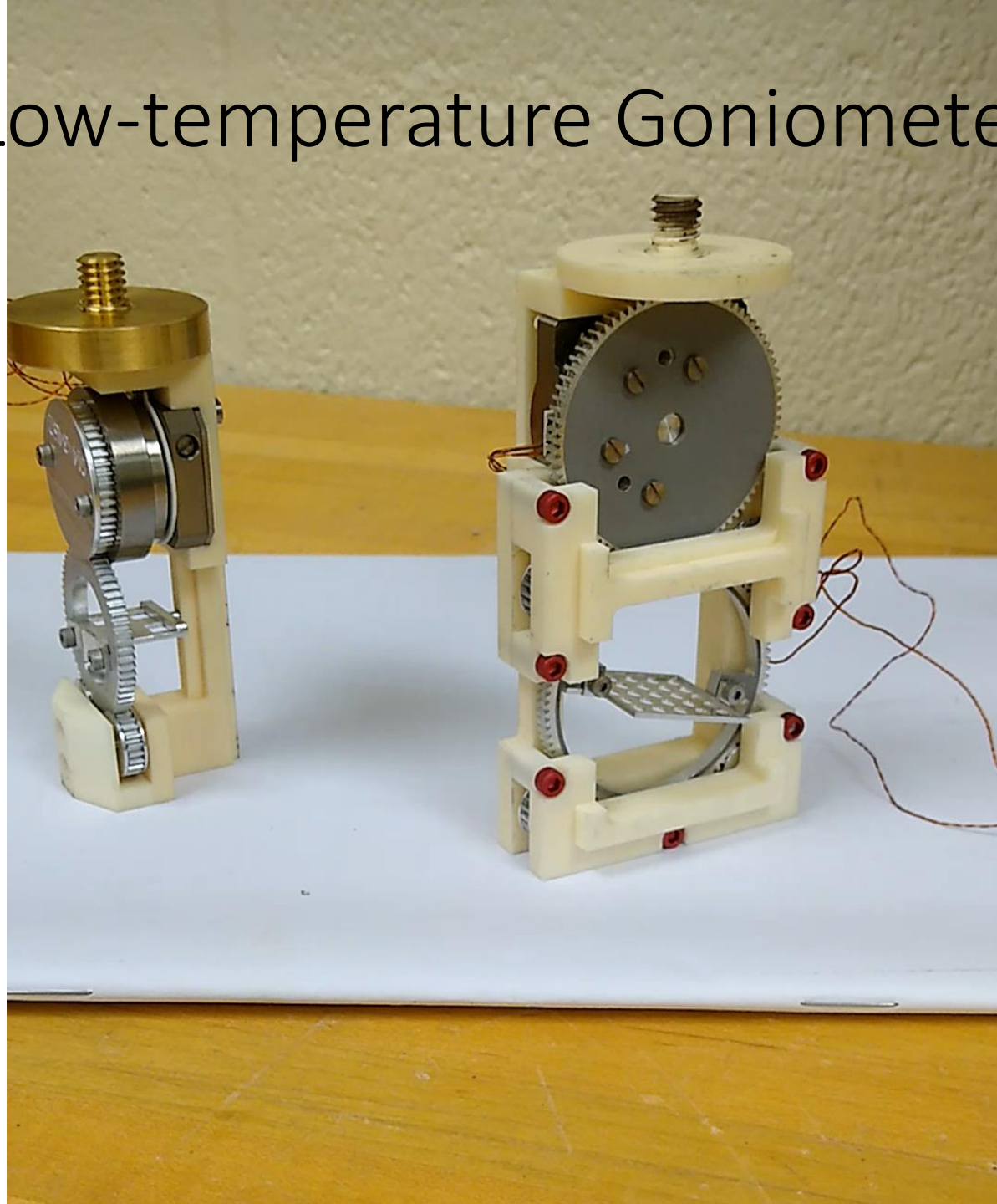


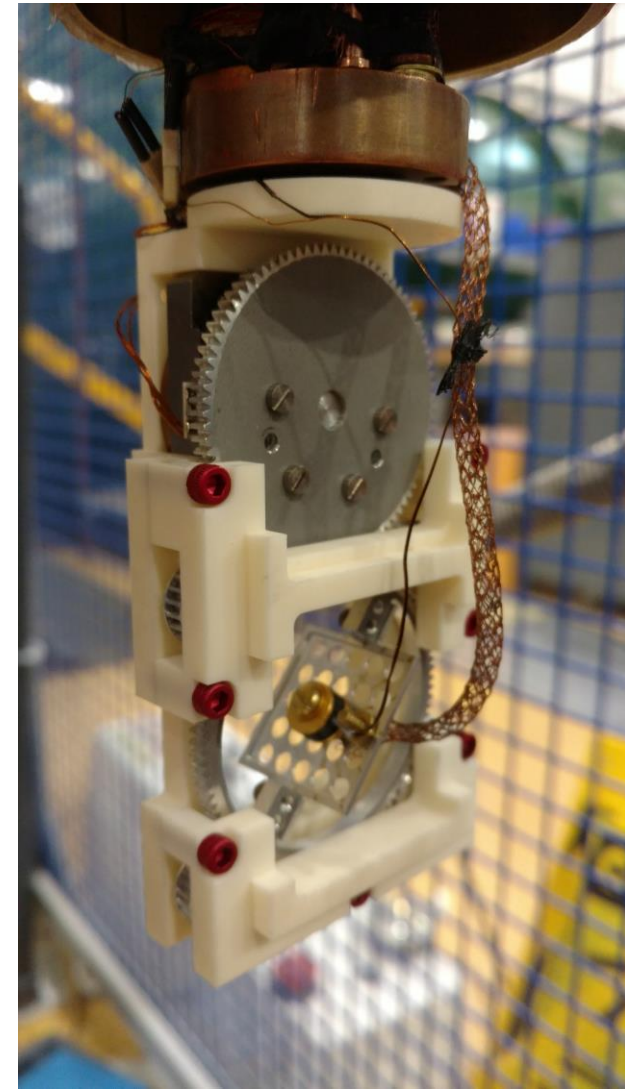
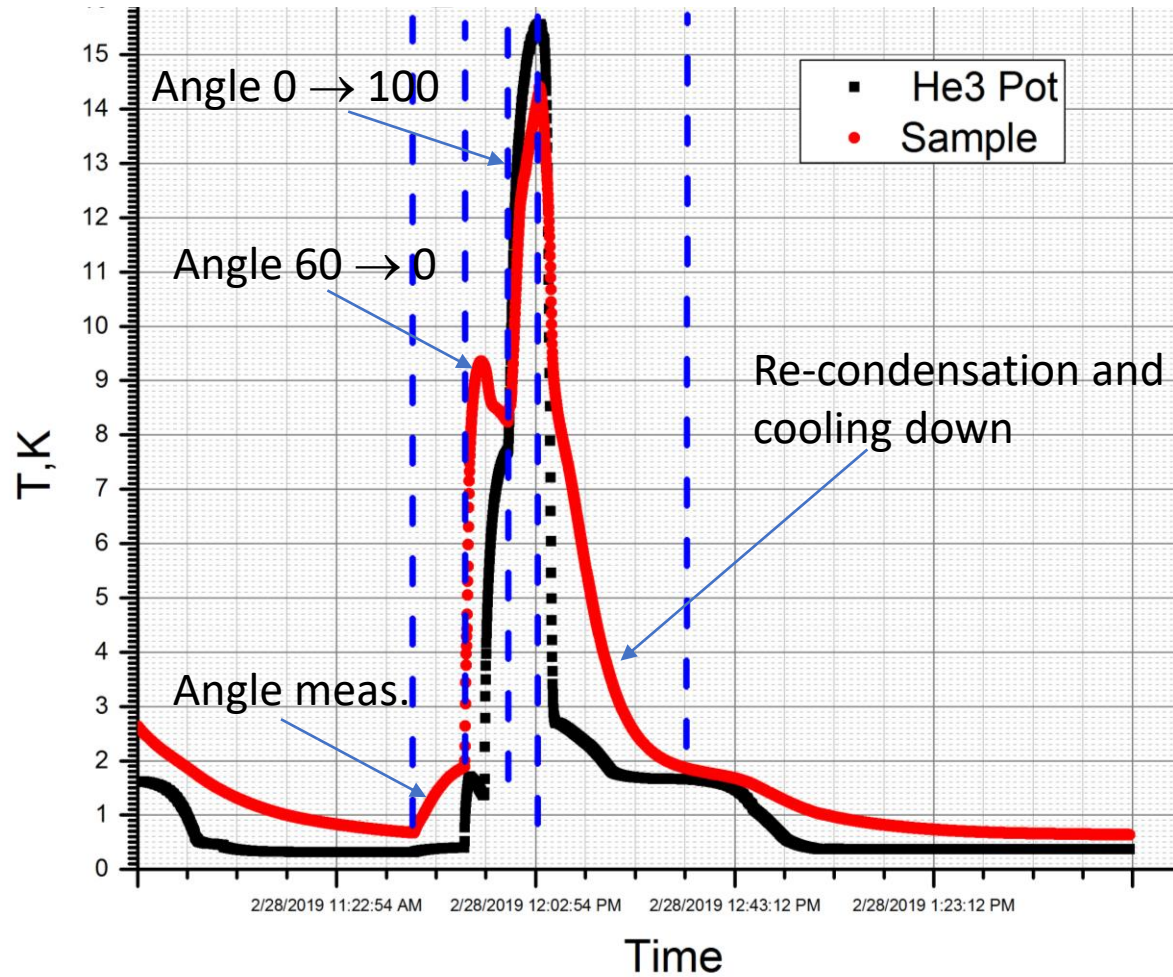
Sample Environment update 2022

