



Ulysses COSPIN high energy telescope observations of cosmic ray and solar energetic particle intensities since its distant Jupiter flyby in 2004.*

R.B. McKibben, J.J. Connell, and C. Lopate

Dept. of Physics and Space Science Center, University of New Hampshire, Morse Hall, 39
College Rd., Durham, NH 03824, USA

bruce.mckibben@unh.edu / Fax: 01 603 862 3584 / Phone: 01 603 862 5087

Following its aphelion and distant flyby of Jupiter in 2004, the Ulysses spacecraft began to climb slowly in heliographic latitude towards its third pass over the South Polar regions in 2006-2007. By the end of 2005, the spacecraft had reached a heliographic latitude of 37 degrees south at a radius of about 4.5 AU from the Sun. The period since the flyby was one of continually declining solar activity, but included in September 2005 one of the largest solar energetic particle events observed in this cycle. We will give a summary of the observations of modulated intensities of cosmic rays at Ulysses as compared to Earth using the COSPIN High Energy Telescope on Ulysses and the IMP-8 CRNC Telescope near Earth. We will also give a preliminary report of observations during the large September 2005 event. Solar energetic particles arrived at Ulysses within hours of the onset of this X17 flare, which occurred at about 1724 UT on September 7. The SEP intensities observed during the event were among the highest observed at Ulysses since its launch in 1990, and at energies below ~ 100 MeV proton intensities remained elevated for 20 days or more following the event.

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