

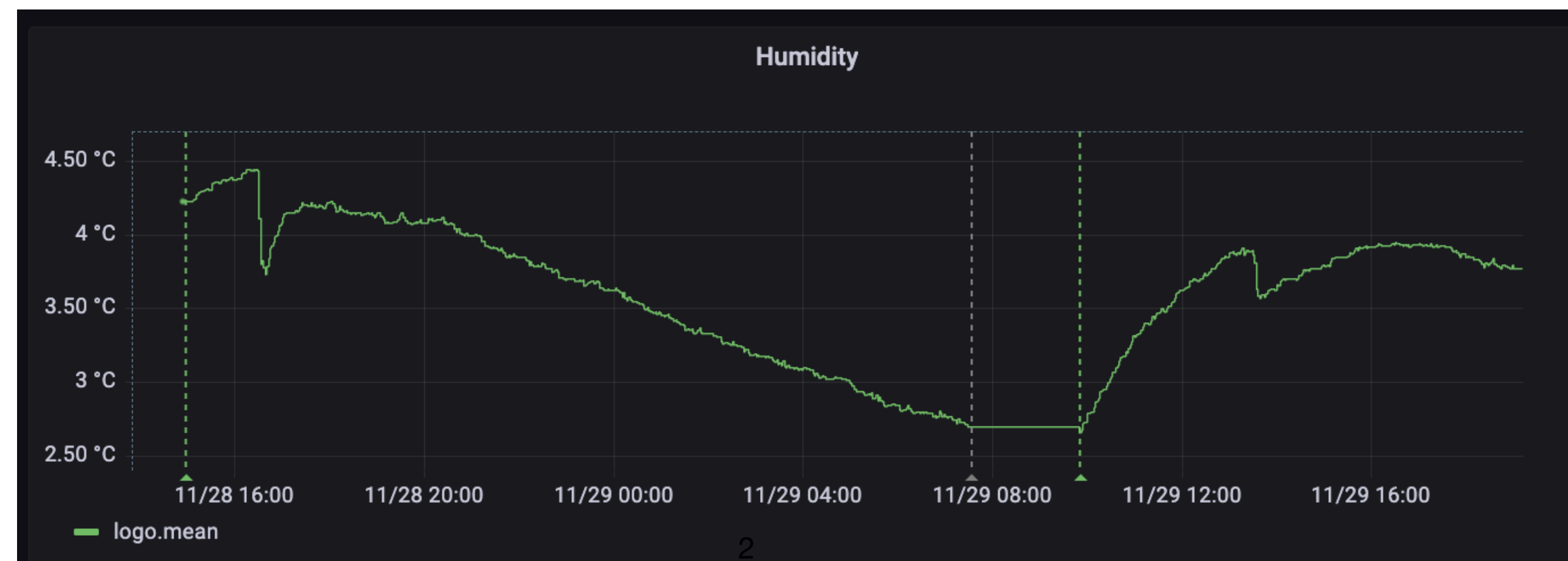


RPC eco-gas at GIF++ Weekly report

Barbara Liberti and Marco Sessa
November 30th, 2023

Stability run 194

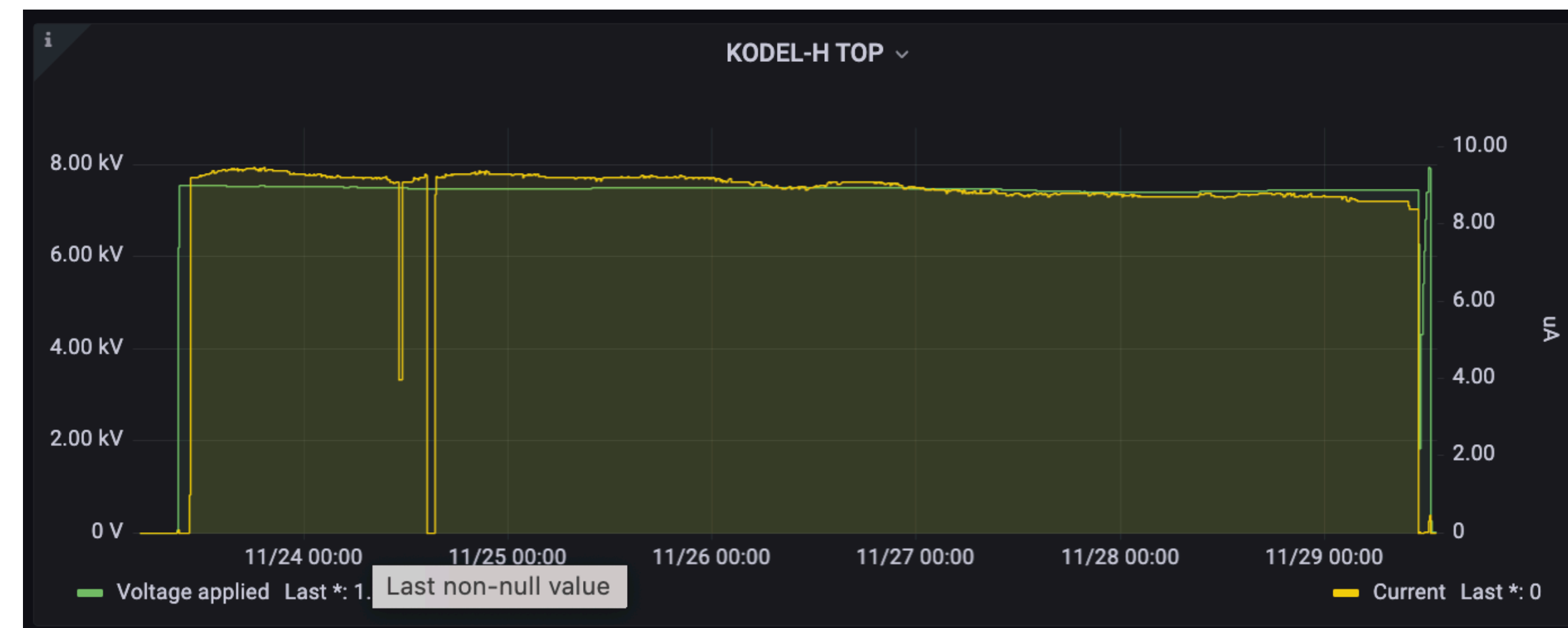
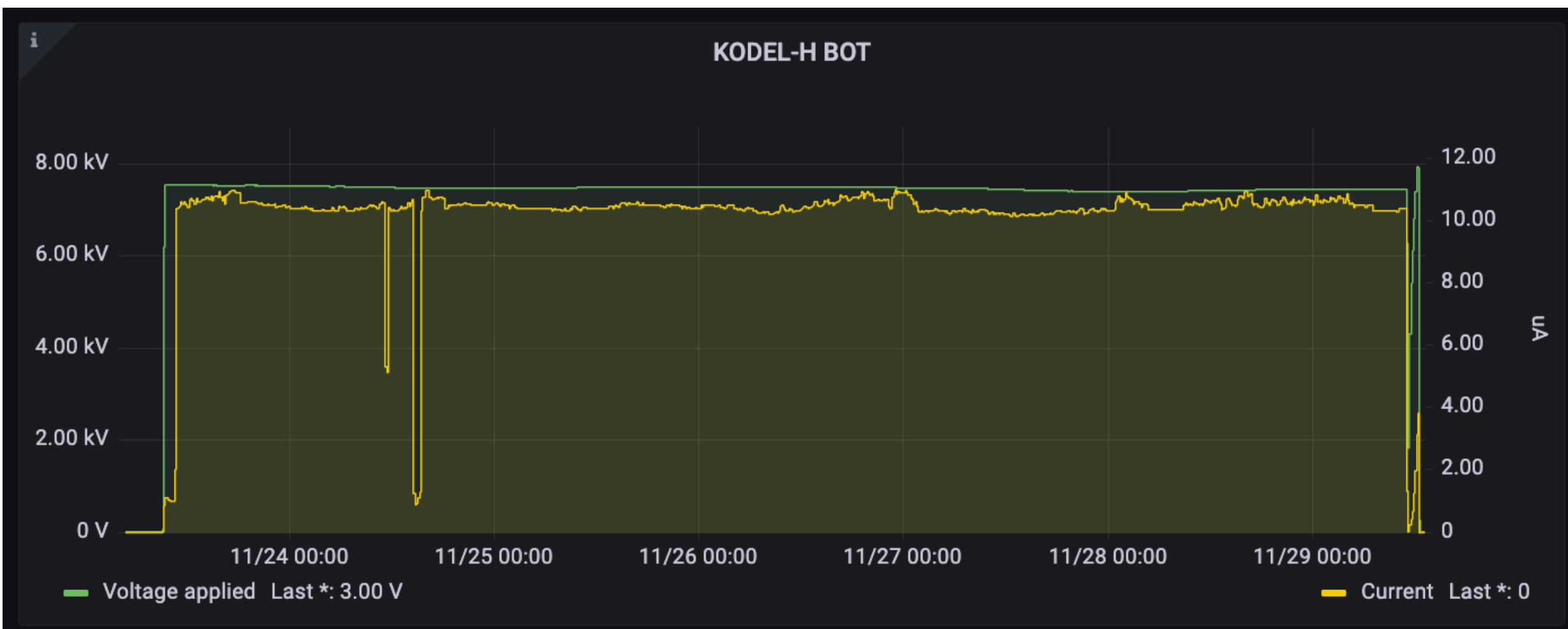
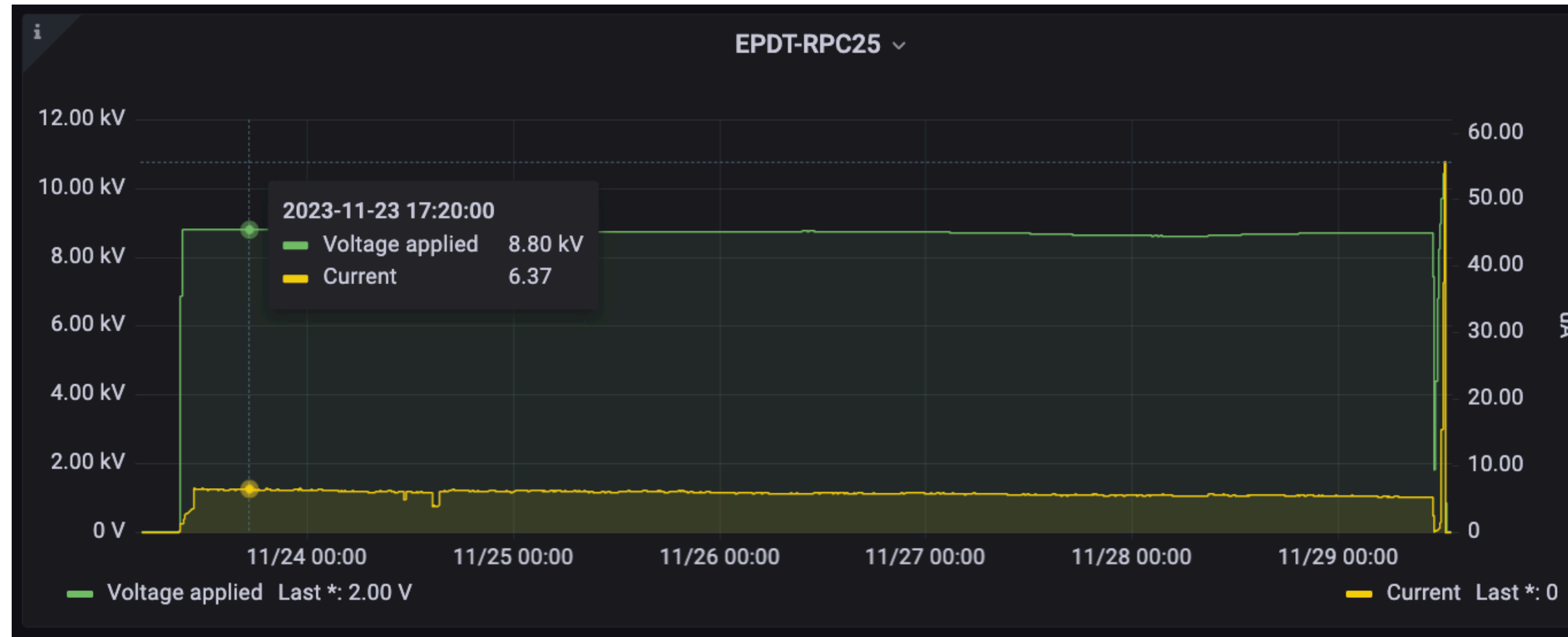
- **Stability run 194** started on Thursday November 23rd around 9:00 and stopped on Wednesday November 29th around 10:30
- All chambers included, except ATLAS (temporarily disconnected from the setup) and ALICE
- **Major problems during the shift:**
 - Problems with the WET MFC regulation → no response → Luca changed the WET to 100% and regulated the DRY (as it was in the past) → now it works → e-log <https://rpcecogas.web.cern.ch/rpcecogaseglog/440>
 - Data logger crashed many times (order of 10 times this week) → also during the second HV scan with source OFF (scan no visible in grafana) and sometimes without alarm e-mail notification
- **Major achievement of the week:**
 - Luca and Gianluca wrote a script to extract the humidity value and log it to the ecogas dashboard → e-log <https://rpcecogas.web.cern.ch/rpcecogaseglog/441>



