



RPC eco-gas at GIF++ Weekly report

Barbara Liberti and Marco Sessa
June 6th, 2024

Stability run 217

Stability - Run ID 0217

Summary Run config Log file Monitoring Plots

Run start: 2024-05-29 20:03:56 Status: **FINISHED**

Run end/last action: 2024-06-05 12:48:33 Duration: 6 days, 16 hours, 44 minutes

Comments:



- All chambers included, but ATLAS
- No major problems during the shift

Only two humidity alarms (yesterday)
-> only one intervention on wet flux

Stability run overview



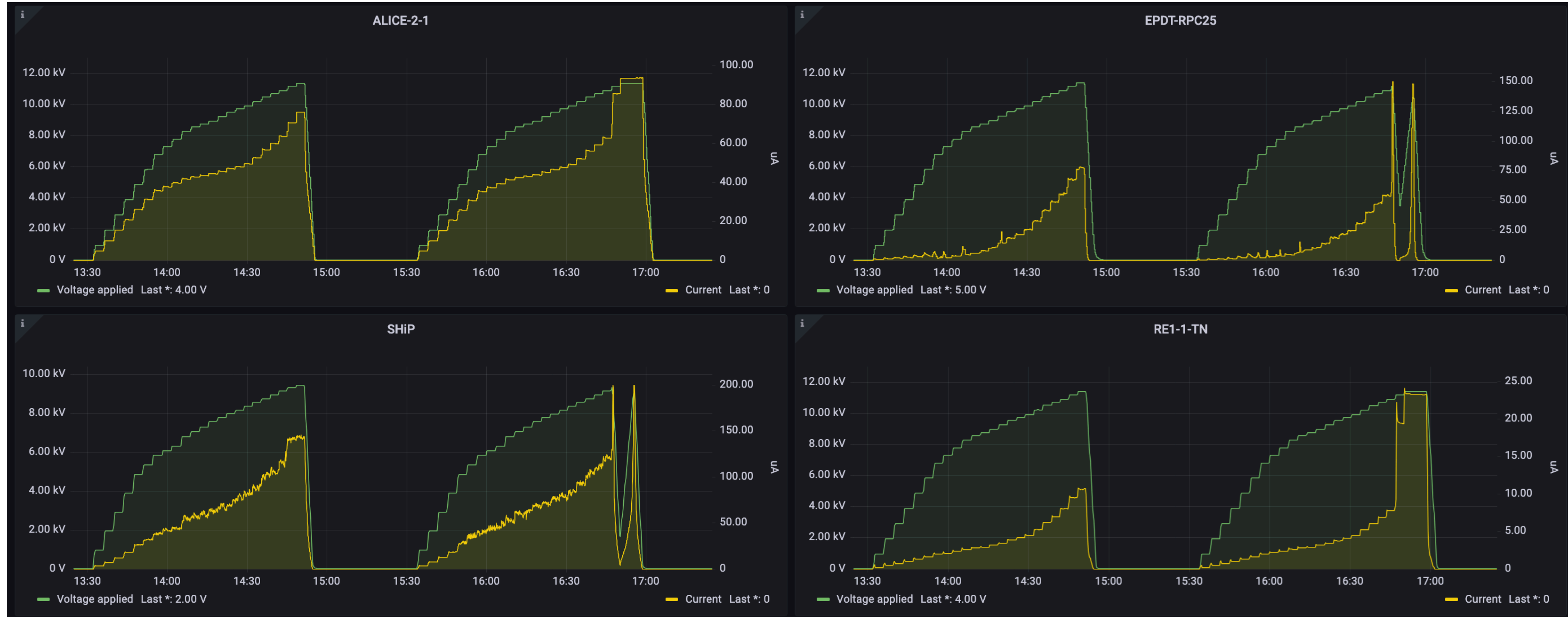
Check list

Shfter(s)	Barbara & Marco	Barbara & Marco	Barbara & Marco	Barbara & Marco	Barbara & Marco	Barbara & Marco	Barbara & Marco	Barbara & Marco
LOGGING	30/05/2024	31/05/2024	01/06/2024	02/06/2024	03/06/2024	04/06/2024	05/06/2024	06/06/2024
Logger status	ok	ok	ok	ok, crashed and restarted	ok	ok, crashed and restarted	ok	ok
WebDCS status	ok	ok	ok	ok	ok	ok	ok	ok
HV data is logged	ok	ok	ok	ok	ok	ok	ok	ok
Grafana alarms - check that the heart icon on the panels is green	ok	ok	ok	ok	ok	ok	ok	ok
MIXER								
Gas mixture	ECO2	ECO2	ECO2	ECO2	ECO2	ECO2	ECO2	ECO2
Check gas mixture percentage iC4H10	4	4	4	4	4	4	4	4
Check gas mixture percentage CO2	60	60	60	60	60	60	60	60
Check gas mixture percentage HFO	35	35	35	35	35	35	35	35
Check gas mixture percentage SF6	1	1	1	1	1	1	1	1
Total gas flow	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
