Readbacker, Source test

T. Hachiya, Runa Takahama, Yumika Namimoto, Miu Morita, Mika Shibata, Maya Shimomura

Status

- Readbacker
  - 1st version completed. Testing with RIKEN test bench

- Setup the fixture and darkbox for source test

- 1st results of source test with fixture

Readbacker

- Implementation and Test done at NWU test bench
  - Additional test with the RIKEN bench
- Readback value is appeared when pushing "Read" button after the command transmission is activated
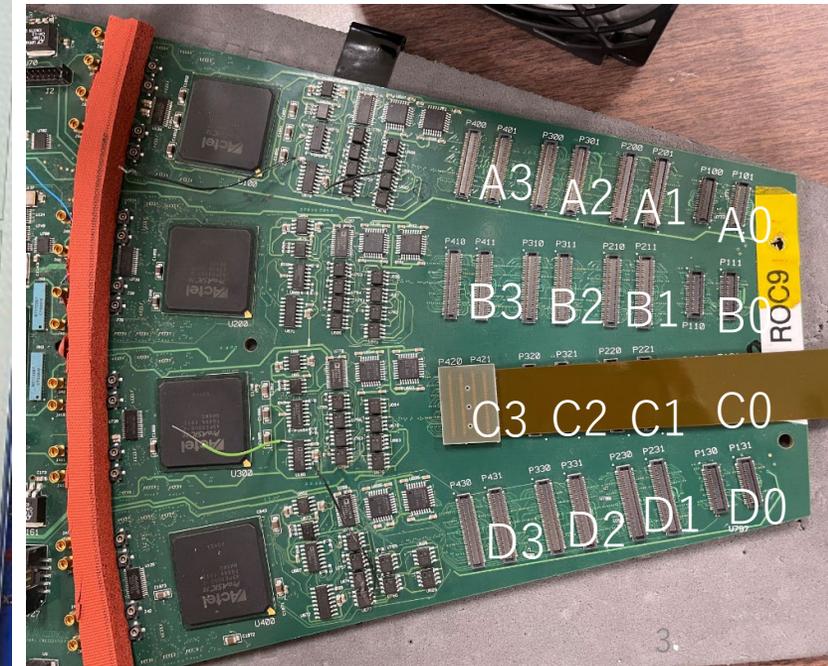

