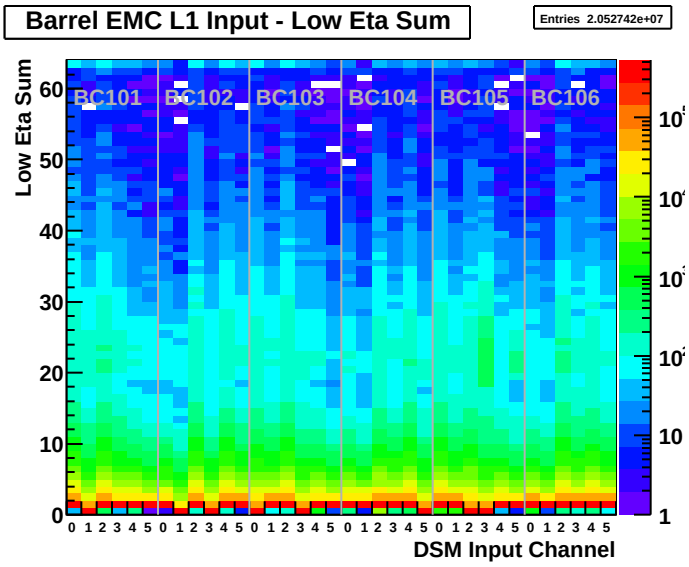
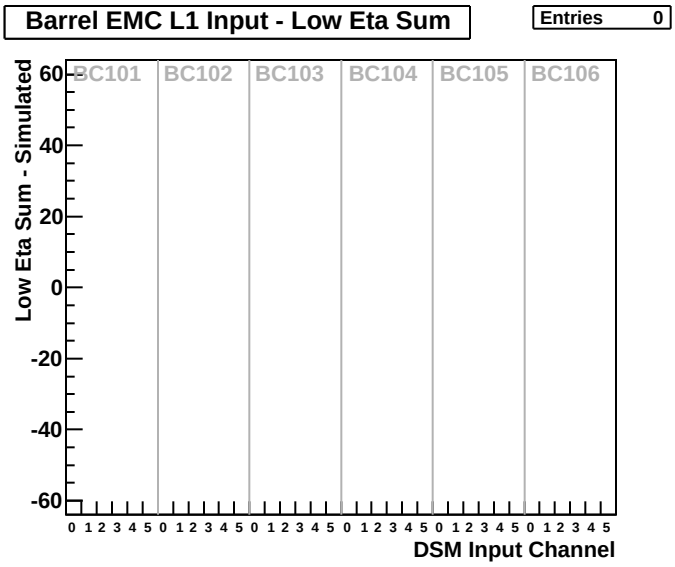
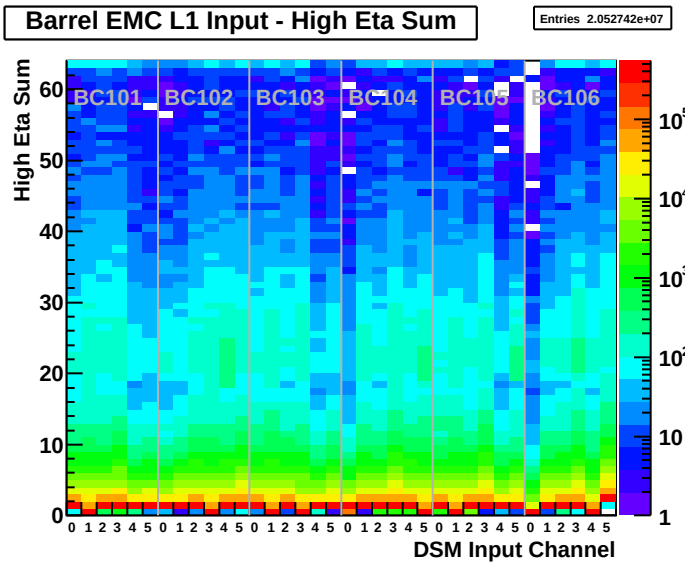
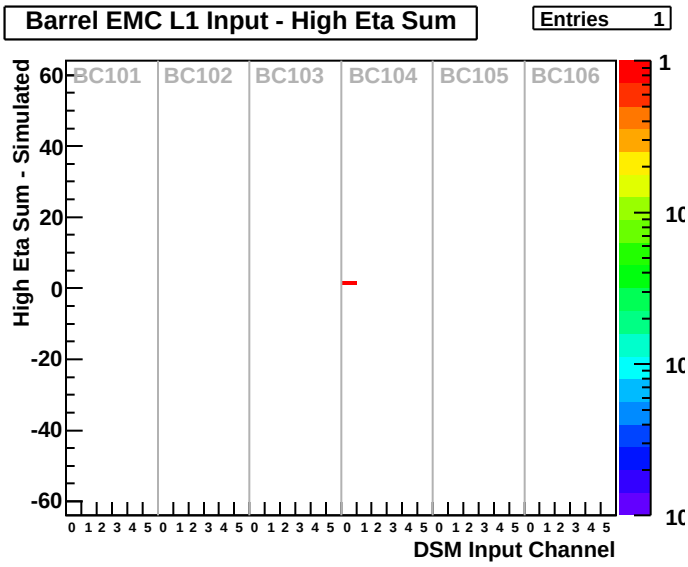
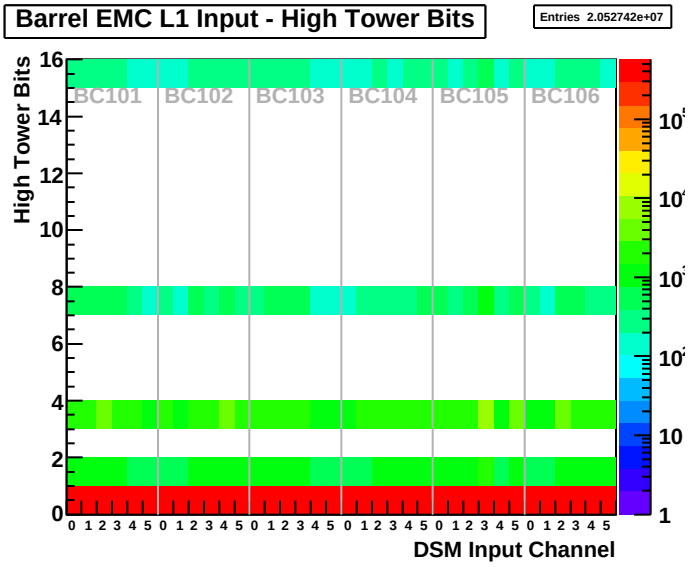
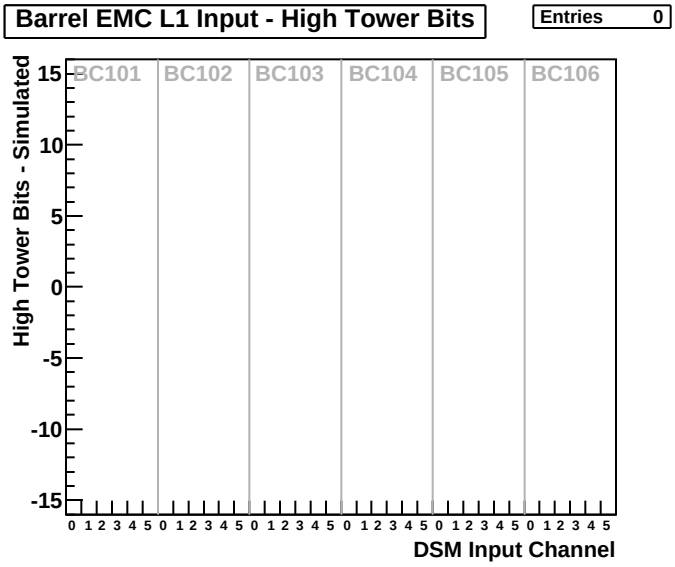

Barrel EMC L1 Input - Low Eta Sum
Entries 2.052742e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

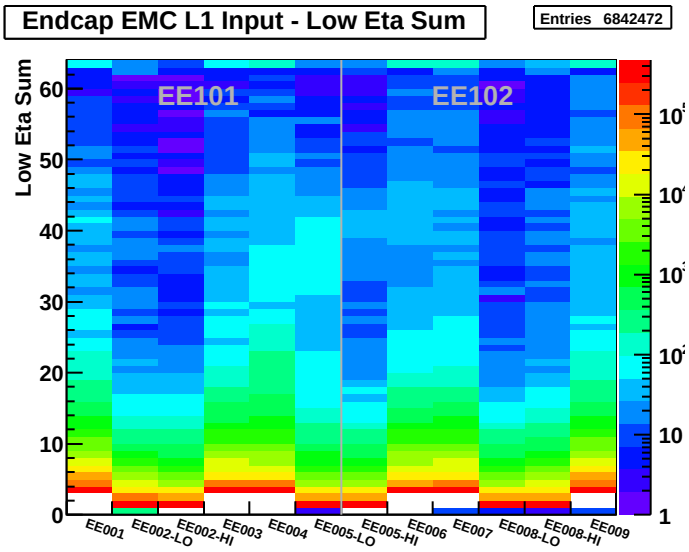

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

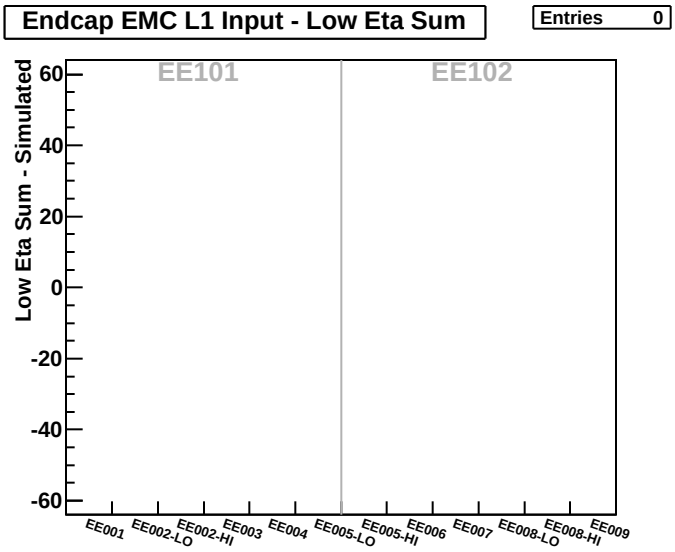

Barrel EMC L1 Input - High Eta Sum
Entries 2.052742e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

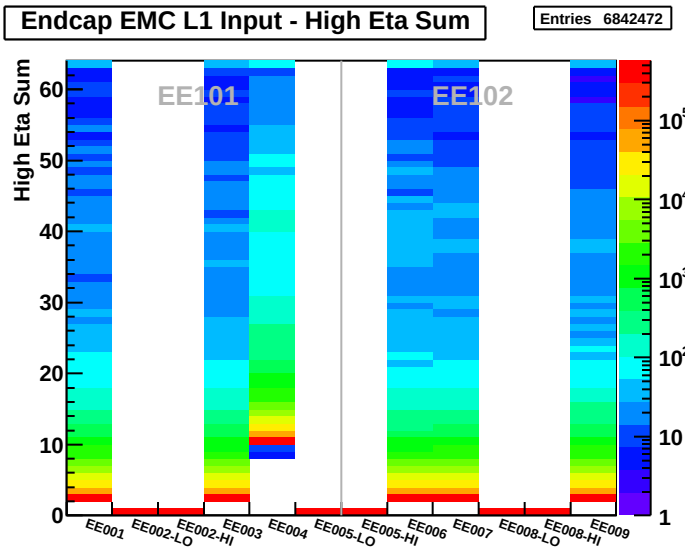

Barrel EMC L1 Input - High Eta Sum
Entries 1
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

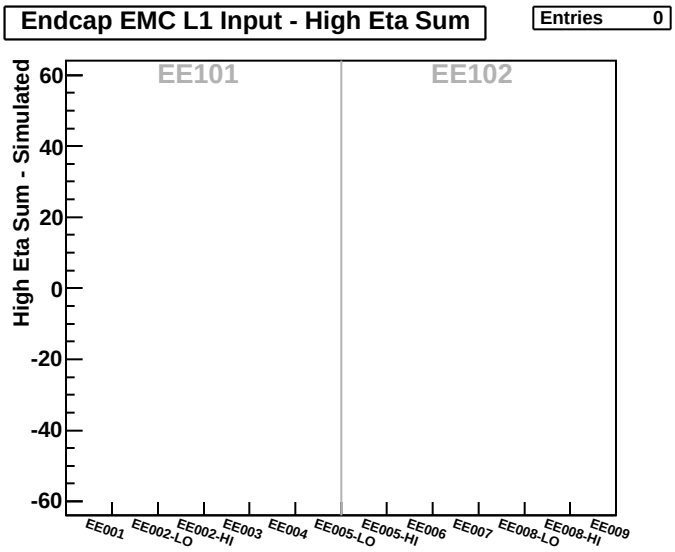

Barrel EMC L1 Input - High Tower Bits
Entries 2.052742e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

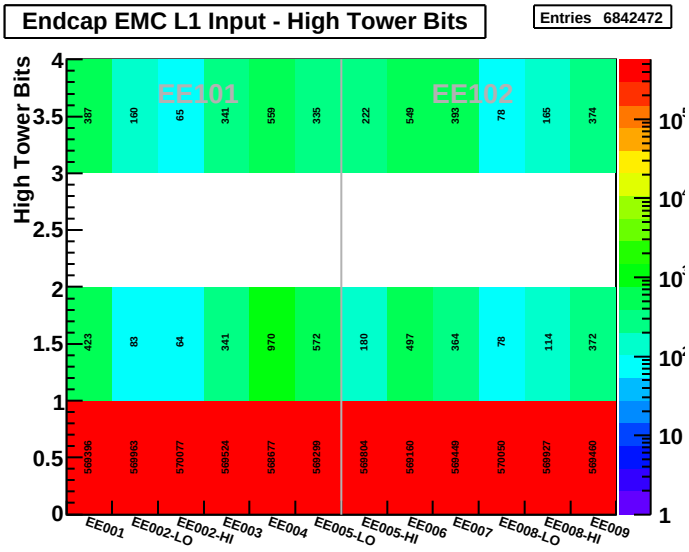

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

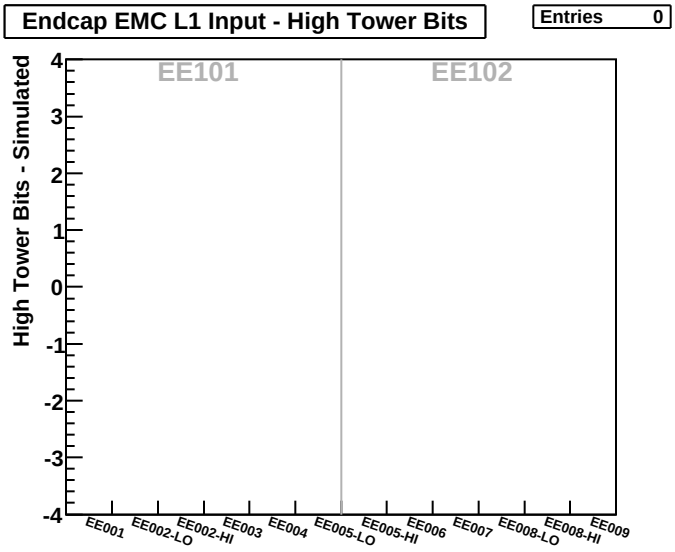

Endcap EMC L1 Input - Low Eta Sum
Entries 6842472
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

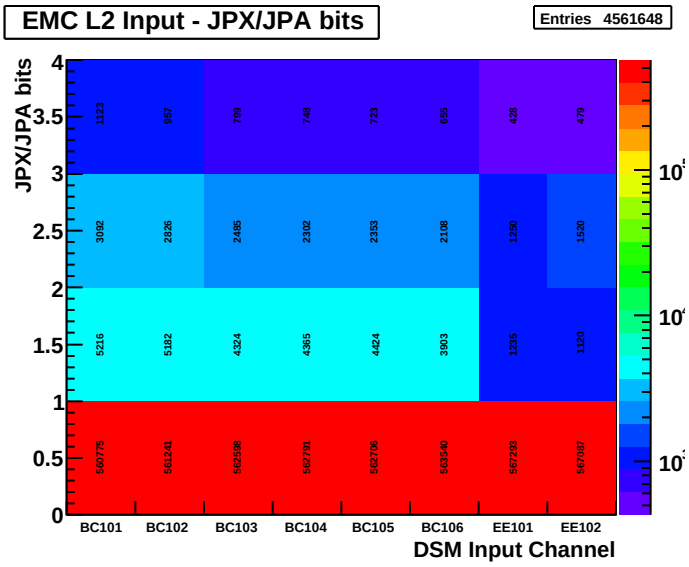

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

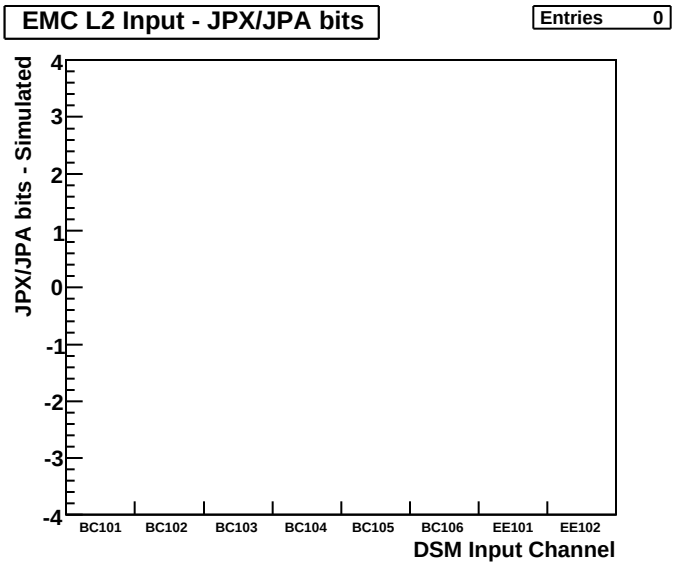

Endcap EMC L1 Input - High Eta Sum
Entries 6842472
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

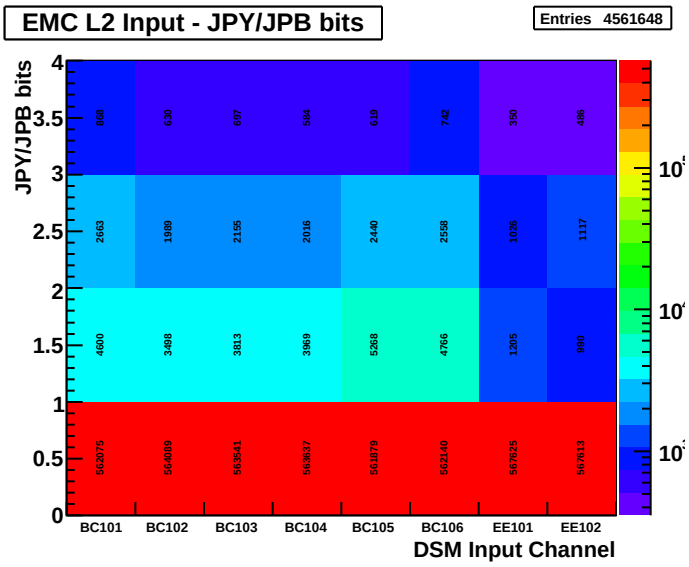

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

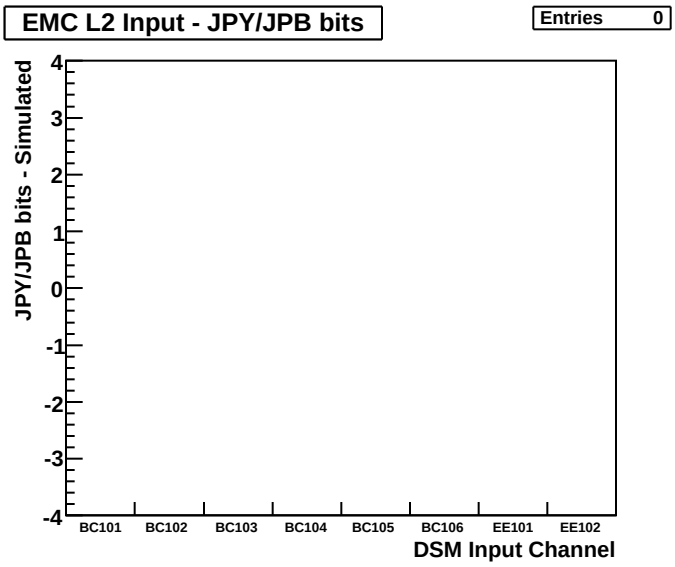

Endcap EMC L1 Input - High Tower Bits
Entries 6842472
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

