

Felix Timing synchronization

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July 20 2023

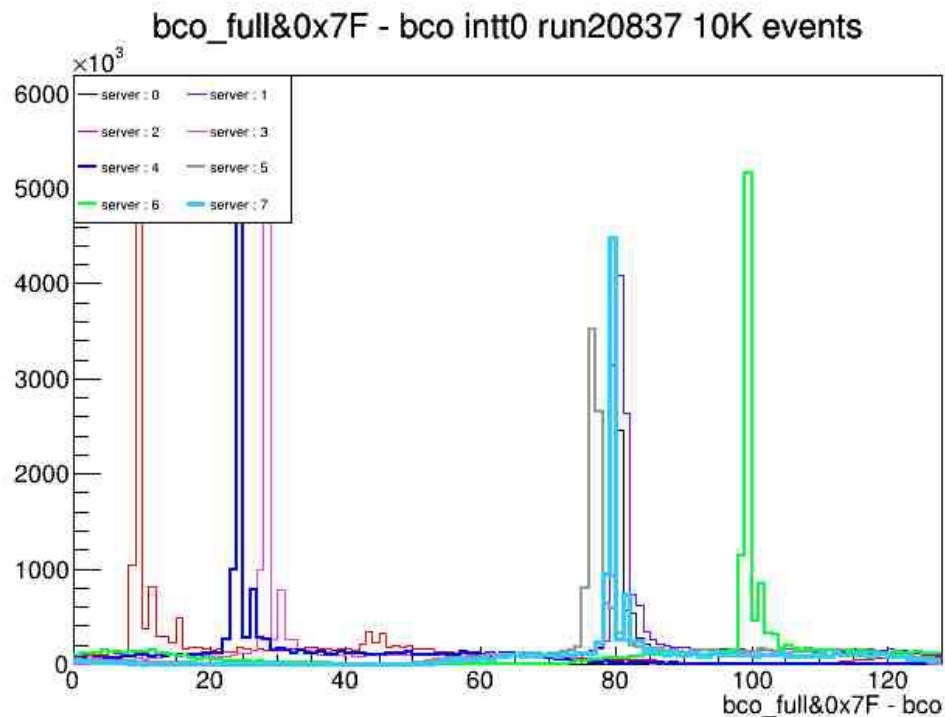


Felix Time-in (7/7)