Sergiy Gladchenko

Low-temperature Goniometer



Sample Thermalization Problems at He3 and Dilution Refrigerators

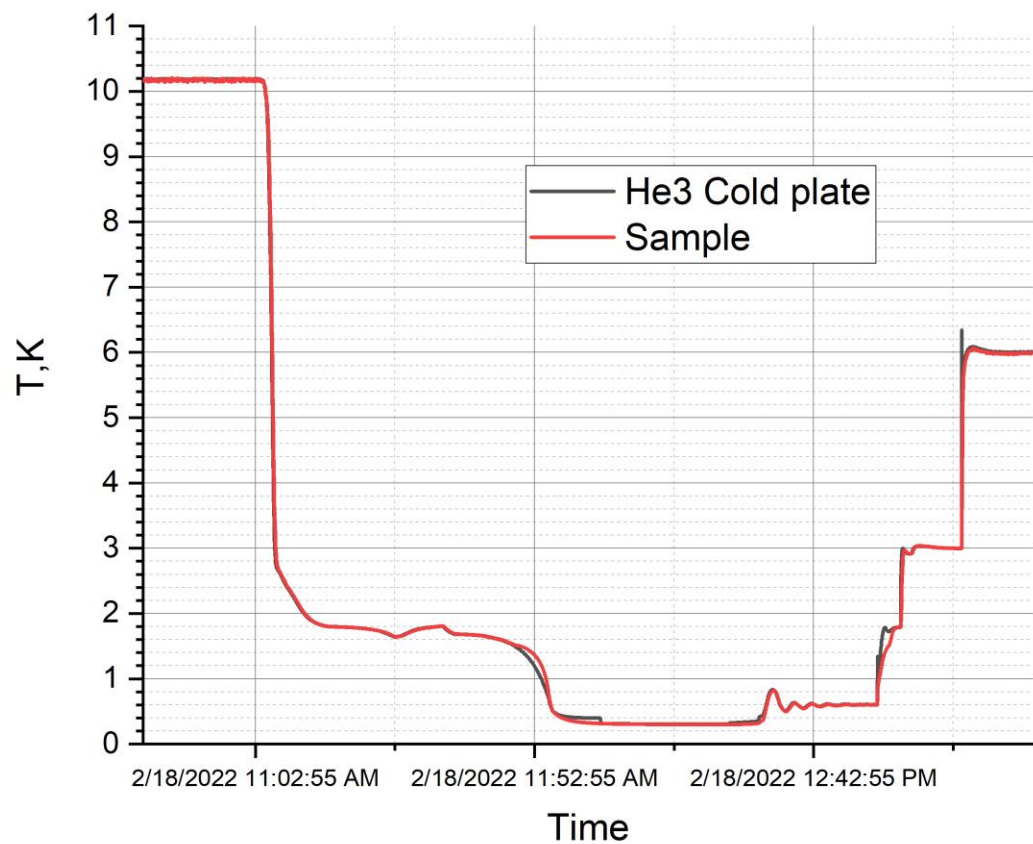


Goniometer Vacuum Can

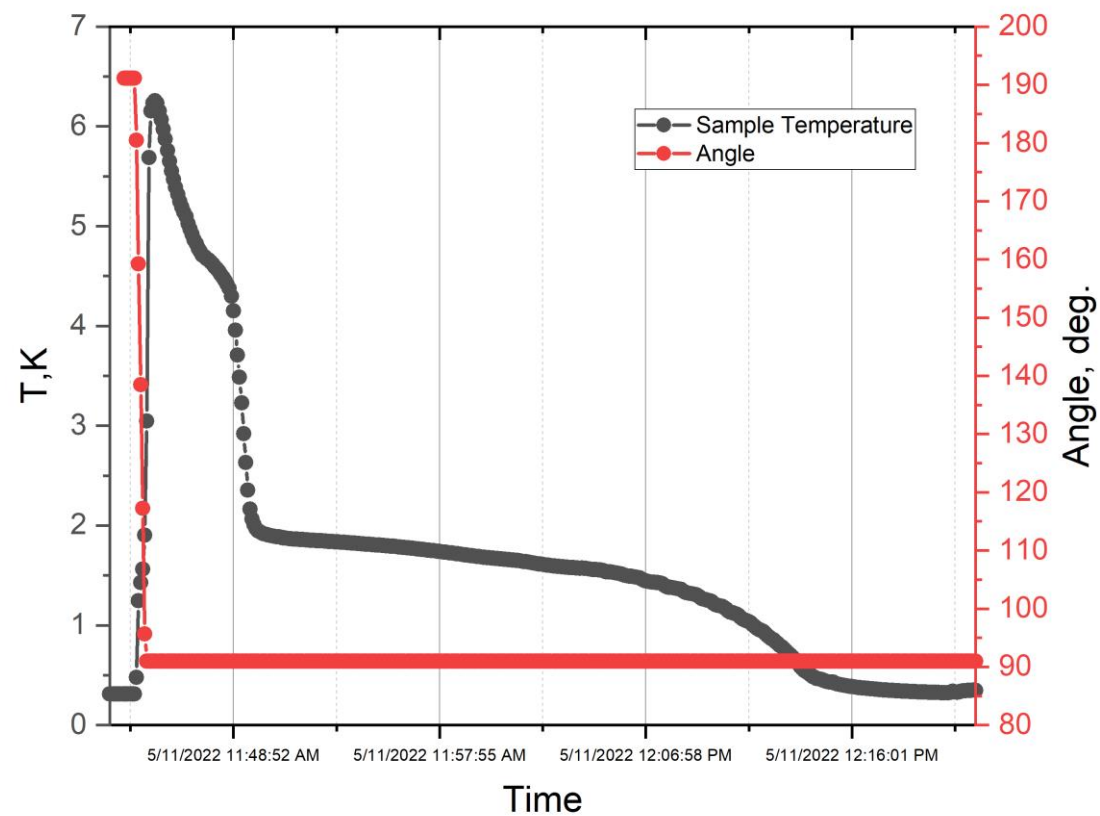


