

## **SOLAR ENERGETIC PARTICLE ANISOTROPIES FROM THE ACE SOLAR ISOTOPE SPECTROMETER**

**R. A. Leske** (1), G. A. de Nolfo (2), C. M. S. Cohen (1), E. R. Christian (2), A. C. Cummings (1), R. A. Mewaldt (1), P. L. Slocum (3), E. C. Stone (1), T. T. von Rosenvinge (2) and M. E. Wiedenbeck (3)

(1) California Institute of Technology, Pasadena, CA 91125 USA,

(2) NASA/Goddard Space Flight Center, Code 661, Greenbelt, MD 20771 USA,

(3) Jet Propulsion Laboratory, Pasadena, CA 91109 USA.

`ral@srl.caltech.edu`

Although not specifically designed for it, the Solar Isotope Spectrometer (SIS) on the Advanced Composition Explorer (ACE) spacecraft is sensitive to particle anisotropies of heavy ions at energies of tens of MeV/nucleon. Using the arrival time of each particle (to the nearest second) and the trajectory measured with the instrument's position sensing detector, the arrival direction of each particle may be determined to  $\sim 30^\circ$  along the spacecraft spin direction and to better than  $1^\circ$  perpendicular to it. This allows the angular distribution of particles to be measured within the  $\sim 140^\circ$  wide field of view of the instrument, from which the intensities both along the field and perpendicular to it can be determined. We describe how anisotropies are obtained from SIS, present a survey of the anisotropic periods observed to date, and examine correlations between the existence of anisotropies and various magnetic field parameters. For some of the larger anisotropies during high intensity periods, we explore how the angular distribution depends on particle energy and species.

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