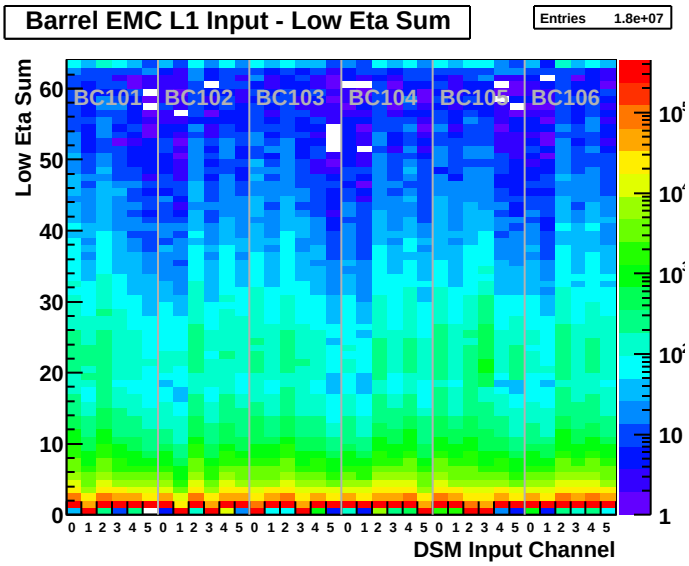
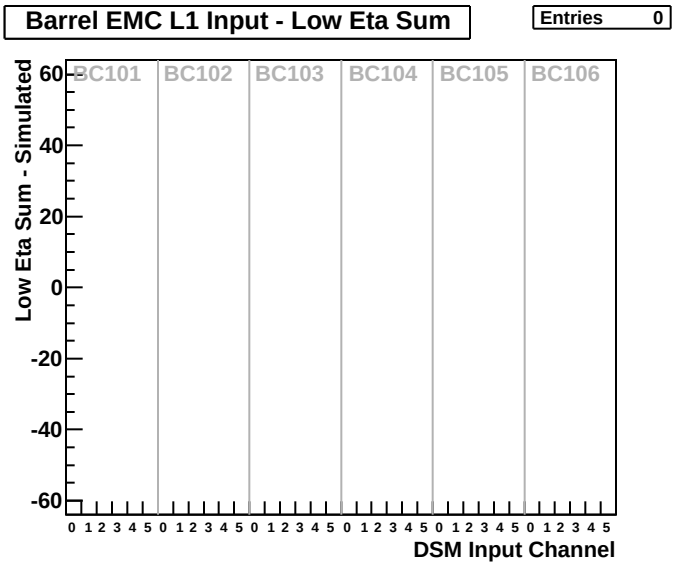
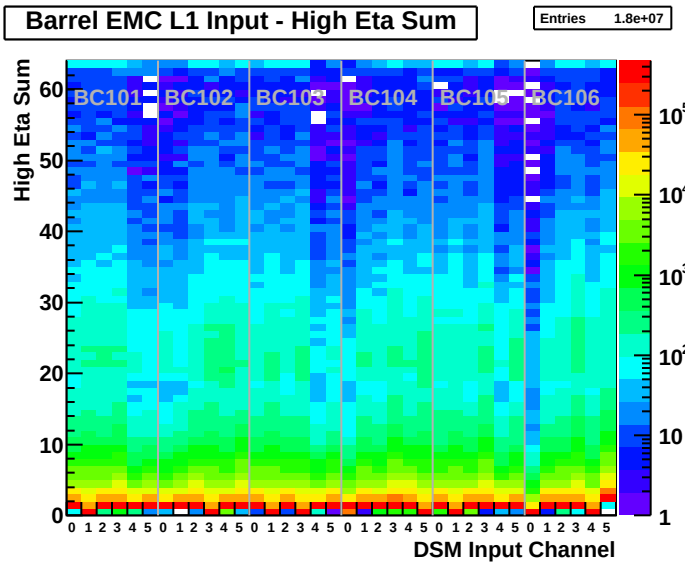
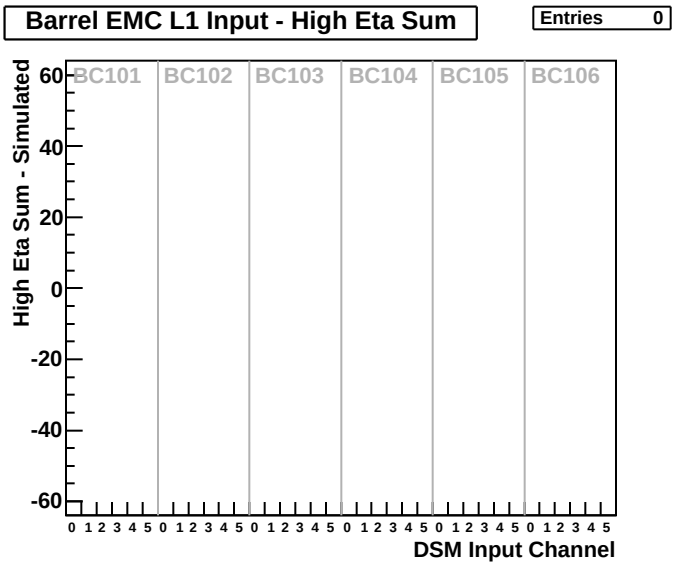
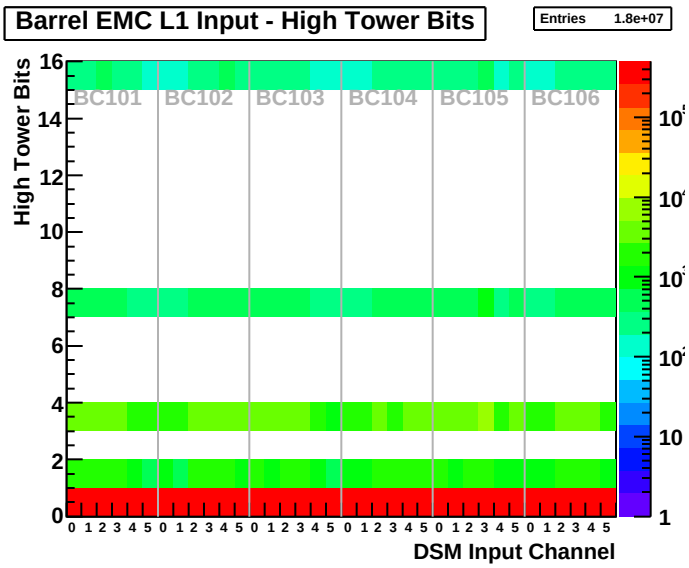
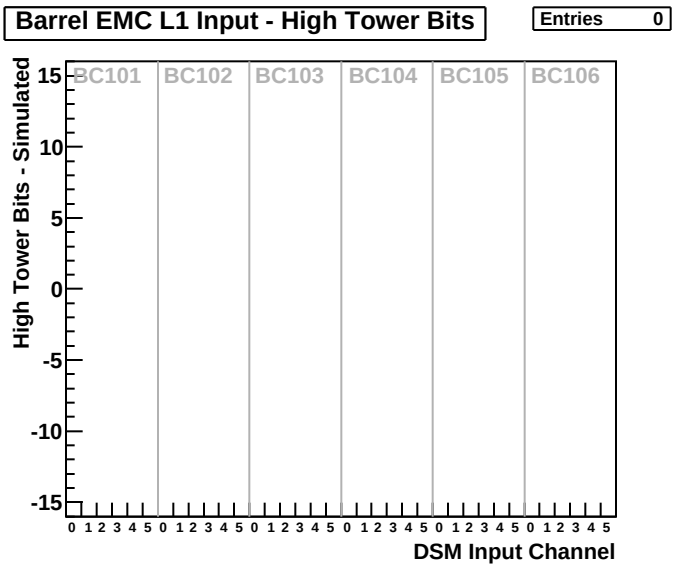

Barrel EMC L1 Input - Low Eta Sum
Entries 1.8e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

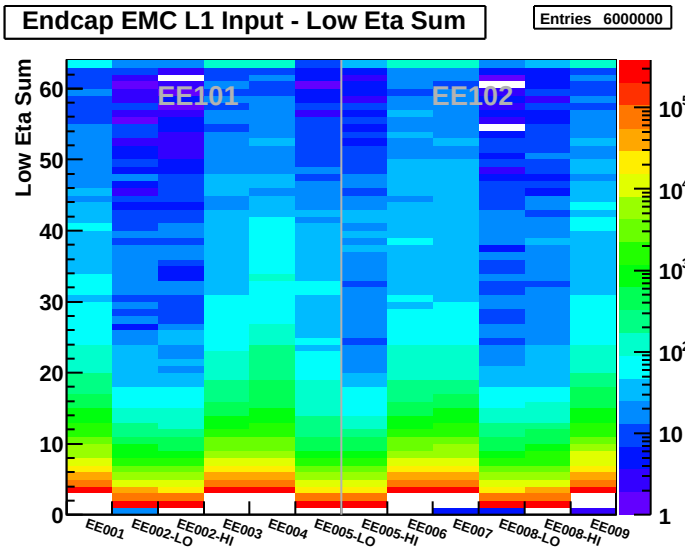

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

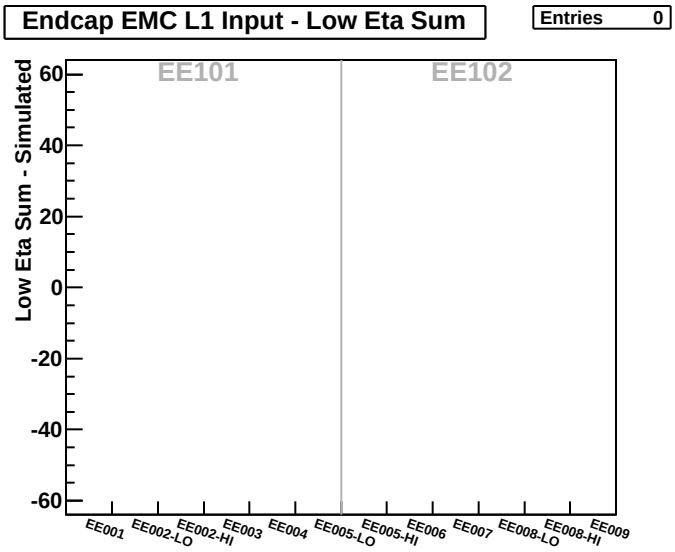

Barrel EMC L1 Input - High Eta Sum
Entries 1.8e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

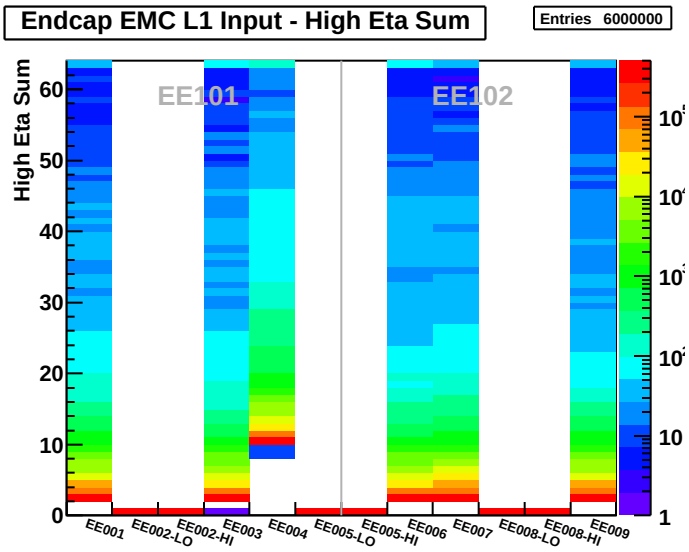

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

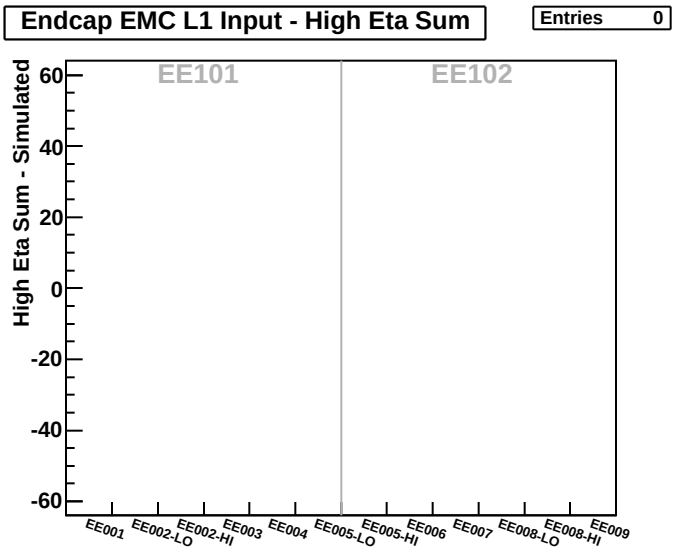

Barrel EMC L1 Input - High Tower Bits
Entries 1.8e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

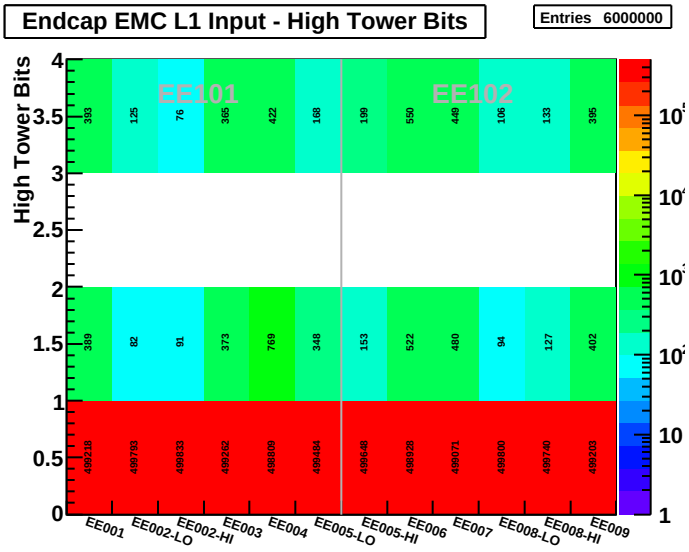

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

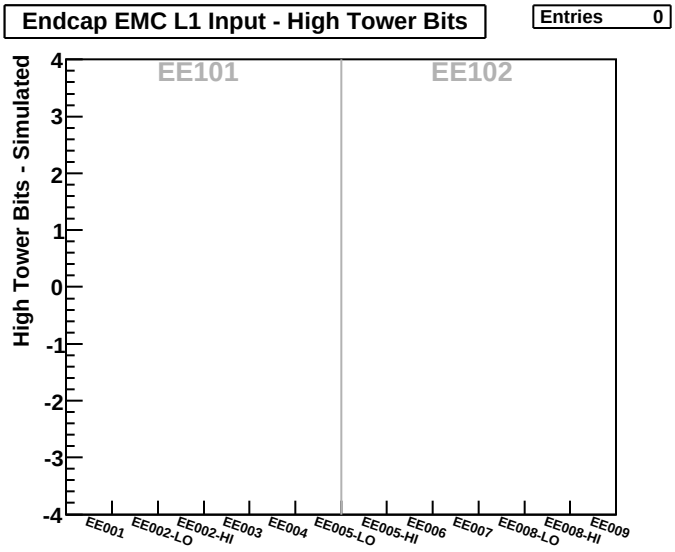

Endcap EMC L1 Input - Low Eta Sum
Entries 6000000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

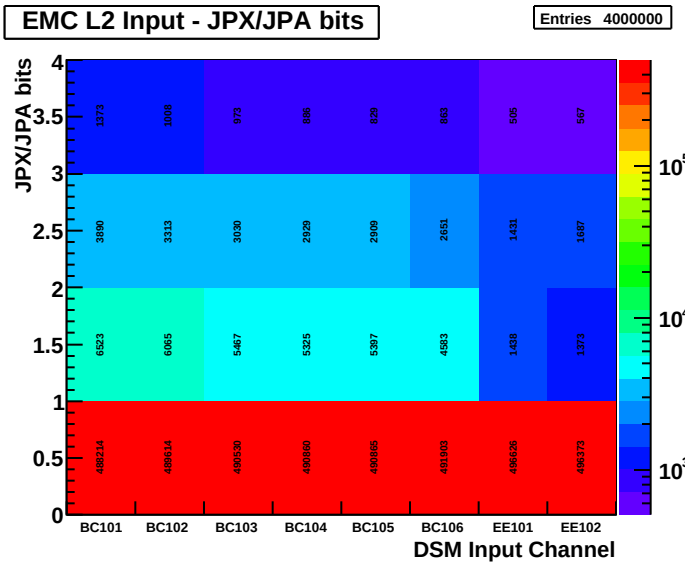

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

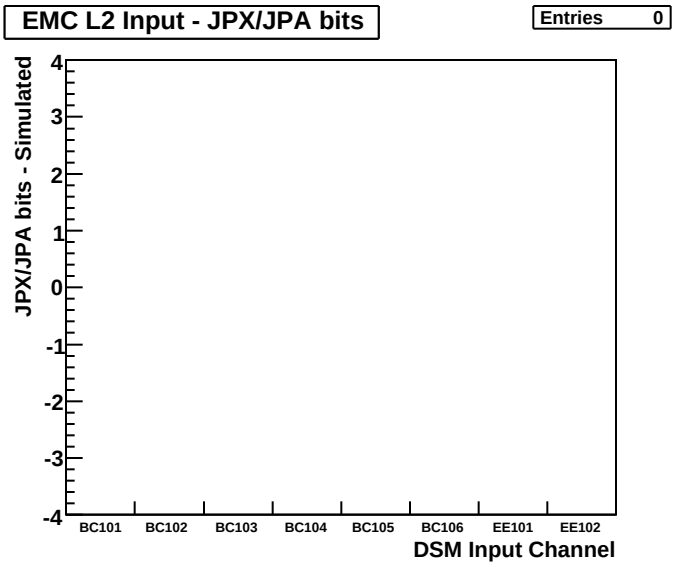

Endcap EMC L1 Input - High Eta Sum
Entries 6000000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

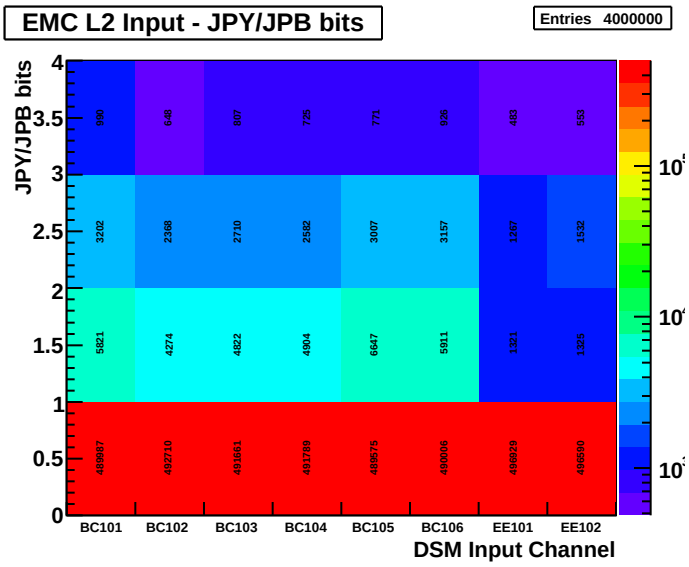

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

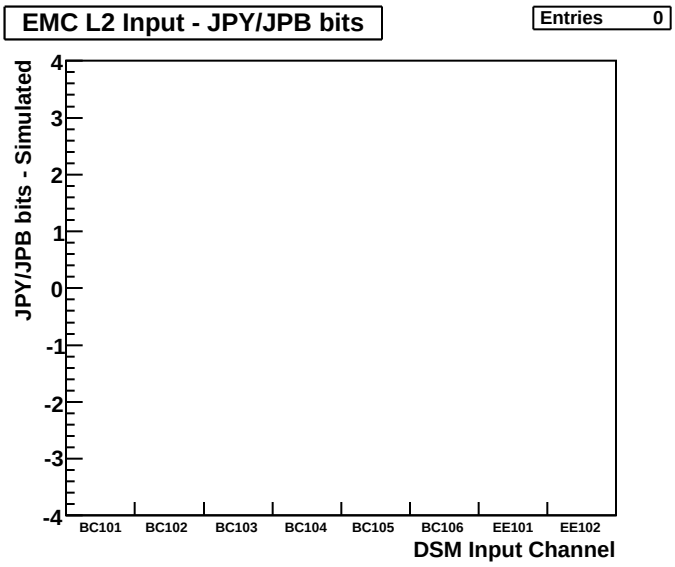

Endcap EMC L1 Input - High Tower Bits
Entries 6000000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

