

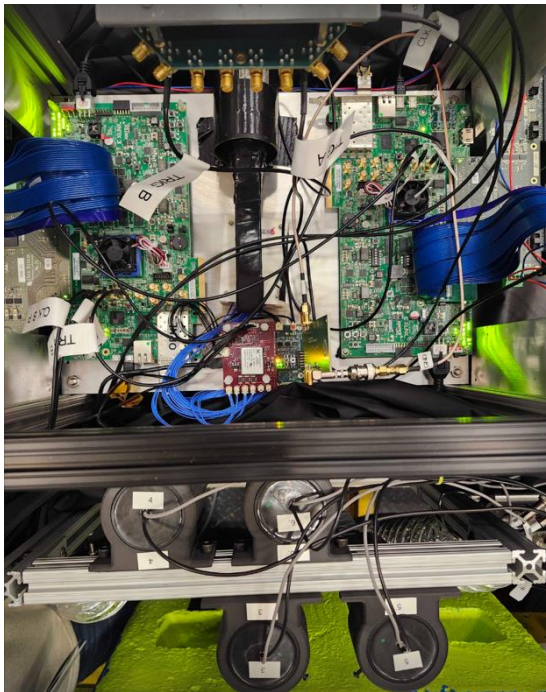
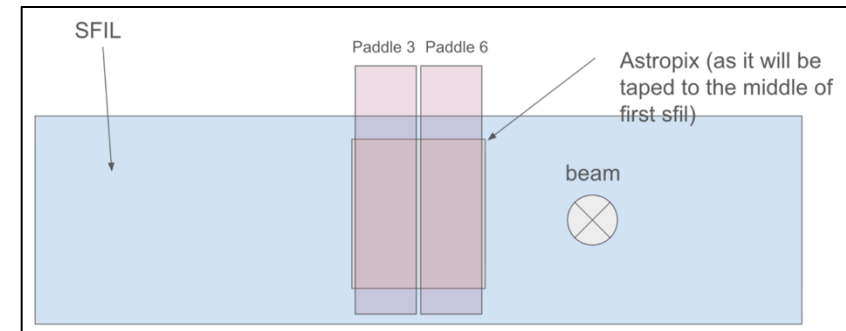
Hall D Beam Test Daily Meeting

2026/4/2

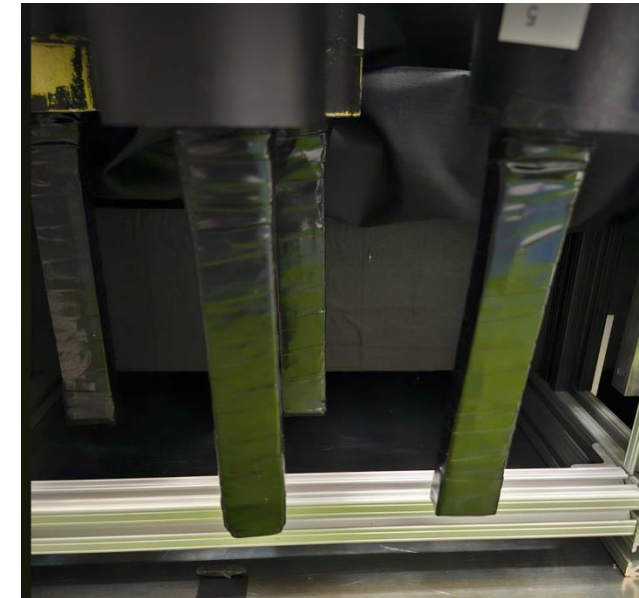
Bobae Kim

Updates (1)

- Hall D RC meeting
 - No updates on beam date (4/16); same as Monday meeting
- Update from yesterday
 - Jared/Bokyung/Junhyung;
 - Measure all dimensions
 - Jared will update drawing with measurements
 - Adjust paddle positions for 'beam mode'

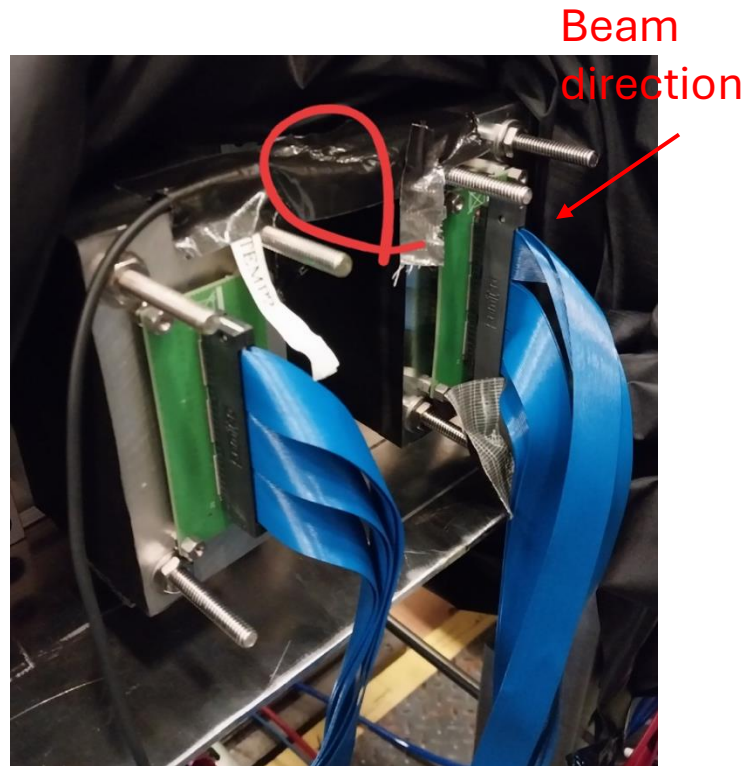
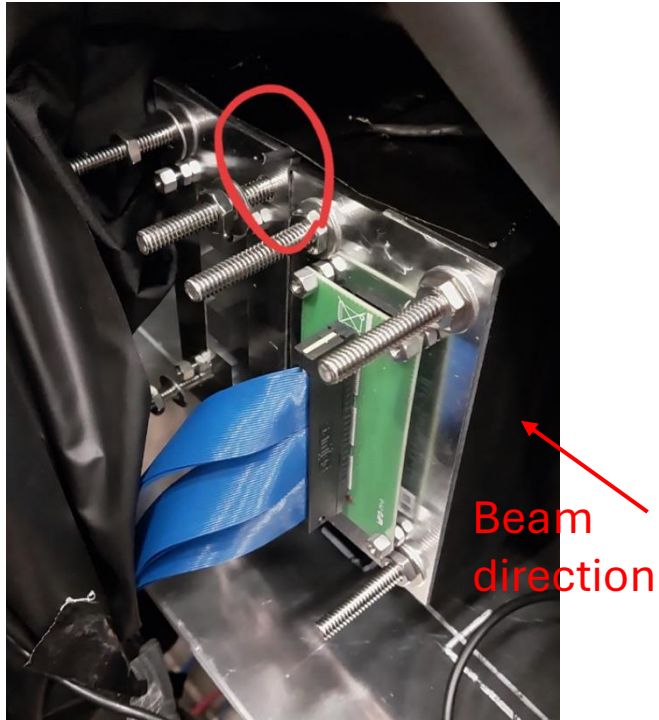