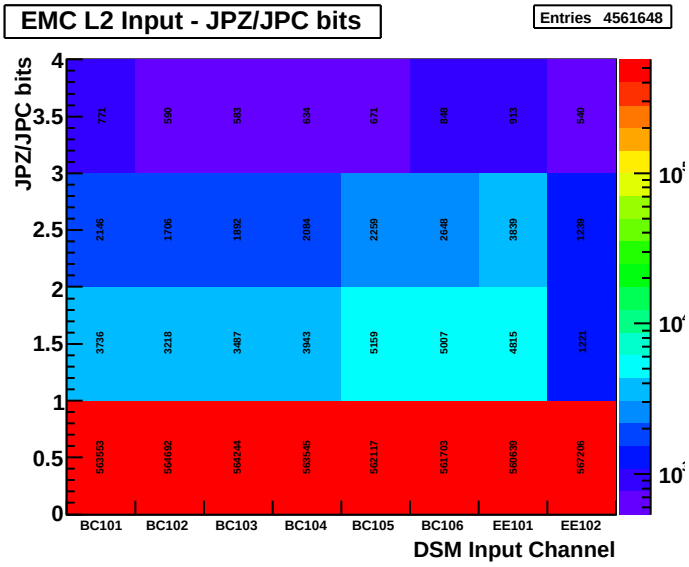

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

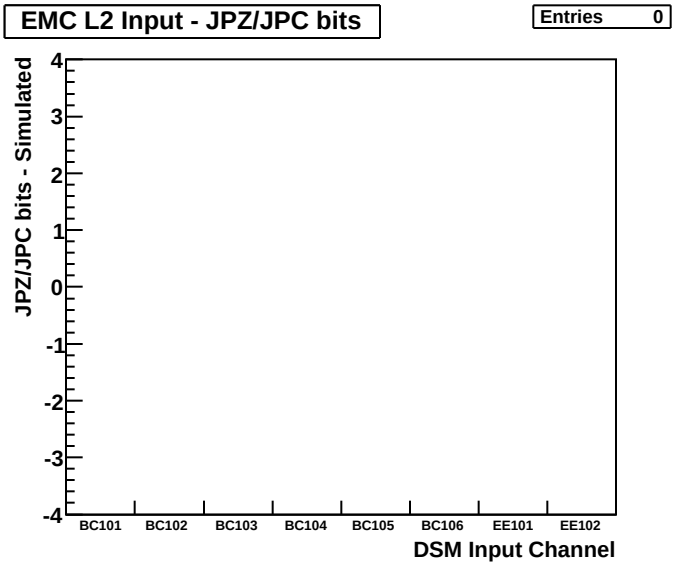

EMC L2 Input - JPX/JPA bits
Entries 4561648
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1123 957 799 748 723 655 428 479
3092 2826 2485 2302 2353 2108 1250 1520
5216 5182 4324 4365 4424 3903 1235 1120
560775 561241 562598 562701 562706 563540 567293 567087

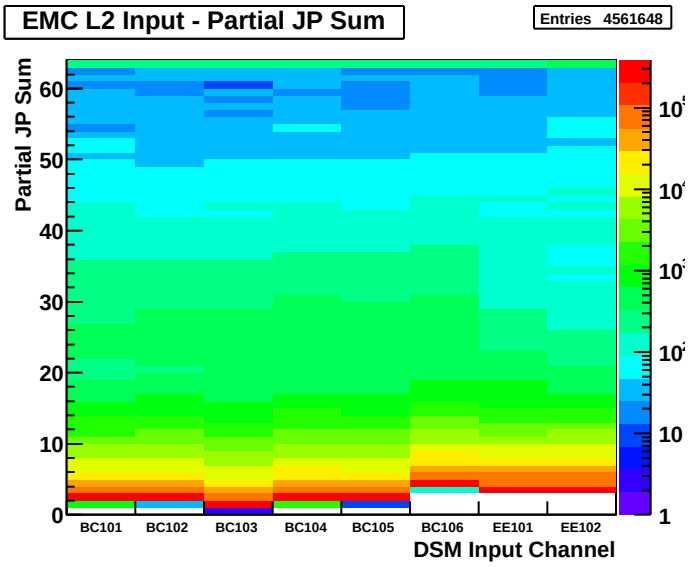

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

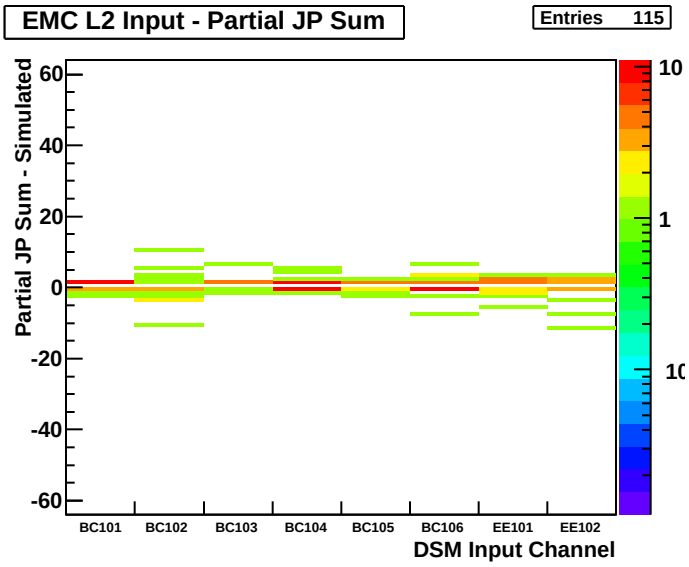

EMC L2 Input - JPY/JPB bits
Entries 4561648
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
688 630 697 594 619 742 350 486
2663 1989 2155 2016 2440 2598 1035 1117
4600 3498 3813 3969 5268 4766 1205 990
562075 564089 563541 563837 561879 562140 567625 567613

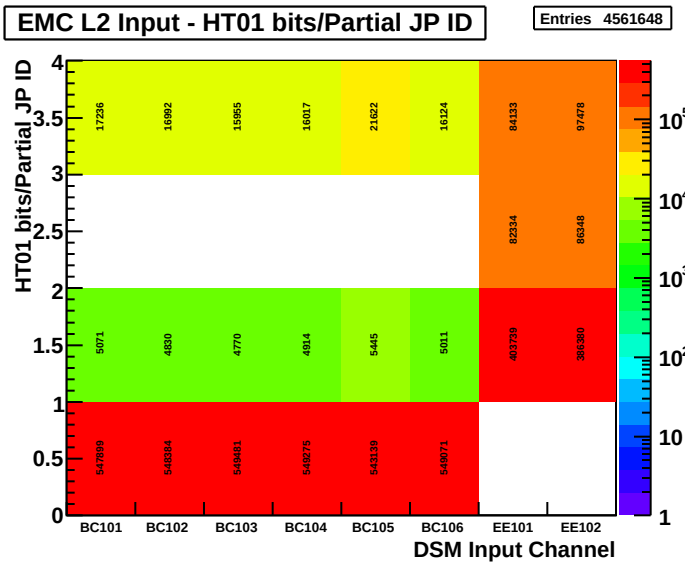

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

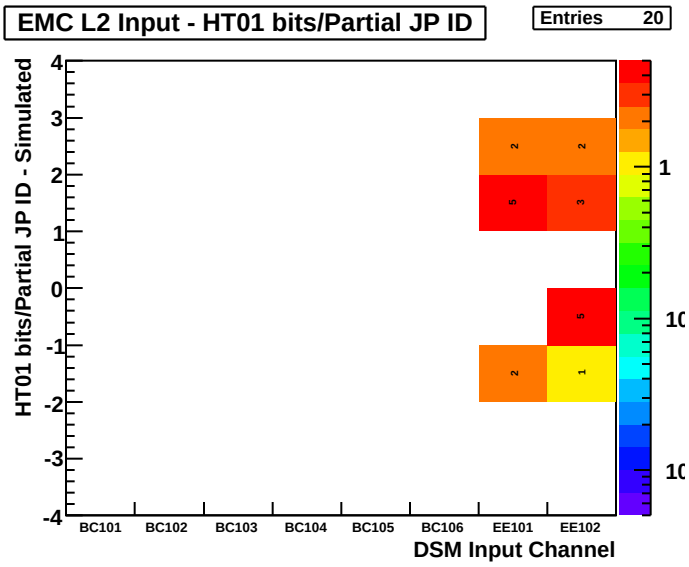

EMC L2 Input - JPZ/JPC bits
Entries 4561648
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
771 590 583 634 671 848 913 540
2146 1706 1892 2084 2259 2648 3839 1239
3736 3218 3487 3943 5159 5007 4815 1221
563553 564692 564244 563545 562117 561703 560539 567206

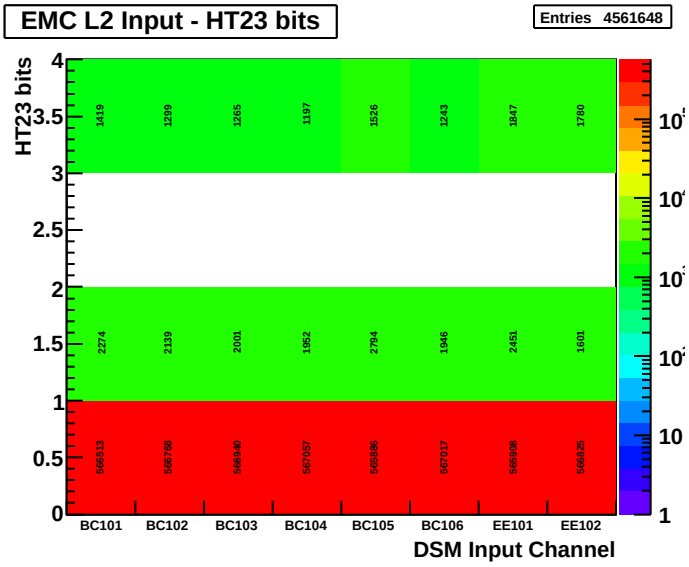

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

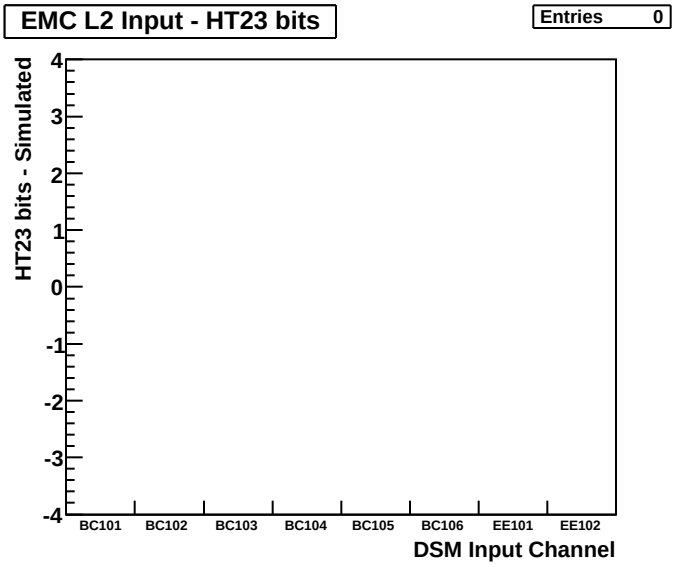

EMC L2 Input - Partial JP Sum
Entries 4561648
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

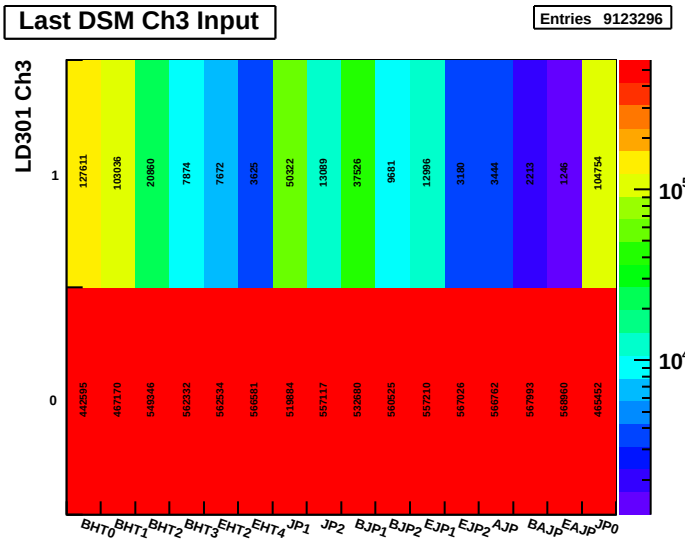

EMC L2 Input - Partial JP Sum
Entries 115
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

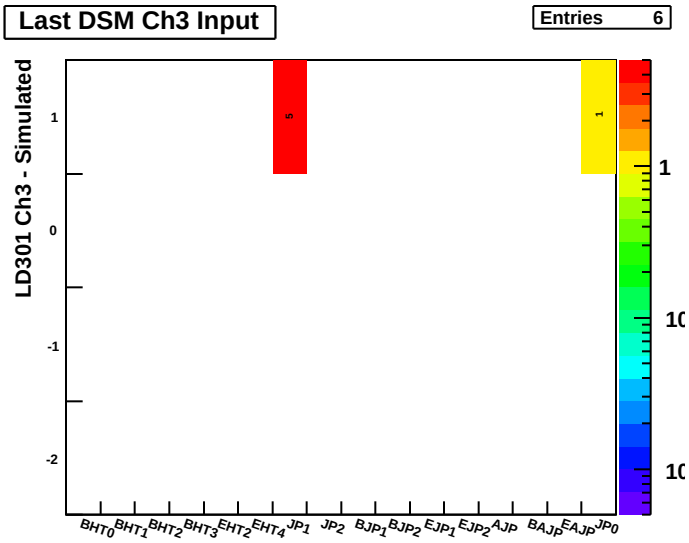

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4561648
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

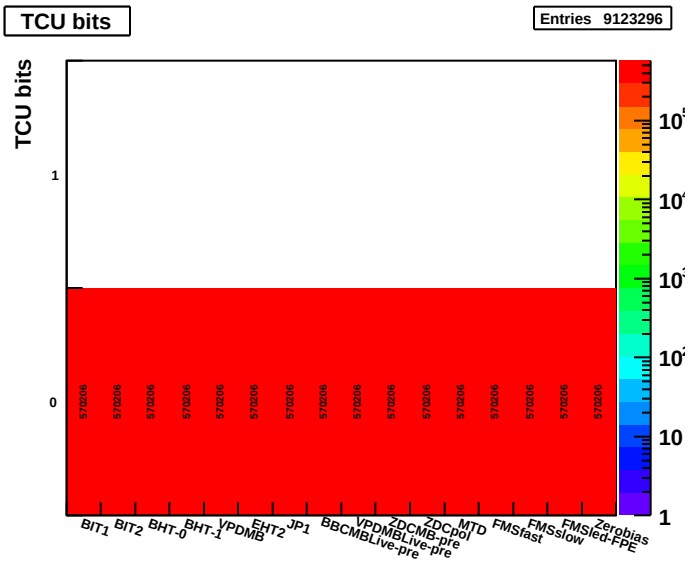

EMC L2 Input - HT01 bits/Partial JP ID
Entries 20
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

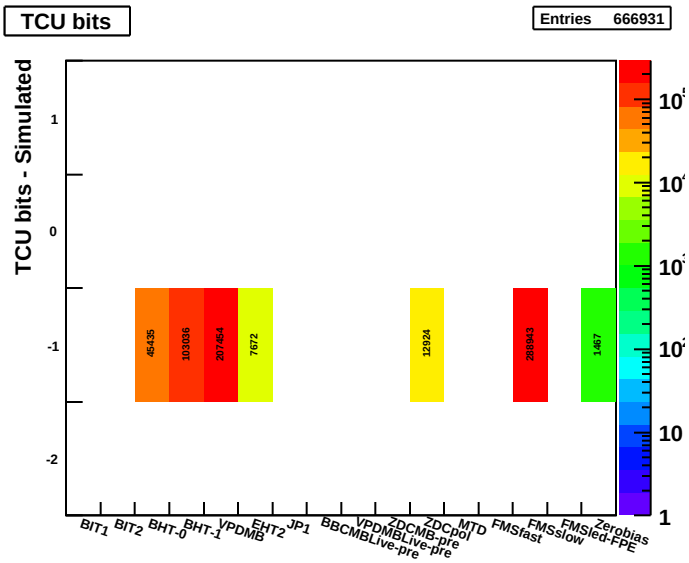

EMC L2 Input - HT23 bits
Entries 4561648
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

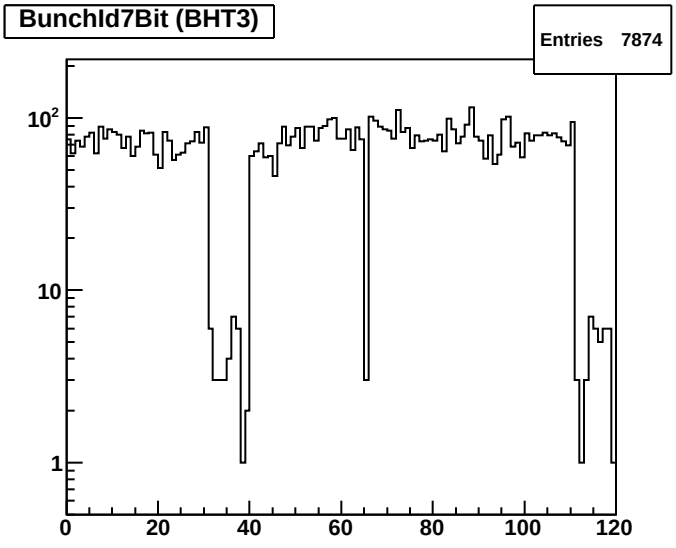

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

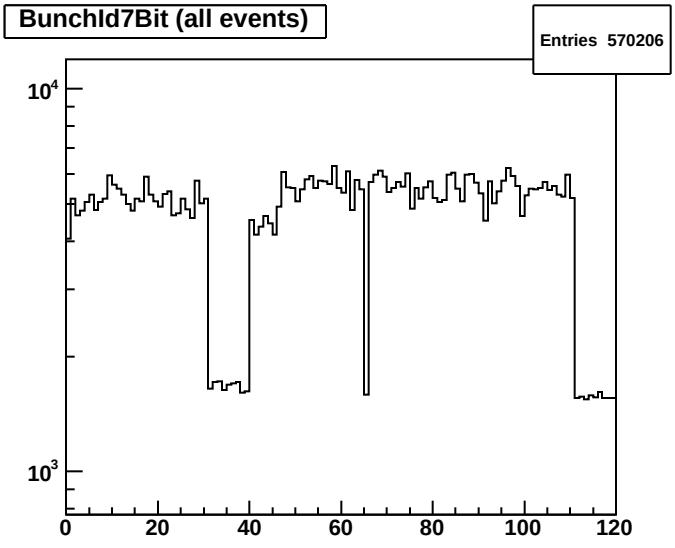

Last DSM Ch3 Input
Entries 9123296
LD301 Ch3
127611 103036 20860 7874 7672 3625 50322 13089 37526 9681 12996 3180 3444 2213 1246 104754
442595 467170 543346 562332 562534 566581 519884 557117 532680 560525 557210 567026 566762 567933 568950 465452
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

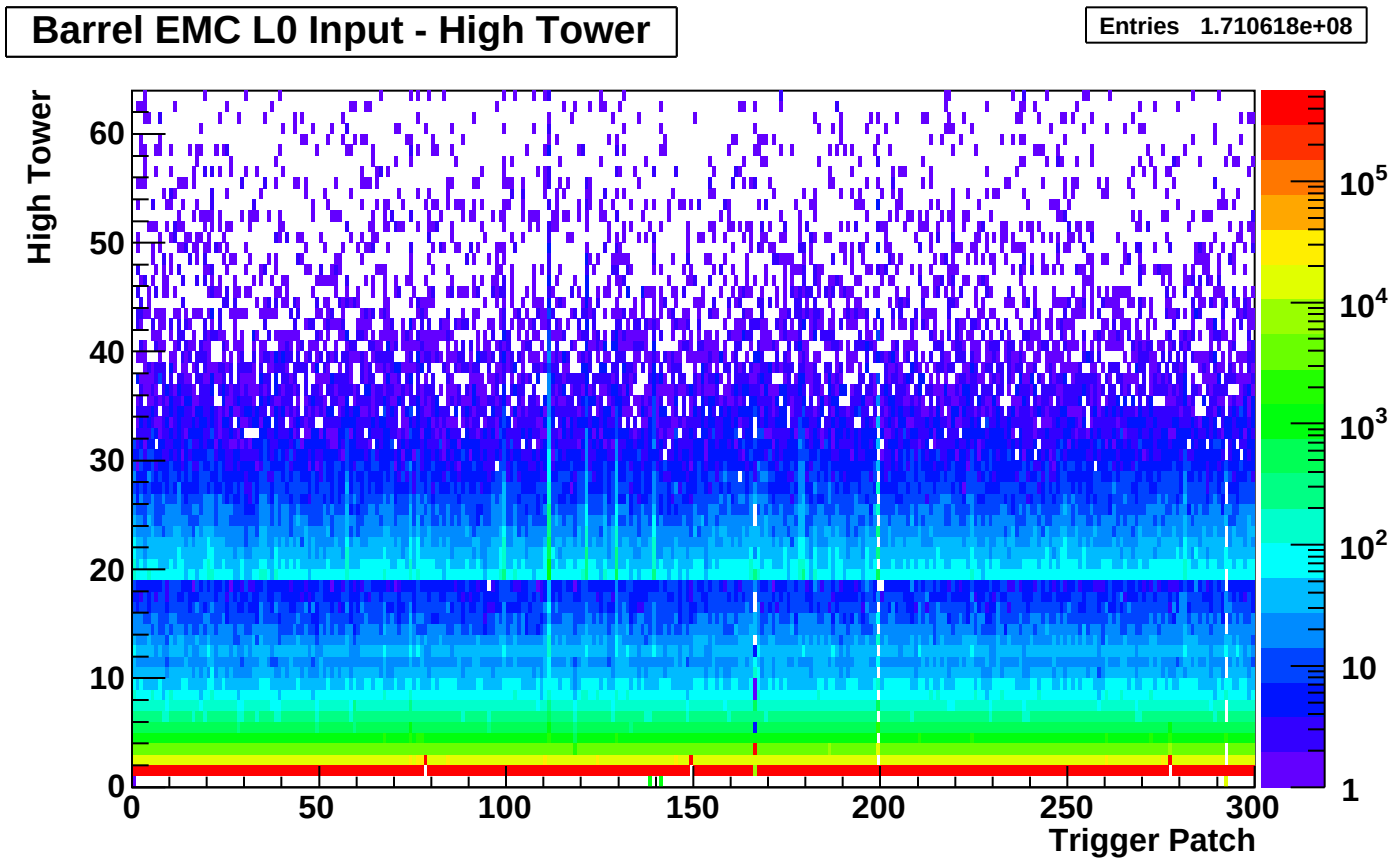

Last DSM Ch3 Input
Entries 6
LD301 Ch3 - Simulated
5
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

