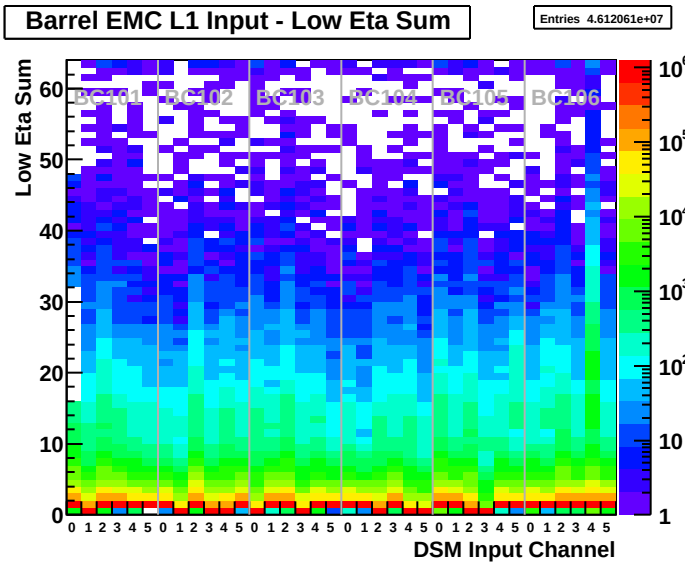
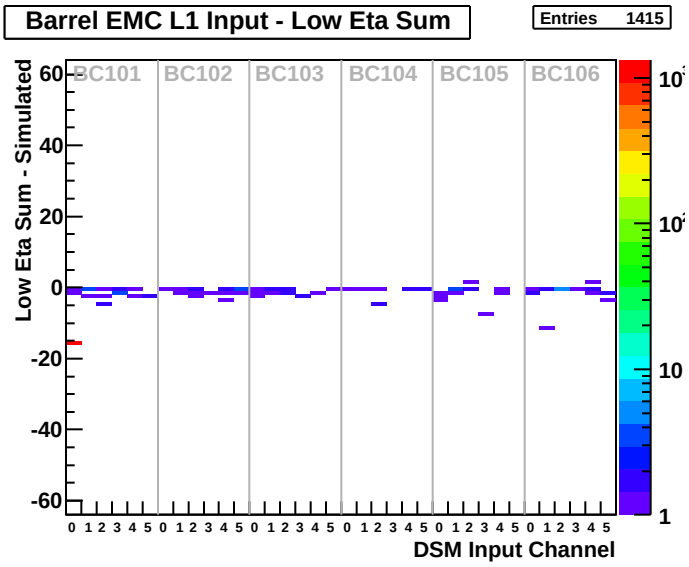
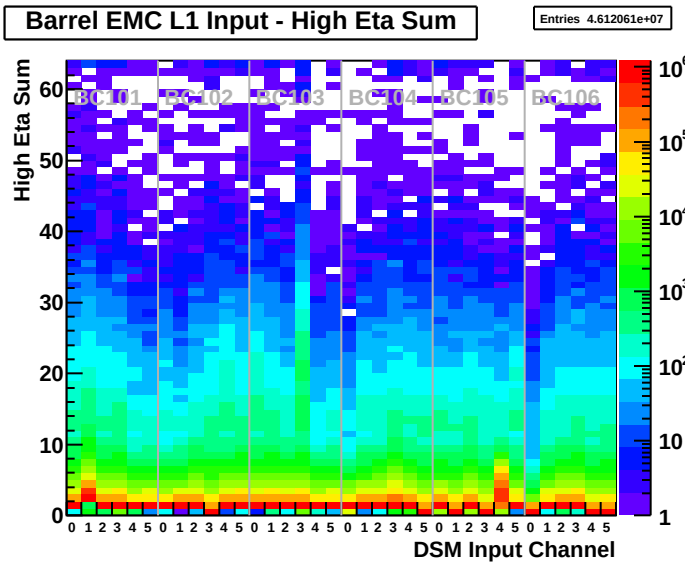
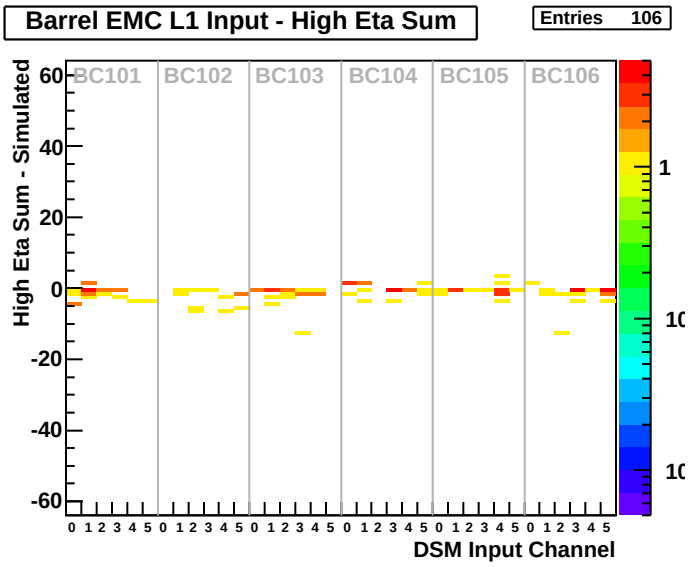
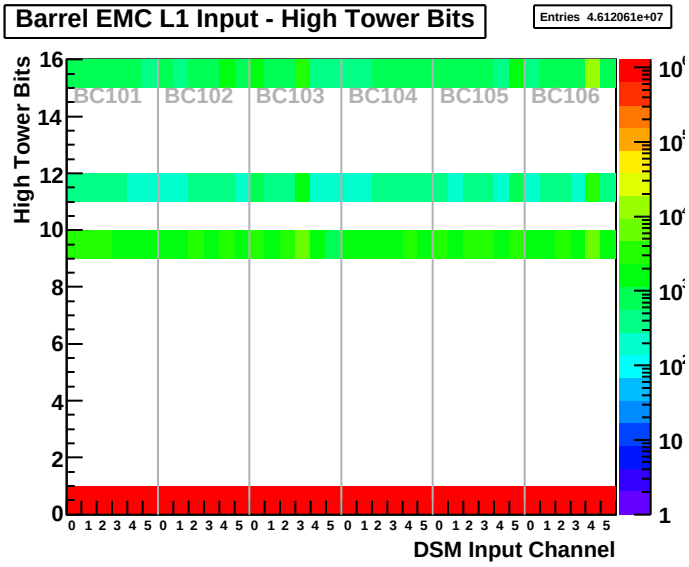
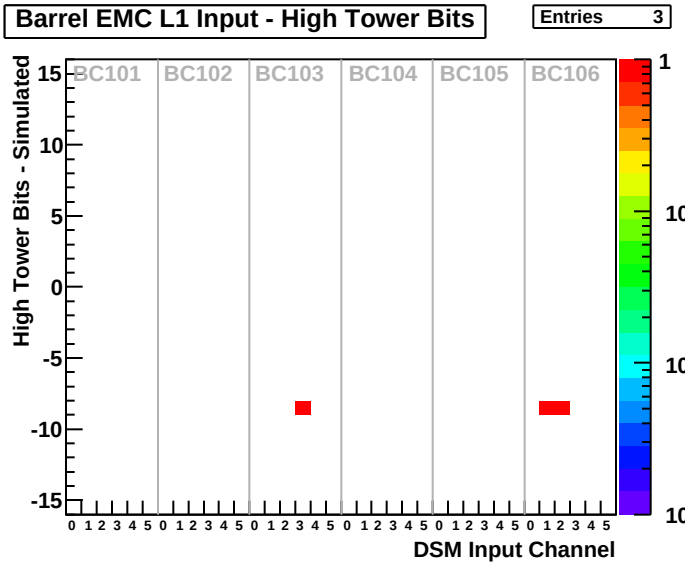

Barrel EMC L1 Input - Low Eta Sum
Entries 4.612061e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

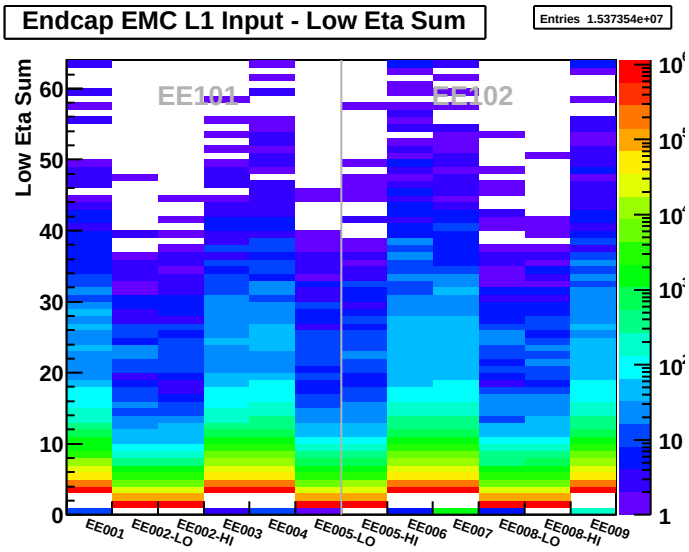

Barrel EMC L1 Input - Low Eta Sum
Entries 1415
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

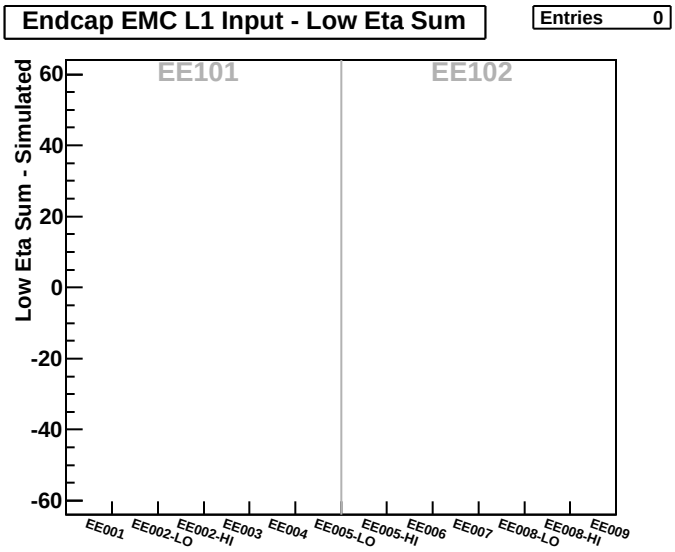

Barrel EMC L1 Input - High Eta Sum
Entries 4.612061e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

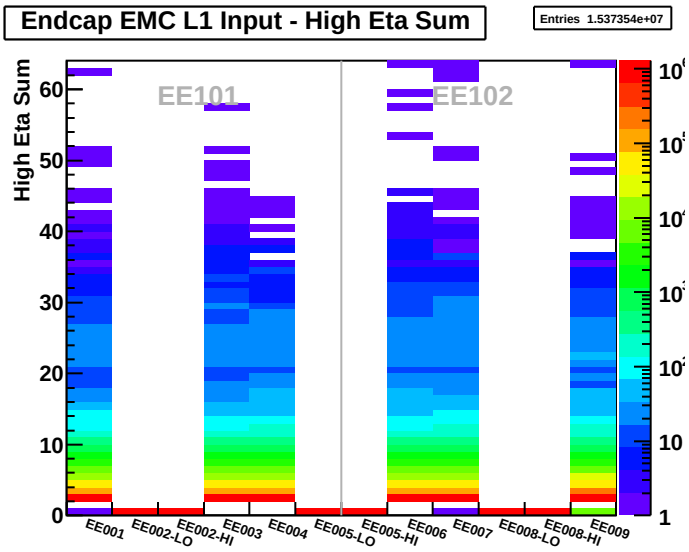

Barrel EMC L1 Input - High Eta Sum
Entries 106
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

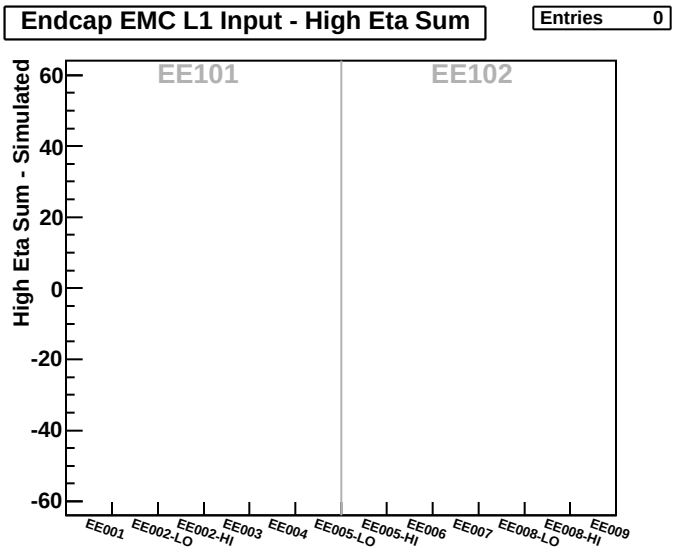

Barrel EMC L1 Input - High Tower Bits
Entries 4.612061e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

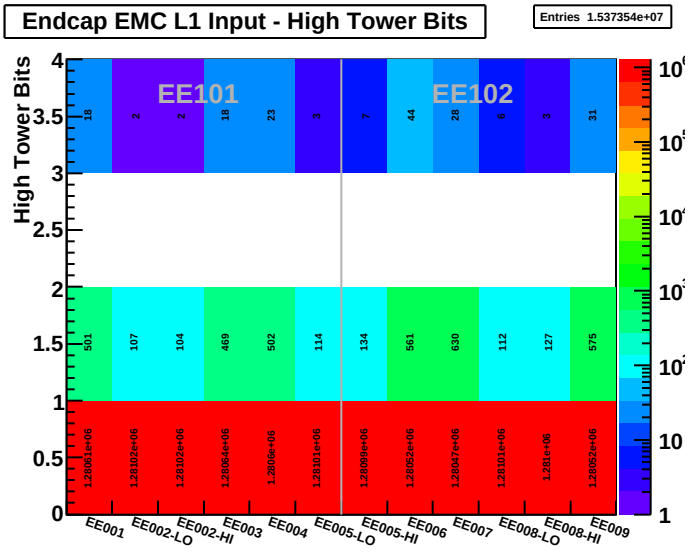

Barrel EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

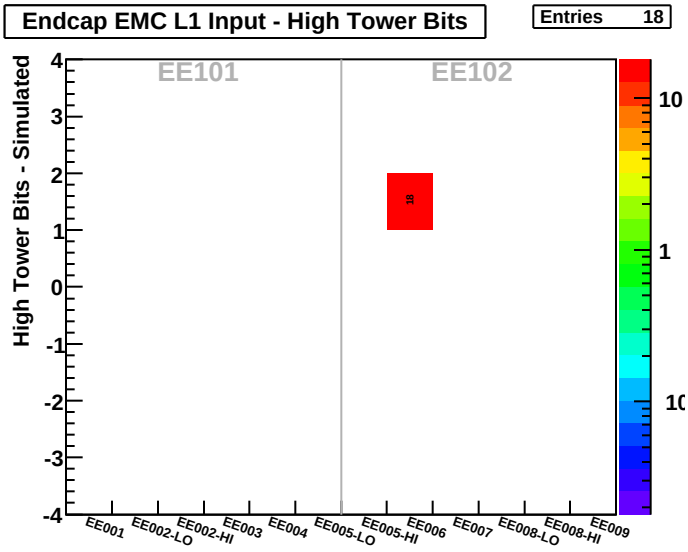

Endcap EMC L1 Input - Low Eta Sum
Entries 1.537354e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

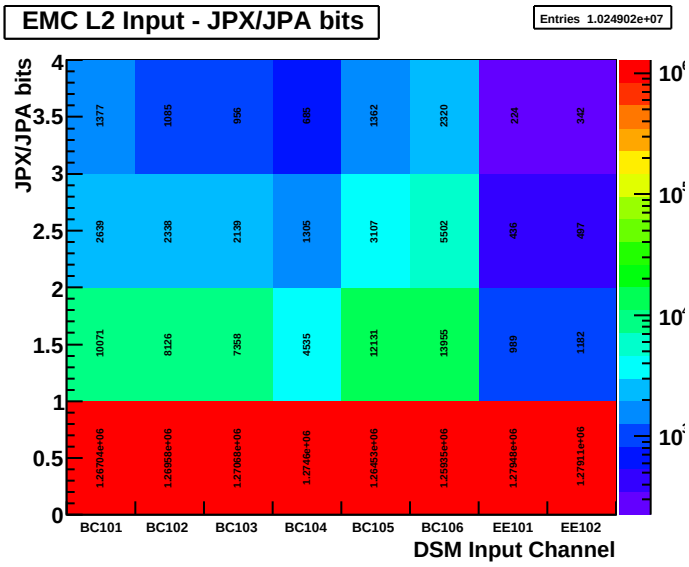

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

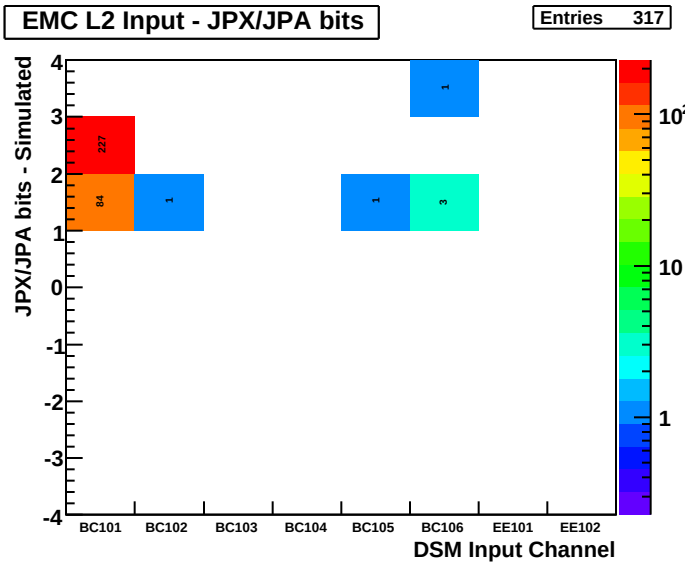

Endcap EMC L1 Input - High Eta Sum
Entries 1.537354e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

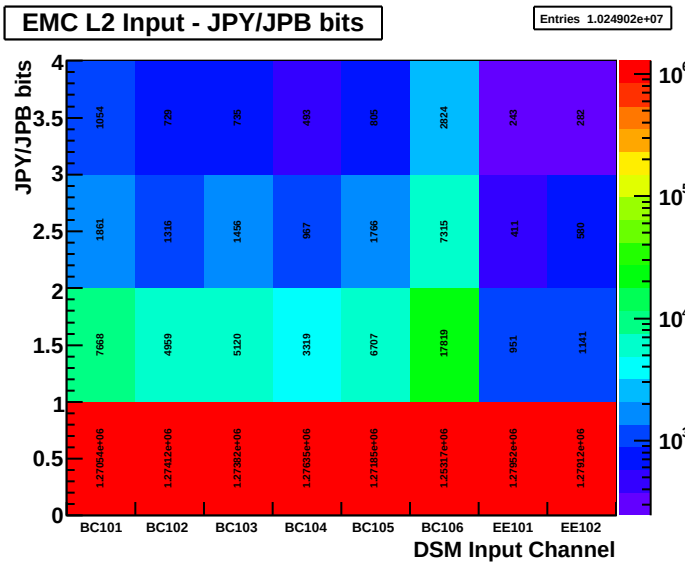

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

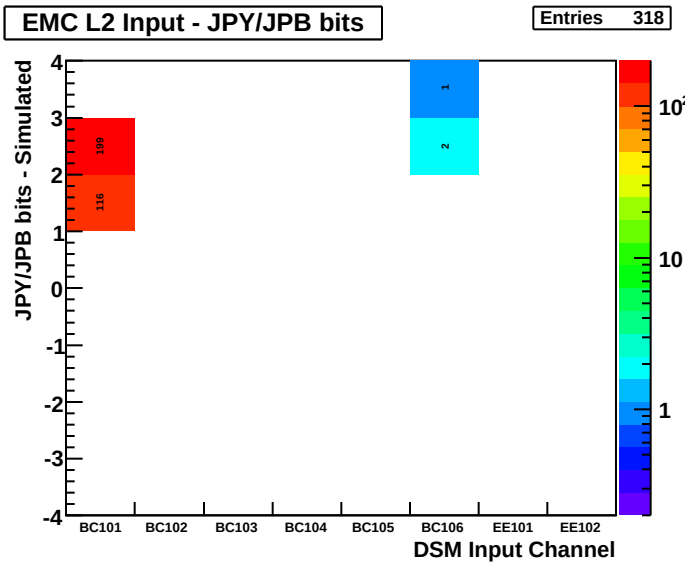

Endcap EMC L1 Input - High Tower Bits
Entries 1.537354e+07
High Tower Bits
EE101
EE102
18 2 2 18 23 3 7 44 28 6 3 31
501 107 104 469 502 114 134 561 630 112 127 575
1.28061e+06 1.28102e+06 1.28102e+06 1.28064e+06 1.2806e+06 1.28101e+06 1.28099e+06 1.28052e+06 1.28047e+06 1.28101e+06 1.281e+06 1.28052e+06
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

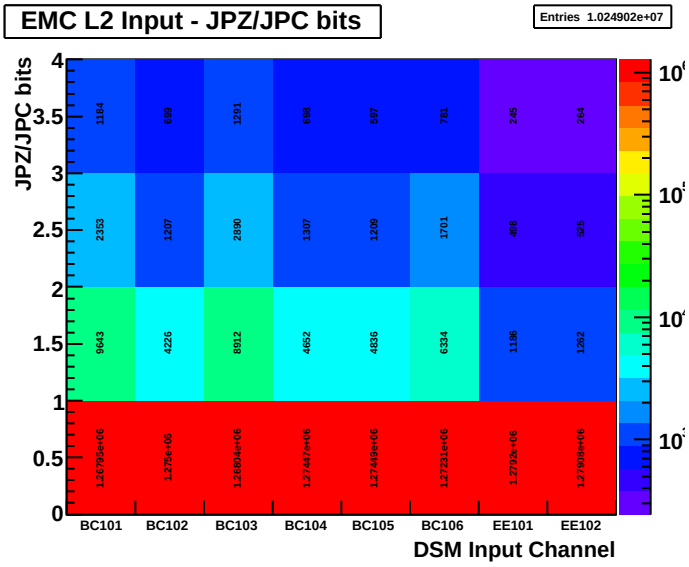

Endcap EMC L1 Input - High Tower Bits
Entries 18
High Tower Bits - Simulated
EE101
EE102
18
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

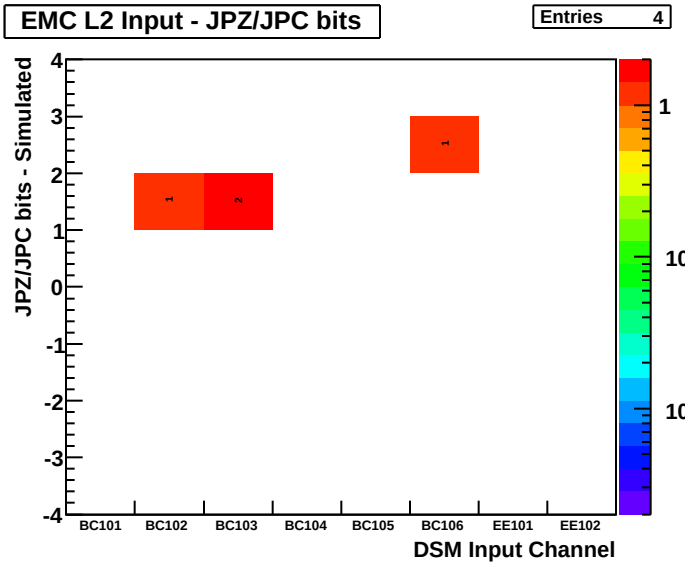

EMC L2 Input - JPX/JPA bits
Entries 1.024902e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1377 1085 956 685 1362 2320 224 342
2639 2338 2139 1305 3107 5502 436 497
10071 8126 7358 4535 12131 13956 988 1182
1.26704e+06 1.26958e+06 1.27058e+06 1.27460e+06 1.26453e+06 1.25935e+06 1.27948e+06 1.27911e+06