Goniometer + Can Low-Temperature Test

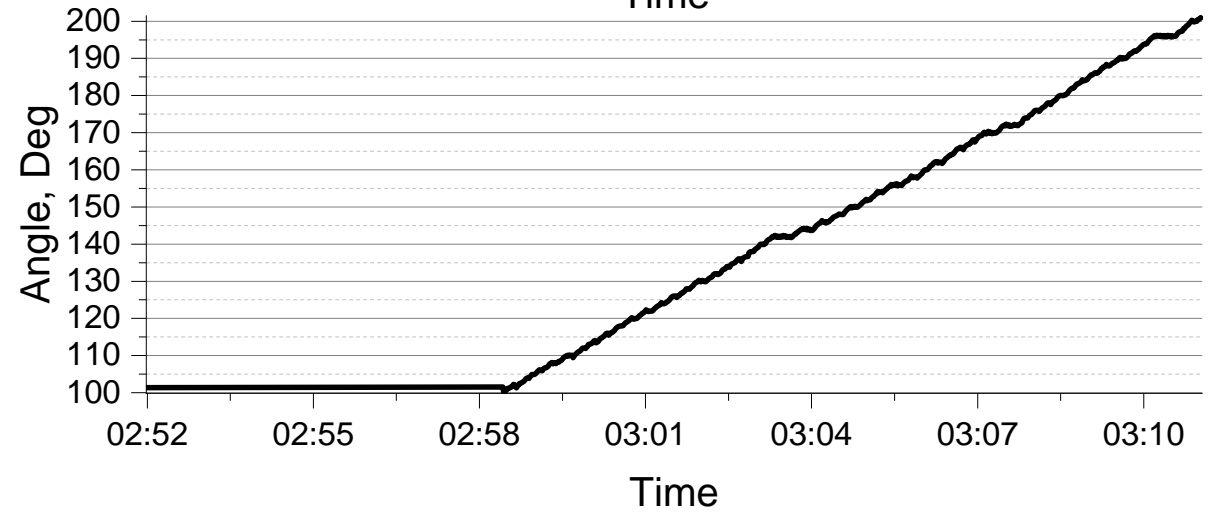
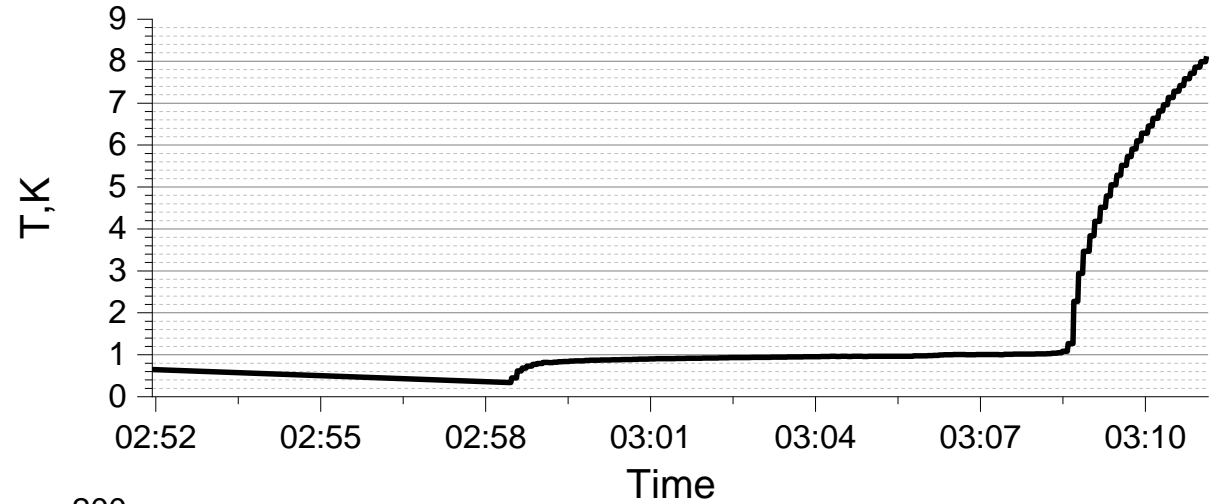
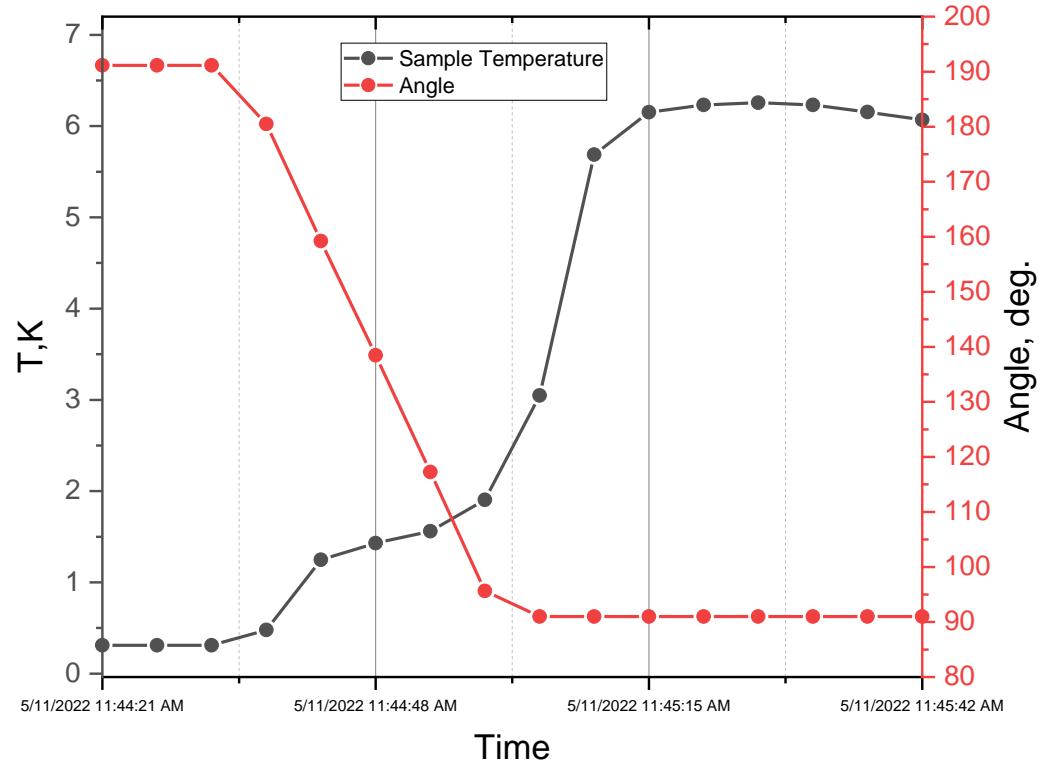
He3 Insert cooling down



