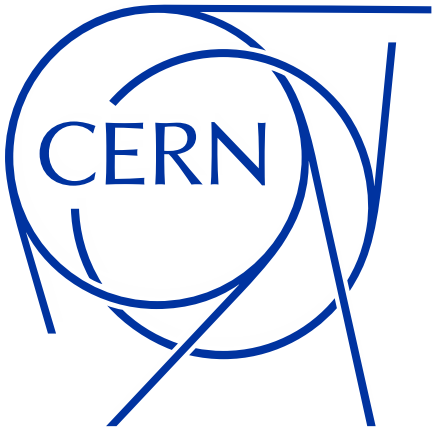
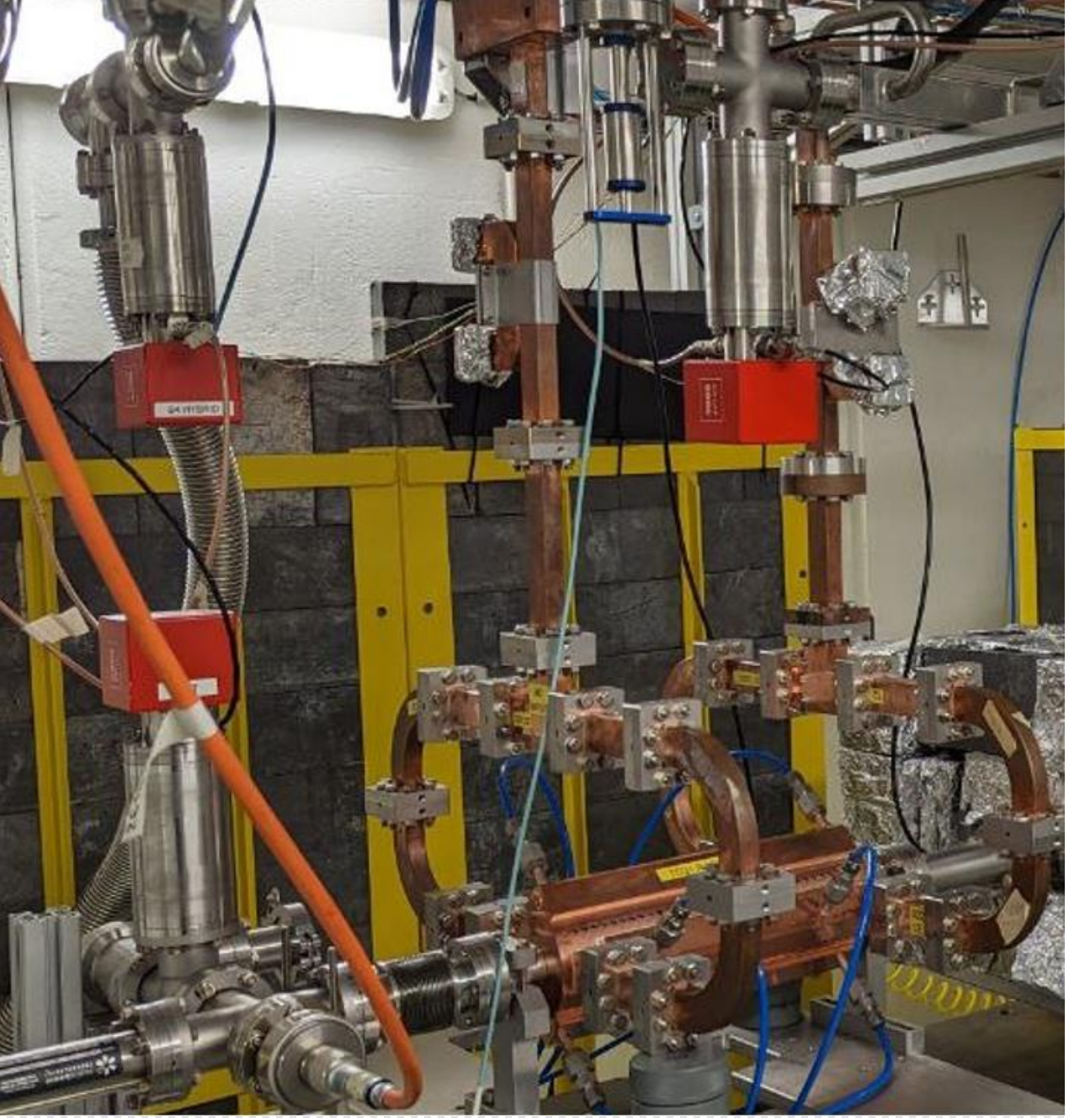


