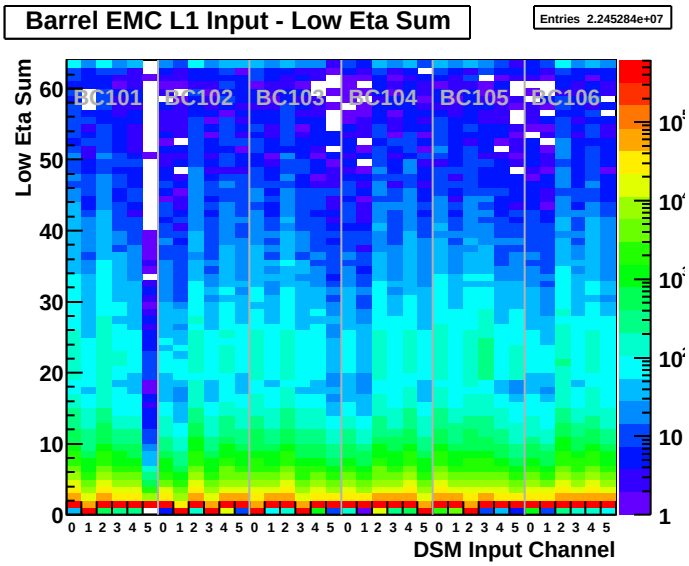
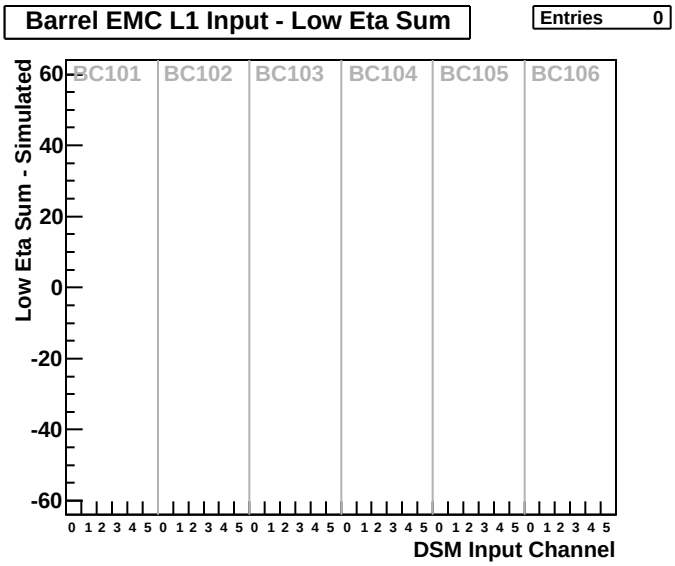
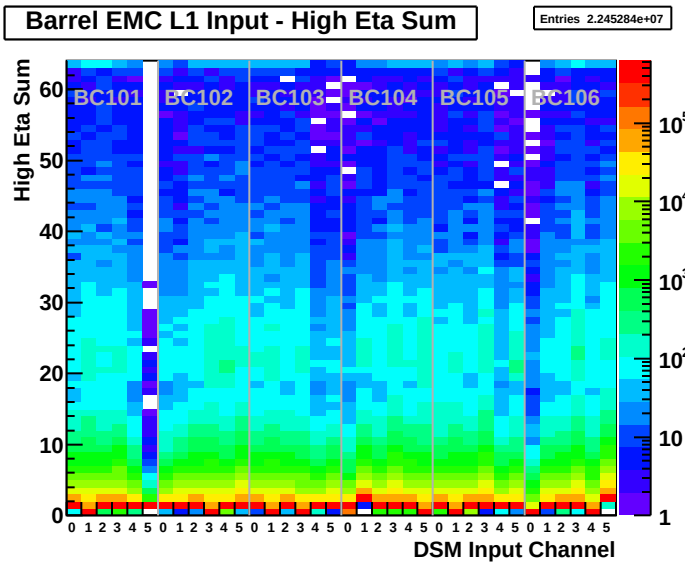
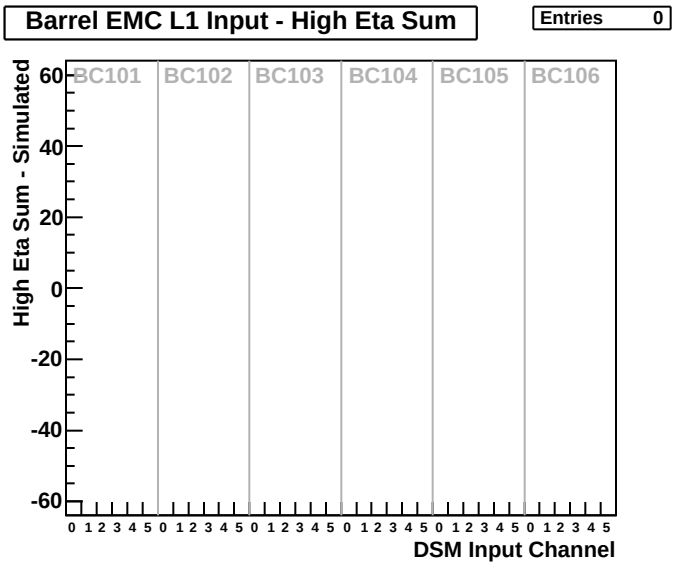
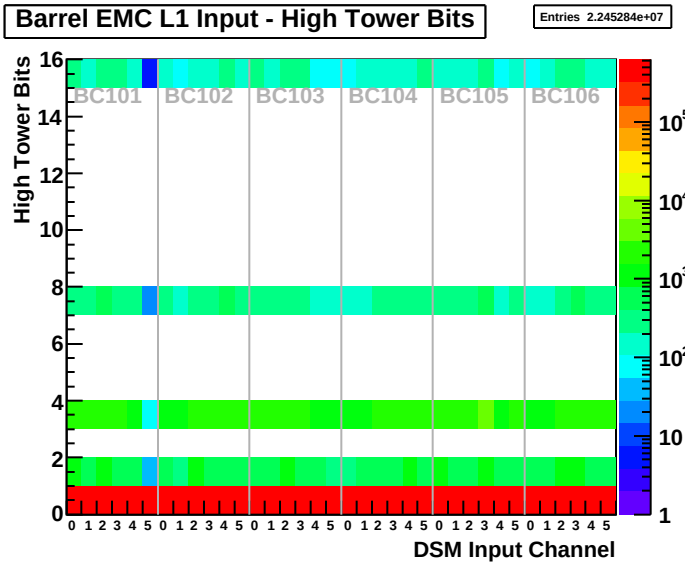
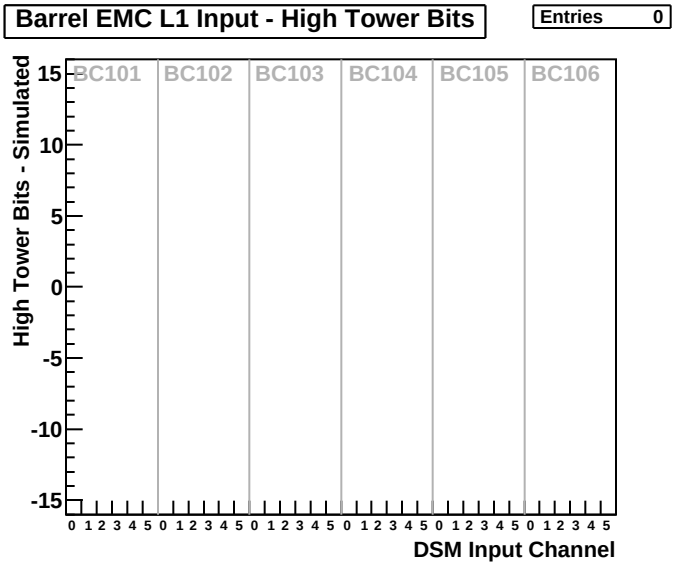

Barrel EMC L1 Input - Low Eta Sum
Entries 2.245284e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

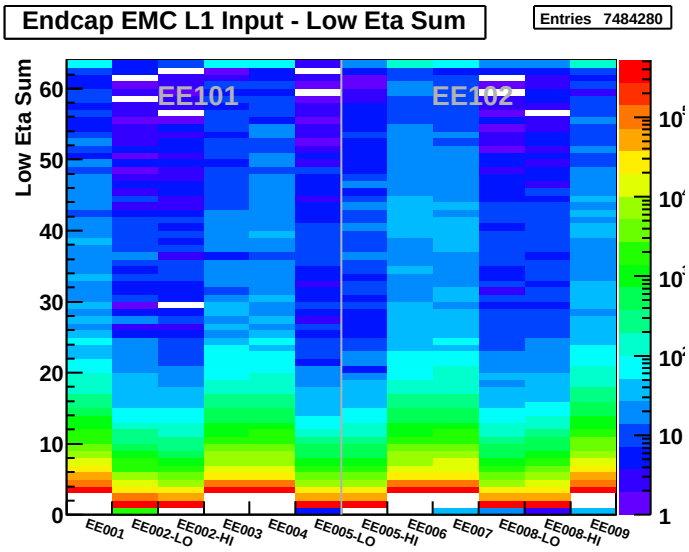

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

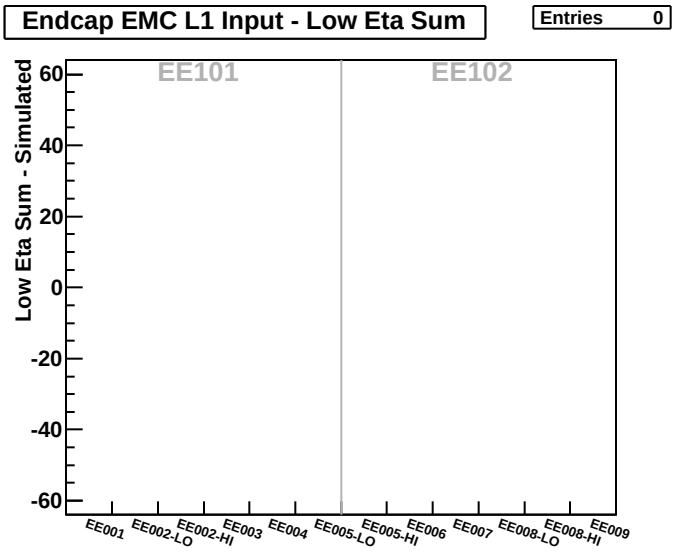

Barrel EMC L1 Input - High Eta Sum
Entries 2.245284e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

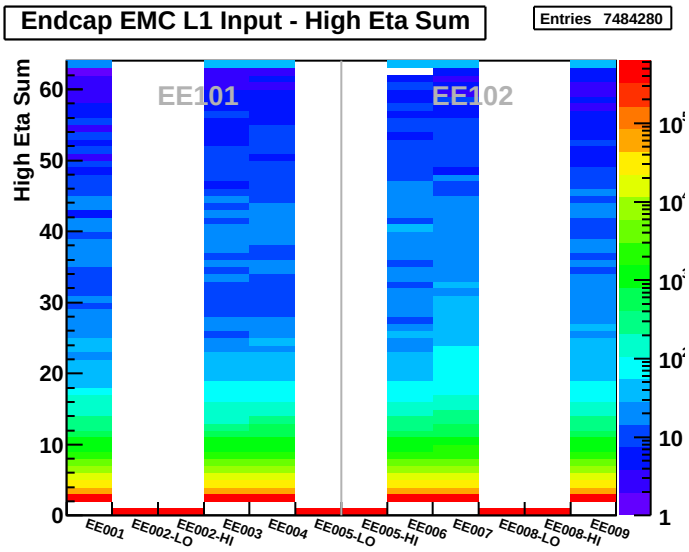

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

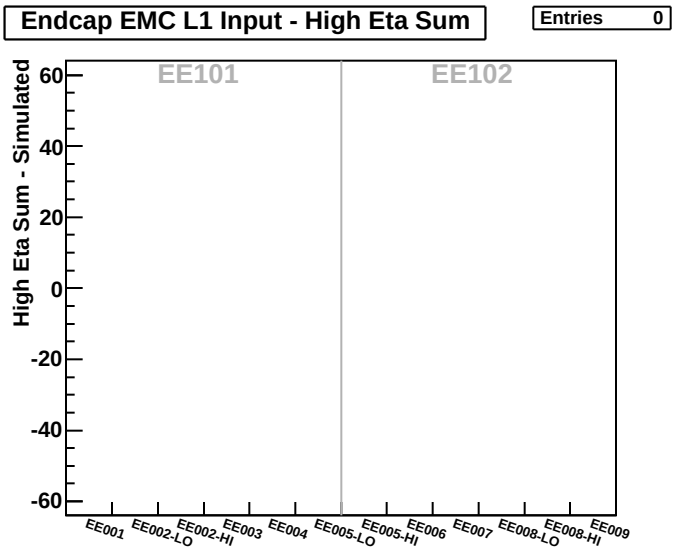

Barrel EMC L1 Input - High Tower Bits
Entries 2.245284e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

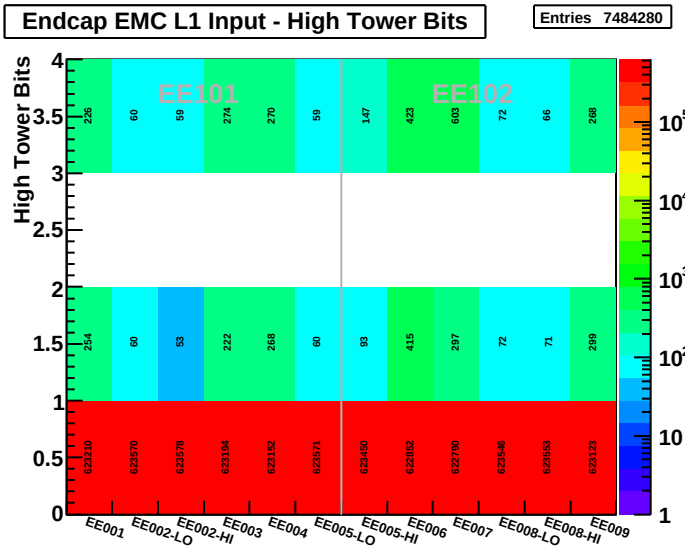

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

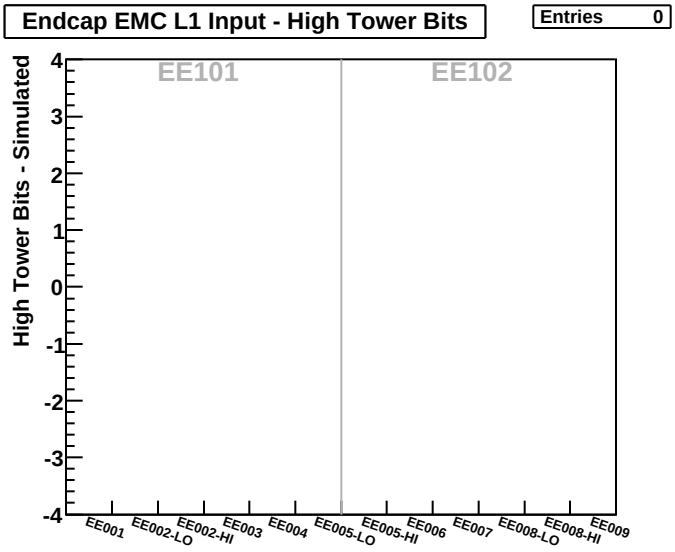

Endcap EMC L1 Input - Low Eta Sum
Entries 7484280
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

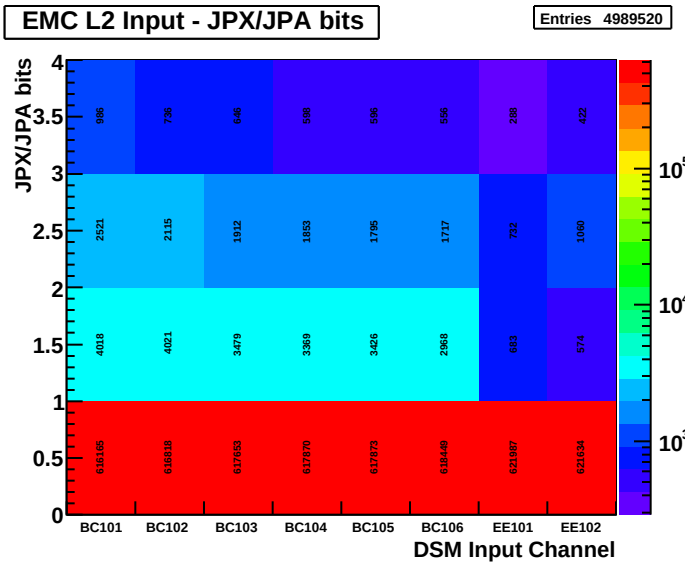

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

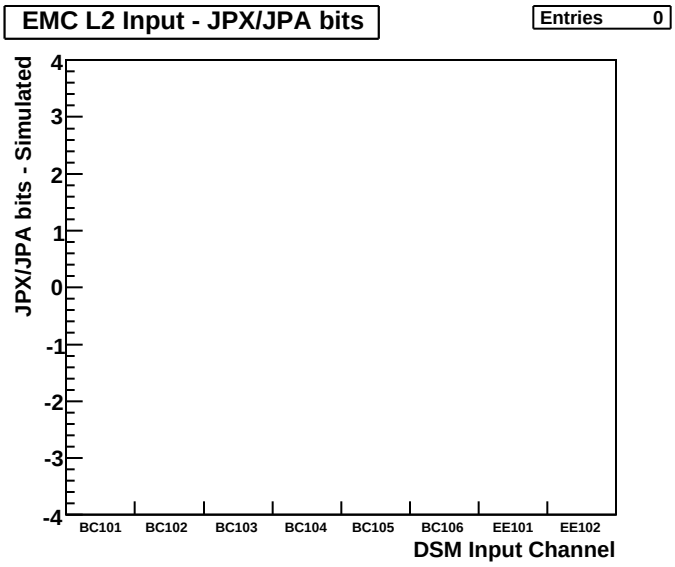

Endcap EMC L1 Input - High Eta Sum
Entries 7484280
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

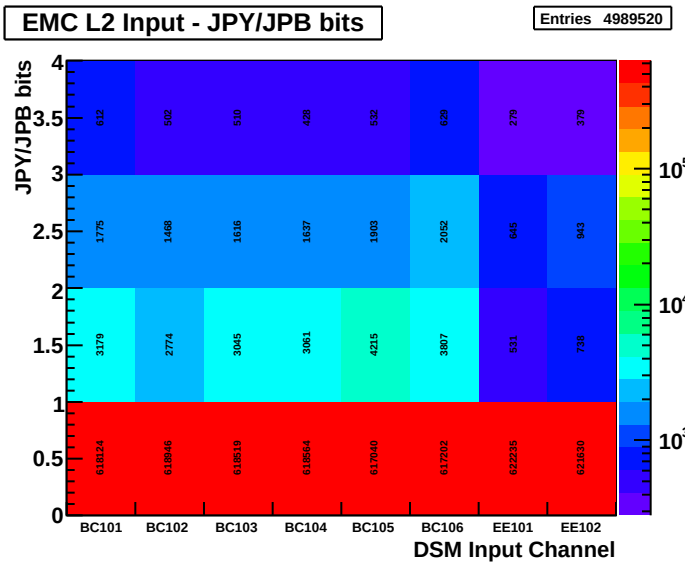

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

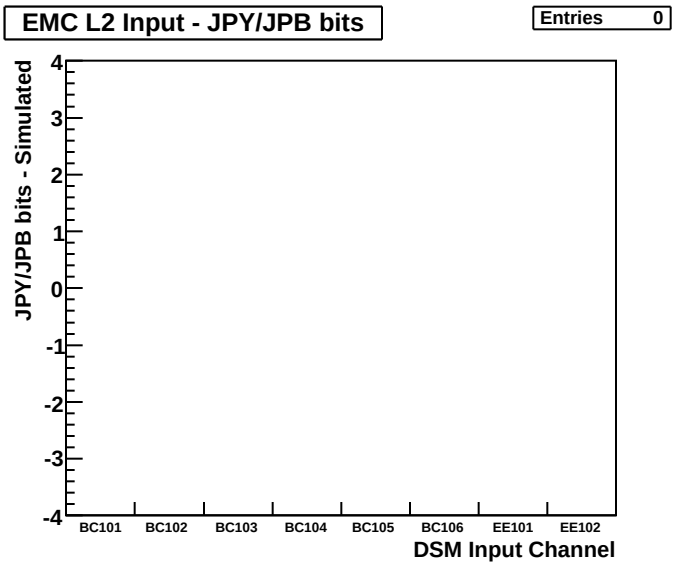

Endcap EMC L1 Input - High Tower Bits
Entries 7484280
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

