

Status of EPDT-RPC25

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EP-DT
Detector Technologies

Performance in lab

RPC25

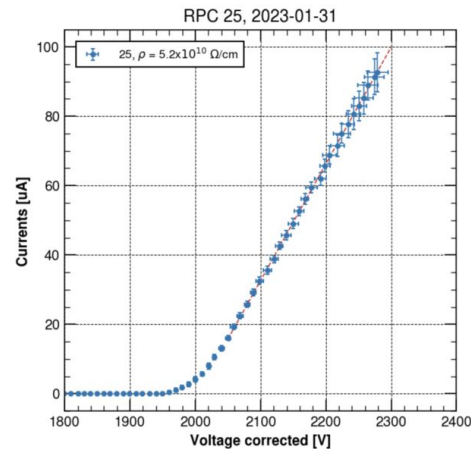
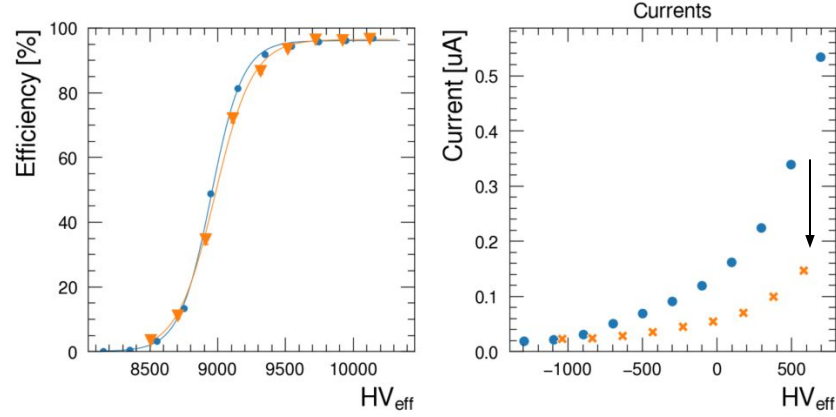
2 mm electrode 2 mm single gap, KODEL bakelite (made in 2021)

- Initially commissioned in laboratory ~ Jan 2023
- Conditioning and general tests done until June 2023

Resistivity measured:

- $5.2 \cdot 10^{10}$ Ohm cm

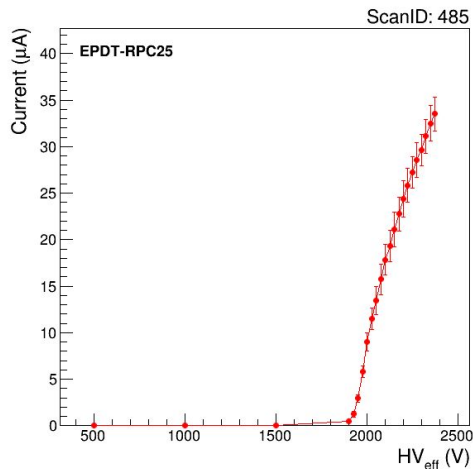
57500 - 2023-01-25 - RPC25 - Name: Cosmics_STD_25_23
R134A/IC4H10/SF6 95.2/4.5/0.3
60286 - 2023-06-12 - RPC25 - Name: Cosmics_STD_23_250
R134A/IC4H10/SF6 95.2/4.5/0.3



