

Weekly Meeting 2025.10.29

- ❑ CDC:
 - ❑ Why does the current of SL1 become so high?
- ❑ Test Chamber
 - ❑ Trying Tracking
- ❑ To do

Investigation of Current Increase (~2 μ A) in CDC (especially SL1) (2025.10.22)

- Turned on the high voltage (HV) for the first time in six weeks.
- Current returned to the same level as before the cap work.
 - The gas supply had been stopped for about one month.
- Removed the aluminum cover of SL1, but the current did not change.

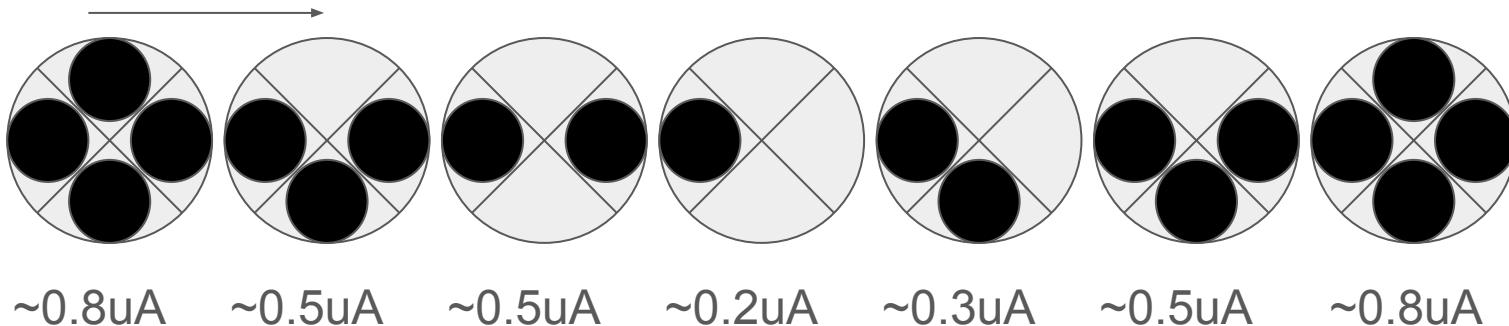
→ The cause is probably related to the **gas**.

Investigation of Current Increase (~2 μ A) in CDC (especially SL1) (2025.10.22)

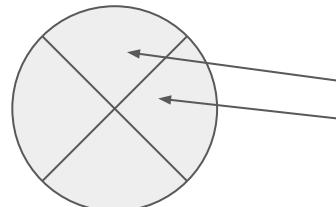
- Swapped the SHV cables between SL1 and SL2
 - The high current (up to 2 μ A) appeared on SL2 instead.
- Swapped back the SHV cables, and then swapped the **daisy-chain** cables right after the low-pass filters.
 - Again, the 2 μ A current appeared on SL2.
- Therefore, the problem is **not** in the power supply or low-pass filters, but in the **daisy chain or the CDC itself**.

Investigation of Current Increase ($\sim 2 \mu\text{A}$) in CDC (especially SL1) (2025.10.22)

- Divided SL1 into four sections and disconnected the daisy chains one by one.
 - The current did **not** decrease evenly (not $1/4$ each time), but changed asymmetrically.
 - It is still unclear how this leads to the $2 \mu\text{A}$ current spikes.



w/ daisy chain

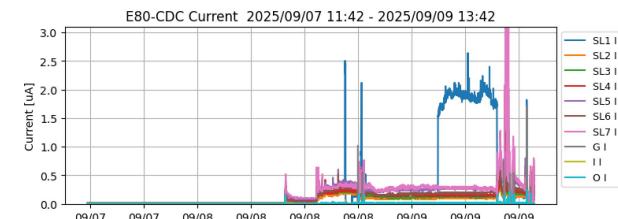
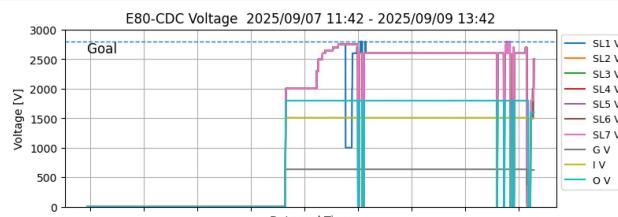


These area seems to be the trouble spot?

