

# Report on weekly shift

*Luca Quaglia*

# Overview

- System status
- Resistivity measurements
- Test beam 2024 request

# System status

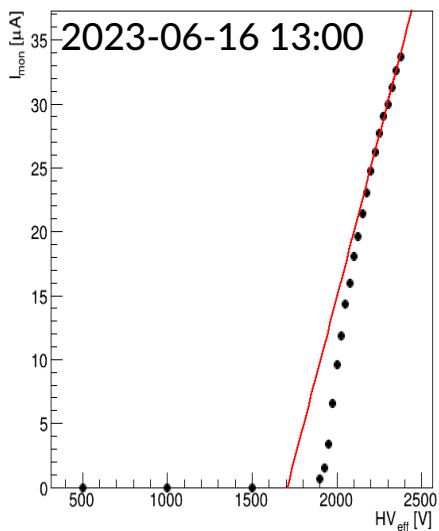
- Currently flushing with Ar and resistivity measurements ongoing
- Tomorrow, December 15<sup>th</sup>, I will stop the gas system for the Xmas break and open the RPC inputs to air as we discussed
- From today source will be off until the end of Xmas break
- Irradiator maintenance ongoing between Jan 8<sup>th</sup> and 12<sup>th</sup> (still source off) + multiple power cuts on 12<sup>th</sup> January 2024 → need to switch off webdcs pc as well as gas pc. I would keep them on during Xmas in case anyone would need to get some data from them
- Restart of the facility on January 15<sup>th</sup> 2024 → we can resume activities around this time
- New Impact ([223457](#)) for 2024, cloned from 2023 → let me know in case anyone else needs to be added to the impact
- Safety inspection will be after the source maintenance

# Resistivity measurements

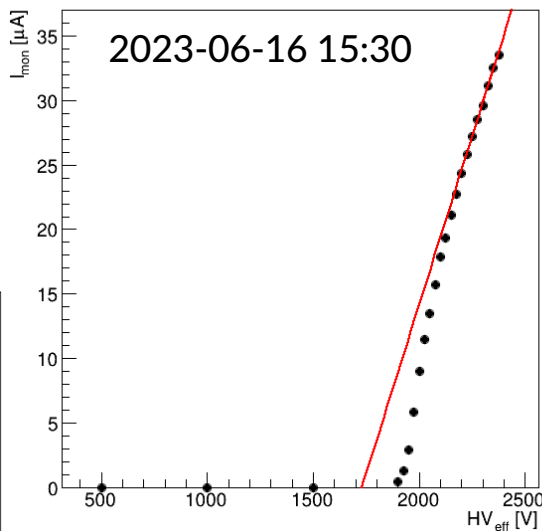
- Resistivity scans:
  - 1) ID 709: (<http://webdcsecogas.cern.ch/index.php?mod=HVSCAN&p=dqm&id=709&r=overview>)
  - 2) ID 710 (ongoing)
- Two more scans between today and tomorrow
- Detailed results for EPDT RPC25 (new EPDT RPC) and KODEL-H
- Trends over time for all RPCs
- All data, updated up to run 709, can be found [here](#)

