

Outer Tracker Upgrade Group Meeting

30 April 2026

IP2I

Arnab Purohit

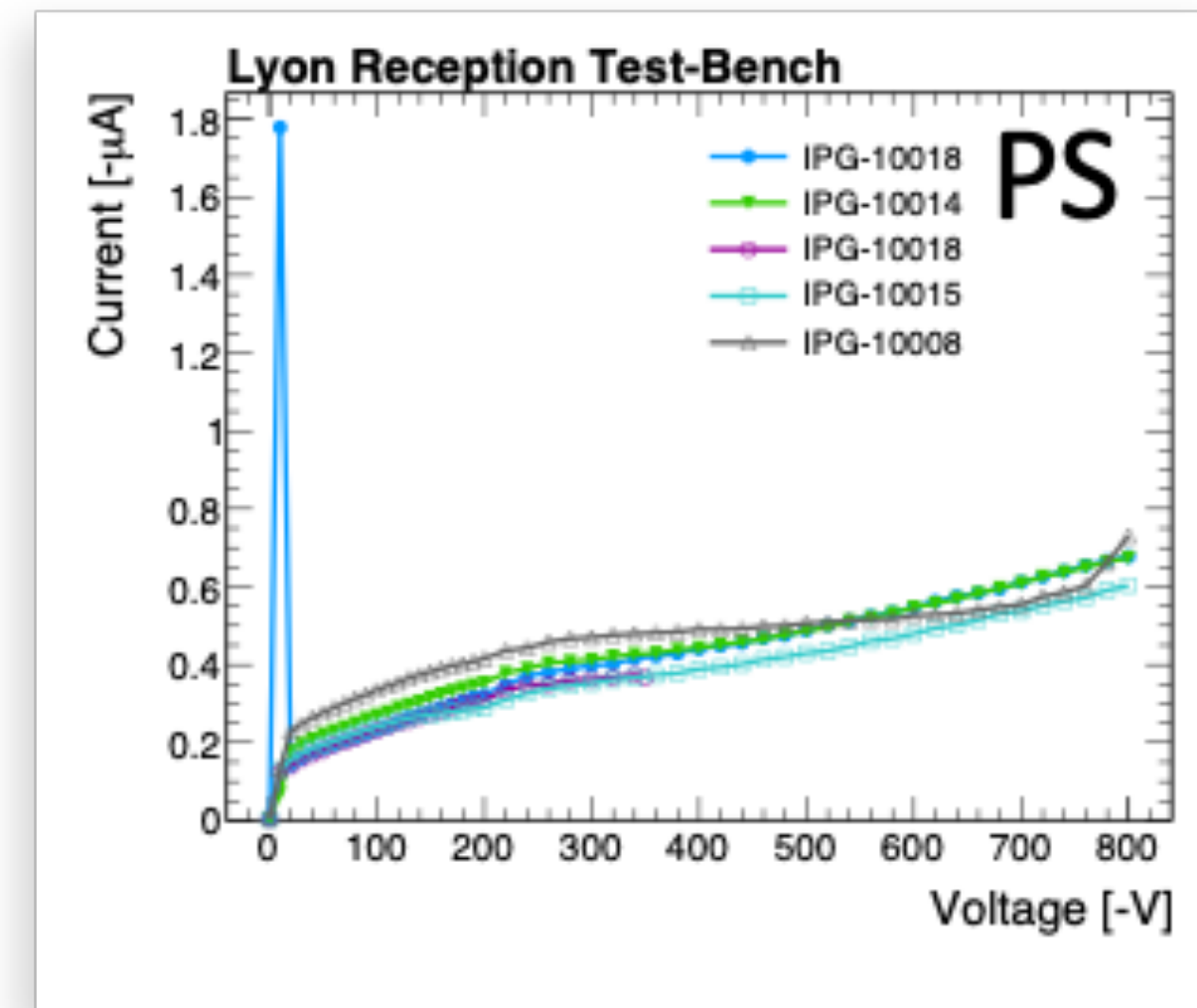
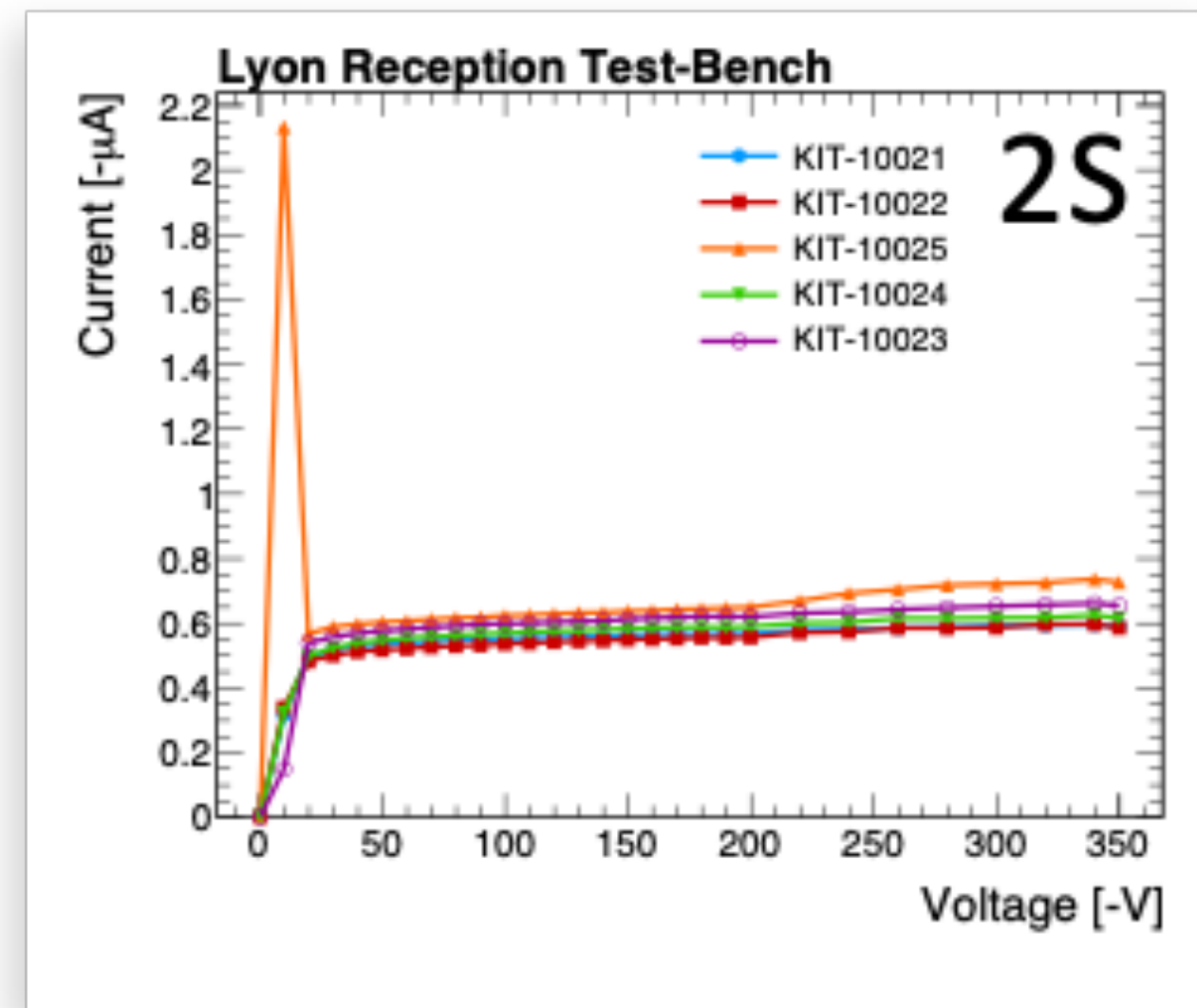