X-Box Summary

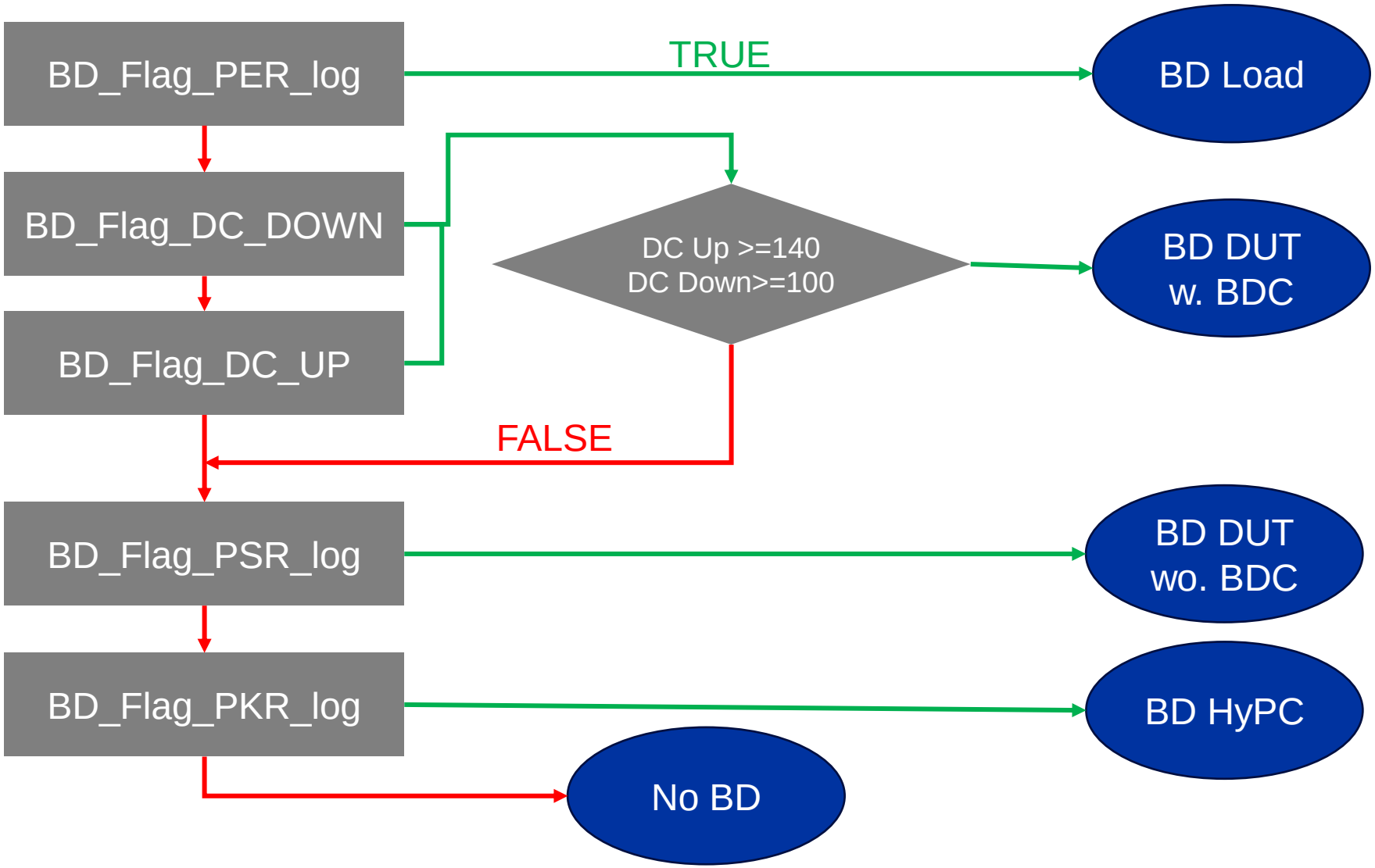
28.02.2024



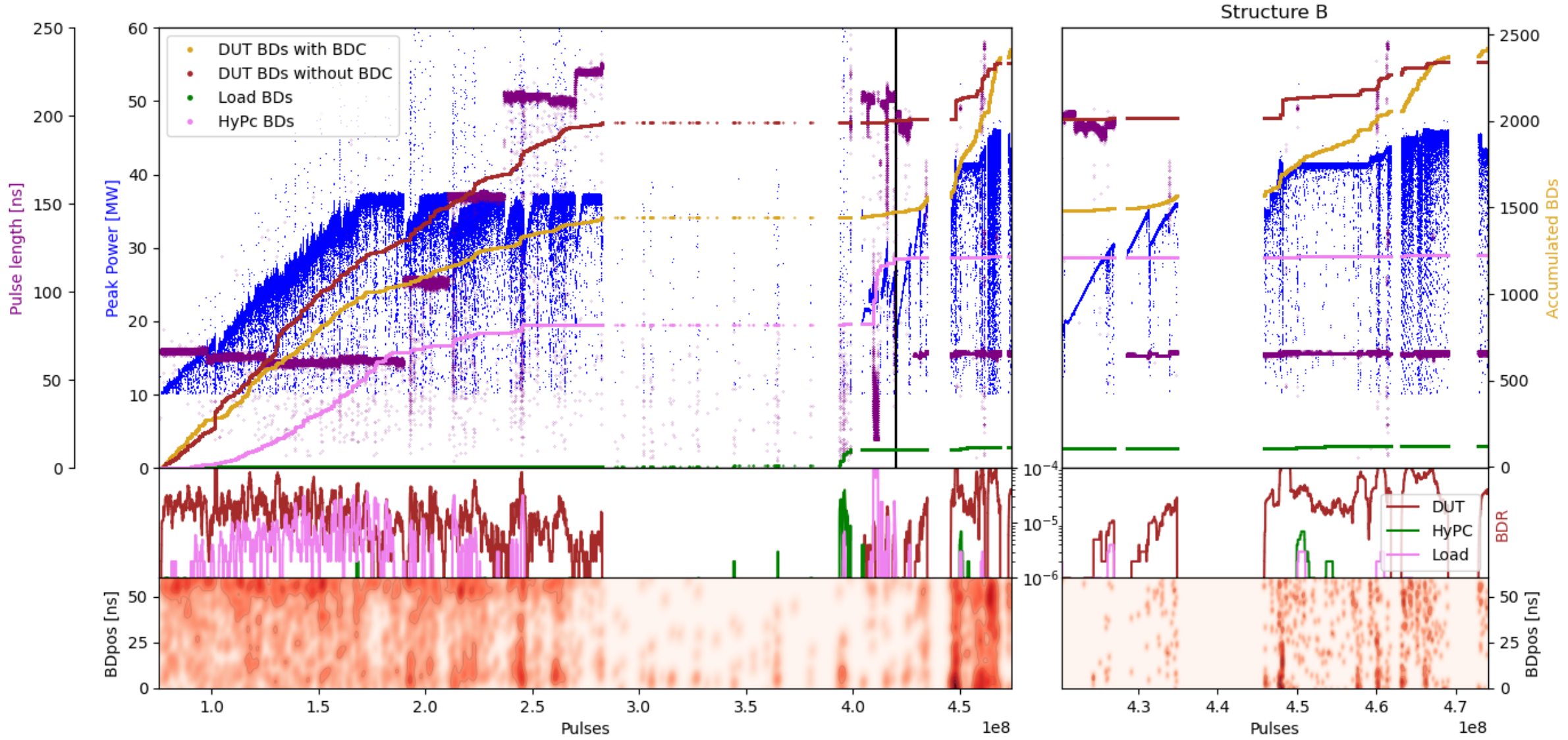
X-Box 2 TD31 N3 N4: Structure B

- **Restarted 26.01.2024**
- 100:1 ratio, all power to Structure B
- Starting power ~25 MW
- Pulse width 50ns
- **Running flat 44MW**