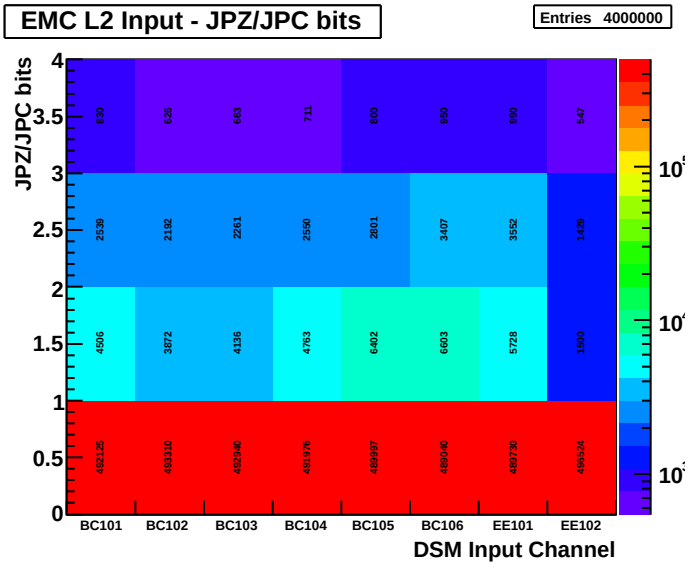

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

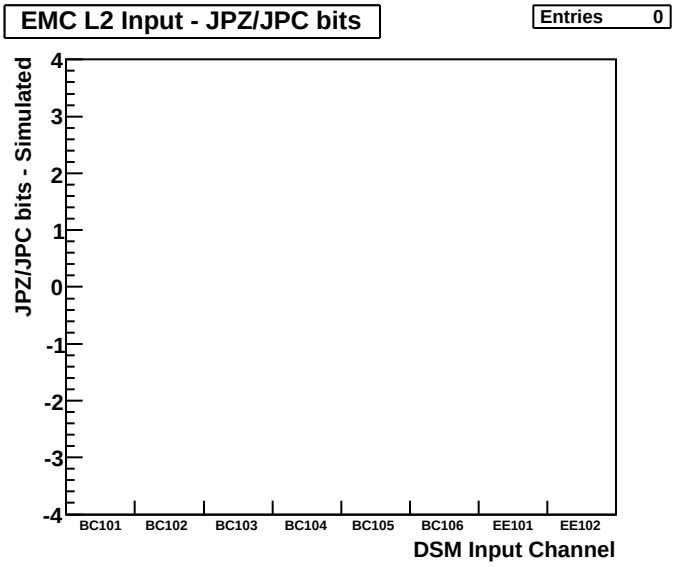

EMC L2 Input - JPX/JPA bits
Entries 4000000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1373 1008 973 886 829 863 505 567
3890 3313 3030 2929 2909 2651 1431 1687
6523 6065 5467 5325 5397 4583 1438 1373
488214 489614 490530 490860 490865 491903 496626 496373

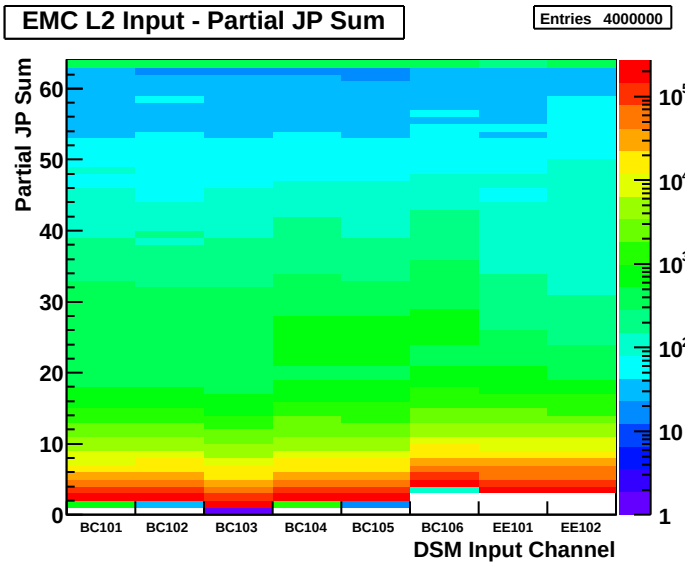

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

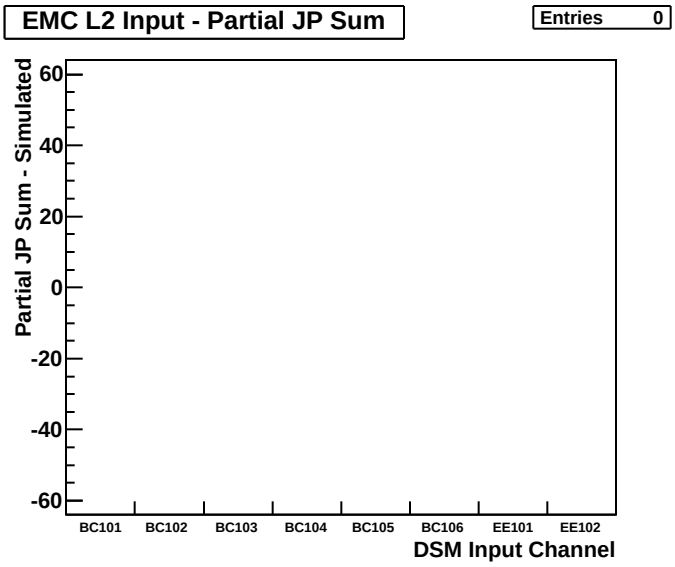

EMC L2 Input - JPY/JPB bits
Entries 4000000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
990 648 807 725 771 926 483 553
3202 2368 2710 2582 3007 3157 1267 1532
5821 4274 4822 4904 6647 5911 1321 1325
489987 492710 491661 491789 489575 490006 496929 496590

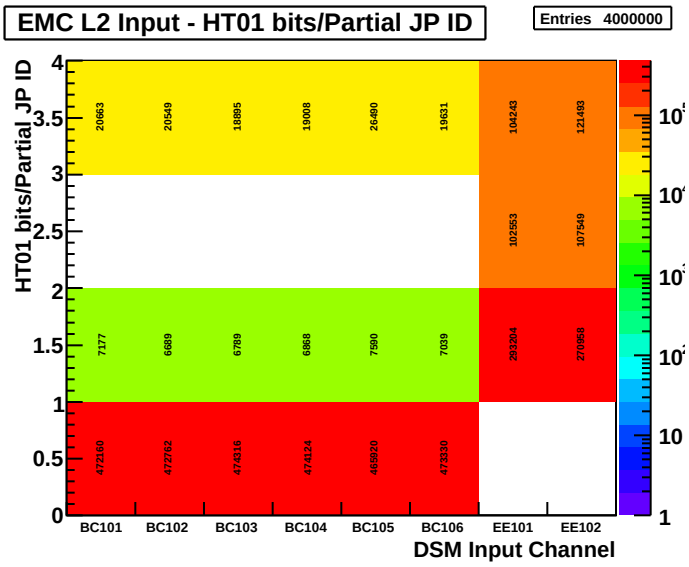

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

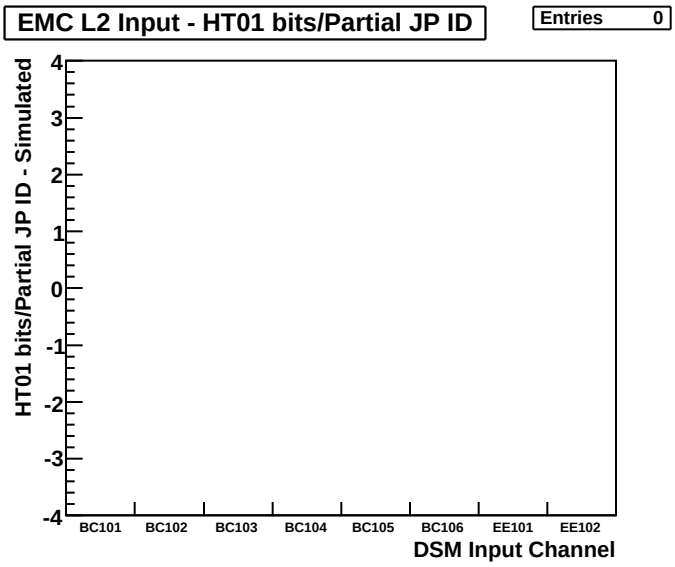

EMC L2 Input - JPZ/JPC bits
Entries 4000000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
830 626 663 711 800 950 990 547
2539 2192 2261 2550 2801 3407 3552 1429
4506 3872 4136 4763 6402 6603 5728 1500
492125 493310 492340 491976 489997 489040 489730 496524

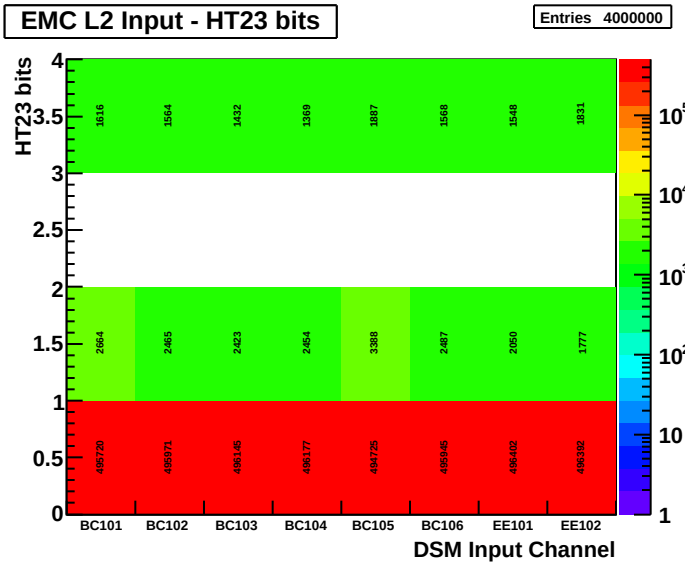

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

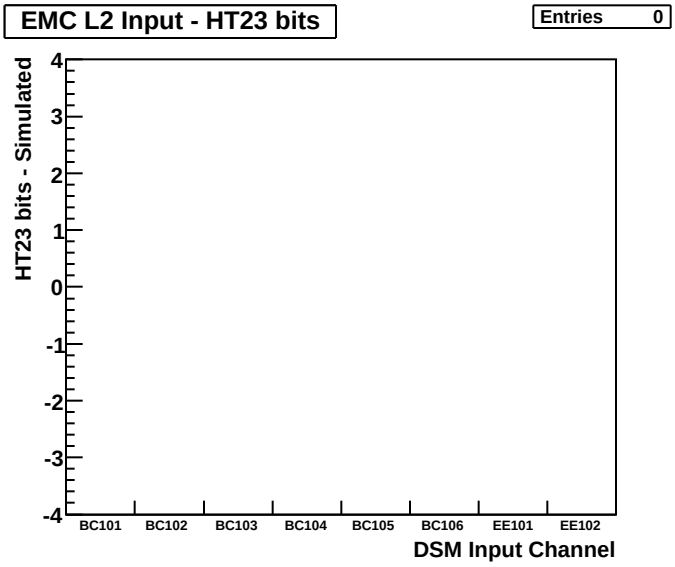

EMC L2 Input - Partial JP Sum
Entries 4000000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

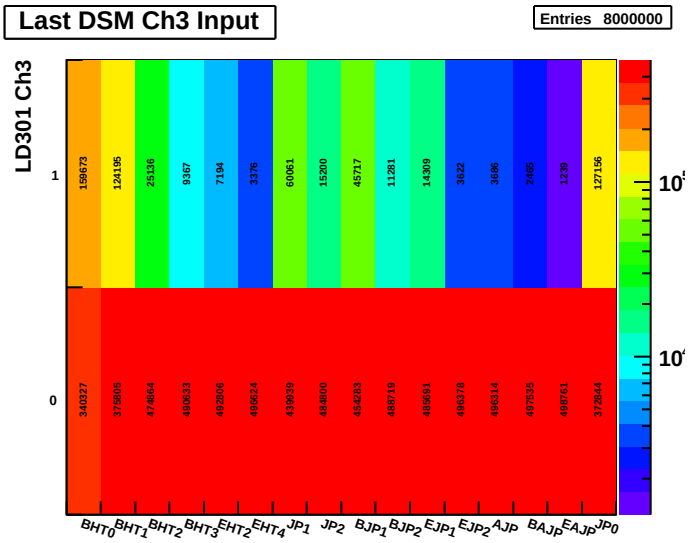

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

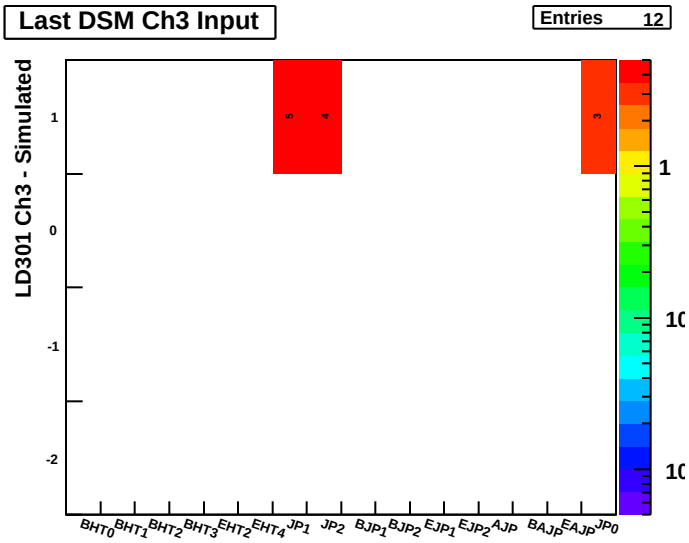

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4000000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

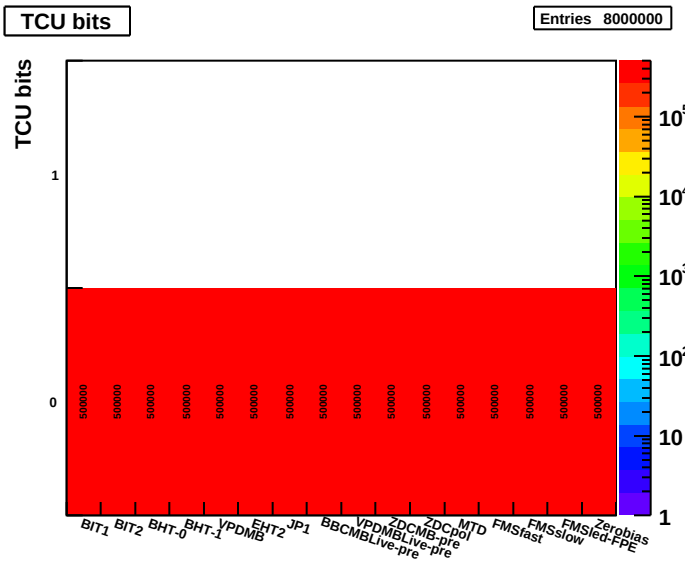

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

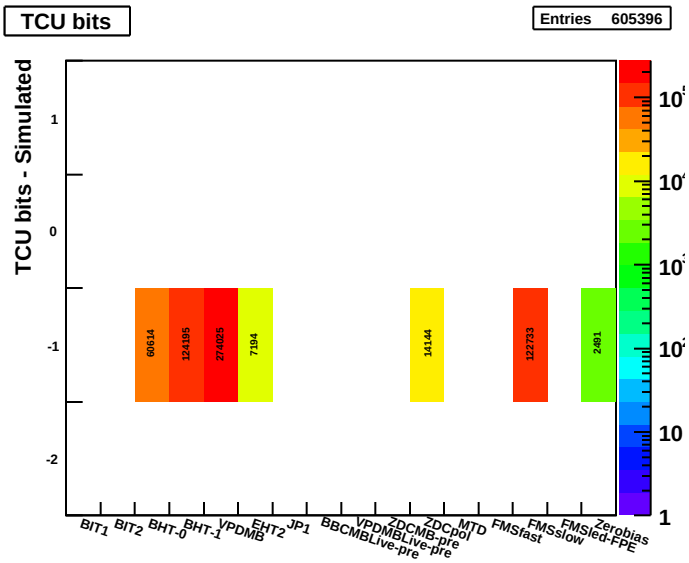

EMC L2 Input - HT23 bits
Entries 4000000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

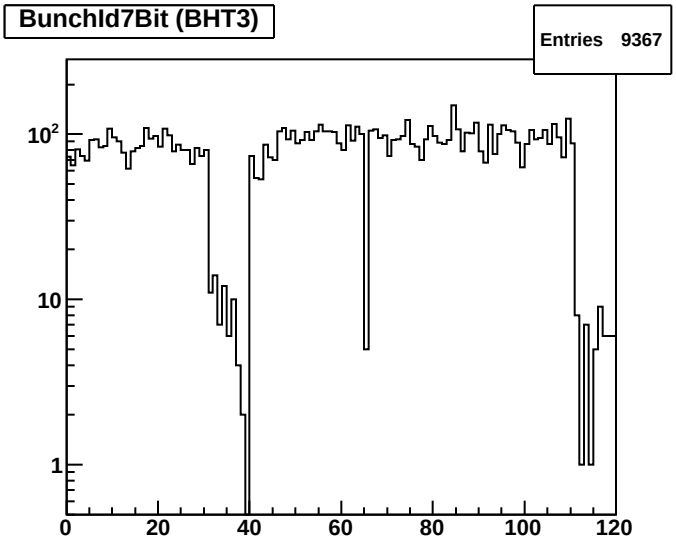

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

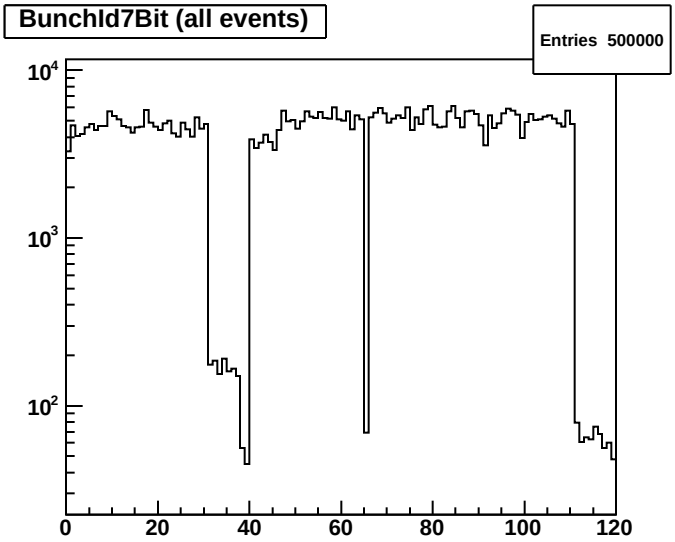

Last DSM Ch3 Input
Entries 8000000
LD301 Ch3
189673 124195 25136 9367 7194 3376 60061 15200 45717 11281 14309 3622 3686 2465 1239 127156
340327 375805 474864 490633 492806 496624 439939 484800 454283 488719 485691 496378 496314 497535 498761 372844
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

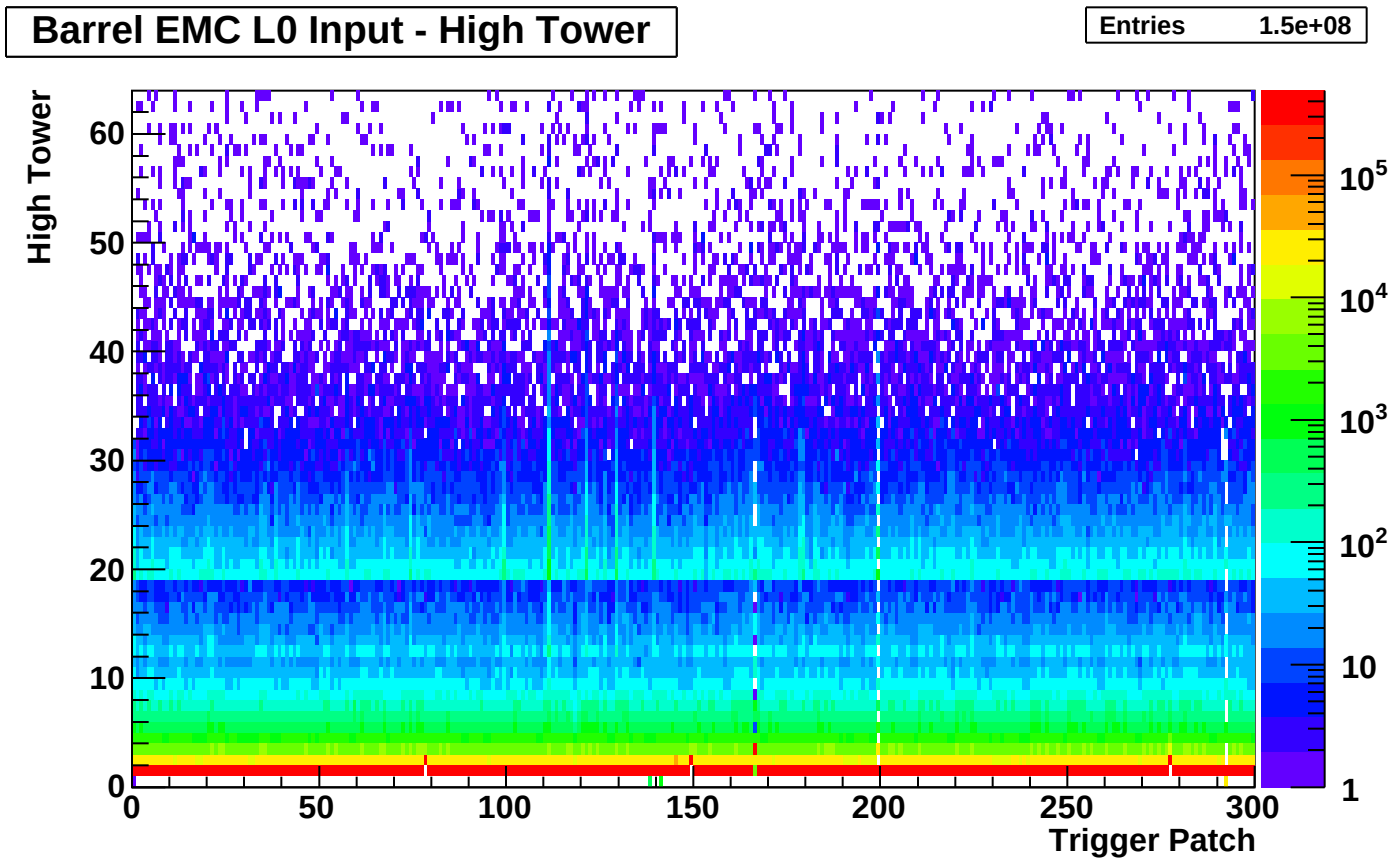

Last DSM Ch3 Input
Entries 12
LD301 Ch3 - Simulated
5 4 3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