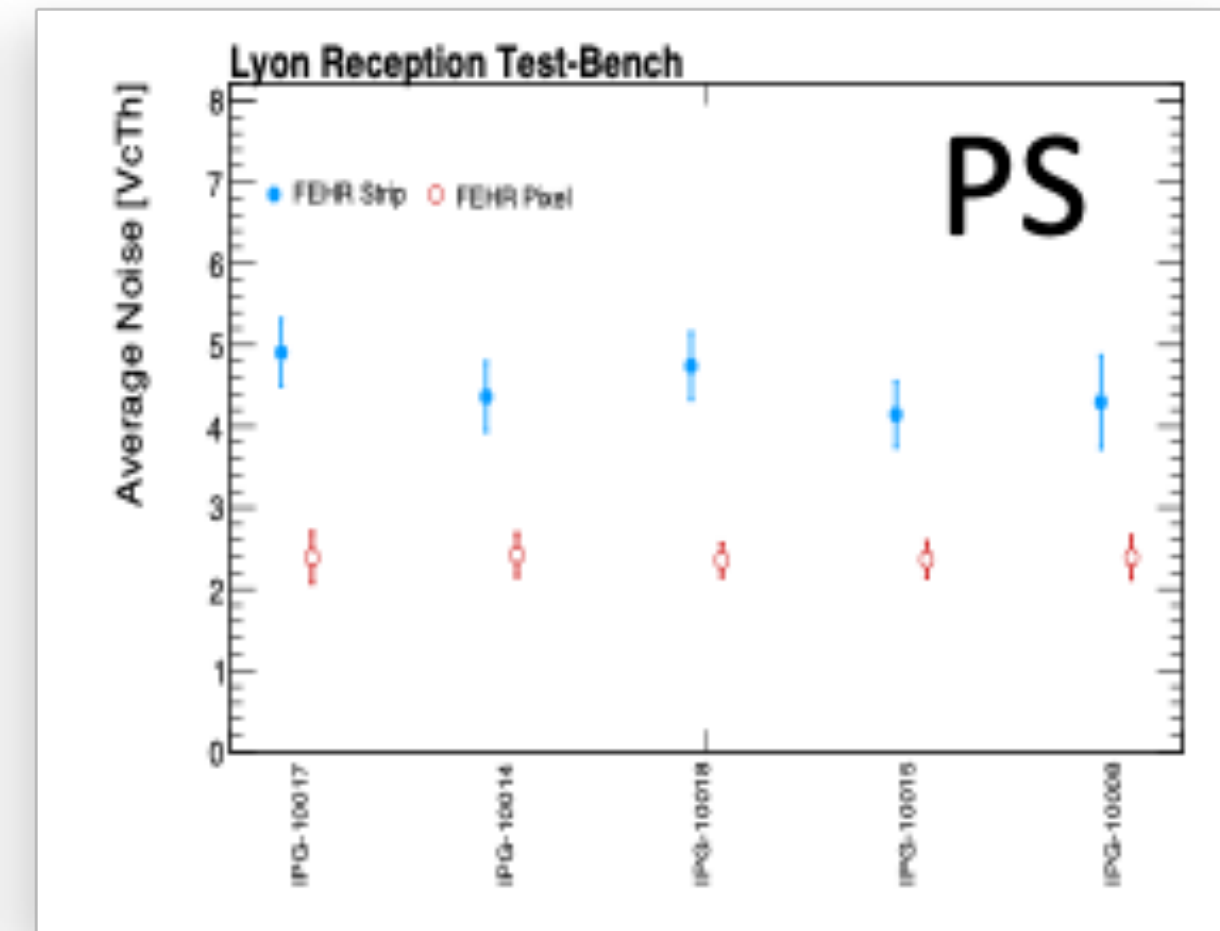
