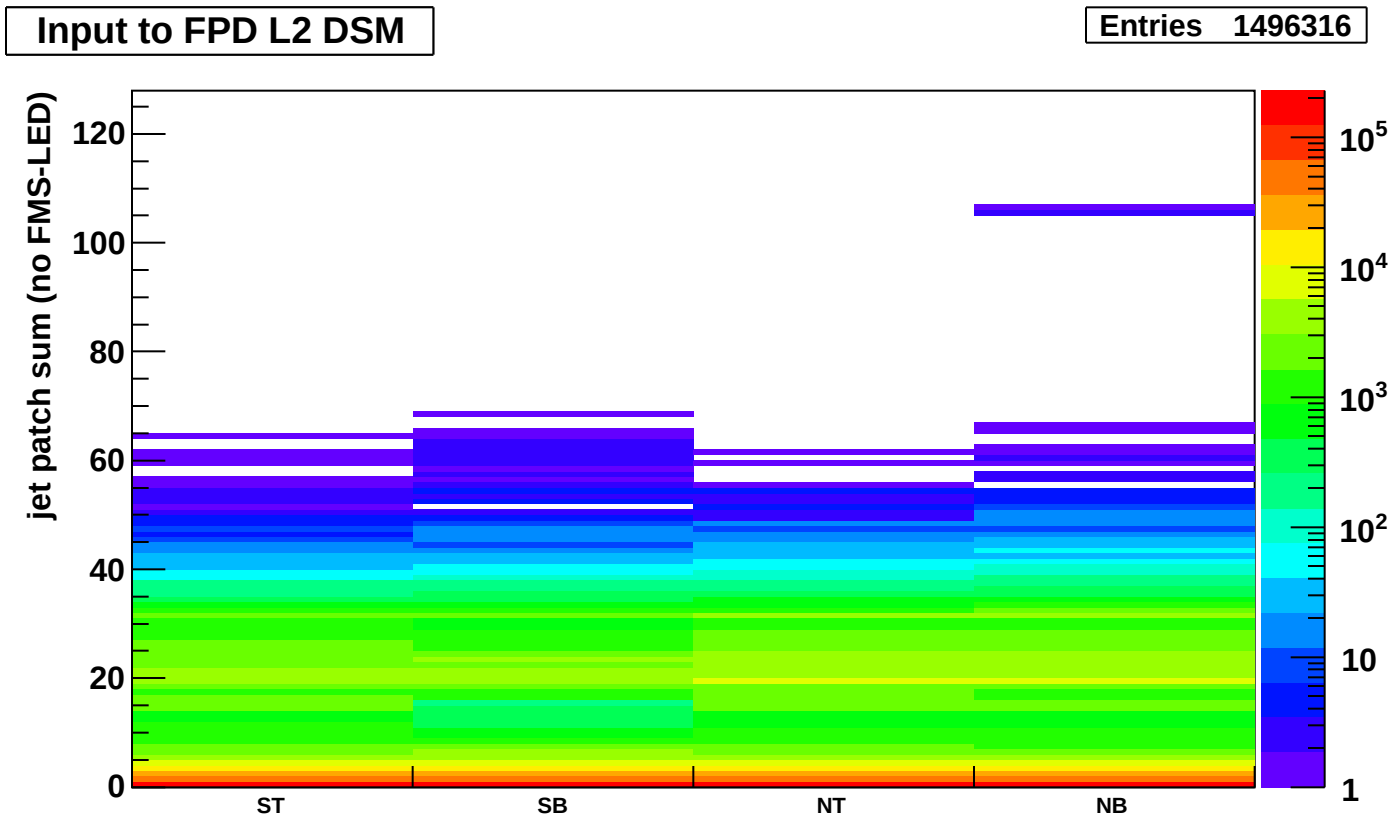

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL LARGE-S LARGE-N

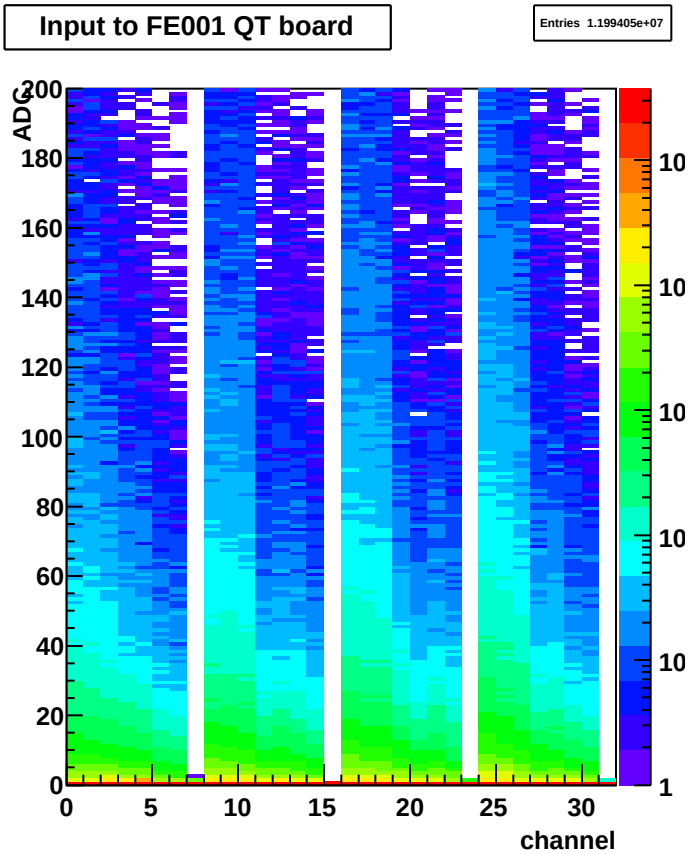

Input to FPD L2 DSM
Entries 1124442
HT bits
95483 43431 41640
22224 7597 8937
257107 323786 324237
SMALL LARGE-S LARGE-N