Stability run 194



Stability run 194



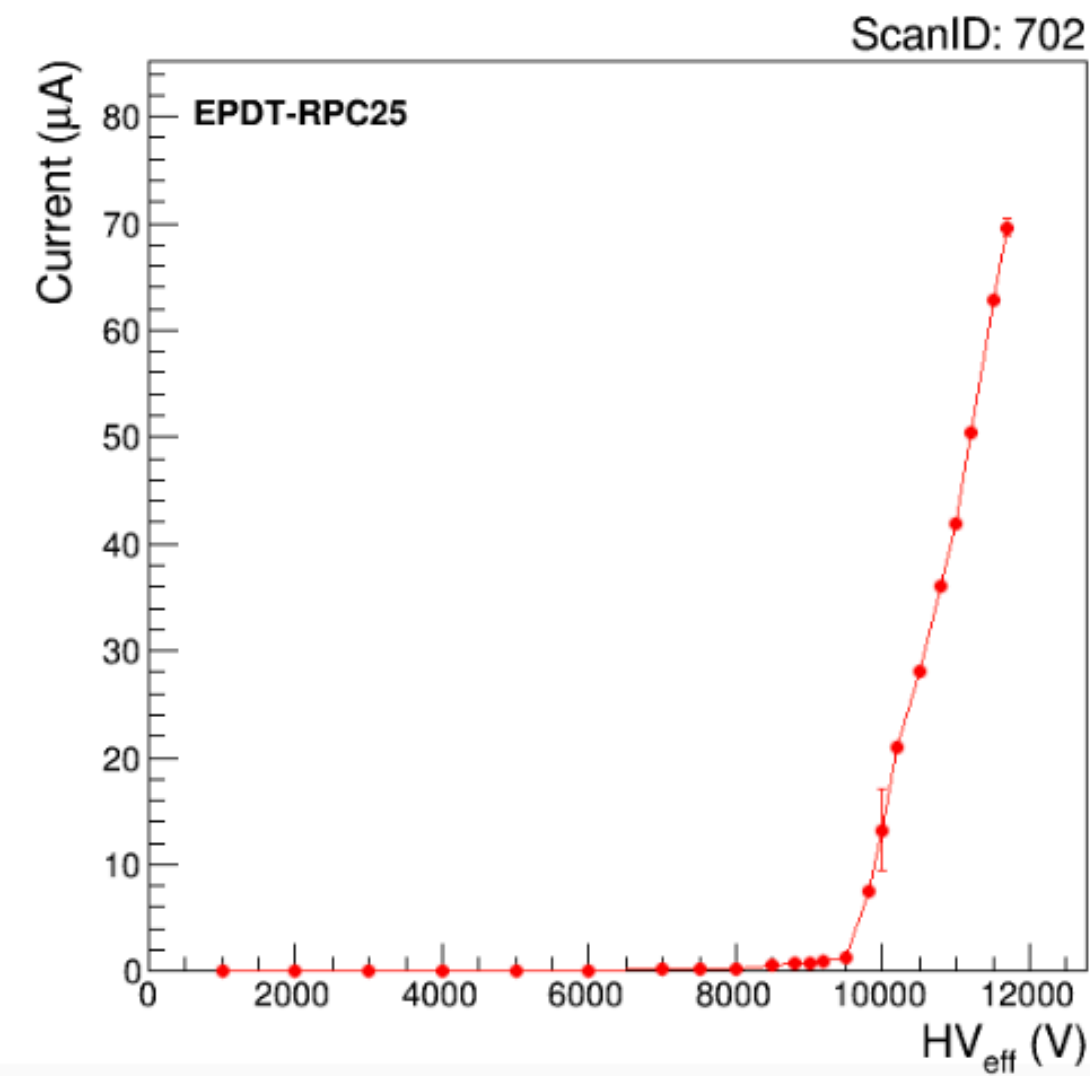