Installation at GIF and test beam performance

Installation at GIF

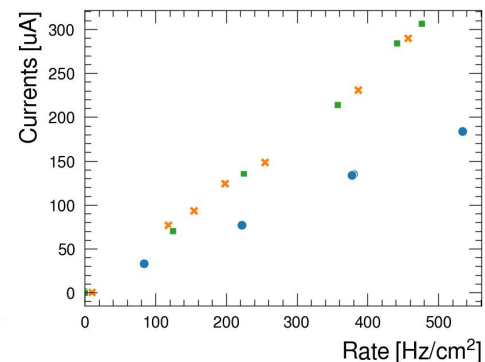
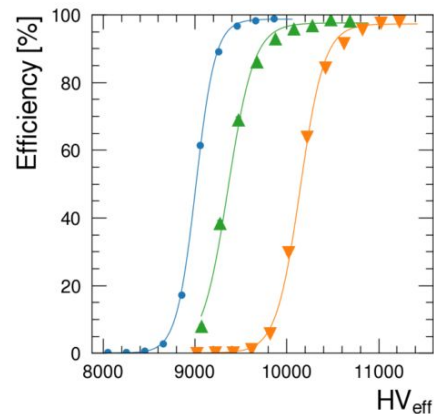
- Wed 14 Jun, ([see elog](#))
- 1 resistivity scan: id 485 \Rightarrow curve not linear \Rightarrow dust in the chamber?