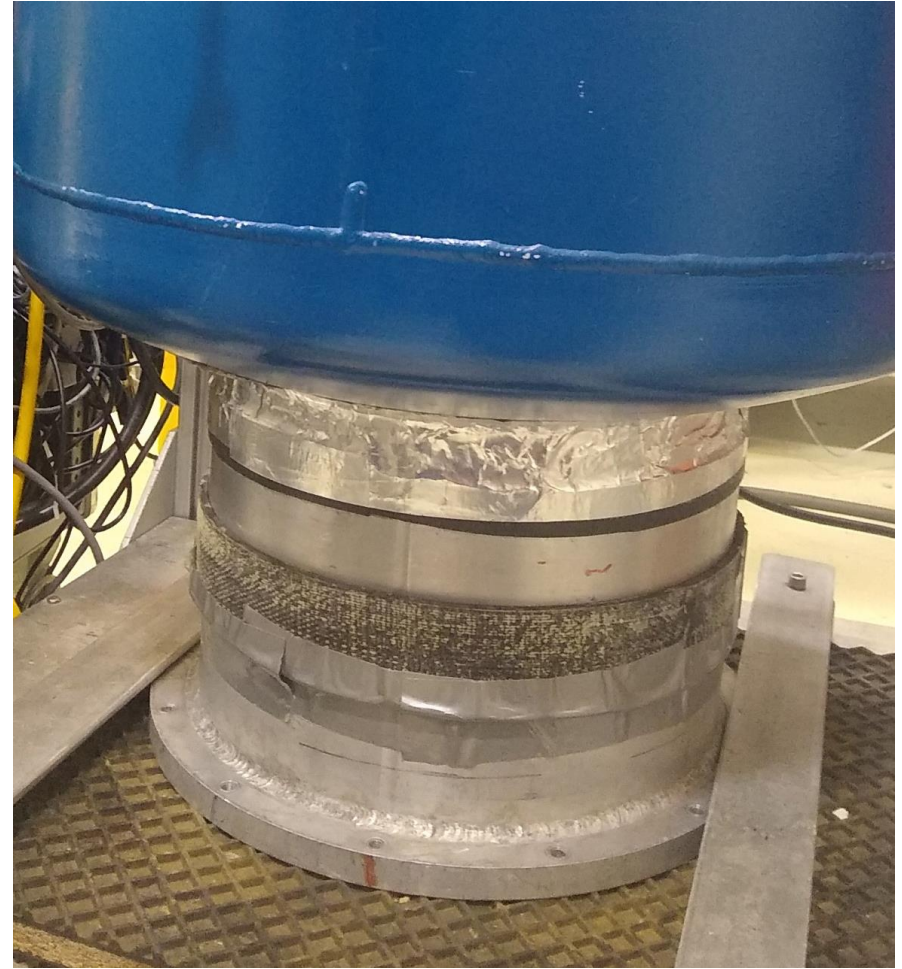
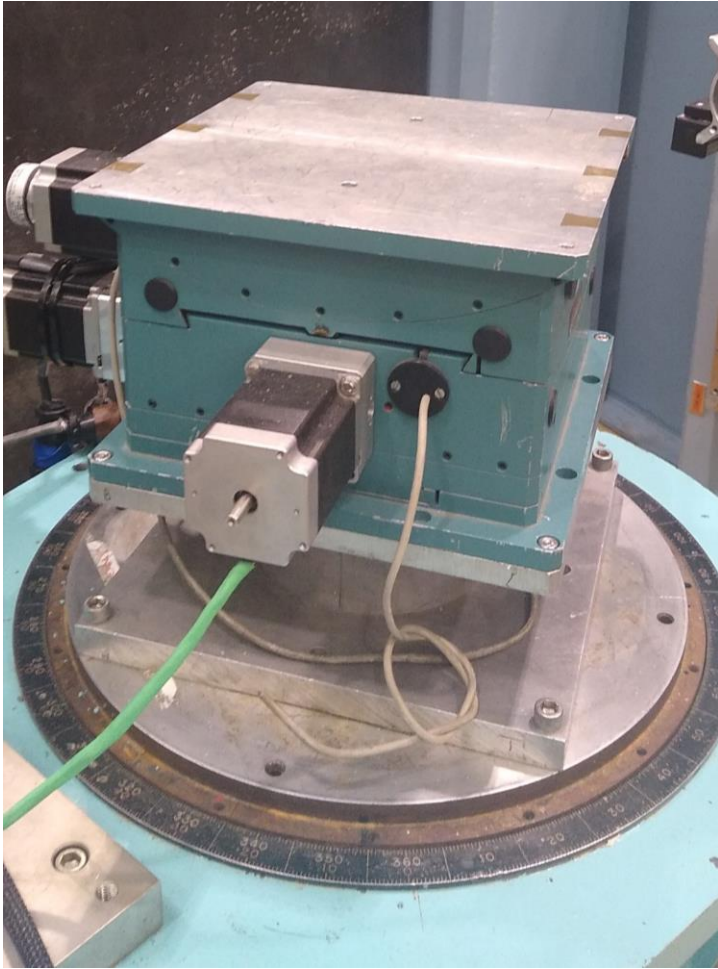
Rotation



