

Understanding Solar Energetic Particles With STEREO HET

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Abstract

The project evaluates solar energetic particles (SEPs) in the Heliosphere utilizing in situ data from the STEREO mission. More specifically, raw data from the High Energy Telescope (HET) corresponding to the abundances and energy spectra of electrons, protons, He, and heavier nuclei was extracted. C codes were modified and written to analyze Pulse heights and fluxes in a readable format. Plots of the data were formulated in Python. Low fluxes of heavier elements prompted a revaluation of the onboard binning process. New selection criteria will be generated to orient the particle energy loss in the detectors with the expected locations of the energy tracks corresponding to each element.

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