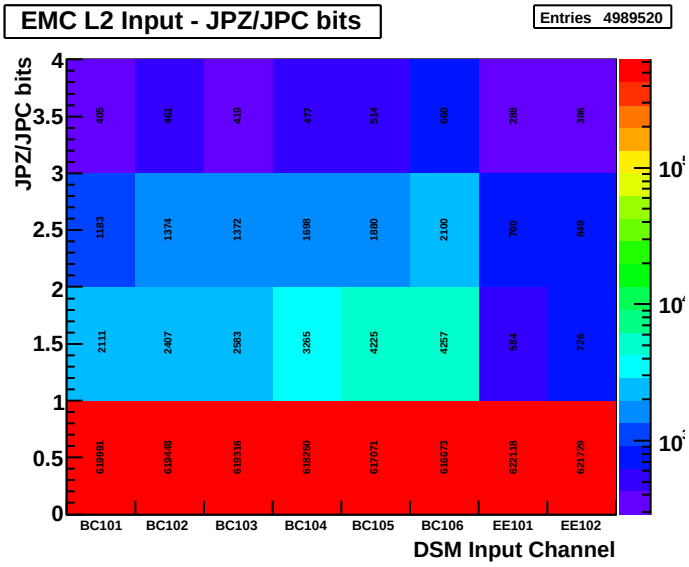

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

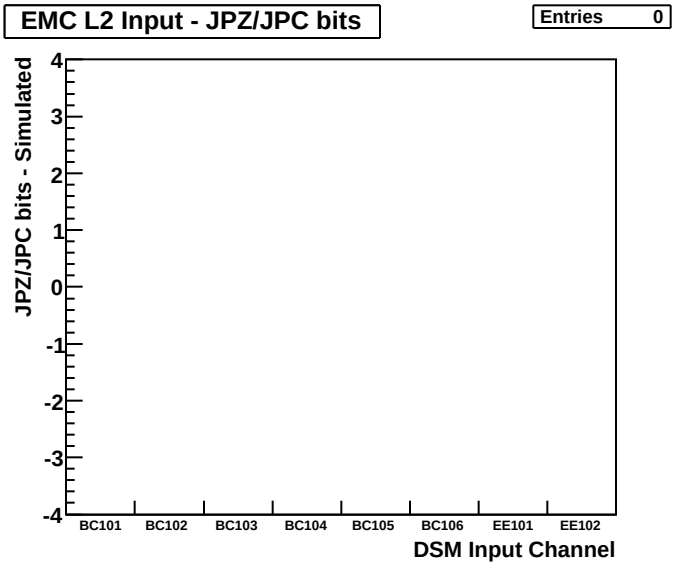

EMC L2 Input - JPX/JPA bits
Entries 4989520
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
986 736 646 598 596 556 288 422
2521 2115 1912 1853 1795 1717 732 1060
4018 4021 3479 3369 3426 2968 683 574
616165 616818 617653 617870 617873 618449 621987 621634

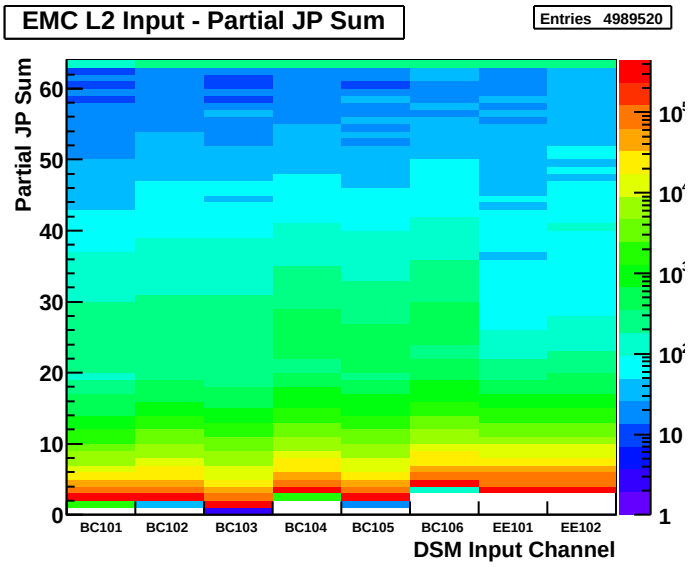

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

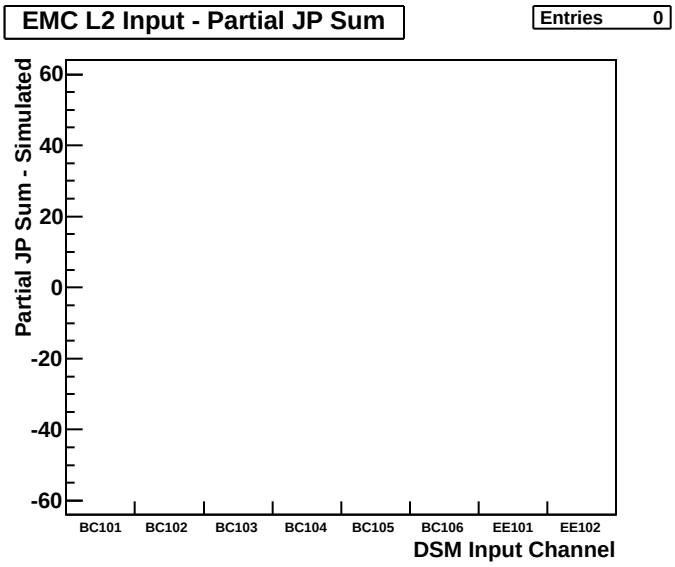

EMC L2 Input - JPY/JPB bits
Entries 4989520
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
612 502 510 428 532 629 279 379
1775 1468 1616 1637 1903 2052 645 943
3179 2774 3045 3061 4215 3807 531 738
616124 616946 618519 618564 617040 617202 622235 621630

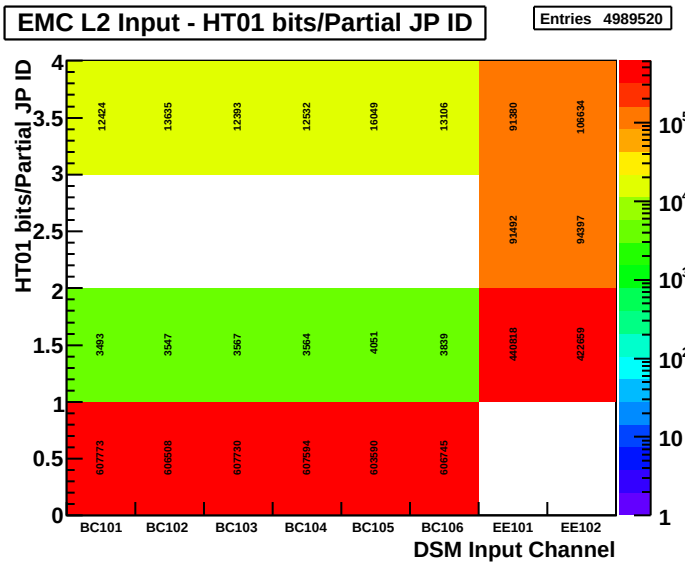

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

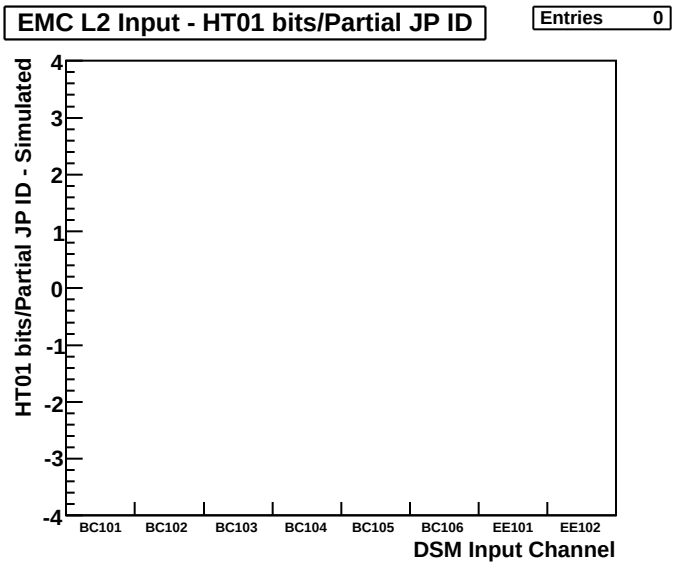

EMC L2 Input - JPZ/JPC bits
Entries 4989520
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
405 461 419 477 514 660 288 386
1183 1374 1372 1698 1880 2100 700 849
2111 2407 2583 3265 4225 4257 584 726
619991 619448 619316 618250 617071 616673 622118 621729

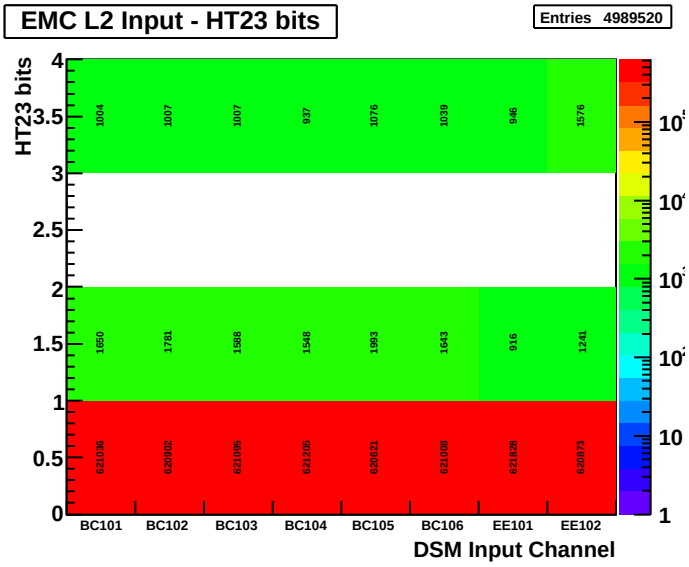

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

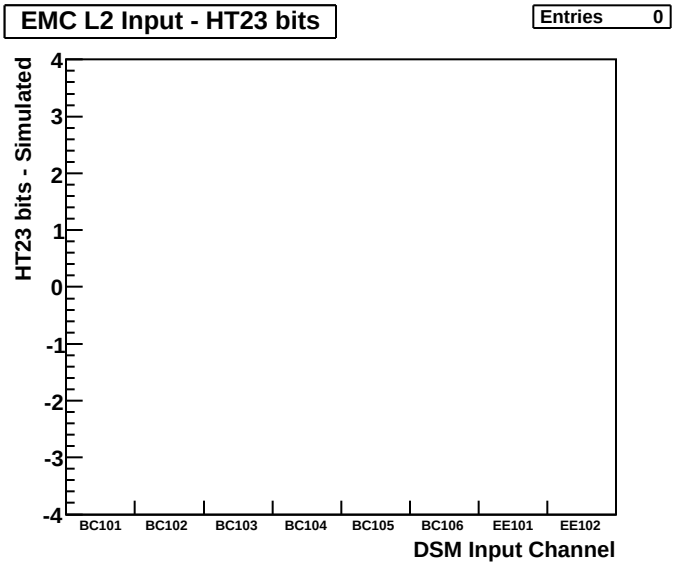

EMC L2 Input - Partial JP Sum
Entries 4989520
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

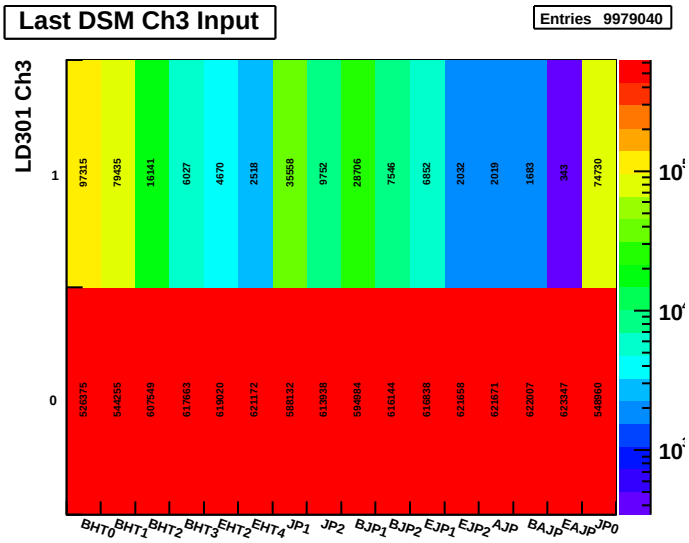

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

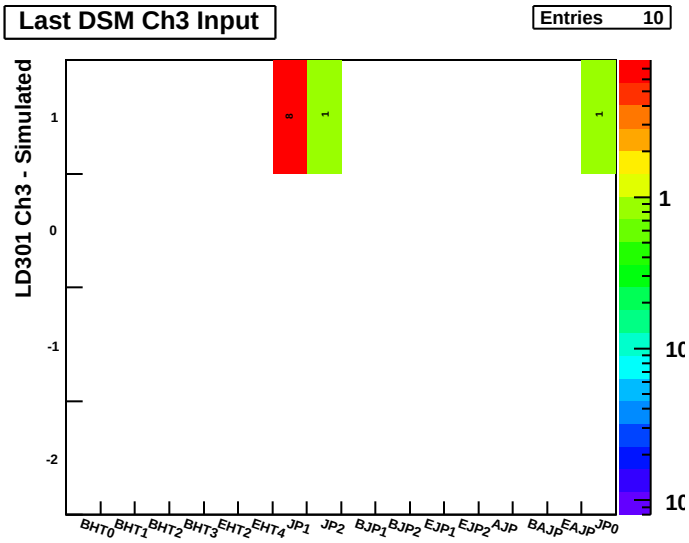

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4989520
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

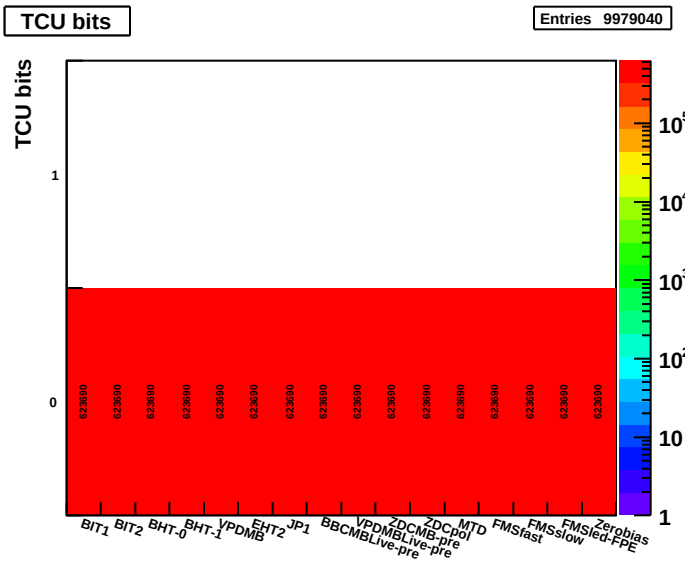

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

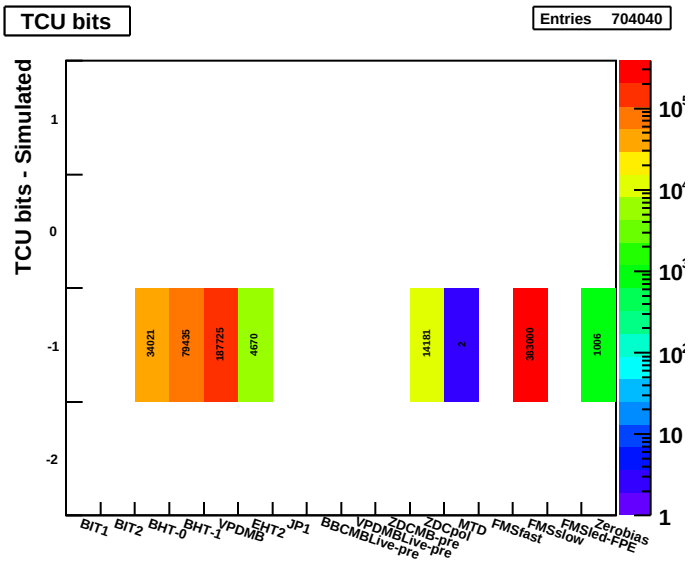

EMC L2 Input - HT23 bits
Entries 4989520
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

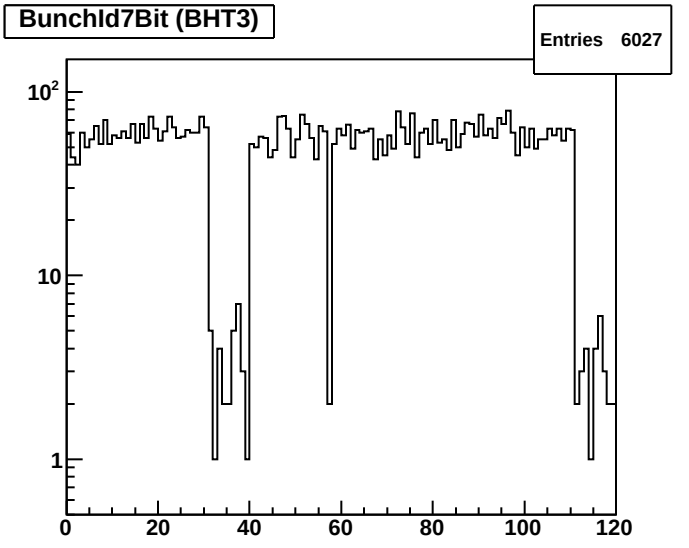

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

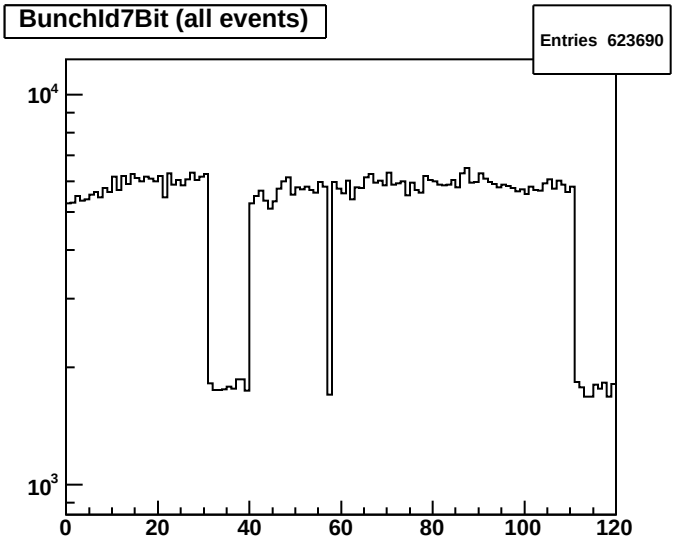

Last DSM Ch3 Input
Entries 9979040
LD301 Ch3
97315 79435 16141 6027 4670 2518 35558 9752 28706 7546 6852 2032 2019 1683 343 74730
526375 544255 607549 617663 619020 621172 598132 613938 594984 616144 616838 621658 621671 622107 623347 548960
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

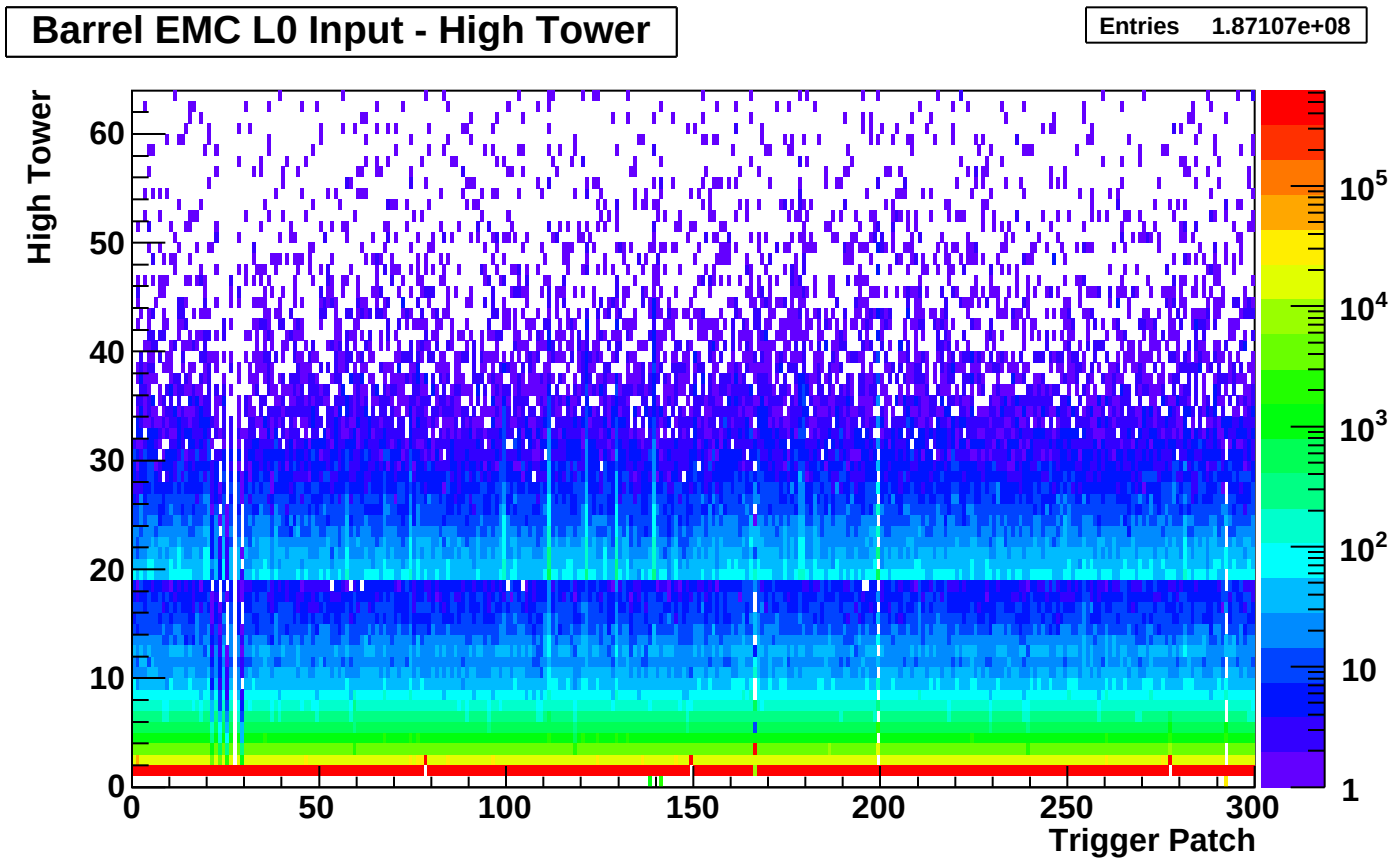

Last DSM Ch3 Input
Entries 10
LD301 Ch3 - Simulated
8 1 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

