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Modulation of galactic cosmic rays during the rising phase of solar activity cycle 23

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Abstract. When ACE was launched in August 1997, it was very nearly solar minimum, and the galactic cosmic ray intensities at 1 AU were at the highest level of this cycle. Solar maximum has now passed, and the cosmic ray intensities have gone through the minimum and are starting to increase once again. The large collecting power and high resolution of the Cosmic Ray Isotope Spectrometer (CRIS) and the Solar Isotope Spectrometer (SIS) instruments on the Ad-

vanced Composition Explorer (ACE) allow us to investigate the changing solar modulation on short time scales and at different rigidities. With these data, we will study the correlation of modulation with magnetic field, current sheet tilt angle, and other phenomena.

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