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ATLAS Muon Spectrometer BIS78 Trigger Upgrade ALEXIS MULSKI, Univ of Michigan - Ann Arbor, ATLAS COLLABORATION — The BIS78 (derived from the ATLAS muon system naming convention) trigger upgrade project extends the trigger coverage of the muon spectrometer in the pseudorapidity region $1 < |\eta| < 1.3$. It is intended to reduce the frequency of fake triggers that emanate from low-energy interactions in the end-cap toroid shielding material. In total, eight integrated modules of next-generation thin resistive plate chamber detectors mounted alongside small monitored drift tube chambers will be assembled for this project. This talk describes the staging of a vertical slice test at the CERN BB5 facility. All components of the data acquisition chain have been successfully integrated. Thin resistive plate chamber detector performance metrics were evaluated with the new signal digitization electronics and high-level readout software.

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