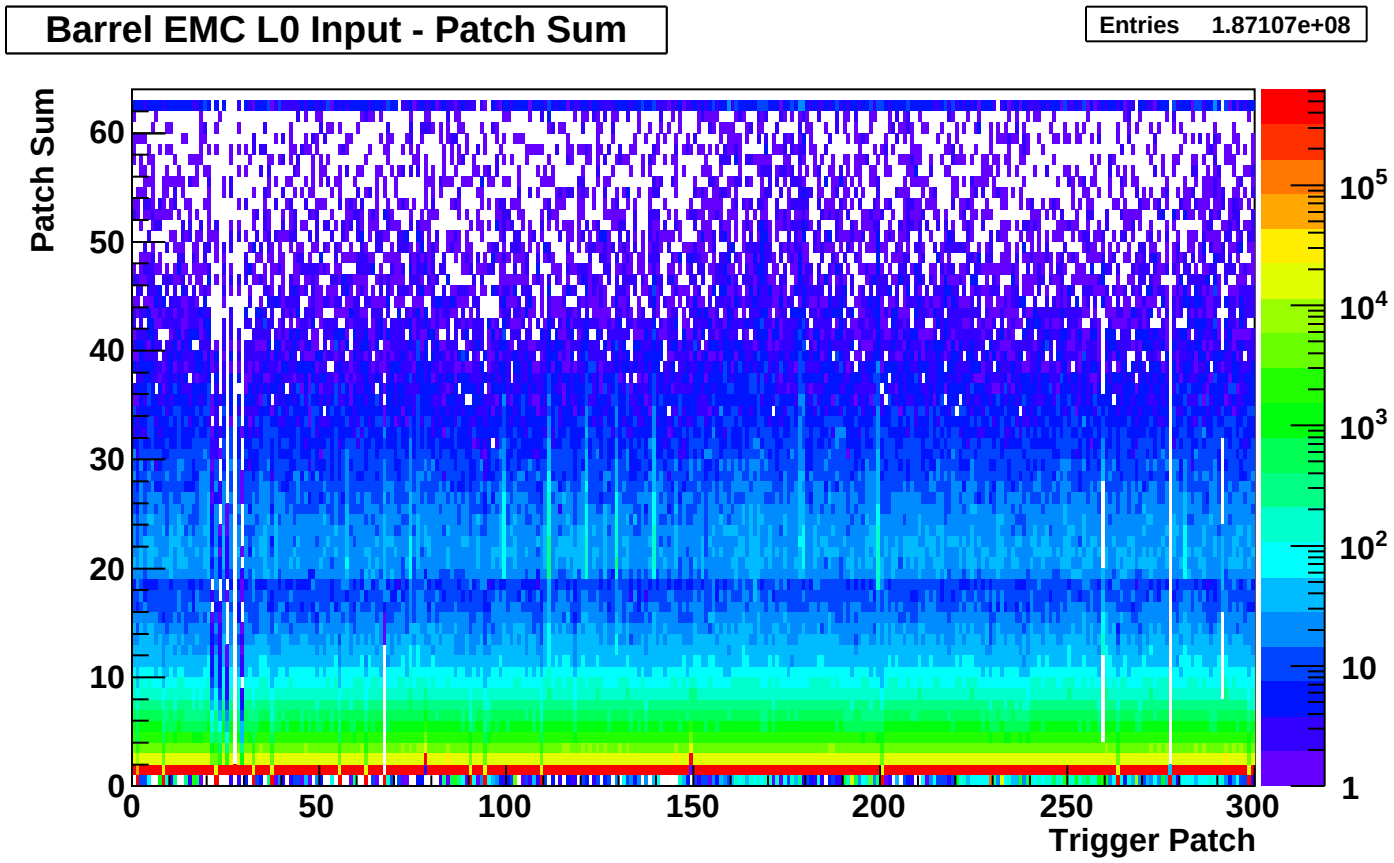

TCU bits
Entries 9979040
TCU bits
623690
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

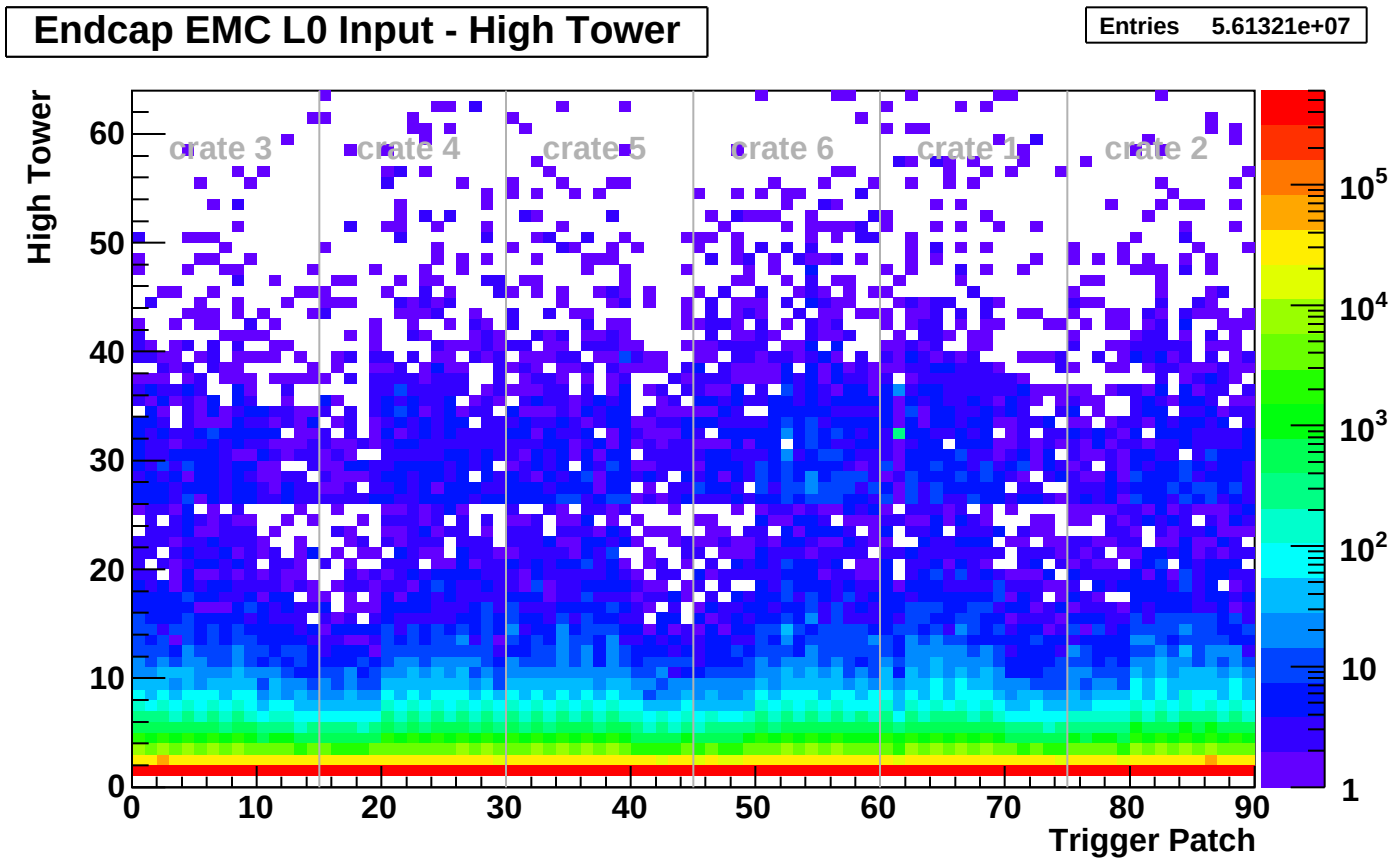

TCU bits
Entries 704040
TCU bits - Simulated
34021 79435 187725 4670 14181 2 383000 1006
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

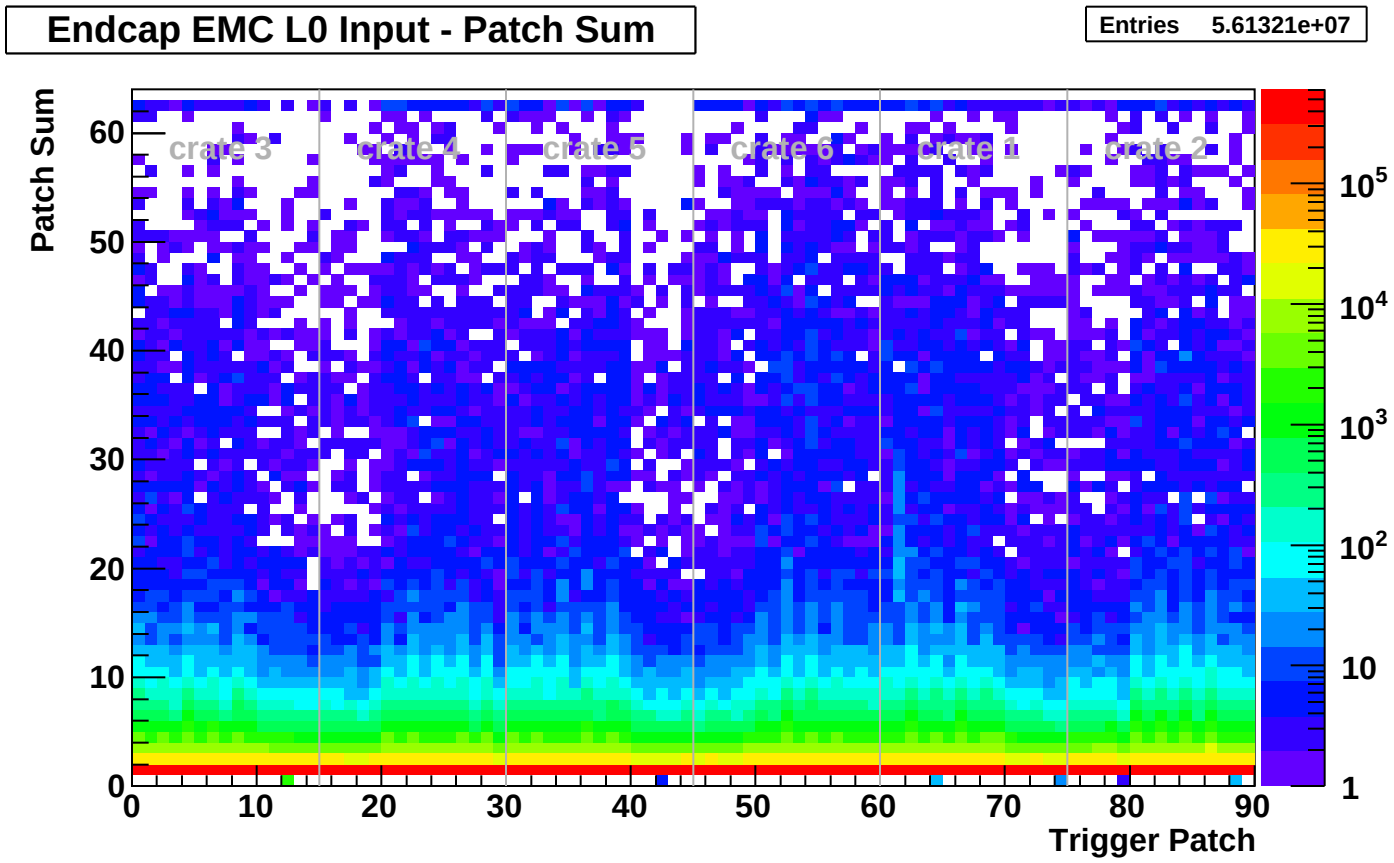

BunchId7Bit (BHT3)
Entries 6027
0 20 40 60 80 100 120

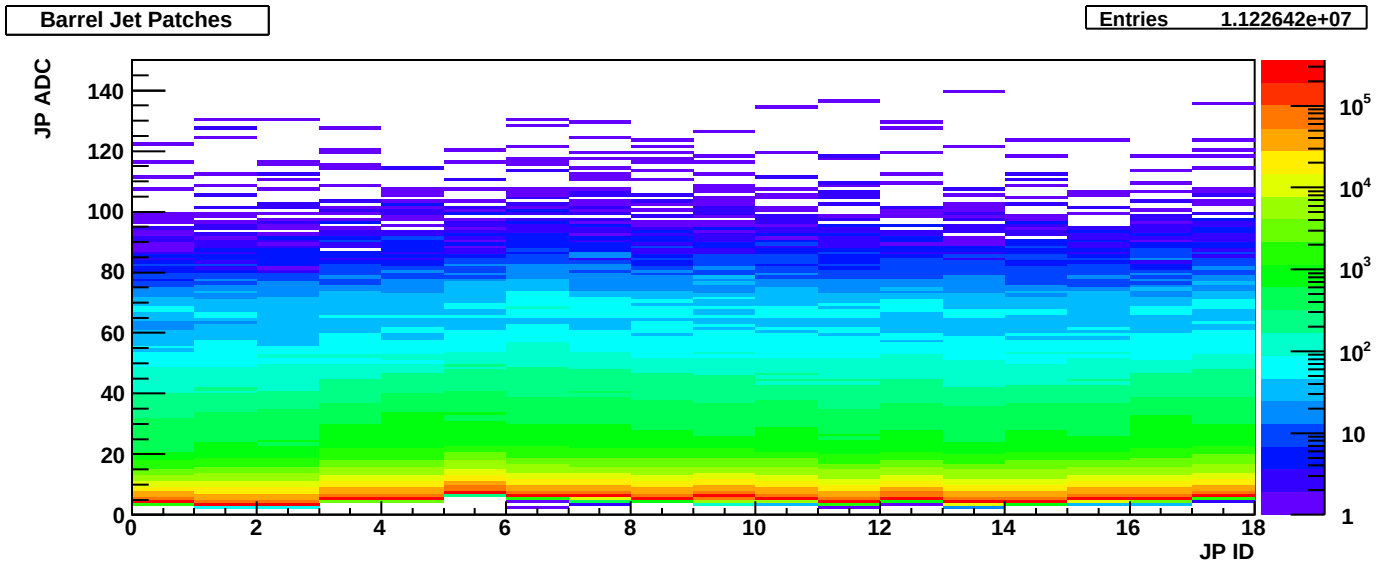

BunchId7Bit (all events)
Entries 623690
0 20 40 60 80 100 120

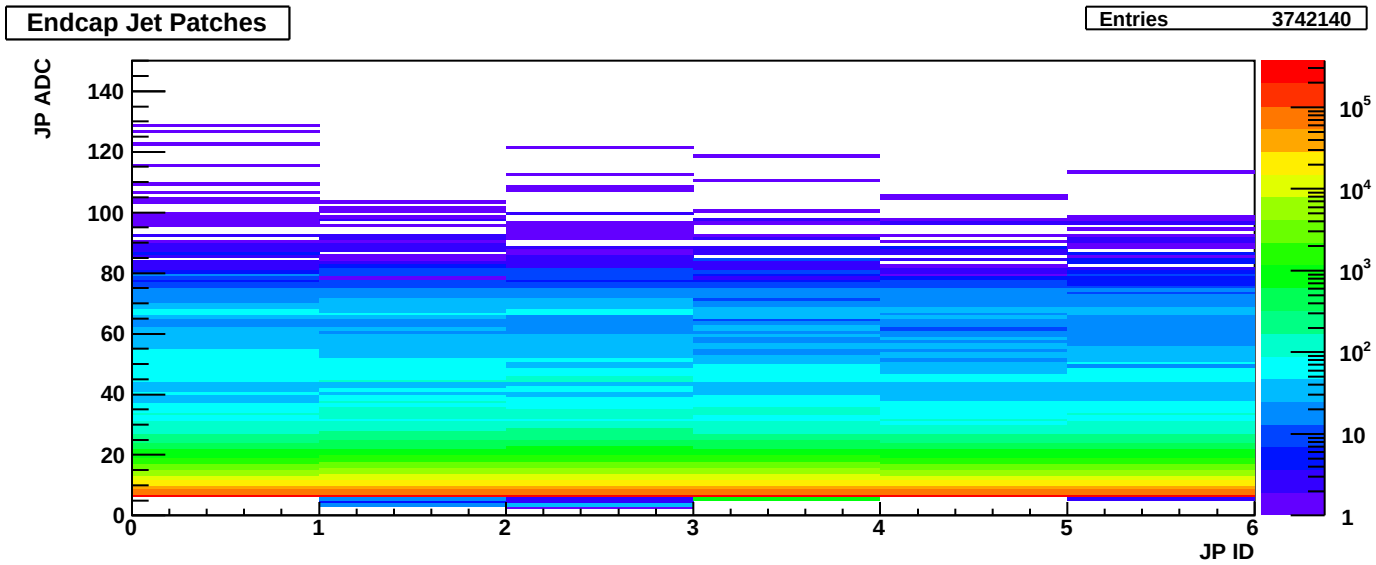

Barrel EMC L0 Input - High Tower
Entries 1.87107e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

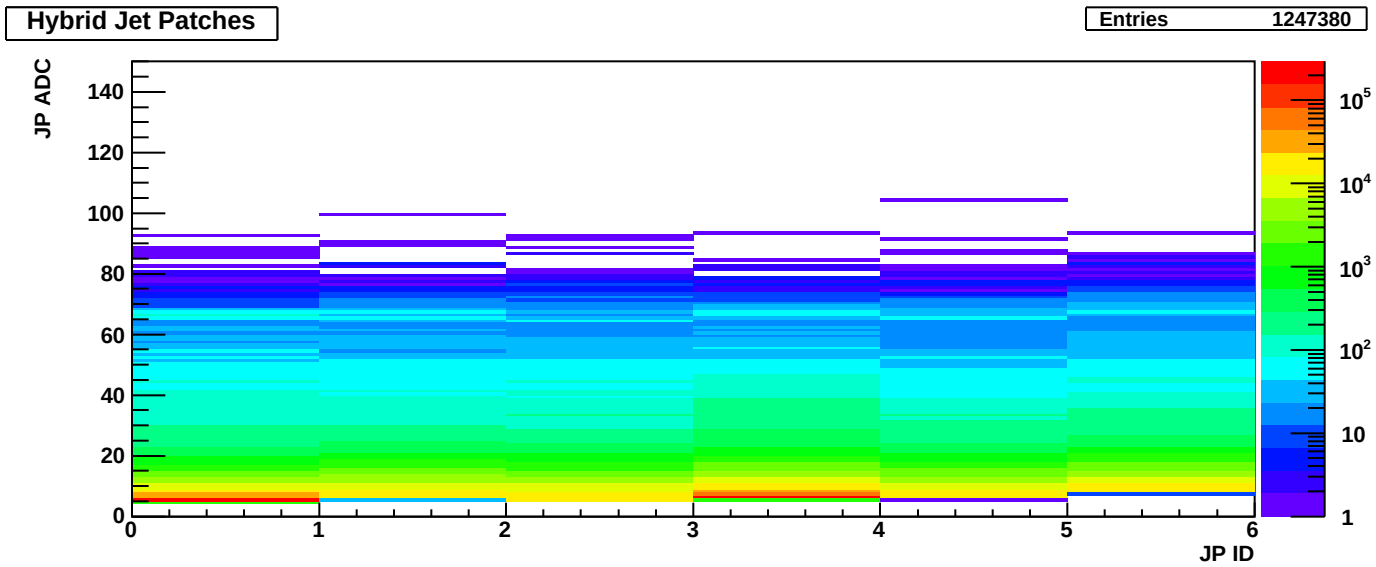

Barrel EMC L0 Input - Patch Sum
Entries 1.87107e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

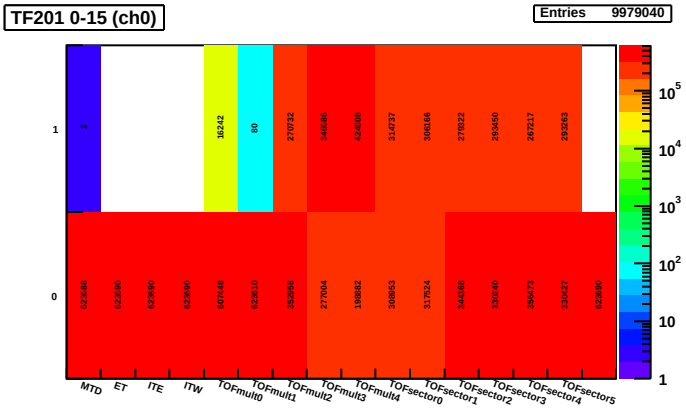

Endcap EMC L0 Input - High Tower
Entries 5.61321e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

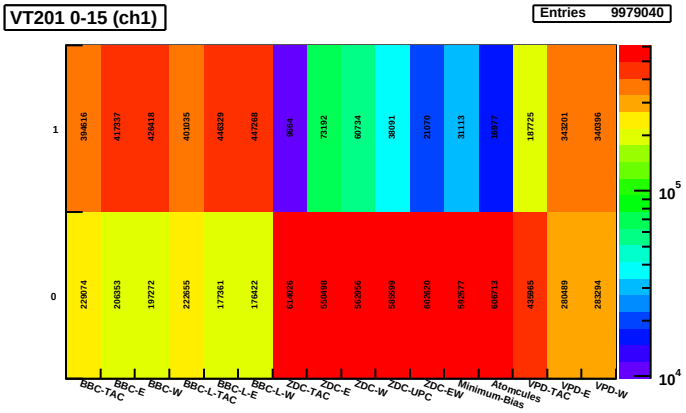

Endcap EMC L0 Input - Patch Sum
Entries 5.61321e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

