

DSG-NPS R&D Meeting Minutes

Date: February 01, 2022

Time: 02:00PM – 03:30PM

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

1. Hardware Monitoring Program Development

Mary Ann Antonioli, Peter Bonneau, and Aaron Brown

1. Reviewed results of running the hardware monitoring program in conjunction with the Keysight scanning program
 - Signal values are passed as expected from Keysight scanning program to hardware monitoring program via shared network variables

2. Hardware Interlock System Development

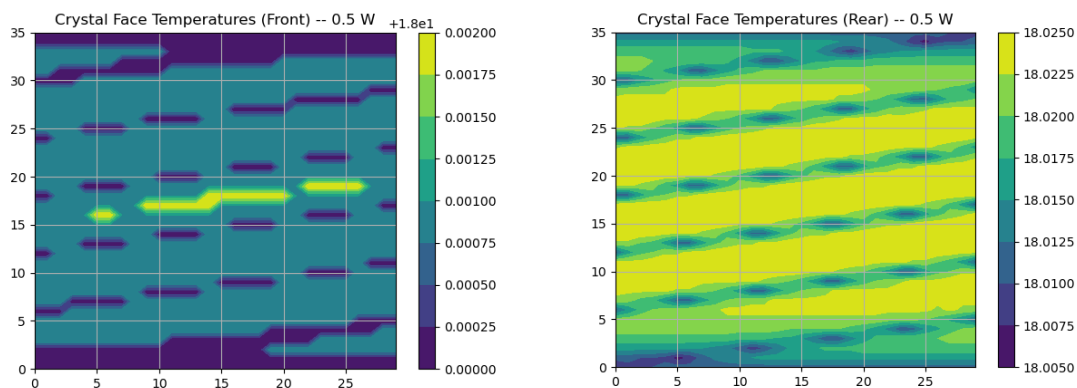
Mary Ann Antonioli, Peter Bonneau, and Aaron Brown

1. Reviewed spreadsheet/Gantt chart detailing LabVIEW subVIs to be developed for hardware interlock system
2. Reviewed LabVIEW subVIs created to communicate with the Kodiak chillers
 - Will contact Brad Sawatzky about getting access to one of the chillers to test communication subVIs
3. Installing additional thermocouples in Keysight terminal blocks (47 of 112 installed)
4. Discussed timing issues with filling arrays in Keysight scanning program and pushing these values to shared network variables
 - Will investigate using pause and resume commands instead of implementing delays

3. Ansys Thermal Analysis

Aaron Brown, and Brian Eng

1. Reviewed modifications to Python code developed to parse analysis results
 - Code now generates contour plots for the temperature probe values



Contour plots generated using front (left) and rear (right) crystal face temperature probe values

4. High Voltage Supply Cable Testing

Aaron Brown, George Jacobs, Mindy Leffel, and Marc McMullen

1. Completed voltage drop testing of 140' cable – no issues noted