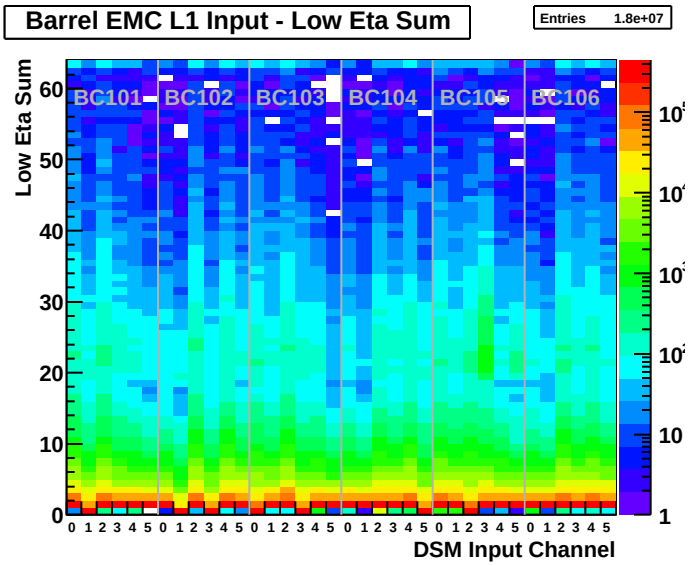
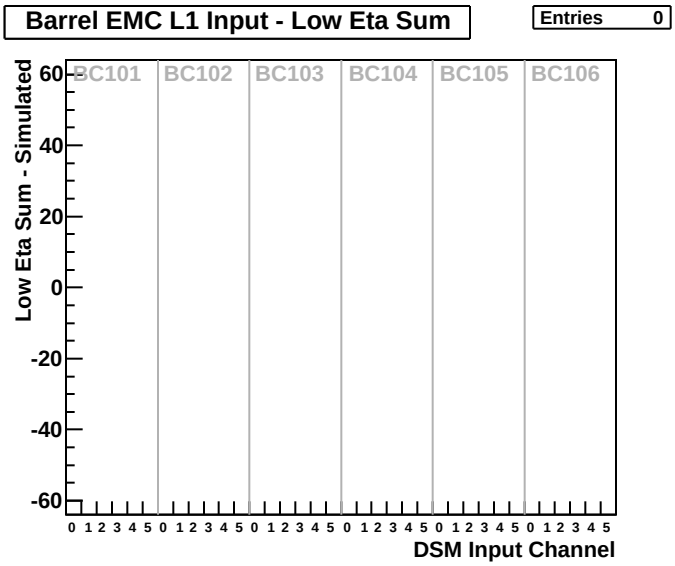
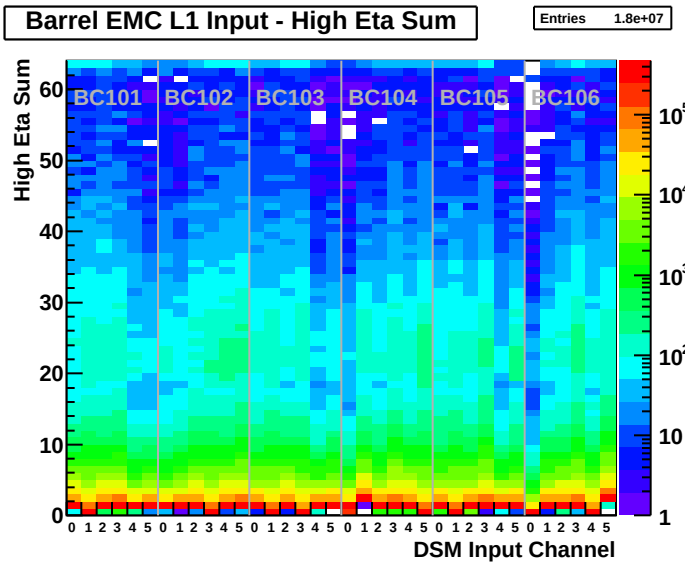
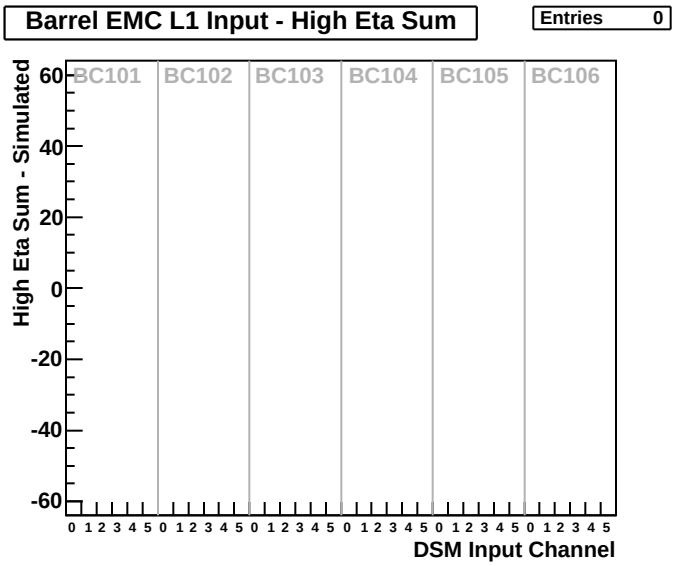
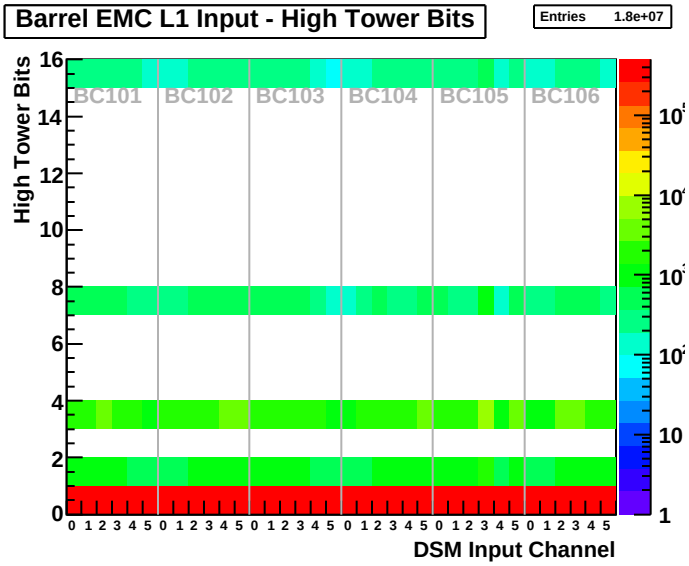
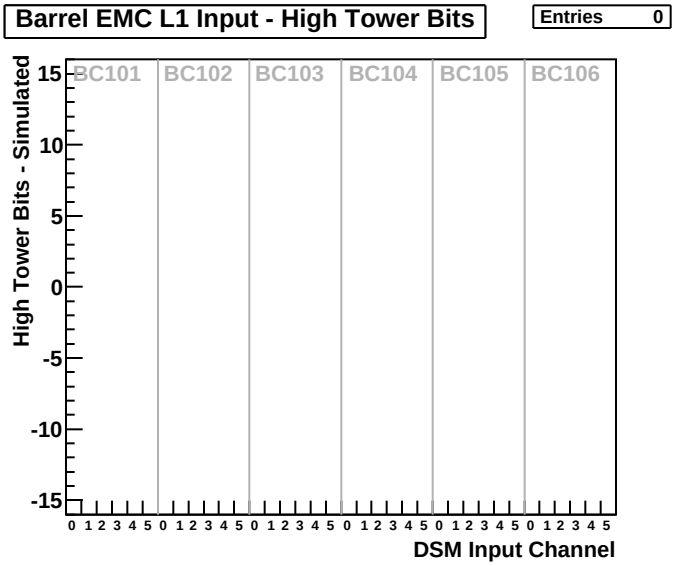

Barrel EMC L1 Input - Low Eta Sum
Entries 1.8e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

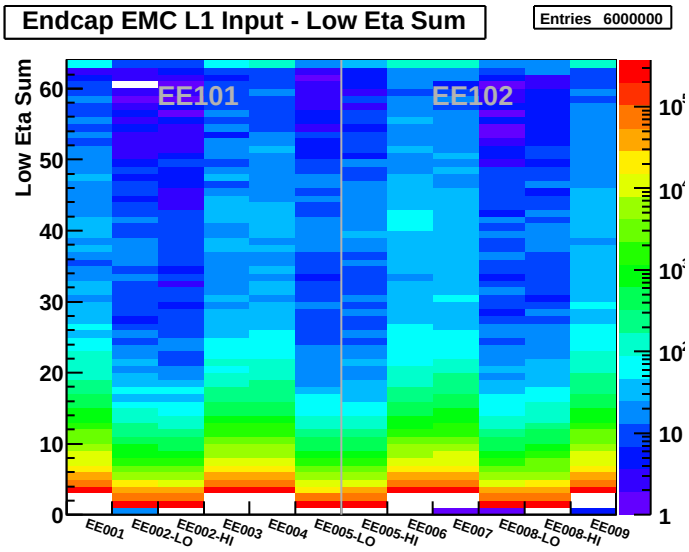

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

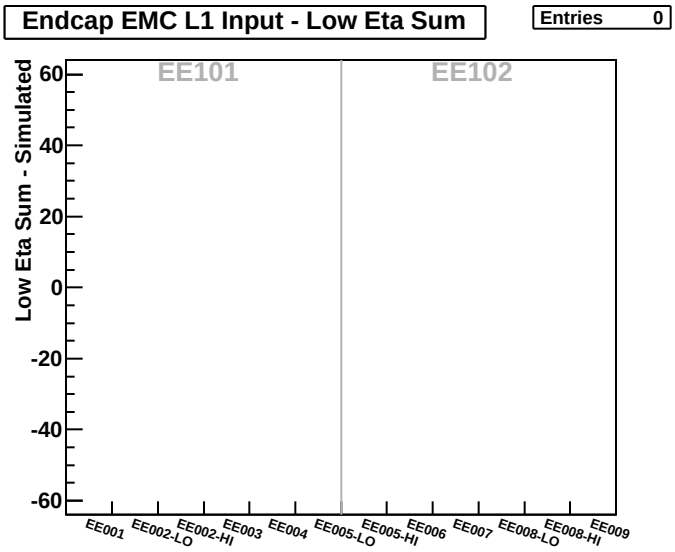

Barrel EMC L1 Input - High Eta Sum
Entries 1.8e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

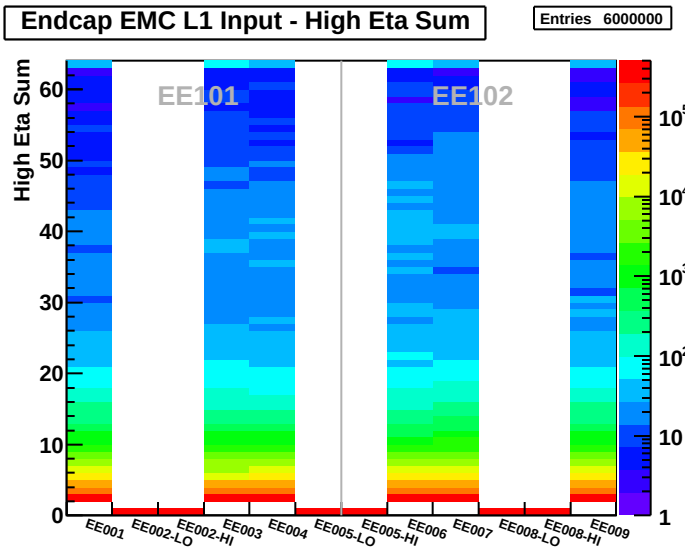

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

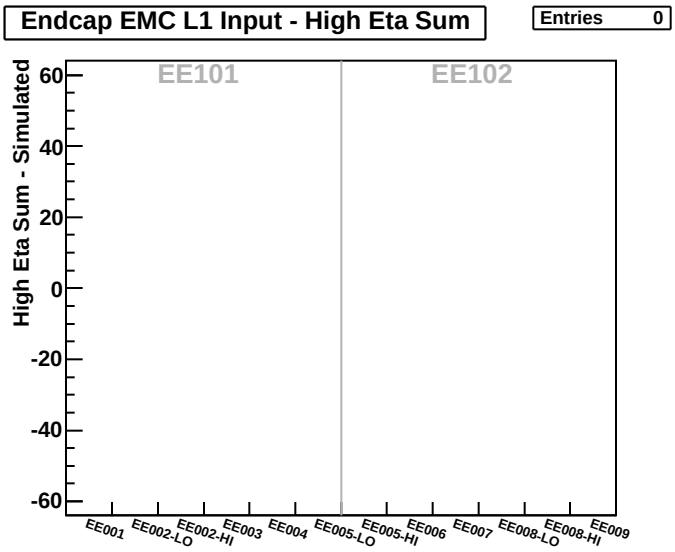

Barrel EMC L1 Input - High Tower Bits
Entries 1.8e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

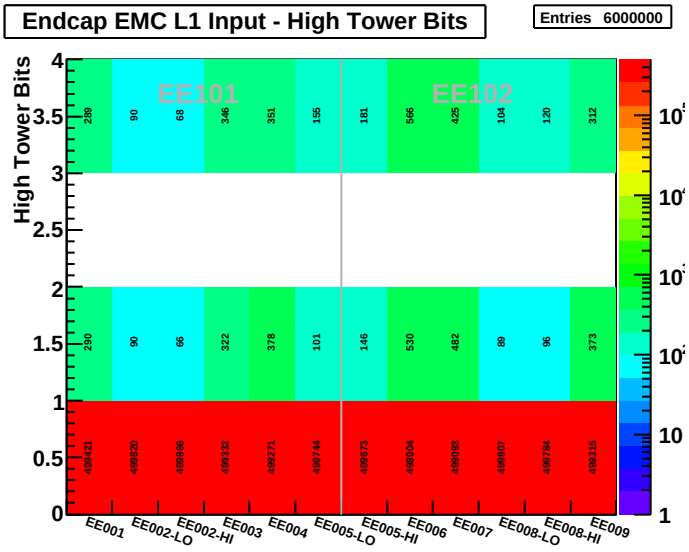

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

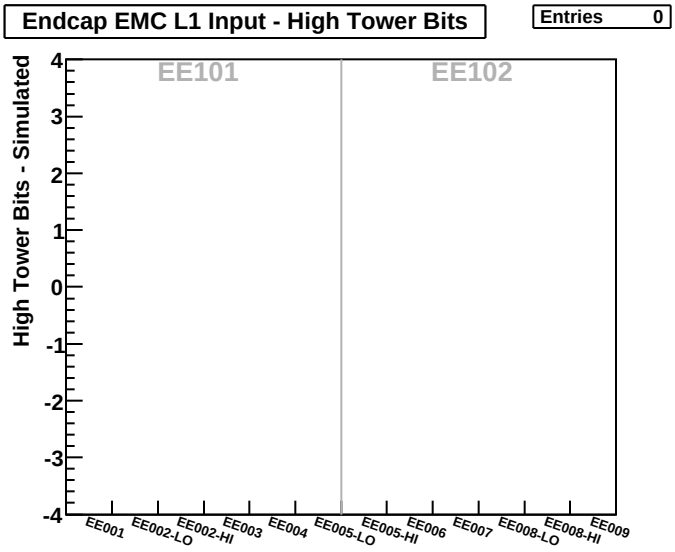

Endcap EMC L1 Input - Low Eta Sum
Entries 6000000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

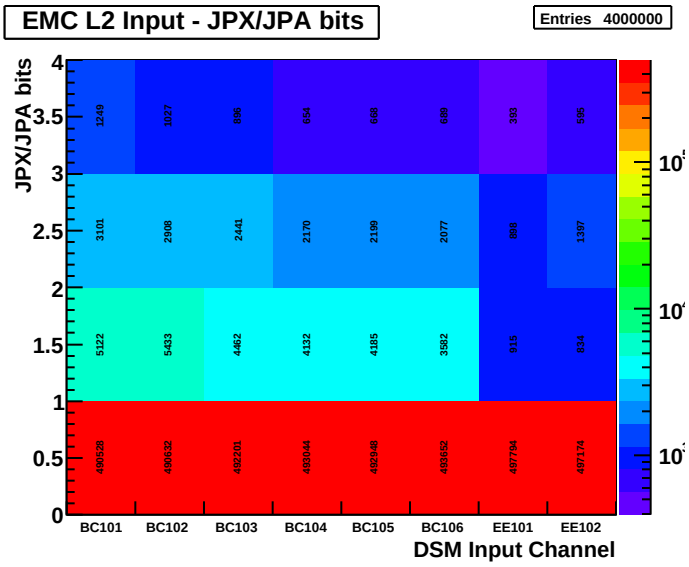

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

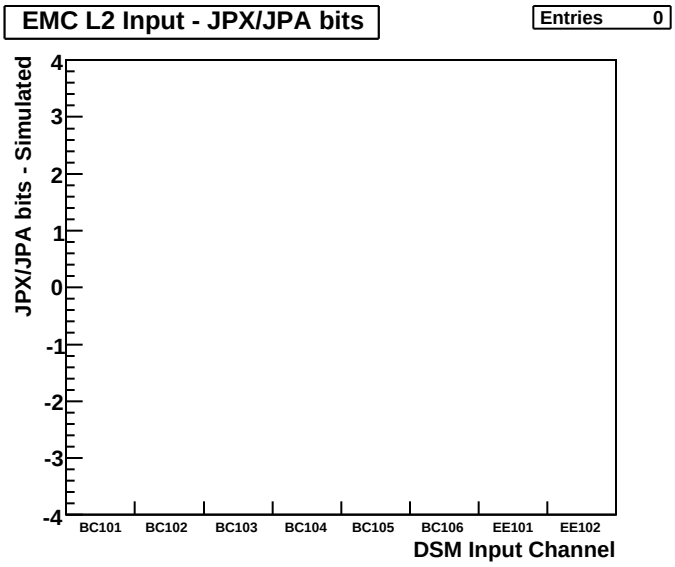

Endcap EMC L1 Input - High Eta Sum
Entries 6000000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

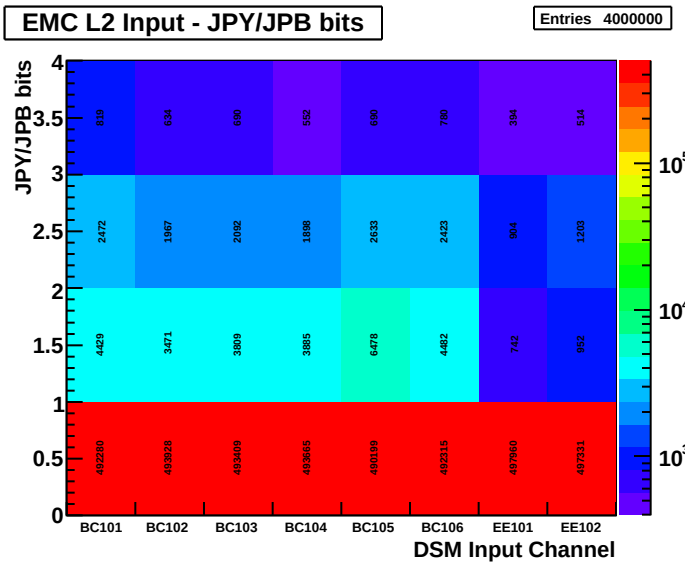

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

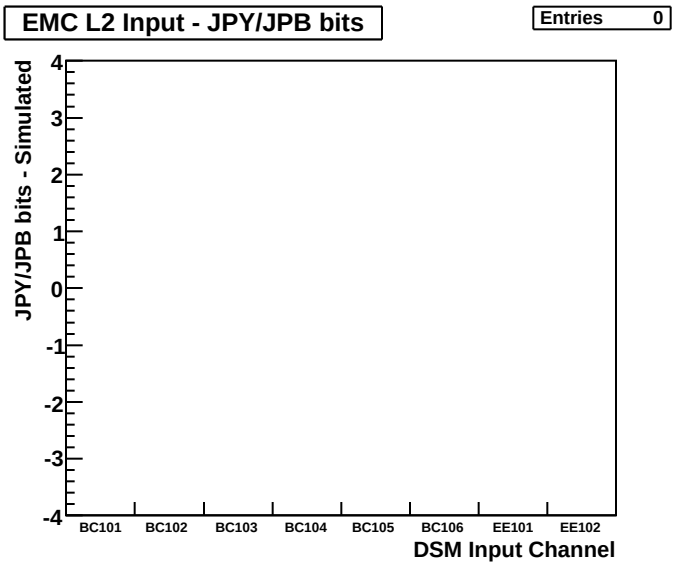

Endcap EMC L1 Input - High Tower Bits
Entries 6000000
High Tower Bits
EE101
EE102
289 90 68 346 351 155 181 566 425 104 120 312
290 90 66 322 378 101 146 530 482 89 96 373
499421 499820 499866 499332 499271 499744 499673 498904 499093 499807 499784 499315
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