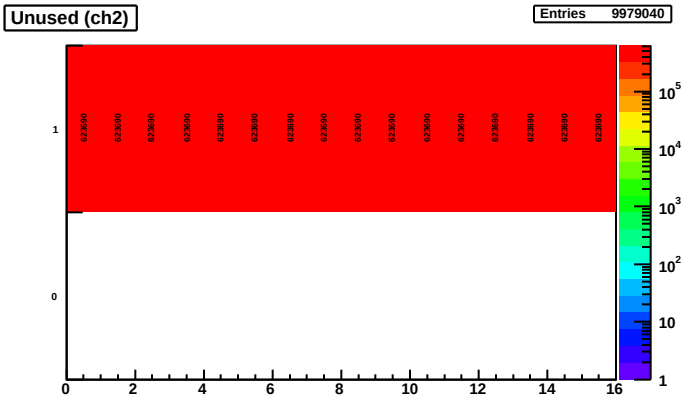

Barrel Jet Patches
Entries 1.122642e+07
JP ADC
JP ID

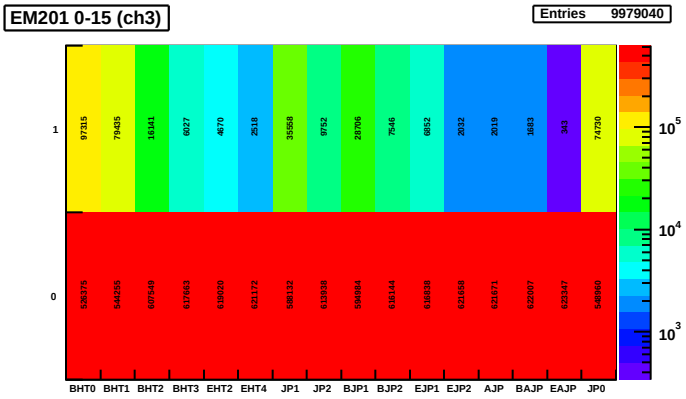

Endcap Jet Patches
Entries 3742140
JP ADC
JP ID

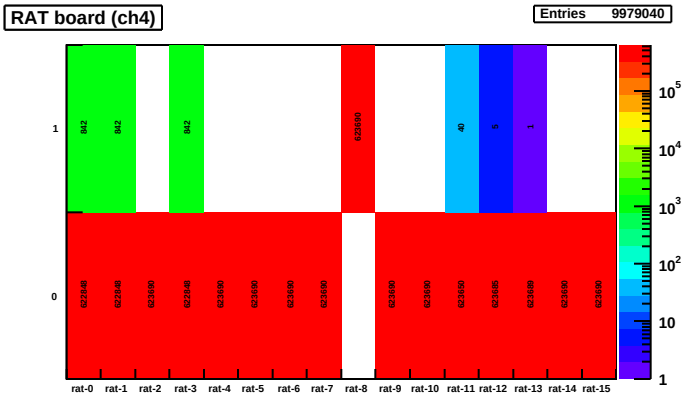

Hybrid Jet Patches
Entries 1247380
JP ADC
JP ID

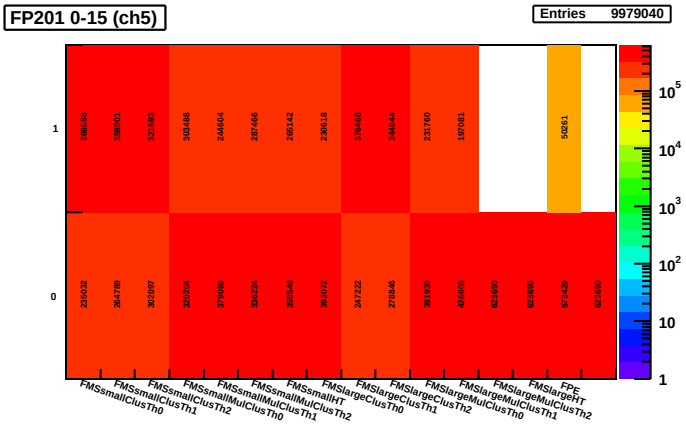

TF201 0-15 (ch0)
Entries 9979040
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

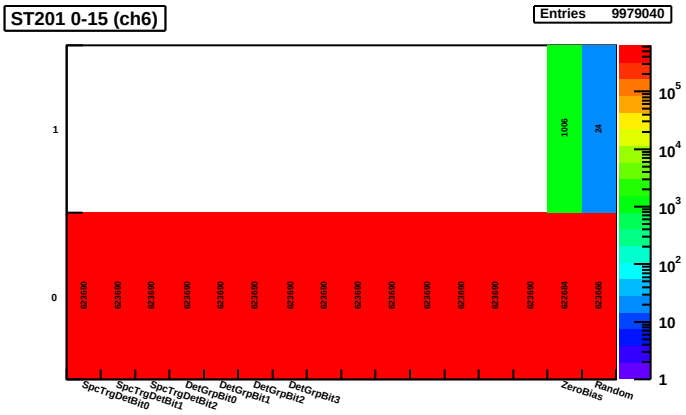

VT201 0-15 (ch1)
Entries 9979040
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

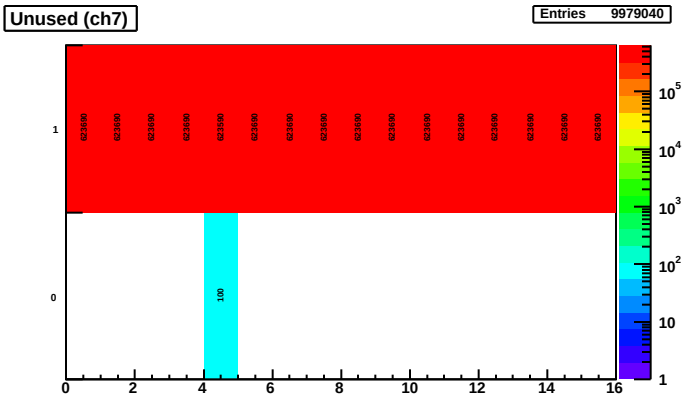

Unused (ch2)
Entries 9979040

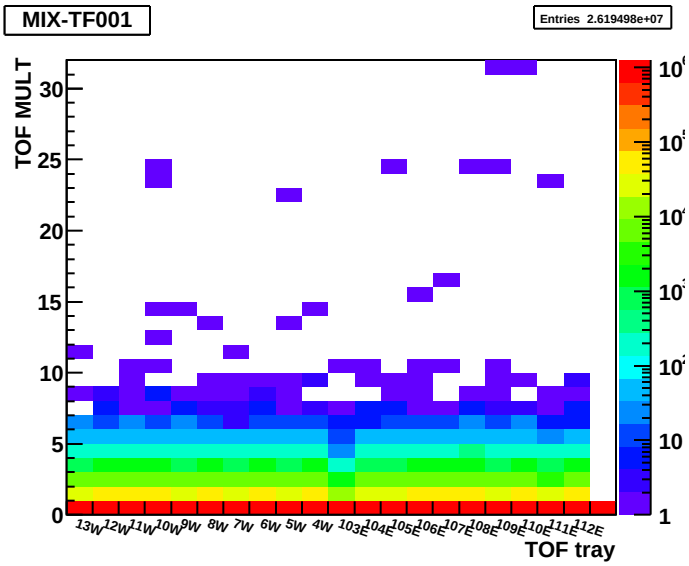

EM201 0-15 (ch3)
Entries 9979040
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

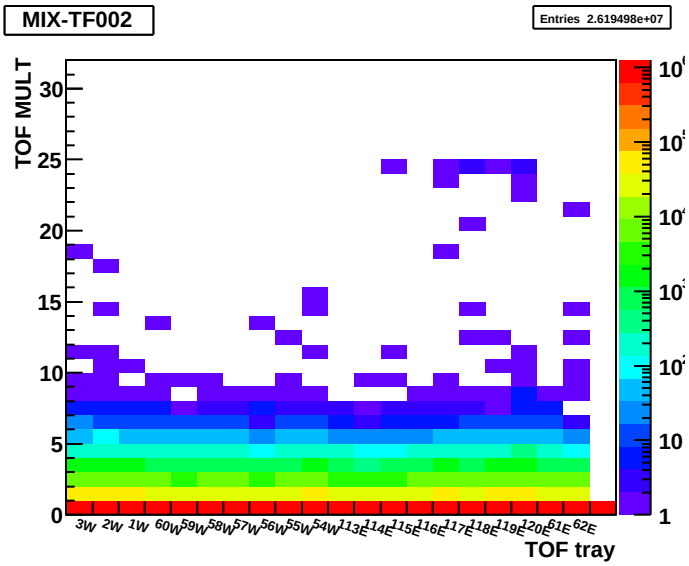

RAT board (ch4)
Entries 9979040
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

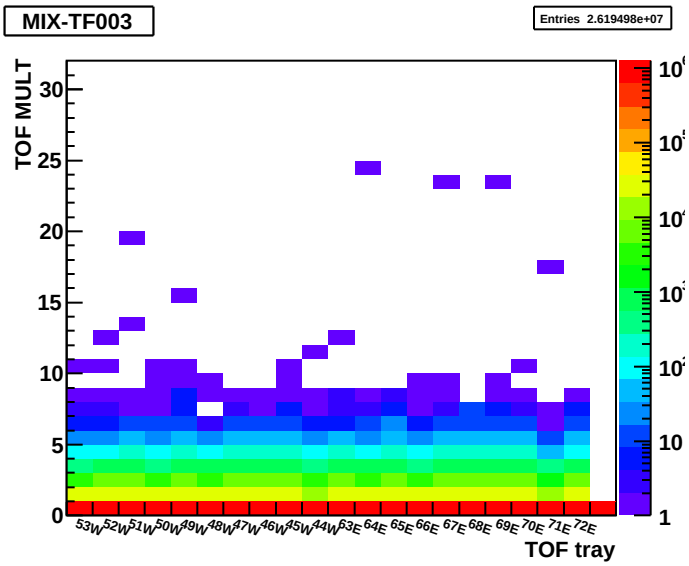

FP201 0-15 (ch5)
Entries 9979040
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

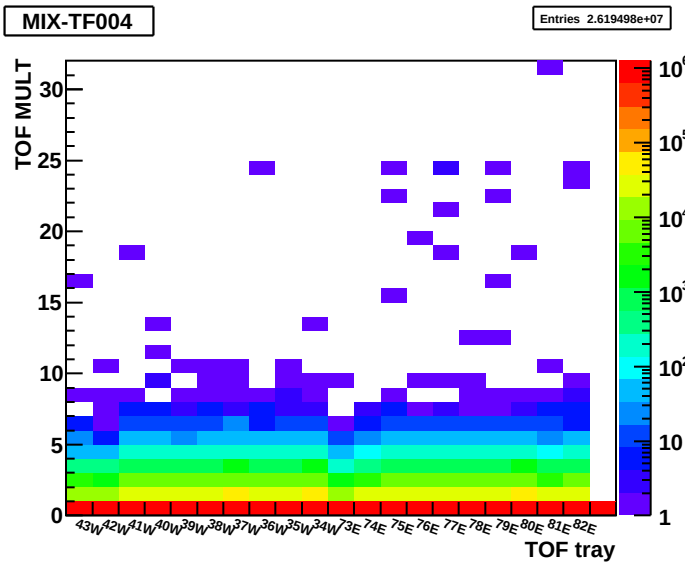

ST201 0-15 (ch6)
Entries 9979040
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

