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PARTICLE OBSERVATIONS AND PROPAGATION IN THE THREE-DIMENSIONAL HELIOSPHERE

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Abstract content

Ulysses, the first spacecraft ever to fly over the poles of the Sun, plays a central role in the Heliospheric Network, the international fleet of spacecraft to explore the Sun and Heliosphere. In November 2006, Ulysses, began its passage over the Sun's south pole for the third time. Although like during the first polar passes in 1994/1995 the Sun is again close to its activity minimum, an unexpected rise of solar activity occurred in December 2006. Active Region 0930 produced a series of major solar flares with the strongest one (X9.0) recorded on December 5 after it rotated into view on the solar east limb. We will present energetic particle observations by Ulysses located at >70 deg south heliolatitude during this period and will discuss their implications for particle propagation to solar polar regions. The observed events will also be compared with previous Ulysses high latitude measurements obtained close to solar maximum. Furthermore, comparisons with data acquired from other spacecraft of the Heliospheric Network near the ecliptic plane will be discussed.

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

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 151-154

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