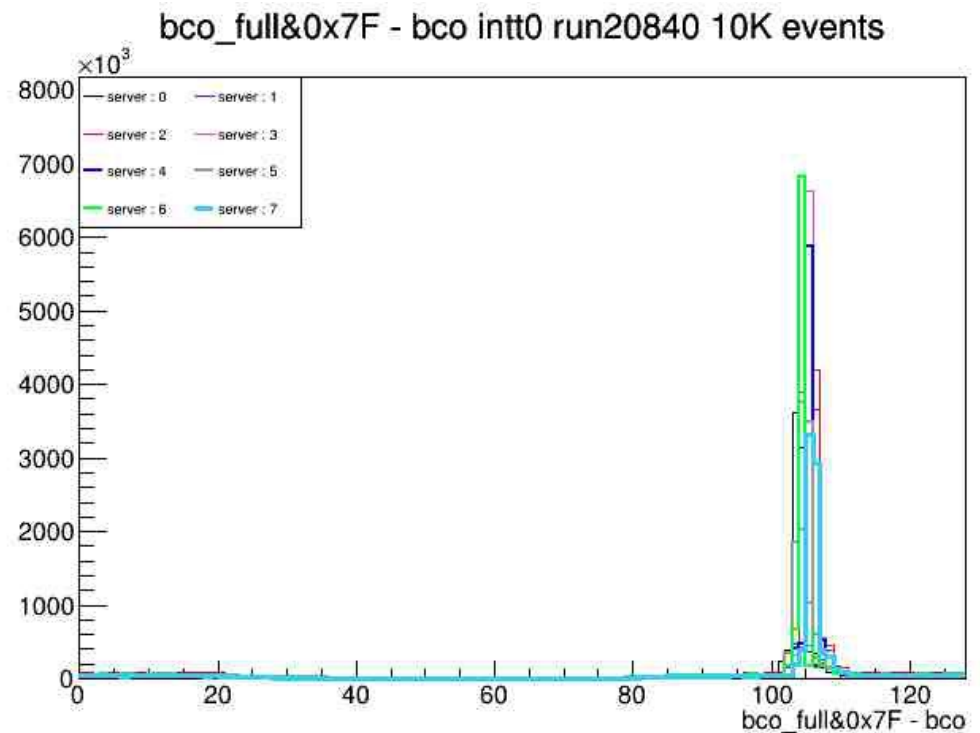
Two symptoms at time-in issue

1. Felix time (BCO_Full – BCO) was spread out -> **Solution : Felix firmware update**
2. Inconsistent between global and local mode

Run 20837
GLOBAL mode



Run 20840
LOCAL mode

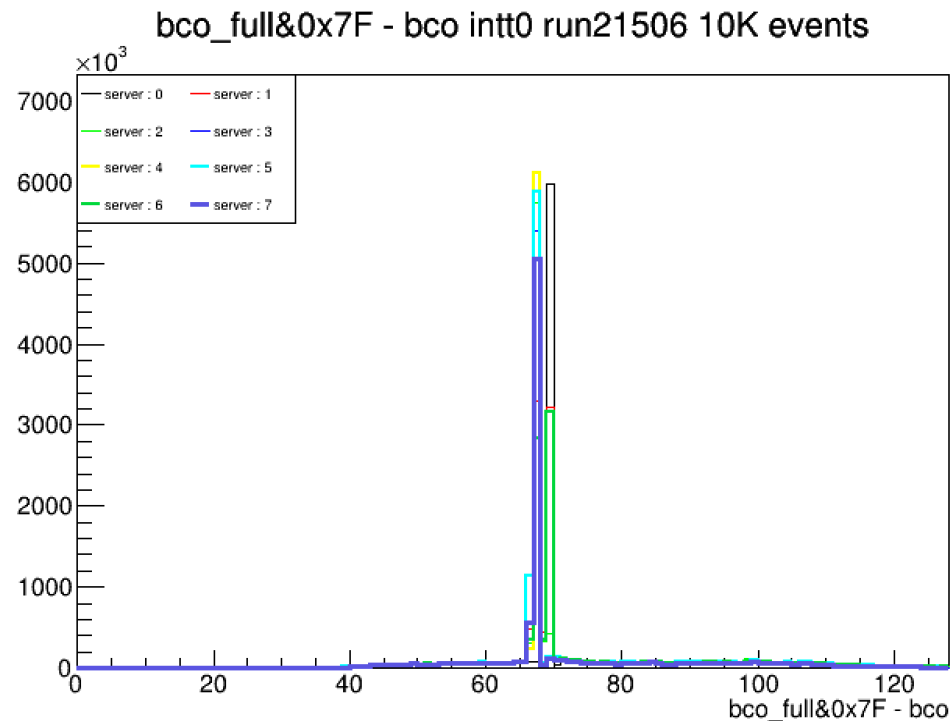


Felix Time-in (7/14)

