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Performance and simulation of the surface detector array of the TAx4 experiment

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The TAx4 experiment is a project to observe highest energy cosmic rays by expanding the detection area of the Telescope Array (TA) experiment with newly constructed surface detectors (SDs) and fluorescence detectors (FDs). New SDs are arranged in a square grid with 2.08 km spacing at the north east and south east of the TA SD array. We use CORSIKA simulations and implement the calibration data of the new SDs to calculate the performance of the new SDs. We compare the data with the simulation and validate the performance of the SDs. The comparison and the performance will be shown in the presentation.

Keywords

Ultra high energy cosmic rays; simulation; etc.

Collaboration

Telescope Array

other Collaboration

Subcategory

Experimental Results

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Session Classification: Discussion

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