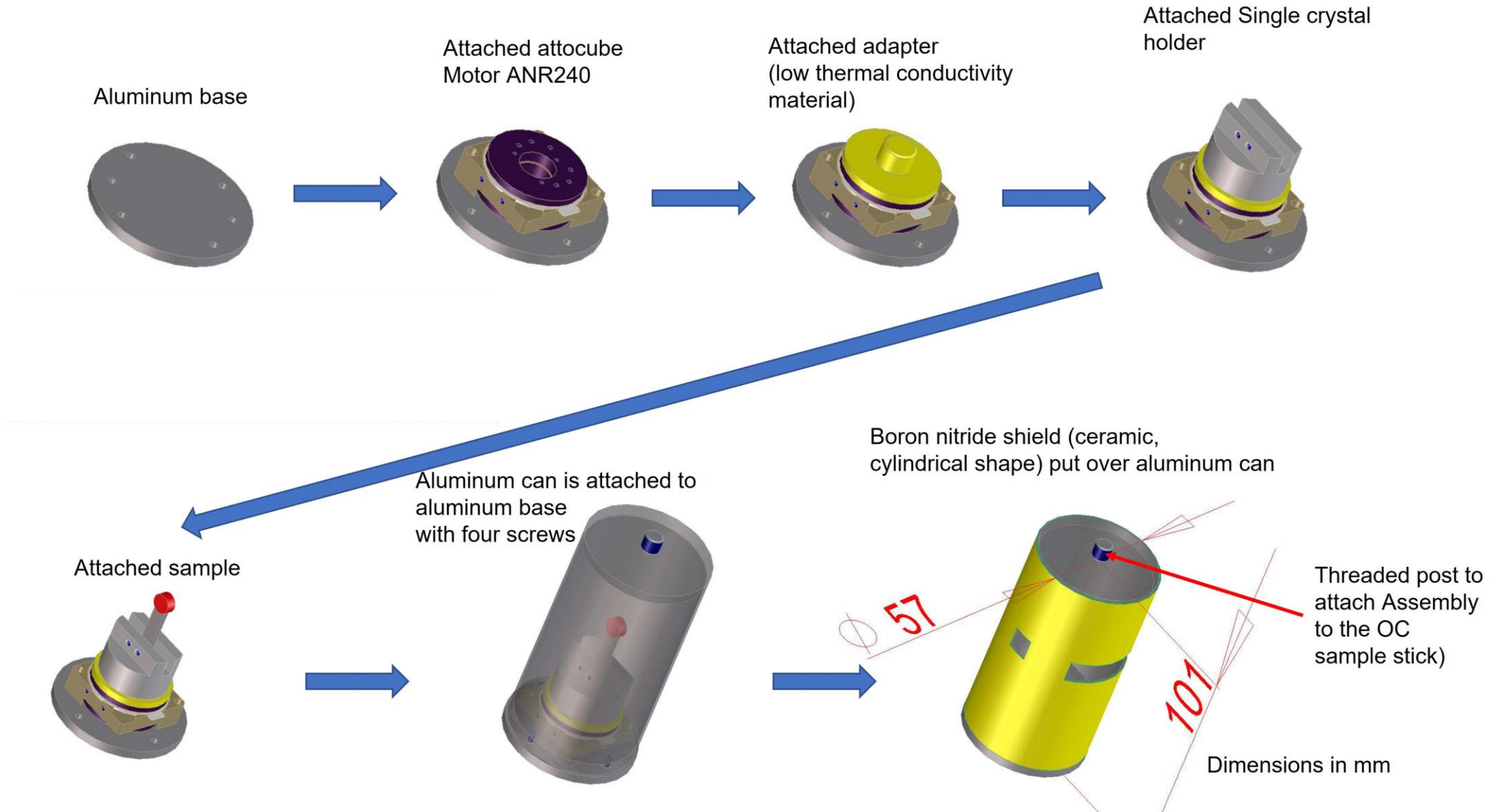
Pulse versus Continuous Rotation



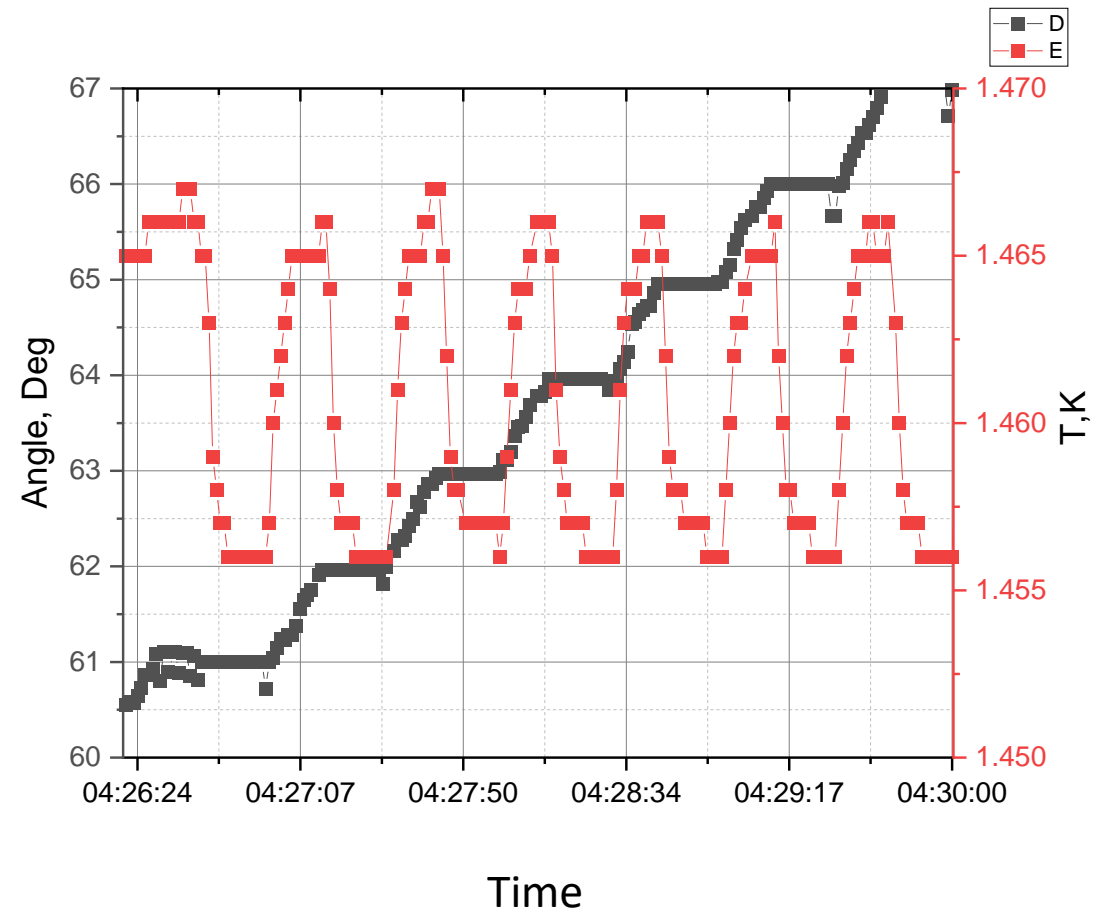
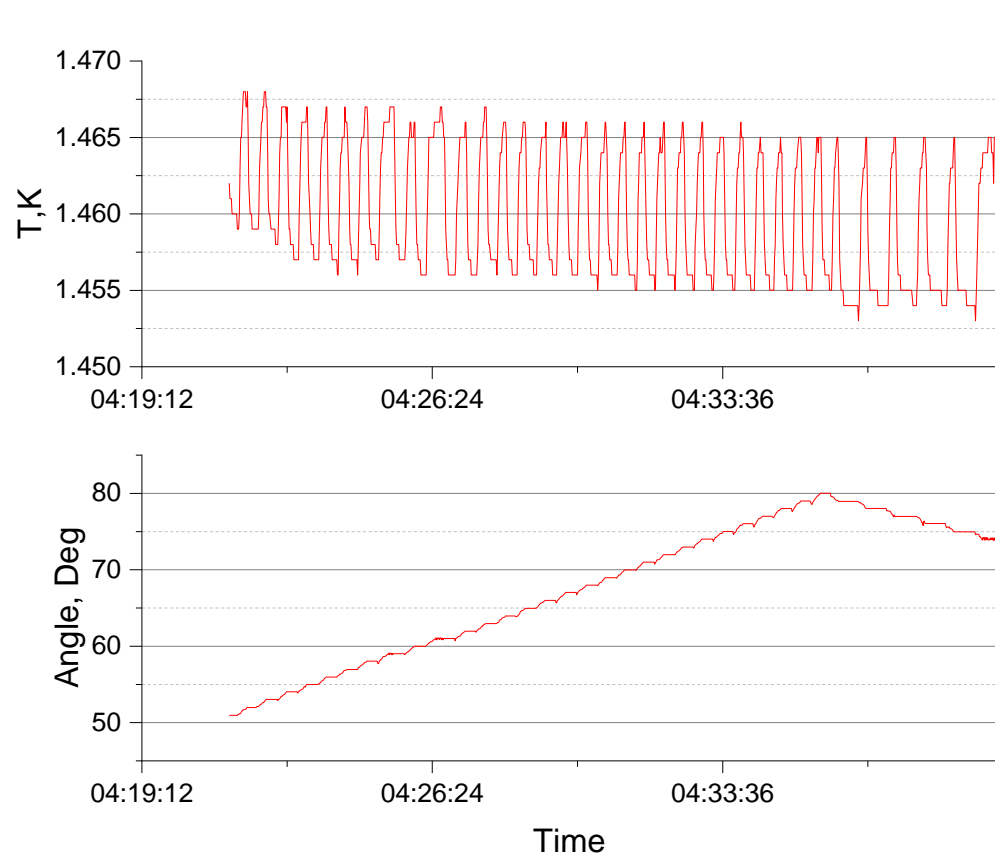
Cryostat Rotation and Shielding