Testing the readbacker at RIKEN

Conn. name and its position

Source test fixture at darkbox

- The stage at the fixture is higher compared with the thru. hole of the box
  - Top is open. We can access from top
  - Conversion cable could be damaged.
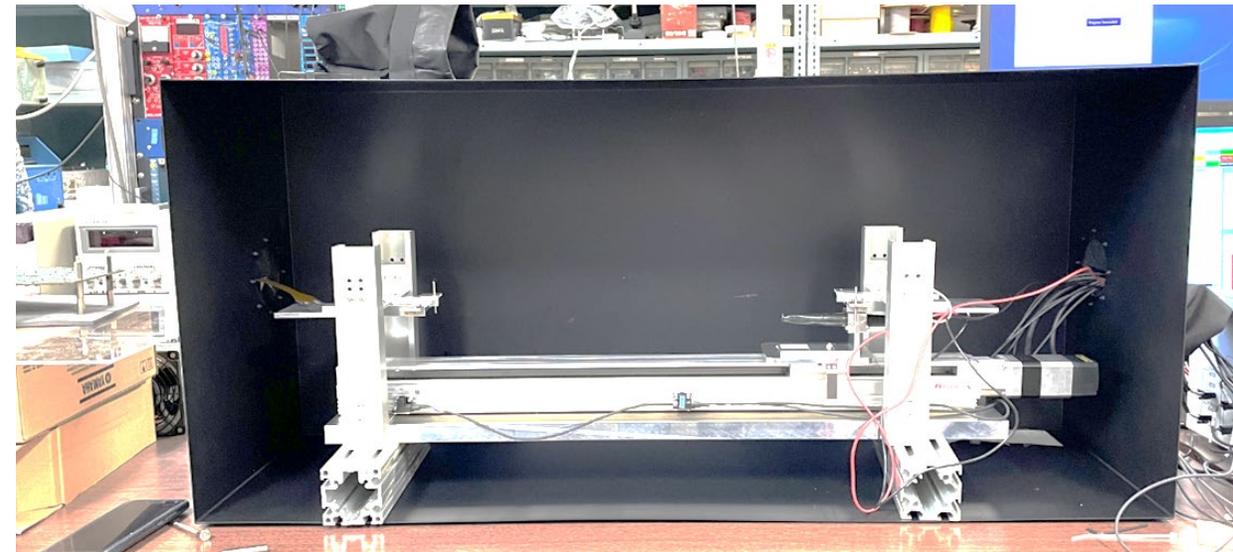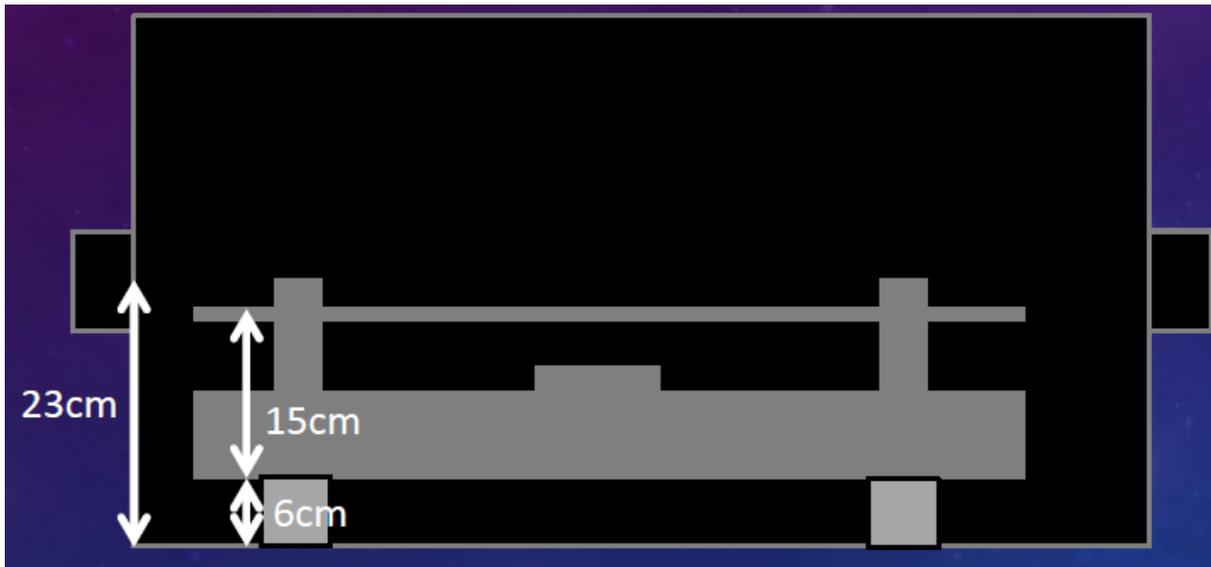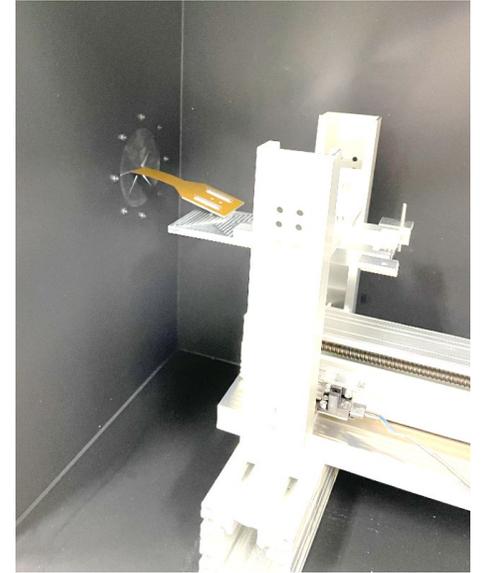
Source test fixture at darkbox 2

- To match the stage at the fixture and the thru. hole of the box, the darkbox is 90 rotated.
  - Fixture is lifted up by
  - Side is open. Accessible from side