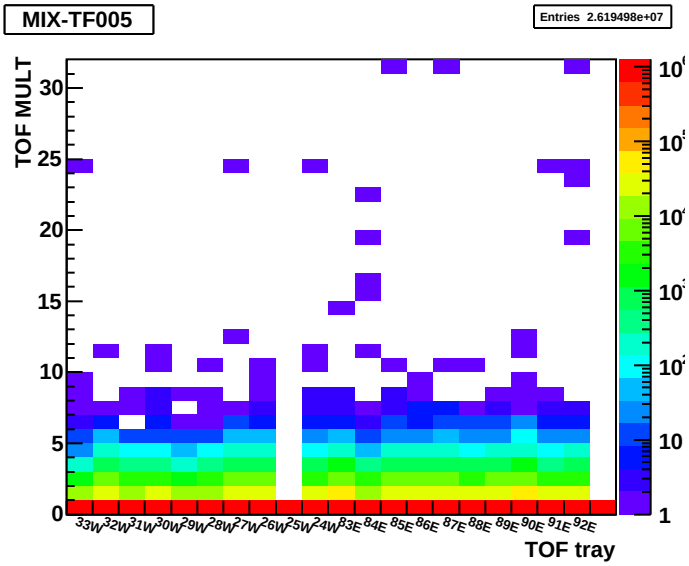

Unused (ch7)
Entries 9979040

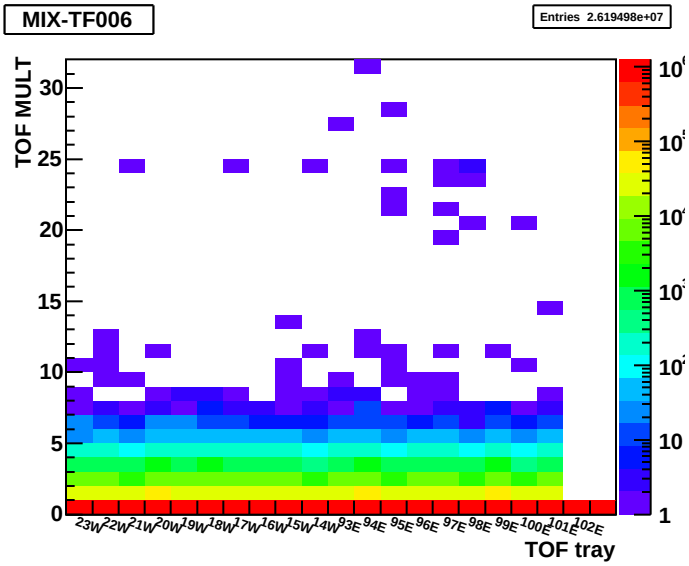

MIX-TF001
Entries 2.619498e+07
TOF MULT
TOF tray

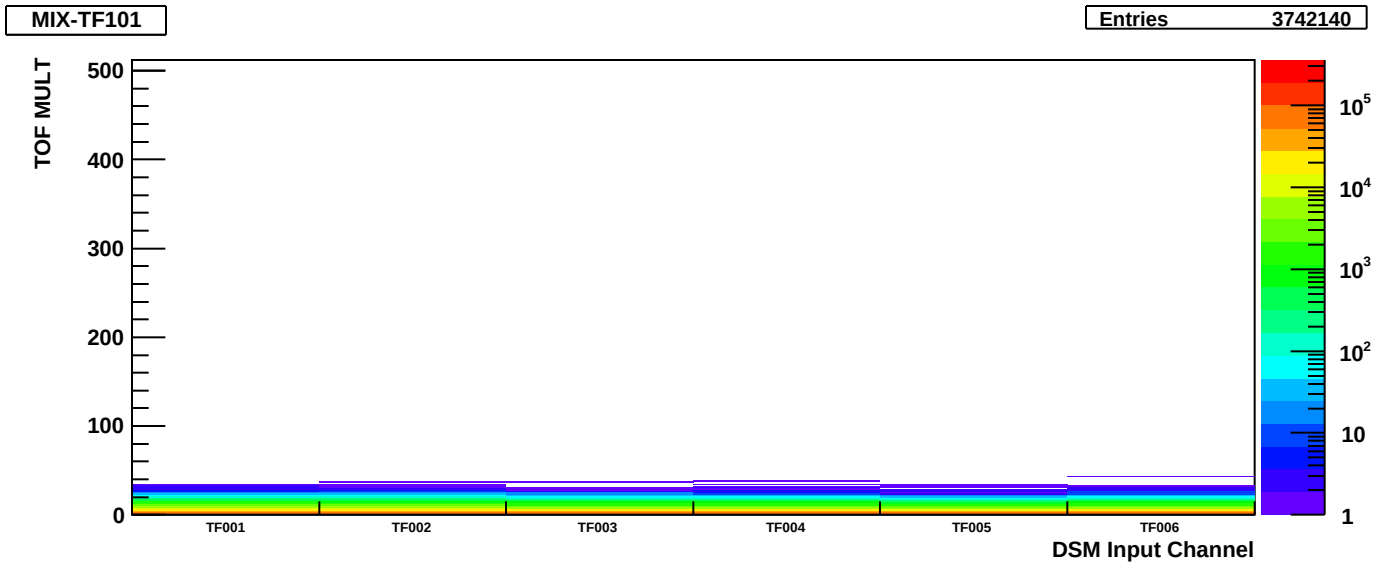

MIX-TF002
Entries 2.619498e+07
TOF MULT
TOF tray

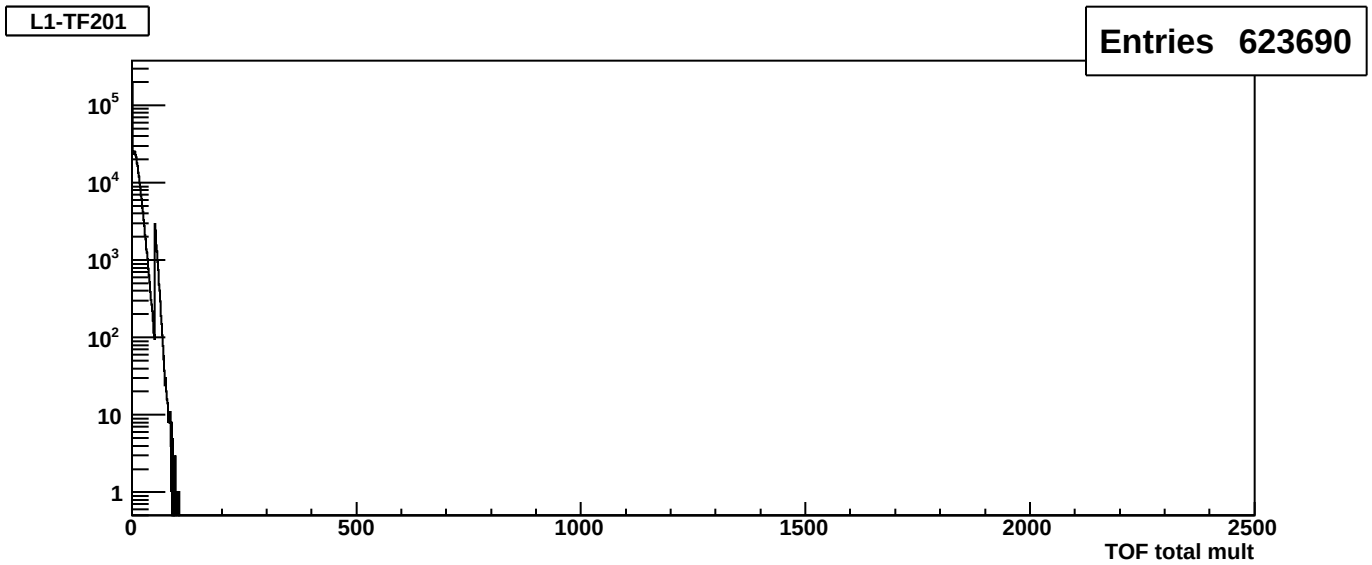

MIX-TF003
Entries 2.619498e+07
TOF MULT
TOF tray

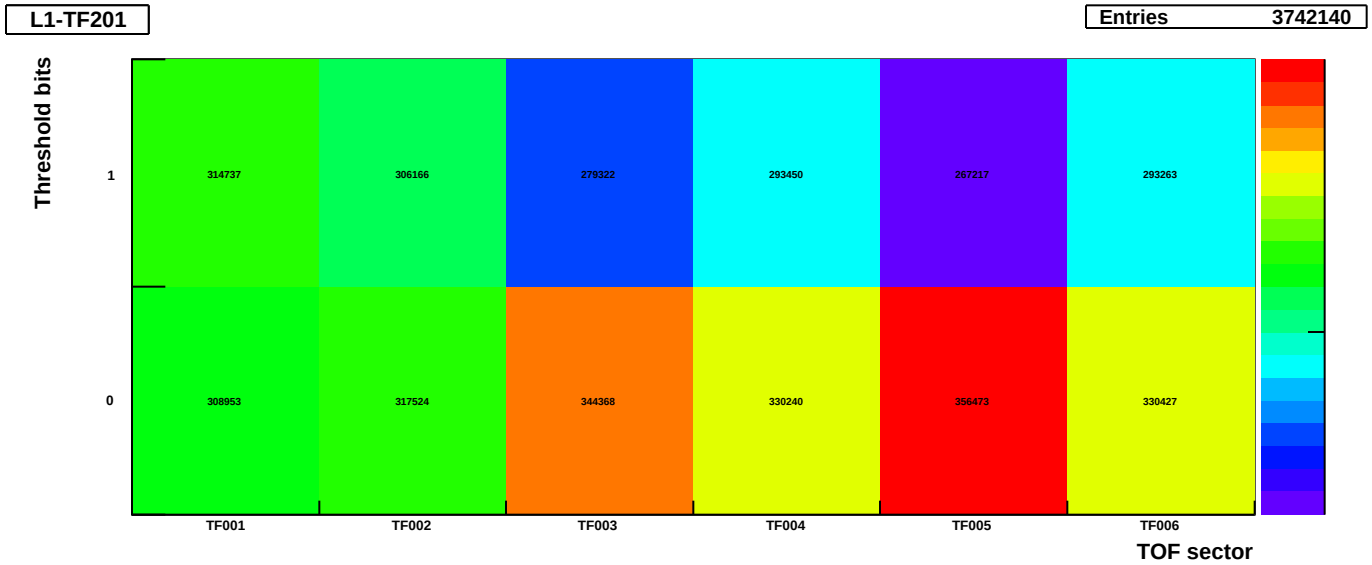

MIX-TF004
Entries 2.619498e+07
TOF MULT
TOF tray

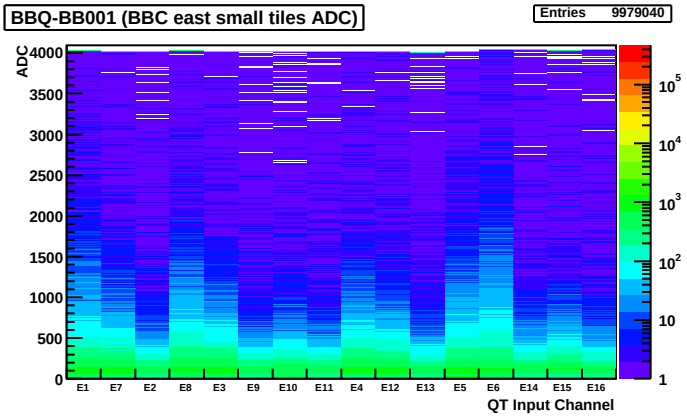

MIX-TF005
Entries 2.619498e+07
TOF MULT
TOF tray

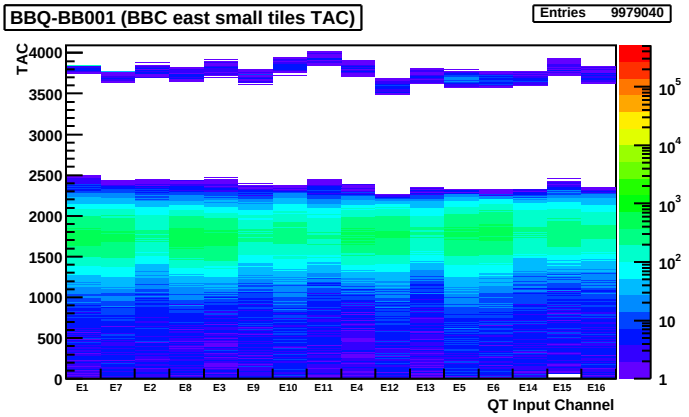

MIX-TF006
Entries 2.619498e+07
TOF MULT
TOF tray

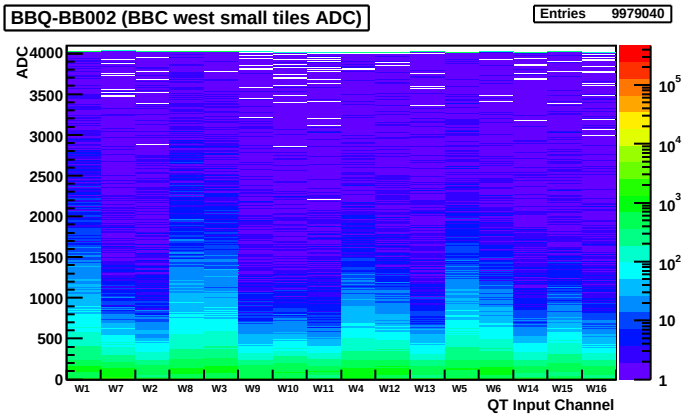

MIX-TF101
Entries 3742140
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

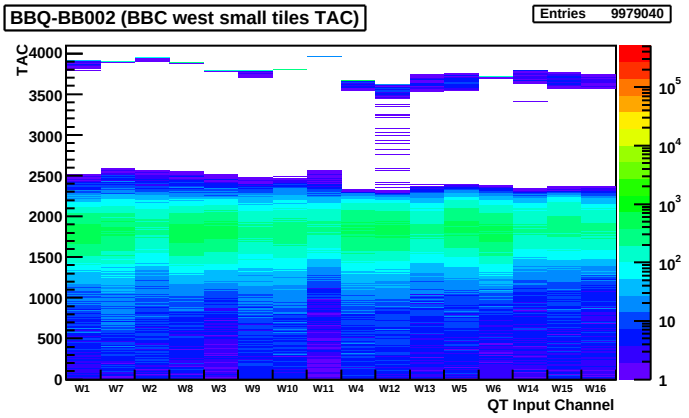

L1-TF201
Entries 623690
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

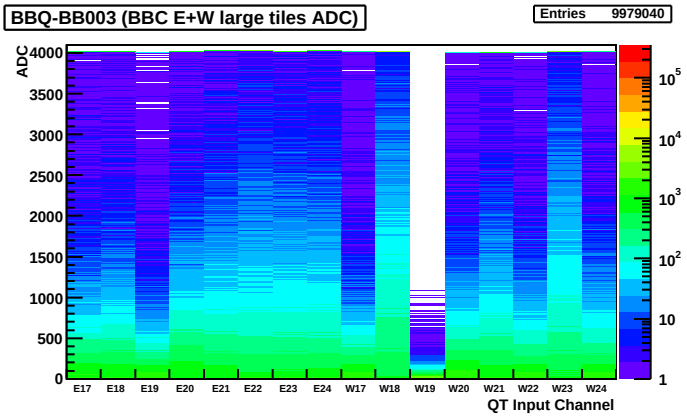

L1-TF201
Entries 3742140
Threshold bits
1
0
314737
306166
279322
293450
267217
293263
308953
317524
344368
330240
356473
330427
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

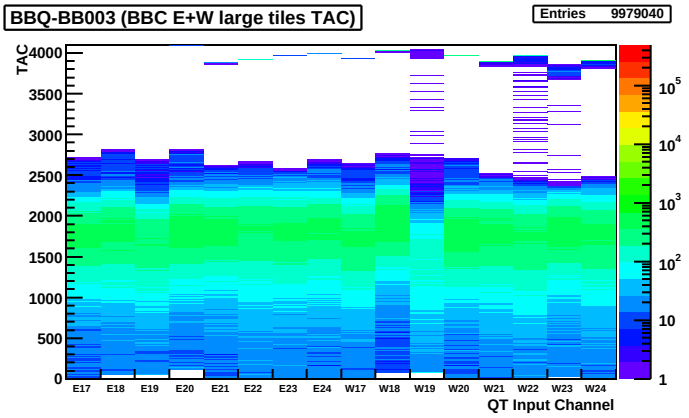

BBQ-BB001 (BBC east small tiles ADC)
Entries 9979040
ADC
QT Input Channel

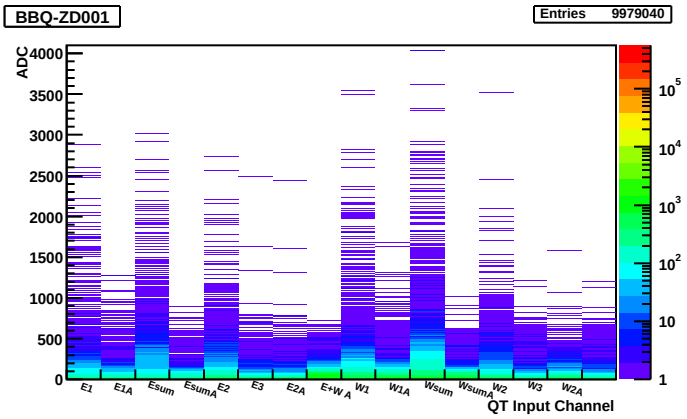

BBQ-BB001 (BBC east small tiles TAC)
Entries 9979040
TAC
QT Input Channel

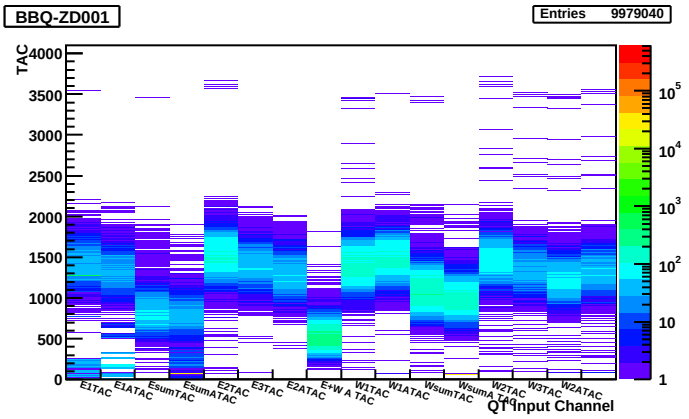

BBQ-BB002 (BBC west small tiles ADC)
Entries 9979040
ADC
QT Input Channel

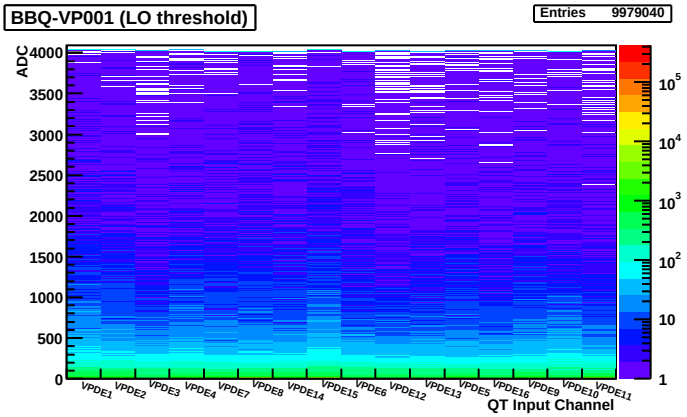

BBQ-BB002 (BBC west small tiles TAC)
Entries 9979040
TAC
QT Input Channel

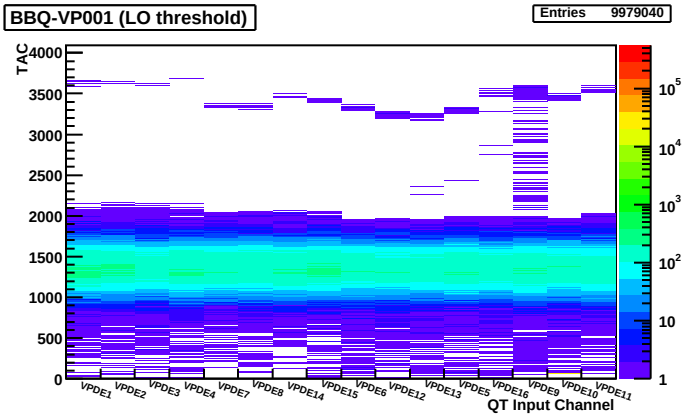

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 9979040
ADC
QT Input Channel

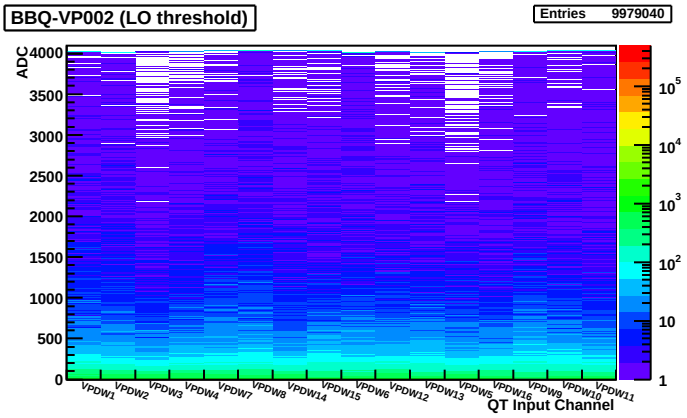

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 9979040
TAC
QT Input Channel