Beam
direction ↑



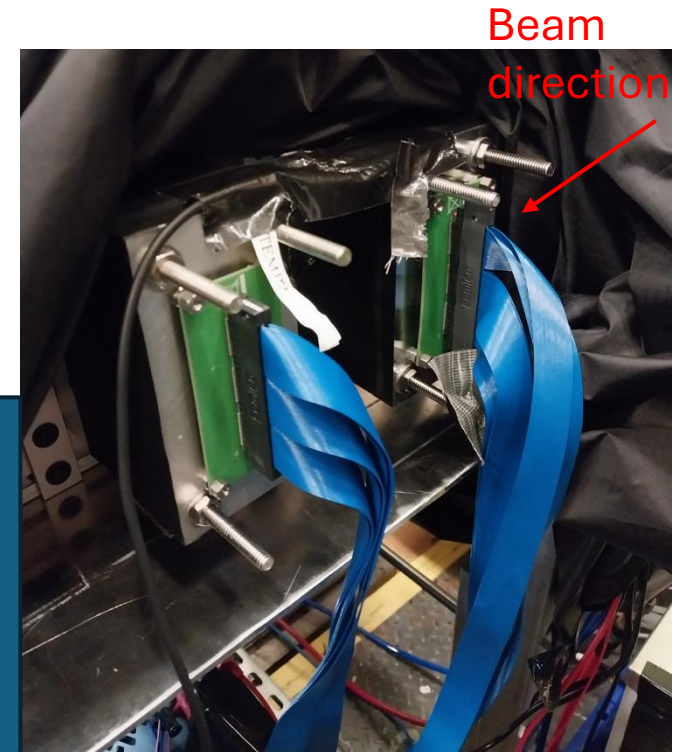
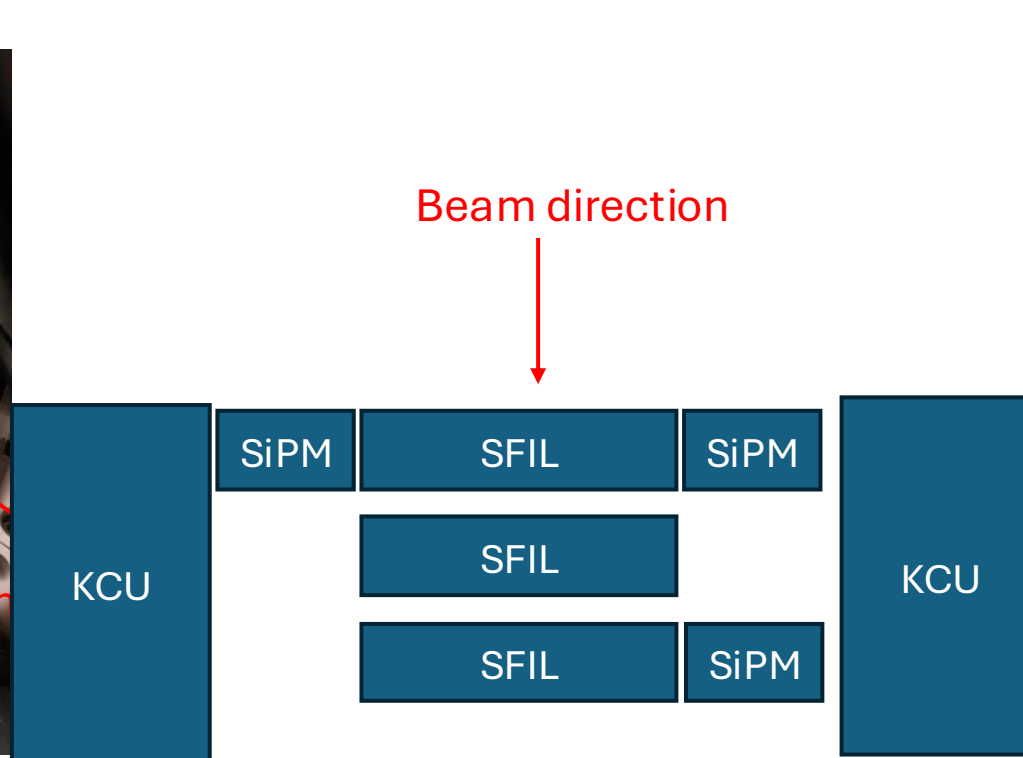
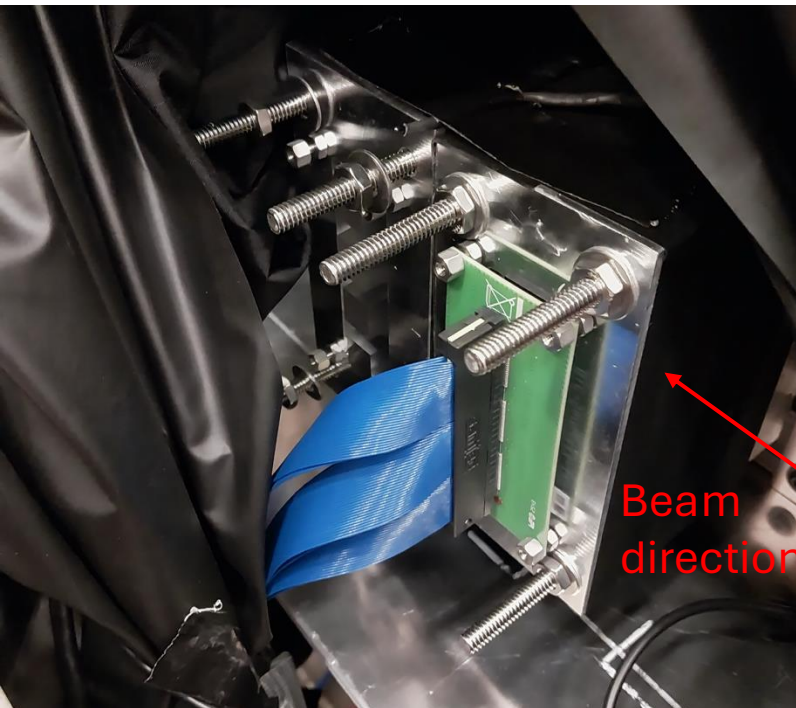
Updates (2)

