

# RPC eco-gas at GIF++ Weekly report

Barbara Liberti and Marco Sessa May 27th, 2025

1

#### Stability run registry

# Stability runs

Run ID	Start time	End time/Last action	Duration	Comment	Status
0280	2025-05-24 23:38	2025-05-26 17:32	1 days, 17 hours, 54 minutes	Run 280 , after restarting the logger, Eco2, stability	ONGOING
0279	2025-05-24 17:19	2025-05-24 17:20	0 days, 0 hours, 0 minutes	Trying again after restarting gas pc - Run 279, ECO2 gas mix	FINISHED
0278	2025-05-24 17:13	2025-05-24 17:14	0 days, 0 hours, 1 minutes	Starting stability run 278 - ECO2 gas mixture	FINISHED
0277	2025-05-24 12:43	2025-05-24 12:44	0 days, 0 hours, 1 minutes	Start new run - same issue as previous runs - New run 277	FINISHED
0276	2025-05-24 12:34	2025-05-24 12:35	0 days, 0 hours, 1 minutes	Start new run. Previous one crashed after few seconds during	FINISHED
0275	2025-05-24 12:26	2025-05-24 12:27	0 days, 0 hours, 0 minutes	Starting new run - the previous one was stopped automaticall	FINISHED
0274	2025-05-24 12:22	2025-05-24 12:23	0 days, 0 hours, 0 minutes	Start new stability run 274. Previous run crashed again afte	FINISHED
0273	2025-05-24 00:16	2025-05-24 00:53	0 days, 0 hours, 36 minutes	Start new run (273). The previous one was killed immediately	FINISHED
0272	2025-05-24 00:06	2025-05-24 00:07	0 days, 0 hours, 0 minutes	Start new run (272) after crash of logger - ECO2 gas mixture	FINISHED
0271	2025-05-21 19:18	2025-05-23 23:33	2 days, 4 hours, 14 minutes	Start new stability run (271) after GIF++ weekly access - so	FINISHED
0270	2025-05-20 23:09	2025-05-21 10:41	0 days, 11 hours, 32 minutes	Start new stability run (270) after grafana gas kill (HFO al	FINISHED
0269	2025-05-20 19:35	2025-05-20 22:56	0 days, 3 hours, 20 minutes	Start again the stability run (269) after grafana gas kill (	FINISHED
0268	2025-05-20 19:34	2025-05-20 19:34	0 days, 0 hours, 0 minutes	Start again the stability run (268) after grafana gas kill (	FINISHED
0267	2025-05-20 11:53	2025-05-20 18:24	0 days, 6 hours, 30 minutes	Start again the stability after grafana gas kill (HFO alert)	FINISHED

- All chambers included, but ATLAS Run 280 ongoing now
- We had a problem on Saturday 24th May with the start of new runs logger crashed continuously and runs were stopped
  - Several attempts (including the restart of the gas computer at some point), but without success
  - Luca suggested us to launch "python watchdog.py". It worked! Can we add these instructions to the official documentation?
  - Few runs were started also on 20th and 21st Was watchdog running on that moment?

# Stability run(s)

GIF++ Wednesday weekly access
Two source off scans



- No detector related problems observed
- Snapshot updated at ~17:00 of 26th of May

# Stability run(s)



- No detector related problems observed
- Snapshot updated at ~17:00 of 26th of May

#### HV scans with source OFF

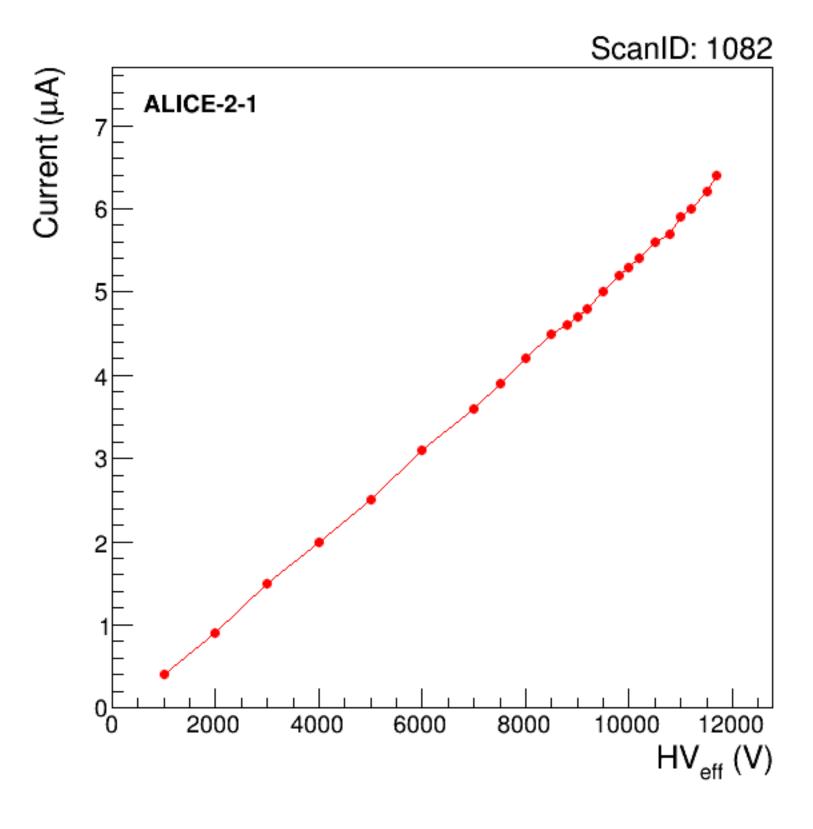
#### HVscan run registry

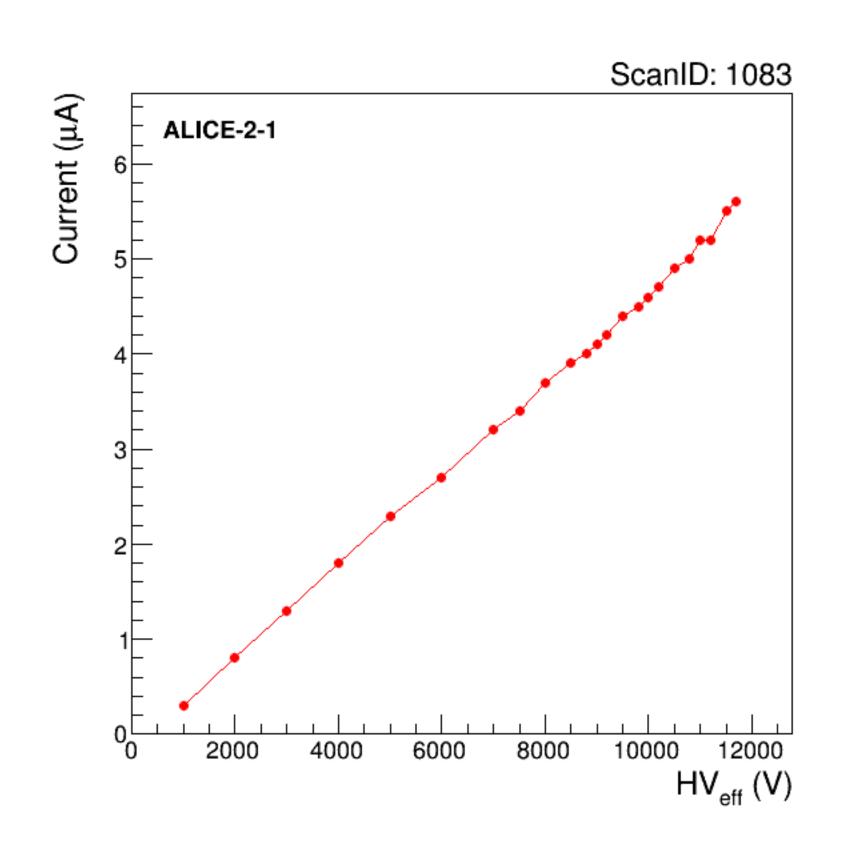
Scan ID	Scan type	Start time	Label	Status	<b>♦</b> #HV <b>♦</b>
	Select scan type ~		Select label v	Select status	~
001084 ₫	Current scan	2025-05-21 12:14	ECOGAS2	FINISHED	23
001083 ₫	Current scan	2025-05-21 10:59	ECOGAS2	FINISHED	23