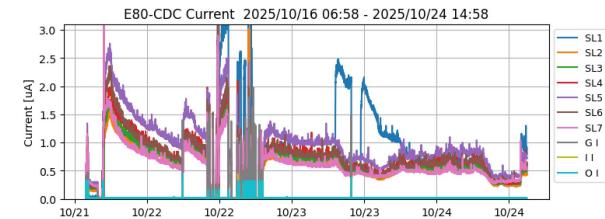
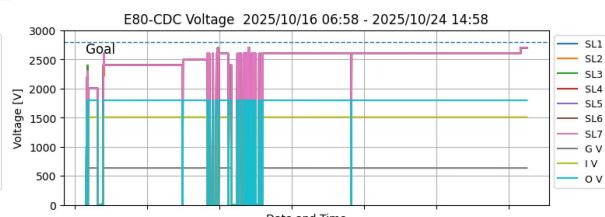
CDC Status

- The current has dropped to the same level as right after the cap work.
 - very good
 - SL1 still often becomes unstable.

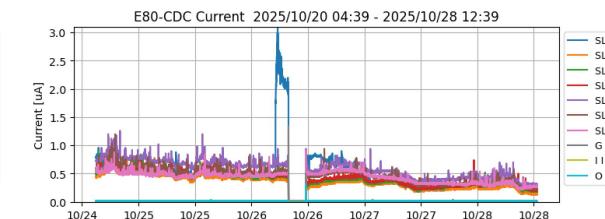
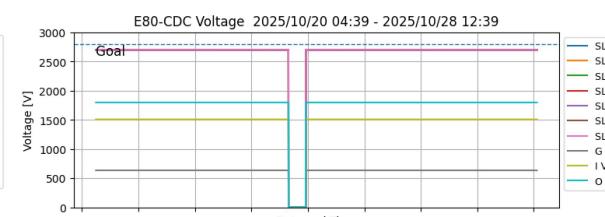
right after the cap work



