INTT Weekly Meeting

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OnlMon Progress

- Development has been rapid
- New Utilities to help with timing
- Simplified existing features for shift crew

For the following plots:

- Produced offline by running my fork over 3 .evt files for the same run (41021)
  - Why only 3 of 8 plots appear on the following TCanvases
- Relatively small amount of events (10k) are used
- These are plots I made for debugging appearance/functionality
- These particular plots aren't to showcase specific data

I am actively maintaining documentation for sPHENIX:
https://docs.google.com/presentation/d/1iV-k1I0l8kT3d_mqpiimqt_m2_Nbm3NDSp_lPGnyCJA/edit?usp=sharing
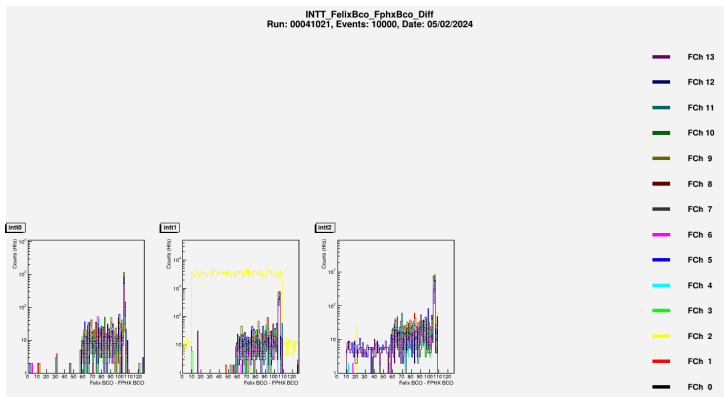
Figure: Felix BCO - FPHX BCO drawing feature. Histogram is timing difference between Felix BCO and FPHX BCO. Each Felix server gets its own subplot. Each Felix channel gets its own histogram. Used for seeing peak and plateau.

Peaks
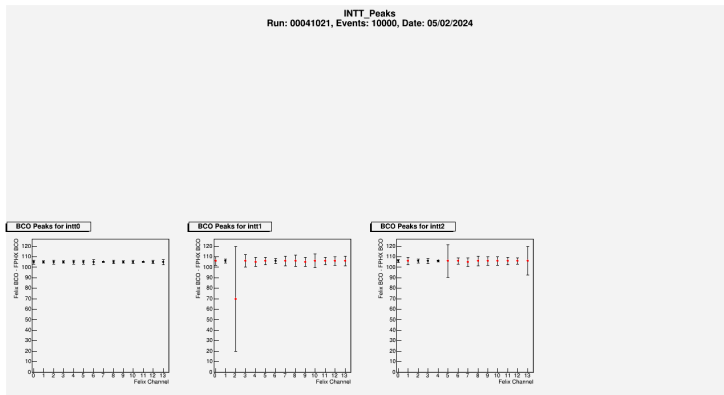
Figure: Easier to read feature to verify timing. Points are positions of BCO peak in preceding plot. Errors are number of bins with 0.035% of the max bin. Each Felix server gets its own subplot. Each Felix channel is a single point. Used just for seeing peaks.
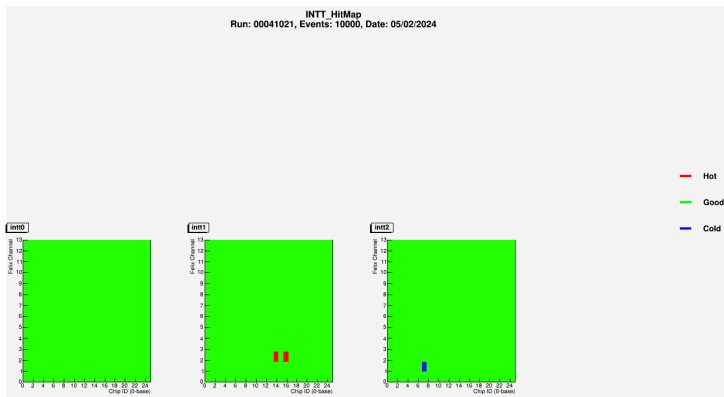
Figure: Completely reworked from how it was before. Histogram is chip state (based on total $10^{-4} <$ hits/event $< 10^{-2}$ for that chip). Each Felix server gets its own subplot. Each Felix channel gets its own histogram.

Summary

- Working versions are already merged (yesterday)
- Due to timing scans and problems with other subsytems' monitors, haven't been tested yet
- Am still improving and refining–another PR is almost ready to be submitted
  - Adding additional feature to draw hitrate distribution
  - Adding additional text showing if there is not enough events for statistical significance