# EPDT RPC25

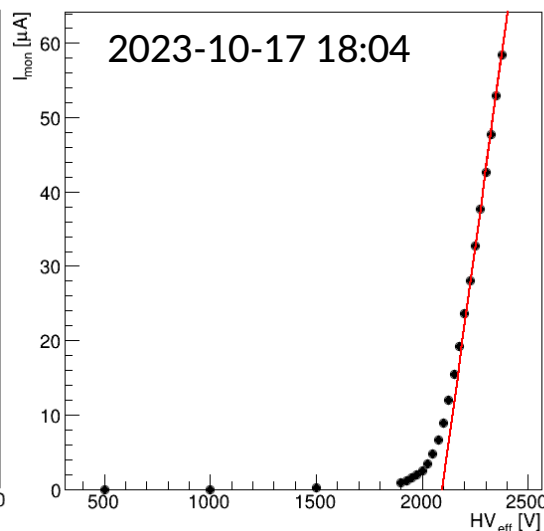
Scan\_000484 for EPDT-RPC25



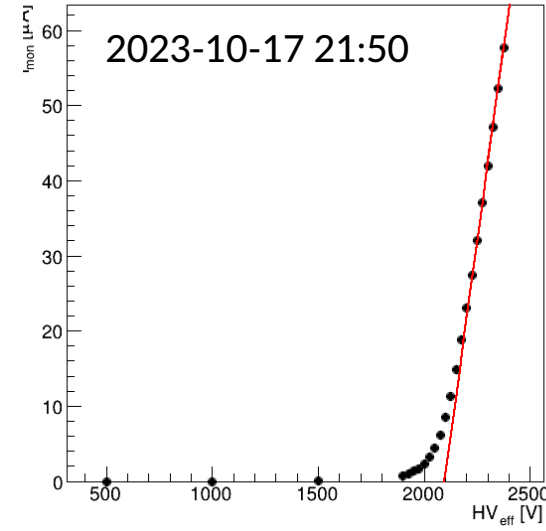
Scan\_000485 for EPDT-RPC25



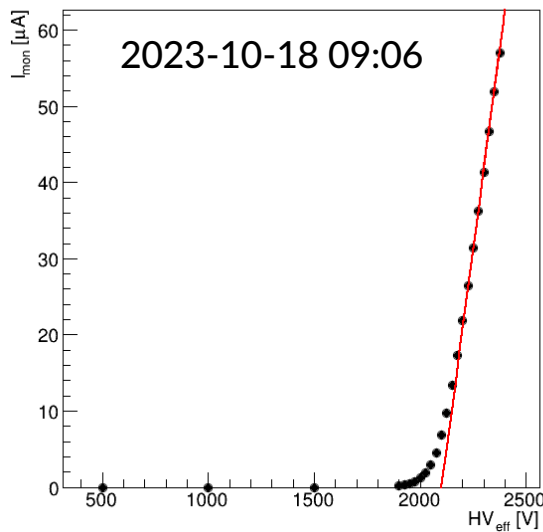
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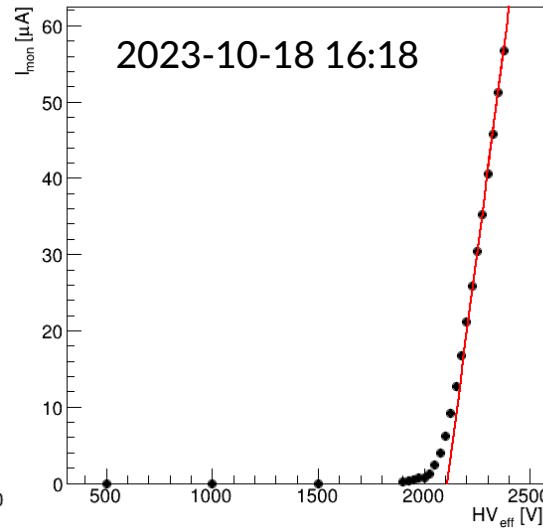
Scan\_000686 for EPDT-RPC25