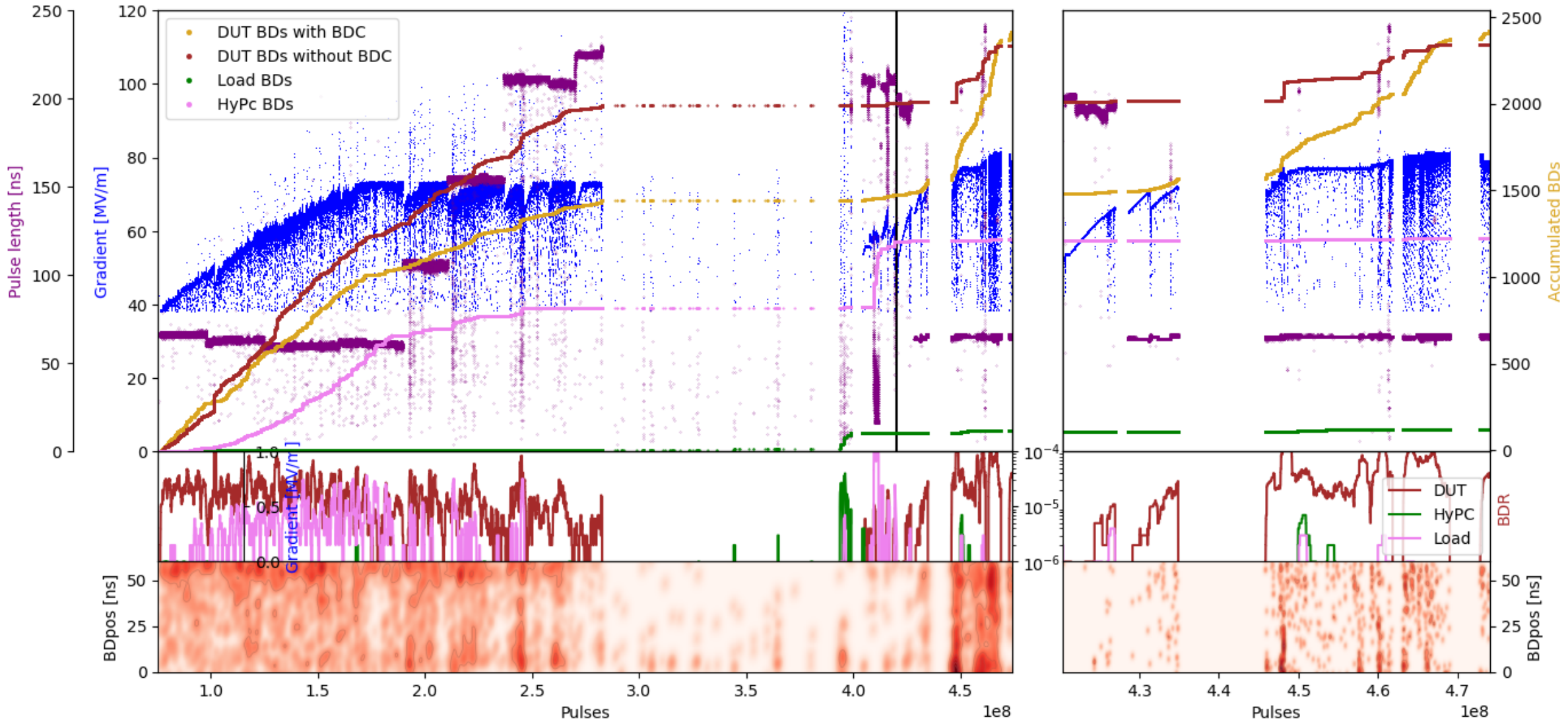
X-Box 2: Reminder on BD classification



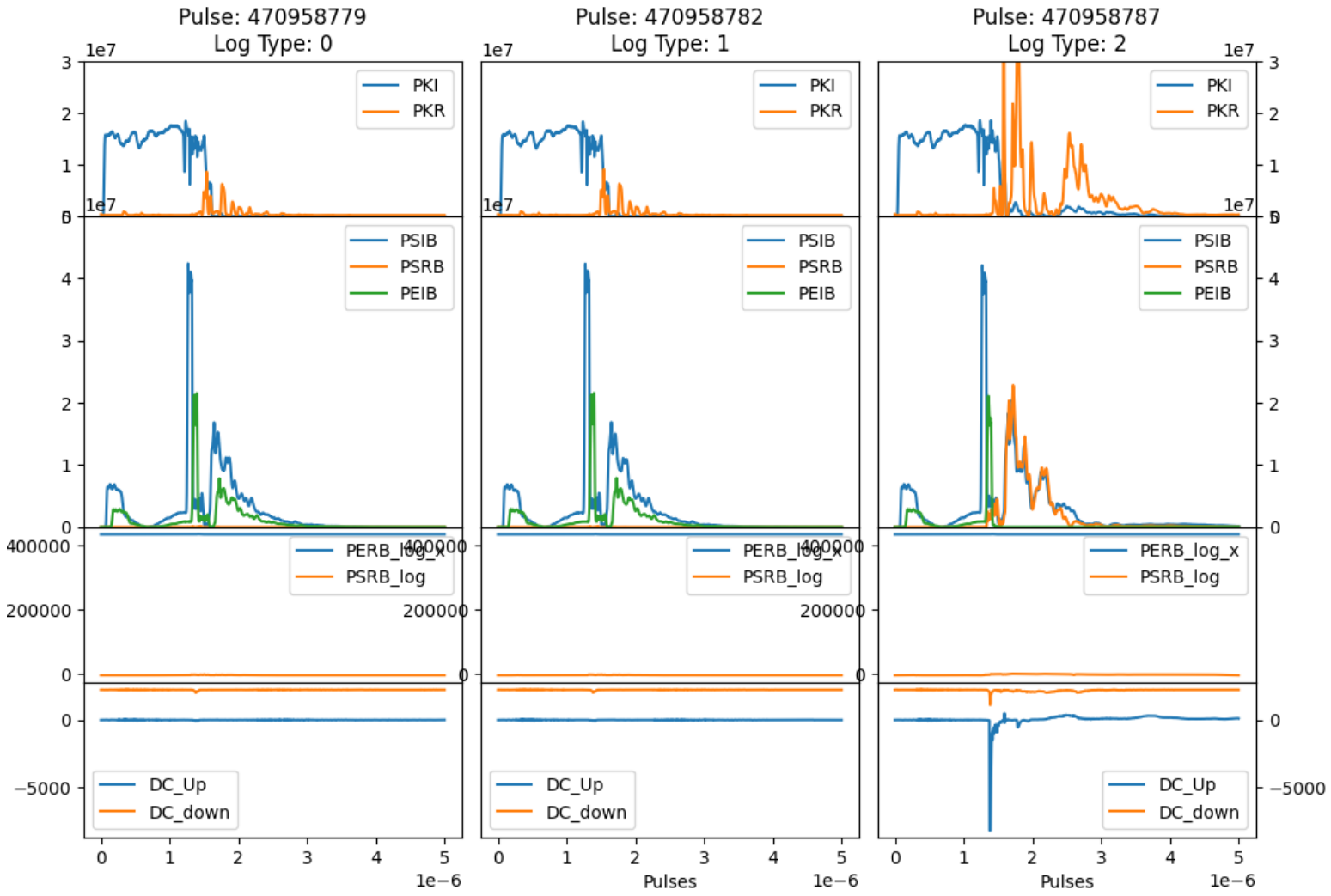
X-Box 2: TD31 N3 N4 Structure B – Peak Power