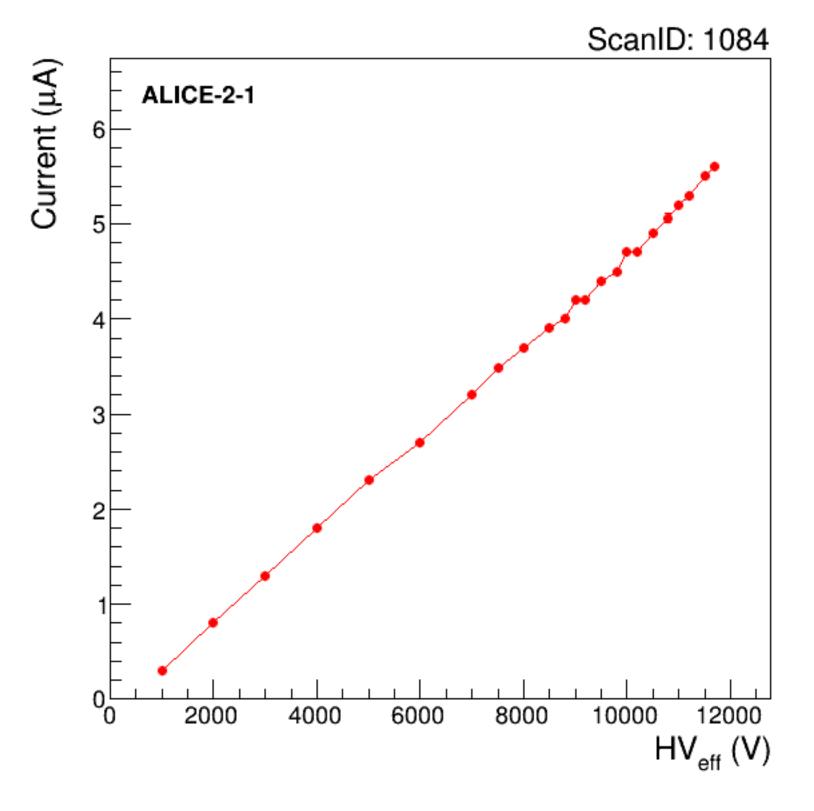
#### ALICE-2-1

#### Last week scan

#### This week scans



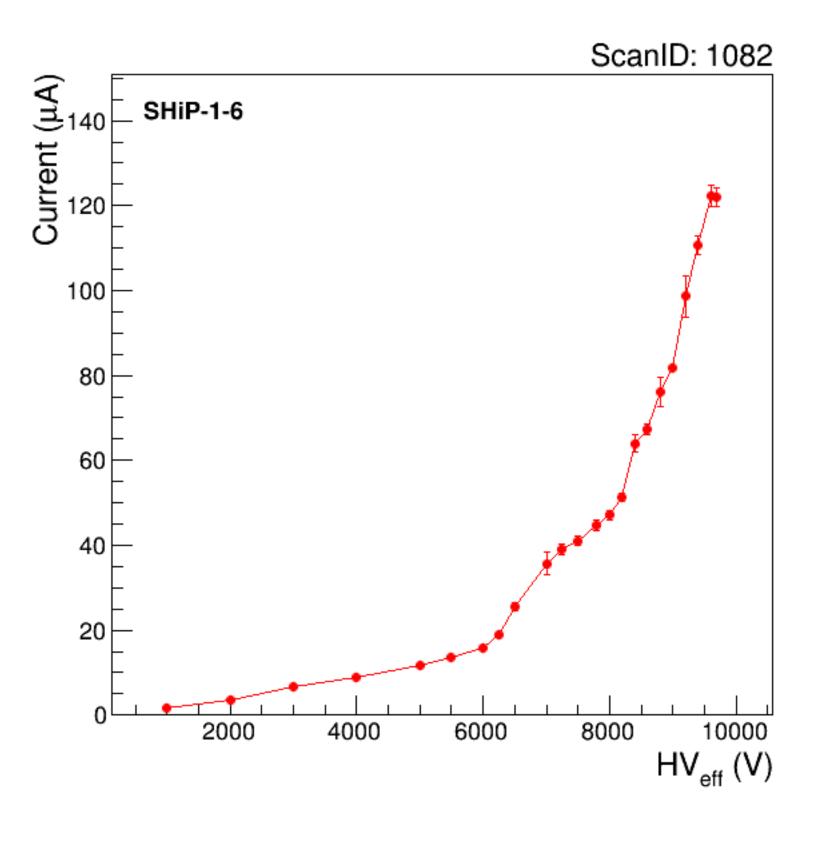


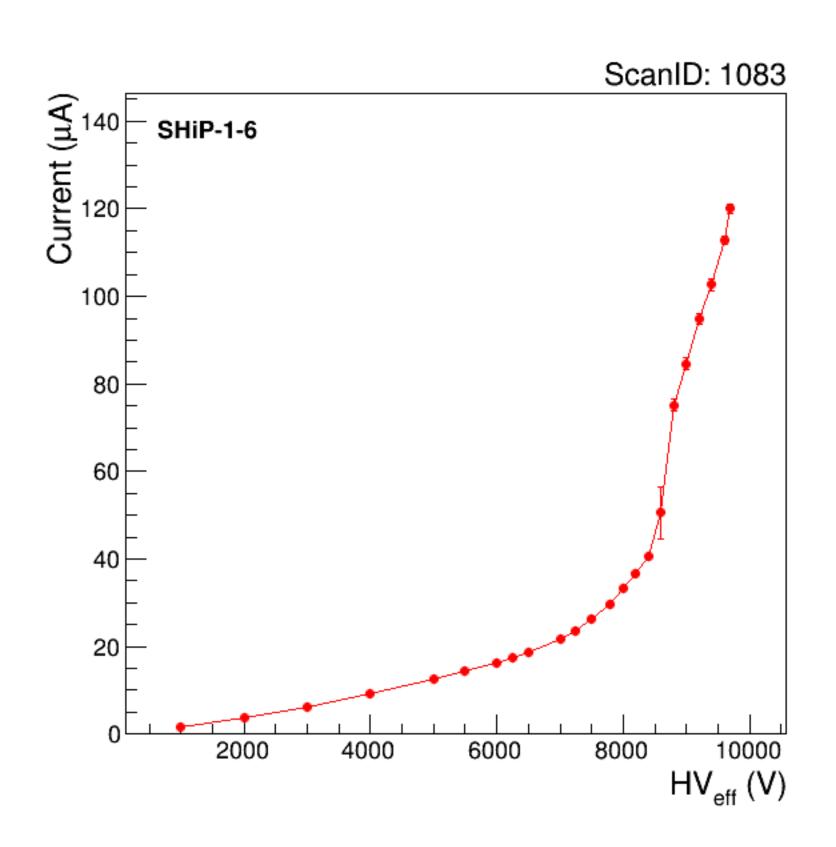


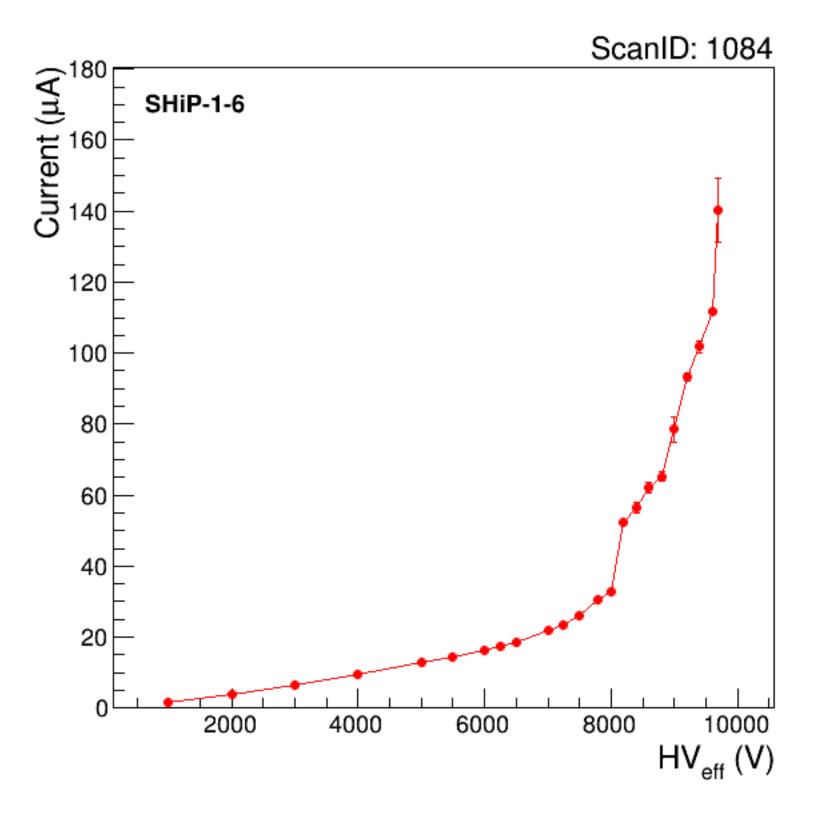
