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Slow Control System for the NIFFTE High Precision TPC REMINGTON THORNTON, Abilene Christian University, NIFFTE COLLABORATION — The Neutron Induced Fission Fragment Tracking Experiment (NIFFTE) has designed a Time Projection Chamber (TPC) to measure neutron induced fission cross-section measurements of the major actinides to sub-1% precision over a wide incident neutron energy range. These measurements are necessary to design the next generation of nuclear power plants. In order to achieve our high precision goals, an accurate and efficient slow control system must be implemented. Custom software has been created to control the hardware through Maximum Integration Data Acquisition System (MIDAS). This includes reading room and device temperature, setting the high voltage power supplies, and reading voltages. From hardware to software, an efficient design has been implemented and tested. This poster will present the setup and data from this slow control system.

Remington Thornton
Abilene Christian University

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