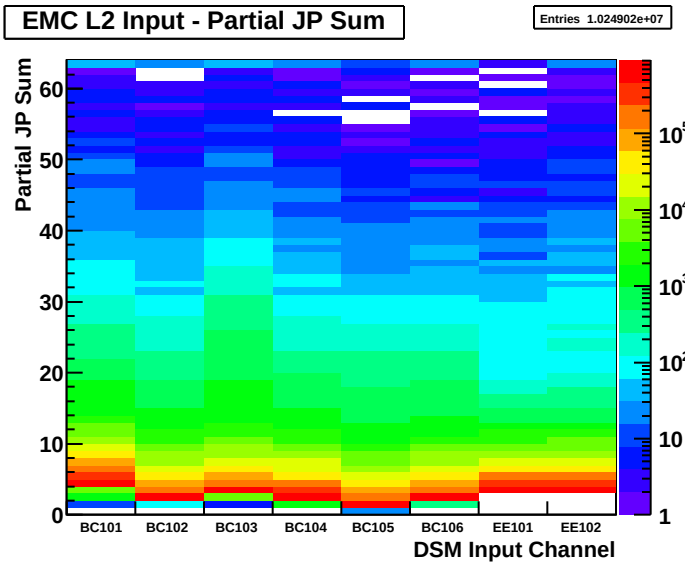

EMC L2 Input - JPX/JPA bits
Entries 317
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
227
84
1
1
1
3
1

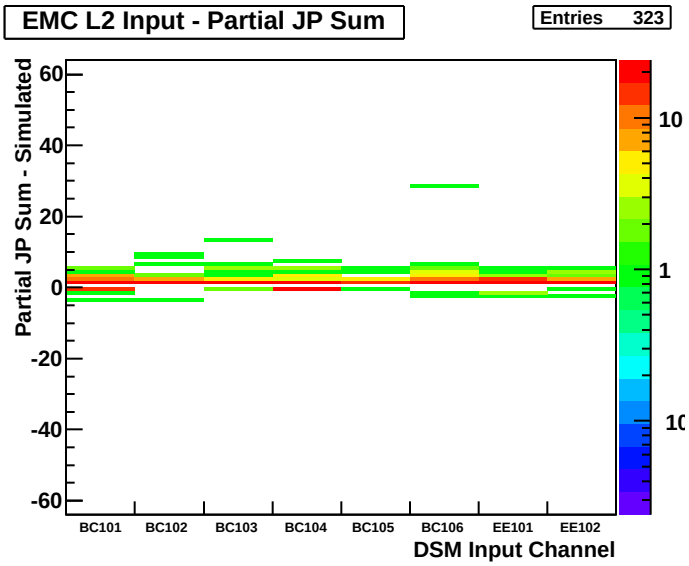

EMC L2 Input - JPY/JPB bits
Entries 1.024902e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1054 729 735 493 805 2824 243 282
1861 1316 1456 967 1766 7315 411 580
7668 4959 5120 3319 6707 17819 951 1141
1.27054e+06 1.27412e+06 1.27382e+06 1.27635e+06 1.27195e+06 1.25317e+06 1.27952e+06 1.27912e+06

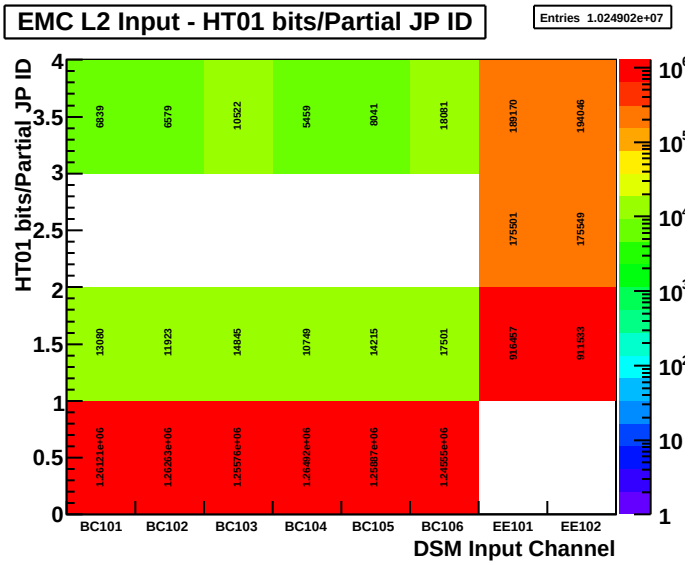

EMC L2 Input - JPY/JPB bits
Entries 318
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
199
116
1
2

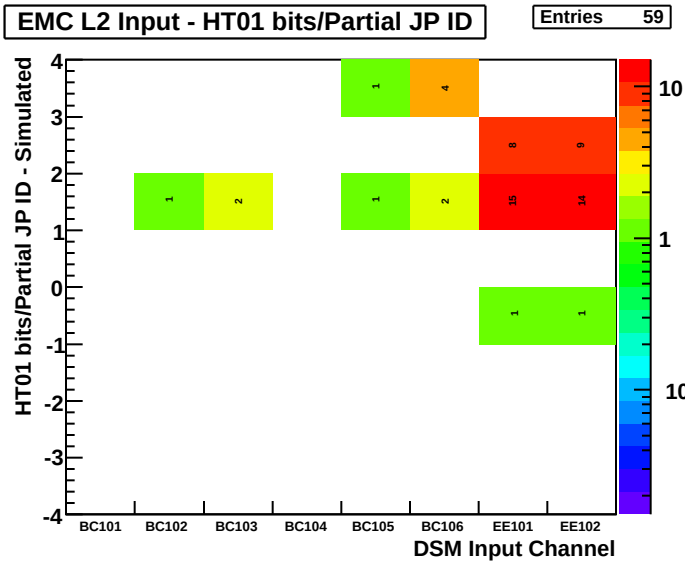

EMC L2 Input - JPZ/JPC bits
Entries 1.024902e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1184 689 1201 698 597 781 245 264
2353 1207 2890 1307 1209 1701 498 525
9643 4226 8912 4652 4636 6334 1188 1282
1.26795e+06 1.275e+06 1.26804e+06 1.27447e+06 1.27449e+06 1.27231e+06 1.2792e+06 1.27908e+06

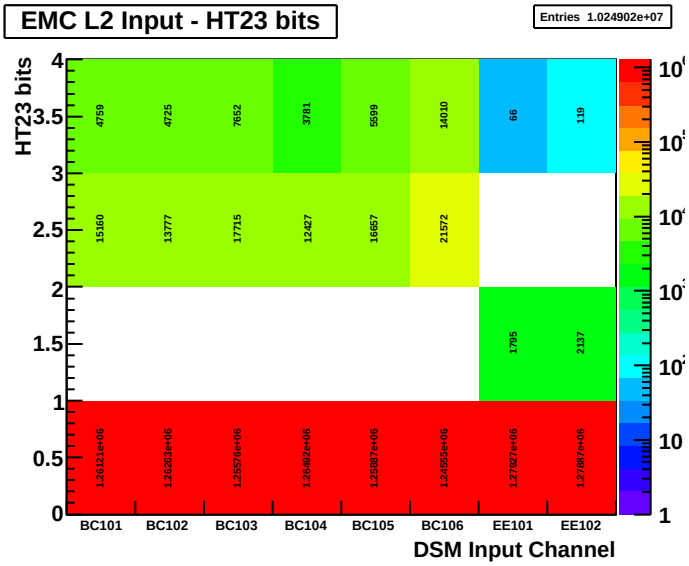

EMC L2 Input - JPZ/JPC bits
Entries 4
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
2
1

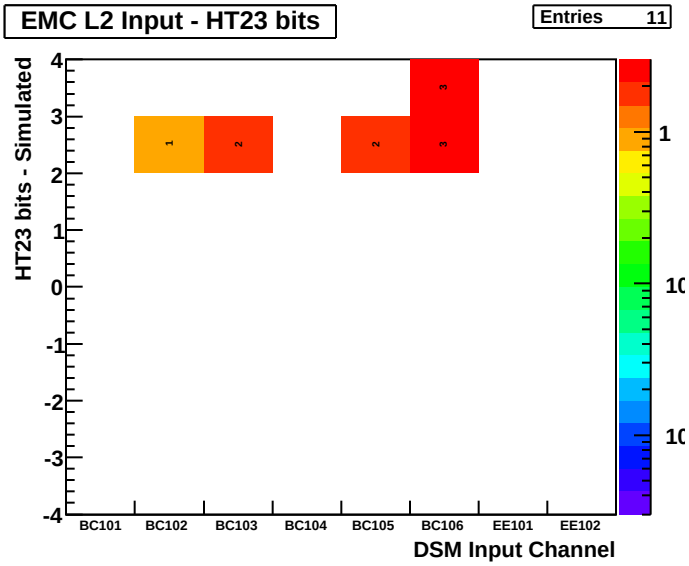

EMC L2 Input - Partial JP Sum
Entries 1.024902e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

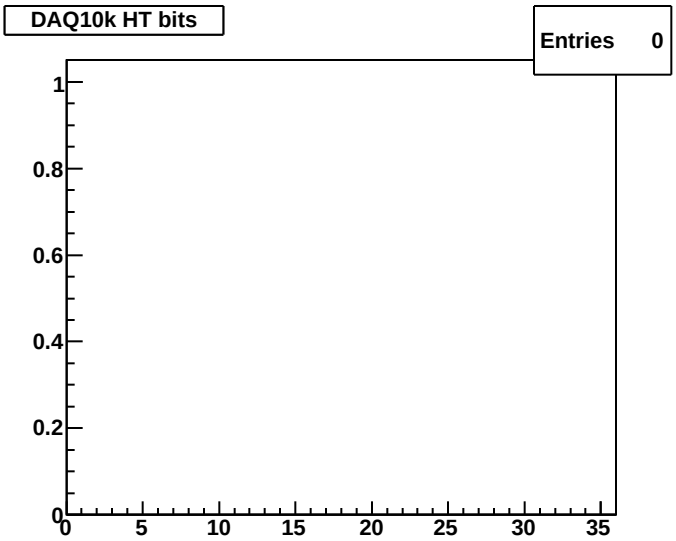

EMC L2 Input - Partial JP Sum
Entries 323
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

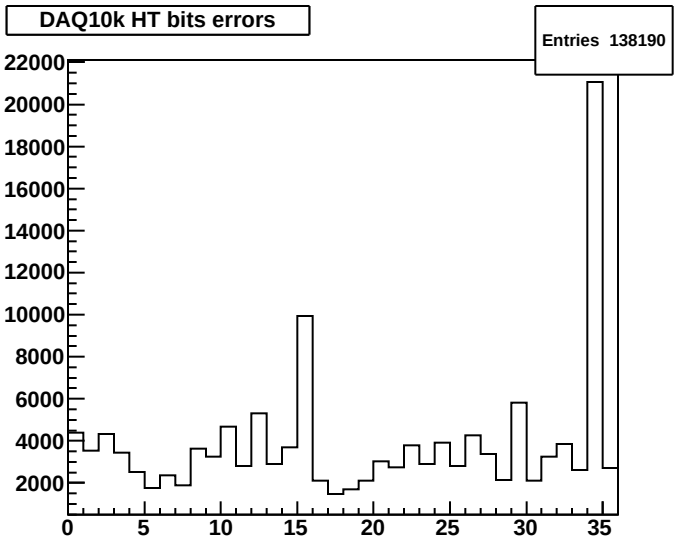

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.024902e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

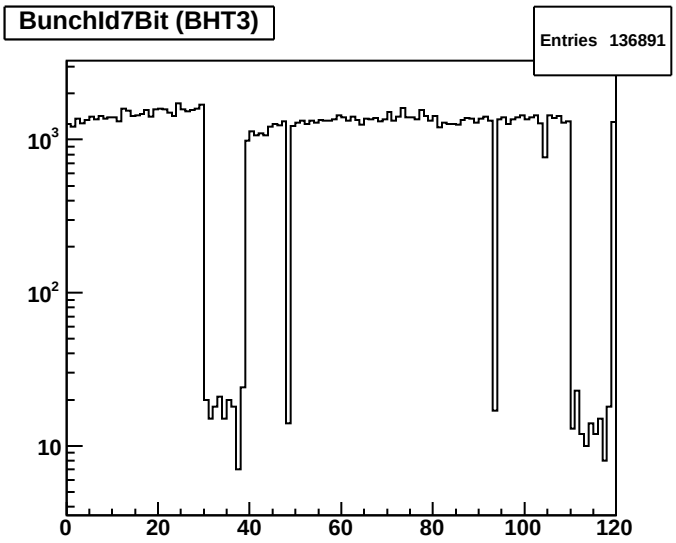

EMC L2 Input - HT01 bits/Partial JP ID
Entries 59
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

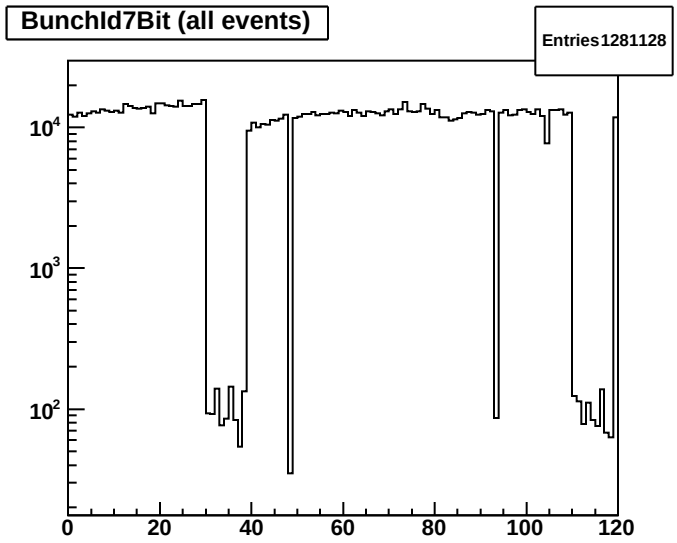

EMC L2 Input - HT23 bits
Entries 1.024902e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

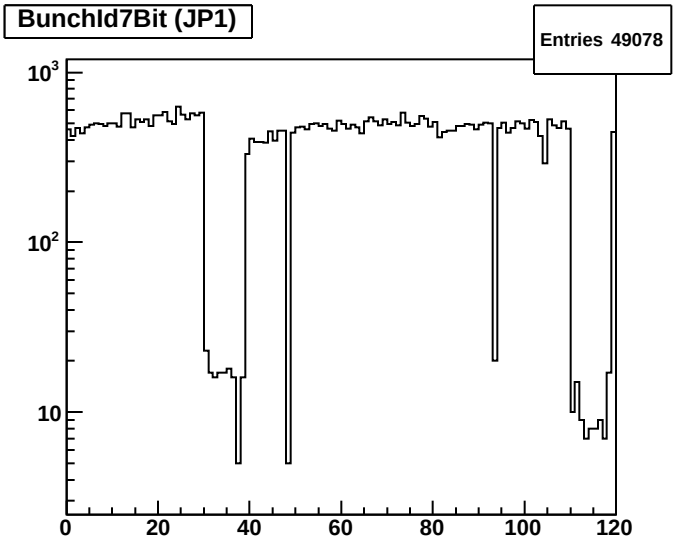

EMC L2 Input - HT23 bits
Entries 11
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

