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Energy Spectrum Measured with Telescope Array Surface Detector DMITRI IVANOV, Rutgers University, BENJAMIN STOKES, GORDON THOMSON, University of Utah, TELESCOPE ARRAY COLLABORATION — The Telescope Array experiment (TA) is the largest cosmic ray experiment in the northern hemisphere. It consists of a surface detector (SD) of 507 scintillation counters and three fluorescence detector stations overlooking the SD. We are analyzing the data collected by TA SD using a new technique which consists of generating a Monte Carlo (MC) simulation with all characteristics of the real data, comparing the MC with the data to verify the validity of the MC, and calculation of the SD aperture from the MC information. We will present our analysis, based solely upon the data, our method of generating CORSIKA showers without the problems caused by thinning, comparisons of our MC with the real data, and the latest TA SD energy spectrum result.

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