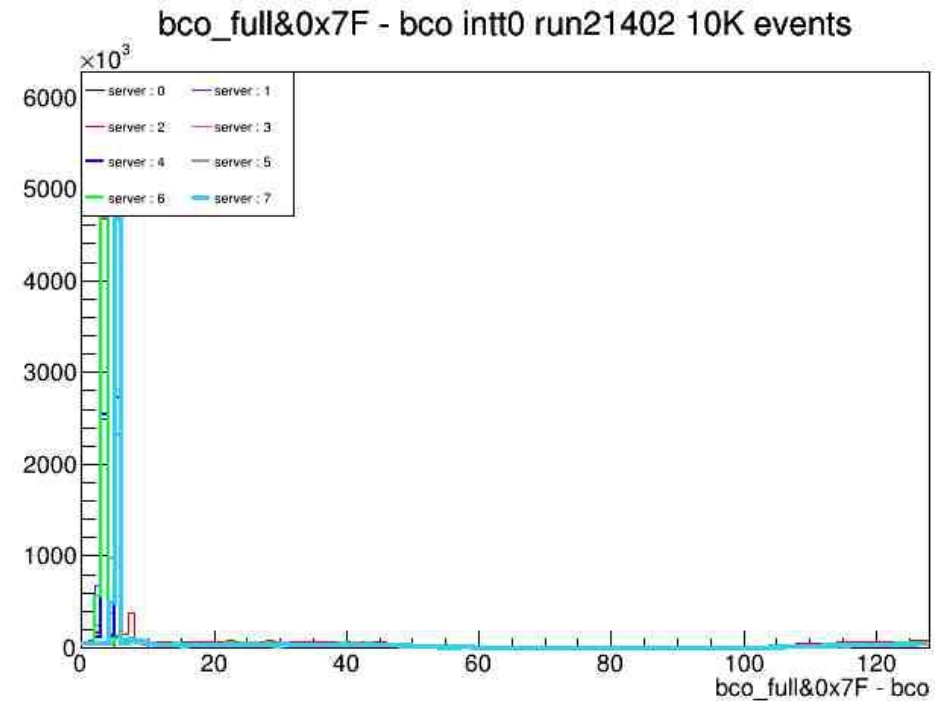
Two symptoms at time-in issue

1. Felix time (BCO_Full – BCO) was spread out -> **Solution : Felix firmware update**
2. Inconsistent between global and local mode -> **Solution : modebit scheduler update**