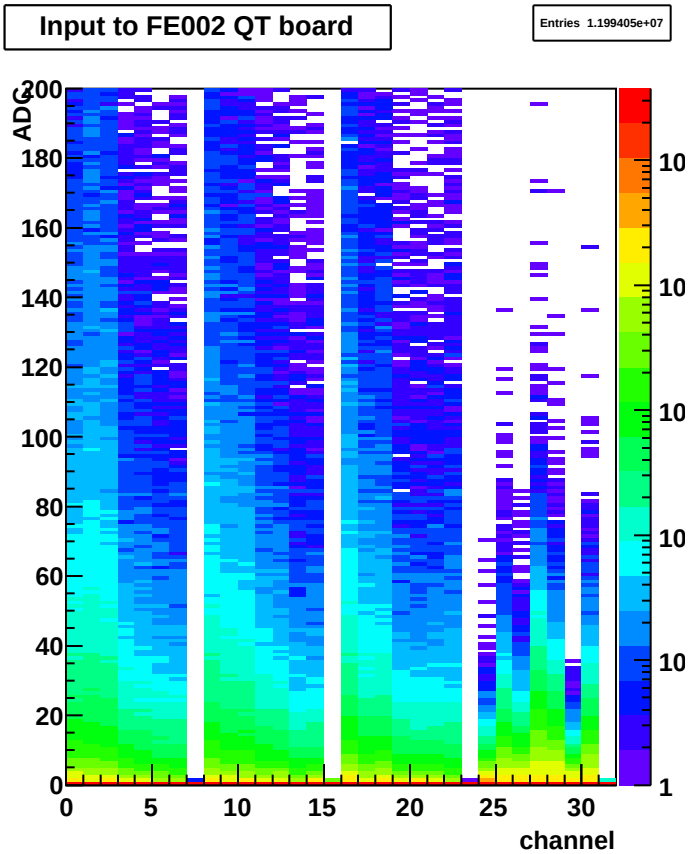

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL LARGE-S LARGE-N

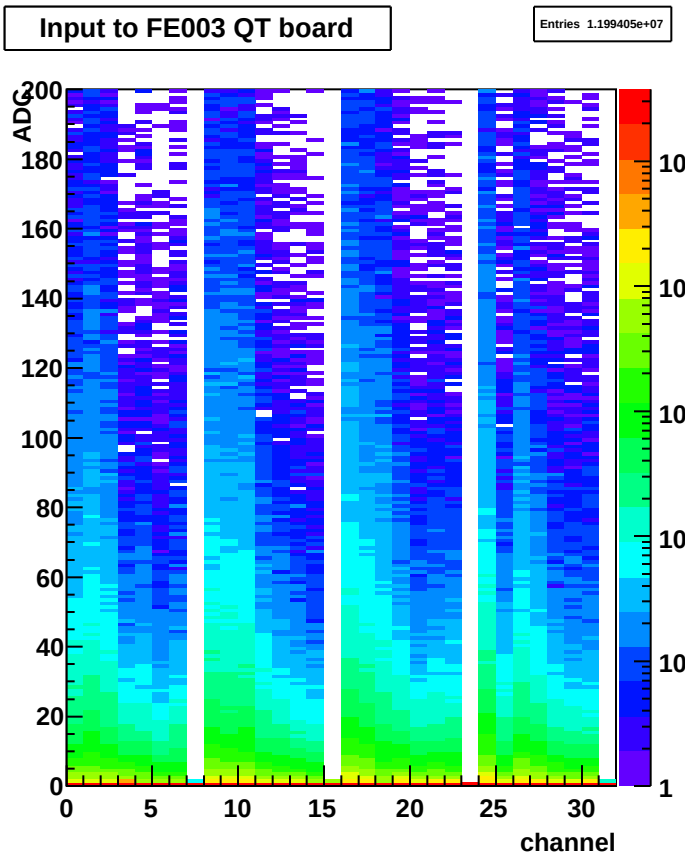

Input to FPD L3 DSM
Entries 5997024
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

