

Current status of the TAx4 surface detectors

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Telescope Array (TA) is the largest ultrahigh-energy cosmic-ray (UHECR) observatory in the northern hemisphere. It explores the origin of UHECRs using a surface detector (SD) array covering approximately 700 km² and fluorescence detector (FD) stations. TA has found evidence for a cluster of cosmic rays with energies greater than 57 EeV known as a hotspot. Recently, implications of anisotropy in the arrival directions in other energy ranges were obtained. Implications of spectrum anisotropy were also obtained. The new SD array of the TAx4 experiment was designed to increase the data collection rate at the highest energies to confirm the implications with more data. We constructed more than half SDs of the TAx4 experiment and have stably operated the SDs. We present TAx4 SD's current status and the data that have already been collected.

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