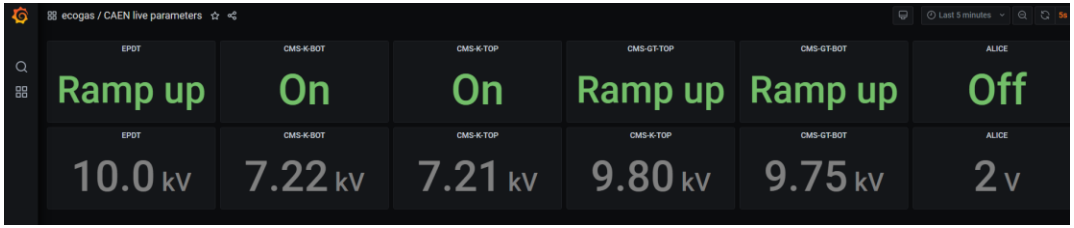
Shift report
01-07/04

Liliana Congedo and Alessandra Pastore

31/03 – 01/04



CAEN data

HV values were set to the standard values but the current limits were too low. Thus, the chambers were rumping up and then tripping continuosly.

31/03 – 01/04

Old run config:

Stability - Run ID 0078

Summary | Run config | Log file | Monitoring | Plots | CMS-GT-2-0-BOT

Chamber/gap	Enabled	Working voltage (V)	Standby voltage (V)	i0 (uA)	Attenuator standby
CMS-GT-2-0-BOT	☑	10600	6500	99	1 (111)
CMS-GT-2-0-TOP	☑	10600	6500	99	1 (111)
CMS-KODEL_1-4-BOT	☑	7400	5000	50	1 (111)
CMS-KODEL_1-4-TOP	☑	7400	5000	50	1 (111)
EPDT-RPC6	☑	10600	6500	99	1 (111)

Updated run config:

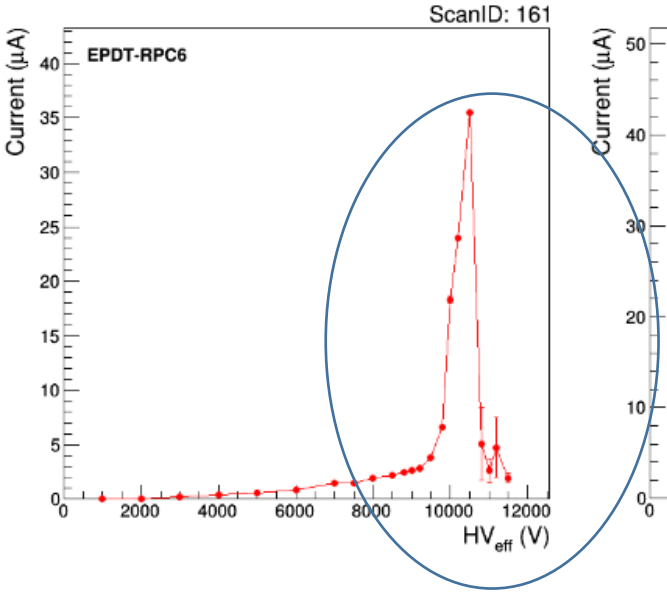
Stability - Run ID 0078

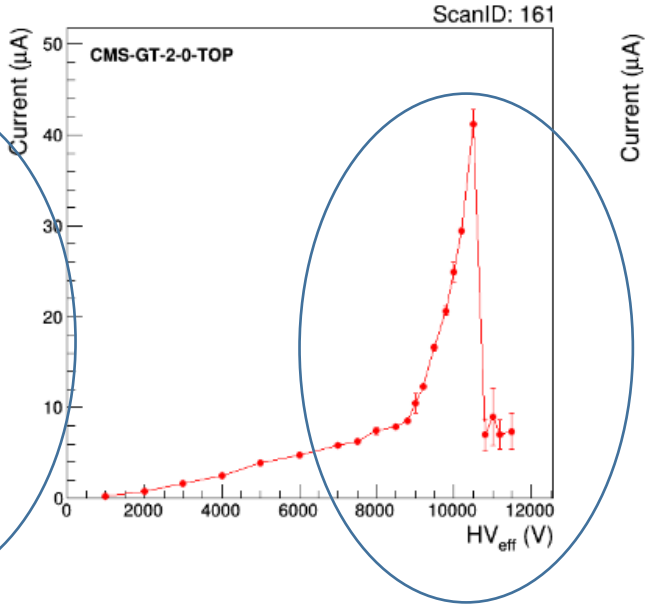
Summary | Run config | Log file | Monitoring | Plots | CMS-GT-2-0-BOT