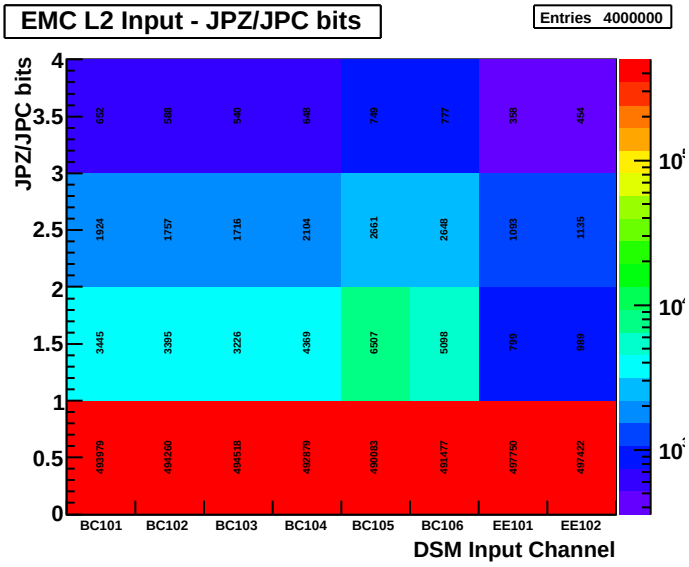

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

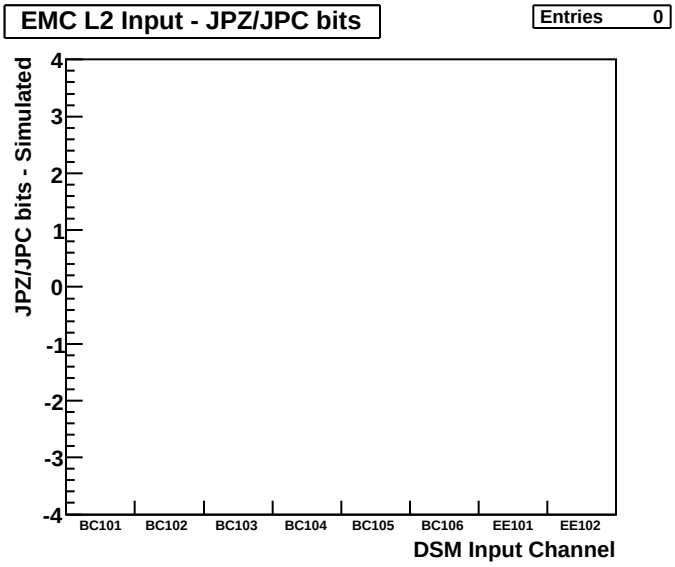

EMC L2 Input - JPX/JPA bits
Entries 4000000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1249 1027 896 654 668 689 393 595
3101 2908 2441 2170 2199 2077 888 1397
5122 5433 4462 4132 4185 3582 915 834
490528 490632 492201 493044 492948 493652 497794 497174

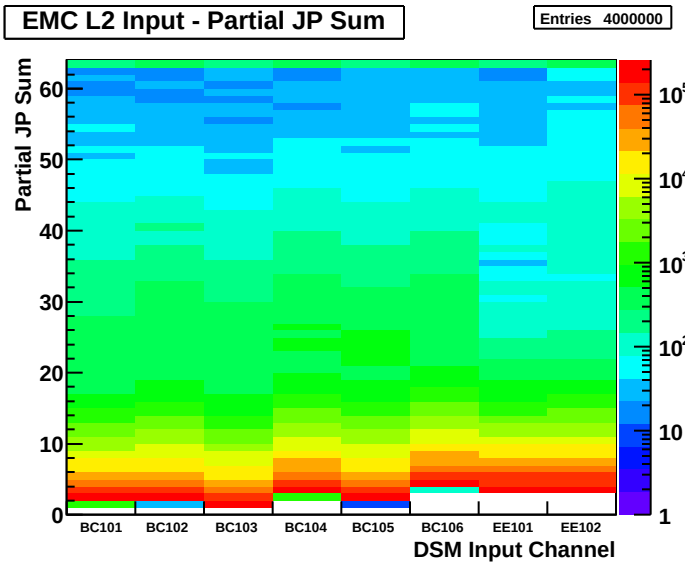

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

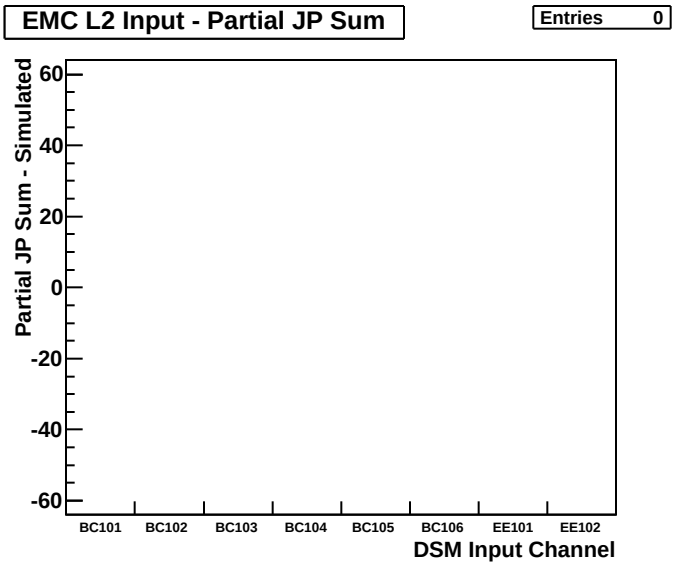

EMC L2 Input - JPY/JPB bits
Entries 4000000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
619 634 690 552 690 780 394 514
2472 1967 2092 1898 2633 2423 904 1203
4429 3471 3809 3885 6478 4482 742 952
492280 493328 493409 493665 490199 492315 497860 497331

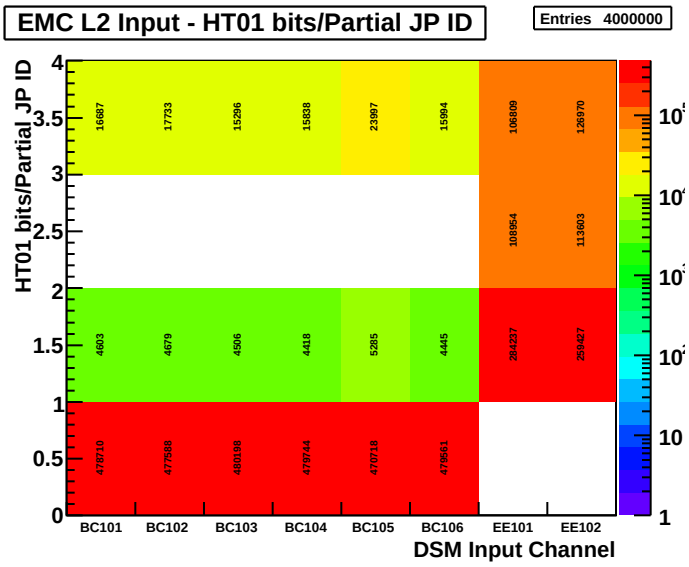

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

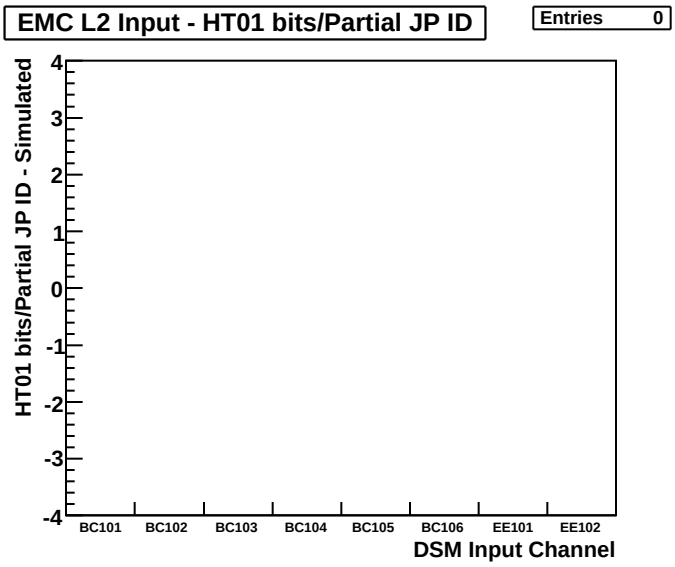

EMC L2 Input - JPZ/JPC bits
Entries 4000000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
652 588 540 648 749 777 358 454
1924 1757 1716 2104 2661 2648 1093 1135
3445 3395 3226 4369 6507 5098 799 939
493979 494260 494518 492879 490083 491477 497750 497422

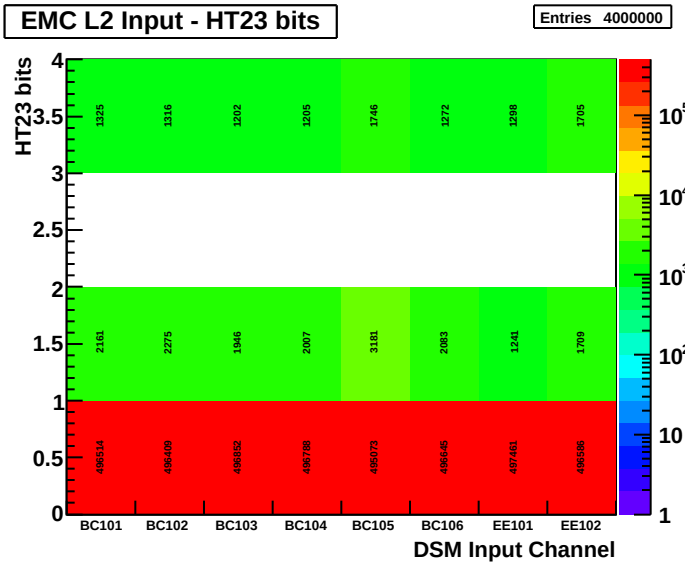

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

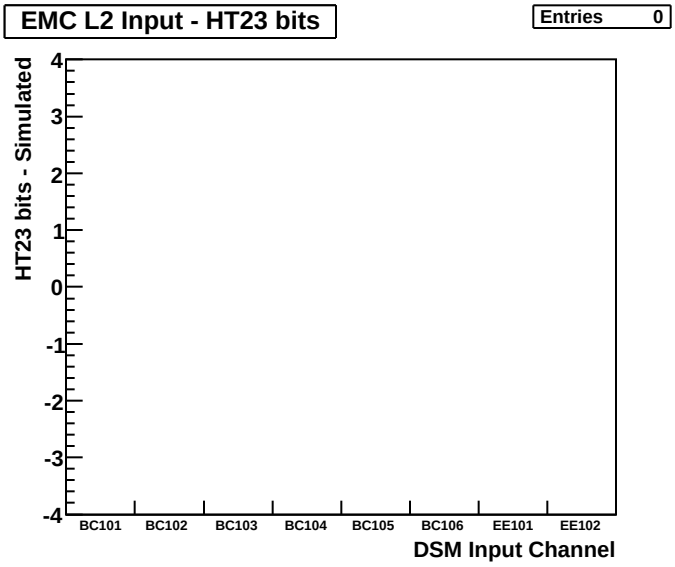

EMC L2 Input - Partial JP Sum
Entries 4000000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

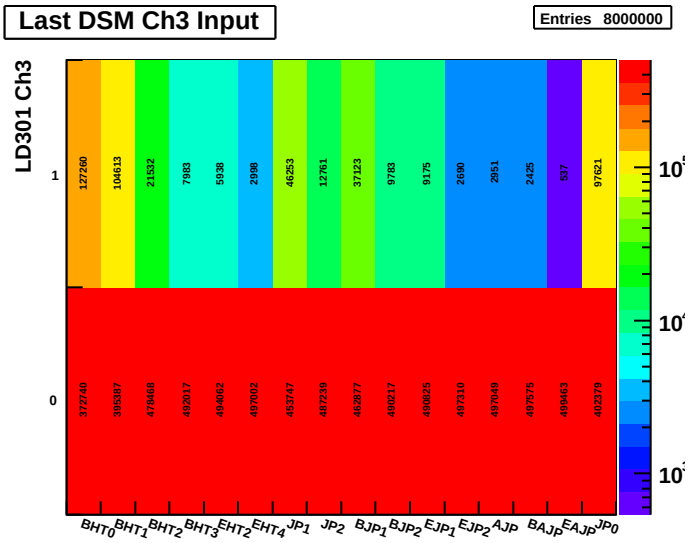

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

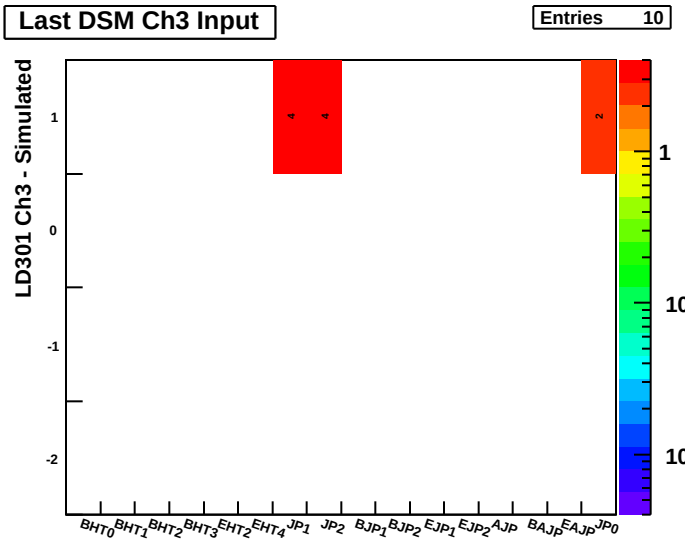

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4000000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

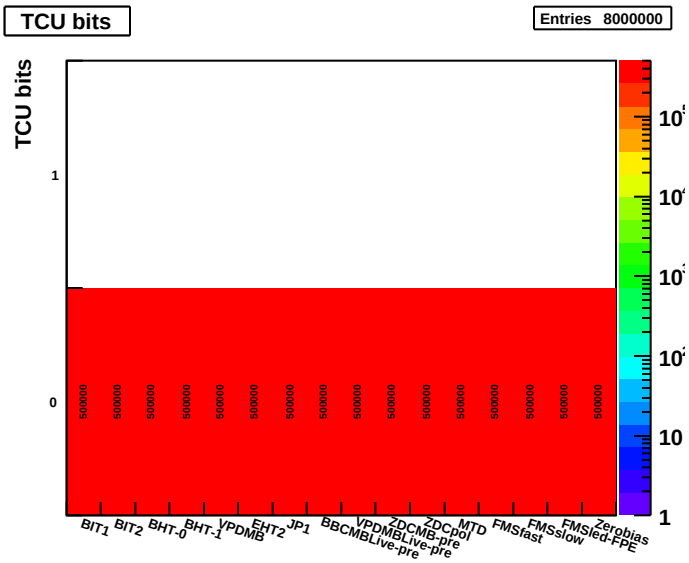

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

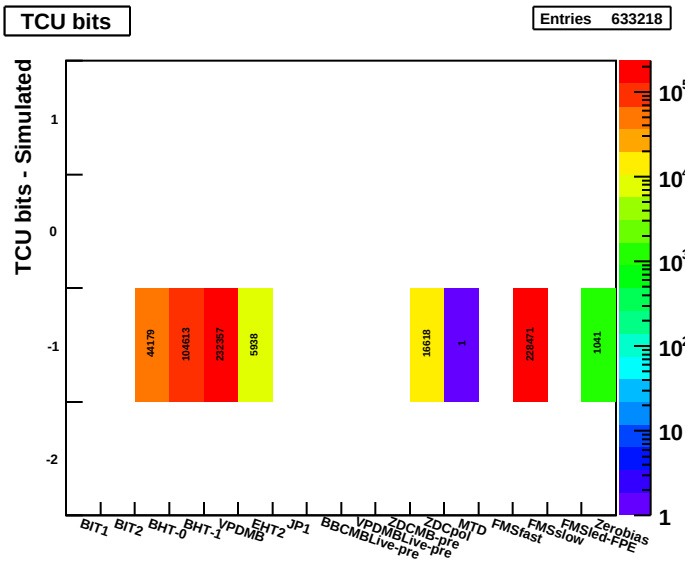

EMC L2 Input - HT23 bits
Entries 4000000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

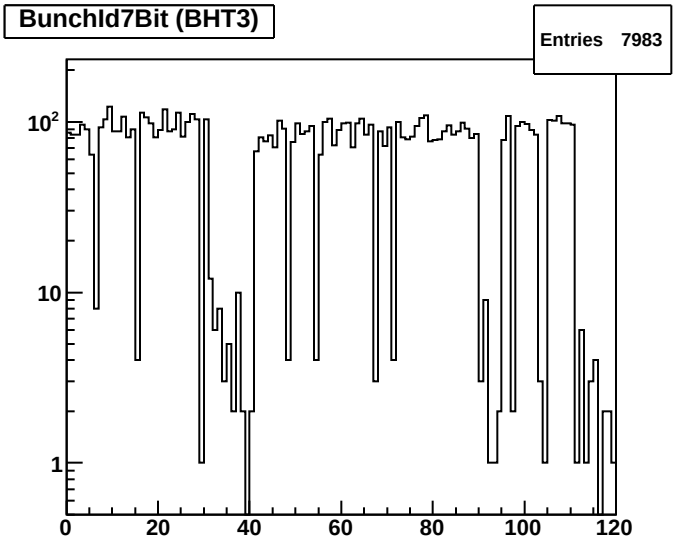

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

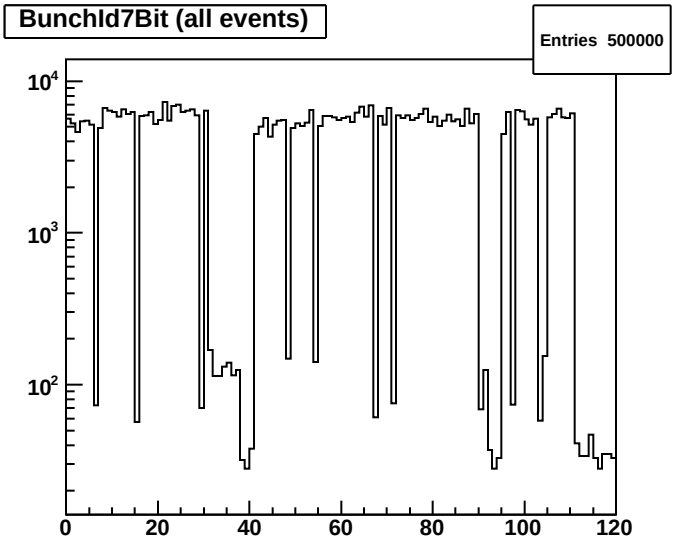

Last DSM Ch3 Input
Entries 8000000
LD301 Ch3
127260 104613 21532 7983 5938 2998 46253 12761 37123 9783 9175 2690 2951 2425 537 97621
372740 395387 478468 492017 494062 497002 453747 487239 462877 490217 490825 497310 497049 497575 499463 402379
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

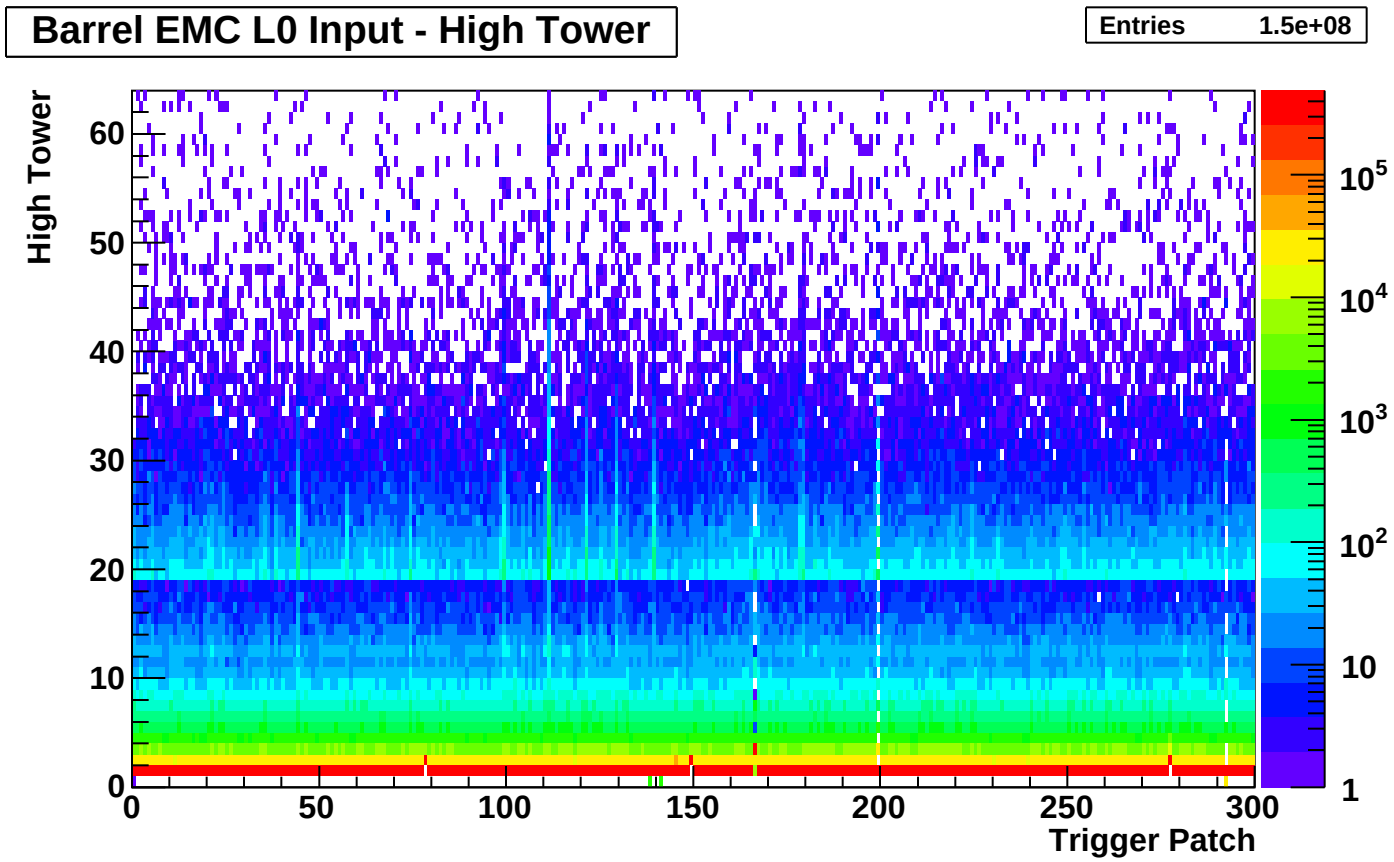

Last DSM Ch3 Input
Entries 10
LD301 Ch3 - Simulated
4 4 2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