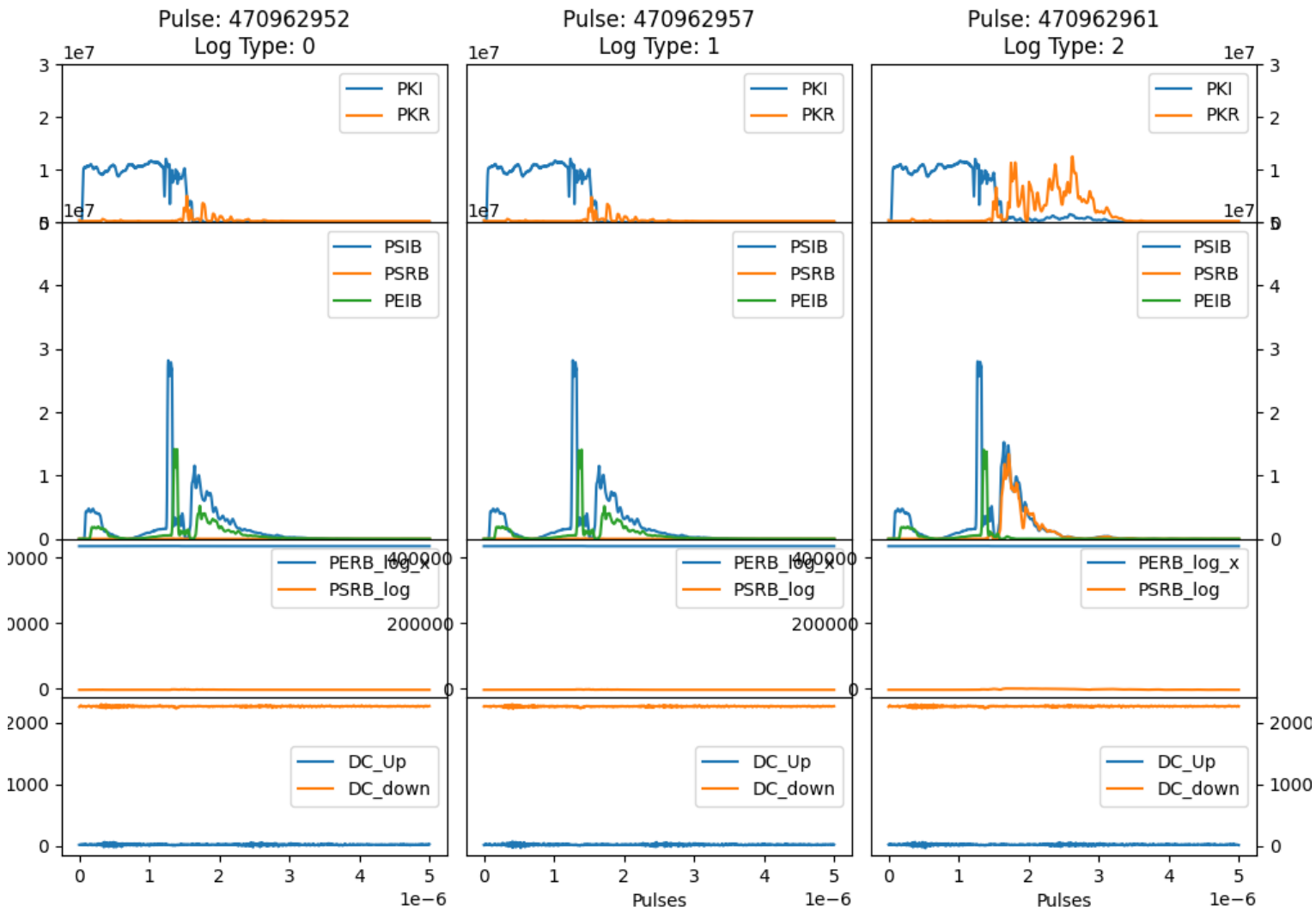
X-Box 2: TD31 N3 N4 Structure B – Gradient