#### **SHIP-1-6**

#### Last week scan

#### This week scans





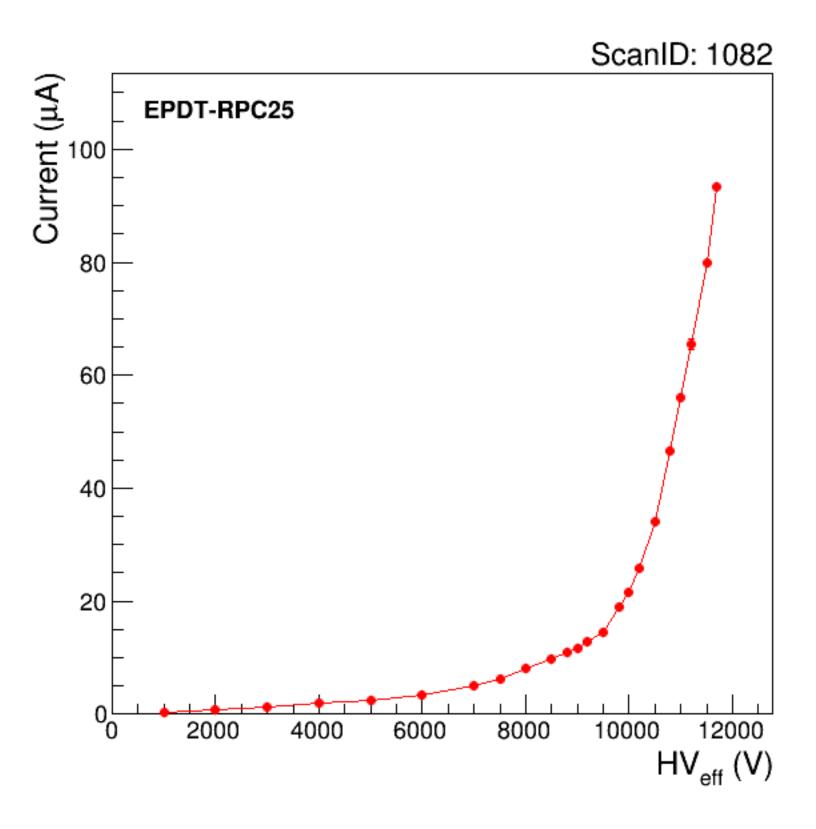


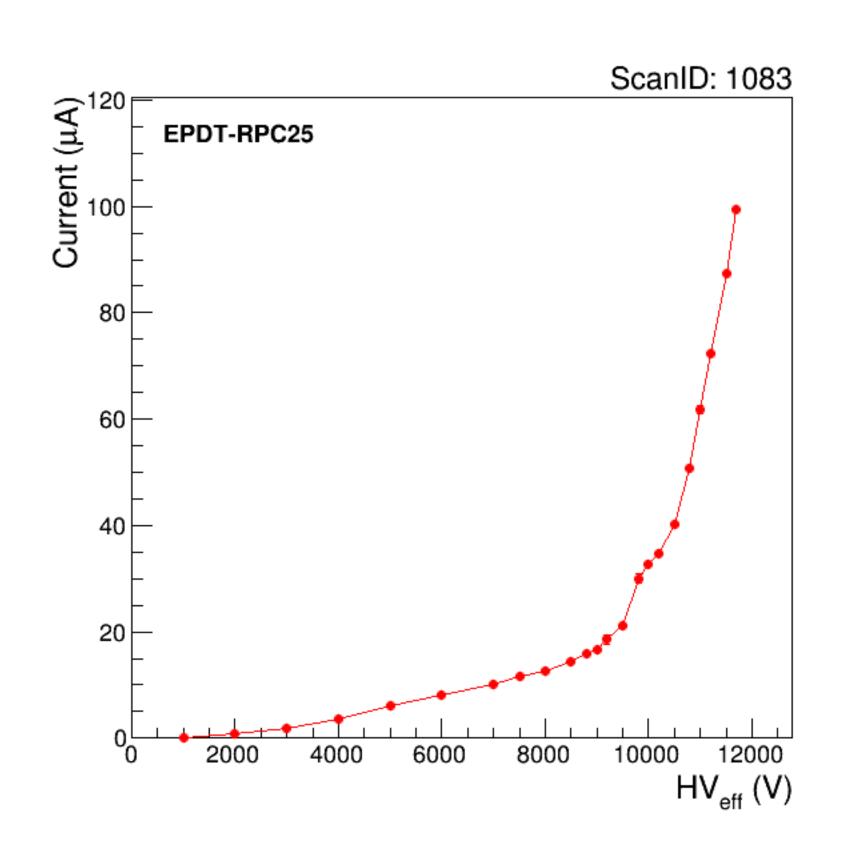
• Some currents jumps during HV scan, but already observed in the past