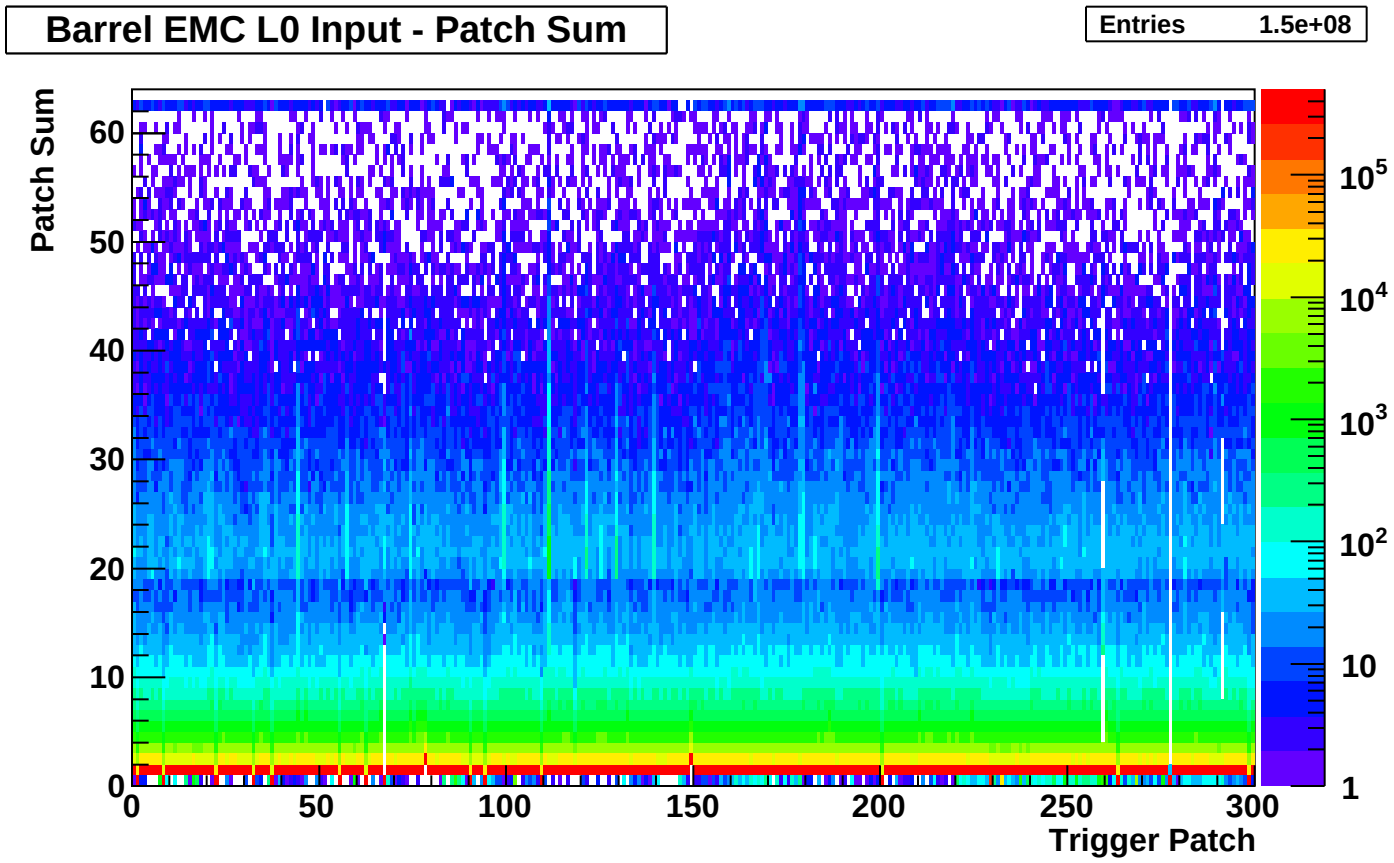

TCU bits
Entries 8000000
TCU bits
500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000 500000
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

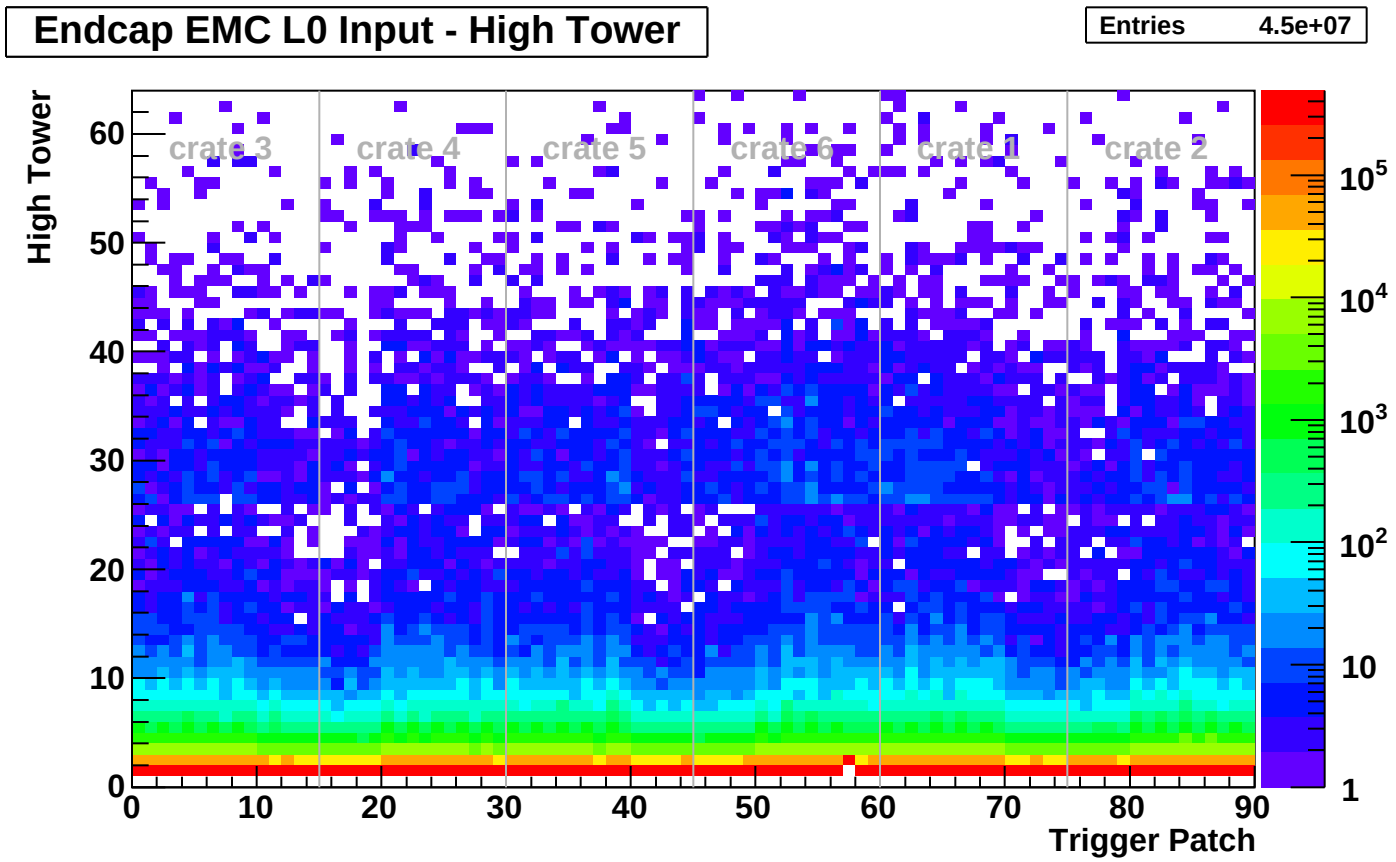

TCU bits
Entries 633218
TCU bits - Simulated
44179 104613 232357 5938 16618 1 228471 1041
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

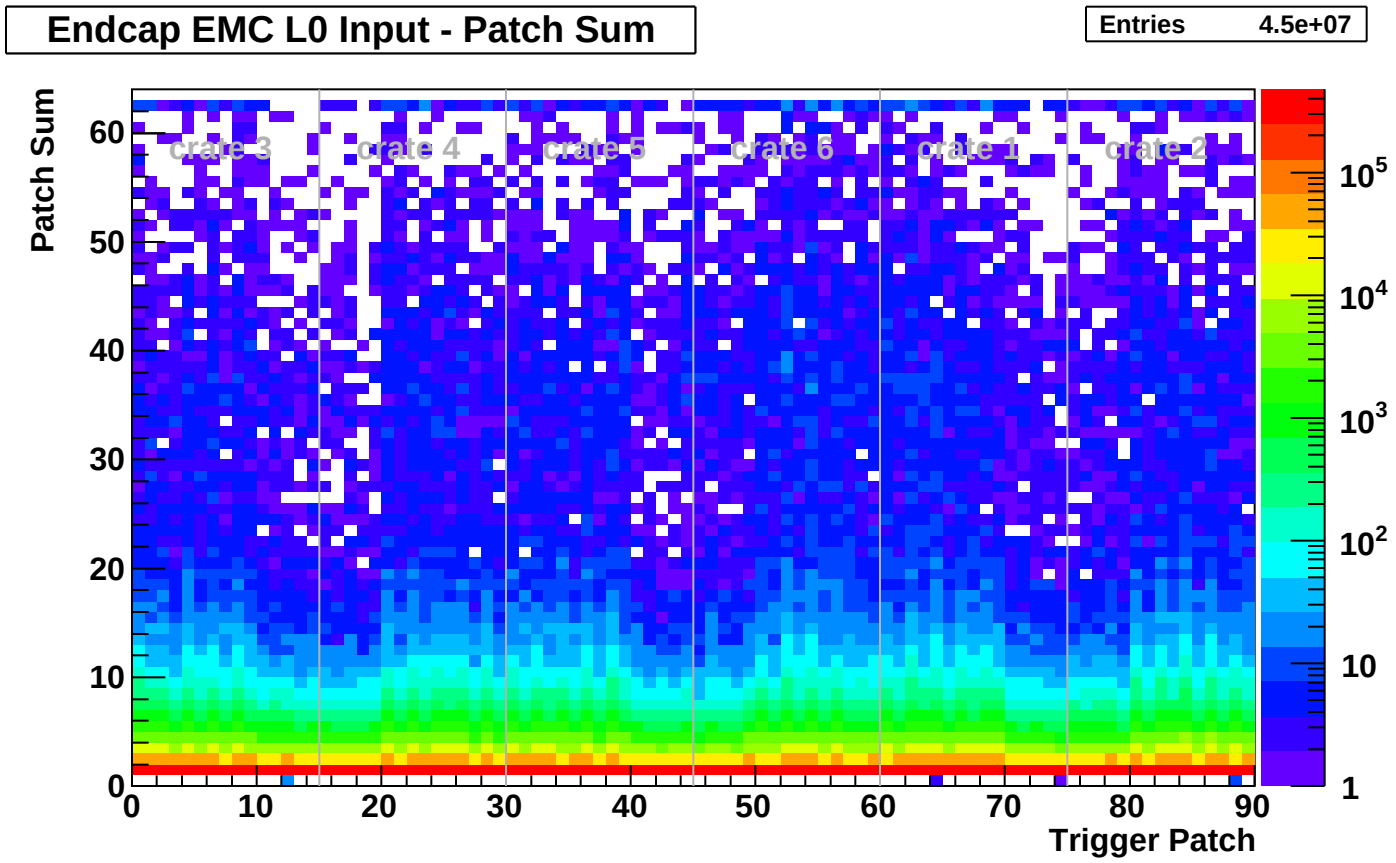

BunchId7Bit (BHT3)
Entries 7983

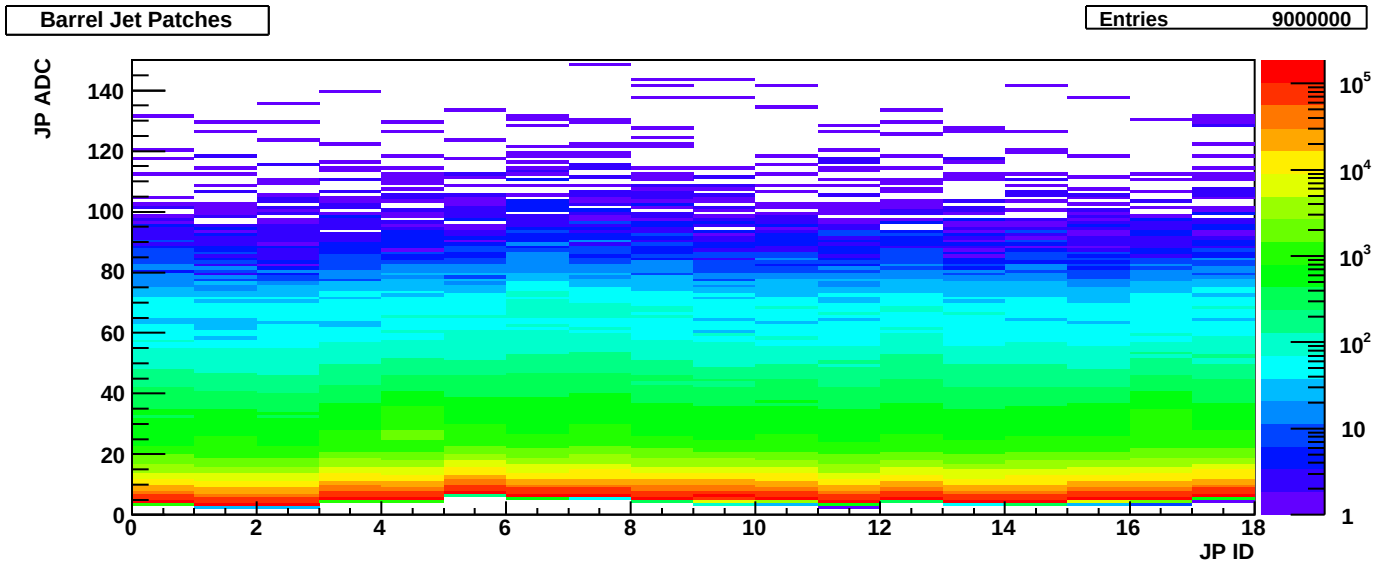

BunchId7Bit (all events)
Entries 500000

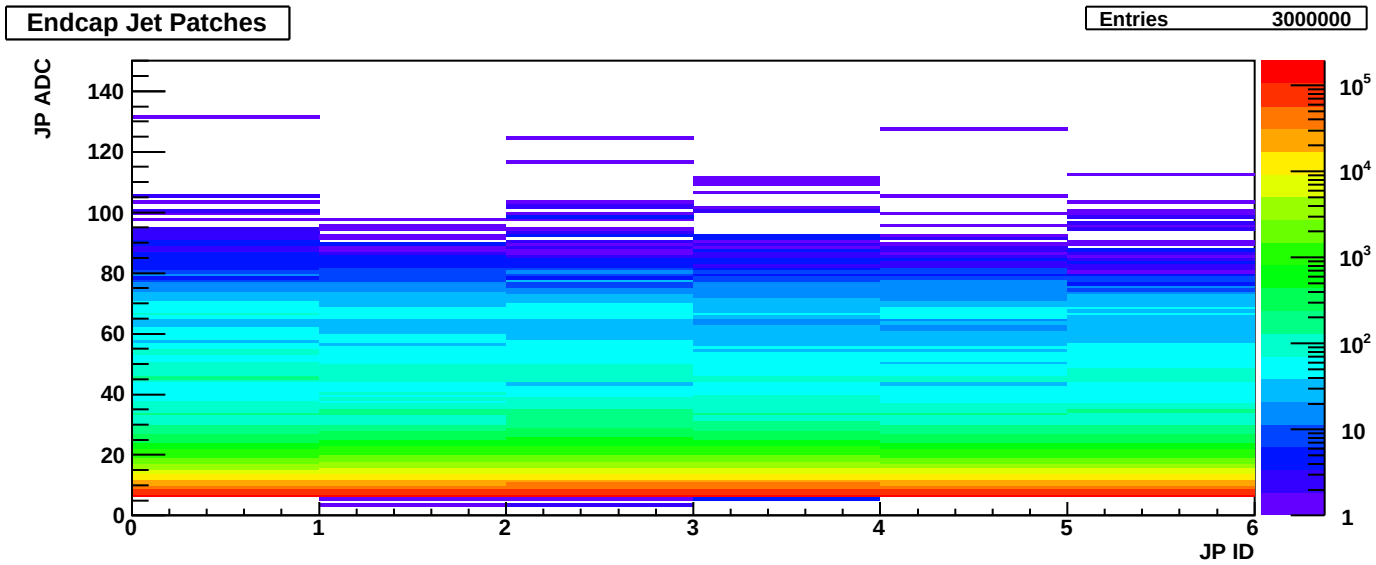

Barrel EMC L0 Input - High Tower
Entries 1.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

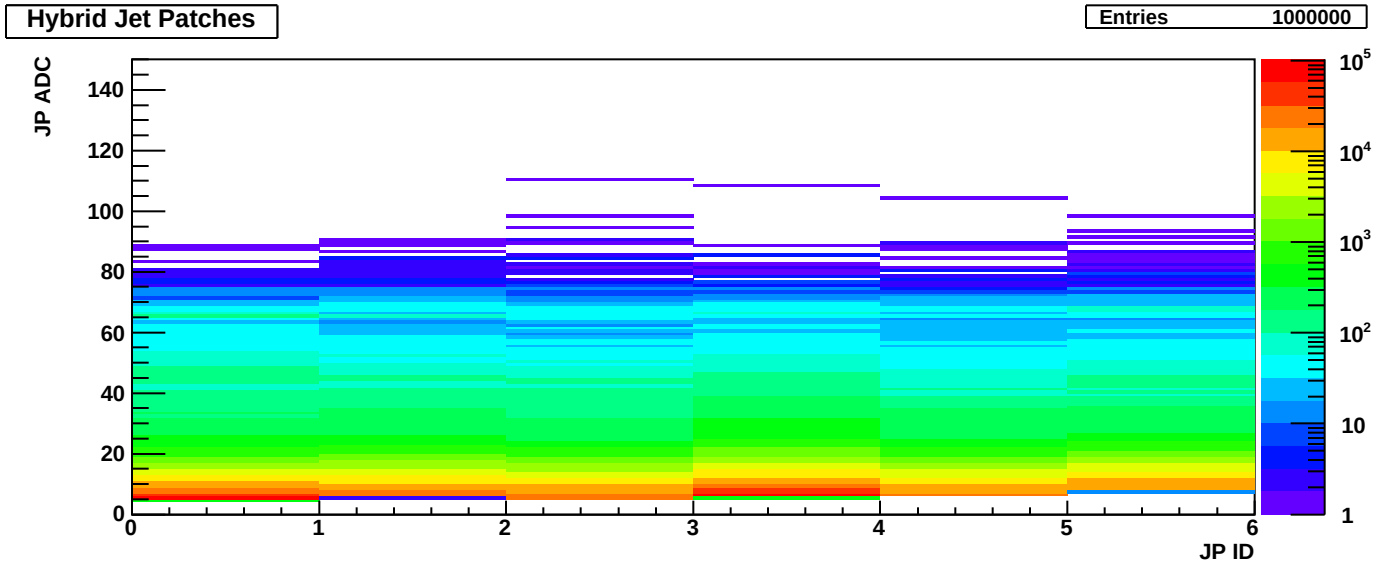

Barrel EMC L0 Input - Patch Sum
Entries 1.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

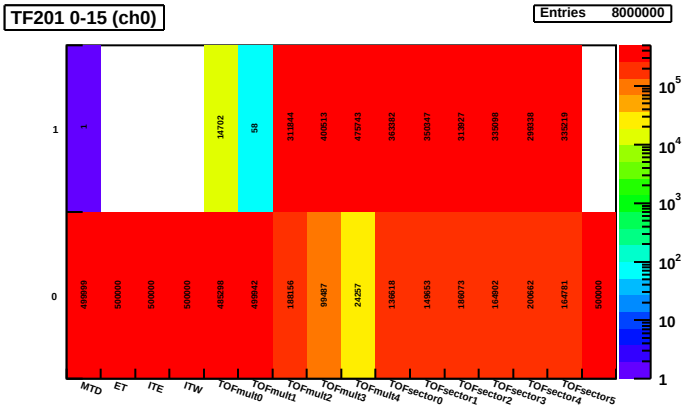

Endcap EMC L0 Input - High Tower
Entries 4.5e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

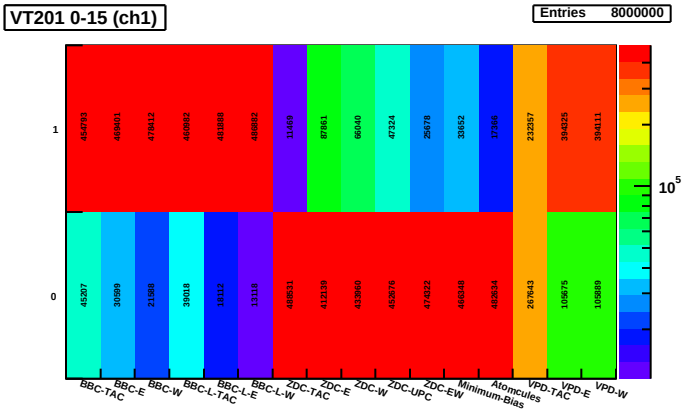

Endcap EMC L0 Input - Patch Sum
Entries 4.5e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