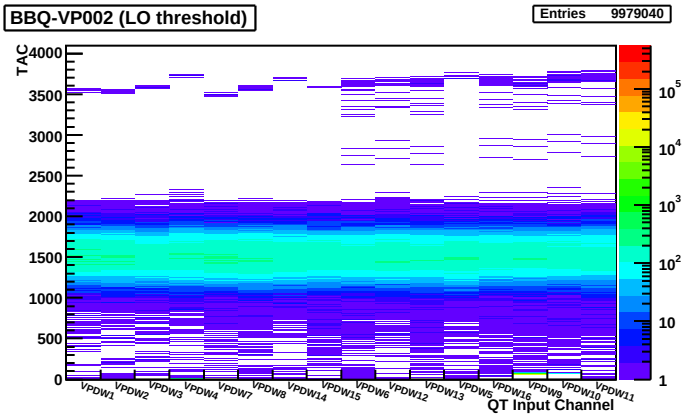

BBQ-ZD001
Entries 9979040
ADC
QT Input Channel

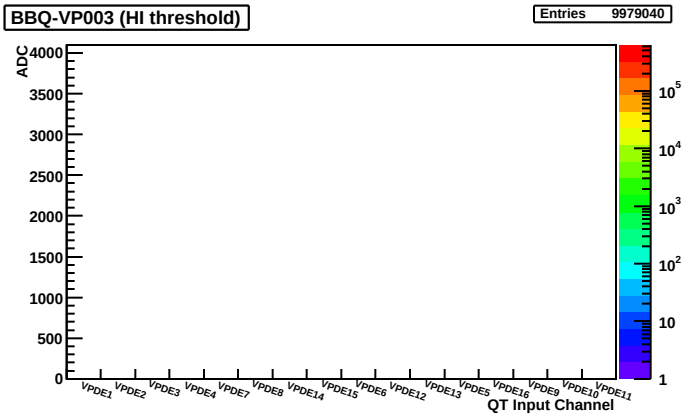

BBQ-ZD001
Entries 9979040
TAC
QT Input Channel

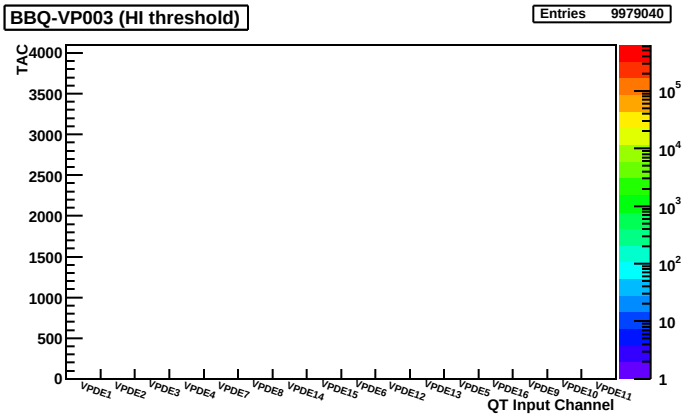

BBQ-VP001 (LO threshold)
Entries 9979040
ADC
QT Input Channel

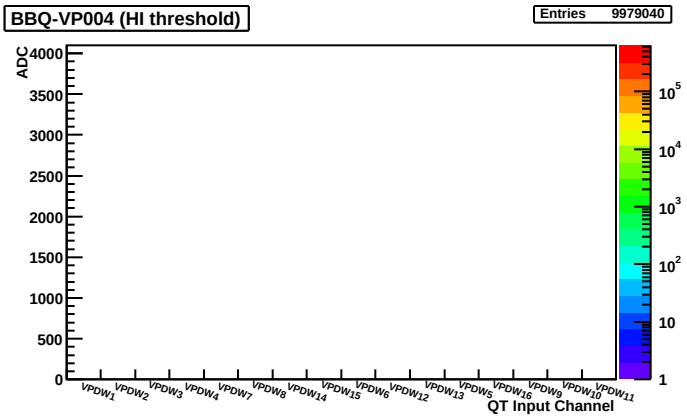

BBQ-VP001 (LO threshold)
Entries 9979040
TAC
QT Input Channel

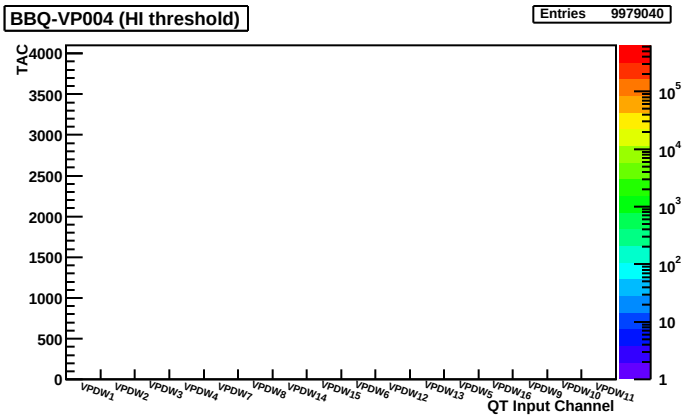

BBQ-VP002 (LO threshold)
Entries 9979040
ADC
QT Input Channel

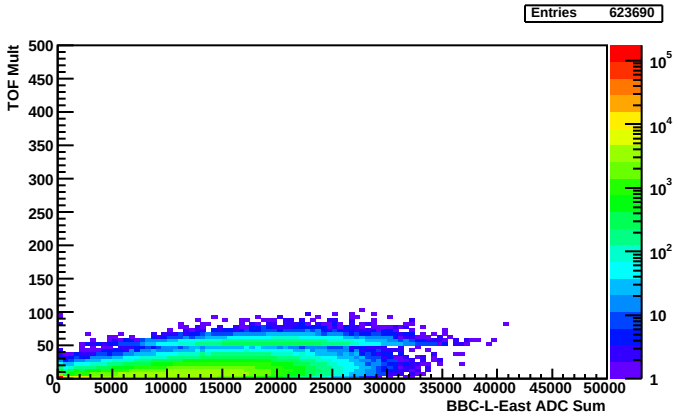

BBQ-VP002 (LO threshold)
Entries 9979040
TAC
QT Input Channel

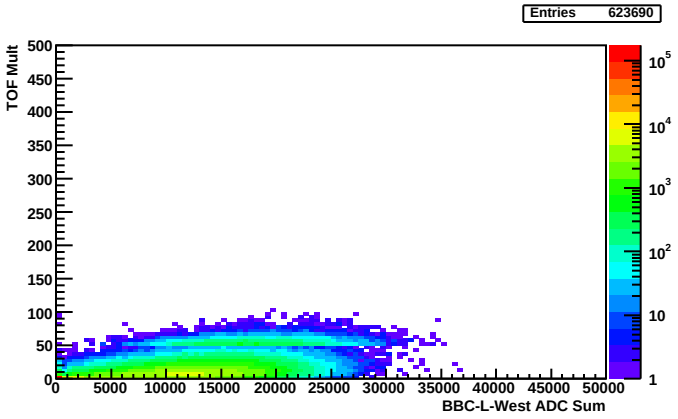

BBQ-VP003 (HI threshold)
Entries 9979040
ADC
QT Input Channel

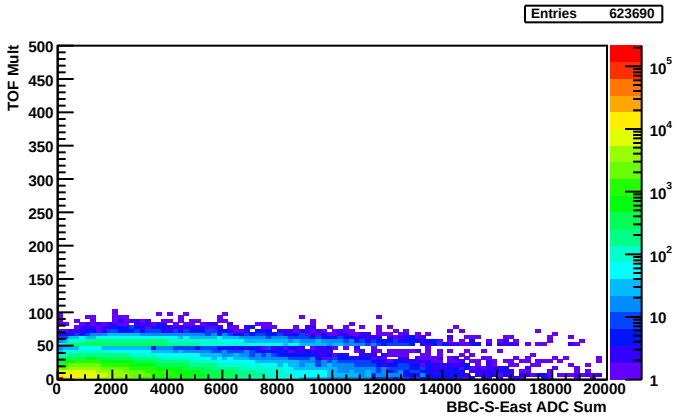

BBQ-VP003 (HI threshold)
Entries 9979040
TAC
QT Input Channel

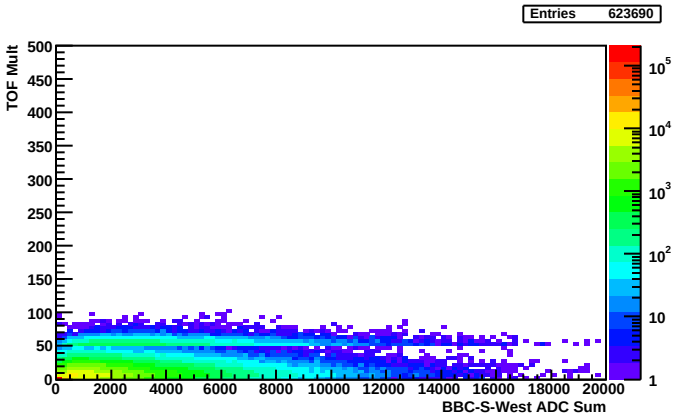

BBQ-VP004 (HI threshold)
Entries 9979040
ADC
QT Input Channel

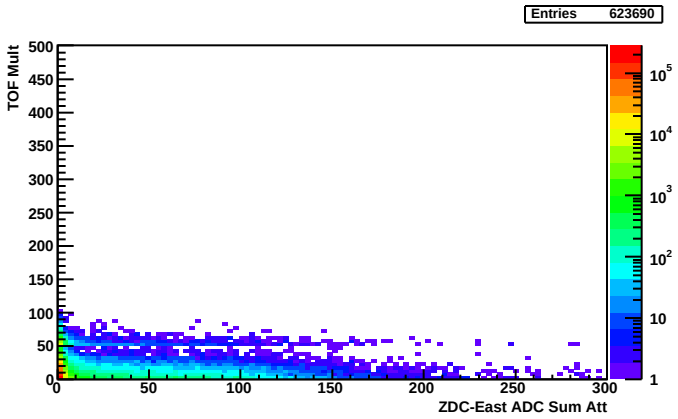

BBQ-VP004 (HI threshold)
Entries 9979040
TAC
QT Input Channel

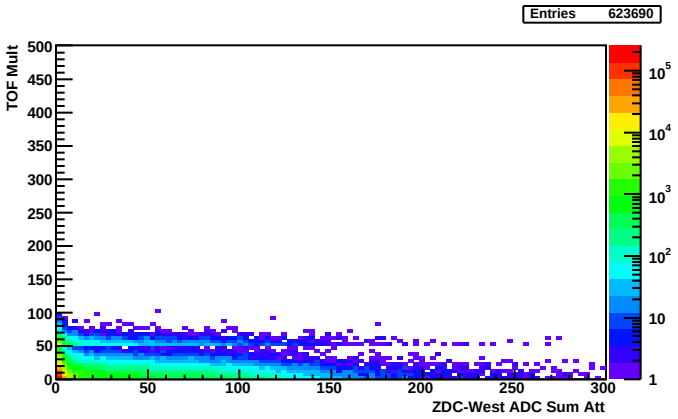

Entries 623690
TOF Mult
BBC-L-East ADC Sum

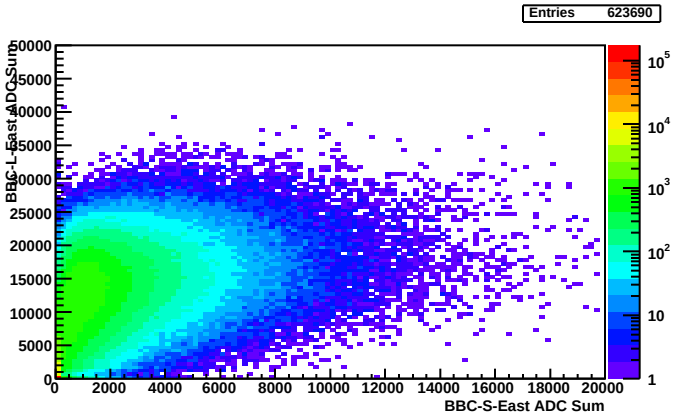

Entries 623690
TOF Mult
BBC-L-West ADC Sum

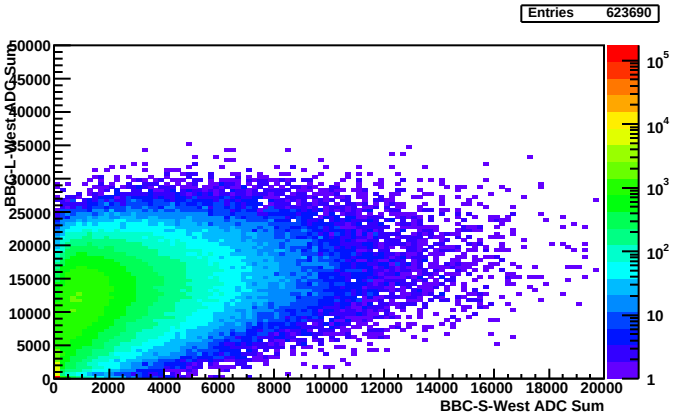

Entries 623690
TOF Mult
BBC-S-East ADC Sum

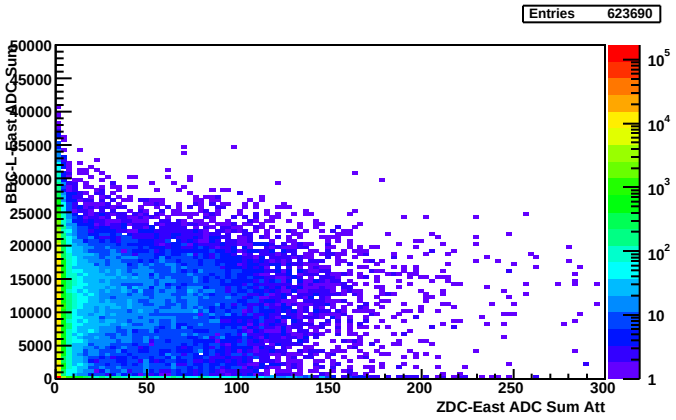

Entries 623690
TOF Mult
BBC-S-West ADC Sum

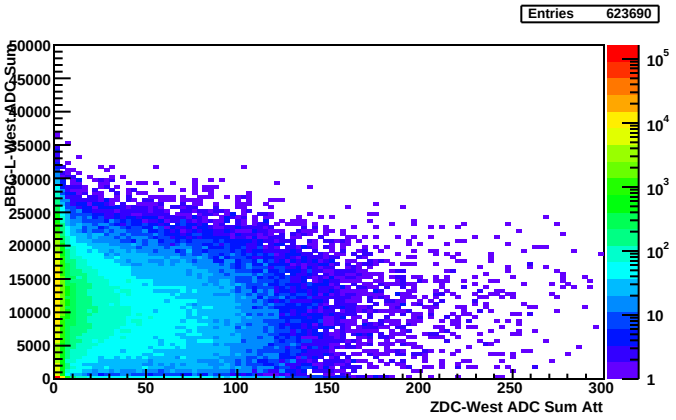

Entries 623690
TOF Mult
ZDC-East ADC Sum Att

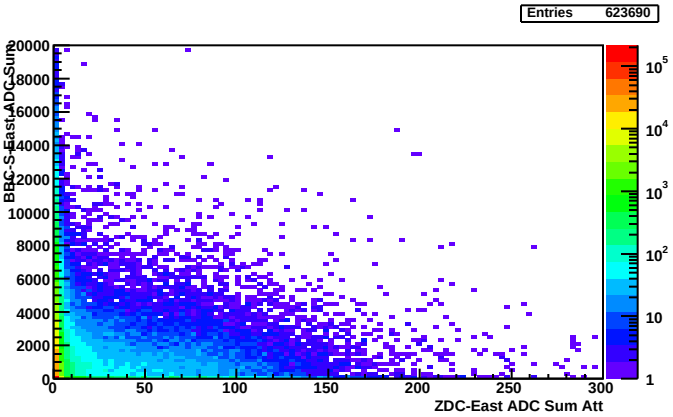

Entries 623690
TOF Mult
ZDC-West ADC Sum Att

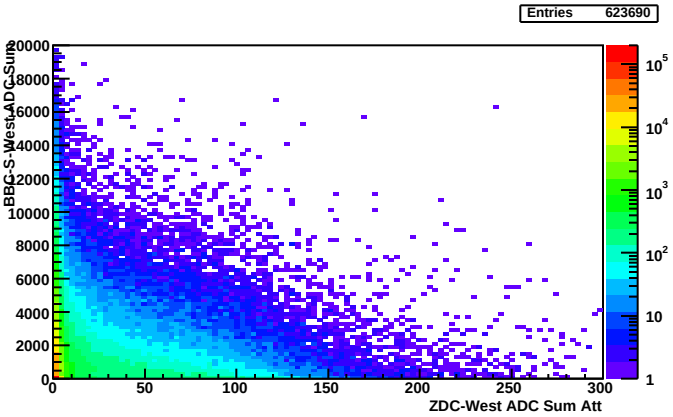

Entries 623690
BBC-L-East ADC Sum
BBC-S-East ADC Sum

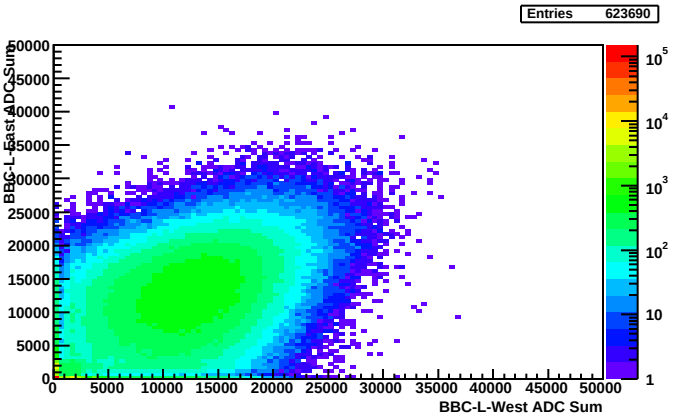

Entries 623690
BBC-L-West ADC Sum
BBC-S-West ADC Sum

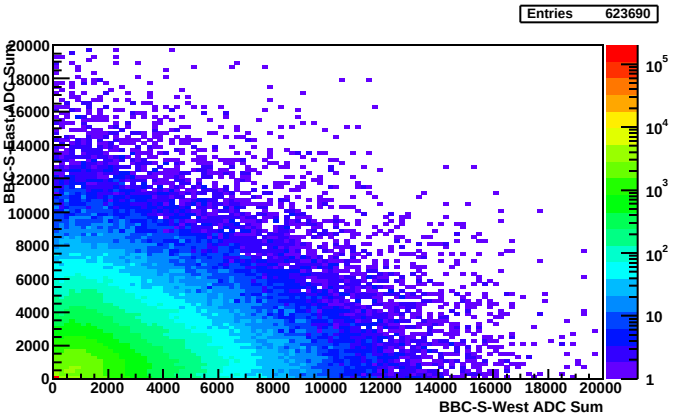

Entries 623690
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

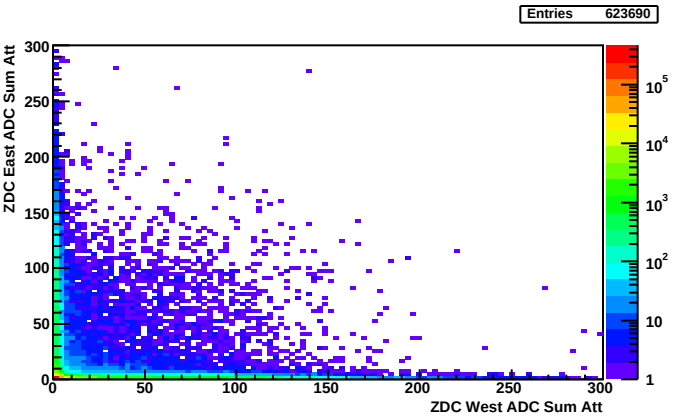

Entries 623690
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

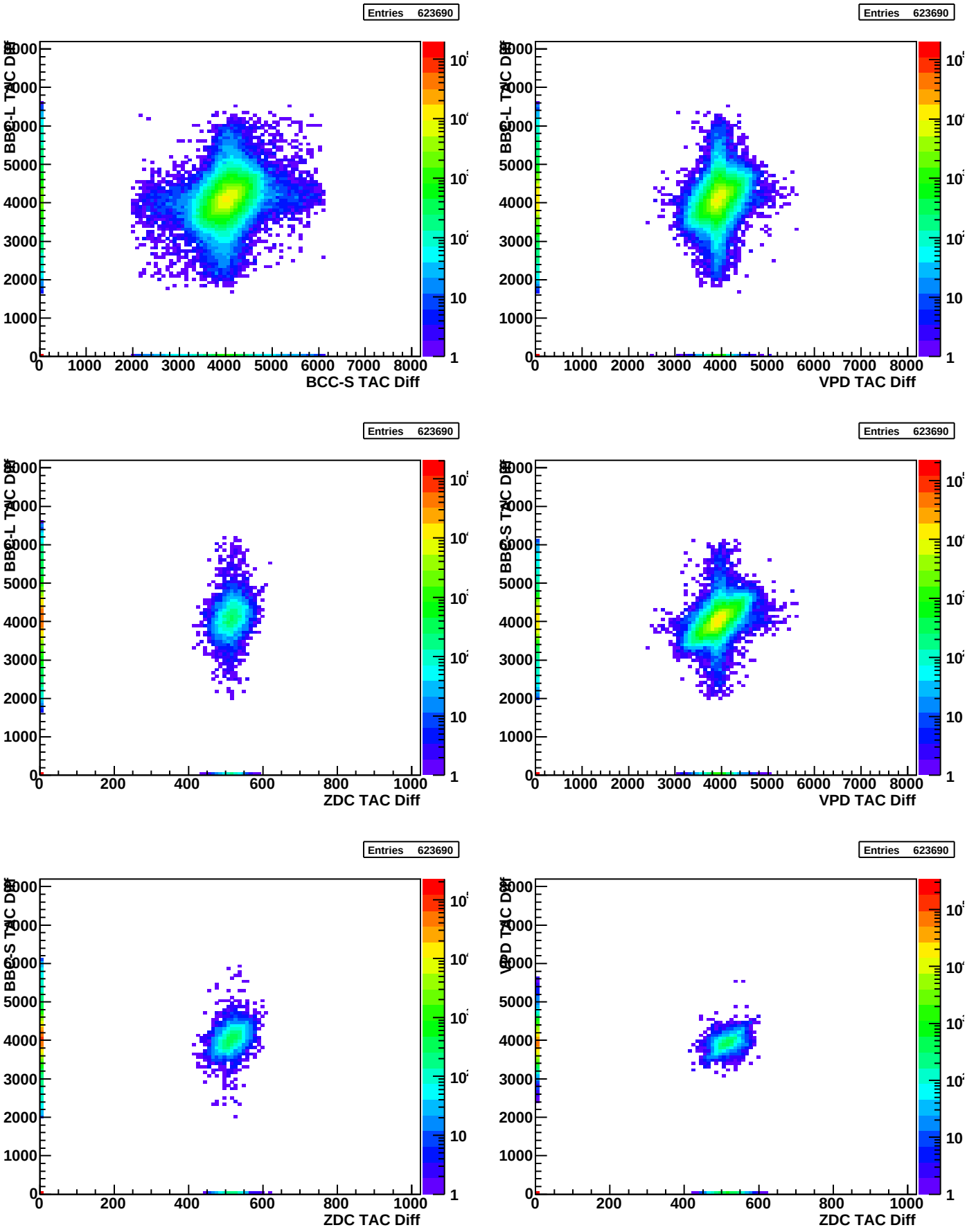

Entries 623690
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

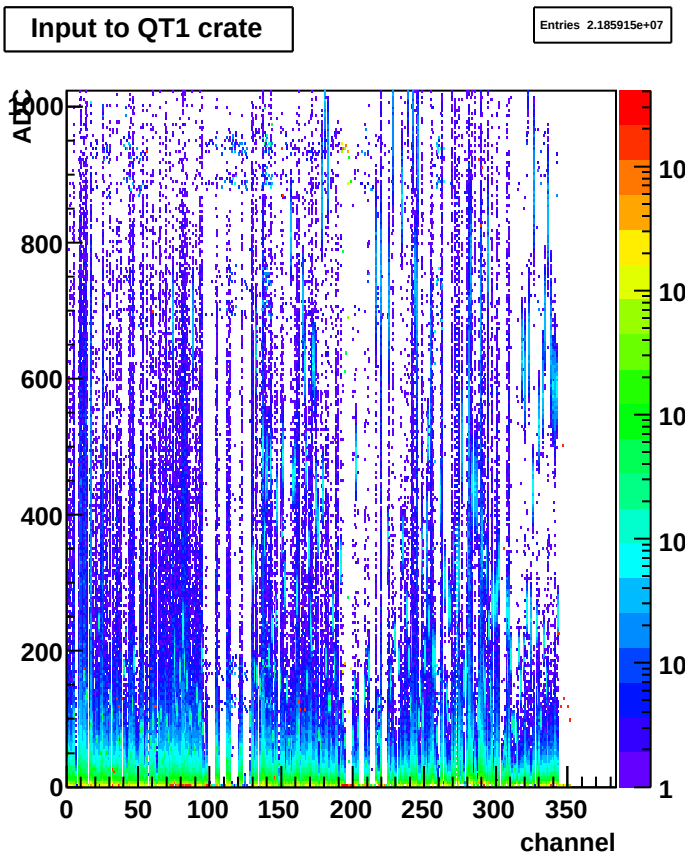

Entries 623690
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

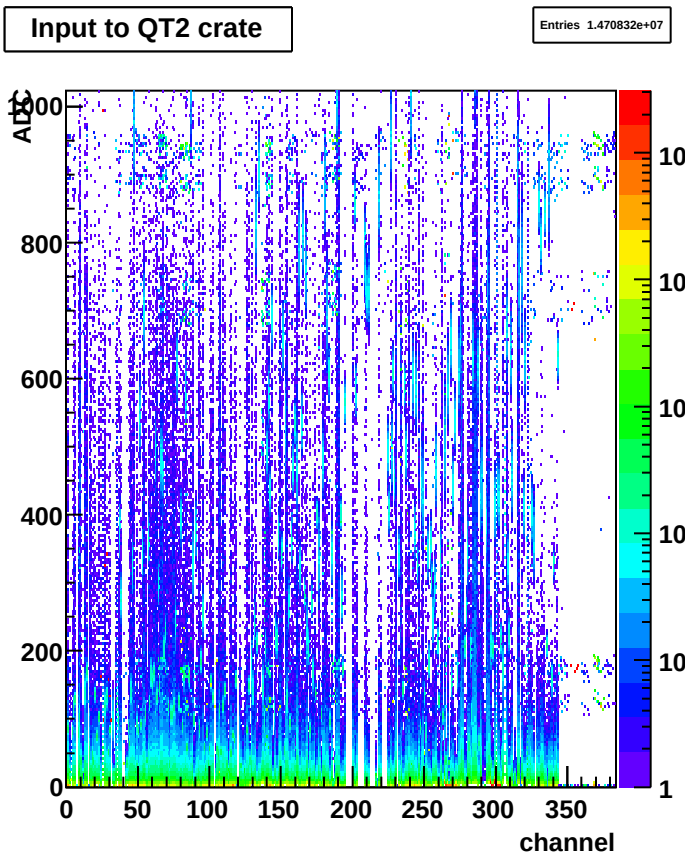

Entries 623690
BBC-L-East ADC Sum
BBC-L-West ADC Sum

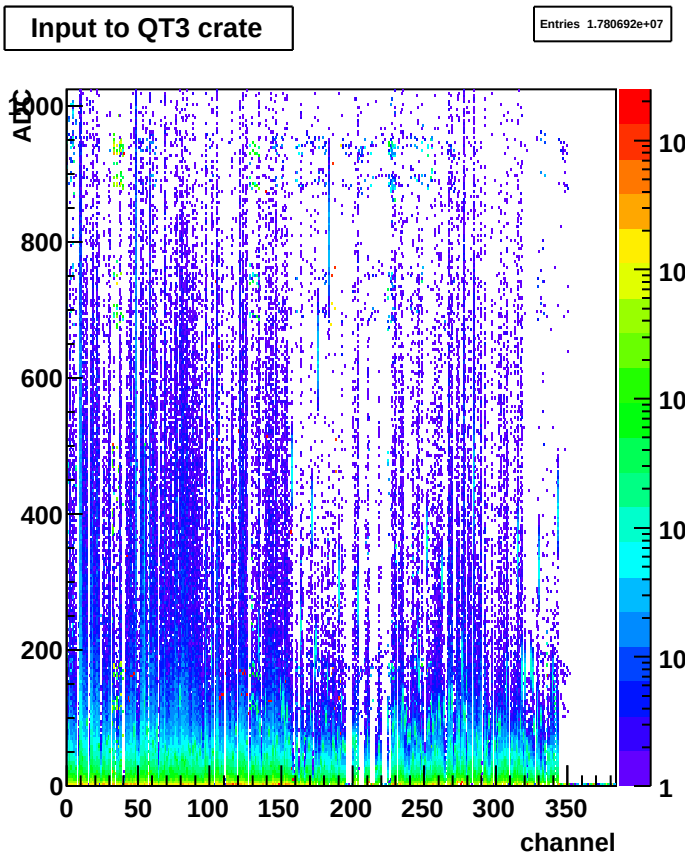

Entries 623690
BBC-S-East ADC Sum
BBC-S-West ADC Sum

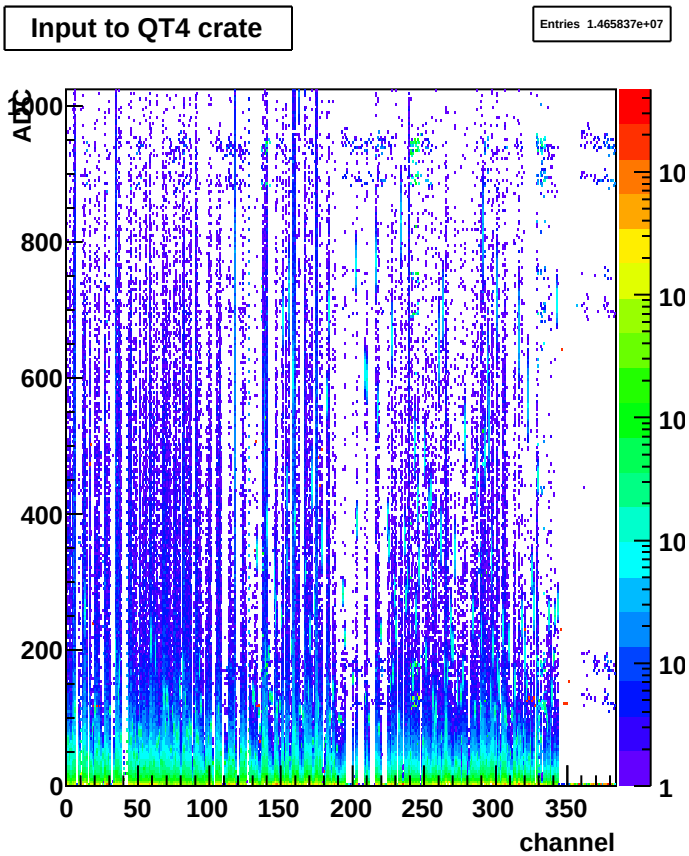

Entries 623690
ZDC East ADC Sum Att
ZDC West ADC Sum Att

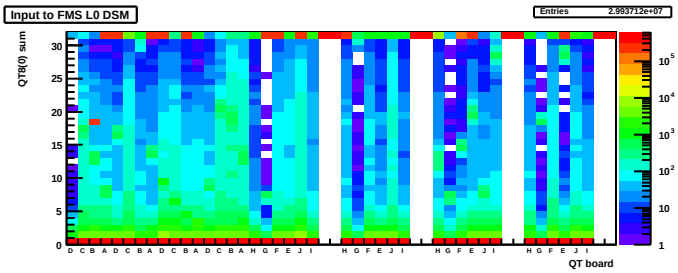

Entries 623690
BBC-L TAC Diff
BCC-S TAC Diff
Entries 623690
BBC-L TAC Diff
VPD TAC Diff
Entries 623690
BBC-L TAC Diff
ZDC TAC Diff
Entries 623690
BBC-S TAC Diff
VPD TAC Diff
Entries 623690
BBC-S TAC Diff
ZDC TAC Diff
Entries 623690
VPD TAC Diff
ZDC TAC Diff