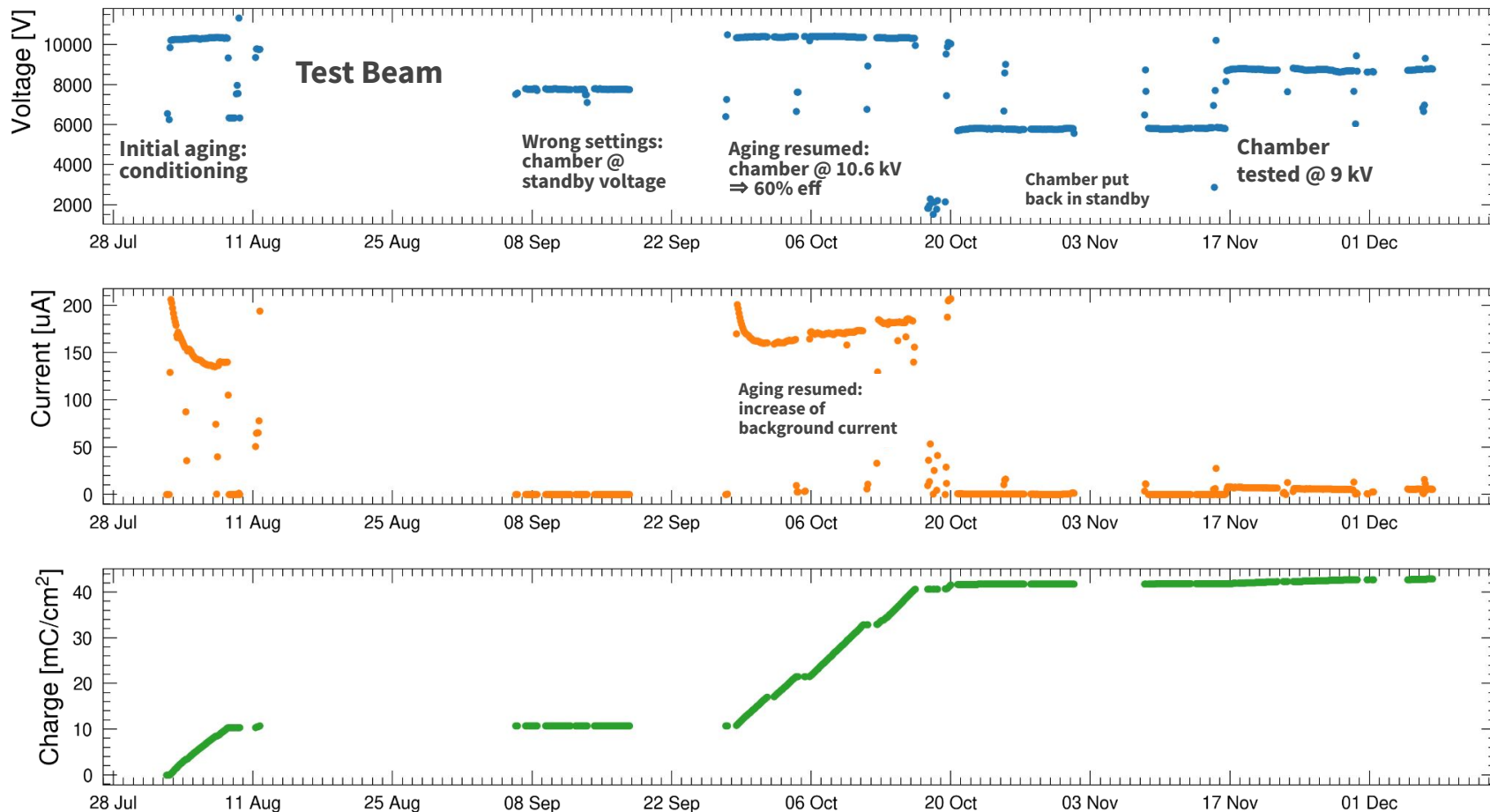
Test beam

- Measured performance with STD, ECO2, ECO3
- Performance compatible with paper results of other chambers
 - Background ECO2 currents \sim ECO3 currents

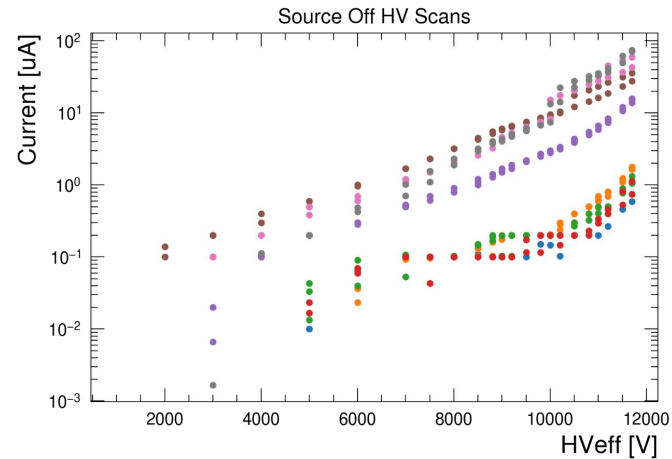
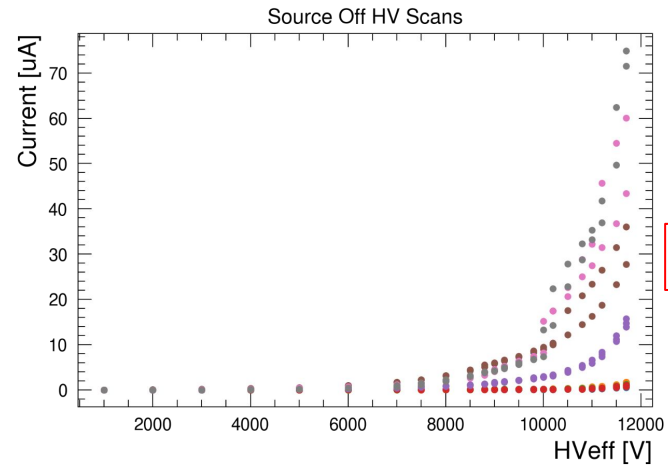
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|--|
| 60307 - 2023-07-06 - RPC25 - Name: SourceOff_STD_25_D |
| R134A/IC4H10/SF6 95.2/4.5/0.3 |
| 60536 - 2023-07-10 - RPC25 - Name: SourceOff_ECO2_25_D |
| CO2/HFO/IC4H10/SF6 60/35/4/1 |
| 60689 - 2023-07-14 - RPC25 - Name: SourceOff_ECO3_25_D |
| CO2/HFO/IC4H10/SF6 69/25/5/1 |