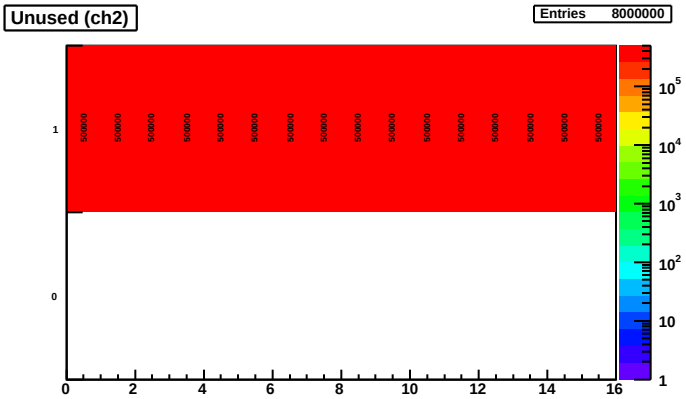

Barrel Jet Patches
Entries 9000000
JP ADC
JP ID

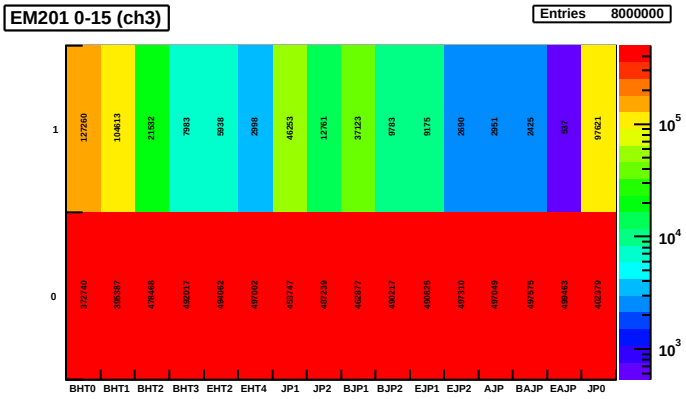

Endcap Jet Patches
Entries 3000000
JP ADC
JP ID

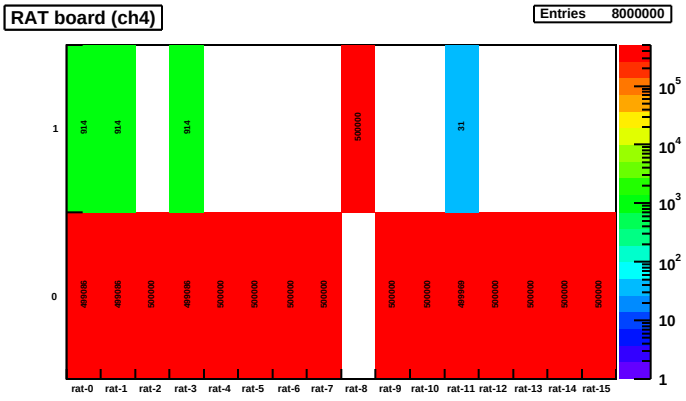

Hybrid Jet Patches
Entries 1000000
JP ADC
JP ID

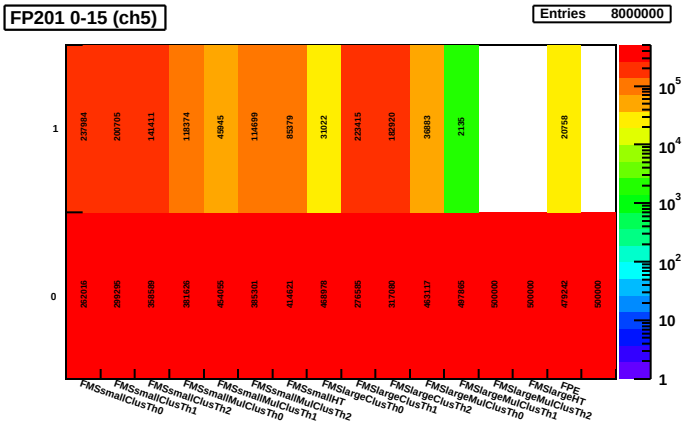

TF201 0-15 (ch0)
Entries 8000000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

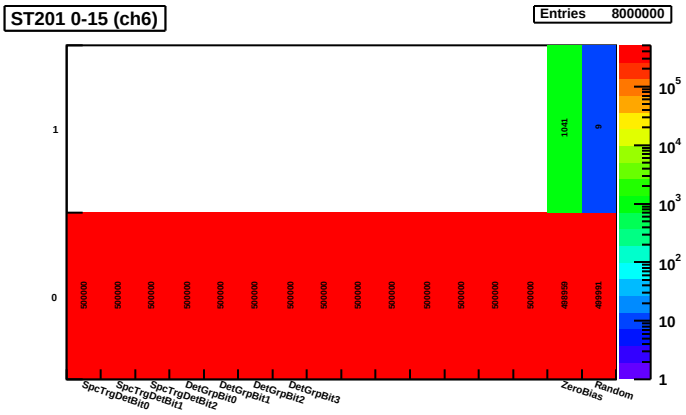

VT201 0-15 (ch1)
Entries 8000000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

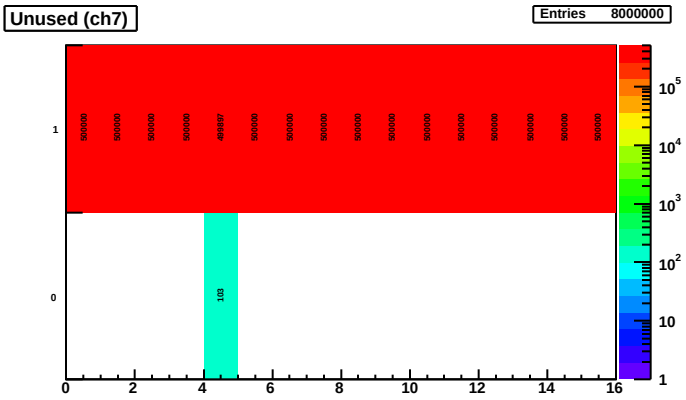

Unused (ch2)
Entries 8000000

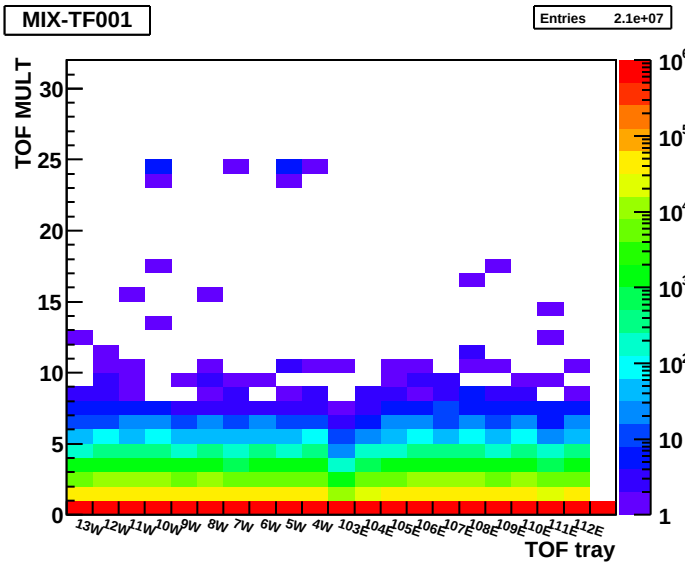

EM201 0-15 (ch3)
Entries 8000000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

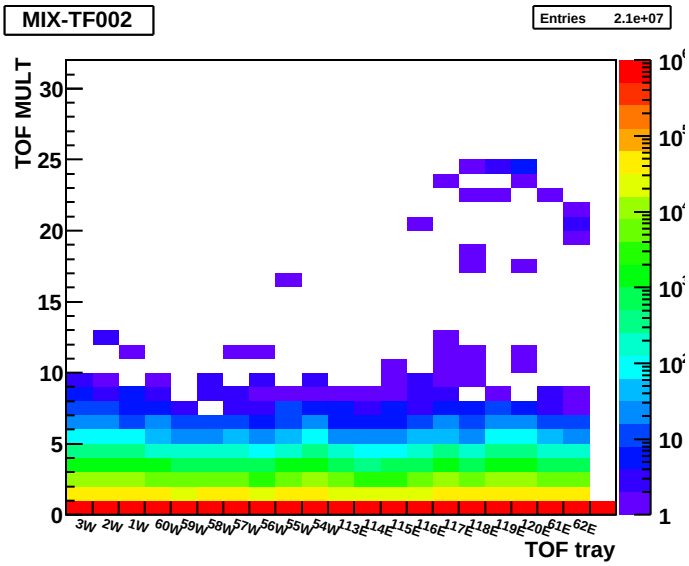

RAT board (ch4)
Entries 8000000
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

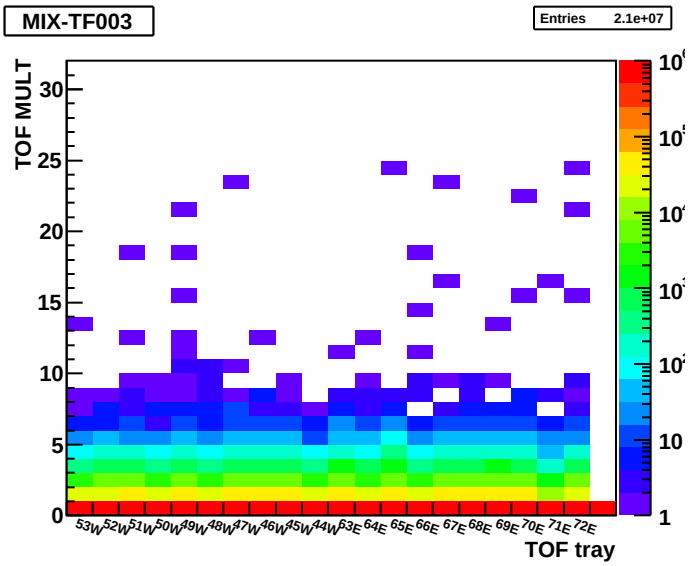

FP201 0-15 (ch5)
Entries 8000000
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

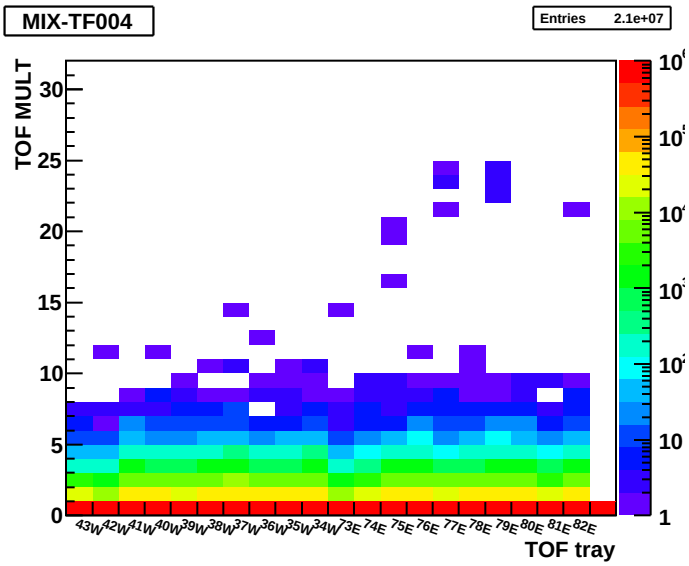

ST201 0-15 (ch6)
Entries 8000000
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

