



## Improved data analysis for EPHIN aboard SOHO

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The COSTEP instrument aboard the Solar and Heliospheric Observatory (SOHO) spacecraft consists of two separate energetic particle detectors, the Low Energy Ion and Electron Instrument (LION) and the Electron Proton Helium Instrument (EPHIN). These detectors allow measurement of electrons, protons and helium of solar, interplanetary or galactic origin in the energy range of 44 keV per particle up to several tens of MeV per nucleon. The objectives of these instruments are the study of particle emissions from the Sun, the galaxy and the heliosphere. EPHIN is collecting data since the launch of the mission in December 1995 covering more than a full 11-year solar cycle. Late in 1996 one of the semiconductor detectors became noisy, affecting the quality of the data in the upper energy range. We used the energy-range empiric relation by Goulding et al. to reconstruct the energy loss of nuclei in the affected detector. New dynamic spectra and long-term quiet time spectra using these techniques are presented.