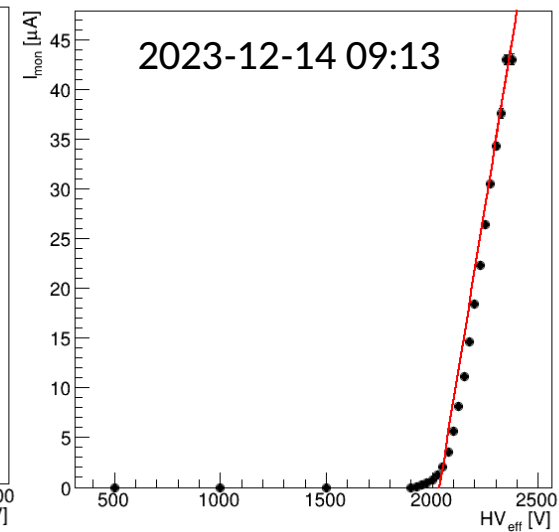
Scan\_000687 for EPDT-RPC25



Scan\_000688 for EPDT-RPC25



Scan\_000709 for EPDT-RPC25



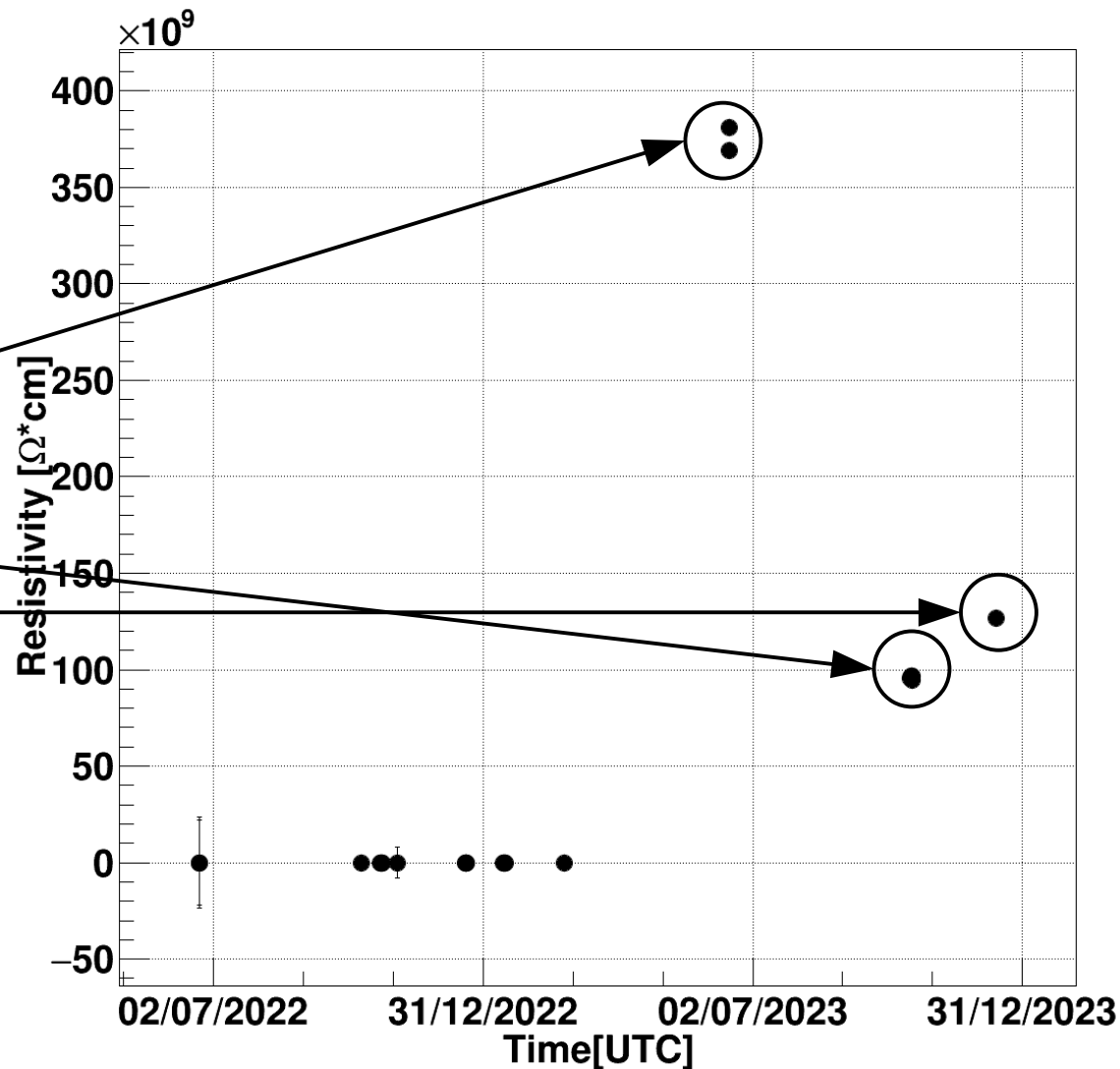
# EPDT RPC25

484-485 - strange  
shape of the curve

685-686-687-688  
Very similar results

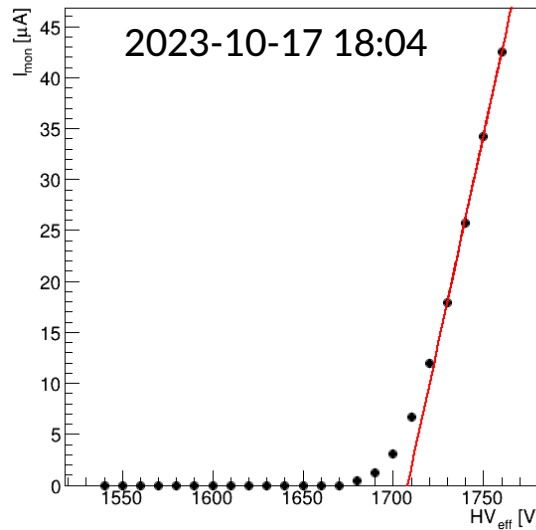
709

**Note:** if the resistivity is 0  
→ RPC was not in the run

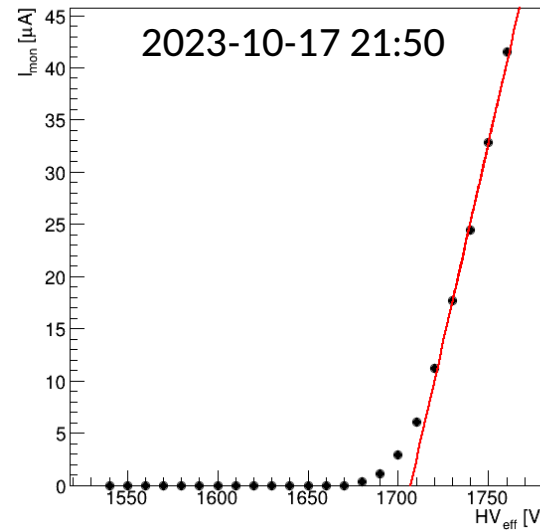