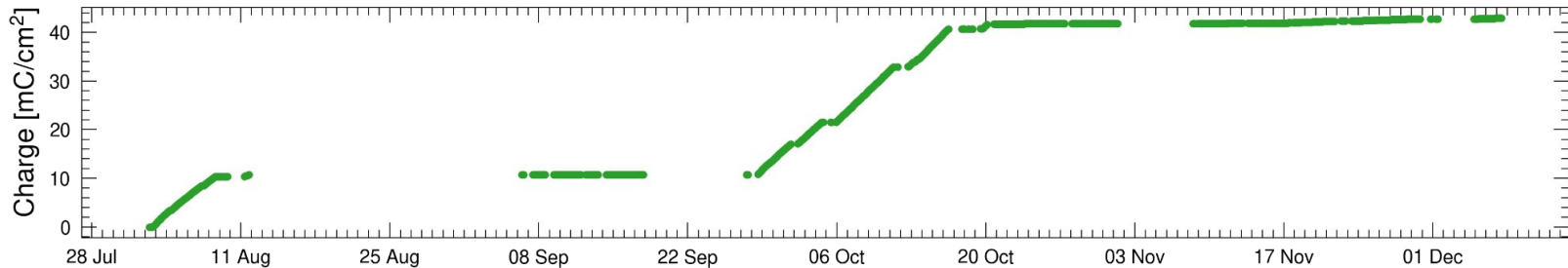
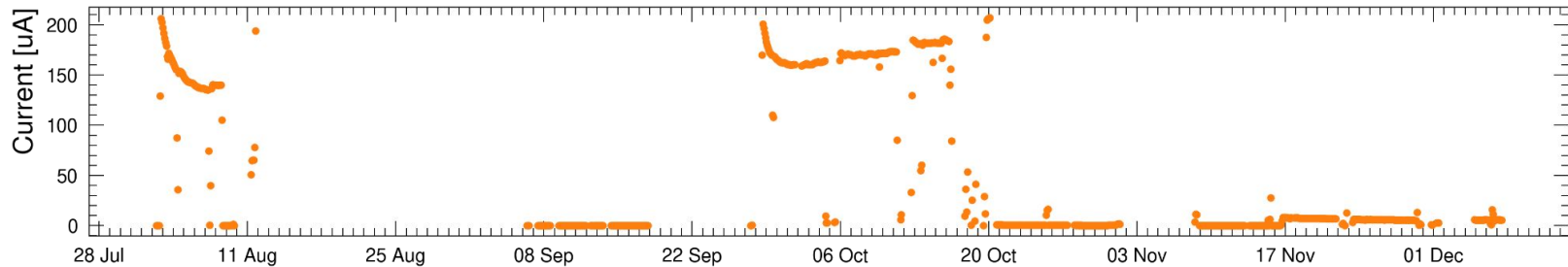
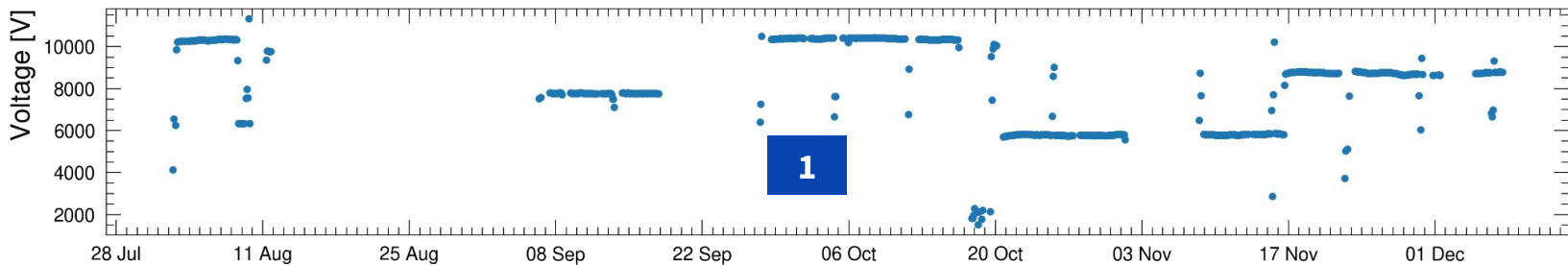