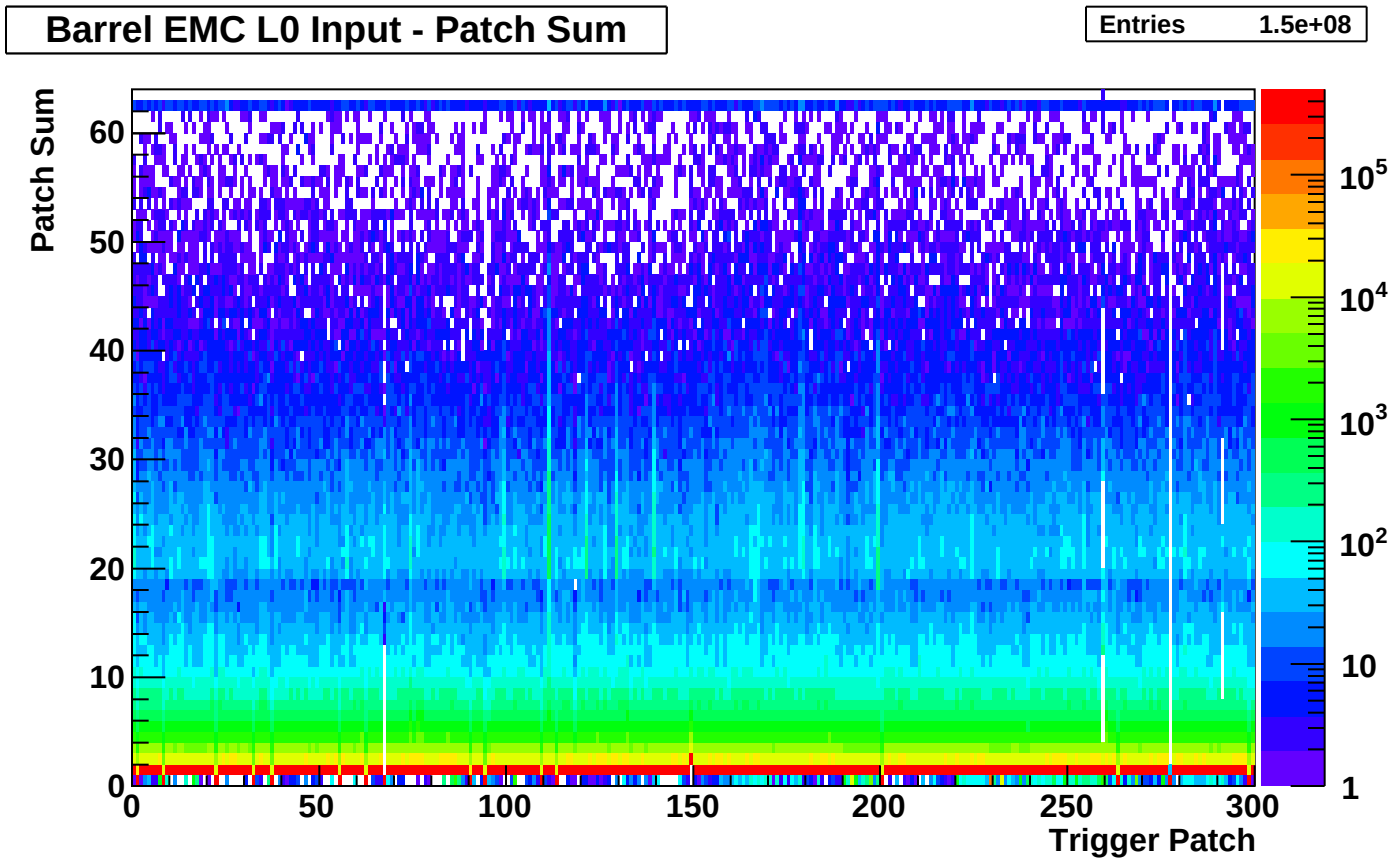

TCU bits
Entries 8000000
TCU bits
500000
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

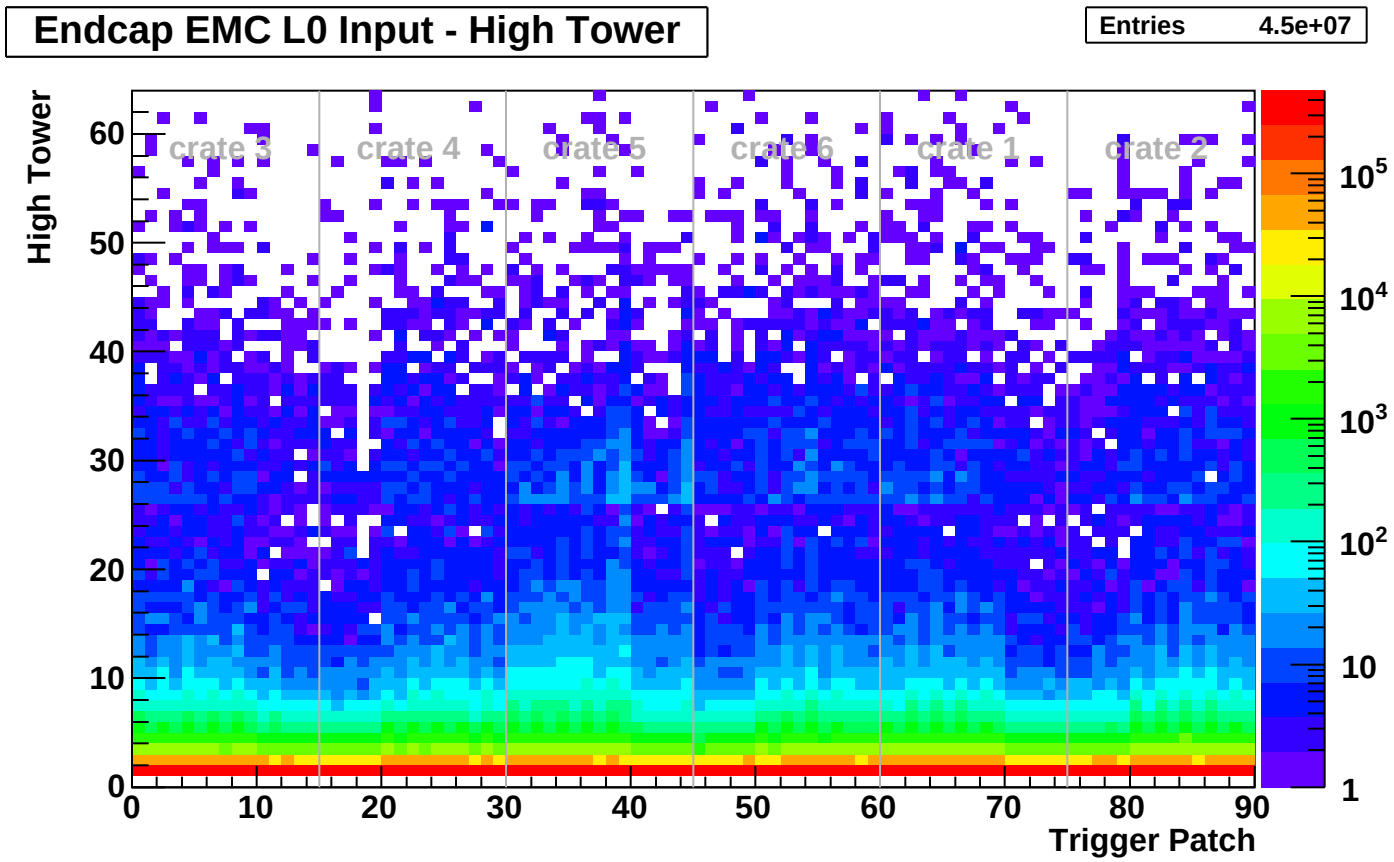

TCU bits
Entries 605396
TCU bits - Simulated
60614 124195 274025 7194 14144 122733 2491
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

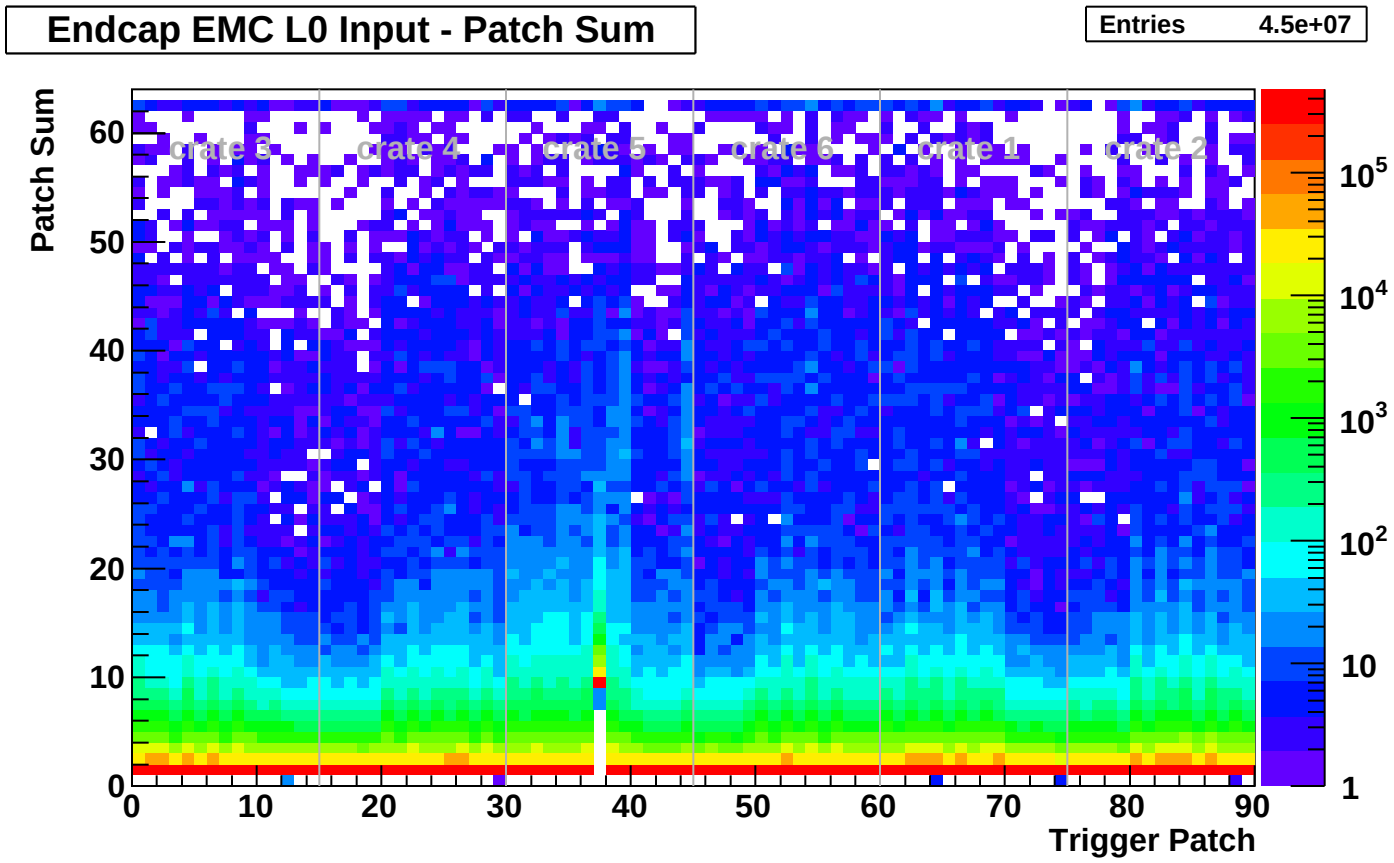

BunchId7Bit (BHT3)
Entries 9367

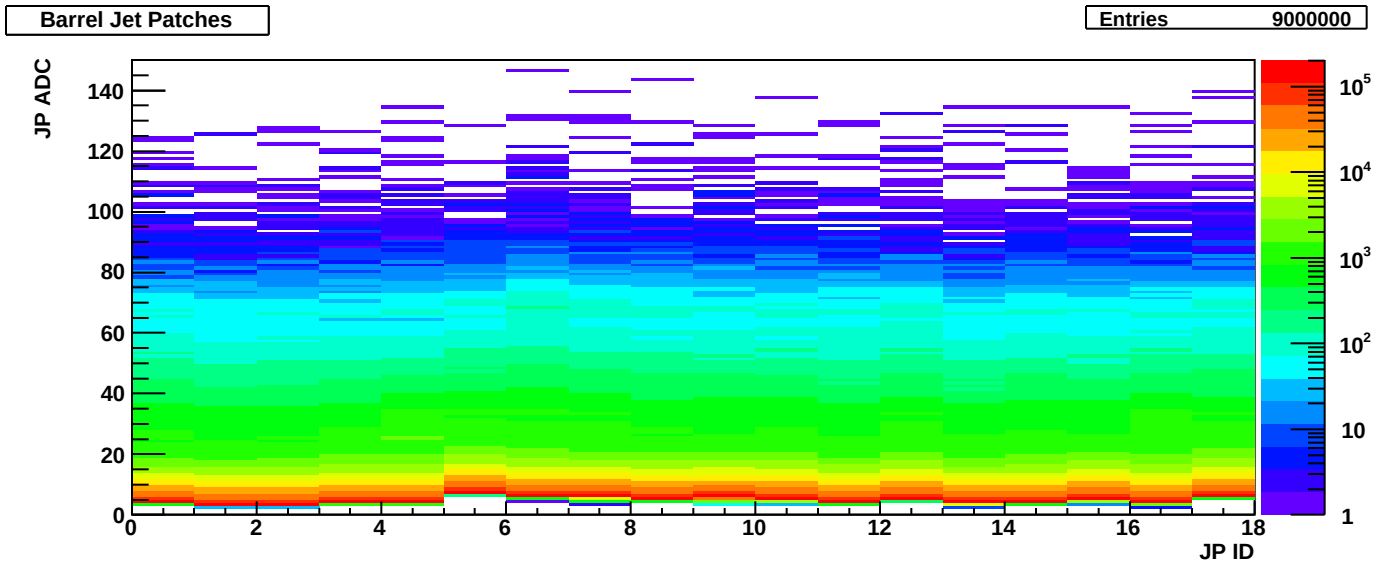

BunchId7Bit (all events)
Entries 500000

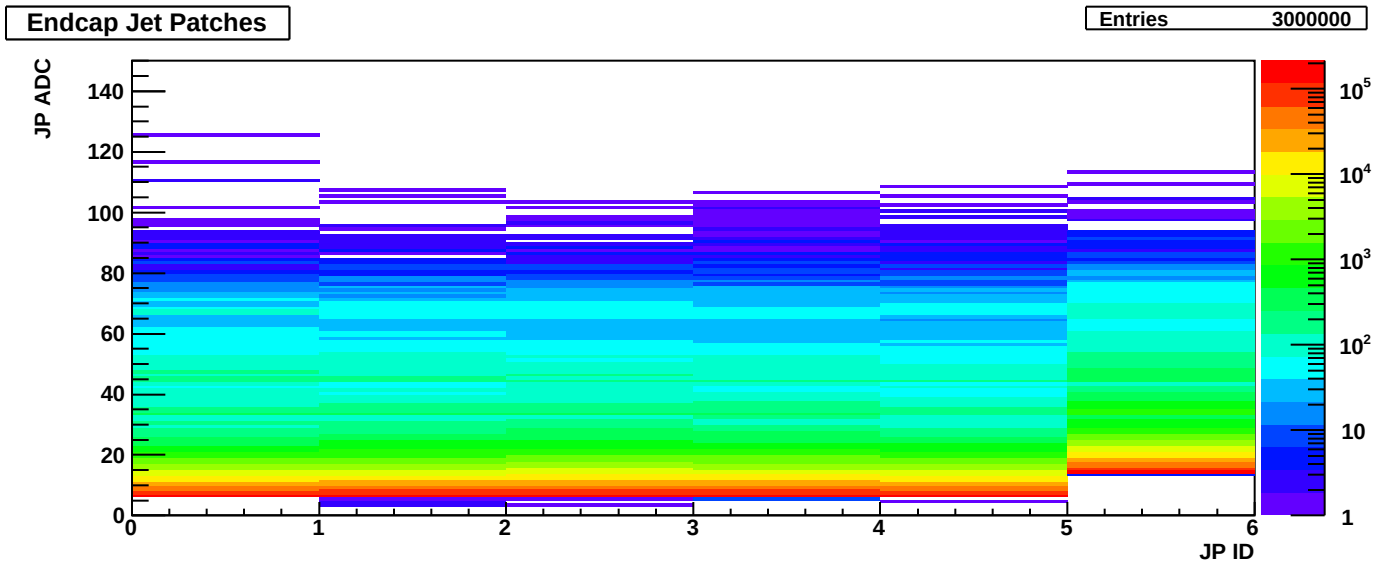

Barrel EMC L0 Input - High Tower
Entries 1.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

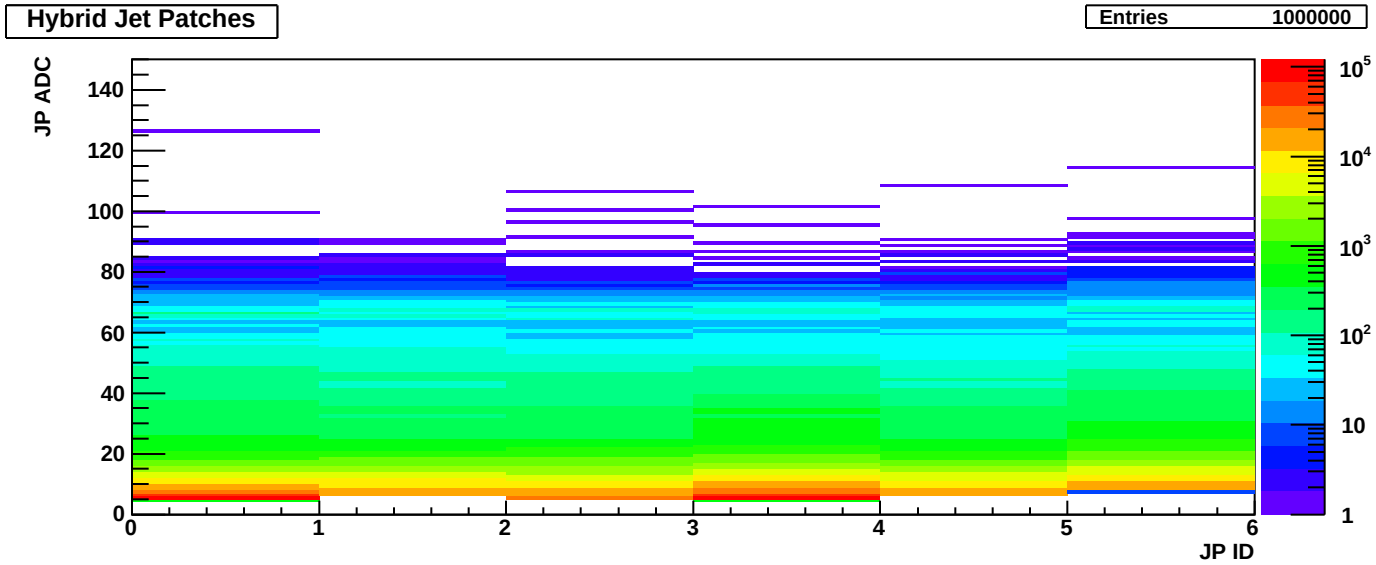

Barrel EMC L0 Input - Patch Sum
Entries 1.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

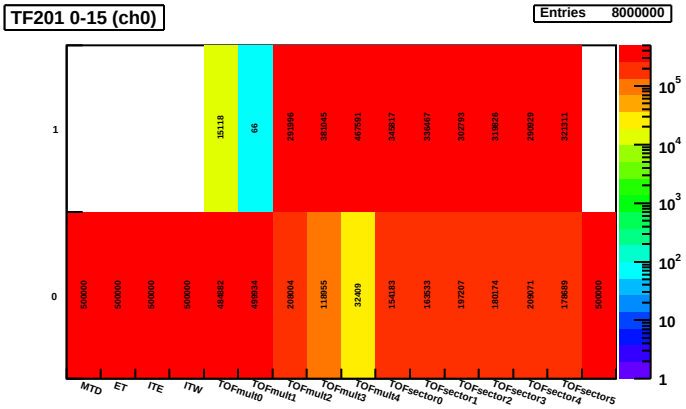

Endcap EMC L0 Input - High Tower
Entries 4.5e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

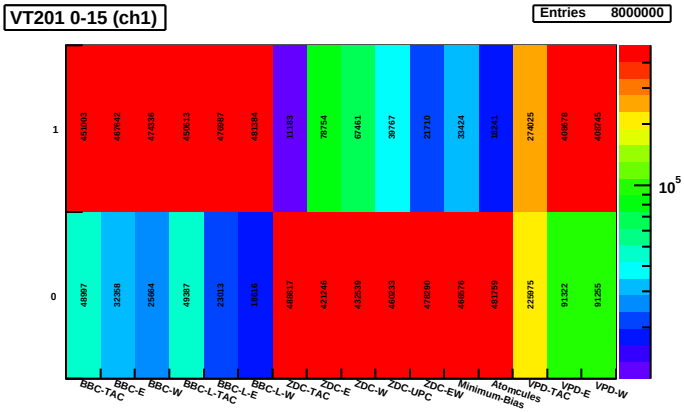

Endcap EMC L0 Input - Patch Sum
Entries 4.5e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