Run 20506
GLOBAL mode

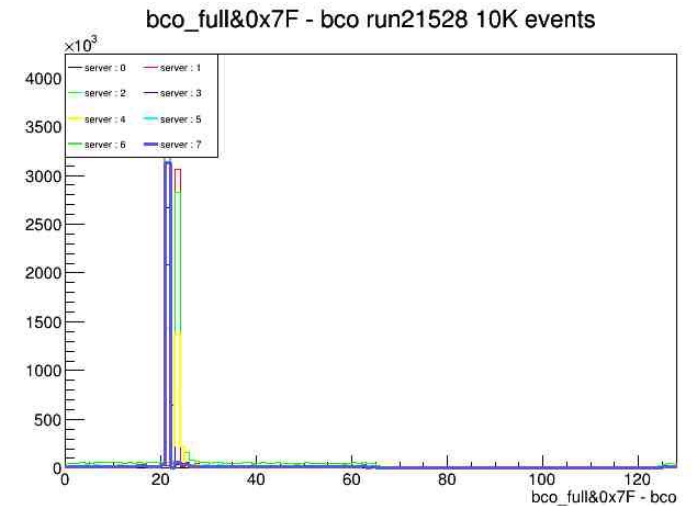
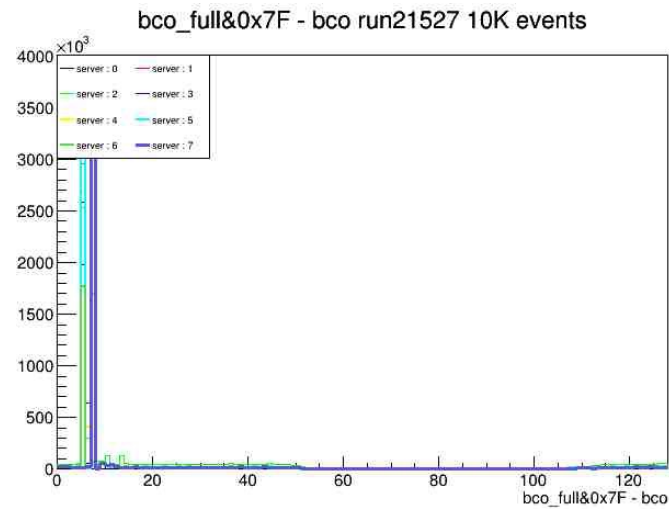
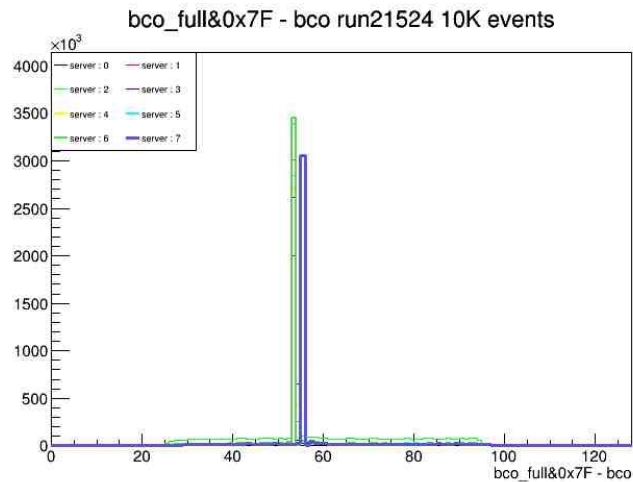
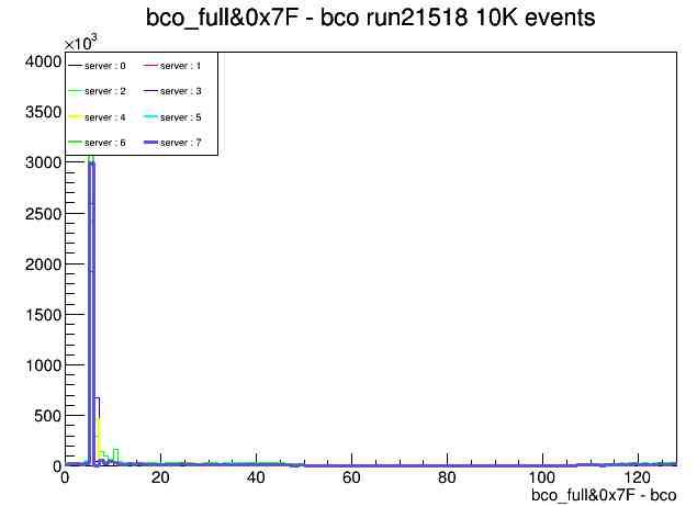
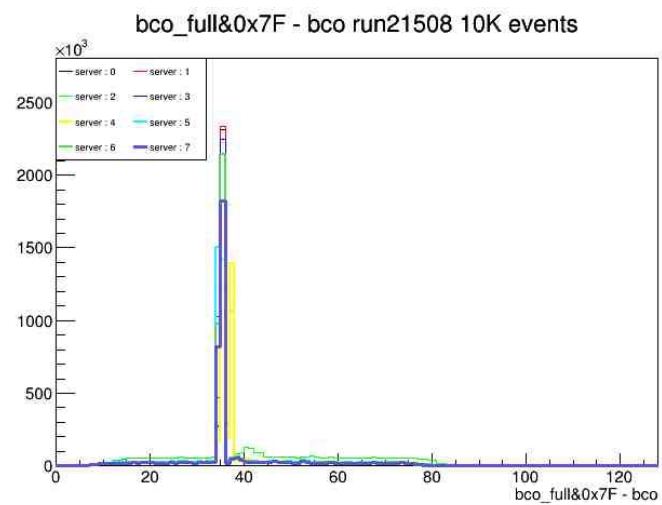
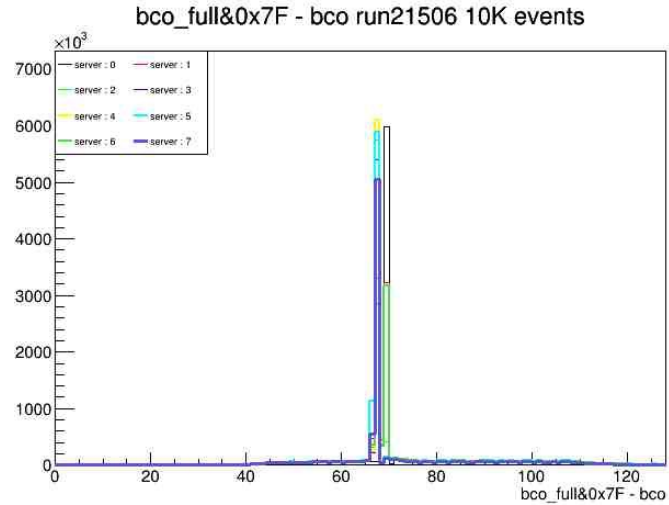


Run 21402
LOCAL mode



Felix Time-in (7/14)