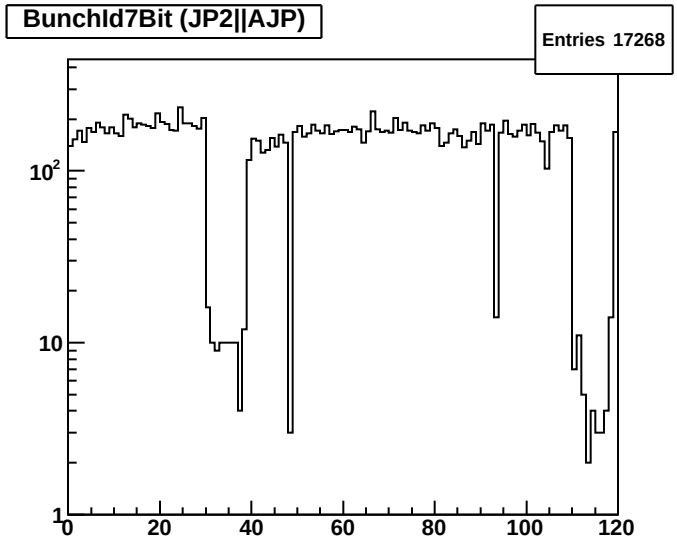

DAQ10k HT bits
Entries 0

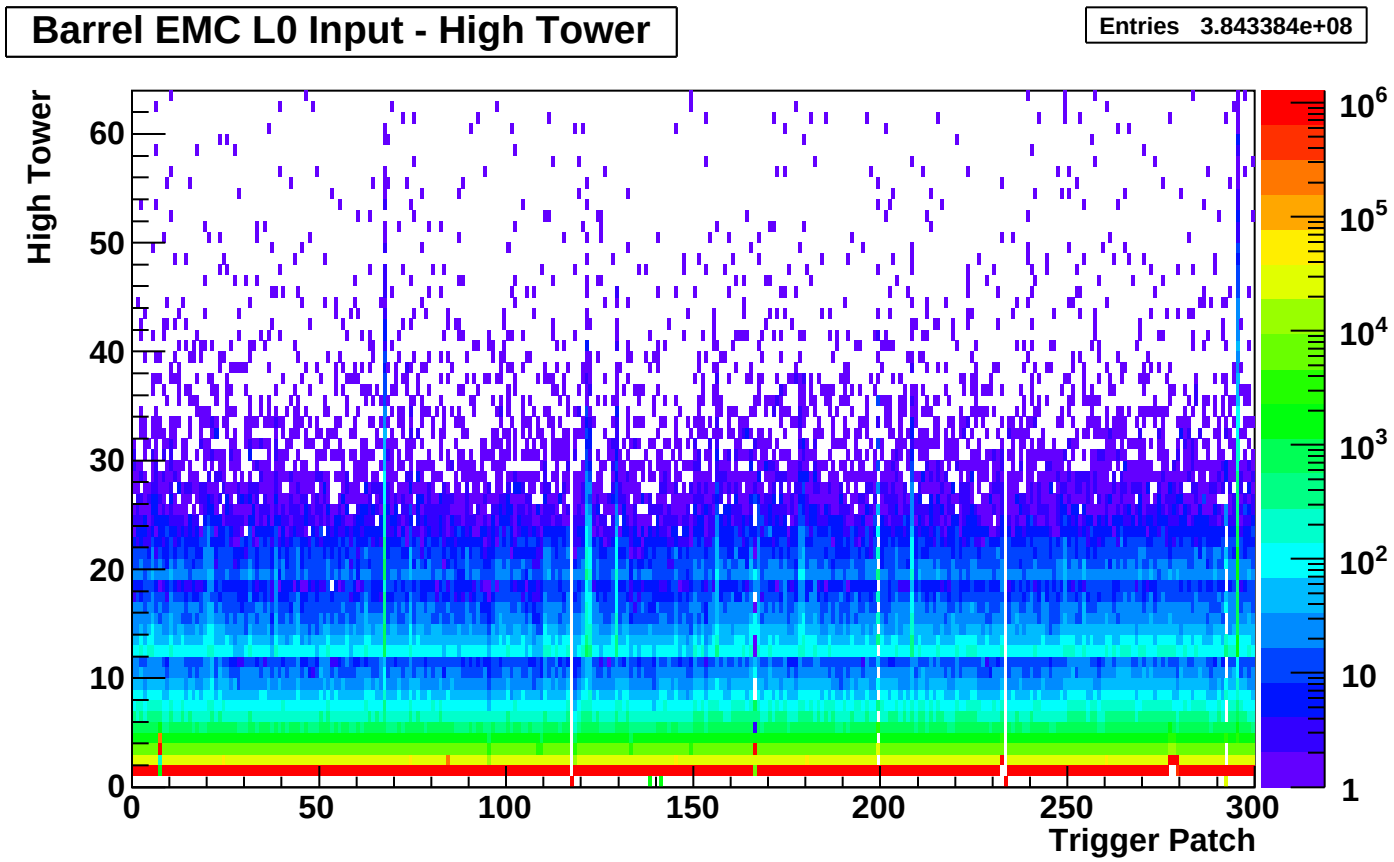

DAQ10k HT bits errors
Entries 138190

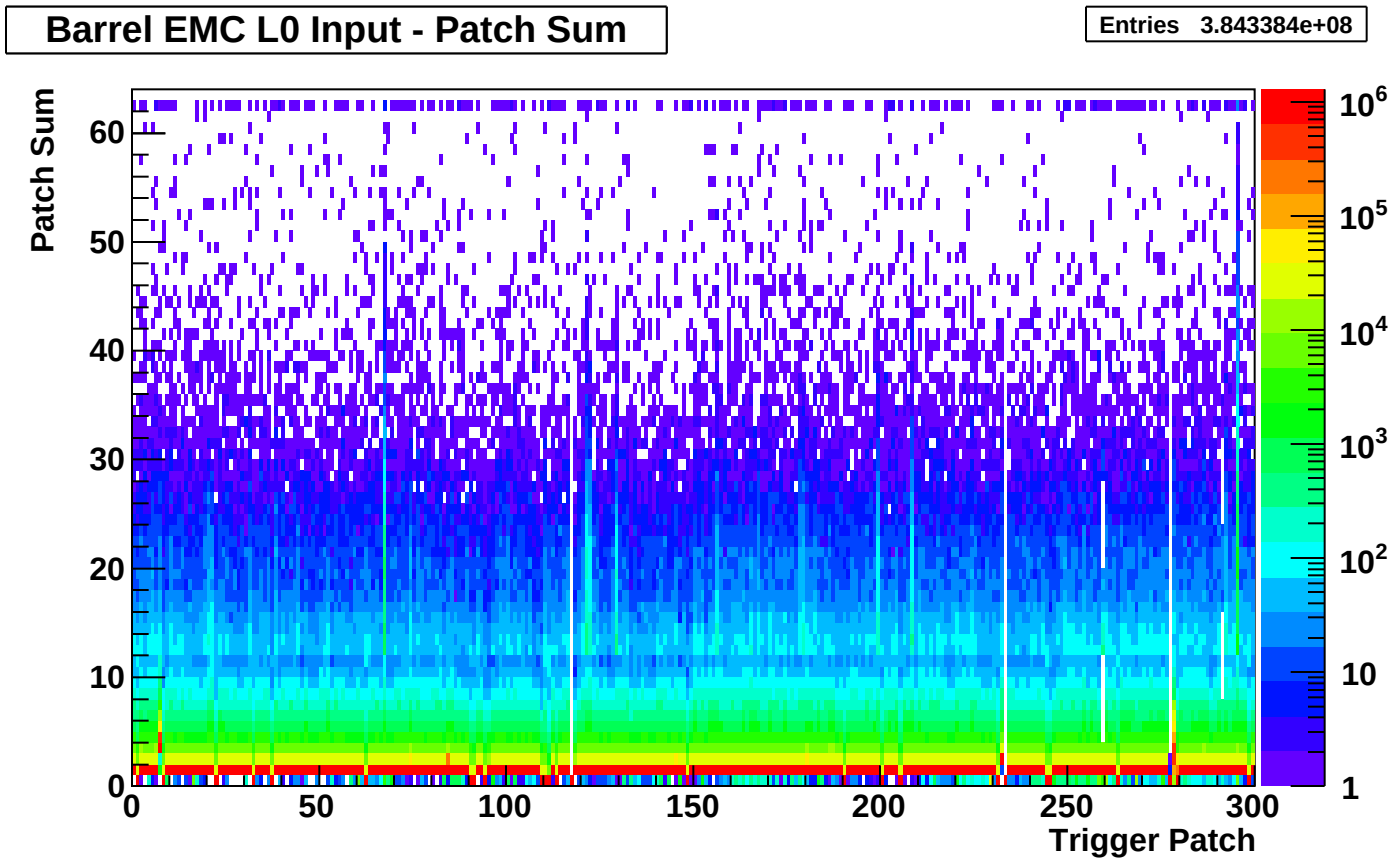

BunchId7Bit (BHT3)
Entries 136891

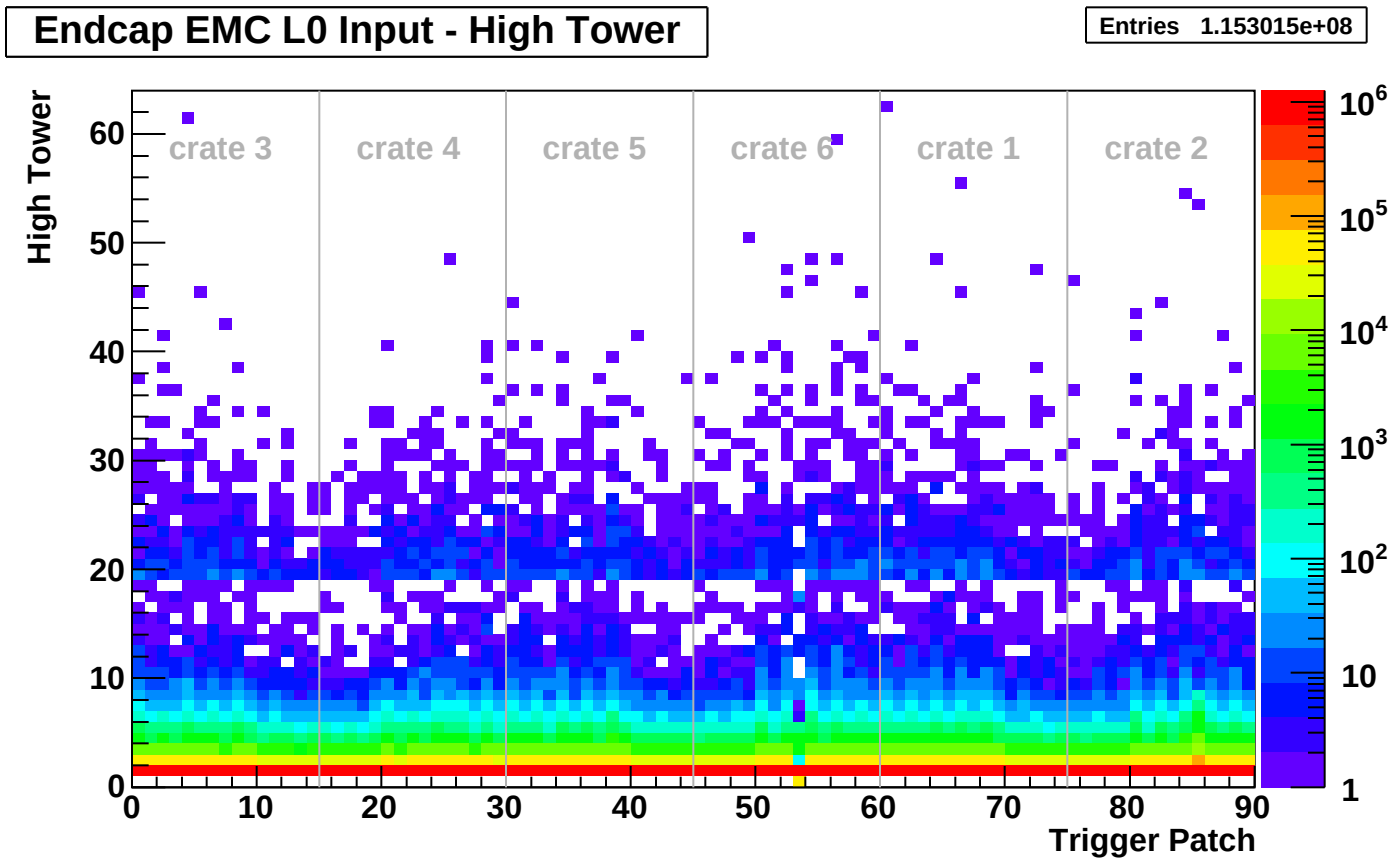

BunchId7Bit (all events)
Entries 1281128

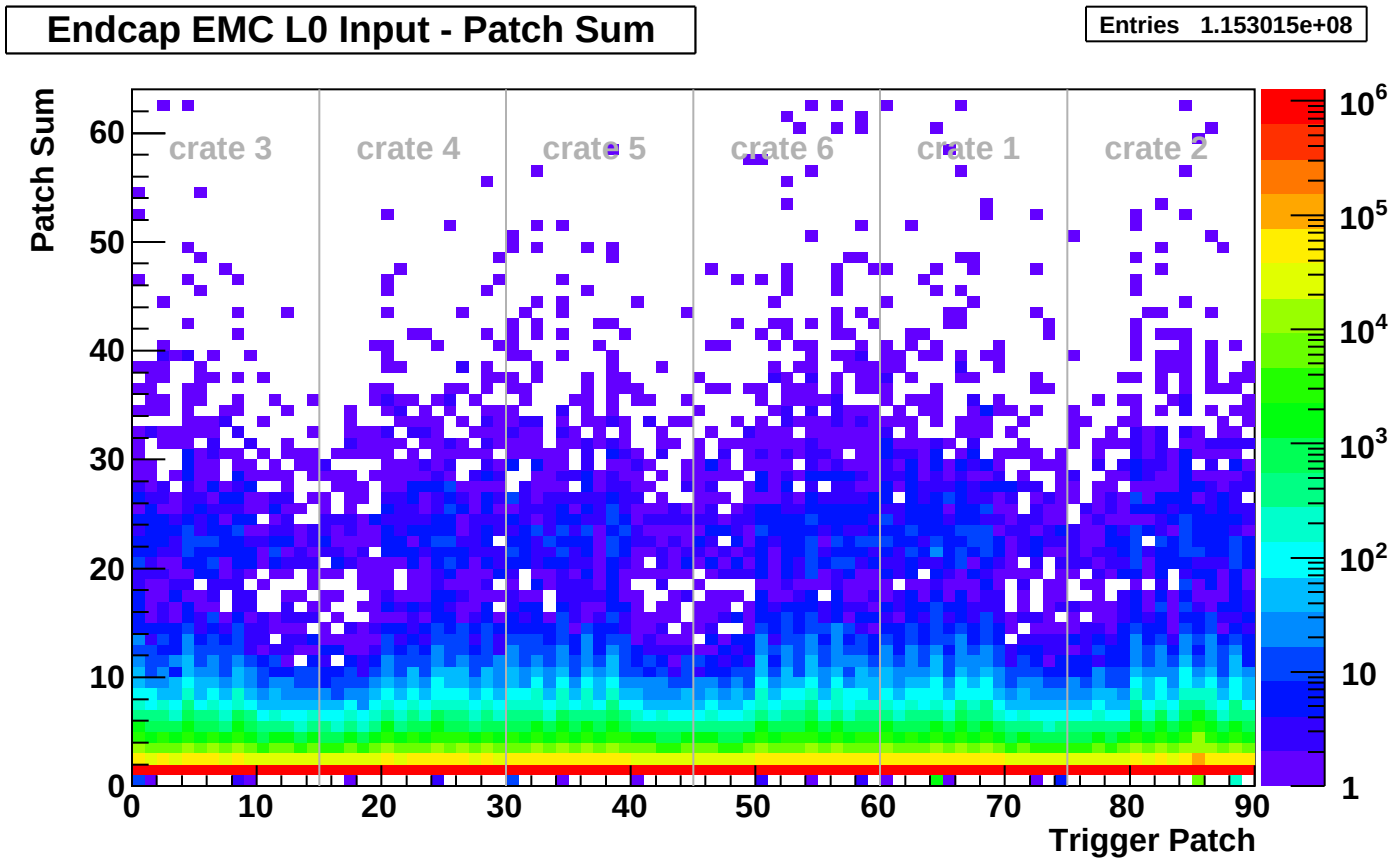

BunchId7Bit (JP1)
Entries 49078

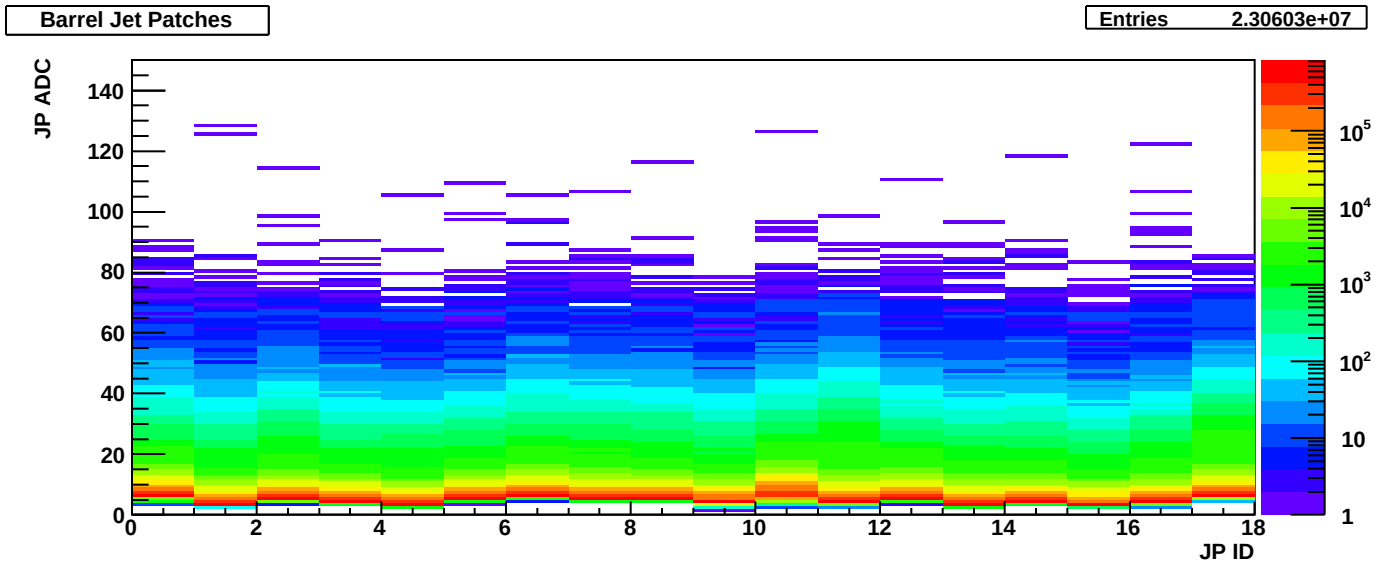

BunchId7Bit (JP2||AJP)
Entries 17268

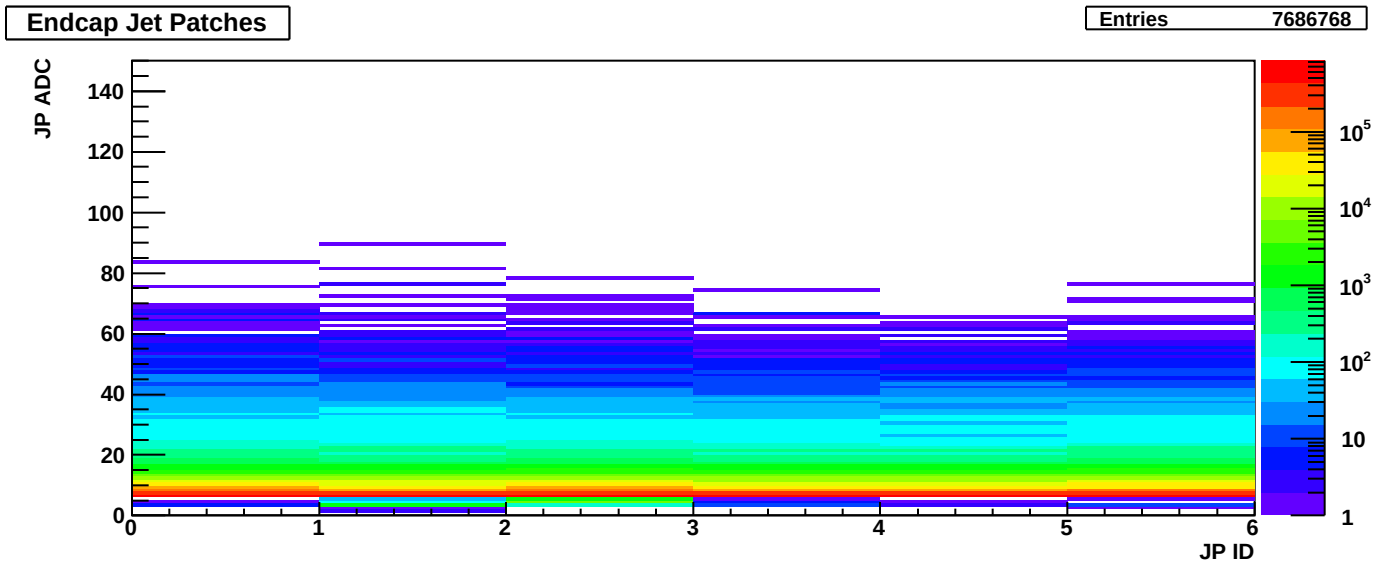

Barrel EMC L0 Input - High Tower
Entries 3.843384e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

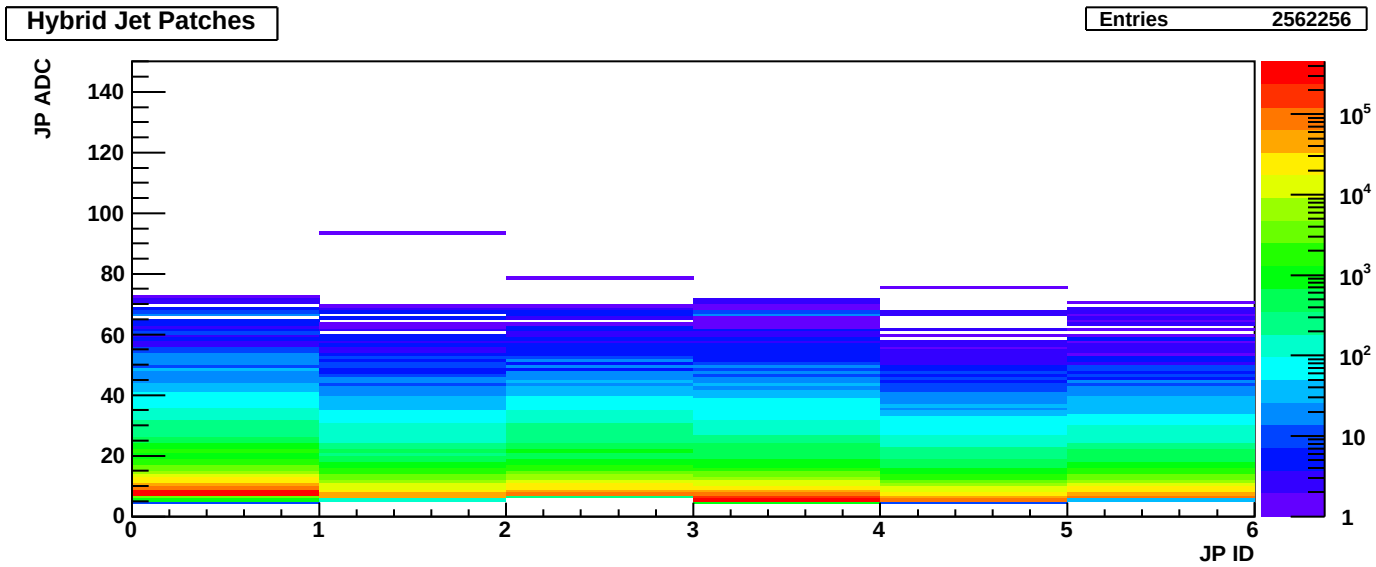

Barrel EMC L0 Input - Patch Sum
Entries 3.843384e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

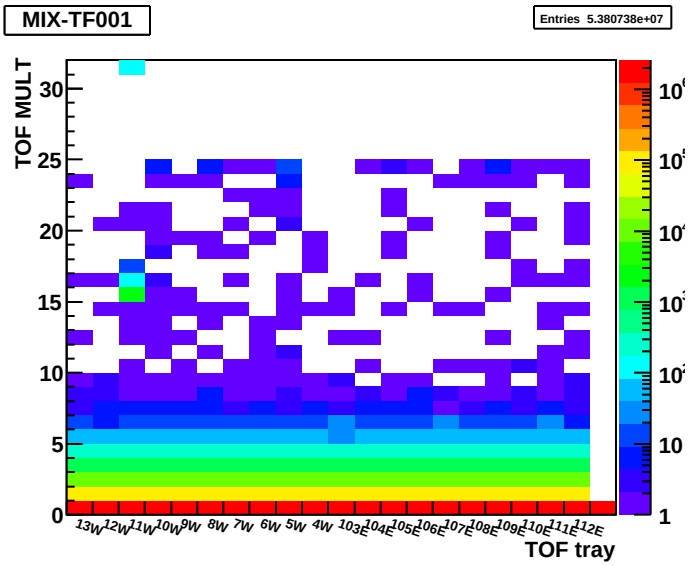

Endcap EMC L0 Input - High Tower
Entries 1.153015e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

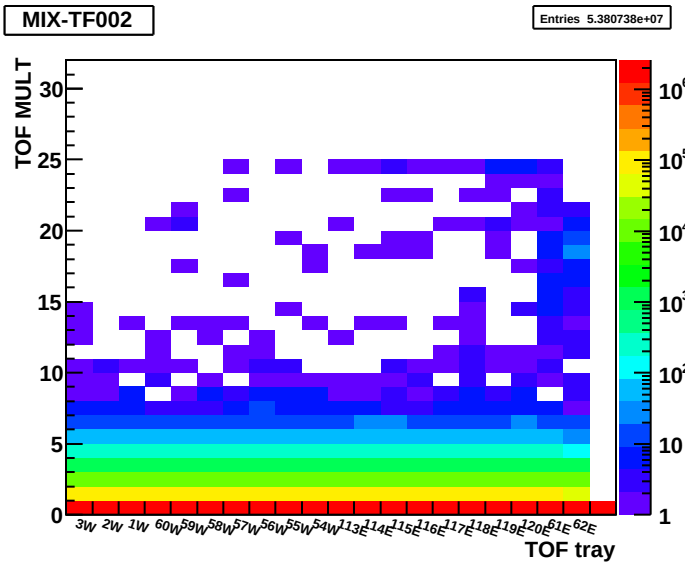

Endcap EMC L0 Input - Patch Sum
Entries 1.153015e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