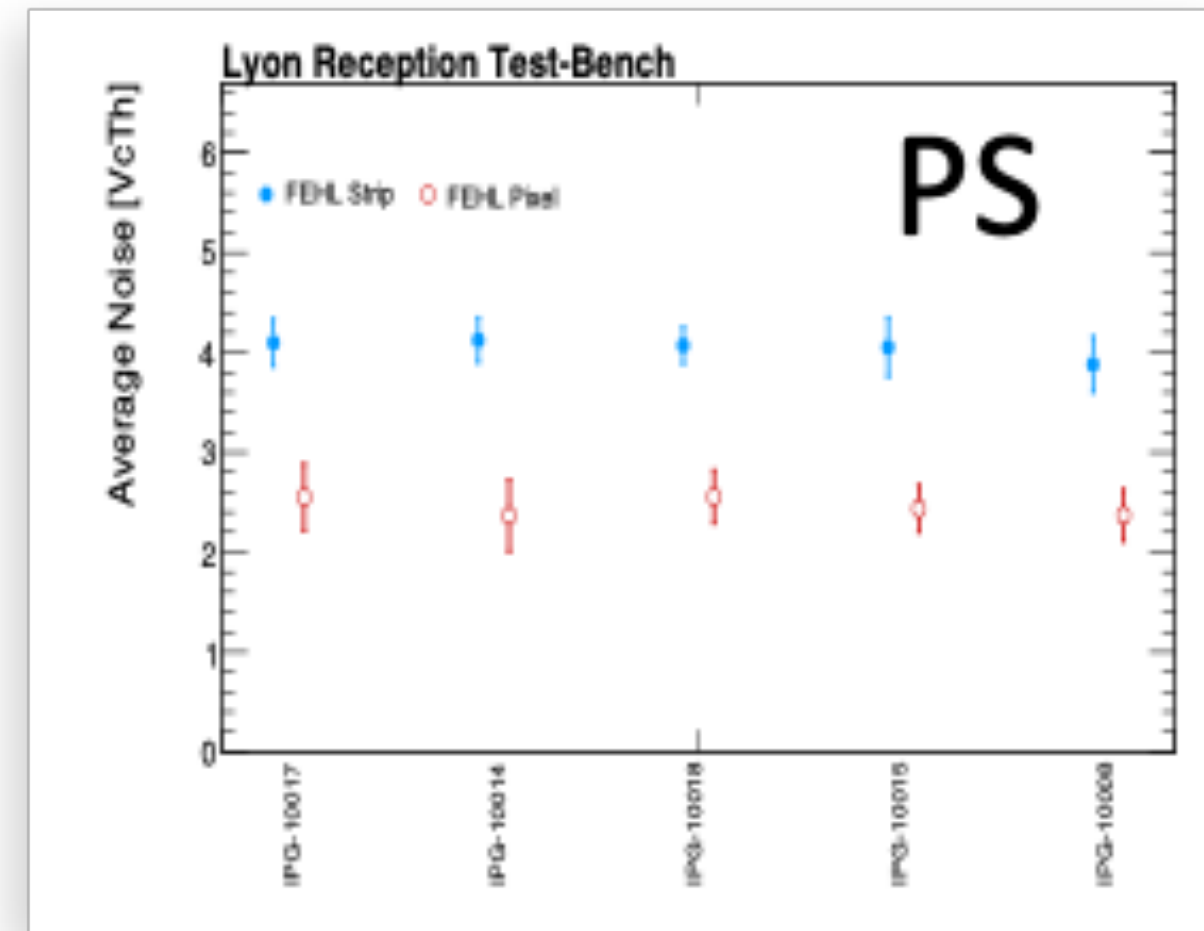
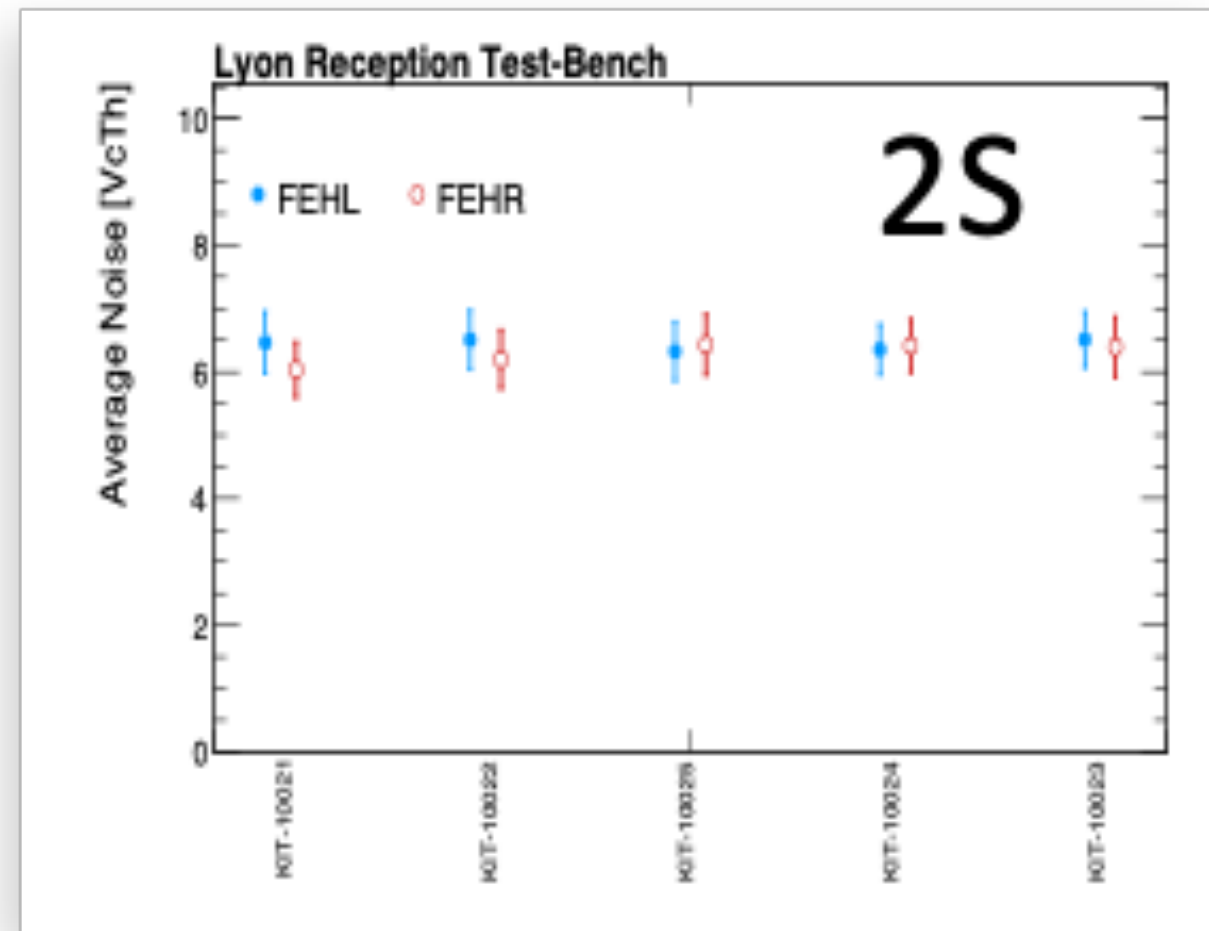
News