Overview of the aging tests

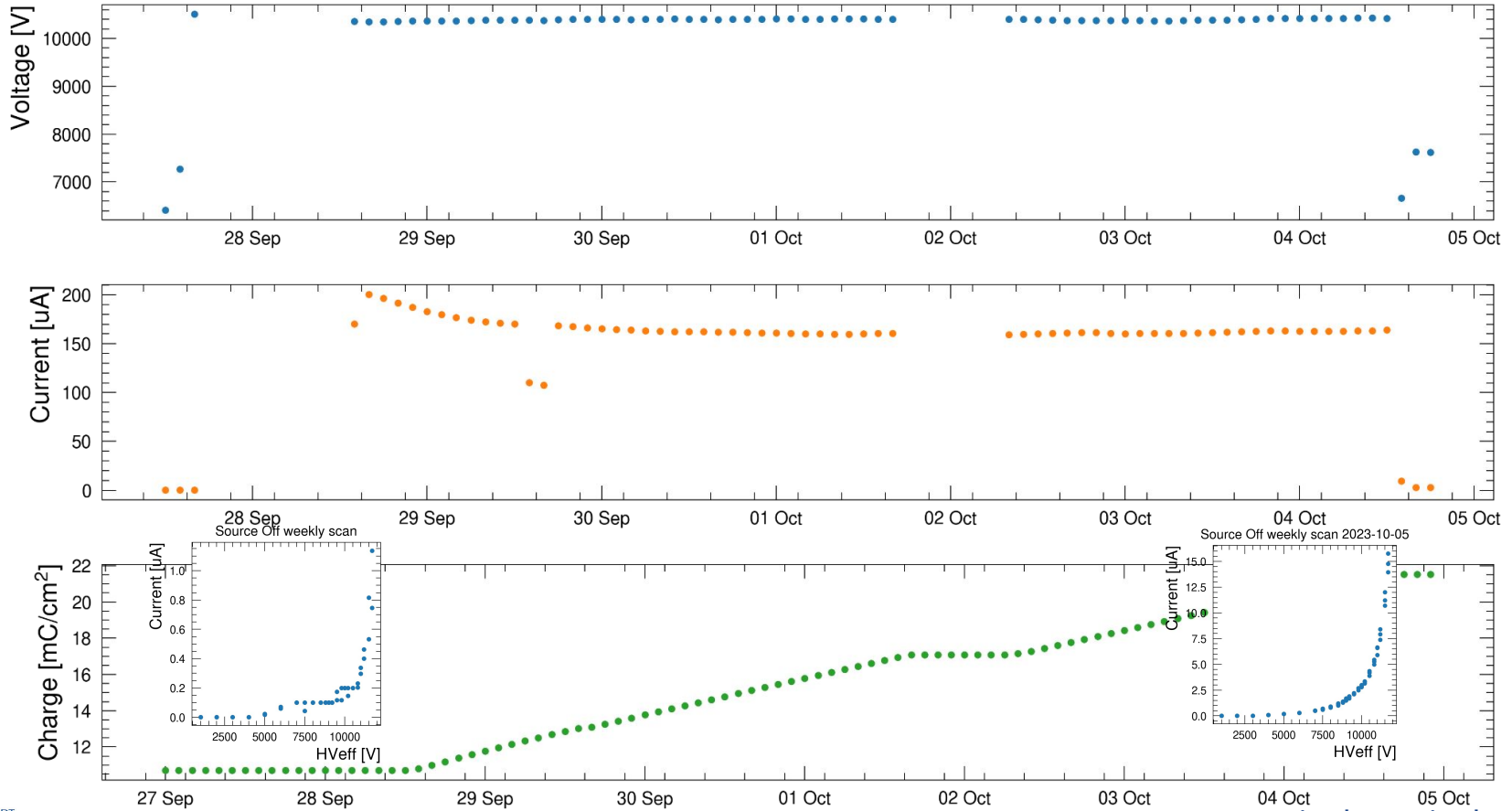


Overview of HV scans

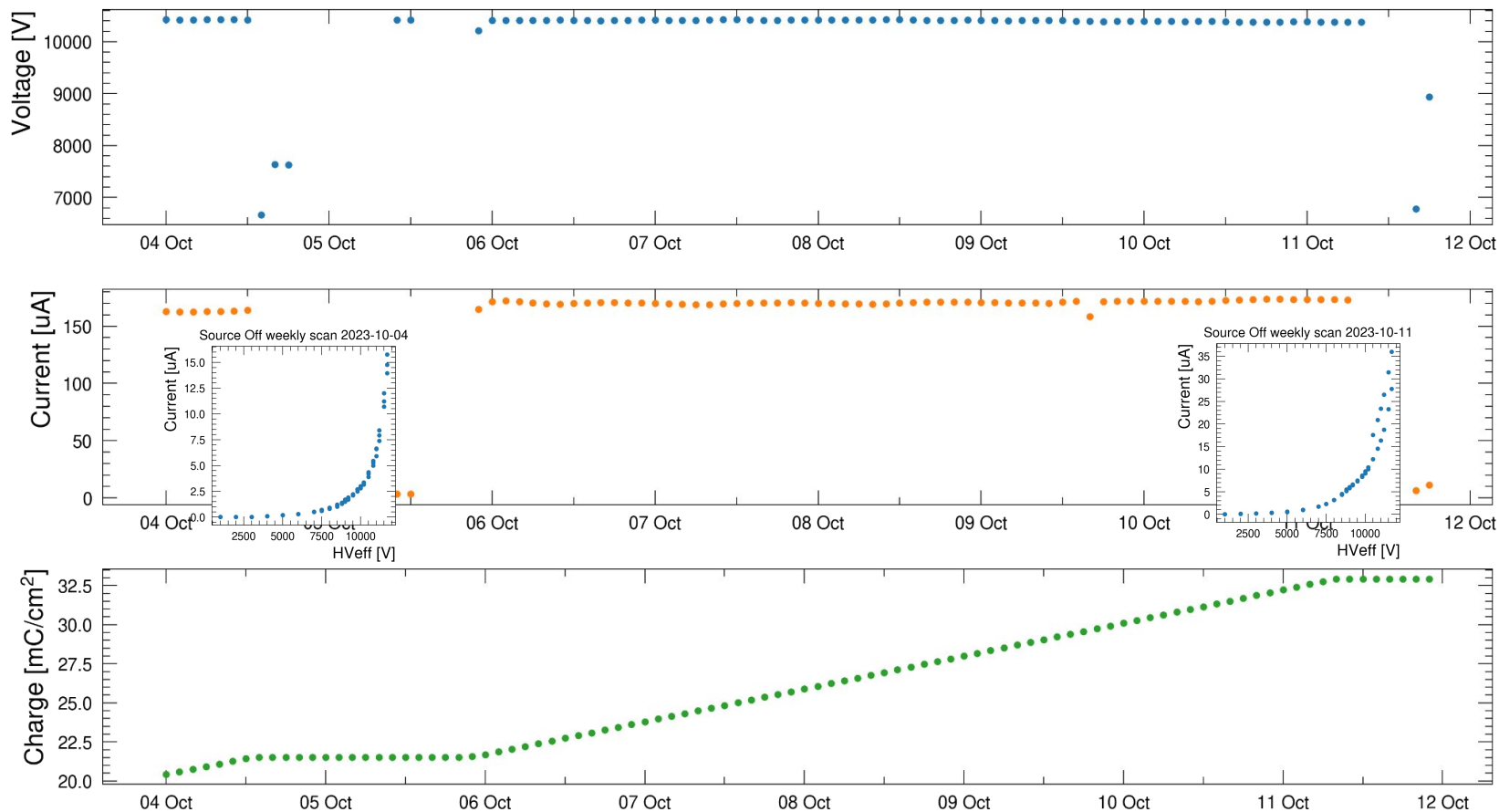