- Hall D RC meeting
 - No updates on beam date (4/16); same as Monday meeting
- Update from yesterday
 - Bokyung/Junhyung/Minsup
 - Install temp. sensor on 2nd SFIL both side
 - Jongwon made temp. sensor work in carbon.

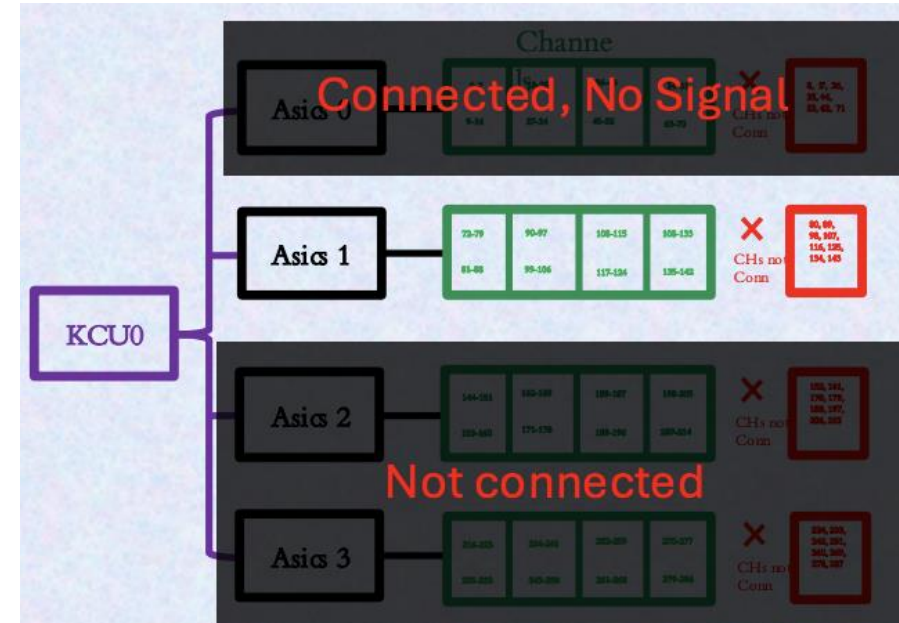
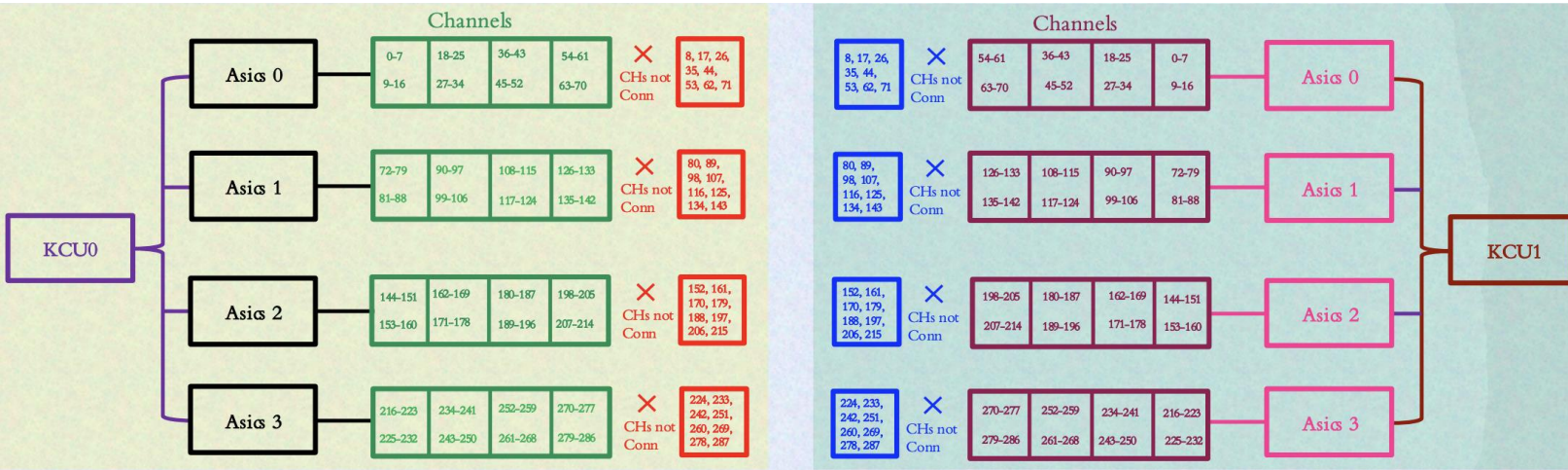