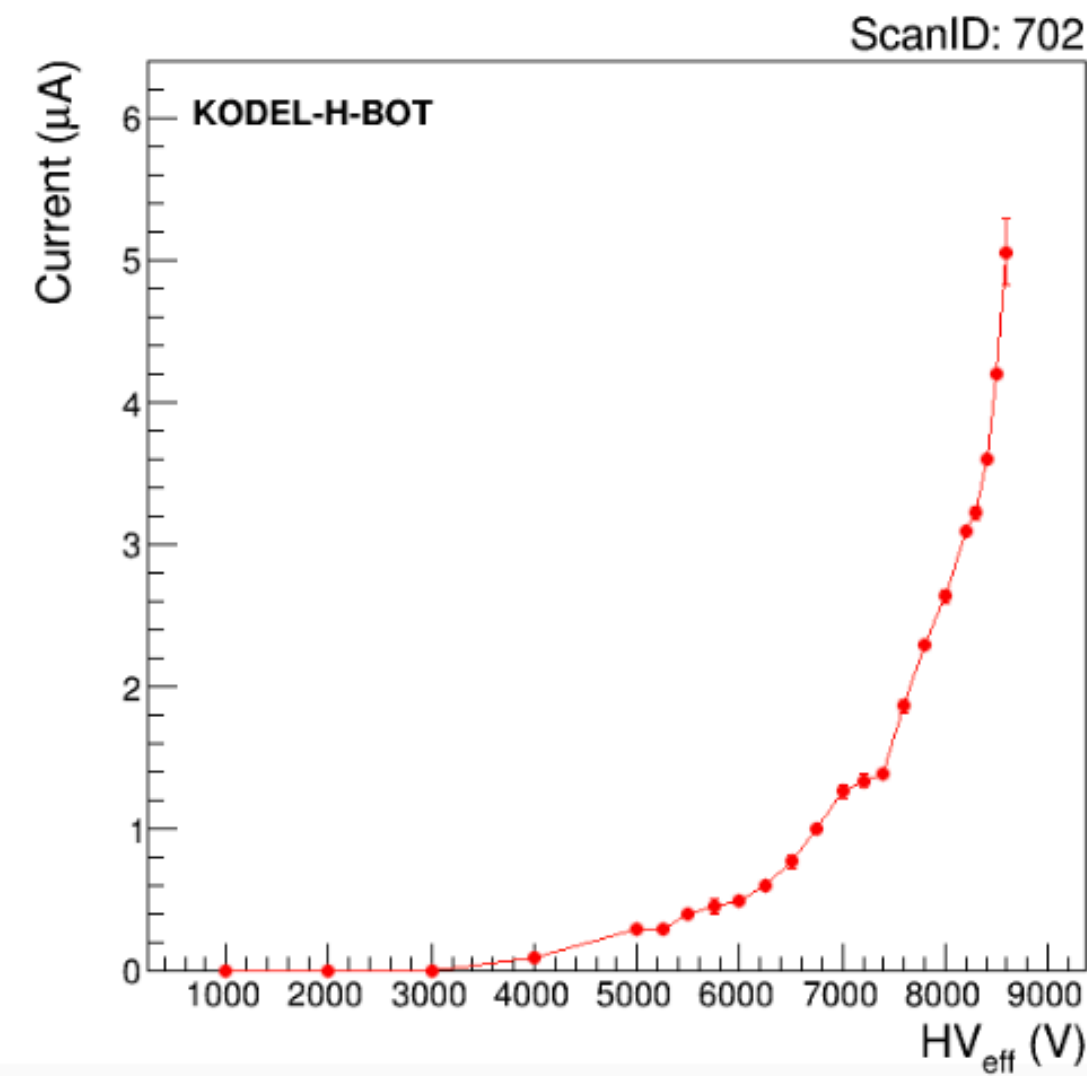
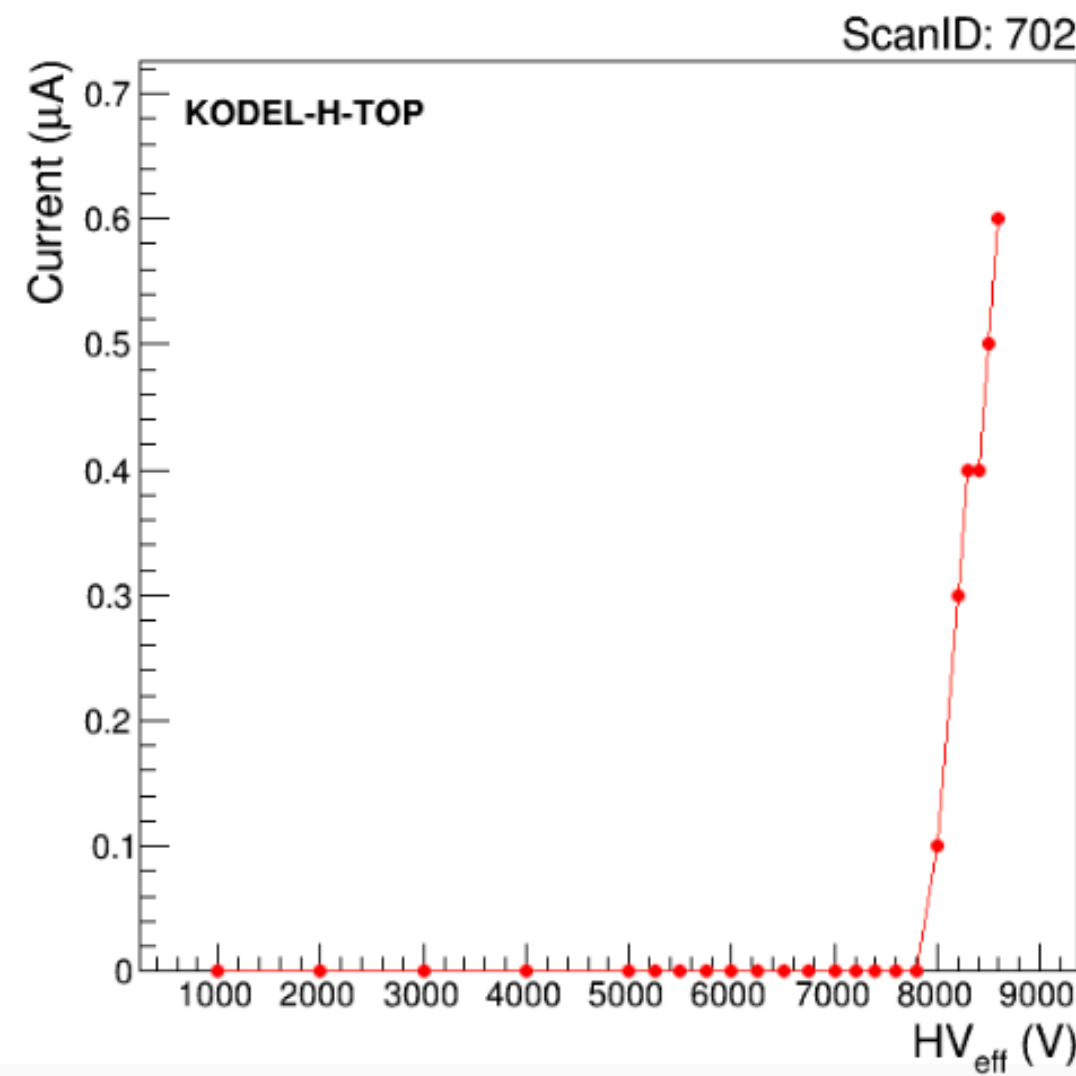
