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Calibration of the Thick and Thin Scintillators for the NSCL/FSU Sweeper Magnet System ANNE HAYES, University of Minnesota Morris, MONA COLLABORATION — The MoNA (Modular Neutron Array) Sweeper-magnet setup at the NSCL is designed to measure neutron unbound states by full kinematic reconstruction of the neutrons and the decay fragments. One crucial aspect of these coincidence experiments is the particle identification of the charged fragments in the focal plane detectors following the sweeper magnet. The particle ID is achieved by the measurement of the energy-loss and total kinetic energy in large thin and thick plastic scintillation detectors, respectively. The pulseheight of the signals from these detectors is strongly position dependent. In order to achieve accurate Delta-E/E-identification for the fragments it is thus necessary to correct for these position dependencies. A procedure was developed to implement this correction quickly and efficiently for the on-line analysis. The procedure is based on Tcl-scripts sourced in the analysis program SpecTcl in combination with fitting routines in Excel. The performance of this procedure will be presented with data from experiment 05124, which studied neutron unbound states close to the neutron dripline.

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