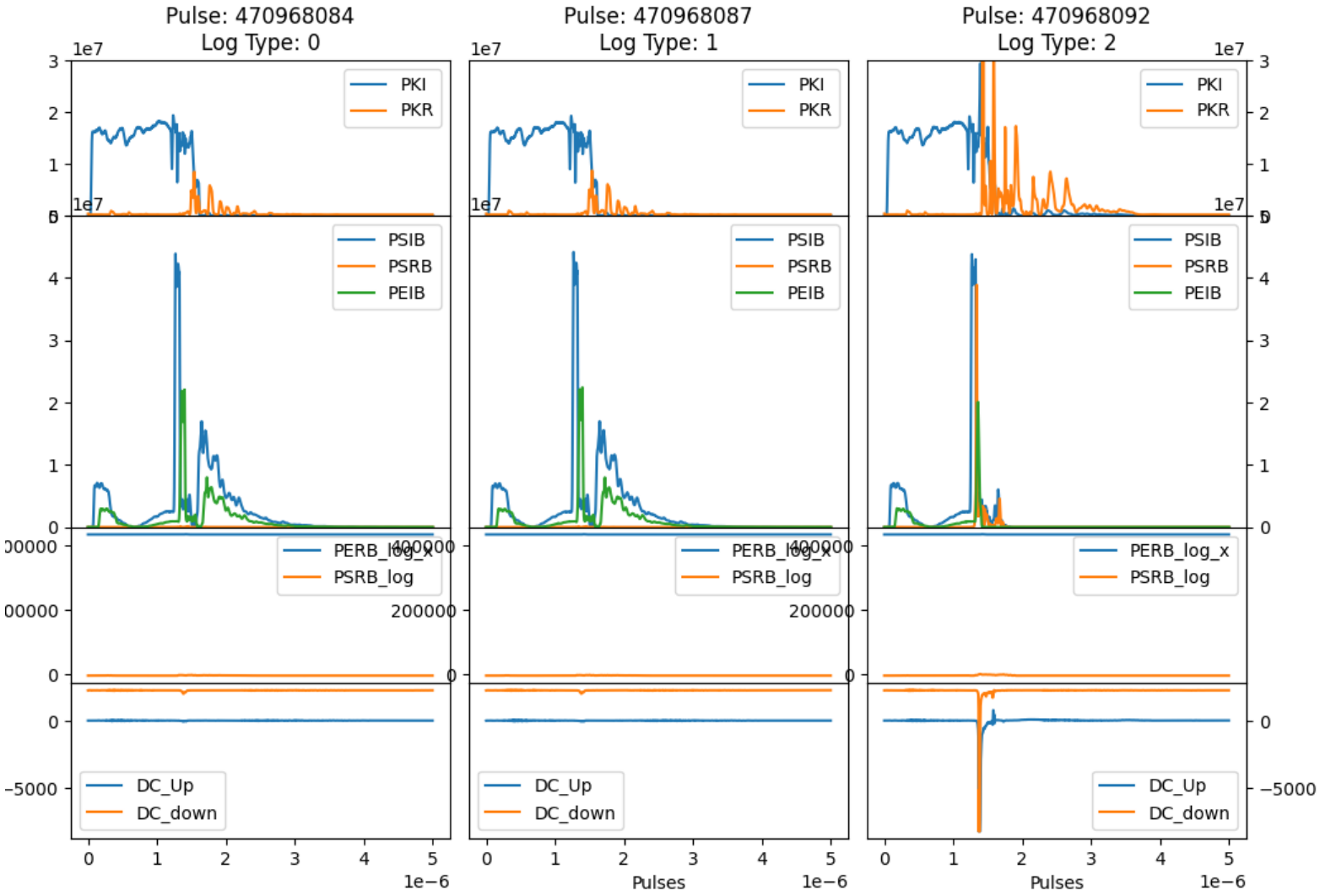
X-Box 2: 24 Feb 2024 Pulse 470958787



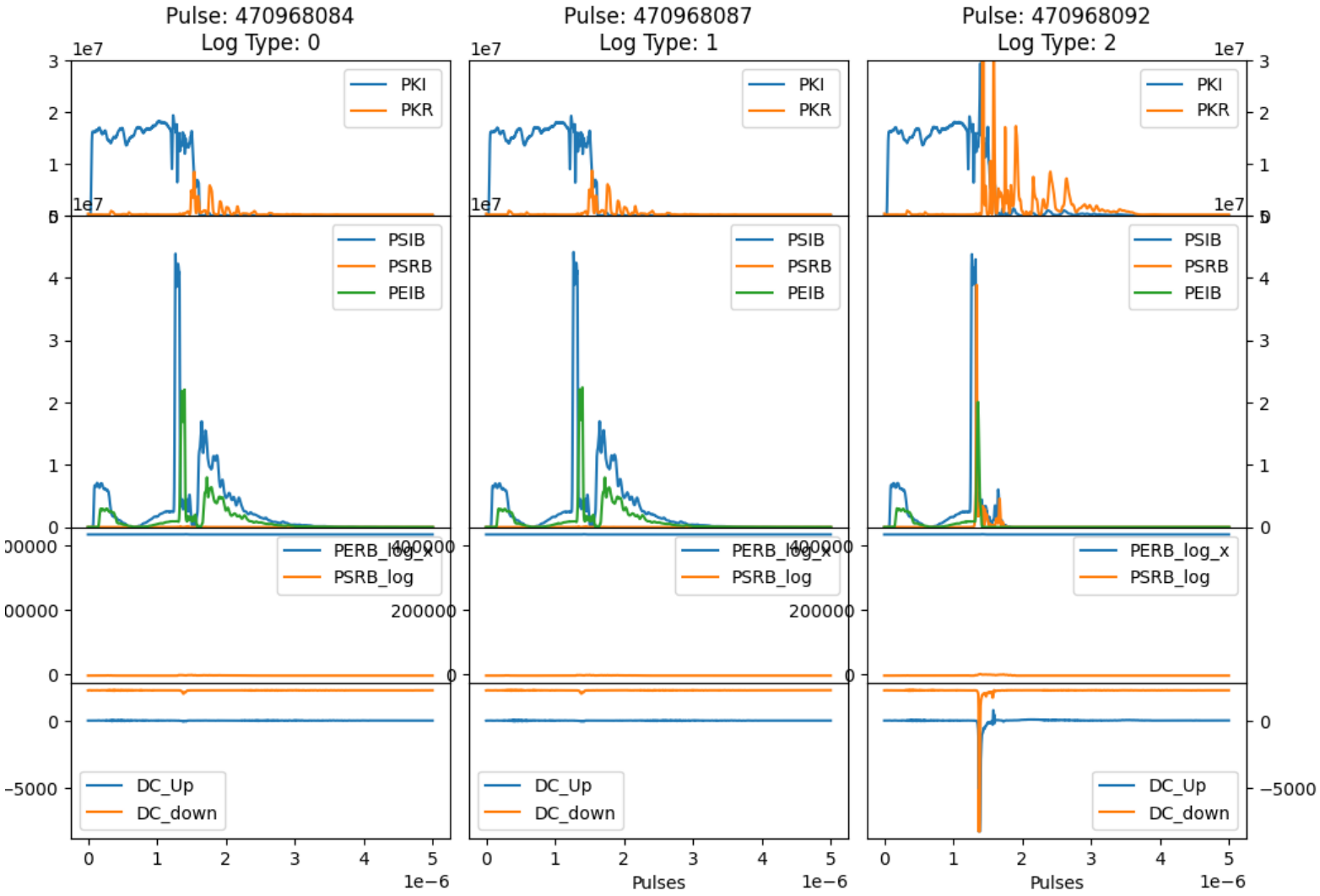
X-Box 2: 24 Feb 2024 Pulse 470962961



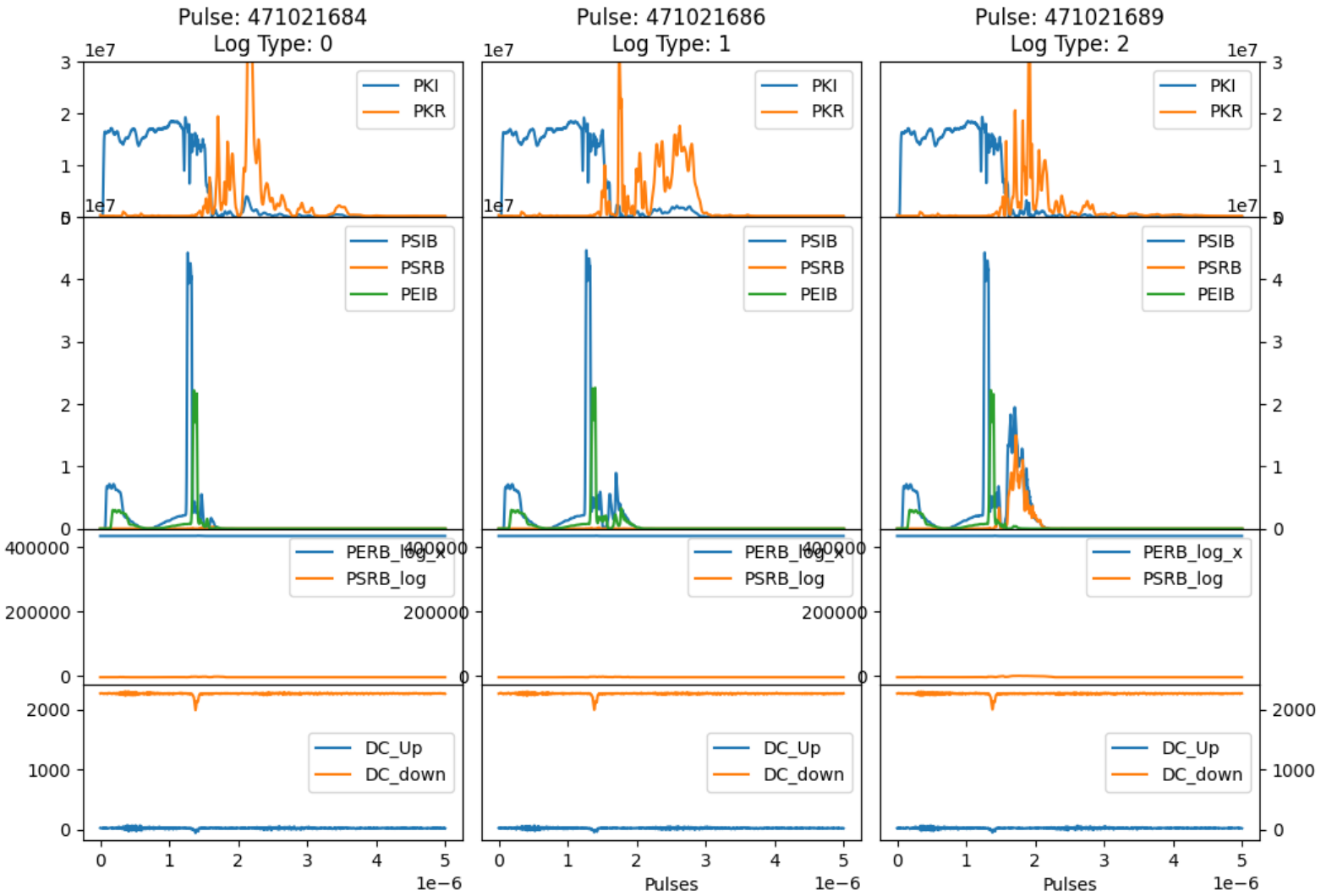
X-Box 2: 24 Feb 2024 Pulse 470968092

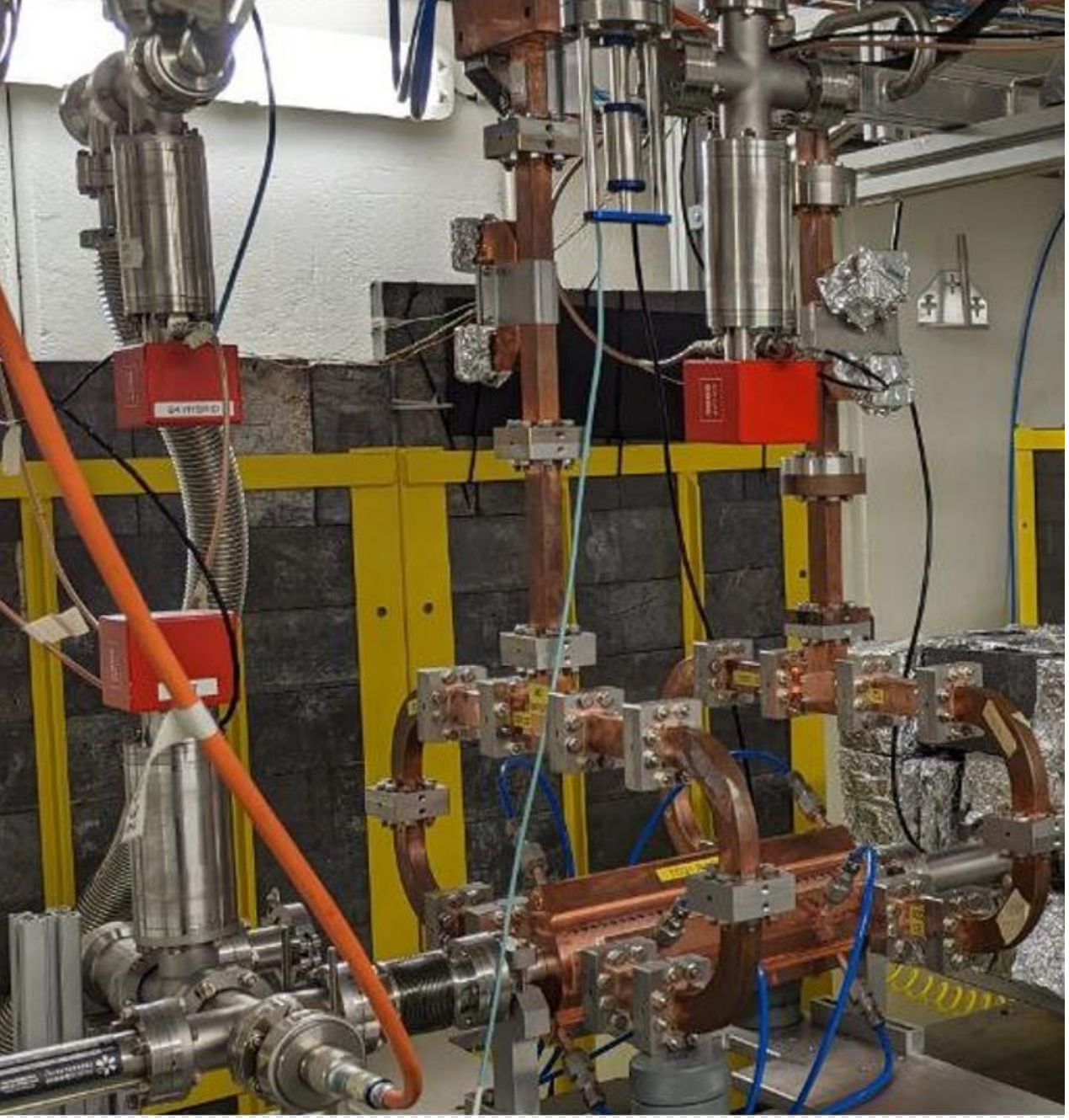


X-Box 2: 24 Feb 2024 Pulse 470968092



X-Box 2: 24 Feb 2024 Pulse 471021689