Plan before beam mode

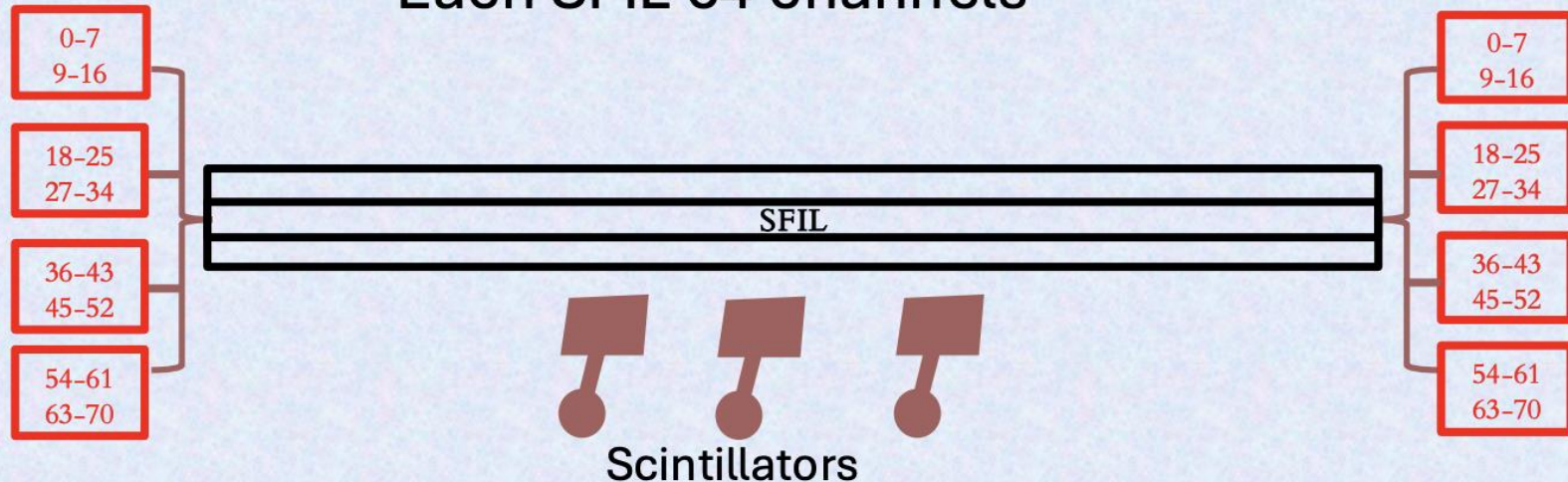
- Cosmic-ray
 - Check h2gcroc channel mapping information each SFIL for online-monitoring
 - Check synchronization between h2gcroc and AstroPix using FPGA timestamp (as well as CAEN)



From Olaiya's slide (http://localhost:13666/ePIC_BIC/542)