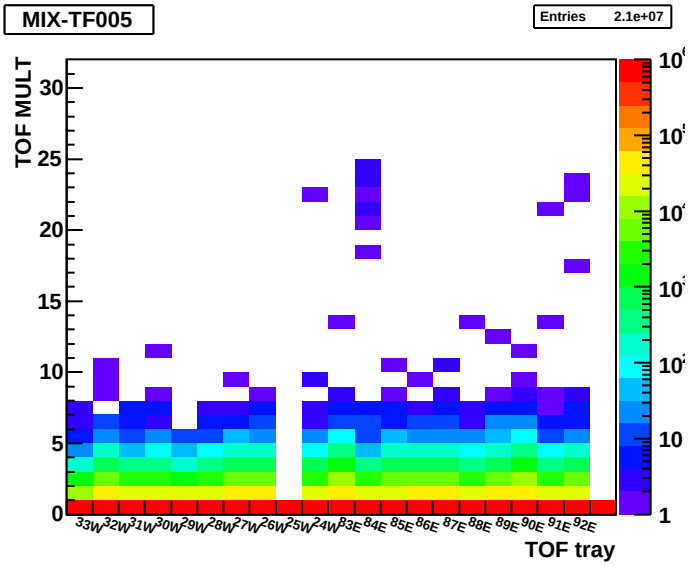

Unused (ch7)
Entries 8000000

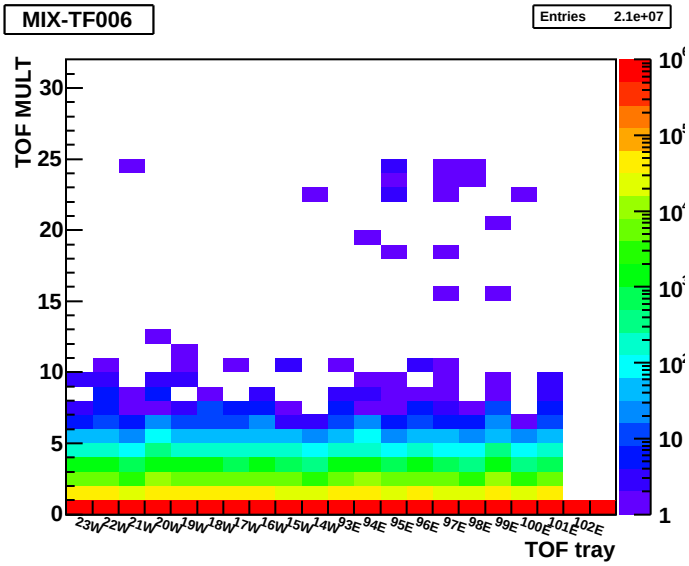

MIX-TF001
Entries 2.1e+07
TOF MULT
TOF tray

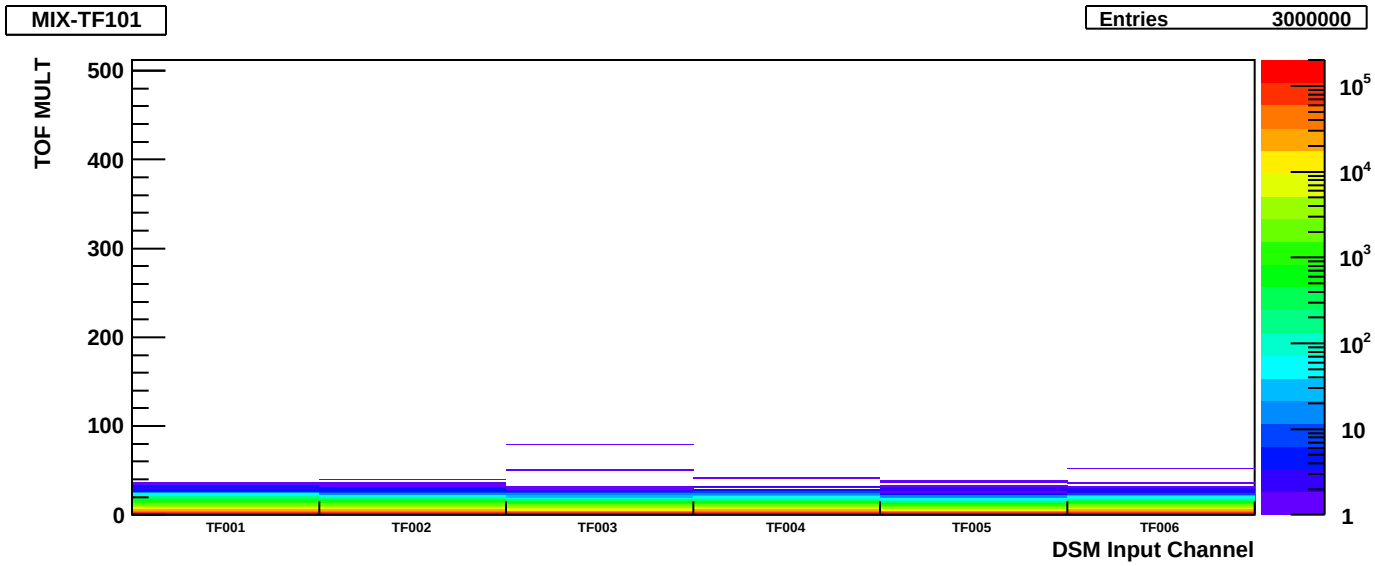

MIX-TF002
Entries 2.1e+07
TOF MULT
TOF tray

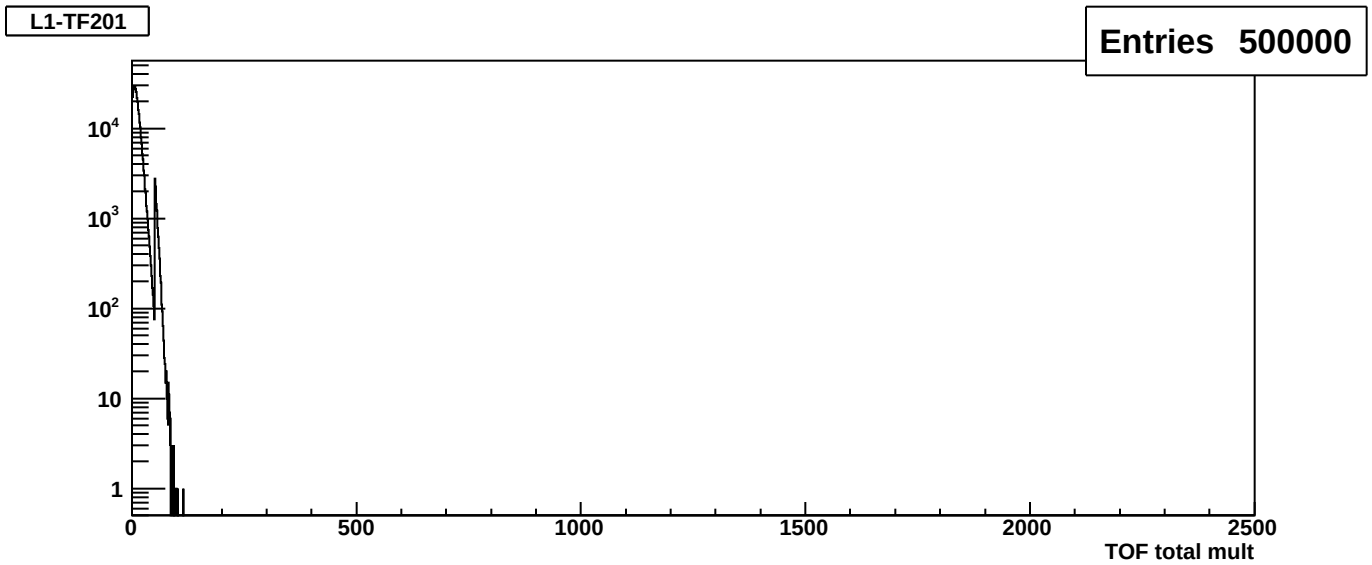

MIX-TF003
Entries 2.1e+07
TOF MULT
TOF tray

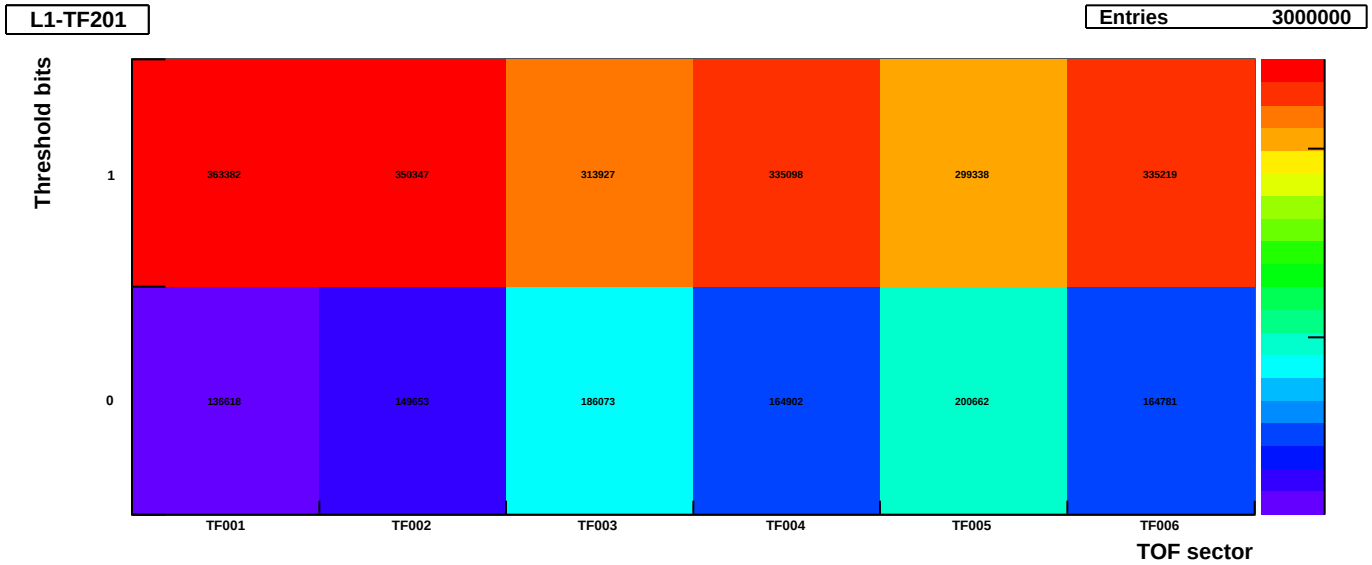

MIX-TF004
Entries 2.1e+07
TOF MULT
TOF tray

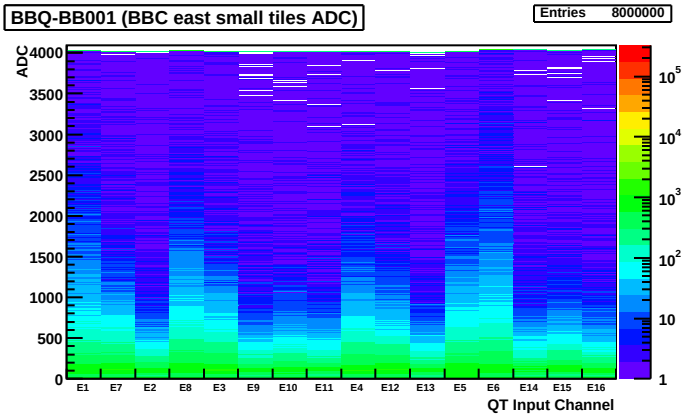

MIX-TF005
Entries 2.1e+07
TOF MULT
TOF tray

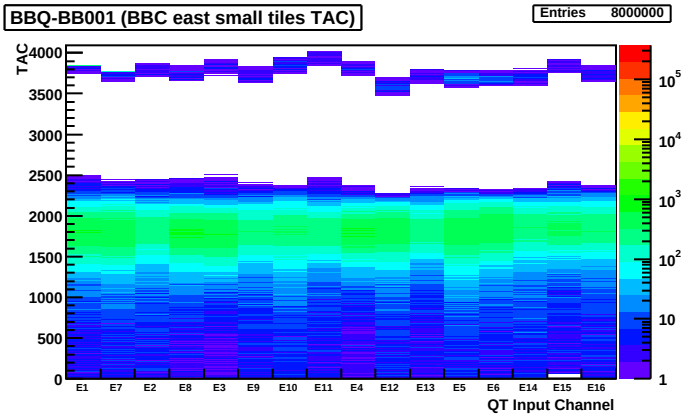

MIX-TF006
Entries 2.1e+07
TOF MULT
TOF tray

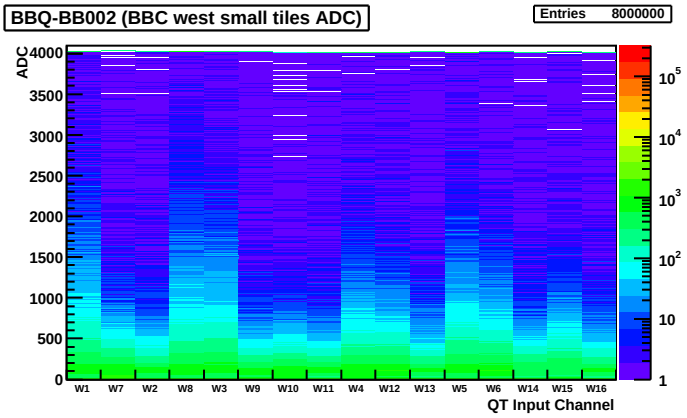

MIX-TF101
Entries 3000000
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

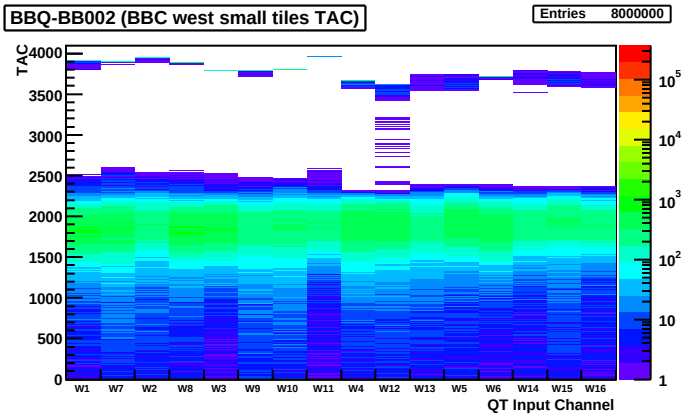

L1-TF201
Entries 500000
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

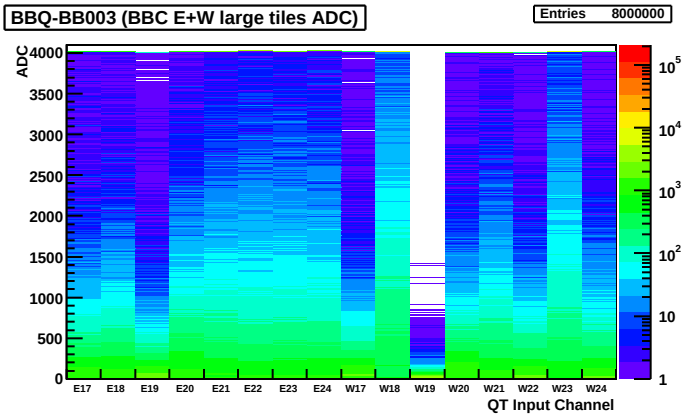

L1-TF201
Entries 3000000
Threshold bits
1
0
363382
350347
313927
335098
299338
335219
136618
149653
186073
164902
200662
164781
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

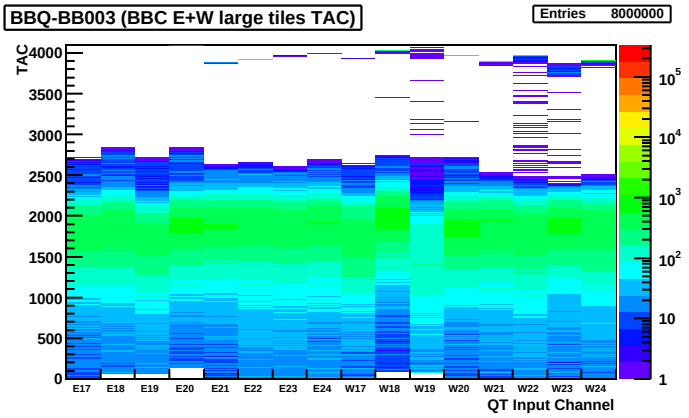

BBQ-BB001 (BBC east small tiles ADC)
Entries 8000000
ADC
QT Input Channel

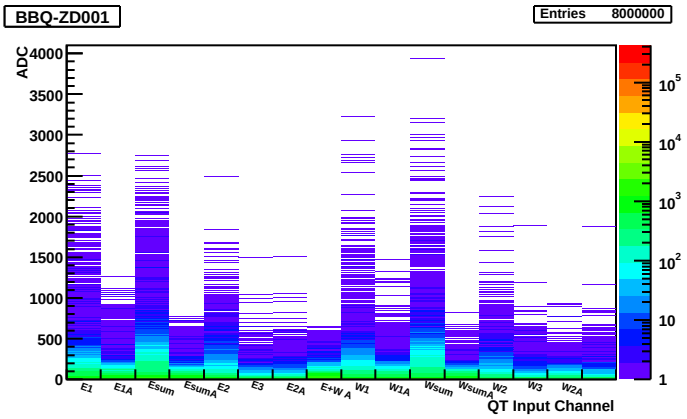

BBQ-BB001 (BBC east small tiles TAC)
Entries 8000000
TAC
QT Input Channel

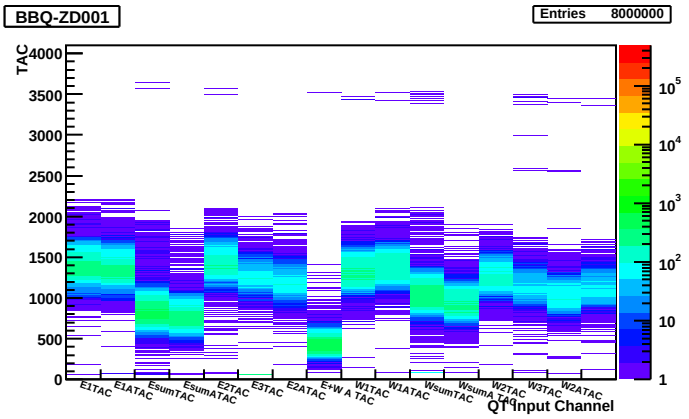

BBQ-BB002 (BBC west small tiles ADC)
Entries 8000000
ADC
QT Input Channel

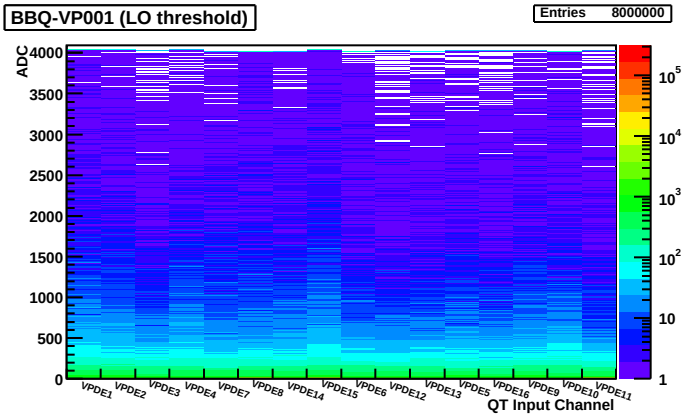

BBQ-BB002 (BBC west small tiles TAC)
Entries 8000000
TAC
QT Input Channel

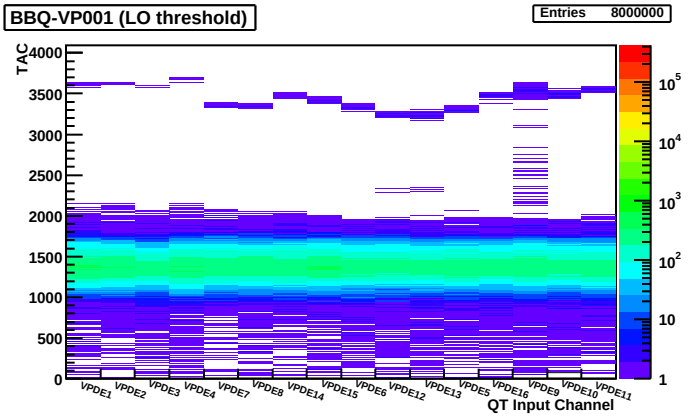

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 8000000
ADC
QT Input Channel

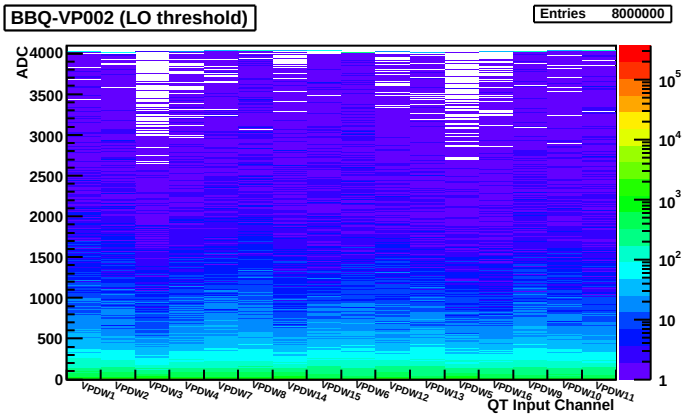

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 8000000
TAC
QT Input Channel