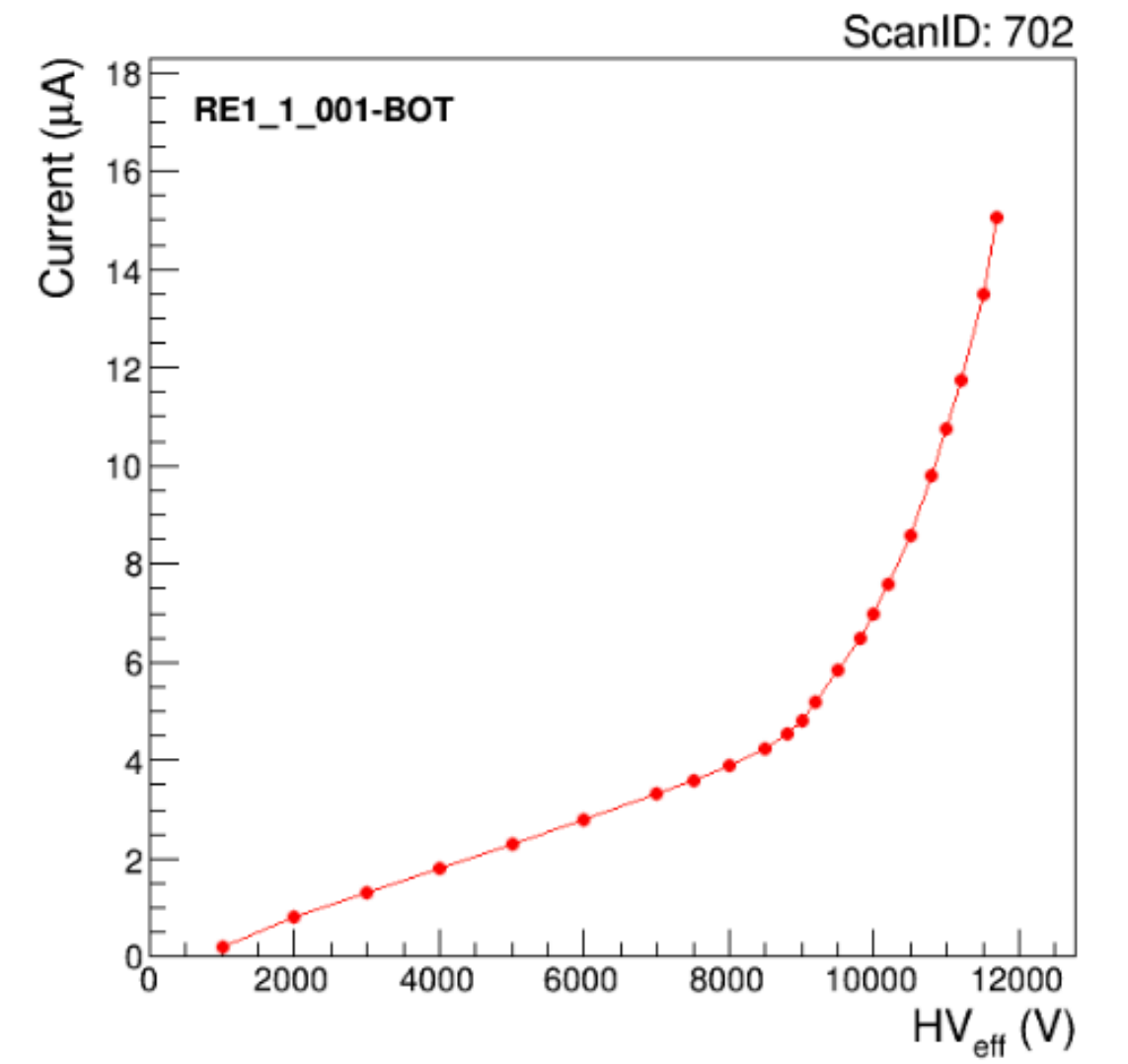
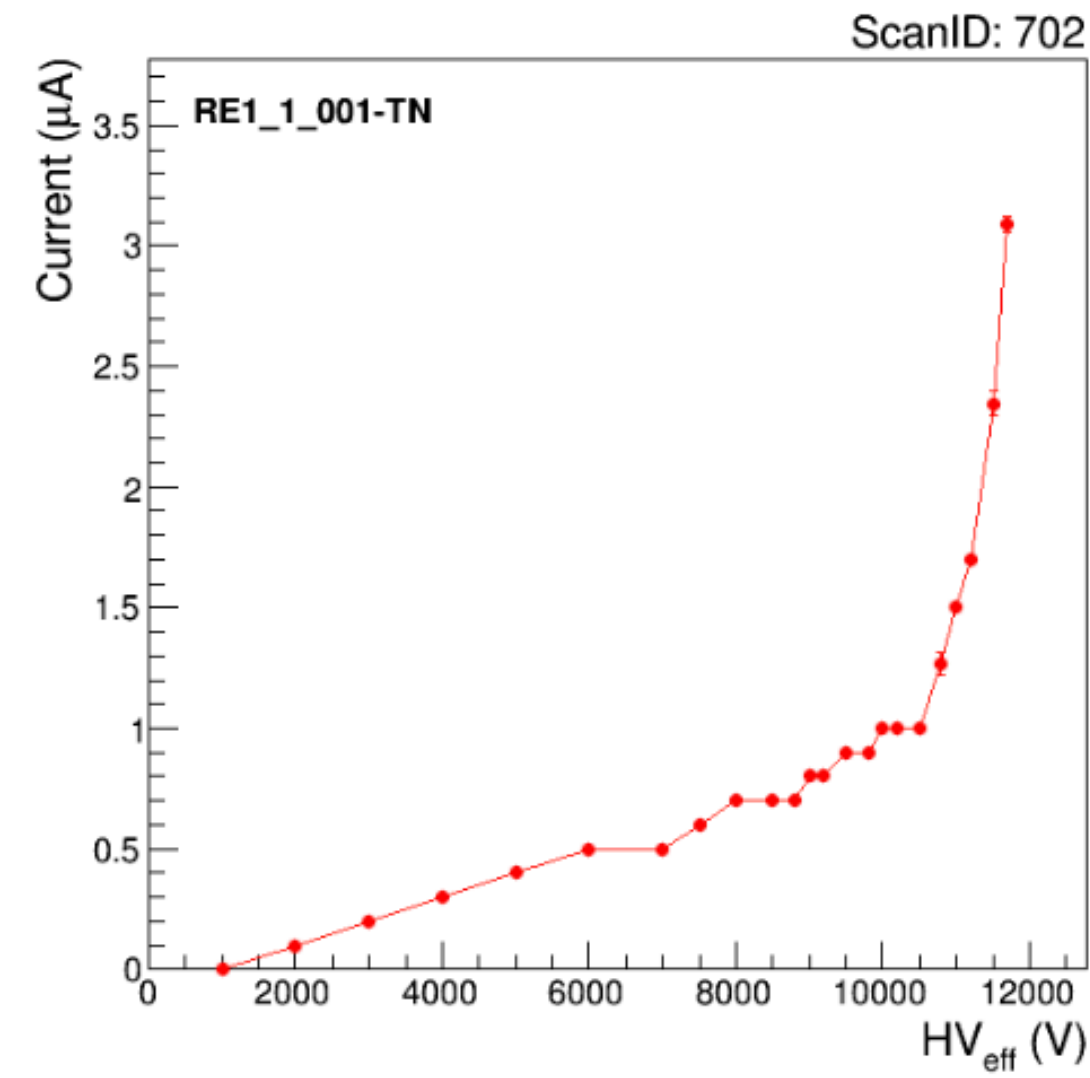
