ProtoDUNE-SP operation updates

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This week

• Operations

- Increased the drift HV
 - 600V/cm during the first half of the week
 - 650V/cm since Wednesday
 - Final target is 750V/cm
- Preparations for the neutron generator runs has been finalized and data taking has been started

Data taking

- CE calibration runs
- Cosmic runs at higher electric field fields
 - Monday-Wednesday: 600V/cm
 - Wednesday-now: 650V/cm
- Neutron runs

DAQ tests and developments

- FELIX hitfinding tests
- Longer-than-normal readout window tests to understand if we could take 1-second TPC&PDS data
- Hit finding with SSPs



366

22.1

1.9

1174

1916

21.1

2350

⊕

2669

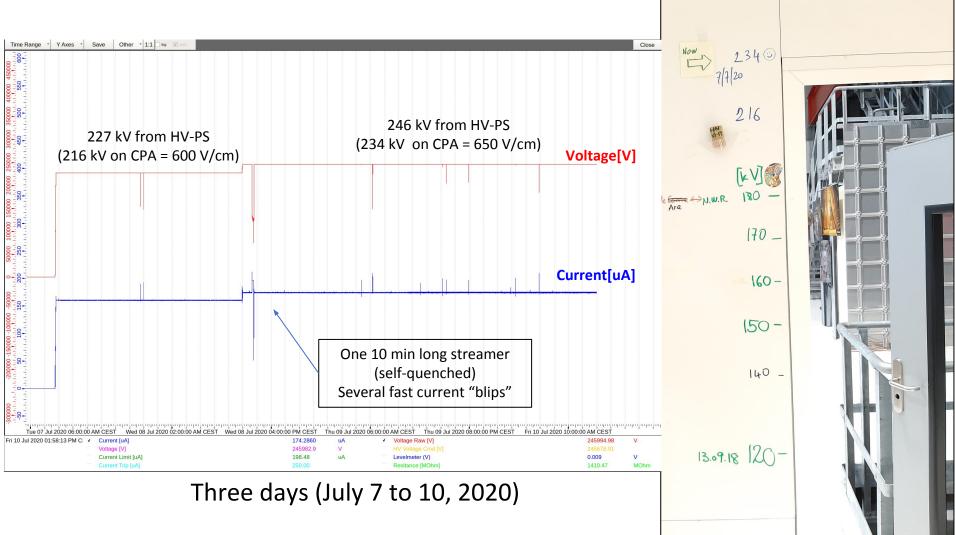
22.2

1.14

Beam

Plug

Drift HV above



• Instabilities: up to now, same as what we had at 180kV

This weekend and next week

- This weekend:
 - Cosmic data taking with the neutron generator on
- Next week:
 - Operations:
 - Continue to increase the cathode HV, first to 700V/cm and finally to 750V/cm!!
 - Data taking:
 - Cosmic data taking with TPC at higher fields
 - Data taking with neutron generator on
 - DAQ tests:
 - DAQ and FELIX tests as much as possible
 - It is possible to keep the CEs on during emptying the cryostat. They will be available for testing and development beyond next week