HFO used	899	976	1100	1180	1280	1390	1450	1550
HUMIDIFIER								
By pass valve status:								
Humidifer Wet MFC:	12.4	12.4	12.4	12.4	12.4	12.41	12.4	11.4
Dew point:	4.41	3.55	4.11	3.84	4.04	4.61	4.05	3.84
GENERAL								
Upstream ABS:	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Detectors in front of setup:								
Bunker pressure:	951.5	955.86	958.7	962.11	960.52	956.3	958.69	960.72
Bunker temperature:	20.58	20.58	20.55	20.53	20.54	20.5	20.52	20.54
ALICE Hvapp	7.26	7.29	7.3	7.32	7.31	7.39	7.3	7.31
ATLAS Hvapp	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
SHiP Hvapp	8.51	8.55	8.57	8.59	8.58	8.55	8.57	8.58
CMS Hvapp	10.26	10.3	10.33	10.36	10.34	10.31	10.33	10.34
EPDT Hvapp	10.26	10.3	10.32	10.35	10.34	10.3	10.32	10.34
Bari 1.0mm Hvapp	//	//	//	//	//	//	//	//
Kodel H HVapp	6.77	6.8	6.81	6.83	6.82	6.8	6.81	6.82
ALICE currents	40.1	39.6	39.1	38.6	38.2	37.3	37.1	36.5
ATLAS currents	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
SHiP currents	121.6	130.1	127	125.4	138	123.2	125.4	127.7
CMS currents (TN-TW-BOT)	7.7 - 9.1 - 33.6	7.6 - 9.5 - 33.8	7.7 - 9.1 - 34.2	7.6 - 9.2 - 34.7	7.6 - 9.2 - 34.7	7.6 - 9.4 - 35.1	7.6 - 9.3 - 35.2	7.6 - 9.1 - 33.7
EPDT currents	126.3	126.8	126.7	126.5	127.7	128.1	128.6	128.4
Bari 1.0mm currents (TOP-BOTTOM)	//	//	//	//	//	//	//	//
Kodel H currents	2.2 - 6.8	1.9 - 6.6	1.8 - 6.4	1.8 - 6.1	1.8 - 6	2.1 - 6.1	2.2 - 6.0	2.1 - 5.8