last week

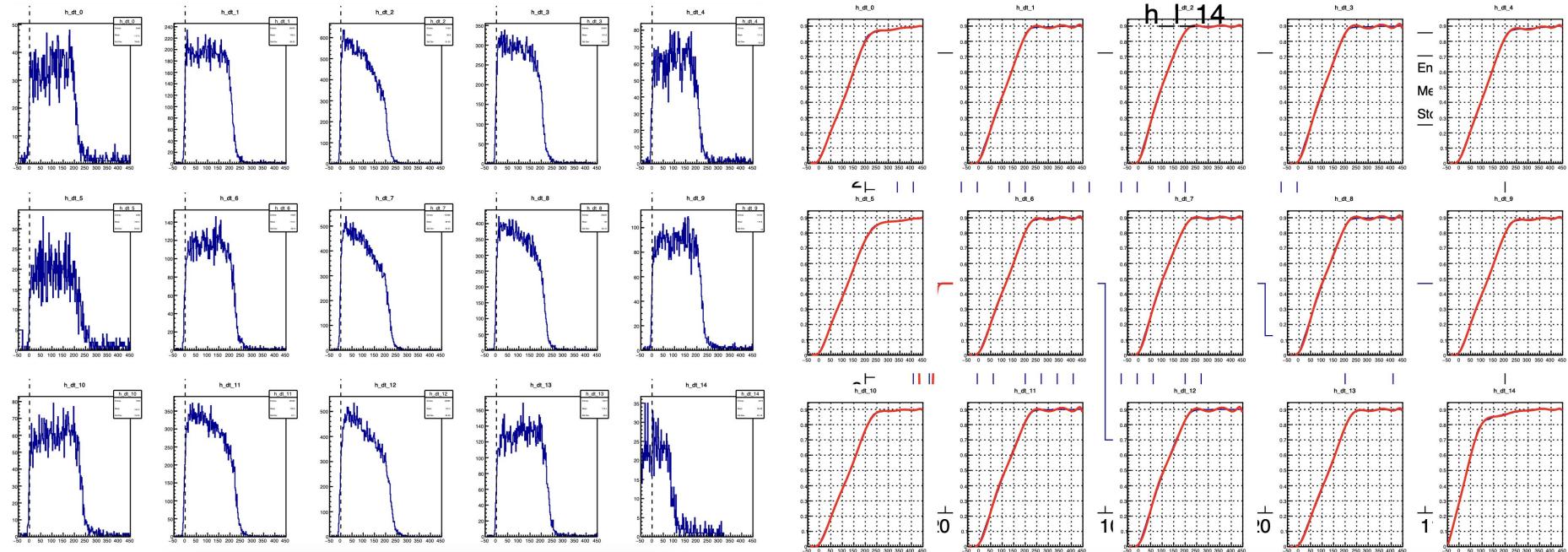


this week



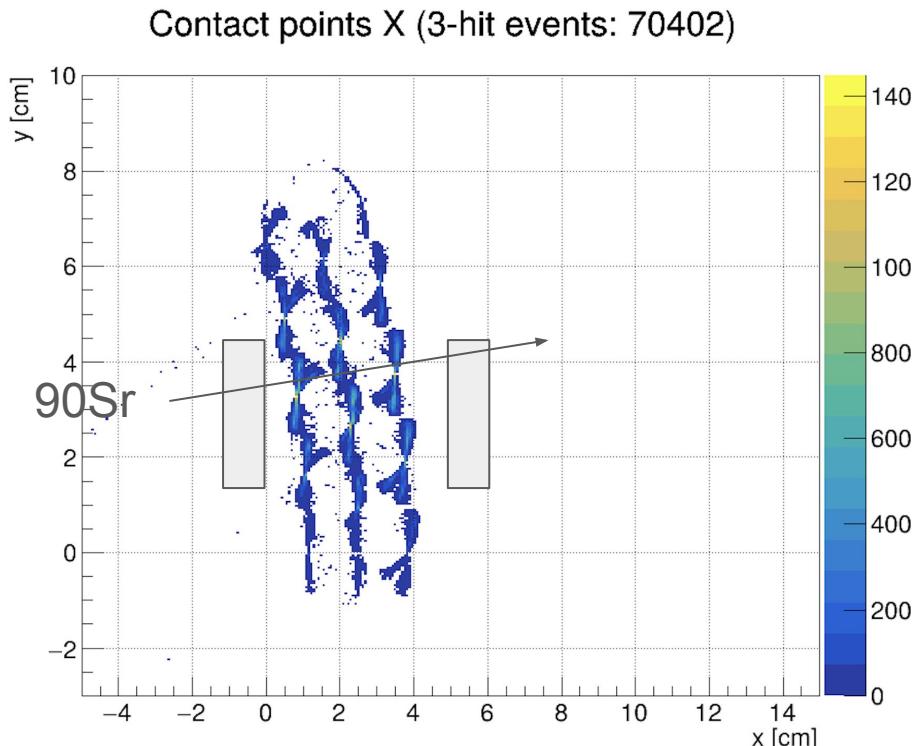
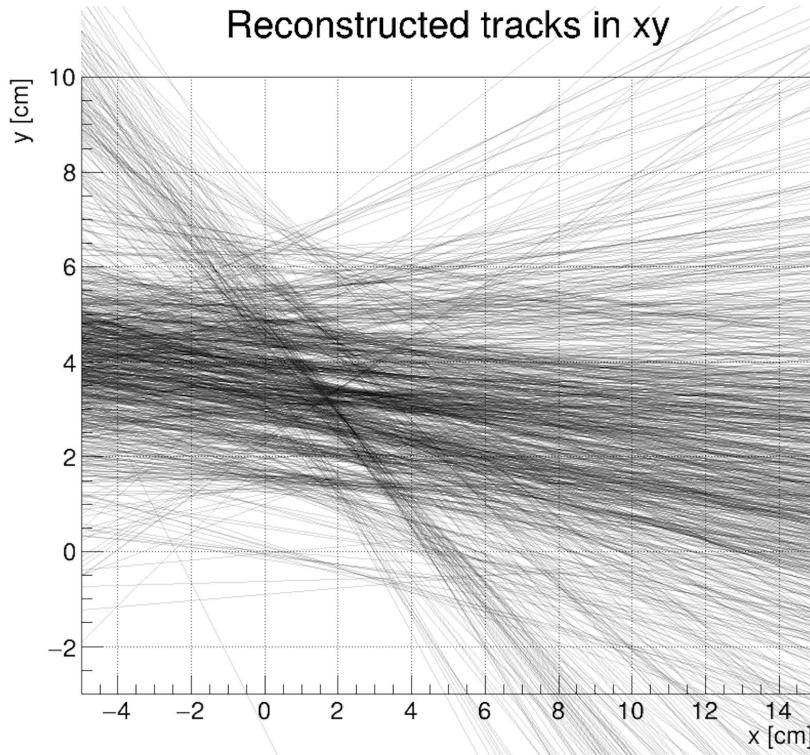
Test Chamber : Tracking, run264