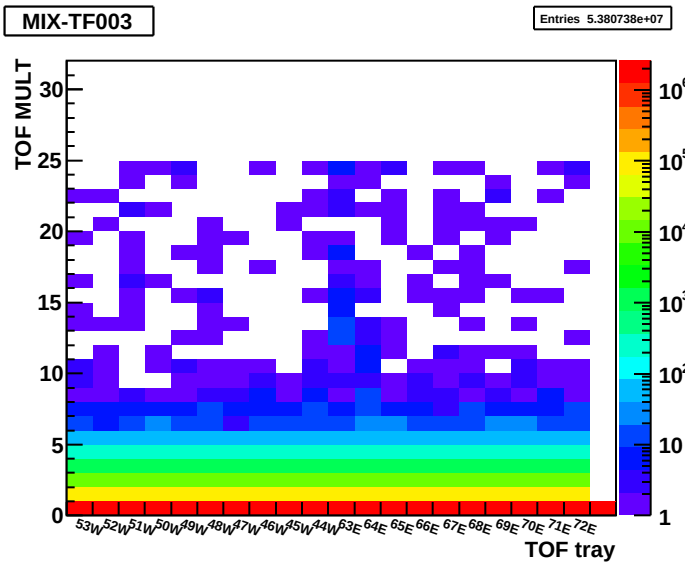

Barrel Jet Patches
Entries 2.30603e+07
JP ADC
JP ID

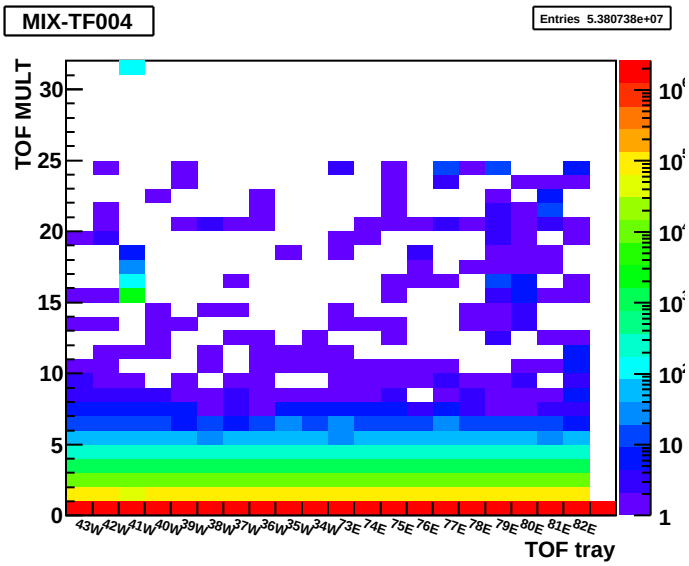

Endcap Jet Patches
Entries 7686768
JP ADC
JP ID

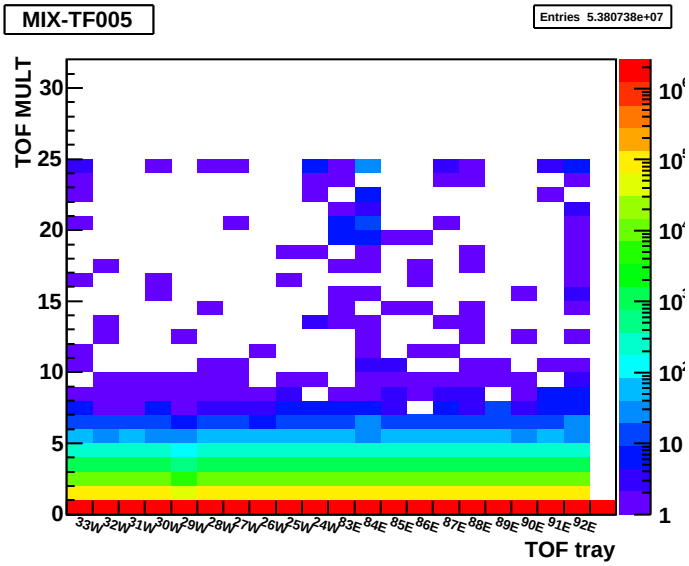

Hybrid Jet Patches
Entries 2562256
JP ADC
JP ID

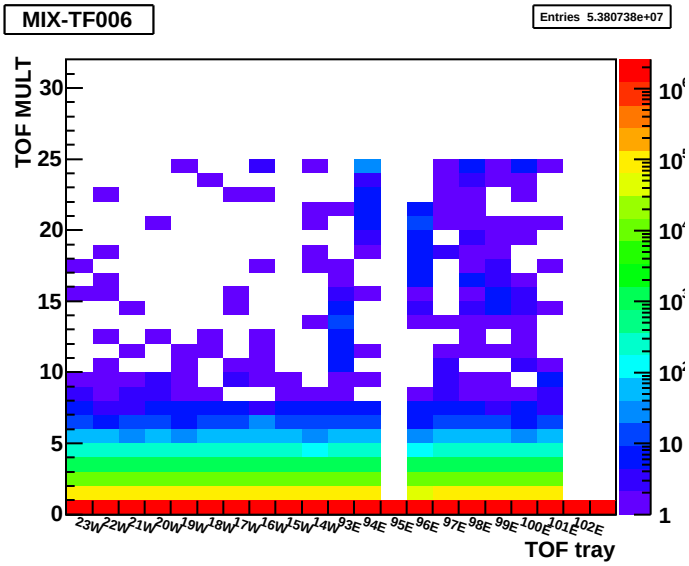

MIX-TF001
Entries 5.380738e+07
TOF MULT
TOF tray

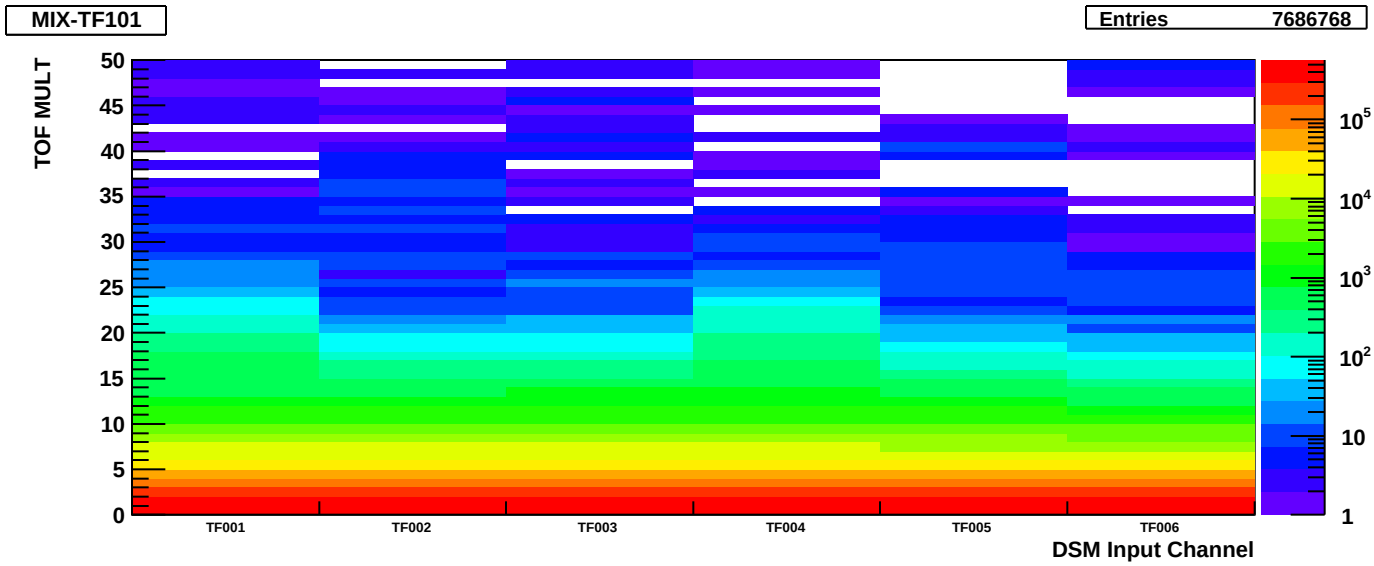

MIX-TF002
Entries 5.380738e+07
TOF MULT
TOF tray

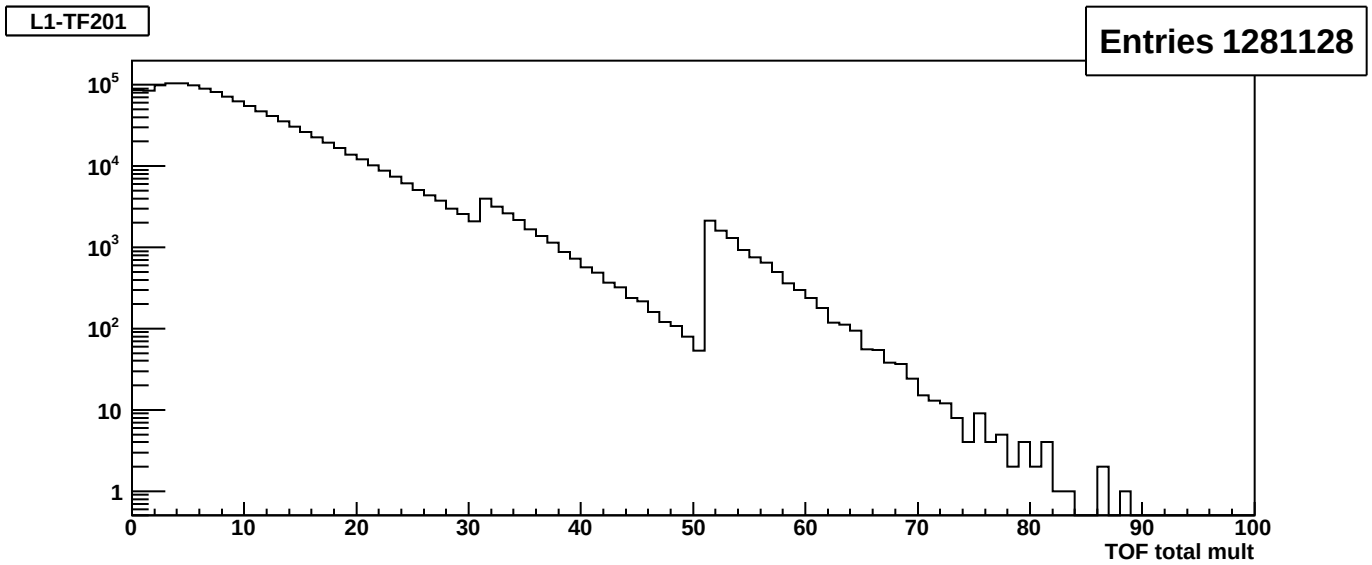

MIX-TF003
Entries 5.380738e+07
TOF MULT
TOF tray

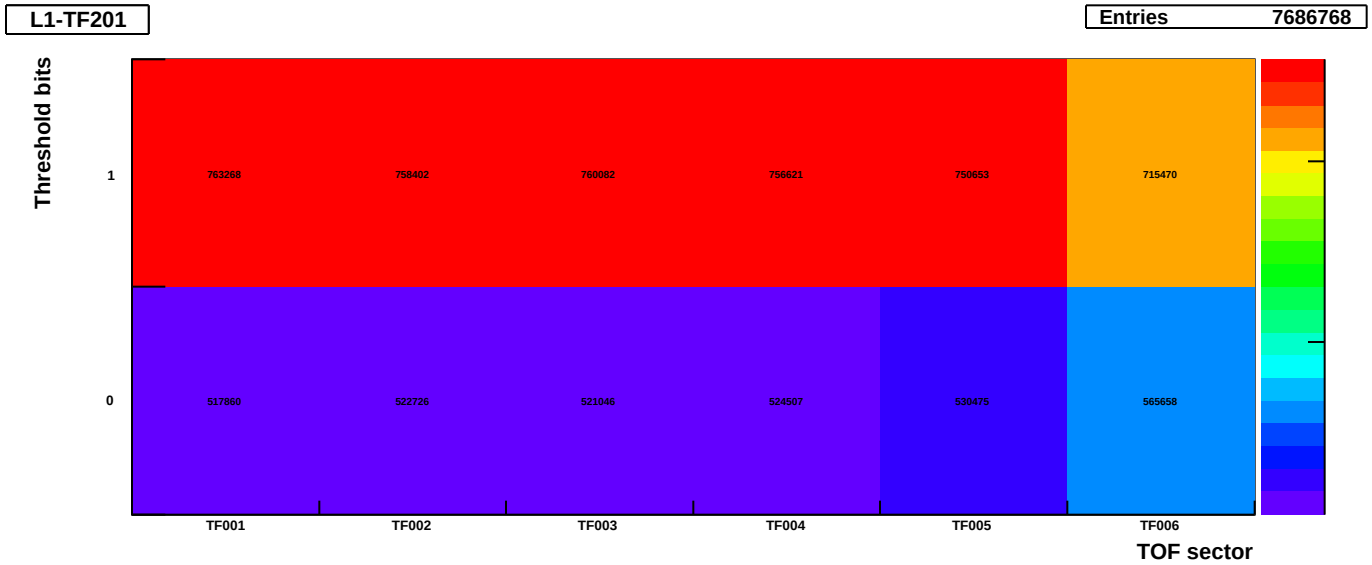

MIX-TF004
Entries 5.380738e+07
TOF MULT
TOF tray

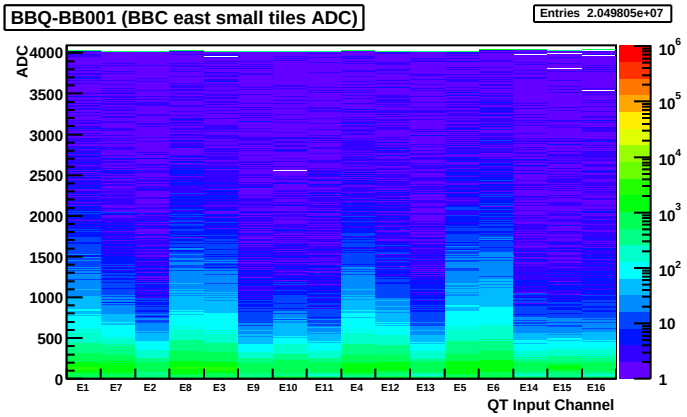

MIX-TF005
Entries 5.380738e+07
TOF MULT
TOF tray

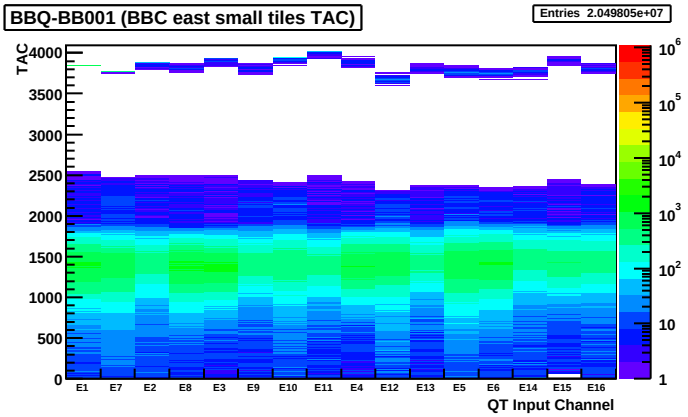

MIX-TF006
Entries 5.380738e+07
TOF MULT
TOF tray

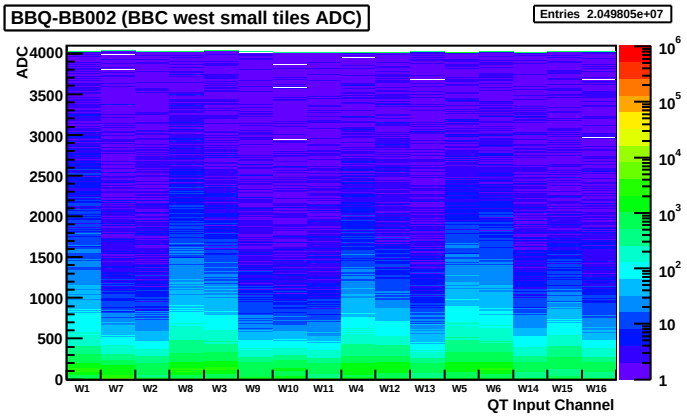

MIX-TF101
Entries 7686768
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

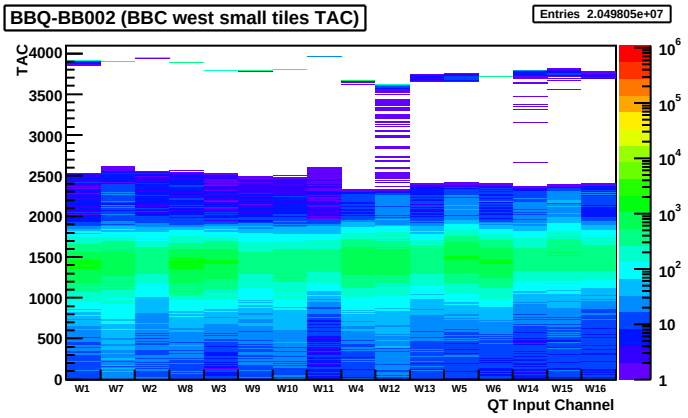

L1-TF201
Entries 1281128
TOF total mult

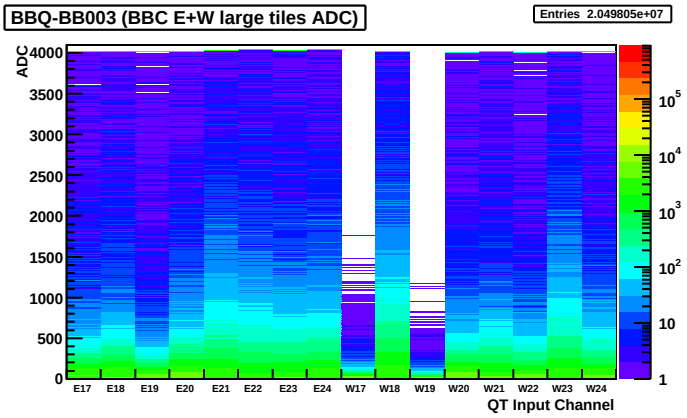

L1-TF201
Entries 7686768
Threshold bits
763268
758402
760082
756621
750653
715470
517860
522726
521046
524507
530475
565658
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

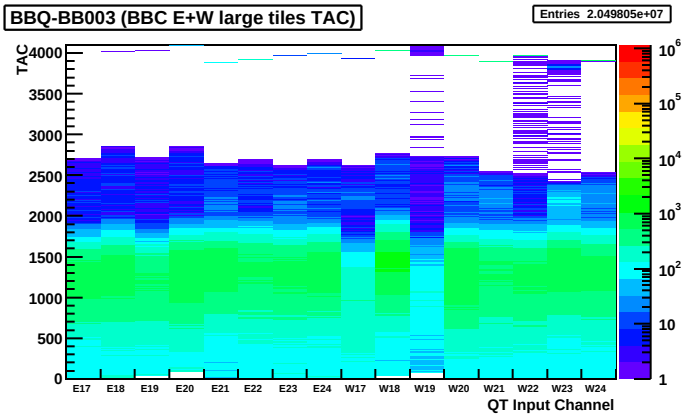

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.049805e+07
ADC
QT Input Channel

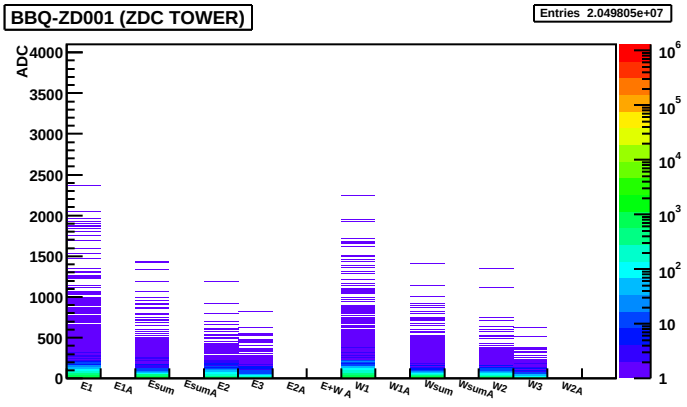

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.049805e+07
TAC
QT Input Channel

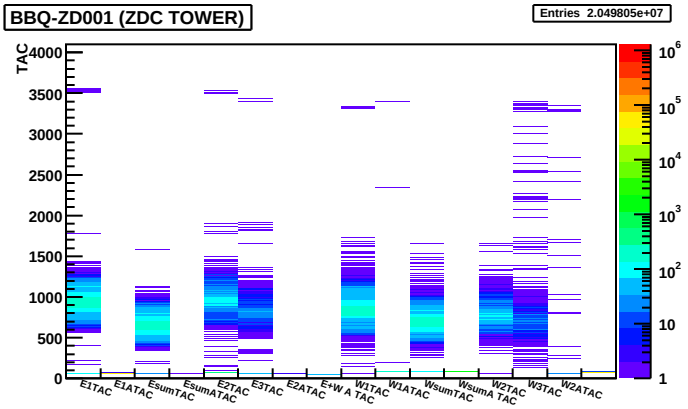

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.049805e+07
ADC
QT Input Channel

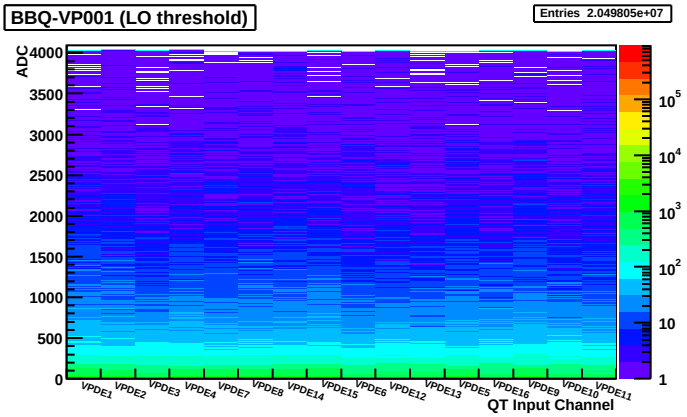

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.049805e+07
TAC
QT Input Channel

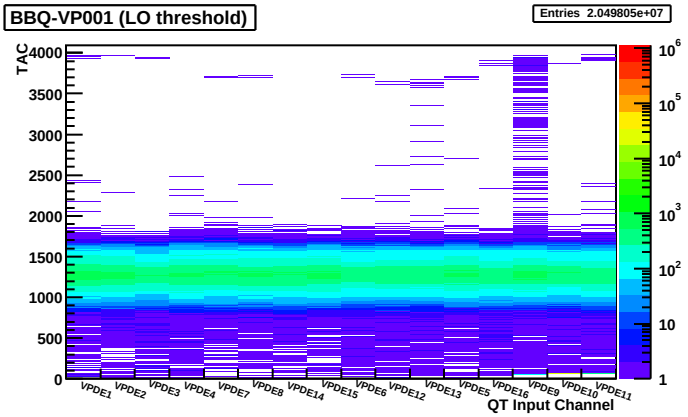

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.049805e+07
ADC
QT Input Channel

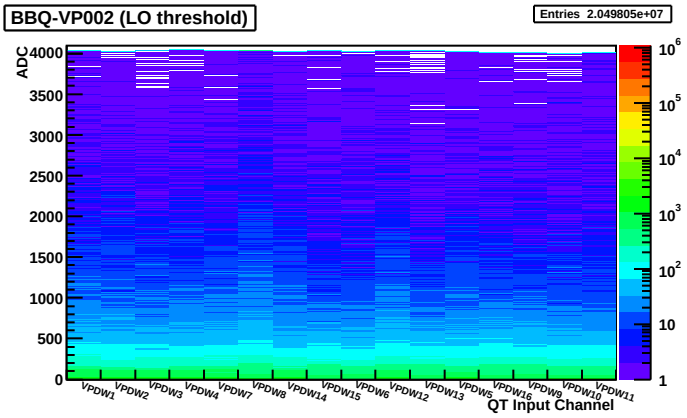

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.049805e+07
TAC
QT Input Channel

