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## Recurrent Modulation of Jovian Electron intensities: Ulysses KET measurements

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### Abstract content

Corotating Interaction Regions are regions in the heliosphere that are formed at the leading edges of high-speed solar wind streams originating in coronal holes. Their effects on the propagation of energetic particles are known. Here we concentrate on the modulation of Jovian electrons by CIRs observed with the Kiel Electron Telescope. After its launch on Oct. 6, 1990 Ulysses followed an in-ecliptic path towards Jupiter. The closest approach to the giant planet occurred on Feb. 8, 1992, when Ulysses began its out-of-ecliptic dive. During that period the flux of 2-10 MeV electrons, originating from Jupiter, were modulated by Corotating Interaction regions until the spacecraft reached a latitude of about 30 degree. Due to the orbital periods of Jupiter and Ulysses, the spacecraft came again close to the planet in 2004. As in 1992 and 1993 the MeV electron fluxes were modulated by CIRs in 2005. In 2006 this modulation stopped again, when the spacecraft was above 30 degree latitude. In order to understand this decay we present a detailed analysis of a series of recurrent Jovian electron decreases and its relation to the solar wind plasma parameters. It was found that the decreases are correlated with enhanced variation in the Bn component.

### If this papers is presented for a collaboration, please specify the collaboration

KET

### Summary

### Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 1 (SH), pages 363-366

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