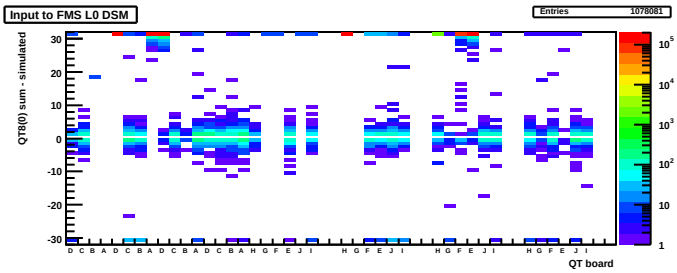

Input to QT1 crate
Entries 2.185915e+07
ADC
channel

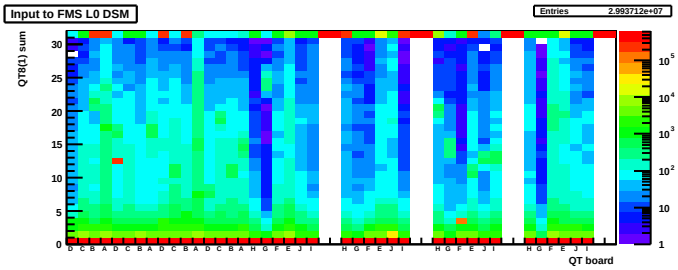

Input to QT2 crate
Entries 1.470832e+07
ADC
channel

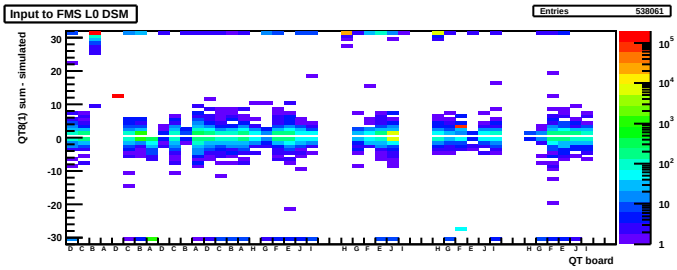

Input to QT3 crate
Entries 1.780692e+07
ADC
channel

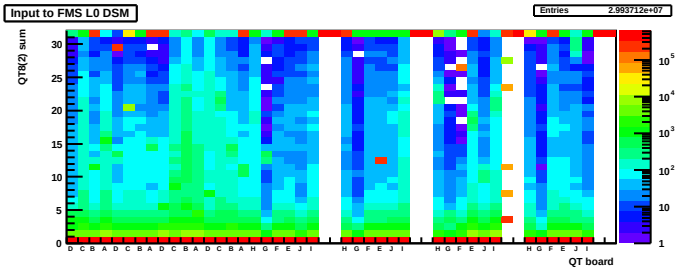

Input to QT4 crate
Entries 1.465837e+07
ADC
channel

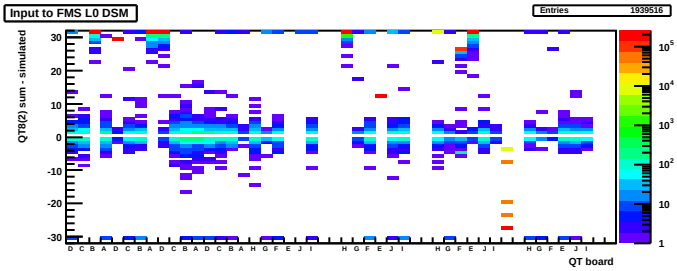

Input to FMS L0 DSM
Entries 2.993712e+07
QT8(0) sum
QT board

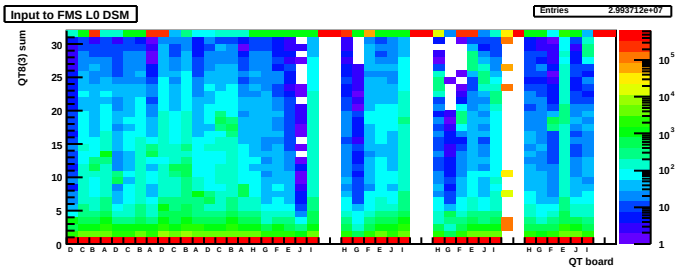

Input to FMS L0 DSM
Entries 1078081
QT8(0) sum - simulated
QT board

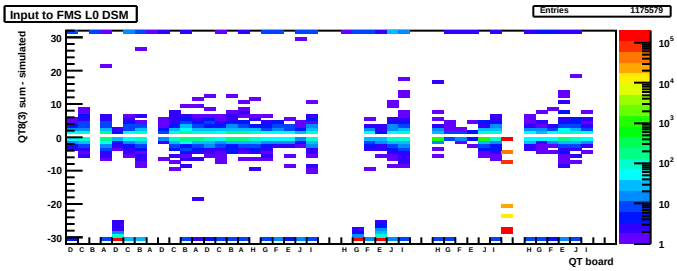

Input to FMS L0 DSM
Entries 2.993712e+07
QT8(1) sum
QT board

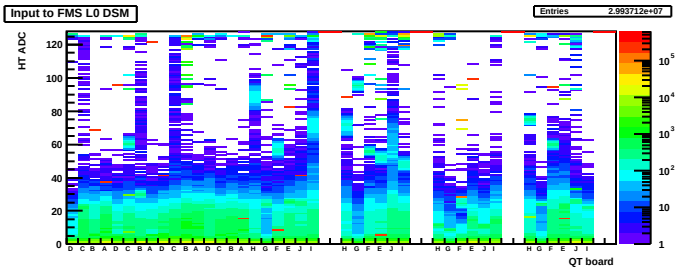

Input to FMS L0 DSM
Entries 538061
QT8(1) sum - simulated
QT board

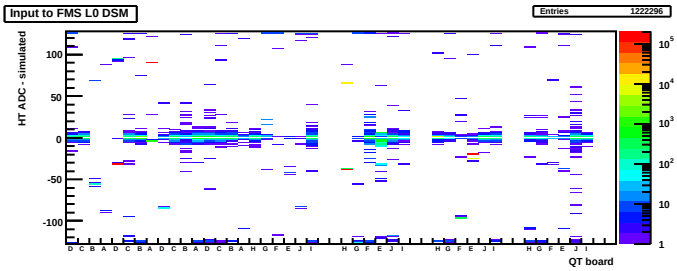

Input to FMS L0 DSM
Entries 2.993712e+07
QT8(2) sum
QT board

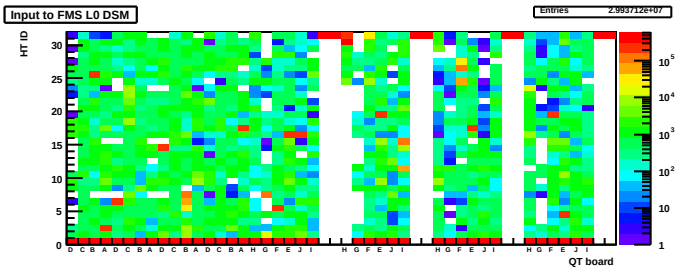

Input to FMS L0 DSM
Entries 1939516
QT8(2) sum - simulated
QT board

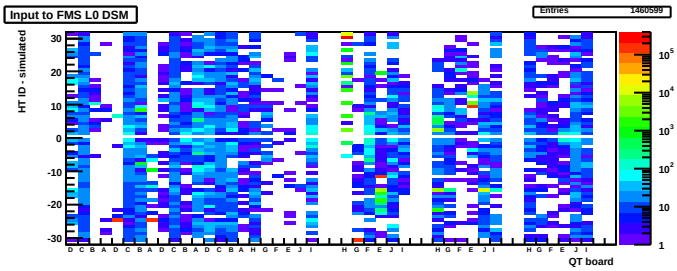

Input to FMS L0 DSM
Entries 2.993712e+07
QT8(3) sum
QT board

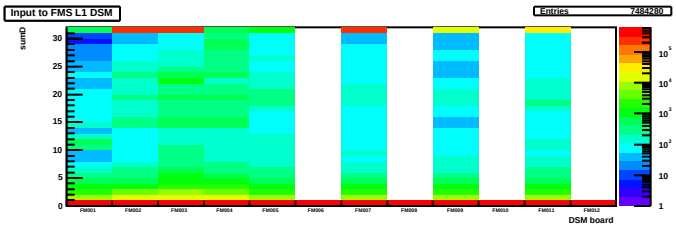

Input to FMS L0 DSM
Entries 1175579
QT8(3) sum - simulated
QT board

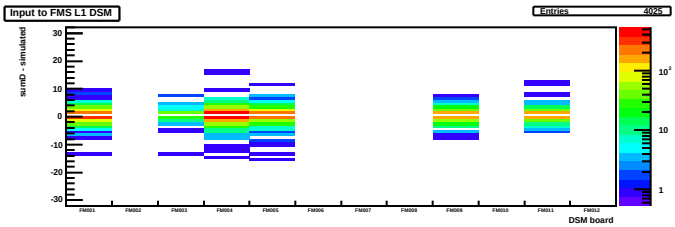

Input to FMS L0 DSM
Entries 2.993712e+07
HT ADC
QT board

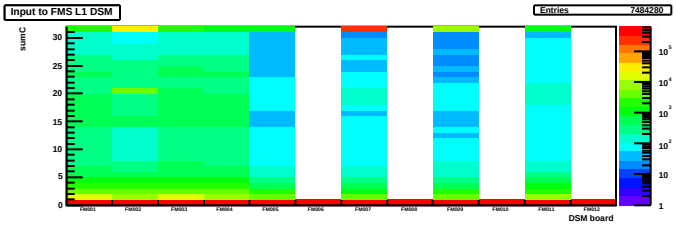

Input to FMS L0 DSM
Entries 1222296
HT ADC - simulated
QT board

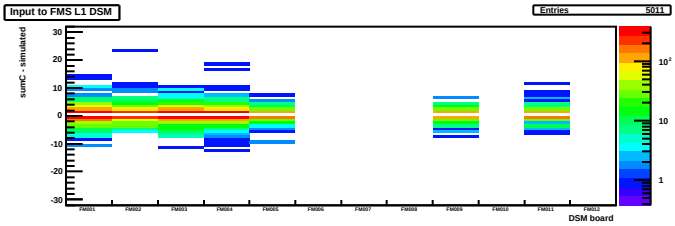

Input to FMS L0 DSM
Entries 2.993712e+07
HT ID
QT board

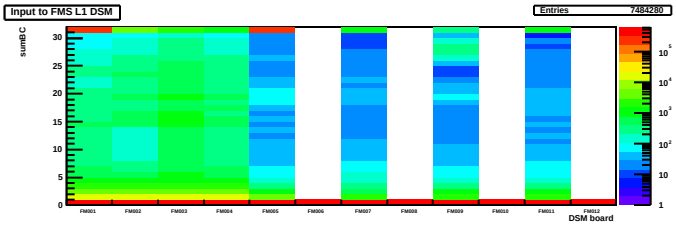

Input to FMS L0 DSM
Entries 1460599
HT ID - simulated
QT board

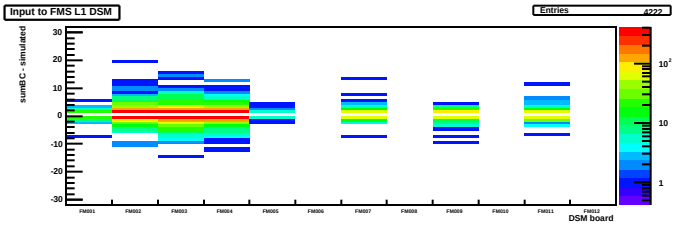

Input to FMS L1 DSM
Entries 7484280
sumD
DSM board

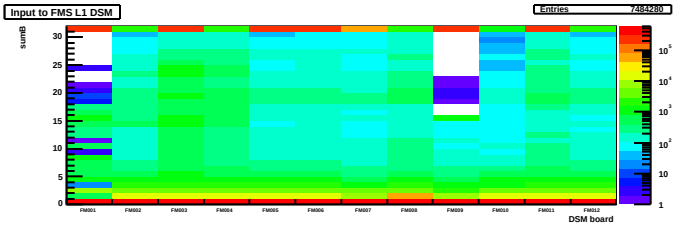

Input to FMS L1 DSM
Entries 4025
sumD - simulated
DSM board

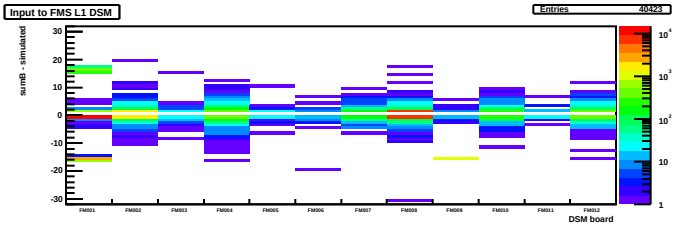

Input to FMS L1 DSM
Entries 7484280
sumC
DSM board

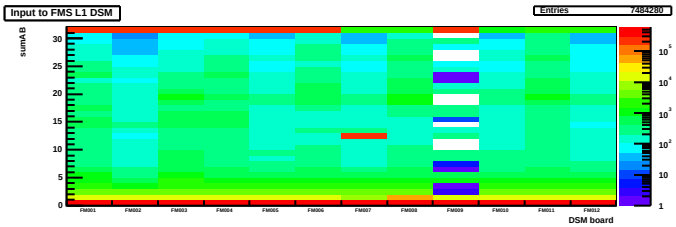

Input to FMS L1 DSM
Entries 5011
sumC - simulated
DSM board

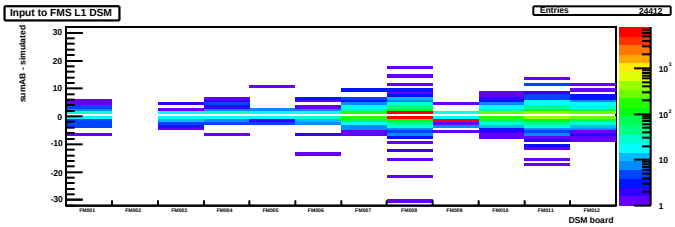

Input to FMS L1 DSM
Entries 7484280
sumBC
DSM board

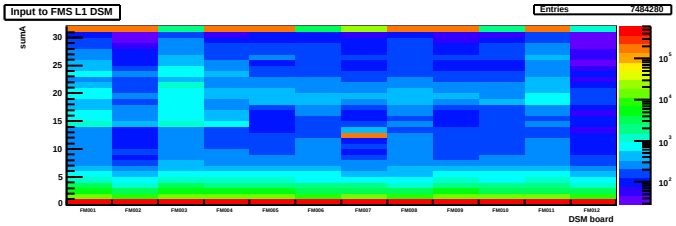

Input to FMS L1 DSM
Entries 4222
sumBC - simulated
DSM board

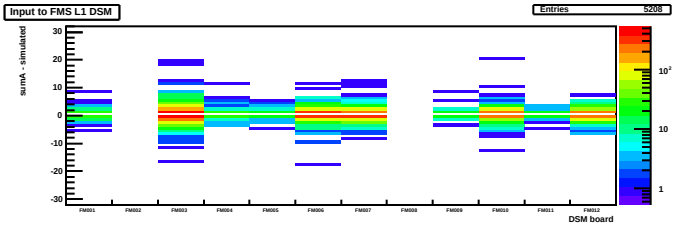

Input to FMS L1 DSM
Entries 7484280
sumB
DSM board

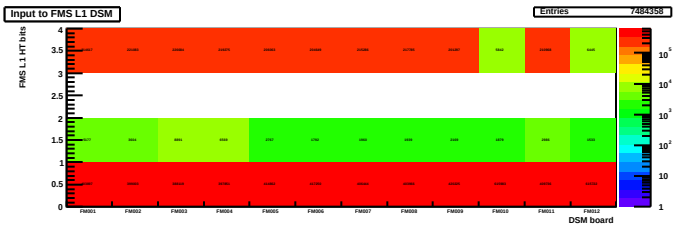

Input to FMS L1 DSM
Entries 40423
sumB - simulated
DSM board

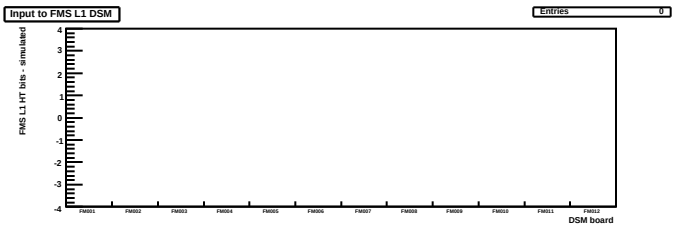

Input to FMS L1 DSM
Entries 7484280
sumAB
DSM board

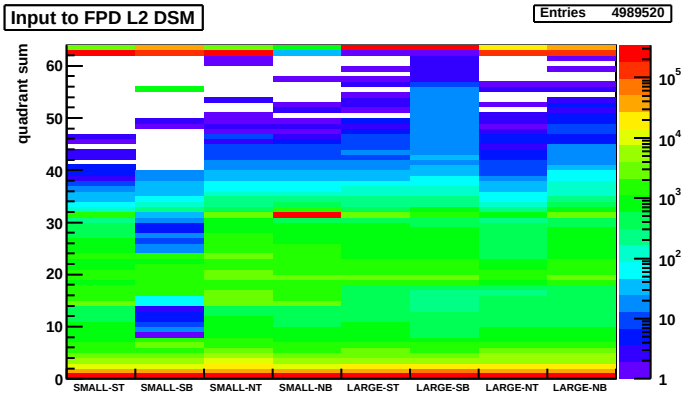

Input to FMS L1 DSM
Entries 24412
sumAB - simulated
DSM board

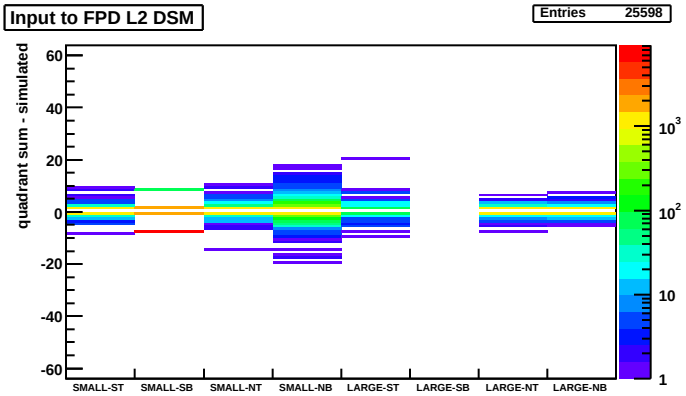

Input to FMS L1 DSM
Entries 7484280
sumA
DSM board

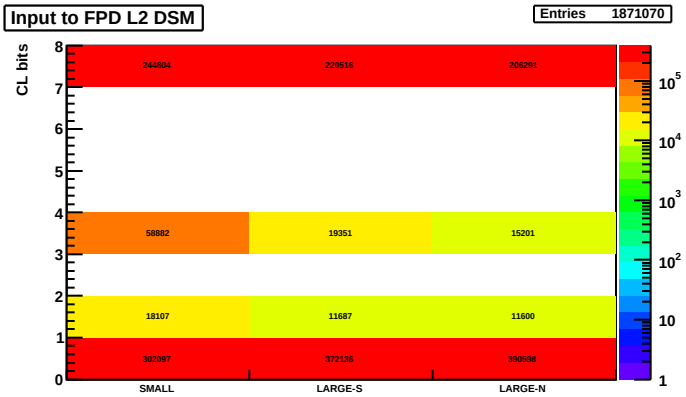

Input to FMS L1 DSM
Entries 5208
sumA - simulated
DSM board

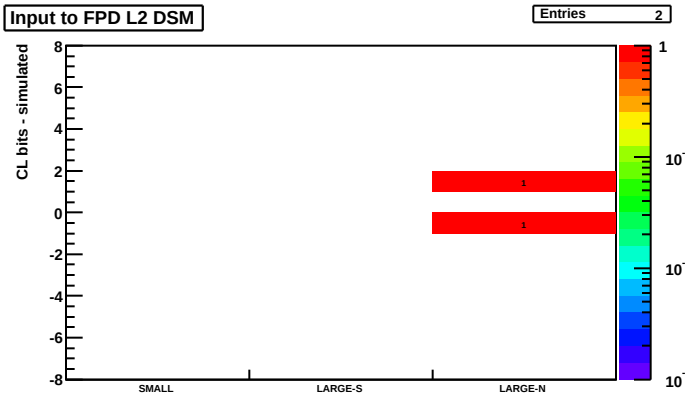

Input to FMS L1 DSM
Entries 7484358
FMS L1 HT bits
DSM board

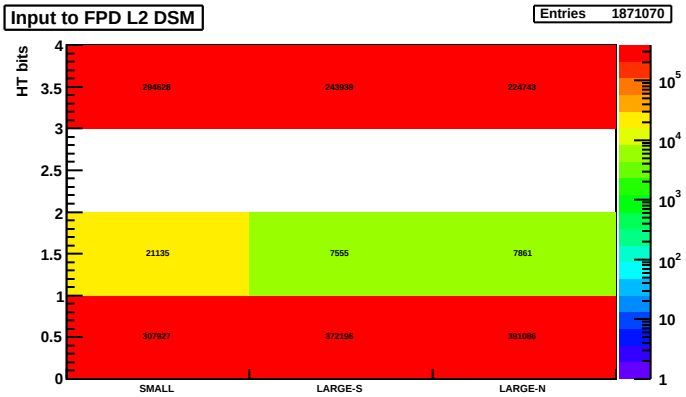

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

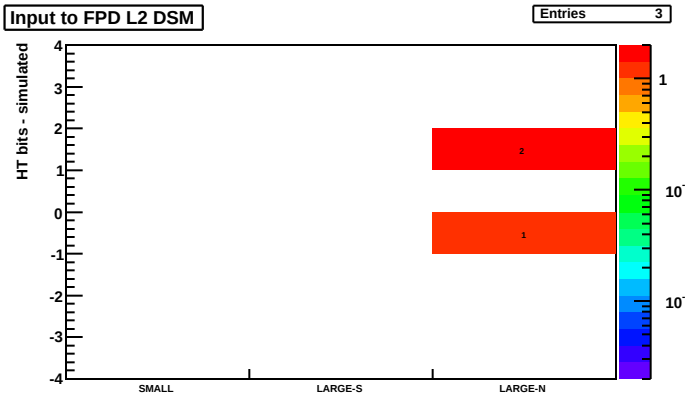

Input to FPD L2 DSM
Entries 4989520
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