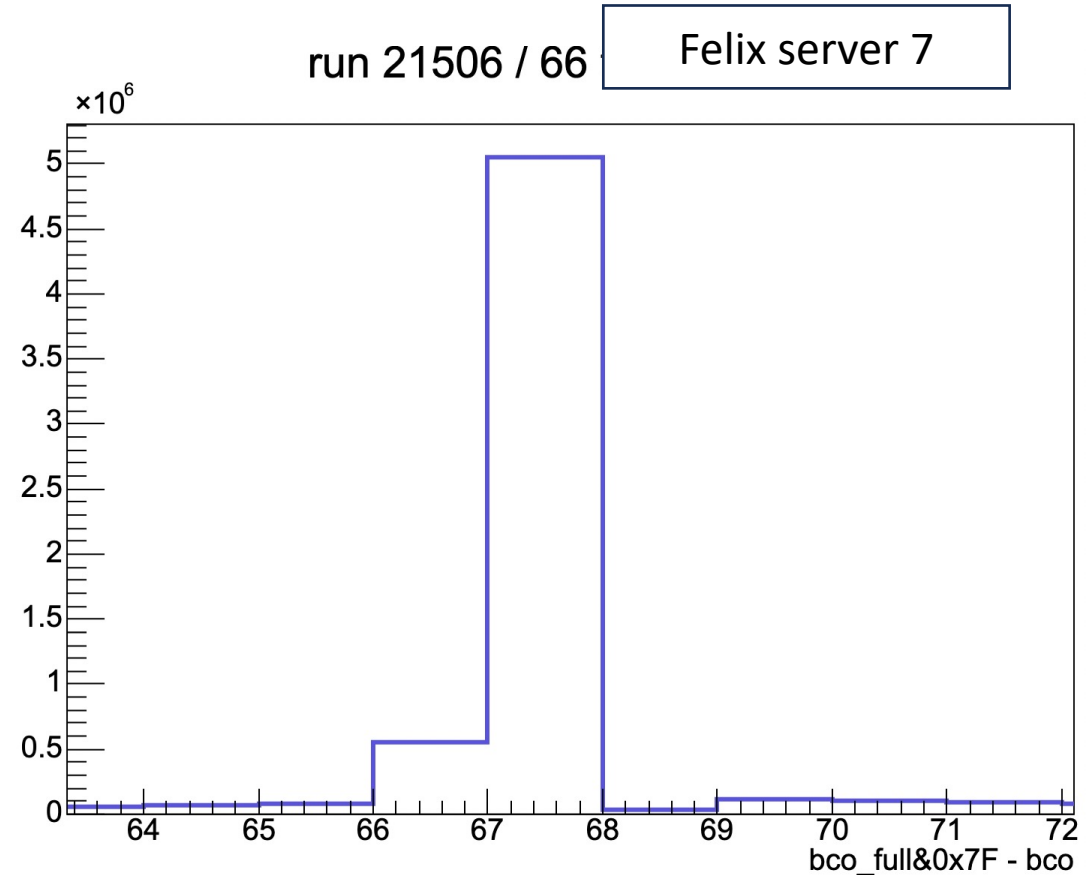
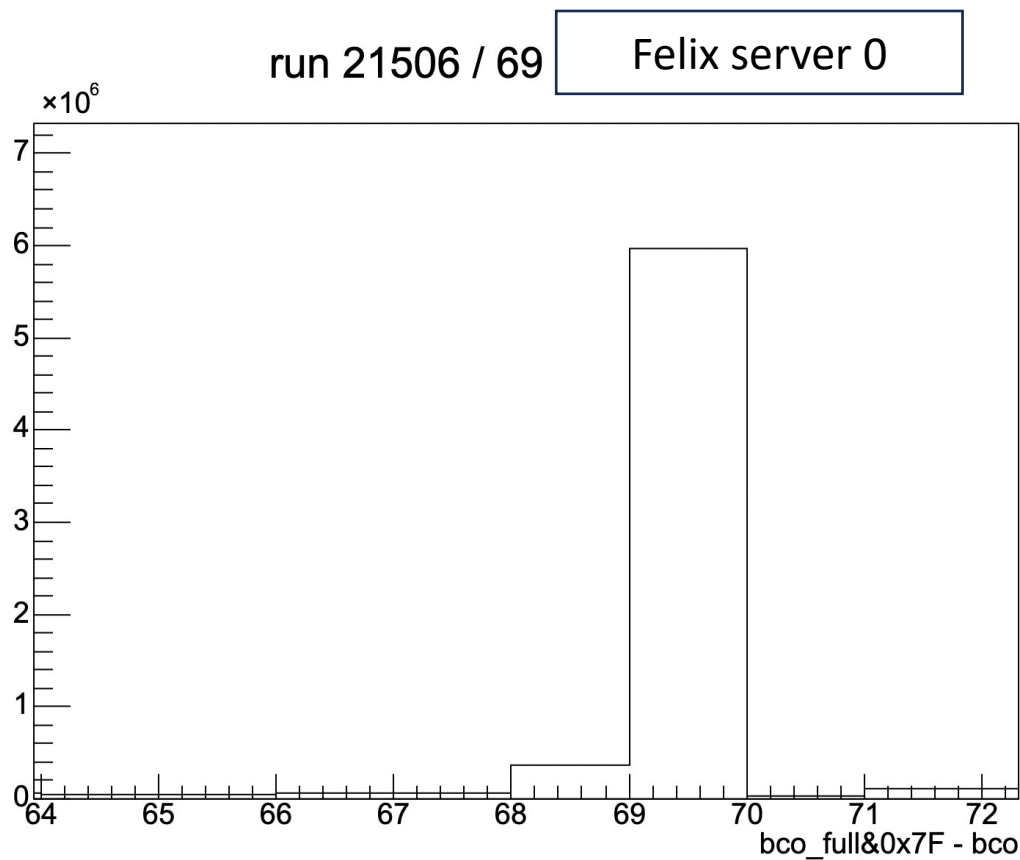
(7/14) Data for DAC scan **Several times they were successfully aligned within ~4BCK in stable!**