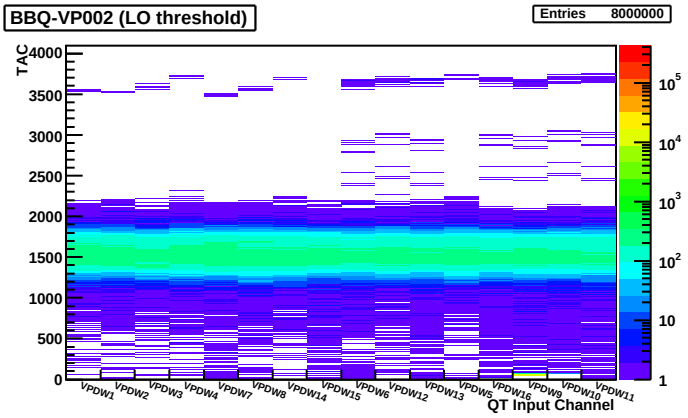

BBQ-ZD001
Entries 8000000
ADC
QT Input Channel

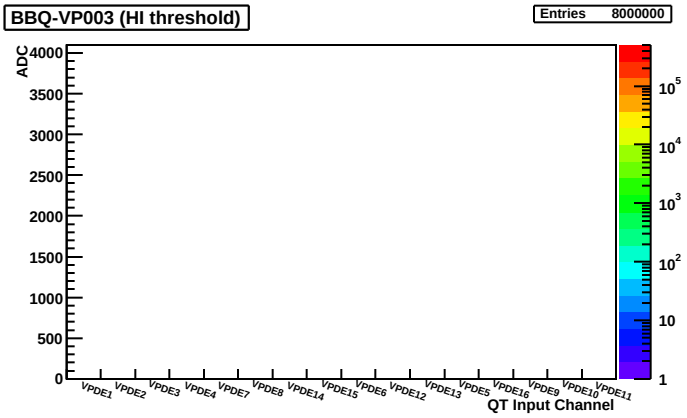

BBQ-ZD001
Entries 8000000
TAC
QT Input Channel

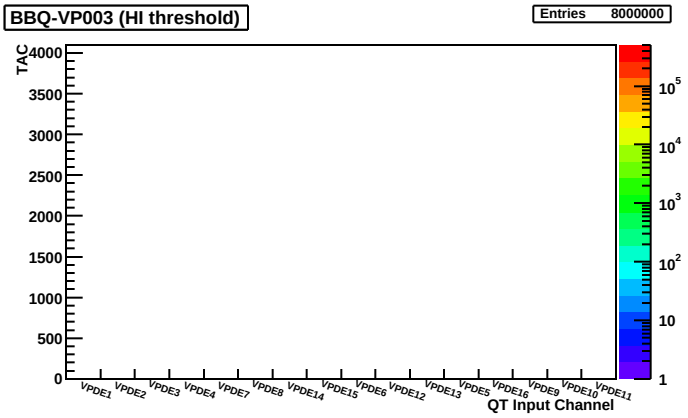

BBQ-VP001 (LO threshold)
Entries 8000000
ADC
QT Input Channel

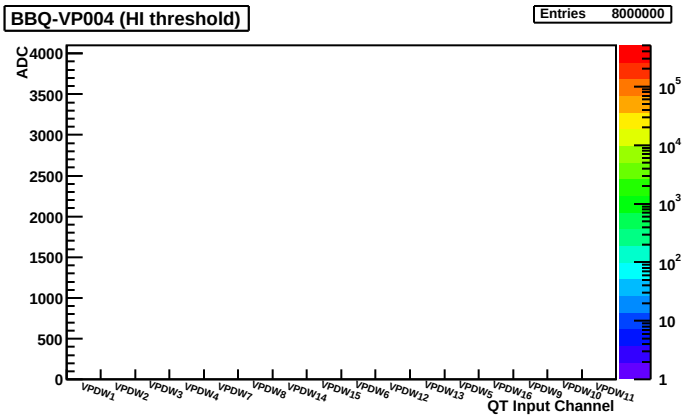

BBQ-VP001 (LO threshold)
Entries 8000000
TAC
QT Input Channel

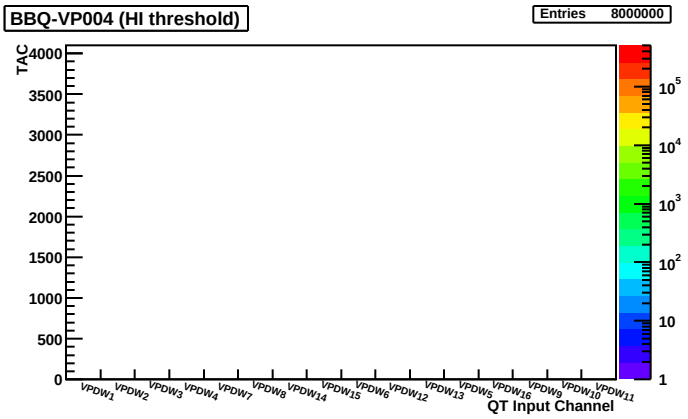

BBQ-VP002 (LO threshold)
Entries 8000000
ADC
QT Input Channel

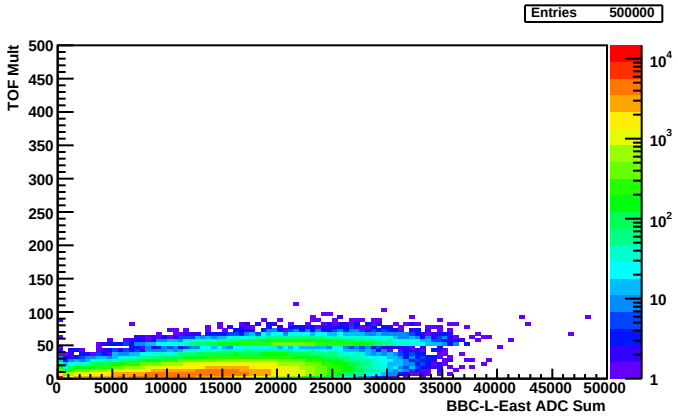

BBQ-VP002 (LO threshold)
Entries 8000000
TAC
QT Input Channel

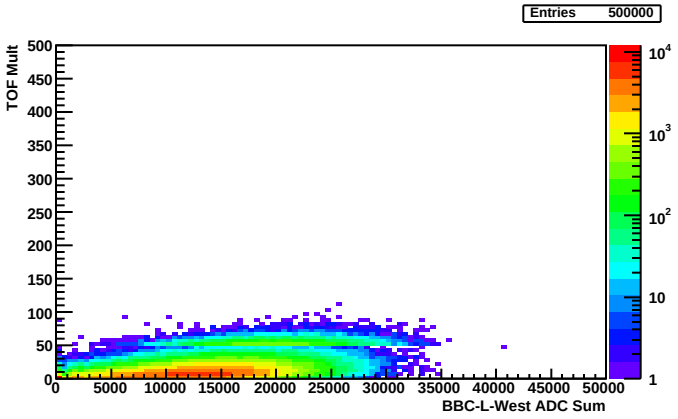

BBQ-VP003 (HI threshold)
Entries 8000000
ADC
QT Input Channel

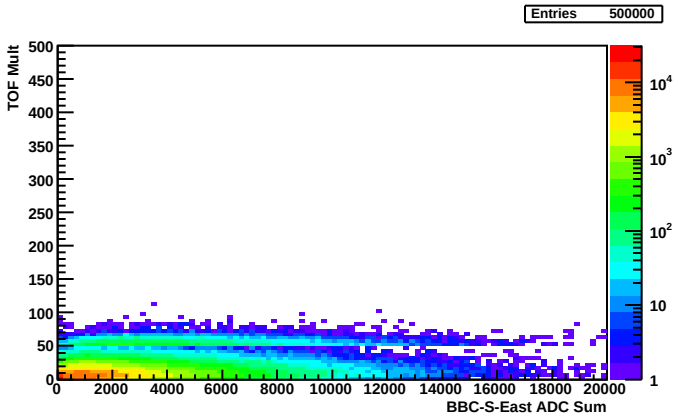

BBQ-VP003 (HI threshold)
Entries 8000000
TAC
QT Input Channel

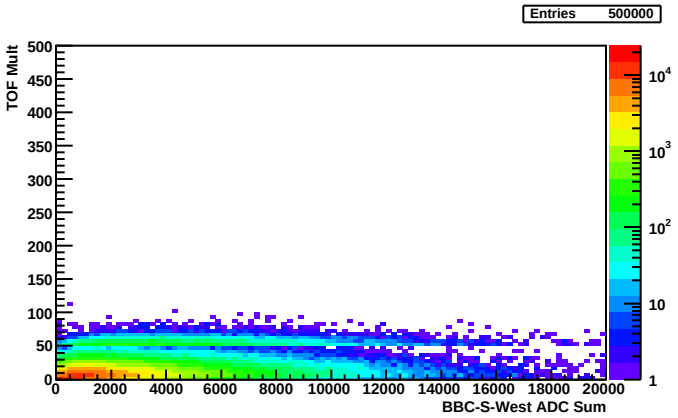

BBQ-VP004 (HI threshold)
Entries 8000000
ADC
QT Input Channel

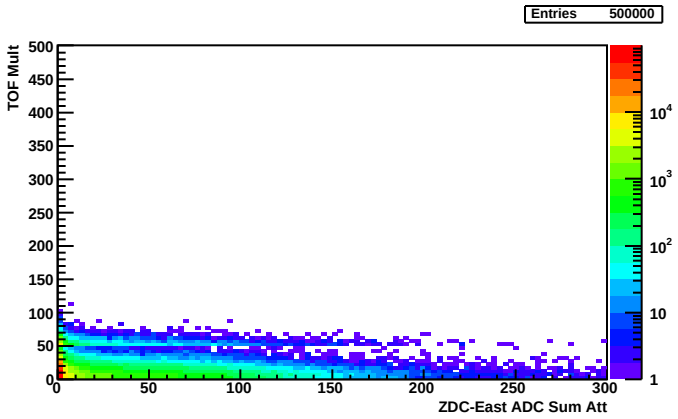

BBQ-VP004 (HI threshold)
Entries 8000000
TAC
QT Input Channel

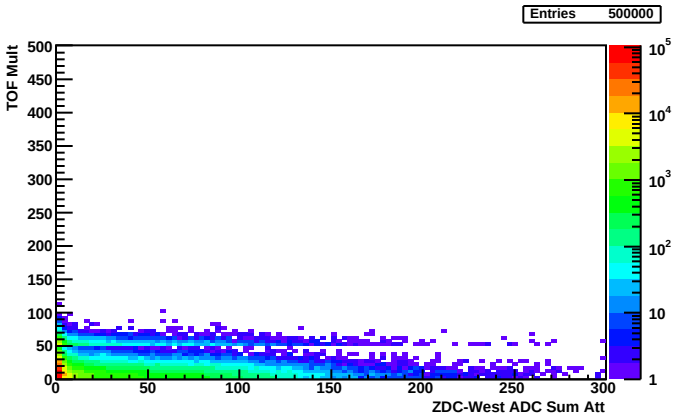

Entries 500000
TOF Mult
BBC-L-East ADC Sum

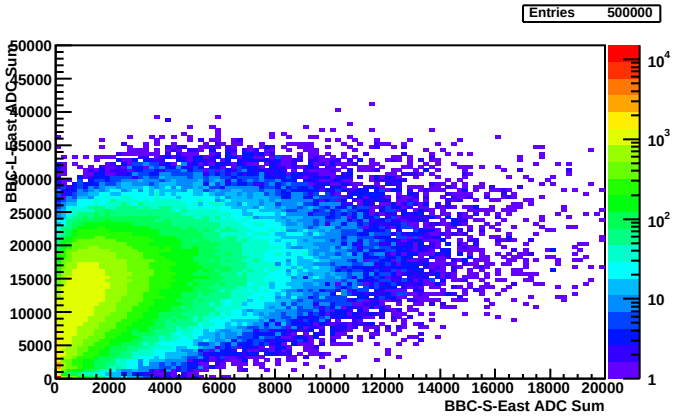

Entries 500000
TOF Mult
BBC-L-West ADC Sum

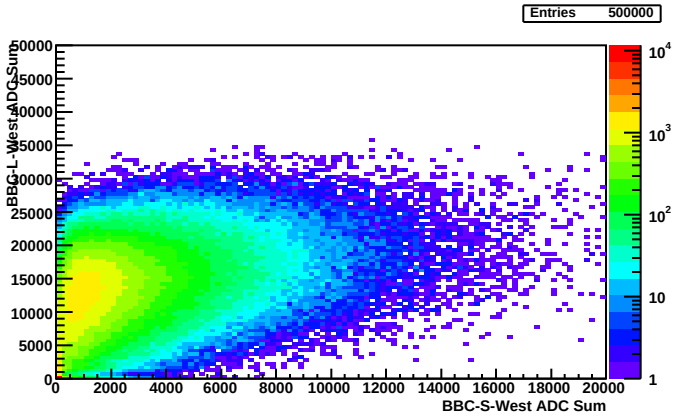

Entries 500000
TOF Mult
BBC-S-East ADC Sum

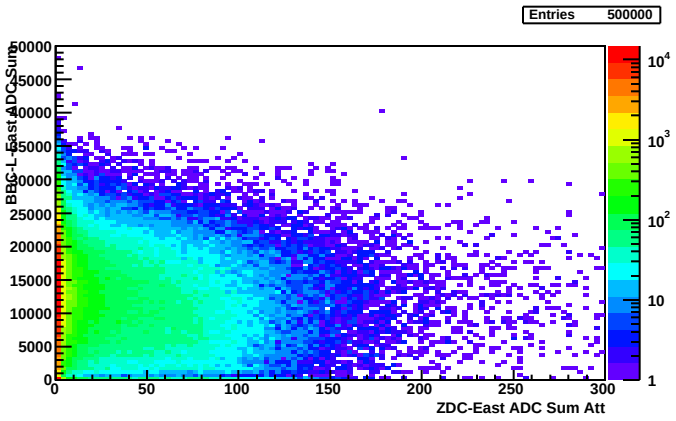

Entries 500000
TOF Mult
BBC-S-West ADC Sum

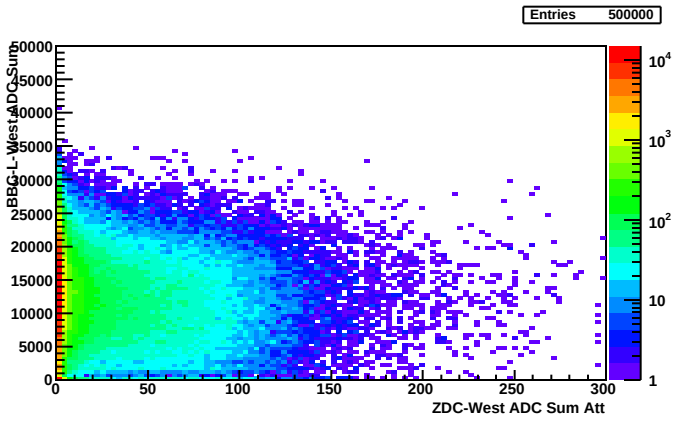

Entries 500000
TOF Mult
ZDC-East ADC Sum Att

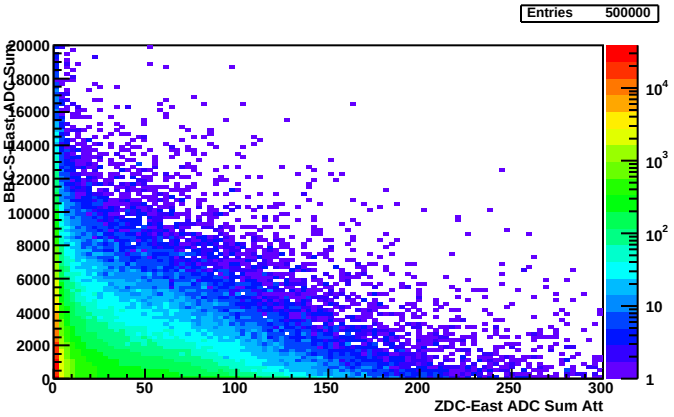

Entries 500000
TOF Mult
ZDC-West ADC Sum Att

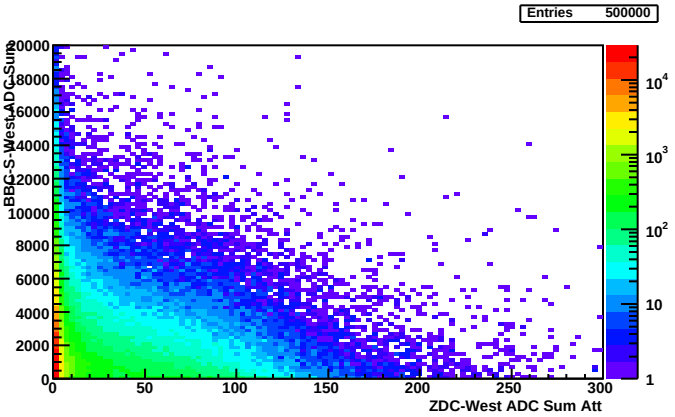

Entries 500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

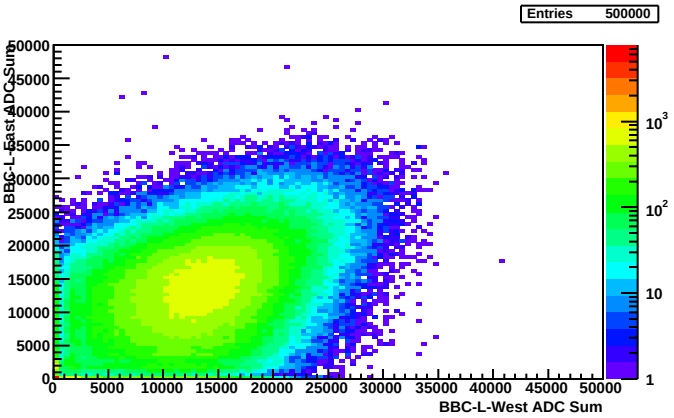

Entries 500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

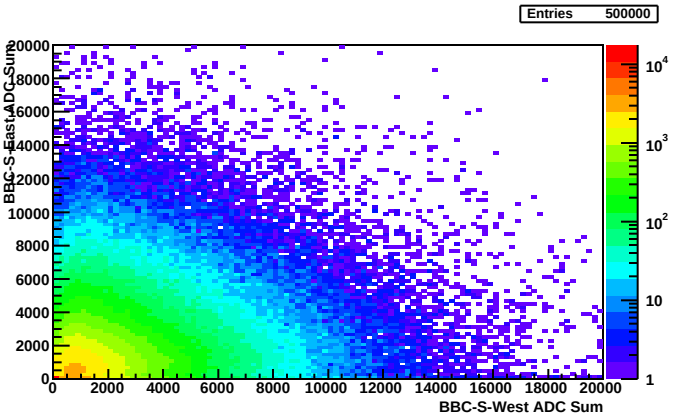

Entries 500000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

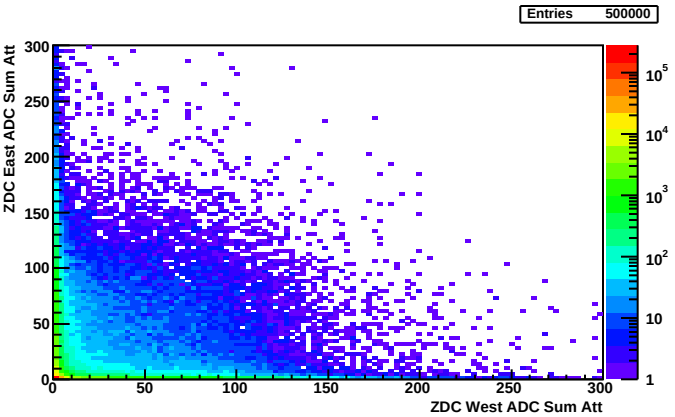

Entries 500000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

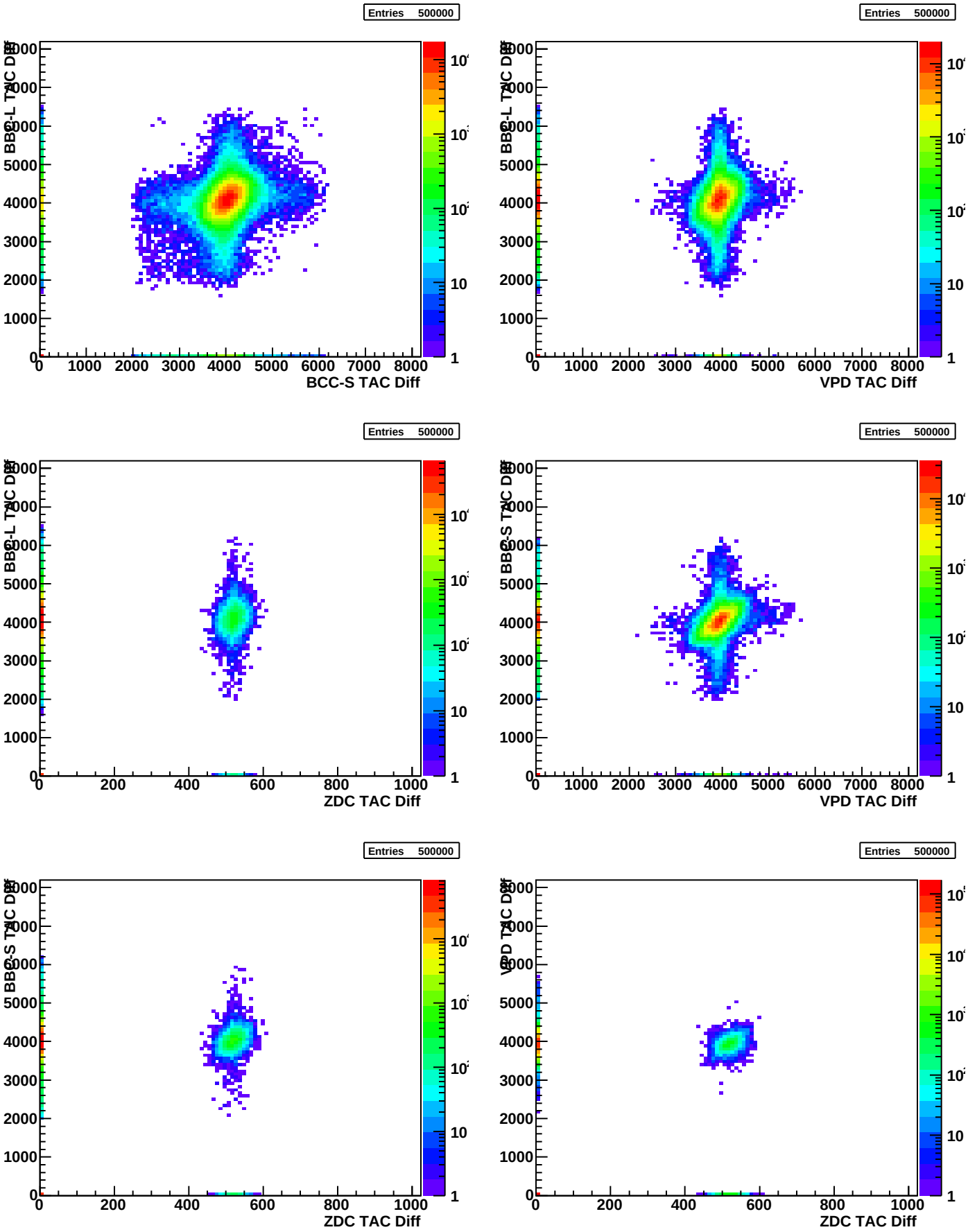

Entries 500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

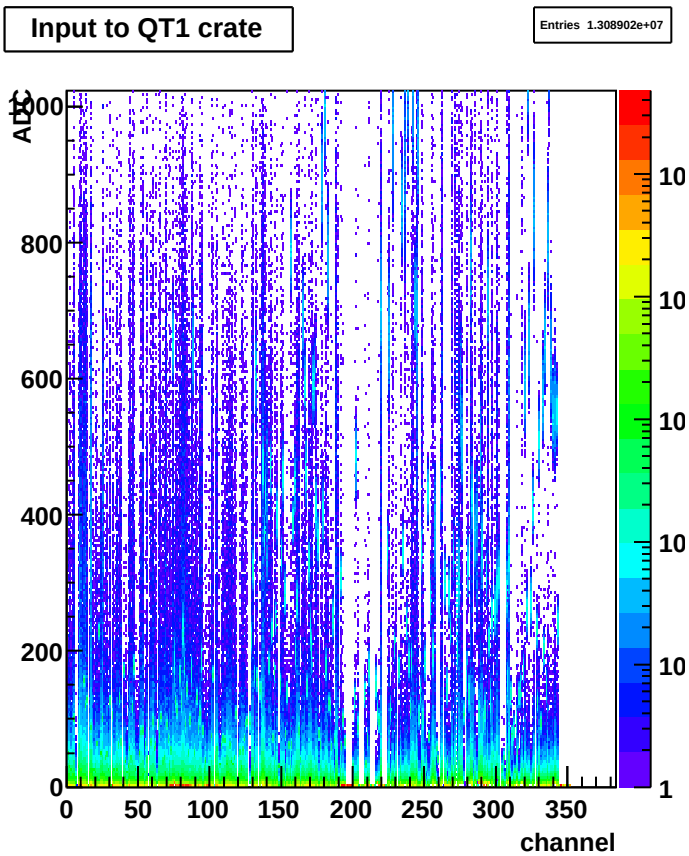

Entries 500000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

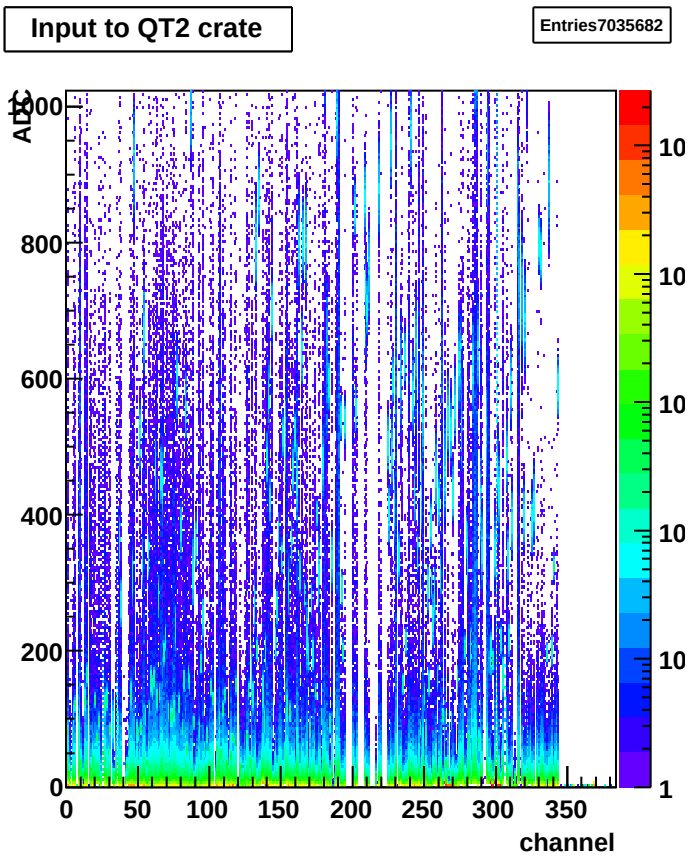

Entries 500000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

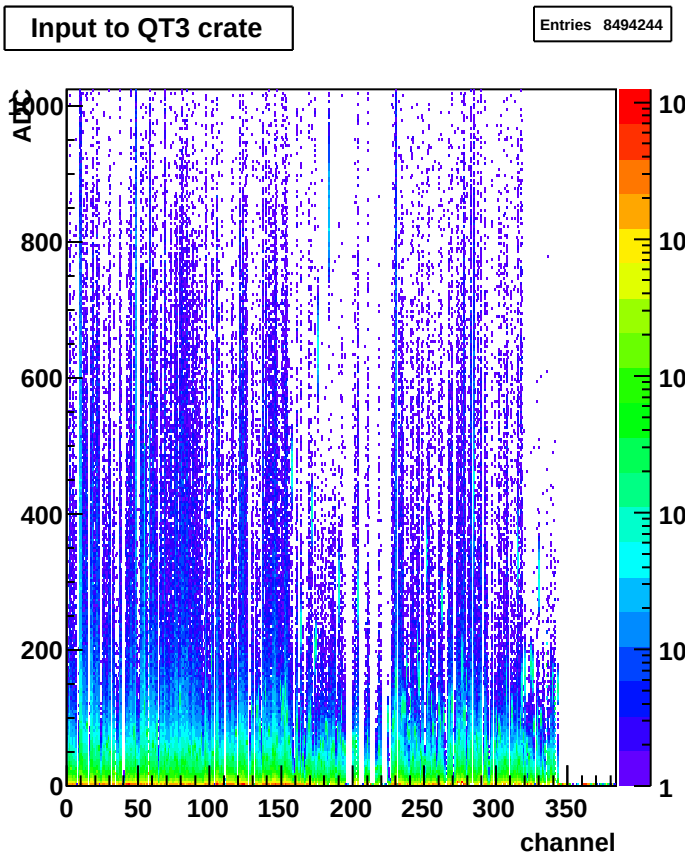

Entries 500000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

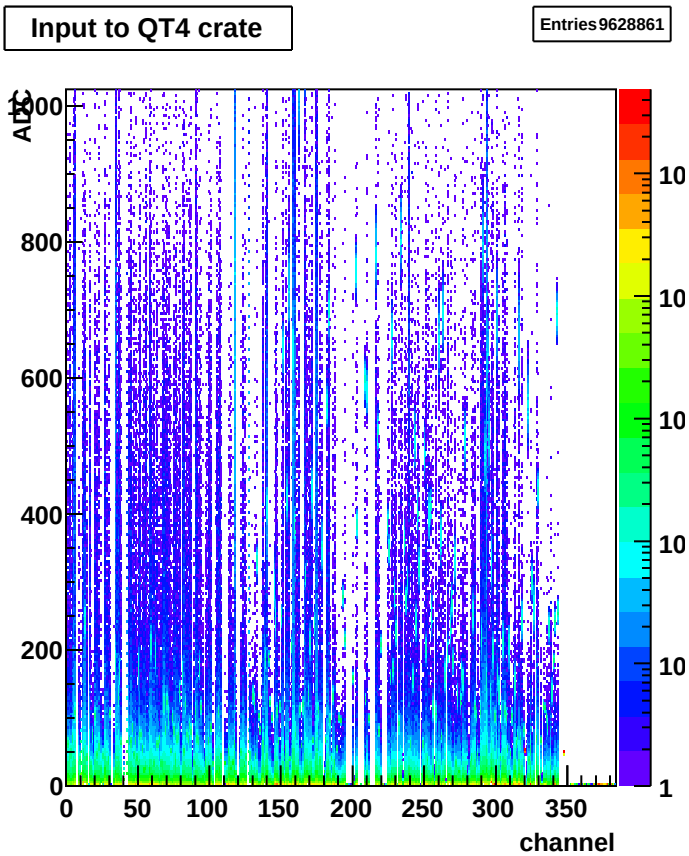

Entries 500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

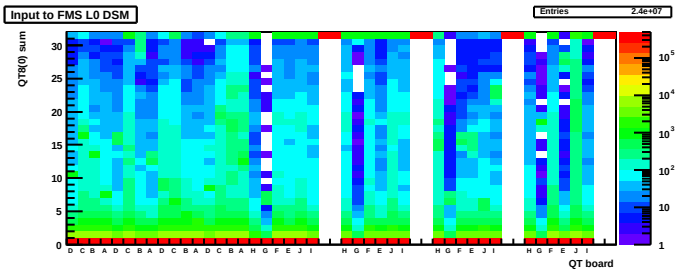

Entries 500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 500000
BBC-L TAC Diff
VPD TAC Diff
Entries 500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 500000
BBC-S TAC Diff
VPD TAC Diff
Entries 500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 500000
VPD TAC Diff
ZDC TAC Diff