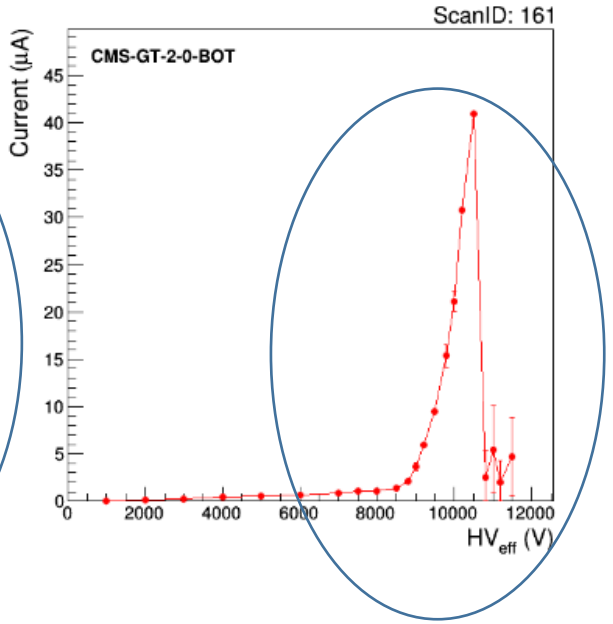
Run configuration updated.

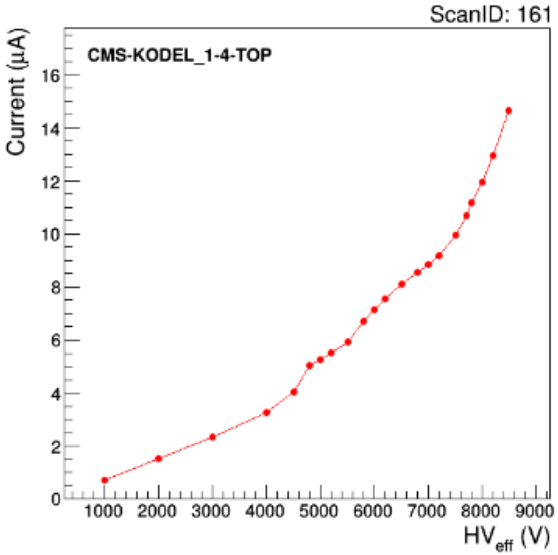
Chamber/gap	Enabled	Working voltage (V)	Standby voltage (V)	i0 (uA)	Attenuator standby
CMS-GT-2-0-BOT	☑	10600	6500	250	1 (111)
CMS-GT-2-0-TOP	☑	10600	6500	250	1 (111)
CMS-KODEL_1-4-BOT	☑	7400	5000	90	1 (111)
CMS-KODEL_1-4-TOP	☑	7400	5000	90	1 (111)
EPDT-RPC6	☑	10600	6500	250	1 (111)