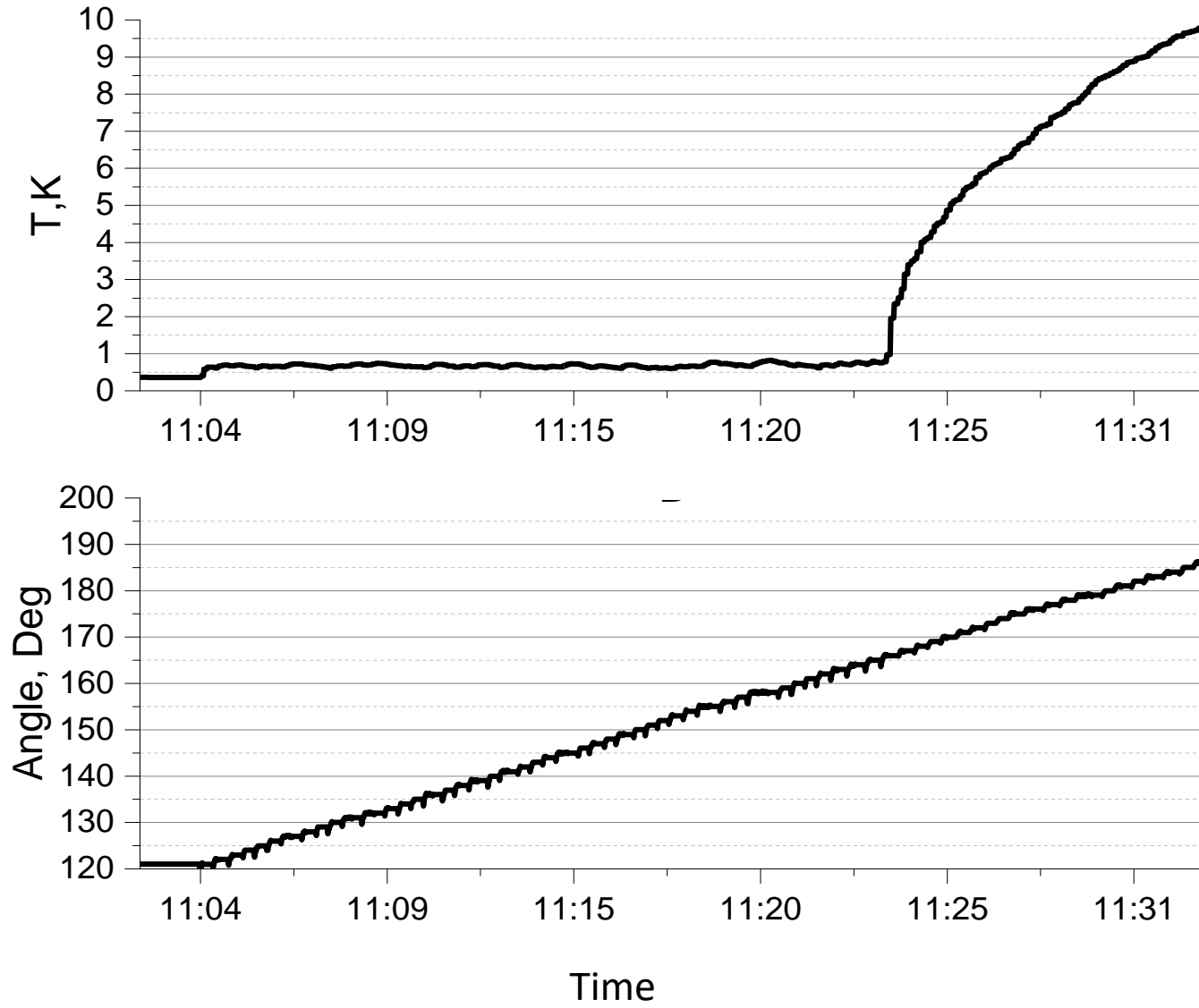
Sample Rotation and Shielding



Piezoelectric Motor Operation at Low Temperatures



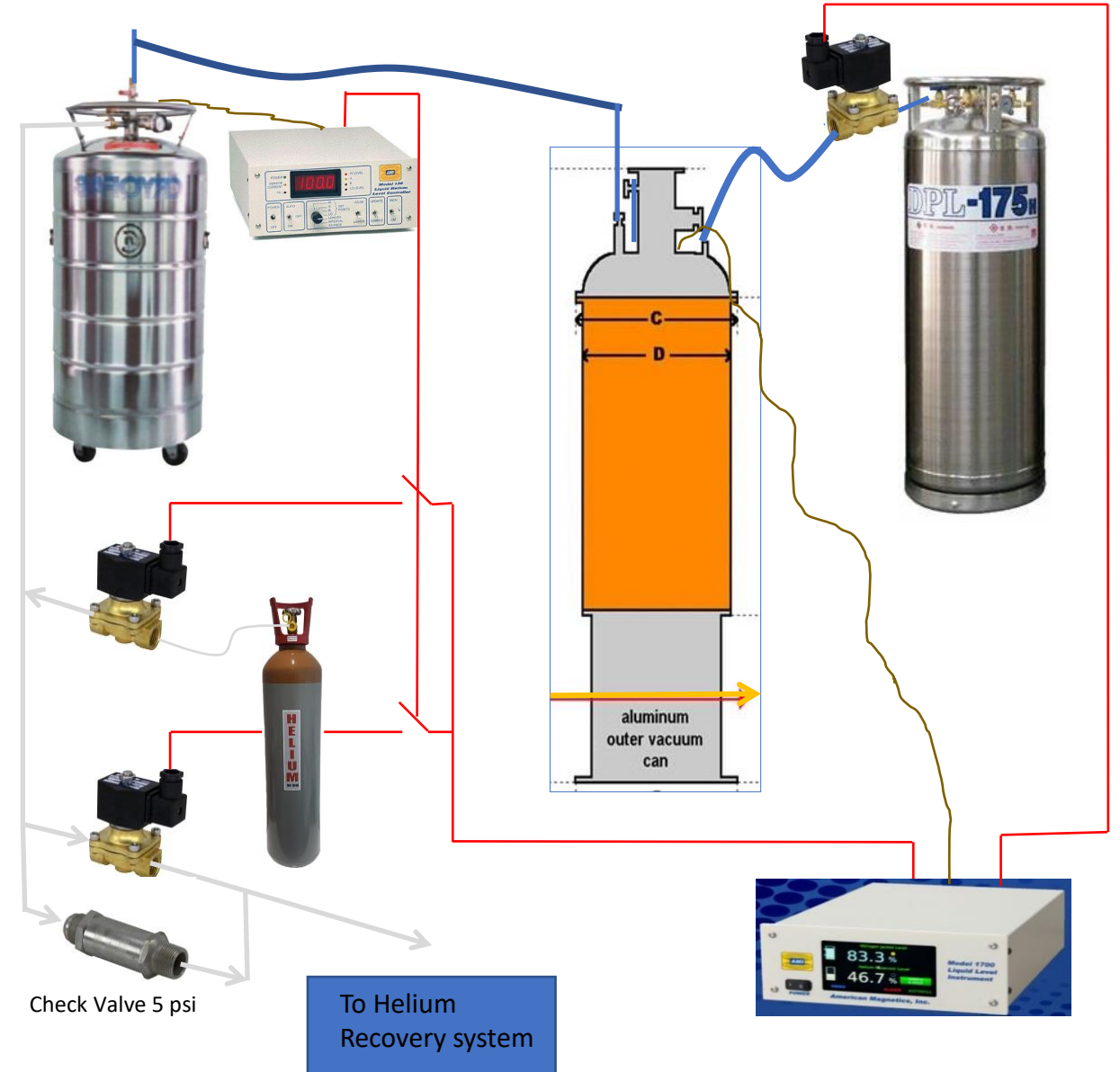
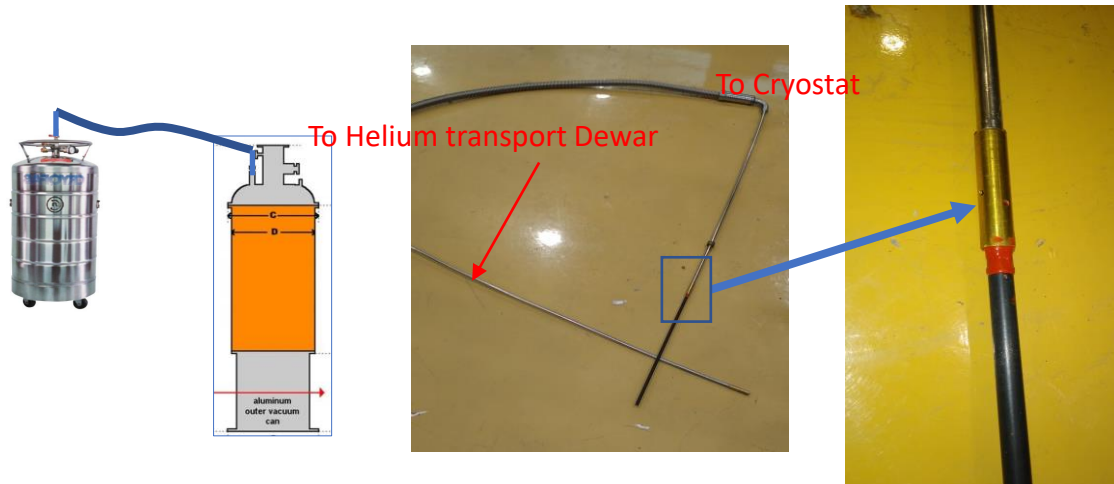
Piezoelectric Motor Operation at Ultra-Low Temperatures