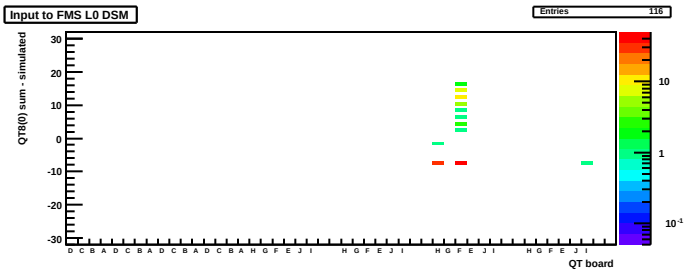

Input to QT1 crate
Entries 1.308902e+07
ADC
channel

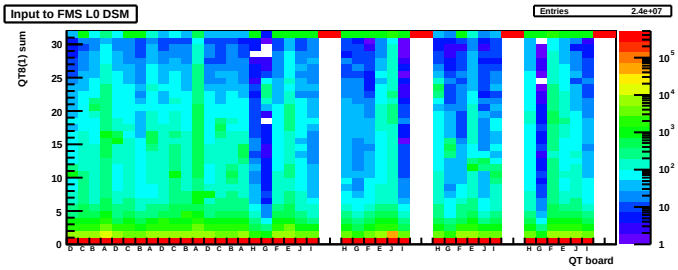

Input to QT2 crate
Entries7035682
ADC
channel

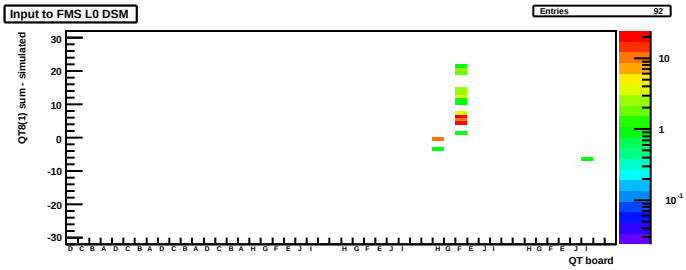

Input to QT3 crate
Entries 8494244
ADC
channel

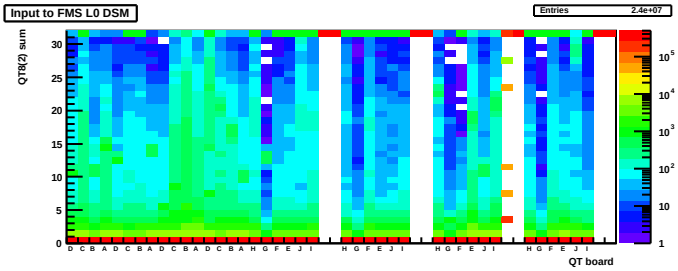

Input to QT4 crate
Entries9628861
ADC
channel

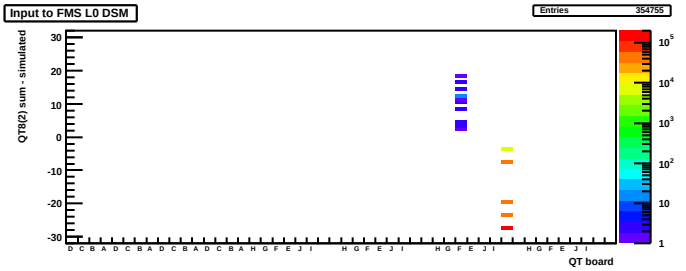

Input to FMS L0 DSM
Entries 2.4e+07
QT8(0) sum
QT board

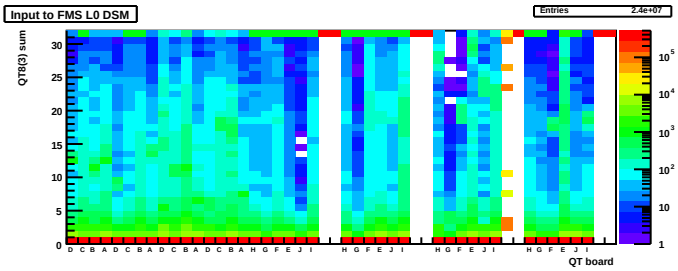

Input to FMS L0 DSM
Entries 116
QT8(0) sum - simulated
QT board

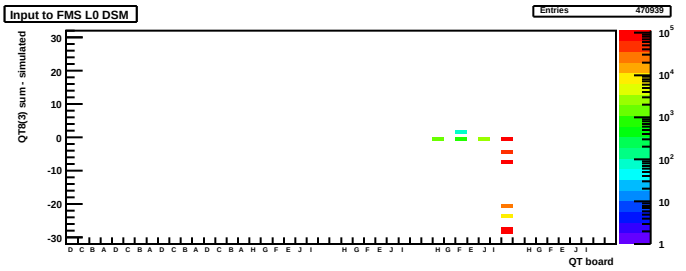

Input to FMS L0 DSM
Entries 2.4e+07
QT8(1) sum
QT board

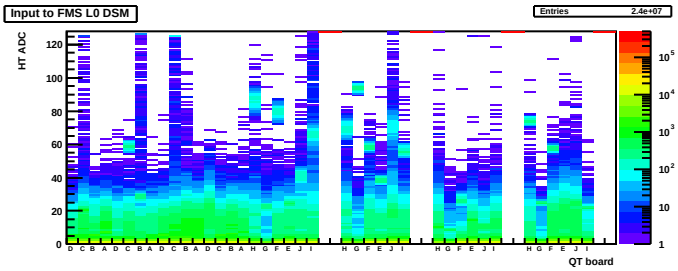

Input to FMS L0 DSM
Entries 92
QT8(1) sum - simulated
QT board

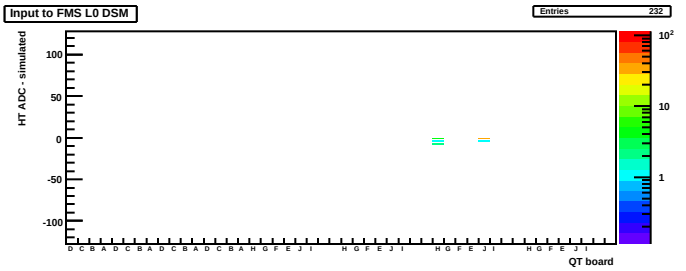

Input to FMS L0 DSM
Entries 2.4e+07
QT8(2) sum
QT board

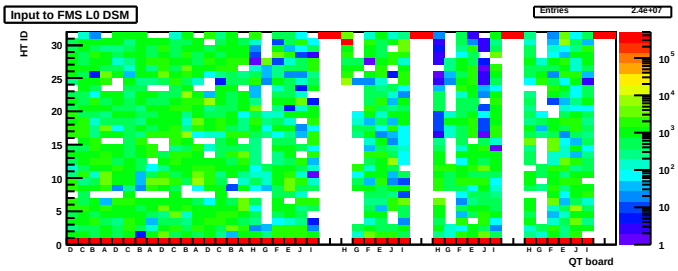

Input to FMS L0 DSM
Entries 354755
QT8(2) sum - simulated
QT board

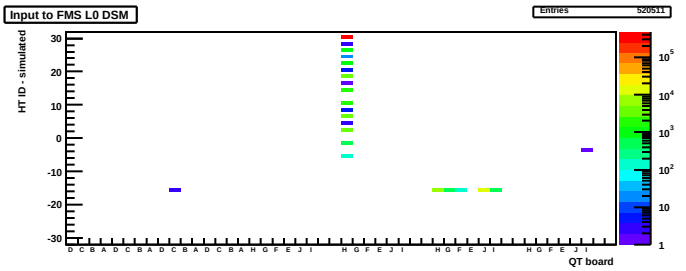

Input to FMS L0 DSM
Entries 2.4e+07
QT8(3) sum
QT board

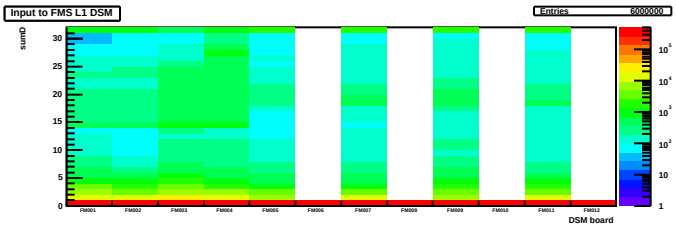

Input to FMS L0 DSM
Entries 470939
QT8(3) sum - simulated
QT board

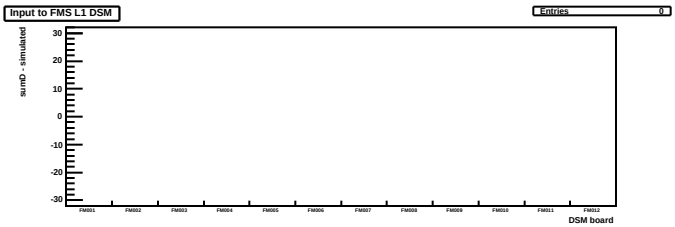

Input to FMS L0 DSM
Entries 2.4e+07
HT ADC
QT board

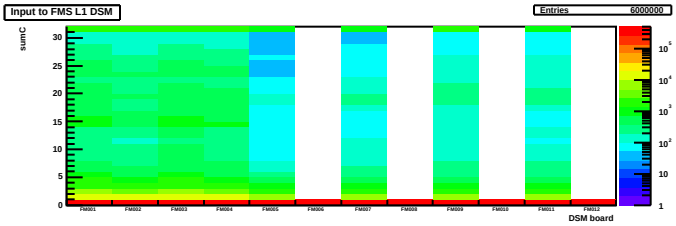

Input to FMS L0 DSM
Entries 232
HT ADC - simulated
QT board

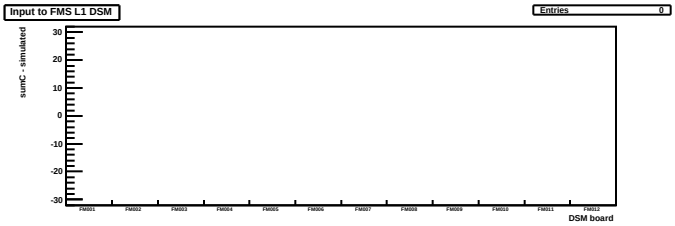

Input to FMS L0 DSM
Entries 2.4e+07
HT ID
QT board

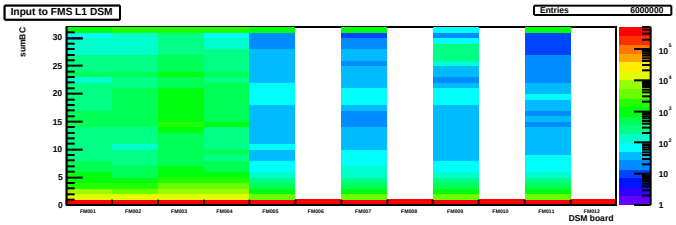

Input to FMS L0 DSM
Entries 520511
HT ID - simulated
QT board

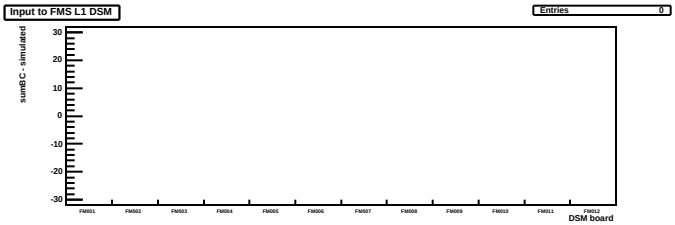

Input to FMS L1 DSM
Entries 6000000
sumD
DSM board

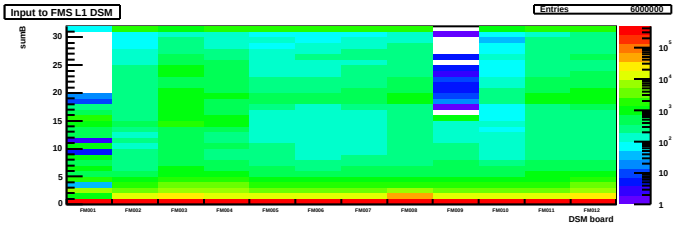

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

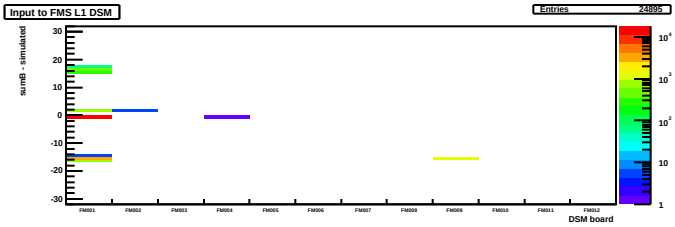

Input to FMS L1 DSM
Entries 6000000
sumC
DSM board

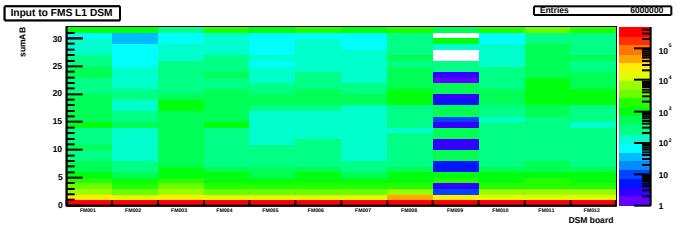

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

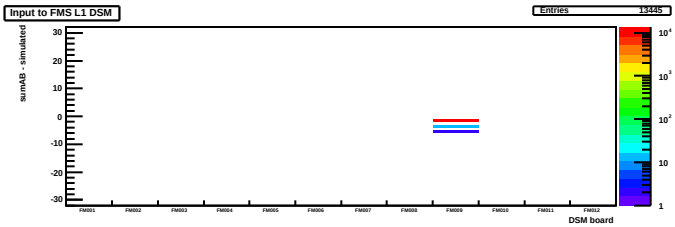

Input to FMS L1 DSM
Entries 6000000
sumBC
DSM board

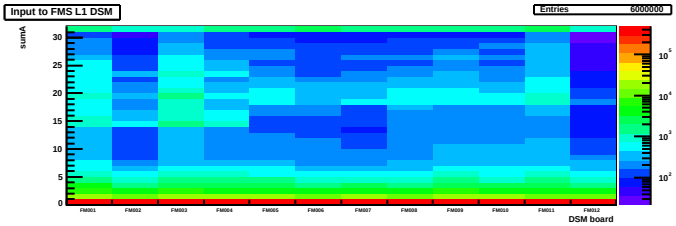

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

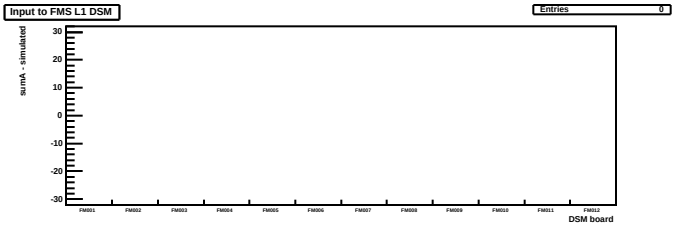

Input to FMS L1 DSM
Entries 6000000
sumB
DSM board

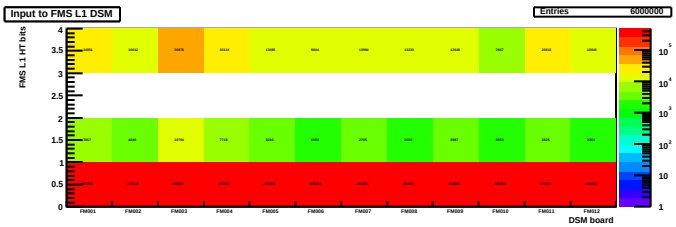

Input to FMS L1 DSM
Entries 24895
sumB - simulated
DSM board

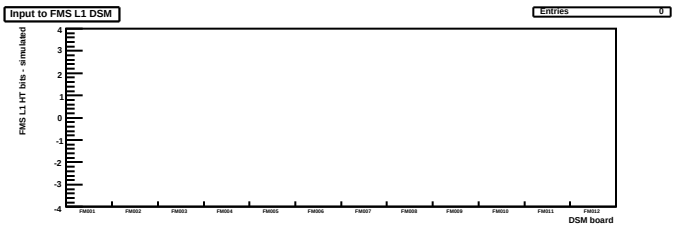

Input to FMS L1 DSM
Entries 6000000
sumAB
DSM board

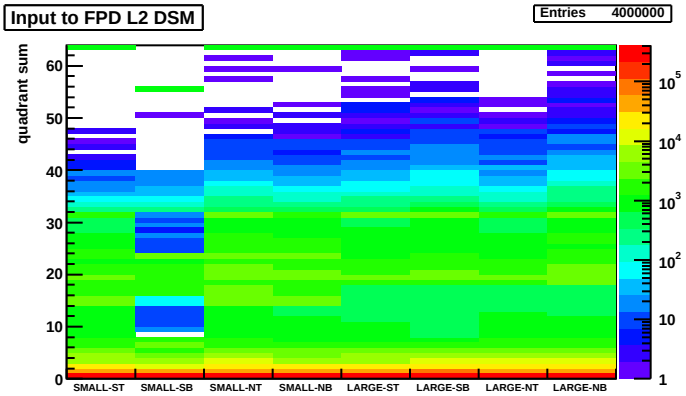

Input to FMS L1 DSM
Entries 13445
sumAB - simulated
DSM board

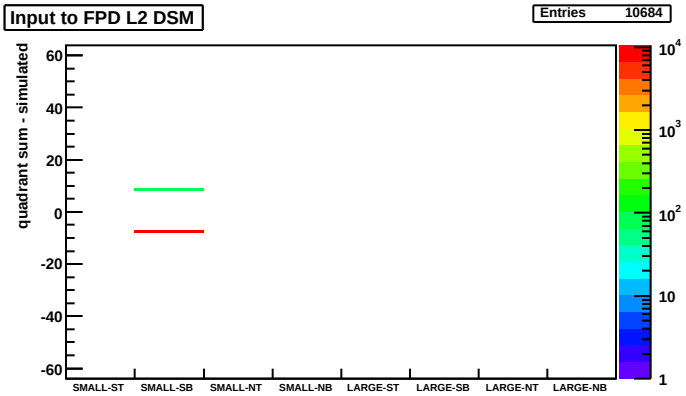

Input to FMS L1 DSM
Entries 6000000
sumA
DSM board

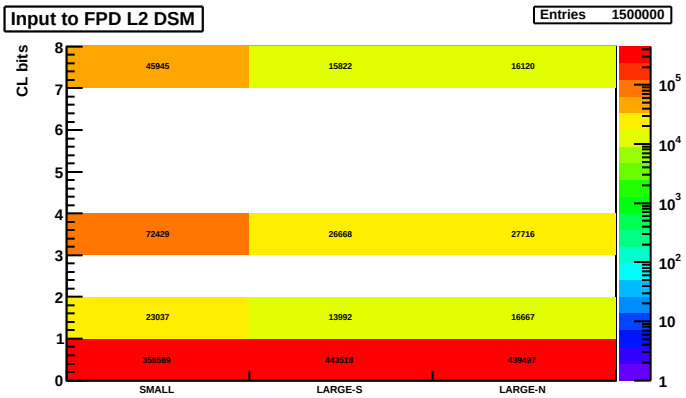

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

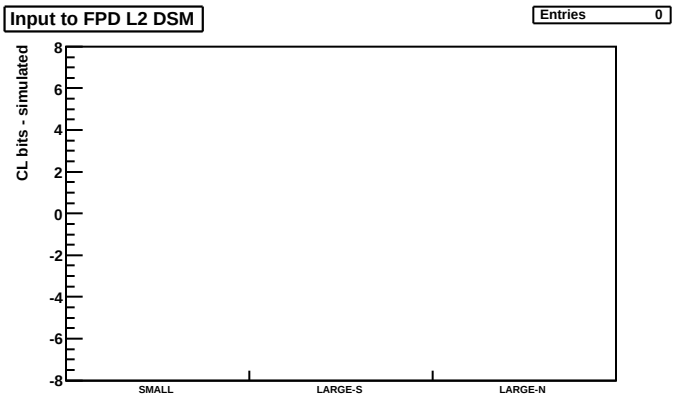

Input to FMS L1 DSM
Entries 6000000
FMS L1 HT bits
DSM board

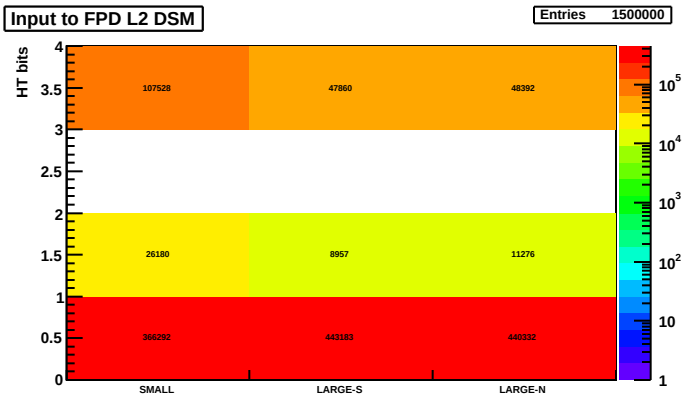

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

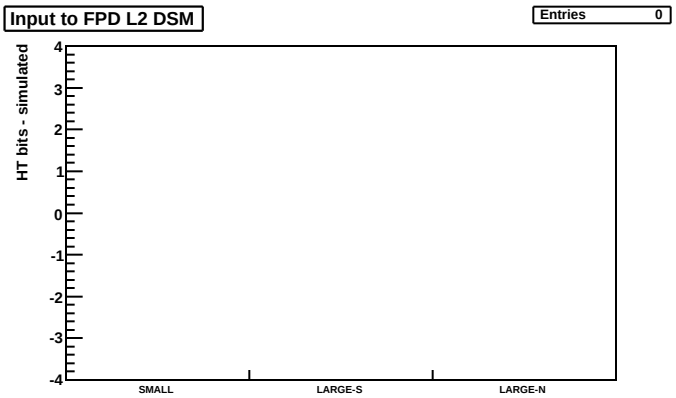

Input to FPD L2 DSM
Entries 4000000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