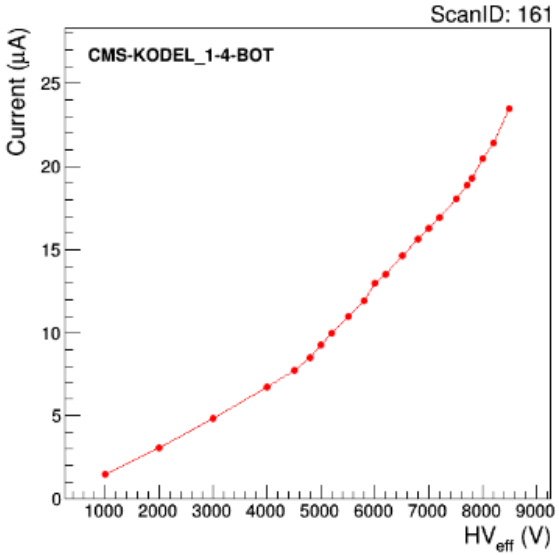
HV scan 31/03/2021





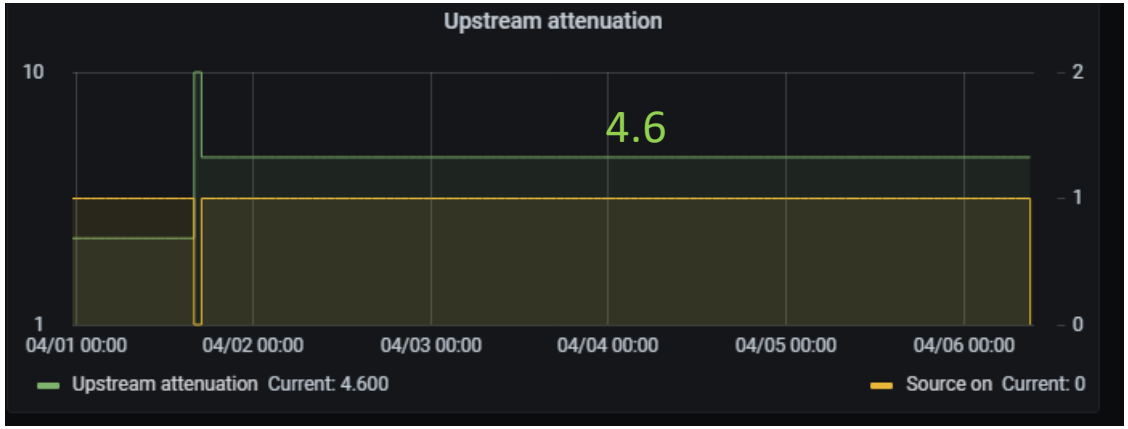