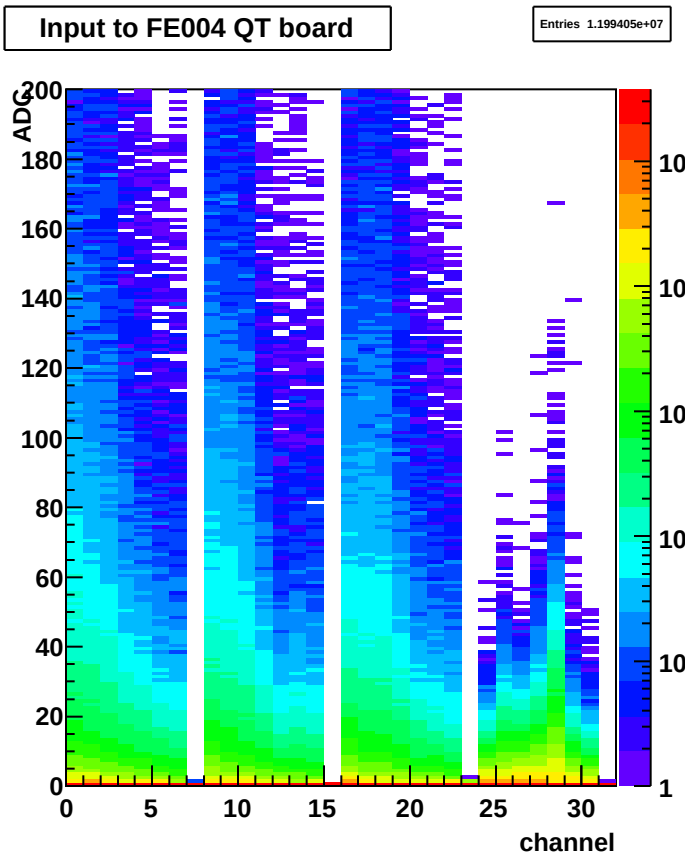

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

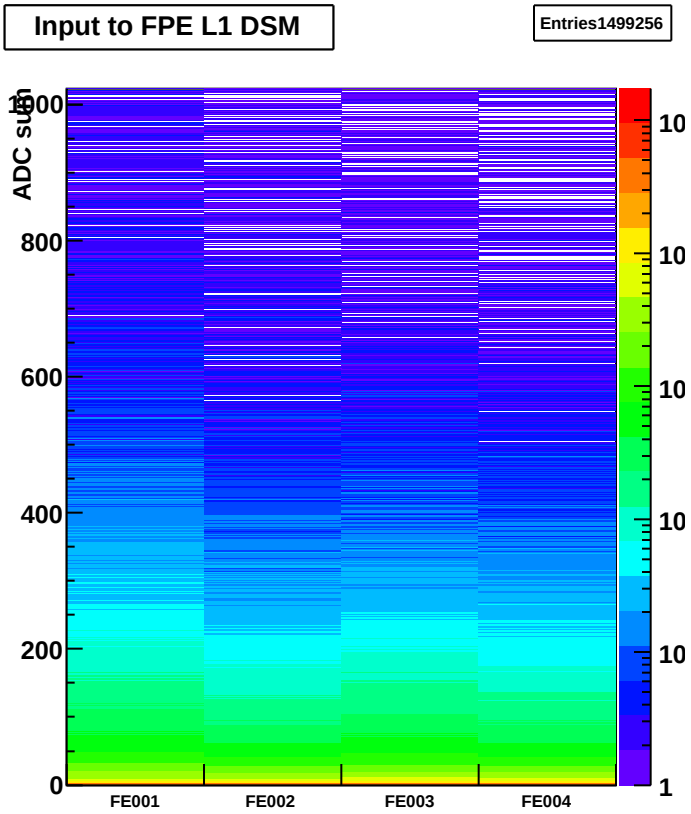

Input to FPD L2 DSM
Entries 1496316
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