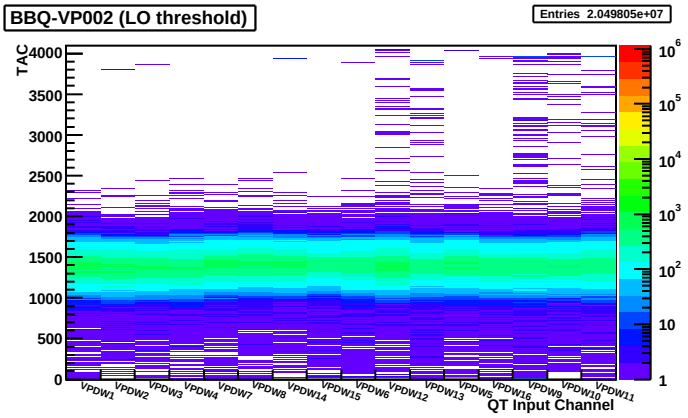

BBQ-ZD001 (ZDC TOWER)
Entries 2.049805e+07
ADC

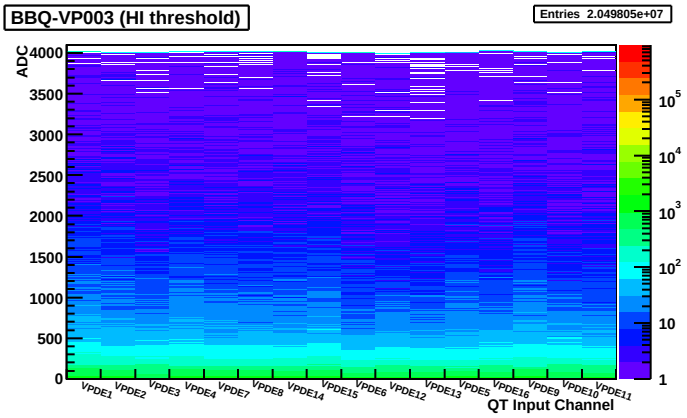

BBQ-ZD001 (ZDC TOWER)
Entries 2.049805e+07
TAC

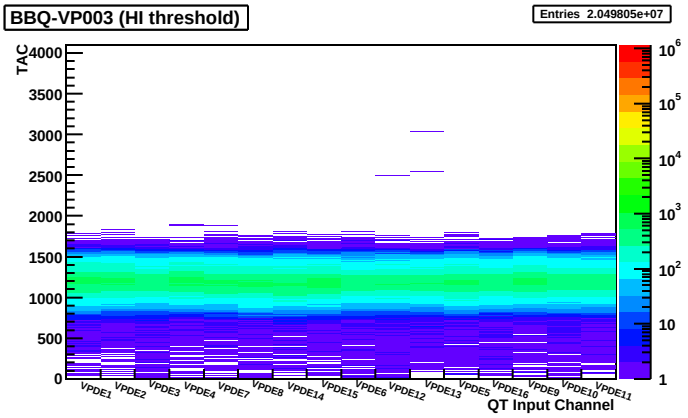

BBQ-VP001 (LO threshold)
Entries 2.049805e+07
ADC
QT Input Channel

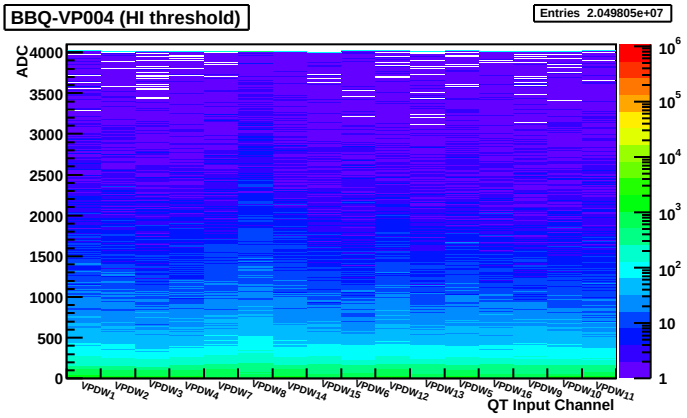

BBQ-VP001 (LO threshold)
Entries 2.049805e+07
TAC
QT Input Channel

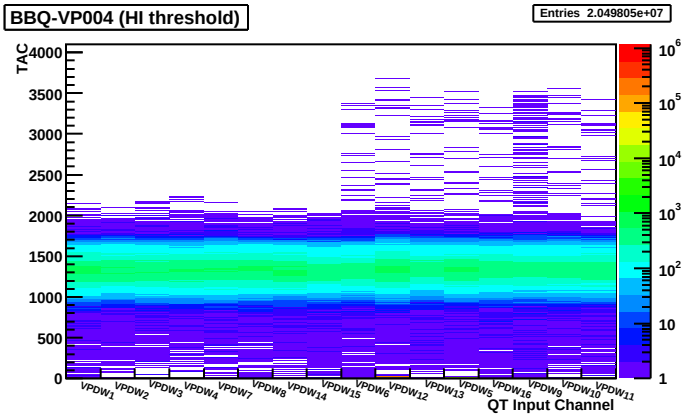

BBQ-VP002 (LO threshold)
Entries 2.049805e+07
ADC
QT Input Channel

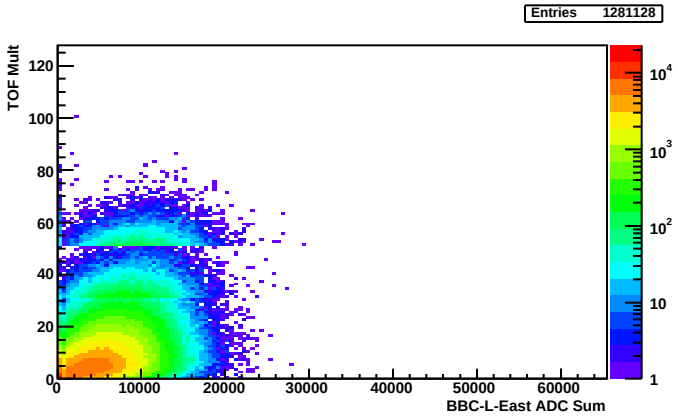

BBQ-VP002 (LO threshold)
Entries 2.049805e+07
TAC
QT Input Channel

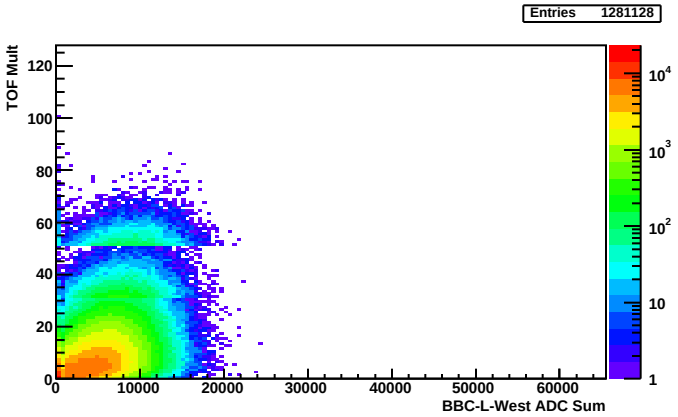

BBQ-VP003 (HI threshold)
Entries 2.049805e+07
ADC
QT Input Channel

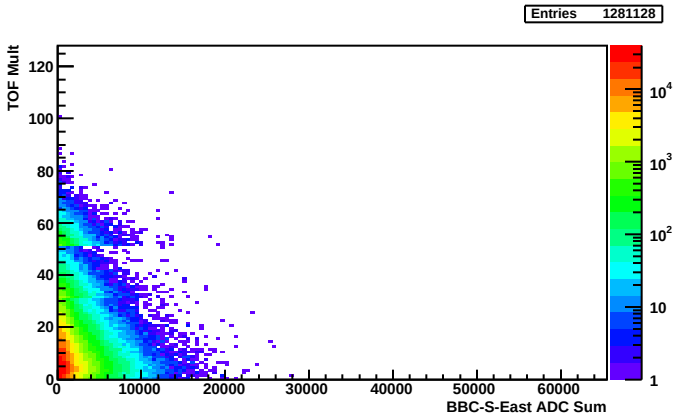

BBQ-VP003 (HI threshold)
Entries 2.049805e+07
TAC
QT Input Channel

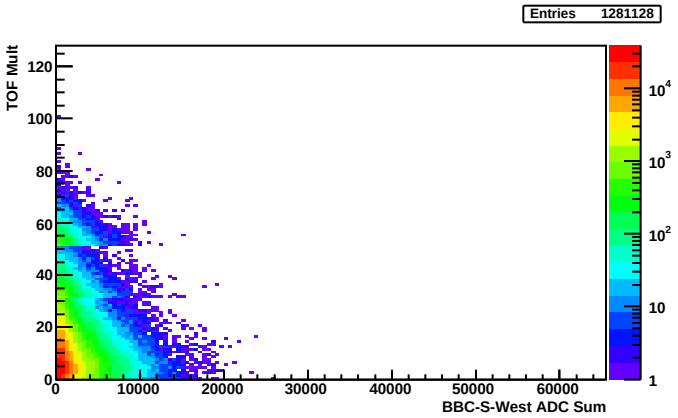

BBQ-VP004 (HI threshold)
Entries 2.049805e+07
ADC
QT Input Channel

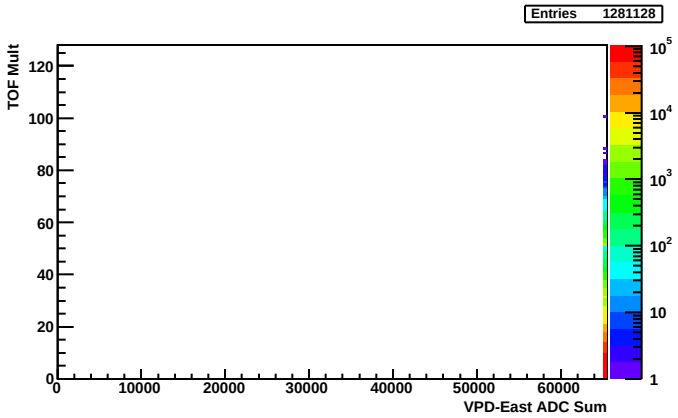

BBQ-VP004 (HI threshold)
Entries 2.049805e+07
TAC
QT Input Channel

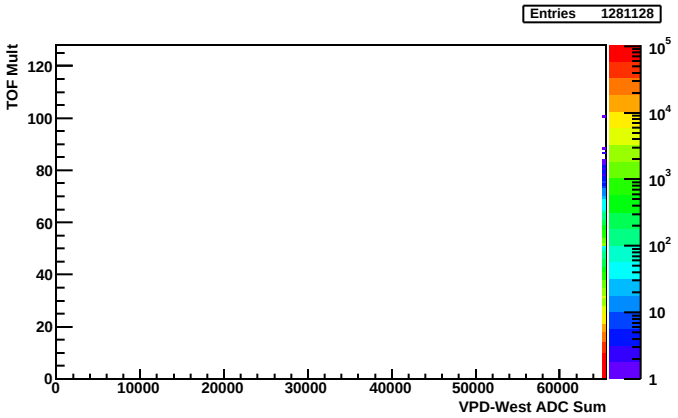

Entries 1281128
TOF Mult
BBC-L-East ADC Sum

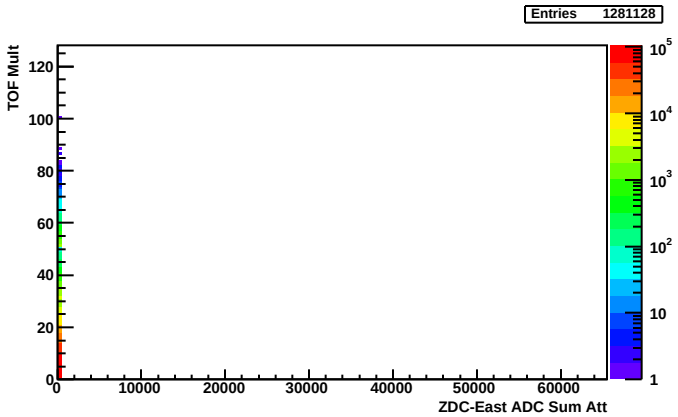

Entries 1281128
TOF Mult
BBC-L-West ADC Sum

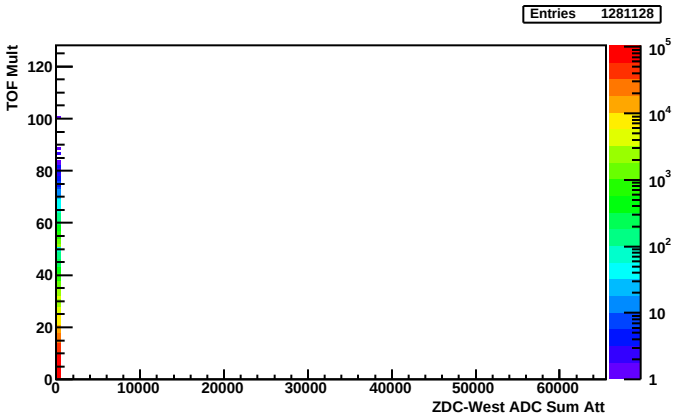

Entries 1281128
TOF Mult
BBC-S-East ADC Sum

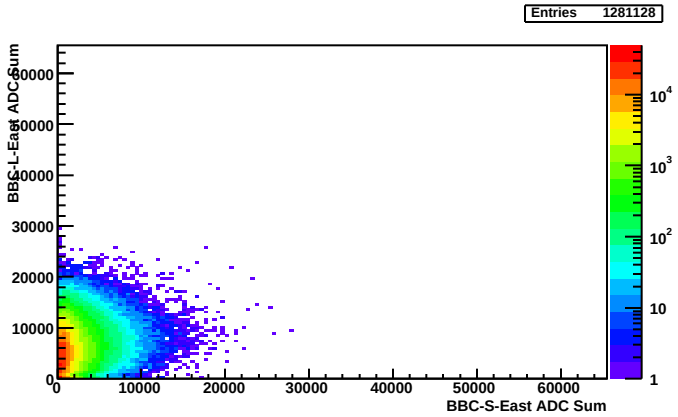

Entries 1281128
TOF Mult
BBC-S-West ADC Sum

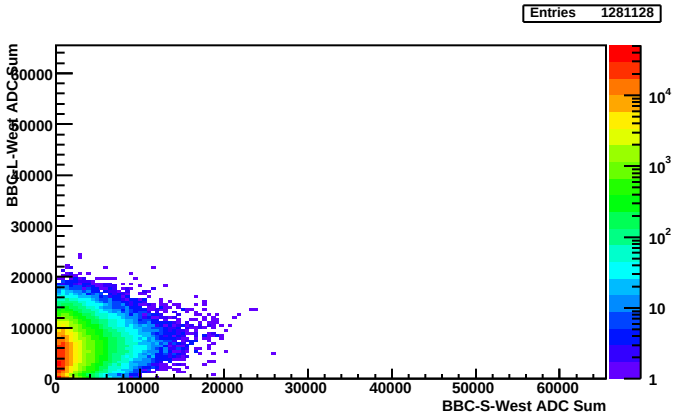

Entries 1281128
TOF Mult
VPD-East ADC Sum

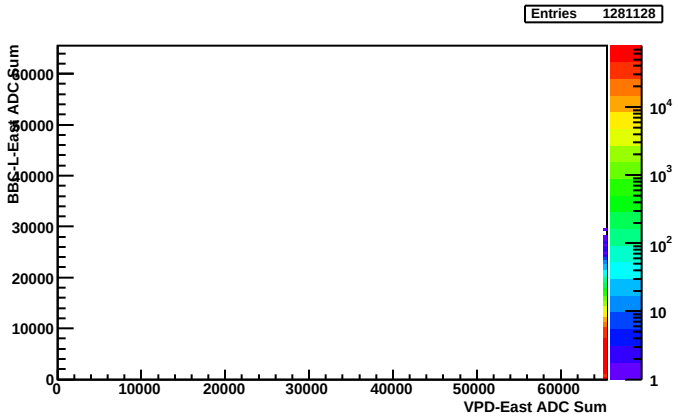

Entries 1281128
TOF Mult
VPD-West ADC Sum

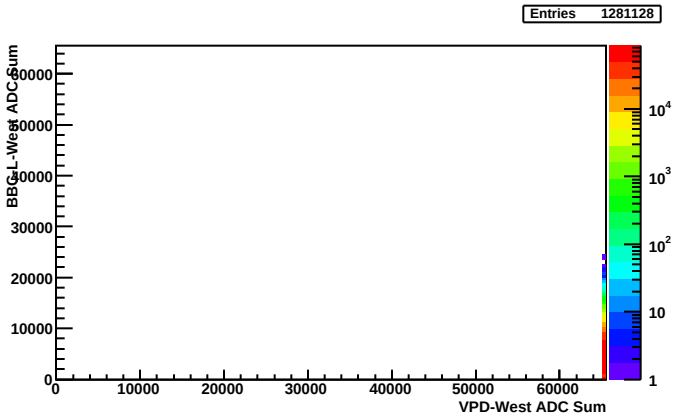

Entries 1281128
TOF Mult
ZDC-East ADC Sum Att

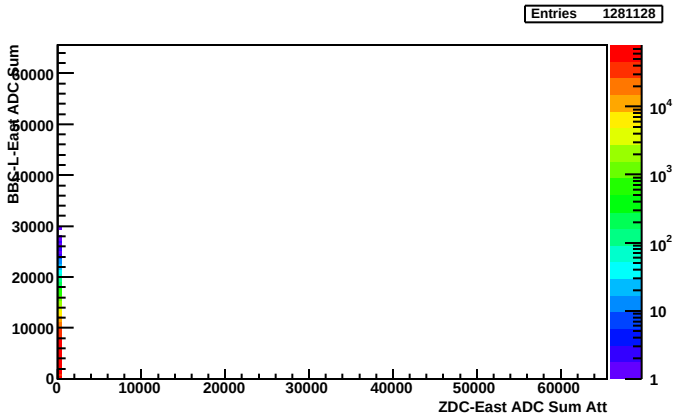

Entries 1281128
TOF Mult
ZDC-West ADC Sum Att

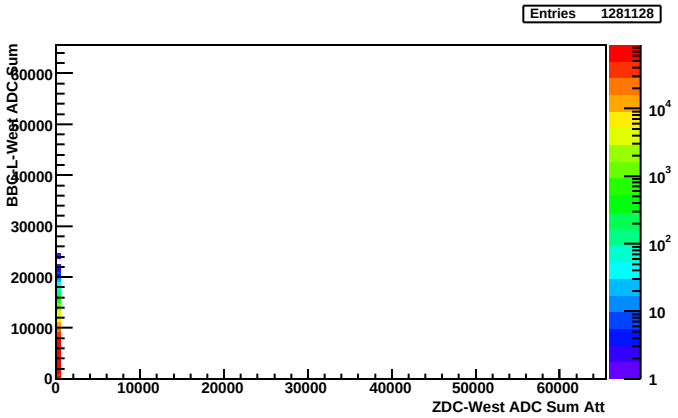

Entries 1281128
BBC-L-East ADC Sum
BBC-S-East ADC Sum

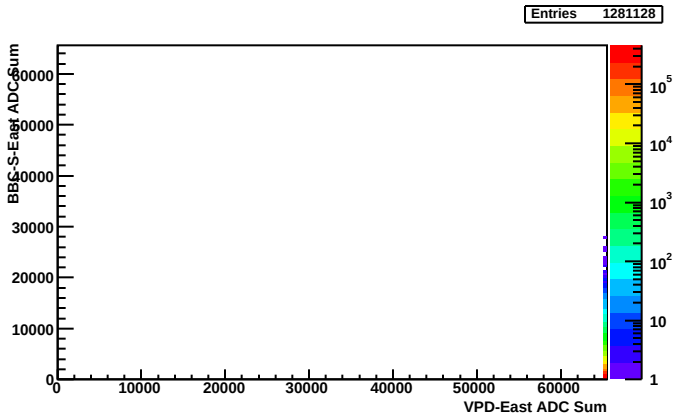

Entries 1281128
BBC-L-West ADC Sum
BBC-S-West ADC Sum

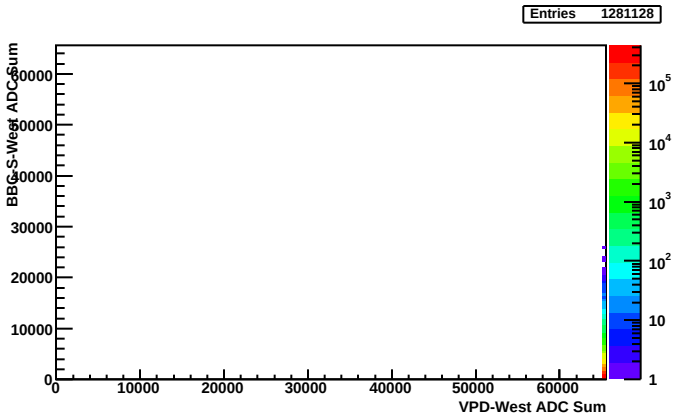

Entries 1281128
BBC-L-East ADC Sum
VPD-East ADC Sum

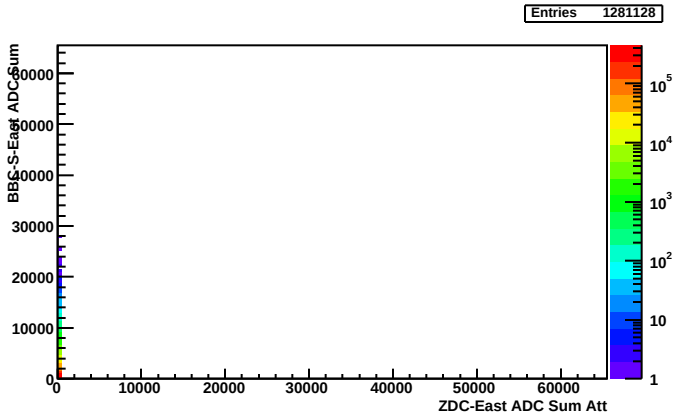

Entries 1281128
BBC-L-West ADC Sum
VPD-West ADC Sum

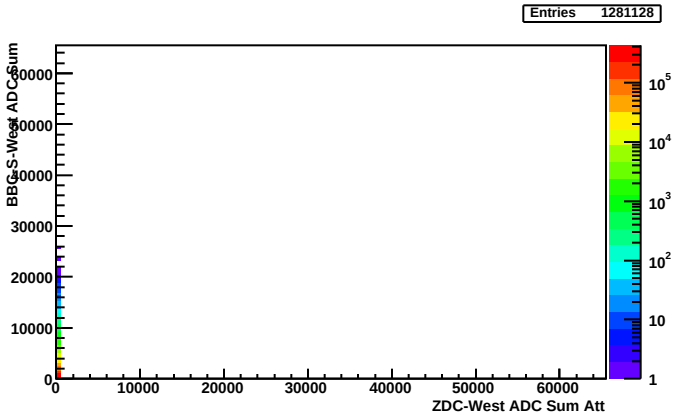

Entries 1281128
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

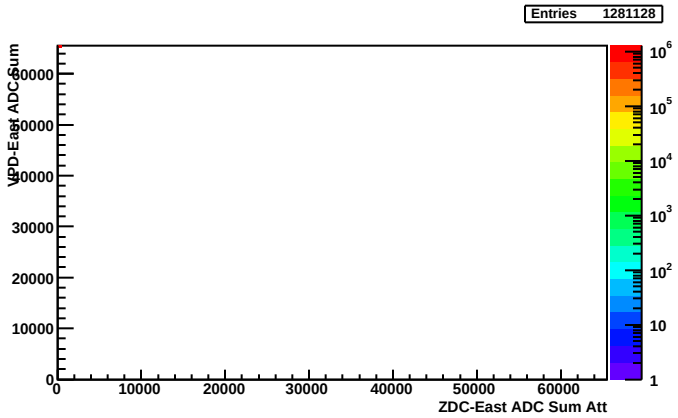

Entries 1281128
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

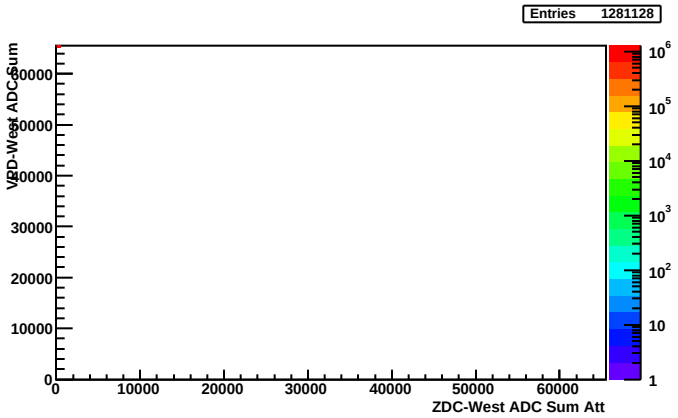

Entries 1281128
BBC-S-East ADC Sum
VPD-East ADC Sum

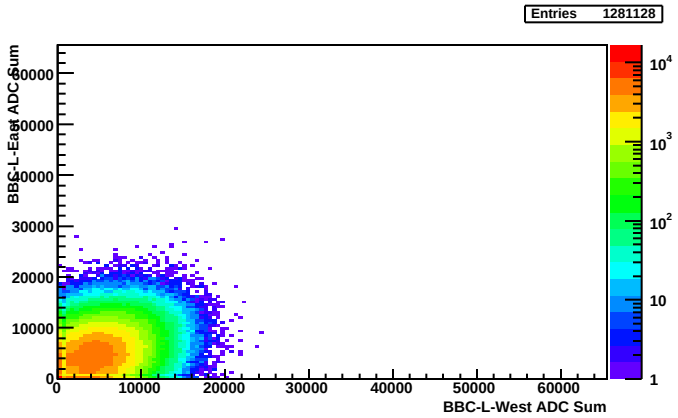

Entries 1281128
BBC-S-West ADC Sum
VPD-West ADC Sum

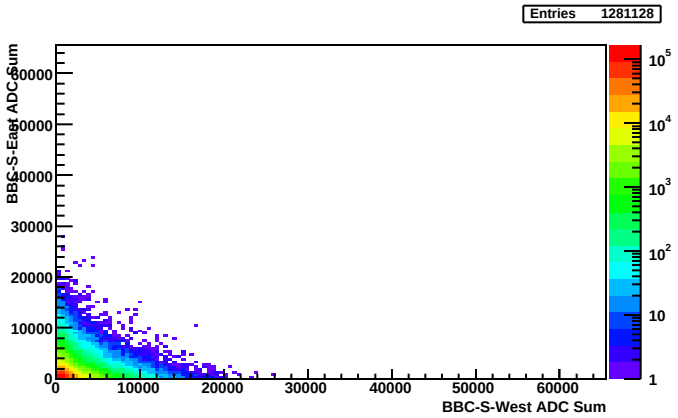

Entries 1281128
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

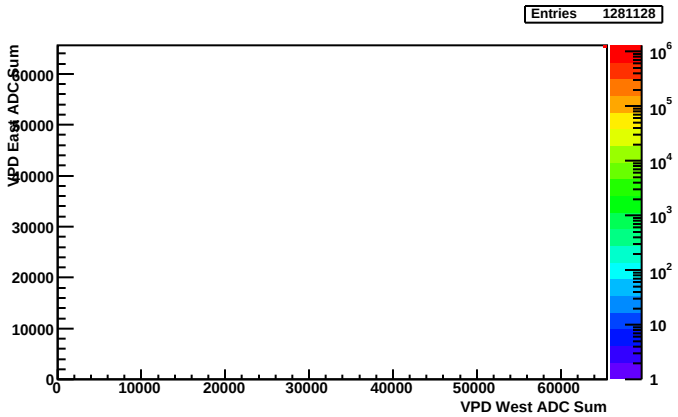

Entries 1281128
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

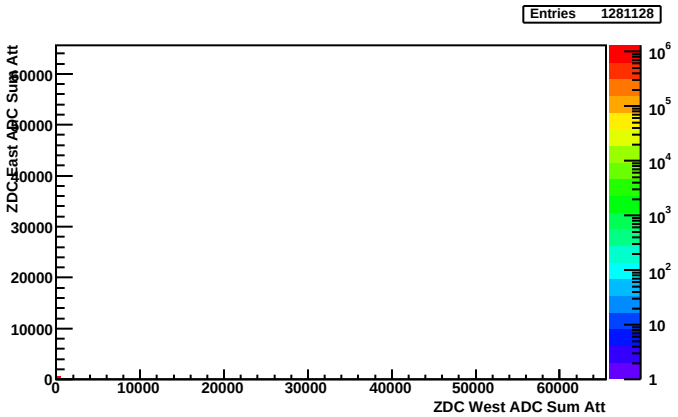

Entries 1281128
VPD-East ADC Sum
ZDC-East ADC Sum Att

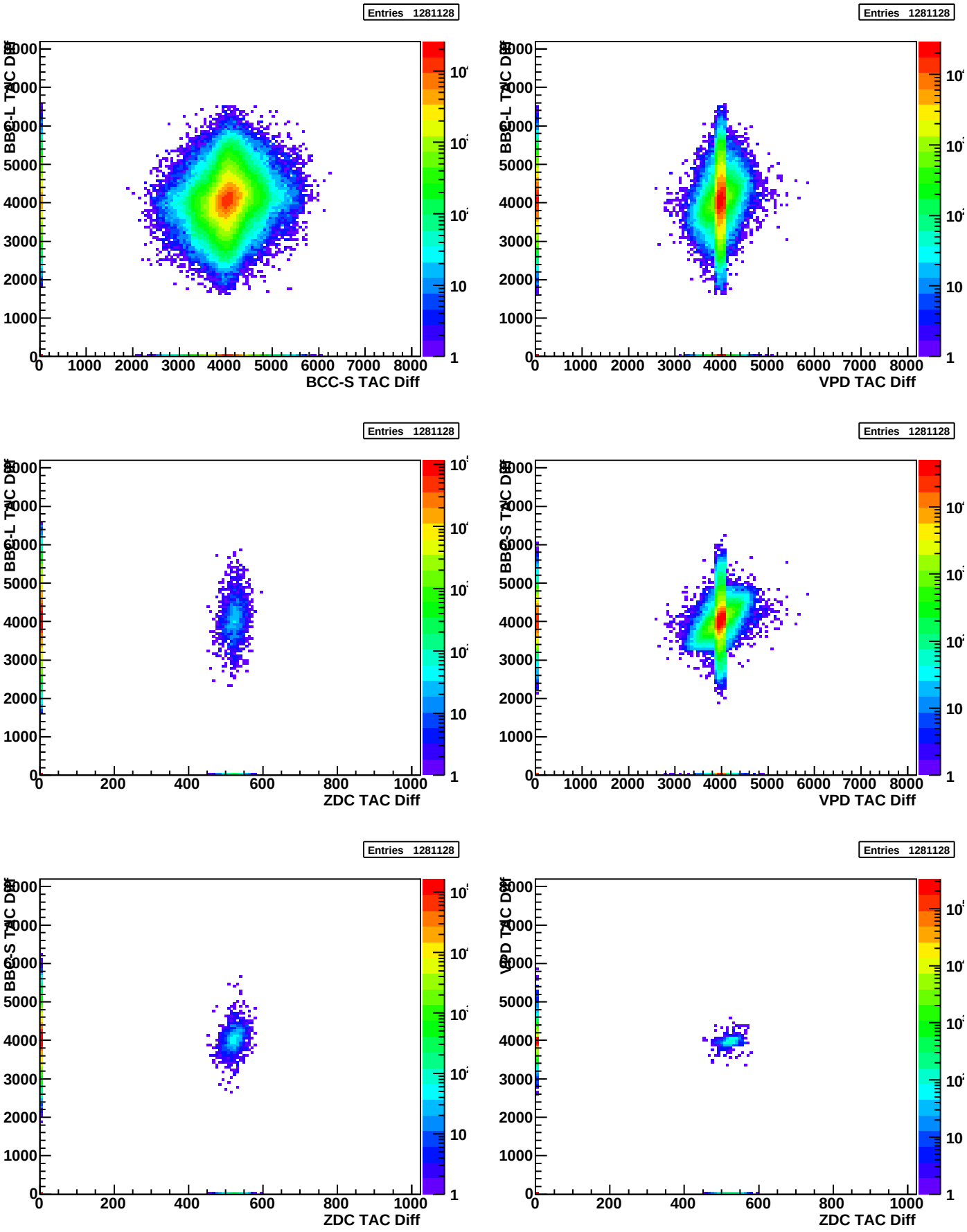

Entries 1281128
VPD-West ADC Sum
ZDC-West ADC Sum Att

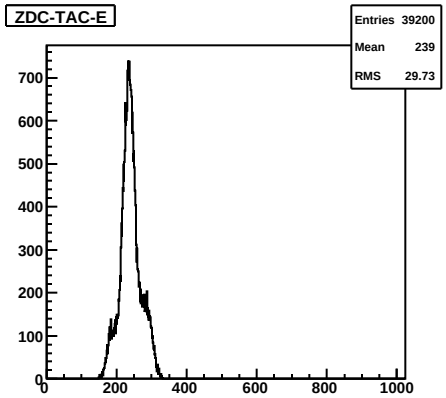

Entries 1281128
BBC-L-East ADC Sum
BBC-L-West ADC Sum

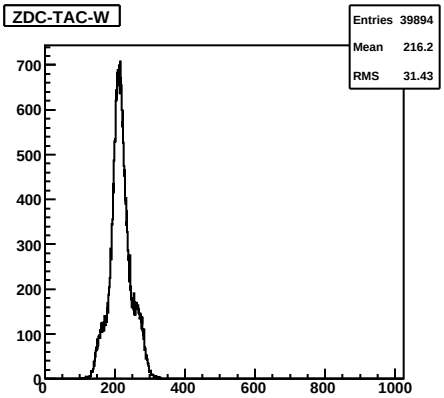

Entries 1281128
BBC-S-East ADC Sum
BBC-S-West ADC Sum

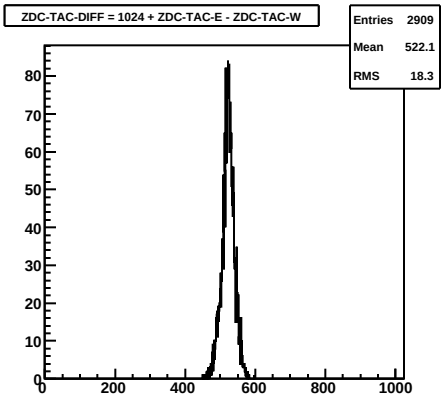

Entries 1281128
VPD East ADC Sum
VPD West ADC Sum

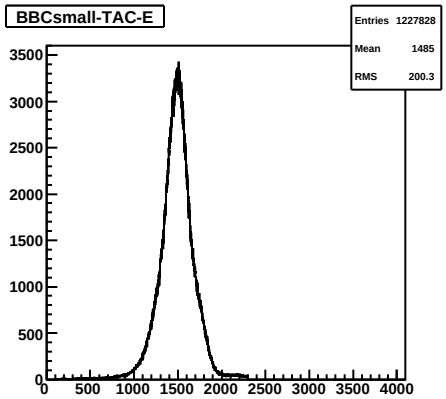

Entries 1281128
ZDC East ADC Sum Att
ZDC West ADC Sum Att

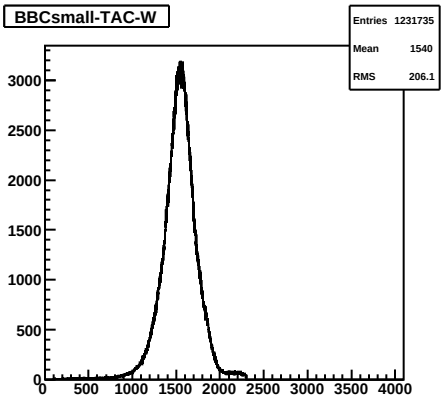

Entries 1281128
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1281128
BBC-L TAC Diff
VPD TAC Diff
Entries 1281128
BBC-L TAC Diff
ZDC TAC Diff
Entries 1281128
BBC-S TAC Diff
VPD TAC Diff
Entries 1281128
BBC-S TAC Diff
ZDC TAC Diff
Entries 1281128
VPD TAC Diff
ZDC TAC Diff

