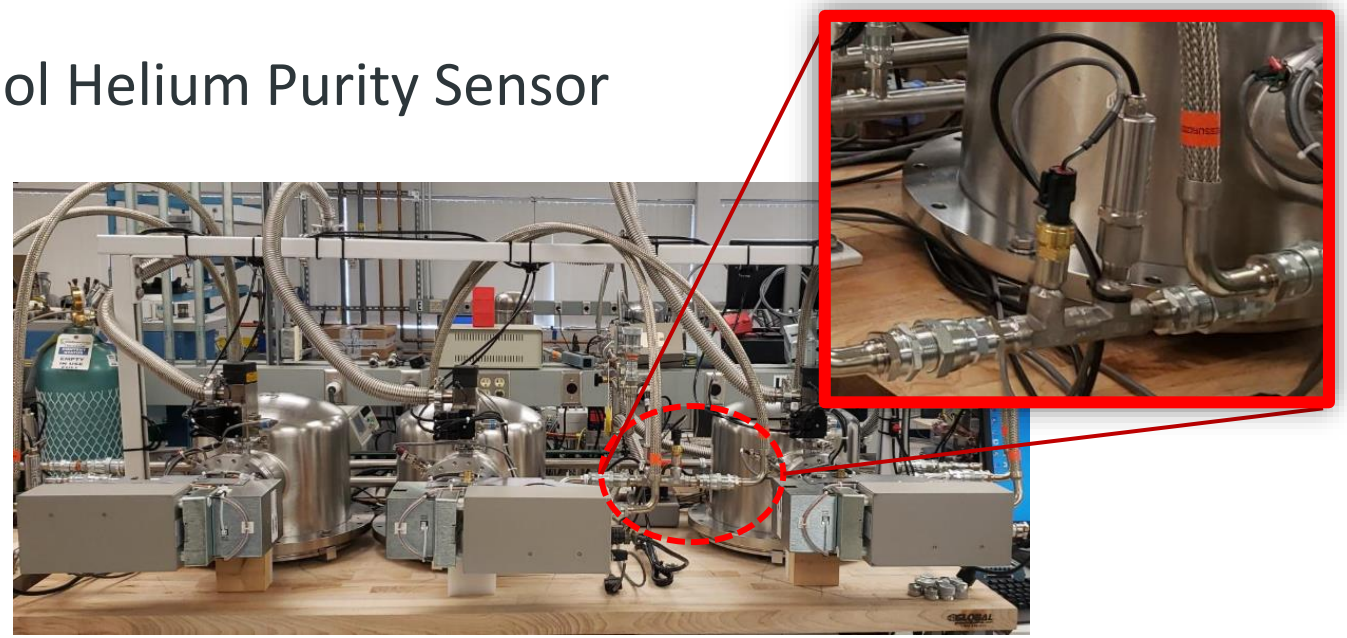
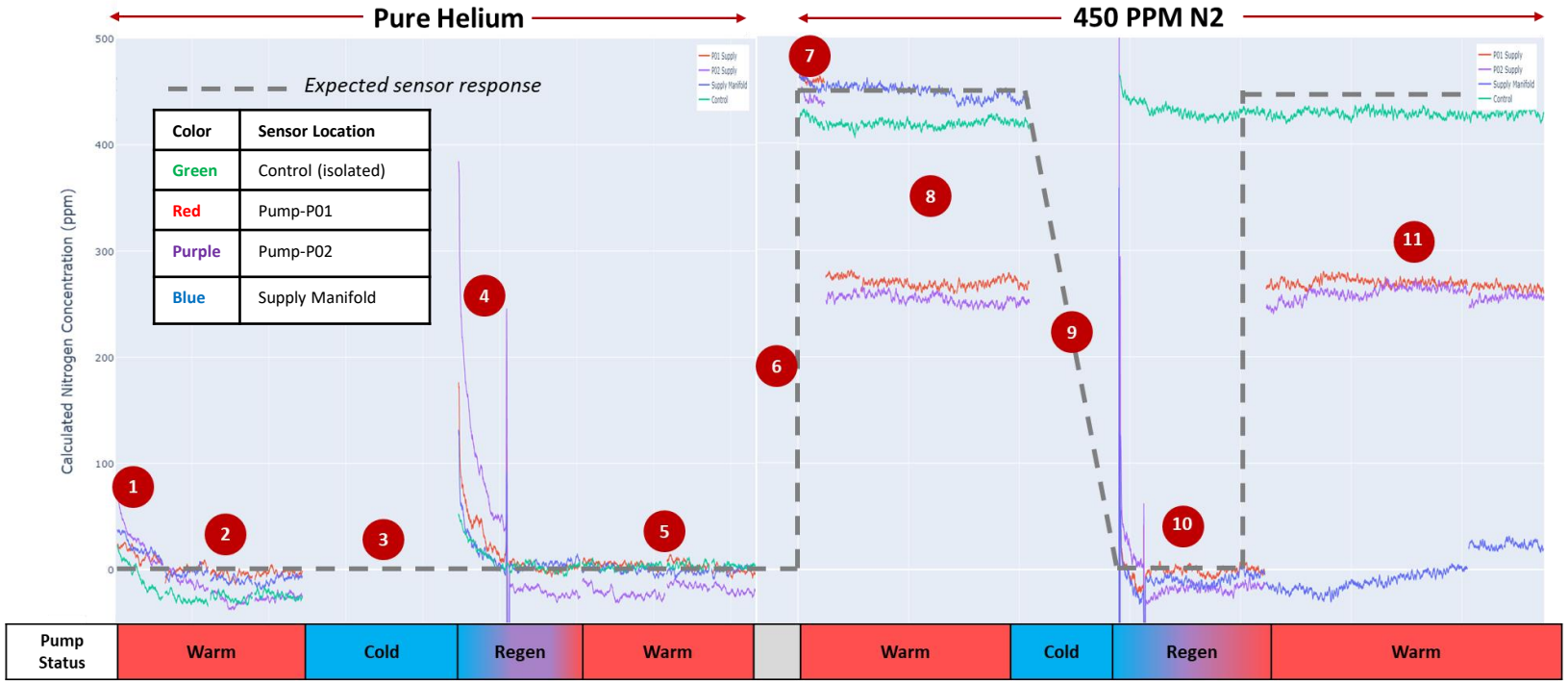
Core Technology Development – On-tool Helium Purity Sensor

Run Phase – System Level Feasibility

- **Status:** In-process & On Track
- **Duration:** 3 months (3/21-6/21)
- **Tasks:**
  - Demonstrate contamination detection at system level
  - Assess feasibility of sensor locations
  - Validate concept of measurements during/after regen
  - Document risk associated to exposure to pressure/flow oscillations & particles





Sequence of events

1. System charged – Pure Helium
2. Turnover system & mix (2 minutes)
3. Cooldown Pumps (no data collected)
4. Regen (re-start data collection)
5. Turnover system & mix (2 minutes)
6. Evacuate system charge
7. System charged – 450 ppm N2
8. Turnover system & mix (2 minutes)
9. Cooldown Pumps
10. Regen (re-start data collection)
11. Turnover system & mix (2 minutes)