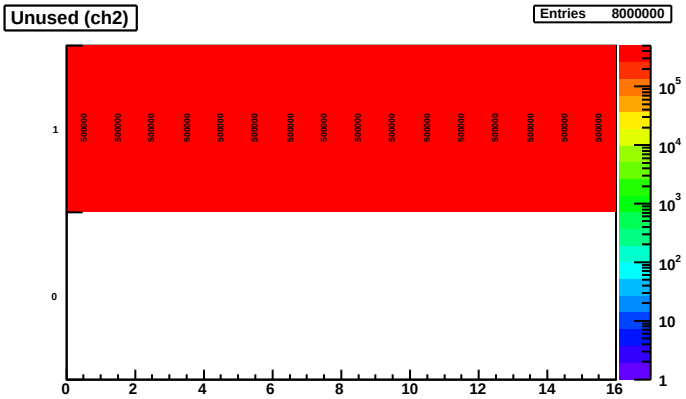

Barrel Jet Patches
Entries 9000000
JP ADC
JP ID

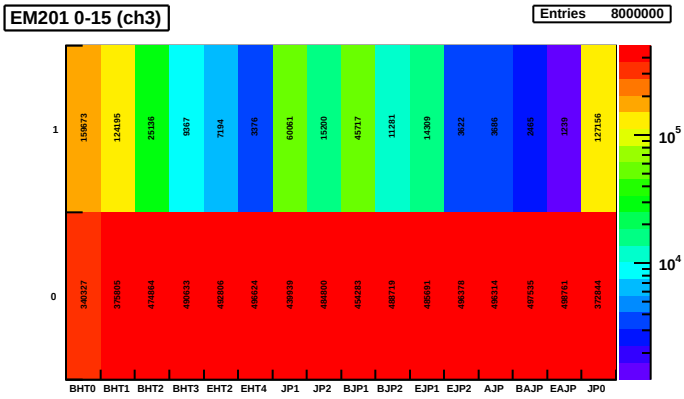

Endcap Jet Patches
Entries 3000000
JP ADC
JP ID

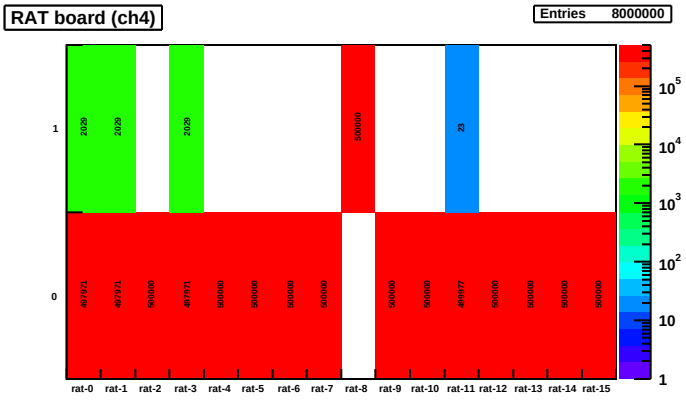

Hybrid Jet Patches
Entries 1000000
JP ADC
JP ID

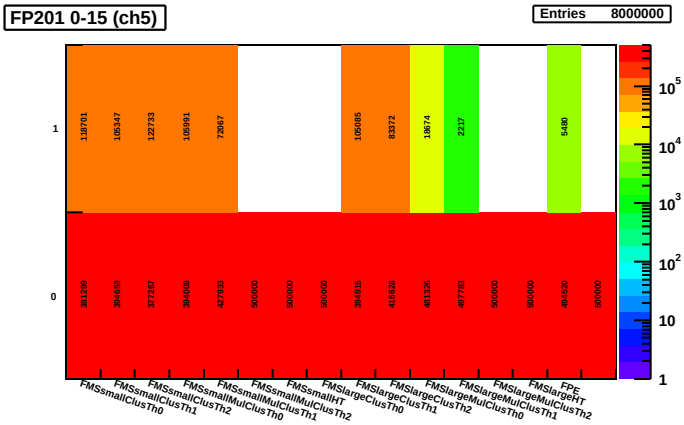

TF201 0-15 (ch0)
Entries 8000000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

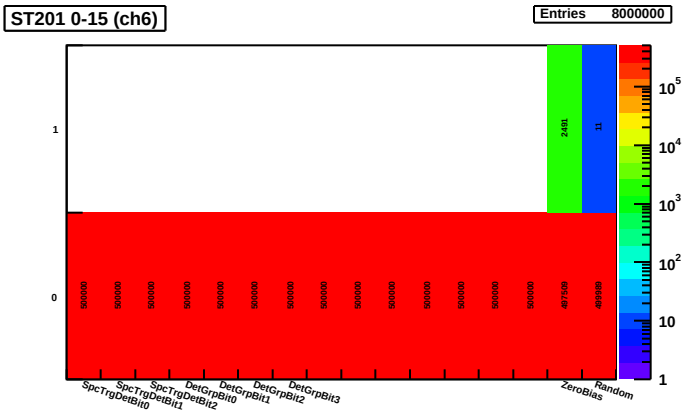

VT201 0-15 (ch1)
Entries 8000000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

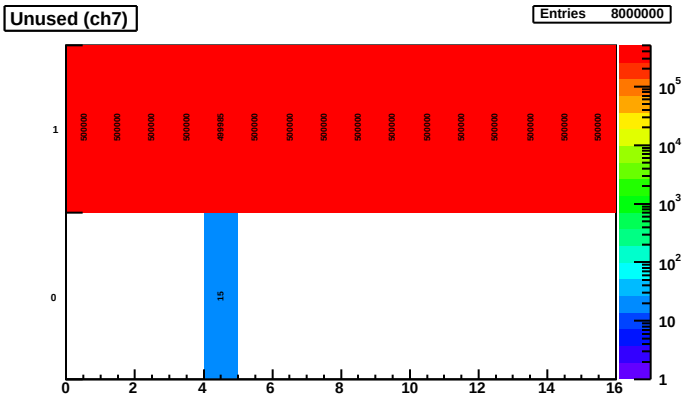

Unused (ch2)
Entries 8000000

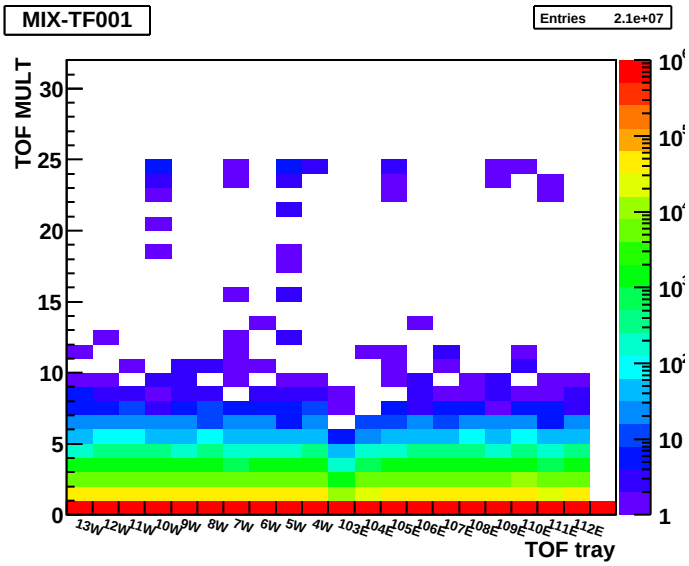

EM201 0-15 (ch3)
Entries 8000000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

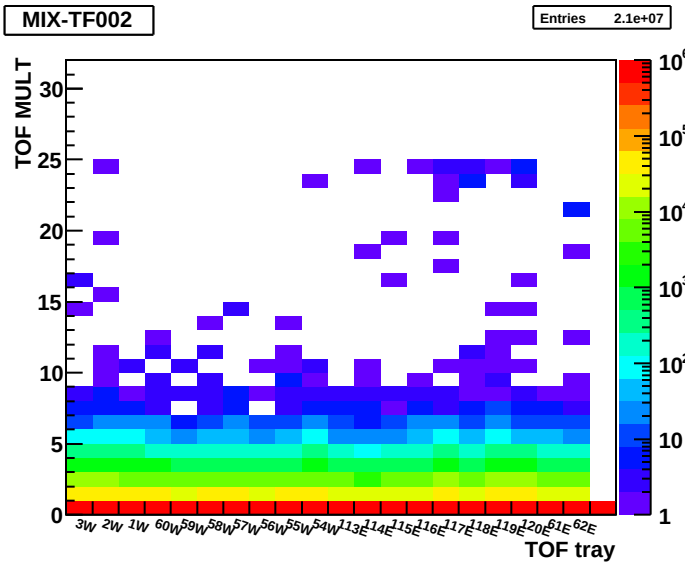

RAT board (ch4)
Entries 8000000
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

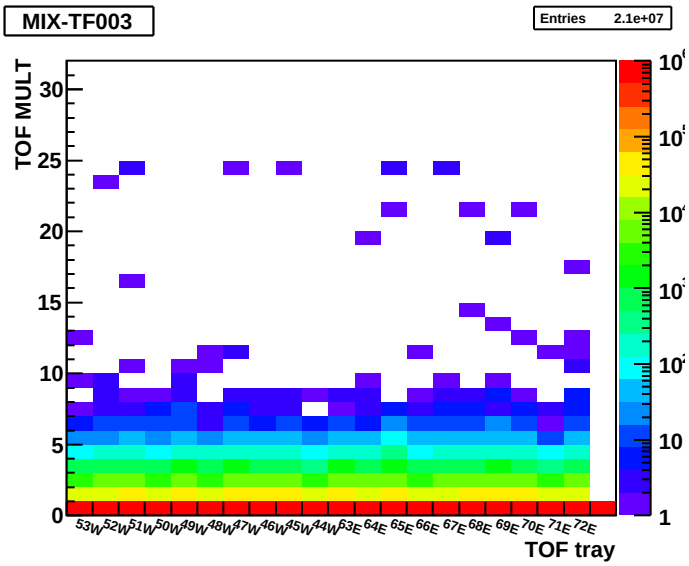

FP201 0-15 (ch5)
Entries 8000000
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

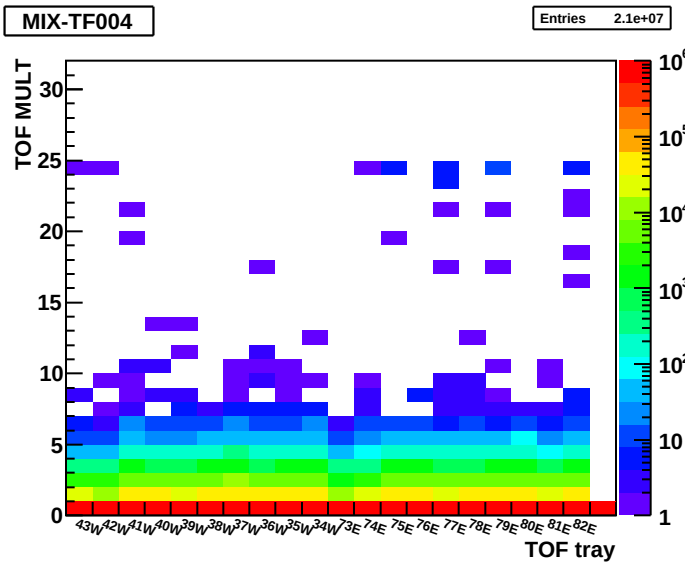

ST201 0-15 (ch6)
Entries 8000000
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