- Logger crashed 3 or 4 times - restarted without problems

HV scans 859 and 860 - overview

Wednesday 5th June

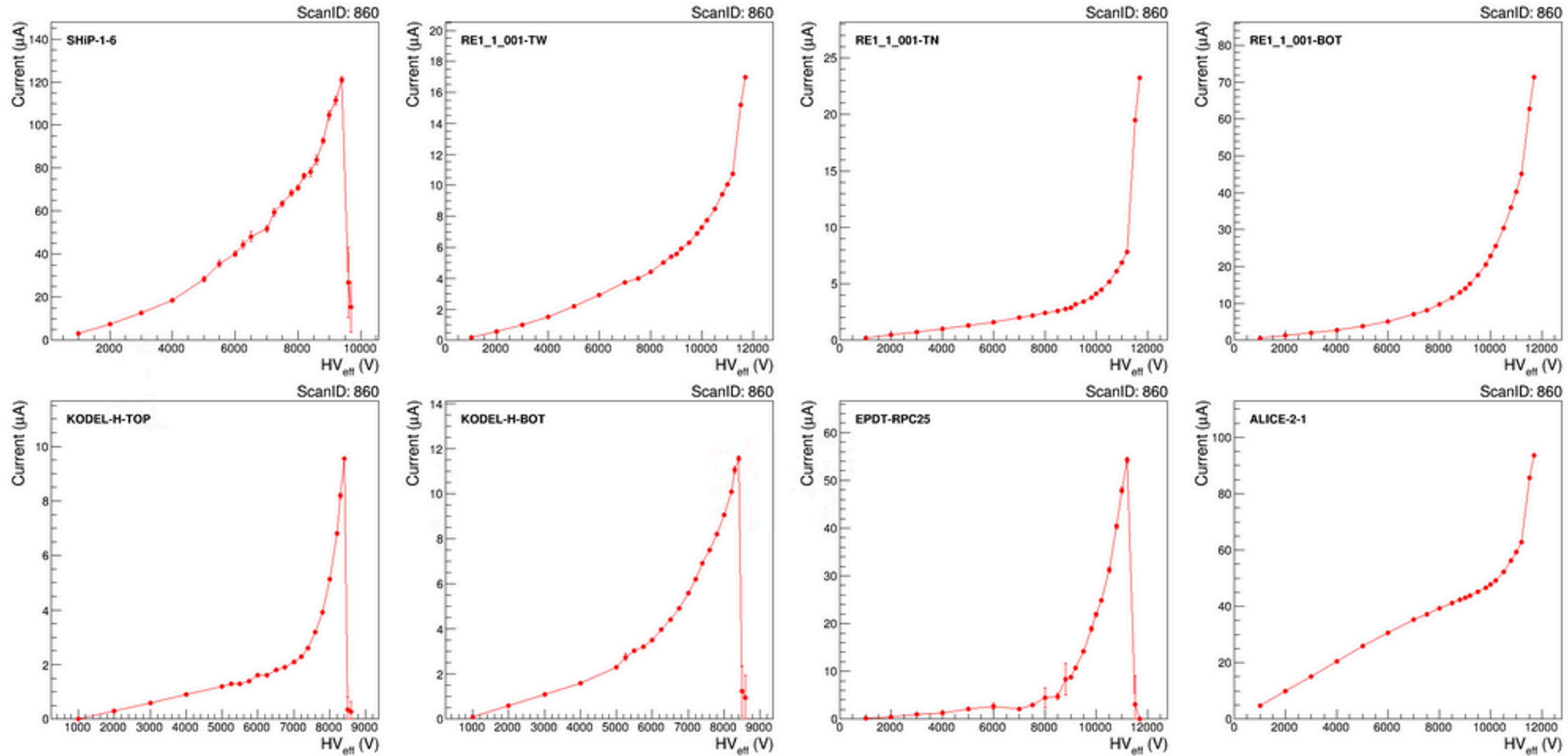


The last part of run 860 was taken with source on —> SHIP, EPDT and Kodel chambers tripped

Unfortunately, I missed the first GIF elog at 16:25 and the source was switched on at 16:51. I apologize for that!