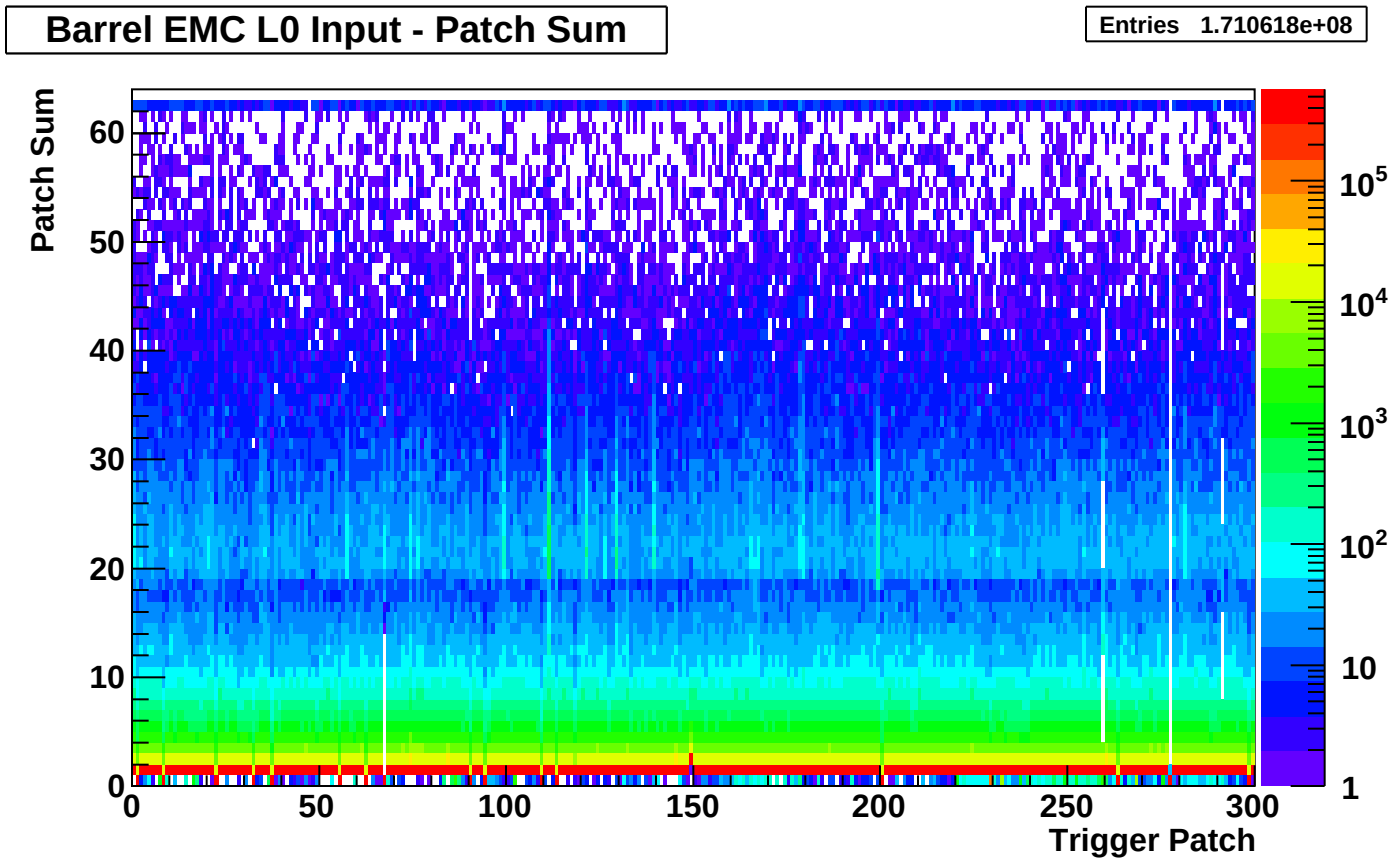

TCU bits
Entries 9123296
TCU bits
570206
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

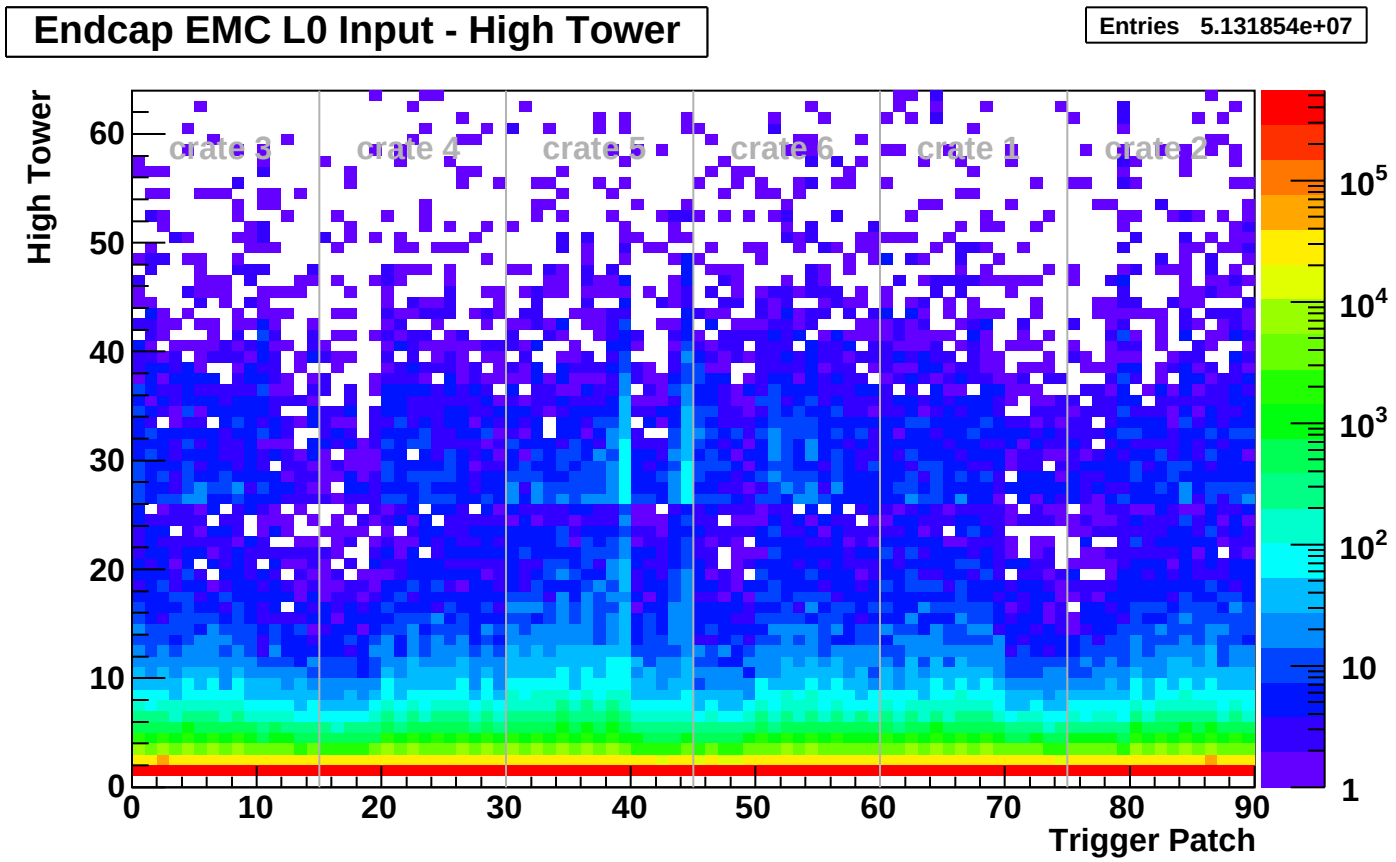

TCU bits
Entries 666931
TCU bits - Simulated
45435 103036 207454 7672 12924 283943 1467
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

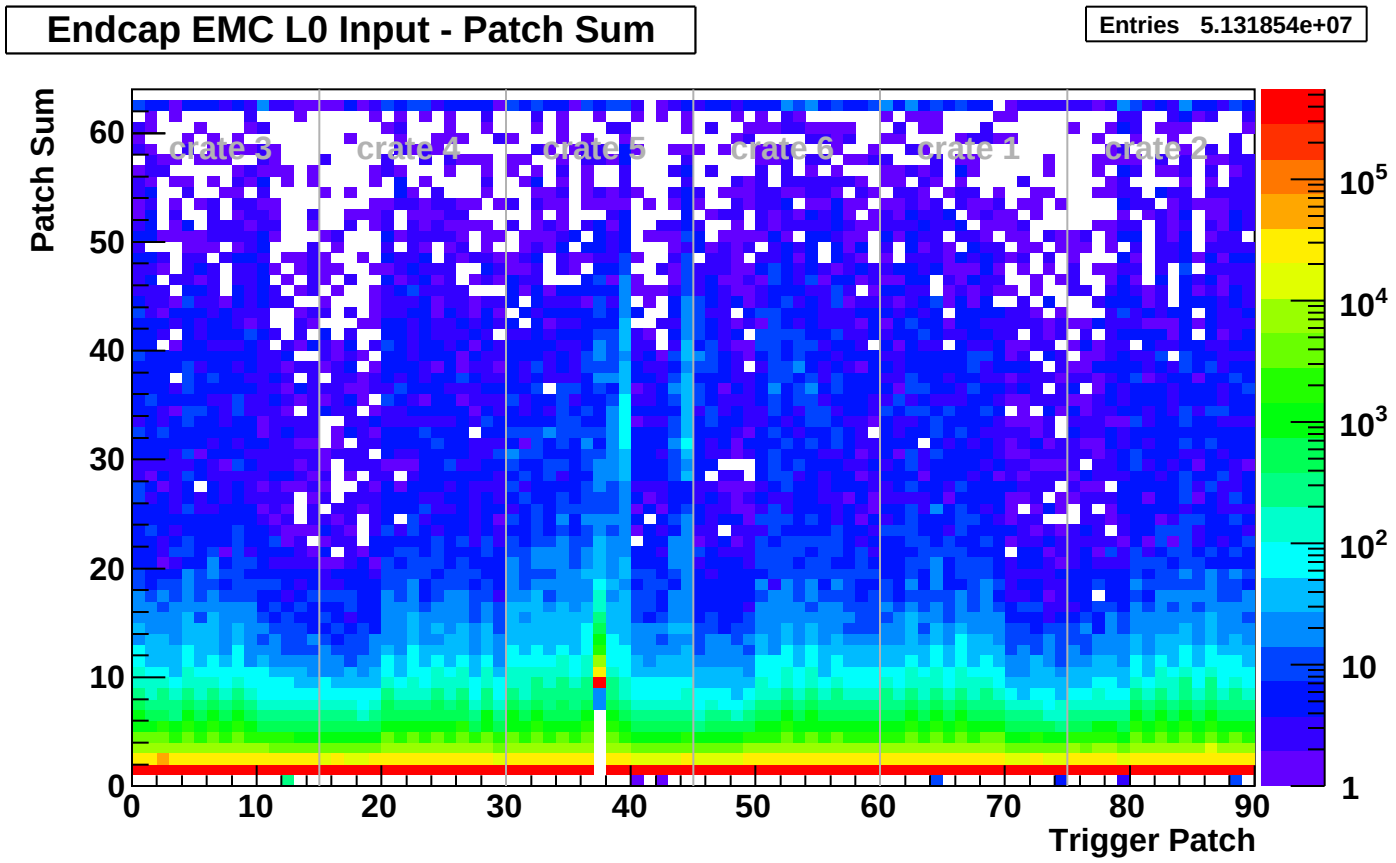

BunchId7Bit (BHT3)
Entries 7874

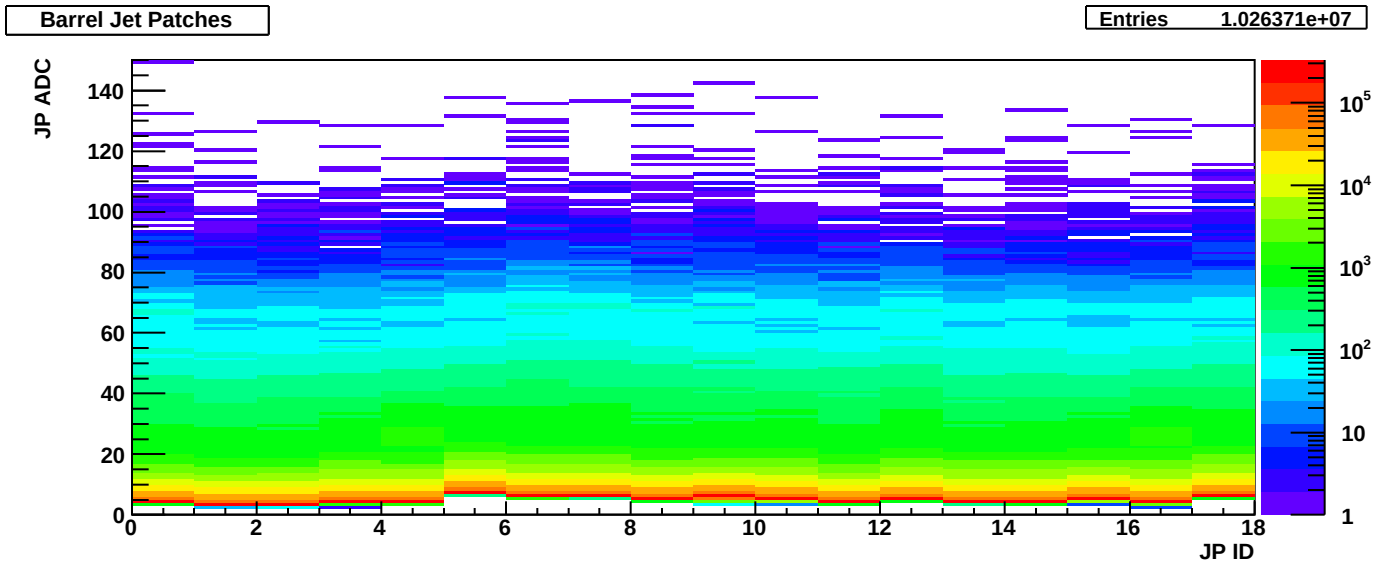

BunchId7Bit (all events)
Entries 570206

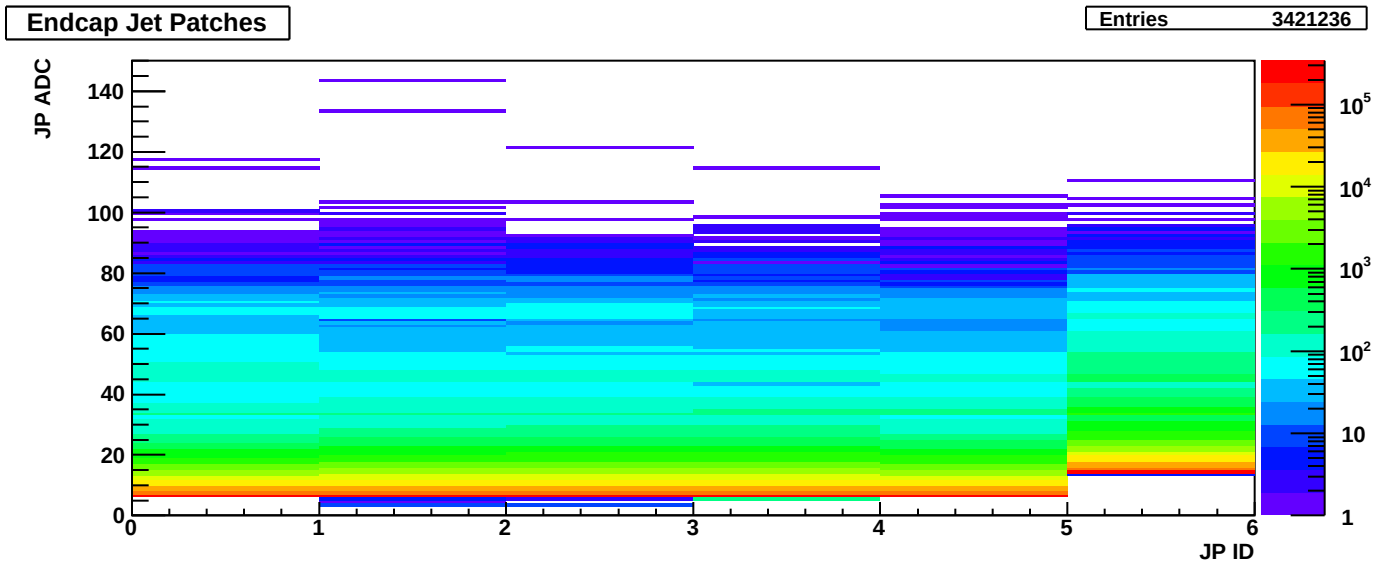

Barrel EMC L0 Input - High Tower
Entries 1.710618e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

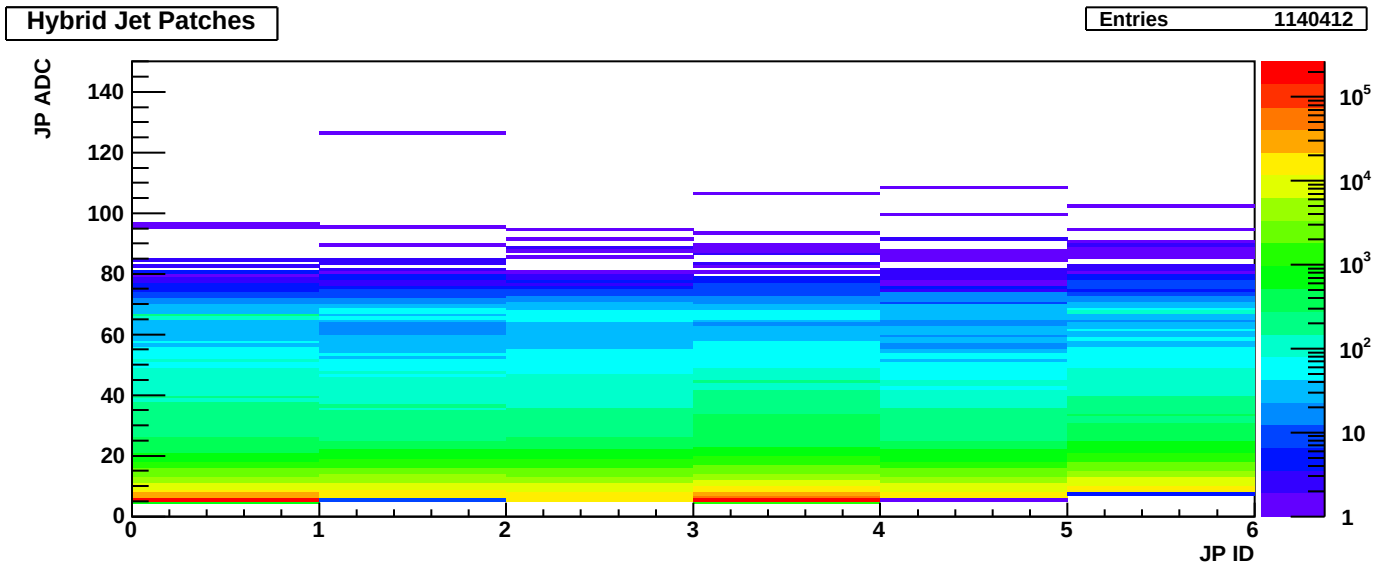

Barrel EMC L0 Input - Patch Sum
Entries 1.710618e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

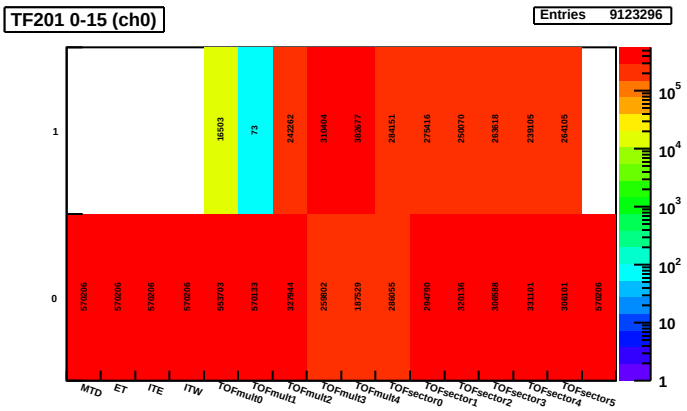

Endcap EMC L0 Input - High Tower
Entries 5.131854e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

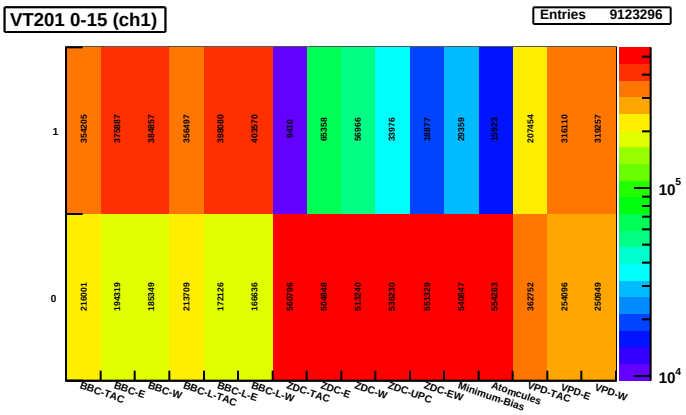

Endcap EMC L0 Input - Patch Sum
Entries 5.131854e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