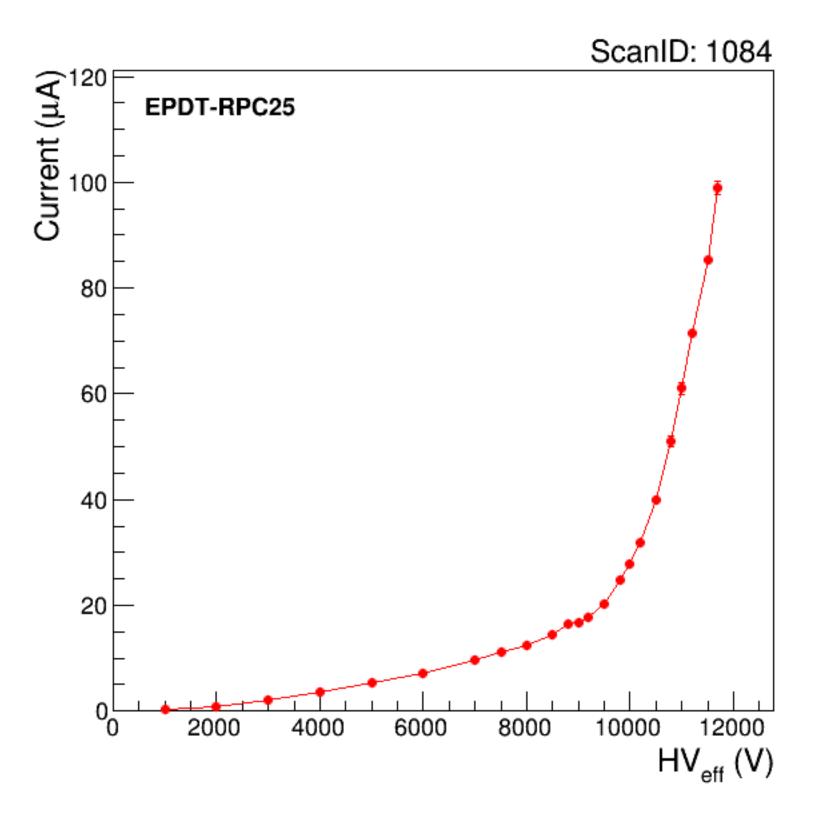
#### EPDT-RPC25

#### Last week scan

#### This week scans



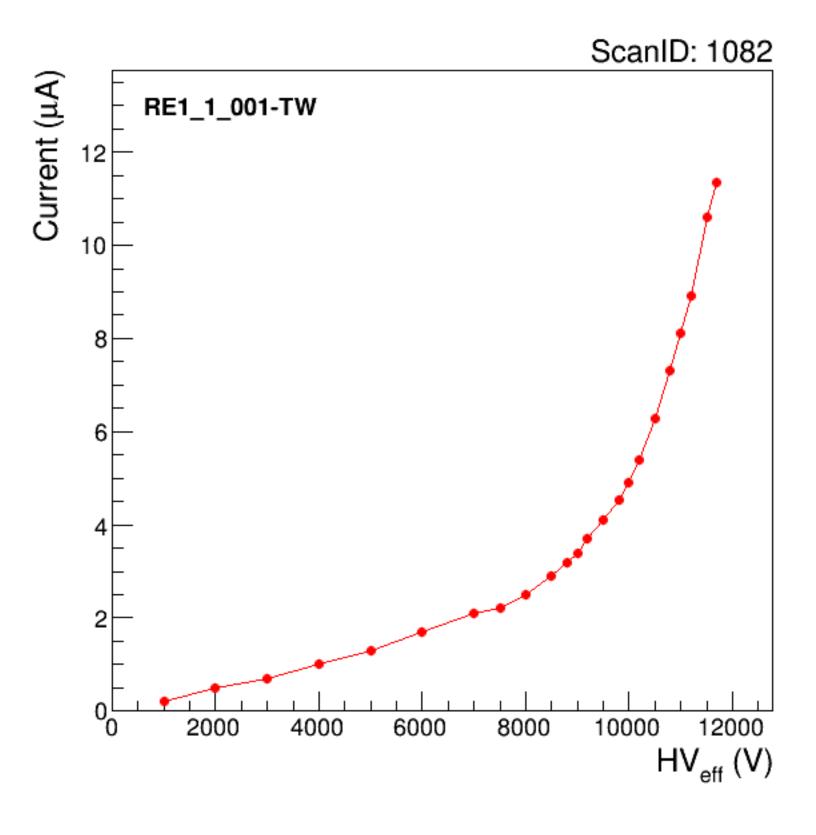


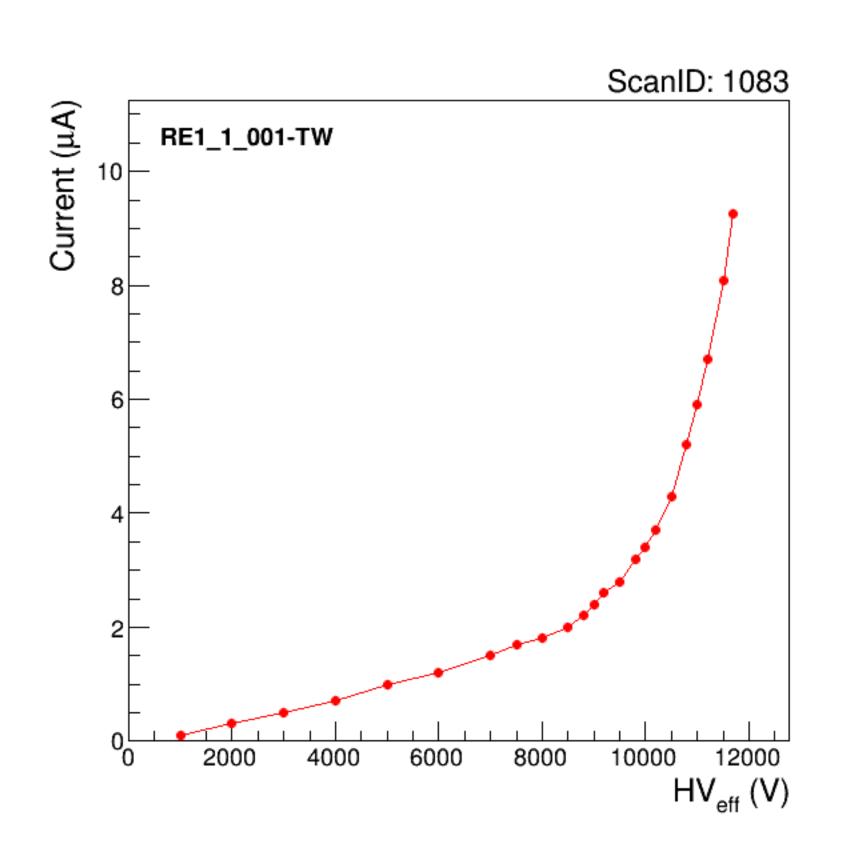


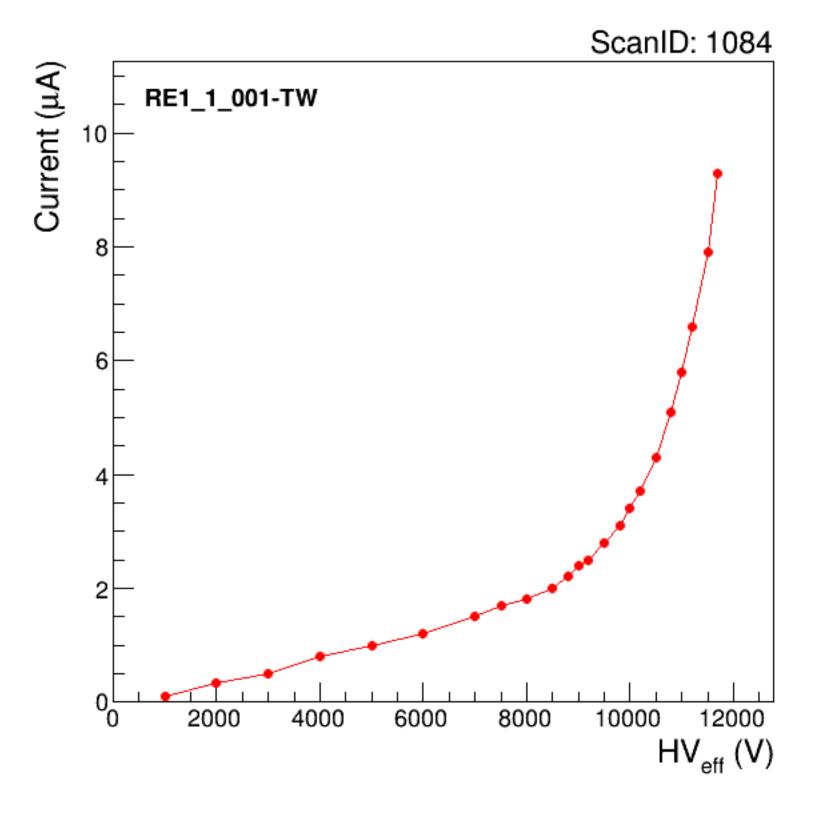
#### RE1\_1\_001-TW

#### Last week scan

#### This week scans



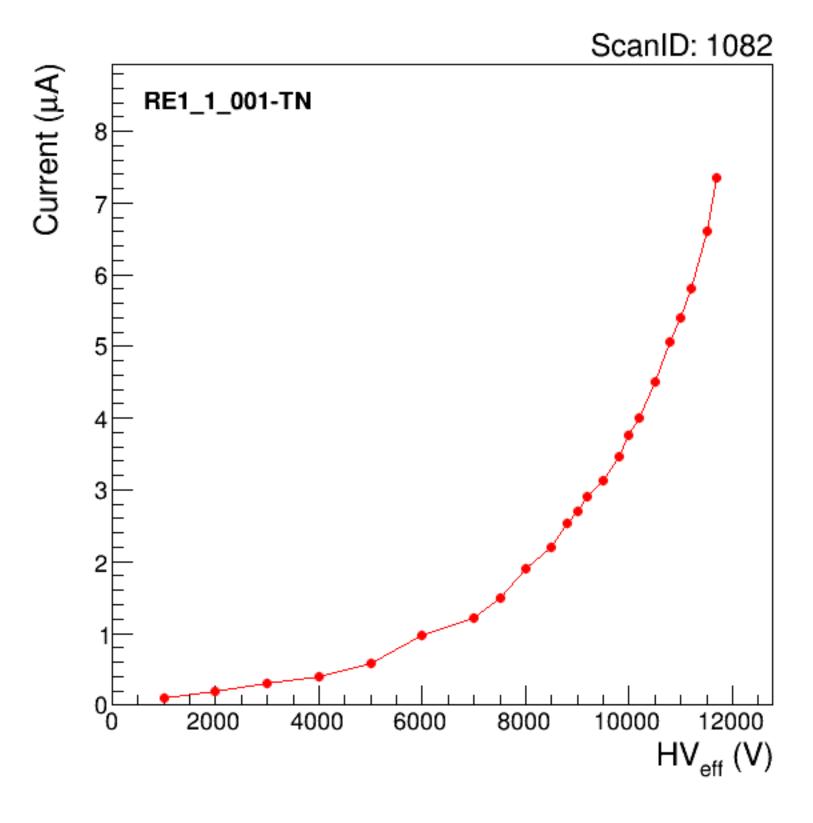


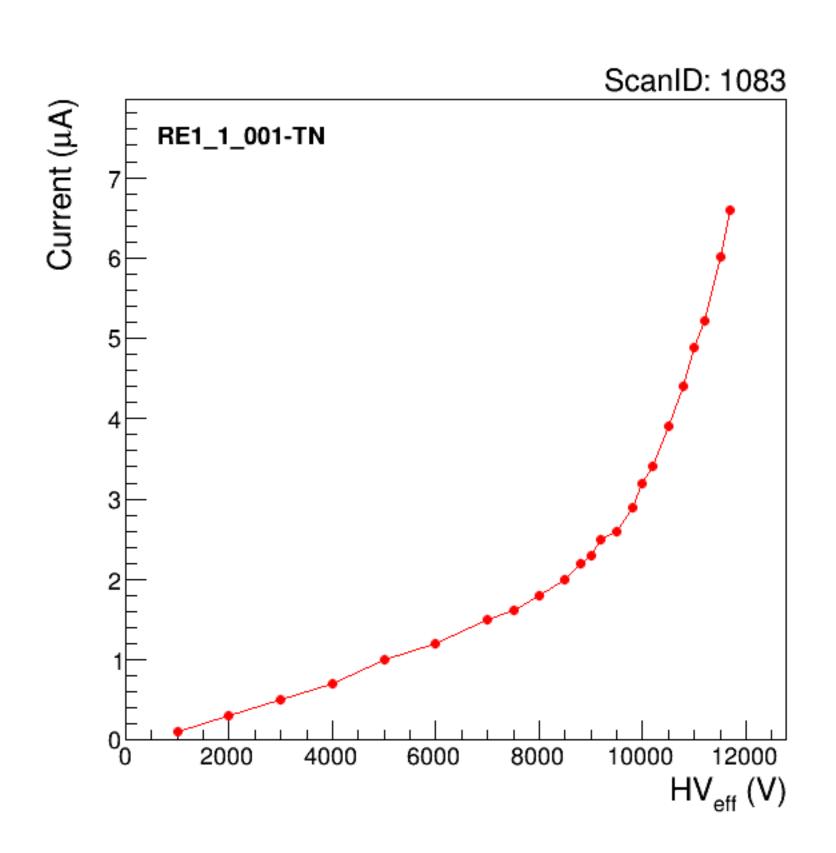