Cause of wide BCK(1)

Our final goal is Time-in within 1BCK (Now 3~4BCK)

Same run ; Felix servers were slightly misaligned

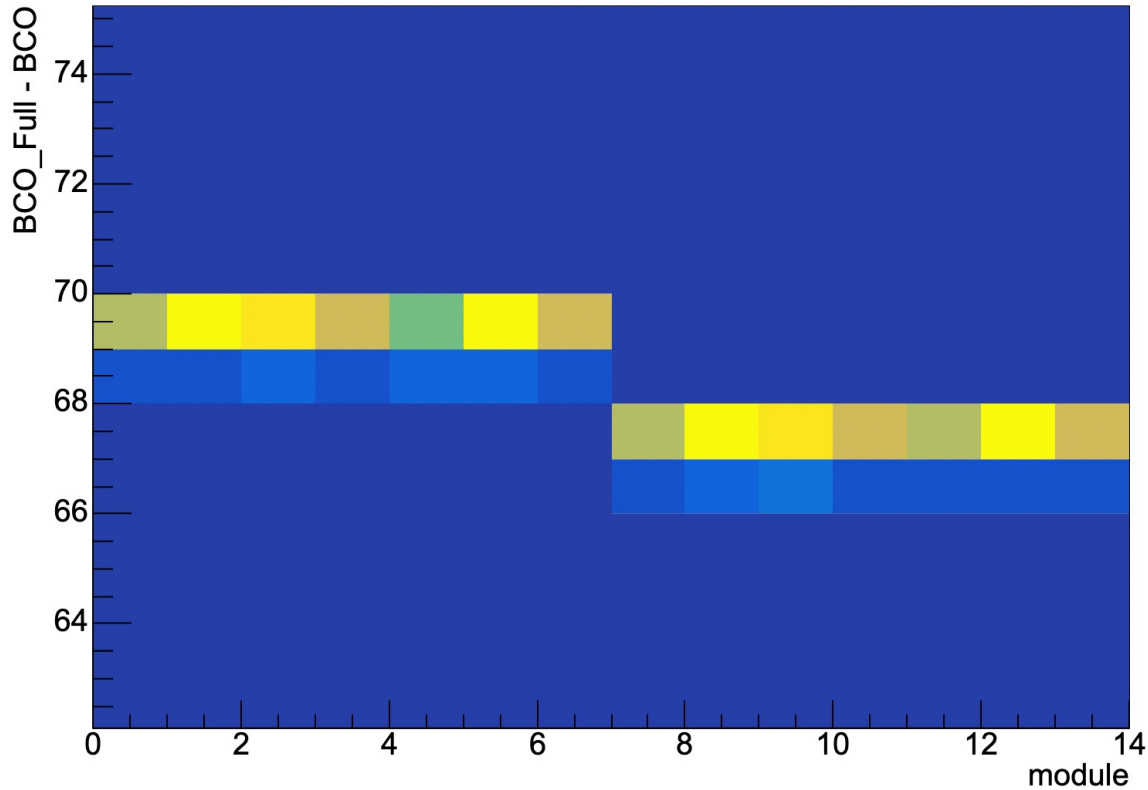


Cause of wide BCK(2)

