

Abstract Submitted
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Development of Atmospheric Monitoring System for Auger North JOHN CLAUS, CLINT ALLEN, ADAM BOTTS, BRYCE CARANDE, MIKE CALHOUN, LUCAS EMMERT, LEVI HAMILTON, T.J. HEID, JOHN KOOP, SARAH MORGAN, SHAY ROBINSON, JOHN SHERMAN, LAWRENCE WIENCKE, CSM PIERRE AUGER TEAM — The Pierre Auger Northern Fluorescence Detector will measure air-showers over distances of 40 km. Vertical Aerosol profile of the atmosphere at the Pierre Auger Northern site will be measured using the side-scatter method over the 40 km baseline. An atmospheric monitoring telescope (AMT) will use a 3.5 m² mirror optimized for UV reflection to focus light from a laser onto a cluster of photomultiplier tubes. The AMT has been built and final testing and modifications are being carried out before its installation later this year. A remotely programmed, 355 nm YAG laser with a final beam energy of 5 mJ is being used. The automation of the laser and the AMT is controlled via a single board computer (SBC). This talk will present an overview of this R&D program.

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