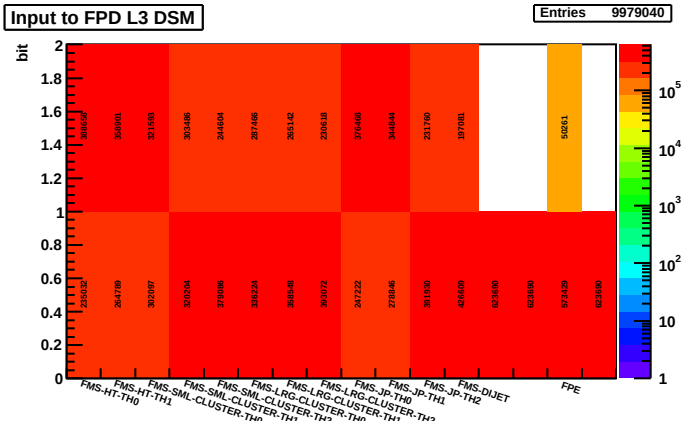

Input to FPD L2 DSM
Entries 25598
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

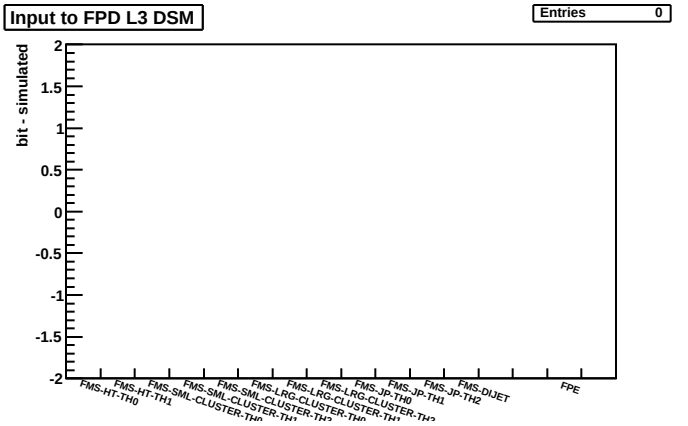

Input to FPD L2 DSM
Entries 1871070
CL bits
244604
220516
206291
58882
19351
15201
18107
11687
11600
302097
372136
390598
SMALL
LARGE-S
LARGE-N

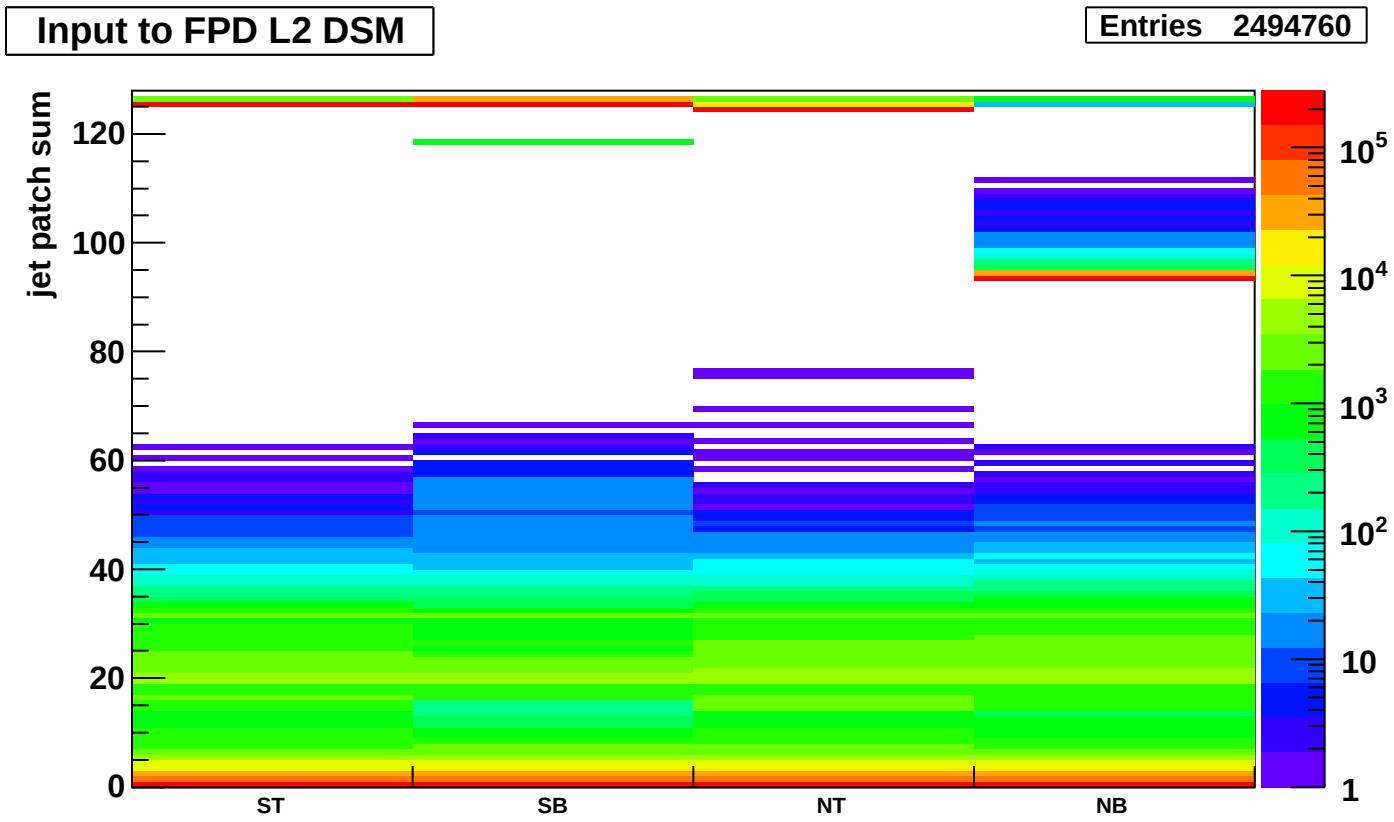

Input to FPD L2 DSM
Entries 2
CL bits - simulated
1
1
SMALL
LARGE-S
LARGE-N

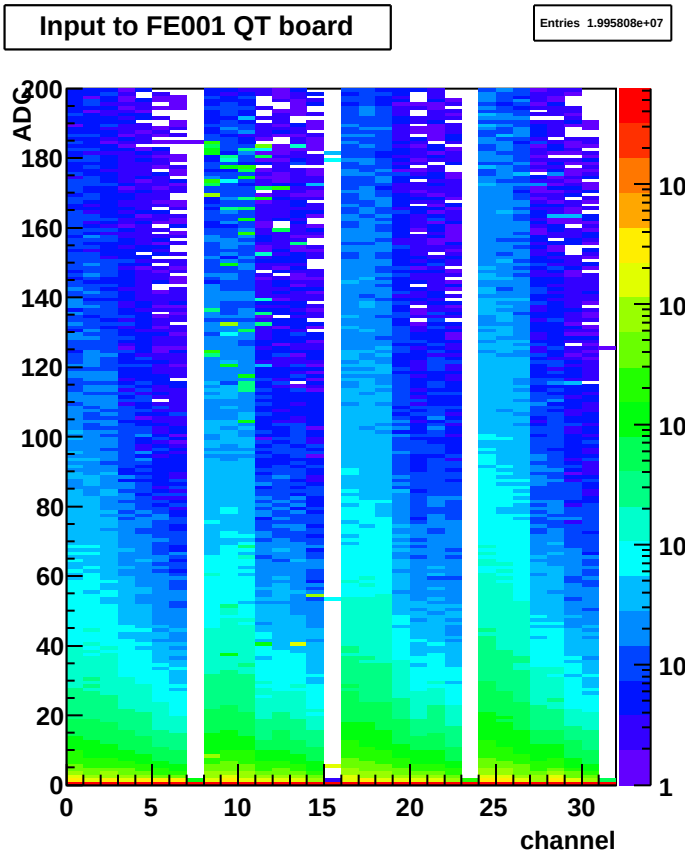

Input to FPD L2 DSM
Entries 1871070
HT bits
294628
243939
224743
21135
7555
7861
307927
372196
391086
SMALL
LARGE-S
LARGE-N

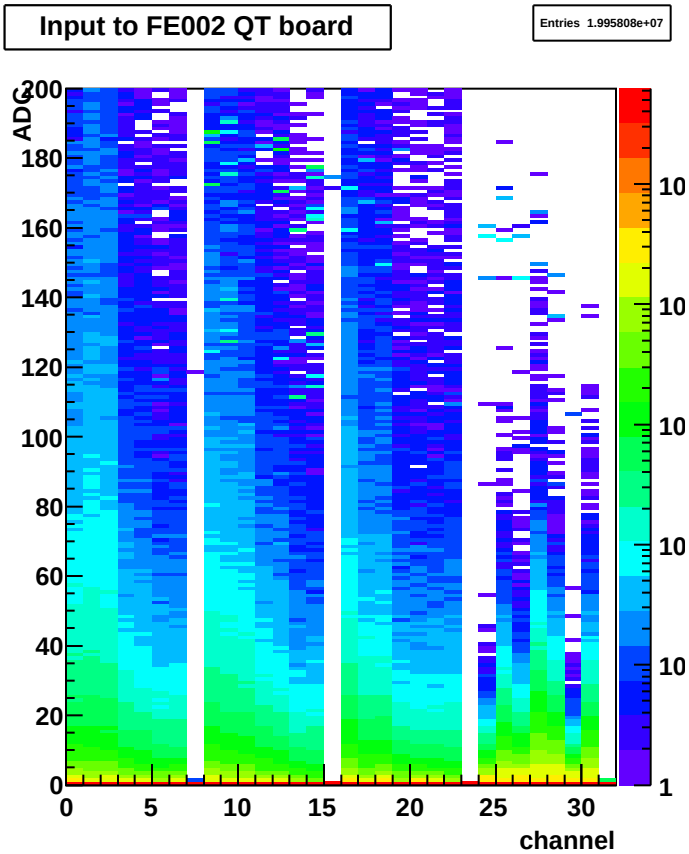

Input to FPD L2 DSM
Entries 3
HT bits - simulated
2
1
SMALL
LARGE-S
LARGE-N

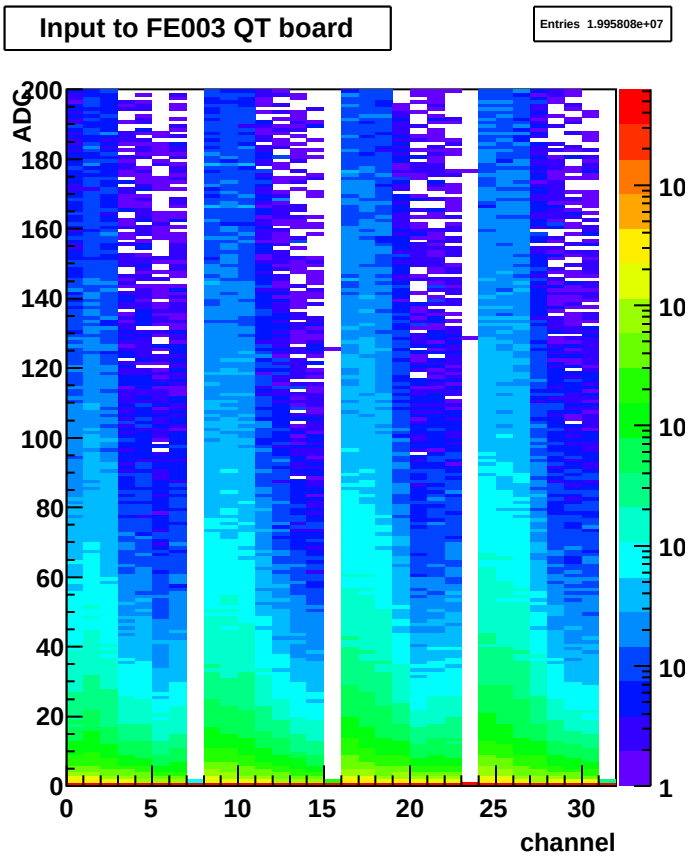

Input to FPD L3 DSM
Entries 9979040
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

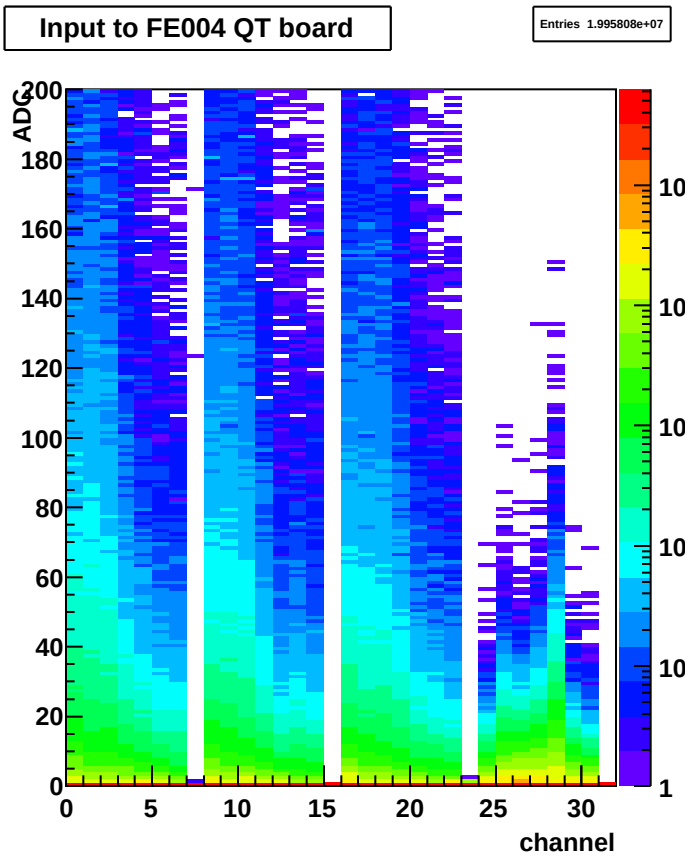

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

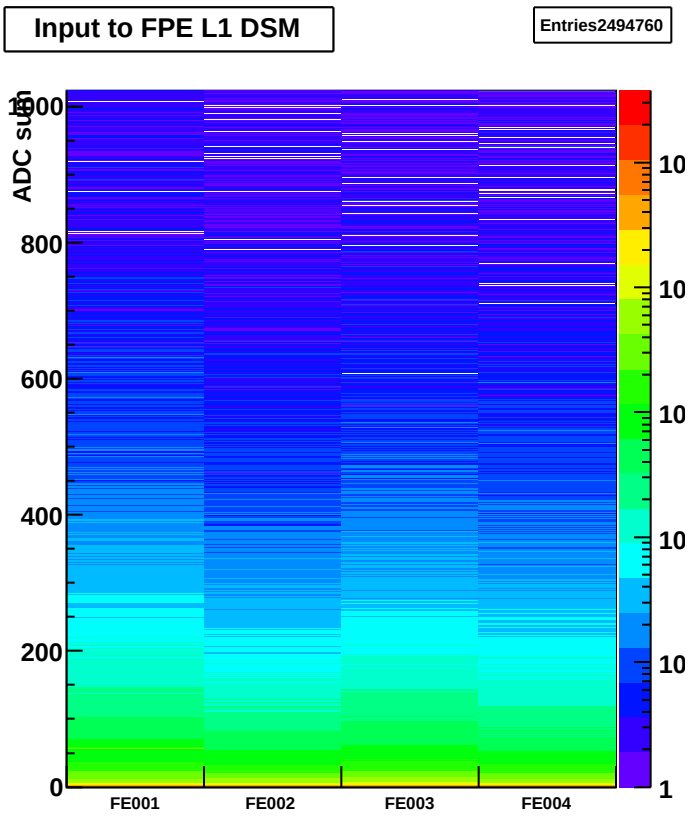

Input to FPD L2 DSM
Entries 2494760
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

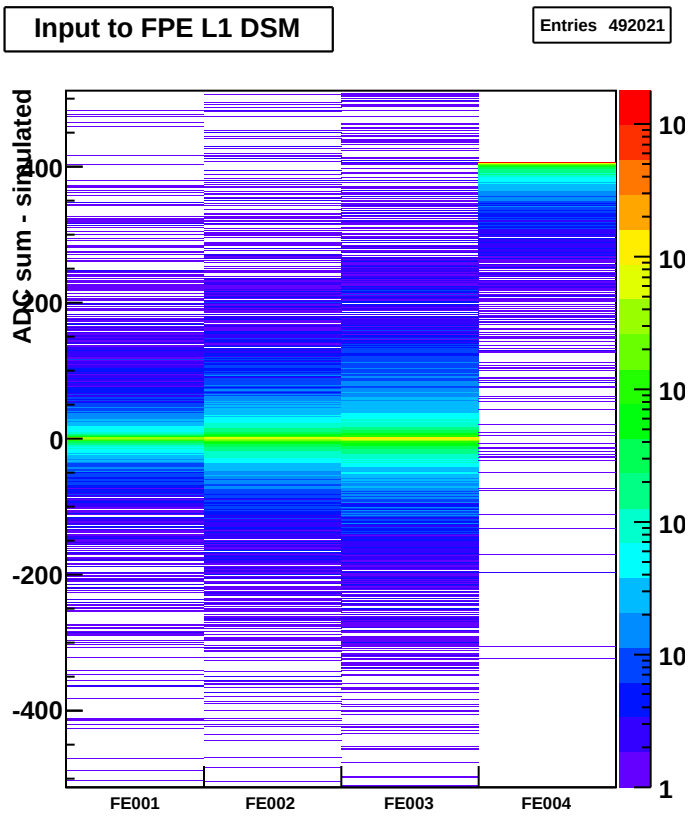

Input to FE001 QT board
Entries 1.995808e+07
ADC
channel

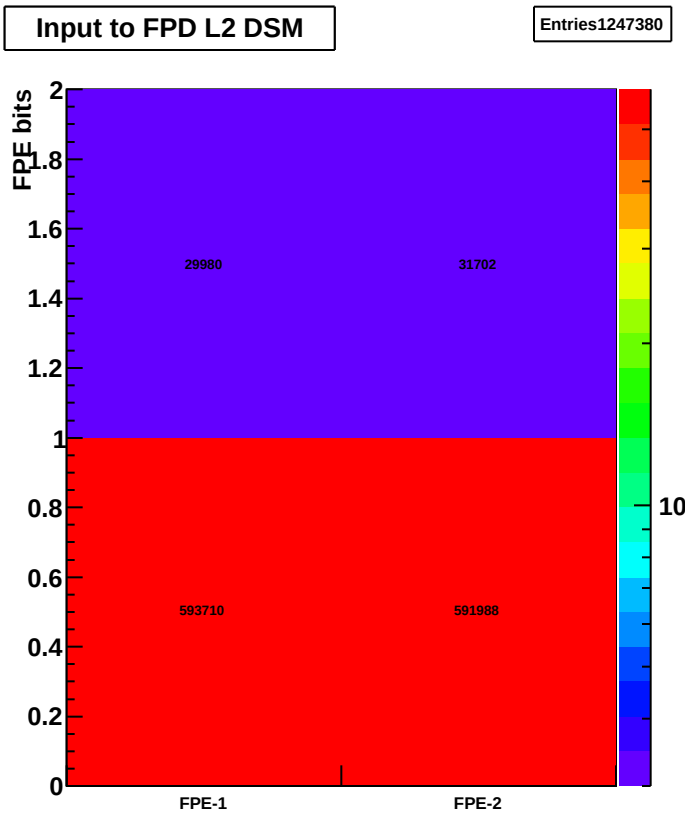

Input to FE002 QT board
Entries 1.995808e+07
ADC
channel

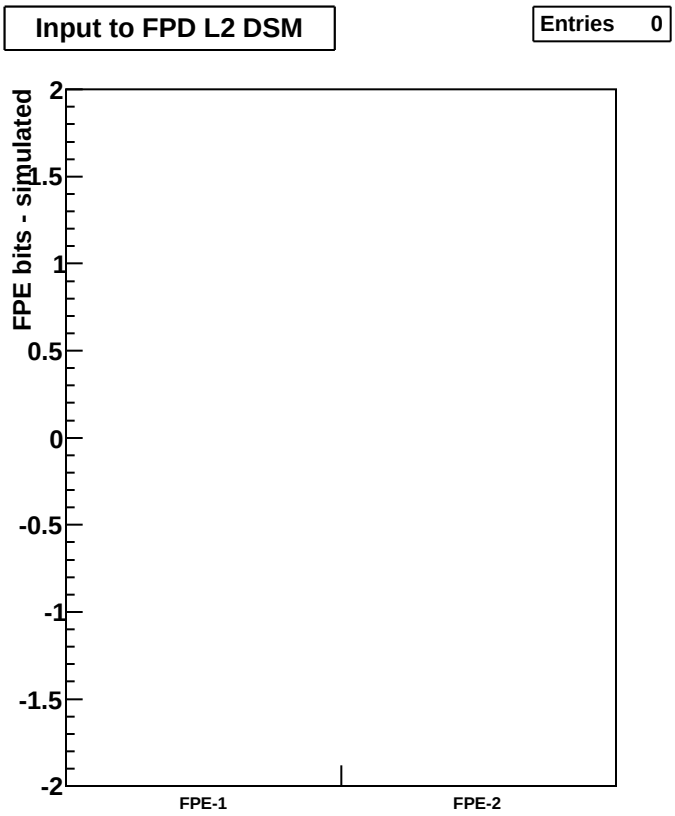

Input to FE003 QT board
Entries 1.995808e+07
ADC
channel


Input to FE004 QT board
Entries 1.995808e+07
ADC
channel


Input to FPE L1 DSM
Entries2494760
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 492021
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPD L2 DSM
Entries1247380
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
29980
31702
593710
591988
FPE-1
FPE-2
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