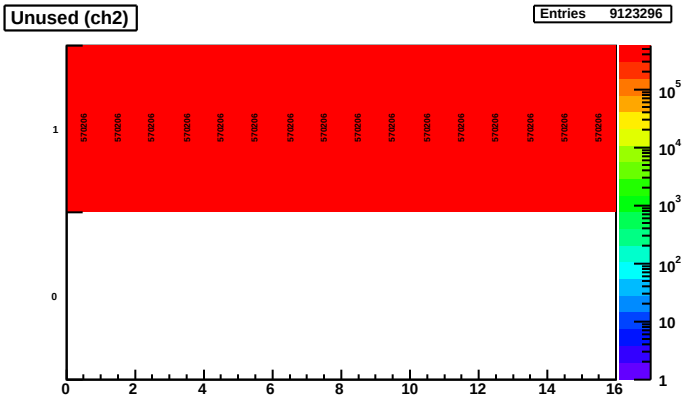

Barrel Jet Patches
Entries 1.026371e+07
JP ADC
JP ID

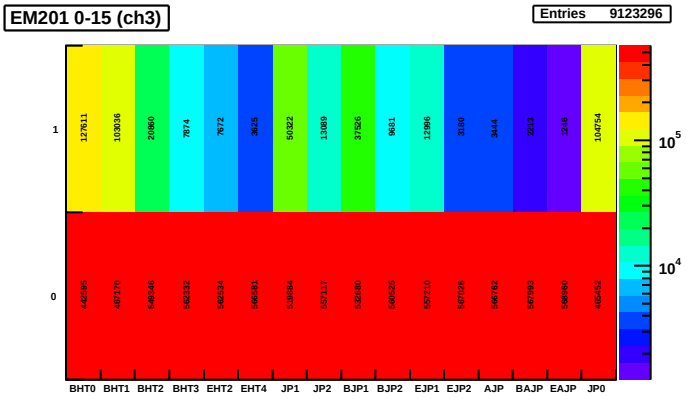

Endcap Jet Patches
Entries 3421236
JP ADC
JP ID

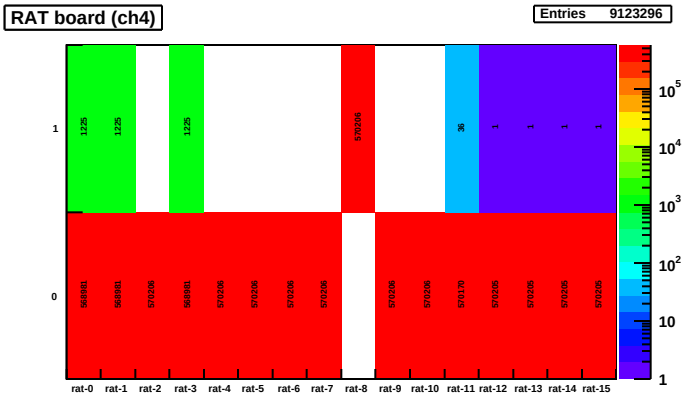

Hybrid Jet Patches
Entries 1140412
JP ADC
JP ID

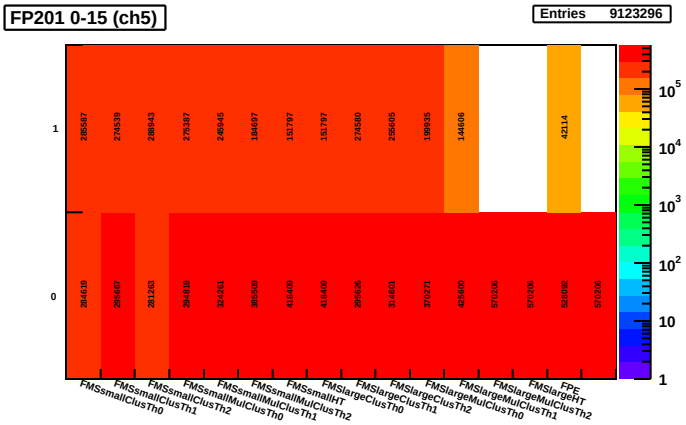

TF201 0-15 (ch0)
Entries 9123296
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

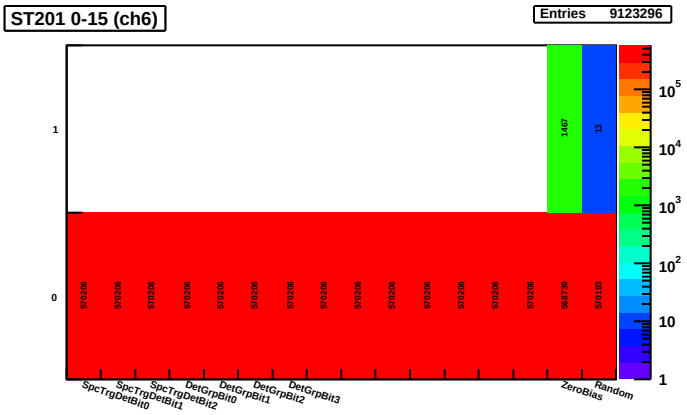

VT201 0-15 (ch1)
Entries 9123296
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Atomcules Minimum-Bias VPD-TAC VPD-E VPD-W

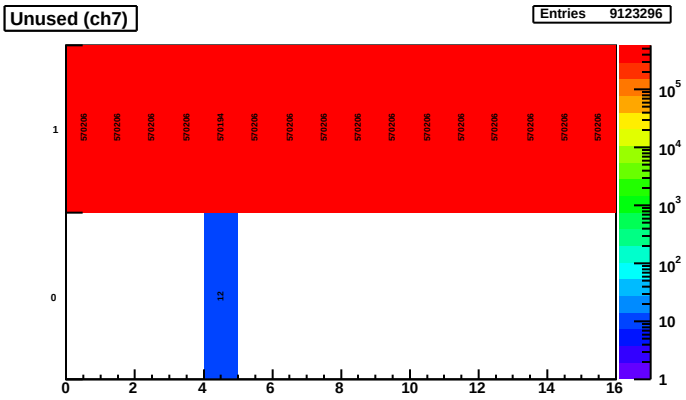

Unused (ch2)
Entries 9123296

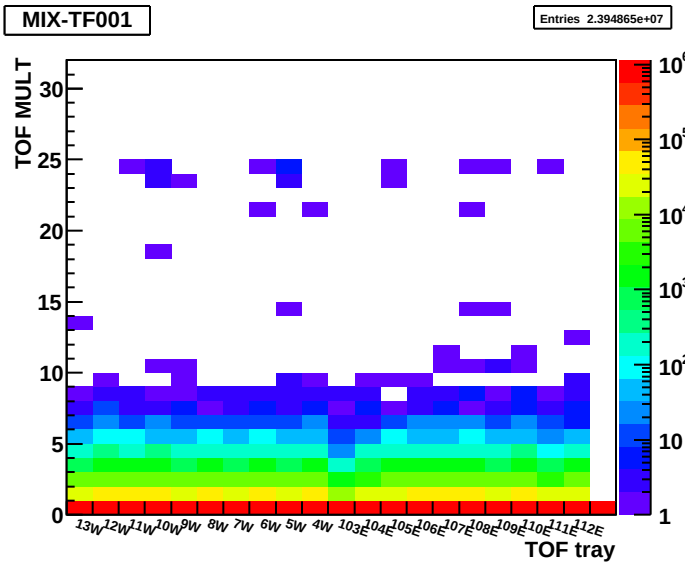

EM201 0-15 (ch3)
Entries 9123296
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

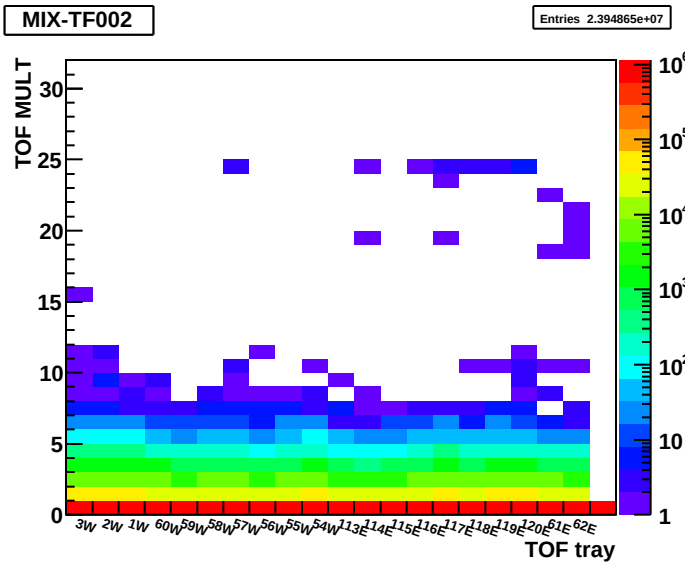

RAT board (ch4)
Entries 9123296
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

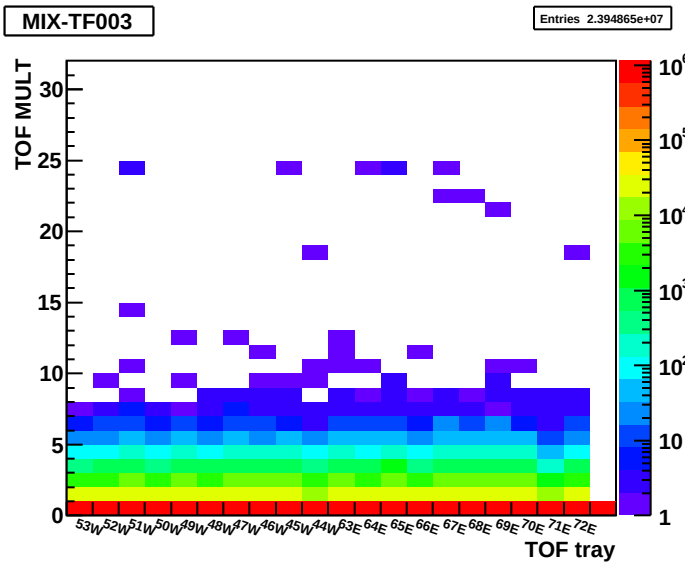

FP201 0-15 (ch5)
Entries 9123296
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

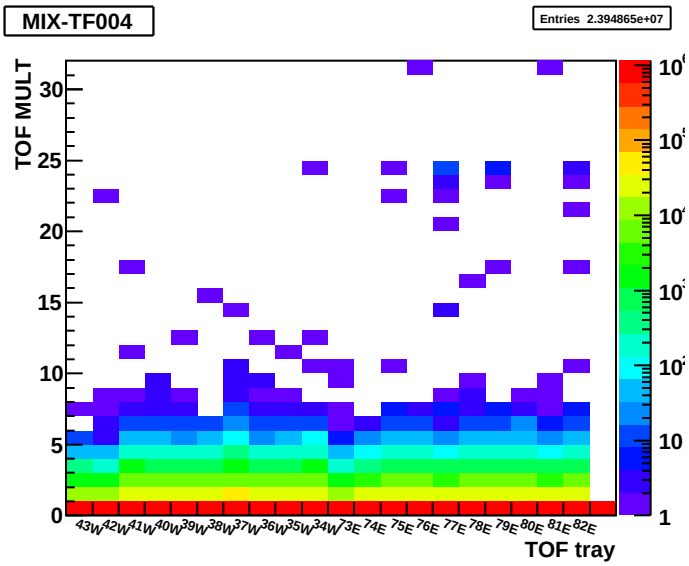

ST201 0-15 (ch6)
Entries 9123296
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

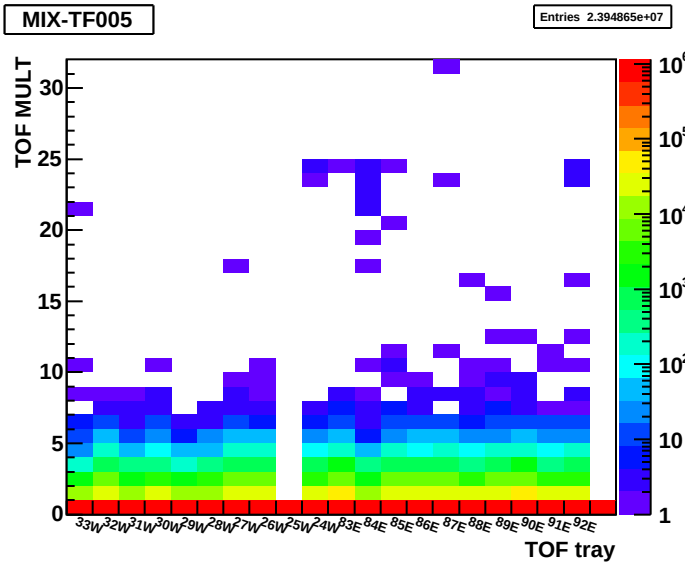

Unused (ch7)
Entries 9123296

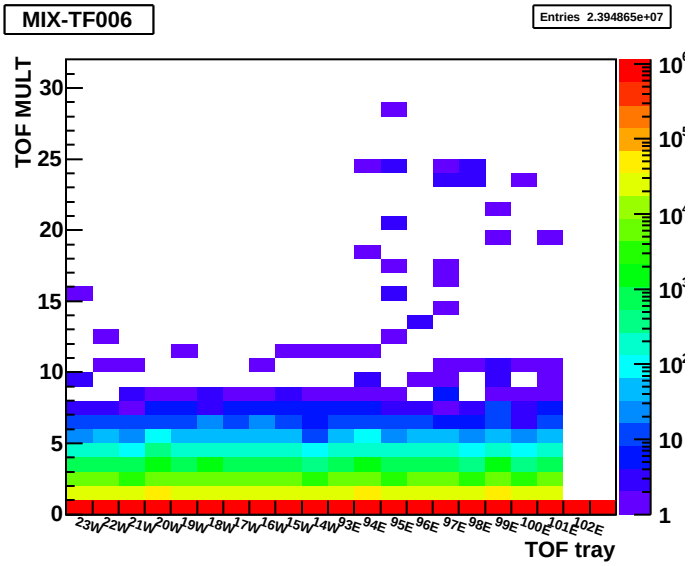

MIX-TF001
Entries 2.394865e+07
TOF MULT
TOF tray

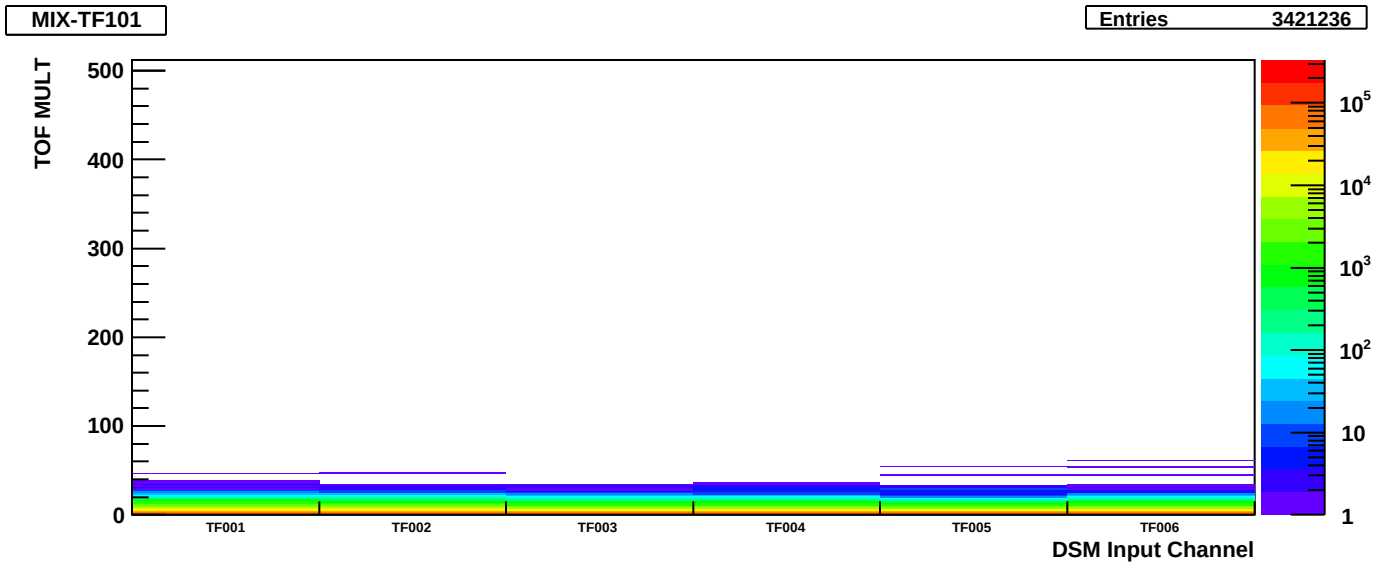

MIX-TF002
Entries 2.394865e+07
TOF MULT
TOF tray

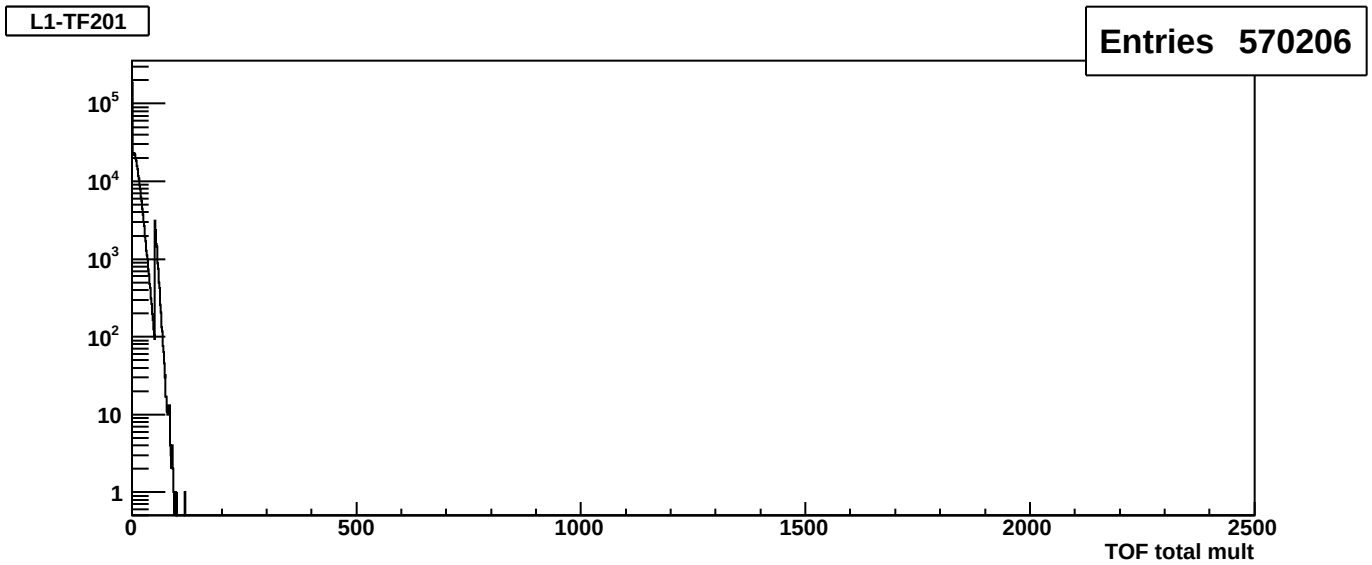

MIX-TF003
Entries 2.394865e+07
TOF MULT
TOF tray

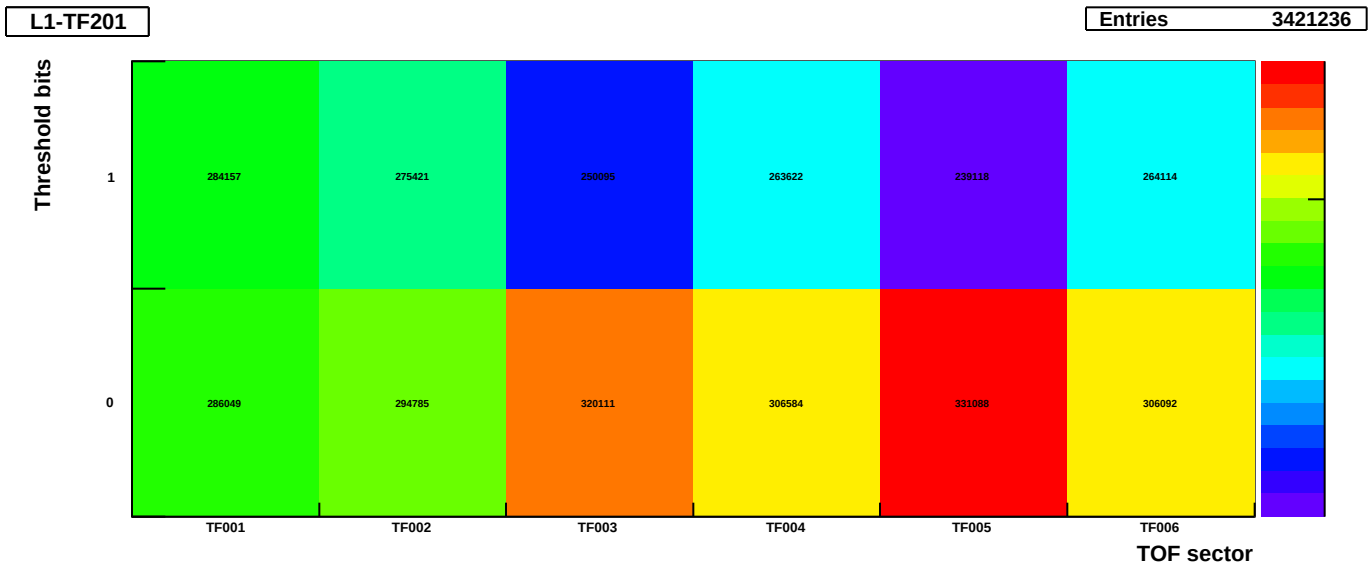

MIX-TF004
Entries 2.394865e+07
TOF MULT
TOF tray

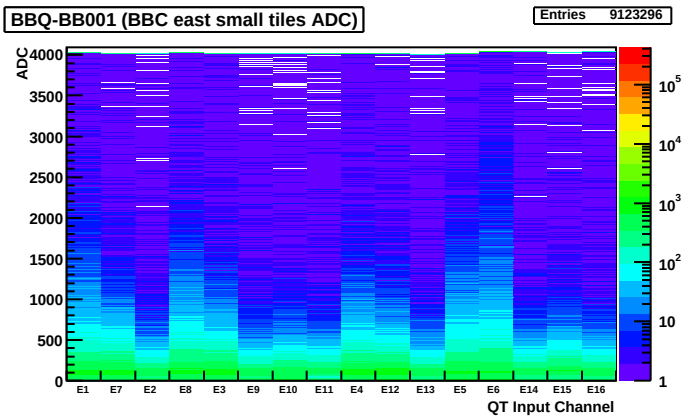

MIX-TF005
Entries 2.394865e+07
TOF MULT
TOF tray

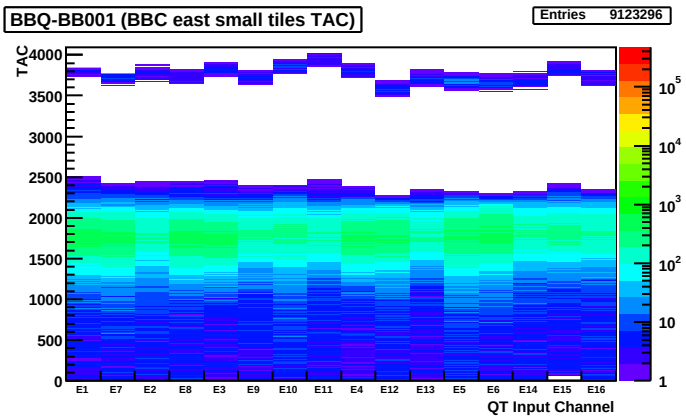

MIX-TF006
Entries 2.394865e+07
TOF MULT
TOF tray

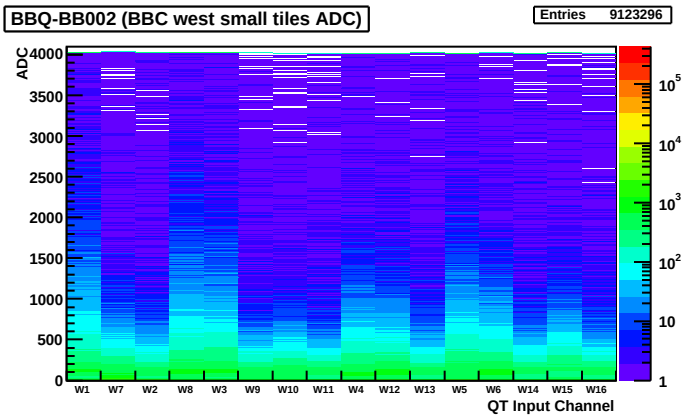

MIX-TF101
Entries 3421236
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^5$
$10^4$
$10^3$
$10^2$
10
1

