

DSG-NPS R&D Meeting Minutes

Date: April 04, 2023

Time: 02:00 PM – 02:50 PM

Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

1. Thermal readback

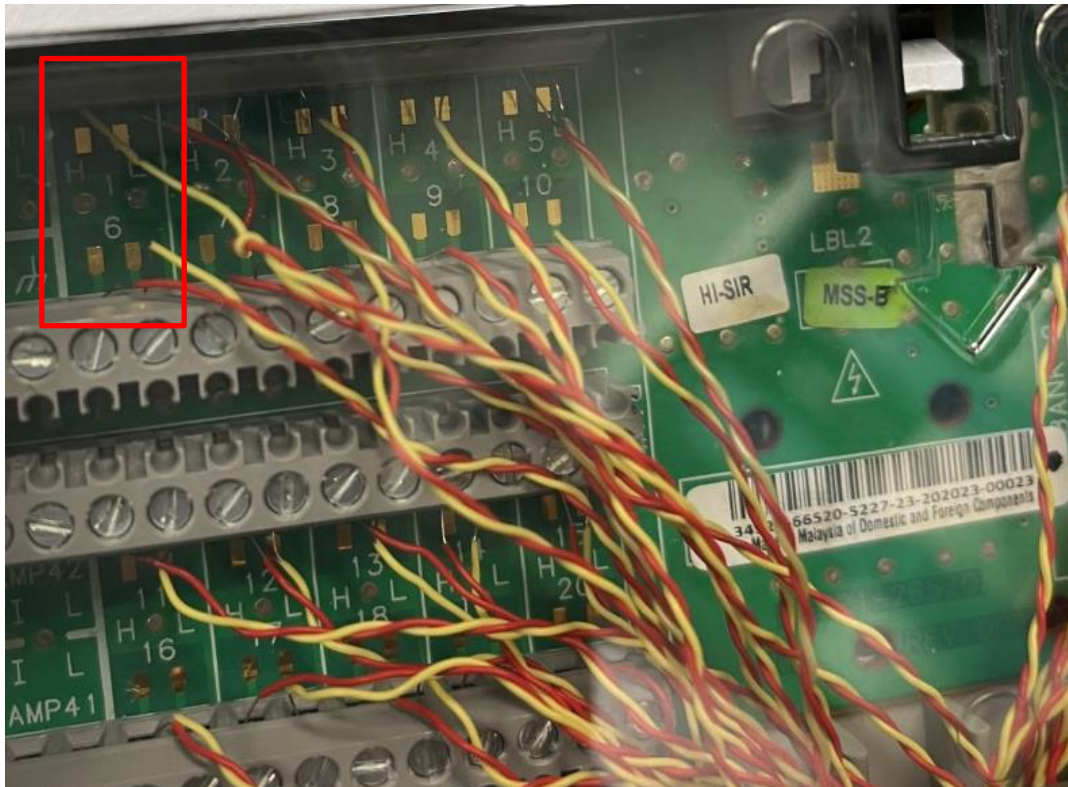
Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, and Tyler Lemon

1. Phoebus thermal readback screens are being redone to replace arrays with individual PVs; Mary Ann has finished seven screens
2. A production softIOC has been made and is working as expected
 - Only a database file for the crystal zone temperatures has been included; additional database files for the remaining signals are in progress
3. An EPICS client for the LabVIEW thermal readback program is in progress