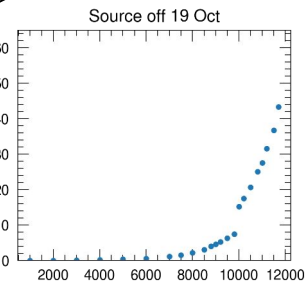
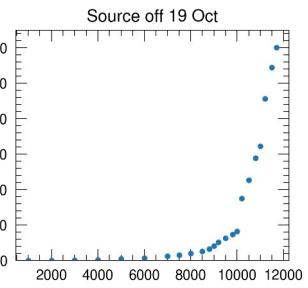
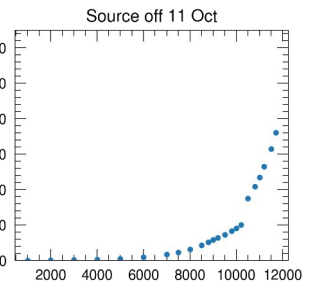
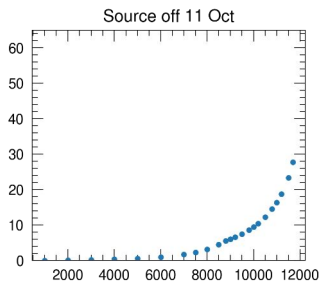
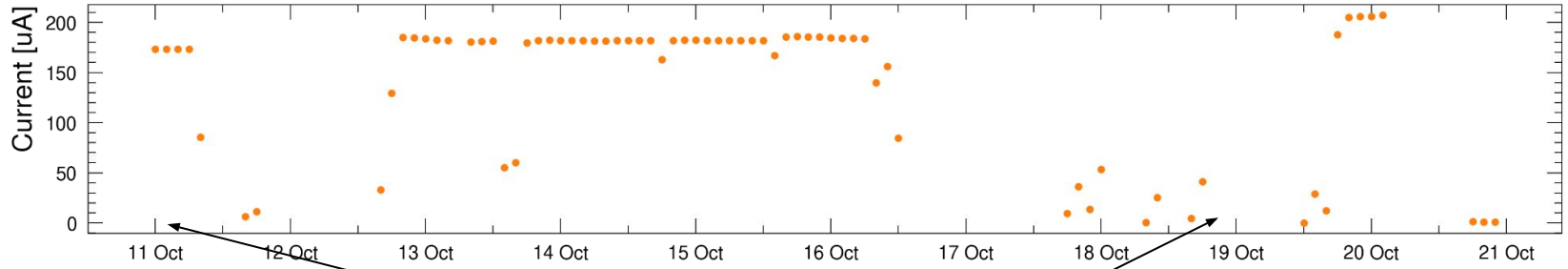
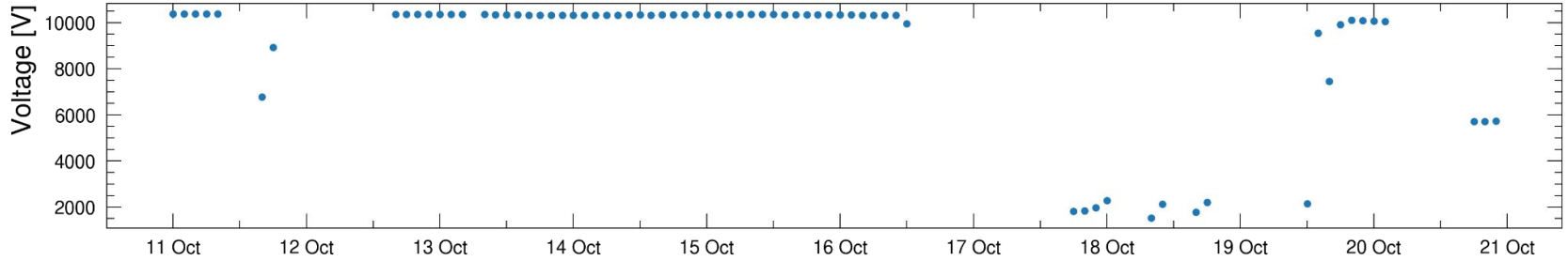
Period 27 Sept - 04 Oct



