

Summary of UHECR Composition Measurements by the Telescope Array Experiment

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We study the chemical composition of Ultra-High Energy Cosmic Rays (UHECRs) primarily using the Xmax technique. The reconstruction techniques use events either seen by two of the TA fluorescence detectors (stereo mode), or by one fluorescence detector, and one fluorescence detector and the TA surface detector (hybrid mode). We compare the observed Xmax distributions to those of shower Monte Carlo simulations, by generating events and analyzing them with exactly the same programs as the data. The results of all analysis are consistent with a light composition. In this talk, a summary of TA chemical composition analysis using the Xmax technique will be presented.

Primary author: Dr IKEDA, Daisuke (Institute for Cosmic Ray Research, University of Tokyo)

Presenter: Dr IKEDA, Daisuke (Institute for Cosmic Ray Research, University of Tokyo)

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