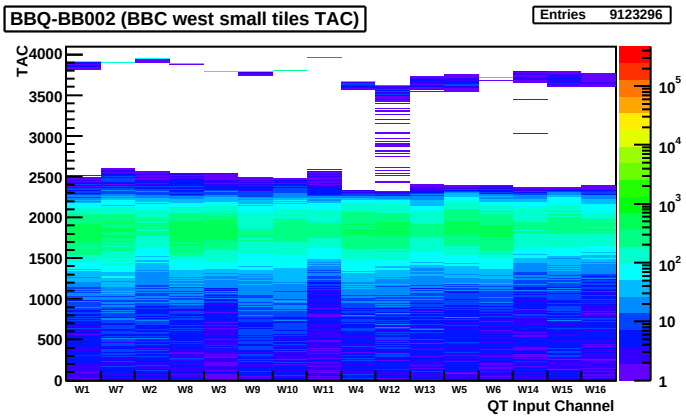

L1-TF201
Entries 570206
$10^5$
$10^4$
$10^3$
$10^2$
10
1
0
500
1000
1500
2000
2500
TOF total mult

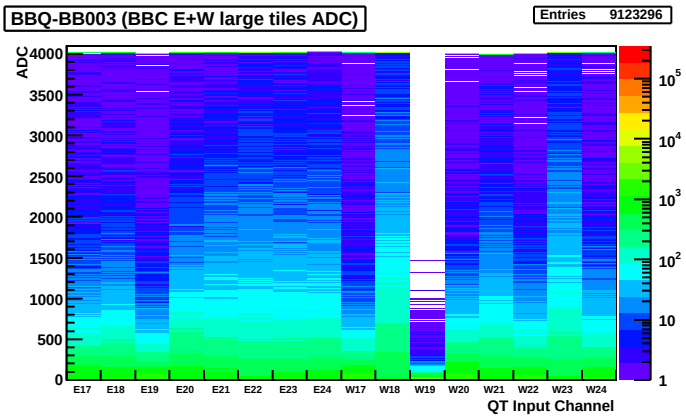

L1-TF201
Entries 3421236
Threshold bits
1
0
284157
275421
250095
263622
239118
264114
286049
294785
320111
306584
331088
306092
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

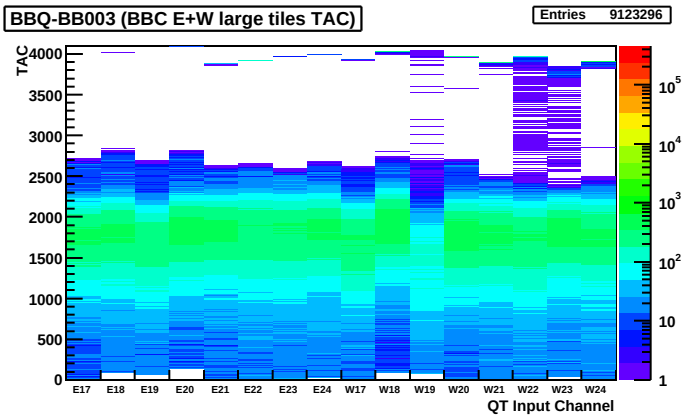

BBQ-BB001 (BBC east small tiles ADC)
Entries 9123296
ADC
QT Input Channel

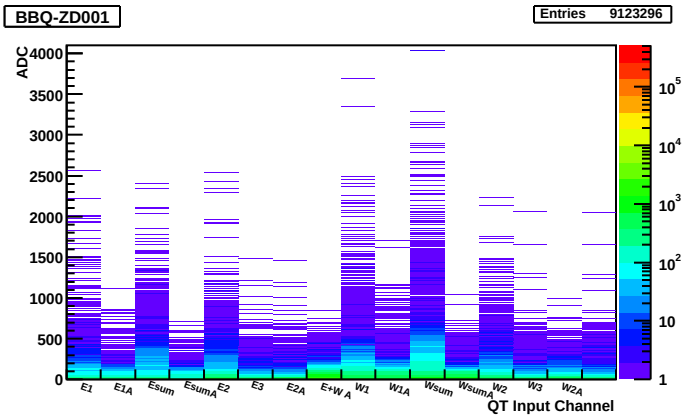

BBQ-BB001 (BBC east small tiles TAC)
Entries 9123296
TAC
QT Input Channel

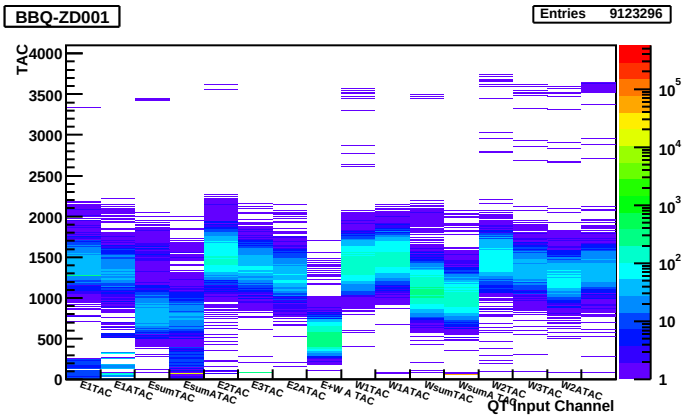

BBQ-BB002 (BBC west small tiles ADC)
Entries 9123296
ADC
QT Input Channel

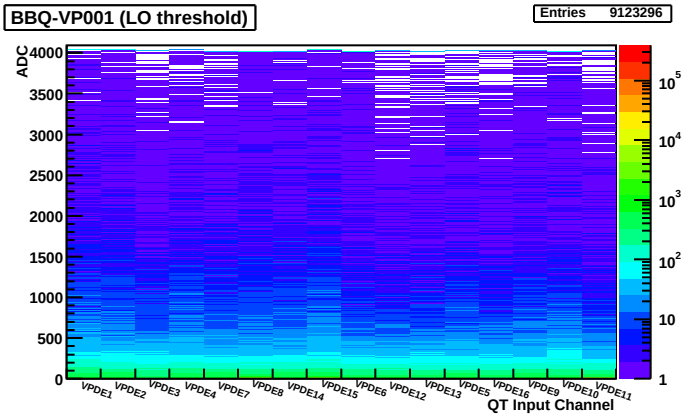

BBQ-BB002 (BBC west small tiles TAC)
Entries 9123296
TAC
QT Input Channel

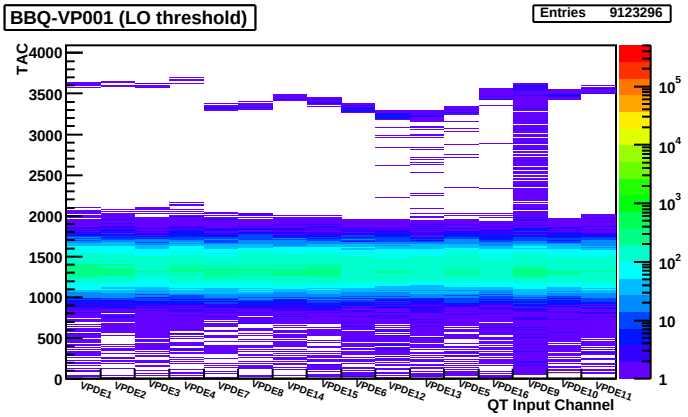

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 9123296
ADC
QT Input Channel

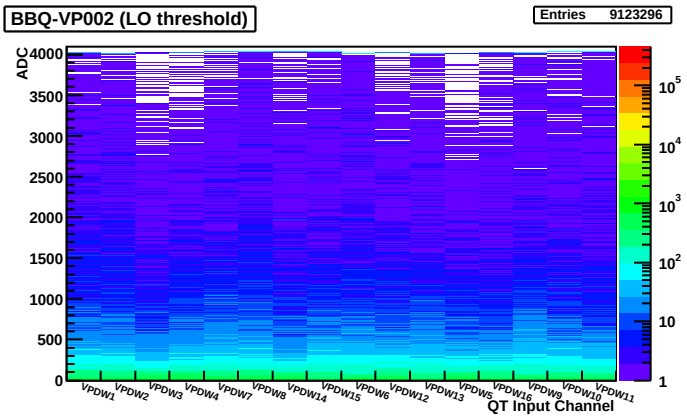

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 9123296
TAC
QT Input Channel