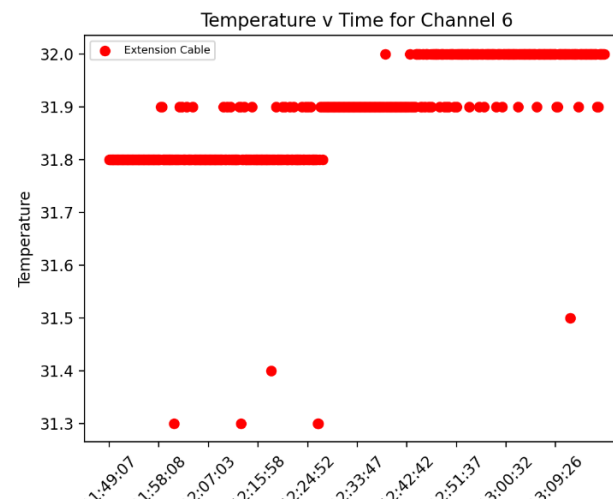
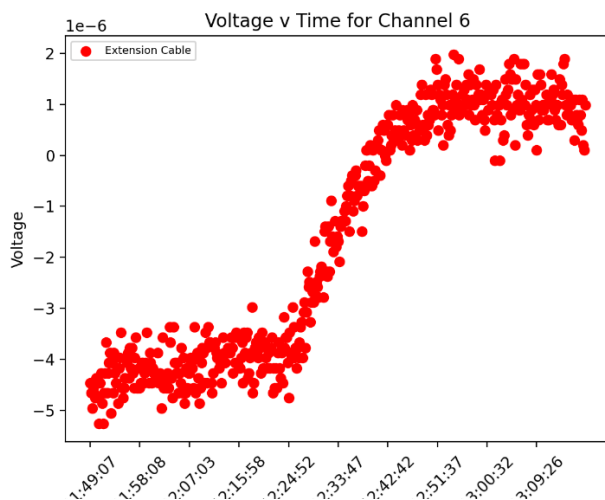
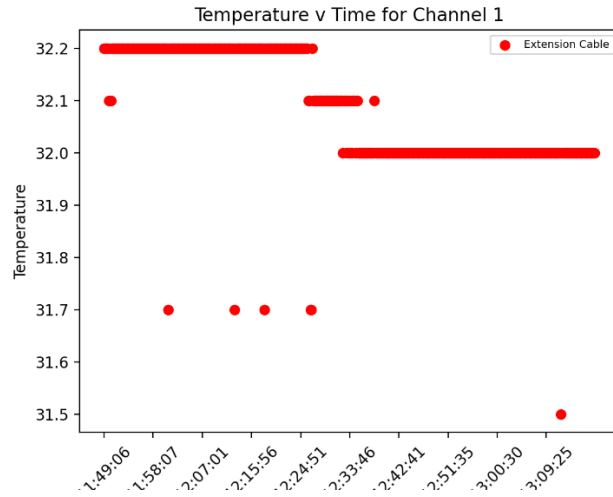
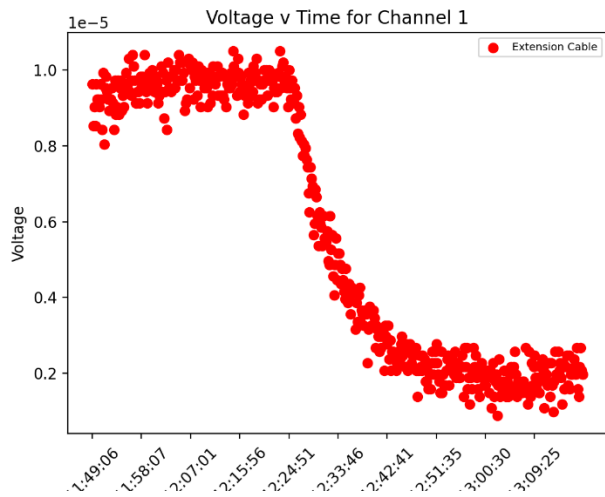
2. Extension cable testing

Aaron Brown

1. Plotted voltage vs. time and temperature vs. time for all 40 channels of terminal block #1
2. The slope of the plots is determined by how the thermocouple is connected
 - Properly connected thermocouples (yellow wire = high) have a negative slope for the temperature and voltage



Terminal block of Keysight test stand located in DSG control room; channel #1 is wired correctly and channel #6 is not (boxed in red)



Plots of voltage and temperature vs. time for channels #1 and #6; channel #6 has been improperly wired

3. Hardware

1. Discussed problems with CAEN power supplies, which are delaying NPS detector tests
 - Channels are randomly having problems with voltage oscillations and tripping off
 - Simona Malace has contacted CAEN technical support