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## The Telescope Array's Middle Drum Observatory: The Detector and First Data

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### Abstract content

The Telescope Array Project (TA) is an Ultra High Energy Cosmic Ray Observatory in central Utah. It performs a hybrid measurement of the extensive air showers induced by cosmic rays. The two detector systems are 1) an array of 576 scintillation detectors and 2) three fluorescence telescope observatories which overlook the ground array. The Telescope Array will measure the study spectral shape, chemical composition of primary cosmic rays, and search for sources. Additionally, it seeks to understand the difference between the HiRes (High Resolution Fly's Eye) and AGASA (Akeno Giant Air Shower Array) spectra. The Middle Drum Observatory has been instrumented using refurbished telescopes from the HiRes-I Observatory at Dugway. We will discuss the detectors, modifications to aid calibration and analysis, and the first data from this observatory.

### If this papers is presented for a collaboration, please specify the collaboration

Telescope Array (TA) Collaboration

### Summary

### Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 5 (HE part 2), pages 1157-1158

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