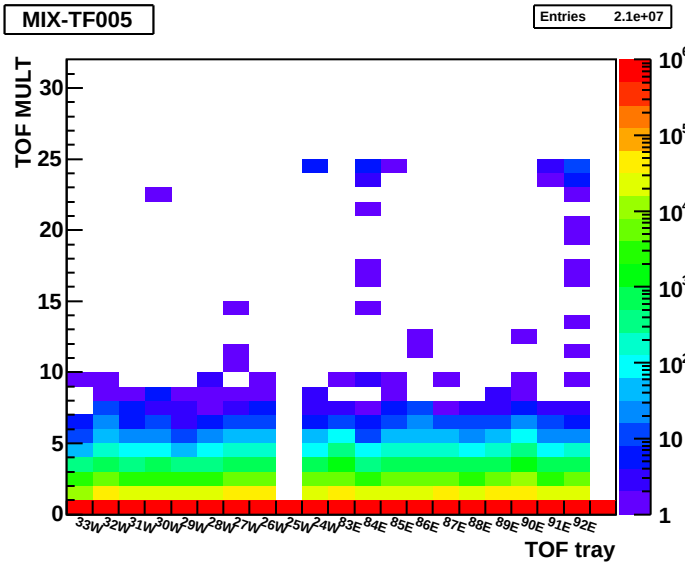

Unused (ch7)
Entries 8000000

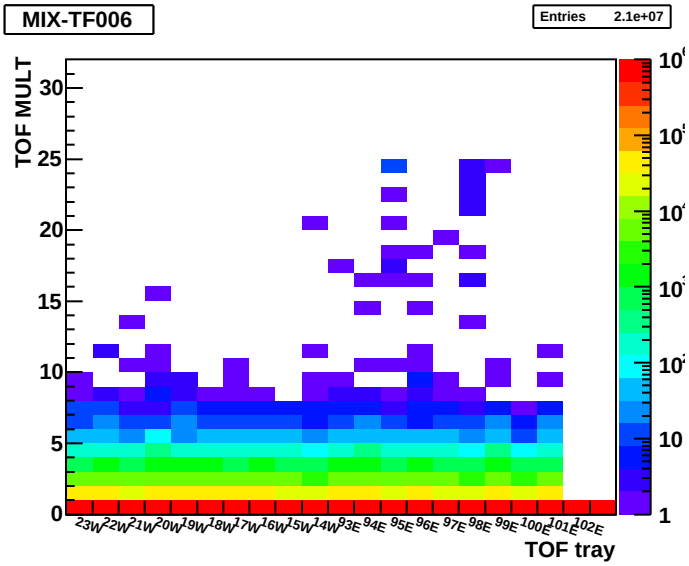

MIX-TF001
Entries 2.1e+07
TOF MULT
TOF tray

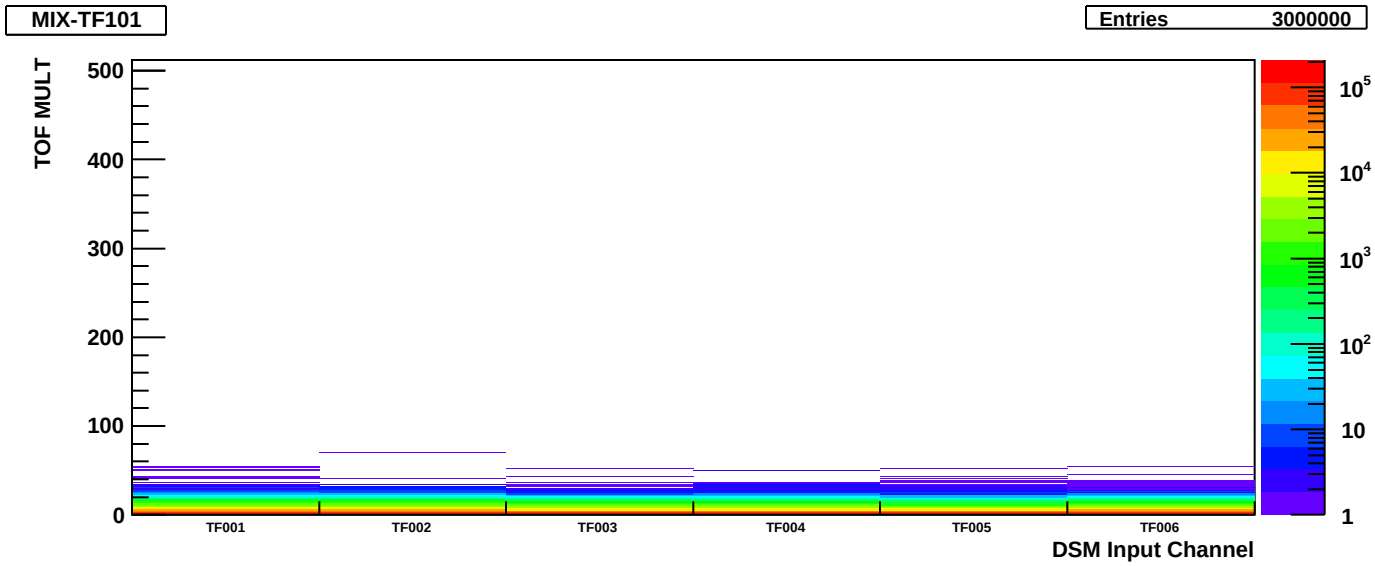

MIX-TF002
Entries 2.1e+07
TOF MULT
TOF tray

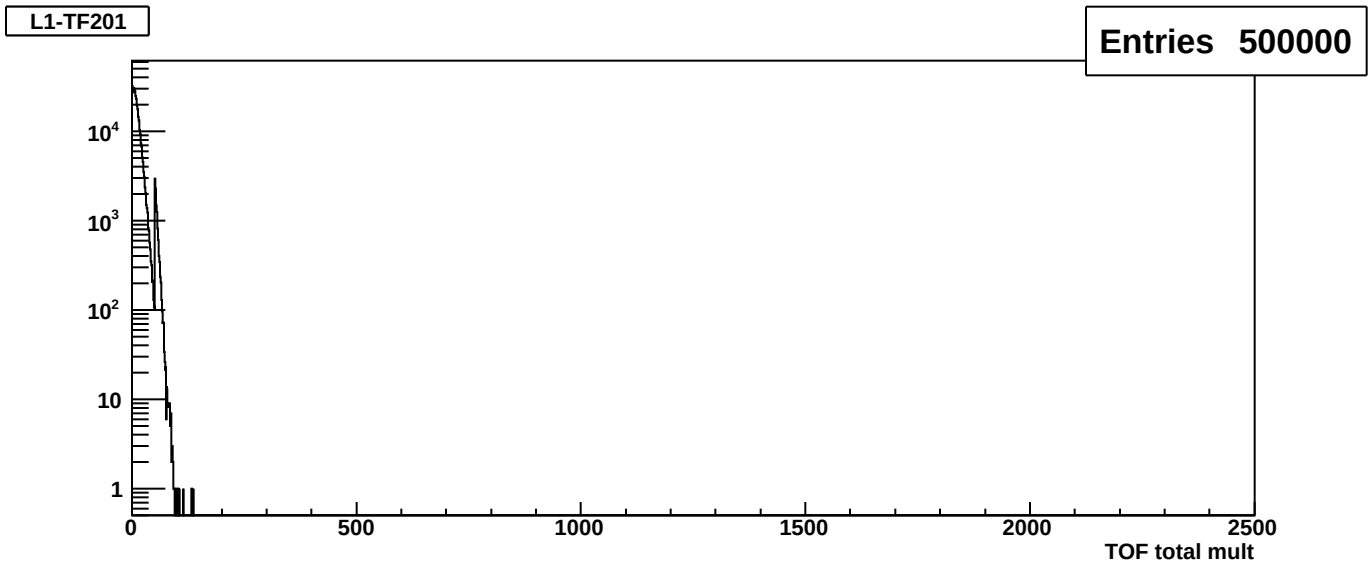

MIX-TF003
Entries 2.1e+07
TOF MULT
TOF tray

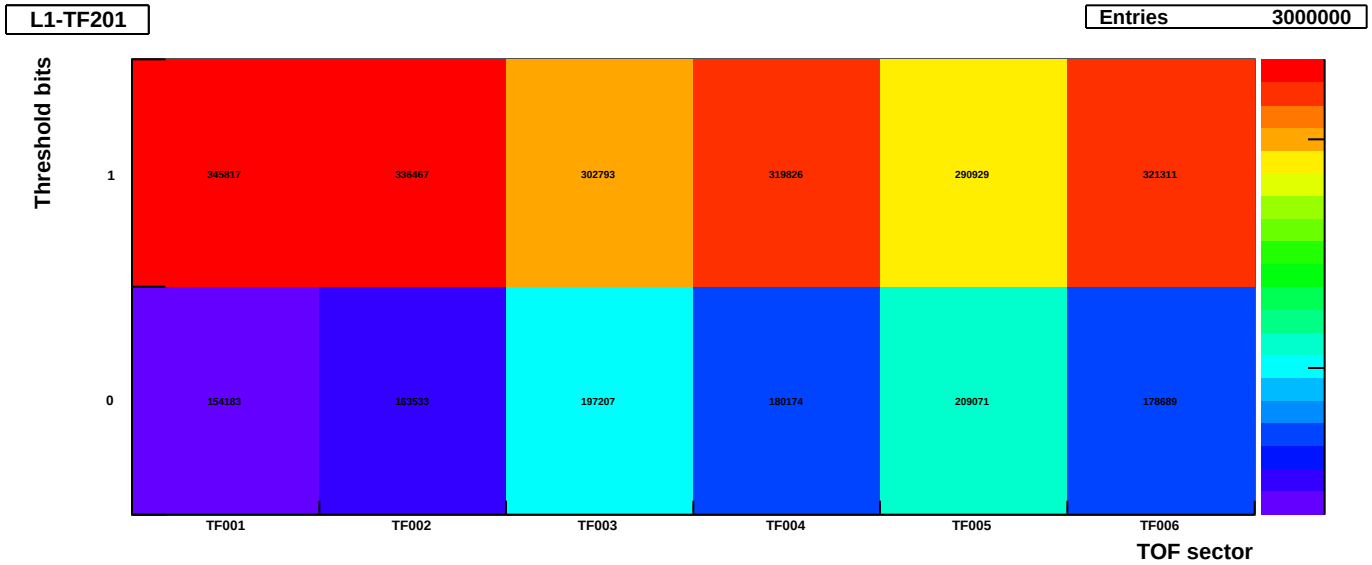

MIX-TF004
Entries 2.1e+07
TOF MULT
TOF tray

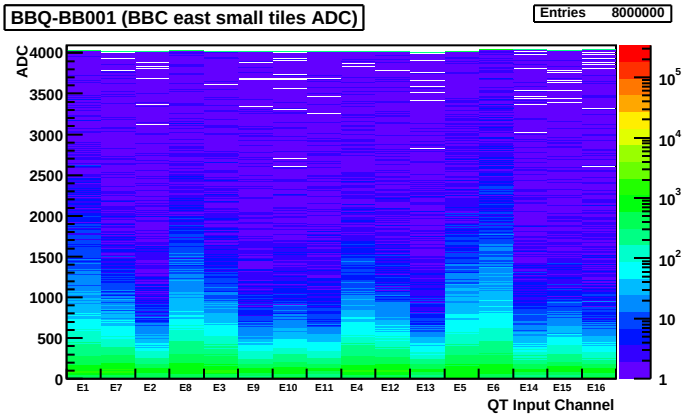

MIX-TF005
Entries 2.1e+07
TOF MULT
TOF tray

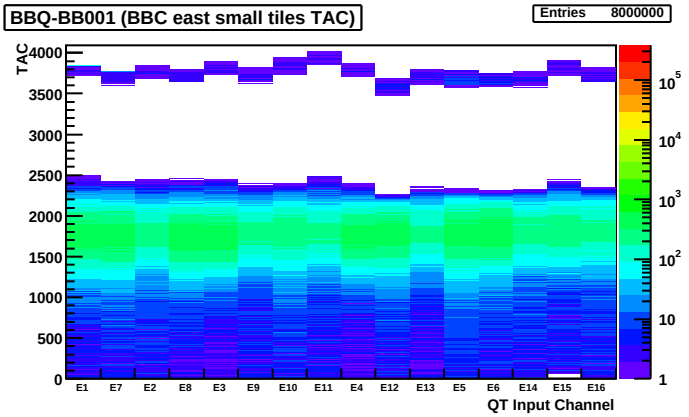

MIX-TF006
Entries 2.1e+07
TOF MULT
TOF tray

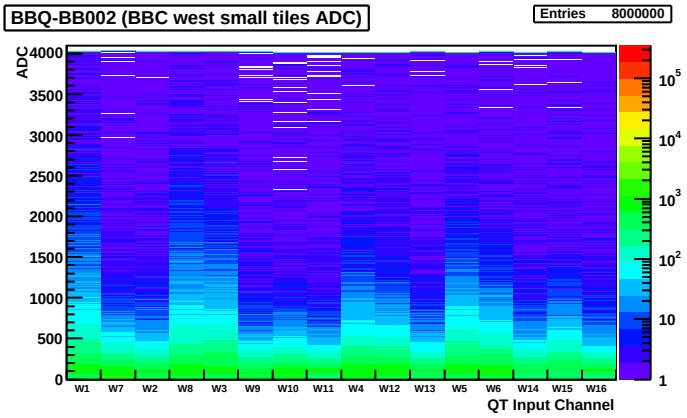

MIX-TF101
Entries 3000000
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

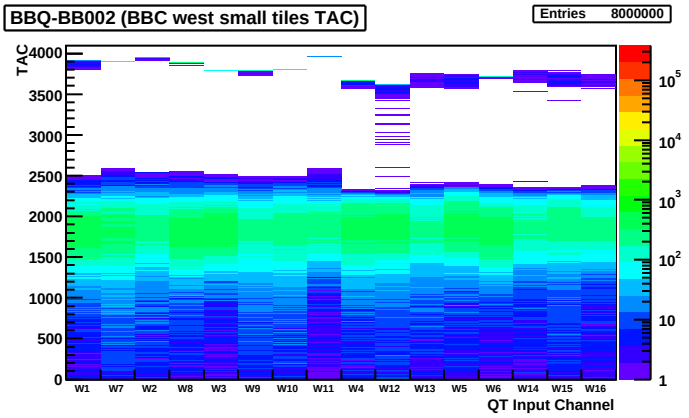

L1-TF201
Entries 500000
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

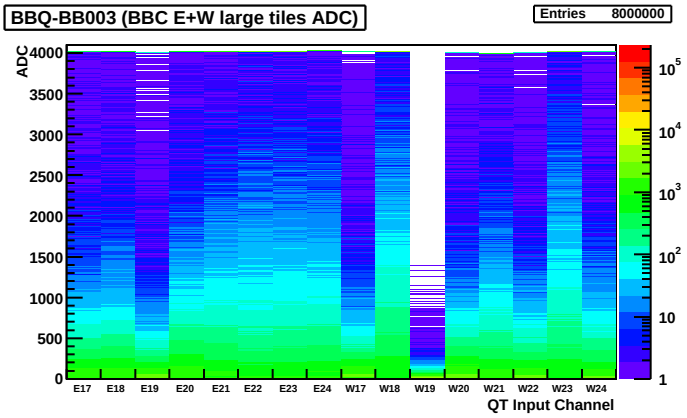

L1-TF201
Entries 3000000
Threshold bits
1
0
345817
336467
302793
319826
290929
321311
154183
163533
197207
180174
209071
178689
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

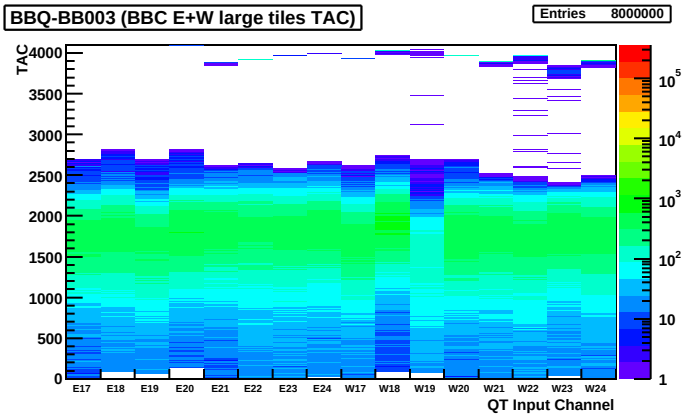

BBQ-BB001 (BBC east small tiles ADC)
Entries 8000000
ADC
QT Input Channel

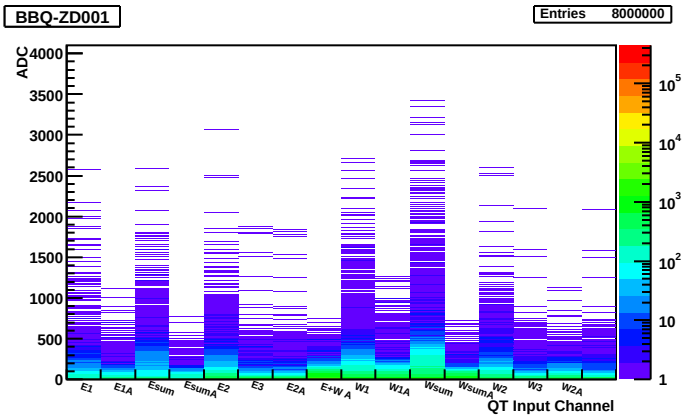

BBQ-BB001 (BBC east small tiles TAC)
Entries 8000000
TAC
QT Input Channel

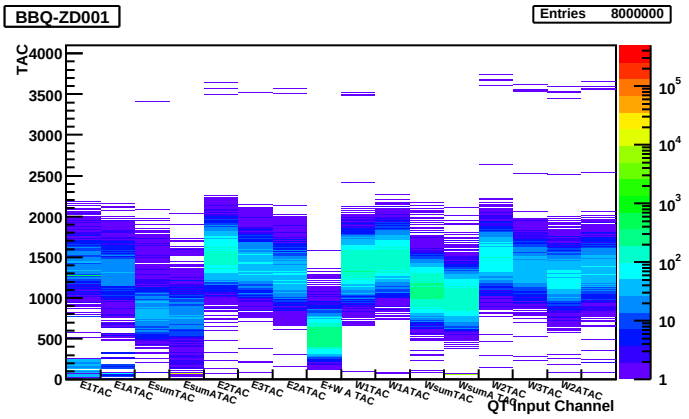

BBQ-BB002 (BBC west small tiles ADC)
Entries 8000000
ADC
QT Input Channel

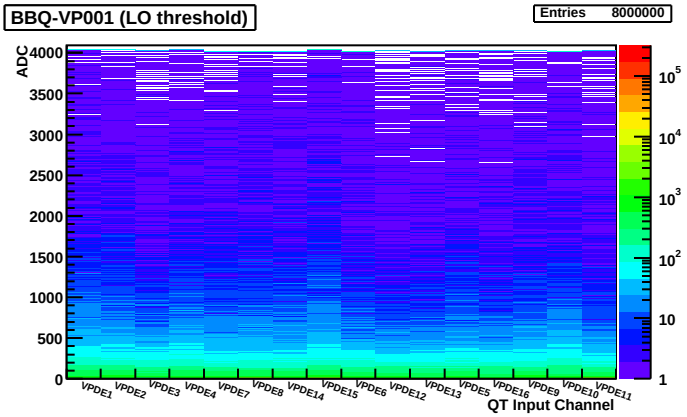

BBQ-BB002 (BBC west small tiles TAC)
Entries 8000000
TAC
QT Input Channel

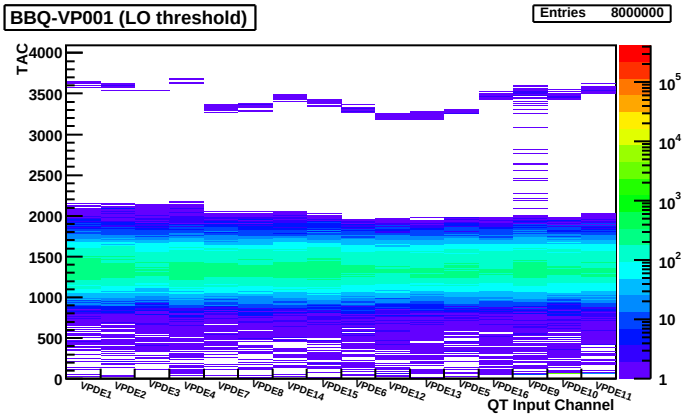

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 8000000
ADC
QT Input Channel

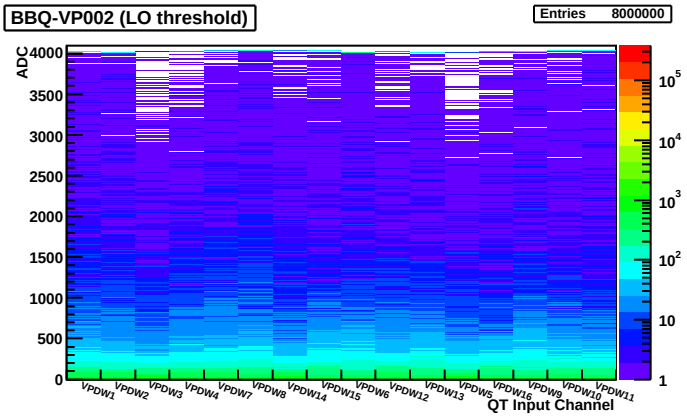

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 8000000
TAC
QT Input Channel