- XT curve



Test Chamber : Tracking, run264

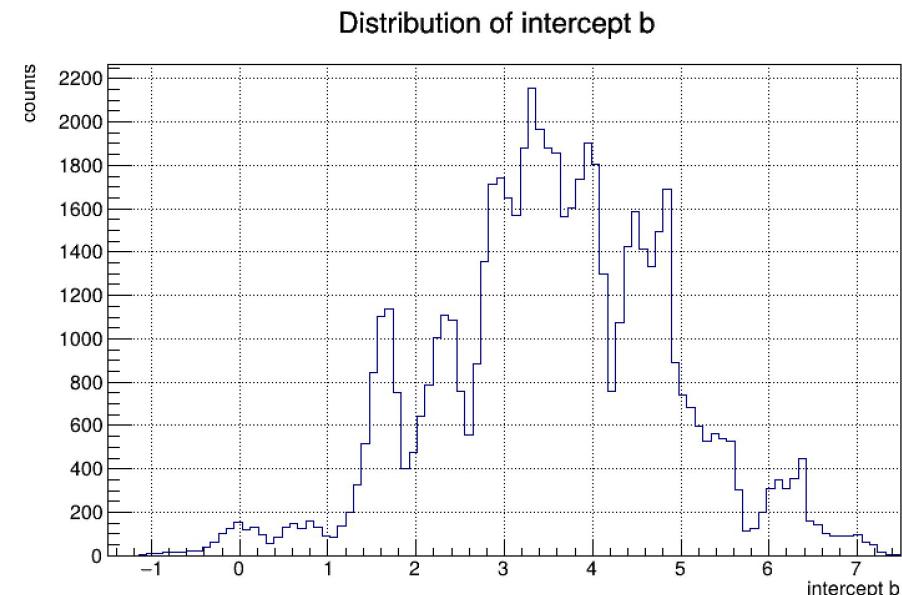
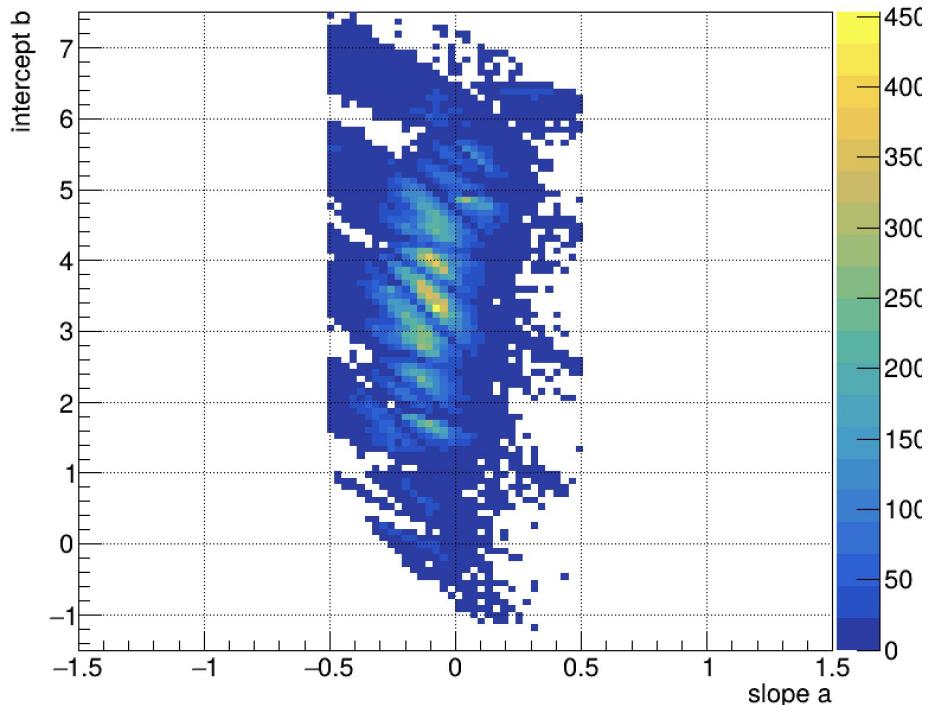
- Tracking with a single test chamber was successful(?)