1. We performed tests of the 5+5 production 2S and PS.
2S Modules:
Right now we kept two modules for the reception test bench
2S_40_6_KIT-10025
PS_40_IPG-10018
2. We have tested the PS and 2S modules in the two boxes with the latest version of GIPHT tag 10.
3. The other modules are integrated on a DEE.

Tests done so far

	Module	ID		Test Type		Date		Temp	
	2S_40_6	KIT-10021		quickTest		2026-03-11		+24C	
				fullTest		2026-03-04		+22C	
	2S_40_6	KIT-10022		quickTest		2026-03-11		+24C	
				fullTest		2026-02-23		0C	
				fullTest		2026-02-23		+20C	
				quickTest		2026-02-23		+20C	
	2S_40_6	KIT-10023		fullTest		2026-03-25		+23C	
				quickTest		2026-03-25		+24C	
				fullTest		2026-03-25		+24C	
				quickTest		2026-03-10		+23C	
	2S_40_6	KIT-10024		quickTest		2026-03-10		+24C	
	2S_40_6	_KIT-10025		quickTest		2026-03-10		+24C	
	PS_40	IPG-10008		fullTest		2026-04-02		+22C	
				quickTest		2026-03-11		+24C	
	PS_40	IPG-10014		quickTest		2026-03-11		+23C	
	PS_40	IPG-10015		quickTest		2026-03-11		+23C	
				fullTest		2026-03-11		+23C	
	PS_40	IPG-10017		fullTest		2026-03-06		+22C	
				fullTest		2026-03-04		+25C	
				quickTest		2026-03-03		+24C	
				quickTest		2026-03-03		+0C	
	PS_40	IPG-10018		quickTest		2026-03-10		+23C	
				quickTest		2026-03-10		+23C	

Summary of results



Reception Test

1. In our test bench, we could not do the FullTest for all the PS modules.
2. It takes > 3 hours. We are trying to understand why.

3. I discussed with Fabio and Stefan.

PC -> eth1 -> internet

-> eth2 -> switch -> FC7

-> HV power supply

-> LV power supply

4. We do not need the Raspberry pi
5. I performed it without the Raspberry Pi. I could run the test but it did not improve the situation.

