Title of Contributed Paper: Alfvén Waves in the Polar Heliosphere: Ulysses Observations

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Keywords: polar heliosphere, cosmic rays, Alfvén waves

Session Code (see tentative classification code): SH6: Modulation

Preferred Presentation: oral ⊗ poster

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Abstract (type roughly 100 words)

One of the characteristic features of the polar heliosphere discovered by Ulysses is the continuous presence of large amplitude, long-period variations in the direction of the magnetic field. Correlation of the field changes with simultaneous perturbations in the solar wind velocity show that they are associated with outward-propagating Alfvén waves. Their periods and wavelengths extend to >10 hours and >0.3 AU with ΔB/B ≈ 1 and the waves are strongly affecting the access of galactic cosmic rays to the polar region. Recent observations by Ulysses as it returned to the solar equator and traversed the north hemisphere have separated the radial and latitudinal dependence of the wave power and other properties.