Auto-refill of LHe and LN system (prototype)

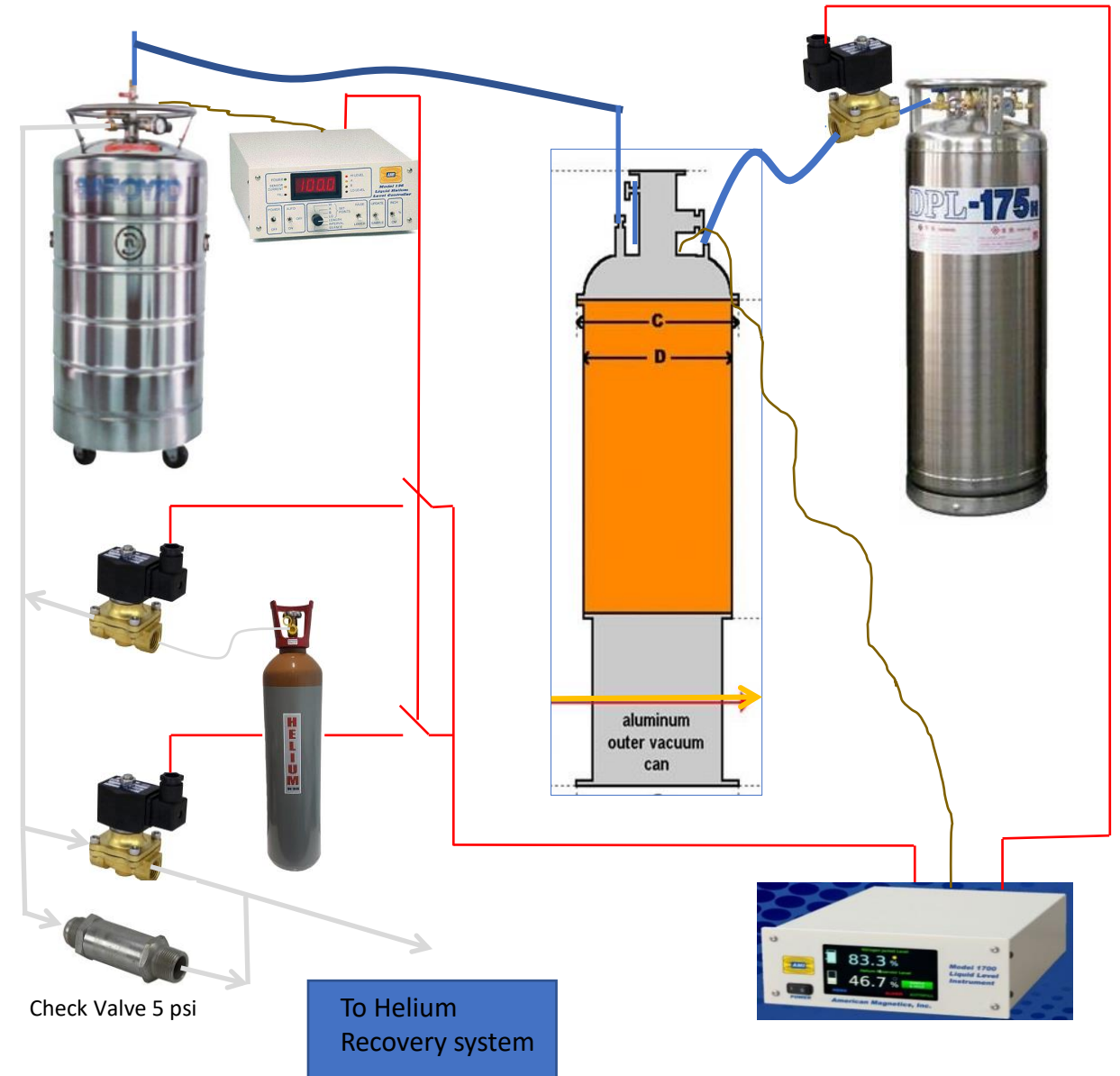
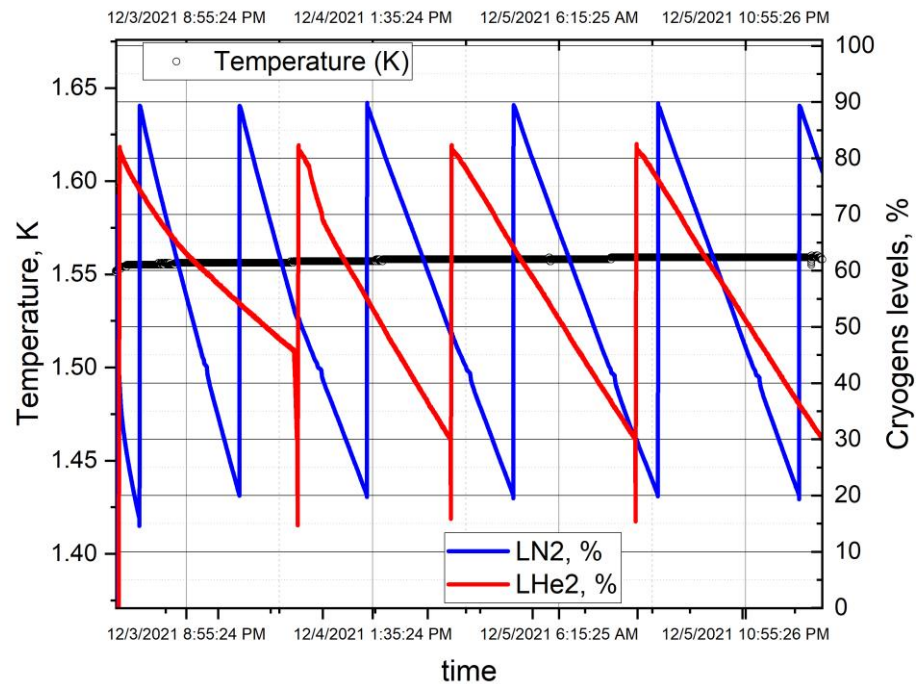
- LN and LHe transfer controlled by Level Meter monitor Model 1700 (standard equipment for SE Wet Cryostats);
- System of solenoid valves and relays start and stop the transfer of cryogenic liquids into the Cryostat;
- To reduce evaporation of Liquid Helium during and between the transfers modified transfer line has been designed;
- Automatic and semi-automatic regime of transfer will be available.