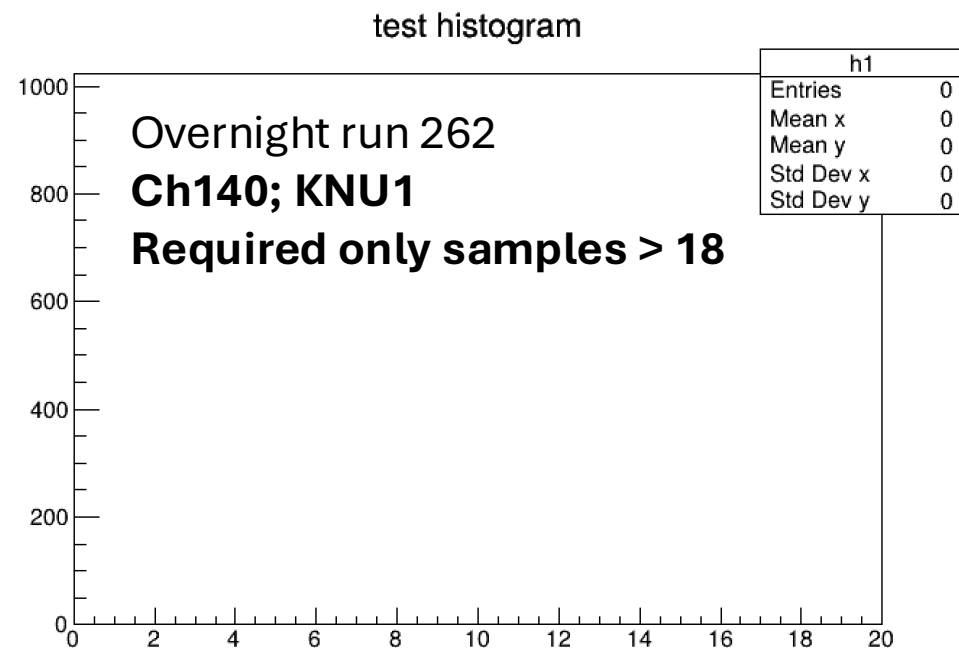
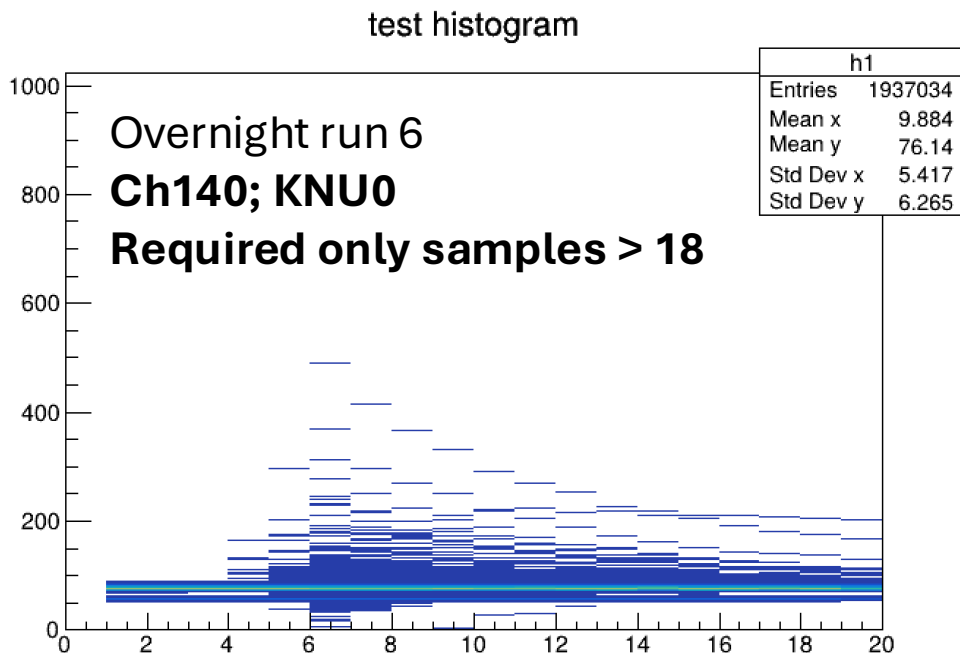
4 lightguides in each SFILS
 Each lightguide 16 channels
 Each SFIL 64 channels



All samples analyzed up until now have 0-71 pedestal (connected but no signal) channels, 72-143 (connected with signal) channels, and others were not connected.

Plan for sync.

- Synchronization between h2gcroc and AstroPix using FPGA timestamp
 - Updated h2gcroc bit file to use external clock