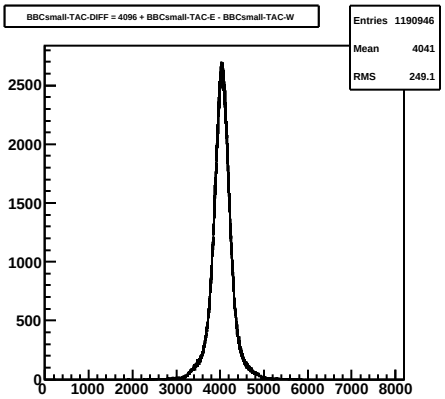

ZDC-TAC-E
Entries 39200
Mean 239
RMS 29.73

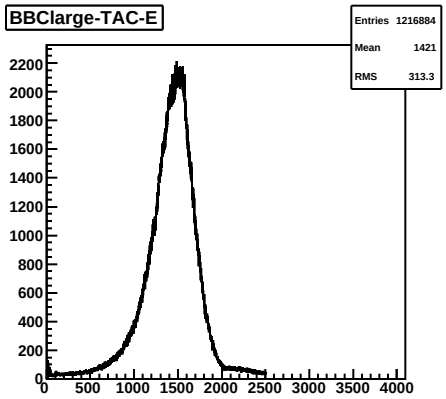

ZDC-TAC-W
Entries 39894
Mean 216.2
RMS 31.43

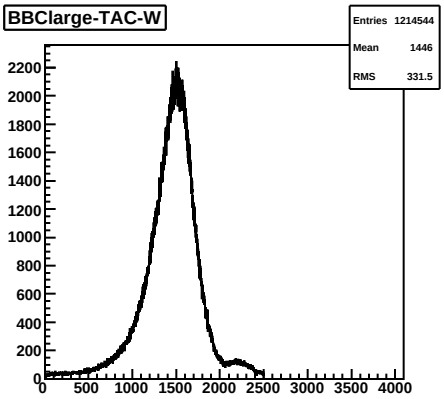

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2909
Mean 522.1
RMS 18.3

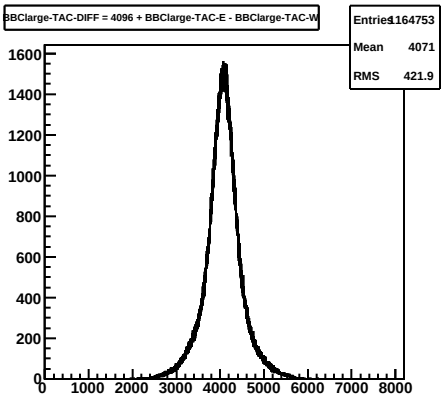

BBCsmall-TAC-E
Entries 1227828
Mean 1485
RMS 200.3

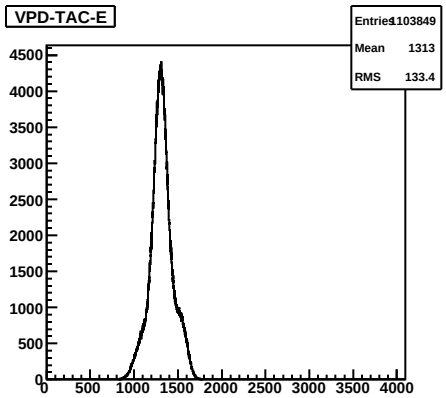

BBCsmall-TAC-W
Entries 1231735
Mean 1540
RMS 206.1

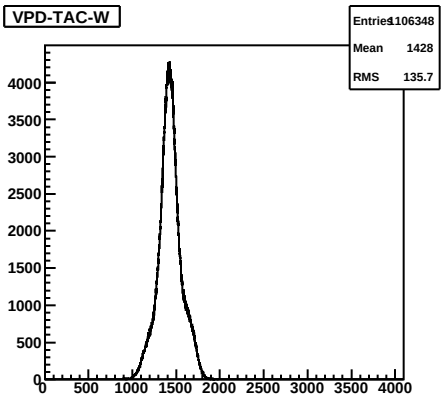

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1190946
Mean 4041
RMS 249.1

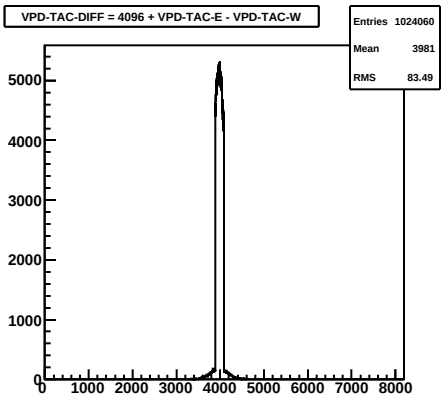

BBClarge-TAC-E
Entries 1216884
Mean 1421
RMS 313.3

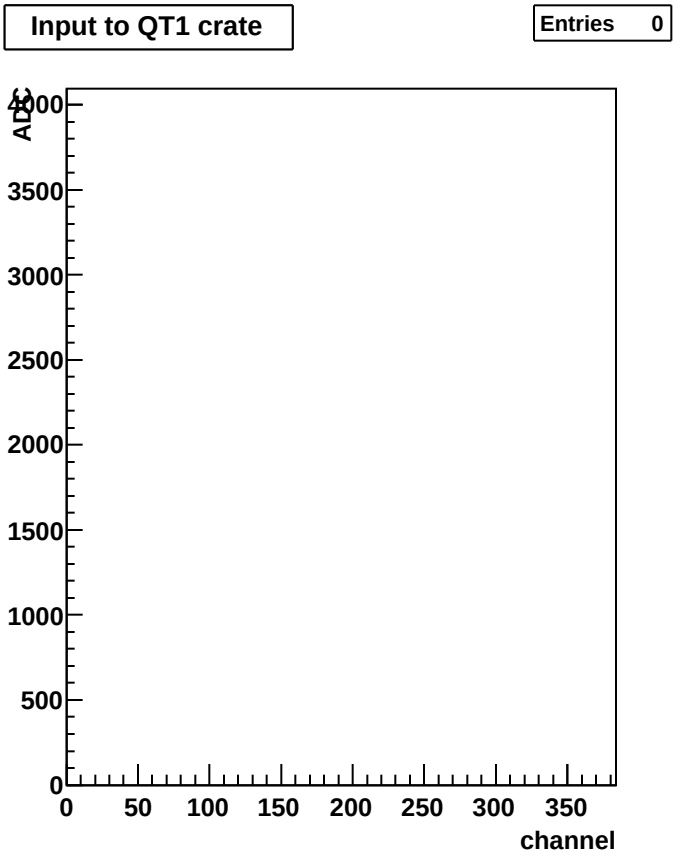

BBClarge-TAC-W
Entries 1214544
Mean 1446
RMS 331.5

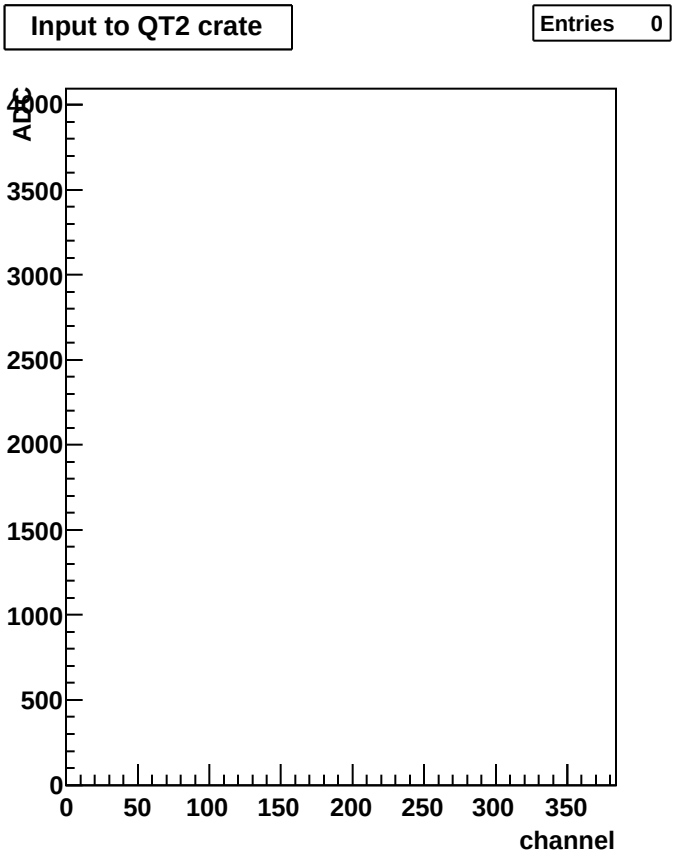

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1164753
Mean 4071
RMS 421.9

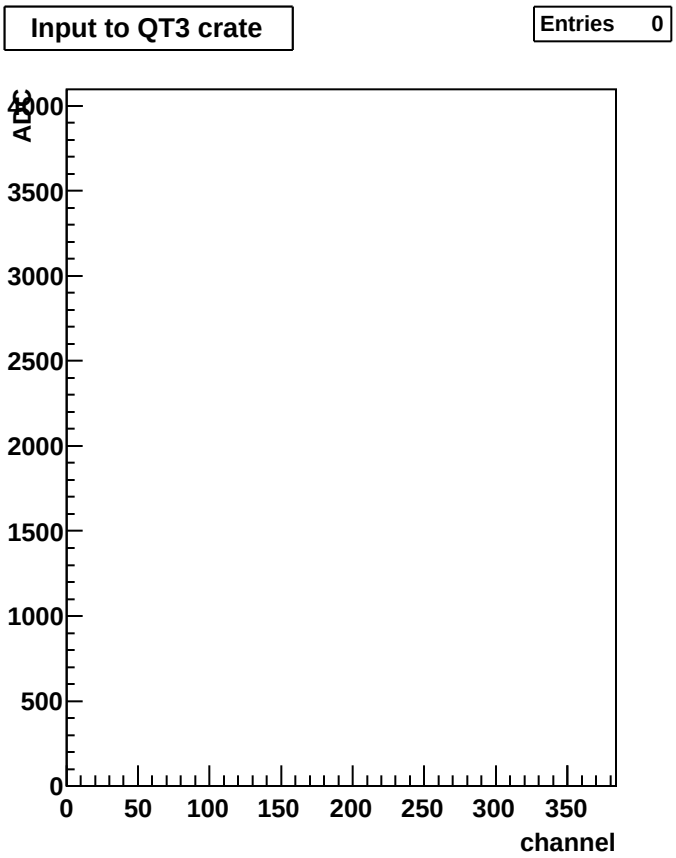

VPD-TAC-E
Entries 1103849
Mean 1313
RMS 133.4

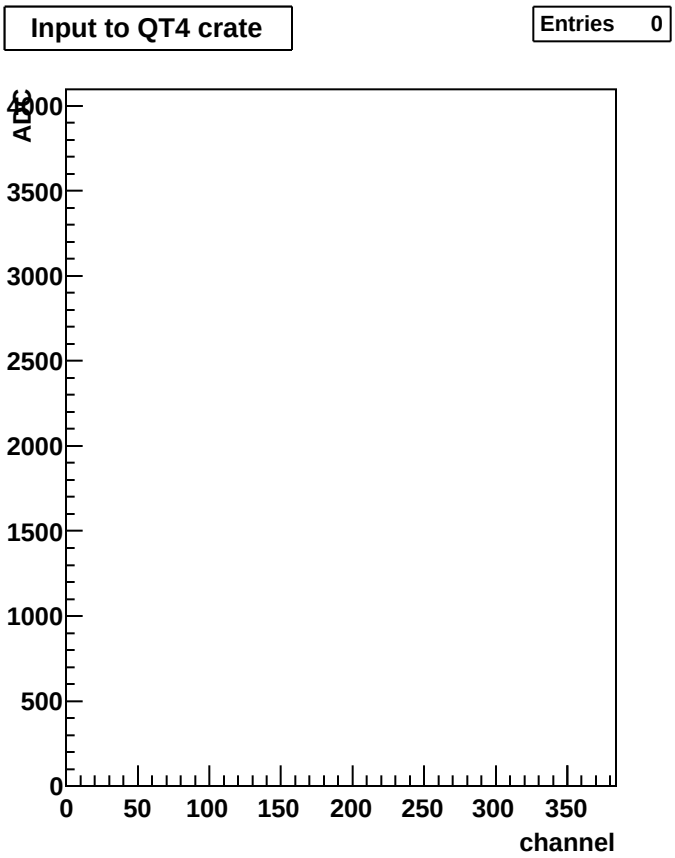

VPD-TAC-W
Entries 1106348
Mean 1428
RMS 135.7

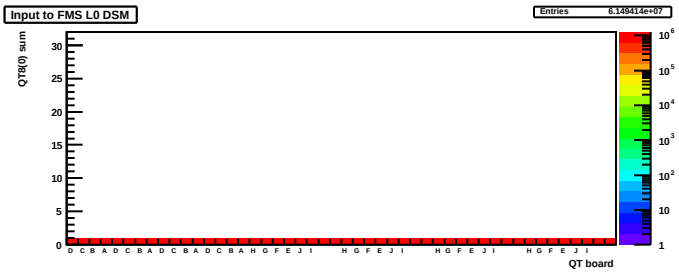

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1024060
Mean 3981
RMS 83.49

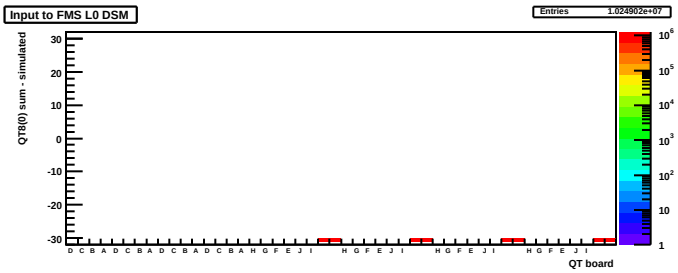

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

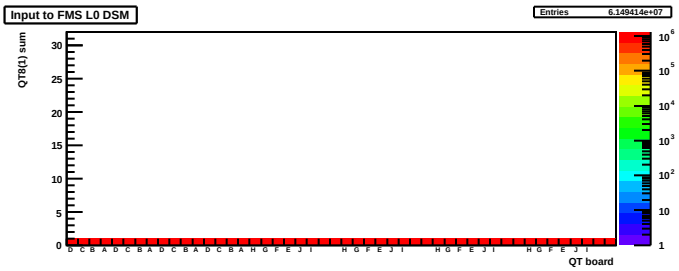

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

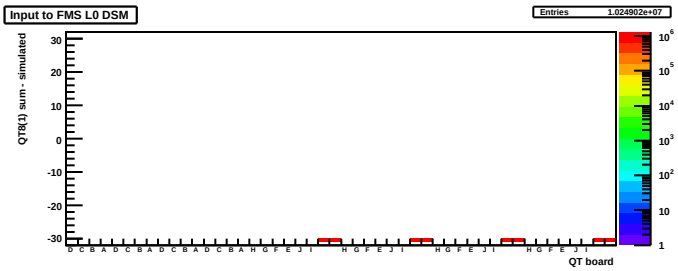

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

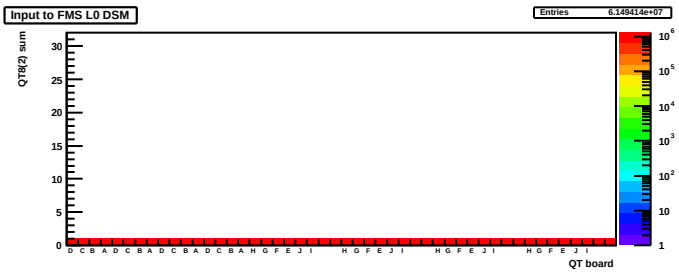

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

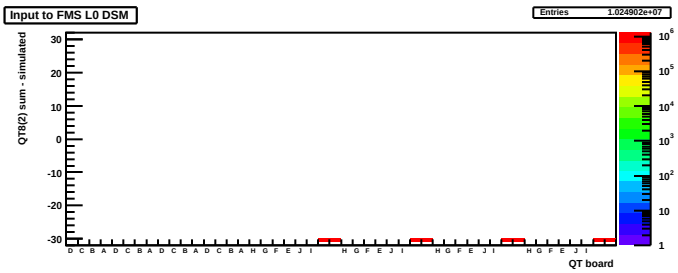

Input to FMS L0 DSM
Entries 6.149414e+07
QT8(0) sum
QT board

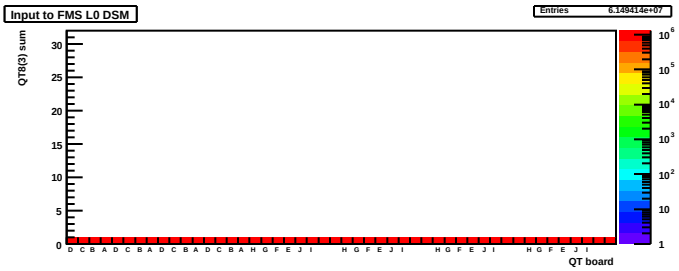

Input to FMS L0 DSM
Entries 1.024902e+07
QT8(0) sum - simulated
QT board

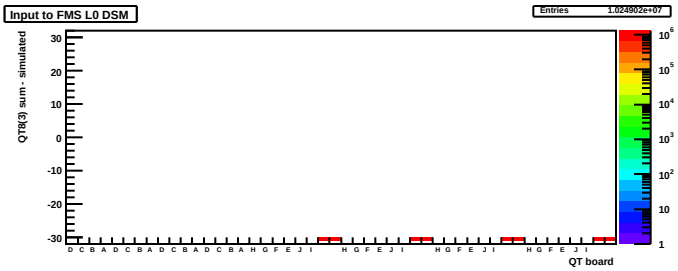

Input to FMS L0 DSM
Entries 6.149414e+07
QT8(1) sum
QT board

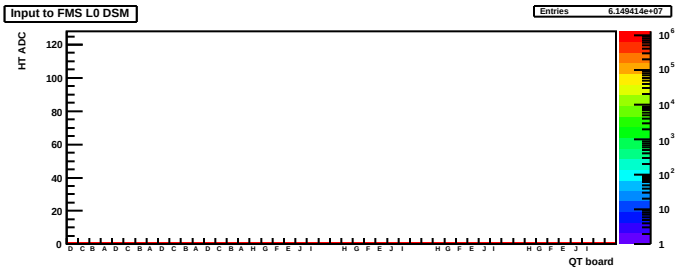

Input to FMS L0 DSM
Entries 1.024902e+07
QT8(1) sum - simulated
QT board

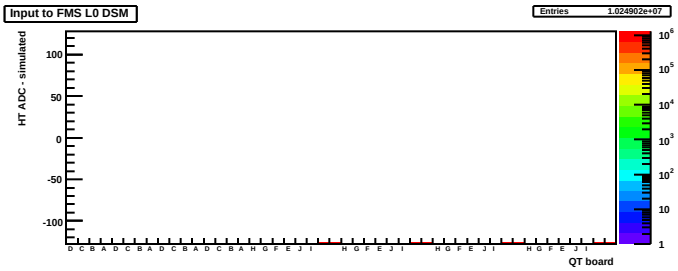

Input to FMS L0 DSM
Entries 6.149414e+07
QT8(2) sum
QT board

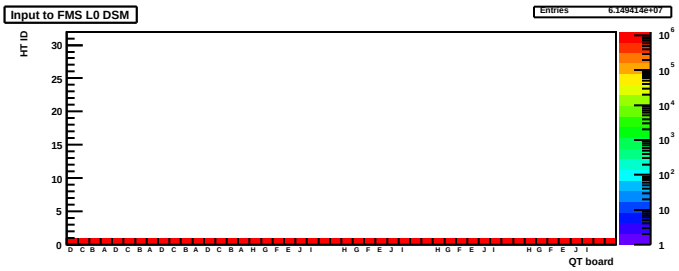

Input to FMS L0 DSM
Entries 1.024902e+07
QT8(2) sum - simulated
QT board

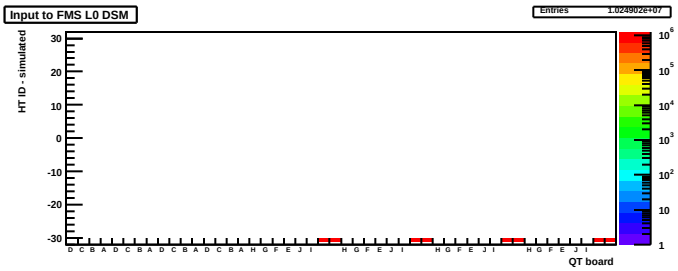

Input to FMS L0 DSM
Entries 6.149414e+07
QT8(3) sum