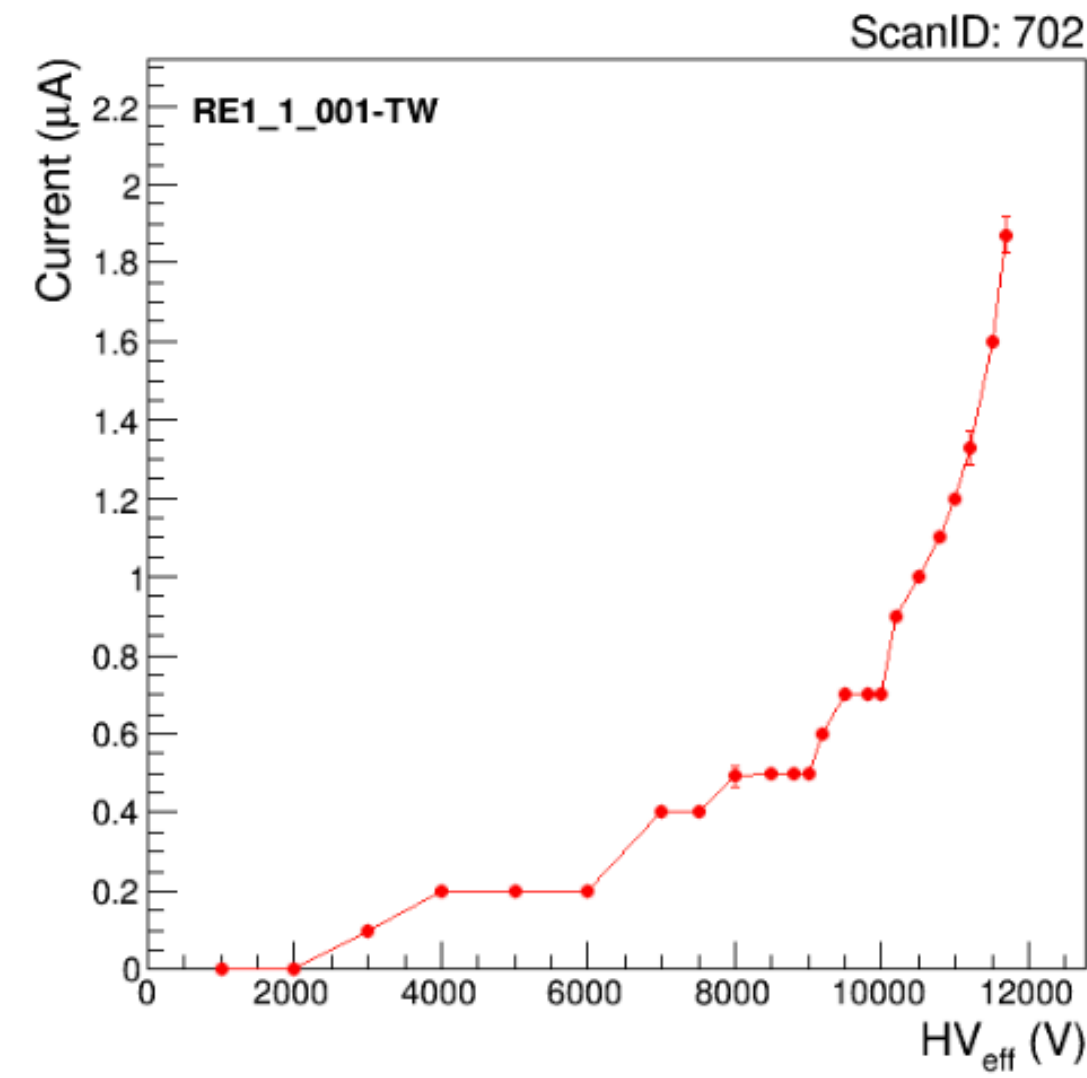
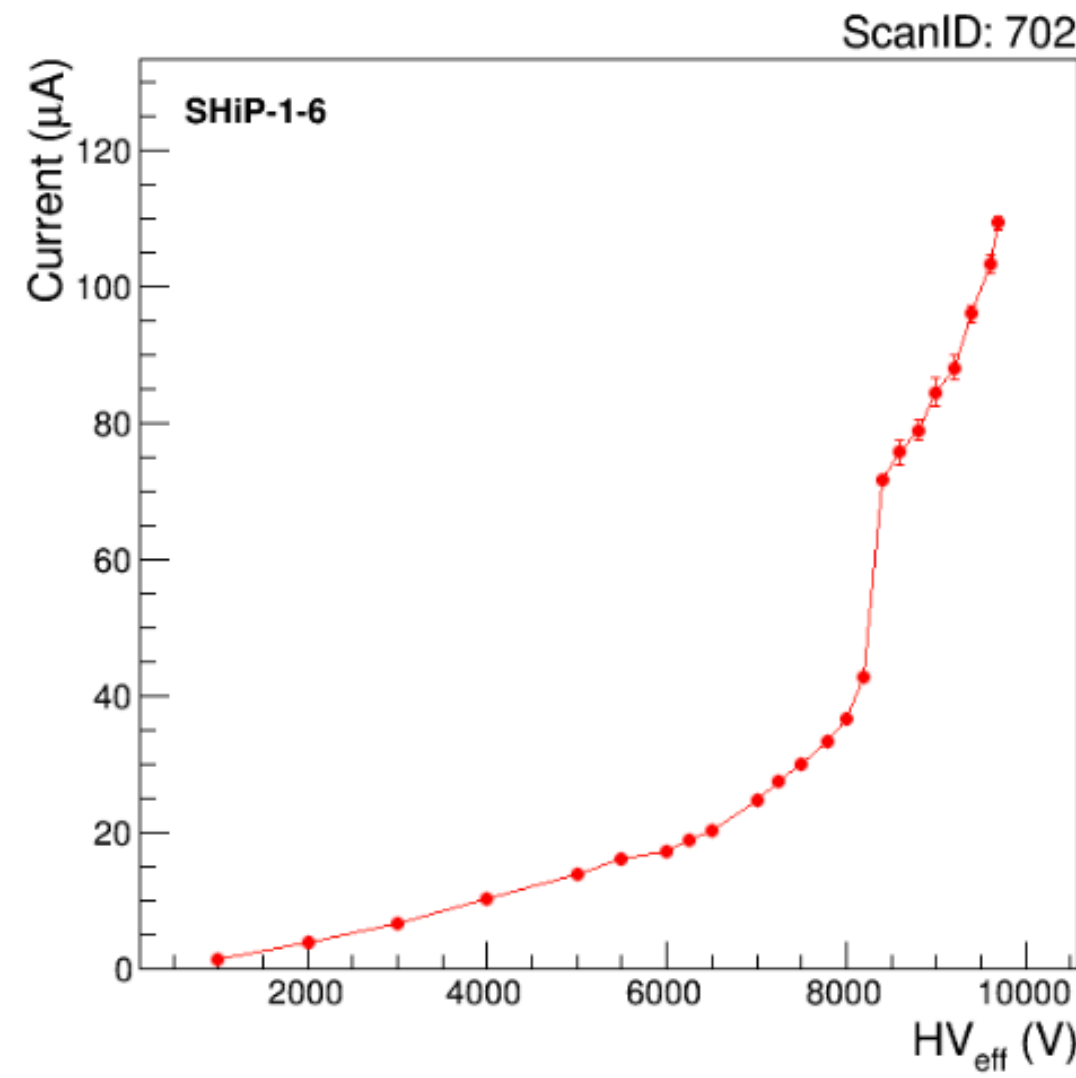
HV scans with source OFF