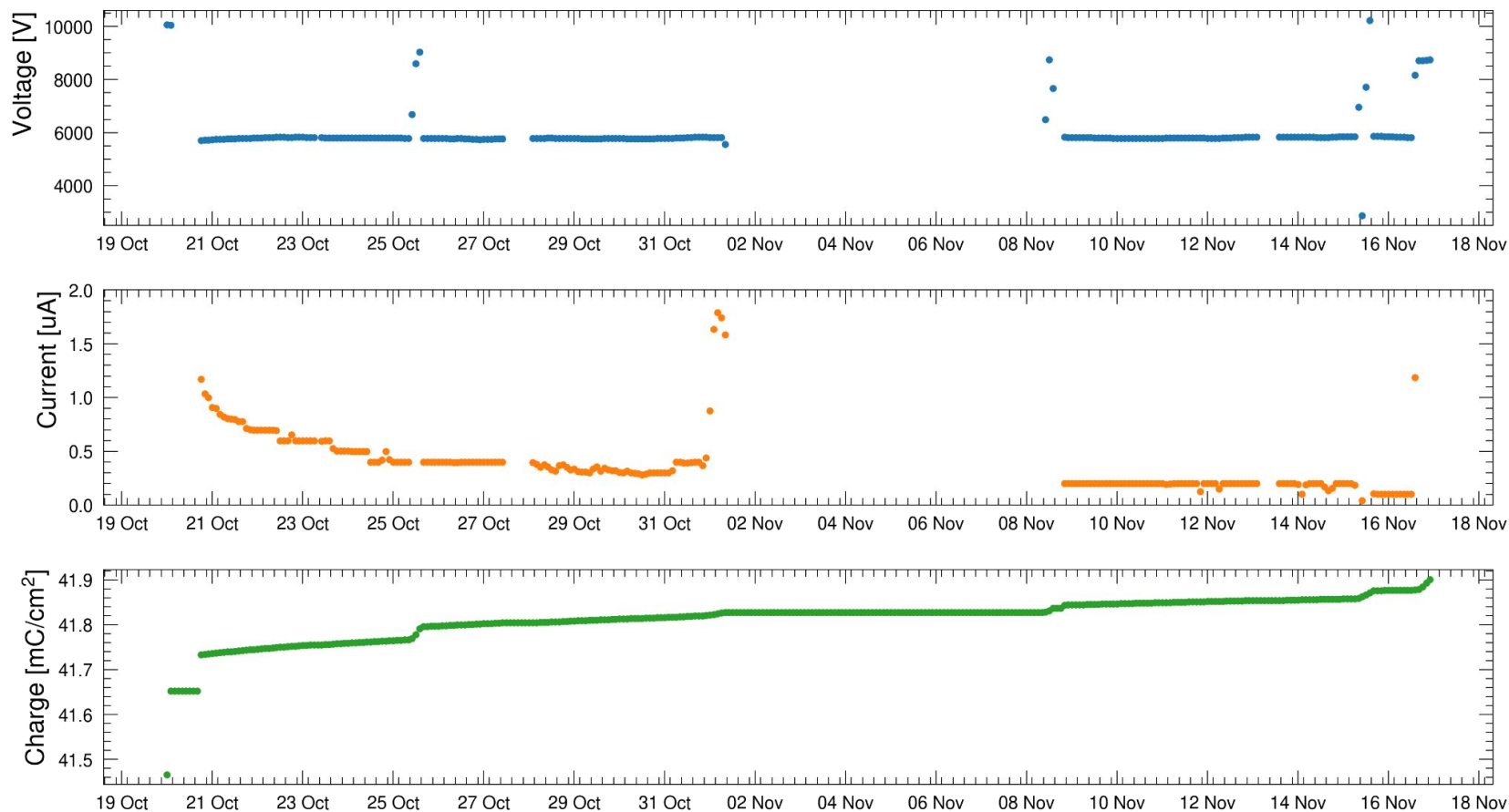
Period 4-11 Oct



Period 11-20 Oct



Period 20 Oct - 16 Nov: chamber standby @ 6 kV



Period 16 Nov - 7 Dec: chamber standby @ 9 kV