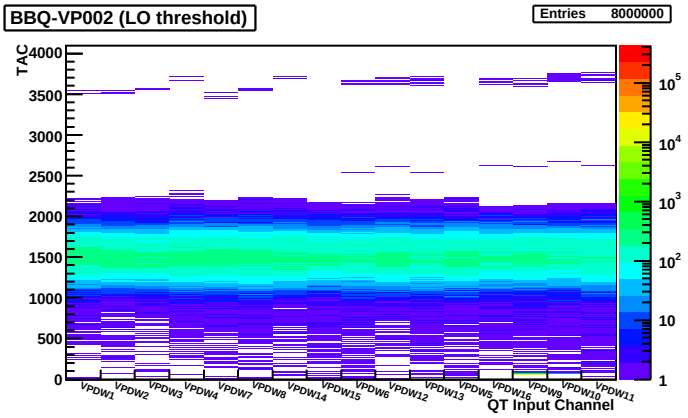

BBQ-ZD001
Entries 8000000
ADC
QT Input Channel

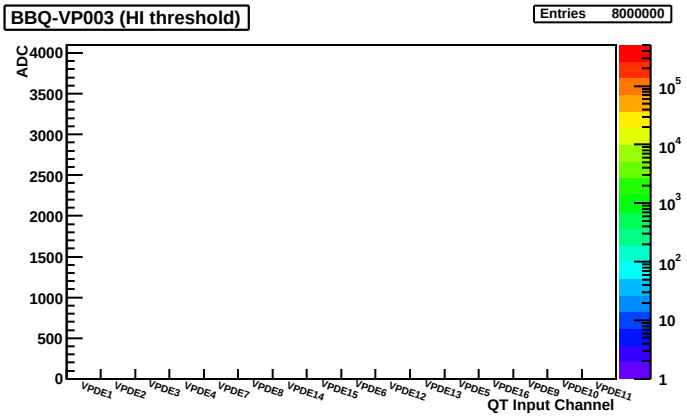

BBQ-ZD001
Entries 8000000
TAC
QT Input Channel

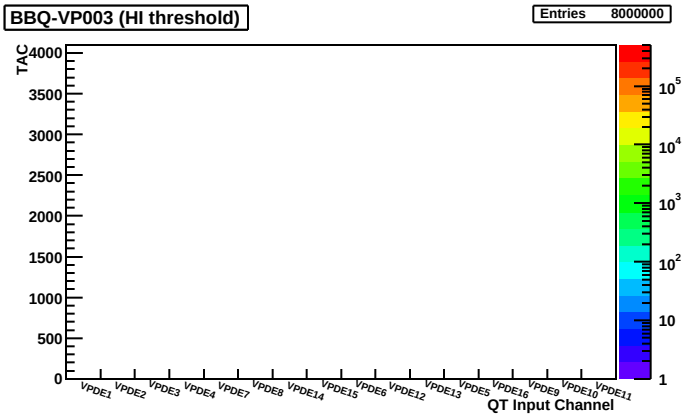

BBQ-VP001 (LO threshold)
Entries 8000000
ADC
QT Input Channel

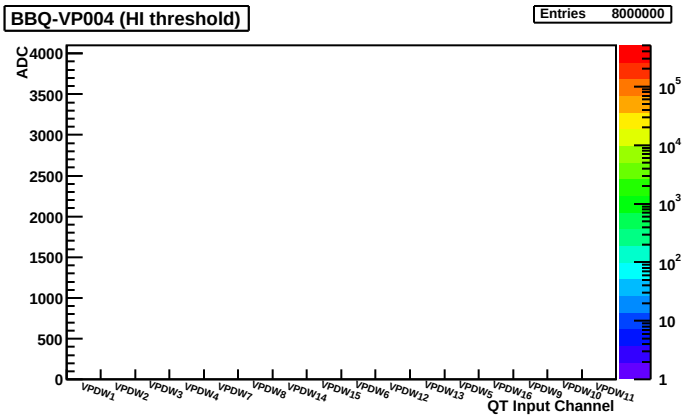

BBQ-VP001 (LO threshold)
Entries 8000000
TAC
QT Input Channel

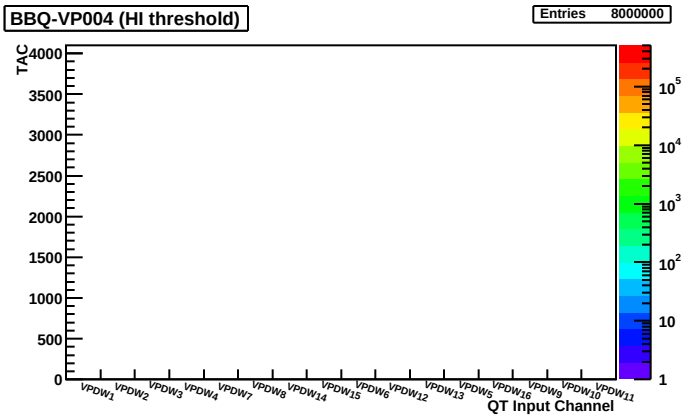

BBQ-VP002 (LO threshold)
Entries 8000000
ADC
QT Input Channel

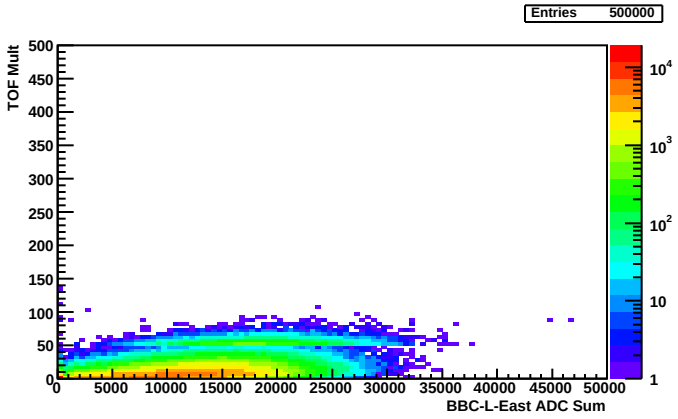

BBQ-VP002 (LO threshold)
Entries 8000000
TAC
QT Input Channel

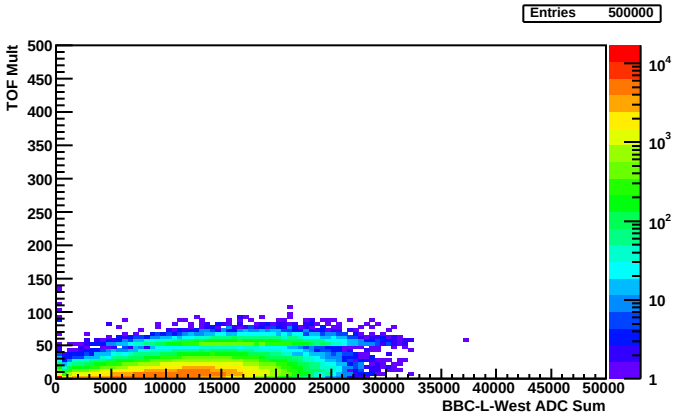

BBQ-VP003 (HI threshold)
Entries 8000000
ADC
QT Input Channel

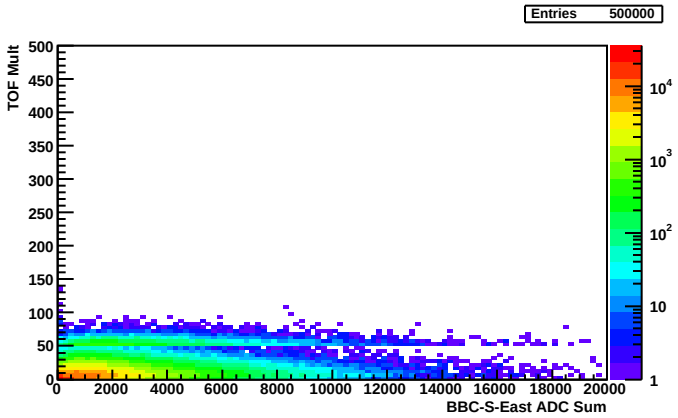

BBQ-VP003 (HI threshold)
Entries 8000000
TAC
QT Input Channel

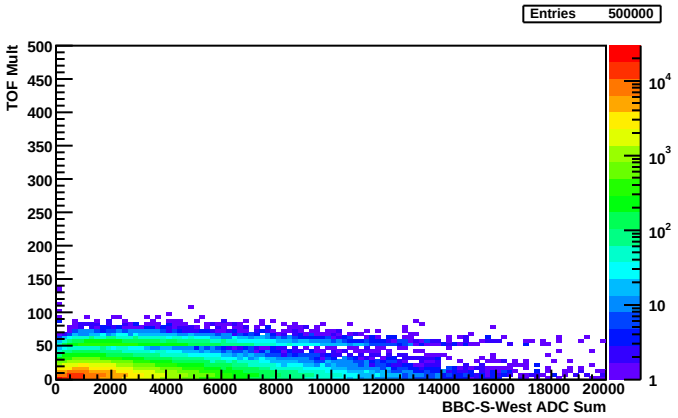

BBQ-VP004 (HI threshold)
Entries 8000000
ADC
QT Input Channel

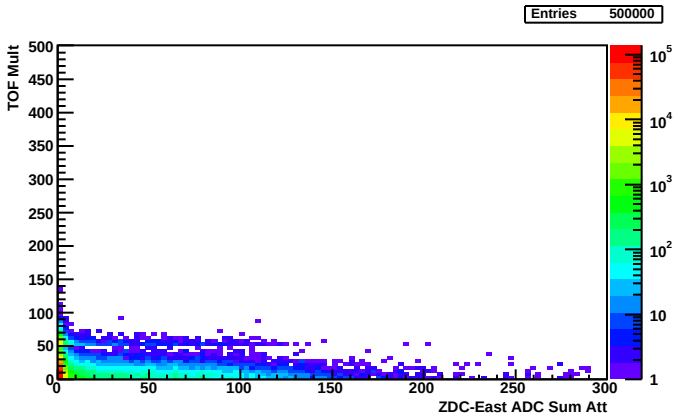

BBQ-VP004 (HI threshold)
Entries 8000000
TAC
QT Input Channel

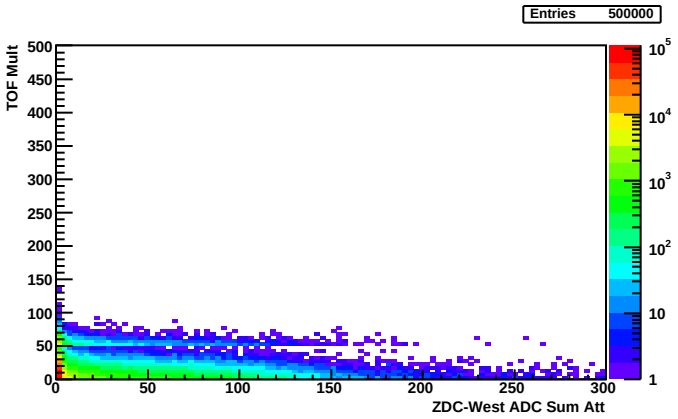

Entries 500000
TOF Mult
BBC-L-East ADC Sum

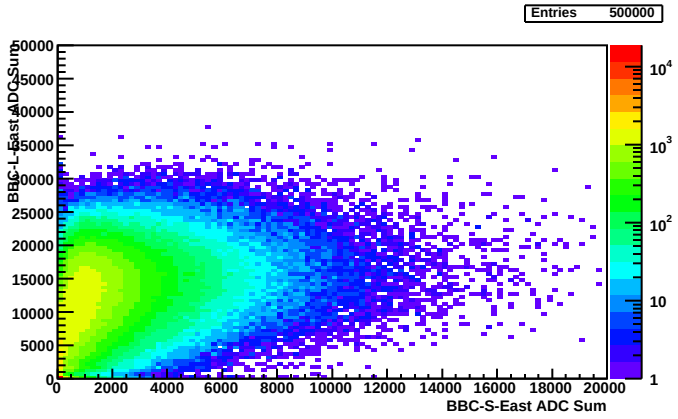

Entries 500000
TOF Mult
BBC-L-West ADC Sum

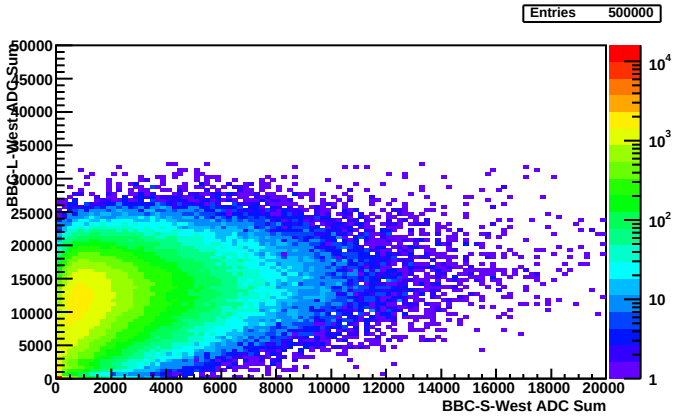

Entries 500000
TOF Mult
BBC-S-East ADC Sum

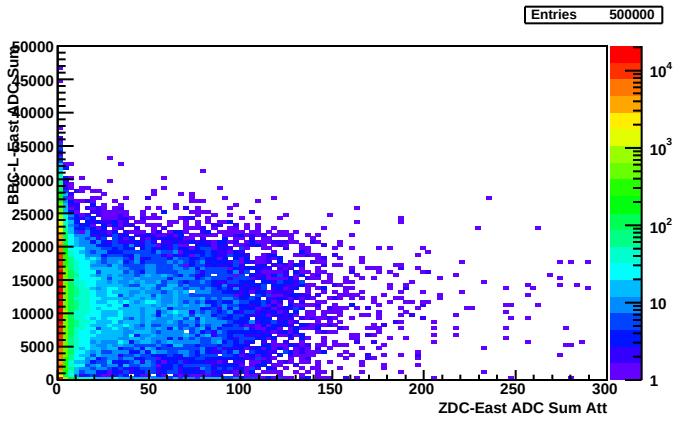

Entries 500000
TOF Mult
BBC-S-West ADC Sum

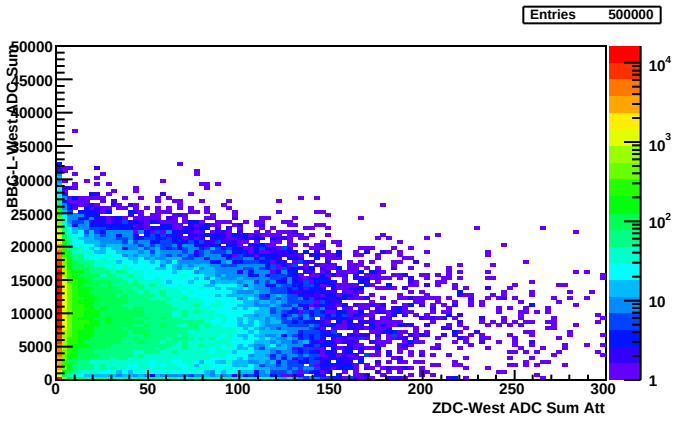

Entries 500000
TOF Mult
ZDC-East ADC Sum Att

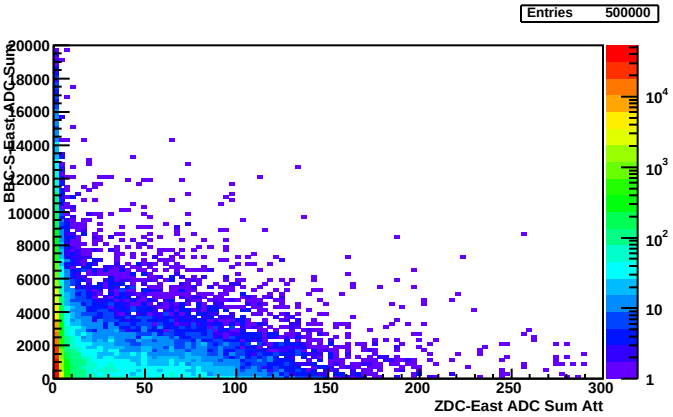

Entries 500000
TOF Mult
ZDC-West ADC Sum Att

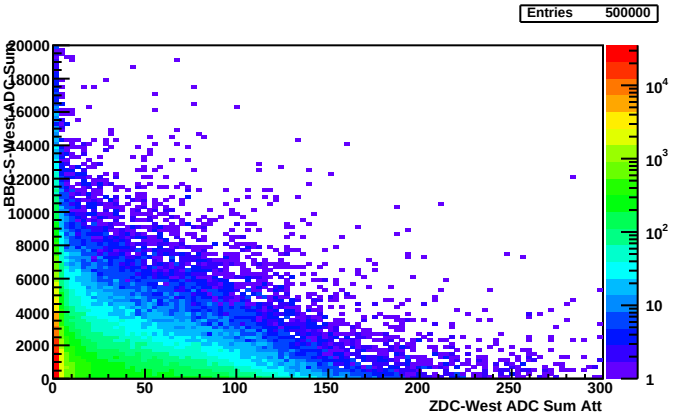

Entries 500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

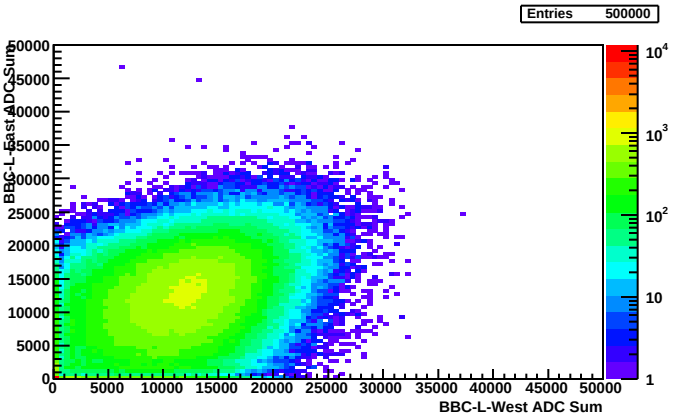

Entries 500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

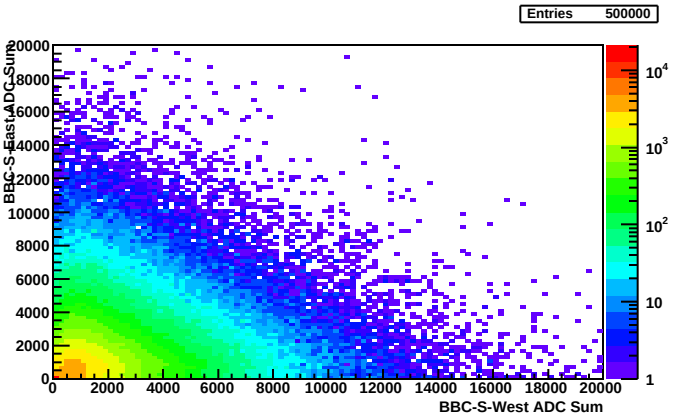

Entries 500000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

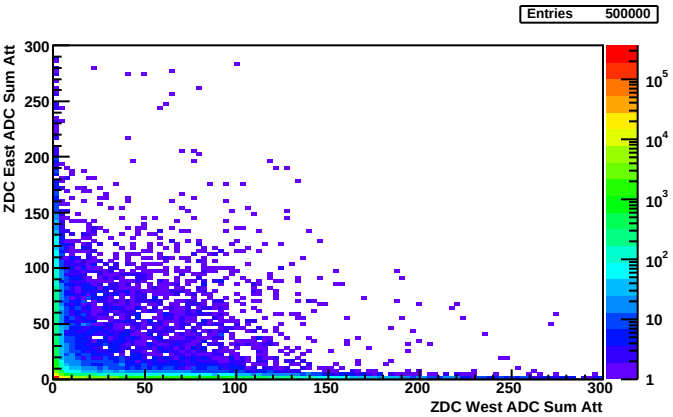

Entries 500000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

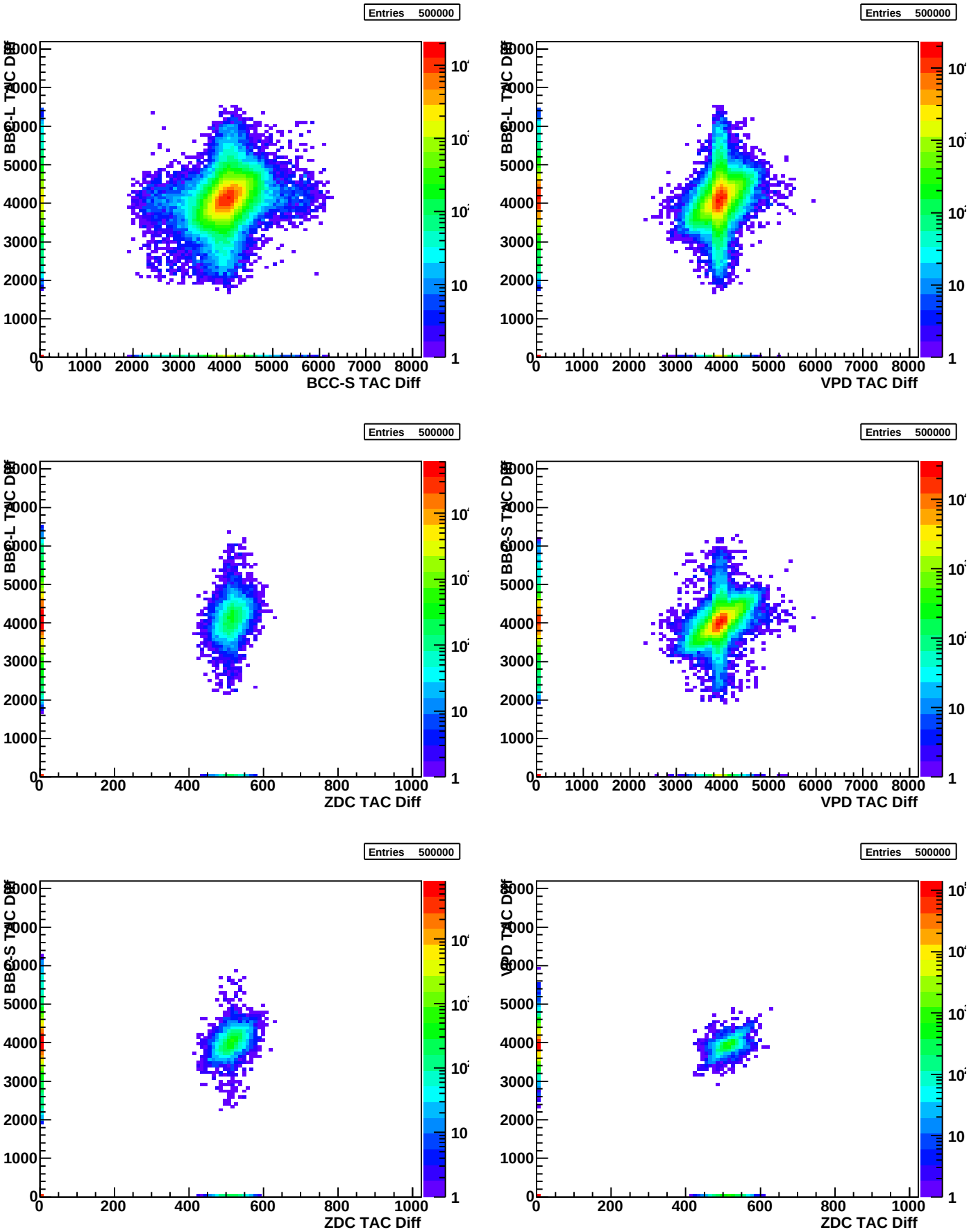

Entries 500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

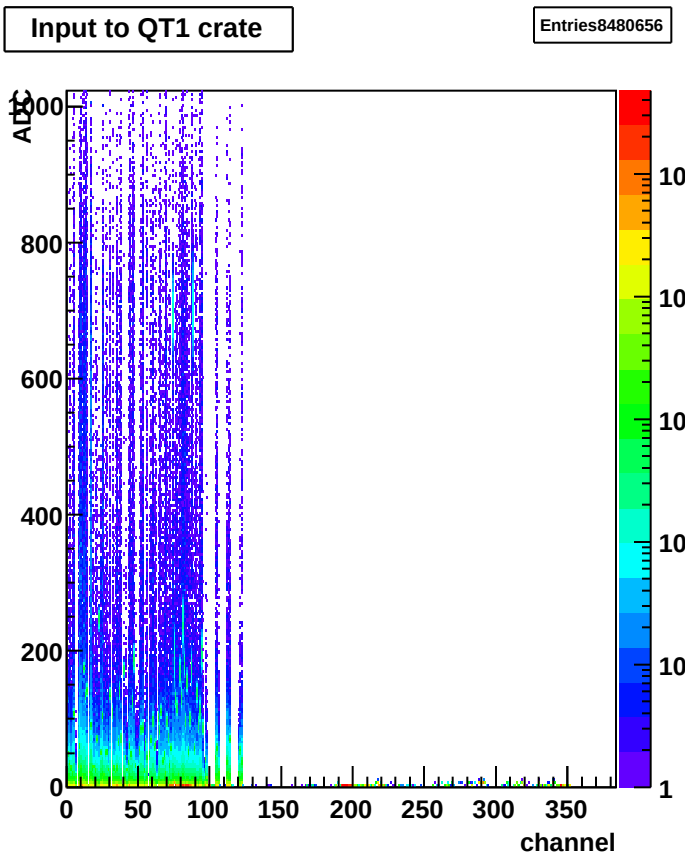

Entries 500000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

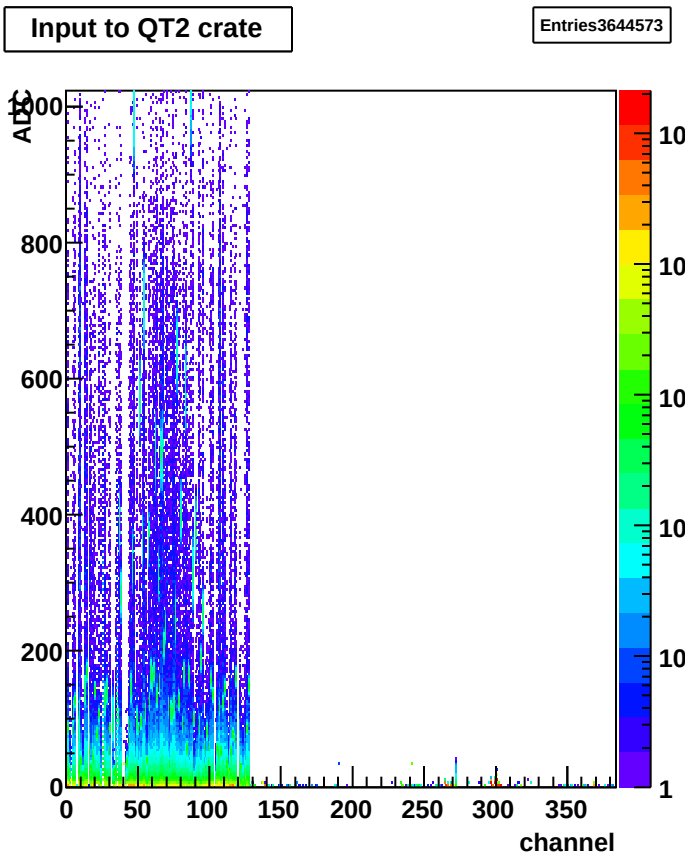

Entries 500000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

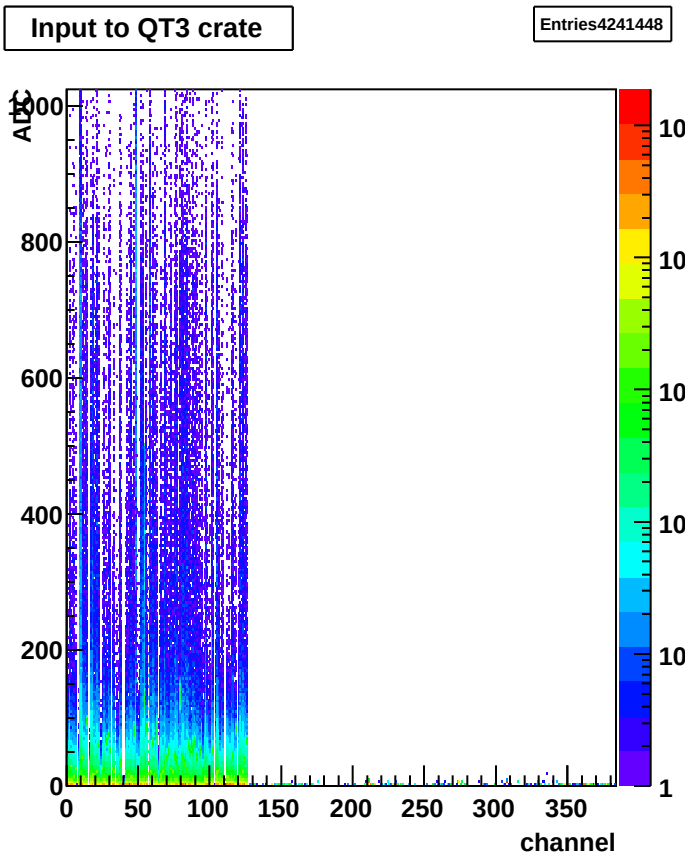

Entries 500000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

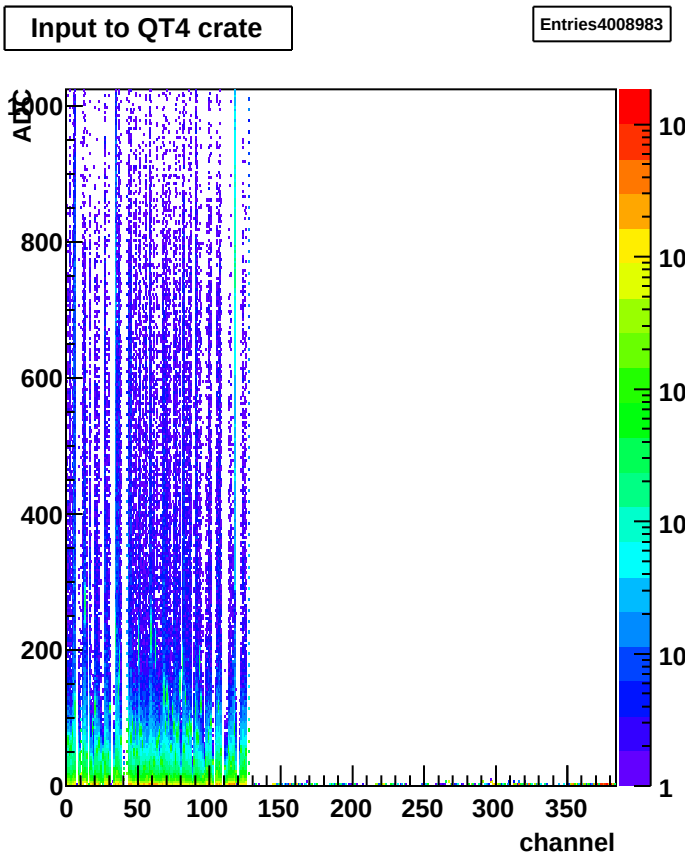

Entries 500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

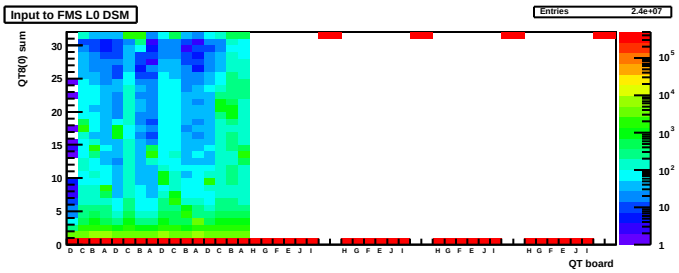

Entries 500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 500000
BBC-L TAC Diff
VPD TAC Diff
Entries 500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 500000
BBC-S TAC Diff
VPD TAC Diff
Entries 500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 500000
VPD TAC Diff
ZDC TAC Diff