QT board

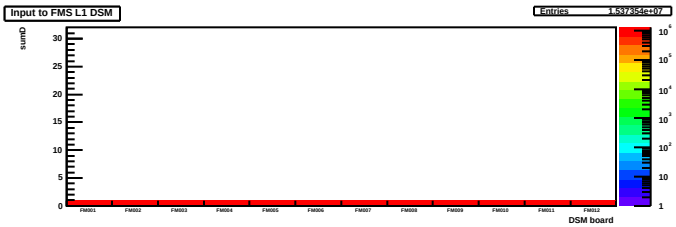

Input to FMS L0 DSM
Entries 1.024902e+07
QT8(3) sum - simulated
QT board

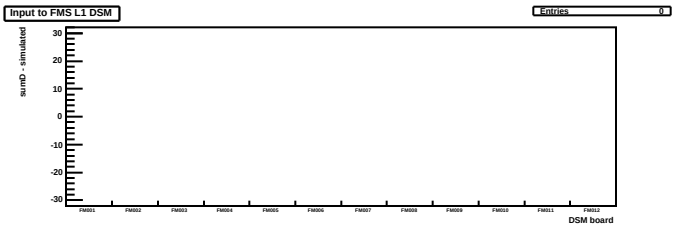

Input to FMS L0 DSM
Entries 6.149414e+07
HT ADC
QT board

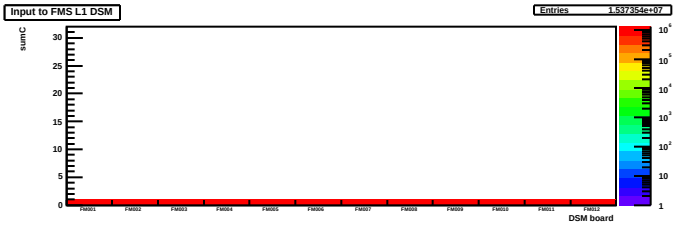

Input to FMS L0 DSM
Entries 1.024902e+07
HT ADC - simulated
QT board

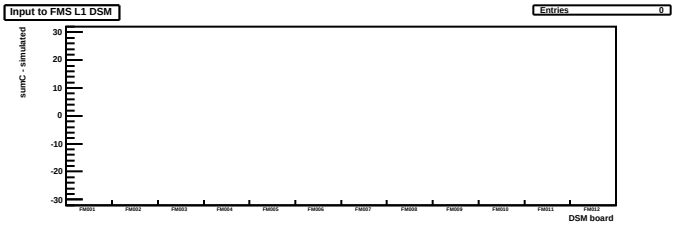

Input to FMS L0 DSM
Entries 6.149414e+07
HT ID
QT board

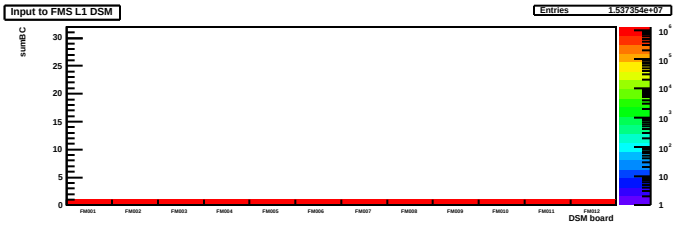

Input to FMS L0 DSM
Entries 1.024902e+07
HT ID - simulated
QT board

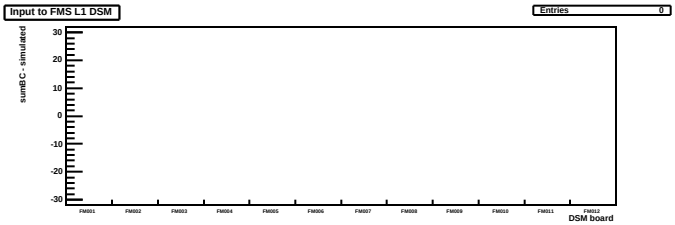

Input to FMS L1 DSM
Entries 1.537354e+07
sumD
DSM board

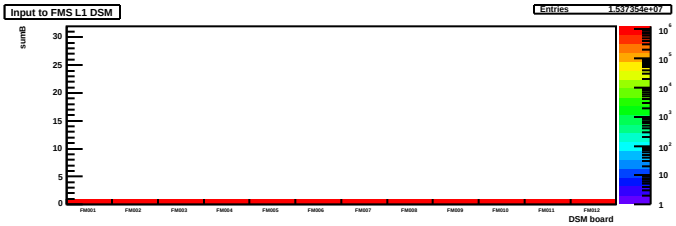

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

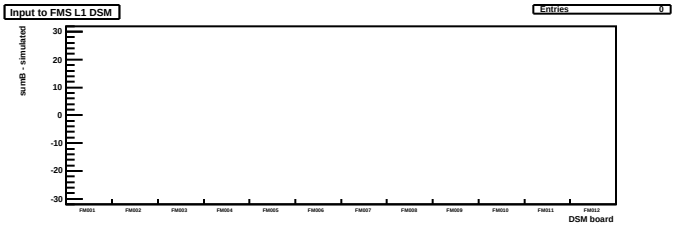

Input to FMS L1 DSM
Entries 1.537354e+07
sumC
DSM board

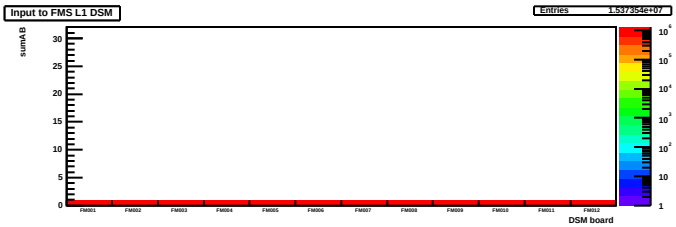

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

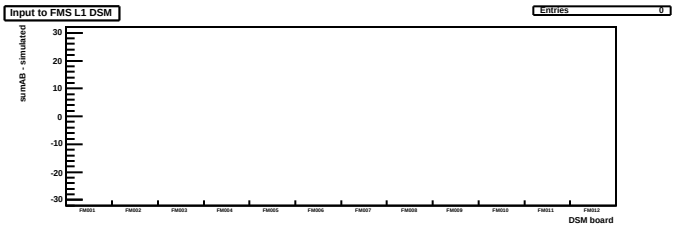

Input to FMS L1 DSM
Entries 1.537354e+07
sumBC
DSM board

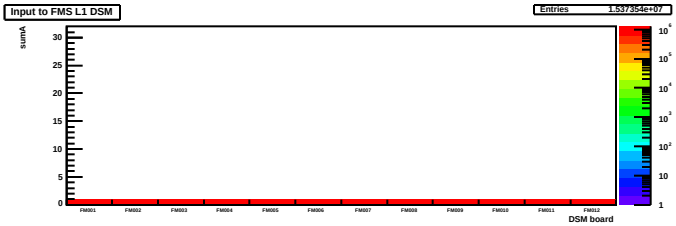

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

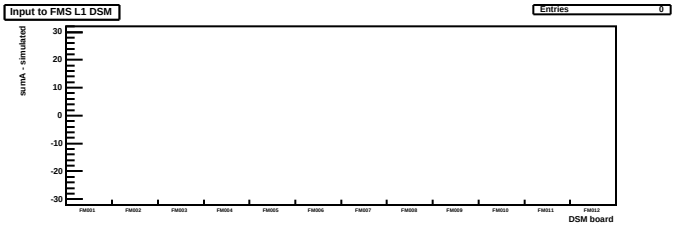

Input to FMS L1 DSM
Entries 1.537354e+07
sumB
DSM board

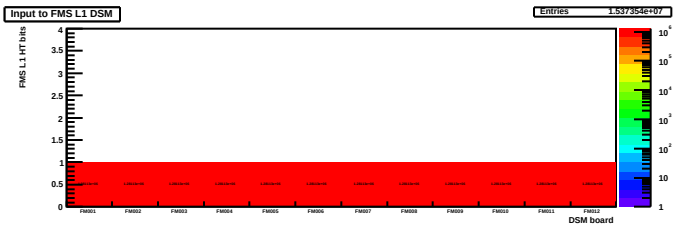

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

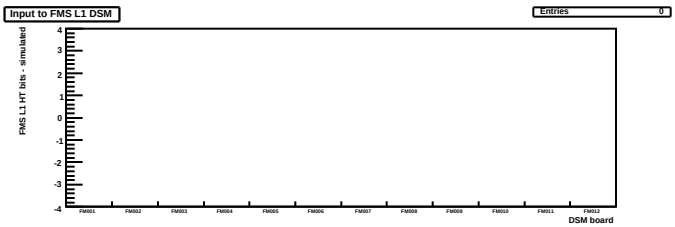

Input to FMS L1 DSM
Entries 1.537354e+07
sumAB
DSM board

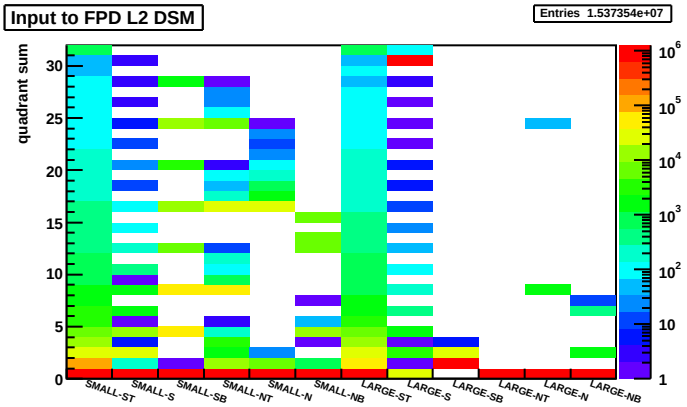

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

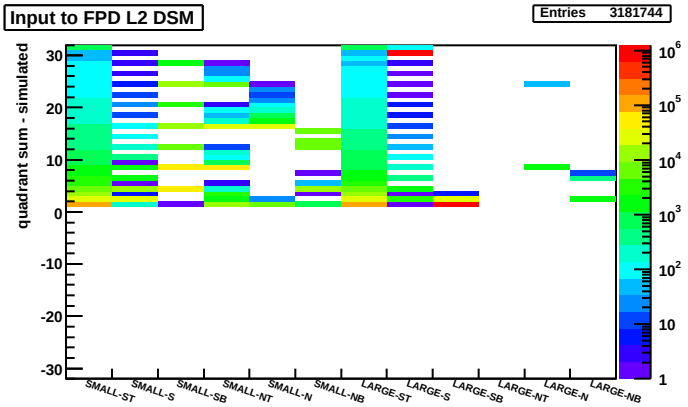

Input to FMS L1 DSM
Entries 1.537354e+07
sumA
DSM board

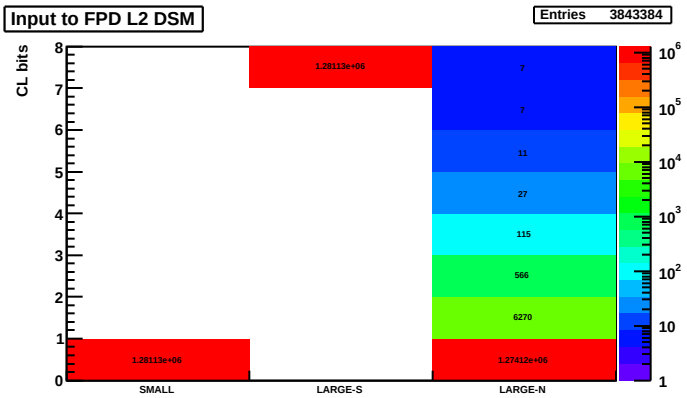

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

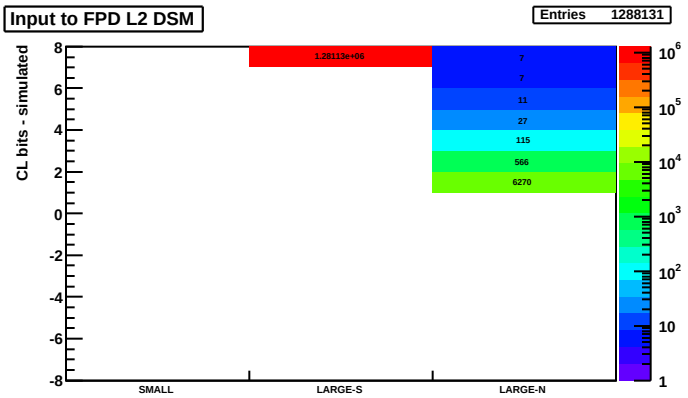

Input to FMS L1 DSM
Entries 1.537354e+07
FMS L1 HT bits
DSM board

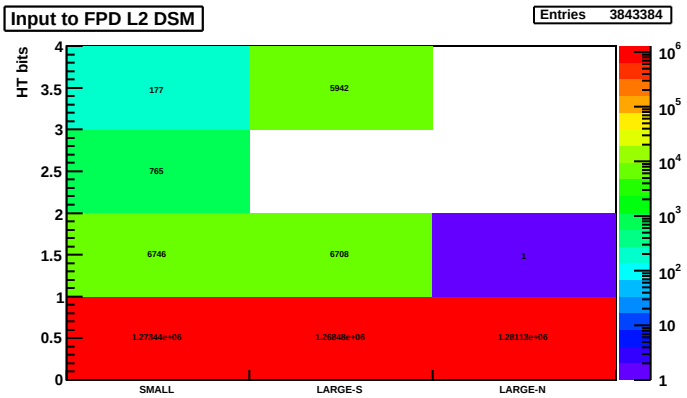

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

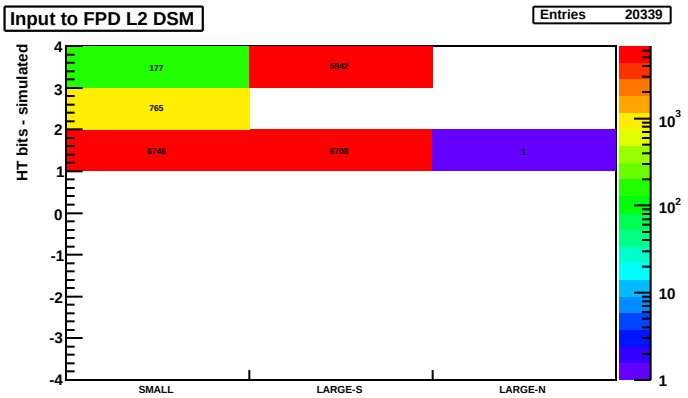

Input to FPD L2 DSM
Entries 1.537354e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

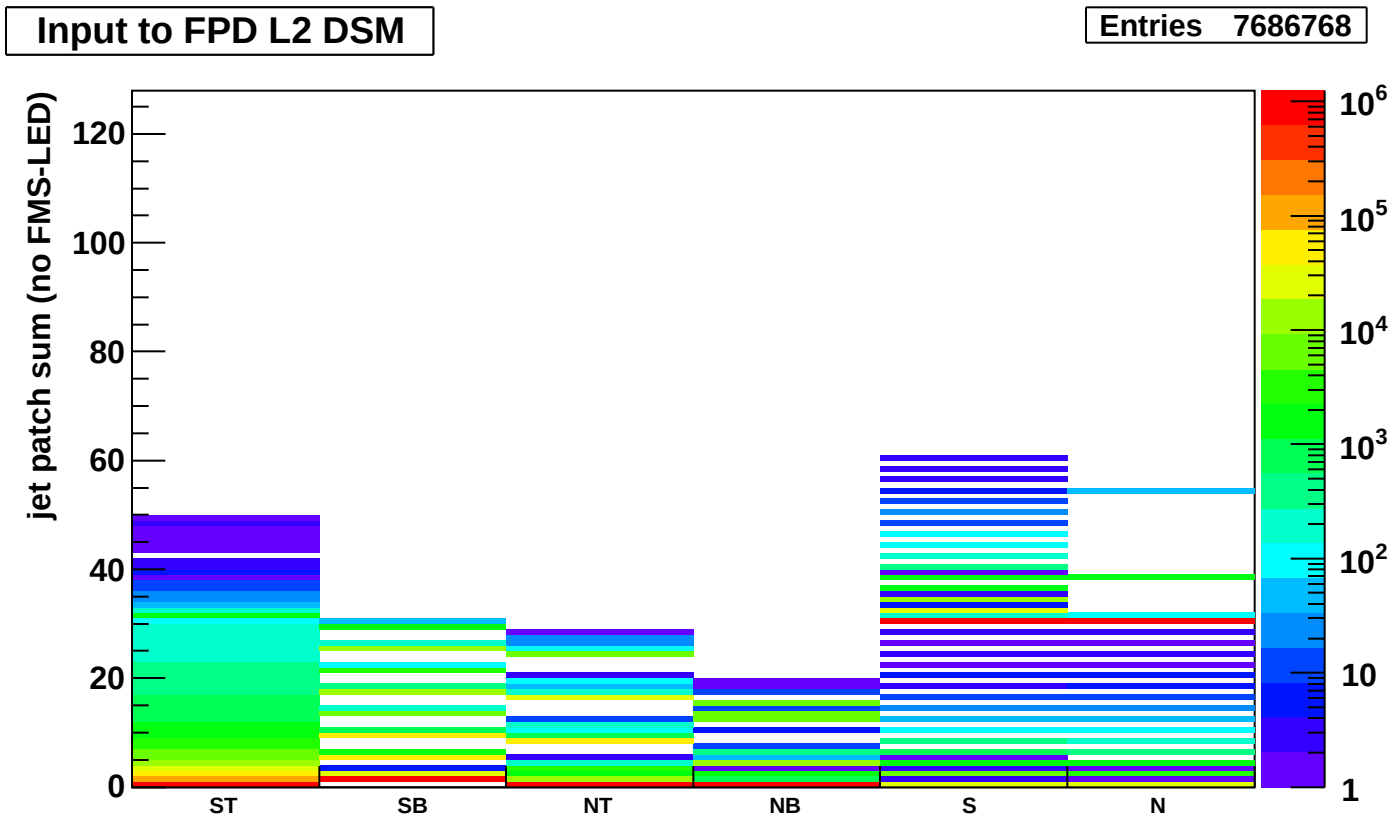

Input to FPD L2 DSM
Entries 3181744
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

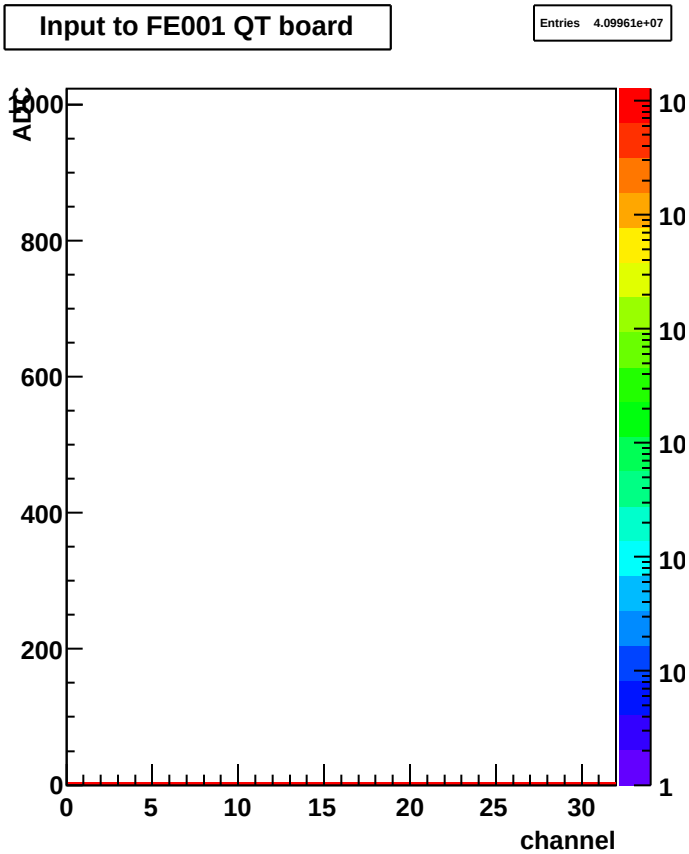

Input to FPD L2 DSM
Entries 3843384
CL bits
1.28113e+06
7
7
11
27
115
566
6270
1.28113e+06
1.27412e+06
SMALL
LARGE-S
LARGE-N