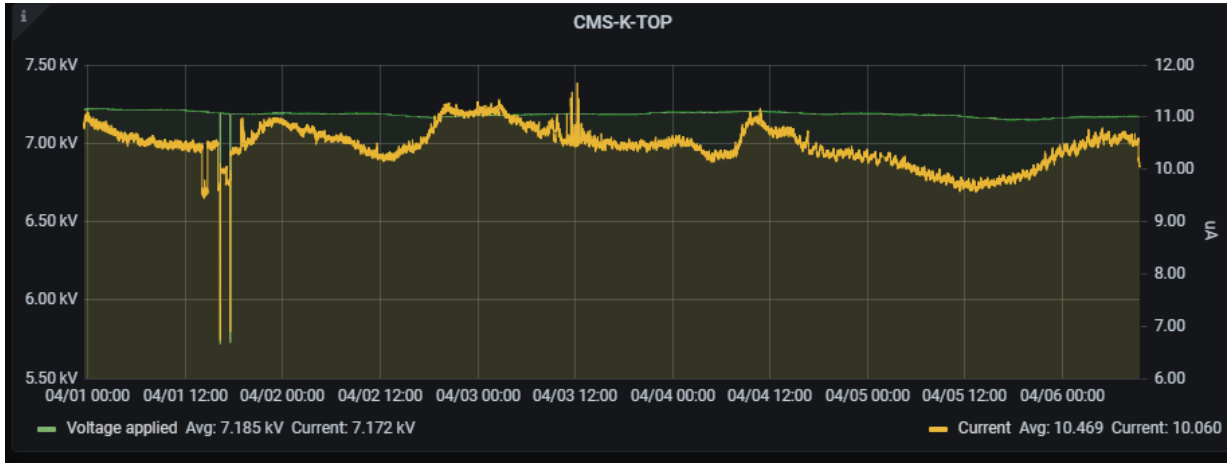


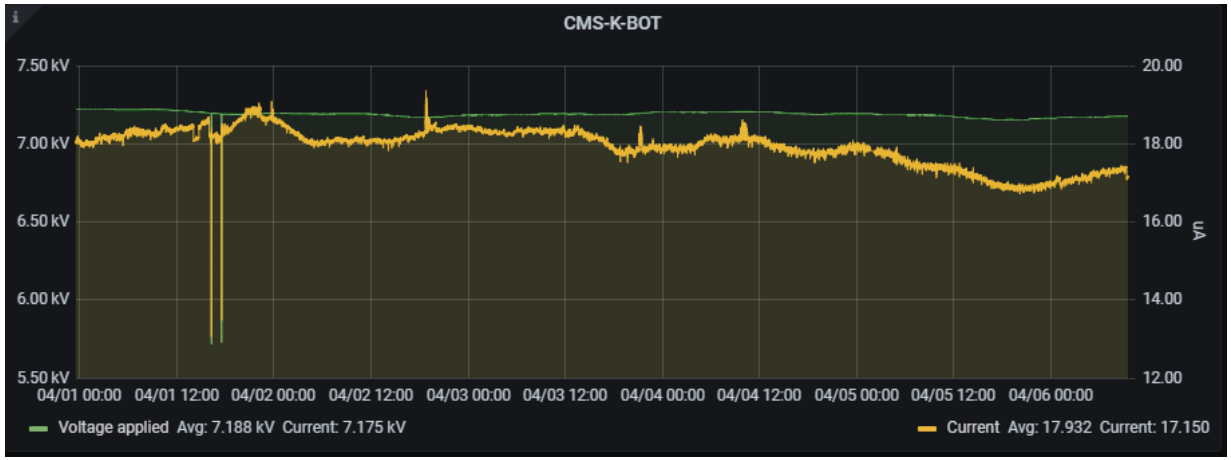


Currents above i0 values with the old config!