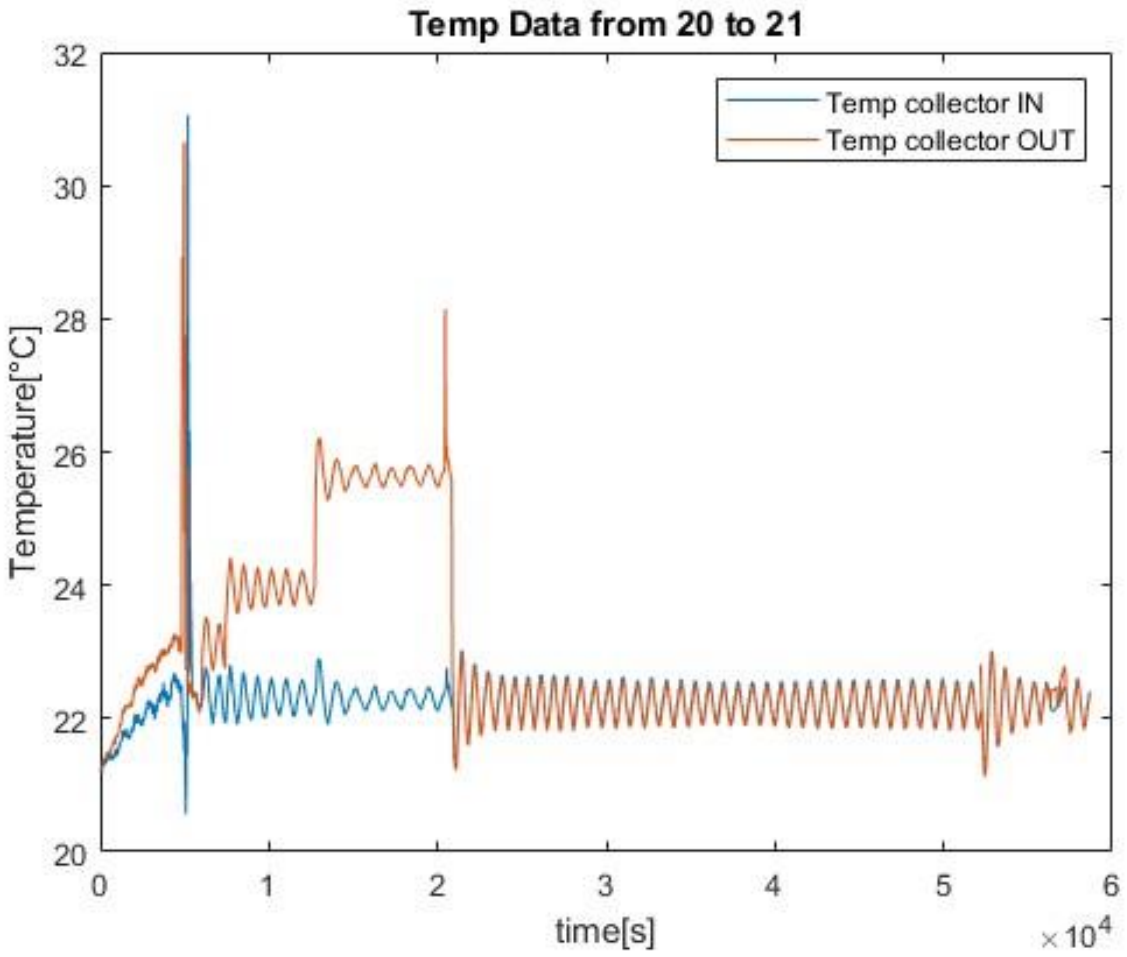
X-Box 2: Planning week 4-8 March 2024

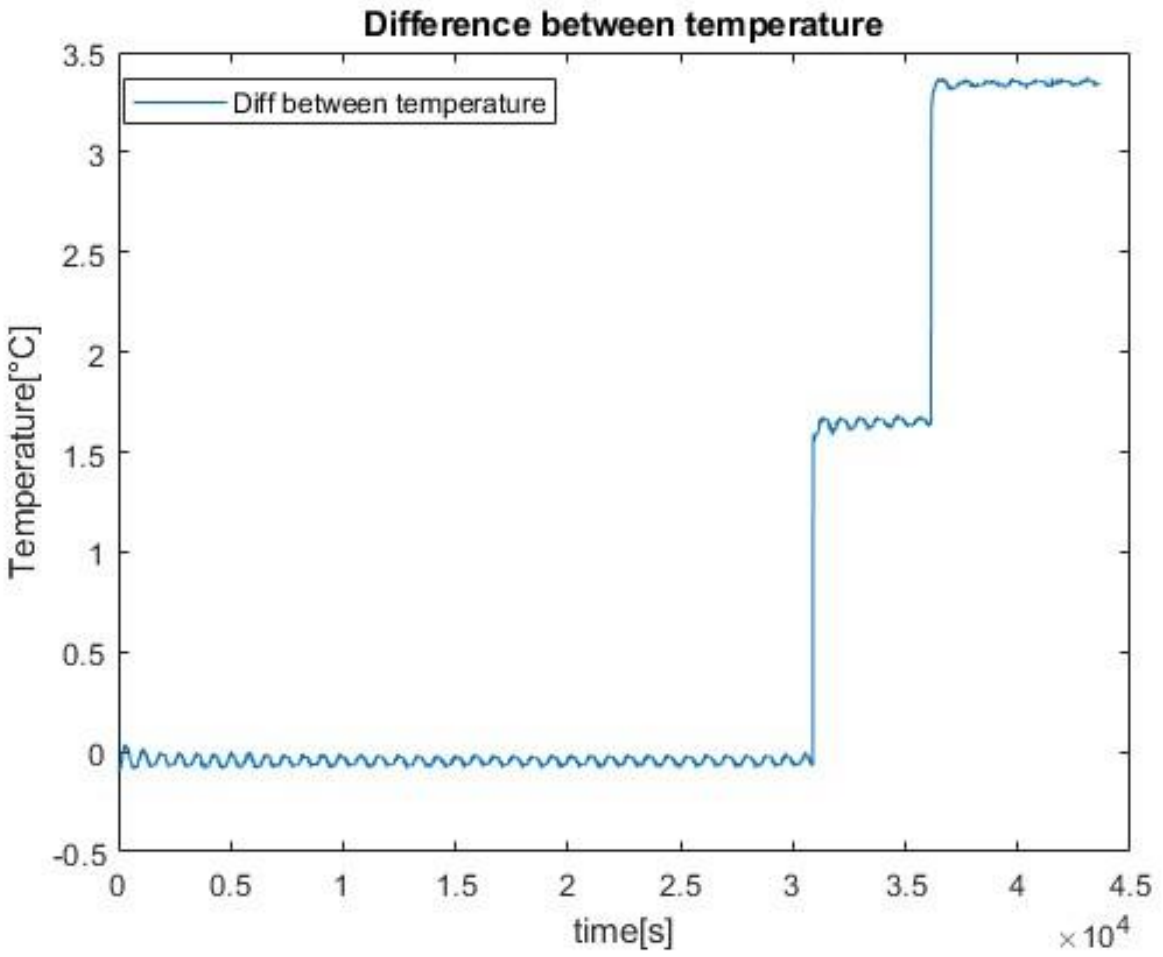
- **Experiment at Xbox2**
  - Demonstration of operation mode using leading edge of modulator to amplify RF pulse (Ping simulations)
  - Study on the dependency of the pulse ripple versus phase rising time

X-Box 3: High Efficiency Tubes Characterisation