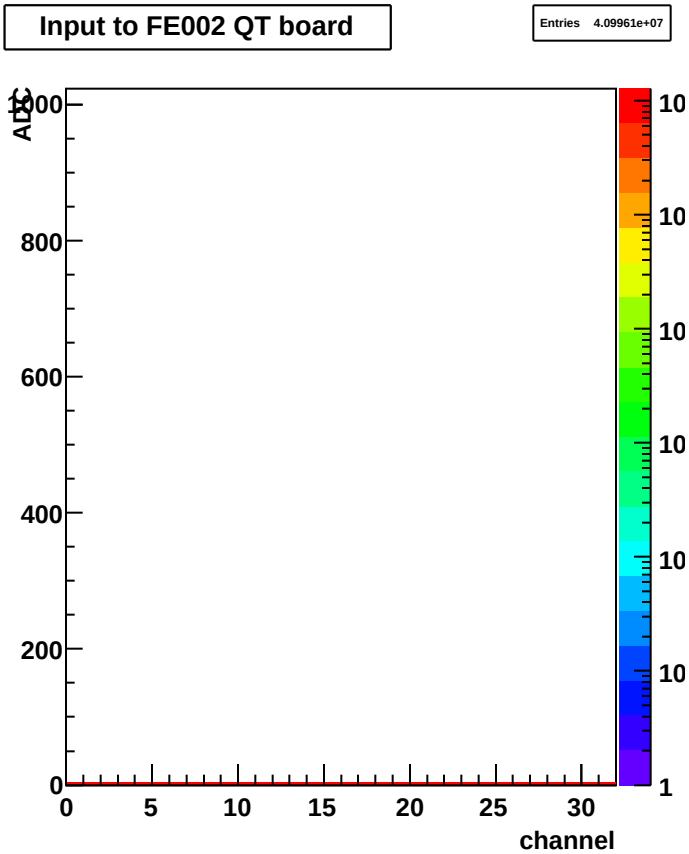

Input to FPD L2 DSM
Entries 1288131
CL bits - simulated
1.28113e+06
7
7
11
27
115
566
6270
SMALL
LARGE-S
LARGE-N

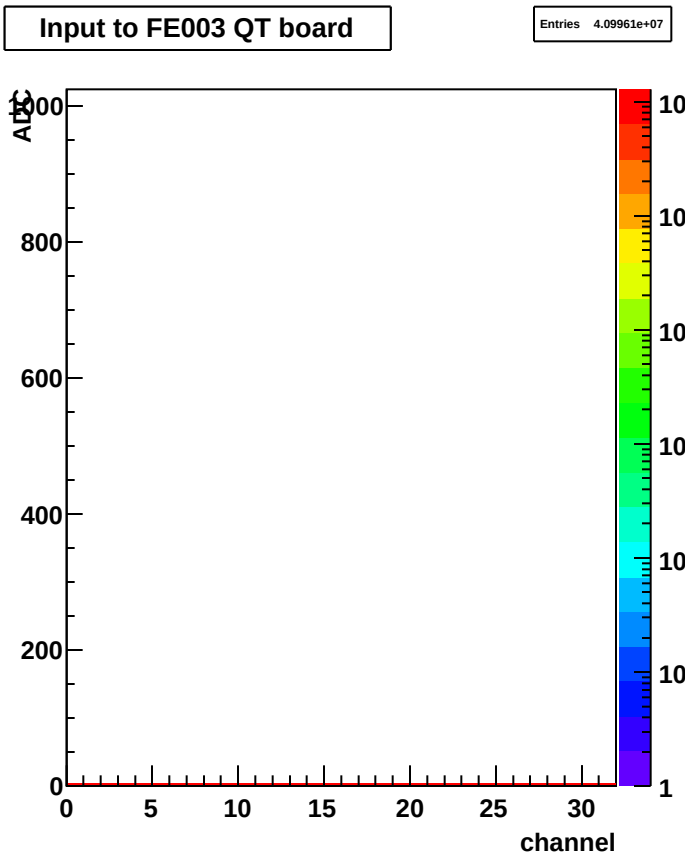

Input to FPD L2 DSM
Entries 3843384
HT bits
177
5942
765
6746
6708
1
1.27344e+06
1.26848e+06
1.28113e+06
SMALL
LARGE-S
LARGE-N

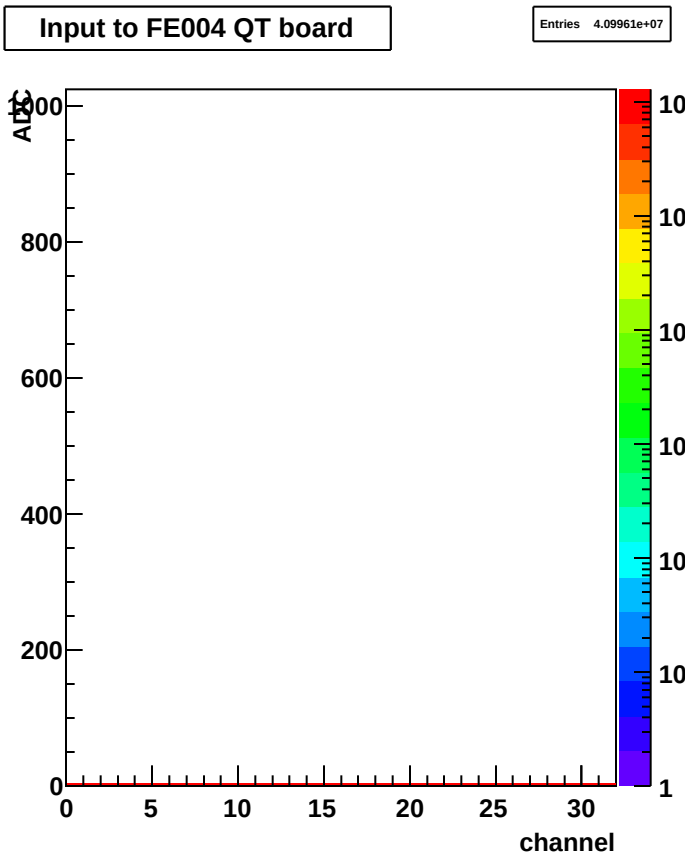

Input to FPD L2 DSM
Entries 20339
HT bits - simulated
177
5942
765
6746
6708
1
SMALL
LARGE-S
LARGE-N

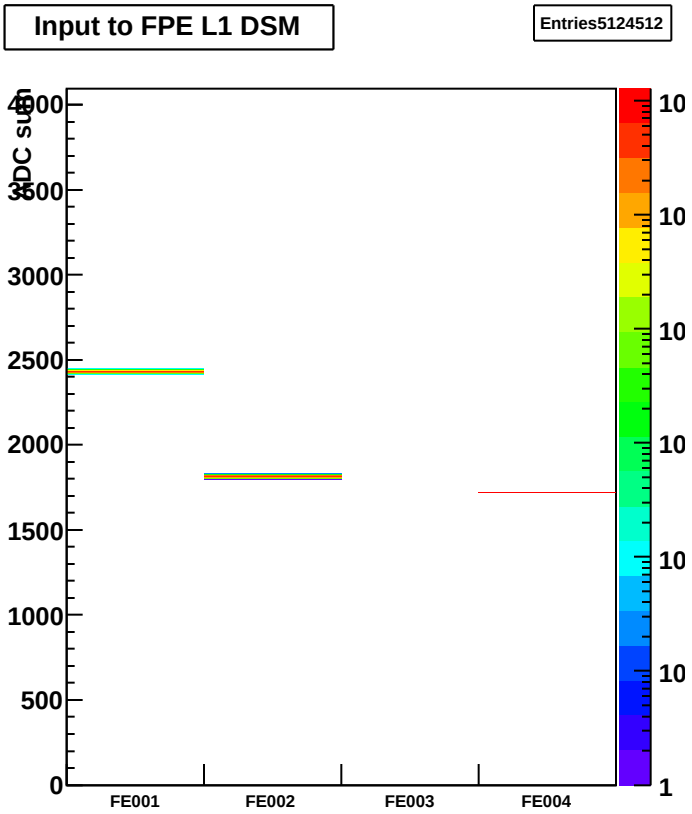

Input to FPD L2 DSM
Entries 7686768
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

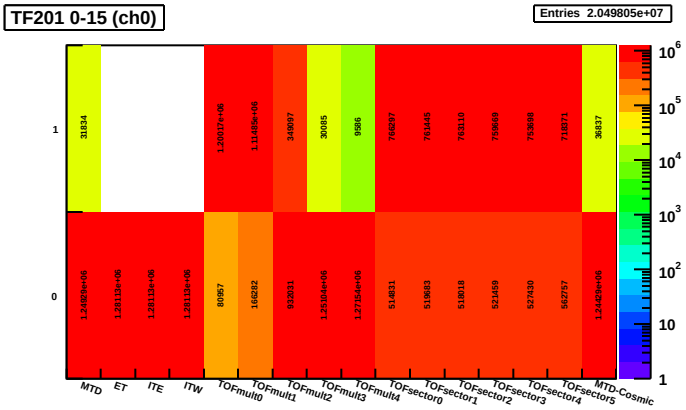

Input to FE001 QT board
Entries 4.09961e+07
ADC
channel

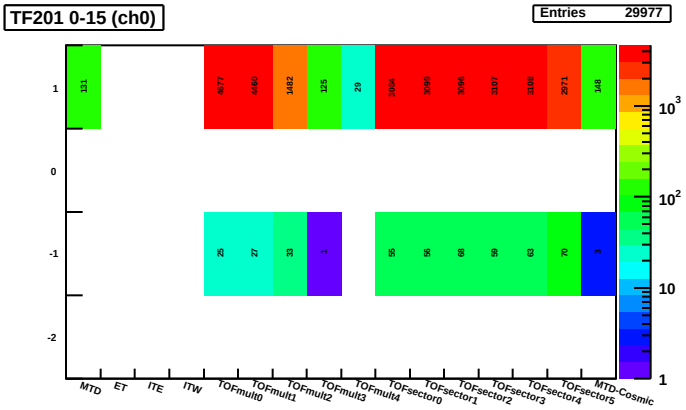

Input to FE002 QT board
Entries 4.09961e+07
ADC
channel

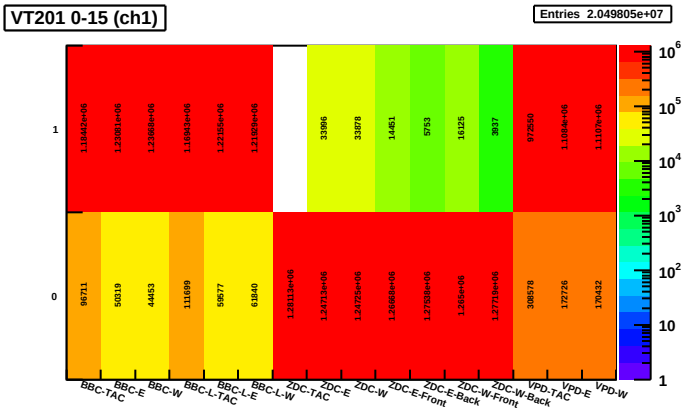

Input to FE003 QT board
Entries 4.09961e+07
ADC
channel

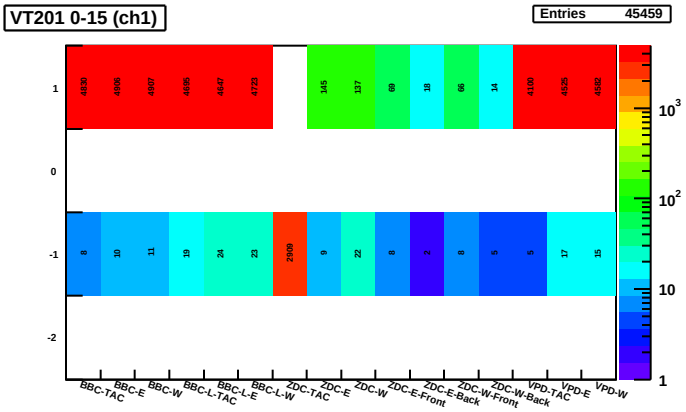

Input to FE004 QT board
Entries 4.09961e+07
ADC
channel

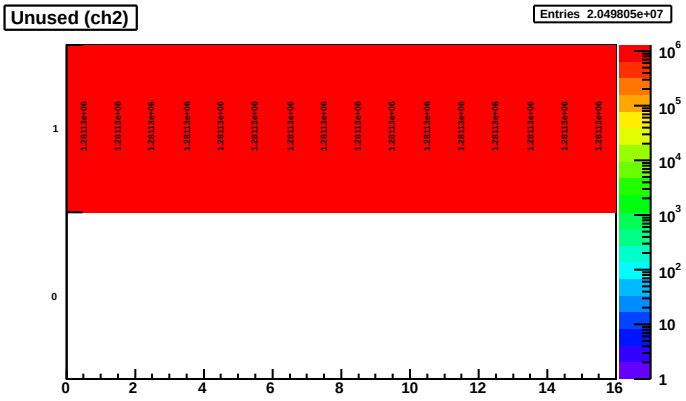

Input to FPE L1 DSM
Entries5124512
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1

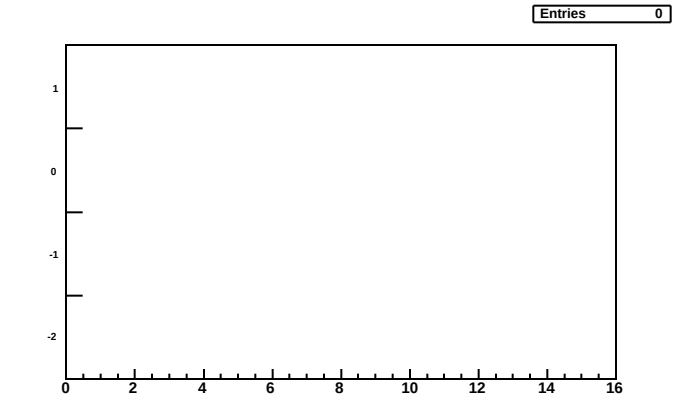

TF201 0-15 (ch0)
Entries 2.049805e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

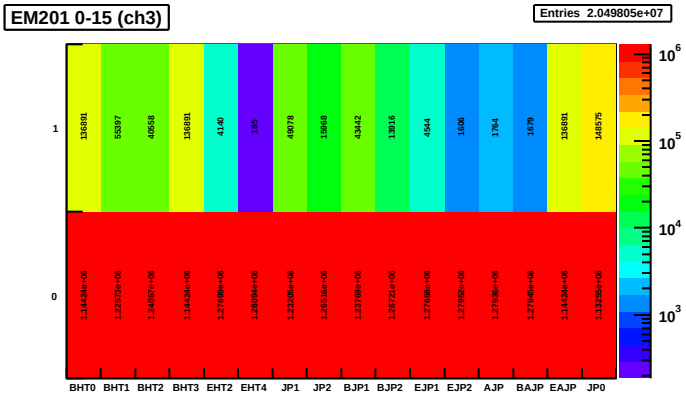

TF201 0-15 (ch0)
Entries 29977
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

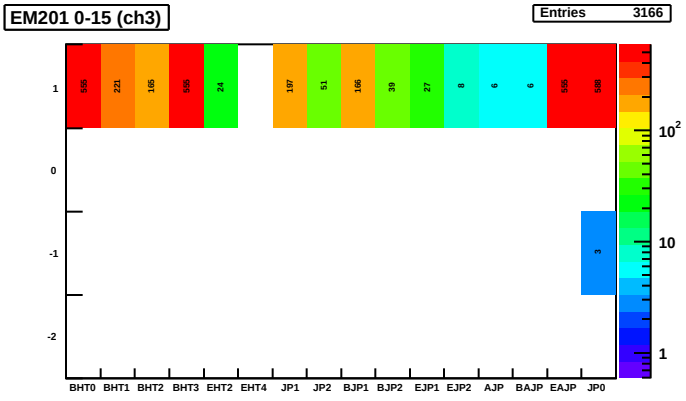

VT201 0-15 (ch1)
Entries 2.049805e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-E-Front
ZDC-E-Back
ZDC-W-Front
ZDC-W-Back
VPD-TAC
VPD-E
VPD-W


VT201 0-15 (ch1)
Entries 45459
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-E-Front
ZDC-E-Back
ZDC-W-Front
ZDC-W-Back
VPD-TAC
VPD-E
VPD-W

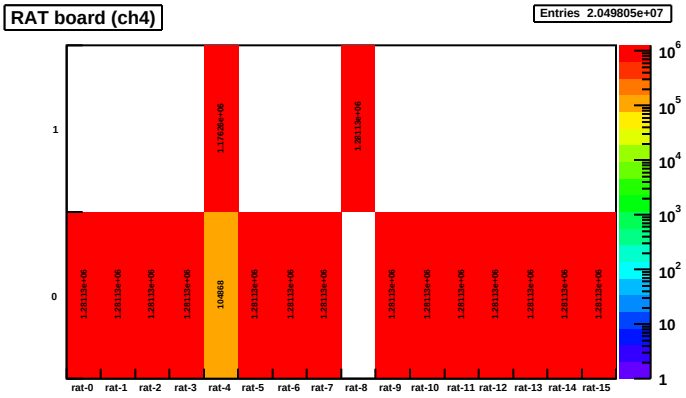

Unused (ch2)
Entries 2.049805e+07

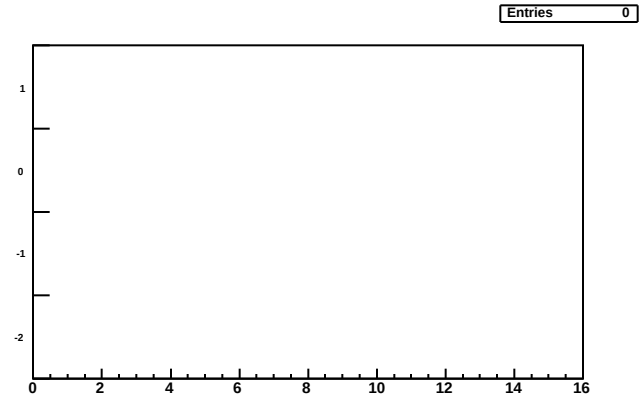

Entries 0


EM201 0-15 (ch3)
Entries 2.049805e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

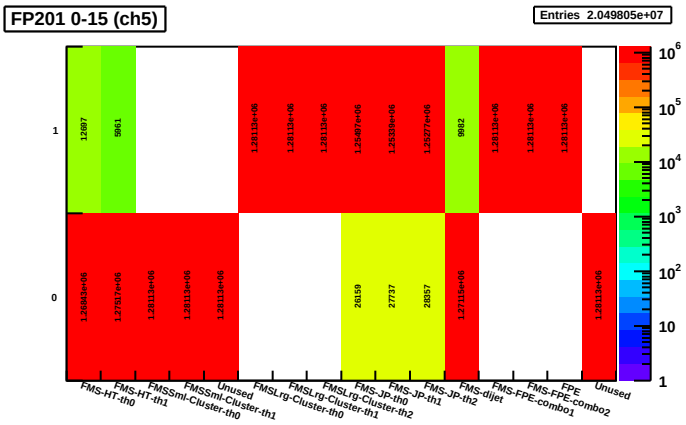

EM201 0-15 (ch3)
Entries 3166
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

RAT board (ch4)

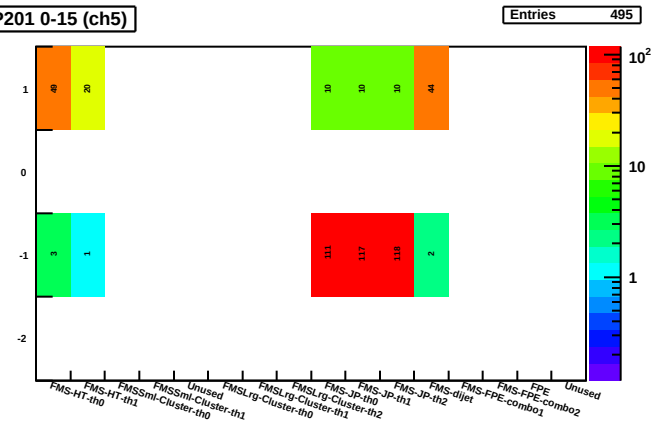




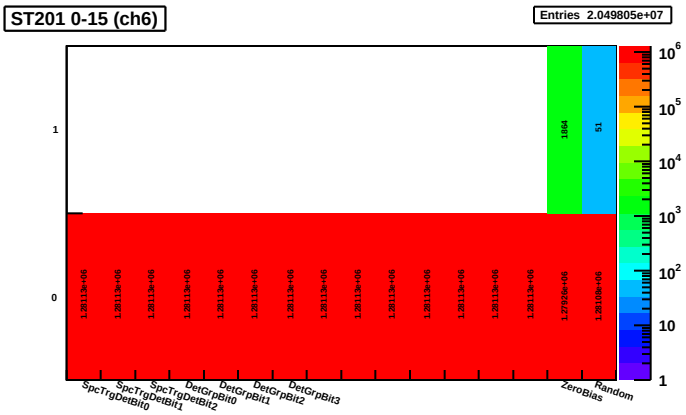
FP201 0-15 (ch5)

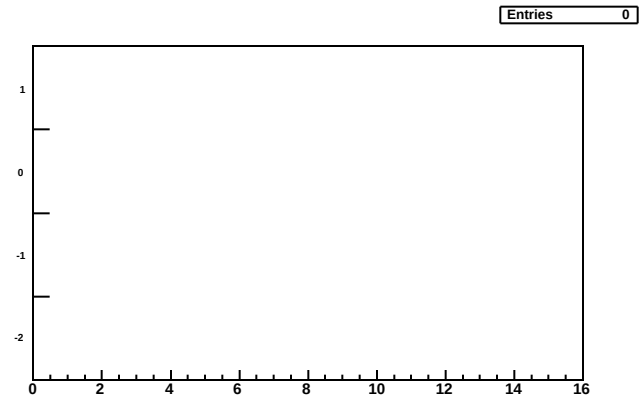
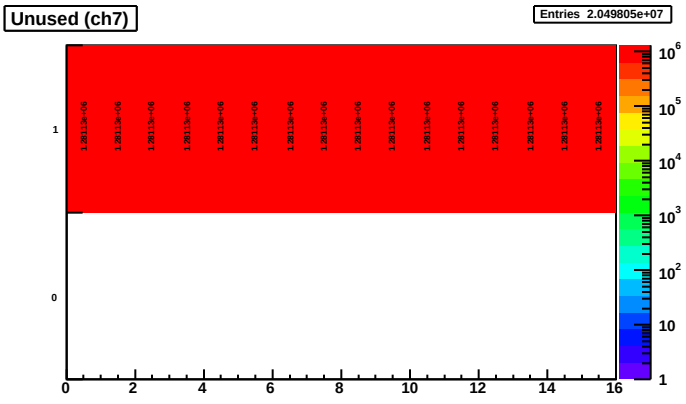
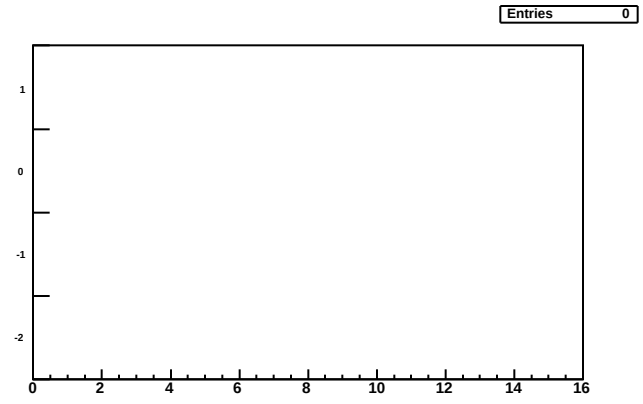


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)