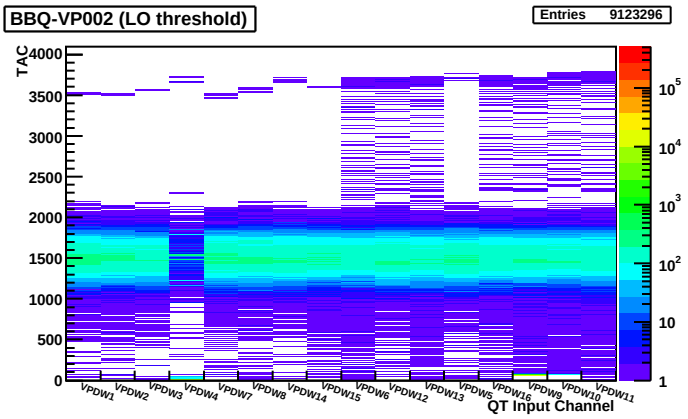

BBQ-ZD001
Entries 9123296
ADC
QT Input Channel

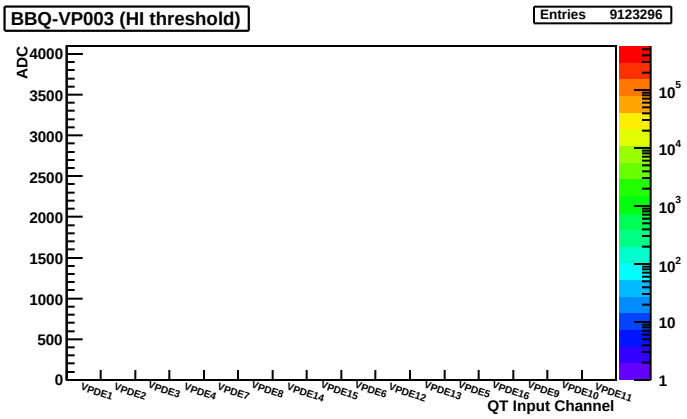

BBQ-ZD001
Entries 9123296
TAC
QT Input Channel

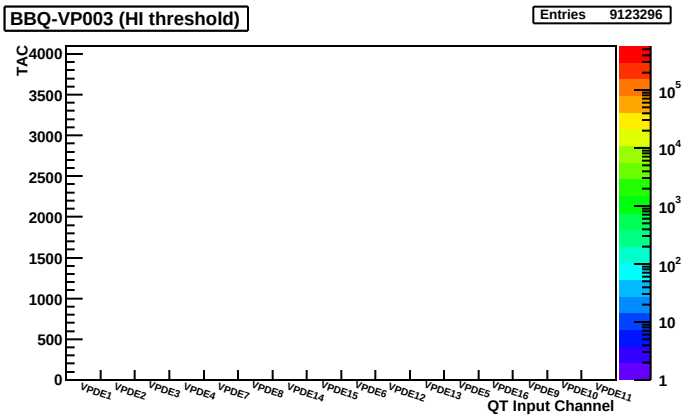

BBQ-VP001 (LO threshold)
Entries 9123296
ADC
QT Input Channel

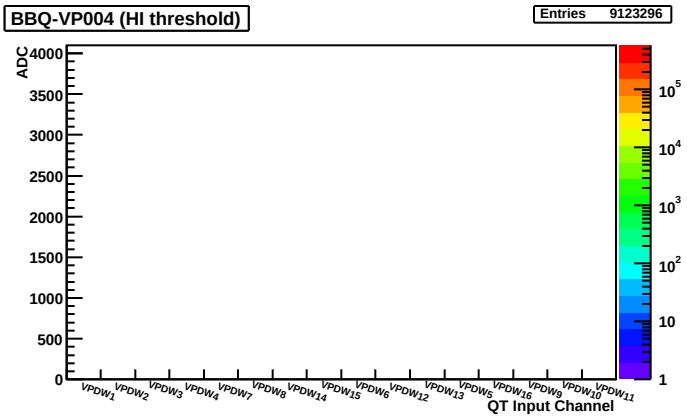

BBQ-VP001 (LO threshold)
Entries 9123296
TAC
QT Input Channel

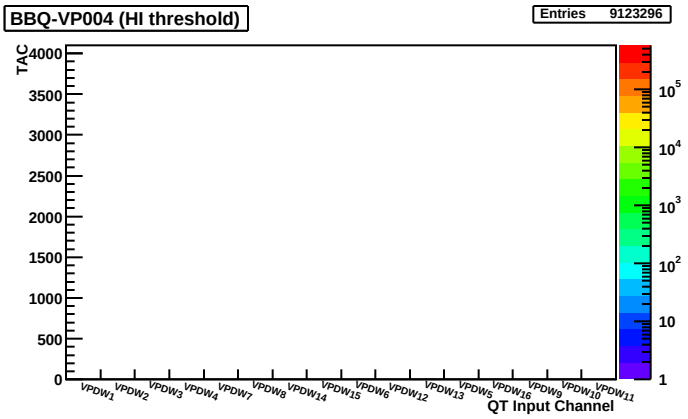

BBQ-VP002 (LO threshold)
Entries 9123296
ADC
QT Input Channel

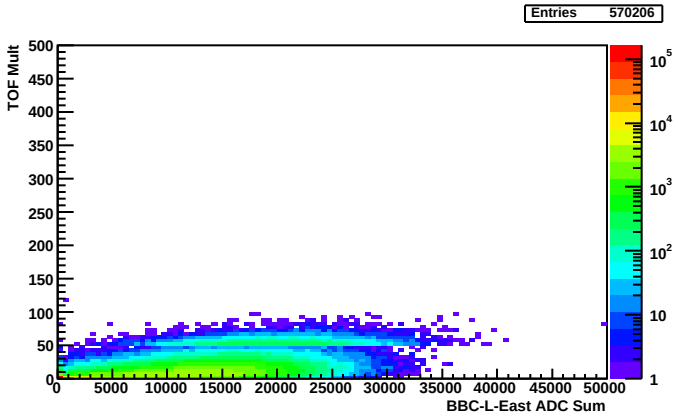

BBQ-VP002 (LO threshold)
Entries 9123296
TAC
QT Input Channel

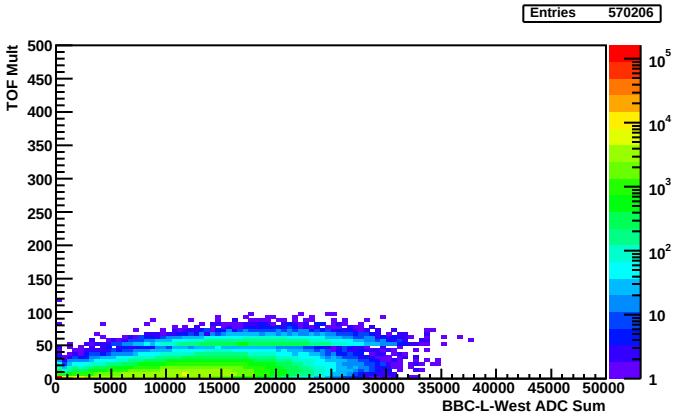

BBQ-VP003 (HI threshold)
Entries 9123296
ADC
QT Input Channel

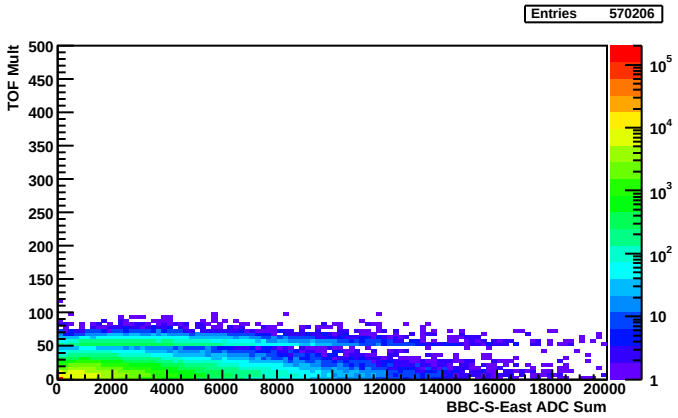

BBQ-VP003 (HI threshold)
Entries 9123296
TAC
QT Input Channel

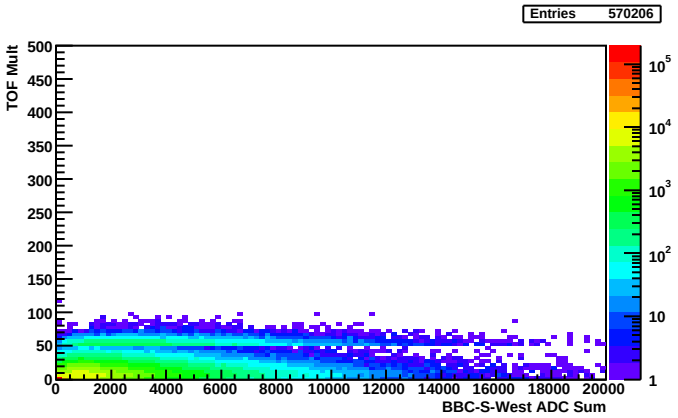

BBQ-VP004 (HI threshold)
Entries 9123296
ADC
QT Input Channel

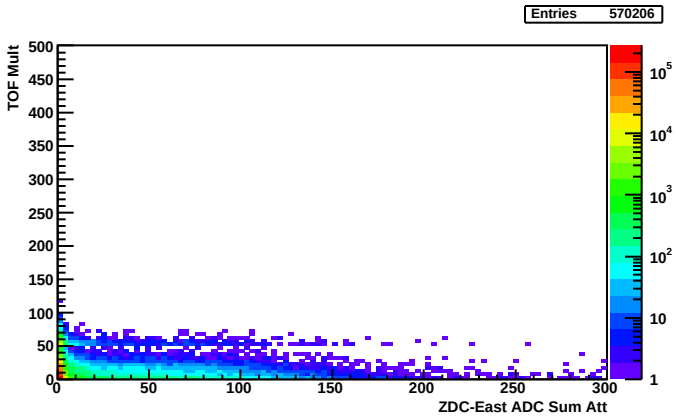

BBQ-VP004 (HI threshold)
Entries 9123296
TAC
QT Input Channel

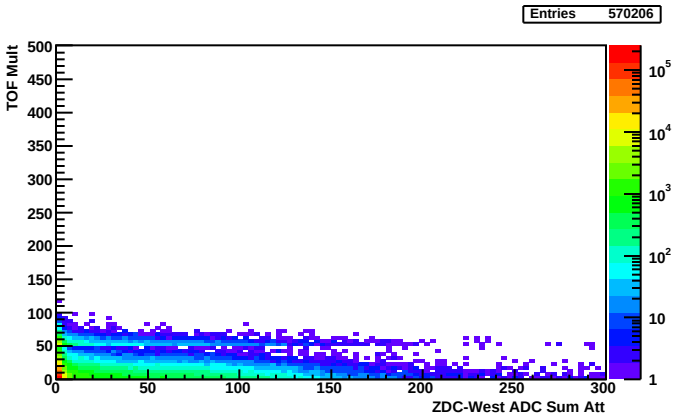

Entries 570206
TOF Mult
BBC-L-East ADC Sum

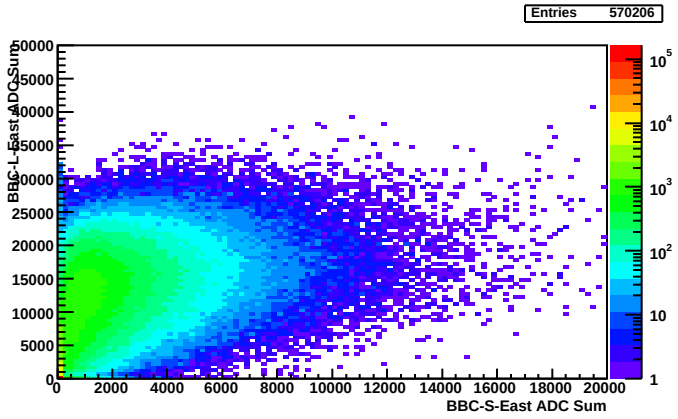

Entries 570206
TOF Mult
BBC-L-West ADC Sum

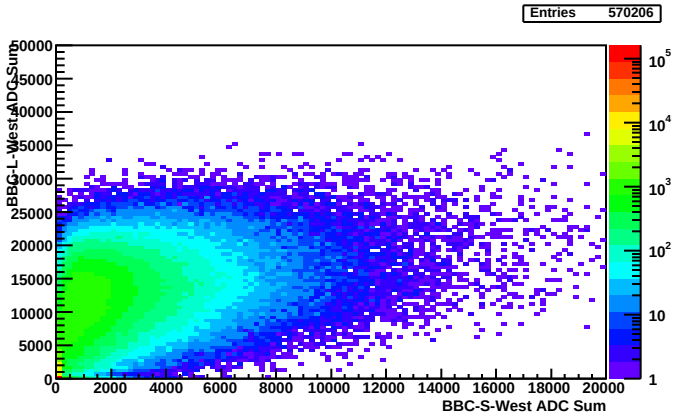

Entries 570206
TOF Mult
BBC-S-East ADC Sum

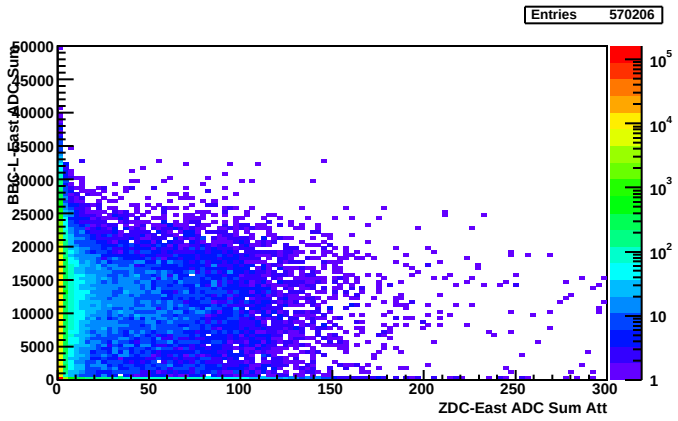

Entries 570206
TOF Mult
BBC-S-West ADC Sum

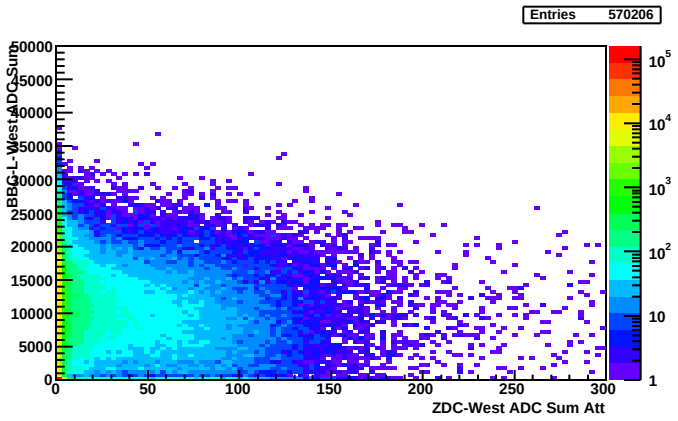

Entries 570206
TOF Mult
ZDC-East ADC Sum Att

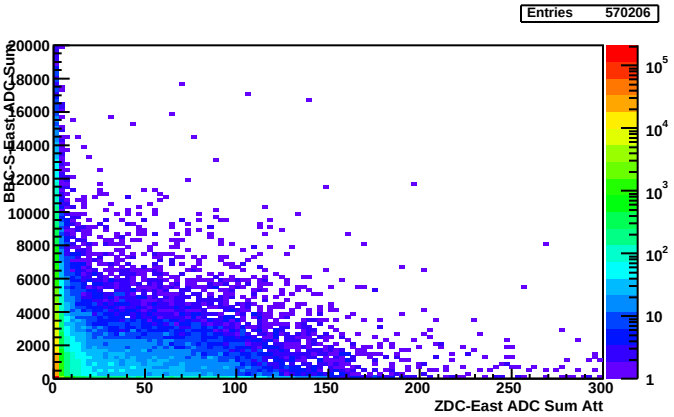

Entries 570206
TOF Mult
ZDC-West ADC Sum Att

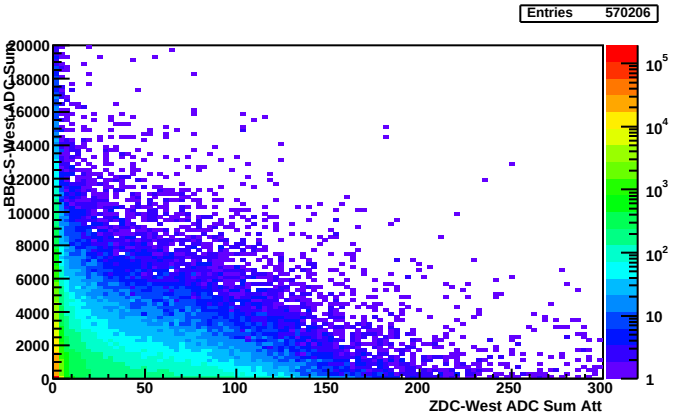

Entries 570206
BBC-L-East ADC Sum
BBC-S-East ADC Sum

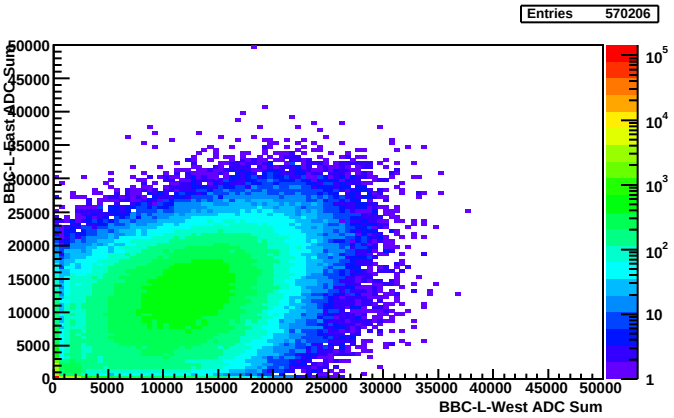

Entries 570206
BBC-L-West ADC Sum
BBC-S-West ADC Sum

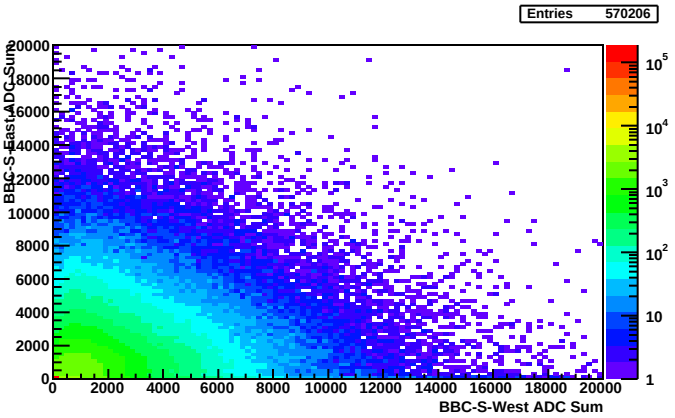

Entries 570206
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

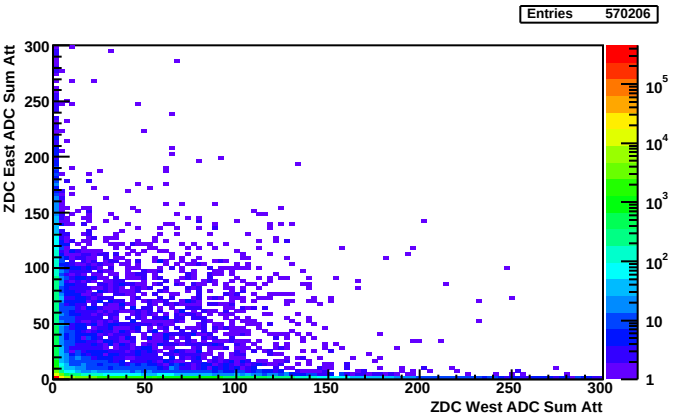

Entries 570206
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

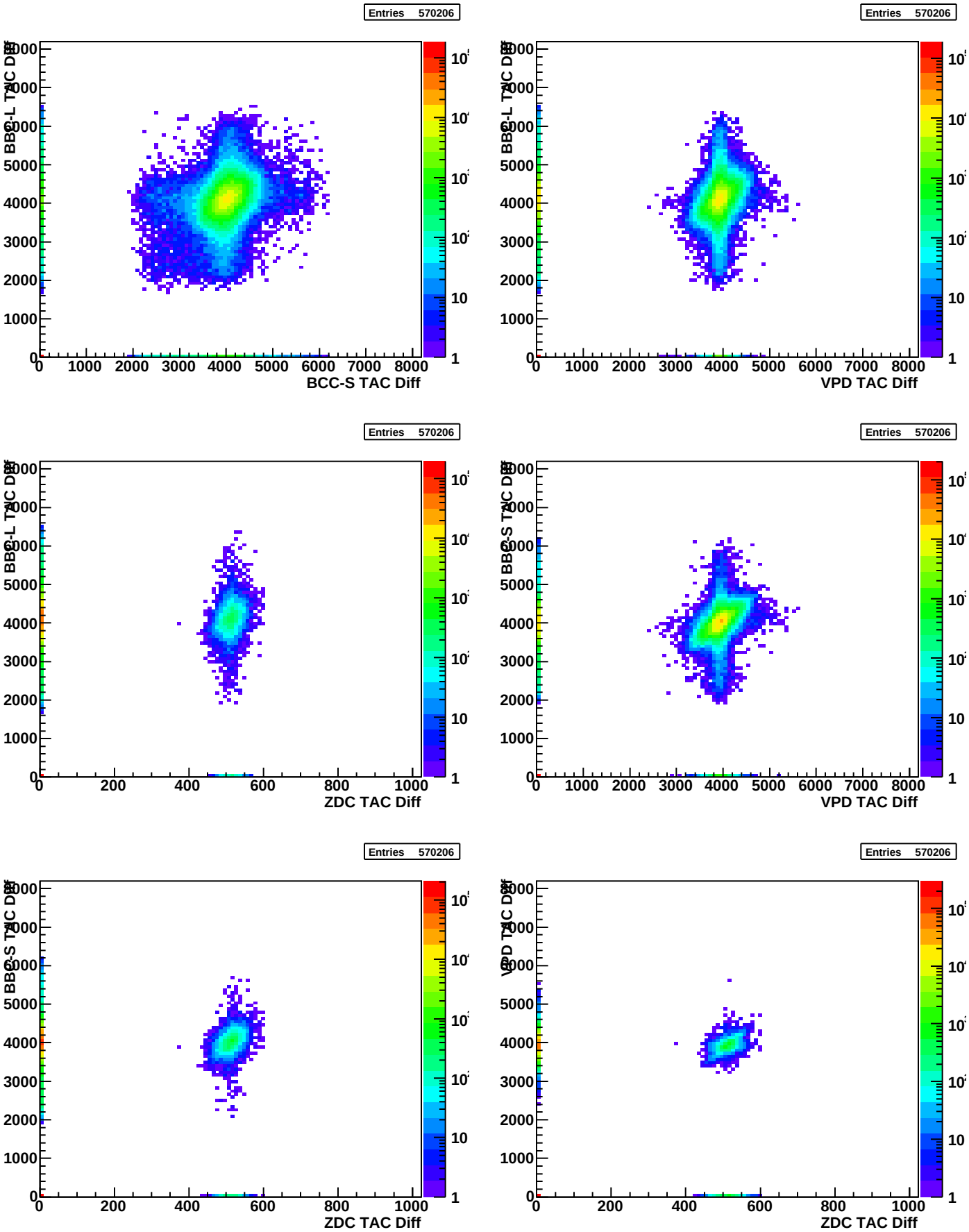

Entries 570206
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

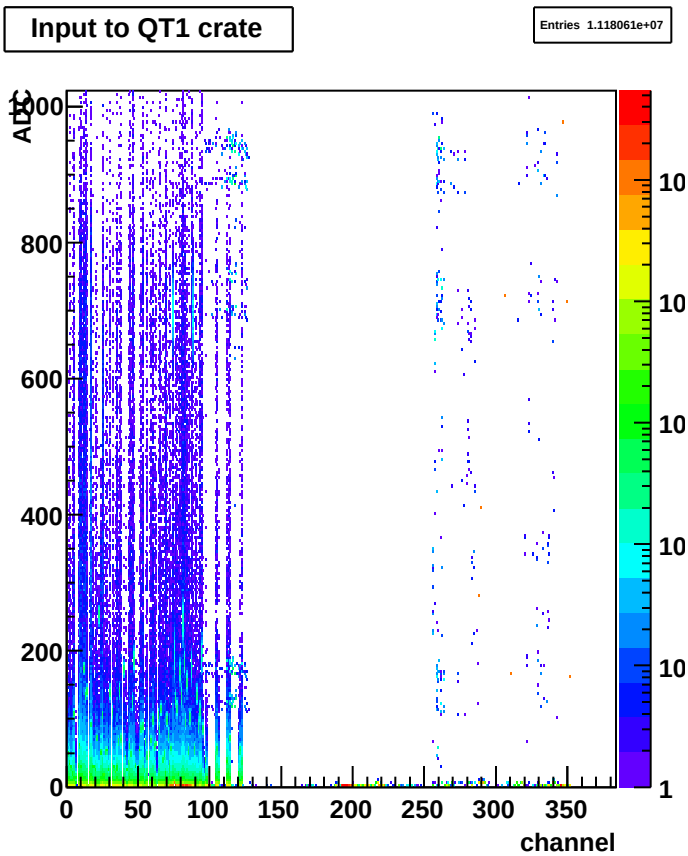

Entries 570206
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

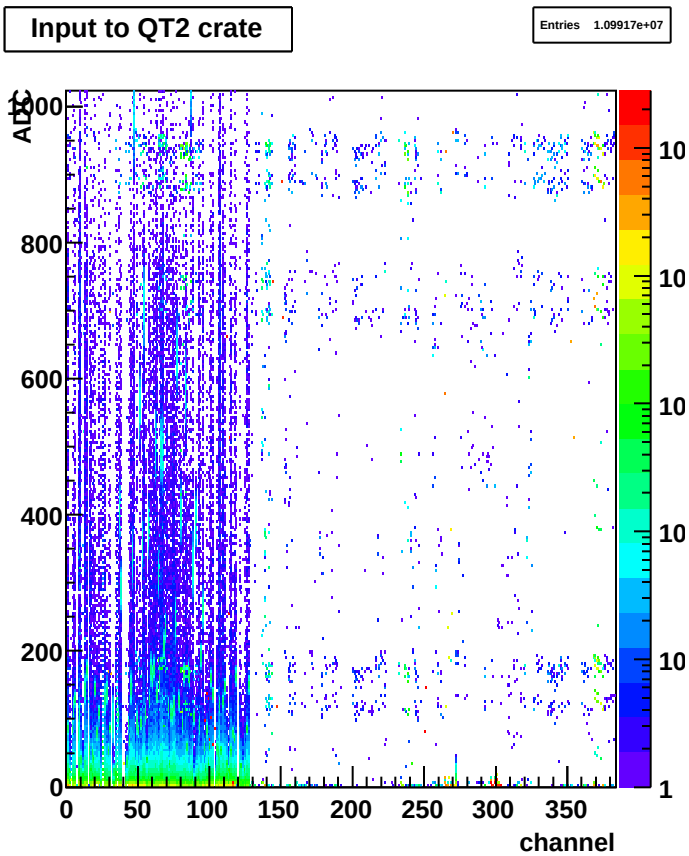

Entries 570206
BBC-L-East ADC Sum
BBC-L-West ADC Sum

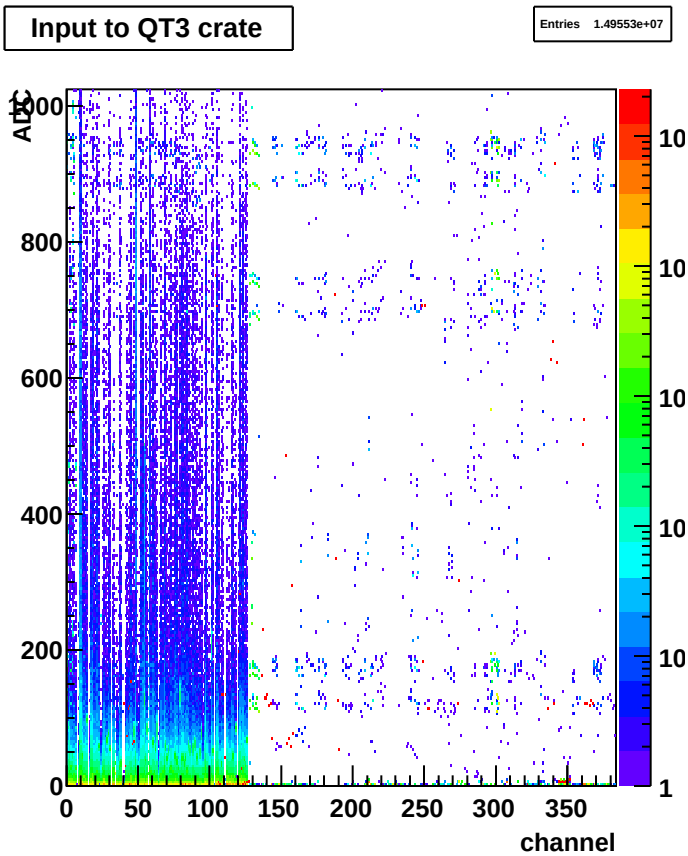

Entries 570206
BBC-S-East ADC Sum
BBC-S-West ADC Sum

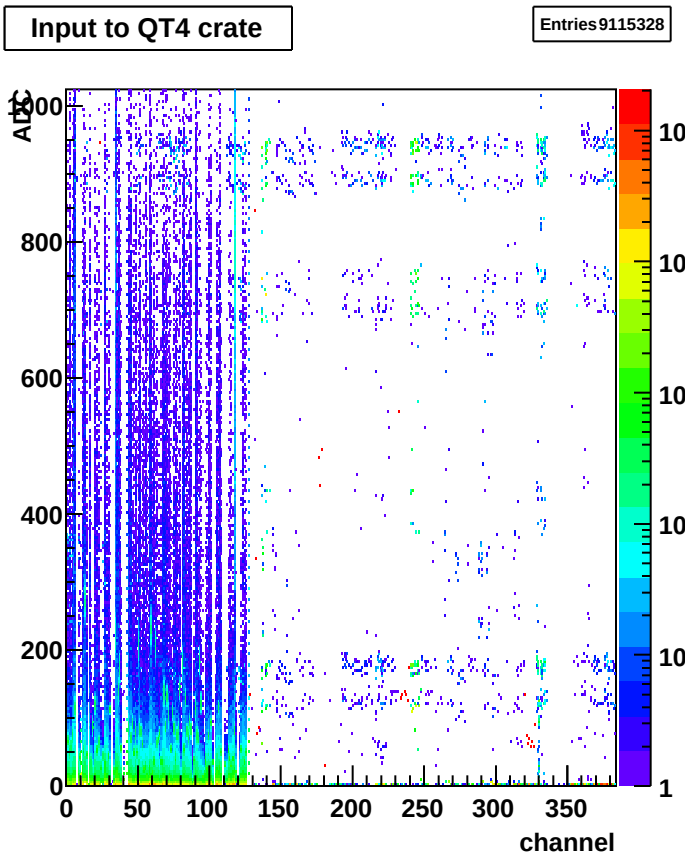

Entries 570206
ZDC East ADC Sum Att
ZDC West ADC Sum Att

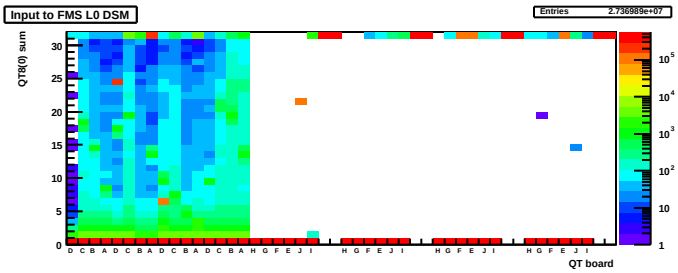

Entries 570206
BBC-L TAC Diff
BCC-S TAC Diff
Entries 570206
BBC-L TAC Diff
VPD TAC Diff
Entries 570206
BBC-L TAC Diff
ZDC TAC Diff
Entries 570206
BBC-S TAC Diff
VPD TAC Diff
Entries 570206
BBC-S TAC Diff
ZDC TAC Diff
Entries 570206
VPD TAC Diff
ZDC TAC Diff