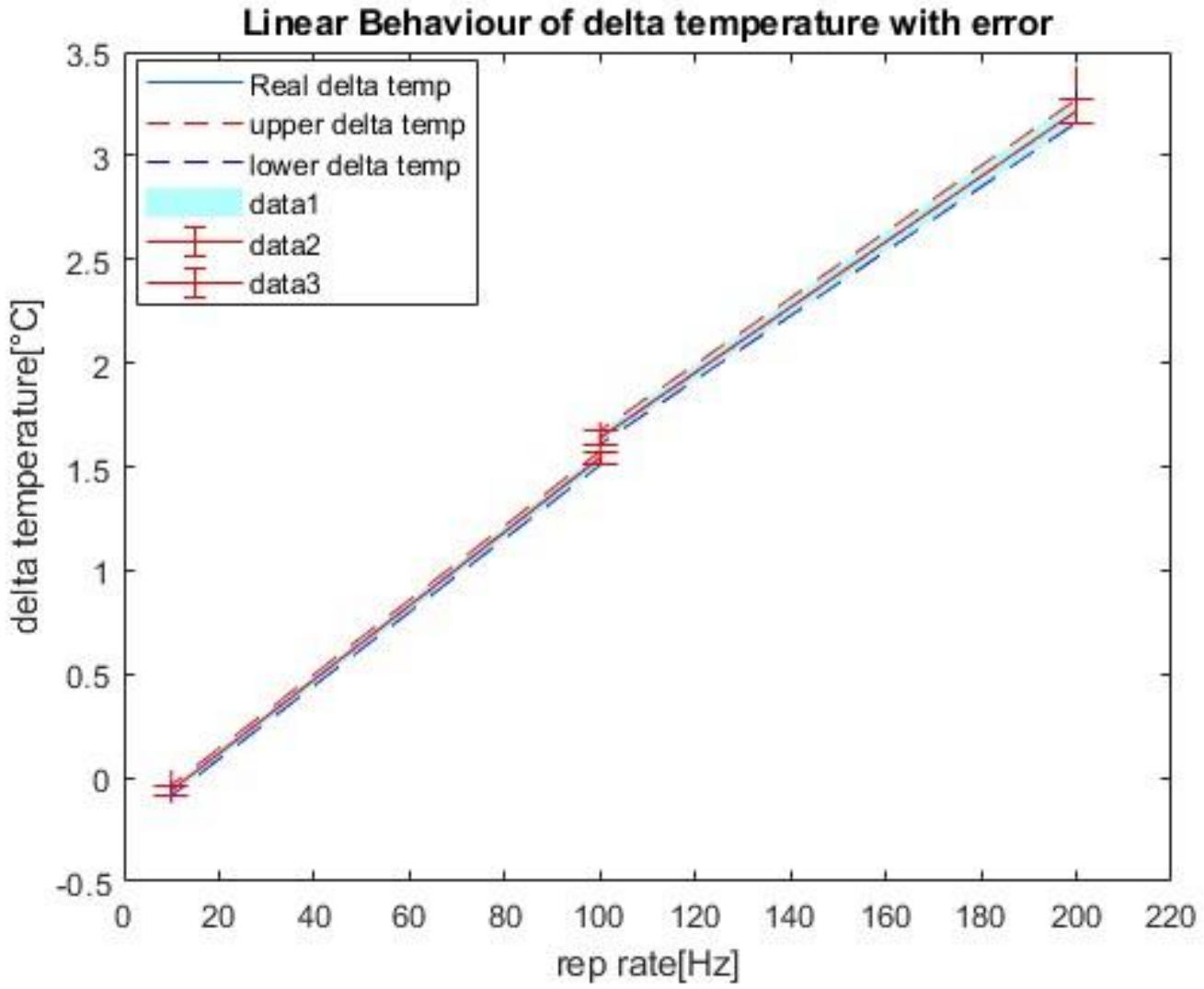
- **New campaign based on calorimetry**
  - Temperature sensors are installed
  - Still waiting for installation of flow meters (fittings)
- Uncertainty sources in collector calorimetry
  - Variations in temperature due to slow response of water station
  - Variations in water flow
  - Accuracy of the surface sensors
    - May improve with PT1000 probes