- Before this, need H2GCROC mapping information corresponding to the SiPMs in the SFIL.
 - Check **h2gcroc events with MIP signals** using waveform and check **their FPGA timestamps**
 - Compare them with the **AstroPix FPGA timestamps** to confirm whether they correspond to the same cosmic-ray event.
- Current issue on h2gcroc
 - No event with **samples > 18**; **only delivers < 4 samples (known issue)** → can't find MIP signal ☹️



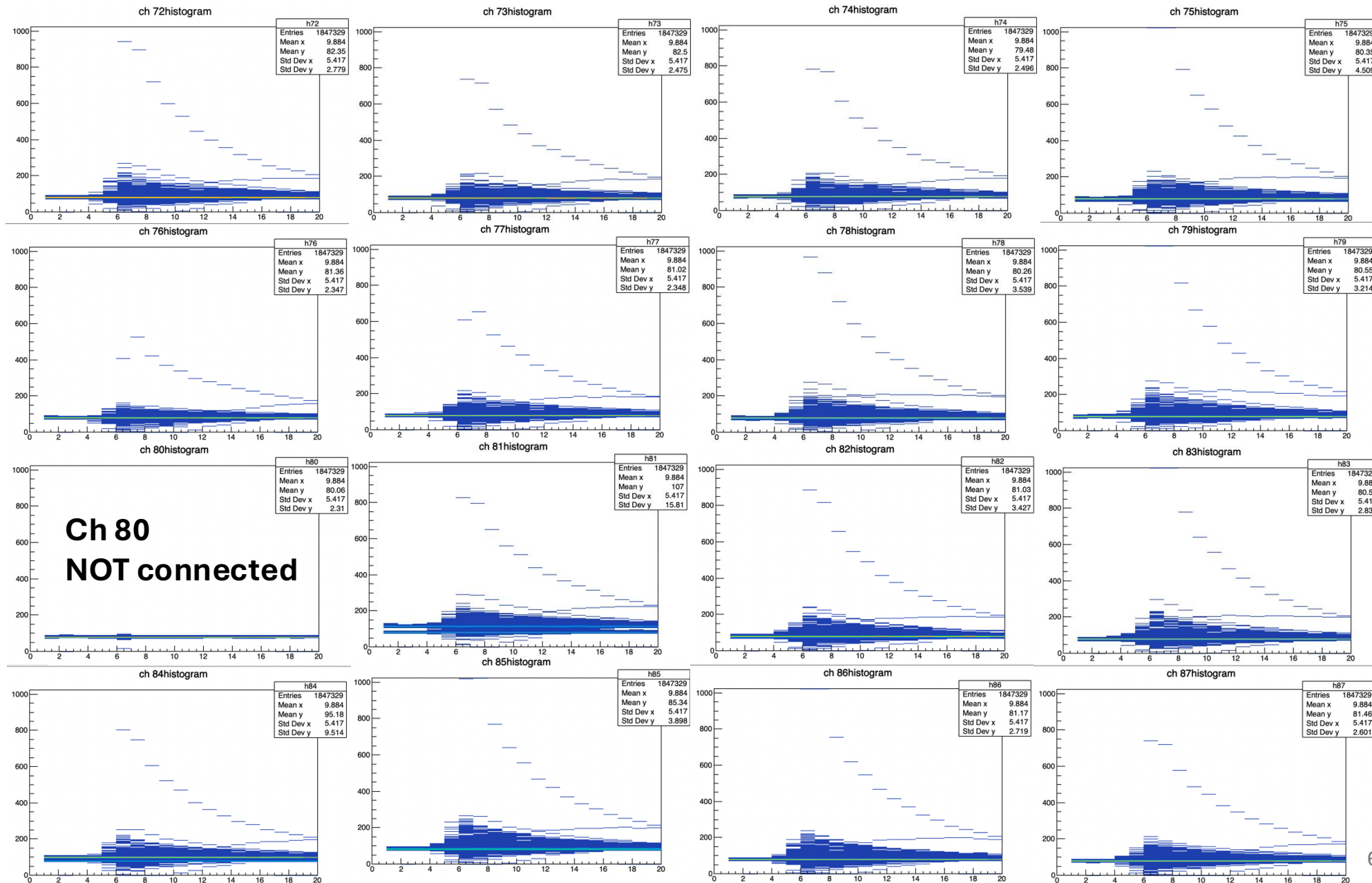
Run 6 KCU0; Required only sample > 18 (1)

