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## Observation of ultra high energy cosmic rays with the surface detector array of the TA experiment

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### Abstract content

The Telescope Array (TA) experiment is an array of surface detectors surrounded by three stations of fluorescence telescopes in Utah, USA, to investigate the origin of the highest energy cosmic rays of energy beyond  $10^{20}$  eV. We deployed about 500 plastic scintillation counters on a grid with 1.2 km spacing as a surface array by March 2007. Each surface detector is outfitted with double layer scintillators of  $3\text{m}^2$  area, readout electronics, and wireless LAN communication system, which are powered by solar system. Here we present the performance of the surface detector array and the status and the prospect of observation of air shower events.

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

Telescope Array Collaboration

### Summary

### Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olive, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 4 (HE part 1), pages 421-424

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