X-Box 3 HEK: Collector calorimetry

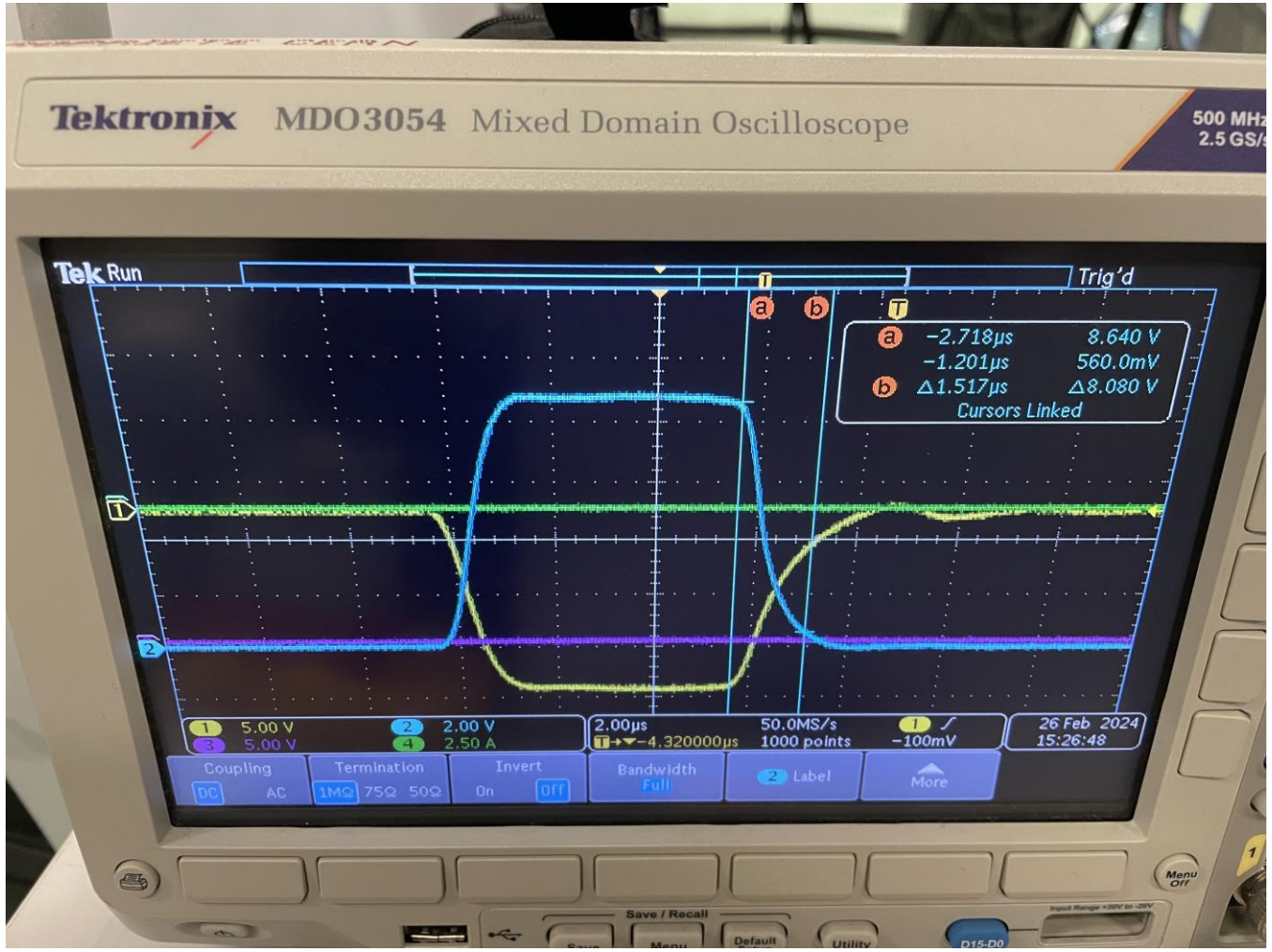


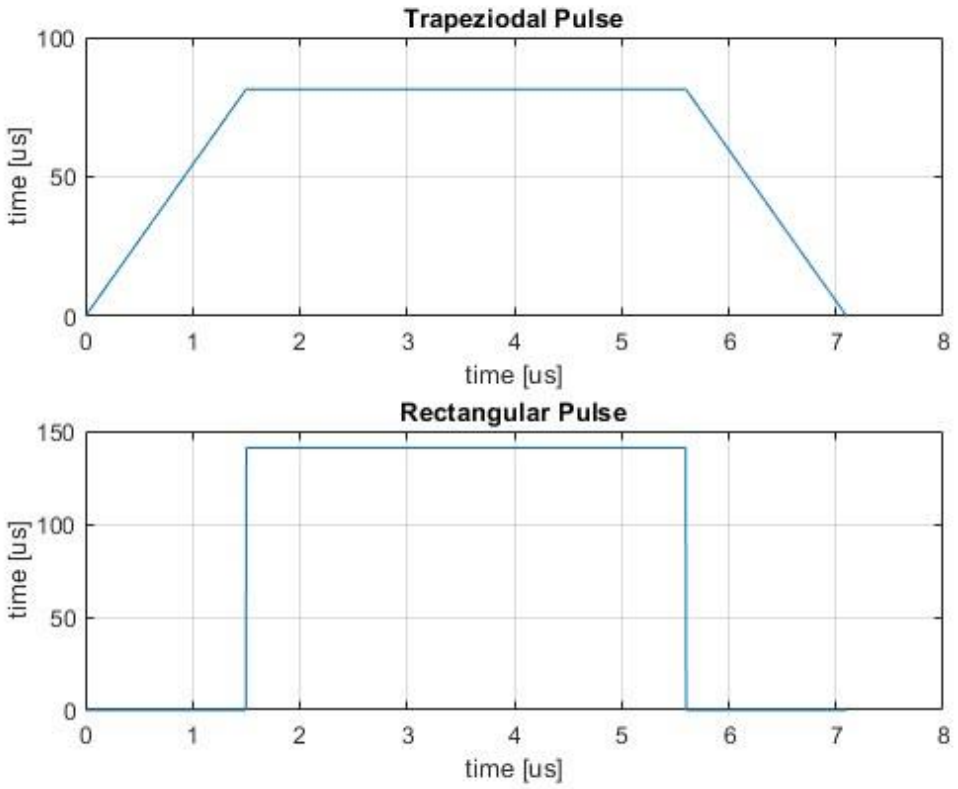


X-Box 3 HEK: Collector calorimetry



X-Box 3 HEK: Collector calorimetry





Meas. peak power (calorimetry) 10.801MW
Meas. beam current (scope) 81.2A
Calculated uPe=1.67

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