# KODEL H TOP

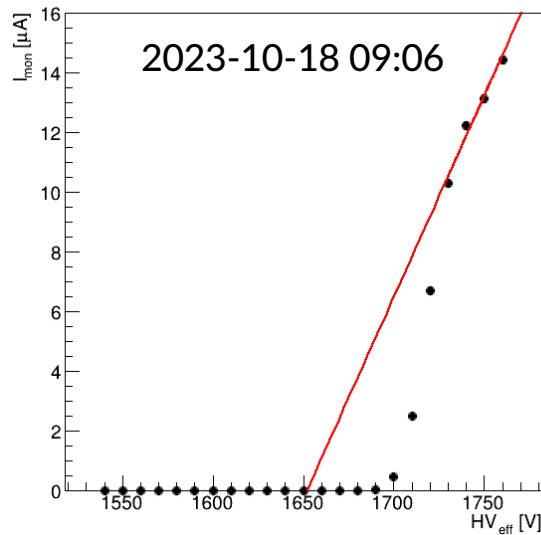
Scan\_000685 for KODEL-H-TOP



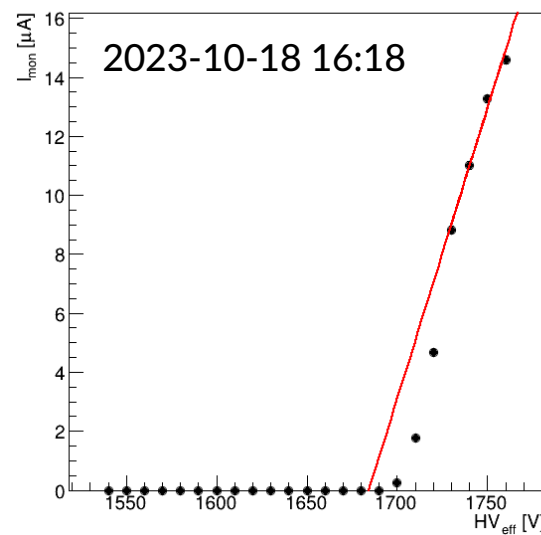
Scan\_000686 for KODEL-H-TOP



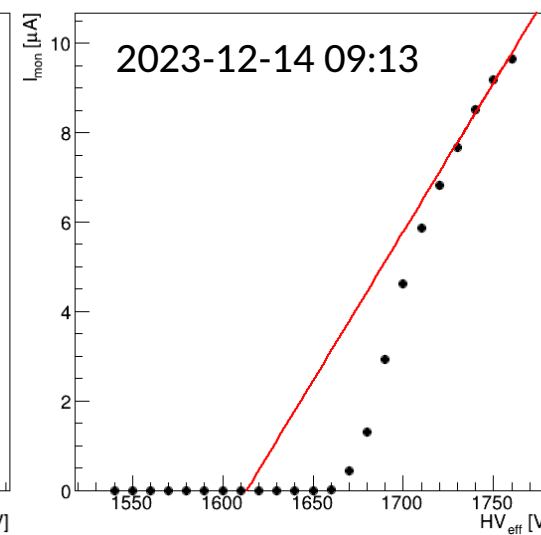
Scan\_000687 for KODEL-H-TOP



Scan\_000688 for KODEL-H-TOP



Scan\_000709 for KODEL-H-TOP

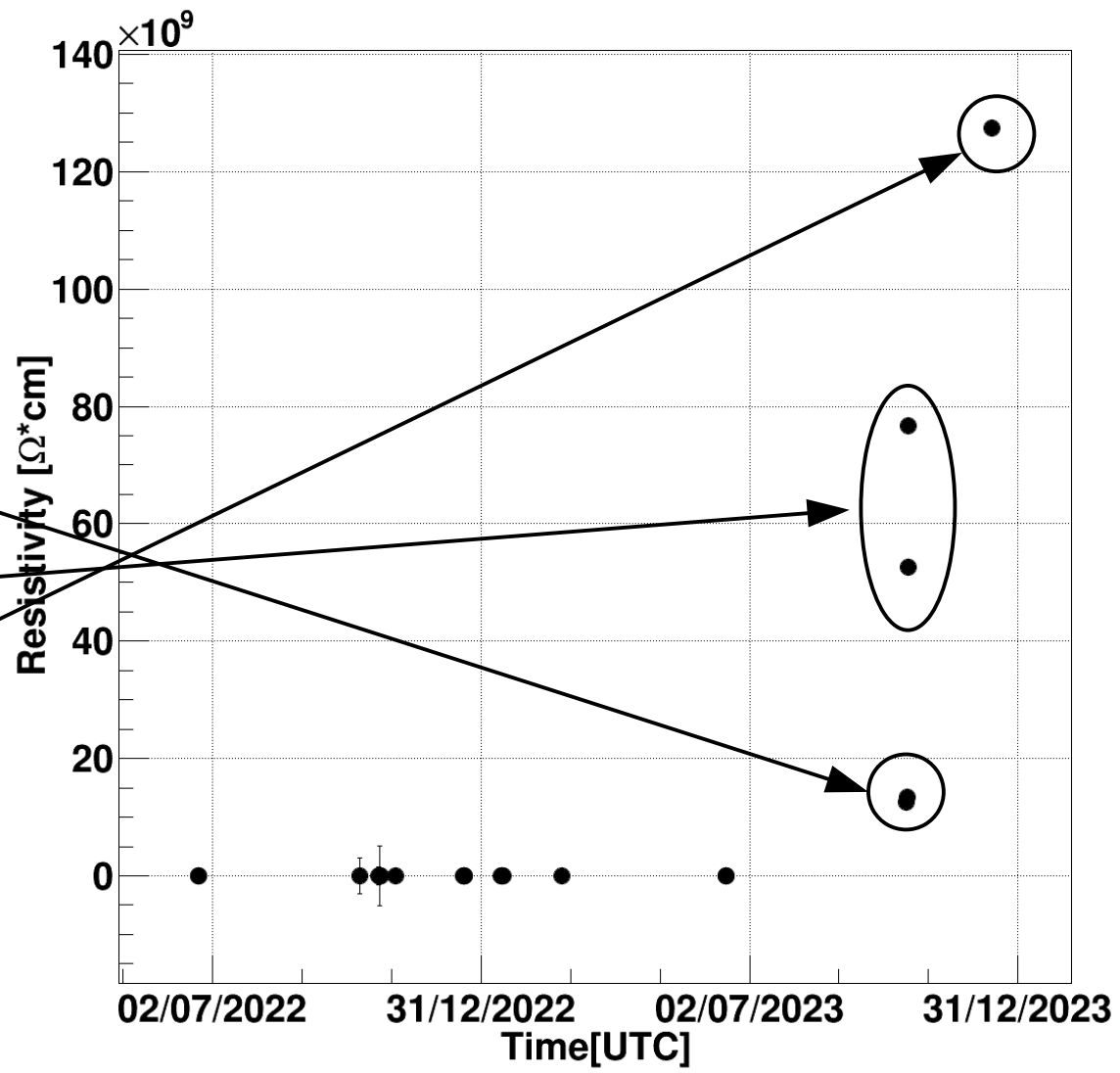


# KODEL H TOP

685-686  
Very similar results