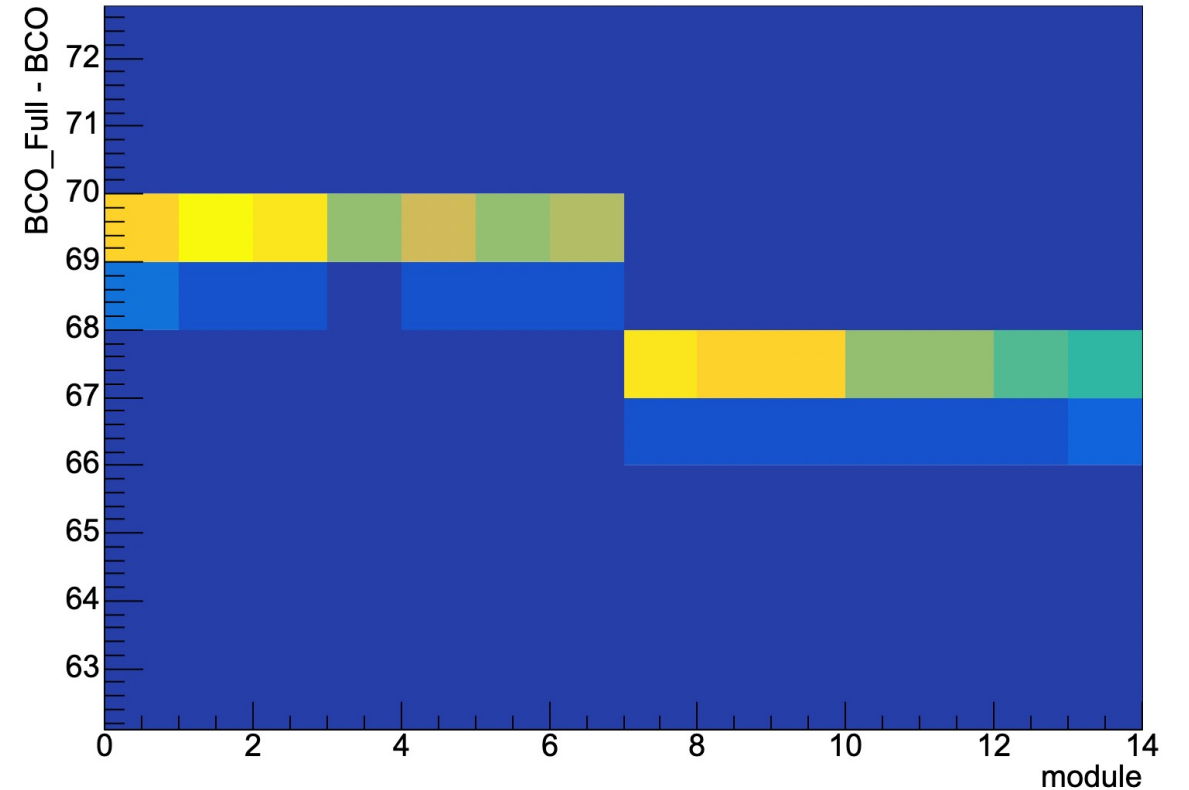
Our final goal is Time-in within 1BCK (Now 3~4BCK)

Same run & same server ; ROCs were slightly misaligned

run 21506 felix 1 roc diff 2



run 21506 felix 6 roc diff 2



Cause of wide BCK(3)

Our final goal is Time-in within 1BCK (Now 3~4BCK)

Same run & same server & same ROC modules were slightly misaligned!

Only at the INTT2 module 11~14

run 21506 felix 2 roc diff 0