Test Chamber : Tracking, run264

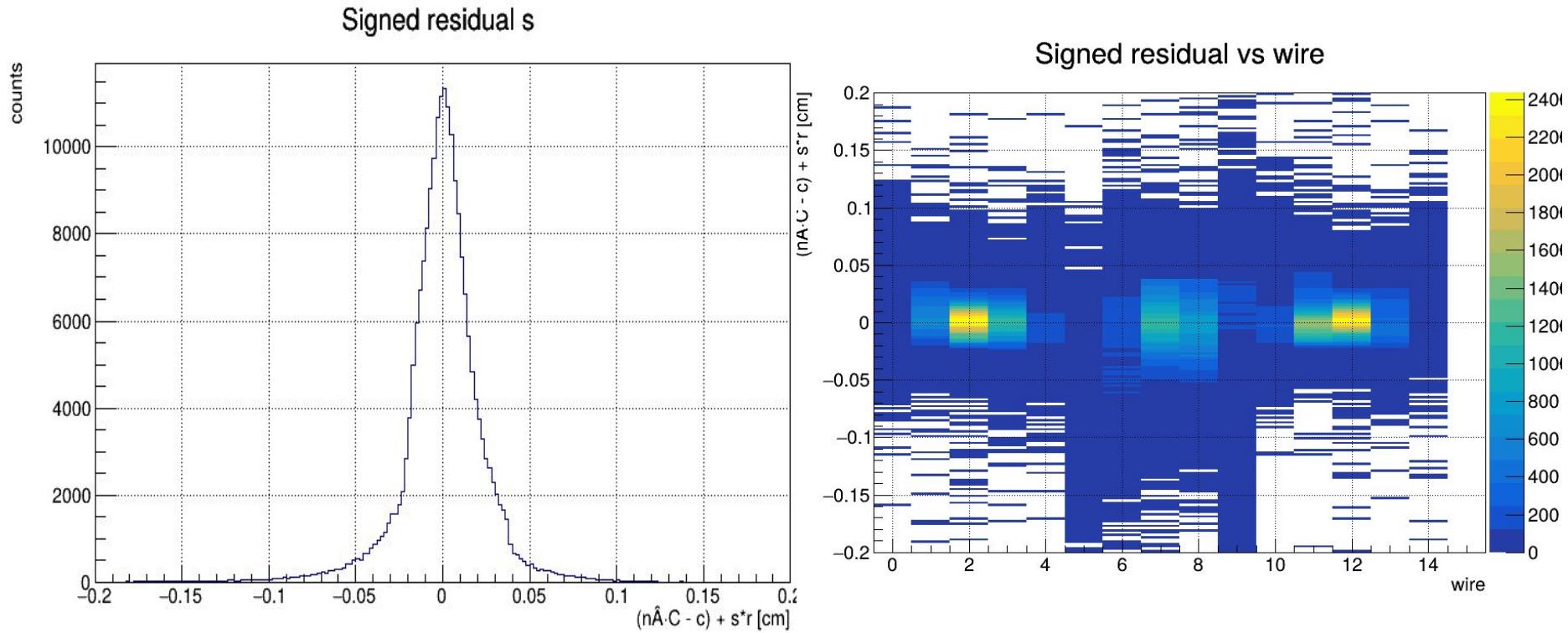
- Tracking with a single test chamber was successful(?)

(a,b) map for 3-hit events (N=70402)



Test Chamber : Tracking, run264

- Tracking with a single test chamber was successful(?)



Test Chamber x ASAGI : Tracking

- currently organizing the code for tracking with two test chambers

to do

- Residual Comparison between ASAGI and SONY-ASD
 - Tracking with the two Test Chambers
(ASAGI-16ch will come in Dec. → Tracking Algorithm ~ in Nov.)
- Analog-out check with SONY-ASD on E80-CDC
- E72 parasite
 - SDC set up with Ohtaka and Tsutsumi?
- E16
 - LG check?
- RARiS WS
 - slide v.0 ~2025/11/9