687-688  
Strange shape of I (HV)  
curves

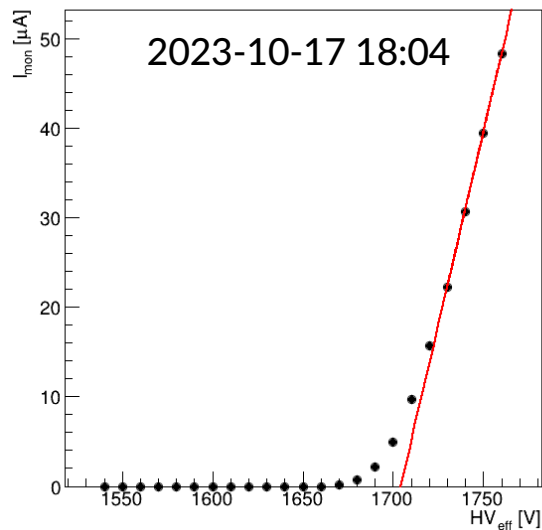
709



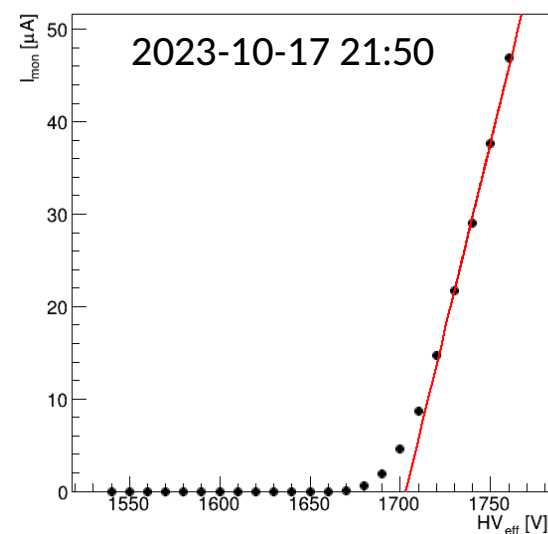


# KODEL H BOT

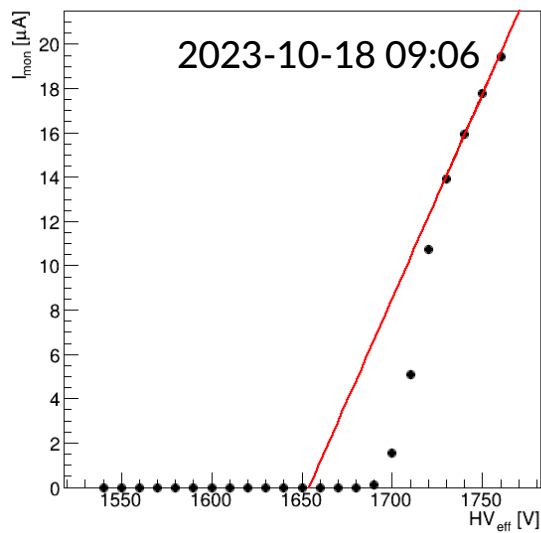
Scan\_000685 for KODEL-H-BOT



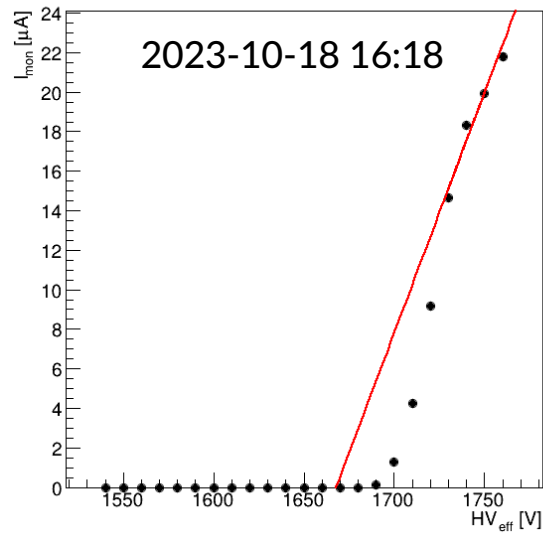
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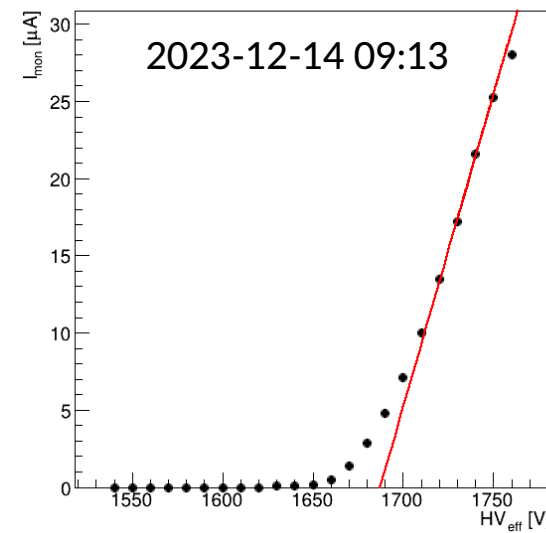
Scan\_000687 for KODEL-H-BOT