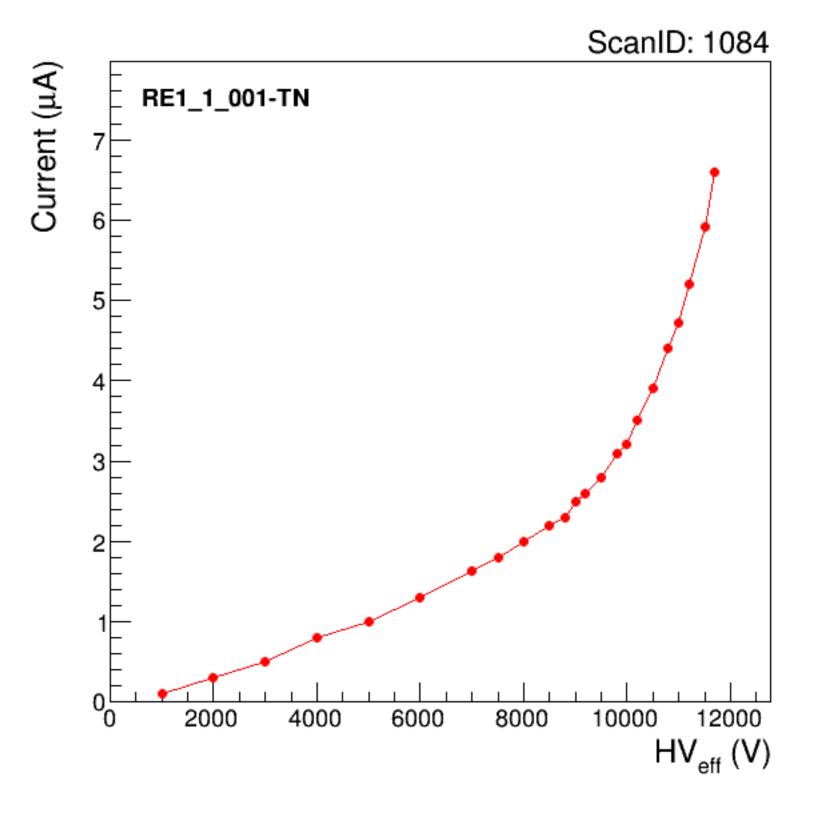
### **RE1\_1\_001-TN**

#### Last week scan

#### This week scans



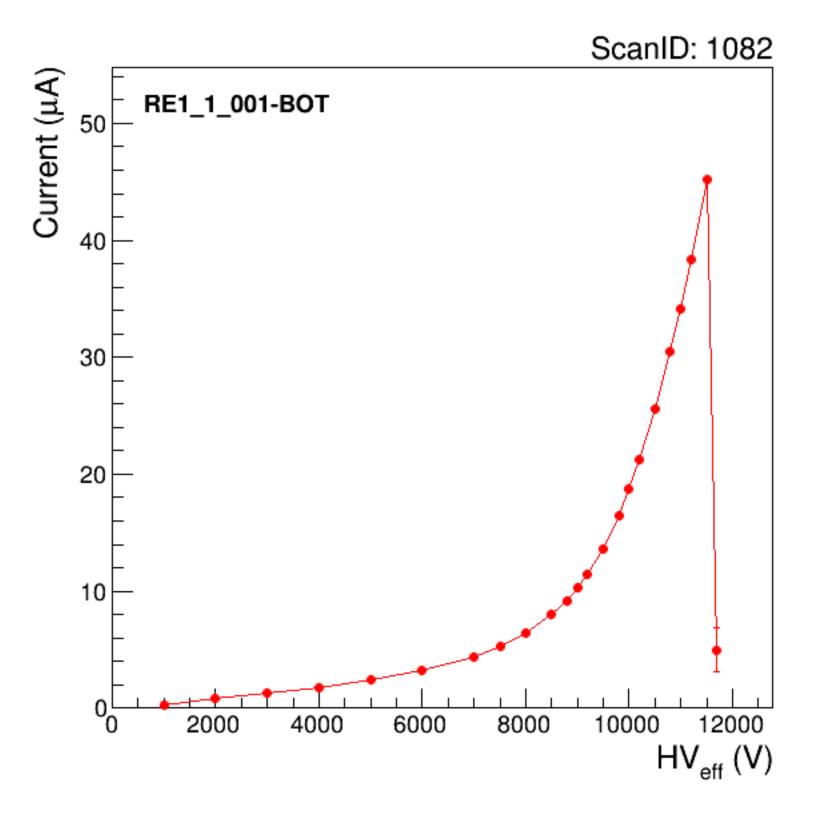


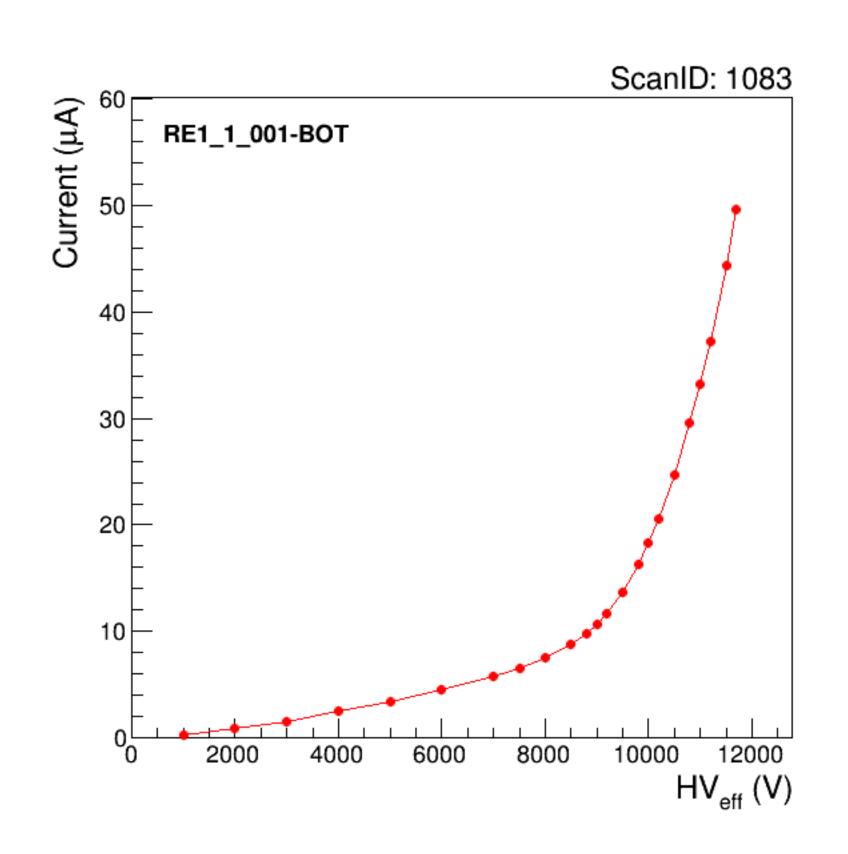


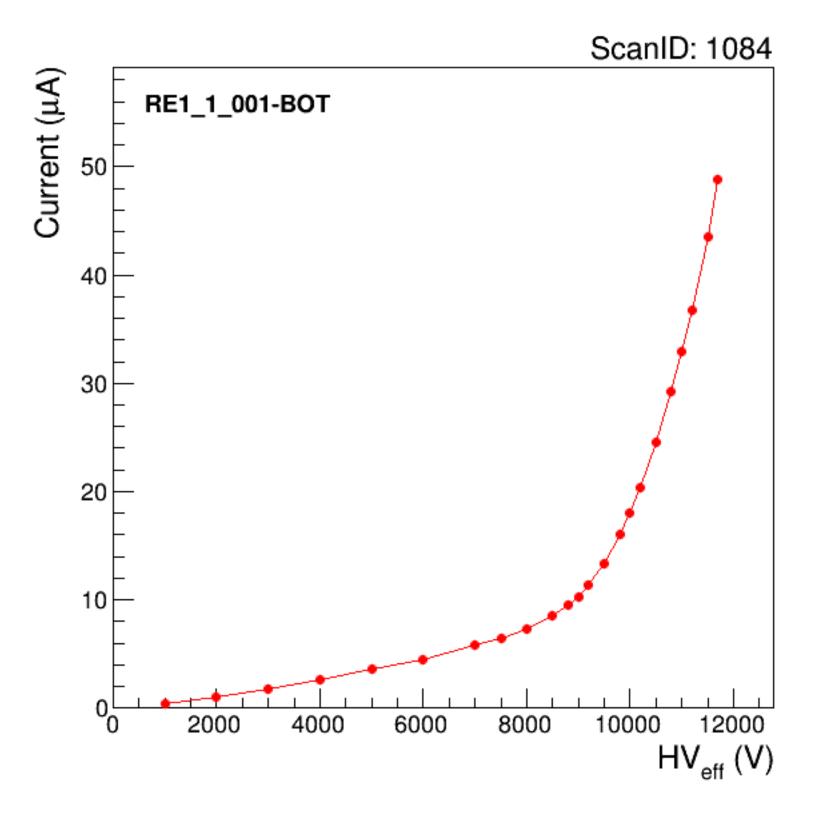
### RE1\_1\_001-BOT

#### Last week scan

#### This week scans



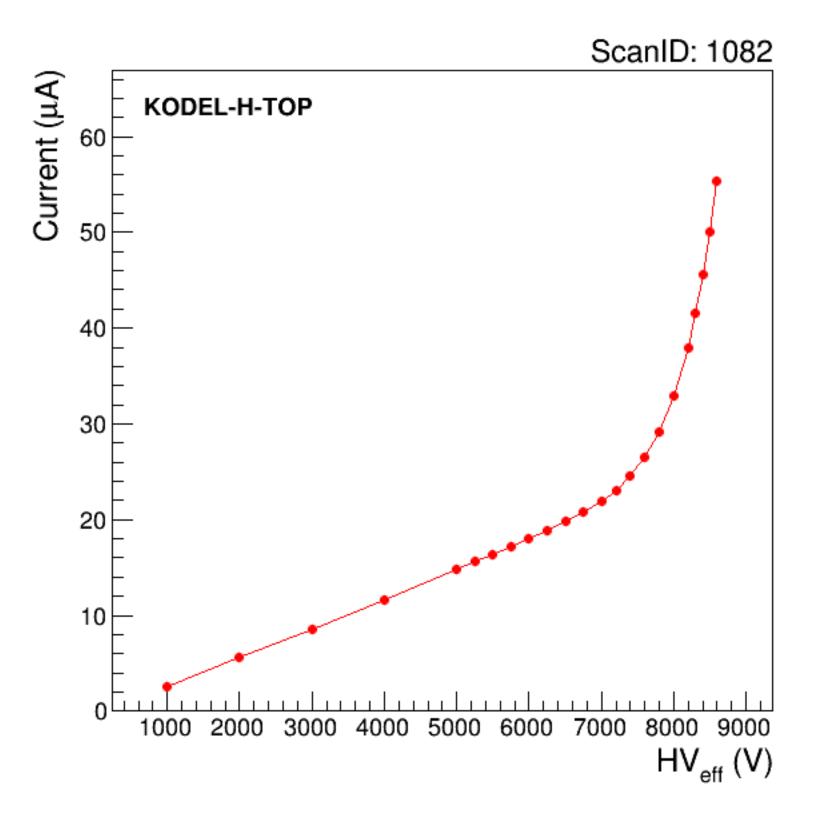


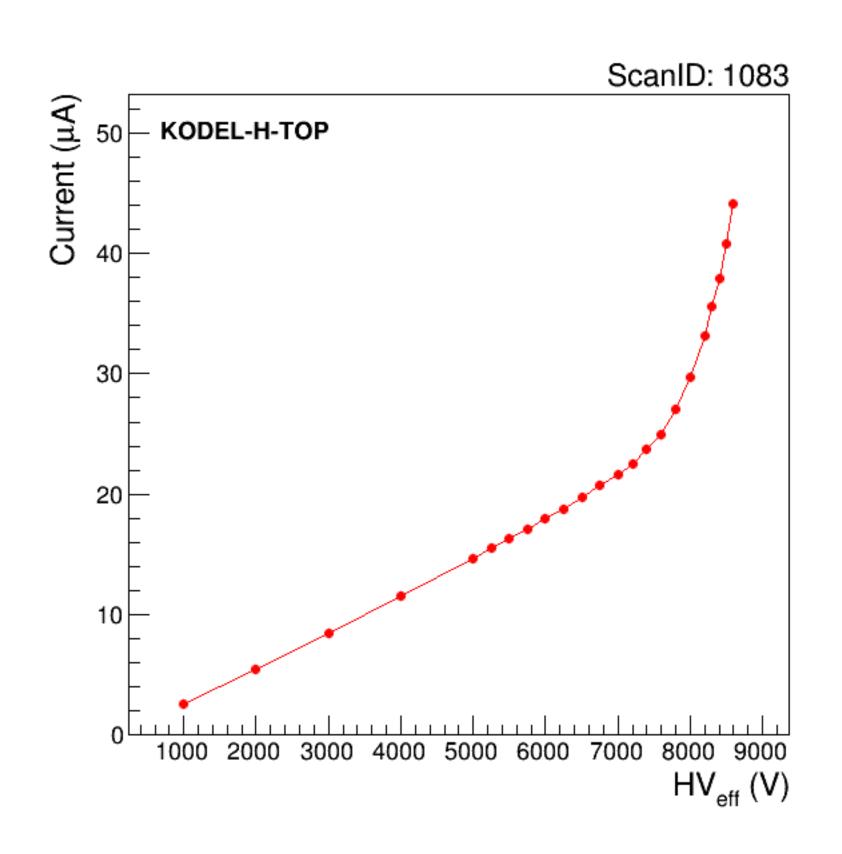