Cold Test

First time in Lyon

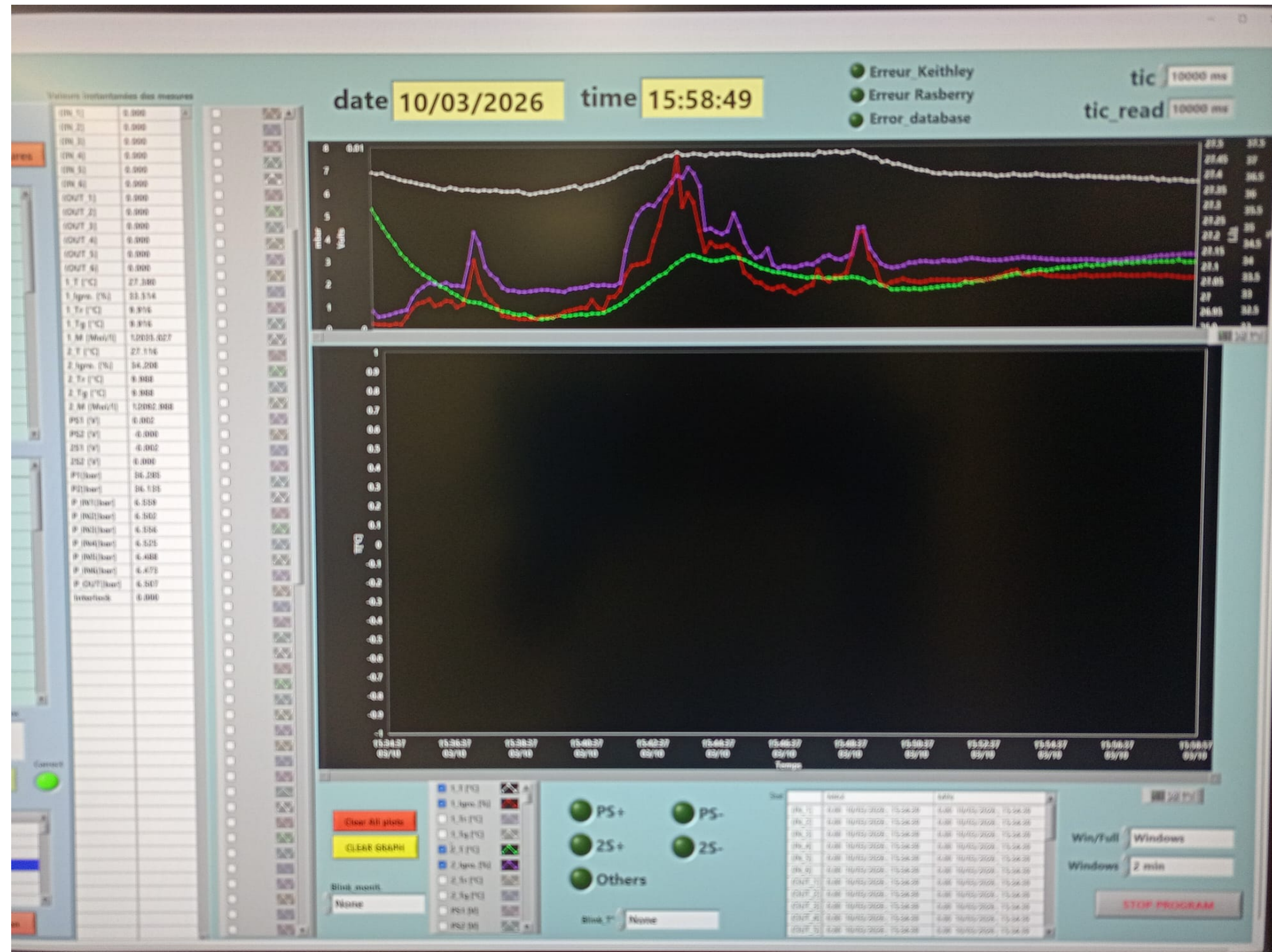
News

1. We integrated two production 2S and PS modules on a Dee using the Integration Software.
2S Modules:
2S_40_6_KIT-10021 (22, 23, 24)
PS_40_IPG-10017 (8,14, 11)
2. We powered the module with Low voltage.
3. The LV current was as expected 270 mA for 2S and 500 mA for PS.
4. We performed basic communication tests successfully.

Ongoing work & To do

DCS

- Labview data is visible in Grafana.



Ongoing work & To do

DCS

- Labview data is visible in Grafana.
- When the Webserver Docker is not up at the beginning of the Labview test then the data was visible.
- We discussed with Rodolf and the problem was that the header file was sent only once the Labview validates the configuration.
- Now it is sending the header with every data point.