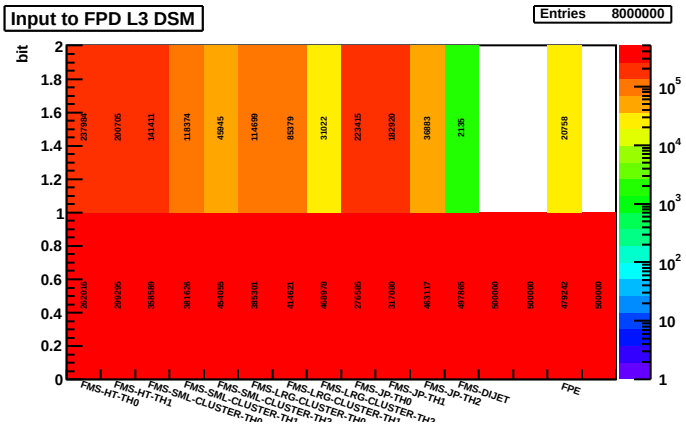

Input to FPD L2 DSM
Entries 10684
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

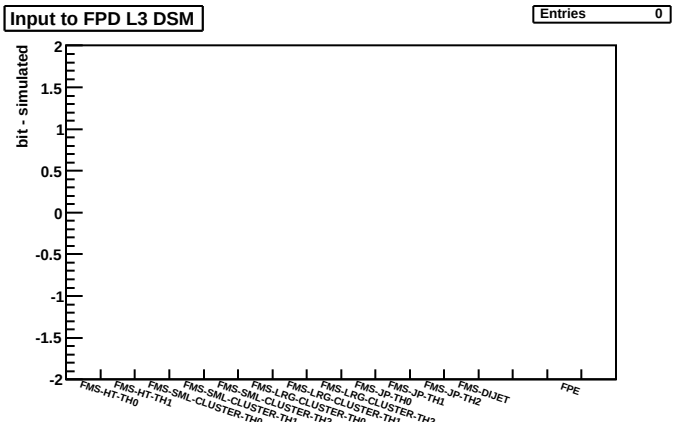

Input to FPD L2 DSM
Entries 1500000
CL bits
45945
15822
16120
72429
26668
27716
23037
13992
16667
358589
443518
439497
SMALL
LARGE-S
LARGE-N

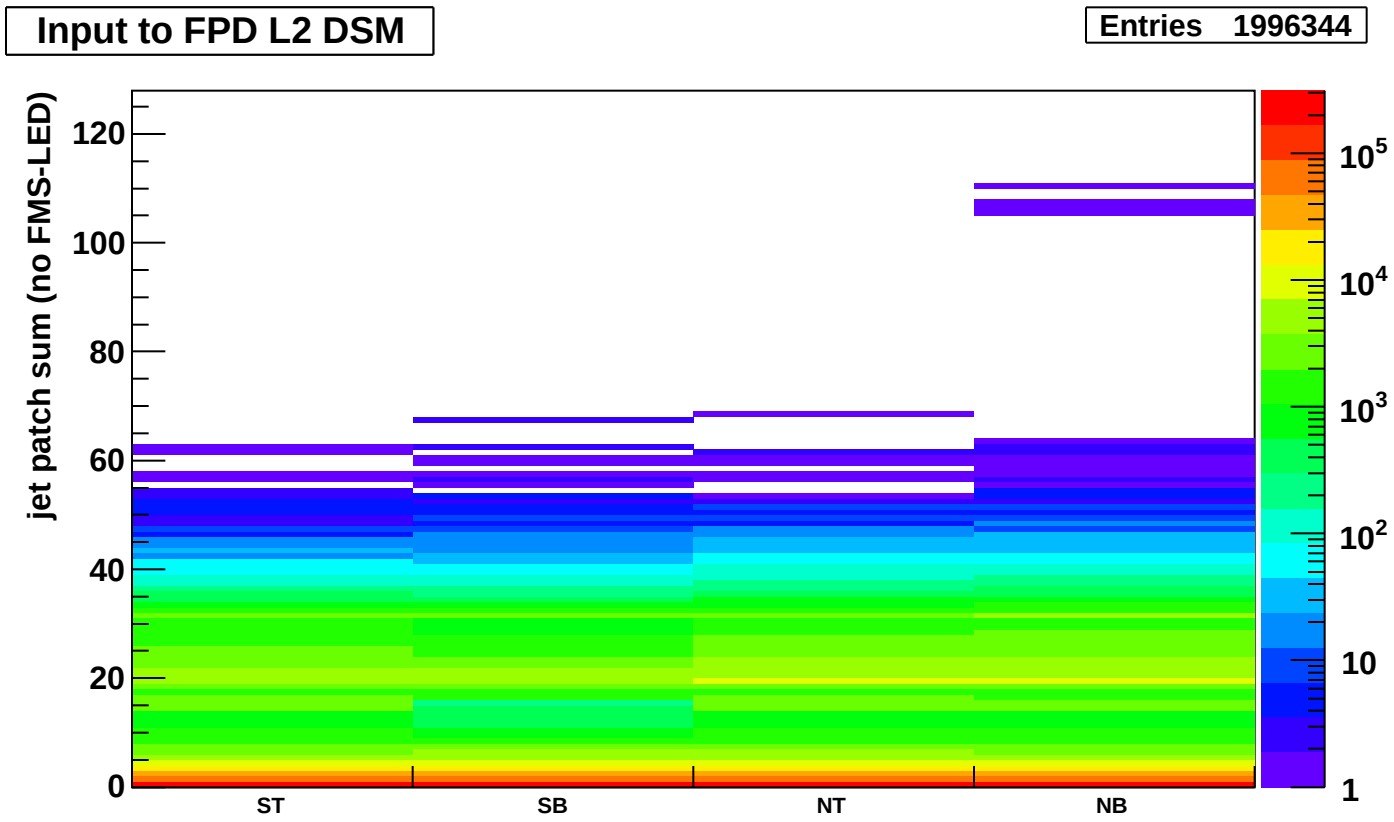

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

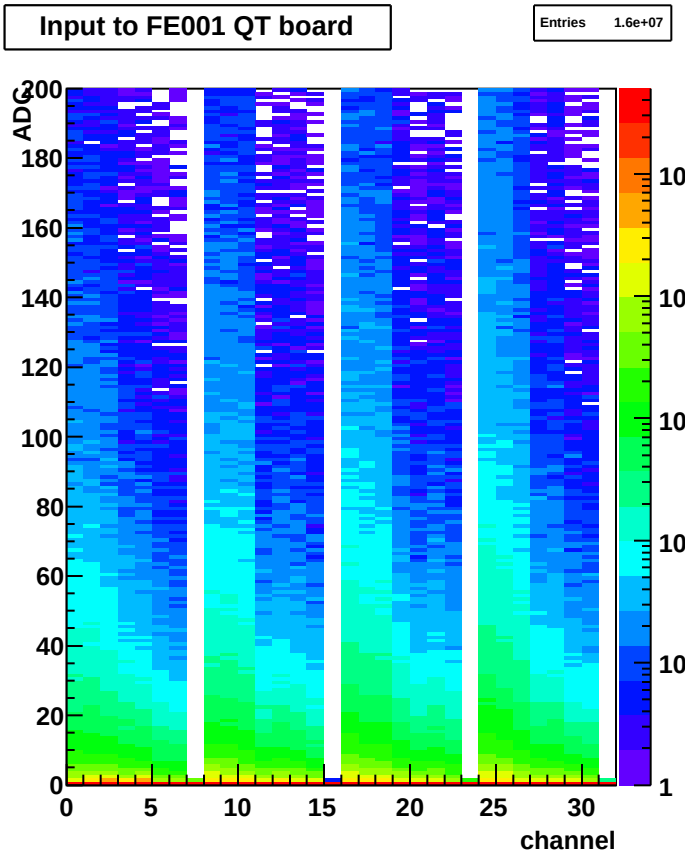

Input to FPD L2 DSM
Entries 1500000
HT bits
107528
47860
48392
26180
8957
11276
366292
443183
440332
SMALL
LARGE-S
LARGE-N

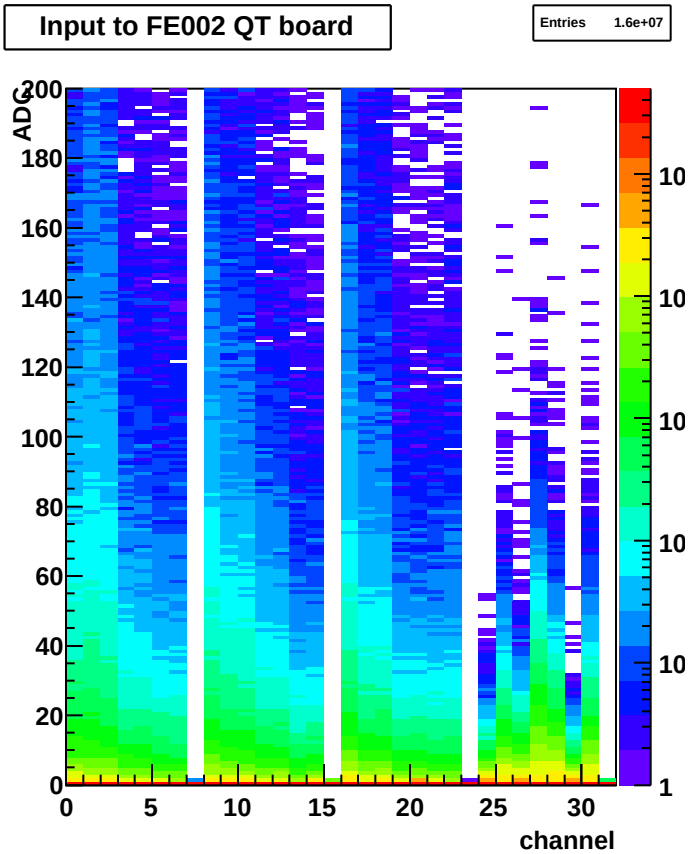

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

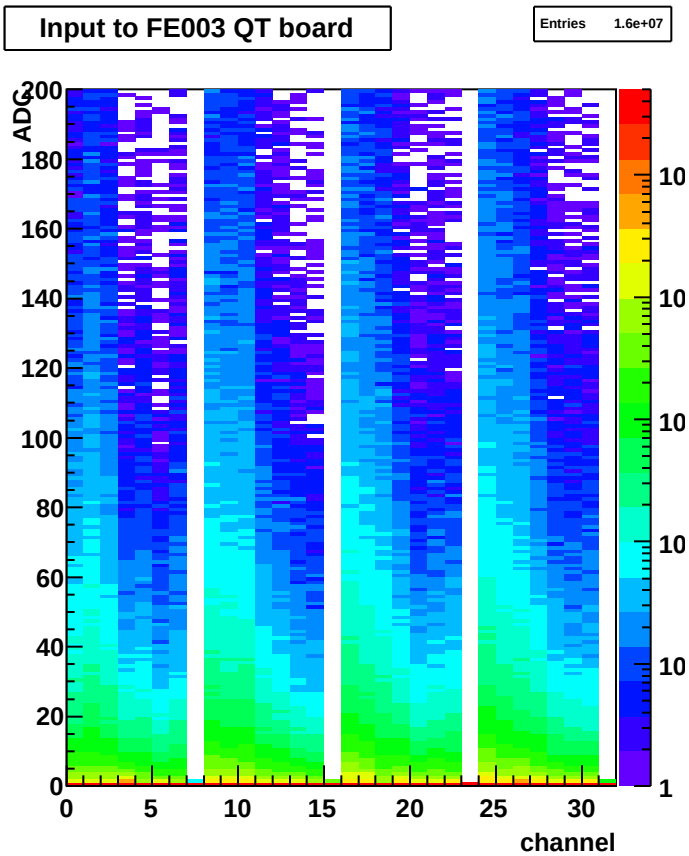

Input to FPD L3 DSM
Entries 8000000
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

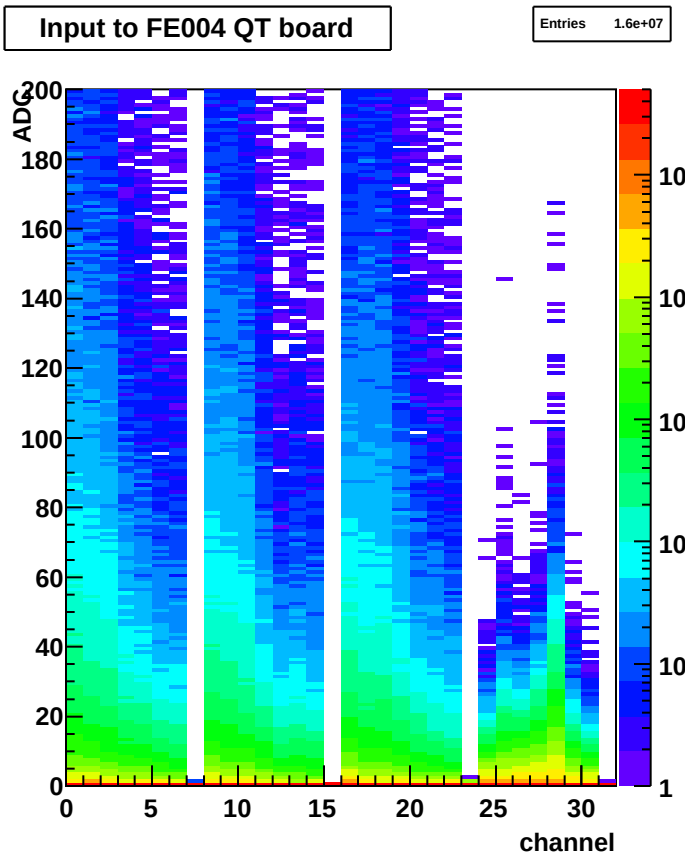

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

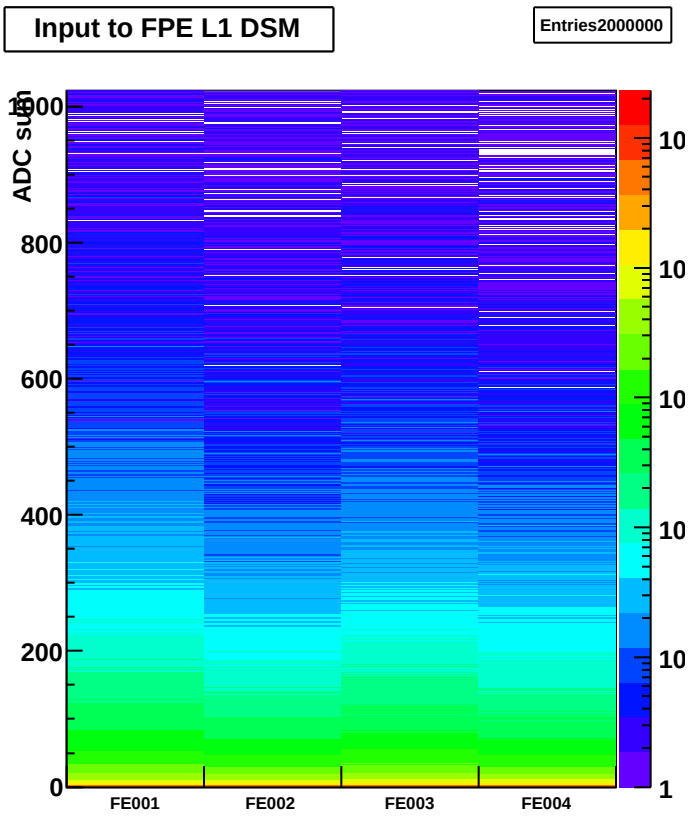

Input to FPD L2 DSM
Entries 1996344
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

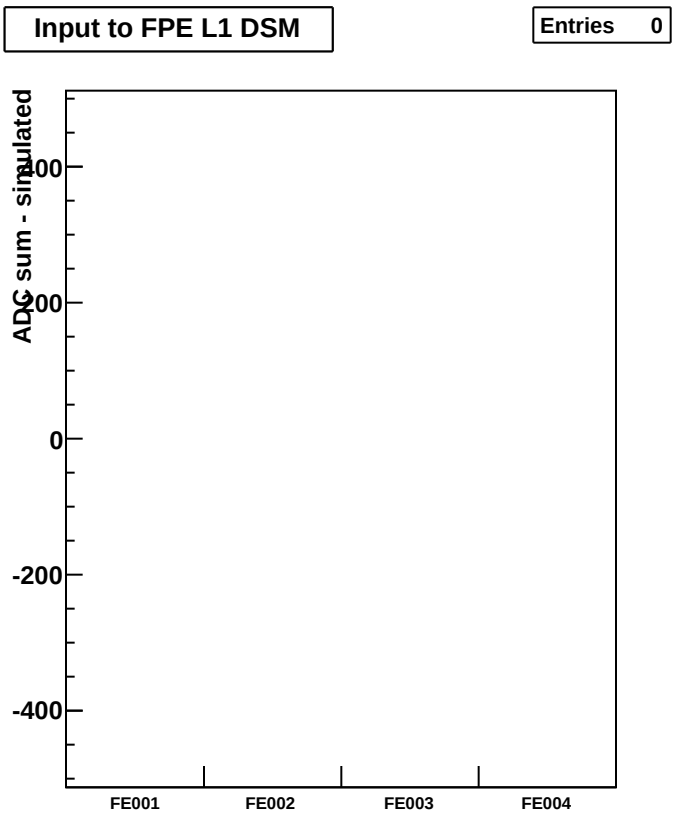

Input to FE001 QT board
Entries 1.6e+07
ADC
channel

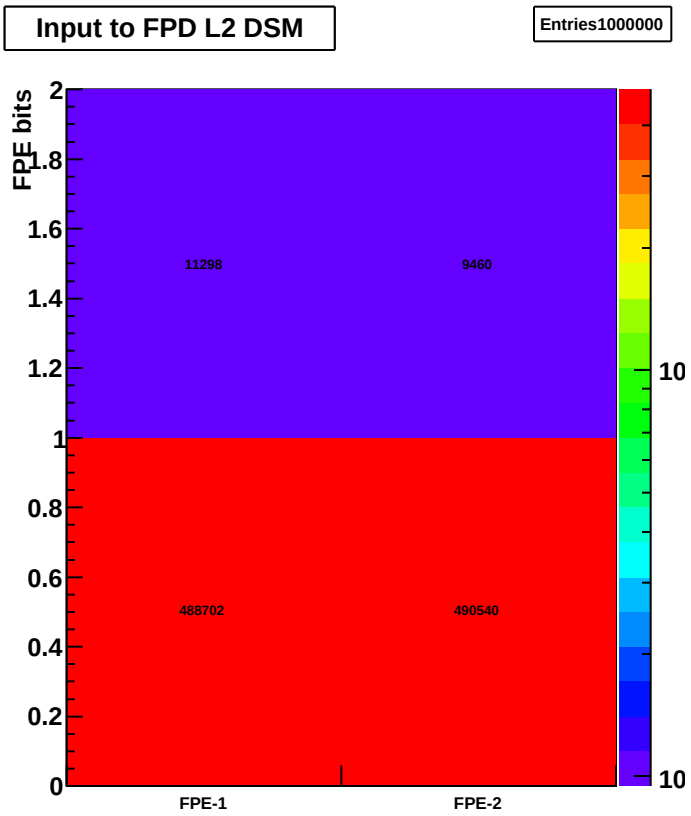

Input to FE002 QT board
Entries 1.6e+07
ADC
channel

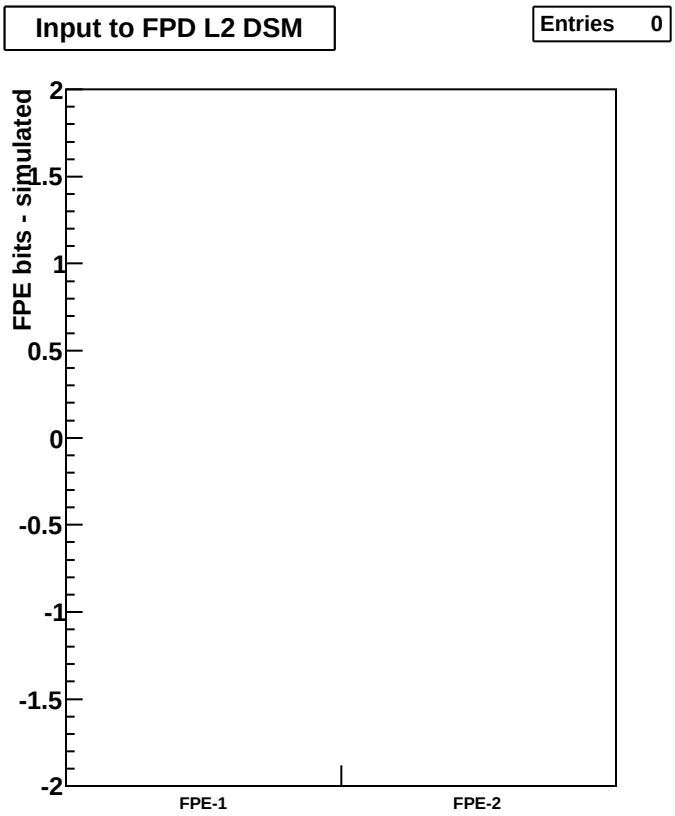

Input to FE003 QT board
Entries 1.6e+07
ADC
channel


Input to FE004 QT board
Entries 1.6e+07
ADC
channel


Input to FPE L1 DSM
Entries2000000
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
Entries1000000
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
11298
9460
488702
490540
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