

DSG-NPS R&D Meeting Minutes

Date: January 26, 2021

Time: 11:00AM – 12:05 PM

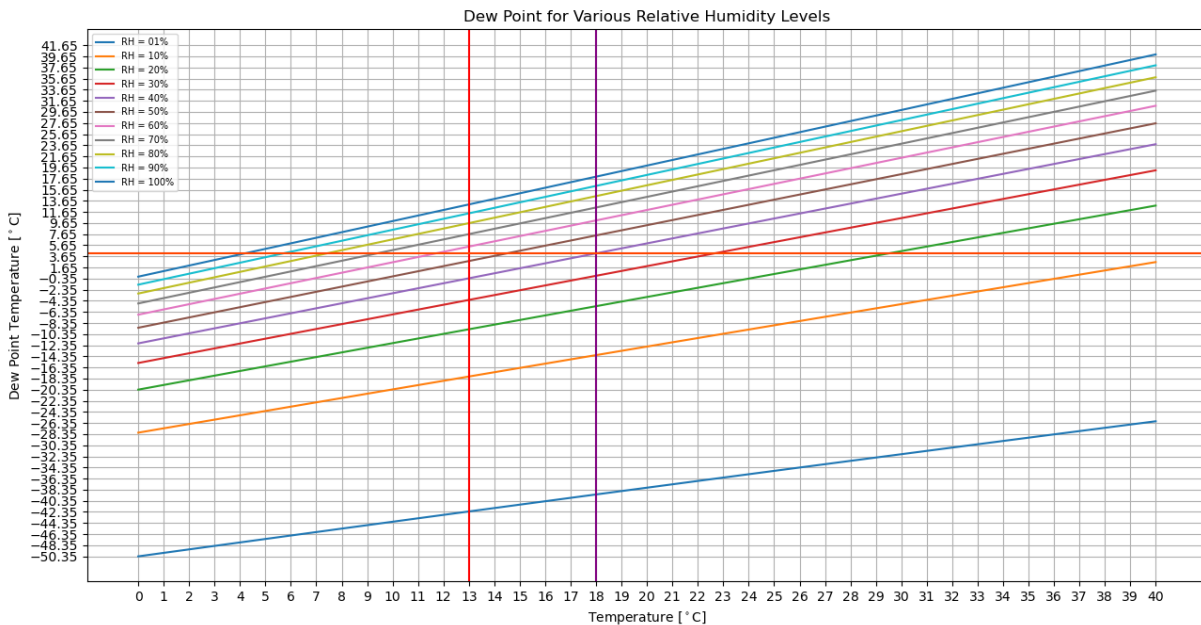
Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

1. CSS screen development status

- 1.1. Mary Ann Antonioli completed 985 of 1080 PMT Settings blocks on the CSS main NPS screen
- 1.2. Aaron Brown completed Python script to generate the main NPS screen OPI file
 - 1.2.1. OPI file will be moved to a Hall B computer for testing

2. NPS Hardware Interlock System development

- 2.1. Aaron Brown received step files for the cooling system from Carlos Munoz-Camacho for development of three-dimensional detector model; started adding cooling system piping to frame model
- 2.2. Aaron Brown generated two dew point calculation plots—a parametric plot (Python) and a three-dimensional plot (Mathematica)



Parametric dew point plot generated via Python

3. Cable fabrication/procurement

- 3.1. Mary Ann developed a schematic for the pinout of the SAMTEC connectors end of the multi-conductor HV cables Mindy Leffel is fabricating
- 3.2. The twelve defective CAEN Radiall 52-pin connectors have been returned; lead time for replacements is ~4 weeks

4. Mary Ann Antonioli generated ramp test plots for 20 CAEN HV modules, 36 channels per module, totaling 720 plots; posted to website.