Ongoing work & To do

Cold Test, DCS

1. Prepare Nodered dashboard for CAEN control.

1. High Voltage Modules' Flow can be produced directly from Gustave's script and another script to validate.

2. The script is updated by Arnab for a few more features

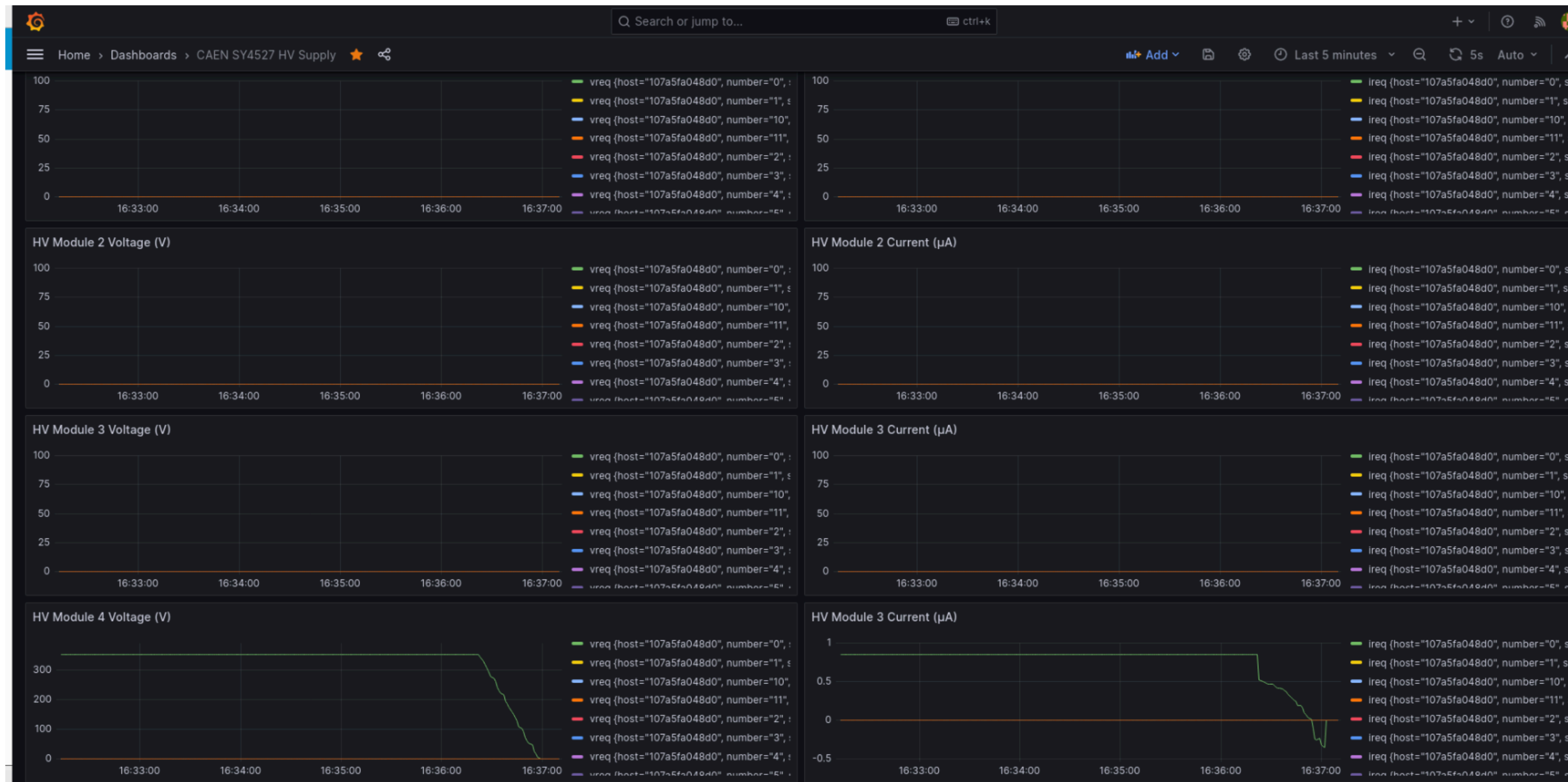
1. Yaml file for sector test.

2. Correct sequence of LV HV powering.



Ongoing work & To do

Cold Test, DCS



Ongoing work & To do

Cold Test, DCS