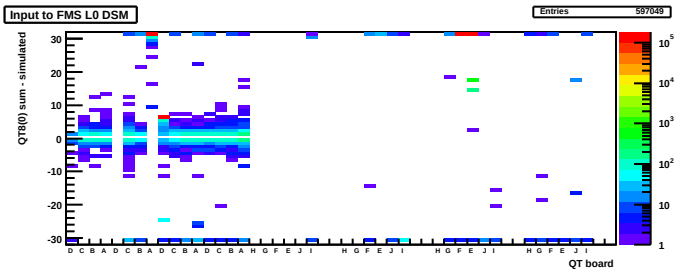

Input to QT1 crate
Entries 1.118061e+07
ADC
channel

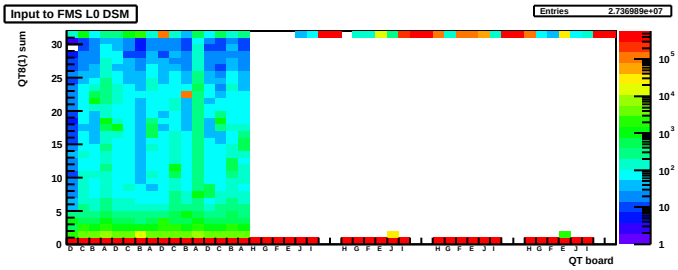

Input to QT2 crate
Entries 1.09917e+07
ADC
channel

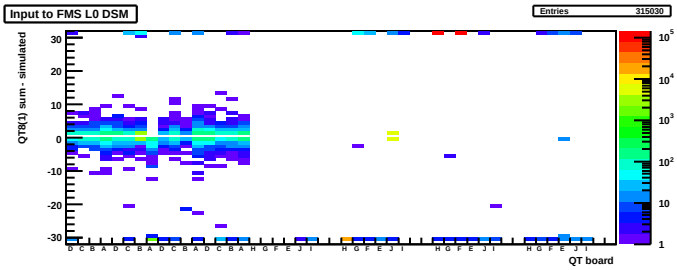

Input to QT3 crate
Entries 1.49553e+07
ADC
channel

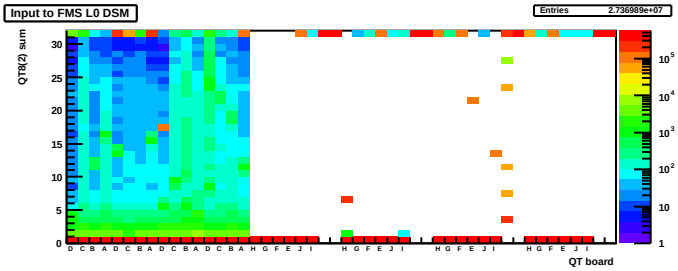

Input to QT4 crate
Entries 9115328
ADC
channel

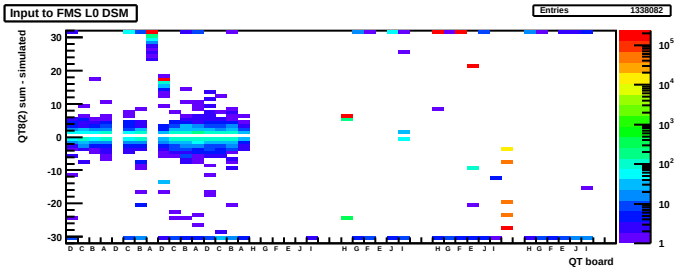

Input to FMS L0 DSM
Entries 2.736989e+07
QT8(0) sum
QT board

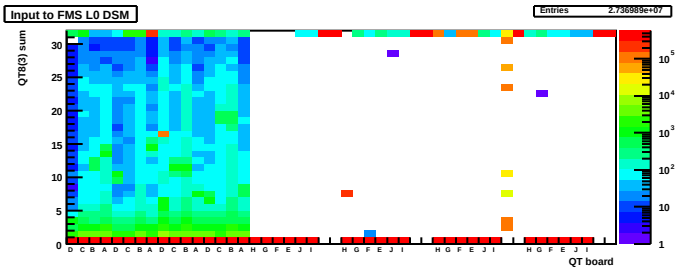

Input to FMS L0 DSM
Entries 597049
QT8(0) sum - simulated
QT board

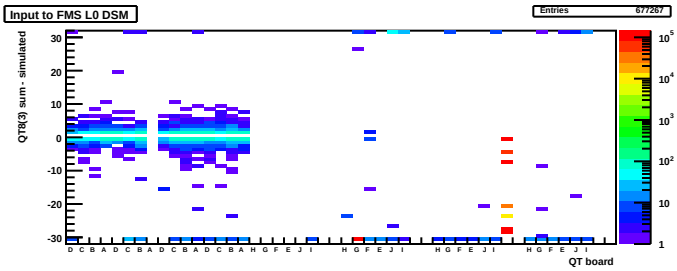

Input to FMS L0 DSM
Entries 2.736989e+07
QT8(1) sum
QT board

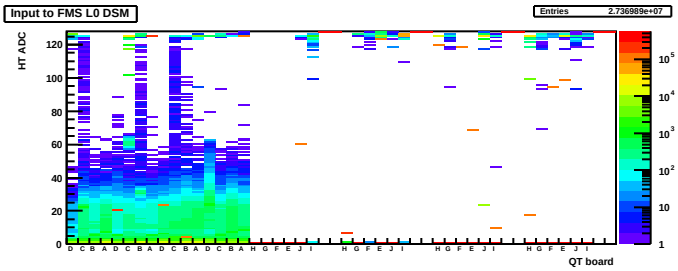

Input to FMS L0 DSM
Entries 315030
QT8(1) sum - simulated
QT board

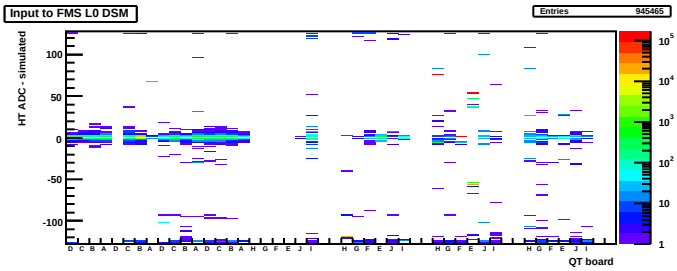

Input to FMS L0 DSM
Entries 2.736989e+07
QT8(2) sum
QT board

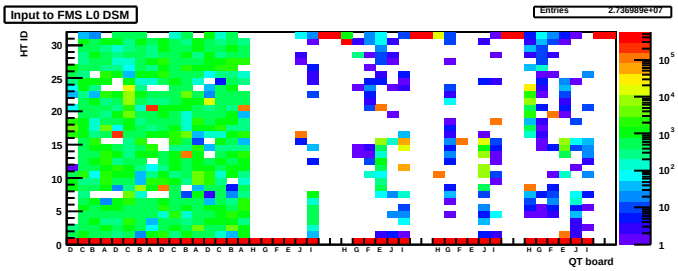

Input to FMS L0 DSM
Entries 1338082
QT8(2) sum - simulated
QT board

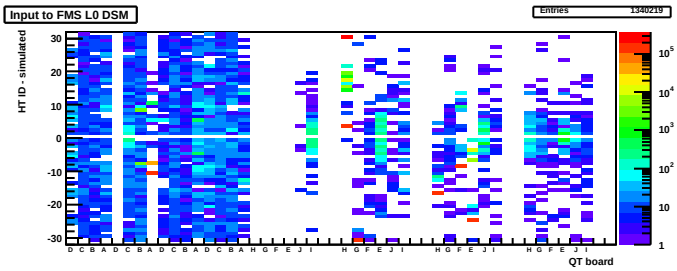

Input to FMS L0 DSM
Entries 2.736989e+07
QT8(3) sum
QT board

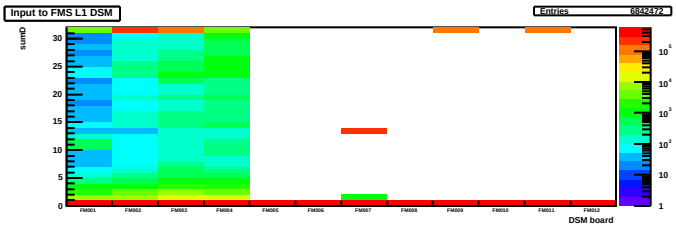

Input to FMS L0 DSM
Entries 677267
QT8(3) sum - simulated
QT board

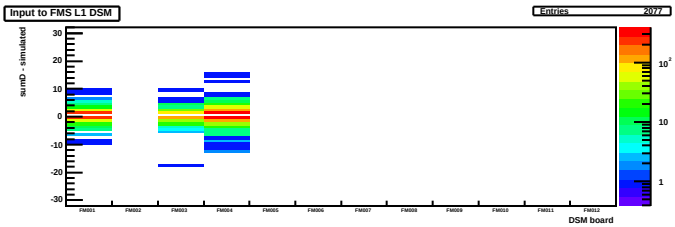

Input to FMS L0 DSM
Entries 2.736989e+07
HT ADC
QT board

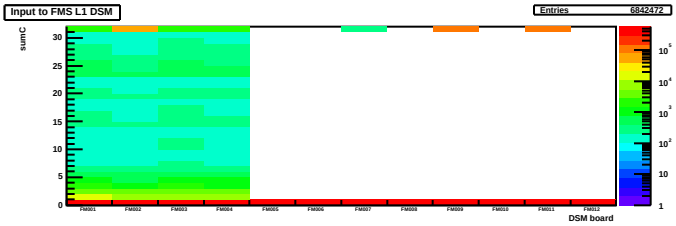

Input to FMS L0 DSM
Entries 945465
HT ADC - simulated
QT board

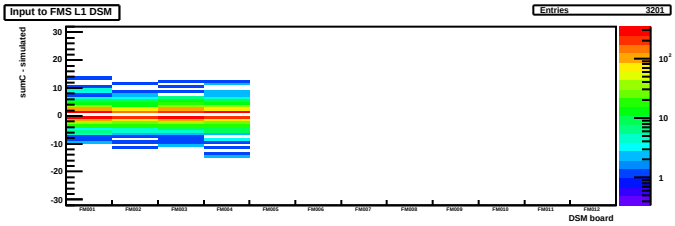

Input to FMS L0 DSM
Entries 2.736989e+07
HT ID
QT board

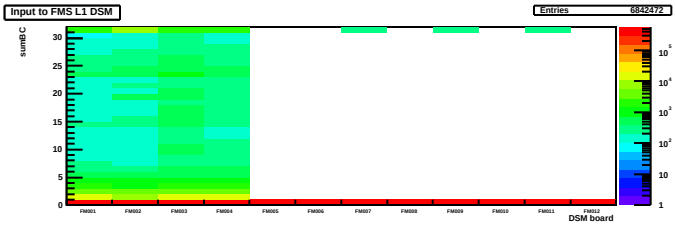

Input to FMS L0 DSM
Entries 1340219
HT ID - simulated
QT board

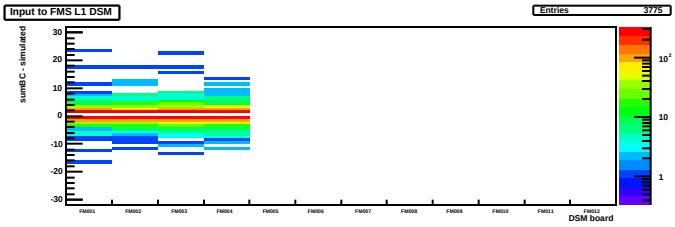

Input to FMS L1 DSM
Entries 6842472
sumD
DSM board

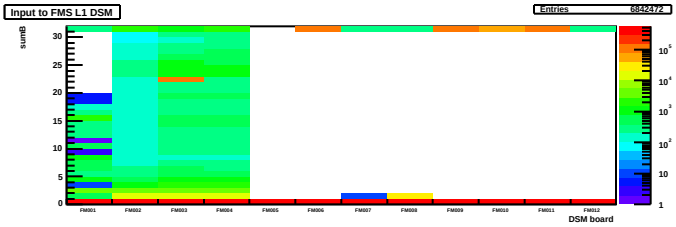

Input to FMS L1 DSM
Entries 2077
sumD - simulated
DSM board

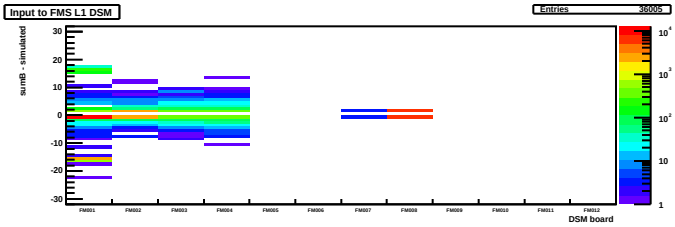

Input to FMS L1 DSM
Entries 6842472
sumC
DSM board


Input to FMS L1 DSM
Entries 3201
sumC - simulated
DSM board

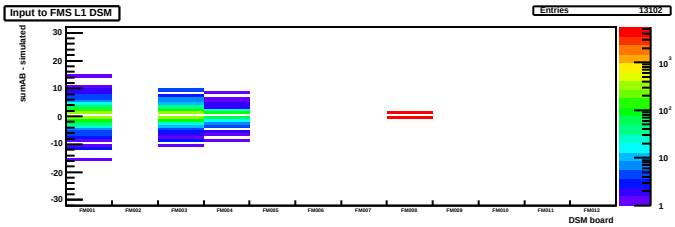

Input to FMS L1 DSM
Entries 6842472
sumBC
DSM board

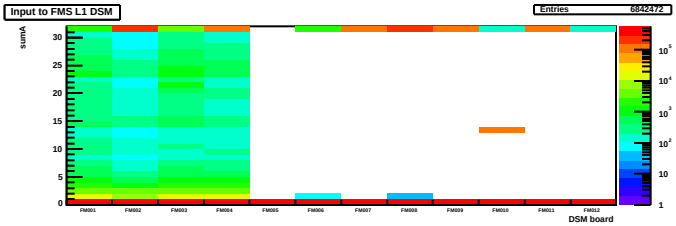

Input to FMS L1 DSM
Entries 3775
sumBC - simulated
DSM board

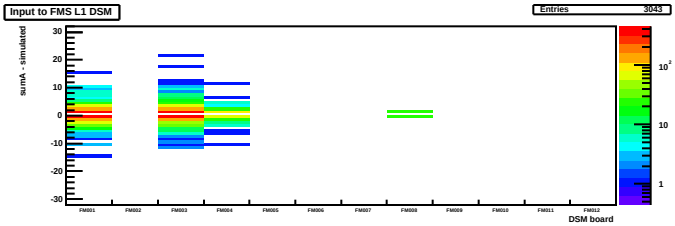

Input to FMS L1 DSM
Entries 6842472
sumB
DSM board

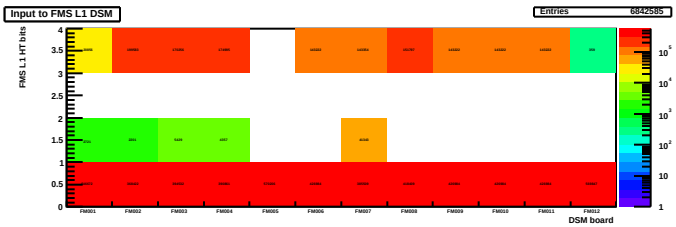

Input to FMS L1 DSM
Entries 36005
sumB - simulated
DSM board

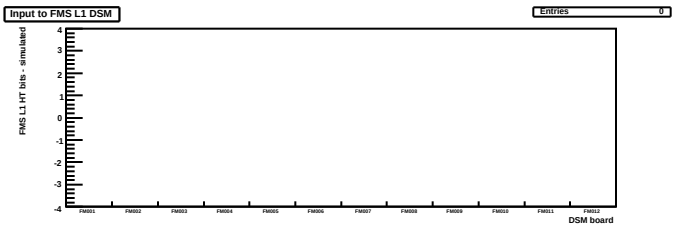
Input to FMS L1 DSM
Entries 6842472
sumAB
DSM board

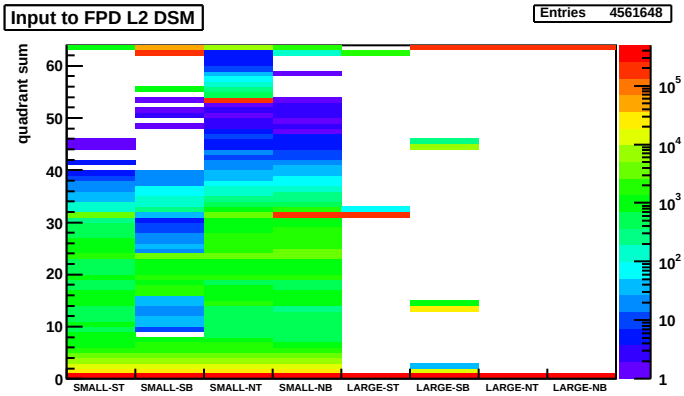

Input to FMS L1 DSM
Entries 13102
sumAB - simulated
DSM board

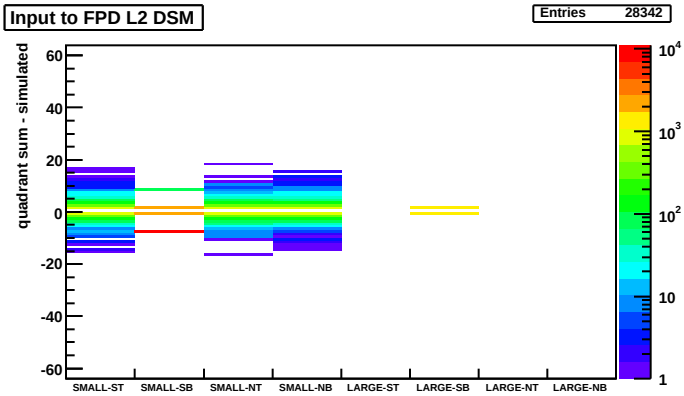

Input to FMS L1 DSM
Entries 6842472
sumA
DSM board

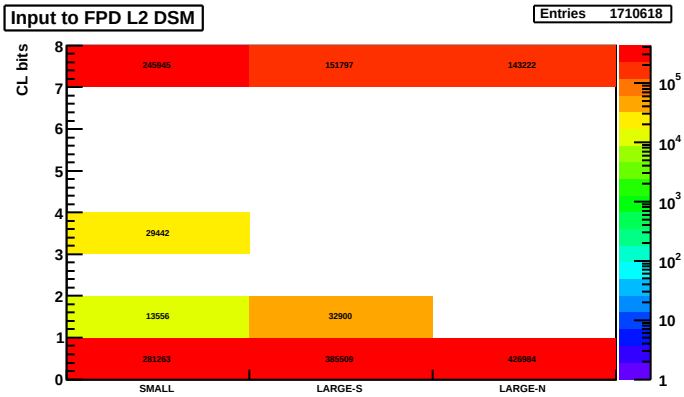

Input to FMS L1 DSM
Entries 3043
sumA - simulated
DSM board

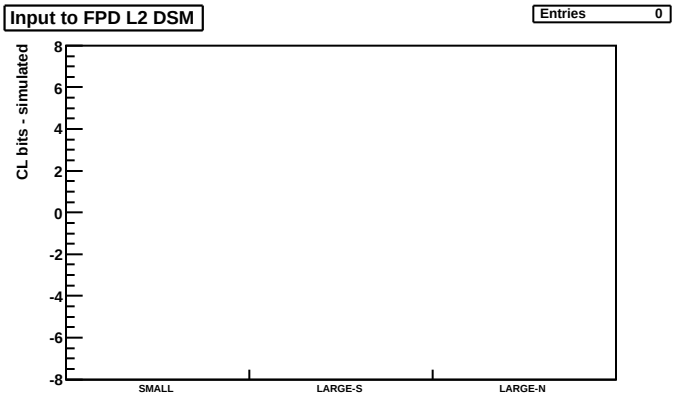

Input to FMS L1 DSM
Entries 6842585
FMS L1 HT bits
DSM board

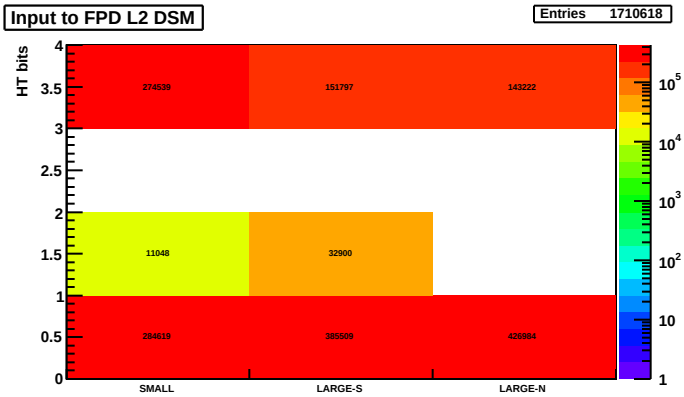

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

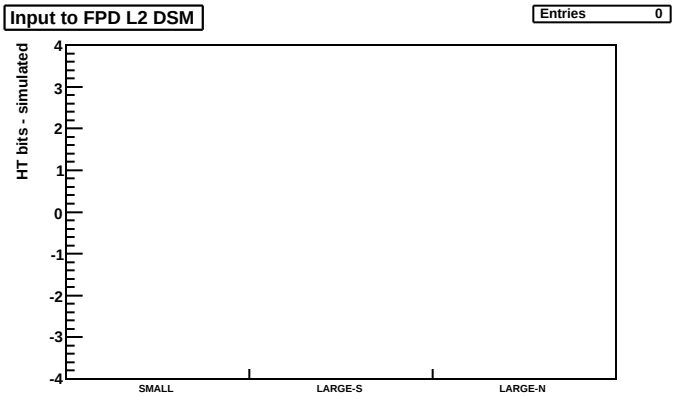

Input to FPD L2 DSM
Entries 4561648
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