Ch 72 ~ 87

cosmic

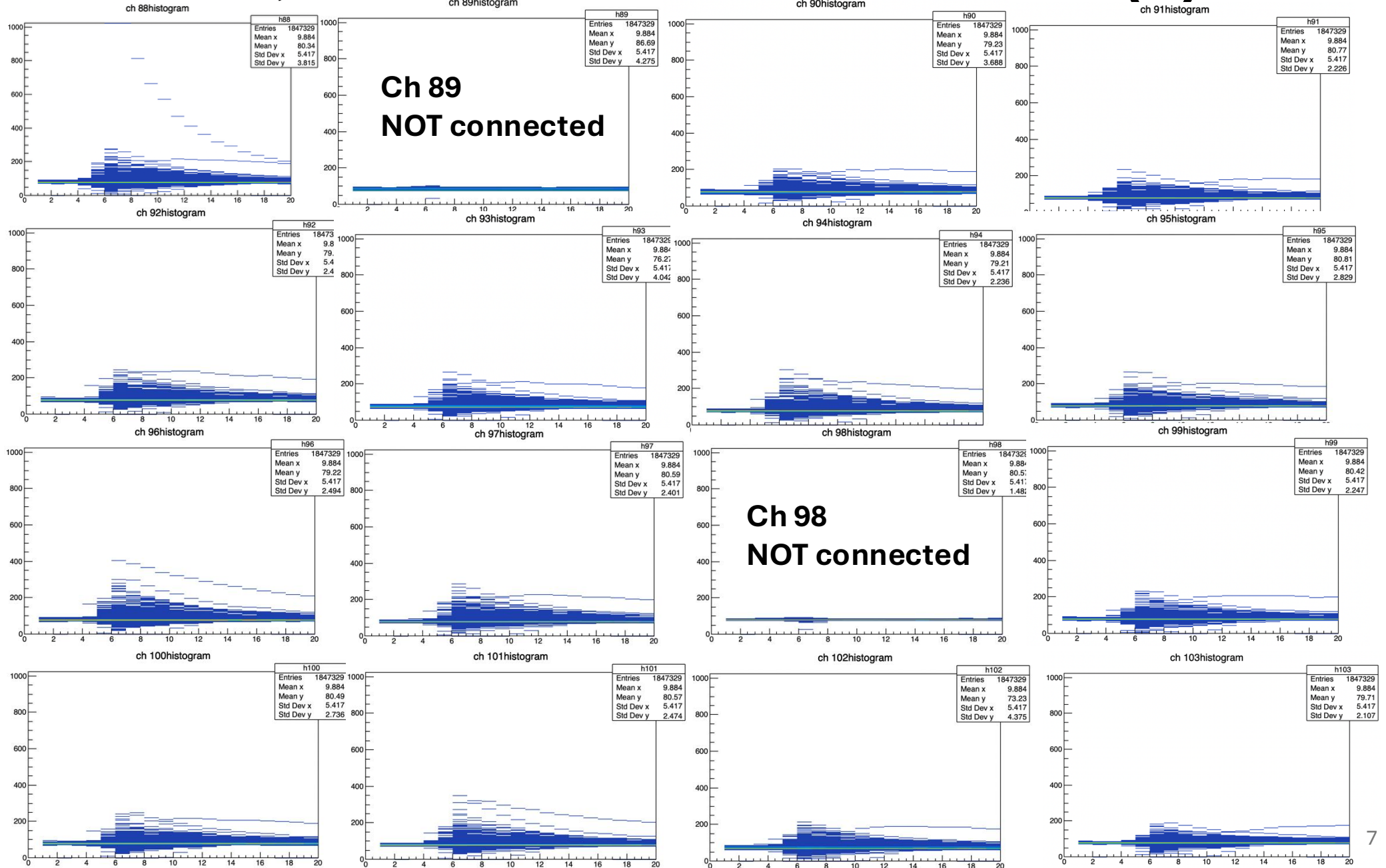
SFIL

4 LGs
+
4 SiPMs



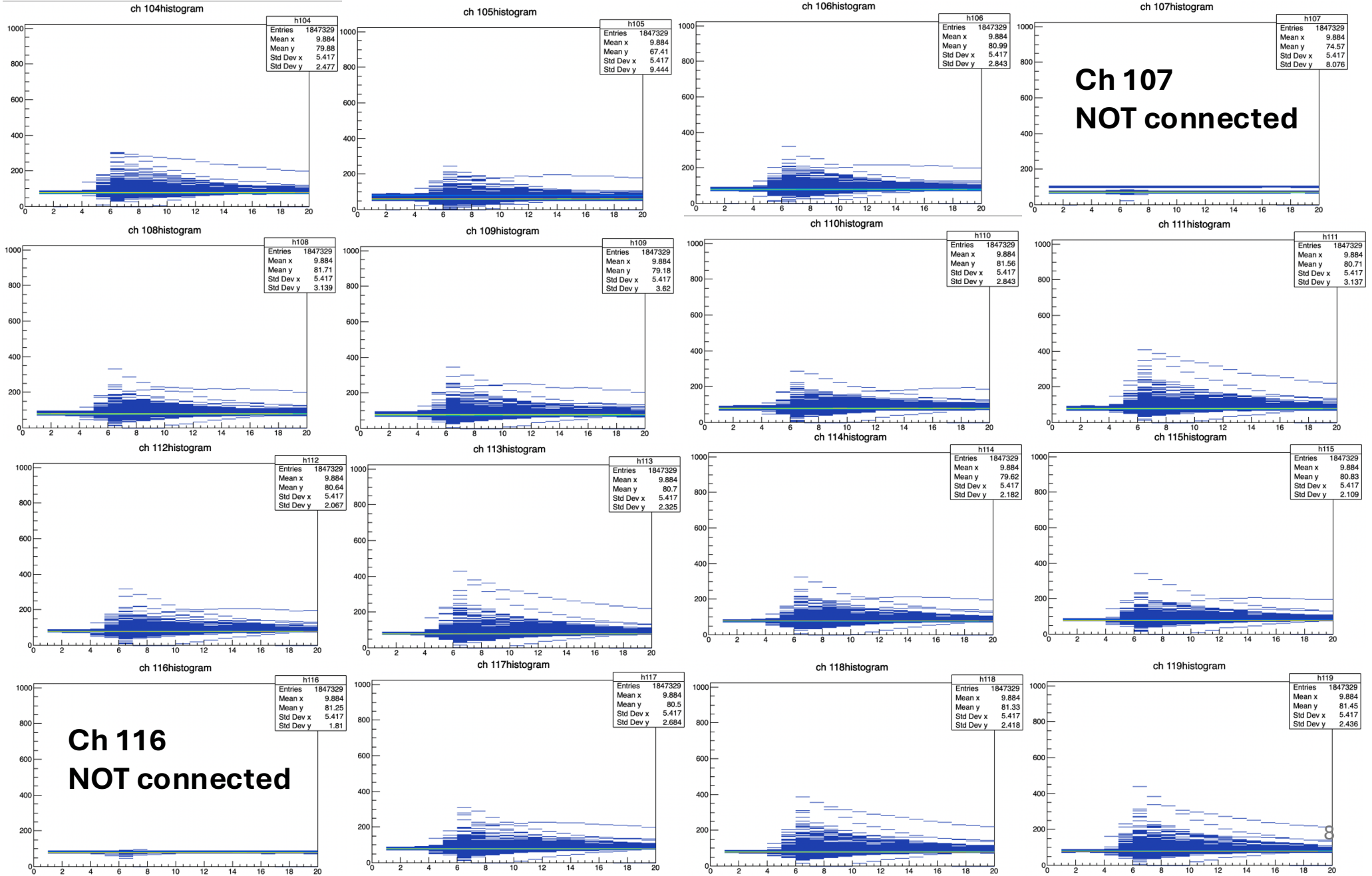
Run 6 KCU0; Required only sample > 18 (2)