HV scans 860

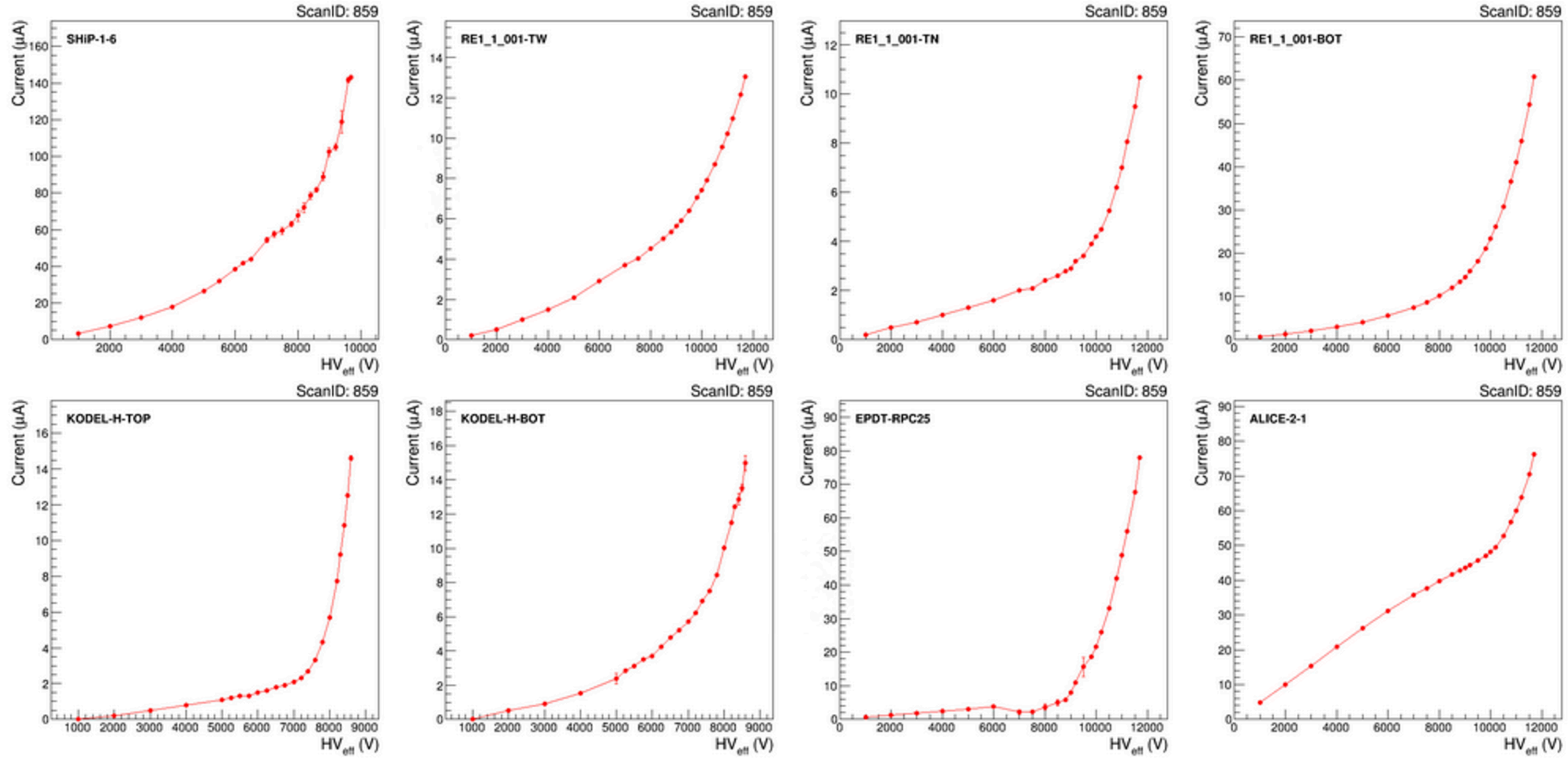
Wednesday 5th June



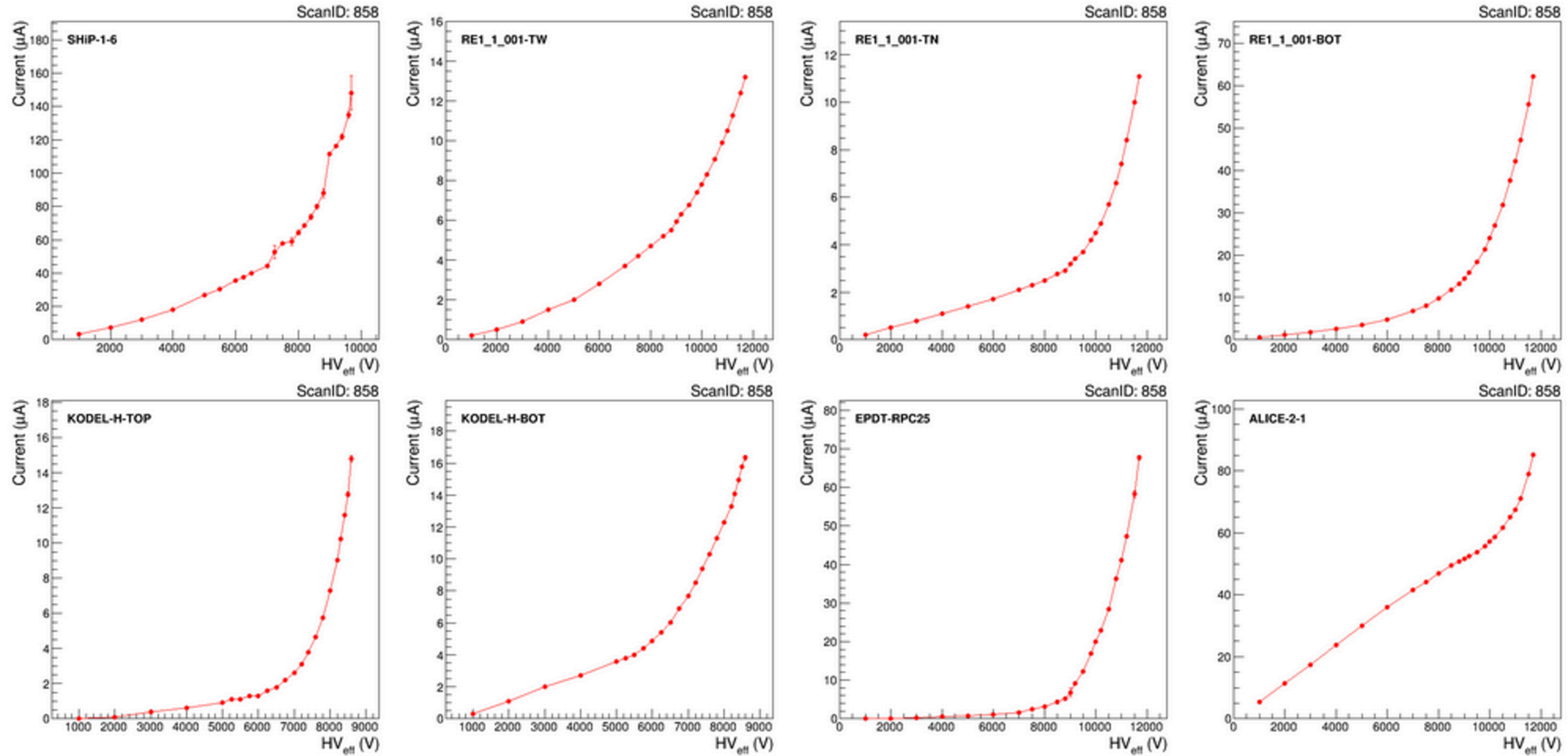
- Scan with source ON during last minutes - it should not be used for source off studies

HV scans 859

Wednesday 5th June



HV scan 858 from last week (for comparison)



- No huge differences observed w.r.t. this week run 859

Ongoing stability run 218

- Started yesterday evening around 8:50 pm

Stability - Run ID 0218

Summary Run config Log file Monitoring Plots

Run start: 2024-06-05 20:42:59 Status: **ONGOING**

Run end/last action: 2024-06-06 10:26:50 Duration: 0 days, 13 hours, 43 minutes

Comments: Starting new stability run - source ON
- all detectors included but ATLAS

Save changes Delete run



~4 uA current jump observed for ALICE
this morning around 9:00 am

Stability - Run ID 0218

Summary Run config Log file Monitoring Plots

Chamber/gap	Enabled	Working voltage (V)	Standby voltage (V)	i0 (uA)
ALICE-2-1	<input checked="" type="checkbox"/>	8500	6500	99
EPDT-RPC25	<input checked="" type="checkbox"/>	10600	6500	150
SHiP-1-6	<input checked="" type="checkbox"/>	8800	5000	200
RE1_1_001-BOT	<input checked="" type="checkbox"/>	10600	6500	200
RE1_1_001-TN	<input checked="" type="checkbox"/>	10600	6500	200
RE1_1_001-TW	<input checked="" type="checkbox"/>	10600	6500	200
KODEL-H-BOT	<input checked="" type="checkbox"/>	7000	5000	50
KODEL-H-TOP	<input checked="" type="checkbox"/>	7000	5000	50

Update run configuration