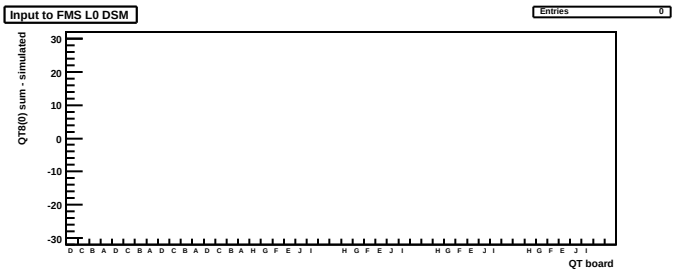

Input to QT1 crate
Entries8480656
ADC
channel

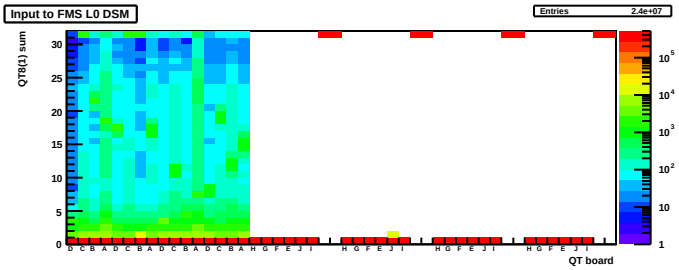

Input to QT2 crate
Entries3644573
ADC
channel

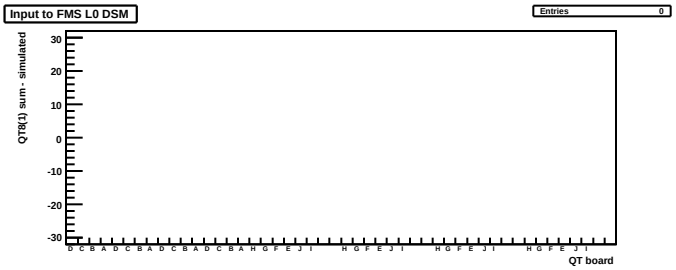

Input to QT3 crate
Entries4241448
ADC
channel

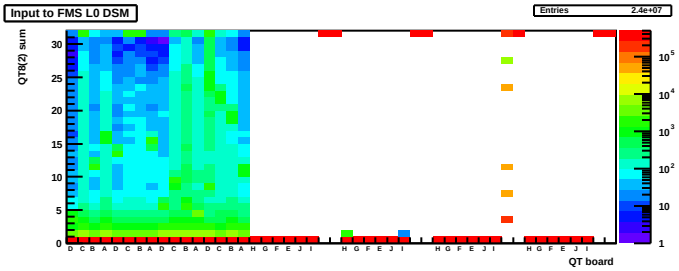

Input to QT4 crate
Entries4008983
ADC
channel

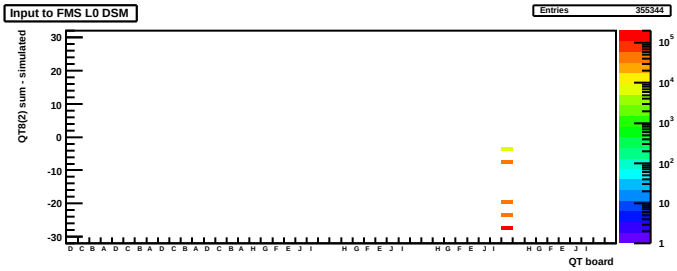

Input to FMS L0 DSM
Entries 2.4e+07
QT8(0) sum
QT board

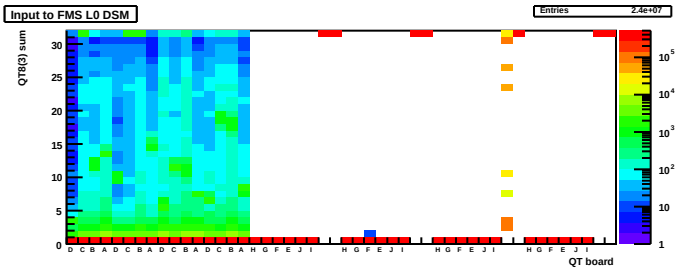

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

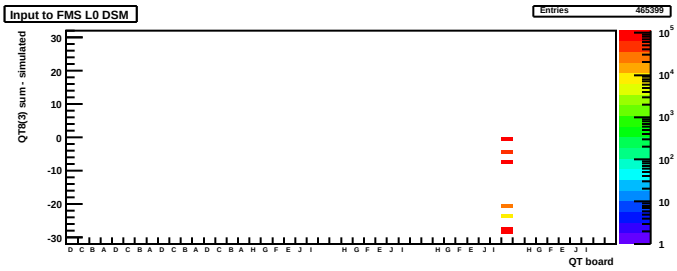

Input to FMS L0 DSM
Entries 2.4e+07
QT8(1) sum
QT board

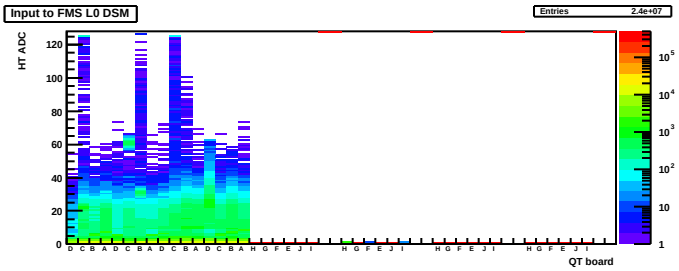

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

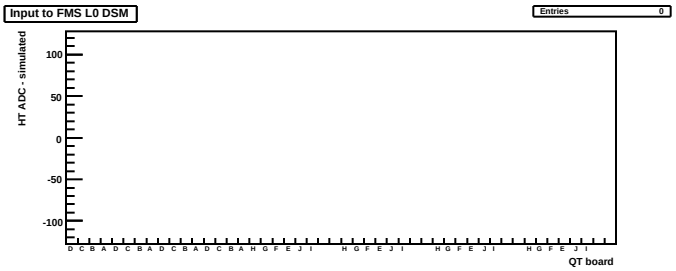

Input to FMS L0 DSM
Entries 2.4e+07
QT8(2) sum
QT board

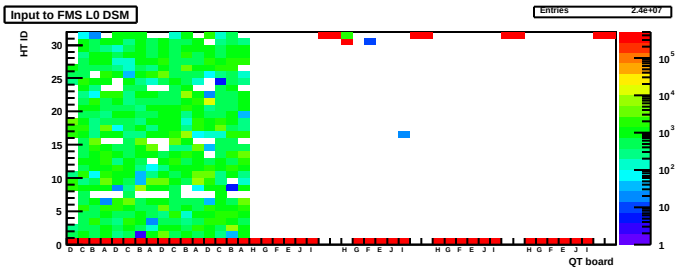

Input to FMS L0 DSM
Entries 355344
QT8(2) sum - simulated
QT board

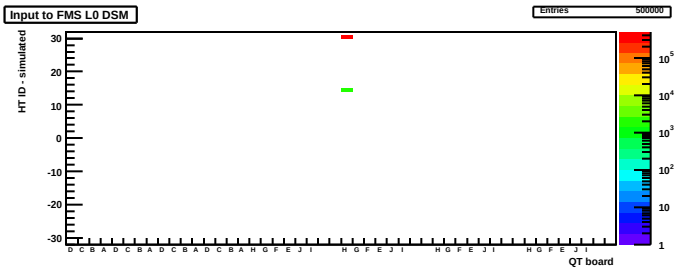

Input to FMS L0 DSM
Entries 2.4e+07
QT8(3) sum
QT board

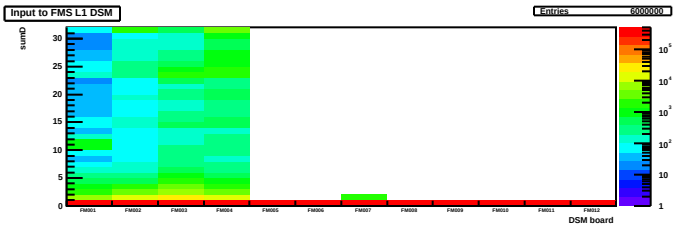

Input to FMS L0 DSM
Entries 465399
QT8(3) sum - simulated
QT board

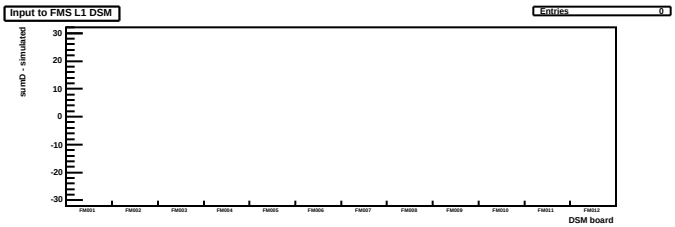

Input to FMS L0 DSM
Entries 2.4e+07
HT ADC
QT board

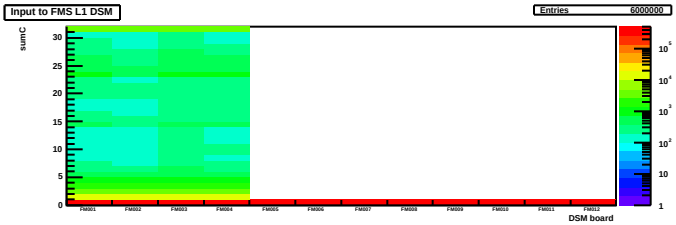

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

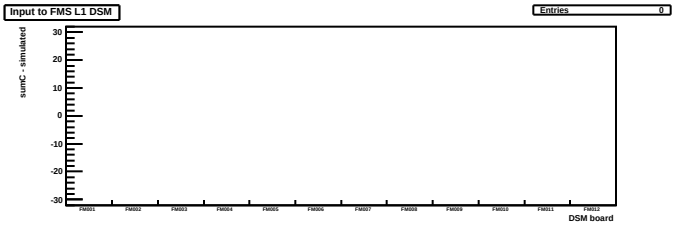

Input to FMS L0 DSM
Entries 2.4e+07
HT ID
QT board

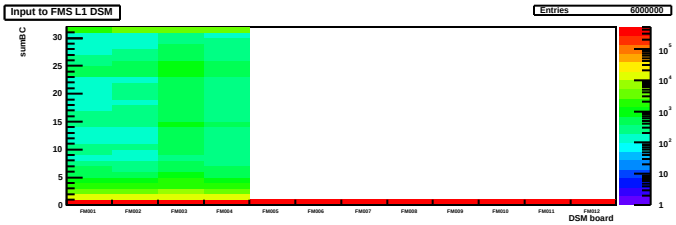

Input to FMS L0 DSM
Entries 500000
HT ID - simulated
QT board

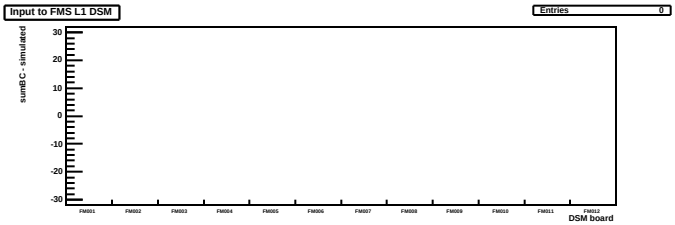

Input to FMS L1 DSM
Entries 6000000
sumD
DSM board

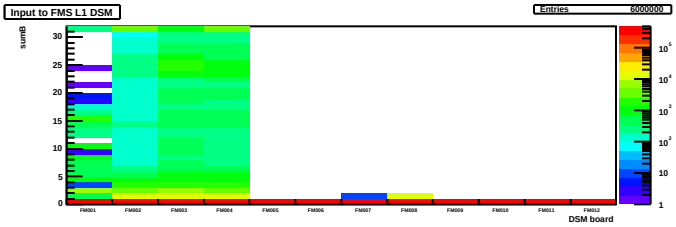

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

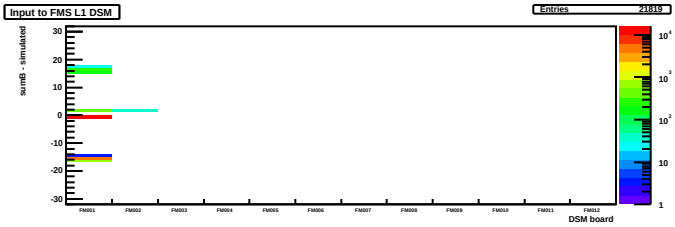

Input to FMS L1 DSM
Entries 6000000
sumC
DSM board

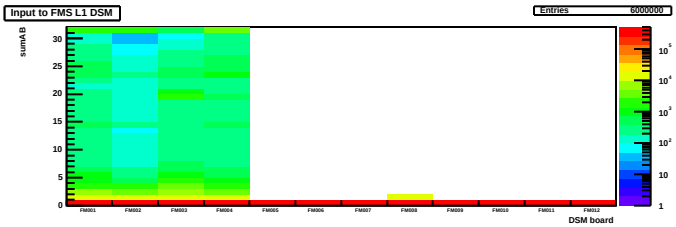

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

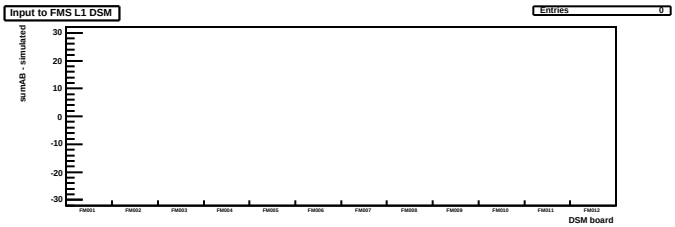

Input to FMS L1 DSM
Entries 6000000
sumBC
DSM board

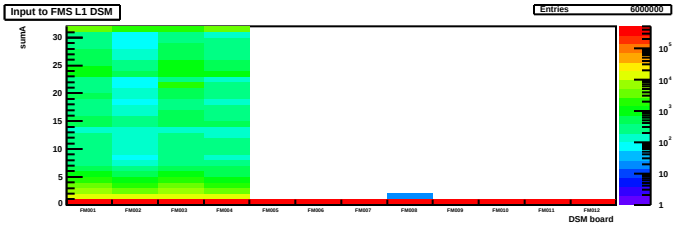

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

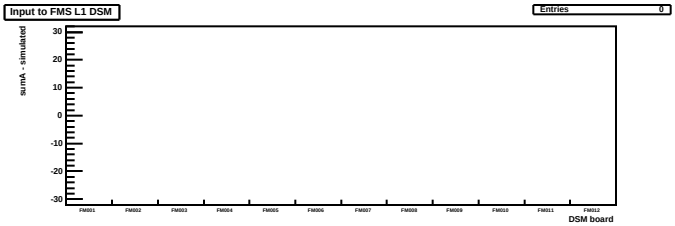

Input to FMS L1 DSM
Entries 6000000
sumB
DSM board

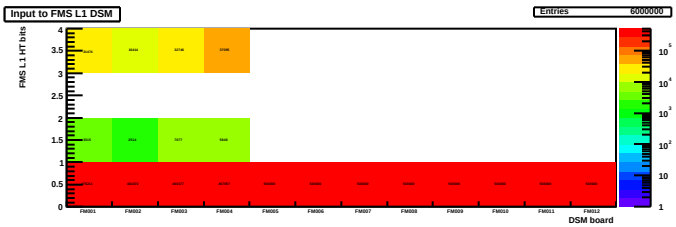

Input to FMS L1 DSM
Entries 21819
sumB - simulated
DSM board

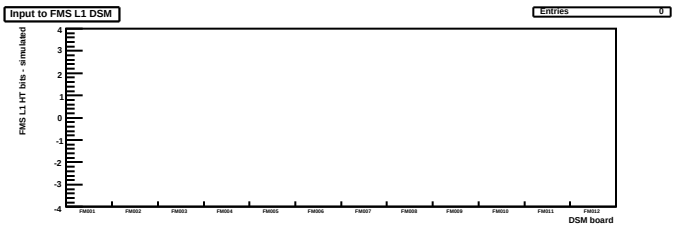

Input to FMS L1 DSM
Entries 6000000
sumAB
DSM board

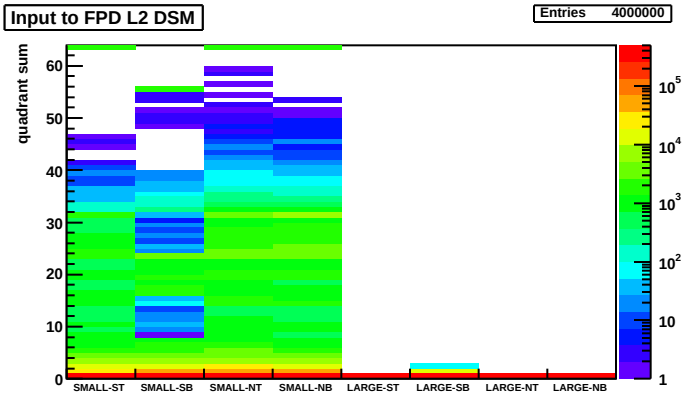

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

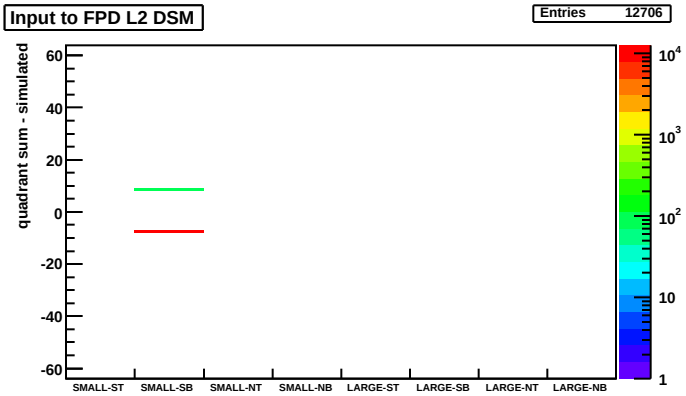

Input to FMS L1 DSM
Entries 6000000
sumA
DSM board

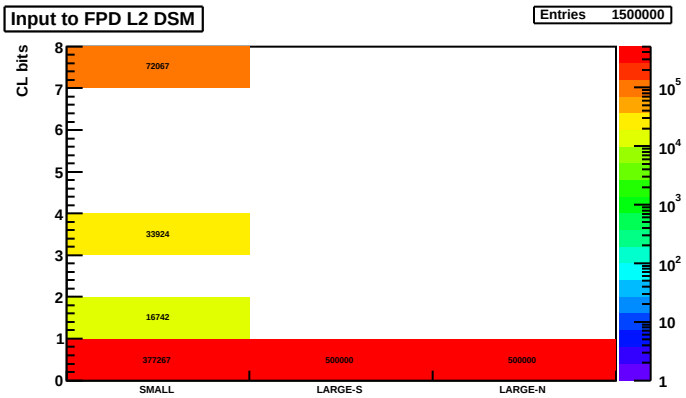

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

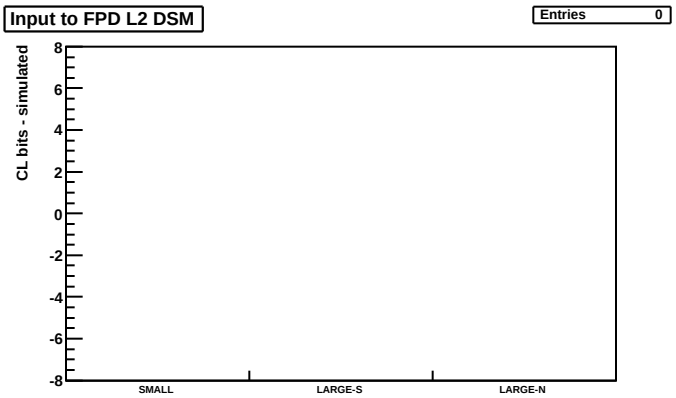

Input to FMS L1 DSM
Entries 6000000
FMS L1 HT bits
DSM board

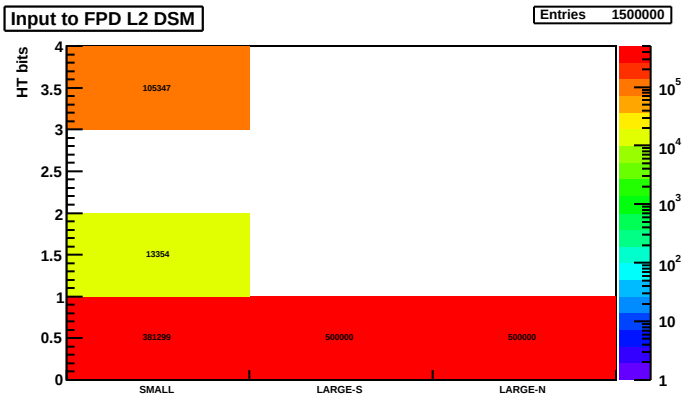

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

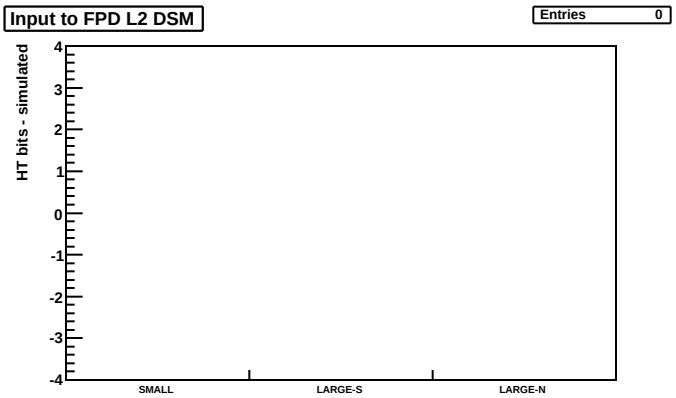

Input to FPD L2 DSM
Entries 4000000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