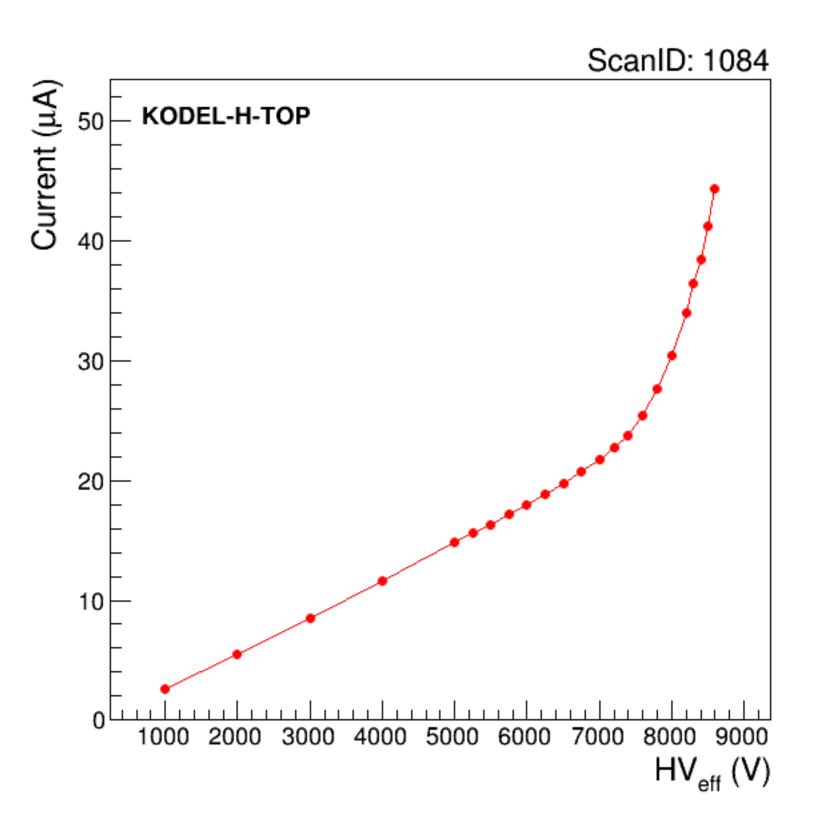
#### **KODEL-H-TOP**

#### Last week scan

#### This week scans



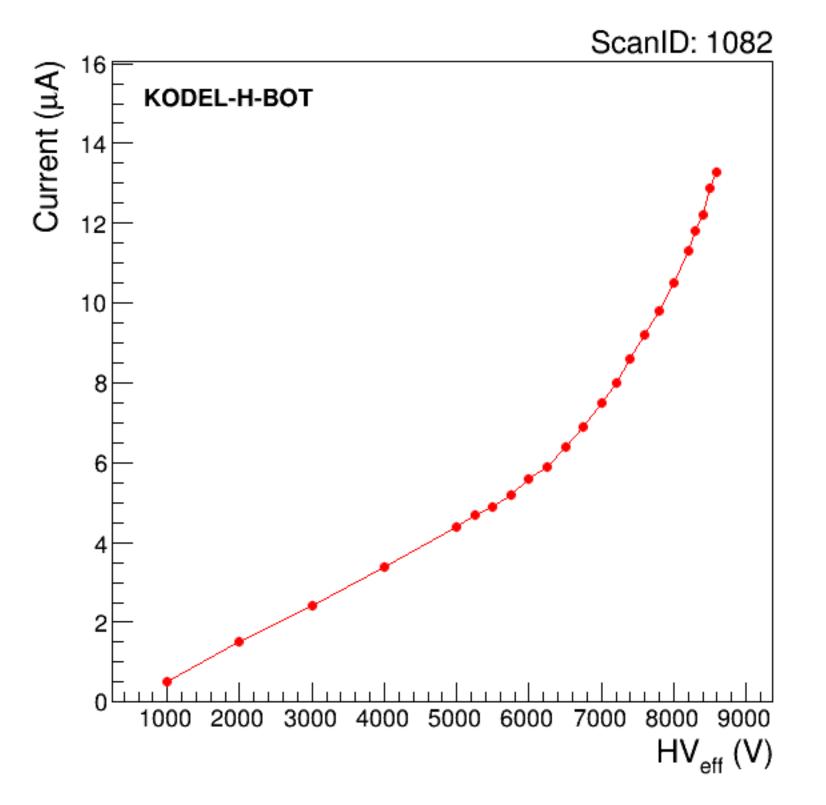




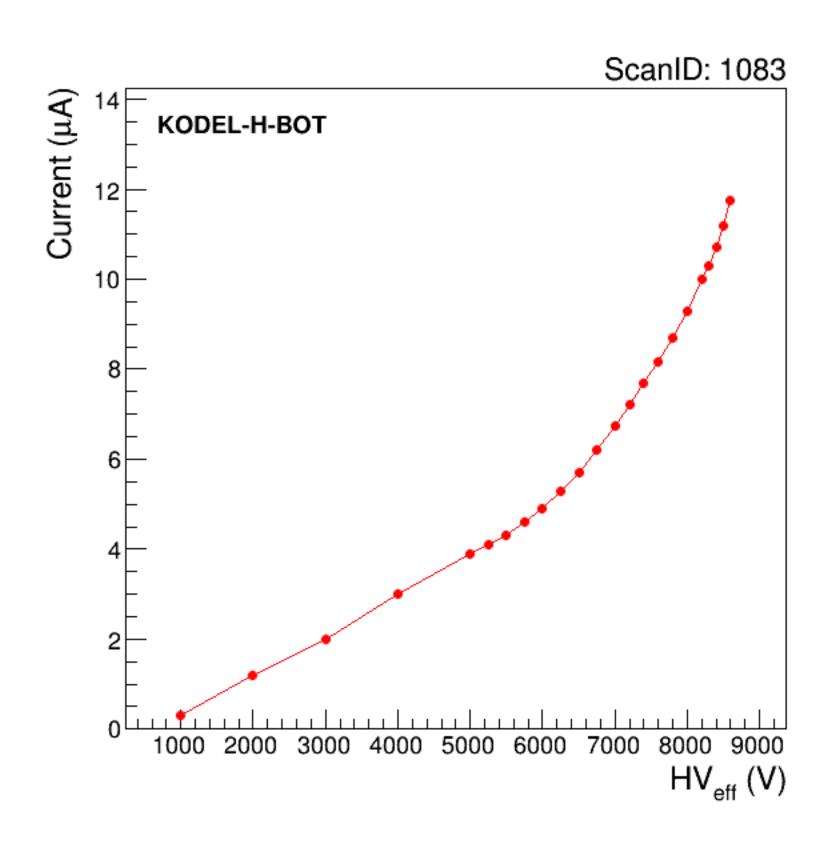
• Ohmic current seems to be the same - 10 uA less at 8600 V

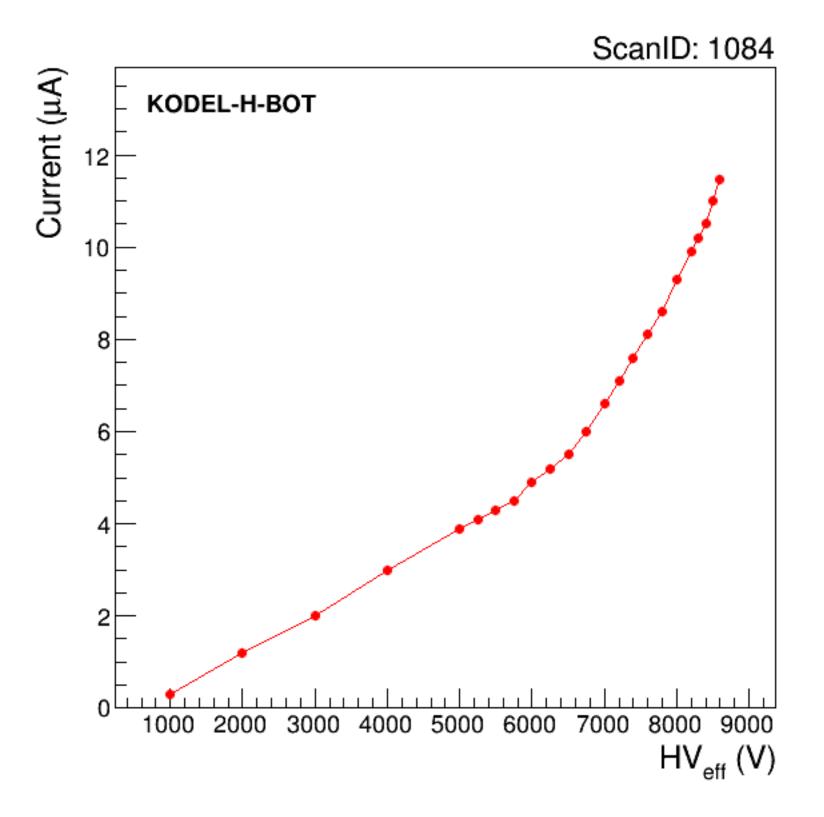
#### **KODEL-H-BOT**

#### Last week scan



#### This week scans





#### Instructions for the next shifter

- All chambers to be included, but ATLAS
  - Use template 280 for the stability run (KODEL applied voltage and i0 limits to be changed manually)
  - Use template 1084 for the HV scans (changed RE11-BOT IO from 60 uA to 80 uA for the source OFF scan to avoid channel trip

#### Stability - Run ID 0280



Chamber/gap	Enabled	Working voltage (V)	Standby voltage (V)	i0 (uA)	Attenuator standby
ALICE-2-1	<b>✓</b>	9500	6500	50	1 (111)
EPDT-RPC25	<b>✓</b>	10600	6500	300	1 (111)
SHiP-1-6	<b>✓</b>	8800	5000	150	1 (111)
RE1_1_001-BOT	<b>✓</b>	10600	6500	60	1 (111)
RE1_1_001-TN		10600	6500	50	1 (111)
RE1_1_001-TW	<b>✓</b>	10600	6500	50	1 (111)
KODEL-H-BOT	<b>✓</b>	6000	5000	50	1 (111)
KODEL-H-TOP	<b>✓</b>	6000	5000	100	1 (111)