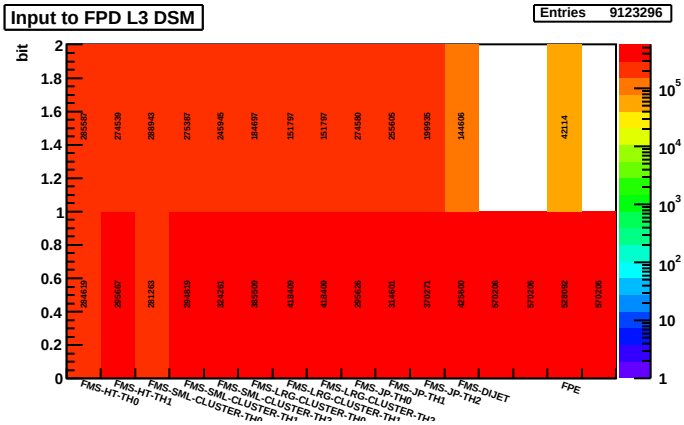

Input to FPD L2 DSM
Entries 28342
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

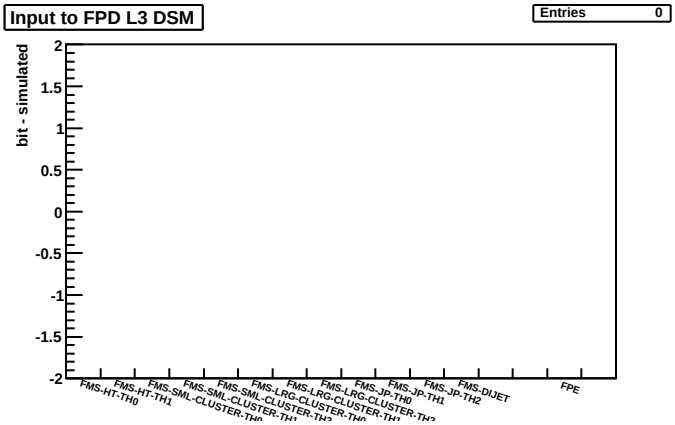

Input to FPD L2 DSM
Entries 1710618
CL bits
245945
151797
143222
29442
13556
32900
281263
385509
426984
SMALL
LARGE-S
LARGE-N

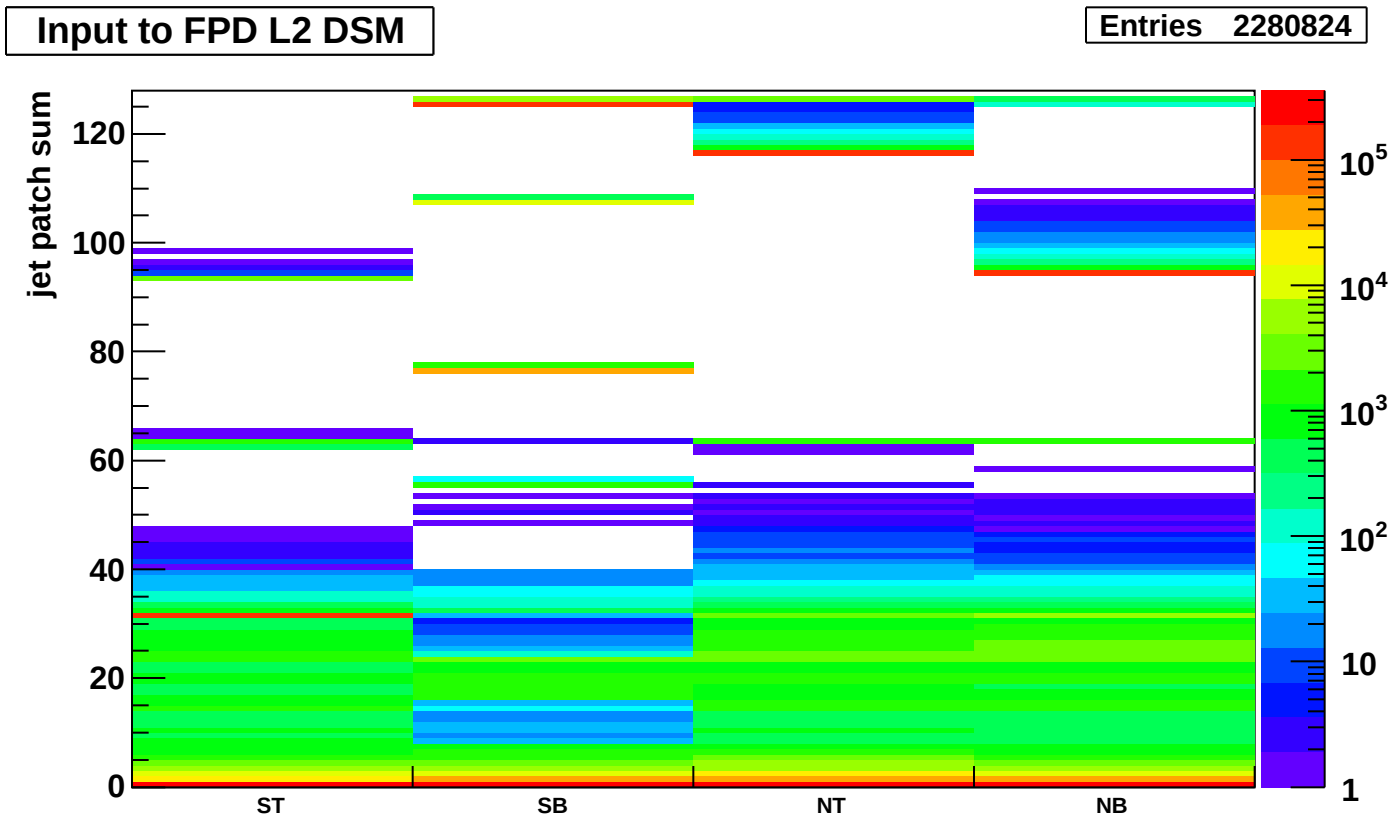

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

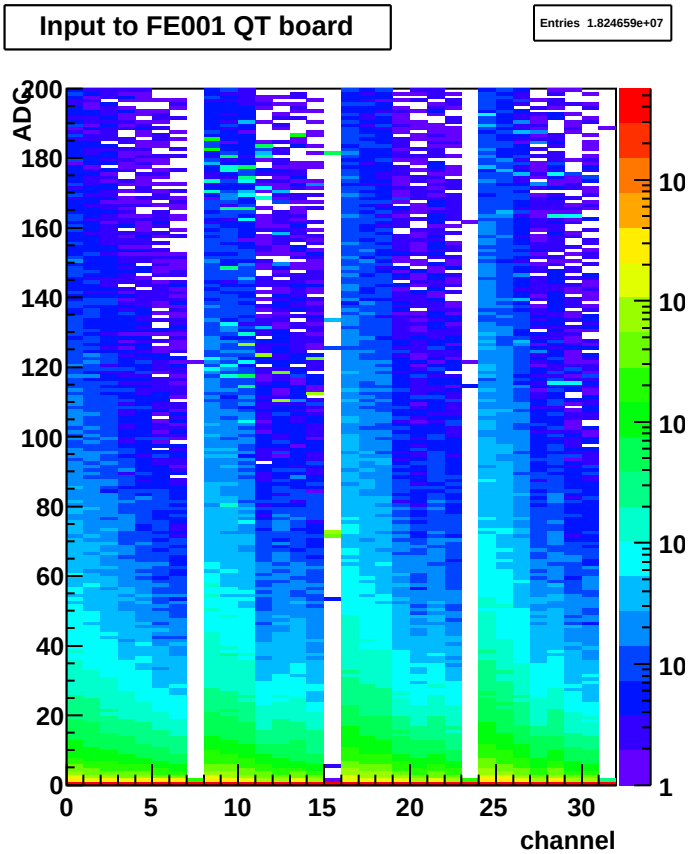

Input to FPD L2 DSM
Entries 1710618
HT bits
274539
151797
143222
11048
32900
284619
385509
426984
SMALL
LARGE-S
LARGE-N

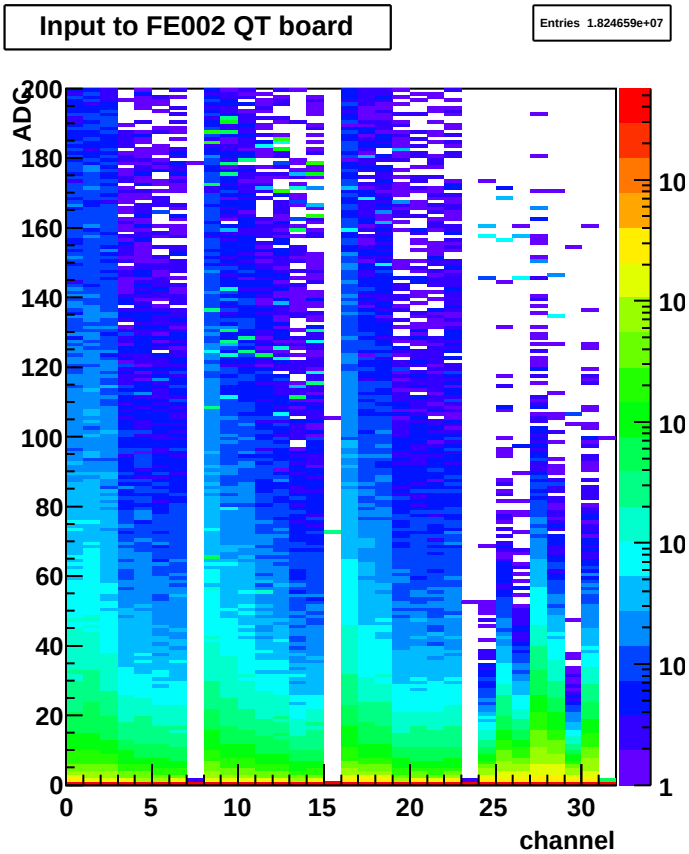

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

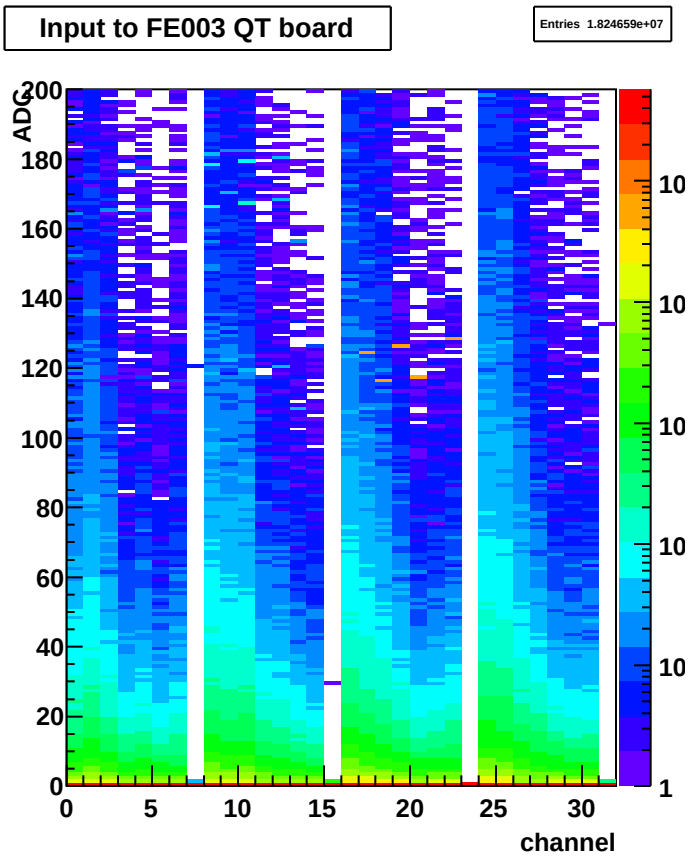

Input to FPD L3 DSM
Entries 9123296
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

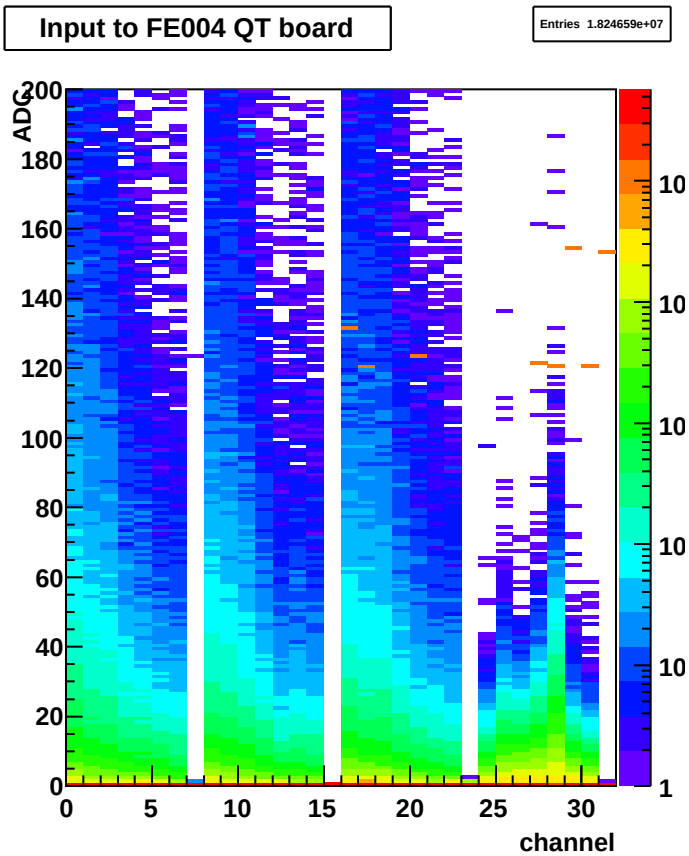

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

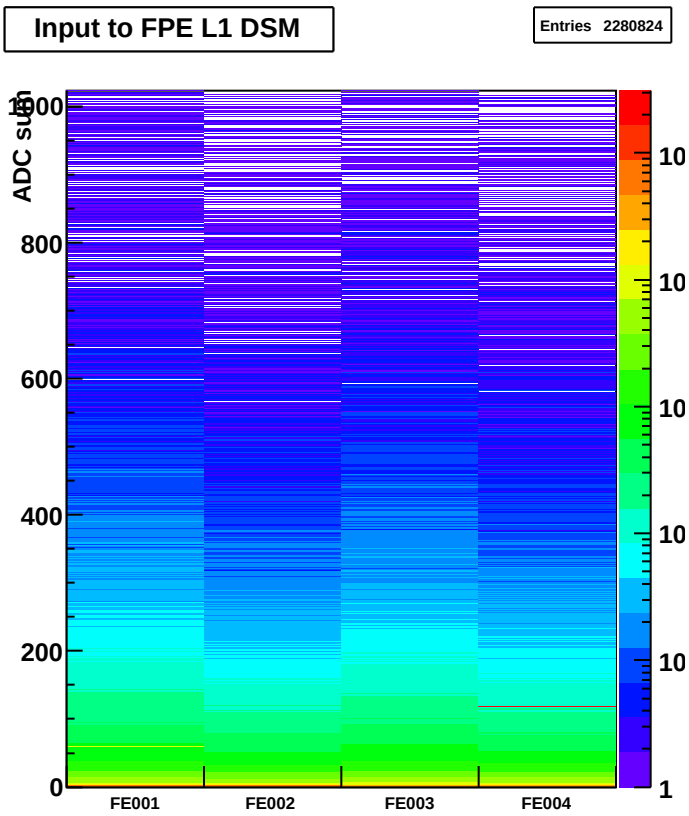

Input to FPD L2 DSM
Entries 2280824
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
$10^2$
$10^3$
$10^4$
$10^5$

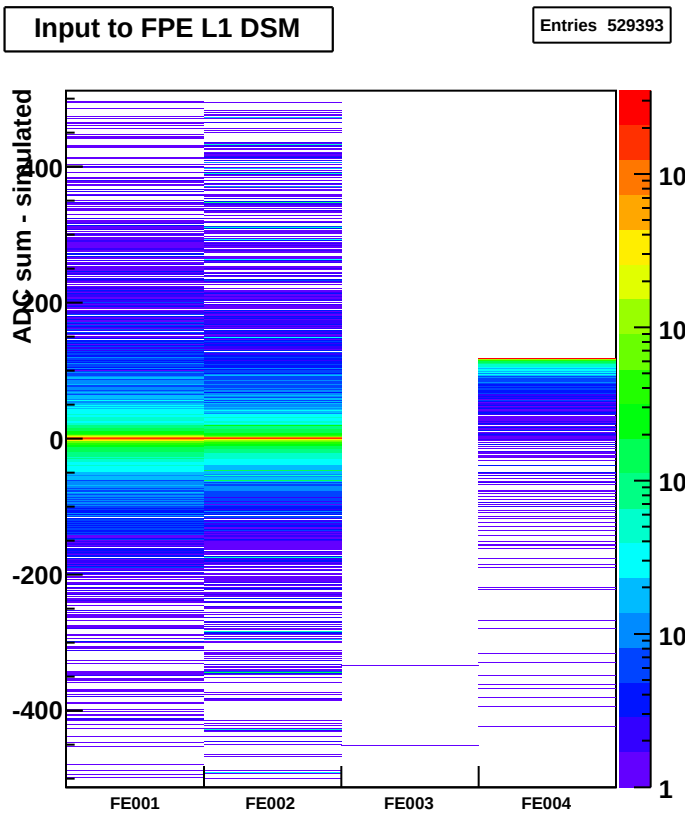

Input to FE001 QT board
Entries 1.824659e+07
ADC
channel

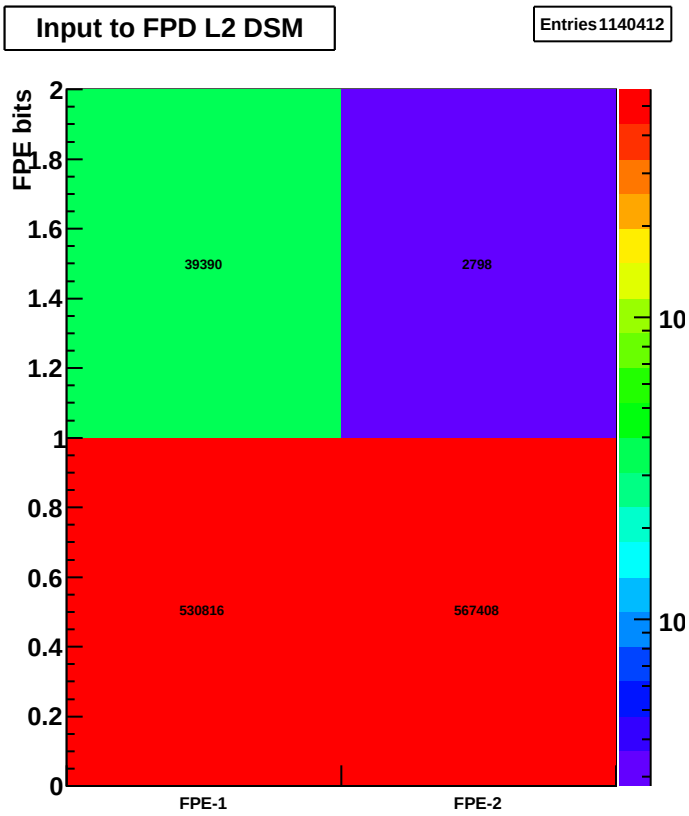

Input to FE002 QT board
Entries 1.824659e+07
ADC
channel

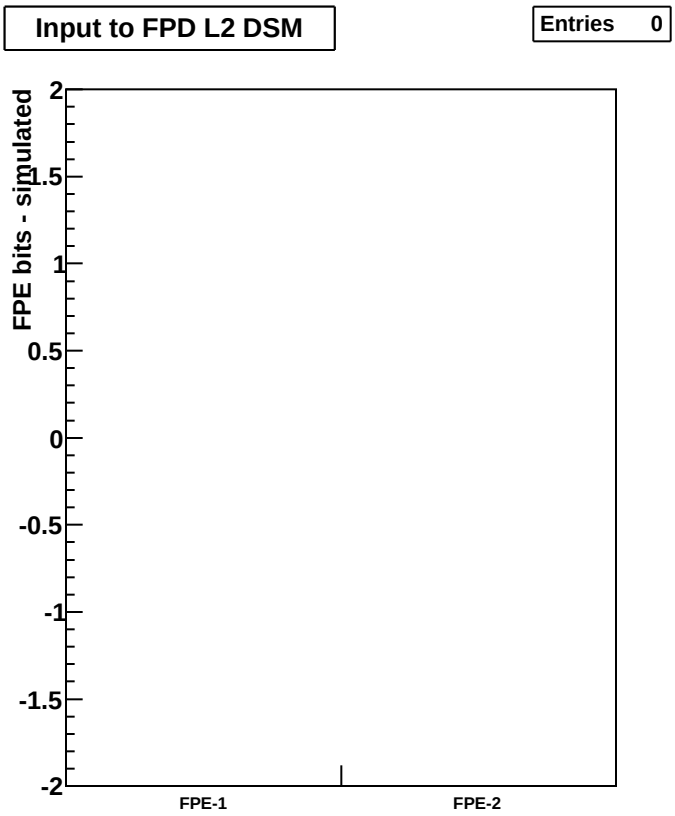

Input to FE003 QT board
Entries 1.824659e+07
ADC
channel


Input to FE004 QT board
Entries 1.824659e+07
ADC
channel


Input to FPE L1 DSM
Entries 2280824
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 529393
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 1140412
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
39390
2798
530816
567408
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