Scan\_000688 for KODEL-H-BOT



Scan\_000709 for KODEL-H-BOT

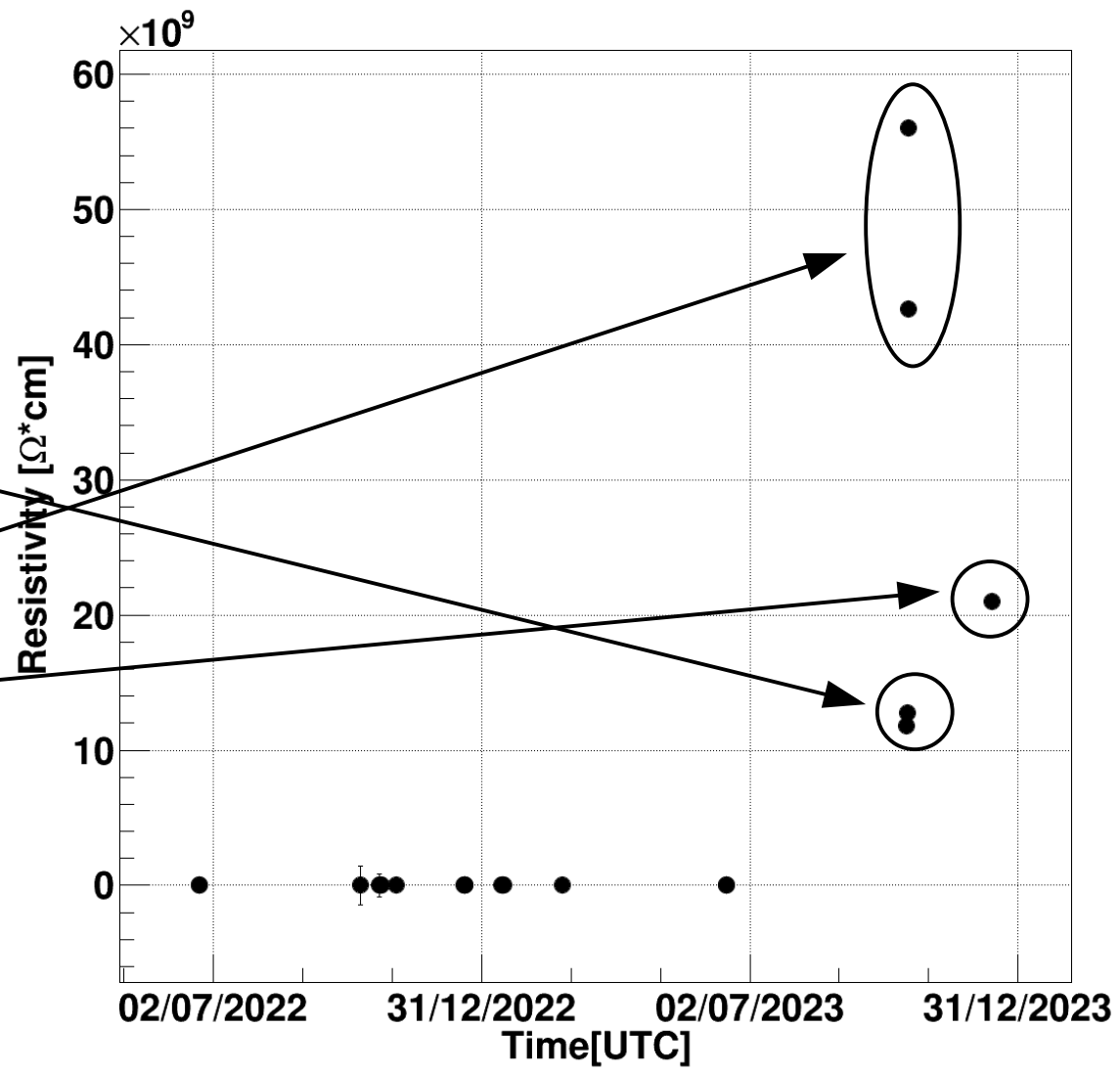


# KODEL H BOT

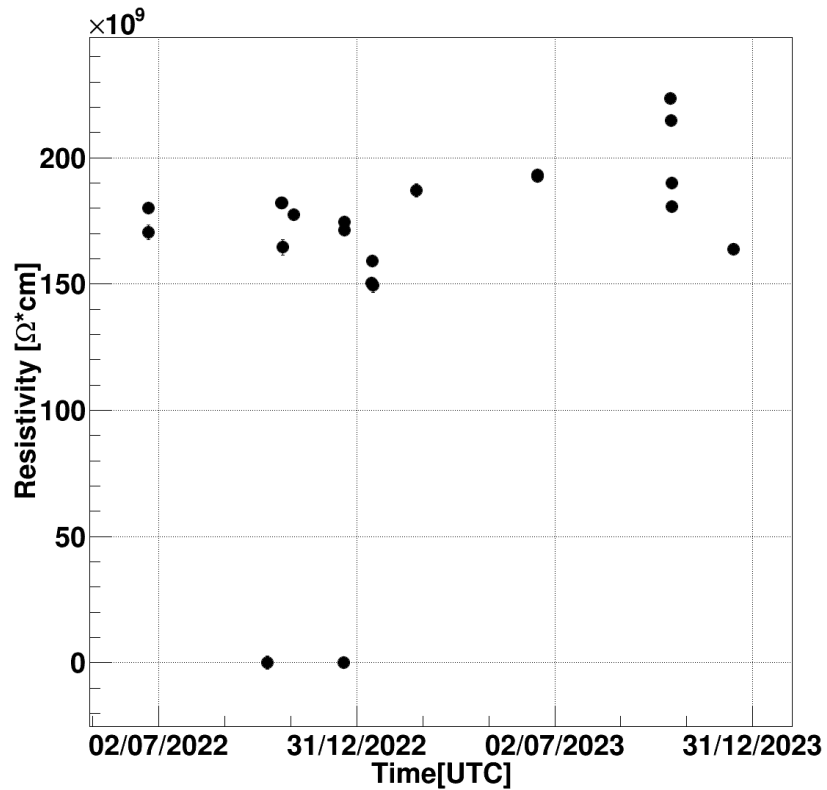
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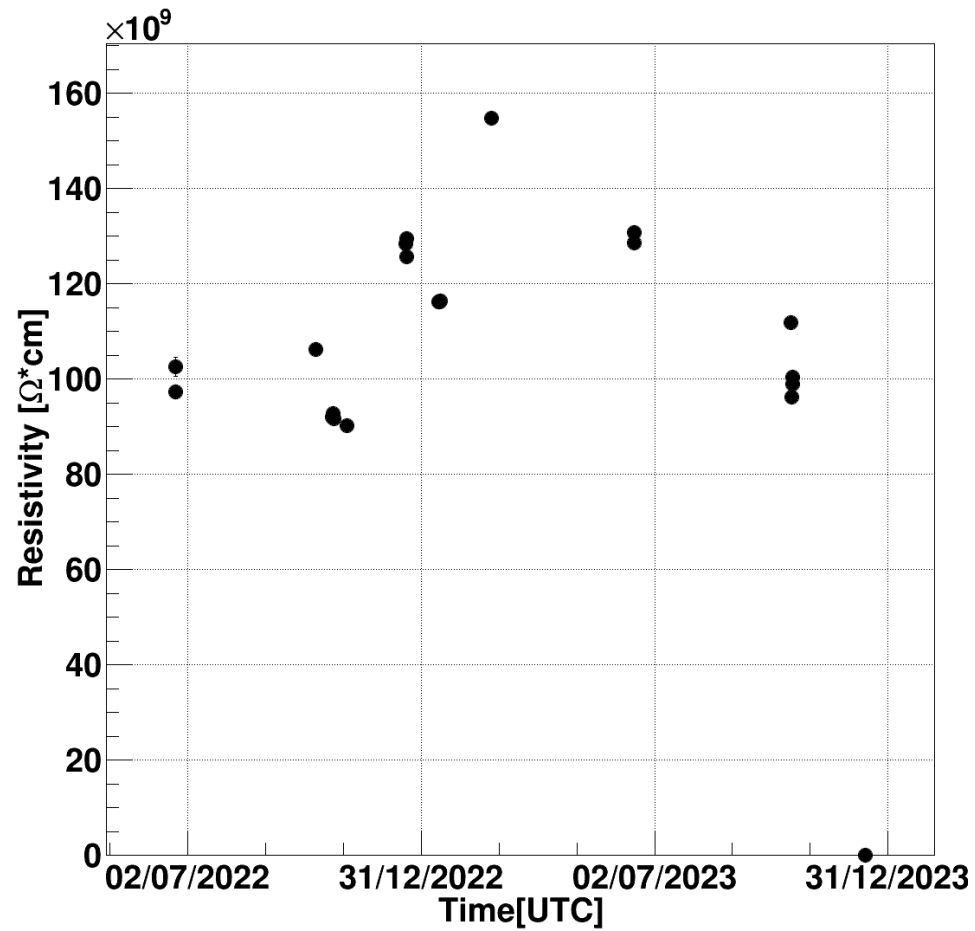
709