Modification of Helium Transfer tube

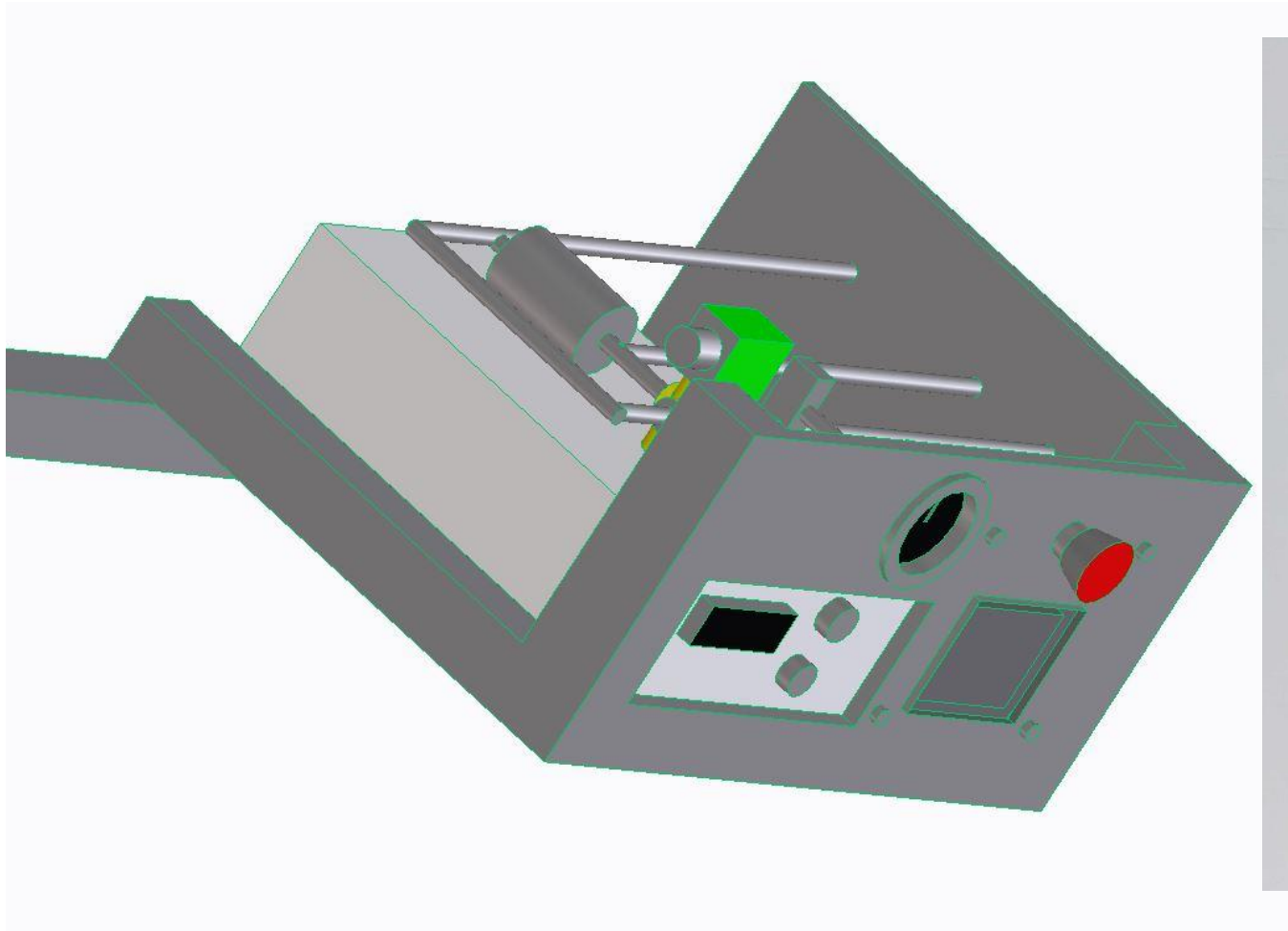


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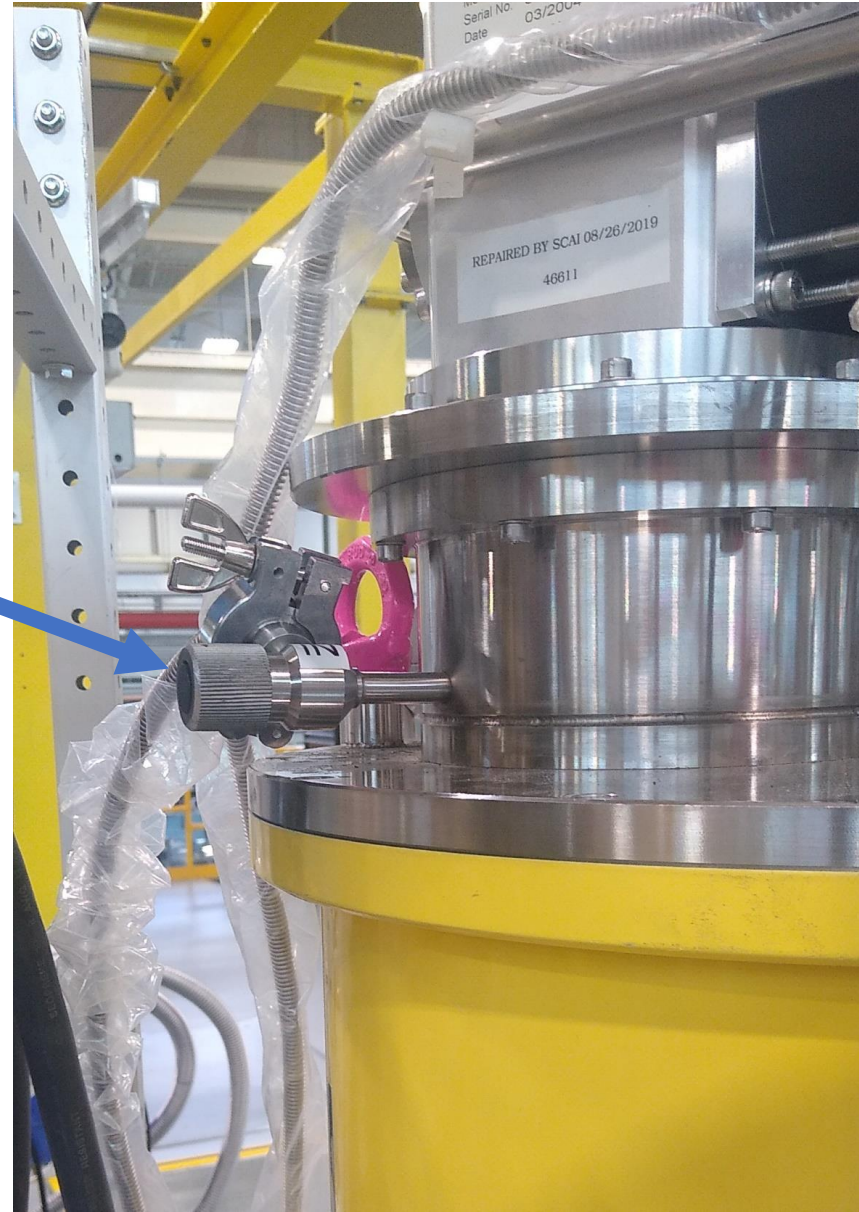
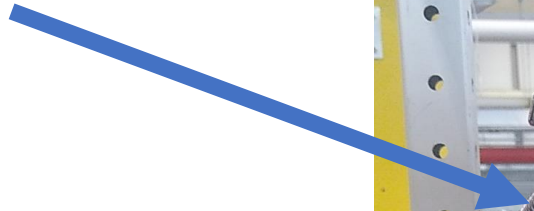
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Auto-refill of LHe and LN system (prototype)



Problems with 10T Magnet



Questions?