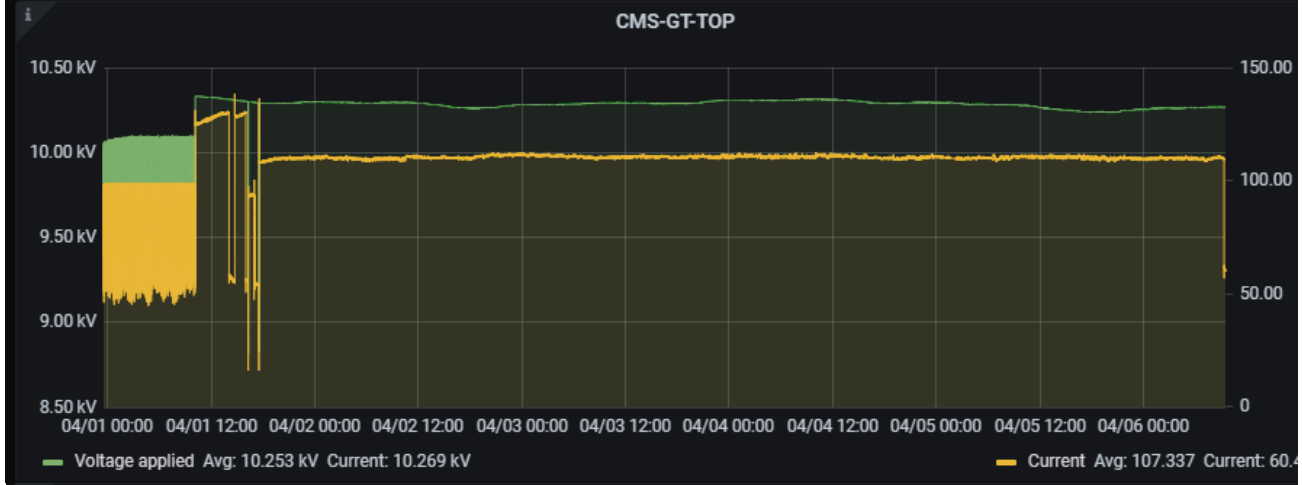
Weekly stability run: currents

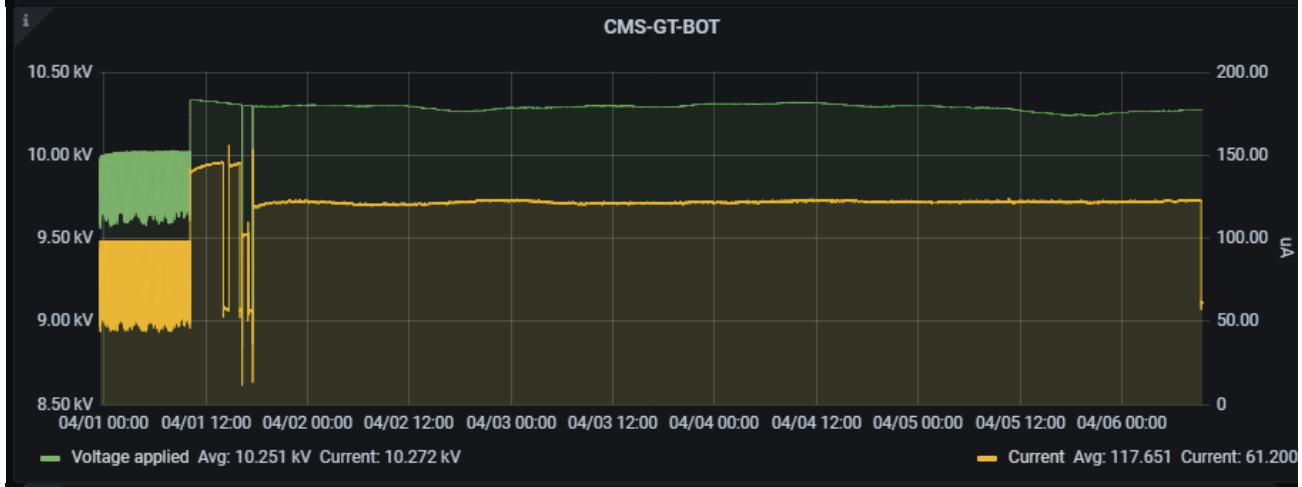


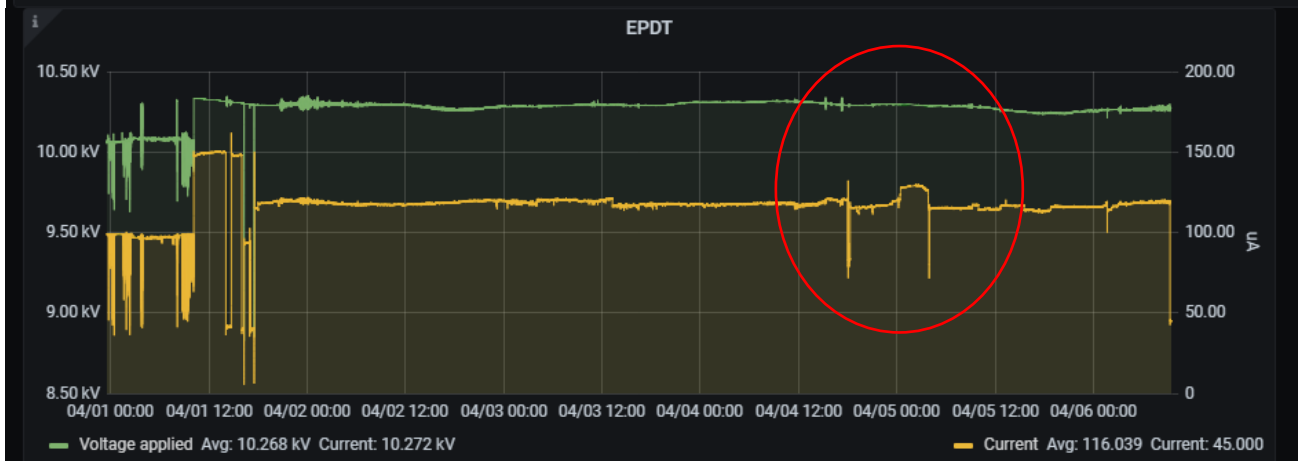


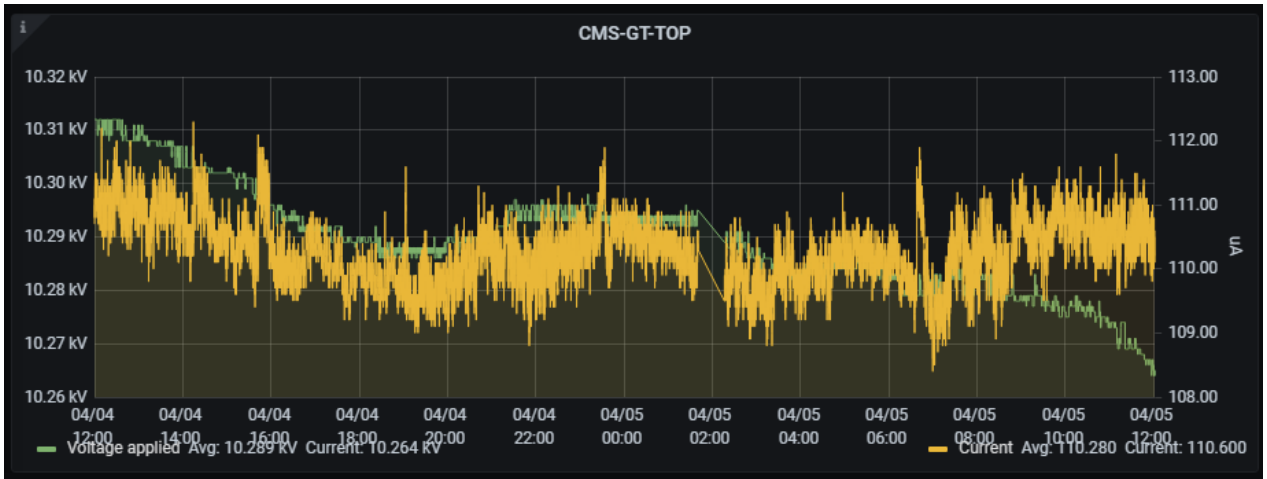


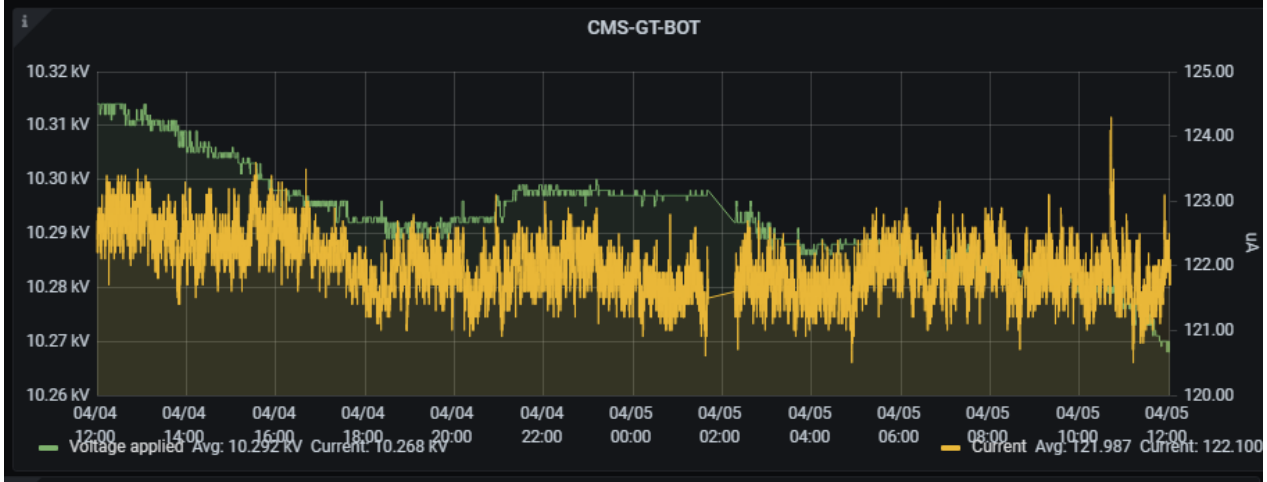
Weekly stability run: currents

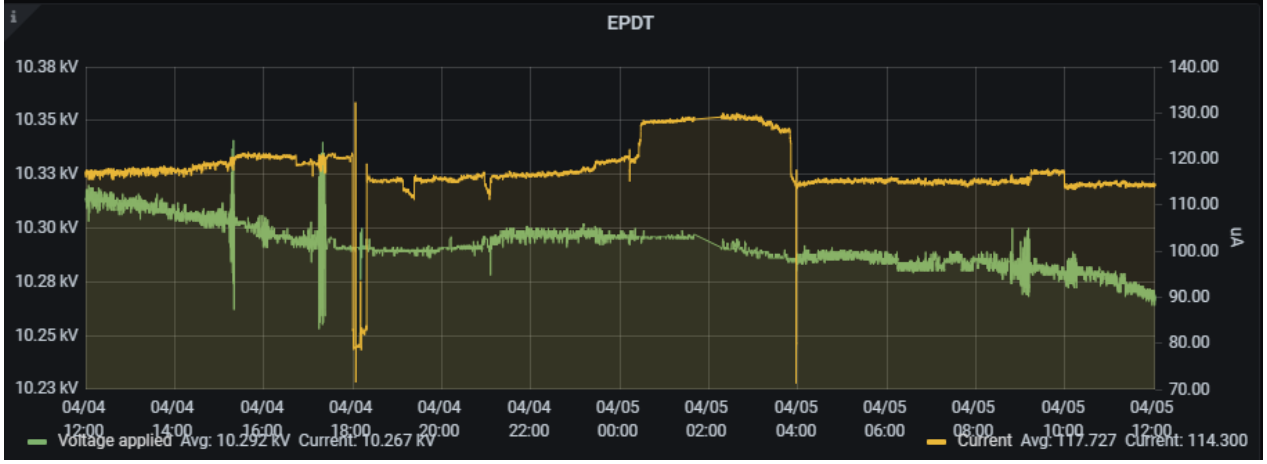