HVscan run registry

Scan ID	Scan type	Start time	Label	Status	#HV
<input type="text"/>	Select scan type <input type="button" value="v"/>	<input type="text"/>	Select label <input type="button" value="v"/>	Select status <input type="button" value="v"/>	<input type="text"/>
000703 ↗	Current scan	2023-11-29 16:09	TB July22	FINISHED	23
000702 ↗	Current scan	2023-11-29 11:07	ECOGAS2	FINISHED	23

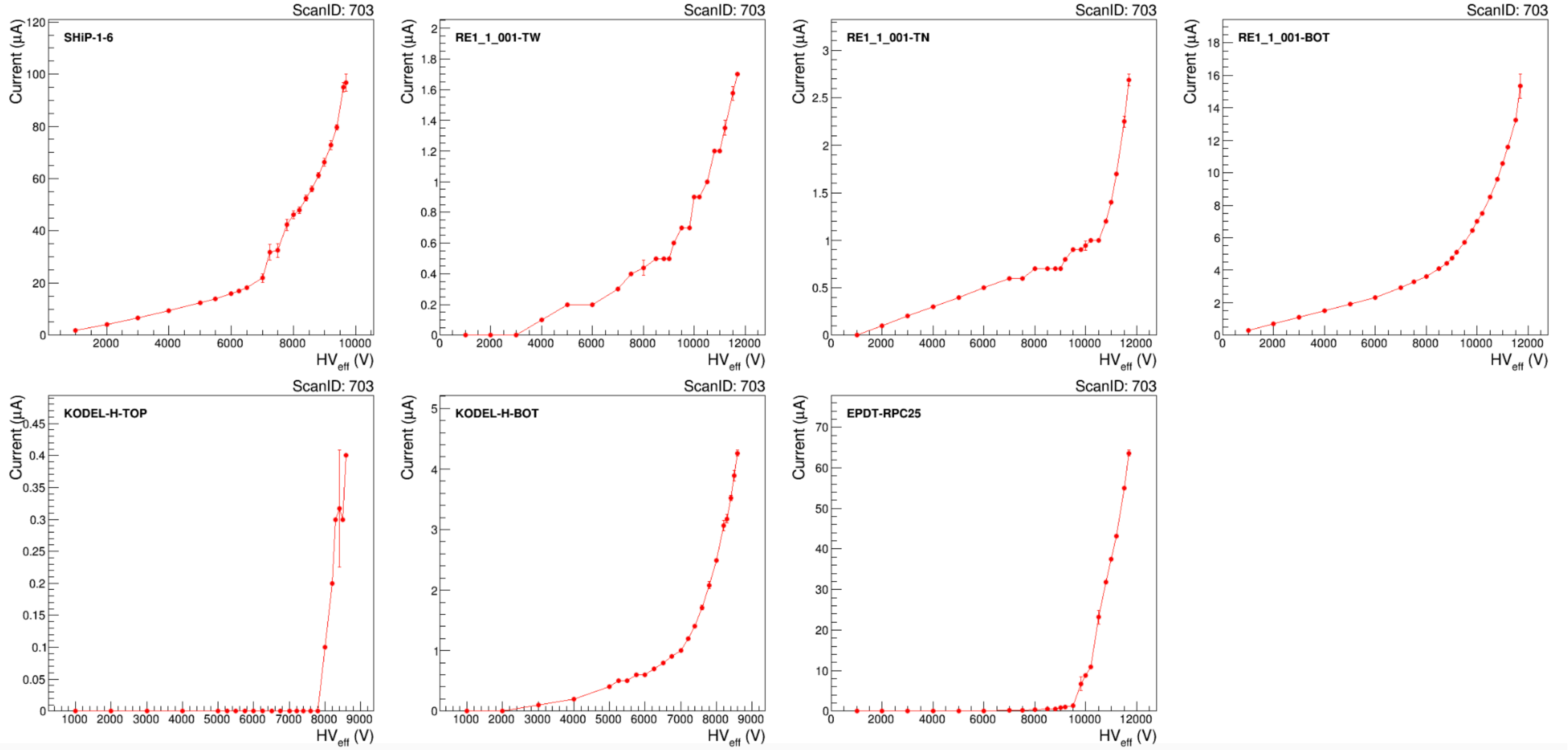
Wrong label -> we hope this is not a problem

HV scan 702



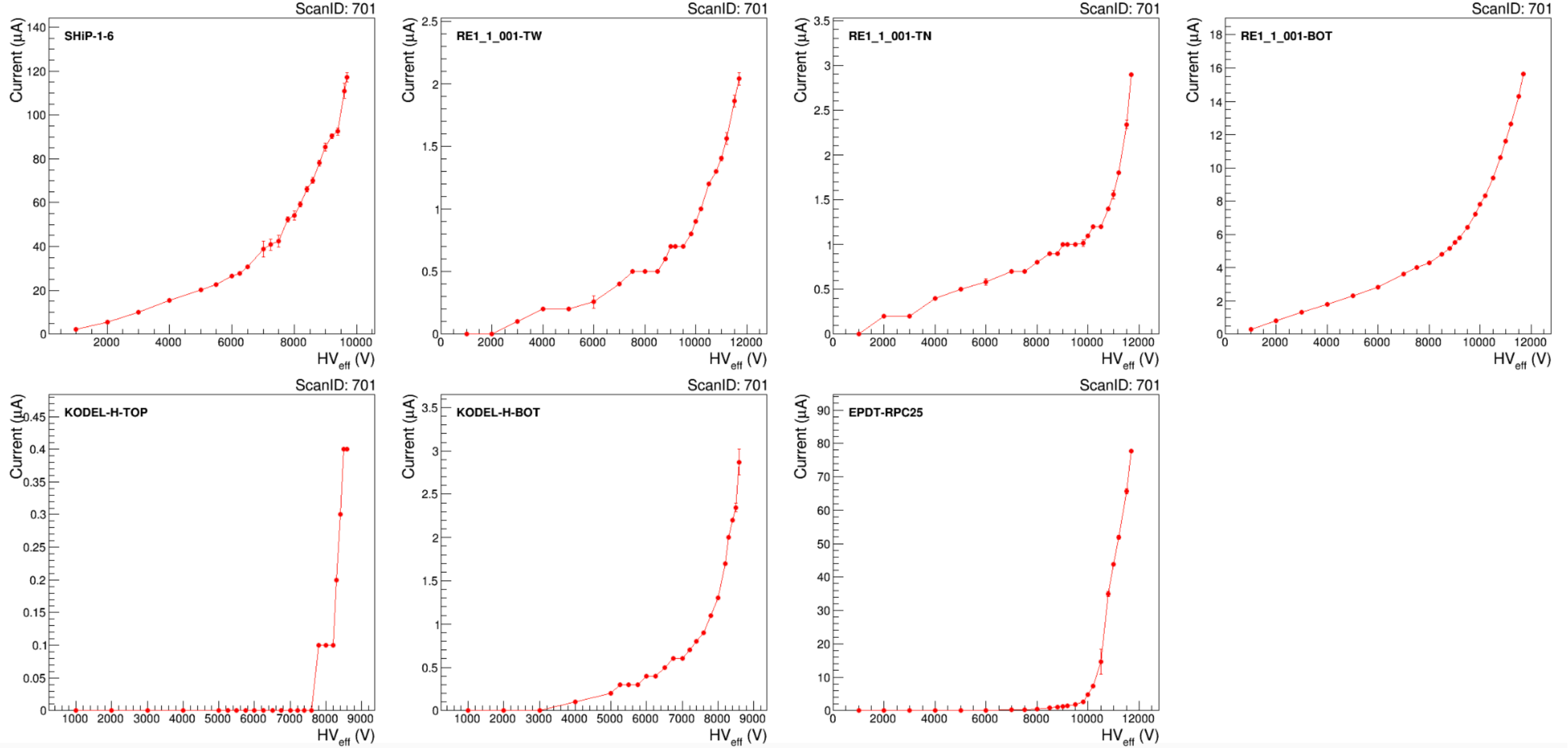
Similar results for scan 702 and 703 -> only a 30 μA jump observed for SHiP in scan 702 around 8000 V