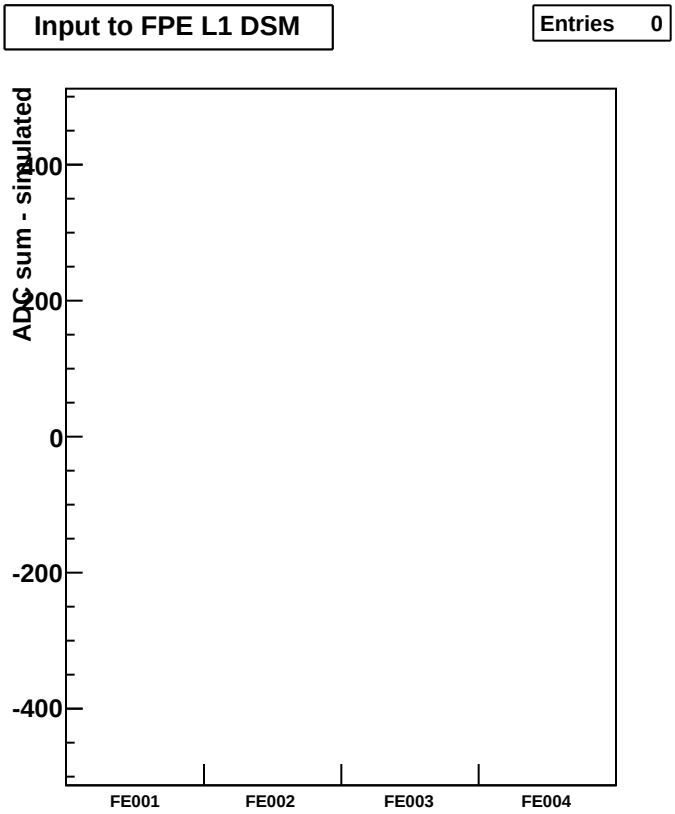

Input to FE001 QT board
Entries 1.199405e+07
ADC
channel

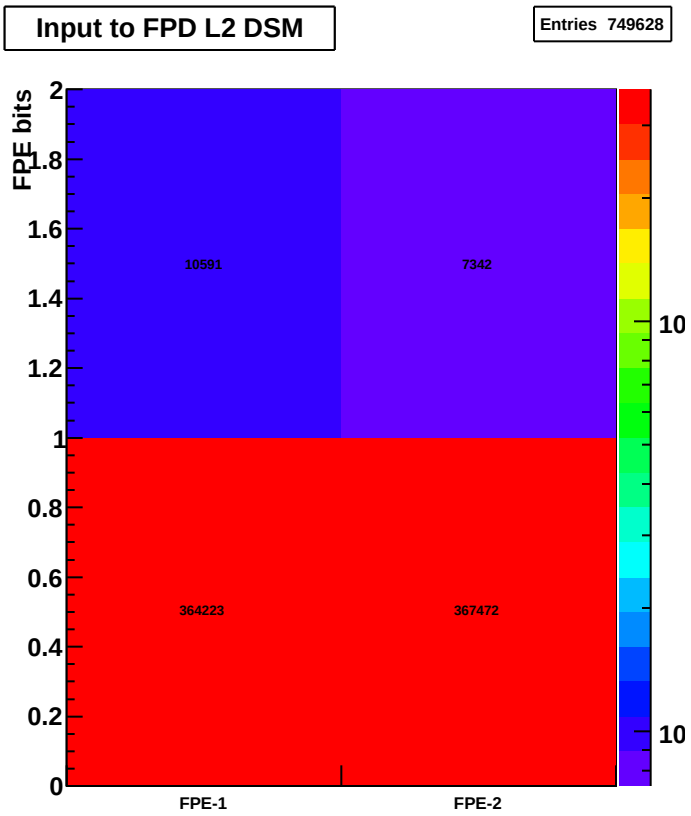

Input to FE002 QT board
Entries 1.199405e+07
ADC
channel

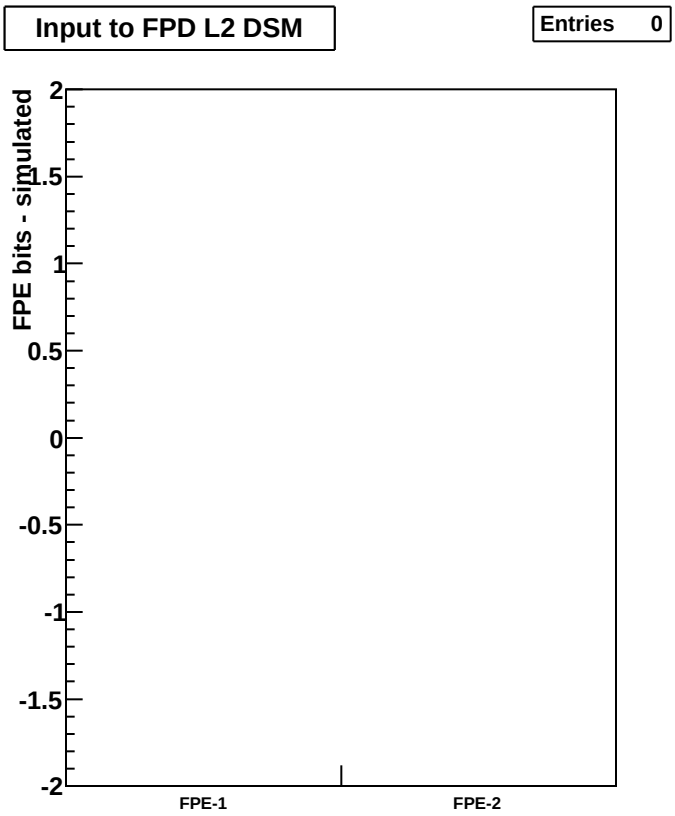

Input to FE003 QT board
Entries 1.199405e+07
ADC
channel


Input to FE004 QT board
Entries 1.199405e+07
ADC
channel


Input to FPE L1 DSM
Entries1499256
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 749628
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
10591
7342
364223
367472
FPE-1
FPE-2
10
10


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
FPE-1
FPE-2