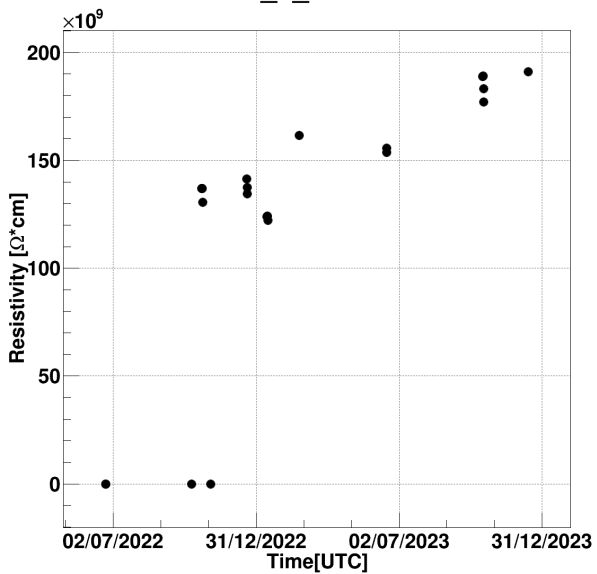
SHiP-1-6



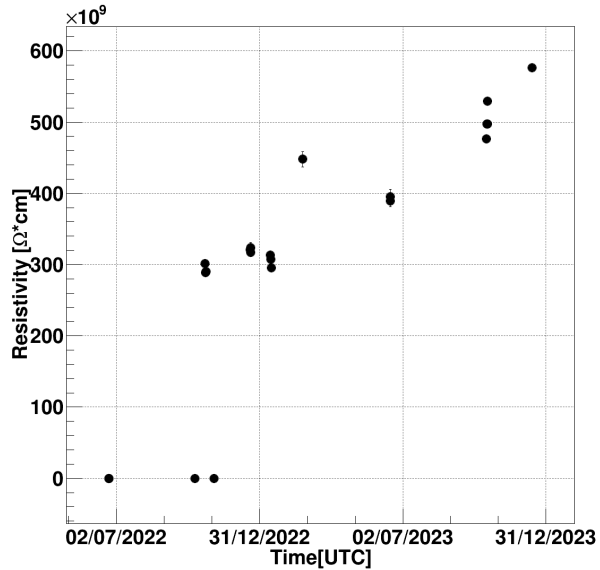
ALICE-2-0



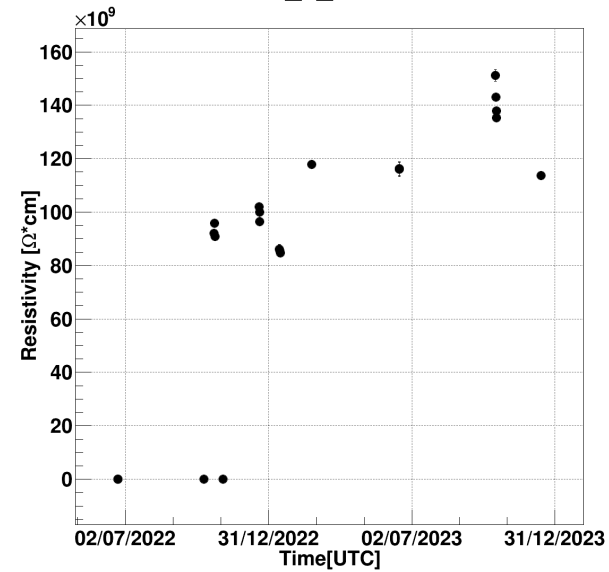
RE1\_1\_001-BOT



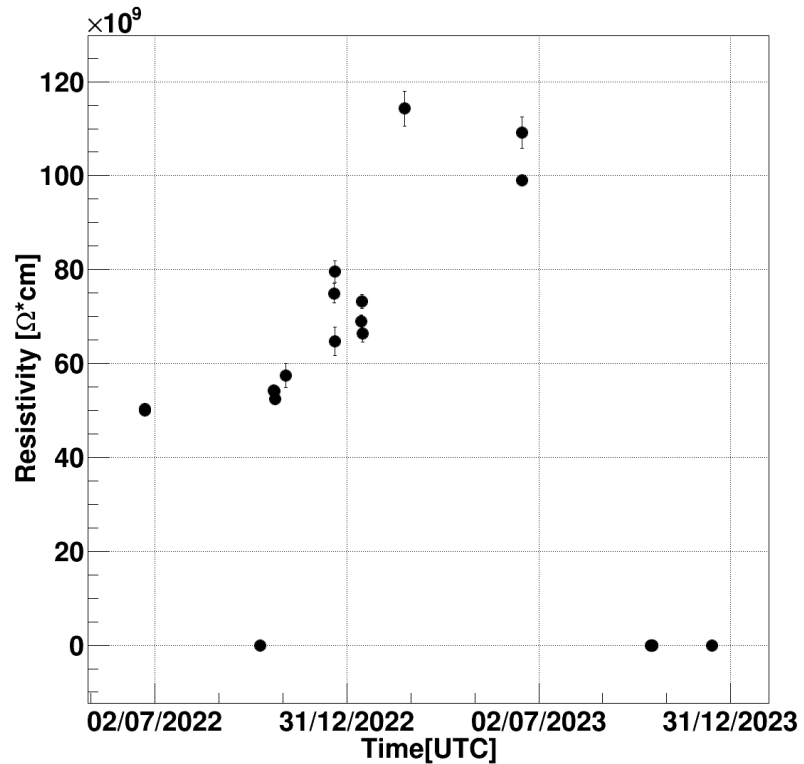
RE1\_1\_001-TW



RE1\_1\_001-TN

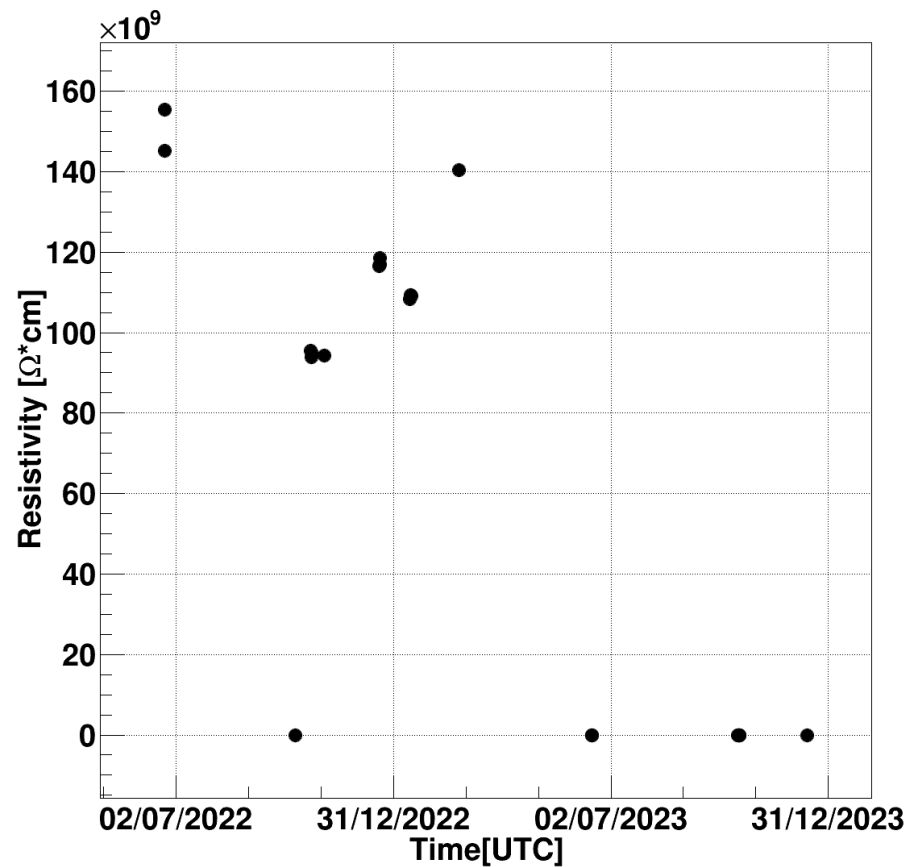


ATLAS-small



Old EPDT RPC, now removed

EPDT-RPC6



# Test beam 2024 request

- Draft of the request attached on this week's Indico
- Start of NA physics on April 10<sup>th</sup> 2024 (w15) and stop on September 26<sup>th</sup> 2024 (w39)
- GIF++ team is collecting all the requests of the users and they are asking for:
  - 1) Setup description + goals of the test beam campaign (I copied/pasted what we wrote last year) + number of weeks (I wrote 2x2 weeks since we don't usually use more than those)
  - 2) Estimate of gas consumption (I've calculated it based on the gas flow in July 2023 TB)
  - 3) Preferred muon intensity (I wrote 10k muons/spill in outer scintillators, which corresponds to high intensity)
  - 4) Preferred time period in which to have the beam  
→ I proposed w18-19 (Apr. 29<sup>th</sup> – May 12<sup>th</sup>) and w36-37 (Sept. 2<sup>nd</sup> – Sept. 15<sup>th</sup>) for the following reasons:
    - a) to avoid the very start and very end of the NA physics
    - b) to have some time in between the two test beams to continue aging