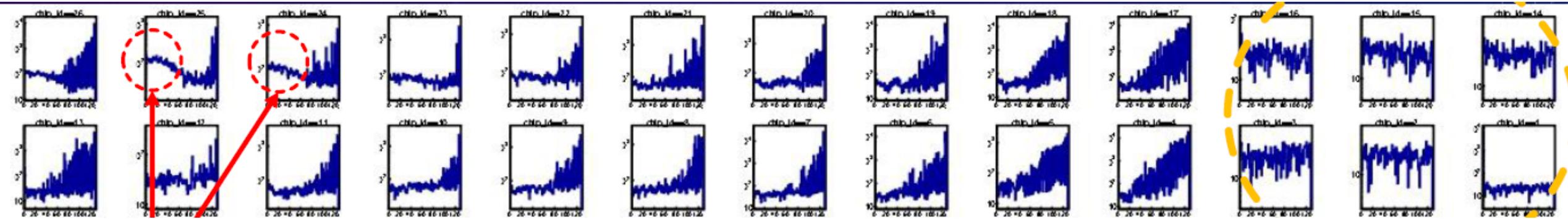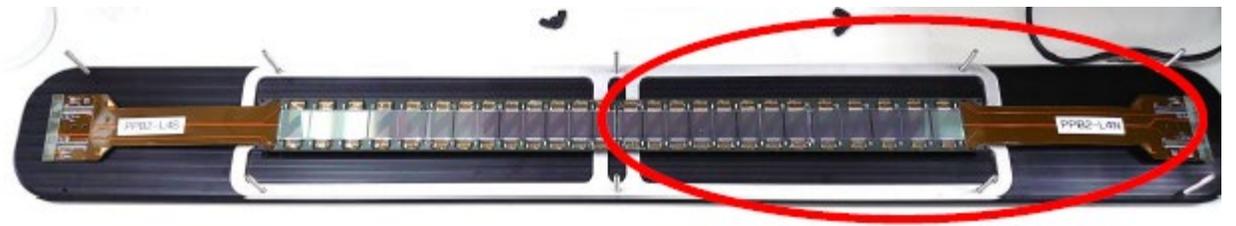- Hole position should be fit with the fixture

Problems

- Cables for the control box is too short

- Rid of the box is locked by the clamp

- We plan to update with
  - The clamp will be changed to the snap lock
  - Lubber legs will be added

- The signal/power cable of PMT should be properly routed and held.
  - Cable is moving unexpectedly when running the stage
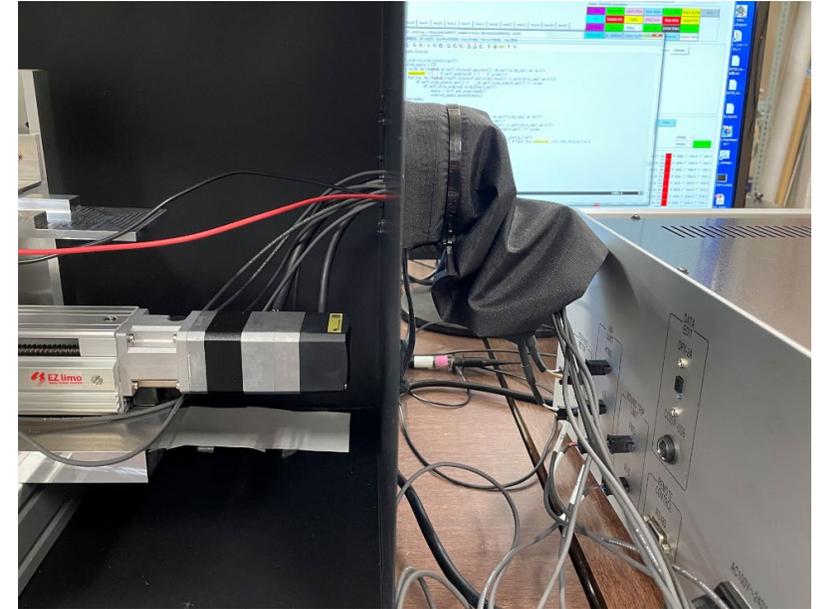
Source test result

- Sr90 source is put on the stage
  - Stage is moving from side to side repeatedly
- the signal from beta-ray is seen
  - Fixture is working nicely
  - Unexpected result for Chip1-3 and 14-16. Will investigate in detail

Summary

- Readbacker development is completed at NWU
    - 1st version is under test at RIKEN

- Source test fixture is installed to the darkbox
    - Some issues are found and fixed

- Source test with the setup
    - Fixture works nicely
    - Data looks strange. Need further investigation