HV scan 703



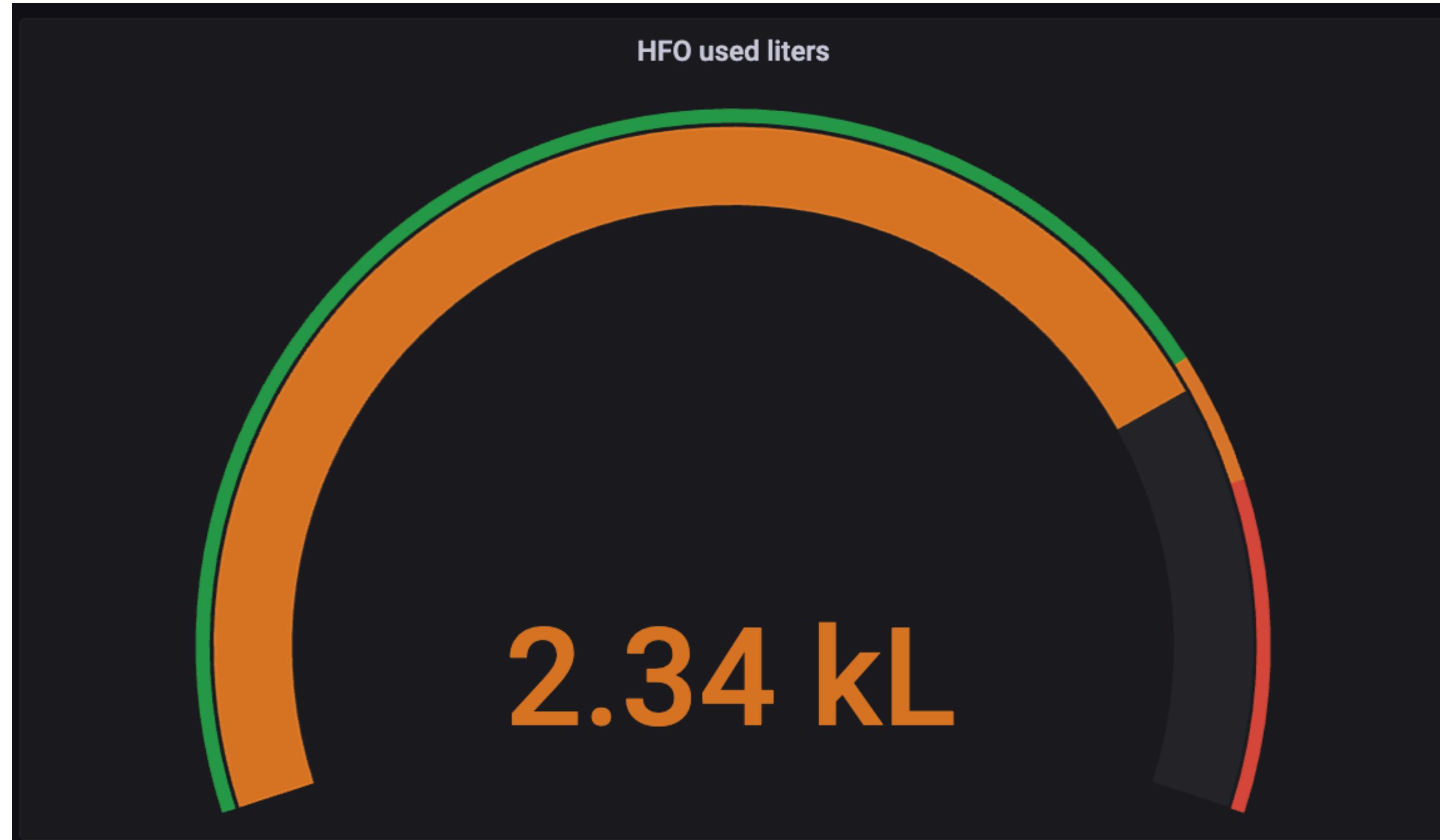
Similar results for scan 702 and 703 -> only a 30 μA jump observed for SHiP in scan 702 around 8000 V

HV scan 701 from last week (for comparison)



Currents seem to be comparable w.r.t. last week scan (701)

Residual HFO today at 12:30



Next stability run

- We started a stability run yesterday evening at 19:26 (Run 195) → but the source was off during the night and it is still OFF now (at 12:30)
- For this reason the run 195 was stopped this morning → maybe it can be also deleted
- Next stability run has to start when the source will be switched ON

Instructions for next shifter

- ATLAS and ALICE still excluded
- EPDT, RE1-1, SHiP, KODEL-H to be included
- For current scan use template 701 -> **EPDT change Itrip to 100uA from telnet (only during scan!)**
- For stability scan use template 194

Chamber/gap	Enabled	Working voltage (V)	Standby voltage (V)	i0 (uA)
EPDT-RPC25	<input checked="" type="checkbox"/>	<input type="text" value="9000"/>	<input type="text" value="6500"/>	<input type="text" value="20"/>
SHiP-1-6	<input checked="" type="checkbox"/>	<input type="text" value="8800"/>	<input type="text" value="5000"/>	<input type="text" value="200"/>
RE1_1_001-BOT	<input checked="" type="checkbox"/>	<input type="text" value="10600"/>	<input type="text" value="6500"/>	<input type="text" value="200"/>
RE1_1_001-TN	<input checked="" type="checkbox"/>	<input type="text" value="10600"/>	<input type="text" value="6500"/>	<input type="text" value="200"/>
RE1_1_001-TW	<input checked="" type="checkbox"/>	<input type="text" value="10600"/>	<input type="text" value="6500"/>	<input type="text" value="200"/>
KODEL-H-BOT	<input checked="" type="checkbox"/>	<input type="text" value="7700"/>	<input type="text" value="5000"/>	<input type="text" value="50"/>
KODEL-H-TOP	<input checked="" type="checkbox"/>	<input type="text" value="7700"/>	<input type="text" value="5000"/>	<input type="text" value="50"/>

From Giuliana's slides of last week - instructions still valid