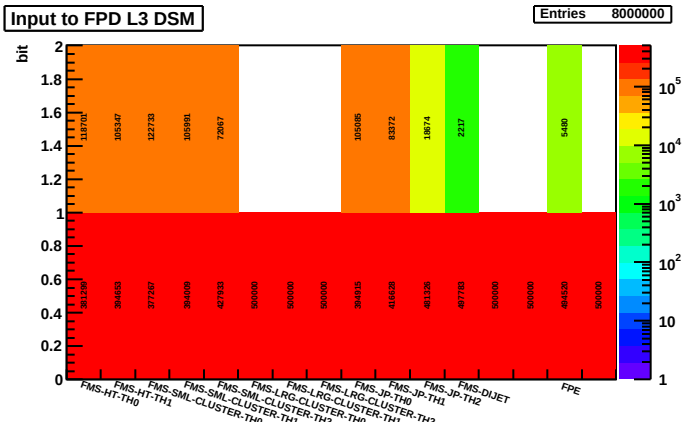

Input to FPD L2 DSM
Entries 12706
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

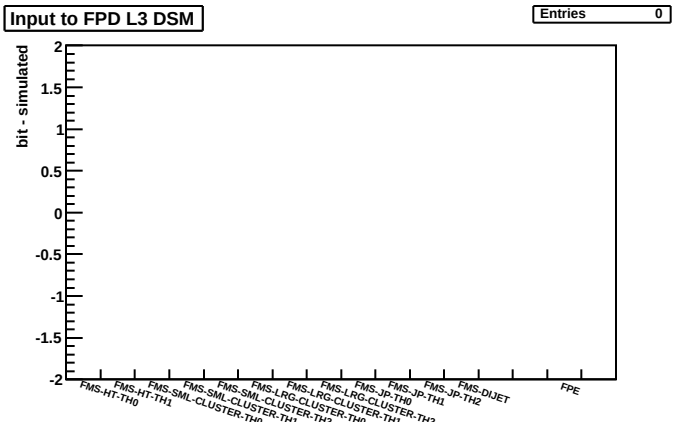

Input to FPD L2 DSM
Entries 1500000
CL bits
72067
33924
16742
377267
500000
500000
SMALL
LARGE-S
LARGE-N

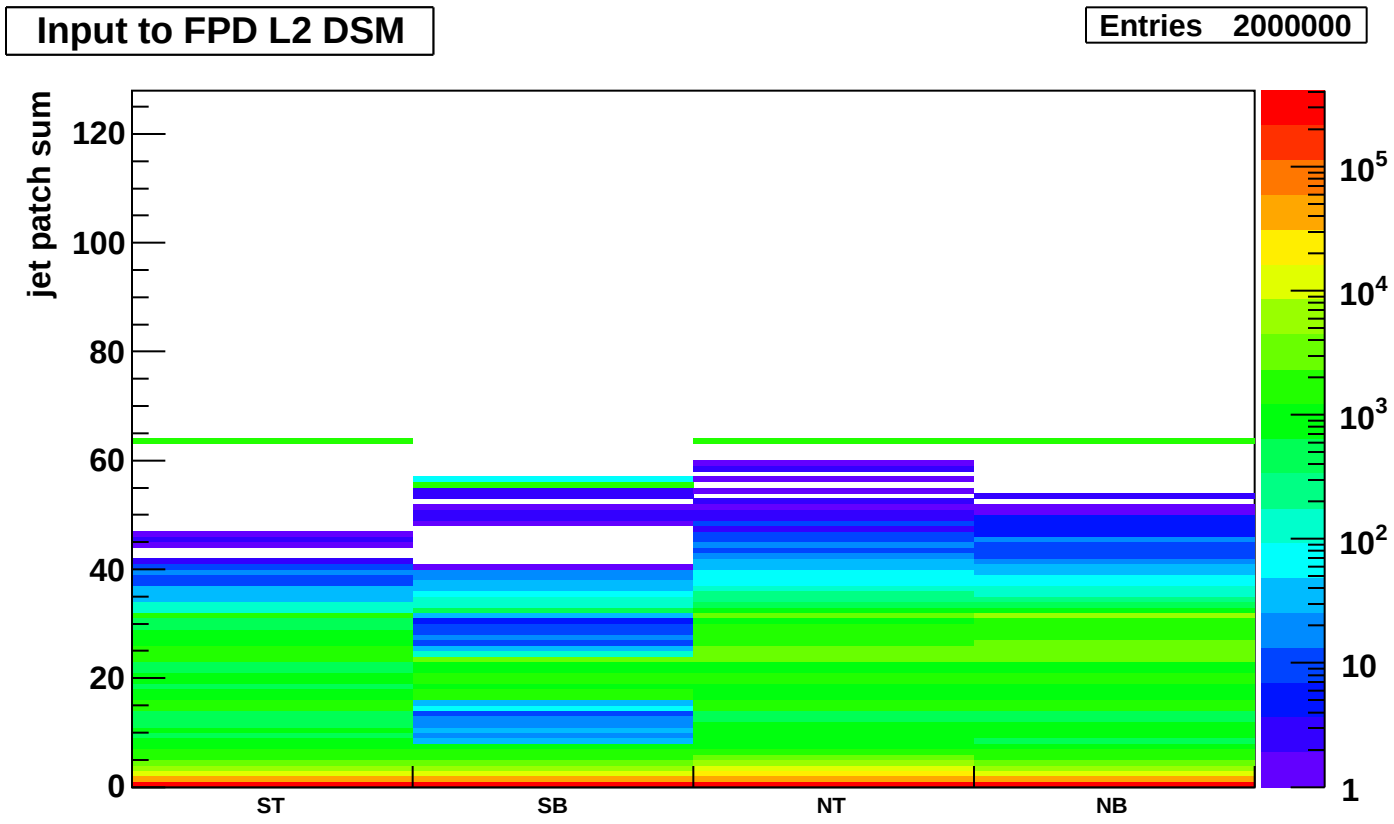

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

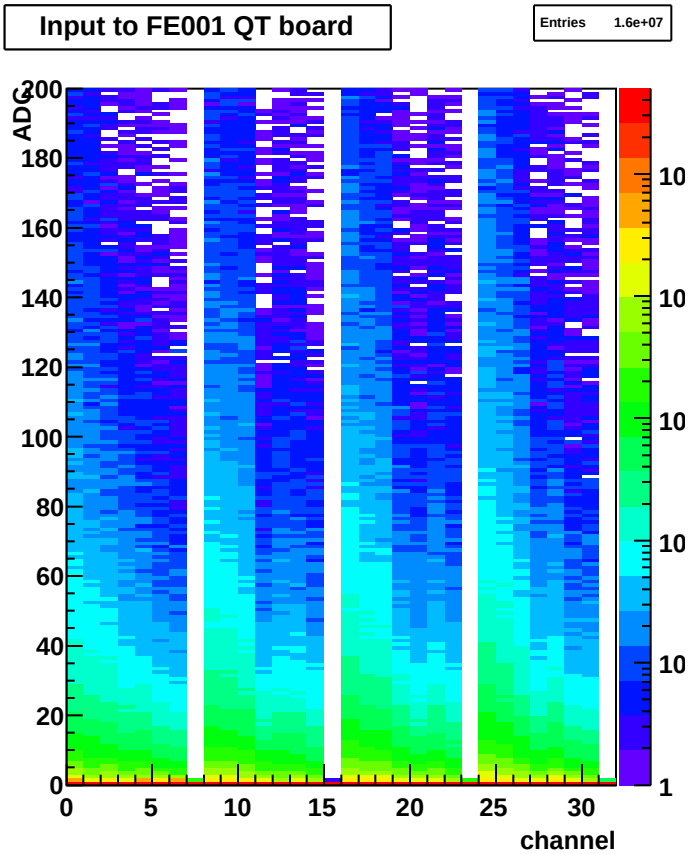

Input to FPD L2 DSM
Entries 1500000
HT bits
105347
13354
381299
500000
500000
SMALL
LARGE-S
LARGE-N

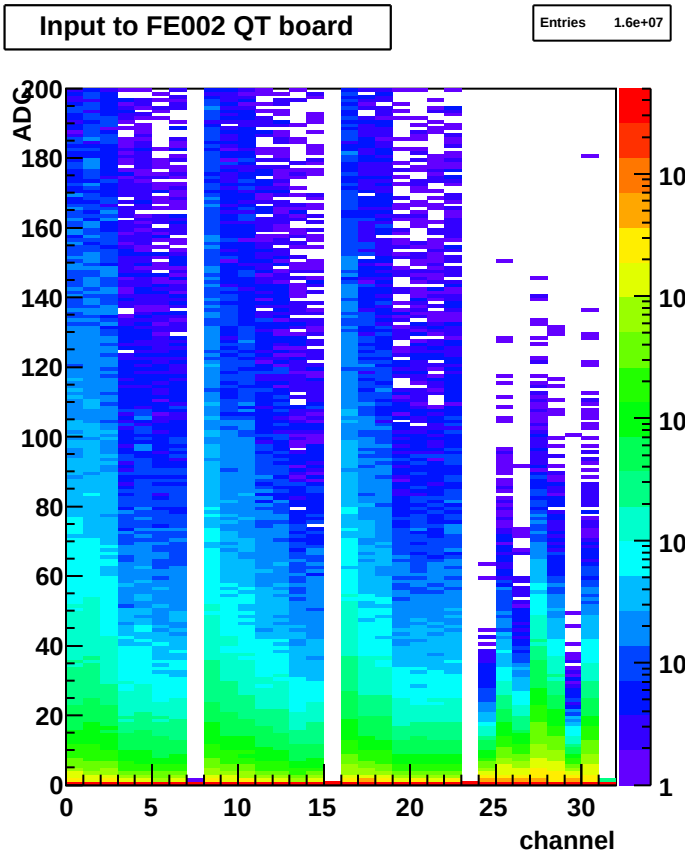

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

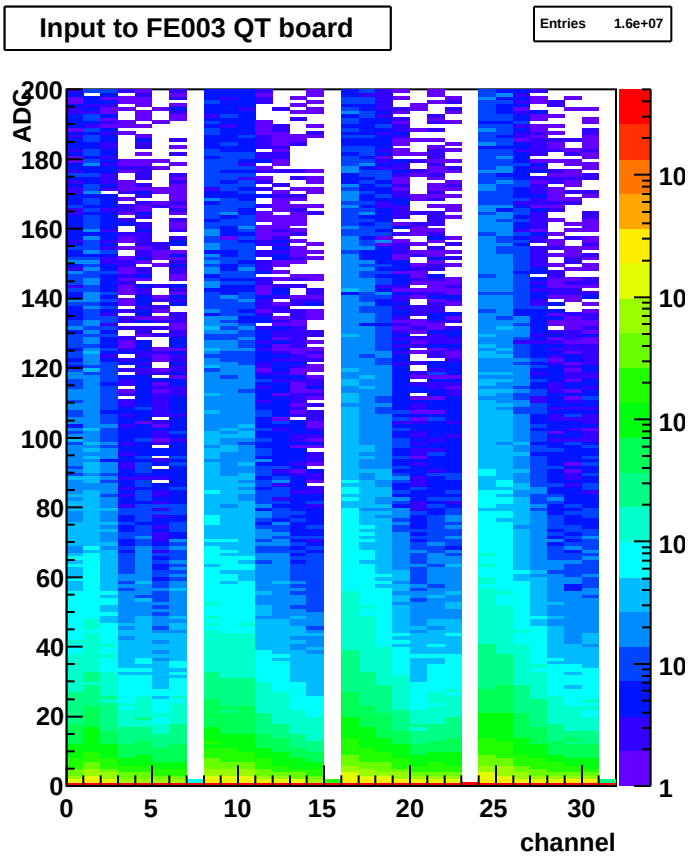

Input to FPD L3 DSM
Entries 8000000
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

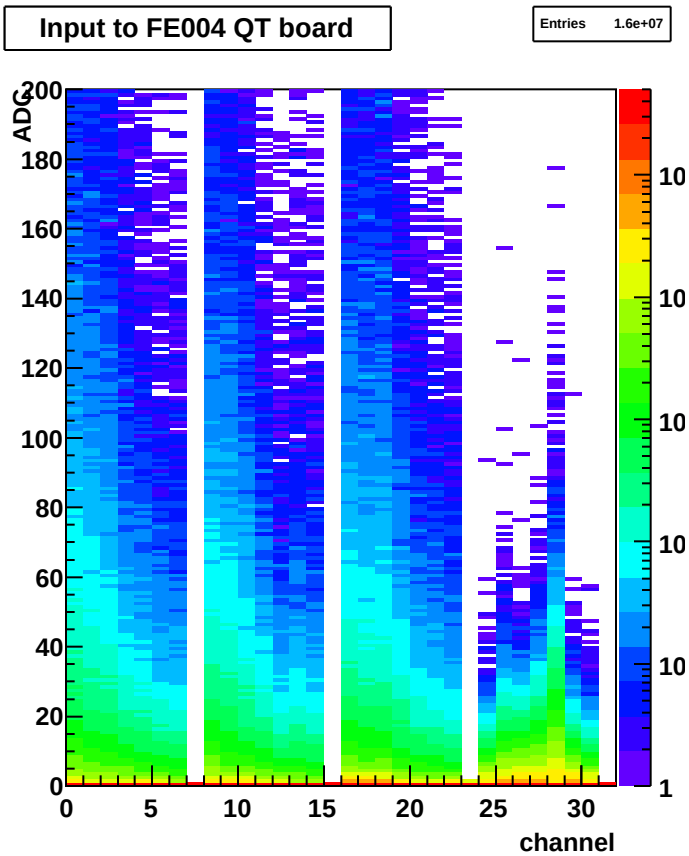

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

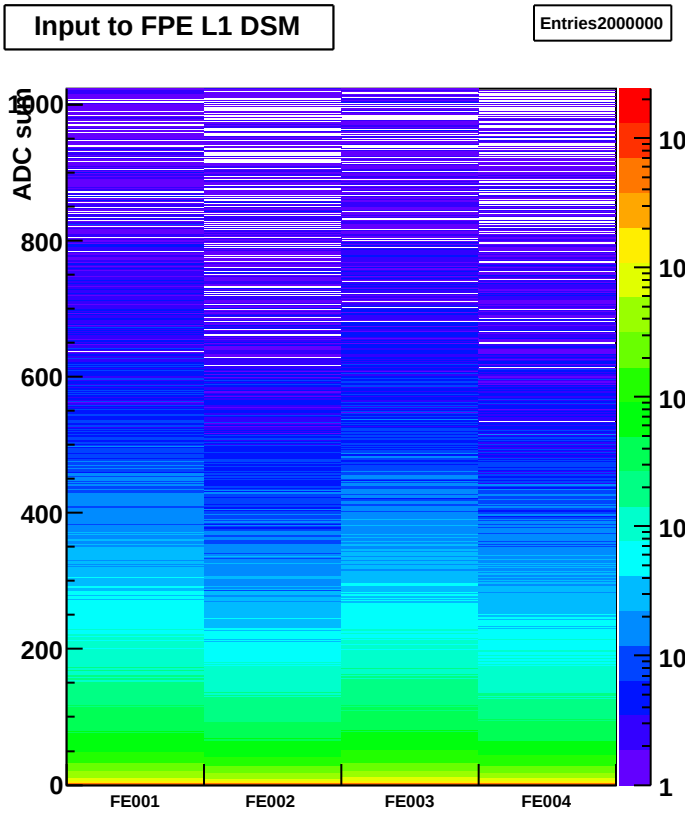

Input to FPD L2 DSM
Entries 2000000
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

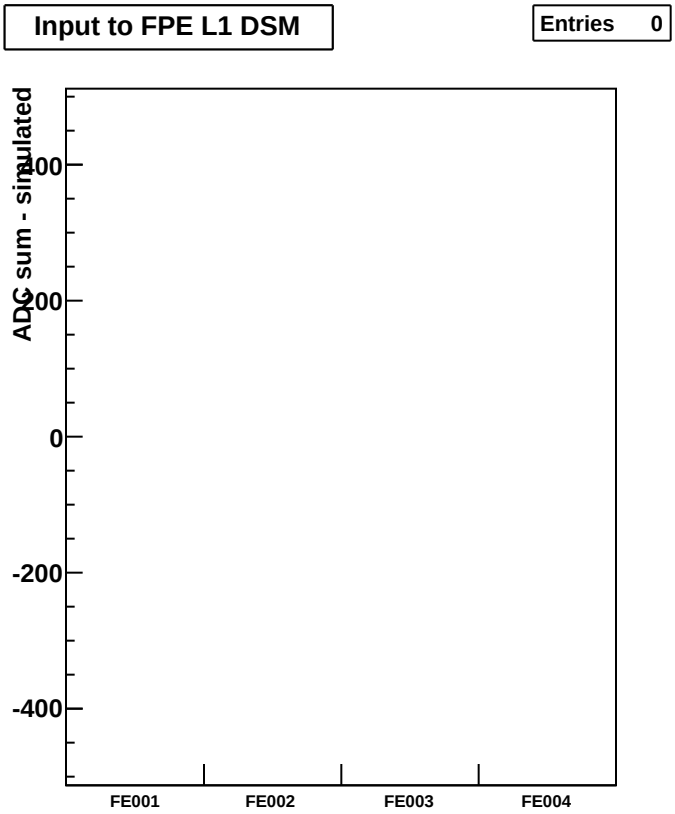

Input to FE001 QT board
Entries 1.6e+07
ADC
channel

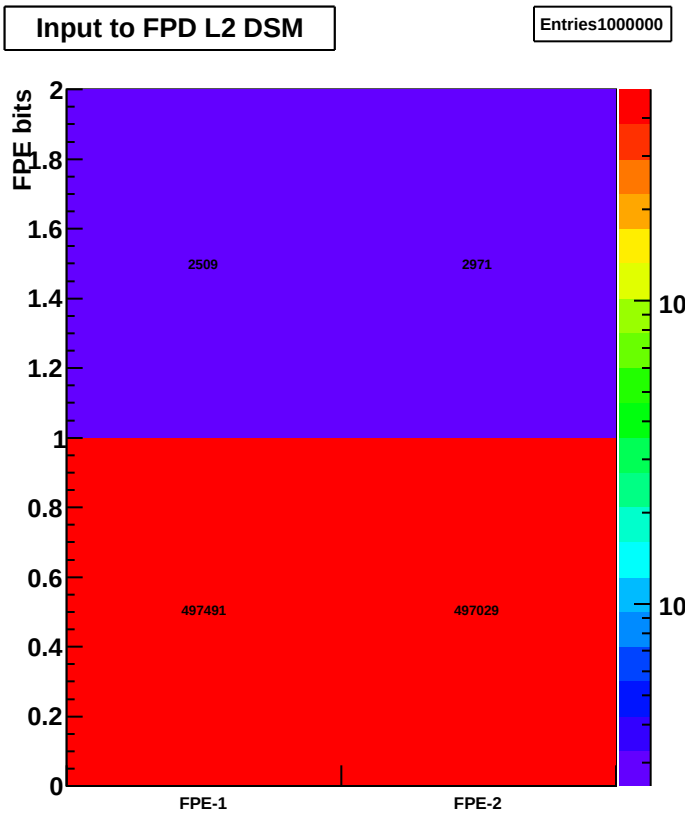

Input to FE002 QT board
Entries 1.6e+07
ADC
channel

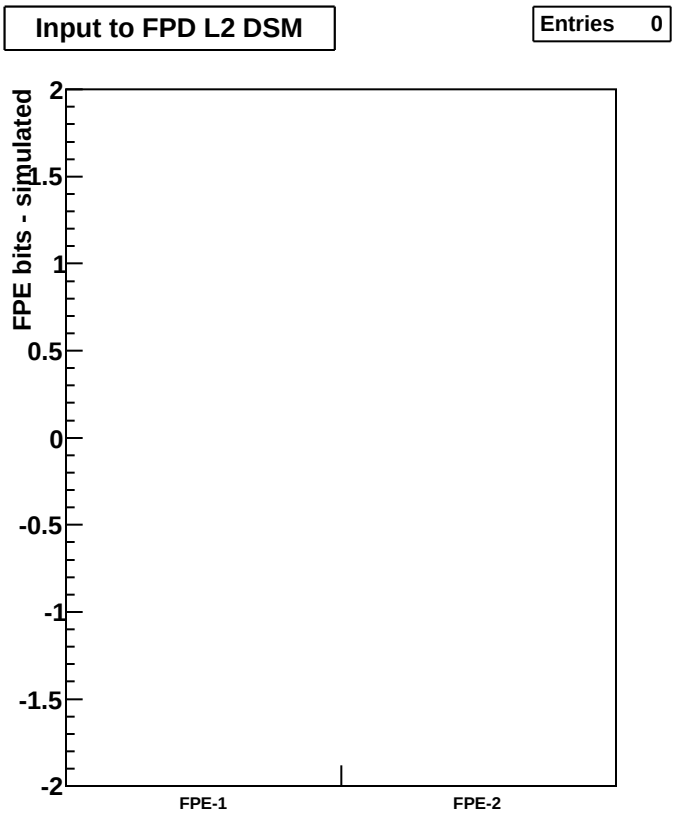

Input to FE003 QT board
Entries 1.6e+07
ADC
channel


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
2509
2971
497491
497029
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