Ch 88~103



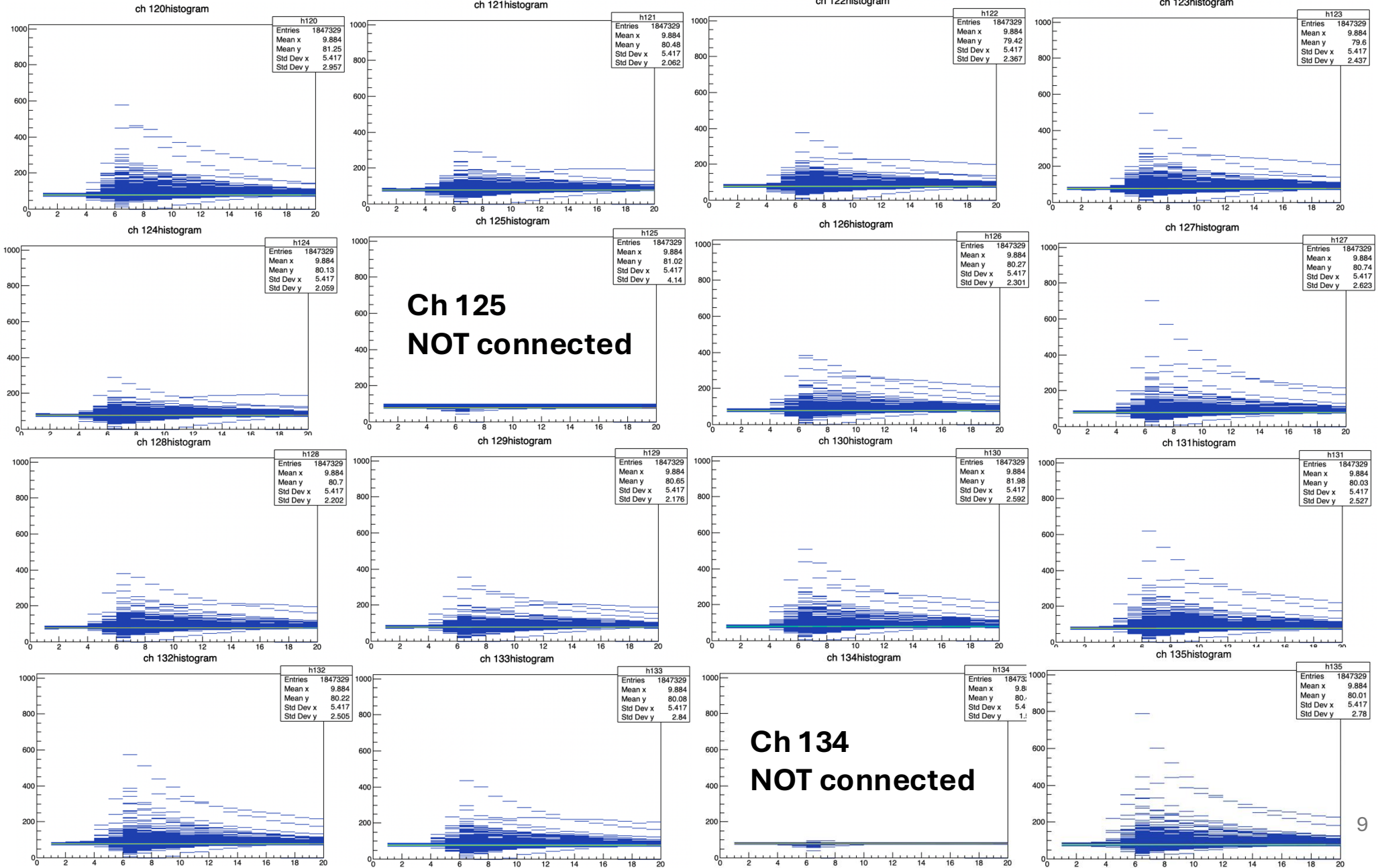
Run 6 KCU0; Required only sample > 18 (3)

Ch 104~119



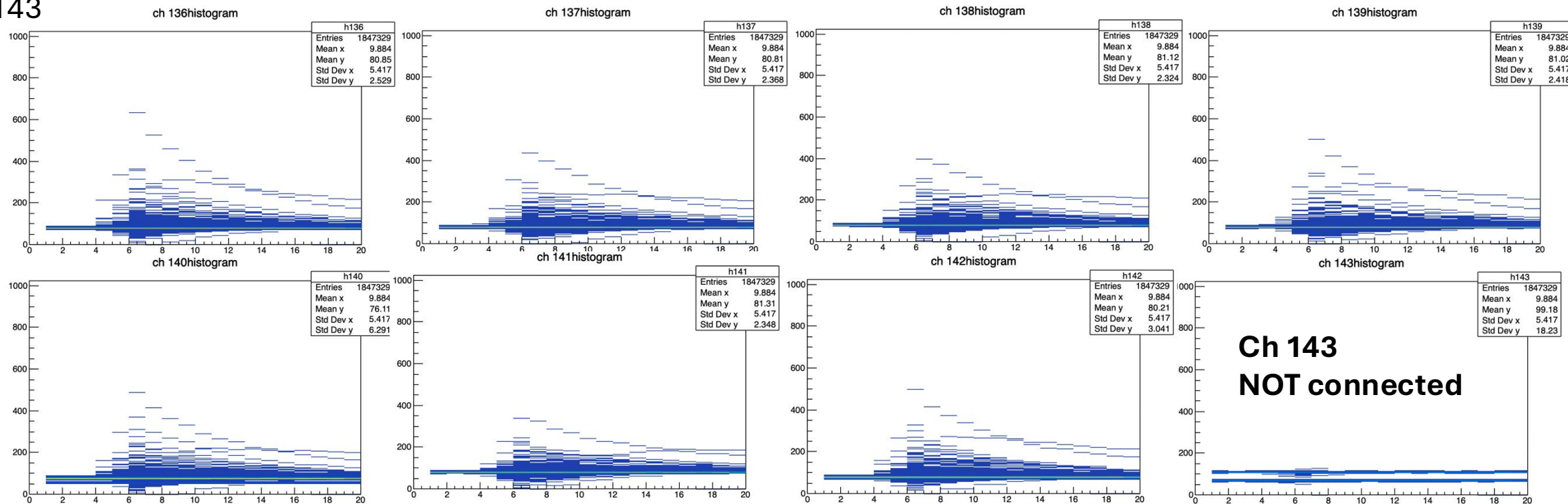
Run 6 KCU0; Required only sample > 18 (4)

Ch 120~135



Run 6 KCU0; Required only sample > 18 (5)

Ch 136~143



→ Total 64 channels (4 SiPM*16 array)

→ Confirmed that

- CH80, 89, 98, 107, 116, 125, 134, 143 are not connected.
- same as Olaiya's slide.