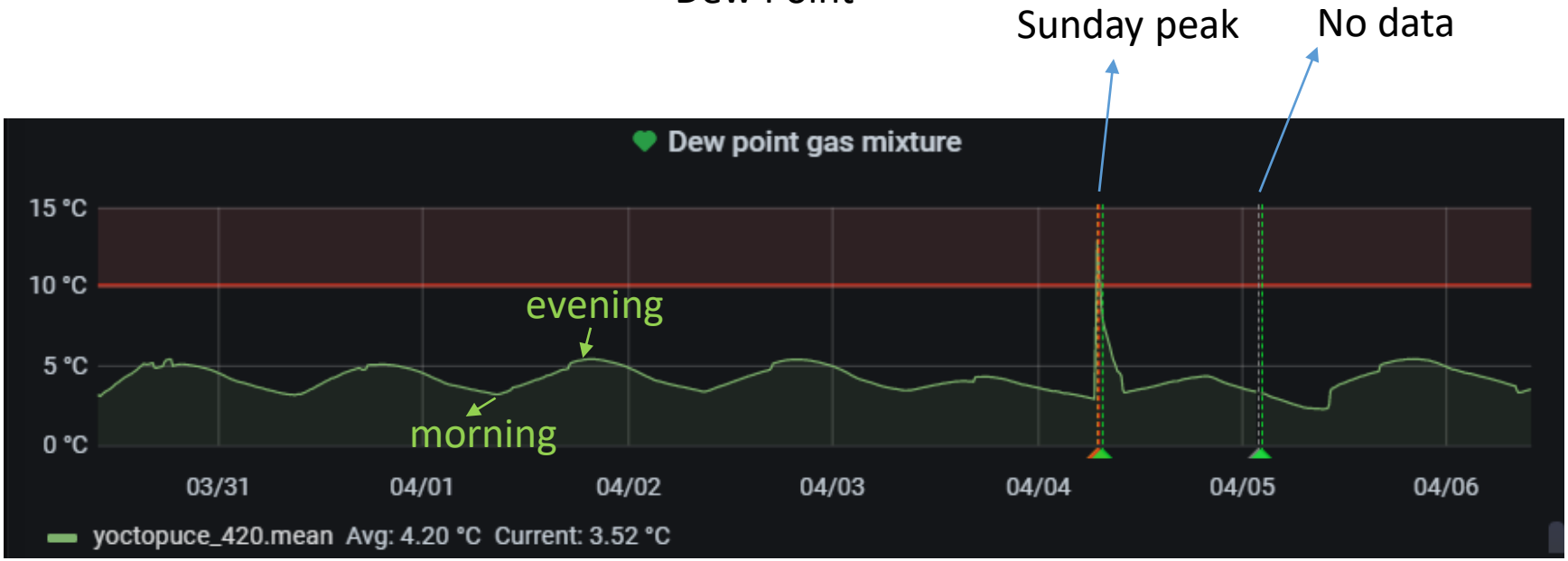


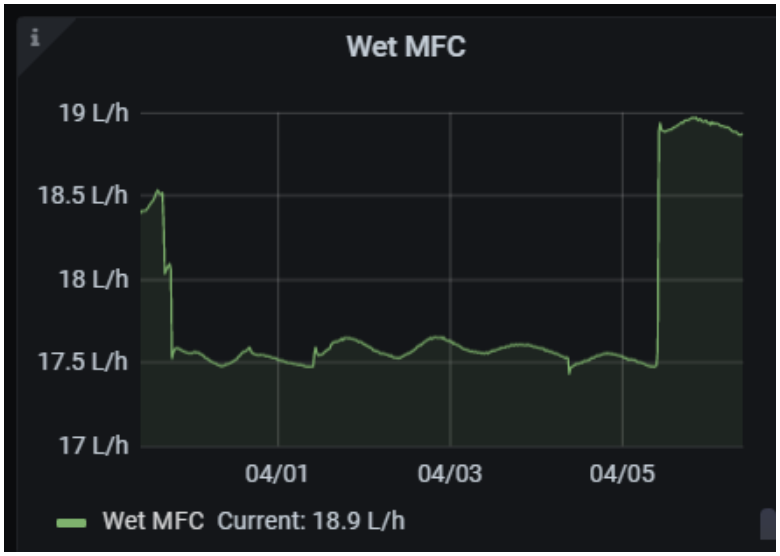


Weekly stability run:
currents 04/04

Some current spikes (up to about 50 microA) happened for EPDT. HV was correspondingly fluctuating of about 100 V. The source and attenuation factor were stable. The CMS chambers current fluctuations were about 2uA.

Dew Point


Sunday peak
No data
Dew point gas mixture
15 °C
10 °C
5 °C
0 °C
evening
morning
03/31
04/01
04/02
04/03
04/04
04/05
04/06
yoctopuce_420.mean Avg: 4.20 °C Current: 3.52 °C


Wet MFC
19 L/h
18.5 L/h
18 L/h
17.5 L/h
17 L/h
04/01
04/03
04/05
Wet MFC Current: 18.9 L/h

Conclusions

- Run config has been updated;
- The source/attenuation status was stable. Correspondingly, CMS chambers current fluctuations were up to a few uA while some current spikes (up to about 50 microA) happened for EPDT;
- Dew point oscillated between ∼3 °C and ∼5 °C, with a Sunday peak (above 10 °C);
- Now the source is off and an HV scan could be performed if everyone agrees.

Thank you!